Top 3 best valued lithium juniors, as lithium prices near a bottom

written by InvestorNews | December 13, 2023

Following an incredible 2022, the lithium sector has had a horrible 2023; however soon the pain should be over. The China lithium carbonate spot price is down 82.5% in the past year and is now below the marginal cost of production, meaning the lithium price fall should end very soon. This assumes the marginal cost producers continue to stop production and that EV sales continue to grow in 2024.

Lithium Ionic’s Bandeira Project: A Game Changer in the World of Critical Minerals

written by Tracy Weslosky | December 13, 2023

In a significant news this morning, Lithium Ionic Corp. (TSXV: LTH | OTCQX: LTHCF) has announced the results of its Preliminary Economic Assessment (PEA) and an updated Mineral Resource Estimate (MRE) for its Bandeira project. Located in the mineral-rich state of Minas Gerais, Brazil, this wholly-owned project stands poised to make a seismic impact in the world of critical minerals and rare earths.

Consolidated Lithium Metals aims to help supply North America with the surging demand for lithium

written by InvestorNews | December 13, 2023

Demand for lithium-ion batteries (and hence lithium) in North America is set to surge 13.8 fold from 2022 to 2035. The US Inflation Reduction Act has led to a massive increase in planned battery manufacturing in North America to support a North American supply chain for electric vehicles and energy stationary storage.

Economy of Scale – A Misused Metric in Mining

written by Jack Lifton | December 13, 2023

I was surprised earlier this week to see an article in the Wall Street Journal in which the rule of “economy of scale” was mistakenly used with regard to the output of a mine to predict that the price of lithium would fall as mine output increased. The author did not seem to understand, and his quoted “experts” didn’t seem to care, that mines are not organic, they don’t

continuously renew their ore bodies, nor are concentrations of hard rock minerals uniform, so that such mines have limited useful lifetimes. The concentrations of the minerals first sought out for extraction are always the highest in the deposit, so that as the extraction of the ore continues lower and lower grades are encountered until it becomes uneconomical, at the price then realized for the ore, to continue “mining” it. Economic assessments of the value of the mine describe this metric as the “life of the mine.” The enormous cost of setting up a mining and beneficiating (concentrating) operation assumes that it is unlikely that some new and more economical method of beneficiation will be discovered, and be experimented upon and proven effective, during the life of a mine, so that the life of the mine could be extended economically by enabling the economically effective processing of lower grade ores. Mines are designed with “best practices’ at the time of the construction. It is not assumed that new technologies will be discovered during the life of the mine that will extend its life.

Yet, on the 23rd oif January, the following sentence appeared in an article about the future supply and price of lithium: “Increasing production, which typically has the effect of reducing unit costs through economies of scale, will likely be the primary source of growth in the industry this year.”

Mine production decisions will of course be dependent upon the price of the mineral being mined. Gold mines are typically opened and shut down and then reopened, for example, by the price of gold dropping to less than the cost of extracting it and then bouncing back. Note well that gold is often mined in grades of just a few parts per million, because its value is as much as $2,000.00/oz or more than $60/gram.

Lithium, today, is produced from two types of “deposits.” One, is hard rock minerals, the best known of which is spodumene and

the largest deposits of which are in Australia. The other is from brines typically found in deserts, which may range in “grade” from the 3000+ grams per ton in the vast brine deposits of Chile to, more typically, 300-1000 grams/ton in the more typical desert brines of Chile, Argentina, and Bolivia.

Most of the lithium produced today comes from spodumene mining in Australia. The golden triangle of South American nations contribute less than 40% from their brines due to the enormous costs and time required to dry and process the brine to recover the lithium.

One may ask why are brines, in particular the vast ones in Chile, which have uniform concentration not dominant in the production of lithium. The answer, always, is cost including the cost of time. The brines must be evaporated in order to bring the lithium concentration to 20,000 parts per million (2 percent), at which concentration they can be processed to selectively recover the lithium. The Wall Street Journal writer would probably ask why not just increase production to lower costs? The answer here is cost, and the cost involved is that of time. It takes 18 months for the brine to be evaporated in the sun (the amounts necessary are simply too vast, one million tons of water must be evaporated to produce 3,000 tons of lithium in Chile’s Atacama Desert, for example, to even consider pumping the brines to fossil fuel heated tanks. Note, by contrast, that the production of one million tons of spodumene can recover 60,000 tons of lithium. But again that is an energy and reagent (sulphuric acid at high pressure and temperature) intensive operation, so it is very costly.

