ASX ANNOUNCEMENT / MEDIA RELEASE

10 May 2023

Replacement Announcement – Ekosolve Results

The attached announcement replaces the announcement lodged on 2 May 2023, titled *Ekosolve Process Delivers 95% Lithium Extraction Efficiency* and is now reported in accordance with the JORC code.

A 10-stage bench-scale counter-current solvent extraction process was designed and conducted to simulate the lithium extraction in a pulsed solvent extraction column. The Pocitos 7 brine content prior to being processed has also been included in the replacement announcement.

Authorised for release by the Board.

Mauro Piccini
Company Secretary
info@c29metals.com.au
www.c29metals.com.au

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EKOSOLVE EXTRACTION OF LITHIUM FROM POCITOS 7 BRINES ACHIEVES 95.8% EFFICIENCY

- **Ekosolve™ DLE technology pilot plant test work at University of Melbourne achieves 95.8% lithium extraction efficiency from brines with average lithium concentration of 95.3 ppm lithium**
- **Lithium recovered from 95.3ppm Li in brine was 91.3 ppm Lithium**
- **Lithium chloride produced is now being converted into Lithium Carbonate in the next stage of processing**

C29 Metals Limited (**C29** or the **Company**) advises that the experimental results for the 10-stage counter-current extraction Ekosolve™ process shows the lithium extraction efficiency achieved was 95.79% after passing through a 10 pass extraction cycle.

University of Melbourne Associate Professor (Chemical Engineering) Dr Kathryn Mumford commented:

> *"This result is similar, and slightly better than previous brines tested from Pozuelos, Incahuasi and Pocitos salars. It demonstrates that the extraction organic solvents have a good extractability for the lithium in the salt lake brine from C29 Metals at low solvent to brine ratios."*

Testing of efficiency of the removal of cations was conducted, with boron, calcium, potassium and magnesium extracted to the solvents and sodium stripped into the brine.

The lithium chloride produced via the Ekosolve™ method is now being further processed to produce a battery grade lithium carbonate product.

A 10-stage bench-scale counter-current solvent extraction process was designed and conducted to simulate the lithium extraction in a pulsed solvent extraction column. The Pocitos 7 brine content prior to being processed (nine samples taken) was as follows:

Table 1 Lithium concentrations of the salt lake brine samples from C29 Metals

	Sample Position	Dilution: 50 times; Unit in mg/L or ppm.	
		[Li]	Average (Ave)
Brine from C29 Metals	Bottom #1	91.21	88.26
	Bottom #2	82.84	
	Bottom #3	90.73	
	Middle #1	95.60	94.49
	Middle #2	95.27	
	Middle #3	92.60	
	Top #1	91.59	91.50
	Top #2	86.91	
	Top #3	96.00	
Average concentration		91.42	

Table 2 Concentrations of other cations in the salt lake brine samples from C29 Metals

	Sample Position	Dilution: 500 or 2500 times, depending on concentration range; Unit in g/L									
		[Na]		[Mg]		[Ca]		[K]		[B]	
Brine from C29 Metals	Bottom #1	90.77	111.59	0.91	0.96	1.46	1.12	1.57	1.91	0.18	0.17
	Bottom #2	157.00		1.09		0.47		2.64		0.15	
	Bottom #3	87.01		0.89		1.41		1.52		0.18	
	Middle #1	90.94	93.80	1.02	0.99	1.68	1.61	1.84	1.74	0.18	0.18
	Middle #2	91.15		0.99		1.64		1.77		0.18	
	Middle #3	99.33		0.94		1.51		1.62		0.18	
	Top #1	85.92	90.43	0.99	0.99	1.59	1.61	1.73	1.74	0.16	0.17
	Top #2	98.62		0.98		1.61		1.75		0.17	
	Top #3	86.74		1.00		1.62		1.75		0.18	
Average concentration		98.61		0.98		1.45		1.80		0.17	

Table 3 Concentrations of anions in the salt lake brine samples from C29 Metals

	Sample Position	Dilution: 500 or 2000 times depending on concentration range; Unit in g/L		
		[Cl]	[SO_4]	[NO_3]
Brine from C29 Metals	Bottom	121.39	3.48	0.30
	Middle	119.60	3.46	0.30
	Top	118.09	3.48	0.30
Average concentration		119.69	3.47	0.30

Table 4 The lithium concentrations for the 1st batch brine (from C29 Metals) passing through 1st EX, 2nd EX, … 10th EX stages

