

South Star Battery Metals Corp. (TSXV:STS)

Positive Anode Material Test Results Using Santa Cruz Graphite

Development Update

August 30, 2021

(Currency is CAD\$ unless noted otherwise)

Closing Price (C\$/sh)	\$0.16	
Rating	NA	
Target (C\$/sh)	NA	
Return to Target	NA	
52 Week Low / High (C\$/sh)	\$0.04 / \$0.31	
CAPITALIZATION	Basic	Diluted
Shares Outstanding (M)	77.4	112.4
Market Capitalization (C\$M)	\$12.4	
Enterprise Value (C\$M)	\$10.0	
Cash and Cash Equivalents (C\$M)	\$2.4	
Total Debt (C\$M)	\$0.0	

STOCK CHART



MAJOR SHAREHOLDERS

Management (19.29%), Green Bow Capital LLC (5.8%)

DISCLOSURE CODE:

(Please refer to the disclosures listed on the back page)

Source: RCS, Company Information, S&P Capital IQ

Company Description

South Star Battery Metals Corp. engages in the exploration and development of mineral properties in Brazil. It is developing the Santa-Cruz Graphite project which covers an area of approximately 13,000 hectares and is located in Bahia State, Brazil. The company was formerly known as South Star Mining Corp. and changed its name to South Star Battery Metals Corp. in May 2021. South Star Battery Metals Corp. was incorporated in 1984 and is headquartered in Vancouver, Canada.

Impact: Positive

South Star announced successful production of LiB battery-grade anode materials and positive initial cycle testing results for the 100%-owned Santa Cruz Graphite project in Southern Bahia, Brazil. The testing results were for the first 35 cycles (charging & discharging) in CR2016 LiB coin cells constructed with anode material (coated spherical purified graphite). **We believe that this is another round of very good news that supports value added processing of Santa Cruz graphite; and follows on previous tests that demonstrated purification to very high levels that is suitable for lithium-ion batteries. We also expect these results to help better define processes to allow creation of spherical and purified graphite on a larger scale. Santa Cruz Graphite has all the attributes you want in a project, including experienced management in a mining-friendly district with good infrastructure and access.**

- Initial life cycle test results provided for first 35 cycles.** Three identical coin cells were created with coated spherical purified graphite from Santa Cruz as part of the ongoing optimization and testing program. Testing included reversible capacity, irreversible capacity loss and long-term cycling stability. Notable positive properties of the Santa Cruz anode material included: 1) all cells having an extremely flat discharge pattern without noticeable degradation over the initial testing period, and 2) reservable capacities at ~350 mAh/g and have an irreversible capacity loss on the first cycle of <10%. Each cycle consisted of 10 hours of charge and 10 hours of discharge, where the full 35 cycles totaled ~700 hours. Testing will continue and consist of at least 100 cycles for each cell. Downstream processing flowsheet optimization remains pending.
- Expected to attract a variety of customers across several sectors.** South Star is preparing to create a diversified range of high-demand, value-added products from its graphite. This would include use in EV's, energy storage, portable electronics, telecom, and specialty applications. Products would include micronized & purified graphite and expanded & expandable graphite. Coated and uncoated SPG will also be produced and available for testing. Management expects Product Information Bulletins with technical information, safety data sheets, and marketing sheets to be posted to its website shortly.
- Targeting production for Q4/22.** Santa Cruz Graphite project is fully permitted and construction-ready, with a simple flowsheet and near surface oxide open pit potential. Most Phase 1 product is already sold.

We do not yet value South Star (no rating or target). We note that these and previous test results ([read more](#)), continue to de-risk the Santa Cruz project, launching the company closer to the production stage for value added products. South Star's graphite is expected to be of high-demand and could be used in a variety of modern sources including EV's and energy storage. **Upcoming Catalysts:** 1) Project Financing (ongoing), 2) Plant Construction (H2/21), and 3) Phase I Production (H2/22).

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Disclosure Statement
 Updated August 30, 2021

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			HOLD	0%
			SELL / Tender	0%
			NA	6%
			Under Review	1%

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Company Name	Ticker Symbol	Disclosures
South Star Battery Metals Corp.	TSXV:STS	

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