



## **Spark Energy Minerals Identifies Priority Targets and Accelerates “Boots on the Ground” Exploration at its Arapaima Lithium Project**

**VANCOUVER, BC / October 23, 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 announce a progress update as the company advances its aggressive “Boots on the Ground” stream sediment and heavy mineral pan concentrate sampling exploration for spodumene rich pegmatites (SRPs) across its prospective 64,359 hectare tenement portfolio.

**Jon Hill VP Exploration, Country Manager & Director of Spark** states *“The immense value we can attribute to the results published in the 2016 and 2023 government reports cannot be understated. Not only have we essentially saved several hundred thousand CAD dollars by not having to repeat this positioning phase of exploration, but we have gained the 12-18 months of upfront time required to achieve this. Having such quality target areas already well defined allows us to immediately advance our field-based exploration and leveraging in the best areas within this prospective land position giving us every chance at early success. We look forward to providing regular updates on the exploration progress.”*

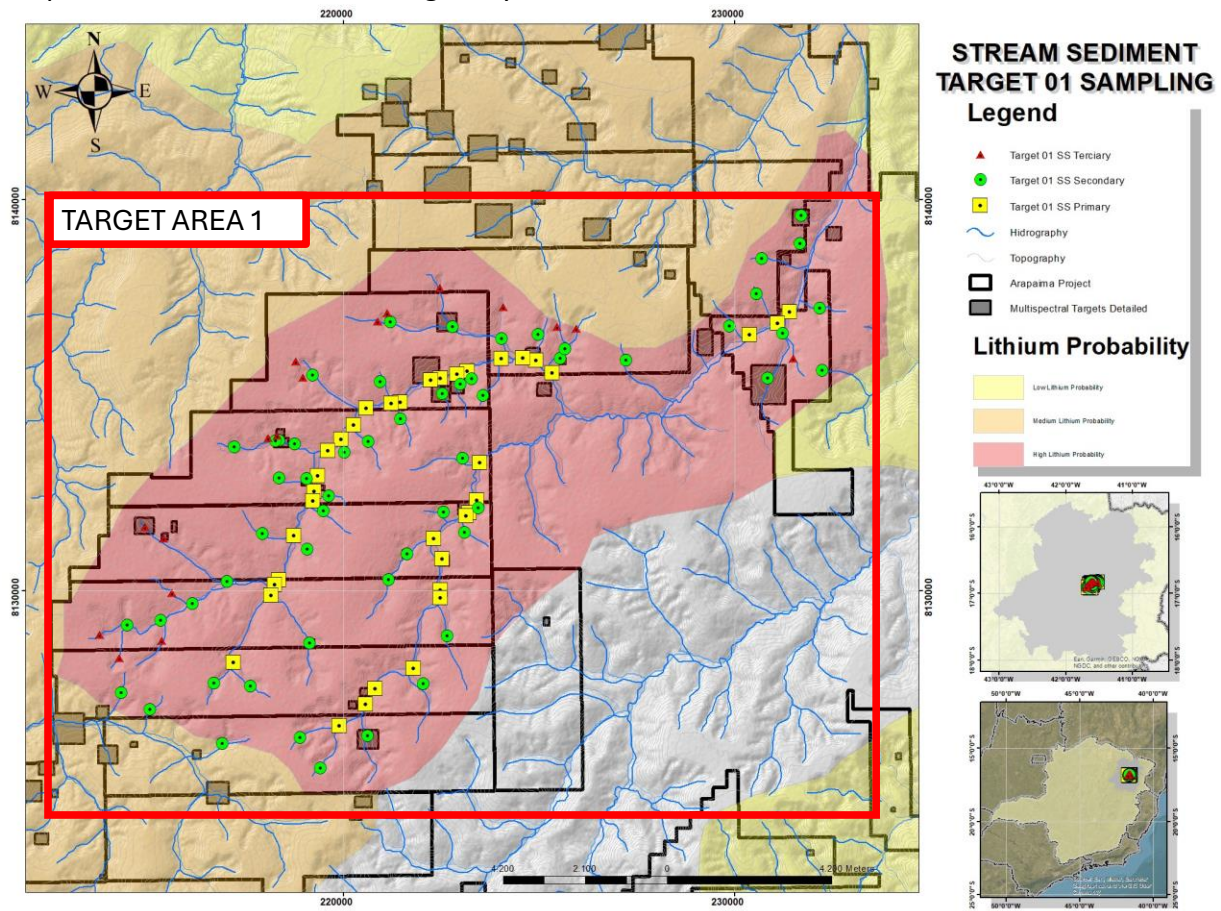
### **Key Exploration Highlights:**

- **Spark has divided its large tenement portfolio into Priority 1 and Priority 2 areas, based on geological assessments and logistical considerations.**
- **The exploration strategy benefits from government geological reports published in 2016 and 2023, saving the company both time and significant costs in early-stage exploration.**
- **Fieldwork includes stream sediment sampling, heavy mineral pan concentrates testing, geological mapping, and rock chip sampling, all aimed at identifying spodumene-rich pegmatites (SRPs) for lithium deposits.**
- **The initial exploration phase will focus on the highest-ranked targets while simultaneously increasing geochemical and geological data across the entire portfolio.**

**Eugene Hodgson, CEO of Spark comments;** *"We are thrilled to announce the commencement of our aggressive 'Boots on the Ground' exploration program at our Arapaima Lithium Project. This strategic initiative leverages our 64,359-hectare tenement portfolio in Brazil's Lithium Valley, positioning Spark Energy Minerals at the forefront of lithium exploration in this globally significant region. Our targeted approach, focusing on high-priority areas identified through comprehensive geological analysis, sets the stage for potentially groundbreaking discoveries. We are confident that our experienced team, led by Jon Hill, and methodical exploration strategy, will unlock the potential of our assets, driving value for our shareholders and contributing to the global clean energy transition."