

## Second Quarter Report 2018

FOR THE THREE MONTHS ENDING 30 JUNE 2018

<b>OZ Minerals Contained Metal Production</b>	<b>FY 2018 Guidance</b>	<b>Q1 2018</b>	<b>Q2 2018</b>	<b>YTD 2018</b>
Total Copper (Tonnes)	100,000 – 110,000	27,466	27,131	54,597
Total Gold (Ounces)	120,000 – 130,000	30,873	28,121	58,994
C1 Cash Costs (US cents/lb)	75 – 85	97	72	85

### OZ Minerals operations and projects delivering to plan

- Prominent Hill delivering to plan on all production and cost guidance
- Carrapateena project on track; above ground infrastructure construction underway, airstrip complete
- Carrapateena province expansion drilling at Khamsin returns 402.6m @ 1.55% copper equivalent<sup>i</sup>
- West Musgrave PFS advancing; Massive Sulphide mineralisation intersected at nearby Yappsu prospect
- Avanco compulsory acquisition in progress; integration underway, strategic planning commenced
- Strong cash balance of \$454 million after Avanco shareholder payments (\$201 million), investment into Carrapateena (\$78 million) and tax payments (\$100 million)
- Corporate head office relocated to Adelaide Airport business district

“This was a business-as-usual quarter for operations and projects across the company, with good progress made on delivering to our plans and growth strategy.

“Prominent Hill saw solid, consistent production that is tracking to guidance. With the drawdown of the open pit stockpile now in place for a full quarter, AISC and C1 costs are lower with no further open pit mining costs or related overheads to be incurred.

“Carrapateena decline development continues its excellent progress and has safely transitioned to Downer EDI, our new underground mining partner. Airstrip construction is complete and processing plant and non-process infrastructure construction is underway. Province expansion drilling at Khamsin has also returned some very encouraging results.

“West Musgrave pre-feasibility study activities have focussed on heritage clearances with traditional owners, infill drilling and renewable power investigation. The regional exploration program has intersected Massive Sulphide mineralisation at nearby Yappsu, just six kilometres from Nebo Babel and mineralisation appears open in all directions.

“The takeover of Avanco is now in compulsory acquisition stage, having received acceptances from over 90% of Avanco shareholders in late June. We have a dedicated integration team in Brazil working on optimising the asset portfolio and accelerating growth as part of a holistic business plan. We will release a detailed Brazil strategy later in the year.

“Our cash balance remained strong at \$454 million at the end of the quarter, following payments to Avanco shareholders, ongoing Carrapateena investment, and tax payments for 2017 and 2018.

“We have also relocated to a new office in a converted warehouse at the Adelaide Airport business district, enabling a more modern and collaborative work space to facilitate our cultural aspirations and reducing our annual rental costs by some 40% at the same time”.



**Andrew Cole, Managing Director and CEO**

## SOCIAL PERFORMANCE

A minor improvement in total recordable injury frequency per million hours worked was achieved at the end of June 2018 compared to the end of the prior quarter (5.91 vs. 6.03<sup>1</sup>).

OZ Minerals' continued focus on safety across its assets saw the team at Prominent Hill begin a collaborative training program with the South Australian Ambulance Service. In addition, Prominent Hill's Safety, Health, Environment and Community team undertook a nationally recognised internal auditor training course, enabling them to effectively audit compliance against OZ Minerals' performance standards and identify opportunities to implement safety best practices across the business. The Stand Together for Safety initiative was also implemented with construction partners at Carrapateena.

At Carrapateena, access agreements were progressed with neighbouring pastoralists. On completion, this will allow for commencement of regional infrastructure to support the project and local stakeholders.

A community information roadshow was run in the Upper Spencer Gulf to keep stakeholders updated on OZ Minerals' activities across the region. The sessions also enabled OZ Minerals to further engage with the community on supplier participation.

The Kokatha Aboriginal Corporation and OZ Minerals co-presented at the 2018 National Native Title Conference on the Carrapateena agreement making process, which was based on shared value creation.

As the takeover offer for Avanco Resources progressed, John Penhall, General Manager Prominent Hill, was seconded to the new role of Chief Operating Officer Brazil to facilitate integration and asset optimisation.

Two new Directors will be joining OZ Minerals' Board. Charlie Sartain and Marcelo Bastos have extensive international mining experience, including in Brazil, and have led copper divisions for global resources companies. Charlie and Marcelo will replace Julie Beeby, who resigned in May 2018, and Peter Tomsett who will be leaving the OZ Minerals' Board on 1 August.

## PROMINENT HILL PROVINCE

Prominent Hill continued its strong performance with 27,131 tonnes of copper and 28,121 ounces of gold produced for the quarter, remaining on track to meet all production and cost guidance metrics.

For operating and cost statistics, please refer to Tables 2 and 3 on pages 10 and 11 of this report.

## Mining

### Underground Operations

Underground operations delivered 689kt of ore at 1.70% copper. Underground grades were lower than the prior quarter due to stope sequencing. An increase in copper ore grade mined is expected in Q3.

Breakthrough of the third portal into the lower open pit was completed on time and budget during the quarter. The fourth haulage decline into the open pit remains on schedule for completion in Q3. The rehandle to a larger surface fleet will commence in August to further improve efficiencies and enable underground ore movement to ramp-up to 3.5-4.0Mtpa<sup>2</sup>

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<sup>1</sup> Q1 2018 TRIF revised upwards from 5.91 to 6.03 due to reduced working hours reconciled

<sup>2</sup> These production targets must be read in conjunction with the production cautionary statement on pages 12 & 13

from 2019. In July, Thiess was awarded a five-year contract to provide run of mine management, crusher feed and ore re-handling services at Prominent Hill.

