



ASX ANNOUNCEMENT | 16 January 2018

LITHIUM CARBONATE CONVERSION SUCCESS

- *25kg sample of Pilgangoora spodumene converted to Lithium Carbonate, exceeding the target 99.5% lithium carbonate purity by producing 99.97% purity, well above battery grade specification and EV grade lithium carbonate*
- *Chinese Lithium Carbonate / Lithium Hydroxide conversion plant set to be complete to accept first Pilgangoora product shipments*

Altura Mining Limited (ASX Code: AJM) ("Altura" or "the Company") is pleased to report the excellent results of its recent conversion process testing in which its 25kg sample of Pilgangoora spodumene achieved a conversion to 99.97% purity Lithium Carbonate. This is above the target 99.5% lithium carbonate purity and exceeds the FMC battery grade specification. It is comparable with even more stringent EV grade lithium carbonate.

The ability to produce lithium carbonate using an unoptimized process flowsheet, which is comparable with a commercial EV grade lithium carbonate, demonstrates the high-quality grade of Altura's Pilgangoora spodumene and the low levels of deleterious elements contained in our ore after concentration. The work was able to demonstrate the advantage Pilgangoora spodumene product holds in producing high purity lithium carbonate.

The Company conducted the independent testing through ANSTO Minerals (a division of the Australian Nuclear Science & Technology Operations) ahead of first sales of spodumene concentrate in Q2 2018. ANSTO processed the ore into Lithium Carbonate via a conventional spodumene processing flowsheet, with this process being comparable to what Altura's customers will use once the purpose-built conversion plant currently being constructed in China is operational. Outlined in Figure 1 is a broad process flow chart of the sulphination process.

ANSTO Minerals employed a conventional spodumene processing flowsheet for the bulk lithium carbonate preparation, and more importantly, no optimisation of the processing parameters was undertaken and thus the success of the program could be further improved with further optimisation opportunities.

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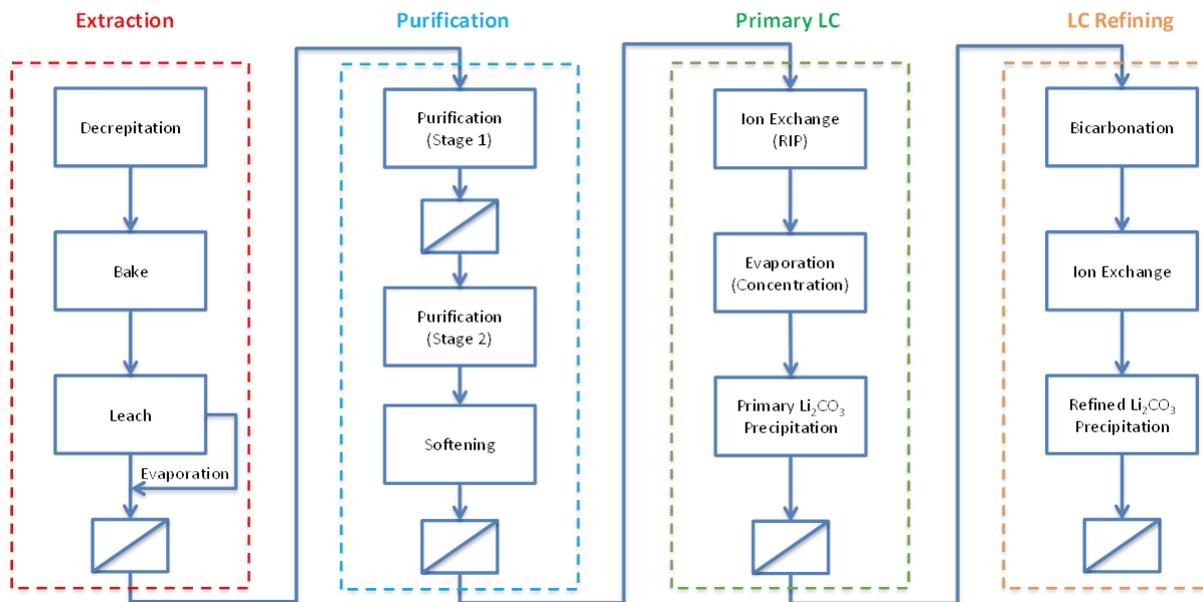


Figure 1: Conventional spodumene processing flowsheet

Element	Primary LC	Refined LC (Low Purity)	Refined LC (High Purity)	FMC Battery Grade	Chinese Battery Grade
	(ppm)			(ppm)	
Al	3	2	2	10	2
As	2	2	2	-	-
B	2	2	2	-	-
Ca	94	2	2	400	25
Cr	2	2	2	-	-
Cs	3	2	2	-	-
Cu	5	5	5	5	2
Fe	8	2	2	5	2
K	25	11	10	5	10
Li	184271	209091	231060	-	-
Mg	16	2	2	-	10
Mn	25	25	25	-	5
Mo	2	2	2	-	-
Na	1023	175	88	500	20
Ni	5	5	5	6	-
P	28	13	16	-	-
Pb	2	2	2	1	5
Rb	25	2	2	-	-
S	804	12	12	334*	10
Si	12	12	12	-	40
Sr	25	2	2	-	-
Zn	25	25	25	5	-
Cl	25	54	25	100	20
F	80	54	40	-	-
Li ₂ CO ₃ (%)	99.59	99.84	99.97	99.5	>99.9

Figure 2: High-quality grade of Pilgangoora concentrate is shown (highlighted) above against industry standard Lithium Carbonate grades

MANAGEMENT VISIT TO CHINESE LITHIUM CARBONATE PLANT SITE

Altura's Chief Operating Officer Chris Evans and Processing Manager Walter Madel recently returned from a successful trip to China to meet with offtake partners Lionergy, to view the progress of its Lithium Carbonate / Lithium Hydroxide conversion plant and to review and discuss the very successful results of the Company's recent spodumene conversion testing to lithium carbonate.

Construction of the plant has progressed well, with majority of civil works complete, and is on track to be fully completed by July 2018, ready for the first product shipment from the Altura Lithium Mine which is firmly on track to begin product sales in Q2 2018.



Construction of the Lionergy Group Lithium Carbonate / Hydroxide Conversion Plant



Construction of the Lionergy Group Lithium Carbonate / Hydroxide Conversion Plant



Lionergy and Altura representatives on site at new lithium carbonate / hydroxide plant

About Altura Mining Limited (ASX: AJM)

Altura is building a leading position in the independent supply of lithium raw materials, with a world-class Altura Lithium Project at Pilgangoora to become Australia's next major hard rock lithium product supplier in 2018. Altura has an experienced in-house team focussed on delivering the Altura Lithium Project into production. The project is the most advanced stage, near-term producing lithium project; coupled with solid offtake partners and a market providing substantial growth opportunities to ensure positive shareholder returns.

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