*

**Exploration Priority 1 Targets at Arapaima Lithium Project:**

The **Priority 1 Target Area** includes the highest-ranked lithium-prospective drainage basins, highlighted in red in both the 2016 and 2023 Government Prospectivity Reports. These areas have shown anomalous stream sediment results and reported spodumene crystals identified in government heavy mineral pan concentrates. Spark's in-house geological team has further refined these targets through reprocessing of public geophysics data, multi-spectral interpretation, and remote sensing analysis.



**Figure 1: Overview of priority target area 1 and sampling plans stream sediment and heavy mineral pan concentrates.**

**Priority 1 Target Area:**

The **Priority 1 Target Area** focuses on the most promising lithium prospects, supported by government reports and Spark's internal analysis. Key exploration activities planned include:

1. **Stream Sediment & Heavy Mineral Sampling:** Covering primary, secondary, and tertiary drainage systems within the highest-ranked target basin.
2. **Regolith and Geological Mapping:** Detailed mapping of soil and rock layers.
3. **Ridge and Spur Traverses:** Identifying and sampling rock outcrops.
4. **Historical Data Follow-Up:** Field verification of previously identified anomalies in government reports.
5. **Geophysical and Remote Sensing Targeting:** Ground follow-up of high-priority targets identified through Spark's reprocessing of geophysics and remote sensing data.

**Exploration Priority 2 Targets at Arapaima Lithium Project:**

**Priority 2 Target Area:**

The Priority 2 area includes secondary-ranked drainage basins, highlighted in orange, yellow, and white in the Government Prospectivity Reports. These areas show anomalous stream sediment results, with reported spodumene crystals identified in government heavy mineral pan concentrates. Spark's geological team has further refined these targets using reprocessed geophysical data, multi-spectral interpretation, and remote sensing. Exploration will also focus on potential extensions of known lithium occurrences, including targets reported by third-party companies like Si6 and Perpetual Resources. Although less data is available, the area shows significant potential.



