NEWS RELEASE

South Star Mining Announces Positive Initial Results from Advanced Graphite Battery Metals and Technology Testing Program

Toronto, ON, April 28, 2021 – South Star Mining Corp. ('South Star' or 'the Company') (TSX-V: STS) (OTC: STSBF) is pleased to announce the positive initial results from its advanced testing program with its technology partner, United States laboratory ("US Lab")[1]. Positive outcomes in the first three phases of testing confirm the suitability of the flake graphite from the Santa Cruz Project for expandability, fire retardant, gaskets & seals, specialty paints & coatings and other value-added applications. The results are consistent with the Company's previous value-add test results. Next steps in the ongoing testing program include purification, micronization, spheronization, classification and surface coating to determine the potential use in the rapidly growing lithium-ion battery industry.

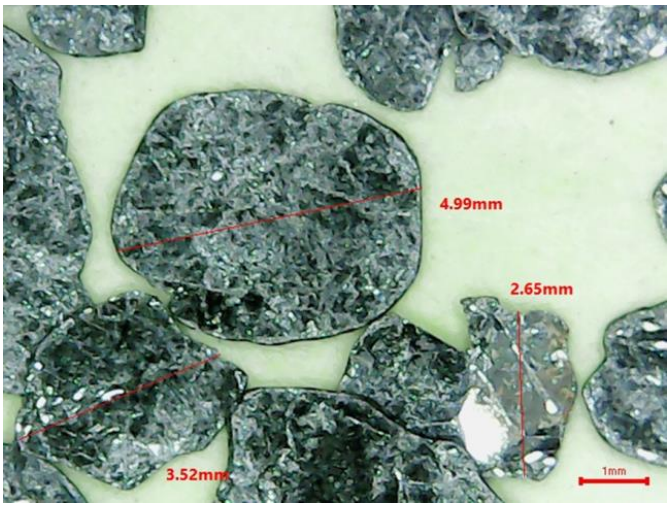

Figure 1 - Optical microscopy image of a +25 mesh fraction of the Santa Cruz flake

South Star CEO Richard Pearce commented: "These very positive results confirm our previous testing. The large flake concentrates are suitable for a wide range of value-add products that have a large and growing demand with very attractive margins. There are no significant levels of contaminants, and the low levels of boron also confirm suitability for nuclear applications. The great surprise are the REEs that may be recoverable in commercial scale as part of the purification process. We will be reporting on those results in our upcoming news releases.

Once our Phase 1 plant is operational in 2022, producing high-quality flake graphite concentrates, South Star can add purification, micronization, and spheronization capabilities downstream of the pilot plant concentration facilities and produce a broad array of diversified products in high demand sectors to a global marketplace. The growth potential is enormous with prices ranging from $3,000/tonne to up to $18,000/tonne, depending on the technical specifications. The Phase 2 plant can then be sized and constructed based on real commercial relationships and market demand. We will allocate capital to

provide strong returns for investors, produce quality value-add products for a growing market and scale intelligently while also mitigating risks.

As part of the scope of the ongoing advanced testing program, South Star will continue to improve our understanding of our inherent material characteristics and then set up a commercial plan that maximizes our pricing and profits across our entire basket of products. With one of the highest percentages of large and jumbo flake deposits (63% >80 mesh) of any projects in our peer group, we will be able to produce significant volumes of the value-add products for decades to come. Unlike most other metals, our large and jumbo flake products come off the concentration line first because they float so well. The testing confirms standard, low-cost expandability process with no extra steps or speciality treatments for intercalation. This will allow South Star to have greater profitability, operational flexibility, and a wide range of value-add, high-margin products in underserved and growing market sectors."

[1]*United States laboratory ("US Lab") specializes in advanced graphite materials and value-add testing for battery and non-battery applications. The US Lab company name has not been published for the purposes of preserving a commercial advantage to South Star in the marketplace.*

Material Characterizations

The Santa Cruz +50 mesh and +80 mesh concentrates were characterized for the key physiochemical properties. Key characteristics are presented in **Table 1**. Classic shaping and form factures for our concentrate are provided in **Figure 1**.

Table 1 - Physiochemical Characteristics of Bulk Concentrate and P50 and P80 Fractions in Santa Cruz Concentrate of 95.33 wt.% C Concentrate Grade Purity Level

Sample	Tap Density, g/cm3	Apparent Density, g/cm3	Particle size, mean, microns
Bulk Concentrate	0.53	0.25	62.3
P80 mesh cut of Concentrate	0.50	0.34	331.6
P50 mesh cut of Concentrate	0.57	0.40	554.8

Seventy-five-element solid ICP analysis on the concentrate samples revealed no deleterious elements in any of the raw samples including a very low measurement of 1.8 ppm for Boron. This low level of Boron confirms a previous laboratory analysis and is a key attribute needed to qualify graphite for nuclear industry uses. The ICP analysis also detected measurable levels of Scandium, Yttrium, Praseodymium, Neodymium, Gadolinium, Dysprosium, as well as several other rare earth elements (REEs) are presented in **Table 2**. As part of the purification testing program, it may be possible to concentrate and collect these elements in the waste stream, potentially adding a high-value by-product to South Star's processing flow sheet.