	[Li] mg/L	Extraction efficiency %	A/O ratio
Original brine	95.31	--	--
1st batch brine after 1st EX stage	89.40	6.20%	1/1
1st batch brine after 2nd EX stage	60.25	36.79%	1/2
1st batch brine after 3rd EX stage	52.89	44.50%	1/3
1st batch brine after 4th EX stage	44.71	53.09%	1/4
1st batch brine after 5th EX stage	39.11	58.97%	1/5
1st batch brine after 6th EX stage	29.72	68.82%	1/6
1st batch brine after 7th EX stage	24.08	74.74%	1/7
1st batch brine after 8th EX stage	8.37	91.22%	1/8
1st batch brine after 9th EX stage	6.73	92.93%	1/9
1st batch brine after 10th EX stage	4.01	95.79%	1/10

The above table shows the lithium extraction facility with the solvent to brine ratio reducing from 1:1 to 10:1 on the final pass. 10 passes are called a cycle. The recovery of lithium after a complete cycle was 95.79%. There was only 4.01 mg/L of lithium left in the "waste brine". This equates to 95.79% of the lithium being extracted.

Table 5 The extracted(-)/stripped(+) percentages of the other cations in the 1st batch brine passing through 1st EX, 2nd EX, … 10th EX stages

	[B]%	[Ca]%	[K]%	[Mg]%	[Na]%
after 1st EX stage	-9.9%	-2.2%	-6.4%	-8.4%	3.2%
after 2nd EX stage	11.6%	-3.3%	-5.1%	-7.8%	5.1%
after 3rd EX stage	6.4%	-4.8%	-6.1%	-9.1%	5.3%
after 4th EX stage	0.8%	-6.9%	-6.7%	-8.2%	5.2%
after 5th EX stage	-4.6%	-7.2%	-5.9%	-8.6%	6.9%
after 6th EX stage	-10.2%	-8.6%	-6.6%	-8.9%	6.7%
after 7th EX stage	-14.8%	-8.9%	-6.2%	-7.6%	8.3%
after 8th EX stage	-21.8%	-10.0%	-7.1%	-8.3%	8.1%
after 9th EX stage	-26.3%	-12.2%	-8.3%	-8.8%	7.6%
after 10th EX stage	-31.0%	-13.6%	-8.2%	-5.0%	9.2%
*Negative values represent the elements were extracted in organic solvent; positive values mean the elements were stripped in brines.					

The 10 stage extraction results are similar, or slightly better, than the extraction efficiencies previously returned by Ekosolve. Next steps include conducting washing, scrubbing and crystallisation of the lithium chloride and conversion to Lithium Carbonate.

Assay results at Pocitos 7 Lithium Brines project were announced on 14 March 2023. The average grade of three packer assay results was 129 ppm lithium with a maximum assay of 142 ppm lithium.

C29 announced it had completed its first diamond drill hole at Pocitos 7 (PCT-23-01), on the Pocitos Salar in the province of Salta, Argentina on 7 February 2023. The hole was drilled to 420m with packer tests intercepting a deep aquifer from 370-400m.

Drill Hole Location and Information

Hole (ID)	Easting (m)	Northing (m)	Depth (m)	Dip	Azimuth	From (m)	To (m)	Interval (m)
PCT-23-01	702840.64 (Zone 19)	7283715.53 (Zone 19)	420	-90	0	30	420	1.5

