

Tritium Laboratory
25 July 2011

SWAB REPORT # 587

SWAB DATE: 14 July 2011

R/V Atlantis

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Distribution:
SWAB Committee
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REPORT FOR SWAB # 587

LOCATION: Astoria, OR

DATE: 14 July 2011

VESSEL: *R/V Atlantis*

TECHNICIAN: Cecilia Roig

Sample #	Sample Identification	³ H dpm/m ²			¹⁴ C dpm/m ²		
		activity	error		activity	error	
1	1st Vial Bkgnd	0	±	0	0	±	0
2	Initial bucket blank C.O. #1	0	±	0	23	±	36
	<u>Main Lab (See Figure 1)</u>						
3	Revco # 1	0	±	0	13	±	0
4	Revco # 2	0	±	0	10	±	35
5	Inside freezer top	0	±	0	0	±	0
6	Inside refrigerator bottom	0	±	0	39	±	37
7	Deck in front of freezers	10	±	17	47	±	36
8	Port sink area	0	±	0	*223	±	43
9	Deck inside fwd. port entrance	0	±	0	38	±	37
10	Deck inside aft port entrance	31	±	42	19	±	32
11	Aft center benchtop	10	±	30	16	±	34
12	Stbd. sink area	0	±	0	32	±	38
13	Inside fume hood	0	±	0	*64	±	39
14	Deck inside aft double doors	0	±	0	*58	±	37
	<u>Bio/Analytical Lab (See Figure 1)</u>						
15	Inside Cospolich top	0	±	0	32	±	36
16	Inside Cospolich bottom	11	±	24	28	±	35
17	Fwd. sink area	4	±	11	33	±	35
18	Deck in front of Cospolich	0	±	0	26	±	38
19	Inside fume hood	17	±	42	9	±	31
20	Aft sink area	10	±	165	0	±	0
21	Deck in front of fume hood	0	±	0	14	±	39
22	Deck inside stbd door	0	±	0	29	±	36
	<u>Miscellaneous Areas (See Figure 2)</u>						
23	Deck inside fwd. walk-in	4	±	18	15	±	34
24	Benchtop inside fwd. walk-in	0	±	0	19	±	35
25	Aft. benchtop inside aft. walk-in	0	±	0	*53	±	37
26	Deck inside aft walk-in	0	±	0	43	±	37
27	Deck center of walk-in vestibules	6	±	20	22	±	35

Sample #	Sample Identification	³ H dpm/m ²			¹⁴ C dpm/m ²		
		activity	error		activity	error	
<u>Electronics/Computer Lab (See Figure 2)</u>							
28	Deck inside stbd. doors	12	±	18	*51	±	36
29	Deck inside fwd. door	0	±	0	29	±	36
30	Deck inside dark room	0	±	0	37	±	37
31	Final bucket blank C.O. #1	0	±	0	15	±	38
32	Initial bucket blank C.O. #2	0	±	0	13	±	37
<u>Wet Lab (See Figure 3)</u>							
33	Inside fume hood	0	±	0	12	±	35
34	Sink area	0	±	0	6	±	35
35	Deck inside aft double doors	0	±	0	37	±	37
<u>Hydro Lab (See Figure 3)</u>							
36	Inside Cospolich top	0	±	0	15	±	39
37	Inside Cospolich bottom	0	±	0	22	±	37
38	Deck in front of Cospolich	4	±	23	12	±	34
39	Inside fume hood	2	±	13	10	±	34
40	Deck inside aft door	0	±	0	28	±	36
41	Port sink area	0	±	0	*71	±	37
42	Deck inside stbd. doors	0	±	0	2	±	83
43	Intermediate bucket blank	6	±	72	0	±	0
<u>Rad Van WHOU 2001400 (See Figure 4)</u>							
44	Inside fume hood	0	±	0	*551	±	53
45	Bench top above freezer	0	±	0	*7,777	±	152
46	Sink area	0	±	0	**33,832	±	311
47	Benchtop above Fridge	0	±	0	**23,058	±	258
48	Inside freezer	0	±	0	*729	±	57
49	Inside fridge	210	±	48	*209	±	40
50	Deck in front of freezer	2	±	0	**11,147	±	182
51	Deck in front of sink	0	±	0	***123,550	±	593
52	Deck inside entrances	0	±	0	**71,974	±	453
53	Final bucket blank C.O. #2	0	±	0	42	±	37

Comments

Please note that the error reported for each isotope is the two-standard deviation counting error. All samples taken on the ship and van were clean of any ^3H contamination. Minor ^{14}C contamination detected on a few samples taken on the ship, these areas should be cleaned before any natural tracer work. ^{14}C was found throughout the radiation van, with the deck in front of the sink at potential health hazard levels. Your insitution's radiation safety office should be notified before attempting cleaning. Cleaning recommendations are attached. The van needs to be retested after cleaning.