



University of Connecticut Health Center

June 27, 2012

Office of Research Safety

United States Nuclear Regulatory Commission
Region I, DNMS
2100 Renaissance Blvd.
King of Prussia, PA 19406

Attn: Sandra Gabriel, Ph.D.

License #: 06-13022-02
Docket # 03001295
Mail Control 577516

Dear Dr. Gabriel:

I am writing to follow up on your email of June 5, 2012, regarding questions you had concerning our request for a license amendment dated May 7, 2012.

Item 1:

I confirm that all radioactive sealed sources were removed from building 27, inventoried and leak tested. All sources are accounted for, no source was found to be leaking and these sources remain on campus. No material was transferred to another licensee or entity. All radioactive waste has been removed by our waste vendor. All equipment has been surveyed and cleared for release. All equipment has been removed from the building.

Item 2:

U-238 uranyl nitrate and acetate were purchased as chemicals and not through the Office of Radiation Safety as licensed material. These compounds were used for staining in our electron microscopy suites. These sealed partially filled containers were picked up by the Radiation Safety Office and stored in the original containers within secondary containment. This waste was solid and/or liquid and no leaks or spills were ever noted. They were picked up by our waste vendor and disposed.

Item 3:

I have attached copies of the original wipe test data and calibration information for all radiation detection equipment used for the survey. Regarding the meter surveys of all surfaces in the building, my staff was instructed not to record a reading unless it exceeded the decision criterion (about twice background). Original ambient radiation surveys

An Equal Opportunity Employer

263 Farmington Avenue
Farmington, Connecticut 06030-3930

Telephone: (860) 679-2723
Facsimile: (860) 679-3826

K-8
MS-16

RECEIVED
REGION I
2012 JUN 28 AM 8:22

577516

NMSS/RGN1 MATERIALS-002

measured with a micro-R chamber indicated no observable exposure rates significantly above background. However, due to the fact that the micro-R chamber could not be calibrated at its lowest ranges, I have attached a follow up survey that was done with a calibrated GM probe, along with calibration data.

The enclosed packet of information contains the survey data you requested. At the front of the packet is a table of contents to assist you in reviewing the data.

Please let me know if you require any further information or repeat surveys. Thank you for your assistance with this amendment request.

Sincerely,

A handwritten signature in black ink, appearing to read 'K. Price', with a long horizontal flourish extending to the right.

Kenneth Price, RSO

BUILDING 27 DECOMMISSIONING DATA

TABLE OF CONTENTS

Wipes/Meter Section-Surface Contamination Data

Survey Diagram, Building Areas A- O

Area A - Wipe Test Meter Results-Floors

Area A - Wipe Test Meter Results-Walls

Area B - Wipe Test Meter Results-Floors

Area B – Wipe Test Meter Results-Walls

Area C – Wipe Test Meter Results-Floors

Area C - Wipe Test Meter Results-Walls

Area D - Wipe Test Meter Results-Floors

Area D – Wipe Test Meter Results-Walls

Area E – Wipe Test Meter Results-Floors

Area E – Wipe Test Meter Results-Walls

Area F – Wipe Test Meter Results-Floors

Area F – Wipe Test Meter Results-Walls

Area G – Wipe Test Meter Results-Floors

Area G – Wipe Test Meter Results-Walls

Area H – Wipe Test Meter Results-Floors

Area H – Wipe Test Meter Results-Walls

Areas I,J –Wipe Test Meter Results-Floors

Areas I,J-Wipe Test Meter Results-Walls

Area K – Wipe Test Meter Results-Floors

Area K – Wipe Test Meter Results-Walls

Area L – Wipe Test Meter Results-Floors

Area L – Wipe Test Meter Results-Walls

Area M – Wipe Test Meter Results-Floors

Area M – Wipe Test Meter Results-Walls

Area N – Wipe Test Meter Results-Floors

Area N – Wipe Test Meter Results-Walls

Area O – Wipe Test Meter Results-Floors

Area O – Wipe Test Meter Results-Walls

North Hallway – Wipe Test Meter Results Floors & Walls

South Hallway –Wipe Test Meter Results Floors & Walls

Stairs North/South – Wipe Test Meter Results Steps

Rest Rooms – Wipe Test Meter Results Floors & Walls

Misc. Items Section

Walk-In Hood Surfaces – Wipe Test Results (see Surveys for F for meter data)

Hood and Sink surfaces Area C2 – Wipe Test Results (see Surveys for C meter data)

Exhaust Stack End Surfaces – Wipe Test Meter Results

Calibrations Section

Liquid Scintillation Counters

Ludlum Gas Proportional Floor Monitor

Ludlum Model 3 with 44-9 Probe

Ludlum Model 3 with 44-9-18 Probe

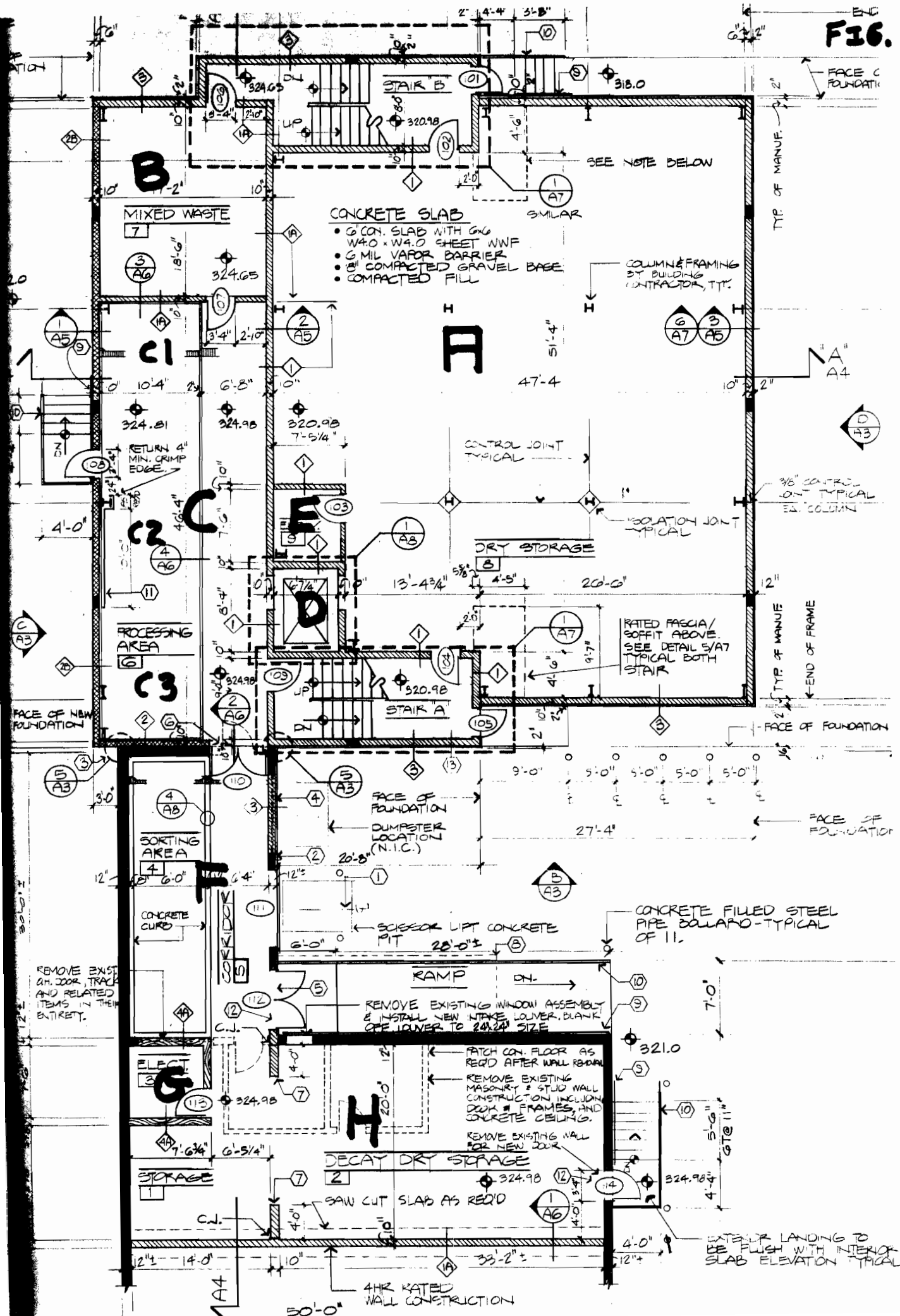
Ludlum Model 3 with 44-9 Probe

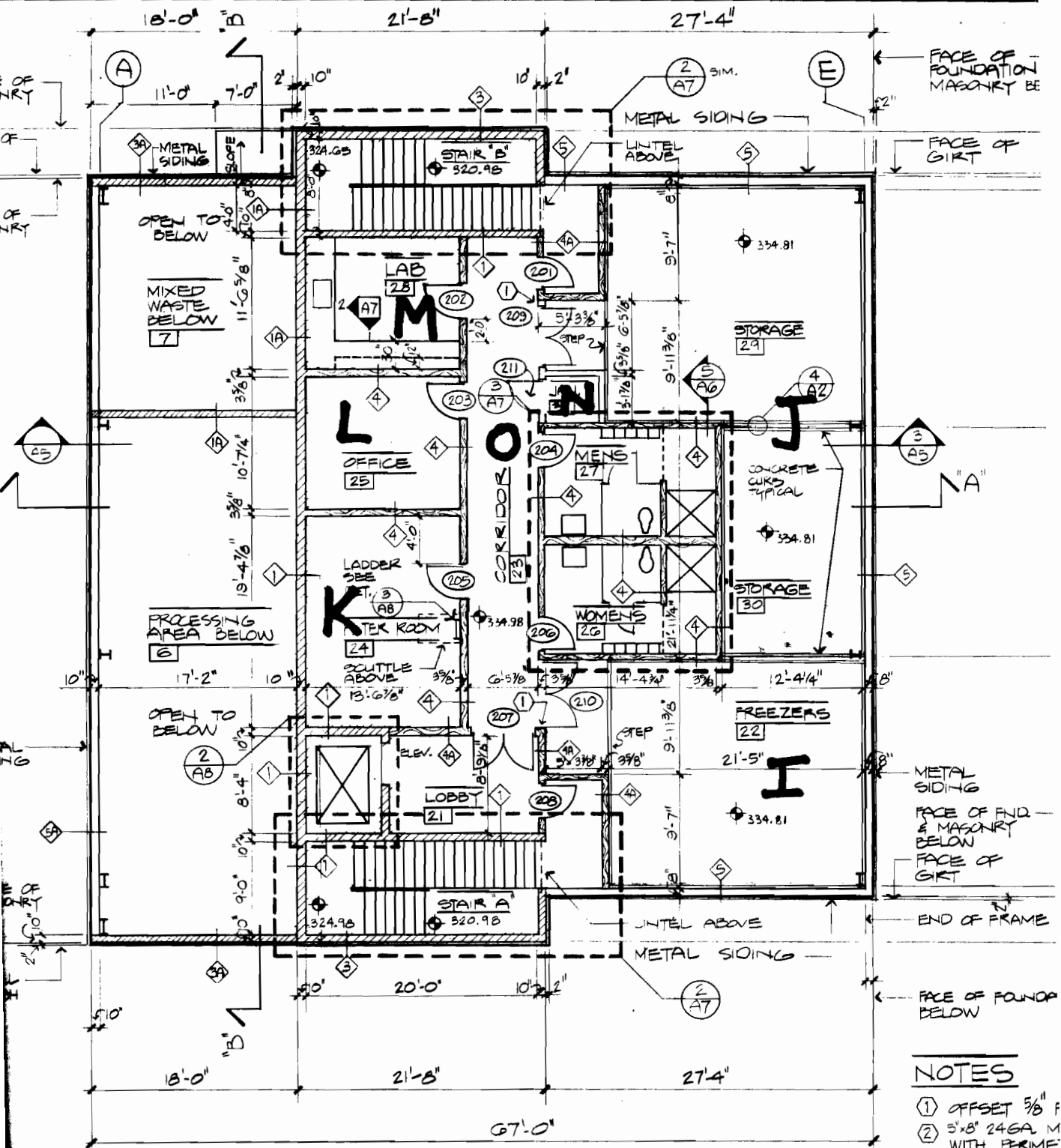
Ambient Gamma Section

Initial Gamma Survey with Ludlum Model 193 uR Chamber & Calibration

Confirmatory Gamma Survey with Ludlum Model 3/44-7 Probe & Calibration

FIG. 1





1
A2 SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0" FF ELEV. 324.98'



— WALL

Decommission Meter Survey

Location: RM A, B, C, D, E, F (FLOORS)

Date: 4/2/12 C1, C2, C3

Initials: PB, PL

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading:

Check source reading:

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: $< 120 \text{ cpm}$

Check source reading: 30 Kcpm

~ Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading: $\sim 1400 \text{ cpm}$

Check source reading: 28 Kcpm
 29 Kcpm
 30 Kcpm
 30 Kcpm

Meter survey results:

All readings \leq Bkg

White Room Floor Swips

Protocol #: 9

Name:decom

30-Mar-02

09:58

Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00


Time = 1.00

QIP = tSIE

ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	13.00	18.00	23.00	265.	
2	1.00	13.00	22.00	24.00	274.	
3	1.00	6.00	13.00	16.00	265.	
4	1.00	8.00	13.00	17.00	267.	
5	1.00	10.00	17.00	21.00	257.	
6	1.00	4.00	10.00	17.00	270.	
7	1.00	9.00	15.00	23.00	270.	
8	1.00	11.00	17.00	22.00	271.	
9	1.00	12.00	21.00	27.00	251.	
10	1.00	13.00	19.00	21.00	265.	
11	1.00	8.00	11.00	15.00	274.	
12	1.00	11.00	21.00	32.00	259.	
13	1.00	12.00	15.00	20.00	249.	
14	1.00	9.00	18.00	24.00	269.	
15	1.00	6.00	12.00	15.00	265.	
16	1.00	11.00	17.00	25.00	270.	
17	1.00	8.00	12.00	14.00	263.	
18	1.00	8.00	14.00	20.00	254.	
19	1.00	11.00	21.00	24.00	264.	
20	1.00	10.00	16.00	21.00	257.	
21	1.00	13.00	21.00	24.00	262.	
22	1.00	13.00	21.00	30.00	225.	
23	1.00	12.00	18.00	19.00	252.	
24	1.00	11.00	18.00	24.00	281.	
25	1.00	7.00	18.00	24.00	269.	
26	1.00	3.00	12.00	17.00	267.	
27	1.00	9.00	14.00	23.00	263.	
28	1.00	9.00	17.00	26.00	264.	
29	1.00	8.00	11.00	18.00	247.	
30	1.00	13.00	17.00	23.00	242.	
31	1.00	12.00	18.00	20.00	219.	
32	1.00	8.00	14.00	18.00	233.	
33	1.00	7.00	11.00	16.00	244.	
34	1.00	6.00	15.00	20.00	249.	
35	1.00	4.00	8.00	11.00	239.	
36	1.00	13.00	22.00	26.00	269.	
37	1.00	6.00	14.00	20.00	247.	
38	1.00	13.00	15.00	21.00	242.	
39	1.00	14.00	23.00	23.00	237.	
40	1.00	8.00	14.00	21.00	223.	
41	1.00	9.00	21.00	25.00	229.	
42	1.00	7.00	11.00	17.00	215.	
43	1.00	14.00	23.00	32.00	266.	
44	1.00	17.00	19.00	22.00	264.	
45	1.00	13.00	18.00	28.00	283.	
46	1.00	8.00	12.00	15.00	255.	
47	1.00	11.00	17.00	22.00	262.	
48	1.00	10.00	14.00	18.00	229.	
49	1.00	6.00	10.00	13.00	219.	
50	1.00	10.00	13.00	22.00	222.	

S#	TIME	CPMA	CPMB	CPMC	tsIE	FLAG
51	1.00	6.00	10.00	13.00	253.	
52	1.00	9.00	14.00	23.00	275.	
53	1.00	9.00	15.00	23.00	243.	
54	1.00	9.00	15.00	19.00	239.	
55	1.00	10.00	15.00	15.00	243.	
56	1.00	9.00	14.00	15.00	248.	
57	1.00	10.00	15.00	16.00	225.	
58	1.00	7.00	12.00	17.00	228.	
59	1.00	3.00	9.00	14.00	221.	
60	1.00	5.00	10.00	15.00	221.	
61	1.00	8.00	14.00	21.00	237.	
62	1.00	9.00	16.00	21.00	228.	
63	1.00	2.00	8.00	14.00	227.	
64	1.00	8.00	21.00	27.00	220.	
65	1.00	12.00	15.00	17.00	209.	
66	1.00	10.00	14.00	19.00	223.	
67	1.00	7.00	16.00	20.00	220.	
68	1.00	5.00	11.00	15.00	230.	
69	1.00	4.00	7.00	13.00	250.	
70	1.00	12.00	18.00	21.00	200.	
71	1.00	12.00	14.00	23.00	211.	
72	1.00	13.00	17.00	22.00	223.	
73	1.00	15.00	19.00	22.00	298.	
74	1.00	8.00	13.00	16.00	222.	
75	1.00	7.00	12.00	13.00	226.	
76	1.00	11.00	14.00	16.00	222.	
77	1.00	12.00	17.00	19.00	210.	
78	1.00	10.00	21.00	26.00	223.	
79	1.00	11.00	18.00	24.00	237.	
80	1.00	13.00	20.00	24.00	225.	
81	1.00	8.00	17.00	25.00	245.	
82	1.00	5.00	9.00	14.00	233.	
83	1.00	7.00	11.00	19.00	262.	
84	1.00	4.00	9.00	15.00	216.	
85	1.00	9.00	12.00	16.00	207.	
86	1.00	0.00	5.00	10.00	205.	
87	1.00	7.00	12.00	17.00	212.	
88	1.00	4.00	9.00	17.00	183.	
89	1.00	11.00	16.00	21.00	204.	
90	1.00	12.00	17.00	22.00	213.	
91	1.00	12.00	17.00	21.00	198.	
92	1.00	15.00	21.00	25.00	194.	
93	1.00	11.00	16.00	19.00	178.	
94	1.00	6.00	12.00	18.00	204.	
95	1.00	10.00	17.00	23.00	218.	
96	1.00	6.00	14.00	17.00	219.	
97	1.00	16.00	21.00	27.00	204.	
(1 missing vial)						
99	1.00	12.00	27.00	35.00	343	} BKg
100	1.00	13.00	20.00	27.00	331	
(1 missing vial)						
102	1.00	24840.0	24922.0	24928.0	832.	JH SM
103	1.00	28301.0	120844.	121026.	834.	MC SM
104	1.00	10083.0	106670.	150900.	327.	JG SM

N/D

 4/12/12

CC=48.78.

Decommission Meter Survey

Location: BUILDING # 27 ROOM A WALLS

Date: 3/6/12

Initials: PB, BL

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: < 120 cpm

Check source reading: 34 Kcpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading: < 120 cpm

Check source reading: 34 Kcpm

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: < 120 cpm

Check source reading: 42 Kcpm

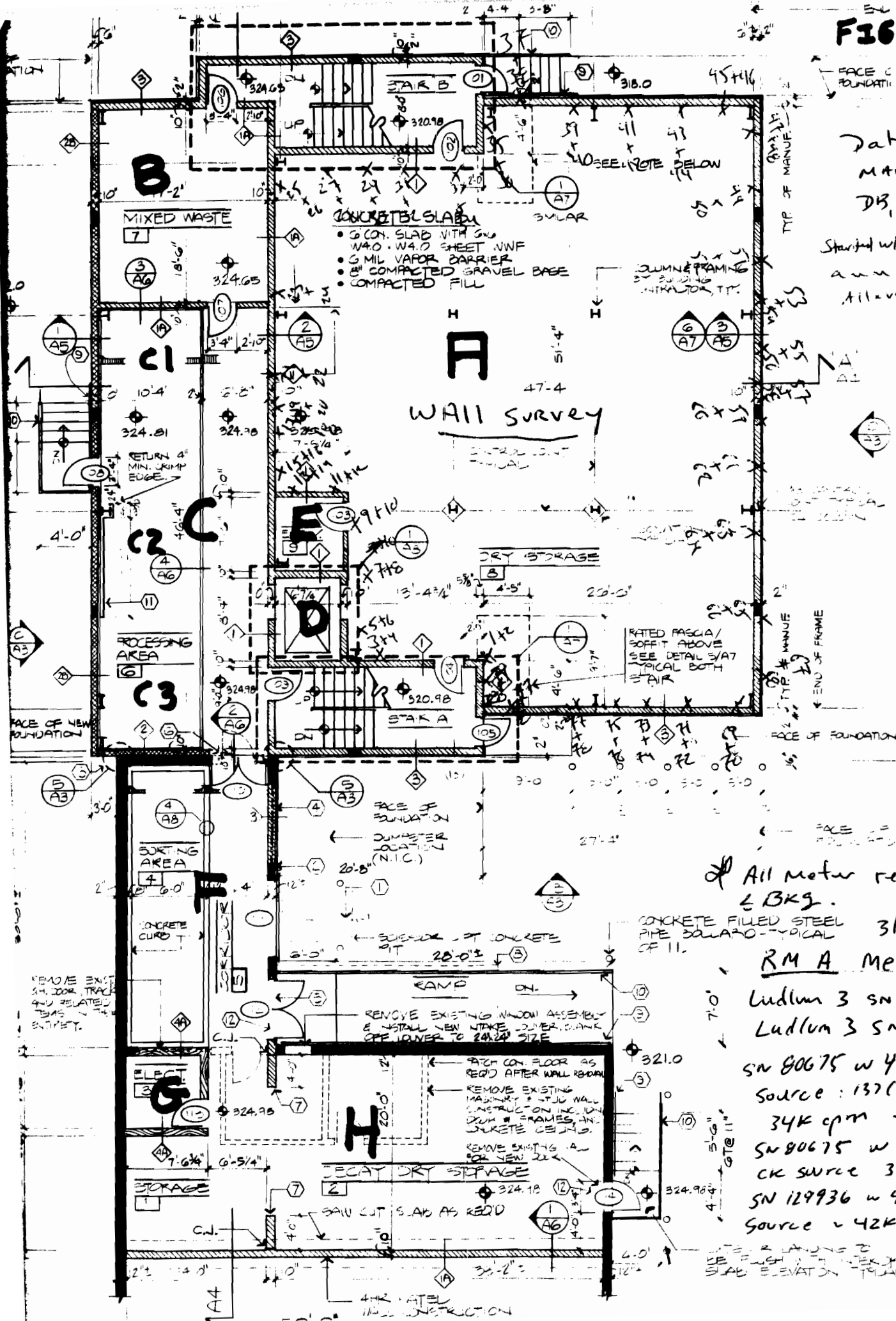
Meter Survey results:

All reading \leq Bkg

FIG. 1

Date:
March 6, 201.
DB, BL

Started w/ #1 still cold
aunt
Ailaven #3 on birth



* All meter readings
L Bkg.

31612

RM A Meter readings

Ludlum 3 SN 80675

Ludlum 3 SN 129936

SN 80675 w 44-9 ck

Source: 137CS 5 pgs 12/88

34K cpm - BKG ~ 2120 cpm

SN 80675 w 44-9-18

CK source 34Kcpm $Bq \approx 10^5$

SN 129936 w 44-9 CK

Source ~ 42Krpm / Bag ~ 120rpm

SLAB ELEVATION TOTAL

WHITE RM WALLS

Protocol #: 9 Name: decom 06-Mar-00 17:03
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	16.00	24.00	27.00	238.	
2	1.00	8.00	16.00	19.00	233.	
3	1.00	4.00	6.00	13.00	209.	
4	1.00	10.00	16.00	18.00	215.	
5	1.00	9.00	14.00	24.00	254.	
6	1.00	8.00	11.00	15.00	254.	
7	1.00	11.00	18.00	23.00	213.	
8	1.00	12.00	15.00	17.00	222.	
9	1.00	12.00	19.00	23.00	248.	
10	1.00	8.00	11.00	14.00	245.	
11	1.00	11.00	18.00	24.00	246.	
12	1.00	10.00	14.00	18.00	232.	
13	1.00	9.00	13.00	17.00	267.	
14	1.00	10.00	16.00	19.00	251.	
15	1.00	6.00	9.00	12.00	227.	
16	1.00	11.00	15.00	20.00	239.	
17	1.00	15.00	22.00	26.00	263.	
18	1.00	11.00	14.00	17.00	248.	
19	1.00	8.00	16.00	21.00	233.	
20	1.00	10.00	13.00	16.00	222.	
21	1.00	6.00	20.00	23.00	263.	
22	1.00	13.00	19.00	24.00	253.	
23	1.00	12.00	17.00	22.00	231.	
24	1.00	12.00	15.00	19.00	226.	
25	1.00	8.00	13.00	17.00	260.	
26	1.00	11.00	18.00	25.00	249.	
27	1.00	10.00	15.00	19.00	240.	
28	1.00	12.00	16.00	21.00	189.	
29	1.00	6.00	7.00	10.00	251.	
30	1.00	9.00	13.00	18.00	222.	
31	1.00	7.00	10.00	20.00	225.	
32	1.00	13.00	22.00	24.00	188.	
33	1.00	8.00	13.00	23.00	213.	
34	1.00	5.00	11.00	16.00	221.	
35	1.00	7.00	15.00	19.00	243.	
36	1.00	6.00	8.00	12.00	204.	
37	1.00	10.00	15.00	18.00	257.	
38	1.00	8.00	15.00	26.00	216.	
39	1.00	4.00	7.00	11.00	234.	
40	1.00	10.00	18.00	25.00	233.	
41	1.00	7.00	14.00	20.00	255.	
42	1.00	8.00	13.00	20.00	236.	
43	1.00	9.00	10.00	12.00	233.	
44	1.00	12.00	17.00	22.00	238.	
45	1.00	13.00	18.00	20.00	251.	
46	1.00	6.00	14.00	18.00	260.	
47	1.00	11.00	17.00	20.00	192.	
48	1.00	19.00	26.00	32.00	199.	
49	1.00	11.00	18.00	25.00	250.	
50	1.00	11.00	17.00	29.00	242.	

- REcounted to LCC, see Attached

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
51	1.00	13.00	20.00	23.00	219.	
52	1.00	5.00	12.00	15.00	208.	
53	1.00	13.00	22.00	27.00	227.	
54	1.00	5.00	15.00	20.00	199.	
55	1.00	6.00	9.00	12.00	228.	
56	1.00	5.00	9.00	11.00	215.	
57	1.00	14.00	23.00	24.00	235.	
58	1.00	10.00	17.00	21.00	205.	
59	1.00	3.00	10.00	13.00	250.	
60	1.00	10.00	14.00	18.00	229.	
61	1.00	10.00	17.00	21.00	220.	
62	1.00	8.00	15.00	18.00	182.	
63	1.00	11.00	20.00	28.00	246.	
64	1.00	6.00	10.00	14.00	253.	
65	1.00	7.00	9.00	13.00	223.	
66	1.00	8.00	16.00	22.00	229.	
67	1.00	13.00	15.00	18.00	162.	
68	1.00	9.00	15.00	20.00	181.	
69	1.00	10.00	20.00	22.00	223.	
70	1.00	6.00	16.00	19.00	222.	
71	1.00	7.00	14.00	19.00	237.	
72	1.00	11.00	20.00	30.00	219.	
73	1.00	7.00	12.00	17.00	232.	
74	1.00	8.00	16.00	17.00	226.	
75	1.00	12.00	19.00	22.00	224.	
76	1.00	8.00	17.00	23.00	188.	
77	1.00	11.00	17.00	24.00	238.	
78	1.00	9.00	16.00	21.00	198.	
79	1.00	3.00	10.00	15.00	210.	
80	1.00	7.00	14.00	18.00	205.	
(1 missing vial)						
82	1.00	24950.0	25008.0	25015.0	828.	^{3H}
83	1.00	28645.0	120932.	121099.	824.	^{14C}
84	1.00	9992.00	106735.	151372.	323.	^{36Cl}
(1 missing vial)						
86	1.00	2.00	12.00	18.00	328.	
87	1.00	8.00	17.00	20.00	341.	

ND
4/12/12

} Std

} BKG

WHITE RM WALLS

CC = 30.42 cpm

RECOUNT

Protocol #: 9 Name: decom 07-Mar-00 09:06
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
(47 missing vials)						
48	1.00	7.00	14.00	19.00	194.	Recount < Bkg
(33 missing vials)						
82	1.00	25288.0	25368.0	25372.0	828. ^{31t}	} std.
83	1.00	28338.0	120421.	120573.	829. ^{14C}	
84	1.00	10035.0	106030.	150494.	325. ^{36Cl}	
(1 missing vial)						
86	1.00	14.00	20.00	28.00	327.	} Bkg
87	1.00	4.00	11.00	15.00	342.	

CC = 40.33 cpm

Decommission Meter Survey

Location: RM A, B, C, D, E, F (FLOORS)

Date: 4/2/12 C1, C2, C3

Initials: PB, BL

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading:

Check source reading:

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: $< 120 \text{ cpm}$

Check source reading: 30 Kcpm

~ Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading: $\sim 1400 \text{ cpm}$

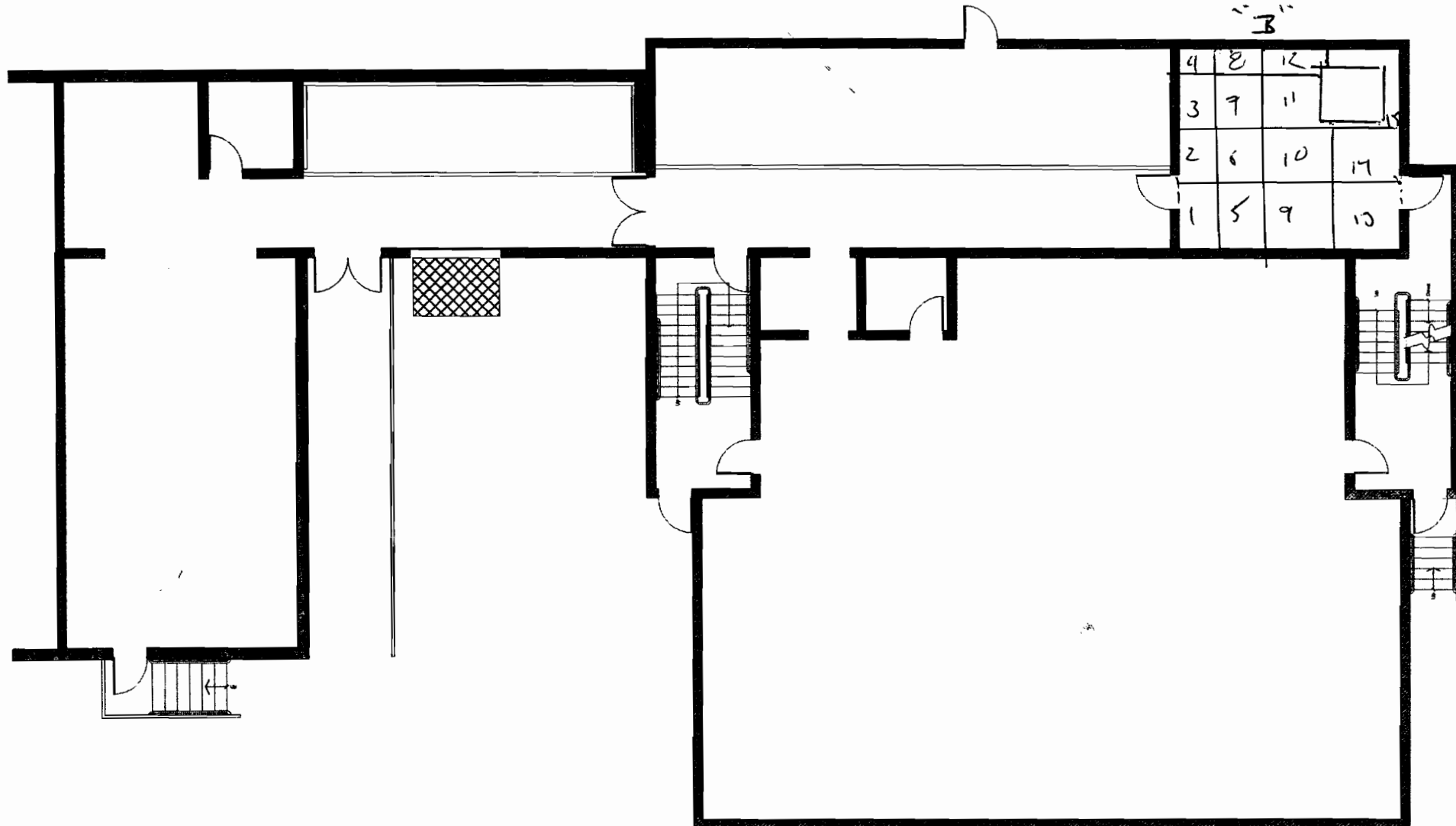
Check source reading: 28 Kcpm
 29 Kcpm
 30 Kcpm
 30 Kcpm

Meter survey results:

All readings \leq Bkg

Mixed Wash
"B"

4	8	12	
3	9	11	
2	6	10	17
1	5	9	13



Decommissioning Floor Plan

Facility:

Surveyed by:

Date of survey:

Drawing
Not To Scale

Mixed Waste Run

"B"

Protocol #: 9 Name: decom 02-Apr-02 09:17
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	10.00	19.00	23.00	197.	
2	1.00	6.00	10.00	16.00	194.	
3	1.00	7.00	10.00	15.00	199.	
4	1.00	8.00	15.00	19.00	195.	
5	1.00	10.00	18.00	26.00	208.	
6	1.00	4.00	8.00	13.00	213.	
7	1.00	8.00	13.00	15.00	214.	
8	1.00	8.00	13.00	20.00	196.	
9	1.00	18.00	27.00	32.00	238.	
10	1.00	8.00	13.00	19.00	233.	
11	1.00	14.00	23.00	30.00	230.	
12	1.00	12.00	19.00	26.00	270.	
13	1.00	8.00	15.00	22.00	232.	
14	1.00	7.00	12.00	15.00	208.	
15	1.00	12.00	18.00	21.00	217.	
(1 missing vial)						
17	1.00	6.00	15.00	26.00	340.	} Bkg
18	1.00	7.00	11.00	16.00	328.	
(1 missing vial)						
20	1.00	24911.0	24978.0	24984.0	826.	^{3H}
21	1.00	28353.0	120577.	120732.	826.	^{14C}
22	1.00	9997.00	107429.	150829.	322.	^{36Cl} SW

ND
 4/12/12

CC = 37.88 cpm

Decommission Meter Survey

Location: Room B WALLS

Date: 3/23/12

Initials: RS RC

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: ≤ 120 cpm

Check source reading: 34 k cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: ≤ 120 cpm

Check source reading: 42 k cpm

Meter Survey results:

