Lake Resources: Lithium Is The New Buy And HODL

Oct. 28, 2021 11:55 AM | Lake Resources NL (LLKKF) | CYDF, NTTHF

Summary

• Lake's flagship project is building funding and moving forward.
• Warrants are also coming in which will provide significant additional funding.
• The company has many projects that could start moving forward parallel to the main project Kachi (located in mining-friendly Argentina).
• Lithium demand continues to grow; the trend is accelerating. We present several new multi-billion dollar lithium plants.
• We conclude with how we are playing the lithium sea change.
A loyal reader asked me recently, "Now that you have skin in the game, can we get an article on Lake Resources"? Fair enough, I've been needing to research them in depth to make sure they are worth my time. Looking at the Lake Resources page (OTCQB:LLKKF) nothing has been written on them since Feb 2021. Quite amazing for a company with a market cap of $843 million USD. However more importantly: Is Lake Resources worth your hard earned speculative cash? I think it is and it is quickly growing to my 3rd largest position in my portfolio.

At First You Had My Curiosity... Now You Have My Attention

I have a lithium watch list that is roughly 100+ tickers long. Given all the tickers, only so much time can be devoted to study companies in-depth. Thus, while I might glance at many companies I only have time to deep dive (research wise) on those that I consider having the best risk to reward. I've had my eye on Lake Resources for quite some time. Why is that? Resource size and now funding. The chess pieces are starting to slip into place. First let's explore the resource and then we can look at funding.

5 Projects and Resource Size

A general overview of the company reveals they have five projects in the works.

(Source: Lake Resources)
Garnering details on the flagship project Kachi, we note the following from the Lake Resources IR page:

- (Kachi) 1 million tonnes [Mt] containing lithium carbonate equivalent (290 mg/L lithium Indicated)
- 3.4 million tonnes [Mt] at 210 mg/L (lithium Inferred)
- Annual production target of 25,500 tonnes of battery grade lithium.
- Using direct extraction technology (DET)
- Low impurities as indicated by a Mg/Li ratio of 3.8 to 4.6

(Source: Lake Resources)

To put this into perspective, let's see what Galan Lithium presents. We can see in the picture below various lithium projects to include Kachi in yellow.

The resource size of Kachi is moderate at 1Mt. Impurities such as Mg appear to be moderate as well, but using DLE technology the project could work very well. One interesting point is Lake Resources has plans in the works to double the output of Kachi. This makes the project even more attractive.

Noted below, lithium is on the horizontal axis while impurities would be on the vertical axis.
Concerning impurities, it will cost capital to clean that lithium and refine it into higher grade, but it appears the company has been successful as the lithium has been purified to 99.97% in tests.

Assets and Funding

Projects need cash in order to advance. Typically the process goes something like this: First a project makes an educated guess via a PEA (preliminary economic...
assessment). Think of it as a "best guess" that according to smallcapinvestor.ca has an accuracy within 20%-30%. After this comes the PFS (Pre-Feasibility Study), which is more technical and accurate to within 10%-15%. Last is the DFS (Definitive Feasibility Study).

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Preliminary Economic Assessment (PEA)</th>
<th>Prefeasibility Study (PFS)</th>
<th>Feasibility Study (FS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study</td>
<td>“What it could be”</td>
<td>“What it should be”</td>
<td>“What it will be”</td>
</tr>
<tr>
<td>Concept</td>
<td>Early stage conceptual assessment of the potential economic viability of mineral resources</td>
<td>Realistic economic and engineering studies sufficient to demonstrate economic viability and establish mineral reserves</td>
<td>Detailed study of how the mine will be built, used as the basis for a production decision</td>
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<tr>
<td>Cost Accuracy</td>
<td>+/- 50%</td>
<td>+/- 25%</td>
<td>+/- 15%</td>
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<tr>
<td>Engineering</td>
<td>&lt;1%</td>
<td>1-5%</td>
<td>5-25%</td>
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<tr>
<td>Mineral Estimate Inputs</td>
<td>Inferred/Indicated/Measured Resources</td>
<td>Indicated &amp; Measured Resources</td>
<td>Probable &amp; Proven Reserves</td>
</tr>
<tr>
<td>Mineral Estimate Outputs</td>
<td>Inferred/Indicated/Measured Resources</td>
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(Source: Smallcapinvestor.ca)

