Appendix C

Building and Survey Unit Diagrams With Results

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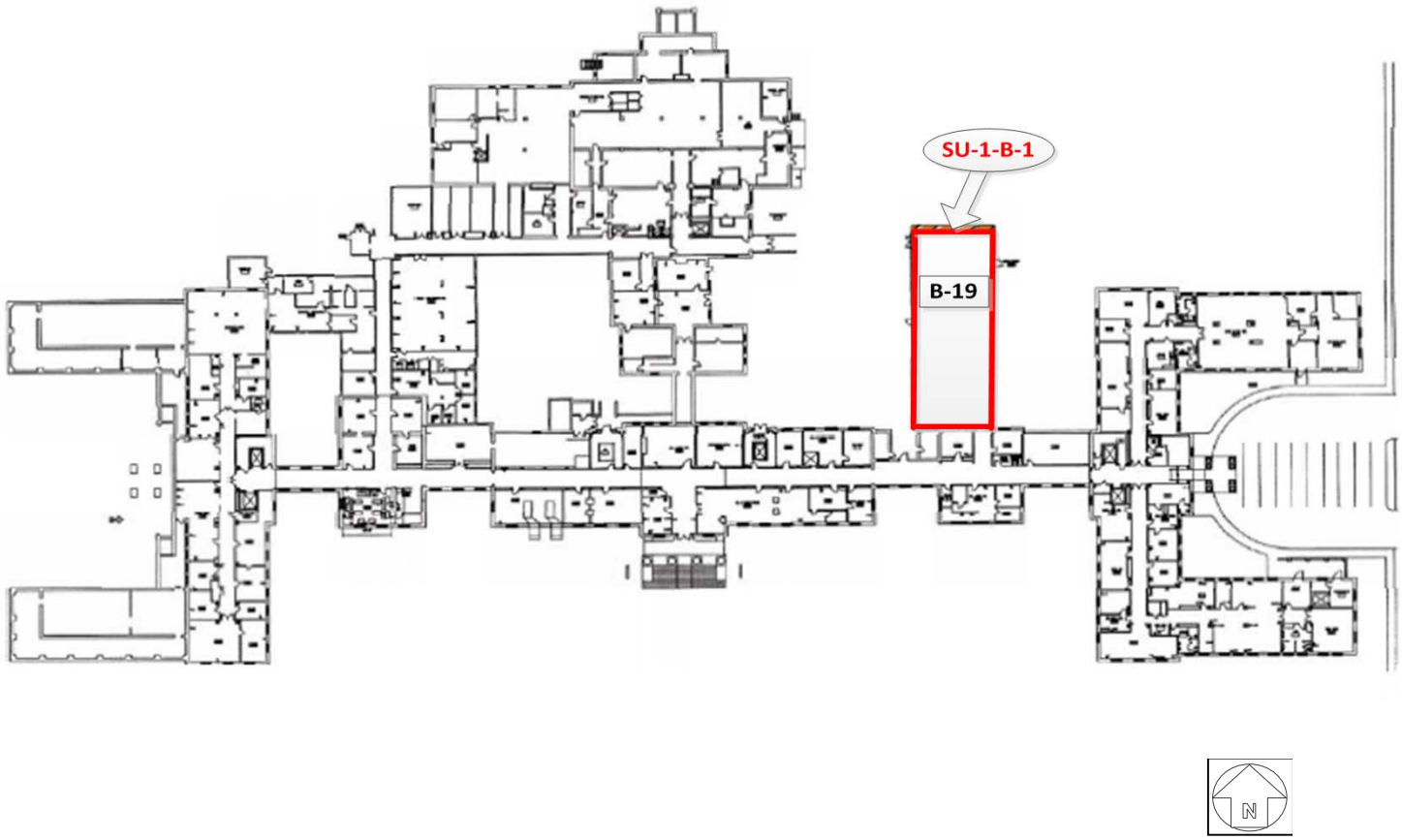


