INITIATING COVERAGE REPORT

//Lithium

STANDARD LITHIUM [TSXV: SLL]

The Best Way Might Not Be the Obvious Way

March 12, 2021

- By-Products Rule: While processing spent brine might not be as sexy as starting a new mine from scratch, the lithium made this way has a chance of being cheaper and available much sooner. Standard Lithium is re-processing spent brine from the Lanxess bromine facility in Arkansas.
- Minimal Technical Risk: There is far lower technical risk to this venture than one would think. The technology for recovering lithium economically from dilute brine is workable, providing the project is located near cheap energy and reagents and providing that the disposal of the spent brine can be cost-effectively managed. All that is true for Standard Lithium.
- Latest Results Show Quality On 3 December 2020 the company announced their pilot process had produced battery-grade lithium carbonate from the Arkansas brine. This not only suggests technical risk is manageable, but it also suggests that perhaps Lanxess and Standard can take a premium position in the market.
- Bad Market or Not, Lithium Chemicals Make Money: With a cost per tonne of less than $5,200 to produce battery-grade lithium carbonate, Standard can make money. There is significant potential to be able to increase output beyond the projected initial 20,900 tpa. And Lanxess is a knowledgeable and accomplished distributor of chemicals to a wide variety of customers. Standard will make money doing this, and we believe that the stock is still a good trade, even at these levels.

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	New	Old
Recommendation	$6.00	N/A
Target	N/A	N/A

Shares O/S	~132M
Shares O/S FD	~154M
Recent Price	C$3.34
Market Cap	~C$514M
Cash	~C$39M

See the end of report for important disclosures

Introduction

When we started Stormcrow, we had a simple prescription for the best (and lowest-risk) ways to make more of any given critical material. Starting a new mine is expensive, takes a very long time and is fraught with regulatory and technical hurdles; it's a necessary task in a market with rapidly growing demand, but it's one of those things that we should all be happy someone else is doing and not us! Processing tailings is an alternative, and maybe a good one, because at least the tailings are generally on surface and the time required to gain permits for a new mining operation is largely eliminated. At the top of our list, the most straightforward option, was to expand an existing producer, because that operation is already functioning, already permitted and has customers for what it sells. But just below capacity expansion and just ahead of processing tailings, in order of preference, is the installation of a new circuit. This involves processing an existing stream of material to extract something before it ends up in a waste pile.

The upside to installing a new circuit at an existing mine is that, again, there is no time required to permit new mining. You also gain the advantage of already having all, or at least most, of the required infrastructure in place, including roads and power and access to at least some chemicals. The downside is that there is still technical risk, but it's the job of the management team (on behalf of the company) and analysts (on behalf of their individual clients and firms) to gauge just how risky the deployed technology might be.

As far as the lithium market goes, it has, obviously, been hammered over the last two years. A combination of the arrival of a delayed supply response and the COVID-19 pandemic suppressing demand has resulted in market prices for lithium chemicals pulling back to the pessimistic levels we envisioned back in 2016 and 2017. In fact, we actually presented to one major lithium chemical producer in 2017 and discussed how we believed there would be periods of depressed prices, including technical-grade lithium carbonate prices of as low as USD$5,000 a tonne in China, levels that have now been reached. In spite of this, the capital markets are seeing past current prices and

looking toward a future that justifies higher equity values, because those equity values have done quite well.

Even as convinced as we were a few years ago, when prices were high, that we would see periods of low lithium chemical pricing, we are equally convinced that vehicle electrification is here to stay, that battery and lithium demand will pick back up and that we will suffer at least one more supply shortfall that will send lithium chemical prices strongly higher. We continue to believe that a larger overall market and more robust demand for better-quality battery-grade lithium chemicals will mean very solid prices for lithium chemicals in the years to come.

