27 June 2017

The Company Announcements Office
Australian Securities Exchange Limited

Prefeasibility Study Results

Aphrodite Gold Limited ("Aphrodite" or "the company") wishes to provide an update to their Pre-feasibility Study. The board and management are greatly encouraged by the results. The Pre-feasibility study included an update to the mineral resource estimation; a comprehensive metallurgical testwork program and process design package including CAPEX and OPEX assessment; open pit mine optimisation, design and cost schedule; environmental baseline assessments including fauna, flora and vegetation, short range endemic invertebrates, subterranean fauna, surface water assessment, material characterisation for use in landform design and, a soil assessment; access road option study; and a preliminary tailing storage facility location and design assessment.

Key Points

- Final prefeasibility documentation of all technical, environmental, infrastructure and regulatory components are nearing completion
- **Indicated and inferred resources are now 13.1 million tonnes @ 2.99 g/t gold for 1.26 million contained ounces compared to the previous estimate *of 28.7 million tonnes @ 1.52 g/t gold for 1.4 million ounces***
- The open pit mineral resource estimate is now 10.2 million tonnes @ 1.8 g/t gold for 598,000 ounces.
- The underground mineral resource estimate is now 2.9 million tonnes @ 7.0 g/t gold for 663,000 ounces, an increase in grade and ounces from 4.6 g/t and 485,000 ounces respectively.
- **The mineral resource is open at depth with strong mineralisation evident below 440 metres to a depth of at least 600 metres**

- Comprehensive metallurgical testwork has established that oxide, transition and primary mineralisation all can be effectively processed incorporating pressure oxidation for an overall metallurgical recovery of 86%. The Upper Primary composites achieved a metallurgical recovery of 92%.

- Processing operating costs are estimated at $38 per tonne for conventional gravity, carbon in leach (CIL) and $53 per tonne incorporating pressure oxidation (POX) followed by CIL

- Capital for a 1 million tonne per annum plant has been estimated at $81M for conventional CIL, and $123M incorporating POX.

- Open pit optimisation to a vertical depth of 155 meters incorporating POX processing resulted in mineralised material of 2.7M tonnes @ 2.2 g/t for 187,000 ounces. For the oxide and Alpha transition zone mineralisation, using conventional CIL processing resulted in a mineralised material 450,000 tonnes @ 2.6 g/t gold for 38,000 ounces.

- The positive metallurgical results and the increase in underground ounces to 663,000 ounces and grade to 7.0 g/t gold of the underground resource has prompted a review of the 2013 Tetra Tech underground mining study.

- 2016 Diamond Drill program obtained greater than 95% core recovery across all Resource, Metallurgical and Geotechnical drilling.

- Other prefeasibility study activities including base line environmental studies for flora; fauna; short range endemic invertebrates; subterranean fauna; material characterisation, surface water assessment, Heritage survey, risk assessments and a tailing storage facility preliminary assessment, were completed without any major impediments identified.

- **Baseline surveys commissioned are in sufficient detail to provide the basis to commence the process of government and regulatory approvals including clearing permit, project management plan and mine closure plan and indicate there are no impediments to obtaining approvals subject to no major changes in legislation.**

Cautionary Statement

The Company advises that the Pre-feasibility Study referred to in this announcement is based on lower-level technical and preliminary economic assessments, and does not yet support a statement of Ore Reserves, as defined under the 2012 edition of the JORC Code, or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the PFS will be realised. There is a low level of geological confidence associated with the Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated or Measured Mineral Resources or that the production target or preliminary economic assessment will be realised.

Some statements in this report regarding estimates or future events are forward-looking statements. They involve risk and uncertainties that could cause actual results to differ from estimated results. Forward-looking statements include, but are not limited to, statements concerning the Company's outlook, and mineralised material estimates. They include statements preceded by words such as "anticipated", "expected", "targeting", "likely", "scheduled", "intends", "potential", "prospective" and similar expressions.

Mineral Resource Estimate

Aphrodite commissioned independent resource consultants McDonald Speijers (MS) to generate a new resource estimate. MS has previously undertaken a mineral resource estimate in May 2012 (refer to ASX Announcement 16 May 2012). The new mineral resource estimate is an update to the Tetra Tech estimate of 2013 (refer to ASX Announcement 12 June 2013).

The new revised 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 50 gm charge.

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 9th February 2011)

Metallurgical Factors

Metallurgical testwork has been carried out for the Pre-Feasibility Study- refer to sections below on the Metallurgical testwork and process design.

No metallurgical factors have been applied to the resource estimate.

The new resource estimate (Table 1) incorporates results from the Company's 2016 Diamond Drill (DDH) program, which aimed to target and further define the oxide/transition zone mineralisation considered to be mineable from an open pit. The 2016 drill program included Resource infill, Metallurgical and Geotechnical drill holes which all achieved 95% core recovery.

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.

Table 1 McDonald Speijers Aphrodite Resource Estimation

	Indicated			Inferred			Indicated + Inferred		
	Tonnes	Gold		Tonnes	Gold		Tonnes	Gold	
Domain	(t)	(g/t)	(oz)	(t)	(g/t)	(oz)	(t)	(g/t)	(oz)
OP (0.5g/t cut-off)	6,213,875	2.06	411,002	3,956,171	1.47	187,199	10,170,045	1.83	598,201
UG (3.0g/t cut- off)	1,556,158	6.6	330,362	1,380,599	7.49	332,303	2,936,758	7	662,665
TOTAL	**7,770,033**	**2.97**	**741,364**	**5,336,770**	**3.03**	**519,502**	**13,106,803**	**2.99**	**1,260,866**

The recently completed infill diamond drilling program provided valuable detailed geological information on the depth of the oxide and transition zones, which results in an update to the geological model and a better understanding of the gold distribution. The new geological modelling is shown by the increase in the gold grade from 1.52g/t (Table 2) to 2.99g/t.