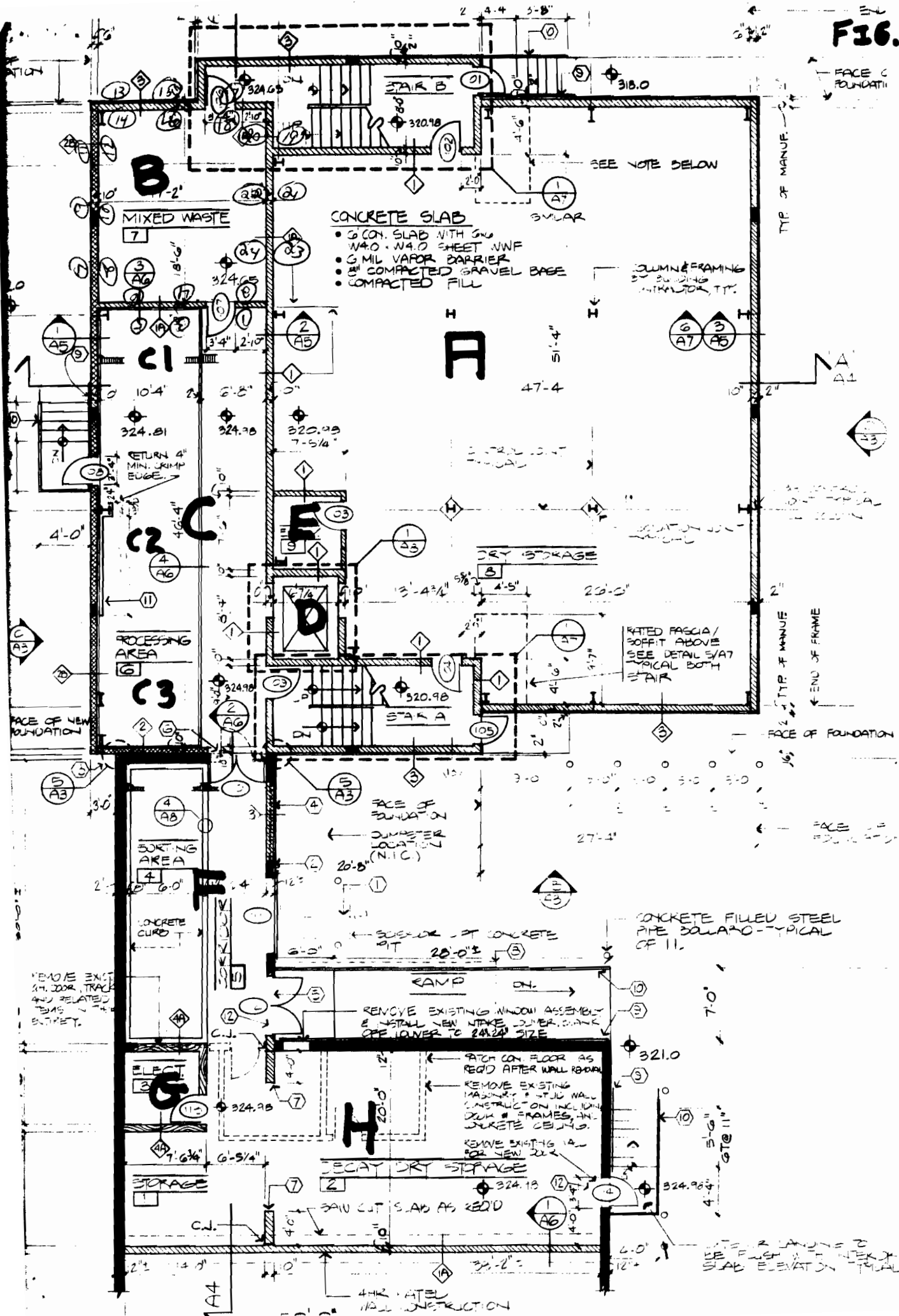
Protocol #: 9 Name:decom 23-Mar-00 15:03
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

B

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	6.00	9.00	12.00	266.	
2	1.00	9.00	14.00	25.00	271.	
3	1.00	6.00	10.00	13.00	266.	
4	1.00	5.00	24.00	30.00	263.	
5	1.00	9.00	15.00	16.00	265.	
6	1.00	7.00	10.00	16.00	274.	
7	1.00	7.00	14.00	16.00	252.	
8	1.00	8.00	15.00	17.00	239.	
9	1.00	6.00	10.00	13.00	235.	
10	1.00	15.00	33.00	34.00	227.	
11	1.00	12.00	22.00	25.00	249.	
12	1.00	8.00	15.00	21.00	253.	
13	1.00	8.00	17.00	23.00	256.	
14	1.00	10.00	16.00	21.00	254.	
15	1.00	10.00	14.00	20.00	258.	
16	1.00	13.00	24.00	31.00	252.	
17	1.00	12.00	12.00	15.00	242.	
18	1.00	8.00	15.00	23.00	245.	
19	1.00	6.00	12.00	17.00	258.	
20	1.00	8.00	12.00	16.00	261.	
21	1.00	6.00	14.00	16.00	273.	
22	1.00	8.00	15.00	21.00	263.	
23	1.00	6.00	9.00	12.00	275.	
24	1.00	10.00	14.00	18.00	267.	
(13 missing vials)						
38	1.00	5.00	12.00	18.00	337.	} Bks
39	1.00	11.00	20.00	31.00	331.	
(1 missing vial)						
41	1.00	25110.0	25179.0	25189.0	832.	- ³ H S+2
42	1.00	28205.0	120910.	121070.	834.	- ¹⁴ C S+2
43	1.00	9974.00	107078.	151116.	322.	- ³⁶ Cl S+2

ND
 4/12/12

CC= 43.97 cpm



Decommission Meter Survey

Location: RM A, B, C, D, E, F (FLOORS)

Date: 4/2/12 C1, C2, C3

Initials: PB, PL

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading:

Check source reading:

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: $< 120 \text{ cpm}$

Check source reading: 30 Kcpm

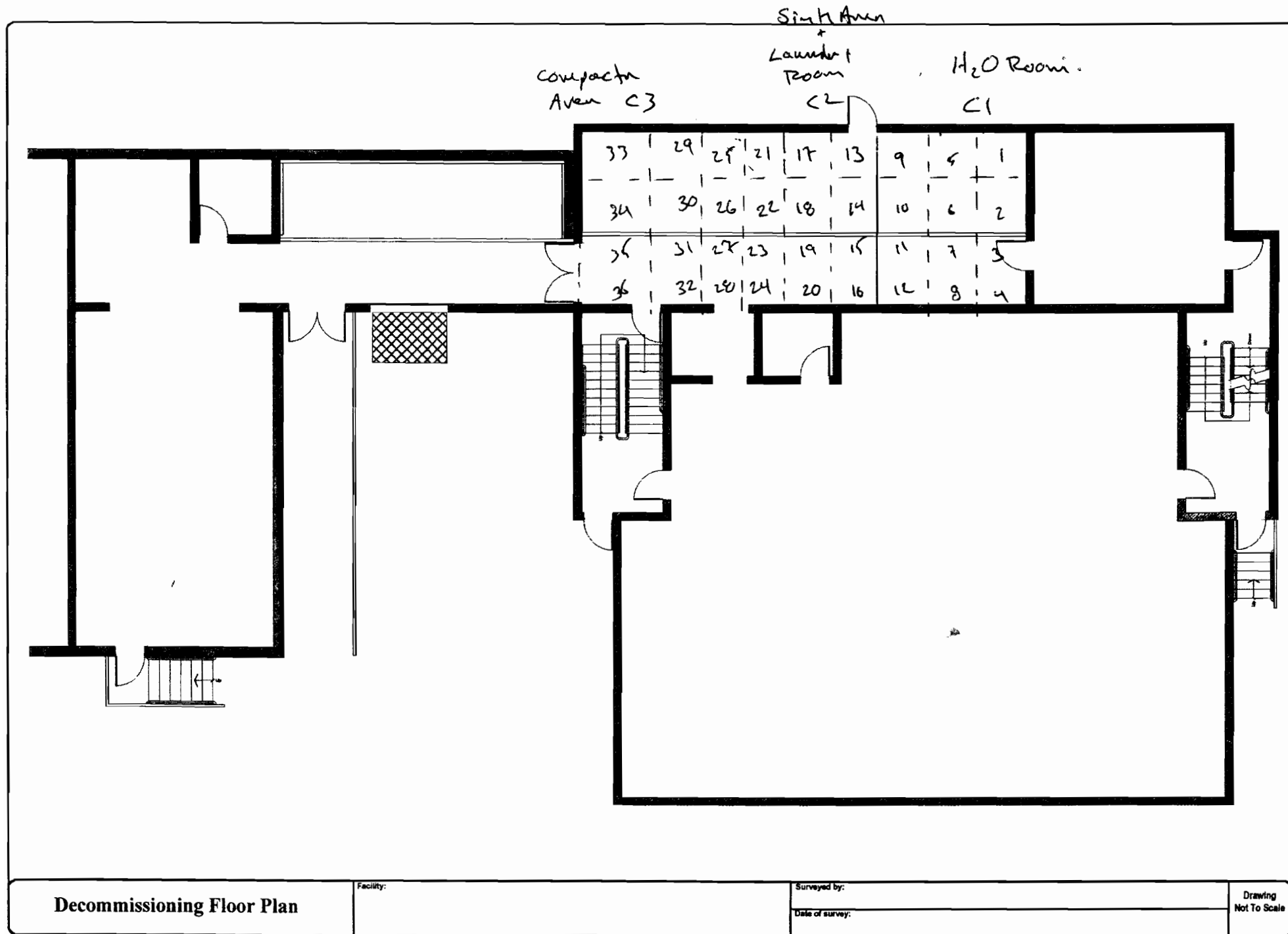
~ Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading: $\sim 1400 \text{ cpm}$

Check source reading: 28 Kcpm
 29 Kcpm
 30 Kcpm
 30 Kcpm

Meter survey results:

All readings \leq Bkg



Protocol #: 9 Name: decom 04-Apr-12 11:43
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	6.00	11.00	18.00	239.	
2	1.00	9.00	16.00	21.00	240.	
3	1.00	14.00	20.00	24.00	254.	
4	1.00	11.00	15.00	21.00	245.	
5	1.00	12.00	15.00	21.00	221.	
6	1.00	10.00	17.00	22.00	222.	
7	1.00	8.00	13.00	17.00	238.	
8	1.00	7.00	18.00	20.00	220.	
9	1.00	9.00	19.00	20.00	209.	
10	1.00	9.00	16.00	22.00	211.	
11	1.00	11.00	15.00	24.00	223.	
12	1.00	11.00	19.00	21.00	238.	
13	1.00	9.00	15.00	22.00	211.	
14	1.00	12.00	18.00	23.00	242.	
15	1.00	11.00	15.00	21.00	242.	
16	1.00	7.00	13.00	20.00	227.	
17	1.00	6.00	9.00	20.00	232.	
18	1.00	9.00	15.00	20.00	231.	
19	1.00	9.00	14.00	21.00	219.	
20	1.00	9.00	19.00	25.00	240.	
21	1.00	6.00	13.00	19.00	245.	
22	1.00	3.00	10.00	17.00	251.	
23	1.00	10.00	14.00	20.00	248.	
24	1.00	12.00	20.00	22.00	256.	
25	1.00	8.00	13.00	15.00	229.	
26	1.00	10.00	15.00	20.00	229.	
27	1.00	7.00	14.00	16.00	256.	
28	1.00	3.00	9.00	13.00	247.	
29	1.00	7.00	13.00	23.00	233.	
30	1.00	15.00	24.00	29.00	256.	
31	1.00	16.00	22.00	24.00	245.	
32	1.00	5.00	13.00	17.00	197.	
33	1.00	15.00	22.00	24.00	218.	
34	1.00	12.00	16.00	20.00	186.	
35	1.00	11.00	17.00	26.00	252.	
36	1.00	7.00	9.00	16.00	237.	
(1 missing vial)						
38	1.00	6.00	14.00	20.00	337	} Bkg
39	1.00	9.00	20.00	32.00	330	
(1 missing vial)						
41	1.00	24818.0	24902.0	24914.0	836.	5H SM
42	1.00	28252.0	120544.	120702.	835.	14C SM
43	1.00	9866.00	105703.	150568.	331.	36C1 SM

LN
 4/12/12

CC=45.18

Decommission Meter Survey

Location: C1, C2, C3 Walls

Date: 3/12/12

Initials: RD DB

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: ≤ 120 cpm

Check source reading: 34K cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: ≤ 120 cpm

Check source reading: 42K cpm

Meter Survey results: All METER READINGS \leq BKG

CJ

Protocol #: 9 Name:decom 12-Mar-00 15:37
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	10.00	14.00	19.00	267.	
2	1.00	9.00	12.00	17.00	268.	
3	1.00	10.00	19.00	28.00	268.	
4	1.00	10.00	15.00	20.00	244.	
5	1.00	7.00	12.00	19.00	263.	
6	1.00	5.00	9.00	12.00	267.	
7	1.00	5.00	16.00	21.00	264.	
8	1.00	6.00	15.00	21.00	258.	
9	1.00	6.00	8.00	13.00	265.	
10	1.00	7.00	15.00	26.00	258.	
11	1.00	7.00	18.00	24.00	258.	
12	1.00	14.00	21.00	26.00	259.	
13	1.00	8.00	12.00	17.00	264.	
14	1.00	14.00	25.00	29.00	260.	
15	1.00	11.00	17.00	22.00	259.	
16	1.00	8.00	11.00	18.00	265.	
17	1.00	4.00	10.00	14.00	268.	
18	1.00	11.00	17.00	21.00	250.	
19	1.00	16.00	23.00	34.00	330.	
20	1.00	9.00	12.00	17.00	340.	
(1 missing vial)						
22	1.00	25194.0	25258.0	25266.0	830.	³⁴
23	1.00	28528.0	120597.	120759.	833.	⁴¹ C
24	1.00	10129.0	107121.	150853.	322.	³⁶ C1

Handwritten signature and date: 4/15/12

~~CC = 30.42 cpm~~

CC = 47.59 cpm

Protocol #: 9 Name: decom 13-Mar-00 09:46
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

C2

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	9.00	11.00	17.00	223.	
2	1.00	2.00	6.00	10.00	226.	
3	1.00	14.00	15.00	25.00	239.	
4	1.00	7.00	10.00	15.00	246.	
5	1.00	14.00	16.00	23.00	209.	
6	1.00	13.00	19.00	26.00	242.	
7	1.00	13.00	23.00	29.00	235.	
8	1.00	11.00	17.00	20.00	235.	
9	1.00	14.00	20.00	24.00	242.	
10	1.00	9.00	12.00	14.00	251.	
11	1.00	6.00	12.00	17.00	248.	
12	1.00	8.00	15.00	20.00	256.	

(6 missing vials)

19	1.00	9.00	17.00	19.00	331.	} BKG
20	1.00	9.00	16.00	20.00	344.	

(1 missing vial)

22	1.00	25027.0	25102.0	25106.0	829.	} std.
23	1.00	28660.0	120896.	121057.	833.	
24	1.00	9997.00	107161.	151237.	323.	

ND
 4/12/12

CC= 30.42 cpm

C3

Protocol #: 9 Name: decom 13-Mar-00 08:38
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

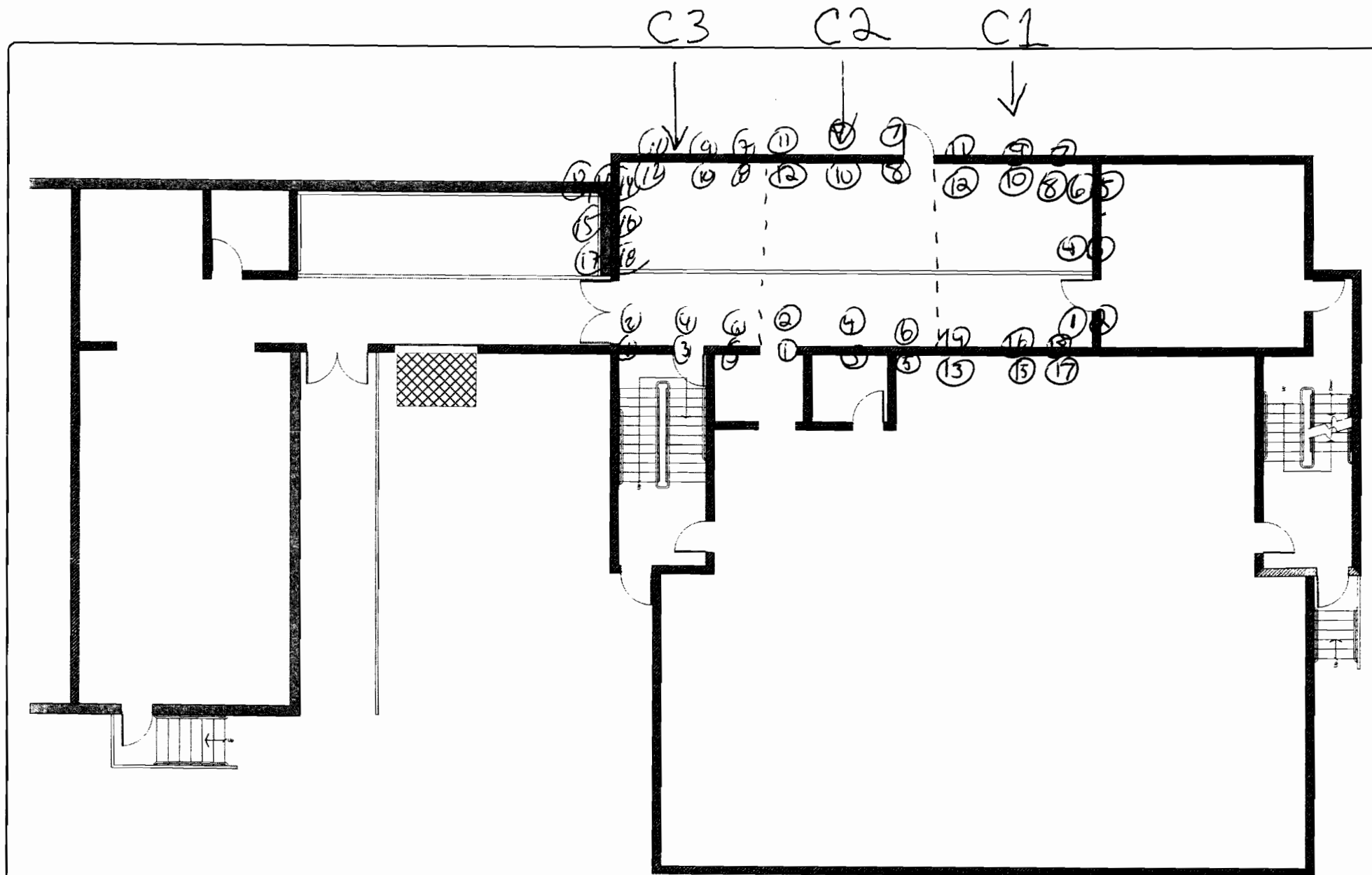
S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	6.00	12.00	19.00	236.	
2	1.00	6.00	7.00	13.00	227.	
3	1.00	6.00	10.00	15.00	250.	
4	1.00	7.00	13.00	19.00	247.	
5	1.00	8.00	13.00	16.00	242.	
6	1.00	11.00	17.00	23.00	241.	
7	1.00	13.00	17.00	19.00	218.	
8	1.00	8.00	15.00	20.00	239.	
9	1.00	4.00	8.00	12.00	235.	
10	1.00	12.00	17.00	28.00	218.	
11	1.00	8.00	14.00	17.00	242.	
12	1.00	11.00	15.00	18.00	223.	
13	1.00	7.00	12.00	19.00	256.	
14	1.00	5.00	7.00	15.00	246.	
15	1.00	3.00	3.00	8.00	259.	
16	1.00	6.00	9.00	13.00	251.	
17	1.00	8.00	13.00	17.00	241.	
18	1.00	2.00	8.00	11.00	250.	
19	1.00	9.00	15.00	22.00	330.	
20	1.00	9.00	18.00	23.00	341.	

(1 missing vial)

22	1.00	25073.0	25130.0	25134.0	830	^{3H}	} Std.
23	1.00	28433.0	120534.	120708.	829	^{14C}	
24	1.00	10050.0	107050.	151018.	328.	^{36Cl}	

CC = 30 cpm

CC 34.17 cpm



Decommissioning Floor Plan

Facility:

ROOM C1, C2, C3

Surveyed by:

Date of survey:

Brian Conley, Dan Bunt
3/12/12

Drawing
Not To Scale

Decommission Meter Survey

Location: RM A, B, C, D, E, F (FLOORS)

Date: 4/2/12 C1, C2, C3

Initials: PB, PL

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading:

Check source reading:

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: $< 120 \text{ cpm}$

Check source reading: 30 Kcpm

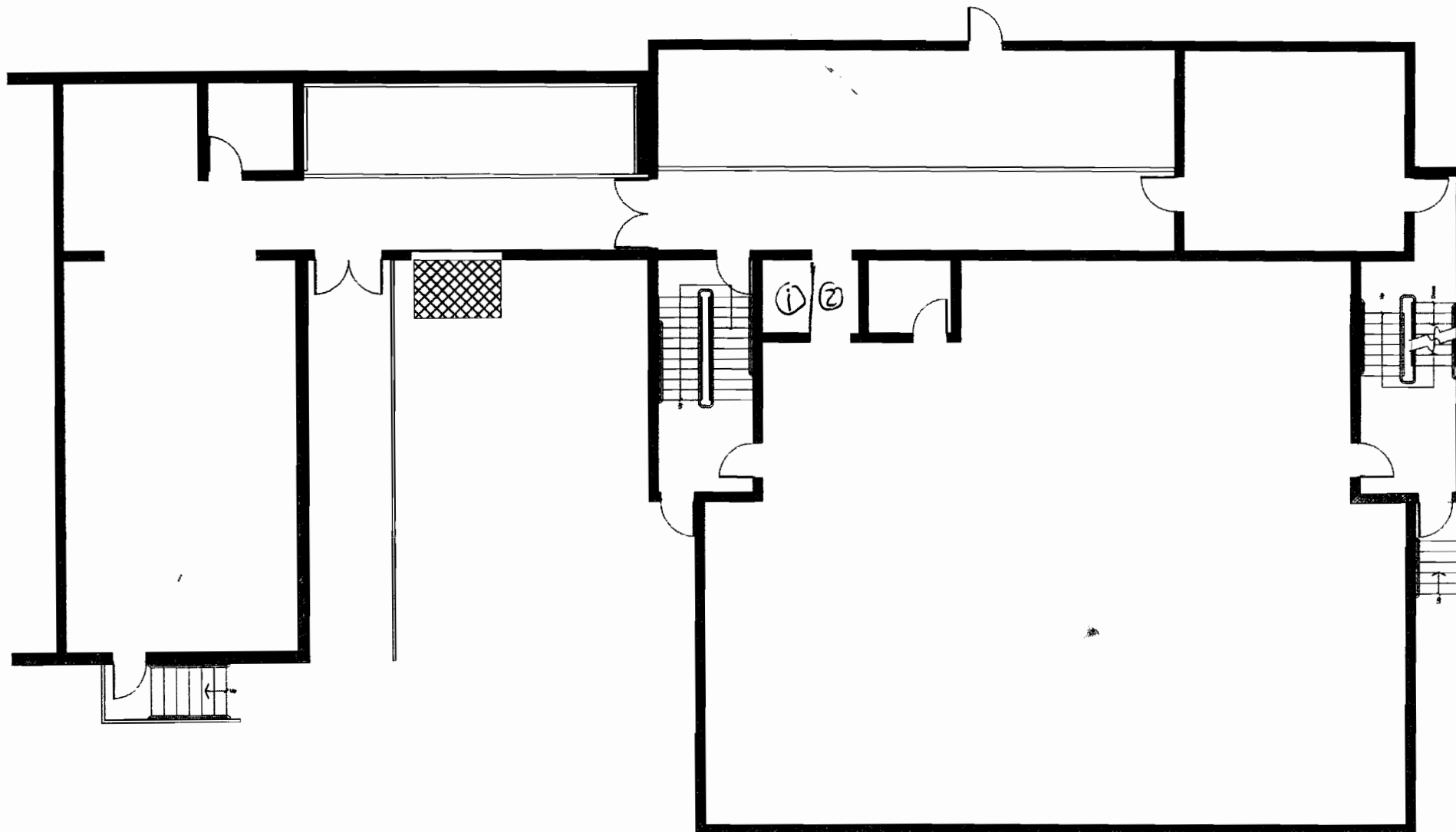
~ Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading: $\sim 1400 \text{ cpm}$

Check source reading: 28 Kcpm
 29 Kcpm
 30 Kcpm
 30 Kcpm

Meter survey results:

All readings \leq Bkg



Decommissioning Floor Plan

Facility:

Surveyed by: *RLS*

Date of survey: *3/30/12*

Drawing
Not To Scale

Elavata Floor "D"

Protocol #: 9 Name: decom 02-Apr-00 07:54
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	8.00	15.00	21.00	214.	
2	1.00	8.00	18.00	24.00	214.	
(1 missing vial)						
4	1.00	14.00	26.00	32.00	338.	} BKG
5	1.00	5.00	13.00	16.00	329.	
(1 missing vial)						
7	1.00	24957.0	25039.0	25047.0	828	} 5th
8	1.00	28828.0	121416.	121571.	832.	
9	1.00	10267.0	106998.	150444.	326.	

ND
 4/12/12

CC= 45.18 cpm

Decommission Meter Survey

Location: Room D Walls

Date: 3/12/12

Initials: RD DB

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: ≤ 120 cpm

Check source reading: 34k cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: ≤ 120 cpm

Check source reading: 42k cpm

Meter Survey results: All Readings \leq Bkg

D

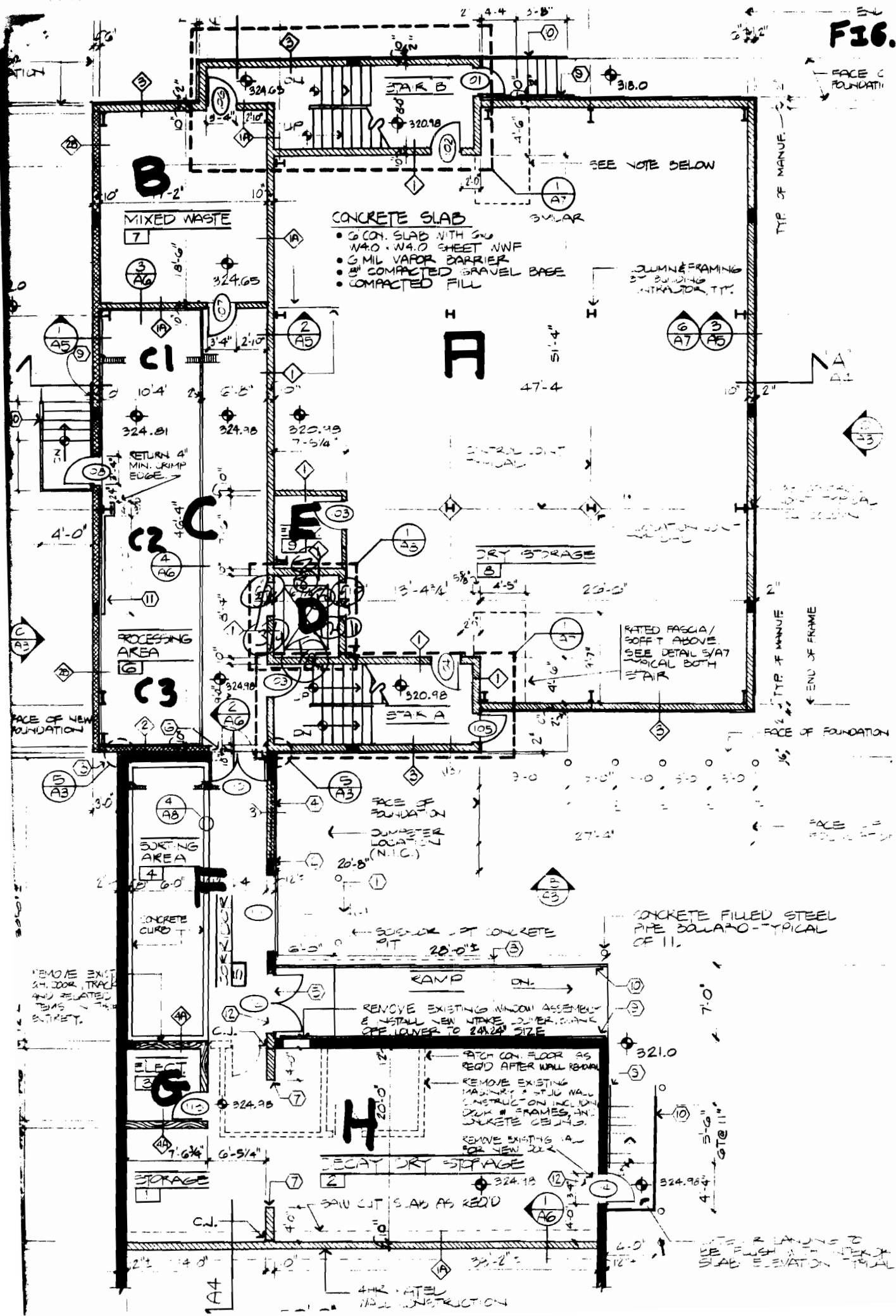
Protocol #: 9 Name: decom 12-Mar-00 10:23
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	8.00	16.00	25.00	270.	
2	1.00	14.00	20.00	26.00	260.	
3	1.00	7.00	15.00	18.00	274.	
4	1.00	10.00	15.00	21.00	273.	
5	1.00	6.00	12.00	15.00	267.	
6	1.00	7.00	16.00	19.00	261.	
7	1.00	10.00	16.00	19.00	272.	
8	1.00	8.00	13.00	15.00	262.	
9	1.00	7.00	16.00	19.00	262.	
10	1.00	8.00	14.00	15.00	266.	
11	1.00	10.00	13.00	21.00	267.	
12	1.00	7.00	14.00	25.00	265.	
(6 missing vials)						
19	1.00	14.00	19.00	26.00	329.	} BKG
20	1.00	10.00	17.00	22.00	345.	
(1 missing vial)						
22	1.00	25003.0	25066.0	25072.0	825.	^{3H}
23	1.00	28548.0	120675.	120840.	829.	^{11C} SW.
24	1.00	9930.00	106707.	151365.	324.	^{36Cl}

Handwritten: K11
 11/12/12

CC= 37.88 cpm

FIG. 1



Decommission Meter Survey

Location: RM A, B, C, D, E, F (FLOORS)

Date: 4/2/12 C1, C2, C3

Initials: PB, PL

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading:

Check source reading:

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: $< 120 \text{ cpm}$

Check source reading: 30 Kcpm

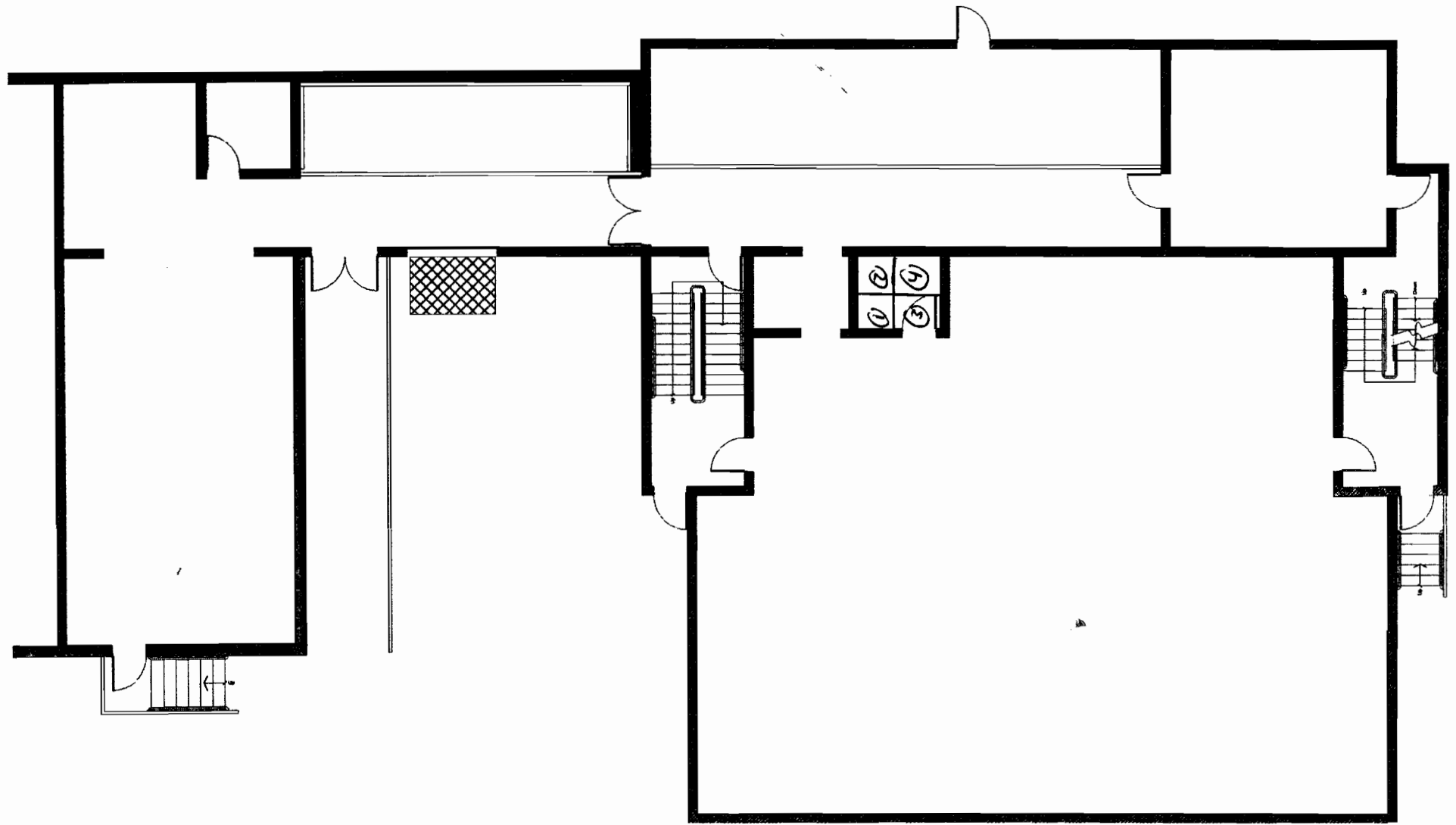
✓ Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading: $\sim 1400 \text{ cpm}$

Check source reading: 28 Kcpm
 29 Kcpm
 30 Kcpm
 30 Kcpm

Meter survey results:

All readings \leq Bkg



Decommissioning Floor Plan

Facility:

Surveyed by: RS

Date of survey: 3/30/12

Drawing
Not To Scale

Elevate Meth Run
Room E

Protocol #: 9 Name: decom 30-Mar-00 16:23
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	8.00	13.00	18.00	239.	
2	1.00	11.00	15.00	23.00	223.	
3	1.00	15.00	19.00	24.00	258.	
4	1.00	16.00	24.00	32.00	233.	
(1 missing vial)						
6	1.00	9.00	18.00	26.00	335.	} Bkg
7	1.00	8.00	22.00	29.00	328.	
(1 missing vial)						
9	1.00	24843.0	24902.0	24905.0	820.	} Std.
10	1.00	28479.0	120581.	120723.	825.	
11	1.00	10194.0	108187.	151177.	315.	

ND
4/12/12

CC= 41.55 cpm

Decommission Meter Survey

Location: Room E Walls

Date: 3/12/12

Initials: *TP* PB

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: ≤ 120 cpm

Check source reading: 34K cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: ≤ 120 cpm

Check source reading: 42K cpm

Meter Survey results: ??

All Readings \leq BKG

3/25/12

Protocol #: 9 Name: decom 12-Mar-00 14:50

Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Time = 1.00 QIP = tSIE ES Terminator = Count

E

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	4.00	12.00	18.00	235.	
2	1.00	7.00	11.00	14.00	246.	
3	1.00	7.00	18.00	25.00	263.	
4	1.00	2.00	9.00	11.00	258.	
5	1.00	7.00	11.00	16.00	243.	
6	1.00	9.00	16.00	19.00	249.	
7	1.00	14.00	21.00	25.00	266.	
8	1.00	9.00	17.00	29.00	262.	
9	1.00	9.00	15.00	17.00	257.	
10	1.00	6.00	10.00	23.00	258.	
11	1.00	11.00	14.00	20.00	252.	
12	1.00	8.00	15.00	22.00	249.	
13	1.00	10.00	13.00	21.00	250.	
14	1.00	6.00	9.00	17.00	266.	

