

25 JANUARY 2018

ASX/MEDIA RELEASE

## COMPLETION OF MERGER AND STATEMENT OF 1.3Moz JORC RESOURCE FOR APHRODITE GOLD PROJECT

Spitfire Materials Limited (ASX: SPI) is pleased to advise that, following its successful merger with Aphrodite Gold Ltd (ASX: AQQ) by way of a scheme arrangement, the Company has acquired the Aphrodite Gold Project and its 2012 JORC compliant 1.3Moz gold resource, located 65km north of Kalgoorlie (Figure 1).

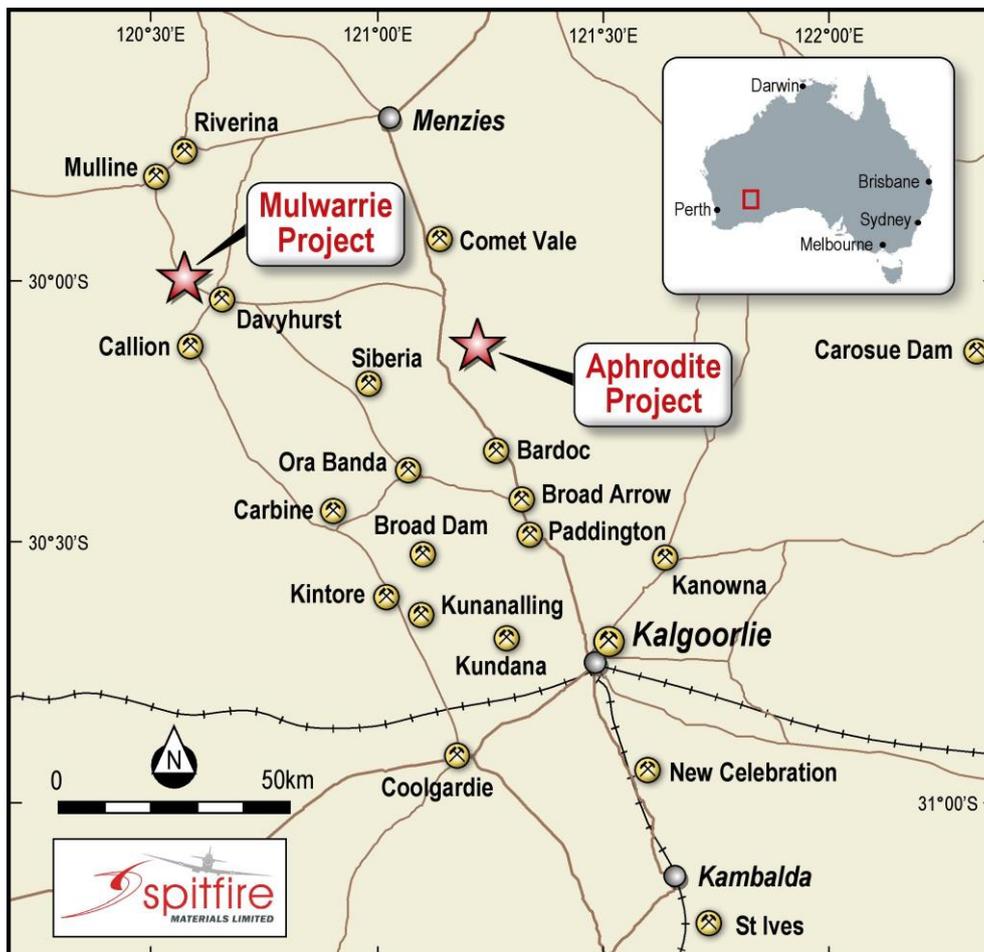


Figure 1: Aphrodite Gold Project Location Map

The 1.3Moz 2012 JORC Mineral Resource was completed as part of Aphrodite Gold's Pre-Feasibility Study in 2017 by independent resource consultants McDonald Speijers (MS). Accordingly, the information outlined below was announced to the market on 27 June 2017 by Aphrodite.

Spitfire confirms that there has been no material change to the Mineral Resource estimate since that date and it is now being released by Spitfire for the first time. The 1.3Moz Mineral Resource will form the basis of the Company's 2018 exploration program and potential future Definitive Feasibility studies.

Spitfire recently announced a \$5.33 million capital raising to underpin its gold exploration and development strategy for 2018, including a major new 5,000m resource in-fill and extensional drill program scheduled to commence at the Aphrodite Project later this month (see ASX announcement, 18 January 2018).