Table 2- TetraTech 2013 Mineral Resource Estimate

	Indicated			Inferred			Indicated + Inferred		
	Tonnes	Gold		Tonnes	Gold		Tonnes	Gold	
Domain	(t)	(g/t)	(oz)	(t)	(g/t)	(oz)	(t)	(g/t)	(oz)
OP (0.5g/t cut off)	13,910,000	1.21	542,000	11,520,000	1	369,000	25,430,000	1.11	911,000
UG (3.0g/t cut-off)	2,480,000	4.47	357,000	830,000	4.79	128,000	3,310,000	4.55	485,000
TOTAL	**16,400,000**	**1.7**	**899,000**	**12,350,000**	**1.26**	**497,000**	**28,740,000**	**1.52**	**1,396,000**

Metallurgical Testwork Results

The metallurgical testwork program consisted of eight (8) composites from seven (7) diamond drill holes. The drill holes were designed to intersect and provide representative samples from major lithological mineralisation types as well as spatial variations of these lithologies. The program was conducted to develop a whole ore processing method and to specifically investigate the ores amenability to conventional CIL, gravity concentration, flotation, pressure oxidation of flotation concentrate and intensive cyanidation. The results from this testwork were used to select the process flow sheet, develop the process design criteria, size equipment and estimate CAPEX and OPEX (±35%), which are discussed in the section below.

The metallurgical testwork (refer to ASX Announcement 28 April 2017) determined that gold recovery through a gravity and CIL only process route for oxide and Alpha transition zone mineralisation was 88% (45% by gravity), while Table 3 shows the gold recoveries for all material through Gravity, Flotation, Pressure Oxidation & CIL process route.

Table 3- Gold Recoveries

		Gold Recovery (%)				
Zone	Lithology	Gravity	Flotation	POX	CIL	Total
Alpha	Transitional	37	48	99	97	83
	Upper Primary	25	70	99	97	92
Phi	Transitional	22	68	99	97	87
	Upper Primary	13	82	99	97	92
Total		**30**	**59**	**99**	**97**	**86**

Process Design Package

Following the metallurgical testwork program as described above, Strategic Metallurgy completed a Process Design Package including CAPEX & OPEX. The basis of the design is for treatment of a 1Mtpa of ROM ore. Based on the resource distribution and testwork conducted during the PFS, a gold recovery of 86% is estimated.

The metallurgical testwork results, described above, have confirmed that all of the Aphrodite mineralisation can be very effectively processed to achieve 86% recovery by incorporating gravity, flotation, POX and CIL. **A gravity and direct cyanidation process option is possible for the oxide & Alpha transition zone mineralisation**.

Processing Operating and Capital Cost Estimates

Strategic Metallurgy (SM) the company's metallurgical consultants developed a OPEX and CAPEX schedule for the 1 Million Tonne per annum Aphrodite Processing facility.

The capital cost estimate is based on the testwork and process design conducted during the PFS. The major cost estimates have been provided through a combination of quotations from industry suppliers and SM's in-house database.

The operating cost is inclusive of labour, maintenance, power and process plant consumables. Operating cost is relatively evenly distributed between consumables, power and labour. Of the consumables in Case 1, lime and cyanide are the most significant operating cost, $5.82/t and $4.83/t, respectively; whilst comminution and oxygen production are the most significant power components, $7.46/t and $3.96/t, respectively at a power cost of $0.34/kWh.

The CAPEX and OPEX for the Gravity & CIL only processing flow sheet is $80.9M and $38.26/t respectively, while the CAPEX and OPEX for the complete flowsheet including gravity, floatation, POX and CIL is $123M and $53.07/t respectively. A complete breakdown of costs is in Appendix 3.

Open Pit Optimisation and Mining Costs

Entech Pty Ltd was engaged by Aphrodite to complete a pre-feasibility study focusing on only the open pit component of the oxide/ supergene and transitional zones of the total mineral resource. The PFS open pit optimisation follows on from the Scoping Study completed in 2016 (refer to ASX Announcement 19 April 2016).

Entech were provided with the Aphrodite JORC compliant resource completed by MacDonald Speijers as discussed above. Aphrodite requested Entech to complete two open pit optimisations based on two different metallurgical recovery and cost scenarios. The input parameters below are the same for the two scenarios:

- **Geology**- the block model is a diluted and recovered resource model (meaning blocks within the model had been factored to account for estimated mining dilution as well as ore recovery) which eliminates the requirement for mining adjustment factors.

- **Geotechnical**- a Geotechnical testwork program was completed on three HQ3 diamond drill holes. The drill holes were designed for the sole purpose of Geotechnical testwork. The testwork results separated the open pit into four domains; North, East, South East and South West and provided the following inputs for the optimisation

Wall	Alluvial/Oxide	Trans/Lower Trans	Fresh
North	25.2°	42.0°	53.1°
East	28.1°	42.9°	55.1°
South West	33.1°	44.1°	55.1°
South East	37.0°	55.1°	55.1°

- **Production Rates & Costs**- Mining costs were sourced by Entech from open pit contractor quotes for similar size operations to the Company's and ranged from $2.41 to $3.84 per bcm for mineralised material and $2.16 to $3.46 per bcm for waste from surface to a depth of 155m respectively. Drill, Charge & Blast costs were estimated to range in price from $0.88 per bcm in the alluvial & oxide waste to $4.04 per bcm for fresh waste.

