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TO : Gordon M. Dunning, Chief, Radiation Effects of Weapons Branch, DBM

DATE: April 16, 1959

FROM : *I. E. Wallen*  
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SUBJECT: CALL TO DR. HELD ON RONGELAP DATA

SYMBOL: BMES:IEW

These are the answers to the questions Dr. Seymour obtained from Ed Held.

1. Sr<sup>90</sup> Analysis of Rongelap Food Samples - (samples for which Cs<sup>137</sup> determination has already been made) All samples were pooled into one lot and the strontium extracted. Four aliquots were withdrawn, two for the direct determination of Sr<sup>90</sup> and two for the determination of the Sr<sup>90</sup> yield from these specific samples. To do this the latter two samples were spiked with a known amount of Sr<sup>90</sup>, considerably greater than the Sr<sup>90</sup> in the sample. The separation has been made, the Sr<sup>90</sup>-Y<sup>90</sup> has reached equilibrium, and the decay of the separated Y<sup>90</sup> is now being run as a check on the separation technique. The data will be available in one week and either mailed or telephoned to you at that time.
2. Food samples from March 1959 trip - Dr. Conard obtained all of the food samples for this trip. With the help of a native he visited the natives at meal time to obtain specific information on their diet.
3. Data submitted to Environmental Scs. Br. on April 13th
  - a. Survey meter readings for March, 1959
  - b. Average of survey meter readings for all trips. Readings for the last three trips have been made at the same locations and therefore are directly comparable.
  - c. Sr<sup>90</sup> in liver of land crabs, through August 1958.
  - d. Sr<sup>90</sup> in skeleton of land crabs, through August 1958.
4. Analysis of Pandanus samples: Analysis of March 1958 samples for Sr<sup>90</sup>, Zr<sup>95</sup>-Nb<sup>95</sup>, Cs<sup>137</sup>, Ru<sup>106</sup>, Rh<sup>106</sup>, Ce<sup>144</sup>, and Sb<sup>125</sup> completed. Samples of August 1958 and March 1959 pandanus fruit now being processed. Some Sr<sup>90</sup> data are available and will be forwarded next week.
5. Sr<sup>90</sup> in plants - Analyses have been completed and data are now being tabulated for samples collected after July, 1957. The available data will be forwarded next week. The items analyzed include coconut meat, pandanus, arrow root, squash, Guetarda, Scaevola, Cassisia, Bristula and Lepturus.

*Received  
1959*

6. Samples for inter laboratory comparison of analyses - Large samples of copra (48 pounds) and of pandanus fruit (several pounds) were collected on the March, 1959 trip. These samples will be prepared for analyses and will then be available to interested laboratories for the purpose of comparing analytical results.