2.6 - Pacific Samples

400259

HSA:JHH:krw

August 29, 1956

Dr. H. L. Volchok
ISOTOPES, INC.
123 Woodland Avenue
Westwood, New Jersey

Dear Herb:

We are sending 14 assorted samples from the Pacific for analysis. The numbers are 4025, 4027, 4029, 4031, 4033, and 4038-46. These samples are to be analyzed for total beta activity for Sr-90 and for calcium. We would like these to be given highest priority in your laboratory as the need for the results is quite immediate.

I am enclosing with this letter a sheet specifying our recommendations for total beta measurements. In addition, we would like to specify that these samples are to be wet ashed rather than dry ashed due to their small size. The activity in all cases should be high enough so that good statistics can be obtained with short counting periods.

I believe that there will be further samples of this type in the near future and we will pass them along as soon as received.

Sincerely,

John H. Harley, Chief
Analytical Branch

Enclosure:
1. Specifications for Total Beta Activity Measurements

cc: J H Harley, HSA
I B Whitney, HSA

HSA

HARLEY:krw
8-29-56

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SPECIFICATIONS FOR TOTAL BETA ACTIVITY MEASUREMENTS

Determination of mixed fission products (total beta activity in samples of soil, water, vegetation and bone) - the following requirements are suggested:

1. Analyses to be made on dried aliquots of solutions prepared from the above samples by ashing or other suitable treatment. The weight of sample in the aliquot may be selected by the analyst to give suitable activity.

2. The original sample dissolved should be a minimum of 10 grams of ash or other solid, or the complete sample.

3. A correction should be made for self-absorption by standard techniques but a self-absorption curve on each sample is not required.

4. The beta activity should be determined by standardization against the K-40 in natural potassium salts, the standard also being corrected for self-absorption.

5. No chemical separations are required and any natural activity may be included as part of the total beta activity.

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