411099

Laboratory Log Book - Lab. Trailer
TG 7.1 - TU-6
HARDTACK Phase I
Eniwetok Atoll
P.P.G.
19 April 1958 - 25 July 1958

RG 326 US ATOMIC ENERGY COMMISSION
Location LANL
Collection H Div
Folder TG 7.1 Tu-6
Lab Trailer Hardtack
Phase II, Eniwetok Atoll

50181
Manufactured by
U. S. Government Printing Office

DATE	Rec'd time	SAMPLE	SOURCE	C/m	C/T	B/C	P/m L	E of C
4-19-58		Bathing Area	water	22	3 min	22	0	
4-19-58		Drinking water	water - fountain	19	3 min	22	0	
5-4-58	1300	Camp Blandy	Beach water	22	6/1	18	2,300	
5-5-58	0800	Camp Blandy	Beach Water	21	6/1	18	2,500	12%
5-6-58	0800	CAMP BLANDY	BEACH WATER	7	6/1	17	7000	10%
	0515	SALT WATER	USS BOXER TAKEN 5-5-58	3	6/1	17	2700	11%
	0815	FRESH WATER	USS BOXER TAKEN 5-5-58	0	6/1	17	—	—
5-7-58	0830	BEACH WATER	CAMP BLANDY	2	6/1	20	1800	11%
	1600	FRESH WATER	USS BOXER TAKEN 5-6-58	0	6/1	20	0	—
	1600	SALT WATER	USS BOXER USS BOXER	1	6/1	20	900	11%
5-8-58	1045	Beach Water	Camp Blandy	2	10/1	18	1800	11%
5-9-58	0800	Beach Water	Camp Blandy	2	10/1	18	2,000	10%
5-10-58	0825	Beach water	Camp Blandy	2	6/1	18	1,600	12%
5-11-58	1630	BEACH WATER	CAMP BLANDY	5	6/1	18	4,500	11
5-12-58	0800	BEACH WATER	CAMP BLANDY	7	6/1	16	5000	.12
	1700	BEACH WATER	CAMP BLANDY	1	6/1	19	900	.11
	1700	Fresh Water	USS Boxer spec taken 0725	2	6/1	19	1,100	.12
	1700	Salt Water	USS Boxer spec taken 0725	3	6/1	16	2,700	.11
time Savings 5-13-58	0845	Beach water	spec taken 0800 Camp Blandy	1	6/1	18	1,100	.10
	0845	Rain H2O (caught in Beaker outside of trailer)	spec taken @ 0845	9	10/1	18	9,000	.10
	1040	water	Peter-oboe	0	10'	19	0	.12
	1135	Rain H2O	spec ... time in Rain 0900	6	10'	19	5,000	.12
	1330	Beach H2O	Camp Blandy spec. taken @ 1200	3	10'	19	3,500	.12
	1330	H2O From Lagoon Camp Blandy	spec taken @ 1200	2	10'	19	4,770 (1,600)	.12
	1450	Ocean H2O	From Peter oboe	6	10'	19	5,000	.12
	1450	H2O From Mess Hall	Peter oboe	3	10'	19	2,500	.12
	1625	Beach water	1600 specimen Camp Blandy	1	10'	19	835	.12
5-14-58	0830	Beach water	Camp Blandy taken @ 2000 5/13	0	10'	19	0	.12
	0830	Beach water	Camp Blandy 0800 specimen	2	10'	19	1,660	.12
	1330	Beach H2O	Camp Blandy 1200 spec.	0	15'	19	0	.12
	1600	BEACH WATER	CAMP BLANDY	10	10'	20	9000	.11
	1600	Open SEA WATER	ALFA-BRAVO CHANNEL 0500	20,009	10'	20	16,674,100	.10
	2000	BEACH WATER	CAMP BLANDY	30	10'	24	4,980	.12
5-15-58	0645	Beach H2O	Camp Blandy	26	5'	50	21,000	.12
	0645	Beach H2O	Marine Pump	26	5'	66	21,000	.12
	0715	H2O - Nan Mess Hall		0	5'	66	0	.12
	0715	H2O - Drinking Fountain Nan trailer Compound		0	5'	69	0	.12

Date (Specimen Rec'd)	Time	Sample	Source	c/m	c/t	B/c	d/m/l	
—	—	—	Camp Blandy 0800-Specimen	210	15'	65	17,500	.12
5-15-58	0855	Beach Water	USS Perkins	18	15'	65	14,450	.12
5-15-58	0935	Brine Discharge	E.A.P.S. USS Perkins	20	15'	65	16,600	.12
—	0935	Fresh water	E.A.P.S.	0	5'	65	—	—
	1040	Flour	Mess Hall	82	5'	65	65,800	.12
		Potatoes	Mess Hall	35	5'	100	28,200	.12
		Sweet Roll	Mess Hall	364	5'	65	303,300	.12
		Biscuit	Mess Hall	68	5'	100	56,600	.12
		Rye Bread	Mess Hall					
	1200	Salt Water	Alfa Channel	1624	10'	78	1,353,300	.12
		Salt Water	Uncle	35	10'	107	29,100	.12
		Salt Water	Barge	0	10'	78	—	—
		Biscuit	Mess Hall	2,006	5'	91		.12
		Sweet Rolls	Mess Hall	875	5'	91		.12
		Potatoes	Mess Hall	1,595	5'	109		.12
		Rye Bread	Mess Hall	1,075	5'	91		.12

An attempt was made to Break down above Food with a one molar solution of Glacial Acetic Acid. 10 cc of solution was evaporated and counted.

Date (Specimen Rec'd)	Time	Sample	Source	c/m	c/t	B/c	d/m/l	
	1840	Salt Water	Camp Blandy 1200	29	10'	108	24,100	.12
		Salt Water	Camp Blandy	0	10'	109	0	.12
		Salt Water	Peter Oboe	13	10'	108	10,800	.12
Late	1500	Wipe - Screen East Side	Mess Hall	54,744	10'	108	—	.12
		Wipe - Table East Side	Mess Hall	30,005	10'	109	—	.12
		Wipe - Partition Between Bake	Mess Hall	19,000	10'	108	—	.12
		Wipe - Edge of Coffee Urn	Mess Hall	7,000	10'	109	—	.12
		Wipe - Table in Hall	Mess Hall	3,000	10'	108	—	.12
		Wipe - Coffee Grinder	Mess Hall	2,000	10'	109	—	.12
	1930	Wipe - Screen East Side	Mess Hall	103,000 c/m				.1[illegible]
		Wipe - Table East Side	Mess Hall	29,000 c/m				.12
		Wipe - Partition Between D&B	Mess Hall	11,000 c/m				.12
		Wipe - Bakery Wall	Mess Hall	9,500 c/m				.[illegible]
		Wipe - Refer Door	Mess Hall	1,000 c/m				.[illegible]
		Broccoli	Mess Hall	69	10'	106		.[illegible]
		Potatoes	Mess Hall	58	10'	62		.[illegible]
5-16-58	0830	Rice [illegible]	Camp Blandy					

