

# Mineral Commodities Ltd

ACN 008 478 653  
ABN 39 008 478 653

39-43 Murray Road North, Welshpool  
WA 6106, Australia  
PO Box 235, Welshpool DC  
WA 6986, Australia  
Telephone: 61 8 6253 1100  
Facsimile: 61 8 9258 3601  
Email: info@mncom.com.au  
Web: www.mineralcommodities.com

## Quarterly Activities Report For the period ended 30 September 2018



	Quarter ended	Quarter ended	Quarter ended	Year to Date	Year to Date
	30-Sep-18	30-Jun-18	30-Sep-17	30-Sep-18	30-Sep-17
<b>Mining</b>					
Tonnes (dmt)	<b>664,588</b>	549,588	514,910	<b>1,870,890</b>	1,527,367
Grade	<b>16.89%</b>	15.41%	28.35%	<b>17.02%</b>	27.18%
- Garnet	<b>12.68%</b>	11.17%	20.76%	<b>12.68%</b>	19.86%
- Ilmenite	<b>2.91%</b>	2.97%	5.61%	<b>3.01%</b>	5.27%
- Zircon	<b>0.53%</b>	0.49%	1.03%	<b>0.56%</b>	1.07%
- Rutile	<b>0.39%</b>	0.39%	0.49%	<b>0.39%</b>	0.51%
- Leucoxene	<b>0.38%</b>	0.39%	0.46%	<b>0.38%</b>	0.47%
<b>GSP / SCP Production &amp; Processing</b>					
Tonnes processed (gross dmt)	<b>199,119</b>	234,145	237,617	<b>682,785</b>	596,988
Tonnes produced (dmt)					
- Garnet concentrate (net) <sup>(1)</sup>	<b>75,621</b>	69,357	85,477	<b>205,630</b>	177,931
- Ilmenite concentrate (net) <sup>(1)</sup>	<b>22,435</b>	26,062	31,551	<b>89,998</b>	94,960
- Zircon/Rutile concentrate	<b>3,366</b>	4,685	5,496	<b>13,180</b>	17,170
zircon in concentrate	<b>67.59%</b>	67.86%	69.65%	<b>68.15%</b>	70.87%
rutile in concentrate	<b>17.09%</b>	17.50%	19.14%	<b>17.64%</b>	17.67%
<b>Sales (wmt)</b>					
- Garnet concentrate <sup>(2)</sup>	<b>53,288</b>	53,418	81,226	<b>159,993</b>	162,762
- Ilmenite concentrate	<b>51,750</b>	55,000	55,000	<b>106,750</b>	227,097
- Zircon/Rutile concentrate	<b>4,116</b>	4,648	5,264	<b>14,776</b>	18,308

### Highlights

- Record mining/PBC processing production achieved at Tormin.
- High grade gold mineralisation results from Doolgunna Project, WA. Further 6,000m of drilling planned.
- Munglinup testwork delivers positive variability results.

### Corporate and Cash

**Dividends:** Interim 2018 dividend of A\$0.006 per share (partially franked) declared, paid in October 2018.

**Cash:** Cash as at 30 September 2018 of US\$14.8 million, plus US\$7.1 million in trade and other receivables.

**Debt:** Borrowings as at 30 September 2018 of US\$2.5 million.

**Securities:** 421.1 million shares and 2.8 million performance rights as at 30 September 2018.

Note (1) - This summary table has been amended to report the production of final concentrates net of GSP concentrate re-feed tonnage. Full details of gross and net concentrate production are available in Appendix 4.

Note (2) - This summary table has been amended to report the sales of final garnet concentrate recognised in accordance with the adoption on 1 January 2018 of AASB 15 – Revenue from Contracts with Customers.

## **SAFETY, ENVIRONMENT AND COMMUNITY**

There were no Lost Time Injuries (“LTI”) during the quarter, with the Company continuing its exemplary performance in occupational health and safety, with only one LTI (sprained ankle) incurred for in excess of 2.5 million man hours worked since Tormin operations commenced in late 2013. Encouragingly there has been a continuing positive decline in the 12-month Total Reportable Injury Frequency Rate (“TRIFR”) with September being the twelfth month in succession to see a decline in the 12-month TRIFR.

The Company maintained its strong commitment to social development and continued with its various initiatives. These include learnerships, portable skills training, bursaries and a commitment to a new local economic development project for a new hostel building in the local community.

## **TORMIN – OPERATIONAL PERFORMANCE**

Mining and Processing continued to exceed budget expectations with record production metrics achieved across both operating disciplines.

Run of Mine (“ROM”) record production of 664,588 tonnes was achieved during the September 2018 quarter compared to the previous quarter’s production of 549,588 tonnes, with the increase due to completion of the garnet re-feed campaign this quarter, enabling the truck fleet to be redirected from rehandle to beach mining activities.

ROM ore grading 16.89% Valuable Heavy Minerals (“VHM”) was mined for the quarter, consisting of a garnet grade of 12.68%, ilmenite grade of 2.91%, zircon grade of 0.53% and rutile grade of 0.39%. The VHM grade improved against the previous quarter and was above the Annual Tormin Mineral Resource Update released in February 2018.

The mining cost per tonne of ore mined for the quarter of US\$2.75/t was below the prior quarter’s US\$3.62/t, due to the increase in mined tonnes, cost control improvements against the prior quarter and a weakening Rand over the quarter improving USD reported costs.

Acquisition and mobilisation of a new larger capacity haulage mining fleet, to be delivered in Q4 2018, which will translate into better operating availability and costs, and will allow access to distant beach areas that have been left unmined for some time.

Record processing throughputs were achieved in the quarter through a combination of high availability and plant performance. The record quarterly PBC / TSP throughput and recovery performance resulted in Total Heavy Mineral Concentrate (“HMC”) production of 168,652 tonnes at 50.2% contained valuable mineral in HMC, compared to the prior quarter’s 185,704 tonnes of HMC produced at 46.3% contained valuable mineral. As such, the contained valuable mineral in HMC production for the September quarter was aligned to the prior quarter. The PBCs operated at an average combined 316t/hr, significantly above the prior quarter’s 297t/hr, and combined with a plant availability of 96% was able to achieve a record total 661,272 tonnes of ROM ore feed processed.

Primary Beach Concentrator / Tailings Scavenger Plant (“PBC / TSP”) recoveries remained strong for the quarter, with recoveries of zircon at 92%, ilmenite and garnet at +88% and rutile at 78%.

Lower Garnet Stripping Plant / Secondary Concentration Plant ("GSP / SCP") feed of 199,119 tonnes during the quarter compared to the prior quarter's 234,145 tonnes reflects the drawdown completion early in the quarter of previously built up HMC inventory and available pre-GSP garnet re-feed concentrate inventory.

Zircon/rutile concentrate production for the September quarter was 3,366 tonnes produced against the previous quarter's 4,685 tonnes, due to lower GSP / SCP feed tonnes. Contained zircon of 67.59% and rutile of 17.09% was slightly below the prior quarter's contained zircon of 67.86% and contained rutile of 17.50%.

Net ilmenite concentrate production for the September quarter was 22,435 tonnes versus prior quarter's 26,062 tonnes, largely reflecting lower ilmenite concentrate production after the end of the high ilmenite content garnet concentrate re-feed campaign early in the quarter.

Net garnet concentrate production was 75,621 tonnes versus the prior quarter's 69,357 tonnes, and at a significantly higher +80% grade of contained garnet in concentrate. During the quarter, the Company re-treated the remaining 5,924 tonnes (previous quarter 52,554 tonnes) of previously stockpiled garnet concentrate to extract excess zircon, to produce a medium grade ilmenite concentrate and to upgrade the garnet concentrate grade.

## Tormin Costs

The following table summarises Tormin's unit costs and revenues:

Summary of Unit Costs & Revenues	Sep-18 Quarter	Jun-18 Quarter	Sep-17 Quarter	Sep-18 Year to Date	Sep-17 Year to Date
Unit production cash costs per tonne of gross final concentrate produced (US\$/dmt)	<b>51.01</b>	41.11	24.95	<b>38.65</b>	28.35
Unit production cash costs per tonne of net final concentrate produced (US\$/dmt)	<b>53.98</b>	52.61	36.13	<b>57.42</b>	46.23
Unit cost of goods sold per tonne of final concentrate sold (US\$/wmt) <sup>(1)</sup>	<b>105.68</b>	106.06 <sup>(2)</sup>	66.21	<b>114.99</b>	72.97
Unit revenue per tonne of final concentrate sold (US\$/wmt)	<b>153.86</b>	137.14 <sup>(2)</sup>	104.66	<b>155.67</b>	113.19
Revenue to Cost of Goods Sold Ratio	<b>1.46</b>	1.29 <sup>(2)</sup>	1.58	<b>1.35</b>	1.55

Note (1) - Cost of goods sold includes production cash costs, product handling, transport and selling costs, royalties, stock movements, and depreciation and amortisation. Excludes corporate and financing costs.

