



ASX RELEASE

10<sup>th</sup> December 2014

**AMENDMENT TO TRANSACTION WITH CASCADE RESOURCES LIMITED**

**Highlights:**

- **Torian Resources Limited has entered into an Amendment to the Conditional Heads of Agreement with Cascade Resources Limited**
- **Transaction to proceed without the Taurus and Mt Keith projects as agreements were unable to be settled with the project Vendors in a reasonable timeframe**
- **Company to focus on the Mt Stirling and Malcolm projects**
- **The projects host an existing Inferred JORC Resource of 37,477 oz Au**
- **ASX Listing Rule 11.1.3 will not apply to the transaction meaning Torian is no longer required to re-comply with Chapters 1 & 2 of the Listing Rules**
- **Drill program planned to commence immediately following completion of the acquisition**
- **Torian shareholders to vote on various resolutions to approve the acquisition at an Extraordinary General Meeting expected to be held following completion of satisfactory due diligence and execution of all relevant transaction documentation**

Torian Resources Limited (**Torian** or **Company**) has entered into an Amendment to the Conditional Heads of Agreement with Cascade Resources Limited (**Cascade**). Following lengthy discussions between Cascade and the Vendors of the Taurus and Mt Keith projects, suitable transaction documentation was unable to be settled in a reasonable timeframe to Torian's satisfaction. As a result, the Company will proceed with the acquisition of the contractual rights over the Mt Stirling and Malcolm projects only.

A summary of the Mt Stirling and Malcolm projects and the amended terms of the proposed transaction are included below.

## **Overview of the Projects**

The projects host an existing Inferred JORC Resource of 37,477 oz Au.

Project	JORC Category	Total Project Resources			Torian's Interest (assuming exercise of options)
		Tonnes	g/t Au	Oz	
Mt Stirling	Inferred	259,750	2.44	20,400	51 - 90% <sup>1</sup>
Mt Stirling Well <sup>2</sup>	Inferred	41,250	8.54	11,327	100%
Malcolm	Inferred	48,000	3.72	5,750	51 - 90% <sup>1</sup>
<b>Total</b>	<b>Inferred</b>	<b>349,000</b>	<b>3.34</b>	<b>37,477</b>	

1. Cascade currently holds an option to acquire 51% and has the right to earn up to a 90% pursuant to the relevant joint venture agreement's.

2. Mt Stirling Well is a prospect within the Mt Stirling Project.

A detailed summary of the supporting project assumptions and data (Table 1 as per JORC (2012) guidelines) is provided in the Appendix.

### ***Mt Stirling Project***

The Mt Stirling Project is located approximately 40 kilometres north west of Leonora. Under the proposed transaction, Torian will acquire a contractual right to acquire 100% of the Mt Stirling Well prospect. Torian will also acquire contractual rights to acquire 51% of the Mt Stirling prospect and 51% of the Mt Cutmore prospect with a right to earn up to 90% of each prospect under the terms of two separate joint venture agreements. The Mt Stirling Project comprises 19 prospecting licences covering an area of 23 square kilometres.

The Mt Stirling Well Prospect has a current JORC compliant Inferred resource of 41,250 tonnes @ 8.54g/t for 11,327oz Au. This resource, whilst inferred, is a high grade, oxidised system, located at surface which the Company believes may be amenable to low cost mining. This resource is open in all directions and further exploration at this prospect is a high priority.

This mineralisation is a flat lying quartz vein hosted in granite. The granite has a diameter of approximately 1 kilometre and there is potential for the current resource to grow significantly. Previous drilling at the prospect occurs over a strike length of approximately 200 metres and there is no drilling deeper than about 40 metres.

Between 1897 and 1913, a small underground mine was active at the Mt Stirling Well prospect. Recorded production from the mine was 3,354 tonnes @ 52.02g/t Au for 5,610 oz's Au.

Previous exploration at the Mt Stirling Project has focused on a small number of targets defined by old workings. RC drilling was conducted at these targets however they remain open along strike and down dip. The Mt Stirling Project has a number of other targets that have been defined by surface sampling that have not been drill tested to date.

### ***Malcolm Project***

The Malcolm Project is located approximately 20 kilometres east of Leonora. Under the proposed transaction Torian will acquire a contractual right to acquire 100% of the Rabbit Warren South prospect and contractual rights to acquire 51% interests in the Mt Stewart, Braemore, Malcolm and Mt George Prospects. Torian has the right to earn up to 90% of each of these Prospects under the terms of various joint venture agreements. The Malcolm Project comprises 54 tenements covering an area of approximately 75 square kilometres.

The Malcolm Project has received only superficial exploration to date, focusing on historic workings. Several reconnaissance RAB holes have intersected anomalous values away from the historic workings. Many of these have not been followed up by RC drilling. In addition JORC Inferred resources have been defined from previous shallow RC drilling. All resources remain open along strike and also at depth.

