**9 APRIL 2014** **ASX/MEDIA RELEASE**

## STRAITS RESOURCES LIMITED
## ASX: SRQ

# TRITTON OPERATIONS: UPDATED MINERAL RESOURCE AND ORE RESERVE ESTIMATE

### KEY POINT

- Ore Reserve Estimate for Avoca Tank, North East and Larsens deposits increased by 20,900 tonnes of contained copper to 30,300 tonnes at 31 December 2013, and includes a maiden Ore Reserve estimate for the Avoca Tank deposit

**Straits Resources Limited Straits ASX:SRQ** is pleased to announce an update of the Mineral Resource and Ore Reserve Estimates, as at 31 December 2013, for its Avoca Tank, North East and Larsens deposits at the Company's Tritton Copper Operations in New South Wales.

The updated Ore Reserve Estimates for these deposits is 1.5Mt at 2.0% copper for a combined 30,300 tonnes of contained copper metal. This represents a substantial increase on the previous Ore Reserve estimate for these deposits as at 30 June 2013 (9,400 tonnes of contained copper metal) and is after depletion of 2,800 tonnes contained copper metal.

The majority of the increase of 20,900 tonnes of contained copper is from the Avoca Tank Project (17,200 tonnes contained copper) where for the first time an Ore Reserve is being reported.

Straits' Executive Chairman, Andre Labuschagne said: "The updated Mineral Resource and Ore Reserves statement for North East / Larsens and initial Ore Reserve for Avoca Tank will greatly assist with our long term planning for the Tritton Operations."

The revised estimates for these deposits are reported in accordance with the JORC Code 2012 standards. The supporting JORC Code 2012 documentation for each estimate is attached to this release.

**Andre Labuschagne**
**Executive Chairman**

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## STATEMENT OF COMPLIANCE WITH JORC CODE REPORTING

This Mineral Resource statement has been compiled in accordance with the guidelines defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

### Competent Person s Statement and Consent – Mineral Resources

This statement has been prepared by Mr Byron Dumpleton a Consultant Resource Geologist confirm that Mr Dumpleton is the Competent Person for the Larsons, North East and Avoca Tank Mineral Resources section of this Report and: he has read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition). Mr Dumpleton is a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report and to the activity for which he is accepting responsibility. Mr Dumpleton is a Member of the Australian Institute of Geologists (MAIG No. 1598). Mr Dumpleton has reviewed the Report to which this Consent Statement applies. Mr Dumpleton is a full time employee of BKD Resources Pty Ltd (ABN 81 109 376 481) and acting as the Mineral Resources Manager for Straits Resources Limited. Mr Dumpleton has been engaged by Straits Resources Limited to prepare the documentation for Larsons, North East and Avoca Tank 31st December Mineral Resource Estimates.

Mr Dumpleton has disclosed to Straits Resources Limited the full nature of the relationship between himself and the company, including any issue that could be perceived by investors as a conflict of interest. Specifically Mr Dumpleton owns 61,349 shares in Straits Resources Ltd which were issued as part of the company share plan in 2010 when Mr Dumpleton was a staff member of Straits Resources Limited.
Mr Dumpleton verifies that the Larsons, North East and Avoca Tank Mineral Resource section of this Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in Mr Dumpleton's supporting documentation relating to Mineral Resources.

With respect to the sections of this report for which Mr Dumpleton is responsible – Mineral Resource Estimates – Mr Dumpleton consents to the release of the Larsons, North East and Avoca Tank Mineral Resources and Ore Reserves Statements as at 31st December 2013 by the directors of Straits Resources Limited.

### Competent Person s Statement and Consent – Ore Reserves

Mr Ian Sheppard, confirms that he is the Competent Person for the Larsons, North East and Avoca Tank Ore Reserves section of this Report and: Mr Sheppard has read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition). Mr Sheppard is a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report and to the activity for which he is accepting responsibility. Mr Sheppard is a Member of The Australasian Institute of Mining and Metallurgy, No. 105998. Mr Sheppard has reviewed the Report to which this Consent Statement applies. Mr Sheppard is a full time employee of Straits Resources Limited.

Mr Sheppard has disclosed to the reporting company the full nature of the relationship between himself and the company, including any issue that could be perceived by investors as a conflict of interest. Specifically Mr Sheppard has rights to 4,870,921 shares in Straits Resources. Title to the shares will vest when a range of conditions have been satisfied as defined in an Employee Share Acquisition Plan. These conditions have not been met at this time. Mr Sheppard verifies that the Ore Reserve sections of this Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in his supporting documentation relating to Ore Reserves.

With respect to the sections of this report for which Mr Sheppard is responsible – Ore Reserve Estimates – Mr Sheppard consents to the release of the 2013 Mineral Resources and Ore Reserves Statement as at 31st December 2013 for Larsons, North East and Avoca Tank.

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# STRAITS RESOURCES LIMITED

## TRITTON MINES OPERATIONS

## Avoca Tank Deposit

## Mineral Resource and Ore Reserve Estimate

## 31st December 2013

**Report Version**

| Author/s | Name | Title |
|---|---|---|
| | Byron Dumpelton | Competent Person ï Mineral Resource Estimate |
| | Ian Sheppard | Competent Person ï Ore Reserve Estimate |

# 1 PROJECT SUMMARY

## 1.1 INTRODUCTION AND SETTING

Avoca Tank is a sulphide copper gold deposit located on EL6126 in central NSW, Australia. The deposit geology is described as a Besshi style volcanic associated massive sulphide. It contains economic grades of copper with minor gold and silver.

The deposit was discovered in 2011. Resource definition drilling was completed in 2012. Since this time the deposit has been the subject of technical studies to establish the economic potential for mining. A pre-feasibility level study has now been completed that concludes a commercially viable mine can be established to exploit the mineralisation. This allows the first public reporting of an Ore Reserve Estimate for Avoca Tank. Mineral Resource estimates have been published in previous years.

The reporting or an Ore Reserve for Avoca Tank assumes the ore will be mined and processed as a small underground mine operated as part of the broader Tritton Resources operations. Copper, gold and silver will be recovered to a copper concentrate product at the existing Tritton sulphide ore processing plant.

# 2 PROJECT BACKGROUND

## 2.1 LOCATION

Avoca Tank deposit is located Northï West of the small town of Girilambone in central NSW, Australia. It is 3km to the north of the operating North-East underground mine. An ore processing plant for sulphide copper gold ore is located at Tritton 30km by road to the south. Avoca Tank ore can be treated at the Tritton plant.

The deposit is located on EL6126. Application for a Mining Lease over the small footprint of the Avoca Tank mine is assumed to be successful following consultation with Government, community and land holders, a process that will take in excess of a year.

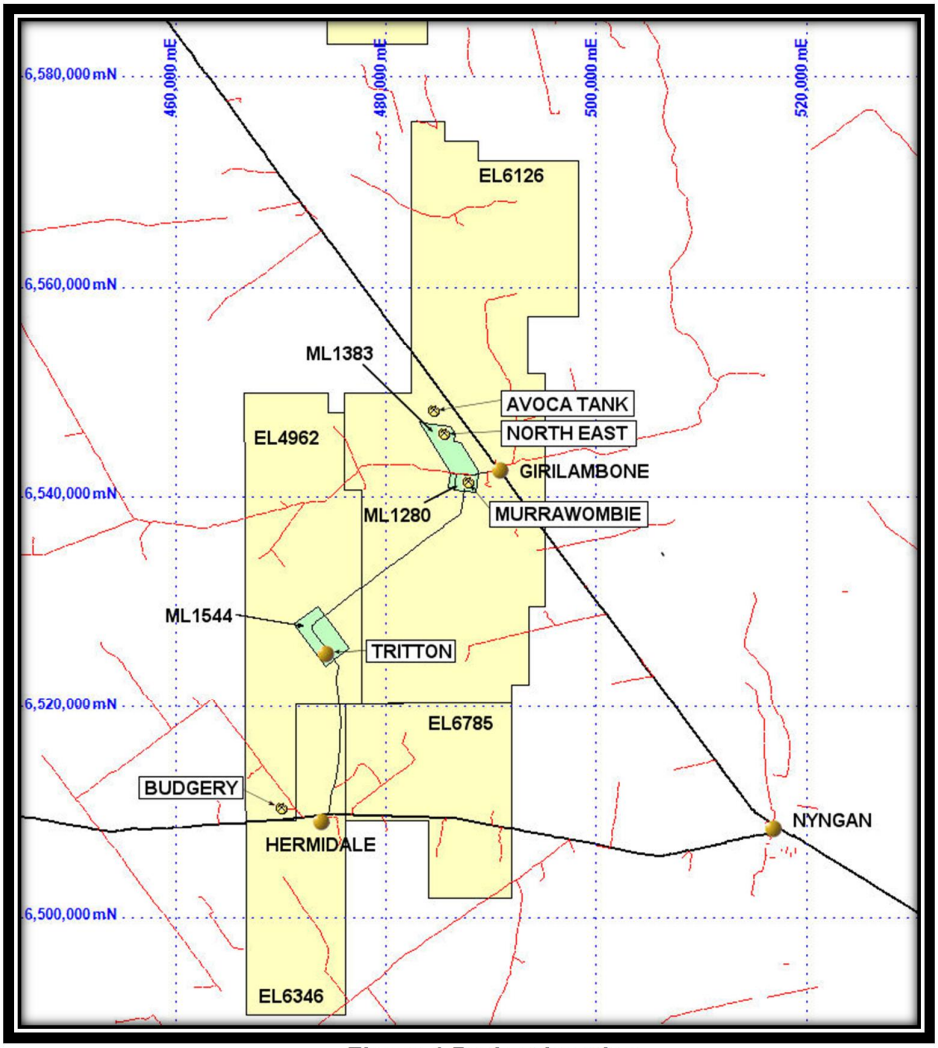


**Figure 1 Project location**

## 2.2 HISTORY

Small historical mine workings of oxide copper mineralisation existed at the site before modern exploration started in the 1970ôs.

The Avoca Tank area was first explored in the 1970ôs by Australian Selection Trust Pty Ltd (Seltrust). Numerous drill programs were undertaken during the period 1975 to 1980, with a total of 36 combined percussion and diamond holes completed. The drilling defined a small gossanous zone with low grade oxidized copper mineralisation. In 1980, Seltrust dropped the lease.

In the period 1995 to 1998, Straits Resources Ltd drilled 13 reverse circulation holes (ATRC002 ï ATRC014) to test for the presence of copper oxides for treatment at the Girilambone SX-EW plant. The holes failed to identify significant mineralisation and did not drill deep enough to test the sulphide potential. A further two reverse circulation holes were drilled in 2008, of which ATRC016 intersected a sulphide zone of 8m @ 0.61% Cu, but was never followed up.

Recommencement of the regional exploration program in August 2011, with a better understanding of the ñBesshiò style volcanic associated massive sulphide mineralisation, had instant success with the discovery of high grade copper mineralisation in the first hole. A total of 12 diamond holes (TATD001 to TATD012) defined two discreet zones of sulphides;

- Main zone: steeply dipping (70º) sequence of multiple lenses with a strike length up to 80m
- East ï West zone: near vertical, poorly defined, lower grade copper zone below the small oxide resource (west of the shaft)

A second phase of nine diamond holes (TATD013 to TATD021) continued the drilling down to 450m below surface on nominal 80 x 80m spacing in 2012. A third program of resource infill drilling was completed in 2012 / 2013 with nominal 40m spacing (TATD022 ï TATD045) to test grade continuity and assist the interpretation of the ore body geometry.

### 2.3 PROPOSED METHOD OF MINING

The Mineral Resource and Ore Reserve estimates have been based on the results of technical studies at the level of pre-feasibility study. The studies have concluded that the ore can be mined by underground methods. Open pit mining is not viable due to the depth of the mineralisation.

Mine access will be via a decline developed at industry standard 1 down for 7 horizontal with dimension of 5.5m high and 5m wide, suitable for use of mechanized jumbo, loader and haul truck equipment. The decline will be located in the footwall of the mineralized lenses (d1, d2, d3). Access levels will intersect the ore at 20m or 25m vertical intervals.

The mine has been divided into three production blocks; top, middle and lower. In the top and middle blocks the mining method to be employed is an up-hole bench stoping system. Empty stopes are to be backfilled with waste rock from decline development. Mining is from bottom to top working on fill. In the lower production block a single sublevel open stope will be mined, without backfill. Crown pillars separate the three production blocks at locations where loss of Mineral Resource in the pillar is modest.

The relatively high grade of the ore encourages the use of a mining method that results in high rate of recovery of the resource. The use of backfill and cable bolting to control ground stability in the stopes is included in the mine design.

### 2.4 PROPOSED ORE PROCESSING

The ore produced from the Avoca Tank mine will be processed at the Tritton sulphide ore processing plant. A copper concentrate product can be produced at the Tritton plant from Avoca Tank ore with no modification of the process necessary.

## 3 GEOLOGY

The Avoca Tank sulphide mineralisation is hosted at the contact between an upper sequence of interlayered metasediments and a lower sequence of mafic volcanics and intrusives with minor associated metasediment enclaves. The mafic volcanics, predominantly doleritic intrusives and basaltic volcanics, occur in the footwall of the mineralised system. The mafics are compositionally variable with subtle chemical differences between the various bodies. Figure 2 shows a schematic geology cross section of the Avoca Tank Geology.

Mineralisation is dominated by massive pyrite-chalcopyrite-sphalerite, minor but locally important magnetite-chalcopyrite, and lesser banded pyrite-chalcopyrite and rare banded pyrite (containing high gold and silver grades). Three stacked lenses have been defined (d1,d2 and d3) for the main portion of the resource with two additional lenses defined within the footwall sequence (d20 and d25).

It is postulated that the higher grades at Avoca Tank relative to other deposits in the Girilambone Group are due to higher fluid temperatures and proximity to a vent source. The alteration assemblages associated with the mineralisation also appear to include higher temperature species such as garnet-actinolite-biotite-magnetite-(chlorite).

Two additional mineralised systems occuring deeper within the Footwall Mafic sequence trend East-West and are normal to the main Avoca Tank mineralised lenses (d1,d2,d3). The deeper of these appears to intersect the lower most (d3) mineralised horizon and is tentatively interpreted as a feeder zone, which wanes in grade away from the main lenses. The mineralisation style is consistent with contorted banded pyrite-chalcopyrite-magnetite-chlorite with trace to locally weak sphalerite and galena.

Only d1, d2 and d3 lenses are of economic interest. There is no Mineral Resource estimated in the footwall lenses d20 and d25.

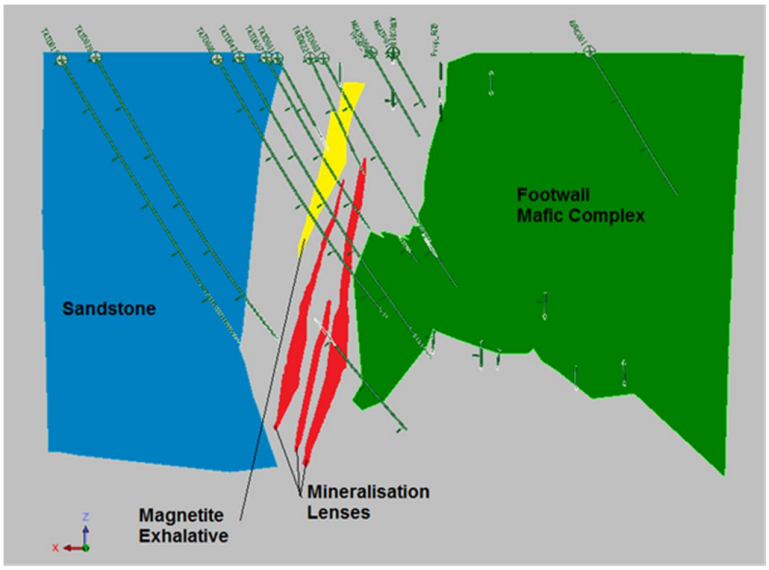


**Figure 2 Schematic geology cross section of the Avoca Tank Geology**

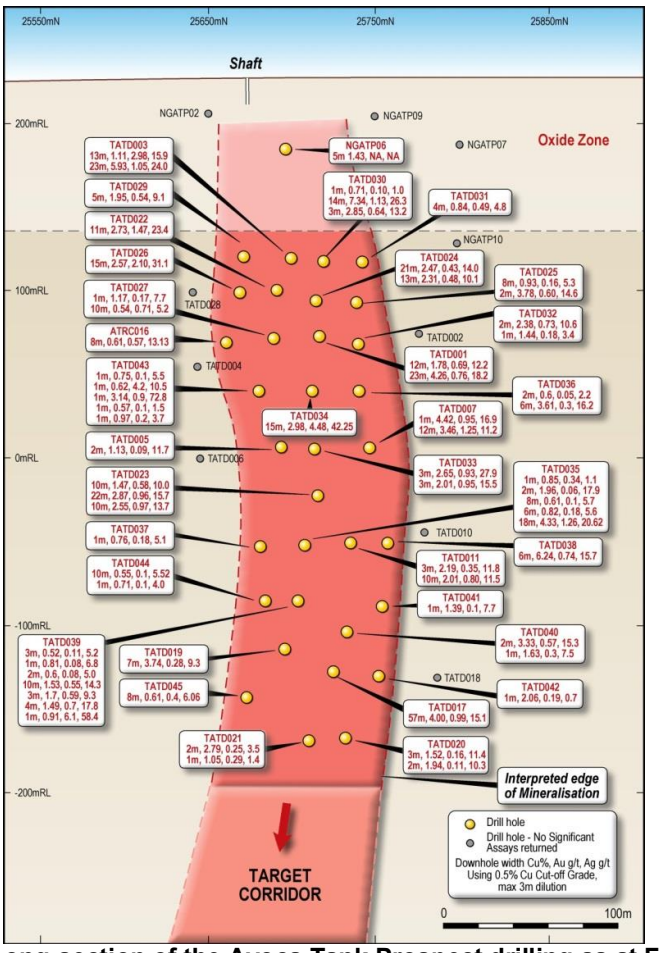


**Figure 3 Long-section of the Avoca Tank Prospect drilling as at February 2013**

# 4 MINERAL RESOURCE ESTIMATE

## 4.1 RESULTS

The Mineral Resource estimate reference date is 31st December 2013. The Avoca Tank deposit has not yet been developed as a mine so difference between estimates over time result only from changes in interpretation or modelling and not depletion.

**Table 1 Mineral Resource estimate for Avoca Tank as at 31st December 2013**

| Estimate | Classification | Cut Off Cu (%) | Tonnes (kt) | Cu % | Au g/t | Cu (kt) | Au (koz) |
|---|---|---|---|---|---|---|---|
| 31 Dec 13 | Measured | 0.6 | | | | | |
| | Indicated | 0.6 | 774 | 2.9 | 0.9 | 23 | 21 |
| | Inferred | 0.6 | 129 | 1.0 | 0.2 | 1.4 | 0.9 |
| | **Total** | **0.6** | **903** | **2.6** | **0.8** | **24.4** | **21.9** |

1. Mineral Resources are quoted as INCLUSIVE of Ore Reserve.
2. Discrepancy in summation may occur due to rounding.

## 4.2 CHANGE FROM PREVIOUS PUBLIC REPORT

There has been no depletion of the Mineral Resource by mining since the previous public report. All changes are the result of reinterpretation of drill-hole and related data, and subsequent changes to the resource estimation model.

