

Tritium Laboratory
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SWAB REPORT #445

SWAB DATE: 18 December 2006

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Distribution:
SWAB Committee
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REPORT FOR SWAB # 445

LOCATION : Lyttelton, New Zealand
 TECHNICIAN: Cecilia Roig
 VESSEL/LAB: R/V Nathaniel B. Palmer

DATE : 18 Dec. 2006
 STATUS: See **COMMENTS**

SAMPLE #	SAMPLE IDENTIFICATION	NET ACTIVITY EXTRACTED	
		3H dpm/m2	14C dpm/m2
1	Machine Blank	-	-
2	Initial bucket blank C.O. #1	0	0
<u>Dry Lab (See Figure 1)</u>			
3	Deck in front of freezers	5	0
4	Inside Percival Sci. 00011175	0	0
5	Ice inside Isotemp 00011622	0	0
6	Inside Percival Sci. 00011176	0	94
7	Ice inside Revco 12063	0	0
8	Ice inside Ultima II freezer	13	0
9	Top of Ultima II freezer	0	0
10	Aft workbench/sink area	0	0
11	Deck inside double doors	29	0
12	Stbd. workbench	53	0
13	Benchtop aft of port sink	21	0
14	Water inside Revco refrigerator 00011164 Freezer drawer	71	0
15	Bottom inside Revco refrigerator 00011164	0	0
<u>Baltic Room (See Figure 1)</u>			
16	Water inside aft door	143	0
17	CTD frame track	0	0
18	Aft port corner of deck	63	0
<u>Radiation Van USAP 0004(See Figure 2)</u>			
19	Interim bucket blank	0	0
20	Inside fume hood	16	9
21	Workbench under window	60	0
22	Workbench across sink	21	0
23	Workbench left of sink	7	0
24	Freezer bottom (furthest from sink)	53	49
25	Refrigerator bottom (closest to sink)	1,265*	700*
26	Deck below ladder	119	26
27	Deck between fume and LSC	184	33
28	Deck inside door	188	2
<u>Radiation Van USAP 0003(See Figure 3)</u>			
29	Workbench left of sink	916*	383
30	Refrigerator bottom furthest from sink	435	105
31	Refrigerator bottom nearest to sink	2,929*	1,326*
32	Inside fume hood	227	162
33	Top of LSC	136	51
34	Workbench across from sink	321	132
35	Deck between fume hood & LSC	2,612*	261
36	Deck center of van	2,536*	249
37	Deck below ladder	51,887**	395
38	Deck inside door	22,199**	287
39	Interim bucket blank	0	52

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SAMPLE #	SAMPLE IDENTIFICATION	NET ACTIVITY EXTRACTED	
		3H dpm/m2	14C dpm/m2
<u>02 Deck, Helo Deck (See Figure 4)</u>			
40	Inside freezer top Baxter Cryo-fridge	24	59
41	Inside refrigerator bottom & drawers Baxter C	19	47
42	Deck below Baxter Cryo-fridge	195	74
43	Inside Air Clean 600 station	0	57
44	Workbench stbd. of sink	31	69
45	Deck in front of door to passageway	113	78
46	Final bucket blank C.O. #1	13	53
47	Initial bucket blank C.O. #2	0	0
48	Deck below sink	0	34
49	Deck in front of passageway door to Workshop	0	0
50	Deck in front of door to stbd.	78	0
51	Deck in front of door to Helo Pad	37	7
52	Deck in front of door to Workshop	9	0
53	Interim bucket blank	0	0
<u>Bio Lab (See Figure 5)</u>			
54	Deck below refrigerator	0	0
55	Deck inside fwd. entrance	0	0
56	Deck below aft sink	0	0
57	Inside AirClean 600 Workstation	0	0
58	Inside fume hood aft of port sink	84	25
59	Inside fume hood fwd. of port sink	26	0
60	Deck below fwd. fume hood	38	0
61	Deck below aft fume hood	9	0
62	Benchtop fwd. of port sink	0	0
63	Workbench right of sink	0	0
64	Inside refrigerator bottom NSF16532	0	0
65	Inside Air Clean 600 PCR Workstation	0	0
66	Deck below port sink	11	0
67	Interim bucket blank	0	0
<u>Hydro Lab (See Figure 6)</u>			
68	Inside bottom So-Low 00011177	0	0
69	Inside bottom Baxter 00011181	25	0
70	Benchtop aft of stbd. sink	1	0
71	Deck below stbd. sink	58	5
72	Deck below aft sink	0	0
73	Benchtop port of aft sink	0	0
74	Deck inside stbd. door	29	0
<u>Wet Lab (See Figure 6)</u>			
75	Deck inside port entrance	62	0
76	Benchtop port of aft sink	0	0
77	Deck inside stbd. door	66	0
78	Benchtop aft of stbd. sink	0	0
79	Deck in center of room	1	0
80	Deck inside fwd. entrance	0	0

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SAMPLE #	SAMPLE IDENTIFICATION	NET ACTIVITY EXTRACTED	
		3H dpm/m2	14C dpm/m2
<u>Aquarium (See Figure 6)</u>			
81	Deck outside aft entrance to Aquarium Room	7	0
82	Deck outside fwd. entrance to Aquarium Room	66	0
<u>Moon Pool Van - 5866-W505 (See Figure 7)</u>			
83	Deck inside side entrance	0	0
84	Shelf next to side entrance	13	0
85	Shelf across side entrance	0	0
86	Deck inside double entrance	0	0
87	Final bucket blank C.O. #2	0	0

Comments

All areas on ship tested free of radioisotope spills. Only minor C14 contamination was detected in Van #s 3 and 4. Both vans also had tritium contamination, the deck in Van #3 needs to be cleaned to prevent tracking to other areas.