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FISSION TRACK DATING OF MEXICAN APATITE

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ABSTRACT

Fission track dating is an extremely useful dating technique, having a wide range of applications from simple age determination to the field of marine geology, study of thermal histories, uplift of mountain ranges, determination of emplacements times and provenance studies. We have applied this technique for determination age of Mexican Apatite which came out to be 31.95±0.05 Ma. In this paper we present experimental detail and results of our work.

INTRODUCTION

The fission track dating [FTD] is carried out by using the property of certain minerals to record the radiation damage (as tracks) caused by the natural fission of U-238 (Fleischer et al., 1975, Durrani and Bull, 1987). The fission track formed in minerals are stable over long geological periods. They begin to form once the