**Table 2 Change in Mineral Resource estimate since previous public report**

| Estimate | Classification | Cut Off Cu (%) | Tonnes (kt) | Cu % | Au g/t | Cu (kt) | Au (koz) |
|---|---|---|---|---|---|---|---|
| 31 Dec 13 | Measured | 0.6 | | | | | |
| | Indicated | 0.6 | 774 | 2.9 | 0.9 | 23 | 21 |
| | Inferred | 0.6 | 129 | 1.0 | 0.2 | 1.4 | 0.9 |
| | **Total** | **0.6** | **903** | **2.6** | **0.8** | **24.4** | **21.9** |
| 30 Jun 13 | Measured | 0.6 | | | | | |
| | Indicated | 0.6 | 704 | 2.8 | 1.0 | 20 | 22 |
| | Inferred | 0.6 | 138 | 0.7 | 0.1 | 1 | 0.3 |
| | **Total** | **0.6** | **842** | **2.5** | **0.8** | **21** | **22.3** |
| | | | | | | | |
| *difference* | *Measured* | *0.6* | | | | | |
| | *Indicated* | *0.6* | *70* | *0.1* | *-0.1* | *3* | *-1* |
| | *Inferred* | *0.6* | *-9* | *0.3* | *0.1* | *0.4* | *0.6* |
| | *Total* | *0.6* | *61* | *0.1* | *0.0* | *3.4* | *-0.4* |

## 4.3 STATEMENT OF COMPLIANCE WITH JORC CODE REPORTING

This Mineral Resource statement has been compiled in accordance with the guidelines defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

### 4.3.1 Competent Person Statement

I, Byron Dumpleton a Consultant Resource Geologist confirm that I am the Competent Person for the Avoca Tank Mineral Resources section of this Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code, 2012 Edition, having five years experience that is relevant to the style of mineralisation and type of deposit described in the Report and to the activity for which I am accepting responsibility.

- I am a Member of the Australian Institute of Geologists (MAIG No. 1598).
- I have reviewed the Report to which this Consent Statement applies.

I am a full time employee of BKD Resources Pty Ltd (ABN 81 109 376 481) and acting as the Mineral Resources Manager for Straits Resources Limited. I have been engaged by Straits Resources Limited to prepare the documentation for Avoca Tank 31st December Mineral Resource estimate.

I have disclosed to Straits Resources Limited the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest. Specifically Mr Dumpleton owns 61,349 shares in Straits Resources Ltd which were issued as part of the company share plan in 2010 when Mr Dumpleton was a staff member of Straits Resources Limited.

I verify that the Avoca Tank Mineral Resource section of this Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Mineral Resources.

### 4.3.2 Competent Person Consent

With respect to the sections of this report for which I am responsible – Mineral Resource Estimate - I consent to the release of the Avoca Tank Mineral Resources and Ore Reserves Statement as at 31st December 2013 by the directors of Straits Resources Limited

| **Signature of Competent Person** | Date |
|---|---|
|  <br>Byron Dumpleton MAIG Member No. 1598 | 17/3/2014. |
| **Signature of Witness** | Witness Name and Address |
|  | TOM COONEY<br>149 KENT RD<br>WOOLOOWIN QLD 4030 |

## 4.4 JORC CODE, 2012 EDITION – TABLE 1 REPORT: AVOCA TANK DEPOSIT

### 4.4.1 Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Sampling techniques*** | 1. *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*<br>2. *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>3. *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.* | 1. All Diamond core samples are based on ½ core, RC samples in waste zones taken as 4 metre composites and re-spit to 1 metre samples when return assays or geology indicate copper or gold mineralisation.<br>2. All core is aligned, measured and metre marked.<br>3. Diamond and RC-precollars conducted by Straits Resources are completed to industry standards. Early percussion drilling are to be treated as historical data, but Straits have assumed that these programs were conducted at Industry standards done in its day (mid 1970ôs). For diamond samples these are taken at geological boundaries to maximum of 1.2 metres and a minimum of 0.3 metres with the standard interval at 1 metre within mineralised zones to approximately 50 metres before and past mineralisation. Diamond core was HQ3 in size from RC pre-collars. All zones sampled by Straits Resources for Main Avoca Tank resource based on the TATD series drillholes in the Avoca Tankôs estimation are primary sulphide, and analysed by a 3 stage aqua regia digestion with an ICP finish (suitable for Cu 0.01-40%) ALS method ME-ICP41. All Cu samples greater than or equal to 1 % were re-submitted for an ore digest ME-OG46. Additional Au analysis by fire assay fusion with an AAS finish, 30g charge (suitable for Au 0.01-100ppm) ALS method Au-AA22. All Au samples greater than or equal to 1 g/t were re-submitted for an ore grade fire assay 30g charge, Au-AA25. |
| ***Drilling techniques*** | 1. *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).* | 1. All available drilling was used for the Avoca Tankôs resource interpretation and estimation as at 26 March 2013. The majority of the drill holes used for the modeling is HQ3 diamond core from the TATD series drilled by Straits Resources. Historical NGATP-series holes are percussion holes drilled in 1975 by SelTrust Mining Corporation Pty Ltd, and the ATRC holes numbered 1 to 14 were drilled by Nord/Straits resources in the mid to late 1990ôs (Sections |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | of the Avoca Resource that has been estimated by these holes have been set as Inferred). ATRC015 and 16 were drilled by Straits Resources in 2008. TATD series holes 1 to 45 were drilled with HQ3 diamond core by Straits between July 2011 and February 2013. Most TATD series holes were drilled HQ3 from PQ3 collars, with the exception of 013,014 and 015 which are HQ3 from RC pre-collars. |
| ***Drill sample recovery*** | *1. Method of recording and assessing core and chip sample recoveries and results assessed.*<br>*2. Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>*3. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | 1. All diamond core has recoveries measured and recorded by the drilling company and confirmed by Straits Resources. RC pre-collar sample recoveries were not recorded nor required to be recorded as all material estimated for the Main Avoca Tank mineralisation is defined by core. RQD measurements are taken on all core prior to all sampling, thus are completed on all intervals used in resource estimation.<br>2. Industry standard drilling practices resulted in good sample recoveries for RC chips and Diamond core along with competent nature of the geology.<br>3. No relationship appears to exist between recovery and grade. |
| ***Logging*** | *1. Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>*2. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>*3. The total length and percentage of the relevant intersections logged.* | 1. All diamond core and RC chips are geologically logged by Company Geologists. All core is also geotechnically logged. Logging is to the level of detail to support the Avoca Tank style of mineralisation.<br>2. Logging of both RC and Diamond core samples recorded lithology, alteration, mineralisation, degree of oxidation, fabric/structure and colour. All core was photographed in both dry and wet form. All RC intervals are stored in plastic chip trays, labeled with interval and hole number. Core is stored in core trays and labelled similarly.<br>3. All RC and core samples were logged in full. |
| ***Sub-sampling techniques and sample preparation*** | *1. If core, whether cut or sawn and whether quarter, half or all core taken.*<br>*2. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>*3. For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>*4. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* | 1. Half core was collected and samples on 1m intervals.<br>2. RC samples for waste sections are collected at 1 metre intervals, with a 1m split and bulk residual collected on the drill rig. The bulk residual was composited to 4 metre interval by spear sampling. If RC composites returned above background copper or gold values, the stored original 1m split was sent to the laboratory for analysis.<br>3. Samples taken are appropriate for the Avoca Tank mineralisation style (Copper VMS). |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | 5. *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*<br>6. *Whether sample sizes are appropriate to the grain size of the material being sampled.* | 4. Sample blanks and industry standards are routinely submitted, Pulps retained to be submitted to different laboratory or re submitted back to same laboratory to test repeatability of sample accuracy (At time of this report this work is still outstanding).<br>5. Field duplicates were completed on RC samples approximately every 20 samples, No sample duplicates were taken on core samples, however all core samples are visually examine against assay values and logged mineralisation.<br>6. The sample sizes are considered appropriate to the grain size of the material being sampled. |
| ***Quality of assay data and laboratory tests*** | 1. *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>2. *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>3. *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.* | 1. All assays were conducted at accredited assay laboratories.Samples for the TATD series drillholes in the Avoca Tankôs estimation are primary sulphide, and analysed by a 3 stage aqua regia digestion with an ICP finish (suitable for Cu 0.01-40%) ALS method ME-ICP41. All Cu samples greater than or equal to 1 % were re-submitted for an ore digest ME-OG46. Additional Au analysis by fire assay fusion with an AAS finish, 30g charge (suitable for Au 0.01-100ppm) ALS method Au-AA22. All Au samples greater than or equal to 1 g/t were re-submitted for an ore grade fire assay 30g charge, Au-AA25. Samples taken pre 1990ôs Straits Resources cannot confirm the exact assay technique, however Straits is assuming for identifying mineralised zone had meet industry standards at the time. No pre 1990 assays are used in the Indicated section resource (main Avoca Tank mineralisation).<br>2. N/A<br>3. Laboratory QA/QC samples were involving the use of blanks, duplicates, standards (commercial and site made certified reference materials are used), replicates as part of in-house procedures. |
| ***Verification of sampling and assaying*** | 1. *The verification of significant intersections by either independent or alternative company personnel.*<br>2. *The use of twinned holes.*<br>3. *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>4. *Discuss any adjustment to assay data.* | 1. Significant mineralised intersections are reviewed by the logging Geologist and Senior Geologist.<br>2. No twinned holes were conducted.<br>3. All Straits Resources geological data is logged directly into Straits Resources logging computers following the Corporate Geology codes. Data is transferred to the Corporate AcQuire database and validated on entry. Down hole survey data is validated and checked for potential deviation from magnetic mineralisation before |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | data entry.<br>4. If survey data is affected by mineralisation, the survey is omitted. With a general trend being applied based on the survey above and below the affected value. |
| ***Location of data points*** | 1. *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>2. *Specification of the grid system used.*<br>3. *Quality and adequacy of topographic control.* | 1. All drill hole collars have been surveyed by using a DGPS by a local contractor. Surveys are entered into the Straits Corporate Acquire database. Historic drill hole collar positions were surveyed by Theodolite. A 3D dtm of the topographic surface was generated using the drill hole collars.<br>2. Resource modelling based on local North East Mine Grid. Rotation of the grid is 31.22 degrees to the west from AGD 66 true North.<br>3. Quality and accuracy of the drill collars are suitable for resource work and resource evaluation for a Probable reserve. In fill survey will be required for detail engineering. |
| ***Data spacing and distribution*** | 1. *Data spacing for reporting of Exploration Results.*<br>2. *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*<br>3. *Whether sample compositing has been applied.* | 1. The Avoca Tank Resource Definition drill out was completed in late March 2013 at nominal 40 metres down dip x 20 metres across strike centres to 40 metres x 40 metres to a depth of 410 metres below surface.<br>2. The Main Avoca Tank mineralisation is defined sufficiently to define both geology and grade continuity for a Mineral Resource estimation and Ore Reserve evaluation.<br>3. For the resource estimation 2 metre composites were applied. |
| ***Orientation of data in relation to geological structure*** | 1. *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>2. *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | 1. Due to the complexity of the local stratigraphy, there is potential for change in strike orientation for mineralisation. This may induce minor BIAS to the data sampled.<br>2. Due to the nature of the complex stratigraphy, several geological interpretations have been generated, estimated, reviewed by the Senior Geologist and Resource Manager and models compared against each other. Model comparison demonstrate very similar tonnes and grade distribution in the vertically and will deliver similar economics. For the resource in the main Avoca Tank mineralisation accurate orientation of mineralisation will not be finally determined until at grade control level. Due to this variability confidence level cannot be greater than Indicated. |
| ***Sample*** | 1. *The measures taken to ensure sample security.* | 1. Chain of Custody is managed by the Company. Samples are stored on site in polyweave bags containing approximately 5 samples. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***security*** | | These bags are securely tied, then loaded and wrapped onto a pallet for dispatch to the laboratory. The samples are freighted directly to the laboratory with appropriate documentation listing sample numbers and analytical methods requested. Samples are immediately receipted by the lab on arrival, with a notification to the Company Senior Geologist of the number of samples that have arrived. |
| ***Audits or reviews*** | *1. The results of any audits or reviews of sampling techniques and data.* | 1. No external audits or reviews have been conducted. |

### 4.4.2 Section 3 Estimation and Reporting of Mineral Resources

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

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Database integrity*** | *1. Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*<br>*2. Data validation procedures used.* | 1. All assay results are logged against unique sample numbers. A sampling sheet detailing sample numbers and core / RC intervals is completed prior to sampling commencing. During the sampling process each sample interval is cross-referenced to the sample number and checked off against the sampling sheet. Pre-numbered bags are used to minimize errors. Assay data is received via email in a common electronic format and verified against the AcQuire database.<br>2. Data validation checks are run by the Database Manager and checked by the logging geologist. |
| ***Site visits*** | *1. Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>*2. If no site visits have been undertaken indicate why this is the case.* | 1. Byron Dumpleton (Straits Resources ï Mineral Resource Manager) has made numerous site visits during the drill out of the Main Avoca Tank resource during various drilling programmes between 2008 and 2013. Mr Dumpleton was also part of the team that developed the Geological Interpretation for the Avoca Tank Deposit.<br>2. N/A. |
| ***Geological interpretation*** | *1. Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*<br>*2. Nature of the data used and of any assumptions made.*<br>*3. The effect, if any, of alternative interpretations on Mineral Resource* | 1. The confidence in the global geological model is considered good for this style of deposit. The Geological setting is close to a traditional style VMS in nature.<br>2. Petrology, geo-chemistry, magnetic susceptibility is used to |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *estimation.*<br>4. *The use of geology in guiding and controlling Mineral Resource estimation.*<br>5. *The factors affecting continuity both of grade and geology.* | assist in identifying geological boundaries along with geological logging.<br>3. The deposit is tabular in nature with mineralisation occurring as stacked lenses with the mineralisation confined sea floor palaeo surface, at the time of deposition.<br>4. Use of modelling the mafic F/W representing pre-depositional seafloor environment, host geology and sulphide lenses are used to define ore zones between the sediment host rock. Within these zone copper grade boundaries are defined at a nominal 0.3 % Copper cut off to control the grade distribution and prevent the over spreading into non mineralised material. |
| ***Dimensions*** | 1. *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.* | 1. The main Avoca Tank Deposit is based on several discrete tabular lenses over an area approximately 130 m north west ï south east, 100 m north east ï south west and with mineralisation starting from 50 metres below the surface. Fresh mineralisation starts at approximately 75 metres below surface. The individual tabular lens have strike lengths ranging from 15 to 60 metres and a down dip extent ranging from 130 to 360 metres. The lenses vary in true width from 2 to 30 metres. Narrow across strike mineralisation also occurs in the F/W of the Main Avoca Tank resource and trend approximately perpendicular to the main Avoca Tank mineralisation with an approximate strike length ranging from 40 to 140 metres. |
| ***Estimation and modelling techniques*** | 1. *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*<br>2. *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*<br>3. *The assumptions made regarding recovery of by-products.*<br>4. *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* | 1. The resource estimation for grade was estimated using Ordinary kriging. The software package for the grade estimation, variography and geological interpretation was Surpac. Cu, Au, Ag, Fe, Zn, S and Density were estimated. Estimation was run in three passes. The first pass was run at a 25 metre search radius for all domains. For the second pass the search radius was doubled to 50. For the third pass the search radius was doubled again to 100 metres again for all domains. Estimation of grade are within interpreted hard grade boundaries based on a nominal 0.3% copper with a minimum of 2m down hole.<br>2. Avoca Tank is yet to be mined and has no mining history. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *5. In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*<br>*6. Any assumptions behind modelling of selective mining units.*<br>*7. Any assumptions about correlation between variables.*<br>*8. Description of how the geological interpretation was used to control the resource estimates.*<br>*9. Discussion of basis for using or not using grade cutting or capping.*<br>*10. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.* | 3. No deleterious elements were estimated.<br>4. The resource was modelled using a 8 mN by 8 mE by 8 mZ with sub celling down to 2 mN by 2 mE and 2 mZ. Each ore domain has been flagged and modelled separately.<br>5. Due to the narrow nature of the mineralised domains block size does not take into account the drill spacing. This is required to prevent developing ñholesòin the mineralised domains.<br>6. No assumptions have been applied to the model for selective mining unit.<br>7. No correlation has been made between variables.<br>8. A top cuts was set to the 97.5 percentile for all elements estimated.<br>9. Block model volume validation was validated against ore solid wireframes for each ore domain. Block model validation for grade was conducted both by visually expecting model sections by northings at 20 metre increments, by benches at 10 metre increments along with swath plots by benches. In summary the model is slightly over predicting grade in the lower RLôs between 4940 to 4860 m RL. This is primarily a function of reduced data points in this region for domains 1, 3 and 4. |
| ***Moisture*** | *1. Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.* | 1. Tonnages are estimated on a dry basis. |
| ***Cut-off parameters*** | *1. The basis of the adopted cut-off grade(s) or quality parameters applied.* | 1. The nominal 0.3% copper cutoff grade used for the mineralised interpretation was chosen as this appears to reflect the natural background grade cutoff. |
| ***Mining factors or assumptions*** | *1. Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.* | 1. The only consideration to the mining method is the minimum interpretation width applied is 2 metres. Otherwise no other mining assumptions have been applied to the Avoca Tank model. The model is setup for mining evaluation and is expected that the Avoca Tank deposit will be mine from underground. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Metallurgical factors or assumptions*** | *1. The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.* | 1. The dominant mineralisation for the Avoca Mineralisation is chalcopyrite. Material that will be mined from Avoca Tank will be process as a copper concentrate at the Tritton Copper Operations a 1.4Mtpa Processing Plant. Composites from the Avoca Tank site have had initial metallurgical testing completed. Staged rougher tests provided copper recoveries of 93-97% while initial cleaner tests to improve copper grades in concentrate provided recoveries of 88-91%. |
| ***Environmental factors or assumptions*** | *1. Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.* | 1. Waste from processing will be disposed of at the current tailings storage facility at Tritton (or utilised as paste fill). Waste from underground development will be stored on surface with the potential for some to be utilised as backfill in the mining process. Any potentially acid forming waste will be encapsulated within the waste dump on the surface. No significant environmental impacts have been identified following a preliminary Environmental Impact Statement prepared for the project. |
| ***Bulk density*** | *1. Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*<br>*2. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.*<br>*3. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.* | 1. Bulk density for the Avoca Tank Model for all material types have been assign by the average values measured across the field.<br>2. Bulk density for the resource has been measured using the Archimedes Principle Method' (weight in air v's weight in water). A total of 4065 density measurements were made.<br>3. Bulk density has been both estimated by the actual measurements for fresh material and assigned by the average values with the Tritton Operation field for Transitional and Oxide material. However, for tonnage reporting the values based on assign values which are approximately 10% lower value than actually densities measured to maintain a conservative approach for the deposit economic evaluation. |
| ***Classification*** | *1. The basis for the classification of the Mineral Resources into varying confidence categories.*<br>*2. Whether 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).* | 1. The classification has been guided by drill density (currently a nominal 20 metres across strike by 40 metres down dip to 40 metres by 40 metres in the lower portion of the deposit), the geological knowledge of the Senior Geology personnel reflecting their understanding of the Tritton Operation VMS Copper field and grade continuity as defined by the grade boundaries. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | 3. *Whether the result appropriately reflects the Competent Person's view of the deposit.* | 2. The drill density and input data is comprehensive in its coverage for the resource to allow reasonable confidence for the tonnage and grade distribution.<br>3. The Mineral Resource estimated appropriately reflects the view of the competent person. |
| ***Audits or reviews*** | 1. *The results of any audits or reviews of Mineral Resource estimates.* | 1. No External Audits have been conducted. |
| ***Discussion of relative accuracy/ confidence*** | 1. *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource 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 resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*<br>2. *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.*<br>3. *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.* | 1. The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC code.<br>2. The statement relates to global estimate of tonnes and grade.<br>3. No production data is available. |

# 5 ORE RESERVE ESTIMATE

## 5.1 RESULTS

The Avoca Tank Ore Reserve Estimate as at 31 December 2013 is reported in Table 3. It is reported according to JORC 2012.

