# **Mineral Commodities Ltd**

ACN 008 478 653 ABN 39 008 478 653

**Quarterly Activities Report For the period ended 30 June 2018** 

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	Quarter ended	Quarter ended	Quarter ended	Year to Date	Year to Date
	30-Jun-18	31-Mar-18	30-Jun-17	30-Jun-18	30-Jun-17
Mining					
Tonnes	549,588	656,714	511,114	1,206,302	1,012,457
Grade	15.41%	18.48%	23.12%	17.09%	27.16%
- Garnet	11.17%	13.94%	17.15%	12.68%	19.84%
- Ilmenite	2.97%	3.14%	4.01%	3.07%	5.24%
- Zircon	0.49%	0.64%	0.91%	0.57%	1.09%
- Rutile	0.39%	0.40%	0.54%	0.39%	0.52%
- Leucoxene	0.39%	0.36%	0.51%	0.38%	0.48%
GSP / SCP Production &					
Processing					
Tonnes processed (gross)	234,145	249,522	183,164	483,667	359,371
Tonnes produced					
- Garnet concentrate (net) (1)	69,357	60,652	60,867	130,009	92,453
- Ilmenite concentrate (net) (1)	26,062	41,501	22,941	67,563	63,409
- Zircon/Rutile concentrate	4,685	5,129	5,462	9,814	11,674
zircon in concentrate	67.86%	68.79%	70.20%	68.35%	71.44%
rutile in concentrate	17.50%	18.13%	17.49%	17.83%	16.98%
Sales (wmt)					
- Garnet concentrate	30,580	50,750	81,368	81,330	81,536
- Ilmenite concentrate	55,000	-	112,987	55,000	172,098
- Zircon/Rutile concentrate	4,648	6,012	6,468	10,660	13,044

# Highlights

- Munglinup Pre-Feasibility study released confirming robust graphite project.
- Munglinup expandable graphite testwork results positive.
- Acquisition of a strategic exploration licence adjacent to Munglinup.
- Record mining/PBC processing production achieved at Tormin.
- Exploration commences on Western Australian exploration assets including 1,500m drilling at Doolgunna.

#### **Corporate and Cash**

**Dividends:** Final 2017 dividend of A\$0.007 per share paid during the quarter, maintaining FY2017 dividends at A\$0.012 per share.

*Cash*: Cash as at 30 June 2018 of US\$10.2 million, plus US\$10.4 million in trade and other receivables.

**Debt**: Borrowings as at 30 June 2018 of US\$3.0 million.

**Securities**: 418.6 million shares and 5.3 million performance rights.

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 is available in Appendix 4.



### **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 2.4 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 June being the ninth month in succession to see a decline in the 12-month TRIFR. The rolling 3-month TRIFR has now been at zero for four months.

The Company maintained its strong commitment to social development and continued with its various initiatives. Circa Rand 1.0 million was spent during the current quarter on learnerships, portable skills training and bursaries.

### **TORMIN – OPERATIONAL PERFORMANCE**

Run of Mine ("ROM") production of 549,588 tonnes was achieved during the June 2018 quarter compared to the previous quarter's production of 656,714 tonnes, with the decrease due to the planned decline in mining tonnes aimed at reducing the high ROM stockpile volumes generated in the March 2018 quarter.

ROM ore grading 15.41% Valuable Heavy Minerals ("VHM") was mined for the quarter, consisting of a garnet grade of 11.17%, ilmenite grade of 2.97%, zircon grade of 0.49% and rutile grade of 0.39%. The VHM grade diminished from the previous quarter but was in line with the Annual Tormin Mineral Resource Update released in February 2018.

The mining cost per tonne of ore mined for the quarter of US\$3.62/t was above the prior quarter's US\$2.38/t, due to the planned reduction in mined tonnes.

Primary Beach Concentrator ("PBC") plant feed rates, availability and mineral recoveries were a record for the June 2018 quarter.

The PBCs operated at an average combined 297t/hr, significantly above the prior quarter's 230t/hr, and combined with a plant availability of 98% was able to achieve a record total 610,486 tonnes of ROM ore feed processed.

Primary Beach Concentrator / Tailings Scavenger Plant ("PBC / TSP") recoveries were also a record for the quarter, with recoveries of zircon at 95%, ilmenite and garnet at +88% and rutile at 78%.

The record quarterly PBC performance resulted in Total Heavy Mineral Concentrate ("HMC") production of 185,704 tonnes, compared to the prior quarter's 144,052 tonnes of HMC produced.

