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**MMG LIMITED**

**五礦資源有限公司**

*(Incorporated in Hong Kong with limited liability)*

**(HKEX STOCK CODE: 1208)**

**(ASX STOCK CODE: MMG)**

## FOURTH QUARTER PRODUCTION REPORT

### FOR THE THREE MONTHS ENDED 31 DECEMBER 2017

This announcement is made pursuant to Rule 13.09 of the Rules Governing the Listing of Securities of The Stock Exchange of Hong Kong Limited (Listing Rules) and the Inside Information Provisions (as defined in the Listing Rules) under Part XIVA of the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong).

The board of directors (Board) of MMG Limited (Company or MMG) is pleased to provide the Fourth Quarter Production Report for the three months ended 31 December 2017.

The report is annexed to this announcement.

By order of the Board

**MMG Limited**

**JIAO Jian**

*CEO and Executive Director*

Hong Kong, 24 January 2018

*As at the date of this announcement, the Board comprises nine directors, of which two are executive directors, namely Mr Jiao Jian and Mr Xu Jiqing; three are non-executive directors, namely Mr Guo Wenqing (Chairman), Mr Zhang Shuqiang and Mr Gao Xiaoyu; and four are independent non-executive directors, namely Dr Peter William Cassidy, Mr Leung Cheuk Yan, Ms Jennifer Anne Seabrook and Professor Pei Ker Wei.*

# FOURTH QUARTER PRODUCTION REPORT

FOR THE THREE MONTHS ENDED 31 DECEMBER 2017

	4Q 17	4Q 17 vs 4Q 16	4Q 17 vs 3Q 17	YTD	YTD 17 vs YTD 16
<b>COPPER CATHODE (tonnes)</b>					
Kinsevere	20,224	-3%	-3%	80,186	-1%
Sepon	17,827	-21%	41%	62,941	-20%
<b>Total</b>	<b>38,051</b>	<b>-12%</b>	<b>14%</b>	<b>143,127</b>	<b>-10%</b>
<b>COPPER (contained metal in concentrate, tonnes)</b>					
Las Bambas	121,140	15%	6%	453,749	37%
Rosebery	359	-29%	19%	1,321	-32%
<b>Total</b>	<b>121,499</b>	<b>15%</b>	<b>6%</b>	<b>455,070</b>	<b>37%</b>
<b>ZINC (contained metal in concentrate, tonnes)</b>					
Dugald River <sup>1</sup>	12,412	n/a	n/a	12,412	n/a
Rosebery	20,054	-6%	16%	74,803	-8%
<b>Total</b>	<b>32,466</b>	<b>52%</b>	<b>88%</b>	<b>87,215</b>	<b>7%</b>
<b>LEAD (contained metal in concentrate, tonnes)</b>					
Rosebery	7,711	9%	19%	26,611	2%
<b>Total</b>	<b>7,711</b>	<b>9%</b>	<b>19%</b>	<b>26,611</b>	<b>2%</b>
<b>MOLYBDENUM (contained metal in concentrate, tonnes)</b>					
Las Bambas	481	n/a	1%	1,431	n/a
<b>Total</b>	<b>481</b>	<b>n/a</b>	<b>1%</b>	<b>1,431</b>	<b>n/a</b>

## KEY POINTS

- Total Recordable Injury Frequency (TRIF) for the fourth quarter 2017 was 1.31 per million hours worked and 1.17 for the full year 2017. This represents a 38% reduction on the full year 2016 TRIF of 1.90.
- Full year copper production of 598,196 tonnes in 2017, a record for MMG and an increase of 19% on 2016.

<sup>1</sup> Includes production from commissioning and start up activities in December 2017.

