

24 August 2017

The Manager, Companies  
Australian Securities Exchange  
Companies Announcement Centre  
20 Bridge Street  
Sydney NSW 2000

Dear Sir/Madam,

**Carrapateena Project Mineral Resource Restatement and Ore Reserve Statement**

Please find enclosed the Carrapateena Ore Reserve Statement as at 4 August 2017. As the Ore Reserve Statement is based on the Carrapateena Project Mineral Resource estimate as at 18 November 2016 released to the ASX on 9 December 2016 that Mineral Resource Statement is also enclosed with this release for ease of reference.

Sincerely,

A handwritten signature in black ink, appearing to be 'R. Mancini', written over a horizontal line.

**Robert Mancini**

Company Secretary and Head of Legal

# Table of Contents

<b>Mineral Resource Statement and Explanatory Notes as at 18 November 2016</b> .....	3
Carrapateena Mineral Resource Statement – 18 November 2016.....	4
JORC Code, 2012 Edition – Table 1.....	10
Section 1 Sampling Techniques and Data.....	10
Section 2 Reporting of Exploration Results.....	15
Section 3 Estimation and Reporting of Mineral Resources.....	16
Competent Person Statement.....	24
<b>Ore Reserve Statement and Explanatory Notes as at 4 August 2017</b> .....	25
Competent Person’s Statement.....	29
JORC Code, 2012 Edition – Table 1.....	30
Section 4 Estimation and Reporting of Ore Reserves.....	30

**OZ Minerals Limited**

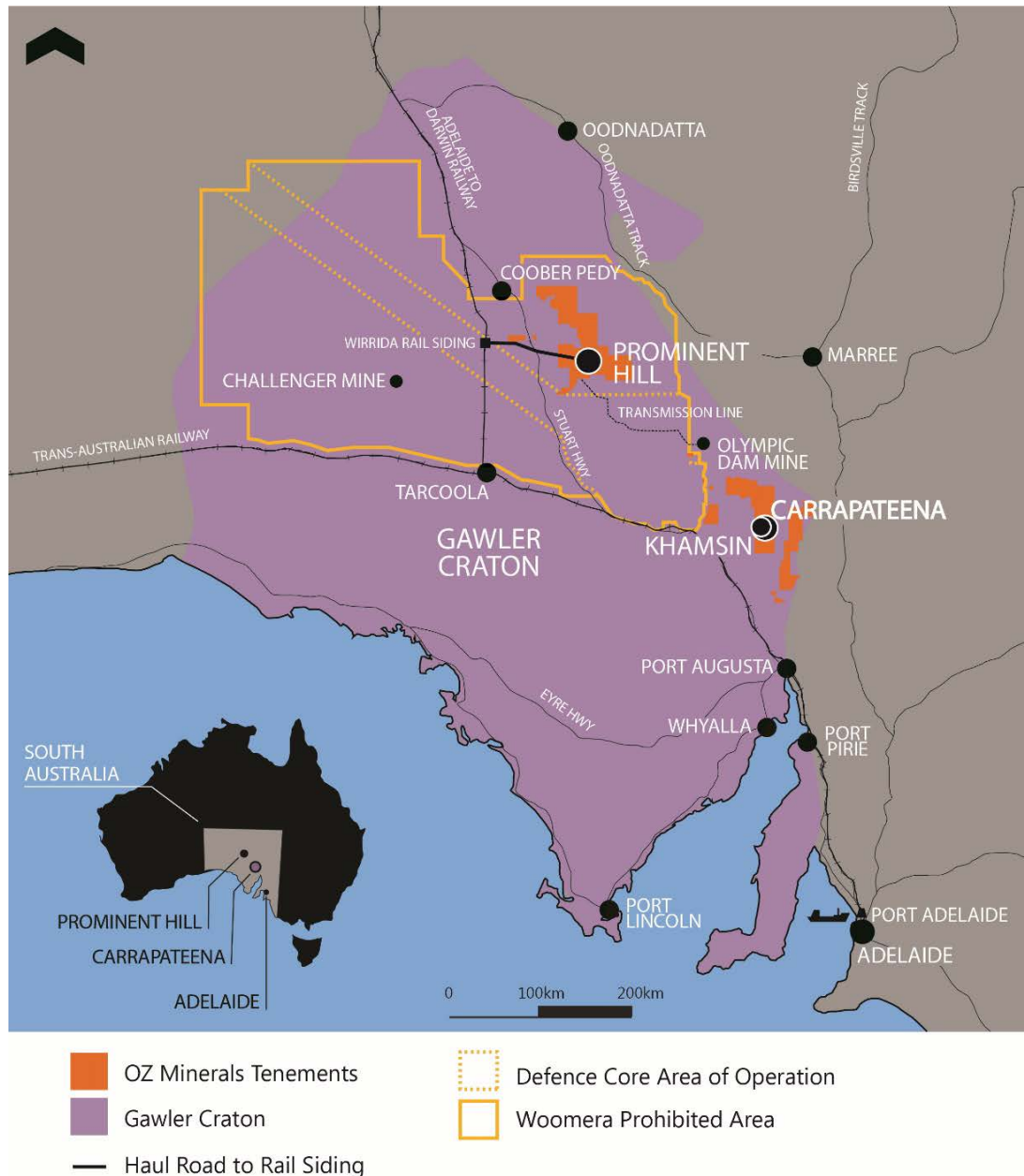
**Carrapateena Project**

**Mineral Resource Statement and Explanatory  
Notes**

**As at 18 November 2016**

**Carrapateena Mineral Resource Statement – 18 November 2016**

The Carrapateena 2016 Mineral Resource Statement relates to an updated Mineral Resource estimate for the Carrapateena copper-gold deposit, an iron oxide copper-gold (IOCG) deposit located in central South Australia on the eastern margin of the Gawler Craton (see Figure 1).



**Figure 1. Location of Carrapateena, South Australia**

This Mineral Resource Statement is an update to the restated 2015 Mineral Resource as at 17 October 2016<sup>1</sup>. The Mineral Resource statement includes additional drilling from 2016 which focused on the

<sup>1</sup> ASX Release “Confidence in Carrapateena project grows” released 07 November 2016

upper part of the deposit between 4200mRL – 4600mRL. The aims of the drilling were to confirm grade and geological continuity across the deposit and upgrade a proportion of the Mineral Resource to Measured Resources. The program comprised a total of 6,616m of which 3,827m were for Resource delineation and 2,789m for metallurgical sampling purposes. The additional Resource delineation drilling was oriented at shallow angles, intersecting the mineralisation at between 25 and 55 degrees. The metallurgical holes were not assayed for the purpose of resource estimation but were logged and used to guide interpretation of the mineralisation.

The 2016 Resource drill hole data have been used to remodel the geology above 4200mRL and re-estimate the Mineral Resource.

The Mineral Resource estimate is intended to be suitable as a basis for assessing a sub-level cave (SLC) mining operation.

### **Mineral Resource**

The estimated Mineral Resource for the Carrapateena deposit is shown in Table 1. The Mineral Resource estimate has been reported in accordance with the 2012 edition of the JORC Code. The Mineral Resource estimate is based on data from 106 drill holes (including 31 wedges) for a total of 60,809 samples in mineralised domains and is an update to the restated 2015 Mineral Resource as at 17 October 2016. The geological interpretation and estimation parameters have been revisited. A nominal cut-off of A\$70 per tonne net smelter return<sup>2</sup> (NSR) has been used to generate a continuity shape in which all material was deemed to have reasonable prospects of eventual economic extraction.

**Table 1: Carrapateena Mineral Resource Estimate<sup>3 4</sup> as at 18 November 2016**

<b>Classification</b>	<b>Tonnes Mt</b>	<b>Cu %</b>	<b>Au g/t</b>	<b>Ag g/t</b>	<b>Cu kt</b>	<b>Au koz</b>	<b>Ag Moz</b>
Measured	61	1.4	0.6	6.3	880	1,180	12.4
Indicated	65	1.6	0.6	7.0	1,030	1,300	14.7
Inferred	8	0.8	0.4	3.5	60	90	0.9
<b>Total</b>	<b>134</b>	<b>1.5</b>	<b>0.6</b>	<b>6.5</b>	<b>1,970</b>	<b>2,570</b>	<b>27.9</b>

### **Changes in the 2016 Mineral Resource estimate**

The differences in resource tonnages and grades between the 2016 Mineral Resource and restated 2015 Mineral Resource are immaterial although the 2016 Mineral Resource has a higher level of confidence.

<sup>2</sup> Net Smelter Return (NSR) details can be found under Section 3 “Cut-off parameters” in the attached JORC Table 1 documentation.

<sup>3</sup> This table is subject to rounding errors.

<sup>4</sup> This Mineral Resource does not account for mining recovery or mining dilution.

## **Geology and geological interpretation**

The Carrapateena Breccia Complex is located within the Olympic copper gold (Cu-Au) Province on the eastern edge of the Gawler Craton. It is hosted within Donington Suite granite and is unconformably overlain by approximately 480 metres 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 and Olympic Dam.

For modelling and estimation, the deposit geology was interpreted into several domains based on a combination of lithology, chemistry and mineralisation style, including: chalcopyrite-dominant domain, bornite-dominant domain, pyrite-chalcopyrite domain, gold enriched zones, leached zones and barren hematite breccias.

## **Sampling and sub-sampling techniques**

All basement samples consist of diamond drill core (NQ, NQ2, HQ and PQ) cut with a manual or automatic core saw. The drill core is sampled as half core, except for PQ core, metallurgical holes and field duplicates, where quarter core was sampled.

All available basement drill core except for metallurgical holes and some instances where holes passed through large intervals of granite outside the mineralisation were sampled on 1 metre intervals but respect geological contacts in places. Entire samples were crushed then pulverised. For OZ Minerals drill holes, sample preparation included drying, crushing, and pulverising in full to a nominal 90 percent passing 75 microns. For Teck Cominco Australia Pty Ltd (Teck) drill holes, samples were pulverised to a nominal 85 percent passing 75 microns.

## **Drilling techniques**

For Teck Cominco Australia Pty Ltd drill holes, a combination of RC and mud-rotary was used for pre-collars. HQ diamond drilling was used through to top of basement and NQ through basement to EOH. For OZ Minerals drill holes, diamond drilling was used from surface with a combination of PQ, HQ and NQ2 core sizes.

## **Sample analysis method**

Samples were sent to either Bureau Veritas' (Amdel) Adelaide laboratory by (OZ Minerals and large proportion of Teck drill holes) or Intertek Genalysis' Perth laboratory (limited Teck holes). Copper and silver were analysed using a multi-acid digest and ICP-OES (copper and silver) or ICP-MS (silver, OZ Minerals holes). Gold grades were analysed using fire assay (typically 20 grams or 40 grams) and, in nearly all cases, an AAS finish.

