



## **Spark Energy Extends Newly Identified Pegmatite Corridor to 7.2km of Strike, Defines New Targets Across its Arapaima Lithium Project in Brazil's Lithium Valley and Provides Corporate Update**

**VANCOUVER, BC / December 13, 2024 / Spark Energy Minerals Inc. ("Spark" or the "Company") (CSE: SPRK) (OTC: SPARF) (Frankfurt: 8PC)** an exploration Company focused on the discovery of battery metals in Brazil's prestigious Lithium Valley, is pleased to provide an update from the second week of exploration at the Company's 64,359-hectare Arapaima Lithium project located in Lithium Valley, Minas Gerais, Brazil.

### **Arapaima Lithium Project Exploration Highlights:**

- Recent work (Targets 1, 2 and 3) completed by teams 1 and 2 has identified two new pegmatite bearing corridors through a large erosional window in lateritic cover sequences both to the northeast and southeast of the ~1.7km corridor segment first identified in early December and adding an additional 5.5km of strike. (Figure 2).
- When combined with these new corridors the total prospective targets in the north (now encompassing targets 1, 2 and 3) extends over ~7.2 km of strike and remains open.
- Geologically the areas can be described as saprolite comprising deeply weathered (kaolinized) - two mica granites with remnant quartz – black tourmaline aggregates hosting numerous pegmatite veins and dykes.
- The third team has recently focused on more regional traverses over the broad target areas four and five in the far northern sectors of the tenement package.
- Work here continues to identify, map and sample various pegmatite exposures hosted by granite. Prominent structural trends that are coincident with geophysical responses including magnetic and radiometric signatures (especially thorium) are starting to appear as occurrence and sampling points begin to populate the geological maps.
- The first batch of nearly 100 samples (rock chip, stream sediment, channel and soil) is being prepared for submission to the accredited SGS laboratory in Belo Horizonte on the 15<sup>th</sup> of December with results expected to be reported by mid-January.