A decline in the quarter's zircon mined grade of 0.49% in comparison to the previous quarter's 0.64% zircon mined grade, resulted in a corresponding decrease in non-magnetic zircon/rutile concentrate production, with 4,685 tonnes produced against the previous quarter's 5,129 tonnes. Contained zircon of 67.86% and rutile of 17.50% was slightly below the prior quarter's contained zircon of 68.79% and contained rutile of 18.13%.



Ilmenite concentrate production for the June quarter was 26,062 tonnes versus prior quarter's 41,501 tonnes, largely reflecting a 70% reduction in high ilmenite garnet re-feed during the quarter.

Gross garnet concentrate production was 121,910 tonnes versus the prior quarter's 153,205 tonnes. During the quarter, the Company re-treated 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.

Net garnet concentrate production was 69,357 tonnes versus the prior quarter's 60,652 tonnes, and at a significantly higher +80% grade of contained garnet in concentrate.

#### **Tormin Costs**

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

Summary of Unit Costs & Revenues	Jun-18 Quarter	Mar-18 Quarter	Jun-17 Quarter	Jun-18 Year to Date	Jun-17 Year to Date
Unit production cash costs per tonne of gross final concentrate produced (US\$/dmt)	41.11	30.13	30.16	34.89	30.37
Unit production cash costs per tonne of net final concentrate produced (US\$/dmt)	52.61	67.82	50.25	59.09	53.37
Unit cost of goods sold per tonne of final concentrate sold (US\$/wmt) (1)	133.92	150.18	71.17	136.61	76.65
Unit revenue per tonne of final concentrate sold (US\$/wmt)	163.19	201.34	117.23	176.93	117.86
Revenue to Cost of Goods Sold Ratio	1.22	1.34	1.65	1.30	1.54

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.

Cash costs per tonne of zircon/rutile, ilmenite and garnet concentrates produced for the quarter was US\$52.61/t gross, compared to the prior quarter's US\$67.82/t, with the decreased cost a result of a reduction in mining costs and activities for the quarter, combined with 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 was US\$133.92/t for the quarter, compared to prior quarter's US\$150.18/t. The decrease against the prior period reflects a change in the relative product mix sold and the above mentioned lower unit production cash costs.

### **Tormin Sales and Marketing**

Sales revenue for the June quarter was US\$15.8 million, above the prior quarter's revenue of US\$11.7 million. This increase in quarterly revenue was substantially driven by the ilmenite concentrate shipment in the current quarter and significantly higher prices achieved for the Company's zircon/rutile concentrate, partially offset by lower non-magnetic zircon/rutile and garnet concentrate tonnes sold.



Tormin shipments/sales for the June quarter were 4,648 wet metric tonnes of zircon/rutile non-magnetic concentrate, 55,000 wet metric tonnes of ilmenite, 30,000 dry metric tonnes of garnet concentrate stockpiled on GMA Garnet Group's ("GMA") behalf and 52,500 dry metric tonnes of garnet concentrate synthetic sales.

Unit revenue per tonne of final concentrate sold was US\$163.19/t for the quarter, compared to the prior quarter's US\$201.34/t, with the decrease due to a higher proportion of lower priced ilmenite and garnet concentrate in the current quarter as compared to the March 2018 quarter, partially offset by improved pricing for the Company's non-magnetic zircon/rutile concentrate.

The Revenue to Cost of Goods Sold Ratio for the June quarter was 1.22 compared to the prior quarter's ratio of 1.34, with the decrease a consequence of the higher proportion of lower value concentrates transported and sold.

The Company achieved continued incremental quarter on quarter increases in sales pricing for its high grade non-magnetic zircon/rutile concentrate, with the average price received for zircon in the June 2018 quarter being 14.6% higher than the previous quarter. Tormin's non-magnetic zircon/rutile concentrate is one of the highest concentrate grades being shipped to China and continues to attract premium pricing. Continued industry tightening of zircon supply will underpin record pricing for the Company's zircon/rutile concentrate in the September 2018 quarter.

Ilmenite pricing and demand remains steady with slight incremental increases for concentrate being achieved.

# **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 June 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 31 March 2018	WIP & Finished Goods at 30 June 2018
Run of Mine Ore Stockpile (total tonnes - Tormin processing plant)	207,810	70,475
Heavy Mineral Concentrate Stockpile (total tonnes - Tormin processing plant)	83,764	13,954
Zircon / Rutile Concentrate Bagged (total tonnes - Tormin, Cape Town or in-transit)	688	924
Ilmenite Concentrate Stockpiles (total tonnes - Tormin, Saldanha Bay or in-transit)	72,328	68,450
Garnet Concentrate Stockpiles (total tonnes - Tormin, Saldanha Bay, in-transit or held on behalf of GMA)	630,697	664,233



Management made a strategic decision to reduce ROM ore held at the end of the June quarter to reduce costs, whilst ensuring sufficient buffer stocks ahead of processing plant requirements.