- **Hydrology**- no detailed hydrological or hydrogeological information was available so Entech assumed a typical pumping arrangement will be used and that any water inflows into the open pits will not be significant and will not cause delays to mining operations.

The processing costs and recovery input parameters for the two scenarios are based on two separate processing flowsheets. Scenario 1 is for a Gravity/CIL only processing facility, Table 4, and Scenario 2 is for a Gravity, Flotation, POX & CIL processing flow sheet and is shown in Table 5.

Table 4: Scenario 1 Gravity/ CIL only Recovery and Costs

Processing Parameters		**Cost**	**Recovery (Phi)**	**Recovery (Alpha)**	**Recovery (Other)**
Alluvial	$/t ore	$ 38.00	93.0%	93.0%	93.0%
Oxide	$/t ore	$ 38.00	93.0%	93.0%	93.0%
Transitional (North 620)	$/t ore	$ 38.00	68.0%	88.0%	90.0%
Transitional (South 620)	$/t ore	$ 38.00	30.3%	88.0%	90.0%
Lower Transition	$/t ore	$ 38.00	24.0%	43.0%	45.0%
Fresh	$/t ore	$ 38.00	30.0%	30.0%	30.0%

Table 5: Scenario 2 POX/CIL Recovery and Costs

Processing Parameters		**Cost**	**Recovery (Phi)**	**Recovery (Alpha)**	**Recovery (Other)**
Alluvial	$/t ore	$ 38.00	93.0%	93.0%	93.0%
Oxide	$/t ore	$ 38.00	93.0%	93.0%	93.0%
Transitional (North 620)	$/t ore	$ 53.00	87.0%	83.0%	90.0%
Transitional (South 620)	$/t ore	$ 53.00	87.0%	83.0%	90.0%
Lower Transition	$/t ore	$ 53.00	92.0%	92.0%	45.0%
Fresh	$/t ore	$ 53.00	92.0%	92.0%	30.0%

The Aphrodite block model and input parameters and a gold price of $A1,700 were programmed into Datamine's NPV Scheduler 4 software, which generated a series of nested pit shells. Based on these results the final pit is selected and re-run through the software to allow for flat pit floors within the optimisation to reflect practical mining outcomes adhering to a minimum working area constraint. The 'ultimate pit' from both scenarios is shown below in Table 6.

Table 6- Pit Optimisation results

		Scenario 1- CIL	**Scenario 2 POX**
Processing Cost	$M	21.47	160.81
Mining Cost	$M	22.43	73.30
Mineralised Material	tonnes	**447,000**	**2.7M**
Avg Grade	g/t	**2.6**	**2.2**
Contained Metal	oz.	**38,000**	**187,000**
Waste	tonnes	12.1M	30.1M
Stripping Ratio	waste/ore	27.1	11.1
Processing Cost	$/t ore	48.00	59.43
Mining Cost	$/t ore	50.15	27.09
Mining Cost	$/t rock	1.79	2.23
Total Cost	$/t ore	104.09	91.55

The final open pit mine design, schedule and detailed cost analysis was completed on Scenario 2, delivered a possible open pit operation of 2.7Mt of mineralised material at an average grade of 2.2g/t for a total of 187,000oz gold, which includes 2.5Mt @ 2.12g/t for 174,318oz as indicated resource (94.4%) and 150,449t @ 2.55g/t for 12,344oz as inferred resource (5.6%). The life of mine of this possible open pit operation is 3 years through a 1Mt pa processing facility. As this target does include inferred resources there is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the first stage open pit possible operation itself will be realised. The stated first stage open pit possible operation is based on the company's current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. **Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met.**

A detailed mine plan and schedule will be completed as part of further studies.

To minimise the time required to pre-strip waste material overlaying the ore lodes and minimise costs, the proposed open pit design consists of four stages. Stage one of open pit operations at Aphrodite will mine the western portion of the deposit, reducing the time to which ore material is uncovered. Stage two will involve the pre-strip of the north eastern extends of the pit whilst Stage three and four mines the pit to depth. The design parameters for the open pit are outlined in the Appendix 2.

The staged approach allows mining in the western extents of the deposit to complete a pre-strip, uncovering material where grade is highest. There is ~50 m of overburden to be stripped to access the underlying ore. Stage one of the operation utilises a single 200 t excavator and a single 120 t excavator to mine the pre-strip, maximising material movement rates to ensure minimal time to ore exposure. Once ore is uncovered, the 200t excavator will advance to Stage two pre-strip being demobilised. The single 120 t excavator will be utilised to selectively mine ore once pre-stripping of Stage one is complete.

Material movement production rates used in the scheduling of the Aphrodite open pit assumed a combined fleet of an EX1900 and an EX1200 or equivalent excavators, loading CAT777 or equivalent open pit haul trucks. The maximum material movement rates applied early in the mine schedule, consisting of the pre-strip of overburden are 900k t and 600k t per month for an EX1900 and EX1200 respectively. Material movement rates assume adequate minimum working areas and are de-rated over the course of the open pit mine life to account for more difficult material types and limited working areas within the pit at depth.

TetraTech 2011 Underground Scoping Study

Aphrodite engaged TetraTech to complete an underground mining study that formed part of the Company's Scoping Study in 2011 (refer ASX Announcement 9th February 2012).