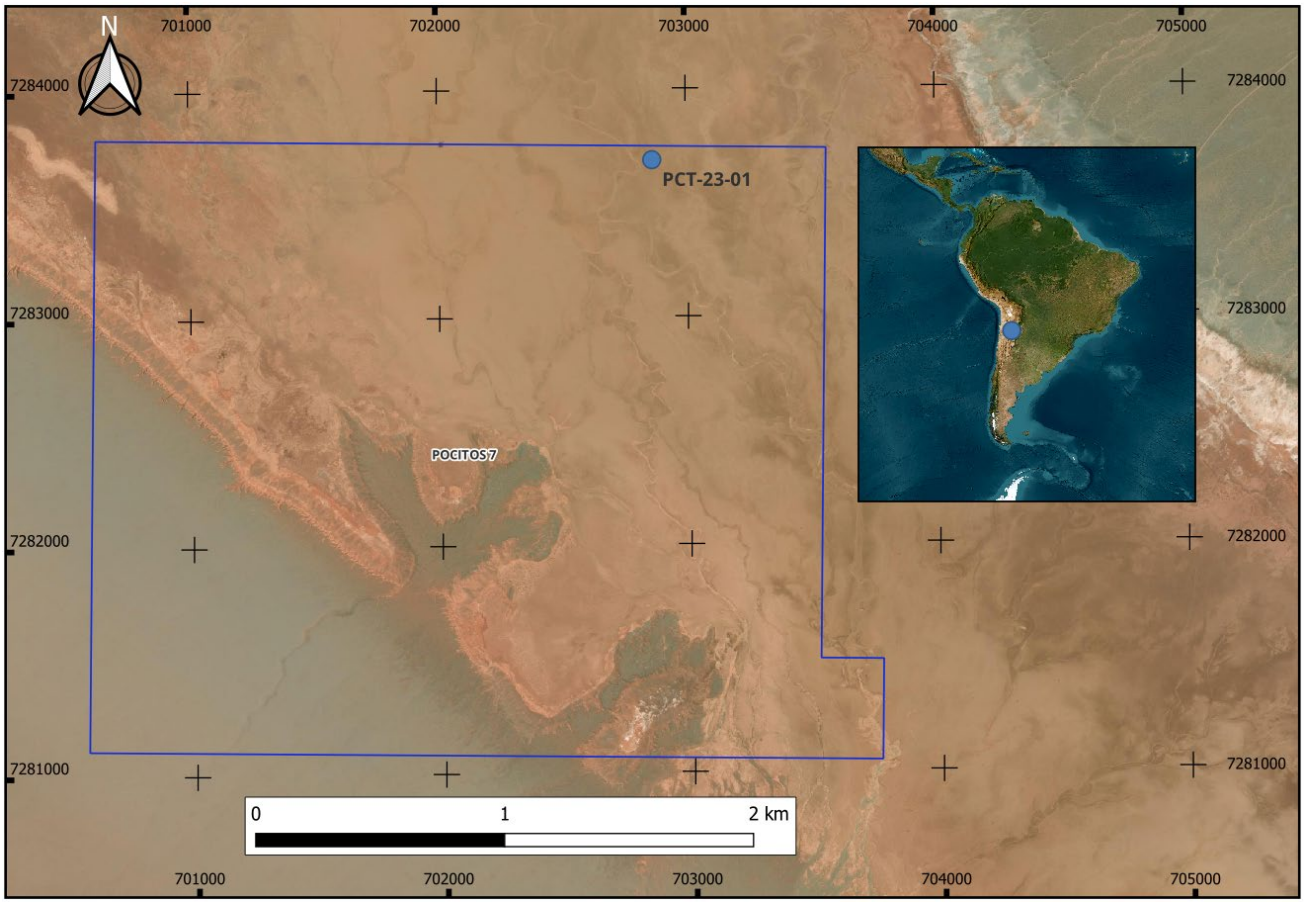

Figure 1:1 Drill hole PCT-23-01 location within Pocitos 7 tenement with proposed MT survey line (orange)

-ENDS-

Authorised for release by the Board.

Mauro Piccini
Company Secretary
info@c29metals.com.au
www.c29metals.com.au

Competent Person Statement

The information in this announcement that relates to the Argentine Li Brine project is based on, and fairly represents information compiled by Phillip Thomas, MAIG FAusIMM, Technical Adviser of C29 Metals, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Thomas has sufficient experience relevant to the style of mineralisation (lithium brines) and type of deposit under consideration, and to the activity which he has undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Thomas consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

Disclaimer

In relying on the above mentioned ASX announcement and pursuant to ASX Listing Rule 5.23.2, the Company confirms that it is not aware of any new information or data that materially affects the information included in the above-mentioned announcement.

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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*	• Drill coring was undertaken along the entire length of the hole to obtain all the core of the stratigraphy and sediments of the salar down to 410m. • Brine samples from target intervals were collected by the Packer tests. Packer tests use a packer device which seals off discrete intervals and allows for sampling only from this interval. Samples have been taken from the relevant section based upon geological logging. The tube was flushed to eliminate contamination before the packers were put in place. • The samples obtained for the metallurgical test were from the hole when it was finalized and a submersible pump was used to pump 40 litres of brine from the well. • Water/brine samples were collected from intervals 370m to 400m. • RR6 was collected at 370m +/-0.5m and RR7 was collected at 385m +/-0.5m
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).*	• A 6 1/4" tricone bit was used to collar the hole then HQ diameter core was drilled to 130m and the hole completed with NQ to 420m. Triple tube Diamond drilling with internal (triple) tube was used to ensure quality core recovery and core recovery by industry standards was very high i.e. >95%
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.*	• Diamond drill core was recovered in 1.5m length intervals in triple tubes. • Various drilling additives/muds and brine water were used as drilling fluid for hole stability to maximize core recovery. The core recoveries were measured from the core and compared to the length of each run to calculate the recovery. • Brine samples were collected over the relevant sections interpreted as the target aquifer(s) based upon the geology encountered and ground water representation. The clays were very even in fineness of grain size, halite inclusions and apparent porosity so there was no sample bias due to brines contained in