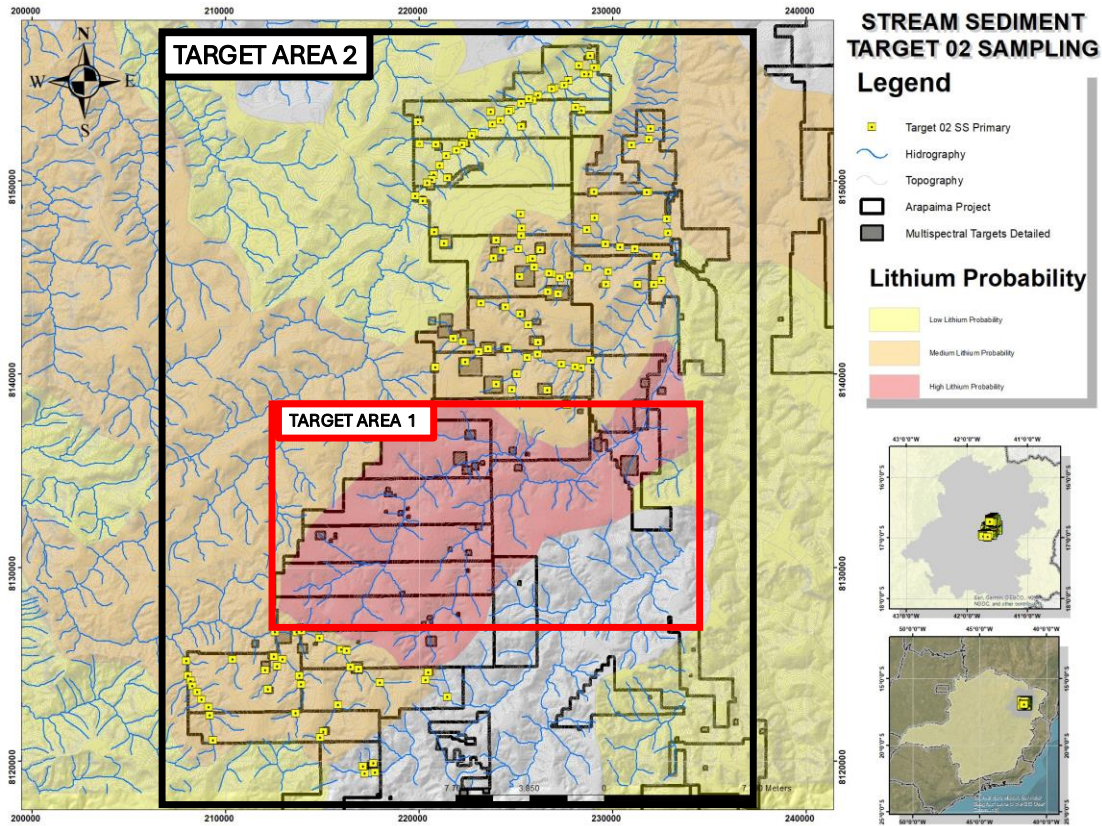
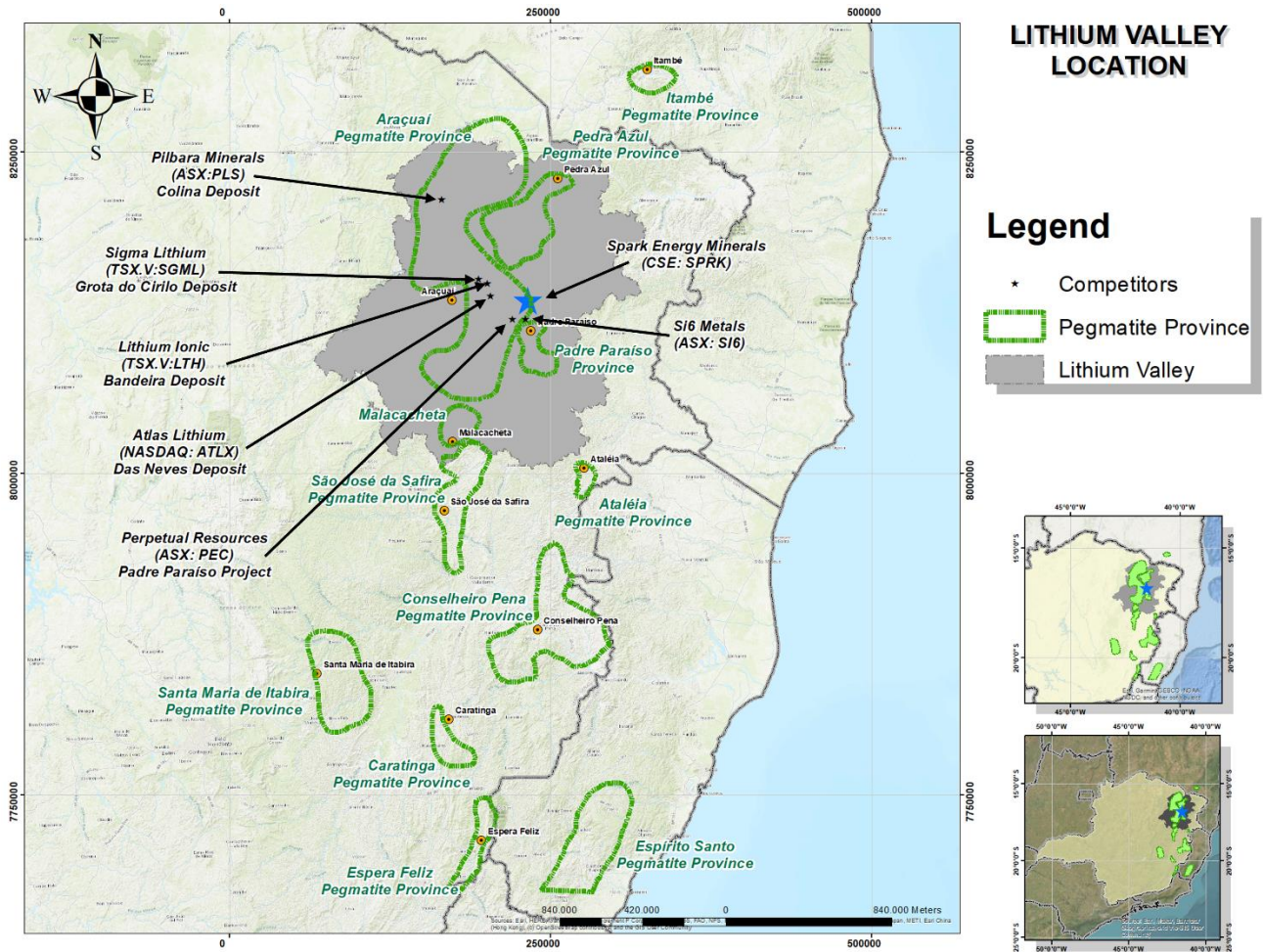