Note (2) - Unit cost of goods sold per tonne of final concentrate sold, unit revenue per tonne of final concentrate sold and the revenue to cost of goods sold ratio for the June quarter comparative have been revised due to the change in revenue recognition policy effected in the June 2018 financial statements that occurred post-release of the June 2018 quarterly report.

Cash costs per tonne of zircon/rutile, ilmenite and garnet concentrates produced for the quarter of US\$53.98/t for 101,422 net concentrate tonnes produced, was reasonably aligned to the prior quarter's US\$52.61/t for 100,104 net concentrate tonnes produced. The slight increase in unit cash production costs was attributable to increased diesel prices and maintenance costs in the quarter, partially offset by a weakening Rand lowering US Dollar reported costs.

Cost of goods sold (incorporating production cash costs, product handling, transport and selling costs, royalties, stock movements, and depreciation and amortisation) per tonne of concentrate sold was US\$105.68/t for the quarter, compared to prior quarter's US\$106.06/t, with the decreased unit costs reflecting predominately Rand based logistics costs and the benefits of the weakening Rand on USD reported costs.

## **Tormin Sales and Marketing**

Sales revenue for the September quarter was US\$16.9 million for a total 109,154 wet metric tonnes sold, above the prior quarter's revenue of US\$15.8 million for 112,936 wet metric tonnes sold. This increase in quarterly revenue was due to a further circa 10% improvement in the prices for the Company's zircon/rutile and ilmenite concentrates, and transport related revenue for the Company's September 2018 garnet concentrate shipment.

Tormin shipments/sales for the September quarter were 4,116 wet metric tonnes of zircon/rutile concentrate, 51,750 wet metric tonnes of ilmenite concentrate and 52,500 dry metric tonnes of garnet concentrate.

Unit revenue per tonne of final concentrate sold was US\$153.86/t for the quarter, compared to the prior quarter's US\$137.14/t, due to increased zircon/rutile and ilmenite concentrate prices achieved during the quarter.

Encouragingly, there was an improvement in the Revenue to Cost of Goods Sold Ratio. The September quarter result of 1.46 was markedly higher than the prior quarter's ratio of 1.29, with the increase in the Revenue to Cost of Goods Sold Ratio a consequence of higher revenue pricing and the weakening Rand lowering USD reported costs in the September quarter.

Tormin's zircon/rutile concentrate is the highest concentrate grade being shipped to China and continues to attract premium pricing. This continued strong demand for the Company's zircon/rutile concentrate is expected to continue, with the next quarter's production contracted at again increased quarter on quarter record prices.

Ilmenite concentrate pricing pressure has slightly abated due to the effects of previous aggressive purchasing and stockpiling of concentrate product by end customers. Demand is expected to remain constant, with a 55,000 tonne shipment expected to be contracted and shipped for this next quarter.

Overall revenue for Q4 2018 should once again exceed prior quarter's results, with the 2018 full year forecast revenue expected to be reasonably aligned to 2017's US\$62.6 million turnover. This estimate is subject to finalising contract execution and shipment on the above mentioned 55,000 tonne ilmenite concentrate shipment.

## **Tormin Work-in-Progress and Final Concentrate Inventory**

The Company is pleased to report that inventories of work-in-progress ("WIP") and final concentrate finished goods at 30 September 2018 remain strong and will further assist in underpinning future production performance, sales/shipments and operating cash generation.

These stock holdings are summarised as follows:

	WIP & Finished Goods at 30 Sept 2018	WIP & Finished Goods at 30 June 2018
Run of Mine Ore Stockpile (total tonnes - Tormin processing plant)	<b>30,330</b>	70,475
Heavy Mineral Concentrate Stockpile (total tonnes - Tormin processing plant)	<b>4,206</b>	13,954
Zircon / Rutile Concentrate Bagged (total tonnes - Tormin, Cape Town or in-transit)	<b>327</b>	924
Ilmenite Concentrate Stockpiles (total tonnes - Tormin, Saldanha Bay or in-transit)	<b>53,122</b>	68,450
Garnet Concentrate Stockpiles (total tonnes - Tormin, Saldanha Bay, in-transit or held on behalf of GMA)	<b>658,662</b>	664,233

Lower ROM stocks reflect an 8.3% increase in primary beach concentrator circuit infeed during the quarter. Operations are maximising primary beach concentrator circuit infeed in order to maximise HMC production.

Lower HMC stockpiles reflect lower HMC production in the September quarter and the completion of prior period drawdown of available HMC stockpiles and available pre-GSP garnet re-feed as supplementary feed for the GSP / SCP.

### Tormin Resource and Prospecting Activities

The annual Tormin Mineral Resource review was completed in February 2018. The full results were released to the market on 28 February 2018 and summarised as follows:

Category	Resource Million Tonnes	Total Heavy Mineral <sup>(1)</sup> (% in Resource)	Ilmenite (% in Resource)	Zircon (% in Resource)	Rutile (% in Resource)	Garnet (% in Resource)
<b>Indicated Resource – Dec 2013</b>	<b>2.70</b>	<b>49.40%</b>	<b>10.60%</b>	<b>3.40%</b>	<b>0.70%</b>	<b>25.30%</b>
Tonnes Mined – FY2014	1.07	53.83%	17.26%	4.76%	0.65%	31.16%
<b>Inferred Resource – Dec 2014</b>	<b>2.70</b>	<b>38.14%</b>	<b>10.05%</b>	<b>2.21%</b>	<b>0.46%</b>	<b>25.22%</b>
Tonnes Mined – FY2015	1.62	49.57%	16.15%	3.88%	0.60%	28.94%
<b>Inferred Resource – Dec 2015</b>	<b>2.70</b>	<b>28.01%</b>	<b>6.97%</b>	<b>1.56%</b>	<b>0.55%</b>	<b>18.54%</b>

Category	Resource Million Tonnes	Total Heavy Mineral <sup>(1)</sup> (% in Resource)	Ilmenite (% in Resource)	Zircon (% in Resource)	Rutile (% in Resource)	Garnet (% in Resource)
Tonnes Mined – FY2016	1.81	45.97%	12.97%	2.78%	0.61%	29.21%
<b>Inferred Resource – Dec 2016</b>	<b>1.80</b>	<b>28.08%</b>	<b>6.15%</b>	<b>1.65%</b>	<b>0.53%</b>	<b>18.99%</b>
Tonnes Mined – FY2017	2.05	27.57%	5.81%	1.10%	0.50%	19.40%
<b>Inferred Resource – Dec 2017</b>	<b>1.80<sup>(2)</sup></b>	<b>15.92%</b>	<b>2.72%</b>	<b>0.79%</b>	<b>0.43%</b>	<b>11.45%</b>
Tonnes Mined – March Qtr 2018	0.66	18.66%	3.14%	0.64%	0.40%	13.94%
Tonnes Mined – June Quarter 2018	0.55	15.51%	2.97%	0.49%	0.39%	11.17%
Tonnes Mined – Sept Quarter 2018	0.66	16.98%	2.91%	0.53%	0.39%	12.68%
<b>Tonnes Mined – Sept YTD 2018</b>	<b>1.87</b>	<b>17.14%</b>	<b>3.01%</b>	<b>0.56%</b>	<b>0.39%</b>	<b>12.68%</b>

(1) Includes other valuable heavy minerals e.g. leucoxene and magnetite

(2) 5% Heavy Mineral ("HM") cut-off grade used

Mining of 664,588 tonnes during the September 2018 quarter was achieved at a total Heavy Mineral ("HM") grade of 16.98%, which exceeded the reported Mineral Resource grade of 15.92% HM.

Since commencement of operations at Tormin, the Company has mined in excess of 8.4 million tonnes. The tonnage mined is materially more than the original declared resource tonnage (2.7 million tonnes), which is indicative of the significant replenishment nature of the deposit where resource blocks are mined more than once per year.