Standard Lithium Ltd. [TSX.V-SLL] catches our eye because, in effect, the process they are developing and deploying involves the addition of a new circuit to an existing mine. Standard is partnered with German chemical giant Lanxess AG to extract lithium from the brine used within the Lanxess bromine operation in Arkansas. By using some new chemical techniques, we believe Standard will be able to very cost-effectively extract lithium from this brine, which is already paying for itself from extraction through to re-injection as a feedstock for production of bromine and related chemicals.

The Brine is the Thing

All mining projects have a simple requirement, which is that the feedstock be readily available and as concentrated as possible. The less gangue material that needs to be moved and dealt with, the cheaper the production of whatever metal we are producing. The exact same thing is true of lithium, and it is why a mine like Greenbushes in Australia or a salar like the Atacama in Chile are the globally important reserves that they are. In both cases, lithium is high grade and is abundantly available.

However, we have seen many cases over the last few years where companies and their management teams seemed to be ignoring the economic realities of potential sources of feedstock in favor of jumping on the lithium bandwagon. For example, we watched companies examining the potential for exploiting sub-100 mg/l lithium brine "deposits" in the southern US. There is

no shortage of < 1% spodumene "deposits" being "developed". All of these "mines" are now awaiting a (much!) better market for lithium as oversupply hit the market in 2018 and COVID-19 has dramatically curtailed demand in 2020.

The key is, as always, the economics. If you can get what amounts to free brine handed to you, even if the lithium content is low, then you have at least the prospect of making money by extracting the contained lithium. It is extremely important that the disposal costs of the spent brine are taken into account, because brine doesn't just evaporate away on its own or pump itself back underground. Today, Lanxess AG operates a bromine production facility near El Dorado, Arkansas. Various groups have been producing bromine from this reservoir for roughly 50 years. To make bromine (Br), hot brine from deep underground is brought to surface and is sparged with chlorine (Cl_2) gas, which displaces Br_2 that is then collected and bottled for sale. That Br-depleted brine is then re-injected into an underground aquifer for disposal. The El Dorado mine is already profitably extracting, processing and disposing of its brine, making it an ideal site for a lithium plant.

Standard Lithium has partnered with Lanxess in a 30:70 joint venture (which will become 40:60 if Standard meets certain milestones) to attempt to produce battery-grade lithium carbonate from the depleted Br brine. There is no shortage of feed. A PEA completed by Worley and dated August 2019 concludes that there is roughly 3.1 million tonnes lithium carbonate-equivalent (LCE) in the existing aquifers currently accessed by Lanxess, with an average lithium grade of 168 mg/l. Normally, that grade wouldn't excite us but as we said above, if you can get the brine for free, it can work.

Exhibit 1 – Primary Resource for the Standard Lithium JV

Reporting Parameter	South Unit	Central Unit	West Unit	Total (and main resource)
Aquifer volume (km^3)	5.828	8.289	16.310	30.427
Brine volume (km^3)	0.689	0.995	1.835	3.515
Average lithium concentration (mg/L)	168	168	168	168
Average Porosity	11.8%	12.0%	11.2%	11.6%
Total elemental Li resources (tonnes)	116,000	167,000	308,000	590,000
Total LCE (tonnes)	615,000	889,000	1,639,000	3,140,000

Source: Company reports

In addition, the company has agreed to terms with TETRA Technologies for the right to explore and produce lithium from brine underlying 11,033 ha of brine leases located approximately 40 km west of the Lanxess El Dorado site. The company has developed an inferred resource for these properties:

Exhibit 2 - Additional Resource Underlying TETRA Claims

Table 1 – South-Western Arkansas Lithium Brine Project Inferred Resource Statement

	Upper Smackover Formation		Middle Smackover Formation		**Total (and main resource)**
Parameter	South Resource Area	North Resource Area	South Resource Area	North Resource Area	
Aquifer Volume (km^3)	2.49	3.65	0.60	0.93	7.66
Brine Volume (km^3)	0.25	0.36	0.06	0.09	0.76
Average lithium concentration (mg/L)	399	160	399	160	199
Average Porosity	10.1%	10.1%	10.3%	10.3%	10.1%
Total Li resource (as metal) metric tonnes (see notes [4] & [5] below)	78,000	44,000	18,000	11,000	151,000
Total LCE resource (metric tonnes) (see notes [4] & [5] below)	413,000	233,000	98,000	59,000	**802,000**