**Table 1: McDonald Speijers Aphrodite Project Resource Estimation**

Domain	Indicated			Inferred			Indicated + Inferred		
	Tonnes	Gold		Tonnes	Gold		Tonnes	Gold	
	(Mt)	(g/t)	(koz)	(Mt)	(g/t)	(koz)	(Mt)	(g/t)	(koz)
<b>OP (0.5g/t cut-off)</b>	6.2	2.1	411	4.0	1.5	187	10.2	1.8	598
<b>UG (3.0g/t cut-off)</b>	1.6	6.6	330	1.4	7.5	332	2.9	7.0	663
<b>Total Resource</b>	<b>7.8</b>	<b>3.0</b>	<b>741</b>	<b>5.3</b>	<b>3.0</b>	<b>520</b>	<b>13.1</b>	<b>3.0</b>	<b>1,261</b>

The resource estimate was classified in accordance with the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC Code 2012) and in accordance to ASX listing rule 5.8 the information below is in support of this revision.

### Geology

Aphrodite is a typical shear-zone hosted lode gold mesothermal deposit hosted by greenstone belt rocks in the Bardoc Tectonic Zone (BTZ) which also hosts several other notable gold deposits. The Aphrodite prospect comprises a suite of intermediate to felsic porphyries that have intruded a sequence of basalts and dominantly volcanic-derived epiclastic rocks. The main zones of mineralisation defined so far (the near vertically dipping Alpha and Phi lodes) lie within a regional N-S sericite-pyrite-arsenopyrite alteration system that extends for about 3km along strike.

### Drilling techniques and spacing

Aphrodite Gold database contains 1,998 holes for an aggregated length of 236,050m. The resource estimate is based on 1,017 of these Reverse Circulation (RC) and Diamond Drill (DD) holes for a total length of 171,381m. The average drill spacing at Aphrodite is at most 40x40m with infill drilling down to 20x20m in some areas. Drill holes have been oriented orthogonally to the general trend of the mineralised bodies. Hole collars have been surveyed by means of Differential Global Positioning System (DGPS).

### Sampling and Sub Sampling Techniques

Reverse circulation (RC) drilling was used by Aphrodite Gold to obtain 1m samples from which 3-5 kg was pulverized to produce a 50g charge for fire assay. All samples were collected off the cyclone of the RC rig(s) with a rotary cone splitter. Bulk samples were weighed to ensure adequate recoveries. Where Diamond Core drilling was used then samples were collected to the nearest 1m interval based on geological boundaries. Field duplicates were collected at a rate of about 1 in 10, and certified standards and blanks were also inserted at regular intervals prior to samples being sent to the laboratory.

### Sample Analysis Method

Samples weighing around 3-5 kg each were submitted to Genalysis laboratory where they were dried and pulverised using best industry practise. Grind checks were also done at regular intervals to ensure acceptable results. Quality control procedures involved the use by the laboratory of certified reference material, assay standards and blanks. All samples were assayed for gold via the fire assay/atomic absorption (FA/AA) technique using a 50gm charge.

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## Estimation and Modelling Techniques

The revised resource was calculated using the Recovered Fraction (RF) modelling method. This is a proprietary method developed by McDonald Speijers. The RF method involves the outlining of an envelope containing all the intersections of interest for each recognised mineralised domain. Within each defined domain a process of intersection selection is then undertaken using a set cut-off value and other set parameters and tests. If the model is to be used for mine planning, then ore loss and dilution skins of specified length may be applied to the edges of the selected ore intersections.

Fixed length composites are then formed for each drill hole wherein the proportion of (diluted) ore intersection is calculated along with the metal content of the intersection. The proportion is called the fraction and has a value between 0 and 1. The metal content is called the accumulation and is calculated as the product of the fraction and the length weighted average grade of that portion of the intersection that falls within the composite length. There may be more than one accumulation for each fraction if more than one metal is involved.

The calculation of the fraction and accumulation is typically carried out concurrently for a range of different cut-offs (or other parameters) with these values interpolated into the model blocks in a single pass.

### Cut-Off Parameters

As per the previous resource estimate in 2013 it was considered practical to divide the mineralisation into near surface (above 155 metres depth below surface) and deeper resource (155-440 metres below surface) and to apply varying cut off grades to each depth domain to reflect potential open pit and underground mining scenarios.

It should be noted that the resources reported refer to separate volumes with no overlaps.

### Mining Factors

Given the steep nature of the mineralised bodies it seems likely that part of the resource will be extracted by open pit methods with the remainder extractable by underground methods. The already completed Scoping Study completed in 2011 showed that this was the most likely scenario (refer ASX Announcement 9<sup>th</sup> February 2011)

### Metallurgical Factors

No metallurgical factors have been applied to the resource estimate.