# **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)
Indicated Resource – Dec 2013	2.70	49.40%	10.60%	3.40%	0.70%	25.30%
Tonnes Mined – FY2014	1.07	53.83%	17.26%	4.76%	0.65%	31.16%
Inferred Resource – Dec 2014	2.70	38.14%	10.05%	2.21%	0.46%	25.22%
Tonnes Mined – FY2015	1.62	49.57%	16.15%	3.88%	0.60%	28.94%
Inferred Resource – Dec 2015	2.70	28.01%	6.97%	1.56%	0.55%	18.54%
Tonnes Mined – FY2016	1.81	45.97%	12.97%	2.78%	0.61%	29.21%
Inferred Resource – Dec 2016	1.80	28.08%	6.15%	1.65%	0.53%	18.99%
Tonnes Mined – FY2017	2.05	27.57%	5.81%	1.10%	0.50%	19.40%
Inferred Resource – Dec 2017	1.80 <sup>(2)</sup>	15.92%	2.72%	0.79%	0.43%	11.45%
Tonnes Mined – March Quarter 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 – June H1 2018	1.21	17.22%	3.07%	0.57%	0.39%	12.68%

<sup>(1)</sup> Includes other valuable heavy minerals e.g. leucoxene and magnetite

Since commencement of operations at Tormin, the Company has mined in excess of 7.7 million tonnes. The tonnage mined is more than the original declared resource tonnage (2.70 million tonnes), which is indicative of the significant replenishment nature of the deposit where resource blocks are mined more than once per year.

Mining of 549,588 tonnes during the June 2018 quarter was achieved at a total Heavy Mineral ("HM") grade of 15.51%, which is aligned with expectations from the reported Mineral Resource grade.

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

<sup>(2) 5%</sup> Heavy Mineral ("HM") cut-off grade used



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.

The Company is confident that the grant and subsequent development of additional identified inland and beach mining and prospecting areas currently under application will allow the current beach mining areas to satisfactorily replenish.

During the June 2018 quarter, the Company lodged its revised Section 102 Extended Mining Rights Application ("Section 102 Application"). The Section 102 Application consultation period with Interested and Affected Parties ("I&AP") for the Integrated Environmental Authorisation Scoping Report ended on 14 May 2018. The consolidation of I&AP responses was integrated into the Final Scoping Report and submitted to the South African Department of Mineral Resources ("DMR") during the quarter. The Final Scoping Report was accepted by the DMR in June. The Company will now work with the DMR to review the Final Scoping Report and refine as necessary, before moving to a full Environmental Authorisation public participation process.

During the quarter the Company lodged its financial performance bond for the De Punt Prospecting Right, situated directly adjoining the southern boundary of the Company's currently owned Geelwal Karoo Farm where the Tormin operations are located. The granting of the Environmental Authorisation Application is the final step for the first granting of any prospecting rights to the Company since 2014. The granting of the Environmental Authorisation was subject to Appeal by the I&APs. The Company submitted responses to the Appeal and is expecting adjudication by the Department for Environmental Affairs ("DEA") by the end of July 2018.

During the June 2018 quarter, consultation occurred via public participation with the I&APs on the Section 24G Application for minor environmental incursions which ended on 4 June 2018. The final Section 24G Application document will be submitted to the DMR for assessment by the end of July 2018.

### Draft 2018 Mining Charter

On 15 June 2018, exactly one year to the day after publication of the previous draft, the new South African Minister of Mineral Resources, Gwede Mantashe (the "Minister"), published for public comment the Draft Broad-Based Black Economic Empowerment Charter for the South African Mining and Minerals Industry, 2018 (the "Draft 2018 Mining Charter").

This is similar to the 2017 draft, and maintains the requirement for a minimum of 30% Broad-Based Black Economic Empowerment ("BBBEE") shareholding.

Applications for mining rights that are pending at the commencement of the Mining Charter, 2018 will be granted if the applicants have a 26% BBBEE shareholding in place (in accordance with the 2010 Mining Charter) with a requirement to increase to 30% within five years. There appears to be no restriction in respect of the commercial nature of the equity increase (i.e. sale or subscription and dilution), the class of beneficiary (it can be a community, an entrepreneur or employees) or in respect of the level within a company at which the transaction is implemented (holding level or asset level).

For new mining rights to be issued, there will be a requirement for the mining right to be held 30% by BBBEE shareholders, with a minimum 14% to be held by a BBBEE entrepreneur and 8% to be held by employees. Significantly, 5% of the employees' stake will be a free carry and non-transferable. Communities must hold an 8% share of the mining right.



