

UNIVERSITY OF MIAMI

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1 March 2012

SWAB REPORT # 591 rerun to check for ^{35}S

SWAB DATE: 2 August 2011

R/V Atlantis and Radioisotope Van

James D. Happell

Distribution:
SWAB Committee
David Fissichella

REPORT FOR SWAB # 591 rerun to check for ^{35}S

LOCATION: Astoria, OR
VESSEL: *R/V Atlantis*

DATE: 2 August 2011
TECHNICIAN: Cecilia Roig

Sample #	Sample Identification	^3H dpm/m ²		^{14}C dpm/m ²	
		activity	error	activity	error
1	1st Vial Bkgnd	0	0	0	0
	<u>Radioisotope Van</u>				
53	Inside fridge	0	0	*4,581	119
54	Deck in front of sink	78	4	*7,143	146

Comments

Please note that the error reported for each isotope is the two-standard deviation counting error. In the cruise before this swab both ^{35}S and ^{14}C were used. A rerun of these samples was requested by WHOI to determine which isotope was involved. Approximately 205 days have elapsed between the original run of these samples. ^{35}S has a half-life of 87.4 days. If the contamination was ^{35}S then the activity in the rerun should be about 20% of the original activity. Original activities were 25,273 and 38,927 dpm/m² respectively. Twenty % of those values are 5055 and 7785 dpm/m² respectively. Therefore the rerun results are consistent with ^{35}S being the source of the contamination.