



Spark Energy Minerals Advances Exploration at its Arapaima Lithium Project and Congratulates Si6 Metals on its 3km Anomalous Lithium Trend

VANCOUVER, BC / October 11, 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 continued progress in advancing its Arapaima Lithium Project's exploration efforts for spodumene rich pegmatites (SRPs) within Brazil's highly prospective Lithium Valley over its strategically positioned 64,000+ hectare tenement package.

Highlights:

- **Extensive Landholding:** Spark holds 64,359 hectares of highly prospective ground for SRPs which is the largest **Contiguous Tenement Package** held by a single company in the Lithium Valley.
- **Exceptional Geological Potential:** The area's geology is supported by fertile G4 granite intrusions and structurally favorable basement formations, interpreted to lie beneath shallow regolith cover within 15 km of key lithium development projects, including Sigma Lithium's Grota do Cirilo operation, Lithium Ionic's Bandeira project, and Atlas Lithium's Das Neves project.
- **Importantly, Australian Junior Explorer Si6** recently announced (see ASX:Si6 full announcement dated 12th August 2024 [here](#)) discovery of promising lithium in soil geochemical results over a strike length of some 3km on their adjoining Padre Paraíso lithium prospect.
- This announcement provides additional **positive technical backup to Spark's geological thesis** (see details from Spark's news release dated 4 October 2024 [here](#)) which points to significant potential for SRPs beneath shallow regolith cover in Sparks extensive tenement package and importantly **extending the search space footprint with exceptional SRP lithium exploration potential** well to the east of the established producers and developers in the Lithium Valley.

- **Target Generation:** Spark’s geological team has developed priority exploration targets using advanced remote sensing and multi-spectral techniques, alongside reprocessed public domain geophysical and geochemical data.