Source: Company reports

A Unique Process for Lithium

The Lanxess bromine operation near El Dorado uses 24.7 million cubic meters of brine per year. This is sufficient to eventually allow the production of 20,900 tpa of battery-grade lithium carbonate. However, to make battery-grade lithium chemical requires overcoming high concentrations of magnesium (Mg) and calcium (Ca) in this paleobrine. If these concentrations of Li, Mg and Ca were present in shallow brine in Argentina or Chile, any proposed lithium mine would very likely be uneconomical. We have always thought of Mg:Li ratios of 10:1 as the limit to economical production from shallow brines, yet here we are faced with a 35:2 ratio. In shallow salar brines, Ca is almost never an issue, but here we face Ca:Li ratios of more than 213:1. We are fortunate that inexpensive energy, hot brine, abundant fresh water and ready access to cheap reagents are available at the El Dorado location because these allow the use of an alternative extraction process.

Exhibit 3 – Representative Brine Sample Analyses

Parameter	Units	LANXESS Bromine Plants			Tetra Feed	LISTR-2 Feed
		Central	West	South		
Lithium (Li)	mg/L	130	154	200	152	210
Potassium (K)	mg/L	1,852	2,403	2,513	2,260	2,295
Sodium (Na)	mg/L	60,900	67,730	66,470	70,200	67,100
Magnesium (Mg)	mg/L	2,795	2,973	2,676	3,540	2,920
Calcium (Ca)	mg/L	31,917	35,029	36,171	35,900	34,950
Barium (Ba)	mg/L	3.15	10.0	6.74	11	13
Strontium (Sr)	mg/L	1,813	2,149	2,161	2,180	2,105
Chloride (Cl)	mg/L	160,000	183,290	172,290	-	-
Sulphate (SO_4)	mg/L	<2,000	<2000	<2000	390	-
Boron (B)	mg/L	132	146	168	176	193
Total Dissolved Solids	mg/L	290,500	301,430	305,290	317,000	-
pH	pH units	1.21	1.09	1.01	0.81	6.20
Density	g/cm³	1.18	1.19	1.18	1.19	1.17
Temperature (field measured)	Celcius	52.1	67.1	62.3	-	-

Source: Company reports

The process followed by Standard Lithium to extract a battery-grade lithium carbonate is novel in its final form but comprised of sub-processes that are proven and reliable. Lithium is first selectively extracted from the brine using a lithium titanate ceramic sorbent, usually referred to as a lithium ion sieve, as outlined in patents and patent applications (such as US 2019/0276327 A1) now held by Standard Lithium. This selectivity of the ion sieve between Li and Ca/Mg is not perfect, but is capable of very dramatically improving the ratios of Ca:Li and Mg:Li in the eluted brine from the sorbent, while also successfully dealing with high levels of Na and K in the feedstock. The spent brine, its lithium removed, is now re-injected into the ground for disposal, just as is currently done.

After loading the ion sieve and washing out the adsorbed salts, we now have a fairly dilute brine in which the levels of Ca and Mg have been dramatically reduced. Ca and Mg levels are further reduced by adding sodium carbonate and/or sodium hydroxide to the brine at this stage. This has the effect of precipitating insoluble Ca and Mg salts without harming Li levels. At this point, however, if we tried to extract lithium carbonate it would still be too impure to be regarded as battery grade.

Ion exchange (IX) is now applied as a highly selective way to remove remaining traces of Mg and Ca from the brine while leaving the Li in solution. It would not be economical to apply IX directly to the original feed brine, there is simply too much Mg and Ca in the brine at that point. The IX system would become saturated too quickly, leading to frequent stripping and rapid replacement of the expensive IX medium with resulting high costs. But if used just for a final "polish" of the brine to create something that is then clean enough to be converted to battery-grade material, IX is now both cost-effective and extremely useful.