I have been told, privately, by the CEO of a large brine operation that his judgement is that lithium production may double by 2025, but that even holding that level of production, economically, depends entirely on the market price of lithium

and the price of energy, so that the very high prices of today, a response to the law of supply and demand caused by the lithium industry's inability to keep up with the surging demand for EV and stationary storage batteries, are, as always, the driver of supply. Should the price of lithium drop as precipitously as it has risen, or if the cost of energy rises too much, that part of the lithium supply dependent on high prices will close (at least in the capitalist "free market" economies).

Economy of scale does not apply here. It is an inapplicable metric in mining. Miners always want the prices of minerals to rise, not decline!

Lithium demand is poised to create a supercycle of supply deficits and lasting high prices

written by Matt Bohlsen | December 13, 2023

The past two years has seen lithium prices rise about ten times from US$7,000/t to US$70,000/t both for lithium hydroxide and carbonate. Meanwhile, the lithium spodumene price has enjoyed a similar 10 fold increase from US$500/t to US$5,000/t. This has been caused by EV sales booming, resulting in a huge demand wave for lithium that literally swamped the small lithium industry.

The lithium carbonate price has risen as EV demand has taken off – Currently at CNY 510,500/t (~US$70,000/t)

Source: Trading Economics

What's next for the lithium sector?

Conventional commodity booms typically follow a rather fast boom and bust cycle as the cure for deficits is high prices, thereby encouraging new supply. However, every once in a while we get a commodity supercycle. That's where the demand wave is so big that it takes as long as a decade for supply to eventually catch up or for demand to subside. New mines can take 5-10 years to come online, yet a new EV and battery factory can be built in 1-2 years.

In the case of lithium, many EV metals experts agree we have only just entered a lithium supercycle. To better understand the size of the demand wave investors need to get a feel for how much lithium will be needed to feed the electric vehicle boom.

A typical 50kWh battery electric car (roughly the global average size in 2022) requires about 45kgs of lithium carbonate equivalent. In 2022 global plugin electric car sales look set to grow by at least 50%+ year over year. Given 2021 global plugin electric car sales were 6.75 million, 2022 will likely end up at about 10.125 million, or 3.375 million additional new electric cars. This means lithium demand, only from plugin electric cars, will increase by roughly 152,000 tonnes ("t") of lithium carbonate equivalent ("LCE") in 2022 ((45/1000) x 3,375,000)). If we add in other sources of lithium the global lithium market will roughly increase by about 185,000t LCE in 2022, or about a 34% increase on 2021 levels of approximately 540,000t LCE.

Looking at lithium supply a typical new mine or mine expansion could possibly bring on 20,000t LCE in a year. This means the market needs about 9 new mines or expansion of existing mines,

just to catch up with demand. This will be needed – and will grow larger – each year.

The scary part is that in a good year electric car demand can grow at 100%pa, as we saw with a 108% increase in 2021, which sent the lithium market into deficit. These days the demand is there but the supply is not, hence the global EV waiting list is now in the order of 3 million vehicles.

A lithium deficit can only mean lithium prices stay 'stronger for longer' this decade

Provided electric car sales growth remains at 30-50%+pa, all of this suggests we are likely to see constant lithium deficits this decade. Strong stationary energy storage sales are also pulling on lithium demand.

A lithium deficit can only mean lithium prices stay 'stronger for longer', meaning about US$50,000/t plus for lithium carbonate and lithium hydroxide and above US$5,000/t for spodumene.

Yet despite this, some analysts are forecasting lithium prices to fall over the next 5 years. This completely contradicts forecasts of continual lithium deficits this decade. In a deficit, prices do not fall.

A contradiction: Many analysts currently forecast lithium prices to fall as lithium deficits continue this decade

Source: Morningstar

What can go wrong with this forecast?

