



123 WOODLAND AVE., WESTWOOD, N. J.

September 3, 1958

Mr. Grote Reber
c/o General Delivery
Wailuku, Maui
Hawaii

Dear Mr. Reber:

We have received your letter concerning carbon-14 dating from Dr. J. L. Kulp and a copy of his letter to you.

We shall be pleased to date any sample or samples which you would care to send. We are equipped to handle such samples and are now doing carbon-14 dating on a routine basis.

It is desirable to have at least six grams of carbon in the sample that is submitted. Smaller samples can be run but the precision suffers. Our dating technique is proportional counting of carbon dioxide at two atmospheres pressure. The method completely eliminates radioactive contamination, isotopic fractionation in the preparation of the counting gas, and yields maximum precision and sensitivity. The system is essentially a modified version of the counting system described by G. J. Fergusson (Nucleonics 13, pg. 18-23, 1955), H. de Vries and G. W. Barendsen (Physica 18, pg. 652, 1952), W. S. Broecker, J. L. Kulp and C. S. Tucek (Science 124, pg. 154-165, 1956).

The counting error by this technique is about \pm 100 years on near recent samples. We can guarantee the accuracy of the carbon-14 content of the sample but we do not carry out any chemical pretreatment to eliminate any contamination which may be present in the sample. In your case there is not likely to be any appreciable contamination since the local vegetation is small.

The charge for an analysis assuming the accuracy on near modern samples need not exceed 2% (with analogous precision backward in time) is \$240.00. In contrast to the university service laboratories, we do not publish periodic lists of dates, but leave the utilization of the results to the organization supplying the samples. At the present time we have a sample backlog extending through July 1958. We would urge you to let us know your plans as soon as possible since this summer's field work will undoubtedly increase this backlog.

Mr. Grote Reber
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We are expanding our facilities to handle the increased flow of samples presently anticipated but we would like to be able to project as accurately as possible.

Looking forward to being of service to you.

Sincerely yours,

ISOTOPES, INC.


James P. Friend

JPF:hdb