Resource replenishment is continuing but at a rate slower than the mining rate. The Company is therefore unable to report a replenishment grade or quantity under the JORC Code (2012), however grade reconciliation and sample grading continues on a daily basis to correlate between the reported Mineral Resource and actual resource in terms of quantity, grade and replenishment.

During the June 2018 quarter, consultation occurred via public participation with the Interested and Affected Parties ("I&APs") on the Section 24G Application for minor environmental incursions. The final Section 24G Application document was submitted to the Department of Mineral Resources ("DMR") for assessment in July 2018.

During the September 2018 quarter the Company lodged its financial performance bond for the Klipvley Karookop prospecting right covering the farming area to the north of the current Tormin operations. The final and full granting of the De Punt prospecting right is under Appeal and a decision is expected in the December 2018 quarter.

As previously reported, during the June 2018 quarter, the Company lodged its revised Section 102 Extended Mining Rights Application ("Section 102 Application") for the beach sands north of the

current mining rights and for the inland strand deposits on the Company owned freehold farm land, in addition to the construction of a Mineral Separation Plant (MSP) to produce final products from the Company's concentrates. The Acceptance of the Scoping Study in June 2018 by the DMR allowed work to continue in the September 2018 quarter on the application process. Works included the preparation and submission of the full Mining Work Program ("MWP") detailing a minimum 10 year mining right on the expanded area covered under the Section 102 Application. The finalisation of the draft Environmental Impact Assessment ("EIA") report for the Section 102 Application progressed during the quarter and was released for public comment in September 2018. The Company will now proceed to a public participation process in early October 2018 with the final submission of the EIA report with all public comments to be completed in November 2018. The DMR then has 107 days to hand down a final decision. The Company expects a final decision on the Section 102 Application in early to mid 2019.

In addition, work was also undertaken on the submission for renewing the current Tormin Mining Rights Renewal Application, with the renewal applications and the MWP for both the current Mining Rights 162 and 163 having been submitted in August 2018.

## **BUSINESS DEVELOPMENT**

### **Munglinup Graphite Project**

MRC Graphite Pty Ltd ("MRCG"), a wholly owned subsidiary of the Company, continued to progress the Munglinup Graphite Project during the quarter.

During the previous quarter the Pre-Feasibility Study ("PFS") was completed, demonstrating the project's potential as a robust, low capex and low opex operation. The PFS highlighted:

- A post-tax project NPV of AU\$139 million;
- A post-tax project IRR of 48%;
- Average annual EBIT of A\$42.4 million; and
- Net cash flow of A\$216.5 million.

Full results were released to the ASX on 30 May 2018. An Ore Reserve of 3.4 million tonnes at an average grade of 15.9% Total Graphitic Carbon ("TGC") was declared, comprising a Proved Reserve of 1.4 million tonnes at 15.8% TGC and a Probable Reserve of 2.0 million tonnes at 16.0% TGC. The expected minimum mine life is nine years with an average annual production of 54,800t of graphite in concentrate.

Leading on from the PFS that confirmed the Munglinup Graphite Project as robust and economically justifiable even at very low pricing scenarios, a Definitive Feasibility Study ("DFS") was commenced. Battery Limits were engaged to manage the DFS with completion scheduled for early 2019.

The Company also undertook its Phase 2 Variability Testwork program at Munglinup during the quarter, with results, as released on 6 September 2018, confirming high grade concentrate is produced in all variability tests and concentrate flake size distribution aligned to geological modelling, with flake size increasing with depth and towards the granitic intrusion.

A total of 20 diamond drill core samples have undergone size by assay analysis, with a subset of 15 samples taken through laboratory scale testwork at ALS Metallurgy Pty Ltd ("ALS") using the standard flowsheet selected in the PFS, in addition to 2 composite samples and a bulk near-surface sample. The samples were sourced from diamond drill core from the Halberts Main and Halberts South deposits.

High-grade final concentrates were produced in all cases with a TGC content of 95.0% to 98.3% after 5 stages of cleaning by flotation. The results highlight that the flowsheet consistently produces high-grade concentrates from feed grades ranging from 6.3% to 36.6% TGC. The potential to further optimise the flowsheet is currently under evaluation.

The Phase 2 Metallurgical testwork program has shown that:

- the Munglinup flowsheet is resilient with respect to concentrate grades;
- has identified blending as the preferred strategy for addressing different ore types; and
- highlighted opportunities for further improvements on project economics through optimising the mining schedule to produce coarser concentrates.

Testwork is continuing to generate additional marketing samples and investigate the potential for further improvements in concentrate flake size distributions and grades.

A follow-up infill drilling program that was developed and scheduled for commencement in the September 2018 quarter was deferred due to other drilling priorities. This program will now be undertaken early next year.

A hydrogeological and geotechnical drilling program was commenced at the end of the quarter, targeting the proposed pits (geotechnical and hydrogeological) and the proposed plant site and tailings storage facility (geotechnical). This program is scheduled for completion in October with pump testing to follow.

Significant environmental studies were completed during the quarter including flora, fauna, aquatics, stygofauna and troglodytes, short range endemics, dieback and targeted underground orchid surveys. A specific flora spring survey was also commenced during the quarter with the final report expected at the end of the year.

Extensive cultural heritage surveys were conducted with the assistance of the Esperance Tjaltjraak Native Title Aboriginal Corporation and archaeologists over the mining lease. A heritage management plan has been developed and is scheduled to be finalised before the end of the year.

The Company remains on schedule to deliver the DFS in the first quarter of 2019.

## **Xolobeni**

The South African Mining Minister, Mr Gwede Mantashe, announced in July 2018 a further two year extension to the existing Moratorium, which was placed on the Xolobeni Project area by former Minister Zwane.

The Minister attended the Xolobeni village on 22 September 2018 to engage with the community about the Xolobeni Project. In what can only be seen as a positive initiative, the Minister has engaged



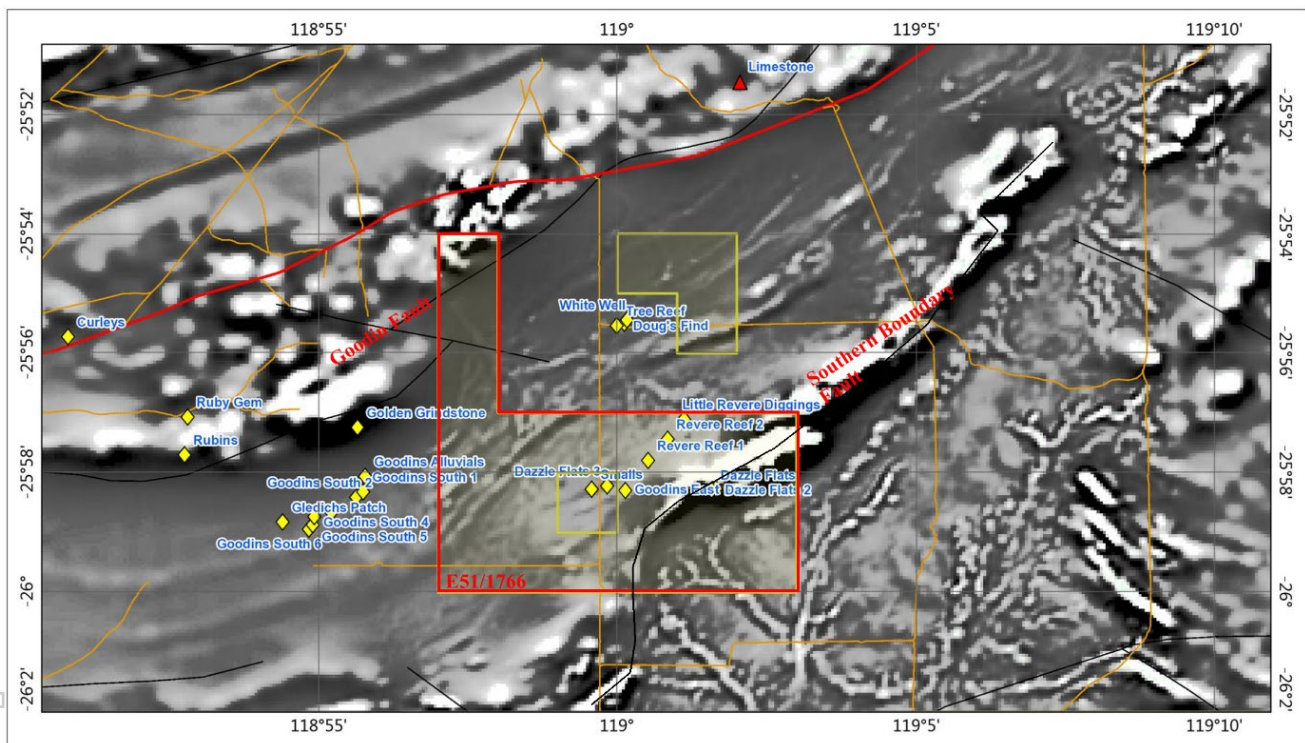
publicly with all interested and affected stakeholders to seek resolution of the longstanding issues surrounding the project between pro- and anti-mining groups. The Company is encouraged by the proactive engagement by the Minister and will continue to monitor the situation. Notwithstanding the extensive media coverage and publicity on the Minister's initiative, this should not be construed or inferred as any approval or endorsement of the project development.

