Mail Station L-231

Ext: 8711

July 31, 1973

Captain Gay

Mr. Carlson

CDR Wolff

Major Cotner Johnson

Major Giamotta

411570

MEMORANDUM

TO: W. E. Nervik, Division Leader, Radiochemistry

FROM:

R. W. Hoff, Radiochemistry Division

SUBJECT: Eniwetok sample analytical program. Progress Report No. 13.

Status as of 27 July 1973.

This progress report summarizes the laboratory analytical effort being carried on at LLL by members of the Radiochemistry Division, Biomedical Division, and Hazards Control Department, at the University of Washington (Dr. Allyn Seymour, Dr. Victor Nelson, Dr. William Schell), at McClellan Laboratory (Col. R. McBryde, Maj. W. Myers), at LFE Environmental (Mr. Leon Leventhal, Mr. William Major), and at Eberline Instrument Corporation (Mr. Eric Geiger, Mr. Ernest Sanchez).

I. Initial processing. All efforts completed prior to 29 June 1973.

Details on completion rates, numbers of samples, laboratories involved, etc. in initial processing are available in earlier issues of this report.

II. Gamma counting, precision Ge(Li) detector spectroscopy:

Gamma counting of all samples has been completed as of 27 July 1973.

The data have been checked for accuracy; correction sheets on errors have been submitted to Bill Phillips.

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University of California

LAWRENCE LIVERMORE LABORATORY

Samples counted and data in computer bank (LLL):

Soils	3058
Sediments	224
Cores	128
Fish	407
Algae	3
Seawater (Hydroxide fraction)	58
Plankton	16
Coral	2
Vegetation	208
Air Filters	61
Animals, birds, eggs, etc.	273
TOTAL	4438

III. Chemical analyses, samples dissolved and elements isolated chemically:

As of 27 July 1973, the status of sample delivery to contract labs is the following:

Sample type		Delivered for chem. anal.	Remain to be delivered
Soils, sediments,		1767 (MCL)	85
cores		1007 (LFE)	
		486 (EIC)	
	TOTAL	3260	
Fish		121 (MCL)	NONE
		197 (LFE)	
	•	114 (UW)	
	TOTAL	432	

Status as of 27 July 1973 continued -

Sample type	Delivered for chem. anal.	Remain to be delivered
Vegetation (208 samples gamma counted)	51 (LFE)	141
Animals (281 samples gamma counted)	0	216
Air filters	58 (MCL)	NONE

McClellan Laboratory (MCL) - The analytical work at MCL was begun in December 1972.

	29 June 1973	13 July 1973	27 July 1973
Samples received (27 July - 1545 soils, 222 sediments, 121 fish,	183 2	1832	1946
58 air filters)	₩.	•	i
Data reported on 90 Sr and Pu (27 July - 1149 soils, 208 sediments, 59 fish, 53 air filters)	1215	1318	1469
Chemistry complete, Samples counting	324	264	303
In process	293	250	174

LFE Environmental Analysis Laboratory (LFE) - The analytical work at LFE was begun on March 5, 1973.

	29 June 1973	13 July 1973	27 July 1973
Samples received			
Soils	880	881	963
Sediments	7	7	44
F1sh	196	196	197
Vegetation	40	40	51
Algae	3	3	3
Water plant residues	2	_2_	2
TOT	AL 1128	1129	1260
Pu data reported		<u>.</u>	
Soils	637	674	734
Fish .	14	4	22
Vegetation	4 6.	4	14
Sr data reported			
Soils	587	619	653
Fish	4	4	4
Vegetation	0	2	4
⁵⁵ Fe data reported (analyses required only on fish samples)	· .		
Fish	4	4	4

Eberline Instrument Company (EIC) - The analytical work at EIC was begun on April 2, 1973.

	29 June 1973	13 July 1973	27 July 1973
Samples received - soils	486	486	486
Pu data reported	314	319	319
Sr data reported	102	217	323
University of Washington			
	29 June 1973	13 July 1973	27 July 1973
Samples received (114 marine.	142	142	142

Analysis of all but 20 of the samples has been completed. Preliminary data have been reported by letter (22 Pu's, 7 Sr's, 24 Fe's). Computer card format has been received by UW and data cards should be forthcoming. Data reported columns will reflect data reported as final data on computer cards.

A progress report will be issued every two weeks.

28 filter media)

Dr. Richard W. Hoff Deputy Division Leader

Radiochemistry Division

RWH:mb