For new mining rights to be issued, there will be a requirement that 1% of Earnings Before Interest, Taxes, Depreciation and Amortisation ("EBITDA") is paid to communities and employees as a trickle dividend from the sixth year of a mining right until dividends are declared or at any point in a 12-month period where dividends are not declared.

The Mining Charter, 2018 will increase the target to procure services from BBBEE entities from 70% to 80% and increase the target to procure goods from BBBEE entities from 50% (in respect of consumer goods) and 40% (in respect of capital goods) to 70%. Up to 5% of the total procurement budget on mining goods and up to 10% of budget on services may be offset using supplier and/or enterprise development.

The Company is currently assessing the impacts of the Draft 2018 Mining Charter.

The Company's operating subsidiary, Mineral Sands Resources (Pty) Ltd ("MSR") has a 50% BBBEE shareholding. As this 50% BBBEE shareholding exceeds the minimum 30% shareholding proposed, and given that MSR already has mining right applications in place, the Company does not currently envisage any change in the ownership structure of its operating subsidiary.

#### **CORPORATE AND 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.

As released on 8 February 2018, completion of the Phase 1 metallurgical testwork program confirmed the ability to produce high-purity graphite flake concentrates. In addition, a significant groundwater source on the mining lease was identified.

During the quarter the Pre-Feasibility Study ("PFS") was completed with results released to the market on 30 May 2018. The results demonstrate 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.

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 mine life is nine years with an average annual production of 54,800t of graphite in concentrate.

The PFS confirmed that the Munglinup Graphite Project is robust and economically justifiable even at very low pricing scenarios and without the requirement for downstream value-added processing that many other graphite projects require to achieve acceptable economic returns. The results also confirmed its technical viability and the Company is now committed to advancing the project through a Feasibility Study towards development.



The Company also undertook an expansion drilling program at Munglinup during the quarter, with results, as released on 5 June 2018, confirming continuity of mineralisation along strike of the known deposits in both quantum and tenor. The additional geological and assay information will be included in a Mineral Resource update currently underway.

A follow-up infill drilling program has been developed and is scheduled for commencement in the September 2018 quarter, and has been designed to provide sufficient geological and assay information to allow for a Mineral Resource update before the end of 2018.

Additional expandable graphite testwork, conducted by European consultancy group Dorfner ANZAPLAN, was completed during the quarter with results released on 10 May 2018. Results suggest excellent expandable volumes for Munglinup graphite of 400 ml/g for coarse (+300 micron) flakes and expansion volumes of 305 ml/g for medium (+180 to -300 micron) flakes. The graphite has been shown to be suitable for a broad range of expandable graphite markets. A concept study has now been established on the development of an expandable plant.

The Company also commenced a Research Agreement with the University of Adelaide ("UoA") testing graphite concentrate from Munglinup for the production of graphene and graphene related products, using the University's proprietary methods. UoA is at the forefront of graphene research in Australia, leading the Australian Research Council ("ARC") Graphene Hub. The Research Agreement is focused on developing graphene production routes that are low cost, environmentally friendly and scalable. This proof of concept study, if successful, will be followed by a pilot scale program.

During the quarter the Company acquired E74/565, an exploration licence adjoining the mining lease hosting the Munglinup graphite deposit. Previous airborne geophysical surveys undertaken in 2011 resulted in the identification of significant anomalies within the Company's current mining lease that extend into E74/565.

The acquisition of this adjoining exploration licence will provide significant benefit to the Munglinup Graphite Project in terms of consolidation of mineral prospectivity, and availability of additional areas for infrastructure.

The Company will be conducting preliminary exploration including drill target generation on the exploration licence in the coming months leading up to drill testing of identified areas of potential graphite mineralisation later in the year.

#### Iran

The Company has continued to actively establish its presence in Iran and has reviewed in excess of 36 green-fields, brown-fields and operating mining projects.

Unfortunately, increased tension in the Middle East and from the USA towards Iran has provided a significant obstacle to expanding 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.



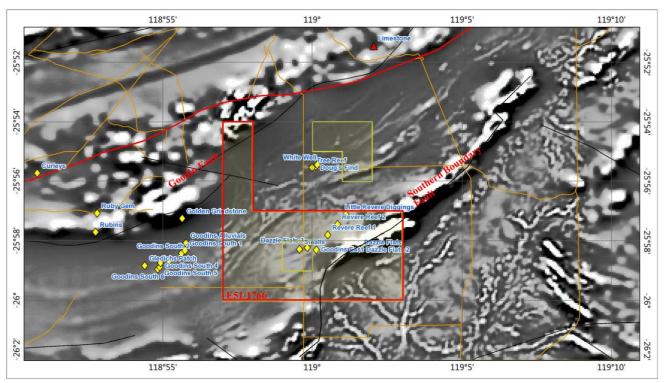
### **Australian Exploration**

During the June 2018 quarter, the following activities were conducted on the Company's other exploration prospects in Western Australia:

- Glen Florrie Prospect The Company commenced negotiations on access arrangements with the pastoral lease holder underlying the Glen Florrie Prospect;
- Geraldton Prospect Applications have been submitted for two tenements considered prospective for lithium and tantalum bearing pegmatite in the Geraldton region;
- Collie Triple Eight Titanomagnetite Prospect The Company entered into an option agreement to acquire the historic Triple Eight Titanomagnetite Project near Collie in Western Australia. The acquisition comprises an active mining lease which expires on 25 June 2038, with the initial option to earn 51% for a cash consideration of A\$25,000 and a minimum expenditure of A\$250,000. Subject to satisfaction of the initial option, the Company has a right to purchase the remaining 49% for A\$500,000. The acquisition of this prospective vanadium project is consistent with the Company's corporate strategy of geopolitical diversification and targeting commodities crucial to the battery technology revolution taking place.

# **Doolgunna Gold and Copper Prospect**

Mineral Commodities Resources Exploration Australia Pty Ltd ("MRCEA") conducted a first phase exploration and bulk sampling campaign to confirm historical intersections and gold recoveries along a quartz reef known as the Revere Reef located on tenement E51/1766.



Location map of the Doolgunna prospect tenements with gold reef occurrences



There are other targets and gold occurrences on the Doolgunna tenements, however the Revere Reef has been assigned priority status due to its potential to host high grade gold associated with strong metasomatic alteration and outcrops of quartz reef and stockwork structures.

1,500m of RC drilling completed during May 2018 identified a highly altered zone associated with the northeast striking Revere Reef structure. RC drilling and two bulk samples have been submitted to the analytical laboratory and results are pending.

The copper potential of the tenements is currently unknown, however the high level of exploration activity by Sandfire Resources is noted on the surrounding tenements.

#### **Cash and Debt**

At 30 June 2018, the Company had US\$10.2 million in cash on hand, an increase from the 31 March 2018 cash balance of US\$9.3 million. Trade and other receivables at 30 June 2018 also increased to US\$10.4 million, an increase from the 31 March 2018 balance of US\$6.8 million.

The increase in cash held at the end of the June quarter reflects cash receipts from the 55,000 tonne ilmenite concentrate shipment in April 2018, partially offset by the US\$2.2 million final dividend paid during the quarter. Cash held was also impacted by advanced transport of garnet and ilmenite concentrates, in preparation for 50,000 tonnes garnet concentrate and 55,000 tonnes ilmenite concentrate shipments contracted for the September 2018 quarter.

Borrowings as at 30 June 2018 were US\$3.0 million, a reduction of US\$0.6 million from the 31 March 2018 borrowings of US\$3.6 million.

The Company expects strong positive operating cash flow generation in the forthcoming quarter and for the balance of the 2018 financial year, as it continues to realise the value of work-in-progress and finished goods inventories, expected production improvements, ilmenite concentrate shipments, garnet concentrate sales and improved pricing for its zircon/rutile and ilmenite concentrate products. Cash on hand at 30 September 2018 is expected to exceed US\$15 million.

#### **Outlook**

Concentrate production guidance for the full year 2018 remains in the order of:

Final Concentrate Production	FY2018 Production Current Guidance Range	FY2018 Production Prior Guidance Range
Zircon / Rutile Concentrate (dry metric tonnes)	20,000 – 22,000	20,000 – 22,000
Ilmenite Concentrate (dry metric tonnes)	100,000 - 120,000	100,000 - 120,000
Garnet Concentrate – Gross (dry metric tonnes)	400,000 – 430,000	400,000 – 430,000
Garnet Concentrate – Net of Refeed (dry metric tonnes)	250,000 - 280,000	250,000 - 280,000



Sales / shipment guidance for the full year 2018 is in the order of:

Final Concentrate Sales	FY2018 Sales Current	FY2018 Sales Prior
	Guidance Range	Guidance Range
Zircon/Rutile Concentrate (wet metric tonnes)	20,000 – 22,000	20,000 – 22,000
Ilmenite Concentrate (wet metric tonnes)	100,000 - 120,000	100,000 - 120,000
Garnet Concentrate Stockpiled (dry metric tonnes)	210,000	210,000
Garnet Concentrate Shipped (dry metric tonnes)	180,000 - 210,000	180,000

Tormin operations will continue to focus on optimising the mining and processing value chain to deliver results in line with the June quarter's record 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 with the DMR.

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. Management continues to assess multiple projects that have synergy with its current jurisdictional and commodity diversification business development strategy.

