



September 12, 2005

5809 Ward Court  
Virginia Beach, VA 23455  
OFFICE: 757-464-4761  
OFFICE 24 HRS.: 1-800-TISSUE-1  
FAX: 757-464-5721

Steve Hammond  
Licensing Assistant  
U.S. Nuclear Regulatory Commission  
Division of Nuclear Materials Safety  
Region I  
475 Allendale Road  
King Prussia, PA 19406

NM532

03036058

Reference: Radioactive Materials License No. 45-25601-01

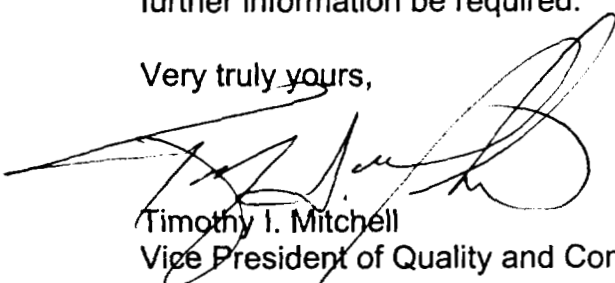
Dear Mr. Hammond:

We would like to request that our radioactive materials license be amended to remove our old location at 1457 Miller Store Road, Suite 105, Virginia Beach, VA 23455. A close out survey of this location was performed, and demonstrated that radiation and contamination levels were indiscernible from background radiation levels. A copy of this survey is attached. We trust that the information provided in support of this decommissioning is sufficient in scope to allow release of this building for unrestricted use.

We would like to request that this license amendment be assigned priority status as LifeNet's lease on this building expires on November 30, 2005.

Please contact Paul Sutcliffe, our consulting physicist, at 757-410-9051, should further information be required.

Very truly yours,

  
Timothy I. Mitchell  
Vice President of Quality and Compliance

Enclosures

2005 SEP 16 PM 1:00

RECEIVED  
NRC/DOH

137688

NM532/DOH MATERIALS-002



## Decommissioning Survey Report

LifeNet  
1457 Miller Store Road  
Virginia Beach, VA 23455

August 29 and 30, 2005

LifeNet was granted a US NRC license September 17, 2002 allowing a maximum possession limit of 150 mCi of hydrogen-3 (tritium), as radiolabeled biochemicals, and 50 mCi of carbon-14 (also as radiolabeled biochemicals) at its research and development facility located at 1457 Miller Store Road, Suite 105, Virginia Beach, VA. From the date of license issuance until present, tritium was the only radionuclide used and stored at this location (see Attachments A and B). Additionally radioactive material was only used in one location, the RAM lab (see Attachment C).

The decommissioning survey was conducted by Paul T. Sutcliffe of Health Physics Consultation (Chesapeake, VA). Extensive wipe tests of selected sites were conducted to ascertain whether there were any contaminated areas within the facility. Those wipe tests were counted using a Packard TriCarb 2900 liquid scintillation counter (serial no. 429924). This counter is on a regular service contract with the last preventative maintenance being performed on May 19, 2005. The counting efficiency for an unquenched tritium standard was 64% (see Attachment D).

Since virtually every wipe test has an associated amount of quench, the Packard liquid scintillation counter (LSC) utilizes an internally stored quench curve and internal standard to determine the counting efficiency for individual wipe samples. Using this counting efficiency (which ranged from 26% to 46%) the LSC is able to calculate individual wipe sample disintegrations per minute.

The minimum detectable activity for the LSC was calculated using the following equation:

$$\text{MDA (dpm)} = \frac{2.71 + 4.65\sqrt{R_B \times t_B}}{(E)(t_B)}$$

Where;  $R_B$  (rate background) = 14 cpm

$t_B$  (time background) = 2.0 min

$E$  (efficiency) = 0.64

$$= \frac{2.71 + 4.65 \sqrt{14 \times 2.0}}{(0.64)(2.0)}$$

= 21 dpm

All surveys for removable contamination were well within the Acceptable Screening Levels for Unrestricted Release as specified for tritium.

Attached are maps of the areas surveyed and results of the wipe tests in those areas.

**MEMORANDUM**

**DATE:** TUESDAY, AUGUST 30, 2005

**FROM:** KATRINA CROUCH

**TO:** PAUL SUTCLIFFE

**CC:** FILE

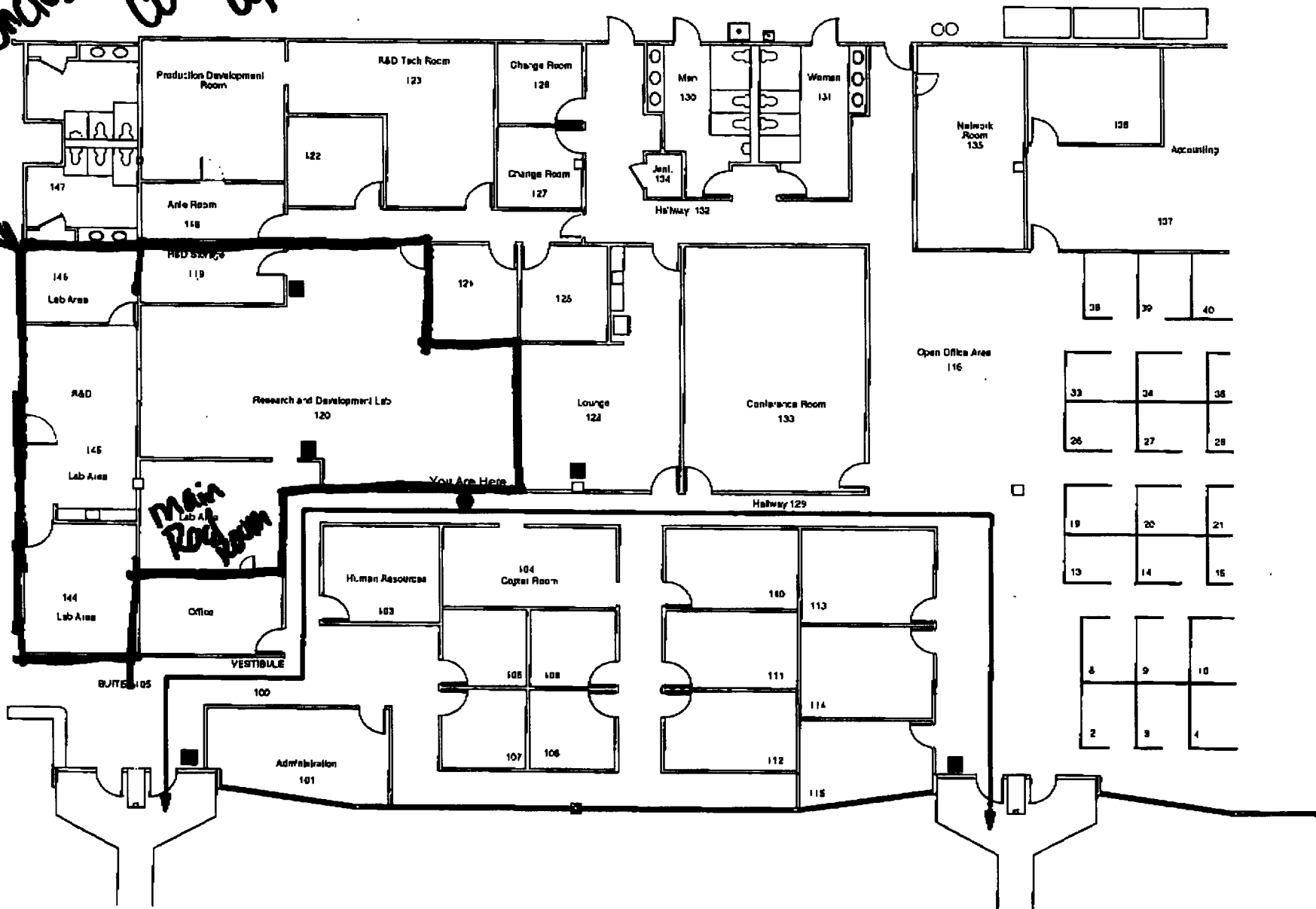
**Regarding: Radiobiology Laboratory**

The LifeNet R&D laboratory has only ever been in possession of tritium; no other radionuclides have been purchased since the license was originally approved in September 2002. Receipt logs and packing receipts are available on request.

# RADIOACTIVE MATERIALS INVENTORY AND WASTE DISPOSAL RECORD

RADIONUCLIDE INVENTORY - The following are currently in Miller Store Road, Suite 105, Research & Development													
Radionuclide	Chemical Form	Original Activity (mCi)	Original Arrival Date	Stock from Balance Sheet (mCi)	Stock Remaining after Decay	Secondary Containers (mCi)	Liq. Waste (mCi)	Solid Waste (Trash and Glass mCi)	Liquid Scint (mCi)	Total (mCi)	Total Discarded (mCi)	Inventory (mCi)	
H-3	Glycerol	5.00	12/20/02	0.0000	0.0000	0.0000	4.1696	0.0100	0.8000	4.9796	4.9673	0	
H-3	Glycerol	5.00	12/20/02	0.0000	0.0000	0.0000	4.2423	0.0250	0.7000	4.9673	4.9673	0	
H-3	Glycerol	1.00	04/15/03	1.0000	0.8746	0.0000	0.7447	0.0800	0.0500	0.8747	0.8747	0	
H-3	Glycerol	5.00	05/12/03	5.0000	4.3911	0.0000	4.1158	0.0360	0.2400	4.3918	4.3918	0	
H-3	Brij 35	3.57	01/28/03	3.3486	2.8940	0.0000	2.8944	0.0000	0.0000	2.8944	2.8971	0	
H-3	Igepal CO-630	3.89	01/28/03	3.8924	3.3639	0.0000	3.3675	0.0000	0.0000	3.3675	3.3675	0	
H-3	Igepal CA-630	3.84	01/28/03	3.8373	3.3163	0.0000	3.3199	0.0000	0.0000	3.3199	3.3199	0	
H-3	n-lauroylsarcosinate	0.53	01/28/03	0.1165	0.1007	0.0000	0.1007	0.0000	0.0000	0.1007	0.1007	0	
H-3	n-lauroylsarcosinate	5.00	03/08/03	0.9750	0.8474	0.0000	0.0000	0.8476	0.0000	0.8476	0.8476	0	
H-3	Melfodextrin	5.00	11/10/04	4.4000	4.2052	0.0000	0.0000	4.2058	0.0000	4.2058	4.2058	0	
H-3	Glycerol	5.00	03/19/03	0.0000	0.0000	0.0000	4.3438	0.4000	0.1800	0.0000	4.9238	0	
H-3	Glycerol	1.00	03/19/03	0.0000	0.0000	0.0000	0.7948	0.0900	0.1000	0.9848	0.9848	0	
H-3	Glycerol	1.00	03/19/03	0.0000	0.0000	0.0000	0.7948	0.0900	0.1000	0.9848	0.9848	0	
H-3	Glycerol	1.00	03/19/03	0.0000	0.0000	0.0000	0.7848	0.0900	0.1100	0.9848	1.9696	0	
H-3	Glycerol	1.00	03/19/03	0.0000	0.0000	0.0000	0.7848	0.0900	0.1100	0.9848	1.9696	0	
H-3	Glycerol	1.00	03/19/03	0.0000	0.0000	0.0000	0.7848	0.0900	0.1100	0.9848	1.9696	0	
H-3	Glycerol	5.00	05/21/03	0.0000	0.0000	0.0000	3.9719	0.4000	0.6000	4.9719	4.9719	0	
H-3	Glycerol	5.00	05/21/03	0.0000	0.0000	0.0000	3.9719	0.4000	0.6000	4.9719	9.9438	0	
H-3	Glycerol	1.00	06/26/03	0.2380	0.2105	0.0000	0.0000	0.2105	0.0000	0.2105	0.2105	0	
H-3	Glycerol	1.00	06/26/03	1.0000	0.0000	0.0000	0.8032	0.0800	0.1000	0.9832	0.9832	0	
H-3	GLYCEROL (MORA)	5.00	06/11/04	5.0000	0.0000	0.0000	4.3719	0.4500	0.1500	4.9719	4.9719	0	
H-3	GLYCEROL (MORA)	5.00	06/16/04	5.0000	0.0000	0.0000	4.3719	0.4500	0.1500	4.9719	4.9719	0	
TOTALS									TOTAL				