- Las Bambas delivered a record production quarter of 121,140 tonnes of copper in copper concentrate for the end of December, taking total 2017 production to 453,749 tonnes.
- Zinc production began at Dugald River, with 12,412 tonnes of zinc in zinc concentrate produced as part of commissioning activities during the December quarter. The project is ahead of schedule and below budget.
- The first shipment of approximately 10,500 wet metric tonnes of zinc concentrate from Dugald River departed the Port of Townsville in Australia for Huangpu, China on 16 December 2017.
- Sepon delivered its strongest quarter for the year, producing 17,827 tonnes of copper cathode in the December quarter, 41% above the September quarter. Sepon's 2017 copper production was 62,941 tonnes.
- Kinsevere continued to demonstrate strong and stable operating performance with production exceeding 80,000 tonnes for the third consecutive year.
- Rosebery produced 20,054 tonnes of zinc in zinc concentrate, up 16% on the September quarter of 2017, taking annual zinc production to 74,803 tonnes.
- Cost and efficiency improvement initiatives continue across all sites, group and support functions to partially offset the impact of grade declines and input cost increases.
- MMG expects to produce 560,000–590,000 tonnes of copper and 190,000–220,000<sup>2</sup> tonnes of zinc in 2018.

## SAFETY

MMG's first value is safety. MMG's operations recorded a Total Recordable Injury Frequency (TRIF) for the fourth quarter 2017 of 1.31 per million hours worked and 1.17 for the full year 2017. This represents a 38% reduction on the full year 2016 TRIF of 1.90.

Whilst we continually strive to eliminate incidents and injuries at our workplaces, a worker at our Las Bambas operation, Mr. Hilario Castro, was fatally injured during the quarter after the haul truck he was driving left the road near the Ferrobamba pit. We will continue to work towards ensuring the safety of all of our people.

## COMMODITY PRICES, MARKETING AND SALES

LME cash price	Quarter – average			Quarter – close		
	4Q 17	3Q 17	4Q 16	4Q 17	3Q 17	4Q 16
Copper (US\$/lb)	3.09	2.88	2.39	3.25	2.94	2.51
Gold (US\$/oz)	1,276	1,278	1,217	1,297	1,285	1,148
Lead (US\$/lb)	1.13	1.06	0.97	1.13	1.14	0.91
Molybdenum (US\$/lb)	8.76	8.13	6.64	10.25	8.33	6.75
Silver (US\$/oz)	16.73	16.83	17.11	16.87	16.86	15.93
Zinc (US\$/lb)	1.47	1.34	1.14	1.50	1.46	1.16

<sup>2</sup> Production volumes include expected pre and post-commercial production volumes at Dugald River. The exact split will be determined when Dugald River declares commencement of commercial operations.

Base metal prices finished the year strongly with average prices for the fourth quarter being well above those for the previous quarter and the fourth quarter of 2016. During December the LME cash copper price traded at levels not seen for more than three years while the zinc price reached 10 year highs.

While increased investor interest in metals has contributed to the rise in prices, the strength is supported by the strong performance of the global economy during 2017, underpinned by growth in metal consumption.

Within the copper market there are also concerns about availability of raw materials going forward and this is flowing through to lower concentrate treatment charges being negotiated for 2018.

The zinc concentrate market remained extremely tight during the fourth quarter as evidenced by spot zinc concentrate treatment charges being at multi-year lows. The concentrate market shortage has constrained refined zinc production through the year, resulting in a drawdown of metal stocks which have overhung the market for a number of years. This stock drawdown continued through the fourth quarter so that at the end of 2017 LME and Shanghai Futures Exchange stocks were only equivalent to 7 days' global consumption.

### PROVISIONAL PRICING

The following table provides a summary of the contained metal that was sold but remains provisionally priced at the end of the fourth quarter 2017 and the month that final average pricing is expected to occur.

Open pricing at 1 January 2018	Jan-18	Feb-18	Mar-18	Apr-18	Total
Copper (tonnes cathode and copper contained in concentrate)	32,227	7,304	3,703	-	43,234
Gold (payable ounces in concentrate)	8,361	241	4,330	2,093	15,025
Lead (tonnes)	1,973	1,610	-	-	3,583
Silver (ounces)	573,636	84,880	208,965	104,159	971,640
Zinc (tonnes)	7,159	62	-	-	7,221
Molybdenum (pounds)	454,382	43,373	-	-	497,755

## OPERATIONS

### LAS BAMBAS

	4Q 17	4Q 17 vs 4Q 16	4Q 17 vs 3Q 17	YTD	YTD 17 vs YTD 16
Copper (tonnes)	121,140	15%	6%	453,749	37%
Molybdenum (tonnes)	481	n/a	1%	1,431 <sup>3</sup>	N/A

Las Bambas delivered a record production quarter of 121,140 tonnes of copper in copper concentrate for the end of December. This was 6% above the September quarter, driven by higher average ore grades and improved operational performance resulting in higher recoveries. Total material movement was also up on previous quarters, reflecting improved utilisation of the mining fleet and efficiency gains.