Figure 2 priority target area 2 sampling plan with sample points for stream sediment and heavy mineral pan concentrates.

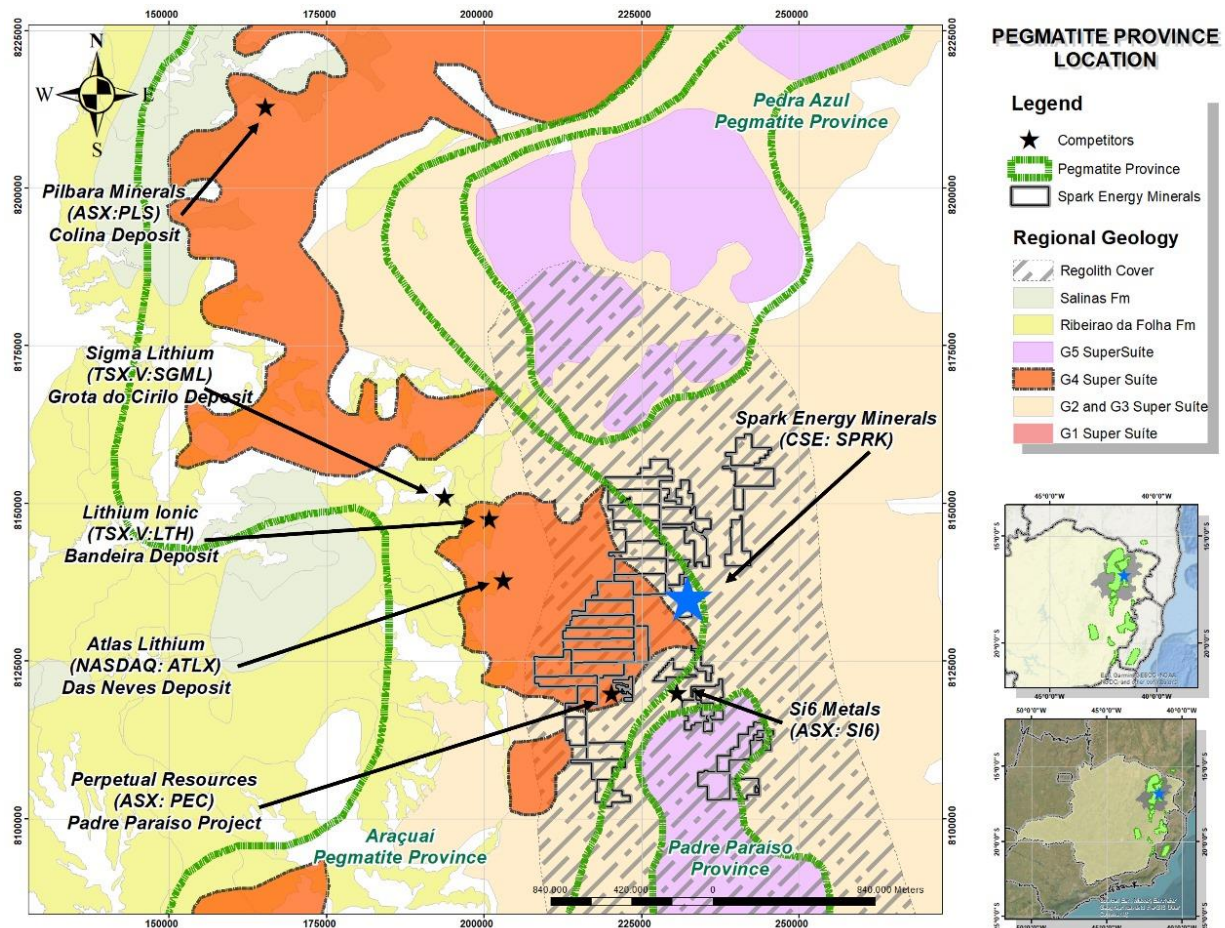
1. **Reconnaissance Sampling:** Conducting regional stream sediment and heavy mineral pan concentrate sampling over Priority 2 targets.
2. **Regolith and Geological Mapping:** Detailed mapping of soil and rock layers.
3. **Ridge and Spur Traverses:** Identifying and sampling rock outcrops during fieldwork.



