JORC Code, 2012 Edition – Table 1: Congolone Deposit

Indicated Resource/Probable Reserve & Measured Resource/Proved Reserve

31 December 2021

Section 1 Sampling Techniques and Data

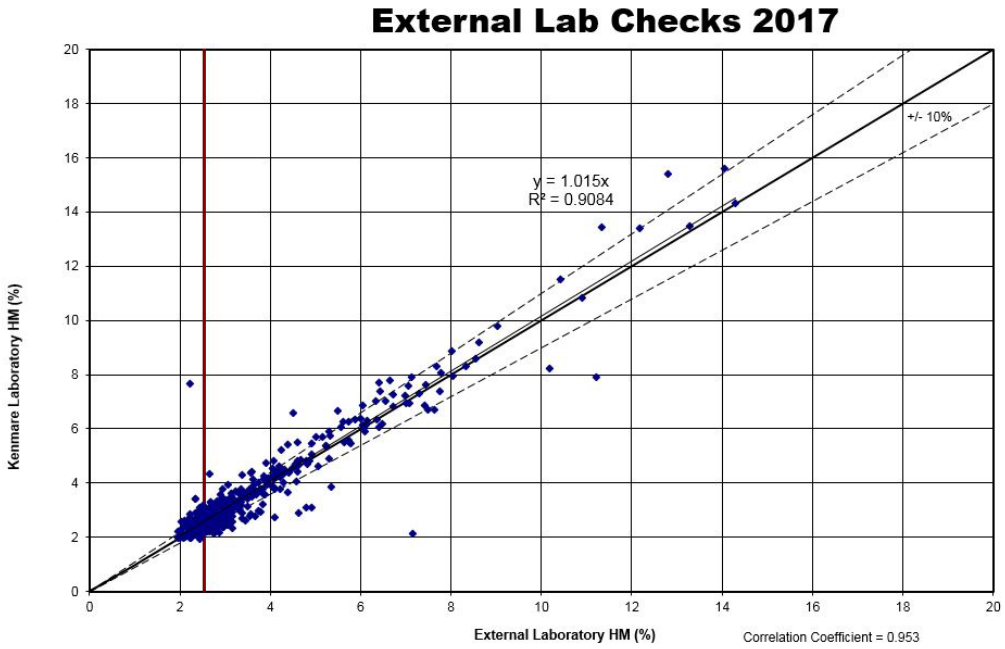
(Criteria in this section apply to all succeeding sections.)

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.*	• Sampled exclusively by vertical drill holes. The majority of the holes were sampled using a tractor mounted open flighted dead-stick auger drill rig in the late 1980's and early 1990's, with sampling at 3m interval except where changes in lithology occurred. Samples were channel sampled from flights of auger and then coned and diagonally channel sampled from ~7kg to 1kg for submission to laboratory. • In 2015 and 2016, air-core drill samples were taken at 1m intervals from 67 holes and 249 holes respectively, drilled using Kenmare's EVH air-core drill rig. Total samples, typically 7 kg, were collected from a cyclone and submitted whole to the Kenmare laboratory to be analysed for oversize (+1mm), slimes (-45 micron), and heavy minerals (+2.8 SG). Heavy mineral (HM) mineralogy determined by compositing HM fractions from the drilling samples by geology unit, then analysing magnetic and non-magnetic fractions using XRF.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Auger drilling rods are 3m and samples taken on 3m intervals. Where sample translation occurred, the bottom 3m of sample was taken in 1988 -1990 (Kenmare) drilling program. The 1994 and 1995 drilling took the bottom 4.5m, sidewall contamination was removed and sample was homogenised by coning and channel sampled. Head pressure and rotation speed reduced to control translation as much as possible. • Air-Core Drilling. Drilling is conducted on a regular grid using air-core drilling technology, an industry standard drilling technique for HM deposits. Drilling rods are 3m long and 3 samples are taken for each rod at 1m intervals with operators taking care to only sample when drilling is progressing to avoid contamination. • Cyclone is regularly cleaned during drilling and at the end of hole if clay lithologies intersected. Bit and starter rod cleaned by water and air venting at end of each hole. • Collar Survey. Collar positions are surveyed using GPS RTK equipment, accurate to within 0.1m in the z direction.