*Red line encloses license covered area*



Protocol# 15 - 3h\_14c\_dpm2.lsa

User: paul

## Assay Definition-

## Assay Description:

Basic dual DPM assay decom survey--rm120

Assay Type: DPM (Dual)

Report Name: Report1

Output Data Path: C:\Packard\Tricarb\Results\paul\3h\_14c\_dpm2

Raw Results Path: C:\Packard\Tricarb\Results\paul\3h\_14c\_dpm2\20050830\_1007.results

RTF File Name: C:\Packard\Tricarb\Results\paul\3h\_14c\_dpm2\Report1.rtf

Assay File Name: C:\Packard\TriCarb\Assays\3h\_14c\_dpm2.lsa

## Count Conditions-

Nuclide: 3H-14C

Quench Indicator: tSIE/AEC

External Std Terminator (sec): 0.5 2s%

Pre-Count Delay (min): 0.00

## Quench Sets:

Low Energy: 3H

Mid Energy: 14C

Count Time (min): 2.00

Count Mode: Normal

Assay Count Cycles: 1

Repeat Sample Count: 1

#Vials/Sample: 1

Calculate % Reference: Off

Background Subtract: Off

Low CPM Threshold: Off

2 Sigma % Terminator: Off

Regions	LL	UL
A	0.0	12.0
B	12.0	156.0
C	0.0	0.0

## Count Corrections-

Static Controller: On

Luminescence Correction: n/a

Colored Samples: Off

Heterogeneity Monitor: n/a

Coincidence Time (nsec): 18

Delay Before Burst (nsec): 75

## Half Life-

Half Life Correction: Off

Standard

3H 291800 DPM 9/27/02

14C 135900 DPM 9/27/02

8/30/05 10:32:42 AM

QuantaSmart (TM) - 1.31 - Serial# 429924

Page # 2

Protocol# 15 - 3h\_14c\_dpm2.1sa

User: paul

Regions	Half Life	Units	Reference Date	Reference Time
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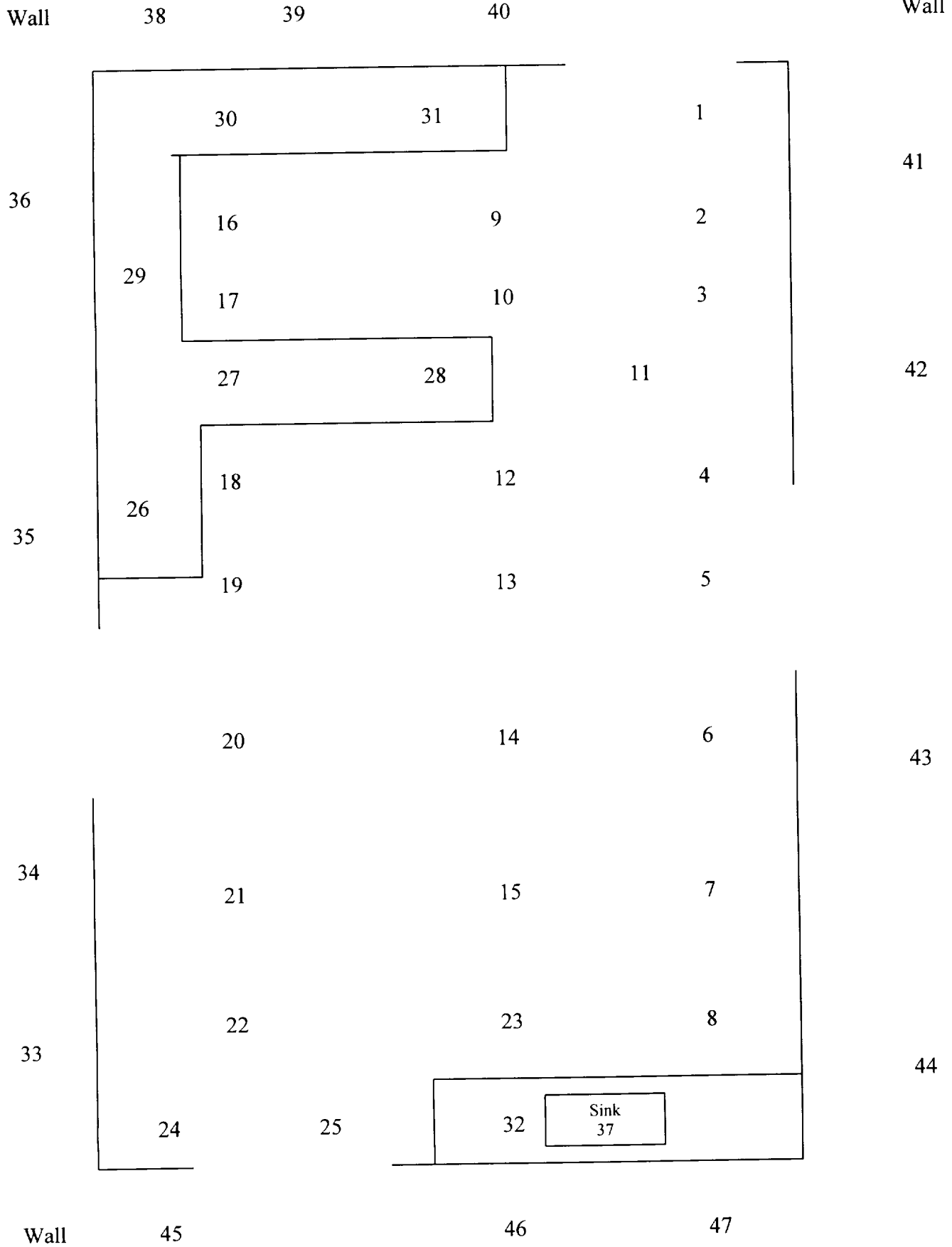
A  
B  
C

Cycle 1 Results

S#	Count	Time	CPMA	CPMB	DPM1	DPM2	tSIE	MESSAGES	Eff Nucl	In A	Eff Nucl	In B	uCi:1	uCi:2
1		2.00	16	5	24	4	1004.48	E		64.45		4.59	0.000011	0.000002
2		2.00	155074	11969	241824	1008	986.56			64.07		4.60	0.108930	0.000454
3		2.00	16774	114252	0	135720	982.91			64.00		4.60	0.000000	0.061135

Wipe Locations 1 - 47

R&D Lab (Room 145)



LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Room 145

Wipe No.	Bkg.cpm	Gross cpm	Net cpm	Efficiency	dpm/100 cm <sup>2</sup>	$\sigma$	Final result (dpm/100 cm <sup>2</sup> )
1	20	20	0	0.40	0	0	0 $\pm$ 0
2	20	13	Bkg.	0.40	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
3	20	18	Bkg.	0.44	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
4	20	20	0	0.42	0	0	0 $\pm$ 0
5	20	20	0	0.45	0	0	0 $\pm$ 0
6	20	16	Bkg.	0.44	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
7	20	15	Bkg.	0.44	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
8	20	14	Bkg.	0.43	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
9	20	19	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
10	20	12	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
11	20	17	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
12	20	14	Bkg.	0.43	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
13	20	21	1	0.44	2	2	2 $\pm$ 2
14	20	15	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
15	20	20	0	0.44	0	0	0 $\pm$ 0
16	20	13	Bkg.	0.38	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
17	20	16	Bkg.	0.44	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
18	20	17	Bkg.	0.43	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
19	20	14	Bkg.	0.44	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
20	20	16	Bkg.	0.44	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
21	20	17	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
22	20	25	5	0.45	11	3	11 $\pm$ 3
23	20	15	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
24	20	15	Bkg.	0.43	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
25	20	15	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
26	20	17	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
27	20	26	6	0.44	14	4	14 $\pm$ 4