The process to replace the current Cemented Hydraulic Fill (CHF) plant with a fit for purpose Paste Plant has progressed and the tender process is nearing completion.

The internal mining study looking to identify potential pathways to higher value mine plans progressed during the quarter. This two-stage study investigates a range of design cut-offs, extraction methodology, combinations of mining areas and haulage options. Development to facilitate initial drilling at depth will commence during Q3 with the investigation of alternative haulage options already underway.

## Processing

There was 2.4Mt of ore milled for the quarter. Copper content in concentrate produced was 43% with gold at 14 g/t. A lower concentrate grade resulted from a changing copper to sulphur ratio associated with differing copper mineral species processed during the quarter. Plant recoveries were 87% for copper and 71% for gold.

The scheduled concentrator shutdown, including relines for both the SAG and Ball Mill, was completed safely and on time during May.

Stockpile drawdown commenced in April following closure of the open pit in Q1. Stockpiled open pit ore will maintain the plant at full capacity until 2023, with the benefit of no further open pit mining costs or associated overheads to be incurred.

An upgrade to mine-to-mill modelling software incorporating improved scenario analysis capability is nearing completion. The software will enable rapid scenario analysis and plan optimisation to facilitate faster decision making at the operational level and improved strategic planning.

## Costs

Q2 marked the step change for Prominent Hill's mining cash costs with the completion of the open pit in Q1 and commencement of ore stockpile processing in April. C1 cash costs were US 72c/lb for the quarter with an All-In Sustaining Cost of US 117c/lb.

The reduction of US 25c/lb compared to the prior quarter was primarily due to the cessation of open pit mining and the resultant reduction in mining cash costs and associated overheads. Gold production was 9% lower than the prior quarter due to stope sequencing, resulting in lower gold credits. TCRC, transport and processing costs were in line with the prior quarter.

With the cessation of open pit mining, Run Of Mine (ROM) management costs, including open pit stockpile management costs, have now been included in underground mining costs. The Q2 underground operating unit costs of \$55/t were higher than Q1 primarily due to this inclusion.

The costs attributable to open pit ore stockpiles processed during the half year amounted to \$40 million. \$13 million of this related to mining costs (recognised as inventory adjustment) and \$27 million related to capitalised depreciation (recognised within net depreciation). Additionally, upward revisions to long term gold price estimates and discount unwind has resulted in a positive Net Realisable Value (NRV) adjustment of \$14 million that will be recognised in the income statement.

## Sales and Marketing

Shipments of Prominent Hill concentrates for the quarter totalled 65,375 dry metric tonnes, containing 29,145 tonnes of copper, 33,095 ounces of gold and 198,067 ounces of silver.

## CARRAPATEENA PROVINCE

Stage two of the Tjungu accommodation village was commissioned and earthworks relating to the Minerals Processing Plant (MPP) and Non-Processing Infrastructure (NPI) sites commenced as planned. Offsite infrastructure works including installation of the main communications network and high voltage powerline also commenced. The planned transition from PYBAR Mining Services to Downer EDI for the underground development works was successfully executed and works remain on schedule.

### Underground development

All key underground milestones are on track with total development at 6,825 metres (3,015 metres to the face of the Tjati decline) and a vertical depth of 435 metres. Record monthly development of 505 metres was achieved in May, with the transition to Downer EDI at the end of June having a limited impact on progress due to handover activities. The upcoming quarter will see underground development works expanded to include access development for future underground crusher installations. The first raisebore hole commenced during the quarter in preparation for installing and commissioning the first ventilation rise in Q3.

### Infrastructure development

Construction of the airstrip has been completed and is awaiting Civil Aviation Safety Authority (CASA) certification.

Stage two of the Tjungu accommodation village was occupied with 316 rooms now available, in addition to those in the original exploration village. Total available rooms on site now total 488 with an average occupancy rate of 345 in June. The final stage will be completed in Q3, increasing capacity at the new village to 550 rooms.

Scheduled earthworks relating to the MPP and NPI sites are progressing as planned, with the on-site borrow pit successfully operating to deliver material requirements. Engineering progress now exceeds 70% for the MPP and NPI packages and construction activities are on track for commencement.

Offsite infrastructure works including installation of the main communications network and high voltage powerline started during the quarter. Over 40 kilometres of the main fibre optic cable to site has been installed and earthworks for major substation sites to support power infrastructure have begun.

Optimisation of the construction and expenditure schedule is ongoing with revised timings under consideration to commence build of the Western Access Road and Tailings Storage Facility. A decision is expected to be made in Q3 that will drive project value by potentially deferring or removing capital expenditure from 2018 without affecting the timing of first concentrate production in Q4 2019.

Expenditure for Q2 on the Carrapateena project was \$92 million. A total of \$729 million of project costs are now committed under contract.

### Carrapateena province expansion

Further funding of \$5 million has been allocated to continue preliminary studies evaluating mining methods and infrastructure requirements for Carrapateena expansion planning. The scope of these studies includes both the current orebody and the wider Carrapateena mineralised zone. These studies will be ongoing during the year as a separate work stream and will not impact the scope, costs or schedule of the current Carrapateena project.