		clays. • Brine quality is not related to the quality of core samples. The porosity, transmissivity and permeability of the lithologies where samples are taken influences the rate of brine inflow and brine characteristics.
Logging	*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.*	The diamond core is logged by a senior geologist and contract geologists with supervision by the senior geologist. The senior geologist also supervised the taking of samples. • Logging is both qualitative and quantitative in nature. The relative proportions of each of the different lithologies which have a direct bearing on the overall porosity, contained and potentially extractable brine are noted, as are more qualitative characteristics such as the sedimentary unit. All cores is photographed. • All core was logged by a geologist
Sub-sampling techniques and sample preparation	• *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.* • *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.*	• Double packer sampling: Brine samples were collected by flushing isolated sections of the hole of all fluid in the hole, to reduce contamination from drilling fluid, then allowing the hole to re-fill with ground waters. Samples were then taken from the relevant section. • Duplicate sampling is undertaken for quality control purposes.
	• *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,*	• The Alex Stewart laboratory located in Jujuy, Argentina, is used as the primary laboratory to conduct the assaying of the brine samples collected. • The Alex Stewart laboratory is ISO 9001 and ISO 14001 certified and specialises in the chemical analysis of brines and inorganic salts, with considerable experience in this field. • The SGS laboratory was used for secondary check analyses and is also certified for ISO/IEC Standard 17025:2017 • Core samples will also be sent to a laboratory for porosity test work.

	duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	• A small amount of nitric acid was used to ensure the ions in solution remained in solution and did not crystalize as the atmospheric pressure and temperature changed.
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.*	• Field duplicates, standards and blanks are used to monitor potential contamination of samples and the repeatability of analyses. • Sub-sample duplicates are also being transported to a second reputable industry standard laboratory in country for check analysis
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.*	• The survey locations were located using handheld GPS with an accuracy of +/- 5m. • The grid System used is POSGAR 94, Argentina Zone 3 • Topographic control was obtained by handheld GPS • The topography is flat.
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.*	• Brine samples were collected within isolated sections of the hole based upon the results of onsite geological logging and presence of brine in the core.
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.*	• The brine concentrations being explored for generally occur as sub-horizontal layers and lenses hosted by conglomerate, sand, halites, silt and/or clay. Vertical diamond drilling is ideal for understanding this horizontal stratigraphy and the nature of the sub-surface brine bearing aquifers
Sample security	• *The measures taken to ensure sample security.*	• Data was recorded and processed by employees, consultants and contractors to the Company and overseen by senior management. • Samples are transported from the drill site to secure storage at the camp on a daily basis.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been conducted to date. The drilling is at a very early stage however the Company's independent consultant and Competent Person has approved the procedures to date.

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 Pocitos 7 Lithium Project consists of one tenement located in Salta Province, Argentina. The tenement is owned by Ekeko S.A. The Company executed an Option Agreement whereby C29 Limited may acquire 80% of the project – for further detail see announcement dated 25 October 2022
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No historical exploration has been undertaken on this licence area
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Pocitos 7 licence area covers a section of the Pocitos salar proper with minor alluvial cover to the southwest. The lithium concentrated brine is sourced locally from hot fluids passing through lithium minerals and altered intrusives and is concentrated in brines hosted within basin alluvial sediments and evaporites.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length* ○ *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case*	• Drillhole ID: PCT-23-01 • Easting: 702840.64 (Zone 19) • Northing: 7283715.53 (Zone 19) • Hole Dip: -90 • Hole Depth: 420m
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Assay results have been derived from SGS method using ICP-OES and are included in the main body of this press release.

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').*	• The brine layers are horizontal to sub-horizontal therefore the intercepted thicknesses of brine layers would be true thickness as the drill hole is vertical. • The brine flowed from the walls of the hole in a section from 350-400m so the intercept width is variable depending on the porosity and transmissitivity of the surrounding clays.
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.*	• Refer to maps, figures and tables in the announcement dated the 19th January, 2023
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.*	• All assay results have been reported as received from the lab. The average assay quoted has been volume weighted
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.*	• All meaningful and material information is reported
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.*	• A Magnetotelleric (MT) geophysical survey will be completed (estimated for May 2023) across the license to view lithological structures at a deeper level to 600m, refine drill hole targeting followed by further diamond drilling. Magnetotellurics (MT) is a passive geophysical method which uses natural time variations of the Earth's magnetic and electric fields to measure the electrical resistivity of the sub-surface. Lower frequencies will penetrate to almost 1,000m.