<sup>3</sup> Production volumes include pre and post-commercial production volumes at Las Bambas

2017 total production was 453,749 tonnes of copper in copper concentrate, at the higher end of the guidance range of 420,000 to 460,000 tonnes, and C1 costs were \$0.99/lb, within guidance of US\$0.95-US\$1.05/lb. Las Bambas is now firmly established as one of the world's top ten copper mines in terms of production.

Following an outstanding ramp up, Las Bambas production guidance for 2018 is 410,000 to 430,000 tonnes of copper in copper concentrate reflecting lower grades as we continue to develop the mine. We also expect to see lower metal production in the first quarter of 2018 as a result of work to manage a localised geotechnical instability. No loss of metal will result, with production deferred to subsequent periods.

Consistent with previous guidance, we expect Las Bambas to deliver in excess of 2 million tonnes of copper in copper concentrate over the first 5 years of operation. A series of work programs to maintain this production profile into the future are well advanced.

C1 unit cost guidance is US\$1.00-1.10/lb for 2018 with the impacts of lower production partly offset by ongoing business improvement initiatives. This positions Las Bambas as one of the lowest cost copper mines of this scale in the world.

#### **KINSEVERE**

	<b>4Q 17</b>	<b>vs</b>	<b>4Q 17</b>	<b>YTD</b>	<b>vs</b>
Copper Cathode (tonnes)	20,224	-3%	-3%	80,186	-1%

Kinsevere again performed strongly, producing 20,224 tonnes of copper cathode for the December quarter and 80,186 tonnes for the full year, above the guidance range of 75,000 to 80,000 tonnes.

This was the third consecutive year of stable and consistent production above 80,000 tonnes. The strong production was supported by significantly improved mining performance with total material movement increasing by 140% from 6.2 million tonnes in 2016 to 14.8 million tonnes in 2017.

Power supply initiatives continue to improve availability and lower the cost of grid supply, with more than 90% of power requirements sourced from the grid during the quarter.

Kalumines third party ore offtake deliveries proceeded as per plan in the fourth quarter. During 2017 approximately 332,791 tonnes of ore from the nearby Kalumines deposit, acquired through an offtake agreement, was processed producing 11,077 tonnes of copper cathode.

Actual C1 costs for 2017 were \$1.58/lb, in line with market guidance of US\$1.50-\$1.60/lb.

Despite declining ore grades at Kinsevere, MMG expects to maintain stable production levels, with guidance of approximately 80,000 tonnes of copper cathode in 2018.

C1 unit costs are expected to be in the range of \$1.57-\$1.67 for 2018, with increased waste movement and higher blasting costs offset by ongoing efficiency and cost reduction initiatives.

## Proposed changes to the DRC mining code

In December 2017 the Congolese government presented parliament with draft changes to the country's Mining Code. MMG has developed a track record of stable and consistent production at Kinsevere and has viewed the DRC as an attractive region for future growth. Whilst the potential impacts to Kinsevere of changes contained in the draft Bill are still being assessed, the changes in their current form are likely to significantly impact the attractiveness of future mining investment and would have a detrimental impact on the current and future economic situation in the DRC. The mining sector currently contributes 22% of GDP and 28% of government revenue in the DRC. MMG, along with other mining companies in the DRC, have urged the government towards an outcome that will preserve the investment climate for the mining sector and offer sustainable benefits for all stakeholders. These discussions are ongoing.

## SEPON

	4Q 17	4Q 17 vs 4Q 16	4Q 17 vs 3Q 17	YTD	YTD 17 vs YTD 16
Copper Cathode (tonnes)	17,827	-21%	41%	62,941	-20%

The December quarter was Sepon's strongest production quarter for the year, producing 17,827 tonnes of copper cathode. This was driven by the availability of higher grade ores exposed through significant waste stripping activities during preceding quarters. These higher grade ores will continue to be mined and processed throughout 2018 and 2019. Average copper feed grade was 2.9% compared to 2.1% in the third quarter of 2017 whilst mined copper grade was 4.1% compared to 3.7%.

