Accepted Manuscript

Late Neoproterozoic adakitic lavas in the Arabian-Nubian shield, Sinai Peninsula, Egypt

Khalid M. Abdelfadil, Mohamed A. Obeid, Mokhles K. Azer, Paul D. Asimow

PII: S1367-9120(18)30064-6

DOI: https://doi.org/10.1016/j.jseaes.2018.02.018

Reference: JAES 3424

To appear in: Journal of Asian Earth Sciences

Received Date: 15 November 2017 Revised Date: 23 February 2018 Accepted Date: 24 February 2018



Please cite this article as: Abdelfadil, K.M., Obeid, M.A., Azer, M.K., Asimow, P.D., Late Neoproterozoic adakitic lavas in the Arabian-Nubian shield, Sinai Peninsula, Egypt, *Journal of Asian Earth Sciences* (2018), doi: https://doi.org/10.1016/j.jseaes.2018.02.018

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Late Neoproterozoic adakitic lavas in the Arabian-Nubian shield, Sinai Peninsula, Egypt

Khalid M. Abdelfadil¹, Mohamed A. Obeid^{2, 3}, Mokhles K. Azer^{4, 5}, Paul D. Asimow⁵

¹Geology Department, Faculty of Science, Sohag University, Sohag, Egypt

²Geology Department, Faculty of Science, Fayoum University, P.O.Box 63514- Fayoum, Egypt

³Faculty of Petroleum and Mining Sciences, Alexandria University (Matrouh Branch), Egypt

⁴Geological Sciences Department, National Research Centre, 12622-Dokki, Cairo, Egypt

⁵Division of Geological & Planetary Sciences, California Institute of Technology, USA

Abstract

The Sahiya and Khashabi volcano-sedimentary successions are exposed near the southern tip of the Sinai Peninsula, the northernmost segment of the Arabian-Nubian Shield (ANS). These Neoproterozoic successions include a series of intermediate to acidic lavas and associated pyroclastic deposits. Field observations and geochemical data reveal two distinct eruptive phases. The lavas representing each phase are intercalated with volcaniclastic greywackes and siltstones. The first eruptive phase, well exposed at Wadi Sahiya, includes basaltic andesite, andesite and dacite with minor rhyolite. The rocks of this sequence are at most weakly deformed and slightly metamorphosed. The second eruptive phase, well exposed at Wadi Khashabi, includes only undeformed and unmetamorphosed dacite and rhyolite. The two volcano-sedimentary successions were

Download English Version:

https://daneshyari.com/en/article/8914005

Download Persian Version:

https://daneshyari.com/article/8914005

<u>Daneshyari.com</u>