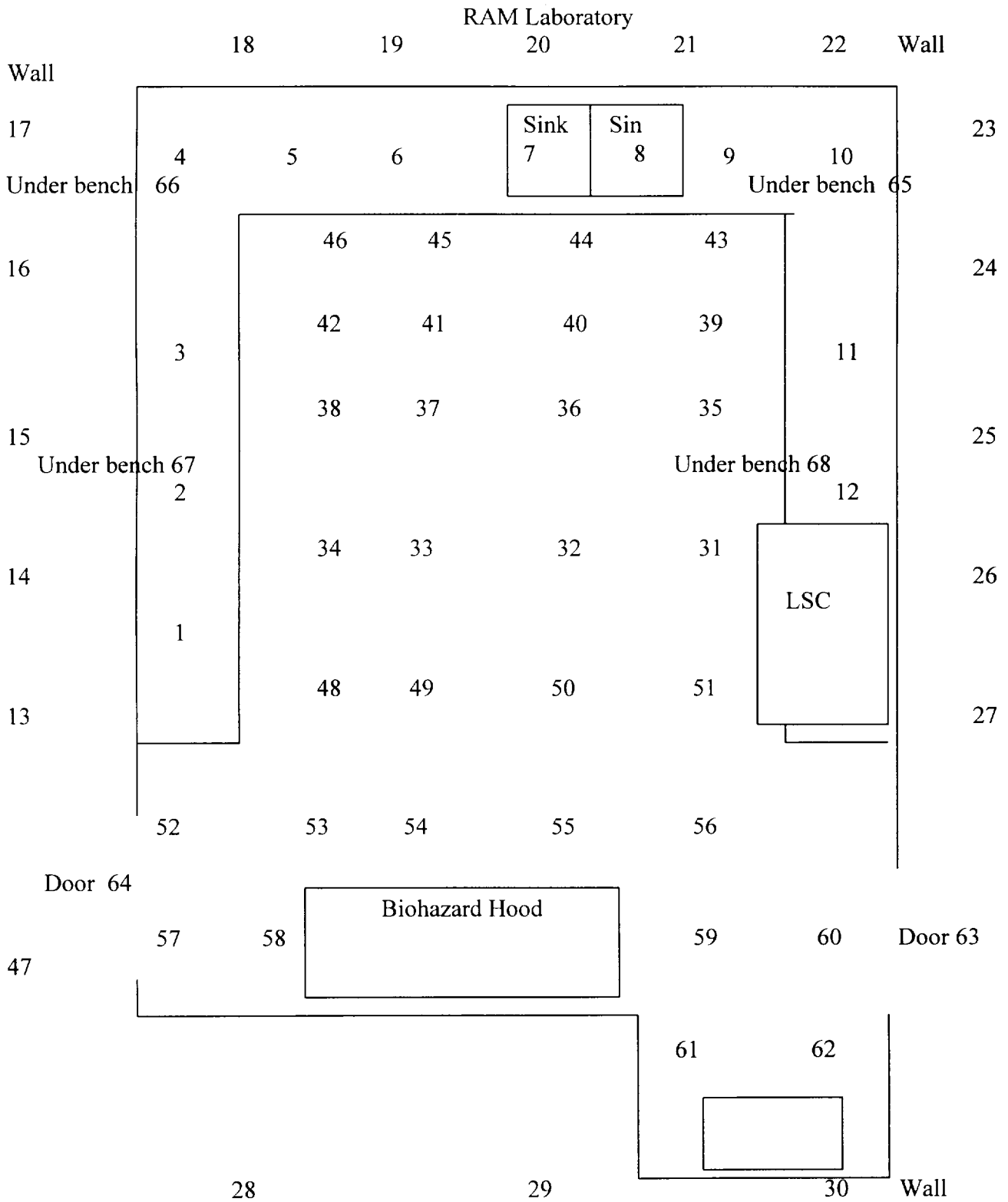
Surveyed 8/29/05 by  
Paul Sutcliffe

LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Room 145

28	20	19	Bkg.	0.44	Bkg.	Bkg.	Bkg.	±	Bkg.
29	20	18	Bkg.	0.45	Bkg.	Bkg.	Bkg.	±	Bkg.
30	20	13	Bkg.	0.45	Bkg.	Bkg.	Bkg.	±	Bkg.
31	20	21	1	0.45	2	1	2	±	1
32	20	14	Bkg.	0.45	Bkg.	Bkg.	Bkg.	±	Bkg.
33	20	21	1	0.45	2	1	2	±	1
34	20	15	Bkg.	0.44	Bkg.	Bkg.	Bkg.	±	Bkg.
35	20	19	Bkg.	0.45	Bkg.	Bkg.	Bkg.	±	Bkg.
36	20	24	4	0.45	9	3	9	±	3
37	20	21	1	0.45	2	1	2	±	1
38	20	19	Bkg.	0.45	Bkg.	Bkg.	Bkg.	±	Bkg.
39	20	18	Bkg.	0.45	Bkg.	Bkg.	Bkg.	±	Bkg.
40	20	19	Bkg.	0.45	Bkg.	Bkg.	Bkg.	±	Bkg.
41	20	18	Bkg.	0.45	Bkg.	Bkg.	Bkg.	±	Bkg.
42	20	20	0	0.45	0	0	0	±	0
43	20	20	0	0.45	0	0	0	±	0
44	20	19	Bkg.	0.45	Bkg.	Bkg.	Bkg.	±	Bkg.
45	20	14	Bkg.	0.45	Bkg.	Bkg.	Bkg.	±	Bkg.
46	20	18	Bkg.	0.45	Bkg.	Bkg.	Bkg.	±	Bkg.
47	20	18	Bkg.	0.45	Bkg.	Bkg.	Bkg.	±	Bkg.

Surveyed 8/29/05 by  
Paul Sutcliffe

Wipe Locations 1 - 68



LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
RAM Lab

Wipe No.	Bkg.cpm	Gross cpm	Net cpm	Efficiency	dpm/100 cm <sup>2</sup>	$\sigma$	Final result (dpm/100 cm <sup>2</sup> )
1	11	13	2	0.41	5	2	5 $\pm$ 2
2	11	10	Bkg.	0.42	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
3	11	14	3	0.46	7	3	7 $\pm$ 3
4	11	17	6	0.42	14	4	14 $\pm$ 4
5	11	18	7	0.41	17	4	17 $\pm$ 4
6	11	17	6	0.42	14	4	14 $\pm$ 4
7	11	13	2	0.42	5	2	5 $\pm$ 2
8	11	21	10	0.37	27	5	27 $\pm$ 5
9	11	19	8	0.39	21	5	21 $\pm$ 5
10	11	29	18	0.41	44	7	44 $\pm$ 7
11	11	35	24	0.42	57	8	57 $\pm$ 8
12	11	23	12	0.42	29	5	29 $\pm$ 5
13	11	16	5	0.39	13	4	13 $\pm$ 4
14	11	15	4	0.42	10	3	10 $\pm$ 3
15	11	15	4	0.42	10	3	10 $\pm$ 3
16	11	9	Bkg.	0.42	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
17	11	14	3	0.42	7	3	7 $\pm$ 3
18	11	21	10	0.42	24	5	24 $\pm$ 5
19	11	9	Bkg.	0.42	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
20	11	14	3	0.41	7	3	7 $\pm$ 3
21	11	14	3	0.42	7	3	7 $\pm$ 3
22	11	14	3	0.42	7	3	7 $\pm$ 3
23	11	44	33	0.42	79	9	79 $\pm$ 9
24	11	19	8	0.42	19	4	19 $\pm$ 4
25	11	20	9	0.42	21	5	21 $\pm$ 5
26	11	18	7	0.42	17	4	17 $\pm$ 4
27	11	16	5	0.42	12	3	12 $\pm$ 3

Surveyed 8/29/05 by  
Paul Sutcliffe

LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
RAM Lab

28	11	17	6	0.42	14	4	14 ± 4
29	11	12	1	0.42	2	2	2 ± 2
30	11	13	2	0.41	5	2	5 ± 2
31	11	18	7	0.42	17	4	17 ± 4
32	11	17	6	0.42	14	4	14 ± 4
33	11	15	4	0.42	10	3	10 ± 3
34	11	15	4	0.41	10	3	10 ± 3
35	11	18	7	0.42	17	4	17 ± 4
36	11	16	5	0.41	12	3	12 ± 3
37	11	15	4	0.41	10	3	10 ± 3
38	11	11	0	0.41	0	0	0 ± 0
39	11	16	5	0.4	13	4	13 ± 4
40	11	17	6	0.41	15	4	15 ± 4
41	11	13	2	0.41	5	2	5 ± 2
42	11	17	6	0.42	14	4	14 ± 4
43	11	18	7	0.42	17	4	17 ± 4
44	11	12	1	0.41	2	2	2 ± 2
45	11	11	0	0.41	0	0	0 ± 0
46	11	14	3	0.41	7	3	7 ± 3
47	11	54	43	0.39	110	11	110 ± 11
48	11	29	18	0.39	46	7	46 ± 7
49	11	14	3	0.42	7	3	7 ± 3
50	11	11	0	0.37	0	0	0 ± 0
51	11	13	2	0.4	5	2	5 ± 2
52	11	19	8	0.4	20	4	20 ± 4
53	11	10	Bkg.	0.4	Bkg.	Bkg.	Bkg. ± Bkg.
54	11	12	1	0.41	2	2	2 ± 2
55	11	18	7	0.41	17	4	17 ± 4

Surveyed 8/29/05 by  
Paul Sutcliffe

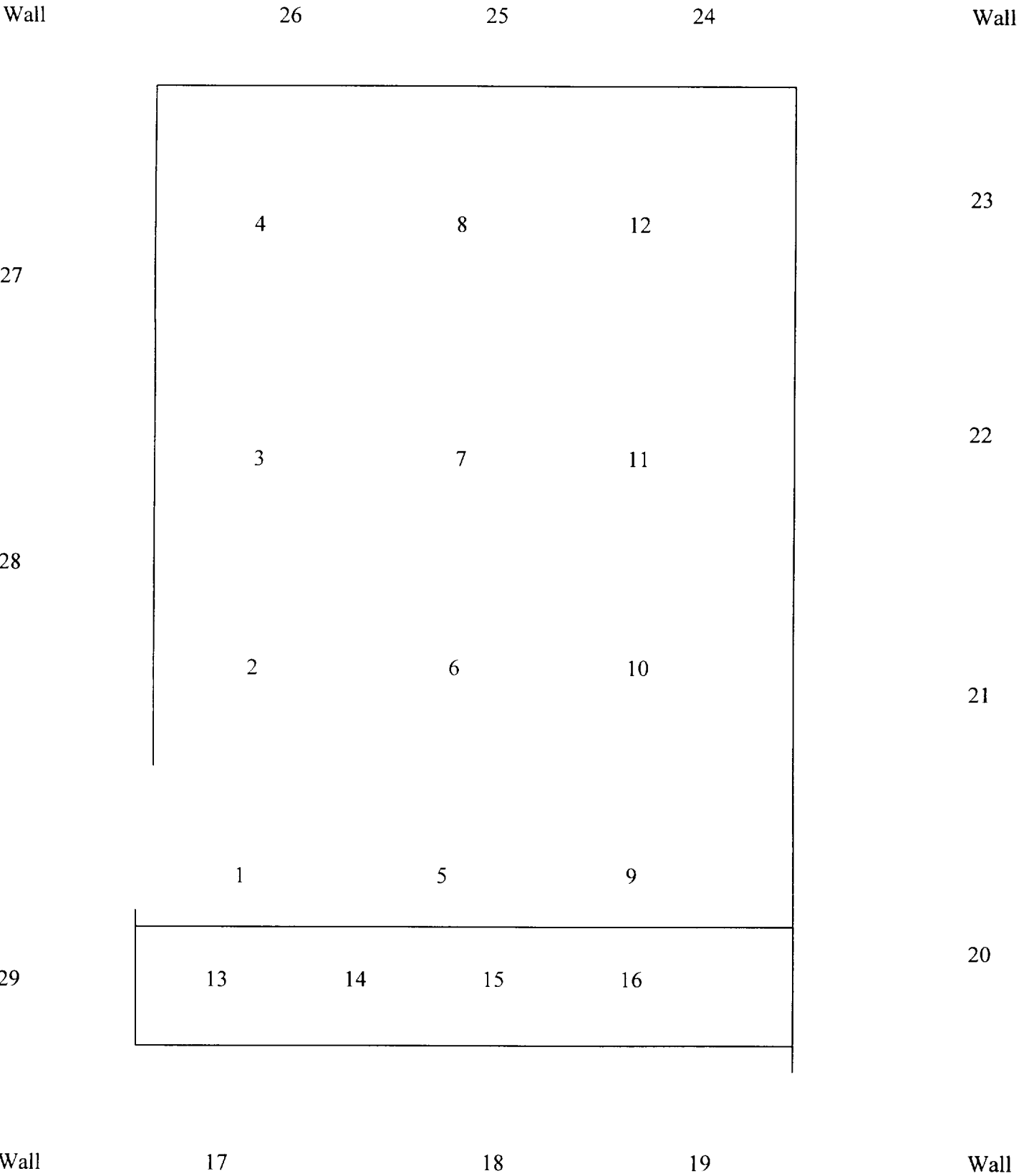
LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
RAM Lab