The brine is now subjected to two stages of concentration. Solar evaporation cannot be employed since Standard Lithium is not operating in a desert. Instead, reverse osmosis (RO) and then mechanical vapor recompression (MVR) are used, both very standard industrial processes. The net result is a clean and concentrated lithium brine. By adding a clean solution of sodium carbonate (Na_2CO_3) to the prepared lithium brine, the lithium

chloride (LiCl) in the brine reacts to make lithium carbonate (Li_2CO_3). This Li_2CO_3 is fairly insoluble in water and precipitates as a white powder that can be filtered out of solution, washed, dried and bagged, resulting in a marketable final product.

Or Maybe the Chemical Quality is the Thing

The quality of final lithium chemical product is important. From a commercial point of view, a producer gets paid for the lithium atoms in their chemical, so producing a tonne of lithium carbonate at a 95% grade is automatically going to be worth less than a tonne of lithium carbonate at a 99.5% grade.

But it's also important to recognize that certain contaminants are much worse than others when trying to make a lithium battery. If those contaminants end up in the final cathode active materials, like lithium iron phosphate (LFP) or lithium manganese oxide (spinel) used in a given battery, the result can be catastrophic failure of the cell.

Standard issued a press release on 3 December 2020 highlighting that the battery-grade lithium carbonate produced using their processes from Arkansas brine meets or exceeds existing levels of chemical purity, including containing an overall grade of 99.96% lithium carbonate and less than 785 ppm contaminants. The company released an assay of their own lithium carbonate, with values that compare very well to commercially available battery-grade lithium carbonate produced by today's major sellers.

Exhibit 4 – Assay of Standard Lithium Li_2CO_3

Contaminant	**Concentration in Lithium Carbonate (ppm)**
Chloride	141
Sulphate	<50
Aluminium	14
Barium	5.34
Calcium	179
Chromium	2
Copper	<0.8
Iron	10
Potassium	<10
Magnesium	58.5
Manganese	<0.4
Sodium	229
Strontium	42
Titanium	2.4
Yttrium	0.8
Zinc	3
Silicon	81
Total Impurities	<785
Lithium Carbonate Purity	**>99.92 wt.%**

Source: Company press release

Economics

The 2019 PEA produced by the company suggests that all-in operating costs for the production of 20,900 tpa of battery-grade Li_2CO_3 will be $4,319 per tonne. The market price for battery-grade Li_2CO_3 used in the PEA is an average of $13,000 across the 25+ years of operation. We expect that investors will suspect that both figures are optimistic, so we have conducted our own financial analysis based on our own forward-looking lithium chemical price deck and historically-validated measures to correct for optimism in 43-101 estimates regarding capex and opex.

For opex, we choose to inflate the figure quoted in the PEA by 20%. That is, we use an operating cost of $5,183 per tonne. We expect this to be a worst-case type figure, and it would take into account a repeated number of final IX and washing stages to clean the finished product beyond the level anticipated by the PEA, or even an IX polish of the $NaCO_3$ solution used to precipitate the battery-grade lithium.

For the average market price for battery-grade Li_2CO_3 we use Stormcrow's own price deck. We have always seen ourselves as something of a conservative voice in the debate around future lithium chemical prices. In the period 2017-2018 when prices were surging to record highs, driven by fundamental undersupply, we forecast that lithium chemical prices would fall and that we would see prices back down (for technical-grade lithium carbonate) to levels of $5,000-$6,000 per tonne, for short periods of time. We are at those levels now.