Sepon's focus continues to be on improving operational performance, with the mine delivering record material movement in November and December and maintaining high levels of throughput in the mill. Total ore milled was up 24% in 2017 compared to 2016.

Despite the strong December quarter, full year production of 62,941 tonnes of copper cathode, was slightly below guidance of around 65,000 tonnes. The lower than anticipated annual production was primarily due to weather related disruptions in the September quarter and the processing of slightly lower than expected grades in the December quarter.

As a result of the lower production rates, actual C1 unit costs for 2017 were US\$1.59/lb, above the guidance range of US\$1.40-\$1.50/lb.

2018 copper cathode production is expected to be between 70,000 and 80,000 tonnes, with the improvement on 2017 driven by higher ore grades and continued strong operational performance. Despite higher production, MMG expects C1 unit costs in the range of US\$1.60-\$1.75/lb. The higher C1 costs reflect that there will be no further capitalisation of deferred mining costs in 2018, with the copper mine approaching the end of its life.

MMG continues to actively review future options for the Sepon mine and associated infrastructure. As part of this strategic review, MMG has initiated an expression of interest process for the Sepon asset. MMG expects an outcome to be determined in the first half of 2018 having now entered the second round of the process with a shortlist of interested parties.

## ROSEBERY

	4Q 17	4Q 17 vs 4Q 16	4Q 17 vs 3Q 17	YTD	YTD 17 vs YTD 16
<b>Contained metal in concentrate</b>					
Zinc (tonnes)	20,054	-6%	16%	74,803	-8%
Lead (tonnes)	7,711	9%	19%	26,611	2%
Copper (tonnes)	359	-29%	19%	1,321	-32%

Rosebery produced 20,054 tonnes of zinc in zinc concentrate, up 16% on the September quarter of 2017. Production was higher due to stronger zinc grades and improved throughput following unplanned mill maintenance in the September quarter.

Total 2017 production of zinc in zinc concentrate was 74,803 tonnes, above the guidance range of 65,000 to 72,000 tonnes due to the strong December quarter. Debottlenecking initiatives to increase throughput and mining rates largely offset the impact of declining head grades.

Actual zinc C1 costs for 2017 were US\$0.07/lb, below the guidance range of US\$0.15-0.25/lb due to the significant contribution from precious metal by-products.

The operation produced 26,611 tonnes of lead in lead concentrate in 2017, up 2% on 2016.

Precious metal production totalled 12,451 oz gold and 6,510 oz silver in 2017.

In 2018, MMG expects to produce 70,000 to 80,000 tonnes of zinc in zinc concentrate. C1 costs for zinc are expected to be in the range of US\$0.00 – US\$0.15/lb due to the significant by-product contribution.

## DUGALD RIVER

	4Q 17	4Q 17 vs 4Q 16	4Q 17 vs 3Q 17	YTD	YTD 17 vs YTD 16
<b>Contained metal in concentrate</b>					
Zinc (tonnes) <sup>4</sup>	12,412	n/a	n/a	12,412	n/a

### Production and sales

Zinc production began in the fourth quarter of 2017, with 12,412 tonnes of zinc in zinc concentrate produced as part of commissioning activities. The first shipment of approximately 10,500 wet metric tonnes of zinc concentrate departed the Port of Townsville in Australia for Huangpu, China on 16 December 2017.

### Project

Project construction is essentially complete with handover from the construction to operations team ongoing and significant demobilisation of project related personnel. The project continues to achieve these milestones ahead of schedule. Key milestones during the quarter included:

- Pastefill plant construction completed and commenced commissioning;
- Underground development of 2,568m was completed during the quarter, with decline reaching 500m below surface;

<sup>4</sup> Includes production from commissioning and start up activities in December 2017.

- 198,586 tonnes of ore was brought to surface during the quarter, with 379,381 tonnes ore stockpile at end December 2017; and
- Concentrate container logistics transportation has commenced.

### **Commissioning and ramp up**

Work to ramp up to nameplate capacity of 1.7 million tonnes of mill throughput per annum will continue over the coming months. MMG expects to produce 120,000 to 140,000 tonnes of zinc in zinc concentrate in 2018 as commissioning progresses and production ramps up. At this stage, it is expected that commercial production will be achieved during the first half 2018.

