

Tritium Laboratory  
May 27, 2009

SWAB REPORT #521

SWAB DATE: 21 May 2009

*R/V Hugh Sharp*  
UDE Radioisotope Van & Mixed-Use Van

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Distribution:  
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REPORT FOR SWAB # 521

LOCATION: Lewes, DE  
 TECHNICIAN: Cecilia Roig  
 VESSEL/LAB: R/V *Hugh Sharp*

DATE: 21 May 2009  
 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	Inside Whirlpool freezer, top	0	0
4	Inside Whirlpool refrigerator, bottom	0	0
5	Inside Holiday freezer, seawater only	0	0
6	Frost inside Holiday freezer, port	0	0
7	Deck in front of Whirlpool	0	0
8	Deck in front of sink	0	0
9	Benchtop stbd of sink	0	10
10	Middle stbd benchtop	0	0
11	Deck in front of carboy sink	0	0
<u>Wet Lab (See Figure 1)</u>			
12	Inside Roper fridge, top	0	0
13	Inside Roper fridge, bottom drawers	0	0
14	Inside small chest freezer	0	2
15	Benchtop aft of sink	0	0
16	Inside fwd large chest freezer	0	0
17	Inside aft large chest freezer	0	0
18	Deck in vestibule area	0	0
<u>UNOLS Shared-Use Van (See Figure 2)</u>			
19	Deck inside aft entrance	0	0
20	Deck in middle of van	0	0
21	Sink area	0	0
22	Deck inside fwd entrance	0	0
<u>Radioisotope Van (See Figure 3)</u>			
23	Deck inside ent near sink	525*	47
24	Benchtop across from LSC	11,652**	0
25	Benchtop above freezer	7,103*	0
26	Top of Percival	219*	0
27	Sink area	817*	7
28	Inside freezer	9	0
29	Inside refrigerator	9,218*	0
30	Deck in center of van	3,499*	0
31	Benchtop above refrigerator	561*	0
32	Inside fume hood	808*	13
33	Deck inside entrance next to fume hood	1,056*	15
34	Intermediate bucket blank	10	0

SAMPLE #	SAMPLE IDENTIFICATION	NET ACTIVITY EXTRACTED	
		3H dpm/m2	14C dpm/m2
<u>DHWU 9088976 Shared-Use Van (See Figure 4)</u>			
35	Deck inside entrance next to sink	98	25
36	Sink area	11	4
37	Benchtop across from sink	0	11
38	Benchtop above refrigerator	0	20
39	Benchtop next to LSC	0	44
40	Inside freezer	0	0
41	Inside refrigerator	0	361*
42	Deck in center of van	0	37
43	Deck at entrance next to LSC	4	100*
44	Final bucket blank	0	0

#### Comments

All areas tested in the ship and the UNOLS Shared-Use van were free of radioisotope contamination. Tritium contamination was seen in virtually every area tested except inside the freezer in the radioisotope van. Deck areas inside the radioisotope van should also be cleaned to prevent tracking contamination to the ship. Radiocarbon contamination was found in two areas of the DHWU 9088976 Shared-Use Van; inside the refrigerator and on the deck next to the LSC. These areas should also be cleaned before any use.