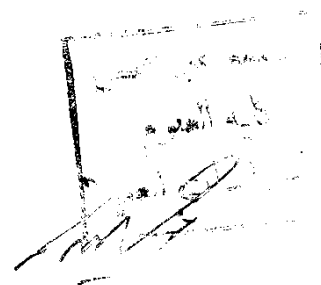


**A STUDY ON THE GEOLOGY AND GENESIS
OF SOME Zn-pb DEPOSITS IN THE
EASTERN DESERT OF EGYPT
(UM SAMIUKI AND UM GHEIG AREAS)**

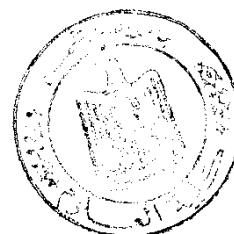
A Thesis

SUBMITTED TO THE
FACULTY OF SCIENCE
AIN SHAMS UNIVERSITY



By

Tabarak Mohammed Mahmoud Deyab



IN PARTIAL FULFILMENT
FOR THE REQUIREMENTS
OF THE DEGREE OF
MASTER OF SCIENCE
In Geology



25127

Tabarak Mohammed Mahmoud Deyab

[Signature]

1987

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TO MY DEAR FAMILY



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N O T E

Beside the work carried out in this thesis, the candidate has pursued post-graduate studies for the partial fulfilment of the Degree of Master of Science in the following topics.

I. Field Geology :

1. Mapping
2. Sampling
3. Photogeology
4. Geotectonic

II. Advanced Mineralogy :

5. Mineralogy
6. Geochemistry
7. Crystallography

III. Advanced Petrology :

8. Igneous Petrology
9. Metamorphic Petrology

Language : German, M.Sc. Course

She also passed successfully an examination in the above mentioned topics.

Head of Geology Department

Prof. Dr. M. A. El-Badry

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A B S T R A C T

This thesis reports on the geology, mode of formation and characteristic features of two widely different Zn-Pb (and Cu) deposits in Egypt, namely those at Um Samiuki (area I) and Um Gheig (area II).

Area I occurs amid an extensive belt of metavolcanic rocks that extends in a NW-SE direction in the southern part of the Eastern Desert of Egypt. This area is made up mainly of a pile of cyclic acidic to intermediate metavolcanic rocks, with their associated pyroclastic and volcanosedimentary rocks. The repetition of the metavolcanic sequence is most conspicuous at Wadi Um Samiuki and Wadi Dabelit. These metavolcanic rocks are classified into : older metavolcanics (at Wadi Um Samiuki) and younger metavolcanics (Abu Hamamid group). The massive sulphide mineralization is associated with the Abu Hamamid group.

Area II lies within the sedimentary sequence of Miocene age extending parallel to the Red Sea in the Eastern Desert of Egypt. The area is made up of dominantly Precambrian basement rocks, Upper Cretaceous, Middle Miocene (Basal and Gypsum series) and Quaternary sedimentary successions. The Zn-Pb mineralization is located in the limegrits and conglomeritic limegrits of the Basal series, and to a lesser extent in the lower parts of the Gypsum series of the Middle Miocene. It is shown that the sulphide mineralization at Um Samiuki is a stratiform