#### **Securities on Issue**

Issued securities at the date of this report comprise:

- 418,591,571 fully paid ordinary shares listed on the ASX.
- 2,000,000 vested Performance Rights exercisable on or before 30 May 2019.
- 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 Performance Rights exercisable on or before 31 May 2020, vesting on 12 months from date of issue, 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.



#### **Terms and Explanations**

**ABET** Adult Basic Education and Training

ARC Australian Research Council
ASX Australian Securities Exchange

**BBBEE** Broad-Based Black Economic Empowerment

BID Black Economic Empowerment
BID Background Information Document
DEA Department of Environmental Affairs

**DMIRS** Department of Mines, Industry Regulation and Safety

**DMR** Department of Mineral Resources

**DMTU** Dry Metric Tonne Unit**DWA** Department of Water Affairs

**EAA** Environmental Authorisation Application

**EBITDA** Earnings Before Interest, Taxes, Depreciation and Amortisation

**EIA** Environmental Impact Assessment

**EMP** Environmental Management Programme

**FIPPA** Foreign Investment Promotion and Protection Act

**GT** Gold Terrace Pty Ltd

**GMA** GMA Group

**GSI** Geological Survey of Iran **GSP** Garnet Stripping Plant

**HDSA** Historically Disadvantaged South Africans

**HM** Heavy Mineral

**HMC** Heavy Mineral Concentrate

**HOA** Heads of Agreement

**I&AP** Interested and Affected Parties

IEP Independent Environmental Practitioner
IMPASCO Iran Minerals Production and Supply Company

**IMIDRO** Iranian Mines and Mining Industries Development and Renovation Organisation

**JORC** Joint Ore Reserves Committee

**LTI** Lost Time Injury

**MOU** Memorandum of Understanding

MPSCB Minerals and Petroleum Sub-Committee BoardMPRDA Mineral and Petroleum Resources Development Act

MRA Mining Right Application

MRCEA MRC Exploration Australia Pty Ltd

MRCG MRC Graphite Pty Ltd
MSP Mineral Separation Plant

MSR Mineral Sands Resources (Pty) Ltd

**NEMA** National Environmental Management Authority

NUM National Union of Mine Workers
PBC Primary Beach Concentrator

Program of Work
PR Prospecting Right
ROM Run of Mine

SARS South African Revenue Service
SCP Secondary Concentrator Plant

**SLP** Social Labour Plan

**SMME** Small Medium Micro Enterprises



**TGC** Total Graphitic Carbon

**TRIFR** Total Recordable Injury Frequency Rate

TSP Tailings Scavenger Plant
UoA University of Adelaide
VAT Value Added Tax

VHM Valuable Heavy Mineral WMT Wet Metric Tonnes



#### **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)
Tormin	Inferred	1.80	15.92%	2.72%	0.79%	0.43%	11.45%
Xolobeni	Measured	224	5.7%	54.5%			
	Indicated	104	4.1%	53.7%			
	Inferred	18	2.3%	69.6%			
Total Xolobeni		346.0	5.0%	54.0%			
Total MRC		347.8	5.3%	53.8%			

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 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)
Halberts Main Zone			
Measured	1.710	14.1%	0.241
Indicated	1.367	15.3%	0.209
Other Areas			
Indicated	0.548	19.1%	0.104
Total	3.625	15.3%	0.554

<sup>\*</sup>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)
Proved	1.41	15.8%	0.222
Probable	2.03	16.0%	0.326
Total	3.44	15.9%	0.548

<sup>\*</sup>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	Purchased from Luke Forti, currently In Transfer	100%	100%
	Yandeyarra	E47/3884	Exploration	Under Application	100%	100%
	Yandeyarra	E47/3885	Exploration	Under Application	100%	100%
						1



Country	Location	Right / Tenement Number	Type of Right / Tenement	Status	Change since last Quarter	Beneficial Interest
	Yandeyarra	E47/3916	Exploration	Under Application	100%	100%
	Yandeyarra	E45/5109	Exploration	Under Application	100%	100%
	Doolgunna	E51/1766	Exploration	Granted	0%	0% (Option to earn-into 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-into 100%)



## **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.

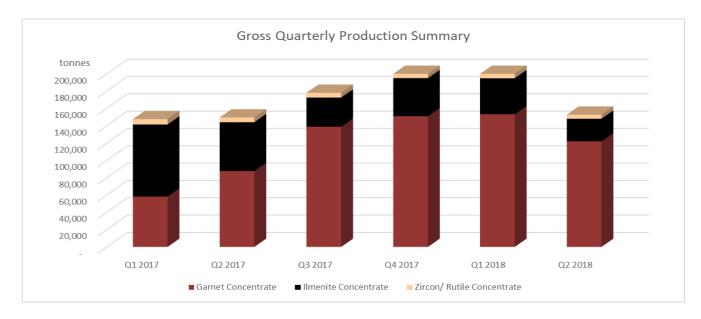


The information in this announcement that relates to metallurgy, the process plant and infrastructure design for Munglinup is based on information compiled and reviewed by Mr David Pass, who is a Member of the AusIMM. Mr Pass is an employee of Battery Limits Pty Ltd. Mr Pass has sufficient experience 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.