DATE	TIME	SAMPLE	SOURCE	c/m	c/l	B/c	c/m/c	
5-16-58	0815	Beach Water	Camp Blandy 0810	132	10'	107	132,000	.11
	0920	BEACH WATER	CAMP BLANDY	17	10'	107	15,400	.11
	1015	Crockers- Mess	Hall (on serving line)	375	10'	107		.10
		Fruit-	Mess Hall (on Serving Line)	98	10'	107		.11
		Bread-	Mess Hall (on table)	151	10'	109		.18%
		Lagoon H2O	Peter Oboe 1200	1,256	10'	107	114,000	.10
	1100	SALT WATER	CAMP BLANDY	17	5'	107	15,000	.12
	1400	Fresh water	USNS Ainsworth TAP-181	7	10'	135	6,363	.11
	1505	Brine Discharge	USNS Ainsworth TAP-181	0	10'	122	0	.10
	1605	Salt water	Camp Blandy	0	5'	111	0	.11
	1635	Salt water	Able	3,000	5'	111	300,000	.11
	1750	Salt Water	Bravo	3,000	5'	116	300,000	.10
	1750	Salt Water	Camp Blandy (0800)	27	5'	73	22,100	.12
5-17-58	2230	Beach water	Camp Blandy (2200)	27	5'	94	22,100	.12
		Beach Water	Camp Blandy 0600	148	5'	92	44,400	.10
		Beach water	Camp Blandy	32	5'	104	22,000	.11
		Shot Barge - fore	H2O					
5-19-58	0830	1) Salt Water -	USS Boxer 5-13-58	2	5'	75	1,700	.12
		2) Fresh Water -	USS Boxer 5-13-58	36	5'	94	34,000	.10
		3) Salt water -	USS Boxer 5-14-58	0	5'	100		.11
		4) Fresh water -	USS Boxer 5-14-58	20	5'	75	17,000	.12
		5) Salt Water -	USS Boxer 5-15-58	6	5'	94	6,000	.10
		6) Fresh water -	USS Boxer 5-15-58	2	5'	100	1,500	.11
		7) Fresh water -	USS Boxer 5-16-58	60	5'	75	50,000	.12
		8) Salt water -	USS Boxer 5-16-58	3	5'	94	3,000	.10
		9) Fresh water -	USS Boxer 5-17-58	0	5'	100	0	.11
		10) Salt water -	USS Boxer 5-17-58	135	5'	75	13,000	.12
		11) Fresh water -	USS Boxer 5-18-58	0	5'	94	0	.10
		12) Salt Water -	USS Boxer 5-18-58	14	5'	100	13,000	.11
		13) Salt water	Camp Blandy	0	5'	75	0	.12
	1510	15 Salt H2O	Camp Blandy	0	5'	80	0	.12
5-20-58	0930	Camp Blandy -	Salt water	7	10'	94	5,400	.13
	1100	Swipe - (EAST)	Mess Hall	559	10'	54	—	.10
		Swipe - (WEST)	Mess Hall	110	10'	115	—	.10
		Swipe - Scullery	Mess Hall	177	10'	54	—	.11
		Swipe - Hall	Mess Hall	345	10'	115	—	.10
		Fresh H2O	USS Boxer (0800)	1	10'	55	770	.13
		Salt H2O	USS Boxer (0800)	0	10'	91	0	.10
	1025	[illegible]	Camp Blandy	1	10'	55	770	.13

CORRECTED/DOE HALL RD

Date	Time	Sample	Source	c/m	T/c	o/c	p/m/c	
5-21-58	0830	Salt H_2O	Camp Blandy	0	10'	51	0	
	1100	Swipe - Non Mess Hall South End - East side		541	10'	51	—	.13
	1100	Swipe - Non Mess Hall South End - West side		1300	10'	80	—	.10
	1100	Swipe - Non Mess Hall North End - West side		85	10'	51	—	.13
	1100	Swipe Non Mess Hall - East side Mess Hall End		1,800	10'	80	—	.10
	1300	Salt H_2O	Camp Blandy	3	10'	51	2,310	.13
	1530	Urine - Schall	Solic separated 50cc	2	10'	53	308	.13
		Urine - Tyler	Camp 50cc	44.6	10'	53	3,140	.13
		Urine - Harvey	50cc	4	10'	80	800	.10
	1600	Salt H_2O	Camp Blandy	0	10'	53	0	.10
5-22-58	1345	Salt H_2O	Camp Blandy	10	10'	50	7,700	.13
5-23-58	1030	Mess Hall - (table)	Peter Oboe (1600 5/22)	3200	101	49		.13
	Swipes	Mess Hall	Peter Oboe (1600 5/22)	442	10'	64	—	.11
		" "	" (1600 5/22)	8,000	10'	86	—	.10
		" "	" (1600 5/22)	980	10'	64	—	.11
	1030	Salt H_2O -	Camp Blandy (1600 5/22)	1	10'	49	770	.13
		Drinking water -	Mess Hall Peter Oboe (5/22)	0	10'	64	0	.11
		Fresh H_2O	USS Boxer (1515 5/22)	0	10'	86	0	.10
		Salt H_2O	USS Boxer (1515 5/22)	0	10'	49	0	.13
	1120	Salt H_2O	Camp Blandy (0730 5/23)	2	10'	42	1,500	.13
	1130	Fresh H_2O	USS Boxer (0750 5/23)	7	10'	42	5,400	.13
		Salt H_2O	USS Boxer (0750 5/23)	0	10'	62	0	.10
5/24/58	0825	Salt H_2O -	Camp Blandy (1200 5/23)	2	10'	43	1,500	.13
	0825	Salt H_2O	Camp Blandy (1600 5/23)	5	10'	57	4,600	.11
	0840	Salt H_2O	Camp Blandy (0800 5/24)	0	10'	56	0	.10
5/25/58	0900	Salt H_2O	(Camp Blandy 1200 5/24)	0	10'	42	0	.13
		Salt H_2O	(Camp Blandy 1600 5/24)	0	10'	56	0	.10
	1500	Salt H_2O	Camp Blandy 0800	2	10'	42	1540	.13
		Salt H_2O	Camp Blandy 1200	0	10'	45	—	—
5-26-58	0800	Salt H_2O	Camp Blandy 0800	1	10'	38	770	.13
	1000	Salt Water	0900	3,000	10'	38	2,310	.13
	1300	Salt Water	0930	19	10'	54	9,000	.10
	1300	Salt H_2O	Camp Blandy (1600 5/26)	0	10'	41	0	.13
	1300	Salt H_2O	(Camp Blandy 1200 5/26)	0	10'	53	0	.10
	1600	Salt H_2O	(Camp Blandy 1600 5/26)	0	10'	48	0	.10
5-27-58	1315	Salt H_2O	(Camp Blandy 0800 5/27)	0	10'	50	0	.10
	1315	Salt H_2O	Camp Blandy 1200 5/27	0	10'	50	0	.10
5-28-58	0900	Salt H_2O	Camp Blandy 0800	3	10'	36	2,310	.13