**Table 3 Ore Reserve Table for Public Reporting of Avoca Tank Mine as at 31 December 2013**

| Estimate | Classification | Cut Off Cu% | Tonnes (kt) | Cu % | Au g/t | Cu (kt) |
|---|---|---|---|---|---|---|
| 31-Dec-13 | Proved | - | - | - | - | - |
| | Probable | 1.2 | 681 | 2.5 | 0.8 | 17.2 |
| | **Total** | | **681** | **2.5** | **0.8** | **17.2** |

1. Ore Reserves are reported as Inclusive of the supporting Mineral Resource estimate
2. Discrepancies in summation will occur due to rounding
3. The estimate is based on a pre-feasibility study. No mining has occurred at the Avoca Tank deposit.

## 5.2 CHANGES FROM PREVIOUS ESTIMATE

The Ore Reserve presented in this report is the first estimate for Avoca Tank.

## 5.3 STATEMENT OF COMPLIANCE WITH JORC CODE REPORTING

This Ore Reserve statement has been compiled in accordance with the guidelines defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

### 5.3.1 Competent Person Statement

I, Ian Sheppard, confirm that I am the Competent Person for the Avoca Tank Ore Reserve section of this Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report and to the activity for which I am accepting responsibility.
- I am a Member of The Australasian Institute of Mining and Metallurgy, No. 105998.
- I have reviewed the Report to which this Consent Statement applies.

I am a full time employee of Straits Resources Limited.

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest. Specifically I have rights to 4,870,921 shares in Straits Resources. Title to the shares will vest when a range of conditions have been satisfied as defined in an Employee Share Acquisition Plan. These conditions have not been met at this time.

I verify that the Ore Reserve section of this Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Ore Reserve.

### 5.3.2 Competent Person Consent

With respect to the sections of this report for which I am responsible – Ore Reserve Estimate - I consent to the release of the 2013 Mineral Resources and Ore Reserves Statement as at 31st December 2013 for Avoca Tank.

## 5.4 CONSENT TO RELEASE

| **Signature of Competent Person** | Date |
|---|---|
| Ian Sheppard Member No.105998 AuSIMM | 18th March 2014 |
| **Signature of Witness** | Witness Name and Address |
| | TOM COONEY<br>149 KENT RD<br>WOOLOOWIN QLD<br>4030 |

## 5.5 EXPERT INPUT

A number of persons have contributed key inputs to the Ore Reserves determination. These are listed below.

In compiling the Ore Reserve the Competent Person has reviewed the supplied information for reasonableness, but has relied on this advice and information to be correct.

**Table 4 Expert contribution to Ore Reserve**

| Expert Person / Organization | Area of Expertise |
|---|---|
| **Byron Dumpleton** | Mineral Resource block Model |
| **Geohart Consultants Pty Ltd** | Geotechnical stability analysis |
| **AMML – Australian Minmet Metallurgical Laboratories Pty Ltd** | Metallurgy of ore processing |
| **Mitchell Bland – RW Corkery & Co** | Environmental Impact of mining operations |
| **Simon Fitzgerald** | Mine design and production scheduling |

### 5.6 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 |
|---|---|---|
| ***Mineral Resource estimate for conversion to Ore Reserves*** | *1. Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.*<br>*2. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.* | 1. The Ore Reserve estimate is based on the 31st December 2013 Mineral Resource, supported by the *avoca_tank_31dec2013_cut_run6_25m_rescat.mdl* digital block model. Mr Byron Dumpleton is the competent person responsible for Mineral Resource Estimation.<br><br>The December 2013 Mineral Resource is a revision of the previously quoted estimate following reinterpretation of geology using the existing drill-hole data. There has been no additional drilling since the previous Mineral Resource estimate.<br><br>2. Mineral Resources are quoted as INCLUSIVE of the Ore Reserve Estimate |
| ***Site visits*** | *1. Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>*2. If no site visits have been undertaken indicate why this is the case.* | 1. Mr Ian Sheppard, competent person for the Avoca Tank Ore Reserve, has visited the site of the proposed Avoca Tank mine, the Tritton ore processing facilities and the nearby North East ï Larsons underground mine. Ground conditions, mining costs and supporting infrastructure at Avoca Tank will be very similar to experience at North East ï Larsons mine and so have been used as reference in the preparation of the Ore Reserve estimate. |
| ***Study status*** | *1. The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.*<br>*2. 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.* | 1. A pre-feasibility study has been completed to describe the proposed Avoca Tank mine. The study has concluded that development and operation of the mine will be technically and commercially viable.<br><br>2. A mine plan has been developed in the pre-feasibility study that shows how the Mineral Resource can be mined. Modifying factors that affect the conversion of Mineral Resource are described in the study, including; dilution and ore loss during mining: recovery of metal in the ore processing plant. |
| ***Cut-off*** | *1. The basis of the cut-off grade(s) or quality parameters applied.* | 1. The December 2013 Ore Reserve uses copper grade, Cu%, as the cut-off grade criteria. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***parameters*** | | 2. Gold and silver grades in the ore are economically important as by-product. A gold grade of 0.5g/t and silver grade of 7g/t are assumed and used to adjust the Cu% cut-off value downwards to reflect the value of these by-products. The assumed gold and silver grades are lower than the average Mineral Resource grade (0.8g/t gold and 14g/t silver). They were selected to approximate the expected Mineral Resource grade of material close to the stope copper cut-off grade by a process of iteration.<br>3. There are no significant impurities in the mineralisation that require inclusion in cut-off grade criteria.<br>4. Different cut-off grades are applied to ore mined by development and ore mined from stoping. This reflects the difference in cost allocation to the method of mining. For ore from development mining, a large portion of the costs are considered sunk at the time of mining since the development will proceed irrespective of the decision to call blasted material as ore or waste. For ore mined from stope, the majority of cost is future expenditure and so is considered in the cut-off grade that guides stope design. Material mined by development has a low cut-off grade compared to ore mined by stope.<br>5. A 1.2% copper cut-off grade is applied to stope ore. The whole of stope average grade must exceed the cut-off grade for inclusion in Ore Reserve.<br>6. A 0.8% copper cut-off grade is applied to development mining<br>7. All ore, in stope or development, must be inside the Mineral Resource volume defined by a 0.6% copper cut-off grade. |
| ***Mining factors or assumptions*** | *1. 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).*<br>*2. 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.*<br>*3. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.*<br>*4. The major assumptions made and Mineral Resource model used for* | 1. December 2013 Mineral Resources have been converted to Ore Reserve by a process of detailed stope and development design.<br><br>2. The mining method to be applied at Avoca Tank, as described in the pre-feasibility study, is underground sub level open stoping. In the upper and middle production blocks of the mine stopes will be mined as single benches between 20m high sub levels. In the lower production block the stopes will be mined over several sub levels up to 80m high. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *pit and stope optimisation (if appropriate).*<br>5. *The mining dilution factors used.*<br>6. *The mining recovery factors used.*<br>7. *Any minimum mining widths used.*<br>8. *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.*<br>9. *The infrastructure requirements of the selected mining methods.* | Access to the ore will be from a spiral decline mined by conventional drill and blast methods. The decline and sub level access drives will be mined 5.5m high by 5, wide, sufficiently large to allow the use of diesel powered loaders and trucks. Ventilating air for the underground mine will be provided by near vertical rises and surface fans.<br><br>3. Geotechnical stability analysis of the proposed stopes has been completed using data from logging of diamond drill holes. Stability has been estimated using the Mathews stability graph method. Cable bolting and backfill of the mined stopes will be used to improve the stability of the rock mass surrounding the stopes. Dilution estimates are based on the stability analysis results that show stopes in the stable zone with some walls in the transitional zone.<br><br>Grade control diamond drilling to a total drill hole density of approximately 10m on strike and 20m down dip is assumed completed prior to mining, to upgrade the Mineral Resource to Measured status.<br><br>4. The Ore Reserve is based on engineer designed stopes and development drives. Moving Stope Optimisation (MSO) software was used to assist with identification of areas of the Mineral Resource suited to stoping. Recommended mining volumes that are produced by MSO analysis are NOT used directly in the estimate of Ore Reserves.<br><br>The Mineral Resource model used in Ore Reserve estimation is *avoca_tank_31dec2013_cut_run6_25m_rescat.mdl* digital block mode<br><br>5. Ore Reserve estimates for development and stope ore include the volume of material that is below the cut-off grade and which is considered impractical to exclude from the surrounding or adjacent volume of ore. Such diluting material is inclusive to the design ore volume and estimate of grade. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | Mining dilution from external to the stope design ore volume is assumed to have nil grade and will increase ore tonnage by;<br>a. 18% for upper and middle production blocks<br>b. 8% for lower production block<br>Ore grades are reduced to reflect the inclusion of nil grade dilution tonnage.<br><br>Mining dilution of development ore is assumed as 0%. Intensive ground support of development drives will be applied.<br><br>6. Mining recovery of ore from stope is assumed as 90%, applied after the dilution calculation.<br><br>Mining recovery of ore from development is assumed as 100%.<br><br>7. A minimum mining width of 5m horizontal is applied in the design of Ore Reserve.<br><br>8. Inferred Mineral Resources have not been used in the Avoca Tank pre-feasibility study. |
| ***Metallurgical factors or assumptions*** | *1. The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.*<br>*2. Whether the metallurgical process is well-tested technology or novel in nature.*<br>*3. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.*<br>*4. Any assumptions or allowances made for deleterious elements.*<br>*5. 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.*<br>*6. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the* | 1. The Avoca Tank ore will be treated at the existing Tritton ore processing plant located 32km by road from the proposed mine. Copper, gold and silver metal will be recovered to a copper concentrate by sulphide flotation.<br><br>The sulphide flotation treatment method is proved on similar deposits in the same region and with geology setting and mineralogy to Avoca Tank.<br><br>2. Laboratory scale flotation tests that simulate the grind size and flotation circuit of the Tritton ore processing plant have been conducted on samples of Avoca Tank mineralisation recovered from diamond drill core. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *specifications?* | 3. Three (3) tests have been completed, considered sufficient to support a pre-feasibility study. The conclusion from the tests is that Avoca Tank ore can be successfully treated in the Tritton ore processing plant to produce a saleable copper concentrate with 24% copper. Composites of drill core samples were created to approximate geology domains that match individual mineralized lenses as interpreted by geologists in the preparation of the Mineral Resource estimate. Composites are approximate and contained material two domains.<br><br>Recovery of metal to copper concentrate is estimated at;<br>a. Copper 94%<br>b. Gold 75%<br>c. Silver 60 to 65%<br><br>4. The Ore Reserve assumes that no allowances are required for deleterious elements in the copper concentrate. This is supported by metallurgy testing results.<br>5. Copper concentrate from Avoca Tank ore will be blended with concentrate from Tritton and North East ï Larson mine and possibly other ore bodies into parcels of 10,000 tonne to suit shipping and smelter customer requirements. The gold content of ore from these other mines is modest. Consequently the gold in copper concentrate from these sources is frequently at a concentration lower than the minimum payable of 1g/t. As a result, when concentrate from Avoca Tank is blended with the low gold concentrates a portion of the gold will not be payable. The commercial modelling has tested a 40% reduction in the revenue from gold content of Avoca Tank ore to account for the impact of blending with low gold copper concentrate. |
| ***Environmental*** | *1. 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.* | 1. A draft Environmental Impact Statement (EIS) that addresses all significant environmental impacts of the proposed Avoca Tank mine has been developed. The draft EIS has concluded that there are no environmental impacts that present a significant risk arising from the construction and operation of the Avoca Tank mine. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | Waste rock characterization testing for acid rock drainage has been completed on 27 samples of waste rock from diamond drill core. Waste rock with a sulphur content of less than 1% are not Potentially Acid Forming and can be stockpiled at surface. Waste rock with sulphur content greater than 1% sulphur will be returned to underground as stope backfill.<br><br>Tailing from ore treatment will be disposed to the existing Tritton Resources tailing storage facility.<br><br>No regulatory approvals for the Avoca Tank mining project have been received. Application for the Mining Lease and associated Government approvals are yet to be made. This is a modifying factor that will prevent reporting of a Proved Ore Reserve until approvals are received. |
| ***Infrastructure*** | *1. 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.* | 1. The Avoca Tank mine project is located in close proximity (2.5km) of the existing Tritton Resources North East ï Larsons mine. Existing equipment maintenance facilities, offices, power, water, and road access (with extension) will be used to support the Avoca Tank mine. Sufficient skilled labour is available in region to support the mine and accommodation is available in the town of Nyngan located within 50km distance from the mine.<br><br>Land on which the Avoca Tank mine is located is freehold lease not owned by Tritton Resources Pty Ltd. Access for mining purposes will require agreement to purchase the land or compensation payments to the land owner. No agreement has been made with the land owner. The Ore Reserve estimate remains classified as Probable until an agreement on land access or purchase of the land has been reached. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Costs*** | *1. The derivation of, or assumptions made, regarding projected capital costs in the study.*<br>*2. The methodology used to estimate operating costs.*<br>*3. Allowances made for the content of deleterious elements.*<br>*4. The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.*<br>*5. The source of exchange rates used in the study.*<br>*6. Derivation of transportation charges.*<br>*7. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.*<br>*8. The allowances made for royalties payable, both Government and private.* | 1. Capital cost estimates for the Avoca Tank mine project have been made to pre-feasibility study level of accuracy (± 25%). Engineering design and cost estimation to meet this level of accuracy has been completed for surface earth works, electrical and water services, buildings and general services by an independent engineering firm. Engineering design and cost estimation for underground development has been completed by Tritton Resources staff using cost experience from the nearby North East ï Larsons mine.<br>2. Operating costs estimates are based on experience at the nearby North East ï Larsons mine that uses similar equipment and mining methods.<br>3. There are no known deleterious elements that will impact capital or operating costs.<br>4. Metal price assumptions for copper, gold and silver are Straits Resources corporate long term assumptions derived from a variety of market sources.<br>5. Exchange rates used in the study that supports the Ore Reserve estimate are Straits Resources corporate long term assumptions derived from a variety of market sources.<br>6. Product transportation charges assumed in the study that supports the Ore Reserve estimate are 2013 actual cost experience for Tritton Resources.<br>7. Copper concentrate treatment and refining charges assumed in the study are 2013 actual cost experience for Tritton Resources of $70/t concentrate smelting and 7c/lb copper refining.<br>8. NSW government royalty of 4% is payable on revenue less deductible items. After deductions, the effective royalty rate on revenue is approximately 3% for Tritton Resources. No private royalties will apply. |
| ***Revenue*** | *1. The derivation of, or assumptions made regarding revenue factors* | 1. Metal price assumptions used in the study that supports the Ore |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***factors*** | *including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.*<br>2. *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.* | Reserve are;<br>a. Copper price of USD$3.18/lb<br>b. Gold price of USD$1300/oz<br>c. Silver price of USD$20/oz<br>d. AUD:USD exchange rate of 0.9<br>e. Copper treatment charge of USD$70/t<br>f. Copper refinery charge of USD7c/lb<br>g. Standard Tritton Resources contract smelter terms for payable metal |
| ***Market assessment*** | 1. *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.*<br>2. *A customer and competitor analysis along with the identification of likely market windows for the product.*<br>3. *Price and volume forecasts and the basis for these forecasts.*<br>4. *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.* | 1. The world market for copper concentrate is large compared to production from Avoca Tank. The Tritton Resources copper concentrate is a clean product with low impurities and demand for this product from copper smelters is expected to remain high. All copper concentrate is sold under life of mine contract to Glencore International AG. |
| ***Economic*** | 1. *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.*<br>2. *NPV ranges and sensitivity to variations in the significant assumptions and inputs.* | 1. The study that supports the Ore Reserve estimate has estimated the Net Present Value of the project as positive in real terms. The project life is only four years so the impact of inflation has been ignored and no assumption is made with regards this economic input. The project is modelled in real dollar terms only. A discount rate of 10% is applied to the model that is calculated in real dollar terms.<br><br>2. The Avoca Tank mine project has a median expected NPV of $9 million, when evaluated as a stand-alone project with full allocation of general and administration costs on a per tonne of ore basis. This valuation is most sensitive to copper price, mined grade and metal recovery to concentrate. The NPV reduces to $3 million when the impact of 40% reduced revenue from gold due blending of concentrate is included in the modelling.<br><br>As an incremental production source to the existing Tritton Resources business the Avoca Tank project will have a higher value than that estimated as a stand-alone project. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Social*** | *1. The status of agreements with key stakeholders and matters leading to social licence to operate.* | 1. The Avoca Tank mine project will be an addition to the existing Tritton Resources operations based in the township of Nyngan in the Bogan Shire NSW. Strong community support for the continued operation of Tritton Resources has been evidenced in regular community consultation sessions. There are no known objections from the community against the Tritton Resources operations.<br><br>The NSW State has granted all necessary licenses for the Tritton Resources operations. Amendments to these licenses will be required to allow construction and operation of the Avoca Tank mining project. |
| ***Other*** | *1. To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:*<br>*2. Any identified material naturally occurring risks.*<br>*3. The status of material legal agreements and marketing arrangements.*<br>*4. 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.* | 1. No material natural risks have been identified for the project.<br>2. All copper concentrate produced by Tritton Resources from the Avoca Tank mining project will be sold to Glencore International AG under an existing life of mine contract.<br><br>3. No application for a Mining Lease covering the Avoca Tank project has been made. The community consultation process followed by application to Bogan shire council and NSW State Government regulatory authorities is anticipated to take one to two years before full approval to mine is granted. This time frame has been considered in the study that supports the Ore Reserve. There are no known reasons why Government approvals would NOT be granted for the mining of the deposit. |
| ***Classification*** | *1. The basis for the classification of the Ore Reserves into varying confidence categories.*<br>*2. Whether the result appropriately reflects the Competent Person's view of the deposit.*<br>*3. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).* | 1. The Ore Reserve is classified as Probable since it is a conversion of Indicated Mineral Resource.<br><br>Modifying factors that result in a Probable classification in addition to the Mineral Resource classification are;<br>a. A Mining Lease has not yet been granted.<br>b. Land access agreement or land sale has not yet been secured.<br>c. Further metallurgy test work is required to provide greater statistical confidence in estimates of metal recovery and copper concentrate quality.<br>d. No independent audit of the Mineral Resource and Ore |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | Reserve estimate has been completed.<br>2. The classification of the Ore Reserve as Probable is appropriate reflection of the overall status of the project technical studies in the opinion of the competent person, Mr Ian Sheppard<br>3. No Probable Ore Reserve has been derived from Measured Mineral Resources. |
| ***Audits or reviews*** | *1. The results of any audits or reviews of Ore Reserve estimates.* | 1. No audits of the Ore Reserve have been completed. |
| ***Discussion of relative accuracy/ confidence*** | *2. 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.*<br>*3. 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.*<br>*4. 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.*<br>*5. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.* | 1. Capital cost estimates have an estimate accuracy of ±25%.<br>2. Operating costs are based on experience at very similar mines operated by Tritton Resources and have an estimate accuracy of ±10%.<br>3. Mineral Resource estimates from which the Ore Reserve estimate is derived are classified as Indicated; moderate confidence.<br>4. Cut-off grade criteria; high confidence (sharp boundaries to the mineralisation make the estimate NOT sensitive to cut-off grade)<br>5. Environmental impact; high confidence (small project footprint and limited impact adjacent to existing mining operations)<br>6. Revenue factors; high confidence (once the project is established the relatively high grade of the deposit provides a good operating margin giving confidence that the estimated ore will be mined)<br>7. Market assessment; low risk (there is a strong demand for copper concentrate in the Asian region)<br>8. Social license to operate; high confidence (existing operations of Tritton Resources are supported by the community)<br>9. Modifying factor confidence is qualified on a global basis as;<br>a. Dilution estimate; low confidence until operating experience is gained.<br>b. Ore Recovery; high confidence (steep dip of ore body is conducive to high recovery).<br>c. Metal recovery to copper concentrate; moderate to high (similar ores are treated at Tritton ore processing plant successfully).<br>d. Ability to achieve Government approval; high confidence. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | e. Ability to obtain access rights to the land required for the project; high confidence at a cost that is affordable to the project. |

End Report

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# STRAITS RESOURCES LIMITED

## TRITTON MINES OPERATIONS

## North East Deposit

## Mineral Resource and Ore Reserve Estimate

## 31st December 2013

**Report Version**

| Author/s | Name | Title |
|---|---|---|
| | Byron Dumpelton | Competent Person – Mineral Resource Estimate |
| | Ian Sheppard | Competent Person – Ore Reserve Estimate |

# 1 PROJECT SUMMARY

## 1.1 INTRODUCTION AND SETTING

North East is a sulphide copper gold deposit located on ML1383 in central NSW, Australia. The deposit geology is described as a Besshi style volcanic associated massive sulphide. It contains economic grades of copper and silver. Minor gold concentrations in the ore are generally not economic when recovered in the copper concentrate.