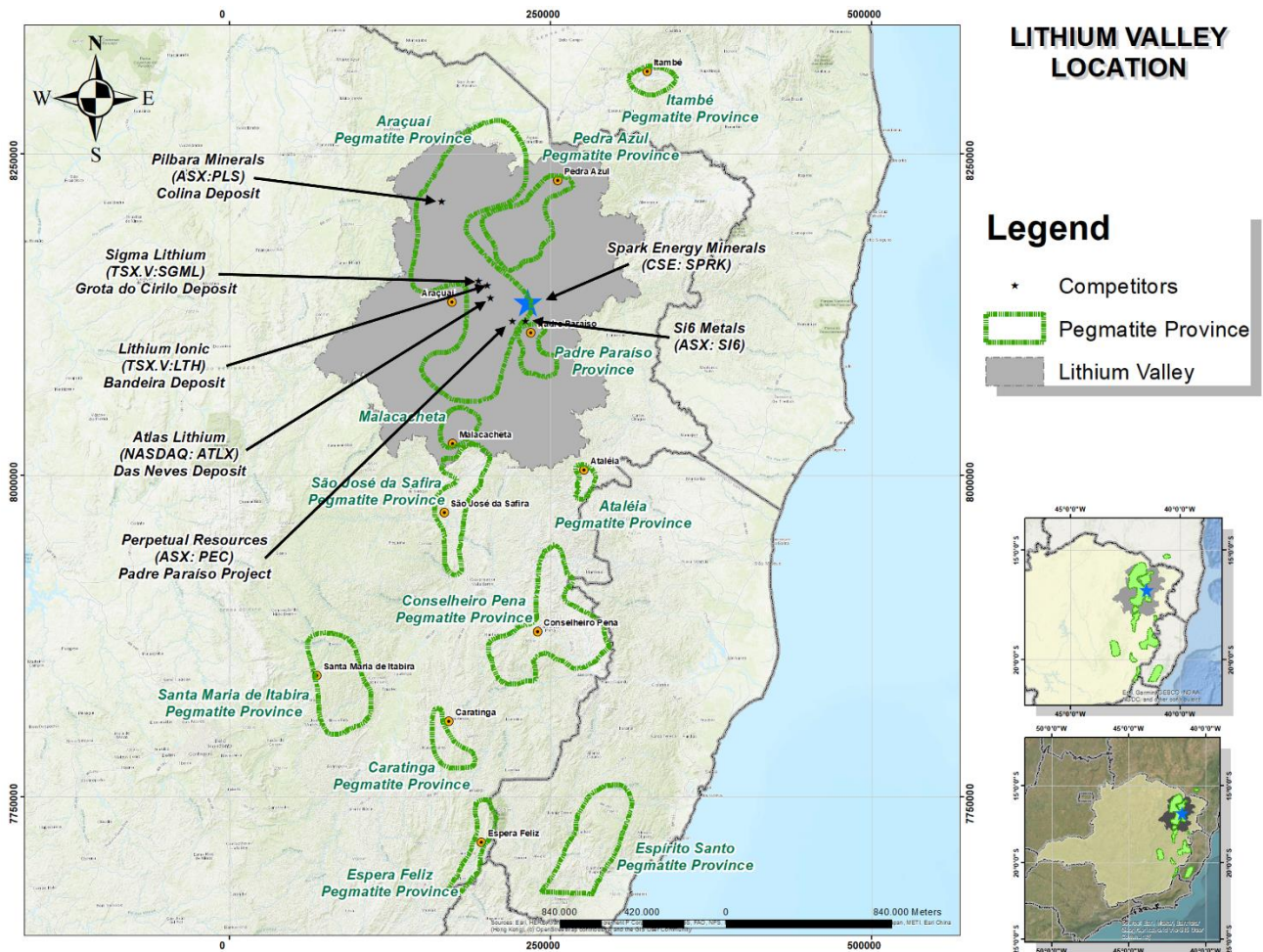


Figure 1 – Regional Location Map of Brazil’s Lithium Valley

Figure 1 illustrates the extent of Brazil's "Lithium Valley" in relation to known pegmatite occurrences within the Eastern Brazilian Pegmatite Province. It highlights the central, strategic location of Spark Energy Minerals’ 64,359-hectare contiguous tenement package and its proximity to key lithium producers and advanced development projects in this rapidly emerging, globally significant lithium region.