The results of the 2011 underground study are outlined below

- The annual production rate was building up to 365,000 tonne per annum of high grade mineralised material
- The mining cost of production per tonne is $78/t
- Capital to first production from the underground is $18M

Other Pre-feasibility Activities

Aphrodite engaged Integrate Sustainability Pty Ltd (ISPL) to coordinate and manage the necessary environmental baseline surveys, which will form the basis of government and regulatory approvals necessary to advance the Aphrodite development. The baseline environmental surveys were completed for the Fauna including Malleefowl assessment, Flora & Vegetation, Subterranean Fauna, Short-Range Endemic Species habitat assessment, Soil survey and Heritage. Desktop studies commenced to focus on Potable & Processing Water Exploration options, Access Road Option Study, onsite power options and, Tailings Storage Facility (TSF).

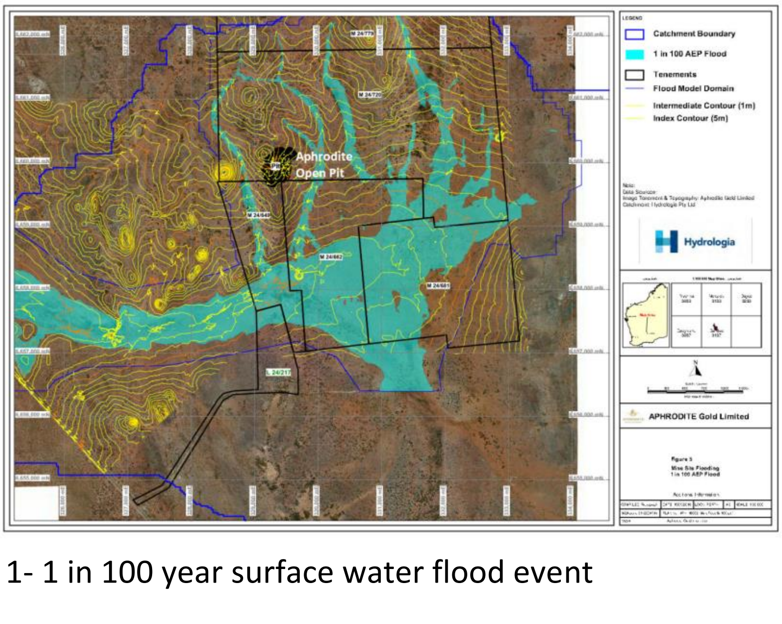
The baseline survey reports are in sufficient detail to provide the basis to commence the process of government and regulatory approvals including clearing permit, project management plan and mine closure plan and indicate there are no impediments to obtaining approvals subject to no major changes in legislation. A summary of the work is outlined below.

Fauna

No priority species and no evidence (direct or indirect) of Malleefowl was observed during the field assessment. Four broad fauna habitats were identified and mapped across the survey area.

Surface Water

The site visit along with desktop analysis of topographical data indicated 3 main drainage channels around the proposed pit location- 1 eastern (running North-South), 1 western (running North-South) and 1 southern (running East-West. The assessment also indicated the Open Pit is unlikely to flood due to location of drainage channels.



Map 1- 1 in 100 year surface water flood event

Flora & Vegetation

None of the native taxa found within the project area were on the Threatened Flora taxa list under the WC Act or the Threatened Species listed under the EPBC Act. The fieldwork confirmed the presence of 7 vegetation types within the study area, none of which are protected at a State or Commonwealth Level.

SRE (Short Range Endemic) Fauna

A total of 15 potential SRE were identified during the desktop assessment, two have the low potential of occurring within the Project area.

During the site visit, two macro habitats were observed, a bare salt playas with fringing vegetation and flat plains with woodlands and shrubland. SRE Fauna is unlikely to be present.

Subterranean Fauna

Study concluded that the Geology within the proposed pit area is non-transmissive and not considered suitable habitats for subterranean fauna. Groundwater within the likely mining area is saline to hypersaline.

Soil Assessment

Soil profile testwork has determined two major soil types, Colluvial and Alluvial, within the project area. The testwork has revealed that the alluvial soil appears to have a subsoil that maybe prone to dispersions and that soil salinity appears to increase with depth. A further detailed soil assessment will be undertaken once the detailed site layout, including processing plant, TSF and other site infrastructure is finalised.

Waste Rock Assessment *(excluding tailings)*

Static testing of the Black Flag waste transition, waste fresh and low grade samples were classified as Potential Acid Forming (PAF). The assessment also concluded that waste rock stock piles are prone to instability and dispersion, which will need to be taken into account when Waste Dump stockpiles are designed. Prior to the detailed waste dump design the Aphrodite block model will be updated to include the results of the Waste Rock Assessment.

Heritage Survey

A heritage survey was completed and facilitated through the Goldfields Land and Sea Council (GLSC) over the Company's Miscellaneous Licences, both granted and pending, and 1 Mining Lease that wasn't covered by the 2011 surveys.

The outcome of the survey was the Aboriginal consultants present had no objections to Aphrodite's proposed activities if Aphrodite adheres to the 250m exclusion zone around Scotia Hill, which is 200m west of the companies Mining Leases and Aphrodite Hill, which is on the western boundary of M24/720 and disturbance to existing waterways and main creeks are avoided.

Access Road Option Study

Following the outcomes of the Surface Water Assessment a civil engineer was appointed to complete a desktop option study into the optimal route for site Access. The study provided Aphrodite with 2 possible access road options. Further studies will be required to accurately estimate the costs of these options.

Onsite Power Study

A Build Own Operate study is currently being completed for the onsite power requirements as an option to utilising grid power

Tailings Storage Facility (TSF)

ATC Williams was engaged by Aphrodite to complete a preliminary site assessment for the location of the TSF. In their desktop report they provided Aphrodite with a summary of suitable TSF design options. Further studies including detailed tailing characterisation will be required before a final TSF design can be developed for Aphrodite.

