



ASX/Media Release – 23 February 2018

## Cascavel Operational Update

### Assay Laboratory at Cascavel Plant Fully Licensed

- Environmental and Army licences for cyanide use in the Laboratory granted.
- Orinoco's Assay Laboratory to be commissioned on the 26<sup>th</sup> of February and supervised by SGS.
- Laboratory will be fully operational by the first week of March.

Orinoco Gold Limited (ASX: OGX) (**Orinoco** or the **Company**) is pleased to announce the recent granting of the Environmental and Army licences for the on-site assay laboratory at the Cascavel Gold Mine.

The onsite assay laboratory brings not only the advantages of cost reduction but also reduces the turnaround time and enhancing the number of assays samples per batch that can be processed.

The Laboratory will have capacity to deliver assays in a quarter of the current time and cover samples from the mine, plant and exploration programmes.



**Picture 1** – The assay laboratory facility at the Cascavel Plant area.

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#### **ASX Code**

**OGX**  
(Ordinary Shares)  
**OGXOD**  
(Listed Options)

#### **Issued Capital**

911,585,119 Ordinary Shares  
280,136,307 Options

### Currently used Laboratory

Due to the high nugget effect on the gold mineralized samples from the Cascavel there is a need for a high volume of samples to return the correct assay grades. Cyanide leaching followed by Atomic Absorption assaying was established as the best routine at the beginning of operations in 2016, but due to the lack of licences has been conducted at an external laboratory (METAGO) in Goiania city 200 kilometres away from the Cascavel mine site.

The assay method comprises of cyanide leaching 1kg samples in bottle rolls, followed by the analysis of the liquor in atomic absorption spectrometer.

The current turnaround cycle time after transporting the samples 200km is 8 days and the facilities at METAGO can only run batches of 12 samples per day.

### Back to Basic On-site Laboratory

The on-site laboratory constructed next to the Cascavel plant can run up to 80 samples per batch and will deliver assay results in 3 days for the mine and plant and 4 days for exploration. The turnaround could be heavily improved with the use of Australian produced Leachwell, this could reduce the leaching time by up to one third. Tests with this system will be carried out soon, in cooperation with SGS Brazil Labs. Initially the planned daily availability for each area will be 20 samples for the mine, 20 for the plant and 40 for exploration.

This will improve and accelerate all our current programs and enhance the planning and controls for mine and plant operations.

In addition, there is the cost reduction on assay costs across all areas of the site.



**Picture 2** – Samples waiting to travel 200km to the currently used external assay laboratory.

### In-house highly skilled and trained people for the Lab operations

The laboratory operations will be driven by the plant manager operation Mr Uili Silva who has worked for more than three years with Orinoco and has 20 years of experience in assay lab management, QAQC in laboratories and exploration sampling. Mr Silva had 6 years working as general coordinator of internal and external laboratories for Yamana Gold and has also vast experience on medium size Gold plant operations.



**Picture 3** – Sample preparation area of the Cascavel Lab. Lab and Plant Manager Mr Uili Silva on the left and Laboratory supervisor Mr Samyr Neme on the right.

#### Laboratory Commissioning by SGS

The commissioning of the laboratory will be carried out under the supervision of SGS. As the containerized analytic section of the lab is an SGS design. The laboratory will be not certified for resource calculations but will have a high level of accuracy for internal control and overcomes the current shortfall for quality assays at our operations.

For resource calculations we will use our partners ALS or SGS to generate certified assays. Turnaround times at those laboratories will still take up to 30 days.



**Picture 4** – Atomic Absorption equipment ready for commissioning.



**Picture 5** – Another view of the sample preparation area at the Cascavel Lab.

President of Orinoco Brazil, Dr Klaus Petersen commented ‘This is a big achievement for our company. The complex licencing for the use of controlled chemicals on-site has been granted with cooperation of the Goiás Environmental Agency and the Army. The laboratory is certainly a key component on speeding up all of the operational controls and planning, as well as a long-desired way for the exploration projects to obtain faster, cheaper and reliable results for bulk samples. The very positive impact on the operations and exploration side of Orinoco will be certainly shown with improved quality and timely results”

**-ENDS-**

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