ND
4/12/12

(4 missing vials)

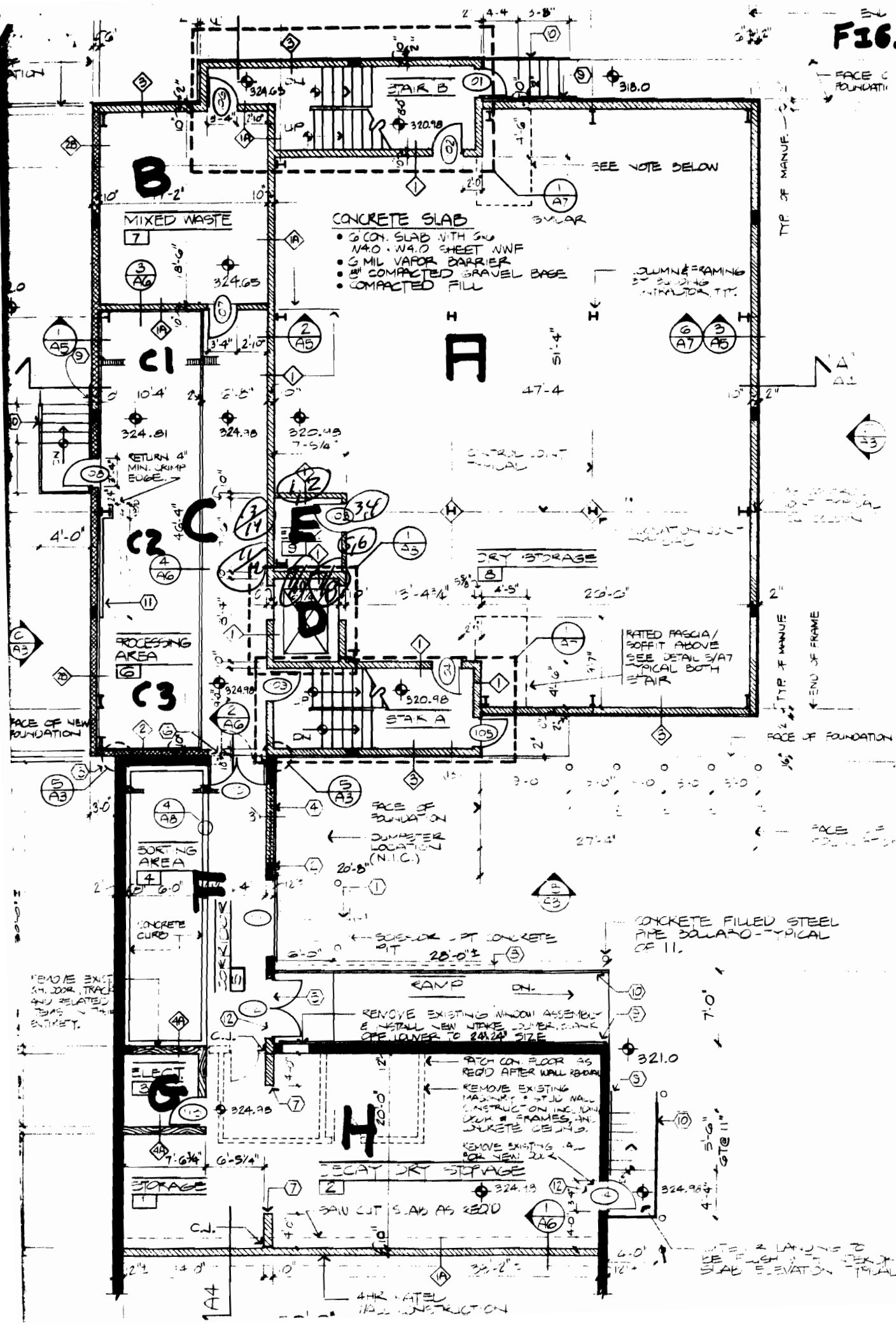
19	1.00	10.00	20.00	26.00	328.	} Bkg
20	1.00	8.00	17.00	22.00	343.	

(1 missing vial)

22	1.00	25078.0	25136.0	25145.0	830.	^{3H}	Std
23	1.00	28494.0	120708.	120872.	832.	^{14C}	
24	1.00	10033.0	106820.	150834.	320.	^{36Cl}	

CC = 37.88 cpm

FIG. 1



Decommission Meter Survey

Location: RM A, B, C, D, E, F (FLOORS)

Date: 4/2/12 C1, C2, C3

Initials: PB, PL

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading:

Check source reading:

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: $< 120 \text{ cpm}$

Check source reading: 30 Kcpm

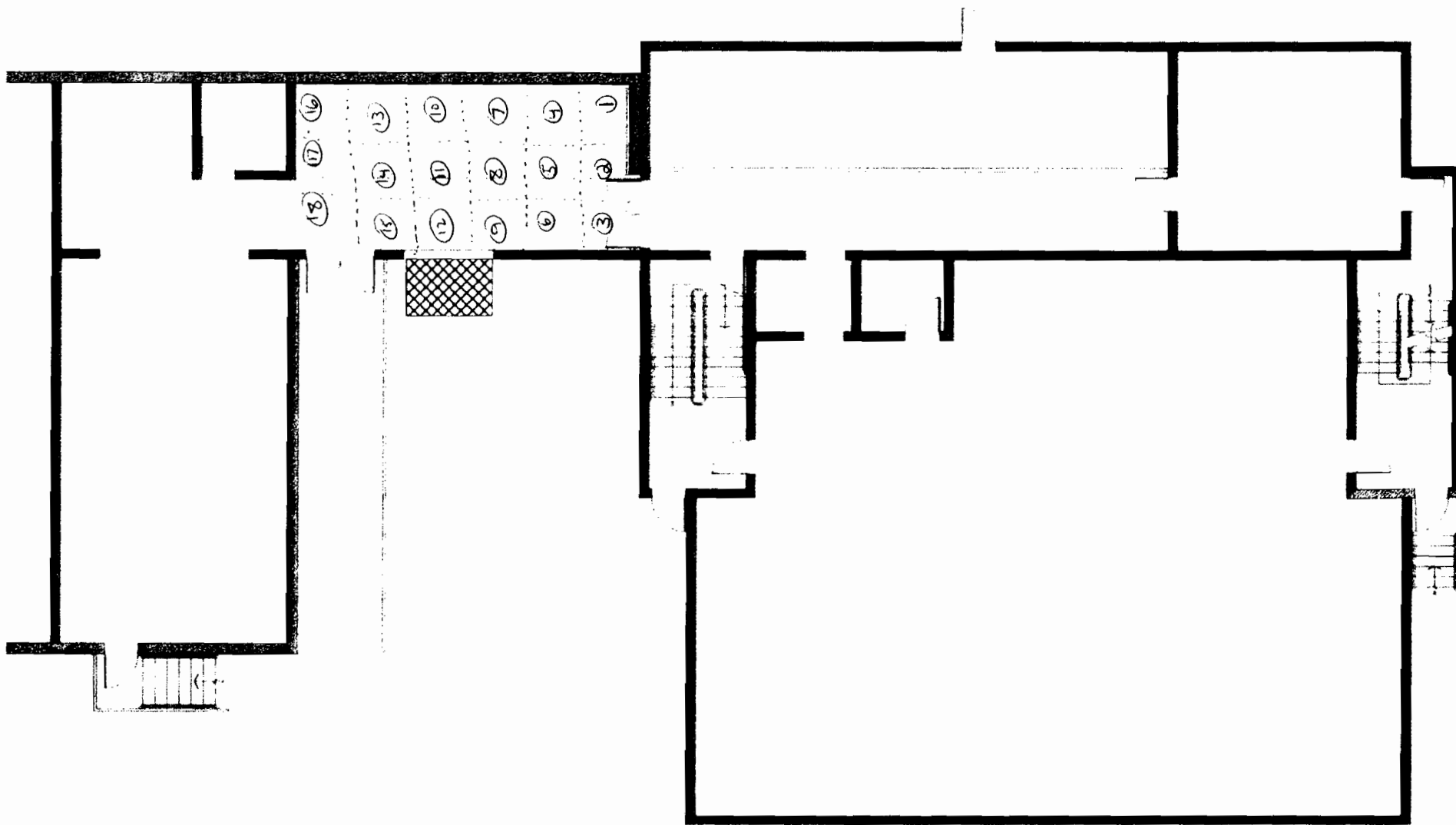
~ Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading: $\sim 1400 \text{ cpm}$

Check source reading: 28 Kcpm
 29 Kcpm
 30 Kcpm
 30 Kcpm

Meter survey results:

All readings \leq Bkg



Decommissioning Floor Plan

Facility:

Surveyed by:

Date of survey:

Drawing
Not To Scale

Sorting Room "F"

Protocol #: 9 Name: decom 03-Apr-02 08:02
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	8.00	14.00	14.00	242.	
2	1.00	7.00	12.00	17.00	252.	
3	1.00	6.00	12.00	17.00	251.	
4	1.00	9.00	13.00	19.00	248.	
5	1.00	9.00	13.00	18.00	253.	
6	1.00	9.00	13.00	19.00	246.	
7	1.00	10.00	17.00	23.00	225.	
8	1.00	12.00	16.00	23.00	213.	
9	1.00	10.00	15.00	18.00	261.	
10	1.00	3.00	8.00	14.00	244.	
11	1.00	8.00	13.00	15.00	244.	
12	1.00	7.00	11.00	16.00	256.	
13	1.00	1.00	2.00	10.00	232.	
14	1.00	10.00	13.00	16.00	243.	
15	1.00	6.00	13.00	19.00	244.	
16	1.00	13.00	18.00	23.00	242.	
17	1.00	9.00	14.00	20.00	232.	
18	1.00	15.00	25.00	27.00	245.	
(1 missing vial)						
20	1.00	14.00	20.00	28.00	333.	} Bkg
21	1.00	6.00	15.00	18.00	328.	
(1 missing vial)						
23	1.00	24672.0	24746.0	24754.0	830.	3H SH
24	1.00	28547.0	121530.	121681.	836.	14C SH
25	1.00	10046.0	106652.	150910.	322.	3Cc SH

ND
4/12/12

CC=40.33

Decommission Meter Survey

Location: Room F Walls

Date: 3/22/12

Initials: RD RS

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: ≤ 120 cpm

Check source reading: 34 k cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: ≤ 120 cpm

Check source reading: 42 k cpm

Meter Survey results: All Readings \leq Bkg

Protocol #: 9 Name:decom 23-Mar-00 10:09
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

F

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	4.00	10.00	15.00	235.	
2	1.00	9.00	14.00	16.00	230.	
3	1.00	8.00	14.00	16.00	241.	
4	1.00	5.00	13.00	20.00	240.	
5	1.00	8.00	11.00	19.00	298.	
6	1.00	5.00	12.00	14.00	243.	
7	1.00	11.00	15.00	19.00	184.	
8	1.00	7.00	13.00	21.00	224.	
9	1.00	7.00	12.00	16.00	243.	
10	1.00	8.00	16.00	22.00	230.	
11	1.00	10.00	13.00	20.00	206.	
12	1.00	8.00	15.00	19.00	243.	
13	1.00	6.00	15.00	22.00	200.	
14	1.00	6.00	14.00	19.00	219.	
15	1.00	4.00	4.00	9.00	222.	
16	1.00	12.00	21.00	27.00	252.	
17	1.00	2.00	9.00	12.00	239.	
18	1.00	11.00	18.00	21.00	244.	
19	1.00	14.00	23.00	27.00	242.	
20	1.00	5.00	9.00	14.00	244.	
21	1.00	6.00	14.00	16.00	235.	
22	1.00	9.00	12.00	16.00	257.	
23	1.00	10.00	20.00	24.00	251.	
24	1.00	3.00	9.00	15.00	245.	
25	1.00	8.00	12.00	23.00	255.	
26	1.00	6.00	8.00	13.00	244.	
27	1.00	9.00	15.00	18.00	256.	
28	1.00	9.00	19.00	24.00	237.	
29	1.00	8.00	18.00	27.00	241.	
30	1.00	6.00	10.00	14.00	244.	
31	1.00	10.00	13.00	20.00	259.	
32	1.00	11.00	15.00	24.00	255.	
33	1.00	15.00	16.00	22.00	242.	
(3 missing vials)						
37	1.00	11.00	15.00	20.00	332.	
38	1.00	12.00	18.00	23.00	338.	
(1 missing vial)						
40	1.00	25028.0	25111.0	25115.0	832.	
41	1.00	28335.0	120468.	120655.	831.	
42	1.00	9970.00	106488.	150381.	321.	

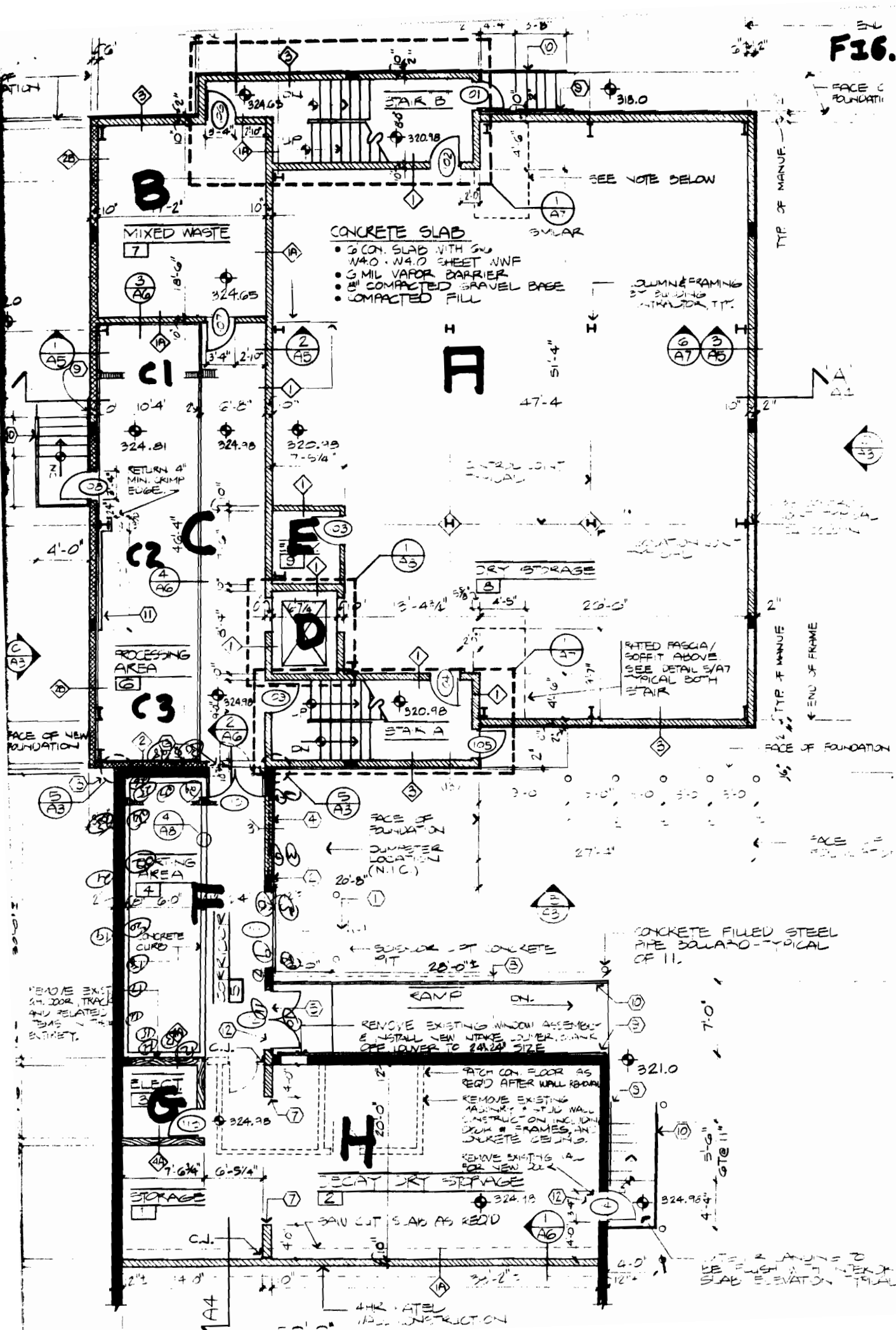
ND
 4/12/12

BKG

34
 NC
 36 CI

SK

CC = 34.17 cpm



Decommission Meter Survey

Location: Floor - Rm G

Date: 4/9/12

Initials: DJS

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: < 100 cpm

Check source reading: 24 Kcpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading:

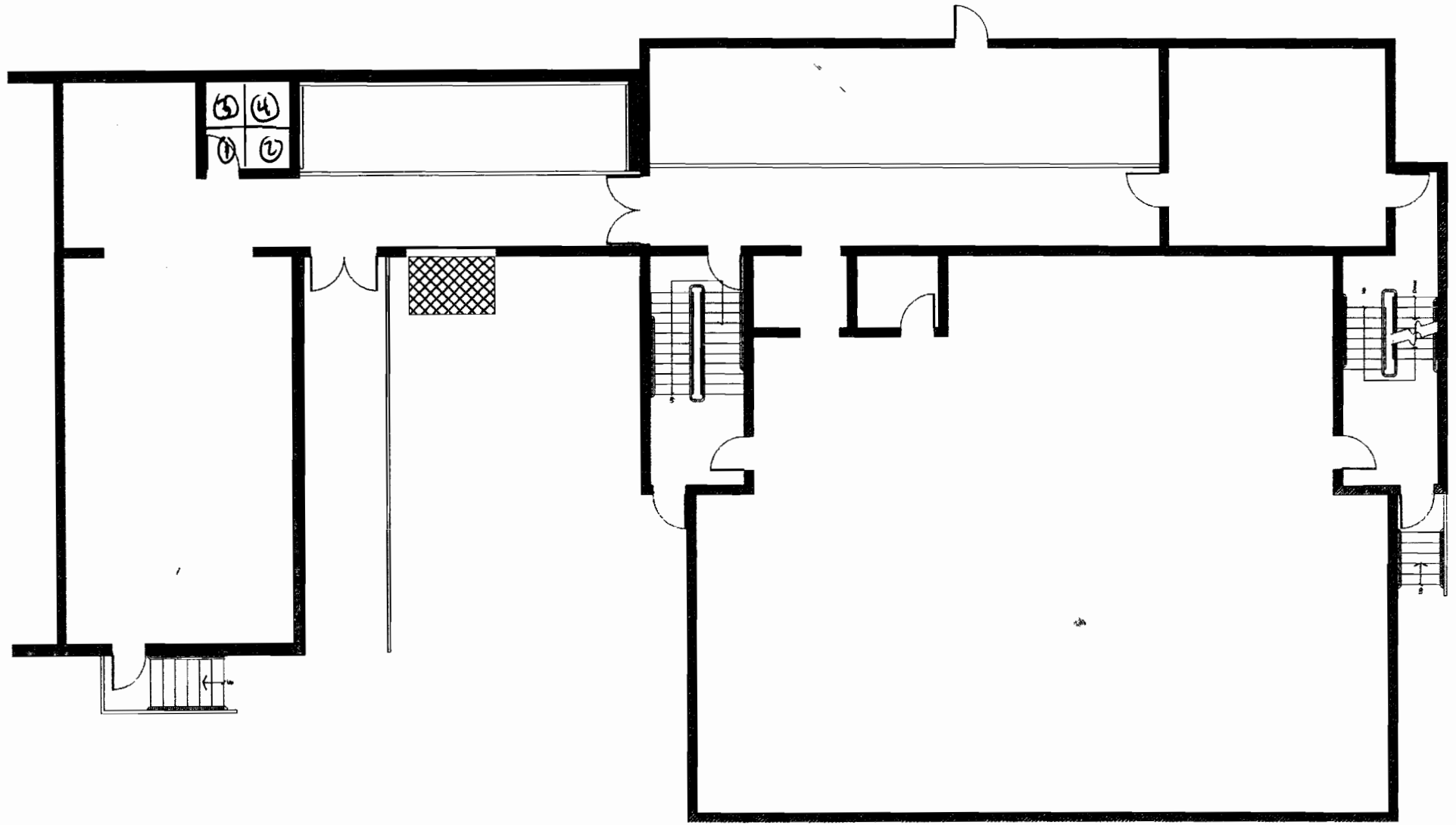
Check source reading:

Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading: 1400 cpm

Check source reading: 30 Kcpm
33 Kcpm
30 Kcpm

Meter survey results: All readings = Bkg



Decommissioning Floor Plan

Facility:

Surveyed by: *RLS*

Date of survey: *3/30/12*

Drawing
Not To Scale

Electrical Closet "G"

Protocol #: 9 Name: decom 02-Apr-00 08:12
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	18.00	23.00	27.00	214.	
2	1.00	10.00	19.00	23.00	242.	
3	1.00	7.00	9.00	9.00	238.	
4	1.00	10.00	19.00	24.00	243.	
(1 missing vial)						
6	1.00	7.00	14.00	18.00	342.	} Bkg
7	1.00	6.00	15.00	26.00	329.	
(1 missing vial)						
9	1.00	25097.0	25177.0	25183.0	830.	} ^{3H} MC *C1 } Std
10	1.00	28527.0	120408.	120573.	825.	
11	1.00	10038.0	107557.	151396.	316.	

Handwritten: 117
 4112112

CC = 37.88 cpm

Decommission Meter Survey

Location: Room G WALLS

Date: 3/23/12

Initials: RS RC

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: ≤ 120 cpm

Check source reading: 34 K cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: ≤ 120 cpm

Check source reading: 42 K cpm

Meter Survey results: ??

Protocol #: 9 Name:decom 23-Mar-00 14:11
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

G

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	9.00	16.00	22.00	252.	
2	1.00	11.00	19.00	20.00	256.	
3	1.00	16.00	20.00	25.00	262.	
4	1.00	14.00	21.00	27.00	249.	
5	1.00	7.00	14.00	19.00	256.	
6	1.00	53.00	55.00	58.00	241.	- Recount
7	1.00	11.00	19.00	24.00	260.	
8	1.00	8.00	13.00	15.00	250.	
9	1.00	6.00	12.00	17.00	226.	
10	1.00	11.00	17.00	21.00	239.	
11	1.00	8.00	13.00	18.00	254.	
12	1.00	6.00	15.00	21.00	300.	
13	1.00	5.00	11.00	16.00	235.	
14	1.00	7.00	12.00	14.00	259.	
15	1.00	215.00	222.00	226.00	255.	- Recount
16	1.00	3.00	4.00	12.00	266.	
(3 missing vials)						
20	1.00	6.00	15.00	21.00	339.	} Bks
21	1.00	9.00	14.00	21.00	333.	
(1 missing vial)						
23	1.00	24998.0	25078.0	25088.0	833.	- ³ H std
24	1.00	28187.0	121536.	121725.	834.	- ¹⁴ C std
25	1.00	9946.00	106873.	150762.	324.	- ³⁶ Cl std

*Recounted to
 ND.
 4/12/12*

CC= 31.68 cpm

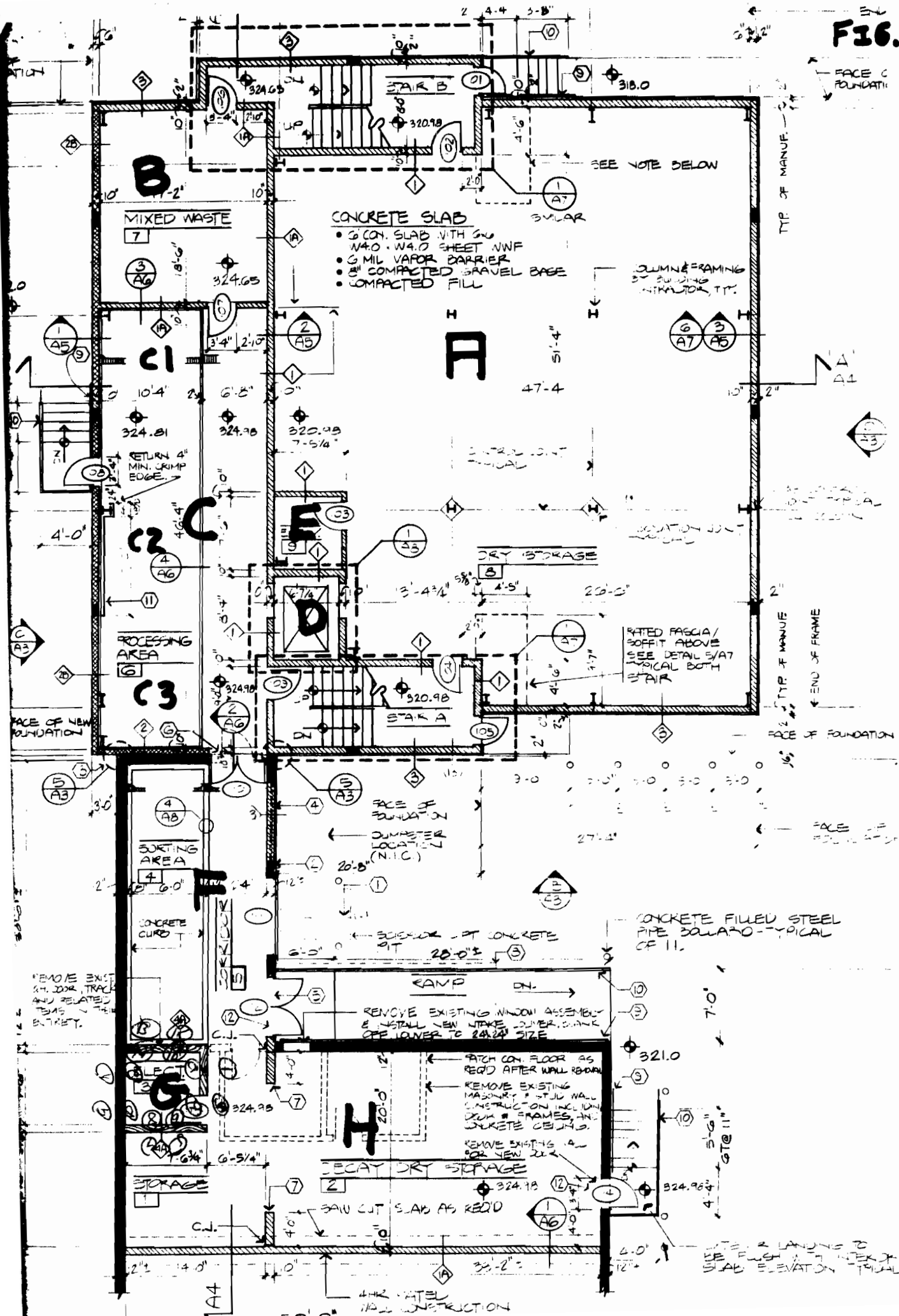
Room G Recounts For #6 & #15

Protocol #: 9 Name: decom 27-Mar-00 11:11
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tsIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tsIE	FLAG
(5 missing vials)						
6	1.00	6.00	14.00	19.00	226.	
(8 missing vials)						
15	1.00	6.00	9.00	13.00	248.	
(4 missing vials)						
20	1.00	7.00	15.00	21.00	342.	} Bks
21	1.00	4.00	14.00	20.00	331.	
(1 missing vial)						
23	1.00	25210.0	25276.0	25277.0	835.	- ³ H Stl
24	1.00	28108.0	120744.	120910.	836.	- ¹⁴ C Stl
25	1.00	9971.00	106664.	150960.	324.	- ³⁶ Cl Stl

CC= 31.68 cpm

FIG. 1



Decommission Meter Survey

Location: Floor - Rm H

Date: 4/19/12

Initials: DB; RC

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: 4100 cpm

Check source reading: 24K cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading:

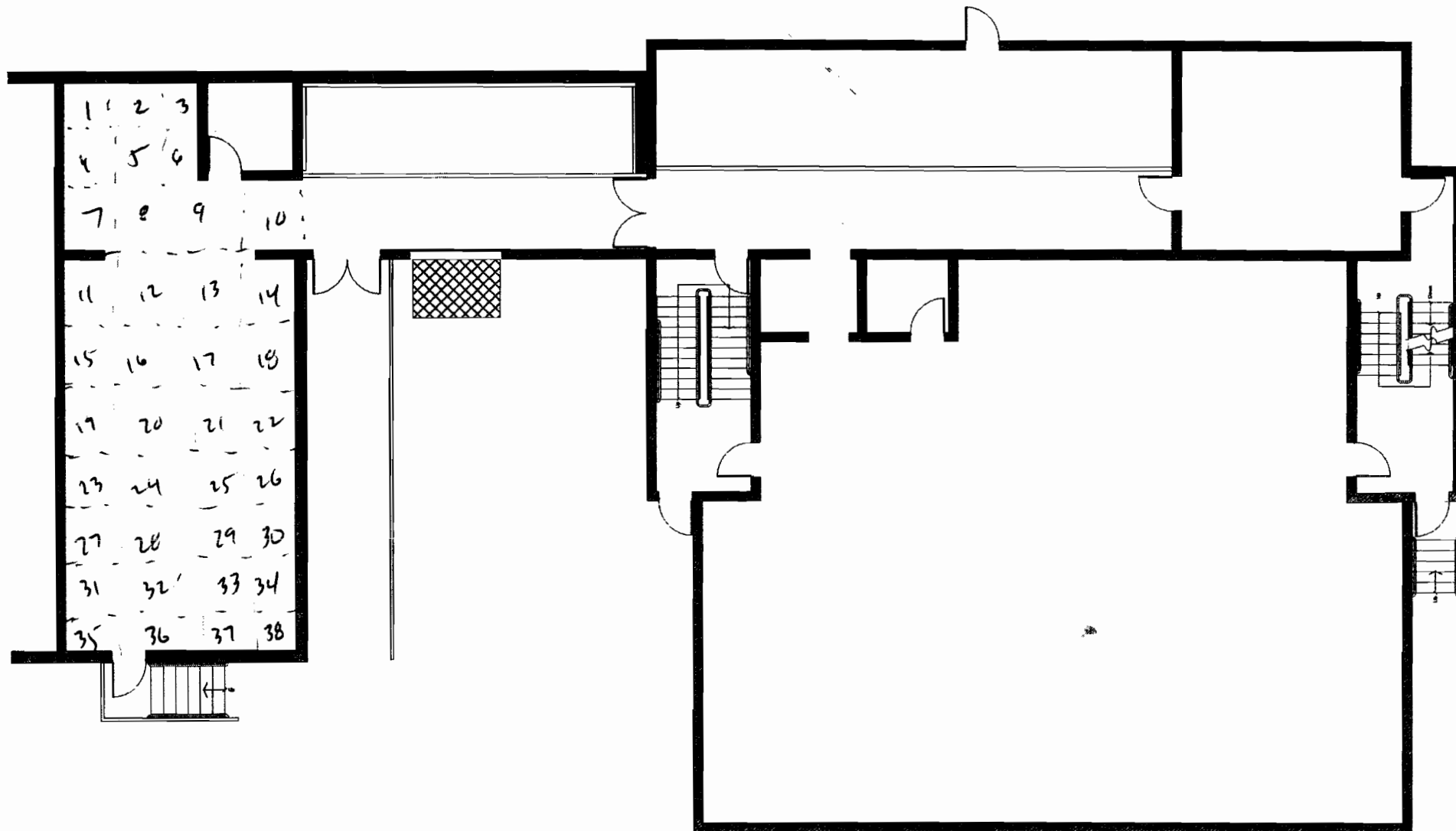
Check source reading:

Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading: 1400 cpm

Check source reading: 30K cpm
33K cpm
30K cpm

Meter survey results: All readings \leq Bkg



Decommissioning Floor Plan

Facility:

Room H Floor wipes

Surveyed by:

DB RC

Date of survey:

4/9/12

Drawing
Not To Scale

Protocol #: 9 Name: decom 09-Apr-00 10:59
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	12.00	19.00	25.00	267.	
2	1.00	8.00	15.00	20.00	268.	
3	1.00	5.00	17.00	23.00	265.	
4	1.00	10.00	16.00	16.00	268.	
5	1.00	15.00	18.00	25.00	272.	
6	1.00	8.00	14.00	22.00	267.	
7	1.00	10.00	26.00	29.00	256.	
8	1.00	10.00	11.00	15.00	279.	
9	1.00	11.00	14.00	18.00	266.	
10	1.00	22.00	31.00	43.00	266.	-Recount
11	1.00	6.00	9.00	11.00	257.	
12	1.00	13.00	15.00	19.00	262.	
13	1.00	1223.00	1225.00	1228.00	264.	-Recount
14	1.00	6.00	9.00	17.00	262.	
15	1.00	11.00	20.00	27.00	230.	
16	1.00	6.00	13.00	19.00	228.	
17	1.00	11.00	16.00	21.00	255.	
18	1.00	25.00	29.00	34.00	255.	
19	1.00	9.00	17.00	21.00	268.	
20	1.00	12.00	18.00	21.00	263.	
21	1.00	9.00	15.00	17.00	261.	
22	1.00	11.00	20.00	28.00	263.	
23	1.00	9.00	12.00	16.00	271.	
24	1.00	8.00	12.00	18.00	260.	
25	1.00	7.00	14.00	21.00	261.	
26	1.00	10.00	15.00	17.00	268.	
27	1.00	11.00	18.00	25.00	258.	
28	1.00	9.00	13.00	20.00	271.	
29	1.00	11.00	19.00	24.00	262.	
30	1.00	13.00	18.00	21.00	271.	
31	1.00	8.00	14.00	17.00	266.	
32	1.00	10.00	13.00	17.00	267.	
33	1.00	7.00	12.00	15.00	267.	
34	1.00	15.00	21.00	27.00	269.	
35	1.00	2.00	9.00	15.00	262.	
36	1.00	7.00	14.00	20.00	262.	
37	1.00	10.00	14.00	18.00	261.	
38	1.00	18.00	23.00	32.00	251.	

(1 missing vial)

40	1.00	8.00	14.00	19.00	336.	} Bkg
41	1.00	10.00	26.00	28.00	328.	

(1 missing vial)

43	1.00	24791.0	24872.0	24875.0	839.	} Std.
44	1.00	27745.0	120160.	120326.	844.	
45	1.00	9679.00	104740.	149745.	334.	

CC = 40.33

Protocol #: 9 Name:decom 09-Apr-00 13:43
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
(9 missing vials)						
10	1.00	11.00	15.00	21.00	259.	
(2 missing vials)						
13	1.00	9.00	15.00	17.00	263.	
(8 missing vials)						
22	1.00	11.00	15.00	24.00	338.	} Bkg
23	1.00	5.00	12.00	14.00	328.	
(1 missing vial)						
25	1.00	25231.0	25289.0	25293.0	838.	} 3rd. 34 14C 36Cl
26	1.00	28232.0	121177.	121385.	840.	
27	1.00	9807.00	104997.	150481.	328.	