However, our models also suggested that as demand for lithium chemicals continues to rise, these more robust markets (plus a need for cleaner and cleaner battery-grade chemicals) will buoy prices. We are not able to show that exact trend at this moment, of course, although we note that spot prices of nearly $26,000 in April 2016 and again in October 2017 for battery-grade lithium carbonate in China suggest that a small shortage of material combined with a robust market can push the price of lithium quite high without crushing subsequent demand, because there really is no substitute for lithium in high-energy density batteries. We use our proprietary price deck for battery-grade lithium carbonate through to 2030, and then an average of the price from 2027-2030 as the constant market price through to 2045.

Exhibit 5 –Lithium Chemical Market Price Forecast

	2018a	2019a	2020f	2023f	2026f	2029f	2030f
Tech Grade CO_3	$ 13.58	$ 8.74	$ 8.81	$ 10.40	$ 9.69	$ 10.75	$ 11.42
Batt Grade CO_3	$ 15.13	$ 9.89	$ 9.97	$ 11.76	$ 10.96	$ 12.16	$ 12.92
Tech Grade OH	$ 16.15	$ 9.93	$ 10.01	$ 11.81	$ 11.01	$ 12.21	$ 12.98
Batt Grade OH	$ 17.75	$ 11.91	$ 12.02	$ 14.18	$ 13.21	$ 14.66	$ 15.57

Source: Stormcrow (2019)

Standard Lithium has targeted initial Li_2CO_3 production of 20,900 tpa using the initially available level of brine from Lanxess Br production. It is unlikely that the Br market will grow so quickly as to justify much higher brine availability. However, the brine pools in the Smackover formation underlying the Lanxess El Dorado operation are huge and shockingly uniform in their chemistry because of the high permeability of the rock making up the Smackover itself. That permeability allows very few production wells to produce a lot of brine. It even allows for some of the least expensive brine disposal possible. There are locations used by Lanxess to dispose of spent brine where the brine needs either minimal or no pressurization to be reinjected.

Based on these facts, we are projecting that, over time and as shown in our cash flow model for the JV, Standard and Lanxess can produce 62,700 tpa of battery-grade Li_2CO_3. The first quantum of 20,900 tpa of production is modeled by us to need total capital expenditures that are 15% higher than the values suggested in Standard's most recent PEA, the second requires capex at the level quoted in the PEA and the third is modeled with a capex level 15% below that described by the PEA. Practice might not make perfect, but it should at least improve things.

It should also be obvious, even with a higher projected opex and lower market price for lithium carbonate, that Standard Lithium and Lanxess can run a money-making business in Arkansas. Our simple cash-flow model generates a NPV (using a 10% discount rate and a 40% share of the total cash flows from the JV) of CAD$485 million. The recent (announced 18 December 2020) financing by the company (for CAD$34 million) has left the company in a comfortable position as demonstration plant operations conclude and the engineering and decision-making phase is reached.

What we, or any other group, should not do, however, is suggest that Standard Lithium's direct extraction technology will become the preferred approach for extracting lithium from any brine, anywhere. The company would not suggest this, either. Again, in the high desert of South America we know that solar evaporation is very cost-effective, while electricity, fresh water and cheap reagents are scarce. There is very little hot brine

available on a South American lithium salar. It is completely possible that there are other situations where the Standard Lithium processing route would be recommended, but we do not know where these situations exist or under what terms, if at all, the JV between Lanxess and Standard Lithium could or would become involved in such lithium projects. Besides, there is more than enough brine under the ground in Arkansas to keep both Lanxess and Standard Lithium busy for a very long time to come.

We should note that, in similar circumstances where we are valuing a more conventional junior mining company, we would be inclined to use a higher discount rate, especially with only PEA-level capex and opex figures available. Here, however, we have already increased the capex and opex figures to levels we consider safe, there is no substantial permitting risk for this "lithium mine" and the novel aspects of this process have already been tested at reasonable scale. We are comfortable with using a 10% discount rate which is, in our current world, much higher than a risk-free rate. Our resulting NPV suggests that the price of the stock should be in or around $3.53. Given recent market excitement about all things related to batteries, the price of SLL is above our fundamentally-derived target. However, there may be reasons based on strong continued market sentiment to own SLL.