## Australian Exploration

### Doolgunna Gold and Copper Prospect

During the September 2018 quarter, the Company focused its exploration work on the Doolgunna Gold and Copper Prospect in the Mid-West Region of Western Australia.

The Doolgunna project, in which MRC has the right to earn up to a 90% interest in granted Exploration Licence E51/1766, is located along the interpreted northern extension of the Andy Well greenstone shear system in proximity to the prospective ENE-trending Goodin Fault zone.



**Location map of the Doolgunna prospect tenements with gold reef occurrences**

The Company announced on 5 September 2018 outstanding assay results from its recently completed bulk sampling and RC drilling program, with 17 g/t Au to 326 g/t Au calculated gold grades from bulk sample testing over a 900m section of exposed quartz reef. These initial bulk sample results and first-pass drilling campaign confirm MRC's belief that the Revere Reef system is a priority target for the discovery of a significant high-grade gold deposit.

A 41-hole RC drilling program for 1,500m was completed during the quarter and was focused along a NE-trending alteration system within the Doolgunna Formation which hosts the Revere Reef system. The holes intersected several narrow, low grade intervals of gold mineralisation based on the assay results received from conventional 50g fire assay analysis. The lower than expected assay results most

likely reflect a high nugget gold distribution, consistent with the very coarse, visible gold observed in rock chip samples of the reef. As a result, the future analysis of drill samples will adopt methods considered more appropriate for coarse gold detection.

To further investigate the potential of a high nugget gold distribution, 5 bulk samples were collected from 3 shallow prospecting pits located along a 900m section of the Revere Reef system. After some on site processing the final concentrates of 3 samples were submitted to the Perth Mint for grade determination. All bulk samples returned highly encouraging calculated gold results as summarised in the below table.

#### Bulk sampling grade results

Area	Sample (kg)	Recovered Gold (Perth Mint - grams)	Au Grade (g/t)
Main reef contact zone - not quartz, Central Pit	293.4	95.58	325.77
Main quartz reef in Central Pit	271.6	82.25	302.84
South Pit – near surface sample	258.5	4.44	17.18

A follow-up 6,000m RC drilling and trenching program was commenced in September 2018 and is scheduled to be completed in the December 2018 quarter, targeted to determine the extent and controls of the reef system and associated gold mineralisation. The program will concentrate on trying to deliver a measured and indicated resource on previously identified high-grade gold mineralisation zones. The forthcoming drilling and trenching program will allow MRC to fully investigate the near surface potential of this identified reef discovery.

#### Iran

Continued uncertainty regarding the United States of America's unilateral withdrawal from the Joint Comprehensive Plan of Action ("JCPOA") on Iran has provided an obstacle to expand the Company's footprint in Iran. Management is actively monitoring the situation and remains committed to extracting value from its first mover advantage in Iran.

### **CORPORATE**

#### **Cash and Debt**

At 30 September 2018 the Company had US\$14.8 million in cash on hand, an increase from the 30 June 2018 cash balance of US\$10.2 million. Trade and other receivables at 30 September 2018 decreased to US\$7.1 million from US\$10.4 million last quarter.

The increase in cash held at the end of the September quarter reflects cash receipts from a 51,750 tonne ilmenite concentrate shipment in August 2018, improved product pricing and the depreciation of the Rand in the September 2018 quarter lowering US dollar reported operating costs. The operating cash flows generated more than fully funded the Company's significant project development and

exploration program expenditures incurred, and fully support the Company's pending October 2018 interim dividend payment.

On 30 August 2018 the Company announced a partially franked interim dividend of 0.6 Australian cent per share, which was paid on 12 October 2018. This interim dividend for 2018 is aligned to the 1.2 Australian cents per share dividends paid for each of the last two years, and the Company expects to continue with future dividend payments within the context of its overall capital management program.

Borrowings as at 30 September 2018 were US\$2.5 million, a reduction of US\$0.5 million from the 30 June 2018 borrowings of US\$3.0 million.

The Company expects continued strong positive operating cash generation in the forthcoming quarter, as it continues to realise the value of finished goods inventories and secured offtake of its concentrate products at stable or improved prices, coupled with a strong USD lowering Rand and Australian denominated costs.

Cash on hand is expected to increase from the USD\$14.8 million at 30 September 2018 to circa US\$20 million by 31 December 2018, with the continued operating cash generation more than funding the October 2018 dividend payment, and the December 2018 quarter's loan repayments and capital investment expenditures for the current project development and exploration programs. This estimate is subject to finalising contract execution and shipment during the December 2018 quarter on a pending 55,000 tonne ilmenite concentrate shipment.

## Outlook

Concentrate production guidance for the full 2018 year has been revised for zircon/ rutile concentrate production, allowing for a conservative expected decline in mined zircon and rutile grades for the forthcoming quarter. All other guidance remains in line with expectations.

Final Concentrate Production	FY2018 Production Current Guidance Range	FY2018 Production Prior Guidance Range
Zircon / Rutile Concentrate (dmt)	<b>16,000 – 18,000</b>	20,000 – 22,000
Ilmenite Concentrate (dmt)	<b>100,000 – 120,000</b>	100,000 – 120,000
Garnet Concentrate – Gross (dmt)	<b>400,000 – 430,000</b>	400,000 – 430,000
Garnet Concentrate – Net of Refeed (dmt)	<b>250,000 - 280,000</b>	250,000 - 280,000

Sales / shipment guidance for the full 2018 year has also been revised during the quarter for the abovementioned pending ilmenite concentrate shipment and the expected downgrade in zircon / rutile concentrate production.

Final Concentrate Sales	FY2018 Sales Current Guidance Range	FY2018 Sales Prior Guidance Range
Zircon/Rutile Concentrate (dmt)	<b>17,000 – 19,000</b>	20,000 – 22,000
Ilmenite Concentrate (dmt)	<b>160,000 – 170,000 <sup>(1)</sup></b>	100,000 – 120,000
Garnet Concentrate (dmt)	<b>210,219</b>	210,000

(1) Subject to finalising contract execution and shipment on a pending 55,000 tonne ilmenite concentrate shipment.

Tormin operations will continue to focus on optimising the mining and processing value chain to deliver results in line with the September quarter's figures. In addition, a concerted effort will be made to secure a definable deliverable date to the Company's current pending Section 102 Application and Prospecting Right applications.

Management will drive the completion of the Feasibility Study for the Munglinup Graphite Project and expedite the requisite studies and regulatory approvals to fast track this project to development.

The advancement of the permitting process in South Africa for the expansion of the Tormin mining operation combined with the progress of the tier 1 jurisdiction Munglinup Graphite Project and the success of the initial drilling at Doolgunna Gold Prospects in Western Australia, sees the Company well positioned in the coming quarters to deliver on its stated expansion and diversification business development strategy.

### **Securities on Issue**

Issued securities at the date of this report comprise:

- 421,091,571 fully paid ordinary shares listed on the ASX.
- 300,000 Performance Rights exercisable on or before 31 May 2021, vesting at a rate of 150,000 per annum on 31 May 2019 to 2020 inclusive, and the closing share price reaching A\$0.20 and remaining at or above A\$0.20 for a period of 5 consecutive trading days.
- 500,000 vested Performance Rights exercisable on or before 31 May 2020.
- 1,000,000 Performance Rights exercisable on or before 1 October 2021, vesting on the 30-day Volume Weighted Average Price of the Company's Shares trading on the ASX being A\$0.20 post issue, and 333,333 vesting on 1 October 2018, 333,333 vesting on 1 October 2019 and 333,334 vesting on 1 October 2020.
- 1,000,000 Performance Rights exercisable on or before 31 May 2021, vesting on the closing share price reaching A\$0.20 and remaining at or above A\$0.20 for a period of 5 consecutive days, 500,000 vesting on 25 June 2019 and 500,000 vesting on 25 June 2020, vesting upon satisfaction of performance criteria based on Key Result Areas and Key Performance Indicators applicable.
- 1,000,000 Performance Rights exercisable on or before 30 September 2021, vesting on the closing share price reaching A\$0.20 and remaining at or above A\$0.20 for a period of 5 consecutive days, 500,000 vesting on 11 October 2019 and 500,000 vesting on 11 October 2020, vesting upon satisfaction of performance criteria based on Key Result Areas and Key Performance Indicators applicable.