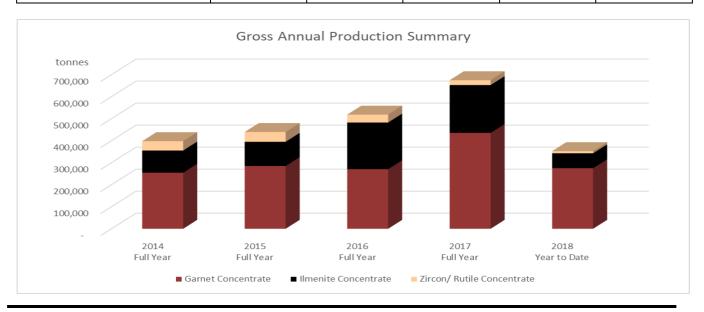


## **APPENDIX 4 - PRODUCTION SUMMARY**

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



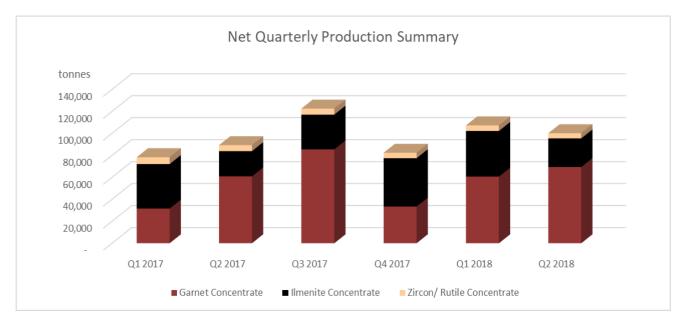
Gross, Year	2014 Full Year	2015 Full Year	2016 Full Year	2017 Full Year	2018 Year to Date
Garnet Concentrate (t)	254,816	284,990	270,802	435,590	275,115
Ilmenite Concentrate (t)	100,437	109,959	211,704	217,019	67,563
Zircon/ Rutile Concentrate (t)	42,668	44,489	35,813	22,111	9,813



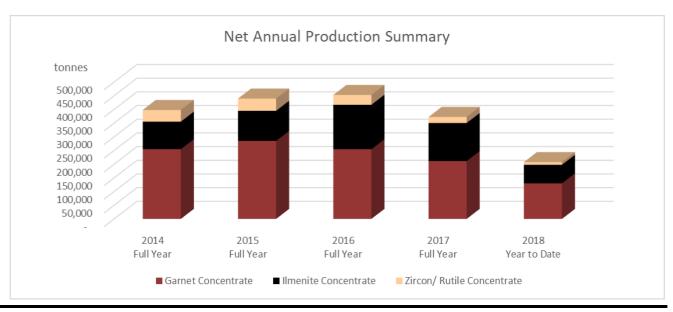


# **APPENDIX 4 – PRODUCTION SUMMARY (Continued)**

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



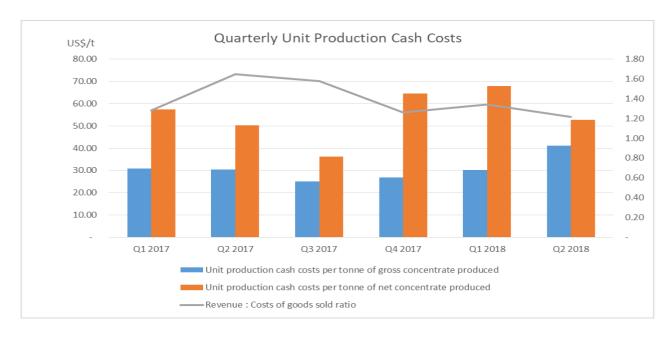
Net, Year	2014 Full Year	2015 Full Year	2016 Full Year	2017 Full Year	2018 Year to Date
Garnet Concentrate (t)	254,816	284,990	254,693	211,394	130,009
Ilmenite Concentrate (t)	100,437	109,959	162,123	138,913	67,563
Zircon/ Rutile Concentrate (t)	42,668	44,489	35,813	22,111	9,814