Other targets have been defined from previous soil geochemical sampling and areas of gold nuggets being found at or very near surface. Most of these areas have never been drill tested.

### ***Resource Parameters***

- **Geology and geological interpretation** – the drillholes were geologically logged noting various features such as rock type, alteration, veining, and oxidation. Mt Stirling Well is a flat lying quartz vein hosted by a granite. Mt Stirling is a typical steep dipping shearzone in basalts. Malcolm is hosted by sheared black shales. All zones of mineralisation outcrop at surface and have had shallow historic minor mining dating from the 1890s. Further details are described above.
- **Sampling and sub-sampling techniques** – sampling was via riffle split from original bulk samples collected at the drill sites during drilling. Sub-sampling was again via riffle splitting in independent laboratories with typically 50 grams used for routine fire assay.
- **Drilling techniques** – only reverse circulation (RC) drilling was used in the resource estimates.

- **The criteria used for classification, including drill and data spacing and distribution** – at Mt Stirling Well the drill spacing is 40m by 40m; at Mt Stirling it is variable ranging from 10m by 10m to 10m by 50m; at Malcolm the drill spacing is 20m by 20m. All the resources were classified as Inferred.
- **Sample analysis method** – all analysis is via 50 gram fire assay, with routine standards and blanks inserted for quality control.
- **Estimation methodology** – Mineralised zones were interpreted on cross sections and digitized outlines created in Micromine software. These were in turn developed into 3 dimensional wire frames encapsulation the mineralisation as interpreted. Drill weighted averages (grade multiplied by width) was used to determine the grades within a wireframe, with discrete higher grade zones (typically +10g/t Au) determined separately.
- **Cut-off grade, including the basis for the selected cut-off grade** – a lower cutoff of 1g/t Au was used as a first pass. Top cuts reflect values below the 97<sup>th</sup> percentile of statistical distribution of the values above 1g/t Au.
- **Mining and metallurgical methods and parameters, and other material modifying factors considered to date** – all resources were shallow, and actually are exposed on the surface. This being the case open pit mining was assumed, typically with a maximum depth of the top of fresh rock (commonly approximately 40m depth). An exception was at Mt Stirling where the mineralisation is known from previous drilling to persist to at least 120m depth. No metallurgical issues were noted in previous shallow historic mining activities in these areas and so none are expected. All resources remain open at depth and commonly along strike. The maximum extrapolation in areas of no drilling was 40m.

### **Amended Heads of Agreement:**

The key terms of the Amended Heads of Agreement are outlined below:

#### ***Transaction***

The Company has entered a conditional heads of agreement with Cascade to acquire the contractual rights Cascade holds over a number of gold projects located in the Goldfields region of Western Australia (as described above) (**Acquisition Options**) (**Transaction**).

#### ***Consideration***

The consideration payable by the Company under the proposed Transaction is 27,272,727 fully paid ordinary shares in the capital of the Company (**Shares**) on a post-Consolidation (as defined below) basis (being 900,000,000 Shares on a pre-Consolidation basis) to Cascade.

### ***Escrow Arrangements***

The following parties are expected to be subject to a minimum of 12 months escrow:

- Cascade Resources Limited; and
- The Project Vendors.

### ***Conditions Precedent***

The Heads of Agreement was subject to a number of conditions precedent. On 26 September 2014, the Company announced the satisfaction of the first condition precedent, being completion of satisfactory due diligence by Cascade.

Pursuant to the Amended Heads of Agreement, the acquisition remains conditional upon:

- Torian completing due diligence on the projects to its satisfaction;
- The Project Vendors agreeing to assign the Acquisition Options on terms satisfactory to Torian;
- Both Torian and Cascade obtaining all required shareholder approvals necessary for the proposed transaction;
- The Company undertaking a consolidation of capital on a ratio of 33:1, occurring simultaneously with the issue of the consideration (**Consolidation**);
- The Company completing a capital raising of up to \$2,000,000 through the issue of up to 10,000,000 Shares at an issue price of \$0.20 per Share, on a post-Consolidation basis (being 330,000,000 Shares on a pre-Consolidation basis), or such amount as otherwise agreed between the parties; and
- The appropriate entities entering into voluntary escrow agreements.

### ***Issue of Shares to Vendors***

The Company will issue 6,450,000 Shares on a post-Consolidation basis (being 212,850,000 Shares on a pre-Consolidation basis) and pay \$295,000 cash to the vendors of the projects in consideration for the exercise of the Acquisition Options.

### **Re-Compliance with ASX Listing Rules Chapters 1 And 2:**

ASX has confirmed that the proposed amended transaction will **not** result in a significant change to the nature and scale of Torian's activities. As ASX Listing Rule 11.1.3 does not apply to the Transaction, Torian will **not** need to re-comply with Chapters 1 and 2 of the ASX Listing Rules. ASX Listing Rule 11.1.2 will apply to the proposed Transaction, requiring the approval of Torian shareholders.

