

DNA1.940923.005fd

January 6, 1947

Re: Refer:  
C16/HS/pr

Dr. Herbert Scoville, Jr.  
Joint Crossroads Committee  
Navy Department  
Washington 25, D. C.

Classification changed to **UNCLASSIFIED**  
by authority of CG-UF-21 2-2  
James T. Davis. APR 22 1974  
SAC Classification Officer

Dear Pete:

I have been unable to contact Sean O'Brien. Can you send me charts of 1) position of ships for test Able, and 2) a copy of the chart I saw at Bikini showing the position of the turtle buoys set out by Doctor Iverson and Doctor Vins. The above charts are attendant upon the final neutron reports.

Until we get the above charts, Doctor Hamilton and I have decided to give you the gold data figures so that you will have something to go on. As you may know, one group of gold buttons was placed on buoys going from the center of the target toward Bikini bearing 050° true. The other toward Namu bearing 296° true. We will designate them as Bikini and Namu buttons.

The closest distance at which buttons were recovered was 300 yards. Bikini, N.V.  $8.15 \times 10^8$ . Two at 400 yards, both Namu, N.V. for both  $7.00 \times 10^8$ . One at 600 yards, Namu, N.V.  $4.26 \times 10^8$ . Three at 700 yards, all Bikini, N.V. 2.91, 2.74, and  $2.70 \times 10^8$ . One at 950 yards, Namu, N.V.  $5.68 \times 10^8$ . 1,200 yards, Namu, N.V.  $2.7 \times 10^8$ , 1,500 yards, Namu, N.V.  $3.39 \times 10^8$ , 2,000 yards, Namu, N.V.  $3.05 \times 10^7$ , 2,000 yards, Namu, N.V.  $5.7 \times 10^6$ , 4,000 yards, 4,800 yards, and 10,000 yards, too weak to measure.

The gold buttons weighed from 3 to 5 grams. When they were brought in they were freed of fission product contamination by treating repeatedly with aqua-regia. Decay curves of the activity remaining were run and gave a half-life of 66 hours, which is that for capture of slow neutrons by gold.

Mass correlations were made at the Radiation Laboratory by making up buttons of the same weight composed of many pieces of gold foil and bombarding them in paraffin in the cyclotron. These were then run separately and in groups so that the zero mass activities could be calculated. Their half-life coincided with the buttons measured from test Baker.

As Doctor Hamilton suggest, the gold data gives the neutron

002227

64

SECRET

**SECRET**

Page Two

Refer:  
C16/HS/pr

Dr. H. Scoville, Jr.

intensities from the cloud of short-life fission products thrown into the air above the lagoon from the blast.

With respect to the decay charts, I would like to say that we are still making comparisons and will let you know what our impressions are as soon as we are finished with them.

Best regards.

Sincerely,

Kenneth G. Scott

KGS:mm

Distributions:

Copy 1 - Dr. H. Scoville, Jr.

Copy 2 - Dr. J. G. Hamilton ✓

Copy 3 - Mr. K. G. Scott

Copied from original in The Bancroft Library for reference only. Copies are deposited in other libraries without express permission. Please return all copies to The Bancroft Library upon completion of research.