Funding

The Aphrodite Board recognises that this report contains a number of forward looking statements concerning production costs, operating costs and capex.

The next stage of the Company's project evaluation is to carry out a Definitive Feasibility Study (DFS) commencing in July and likely to take approximately 6 to 9 months at an estimated cost of approximately $10m. The key activities will include further drilling for Metallurgical purposes and enhanced Resource definition, Mining, Metallurgical and Civils studies, Environmental studies and Legal and Regulatory reviews.

This DFS is likely to be Equity funded. During the DFS stage the Company will commence discussions with Lenders and Equity providers for the possible funding of construction of on-site production facilities assuming the results of the DFS can support such funding. Further Equity capital raised is likely to be dilutionary to existing shareholders.

The Company believes there are strong grounds to assume that future funding will be available to further evaluate the potential development of the Aphrodite resource and associated infrastructure requirements. Reasons for this belief include:

- Aphrodite has a track record of past funding, which includes signing a royalty agreement in 2012 with Franco Nevada and recently in 2016 the company undertook a capital raising for $2M from a share placement, including a large sum provided by an Institutional Investor (see ASX announcement 22 June 2016), with an additional $2M raised from shareholders in a Share Placement Plan prior to the commencement of the Pre-Feasibility Study.
- The Aphrodite Board are strongly encouraged by the updated mineral resource estimate prepared by our external geological consultant and discussed within this announcement. The new revised mineral resource estimate with significantly higher grades than the previous JORC resource issued to ASX on 12 June 2013 will facilitate future capital raisings.
- The Board can confirm incomplete confidential discussions with several overseas major gold project investors regarding capital raising which in conjunction with the positive PFS data now released, provides reasonable confidence to the Company

- The Pre-Feasibility Study concludes that further evaluation is required of Aphrodite’s underground mineral resource estimate of 2.9Mt @ 7.0g/t for 663,000 ounces as part of the future potential development. This upgrade in the underground mineral resource is significant.
- Several parties have commenced discussions with the Company about ways of joint venturing whereby the Company may be able to significantly reduce its capital requirements next year following any successful DFS. These discussions are around possible use of other parties production facilities and the mining of the Company’s Mineral resources. Whilst these discussions are at an early stage, and remain confidential, the concepts being discussed may lead to a significant reduction in project capex funding in 2018.
- The Company considers that it has properly addressed the issues highlighted in ASIC Information Sheet 214 regarding forward looking statements and funding options available to the Company.

Yours sincerely

Michael Beer
Company Secretary

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 the report to which this statement is attached that relates to open pit possible operations and Pre-feasibility Studies, is based on information compiled by Mr Eduard Eshuys, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Eduard Eshuys 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 Eshuys consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

APPENDIX 1- LOCATION MAPS

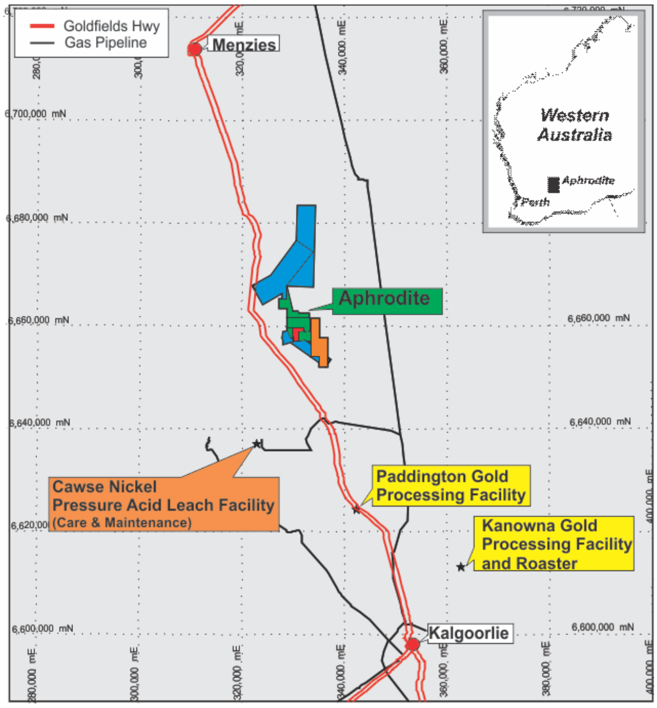


Figure 1- Aphrodite Regional Location Map

The Aphrodite deposit consists of 5 granted Mining Leases, 1 Exploration Licence E24/186, 3 granted Miscellaneous Licences which have been issued for water exploration and an application of a Miscellaneous Licence for haul road construction (see Fig 2)