The total capital cost from 1 August 2015 to project completion is expected to be between US\$550-570 million, below the previous guidance range of US\$600-620 million plus interest costs. The total capital cost will be determined upon the achievement of commercial production, anticipated in the first half of 2018.

Dugald River is positioned to be within the world's top ten zinc mines when operational, with annual production of around 170,000 tonnes of zinc in zinc concentrate, plus by-products. The mine will operate over an estimated 25 years. As previously disclosed, MMG expects to achieve C1 costs of US\$0.68-0.78/lb when at a steady state of operation, which is anticipated in the second half of 2018.

## **GEOSCIENCE AND DISCOVERY**

Exploration was carried out at the Las Bambas Operation in Peru and the Nambulwa Project close to Kinsevere Mine in the DRC, as well as a number of greenfield projects in Southern Africa, South America and Australia.

At Las Bambas, geological mapping, surface geochemical and geophysical survey programs continue to systematically explore for satellite deposits near current mining operations. This included the completion of high resolution airborne and ground magnetic surveys which have proved effective for new target generation across the entire mining lease area. A limited amount of diamond drilling was also completed to test deep extensions to known mineralisation below Ferrobamba.

The drilling program at Nambulwa was completed during the quarter for a total of 28,800 metres and 245 holes drilled in 2017. The Nambulwa drilling program delineated a well constrained supergene and copper oxide deposit at the Nambulwa Main prospect as well as identified a new chalcocite copper sulphide discovery at the Kimbwe 1 prospect. Resource delineation drilling is planned for the Nambulwa Project in 2018.

A number of surface sampling, geophysical survey and scout drilling programs were completed at several greenfield projects in Australia, Brazil, Zambia and the DRC. This included diamond drilling of sediment hosted zinc deposit targets in the McArthur Basin in Australia, RC and diamond drilling of nickel sulphide targets at the Limoeiro and Plumridge Projects in Brazil and Australia respectively, and aircore and diamond drilling of geochemical targets near Solwezi in Zambia. Regional surface sampling was also completed at the Kakanda prospect in the central copper belt in the DRC. MMG withdrew from the Plumridge JV in Western Australia after the drilling program returned no significant nickel sulphide mineralisation.



# CORPORATE UPDATE

## APPOINTMENT OF KEY EXECUTIVES

During the quarter the board of directors announced the appointment of two new members to the Executive Committee of the Company. Mr Mark Davis was appointed as the Executive General Manager Operations – Africa, Australia and Asia and Mr Suresh Vadnagra as the Executive General Manager Operations – Americas.

Mr Davis joined the Company in January 2013 and was appointed as the General Manager Operational Excellence of the Company in November 2014. Prior to MMG, Mr Davis previously worked across multiple commodities and roles including engineering, business improvement, operations and business management and as the General Manager Aluminium South Africa for BHP Billiton Limited.

Mr Vadnagra joined the Company in March 2011 and was appointed as the Group General Manager Operations South America in December 2016. Prior to this, he was the General Manager of the Sepon mine in Lao PDR and the General Manager Operational Excellence, where he led the integration of Las Bambas into MMG following its acquisition in 2014. Prior to MMG, Mr Vadnagra previously held senior roles in Iluka Resources and BHP Billiton Limited.

The new roles of Mr Davis and Mr Vadnagra will replace the former Chief Operating Officer position, which has been managed in an acting capacity by Mr Greg Travers, since the resignation of Mr Marcelo Bastos. Mr Davis and Mr Vadnagra will bring extensive operational expertise and experience to MMG and also guide regional growth opportunities for MMG.

## FINANCIAL UPDATE

### **Voluntary Pre-payment of Las Bambas Project Facility**

On 24 January 2018, the Company announced that the shareholders of Minera Las Bambas S.A. (Las Bambas) have resolved to use surplus funds to pre-pay a further US\$500,000,000 of principal outstanding under the US\$5,988,000,000 Project Facility that was established to finance the Las Bambas project.

The pre-payment will take effect on 31 January 2018 and is expected to result in an annualised interest saving on borrowings of approximately US\$26,000,000, subject to prevailing LIBOR.