56	11	14	3	0.42	7	3	7 ± 3
57	11	12	1	0.39	3	2	3 ± 2
58	11	10	Bkg.	0.39	Bkg.	Bkg.	± Bkg.
59	11	11	0	0.4	0	0	0 ± 0
60	11	16	5	0.4	13	4	13 ± 4
61	11	12	1	0.41	2	2	2 ± 2
62	11	12	1	0.42	2	2	2 ± 2
63	11	17	6	0.4	15	4	15 ± 4
64	11	14	3	0.4	8	3	8 ± 3
65	11	15	4	0.39	10	3	10 ± 3
66	11	12	1	0.42	2	2	2 ± 2
67	11	11	0	0.41	0	0	0 ± 0
68	11	12	1	0.42	2	2	2 ± 2

Surveyed 8/29/05 by  
Paul Sutcliffe

Wipe Locations 1 - 29

R&D Lab (Room 146)



LlfeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Room 146

Wipe No.	Bkg.cpm	Gross cpm	Net cpm	Efficiency	dpm/100 cm <sup>2</sup>	$\sigma$	Final result (dpm/100 cm <sup>2</sup> )
1	12	18	6	0.43	14	4	14 $\pm$ 4
2	12	16	4	0.43	9	3	9 $\pm$ 3
3	12	14	2	0.44	5	2	5 $\pm$ 2
4	12	23	11	0.44	25	5	25 $\pm$ 5
5	12	18	6	0.43	14	4	14 $\pm$ 4
6	12	14	2	0.44	5	2	5 $\pm$ 2
7	12	14	2	0.44	5	2	5 $\pm$ 2
8	12	17	5	0.43	12	3	12 $\pm$ 3
9	12	12	0	0.41	0	0	0 $\pm$ 0
10	12	14	2	0.44	5	2	5 $\pm$ 2
11	12	19	7	0.43	16	4	16 $\pm$ 4
12	12	13	1	0.43	2	2	2 $\pm$ 2
13	12	17	5	0.45	11	3	11 $\pm$ 3
14	12	15	3	0.45	7	3	7 $\pm$ 3
15	12	12	0	0.45	0	0	0 $\pm$ 0
16	12	20	8	0.45	18	4	18 $\pm$ 4
17	12	15	3	0.45	7	3	7 $\pm$ 3
18	12	15	3	0.45	7	3	7 $\pm$ 3
19	12	19	7	0.45	16	4	16 $\pm$ 4
20	12	15	3	0.45	7	3	7 $\pm$ 3
21	12	15	3	0.45	7	3	7 $\pm$ 3
22	12	16	4	0.46	9	3	9 $\pm$ 3
23	12	14	2	0.45	4	2	4 $\pm$ 2
24	12	12	0	0.45	0	0	0 $\pm$ 0
25	12	14	2	0.45	4	2	4 $\pm$ 2
26	12	21	9	0.46	20	4	20 $\pm$ 4
27	12	20	8	0.45	18	4	18 $\pm$ 4

Surveyed 8/29/05 by  
Paul Sutcliffe

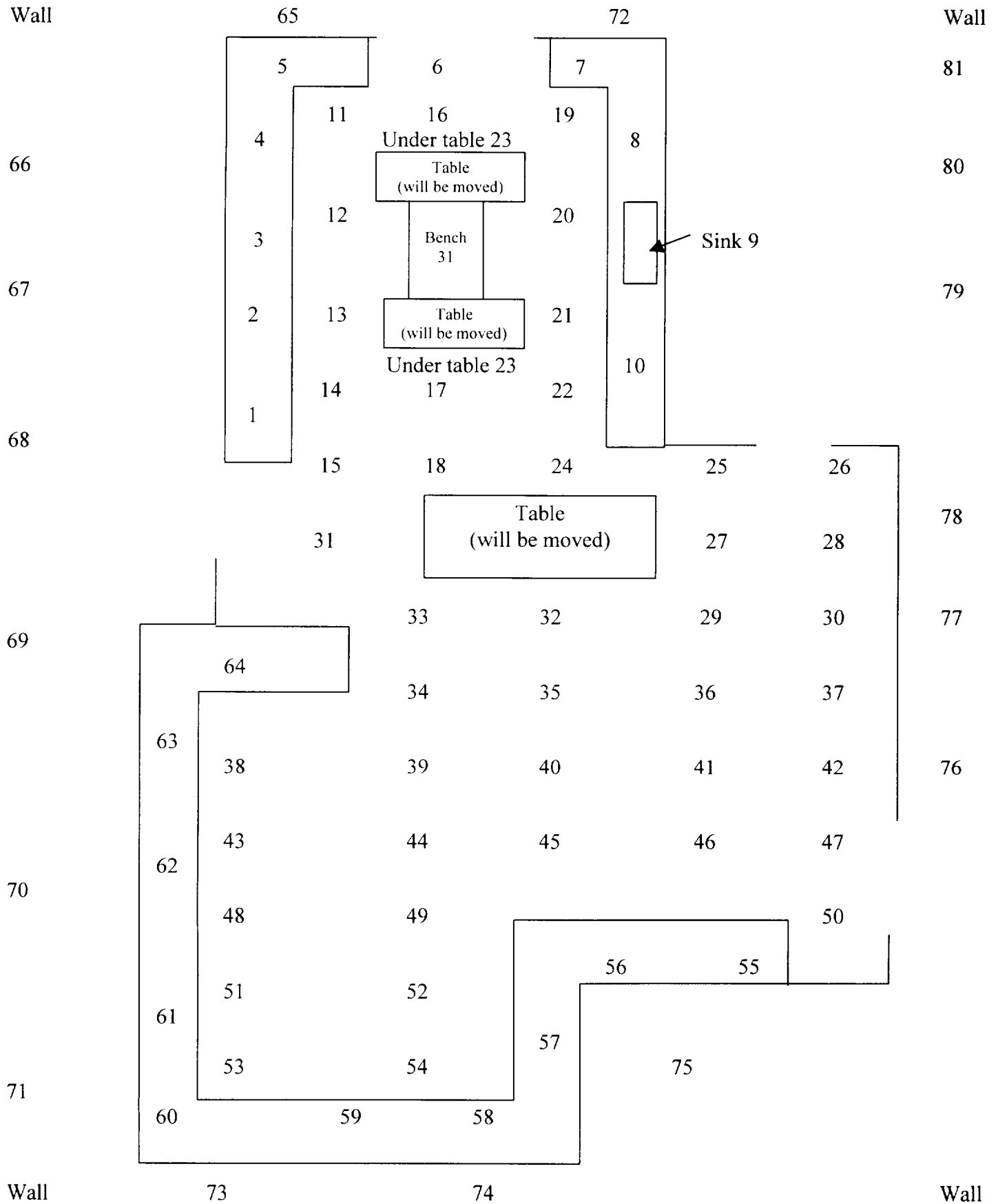
LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Room 146

28	12	15	3	0.45	7	3	$7 \pm 3$
29	12	17	5	0.45	11	3	$11 \pm 3$

Surveyed 8/29/05 by  
Paul Sutcliffe

Wipe Locations 1 - 81

Main Lab (Room 120)



LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Room 120 (Main Lab)

Wipe No.	Bkg.cpm	Gross cpm	Net cpm	Efficiency	dpm/100 cm <sup>2</sup>	$\sigma$	Final result (dpm/100 cm <sup>2</sup> )
1	12	14	2	0.43	5	2	5 $\pm$ 2
2	12	8	Bkg.	0.43	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
3	12	12	0	0.42	0	0	0 $\pm$ 0
4	12	13	1	0.42	2	2	2 $\pm$ 2
5	12	15	3	0.41	7	3	7 $\pm$ 3
6	12	15	3	0.42	7	3	7 $\pm$ 3
7	12	6	Bkg.	0.26	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
8	12	12	0	0.37	0	0	0 $\pm$ 0
9	12	13	1	0.40	3	2	3 $\pm$ 2
10	12	13	1	0.42	2	2	2 $\pm$ 2
11	12	10	Bkg.	0.42	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
12	12	17	5	0.41	12	3	12 $\pm$ 3
13	12	12	0	0.39	0	0	0 $\pm$ 0
14	12	10	Bkg.	0.40	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
15	12	9	Bkg.	0.41	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
16	12	12	0	0.40	0	0	0 $\pm$ 0
17	12	14	2	0.42	5	2	5 $\pm$ 2
18	12	13	1	0.43	2	2	2 $\pm$ 2
19	12	11	Bkg.	0.39	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
20	12	13	1	0.38	3	2	3 $\pm$ 2
21	12	10	Bkg.	0.42	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
22	12	15	3	0.42	7	3	7 $\pm$ 3
23	12	13	1	0.41	2	2	2 $\pm$ 2
24	12	11	Bkg.	0.41	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
25	12	20	8	0.39	21	5	21 $\pm$ 5
26	12	11	Bkg.	0.42	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
27	12	15	3	0.40	8	3	8 $\pm$ 3

Surveyed 8/29/05 by  
Paul Sutcliffe

LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Room 120 (Main Lab)