CC = 35.41 cpm

Decommission Meter Survey

Location: Room H Walls

Date: 3/23/12

Initials: RS RC

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: ≤ 120 cpm

Check source reading: 34 k cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: ≤ 120 cpm

Check source reading: 42 k cpm

Meter Survey results:

?
All READINGS \leq BKG
~~4/25/12~~

Protocol #: 9 Name:decom 23-Mar-00 16:16
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

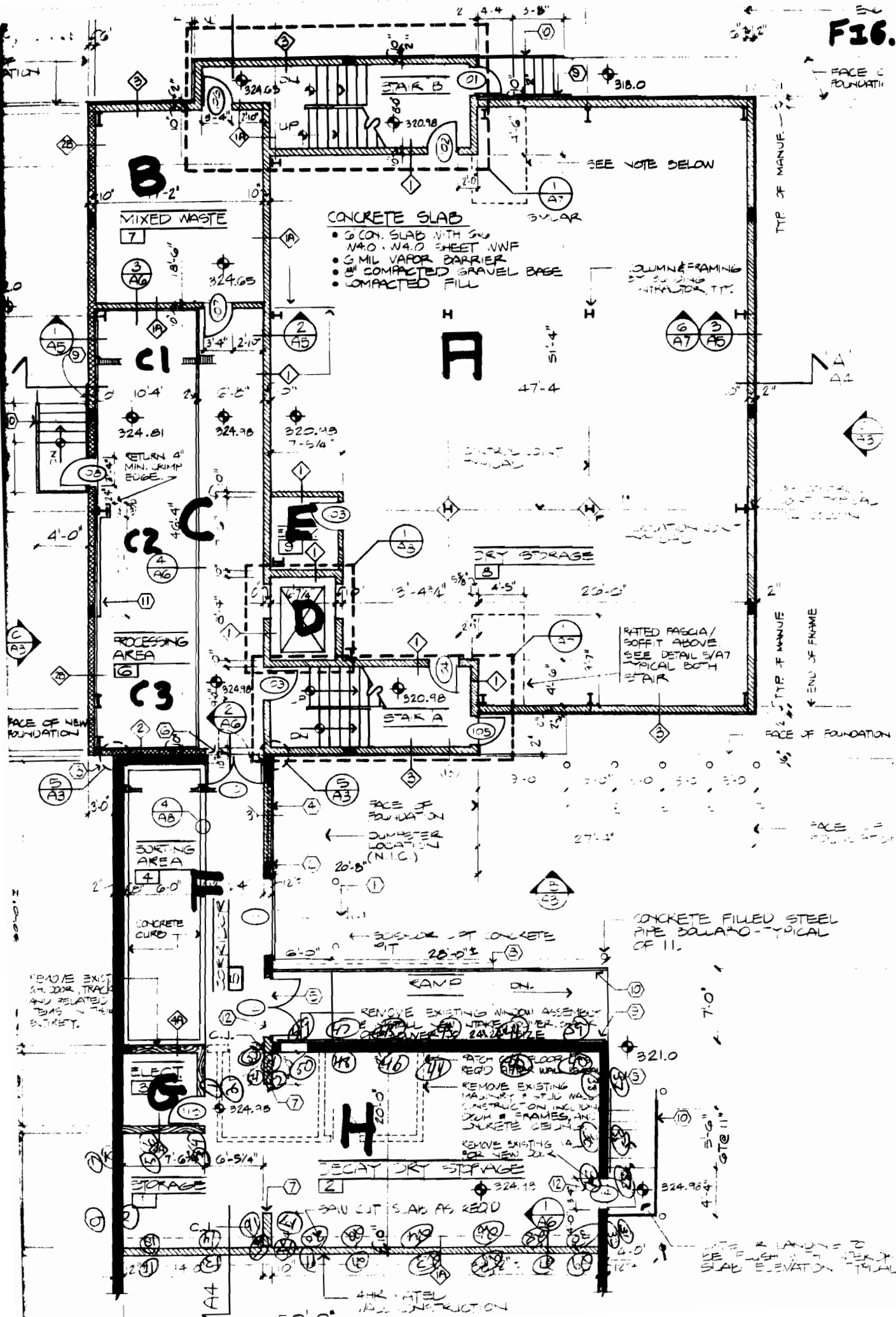
S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	7.00	14.00	17.00	241.	
2	1.00	11.00	12.00	21.00	228.	
3	1.00	7.00	12.00	14.00	247.	
4	1.00	7.00	14.00	21.00	238.	
5	1.00	11.00	14.00	18.00	248.	
6	1.00	14.00	21.00	29.00	233.	
7	1.00	8.00	11.00	19.00	250.	
8	1.00	6.00	11.00	16.00	233.	
9	1.00	11.00	17.00	23.00	250.	
10	1.00	10.00	12.00	14.00	241.	
11	1.00	13.00	16.00	21.00	248.	
12	1.00	5.00	14.00	17.00	249.	
13	1.00	6.00	13.00	18.00	238.	
14	1.00	8.00	12.00	23.00	242.	
15	1.00	14.00	19.00	25.00	239.	
16	1.00	13.00	21.00	26.00	249.	
17	1.00	15.00	20.00	25.00	238.	
18	1.00	8.00	18.00	22.00	244.	
19	1.00	5.00	10.00	19.00	248.	
20	1.00	7.00	12.00	15.00	243.	
21	1.00	8.00	11.00	15.00	237.	
22	1.00	13.00	16.00	20.00	231.	
23	1.00	11.00	15.00	21.00	242.	
24	1.00	7.00	13.00	18.00	209.	
25	1.00	11.00	19.00	24.00	243.	
26	1.00	8.00	12.00	18.00	236.	
27	1.00	10.00	12.00	17.00	300.	
28	1.00	13.00	16.00	21.00	300.	
29	1.00	7.00	15.00	20.00	254.	
30	1.00	6.00	11.00	18.00	245.	
31	1.00	7.00	13.00	15.00	236.	
32	1.00	11.00	14.00	21.00	214.	
33	1.00	8.00	15.00	21.00	244.	
34	1.00	13.00	19.00	25.00	223.	
35	1.00	8.00	12.00	17.00	246.	
36	1.00	9.00	23.00	29.00	226.	
37	1.00	7.00	12.00	16.00	251.	
38	1.00	6.00	15.00	22.00	223.	
39	1.00	10.00	14.00	17.00	249.	
40	1.00	10.00	12.00	13.00	233.	
41	1.00	15.00	19.00	27.00	270.	
42	1.00	10.00	14.00	18.00	272.	
43	1.00	11.00	19.00	23.00	274.	
44	1.00	10.00	15.00	24.00	258.	
45	1.00	12.00	19.00	21.00	260.	
46	1.00	8.00	14.00	20.00	255.	
47	1.00	10.00	15.00	19.00	258.	
48	1.00	6.00	15.00	21.00	260.	
49	1.00	8.00	16.00	23.00	249.	
50	1.00	13.00	17.00	20.00	238.	

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
51	1.00	11.00	15.00	18.00	258.	
52	1.00	13.00	17.00	21.00	260.	
53	1.00	11.00	15.00	19.00	272.	
54	1.00	11.00	15.00	22.00	256.	
(1 missing vial)						
56	1.00	8.00	19.00	25.00	338.	} Bks
57	1.00	9.00	23.00	25.00	331.	
(1 missing vial)						
59	1.00	25207.0	25273.0	25282.0	833.	- ³ H std.
60	1.00	28457.0	120741.	120868.	832.	- ¹⁴ C std.
61	1.00	9997.00	107350.	151529.	325.	- ³⁶ Cl std.

ND
4/12/12

CC = 36.65 cpm

FIG. 1



Decommission Meter Survey

Location: RM I, J, K, L, N, C3, BATHROOMS, (FLOORS)

Date: 4/3/12

Initials: DS, BL

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading:

Check source reading:

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

~~1000~~ ¹²⁰⁰ < 1200cpm

Check source reading:

32 Kcpm

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading:

< 1200cpm

Check source reading:

30 Kcpm

Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading:

< 1400cpm

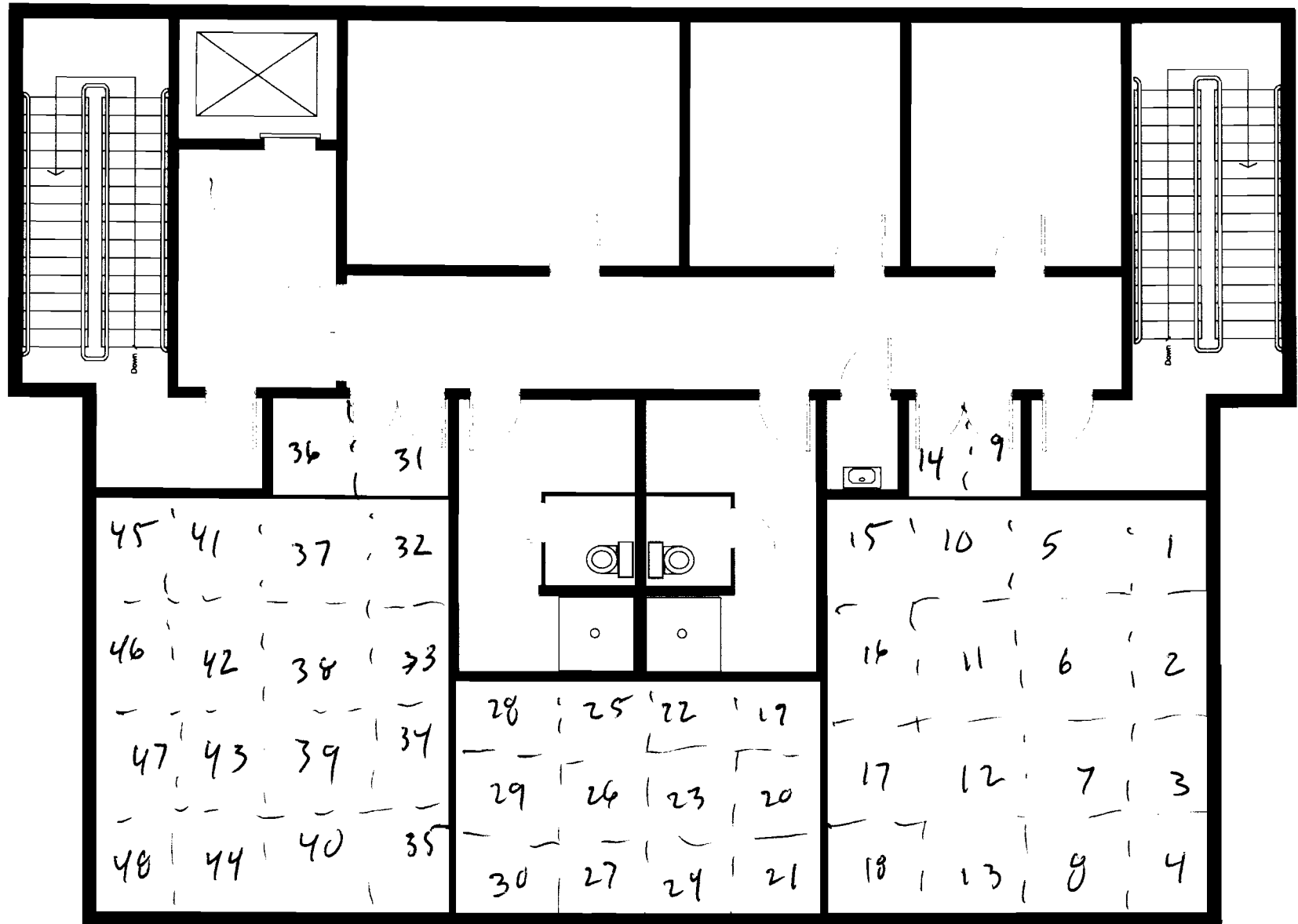
Check source reading:

29 Kcpm
30 Kcpm
33 Kcpm
34 Kcpm

Meter survey results:

All reading < BKG

Rm "I" & "J" Floor wipes



Decommissioning Floor Plan

Facility:

Surveyed by:

DS, BL

Date of survey:

4/2/12

Drawing
Not To Scale

3A5

Protocol #: 9 Name:decom 02-Apr-10 10:06
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	12.00	16.00	19.00	214.	
2	1.00	10.00	14.00	18.00	255.	
3	1.00	9.00	12.00	18.00	254.	
4	1.00	5.00	13.00	22.00	230.	
5	1.00	9.00	13.00	16.00	249.	
6	1.00	7.00	16.00	21.00	262.	
7	1.00	8.00	15.00	22.00	267.	
8	1.00	8.00	17.00	23.00	254.	
9	1.00	9.00	15.00	24.00	251.	
10	1.00	12.00	20.00	22.00	262.	
11	1.00	8.00	13.00	16.00	262.	
12	1.00	8.00	9.00	17.00	254.	
13	1.00	9.00	10.00	13.00	248.	
14	1.00	10.00	21.00	29.00	232.	
15	1.00	11.00	17.00	21.00	248.	
16	1.00	10.00	17.00	23.00	257.	
17	1.00	10.00	14.00	16.00	253.	
18	1.00	11.00	21.00	24.00	245.	
19	1.00	6.00	9.00	12.00	245.	
20	1.00	9.00	14.00	19.00	257.	
21	1.00	11.00	15.00	17.00	244.	
22	1.00	4.00	12.00	16.00	254.	
23	1.00	5.00	13.00	23.00	249.	
24	1.00	10.00	24.00	29.00	255.	
25	1.00	11.00	22.00	29.00	235.	
26	1.00	8.00	12.00	16.00	254.	
27	1.00	7.00	10.00	16.00	253.	
28	1.00	9.00	14.00	22.00	237.	
29	1.00	12.00	16.00	20.00	240.	
30	1.00	6.00	13.00	20.00	214.	
31	1.00	8.00	15.00	20.00	235.	
32	1.00	5.00	14.00	18.00	264.	
33	1.00	8.00	11.00	18.00	255.	
34	1.00	12.00	18.00	23.00	235.	
35	1.00	12.00	23.00	30.00	218.	
36	1.00	6.00	16.00	20.00	250.	
37	1.00	4.00	11.00	20.00	254.	
38	1.00	9.00	15.00	18.00	246.	
39	1.00	6.00	15.00	20.00	252.	
40	1.00	10.00	19.00	26.00	218.	
41	1.00	10.00	14.00	18.00	263.	
42	1.00	13.00	16.00	20.00	247.	
43	1.00	7.00	16.00	20.00	251.	
44	1.00	10.00	17.00	21.00	239.	
45	1.00	4.00	15.00	22.00	224.	
46	1.00	9.00	14.00	20.00	218.	
47	1.00	11.00	17.00	24.00	239.	
48	1.00	7.00	12.00	16.00	227.	
(1 missing vial)						
50	1.00	9.00	13.00	21.00	263.	BM

MD
 4/12/12

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
51	1.00	8.00	13.00	16.00	273.	734
(4 missing vials)						
56	1.00	25177.0	25246.0	25251.0	826.	7434
57	1.00	28601.0	121338.	121491.	832.	14254
58	1.00	10033.0	106948.	151237.	323.	366154

CC = 31.68

Decommission Meter Survey

Location: BUILDING #27 ROOMS I, J WALLS

Date: 3/7/12

Initials: PB, BL

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: ≤ 120 cpm

Check source reading: 34K cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading: ≤ 120 cpm

Check source reading: 34K cpm

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: ≤ 120 cpm

Check source reading: 42K cpm

Meter Survey results: All readings \leq Bkg.

FIG. 2



- 

NORTH

SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0" FF ELEV. 334.98'

— WALL

RM I, J WALL WIPES

Protocol #: 9 Name:decom 07-Mar-00 12:16
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	16.00	23.00	31.00	266.	
2	1.00	12.00	13.00	20.00	269.	
3	1.00	12.00	15.00	16.00	267.	
4	1.00	4.00	12.00	15.00	279.	
5	1.00	8.00	13.00	18.00	255.	
6	1.00	8.00	13.00	16.00	263.	
7	1.00	5.00	8.00	14.00	261.	
8	1.00	8.00	14.00	19.00	258.	
9	1.00	7.00	15.00	22.00	258.	
10	1.00	9.00	14.00	22.00	256.	
11	1.00	6.00	12.00	20.00	258.	
12	1.00	14.00	26.00	28.00	262.	
13	1.00	8.00	19.00	27.00	258.	
14	1.00	8.00	13.00	16.00	252.	
15	1.00	4.00	8.00	11.00	256.	
16	1.00	6.00	9.00	11.00	252.	
17	1.00	5.00	13.00	18.00	252.	
18	1.00	4.00	9.00	11.00	253.	
19	1.00	6.00	13.00	17.00	262.	
20	1.00	8.00	14.00	22.00	252.	
21	1.00	12.00	21.00	27.00	266.	
22	1.00	11.00	15.00	20.00	251.	
23	1.00	7.00	18.00	21.00	266.	
24	1.00	14.00	23.00	31.00	250.	
25	1.00	8.00	17.00	17.00	263.	
26	1.00	10.00	17.00	25.00	255.	
27	1.00	7.00	12.00	19.00	244.	
28	1.00	8.00	18.00	32.00	255.	
29	1.00	13.00	18.00	22.00	257.	
30	1.00	10.00	14.00	18.00	263.	
31	1.00	4.00	7.00	14.00	245.	
32	1.00	5.00	7.00	13.00	269.	
33	1.00	11.00	16.00	18.00	254.	
34	1.00	9.00	11.00	15.00	251.	
35	1.00	9.00	17.00	25.00	254.	
36	1.00	2.00	9.00	16.00	256.	
37	1.00	10.00	17.00	20.00	249.	
38	1.00	8.00	13.00	17.00	236.	
39	1.00	11.00	21.00	24.00	257.	
40	1.00	7.00	11.00	16.00	196.	
41	1.00	7.00	14.00	18.00	248.	
42	1.00	14.00	18.00	20.00	245.	
43	1.00	11.00	18.00	24.00	252.	
44	1.00	10.00	19.00	23.00	266.	
45	1.00	7.00	14.00	19.00	242.	
46	1.00	7.00	15.00	22.00	245.	
47	1.00	8.00	13.00	19.00	243.	
48	1.00	9.00	15.00	17.00	246.	
49	1.00	9.00	14.00	20.00	245.	
50	1.00	4.00	9.00	13.00	239.	

RM I, J RM WALL WIPES

S#	TIME	CPMA	CPMB	CPMC	tsIE	FLAG
51	1.00	7.00	14.00	18.00	246.	
52	1.00	5.00	13.00	18.00	252.	
53	1.00	5.00	10.00	17.00	244.	
54	1.00	12.00	18.00	24.00	260.	
55	1.00	10.00	16.00	21.00	239.	
56	1.00	8.00	13.00	22.00	249.	
57	1.00	7.00	15.00	20.00	254.	
58	1.00	11.00	17.00	23.00	249.	
59	1.00	4.00	10.00	14.00	261.	
60	1.00	10.00	18.00	30.00	257.	
61	1.00	8.00	14.00	20.00	261.	
62	1.00	13.00	19.00	21.00	259.	
63	1.00	8.00	13.00	16.00	263.	
64	1.00	12.00	16.00	23.00	253.	
65	1.00	5.00	12.00	19.00	256.	
66	1.00	7.00	11.00	12.00	247.	
67	1.00	6.00	10.00	19.00	255.	
68	1.00	3.00	8.00	13.00	251.	
69	1.00	9.00	14.00	22.00	259.	
70	1.00	9.00	12.00	21.00	253.	
71	1.00	7.00	12.00	20.00	254.	
72	1.00	8.00	10.00	14.00	227.	
73	1.00	9.00	16.00	20.00	243.	
74	1.00	10.00	15.00	18.00	223.	
75	1.00	8.00	12.00	17.00	255.	
76	1.00	9.00	15.00	19.00	250.	
77	1.00	13.00	19.00	23.00	266.	
78	1.00	10.00	16.00	19.00	256.	
79	1.00	10.00	13.00	17.00	260.	
80	1.00	11.00	14.00	16.00	258.	
81	1.00	10.00	23.00	29.00	267.	
82	1.00	12.00	14.00	19.00	262.	
(1 missing vial)						
84	1.00	25381.0	25434.0	25438.0	825 ³⁴	} STD
85	1.00	28435.0	120463.	120624.	830 ^{MC}	
86	1.00	10024.0	106772.	151471.	323 ³⁴	
(1 missing vial)						
88	1.00	7.00	13.00	18.00	329.	} BKG
89	1.00	6.00	14.00	26.00	339.	

ND
41/112/112

CC= 37.88 cpm

Decommission Meter Survey

Location: RM I, J, K, L, N, C3, Bathrooms (Floors)

Date: 4/3/12

Initials: DS, BL

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading:

Check source reading:

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

~~1200~~ ¹²⁰⁰ < 120cpm

Check source reading:

32 Kcpm

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading:

< 120cpm

Check source reading:

30 Kcpm

Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading:

< 1400cpm

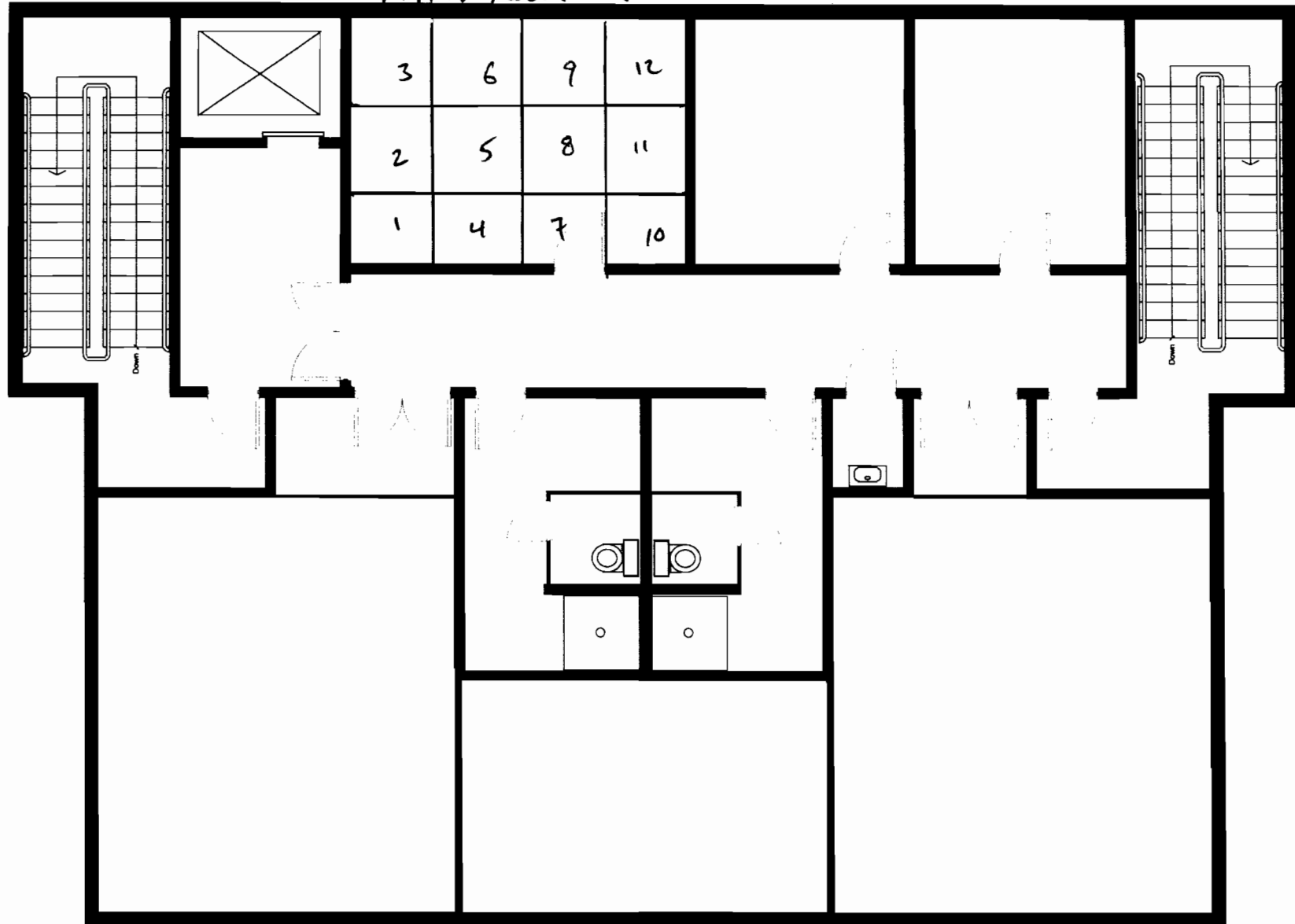
Check source reading:

29 Kcpm
30 Kcpm
33 Kcpm
34 Kcpm

Meter survey results:

All readings < Bkg

Filter Room "K"



Decommissioning Floor Plan

Facility:

Surveyed by:

Date of survey:

Drawing
Not To Scale

Filter Run "K"

Protocol #: 9 Name: decom 02-Apr-92 12:45
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	12.00	18.00	23.00	267.	
2	1.00	9.00	15.00	20.00	253.	
3	1.00	7.00	10.00	14.00	218.	
4	1.00	15.00	25.00	29.00	232.	
5	1.00	10.00	20.00	26.00	248.	
6	1.00	6.00	10.00	17.00	236.	
7	1.00	6.00	15.00	22.00	230.	
8	1.00	12.00	20.00	23.00	207.	
9	1.00	12.00	16.00	18.00	223.	
10	1.00	8.00	12.00	13.00	241.	
11	1.00	6.00	11.00	13.00	229.	
12	1.00	8.00	13.00	20.00	239.	
(1 missing vial)						
14	1.00	11.00	16.00	22.00	258.	} B4
15	1.00	17.00	24.00	28.00	271.	
(4 missing vials)						
20	1.00	24788.0	24844.0	24852.0	827.	3HSM
21	1.00	28711.0	121273.	121436.	829.	14C SM
22	1.00	10122.0	107219.	151133.	322.	361 SM

VD
 4/12/12

CC= 40.33

Decommission Meter Survey

Location: BUILDING #27 RM K WALLS

Date: 3/7/12

Initials: DB, BL

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: $\leq 120 \text{ Kcpm}$

Check source reading: 346 cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading: $\leq 120 \text{ Kcpm}$

Check source reading: 34 Kcpm

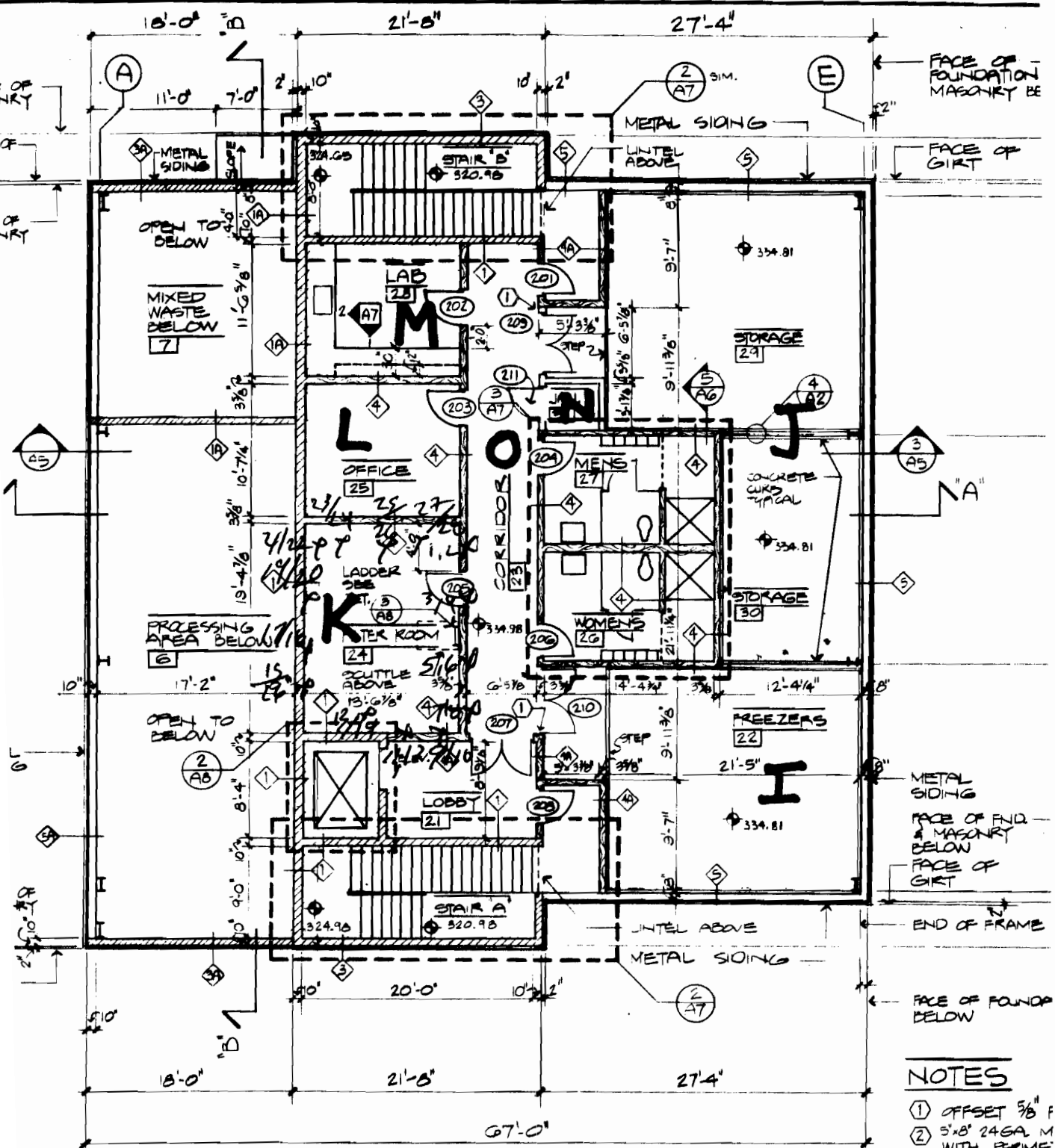
Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: $\leq 120 \text{ Kcpm}$

Check source reading: 42 Kcpm

Meter Survey results:

ALL READINGS \leq BRG



NOTES

- ① OFFSET $\frac{5}{8}$ " F
- ② 5'x8' 24-GA. M WITH PERIMETER SEAL TYPICAL



NORTH

1
A2

SECOND FLOOR PLAN

SCALE: $\frac{1}{8}" = 1'-0"$ FF ELEV. 334.98'

— WALL

RM K WALL WIPO S

Protocol #: 9 Name:decom 08-Mar-00 08:49
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	3.00	3.00	9.00	241.	
2	1.00	11.00	16.00	17.00	233.	
3	1.00	6.00	13.00	17.00	247.	
4	1.00	7.00	16.00	20.00	245.	
5	1.00	11.00	13.00	21.00	236.	
6	1.00	8.00	13.00	16.00	251.	
7	1.00	5.00	11.00	14.00	181.	
8	1.00	11.00	19.00	21.00	239.	
9	1.00	6.00	12.00	19.00	238.	
10	1.00	8.00	12.00	20.00	252.	
11	1.00	7.00	13.00	17.00	244.	
12	1.00	5.00	11.00	15.00	263.	
13	1.00	8.00	16.00	23.00	252.	
14	1.00	12.00	15.00	22.00	248.	
15	1.00	11.00	16.00	21.00	227.	
16	1.00	8.00	14.00	19.00	212.	
17	1.00	8.00	11.00	14.00	249.	
18	1.00	13.00	20.00	25.00	225.	
19	1.00	8.00	16.00	20.00	240.	
20	1.00	6.00	13.00	20.00	222.	
21	1.00	7.00	18.00	20.00	224.	
22	1.00	7.00	15.00	18.00	246.	
23	1.00	10.00	14.00	17.00	235.	
24	1.00	8.00	18.00	22.00	257.	
25	1.00	11.00	14.00	17.00	236.	
26	1.00	8.00	14.00	21.00	223.	
27	1.00	5.00	16.00	19.00	230.	
28	1.00	12.00	16.00	23.00	207.	

(1 missing vial)

30	1.00	24963.0	25035.0	25041.0	833.	} 3H 14C } 5H 30Cl
31	1.00	28523.0	120750.	120950.	831.	
32	1.00	9950.00	106028.	150787.	327.	
33	1.00	5.00	16.00	21.00	329.	} 3HCG
34	1.00	13.00	21.00	26.00	338.	

CC = 37.88 cpm

ND
 4/12/12

Decommission Meter Survey

Location: RM I, J, K, L, N, C3

Date: 4/3/12

Initials: DS, BL

BATHROOMS, (FLOORS)
OK

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading:

Check source reading:

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

~~1000~~ ^{top} < 120cpm

Check source reading:

32 Kcpm

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading:

< 120cpm

Check source reading:

30 Kcpm

Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading:

< 1400cpm

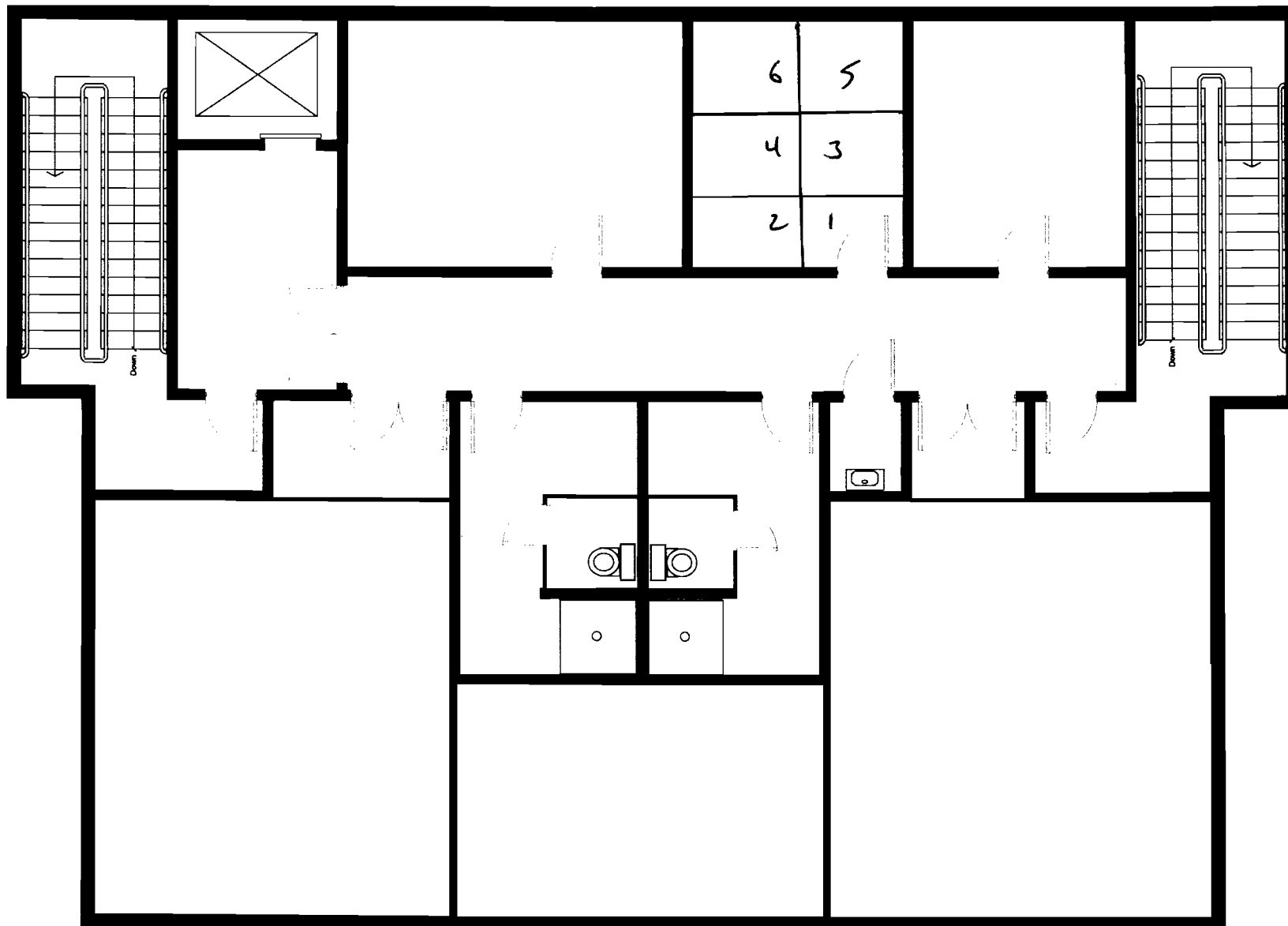
Check source reading:

29 Kcpm
30 Kcpm
33 Kcpm
34 Kcpm

Meter survey results:

All readings \leq BKG

Office "L"



Decommissioning Floor Plan

Facility:

Surveyed by:

Date of survey:

Drawing
Not To Scale

02 Apr 02

Protocol #: 9 Name: decom 02-Apr-02 13:27

Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Time = 1.00 QIP = tSIE ES Terminator = Count


S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	9.00	15.00	19.00	255.	
2	1.00	7.00	9.00	15.00	240.	
3	1.00	12.00	15.00	16.00	252.	
4	1.00	9.00	15.00	19.00	238.	
5	1.00	9.00	17.00	26.00	240.	
6	1.00	10.00	15.00	20.00	239.	
(1 missing vial)						
8	1.00	7.00	13.00	20.00	337.	
9	1.00	10.00	26.00	34.00	329.	
(1 missing vial)						
11	1.00	24973.0	25041.0	25044.0	828.	3HSTM
12	1.00	28512.0	120785.	120934.	827.	14CSM
13	1.00	9943.00	107126.	150985.	320.	36CUM

cc = 47.59

Decommission Meter Survey

Location: Room L Walls

Date: 3/15/12

Initials: 

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: ≤ 120 cpm

Check source reading: 34K cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading:

Check source reading:

Meter Survey results: All Readings \leq BKG

Protocol #: 9 Name:decom 15-Mar-00 09:29
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

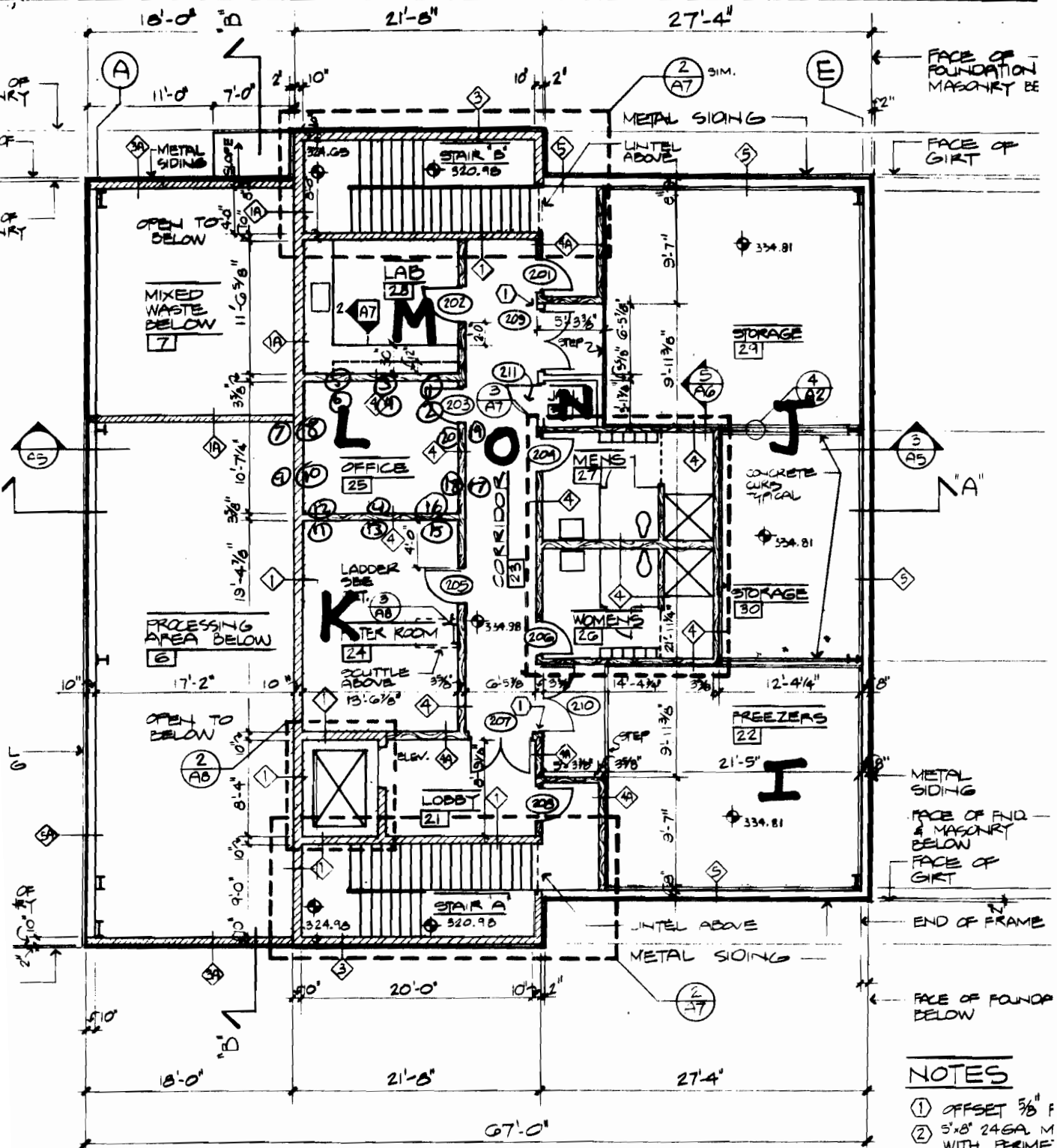
S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	5.00	14.00	18.00	234.	
2	1.00	10.00	14.00	23.00	236.	
3	1.00	11.00	18.00	22.00	249.	
4	1.00	5.00	12.00	15.00	257.	
5	1.00	4.00	12.00	17.00	265.	
6	1.00	11.00	17.00	20.00	260.	
7	1.00	7.00	9.00	14.00	259.	
8	1.00	6.00	12.00	19.00	263.	
9	1.00	8.00	16.00	20.00	259.	
10	1.00	13.00	21.00	27.00	264.	
11	1.00	11.00	17.00	22.00	258.	
12	1.00	7.00	10.00	17.00	256.	
13	1.00	14.00	17.00	21.00	263.	
14	1.00	6.00	14.00	19.00	258.	
15	1.00	3.00	10.00	13.00	252.	
16	1.00	7.00	9.00	19.00	257.	
17	1.00	4.00	7.00	11.00	255.	
18	1.00	12.00	22.00	27.00	261.	
19	1.00	5.00	10.00	13.00	251.	
20	1.00	10.00	17.00	20.00	259.	