## **Estimation methodology**

A block model was constructed having values estimated independently for Cu, Au, Ag, U, F, C, Ba, Fe, Mg, Si, S, SG (as measured) and Weight Loss on Drying, by using Ordinary Kriging of sample data composited to four metre intervals, except for Fluorine where 1m composites were used as many recent holes were

only assayed for Fluorine for 1m in every 4m. Domain boundaries were generally treated as hard boundaries during estimation except for gold, for which soft boundaries were used between some domains.

Whilst the 2016 and 2015 estimates used the same estimation methodology the additional, low-angle, data from the 2016 drilling campaign led to refined search neighbourhood and variogram model parameters in 2016, which have been used to update the entire resource.

### **Mineral Resource Classification Criteria**

The basis for Mineral Resource classification is underpinned by the robustness of the conceptual geological model, quality of data and the continuity of geology and grade relative to the arrangement of data. OZ Minerals provided advice to the Competent Person relating to the quality of the data and the confidence in the interpretations of geology and mineralisation. The quality of the estimation of grades was assessed using the relative kriging variance, estimation pass, slope of regression, distance to the nearest informing composite and number of holes used in the copper estimate. The confidences in the interpretations and copper estimate were then integrated, resulting in annealing of the classification in places. Finally, those parts of the model which were unlikely to satisfy the 'reasonable prospects test' (reasonable prospects for eventual economic extraction), were excluded from the resource estimate, mainly on the basis of contiguity, dimensions and grade. A depth cut-off of 1470m below surface (3630mRL) has been applied to the A\$70 NSR shape as mineralisation below this level is outside of the reasonable prospects volume.

The Competent Person has checked, reviewed and integrated all of this information and subsequently assigned a classification of Measured, Indicated or Inferred Mineral Resource to the estimate; and excluded parts of the model that do not to satisfy the 'reasonable prospects test' from the Mineral Resources.

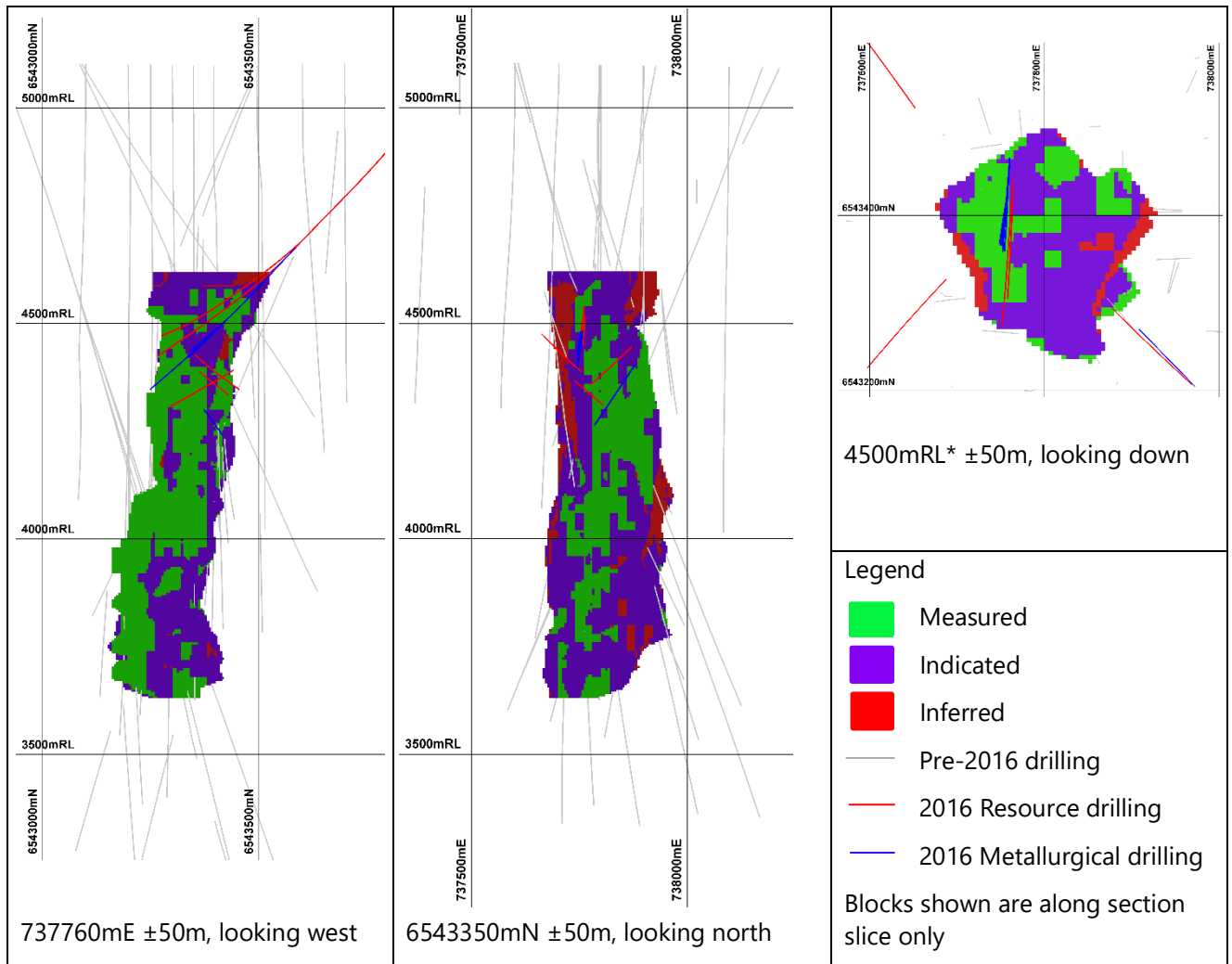
### **Cut-off grade**

The Mineral Resource is reported within a shape which has been generated using a cut-off NSR (net smelter return) of A\$70 per tonne. The NSR of \$A70 per tonne was selected as the number which exceeds expected mining, milling and GA costs, assuming that the mineralisation is amenable to mining by SLC. No cut-off has been applied to Mineral Resources inside the A\$70 NSR cut-off shape.

The formula that has been used for the NSR calculation is:  $NSR = 0.7 \times \text{In situ value (ISV)}$

where  $ISV = (\text{Cu \%} \div 100\% \times 2204\text{lb/t} \times \text{USD}2.94/\text{lb} + \text{Au g/t} \div 31.1\text{g/oz} \times \text{USD}1281/\text{oz} + \text{Ag g/t} \div 31.1\text{g/oz} \times \text{USD}19/\text{oz}) \div 0.75\text{USD/AUD}$ .

Implied in the factor used to convert ISV to NSR are the following metallurgical recoveries: 91 percent for copper, 73 percent for gold and 79 percent for silver. The difference between using the simplified formula above and a more detailed NSR formula was not considered to be significant for the purposes of this Mineral Resource estimate.



**Figure 2. Mineral Resource showing blocks within the nominal A\$70/t NSR cut-off shape and classification.**

\* Australian Height Datum = 5000mRL. The topographic surface above the Mineral Resource is approximately 5100mRL.

**Mining and Geotechnical**

Carrapateena has a high grade core of bornite and chalcopyrite-rich mineralisation that is considered amenable to mining by SLC. For the purpose of this statement it is assumed that SLC will be a suitable method for extraction of the high grade mineralisation and this is supported by the 2016 Pre-Feasibility Study. The SLC mining parameters are based on 25 metre level spacing and 15 metre drill drive spacing.

This Mineral Resource does not account for mining recovery, however the nature of the 'reasonable prospects' shape, and the reporting of all material within it regardless of NSR, means that some dilution is already accounted for in the Resource estimate.



## Processing

Metallurgical test work studies on representative samples selected via a geometallurgical study have shown that a conventional crushing, grinding and flotation circuit would produce acceptable concentrate grades and metal recoveries. Metal recoveries used in the 2016 Pre-Feasibility Study include 91 percent for copper, 73 percent for gold and 79 percent for silver.

## Environment

Environmental baseline studies at Carrapateena have been ongoing since OZ Minerals acquired the project in 2011. As a part of any approvals process environmental and social impact assessments including but not limited to studies covering groundwater, surface water, flora, fauna and air quality and impacts would need to be finalised and presented to the government as the first step towards gaining a Mining Lease. OZ Minerals has protocols to define and manage environmental and social risks.

## Reasonable Prospects

- The 2016 Pre-Feasibility Study supports an underground mining operation using SLC.
- The reasonable prospects shape was generated based on a cut-off NSR of A\$70 per tonne assuming mining by SLC.
- Given the likely mining method the classification also accounts for the expected contiguity of material above cut-off.
- Metallurgical test work indicates that a saleable concentrate can be produced.
- Reporting of the Resources has been limited to above 1470 metres below surface (3630mRL) as mineralisation below 3630mRL does not pass the current reasonable prospects test.

## Dimensions

- The deposit geometry is generally pipe-like, with the lateral extent reducing with depth. Limits of the Mineral Resource are listed in Table 2.