Table 2 - REEs from ICP Analysis of Santa Cruz Graphite Samples

Rare-earth element	Sc (Scandium)	Y (Yttrium)	La (Lanthanum)	Ce (Cerium)	Pr (Praseodymium)	Nd (Neodymium)	Sm (Samarium)	Eu (Europium)
Concentration, ppm	0.65	1.4	1	20	0.22	1.1	0.05	0.1
Rare-earth element	Gd (Gadolinium)	Tb (Terbium)	Dy (Dysprosium)	Ho (Holmium)	Er (Erbium)	Tm (Thulium)	Yb (Ytterbium)	Lu (Lutetium)
Concentration, ppm	0.26	0.05	0.31	0.05	0.05	0.05	0.05	0.05

Expandability Testing of Concentrates

The Santa Cruz +50 mesh and +80 mesh concentrates were tested for expandability utilizing an industry standard chemical intercalation and heating to 950° C. Post-expansion analysis indicated an expansion coefficient average of 196.09 cm^3/g and a BET Specific Surface Area ("SSA") of 56.97 m^2/g for the +50 mesh samples (Figure 2) and an expansion coefficient average of 264.29 cm^3/g and a BET SSA of 99.09 m^2/g for the +80 mesh samples (Figure 3). These results demonstrate excellent suitability for use in expandable and expanded graphite products such as high temperature seals, gaskets and fire retardants. With various size cuts yielding different expansion results, the Company will be able to produce intercalated graphite with tunable purity and expansion properties for a variety of potential customers in multiple market segments from fire retardants to foams, gaskets and seals.

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Figure 2 – +50 Mesh Expanded Graphite

Figure 3 – +50 Mesh Natural & Expanded Graphite

Natural Flake Graphite | Expanded Graphite

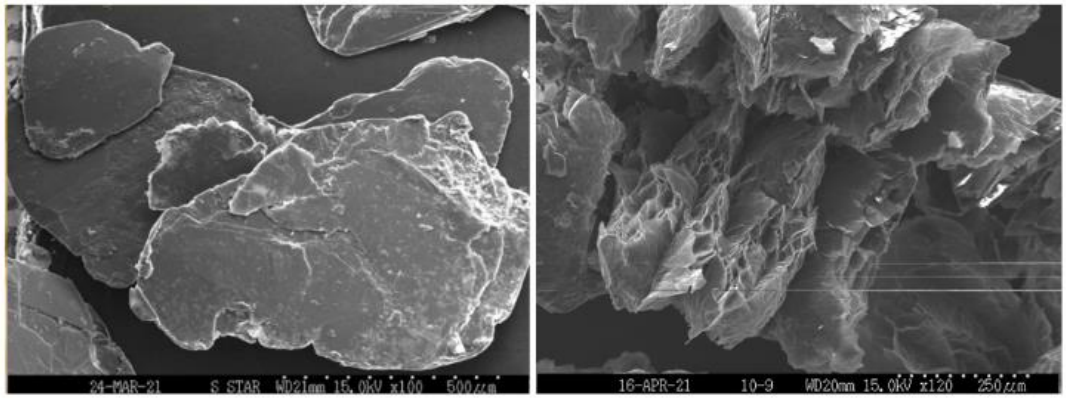
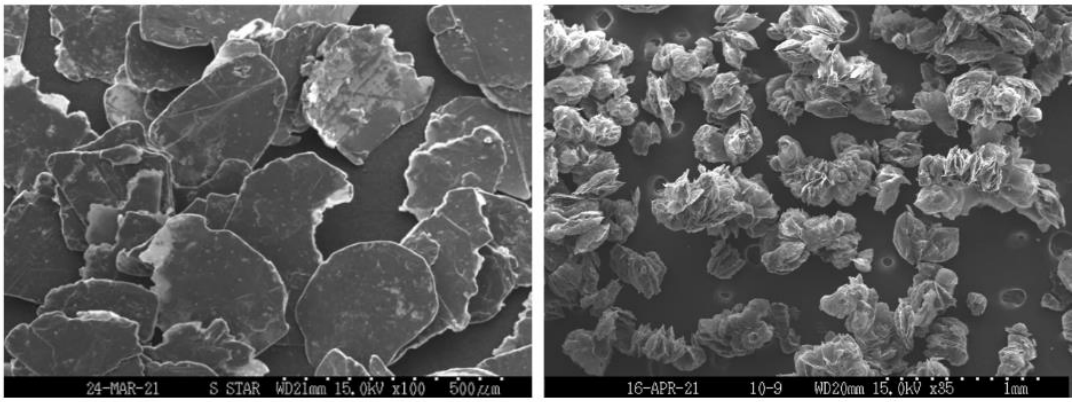