DATE	TIME	SAMPLE	SOURCE	C/ml	C/T	B/C	D/ml
5-28-58	1000	SALT WATER	PETER OBOE 0930 WINDOW LEDGE	45	10'	36	34,600
	1000	SWIPE	PETER OBOE SCULLERY	180	10'	51	
	1000	SWIPE	PETER OBOE WINDOW LEDGE	56	10'	43	
	1000	SWIPE	PETER OBOE SERVING LINE	265	10'	51	
	1000	SWIPE	PETER OBOE	279	10'	36	
5-29-58	0800	SALT H_2O	CAMP BLANDY	0	10'	39	0
5-30-58	1100	SALT H_2O	CAMP BLANDY	8	10'	37	6,2
#5-31-58 cancelled							
6-1-58	0900	SALT H_2O	CAMP BLANDY (0800 spec.)	10	10'	40	7,7
6-1-58	1300	SALT H_2O	CAMP BLANDY (0800 spec.)	15	10'	41	11,5
6-1-58	1650	SALT H_2O	CAMP BLANDY (0800 spec.)	25	10'	42	19,3
6-2-58	0930	SALT H_2O	CAMP BLANDY (0800)	18	10'	41	13,860
6-3-58	0945	SALT H_2O	CAMP BLANDY (1200 6/3/58)	29	10'	40	26,4
	0945	SALT H_2O	CAMP BLANDY (1600 6/3/58	25	10'	53	25,m
	0945	SALT H_2O 0900 6-1-58	CAMP BLANDY (0800 6/3/58) USS BOKER	34	10'	55	30,0
	0945	SALT WATER 0900 6-1-58	EVAP. CIR SYS USS BOKER	0	10'	51	—
	0945	FRESH WATER 0800 6-2-58	EVAP. FRESH H_2O USS BOKER	0	10'	53	—
	0945	SALT WATER 0800 6-2-58	EVAP. CIR SYS USS BOKER	3	10'	65	2,70
	0945	FRESH WATER 0800 6-3-58	EVAP. FRESH H_2O USS BOKER	3	10'	55	2,7
	0945	FRESH WATER 0800 6-3-58	EVAP. FRESH H_2O USS BOKER	0	10'	53	—
	0945	SALT WATER	EVAP. CIR SYS 1200	20	10'	53	20,000
	1515	SALT WATER	CAMP BLANDY 6-3-58 1600	25	10'	53	25,000
6-4-58	0900	SALT WATER	CAMP BLANDY 0800	28	10'	50	28,0
	0900	SALT WATER	CAMP BLANDY P-O MESS 0835	50	10'	51	50,0
	0910	SWIPE	SERVING LINE P-O MESS 0836	34	10'	51	—
	0910	SWIPE	TABLE WEST SIDE P-O MESS 0837	45	10'	53	—
	0910	SWIPE	TABLE EAST SIDE P-O MESS 0838	400	10'	50	—
	0910	SWIPE	SCULLERY Non Mess Hall	22	10'	53	—
	0930	Swipe - Center - West side Screen	Non Mess Hall	400	10'	58	—
		Swipe - NW Corner Screen	Non Mess Hall	1,100	10'	51	—
		" NE Corner Screen	Non Mess Hall	7	10'	50	—
		" Screen - Main Entrance		10	10'	53	
	1315	SALT H_2O - (1200 spec.)	CAMP BLANDY 0900	578	10'	53	53,6
6-5-58	0930	SALT WATER	CAMP BLANDY	29	10'	56	26,3
6-6-58	1400	SALT H_2O	CAMP BLANDY	17	10'	48	15,0
6-7-58	0810	SALT H_2O	CAMP BLANDY	18	10'	52	18,0
6-8-58	0800	SALT H_2O	CAMP BLANDY	17	10'	43	17,1
6-9-58	0800	SALT H_2O	CAMP BLANDY	11	10'	42	11,0
6-10-58	0800	SALT H_2O	CAMP BLANDY	20	10'	37	20,0

CONFIDENTIAL

DATE	TIME	SAMPLE	SOURCE	C/m	C/T	A/e	P/m/L	
* 6-11-58	0830	Salt H_2O - Swipe-	Camp Blandy	27	10'	36	27,000	.10
6-11-58	0930	window screen - Swipe-	South side Peterobec MH	300	10'	37	—	.10
	0930	window screen Swipe-	East side (Peter-obec) Mess Hall West Side	5,200	10'	44	—	.11
	0930	window Screen Swipe-	Peter-Obec MH Northeast	86	10'	36	—	.10
	0930	window Screen - Swipe-	Side Peterobec MH	3,600	10'	40	—	.10
	1035	Fresh water System	USS Boter 0815 (spec of 6-10-58)	0	10'	48	0	.10
	1035	salt water System	USS Boter 0815 (6-10-58 spec)	200	10'	43	82,000	.11
	1035	Fresh water System	USS Boter 0815 (6-11-58 spec	0	10'	49	0	.10
	1035	Salt water System	USS Boter 0815 (6-11-58 spec)	188	10'	32	14,600	.13
	1315	Salt water	Camp Blandy	27	10'	28	21,000	.13
	1600	Salt H_2O	Camp Blandy	20	10'	33	15,400	.13
6-12-58	0820	Salt H_2O - Swipe	Camp Blandy Peterobec	17	10'	36	13,000	.10
6-12-58 specimens taken @ 1615 6-11-58	0900	Serving tray - Swipe-	Mess Hall Peterobec	5	10'	37	—	.10
	eating	table - Swipe-	Mess Hall Peterobec	51	10'	39	—	.11
		Serving Line - Swipe-	Mess Hall Peterobec	15	10'	36	—	.10
		Kitchen table	Mess Hall (1200)	2	10'	38	—	.11
	1315	Salt H_2O -	Camp Blandy	14	10'	37	13,700	.11
	1610	Salt H_2O -	Camp Blandy	15	10'	41	13,600	.11
6-13-58	[illegible]	Salt H_2O	Camp Blandy	10	10'	38	9,000	.11
6-13-58	1380	Salt H_2O	Camp Blandy	10	10'	38	10,000	.10
6-13-58	1630	Salt H_2O	Camp Blandy	10	10'	38	10,000	.10
6-14-58	0815	Salt H_2O	Camp Blandy	12	10'	38	13,000	.10
6-14-58	1230	Salt H_2O	Camp Blandy	22	10'	36	22,000	.10
* 6-15-58	0820	Salt H_2O	Camp Blandy	26	10'	33	26,000	.10
	1320	Salt H_2O	Camp Blandy	25	10'	37	25,000	.10
	1615	Salt H_2O	Camp Blandy	26	10'	34	24,000	.10
6-16-58	0850	Salt H_2O	Camp Blandy	27	10'	35	24,500	.11
	1210	Salt H_2O -	Camp Blandy	31	10'	39	28,000	.11
6-17-58	0835	Salt H_2O -	Camp Blandy Serving Line	28	10'	33	25,000	.10
	1030	Swipe-	Non Mess Hall	7	10'	37	—	.10
		Swipe table-19	Non Mess Hall	4	10'	25	—	.13
		Swipe-	Kitchen table Non Mess Hall	2	10'	33	—	.10
		Swipe -	Dish washing Room Non Mess Hall	0	10'	37	—	.11
	1270	Camp Blandy -	Salt H_2O	55	10'	33	35,000	.10
	1600	Salt H_2O -	Camp Blandy	13	10'	27	13,000	.10
6-18-58	0800	Salt H_2O -	Camp Blandy	20	10'	33	15,000	.11