The deposit is being mined using underground methods by Tritton Resources Pty Ltd a subsidiary of Straits resources Limited. Open pit mining of the near surface oxide portion of the North East deposit was completed prior to 2002 by the Girilambone Copper Company. Sulphide mineralisation at depth was not suited to the heap leach processing method at the Girilambone copper mine and the pit was mined only to the base of oxidized ore. Underground mining of the North East sulphide ore by Tritton Resources commenced in 2008. Ore is treated at the Tritton copper sulphide ore processing plant by flotation to produce a copper concentrate product.

North East ore is mined on the assumption that the larger Tritton mine covers the majority of overhead or fixed cost incurred by the business. North East ore production fills spare ore processing capacity and so is not expected to cover a full share of overhead expenses.

The North East mine is fully permitted for production.

This Mineral Resource and Ore Reserve estimate is a revision of the estimate following depletion by production off set by definition of additional resource and reserve down dip of the mining front.

# 2 PROJECT BACKGROUND

## 2.1 LOCATION

North East deposit is located 3km North–West of the small town of Girilambone in central NSW, Australia. It forms part of the Tritton Resources Girilambone mining area that includes the North East mine, Larsons mine, Murrawombie mine and Avoca Tank project. The ore processing plant for sulphide copper gold ore is located at Tritton 30km by road to the south. North East mine ore is hauled by on-highway road train truck for processing at the Tritton plant.

The deposit is located on ML1383.

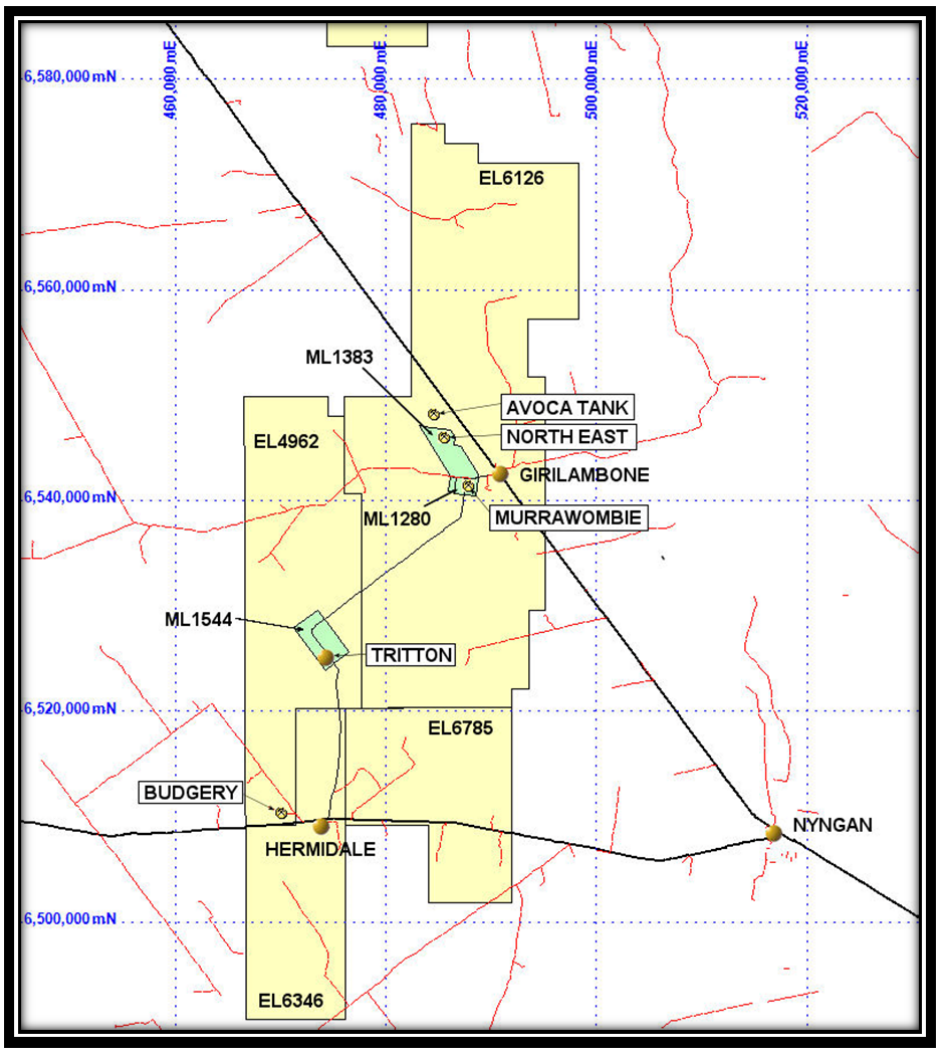


**Figure 1 Location of North East mine**

## 2.2 HISTORY

The North East underground mine has been in production since 2008. Prior to this the near surface oxide portion of the deposit was mined by open pit. Oxide ore was processed at the Girilambone copper heap leach and SXEW plant. Mining of the sulphide ore below the pit became economic following the construction of the Tritton copper sulphide flotation plant.

The deposit below the pit has been mined from the top down using conventional bench stoping. Mining is now approximately 400m vertical below the portal.

North East mine shares infrastructure with the adjacent Larsons deposit. Decline access to Larsons was developed from the North East mine portal. No underground sourced ore has yet been mined from Larsons deposit.

The modest size of the North East deposit supports a production rate of 800 to 1000 tonne per day.

## 2.3 METHOD OF MINING

The Mineral Resource and Ore Reserve estimates have been based on the results of technical input to budgets and mine plans at the level of feasibility study. The mine plans assume the continued use of up-hole bench stoping with sub-level developed at 20m vertical intervals. Rib pillars are left in sub economic areas of mineralisation. There is no backfill used.

Historical experience with stope stability is used to inform the estimate of mining dilution. An assumption of 12% dilution by nil grade waste is applied to stope production in the estimate of Ore Reserve.

Mine access is via a decline developed at industry standard 1 down for 7 horizontal with dimension of 5.5m high and 5m wide, suitable for use of mechanized jumbo, loader and 45 tonne capacity haul truck equipment.

Definition of Mineral Resource and Ore Reserve is completed in small increments by diamond drilling from the access decline. Since decline development is not advanced past the last known Ore Reserve the diamond drilling coverage is limited and only modest increments in the Mineral Resource is possible as the mining follows the mineralisation down dip. As a result the Mineral Resource and Ore Reserves at North East are expected to remain modest. Historically the depletion due to mining has been replaced by incremental definition of additional Mineral Resource.

### 2.4 ORE PROCESSING

The ore produced from the North East mine will continued to be processed at the Tritton copper sulphide ore processing plant.

## 3 GEOLOGY

Regionally the mineralisation is hosted within early Ordovician sediments as part of the Girilambone metasedimaents. The North East mineralisation is hosted within with the Pelitic to Psammite sediments, and sparse zones of courser sandstones of the Girilambone Group.

The North East sulphide mineralisation is stratiform and is classified as a “Besshi style” volcanogenic massive sulphide. Mineralisation is dominated by banded to stringer pyrite – chalcopyrite, with minor but locally important magnetite – chalcopyrite, lesser massive pyrite – chalcopyrite, and rare banded pyrite.

Structurally the North East sulphide mineralisation is hosted within a corridor of moderate to intense shearing related to a thrust fault observed in the east wall of the Eastern Shear of the Murrawombie Pit (Murrawombie pit is located approximately 5 km SW of the North East mineralisation). The shear corridor has been traced by Sirotem (Nord) to the north west of the Murrawombie pit, with the North East mineralisation sitting above the Eastern Shear, in relatively underformed sediments with observed shearing occurring post mineralisation.

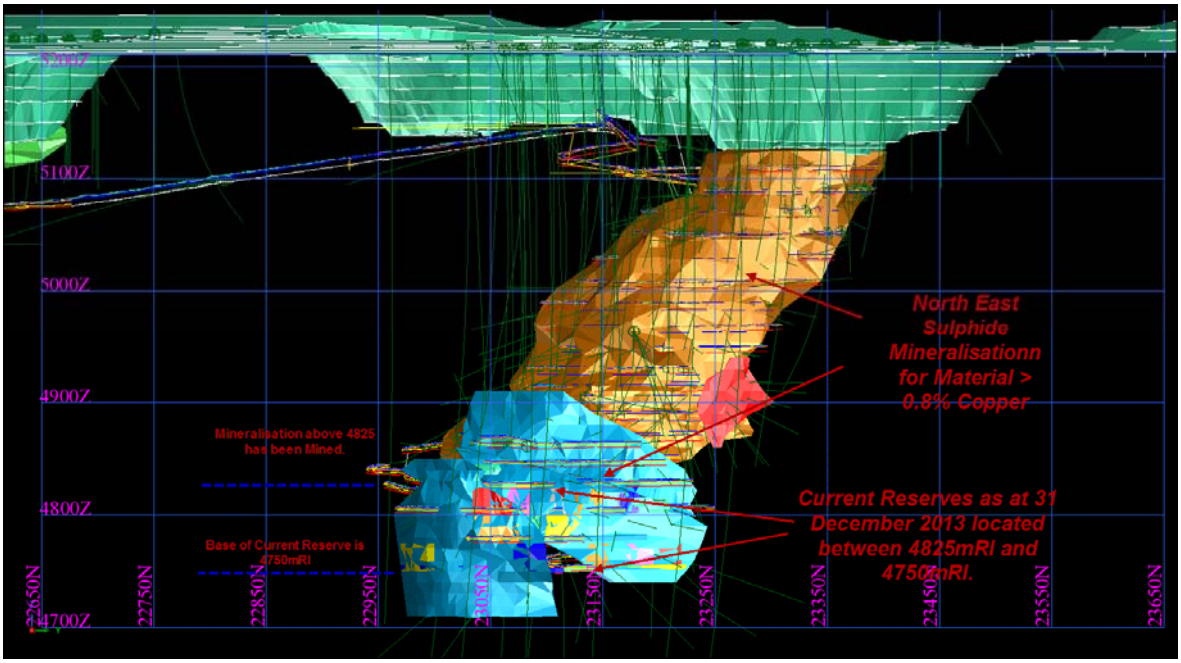


**Figure 2 Schematic vie of the North East Geology and mine**

# 4 MINERAL RESOURCE ESTIMATE

## 4.1 RESULTS

The Mineral Resource estimate reference date is 31st December 2013. The North East deposit has been mined and Mineral Resource depleted since the previous public report.

**Table 1 Mineral Resource estimate for North East as at 31st December 2013**

| Estimate | Classification | Cut Off Cu (%) | Tonnes (kt) | Cu % | Cu (kt) |
|---|---|---|---|---|---|
| 31 Dec 13 | Measured | 0.6 | 111 | 2.3 | 2.5 |
| | Indicated | 0.6 | 242 | 1.6 | 3.9 |
| | Inferred | 0.6 | 153 | 1.8 | 2.7 |
| | **Total** | **0.6** | **506** | **1.8** | **9.1** |

1. Mineral Resources are quoted as INCLUSIVE of Ore Reserve.
2. Discrepancy in summation may occur due to rounding.
3. Reported Tonnes and grade are based on estimated Stoping and development positions for North East as at 31 December 2013 (Material below 4825mRL).
4. Reported tonnes and grade based on the North East Grade Control Model as at 28 October 2013

## 4.2 CHANGE FROM PREVIOUS PUBLIC REPORT

Mine production in the period June 2013 to December 2013 was 193k tonne at 1.5% copper for 2.8k tonne copper. This production depleted the June 2013 Mineral Resource.

Additions to the Mineral Resource result from evaluation of existing and new drill hole data and information from development driving in mineralisation.

**Table 2 Change in Mineral Resource estimate since previous public report**

| Estimate | Classification | Cut Off Cu (%) | Tonnes (kt) | Cu % | Cu (kt) |
|---|---|---|---|---|---|
| 31 Dec 13 | Measured | 0.6 | 111 | 2.3 | 2.5 |
| | Indicated | 0.6 | 242 | 1.6 | 3.9 |
| | Inferred | 0.6 | 153 | 1.8 | 2.7 |
| | **Total** | **0.6** | **506** | **1.8** | **9.1** |
| 30 Jun 13 | Measured | 0.6 | 30 | 2.4 | 0.8 |
| | Indicated | 0.6 | 250 | 1.9 | 5 |
| | Inferred | 0.6 | 60 | 1.8 | 1.1 |
| | **Total** | **0.6** | **340** | **1.9** | **6.9** |
| | | | | | |
| *difference* | *Measured* | *0.6* | *81* | *-0.11* | *1.7* |
| | *Indicated* | *0.6* | *-8* | *-0.24* | *-1.1* |
| | *Inferred* | *0.6* | *93* | *-0.01* | *1.6* |
| | *Total* | *0.6* | *166* | *-0.08* | *2.2* |

### 4.3 STATEMENT OF COMPLIANCE WITH JORC CODE REPORTING

This Mineral Resource statement has been compiled in accordance with the guidelines defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

#### 4.3.1 Competent Person Statement

I, Byron Dumpleton a Consultant Resource Geologist confirm that I am the Competent Person for the North East Mineral Resources section of this Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report and to the activity for which I am accepting responsibility.
- I am a Member of the Australian Institute of Geologists (MAIG No. 1598).
- I have reviewed the Report to which this Consent Statement applies.

I am a full time employee of BKD Resources Pty Ltd (ABN 81 109 376 481) and acting as the Mineral Resources Manager for Straits Resources Limited. I have been engaged by Straits Resources Limited to prepare the documentation for Avoca Tank 31st December Mineral Resource estimate.

I have disclosed to Straits Resources Limited the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest. Specifically Mr Dumpleton owns 61,349 shares in Straits Resources Ltd which were issued as part of the company share plan in 2010 when Mr Dumpleton was a staff member of Straits Resources Limited.

I verify that the North East Mineral Resource section of this Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Mineral Resources.

#### 4.3.2 Competent Person Consent

With respect to the sections of this report for which I am responsible – Mineral Resource Estimate - I consent to the release of the North East Mineral Resources and Ore Reserves Statement as at 31st December 2013 by the directors of Straits Resources Limited

| | |
|---|---|
| **Signature of Competent Person**<br><br>Byron Dumpleton MAIG Member No.1598 | Date<br>24/3/2014 |
| **Signature of Witness** | Witness Name and Address<br>TOM COONEY<br>149 KENT RD<br>WOOLOOWIN QLD 4030 |

