Tritium Laboratory 13 December 2010

SWAB REPORT # 566

SWAB DATE: 8 December 2010

R/V Blue Heron and Radiation Van

James D. Happell

Distribution: SWAB Committee Doug Ricketts

REPORT FOR SWAB # 566

LOCATION: Duluth, MN VESSEL/LAB: R/V Blue Heron and Radiation Van

DATE: 8 December 2010 TECHNICIAN: Jim Happell

Sample #	Sample Identification	³ H dpm/m ²			¹⁴ C dpm/m ²			
		activity	e	error	activity		error	
1	1st Vial Bkgnd	0	±	0	0	±	0	
2	Initial bucket blank	0	±	0	16	±	39	
Dry Lab (See Figure 1)								
3	Deck in front of passage to lazarette	18	±	35	16	\pm	33	
4	Inside chest freezer	0	\pm	0	33	±	37	
5	Port benchtop	0	\pm	0	15	\pm	36	
6	Center benchtop	0	\pm	0	23	\pm	36	
7	Stbd benchtop	0	\pm	0	3	\pm	40	
8	Deck in front stairs to main deck	0	\pm	0	12	\pm	36	
9	Bench adjacent to sink	0	±	0	19	±	38	
Wet Lab (S	See Figure 2)							
10	Inside freezer	27	±	36	26	±	34	
11	Inside refrigerator	138	\pm	56	23	±	27	
17	Starboard benchtop	21	±	44	8	±	30	
18	Port benchtop	10	\pm	23	24	±	35	
12	Deck in front of stairs to dry lab	0	\pm	0	37	\pm	37	
13	Deck in front of aft door	40	\pm	52	0	\pm	0	
14	Galley/Mess deck by aft door	377	\pm	75	0	\pm	0	
15	Deck in Galley	36	\pm	45	16	\pm	31	
16	Deck under table	7	\pm	26	13	\pm	34	
19	Ice from truckbed	17	±	25	35	±	35	
Whaleback	x Deck (See Figure 3)							
20	Deck inside pilot house	93	±	52	27	±	30	
21	Deck in front of pilot house	0	±	0	32	±	37	
22	Deck by hydro winch	5	±	46	1	±	25	
23	Intermediate bucket blank	30	±	54	0	±	0	

Sample #	Sample Identification	³ H dpm/m ²			¹⁴ C dpm/m ²		
		activity	e	rror	activity	tivity erro	
Radiation	Van (See Figure 4)						
24	Rad Van Benchtop adjacent to LSC	0	±	0	*4775	±	122
25	Inside fumehood	0	±	0	*96	±	38
26	Bench adjacent to sink	0	±	0	46	±	36
27	Inside refrigerator near single door	0	±	0	22	±	36
28	Inside refrigerator next to LSC	0	±	0	23	±	36
29	Deck in center of van	16	\pm	20	*52	\pm	36
30	Top of LSC	19	\pm	22	*54	\pm	36
31	Passenger floormat in truck	0	\pm	0	35	±	39
32	Floor of room 10 in RLD building	40	\pm	21	*136	±	39
33	Final bucket blank	0	<u>+</u>	0	35	±	38

Comments

Please note that the error reported for each isotope is the two-standard deviation counting error. All areas tested on the R/V Blue Heron were free of radioisotope contamination.

Minor ¹⁴C contamination was found in several areas in the Rad Van, but no cleaning is required