At the Khamsin prospect, located just 10km to the north west of Carrapateena, a program of three diamond drill holes (~4,500m) was undertaken to test the extent of the known mineralisation. All three drill holes returned broad intersections of zoned bornite and chalcopyrite mineralisation. A broad intersection of 402.6m @ 1.38% Cu and 0.27 g/t Au in DD18KMS031

(from 735m) extends the existing high grade mineralisation from the 2014-2015 drilling, further to the south west. The drilling results are currently being used to aid in geological modelling of the Khamsin deposit.

**Table 1: Drilling results from the Khamsin prospect**

Hole Number	From (m)	To (m)	Interval (m)	Cu (%)	Au (g/t)
*DD18KMS030	735.0	748.0	13.0	2.14	0.10
*And	961.6	990.9	29.3	0.87	0.29
*DD18KMS031	743.0	1145.6	402.6	1.38	0.27
**Including	743.0	785.0	42.0	3.62	0.09
**Including	841.0	873.0	32.0	2.09	0.24
**Including	974.0	1005.0	31.0	2.52	0.16
**Including	1099.0	1145.6	46.6	1.32	1.01
*DD18KMS032	1255.8	1382.0	126.2	1.13	0.50
**Including	1296.1	1319.0	22.9	1.83	0.97
**Including	1357.0	1382.0	25.0	1.54	0.73

\*0.1% Cu cut off with unlimited internal dilution.

\*\*0.7% Cu cut off up to/including 4m internal dilution.

Reported as down hole lengths as true widths are not known

During the quarter, ~6,500m was drilled at both Khamsin and Fremantle Doctor. Drilling is continuing at the Fremantle Doctor prospect with assay results pending. Detailed information required under JORC 2012 can be found in Appendix 1 of this Report.

Heritage clearances were completed at Punt Hill during the quarter with drilling expected to commence in H2.

Expenditure for Q2 on Carrapateena province expansion was \$3.9 million.

## MUSGRAVE PROVINCE

Substantial progress on the West Musgrave Pre-Feasibility Study was made during the quarter.

Resource categorisation continues to increase with an extensive infill program of 40,000m, which is approximately 25% complete.

Metallurgical drilling on site and test work utilising existing samples have been completed. The results form the basis for metallurgical testing on the new samples, which is scheduled to begin in Q3.

Exploration drilling has commenced at the Yappsu prospect (6 km east of Nebo) with Massive Sulphide mineralisation intersected. The prospect has been targeted as part of the regional exploration program to complement development of the Nebo-Babel deposits, with significant progress made in further understanding the geology of the prospect. Exploration at Yappsu is at an early stage and mineralisation currently appears open in all directions.

Investigation of wind and solar as supplementary power solutions continues to be a focus for the project. A 100m wind mast was installed and commissioned, and over the next year data will be collected to analyse the suitability of wind power as a viable power option. Energy solution providers were engaged to investigate options for the project and discussions were held with the Federal Government's Australian Renewable Energy Agency (ARENA) to identify funding opportunities for hybrid power solutions.

Heritage surveys were undertaken concentrating on the development footprint. Infrastructure corridors have been outlined with encouraging community support. Baseline environmental characterisation studies have commenced to expedite the environmental permitting for the project.

Expenditure for Q2 on the West Musgrave project was \$6.0 million.

## **AVANCO SHAREHOLDER OFFER**

A significant milestone was reached during the quarter as Avanco shareholder offer acceptances passed 90%, resulting in OZ Minerals (through its wholly owned subsidiary OZ Minerals Brazil (Holdings) Pty Ltd) commencing compulsory acquisition of the remaining Avanco shares.

The Avanco acquisition provides an operating asset in the Antas mine whilst adding a significant pipeline of development and exploration opportunities in the Carajás and Gurupi provinces in Brazil. An integration team including key technical personnel from OZ Minerals are now working with the Avanco team in Brazil to optimise the asset base and unlock the potential of the extensive project pipeline within the Avanco portfolio.

The compulsory acquisition process is expected to be completed in August, with combined entity guidance for 2018 to follow. A detailed strategy update for the Brazil assets will be released later in the year.

## **STRATEGIC OPERATIONAL PROJECTS**

### **Concentrate Treatment Plant update**

CTP technical studies continued through Q2.

A Hazard Identification (HAZID) review of processes was held during the quarter with no material hazards or fatal flaws identified. Execution and ramp-up strategies for the plant are currently being considered and concentrate logistics modelling has been developed across a range of scenarios. A community consultation session was also held in Whyalla during the quarter for local stakeholders.

Expenditure for Q2 relating to the Concentrate Treatment Plant was \$3.2 million.

### **Power Strategy update**

The second phase of the Power Strategy covering procurement and generation was further progressed, with the future sourcing strategy contemplating the traditional approach to supply as well as alternate generation sources.

The Prominent Hill team hosted ElectraNet's Board and management on site during the quarter to build contextual understanding, ahead of construction of the new 270 km high-voltage power line.

Planning for the line construction was progressed with the directors of the Barngarla Aboriginal Corporation. Cultural heritage alignment works were also undertaken together with the Kokatha, enabling the alignment of the powerline to be optimised to avoid significant cultural heritage sites and enable conclusion of additional land access agreements as well as more targeted cultural heritage survey works. A request for tender (RFT) for design and construction of the line was released and responses are under evaluation.