(1 missing vial)

22	1.00	10.00	17.00	26.00	332.	} BKG 3H 14C 36Cl
23	1.00	7.00	23.00	31.00	343.	
24	1.00	25172.0	25239.0	25245.0	833.	
25	1.00	28473.0	120479.	120646.	837.	
26	1.00	10190.0	107114.	151278.	324.	

Std

CC = 43,97 cpm



1
A2

SECOND FLOOR PLAN

SCALE: $\frac{1}{8}" = 1'-0"$ FF ELEV. 324.98'



NORTH

— WALL

Decommission Meter Survey

Location: RM "M" Floor & WALLS & Counters

Date: 4/10/12

Initials: DB

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: < 100 cpm

Check source reading: 25K cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading: < 100 cpm

Check source reading: 25K cpm

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading:

Check source reading:

Meter: Ludlum 12 sn 274198 with 239-1F floor probe

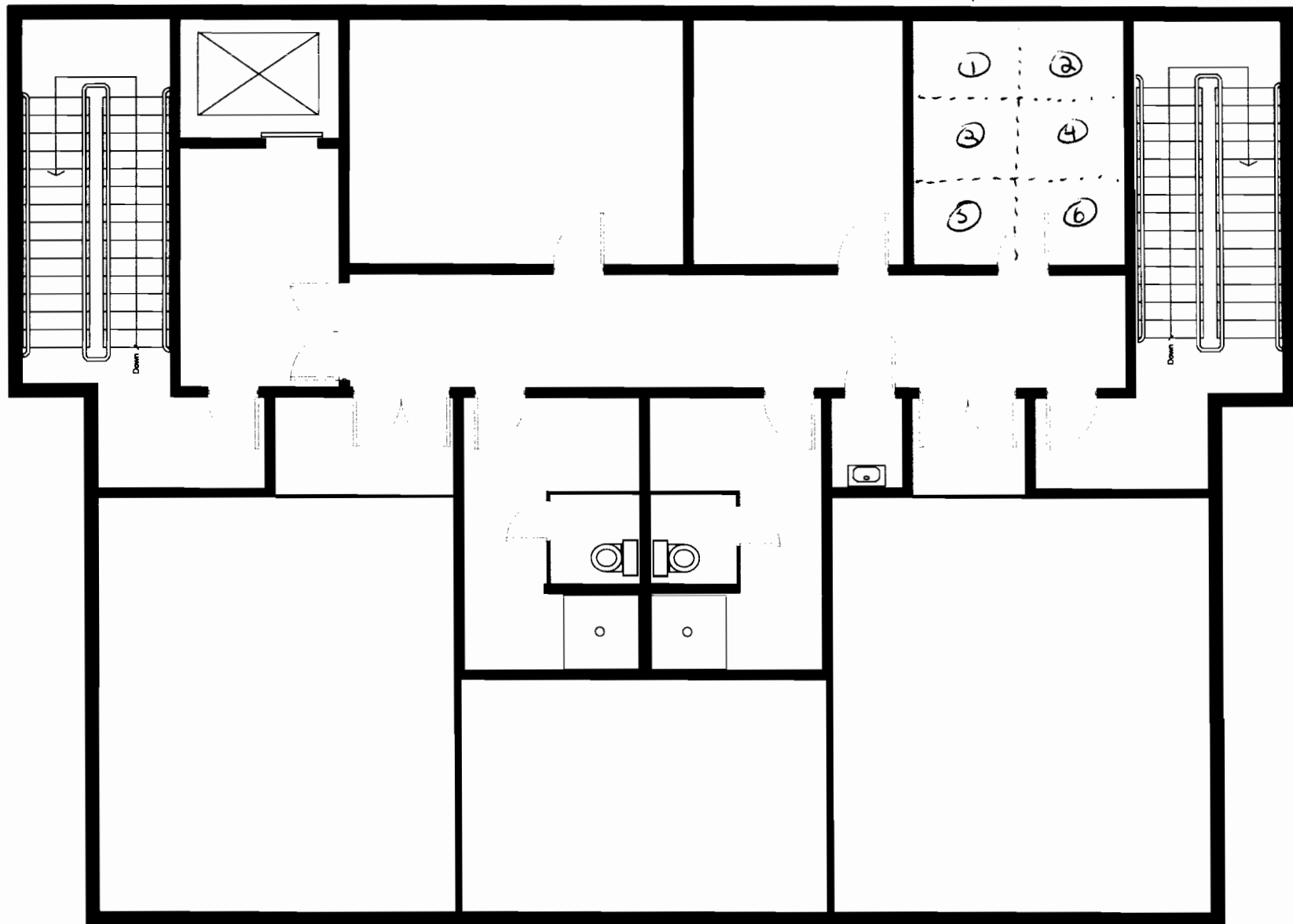
Background reading:

Check source reading:

Meter survey results: All reading $<$ Bkg

24 "M"

FLOOR



Decommissioning Floor Plan

Facility:

Surveyed by:

Date of survey:

5/10/12

Drawing
Not To Scale

Protocol #: 9 Name:decom 10-Apr-00 09:42
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

Room M
 FLOORS

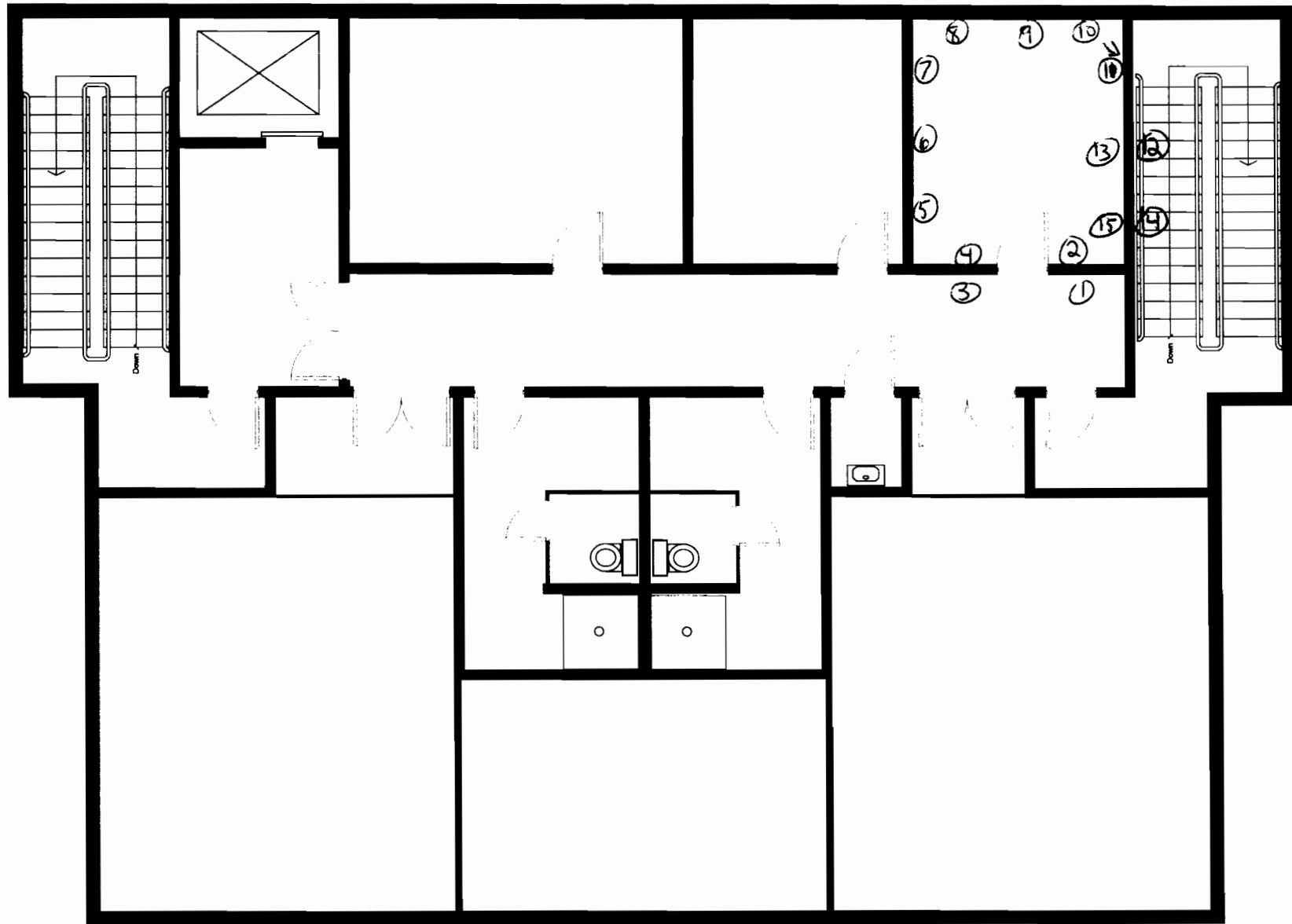
S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	11.00	16.00	24.00	260.	
2	1.00	9.00	16.00	24.00	243.	
3	1.00	19.00	25.00	29.00	264.	
4	1.00	14.00	18.00	21.00	272.	
5	1.00	5.00	11.00	13.00	254.	
6	1.00	6.00	14.00	18.00	256.	
(15 missing vials)						
22	1.00	6.00	14.00	22.00	338.	} BKG
23	1.00	9.00	22.00	29.00	329.	
(1 missing vial)						
25	1.00	25168.0	25256.0	25259.0	839.	^{3H}
26	1.00	28159.0	121008.	121182.	840.	^{14C}
27	1.00	9995.00	105648.	150818.	327.	^{36Cl} Std.

ND
 4/12/12

CC= 41.55 cpm

Rm "M"

WALLS



Decommissioning Floor Plan

Facility:

Surveyed by:

KL

Date of survey:

5/10/12

Drawing
Not To Scale

Protocol #: 9 Name:decom 10-Apr-00 10:08
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

Room M
WALLS

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	8.00	12.00	19.00	273.	
2	1.00	7.00	14.00	16.00	275.	
3	1.00	6.00	13.00	20.00	277.	
4	1.00	12.00	18.00	22.00	272.	
5	1.00	9.00	17.00	26.00	273.	
6	1.00	10.00	15.00	21.00	266.	
7	1.00	8.00	15.00	22.00	263.	
8	1.00	12.00	15.00	18.00	267.	
9	1.00	8.00	16.00	21.00	266.	
10	1.00	8.00	15.00	21.00	254.	
11	1.00	10.00	14.00	18.00	266.	
12	1.00	8.00	14.00	22.00	271.	
13	1.00	7.00	14.00	25.00	268.	
14	1.00	11.00	19.00	26.00	260.	
15	1.00	11.00	29.00	33.00	262.	

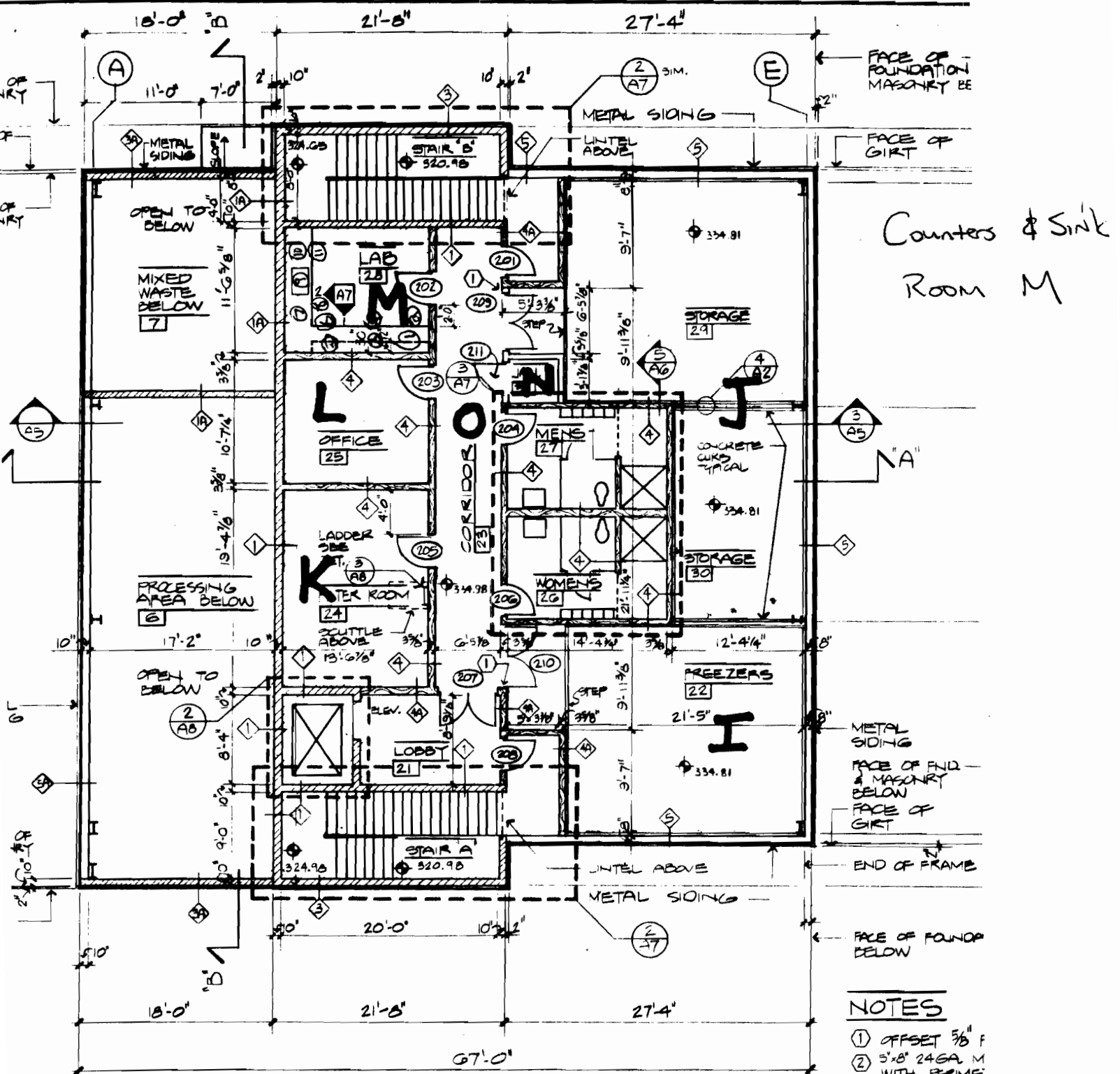
(6 missing vials)

22	1.00	3.00	10.00	13.00	338.	} Bkg
23	1.00	11.00	24.00	29.00	329.	

(1 missing vial)

25	1.00	25139.0	25207.0	25209.0	839.	} std.
26	1.00	28286.0	120390.	120597.	841.	
27	1.00	9850.00	105418.	150738.	324.	

CC = 41.55 cpm



1 SECOND FLOOR PLAN
 SCALE: 1/8" = 1'-0" FF ELEV. 324.98



— WALL

Protocol #: 9 Name: decom 10-Apr-00 10:58
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

ROOM M

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	9.00	16.00	24.00	269.	
2	1.00	11.00	17.00	22.00	268.	
3	1.00	10.00	18.00	27.00	264.	
4	1.00	10.00	15.00	17.00	266.	
5	1.00	8.00	13.00	23.00	270.	
6	1.00	5.00	13.00	16.00	266.	
7	1.00	23.00	27.00	30.00	268.	
8	1.00	115.00	136.00	136.00	12.0	-Recount attached #10
9	1.00	10.00	14.00	20.00	266.	
10	1.00	12.00	15.00	23.00	265.	
11	1.00	7.00	13.00	22.00	262.	

(10 missing vials)

22	1.00	12.00	18.00	26.00	341.	} Bkg
23	1.00	11.00	19.00	24.00	328.	

(1 missing vial)

25	1.00	25197.0	25269.0	25273.0	835.	} Std
26	1.00	28418.0	121003.	121193.	850.	
27	1.00	9939.00	106177.	151579.	324.	

KD
 4/12/12

CC = 37.88 cpm

Protocol #: 9 Name: decom 10-Apr-00 14:42
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
(7 missing vials)						
8	1.00	13.00	18.00	18.00	13.1	Recount < Bkg

(13 missing vials)						
22	1.00	9.00	16.00	21.00	337.	} Bkg
23	1.00	8.00	17.00	26.00	328.	
(1 missing vial)						
25	1.00	25211.0	25290.0	25297.0	840	} Std. 3H 11C 36Cl
26	1.00	28296.0	120605.	120781.	842.	
27	1.00	9717.00	105550.	150788.	321.	

CC= 37.88

Decommission Meter Survey

Location: RM I, J, K, L, N, C3, Bathrooms, (Floors)

Date: 4/3/12

Initials: DS, BL

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading:

Check source reading:

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

~~1000~~ ¹²⁰⁰ < 120cpm

Check source reading:

32 Kcpm

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading:

< 120 Lpm

Check source reading:

30 Kcpm

Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading:

< 1400 cpm

Check source reading:

29 Kcpm

30 Kcpm

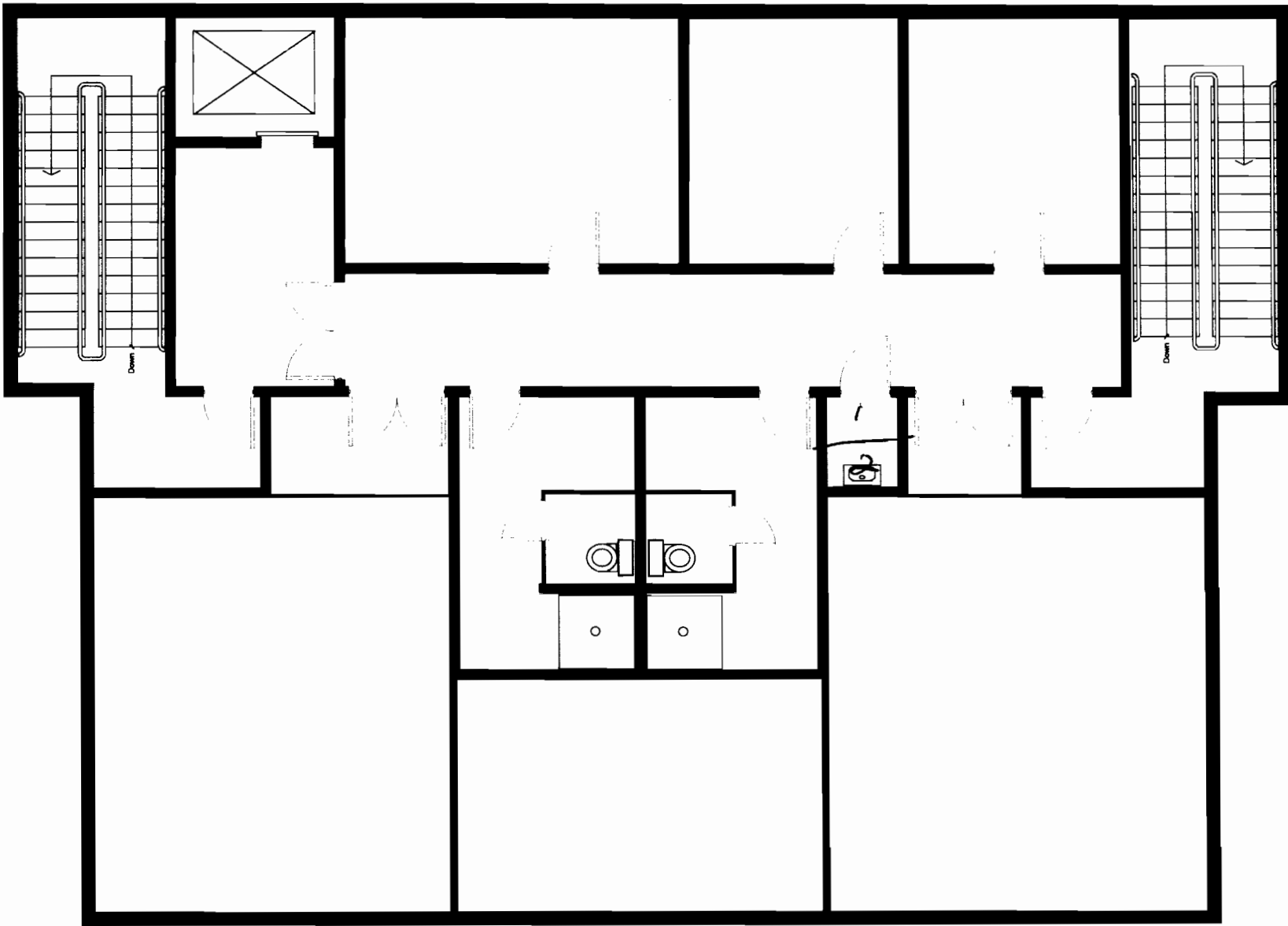
33 Kcpm

34 Kcpm

Meter survey results:

All reading < Bkg

Rm "N" CLOSET



Decommissioning Floor Plan

Facility:

Surveyed by:

Date of survey _____

**Drawing
Not To Scale**

circlet
"N"

Protocol #: 9 Name:decom 02-Apr-02 13:54
Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	5.00	11.00	19.00	262.	
2	1.00	9.00	14.00	21.00	267.	
(1 missing vial)						
4	1.00	6.00	12.00	22.00	257.	} Bk
5	1.00	12.00	17.00	22.00	270.	
(1 missing vial)						
7	1.00	24943.0	25009.0	25012.0	829.	SH sta
8	1.00	28418.0	120714.	120870.	834.	14c sm
9	1.00	9821.00	106671.	150362.	322.	36c1 sta

UD
#112/112

CC: 32.93

Decommission Meter Survey

Location: ROOM N WALLS

Date: 3/15/12

Initials: RD

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: ≤ 120 cpm

Check source reading: 34 K cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading:

Check source reading:

Meter Survey results: All READINGS \leq BKG

Protocol #: 9 Name: decom 15-Mar-00 08:51
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

N

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	8.00	16.00	20.00	219.	
2	1.00	6.00	14.00	22.00	220.	
3	1.00	4.00	10.00	15.00	233.	
4	1.00	7.00	16.00	24.00	240.	
5	1.00	7.00	12.00	16.00	203.	
6	1.00	3.00	11.00	19.00	235.	
7	1.00	6.00	15.00	21.00	237.	
8	1.00	5.00	7.00	9.00	232.	

UD
 4/12/12

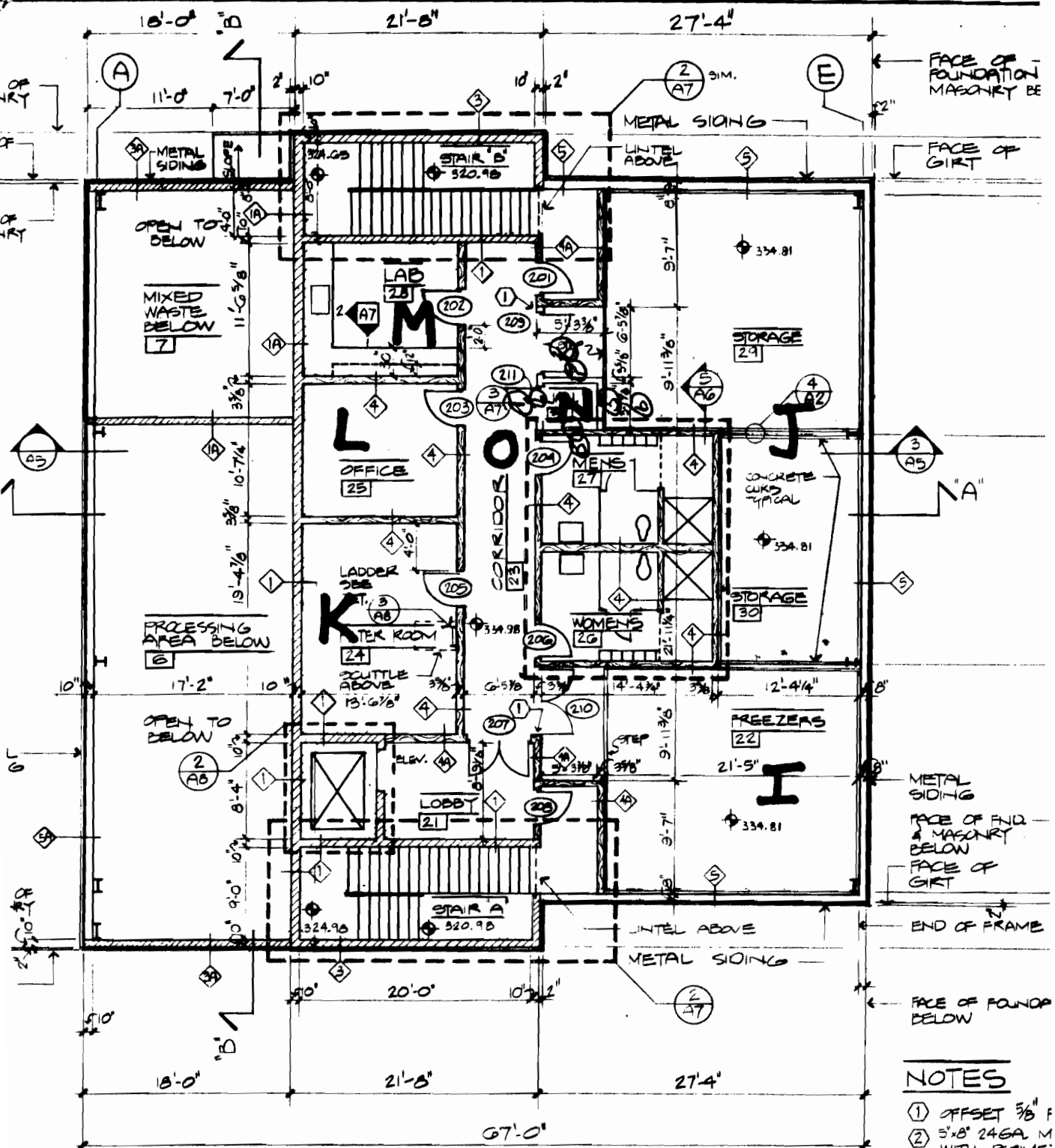
(10 missing vials)

19	1.00	16.00	26.00	32.00	333.	} BKL
20	1.00	11.00	19.00	30.00	345.	

(1 missing vial)

22	1.00	25120.0	25185.0	25193.0	829.	} Std
23	1.00	28211.0	120817.	120999.	835.	
24	1.00	9886.00	106759.	150504.	323.	

CC = 45.18 cpm



1
A2 SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0" FF ELEV. 324.98'



— WALL

Decommission Meter Survey

Location: RM 0 Floor

Date: 4/2/12

Initials: DS, BL

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading:

Check source reading:

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: $< 120 \text{ cpm}$

Check source reading: 30 Kcpm

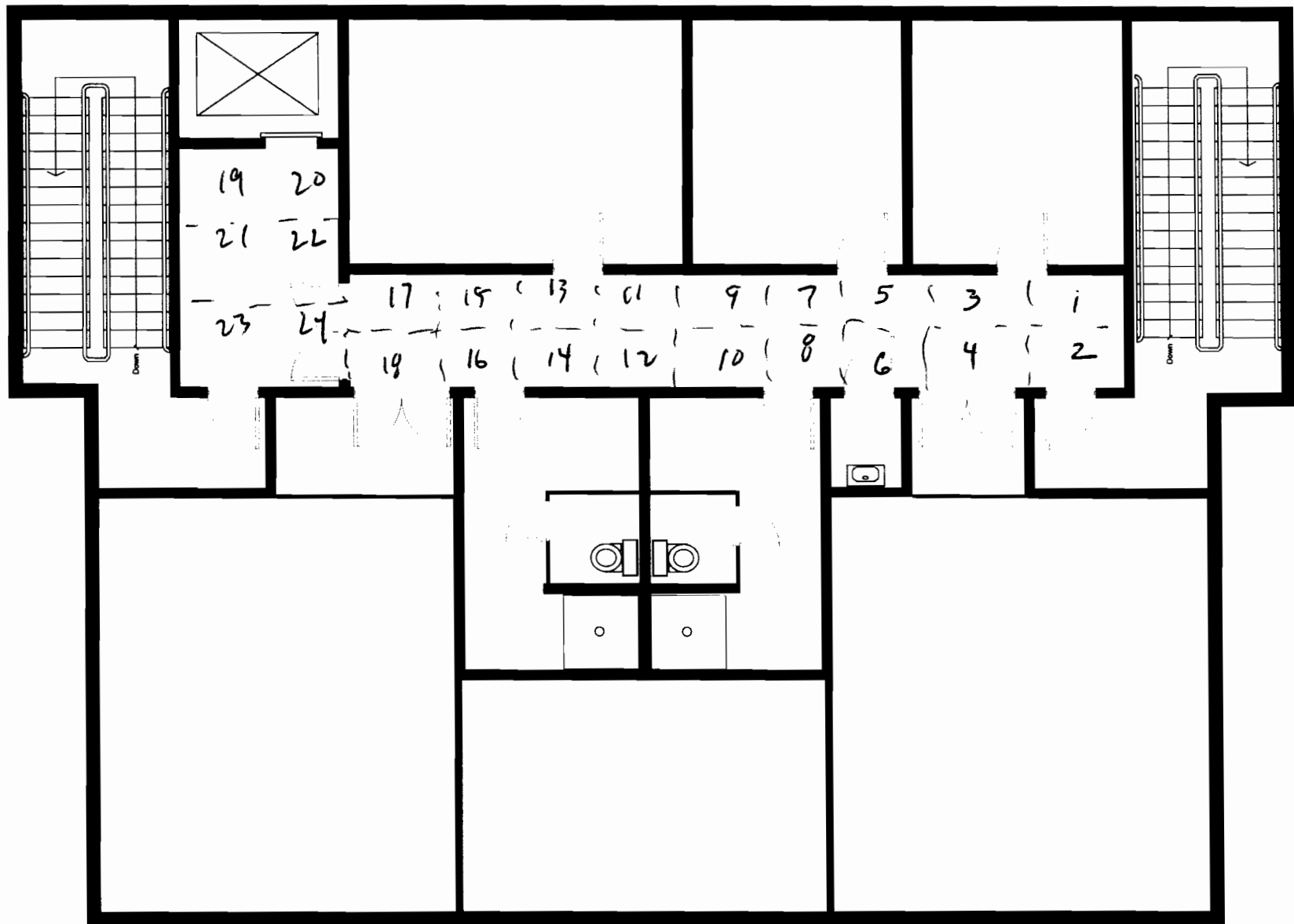
Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading: $\sim 1000 \text{ cpm}$

Check source reading: 28 Kcpm
 29 Kcpm
 30 Kcpm
 30 Kcpm

Meter survey results: All readings $\sim \text{Bkg}$

Rm 0" Floor wipes



Decommissioning Floor Plan

Facility:

Surveyed by:

BD, BL

Date of survey:

4/2/12

Drawing
Not To Scale

2nd Floor Comidor

0

Protocol #: 9 Name:decom 02-Apr-02 16:18
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	11.00	18.00	30.00	212.	
2	1.00	11.00	15.00	19.00	247.	
3	1.00	16.00	22.00	25.00	257.	
4	1.00	12.00	14.00	18.00	246.	
5	1.00	9.00	13.00	18.00	255.	
6	1.00	10.00	15.00	18.00	260.	
7	1.00	6.00	14.00	23.00	265.	
8	1.00	7.00	12.00	15.00	258.	
9	1.00	3.00	9.00	15.00	258.	
10	1.00	10.00	18.00	20.00	246.	
11	1.00	8.00	18.00	27.00	266.	
12	1.00	10.00	17.00	20.00	251.	
13	1.00	13.00	23.00	28.00	261.	
14	1.00	15.00	22.00	24.00	232.	
15	1.00	7.00	10.00	16.00	255.	
16	1.00	11.00	14.00	23.00	254.	
17	1.00	11.00	16.00	20.00	211.	
18	1.00	12.00	18.00	23.00	254.	
19	1.00	7.00	18.00	21.00	248.	
20	1.00	6.00	13.00	23.00	246.	
21	1.00	6.00	14.00	19.00	242.	
22	1.00	8.00	12.00	16.00	214.	
23	1.00	4.00	8.00	13.00	262.	
24	1.00	9.00	15.00	19.00	242.	
(1 missing vial)						
26	1.00	8.00	17.00	18.00	338.	
27	1.00	12.00	23.00	27.00	327.	
(1 missing vial)						
29	1.00	24828.0	24903.0	24909.0	829.	3H SH
30	1.00	28279.0	121175.	121334.	837.	14CSH
31	1.00	10058.0	106716.	150555.	322.	36CSH