### **Shareholder Approvals:**

A notice of meeting seeking shareholder approval for the resolutions required to effect the proposed transaction will be sent to Torian shareholders in due course. It is expected that Torian will convene a meeting to facilitate shareholder approval in February 2015.

### **Proposed Capital Structure:**

The anticipated effect of the proposed Transaction on the capital structure of the Company is set out in the table below.

	Shares	Options
<b>Securities on issue pre Consolidation and post debt conversion</b>	500,332,463	30,200,000 <sup>1</sup>
<b>Securities on issue post Consolidation<sup>2</sup> (33:1)</b>	15,161,590	915,151
<b>Consideration payable to Cascade</b>	27,272,727	Nil
<b>Capital Raising</b>	10,000,000	Nil
<b>Consideration payable to Project Vendors</b>	6,450,000	Nil
<b>Total</b>	<b>58,884,317</b>	<b>915,151</b>

### **Notes:**

1. 5,075,000 unlisted options exercisable at 20 cents each on or before 31 December 2014, 5,075,000 unlisted options exercisable at 22 cents each on or before 31 December 2014, 10,000,000 unlisted options exercisable at 4.6 cents each on or before 29 December 2015, 5,025,000 unlisted options exercisable at 24 cents each on or before 31 December 2015 and 5,025,000 unlisted options exercisable at 26 cents each on or before 31 December 2015.
2. The Consolidation will result in the price of Shares increasing from approximately \$0.006 to approximately \$0.20.

### **Proposed Board Changes:**

As part of the proposed transaction the board will be reconstituted as follows:

Non-Executive Chairman: Mr Andrew Sparke

Managing Director: Mr Matthew Sullivan

Executive Director: Mr Sunil Dhupelia

Non-Executive Director: Mr Nathan Taylor

### **Proposed Indicative Timetable\*:**

Event	Date
ASX announcement of the Proposed Transaction	June 2014
Complete Due Diligence	December 2014
Send Notice of Meeting seeking approval for Capital Raising, Consolidation and issue of Shares as consideration for the Proposed Transaction	Dec 2014/Jan 2015
Shareholder meeting	February 2015
Complete Capital Raising	February 2015
Satisfaction (or waiver) of other Conditions	February 2015
Completion of Proposed Transaction	February 2015

\* This timetable is indicative only and subject to change.

For further information please contact:

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### **Competency Statement**

The information in this report relation to Exploration Results and Mineral Resources is based on information reviewed by Mr Matthew Sullivan who is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient exploration experience which is relevant to the style of mineralisation under consideration to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves'. Mr Sullivan is a director of Torian Resources and Cascade Resources and consents to the inclusion of the matters based on his information in the form and context in which it appears.

## ANNEXURE A – PRO FORMA BALANCE SHEET AS AT 30 JUNE 2014

The unaudited pro-forma Balance Sheet has been prepared to provide information on the assets and liabilities of the Company and pro-forma assets and liabilities of the Company as noted below. The historical and pro-forma financial information is presented in an abbreviated form, insofar as it does not include all of the disclosures required by Australian Accounting Standards applicable to annual financial statements.

### Balance Sheet and Pro Forma Balance Sheet as at 30 June 2014

	Audited Balance Sheet 30-Jun-14	Pro Forma Adjustments	Note	Unaudited Pro Forma Balance Sheet 30-Jun-14
<b>ASSETS</b>				
<b>CURRENT ASSETS</b>				
Cash and cash equivalents	93,549	1,616,042	1	1,709,591
Trade and other receivables	23,299	-		23,299
<b>TOTAL CURRENT ASSETS</b>	<b>116,849</b>	<b>1,616,042</b>	<b>-</b>	<b>1,732,890</b>
<b>NON-CURRENT ASSETS</b>				
Financial assets	1,429	-		1,429
Property, plant and equipment	12,859	-		12,859
Exploration and evaluation assets	-	6,744,545	2	6,744,545
<b>TOTAL NON-CURRENT ASSETS</b>	<b>14,288</b>	<b>6,744,545</b>		<b>6,758,833</b>
<b>TOTAL ASSETS</b>	<b>131,137</b>	<b>8,360,587</b>		<b>8,491,723</b>
<b>LIABILITIES</b>				
<b>CURRENT LIABILITIES</b>				
Trade and other payables	229,297	(100,000)	3	129,297
Financial liabilities	307,174	(307,174)	4	-
<b>TOTAL CURRENT LIABILITIES</b>	<b>536,470</b>	<b>(407,174)</b>	<b>-</b>	<b>129,297</b>
<b>TOTAL LIABILITIES</b>	<b>536,470</b>	<b>(407,174)</b>		<b>129,297</b>
<b>NET ASSETS</b>	<b>(405,334)</b>	<b>8,767,761</b>		<b>8,362,427</b>
<b>EQUITY</b>				
Issued capital	55,725,782	8,553,761	5	64,279,543
Reserves	1,995,700	-		1,995,700
Accumulated losses	(58,126,816)	214,000	6	(57,912,816)
<b>TOTAL EQUITY</b>	<b>(405,334)</b>	<b>8,767,761</b>		<b>8,362,427</b>



**Pro Forma Adjustment Notes:**

1. Recognition of net cash with the below adjustments and inclusive of cash raised of \$1.72 million (\$2 million net of costs of raising share capital). Additional funds of \$300,000 anticipated to be recovered by way of tenement sales and recoupment of rehabilitation bonds (see note 6). Reductions in cash relate to \$295,000 vendor payments and reductions to repay loans (see Note 4);
2. Exploration assets purchased by way of issue of shares to purchase contractual rights owned by Cascade, and cash and share issues to exercise the options, which are all costs associated with acquiring the underlying tenements;
3. Net \$100,000 accrued liability reduction as a result of prior scrip issues which will discharge part of accrued Directors fees and rental owed to related parties;
4. Reduction of loans payable to related and third parties on the following basis:
  - a. \$20,000 interest payable to ROC Salt Limited discharged by cash;
  - b. \$198,216 payable to former Director Mr Peter Ashcroft/his related entities discharged by share issue;
  - c. \$88,958 loan payable inclusive of interest to be repaid in cash;
5. Issue of capital to reflect the acquisition and exercise of contractual rights in addition to all agreed conversions of debt or trade payables;
6. Reduction in carried forward losses to account for receipt of an estimated \$214,000 in rehabilitation bonds on transfer/surrender of tenements (\$300,000 less Acquisition Costs of \$86,000). Note that in prior audited financial statements auditors recommended the write off of these bonds and they were impaired however the company has a track record of recovering these bonds and they are highly likely to be received. On receipt the impairment will be reversed and will result in a net favourable reduction in carried forward losses.

## ANNEXURE B – JORC CODE, 2012 EDITION TABLES

### Mt Stirling Project

#### JORC Code, 2012 Edition – Table 1

##### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All data and results referred to in this report are historic, and date from the late 1980s to the present day. This data has been judged to be reliable following independent research, including discussions with previous operators and explorers in person.</li> <li>Samples were collected via Rotary Air Blast (RAB) and Reverse Circulation (RC) drill chips.</li> <li>All drilling yielded samples on a metre basis. RAB drilling samples were commonly composited into intervals of 4 or 5m, with selected individual or 2m resamples collected. Reverse Circulation (RC) drilling is utilised to obtain 1 m samples which are riffle split, from which approx. 2-3 kg is pulverised to produce a 50 g charge for fire assay.</li> <li>Sample preparation method is total material dried and pulverized to nominally 85% passing 75 µm particle size. Gold analysis method is generally by 50g Fire Assay, with Atomic Absorption Spectrometry (AAS) finish (DL 0.01 – UL 50 ppm Au). Samples exceeding the upper limit of the method were automatically re-assayed utilizing a high grade gravimetric method.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>RAB holes were typically 100mm in diameter, RC drilling usually 155mm in diameter. RC drilling was via a face sampling hammer.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul style="list-style-type: none"> <li>Recoveries were logged onto paper logs during drilling. Recoveries were visually assessed.</li> <li>Sample recoveries were maximised in RAB and RC drilling via collecting the samples in a cyclone prior to sub sampling. RAB drillholes were stopped if</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>significant water flows were encountered.</p> <ul style="list-style-type: none"> <li>No relationship appears from the data between sample recovery and grade of the samples.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All drillholes were geologically logged. This logging appears to be of high quality and suitable for use in further studies.</li> <li>Logging is qualitative in nature.</li> <li>All samples / intersections are logged. 100% of relevant length intersections are logged.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Non-core RC drill chip sample material is riffle split, where sample is dry. In case of wet sample a representative 'grab' sample method is utilized.</li> <li>The sample preparation technique is total material dried and pulverized to nominally 85% passing 75 µm particle size, from which a 50g charge was representatively riffle split off, for assay.</li> <li>Standard check (known value) sample were not used in all cases. Where used the known values correspond closely with the expected values. A duplicate (same sample duplicated) were commonly inserted for every 20 or 30 samples taken.</li> <li>There is a significant amount of coarse gold at Mt Stirling Well. This is reflected in the poor repeatability of some samples and also was noted on the drill logs.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Various independent laboratories have assayed samples from the project over the years. In general they were internationally accredited for QAQC in mineral analysis.</li> <li>No geophysical tools have been used to date.</li> <li>The laboratories inserted blank and check samples for each batch of samples analysed and reports these accordingly with all results.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Selected significant intersections were resampled from original remnant sample material and analysed again.</li> <li>No twinned holes have been used to date.</li> <li>Documentation of primary data is field log sheets (hand written). Primary data is entered into application specific data base. The data base is subjected to data verification program, erroneous data is corrected. Data</li> </ul>