28	12	12	0	0.34	0	0	0 ± 0
29	12	15	3	0.41	7	3	7 ± 3
30	12	11	Bkg.	0.39	Bkg.	Bkg.	Bkg. ± Bkg.
31	12	19	7	0.40	18	4	18 ± 4
32	12	13	1	0.39	3	2	3 ± 2
33	12	14	2	0.42	5	2	5 ± 2
34	12	18	6	0.42	14	4	14 ± 4
35	12	11	Bkg.	0.42	Bkg.	Bkg.	Bkg. ± Bkg.
36	12	15	3	0.41	7	3	7 ± 3
37	12	12	0	0.40	0	0	0 ± 0
38	12	12	0	0.42	0	0	0 ± 0
39	12	16	4	0.41	10	3	10 ± 3
40	12	9	Bkg.	0.42	Bkg.	Bkg.	Bkg. ± Bkg.
41	12	11	Bkg.	0.41	Bkg.	Bkg.	Bkg. ± Bkg.
42	12	12	0	0.41	0	0	0 ± 0
43	12	11	Bkg.	0.41	Bkg.	Bkg.	Bkg. ± Bkg.
44	12	12	0	0.42	0	0	0 ± 0
45	12	16	4	0.43	9	3	9 ± 3
46	12	20	8	0.42	19	4	19 ± 4
47	12	15	3	0.43	7	3	7 ± 3
48	12	14	2	0.43	5	2	5 ± 2
49	12	15	3	0.42	7	3	7 ± 3
50	12	15	3	0.41	7	3	7 ± 3
51	12	16	4	0.42	10	3	10 ± 3
52	12	13	1	0.39	3	2	3 ± 2
53	12	13	1	0.41	2	2	2 ± 2
54	12	17	5	0.42	12	3	12 ± 3
55	12	10	Bkg.	0.41	Bkg.	Bkg.	Bkg. ± Bkg.

Surveyed 8/29/05 by  
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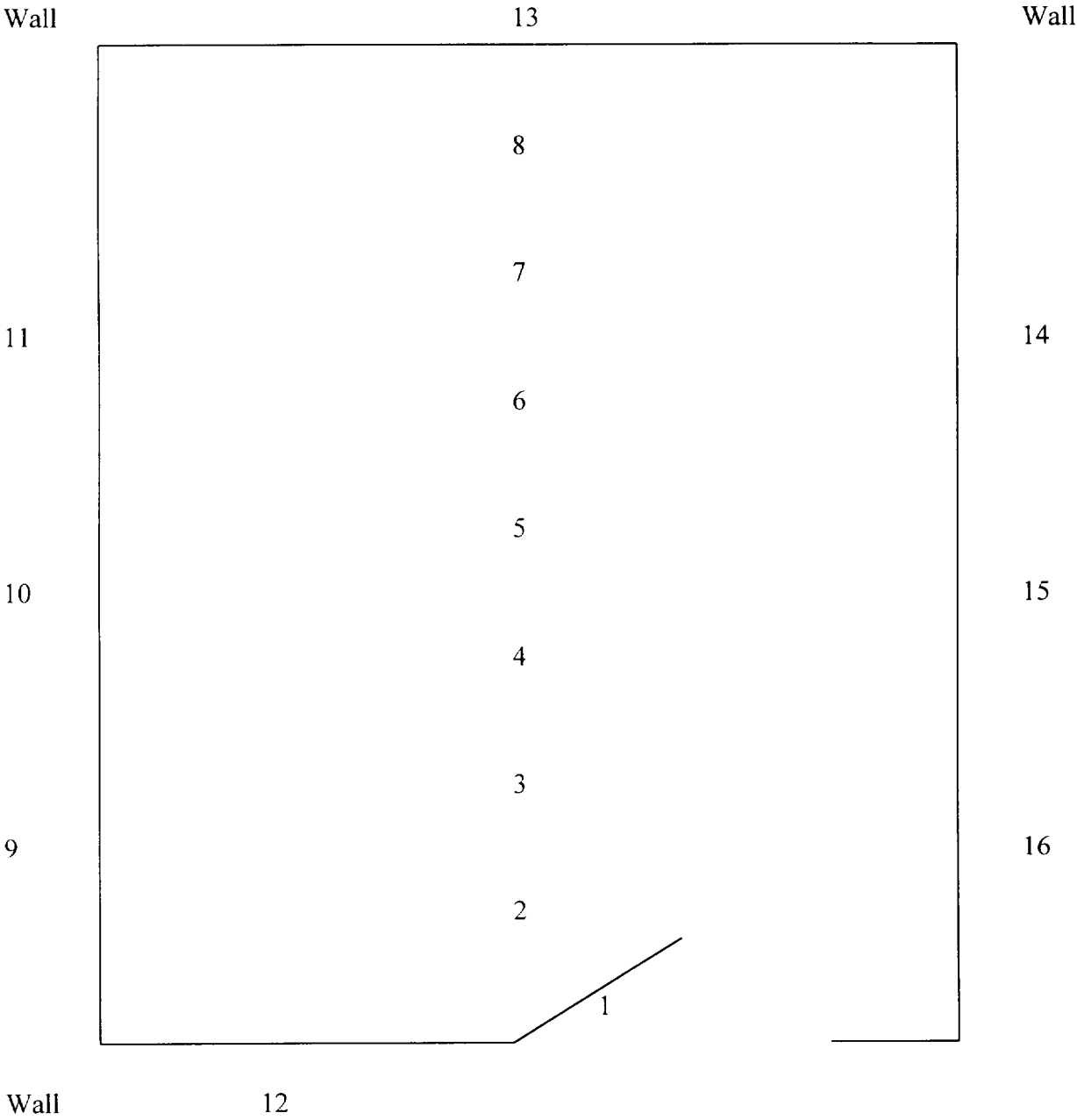
LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Room 120 (Main Lab)

56	12	17	5	0.41	12	3	12 ± 3
57	12	12	0	0.42	0	0	0 ± 0
58	12	13	1	0.35	3	2	3 ± 2
59	12	15	3	0.37	8	3	8 ± 3
60	12	14	2	0.42	5	2	5 ± 2
61	12	11	Bkg.	0.42	Bkg.	Bkg.	Bkg. ± Bkg.
62	12	13	1	0.41	2	2	2 ± 2
63	12	10	Bkg.	0.42	Bkg.	Bkg.	Bkg. ± Bkg.
64	12	10	Bkg.	0.41	Bkg.	Bkg.	Bkg. ± Bkg.
65	12	19	7	0.42	17	4	17 ± 4
66	12	11	Bkg.	0.42	Bkg.	Bkg.	Bkg. ± Bkg.
67	12	17	5	0.42	12	3	12 ± 3
68	12	13	1	0.41	2	2	2 ± 2
69	12	12	0	0.41	0	0	0 ± 0
70	12	10	Bkg.	0.42	Bkg.	Bkg.	Bkg. ± Bkg.
71	12	14	2	0.42	5	2	5 ± 2
72	12	14	2	0.42	5	2	5 ± 2
73	12	14	2	0.41	5	2	5 ± 2
74	12	15	3	0.42	7	3	7 ± 3
75	12	14	2	0.42	5	2	5 ± 2
76	12	15	3	0.42	7	3	7 ± 3
77	12	11	Bkg.	0.42	Bkg.	Bkg.	Bkg. ± Bkg.
78	12	11	Bkg.	0.41	Bkg.	Bkg.	Bkg. ± Bkg.
79	12	19	7	0.41	17	4	17 ± 4
80	12	18	6	0.39	15	4	15 ± 4
81	12	11	Bkg.	0.39	Bkg.	Bkg.	Bkg. ± Bkg.

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Wipe Locations 1 - 16

R&D Storage Room



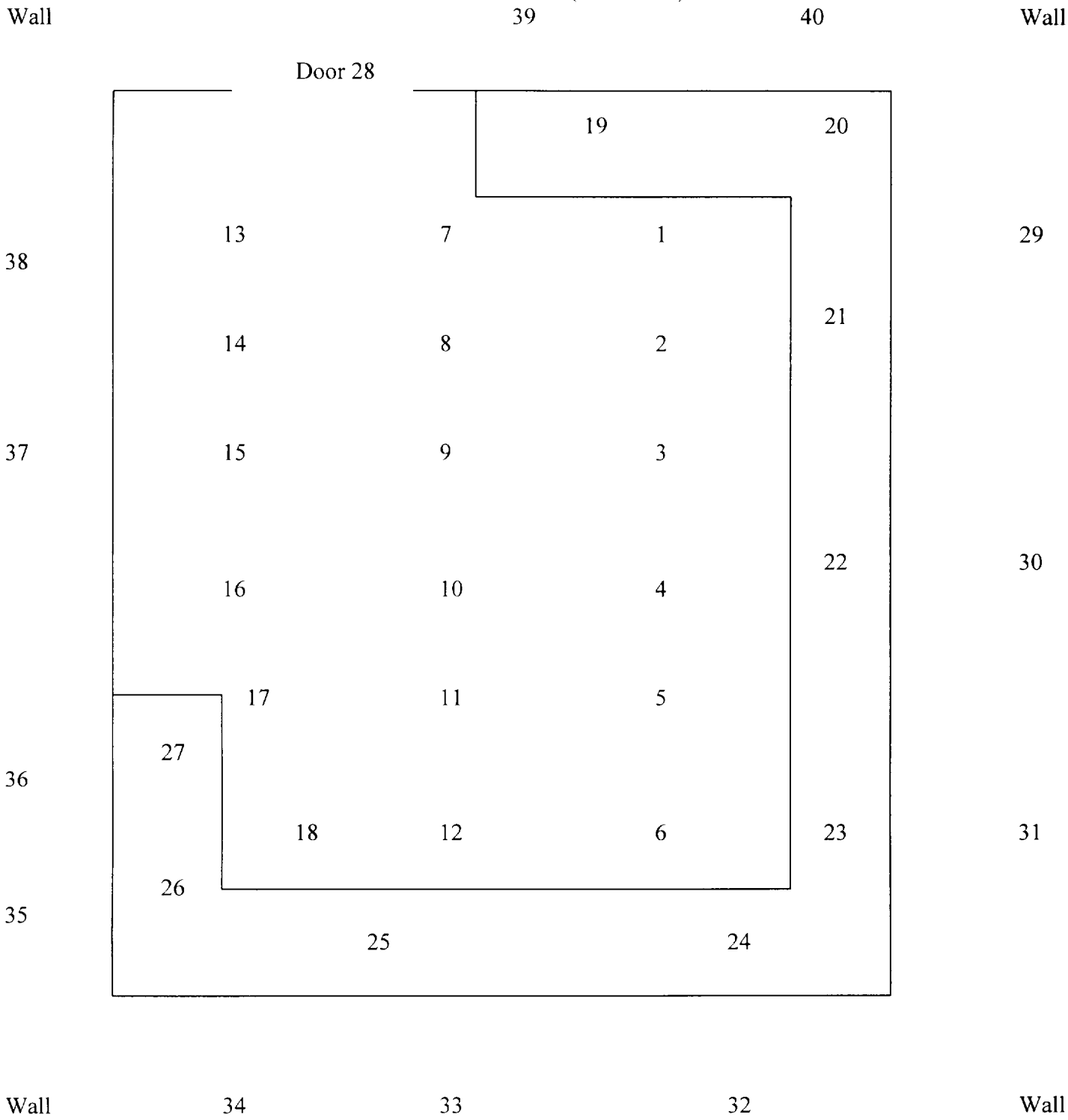
LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Storage Room