EV demand looks strong but in 2022 sales have been relying heavily on China, which has been responsible for 50-60% of

global sales. This means any sales collapse in China will be heavily felt. European EV sales growth has weakened in 2022 due to events in Europe weakening their economy. USA EV sales have been growing quite well from a lower base, but the U.S economy is now slowing as interest rates are rapidly rising.

One plus for lithium demand is in the USA in 2023-24 we can expect to see new demand coming on from electric pickup trucks, which typically have a battery almost twice the size of an electric sedan, thereby requiring almost twice as much lithium.

Closing remarks

2022 has seen the West wake up to the need to source critical minerals and establish their own supply chain, or risk being left behind, as China grabs global electric car market share. The Inflation Reduction Act and the EU Critical Raw Materials Act are designed to address this problem and bring supply chains back home or at least with free trade agreement countries.

Again this is further evidence to suggest that the rest of this decade will see a fight to source critical minerals, none more important than lithium.

We may need to get used to lithium chemical prices at, or north of, US$50,000/t for the foreseeable future. This stronger for longer lithium pricing narrative should also flow through to the lithium miners many of which are currently priced at extremely low 2023 and 2024 earnings multiples, based on lithium prices falling back to US$20,000/t. If analysts become a little braver and use US$40-50,000/t in their models expect some very significant price target increases over the next year or two. Stay tuned.

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Patriot Battery Metals is marking its territory as a lithium explorer for Quebec's Battery Valley

written by InvestorNews | December 13, 2023

The province of Quebec appears to be going "all in" on powering the electric vehicle revolution. The bet is being placed in Becancour, a small town along the shores of the St. Lawrence River about midway between Montreal and Quebec City, which is rapidly emerging as a center for producing the advanced materials needed for lithium-ion batteries. Companies including General Motors, POSCO Chemical, and BASF are setting up shop to produce cathode active materials and lithium battery recycling in this strategic Quebec locale.

But what is the attraction to this particular location? Becancour offers an inviting combination of highly efficient logistics for delivering battery materials to both North America

and Europe, and it has ready access to hydroelectricity that will lower the carbon footprint of products produced there, an advantage that can be passed on to the battery and EV sectors.

It also doesn't hurt that Quebec happens to be in a region that is rich in the minerals and metals needed for battery material manufacturing. With the support of the provincial and federal governments, Becancour is looking to become Canada's "Battery Valley."

Given the commitment is already there, both from government and the private sector, who have announced billions in capital spending, one now needs to look upstream to see where they plan to source the raw materials for this battery hub. As we discussed in the Dean's List, lithium is on the critical minerals list and a key battery component. Quebec appears to be blessed with an abundance of hard rock lithium or pegmatites which can contain a lithium bearing mineral known as spodumene. One company attracting a lot of attention in the lithium space is Patriot Battery Metals Inc. (TSXV: PMET | OTCQB: PMETF), a mineral exploration company focused on the acquisition and development of mineral properties containing battery, base, and precious metals.

Patriot Battery Metals' flagship asset is the 100% owned Corvette Property, a 214 km^2 land package situated along a ~50 km lithium pegmatite trend, located in the James Bay Region of Québec. The high number of well-mineralized pegmatites in this core area of the trend indicates a strong potential for a series of relatively closely spaced/stacked, sub-parallel, and sizable spodumene-bearing pegmatite bodies, with significant lateral and depth extent, to be present. Located only 15 km from the high voltage power lines connected to one of the largest hydro power schemes in the world, there is potential for the Corvette Property to produce 'green lithium'.

There are two things that have attracted my attention with respect to Patriot Battery Metals. First is the abundance of impressive results to date and the fact that there is a lot more coming. The core area includes an approximate 2 km long corridor hosting numerous spodumene pegmatites, highlighted by the large CV1 and CV5 pegmatite outcrops, and has returned drill intercepts of:

- 1.65% Li_2O and 193 ppm Ta_2O_5 over 159.7 m (CV22-042)
- 1.22% Li_2O and 138 ppm Ta_2O_5 over 152.8 m (CV22-030)
- 2.13% Li_2O and 163 ppm Ta_2O_5 over 86.2 m (CV22-044), and,
- 2.22% Li_2O and 147 ppm Ta_2O_5 over 70.1 m, including 3.01% Li_2O and 160 ppm Ta_2O_5 over 40.7 m (CV22-017).