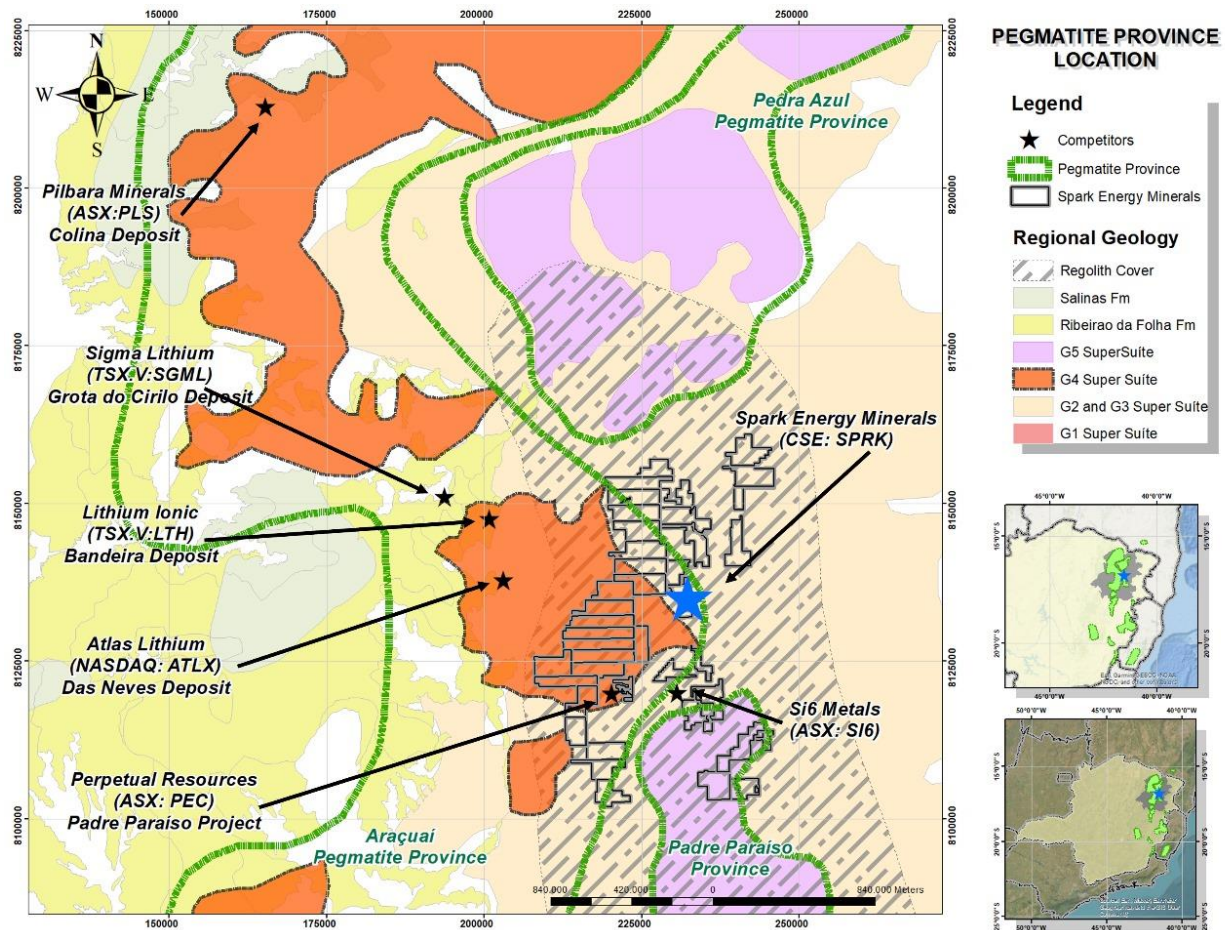


Figure 2 – Map Highlighting Spark Energy Minerals’ 64,359-hectare Contiguous Tenement Package

Figure 2 showcases Spark Energy Minerals’ 64,359-hectare contiguous tenement package in relation to major lithium-producing mines and key development projects including the location of Si6 Metals Padre Paraiso Project. The background features a simplified geological map, emphasizing the central positioning of the fertile G4 granite intrusions, along with host basement formations of schist and granite-gneiss complexes. Notably, the map also identifies the areas of shallow regolith cover, underscoring the exploration potential within these zones.

Si6 Results:

The lithium anomalies discovered at Si6’s Padre Paraiso Lithium Project are concentrated in the Salinas formation zone associated with pegmatite intrusives. This geological setting conducive to lithium mineralization, typically found in lithium deposits on the Lithium Valley province including Latin Resources’ Colina MRE and Sigma’s Grota do Cirilo Project.

Based on the interconnected nature of the tenements between Si6's Padre Paraiso and Spark's Arapaima, the exploration team theorise this geological formation also resides on Spark's ground. Further ground truthing must be conducted to prove this theory.

Si6's soil sampling program was completed over the summer and conducted over a previously identified pegmatite corridor approximately 3km long by 800m wide, where previous surface and auger samples returned strong lithium anomalies up to 401ppm Li_2O^2 . The assay results have identified several zones with elevated lithium values against background. The highest recorded value was 140ppm Li, found in the middle eastern portion of pegmatite corridor (See corridor shown in Figure 3 below).