The pre-payment follows a similar pre-payment of US\$500,000,000 made by Las Bambas on 31 July 2017 as well as the transactions referenced below that are aimed at simplifying the Company's capital structure and reducing gearing and funding costs.

On 29 December 2017, MMG also announced the following transactions relating to its funding arrangements;

### **Redemption of Convertible Redeemable Preference Shares**

On 30 July 2013, MMG issued 338,000,000 Convertible Redeemable Preference Shares (CRPS) in Topstart Limited, a wholly owned subsidiary, for a total consideration of US\$338,000,000. The terms of the CRPS conferred a right on the holder, Alber Holdings Company Limited, to receive dividends at a rate of 5% per annum for the first eight years after their issue payable in cash semi-annually in arrears. The maturity date of the Convertible Redeemable Preference Shares is the date falling 25 years after their date of issue in July 2013.

On 29 December 2017, in accordance with the terms of the CRPS, Topstart Limited elected to redeem all of the Convertible Redeemable Preference Shares, with the redemption payment made out of existing liquidity sources available to the Company. The redemption simplifies the capital structure and results in a reduction in funding costs for MMG.

### **Las Bambas Shareholder Loan Agreement**

Upon the acquisition of the Las Bambas Project in 2014, the Company's 62.5% share of equity contribution to the Las Bambas joint venture entity was financed by an unsecured four-year term loan of up to US\$2,262,000,000 from Top Create Resources Limited, a wholly owned subsidiary of China Minmetals Corporation, the Company's controlling shareholder (Las Bambas Shareholder Loan Agreement).

On 29 December 2017 the parties to the Las Bambas Shareholder Loan Agreement entered into an agreement

- (i) extending the term of the agreement from four years to 11 years, with loan repayments, now falling due in three separate tranches in July 2021 (US\$700,000,000), July 2023 (US\$700,000,000), and July 2025 (balance) (originally due in one lump-sum in July 2018);
- (ii) further postponing interest payments, the first of which will now fall due in July 2018 (originally July 2017), and annually thereafter; and
- (iii) with effect from 25 July 2018, changing the existing single floating interest rate to a separate all-in fixed rate for each of the repayment tranches of between 3.70% and 4.50% per annum.

# CORPORATE DETAILS

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## MMG LIMITED

### EXECUTIVE COMMITTEE

JIAO Jian, Chief Executive Officer and Executive Director

Ross CARROLL, Chief Financial Officer

XU Jiqing, Executive General Manager Marketing and Risk and Executive Director

Troy HEY, Executive General Manager Stakeholder Relations

Greg TRAVERS, Executive General Manager Business Support

Mark DAVIS, Executive General Manager Operations – Africa, Australia and Asia

Suresh VADNAGRA, Executive General Manager Operations – Americas

Throughout this report figures in italics indicate that this figure has been adjusted since it was previously reported.

# APPENDIX

## GUIDANCE SUMMARY

	2018 Guidance	2017 Actual
<b>LAS BAMBAS</b>		
Copper – production	410,000 – 430,000 tonnes	453,749 tonnes
Copper – C1 costs	US\$1.00 – US\$1.10 / lb	US\$0.99 / lb
<b>KINSEVERE</b>		
Copper – production	~ 80,000 tonnes	80,186 tonnes
Copper – C1 costs	US\$1.57 – US\$1.67 / lb	US\$1.58 / lb
<b>SEPON</b>		
Copper – production	70,000-80,000 tonnes	62,941 tonnes
Copper – C1 costs	US\$1.60 – US\$1.75 / lb	US\$1.59/ lb
<b>ROSEBERY</b>		
Zinc – production	70,000 – 80,000 tonnes	74,803 tonnes
Zinc – C1 costs	US\$0.00 – US\$0.15 / lb	US\$0.07/ lb
<b>DUGALD RIVER</b>		
Zinc – production	120,000 – 140,000 tonnes <sup>5</sup>	12,412 tonnes

<sup>5</sup> Production volumes include expected pre and post-commercial production volumes at Dugald River. The exact split will be determined when Dugald River declares commencement of commercial operations.