**Table 2: Dimensions of the Mineral Resource**

	<b>Minimum</b>	<b>Maximum</b>	<b>Extent (metres)</b>
Easting	737,665	737,965	300
Northing	6,543,101	6,543,526	425
RL	3,630	4,600	970

**JORC Code, 2012 Edition – Table 1**

**Section 1 Sampling Techniques and Data**

<b>Criteria</b>	<b>Comments</b>
<b>Sampling techniques</b>	<p>All basement samples consist of diamond drill core (NQ, NQ2, HQ and PQ) cut with a manual or automatic core saw. The drill core is sampled as half core, except for PQ core, metallurgical holes and field duplicates, where quarter core was sampled. The method of sampling is considered to be of an acceptable quality for the estimation of Mineral Resources.</p> <p>All available basement drill core prior to 2016 was sampled.</p> <p>Where 2016 resource drill holes intersected large intervals of basement granite distal to the mineralisation zone, drill core was sampled at one metre intervals every second metre. All other available basement drill core from 2016 resource drilling was sampled.</p> <p>Sampling interval is generally 1m but respects geological contacts in places.</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 copper and fire assay with AAS for gold (40g or 20g charge). Sub-sampling, sample preparation, assay methods and assay quality are discussed in other parts of this table.</p>
<b>Drilling techniques</b>	<p>For Teck Cominco Australia Pty Ltd (Teck) drill holes, a combination of RC and mud-rotary was used for pre-collars. HQ diamond drilling was used through to top of basement and NQ through basement to EOH. For OZ Minerals drill holes, diamond drilling was used from surface with a combination of PQ, HQ and NQ2 core sizes.</p> <p>70% of Teck drill holes were vertical to sub-vertical, 2 holes were angled (non-vertical) from surface, and 13 holes were wedges off a sub-vertical parent hole. All OZ Minerals drill holes were angled from surface. For angled and wedge holes, core was orientated using an ACE, ACT or Coretell core orientation tool.</p>
<b>Drill sample recovery</b>	<p>Length based core recovery is measured from reassembled core for every drill run. The data were recorded in a SQL Server database via a GBIS front end. Average core recovery was high with more than 99% recovered through the mineralised zone.</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>There is no significant relationship between sample recovery and grade. The very high core recovery means that any effect of such losses would be negligible if such a relationship even existed.</p>
<b>Logging</b>	<p>Core samples were geologically logged by geologists and geotechnically logged by geologists (Teck drill holes) or geotechnical personnel (OZ Minerals drill holes). Logging is considered to have appropriate detail to support Mineral Resource estimation, mining studies and metallurgical studies.</p> <p>Core logs were qualitative and quantitative in nature. Lithology and alteration were logged qualitatively; mineralisation, structure and geotechnical data were logged</p>

<b>Criteria</b>	<b>Comments</b>
	<p>quantitatively. Core was photographed both dry and wet after metre marking and orientation.</p> <p>All core in the mineralised zone (68,016m, 100 percent) was logged. This included 3,602m of core from metallurgical drill holes that was used to guide the geological interpretation but not used in the grade estimation.</p>
<b>Sub-sampling techniques and sample preparation</b>	<p>All sampled core was cut with an automatic or manual core saw in a consistent way that preserved the bottom of hole reference line, where present. Half core was used for normal samples, quarter core for field duplicates and for three metallurgical drill holes. 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 percent (OZ) or 85 percent (Teck) passing 75 microns. This is considered industry standard for this style of mineralisation.</p> <p>For OZ Minerals drill holes, controlled copies of SOPs (Standard Operating Procedures) and sign-offs exist for all sampling steps, all staff were adequately trained in these. Checks were made by geologists on sampling prior to loading data into database.</p> <p>Sample representivity was assured by taking field duplicates, lab coarse crush, and pulp duplicates every 50 samples. Sizing data was collected for OZ Minerals holes for one in every 40 pulverised samples by the laboratory analysing the samples. Analysis of these results indicated that the sampling was representative.</p> <p>Analysis of duplicate data at a variety of scales, from quarter core to crushed core to pulp duplicates, indicated the sample sizes were appropriate to the grain size of the material being sampled.</p>
<b>Quality of assay data and laboratory tests</b>	<p>OZ Minerals received data quality reports and data for Teck drill holes, including Certified Standards, which indicated the raw data were suitable as a basis for Mineral Resource estimation. Samples sent to Bureau Veritas' (Amdel) Adelaide Laboratory by Teck had copper and silver grades determined by IC3E (ICP-OES), with 'high grade' copper (&gt;1%) undergoing reanalysis by MET1 (ICP-OES). Gold grades were determined via FA2 (Fire Assay, 20g, AAS). Samples sent by Teck to Genalysis in Perth had copper grades determined by four acid digest and ICP-OES, with 'high grade' analysis (Cu &gt;1%) determined by modified four acid digest and ICP-OES. Gold at Genalysis was determined by Fire Assay finished by flame AAS. Uranium was analysed using lithium metaborate fusion (Bureau Veritas, Adelaide) or sodium peroxide fusion (Genalysis, Perth) followed by ICP-MS.</p> <p>For OZ Minerals drill holes, copper grades were determined using a modified aqua regia digest with ICP-OES determination at Bureau Veritas Adelaide Laboratory. Gold grades were determined by 40g Fire Assay finished by AAS at Bureau Veritas Adelaide Laboratory (Amdel).</p> <p>For both Teck and OZ Minerals assay results, the techniques are considered to be total for all relevant elements with the exception of sulphur (Teck, ICP-OES) which is near-total.</p>

<b>Criteria</b>	<b>Comments</b>
	<p>For Teck drill holes, assay data quality was determined through submission of field and laboratory standards, blanks and repeats which were inserted at a nominal rate of 1 each per 20 drill samples.</p> <p>For OZ Minerals drill holes, assay data quality was monitored through submission of 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>Teck sent a selection of coarse rejects and pulps to an umpire laboratory for analysis. Comparison of results between laboratories did not reveal any significant problems. OZ Minerals submitted two batches of check assays each to two umpire laboratories. Comparison of the results between laboratories did not reveal any significant problems. Quarterly QAQC reports commenced from the June 2012 quarter.</p> <p>Minor differences exist in the accuracy and precision of data between drilling campaigns (Teck using Amdel, Teck using Genalysis, OZ Minerals using Bureau Veritas Amdel), but the differences are not considered to be significant, and the results are considered to be acceptable.</p>
<b>Verification of sampling and assaying</b>	<p>Documented verification of significant intervals by independent personnel has not been done, however the mineralisation appears to be reasonably continuous and is not dominated by any one significant intersection. Furthermore, the tenor of copper is visually predictable. The assay data for all Teck drill holes were imported from source lab text files into the OZ Minerals database by an external company (Expedio), and the results were compared with the database supplied by Teck.</p> <p>Several drill holes were wedged providing close-spaced data from which short scale variability was assessed. OZ Minerals drilled several holes around Teck drill hole CAR050 to confirm grade and geological continuity. Two pairs of twin holes were drilled through the Mineral Resource for metallurgical testing. A review of data from these holes reveals very strong correlation of geology and grades.</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. Data entry, validation and storage are discussed in the section on database integrity below.</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 used in this estimate.</p>

<b>Criteria</b>	<b>Comments</b>
<b>Location of data points</b>	<p>All collar locations for drill holes prior to 2016 were determined by DGPS. All collar locations for 2016 drill holes were determined by Garmin 62S Handheld GPS. The locations have been cross checked using DGPS and are within an error of <math>\pm 9\text{m}</math>.</p> <p>Teck drill holes had downhole surveys (about every 30m) by multiple methods including Ranger Multi-Shot survey tool, Wellnav SRG (surface recording gyro) and Eastman Camera surveys.</p> <p>For OZ Minerals drill holes, magnetic downhole surveys were taken at nominal 30m intervals using digital Reflex EZ-Trac equipment. Completed holes were gyro surveyed using a conventional Reflex Gyro E537 tool. An APS GPS-based system was used to determine the reference azimuth at the collar. Due to difficulties with establishing the collar reference azimuth, some OZ Minerals holes use as a reference azimuth a calculated "best-fit" with EZ-Trac (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, generally two runs up to June 2012, and four runs from that date onwards. Some holes were surveyed by Surtron Pty Ltd and/or ABIM Solutions Pty Ltd using a north-seeking gyroscope.</p> <p>The grid is MGA94 zone 53. Local elevations have been used, where 5000mRL is equal to Australian Height Datum.</p> <p>A DTM was flown for Teck in 2007, and over an expanded area for OZ Minerals in April 2012. The 2012 DTM was consistent (<math>\pm 1.6\text{m}</math> maximum) with the DGPS collar pickups for drill holes affecting the Mineral Resource.</p>
<b>Data spacing and distribution</b>	<p>No Exploration Results are reported in this statement.</p> <p>Drill testing the spatial extent of the prospect started with a 200 metre x 200 metre grid sequence, with 100 metre x 100 metre infill drilling commencing in September 2006. Two infill holes with four additional wedges were drilled to 50 metre spacing (north-south) in the bornite zone in the south west of the deposit. After late 2011, OZ Minerals drilled non-vertical holes with the intention of better defining the limits of the copper mineralised zones. The holes were drilled in a variety of directions and so the spacing between holes was not uniform. The spacing is typically less than 50 metres in the upper part of the Measured and Indicated parts of the Mineral Resource, becoming wider at depths below 3,800mRL and in the Inferred part of the Mineral Resource.</p> <p>The data spacing and distribution is considered sufficient to establish geological and grade continuity appropriate for the Mineral Resource estimation and classification.</p> <p>Compositing of sample data to 4m lengths is discussed in Estimation and modelling techniques, below. No physical compositing of samples has occurred.</p>
<b>Orientation of data in relation to geological structure</b>	<p>The Hematite Breccia that hosts the mineralisation is generally massive (at the scale of interest) with little internal structure. The deposit is interpreted as steep on the south and west sides.</p> <p>The edges of the main high-grade zone constituting the Measured and Indicated parts of the Mineral Resource are now reasonably well defined in the upper part of the deposit. The original Teck drilling was mostly vertical but OZ Minerals infill drilling program consisted of deep angled holes to better define the boundaries of the steeply plunging mineralisation. In 2016 the drilling was specifically designed to</p>

**Carrapateena Mineral Resource  
Explanatory Notes  
As at 18 November 2016**

<b>Criteria</b>	<b>Comments</b>
	<p>intersect the mineralisation at shallow angles (between 25 and 55 degrees) as such angles of intersection were lacking prior to 2016. Some of the Inferred part of the Mineral Resource, particularly the upper part of the eastern mineralisation (mostly east of 738,000mE, above 4,100mRL), still relies primarily on vertical drill holes at 100m x 100m horizontal spacing.</p> <p>Structures and mineralisation boundaries through the deposit mostly appear to be sub-vertical. Angled drill holes have been used to intersect these boundaries. Within the mineralised zone anisotropy of copper grade varies locally. A variety of drill hole orientations have been used to minimise the possibility of bias being introduced by drill hole orientation. The mineralisation occurs mostly as disseminated sulphides and does not show a strong structural fabric at drill-core scale.</p> <p>Angled drilling by OZ Minerals has not highlighted any orientation-specific sampling biases.</p>
<b>Sample security</b>	<p>Samples were transported from site to the laboratories by road. For OZ Minerals drill holes, despatches listing samples were sent electronically to the laboratory. Any discrepancy between listed and received samples was communicated back to site staff for resolution.</p>
<b>Audits or reviews</b>	<p>An internal audit of Teck's Carrapateena database was conducted in 2008. This study identified a significant proportion (9%) of failed QAQC samples in the Teck database at that time. During 2007 and 2008 a total of 9,007 samples, including QAQC samples, coarse rejects and quarter core from an entire hole (CAR051W1) were sent to an umpire laboratory (Genalysis, Perth) for reanalysis. Minor contamination issues were concluded to have affected Amdel results but were not deemed to have a significant impact on the data.</p> <p>An external audit of Bureau Veritas Amdel Adelaide was undertaken by ioGlobal in October 2012. OZ Minerals geologists conducted three inspections of Bureau Veritas Amdel Adelaide during the 2011-2013 drilling campaign. Minor issues were noted on both the audit and inspections but were not considered to be material overall.</p> <p>AMC Consultants Pty Ltd undertook a review of the data collection and sampling procedures during an audit of the 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. OZ Minerals accepts AMC's view, but does not believe that this issue has had a material effect on the quality of the data, as the systematic monitoring of quality control samples occurred on a periodic basis prior to modelling in any case.</p> <p>Data from the 2016 drilling campaign has not been subject to external audit or review, but OZ has conducted internal checks, which have not revealed any material issues.</p>