Date	Time	Sample	Source	c/m	c/t	B/c	d/m/l
6-19-58	0820	Swipe- window ledge	South side Peter oboe MH	65	10'	29	—
Specimen taken 1715, 6-18-58	0820	swipe window	East side Peter oboe MH	900	10'	26	—
	0820	Swipe window	North side Peter oboe MH	1,076	10'	29	—
	0820	swipe dust window Ledge-	North west P-O MH.	3240	10'	34	—
	0815	Salt H_2O	- Camp Blandy	35,~~000~~	10'	29	35,000
6-20-58	0800	Salt H_2O-	Camp Blandy	34	10'	34	34,000
6-21-58	0800	Salt H_2O	Camp Blandy	52	10'	31	52,000
6-22-58	0915	Salt H_2O	Camp Blandy	63	10'	28	63,000
6-23-58	0815	Salt H_2O	Camp Blandy	53	10'	31	53,000
6-23-58	0940	Rain Water	- Outside Trailer	13	10'	34	13,000
6-24-58	0815	Salt H_2O-	Camp Blandy	58	10'	27	53,000
	0815	Swipe- South-West side	Nav Mess Hall	9	10'	28	—
	0815	Swipe North West side-	Nav Mess Hall	0	10'	40	—
	0815	Swipe North East side	Nav Mess Hall	20	10'	32	—
	0815	Swipe South east side	Nav Mess Hall	5	10'	27	—
Alpha counts	0815	Swipe South - West side	Nav Mess H.	9	10'	49	—
	0815	Swipe North West side	Nav Mess Hall	3	10'	49	—
	0815	Swipe North East side	Nav Mess Hall	0	10'	49	—
	0815	Swipe Southeast side	Nav Mess Hall	6	10'	49	—
6-25-58	0730	Rain Water	Outside Trlr.	11	10'	29	10,000
	0800	Salt H_2O	Camp Blandy	37	10'	29	34,000
6-26-58	0740	Swipe- table- North side	Peter oboe M.H.	56	10'	26	—
	0740	Swipe- table- South side	Peter oboe M.H.	25	10'	31	—
	0740	Swipe Screen west side	Peter oboe M.H.	42	10'	33	—
	0740	Swipe Screen	east side Peter oboe M.H.	241	10'	27	—
Alpha counts	0740	Swipe	table - North side Peter oboe M.H.	0	10'	20	
	0740	Swipe - table South side -	Peter oboe M.N.	3	10'	28	
	0740	Swipe - west side Screen-	Peter oboe M.N.	2	10'	20	
	0740	Swipe - Screen east side	Peter oboe M.N.	4	10'	20	
Soil Samples	1030	103.5 grams soil from Uncle		d/m for rec. 14,800	10'	26	d/m for 1,480,0[illegible]
		120 grams soil from 2410. 002		20,700	10'	31	1,880,[illegible]
		135 grams soil from Charlie		937 ~~964~~	10'	27	85,00[illegible]

100 grams of above soil was dissolve in 100 cc of water. 10 cc was evaporated and Counted.

Alpha Counts were 1 c/m Uncle sample, 2 c/m f[illegible] 0 c/m for Charlie sample.

Date	Rec'd time	Sample	Source	Gross c/m	B/G	Net c/m	d/m/l	Counter Efficiency	C[illegible]
6-27-58	0815	Salt H_2O	Camp Blandy	74	29	45	45,000	.10	10'
* Redwood 0530 6-28-58	0825	Salt H_2O	Camp Blandy	48	26	22	23,000	.10	10'
6-28-58	1200	Salt H_2O -	Camp Blandy	50	26	24	24,000	.10	10'
6-28-58	1515	Rain H_2O	Caught outside trailer	44	29	15	15,000	.10	10'
6-29-58	0800	Salt H_2O	Camp Blandy	66	32	34	34,000	.10	10'
	0800	Rain H_2O	collected overnight; 1000cc	1,530	30	1,500	1,364,000	.11	10'
* Hickory 1200	1100	Rain H_2O	Morning collection	143	35	108	98,100	.11	10'
	1245	Salt H_2O	Camp Blandy	60	34	26	26,000	.10	10'
	1900	SALT WATER	CAMP BLANDY 1600	68	33	35	35,000	.10	10'
	1900	RAIN WATER	AFTERNOON	119	32	87	[illegible]	.11	10'
6-30-58	0840	Swipe Window screen	east side Nan M.H.	144	32	112	—	.10	10'
	0840	Swipe Window Screen	North side Nan M.N.	210	22	188	—	.13	10'
	0840	Swipe- Window Screen	South side Nan M.N.	244	38	206	—	.11	10'
	0840	Swipe- Window screen	West side Nan M.N.	82	32	50	—	.10	10'
Alpha counts	0840	Swipe Window Screen	east side Nan M.N.	19	21	0	—	.42	10'
	0840	Swipe Window screen	North side Nan M.N.	20	21	0	—	.42	10'
	0840	Swipe Window screen	South side Nan M.N.	21	21	0	—	.42	10'
	0840	Swipe Window Screen	West side Nan M.N.	20	21	0	—	.42	10'
	0910	Salt H_2O	Camp Blandy	63	32	31	31,000	.10	10'
Beta	0945	tape	Fallout trays No. 1	357	32	325	—	.10	10'
B. G.	↓	Filter paper	Fallout trays	224	32	192	—	.10	10'
Alpha		tape	Fallout tray	18	21	0	—	.42	10'
Alpha		Filter paper	"	21	21	0	—	.42	10'
Beta		tape	Fallout tray No. 2	320	32	288	—	.10	10'
Beta		Filter paper	"	288	32	266	—	.10	10'
Alpha		tape	"	20	21	0	—	.42	10'
Alpha		Filter Paper	"	17	21	0	—	.42	10'
Beta		tape	Fallout tray No. 3	326	32	293	—	.10	10'
Beta		Filter paper	"	211	32	179	—	.10	10'
Alpha		tape	"	19	21	0	—	.42	10'
Alpha		Filter paper	"	15	21	0	—	.42	10'
	1215	Salt H_2O	camp Blandy	45	30	15	15,000	.10	10'
	1610	Salt H_2O	Camp Blandy	63	30	33	33,000	.10	10'
7-1-58	0815	Salt H_2O	Camp Blandy	54	30	24	24,000	.10	10'
7-2-58	0816	Salt H_2O	Camp Blandy	58	29	29	29,000	.10	10'
7-2-58	1230	Salt H_2O	Camp Blandy	55	29	26	26,000	.10	10'
- Alpha count	1230	" "	"	2.5	2	0	—	.14	30'
	1330	Salt H_2O	Swimming area Peter Aboe	73	29	44	44,000	.10	10'
Alpha count		" "	" "	2	2	0	—	.14	20