## Terms and Explanations

<b>AIG</b>	Australian Institute of Geosciences
<b>ASX</b>	Australian Securities Exchange
<b>AusIMM</b>	Australian Institute of Mining and Metallurgy
<b>DFS</b>	Definitive Feasibility Study
<b>DMR</b>	Department of Mineral Resources
<b>DMT</b>	Dry Metric Tonne
<b>EBIT</b>	Earnings before Interest and Taxes
<b>GMA</b>	GMA Group
<b>GSP</b>	Garnet Stripping Plant
<b>HM</b>	Heavy Mineral
<b>HMC</b>	Heavy Mineral Concentrate
<b>I&amp;AP</b>	Interested and Affected Parties
<b>IRR</b>	Internal Rate of Return
<b>JORC</b>	Joint Ore Reserves Committee
<b>LTI</b>	Lost Time Injury
<b>MRCG</b>	MRC Graphite Pty Ltd
<b>NPV</b>	Net Present Value
<b>PBC</b>	Primary Beach Concentrator
<b>PFS</b>	Pre-Feasibility Study
<b>RC</b>	Reverse Circulation
<b>ROM</b>	Run of Mine
<b>SCP</b>	Secondary Concentrator Plant
<b>TGC</b>	Total Graphitic Carbon
<b>TRIFR</b>	Total Recordable Injury Frequency Rate
<b>TSP</b>	Tailings Scavenger Plant
<b>VAT</b>	Value Added Tax
<b>VHM</b>	Valuable Heavy Mineral
<b>WIP</b>	Work in Progress
<b>WMT</b>	Wet Metric Tonne

For personal use only

## APPENDIX 1 – RESOURCE STATEMENT

### Resources - Mineral Sands

The **Tormin** and **Xolobeni** Mineral Resources as at 31 December 2017 are as follows:-

Project	Category	Resource Million Tonnes	Total Heavy Mineral %	Ilmenite (% in HM)	Zircon (% in HM)	Rutile (% in HM)	Garnet (% in HM)
<b>Tormin</b>	<b>Inferred</b>	<b>1.80</b>	<b>15.92%</b>	<b>2.72%</b>	<b>0.79%</b>	<b>0.43%</b>	<b>11.45%</b>
Xolobeni	Measured	224	5.7%	54.5%			
	Indicated	104	4.1%	53.7%			
	Inferred	18	2.3%	69.6%			
<b>Total Xolobeni</b>		<b>346.0</b>	<b>5.0%</b>	<b>54.0%</b>			
<b>Total MRC</b>		<b>347.8</b>	<b>5.3%</b>	<b>53.8%</b>			

Note: Individual minerals reported as a percentage of the total heavy mineral concentrates.

The Mineral Resource estimate previously reported under JORC Code (2004) for Tormin is re-presented with updated disclosure under JORC Code (2012). The Tormin Mineral Resource is based on mined material reconciliation as at 31 December 2017.

### Resources - Graphite

On 11 September 2017, the Company announced that it acquired a 51% interest in the advanced, high grade Munglinup Graphite Project.

In 2016 the Munglinup Graphite Project Mineral Resource was updated by AEMCO Pty Ltd for Gold Terrace Pty Ltd in accordance with the JORC Code (2012). The Indicated and Measured Resource is 3.625 million tonnes at 15.3% Total Graphitic Carbon ("TGC") using a lower cut-off grade of 10% or 1.6 million tonnes at 18.7% TGC using a cut-off grade of 15%.

	Resource (Million Tonnes)	Grade (Total Graphitic Content %)	Contained Graphite (Million Tonnes)
<b>Halberts Main Zone</b>			
Measured	1.710	14.1%	0.241
Indicated	1.367	15.3%	0.209
<b>Other Areas</b>			
Indicated	0.548	19.1%	0.104
<b>Total</b>	<b>3.625</b>	<b>15.3%</b>	<b>0.554</b>

\*Some discrepancies in totals may occur due to rounding of numbers.

## Reserves - Graphite

On 30 May 2018, the Company announced the results of a Pre-Feasibility Study on the Munglinup Graphite Project.

As a result of this study, a maiden Proved and Probable Reserve of 3.44 million tonnes at 15.9% TGC was reported using a variable cut-off grade.

	Ore Reserve (Million Tonnes)	Grade (Total Graphitic Content %)	Contained Graphite (Million Tonnes)
<b>Proved</b>	1.41	15.8%	0.222
<b>Probable</b>	2.03	16.0%	0.326
<b>Total</b>	<b>3.44</b>	<b>15.9%</b>	<b>0.548</b>

\*Some discrepancies in totals may occur due to rounding of numbers.

## APPENDIX 2 – LISTING OF RIGHTS AND TENEMENTS

The following information is provided pursuant to ASX Listing Rules 5.3.3:

Country	Location	Right / Tenement Number	Type of Right / Tenement	Status	Change since last Quarter	Beneficial Interest
South Africa	Tormin	(WC)30/5/1/1/2/10261 PR	Prospecting	Under Application	NA	100%
	Tormin	(WC) 30/5/1/1/2/10262 PR	Prospecting	Under Application	NA	100%
	Tormin	(WC)30/5/1/2/2/163 MR	Mining	Approved	N/A	100%
	Tormin	(WC) 30/5/1/1/2/10259 PR	Prospecting	Under Application	N/A	100%
	Tormin	(WC)30/5/1/2/2/162 MR	Mining	Approved	N/A	100%
	Tormin	(WC)30/5/1/1/2/10036 PR	Prospecting	Approved	N/A	100%
	Tormin	(WC)30/5/1/1/2/10199 PR	Prospecting	Approved	N/A	100%
	Tormin	(WC)30/5/1/1/2/10226 PR	Prospecting	Closed	100%	100%
	Tormin	(WC)30/5/1/1/2/10229 PR	Prospecting	Closed	100%	100%
	Tormin	(WC)30/5/1/1/2/10240 PR	Prospecting	Under Application	100%	100%
South Africa	Xolobeni	EC30/5/1/1/2/6 PR	Prospecting	Closed – Converting to Mining Right	N/A	100%
	Xolobeni - Kwanyana block	EC30/5/1/1/2/10025 PR	Prospecting	Subject to moratorium - Converting to Mining Right	N/A	100%
	Xolobeni	EC30/5/1/1/2/10025 MR	Mining	Subject to moratorium - Under Application	100%	100%
Australia	Munglinup	M74/245	Mining	Granted, In Transfer	51%	51% (Option to acquire 90%)
	Munglinup	E74/505	Exploration	Granted, In Transfer	51%	51% (Option to acquire 90%)
	Munglinup	E74/565	Exploration	Granted	100%	100%
	Yandeyarra	E47/3884	Exploration	Granted	100%	100%
	Yandeyarra	E47/3885	Exploration	Granted	100%	100%
	Yandeyarra	E47/3916	Exploration	Under Application	100%	100%
	Yandeyarra	E45/5109	Exploration	Granted	100%	100%



Country	Location	Right / Tenement Number	Type of Right / Tenement	Status	Change since last Quarter	Beneficial Interest
	Doolgunna	E51/1766	Exploration	Granted	0%	0% (Option to earn-in to 90%)
	Doolgunna	E51/1770	Exploration	Granted		0% (Option to earn-in to 90%)
	Doolgunna	P51/2787	Prospecting	Granted		0% (Option to earn-in to 90%)
	Doolgunna	P51/2787	Prospecting	Granted		0% (Option to earn-in to 90%)
	Cave Hill	E51/1867	Exploration	Under Application	100%	100%
	Glen Florrie	E08/2963	Exploration	Under Application	100%	100%
	Collie-Harvey	M70/888	Mining	Granted, In Transfer	0%	0% (Option to earn-in to 100%)