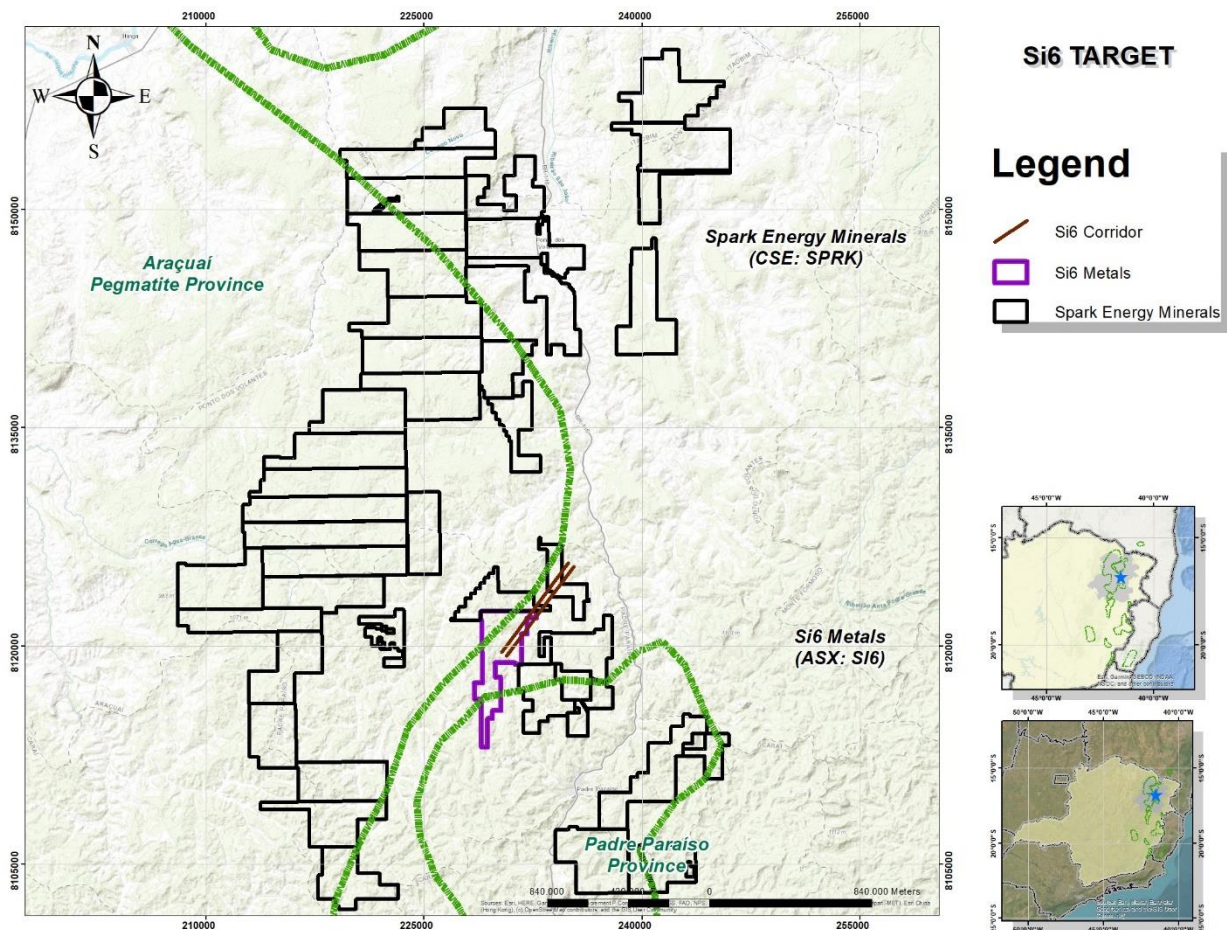


Figure 3 – Zoomed in map of Spark Energy Minerals' Tenement's in relation to Si6's Padre Paraso Lithium Project

Figure 3 showcases Spark Energy Minerals' 64,359-hectare contiguous tenement package highlight the location of Si6 Metals Padre Paraiso project relative to Sparks adjacent Tenements and highlights the connected Li anomalous corridor.

Jon Hill, VP Exploration of Spark Energy Minerals, commented: *“We congratulate our neighbour Si6 Metals on their recently reported positive exploration results, which provides further unequivocal data supporting our geological interpretation that predicted the SRP lithium-prospective geology extends under shallow regolith cover well to the east of the known major deposits. The 3km trend of anomalous lithium in soil results reported by Si6 Metals now adds further to the prior reported lithium and pathfinder element regional stream sediment anomalies, as well as the presence of spodumene particles in regional heavy mineral concentrate samples, as presented in the CPRM’s 2016 and 2023 government publications^{1&2}. Our team continues to actively refine its multi-disciplinary target generation and field-based exploration activities”*

Eugene Hodgson, CEO of Spark Energy Minerals, added: *"The recent developments in our Arapaima Lithium Project, coupled with Si6 Metals' promising results, further validate our strategic position in Brazil's Lithium Valley. Our extensive 64,359-hectare land package, confirmed as the largest contiguous holding in the region, positions Spark at the forefront of lithium exploration in this globally significant area. We are excited about the potential this represents for our shareholders and the future of sustainable energy resources."*

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 Development, the Geological Survey of Brazil promoting mineral research. Technical Report – 2016*

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

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 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.

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 RN Property, the Acquirors 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.