The 2017 resource estimate (Table 1) incorporated results from AQQ's 2016 Diamond Drill (DDH) program. The mineral resource is open at depth with strong mineralisation evident below 440 metres to a depth of at least 600 metres however the drilling density below 440 metres is insufficient to allow a resource to be estimated without additional drilling.

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## **DISCLAIMERS AND FORWARD-LOOKING STATEMENTS**

This announcement contains forward looking statements. Forward looking statements are often, but not always, identified by the use of words such as "seek", "target", "anticipate", "forecast", "believe", "plan", "estimate", "expect" and "intend" and statements that an event or result "may", "will", "should", "could" or "might" occur or be achieved and other similar expressions.

The forward-looking statements in this announcement are based on current expectations, estimates, forecasts and projections about Spitfire and the industry in which they operate. They do, however, relate to future matters and are subject to various inherent risks and uncertainties. Actual events or results may differ materially from the events or results expressed or implied by any forward-looking statements. The past performance of Spitfire is no guarantee of future performance.

None of Spitfire's directors, officers, employees, agents or contractors makes any representation or warranty (either express or implied) as to the accuracy or likelihood of fulfilment of any forward-looking statement, or any events or results expressed or implied in any forward-looking statement, except to the extent required by law. You are cautioned not to place undue reliance on any forward-looking statement. The forward-looking statements in this announcement reflect views held only as at the date of this announcement.

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## **Competent Person's Statement**

*The information in the report to which this statement is attached that relates to Resource estimates is based on information compiled by Mr Diederik Speijers, Director of McDonald Speijers Consultants, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Diederik Speijers has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Speijers consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*The information in this announcement relating to Exploration Targets, Exploration Results and Mineral Resources is based on information compiled by the Company's proposed Managing Director, Mr John Young, a competent person, who is a Member of the Australian Institute of Mining and Metallurgy. Mr Young has sufficient experience relevant to the style of mineralisation and to the type of activity described to qualify as a competent person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr Young has disclosed to the Company that he is a substantial shareholder in the Company. Mr Young consents to the inclusion in this announcement of the matters based on his information in the form and content in which it appears*

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## JORC Code, 2012 Edition – Table 1 report - Aphrodite

### 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>About 80% reverse circulation chips and 20% half or quarter core.</li> <li>Chips over 1m rotary or riffle split on site to ~3kg and core was sawn on 1m intervals.</li> <li>Continuous sampling below unmineralised overburden layer.</li> <li>Chips crushed to 3mm then 2.5kg pulverized, core crushed and pulverized entirely.</li> <li>Standard 50g fire assay (84%), AR digest on unknown (16%).</li> <li>Large number of drilling programs by several owners over 20-year period.</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>Reverse circulation (80%) and HQ or NQ core (20%)</li> <li>Aircore and rotary air blast holes excluded from resource estimation.</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> <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>All core measured in tray for recovery.</li> <li>Chip recovery not documented for historic drilling.</li> <li>Generally high core recovery recorded.</li> <li>RC chip recovery in recent drilling recorded by weight but not recorded in most historic drilling (prior to 2010).</li> <li>No observed relationship between recovery and grade.</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 core and chip intervals geologically logged.</li> <li>Historic logging retrieved and combined with recent data with some minor gaps in metadata.</li> <li>Logging includes lithologies, alteration, mineralization, colour, oxidation, regolith, moisture, etc.</li> <li>Purpose drilled core holes for metallurgical and geotechnical data collection.</li> </ul>