**Figure 3 – Regional Location Map of Brazil's Lithium Valley**

**Figure 3** showcases the extent of Brazil's "Lithium Valley" and its relation to known pegmatite occurrences in the Eastern Brazilian Pegmatite Province. It emphasizes the strategic, central location of Spark Energy Minerals' 64,359-hectare tenement package, highlighting its proximity to key lithium producers and advanced development projects in this growing, globally important lithium region.





**Figure 4 – Map Highlighting Spark Energy Minerals’ 64,359-hectare Contiguous Tenement Package**

**Figure 4** highlights Spark Energy Minerals’ 64,359-hectare tenement package in relation to major lithium-producing mines and key development projects, including Si6 Metals' Padre Paraíso Project. The map features a simplified geological background, showcasing the central location of fertile G4 granite intrusions, alongside host formations of schist and granite-gneiss complexes. Areas of shallow regolith cover are also identified, emphasizing the exploration potential within these zones.

1. 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
2. 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

## **Investor Relations**

The Company further announces that it has entered into a consulting agreement dated October 23, 2024 (the “**IR Agreement**”) with Sideways Frequency, LLC (“**Sideways Frequency**”), pursuant to which Sideways Frequency has agreed to provide certain investor relations services to the Company in exchange for cash consideration in the amount of USD150,000. The IR Agreement has an initial term of 31 days unless earlier terminated or renewed in accordance with its terms. The Company may renew the IR Agreement for successive 31-day periods upon providing notice to Sideways Frequency.

Pursuant to the terms of the IR Agreement, Sideways will provide certain services to the Company, including, but are not limited to, email campaigns, native advertising, display ads, lead generation, creation of content, strategic planning, digital advertisement placement, and overseeing progress and result of digital campaign and such other services as mutually agreed to by the Company and Sideways Frequency.

Sideways Frequency is an investor relations consultancy firm headquartered in Utah, United States. Sideways Frequency is arm’s length to Spark and, to the Company’s knowledge, holds no securities, directly or indirectly, of the Company nor has any right or intent to acquire such an interest. Sideways Frequency, LLC; Address: 1389 Center Drive Suite 200, Park City, Utah; Email: [info@sidewaysfrequency.com](mailto:info@sidewaysfrequency.com), primary contact Mr. Wesley De Souza, CEO, Sideways Frequency.

## **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.

## **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 holds significant land and mineral rights 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**

<https://sparkenergyminerals.com>

Email to [info@sparkenergyminerals.com](mailto:info@sparkenergyminerals.com)

Contact: Eugene Hodgson, CEO, Tel. +1-778-744-0742

**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 exploration programs on its properties, the performance of investor relations services, 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. 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 exploration programs on its properties, the performance of investor relations services, 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.