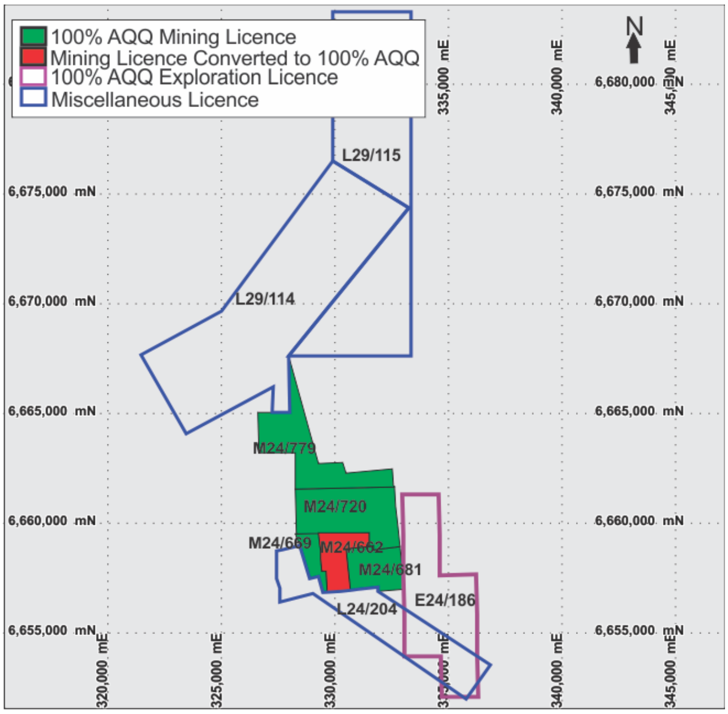


Figure 2- Aphrodite Tenement Map

APPENDIX 2 Open Pit design parameters

Item	Oxide	Transitional	Fresh
North Domain			
Batter Height	15 m	15 m	15 m
Berm Width	8 m	8 m	5 m
Inter Ramp Angle	25°	42°	55°
Batter Angle	37°	60°	70°
Single Lane Haul Road	15 m	15 m	15 m
Dual Lane Haul Road	25 m	25 m	25 m
East Domain			
Batter Height	15 m	15 m	15 m
Berm Width	8 m	5 m	5 m
Inter Ramp Angle	30°	42°	55°
Batter Angle	40°	60°	70°
Single Lane Haul Road	15 m	15 m	15 m
Dual Lane Haul Road	25 m	25 m	25 m
South-West Domain			
Batter Height	15 m	15 m	15 m
Berm Width	8 m	5 m	5 m
Inter Ramp Angle	33°	44°	55°
Batter Angle	45°	55°	70°
Single Lane Haul Road	15 m	15 m	15 m
Dual Lane Haul Road	25 m	25 m	25 m
South-East Domain			
Batter Height	15 m	15 m	15 m
Berm Width	8 m	5 m	5 m
Inter Ramp Angle	39°	55°	55°
Batter Angle	55°	70°	70°
Single Lane Haul Road	15 m	15 m	15 m
Dual Lane Haul Road	25 m	25 m	25 m