Criteria	JORC Code explanation	Commentary
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>• Core was half or quarter sawn depending on program.</li> <li>• Chips were rotary or riffle split depending on program but generally in accordance with standard industry methods at the time of the program. Limited wet samples were speared in historic drilling.</li> <li>• Duplicate field samples taken from RC chips for most programs. 1 in 20 for recent drilling and well recorded. More variable in historic drilling and details not always well recorded.</li> <li>• Duplicate sampling of sawn core in recent drilling.</li> <li>• Sample sizes are generally considered adequate within the bounds of what is practical.</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>• Majority of samples prepared and assayed by industry standard techniques for gold deposits using well established laboratory services.</li> <li>• Recent checking of fire assays by bulk Leachwell and screen fire methods to guard against the possible presence of coarse free gold grains and to investigate refractory character of mineralization.</li> <li>• Blind field duplicates submitted as well as reference standards although documentation not always well preserved in historic programs due to ownership changes.</li> <li>• Interlab checks undertaken during recent drilling but not recorded in historic programs.</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>• No specific twin hole program has been undertaken but there are numerous opportunistic twin holes that show reasonable correlation given the nature of the mineralization but this must necessarily be a qualitative comparison.</li> </ul>
Location of data points	<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>• Downhole surveys by gyro, multi shot or single shot, generally on nominal 30m intervals. One batch of recent RC drilling suffered from instrumental errors on dip measurements.</li> <li>• Collars located by standard survey for recent drilling. Details for historic drilling not always well recorded but at least some were documented as location by regular survey.</li> <li>• Grid system based on AMG84 Zone 51. Coordinates truncated for modelling purposes.</li> <li>• Surface topography wireframe constructed from drill collar elevation data. Topographic relief is very low.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Some historic hole collars set at nominal elevations and required minor adjustment to the topo surface. Any errors in this process are considered small and are not critical to the resource estimation.</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>Data spacing is highly variable, particularly in deeper parts and lateral extremes of the mineralization where it may be sparse.</li> <li>The mineralization is contained within broad structural zones but is not always able to be readily correlated between intersections.</li> <li>The estimation technique has been chosen to deal with this issue and it also reflects in the assigned resource categories.</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>Broad mineralizing structures are well recognized and sub-vertical to steep dipping. Mineralised sub-structures appear to be mostly parallel to broader zones.</li> <li>Drill holes are generally oriented to be as perpendicular as possible to these structures, that is east or west orientation and inclined at approximately 60 degrees.</li> <li>Some holes are oriented on north-south sections where an additional mineralised cross structure has been postulated.</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 hand delivered to sample preparation facility in Kalgoorlie for recent drilling but the procedure is not documented for historic drilling.</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>Internal audits of sampling techniques as well as data handling and validation was regularly conducted by Aphrodite Geologists prior to the merger, as part of due diligence and continuous improvement and review of procedures.</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><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Aphrodite Gold is now a wholly-owned subsidiary of Spitfire Materials Ltd and has 100% ownership of 5 mining leases, 1 exploration licence and 2 prospecting licences that cover the project area. All are granted with the mining leases nearest expiry year being 2028.</li> <li>There are no known environmental or heritage encumbrances in the immediate vicinity of the deposit which might impact on its exploitation.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Project has had many owners over more than 20 years and has been reviewed multiple times. However not many historical documents are currently available.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>Discontinuous shoots of low to moderate tenor gold mineralisation within two broader sub-parallel mineralised structural zones. Mineralisation is beneath a substantial thickness of leached overburden. Free milling in upper oxidized and partially oxidized zones but mostly refractory in the primary zone.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No recent drilling is reported in this announcement. The previous drilling was reported by Aphrodite Gold Limited (ASX: AQQ) prior to the merger with Spitfire.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>No drilling is included in this report but previous drilling completed reported intervals that were length weighted in the downhole direction. This ensured that smaller intervals receive less weighting.</li> <li>No high-grade cut-off were applied to exploration/infill drilling</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <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>No drill results are included in this report but previous drill programs have indicated that mineralisation at Aphrodite is interpreted to be hosted by shear zone and linking structures within the BTZ which trends about NNW.</li> <li>Typically, the angular difference between the drillholes and mineralisation is about 35°, given the sub-vertical nature of the mineralised bodies.</li> </ul>

