

Tritium Laboratory
7 August 2011

SWAB REPORT # 588

SWAB DATE: 22 July 2011

R/V Melville

James D. Happell

Distribution:
SWAB Committee
Gary Lain

REPORT FOR SWAB # 588

LOCATION: Point Loma, San Diego, CA
VESSEL: R/V Melville

DATE: 22 July 2011
TECHNICIAN: Charlene Grall

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 Bucket Blank CO #1	41	± 69	0	± 0
<u>Main Lab (See Fig 1)</u>				
3 Wooden bench top across & slightly aft of port sink	47	± 52	0	± 0
4 Wooden bench top aft of sink	23	± 42	3	± 25
5 Deck in front of aft Kenmore freezer	42	± 46	1	± 14
6 Deck outside of lab entrance	36	± 50	0	± 0
7 Deck at entrance to aft stairs	80	± 53	0	± 0
8 Deck in front of Sanyo -80C freezer	92	± 55	0	± 0
9 Deck between starboard entrance and Kelvinator	71	± 45	3	± 16
10 Deck in front of passage to forward areas	51	± 47	0	± 0
11 Deck in front of computer benchtops	59	± 51	0	± 0
12 Deck across from starboard entrance	67	± 49	0	± 0
<u>Analytical Lab (see Fig 1)</u>				
13 Deck inside aft entrance	53	± 52	0	± 0
14 Inside fume hood	108	± 55	0	± 0
15 Sink area	57	± 42	5	± 22
16 Forward benchtop	79	± 51	0	± 0
17 Deck inside starboard entrance	41	± 42	0	± 0
18 Deck in front of sink	91	± 48	0	± 0
19 Benchtop across from sink	70	± 48	2	± 11
<u>Aft Deck (see Fig. 1)</u>				
20 Workbench where rad bottles stored	31	± 111	0	± 0
21 Deck where samples stored	82	± 61	0	± 0
22 Deck at A-frame where CTD came onboard	146	± 64	0	± 0
23 Deck aft of A-frame where entrance to rad van was	208	± 64	0	± 0
24 Deck forward of where incubators were set up	236	± 56	0	± 0
<u>02 Deck (No figure)</u>				
25 Deck where door to rad waste van opened	98	± 57	0	± 0