For personal use only

### APPENDIX 3 – COMPETENT PERSONS STATEMENT

The information in this announcement which relates to Exploration Results, Mineral Resources or Ore Reserves for Xolobeni is based on information compiled by Mr Allen Maynard, who is a Member of the Australian Institute of Geosciences ("AIG"), a Corporate Member of the Australasian Institute of Mining & Metallurgy ("AusIMM") and independent consultant to the Company. Mr Maynard is the Director and Principal Geologist of Al Maynard & Associates Pty Ltd and has over 37 years' of exploration and mining experience in a variety of mineral deposit styles. Mr Maynard has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves ("JORC Code (2004)"). This information was prepared and first disclosed under the JORC Code (2004). It has not been updated since to comply with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC Code (2012)") on the basis that the information has not materially changed since it was last reported. Mr Maynard consents to inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this announcement which relates to Exploration Results, Mineral Resources or Ore Reserves for Tormin is based on information compiled by Mr Adriaan du Toit, who is a Member of the AusIMM and was previously an independent consultant to the Company. Mr du Toit is the Director and Principal Geologist of AEMCO Pty Ltd and 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 which he is undertaking to qualify as a Competent Person as defined in the JORC Code (2012). The information from Mr du Toit was prepared under the JORC Code (2012). 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 information in this announcement which relates to Mineral Resources for Munglinup is based on information compiled by Mr Adriaan du Toit who is a member of the AusIMM and an independent consultant to Gold Terrace Pty Ltd. Mr du Toit is the Director and Principal Geologist of AEMCO Pty Ltd and 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 JORC Code (2012). The information from Mr du Toit was prepared under the JORC Code (2012). 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 information in this announcement which relates to the Ore Reserve for Munglinup is based on information compiled by Mr Daniel Hastings, who is a Member of the AusIMM. Mr Hastings is an employee of Hastings Bell Pty Ltd and a consultant to the Company. Mr Hastings has sufficient experience relevant to the type of deposit under consideration to qualify as a Competent Person as defined by the JORC Code (2012). Mr Hastings consents to the inclusion in the report of the matters based on the reviewed information in the form and context in which it appears.

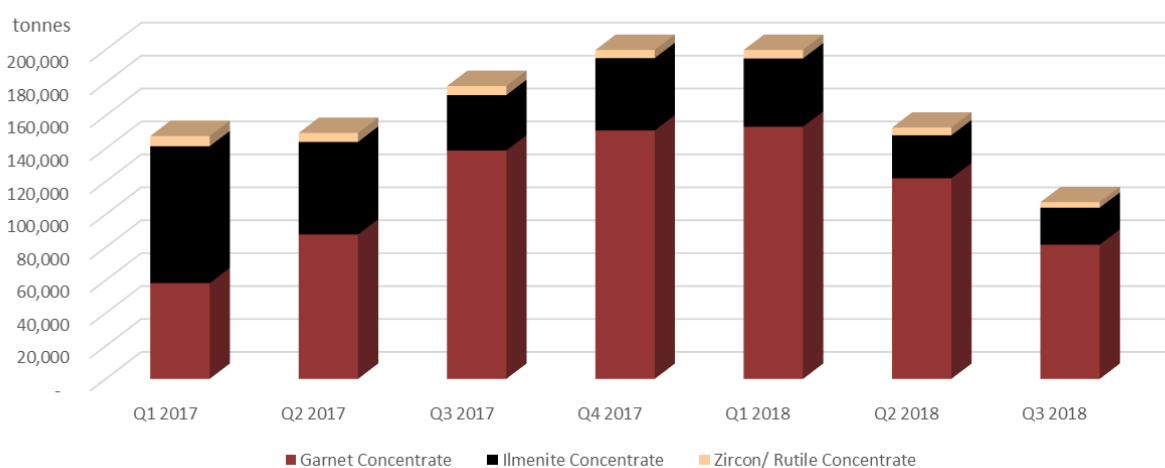
The information in this announcement that relates to metallurgy, the process plant and infrastructure design for Munghlinup is based on information compiled and reviewed by Mr David Pass, who is a Member of the AusIMM. Mr Pass is an employee of Battery Limits Pty Ltd. Mr Pass has sufficient experience relevant to process plant and infrastructure design thereof to qualify as a Competent Person as defined by the JORC Code (2012). Mr Pass consents to the inclusion in the report of the matters based on the reviewed information in the form and context in which it appears.

For personal use only

## APPENDIX 4 – PRODUCTION SUMMARY

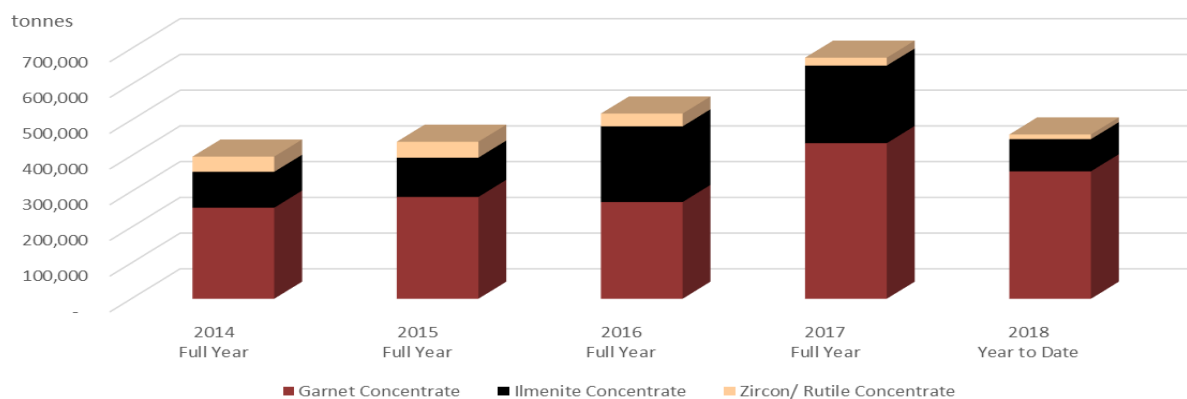
Gross, Quarter	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018
Garnet Concentrate (t)	58,160	87,728	138,775	150,926	153,205	121,910	81,545
Ilmenite Concentrate (t)	83,171	56,253	33,642	43,953	41,501	26,062	22,435
Zircon/ Rutile Concentrate (t)	6,212	5,462	5,496	4,941	5,129	4,685	3,366

### Gross Quarterly Production Summary



Gross, Year	2014 Full Year	2015 Full Year	2016 Full Year	2017 Full Year	2018 Year to Date
Garnet Concentrate (t)	254,816	284,990	270,802	435,590	356,661
Ilmenite Concentrate (t)	100,437	109,959	211,704	217,019	89,998
Zircon/ Rutile Concentrate (t)	42,668	44,489	35,813	22,111	13,180