## Section 2 Reporting of Exploration Results

<b>Criteria</b>	<b>Comments</b>
<b>Mineral tenement and land tenure status</b>	<p>The Carrapateena deposit is located in South Australia in Exploration Licence 4903 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>EL4903 is currently in good standing. No known impediments exist to obtaining a licence to operate in the area.</p>
<b>Exploration done by other parties</b>	<p>The Carrapateena deposit was discovered in 2005 by RMG Services Pty Ltd. The approximate lateral extent of the mineralised zone was defined by drilling carried out during 2006-2008 by a joint venture between RMG Services Pty Ltd and Teck Cominco Australia Pty Ltd. The project was acquired by OZ Minerals in 2011.</p>
<b>Geology</b>	<p>The Carrapateena Breccia Complex is located within the Olympic copper gold (Cu-Au) Province on the eastern edge of the Gawler Craton. It is hosted within Donington Suite granite and is unconformably overlain by approximately 480m 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 and Olympic Dam.</p>
<b>Drill hole Information</b>	<p>No Exploration Results have been reported in this release, therefore there is no drill hole information to report. This criterion is not relevant to this report on Mineral Resources.</p>
<b>Data aggregation methods</b>	<p>No Exploration Results have been reported in this release, therefore there are no drill hole intercepts to report. This criterion is not relevant to this report on Mineral Resources.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>No Exploration Results have been reported in this release, therefore there are no drill hole intercepts to report. This criterion is not relevant to this report on Mineral Resources.</p>
<b>Diagrams</b>	<p>No Exploration Results have been reported in this release, therefore no exploration diagrams have been produced. This criterion is not relevant to this report on Mineral Resources.</p>
<b>Balanced reporting</b>	<p>No Exploration Results have been reported in this release. This criterion is not relevant to this report on Mineral Resources.</p>
<b>Other substantive exploration data</b>	<p>No Exploration Results have been reported in this release. This criterion is not relevant to this report on Mineral Resources.</p>
<b>Further work</b>	<p>The company is currently undertaking a prefeasibility study (PFS) assuming a SLC mining method. Further resource definition work will be planned based on the outcomes of this study.</p>

### Section 3 Estimation and Reporting of Mineral Resources

<p><b>Database integrity</b></p>	<p>Data is stored in a SQL Server database and is entered via a GBIS front end. Assay data were loaded from text files supplied by the laboratory directly into the database without manual transcription. Core logging for OZ Minerals holes was directly into the database using Toughbooks. Weight measurements for density were keyed into the database up to 16 March 2012, and then automated data capture was used from that date onwards. Core length measurements for recovery were made on paper prior to entry into the GBIS database. Whenever records are added or modified, the database records the time, date and the identity of the user entering or changing the data. Different user profiles and security settings exist to minimise the possibility of inadvertent modification of data.</p> <p>Lookup codes are used to ensure consistency of the way data are recorded and for referential maintaining integrity of the database. Assay and density data were reviewed visually for reasonableness and also through using statistical plots. Outliers identified were investigated and corrected as required. The Teck historical data loaded from source laboratory files was compared with the database handed over by Teck.</p>
<p><b>Site visits</b></p>	<p>The Competent Person has visited the Carrapateena site a total of ten times since OZ Minerals acquired the Project. The Competent Person found the protocols and practices relating to all stages of resource definition to be acceptable. The Competent Person did not find any issues that would materially affect the Mineral Resource estimate.</p>
<p><b>Geological interpretation</b></p>	<p>Confidence in the geological interpretation varies locally, and is dependent on the spacing of drilling as well as the continuity of mineralisation, both of which vary throughout the deposit. At deposit scale, the hematite breccia zone appears to be quite continuous, but its limits at depth are not yet well-defined. A subset of the hematite breccia zone contains significant copper mineralisation. Bornite-dominant and chalcopyrite-dominant zones appear as distinct clusters on scatter plots of copper and sulphur grades. The interpreted high copper grade domains were constructed using a combination of copper grade, ratio of Cu:S (adjusted for the assumed presence of sulphur in barite), and visual logs of lithology and mineralisation. Delimiting grade criteria for the chalcopyrite-dominant zone were typically copper exceeding 1.5% and Cu:S between 0.8 and 1.25. Bornite-dominant mineralisation generally had Cu:S exceeding 1.25. Copper in the bornite-dominant zone was usually more than 1.5% copper but locally some zones having lower copper grades than this were included in this domain. Chalcopyrite-dominant zones are often but not always adjacent to zones of bornite mineralisation. Confidence in the boundaries and continuity of the bornite-dominant and chalcopyrite-dominant high copper grade domains are commensurate with their classification. The mostly low-grade mineralisation in the north, east, and at depth, is less continuous and has consequently been classified mainly as Inferred. Confidence decreases with depth as the distances between drill holes becomes wider. Both the hematite breccia zone and the copper-mineralised zones are open at depth.</p> <p>The geological interpretation was based on drill core data, including geochemical data, and core logs and photos. Core logs, photos and, where appropriate, assays from metallurgical holes were also used to guide the interpretation. The geological</p>



	<p>model is interpreted to be a near-vertical body of hematite dominated breccia hosted within altered granite. Holes drilled by Teck up to 2008 were mostly sub-vertical, and these have in some cases been assumed to be near-parallel to geological and mineralisation boundaries. This interpretation has mostly been confirmed by drilling by OZ Minerals Limited since 2011 using angled drill holes. It has been assumed that near-vertical boundaries continue at depth where there is limited data. Alternative, plausible interpretations in the upper part of the deposit may have a moderate effect on estimated grades at a local scale.</p> <p>Copper sulphide mineralisation is mostly hosted in a hematite breccia zone within altered granite. The deposit is overlain by mostly unmineralised sediments. There is evidence of a leached zone lacking copper mineralisation at the top of the hematite breccia zone immediately below the unmineralised sediments. The Mineral Resource is restricted to mineralisation hosted in the hematite breccia zone.</p> <p>Copper grades are generally highest where bornite is the dominant copper sulphide, although there is also a high grade chalcopyrite dominant zone. Chlorite alteration is present in some parts of the deposit. Where chlorite is abundant, copper and gold grades are generally low. Continuity of zones of chlorite alteration can be quite variable and zones with abundant chlorite have not been modelled separately. Dykes are present within the hematite breccia zone and in the granite, but they are not necessarily barren of copper and are not considered to have a significant effect on the estimated Mineral Resource. Gold-only mineralisation is present in some parts of the hematite zone where only trace concentrations of copper are present. Copper mineralisation is generally accompanied by gold mineralisation, although gold grades vary.</p>
<p><b>Dimensions</b></p>	<p>The maximum extents of the Mineral Resource inside the A\$70/t NSR cut-off shape are 300 metres (X) x 425 metres (Y) x 970 metres (Z). The deposit geometry is generally pipe-like with the lateral extent decreasing with depth. The topographic surface over the mineralisation is at approximately 5100mRL. The depths from surface to the upper and lower limits of the Mineral Resource are approximately 485m and 1,470m respectively.</p>
<p><b>Estimation and modelling techniques</b></p>	<p>Domain definition used a combination of assay data and geology, taking into consideration the characteristics of the breccia, the mineralogy of copper and iron, and the copper and iron grades. There are distinct differences in copper grade population statistics between lithological domains and changes in grade at lithological domain boundaries. Mineralisation domains were derived primarily from the lithological domains but modified for the presence of leached zones and differences in copper sulphide mineralogy. Mineralisation domains were used for the estimation of Cu, Ag, U, Co, S and Ba. Gold was estimated using the same domains as for Copper except that the Bornite domain was extended into the adjacent BHM domain to accommodate elevated Au grades that were consistent with those in the Bornite domain. Lithological domains were used for the estimation of specific gravity, carbon and the important major rock-forming elements iron, magnesium and silicon. Four additional domains were created for estimation of fluorine because of the distinctly bimodal grade populations in the main copper mineralised domains. The mineralisation domains relevant for the estimated Mineral Resource are:</p> <ul style="list-style-type: none"> <li>• Pyrite-chalcopyrite in main copper-mineralised zone</li> </ul>

	<ul style="list-style-type: none"> <li>• Chalcopyrite in main copper-mineralised zone</li> <li>• Bornite in main copper-mineralised zone</li> <li>• Bornite in main gold-mineralised zone</li> <li>• Eastern copper-mineralised zone</li> <li>• Deep high-grade copper zone (mixed bornite and chalcopyrite)</li> <li>• Barren hematite zone</li> <li>• Thin gold enriched zones above the Pyrite, Chalcopyrite and Bornite zones</li> <li>• Thin Leached zones above the Pyrite, Chalcopyrite and Bornite zones</li> <li>• A larger, sub-vertical Leached zone in the upper northwest part of the mineralisation</li> </ul> <p>Other domains exist including the surrounding granite, dykes and cover sequence, but these do not contain significant copper mineralisation and have been excluded from the estimated Mineral Resource. Domain boundaries were treated as hard boundaries for the estimation of all variables except uranium, which was treated as soft between the chalcopyrite and bornite domains. Similar to the restated 2015 estimate, chalcopyrite and pyrite-chalcopyrite mineralisation within the main mineralised zone have been treated separately during estimation. Domain wireframes below 4,150m RL were retained from 2015 and were constructed with Maptek Vulcan™ using a combination of implicit modelling and manually digitised surfaces. The implicit modelling process used categorical values for modelled domains based on drill hole data. Additional constraints were also applied, by using horizontal lines to force the domain boundaries produced by the implicit modelling to go through interpreted points. Cross-sectional interpretation was not the primary method of wireframe construction due to a combination of the pipe-shaped mineralisation, irregular drill pattern, and steep drill holes. Above 4,150m RL, where 2016 drilling data informs the interpretation, domain wireframes were updated manually using Micromine™.</p> <p>Estimation used Ordinary Kriging. Samples were composited to 4m for all variables except for fluorine, which used 1m composites. Variographic analysis was done using GeoAccess™ and Micromine™ but, given the small relative increase in data in 2016, previous variography was heavily relied upon. Domain construction used Maptek Vulcan™ and Micromine™ and estimation was done using Micromine™. Up to two search and estimation passes were used, with a third pass being used to assign default values to the negligible amount of unestimated blocks remaining after the second pass. The first pass used search radii equivalent to 100% of the modelled variogram ranges. The second pass used 200% of the modelled variogram range. For the two most important domains in the Mineral Resource, the bornite-dominant and chalcopyrite-dominant zones, the first pass search radii were 160m x 96m x 64m and 120m x 78m x 48m respectively. The first pass used a minimum of 20 composites from at least two drill holes and all four quadrants to be populated with 5 composites. The second pass did not use sector constraints but required a minimum and maximum number of 20 and 40 composites respectively, and a maximum of 10 composites from any single hole, thereby requiring data from at least two holes before writing an estimate. The third pass assigned a grade near to the median composite grade for the relevant domain to</p>
--	---

unestimated blocks. Less than 0.2% of the blocks included in the Mineral Resource had a copper grade assigned during the third pass.