Typically after the DFS a project will see massive funding. The trick is to have enough money to get to the DFS and enter into negotiations from a position of strength. Some companies build up small funding deals to parlay into larger deals. That is the path that Lithium Americas (LAC) took via its various dealings. Neolithium (OTCQX:NTTHF) also took this path via selling 8% of the company to CATL and later selling the entire company which is currently pending.

**Cash Fuels Projects**

Looking at Lake Resources, we see they have capital via cash on hand and various partnerships.

- $26 million AUD in cash as of June 2021 Funding.
- Lilac Solutions to provide technology, engineering teams, and an onsite demonstration plant and in return earn a maximum of 25% of the Kachi project.
- After earning its 25% interest, Lilac is expected to fund $50 million USD of development costs.
• Expression of interest to cover 70% of the total Kachi project funding requirements from UKEF (UK Export Finance) in conjunction with the EDC (Canada Export Credit Agency). Approximately $380.8 million.

Looking at the Lilac deal, it appears they have to hit set milestones in order to be awarded increasing amounts of ownership in the Kachi Project.

Lake Resources Partners with Lilac Solutions - Kachi Project Aligns Climate Tech with Upstream Lithium Supply

• **Lilac to Earn in to Kachi Project**
  Lilac Solutions will contribute technology, engineering teams, and on-site demonstration plant,
  - Initial 10% - Lilac to fund at its cost the completion of testing of its technology for the Kachi Project
  - Further 10% - Satisfying all agreed testing criteria using the demonstration plant at the Kachi Project
  - Final 5% - Kachi lithium product achieving the highest agreed qualification standards with certain offtakers

• **Lilac to Contribute c.US$50 million to Kachi Project, once earn in complete**
  Lilac to contribute pro rata to funding development of the Kachi Project, approx. US$50m

(Source: Lake Resources at the 4:21 mark)

Reviewing the project, we can see a capex estimate of $544 million USD required to bring the project from concept to production. This puts it in the mid range of costs to bring a project online. With $26 million in the bank, a $50 USD million deal, and then potentially 70% of the project cost covered ($380.8 million USD), it seems rather likely that this project will move forward to production given time.

**The Resource**

Per the video at the 6:25 mark, we can see interesting figures concerning the Kachi project such as:

• 25 years of production will use 20% of the resource

• Kachi - 740 sq km

• Currently drilling to upgrade resource for expansion

• Production target 25,500 tpa - 2024 with expansion study in place to double production to 51,000 tpa
Moving on to expansion talk, we see the expansion study is going to look at taking the direct lithium extraction to 51,000 tpa LCE which is double the current plan. The slide also notes that they have to drill more (currently underway) to "upgrade more inferred resources to measured and indicated resources". IF and when this happens, they would announce it. This could potentially impact the stock in a positive way, but let's move on. We can assume if they double production this will take the resource used to 40% by 25 years. This gives us ample room to expand years down the road to even more output and I highly doubt they have fully explored the land they have.

(Source: Lake Resources at the 6:31 mark)

**Margins Comparison**

At the 7:14 mark, we see various projections of cost and margins given Lake's direct extraction vs brine evaporation and lithium hard rock. I need to confirm the brine evaporation Opex and the DLE numbers, but overall it appears Lake wants to charge a premium for lithium that is 99.97% pure (assuming everything works). Key word here is *assuming*. Mr. Murphy has a particular way to destroying all well laid plans, but time will tell if the aspirations pan out. As a side note, I found the explanation of Lilac DLE technology that Lake Resources is going to be using interesting.

Per Lilac: "The company produces ion exchange beads that are loaded into tanks, through which brine flows. As the brine percolates through the beads, the beads absorb lithium out of the brine."
Once the beads are saturated with lithium, hydrochloric acid is used to flush out the lithium, yielding lithium chloride. The lithium chloride is then processed on-site with conventional process equipment to yield a 'finished product' for sale to battery makers."

