

17 August 2018    Barry Fitzgerald

## Recognition that lithiums ain't lithiums may help explain price volatility

Historic buying opportunity or head for the hills? It is a question being asked about the lithium sector where share prices in the last month alone are down 20-30 per cent.

Among the leading lithium stocks, Pilbara Minerals (PLS) has fallen 24%, Kidman (KDR) 30%, Galaxy (GXY) 20%, Orocobre (ORE) 30% and Altura (AJM) 20%. Even Mineral Resources (MIN) with its substantial non-lithium business is off by 10%.

The damage is more severe when current share prices are compared with the highs touched last year.

The shorthand explanation offered up for the sell-off is that the rise-and-rise of the Western Australian hard-rock (spodumene) industry has tipped the market into over-supply, causing price weakness in the Chinese spot market for lithium carbonate.

The explanation is flawed on a number of counts, not the least of which is the spodumene price is still in a \$US850-\$US950 a tonne range because it is plugged into the more price-stable lithium hydroxide market, the increasingly-preferred precursor for battery makers.

From that it can be readily appreciated that the lithium market is opaque as they come. Using single spot price estimates of where pricing is for a product that comes with a multitude of specifications and uses just ain't right.

It was a subject tackled by Pilbara CEO Ken Brinsden on the sidelines of last week's Diggers & Dealers conference.

Brinsden said pure and simple that the thesis that the lithium market is over supplied was plain wrong.

He reckons two key factors explain the weakness in Chinese spot prices for lithium carbonate (again, not spodumene or the later stage lithium hydroxide)

First up, there was China's quite-right decision to shift incentives for battery adoption as part of its efforts to clean up its skies from old technology battery chemistries, to nickel-rich cathode batteries with higher energy densities.

The shift does not directly affect lithium usage but it has forced a retooling of a big chunk of the Chinese battery industry which still has a way to run.

Perhaps more telling then is part two of Brinsden's explanation for the current weakness in lithium carbonate prices in China.

It relates to efforts in China to develop a brine-based lithium industry. "Some of the investments are bearing fruit and it's led to the dumping of sub-grade material on to the market. It's had the effect of putting ore tonnes in the market in a relatively short period," Brinsden said.

“But the volume it is not much at 6,000-8,000 tonnes of lithium carbonate equivalent. It is the way they have done it that is the problem. But I don’t expect that to be a game changer in the slightest because the quality of the product is always very poor.”

To round off the argument that there is a disconnect in this market between lithium stock valuations and what has actually happened to the spodumene market, it is worth noting that Mineral Resources said in its quarterly report that it expects prices to be flat at \$US960/t in the September quarter.

It did suggest there was some expectation the price could weaken into the December quarter. But when the best of the WA producers are sporting cash costs of around \$US300/t, there will still be plenty left on the table.

### **Lithium battery thematic alive and well:**

Just in case there is any doubt out there that the lithium-ion battery thematic, based as it is on the world’s shift to electric vehicles and storage of renewable energy, has died on the vine, it is over to US lithium heavyweight Albemarle at its recent June quarter earnings call:

“Lithium growth continues to be driven by accelerating demand for electric vehicles. The 2017 sales of plug-in and pure electric automobiles were up about 56% over the prior year and sales through the first half of 2018 are up almost 90% versus the first half of 2017.

Our customers are experiencing growth consistent with that data. Recently, major cathode and battery manufacturers have reported year-on-year sales growth, ranging from 21% to 75% for the first half of 2018.

“Our customers and our customers’ customers continue to invest for future growth in a manner that is consistent with the Albemarle demand model. And the global environment for EV adoption continues to build momentum.

“Since the beginning of 2018, another six countries have either proposed bans on the sale of gas-powered vehicles or introduced new consumer incentives to encourage EV adoption. In the United States, four states have proposed or enacted legislation related to EV infrastructure or incentives, with California placing \$2.5 billion toward their Zero-Emission Vehicle program in the form of rebates and charging infrastructure.”

It is also worth mentioning here that Albemarle does not bother looking at the Chinese spot price for lithium carbonate, saying it is totally unrepresentative of how its products with 20 different specifications – some unique to individual customers – are priced.

Hopefully for the ASX-listed lithium producers, that will also soon become apparent to local investors in the space who seem to have panicked for no good reason.

### **Chinese consortium arrives at Cassini**

BHP made a splash at Diggers & Dealers with its plan to accelerate the swing by its Nickel West unit from supplier to the stainless steel market, to the lead supplier of nickel sulphate to the battery metals market.

BHP wants to capture the 10-15% premium nickel sulphate commands in the battery materials market over nickel products in the stainless steel market. The plan to make the switch is a response to overwhelming demand coming down the pipeline for the battery revolution.

The demand wave has just picked up little Cassini (CZI), which went in to a trading halt earlier in the week pending details of a capital raising.

It is likely to confirm today a \$4.2m raising at 6.1c a share for working capital purposes. But the bigger news is that about 75% of the placement has found its way in to the hands of a group of Chinese investors with a background in battery materials.

Cassini has that in spades, courtesy of its West Musgrave nickel-copper-cobalt joint venture in WA where OZ Minerals is on its way to earning a 70% interest, leaving Cassini with 30%.

Cassini is funded to the point of a development decision on a \$730-\$800 million mine development likely to produce up to 25,000tpa of nickel, 30,000tpa of copper, and 1,000tpa of cobalt from mid-2022 at robust cash costs of \$US2-\$US2.30/lb nickel (after by-product credits).

The entry on to the Cassini register by the Chinese investors (15% of post placement capital) has obvious strategic implications for the financing of its 30% share as the likely development of West Musgrave draws closer.

It is also another reminder that while western markets have gone weak at the knees at the moment on metal prices in general, the Chinese are looking further ahead to the tsunami of demand to come from the EV and renewable energy storage revolution. It's all about securing future supply.