Date	Time Rec'd	Sample	Source	Gross c/m	B/c	Net c/m	D/M/L	Counter EFF.
7-2-58	1330	Salt H_2O	100 mR/R Peter oboe	6,686 ~~6,700~~	36	6,650	60,590,000	.11
Alpha count	1330	" "	" "	2	2	0	—	.14
7-2-58	1430	swipe table	Peter oboe Mess Hall	29	29	0	—	.10
	1430	Swipe Cooking Pot & trays	Peter oboe Mess Hall	36	36	0	—	.11
	1430	[illegible]	Peter oboe Mess Hall	30	29	1	—	.10
	1430	Silverware	Rack Peter oboe Mess Hall	51	36	15	—	.11
No alpha activity found on above swipes.								
	1615	Salt H_2O	Camp Blandy	50	29	21	21,000	.10
* [illegible] 7-3-58	0630	Rain Water	Collected overnight [illegible]	8599	19	8,580	865,000	[illegible]
	0815	Salt H_2O	Camp Blandy	76	27	49	61,000	.08
	1330	Rain Water	Collected During 1315 to 1330	117,000	27	117,000	146,580,000	.08
7-4-58	[illegible]	tape	[illegible]	[illegible]	250	[illegible]	—	.13
Counting room	[illegible]	Filter Paper	"	[illegible]	327	1600	—	.8
End of trailer	0800	tape	"	54,125	250	53,900	—	.13
put outside on Engineers Roof	0800	Filter Paper	"	66,257	327	65,800	—	.08
Size of above tape and Filter paper is								
	0900	Swipe - Right Front Peter-oboe	H.H. (taken 1416 hrs)	570	413	167	—	.08
	0900	Swipe Left Front	Peter-oboe H.H. 1416, 7/3/58	983	250	733	—	.13
	0900	Swipe Right Rear	"	3,644	336	3,208	—	.09
	0900	Swipe Left Rear	"	481	327	154	—	.08
	0915	& Salt H_2O	Camp Blandy	430 ~~[illegible]~~ 324		106	132,500	.08
put out @1000 7/4	1715	3.2cm tape	From Fallout tray on Front of trailer	1,846	300	1,546	—	.08
	1715	Rain H_2O	only 5cc collected	59,000	300	59,000	147,000,000	.08
7-5-58	[illegible]	tape	Fallout tray	650	175	[illegible]		
	[illegible]	Filter paper	"	[illegible]	137	[illegible]		
	[illegible]	Rain H_2O	collected overnight	[illegible]	187	[illegible]	[illegible]	
	0820	Salt Water	Camp Blandy	249	187	62	[illegible]	
	1220	Salt H_2O	Camp Blandy	[illegible]	156	[illegible]	[illegible]	[illegible]
7-6-58	0815	Rain H_2O	collected overnight	2,085	122 ~~[illegible]~~	1,913	1,900,000	10%
	0820	Salt H_2O	Camp Blandy	179	110	69	86,000	.08
	1640	tape	Fallout tray	465	135	330	—	.08
7-7-58	0800	Salt H_2O	Camp Blondy	162	162	[illegible]	[illegible]	.10
7-8-58	0740	Filter paper ~~tape~~	Fallout tray put out 7/4	600	78	522	—	.09
	1000	Salt H_2O	Camp Blondy	158	78	80	90,000	.09
	1040	Filter paper	Fallout tray	394	78	316	—	.09
	1200	Rain H_2O	Rain of 1100-1120	680	80	600	750,000	.08
	1200	Salt H_2O	Camp Blandy	133	90	43	47,000	.09
	1430	Rain H_2O	[illegible]	546	90	456	507,000	.09

Date	Time Read	Sample	Source	Gross c/m	B/C	Net c/m	D/M	D/M/L	ct	C/E
7-8-58	1430	Swipe Plate	Non Mess Hall	95	95	0	0	—	10'	.08
	1430	Swipe Serving Line	" " "	117	90	17	158	—	10'	.09
	1430	Swipe table near coffee urn	" " "	92	80	12	160	—	10'	.08
	1430	Swipe North Eating table side	" " "	96	96	0	0	—	10'	.10
	1430	Kitchen table	" " "	90	90	0	0	—	10'	.09
7-9-58	0810	Salt H_2O	Camp Blandy	125	82	43	430	43,000	10'	.10
	1000	tape	North End of trailer put out 7/8	460	82	378	3,780	—	10'	.10
	1015	2cc of Rain Water		957	82	875	8,750	4,375,000	10'	.10
	1030	4cc of Rain Water		250	82	168	1,680	420,000	10'	.10
7-10-58	0745	Rain Water	collected overnight Peter Oboe	4,018	69	3,949	43,877	4,390,000	10'	.09
	0830	Swipe - table	Mess Hall	79	72	7	58	—	10'	.08
	0830	Swipe tray in rack	"	78	69	9	100	—	10'	.09
	0830	Swipe - top of Dishwasher	"	292	69	223	2,477	—	10'	.09
	0830	Serving Line	"	284	72	212	2,645	—	10'	.08
	0830	Salt Water	Camp Blandy	238	69	169	1,877	188,000	10'	.09
	1100	1 gram of Soil	outside trailer	769	69	700	7,777 (1 gram)	per 100 gram 777,700	10'	.09
	1230	Salt Water	Camp Blandy	124	78	46	510	51,000	10'	.09
	1645	1cc Rain Water	Afternoon Rainfall	80	70	10	110	110,000	10'	.09
7-11-58	0745	5cc Rain Water	overnight Rainfall	120	62	58	580	116,000	10'	.10
	0810	Salt Water	Camp Blandy Morning	90	62	28	280	28,000	10'	.10
	1000	1cc Rain Water	Rainfall	166	60	106	1060	106,000	10'	.10
* Paper [illegible]	1030 7/12									
	0810 7/13	Salt water	Camp Blandy	194	57	36	360	50,000	10'	.10
7/13	0845	Filter paper	Fallout tray	72	57	15	150	—	10'	.10
	1430	RAIN WATER	[illegible]	92	61	31	310	31,000	10'	.10
7/14	0810	tape	Fallout tray	109	53	56	560	—	10'	.10
	0810	Salt Water	Camp Blandy	107	53	54	540	54,000	10'	.10
	1215	Filter paper	Fallout tray	108	53	55	550	—	10'	.10
7/15	0815	8cc Rain H_2O	overnight Rainfall	88	55	33	330	41,200	10'	.10
7/15	0900	Salt Water	Camp Blandy	81	55	26	260	26,000	10'	.10
	1850	Rain Water		79	53	26	260	26,000	10'	.10
7/16	[illegible]	Rain Water	overnight Rain	60	54	6	60	6,000	10'	.10
7/16	1030	Salt Water	Camp Blandy	86	54	32	320	32,000	10'	.10
7/17	0815	Salt Water	Camp Blandy	90	51	39	391	51,[illegible]	10'	.10
7/18	0800	Rain Water	overnight Rainfall	800	53	747	6800	680,000	10'	.11
7/21	0800	Rain Water	two day Rainfall	69	43	26	260	26,000	10'	.10
	1300	Rain Water	AM Rainfall	63	43	20	200	20,000	10'	.10