Criteria	JORC Code explanation	Commentary
	• *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.*	• Heavy mineral mineralisation occurs as disseminated zones within sedimentary units. At Congolone the units are deposited as aeolian dunes. Mineralised zones extend for many hundreds of metres to kilometres along strike with minor local variability. • BHP auger samples were field split to 1kg – 2kg then submitted to on site laboratory where HM and slime content were determined using LST. • The total sample is bagged at the air core rig and transported to the laboratory for splitting and HM determination. This eliminates the risk of inaccuracies caused in field splitting. • Downhole sampling is conducted at 1m intervals principally to delineate the edges of the layers for mine planning purposes. This leads to an excess of grade information - above that strictly required for grade estimation for the geological model.
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).*	• Open flight auger drilling for the 1980's to 1990's drilling, all holes vertical and approximately 70mm in diameter. Samples taken from flights by "channel" sampling. • 2015 and 2016 drilling were NQ air-core drilling with hole diameter approx. 75mm, all holes are vertical. Air-core drilling is a form of reverse circulation drilling requiring twin tubes, and where the sample is collected from the open face drilling bit and blown up the inner tube. It is well suited to drilling unconsolidated sediments and is one of the few drilling techniques to give good sample quality below the water table. It is the most common method used for mineral sands deposit definition.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• Auger sample recovery calculated as length of sample recovered per interval drilled. Generally, within range of 75% to 100% for BHP drilling. • For aircore recovery is based on field assessment of sample volume. Samples with good recovery weigh 7-8kg for each metre (7.7 kg theoretical). With air-core method, there is normally lower than average sample recovery at the very top of the drillhole due to air and sample losses into the surrounding soil. Sample recovery below the water table can be greater than 100% as water flowing into the hole causes the hole to have a greater diameter than the drilling bit. With careful management, though, sampling below the water table still gives uncontaminated samples provided the sample stream is only sampled when the bit is cutting new material. • With the disseminated style of mineralisation typical of heavy mineral deposits, it is preferable to have samples of lower volume that are free of contamination, rather than samples of correct sample weight that may be contaminated. Therefore, while drilling, the sampling team focuses on ensuring that the sample stream coming from the drilling rig is only sampled when the bit is drilling into new, uncontaminated material. Contamination is most often a problem during rod changes and where there is a high flow of groundwater into the drillhole.

Criteria	JORC Code explanation	Commentary
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• The entire drill sample is delivered to the laboratory for further analysis, thereby eliminating the possibility of sample bias caused by splitting the sample in the field. • Samples are collected in calico bags and allowed to drain and partially dry in the field or in the exploration yard prior to delivery to the laboratory. With very wet samples there can be a slight loss of the slimes fraction through the weave of the cloth of the bag as the sample drains, but this is only a very small fraction of the total slimes in the sample.
	• *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.*	• Materials sampled by the air-core drilling rig can be dry, moist or wet. Dry samples may lose some of their slimes fraction due to blowing out of the sampling equipment, but HM and oversize are not affected. Moist drill samples are the most representative as the whole sample is returned as "clumps" of material from the bit face. There is no chance for HM or slimes to segregate in the moist samples, because all of the material stays stuck together. Wet samples taken from permeable sands and gravels underneath the water table where there is a high flow of water into the drillhole may segregate at the bit face and in the drill string and there is potential for slimes to be washed out of the sample, and for HM to segregate from the quartz sand and to preferentially be flushed out of the system with the other drill spoils at rod changes • No bias is observed.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Drillholes are logged in the field. All samples are qualitatively logged for lithology, grainsize, colour, clay content, sorting and a description of any unusual features like hardness. Sand samples are panned to estimate HM content which is useful as a check on the laboratory analysis. The laboratory also records the colour of the dried samples. • Virtually all of the drill samples are sand or sandy clay. Drillhole logs are useful in separating geology units and for checking the laboratory results, but do not provide any information additional to the laboratory data that is fundamentally required for the resource estimation. • Information obtained is sufficient to support the level of resource classification
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	• Auger samples were taken from flights, attempting to account for sample translation where observed. Samples were then "homogenised" and channel sampled down to 1 – 2kg weight. • All of the aircore field samples are delivered to the laboratory for analysis. This eliminates the need for field splitting and the possibility of bias from this source. • At the laboratory the sample is oven dried then "gently pulverised" by hitting the cloth sample bag with a rubber mallet. The resulting sample is then coarsely sieved at 1 mm and any aggregate lumps broken down so that they pass through the screen. Any genuine oversize (+1mm grains) are weighed at this stage and the oversize% is then

