ASX Code: KGD 20 December 2016



# **ASX Announcement**

# **Woodlark - Project Engineering Update**

Kula Gold Limited's JV partner Geopacific Resources Limited (Geopacific), which is in the second stage of its farm-in to progress the Woodlark Island Gold Project through to production, have released the following Project Engineering update.

Geopacific have mobilised drill rigs and commenced the development drilling program on the island while progressing optimisation studies.



#### 20 December 2016

## GEOPACIFIC RESOURCES LIMITED

ACN 003 208 393

ASX Code: GPR

info@geopacific.com.au www.geopacific.com.au

#### **AUSTRALIAN OFFICE**

Level 1, 278 Stirling Highway Claremont, WA 6010. PO Box 439, Claremont, WA 6910. T+61 8 6143 1823

#### **FIJI OFFICE**

PO Box 9975 Nadi Airport Nadi T +679 6 72 7150 F +679 6 72 7152

#### **DIRECTORS**

Chairman: Milan Jerkovic
Managing Director: Ron Heeks
Non-Exec Director: Mark Bojanjac
Non-Exec Director: Ian Clyne

### **COMPANY SECRETARY**

Matthew Smith

### **PROJECTS**

CAMBODIA: Kou Sa Copper

FIJI:

Nabila Gold Rakiraki Gold Sabeto Gold-Copper Vuda Gold-Copper Cakaudrove Gold-Silver

PAPUA NEW GUINEA: Woodlark Island Gold

## **WOODLARK – PROJECT ENGINEERING UPDATE**

The Board of Geopacific Resources Limited (Geopacific) is pleased to announce an update on work undertaken to optimise the metallurgy and project engineering on the Woodlark Gold Project (Woodlark).

Geopacific's geological team is on site and has commenced the development drillout of Woodlark. Progress is simultaneously being made on studies that will allow Geopacific to:

- · optimise metallurgy and process plant design, and
- rebase both CAPEX and OPEX costs.

The development drillout and rebasing of costs form the basis of work required for Geopacific to deliver a 1.2 million ounce gold reserve by spending a maximum of \$8 million. This will earn Geopacific 51% of Woodlark and complete Tranche 2 of the joint venture with Kula Gold Limited.

## Positive progress on optimisation studies

Kula Gold Limited (Kula) completed the original feasibility study in 2012 at the height of the mining cost cycle. This resulted in high capital and operating costs (CAPEX and OPEX). Geopacific is revisiting the costs in the current environment and finding opportunities for significant savings. Improved plant design and operations are also being considered and costed. This strategy will allow Geopacific to ensure that the optimal build solution is selected.

Geopacific engaged Independent Metallurgical Operations (IMO) to perform an initial strategic review of the metallurgical studies and testwork for Woodlark, the aim being to look at more efficient processing options. This work is already highlighting potentially significant cost savings in both CAPEX and OPEX costs.

### HIGHLIGHTS

- Plant design improvements identified
- Cost drivers identified
- Potential to further optimise cost drivers
- Overall reduction of CAPEX and OPEX costs in sight

### **Geopacific Managing Director Ron Heeks said**

"Drawing on our experience of operating in the Asia Pacific region and the ability to tailor solutions to project requirements, we are seeing encouraging progress in our work to optimise the metallurgical and engineering studies for Woodlark. This is expected to produce significant savings in both CAPEX and OPEX costs. OPEX savings in particular, will result in a lower mining-grade cut-off, which will result in more gold ounces reporting to gold Reserves"



# Parameters for optimisation of operational expenses

Power generation and human resources have been identified as the main cost drivers for operating Woodlark, leading Geopacific to focus initial work on reducing these costs because they have the greatest impact. The aim being to reduce overall operating costs.

Geopacific, in conjunction with IMO have developed an operating and human resource cost model that demonstrates the impact of these costs on the profitability of operations. Rationalisation of power costs and labour market expectations since the release of the original feasibility study in 2012 has allowed for significant optimisation of operating costs. These are currently being used for financial modelling.