## 4.4 JORC CODE, 2012 EDITION – TABLE 1 REPORT: NORTH EAST DEPOSIT

### 4.4.1 Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Sampling techniques* | 1. *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*<br>2. *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>3. *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.* | 1. All Diamond core samples are based on ½ core, pre-collar RC samples in waste zones taken as 4 metre composites and re-spit to 1 metre samples when return assays or geology indicate copper or gold mineralisation. Dedicated RC holes samples are taken at 1 metre intervals. Underground face sample data is collected at 1 metre intervals or at geological breaks as rock chip samples.<br>2. All diamond core is aligned, measured and metre marked. All underground face sample faces collected are digitally photographed and with face position measured from survey points and survey pickups.<br>3. Diamond and RC-pre-collars conducted by Straits Resources are completed to industry standards. Early percussion drilling is to be treated as historical data, but Straits have assumed that these programs were conducted at Industry standards done in its day (mid 1970's). For diamond drilling samples these are taken at geological boundaries to maximum of 1.4 metres and a minimum of 0.5 metres with the standard interval at 1 metre within mineralised zones to approximately 50 metres before and past mineralisation horizons. Diamond core drilled from surface are predominantly NQ2 in size from RC pre-collars, 2 of the holes were PQ in size. Underground grade control holes are NQ2 for down holes and LTK60 for up holes. Underground face samples (rock chip) are also collected for grade estimation with ore drives mapped and ore boundaries picked up by survey. All Exploration holes sampled by Straits Resources for the North East resource for the primary sulphides, are analysed by a 3 stage aqua regia digestion with an ICP finish (suitable for Cu 0.01-40%) ALS method ME-ICP41. All Cu samples greater than or equal to 1 % were re-submitted for an ore digest ME-OG46. Additional Au analysis by fire assay fusion with an AAS finish, 30g charge (suitable for Au 0.01-100ppm) ALS method Au-AA22. All Au samples greater |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | than or equal to 1 g/t were re-submitted for an ore grade fire assay 30g charge, Au-AA25. All diamond Grade Control holes and Face samples are assayed using ore grade digest, methods ME-OG46 for Cu, Fe, Ag, Zn, Pb and S with Au FA using method Au-AA25 from ALS Orange, NSW, Australia. |
| *Drilling techniques* | 1. *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).* | 1. All available drilling was used for the North East resource interpretation and estimation as at 31 December 2013 below the oxide pit. Drilling used was RC and diamond core, and underground Face Samples. For the resource 59 holes were surface RC holes (4%), 146 holes were surface diamond (9%), 777 were underground grade control diamond holes (49%) and 594 Face sample locations (38%). The majority of the surface drill holes used for the modeling is NQ2. For UG GC NQ2 is used for down holes and LTK60 for up holes. |
| *Drill sample recovery* | 1. *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>2. *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>3. *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | 1. All diamond core has recoveries measured and recorded by the drilling company and confirmed by Straits Resources. RC pre-collar sample recoveries were not recorded nor required to be recorded as all material estimated for the North East mineralisation is defined by core below 150 metres from the surface and a mixture of RC and diamond above 150 metres. RQD measurements are taken on all core prior to all sampling, thus are completed on all intervals used in resource estimation.<br>2. Industry standard drilling practices resulted in good sample recoveries for RC chips and good to reasonable for Diamond core.<br>3. No relationship appears to exist between recovery and grade. |
| *Logging* | 1. *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>2. *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>3. *The total length and percentage of the relevant intersections logged.* | 1. All diamond core and RC chips are geologically logged by Company Geologists. All exploration core is also geotechnically logged. Logging is to the level of detail to support the North East style of mineralisation (VMS-Beshi style).<br>2. Logging of both RC and Diamond core samples recorded lithology, alteration, mineralisation, degree of oxidation, fabric/structure and colour. All exploration core was photographed in both dry and wet form, for UG grade control holes all core is photo graphed in wet form only. All RC intervals are stored in plastic chip trays, labeled |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | with interval and hole number. Core is stored in core trays and labelled similarly. Underground faces were faces are taken are digitally photographed.<br>3. All RC and core samples were logged in full and face samples are logged for lithology and accompanied by geological mapping. |
| *Sub-sampling techniques and sample preparation* | 1. *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>2. *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>3. *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>4. *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>5. *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*<br>6. *Whether sample sizes are appropriate to the grain size of the material being sampled.* | 1. Half core was collected on average at 1m intervals, minimum sample length is 0.5 metres and maximum length is 1.4 metres.<br>2. RC samples for waste sections are collected at 1 metre intervals, with a 1m split and bulk residual collected on the drill rig. The bulk residual was composited to 4 metre interval by spear sampling. If RC composites returned above background copper or gold values, the stored original 1m split was sent to the laboratory for analysis.<br>3. Samples taken are appropriate for the North East mineralisation style (Copper VMS).<br>4. Sample blanks and industry standards are routinely submitted, Pulps retained to be re-submitted to test for reproducibility.<br>5. No field duplicates have been conducted for the North East mineralisation. The understanding of sample representative and grade estimation is reviewed through mine to mill reconciliations and stope reconciliations and closing reports. All core samples are visually examined against assay values and logged mineralisation.<br>6. The sample sizes are considered appropriate to the grain size of the material being sampled. |
| *Quality of assay data and laboratory tests* | 1. *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>2. *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>3. *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.* | 1. All assays for holes drilled by Straits Resources were conducted at accredited assay laboratories. Samples for the drillholes in the North East resource estimation are primary sulphide, all surface exploration holes are analysed by a 3 stage aqua regia digestion with an ICP finish (suitable for Cu 0.01-40%) ALS method ME-ICP41. All Cu samples greater than or equal to 1 % were re-submitted for an ore digest ME-OG46. Additional Au analysis by fire assay fusion with an AAS finish, 30g charge (suitable for Au 0.01-100ppm) ALS method Au-AA22. All Au samples greater than or equal to 1 g/t were re-submitted for an ore grade fire assay 30g charge, Au-AA25. Samples taken pre 2005 cannot confirm the exact assay technique, however Straits is assuming for identifying |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | mineralised zones the assays had meet industry standards at the time.<br>2. N/A<br>3. Laboratory QA/QC samples were involving the use of blanks, duplicates, standards (commercial and site made certified reference materials are used), replicates as part of in-house procedures. |
| *Verification of sampling and assaying* | *1. The verification of significant intersections by either independent or alternative company personnel.*<br>*2. The use of twinned holes.*<br>*3. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>*4. Discuss any adjustment to assay data.* | 1. Significant mineralised intersections are reviewed by the logging Geologist and Senior Geologist.<br>2. No twinned holes were conducted.<br>3. All Straits Resources geological data is logged directly into Straits Resources logging computers following the Corporate Geology codes. Data is transferred to the Corporate AcQuire database and validated on entry. Down hole survey data is validated and checked for potential deviation from magnetic mineralisation before data entry.<br>4. No adjustments to assay data were made. If survey data is affected by mineralisation, the survey is omitted. With a general trend being applied based on the survey above and below the affected value. |
| *Location of data points* | *1. Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>*2. Specification of the grid system used.*<br>*3. Quality and adequacy of topographic control.* | 1. All recent surface drill hole collars have been surveyed by using a DGPS by a local contractor, all pre 2008 holes are surveyed by theodolite. All UG hole collars are surveyed in by theodolite by company surveyors. Surveys are entered into the Straits Corporate Acquire database. A 3D dtm of the topographic surface was generated using the drill hole collars outside of the North East, Hartman and Larsen pit area. Pit and nearby infrastructure is picked up by company surveyors.<br>2. Resource modelling based on local North East Mine Grid. Rotation of the grid is 31.22 degrees to the west from AGD 66 true North.<br>3. Quality and accuracy of the drill collars are suitable for resource work and resource evaluation for Proved and Probable reserve. |
| *Data spacing and distribution* | *1. Data spacing for reporting of Exploration Results.*<br>*2. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and* | 1. The North East Resource surface definition drilling was conducted on a nominal 100 metre x 100 metre to 50 metre x 50 metre grid with infill Grade Control drilling conducted on a nominal 20 metre x 20 metre. Reserve area is primarily drilled out by U/G GC drilling. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *classifications applied.*<br>*3. Whether sample compositing has been applied.* | Face samples are taken at regular intervals along strike (between 3 to 6 metres) with samples taken at 1 metre intervals across the face.<br>2. The North East mineralisation is defined sufficiently to define both geology and grade continuity for a Mineral Resource estimation and Ore Reserve evaluation and stope delineation.<br>3. Samples are collected at 1 metre intervals and or to geology breaks. Minimum sample interval is 0.5 metres, maximum sample interval is 1.4 metres. For the resource estimation 1 metre composites were generated and applied. |
| *Orientation of data in relation to geological structure* | *1. Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>*2. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | 1. This deposit may have minor BIAS due to the "fan" nature of the UG drilling and mixed sample support as face sample data is used for resource estimation and delineation.<br>2. No material issues due to sampling BIAS is expected due to the extensive geological knowledge and mining history, therefore this is seen as a low risk. |
| *Sample security* | *1. The measures taken to ensure sample security.* | 1. Chain of Custody is managed by the Company. Samples are stored on site in polyweave bags containing approximately 5 samples. These bags are securely tied, then loaded and wrapped onto a pallet for dispatch to the laboratory. The samples are freighted directly to the laboratory with appropriate documentation listing sample numbers and analytical methods requested. Samples are immediately receipted by the lab on arrival, with a notification to the Company Senior Geologist of the number of samples that have arrived. |
| *Audits or reviews* | *1. The results of any audits or reviews of sampling techniques and data.* | 1. External reviews and audits have been conducted by AMC in 2010, no fatal flaws or significant issues with the past North East models were identified. |

### 4.4.2 Section 3 Estimation and Reporting of Mineral Resources

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

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Database integrity* | *1. Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*<br>*2. Data validation procedures used.* | 1. All assay results are logged against unique sample numbers. A sampling sheet detailing sample numbers and core / RC intervals is completed prior to sampling commencing. During the sampling process each sample interval is cross-referenced to the sample number and checked off against the sampling sheet. Pre-numbered bags are used to minimize errors. Assay data is received via email in a common electronic format and verified against the AcQuire database.<br>2. Data validation checks are run by the Database Manager and checked by the logging geologist. |
| *Site visits* | *1. Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>*2. If no site visits have been undertaken indicate why this is the case.* | 1. Byron Dumpleton (Straits Resources – Mineral Resource Manager) has made numerous site visits during the drill out of the North East resource during various drilling programmes between 2008 and 2013. Mr Dumpleton was also part of the team that developed the Geological Interpretation and Grade control procedures for the North East Deposit.<br>2. N/A. |
| *Geological interpretation* | *1. Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*<br>*2. Nature of the data used and of any assumptions made.*<br>*3. The effect, if any, of alternative interpretations on Mineral Resource estimation.*<br>*4. The use of geology in guiding and controlling Mineral Resource estimation.*<br>*5. The factors affecting continuity both of grade and geology.* | 1. The confidence in the North East geology model is high due extensive UG exposure and mining history. The geological model is considered good for this style of deposit. The Geological setting is close to a traditional “Beshi style” (type of VMS mineralised system).<br>2. The nature of the North East drilling data generally intersects the mineralisation at good angles. Ore development and geological mapping is used extensively to control ore boundaries.<br>3. The deposit is tabular in nature with good visible mineralisation. The UG mine has been operating since 2008 and has demonstrated good geological and grade continuity and the |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | geological knowledge by the geology team is high, minimizing the risk for alternative interpretations.<br>4. Surveyed geological mapping of ore zones and core logging are used to fix resource position. Grade boundaries of a nominal 0.8% Cu are used to confine the grade estimation.<br>5. The mineralisation at depth does have faulting with significant fault movement which offset the ore horizons. These faults are well understood geological due to UG mapping and exposure. |
| *Dimensions* | 1. *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.* | 1. The North East resource occurs as several discrete tabular lenses covering an area approximately 450 m north – south and 500 m east – south with mineralisation starting from near surface. Fresh mineralisation starting at approximately 100 metres below surface. The tabular lenses have strike lengths ranging from 150 to 200 metres and a down dip extent ranging from 90 to 420 metres with an over added length of approximately 940m. The lenses vary in true width from 2 to 20 metres, with an average true width of 5 to 7 metres. A major faulting off set occurs at approximately 410 metres below surface. The faulting shifts the down dip section of the main ore lenses up approximately 90 metres. The current North East resource has been interpreted to a depth of approximately 520 metres below the current surface and is still open at depth. The current resource is closed off along strike. |
| *Estimation and modelling techniques* | 1. *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*<br>2. *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*<br>3. *The assumptions made regarding recovery of by-products.*<br>4. *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage* | 1. The resource estimation for grade was estimated using Ordinary kriging. The software package for the grade estimation, variography and geological interpretation was Surpac. Cu, Au, Ag, Fe, Zn, S and Density were estimated. Estimation was run in one to two passes pending on the model domain and data density and geology confidence. The first pass was run at a 30 metre search radius. For the second pass the search radius was run at 140 metres. Estimation of grade are within interpreted hard grade boundaries based on a nominal 0.8% copper solid (closed wireframe) with a minimum width of 2m down hole.<br>2. North East resource has been mined historically both as an Open Pit for its oxide copper mineralisation (in the 1990's) and |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *characterisation).*<br>*5. In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*<br>*6. Any assumptions behind modelling of selective mining units.*<br>*7. Any assumptions about correlation between variables.*<br>*8. Description of how the geological interpretation was used to control the resource estimates.*<br>*9. Discussion of basis for using or not using grade cutting or capping.*<br>*10. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.* | for Fresh chalcopyrite mineralisation (since 2008). The North East resource model has only been modelled for the fresh sulphides (chalcopyrite mineralisation). Reconciliations for the FY13 and Q1 and Q2 for FY14 shows Mined claimed tonnes has marginally overcalled by 1.6%, marginally under called Cu grade by 1.02% and marginally overcalled copper metal tonnes marginally by 0.59% against reconciled Mill production.<br>3. No deleterious elements were estimated.<br>4. The resource was modelled using a 8 mN by 4 mE by 4 mZ with sub celling down to 2 mN by 1 mE and 1 mZ. Each ore domain has been flagged and modelled separately.<br>5. Block model parent cell size dimension takes into account for incorporating face sample data, to accommodate narrow sections and satellite mineralised domains and drill spacing. The block size is general larger than the face sampled area or equivalent, and is approximately 40% less than the average GC drill spacing along strike.<br>6. No assumptions have been applied to the model for selective mining unit.<br>7. No correlation has been made between variables.<br>8. A top cuts was set to the 97.5 percentile for all elements estimated.<br>9. Block model volume validation was validated against ore solid wireframes for each ore domain. Block model validation for grade was conducted both by visually expecting model sections by northings at 20 metre increments, by benches at 10 metre increments and exposed underground ore development. |
| *Moisture* | *1. Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.* | 1. Tonnages are estimated on a dry basis. |
| *Cut-off parameters* | *1. The basis of the adopted cut-off grade(s) or quality parameters applied.* | 1. The nominal 0.8% copper cutoff grade used for the mineralised interpretation was chosen as this appears to reflect the natural background grade cutoff. |
| *Mining factors or* | *1. Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining* | 1. The only consideration to the mining method is the minimum interpretation width applied is 2 metres. Otherwise no other mining assumptions have been applied to the North East model. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *assumptions* | *reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.* | The model is setup for mining evaluation and stope delineation with low grade material (generally sub 0.8 Cu%) estimated outside the copper ore domains to estimate grade for planned dilution from stope designs. Material not estimated is set to zero. |
| *Metallurgical factors or assumptions* | 1. *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.* | 1. The dominant mineralisation for the North East Mineralisation is chalcopyrite. Material mined from North East is process at the Tritton Copper Operations copper concentrator a 1.4Mtpa Processing Plant. Processing recoveries for North East are on average 94.5%. |
| *Environmental factors or assumptions* | 1. *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.* | 1. Waste from processing is disposed at the current tailings storage facility at Tritton (or utilised as paste fill). Waste from underground development is stored within the Hartman's Pit and as backfill in the mining process. Any potentially acid forming waste will be encapsulated within the waste dump on the surface or is placed in as stope backfill. No significant environmental impacts have been identified for the North East mining operation. |
| *Bulk density* | 1. *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*<br>2. *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.*<br>3. *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.* | 1. Bulk density for the North East Model for waste material type has been assign by the average values measured across the field. Density for material within ore domains have been estimated using Ordinary Kriking.<br>2. Bulk density for the resource has been measured using the Archimedes Principle Method' (weight in air v's weight in water). A total of 15,133 density measurements have been used for the North East resource estimate.<br>3. Bulk density has been estimated by the actual measurements for fresh ore material. For material outside the mineralised domains an average density value for the host material has been |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | assigned. |
| *Classification* | *1. The basis for the classification of the Mineral Resources into varying confidence categories.*<br>*2. Whether 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).*<br>*3. Whether the result appropriately reflects the Competent Person's view of the deposit.* | 1. The classification has been guided by drill density (currently at nominal 20 x 20m above 4775mRl including face samples and surveyed ore mapping, below 4775 drilling is spaced at a nominal 30 x 30 metres to 50 x 50 metres), the geological knowledge of the Senior Geology personnel and the Mineral Resource Manager reflecting their understanding of the North East resource and the Tritton Copper Operation VMS field, and grade continuity.<br>2. The drill and input data density is comprehensive in its coverage for the resource to allow reasonable confidence for the tonnage and grade distribution to the levels of Measured, Indicated and Inferred.<br>3. The Mineral Resource estimated appropriately reflects the view of the competent person. |
| *Audits or reviews* | *1. The results of any audits or reviews of Mineral Resource estimates.* | 1. External reviews and audits have been conducted by AMC for early generations of the North East resource models, no fatal flaws or significant issues with the past North East models were identified at the time. The current model follows the same principles for their interpretation methodology and estimation criteria. |
| *Discussion of relative accuracy/ confidence* | *1. Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource 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 resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*<br>*2. 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.*<br>*3. These statements of relative accuracy and confidence of the estimate* | 1. The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC code.<br>2. The statement relates to local estimate of tonnes and grade above the 4775mRL and below 4775m Rl the estimate relates to a global estimate.<br>3. The North East resource model has only been modelled for the fresh sulphides (chalcopyrite). Reconciliations for the FY13 and Q1 and Q2 for FY14 shows Mined claimed tonnes has marginally overcalled by 1.6%, marginally under called Cu grade by 1.02% and marginally overcalled copper metal tonnes by 0.59% against reconciled Mill production. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *should be compared with production data, where available.* | |

# 5 ORE RESERVE ESTIMATE

## 5.1 RESULTS

The North East Ore Reserve Estimate as at 31 December 2013 is reported in Table 3. It is reported according to JORC 2012.

**Table 3 Ore Reserve Table for Public Reporting of North East Mine as at 31 December 2013**

| Estimate | Classification | Cut Off Cu% | Tonnes (kt) | Cu % | Cu (kt) |
|---|---|---|---|---|---|
| 31-Dec-13 | Proved | - | 51 | 2.2 | 1.1 |
| | Probable | 1.2 | 140 | 1.6 | 2.6 |
| | **Total** | | **191** | **1.8** | **3.4** |

1. Ore Reserves are reported as Inclusive of the supporting Mineral Resource estimate
2. Discrepancies in summation will occur due to rounding

## 5.2 CHANGES FROM PREVIOUS ESTIMATE

The previous public reported Ore Reserve estimate was as at 30th June 2013. Changes in the Ore Reserve result from a combination of depletion due to mining and estimation of additional Mineral Resource that was available for conversion to Ore Reserve.

**Table 4 Change in Ore Reserve estimate**

| Estimate | Classification | Cut Off Cu (%) | Tonnes (kt) | Cu % | Cu (kt) |
|---|---|---|---|---|---|
| 31-Dec-13 | Proved | 1.2 | 51 | 2.2 | 1.1 |
| | Probable | 1.2 | 140 | 1.6 | 2.3 |
| | **Total** | | **191** | **1.8** | **3.4** |
| 30-Jun-13 | Proved | 1.2 | - | - | - |
| | Probable | 1.2 | 182 | 1.6 | 2.9 |
| | **Total** | | **182** | **1.6** | **2.9** |
| | | | | | |
| *difference* | *Proved* | - | *+51* | *+2.2* | *+1.1* |
| | *Probable* | - | *-32* | *-* | *-0.6* |
| | *Total* | - | *+9* | *+0.2* | *+0.5* |

## 5.3 STATEMENT OF COMPLIANCE WITH JORC CODE REPORTING

This Ore Reserve statement has been compiled in accordance with the guidelines defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

### 5.3.1 Competent Person Statement

I, Ian Sheppard, confirm that I am the Competent Person for the North East Ore Reserve section of this Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report and to the activity for which I am accepting responsibility.
- I am a Member of The Australasian Institute of Mining and Metallurgy, No. 105998.

- I have reviewed the Report to which this Consent Statement applies.

I am a full time employee of Straits Resources Limited.

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest. Specifically I have rights to 4,870,921 shares in Straits Resources. Title to the shares will vest when a range of conditions have been satisfied as defined in an Employee Share Acquisition Plan. These conditions have not been met at this time.

I verify that the Ore Reserve section of this Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Ore Reserve.

### 5.3.2 Competent Person Consent

With respect to the sections of this report for which I am responsible – Ore Reserve Estimate - I consent to the release of the 2013 Mineral Resources and Ore Reserves Statement as at 31st December 2013 for North East.

### 5.4 CONSENT TO RELEASE

| **Signature of Competent Person** | Date |
|---|---|
| Ian Sheppard Member No.105998 AuSIMM | 24th March 2014 |
| **Signature of Witness** | Witness Name and Address |
| | TOM COONEY<br>149 KENT RD<br>WOOLOOWIN QLD 4030 |

### 5.5 EXPERT INPUT

A number of persons have contributed key inputs to the Ore Reserves determination. These are listed below.

In compiling the Ore Reserve the Competent Person has reviewed the supplied information for reasonableness, but has relied on this advice and information to be correct.