Around 95% of the Mineral Resource has an informing composite within the nominal drill hole spacing of 50m. For Measured, Indicated and Inferred resources these proportions are 99.7%, 95.5% and 49.6% respectively. The maximum distance from any block within the Mineral Resource to the closest composite used for the estimation of the copper grade of that block is 107m.

The block model used for the current estimate was compared with the 2015 estimate. The differences in tonnages and grades at a range of cut-off grades were in line with those expected as a consequence of the additional data and changes to domains and estimation parameters for the current Mineral Resource. In addition, several check estimates were run using different top-cuts and search neighbourhood parameters with results showing only minor differences to the base case. There has been no historical mine production from the Carrapateena deposit.

The current assumption is that revenue will only be obtained from copper, gold and silver.

Grades were estimated independently for Cu, Au, Ag, U, F, Fe, SG (as measured), and Weight Loss on Drying. Sulphur and barium were also estimated using the same parameters as copper to ensure that the same composites were used with the same Kriging weights as for copper, because the purpose of estimating these elements is to assist in distinguishing the sulphide/sulphate mineralogy. Cobalt was estimated using the same parameters as copper. Carbon, magnesium and silicon were estimated using the same parameters as iron.

A sub-blocked model was used, having a parent block size of 20×20×20 metres, with sub-blocks down to 5×5×5m to honour domain boundaries. Parent cell estimation was employed.

Sample spacing varies widely. In the vertical direction, composites are spaced at 4 metres downhole. In the horizontal plane, the spacing between holes is not uniform. In the higher grade core of the deposit, the spacing is less than around 30×30m locally, but generally targeted to 50×50 metres, increasing to ~100×100 metres outwards from here. Since holes have been angled to obtain information on lateral controls, the horizontal spacing varies.

Blocks and sub-blocks in this estimate were made sufficiently small as to provide resolution of domain geometry in the block model. The block size chosen does not imply a selective mining unit size. Blocks having grades below cut-off surrounded by blocks having grades above cut-off do not constitute a significant proportion of the Mineral Resource.

Strong correlations exist between some variables. Variables have been estimated independently. Other than fluorine, carbon and weight loss on drying, all other variables estimated are fully assayed and estimated using similar domains, methods and parameters, meaning that the data assists to preserve any correlation between the variables at the block scale.

Geological interpretation guided the selection of domains, along with exploratory data analysis, particularly of copper and sulphur. The Carrapateena Breccia Complex was treated as a limit for the estimated Mineral Resource, although localised zones of copper mineralisation exist beyond this.

	<p>The impact of very high-grade composites was restricted using top-cuts, which generally were around the 99<sup>th</sup> percentile of the distribution of grades of 4m composites for most variables, and the 1m composites for fluorine. Check estimates revealed that the choice of top-cuts did not have a material effect on the estimate.</p> <p>Estimates were carefully validated by: visual validation in 3D; checks include that all blocks are filled, that block grades match sample grades logically, that artefacts are not excessive given the choice of search parameters, and visual assessment of relative degree of smoothing.</p> <p>Statistical validation included: comparison of input versus output grades globally; semi-local checks using swath plots to check for reproduction of grade trends; comparison of global grade tonnage curve of estimates against grade tonnage curves derived from the previous estimate.</p>															
<b>Moisture</b>	<p>Tonnages are estimated on a dry basis. Although core recovery is very high (&gt;99%) and core is competent and of very low porosity, a small moisture adjustment has been made to measured SG when calculating dry density. Received and dried sample weight measurements were taken at the Bureau Veritas (Amdel) Adelaide laboratory for OZ Minerals drill holes. The percentage difference (weight loss on drying) has been treated as a separate variable for estimation. The dry density from which tonnages were estimated was calculated for each block after correcting for the estimated weight loss on drying. Weight loss on drying averaged 0.3%.</p>															
<b>Cut-off parameters</b>	<p>A shape generated using a cut-off NSR (net smelter return) of A\$70/t has been used for the reported Mineral Resource, assuming mining with SLC. The value of \$A70/t was recommended by OZ Minerals' mining engineers as the value which covers expected mining, processing and site G&amp;A costs, while still maintaining acceptable continuity of mineralisation above cut-off.</p> <p>The formula that has been used for the NSR calculation is: <math>NSR = 0.7 \times \text{In situ value (ISV)}</math></p> <p>where <math>ISV = (\text{Cu \%} \div 100\% \times 2204\text{lb/t} \times \text{USD}2.94/\text{lb} + \text{Au g/t} \div 31.1\text{g/oz} \times \text{USD}1281/\text{oz} + \text{Ag g/t} \div 31.1\text{g/oz} \times \text{USD}19/\text{oz}) \div 0.75\text{USD/AUD}</math>.</p> <p>Economic assumptions used for the NSR formula are provided below. They are drawn from OZ Minerals life-of-mine (LOM) Corporate Economic Assumptions released in Quarter 3 2016 and are the consensus values of major brokers issued in July 2016.</p> <table border="1" data-bbox="464 1608 1129 1794"> <thead> <tr> <th>Assumptions</th> <th>Unit</th> <th>LOM</th> </tr> </thead> <tbody> <tr> <td>Copper</td> <td>US\$/lb</td> <td>2.94</td> </tr> <tr> <td>Gold</td> <td>US\$/oz</td> <td>1281</td> </tr> <tr> <td>Silver</td> <td>US\$/oz</td> <td>19</td> </tr> <tr> <td>Exchange Rate</td> <td>AUD/USD</td> <td>0.75</td> </tr> </tbody> </table> <p>Implied in the factor used to convert ISV to NSR are the following metallurgical recoveries: 91 percent for copper, 73 percent for gold and 79 percent for silver. The difference between using the simplified formula above and a more detailed NSR</p>	Assumptions	Unit	LOM	Copper	US\$/lb	2.94	Gold	US\$/oz	1281	Silver	US\$/oz	19	Exchange Rate	AUD/USD	0.75
Assumptions	Unit	LOM														
Copper	US\$/lb	2.94														
Gold	US\$/oz	1281														
Silver	US\$/oz	19														
Exchange Rate	AUD/USD	0.75														

	<p>formula was not considered to be significant for the purposes of this Mineral Resource estimate.</p>
<p><b>Mining factors or assumptions</b></p>	<p>Carrapateena has a high grade core of bornite and chalcopyrite rich mineralisation that is amenable to SLC. For the purpose of this statement it is assumed that SLC will be a suitable method for extraction of the higher grade mineralisation and the 2016 Pre-Feasibility Study supports this. The higher grade SLC core is surrounded by a contiguous zone of mineralisation that may in future support an expanded SLC mining operation at a lower cut-off.</p> <p>The SLC mining parameters are based on using 25m level spacing and 15m drill drive spacing to yield a 4Mtpa production rate.</p> <p>Extraction of the Resources has only been contemplated to a depth of 1470m metres as mineralisation below 3630mRL do not pass the current reasonable prospects test.</p> <p>This Mineral Resource does not account for mining recovery.</p>
<p><b>Metallurgical factors or assumptions</b></p>	<p>Metallurgical test work on representative samples selected via a geometallurgical study have shown that a conventional crushing, grinding and flotation circuit would produce acceptable concentrate grades and metal recoveries. Metal recoveries used in the 2016 Pre-Feasibility study include 91 percent for copper, 73 percent for gold and 79 percent for silver.</p>
<p><b>Environmental factors or assumptions</b></p>	<p>In 2013 OZ Minerals was granted a Retention Lease to allow for further Advanced Exploration Works associated with the Carrapateena deposit. Since granting of this lease Environmental monitoring works have been ongoing as part of continued compliance with lease conditions and the continued preparation for an application for a Mining Lease. These include developing a further understanding of baseline conditions for groundwater, surface water, flora, fauna, air quality and social.</p> <p>Cultural clearance of a large project footprint was undertaken with the recognised Traditional Owners during 2015 as a part of ensuring any cultural heritage considerations are understood prior to final engineering.</p> <p>Environmental risk will be both defined and managed through the application of appropriate engineering and design controls, monitoring and measurement, modelling and infield inspections and maintenance regimes throughout the prefeasibility and ongoing engineering stages. As a part of engineering studies environmental risk and impact assessments have been and will continue to be conducted.</p>
<p><b>Bulk density</b></p>	<p>The water immersion method was used for density determination. For Teck drill holes, the density was determined from a sample from almost every second metre of core in basement. For OZ Minerals drill holes in basement, the density was determined for the entire length of every metre for NQ core, or a representative sample from every metre of HQ or PQ core.</p> <p>OZ Minerals routinely repeated measurements and also had 2 standards each made of aluminium and titanium for QAQC purposes.</p> <p>The mineralised material is not significantly porous. Moisture has been estimated as described in the Moisture criterion in this table.</p> <p>The lithological domains were considered to be suitable for use as domains for density estimation.</p>

