

Tritium Laboratory
October 4, 2014

SWAB REPORT #275

SWAB DATE: 11 September 2000

R/V Nathaniel B. Palmer
NBP Radioisotope Vans

James D. Happell
Assistant Research Professor

Distribution:

SWAB COMMITTEE
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REPORT FOR SWAB # 275

LOCATION : Ft. Forchon, LA
 TECHNICIAN: Cecilia Roig
 VESSEL/LAB: R/V Nathaniel B. Palmer

DATE : 11 September 2000
 STATUS: All areas
 tested free of radio
 isotope spills.

SAMPLE #	SAMPLE IDENTIFICATION	NET ACTIVITY EXTRACTED	
		³ H dpm/m ²	¹⁴ C dpm/m ²
1	Machine blank	-	-
2	Initial bucket blank (C.O.#1)	121	0
<u>Bio Lab (See Figure 1)</u>			
3	Workbench port of sink	57	0
4	Inside fume hood	0	0
5	Deck just inside entrance to Electronics Lab	15	19
6	Deck just outside door to Cold Room	0	0
7	Deck below port sink	0	0
8	NSF#01804 Freezer/refrigerator, top	0	0
9	NSF#01804 Freezer/refrigerator, bottom	33	0
10	Walk-in Cold Room 918: Workbench port of sink	0	3
11	Walk-in Cold Room 920: Workbench port of sink	40	27
<u>Dry Lab (See Figure 2)</u>			
12	Deck inside fwd port entrance	37	0
13	Inside incubator NSF#016612	0	0
14	Inside incubator NSF#016613	67	21
15	Inside incubator NSF#02883	110	37
16	Deck between cryofridge and incubators	78	0
17	Top of cryo-fridge NSF	41	3
18	Top and handle of Ultra-low freezer, NSF#05893	47	0
19	Deck below workbenches	0	0
20	Deck just inside aft double door entrance	201	0
21	Aft workbench/sink area	3	1
22	Deck just inside aft entrance of Fwd Dry Lab	0	0
<u>Forward Dry Lab (See Figure 2)</u>			
23	Deck inside aft port entrance of Dry Lab	20	0
24	Computer workbench	44	0
25	Deck below ship monitoring computer station	153	0
26	Deck below computer station	0	30
<u>Hydro Lab (See Figure 3)</u>			
27	Stbd sink area	7	0
28	Deck below sink area	11	10
29	Deck of Haz-Mat Locker	0	0
30	Deck of Shop	0	7
31	Refrigerator NSF#01905, bottom	0	3
32	Refrigerator NSF#01905, freezer top	44	0
33	Bucket blank	63	13
<u>Radioisotope Van (See Figure 4)</u>			
34	Inside refrigerator/freezer, top	149,477***	54
35	Inside refrigerator/freezer, bottom	52,318**	31
36	Inside cabinet left of and below sink	931	11

SAMPLE #	SAMPLE IDENTIFICATION	NET ACTIVITY EXTRACTED	
		³ H dpm/m ²	¹⁴ C dpm/m ²
37	Workbench between sink and LSC	1,465	0
38	Deck below sink	45,329**	53
39	Inside fume hood	704	31
40	Deck below fume hood	15,487**	15
41	Lid of LSC	553	13
42	Workbench across from sink	989	0
43	Final bucket blank	0	0
<u>02 Deck/Helodeck (See Figure 5)</u>			
44	New bucket blank (C.O. #2)	39	0
45	Refrigerator/freezer, top	2,201*	96
46	Refrigerator/freezer, bottom	877	0
47	Deck below sink	125	0
48	Deck from Hangar to Stairs	0	0
49	Workbench area left of sink	0	0
50	Helodeck Deck outside fwd port door into Hang	0	0
51	Fwd deck outside aft entrance to workshop	34	0
52	Helicopter hangar deck inside stbd hatch	19	24
53	Fwd deck area	17	23
54	Aft deck area	6	0
55	Deck below where rad van entrance was located	0	0
56	Portside deck next to rail	0	5
57	Aft area of deck	0	0
58	Final bucket sample	29	0

COMMENTS

The ship, itself, is completely free of contamination by tritium or radiocarbon. However, the refrigerator/freezer located in the Helicopter Workshop, obviously had been used to store tritium at some time. This should be cleaned if it is to be used by non-radioisotope scientific personnel. The radioisotope van is contaminated with tritium, especially inside the refrigerator/freezer. This needs to be cleaned and decontaminated immediately. Also, the deck of the van is tritium contaminated. All these areas must be cleaned and decontaminated before any further use.