**Table 5 Expert contribution to Ore Reserve**

| Expert Person / Organization | Area of Expertise |
|---|---|
| **Wayne Race** | Mine design |
| **Byron Dumpleton** | Mineral Resource estimation model |

### 5.6 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 |
|---|---|---|
| *Mineral Resource estimate for conversion to Ore Reserves* | 1. *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.*<br>2. *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.* | 1. The Ore Reserve estimate is based on the 31st December 2013 Mineral Resource, supported by the North East Grade Control Model Ne_gc_bm_28oct2013_rescat_as_at31dec2013.mdl digital block model. Mr Byron Dumpleton is the competent person responsible for Mineral Resource Estimation.<br><br>Information from stoping and development on ore in mining levels above where the Ore Reserve is located has been used to assist with the December 2013 Ore Reserve.<br><br>2. Mineral Resources are quoted as INCLUSIVE of the Ore Reserve Estimate |
| *Site visits* | 1. *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>2. *If no site visits have been undertaken indicate why this is the case.* | 1. Mr Ian Sheppard, the competent person responsible for the Ore Reserve estimate, has visited the North East mine on several occasions. Ground conditions, mining methods, operating costs and supporting infrastructure have been inspected. Assumptions regards modifying factors applied in the estimate are based on these inspections. |
| *Study status* | 1. *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.*<br>2. *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.* | 1. The North East mine is an active mining operation. Reporting of the Ore Reserve estimate is supported by an operating budget, production experience and mine plans. The combination of budgets and mine plans contains information on the modifying factors that exceeds the standard of a Feasibility Study.<br><br>2. Production plans have been developed that shows how the Ore Reserve will be mined. The North East mine is an active operation with all infrastructure and mining equipment in place. The only required capital expenditure to mine the Ore Reserve is the development of decline access from the 4800mRL level to |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | the 4750mRL level. Ore will be processed at the existing Tritton flotation concentrator where North East mine ore is being successfully treated. The combination of mine plans and existing mine and processing infrastructure exceeds the standard for the level of information contained in a Feasibility study. |
| *Cut-off parameters* | *1. The basis of the cut-off grade(s) or quality parameters applied.* | 1. The December 2013 Ore Reserve uses copper grade, Cu%, as the cut-off grade criteria.<br><br>2. There are no significant impurities in the mineralisation that require inclusion in the cut-off grade criteria.<br><br>3. Different cut-off grades are applied to ore mined by development and ore mined by stoping. This reflects the difference in cost allocation to the method of mining. For ore from development mining a large portion of the costs are considered sunk at the time of mining since the development will proceed irrespective of the decision to call blasted material as ore or waste. For ore mined from stope, the majority of cost is future expenditure and so is considered in the cut-off grade that guides stope design. Material mined by development has a low cut-off grade compared to ore mined by stope.<br><br>4. A 1.2% copper cut-off grade is applied to stope ore. The whole of stope average grade must exceed the cut-off grade for inclusion in the Ore Reserve. In special circumstances a reduced cut-off grade of 1% copper is allowed for stopes that can be mined with reduced cost where stope development is paid for by higher grade stope along strike. A single stope is included in the Ore Reserve at this lower cut-off grade.<br><br>5. A 0.8% copper cut-off grade is applied to ore mined by development.<br><br>6. All ore, in stope or development, must be inside the Mineral |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | Resource volume defined by a 0.6% copper cut-off grade. |
| *Mining factors or assumptions* | *1. 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).*<br>*2. 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.*<br>*3. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.*<br>*4. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).*<br>*5. The mining dilution factors used.*<br>*6. The mining recovery factors used.*<br>*7. Any minimum mining widths used.*<br>*8. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.*<br>*9. The infrastructure requirements of the selected mining methods.* | 1. December 2013 Mineral Resources have been converted to Ore Reserve by a process of detailed stope and development design.<br>2. The mining method applied at North East mine is up-hole bench mining. Stopes are mined in retreat from the end of the ore towards the access drive. Sublevel interval is 20m vertical. Rib pillars are left in waste areas to support the stope. No backfill is placed. Stope heights of over 80m vertical and 30m on strike have been mined at North East between pillars without significant stope wall failure occurring. This history experience is used to guide stope design for Ore Reserve estimation.<br>3. Access to the ore is from a decline mined at a gradient of 1 down for 7 horizontal. Ore and waste are removed by loader and truck to the surface (approximately 400m vertical lift). Ore is transported to the processing plant from a surface stockpile by on highway truck road train operating on a majority sealed road.<br>4. Geotechnical design of the stope is based on experience mining stopes immediately above. Strike length of up to 40m and vertical height of 60m is allowed. Similar stope sizes have been mined previously in the ore body without significant dilution. There are no identified major structures or changes in the rock mass that suggest such stope dimensions will be unstable in the Ore Reserve.<br>5. The Ore Reserve is based on engineer designed stopes and development drives. The Mineral Resource model used is *Ne_gc_bm_28oct2013_rescat_as_at31dec2013.md.*<br>6. Ore Reserve estimates include the volume of material that is below cut-off grade and which is considered impractical to |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | exclude from the surrounding or adjacent volume of ore. Such internal dilution material is inclusive to the design ore volume and estimate of grade.<br><br>7. Mining dilution from external to the stope design volume is assumed to have nil grade and will increase the ore tonnage by 12%, Ore Reserve grades are reduced to reflect the inclusion of nil grade dilution tonnage.<br><br>8. Mining dilution from external to the drive for development ore is assumed to be nil, since there is good access to control location of the development mining and intense ground support is installed.<br><br>9. Mining recovery of ore from stope is assumed as 90%, applied after the dilution calculation.<br><br>10. Mining recovery of ore from development is assumed as 100%. |
| *Metallurgical factors or assumptions* | *1. The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.*<br>*2. Whether the metallurgical process is well-tested technology or novel in nature.*<br>*3. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.*<br>*4. Any assumptions or allowances made for deleterious elements.*<br>*5. 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.*<br>*6. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?* | 1. The North East ore is treated at the existing Tritton ore processing plant located 30km by road from the mine. Copper, gold and silver are recovered to a copper concentrate by sulphide flotation.<br>2. The sulphide flotation treatment method is being used successfully to treat North East mine ore. Metal recovery estimates are based on production history.<br>3. There is no evidence to suggest any change in the mineralogy in the mineralisation on which the Ore Reserve is based. Hence no change in metal recovery performance is expected. No metallurgy test work has been completed on the Ore Reserve.<br>4. North East mine ore occasionally contains elevated levels of fast floating talc that will report to the copper concentrate, reducing concentrate grade. Talc suppressant chemicals are added to the |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | flotation cells when elevated levels of talc are present to nearly eliminate this problem. No other deleterious elements are found in the North East ore. |
| *Environmental* | 1. *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.* | 1. North East mine operates under the Tritton Resources Limited Mine Operations Plan, EPA licenses and associated local and NSW State Government approvals. The mine is located on a Mining Lease. The environmental impact of the mine and the ore processing are fully approved.<br>2. Waste rock from mining operations is disposed to the Hartman's Open pit. Waste rock with sulphur content of less than 1% is Not Potentially Acid Forming and can remain stockpiled at surface. The small quantity of waste rock with sulphur content greater than 1% is disposed into empty stopes underground. |
| *Infrastructure* | 1. *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.* | 1. All infrastructure necessary to support mining operations is in place. |
| *Costs* | 1. *The derivation of, or assumptions made, regarding projected capital costs in the study.*<br>2. *The methodology used to estimate operating costs.*<br>3. *Allowances made for the content of deleterious elements.*<br>4. *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.*<br>5. *The source of exchange rates used in the study.*<br>6. *Derivation of transportation charges.*<br>7. *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.*<br>8. *The allowances made for royalties payable, both Government and private.* | 1. Capital cost for the modest length of decline development is based on historical actual experience at North East mine.<br>2. Estimates of operating cost for the development, mining and processing of the Ore Reserve are based on historical actual experience at the North East mine. Cost estimates are at better than Feasibility study level of confidence ±10%<br>3. The cost of talc suppression chemical and dosage rates is known from recent operating experience.<br>4. Metal price assumptions for copper, gold and silver are Straits Resources corporate long term assumptions derived from a variety of market sources.<br>5. Exchange rate assumptions are Straits Resources corporate long term assumptions derived from a variety of market sources.<br>6. Product transport charges are current contracted rates.<br>7. Copper concentrate treatment and refining charges are actual cost for Tritton Mines in 2013; USD$70/t treatment and |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | USD$0.07/lb refining.<br>8. NSW Government royalty of 4% is payable on revenue less deductible items. After deductions, the effective royalty rate on revenue is approximately 3% for Tritton Resources. No private royalties apply. |
| *Revenue factors* | *1. 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.*<br>*2. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.* | 1. Metal price assumptions are;<br>a. Copper price of USD$3.18/lb<br>b. Gold price of $1300/oz<br>c. Silver price of USD$20/oz<br>d. AUD:USD exchange rate of 0.9<br>e. Copper treatment charge of USD$70/t<br>f. Copper refery charge of USD7c/lb<br>g. Standard Tritton commercial terms under contract for payable metal rates |
| *Market assessment* | *1. The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.*<br>*2. A customer and competitor analysis along with the identification of likely market windows for the product.*<br>*3. Price and volume forecasts and the basis for these forecasts.*<br>*4. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.* | 1. Copper metal production from North East is very small compared to world copper market size. There are market restrictions. All copper concentrate is sold to Glencore International AG under a life of mine contract. |
| *Economic* | *1. 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.*<br>*2. NPV ranges and sensitivity to variations in the significant assumptions and inputs.* | 1. The economics of mining North East ore has been clearly demonstrated by the Tritton Mines budget. North East ore mining is justified on marginal costing, that assumes all fixed costs for the business are covered by the larger Tritton mine and there is no allocation of fixed cost to North East mine.<br>2. Estimation of a NPV for the small Ore Reserve that will be mined as part of larger mining operation with shared costs is not considered reasonable. No NPV is estimated. |
| *Social* | *1. The status of agreements with key stakeholders and matters leading to social licence to operate.* | 1. The North East mine operation is fully permitted as part of the Tritton Resources operations based in the township of Nyngan in the Bogan Shire NSW. Strong community support for the continued operation of the Tritton Resources mines has been |

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>evidenced in regular community consultation sessions. There are no known objections from the community against the Tritton Resources operations.</td></tr>
<tr><td>Other</td><td>1. To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:<br>2. Any identified material naturally occurring risks.<br>3. The status of material legal agreements and marketing arrangements.<br>4. 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.</td><td>1. No material natural risks have been identified for the project.<br><br>2. All copper concentrate produced by Tritton Resources from North East mine will be sold to Glencore International AG under existing life of mine contracts.<br><br>3. North East mine is on a granted Mining Lease. All necessary approvals to allow continued mine operation are in place.</td></tr>
<tr><td>Classification</td><td>1. The basis for the classification of the Ore Reserves into varying confidence categories.<br>2. Whether the result appropriately reflects the Competent Person’s view of the deposit.<br>3. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</td><td>1. The Ore Reserves is classified as Probable as a result of conversion from Indicated Mineral Resource.<br><br>No additional modifying factors are applicable to the categorization of the Ore Reserve.<br><br>No Ore Reserve has been derived from Measured Mineral Resource.</td></tr>
<tr><td>Audits or reviews</td><td>1. The results of any audits or reviews of Ore Reserve estimates.</td><td>1. There has been no external review of the Ore Reserve.</td></tr>
<tr><td>Discussion of relative accuracy/ confidence</td><td>1. 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</td><td>
<table>
<tr><th>Criteria</th><th>Risk Rating</th><th>Comment</th></tr>
<tr><td>Mineral Resource estimate for conversion to Ore Reserves</td><td>Low</td><td>Reconciliation history indicates the resource model techniques applied are a good estimation of the Mineral Resource grade. Good continuity of mineralisation between drill hole intercepts is demonstrated.</td></tr>
<tr><td>Classification</td><td>Low</td><td>All Probable based on Indicated Mineral</td></tr>
</table>
</td></tr>
</table>

| Criteria | JORC Code explanation | Commentary |
|---|---|---|

*discussion of the factors which could affect the relative accuracy and confidence of the estimate.*

2. *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.*
3. *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.*
4. *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*

| | | |
|---|---|---|
| | | Resource. No complication from modifying factors. |
| Site visit | Low | |
| Study status | Low | Operating mine with budget and mine plans exceeding standard of Feasibility Study. |
| Cut-off grade | Low | Mineralisation has sharp grade boundaries. |
| Mining factors | Low | Experience from recent operations in the same rock mass. |
| Metallurgy factors | Low | Ore from the same ore body is currently being processed successfully. |
| Environmental | Low | All permits in place. No significant risks identified from existing operation. |
| Infrastructure | Low | All infrastructure is in place. |
| Costs | Low | Estimates based on current experience. |
| Revenue Factors | High | Copper metal price has high annual variability. North East mine runs with thin margins and operations could be suspended during period of extended low metal price. |
| Market assessment | Low | Life of mine concentrate sale contract in place. |
| Economics | Medium | Risk reflects impact of metal price variability. |
| Social | Low | Mine is fully permitted and operating with no community objections |

End Report

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HQ South Tower
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# STRAITS RESOURCES LIMITED

## TRITTON MINES OPERATIONS

## Larsons Deposit

## Mineral Resource and Ore Reserve Estimate

## 31st December 2013

**Report Version**

| Author/s | Name | Title |
|---|---|---|
| | Byron Dumpelton | Competent Person – Mineral Resource Estimate |
| | Ian Sheppard | Competent Person – Ore Reserve Estimate |

# 1 PROJECT SUMMARY

## 1.1 INTRODUCTION AND SETTING

Larsons is a sulphide copper gold deposit located on ML1383 in central NSW, Australia. The deposit geology is described as a Besshi style volcanic associated massive sulphide. It contains economic grades of copper and silver. Minor gold concentrations in the ore are generally not economic when recovered in the copper concentrate.

The deposit is to be mined using underground methods by Tritton Resources Pty Ltd a subsidiary of Straits Resources Limited. Open pit mining of the near surface oxide portion of the Larsons deposit was completed prior to 2002 by the Girilambone Copper Company. Sulphide mineralisation at depth was not suited to the heap leach processing method at the Girilambone copper mine and the pit was mined only to the base of oxidized ore. Underground mining of development to access the Larsons sulphide ore and adjacent North East deposit by Tritton Resources commenced in 2008. Although access to the ore by decline was completed there has been no mining of the Larsons ore to date from underground. Completion of the access development and start of ore mining is expected in 2014.
The Larsons ore will be treated at the Tritton copper sulphide ore processing plant by flotation to produce a copper concentrate product.

Larsons ore is mined on the assumption that the larger Tritton mine covers the majority of overhead or fixed cost incurred by the business. Larsons ore production fills spare ore processing capacity and so is not expected to cover a full share of overhead expenses

The Larsons mine is fully permitted for production. Access to the Larsons deposit is from the decline that services the North East deposit. The two deposits share mining equipment, labour and infrastructure.

This Mineral Resource and Ore Reserve estimate is a revision of the previous estimate following additional engineering studies investigating the mining of Mineral Resource close to the base of the Larsons pit.

# 2 PROJECT BACKGROUND

## 2.1 LOCATION

The Larsons deposit is located 3km North–West of the small town of Girilambone in central NSW, Australia. It forms part of the Tritton Resources Girilambone mining area that includes the North East mine, Larsons mine, Murrawombie mine and Avoca Tank project. The ore processing plant for sulphide copper gold ore is located at Tritton 30km by road to the south.

The deposit is located on ML1383.

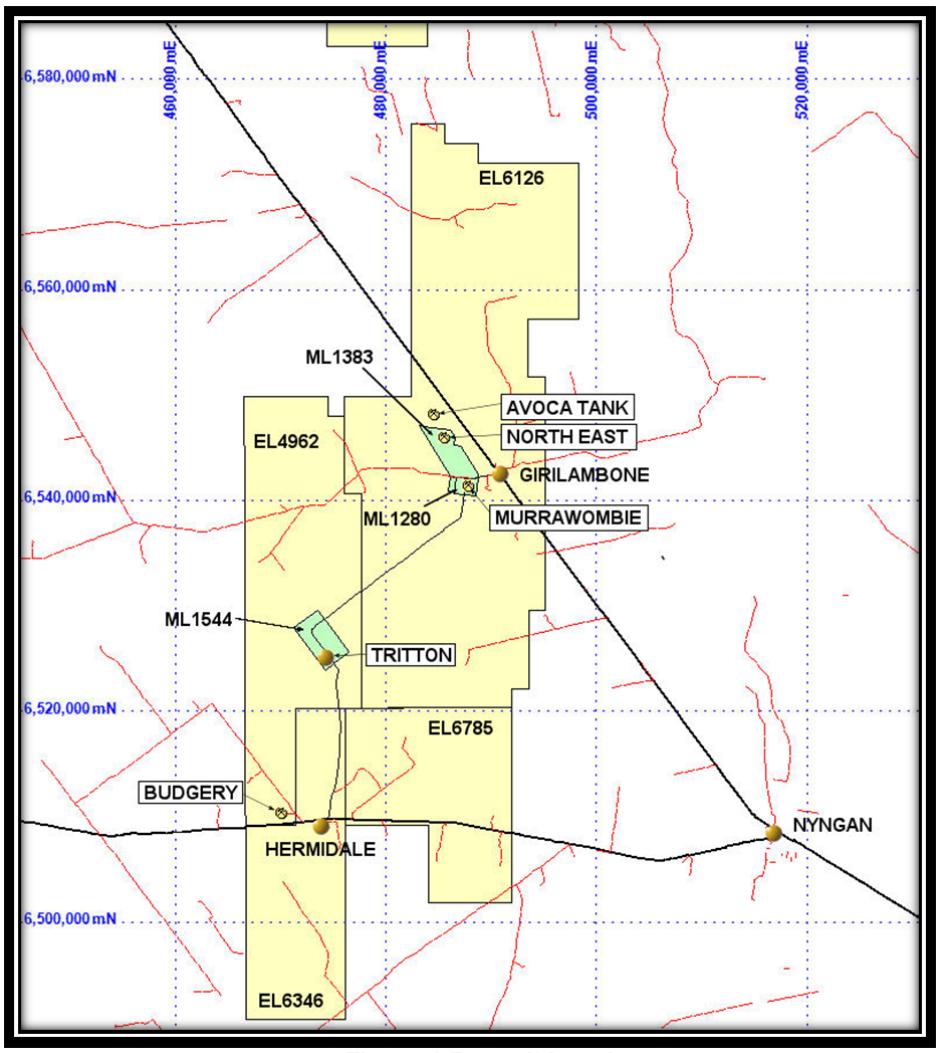


**Figure 1 Deposit location**

## 2.2 HISTORY

The Larsons deposit was first mined by open pit. Oxide ore was processed at the Girilambone copper heap leach and SXEW plant. The pit reached its final depth where the mineralisation became sulphide in character and not suitable for heap leaching.

Mining of the sulphide ore below the pit became economic following the construction of the Tritton copper sulphide flotation plant. In 2008 development of the adjacent North East underground mine commenced. The portal and part of the North East access decline are shared by the Larsons deposit.

Decline access to the Larsons deposit has been in place for several years. However mining of the Larsons deposit ore has yet not started while mining operations were focused on the North East deposit.

Ore production from the Larsons deposit is expected to start in 2014.

## 2.3 METHOD OF MINING

The Mineral Resource and Ore Reserve estimates have been based on the results of technical input to budgets and mine plans at the level of feasibility study. The mine plans assume the use of up-hole bench stoping with sub-level developed at 20m vertical intervals. Rib pillars are to be left in sub economic areas of mineralisation. There is no backfill required. The mining method is identical to that successfully used at the adjacent North East mine.

Ore from crown pillar stopes that breakthrough the base of the Larsons open pit is included in the Ore Reserve estimate. These crown pillar stopes will be mined with some drilling from the open pit in a modification of the usual underground method.

Historical experience with stope stability at the adjacent North East is used to inform the estimate of mining dilution. An assumption of 15% dilution by nil grade waste is applied to most stope production in the estimate of Ore Reserve. This compares to 12% dilution factor used at North East. The higher dilution allowance reflects a conservative approach where we have no specific experience of stability at Larsons deposit.

Mine access is via a decline developed at industry standard 1 down for 7 horizontal with dimension of 5.5m high and 5m wide, suitable for use of mechanized jumbo, loader and 45 tonne capacity haul truck equipment.

### 2.4 ORE PROCESSING

The ore produced from the Larsons mine will be processed at the Tritton copper sulphide ore processing plant. Larsons mine ore will be hauled by on-highway road train truck 30km for processing at the Tritton plant.

## 3 GEOLOGY

Regionally the mineralisation is hosted within early Ordovician sediments as part of the Girilambone metasedimaents. The Larsens mineralisation is hosted within with the Pelitic to Psammite sediments, and sparse zones of courser sandstones of the Girilambone Group.

The Larsens sulphide mineralisation is stratiform and is classified as a “Besshi style” volcanogenic massive sulphide. Mineralisation is dominated by massive pyrite – chalcopyrite, with minor banded to stringer pyrite – chalcopyrite, and sparse locally important magnetite – chalcopyrite.