Criteria	JORC Code explanation	Commentary
		calculated on the entire sample. The sample is then dry riffle-split down to a nominal 100g sample size for further analysis.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• Virtually all drill samples consist of sand, clayey sand or sandy clay. For these samples the sample preparation method is appropriate. Very rarely, samples are taken of weathered bedrock, where the sample consists of rock fragments and clay with little sand fraction, and while these samples are slower to analyse, the method still gives relevant results. • Auger sampling technique may result in spot sampling, rather than continuous sampling of the interval, but is generally appropriate for length of interval sampled.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• All sample preparation stages are documented in standard operating procedures. • Employees conducting the work are constantly monitored by their supervisor to ensure standard procedures are being followed. • Work is also monitored by geology staff, who work in an adjacent office. • Laboratory duplicates are taken as part of Laboratory internal quality control at an approximate rate of 1:20. • Geology staff takes blind duplicates at a rate of about 1:20. • Details of historic laboratory procedures not documents, but reference is made to quality checks giving good correlation.
	• *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.*	• The entire sample is delivered to the lab, so it is representative. Care is taken with the sample collection and handling to ensure that the sample delivered to the laboratory is representative of the interval drilled.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• The one-metre drill sample of 7kg nominal size is certainly large enough to reliably capture the HM, slimes and oversize characteristics of the in-situ material. Smaller diameter drilling systems have been tested in the past, which gave smaller sample volume; the sample quality was not as good as with NQ system. • The portion split at the laboratory is nominally 100g. This is sufficiently large to consistently estimate HM%, but is too small to consistently measure the generally very low percentage of oversize. However, it is sufficient for the level of resource estimate.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• Sieving to determine +1mm (oversize) and -45micron (slimes) – BHP (-63µm). • Heavy mineral separation using LST heavy liquid to separate HM from other minerals (predominantly quartz). • Control procedures include laboratory duplicates and blind duplicates. LST density is monitored and kept above 2.8 (it is water soluble).
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in*	• Geophysical tools and handheld XRF, etc. are not used. Panning and laboratory

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	determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	analysis are seen as the most appropriate assessment techniques. .
	• *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.*	• Duplicates (both lab internal, and blind geology duplicates) and external laboratories are used to ensure accuracy and precision. • XRF analysis is used to estimate mineralogy. The XRF is calibrated using standards and known samples. • Round-robin inter-lab checking. • QAQC systems return acceptable results. For HM, 90% of the blind duplicates completed in 2016 were within 13% margin of error for HM, with extremely good correlation (Correlation coefficient of 0.93 for HM) and no bias apparent. • Duplicate samples analysed by an external lab in 2017 returned the following comparison, 90% of the samples were within 11% of the assay average value (data limited to assays greater than 2%). The correlation coefficient was 0.95 and there was no significant bias. 