Criteria	JORC Code explanation	Commentary
		storage is retention of physical log sheet, two electronic backup storage devices and primary electronic database.
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Survey control used is hand held GPS. No down hole surveys were completed to date. As these areas contain drillholes to no more than 100m significant deviations are not expected.</li> <li>Grid systems are various local grid converted to MGA coordinates.</li> <li>Topographic control is accurate to +/- 0.5 m.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>The drill spacing is variable but generally no greater than 200m by 40m, with some areas infilled to 80m by 40m.</li> <li>The areas have drilling density sufficient for JORC Inferred category. Further infill will be required for other categories.</li> <li>Apart from the reconnaissance RAB drilling, no sample compositing has been used.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Apart from some vertical reconnaissance RAB drilling, the orientation of the drilling is approximately at right angles to the known mineralisation and so gives a fair representation of the mineralisation intersected.</li> <li>No sampling bias is believed to occur due to the orientation of the drilling.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were delivered to the laboratory in batches at regular intervals. These are temporarily stored in a secure facility after drilling and before delivery</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>The company engages independent consultants who regularly audit the data for inconsistencies and other issues. None have been reported to date.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known</li> </ul>	<ul style="list-style-type: none"> <li>The details relating to the tenements are located in the Tenement Status section of this report.</li> </ul> <p>The tenement status is described elsewhere in this report.</p>

Criteria	JORC Code explanation	Commentary
	<i>impediments to obtaining a licence to operate in the area.</i>	
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>All work relating to previous exploration contained within this report was completed by other parties. Details are included in the references.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Details of the geology are found elsewhere in this report.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Details of the drilling, etc are found within the various tables and diagrams elsewhere in this report.</li> <li>No material information, results or data have been excluded.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Weighted averages were calculated by a simple weighting of from and to distances down each hole. Most samples are 1 metre samples. No top cuts were applied. Lower cut-offs used were – Mt Stirling 1g/t Au.</li> <li>The high grade nature of the resource at Mt Stirling Well means that little low grade material has been included in the intersection table. At Mt Stirling a small amount of higher grade is consistently present in each intersection as shown in the drill results tables above.</li> <li>No metal equivalent values are used</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Details of geology, and selected cross sections are given elsewhere in this report <ul style="list-style-type: none"> <li>At Mt Stirling Well the gently dipping nature of the mineralisation means that steeply inclined holes give approximately true widths. At Mt Stirling the steep dip of the mineralisation means that drill widths are exaggerated. These are shown in the tables above.</li> </ul> </li> <li>The tables above show drill widths not true widths. In the case of Mt</li> </ul>

Criteria	JORC Code explanation	Commentary
		Stirling Well the drill widths are approximately the same as true widths.
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Details of geology, and selected cross sections are given elsewhere in this report.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Details of the results, drilling, etc are reported elsewhere in this report.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>Details of geology, and selected cross sections are given elsewhere in this report.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Proposed work included drilling of selected twin holes followed by infill and step out RC drilling across all resources. The aim of such work is to increase confidence in the data and also to test for extensions to the known resources. Budgets are being prepared for this work at present.</li> <li>In addition a significant number of additional prospects are known to exist within the projects as defined by previous RAB and RC drilling intersections. These will form the second phase of exploration.</li> <li>Various maps and diagrams are presented elsewhere in this report to highlight possible extensions and new targets.</li> </ul>