Structurally the Larsens sulphide mineralisation is hosted within a corridor of moderate to intense shearing related to a thrust fault observed in the east wall of the Eastern Shear of the Murrawombie Pit (Murrawombie pit is located approximately 4 km SW of the Larsens mineralisation). The shear corridor has been traced by Sirotem (geophysical exploration tool) to the north west of the Murrawombie pit, with the Larsens mineralisation sitting Hanging Wall to the Eastern Shear, in relatively un-deformed sediments.

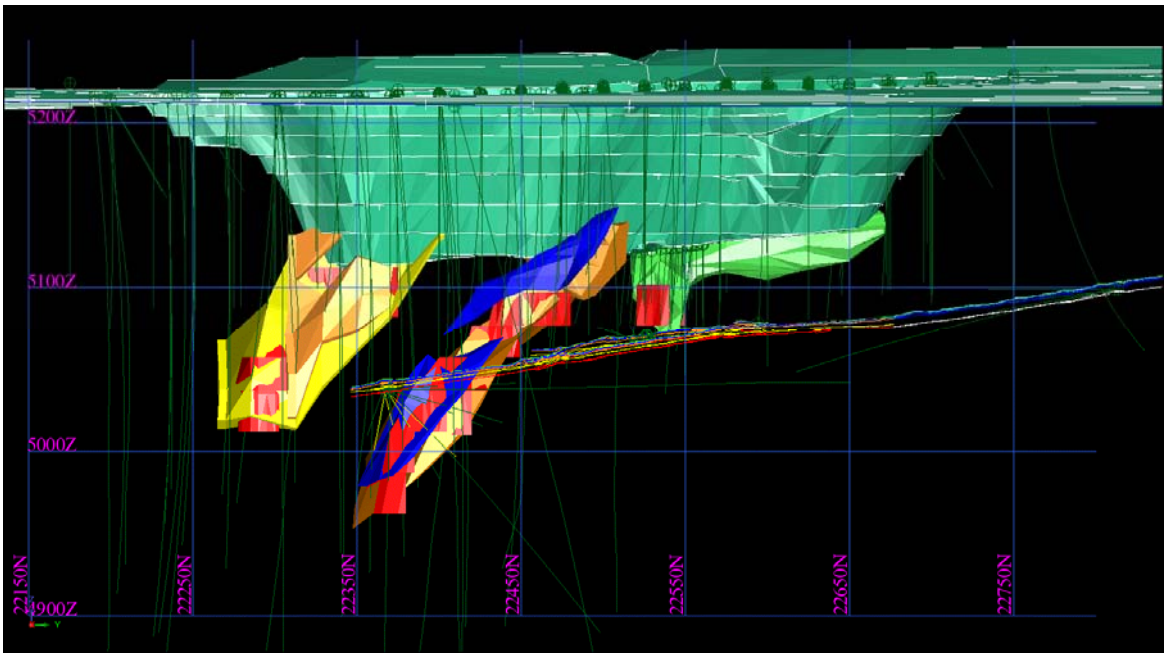


**Figure 2 Schematic vie of the Larsons Geology and mine**

# 4 MINERAL RESOURCE ESTIMATE

## 4.1 RESULTS

The Mineral Resource estimate reference date is 31st December 2013. There has been no mining of the Larsons deposit since the previous public report.

**Table 1 Mineral Resource estimate for Larsons as at 31st December 2013**

| Estimate | Classification | Cut Off Cu (%) | Tonnes (kt) | Cu % | Cu (kt) |
|---|---|---|---|---|---|
| 31 Dec 13 | Measured | 0.6 | 810 | 1.8 | 14.6 |
| | Indicated | 0.6 | | | |
| | Inferred | 0.6 | **810** | **1.8** | **14.6** |
| | **Total** | **0.6** | 810 | 1.8 | 14.6 |

1. Mineral Resources are quoted as INCLUSIVE of Ore Reserve.
2. Discrepancy in summation may occur due to rounding.

## 4.2 CHANGE FROM PREVIOUS PUBLIC REPORT

There has been no depletion by mining since the previous estimate and hence no change in the Mineral Resource estimate.

## 4.3 STATEMENT OF COMPLIANCE WITH JORC CODE REPORTING

This Mineral Resource statement has been compiled in accordance with the guidelines defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

### 4.3.1 Competent Person Statement

I, Byron Dumpleton a Consultant Resource Geologist confirm that I am the Competent Person for the Larsons Mineral Resources section of this Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report and to the activity for which I am accepting responsibility.
- I am a Member of the Australian Institute of Geologists (MAIG No. 1598).
- I have reviewed the Report to which this Consent Statement applies.

I am a full time employee of BKD Resources Pty Ltd (ABN 81 109 376 481) and acting as the Mineral Resources Manager for Straits Resources Limited. I have been engaged by Straits Resources Limited to prepare the documentation for Avoca Tank 31st December Mineral Resource estimate.

I have disclosed to Straits Resources Limited the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest. Specifically Mr Dumpleton owns 61,349 shares in Straits Resources Ltd which were issued as part of the company share plan in 2010 when Mr Dumpleton was a staff member of Straits Resources Limited.

I verify that the Larsons Mineral Resource section of this Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Mineral Resources.

### 4.3.2 Competent Person Consent

With respect to the sections of this report for which I am responsible – Mineral Resource Estimate - I consent to the release of the Larsons Mineral Resources and Ore Reserves Statement as at 31st December 2013 by the directors of Straits Resources Limited

| **Signature of Competent Person** | Date |
|---|---|
| Byron Dumpleton Member No.1598 | 1/4/2014. |
| **Signature of Witness** | Witness Name and Address<br>ROBERT ALLAN BRAINSBURY<br>44 QUANDONG ST.<br>ASHGROVE QLD 4060 |

## 4.4 JORC CODE, 2012 EDITION – TABLE 1 REPORT: LARSONS DEPOSIT

### 4.4.1 Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Sampling techniques* | 1. *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*<br>2. *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>3. *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.* | 1. All Diamond core samples are based on ½ core, pre-collar RC samples in waste zones taken as 4 metre composites and re-spit to 1 metre samples when return assays or geology indicate copper or gold mineralisation. Dedicated RC holes samples are taken at 1 metre intervals. Underground face sample data is collected at 1 metre intervals or at geological breaks as rock chip samples.<br>2. All diamond core is aligned, measured and metre marked. All underground face sample faces collected are digitally photographed and with face position measured from survey points and survey pickups.<br>3. Diamond and RC-pre-collars conducted by Straits Resources are completed to industry standards. Early percussion drilling is to be treated as historical data, but Straits have assumed that these programs were conducted at Industry standards done in its day (mid 1970's). For diamond drilling samples these are taken at geological boundaries to maximum of 1.4 metres and a minimum of 0.5 metres with the standard interval at 1 metre within mineralised zones to approximately 50 metres before and past mineralisation horizons. Diamond core drilled from surface is NQ2 in size from RC pre-collars. All Exploration holes sampled by Straits Resources for the Larsens resource for the primary sulphides, are analysed by a 3 stage aqua regia digestion with an ICP finish (suitable for Cu 0.01-40%) ALS method ME-ICP41. All Cu samples greater than or equal to 1 % were re-submitted for an ore digest ME-OG46. Additional Au analysis by fire assay fusion with an AAS finish, 30g charge (suitable for Au 0.01-100ppm) ALS method Au-AA22. All Au samples greater than or equal to 1 g/t were re-submitted for an ore grade fire assay 30g charge, Au-AA25 from ALS Orange, NSW, Australia. Holes drilled by NORD and GCC were process at SGS in |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | Cobar, NSW. |
| *Drilling techniques* | 1. *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).* | 1. All available drilling was used for the Larsens resource interpretation and estimation as at 31 December 2013 below the Larsen oxide open pit. Drilling used was RC and diamond core. For the resource 97 holes were surface RC holes 78%), 27 holes were surface diamond (22%), and 1 hole was Percussion. |
| *Drill sample recovery* | 1. *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>2. *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>3. *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | 1. All diamond core has recoveries measured and recorded by the drilling company and confirmed by Straits Resources. RC pre-collar sample recoveries were not recorded nor required to be recorded as all material estimated for the Larsens mineralisation is defined by core below 150 metres from the surface and a mixture of RC and diamond above 150 metres. RQD measurements are taken on all core prior to all sampling, thus are completed on all intervals used in resource estimation.<br>2. Industry standard drilling practices resulted in good sample recoveries for RC chips and good to reasonable for Diamond core.<br>3. No relationship appears to exist between recovery and grade. |
| *Logging* | 1. *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>2. *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>3. *The total length and percentage of the relevant intersections logged.* | 1. All diamond core drill and RC chips are geologically logged by Company Geologists. All core drilled by Straits is also geotechnically logged. Logging is to the level of detail to support the Larsens style of mineralisation (VMS-Beshi style).<br>2. Logging of both RC and Diamond core samples recorded lithology, alteration, mineralisation, degree of oxidation, fabric/structure and colour. All exploration core was photographed in both dry and wet form, for UG grade control holes all core is photo graphed in wet form only. All RC intervals are stored in plastic chip trays, labeled with interval and hole number. Core is stored in core trays and labelled similarly. Underground faces were faces are taken are digitally photographed.<br>3. All RC and core samples were logged in full. |
| *Sub-sampling* | 1. *If core, whether cut or sawn and whether quarter, half or all core* | 1. Half core was collected on average at 1m intervals, minimum |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *techniques and sample preparation* | *taken.*<br>2. *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>3. *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>4. *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>5. *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*<br>6. *Whether sample sizes are appropriate to the grain size of the material being sampled.* | sample length is 0.5 metres and maximum length is 1.4 metres.<br>2. RC samples for waste sections are collected at 1 metre intervals, with a 1m split and bulk residual collected on the drill rig. The bulk residual was composited to 4 metre interval by spear sampling. If RC composites returned above background copper or gold values, the stored original 1m split was sent to the laboratory for analysis.<br>3. Samples taken are appropriate for the Larsens mineralisation style (Copper VMS).<br>4. Sample industry standards and Tritton Operation matrix match standards were routinely submitted, Pulps retained to be re-submitted to test for reproducibility, no blanks were used for any of the Larsens drill campaigns.<br>5. No field duplicates have been conducted for the Larsens mineralisation. 130 pulp repeats were done with Q-Q plots showing minimal bias. All core samples are visually examined against assay values and logged mineralisation.<br>6. The sample sizes are considered appropriate to the grain size of the material being sampled. |
| *Quality of assay data and laboratory tests* | 1. *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>2. *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>3. *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.* | 1. All assays for holes drilled by Straits Resources were conducted at accredited assay laboratories. Samples for the drillholes in the Larsens resource estimation are primary sulphide, all surface exploration holes are analysed by a 3 stage aqua regia digestion with an ICP finish (suitable for Cu 0.01-40%) ALS method ME-ICP41. All Cu samples greater than or equal to 1 % were re-submitted for an ore digest ME-OG46. Additional Au analysis by fire assay fusion with an AAS finish, 30g charge (suitable for Au 0.01-100ppm) ALS method Au-AA22. All Au samples greater than or equal to 1 g/t were re-submitted for an ore grade fire assay 30g charge, Au-AA25. Samples taken pre 2005 cannot confirm the exact assay technique, however Straits is assuming for identifying mineralised zones the assays had meet industry standards at the time. Holes drilled by NORD and GCC were process at SGS in Cobar, NSW.<br>2. N/A<br>3. Laboratory QA/QC samples were involving the use of blanks, |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | duplicates, standards (commercial and site made certified reference materials are used), replicates as part of in-house procedures. |
| *Verification of sampling and assaying* | *1. The verification of significant intersections by either independent or alternative company personnel.*<br>*2. The use of twinned holes.*<br>*3. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>*4. Discuss any adjustment to assay data.* | 1. Significant mineralised intersections are reviewed by the logging Geologist and Senior Geologist.<br>2. No twinned holes were conducted.<br>3. All Straits Resources geological data is logged directly into Straits Resources logging computers following the Corporate Geology codes. Data is transferred to the Corporate AcQuire database and validated on entry. Down hole survey data is validated and checked for potential deviation from magnetic mineralisation before data entry.<br>4. No adjustments to assay data were made. If survey data is affected by mineralisation, the survey is omitted. With a general trend being applied based on the survey above and below the affected value. |
| *Location of data points* | *1. Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>*2. Specification of the grid system used.*<br>*3. Quality and adequacy of topographic control.* | 1. All recent surface drill hole collars have been surveyed by using a DGPS by a local contractor, all pre 2008 holes are surveyed by theodolite. All UG hole collars are surveyed in by theodolite by company surveyors. Surveys are entered into the Straits Corporate Acquire database. A 3D dtm of the topographic surface was generated using the drill hole collars outside of the Larsens, Hartman and Larsen pit area. Pit and nearby infrastructure is picked up by company surveyors.<br>2. Resource modelling based on local North East Mine Grid. Rotation of the grid is 31.22 degrees to the west from AGD 66 true North.<br>3. Quality and accuracy of the drill collars are suitable for resource work and resource evaluation for Proved and Probable reserve. |
| *Data spacing and distribution* | *1. Data spacing for reporting of Exploration Results.*<br>*2. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*<br>*3. Whether sample compositing has been applied.* | 1. The Larsens Resource surface definition drilling was conducted on a nominal 25 x 25 metres down to 12.5 metre x 12.5 metres grid at the base of the northern section of the Larsens pit.<br>2. The Larsens mineralisation is defined sufficiently to define both geology and grade continuity for a Mineral Resource estimation and Ore Reserve evaluation to Probable level. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | 3. Samples are collected at 1 metre intervals and or to geology breaks. Minimum sample interval is 0.5 metres, maximum sample interval is 1.4 metres. For the resource estimation 1 metre composites were generated and applied. |
| *Orientation of data in relation to geological structure* | *1. Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>*2. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | 1. This deposit may have minor BIAS mixed sample support as both ½ core diamond (NQ) and RC samples are used.<br>2. No material issues due to sampling BIAS is expected due to the extensive geological knowledge and mining history, therefore this is seen as a low risk. |
| *Sample security* | *1. The measures taken to ensure sample security.* | 1. Chain of Custody is managed by the Company. Samples are stored site in polyweave bags containing approximately 5 samples. The bags are securely tied, then loaded and wrapped onto a pallet dispatch to the laboratory. The samples are freighted directly to laboratory with appropriate documentation listing sample numbers a analytical methods requested. Samples are immediately receipted the lab on arrival, with a notification to the Company Senior Geologis the number of samples that have arrived. |
| *Audits or reviews* | *1. The results of any audits or reviews of sampling techniques and data.* | 1. External reviews and audits have been conducted by AMC in 2011, no fatal flaws or significant issues with Larsens model were identified. |

### 4.4.2 Section 3 Estimation and Reporting of Mineral Resources

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

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Database integrity* | *1. Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*<br>*2. Data validation procedures used.* | 1. All assay results are logged against unique sample numbers. A sampling sheet detailing sample numbers and core / RC intervals is completed prior to sampling commencing. During the sampling process each sample interval is cross-referenced to the sample number and checked off against the sampling sheet. Pre-numbered bags are used to minimize errors. Assay data is received via email in a common electronic format and verified against the AcQuire database.<br>2. Data validation checks are run by the Database Manager and checked by the logging geologist. |
| *Site visits* | *1. Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>*2. If no site visits have been undertaken indicate why this is the case.* | 1. Byron Dumpleton (Straits Resources – Mineral Resource Manager) has made numerous site visits since 2008 and has sited the core drill before 2008. Mr Dumpleton was also part of the team that developed the Geological Interpretation for the and modelling of the Larsens Deposit.<br>2. N/A. |
| *Geological interpretation* | *1. Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*<br>*2. Nature of the data used and of any assumptions made.*<br>*3. The effect, if any, of alternative interpretations on Mineral Resource estimation.*<br>*4. The use of geology in guiding and controlling Mineral Resource estimation.*<br>*5. The factors affecting continuity both of grade and geology.* | 1. The confidence in the geological model for the sulphides is considered good for this style of deposit. The Geological setting is close to a traditional “Beshi style” (type of VMS mineralised system).<br>2. The nature of the Larsens drilling data generally intersects the mineralisation at good angles.<br>3. The deposit is tabular in nature with good visible mineralisation. The geological and grade continuity and the geological knowledge by the Tritton geology team is high, minimizing the risk for alternative interpretations, current Grade Control have intersected the resource were expected.<br>4. Grade boundaries of a nominal 0.3% Cu are used to confine the grade estimation along with understanding the geological controls from mining the oxide open pit immediately above the |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | sulphide mineralisation.<br>5. The mineralisation for Larsens occurs in smaller tabular lens compared to North East resource located approximately 700 metres to the north of the deposit and it is yet to deermine if the separation of the tabular lenses are due faulting or as separate clusters of mineralisation. |
| *Dimensions* | 1. *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.* | 1. The Larsens resource occurs as several discrete tabular lenses covering an area approximately 500 m north – south and 250 m east – south with mineralisation starting from near surface. Fresh mineralisation starting at approximately 120 metres below surface. The tabular lenses have short strike lengths ranging from 40 to 200 metres relative to their down dip extent which range from 60 to 300 metres with an average dip of the lenses of 45 degrees back to east. The lenses vary in true width from 2 to 20 metres, with an average true width in the order of 7 to 12 metres. |
| *Estimation and modelling techniques* | 1. *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*<br>2. *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*<br>3. *The assumptions made regarding recovery of by-products.*<br>4. *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*<br>5. *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*<br>6. *Any assumptions behind modelling of selective mining units.*<br>7. *Any assumptions about correlation between variables.* | 1. The resource estimation for Copper grade was estimated using Ordinary kriging. The software package for the grade estimation, variography and geological interpretation was Surpac. Gold, Silver, and Zinc were estimated using Inverse Distance to the power of 2. Estimation was run in a single pass using a 40 metres search radius with orientation adjusted to reflect average strike and dip of the sulphide lenses. Estimation of grade is within interpreted hard grade boundaries based on a nominal 0.3% Copper solid (closed wireframe) with a minimum width of 2m down hole.<br>2. Larsens resource has been mined historically as an Open Pit for its oxide copper and transitional mineralisation (in the mid 1990's). Underground decline development has commenced with the first round of UG grade control drilling completed in late December 2013. Development on ore is yet to be started.<br>3. No deleterious elements were estimated.<br>4. The resource was modelled using a 10 mN by 10 mE by 5 mZ |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | 8. *Description of how the geological interpretation was used to control the resource estimates.*<br>9. *Discussion of basis for using or not using grade cutting or capping.*<br>10. *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.* | with sub celling down to 2.5 mN by 2.5 mE and 1.25 mZ. Each ore domain has been flagged and estimated separately.<br>5. Block model parent cell size dimension takes into account to accommodate narrow sections and of the mineralised domains and drill spacing. The block size is general larger than the face sampled area or equivalent, and is approximately 40% of the average drill spacing.<br>6. No assumptions have been applied to the model for selective mining unit.<br>7. No correlation has been made between variables.<br>8. No top cuts were applied to the samples for estimation.<br>9. Block model volume validation was validated against ore solid wireframes for each ore domain. Block model validation for grade was conducted both by visually expecting model sections by northings at 25 metre increments (drill spacing), by benches at 10 metre increments. |
| *Moisture* | 1. *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.* | 1. Tonnages are estimated on a dry basis. |
| *Cut-off parameters* | 1. *The basis of the adopted cut-off grade(s) or quality parameters applied.* | 1. The nominal 0.3% copper cutoff grade used for the mineralised interpretation was chosen as this appears to reflect the natural background grade cutoff. |
| *Mining factors or assumptions* | 1. *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.* | 1. The only consideration to the mining method is the minimum interpretation width applied is 2 metres. Otherwise no other mining assumptions have been applied to the Larsens model. The model is setup for mining evaluation. Material not estimated is set to zero. |
| *Metallurgical factors or* | 1. *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to* | 1. The dominant mineralisation for the Larsens Mineralisation is chalcopyrite. Material planned to be mined at Larsens will be process at the Tritton Copper Operations copper concentrator a |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *assumptions* | *consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.* | 1.4Mtpa Processing Plant. Processing recoveries for Larsens are expected to be 94.5%. |
| *Environmental factors or assumptions* | 1. *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.* | 1. Waste from processing is disposed at the current tailings storage facility at Tritton (or utilised as paste fill). Waste from underground development is stored within the Hartman's Pit and as backfill in the mining process. Any potentially acid forming waste will be encapsulated within the waste dump on the surface or is placed in as stope backfill. No significant environmental impacts have been identified for the Larsens mining operation. |
| *Bulk density* | 1. *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*<br>2. *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.*<br>3. *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.* | 1. Bulk density for the Larsens Model for waste material type has been assign by the average values measured across the field for oxide and transition. Density for material within ore domains have been assigned by the average value taken from the Larsens diamond drill core.<br>2. Bulk density for the resource has been measured using the Archimedes Principle Method' (weight in air v's weight in water). A total of 134 density measurements have been used for determining mean density value for Larsens for the mineralised domains.<br>3. Bulk density has been estimated by the actual measurements for fresh ore material. For material outside the mineralised domains an average density value for the host material has been assigned. |
| *Classification* | 1. *The basis for the classification of the Mineral Resources into varying confidence categories.*<br>2. *Whether 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,* | 1. The classification has been guided by drill density (currently at nominal 25 x 25m along the geological knowledge of the Senior Geology personnel and the Mineral Resource Manager reflecting their understanding of the Larsens resource and the Tritton Copper Operation VMS field. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *quantity and distribution of the data).*<br>*3. Whether the result appropriately reflects the Competent Person's view of the deposit.* | 2. The drill and input data density is comprehensive in its coverage for the resource to allow reasonable confidence for the tonnage and grade distribution to the levels of Indicated.<br>3. The Mineral Resource estimated appropriately reflects the view of the competent person. |
| *Audits or reviews* | *1. The results of any audits or reviews of Mineral Resource estimates.* | 1. External reviews and audits have been conducted by AMC for the Larsens resource model, no fatal flaws or significant issues were identified at the time. |
| *Discussion of relative accuracy/ confidence* | *1. Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource 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 resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*<br>*2. 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.*<br>*3. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.* | 1. The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC code.<br>2. The statement relates to global estimate of tonnes and grade.<br>3. No production data is available. |

# 5 ORE RESERVE ESTIMATE

## 5.1 RESULTS

The Larsons Ore Reserve Estimate as at 31 December 2013 is reported in Table 2. It is reported according to JORC 2012.