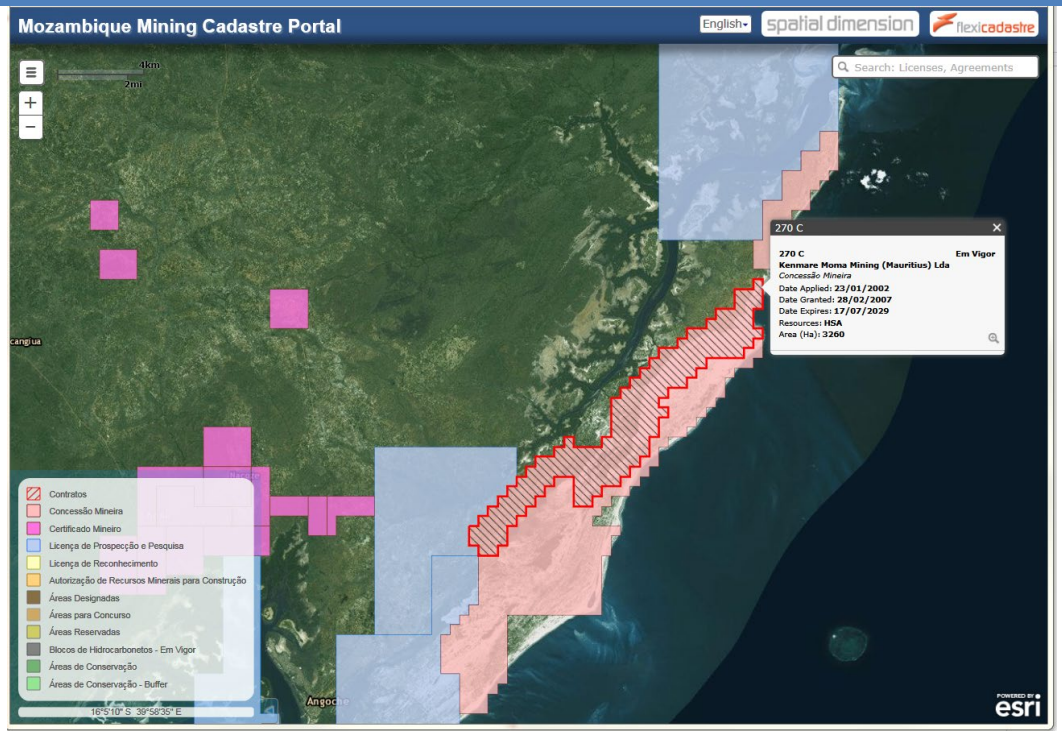
Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • •	• Mineral sands drilling involves hundreds or thousands of drillholes with moderate grade intersections. Although high-grade intersections are a relatively insignificant part of the overall mineralisation, high grade results are often checked by examining the HM "sinks" from the analysis (the HM resulting from the analysis process is stored for further testing). Sometimes, especially near weathered bedrock, iron-rich sediments and concretions can give false positive HM values. False positives are excluded or re-assayed.
	• *The use of twinned holes.*	• A total of 114 twin holes were drilled in the 2016 program to check the pre-existing drilling. HM correlation for all samples is 0.33, with insignificant bias towards higher assays in the auger samples. Slimes correlation coefficient is very good at 0.60, but is biased towards higher auger results, due mainly to the coarser slimes screen used.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• The primary data storage is in a Microsoft Access database. Collar data, geology data, assay data and mineralogy data are loaded from separate sources and verified with queries designed to detect common errors. Data is then loaded into mining software (Datamine studio RM) and geologists check the resulting cross sections to ensure drillholes are correctly positioned and assays are appropriate for the geology unit and location.
	• *Discuss any adjustment to assay data.*	• No adjustment is made to the assay data for the purposes of public reporting.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The 1988 – 89 drilling was surveyed using theodolite and chain from a base station set up on rock at Congolone point. Survey was undertaken by Kenmare and then checked by an independent survey contractor. • A RTK GPS system was used to survey the 2015 and 2016 drillholes. • The grid is UTM37S (WGS84) • The grid is tied into the national Mozambican topographic controls via a number of beacons setup around site. However, these are rarely used as the satellite based GPS system is primarily used for drillhole surveys. The base station for this has been levelled using a nearby beacon. A difference of +/- a few metres relative to the national grid is not a concern because the regional topographic data is never used in any case.
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.*	• No Exploration Results are reported. • Variograms in the main mineralised units show X range of 597.6m and Y range of 500m • Drill spacings are nominally 50m x 200m in the main resource, with 500m x 500m spacings to the south of the resource. • Areas with drill spacing of 200m x 50m spacing and availability of mineralogical data are classified as Measured Resources; Indicated: 200m x 50m to 500m x 200m drilled hole spacing; and Inferred Resources: wider drill hole spacing: 500m x 200m.