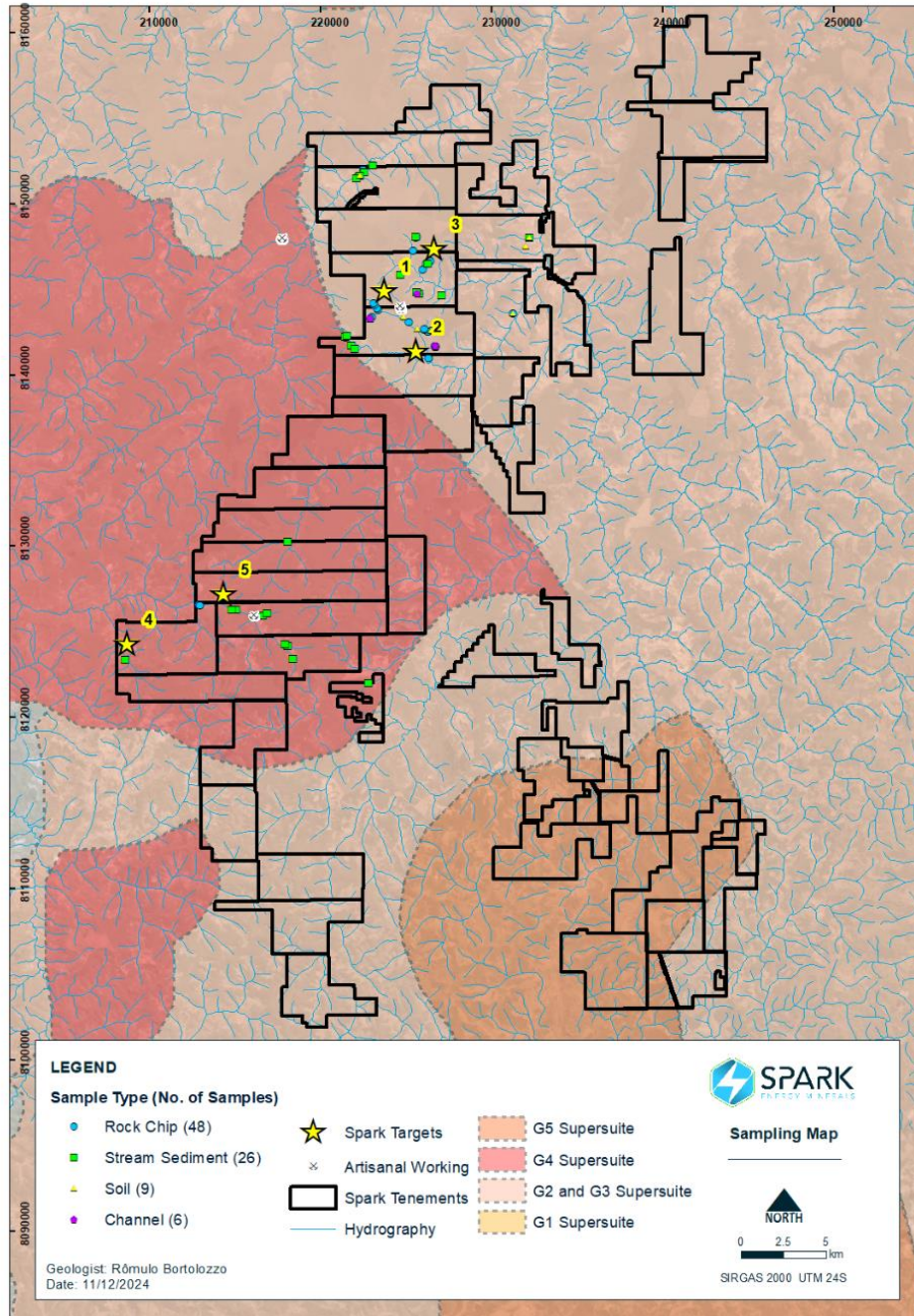


Figure 1: Figure showing the location of geological data points and samples collected to date relative to the priority target areas over the Arapaima Lithium project tenements

Spark's exploration continued with field reconnaissance mapping and sampling, with two teams now focusing on further evaluation of and definition of extensions to the prominent **pegmatite corridor** recently identified (see PR dated December 3<sup>rd</sup>, 2024, [here](#)). The third team continued the more regional-focused first-pass reconnaissance mapping and stream sediment sampling. To date, exploration has covered approximately 10-15% of Spark's extensive tenement package in the region,

defining five priority target areas. A total of 130 geological points have been described and 89 samples have been collected (Figure 1).