Criteria	JORC Code explanation	Commentary
<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>• No maps are included in this report. The previous drilling was reported by Aphrodite Gold Limited (ASX: AQQ) prior to the merger with Spitfire.</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>• No drill results are included in this report with the resource estimation update. The previous drilling was reported by Aphrodite Gold Limited (ASX: AQQ) prior to the merger with Spitfire.</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>• The previous exploration work completed on the deposit was done by previous owners and are too extensive to report in the context of this announcement.</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>• Spitfire has planned a 5,000m diamond drill program to infill and upgrade the Aphrodite JORC resource reported above.</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> <li>• <i>Data validation procedures used.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Various historic databases have been combined with recent drilling data (since 2010) to form a unified database held in a Datashed model database. Some metadata is missing for historic drilling programs.</li> </ul>
<i>Site visits</i>	<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>• Site has been visited on three occasions by personnel from McDonald Speijers and Mr John Young.</li> </ul>
<i>Geological interpretation</i>	<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>• Major structurally controlled envelopes of mineralization can be interpreted with confidence in most cases from relatively wide spaced holes.</li> <li>• Shoots within these envelopes are less continuous and not so easily defined but are preferentially developed on hanging and footwalls of envelopes. Multiple interpretations of shoots are possible.</li> <li>• This lack of defined shoot continuity affects the assigned resource category.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Resource extends NNW over a strike length of 1700m and includes two separate major mineralised zones of a maximum width of 350m.</li> <li>Depth below surface to top of resource between 35m and 60m.</li> <li>Resource defined to maximum 500m below surface.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>Block modelling using proprietary Recovered Fraction composites selected as most appropriate for this mineralisation as this determines tonnage at the compositing stage rather than relying on grade smoothing. Yields a block model with an ore fraction and ore grade in each cell for specific assay cut-offs.</li> <li>Interpolation by inverse distance weighting within broadly defined envelopes of mineralisation and using dynamically adjusted search ellipsoid orientation.</li> <li>Domains defined on major structural features hosting mineralisation as well as interpretation of weathering surfaces.</li> <li>Search ellipsoids are anisotropic with radii dependent on sample spacing and use dynamically adjusted orientation guided by a manual interpretation of mineralised trends.</li> <li>Block size 10m (NS) by 5m (EW) by 5m (vert) with subcells to half of these dimensions.</li> <li>Sulphur and arsenic also estimated as these may affect metallurgical performance.</li> <li>Minimal top-cutting of gold grades after investigation of statistical and spatial distribution of high grade samples.</li> <li>Estimates validated visually on 40m drill cross sections and in plan.</li> </ul>
<i>Moisture</i>	<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>All estimates based on dry bulk density.</li> </ul>
<i>Cut-off parameters</i>	<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>Nominal assay cut-off determined by preliminary estimation of current cost and revenue parameters. Different cut-off values for surface and underground extractable mineralisation based on depth from surface of 160m.</li> </ul>
<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</li> </ul>	<ul style="list-style-type: none"> <li>Both undiluted (resource) and diluted estimates have been made at a range of cut-offs.</li> <li>Undiluted estimates apply maximum internal waste and minimum width parameters at the compositing stage for intersections at specific assay cut-offs.</li> <li>Diluted estimates additionally include ore loss and waste dilution</li> </ul>

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	<p><i>always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i></p>	<p>skins to the edges of all intersections.</p> <ul style="list-style-type: none"> <li>• Allowances for waste and mining skins are based on experience with models of this type.</li> </ul>
<p><i>Metallurgical factors or assumptions</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A distinction is made between surface extractable generally free-milling mineralization and underground extractable ore which is partially refractory.</li> <li>• Assumptions about metallurgical recovery are based on test work conducted on cores as well as a large suite of Leachwell analyses on sample composites selected to be representative of the surface extractable mineralisation.</li> </ul>
<p><i>Environmental factors or assumptions</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• At this time no issues are anticipated with waste and process residue handling that would be outside the regular operating conditions for mines of this type in the Eastern Goldfields.</li> <li>• Heritage survey has identified one site of cultural significance some 500m from deposit.</li> </ul>
<p><i>Bulk density</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Dry bulk density estimates have been made for mineralization according to depth below surface and mineralised domain.</li> <li>• Estimates are based on historic core measurements and gamma-gamma logging for underground extractable material and on recent core measurements alone for surface extractable material.</li> <li>• Where deemed appropriate, waxing of cores has been undertaken prior to measurement by water displacement.</li> </ul>
<p><i>Classification</i></p>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <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>	<ul style="list-style-type: none"> <li>• Classification takes account of the relative interpretative uncertainties of this style of mineralization and the methods used for estimation.</li> <li>• Drill hole spacing is the most significant factor in classification and account is taken of the data quality in overall determination.</li> <li>• Mineralisation is classified as Indicated, Inferred or Null (not resource) based on personal visual assessment by the Competent Person.</li> </ul>

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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>Current resource estimate not reviewed at this stage but several previous estimates and reviews have been made at earlier stages in the project's history including by Goldfields, Coffey and TetraTech.</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 proprietary Recovered Fraction method was selected for estimation because of the difficulty of reliably interpreting and correlating assay-defined shoots within the identified mineralised structural zones. This technique preserves tonnage-grade relationships in regions of variable drill data spacing whereas conventional assay smoothing techniques do not.</li> <li>The estimates tend towards being global rather than local in that ore tonnage may be spread over an aggregation of cells. This contrasts with conventional grade smoothing methods which assume that a single cell contains 100% ore or waste based on a post-applied cut-off grade filter.</li> <li>Global estimates using the RF method are relatively immune to changes in data density and are insensitive to different smoothing algorithms.</li> <li>The deposit is undeveloped and thus no production data is available.</li> </ul>