## LAS BAMBAS

		QUARTER ENDED					YEAR-TO-DATE	
		DEC	MAR	JUN	SEP	DEC	DEC	DEC
		2016	2017	2017	2017	2017	2017	2016
Ore mined - copper	tonnes	12,632,340	12,097,495	13,736,039	13,350,272	13,689,307	52,873,113	46,910,080
Ore milled - copper	tonnes	12,645,845	12,205,267	13,095,910	13,195,092	13,001,373	51,497,642	46,502,808
<b>COPPER</b>								
Ore mined - grade	%	1.0	1.1	1.0	1.1	1.06	1.05	0.9
Ore milled - grade	%	1.0	1.1	1.0	1.1	1.1	1.0	0.9
Recovery	%	84.2	86.6	84.2	81.4	85.1	84.3	77.1
<b>Production</b>								
Copper concentrate	tonnes	277,827	271,802	286,561	303,322	330,294	1,191,979	926,015
Grade	%	38.0	40.6	37.4	37.6	36.7	38.1	35.7
Containing	tonnes	105,491	111,341	107,099	114,169	121,140	453,749	330,227
<b>Sales</b>								
Total concentrate sold	tonnes	414,473	317,113	276,581	297,514	317,624	1,208,832	857,679.6
Payable metal in product sold	tonnes	148,522	124,624	98,440	106,397	113,009	442,471	296,981.7
<b>MOLYBDENUM</b>								
Recovery	%	-	-	78.7	80.1	79.3	80.1	-
<b>Production</b>								
Molybdenum concentrate	tonnes	-	282	675	965	985	2,907	-
Grade	%	-	49.7	49.2	49.5	48.8	49.2	-
Contained metal produced	tonnes	-	140	332	478	481	1,431	-
<b>Sales</b>								
Total product sold	tonnes	-	-	344	928	1,178	2,450	-
Payable metal in product sold	tonnes	-	-	165	454	583	1,202	-

## KINSEVERE

		QUARTER ENDED					YEAR-TO-DATE	
		DEC	MAR	JUN	SEP	DEC	DEC	DEC
		2016	2017	2017	2017	2017	2017	2016
Ore mined - copper	tonnes	457,313	674,641	560,956	578,245	651,835	2,465,677	2,009,298
Waste Mined	tonnes	1,431,268	2,019,004	2,849,017	3,720,403	3,747,372	12,335,797	4,163,544
<b>TOTAL MINED</b>	<b>tonnes</b>	<b>1,888,581</b>	<b>2,693,645</b>	<b>3,409,974</b>	<b>4,298,648</b>	<b>4,399,206</b>	<b>14,801,473</b>	<b>6,172,842</b>
Ore milled - copper	tonnes	587,053	539,640	540,764	603,968	589,934	2,274,305	2,294,530
<b>COPPER</b>								
Ore mined - grade	%	4.3	5.8	3.8	4.0	2.0	4.0	4.0
Ore milled - grade	%	3.7	3.8	3.9	3.7	3.5	3.7	3.7
Recovery	%	96.7	95.2	95.0	94.3	97.1	95.4	93.8
<b>Production</b>								
Contained metal produced - cathode	tonnes	20,807	19,349	19,855	20,758	20,224	80,186	80,650
<b>Sales</b>								
Total product sold - cathode	tonnes	20,601	19,103	19,923	20,732	20,264	80,023	80,491
Payable metal in product sold - cathode	tonnes	20,601	19,103	19,923	20,732	20,264	80,023	80,491

## SEPON

		QUARTER ENDED					YEAR-TO-DATE	
		DEC	MAR	JUN	SEP	DEC	DEC	DEC
		2016	2017	2017	2017	2017	2017	2016
Ore mined - copper	tonnes	1,028,264	383,077	214,937	227,839	510,089	1,335,942	2,967,991
Ore milled - copper	tonnes	717,393	766,630	834,820	782,259	765,608	3,149,317	2,547,564
<b>COPPER</b>								
Ore mined - grade	%	3.5	2.7	2.4	3.7	4.1	3.4	4.0
Ore milled - grade	%	3.9	2.9	2.2	2.1	2.9	2.5	3.7
Recovery	%	82.2	80.3	78.1	77.4	79.3	78.9	84.0
<b>Production</b>								
Contained metal produced - cathode	tonnes	22,527	16,850	15,606	12,658	17,827	62,941	78,492
<b>Sales</b>								
Total product sold - cathode	tonnes	22,356	17,048	16,055	12,104	17,724	62,931	78,714
Payable metal in product sold - cathode	tonnes	22,356	17,048	16,055	12,104	17,724	62,931	78,714