More details on the cost model will be released as studies progress.

## **Power generation**

Power is the most significant cost driver at Woodlark. Changes to the processing plant design have the potential to dramatically reduce the power consumption, directly reducing operating costs. The metallurgical testwork undertaken, suggest that these design changes can be made. Geopacific is also advancing studies to assess and compare various potential methods of power generation like LPG gas, which has recently become available for seaborne delivery. This has potential to reduce CAPEX and OPEX costs.

One of the major benefits of being based on an Island is the cost reductions afforded by direct, bulk deliveries of consumable supplies like diesel and gas.

Geopacific is currently looking at all of the available alternatives for power generation, in order to develop and select the most cost effective solution for Woodlark. Information on potential power generation options are detailed in the table below.

Method of power generation	Potential for use	Details	
Diesel	Possible	Diesel was included in the original feasibility study in 2012 at the height of the cost cycle. Geopacific is seeing significant cost reductions since these levels	
Liquid Petroleum Gas (LPG)	Possible	LPG and Liquid Natural Gas (LNG) are both produced in Papua New Guinea (PNG). Methods of delivering LPG to the island will impact on the likelihood of LPG being used as a power source, with options currently being assessed.	
Coal	Possible	High-quality coal is available in the region, with initial studies demonstrating that coal has potential to provide the most consistent power costs as a result of long-term, coal supply contracts. Studies to date have indicated that the emissions from a coal plant would most likely lower than diesel. This option is also under consideration by other regional operations.	
Diesel-Solar Hybrid	Unlikely	Solar could be used to supplement another power source, like diesel, but does not appear to be sufficiently cost effective to warrant serious consideration. Solar power may become a viable option with improved battery technology or if oil prices reach prices above USD 100 per barrel.	



#### **Human resources**

Geopacific's goal is to use limited numbers of expatriates on Woodlark, which will reduce the cost of the human resource component in relation to the costs of the original feasibility study.

Geopacific's intention is to ensure maximum employment of people from the communities of Woodlark Island, reducing the need to rely on fly-in-fly-out (FIFO) employees. Geopacific has begun working within the communities of Woodlark to establish what skills levels already exist and what training needs to be provided to prepare for the ramp up of operations. Geopacific is impressed with the calibre and dedication of staff from the local community. Geopacific's experience in successfully training people from local communities will prove valuable in this regard.

Papua New Guinea (PNG) has a long history of mining, resulting in high skill levels across the country. Geopacific intends to draw from this pool of human resources, further limiting the need for expatriates.

## Rebasing CAPEX costs for process plant and infrastructure

Geopacific engaged Mincore to undertake a strategic plant and infrastructure design and cost review. In preparation for the review, managing director Cameron Bain visited Woodlark to assess the site.

### **About Mincore**

Mincore is an Australian minerals engineering, procurement and construction company with experience in Australia, Papua New Guinea, Indonesia, Laos, Malaysia and West Africa.

Recent PNG experience includes the restart of the K92 Underground Gold Mine in the Eastern Highlands of PNG, after 10 years on care and maintenance. Mincore also provides effective solutions to existing operations in PNG including Lihir, Simberi and Hidden Valley.

A large part of Mincore's work is at remote sites that face logistical challenges. Using in-house expertise, Mincore tailor the approach for each project to maximise the project's value using LEAN design, procurement and construction methodologies. A recent example of this is the use of modular steel structures and bolted tanks to minimise site construction man-hours on a remote build in Africa.

### Strategic review

The strategic review for Woodlark Island will leverage off Mincore's regional project experience and LEAN approach to project implementation to optimise CAPEX and OPEX costs.

Geopacific is focussed on achieving two aspects with regard to plant design:

- keeping the footprint of the plant to a minimum, thereby reducing costs and minimising environmental impact; and
- identifying process improvement opportunities, including optimising plant size and operating cost efficiencies.