Criteria	JORC Code explanation	Commentary
		• In view of the variogram ranges, the 50m x 200m spacing is appropriate for Measured Resource status. • There is a moderate degree of confidence in the continuity of mineralisation in areas tested at drill spacing of 500m x 200m and Inferred Resource classification is appropriate. • Sample compositing has not been used in the modelling process for HM, Slimes and Oversize components of the ore. • Compositing is used to determine mineralogy, but this is far less variable than the HM content, and is appropriate.
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 mineralisation has a general NE – SW elongate trend with the main mineralisation 4900m long by 1200m wide • Most of the drilling is aligned with the UTM grid with the 50m spacing across strike and 200m spacing along strike. The grid spacing is suitable for the orebody shape.
Sample security	• *The measures taken to ensure sample security.*	• Samples are sun dried in calico bags and then stored in weather-proof shelters. • HM recovered from the analysis of samples is stored and retrieved as required for mineralogical analysis. • Sample bags remain in Kenmare custody from drill rig to laboratory.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits conducted specifically for sampling.

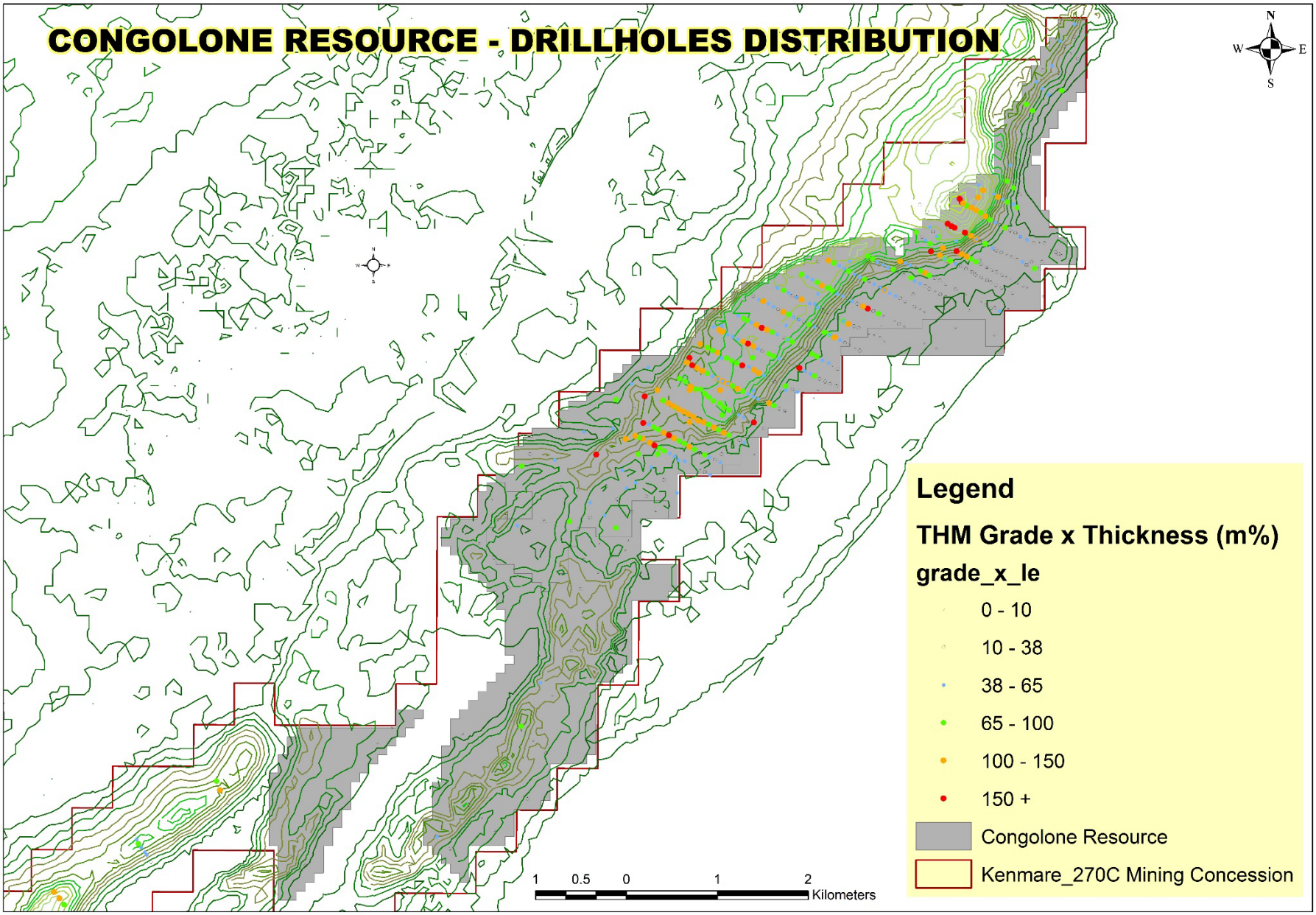
Section 2 Reporting of Exploration Results