We have examined a number of comparable lithium companies with respect to their market value. We selected names that are not in sizable production but that are advanced enough to have a mineral reserve/resource and a production plan. Our list of comparables which we believe are relevant to SLL is shown below. We compare reserve size, proposed annual production and market capitalization for the group:

Exhibit 6 – Data for Comparables

Company	Ticker	Reserve/Resource (kt LCE)	Proj. Annual Production (LCE)	Market Cap (CAD$M)	Cap/Reserve	Cap/Production
Lithium Americas	LAC:T	5,052	49,600	$ 2,890	0.572	0.058
Liontown Resources	LTR:A	5,300	43,750	$ 834	0.157	0.019
Piedmont Lithium	PLL:Q	2,572	22,750	$ 832	0.323	0.037
Neo Lithium	NLC:V	1,300	20,000	$ 350	0.269	0.018
Lake Resources	LKE:A	1,000	25,500	$ 322	0.322	0.013
Millenial Lithium	ML:V	943	24,000	$ 287	0.304	0.012
Bacanora Minerals	BCN:V	1,670	17,500	$ 232	0.139	0.013
Cypress Development	CYP:V	1,353	27,400	$ 165	0.122	0.006
Frontier Lithium	FL:V	1,340	14,047	$ 191	0.143	0.014
Sigma Lithium	SGMA:V	2,527	33,000	$ 326	0.129	0.010
				Averages	0.248	0.020
				Standard Devn.	0.142	0.016

Source: Company and market data

Neither the ratio of market capitalization to reserve/resource levels or market capitalization to projected annual production levels are particularly good indicators of value, both have correlation coefficients of roughly 0.75 (meaning only about 56% of change in the market cap is linked to changes in either reserve/resource size or projected annual production). But in the capital markets, even correlation of 0.75 is nothing to dismiss.

At present, the Standard Lithium/LANXESS JV has a resource size of 3.14 Mt in LCE terms. Given the average ratio of market capitalization to reserve/resource size along with standard deviation, we can suggest that market sentiment at present could value SLL in a market capitalization range of CAD$333 million to CAD$1,225 million. Doing the same with the average ratio of market capitalization to projected future production along with its standard deviation suggests a market capitalization range of CAD$251 million to CAD$2,257 million. Using a simple-minded average of those range values suggests SLL should trade around a market capitalization of CAD$1,016 million compared to peers, or CAD$6.57 per share.

