ASX RELEASE

LPI.ASX

17 November 2022

# LPI PRODUCES BATTERY GRADE LITHIUM CARBONATE WITH 99.92% PURITY FROM MARICUNGA PROJECT

LITHIUMPOVVER

## HIGHLIGHTS

- Optimisations introduced to the production process of LPI's Maricunga lithium project exceed industry standards, with 99.92% purity battery grade lithium carbonate being produced from samples of concentrated brine.
- Technical certification by IBZ Salzchemic GnbH & Co, under international standards, was conducted under the supervision of GEA Messo in Germany and LPI's experts in Chile.
- Samples will now be sent to potential lithium buyers for analysis as part of LPI's financing plans for mine construction at Maricunga.

Lithium Power International Limited (**ASX: LPI**) ("**LPI**" or the "**Company**") is pleased to provide the results from the latest optimisations introduced to the Maricunga lithium production process in January 2022 in the project's updated Definitive Feasibility Study.

Lithium Carbonate with a **99.92%<sup>1</sup>** purity was produced from original, concentrated brine from LPI's test evaporations ponds at Maricunga. This significantly exceeds the industry standard specifications for battery grade lithium carbonate of 99.5%.

A relevant test to measure the Loss of Ignition ("LOI") was also conducted for 30 minutes at 500 °C, showing an LOI of 0.2%. As a result, the purity after LOI was 99.72%.

As announced in the March 2022 Quarterly Report released to ASX on 29 April 2022, concentrated brine had been sent to LPI's technological partner GEA Messo to further test production processes.

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 $<sup>^1</sup>$  Purity after Loss of Ignition – LOI for 30 minutes at 500  $^\circ C$  – of 99.72%.

This work was executed by the independent certified laboratory, IBZ-Salzchemie GmbH & Co KG in Germany. This was done under the supervision of GEA, with the objective of producing up to 10kg of battery grade Li2CO3.

LITHIUMPOVVER

Chemical Analysis: Compound	Method	Unit	Sample
Li2CO3	%	99.92	
Li2CO3 with LOI	%	99.72	
AI	DIN EN ISO 11885 E22 2009-09	mg/kg	< 1
В	DIN EN ISO 11885 E22 2009-09	mg/kg	< 1
Са	DIN EN ISO 11885 E22 2009-09	mg/kg	57
Cr	DIN EN ISO 11885 E22 2009-09	mg/kg	< 1
Cu	DIN EN ISO 11885 E22 2009-09	mg/kg	< 1
Fe	DIN EN ISO 11885 E22 2009-09	mg/kg	4
К	DIN EN ISO 11885 E22 2009-09	mg/kg	< 10
Mg	DIN EN ISO 11885 E22 2009-09	mg/kg	9.3
Na	DIN EN ISO 11885 E22 2009-09	mg/kg	500
Ni	DIN EN ISO 11885 E22 2009-09	mg/kg	< 1
Pb	DIN EN ISO 11885 E22 2009-09	mg/kg	0.83
Sr	DIN EN ISO 11885 E22 2009-09	mg/kg	2
Zn	DIN EN ISO 11885 E22 2009-09	mg/kg	1
CI	DIN 38405 Part 1	mg/kg	125
Br	DIN EN ISO 10304-1 2009-07	mg/kg	< LoQ
SO4	DIN EN ISO 10304-1 2009-07	mg/kg	100
Si	DIN EN ISO 11885 E22 2009-09	mg/kg	12.6
Li	DIN EN ISO 11885 E22 2009-09 mg/kg		187'739
С	EN ISO 15350 2010-08	mg/kg	160'000
LOI	30 minutes at 500 °C	%	0.2

The chemical analysis and detailed composition of impurities was as follows:

Source: IBZ-Salzchemie GmbH & Co. KG

Samples will now be sent to potential off-takers for due diligence as part of the ongoing Maricunga finance process.

Appendix 1 (below) is the formal Analysis Certificate and a visual description of the sample Lithium Carbonate provided by IBZ-Salzchemie GmbH & Co. KG. This report has been verified internally by LPI's Chilean team.

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### Lithium Power International's Chief Executive Officer, Cristobal Garcia-Huidobro, commented:

"We are very pleased with these positive results from our latest testing activities. Not only do they confirm the high quality and consistency of our product, but also the sustainability of our process. We are confident that those results will be welcomed by potential off-takers participating in the financing process of the Maricunga project."