<p><b>Classification</b></p>	<p>The basis for Mineral Resource classification is underpinned by the robustness of the conceptual geological model, quality of data and the continuity of geology and grade relative to the arrangement of data. OZ Minerals provided advice to the Competent Person relating to the quality of the data and the confidence in the interpretations of geology and mineralisation. The quality of the estimation of grades and density was assessed using the relative kriging variance, pass in which the estimate was made, slope of regression, distance to the nearest informing composite and number of holes used in the copper estimate. The confidences in the interpretations and copper estimate were then integrated, resulting in annealing of the classification in places. Finally, those parts of the model which were unlikely to satisfy the 'reasonable prospects test' (reasonable prospects for eventual economic extraction), were excluded from the resources, mainly on the basis of contiguity, dimensions and grade within the context of the proposed mining method of SLC.</p> <p>The Competent Person has checked, reviewed and integrated all of this information and subsequently assigned a classification of Measured, Indicated or Inferred Mineral Resource to the estimates; and excluded parts of the model that do not satisfy the 'reasonable prospects test' from the Mineral Resources.</p> <p>Appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</p> <p>The result appropriately reflects the Competent Person's view of the deposit.</p>
<p><b>Audits or reviews.</b></p>	<p>This Mineral Resource estimate as at 18 November 2016 has not been audited. A previous Carrapateena Mineral Resource estimate (as at 31 October 2012) was audited by AMC Consultants Pty Ltd during 2013 to assess whether it was suitable for use in a pre-feasibility study (PFS). The audit found that there were no fundamental flaws in the Mineral Resource estimate and, with minor caveats regarding local grade estimation which may be relevant for the evaluation of selective mining options, it was fit for purpose. The conclusions of the 2013 AMC audit were considered, and where appropriate, modifications to the estimation processes were incorporated into subsequent models, including the model on which the current Mineral Resource is based.</p>
<p><b>Discussion of relative accuracy / confidence.</b></p>	<p>Factors affecting global accuracy and confidence of the estimated Mineral Resource at the selected cut-off include:</p> <ul style="list-style-type: none"> <li>• Conditional biases of estimated grades caused by the use of Ordinary Kriging. This has been mitigated by the introduction of a chalcopyrite-dominant domain, for which copper grades typically exceed 1.5%. This roughly coincides with the selected cut-off grade, so in general the boundaries of the chalcopyrite and bornite domains with lower-grade domains tend to coincide with the limits of the reported Mineral Resource. Within the bornite-dominant domain, there are some small zones having grades below cut-off that were not treated as a separate domain for copper estimation, and so smoothing of estimated grades in this domain will introduce local conditional biases of estimated copper grades. However, below-cut-off material makes up a relatively small proportion of the bornite domain so the effect of this on the accuracy of the estimated Mineral Resource is not expected to be large.</li> </ul>

	<ul style="list-style-type: none"><li>• Uncertainty of the position of domain boundaries, which is largely due to the arrangement of drill hole intersections. The size of the mineralised domain wireframes has a direct effect on the estimated tonnage of the Mineral Resource, with the 2016 estimate demonstrating the impact of the interpreted volume of the Bornite domain on mean grade. The classification of the Mineral Resource has taken into consideration to the confidence in the position of domain boundaries given the distribution of drill hole data.</li><li>• The Mineral Resource estimate reported assumes sufficient local-scale detail to be useful for the preliminary technical and economic evaluation of a SLC mining method.</li></ul> <p>There has been no production from the Carrapateena deposit for comparison with the estimated Mineral Resource.</p>
--	---

## **Competent Person Statement**

The information in this report that relates to Mineral Resources is based on information compiled by Stuart Masters, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (108430) and a Member of the Australian Institute of Geoscientists (5683). Stuart Masters is a full time employee of CS-2 Pty Ltd and has no interest in, and is entirely independent of, OZ Minerals. Stuart Masters 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' (JORC 2012). Stuart Masters consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Stuart Masters BSc (Geology), CFSG, has over 30 years of relevant and continuous experience as a geologist including 12 years in Iron-Oxide-Copper-Gold style deposits. Stuart Masters has visited site on ten occasions since OZ Minerals acquired the project including once since the Mineral Resource was reported in September 2015.

### **Stuart Masters CS-2 Pty Ltd**

#### **Contributors**

- Overall
  - Stuart Masters, CS-2 Pty Ltd
- Data Quality
  - John de Little, OZ Minerals
- Geological Interpretation
  - John de Little, Bruce Whittaker OZ Minerals
- Estimation
  - Stuart Masters, CS-2 Pty Ltd,

Stuart Masters is solely responsible for Mineral Resource classification but has relied on, and checked and reviewed, data and advice from OZ Minerals' geologists regarding data quality and interpretation.



**OZ Minerals Limited**

**Carrapateena Project**

**Ore Reserve Statement and Explanatory Notes**

**As at 4 August 2017**

## Introduction

This Ore Reserve estimate is based on the Carrapateena 2016 Mineral Resource estimate as at 18 November 2016, originally released to the ASX on 9th December 2016, and re-attached to this report for ease of reference. A Pre-Feasibility Study was completed during 2016 on the previously released 2015 Mineral Resource estimate as at 25 September 2015, released to the ASX on 6 October 2015. The Pre-Feasibility Study has been updated for the 2016 Mineral Resource Estimate, including a revision to the mine access and material handling system, and modifications to the mining footprint where required. Based on the mining and processing schedules completed for the study update, together with ongoing metallurgical test-work, the Carrapateena Project is no longer reliant on the incorporation of a Concentrate Treatment Plant (CTP), and has not been included.

## Orebody and Mining Method

The Carrapateena orebody is located within the Carrapateena Breccia Complex. The orebody is 200-300m in diameter, extends over 1,000m vertically and is overlain by about 480m of barren sediments. The mining method on which the Ore Reserve estimate has been based is Sub-Level Caving (SLC), a bulk and non-selective mining method appropriate for the extraction of the Mineral Resource.

## Ore Reserve Estimate

The Carrapateena underground Ore Reserve estimate as at 4 August 2017 is summarised in the table following.

**Table 2: Carrapateena Mineral Reserve Estimate<sup>5</sup> as at 4 August 2017**

<b>Classification</b>	<b>Ore (Mt)</b>	<b>Cu (%)</b>	<b>Au (g/t)</b>	<b>Ag (g/t)</b>	<b>Cu (kt)</b>	<b>Au (koz)</b>	<b>Ag (Moz)</b>
Proved Reserve	-	-	-	-	-	-	-
Probable Reserve	79	1.8	0.7	8.5	1,400	1,800	22
<b>TOTAL</b>	<b>79</b>	<b>1.8</b>	<b>0.7</b>	<b>8.5</b>	<b>1,400</b>	<b>1,800</b>	<b>22</b>

Notes accompanying the Ore Reserve Estimate

1. This Ore Reserve estimate has been reported in accordance with JORC Code (2012) guidelines, and must be read in conjunction with the accompanying *Table 1 Section 4 - Estimation and Reporting of Ore Reserves*.
2. Some discrepancies in total may occur due to the rounding of numbers.

<sup>5</sup> This table is subject to rounding errors.



## **Contributors**

The Ore Reserve estimate in this report has been compiled by Murray Smith, who is the Competent Person for the reporting of the Ore Reserve estimate. In the course of compiling the estimate, Mr Smith has relied, and believed he had a reasonable basis to rely, on information provided by the following third parties:

<b>Information Source</b>	<b>Subject Matter</b>
Stuart Masters CS-2 Pty Ltd	Mineral Resource estimate
Gavin Power Power Geotechnical	SLC diluted production tonnes and grades
Mike Turner Turner Mining and Geotechnical	Geotechnical and hydrological inputs
Andrew Mooney OZ Minerals	Coordination of the study update
Christopher Fang OZ Minerals	Financial Evaluation
Ben Baade OZ Minerals	Metallurgical Parameters
Daniel Leinfelder OZ Minerals	Environmental and Social

## **Competent Person's Statement**

The information in this report that relates to Ore Reserves is based on and fairly represents information and supporting documentation compiled by Murray Smith B.Eng.(Mining), a Competent Person who is a Member and Chartered Professional of the Australasian Institute of Mining and Metallurgy (AusIMM Membership No. 111064).

Murray Smith is a full time employee of Mining Plus Pty Ltd, and prior to this study had no dealings with OZ Minerals Limited. Murray Smith is not a shareholder of OZ Minerals Limited, and is considered to be independent of OZ Minerals Limited.

Murray Smith BEng (Min) has over 20 years of experience as a mining engineer, and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities 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' (JORC 2012). Murray Smith consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The Ore Reserve estimate has been reported in accordance with the guidelines defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition).