Date	Time Rec'd	Sample	Source	Gross c/m	B/G	Net c/m	D/min	C+	C.E.
7-25	0800	Salt H_2O	Camp Blandy	56	46	10	10,000	10'	10%
	1200	Salt H_2O	Camp Blandy	77	43	34	34,000	10'	.10
	1600	Salt H_2O	Camp Blandy	72	43	29	29,000	10'	.10

Counter Efficiency

Counter	Source	c/m from Counter − Background	% Counter Efficiency
	22,900 d/m		
2	22,900 d/m	2,800	12
3	22,900 d/m	2,668	12
4	22,900 d/m	2,209	10
5	22,900 d/m	2,691	11
Alpha	13,977 d/m	4,573	33
Counts taken 4-30-58	5-2-		
1	22,800 d/m	2,889	13
2	22,900 d/m	2,500	11
3	22,800	2,442	10
4	4-26-		
5	22,800 d/m	2,300	10
Alpha	13,977 d/m	4,260	30
1	22,800 d/m	2,150	10
2	22,800 d/m	3,100	13
3	22,900 d/m	2,500	11
4	22,900 d/m	2,320	10
5	22,800 d/m	2,450	11
Alpha	13,563	5,150	38
checked 6-11-58			
Alpha 6-25-58	13,563	5,665	42
Alpha 6-30-58	13,563	1,037	8
	1,300	85	6.5
	1,872	94	6.8
	13,977	747	5.3
			27.6
Alpha 7-2-58	13,977	1,941	13
7-3-58			
1	22,800	2,200	8
2	22,900	3,760	13
3	22,800	2,500	9
4	22,900	2,300	8
5	22,900	2,850	10
Alpha	13,977	1,450	10
1			
3			
4	22,800	2,320	10
	22,800		

		Source	c/m	efficiency
7-11-58				
Alpha		13,977	2,135	1590
	1	22,900	2,254	1090
	3	22,800	2,500	1190
	4	22,800	2,249	1090
	5	22,900	2,374	1090
1/18/60	1	22,800	2,300	1090
	3	22,800	2,600	1190
	4	22,800	2,280	1090
	5	22,800	2,500	1190

Not

13

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14

CPM	wk 10	11	12	13	14	15	16
1	1,000	909	830	770	715	667	625
2	2,000	1,818	1,660	1,540	1,430	1,334	1,250
3	3,000	2,727	2,490	2,310	2,135	2,001	1,875
4	4,000	3,636	3,320	3,080	2,860	2,668	2,500
5	5,000	4,545	4,150	3,850	3,775	3,335	3,125
6	6,000	5,454	4,980	4,620	4,270	4,002	3,750
7	7,000	6,363	5,810	5,390	5,005	4,669	4,375
8	8,000	7,272	6,640	6,160	5,720	5,336	5,000
9	9,000	8,181	7,470	6,930	6,435	6,003	5,625
10	10,000	9,090	8,300	7,700	7,150	6,670	6,250
11	11,000	9,999	9,130	8,470	7,865	7,337	6,875
12	12,000	10,908	9,960	9,240	8,540	8,004	7,500
13	13,000	11,817	10,990	10,010	9,285	8,671	8,125
14	14,000	12,726	11,620	10,780	10,010	9,338	8,750
15	15,000	13,635	12,450	11,550	10,925	10,005	9,375
16	16,000	14,544	13,280	12,320	11,540	10,672	10,000
17	17,000	15,453	14,110	13,160	12,155	11,339	10,625
18	18,000	16,362	14,960	13,860	12,870	12,006	11,350
19	19,000	17,271	~~14,630~~ 15,770	~~13,585~~ 14,630	~~13~~ 13,685	12,673	11,975
20	20,000	18,180	16,600	15,400	14,300	13,340	12,500
21	21,000	19,089	17,430	16,170	15,015	14,007	13,125
22	22,000	19,998	18,260	16,940	15,730	14,674	13,750
23	23,000	20,907	19,290	17,780	16,445	15,341	14,375

preparation of AgCl.

1. In a 50 ml. beaker place approx. 25 ml. deionized water
2. Add 2% aerosol solution - 2 drops
3. " 20 drops 5% HCl solution
4. " 15 drops 5% $AgNO_3$ solution
5. Heat to almost boiling
6. Filter through assembly.

apparatus assembly.

1. Place porcelain filter base in rubber stopper, insert in filter flask.
2. attach vac. connection.
3. place filter paper on filter base.
4. Dampen with deionized water from wash bottle.
5. Center chimney over filter paper and secure with rubber bands. Use care in installing since chimney can fly over and break.

Sample for analysis should be clear, if turbid, filter before analysis.