RFT documents for the supply of electricity to Prominent Hill and Carrapateena were also released in early July. Meetings with short-listed providers are about to commence with a decision expected in Q3. A range of pricing options across different durations are being considered.

Electricity pricing remains fixed at Prominent Hill to the end of 2018.

## EXPLORATION AND GROWTH

Fieldwork continued at Eloise, with the focus on completing ground EM on regional targets and further drilling at the Jericho prospect. 18 line-kms of geophysics surveying were completed during the quarter on the regional targets at the Defiance, Yukon and St Louis prospects. An initial 1,900m drilling program was completed on the Jericho prospect and all six holes intersected copper mineralisation, including<sup>3</sup>:

- EL18D01 24m @ 0.26% Cu and 0.03g/t Au from 206m
- EL18D02 44m @ 1.05% Cu and 0.22g/t Au from 159m including 17m @ 2.3% Cu and 0.5g/t Au from 165m
- EL1803 17m @ 0.85% Cu and 0.29g/t Au from 153m, 6m @ 1.02% Cu and 0.28g/t Au from 278m and 13m @ 0.68% Cu and 0.29g/t Au from 433m (EL18D03)
- EL1804 50.5m @ 0.51% Cu and 0.14g/t Au from 344.5m including 9m @ 1.43% Cu and 0.5g/t Au from 368m
- EL18D05 17m @ 1.29% Cu and 0.22g/t Au from 135m including 3m @ 4.46% Cu and 0.69g/t Au from 147m
- EL18D06 11m @ 0.85% Cu and 0.13g/t Au from 97m

The drill program at Jericho was extended at the end of the quarter due to the encouraging results; a further eight holes will be completed for an additional 1,700m.

Regional drilling was completed at the Arlington, Defiance, St Louis and Yukon targets. The drill hole at Defiance intersected a wide zone (+200m) of weak but persistent chalcopyrite mineralisation. Copper grades are expected to be relatively low based on visual estimates. However, the host rock is strongly altered and warrants further work.

No activity was undertaken on the Coompana project as the company awaits the completion of the scientific drill program, sponsored by Geological Survey of South Australia in conjunction with Geoscience Australia.

Heritage clearances were completed at the East Musgrave project during the quarter with drilling expected to commence in Q3.

Drill testing of multiple IOCG targets was completed during the quarter on the Alvito project in Portugal. The initial program of 2,100m was extended to a total of 2,437m. Three additional holes are being drilled to follow up on best visual intersections of chalcopyrite mineralisation and magnetite breccias containing copper sulphides. Geologic logging and sampling for assay is currently underway, with first results expected in Q3.

During the reporting period, OZ Minerals signed a binding Heads of Agreement with private explorer Mineral Prospektering i Sverige to explore for IOCG mineralisation in the Norrbotten district of northern Sweden. Exploration will focus on a >3km untested trend of interpreted thrust faulting, coincident with partially-overlapping gravity and EM anomalism. A copper zinc skarn system occurs on the southern edge of the target area, and the priority zone for initial testing is bound between two known hydrothermal iron occurrences; Teltaja and Kevus. A base of till geochemical sampling program, designed to highlight areas of interest within the target area is scheduled to begin in Q3.

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<sup>3</sup> This information is extracted from the announcement by Minotaur Exploration Limited titled "Expansive copper-gold system proven at 'Jericho'" released on 14 June 2018 and is available at [www.minotaurexploration.com.au/investorinformation/asxannouncements](http://www.minotaurexploration.com.au/investorinformation/asxannouncements). OZ Minerals is not aware of any new information or data that materially affects the information included in that announcement. OZ Minerals confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from that announcement.

At the Oaxaca project in Mexico, field work at Riqueza Marina led to the discovery of more surface Cu-Zn-Au-Ag mineralisation approximately 1.2 km north-east of the gossanous sub-crop previously reported. Geophysical equipment was mobilised to Riqueza Marina and an environmental study was completed at the project in preparations for drilling. Drill permitting continues. At the Zaachila project, geological reconnaissance extended the known mafic / felsic volcanic rock-associated copper occurrences to a strike length of approximately 2 km. Activities on the Oaxaca projects for Q3 will focus on gravity and magnetic geophysical surveys and permitting of a drilling program at Riqueza Marina.

Expenditure for Q2 on Exploration and Growth was \$4.8 million.

## **CORPORATE**

The total amount of gold hedged remains at 267,137 ounces at an average price of A\$1,736/oz, and full exposure to the spot gold price will continue until Q3 2018 when initial contracts will begin to mature.

OZ Minerals' head office relocated to the Adelaide Airport business district as planned during the quarter. The move reflects the next phase of the company's growth, providing a modern work environment that will improve collaboration, encouraging both flexibility and agility whilst achieving significant savings in corporate leasing costs.

## Corporate Information

### Webcast

As is OZ Minerals' established practice, a presentation associated with this Quarterly Report will be broadcast at 10am (AEST) on the day that the Report is lodged with the ASX. Access to this live broadcast is available to all interested parties via the OZ Minerals website ([www.ozminerals.com](http://www.ozminerals.com)) and is archived on the website shortly thereafter for ongoing public access. The date of each Quarterly Report presentation is announced in advance and can be found on the OZ Minerals website.

While we will endeavour to release the Report on the date provided in advance, we may bring the announcement forward if the relevant information is finalised earlier than expected or delay the Report if information is not final.