Location Drawing

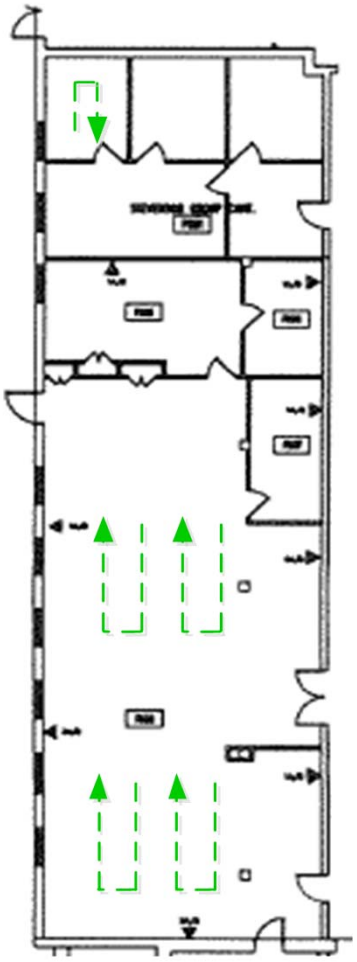
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 1 Basement

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Scan Path

Survey Unit Identifier

SU-1-B-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 1 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 1, 1st Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
SU1-1-1	155	130	306	226	35	-5	517	278	104

Area Scanned (ft^2) 97

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Beta

Location: Building 1, 1st Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
SU1-1-1	155	130	306	226	35	-5	517	278	104

Area Scanned (ft^2) 97

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 1, 1st Level

		Gross CPM				Activity (dpm/100cm$^{2)}$			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU1-1-1	155	0	23	3	5	-5	36	-1	8

Area Scanned (ft^2) 97

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	3	cpm
Probe Area:	582	cm^2	Background σ:	7.32	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	720	dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 1 Basement Level

All measurements in µR/hour

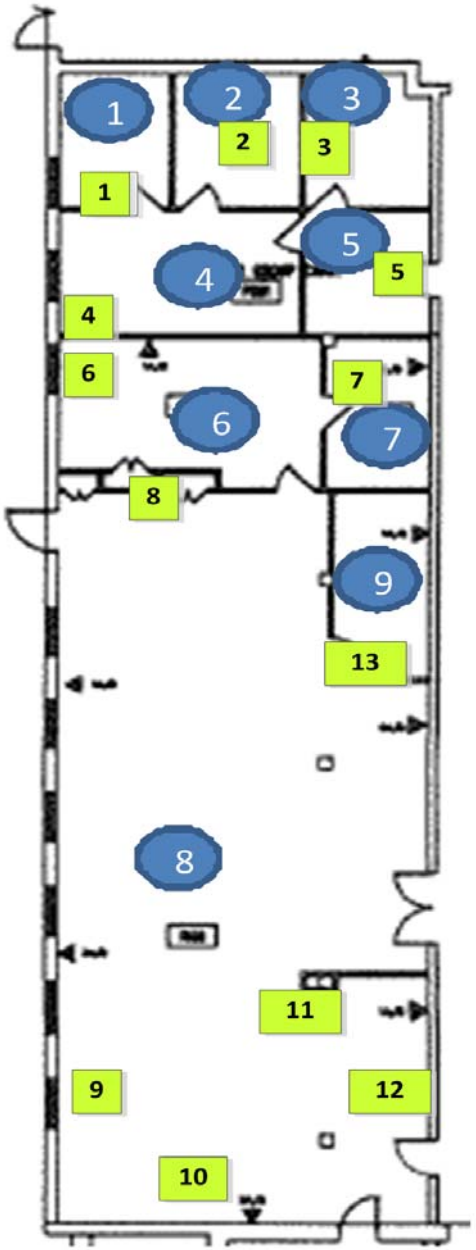
Date: 12/15/2011

Location	1-B-1
1	10
2	9
3	10
4	9
5	8
6	8
7	8
8	9
9	10
10	10
11	12
12	11
13	12
14	9
15	9
16	10

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012

Room	X,Y Locations				
1	S-2,3				
2	8,6				
3	W-5,5				
4	1,5				
5	6,5				
6	2,10				
7	2,9				
8	N-3,4	3,8	5,2	15,9	20, 7
9	1,2				



