

## QUARTERLY ACTIVITIES REPORT

JUNE 2019

### Opuwo Cobalt Project, Namibia (CLA 95%)

During the Quarter, the Company completed and finalised the in-progress phases of work with respect to the Opuwo Cobalt Project, since taking the decision to slow evaluation on the project in March 2019, primarily due to the continuing low cobalt price.

#### REVIEW OF DRILLING – NORTHWEST ANTICLINE TARGET

As announced on 18th March 2019, the Company received drilling results from the NW Anticline Target at the Opuwo Project. As foreshadowed in that announcement, the drilling results were reviewed and interpreted on a sectional basis, and a geological model for the target area was completed.

#### RESOURCE ESTIMATION

The geological model for the new zone referred to above was provided to a consultant resource geologist for review and resource estimation. The consultant advised that currently the broad spaced drilling and data density in this zone was insufficient for a Mineral Resource to be classified under the JORC Code. The resultant resource estimate was therefore only able to be used for internal purposes. Following this, a further review of the drilling was completed to determine what additional drilling would be required in this zone to enable it to be included in an updated JORC compliant Mineral Resource. The Company does not intend to commit expenditure to complete this additional drilling until such time as a decision to re-commence evaluation studies on the Opuwo Project is made.

#### MINING STUDIES

Following completion of a resource model, consultant mining engineers were tasked with creating a cost model for mining of the Northwest Anticline Target based on the internal resource model, to confirm that the newly defined area of mineralisation had economic prospects of extraction, before considering undertaking the drill program to increase the data density and therefore allow inclusion as an addition to the existing Mineral Resource.

A draft report from the engineer was received in June and is being reviewed. Again, due to the mining study not being JORC compliant the results and conclusions are only able to be used for internal purposes.

#### METALLURGICAL TESTWORK

During the Quarter metallurgical testwork continued at the project. Testwork was carried out on the following parts of the process:

- Flotation optimisation
- Roasting and extractive leaching

Flotation testwork focused on determining the optimum grind size required to maximise flotation of sulphide minerals. A limited set of reagents have been trialled and further trials are recommended to test the effect of reagents on improving flotation as well as different rougher kinetics. Review of flotation results has identified an irregularity between the chemical assays and mineralogical reports which needs to be understood before these results can be published.

Roasting testwork utilised both fluidised bed and kiln roasting methods. Roasting testwork requires a number of methods and temperatures to be trialled to find the optimum temperature to both extract the metals from the sulphide minerals and control the gases and temperatures present within the kiln to ensure sintering does not occur. Recoveries from these methods varied greatly, indicating that a consistent process has not yet been developed. In addition, initial tests where it was thought sinter was formed have now been reinterpreted to represent formation of ferrite. However, off gas testing has not confirmed the reactions taking place, in part due to the methodology of collecting the gas samples in the testing laboratory. A number of further tests are required to obtain a representative estimate of the recovery possible through roasting, which will then need to be replicated to confirm repeatability of results.

In summary, any further work relating to the metallurgical process for treating the Opuwo ore will consider both the roasting method described above, and the autoclave leaching method that was originally investigated for treating the ore, which requires optimisation to reduce reagent consumption and implied operating costs.

## **ENVIRONMENTAL IMPACT ASSESSMENT**

SLR Namibia was contracted to conduct the Environmental Impact Assessment (EIA) of the Opuwo Cobalt Project in January 2019. The EIA forms a substantial part of the Pre-Feasibility Study (PFS).

During the Quarter the Environmental Impact Assessment Scoping Report for the Opuwo Cobalt Project was finalised, reviewed and lodged for public comment, which is considered to be an important step should the Company decide to re-accelerate the evaluation and development of the Project.

## **OPUWO REGIONAL EXPLORATION**

In addition to work on the Opuwo Cobalt Project, a general review of the exploration potential across the Company's landholdings in Namibia was completed. Mapping and sampling was completed at the Jimi Vanadium-Chromium Prospect and a review completed of the Otuziru lead-zinc-vanadium Prospect. A drilling program was designed for Otuziru to expand upon the existing defined mineralisation and is being considered for implementation in the second half of this year.

### **Abednegno Hill Project. WA (CLA 100%)**

The Abednegno Hill Nickel Project is located to the south and west of Minara Resources' Murrin Murrin nickel mine.

As reported in the previous Quarterly Activities Reports, Celsius completed a ground EM survey over its Leonora tenements during October – November 2017 which detected two bedrock anomalies. Follow up work programs to test these anomalies have been designed, however no further work was conducted during the Quarter.

### **Carnilya Hill Project, WA (CLA 30%)**

Celsius (through View Nickel Pty Ltd) owns a 30% joint venture interest in the Carnilya Hill Joint Venture in Western Australia with Mincor Resources NL. Mincor Resources NL (ASX:MCR) is the operator of the Carnilya Hill JV. No activity was reported by Mincor during the quarter.

### **Hann River Project, WA (E80/5117 CLA 100%, base metal rights on E80/5027)**

Celsius has an Exploration Licence Application pending (E80/5117) over an area located in the Kimberley region of Western Australia, approximately 300 km east of Derby. The application area is considered prospective for copper and cobalt mineralisation, hosted in the Mt Carson Volcanics geological unit. An agreement is in place with Jindalee Resources Limited (ASX:JRL) regarding their adjacent granted Exploration Licence (E80/5027), whereby the diamond rights on CLA's licence application area have been exchanged for the base metal rights on E80/5027. The Company is currently negotiating access agreements with the Pastoral Lease holder of part of the land that covers the exploration licence application.

### **Corporate**

During the Quarter the Company continued reviewing potential acquisitions and investments in commodities which complement or diversify the Company's current commodity exposure.

At the end of the Quarter, the Company held approximately **\$6.655 million** in cash reserves, with ongoing costs to reduce significantly in the current Quarter due to completion of all work programs and significant reduction in staff and consultant numbers.

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### **Competent Persons Statement**

*Information in this report relating to Exploration Results is based on information reviewed by Mr. Brendan Borg, who is a Member of the Australasian Institute of Mining and Metallurgy and Managing Director of Celsius Resources. Mr. Borg 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 by the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Borg consents to the inclusion of the data in the form and context in which it appears.*