



Just imagine if half of the world's lithium carbonate market was controlled by only two companies. At this stage, 30% of the market is supplied by the Greenbushes mine in Western Australia, owned by Talison Lithium. What if another 20% chunk was controlled by global mining giant Rio Tinto, leaving the multitude of emerging lithium players to squabble over the remainder?

Sound like Superman v. Lex Luthor? You're not too far off.

Serbia is the only known source of Jadarite, a new mineral discovered in 2004 by Rio Tinto geologists. Jadarite has the same chemical composition as the fictional krypotonite of Superman fame. I did a search about this and found that Jadar has a chemical formula of sodium lithium boron silicate hydroxide. Rio Tinto took the sample of to Dr Chris Stanley at London's Natural History Museum, who was at first unable to identify the mineral. Then he did a web search and got lots of hits.

According to the BBC report at the time, Stanley told them this: "Towards the end of my research I searched the web using the mineral's chemical formula — sodium lithium boron silicate hydroxide — and was amazed to discover that same scientific name written on a case of rock containing kryptonite stolen by Lex Luthor from a museum in the film Superman Returns.

"The new mineral does not contain fluorine and is white rather than green but, in all other respects, the chemistry matches that for the rock containing kryptonite," he added According to Rio's website, Jadarite is a benign mineral with no evidence of negative impacts on human health. Jadarite contains lithium and borates. "With Jadarite, Serbia has the potential to supply a significant percent of the world's lithium, which is used to power hybrid and electric vehicles, modern computers, mobile phones," the company adds. Rio's entry into lithium is now a prospect with growing media chatter in Australia regarding the company's Jadar lithium-borate deposit in Serbia. Wednesday's edition of the Australian Financial Review, the national business daily, ran a large article about a Morgan Stanley report on batteries and the sources of the metals, including new lithium mines, needed for them.

"Interestingly, Rio's Jadar doesn't even find its way on to the list of longer-term Morgan Stanley radar at the moment," says the AFR. "But we reckon that will change at some point over the next couple of years. Jadar is a deposit big enough to feed up to 20% of the current lithium market and Rio reckons its quality and production credits make it a very attractive development option. All it needs is market scale and certainty."

You can bet that paragraph was based on a background chat with someone at Rio Tinto. And this last December on the subject of Rio and lithium in the Sydney Morning Herald:



"It's one of the world's hottest commodities and now Rio Tinto wants to join the party". Down in the story was a time projection very similar to that in the AFR: "While it is not likely to be developed in the next year or two, Rio's diamonds and minerals boss Alan Davies said the Jadar deposit in Serbia was 'exciting' for its lithium and boric acid potential". And this is a direct quote from Davies: "Lithium carbonate would be new for us but the world will need a lot more lithium in the future for electric cars. Hopefully, we'll be able to supply into that sector and be a strategic partner with a car manufacturer or a battery manufacturer".

Now, believe me, no-one at Rio talks on the record and that openly if it's only a thought bubble. Rio runs a very tight ship when it comes to public pronouncements.

Then the Herald jumped to the wrong conclusion. It argued that, with Rio suffering declining revenues from its copper and iron ore businesses, it would be unlikely to be spending money on Jadar.

And it did: on February 17, the global miner announced it had authorized funding to compete the pre-feasibility study at Jadar. It committed to spending \$20 million on that study, adding to the \$70 million already spent at Jadar, which is located 140km from Belgrade and near the city of Loznica.

Rio says officially it will be two years before it commits to a full feasibility study, but don't rule out something sooner if iron ore and base metal prices continue to languish and (b) lithium prices stay strong.

Jadar has the potential to be a significant disrupter in the lithium space.

Rio acknowledges that it will take much investment, technical work and planning to refine the mining of this mineral.

But, clearly, it thinks the effort is worth its while. And my hunch is that we will see Jadar talked about a good deal in the next year or two.

source: investorintel.com