**Table 2 Ore Reserve Table for Public Reporting of Larsons Mine as at 31 December 2013**

| Estimate | Classification | Cut Off Cu% | Tonnes (kt) | Cu % | Cu (kt) |
|---|---|---|---|---|---|
| 31-Dec-13 | Proved | - | | | |
| | Probable | varies | 631 | 1.5 | 9.7 |
| | **Total** | | **631** | **1.5** | **9.7** |

1. Ore Reserves are reported as Inclusive of the supporting Mineral Resource estimate
2. Discrepancies in summation will occur due to rounding

## 5.2 CHANGES FROM PREVIOUS ESTIMATE

The previous public reported Ore Reserve estimate was as at 30th June 2013. Changes in the Ore Reserve result from a combination of depletion due to mining and estimation of additional Mineral Resource that was available for conversion to Ore Reserve.

| Estimate | Classification | Cut Off Cu (%) | Tonnes (kt) | Cu % | Cu (kt) |
|---|---|---|---|---|---|
| 31-Dec-13 | Proved | - | | | |
| | Probable | varies | 631 | 1.5 | 9.7 |
| | **Total** | | **631** | **1.5** | **9.7** |
| 30-Jun-13 | Proved | - | | | |
| | Probable | 1.2 | 440 | 1.6 | 7.0 |
| | **Total** | | **440** | **1.6** | **7.0** |
| | | | | | |
| *difference* | *Proved* | - | - | - | - |
| | *Probable* | - | *+191* | *-0.1* | *+2.7* |
| | *Total* | - | *+191* | *-0.1* | *+2.7* |

## 5.3 STATEMENT OF COMPLIANCE WITH JORC CODE REPORTING

This Ore Reserve statement has been compiled in accordance with the guidelines defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

### 5.3.1 Competent Person Statement

I, Ian Sheppard, confirm that I am the Competent Person for the Larson Ore Reserve section of this Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report and to the activity for which I am accepting responsibility.
- I am a Member of The Australasian Institute of Mining and Metallurgy, No. 105998.
- I have reviewed the Report to which this Consent Statement applies.

I am a full time employee of Straits Resources Limited.

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest. Specifically I have rights to 4,870,921 shares in Straits Resources. Title to the shares will vest when a range of conditions have been satisfied as defined in an Employee Share Acquisition Plan. These conditions have not been met at this time.

I verify that the Ore Reserve section of this Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Ore Reserve.

### 5.3.2 Competent Person Consent

With respect to the sections of this report for which I am responsible – Ore Reserve Estimate - I consent to the release of the 2013 Mineral Resources and Ore Reserves Statement as at 31st December 2013 for Larsons.

## 5.4 CONSENT TO RELEASE

| **Signature of Competent Person** | Date |
|---|---|
|  <br>Ian Sheppard Member No.105998 AuSIMM | 1 - April 2014 |
| **Signature of Witness**<br>  | Witness Name and Address<br>ROBERT ALLAN BRAINSBURY<br>44 QUANDONG ST.<br>ASHGROVE QLD 4060 |

## 5.5 EXPERT INPUT

A number of persons have contributed key inputs to the Ore Reserves determination. These are listed below.

In compiling the Ore Reserve the Competent Person has reviewed the supplied information for reasonableness, but has relied on this advice and information to be correct.

**Table 3 Expert contribution to Ore Reserve**

| Expert Person / Organization | Area of Expertise |
|---|---|
| **Australian Mine Design and Development** | Mine design |
| **Byron Dumpleton** | Mineral Resource estimation model |

### 5.6 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 |
|---|---|---|
| *Mineral Resource estimate for conversion to Ore Reserves* | *1. Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.*<br>*2. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.* | 1. The Larsons Ore Reserve estimate is based on the 31st December 2013 Mineral Resource, supported by the Larsons Resource block model. Mr Byron Dumpleton is the competent person responsible for Mineral Resource Estimation.<br><br>Information from stoping and development on ore in the adjacent North East mine has been used to assist with the December 2013 Ore Reserve.<br><br>Mineral Resources are quoted as INCLUSIVE of the Ore Reserve Estimate |
| *Site visits* | *1. Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>*2. If no site visits have been undertaken indicate why this is the case.* | 1. Mr Ian Sheppard, the competent person responsible for the Ore Reserve estimate, has visited the Larson mine on several occasions. Ground conditions, operating costs and supporting infrastructure have been inspected. Assumptions regards modifying factors applied in the estimate are based on these inspections and experience from the adjacent North East mine. Access to the Larsons mine is through the North East mine decline and uses the same infrastructure. |
| *Study status* | *1. The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.*<br>*2. 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.* | 1. The Larson deposit is situated within an active mining operation based on the adjacent North East deposit. Reporting of the Ore Reserve estimate is supported by an operating budget, production experience and mine plans. The combination of budgets and mine plans contains information on the modifying factors that exceeds the standard of a Feasibility Study.<br><br>2. Production plans have been developed that shows how the Ore Reserve will be mined. The Larson mine is an active operation |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | with all infrastructure and mining equipment in place. The only significant capital expenditure required to mine the Ore Reserve is extension of the access decline. Ore will be processed at the existing Tritton flotation concentrator where ore from the adjacent North East mine ore is being successfully treated. The combination of mine plans and existing mine and processing infrastructure exceeds the standard for the level of information contained in a Feasibility study. |
| *Cut-off parameters* | *1. The basis of the cut-off grade(s) or quality parameters applied.* | 1. The December 2013 Ore Reserve uses copper grade, Cu%, as the cut-off grade criteria.<br><br>2. There are no significant impurities in the mineralisation that require inclusion in the cut-off grade criteria.<br><br>3. Different cut-off grades are applied to ore mined by development and ore mined by stoping. This reflects the difference in cost allocation to the method of mining. For ore from development mining a large portion of the costs are considered sunk at the time of mining since the development will proceed irrespective of the decision to call blasted material as ore or waste. For ore mined from stope, the majority of cost is future expenditure and so is considered in the cut-off grade that guides stope design. Material mined by development has a low cut-off grade compared to ore mined by stope.<br><br>4. A 1.2% copper cut-off grade is applied to stope ore. The whole of stope average grade must exceed the cut-off grade for inclusion in the Ore Reserve. In special circumstances a reduced cut-off grade of 1% copper is allowed for stopes that can be mined with reduced cost where stope development is paid for by a higher grade stope along strike. Crown pillar stope ore that can be drilled from the base of the completed Larson open pit at lower cost is included at a lower cut-off grade of 1.0% copper if |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | necessary. Two stopes are included in the Ore Reserve on this basis.<br><br>5. A 0.8% copper cut-off grade is applied to ore mined by development.<br><br>6. All ore, in stope or development, must be inside the Mineral Resource volume defined by a 0.6% copper cut-off grade. |
| *Mining factors or assumptions* | *1. 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).*<br>*2. 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.*<br>*3. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.*<br>*4. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).*<br>*5. The mining dilution factors used.*<br>*6. The mining recovery factors used.*<br>*7. Any minimum mining widths used.*<br>*8. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.*<br>*9. The infrastructure requirements of the selected mining methods.* | 1. December 2013 Mineral Resources have been converted to Ore Reserve by a process of detailed stope and development design.<br><br>2. The mining method applied at Larson mine is up-hole bench mining. Stopes are mined in retreat from the end of the ore towards the access drive. Sublevel interval is 20m vertical. Rib pillars are left in waste areas to support the stope. No backfill is placed. Stope heights of over 80m vertical and 30m on strike have been mined at the adjacent North East mine between pillars without significant stope wall failure occurring. Similar rock mass conditions exist at Larsons mine. The North east mine stope experience is used to guide stope design for Ore Reserve estimation.<br><br>3. Access to the ore is from a decline mined at a gradient of 1 down for 7 horizontal. Ore and waste are removed by loader and truck to the surface (approximately 100m vertical lift). Ore is transported to the processing plant from a surface stockpile by on highway truck road train operating on a majority sealed road.<br><br>4. Geotechnical design of the stope is based on experience mining stopes in the adjacent North East mine in similar rock mass conditions. There are no identified major structures or differences in the rock mass that suggest Larson stopes will be |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | unstable when mined at similar dimensions to those at North East mine.<br><br>5. The Ore Reserve is based on engineer designed stopes and development drives. The designs are based on the December 2013 Mineral Resource.<br><br>6. Ore Reserve estimates include portions of material that is below cut-off grade and which is considered impractical to exclude from the surrounding or adjacent volume of ore. Such internal dilution material is inclusive to the design ore volume and estimate of grade.<br><br>7. Mining dilution from external to the stope design volume is assumed to have nil grade and will increase the ore tonnage by;<br><br>a. 15% for stope with no exposure to the open pit<br>b. 15% to 20% for crown pillar stopes exposed to the open pit<br><br>Ore Reserve grades are reduced to reflect the inclusion of nil grade dilution tonnage.<br><br>8. Mining dilution from external to the drive for development ore is assumed to be nil, since there is good access to control location of the development mining and intense ground support is installed.<br><br>9. Mining recovery of ore from stope is assumed as 90%, applied after the dilution calculation. Crown pillar stope ore recovery is variable from 85% to 70%. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | 10. Mining recovery of ore from development is assumed as 100%. |
| *Metallurgical factors or assumptions* | *1. The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.*<br>*2. Whether the metallurgical process is well-tested technology or novel in nature.*<br>*3. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.*<br>*4. Any assumptions or allowances made for deleterious elements.*<br>*5. 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.*<br>*6. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?* | 1. The Larson ore is treated at the existing Tritton ore processing plant located 30km by road from the mine. Copper, gold and silver are recovered to a copper concentrate by sulphide flotation.<br>2. The sulphide flotation treatment method is being used successfully to treat ore from the adjacent North East mine and Tritton mine, both having identical mineralogy to that found at Larson mine. The Larsons ore is expected to process successfully through the Tritton plant.<br>3. No specific metallurgy test work has been completed on the Ore Reserve.<br>4. North East mine ore occasionally contains elevated levels of fast floating talc that will report to the copper concentrate, reducing concentrate grade. It is possible that similar occasionally high levels of talc will be found at the Larsons mine ore. Talc suppressant chemicals are added to the flotation cells when elevated levels of talc are present to nearly eliminate this problem. After suppression the talc in ore has no deleterious impact on the copper concentrate product. No other deleterious elements are known in the Larsons ore. |
| *Environmental* | *1. 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.* | 1. Larsons mine operates under the Tritton Resources Limited Mine Operations Plan, EPA licenses and associated local and NSW State Government approvals. The mine is located on a Mining Lease. The environmental impact of the mine and the ore processing are fully approved.<br><br>2. Waste rock from mining operations is disposed to the Hartman's Open pit. Waste rock with sulphur content of less than 1% is Not Potentially Acid Forming and can remain stockpiled at surface. The small quantity of waste rock with sulphur content greater than 1% is disposed into empty stopes underground. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Infrastructure* | *1. 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.* | 1. All infrastructure necessary to support mining operations is in place. |
| *Costs* | *1. The derivation of, or assumptions made, regarding projected capital costs in the study.*<br>*2. The methodology used to estimate operating costs.*<br>*3. Allowances made for the content of deleterious elements.*<br>*4. The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.*<br>*5. The source of exchange rates used in the study.*<br>*6. Derivation of transportation charges.*<br>*7. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.*<br>*8. The allowances made for royalties payable, both Government and private.* | 2. Capital cost for the modest length of decline development is based on historical actual experience at North East mine. The same equipment, operators and management are engaged at both North East and Larsons mines. Both mines are accessed from the same decline.<br>3. Estimates of operating cost for the development, mining and processing of the Ore Reserve are based on historical actual experience at the North East mine. Cost estimates are at better than Feasibility study level of confidence ±10%<br>4. The cost of talc suppression chemical and dosage rates is known from recent operating experience.<br>5. Metal price assumptions for copper, gold and silver are Straits Resources corporate long term assumptions derived from a variety of market sources.<br>6. Exchange rate assumptions are Straits Resources corporate long term assumptions derived from a variety of market sources.<br>7. Product transport charges are current contracted rates.<br>8. Copper concentrate treatment and refining charges are actual cost for Tritton Mines in 2013; USD$70/t treatment and USD$0.07/lb refining.<br>9. NSW Government royalty of 4% is payable on revenue less deductible items. After deductions, the effective royalty rate on revenue is approximately 3% for Tritton Resources. No private royalties apply. |
| *Revenue factors* | *1. 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.*<br>*2. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.* | 1. Metal price assumptions are;<br>a. Copper price of USD$3.18/lb<br>b. Gold price of $1300/oz<br>c. Silver price of USD$20/oz<br>d. AUD:USD exchange rate of 0.9<br>e. Copper treatment charge of USD$70/t<br>f. Copper refery charge of USD7c/lb<br>g. Standard Tritton commercial terms under contract for |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | payable metal rates |
| *Market assessment* | *1. The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.*<br>*2. A customer and competitor analysis along with the identification of likely market windows for the product.*<br>*3. Price and volume forecasts and the basis for these forecasts.*<br>*4. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.* | 1. Copper metal production from Larsons is very small compared to world copper market size. There is no market size restrictions. All copper concentrate is sold under life of mine contract to Glencore International AG. |
| *Economic* | *1. 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.*<br>*2. NPV ranges and sensitivity to variations in the significant assumptions and inputs.* | 1. The economics of mining Larsons ore has been clearly demonstrated by the Tritton Mines budget. Larsons ore mining is justified on marginal costing, that assumes all fixed costs for the business are covered by the larger Tritton mine and there is no allocation of fixed cost to the Larsons mine.<br>2. Estimation of a NPV for the small Ore Reserve that will be mined as part of larger mining operation with shared costs is not considered reasonable. No NPV is estimated. |
| *Social* | *1. The status of agreements with key stakeholders and matters leading to social licence to operate.* | 1. The Larsons mine operation is fully permitted as part of the Tritton Resources operations based in the township of Nyngan in the Bogan Shire NSW. Strong community support for the continued operation of the Tritton Resources mines has been evidenced in regular community consultation sessions. There are no known objections from the community against the Tritton Resources operations. |
| *Other* | *1. To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:*<br>*2. Any identified material naturally occurring risks.*<br>*3. The status of material legal agreements and marketing arrangements.*<br>*4. 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* | 1. No material natural risks have been identified for the project.<br>2. All copper concentrate produced by Tritton Resources from North East mine will be sold to Glencore International AG under existing life of mine contracts.<br>3. Larsons mine is on a granted Mining Lease. All necessary approvals to allow continued mine operation are in place. |

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>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.</td><td></td></tr>
<tr><td>Classification</td><td>1. The basis for the classification of the Ore Reserves into varying confidence categories.<br>2. Whether the result appropriately reflects the Competent Person's view of the deposit.<br>3. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</td><td>1. The Ore Reserves is classified as Probable as a result of conversion from Indicated Mineral Resource.<br><br>No additional modifying factors are applicable to the categorization of the Ore Reserve.<br><br>No Ore Reserve has been derived from Measured Mineral Resource.</td></tr>
<tr><td>Audits or reviews</td><td>1. The results of any audits or reviews of Ore Reserve estimates.</td><td>1. There has been no external review of the Ore Reserve.</td></tr>
<tr><td>Discussion of relative accuracy/ confidence</td><td>1. 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.<br>2. 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.<br>3. 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.<br>4. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</td><td>
<table>
<tr><th>Criteria</th><th>Risk Rating</th><th>Comment</th></tr>
<tr><td>Mineral Resource estimate for conversion to Ore Reserves</td><td>Medium - High</td><td>No production from Larsons by underground methods to date. Hence no reconciliation data is available to quantify the accuracy of the estimate.</td></tr>
<tr><td>Classification</td><td>Low</td><td>All Probable based on Indicated Mineral Resource. No complication from modifying factors.</td></tr>
<tr><td>Site visit</td><td>Low</td><td>Site visits completed</td></tr>
<tr><td>Study status</td><td>Low</td><td>Operating mine with budget and mine plans exceeding standard of Feasibility Study.</td></tr>
<tr><td>Cut-off grade</td><td>Low</td><td>Mineralisation has sharp grade boundaries.</td></tr>
<tr><td>Mining factors</td><td>Medium</td><td>Experience from recent operations in the similar rock mass at North East. Higher dilution rates assumed than those used in the adjacent North East mine due lack of direct experience in this ore body. Slightly higher risk due lack of direct experience in</td></tr>
</table>
</td></tr>
</table>

| Criteria | JORC Code explanation | Commentary | | |
|---|---|---|---|---|
| | | | | this ore body. |
| | | Metallurgy factors | Low | Ore from similar ore bodies is currently being processed successfully. |
| | | Environmental | Low | All permits in place. No significant risks identified from existing operation. |
| | | Infrastructure | Low | All infrastructure is in place. |
| | | Costs | Low | Estimates based on current experience. |
| | | Revenue Factors | High | Copper metal price has high annual variability. Larsons mine runs with thin margins and operations could be suspended during period of extended low metal price. |
| | | Market assessment | Low | Life of mine concentrate sale contract in place. |
| | | Economics | Medium | Risk reflects impact of metal price variability. |
| | | Social | Low | Mine is fully permitted and operating with no community objections |

End Report