

13 June 2013

Company Announcements Office  
Australian Securities Exchange Limited

## **APHRODITE PLANNING TO BUILD MODERN PLANT TO ALSO SERVE AS A REGION GOLD PROCESSING HUB**

- *Plant to process up to 1.5 million tonnes per annum being planned*
- *Aphrodite to process additional ore from neighbouring gold resources*
  - *Significantly longer project economic life expected*
- *First anticipated gold production commencing from late 2015*

Aphrodite Gold Limited (ASX:AQQ) is planning to build, commission and operate the first new ore processing plant in the Kalgoorlie region for the past 20 years with a new oxide and refractory gold processing plant on the site of its Aphrodite Gold Project near Kalgoorlie, Western Australia.

The plant is initially being designed to process up to 1 million tonnes of ore per annum, with the ability to add capacity to 1.5 million tonnes.

The Aphrodite Gold Deposit will be the cornerstone for initial production anticipated to commence from late 2015 with an initial rate of around 30koz gold per annum. It is to start with oxide material increasing to more than 100koz per annum within four years. Plant expansion and custom treatment can significantly increase these projections with higher grade underground refractory ores and sourcing of additional ore.

The plant plans include a pressure oxidation circuit that would be a first for the region that will enable treatment of refractory ore. This ore type is common in the region. Recoveries based on tests on Aphrodite material are projected at around 95% for oxide ore and 90% for refractory ore.

Aphrodite Gold has begun negotiations with a number of more advanced regional gold companies for off take agreements or to sell their ore to the Company. This would substantially increase throughput to improve project economics and to extend the Life of project for the long term.

The Aphrodite gold mine and processing plant prefeasibility study is at an advanced stage with no significant technical obstacles identified to date. Infrastructure in the region is well developed including ready access to power supply, road transport and labour.

The Company Directors are of the view that a new refractory ore processing plant is needed in the region with the nearest existing plant being about 20 years old and 60km from the Aphrodite Gold Project.

The plant and its components are being designed by project engineers Tetra Tech, and consultants METS. Tetra Tech is one of the world's largest engineering companies with more than 350 offices and 14,000 staff worldwide. METS (Mineral Engineering Technical Services) is an Australian-owned leading consultant to the global mining industry.

Yesterday the company announced a 35% increase in its own JORC resource to 1.4 million oz gold. The resource estimate could expand further with additional exploration including drilling of lodes along strike and at depth as well as other targets within the project tenements.

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The Aphrodite mine operating life is currently projected at near 10 years, although there is strong potential for expansion from additional exploration.

Importantly, the plant's economic operating life is likely to be significantly increased by unlocking the neighbouring resources through the anticipated off take agreements or by purchase of resource mentioned previously.

"The history of the Eastern Goldfields bodes well for building a much needed new refractory ore processing plant. Such development will lift the prospects of regional miners and explorers and would be a bonus for the City of Kalgoorlie," said Mr Peter Buttigieg, Chairman of Aphrodite Gold.

"The Company's plan is underpinned by a multiple financing strategy. In addition to its channel to large China-based investors, the Company will complement this with existing funding partners and advanced gold hedging strategies being developed by its financial advisors. "

The Company is in negotiation with China-based investors to buy into the Aphrodite Gold Project. They are attracted to the Aphrodite project because it is of sufficient size and its scale up potential to make a new, environmentally acceptable plant an economic proposition that can occupy a dominant processing position in the region for many years.

Aphrodite has sufficient resources and a highly prospective tenement portfolio (including the adjoining Scotia JV tenements) located in a world class gold province to plan a 1.0-1.2Mt/yr plant, which can also take advantage of other refractory resources nearby that, due to their size, are not capable of supporting their own processing plant.

Aphrodite has appointed three specialist funding advisors including Noah's Rule and Australian National Merchant Capital Investments an intermediary for the China-based investors



Peter Buttigieg  
Chairman of Directors



Wayne Ryder  
Chief Executive Officer

**Note:** The JORC Resource for the Aphrodite Gold Project consists of 16.40Mt @ 1.70g/t Au for 898,000 ounces (Indicated) and 12.34Mt @ 1.26g/t Au for 498,000 ounces (Inferred) totalling 28.74Mt @ 1.52g/t Au for 1.4 Million ounces of gold. This resource has been broken down into two domains; potential open pit (0 to 150m depth) and underground (below 150 to 540m depth). Potential open pit resources consist of 13.91Mt @1.21g/t Au for 542,000 ounces (Indicated) and 11.52Mt @1.00g/t Au for 369,000 ounces (Inferred) totalling 25.43Mt @ 1.11 g/t Au for 911,000ounces at a cut-off grade of 0.5g/t. Potential underground resources consist of 2.48Mt @ 4.47g/t Au for 347,000 ounces (Indicated) and 0.83Mt @ 4.79g/t Au for 128,000 ounces (Inferred) totalling 3.31Mt @ 4.55 g/t Au for 485,000 ounces at a cut off grade of 3.0g/t. Full details of the JORC resource are contained in the Company's ASX announcement of 12 June 2013.

**Competent Person Statement:** The information in this report that relates to exploration targets, exploration results and mineral resources is based on information compiled and reviewed by Leon Reigys Managing and Technical Director of Aphrodite Gold Ltd, who is a Fellow of The Australasian Institute of Mining and Metallurgy (AusIMM) and a Member of The Australian Institute of Geoscientists (AIG). Mr Reigys has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is reporting on as a competent person as defined in the 2012 Edition of "The Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves." Mr. Reigys consents to the inclusion in this report of the matters based on the information compiled by him, in the form and context in which it appears.

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