### Issued Share Capital at 18 July 2018

Ordinary Shares	322,361,023
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### Share Price Activity for the June Quarter (Closing Price)

High \$10.67
Low \$8.85
Last \$9.00 (18 July 2018)
Average daily volume 2.1 million shares

### Share Registry

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## OZ Minerals Prominent Hill Production and Costs

Table 2: Operating Statistics

		Q1 2018	Q2 2018	YTD 2018
MINED (TONNES)	MALU OP COPPER-GOLD ORE	2,225,282	-	2,225,282
	MALU OP GOLD-ONLY ORE	863	-	863
	UNDERGROUND TOTAL ORE	679,834	688,619	1,368,453
	OP WASTE	602,401	-	602,401
MINED GRADE SOURCE				
MALU OP - COPPER-GOLD ORE	COPPER (%)	0.97	-	0.97
	GOLD (G/T)	0.44	-	0.44
MALU OP - GOLD-ONLY ORE	COPPER (%)	0.12	-	0.12
	GOLD (G/T)	1.27	-	1.27
UNDERGROUND - TOTAL ORE	COPPER (%)	1.81	1.70	1.75
	GOLD (G/T)	0.59	0.65	0.62
ORE MILLED	(TONNES)	2,471,967	2,390,588	4,862,555
MILLED GRADE	COPPER (%)	1.30	1.31	1.30
	GOLD (G/T)	0.53	0.51	0.52
	SILVER (G/T)	3.08	3.65	3.37
RECOVERY	COPPER (%)	85.8	86.8	86.3
	GOLD (%)	72.9	71.1	72.0
	SILVER (%)	73.7	74.0	73.9
COPPER CONCENTRATE PRODUCED	TONNES	59,172	63,093	122,265
CONCENTRATE GRADE	COPPER (%)	46.4	43.0	44.7
	GOLD (G/T)	16.2	13.9	15.0
	SILVER (G/T)	94.9	84.9	89.7
CONTAINED METAL IN	COPPER (TONNES)	27,466	27,131	54,597
CONCENTRATES PRODUCED	GOLD (OZ)	30,873	28,121	58,994
	SILVER (OZ)	180,463	172,261	352,724
TOTAL CONCENTRATE SOLD	(DM TONNES)	52,131	65,375	117,506

Table 3: Operating Costs ('C1 Costs')

<b>US Cents per pound</b>	<b>Q1 2018</b>	<b>Q2 2018</b>	<b>YTD 2018</b>
Mining costs	79.2	49.5	64.4
Site processing costs	36.1	37.0	36.6
TC/RC and transport	44.0	43.1	43.6
Net By - Product credit	(71.1)	(64.5)	(67.8)
Other direct cash costs	9.2	7.3	8.3
<b>Total C1 costs</b>	<b>97.4</b>	<b>72.4</b>	<b>85.1</b>
Royalties	19.0	18.4	18.7
Other indirect costs	2.8	5.3	4.1
<b>Total cash costs</b>	<b>119.2</b>	<b>96.1</b>	<b>107.9</b>
D&A	75.1	26.9	51.1
<b>Total production costs</b>	<b>194.3</b>	<b>123.0</b>	<b>159.0</b>

OZ Minerals has adopted the direct cash expenditure incurred approach in calculating operating costs from 2018, which is aligned to the Wood Mackenzie methodology. For the year, this will again reflect the marginal cash cost of producing contained copper in concentrate.

As a result, total reported C1 costs no longer include deductions for deferred mining and ore inventory adjustments.

Table 4: Guidance

GUIDANCE	2018	2019
<b>PROMINENT HILL:</b>		
COPPER PRODUCTION*	100,000 - 110,000 TONNES	95,000 - 105,000 TONNES
GOLD PRODUCTION*	120,000 - 130,000 OUNCES	100,000 - 110,000 OUNCES
UNDERGROUND ORE MOVEMENT	2.8 – 3.1MT	3.5 – 4.0MT
UNDERGROUND UNIT MINING COSTS <sup>1</sup>	A\$45 - A\$55/TONNE	
UNDERGROUND CAPITAL EXPENDITURE	A\$50 - A\$60 MILLION (INC. DEVELOPMENT)	
GROWTH CAPITAL EXPENDITURE	A\$20 - A\$25 MILLION	
SITE SUSTAINING CAPITAL EXPENDITURE	A\$10 - A\$20 MILLION	
ALL IN SUSTAINING COST <sup>2</sup>	US 120c – US 130c/lb	
C1 COSTS <sup>2,3</sup>	US 75c – US 85c/lb	
<b>OTHER:</b>		
CARRAPATEENA CONSTRUCTION CAPITAL	CIRCA A\$500 MILLION	
WEST MUSGRAVE PFS (INCL. EXPLORATION)	A\$20 - A\$30 MILLION	
CARRAPATEENA PROVINCE EXPANSION	A\$8 - A\$10 MILLION	
CONCENTRATE TREATMENT PLANT STUDIES	UP TO A\$12 MILLION	
EXPLORATION	A\$10 - A\$15 MILLION	

<sup>1</sup> Underground Unit Mining Costs include geology costs and exclude underground capital expenditure

<sup>2</sup> AUD/USD of 0.76 has been used in converting A\$ costs to US\$ for C1 and AISC guidance

<sup>3</sup> From 2018, C1 costs have been calculated to align with the Wood Mackenzie methodology, which excludes inventory movements

**\* Production Targets Cautionary Statement**

Production Targets for the Prominent Hill Underground only are based on:

Proved Ore Reserve	44%
Probable Ore Reserve	47%
Measured Mineral Resource	1%
Indicated Mineral Resource	3%
Inferred Mineral Resource	5%

Production Targets for the entire Prominent Hill asset are based on:

Proved Ore Reserve	47%
Probable Ore Reserve	45%
Measured Mineral Resource	1%
Indicated Mineral Resource	2%
Inferred Mineral Resource	5%

The modifying factors used in the estimation of the Ore Reserve were also applied to the Mineral Resources in the generation of the production target. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production targets will be realised.