ND
 4/12/12

CC=39.11

Decommission Meter Survey

Location: BUILDING #27 RM 0 WALLS

Date: 3/9/12

Initials: DA, BL

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: ≤ 120 cpm

Check source reading: 34K cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading: ≤ 120 cpm

Check source reading: 34K cpm

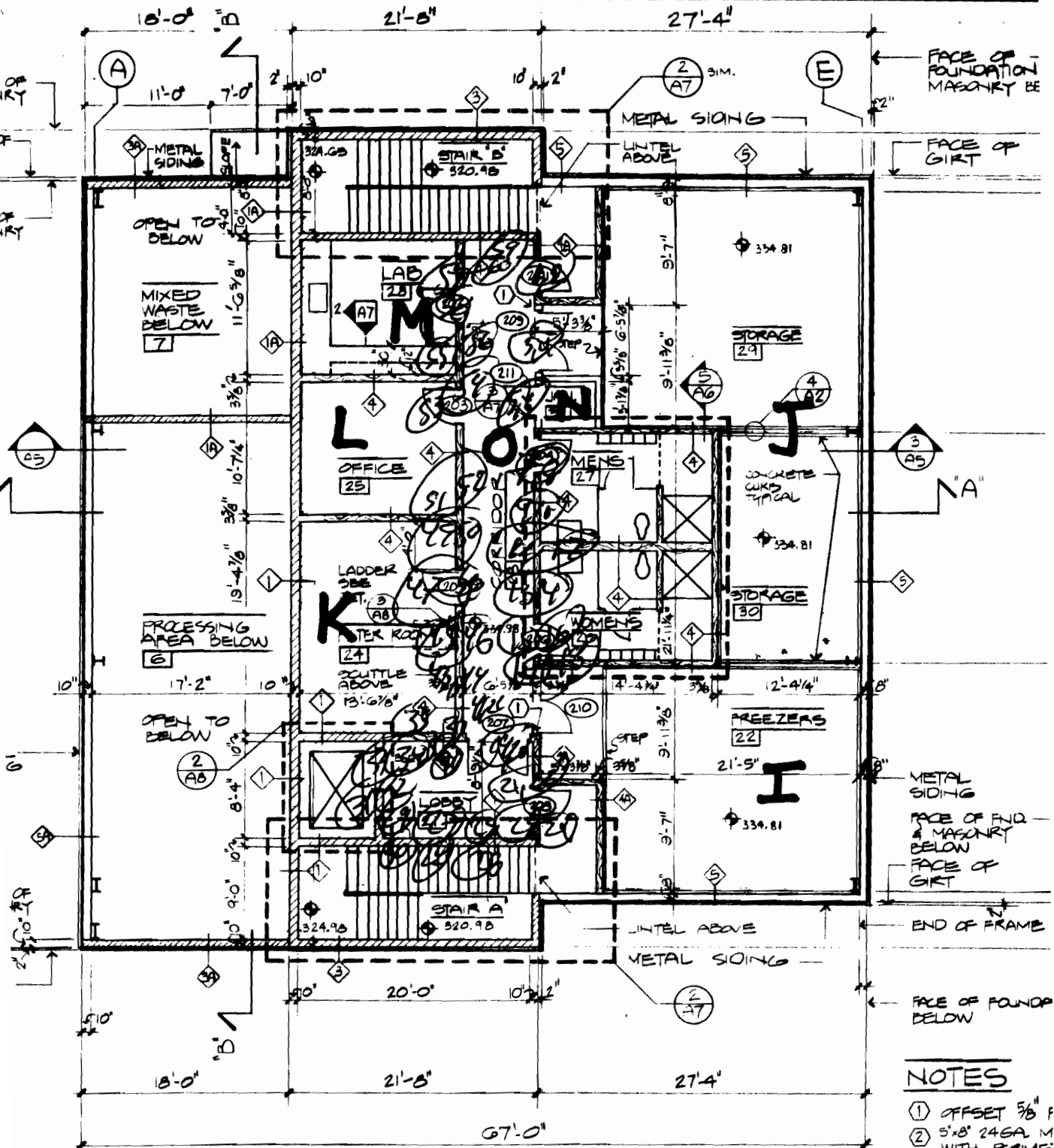
Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: ≤ 120 cpm

Check source reading: 42K cpm

Meter Survey results:

All readings \leq Bkg



NOTES

- ① OFFSET $\frac{5}{8}$ " F
- ② 5'-8" 24 GA. M WITH PERIME SEAL TYPICAL



NORTH

1
A2

SECOND FLOOR PLAN

SCALE: $\frac{1}{8}$ " = 1'-0" FF ELEV. 334.98'

— WALL

pm 0 walls

Protocol #: 9 Name:decom 08-Mar-00 16:53
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tsIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tsIE	FLAG
1	1.00	10.00	18.00	21.00	247.	
2	1.00	9.00	14.00	20.00	271.	
3	1.00	11.00	23.00	25.00	255.	
4	1.00	12.00	17.00	24.00	237.	
5	1.00	9.00	14.00	18.00	259.	
6	1.00	8.00	11.00	17.00	269.	
7	1.00	9.00	16.00	20.00	271.	
8	1.00	9.00	19.00	26.00	272.	
9	1.00	5.00	9.00	13.00	265.	
10	1.00	10.00	14.00	17.00	264.	
11	1.00	12.00	17.00	24.00	269.	
12	1.00	10.00	15.00	21.00	270.	
13	1.00	4.00	7.00	9.00	271.	
14	1.00	11.00	16.00	21.00	265.	
15	1.00	10.00	17.00	21.00	271.	
16	1.00	12.00	23.00	25.00	266.	
17	1.00	14.00	17.00	26.00	268.	
18	1.00	6.00	13.00	24.00	270.	
19	1.00	8.00	13.00	22.00	267.	
20	1.00	7.00	18.00	25.00	272.	
21	1.00	10.00	14.00	20.00	263.	
22	1.00	12.00	17.00	22.00	256.	
23	1.00	14.00	20.00	27.00	257.	
24	1.00	11.00	15.00	19.00	267.	
25	1.00	9.00	16.00	18.00	267.	
26	1.00	10.00	15.00	22.00	265.	
27	1.00	11.00	16.00	20.00	247.	
28	1.00	6.00	12.00	18.00	230.	
29	1.00	9.00	15.00	20.00	247.	
30	1.00	5.00	11.00	15.00	251.	
31	1.00	9.00	19.00	25.00	265.	
32	1.00	12.00	17.00	25.00	263.	
33	1.00	14.00	20.00	25.00	260.	
34	1.00	7.00	14.00	21.00	263.	
35	1.00	11.00	15.00	22.00	263.	
36	1.00	7.00	13.00	22.00	252.	
37	1.00	11.00	19.00	20.00	252.	
38	1.00	8.00	14.00	19.00	248.	
39	1.00	11.00	16.00	17.00	262.	
40	1.00	5.00	7.00	15.00	265.	
41	1.00	8.00	13.00	20.00	269.	
42	1.00	7.00	10.00	21.00	268.	
43	1.00	7.00	11.00	16.00	262.	
44	1.00	5.00	11.00	14.00	256.	
45	1.00	9.00	15.00	22.00	258.	
46	1.00	10.00	16.00	19.00	258.	
47	1.00	10.00	15.00	20.00	236.	
48	1.00	5.00	13.00	22.00	259.	
49	1.00	10.00	16.00	19.00	267.	
50	1.00	17.00	19.00	23.00	264.	

Run 0 WALLS

S#	TIME	CPMA	CPMB	CPMC	tsIE	FLAG
51	1.00	6.00	7.00	8.00	271.	
52	1.00	6.00	9.00	13.00	270.	
53	1.00	7.00	17.00	21.00	266.	
54	1.00	8.00	16.00	19.00	264.	
55	1.00	10.00	16.00	21.00	260.	
56	1.00	5.00	6.00	13.00	269.	
57	1.00	13.00	23.00	26.00	253.	
58	1.00	5.00	11.00	17.00	265.	
59	1.00	8.00	13.00	19.00	249.	
60	1.00	4.00	12.00	15.00	259.	
(1 missing vial)						
62	1.00	24958.0	25035.0	25042.0	831	} ^{3H} ^{14C} ^{36Cl} } sd
63	1.00	28400.0	120739.	120903.	837	
64	1.00	9854.00	106527.	151110.	323	
(1 missing vial)						
66	1.00	10.00	13.00	19.00	328.	} Bkg
67	1.00	12.00	22.00	30.00	346.	

ND
4/12/12

$$CC = 42.76 \text{ cpm}$$

Decommission Meter Survey

Location: NORTH HALLWAY

Date: 3/13/12

Initials: RD

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: ≤ 120 cpm

Check source reading: 34 k cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading:

Check source reading:

Meter Survey results: All READINGS \leq BKG

Protocol #: 9 Name: decom 13-Mar-00 16:20
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

**NORTH
HALL**

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	9.00	15.00	17.00	244.	
2	1.00	5.00	16.00	22.00	239.	
3	1.00	8.00	14.00	23.00	254.	
4	1.00	9.00	11.00	17.00	262.	
5	1.00	7.00	13.00	20.00	270.	
6	1.00	9.00	14.00	17.00	262.	
7	1.00	12.00	17.00	21.00	262.	
8	1.00	8.00	16.00	24.00	269.	
9	1.00	4.00	8.00	13.00	268.	
10	1.00	14.00	18.00	23.00	265.	
11	1.00	4.00	8.00	14.00	261.	
12	1.00	9.00	17.00	23.00	264.	
13	1.00	5.00	10.00	16.00	264.	
14	1.00	10.00	18.00	25.00	263.	
15	1.00	11.00	21.00	24.00	260.	
16	1.00	13.00	14.00	24.00	263.	
17	1.00	12.00	19.00	24.00	257.	
18	1.00	10.00	17.00	24.00	267.	
19	1.00	8.00	10.00	17.00	259.	
20	1.00	15.00	21.00	25.00	260.	
21	1.00	17.00	21.00	30.00	265.	
22	1.00	10.00	20.00	28.00	259.	
23	1.00	9.00	12.00	17.00	256.	
24	1.00	5.00	12.00	15.00	270.	
25	1.00	8.00	9.00	12.00	262.	
26	1.00	6.00	11.00	15.00	273.	
27	1.00	11.00	13.00	17.00	262.	
28	1.00	8.00	13.00	19.00	264.	
29	1.00	9.00	14.00	19.00	258.	
30	1.00	10.00	11.00	15.00	265.	
31	1.00	12.00	14.00	20.00	266.	
32	1.00	3.00	13.00	21.00	265.	
33	1.00	9.00	12.00	18.00	248.	
34	1.00	7.00	12.00	21.00	253.	
35	1.00	8.00	16.00	18.00	255.	
36	1.00	8.00	12.00	13.00	266.	
37	1.00	8.00	16.00	20.00	250.	
38	1.00	7.00	12.00	19.00	266.	
39	1.00	5.00	12.00	17.00	260.	
40	1.00	13.00	15.00	18.00	256.	
41	1.00	8.00	13.00	18.00	267.	
42	1.00	8.00	10.00	16.00	265.	
43	1.00	6.00	13.00	17.00	266.	
44	1.00	8.00	14.00	21.00	260.	

(10 missing vials)

55	1.00	8.00	12.00	18.00	329.	} BKG
56	1.00	9.00	15.00	21.00	341.	

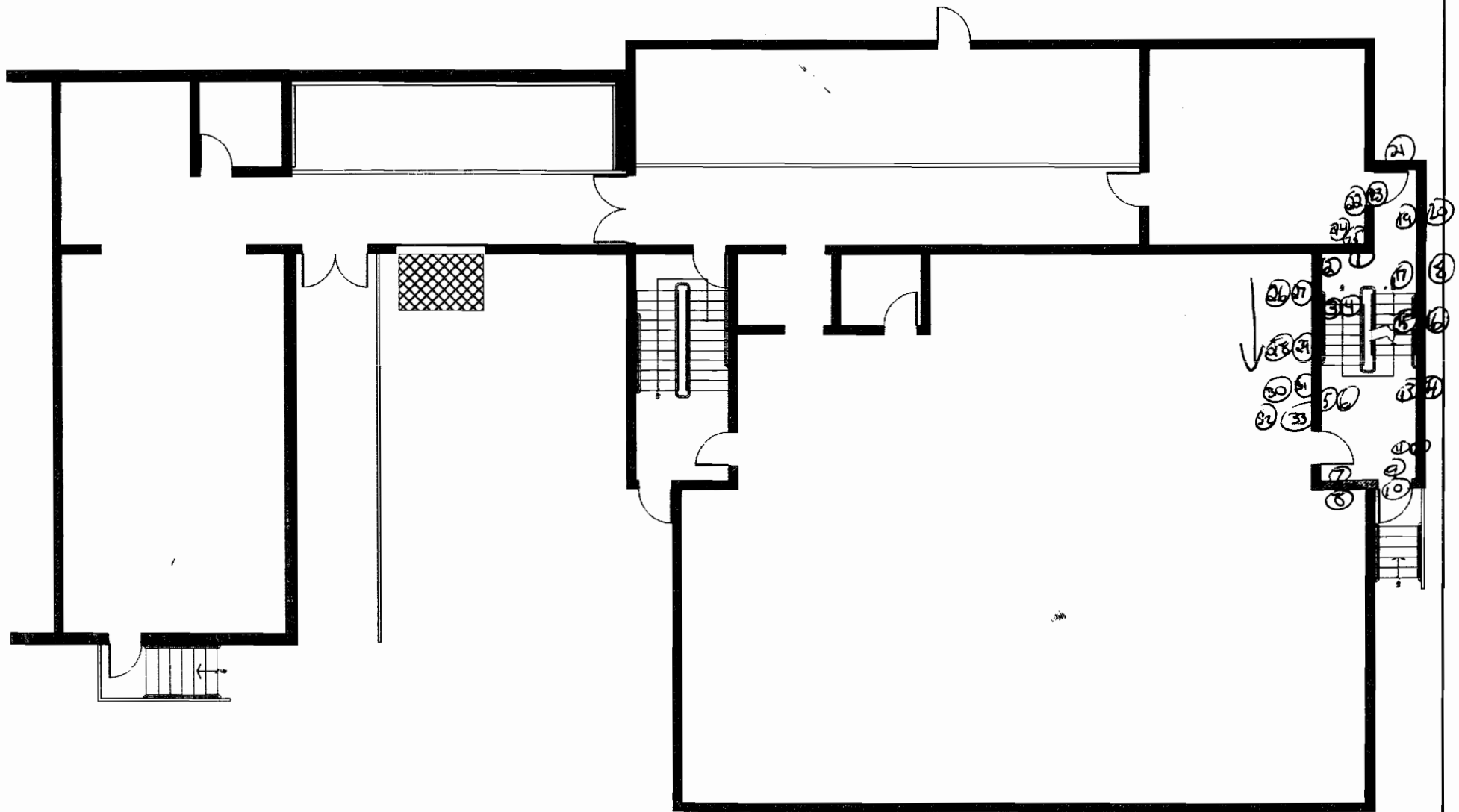
(1 missing vial)

58	1.00	25253.0	25337.0	25343.0	828.	^{3H} Std
59	1.00	28625.0	121185.	121335.	839.	^{14C}

KD
 4/12/12

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
60	1.00	9993.00	107032.	151014.	316.36	C1 Std

CC= 31.68 cpm



Decommissioning Floor Plan

Facility:

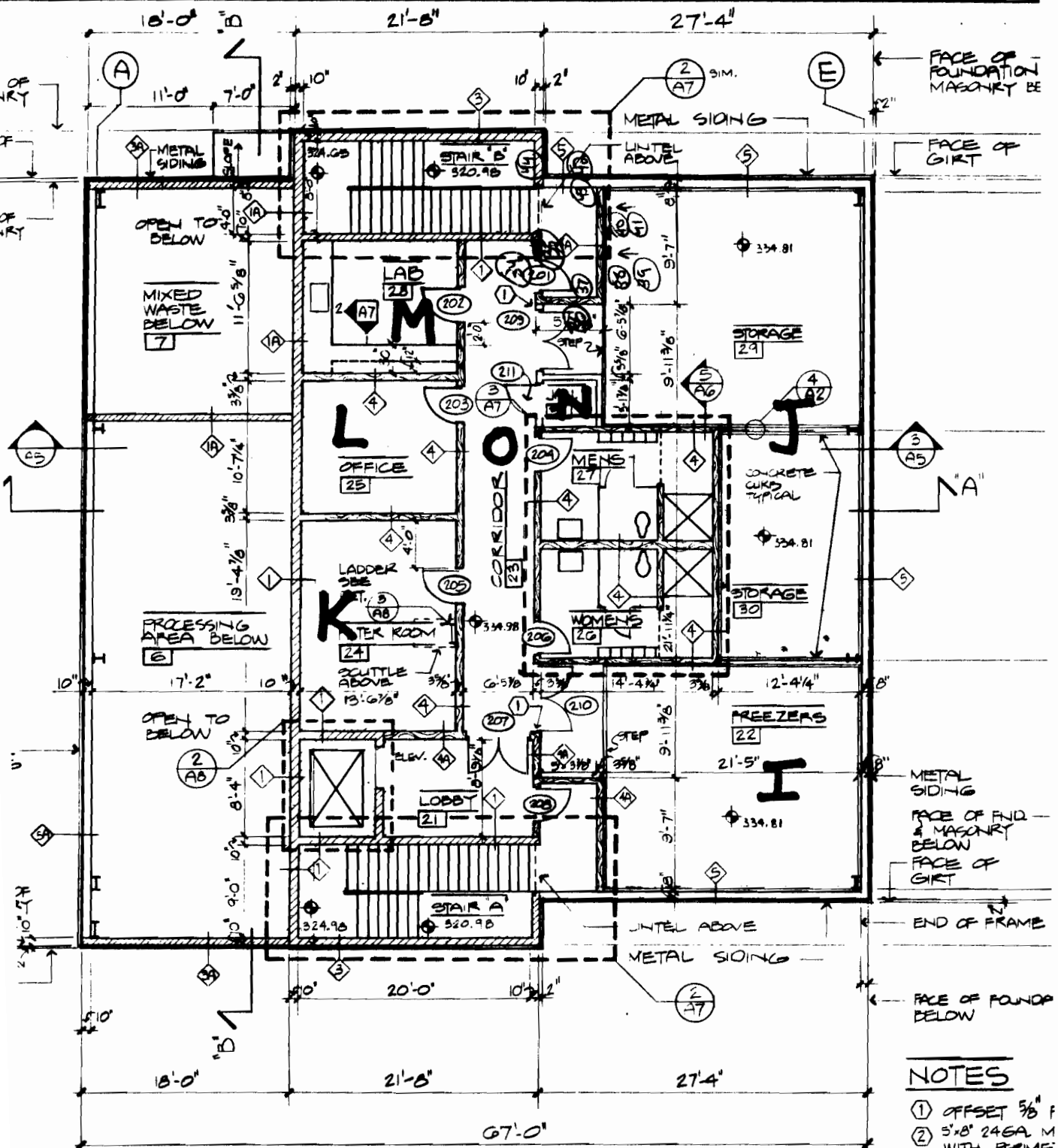
NORTH Hallway

Surveyed by:

Date of survey:

Ryan Campbell
3/13/12

Drawing
Not To Scale



— WALL

Decommission Meter Survey

Location: South Hallway

Date: 3/13/12

Initials: RB DB

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: ≤ 120 cpm

Check source reading: 34 K cpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: ≤ 120 cpm

Check source reading: 42K cpm

Meter Survey results: All Readings \leq BKG

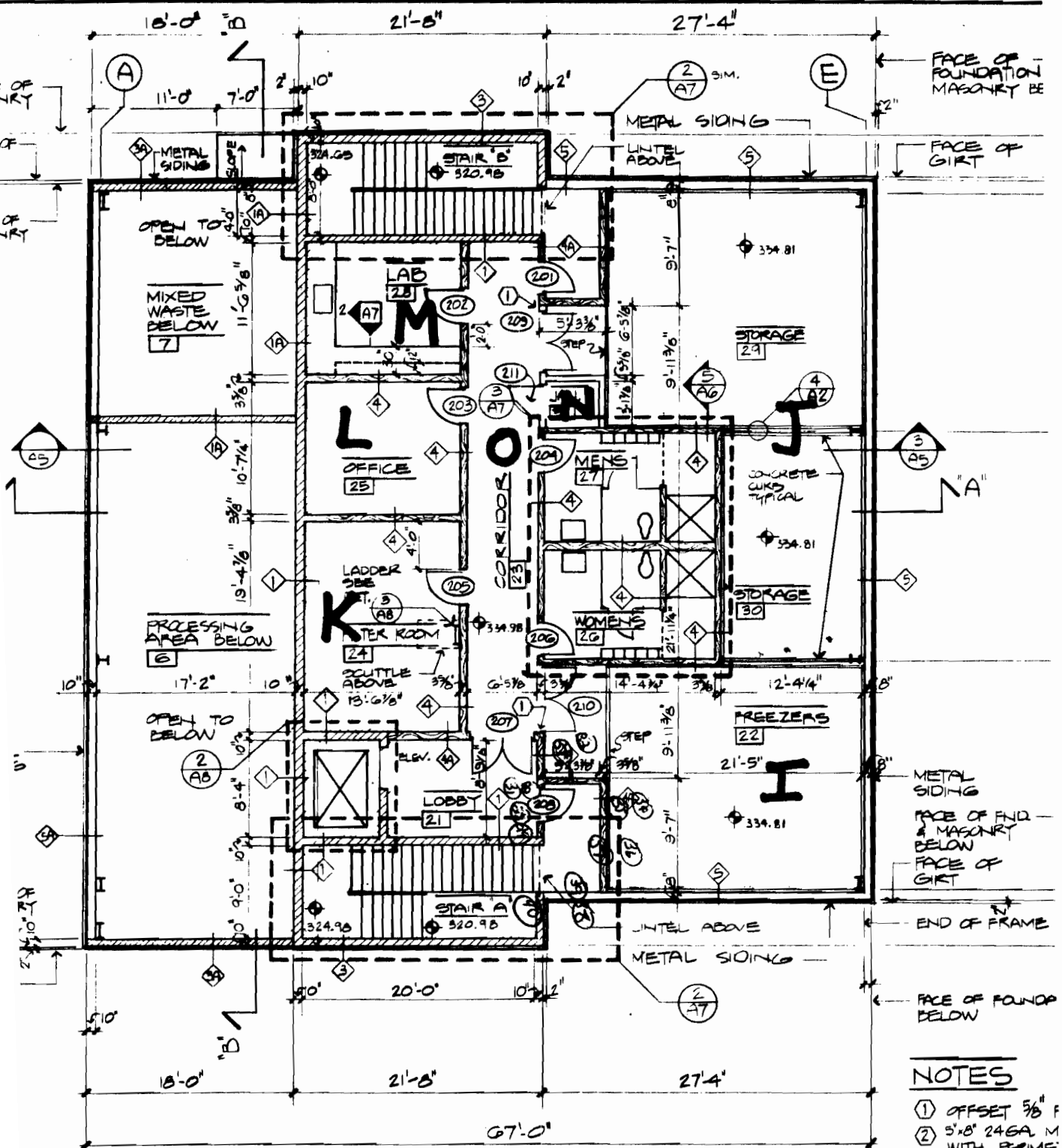
Protocol #: 9 Name:decom 13-Mar-00 14:28
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

**SOUTH
HALL**

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	11.00	12.00	17.00	252.	
2	1.00	13.00	15.00	24.00	250.	
3	1.00	7.00	16.00	20.00	261.	
4	1.00	7.00	11.00	12.00	265.	
5	1.00	5.00	13.00	17.00	272.	
6	1.00	14.00	20.00	24.00	269.	
7	1.00	5.00	7.00	12.00	268.	
8	1.00	6.00	13.00	18.00	276.	
9	1.00	7.00	15.00	21.00	272.	
10	1.00	9.00	13.00	16.00	270.	
11	1.00	6.00	12.00	20.00	266.	
12	1.00	9.00	15.00	24.00	265.	
13	1.00	7.00	12.00	16.00	268.	
14	1.00	9.00	16.00	20.00	269.	
15	1.00	13.00	23.00	29.00	266.	
16	1.00	14.00	22.00	25.00	264.	
17	1.00	12.00	15.00	26.00	262.	
18	1.00	12.00	19.00	24.00	271.	
19	1.00	13.00	22.00	29.00	262.	
20	1.00	19.00	26.00	33.00	267.	
21	1.00	11.00	16.00	19.00	267.	
22	1.00	7.00	10.00	12.00	264.	
23	1.00	4.00	16.00	22.00	258.	
24	1.00	10.00	14.00	17.00	269.	
25	1.00	5.00	9.00	14.00	266.	
26	1.00	14.00	21.00	25.00	277.	
27	1.00	13.00	17.00	22.00	269.	
28	1.00	8.00	13.00	18.00	268.	
29	1.00	23.00	24.00	30.00	259.	
30	1.00	11.00	17.00	22.00	269.	
31	1.00	10.00	12.00	15.00	271.	
32	1.00	9.00	18.00	22.00	268.	
33	1.00	7.00	14.00	19.00	247.	
34	1.00	14.00	17.00	19.00	257.	
35	1.00	14.00	19.00	23.00	255.	
36	1.00	13.00	18.00	22.00	267.	
37	1.00	11.00	14.00	17.00	255.	
38	1.00	10.00	19.00	24.00	266.	
39	1.00	15.00	23.00	31.00	260.	
40	1.00	10.00	18.00	23.00	260.	
(14 missing vials)						
55	1.00	9.00	18.00	26.00	328.	} BKG
56	1.00	11.00	15.00	22.00	343.	
(1 missing vial)						
58	1.00	25032.0	25096.0	25100.0	829	Std. ^{3H} ^{14C} ^{36Cl}
59	1.00	28602.0	121034.	121184.	837.	
60	1.00	10205.0	106843.	150500.	321.	

ND
4/12/12

CC= 37.88 cpm



NOTES

- ① OFFSET 5/8" F
- ② 5'x8' 24GA. M WITH PERIMETER SEAL TYPICAL

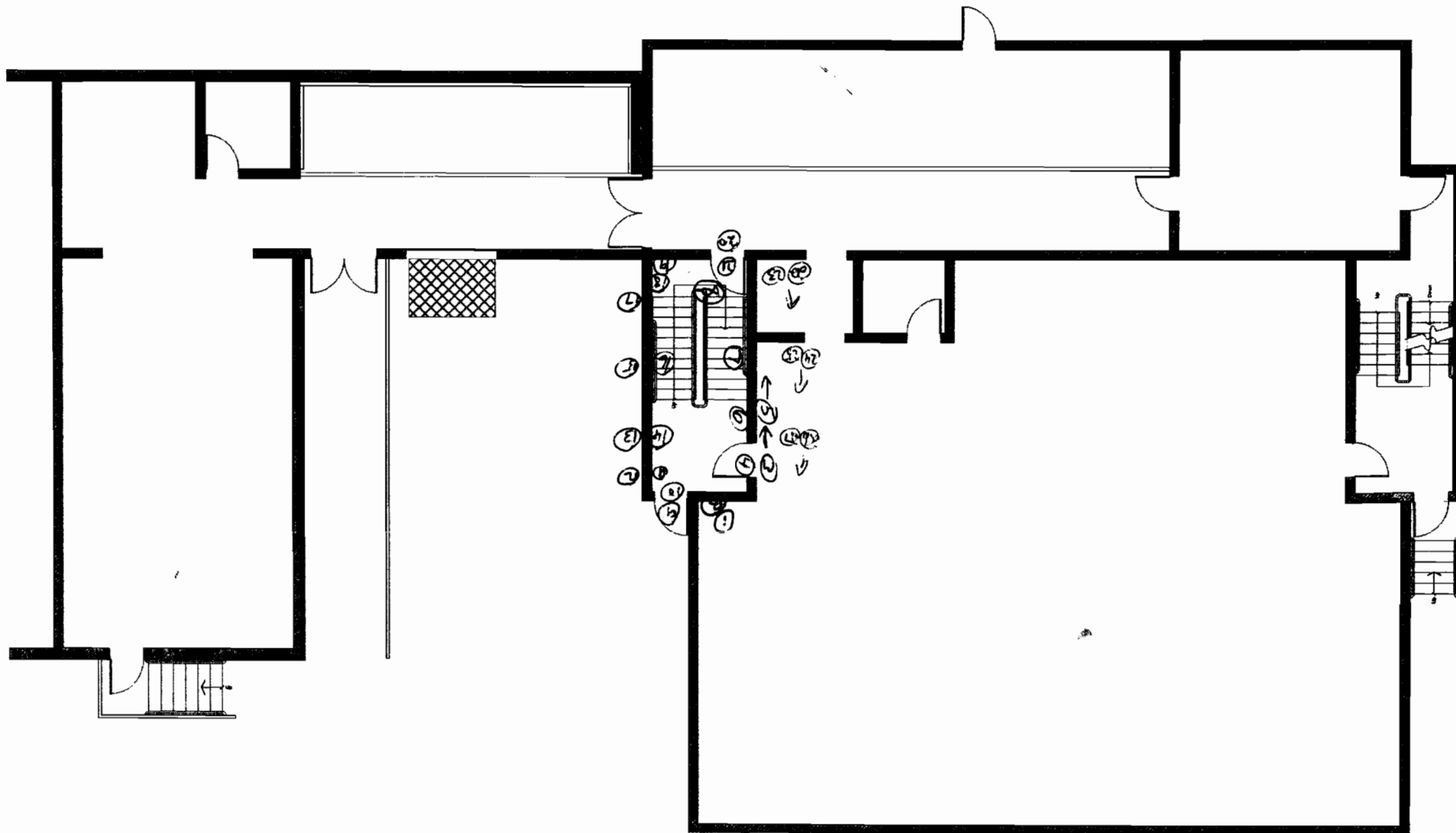


1
A2

SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0" FF ELEV. 334.98'

— WALL



Decommissioning Floor Plan

Facility:

SOUTH HALLWAY

Surveyed by:

Date of survey:

Ryan Conley
3/13/12

Drawing
Not To Scale

Decommission Meter Survey

Location: STAIRWELLS (FLOOR)

Date: 4/4/12

Initials: DS, BL

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: $\leq 100 \text{ cpm}$

Check source reading: 24Kcpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading:

Check source reading:

Meter: Ludlum 12 sn 274198 with 239-1F floor probe

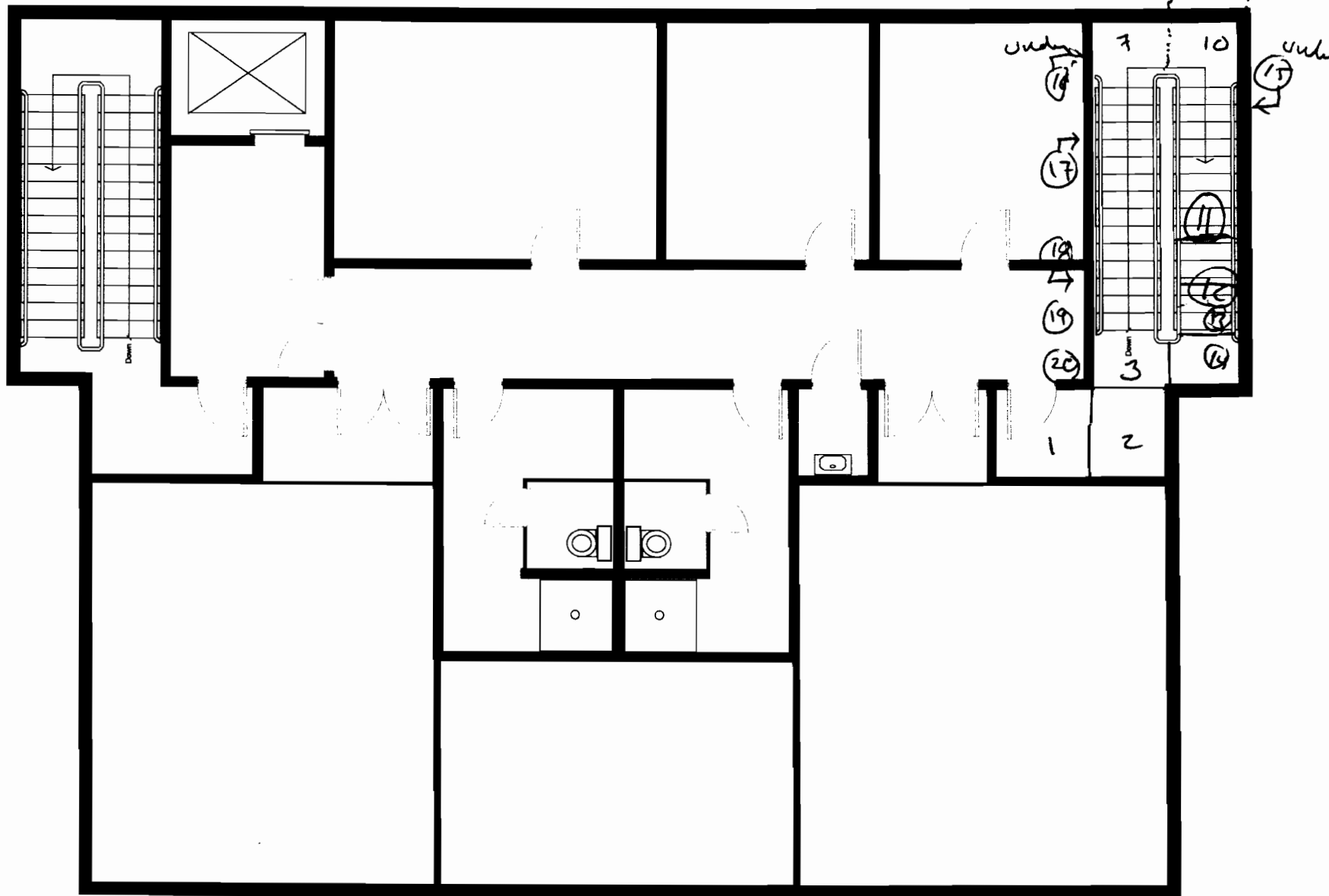
Background reading: $\leq 1400 \text{ cpm}$

Check source reading:
30Kcpm
31Kcpm
29Kcpm

Meter survey results:

All reading $\leq 13K$

Stairwell Floor wipe)



Decommissioning Floor Plan

Facility:

Surveyed by:

TRZ, RL

Date of survey:

4/3/12

Drawing
Not To Scale

Stairwell (Near Mixed Waste Room)

Protocol #: 9 Name: decom 04-Apr-02 09:21
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	14.00	21.00	27.00	227.	
2	1.00	15.00	21.00	25.00	243.	
3	1.00	8.00	12.00	17.00	250.	
4	1.00	12.00	15.00	20.00	215.	
5	1.00	11.00	15.00	20.00	182.	
6	1.00	8.00	15.00	20.00	170.	
7	1.00	11.00	19.00	31.00	200.	
8	1.00	8.00	12.00	16.00	225.	
9	1.00	16.00	23.00	29.00	234.	
10	1.00	7.00	13.00	21.00	232.	
11	1.00	9.00	10.00	17.00	239.	
12	1.00	10.00	18.00	24.00	221.	
13	1.00	9.00	18.00	22.00	249.	
14	1.00	10.00	13.00	15.00	251.	
15	1.00	12.00	19.00	27.00	262.	
16	1.00	11.00	20.00	29.00	258.	
17	1.00	12.00	18.00	22.00	260.	
18	1.00	6.00	8.00	8.00	244.	
19	1.00	20.00	28.00	36.00	249.	
20	1.00	18.00	22.00	26.00	249.	