APPENDIX 3- Processing Design Flowsheet & detailed OPEX/CAPEX

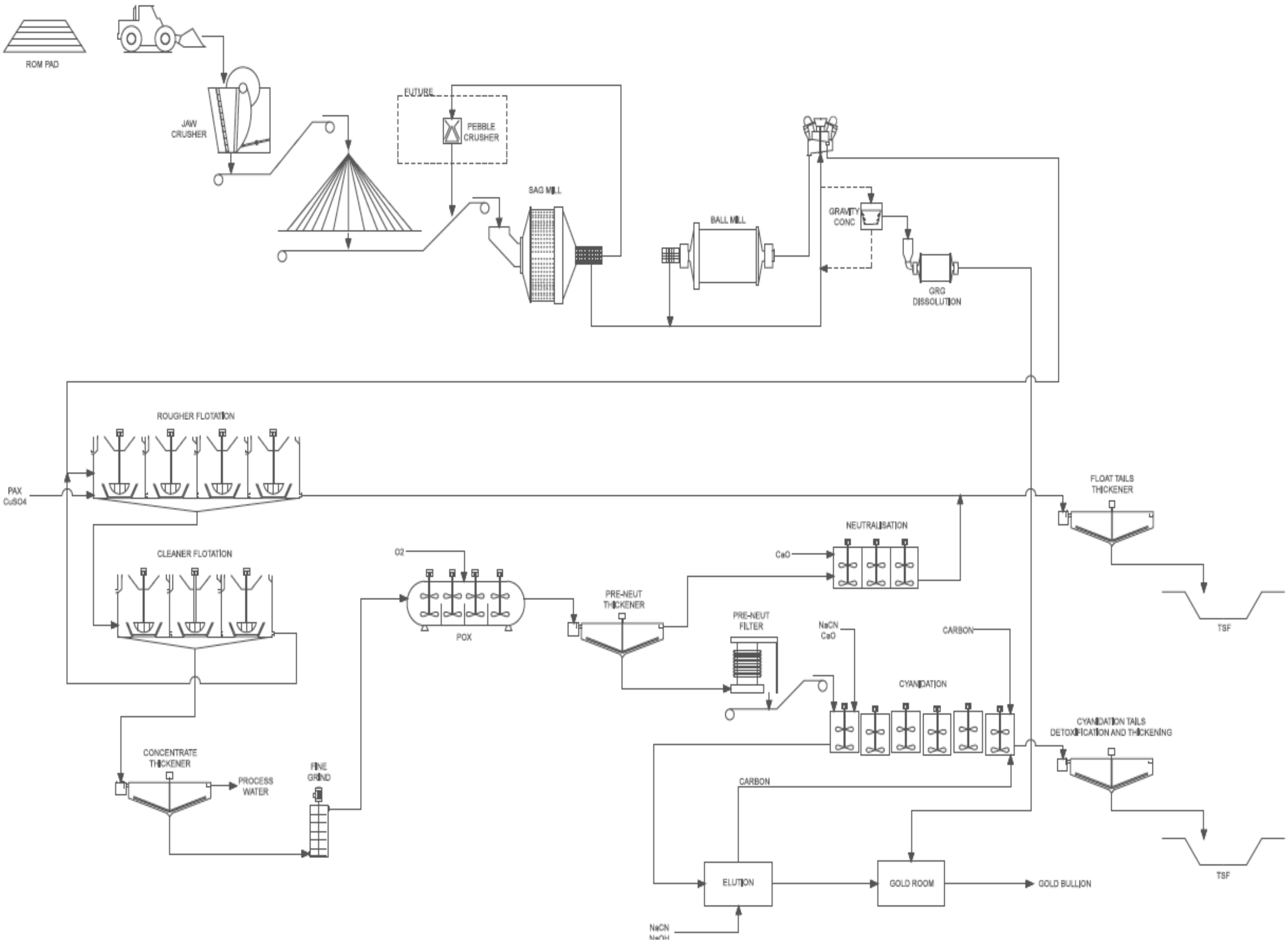


Table 1 shows the detailed CAPEX for the POX flow sheet

DIRECT COSTS	% OF DIRECTS	COST (AUD)
CRUSHING	3%	$3,237,312
COARSE ORE STORAGE AND RECLAIM	2%	$2,231,084
GRINDING AND CLASSIFICATION	16%	$15,529,489
FLOTATION	7%	$6,428,540
FLOTATION TAILS THICKENER	2%	$2,235,410
FINE GRIND AND CLASSIFICATION	2%	$1,605,524
PRESSURE OXIDATION	14%	$13,212,950
NEUTRALISATION	2%	$1,791,437
CYANIDATION	6%	$6,067,581
CYANIDATION TAILS THICKENER	1%	$1,112,007
GOLDROOM/ ELUTION	5%	$4,678,652
CARBON REGENERATION	1%	$1,315,776
REAGENTS	9%	$8,143,960
SITE SERVICES	7%	$6,818,075
OXYGEN PLANT	11%	$10,949,495
INFRASTRUCTURE	10%	$9,952,500
SUBTOTAL		**$95,309,793**
INDIRECT COSTS		
EPCM	12%	$11,437,175
INSURANCES	0.1%	$95,310
TEMPORARY WORKS	2%	$1,906,196
FIRST FILL AND REAGENTS	3%	$2,859,294
SPARES	2%	$1,906,196
CONTINGENCY	10%	$9,530,979
SUBTOTAL		**$27,735,150**
TOTAL		**$123,044,942**

Table 2 OPEX for the POX processing

Item	Case 1
Operating consumables	$16.45
Process labour	$12.36
Power	$17.14
Laboratory	$1.17
Maintenance materials	$5.95
Total	$53.07

Table 3 CAPEX for the Gravity/CIL Only processing

DIRECT COSTS	% OF DIRECTS	COST (AUD)
CRUSHING	5%	$3,237,312
COARSE ORE STORAGE AND RECLAIM	4%	$2,231,084
GRINDING AND CLASSIFICATION	25%	$15,529,489
FLOTATION	10%	$6,407,226
FLOTATION TAILS THICKENER	4%	$2,238,280
FINE GRIND AND CLASSIFICATION	0%	$-
PRESSURE OXIDATION	0%	$-
NEUTRALISATION	0%	$-
CYANIDATION	10%	$6,039,968
CYANIDATION TAILS THICKENER	1%	$936,996
GOLDROOM/ ELUTION	7%	$4,678,652
CARBON REGENERATION	2%	$1,315,776
REAGENTS	8%	$5,110,418
SITE SERVICES	9%	$5,672,428
OXYGEN PLANT	0%	$-
INFRASTRUCTURE	15%	$9,267,500
SUBTOTAL		**$62,665,129**
INDIRECT COSTS		
EPCM	12%	$7,519,815
INSURANCES	0.1%	$62,665
TEMPORARY WORKS	2%	$1,253,303
FIRST FILL AND REAGENTS	3%	$1,879,954
SPARES	2%	$1,253,303
CONTINGENCY	10%	$6,266,513
SUBTOTAL		**$18,235,553**
TOTAL		**$80,900,682**

Table 4 OPEX for the Gravity/CIL process flowsheet

Item	Case 2
Operating consumables	$9.90
Process labour	$11.97
Power	$11.45
Laboratory	$1.11
Maintenance materials	$3.84
Total	$38.26

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	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• About 80% reverse circulation chips and 20% half or qtr core. • Chips over 1m rotary or riffle split on site to ~3kg and core was sawn on 1m intervals. • Continuous sampling below unmineralised overburden layer. • Chips crushed to 3mm then 2.5kg pulverized, core crushed and pulverized entirely. • Standard 50g fire assay (84%), AR digest on unknown (16%). • Large number of drilling programs by several owners over 20 year period.
Drilling techniques	• *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).*	• Reverse circulation (80%) and HQ or NQ core (20%) • Aircore and rotary air blast holes excluded from resource estimation.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• All core measured in tray for recovery. • Chip recovery not documented for historic drilling. • Generally high core recovery recorded. • RC chip recovery in recent drilling recorded by weight but not recorded in most historic drilling (prior to 2010). • No observed relationship between recovery and grade.