The Ore Reserve and Mineral Resource Estimate underpinning these Production Targets were prepared by a Competent Person in accordance with the JORC Code 2012. The production targets are the result of detailed studies based on the actual performance of our existing mines and processing plant. These studies include the assessment of mining, metallurgical, ore processing, marketing, government, legal, environmental, economic and social factors.

Further information on Prominent Hill Resources and Reserves is available in the document entitled "Prominent Hill 2017 Mineral Resource and Ore Reserve Statement and Explanatory Notes" which is annexed to the ASX Release entitled "Prominent Hill underground Reserve growth continues, mine life extended to 2029" released on 21 November 2017 and available at [https://www.ozminerals.com/uploads/media/171121\\_Prominent\\_Hill\\_2017\\_Mineral\\_Resource\\_and\\_Ore\\_Reserve.pdf](https://www.ozminerals.com/uploads/media/171121_Prominent_Hill_2017_Mineral_Resource_and_Ore_Reserve.pdf). OZ Minerals confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. OZ Minerals confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

## **i COPPER EQUIVALENT CALCULATION – KHAMSIN DRILL RESULTS**

The copper equivalent percent was calculated using the following formula:  $Cu\ Eq\ \% = Cu\ \% + (0.647 * Au\ g/t)$ . Copper equivalent has been calculated using a copper price of \$US 6415/tonne and a gold price of \$US 1292/oz.

Metallurgical test work conducted on a single composite sample in 2014 suggests that Khamsin material is similar in milling and flotation properties to Carrapateena material, and could be processed by a conventional crushing, grinding and flotation circuit. Copper recoveries of 90 percent at 35 percent copper in concentrate and gold recoveries of 75 percent with 10g/t in concentrate were achieved to date in the test work which are compatible with more detailed test work outputs from Carrapateena. It is assumed that the elements included in the metal equivalents calculation would therefore have a reasonable potential to be recovered.

## **COMPETENT PERSONS STATEMENT**

The information in this report that relates to exploration results in respect to the Khamsin deposit are based on and fairly represents information and supporting documentation compiled by Mr Hamish Freeman BSc (Hons), a competent person who is a member of the Australian Institute of Geoscientists. Mr Freeman is a full-time employee of OZ Minerals Limited. Mr Freeman is a shareholder of OZ Minerals and is entitled to participate in the OZ Minerals Performance Rights Plan. Mr Freeman has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Freeman consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Mr Freeman has more than 22 years of continuous and relevant experience as a geologist in mineral exploration, including 18 years in iron oxide copper-gold deposits.

## CARRAPATEENA PROJECT: KHAMSIN

JORC 2012 Table 1 – Section 1: Sampling techniques and data

Criteria	Comments
Sampling techniques	<p>All basement samples consist of diamond drill core (NQ2 and HQ) cut with an automatic core saw and sampled as half core, except for field duplicates, where quarter core was sampled. The method of sampling is considered to be of an acceptable quality for the reporting of Exploration Results.</p> <p>Predominantly 1m samples were obtained, but lengths range from 0.5m to 1.5m where adjusted to geological or major alteration boundaries. All available basement drill core was sampled.</p> <p>Entire samples were crushed then pulverised to a nominal 90% passing 75 microns. The resulting pulps were analysed using a variety of methods which included multi acid digest with ICP-OES determination for Cu, and fire assay (40g charge) with AAS finish for Au. Sub-sampling, sample preparation, assay methods and assay quality are discussed in the criterion Sub-sampling techniques and sample preparation below.</p>
Drilling techniques	<p>Drill holes were diamond cored from surface using a combination of PQ, HQ and NQ2 core sizes. Holes were inclined and core was oriented using an Borecam core orientation tool.</p>
Drill sample recovery	<p>Length-based core recovery was measured from reassembled core for every drill run. The data were recorded in a SQL Server database via a Geobank front end. Average core recovery was high with more than 99 percent recovered through the reported intersections.</p> <p>The style of mineralisation and drilling methods employed lead to very high sample recovery, so no further effort was considered necessary to increase core recovery.</p> <p>Scatterplots of grade and core recovery do not suggest any relationship. The very high core recovery means that any effect of such losses would be negligible if such a relationship were to exist.</p>
Logging	<p>All core samples were geologically logged by geologists and are considered to have been logged in appropriate detail to support Mineral Resource estimation, mining studies and metallurgical studies. Detailed geotechnical logging was not carried out for the reported drill holes, however RQD and geological structural data were collected for all core drilled.</p> <p>Core logs were qualitative and quantitative in nature. Lithology and alteration were logged qualitatively; mineralisation and structure were logged quantitatively. Core was photographed both dry and wet after meter marking and orientation.</p> <p>All recovered core (4586.9 metres, 100 percent) from the relevant intersections was geologically logged.</p>
Sub-sampling techniques and sample preparation	<p>All sampled core was cut with an automatic core saw in a consistent way that preserved the bottom of hole reference line, where present. Half core was used for normal sampling and quarter core for field duplicates. Samples were mostly 1m in length, but also ranged from 0.5m to 1.5m if adjusted to geological or major alteration boundaries.</p> <p>Only core samples were used in basement.</p> <p>Sample preparation included drying, crushing, and pulverising in full to a nominal 90% passing 75 microns. This is considered industry standard for this style of mineralisation. A quartz wash is used between the milling of each sample to reduce the risk of sample contamination.</p> <p>Controlled copies of SOPs (Standard Operating Procedures) and sign-offs exist for all sampling steps, and all staff were adequately trained in these. Checks were made by geologists on sampling prior to loading data into the database.</p> <p>Sample representativity was monitored by taking field duplicates, lab coarse crush, and pulp duplicates every 50 samples. Sizing data was collected for one in every 20 pulverised samples by the laboratory analysing the samples. Analysis of these results indicates that the sampling is representative.</p>