A total of three drill rigs are currently operating at the Corvette Property – two targeting the CV5 pegmatite corridor and one targeting the CV13 pegmatite cluster. As of September 15, 2022, a total of approximately 19,199 m over sixty-five (65) holes have now been completed over the 2022 drill campaign with drilling anticipated to continue through to mid-October, at which time the 2022 drill program will conclude with final core processing on site and shipment to the lab for analysis.

Source: Patriot Battery Metals Inc. Sep 19, 2022 Press Release

As you can see from the illustration above, there is still a lot of outstanding assays pending for the summer drilling program. But perhaps even more intriguing is the Company's latest capital raise to fund drilling for the foreseeable future. I've seen a lot of flow-through share offerings in my time and even participated in several but I have never seen anyone command a price representing a 109% premium to the last traded share price prior to the offering. I know the Federal Government's 30%

Critical Mineral Exploration Tax Credit has added a little more incentive to flow-through shares but this premium is astounding (at least to me). Perhaps PearTree Securities Inc. is wildly bullish about lithium in Quebec and is more than happy to spend C$20 million on 1.5 million shares at C$13.27 when Patriot's stock price was at C$6.35. I know it's made me pay a lot more attention to this stock.

However, Patriot Battery Metals is not a cheap stock at present. It, along with many of its lithium peers, are trading at or near all time highs despite what most of the rest of the market is doing. Granted lithium seems to have better economics right now than most other metals, meaning the value creation for investors can be very steep on a successful asset. With that in mind, the Corvette Property doesn't have a resource estimate or PFS as of yet, which means there could already be a lot of optimism built into its C$580 million market cap… or not.

Why have lithium miner stock prices fallen when lithium prices have surged higher?

written by InvestorNews | December 13, 2023

Investing in the stockmarket is part science and part art. The science part refers to the fundamental analysis and the art refers more to the instinct/understanding and timing of investments. What truly sets great investors apart from the average are two things – Spotting a winning trend early and investing when there is a market disconnect caused by negative

sentiment.

Today's article is about just that. The winning trend is the EV and lithium boom, and the disconnect is the recent lithium price gains while the lithium miners stock prices fell. Did you know that in the past 3 months lithium carbonate spot prices in China have more than doubled (up ~125%), yet lithium miners stocks have fallen in many cases by 25% or more in the same time period?

China lithium spot prices are up ~125% in the past 3 months and 10x the past 14 months

Source: Trading Economics

The chart below shows the stock price falls of several lithium producers and one highly promising junior. In the past 3 months (as lithium prices more than doubled) Albemarle Corporation (NYSE: ALB) has fallen 32.40%, Livent Corporation (NYSE: LTHM) has fallen 28.43%, SQM (NYSE: SQM) is down 6.20%, Ganfeng Lithium (HK: 1772) is down 9.53%, and Lithium South Development Corp. (TSXV: LIS) is down 35.35%.

Leading lithium miners' stock prices the past 3 months have fallen significantly

Source: Yahoo Finance

Why have lithium miner stock prices fallen when lithium prices have surged higher?

The answer as to why is as follows:

- Several lithium miners sell their lithium on contract

prices which are yet to properly reflect the market spot price for lithium. As these contracts expire they will be replaced with much higher contract prices or spot prices.

- Macro events and market sentiment – The general market has been selling off with the S&P500 down about 10% from its peak due to U.S. interest rates soon to rise and more recently the Russia-Ukraine crisis. Of course, this will pass and has almost zero impact on EV sales and/or lithium prices. In fact, current very high oil prices are helping EV sales. In my situation my new electric car costs me $17 to drive 420kms compared to $75 for my old gasoline car, that's about 4.5x less. Servicing costs are almost zero, with the main cost being tire replacements.

The recent disconnect between the more than doubling of lithium prices and lithium miners stock prices falling would only make sense if the sector was in trouble, yet EV sales are setting new records, up 108% in 2021, and look set to grow well above 50% each year this decade. Lithium demand is forecast to grow 11x this decade with most analysts forecasting growing lithium deficits. So we have a winning trend and a huge disconnect caused by macro factors (Russia-Ukraine conflict, rising US interest rates). Great investors can see this huge disconnect and will move now to profit from it.