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#### CHARGING THE FUTURE



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CHARGING THE FUTURE

# IBZ - Salzchemie GmbH & Co. KG

#### Chemical and Geochemical Consultancy · Nanomaterials

IBZ - Salzchemie GmbH & Co. KG Schwarze Kiefern 4 · 09633 Halsbruecke · Germany

Minera Salar Blanco S.A. Mr. Tarek Halasa Av. El Golf 40, Piso 20 Las Condes Chile

## **Analysis Certificate**

CEO Prof. Dr. rer. nat. habil. Gerald Ziegenbalg

phone +49 3731 200-155 +49 3731 200-156 fax

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## Sample:

Washed and dried Li<sub>2</sub>CO<sub>3</sub>, obtained during process simulation with original brine at IBZ-Salzchemie white crystals

Visual description of the sample:



Analysis results are given in the following pages.

Chemical analysis, microscopic picture and particle size distribution Appendix:

Best regards, IBZ-Salzchemie GmbH & Co. KG

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Dr. Sven Ziegenbalg Authorized Officer



**Dr. Ziegenbalg GmbH** Schwarze Kiefern 4 · 09633 Halsbruecke Company Register Chemnitz HRB 25580 Sparkasse Mittelsachsen SWIFT-BIC WELADED1FGX

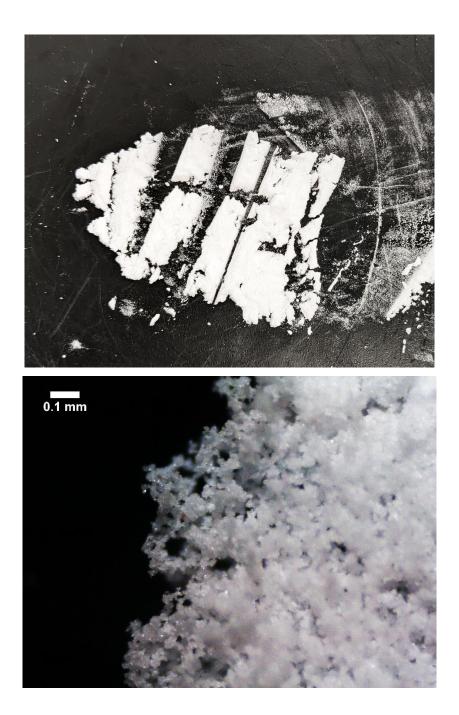
**Commerzbank Freiberg** IBAN DE17 8705 2000 3115 0294 70 IBAN DE60 8704 0000 0301 4461 00 SWIFT-BIC COBADEFFXXX

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Compound	Method	Unit	Sample
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Li <sub>2</sub> CO <sub>3</sub> with LOI		%	99.72
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Li	DIN EN ISO 11885 E22 2009-09	mg/kg	187'739
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LOI	30 minutes at 500 °C	%	0.2

**Chemical Analysis:** 

## **Product Picture:**



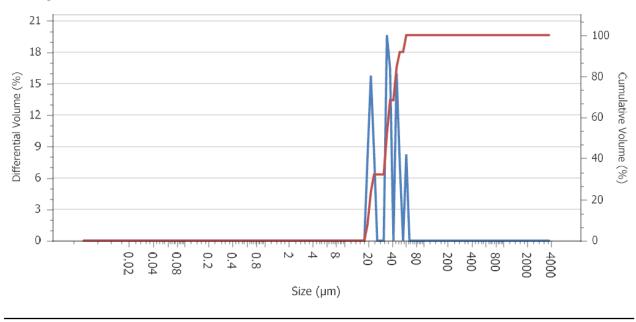
**Particle Size Distribution** 

# **Measurement Results**



## Sample Information

Date/Time: 11/4/2022 2:41:34 PM Device: B9810018L05 Method: LiCO3 Material: Lithium carbonate SampleID: Gea Chile User: Korngröße Module: Universal Liquid Module Properties: LiCO3 Carrier Fluid: IBZ Ethanol GroupId: LiCOs-MSB-3



# **Graph of Results**

# Statistics

	1		
Run	1	Avg	CV (%)
D10 (µm)	20.97	20.97	0.0000
D50 (µm)	35.93	35.93	0.0000
D90 (µm)	51.52	51.52	0.0000
Mean (µm)	36.10	36.10	0.0000
StDev (µm)	12.11	12.11	0.0000
Total (%)	100.0	100.0	0.0000
Volume(%) at size = 100 (µm)	0.0000	0.0000	0.0000
Volume(%) at size = 1000 (µm)	0.0000	0.0000	0.0000
Volume(%) at size = 200 (µm)	0.0000	0.0000	0.0000
Volume(%) at size = 400 (µm)	0.0000	0.0000	0.0000
Volume(%) at size = 600 (µm)	0.0000	0.0000	0.0000
Volume(%) at size = 800 (µm)	0.0000	0.0000	0.0000

Type: Arithmetic

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