Criteria	Comments
	<p>Analysis of duplicate data from a variety of scales, from quarter core to crushed core to pulp duplicates, indicates the sample sizes are appropriate to the grain size of the material being sampled.</p>
<p>Quality of assay data and laboratory tests</p>	<p>All samples were assayed at Bureau Veritas Adelaide Laboratory (Amdel). Copper grades were determined using a multi-acid digest with ICP-OES finish. Gold grades were determined by 40g fire assay with AAS finish.</p> <p>Review of QAQC results confirms that the quality of the data is acceptable.</p> <p>Geophysical measurements of magnetic susceptibility and radioactivity were taken on drill core but these data have not been used to determine any element concentrations.</p> <p>Assay data quality was monitored through submission of certified standards and blanks every 25 samples, quarter core field duplicates and lab coarse crush and pulp duplicates every 50 samples. Analysis of results from these samples showed that levels of bias, precision and contamination are within limits that are considered acceptable.</p>
<p>Verification of sampling and assaying</p>	<p>Documented verification of significant intervals by independent personnel has not been done, however the intersections have been verified by alternative personnel within OZ Minerals and the tenor of Cu is visually predictable.</p> <p>No twin holes have been drilled because the focus to date has been on finding high grade mineralisation.</p> <p>Primary data is stored both in its source electronic form, and, where applicable, on paper. Assay data is retained in both the original certificate (.pdf) form, where available, and the text files received from the laboratory. Core logging was recorded directly into the database using Toughbooks. Core length measurements for recovery were made on paper prior to entry into the database. Different user profiles and security settings exist to minimise the possibility of inadvertent modification of data. Assay data were reviewed visually for reasonableness.</p> <p>Where assay results are below detection limit, a value of half the detection limit has been used. No other adjustments were made to assay data.</p>
<p>Location of data points</p>	<p>All collar locations were determined by DGPS, or GPS for easting and northing, projected onto a digital terrain model (DTM) to determine elevation.</p> <p>All drill holes had magnetic down hole surveys taken at nominal 30m intervals using digital Borecam Proshot equipment. Completed holes were gyro surveyed using a conventional Axis Minetech Champ Gyro tool. The collar reference azimuth for most holes was calculated using a "best-fit" with Borecam Proshot (magnetic) surveys in non-magnetic ground in the cover sequence. To minimise the effect of drift of azimuth measurements with the conventional gyro, an average of multiple runs was normally used, typically two runs. The difference in interpreted volume of mineralisation due to drill hole position uncertainty is considered to be immaterial for the purpose of reporting Exploration Results or estimating Mineral Resources.</p> <p>The grid is MGA94 zone 53 south. Local elevations have been used, where 5000mRL is equal to Australian Height Datum.</p> <p>A DTM was flown by OZ Minerals in April 2012. The accuracy of the 2012 DTM is considered to be acceptable for the determination of collar elevation for the reported Exploration Results.</p>
<p>Data spacing and distribution</p>	<p>Drill holes at Khamsin were drilled in a variety of directions and the spacing between holes is not uniform. Drill hole locations are shown in the accompanying presentation. Predominantly 1m samples were obtained, but lengths range from 0.5m to 1.5m if adjusted to geological or major alteration boundaries.</p> <p>Within basement, holes were mostly spaced at approximately 100m or closer in the known mineralised zone at depths above 3900mRL (up to 1200m below surface). Below 3900mRL and at the margins of the mineralisation, spacing varies but is generally wider than 100m.</p>

Criteria	Comments
	<p>No new or updated Mineral Resource or Ore Reserve estimate has been reported in this release.</p> <p>No physical compositing of samples has occurred.</p>
Orientation of data in relation to geological structure	At Khamsin, a variety of drill hole orientations have been used to minimise the possibility of bias being introduced by drill hole orientation. Current drilling suggests the mineralisation occurs as a massive sub-vertical body with localised high grade sub-vertical and sub-horizontal zones.
Sample security	Samples were sent via road transport from Carrapateena Exploration Site to the laboratory in Adelaide. Despatches listing samples were sent electronically to the laboratory. Any discrepancy between listed and received samples was communicated back to site staff for resolution.
Audits or reviews	<p>No audit has occurred on the sampling of the holes specific to this release.</p> <p>An external audit of Bureau Veritas Adelaide laboratory was undertaken by ioGlobal in October 2012. OZ Minerals geologists inspected Bureau Veritas Adelaide laboratory during April 2014. Minor issues were noted on both the audit and inspection but were not considered to be material overall.</p> <p>Drilling and core processing at Khamsin is conducted using the same facilities and protocols as for the Carrapateena deposit. AMC Consultants Pty Ltd undertook a review of the data collection and sampling procedures during an audit of the Carrapateena Mineral Resource estimate between 30 September and 3 October 2013. AMC formed the view that the data collection procedures were industry standard practice, with the exception of the monitoring of the quality control samples, which did not appear to be being undertaken on a batch by batch and continuous basis. Since AMC's audit, quality control data has been reviewed more frequently, and systematic monitoring of quality data occurs prior to the release of Exploration Results in any case.</p>