(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.* • *The security of the tenure held at the time of reporting along with any known impediments to*	• Concessão mineira (Mining Concession) No. 270C held by Kenmare resources subsidiary Kenmare Moma Mining, as shown below:

Criteria	JORC Code explanation	Commentary
	obtaining a licence to operate in the area.	 • The Mining Concession is valid until 17 July 2029.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• In the late 1980s Kenmare held a joint venture over the Congolone deposit with the Mozambique Department of Mines (MIREM) and Geolski Zavod (Yugoslav geological survey). Geolski Zavod and Kenmare conducted exploration work on the deposit for several years and in the 1990's the project was the subject of a joint venture with BHP. The work was of a high quality with metallurgical testing and mineralogy of the minerals being tested by industry experts Mineral Deposits Limited as part of a Feasibility Study in 1989.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The mineralisation is hosted in clean recent dune sands which are formed up against and in places overlie, the Old Red Dune sands. The recent dune sands are tan to yellow in colour, well sorted and low in slimes content. The Old Red Dune contains some mineralisation as well and has a pronounced seaward facing escarpment on its SE side. At the base of the escarpment is a well defined strandline containing the highest grades.

Criteria	JORC Code explanation	Commentary
		However, much of the recent sands has been remobilised to form an aeolian deposit to the NW over the red dunes.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Delineation of heavy mineral deposits requires numerous shallow drillholes, most of them with moderate or low-grade intercepts. Total of 13,582m have been drilled at Congolone over 618 holes. The information is best presented in plan view, where all the relevant information can be presented in a more concise form - see drill plan below. The plan summarises the grade information as a "metal factor", classified by grade x thickness. The grade is HM%, with a threshold at 2% HM (values below this are not included and would give a "0" value). The thickness value is the total aggregate intercept in the drillhole exceeding the 2% threshold. Only those depth intervals exceeding 2% HM are included in the thickness value.


CONGOLONE RESOURCE - DRILLHOLES DISTRIBUTION
N
W
E
S
Legend
THM Grade x Thickness (m%)
grade_x_le
0 - 10
10 - 38
38 - 65
65 - 100
100 - 150
150 +
Congolone Resource
Kenmare_270C Mining Concession
1 0.5 0 1 2
Kilometers

Criteria	JORC Code explanation	Commentary
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 exploration results are being reported for this deposit.
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').*	• The drillholes are vertical and the mineralisation is generally sub-horizontal.
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.*	See drillhole plan above.
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.*	• Exploration data is not being reported. Only Measured, Indicated and Inferred Resources are the subject of this report.
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.*	• There is no other relevant exploration data for this area.

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Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Detailed drilling of Inferred and Indicated resources will be undertaken to upgrade them to Measured Resource. • The resource is limited in lateral extent to the north northwest because the mineralised geology units do not occur further in those directions. Mineralisation does extend southwest and will be the subject of further investigation as the project progresses.