Figure 4 – +80 Mesh Natural & Expanded Graphite

Natural Flake Graphite | Expanded Graphite



Additional expandability tests/data of concentrate and purified graphites will be released when completed, as part of the current testing program.

Expandable (Intercalated) Graphite

Due to the layered structure of graphite, small molecules can be introduced between the carbon layers (intercalation). Under the influence of heat the layers separate like an accordion, and the graphite flakes expand. Depending upon the grade of material, expansion can commence at as low as 180°C (Start Temperature) and can occur suddenly and rapidly. The final volume can be several hundred times greater than the initial volume of flake.

Expandable graphite is a high value-add product that has a wide range of applications due to the thermal and electrical conductivities, soft and ductile nature while extremely resistant to attack from high temperatures, corrosive chemicals, compression or radiation. Uses include heat sinks, high temperature gaskets and seals, fire retardants, paints and coatings, and fillers in chemically resistant composites, amongst others. It is widely used in automotive, petrochemical, chemical, nuclear,

electronics, metal castings and building industries. Prices can range from USD thousands to tens of thousands, depending on the technical specification, purity and added value, when compared to traditional graphite.

About South Star Mining Corp.
South Star Mining Corp. is focused on the selective acquisition and development of near-term production projects in Brazil. South Star is driven to create fundamental value in the battery metals sector for clients and investors with real projects that have strong intrinsic financial and operating metrics, and that can be profitable throughout the resource cycle. South Star has an experienced executive team with a strong history of discovering, developing, building and operating profitable mines in Brazil.

The Santa Cruz Graphite Project ("the Project"), located in Southern Bahia, is the first of a series of battery metals projects that will be put into production. Brazil is the second-largest graphite-producing region in the world with more than 80 years of continuous mining. The Project has at-surface mineralization in friable materials, and successful large-scale pilot plant testing (>30t) has been completed. The results of the testing show that approximately 65% of Cg concentrate is +80 mesh with good recoveries and 95%-99% Cg. With excellent infrastructure and logistics, South Star is carrying its development plan towards Phase 1 production projected in Q4 2022, pending financing.

South Star is committed to a corporate culture, project execution plan and safe operations that embrace the highest standards of ESG principles based on transparency, stakeholder engagement, on-going education and stewardship. To learn more, please visit the Company website at http://www.southstarmining.ca.

This news release has been reviewed and approved by Richard Pearce, P.E., a "Qualified Person" under National Instrument 43-101 and President and CEO of South Star Mining.

On behalf of the Board,

Mr. Richard Pearce
Chief Executive Officer

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CAUTIONARY STATEMENT

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this press release.

This news release and the Updated Technical Report contain references to inferred resources. –The Report is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves.

FORWARD-LOOKING INFORMATION

The information contained herein contains "forward-looking statements" within the meaning of applicable securities legislation. Forward-looking statements relate to information that is based on assumptions of management, forecasts of future results, and estimates of amounts not yet determinable. Any statements that express predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance are not statements of historical fact and may be "forward-looking statements".

Forward-looking statements are subject to a variety of risks and uncertainties which could cause actual events or results to differ from those reflected in the forward-looking statements, including, without limitation: risks related to failure to obtain adequate financing on a timely basis and on acceptable terms; risks related to the outcome of legal proceedings; political and regulatory risks associated with mining and exploration; risks related to the maintenance of stock exchange listings; risks related to environmental regulation and liability; the potential for delays in exploration or development activities or the completion of feasibility studies; the uncertainty of profitability; risks and uncertainties relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits; risks related to the inherent uncertainty of production and cost estimates and the potential for unexpected costs and expenses; results of prefeasibility and feasibility studies, and the possibility that future exploration, development or mining results will not be consistent with the Company's expectations; risks related to commodity price fluctuations; and other risks and uncertainties related to the Company's prospects, properties and business detailed elsewhere in the Company's disclosure record. Should one or more of these risks and uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in forward-looking statements. Investors are cautioned against attributing undue certainty to forward-looking statements. These forward looking statements are made as of the date hereof and the Company does not assume any obligation to update or revise them to reflect new events or circumstances. Actual events or results could differ materially from the Company's expectations or projections.