**ROSEBERY**

		QUARTER ENDED					YEAR-TO-DATE	
		DEC	MAR	JUN	SEP	DEC	DEC	DEC
		2016	2017	2017	2017	2017	2017	2016
Ore mined	tonnes	239,904	240,149	244,428	251,699	254,537	990,813	931,573
Ore milled	tonnes	229,341	233,780	248,558	229,308	256,927	968,573	939,125
<b>ZINC</b>								
Ore mined - grade	%	9.6	8.7	8.4	9.3	9.1	8.9	8.3
Ore milled - grade	%	10.7	9.2	8.5	8.8	9.1	8.9	9.9
Recovery	%	87.3	88.6	87.1	85.7	86.1	86.9	87.9
<b>Production</b>								
Zinc concentrate	tonnes	38,293	34,254	32,803	31,446	36,370	134,874	145,294
Grade	%	55.9	55.9	56.0	54.8	55.1	55.5	56.1
Containing	tonnes	21,424	19,146	18,373	17,230	20,054	74,803	81,447
<b>Sales</b>								
Total product sold	tonnes	43,790	29,556	34,482	29,365	30,715	124,117	152,557
Payable metal in product sold	tonnes	21,683	14,252	16,668	13,999	14,708	59,627	74,657
<b>LEAD</b>								
Ore mined - grade	%	3.3	2.7	2.8	3.5	3.8	3.2	3.1
Ore milled - grade	%	3.6	3.4	3.1	3.5	3.8	3.4	3.4
Recovery	%	85.0	79.7	80.2	81.1	78.6	79.8	81.1
<b>Production</b>								
Lead concentrate	tonnes	11,585	9,981	10,015	10,665	12,701	43,361	42,419
Grade	%	61.3	62.6	61.6	60.8	60.7	61.4	61.3
Containing	tonnes	7,103	6,253	6,167	6,479	7,711	26,611	26,005
<b>Sales</b>								
Total product sold	tonnes	14,892	8,134	11,336	8,996	12,245	40,711	43,112
Payable metal in product sold	tonnes	8,590	4,768	6,622	5,213	7,158	23,761	24,868
<b>COPPER</b>								
Ore mined - grade	%	0.3	0.2	0.2	0.2	0.2	0.2	0.3
Ore milled - grade	%	0.4	0.3	0.2	0.2	0.2	0.2	0.3
Recovery	%	62.1	56.0	53.6	60.6	59.2	57.2	63.1
<b>Production</b>								
Copper concentrate	tonnes	2,794	1,789	1,779	1,679	1,969	7,217	10,994
Grade	%	18.1	19.2	17.8	18.0	18.2	18.3	17.7
Containing	tonnes	505	343	316	303	359	1,321	1,948
<b>Sales</b>								
Total product sold	tonnes	3,034	1,825	1,938	1,552	2,054	7,368	11,586
Payable metal in product sold	tonnes	516	321	336	261	361	1,280	1,943
<b>OTHER METALS</b>								
Ore milled grade - gold	g/t	1.6	1.4	1.3	1.4	1.5	1.4	1.4
Ore milled grade - silver	g/t	111.2	111.1	105.7	121.7	111.4	112.3	98.0
Recovery - gold	%	27.9	31.2	31.6	27.1	24.8	28.5	29.3
<b>Production</b>								
Gold dore	oz	5,209	5,260	4,956	4,617	5,056	19,890	19,949
Containing - gold	oz	3,284	3,302	3,238	2,885	3,026	12,451	12,178
Containing - silver	oz	1,664	1,694	1,553	1,566	1,696	6,510	6,779
<b>Sales</b>								
Gold dore sold	oz	4,722	5,628	5,017	4,042	2,417	17,104	19,195
Payable metal in product sold - gold	oz	9,138	7,336	7,824	6,425	6,180	27,765	31,752
Payable metal in product sold - silver	oz	809,582	513,808	646,652	543,160	650,920	2,354,540	2,346,353