Wipe No.	Bkg.cpm	Gross cpm	Net cpm	Efficiency	dpm/100 cm <sup>2</sup>	$\sigma$	Final result (dpm/100 cm <sup>2</sup> )
1	16	17	1	0.43	2	2	2 $\pm$ 2
2	16	21	5	0.45	11	3	11 $\pm$ 3
3	16	14	Bkg.	0.43	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
4	16	18	2	0.44	5	2	5 $\pm$ 2
5	16	19	3	0.45	7	3	7 $\pm$ 3
6	16	14	Bkg.	0.44	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
7	16	18	2	0.45	4	2	4 $\pm$ 2
8	16	15	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
9	16	16	0	0.45	0	0	0 $\pm$ 0
10	16	10	Bkg.	0.46	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
11	16	15	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
12	16	21	5	0.45	11	3	11 $\pm$ 3
13	16	16	0	0.45	0	0	0 $\pm$ 0
14	16	16	0	0.45	0	0	0 $\pm$ 0
15	16	22	6	0.46	13	4	13 $\pm$ 4
16	16	17	1	0.45	2	1	2 $\pm$ 1

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Wipe Locations 1 - 40

R&D Lab (Room 144)



LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Room 144

Wipe No.	Bkg.cpm	Gross cpm	Net cpm	Efficiency	dpm/100 cm <sup>2</sup>	$\sigma$	Final result (dpm/100 cm <sup>2</sup> )
1	17	19	2	0.45	4	2	4 $\pm$ 2
2	17	27	10	0.44	23	5	23 $\pm$ 5
3	17	16	Bkg.	0.44	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
4	17	17	0	0.45	0	0	0 $\pm$ 0
5	17	15	Bkg.	0.44	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
6	17	12	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
7	17	19	2	0.43	5	2	5 $\pm$ 2
8	17	22	5	0.44	11	3	11 $\pm$ 3
9	17	15	Bkg.	0.44	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
10	17	16	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
11	17	12	Bkg.	0.44	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
12	17	20	3	0.44	7	3	7 $\pm$ 3
13	17	21	4	0.44	9	3	9 $\pm$ 3
14	17	21	4	0.44	9	3	9 $\pm$ 3
15	17	17	0	0.44	0	0	0 $\pm$ 0
16	17	20	3	0.44	7	3	7 $\pm$ 3
17	17	23	6	0.43	14	4	14 $\pm$ 4
18	17	16	Bkg.	0.43	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
19	17	21	4	0.45	9	3	9 $\pm$ 3
20	17	14	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
21	17	17	0	0.45	0	0	0 $\pm$ 0
22	17	15	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
23	17	17	0	0.45	0	0	0 $\pm$ 0
24	17	19	2	0.45	4	2	4 $\pm$ 2
25	17	15	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
26	17	22	5	0.44	11	3	11 $\pm$ 3
27	17	21	4	0.45	9	3	9 $\pm$ 3

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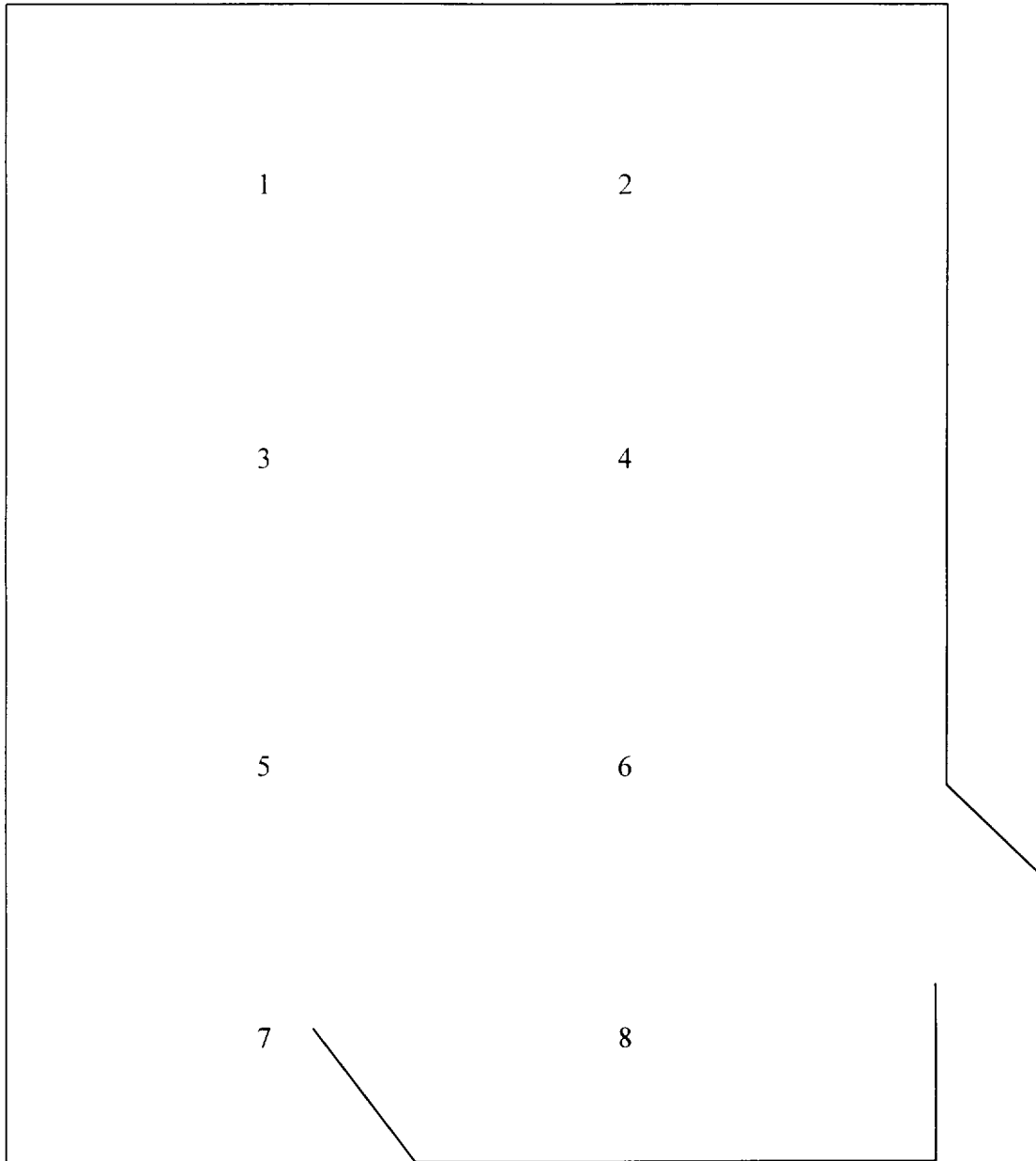
LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Room 144

28	17	20	3	0.44	7	3	7 ± 3
29	17	19	2	0.44	5	2	5 ± 2
30	17	22	5	0.45	11	3	11 ± 3
31	17	17	0	0.45	0	0	0 ± 0
32	17	13	Bkg.	0.45	Bkg.	Bkg.	Bkg. ± Bkg.
33	17	17	0	0.45	0	0	0 ± 0
34	17	28	11	0.45	24	5	24 ± 5
35	17	19	2	0.44	5	2	5 ± 2
36	17	20	3	0.45	7	3	7 ± 3
37	17	17	0	0.45	0	0	0 ± 0
38	17	16	Bkg.	0.45	Bkg.	Bkg.	Bkg. ± Bkg.
39	17	16	Bkg.	0.44	Bkg.	Bkg.	Bkg. ± Bkg.
40	17	21	4	0.44	9	3	9 ± 3

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Wipe Locations 1 - 8

Lab Director's Office



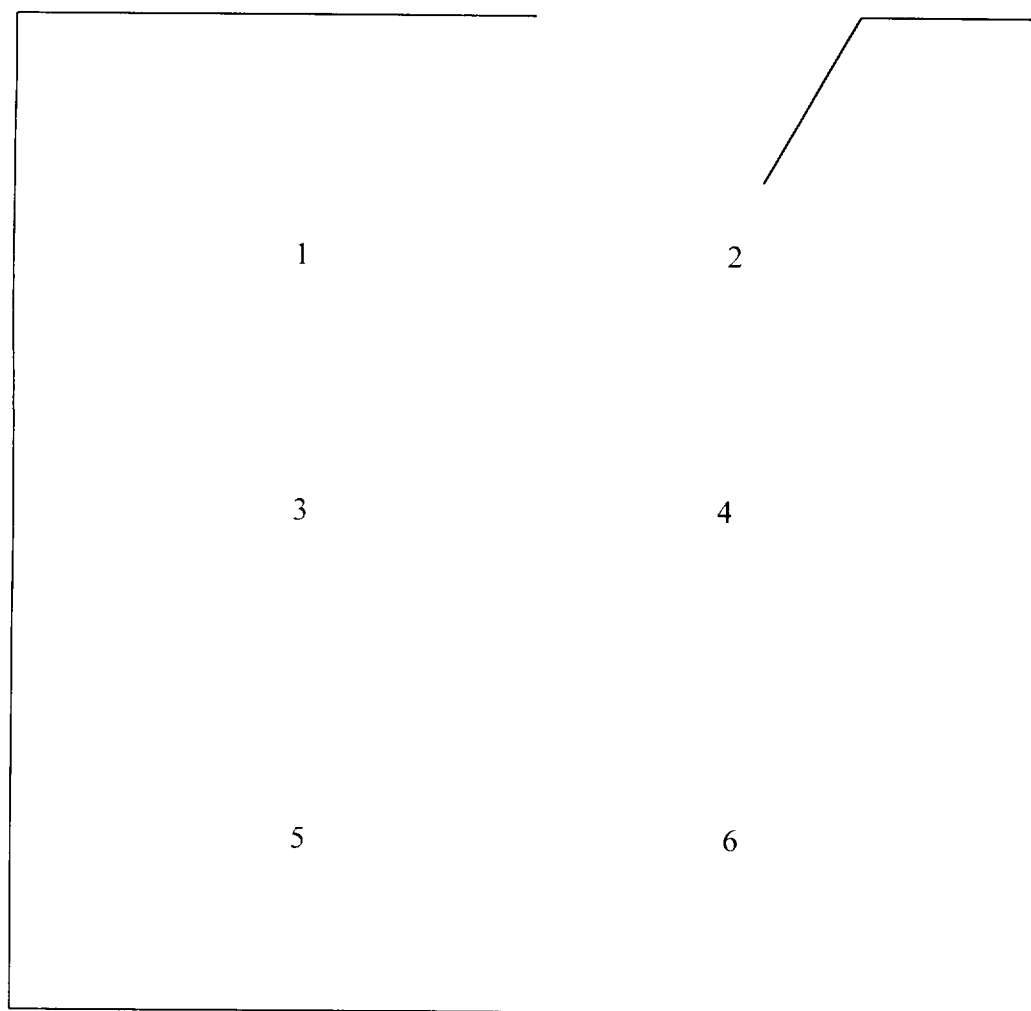
LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Lab Director's Office