(Source: Lilac Solutions)

**Direct extraction**

**Premium price – very high margin**

(Source: Lake Resources at the 7:14 mark)

**Project Cost & Details**

We can see in the presentation that we are looking at 1.01 Mt for the total project size with capex to build the plant at $544 US which is in line with other various lithium projects. NVP is $1,580 million. When compared to market cap of $843 million USD, we predict the stock could rise quite a bit more if one factors in the NPV listed is just for the Kachi project. Cost per tonne is $4,178 USD. Something to ponder: What does the total company NPV look like as other projects move forward?
(Source: Lake Resources at the 7:26 mark)

Lake Rewards Shareholders and Warrants Fund the Projects

In the plethora of stocks I have been in over the years, I have never experienced one that rewarded shareholders as Lake Resources has done. Quite frankly, they really gave back to shareholders via the issuance of warrants at 0.35 AUD.

These warrants (once executed) directly fund the company and upon execution a second warrant will be spun off executable at 0.75 AUD. How this works differs a bit depending on where you live in the world. My understanding (having participated in the 1st warrant) is if you executed it and you live in Australia you will get the 2nd warrant. If you live in the US, you will be paid for the second warrant if you registered with Lodge Partners via a convoluted process.

However contrary to what I read, I have received my second set of warrants in my Interactive Brokers account and I reside in the USA; hence your mileage may vary. To reintegrate though, Lake Resources rewarding loyal shareholders is quite commendable and frankly should be emulated by other lithium companies [I'm looking at you Cypress Development (OTCQB:CYDVF)]. This would be a praiseworthy way to reward shareholders and yet allow companies to fund projects at a slight discount to the current share price.

Timeline of Kachi

The DFS is set to arrive in Q2 of 2022. Granted this could slip, but at least it gives us a rough idea. After the DFS, we are looking at potential partners and/or funding.

The other projects appear to be in the early stages and I have not seen any cost projects or tonnage estimations put forth as of yet.
There Can Be Only One

I'm going to take a break from talking about Lake Resources for a moment. I really think that people starting out need some unwanted advice from a veteran. The markets can be approached several ways and from several risk tolerances. Yet I see one reoccurring trend in new investors. They are very concerned about how much they make. I had a gentleman (let's call him Jonathan), tell me yesterday that his children were making more in their accounts than he was. Obviously, they had higher risk individual stocks as opposed to his index funds. However, the point should not be him focusing on potential gains or what might have happened on the positive side. The focus of old hands tends to be on how much you can lose and this is because we have done every dumb thing you can imagine.

Managing Mr. Murphy

You can roll the dice and win 10 times in a row but if you 7 out on the 11th roll it is game over. Hence, pros focus on potential risk. This is not to say you should not take risk. Just realize you need to assess the max risk vs the max reward. For example, I have a particular lithium stock where I assess the max risk is a 70% downward movement if a black swan event hits. The max upside looking at peers market caps, tonnage of lithium that could be extracted, lithium grades, etc., is about 600%-1100%. Hence, the risk to reward makes sense IF we keep the total amount of capital at levels we can afford to lose and still be in the game. Some people will read that and say what I am saying is very risky. Yes, I agree it is very risky. Yet this is educated risk. The point is know what you can lose if things go south and plan on it happening. Mr. Murphy will strike when most unexpected.