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.* •	• The primary measure to avoid data corruption is the input and storage of all sample data in a relational database. Checks are made on all data input into the database to ensure data integrity. The final check is the visual presentation of the new data in cross section, where geologists confirm that the information matches the expected results for the unit and location, the logged data, and is consistent with previously generated information for that area.
	• *Data validation procedures used.*	• Database integrity rules for all input data & visual checking of new data in cross section.
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 Competent Person is currently a full time employee of Kenmare Resources and works at the site. He has had sufficient exposure to the drilling and sampling practices to be satisfied as to the suitability for this data to be used in resource estimation.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	• The resource model is fundamentally based on the geology interpretation. Each unit making up the model is modelled separately. • The geology consists of a single unit that is easy to distinguish from basement units.
	• *Nature of the data used and of any assumptions made.*	• The geology data is used, including elevation, lithology, clay content, colour, HM content and oversize content. • Variogram data is used to set the parameters for HM estimation in the different units.
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*	• The drill data is relatively closely spaced and so alternative interpretations have little effect on the model.
	• *The use of geology in guiding and controlling Mineral Resource estimation.*	• The geology model is used as the over-riding control in the resource estimation. Each geology unit is modelled separately.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>• The factors affecting continuity both of grade and geology.</td><td>• The mineralisation was deposited in sand dunes formed parallel to the coastline and a strand at the base of the dunes. In the dunes the grade is disseminated with general trends following the direction of the dunes. At a smaller scale there is some local variation related to individual dune formation. However, grade trends are generally elongate and tabular.
• The strands are more elongate, but tend to be similar in shape to the dunal mineralisation.</td></tr>
<tr><td>Dimensions</td><td>• 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.</td><td>• Mineralisation has been defined over an 8.5 km strike length in a NE-SW direction and varies between 1.5km and 0.5km wide. The Base of Mineralisation extends from about 0 mASL up to 50 mASL.</td></tr>
<tr><td>Estimation and modelling techniques</td><td>• 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.</td><td>• The current resource model is a block model where the block estimates have been calculated using Simple Kriging algorithm.
• The key assumptions are that the grade is continuous within the ellipsoid used to select samples. Ranges for the x, y and z directions are determined using Variography.
• The SK model estimates grades in blocks using variances, weighted distances and nugget effect calculated from variogram analysis.
• Extreme values are not cut in this model.
• Simple Kriging Interpolation Factors for Congolone geology block model.
<table>
<tr><th>VARIABLE</th><th>EST. METHOD</th><th>SEARCH DIST. X-DIRECTION</th><th>SEARCH DIST. Y-DIRECTION</th><th>SEARCH DIST. Z-DIRECTION</th><th>MIN NUMBER OF POINTS</th><th>MAX NUMBER OF POINTS</th></tr>
<tr><td>HMIN</td><td>SK</td><td>597.6</td><td>500</td><td>11.9</td><td>10</td><td>20</td></tr>
</table></td></tr>
<tr><td></td><td>• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</td><td>• Two previous estimates have been undertaken for the Congolone orebody. The first was a manual polygonal estimate undertaken in 1989 and the second a block model using ID^3 interpolation. Both of these estimates substantially matched each other and the current Indicated Resource estimate.
• In 2015, the Inferred Resource was based on new data and has not previously been the subject of a resource estimate.
• 2016 resource estimate is based on new data from EVH aircore drilling program (within and outside the lateral area covered by the manual estimates), and also based on assays from the 2015 EVH drilled samples</td></tr>
<tr><td></td><td>• The assumptions made regarding recovery of by-products.</td><td>• The main products are ilmenite, zircon and rutile. None of these are regarded as “by-products”. No other minerals are considered as potential by-products in this estimate.</td></tr>
<tr><td></td><td>• Estimation of deleterious elements or other non-</td><td>• Ilmenite TiO_2 quality is estimated during the mineralogy determination. Problematic</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	trash minerals such as kyanite, chromite, and monazite are estimated using stoichiometric chemical analysis. • The Congolone orebody is well oxidised and no sign of potentially acid sulphate soils have been observed. This accords with the experience at the Namalope mine which is located in similarly oxidised sediments.
	• *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.* •	• The block model uses 25m x 25m x 1m parent block size. Sub-celling has been allowed to allow good fit to the wireframes. • Most of the ore mined at Namalope is dredged and the Congolone deposit may be mined by either dredging or a combination of dredge and dry mining. The dredges typically sweep a channel 40m wide at the base and about 80m at the top. The drill spacing and block sizes are appropriate for evaluating both types of mining.
	• *Any assumptions about correlation between variables.*	• The mineralogy is determined on a HM basis (e.g. an ilmenite content of 80% of the HM), and then multiplied by the HM content to obtain the in-situ estimate for each of the minerals. The mineralogy is much less variable than the HM content and so this is an appropriate way of determining in-situ estimates for each of the different minerals.
	• *Description of how the geological interpretation was used to control the resource estimates.*	• Block modelling is constrained within the geology unit – including using only the sample values from that unit, and the variogram range parameters specific to that unit.
	• *Discussion of basis for using or not using grade cutting or capping.*	• The samples are not capped in order to have all mineralogical grades influencing the estimation process. In general capping is not necessary for this type of deposit as grades are not significantly variable and volume-variance is low.
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• The block model is aggregated vertically into a two-dimensional display and the results compared with the previous version of the model. • The block model is aggregated vertically into a two-dimensional display and the resulting grades are compared to the drill samples. • SWATH analysis comparing drill hole data and resource model data is undertaken for all lithological units
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 dry.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• All drill values within the mineralized zone were included in the model, and only those zones that averaged 2% HM or above were included in the resource estimate. • Cut-off grades are calculated using applicable contract prices under KMPL's existing contracts and current operating costs. The marginal economic cut-off grade is actually 1.4% HM, but within the mineralised units, there is very little material which is below 2%