### 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
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>The database was checked against the hard copy originals for validity.</li> <li>Data validation checked consistency of features such as hole depth, consistent down hole surveys, duplicate assays, etc.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The competent person made site visits to all projects during the course of the last year.</li> </ul>
<i>Geological</i>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation</li> </ul>	<ul style="list-style-type: none"> <li>The geology of the various resources is reasonably well documented and</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Interpretation</i>	<p><i>of the mineral deposit.</i></p> <ul style="list-style-type: none"> <li><i>Nature of the data used and of any assumptions made.</i></li> <li><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li><i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<p>understood. Most are in areas of outcrop and so direct observation of dips, strikes, widths, etc have been made.</p> <ul style="list-style-type: none"> <li>3D models of the geology were commonly used as a guide for the interpretation of the mineralization.</li> <li>Continuity is assumed to be from hole to hole. As the maximum spacing of holes is 80m in the resources this appears to be a reasonable assumption. At all times the geology guided the continuity. No faults or other dislocations that may influence the geological continuity are known within the resources.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The widths of the mineralisation within the resources are fairly uniform. The strike and dip extents of the mineralisation in the various resources is determined solely by drilling.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> <li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li><i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <li>The resources were estimated using Micromine software. The mineralization was wireframed at the cut off grades stated above. Where high grade domains were noted these were subset from the overall wireframes.</li> <li>Where historic workings are also mapped these were also wireframed and deducted from the resource. These estimates were validated against historic production records where known.</li> <li>Geological models were used to constrain the mineralization models. The method used is considered to be suitable for the estimation of Inferred Resources. More complex methods may be appropriate for resources of higher category.</li> <li>There is modest previous mining activity across most of the resources. These provide evidence of width, dip, strikes, etc.</li> <li>Top cuts were not applied, however their influence on the wireframes was reduced by domaining high grade zones separately.</li> <li>No data was available for reconciliation. The model was compared to the drill data directly on section using the geological features as a guide. Minor adjustments were made following this.</li> </ul>
<i>Moisture</i>	<ul style="list-style-type: none"> <li><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>The estimates are made on a dry basis as little information exists reliably outlining the moisture contents.</li> </ul>
<i>Cut-off</i>	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The lower cut off were arbitrarily assigned after a visual assessment of the mineralization on cross sections. No upper cuts were applied, but their</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>parameters</i>		potential influence was reduced by separately domaining any high grade areas.
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All resources are assumed to be open pit mineable. This is due to the oxide nature of the upper parts of the resources and the relatively shallow nature of the drilling to date. No mining studies have been made to date for any resource.</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All mineralisation is assumed to be free milling on the basis of historic data. The Mt Stirling Well mineralization contains a significant amount of coarse gold as noted in previous assay reports. Some visible gold was panned drill cuttings at Mt Stirling Well and also directly observed in historic workings. A significant proportion of gravity recoverable gold would be expected in any future processing.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The assumed operations will have typical waste dumps as seen in many sites across Western Australia. These include dewatering and tailings disposal facilities.</li> <li>No assumed operation in the future will have an unusual impact on the environment.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>No data relating to bulk densities were available and so these values have been assumed. An SG of 2.2t/m<sup>3</sup> was assumed for all material. This reflects the semi oxidised nature of most of the material.</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> </ul>	<ul style="list-style-type: none"> <li>The classification of all resources as Inferred reflects various unknowns of the data. Despite this there is sufficient continuity of the mineralisation across all</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>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).</i></li> <li><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<p>resources.</p> <ul style="list-style-type: none"> <li>As currently understood these estimates give a fair reflection of the resources.</li> </ul> <p>As currently understood these estimates give a fair reflection of the resources.</p>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>The resources have received a number of peer reviews. No key issues were raised.</li> </ul>
<i>Discussion of relative accuracy/confidence</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>The classification of the resources as Inferred reflects the presently understood confidence in the continuity of dimensions and grade of the resources.</li> <li>Various features require additional drilling. For example the coarse gold at Mt Stirling Well needs additional sampling. In all cases the resources remain open, particularly down dip.</li> <li>A more rigorous statistical understanding of the mineralisation in the resources will be made following more detailed drilling.</li> <li>The resources stated in this report relate to local estimates. Further drilling is warranted before any economic evaluation is made.</li> <li>Details of assumptions used are stated in the report.</li> </ul>

