

29th September 2022

ASX Announcement

GEKKO PLANT OUTPERFORMS EXPECTATIONS

Highlights:

- Gravity Recovery in excess of 95% of liberated gold.
- Jig tails contained negligible free gold.
- Confirmation that flowsheet of Gekko Inline Pressure Jig, as a pre-concentrator, followed by Gekko Spinner to recover high value concentrate, is appropriate for Kat Gap Gold Ore.
- Gravity recovery is highly dependent on crush size.



Figure 1: Gekko Pilot Plant

INTRODUCTION

Classic Minerals Limited (ASX: CLZ) (Classic) is pleased to announce that it has validated the decision taken to invest in the Gekko range of equipment for processing Kat Gap gold ore. The test work completed by Nagrom in the laboratory¹ has now been confirmed with the Gekko Inline Pressure Jig and Gekko Spinner delivering more than 95% of the liberated gold through a simple gravity process at a crush size of less than 2mm. The Gekko equipment also supported the decision that a low-cost plant will be able to deliver outstanding results. The plant configuration assists Classic in having a greener, chemical free footprint as there is no chemical involvement and the power usage is also very low compared to traditional gold processing plants.

The Gekko Jig used, in the pilot plant setup, was an IPJ 1000 capable of processing a throughput of up to 30 tons per hour. Classic also has a Gekko IPJ 2400 which has a nameplate capacity of up to 100 tons per hour.

The Pilot is capable of processing 10 tonnes of feed per hour, however, was run at 1-2 tph during the pilot in order to focus on understanding and optimising process dynamics rather than throughput rate.

The Pilot is upgradeable to 100tph utilising the equipment which is already owned by Classic.

The full flowsheet is:

- Gekko Jig concentrates to a Gekko centrifugal concentrator
- Jig tailings to two centrifugal gold concentrators (ICON) in series
- Concentrate clean-up for smelting
- Tailings collected for reprocessing when CIL plant established (cyanide alternatives are currently being assessed to continue the philosophy of a greener gold plant – if technically and commercially appropriate).

Preliminary results

The results were as expected, with the gravity flowsheet recovering the majority of the liberated gold except for a small amount of ultrafine gold, which flowed to tailings.

- The Pilot flowsheet is appropriate for the mineralisation type at Kat Gap.
- Jig tails contained negligible free gold
- The majority of the gold (from coarse to ultrafine) was recovered in the jig/Spinner combination

¹ ASX Announcement 10 August 2020

- The 'scavenger' centrifugal concentrators captured predominantly fine gold that the spinner had not recovered.
- The concentrate produced contains gold ranging from ultrafine (floating) to 2mm in size.
- Classic are currently awaiting assays to reconcile the gold grade and recovery.

Commercial Implications

Once fully commissioned onsite, the Gekko plant is expected to produce gold in line with the previous testwork i.e., at a recovery of up to 70% of the gold in the feed.

Figure 2: Gekko Pilot Plant



“Chairman John Lester said “That today we have had our decision to purchase the Gekko plant and equipment for Kat Gap ore vindicated with the test results for the pilot plant. I am now confident that the next stage of commissioning the full plant, will provide the results, for Classic, that we have been looking for. Upon the approval for the Tailings Storage Facility we will commence the plant assembly and commissioning and proceed to processing Kat Gap ore and producing gold. We already have the additional Gekko components that will permit a processing capacity in excess of 100 tons per hour at Kat Gap.

Figure 3, 4, 5, 6 & 7: Gekko Pilot Plant



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Figure 8: Kat Gap Bulk Sample Pit



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ABOUT THE FORRESTANIA GOLD PROJECT

The FGP Tenements (excluding Kat Gap) are registered in the name of Reed Exploration Pty Ltd, a wholly owned subsidiary of ASX listed Hannans Ltd (ASX: HNR). Classic has acquired 80% of the gold rights on the FGP Tenements from a third party, whilst Hannans has maintained its 20% interest in the gold rights. For the avoidance of doubt Classic Ltd owns a 100% interest in the gold rights on the Kat Gap Tenements and also non-gold rights including but not limited to nickel and other metals.

Classic has a Global Mineral Resource of **8.24 Mt at 1.52 g/t for 403,906 ounces of gold**, classified and reported in accordance with the JORC Code (2012), with a Scoping Study (see ASX Announcement released 2nd May 2017) suggesting both the technical and financial viability of the project. The current post- mining Mineral Resource for Lady Ada, Lady Magdalene and Kat Gap is tabulated below.

Additional technical detail on the Mineral Resource estimation is provided, further in the text below and in the JORC Table 1 as attached to ASX announcements dated 18th December 2019, 21st January 2020, and 20 April 2020.

Prospect	Indicated			Inferred			Total		
	Tonnes	Grade (Au g/t)	Ounces Au	Tonnes	Grade (Au g/t)	Ounces Au	Tonnes	Grade (au)	Ounces
Lady Ada	257,000	2.01	16,600	1,090,800	1.23	43,100	1,348,100	1.38	59,700
Lady Magdalene				5,922,700	1.32	251,350	5,922,700	1.32	251,350
Kat Gap				975,722	2.96	92,856	975,722	2.96	92,856
Total	257,000	2.01	16,600	7,989,222	1.50	387,306	8,246,522	1.52	403,906

Notes:

- The Mineral Resource is classified in accordance with JORC, 2012 edition*
- The effective date of the mineral resource estimate is 20 April 2020.*
- The mineral resource is contained within FGP tenements*
- Estimates are rounded to reflect the level of confidence in these resources at the present time.*
- The mineral resource is reported at 0.5 g/t Au cut-off grade*
- Depletion of the resource from historic open pit mining has been considered*

Forward Looking Statements

This announcement may contain certain “forward-looking statements” which may not have been based solely on historical facts, but rather may be based on the Company’s current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have reasonable basis. However, forward looking statements are subjected to risks, uncertainties, assumptions and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to Resource risk, metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks in the Countries and States in which we operate or sell product to, and governmental regulation and judicial outcomes. For a more detailed discussion of such risks and other factors, see the Company’s annual reports, as well as the Company’s other filings. Readers should not place undue reliance on forward looking information. The Company does not undertake any obligation to release publicly any revisions to any “forward-looking statements” to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

Competent Persons Statement

The information contained in this report that relates to Metallurgy is based on information compiled by Mark Hargreaves, a Competent Person who is a Member of the Australian Institute of Geoscientists (AIG). Mr Hargreaves is a consultant metallurgist and consults to Classic Minerals Ltd. Mr. Hargreaves has sufficient experience that is relevant to the style of mineralisation and the 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. Hargreaves consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

This announcement has been approved by the Board.

ENDS: