

22 June 2018

The Manager Companies Announcements Office Australian Securities Exchange

Dear Sir/Madam

UPDATED ANNOUNCEMENT WITH JORC TABLES

Please find attached the announcement lodged yesterday, 21 June 2018, "Further Testwork to Enhance Opuwo Scoping Study" from Celsius Resources Limited ("**Celsius**" or "**Company**") (ASX:CLA) which now includes Appendix 1 with JORC tables.

Yours faithfully,

Mass

Melanie Ross Company Secretary

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FURTHER TESTWORK TO ENHANCE OPUWO SCOPING STUDY

Celsius Resources Limited (ASX: CLA) ("Celsius" or "Company") is pleased to announce that ongoing metallurgical test work has identified a number of opportunities that could significantly reduce operating and capital costs for the planned down-stream cobalt/copper refinery, to be integrated into the overall development of the Opuwo Cobalt Project.

Flotation testwork conducted as part of the Scoping Study has achieved improvements in concentrate grade and metal recovery percentages, whilst successive iterations of the leaching testwork have had the effect of significantly reducing the expected operating costs, owing to a higher concentrate feed into the process, and utilising a reduction in required leaching intensity. Opportunities for further metallurgical process improvements have also been identified, which are expected to allow further beneficial iterations to capital and operating cost estimates.

To fully evaluate these opportunities, some further metallurgical test work will be performed by SGS Perth over the next 8 weeks. Upon completion of this additional metallurgical test work, the process mass balance model will be updated, which will form the basis of plant sizing and capital and operating cost estimates across both the concentrate and refinery processes for inclusion in the Scoping Study, which is now expected to be completed early in Q4, CY2018.

Celsius Project Director, Pine van Wyk commented:

"Celsius is excited by the potential positive impact of significantly reduced operating costs that our metallurgical test work has identified, which may also have positive implications for capital costs. The process improvements that the Company is investigating will not only have a positive impact on costs but will also potentially reduce the cut-off mining grades and thereby allow an enhanced mine design. The Opuwo Cobalt Project is of such a size and global significance that it warrants sufficient study time to ensure an overall optimised project design is achieved."

Process Flowsheet Development

Ongoing work as part of the Scoping Study is refining the process flowsheet, and the results to date indicate that saleable products, including cobalt sulphate, copper metal, and a zinc by product, can be produced from the Opuwo mineralisation. Announcements regarding the results of the metallurgical testwork programs were published to the market on 30 November, 2017, 20 February, 2018, and 13 June, 2018, with further information about the metallurgical test work program provided in Appendix 1.

The process flow sheet is expected to comprise:

- conventional froth flotation to produce a mixed sulphide concentrate;
- oxidative leaching (using relatively low pressure and temperature conditions) to extract cobalt, copper and zinc metals into solution; and
- conventional processes of solvent extraction / electrowinning (SX-EW) to recover saleable products.

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Flotation Test Work

Previous flotation test work has confirmed that the simple sulphide mineralisation comprising the Opuwo deposit can be concentrated using conventional froth flotation techniques, to produce a mixed sulphide concentrate containing a majority of the cobalt, copper and zinc. Closed circuit flotation performance has yielded recoveries of 81% for cobalt (Co), 83% for copper (Cu), and 54% for zinc (Zn) at concentrations of 1.44% Co, 5.50% Cu and 4.37% Zn. These concentrate results were obtained from mixed composite fresh ore samples, gathered throughout the orebody with grades of 0.142% Co, 0.57% Cu and 0.65% Zn. Further optimisation of these results is considered possible.

Additionally, test work is currently underway on samples from transition zone mineralisation, where partial oxidisation of sulphide minerals is observed, to assess the levels of recovery that can be expected for these mineralisation types in the floatation process. Transitional and oxide mineralisation makes up less than 5% of the Mineral Resource.

Two additional composite samples are being tested to assess the effect of varying head grade on the flotation process, and to further develop grade/recovery models for the flotation processes in order to optimise the cutoff mining grades, and thereby optimise capital and operating cost estimates.

Leaching Test Work

The second phase of the metallurgical test work program has evaluated the amenability of the Opuwo concentrate to be leached, to liberate the metals of interest into solution for further refining with solvent extraction. Leach testing of Opuwo concentrates has demonstrated excellent extraction of cobalt, copper and zinc, using relatively low pressure and temperature conditions.

A series of 10 leaching tests have been completed, with several additional tests in progress. The best leach extraction achieved thus far is as follows: cobalt: 98%, copper: 97%, zinc: 99%, obtained from a concentrate containing 1.17% Co, 3.29% Cu and 2.68% Zn. These high leach extractions suggested that the intensity of the leaching process could be reduced to save on reagent and operating costs. Subsequent leach tests will systematically reduce the leach intensity in order to find the optimal trade-off between concentrate grade, recovery, leaching conditions and operating cost. Initial results for reduced leach intensity have confirmed continued high recoveries and indicate that further reductions in leach intensity (and therefore operating costs) should be possible without any meaningful loss in recovery.

Further concentrate and leached samples have been sent for mineralogy analysis by QEMSCAN. Three samples of rougher concentrates, ground to different sizes, and five samples of leach residues from different leach tests are being evaluated. The aim of the mineralogy analysis is to determine the cobalt deportment and liberation/locking of cobalt-bearing minerals, which will provide a better understanding of leaching process recoveries and the leaching of gangue minerals. This will enable further optimisation of the capital and operating (reagent consumption and energy) costs of the refinery.



Mine Design and Other Studies

Significant progress has been made on modelling mine design options for the Opuwo Cobalt Project with a number of options being evaluated. Key input drivers will be refined as updated processing cost and geotechnical data become available over the next few weeks.

Based on the preliminary results of the mining studies, it is expected that the Indicated portion of the Mineral Resource will be mined using a combination of open pit and underground methods (open stoping), and that the Inferred portion of the Mineral Resource will be mined using underground methods (open stoping) only.

Good progress has been made on a number of other projects aspects including:

- conceptual tailings disposal study has been completed.
- environmental screening study has been completed, with baseline monitoring commenced.
- high-level study on power and water availability has been completed.

Resource Development Drilling Continuing

Further exploration drilling undertaken since Celsius reported its maiden JORC Mineral Resource for the Opuwo Cobalt Project on 16 April 2018 has continued to expand the mineralised zone. The drilling has focussed on resource expansion in the western and central zones and is expected to provide data for a future upgrade to the Mineral Resource.

Brendan Borg Managing Director

Competent Persons Statement

Information in this report relating to Metallurgical Testwork Results is based on information reviewed by Mr. Pine van Wyk, who is a Member of the South African Institute of Mining and Metallurgy (a Recognised Professional Organisation), and an Executive Director of Celsius Resources. Mr. van Wyk 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. van Wyk consents to the inclusion of the data in the form and context in which it appears.



Appendix 1: The following tables are provided to ensure compliance with the JORC Code (2012) requirements for the reporting of Exploration Results for the Opuwo Cobalt Project

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary			
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 Samples for metallurgical test work were drilled using the Diamond Core (DC) drilling technique, using standard equipment. Mineralised zones were determined approximately in the field using a Niton portable XRF anlalyser, assisted by assay data from the relevant Reverse Circulation (RC) twin hole. Sampling of the entire mineralised zone estimated to be above a 500 ppm cobalt cutoff grade was undertaken, based on the guidance from the above. 			
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc). 	 DC drilling was done using a standard tube, at HQ and NQ size. DC was oriented using a Reflex EZ-TRAC tool. 			



Criteria	JORC Code explanation	Commentary			
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Recovery in holes drilled for metallurgical test work samples was generally recorded as good. All drilling was supervised by a suitably qualified geologist, trained to monitor sample representivity, including evenness of samples being collected from the RC rig, and routine cleaning/flushing of the cyclone on the drill rig. No relationship exists between sample recovery and grade. 			
Logging Sub-sampling techniques and sample preparation	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	 Drilling logged in detail on lithology/mineralisation for DC. Lithology, alteration and oxidation logged qualitatively. Sulphide and quartz vein content logged quantitatively. All DC holes are photographed. A Niton portable XRF analyzer was used to assist in determining mineralised horizons. All chips/core was logged to denote rock type, color, alteration, mineralisation style, core recoveries, and any measurable structure. Diamond Core was cut using a core saw. Generally, ¾ core was submitted to the laboratory for metallurgical test work, except sample for comminution testing, for which full core was required. Samples for metallurgical testing were assayed before commencement of metallurgical test work, to ensure appropriate material was sampled, and that grades approximately 200 kg of core was collected from 4 diamond 			
	 Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	drillholes for metallurgical test work, spread across approximately 6 km of the mineralised zone.			



Criteria	JORC Code explanation	Commentary			
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 Metallurgical test work samples were shipped to SGS Australia and assayed individually, and as a composite, prior to commencement of metallurgical test work. SGS Australia also completed assays on the products generated from metallurgical test work. A variety of analytical methods were employed, namely 4-acid digestion with ICP finish, sodium peroxide fusion with ICP finish, lithium metaborate fusion/XRF, and sulphur speciation using Eltra instrument. Mineralogy work has been completed by X-ray Diffusion (XRD) and QEMSCAN, also by SGS Australia, SGS South Africa, and CSIRO. No geophysical tools were used to determine any element concentration in these results. Standard QA/QC samples and procedures used by the laboratory. Assays conducted on RC samples from twin holes were used to validate assays on the metallurgical test work samples. 			
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Mineralised zones reported in assays correspond well with the same zones from RC twin holes. All samples for metallurgical test work are from diamond drillholes that are twins of earlier RC holes. An electronic database containing collars, geological logging and assays is maintained by consultants external to the Company. Data is collected in Excel spreadsheets in the field, and then loaded and validated by the Company's external database managers. Validation of assay data against field logging and mineralised zones determined in the field using a portable XRF is undertaken, prior to reporting. No adjustment to assay data has been made. 			



Criteria	JORC Code explanation	Commentary			
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 All sampling located initially by hand held GPS; UTM grid WGS84 Zone 33 (South); Holes have been surveyed using Differential GPS (DGPS). Downhole surveys to measure hole deviation were routinely completed. 			
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	Samples for metallurgical test work were collected from 4 holes from across approximately 6 km of the mineralised zone.			
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 Drilling holes for metallurgical test work were drilled straight (vertical), oblique to the mineralisation, to maximise the weight of material available for metallurgical testing. No sampling bias is expected, as the whole mineralised interval was collected from each hole for inclusion in the metallurgical test work sample. 			
Sample security	The measures taken to ensure sample security.	Samples for metallurgical test work were prepared for dispatch to the laboratory by senior Celsius Resources or Gecko Namibia staff.			
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	 A review of drilling methods and sampling procedures has been undertaken by the Company's external Resource Geologists. No significant issues were identified. 			



Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The Opuwo Cobalt Project comprises four Exclusive Prospective Licenses EPLs 4346, 4350, 4351 and 4540. Celsius has a 95% ownership of the Project. EPL 4346 is undergoing the renewal process for a further two-year term from June 2017. There are currently no known impediments to developing a project in this area.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• Previous work carried out by Kunene Resources included geological mapping, outcrop sampling, soil sampling, high resolution magnetic and radiometric data and hyperspectral data. Two holes were drilled in 2015, which intersected cobalt, copper and zinc mineralisation.



Criteria	JORC Code explanation	Commentary			
Geology	• Deposit type, geological setting and style of mineralisation.	• The Kaoko Orogen (Kaokobelt) consists of metasedimentary rocks of the Damaran Supergroup deposited on the passive margin of a Late Proterozoic continental rift system. The Damaran sediments overlie the Congo Craton with its Archean to Early Proterozoic basement rocks of the Epupa and Huab Complexes.			
		• The key tectonic and sedimentary events in the Kaokobelt are:			
		 Rifting at the southern Congo Craton between 900-840 Ma including local rift-related continental intrusives and extrusives (e.g. Oas syenite and Lofdal carbonatites 840-756 Ma) 			
		 Deposition of a 1 to 4 km thick siliciclastic transgression sequence: Nosib Group including Ombombo Formation in the upper part with increasing carbonate sedimentation (and the DOF horizon), 880- 712 Ma 			
		 Chuos glaciation with deposition of tillites and cold water shales and marlstones 712-692 Ma 			
		 Deposition of carbonate dominated sediments on the shallow Kunene Platform: Otavi Group 			
		o Ghaub glaciation at 638-635 Ma (Hoffmann et al., 2004)			
		 Deposition of carbonate dominated sediments on the shallow Kunene Platform: Tsumeb Subgroup 635-550 Ma 			
		o Collision of Kalahari and Congo Craton 550 Ma (Alkmim et al. 2001)			
		 Peak metamorphism 530 Ma. 			
		• Mineralisation at Opuwo is hosted in the Neoproterozoic sediments of the Kaoko Belt, which is interpreted as a western extension of the Copper Belt in the DRC and Zambia.			
		• The Dolomite Ore Formation (DOF) is a carbon rich, marly dolomitic horizon in a sequence of clastic and carbonate lithologies in the upper Ombombo Subgroup. The carbon rich nature of the ore bearing horizon is interpreted to have facilitated the precipitation of the metals of interest, namely cobalt, copper and zinc.			
		• Cobalt, copper and zinc sulphide mineralisation is present predominantly as linnaeite, chalcopyrite and sphalerite respectively. Minor zones of oxidised and partially oxidised mineralisation occur in the upper portion of the deposit.			



Criteria	JORC Code explanation	Commenta	ry					
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following 	The four holes used for metallurgical test work are listed below. Drillholes have been accurately surveyed using DGPS.						
	information for all Material drill holes: o easting and northing of the drill hole collar	Hole	Easting (UTM Zone 33S)	Easting (UTM Zone 33S)	RL (m)	Dip	Azimuth	Depth (m)
	 elevation or RL (Reduced 	DOFD0041	365146.527	8026723.026	1241.49	-90	0	122.38
	Level – elevation above sea	DOFD0042	364229.78	8026531.022	1246.52	-90	0	80.46
	level in metres) of the drill hole collar	DOFD0049	370175.585	8026305.899	1241.54	-90	0	95.49
	 o dip and azimuth of the hole 	DOFD0054	366977.06	8026375.54	1237.69	-90	0	80.55
Data	 from the understanding of the report, the Competent Person should clearly explain why this is the case. In reporting Exploration Results, weighting averaging techniques, 		aggregation wa					
Data aggregation methods		All result metallur	aggregation wa ts reported are gical test work, gical tests.	assays on the	composit			ious
	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 							



Criteria	JORC Code explanation	Commentary		
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 Intercepts not reported – samples discussed in this release were for metallurgical test work. 		
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	Metallurgical test work results only in this release.		
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	 Metallurgical test work samples only in this release. All other exploration drillholes reported in previous releases. 		
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 Nothing material to the metallurgical test work program. 		
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Further metallurgical test work is currently being conducted, to optimise and improve upon results already reported. Further metallurgical test work programs will be conducted as part of future studies. 		