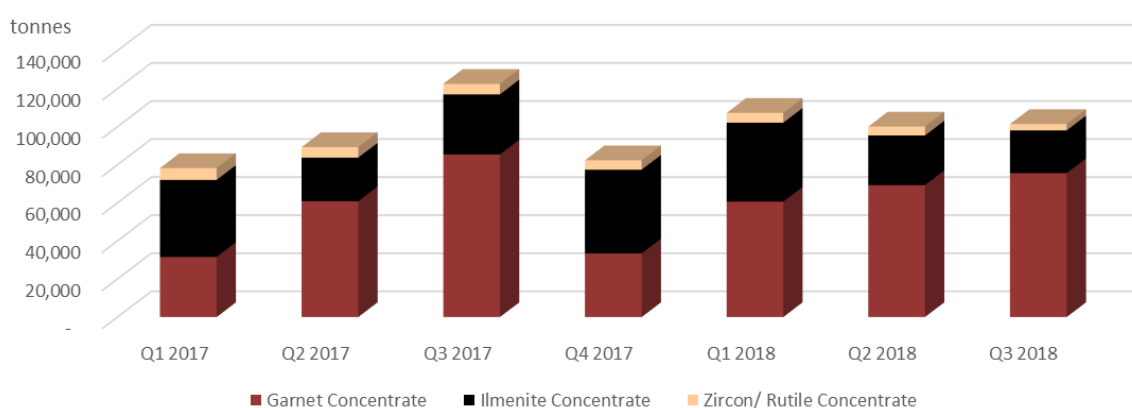
### Gross Annual Production Summary



## APPENDIX 4 – PRODUCTION SUMMARY (Continued)

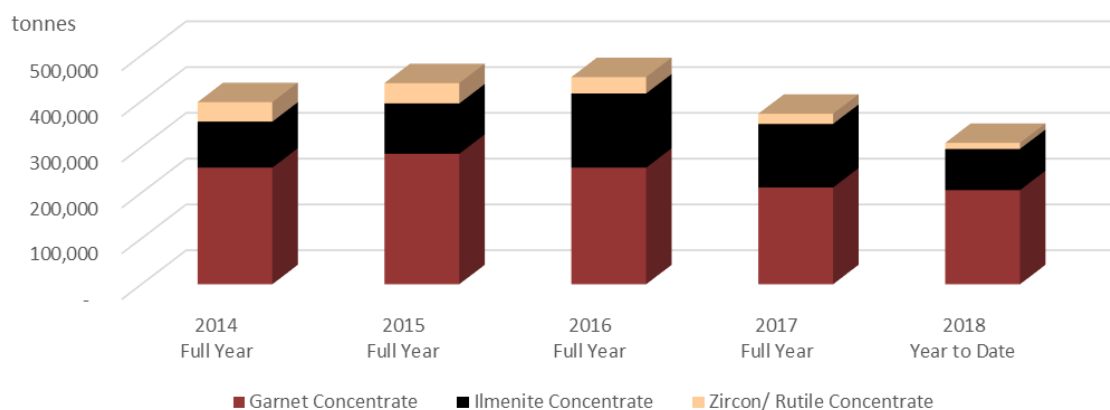
Net, Quarter	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018
Garnet Concentrate (t)	31,586	60,867	85,477	33,464	60,652	69,357	75,621
Ilmenite Concentrate (t)	40,468	22,941	31,551	43,953	41,501	26,062	22,435
Zircon/ Rutile Concentrate (t)	6,212	5,462	5,496	4,941	5,129	4,685	3,366

### Net Quarterly Production Summary



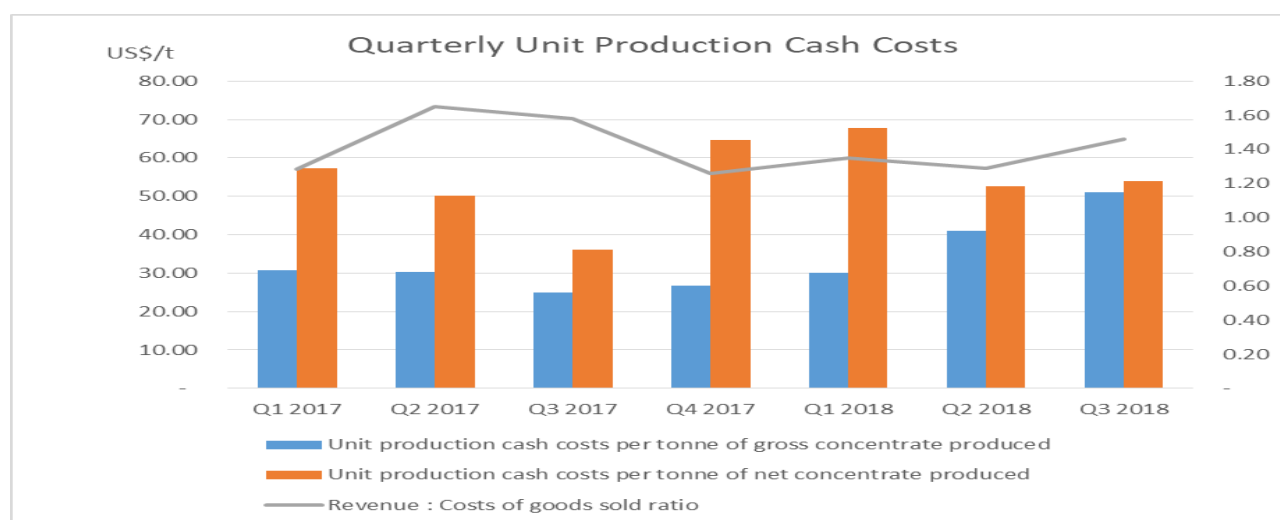
Net, Year	2014 Full Year	2015 Full Year	2016 Full Year	2017 Full Year	2018 Year to Date
Garnet Concentrate (t)	254,816	284,990	254,693	211,394	205,630
Ilmenite Concentrate (t)	100,437	109,959	162,123	138,913	89,998
Zircon/ Rutile Concentrate (t)	42,668	44,489	35,813	22,111	13,180

### Net Annual Production Summary

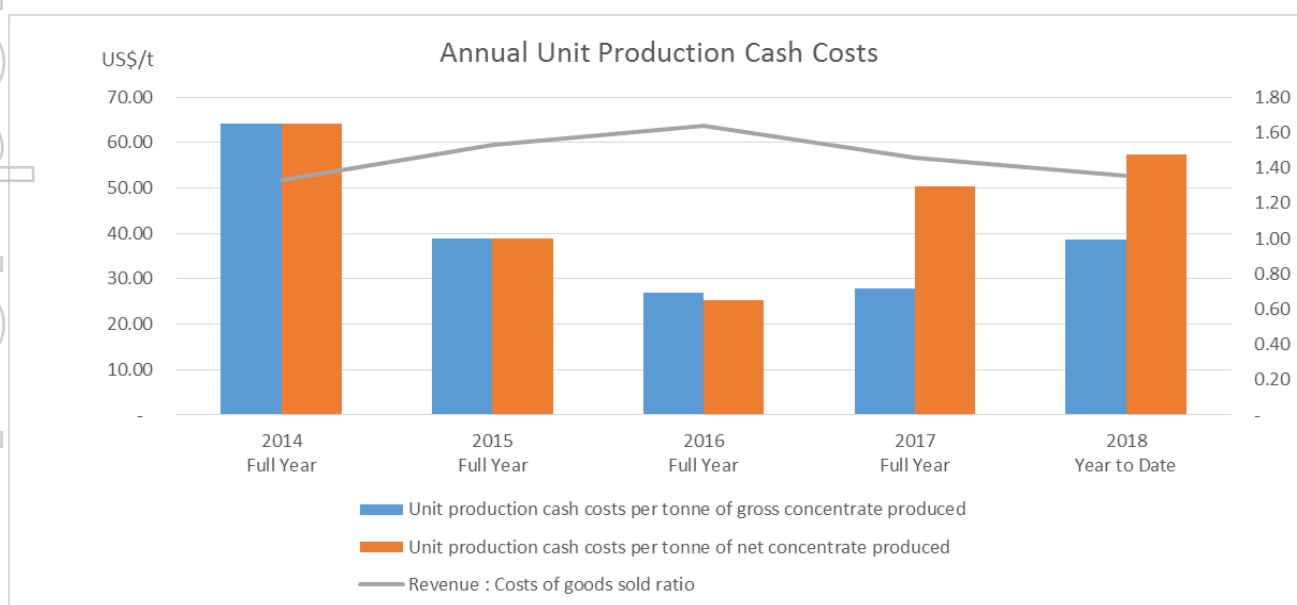


## APPENDIX 5 – UNIT PRODUCTION CASH COSTS

Quarter	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018
Unit production cash costs per tonne of gross concentrate produced (US\$/t)	30.76	30.37	24.95	26.81	30.13	41.11	51.01
Unit production cash costs per tonne of net concentrate produced (US\$/t)	57.38	50.25	36.13	64.65	67.82	52.61	53.98
Revenue: Costs of goods sold ratio	1.28	1.65	1.58	1.26	1.35	1.29	1.46