6. Filter prepared. AgCl thru assembly, wash walls with water.
7. Filter liquid sample before filter drys.

Sample counts sample

Sample #1 21,138 c/m for five minutes
21,038

Sample #2 18,100 c/m for five minutes
-100 background
18,000

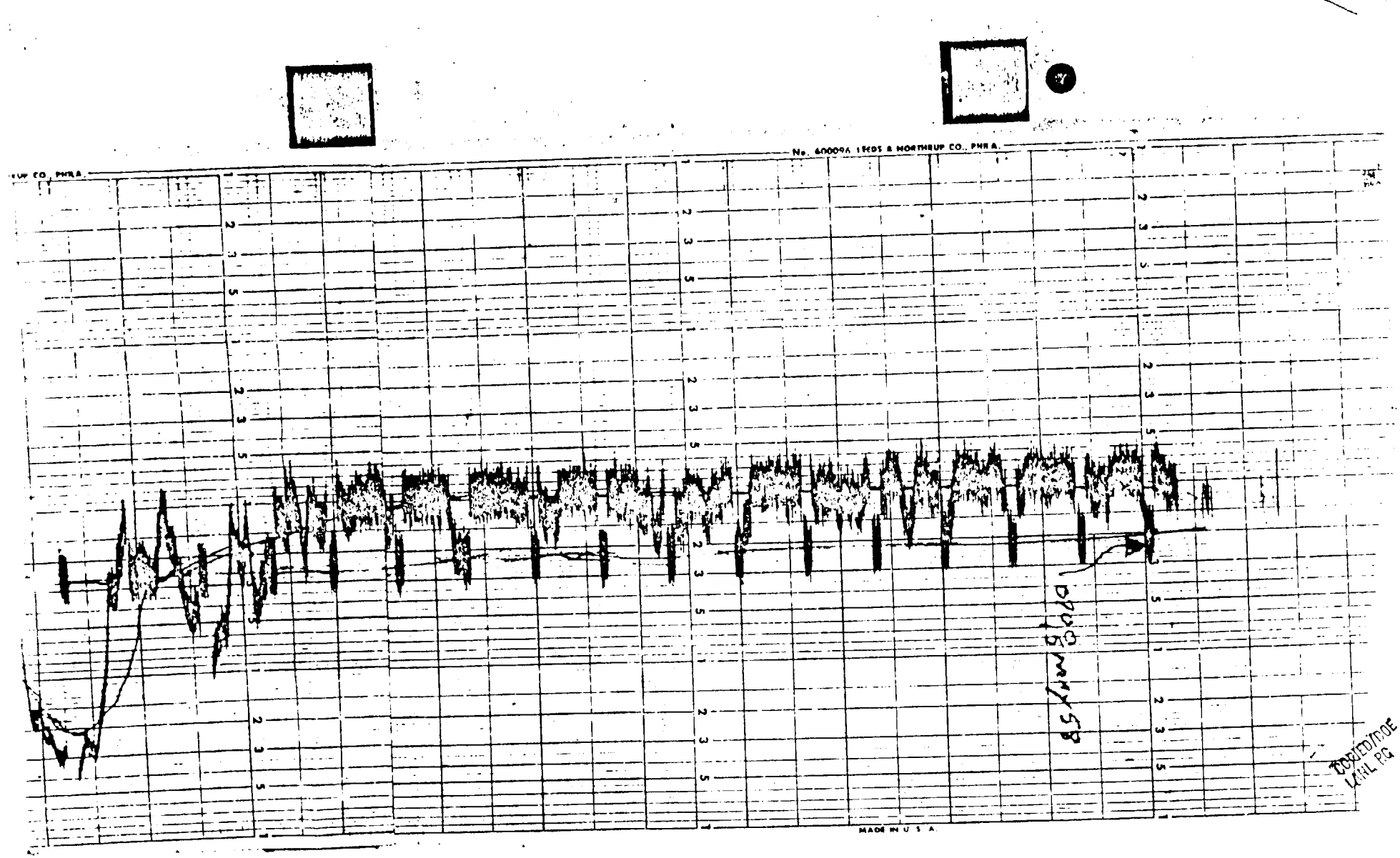
2,000 G/m Biscuit
875 G/m Sweet Rolls
1,595 G/m Potatoes
1,075 G/m Rye Bread

Spec. No.	Soil samples	Weight
(1)	Uncle	103.5 grams
(2)	2410.4	120 grams
(3)	Charlie	135 grams

100 grams of above soil sample was placed in beaker of 100cc H_2O

10cc of solution was evaporated in a planchet.

Sample counts	Count for 1'	Background	Net count	For 100 cc
(1) Gross Beta for 10' 148,440	14,840	26	14,800	
Alpha for 10' 210	21	20	1	
Counter efficiency 10% 148,000 D/m per 10cc				
1,480,000 D/m per 100cc				
(2) Gross Beta for 10' 207,588	20,758	31	20,700	
Alpha for 10' 220	22	20	2	
Counter efficiency 10% 185,000 D/m for 10cc				
1,850,000 D/m for 100cc				
(3) Gross Beta for 10' 9,640	964	27	937	
Alpha for 10'	0	20	0	
Counter efficiency 10% 8,500 D/m per 10cc				
85,000 D/m per 100cc				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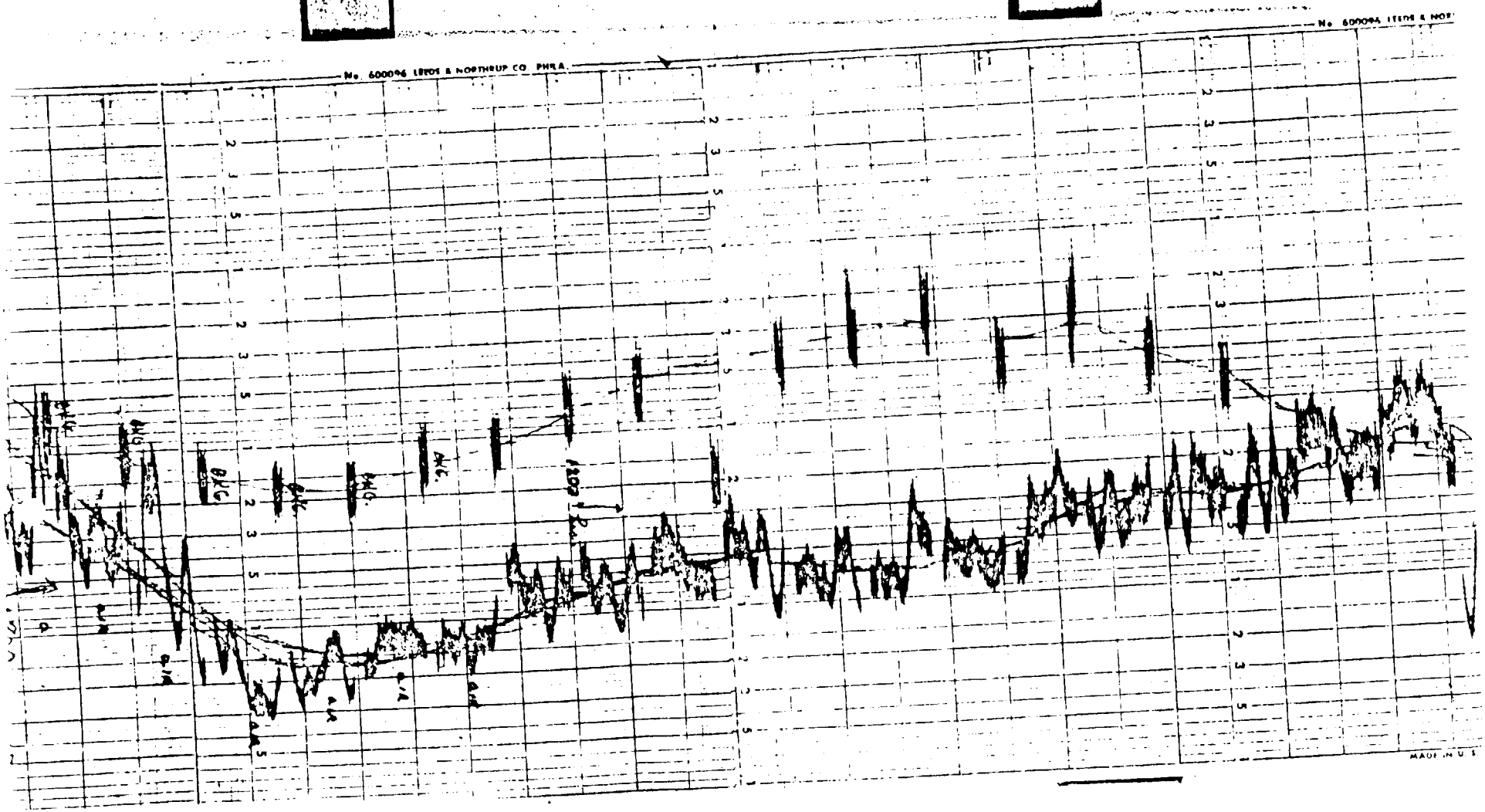
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5/15/58