CARRAPATEENA PROJECT: KHAMSIN

JORC 2012 Table 1 – Section 2: Reporting of exploration results

Criteria	Comments
Mineral tenement and land tenure status	<p>The Khamsin prospect is located in South Australia in Exploration Licence 5919 which is held by OZ Minerals Carrapateena Pty Ltd (34 percent) and OZM Carrapateena Pty Ltd (66 percent), both wholly owned subsidiaries of OZ Minerals Limited.</p> <p>The tenement is located on the traditional lands of the Kokatha people.</p> <p>EL5919 is currently in good standing. No known impediments exist to obtaining a licence to operate in the area.</p>
Exploration done by other parties	<p>In the latter part of the 1970s, Carpentaria Exploration Co. Pty. Ltd. and Australian Selection Pty. Ltd drilled several holes on gravity and/or aeromagnetic highs at a prospect named Salt Creek, 100 km south east of Olympic Dam and immediately west of Carrapateena. These holes were drilled near the Khamsin Prospect and intersected granite and hematite altered granite breccia. In 2007 under a joint venture between R.M.G Services Pty Ltd and Teck Cominco Australia (now Teck Resources Australia) two holes were drilled on the eastern and northern margin of the Khamsin Prospect. They intersected altered granite and hematite altered granite breccia respectively but failed to intersect significant mineralisation.</p>
Geology	<p>The Khamsin prospect is located within the Olympic copper gold (Cu-Au) Province on the eastern edge of the Gawler Craton. Mineralisation is hosted within Donington Suite granite and unconformably overlain by approximately 530m to 570m of Neoproterozoic sediments. Mineralisation and alteration is in the form of that seen at other large South Australian iron oxide copper gold (IOCG) deposits including Prominent Hill, Carrapateena and Olympic Dam.</p>
Drill hole Information	<p>Refer to Table 3 on page 19.</p> <p>All information material to the understanding of the Exploration Results has been included. Drill hole information for holes shown on the plan and section slides which are not included in Table 3 on page 19 have been previously reported.</p>
Data aggregation methods	<p>All drill hole intervals referred to in this announcement are length-weighted and are calculated using the following cut-off grades:</p> <ul style="list-style-type: none"> <li>• 0.1% Cu delimiting cut-off grade with unlimited internal dilution and no adjustments to high-grade samples.</li> <li>• 0.7% Cu delimiting cut-off grade with up to/including 4 metres internal dilution and no adjustments to high-grade samples.</li> </ul> <p>High grade copper intervals within broader low grade intervals are reported as included using 0.1% Cu or 0.7% Cu cut-off grade with unlimited or up to/including 4 metres internal dilution respectively.</p> <p>A copper equivalent grade was calculated using the following formula: <math>Cu Eq \% = Cu \% + (0.647 * Au g/t)</math>. Copper equivalent has been calculated using a copper price of \$US 6415/tonne and a gold price of \$US 1292/oz.</p>
Relationship between mineralisation widths and intercept lengths	<p>Preliminary modelling indicates the mineralisation envelope is a massive sub-vertical body with localised sub-vertical and sub-horizontal high grade zones. The interpreted envelope starts approximately 530m below the surface and has approximate dimensions of 850m x 500m x 1100m. Envelope boundaries in the south, east and north are tentative as they are not constrained by many drill holes.</p> <p>Drill holes intersected the sub vertical mineralisation at angles in the range of approximately 0 to 45 degrees and sub horizontal mineralisation in the range of 55 to 90 degrees. As the current modelling is still preliminary, the true width of the mineralisation is uncertain and is therefore not known.</p> <p>Mineralisation has been reported as down hole lengths as the true width is not known.</p>
Diagrams	<p>Refer to Slides 21 and 22 in the accompanying presentation.</p>
Balanced reporting	<p>All significant Exploration Results are reported.</p>

## APPENDIX 1: EXPLORATION DRILLING RESULTS



Other substantive exploration data	There is no other material exploration data at this time.
Further work	Drilling continues at the Fremantle Doctor prospect with assay results pending.

KHAM SIN PROSPECT DRILL HOLE INFORMATION – TABLE 3

Hole Name	Total Depth (m)	East (MGA)	North (MGA)	RL (Local)	Dip	Azimuth (MGA)	From (m)	To (m)	Width (m)	Cu %	Au g/t
DD18KMS030	1510.1	729279	6548081	5087	-73.15	149.8	735	748	13*	2.14	0.10
DD18KMS031	1560.9	728916	6547993	5097	-63.95	127.53	743	1145.6	402.6*	1.38	0.27
DD18KMS032	1515.9	729760	6548152	5080	-55.22	251.33	1255.8	1382	126.2*	1.13	0.50

\*0.1% Cu cut-off with unlimited internal dilution.