Criteria	JORC Code explanation	Commentary
		and this is used to balance with MSP production.
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.* •	• The resource is considered as probable dredge feed. For dredge mining the ore must be greater than 5m thick and typically be wider than 180m. Dredge mining must proceed continuously so all of the ore zones must be connected, unless a channel is to be constructed. In general dredge feed should have less than 14% average slimes content, making Congolone very amenable to this mining method. However, other options such as "Dozer Trap" or other dry mining methods have not been eliminated. • Previous economic evaluation, based on current Kenmare operational data and first principal estimates has shown that either method may reasonably assume to produce an economic project.
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.*	• Metallurgical recovery is based on test work of representative bulk samples undertaken by a respected industry metallurgical consultant and equipment supplier as part of the 1989 FS. It is assumed that these recoveries will be able to be replicated or bettered with the advance of 25 years in equipment development.
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.*	• Tailings sand from the Wet Concentrator plant are deposited immediately behind the dredges in separate paddocks. Slimes which may build up at times in the paddocks will be pumped to drying cells within the tailings areas. Mineral Separation Plant tailings are mixed in with the mine sand tailings. • The local vegetation environment generally consists of bare dune sparsely vegetated dune and minor scrubby coastal heathland. Where available, topsoil stripped from in front of the mining operations will be placed on the dry tailings sand behind the mine and then regrowth encouraged from the natural seed bank in the soil.

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.* • *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.*	• An assumed bulk density of 1.7 t/m3 is used for the block model. In 1989 two samples were tested that gave average density values of about 1.6 t/m3. However these samples were generally taken from the top few metres of the profile. A similar result was obtained for the Namalope deposit. • During the first year of production at Namalope, the tonnes mined by the dredges were reconciled to early geology models that used a density of 1.6. Both the measured feed tonnage and the HM production levels indicated that the ore density was higher than 1.6, and close to 1.7. Therefore, since that time the models have used an assumed density of 1.7 and there have been no further problems with tonnage estimation of the model. By analogy a similar result is expected when the full profile at Congolone is mined, therefore the standard density has been maintained.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Congolone deposit is divided into Inferred, Indicated and Measured resources on the basis of the drilling spacing and mineralogy density. Areas with drill spacing of 200m x 50m spacing and availability of mineralogical data are classified as Measured Resources; Indicated: 200m x 50m to 500m x 200m drilled hole spacing; and Inferred Resources: wider drill hole spacing: 500m x 200m. • In the view of the Competent Person, all of the relevant factors have been taken into account in making the classification. • The current classification reflects the view of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No specific audits have been undertaken on the Congolone Resource by outside parties. However, SRK of Cardiff has audited other Kenmare Resources and found no substantive issues with the techniques applied. • The 1988-89 drilling and assaying techniques were audited by MDL of Queensland and found to be of suitable standard.
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*	• Overall accuracy is expected to be good at the global level as there is generally very little variability in the grades. Overall the model is similar, but conservative, in average HM grade estimation when compared to drill data mean (2.6% v 3.1%) respectively, with mean slimes and oversize similarly slightly lower between the model and the drill data. • Mineralogy data is likewise very constant in terms of the mineral species contents and is not likely to change significantly. Ilmenite quality is also reasonably consistent. • The Company's experience of mining Unit 6 and 2 material at the Namalope orebody since 2013 has shown that the actual grade determined from feed samples is on average within +/- 1% of the predicted grade. No direct production data is available for

Criteria	JORC Code explanation	Commentary
	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 Congolone deposit, but this is seen as reasonable confirmation of the estimation techniques.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Not Applicable – Only Resources being reported in this release