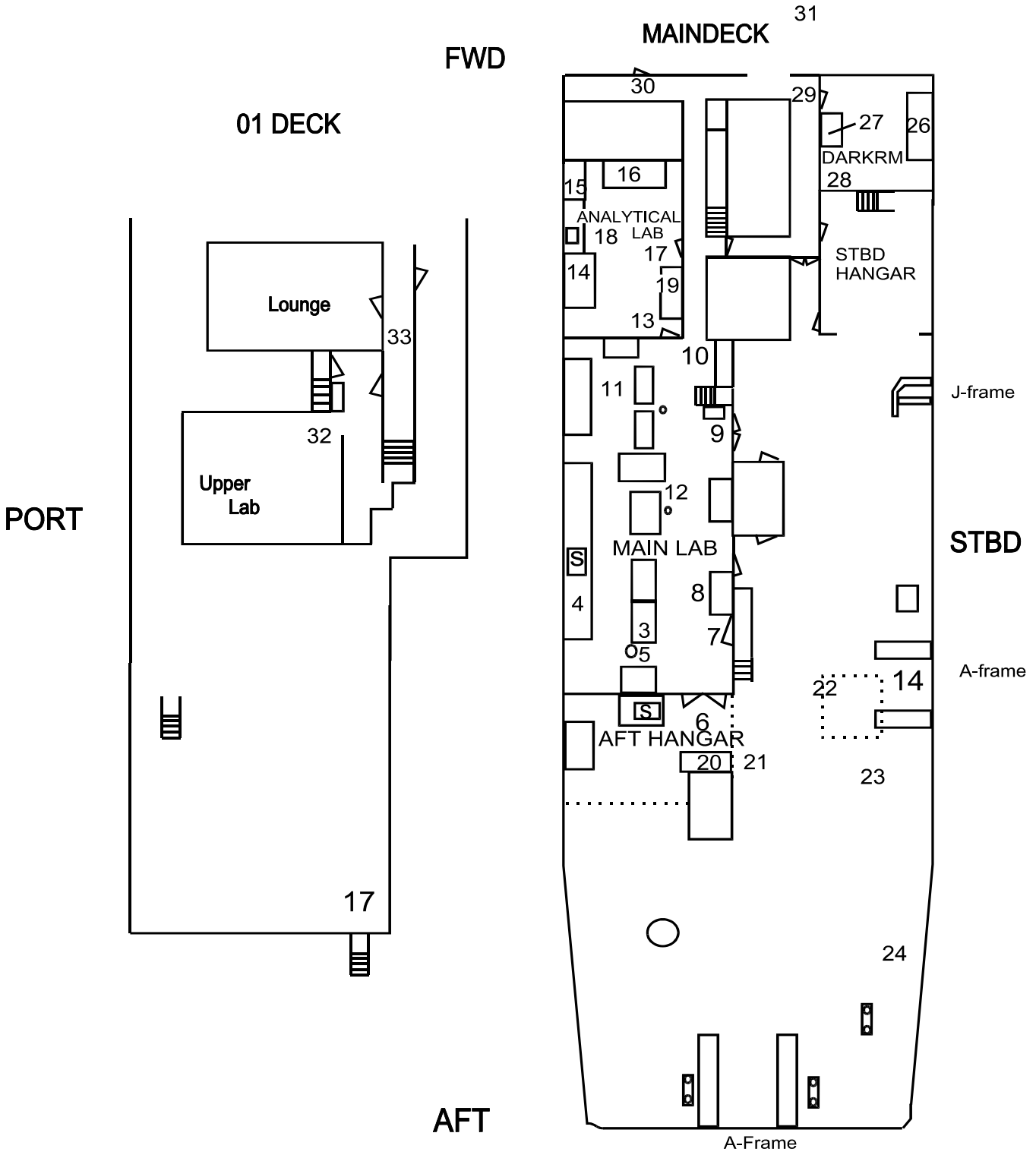
Sample #	Sample Identification	^3H dpm/m ²		^{14}C dpm/m ²	
		activity	error	activity	error
<u>Dark room (See Fig. 1)</u>					
26	Sink area	92	± 43	0	± 0
27	Benchtop across from sink	0	± 0	0	± 0
28	Deck inside aft entrance	20	± 103	0	± 0
29	Deck in passage outside of forward entrance	10	± 0	0	± 0
<u>Miscellaneous areas (see Fig. 1)</u>					
30	Deck at forward entrance to mess	0	± 0	0	± 0
31	Deck at aft entrance to mess	0	± 0	0	± 0
32	Upper lab deck in front of design jet printer	0	± 0	0	± 0
33	Passageway deck outside library	9	± 0	0	± 0
34	Final bucket blank CO #1	0	± 0	0	± 0
<u>Radioisotope Van #12 (see Fig. 2)</u>					
35	Initial bucket blank CO #2	0	± 0	0	± 0
36	Benchtop opposite sink	17	± 0	0	± 0
37	Fume hood and adjacent benchtop	207	± 88	0	± 0
38	Inside refrigerator	437	± 97	0	± 0
39	Inside freezer	*8017	± 210	**12062	± 189
40	Benchtop above refrigerator	8	± 41	8	± 35
41	Benchtop above freezer	18	± 92	0	± 0
42	Sink area	31	± 115	0	± 0
43	Deck in front of entrance by fume hood	117	± 59	0	± 0
44	Deck in front of entrance by sink	134	± 61	0	± 0
45	Intermediate bucket blank CO #2	9	± 0	0	± 0
<u>Waste Rad Van (No Figure)</u>					
46	Deck at back of van	118	± 58	*66	± 37
47	Deck on right side of van	278	± 85	*52	± 32
48	Deck on left side of van	269	± 93	*62	± 34
49	Center deck in van	259	± 82	*91	± 37
50	Deck in front of double doors	*1682	± 141	*213	± 34
51	Final bucket blank CO #2	0	± 0	0	± 0

Comments

Please note that the error reported for each isotope is the two-standard deviation counting error. All areas tested on the ship were free of contamination. Radioisotope Van freezer tested positive for minor ^3H and ^{14}C contamination. We recommended that the freezer be cleaned. The Waste Rad Van had minor ^3H and ^{14}C contamination. No action required.

Figure 1.
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RADIOISOTOPE VAN # 12