Nothing Is Impossible (Make Your Dreams Come True)

I've amassed some accounts that for me are rather large in size. Of course this is a relative term. Yet, I started with $100 dollars from picking snap beans. The point is, if you never start you can't begin the voyage to wealth. This will require some sacrifice on your part. You might have to skip that coffee on the way to work. Maybe pick up a side job like writing for Seeking Alpha. Maybe you skip something now and put $10 dollars in your account. This is paying your future self. Invest in future you. I told my friend John "Fund your account". His response is "Austin I can't because...". "Okay" I said, "Just put $25 in it" to which he said "I can do that!". Yes, yes you can. While these amounts might seem trivial or even silly, pennies add up to dollars. Dollars add up to wealth once compound interest takes place. Getting back on topic.
Lithium Demand

The links below should be viewed through the lens of a sea change of massive weight approaching the EV sector. Do note that since so much capital is flowing into EV, I have modified my links to only include those that are investing at least $1 billion into electric or those that are simply interesting. Otherwise this section would be pages long. Updates since my last article:

- Toyota to invest $3.4 Billion by 2030
- Lilac receives $150 million in funding from investors to include BMW. This is the same Lilac that is funding Lake Resources for $50 million.

Previous lithium demand news from my last article:

- CATL Looks to Raise $9 Bln to Expand Lithium-ion Battery Production
- Ford (NYSE:F) to invest $11.4 billion into EV.
- CATL Signs Agreement to Build New Battery Manufacturing Base in Shanghai
- SK Innovation to Invest $1 Billion in a New Battery Factory in China
- Ganfeng Lithium to invest 8.4 billion yuan ($1.3 billion US) in two new lithium battery production projects, solid state batteries expansion
- Glencore Stake Boosts Britishvolt £4bn Plans for Battery Factory
- Lucid rolls first EV off assembly line
- Electric Vehicles Will Usher in New Pennsylvania Regulations
- Ganfeng (OTCPK:GNENY) to invest $1.3 billion in two lithium battery projects
- Canada proposing a law to make 50% of cars electric by 2030 and 100% by 2035.
- Rio Tinto (NYSE:RIO) to plunge $2.4 billion into lithium project
- Nissan (OTCPK:NSANY) & Envision $873 Billion (euro) investment into EV factories
- Stellantis (STLA) will invest more than $30 billion in electrification
- Volkswagen (OTCPK:VWAGY) will spend $86 billion on electric cars
- BMW (OTCPK:BMWYY) to invest $32 billion into electric cars

https://seekingalpha.com/amp/article/4462897-lake-resources-lithium-is-the-new-buy-and-hold
Ford (NYSE:F) $22 billion by 2025 and they are expanding EV capabilities

CATL will spend $5.1 billion to build a battery plant

General Motors (NYSE:GM) via a $2.2 billion investment into electric vehicles at Detroit

GM $2.0 billion, TN (plus an additional $153 billion for upgrades) and that is just part of the $20 billion they plan on investing over the next 5 years

Hyundai (OTCPK:HYMLF) announces $7.4 billion investment in EV

Indecent Amounts of Lithium are Required

The lithium sea change is here and gaining speed exponentially. Every single week I see news of new mega projects that will require disgusting, indecent amounts of lithium. These multi-billion dollar projects are not just haphazardly created. No. These projects are planned in great detail. It would be one thing if it were just a solo yolo project, but when you see an entire industry invest hundreds of billions into production that demands lithium, you need to take notice. Depending on your investment time frame, these lithium investments can indeed pan out in the short term. However, what if one dares go counter-culture and invest long term? What does the landscape of lithium look like in 5 or 10 years? I think the most risky bet here is not to bet. Hence we are betting hard on Lake Resources and it has grown to our 3rd largest investment behind Cypress Development and Nano One (OTCPK:NNOMF).

Risk

What I write is not financial advice. You simply must do your own research. If you do not, not only will you have no clue what you are doing or why, but you will have no idea when to sell. If you are in need of help, consult a financial professional.

Disclosure: I/we have a beneficial long position in the shares of LLKKF either through stock ownership, options, or other derivatives. I wrote this article myself, and it expresses my own opinions. I am not receiving compensation for it (other than from Seeking Alpha). I have no business relationship with any company whose stock is mentioned in this article.

Additional disclosure: We also own Cypress Development and Nano One. We own Lake Resources on the ASX market as well under ticker LKE along with June 2022 warrants.
Editor's Note: This article discusses one or more securities that do not trade on a major U.S. exchange. Please be aware of the risks associated with these stocks.

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