Two popular ETFs that track the stocks of EVs, batteries, lithium and EV metal companies also tell a similar story, having both fallen the past 3 months. The Global X Lithium & Battery Tech ETF (LIT) is now trading on a PE of just 26 and the Amplify Lithium & Battery Technology ETF (BATT) trades on a PE of only 21. Considering the sector's growth rate of well above 50%pa, this is plain crazy.

A final example could be Tesla (NASDAQ: TSLA). The stock is down 26% over the past 3 months despite reporting its best ever

results in Q4, 2021 and smashing the competition. Tesla had an outstanding 2021 growing revenues 71% YoY and GAAP earnings by 665% YoY. Total vehicle production grew 83% YoY. 2022 looks to be even better for Tesla with 2 new gigafactories set to open and production likely to grow from ~936,000 electric cars in 2021 to somewhere near 1.7 million in 2022. One more key factor highlighting global EV demand, Tesla has an estimated 1.3 million pre-orders for their Cybertruck. In total Tesla's pre-orders are so high that they don't even accept orders for Model Y in many countries as they cannot meet demand for some years.

Tesla's electric cars have huge waiting lists and well over 1.5 million pre-orders

Closing remarks

All forms of lithium prices (spodumene, Li hydroxide, Li carbonate) have been surging higher the past 14 months. In particular, the China lithium carbonate price has surged **125% higher** the past 3 months, while leading lithium miners and others fell between 6% and 35%. Albemarle, the leading lithium miner, has **fallen 32%** in the past 3 months. This is a huge disconnect, and frankly what great investors dream of. I will be topping up my positions in the EV companies and lithium miners as the EV and lithium boom has only just begun and current macro events have opened up a huge buying opportunity for investors. The last time I saw this happen was in the March 2020 Covid-19 low, with many lithium stocks surging higher once market sentiment improved.

My view is that the lithium miners are currently like a tightly sprung coil. As soon as the market sentiment and macro issues

improve that coil should spring open propelling lithium miners stock prices higher and closing the current huge disconnect.

Don’t miss this opportunity to buy into ‘white gold’ as lithium becomes the most critical element of the modern era.

Disclosure: The author is long all the stocks and ETFs mentioned in this article.

CBLT’s portfolio of 9 now includes a lithium project in Manitoba

written by InvestorNews | December 13, 2023

Lithium and cobalt are two of the key critical metals needed to power the electric vehicle (EV) revolution. As a result, companies that can successfully explore and grow a resource either of lithium or of cobalt quickly become highly valued. Our company today, CBLT Inc., (TSXV: CBLT), already has several cobalt, exploration stage, projects in Canada, some gold opportunities, and now a promising potential lithium project in Manitoba, Canada.

CBLT Inc. (TSXV: CBLT) announced to the market in February 2021 that it had acquired 100% of the Shatford Lake Property, located in the Winnipeg River-Cat Lake pegmatite field in eastern Manitoba. This Property had been previously explored for rare element containing pegmatites with historical mapping and drilling identifying multiple pegmatite dykes. Most of this prior work focused on the tantalum potential of the dykes and

lithium was not analyzed for. Spodumene, the pre-eminent ore of lithium, however, was noted in an assessment report and provincial geologists also documented the presence of lithia mica.

The Shatford Lake Property lies just 5 km southwest of the well-known Tanco Mine. The Tanco Mine is a lithium-cesium-tantalum (LCT-type) pegmatite, producing cesium and tantalum. Lithium, beryllium and rubidium were also previously produced at Tanco. It was estimated back in 1991 that Tanco had lithium reserves of 7.3 million tonnes at 2.76% Li2O (a historical third party estimate). To put this in perspective, the world's leading lithium spodumene mine in Australia, Greenbushes, has a total Resource of 178.5Mt @2.0% Li2O. This shows that although Tanco is much smaller (based only on the historical third party estimate), it is a very high grade, with potential valuable by-products. Most lithium projects today have grades of around 0.9-1.5% Li2O. A typical lithium spodumene producer has a total Resource size of around 50-250 MT @ 1.0-1.4% Li2O.