Wipe No.	Bkg.cpm	Gross cpm	Net cpm	Efficiency	dpm/100 cm <sup>2</sup>	$\sigma$	Final result (dpm/100 cm <sup>2</sup> )
1	13	23	10	0.45	22	5	22 $\pm$ 5
2	13	16	3	0.45	7	3	7 $\pm$ 3
3	13	17	4	0.45	9	3	9 $\pm$ 3
4	13	18	5	0.45	11	3	11 $\pm$ 3
5	13	16	3	0.45	7	3	7 $\pm$ 3
6	13	19	6	0.45	13	4	13 $\pm$ 4
7	13	22	9	0.45	20	4	20 $\pm$ 4
8	13	15	2	0.45	4	2	4 $\pm$ 2

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Wipe Locations 1 - 6

Room 124



LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Room 124

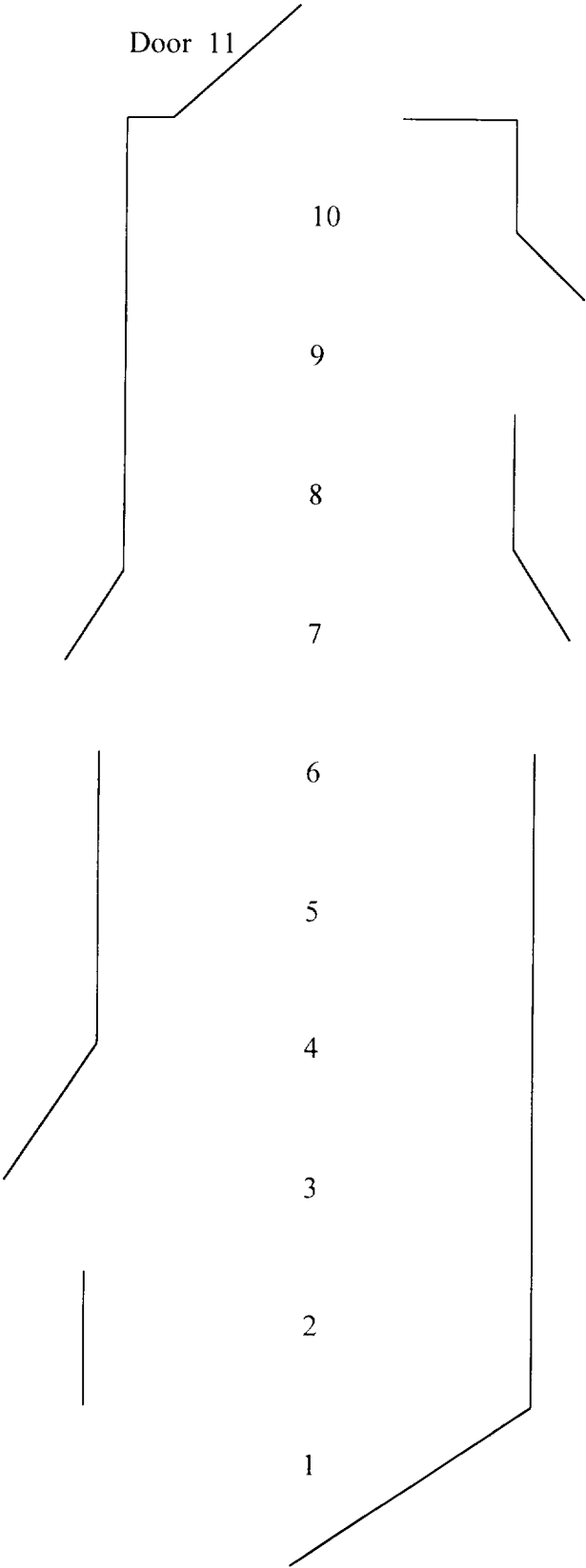
Wipe No.	Bkg.cpm	Gross cpm	Net cpm	Efficiency	dpm/100 cm <sup>2</sup>	$\sigma$	Final result (dpm/100 cm <sup>2</sup> )
1	14	16	2	0.45	4	2	4 $\pm$ 2
2	14	21	7	0.45	16	4	16 $\pm$ 4
3	14	18	4	0.45	9	3	9 $\pm$ 3
4	14	10	Bkg.	0.45	Bkg.	Bkg.	Bkg. $\pm$ Bkg.
5	14	17	3	0.45	7	3	7 $\pm$ 3
6	14	20	6	0.45	13	4	13 $\pm$ 4

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Wipe Locations 1 - 11

Hallway (132)

Door 11



LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Hallway

Wipe No.	Bkg.cpm	Gross cpm	Net cpm	Efficiency	dpm/100 cm <sup>2</sup>	$\sigma$	Final result (dpm/100 cm <sup>2</sup> )
1	12	12	0	0.45	0	0	0 $\pm$ 0
2	12	18	6	0.45	13	4	13 $\pm$ 4
3	12	19	7	0.45	16	4	16 $\pm$ 4
4	12	16	4	0.45	9	3	9 $\pm$ 3
5	12	15	3	0.45	7	3	7 $\pm$ 3
6	12	19	7	0.44	16	4	16 $\pm$ 4
7	12	16	4	0.45	9	3	9 $\pm$ 3
8	12	17	5	0.45	11	3	11 $\pm$ 3
9	12	19	7	0.45	16	4	16 $\pm$ 4
10	12	17	5	0.44	11	3	11 $\pm$ 3
11	12	18	6	0.44	14	4	14 $\pm$ 4

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Wipe Locations 1 - 10

Marketing

6

1

7

2

8

3

Door to R&D Lab (Room 145)

9

4

10

5

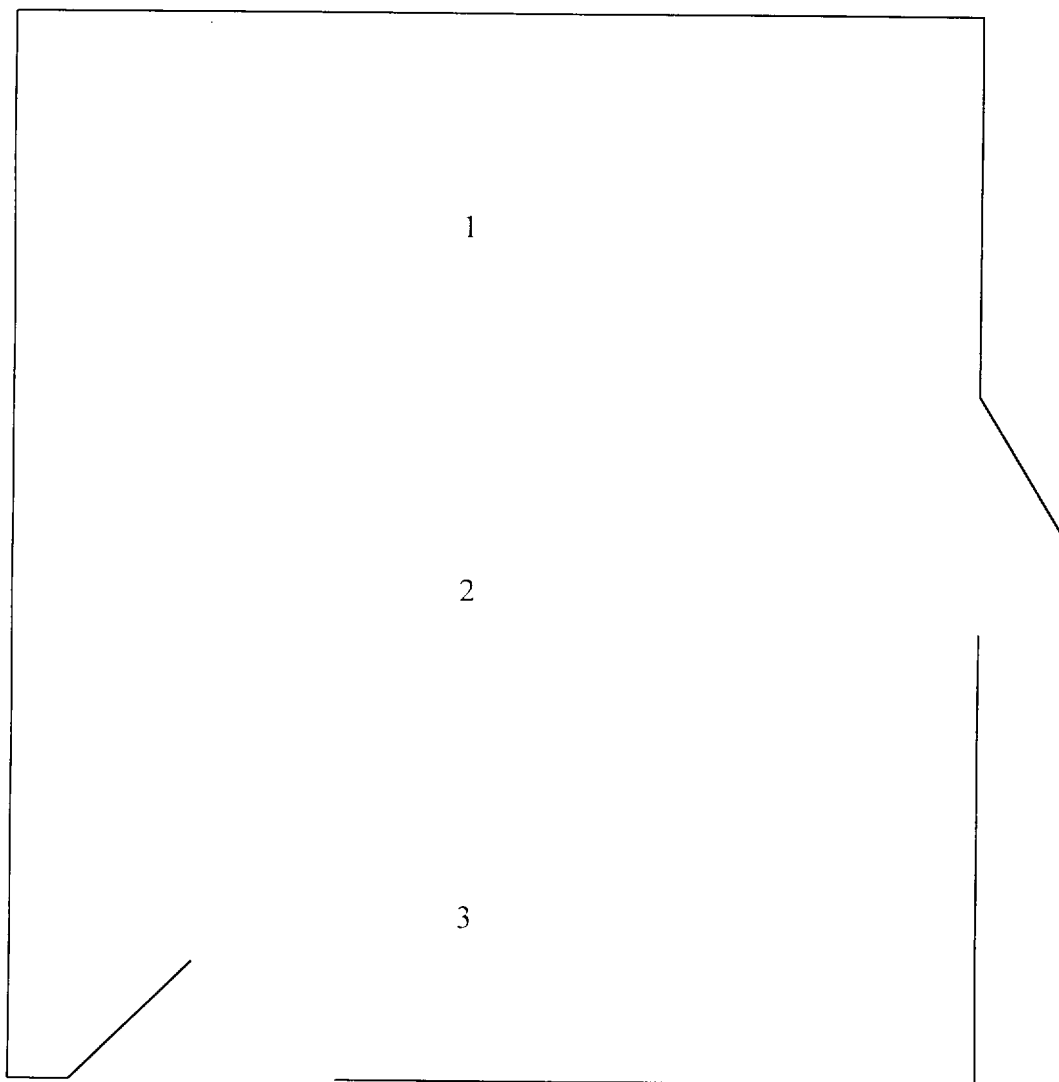
LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Marketing