## Malcolm Project

### JORC Code, 2012 Edition – Table 1

#### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All data and results referred to in this report are historic, and date from the late 1980s to the present day. This data has been judged to be reliable following independent research, including discussions with previous operators and explorers in person.</li> <li>Samples were collected via Rotary Air Blast (RAB) and Reverse Circulation (RC) drill chips. A minor number of diamond drillholes (DD) were drilled at Malcolm.</li> <li>All drilling yielded samples on a metre basis. RAB drilling samples were commonly composited into intervals of 4 or 5m, with selected individual or 2m resamples collected. Reverse Circulation (RC) drilling is utilised to obtain 1 m samples which are riffle split, from which approx. 2-3 kg is pulverised to produce a 50 g charge for fire assay. Diamond core is sawn in half before crushing, pulverising and assaying.</li> <li>Sample preparation method is total material dried and pulverized to nominally 85% passing 75 µm particle size. Gold analysis method is generally by 50g Fire Assay, with Atomic Absorption Spectrometry (AAS) finish (DL 0.01 – UL 50 ppm Au). Samples exceeding the upper limit of the method were automatically re-assayed utilizing a high grade gravimetric method.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>RAB holes were typically 100mm in diameter, RC drilling usually 155mm in diameter; diamond drilling was either NQ (50mm) or HQ (63mm). Triple tube coring was used in oxide zones. Core was orientated where possible via spear to mark the bottom of the hole. RC drilling was via a face sampling hammer.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	<ul style="list-style-type: none"> <li>Recoveries were logged onto paper logs during drilling. Recoveries were visually assessed.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Sample recoveries were maximised in RAB and RC drilling via collecting the samples in a cyclone prior to sub sampling. Diamond drilling used drilling muds to reduce loss of core in oxide zones and careful monitoring of the pumping of drilling fluids. RAB drillholes were stopped if significant water flows were encountered.</li> <li>No relationship appears from the data between sample recovery and grade of the samples.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All drillholes were geologically logged, whilst the diamond holes at Malcolm also have geotechnical logs. This logging appears to be of high quality and suitable for use in further studies.</li> <li>Logging is qualitative in nature.</li> <li>All samples / intersections are logged. 100% of relevant length intersections are logged.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Non-core RC drill chip sample material is riffle split, where sample is dry. In case of wet sample a representative 'grab' sample method is utilized.</li> <li>The sample preparation technique is total material dried and pulverized to nominally 85% passing 75 µm particle size, from which a 50g charge was representatively riffle split off, for assay.</li> <li>Standard check (known value) sample were not used in all cases. Where used the known values correspond closely with the expected values. A duplicate (same sample duplicated) were commonly inserted for every 20 or 30 samples taken. <ul style="list-style-type: none"> <li>Routine standards and duplicates were used to check for accuracy and precision of the results.</li> </ul> </li> </ul> <p>The grain size is generally fine and so the sample size is appropriate.</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Various independent laboratories have assayed samples from the project over the years. In general they were internationally accredited for QAQC in mineral analysis.</li> <li>No geophysical tools have been used to date.</li> <li>The laboratories inserted blank and check samples for each batch of samples analysed and reports these accordingly with all results.</li> </ul>
Verification of	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or</li> </ul>	<ul style="list-style-type: none"> <li>Selected significant intersections were resampled from original remnant</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>sampling and assaying</i>	<i>alternative company personnel.</i> <ul style="list-style-type: none"> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<p>sample material and analysed again.</p> <ul style="list-style-type: none"> <li>No twinned holes have been used to date.</li> <li>Documentation of primary data is field log sheets (hand written). Primary data is entered into application specific data base. The data base is subjected to data verification program, erroneous data is corrected. Data storage is retention of physical log sheet, two electronic backup storage devices and primary electronic database.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>Survey control used is hand held GPS. Down hole surveys were completed on most diamond drillholes at Malcolm. These surveys were via a single shot down hole tool. As the other drillholes were drilled to no more than 100m significant deviations are not expected.</li> <li>Grid systems are various local grid converted to MGA coordinates.</li> <li>Topographic control is accurate to +/- 0.5 m.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The drill spacing is variable but generally no greater than 200m by 40m, with some areas infilled to 40m by 40m and 20m by 20m.</li> <li>The infilled areas have drilling density sufficient for JORC Inferred category. Further infill will be required for other categories.</li> <li>Apart from the reconnaissance RAB drilling, no sample compositing has been used.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Apart from some vertical reconnaissance RAB drilling, the orientation of the drilling is approximately at right angles to the known mineralisation and so gives a fair representation of the mineralisation intersected.</li> <li>No sampling bias is believed to occur due to the orientation of the drilling.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Samples were delivered to the laboratory in batches at regular intervals. These are temporarily stored in a secure facility after drilling and before delivery</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>The company engages independent consultants who regularly audit the data for inconsistencies and other issues. None have been reported to date.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The details relating to the tenements are located in the Tenement Status section of this report.</li> </ul> <p>Tenement details are described elsewhere in this report.</p>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>All work relating to previous exploration contained within this report was completed by other parties. Details are included in the references.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Details of the geology are found elsewhere in this report.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Details of the drilling, etc are found within the various tables and diagrams elsewhere in this report.</li> <li>No material information, results or data have been excluded.</li> </ul> <p>No material information has been excluded.</p>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Weighted averages were calculated by a simple weighting of from and to distances down each hole. Most samples are 1 metre samples. No top cuts were applied. Lower cut-offs used were – Malcolm 1g/t Au.</li> <li>The drilling results are shown tabulated elsewhere in this report.</li> </ul> <p>No metal equivalents have been used</p>
<i>Relationship between</i>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Details of geology, and selected cross sections are given elsewhere in this report</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>The steep dipping nature of the mineralisation means that steeply inclined drillholes will show exaggerated widths. These are shown in the diagrams and tables elsewhere in this report.</li> </ul> <p>The drilling results shown elsewhere in this report are drill widths not true widths.</p>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>Details of geology, and selected cross sections are given elsewhere in this report.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>Details of the results, drilling, etc are reported elsewhere in this report.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>Details of geology, and selected cross sections are given elsewhere in this report.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Proposed work included drilling of selected twin holes followed by infill and step out RC drilling across all resources. The aim of such work is to increase confidence in the data and also to test for extensions to the known resources. Budgets are being prepared for this work at present.</li> <li>In addition a significant number of additional prospects are known to exist within the projects as defined by previous RAB and RC drilling intersections. These will form the second phase of exploration.</li> <li>Various maps and diagrams are presented elsewhere in this report to highlight possible extensions and new targets.</li> </ul>