Exhibit 7 – Simple Cash Flow Model

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2035	2040	2045	2046
Production Project 1 (t)	-	-	3,000	8,000	13,800	18,900	20,900	20,900	20,900	20,900	20,900	20,900	20,900	20,900	
Production Project 2 (t)	-	-	-	-	-	-	5,000	15,000	20,900	20,900	20,900	20,900	20,900	20,900	
Production Project 3 (t)	-	-	-	-	-	-	-	-	-	5,000	15,000	20,900	20,900	20,900	
Market Price ($/t)	$ 9,972	$ 10,797	$ 11,792	$ 11,765	$ 10,873	$ 10,681	$ 10,964	$ 11,541	$ 12,005	$ 12,163	$ 12,921	$ 12,158	$ 12,158	$ 12,158	
OpEx ($/t)	$ 5,183	$ 5,183	$ 5,183	$ 5,183	$ 5,183	$ 5,183	$ 5,183	$ 5,183	$ 5,183	$ 5,183	$ 5,183	$ 5,183	$ 5,183	$ 5,183	
Revenue	$ -	$ -	$ 35,375,117	$ 94,119,584	$ 150,053,082	$ 201,872,074	$ 283,965,767	$ 414,321,116	$ 501,803,993	$ 569,241,775	$ 733,915,617	$ 762,278,287	$ 762,278,287	$ 762,278,287	
COGS	$ -	$ -	$ 15,548,400	$ 41,462,400	$ 71,522,640	$ 97,954,920	$ 134,234,520	$ 186,062,520	$ 216,641,040	$ 242,555,040	$ 294,383,040	$ 324,961,560	$ 324,961,560	$ 324,961,560	
Margin	$ -	$ -	$ 19,826,717	$ 52,657,184	$ 78,530,442	$ 103,917,154	$ 149,731,247	$ 228,258,596	$ 285,162,953	$ 326,686,735	$ 439,532,577	$ 437,316,727	$ 437,316,727	$ 437,316,727	
Overhead	$ 4,000,000	$ 8,000,000	$ 10,000,000	$ 13,333,333	$ 16,333,333	$ 19,333,333	$ 22,333,333	$ 25,333,333	$ 28,333,333	$ 31,333,333	$ 34,333,333	$ 49,333,333	$ 64,333,333	$ 79,333,333	
CapEx	$ -	$ 196,846,650	$ -	$ 185,354,700	$ 120,534,950	$ 171,171,000	$ 161,178,000	$ 104,813,000	$ 145,495,350	$ 137,001,300	$ 89,091,050	$ -	$ -	$ -	
Pre-Tax Cash Flow	$ (4,000,000)	$ (204,846,650)	$ 9,826,717	$ (146,030,849)	$ (58,337,841)	$ (86,587,179)	$ (33,780,086)	$ 98,112,262	$ 111,334,269	$ 158,352,102	$ 316,108,194	$ 387,983,394	$ 372,983,394	$ 357,983,394	
Tax	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 106,695,433	$ 102,570,433	$ 98,445,433	
Post-Tax Cash Flow	$ (4,000,000)	$ (204,846,650)	$ 9,826,717	$ (146,030,849)	$ (58,337,841)	$ (86,587,179)	$ (33,780,086)	$ 98,112,262	$ 111,334,269	$ 158,352,102	$ 316,108,194	$ 281,287,960	$ 270,412,960	$ 259,537,960	$ 2,076,303,684
Discount Rate	10%														
DCF (40% JV Share)	$ (1,600,000)	$ (74,489,691)	$ 3,248,501	$ (43,886,055)	$ (15,938,212)	$ (21,505,530)	$ (7,627,191)	$ 20,138,842	$ 20,775,303	$ 26,862,700	$ 48,749,357	$ 26,935,241	$ 16,078,065	$ 9,581,726	$ 69,685,280
NPV (USD)	$ 351,098,153														
NPV (CAD)	$ 484,515,451														
Cash (CAD)	$ 66,463,113														
Loan (CAD)	$ 4,901,695														
Shares (fd)	152,795,299														
NPV/sh	$ 3.57														

Source: Stormcrow

Conclusion:

Lithium as By-Product is Worth the Risk

We have always maintained that the relatively small markets for critical materials are worth taking the risk to enter, especially if inexpensive, by-product production is used. At least one important battery metal, cobalt, is produced almost entirely as a by-product of nickel and copper mining. In the case of cobalt, scarcity allows pretty much nothing except by-product production, while lithium is relatively plentiful. Yet there are more than enough mining operations out there producing large quantities of lithium-bearing tailings that could potentially serve as feedstock that, sooner or later, someone was bound to find a way to cost-effectively turn this type of feed into lithium chemical.

The process developed and being further refined by Standard Lithium can do just that, using brine from the Lanxess El Dorado bromine plant. In Lanxess, Standard has found a knowledgeable and well-financed partner. With the technology developed by Standard Lithium and the operational expertise of Lanxess, it appears likely to us that a significant new producer of battery-grade lithium carbonate and, perhaps at a later date, battery-grade lithium hydroxide is very likely to emerge.

We are initiating coverage on Standard Lithium with a POSITIVE recommendation and a CAD$6.00 target based on market sentiment. However, we caution that the stock is trading in a range where price fluctuations and market conditions should be monitored.

Important Disclosures

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