Geopacific's recent experience of assessing plant and build options for the Kou Sa project in Cambodia is proving useful in directing the Company toward solutions for Woodlark. This includes understanding how to achieve cost savings from manufacturing the processing plant in the Asia Pacific region. These savings will be aided by efficiencies resulting from the fact that prefabricated sections can be built in Asia and delivered by barge, directly to the project. The prefabricated sections can be large, unhindered by the need to reduce



sections to 2.4m widths required to accommodate delivery by road, another benefit of being based on an Island.

The scope of the strategic plant and infrastructure cost review by Mincore will include:

- Re-costing the original 2012 process plant and infrastructure on a like-for-like basis.
- Identifying process improvement, sizing and operating cost opportunities.
- Rebasing costs for the project build

This review will take into account alternate processing plant options identified by the strategic review of metallurgical and processing options undertaken by IMO.

### **CONTACT**

For further information on this update or the Company generally, please visit our website at www.geopacific.com.au or contact:

**Mr Ron Heeks** 

**Managing Director** 



### **Competent Person's Statement**

The information in this announcement that relates to exploration results is based on information compiled by or under the supervision of Ron Heeks, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy and Managing Director of Geopacific. Mr Heeks has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity he is undertaking 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 Heeks consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to the Mineral Resource estimates for Kulumadau, Busai and Woodlark King is based on information compiled by Mr. John Doepel, Principal Geologist for Continental Resource Management Pty Limited (Resource Report, Woodlark Island). CRM has acted as independent consulting geologist to WML since 2005 and has undertaken several visits to the island and to the sample preparation facilities. Mr. Doepel is a Member of The Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 Doepel consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

### **Forward Looking Statements**

All statements other than statements of historical fact included in this announcement including, without limitation, statements regarding future plans and objectives of Geopacific Resources Limited are forward-looking statements. When used in this announcement, forward-looking statements can be identified by words such as 'may', 'could', 'believes', 'estimates', 'targets', 'expects' or 'intends' and other similar words that involve risks and uncertainties.

These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this announcement, are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the company, its directors and management of Geopacific Resources Ltd that could cause Geopacific Resources Limited's actual results to differ materially from the results expressed or anticipated in these statements.

Geopacific Resources Ltd cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. Geopacific Resources Ltd does not undertake to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this announcement, except where required by applicable law and stock exchange listing requirements. Woodlark is fully permitted fully by the PNG Government, subject to meeting the conditions of the licence.



# Appendix 1 – Table 1

### Report as per JORC2012

## As of July 2012 at 0.5g/t Au lower cutoff

Deposit	Category	Resource (Mt)	Grade – cut (g/t gold)	Gold – cut (Oz)
Kulumadau	Measured	5.0	1.78	285,000
	Indicated	4.4	1.75	245,000
	Inferred	8.6	1.4	375,000
	Totals	18.0	1.6	910,000
Busai	Measured	3.9	1.54	190,000
	Indicated	10.4	1.4	480,000
	Inferred	8.8	1.3	370,000
	Totals	23.1	1.4	1,040,000
Woodlark King	Indicated	3.0	1.2	115,000
	Inferred	1.0	1.8	60,000
	Totals	4.0	1.4	175,000
All	Measured	8.9	1.67	480,000
	Indicated	17.8	1.5	840,000
	Inferred	18.5	1.4	800,000
Totals	All	45.1	1.5	2,120,000

Note 1: Totals may appear incorrect due to rounding

Note 2: The Busai Indicated Resource includes 0.4Mt @ 1.4/t Au for 20,000oz from overlying alluvial mineralisation.

Note 3: The Busai Inferred Resources includes 0.4Mt @ 1.2/Au for 15,000oz from overlying alluvial mineralisation and 3.9Mt @ 0.9g/t Au for 110,000oz from Munsai (2km southeast of Busai)

Note 4: The Bonivat Inferred Resource includes 0.3Mt @ 3.0g/t for 30,000oz Au form Watou (1.5km south of Woodlark King)

Note 5: All Resources based on 0.5g/t gold cut-off grade