DINNING ROOM SWIPE COUNT REPORT

1500 30,000 c/m = 3 mr
1700 29,000 c/m = 2 mr

1500 19,000 c/m = 1 mr
1700 11,000 c/m = 1 mr

1700 9,500 c/m

1500 3,000 c/m

1500 55,000 c/m/
1700 102,608 c/m

1700
1,000 c/m

15000 2,000 c/m

Broccoli - 58 c/m
Potatoes - 69 c/m

RECOMMENDATIONS FOR RAD-CHEM WORK ON FUTURE OPERATIONS AND SOME OBSERVATIONS MADE DURING OPERATION HARDTACK.—

1. Efficiency of Geiger-Mueller tube is about 15%, but some may vary from 10 to 20%.

2. Check efficiency of G-M tube at least once each week with Strontium^{90} source.

3. Alpha counting setup is very poor. Samples, such as swipes with become stuck in drawer and the phosphor will be wiped off tube. Better technique is to use Thyac probe attached to Berkeley Scaler. Efficiency will be same as Radiac instrument. Use a good plutonium source for calculated efficiency.

4. Ideal counting time for field work is ten minutes. It is better than several short counts.

5. ten or fifteen cc is good amount to evaporate. Large flat planchets are best to use.

6. Decide who is to collect the samples.

7. It might prove educational and interesting to visit other task groups to observe procedures and counting techniques.

8. Use first shelf of lead pig for best counting results.

9. Would be desirable to have mimeograph sheets for counting log.

10. When background goes up outside of trailer, background in lead pigs will raise.

11. Some of the different types of specimens handled at EPG were as follows: sea water, food samples, swipes from mess halls, nose swipes for alpha, urines for tritum, fresh water samples, air filter samples for Gross Beta and alpha. Only tritum analysis was done at Eniwetok atoll.

12. Swipes of mess halls are of no value when you don't know the area covered.

13. No radioiodines were done at EPG.

14. Results of liquid specimens were reported at Bikini Atoll so many d/m per liter, and at Eniwetok Atoll so many d/m per cc.

15. Keep out unauthorized people from the trailers.

16. Extremly hot specimens should not be counted.

17. Counting rain water samples may be of value. Several high counts were had on the operation

18. Sea water will have higher counts in the morning than the afternoon, due to tide changes.

19. About one thousand samples at EPG. About [illegible] at Bikini.

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[redacted]

SUBJECT: List of samples processed 13 July through 19 July 1958, BIKINI ATOLL.

SAMPLE	WHERE COLLECTED	DATE	TIME	COUNT
Salt Water	Camp Blandy Swimming Area	13-7	0810	57,000 d/m/liter
Filter Paper	Fallout tray, No. 1, Nan	"	0845	15 c/p/m
Rain Water	Radchem. Trailer, Compound area, Nan	"	1930	31,000 d/m/liter
Tape	Fallout tray, No. 1, Nan	14-7	0810	56 c/p/m
Salt Water	Camp Blandy Swimming Area	"	0810	54,000 d/m/liter
Filter Paper	Fallout tray, No. 2, Nan	"	1215	55 c/p/m
Rain Water	Overnight Rainfall, Nan	15-7	0815	41,000 d/m/liter
Salt Water	Camp Blandy Swimming Area	"	0900	26,000 "
Rain Water	Radchem. Trailer, Compound Area, Nan	"	1350	26,000 "
Rain Water	Overnight Rainfall, Nan	16-7	0800	6,000 d/m/liter
Salt Water	Camp Blandy Swimming Area	"	0815	32,000 "
Salt Water	Camp Blandy Swimming Area	17-7	0815	39,000 d/m/liter
Rain Water	Radchem. Trailer, Compound area, Nan	18-7	0800	680,000 d/m/liter

[redacted]

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[redacted]

SUBJECT: List of samples processed 5 July through 12 July 1958, BIKINI ATOLL.

SAMPLE	WHERE COLLECTED	DATE	TIME	COUNT
Tape	Fallout tray, No. 1, Nan	5-7	0730	680 c/p/m
Filter Paper	Fallout tray, No. 2, Nan	"	0730	1,063 "
Rain Water	Radchem.Trailer,Compound Area, Nan	"	0745	1,400,000 d/m/liter
Salt Water	Camp Blandy Swimming Area	"	0810	77,500 "
Salt Water	Camp Blandy Swimming Area	"	1220	54,000 "
Rain Water	Radchem.Trailer, Compound Area, Nan	6-7	0815	1,900,000 d/m/liter
Salt Water	Camp Blandy Swimming Area	"	0820	86,000 "
Tape	Fallout tray, No. 1, Nan	"	1640	330 c/p/m
Salt Water	Camp Blandy Swimming Area	7-7	0800	60,000 d/m/liter
Filter Paper	Fallout tray, No. 1 Nan	8-7	0740	522 c/p/m
Filter Paper	Fallout tray, No. 2 Nan	"	1040	316 "
Salt Water	Camp Blandy Swimming Area	"	1000	90,000 d/m/liter
Salt Water	Camp Blandy Swimming Area	"	1200	47,000 "
Rain Water	A.M. Collection, Compound Area, Nan	"	1200	750,000 "
Rain Water	P.M. Collection, Compound Area, Nan	"	1430	507,000 "
Swipe	Plate, Mess Hall, Nan	"	1430	0 c/p/m
Swipe	Serving Counter, Mess Hall, Nan	"	1430	17 "
Swipe	Table, Mess Hall, near coffee urn	"	1430	12 "
Swipe	Table, Mess Hall, eating	"	1430	0 "
Swipe	Table, Mess Hall, kitchen	"	1430	0 "
Rain Water	Radchem.Trailer, Compound Area, Nan	10-7	0745	4,390,000 d/m/liter
Swipe	Table, Mess Hall, Peter-Oboe	"	0830	7 c/p/m
Swipe	Tray, Mess Hall, Peter-Oboe	"	0830	9 "
Swipe	Dishwasher, Mess Hall, Peter-Oboe	"	0830	223 "
Swipe	Serving Counter, Mess Hall, Oboe	"	0830	212 "
Salt Water	Camp Blandy Swimming Area	"	1230	188,000 d/m/liter
Salt Water	Camp Blandy Swimming Area	"	1100	51,000 "
Soil	Radchem.Trailer, Outside, Nan	"	1645	7,800 d/m/gram
Rain Water	Radchem.Trailer, Afternoon rainfall	11-7	0745	110,000 d/m/liter
Rain Water	Compound Area, overnight rainfall	"	1000	116,000 d/m/liter
Rain Water	Compound Area	"	0810	106,000 "
Salt Water	Camp Blandy Swimming Area	"		28,000 "

[redacted]

All of the above samples were tested for Gross Beta.
No Alpha activity was found on any of these samples.
Swipes were taken of an area of approximately 15 cm^2.
Size of the tape and filter paper was 3.7 cm in diameter.

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