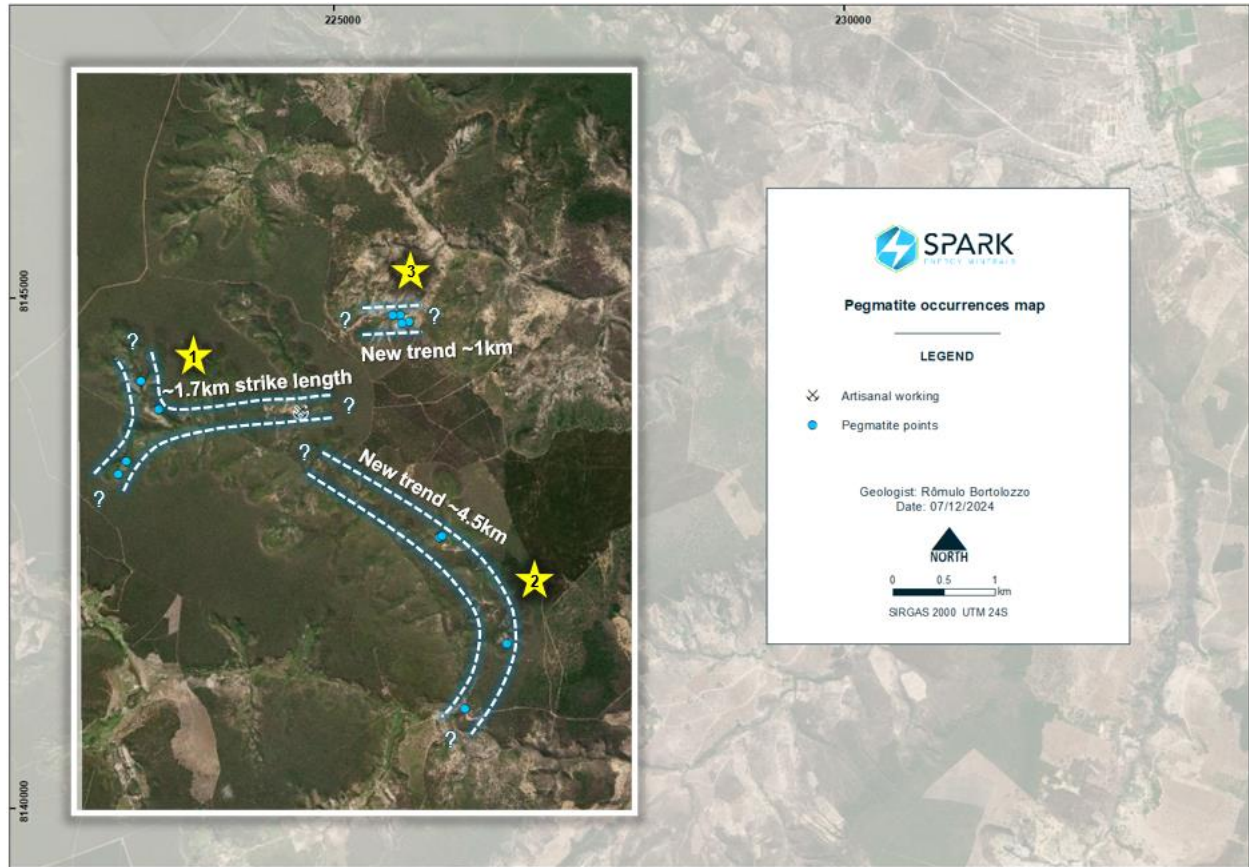


Figure 2: Recently identified and mapped pegmatite corridors with a combined strike extent of 7.2km in the northern half of the Arapaima Lithium project tenements

Continued exploration in this important newly defined target area will focus on detailed mapping and sampling of the highly weathered pegmatite exposures with the aim of positively identifying potential lithium bearing minerals such as spodumene (ref 1 & 2) that have been previously cited in government reports. This provides the team with a challenge in this region where the tropical weathering processes is expected to have largely converted spodumene to smectite clay which at times may still exhibit pseudomorphs of the original crystalline form of spodumene but only retaining low levels of Lithium in sample analyses.





*Figure 3: View of newly identified pegmatite exposures typical of the area within Targets 4 and 5*



*Figure 4: Weathered pegmatite intruded into two-mica granite Target 4*



**Jon Hill, Director of Spark Energy Minerals commented:** *“Exploration findings to date have been particularly encouraging, the team has successfully identified and confirmed metasomatized two mica granites intruded by pegmatites in the initial priority areas targeted by the program, where they are exposed through regolith and tertiary cover. Importantly the team has been able to further delineate and extend the footprint of these occurrences over a significant, combined 7.2 km strike length to date. The presence of old excavations intercepting these pegmatites has been an important find from drone reconnaissance and these will be accessed for mapping and sampling once this is safe to do so. Geophysical data also strongly suggests extensions to the zone of interest beneath the cover is probable. Based on work completed over the past two weeks it now seems likely we have identified several potential source pegmatites for the lithium-bearing minerals like spodumene and lepidolite reported by the government heavy mineral -stream sediment samples.”*

### **Target Generation Program: Planning remainder of exploration in December 2024**

- Submit first sample batches to SGS Laboratory in Belo Horizonte
- Teams 1 and 2 continue to map and sample the combined target comprising the three pegmatite trends (1, 2 and 3) with the aim of accessing the old workings identified by the drone overflight.
- Team 3 to evaluate the extension of the Si6 area into the Spark tenement and commence traverses over the southern tenement blocks to determine an appropriate stream sampling strategy.