All of this means the Shatford Lake Property appears to be highly prospective for lithium and may hold a very high grade lithium deposit, similar to Tanco's. If high grade lithium is found, then the next question for investors will be how extensive and large the resource is. t

The Shatford Lake Property is in an early stage of exploration, but it is very promising.

CBLT Inc.'s sample assay locations at the newly acquired Shatford Lake Property in Manitoba, Canada

Source: CBLT Inc. Twitter page

The summer exploration program at Shatford Lake began in June 2021 and then on August 10, CBLT Inc. informed the market that "the first batch of samples has been sent to an accredited lab for analysis. Results are expected in approximately six weeks." This means assay results from surface samples should be due about now. Added to this will be results from surface mapping trying to identify pegmatite locations.

CBLT Inc.'s cobalt properties also some with gold potential – All at exploration stage

Source: CBLT Inc. website

Big Duck Lake update

CBLT Inc. owns 100% of the Big Duck Lake gold property. It covers six square kilometers of prospective geology, east of Thunder Bay, Ontario in the Hemlo Gold Camp region. It contains 46 showings including the Coco-Estelle Deposit, which hosts a historic resource of 53,700T @ 10.7 g/t Au, or more than 18,000 ounces of contained gold (historic resource, so cannot be relied upon with CBLT carrying out confirmatory work including drilling). In a recent update CBLT Inc. stated: "CBLT's work on Big Duck Lake has begun, with a detailed review of historical data. CBLT is continuing with its consultation with Pays Plat First Nation, including a recent in-person meeting in Thunder Bay…..CBLT will be at Big Duck Lake as soon as reasonably possible to carry out a diamond drill program and to investigate the high grade zinc and copper showings."

Ready Set Gold Corp. update

CBLT Inc. also holds a small shareholding in Ready Set Gold Corp. (CSE: RDY). At this time CBLT Inc. is not happy with Ready

Set Gold Corp.’s performance as discussed in an update here.

Closing remarks

CBLT Inc. runs a very streamlined company with a focus on avoiding shareholder dilution and on maximizing return for shareholders. The Company also looks to add value with astute deal making. Traditionally the focus has been on cobalt, and some gold, but in 2021 has broadened its focus to include lithium. In total CBLT Inc. currently has 9 projects as you can read here.

With sample assay results due soon at the exciting Shatford Lake Property, investors are keen to see what the future holds. Following this will be results of the historical data review and then further exploration work at Big Duck Lake.

CBLT Inc.’s stock is up 50% the past year, but still trades on a low market cap of just C$4.57 million.

The Technology Metals Show with Neo Lithium’s Waldo Perez on the state of the lithium market

written by InvestorNews | December 13, 2023

Technology Metals Show hosts Jack Lifton and Peter Clausi interview Waldo Perez, President, CEO and Director of Neo Lithium Corp. (TSXV: NLC | OTCQX: NTTHF) on the state of the

lithium market. “When it comes to lithium there are two places and two sources.” Waldo started. “First is the Puna plateau which is Chile, Bolivia and Argentina for brine resources. 60% of the lithium of the planet is located in an area that covers this plateau.” He continued, “The other source is a mineral called spodumene. This mineral is more common in the planet but the best spodumene is found in Australia.”

In this interview, which may also be viewed on YouTube (click here to subscribe to the InvestorIntel Channel), Waldo went on to say that CATL – largest battery producer in the world, is a strategic investor in Neo Lithium. He explained that Neo Lithum’s Tres Quebradas (3Q) Lithium Project was selected by CATL because it is the highest grade undeveloped project in the world and has low OPEX and CAPEX. The project has 50% IRR and payback of less than 2 years. To watch the full interview, click here

About Neo Lithium Corp.

Neo Lithium Corp. has quickly become a prominent new name in lithium brine exploration by virtue of its high quality 3Q Project and experienced team. Neo Lithium is rapidly advancing its recently discovered 3Q Project – a unique high-grade lithium brine lake and salar complex in Latin America’s “Lithium Triangle”. The 3Q Project is located in the Catamarca Province, the largest lithium producing area in Argentina covering approximately 35,000 ha including a salar complex of approximately 16,000 ha.

To learn more about Neo Lithium Corp., click here

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