

Review of: "Exploration of Quartz, Feldspar, and Mica Minerals Using Geophysical Resistivity, Self-Potential, and Natural Electrical Field Techniques"

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Potential competing interests: No potential competing interests to declare.

Review Report on "Exploration of Quartz, Feldspar, and Mica Minerals Using Geophysical Resistivity, Self-Potential, and Natural Electrical Field Techniques"

1. Introduction: The introduction provides a brief overview of exploration methods for ore deposits and introduces the self-potential (SP) and vertical electrical sounding (VES) techniques. However, it lacks depth in explaining the significance of these methods for mineral exploration and their historical context. More background information on the relevance of geophysical exploration in the study area and the specific minerals targeted would enhance the introduction's clarity and context.

2. Study Area: The description of the study area is concise but lacks detail. Additional information on the geological context, such as the lithology and tectonic setting, would provide valuable context for understanding the distribution of minerals. Including a map of the study area would also help readers visualize its location and terrain features.

3. Method of Exploration: The methodology section outlines the use of SP and VES techniques for exploration, but it lacks detail on the survey design, instrumentation, data processing, and interpretation methods. Providing information on survey parameters, electrode configurations, and data inversion techniques would improve the reproducibility and reliability of the study's findings.

4. Results and Discussion: The results are presented in a tabular format, but the interpretation is limited and lacks detailed analysis. The discussion section does not provide a thorough explanation of the observed anomalies or their geological significance. Including cross-sectional interpretations of the SP and VES data, along with geological correlations, would strengthen the discussion and provide insights into the distribution of minerals in the study area.

5. Conclusions: The conclusions summarize the main findings of the study but lack depth in discussing their implications for mineral exploration. More detailed interpretations of the SP and VES anomalies in relation to the geological framework of the study area would enhance the conclusions' significance and relevance.

General Comments:

- The paper would benefit from a more systematic structure, with clearly defined sections for introduction, methodology,

results, discussion, and conclusions.

- The writing style is informal at times and could be improved for clarity and professionalism.
- Citations should follow a consistent format throughout the manuscript, and all references cited in the text should be included in the reference list.

In conclusion, the paper provides a basic overview of geophysical exploration techniques for minerals but lacks depth in methodology, interpretation, and discussion. Addressing these issues would enhance the scientific rigor and value of the study. So I will recommend the author(s) should carry out major revision, and let's see the revised version. Thank you.