Eugene Hodgson, CEO of Spark Energy Minerals, stated: "The extension of our pegmatite corridor to 7.2km of strike at the Arapaima Lithium Project is a significant milestone for Spark Energy. This discovery, along with the identification of new targets, reinforces our belief in the project's potential within Brazil's Lithium Valley. Our exploration teams have made remarkable progress in a short time, and we're excited about the prospects these findings present for our shareholders and the future of lithium exploration in the region."

### **Extension of Marketing Agreement**

Additionally, Spark announces that it has extended its previously announced (see the Company's August 8, 2024, news release) engagement with bullVestor Medien GmbH ("bullVestor") and its General Manager, Helmut Pollinger, to provide certain strategic planning services to the Company, which services may include investor relations activities within the meaning of applicable securities laws and the policies of the Canadian Securities Exchange.

The Company has extended the engagement with bullVestor for an additional term of three months ending on April 30, 2025, in consideration for the Company making a cash payment of \$200,000. bullVestor and its principal are at arm's length to the Company and, to the knowledge of the Company, bullVestor does not own, control, or direct any securities of the Company. (bullVestor

Medien GmbH; Address: Gutenhofen 4 - 4300 St. Valentin; Email: kontakt@bullvestor.at; Tel: +43 (0) 7435-44077)

### **Qualified Person:**

The scientific and technical information disclosed in this document has been reviewed and approved by Jonathan Victor Hill BSc Hons, FAUSIMM, a Qualified Person consistent with NI 43-101.

1. Source: "Evaluation of the Lithium Potential in Brasil" – Mid – Jequitinhonha River, North - East Minas Gerais" – ministry of Mines and Energy, Secretary of Geology, Mines and Development, the Geological Survey of Brazil promoting mineral research. Technical Report – 2016
2. Source: "Lithium Potential Assessment Project in Brasil" in the Eastern Pegmatite Province of Brasil: the Geological Survey of Brazil promoting mineral research. Technical Report 19 – August 2023 DOI: 10.29396/ITCPRM.2023.19

### **About Spark Energy Minerals Inc.**

Spark Energy Minerals, Inc. is a Canadian company focused on the acquisition, exploration, and development of battery metals and mineral assets, with a particular emphasis on its substantial interests in Brazil. The Company's flagship project is the Arapaima Lithium project spanning 64,359 hectares in Brazil's renowned Lithium Valley, one of the most prolific mining regions in the world. This region is rapidly gaining global recognition for its vast deposits of lithium and rare earth minerals, positioning Brazil as a critical player in the global energy transition.

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

### **FOR ADDITIONAL INFORMATION, SEE THE COMPANY'S WEBSITE AT**

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### **Forward-Looking Statement Disclaimer**

Certain statements contained in this release may constitute "forward-looking statements" or "forward-looking information" (collectively "forward-looking information") as those terms are used in the Private Securities Litigation Reform Act of 1995 and similar Canadian laws. These statements relate to future events or future performance. The use of any of the words "could," "intend," "expect," "believe," "will," "projected," "estimated", "anticipates" and similar expressions and statements relating to matters that are not historical facts are intended to identify forward-looking information and are based on the Company's current belief or assumptions as to the outcome and timing of such future events. Actual future results may differ materially. In particular, this release contains forward-

looking information relating to the business of the Company, the Property, financing and certain corporate changes. The forward-looking information contained in this release is made as of the date hereof, and the Company is not obligated to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by applicable securities laws.