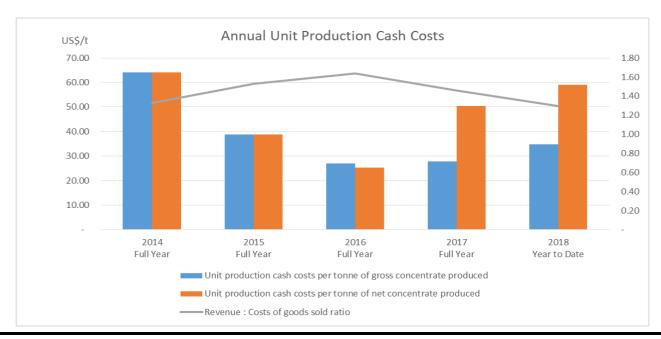


#### **APPENDIX 5 – UNIT PRODUCTION CASH COSTS**

Quarter	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 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
Unit production cash costs per tonne of net concentrate produced (US\$/t)	57.38	50.25	36.13	64.65	67.82	52.61
Revenue: Costs of goods sold ratio	1.28	1.65	1.58	1.26	1.34	1.22



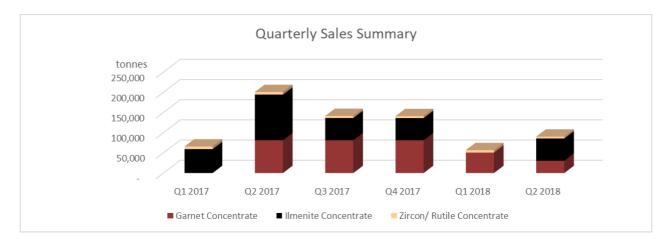
Year	2014 Full Year	2015 Full Year	2016 Full Year	2017 Full Year	2018 Year to Date
Unit production cash costs per tonne of gross concentrate produced (US\$/t)	64.10	38.82	27.03	27.89	34.89
Unit production cash costs per tonne of net concentrate produced (US\$/t)	64.10	38.82	25.23	50.31	59.09
Revenue: Costs of goods sold ratio	1.33	1.53	1.64	1.46	1.30



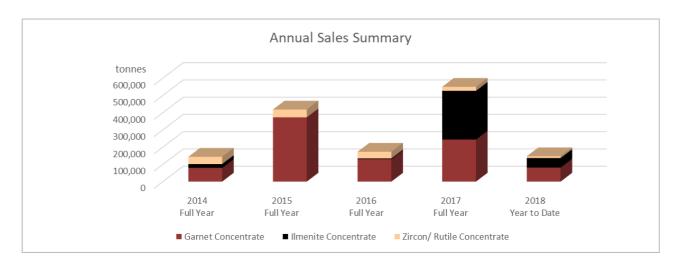


#### **APPENDIX 6 - SALES SUMMARY**

Quarter	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018
Garnet Concentrate (t)	168	81,368	81,226	81,200	50,750	30,580
Ilmenite Concentrate (t)	59,111	112,987	55,000	55,000	-	55,000
Zircon/ Rutile Concentrate (t)	6,576	6,468	5,264	4,844	6,012	4,648



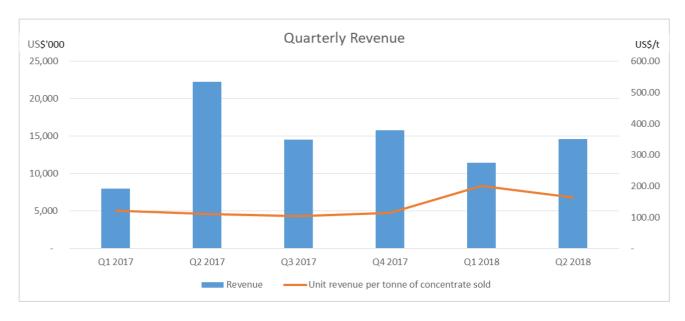
Year	2014 Full Year	2015 Full Year	2016 Full Year	2017 Full Year	2018 Year to Date
Garnet Concentrate (t)	79,630	372,466	130,308	243,962	81,330
Ilmenite Concentrate (t)	21,920	-	4,070	282,098	55,000
Zircon/ Rutile Concentrate (t)	42,042	45,240	38,408	23,152	10,660





#### **APPENDIX 7 – REVENUE**

Quarter	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018
Total Revenue (US\$'000)	7,003	5,083	6,807	9,326	11,454	14,624
Revenue per tonne of concentrate sold (US\$/t)	588.13	464.39	117.41	101.42	201.34	163.19



Year	2014 Full Year	2015 Full Year	2016 Full Year	2017 Full Year	2018 Year to Date
Total Revenue (US\$'000)	31,144	46,579	26,863	60,417	26,079
Revenue per tonne of concentrate sold (US\$/t)	216.89	111.51	163.27	113.33	176.93