(1 missing vial)

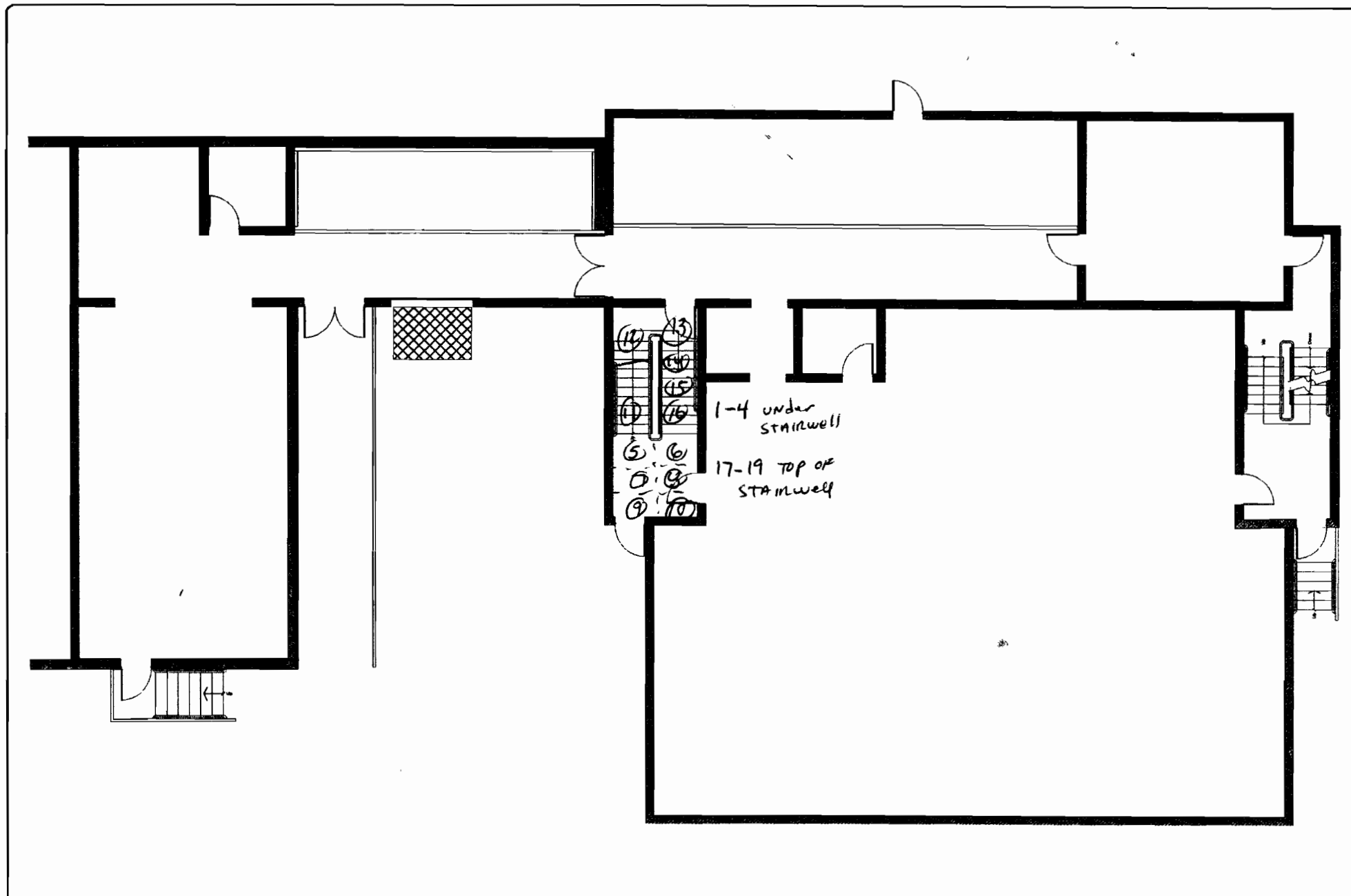
22	1.00	4.00	14.00	18.00	336	} Bkg
23	1.00	8.00	18.00	26.00	329	

(1 missing vial)

25	1.00	25191.0	25258.0	25263.0	832.	3H Std
26	1.00	28706.0	121589.	121748.	835.	14C Std
27	1.00	9951.00	106420.	151143.	324.	36C Std

CC = 37.28

ND
 4/12/12



Decommissioning Floor Plan

Facility:

STAIRWELL floor

Surveyed by:

DB, RC

Date of survey:

4/9/12

Drawing
Not To Scale

Protocol #: 9 Name:decom 09-Apr-00 15:35
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	5.00	9.00	12.00	229.	
2	1.00	14.00	17.00	26.00	251.	
3	1.00	9.00	13.00	19.00	268.	
4	1.00	5.00	8.00	19.00	267.	
5	1.00	8.00	10.00	17.00	266.	
6	1.00	11.00	17.00	21.00	263.	
7	1.00	8.00	12.00	19.00	268.	
8	1.00	5.00	10.00	13.00	269.	
9	1.00	12.00	16.00	16.00	272.	
10	1.00	11.00	21.00	27.00	256.	
11	1.00	11.00	21.00	23.00	249.	
12	1.00	9.00	13.00	23.00	267.	
13	1.00	14.00	16.00	17.00	271.	
14	1.00	10.00	15.00	16.00	253.	
15	1.00	12.00	16.00	21.00	261.	
16	1.00	10.00	17.00	30.00	267.	
17	1.00	12.00	21.00	25.00	250.	
18	1.00	8.00	13.00	17.00	259.	
19	1.00	16.00	19.00	20.00	253.	

(2 missing vials)

22	1.00	4.00	16.00	22.00	336.	} BKG
23	1.00	11.00	19.00	24.00	329.	

(1 missing vial)

25	1.00	25196.0	25256.0	25261.0	838.	} SKL
26	1.00	28196.0	120660.	120840.	841.	
27	1.00	9771.00	105396.	150031.	327.	


ND
 4/12/12

CC: 35.41 cpm

Decommission Meter Survey

Location: WOMEN'S ROOM 2nd Floor Walk

Date: 3/14/12

Initials: 

Check Source: 137-CS 5 uCi 12/88

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading: ≤ 120 cpm

Check source reading: 34Kcpm

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading:

Check source reading:

Meter Survey results: All Readings \leq BKG

Protocol #: 9 Name: decom 14-Mar-00 15:32
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

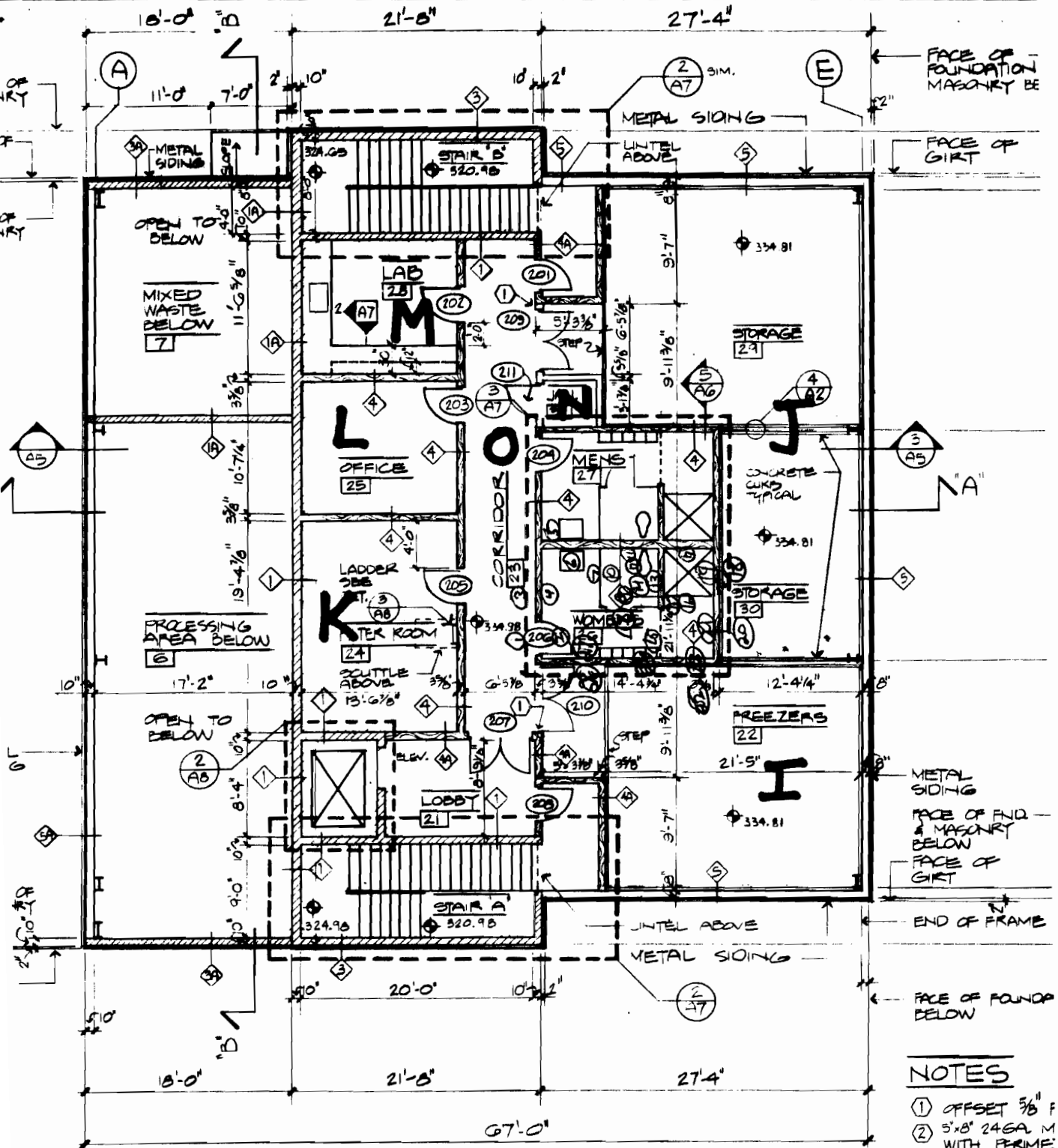
**WOMENS
RM**

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	3.00	12.00	15.00	234.	
2	1.00	7.00	8.00	12.00	238.	
3	1.00	7.00	13.00	19.00	247.	
4	1.00	7.00	13.00	16.00	256.	
5	1.00	9.00	15.00	27.00	262.	
6	1.00	10.00	11.00	18.00	258.	
7	1.00	4.00	8.00	13.00	253.	
8	1.00	6.00	12.00	19.00	263.	
9	1.00	13.00	20.00	26.00	256.	
10	1.00	6.00	11.00	17.00	264.	
11	1.00	7.00	12.00	19.00	253.	
12	1.00	3.00	7.00	14.00	258.	
13	1.00	10.00	19.00	21.00	260.	
14	1.00	5.00	10.00	20.00	257.	
15	1.00	9.00	15.00	19.00	252.	
16	1.00	8.00	15.00	21.00	255.	
17	1.00	5.00	9.00	14.00	251.	
18	1.00	7.00	11.00	18.00	260.	
19	1.00	5.00	11.00	14.00	246.	
20	1.00	13.00	17.00	21.00	252.	
21	1.00	10.00	12.00	17.00	251.	
22	1.00	10.00	17.00	24.00	251.	
23	1.00	13.00	24.00	30.00	248.	
24	1.00	10.00	15.00	22.00	263.	
25	1.00	7.00	14.00	19.00	254.	
26	1.00	3.00	9.00	17.00	264.	
27	1.00	12.00	18.00	22.00	259.	
(9 missing vials)						
37	1.00	8.00	19.00	29.00	331.	} BKG
38	1.00	8.00	14.00	21.00	336.	
(1 missing vial)						
40	1.00	25291.0	25358.0	25364.0	831.	SH
41	1.00	28189.0	120215.	120366.	834.	14C
42	1.00	10022.0	107571.	151431.	324.	36C1

RM
9/12/12

CC = 41.55 cpm

Std



1
A2

SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0" FF ELEV. 334.98



WOMENS RM

— WALL

Decommission Meter Survey

Location: RM I, J, K, L, N, C3, Bathrooms, (Floors)

Date: 4/3/12

Initials: DB, BL

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading:

Check source reading:

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

~~1100~~ ¹²⁰ 120cpm

Check source reading:

32 Kcpm

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading:

120cpm

Check source reading:

30 Kcpm

Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading:

1100cpm

Check source reading:

29 Kcpm

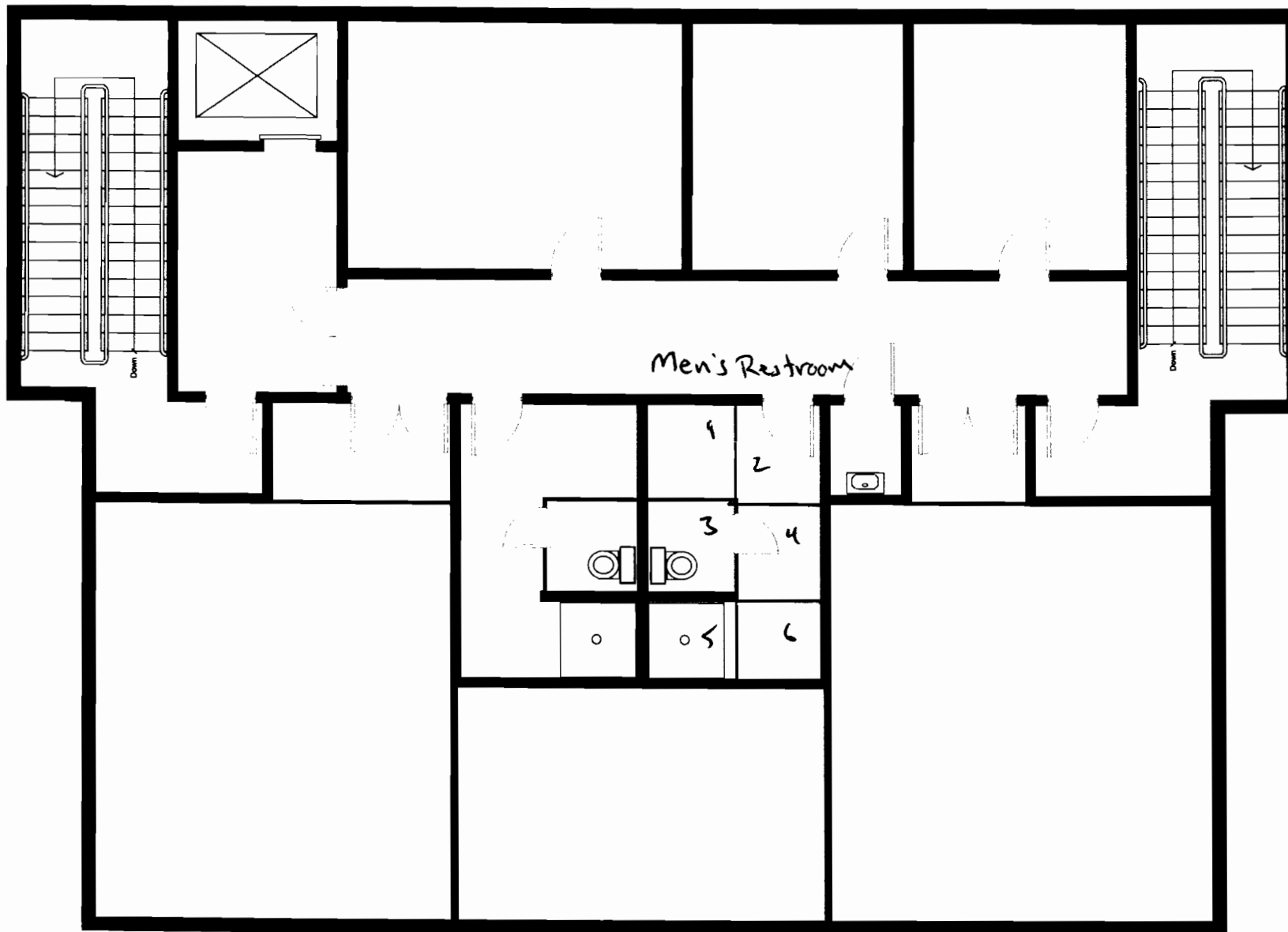
30 Kcpm

33 Kcpm

34 Kcpm

Meter survey results:

All readings \leq Bkg



Decommissioning Floor Plan

Facility:

Surveyed by:

Date of survey:

Drawing
Not To Scale

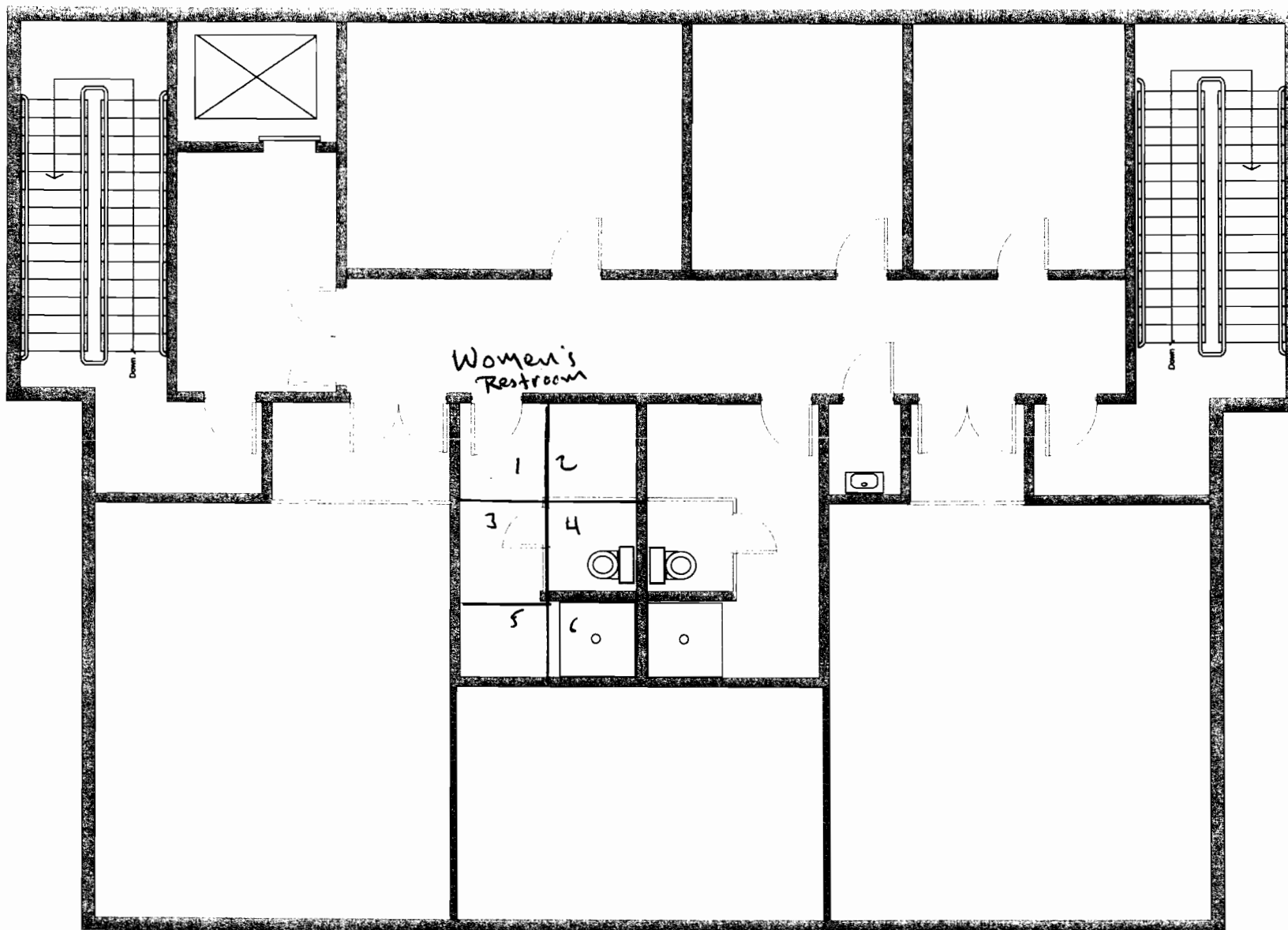
Men's Room

Protocol #: 9 Name:decom 02-Apr-02 15:11
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	12.00	17.00	22.00	243.	
2	1.00	7.00	13.00	15.00	237.	
3	1.00	9.00	15.00	18.00	258.	
4	1.00	11.00	14.00	19.00	252.	
5	1.00	7.00	13.00	16.00	256.	
6	1.00	8.00	13.00	25.00	235.	
(1 missing vial)						
8	1.00	13.00	18.00	23.00	341.	} Rky
9	1.00	8.00	13.00	21.00	329.	
(1 missing vial)						
11	1.00	25115.0	25180.0	25186.0	827.	3H SH
12	1.00	28409.0	120790.	120953.	831.	14C SH
13	1.00	9997.00	106921.	150975.	323.	36C 15H

ND
 4/12/12

CC:34.17



Decommissioning Floor Plan

Facility:

Surveyed by:

Date of survey:

Drawing
Not To Scale

Women's Room

Protocol #: 9 Name: decom 02-Apr-02 15:51
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	9.00	16.00	21.00	256.	
2	1.00	3.00	9.00	15.00	257.	
3	1.00	10.00	16.00	23.00	255.	
4	1.00	11.00	15.00	22.00	239.	
5	1.00	10.00	16.00	22.00	256.	
6	1.00	12.00	15.00	23.00	266.	
(1 missing vial)						
8	1.00	9.00	14.00	20.00	256.	} Bkg
9	1.00	5.00	10.00	13.00	265.	
(1 missing vial)						
11	1.00	25240.0	25304.0	25308.0	826.	3H SH
12	1.00	28499.0	120708.	120870.	830.	14C SH
13	1.00	10012.0	107506.	151552.	323.	31C13H

DD
 4/12/12

cc: 30.42

Protocol #: 9 Name: decom 22-Mar-00 14:45
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	11.00	14.00	20.00	247.	
2	1.00	10.00	15.00	27.00	229.	
3	1.00	17.00	26.00	33.00	227.	
4	1.00	13.00	16.00	17.00	244.	
5	1.00	9.00	13.00	19.00	209.	
6	1.00	10.00	12.00	20.00	243.	
7	1.00	6.00	13.00	19.00	233.	
8	1.00	7.00	17.00	25.00	239.	
9	1.00	14.00	24.00	25.00	234.	
10	1.00	11.00	19.00	27.00	205.	
11	1.00	69.00	85.00	92.00	253.	
12	1.00	24.00	28.00	30.00	237.	
13	1.00	18.00	26.00	31.00	219.	
14	1.00	7.00	12.00	16.00	220.	
15	1.00	9.00	15.00	18.00	185.	
16	1.00	17.00	19.00	25.00	209.	

(2 missing vials)

19	1.00	11.00	21.00	24.00	329.
20	1.00	15.00	22.00	26.00	337.

3BKL

(1 missing vial)

22	1.00	24861.0	24933.0	24935.0	829.
23	1.00	28612.0	121041.	121187.	831.
24	1.00	9849.00	107080.	150966.	322.

34
HC
34C1

CL = 38

Survey of Area F, walls / floor
 has more extensive hood surveys

WALK
 12/1/00

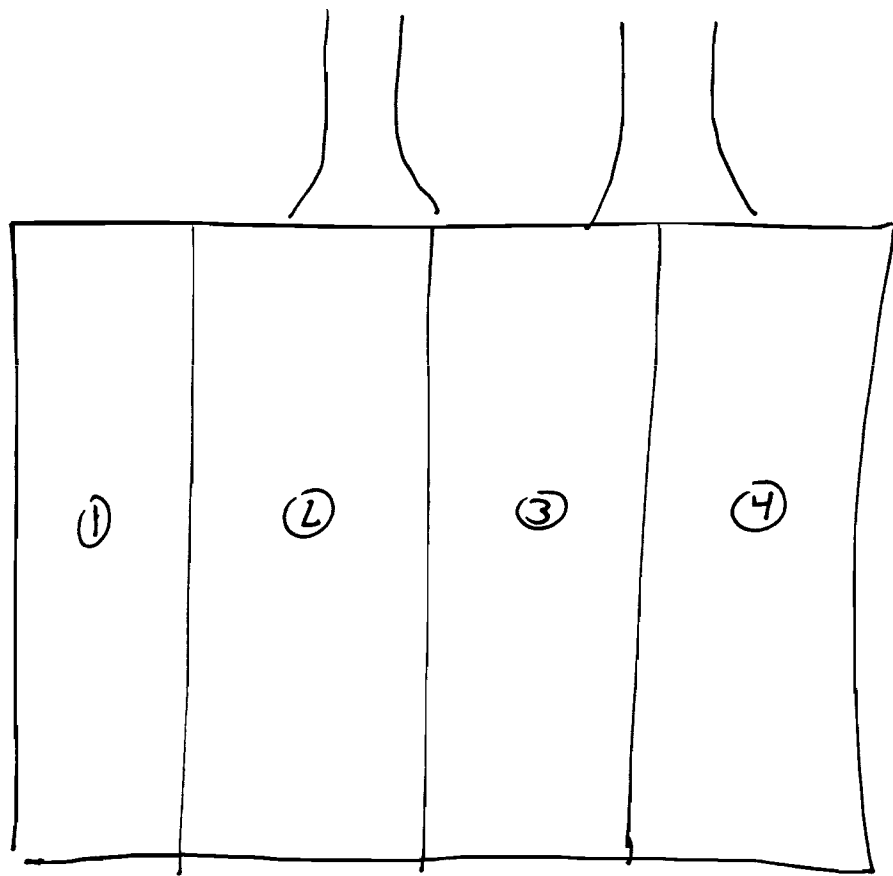
RECOUNT ATTACHED - ND

ND
 4/12/12

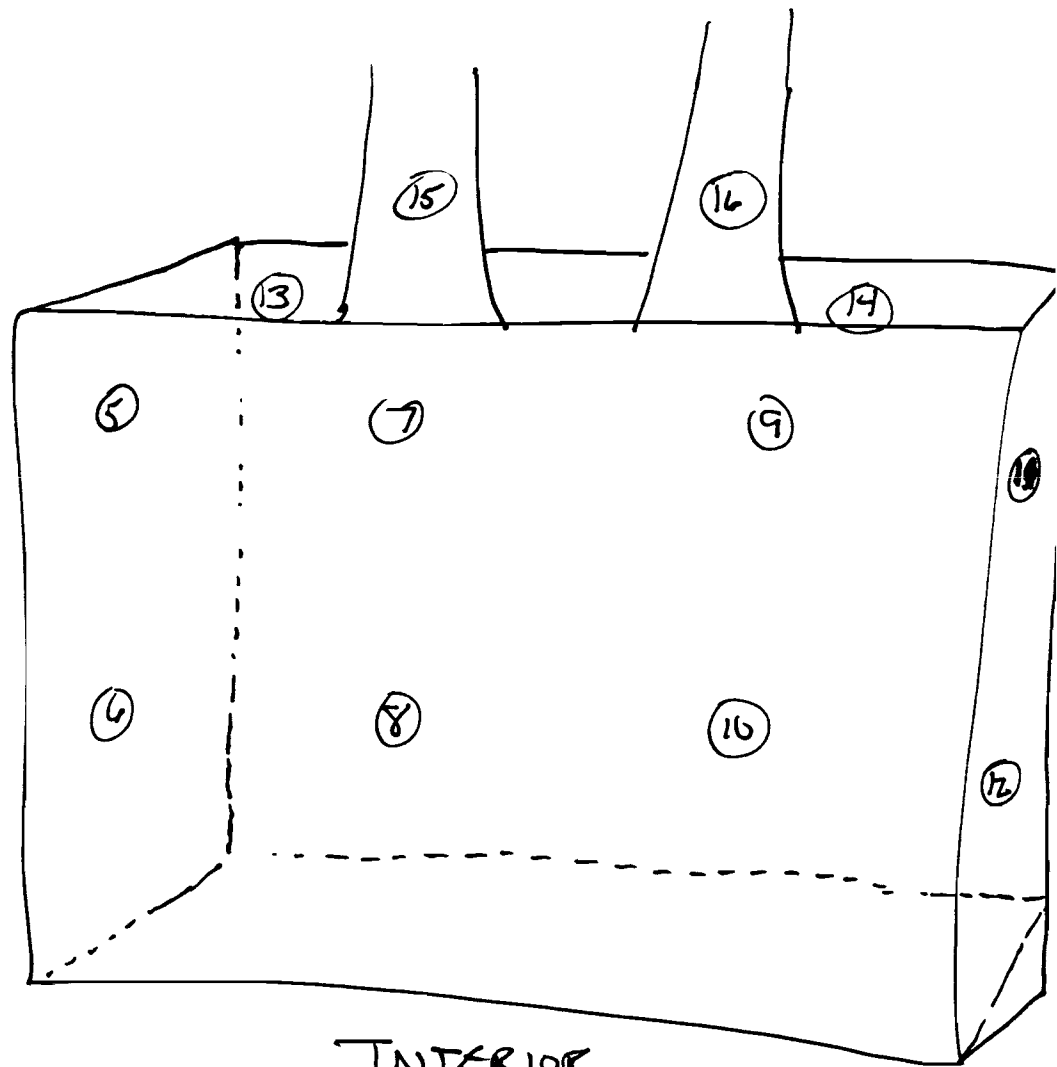
Protocol #: 9 Name:decom 23-Mar-00 13:57
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
(10 missing vials)						
11	1.00	13.00	19.00	23.00	236.	< BKG 26
(8 missing vials)						
20	1.00	6.00	9.00	17.00	338.	
21	1.00	2.00	12.00	20.00	333.	
(1 missing vial)						
23	1.00	25240.0	25290.0	25294.0	833.	
24	1.00	28165.0	120347.	120486.	833.	
25	1.00	10114.0	107237.	151594.	327.	

WIKI
 RM
 7-12-00



DOORS



INTERIOR

Decommission Meter Survey

Location: EHF FILTER BANK, Sink in Rm C

Date: 4/19/02

Initials: JF

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading:

Check source reading:

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading: ≤ 100 cpm

Check source reading: 25 K cpm

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: ≤ 120 cpm

Check source reading: 30k cpm

Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading:

Check source reading:

Meter: Ludlum 192 sn 225050

Background reading:

Check source reading:

Meter survey results: All READINGS \leq Bkg

Protocol #: 9 Name: decom 19-Apr-00 10:58
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tsIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tsIE	FLAG
1	1.00	12.00	20.00	25.00	243.	Filter Bank
(1 missing vial)						
3	1.00	13.00	17.00	19.00	256.	TRAP
(1 missing vial)						
5	1.00	7.00	11.00	17.00	254.	PIPE
(16 missing vials)						
22	1.00	11.00	15.00	19.00	343.	} Bkg
23	1.00	4.00	13.00	24.00	327.	
(1 missing vial)						
25	1.00	24755.0	24831.0	24837.0	828	} std.
26	1.00	28029.0	120393.	120571.	837.	
27	1.00	10041.0	106317.	150784.	325.	

CC 35 (p427)

XP
 4/25/12

Decommission Meter Survey

Location: Bldg 27 Exhaust Stack (end point on roof)

Date: 4/24/12

Initials: RS

Check Source: 137-CS 8 uCi 8/26/85 CS-3

Meter: Ludlum 3 sn 80675 with 44-9 probe sn 100461

Background reading:

Check source reading:

Meter: Ludlum 3 sn 80675 with 44-9-18 probe sn 170597

Background reading:

Check source reading:

Meter: Ludlum 3 sn 129936 with 44-9 probe sn 179596

Background reading: ≤ 120 cpm

Check source reading: 30 k cpm

Meter: Ludlum 12 sn 274198 with 239-1F floor probe

Background reading:

Check source reading:

Meter: Ludlum 192 sn 225050

Background reading:

Check source reading:

Meter survey results: All Readings \leq Bkg

Bldg 27 Exhaust Stack (end point on roof)

Protocol #: 9 Name: decom 24-Apr-00 09:28
 Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
 Time = 1.00 QIP = tSIE ES Terminator = Count

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG
1	1.00	13.00	20.00	23.00	262.	
(20 missing vials)						
22	1.00	13.00	22.00	29.00	341.	
23	1.00	13.00	23.00	29.00	330.	Bks
(1 missing vial)						
25	1.00	24767.0	24856.0	24862.0	838.	³ H St2
26	1.00	27970.0	120886.	121072.	843.	¹⁴ C St2
27	1.00	10089.0	106166.	151137.	330.	³⁶ Cl St2

CC = 41.55 cpm

~~27~~
4/25/12

:SCINTEFF LIQUID SCINTILLATION COUNTING EFFICIENCIES VERSUS T_{sie} RATIOS

LSC MANUFACTURER: PACKARD
 MODEL: TRICARB 1600CA
 VIAL SIZE: 7 ML VIALS, 4 ML COCKTAIL
 RADIONUCLIDE : ^3H
 COUNT DATE : 3/7/2012
 LSC STANDARD ACTIVITY ; 126004 DPM
 COUNT TIME = 1 MIN

T_{sie}	CPM A	CPM B	CPM C	EFF A	EFF B	EFF C
724	62899	62978	62985	0.499183	0.49981	0.499865
611	57591	57618	57622	0.457057	0.457271	0.457303
525	51920	51932	51938	0.41205	0.412146	0.412193
339	35810	35817	35832	0.284197	0.284253	0.284372
253	25116	25124	25132	0.199327	0.19939	0.199454
173	16892	16900	16902	0.134059	0.134123	0.134139
115	8899	8907	8913	0.070625	0.070688	0.070736
76	4258	4266	4271	0.033793	0.033856	0.033896
46	1523	1526	1528	0.012087	0.012111	0.012127
				0	0	0

c-channel
 $t_{sie} = \left\{ \begin{array}{l} 253 \quad 0.20 \\ 80 \quad 173 \quad 0.13 \end{array} \right\} .07$

225 - ? 0.18 ^3H

^{36}Cl Standard, from Inventory:
 $6.9 \text{E-}^3 \text{ uCi}$, 153,500 dpm 4/29/96
 0.0691 uCi

$$^{36}\text{Cl eff} = \frac{150,891 \text{ cpm}}{153,500} = 0.983$$

LIQUID SCINTILLATION COUNTING EFFICIENCIES VERSUS T_{sie} RATIOS

LSC MANUFACTURER: PACKARD
 MODEL: TRICARB 1600CA
 VIAL SIZE 7 ML VIALS, 4 ML COCKTAIL
 RADIONUCLIDE : 14-C
 COUNT DATE : 3/7/2012
 LSC STANDARD ACTIVITY ; 127500 DPM
 COUNT TIME = 1 MIN

T _{sie}	CPM A	CPM B	CPM C	EFF A	EFF B	EFF C
723	33022	120862	120881	0.258996	0.947937	0.948086
604	39723	120157	120164	0.311553	0.942408	0.942463
515	44713	118467	118471	0.35069	0.929153	0.929184
425	52615	116732	116736	0.412667	0.915545	0.915576
333	64940	113861	113870	0.509333	0.893027	0.893098
250	80422	109891	109896	0.630761	0.86189	0.861929
173	90452	102998	103004	0.709427	0.807827	0.807875
114	89747	91508	91514	0.703898	0.71771	0.717757
74	73763	73819	73822	0.578533	0.578973	0.578996
46	47463	47471	47472	0.372259	0.372322	0.372329

*77 }
 .67% }
 eff = 0.84 @ t_{sie} 225*

LIQUID SCINTILLATION COUNTING EFFICIENCIES VERSUS T_{sie} RATIOS

LSC MANUFACTURER: PACKARD
 MODEL: TRICARD 2300 TR
 VIAL SIZE 7 ML VIALS, 4 ML COCKTAIL
 RADIONUCLIDE : 3-H
 COUNT DATE : 3/7/2012
 LSC STANDARD ACTIVITY ; 126004 DPM
 COUNT TIME = 1 MIN

T _{sie}	CPM A	CPM B	CPM C	EFF A	EFF B	EFF C
694	67329	67363	67369	0.53434	0.53461	0.534658
591	61831	61844	61849	0.490707	0.49081	0.490849
507	56784	56771	56779	0.450652	0.450549	0.450613
329	39692	39698	39701	0.315006	0.315053	0.315077
243	28706	28713	28723	0.227818	0.227874	0.227953
180	19601	19610	19612	0.155559	0.15563	0.155646
119	10930	10938	10942	0.086743	0.086807	0.086839
78	5282	5285	5286	0.041919	0.041943	0.041951
47	1886	1891	1892	0.014968	0.015007	0.015015
				0	0	0

$f = 0.71$

$t_{1/2} = 225$

$\mu \approx .21$

LIQUID SCINTILLATION COUNTING EFFICIENCIES VERSUS Tsie RATIOS

LSC MANUFACTURER: PACKARD
 MODEL: TRICARD 2300 TR
 VIAL SIZE 7 ML VIALS, 4 ML COCKTAIL
 RADIONUCLIDE : 14-C
 COUNT DATE : 3/7/2012
 LSC STANDARD ACTIVITY ; 127500 DPM
 COUNT TIME = 1 MIN

Tsie	CPM A	CPM B	CPM C	EFF A	EFF B	EFF C
693	32971	121725	121743	0.258596	0.954706	0.954847
583	39517	120125	120131	0.309937	0.942157	0.942204
499	45007	119552	119560	0.352996	0.937663	0.937725
415	53616	118325	118338	0.420518	0.928039	0.928141
326	66068	115595	115601	0.51818	0.906627	0.906675
241	81487	110929	110931	0.639114	0.870031	0.870047
180	93382	105999	106001	0.732408	0.831365	0.83138
120	93714	95324	95327	0.735012	0.747639	0.747663
77	78951	78986	78989	0.619224	0.619498	0.619522
46	53968	53977	53979	0.423278	0.423349	0.423365

$f = .74$

$\mu = .86$

$t_{111} = 225$

Packard Tricarb 2300 TR

Printed at: 3/7/12

Region: 11.0

Printed at: 3/7/12

Printed at: 3/7/12

Printed at: 3/7/12

7 ml LSC vials @ 4 ml cocktail
3/7/12

C-14	1	1.00	93381.6	105999.	106001.	180.
	2	1.00	93714.0	95324.0	95327.0	120.
	3	1.00	78951.0	78986.0	78989.0	76.6
	4	1.00	53968.2	53977.0	53979.0	46.3
	5	1.00	9938.40	115968.	151015.	311.
	6	1.00	67329.0	67363.0	67369.0	694.
	7	1.00	61831.0	61844.0	61849.0	591.
	8	1.00	56764.0	56771.0	56779.0	507.
	9	1.00	39692.2	39698.0	39701.0	329.
	10	1.00	28706.0	28713.0	28723.0	243.
	11	1.00	19601.0	19610.0	19612.0	180.
	12	1.00	10930.0	10938.0	10942.0	119.
	13	1.00	5282.00	5285.00	5286.00	78.3
	14	1.00	1886.00	1891.00	1892.00	47.0

(1 missing vial)

1-36 12 1.00 9938.40 115968. 151015. 311.