Criteria	JORC Code explanation	Commentary
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All core and chip intervals geologically logged. • Historic logging retrieved and combined with recent data with some minor gaps in metadata. • Logging includes lithologies, alteration, mineralization, colour, oxidation, regolith, moisture, etc. • Purpose drilled core holes for metallurgical and geotechnical data collection.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Core was half or quarter sawn depending on program. • 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. • 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. • Duplicate sampling of sawn core in recent drilling. • Sample sizes are generally considered adequate within the bounds of what is practical.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	• Majority of samples prepared and assayed by industry standard techniques for gold deposits using well established laboratory services. • 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. • Blind field duplicates submitted as well as reference standards although documentation not always well preserved in historic programs due to ownership changes. • Interlab checks undertaken during recent drilling but mnot recorded in historic programs.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• 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.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Downhole surveys by gyro, mult-ishot or single shot, generally on nominal 30m intervals. One batch of recent RC drilling suffered from instrumental errors on dip measurements. • 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. • Grid system based on AMG84 Zone 51. Coordinates truncated for modelling purposes. • Surface topography wireframe constructed from drill collar elevation data. Topographic relief is very low. • 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.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Data spacing is highly variable, particularly in deeper parts and lateral extremes of the mineralization where it may be sparse. • The mineralization is contained within broad structural zones but is not always able to be readily correlated between intersections. • The estimation technique has been chosen to deal with this issue and it also reflects in the assigned resource categories.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• Broad mineralizing structures are well recognized and sub-vertical to steep dipping. Mineralised sub-structures appear to be mostly parallel to broader zones. • 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.

Criteria	JORC Code explanation	Commentary
		• Some holes are oriented on north-south sections where an additional mineralised cross structure has been postulated.
Sample security	• *The measures taken to ensure sample security.*	• Samples hand delivered to sample preparation facility in Kalgoorlie for recent drilling but the procedure is not documented for historic drilling.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	•

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *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.* • *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.*	• Aphrodite Gold has 100% ownership of 5 mining leases that cover the project area. All are granted with a nearest expiry year 2028. • There are no known environmental or heritage encumbrances in the immediate vicinity of the deposit which might impact on its exploitation.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Project has had many owners over more than 20 years and has been reviewed multiple times. However not many historical documents are currently available.
Geology	• *Deposit type, geological setting and style of mineralisation.*	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

Criteria	JORC Code explanation	Commentary
		overburden. Free milling in upper oxidized and partially oxidized zones but mostly refractory in the primary zone.
Drill hole Information	• *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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *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.*	• Data volume too great to include in this table. Project is in development stage.
Data aggregation methods	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable. Project is in development stage.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• Not applicable. Project is in development stage and individual intersections are too numerous to report here. See main report.

Criteria	JORC Code explanation	Commentary
Diagrams	• *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.*	• See main report
Balanced reporting	• *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.*	• Not applicable. Project is in development stage.
Other substantive exploration data	• *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.*	• Not applicable. Project is in development stage.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Not applicable. Project is in development stage.

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *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.* • *Data validation procedures used.*	• 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.

Criteria	JORC Code explanation	Commentary
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Site has been visited on three occasions by personnel from MS including during drilling operations by current owner.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Major structurally controlled envelopes of mineralization can be interpreted with confidence in most cases from relatively wide spaced holes. • 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. • This lack of defined shoot continuity affects the assigned resource category.
Dimensions	• *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.*	• Resource extends NNW over a strike length of 1700m and includes two separate major mineralised zones of a maximum width of 350m. • Depth below surface to top of resource between 35m and 60m. • Resource defined to maximum 500m below surface.
Estimation and modelling techniques	• *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.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.*	• 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. • Interpolation by inverse distance weighting within broadly defined envelopes of mineralisation and using dynamically adjusted search ellipsoid orientation. • Domains defined on major structural features hosting mineralisation as well as interpretation of weathering surfaces. • Search ellipsoids are anisotropic with radii dependent on sample spacing and use dynamically adjusted orientation guided by a manual interpretation of mineralised trends. • Block size 10m (NS) by 5m (EW) by 5m (vert) with subcells to half of these dimensions. • Sulphur and arsenic also estimated as these may affect metallurgical performance.

Criteria	JORC Code explanation	Commentary
	• *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Minimal top-cutting of gold grades after investigation of statistical and spatial distribution of high grade samples. • Estimates validated visually on 40m drill cross sections and in plan.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• All estimates based on dry bulk density.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• 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.
Mining factors or assumptions	• *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.*	• Both undiluted (resource) and diluted estimates have been made at a range of cut-offs. • Undiluted estimates apply maximum internal waste and minimum width parameters at the compositing stage for intersections at specific assay cut-offs. • Diluted estimates additionally include ore loss and waste dilution skins to the edges of all intersections. • Allowances for waste and mining skins are based on experience with models of this type.
Metallurgical factors or assumptions	• *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.*	• A distinction is made between surface extractable generally free-milling mineralization and underground extractable ore which is partially refractory. • 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.

Criteria	JORC Code explanation	Commentary
Environmen-tal factors or assumptions	• *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.*	• 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. • Heritage survey has identified one site of cultural significance some 500m from deposit.
Bulk density	• *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.* • *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.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Dry bulk density estimates have been made for mineralization according to depth below surface and mineralised domain. • 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. • Where deemed appropriate, waxing of cores has been undertaken prior to measurement by water displacement.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *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).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• Classification takes account of the relative interpretative uncertainties of this style of mineralization and the methods used for estimation. • Drill hole spacing is the most significant factor in classification and account is taken of the data quality in overall determination. • Mineralisation is classified as Indicated, Inferred or Null (not resource) based on personal visual assessment by the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• 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.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• *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.* • *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.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• 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. • 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. • Global estimates using the RF method are relatively immune to changes in data density and are insensitive to different smoothing algorithms. • The deposit is undeveloped and thus no production data is available.

Section 4 Estimation and Reporting of Ore Reserves

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

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.

Criteria	JORC Code explanation	Commentary
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore* • *Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• Not applicable at this time, as no mineral reserve has been estimated or reported.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.

Criteria	JORC Code explanation	Commentary
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.

Criteria	JORC Code explanation	Commentary
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• Not applicable at this time, as no mineral reserve has been estimated or reported.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *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.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Not applicable at this time, as no mineral reserve has been estimated or reported.