

LABORATORY SURVEY REPORT

1. Permit Holder: Charlie Brown Permit Number: 00 - 00

Location(s): 1, 2 & 3 Dog House Hall Surveyed By: Snoopy

2. SURVEY INSTRUMENT

WIPE TEST INSTRUMENT

Date: 02 / 24 / 2007

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Make/Model: Ludlum 3

Make/Model: Wallac 1409 / Wallac 1480

Serial #: 99999

Serial #: 535 / 80406

Type*: GM

Type*: LSC / GC

x0.1 x1 x10 x100 x1000

Isotopes Used: ³H ¹⁴C ³⁵S ³²P / ¹²⁵I

Dose Rate C.F.: 1.0 1.0 1.1 1.0 NA

Efficiency (%): 30 90 90 90 / 60

Check Source Range (mrem/h): 0.8 - 1.2

Calibration Due Date: 12 / 07

*Type: GM = Geiger-Müller Detector

LSC = Liquid Scintillation Counter

GC = Gamma Counter

3.

RESULTS

a Description	b Meter Survey	c Wipe Test Results			
		GM	LSC		GC
Instrument Type*	GM	LSC		GC	
Units	mrem/h	gross cpm	dpm/100 cm ²	gross cpm	dpm/100 cm ²
Background	<0.05	32	-----	28	-----
Check Source (mrem/h) and Standard(s) (cpm)	1.0	105423	-----	86954	-----
Lab Coats	<0.05	-----	-----	-----	-----
Non-RAM Trash Cans	<0.05				
All Areas: 1 - 13	<0.05	≤44	<100	39	<100
# 3: pipetteman	0.2	35	<100	42	<100
#7: bench top	2.0	11356	12582	33	<100
#7: after decon	<0.05	35	<100		

4. NOTES: See legend or maps dated: 07 / 20 / 2006

No use in room 3 since last survey.

Equations:

$$mrem/h = C.F. \times \text{meter reading (mR / h scale)} \quad dpm = \frac{\text{gross cpm} - \text{background cpm}}{\text{efficiency (c/d)}}$$

ALARA Guidelines and New York State Limits:

	Areas Labeled for Radiation Use		Non-Radiation Use Areas	
	ALARA	NYS Limit	ALARA	NYS Limit
Removable Contamination (dpm/100 cm ²)	1000	5000	100	1000
Fixed Contamination (mrem/h)	0.5	1	0.05	0.2
All Other Dose Rates (mrem/h)	None	None	0.05	2*

* New York State does not allow a member of the public to receive more than 2 mrem in any one hour or 100 mrem in any calendar year. To ensure compliance with this limit, dose rates around Areas Labeled for Radiation Use cannot exceed 2 mrem/h at the edge and 0.05 mrem/h at one foot from the edge of the labels.

5. Survey Meters Used by this Lab:

Meter [^] Serial #	Meter Make	Meter Model	Probe [♥] Model	Probe [♦] Serial #	Operating [*]
99999	Ludlum	3	44-9	N/A	Y N
↓	↓	↓	44-3	N/A	Y N
11111	↓	↓	44-9	N/A	Y N
_____	_____	_____	_____	_____	Y N
_____	_____	_____	_____	_____	Y N

Note Key:

- ♣ The meter serial number is either tagged or stamped on the meter itself. It is not on the probe.
- ♥ See the meter calibration label(s).
- ♦ The probe may have it's own serial number tagged or stamped on the exterior. Leave the probe serial number space blank if number is not visible.
- ♣ Immediately tag and date malfunctioning meters with an "OUT-OF-SERVICE" label over the meter readout. Contact EH&S at 5-5237 for repair advice.
- ☎ If missing, report to EH&S at 5-5237 to obtain replacement labels and notices.

6. Visual Inspection:

- "Emergency Procedures" and "NOTICE TO EMPLOYEES" posted in all authorized rooms. ☎ (Call 5-5237)
- Entrances to all rooms containing radioactive material are labeled. ☎ (Call 5-5237)
- All authorized rooms have been surveyed this month or noted as not used.
- All survey results are below the ALARA Guidelines or the reason for not achieving results below ALARA is explained in the notes section.

7. Permit Holder Review

Permit Holder Signature: Charlie Brown Date: 02 / 24 / 07