

A R T , I N C .

October 3, 2007

Independent Mathematical Contractors, Inc.
334 Cherry Parks
Tacoma, WA 98402

Dear IMC:

The Spate Gallery has recently been approached by a dealer of antiques with headquarters in the outskirts of Athens who has offered us first purchase rights to a so-called ancient tapestry. However, we are concerned with its authenticity and have contracted with your company to ascertain its age.

The dealer has indicated that the tapestry is 2000 years old, having been loomed sometime in the first century B.C. In order to determine the veracity of this claim, our technical analysis department was able to obtain a small portion of the tapestry and has done an analysis of the elements present therein. In addition to those which one might generally expect to find, they report the presence of 190 nanograms (ng) of Carbon-14 in the 1 gram sample they took.

As you will of course know from your own references on the subject, the amount of C14 present in the environment has varied with time. This amount is constant in living creatures, and then decays (the half-life of C14 is 5,780 years) after they die. Included you will find a chart indicating the amount (in ng) of C14 (per gram) present in the environment for the past 2,100 years. This was compiled by our consulting scientist, Dr. Quinn, so we have every reason to believe its accuracy.

As specified in your contract, we need as accurate an estimate of the age of this tapestry as you can provide, so as to determine both whether we should pay the dealer's usurious price and whether we should continue dealing with the company he represents. Unfortunately, we are under some time constraints, as the dealer requires an answer soon; we therefore need your report by the 29th of this month. We include a copy of our requirements for a technical report of this nature. In addition, as it is in both of our interests to assure the successful and timely completion of your project, our consulting scientist, Dr. Jennifer Quinn, is available to answer any and all additional questions that you may have regarding the technicalities or requirements related to your effort. You are urged to contact her as a group with any questions you may have—and, as is also indicated in your contract, you should see her (also as a group) to give a progress report on the project by the 19th.

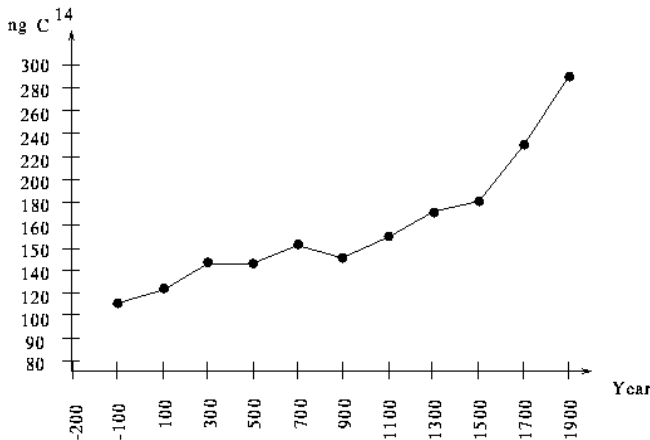
We look forward to seeing your finished project.

Yours sincerely,

M. Ike Langelo, President
Art, Inc.

Encl: figure, technical report requirements

The figure.



Art, Inc. Technical Report Requirements

All reports submitted to Art, Inc. should be written so that all members of the board of directors can understand the issues raised therein and therefore be able to appropriately use the report. The board members can all boast of a good university education—however, being in the art field, they should be assumed only to remember algebra and basic definitions from precalculus.

Reports should further:

- Be written in the first person plural (e.g., "We found the requisite data from the figure...").
- Include mathematical formulas in the text of the body of the report as appropriate to describe the methods and results obtained.
- Clearly explain how the mathematical formulas that are included bear on the problem being solved.
- Consist of
 - An *Introduction*, describing the problem to be solved, and an indication of the mathematical method used to solve it.
 - A *Body*, describing the mathematical problem that was solved to answer the question(s) posed in the introduction and the solution to it.
 - A *Conclusion*, summarizing the results obtained from the solution described in the body and clearly stating their relevance to the original problem as described in the introduction.
- Be 2.5--5 pages in length.