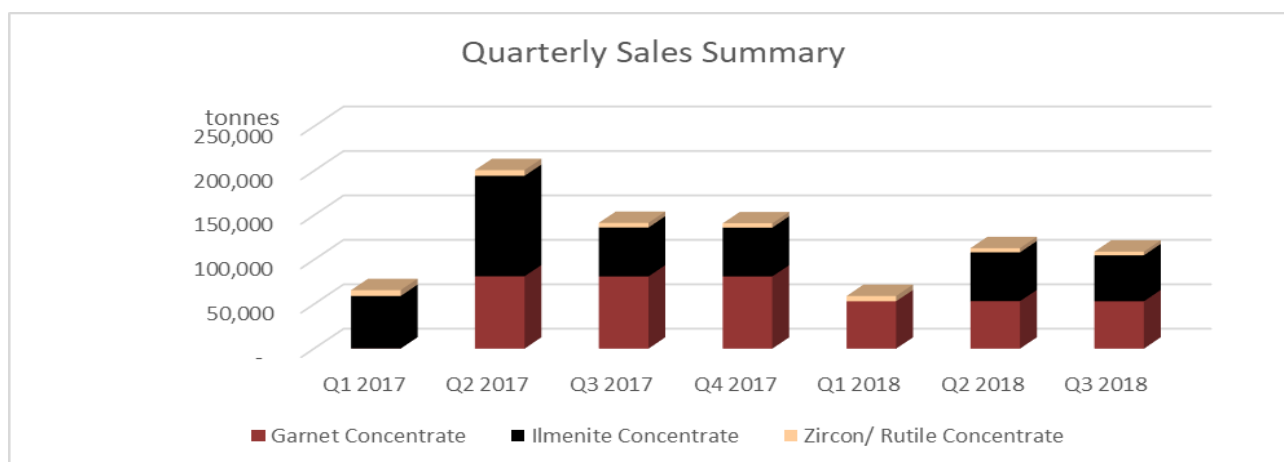
Year	2014 Full Year	2015 Full Year	2016 Full Year	2017 Full Year	2018 Year to Date
Unit production cash costs per tonne of gross concentrate produced (US\$/t)	64.10	38.82	27.03	27.89	38.65
Unit production cash costs per tonne of net concentrate produced (US\$/t)	64.10	38.82	25.23	50.31	57.42
Revenue: Costs of goods sold ratio	1.33	1.53	1.64	1.46	1.35



## APPENDIX 6 – SALES SUMMARY

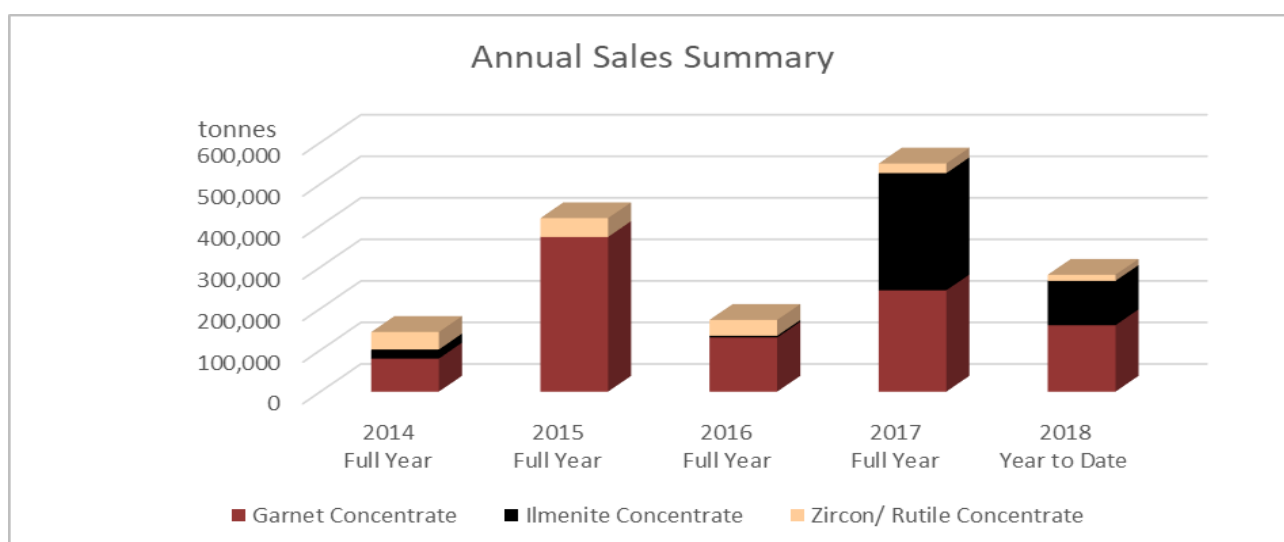
Quarter	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018 <sup>(1)</sup>	Q2 2018 <sup>(1)</sup>	Q3 2018 <sup>(1)</sup>
Garnet Concentrate (t)	168	81,368	81,226	81,200	53,288	53,418	53,288
Ilmenite Concentrate (t)	59,111	112,987	55,000	55,000	-	55,000	51,750
Zircon/ Rutile Concentrate (t)	6,576	6,468	5,264	4,844	6,012	4,648	4,116

Note (1) - This summary table has been amended to report the sales of final garnet concentrate recognized in accordance with the adoption on January 2018 of AASB 15 Revenue from Contracts with Customers.



Year	2014 Full Year	2015 Full Year	2016 Full Year	2017 Full Year	2018 <sup>(1)</sup> Year to Date
Garnet Concentrate (t)	79,630	372,466	130,308	243,962	159,993
Ilmenite Concentrate (t)	21,920	-	4,070	282,098	106,750
Zircon/ Rutile Concentrate (t)	42,042	45,240	38,408	23,152	14,776

Note (1) - This summary table has been amended to report the sales of final garnet concentrate recognized in accordance with the adoption on January 2018 of AASB 15 Revenue from Contracts with Customers.



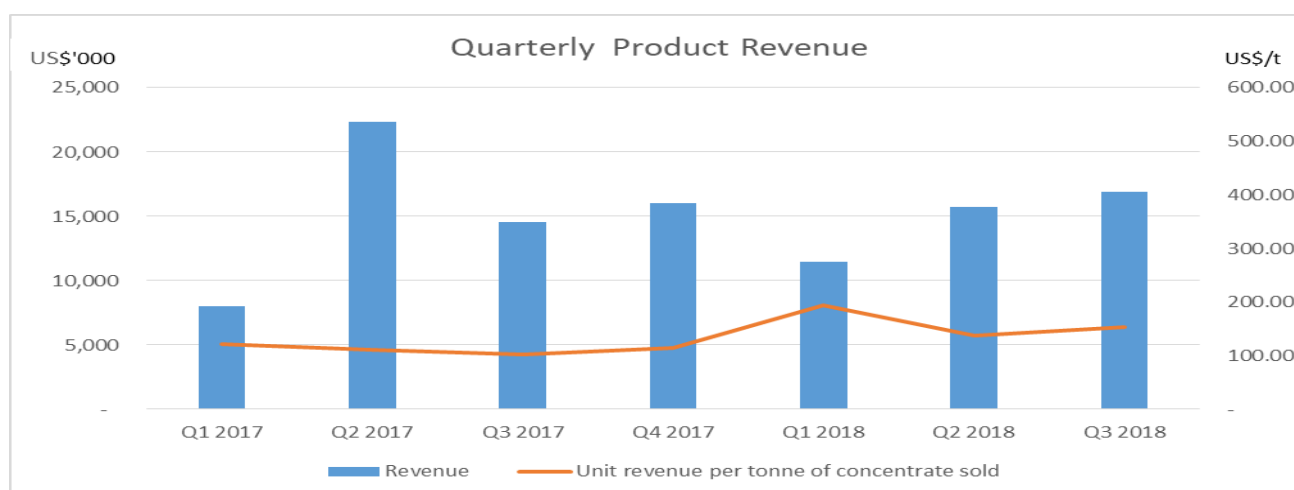
For personal use only

## APPENDIX 7 – REVENUE

Quarter	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018
Total Product Revenue (US\$'000) <sup>(2)</sup>	8,009	22,349	14,546	16,026	11,454	15,759 <sup>(1)</sup>	16,905
Revenue per tonne of concentrate sold (US\$/t)	121.61	110.75	102.81	114.76	194.44 <sup>(1)</sup>	137.14 <sup>(1)</sup>	153.86

Note (1) – This summary table has been amended to report the sales of final garnet concentrate recognised in accordance with the adoption on 1 January 2018 of AASB 15 - Revenue from Contracts with Customers. As such, revenue for the June 2018 quarter comparative and unit revenue per tonne of final concentrate sold for the March and June 2018 quarters have been revised due to the change in revenue recognition policy effected in the June 2018 financial statements, that occurred post-release of the June 2018 quarterly report.

Note (2) – Revenue has been adjusted to report only product revenue, excluding other revenue.



Year	2014 Full Year	2015 Full Year	2016 Full Year	2017 Full Year	2018 Year to Date
Total Product Revenue (US\$'000) <sup>(1)</sup>	33,271	46,180	26,873	60,930	44,118
Revenue per tonne of concentrate sold (US\$/t)	216.89	111.51	163.27	113.33	155.67

Note (1) – Revenue has been adjusted to report only product revenue, excluding other revenue.