Wipe No.	Bkg.cpm	Gross cpm	Net cpm	Efficiency	dpm/100 cm <sup>2</sup>	$\sigma$	Final result (dpm/100 cm <sup>2</sup> )		
1	18	17	Bkg.	0.45	Bkg.	Bkg.	Bkg.	±	Bkg.
2	18	17	Bkg.	0.44	Bkg.	Bkg.	Bkg.	±	Bkg.
3	18	18	0	0.45	0	0	0	±	0
4	18	20	2	0.45	4	2	4	±	2
5	18	18	0	0.44	0	0	0	±	0
6	18	14	Bkg.	0.45	Bkg.	Bkg.	Bkg.	±	Bkg.
7	18	16	Bkg.	0.45	Bkg.	Bkg.	Bkg.		Bkg.
8	18	14	Bkg.	0.45	Bkg.	Bkg.	Bkg.		Bkg.
9	18	25	7	0.45	16	4	16	4	
10	18	20	2	0.45	4	2	4	2	

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Wipe Locations 1 - 3

Ante (Prep) Room



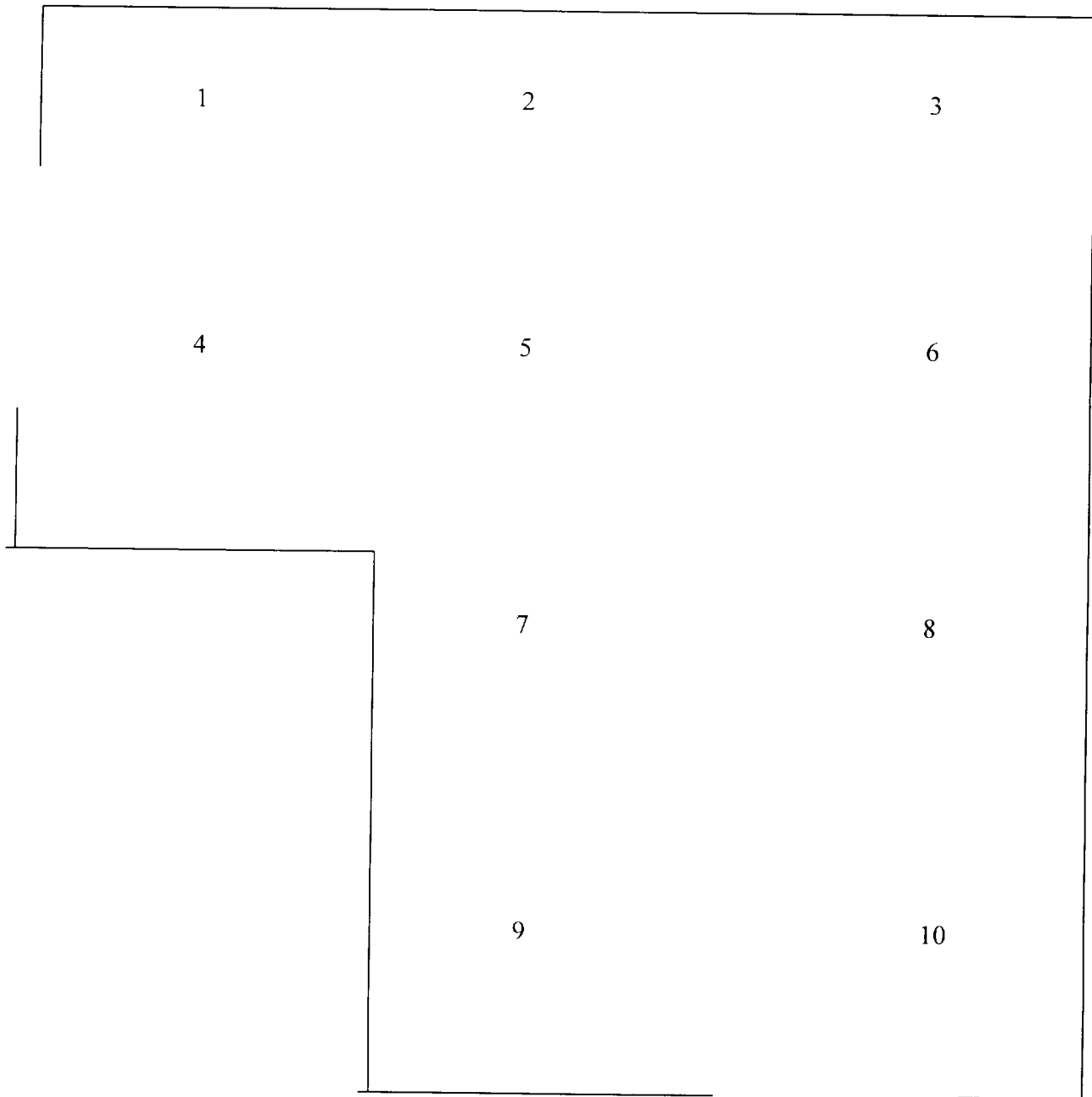
LifeNet  
 1457 Miller Store Road  
 Virginia Beach, VA  
 Antee (Prep) Room

Wipe No.	Bkg.cpm	Gross cpm	Net cpm	Efficiency	dpm/100 cm <sup>2</sup>	$\sigma$	Final result (dpm/100 cm <sup>2</sup> )	
1	18	16	Bkg.	0.45	Bkg.	Bkg.	Bkg.	$\pm$ Bkg.
2	18	15	Bkg.	0.44	Bkg.	Bkg.	Bkg.	$\pm$ Bkg.
3	18	21	3	0.44	7	3	7 $\pm$ 3	

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Wipe Locations 1 - 10

R&D Tech Room (Room 123)



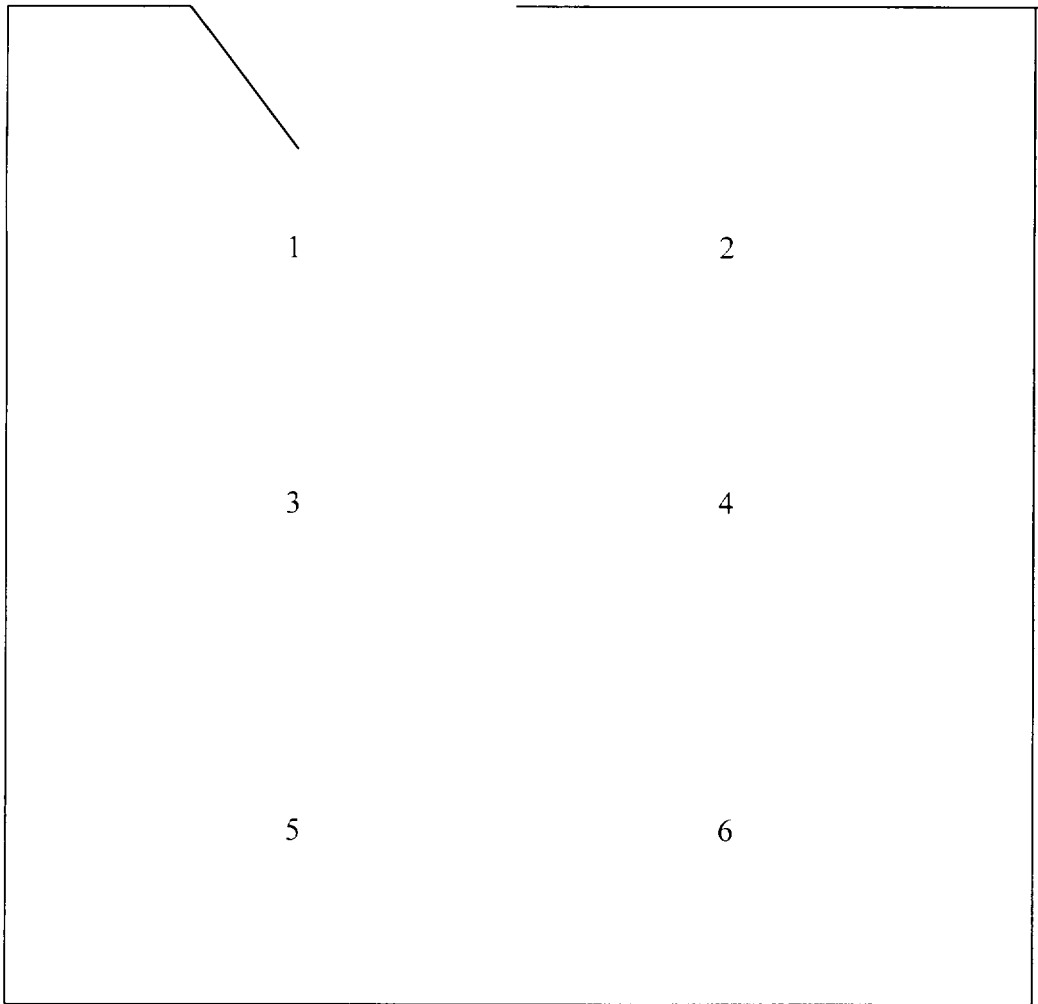
LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Room 123

Wipe No.	Bkg.cpm	Gross cpm	Net cpm	Efficiency	dpm/100 cm <sup>2</sup>	$\sigma$	Final result (dpm/100 cm <sup>2</sup> )
1	13	17	4	0.45	9	3	9 $\pm$ 3
2	13	19	6	0.44	14	4	14 $\pm$ 4
3	13	15	2	0.44	5	2	5 $\pm$ 2
4	13	15	2	0.45	4	2	4 $\pm$ 2
5	13	14	1	0.45	2	1	2 $\pm$ 1
6	13	15	2	0.45	4	2	4 $\pm$ 2
7	13	21	8	0.45	18	4	18 $\pm$ 4
8	13	13	0	0.45	0	0	0 $\pm$ 0
9	13	14	1	0.45	2	1	2 $\pm$ 1
10	13	16	3	0.45	7	3	7 $\pm$ 3

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Wipe Locations 1 - 6

Room 125



LifeNet  
1457 Miller Store Road  
Virginia Beach, VA  
Room 125

Wipe No.	Bkg.cpm	Gross cpm	Net cpm	Efficiency	dpm/100 cm <sup>2</sup>	$\sigma$	Final result (dpm/100 cm <sup>2</sup> )
1	15	22	7	0.46	15	4	15 $\pm$ 4
2	15	19	4	0.45	9	3	9 $\pm$ 3
3	15	24	9	0.45	20	4	20 $\pm$ 4
4	15	21	6	0.45	13	4	13 $\pm$ 4
5	15	21	6	0.45	13	4	13 $\pm$ 4
6	15	19	4	0.46	9	3	9 $\pm$ 3

Surveyed 8/30/05 by  
Paul Sutcliffe

This is to acknowledge the receipt of your letter/application dated

7/12/2005, and to inform you that the initial processing which includes an administrative review has been performed.

☒ AMEND. 45-25601-08  
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned Mail Control Number 137688.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.