## SUMMARY OF OPERATIONS ON CONTRACT NO. W-28-094-eng-33

16/17

Project I.\* Basic studies on the effect of X-rays upon fish in various stages of development.

FOR THE MONTH OF JUNE 1948.

Sections I and II\*

May and June for release in Samish River where their parents had been recaptured. From May 3 to June 5, the fish were marked by removal of adipose and left pelvic (25,674 fish) or adipose and right pelvic (29,398 fish).

A total of 55,072 were marked. Minor lesses probably made the number planted nearly 55,000 fish. Six plantings were made from May 18 to June 15. These fish are expected to return as adult spawners in the falls of the years 1950, 1951, and 1952.

During the marking procedure attention was paid to the general size, appearance, and activity of the irradiated stock, marked by adipose and left pelvic, as compared to the control stock, marked by adipose and right pelvic. The concensus of opinion of the members of the staff doing the fin-marking was that there was no obvious superiority of centrol stock over irradiated, but that if any difference were present it was probably in favor of the irradiated stock.

Project V.

<u>8</u> 8

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The laboratory studies on the transfer of "activity" in Bikini mud and coral rocks to living material continued at a somewhat restricted rate.

Tissues from flatfish, Parophrys vetulis, that had lived in the contaminated water for some time, were used for counting accumulated activity and tissue study.

DOS ARCHIVES

<sup>\*</sup> Project and section numbers refer to the Project Chronology Chart and Summary UNFI-9, revised March 11, 1948.

· Project VIII.

The Hanford Works have provided numerous services during the month in aiding the regular program at the laboratory and in expediting the preparations for the Radiobiological Resurvey of Bikini.

Mr. Allyn H. Seymour and Dr. Lauren R. Donaldson visited Richland and the plant area on June 17 and 18, for conferences and to transport material between the laboratories.

Project IX.

Work continued on the ashing and activity counting of the material collected at Eniwetok, near Runit Island, on May 16, 1948.

The data from the counts was summarised and decay curves were prepared of the decline in activity of some of the samples.

Captain J. S. Russell USN visited the laboratory on June 11, 1948, to review the Eniwetok results and to discuss the Navy participation in the Radiobiology Resurvey.

Project X. Bikini Radiobiological Reservey of 1948.

Preparations for the resurvey were accelerated to a point that they eccupied most of the waking hours of the staff. The twelve men making up the scientific personnel were selected, security clearances, health records and examinations, travel orders, identification cards, etc. were obtained.

The following named persons left by plane on June 26, 1948 to undertake the resurvey of the Bikini area.

Dr. Lauren R. Donaldson

Dr. Arthurd. Welander

Mr. Richard H. Osborn

Mr. Frank G. Lowman

Dr. Asher A. White

Mr. Allyn H. Seymour

Mr. John J. Koch

Mr. John R. Donaldson

Joining group in San Francisco:

Dr. Theodore H. Bullock Mr. Edward E. Held

Dr. George J. Hollenberg

Joining group in Honolulu:

Mr. Spencer W. Tinker

Lt. Joseph J. Schmidt USN accompanied the group to ast as naval liaison.

Lauren R. Donaldson. Director Contract No. W-28-094-eng-33