(6 missing vials)

4-3 19 1.00 67329.0 67363.0 67369.0 694.
20 1.00 61831.0 61844.0 61849.0 591.
21 1.00 56764.0 56771.0 56779.0 507.

(1 missing vial)

23 1.00 39692.2 39698.0 39701.0 329.
24 1.00 28706.0 28713.0 28723.0 243.
25 1.00 19601.0 19610.0 19612.0 180.
26 1.00 10930.0 10938.0 10942.0 119.
27 1.00 5282.00 5285.00 5286.00 78.3
28 1.00 1886.00 1891.00 1892.00 47.0

(1 missing vial)

5-30 30 1.00 9997.60 115250. 150891. 313.

(6 missing vials)

37 1.00 9.20 17.00 25.00 253.
38 1.00 14.00 22.00 27.00 254.
39 1.00 11.00 15.00 17.00 254.
40 1.00 10.00 13.00 17.00 254.
41 1.00 6.00 11.00 17.00 252.
42 1.00 11.00 14.00 19.00 254.
43 1.00 4.00 11.00 16.00 252.
44 1.00 9.00 15.00 17.00 255.
45 1.00 11.00 16.00 21.00 252.
46 1.00 7.00 11.00 16.00 252.

$\bar{r} = 19.2$

127,500 dpm 4/18/97
Alt = Same

C1-36 std.

290,500 dpm 4/18/97
Alt = 126004 dpm

C1-36 std.

Bkgd. 1 cotton tipped applicator

$T_{sie} = 253.2$

Packard Tri-Carb 1600 CA

7ml LSC vials @ 4ml cocktail

Protocol #: 9

Name: decom

3/7/12 07-Mar-00 17:03

Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Time = 1.00

QIP = tSIE

ES Terminator = Count

	S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG	
C14	1	1.00	33022.0	120862.	120881.	723.	1 μ s	C-14 127,500 dpm 4/18/97
	2	1.00	39723.0	120157.	120164.	604.	2 "	"
	3	1.00	44713.0	118467.	118471.	515.	3 "	"
	4	1.00	52615.0	116732.	116736.	425.	4 "	"
	5	1.00	64940.0	113861.	113870.	333.	5 "	"
	6	1.00	80422.0	109891.	109896.	250.	6 "	"
	7	1.00	90452.0	102998.	103004.	173.	7 "	"
	8	1.00	89747.0	91508.0	91514.0	114.	8 "	"
	9	1.00	73763.0	73819.0	73822.0	74.3	9 "	"
	10	1.00	47463.0	47471.0	47472.0	45.6	10 "	"
	(8 missing vials)							
H3	19	1.00	62899.0	62978.0	62985.0	724.	1 μ s	H-3 290,500 dpm 4/18/97
	20	1.00	57591.0	57618.0	57622.0	611.	2 "	"
	21	1.00	51920.0	51932.0	51938.0	525.	3 "	"
	(1 missing vial)							
	23	1.00	35810.0	35817.0	35832.0	339.	5 "	"
	24	1.00	25116.0	25124.0	25132.0	253.	6 "	"
	25	1.00	16892.0	16900.0	16902.0	173.	7 "	"
	26	1.00	8899.00	8907.00	8913.00	115.	8 "	"
	27	1.00	4258.00	4266.00	4271.00	75.5	9 "	"
	28	1.00	1523.00	1526.00	1528.00	45.8	10 "	"
	(1 missing vial)							
21-36	30	1.00	9836.00	106238.	150729.	326.		C1-36 std.
	(6 missing vials)							
Bkgd.	37	1.00	9.00	14.00	19.00	268.		BKgd 1 cotton tipped applicator
	38	1.00	9.00	15.00	20.00	269.		"
	39	1.00	9.00	18.00	23.00	265.		"
	40	1.00	12.00	19.00	24.00	268.		"
	41	1.00	9.00	12.00	18.00	275.		"
	42	1.00	5.00	12.00	19.00	275.		"
	43	1.00	9.00	16.00	20.00	268.		"
	44	1.00	11.00	12.00	17.00	274.		"
	45	1.00	11.00	13.00	14.00	272.		"
	46	1.00	9.00	14.00	16.00	263.		"

 $\bar{C} = 19.0$

$$\bar{t}_{SIE} = 269.7$$



Designer and Manufacturer
of
Scientific and Industrial
Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER ATLANTIC NUCLEAR ORDER NO. 20192279

Mfg. Ludlum Measurements, Inc. Model 12 Serial No. 274198

Mfg. Ludlum Measurements, Inc. Model 43-37 Serial No. PR 302119

Cal. Date 23-Jan-12 Cal Due Date 23-Jan-13 Cal. Interval 1 Year Meterface 202-356

Check mark ☒ applies to applicable instr. and/or detector IAW mfg. spec. T. 70 °F RH 24 % Alt 709.8 mm Hg

☒ New Instrument ☐ Instrument Received ☐ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☒ Mechanical ck. ☒ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity

☒ F/S Resp. ck ☒ Reset ck. ☐ Window Operation ☒ Geotropism

☒ Audio ck. ☐ Alarm Setting ck. ☒ Batt. ck. (Min. Volt) 2.2 VDC

☒ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☐ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set Comments V Input Sens. 4 mV Det. Oper. Comments V at 4 mV Threshold mV
Dial Ratio =

☒ HV Readout (2 points) Ref./Inst. 500 / 518 V Ref./Inst. 2000 / 2003 V

COMMENTS:

High voltage (ALPHA) = 1300 v.

High voltage (BETA) = 1700 v.

Model 12 currently set for 1700 v.

Calibrated using 6 ft. cable.

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X 1000	400kcpm		<u>400</u>
X 1000	100kcpm		<u>100</u>
X 100	40kcpm		<u>400</u>
X 100	10kcpm		<u>100</u>
X 10	4kcpm		<u>400</u>
X 10	1kcpm		<u>100</u>
X 1	400cpm		<u>400</u>
X 1	100cpm		<u>100</u>

*Uncertainty within ± 10% C.F. within ± 20%

ALL Range(s) Calibrated Electronically

REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout			Log Scale		

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978. State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: ☐ 73410 ☐ 1131 ☐ 781 ☐ 059 ☐ 280 ☐ 60646 ☐ 70897 ☐ Ra-226 S/N Y982

Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-304

☒ Alpha S/N Pu239 #4337 ☒ Beta S/N Tc99 #635/83 ☐ Other

☒ m 500 S/N 38120 ☐ Oscilloscope S/N ☒ Multimeter S/N 78401030

Calibrated By: Lema Ortega Date 23-Jan-12

Reviewed By: Riana De Luna Date 24 Jan 12

Bench Test Data For Detector

Detector 43-37 Serial No. PR 30219

Customer ATLANTIC NUCLEAR

Order #. 20192279

Counter 12 Serial No. 274198

Counter Input Sensitivity 4 mV

Count Time 4pm Distance Source to Detector Surface

Other Plateau'd with left cable

High Voltage Background Isotope Pu 239 Isotope Tc 99 Isotope _____ Isotope _____
Size 30900 dpm Size 22900 dpm Size _____ Size _____

[illegible]

Signature Lena Riteg

Date 23 Jan -12

~~MDL~~ 860 cpm BKG

INSTRUMENT BETA CALIBRATION REPORT

with BG-004A Beta Standards

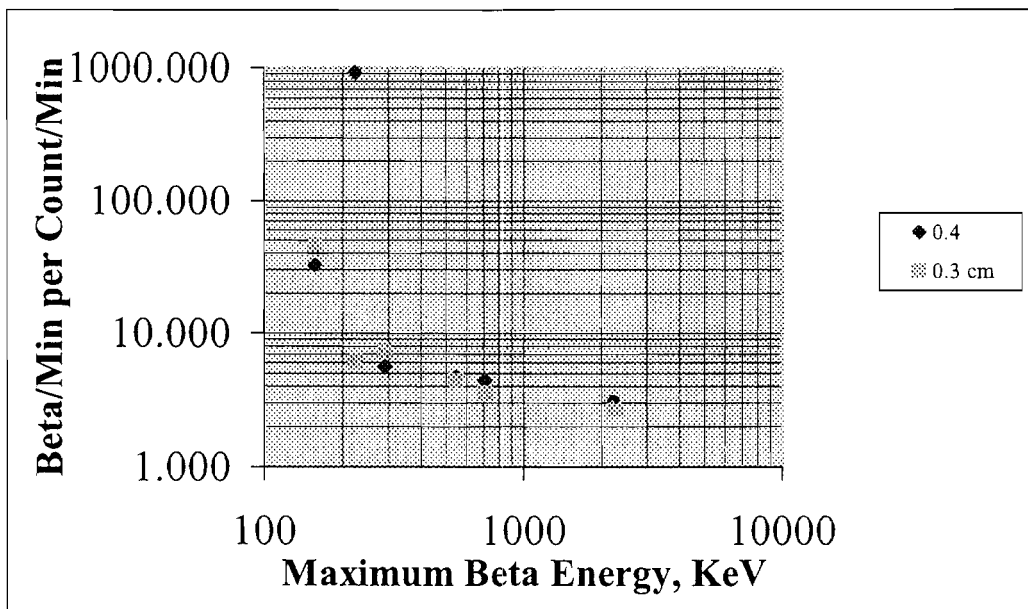
Floor Monitor

Type: Ludlum Model: 239-1F Serial #: 43-37

Probe: 43-37 Serial#: 37,250

Date: 3/3/2012 HV: 1800 Chk. Src.: 137-CS CPM: 37,250

NUCLIDE	KEV MAX	CM(1)	CPM	BPM/CPM	CM(2)	CPM	BPM/CPM
14-C	156.5	0.4	9950	32.270	0.3 cm	7000	45.870
147-Pm	224.7		1	910.291		150	6.069
99-Tc	292		16075	5.524		12000	7.400
36-Cl	709.3		9825	4.293		12000	3.515
90-Y	2283	-0.284	15200	2.832	-0.839	16000	2.696
90-Sr	546			4.624			4.377
BPM/CPM 90-Sr =		4.624	BPM/CPM 90-Sr =		4.377		



note: EIF upstairs BKG 860 cpm
Downstairs BKG = 1400 cpm

UNIVERSITY OF CONNECTICUT HEALTH CENTER RADIATION SAFETY OFFICE

Beta/Nal Survey Instrument Linearity Calibration Record

Owner: **RSO**

UHC #: _____

Date: **2/17/2012**

Manufacturer: **Ludlum**

Model: **3**

S/N: **129936**

Detector Model: **44-9**

Detector S/N: _____

Mechanical Zero - O.K.: X Adjusted to Zero: _____ Cannot be Zeroed: _____

Battery Check - O.K.: X Weak or Dead: _____ Replaced: _____

Speaker / Earphone - O.K.: X Broken: _____ N/A: _____

Calibration For - mR/hr: _____ cpm: X

Linearity Calibration Source - Cs-137 600mCi 10/93 SN 10273

Check Source - 34 K cpm @ contact w/ 84C 137-15 Handwritten signature $A(t) = 3.38 \mu Ci$

Beta Source: C1-36 SN: NES-269 Range: X10 cpm set: 13,000

Beta cpm / Gamma mR/hr CALIBRATION DATA

Range	Distance from Source *		Dose Rate (mR/hr)	Instrument Reading (cpm)		Beta cpm per Gamma mR/hr Correction Factor
X10	Feet 5	Inches * 1	4.46027	13000		2914.62
Attenuated Beam Meter Scale Calibration Data ***						
	Feet	Inches *	Dose Rate (mR/hr)	Expected	Actual	Correction Factor
X100	2	10.78	13.72	40000	40000	1.000
	4	1.18	6.86	20000	20000	
X10	2	10.78	13.72	40000	40000	1.000
	4	1.18	6.86	20000	20000	
X1	9	1.97	1.37	4000	4000	1.000
	12	11.52	0.69	2000	2000	
X0.1	28	11.75	0.14	400	400	1.000
	33	5.55	0.10	300	300	

* - All data for Attenuated Beam

INSTRUMENT BETA CALIBRATION REPORT

with BG-004A Beta Standards

Type: Ludlum

Model: 3

Serial #: 129936

Probe: 44-9

Serial#:

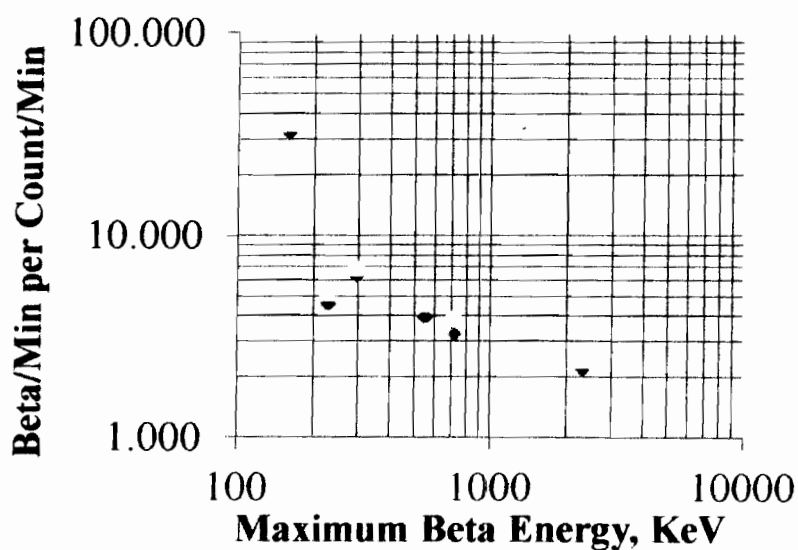
Date: 02/17/12

HV:

Chk. Src.:

CPM:

NUCLIDE	KEV MAX	CM(1)	CPM	BPM/CPM	CM(2)	CPM	BPM/CPM
14-C	156.5	CONTACT	10000	32.109	0.3 cm	9000	35.676
147-Pm	224.7		200	4.601		180	5.112
99-Tc	292		14000	6.342		13000	6.830
36-Cl	709.3		13000	3.244		11000	3.834
90-Y	2283	-0.755	19000	2.183	-0.651	17000	2.403
90-Sr	546			3.953			4.546
BPM/CPM 90-Sr =		3.953	BPM/CPM 90-Sr =		4.546		



**UNIVERSITY OF CONNECTICUT HEALTH CENTER
RADIATION SAFETY OFFICE**

Beta/NaI Survey Instrument Linearity Calibration Record

Owner: **PRICE**

UCHC #:

Date: **12/7/2011**

Manufacturer: **Ludlum**

Model: **3**

S/N: **80675**

Detector Model: **44-9-18**

Detector S/N: **170597**

Mechanical Zero - O.K.: X Adjusted to Zero: Cannot be Zeroed:

Battery Check - O.K.: X Weak or Dead: Replaced:

Speaker / Earphone - O.K.: X Broken: N/A:

Calibration For - mR/hr: cpm: X

Linearity Calibration Source - Cs-137 600mCi 10/93 SN 10273

Check Source - 34K cpm @ contact w/ 8 uCi Cs-137

$A(t) = 3.39 \mu\text{Ci}$

Beta Source: **Cl-36 SN: NES-269** Range: X10 cpm set: 13,000

Beta cpm / Gamma mR/hr CALIBRATION DATA

Range	Distance from Source *		Dose Rate (mR/hr)	Instrument Reading (cpm)		Beta cpm per Gamma mR/hr Correction Factor
X10	Feet 5	Inches * 11	3.30737	13000		3930.62
Attenuated Beam Meter Scale Calibration Data ***						
	Feet	Inches *	Dose Rate (mR/hr)	Expected	Actual	Correction Factor
X100	3	4.48	10.18	40000	40000	1.000
	6	8.95	2.54	10000	10000	
X10	3	4.48	10.18	40000	40000	1.000
	6	8.95	2.54	10000	10000	
X1	10	8	1.02	4000	4000	1.000
	21	3.99	0.25	1000	1000	
X0.1	33	8.76	0.10	400	400	1.000
	38	11.38	0.08	300	300	

* - All data for Attenuated Beam

Calibration By: BL

INSTRUMENT BETA CALIBRATION REPORT

with BG-004A Beta Standards

Type: Ludlum

Model: 3

Serial #: 80675

Probe: 44-9-18

Serial#: 170597

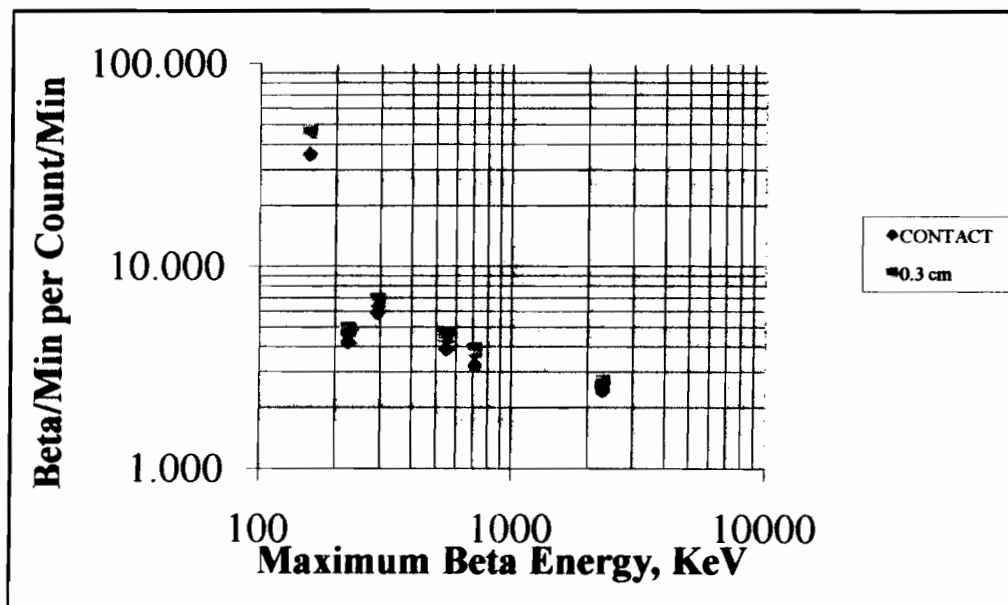
Date: 12/07/11

HV:

Chk. Src.: 137-CS

CPM:

NUCLIDE	KEV MAX	CM(1)	CPM	BPM/CPM	CM(2)	CPM	BPM/CPM
14-C	156.5	CONTACT	9000	35.677	0.3 cm	7000	45.871
147-Pm	224.7		230	4.215		200	4.847
99-Tc	292		15000	5.920		13000	6.830
36-Cl	709.3	-0.678	13000	3.244	-0.651	11000	3.834
90-Y	2283		18000	2.426		16000	2.660
90-Sr	546			3.874			4.546
BPM/CPM 90-Sr =		3.874	BPM/CPM 90-Sr =		4.546		



UNIVERSITY OF CONNECTICUT HEALTH CENTER RADIATION SAFETY OFFICE

Beta/NaI Survey Instrument Linearity Calibration Record

Owner: PRICE

UCHC #:

Date: 12/7/2011

Manufacturer: Ludlum

Model: 3

S/N: 80675

Detector Model: 44-9

Detector S/N: 100461

Mechanical Zero - O.K.: X Adjusted to Zero: _____ Cannot be Zeroed: _____

Battery Check - O.K.: X Weak or Dead: _____ Replaced: _____

Speaker / Earphone - O.K.: X Broken: _____ N/A: _____

Calibration For - mR/hr: _____ cpm: X

Linearity Calibration Source - Cs-137 600mCi 10/93 SN 10273

Check Source - 34K cpm @ contact w/ 8 uCi Cs-137

Beta Source: Cl-36 SN: NES-269 Range: X10 cpm set: 13,000

Net = 3,3946

Beta cpm / Gamma mR/hr CALIBRATION DATA

Range	Distance from Source *		Dose Rate (mR/hr)	Instrument Reading (cpm)		Beta cpm per Gamma mR/hr Correction Factor
X10	Feet 5	Inches * 11	3.30737	13000		3930.62
Attenuated Beam Meter Scale Calibration Data ***						
	Feet	Inches *	Dose Rate (mR/hr)	Expected	Actual	Correction Factor
X100	3	4.48	10.18	40000	40000	1.000
	6	8.95	2.54	10000	10000	
X10	3	4.48	10.18	40000	40000	1.000
	6	8.95	2.54	10000	10000	
X1	10	8	1.02	4000	4000	1.000
	21	3.99	0.25	1000	1000	
X0.1	33	8.76	0.10	400	400	1.000
	38	11.38	0.08	300	300	

* - All data for Attenuated Beam

Calibration By: BL

INSTRUMENT BETA CALIBRATION REPORT

with BG-004A Beta Standards

Type: Ludlum

Model: 3

Serial #: 80675

Probe: 44-9

Serial#: 100461

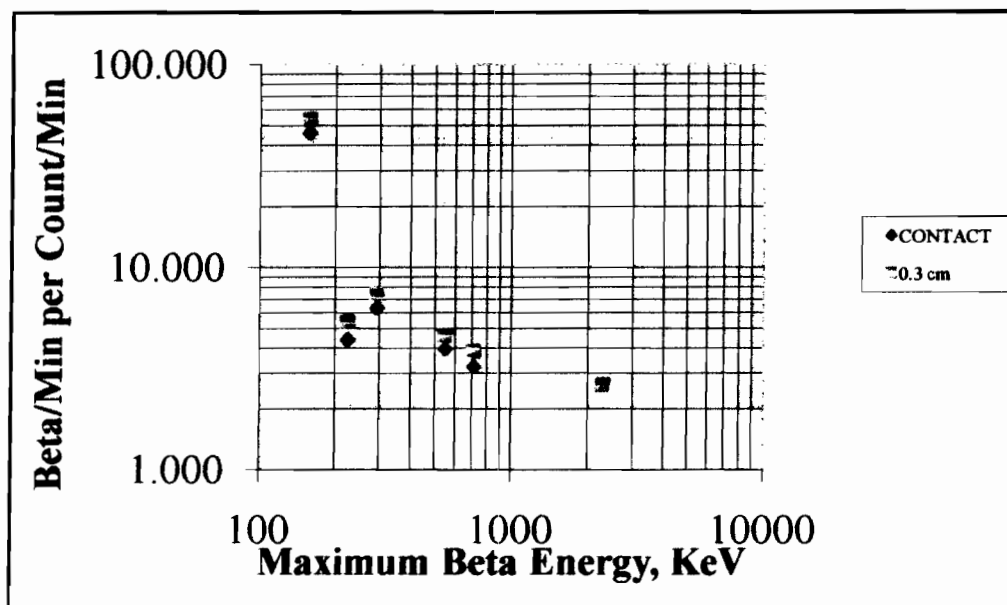
Date: 12/07/11

HV:

Chk. Src.: 137-CS

CPM:

NUCLIDE	KEV MAX	CM(1)	CPM	BPM/CPM	CM(2)	CPM	BPM/CPM
14-C	156.5	CONTACT	7000	45.871	0.3 cm	6000	53.516
147-Pm	224.7		220	4.406		180	5.386
99-Tc	292		14000	6.342		12000	7.400
36-Cl	709.3		13000	3.244		11000	3.834
90-Y	2283	-0.755	17000	2.630	-0.741	16000	2.624
90-Sr	546			3.953			4.654
BPM/CPM 90-Sr =		3.953	BPM/CPM 90-Sr =		4.654		

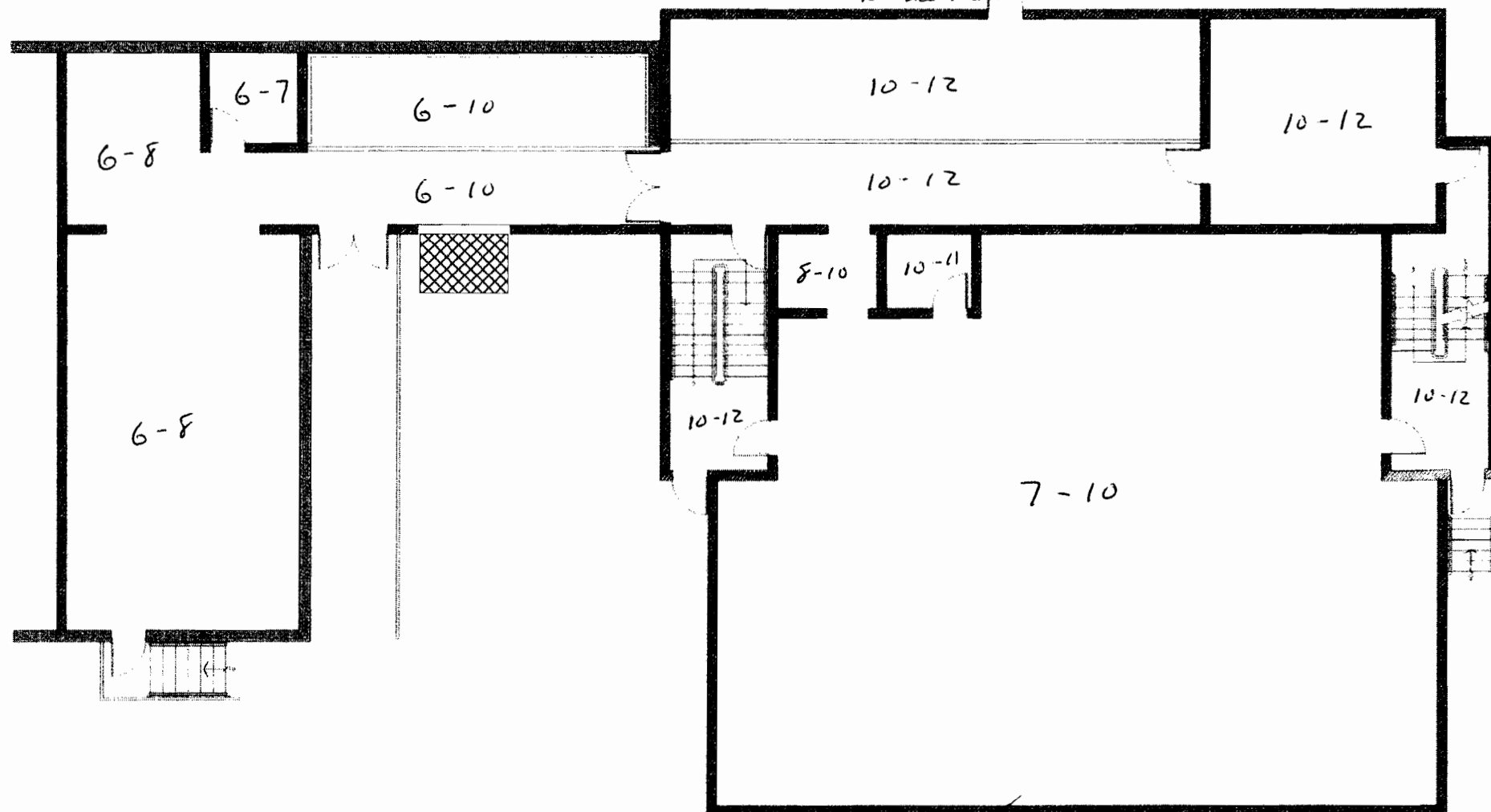


All Readings in micro-R/hr using Ludlum Model 192 SN 225050

Bkg = 9

check source - ^{137}Cs 8mCi 8/26/85 cs-3

check source reading = ~~17000~~ 1700 front of meter
700 side of meter



Decommissioning Floor Plan

Facility:

Surveyed by:

RS, DB

Date of survey:

4/20/12

Drawing
Not To Scale

UNIVERSITY OF CONNECTICUT HEALTH CENTER

RADIATION SAFETY OFFICE

Survey Instrument Calibration Record

Owner: RSO

UCHC No. _____

Date 3/8/12

Manufacturer: Ludlum

Model: 192

S/N: 225050

Detector Model: μR

S/N: _____

Mechanical Zero: O.K. /

Adjusted to zero _____

Cannot be zeroed _____

Battery Check: O.K. /

Weak or Dead _____

Replaced _____

Speaker or Earphone: O.K. /

Doesn't Work _____

Not Applicable _____

Calibration for: mR/hr R/hr

cpm _____

Calibration source Cs-137 600mCi 10/93 SN 10273

Check source: Available 137Cs

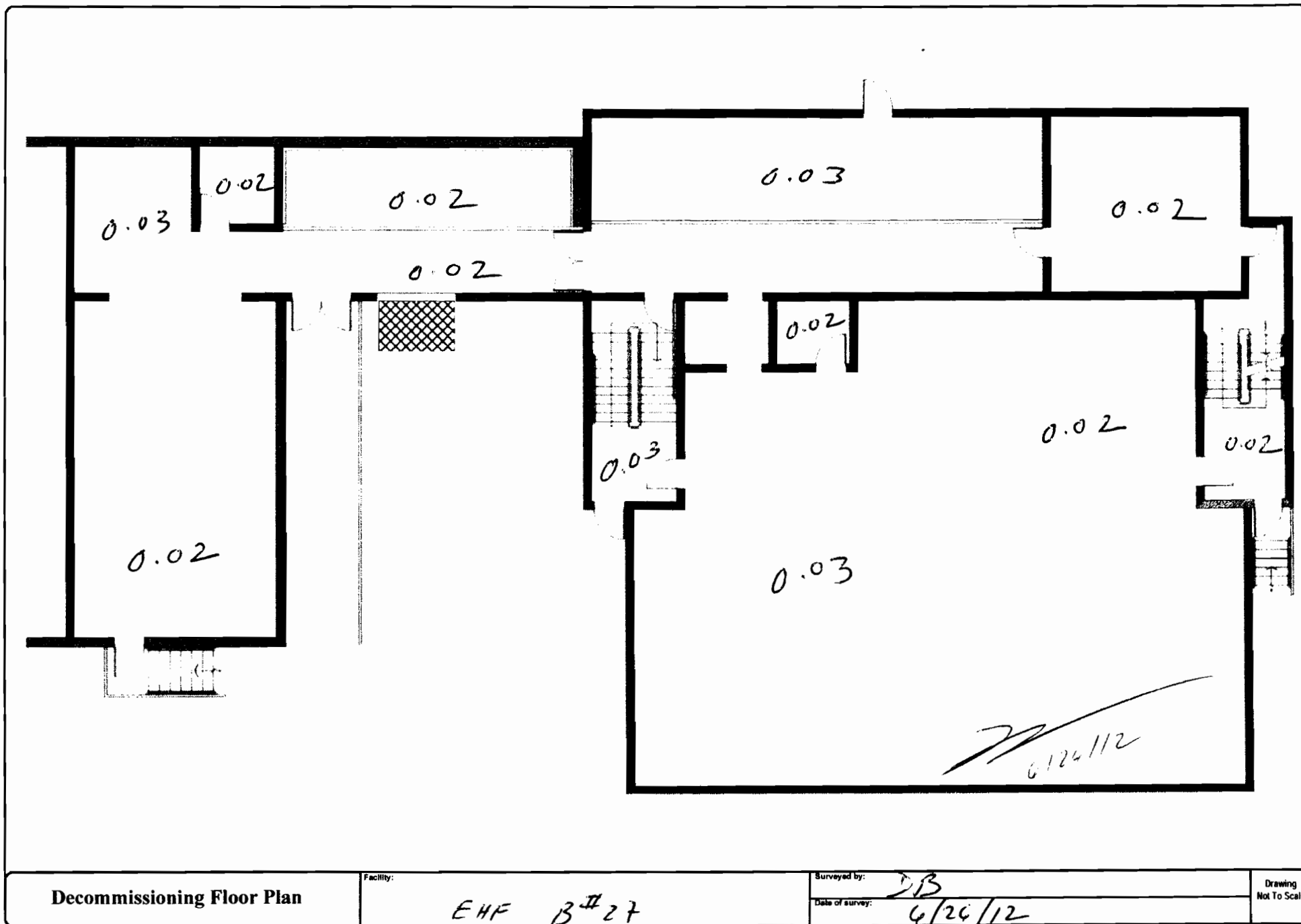
Not Available _____

1800 $\mu R/hr$ @ contact front of meter

CALIBRATION DATA

RANGE	DISTANCE FROM SOURCE	DOSE RATE mR/HR	INSTRUMENT READING	CORRECTION FACTOR
<u>X 1000</u>	<u>5' 3/4" A</u>	<u>4.5</u>	<u>4.0</u>	<u>1.06</u>
	<u>10' 8 3/4" A</u>	<u>1.0</u>	<u>1.0</u>	
<u>X 100</u>	<u>16' 11 5/8" A</u>	<u>0.4</u>	<u>.39</u>	<u>.96</u>
	<u>33' 11 1/8" A</u>	<u>0.1</u>	<u>.11</u>	
<u>X 10</u>	<u>UNABLE TO CAL</u>	<u>LOW SCALE</u>		
<u>X 1</u>	<u>UNABLE TO CAL</u>	<u>LOW SCALE</u>		

A = Attenuated Beam Used



* All READINGS in mR/hr

Background \leq 0.03 mR/hr

INSTRUMENT USED:
Ludlum 3 w 44-7
SN 48257

INSTRUMENT USED:

UNIVERSITY OF CONNECTICUT HEALTH CENTER

RADIATION SAFETY OFFICE

Survey Instrument Calibration Record

Owner: RSO UCHC #: _____ Date: 10/18/11

Manufacturer: Ludlum Model: 3 Serial #: 48257

Detector Model: 44-7 Detector Serial #: _____

Mechanical Zero: O.K. ☒ Adjusted to Zero _____ Cannot Be Zeroed _____

Battery Check: O.K. ☒ Replaced _____ Unable to Replace _____

Speaker or Earphone: O.K. ☒ Not Working _____ Not Applicable _____

Calibration for: mR/hr ☒ CPM _____ CPM per mR/hr _____ CPS _____ CPS per mR/hr _____

Calibration Source: Cs-137 600mCi 10/93 SN 10273

Check Source: Available: ³⁶Cl Check Source Not Available: _____
3 mR/hr @ contact

CALIBRATION DATA

RANGE	DISTANCE FROM SOURCE	DOSE RATE mR/hr	INSTRUMENT READING (mR/hr)	CORRECTION FACTOR
X100	2' 9 ³ / ₈ "	150	150	1.0
	4' 9 ³ / ₄ "	50	50	
X10	2' 9 ³ / ₈ " A	15	15	1.0
	4' 9 ⁷ / ₈ " A	5	5	
X1	8' 9 ³ / ₈ " A	1.5	1.5	1.0
	15' 2 ⁷ / ₈ " A	0.5	0.5	
X0.1	27' 9 ⁷ / ₈ " A	0.15	0.15	1.0
	34' 1" A	0.1	0.1	

A = Attenuated Beam Used

Calibration performed by: RS