NORTH 4-7070

ISOTOPES, INC. 123 WOODLAND AVENUE, WESTWOOD, NEW JERSEY

October 9, 1961

Dr. Grote Reber
C.S.I.R.O.
Stowell Avenue
Hobart, Tasmania
Australia

Dear Dr. Reber:

Listed below are the results of the samples we have completed since our last report.

Isotopes, Inc. No.	Sample	Age in years bp
I-317	4A	1500 ± 150
I-318	5A	<100
I-319	6B	<100
I-320	7C	<100
I-321	9A	550 ± 175

The ages of all samples we have reported are based on the value of 0.95 times the observed activity of the N.B.S. oxalic acid standard. This value is taken as the average value of environmental carbon for the year 1950. Because of the statistical nature of radioactivity, possible Seuss, and/or de Vries effects it is felt that ages of less than 100 years cannot generally be determined precisely. The nuclear tests of the 1950's introduced large quantities of "artificial" C^{14} into the atmosphere with a consequent increase in the level of environmental C^{14}. Thus, we may be fairly sure that any material with an activity greater than the modern standard value was formed after the early 1950's. This was the case with samples I-319 and I-320 reported above.

I am sorry for the slowness in obtaining results on these samples. It takes a considerably longer time to analyze small samples than larger ones because the levels of activity are much lower. With your samples, as is the case with many

samples, the charcoal is not pure carbon and the actual carbon content by weight is often less than 50%. We have been doing our best to obtain reliable results on these small samples and we could not do them any faster.

We hope to complete the remaining sample this week, and we will forward the results as soon as we have it.

Sincerely yours,

ISOTOPES, INC.

Milton Trautman
Project Director

MT:js

Via Air Mail