### 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
<i>Database integrity</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The database was checked against the hard copy originals for validity.</li> <li>Data validation checked consistency of features such as hole depth, consistent down hole surveys, duplicate assays, etc.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Data validation procedures used.</i></li> </ul>	
Site visits	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The competent person made site visits to all projects during the course of the last year.</li> </ul>
Geological interpretation	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The geology of the various resources is reasonably well documented and understood. Most are in areas of outcrop and so direct observation of dips, strikes, widths, etc have been made.</li> <li>• 3D models of the geology were commonly used as a guide for the interpretation of the mineralization.</li> <li>• Continuity is assumed to be from hole to hole. As the maximum spacing of holes is 40m in the resources this appears to be a reasonable assumption. At all times the geology guided the continuity. No faults or other dislocations that may influence the geological continuity are known within the resources.</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The widths of the mineralisation within the resources are fairly uniform. The strike and dip extents of the mineralisation in the various resources is determined solely by drilling.</li> </ul>
Estimation and modelling techniques	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding recovery of by-products.</i></li> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of</i></li> </ul>	<ul style="list-style-type: none"> <li>• The resources were estimated using Micromine software. The mineralization was wireframed at the cut off grades stated above. Where high grade domains were noted these were subset from the overall wireframes.</li> <li>• Where historic workings are also mapped these were also wireframed and deducted from the resource. These estimates were validated against historic production records where known.</li> <li>• Geological models were used to constrain the mineralization models. The method used is considered to be suitable for the estimation of Inferred Resources. More complex methods may be appropriate for resources of higher category.</li> <li>• There is modest previous mining activity across most of the resources. These provide evidence of width, dip, strikes, etc.</li> <li>• Top cuts were not applied, however their influence on the wireframes was reduced by domaining high grade zones separately.</li> <li>• No data was available for reconciliation. The model was compared to the drill data directly on section using the geological features as a guide. Minor adjustments were made following this.</li> </ul> <ul style="list-style-type: none"> <li>• Lower grade cut offs were used to define the edges of the wireframes,</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>model data to drill hole data, and use of reconciliation data if available.</i>	whilst the higher grades were not cut due to a lack of statistics. The higher grade areas were wireframed separately so as not to affect the surrounding lower grade haloes. the wireframes were checked manually against the cross sectional interpretations for consistency. Minor changes were made following this process.
Moisture	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>The estimates are made on a dry basis as little information exists reliably outlining the moisture contents.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>The lower cut off were arbitrarily assigned after a visual assessment of the mineralization on cross sections. No upper cuts were applied, but their potential influence was reduced by separately domaining any high grade areas.</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All resources are assumed to be open pitable. This is due to the oxide nature of the upper parts of the resources and the relatively shallow nature of the drilling to date. No mining studies have been made to date for any resource.</li> </ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All mineralisation is assumed to be free milling on the basis of historic data. Most other resource contain some visible gold either in panned drill cuttings or directly observed in historic workings. A significant proportion of gravity recoverable gold would be expected in any future processing.</li> </ul>
Environmental factors or assumptions	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>The assumed operations will have typical waste dumps as seen in many sites across Western Australia. These include dewatering and tailings disposal facilities.</li> <li>No assumed operation in the future will have an unusual impact on the environment.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>reported with an explanation of the environmental assumptions made.</i>	
Bulk density	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>No bulk density data were available. Bulk densities were assumed based on industry experience elsewhere in Western Australia. An SG of 2.2t/m<sup>2</sup> was assumed for all material. This reflects the semi oxidised nature of most of the material.</li> </ul> <p>An assumed SG of 2.2 has been assumed for all material based on experience elsewhere in this region.</p>
Classification	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>The classification of all resources as Inferred reflects various unknowns of the data. Despite this there is sufficient continuity of the mineralisation across all resources.</li> <li>As currently understood these estimates give a fair reflection of the resources.</li> </ul> <p>The result is appropriate in the competent person's view.</p>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>The resources have received a number of peer reviews. No key issues were raised.</li> </ul>
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>The classification of the resources as Inferred reflects the presently understood confidence in the continuity of dimensions and grade of the resources.</li> <li>Various features require additional drilling. In all cases the resources remain open, particularly down dip.</li> <li>A more rigorous statistical understanding of the mineralisation in the resources will be made following more detailed drilling.</li> <li>The resources stated in this report relate to local estimates. Further drilling is warranted before any economic evaluation is made.</li> <li>Details of assumptions used are stated in the report.</li> </ul>