



## Fission track data is not AFTA®

***Do you know what you're getting?***

### **AFTA is a system ....**

AFTA is a system based on a series of techniques developed by Geotrack International to provide accurate constraints (and limits) on the thermal history of a rock sample. The system has undergone progressive improvements and refinement at Geotrack for the last 15 years. Only Geotrack has access to the most advanced description of annealing kinetics, developed and calibrated in-house through a 4-year project supported by five of the leading international exploration companies.

### **AFTA provides ....**

The end result of an AFTA determination on a rock sample is a time-temperature solution ( $T(t)$ ), including 95% confidence limits. The quality of the solution is only as good as the care taken at each step of the procedure.

### **AFTA is not ....**

Setting up a microscope, buying a bottle of acid and measuring fission tracks is not AFTA. You may have fission track data on your desk, but unless the data were collected correctly, the samples were selected correctly, the most accurate algorithm was used in the interpretation .... you will NOT have AFTA. This is what you care about - an accurate  $T(t)$  solution. You don't have time to care about data acquisition and algorithm development. It is easy to be fooled, as fission track analysis is a highly specialised field.



### **Decide for yourself ...**

You decide. In choosing a supplier, we can at least arm you with the right questions, and even assist you in evaluating the answers you discover. If data quality and reliable  $T(t)$  solutions are what you're after, you cannot afford a cheap solution based on obsolete practices. Here are some key questions in considering a supplier:

- ✓ Does the provider have experience and a clear understanding of the exploration question being posed?
- ✓ Is mineral separation performed directly by the provider, thus ensuring the highest QC on the job, or are the separations or analyses outsourced?
- ✓ Are the FT measurements performed by an inexperienced student or researcher? Are the support data supplied by the company treated confidentially?
- ✓ Is a direct measurement of chlorine content made? Is it made for each analysed grain? Or is the chlorine content *assumed, inferred, ignored* or are you told "*oh, it really doesn't matter that much*"?
- ✓ What kinetic algorithm is used in the interpretation of the data? Is it an algorithm published over 10 years ago?
- ✓ Will you receive statistical limits (e.g. 95% confidence limits) on the  $T(t)$  solution, indicating the quality of the solution?
- ✓ Are estimates given on the amount of section removed or the paleogradient? Are confidence limits provided for these constraints as well? Is a basin model provided for the sampled section?

**Geotrack  
International**  
***... acknowledged leader in  
this highly specialised  
field***