

Australian Securities Exchange
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ANNUAL TORMIN MINERAL RESOURCE UPDATE

Mineral Commodities Ltd (ASX: MRC) ("the Company" or "MRC") provides the below in respect to its annual Tormin Mineral Sands Operation ("Tormin") resource audit.

A summary of all material information is set out below. Full details of the resource audit will be included in the Annual Report to shareholders in accordance with ASX Listing Rule 5.21.

Executive Chairman Mark Caruso said, *"There continues to be a strong correlation between the inferred resource and the material mined to date. The 2017 Mined Resource demonstrates a continued volumetric natural replenishment with in excess of 6.55MT having been mined to date against the initial indicated resource of 2.7MT. Furthermore, processing optimisations in 2017 have resulted in additional recovery of VHM which was formerly being returned to the beach as tailings and enhancing the resource grade.*

Notwithstanding the reduction in the inferred resource grade, the Tormin Mine remains a World Class Resource and the Company remains confident that in conjunction with the granting of the current Prospecting and Mine Extension Applications, the resource will underpin MRC operations into the future."

Updated Tormin Resource Table

Category	Resource Million Tonnes	Total* HM%	Ilmenite (%HM)	Zircon (%HM)	Rutile (%HM)	Garnet (%HM)
Indicated Resource – Dec 2013	2.70	49.4%	10.6%	3.4%	0.7%	25.3%
Inferred Resource – Dec 2014	2.70	38.14%	10.05%	2.21%	0.46%	25.22%
Inferred Resource – Dec 2015	2.70	28.01%	6.97%	1.56%	0.55%	18.54%
Inferred Resource – Dec 2016	1.80	28.08%	6.15%	1.65%	0.53%	18.99%
Material Mined 2017	2.05	27.57%	5.81%	1.10%	0.50%	19.40%
Inferred Resource – Dec 2017 5% THM cut-off	1.8	15.92%	2.72%	0.79%	0.43%	11.45%

* Includes other valuable heavy minerals e.g. Leucoxene and Magnetite



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The December 2017 inferred resource is based on the reasonable prospect for the economic extraction of the material, as has occurred over the past 4 years. Note that individual minerals are reported as a percentage of the total resource.

Mining has now been ongoing for four years and a total of 6.55 million tonnes of material has been processed. The tonnage processed is more than the original declared resource tonnage (2.7 Mt) which is indicative of the replenishment nature of the resource where resource blocks gets mined more than once per year.

The inferred resources tonnage remains at 1.8 million tonnes. Resource replenishment is occurring but at a rate that is slower than the mining rate. The Company is unable to report a replenishment grade or quantity under the 2012 JORC code. The Company continues to conduct grade reconciliation and sample grading on a daily basis as part of the mining operation to correlate between stated resource and actual resource in terms of quantity, grade and replenishment.

The resource grade has lowered and total heavy mineral content is now 15.92% at a cut-off grade of 5% Heavy Mineral ("HM").

The nature of the resource replenishment is typical of modern day beach placer deposits found along the West Coast of South Africa and the Southeastern Tamil Nadu coast of India.

- ENDS -

For enquires regarding this release please contact:

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**Competent Persons Statement**

The work in this report was prepared by Adriaan du Toit who is a Member of the Australian Institute of Mining and Metallurgy (AusIMM) who is an independent consultant to MRC. Mr du Toit is the Director and Principle Geologist of AEMCO Pty Ltd. He has over 26 years of exploration and mining experience in a variety of mineral deposits and styles. Mr du Toit has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined by the 2012 JORC Edition. The information from Mr du Toit was prepared under the JORC Code 2012 Edition. Mr du Toit consents to inclusion in the report of the matters based on this information in the form and context in which it appears.

The following table provides a summary of important assessment and reporting criteria used for the Tormin Mine in accordance with the Table 1 checklist in The Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition). Criteria in each section apply to all preceding and succeeding sections.

Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All field and lab results obtained and entered into the onsite database is verified by a supervisor. All results are double checked and verified. A standard is made on the site and sent to the laboratory with each batch of samples as a quality check. External calibration is done every 6 months. The current mine grade database for 2017 consist of 3,428 grades analyses suites for mined blocks and 119 grade control samples taken (50m x 50m grid) to verify remaining grades over the resource area during December 2017 to January 2018.
Site visits	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No site visits was undertaken for this resource audit although the Competent Person ("CP") did visit the mine on a number of occasions during 2016 and 2017 and is therefore familiar with the site and resource conditions.
Geological interpretation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Resource reconciliation from 2017 production data indicates that production grades were very close (average of 90%) to the resource grade. This is due to strict grade control procedures on the mine site. The mine also actively targets replenishment areas after high storm or tide surges that contains grades higher than the background resource grade. The variable, unstable and replenishment nature of the resource makes it impossible to classify the resource in any category higher than inferred. The overall trend in the grade mined from 2014 to the end of 2017 is negative as the original resource of 2.7 Mt has now been mined at least 3 times (total tonnage mined/processed of 6.55 Mt up to December 2017). Replenishment of the resource is still taking place but at a slower than mining rate. The bottom of the resource (being a placer deposit) is limited by the bedrock contact and coastal cliffs. The resource is open towards the ocean and surf zone.
Dimensions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The deposit has a strike length along the coastline within the mining lease of ~9000m and an average width from the cliff to within the surf zone of 123m. It is developed from surface to a maximum depth of 6.25m. The average resource thickness used to be 3.5m but is only about 2.6m currently resulting in a narrower dry beach zone during low and high tide.
Estimation and modelling techniques	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> The 2007 Steemson resource was interpreted using the data and results from 236 hand auger holes (402.3m) and 336 reverse circulation holes (1049.35m) drilled during 1989 to 1991 by Trans Hex. The original resource was signed off on 31 October 2011 by Mr Allen Maynard as the competent person. Mr Maynard is the director and principle geologist of Al Maynard & Associates Pty Ltd (Perth, WA). All original analyses were conducted by MINTEK using microscopic point counting, x-ray and scanning electron microprobe techniques. Bulk sampling done by MSR in 2005 were sent to SGS Johannesburg for grain counting. Bulk sampling was used to confirm the historical Trans Hex drill data and results. The bulk sample results were generally the same or better than the Trans Hex drilling results.

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	<p><i>variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></p> <ul style="list-style-type: none"> <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> <i>Any assumptions behind modelling of selective mining units.</i> <i>Any assumptions about correlation between variables.</i> <i>Description of how the geological interpretation was used to control the resource estimates.</i> <i>Discussion of basis for using or not using grade cutting or capping.</i> <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i> 	<ul style="list-style-type: none"> An analysis cut off of 0.1% zircon (MINTEK) was used and a resource cutoff grade of 0.3% zircon (Steemson, 2007). Original resource modelling was done using only Reverse Circulation ("RC") drilling results using a polygonal method. Resource blocks were constructed in the southern mining area so that they were orthogonal to the drill traverses. In the northern area, resource block are trapezoidal in plan view. Resource blocks were extended half way between drill lines and 10m from the drill holes in section. Current resource audit modelling were done using grade control samples taken from 119 test pits excavated during November to January 2018 to verify the remaining in-situ grade. Remaining volumes were based on surveying data done in January 2018 and observed mined depths in 541 mine or test pits from 2017. Recovery studies (three stage spiral circuit) by Multotec and Mintek in 2012 showed that an overall circuit can produce a concentrate of 11.66% Zircon into 60.8% of the feed mass with a Zircon recovery of 86.6%. Metallurgical sizing work was done in 2005 by Bateman Minerals Ltd. Mine production during 2017 achieved a 70.9% Zircon / Rutile recovery (22,111 tonnes from a head feed containing ~31,200 tonnes) – not taking into consideration processing losses. Reconciliation of 2017 mine production data (January to December 2017) with the December 2016 resource statement indicates a negligible difference of 0.51% in the total Heavy Mineral Sand ("HMS") grade (27.57% mined against 28.08% inferred).
Moisture	<ul style="list-style-type: none"> <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i> 	<ul style="list-style-type: none"> The resource tonnages are based on a dry basis. Most of the material is fully saturated when mined but are free draining.
Cut-off parameters	<ul style="list-style-type: none"> <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i> 	<ul style="list-style-type: none"> In the original Steemson resource, a 0.3% zircon cut-off grade was based on a 70% zircon recovery and a zircon price of US\$700/tonne. A 5% cut-off on total heavy mineral content was applied to the current resource.
Mining factors or assumptions	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> A definitive feasibility study on the deposit was done in 2006 by K'Enyuka and a Bankable Feasibility Study ("BFS") review by HBH consultants. The dynamic beach environment results in a cyclic depositional and erosion of the beach surface. Historical studies by Trans Hex have found a weighted average change over 9 months of up to ~9% loss or up to ~7% increase. This variability is also evident in the replenishment rate and grade of material observed. Mining is opencast using coffer type dams constructed with excavators. The pits generally only remain open during low tide, except where beach conditions allow larger more stable protection bunding to be constructed. Construction and mining methods are similar to that being used for beach diamond mining along the west coast of South Africa and Namibia. There is no stripping ratio as material is from surface onto bedrock. Natural replenishment of the resource is taking place as the open pits are filled with HMS material from the surf zone during the next high tide. Data indicates no correlation ($R^2=0.04$) between the original resource grade and the replenishment grade for the same mine block area. In general it appears that replenishment is erratic and unpredictable. In some areas zircon grade replenishment may only be 35%, while in other areas there are a 34% increase over and above the original zircon concentration. Replenishment appear to be mainly a function of time and the number of sea storm events. Given enough time between mining events the resources is currently still replenishing although the long term trend is a lowering in grade. The overall lowering of the beach surface (due to mining) have resulted in the faster movement of large volumes of material between the beach and the surface zone than before mining started. Over the past 4 years some mining blocks have now been mined up to 20 times or more.
Metallurgical factors or	<ul style="list-style-type: none"> <i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for</i> 	<ul style="list-style-type: none"> Extensive metallurgical testing has been done before the current processing plant that is now in operation were designed. These include the following studies:



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assumptions	<p>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.</p>	<ul style="list-style-type: none"> • 2002 -2003 Spiral test work and trials by Multotec Process Equipment (Pty) Ltd and Mintek – Johannesburg • 2003 Grain analysis by SGS Lakefield including Total Heavy Mineral ("THM"), Magnetic Separation and XRF analyses. Also ilmenite fraction analyses for smelter feedstock • 2003 Magnetic separation work by Diamantina laboratory in Perth • 2005 Bateman Minerals (Pty) Ltd electrostatic separation study • 2007 Processing and recovery tests by Titanatek Pty Ltd - Queensland • 2007 & 2009 Metallurgical testwork by AMMTEC Ltd – Australia • 2007 Metallurgical upgrade test work by Multotec Process Equipment Pty Ltd – Kempton Park, RSA. <p>Some of the studies done to improve the current recoveries and grades are:</p> <ul style="list-style-type: none"> • 2014 Processing improvement study by MSP Engineering • 2014 Garnet stripping testwork by R Simmons, N Sibishi & C Moetjie using a twin start Mineral Technology VHG, a Multotec SC20 & SC21 spirals • 2015 Magnetic Mineral Separation plant study by MSP Engineering • 2015 Integrated Mineral Separation Plant study by MSP Engineering
Environmental factors or assumptions	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The mine has an approved environmental management programme and has been subject to an environmental impact assessments and audits. The mine is currently busy with a Section 24G application to the Department of Mineral Resources (Republic of South Africa) to obtain environmental approval for a number of listed activities that have been constructed. • The mine has also applied for a Section 102 application to increase the mining area substantially. • There is a 10m stability buffer zone between the coastal cliffs and the beach where no mining is allowed. It would appear that the original resource model allowed for at least a 5m buffer zone. • All mining voids get naturally filled with beach sand material during high tide and there is therefore no rehabilitation liability in this regard. • Tailings get dumped onto the beach where it is distributed and settled along the coastline under natural wave and sea current action. There are no pollutants introduced with the tailings and the material is inert.
Bulk density	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The bulk density is based on an accurate calculation of the specific gravity ("SG") of the silica and heavy mineral sand content fraction of each sample. It is therefore not a fixed density and appears to fluctuate between 1.9 and 2.4 as per the formula below: • $SG = 1.5 + (0.009 \times HM)$. • A conservative SG of 1.9 was applied in the current resource modelling.
Classification	<ul style="list-style-type: none"> • The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> • The original resource classification was an indicated resource. • It was based on historical drilling and bulk sampling. • The original resources were signed off in 2011 by Mr Allen Maynard of Al Maynard & Associates Pty Ltd as the competent person on the resource statement. • A review of the resource during 2014 by Mr du Toit of AEMCO resulted in the resource being downgraded into an inferred category due to the impact from mining and replenishment. • Due to the removal of material from mining the current resources volumes have been downgraded to 1.8 million tonnes from the original 2.8 million tonnes resource.
Audits or reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> • The original indicated JORC resource of 2.7 million tonnes compares very favourably with the June 1992 Historical Foreign Estimate ("HFE") by A van den Westhuizen and PD Danchin that classified the Geelwal (Steenvas) and Karoo (Geelwal) area into 3,003,881 tonnes proven, 221,088 tonnes indicated and 891 528 tonnes inferred. A total HFE



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		<p>resource of 4.1 million tonnes @ 30% HM.</p> <ul style="list-style-type: none"> • Another HFE in 1998 by Trans Hex (Barnex – RBM) reported an estimated resource of 6 million tonnes @ 2.78% zircon. • Anglovaal reported in 1983 a resource of 11.8 million tonnes @ 8.4% zircon over 5m depth over the same area. • The last resource audit statement by du Toit in December 2016 has been reviewed and the resource will remain in the inferred category but the grades have been lowered as per the resource table. • Over the past three years 6.55 million tonnes of material have been mined. Some of this material has been replaced through beach replenishment.
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The Geelwal Karoo HMS deposit have been known and investigated over the past 57 years with the earliest detailed investigation by Trans Hex in 1989. The deposit was first documented in 1931 by Haughton. • The deposit is well understood due to being mined over the past 4 years, but because of the dynamic and replenishment nature of the environment, resource block grades are not stable and change over time. • The current JORC resource audit statement represents the lowest tonnage reported in comparison to HFE and appear to be conservative. Estimated resource grades appear to be realistic as previous production grades of HMS during 2017 was in line with that of the December 2016 inferred resource statement.