

Tritium Laboratory  
27 July 2010

SWAB REPORT # 550

SWAB DATE: 17 July 2010

*R/V* Hugh Sharp  
and Radioisotope Van

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Associate Research Professor

Distribution:  
SWAB Committee  
T. Deering

REPORT FOR SWAB # 550

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

DATE: 17 July 2010  
 STATUS: See Comments

SAMPLE #	SAMPLE IDENTIFICATION	NET ACTIVITY EXTRACTED	
		<sup>3</sup> H dpm/m <sup>2</sup>	<sup>14</sup> C dpm/m <sup>2</sup>
1	Machine blank	0	0
2	Initial bucket blank	4	0
<u>Main Lab - See Figure 1</u>			
3	Inside Whirlpool freezer top	37	0
4	Inside Whirlpool refrigerator bottom	16	0
5	Inside Holiday freezer	26	0
6	Inside -80 freezer	3	0
7	Deck in front of Whirlpool	5	0
8	Bench top across -80 freezer	22	23
9	Bench top next to sink	23	0
10	Mid stbd. bench top	40	0
11	Deck at aft entrance	11	0
12	Deck center of lab	0	0
13	Deck at stbd. entrance	0	0
<u>Wet Lab - See Figure 1</u>			
14	Inside Holiday freezer	22	0
15	Inside freezer top	17	8
16	Inside refrigerator bottom	14	0
17	Stbd. bench top next to CTD door	10	0
18	Bench top next to stbd. sink	30	0
19	Aft sink area	13	0
20	Deck center of vestibule	41	0
21	Intermediate bucket blank	19	0
<u>Radioisotope Van - See Figure 2</u>			
22	Inside fume hood	358	0
23	Sink area	265	1087 *
24	Top of LSC	318	11356 **
25	Bench top above freezer	0	390514 ***

SAMPLE #	SAMPLE IDENTIFICATION	NET ACTIVITY EXTRACTED	
		<sup>3</sup> H dpm/m <sup>2</sup>	<sup>14</sup> C dpm/m <sup>2</sup>
26	Inside freezer	67	221 *
27	Deck at entrance next to LSC	155	813 *
28	Inside refrigerator	1817 *	35
29	Deck center of sink	395	1962 *
30	Bench top above refrigerator	1911 *	25
31	Deck at entrance next to fume hood	334	363 *
32	Final bucket blank	24	0

### Comments

All areas tested on the the ship were free of radioisotope contamination. <sup>14</sup>C contamination was found in several areas in the van. Of particular concern is the bench top above the freezer, this bench top and the cover of the LSC need immediate cleaning. Deck areas should also be cleaned to prevent tracking contamination into the ship. Minor <sup>3</sup>H contamination also found in two areas in the radioisotope van.























