## RESOURO GOLD INC

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Summary of Metallurgical Test Work at the Novo Mundo Project, Brazil, October 2022

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The Qualified Person (QP) for the Company is Marcelo Juliano de Carvalho, PhD, Director and COO of the Company and a Qualified Person as defined by National Instrument 43-101- Standards of Disclosure for Mineral Projects.

## **Sample Preparation**

- Metallurgical Test Work was completed on a **96.58 kg composite sample** from Novo Mundo.
- The sample was **composed of 9 individual samples of approximately 10 kg each** collected from base-of-pit mineralization in the Dionisio and Luizão open pits and from the previously stockpiled material from the Dionisio open pit. The average grade of the composite sample was 16.5 g/t of gold.
- The composite sample was shipped to TestWork Laboratories based in Belo Horizonte, Brazil. TestWork is an accredited metallurgical laboratory that provides services to a range of major and junior mining companies.
- The samples were crushed to 3.2 mm, homogenized, and subsamples taken for grinding curve analysis, Bond Work Index determination and head grade analysis. The samples were pulverized to obtain two size fractions, P<sub>80</sub> = 106 µm and one P<sub>80</sub>=75 µm with all subsequent tests done on each size subsets. Gravity concentration, a leaching flowsheet and a flotation flowsheet were considered in this preliminary phase of testing.

## Bond Work Index Results

 The Bond Work Index ("WI<sub>bond</sub>") test conducted on the Novo Mundo rock returned an average WI<sub>bond</sub> of 14.3 kWh/t. Typically, a gold project with mineralized rock having a WI<sub>bond</sub> less than 16 is considered good. This means the Novo Mundo rock will require less energy to crush each tonne of rock, indicating the crushing steps in plant designs will likely be able to utilize standard, readily available equipment.

#### Bond Work Index (WI<sub>Bond</sub>)

Product passing 75 microns	74%
WI (short ton)	13.00 kWh/short Ton
WI	14.3 kWh/tonne

## **Gravity Concentration & Leaching**

- Gravimetric tests were performed on the samples using a bench scale Knelson MD3 concentrator. The 106 μm sized sample returned 30.21% recoveries whilst the 75 μm size returned 27.89% recovery. The results indicate moderate gravity gold recoveries and no clear relationship between recovery and grind size.
- TestWork performed Direct Leaching and Gravimetric Concentration followed by Carbon-in-Leach (CIL) on each size fraction.

# Gravity Concentration & Leaching (cont.)

 In all tests, 70% recovery was reached within 4 hours, and on the finer (75 μm) fraction, >93.5% recoveries were achieved within 8 hours. Only minor improvements in recoveries were achieved from the full 24-hour leach.



# Gravity Concentration & Leaching (cont.)

- The tailings from the gravity concentration were subject to leaching and across 8 tests, all returned recoveries >86.69% within the first 8 hours. The best overall recovery for the leaching flowsheet was 93.70% with a cyanide consumption of 5.7kg/t.
- The test-work demonstrated both Leach and Floatation Gold Recovery was constantly over 90% for ore treated at a grind size (P80) of 75 microns. These recoveries were achieved with low reagent recovery, and the composite Bond Work Index to achieve a P80 of 75 microns was 14.3 KW/Hrs per tonne. These results indicate that the ore is clean and high recoveries can be achieved by direct leach or floatation with reasonable regent and power costs.

100% 90% 80% 70% 60% Au Recovery (%) 50% 40% 30% 20% 10% 0% 12 0 Δ 8 16 20 24 time (hours)

### Flotation

 The tailings from the gravimetric concentration were subject to 10 flotation tests, 5 from each of the two size fractions. The recoveries in the rougher flotation stages were around 94.8%, and when coupled in line with the gravimetric recovery, overall recoveries are around 98.3%. It was noted that in the flotation steps, virtually no difference was observed between the two grind sizes. This indicates that material from the Novo Mundo project might be amenable to less intense grinding resulting in a lower overall power consumption.