**Murray Smith**

**Principal Mining Consultant  
Mining Plus Pty Ltd**

## JORC Code, 2012 Edition – Table 1

### Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li>• <i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i></li> <li>• <i>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Mineral Resource estimate used as a basis for the conversion to an Ore Reserve was the 2016 Resource as at November 18th 2016, detailed in the ASX release dated 9<sup>th</sup> December 2016, and available here: <a href="http://www.asx.com.au/asxpdf/20161209/pdf/43dljh6t2qkn4r.pdf">http://www.asx.com.au/asxpdf/20161209/pdf/43dljh6t2qkn4r.pdf</a></li> <li>• This resource is restated, unchanged, as part of this release.</li> <li>• The Mineral Resources detailed in that release are inclusive of the Ore Reserves reported in this release.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Competent Person for Ore Reserves visited the site in June 2017 and inspected the Tjati access decline. Diamond drill core representative of the orebody and overlying strata was also inspected.</li> </ul>
<b>Study status</b>	<ul style="list-style-type: none"> <li>• <i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i></li> <li>• <i>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A Pre-Feasibility Study was completed in 2016 based on a 4.0 Mtpa Sub-Level Caving (SLC) operation. The study has been updated in 2017 with an alternative access and material handling system layout, but with the same mining method. The mining footprint was modified where required, and there has been a marginal increase in production rate to 4.25 Mtpa.</li> <li>• The updated study includes appropriate Modifying Factors and indicates a technically achievable project with robust project economics.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• <i>The basis of the cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Economic evaluation is undertaken using a financial model that includes: <ul style="list-style-type: none"> <li>○ revenue,</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>○ operating and capital costs,</li> <li>○ assumed commodity prices and exchange rates,</li> <li>○ metallurgical recovery,</li> <li>○ transport costs,</li> <li>○ smelting and refining costs, and</li> <li>○ royalty payments</li> </ul> <ul style="list-style-type: none"> <li>• Revenue will be derived from copper, gold and silver. Ore value is expressed as a net smelter return (NSR), the payable value of metals in concentrate less realisation, royalties and other commercial costs. The calculation used was:   <math display="block">\text{NSR} = \text{In-Situ Value (ISV)} \times 0.7, \text{ where}</math> <math display="block">\text{ISV} = ((\text{Cu}\% / 100 \times 2204\text{lb/t} \times \text{Cu price}) + (\text{Au g/t} / 31.1\text{g/oz} \times \text{Au price}) + (\text{Ag g/t} / 31.1\text{g/oz} \times \text{Ag price})) / \text{XR}</math> <math display="block">\text{Cu price} = \text{US}\\$2.94/\text{lb}</math> <math display="block">\text{Au price} = \text{US}\\$1281/\text{oz}</math> <math display="block">\text{Ag price} = \text{US}\\$19/\text{oz}</math> <math display="block">\text{XR} = 0.75 \text{ AUD/USD}</math> </li> <li>• Cut-off values for the mine design were based on iterative reviews of the design, cave flow simulation and economic analysis.</li> <li>• Recovered SLC ore, including dilution, is forecast using Power Geotechnical Cellular Automata (PGCA) software to simulate cave flow and ore recovery based on the Mineral Resource block model. Input parameters for PGCA were based on parameters used at other SLC operations which use PGCA software, plus some site specific factors. These parameters will be refined using reconciliation data once the project is in production.</li> <li>• A range of shut-off values were modelled in PGCA to assess the SLC inventory variability, and high-level schedules undertaken for each</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>case. Based on these schedules, initial cave production used a shut-off value of \$88/t to optimise IRR, before transitioning to a shut-off value of \$92/t to optimise NPV for the project.</p> <ul style="list-style-type: none"> <li>• Adjustments were made to the PGCA generated SLC footprint to take into account mining practicality and to ensure a smoother cave shape.</li> <li>• Any SLC production ring within the final cave footprint was classified as ore, regardless of the NSR value, with the result that some rings are deemed ore despite being below the cut-off value.</li> <li>• All development was assessed against a cut-off value of \$30/t, to cover processing, general and administrative, and sustaining capital costs.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>• <i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i></li> <li>• <i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i></li> <li>• <i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i></li> <li>• <i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></li> <li>• <i>The mining dilution factors used.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Pre-Feasibility Study completed in 2016 concluded that Sub-Level Caving was the preferred mining method for Carrapateena. The updated 2017 study retains this mining method, with modified access, ventilation and material handling designs.</li> <li>• Geotechnical parameters and engineering assessments have determined that the rock mass above the mine design area will cave and propagate to surface. During the design process the footprint of the upper levels of the cave were expanded beyond the optimum economic footprint in order to ensure cave initiation and propagation. Further work is being undertaken on pre-conditioning as part of a Feasibility Study that is currently underway.</li> <li>• Power Geotechnical used their proprietary PGCA software to simulate cave flow and ore recovery, including dilution. Input parameters for PGCA were based on parameters used at other SLC operations which use PGCA software, plus some site specific factors.</li> <li>• PGCA outputs include dilution, and no additional mining dilution factors were incorporated in the Ore Reserve estimate for SLC material. Dilution was not included for development included within the Ore Reserve estimate, to avoid the possibility of double counting</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>The mining recovery factors used.</i></li>   <li>• <i>Any minimum mining widths used.</i></li>   <li>• <i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></li> </ul>	<p>ore tonnes included in the SLC production schedule.</p> <ul style="list-style-type: none"> <li>• Dilution includes material overlying the SLC design and from the edges of the cave. The overlying Woomera Shale unit has the potential to degrade into finer particles than the other rock types overlying the cave. For this reason, the cave flow modelling in PGCA assumed that the Woomera Shale had twice the migration velocity compared to the other rock types.</li> <li>• A sensitivity analysis was undertaken on the fines migration speed which indicated that if the migration speed was similar to the rest of the overlying strata there would be an improvement in value of approximately \$2/t value compared to the base case. If the fines migration was 3x the average, there would be a reduction in value of approximately \$4/t value compared to the base case.</li> <li>• For SLC production rings generated by PGCA which were included in the final cave design footprint, 105% of the tonnes blasted were recovered, for 97% of the contained metal. Additional production rings were added to refine the cave shape, and for these rings 40% of the in-situ tonnes blasted were recovered.</li> <li>• The mine design incorporates 25m sublevel spacing, 5m wide production drives at a spacing of 15m (centre to centre) and a standard SLC ring design. The PGCA model assumed a draw width of 11m, based on experience at other similar SLC operations.</li> <li>• Sub-Level Caving is a non-selective, bulk mining method in which dilution is incurred to recover economic ore. Inferred Mineral Resources that have been modelled as recovered in the PGCA cave flow model have been included in the financial evaluation of the study, as they are inextricably linked in the mining method.</li> <li>• The quantity of Inferred Resource material that is included in the financial evaluation, but <u>not</u> included in the statement of Ore Reserves is tabulated here:</li> </ul>

Criteria	JORC Code explanation	Commentary																
	<ul style="list-style-type: none"> <li><i>The infrastructure requirements of the selected mining methods.</i></li> </ul>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Ore (Mt)</th> <th style="text-align: center;">Cu (%)</th> <th style="text-align: center;">Au (g/t)</th> <th style="text-align: center;">Ag (g/t)</th> <th style="text-align: center;">Cu (kt)</th> <th style="text-align: center;">Au (koz)</th> <th style="text-align: center;">Ag (Moz)</th> </tr> </thead> <tbody> <tr> <td><b>Inferred Resources</b></td> <td style="text-align: center;">4.7</td> <td style="text-align: center;">0.6</td> <td style="text-align: center;">0.3</td> <td style="text-align: center;">2.9</td> <td style="text-align: center;">30</td> <td style="text-align: center;">39</td> <td style="text-align: center;">0.5</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>The inclusion of this Inferred Resource material in the financial evaluation is not material to the project evaluation.</li> <li>All major infrastructure for the project has been included in the financial evaluation, including: <ul style="list-style-type: none"> <li>material handling system (crushers and conveyors),</li> <li>pump stations,</li> <li>primary ventilation fans and refrigeration plant</li> <li>workshops, electrical &amp; other services distribution,</li> <li>process plant,</li> <li>accommodation village.</li> </ul> </li> </ul>		Ore (Mt)	Cu (%)	Au (g/t)	Ag (g/t)	Cu (kt)	Au (koz)	Ag (Moz)	<b>Inferred Resources</b>	4.7	0.6	0.3	2.9	30	39	0.5
	Ore (Mt)	Cu (%)	Au (g/t)	Ag (g/t)	Cu (kt)	Au (koz)	Ag (Moz)											
<b>Inferred Resources</b>	4.7	0.6	0.3	2.9	30	39	0.5											
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li><i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li><i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical test work has shown that a conventional crushing, grinding and flotation circuit would produce internationally saleable concentrate with acceptable metal recoveries.</li> <li>The metallurgical process is well-tested technology.</li> <li>The metallurgical recoveries used in the study are shown below: <table border="1" style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Metal</th> <th style="text-align: center;">Recovery (%)</th> </tr> </thead> <tbody> <tr> <td>Copper</td> <td style="text-align: center;">91</td> </tr> <tr> <td>Gold</td> <td style="text-align: center;">73</td> </tr> <tr> <td>Silver</td> <td style="text-align: center;">80</td> </tr> </tbody> </table> </li> <li>Metallurgical domains are based on the resource domains, which</li> </ul>	Metal	Recovery (%)	Copper	91	Gold	73	Silver	80								
Metal	Recovery (%)																	
Copper	91																	
Gold	73																	
Silver	80																	

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Any assumptions or allowances made for deleterious elements.</i></li> <li>• <i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i></li> <li>• <i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<p>were largely driven by mineralogical and chemical properties of the rocks. Additional metallurgical domaining and corresponding metallurgical recovery factors will be delivered with the Feasibility Study, due for completion in Q4 2017.</p> <ul style="list-style-type: none"> <li>• The Carrapateena resource contains fluorine and uranium. These elements and other radioactive progeny are expected to be partially recovered into the concentrate produced, and may attract a commercial penalty to the price received. This update has on average lower fluorine and uranium grades in concentrate than the previous estimate.</li> <li>• The concentrate produced by the Carrapateena Project will be marketable to international smelters in its own right. Metallurgical test work has confirmed between 50% to 70% downgrade of uranium grade when processing Run-of-Mine ore through the flotation circuit, without the requirement for a Concentrate Treatment Plant (CTP).</li> <li>• All material within the Ore Reserve estimate requires treatment via a flotation circuit as detailed above, and the mineralogical content has been assessed to confirm that an internationally marketable concentrate will be produced.</li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li>• <i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i></li> </ul>	<ul style="list-style-type: none"> <li>• In 2013 Carrapateena was granted a Retention Lease 127 to allow for further Advanced Exploration Works associated with the Carrapateena Deposit. Since the granting of this lease technical studies have been ongoing both as part of the continued compliance with the Retention Lease 127 conditions and the development of the Mining Lease Proposal.</li> <li>• As a part of the impact assessment work OZ Minerals developed a further understanding of baseline conditions for groundwater, surface water, flora, fauna, air quality, radiation and social to build upon works completed in 2012. Detailed modelling and assessment of effects studies were subsequently completed for groundwater, surface water, air quality and socioeconomic aspects of the project as</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>conceptualised in the Pre-Feasibility Study. These projects confirmed the low impact profile expected to be observed from a remote project such as Carrapateena. Due to the importance of groundwater in the region the outcomes of the groundwater modelling has been subject to and validated by an independent peer review process.</p> <ul style="list-style-type: none"> <li>• Environmental risk will be defined through ongoing risk assessments and evaluations and managed through the application of appropriate design and management controls. All fundamental design controls that are required to achieve the environmental outcomes desired by the project are subject to rigorous assessment through Layers of Protection Analysis.</li> <li>• OZ Minerals has progressed the environmental studies for Australian Government and South Australian Government approval submissions and the Mining Lease Proposal was submitted on 26 May 2017 and the public consultation period closed on 19 July 2017. Having completed pre lodgement consultation with regulators, local government, local community and directly impacted stakeholders, OZ Minerals has confidence that the project has no fatal flaws in the environmental assessment.</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>• <i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Infrastructure sufficient for the operation of the 4.25 Mtpa SLC mine and processing plant has been designed and is included in the financial evaluation of the project.</li> <li>• There are no identified impediments to the success of proposed infrastructure.</li> </ul>
<b>Costs</b>	<ul style="list-style-type: none"> <li>• <i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></li> <li>• <i>The methodology used to estimate operating costs.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Mining capital and operating costs were reviewed as part of the updated study, and were re-estimated from first principles. Where practicable, operating cost estimates were compared to expenditure incurred to date on the Tjati access decline. Capital costs were estimated based on quotes for equipment from a database of suppliers.</li> </ul>

Criteria	JORC Code explanation	Commentary																											
	<ul style="list-style-type: none"> <li>• Allowances made for the content of deleterious elements.</li> <li>• The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.</li> <li>• The source of exchange rates used in the study.</li> <li>• Derivation of transportation charges.</li> <li>• The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li>   <li>• The allowances made for royalties payable, both Government and private.</li> </ul>	<ul style="list-style-type: none"> <li>• Other costs estimated in the 2016 PFS were reviewed and updated where appropriate.</li> <li>• Commodity price and FX assumptions used in the evaluation are drawn from 2017 Corporate economic assumptions released in the Second Quarter of 2017 which are the consensus values of major brokers issued in March 2017.</li> <li>• Transportation charges were estimated having regard to current market conditions and expectation for the future.</li> <li>• Commercial costs including TCRCs, penalties etc. were estimated having regard to market benchmarks and future expectations.</li> <li>• The South Australian State royalty will be 2% of Mine gate Value for the first five years of production, and 5% thereafter. There is an additional NTMA royalty on top of the state royalties.</li> </ul>																											
<b>Revenue factors</b>	<ul style="list-style-type: none"> <li>• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>• The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	<ul style="list-style-type: none"> <li>• The Ore Reserve estimate is based on long term (Lt) economic parameters. These parameters are shown in the table following, being the consensus values of major brokers issued in March 2017.</li> </ul> <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Economic Parameter</th> <th>Units</th> <th>Lt Value</th> </tr> </thead> <tbody> <tr> <td>Copper</td> <td>US\$ / lb</td> <td>2.91</td> </tr> <tr> <td>Gold</td> <td>US\$ / oz</td> <td>1279</td> </tr> <tr> <td>Silver</td> <td>US\$ / oz</td> <td>19.5</td> </tr> <tr> <td>Concentrate Load &amp; Transport</td> <td>AU\$ / t</td> <td>59</td> </tr> <tr> <td>Concentrate Sea Freight</td> <td>US\$ / dmt</td> <td>65</td> </tr> <tr> <td>Copper Concentrate Smelting</td> <td>US\$ / dmt</td> <td>85</td> </tr> <tr> <td>Copper Refining</td> <td>US\$ / lb</td> <td>0.085</td> </tr> <tr> <td>Gold Refining</td> <td>US\$ / oz</td> <td>5.00</td> </tr> </tbody> </table>	Economic Parameter	Units	Lt Value	Copper	US\$ / lb	2.91	Gold	US\$ / oz	1279	Silver	US\$ / oz	19.5	Concentrate Load & Transport	AU\$ / t	59	Concentrate Sea Freight	US\$ / dmt	65	Copper Concentrate Smelting	US\$ / dmt	85	Copper Refining	US\$ / lb	0.085	Gold Refining	US\$ / oz	5.00
Economic Parameter	Units	Lt Value																											
Copper	US\$ / lb	2.91																											
Gold	US\$ / oz	1279																											
Silver	US\$ / oz	19.5																											
Concentrate Load & Transport	AU\$ / t	59																											
Concentrate Sea Freight	US\$ / dmt	65																											
Copper Concentrate Smelting	US\$ / dmt	85																											
Copper Refining	US\$ / lb	0.085																											
Gold Refining	US\$ / oz	5.00																											

Criteria	JORC Code explanation	Commentary																																				
		<table border="1" style="width: 100%;"> <tr> <td style="width: 60%;">Silver Refining</td> <td style="width: 15%;">US\$ / oz</td> <td style="width: 10%;">0.50</td> <td style="width: 15%;"></td> </tr> <tr> <td>Exchange Rate</td> <td>AUD / USD</td> <td>0.75</td> <td></td> </tr> </table> <table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Metal Payability</th> <th style="text-align: center;">Grade in Concentrate Exceeds</th> <th style="text-align: center;">Payable Portion</th> </tr> </thead> <tbody> <tr> <td rowspan="4">Copper (%)</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0.9675</td> </tr> <tr> <td style="text-align: center;">35</td> <td style="text-align: center;">0.97</td> </tr> <tr> <td style="text-align: center;">45</td> <td style="text-align: center;">0.9725</td> </tr> <tr> <td style="text-align: center;">50</td> <td style="text-align: center;">0.975</td> </tr> <tr> <td rowspan="4">Gold (g/t)</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0.93</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">0.95</td> </tr> <tr> <td style="text-align: center;">10</td> <td style="text-align: center;">0.96</td> </tr> <tr> <td style="text-align: center;">20</td> <td style="text-align: center;">0.97</td> </tr> <tr> <td rowspan="2">Silver (g/t)</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">30</td> <td style="text-align: center;">0.9</td> </tr> </tbody> </table>			Silver Refining	US\$ / oz	0.50		Exchange Rate	AUD / USD	0.75		Metal Payability	Grade in Concentrate Exceeds	Payable Portion	Copper (%)	0	0.9675	35	0.97	45	0.9725	50	0.975	Gold (g/t)	0	0.93	5	0.95	10	0.96	20	0.97	Silver (g/t)	0	0	30	0.9
Silver Refining	US\$ / oz	0.50																																				
Exchange Rate	AUD / USD	0.75																																				
Metal Payability	Grade in Concentrate Exceeds	Payable Portion																																				
Copper (%)	0	0.9675																																				
	35	0.97																																				
	45	0.9725																																				
	50	0.975																																				
Gold (g/t)	0	0.93																																				
	5	0.95																																				
	10	0.96																																				
	20	0.97																																				
Silver (g/t)	0	0																																				
	30	0.9																																				
<b>Market assessment</b>	<ul style="list-style-type: none"> <li>• <i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></li> <li>• <i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></li> <li>• <i>Price and volume forecasts and the basis for these forecasts.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Copper concentrates are sold on the open concentrate market to a range of overseas smelters.</li> <li>• The Ore Reserve estimate uses OZ Minerals forecast assumptions shown in the tables above to estimate the revenue and cost of sales.</li> <li>• Revenue is determined by the metal content, metal payable scales negotiated for the product and the price assumptions.</li> </ul>																																				

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
	<ul style="list-style-type: none"> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	<ul style="list-style-type: none"> <li>The cost of sales includes the transport costs from mine to customer, the negotiated smelter treatment and refining charges and commercial remedies for deleterious elements. The smelter treatment and refining charges are typically negotiated on an annual basis directly with customers with regard to industry benchmark terms.</li> <li>Deleterious elements are accounted for in the concentrate product, with penalty scales on a pro rata basis according to their content. The current mining and processing schedule does not see any penalties paid until 2026.</li> <li>There is a proven ability by OZ Minerals to sell and a proven acceptance by buyers (smelters) to purchase a concentrate of the quality which will be produced by Carrapateena. Any improvements on concentrate quality such as higher concentrations of payable metals or decreased deleterious elements achieved through technical processes will increase the saleability of the concentrate.</li> </ul>
<b>Economic</b>	<ul style="list-style-type: none"> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<ul style="list-style-type: none"> <li>Carrapateena is an economically robust project, generating a strong NPV and high IRR as reported in the 2016 PFS and this update.</li> <li>Sensitivity analyses were carried out and the project was found to be sensitive to commodity prices. For all sensitivity scenarios modelled project NPV remained positive.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>The status of agreements with key stakeholders and matters leading to social licence to operate.</li> </ul>	<ul style="list-style-type: none"> <li>OZ Minerals has negotiated a Native Title Mining Agreement with the Kokatha Aboriginal Corporation for the activities as approved under Retention Lease 127 and signed a new agreement in July 2017 for the future stages of the project. During 2016 OZ Minerals and Kokatha Aboriginal Corporation signed a partnering agreement titled 'Nganampa palyanku kanyintjaku or Keeping the future good for all of us' which encapsulates, recognises and values the ongoing contribution of both partners to the development of the Carrapateena Project.</li> <li>Negotiations have commenced with the local landowners to</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>negotiate new land access agreements for the future stages of the project.</p> <ul style="list-style-type: none"> <li>Recent community briefing sessions were held in Roxby Downs, Woomera, Port Augusta, Whyalla and Port Pirie in May 2017 in the lead up to submitting the Carrapateena Mining Lease Application. OZ Minerals staff regularly meet with community groups, local business and local councils, and has a strong focus and positive reputation in the Upper Spencer Gulf and Outback Communities Area.</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li><i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></li> <li><i>Any identified material naturally occurring risks.</i></li> <li><i>The status of material legal agreements and marketing arrangements.</i></li> <li><i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i></li> </ul>	<ul style="list-style-type: none"> <li>OZ Minerals has advised that Carrapateena is in compliance with all legal and regulatory requirements.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li><i>The basis for the classification of the Ore Reserves into varying confidence categories.</i></li> <li><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> <li><i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i></li> </ul>	<ul style="list-style-type: none"> <li>Measured Resources and Indicated Resources recovered in the cave flow model have been converted to Probable Ore Reserves.</li> <li>The Ore Reserve classification reflects the Competent Person's view of the deposit, with supporting information provided by others.</li> <li>Approximately 45% of the Probable Ore Reserves has been derived from Measured Mineral Resources. The absence of Proved Reserves derived from Measured Mineral Resources is due to the inherent lack of selectivity with the SLC mining method, which precludes the ability to exactly quantify the source of material recovered at underground</li> </ul>



Criteria	JORC Code explanation	Commentary
		drawpoints.
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Ore Reserve estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Ore Reserve estimate has been reviewed by OZ Minerals and by Mining Plus Pty Ltd in their peer review process, but has not been subjected to an independent external audit. No material issues were identified during the reviews undertaken.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li><i>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</i></li> <li><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li><i>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i></li> <li><i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence</i></li> </ul>	<ul style="list-style-type: none"> <li>It is the opinion of the Competent Person that the Ore Reserve estimate is supported by appropriate design, scheduling, and costing work reported to a Pre-Feasibility Study level of detail.</li> <li>No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.</li> <li>There is greater uncertainty inherent in caving mining methods than in more selective mining methods. The non-selective nature of the Sub-Level Cave mining method precludes the ability to exactly quantify the source of material recovered at underground drawpoints. Recovered grades are estimated with PGCA cave flow modelling software using input assumptions developed from experience at other operations using the same mining method.</li> <li>Calibration of the flow model will be required once production commences, and thereafter at regular intervals in order to validate the assumptions used in the PGCA cave flow modelling software.</li> <li>The Ore Reserve was estimated using a shut-off value significantly higher than the breakeven value calculated with the project financial model. It is unlikely to be significantly impacted by adverse changes in metal prices or operating costs.</li> <li>The speed of fines migration through the cave column will influence the value of material recovered. Accelerated rates of migration in</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>of the estimate should be compared with production data, where available.</i>	excess of what has been assumed in the study will adversely affect the value of material drawn. Conversely, lower migration rates would see an increase in value.