SURVEY UNITS
LEGEND

Assigned Room Number

Data Point

Survey Unit Identifier

SU-1-B-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 1 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 1
Survey Unit: 1-B-1
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	105	111	19	275	90
2	Concrete	141	183	21	454	100
3	Drywall	126	153	20	379	100
4	Concrete	98	97	19	240	90
5	Concrete	170	241	22	598	110
6	Concrete	136	173	21	429	100
7	Concrete	157	215	22	534	110
8	Plaster Wall	138	177	21	439	100
9	Concrete	117	135	20	335	100
10	Concrete	97	95	19	235	90
11	Concrete	104	109	19	270	90
12	Concrete	115	131	20	325	100
13	Drywall	109	119	19	295	100
					0	0
QC12	Tile Floor	110	121	20	300	100
QC13	Tile Floor	121	143	20	355	100
				Maximum:	598	
				Average:	370	
				STDEV:	115	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Painted Concrete/Linoleum	
Instrument:	2360	141321	Background (cpm):	99.5	
Detector:	44-110	PR-258430	Background σ (cpm):	12.73	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 1
Survey Unit: 1-B-1
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Carpet over Concrete	120	141	20	350	100
2	Carpet over Concrete	104	109	19	270	90
3	Tile Floor	123	147	20	365	100
				Maximum:	365	
				Average:	328	
				STDEV:	51	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Painted Concrete/Linoleum	
Instrument:	2360	184935	Background (cpm):	99.5	
Detector:	43-68	PR-181739	Background σ (cpm):	12.73	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 1
Survey Unit: 1-B-1
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	90	6	13	99	390
2	Concrete	69	-4	13	-64	380
3	Drywall	103	-3	10	-39	300
4	Concrete	76	-1	13	-10	390
5	Concrete	84	3	13	52	390
6	Concrete	77	0	13	-2	390
7	Concrete	85	4	13	60	390
8	Plaster Wall	175	34	12	521	350
9	Concrete	94	8	13	130	400
10	Concrete	94	8	13	130	400
11	Concrete	76	-1	13	-10	390
12	Concrete	87	5	13	76	390
13	Drywall	107	-1	10	-8	310
					0	0
QC12	Concrete	110	16	13	255	410
QC13	Drywall	84	-12	9	-187	290
				Maximum:	521	
				Average:	72	
				STDEV:	149	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Concrete	Drywall
Instrument:	2360	253237		Background (cpm):	39	54
Detector:	43-68	PR-216834		Background σ (cpm):	11.07	6.86
Probe Area:	126	cm^2		Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 1
Survey Unit: 1-B-1
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	88	5	13	83	390
2	Concrete	65	-6	12	-96	380
3	Floor Tile	90	-2	9	-25	280
					0	0
				Maximum:	83	
				Average:	-12	
				STDEV:	90	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Concrete	Floor Tile
Instrument:	2360	253237		Background (cpm):	39	47
Detector:	43-68	PR-216834		Background σ (cpm):	11.07	6
Probe Area:	126	cm^2		Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 1
Survey Unit: 1-B-1
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	1	0	2	-3	30
2	Concrete	2	0	2	1	30
3	Drywall	3	0	2	2	30
4	Concrete	2	0	2	1	30
5	Concrete	5	2	2	14	40
6	Concrete	4	1	2	10	40
7	Concrete	5	2	2	14	40
8	Plaster Wall	2	0	2	-2	30
9	Concrete	4	1	2	10	40
10	Concrete	3	1	2	6	30
11	Concrete	3	1	2	6	30
12	Concrete	3	1	2	6	30
13	Drywall	3	0	2	2	30
QC12	Concrete	2	0	2	1	30
QC13	Drywall	3	0	2	2	30
				Maximum:	14	
				Average:	5	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Concrete	Drywall
Instrument:	2360	253237		Background (cpm):	0.82	1
Detector:	43-68	PR-216834		Background σ (cpm):	1.77	1.27
Probe Area:	126	cm^2		Sample Analysis Time:	2	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

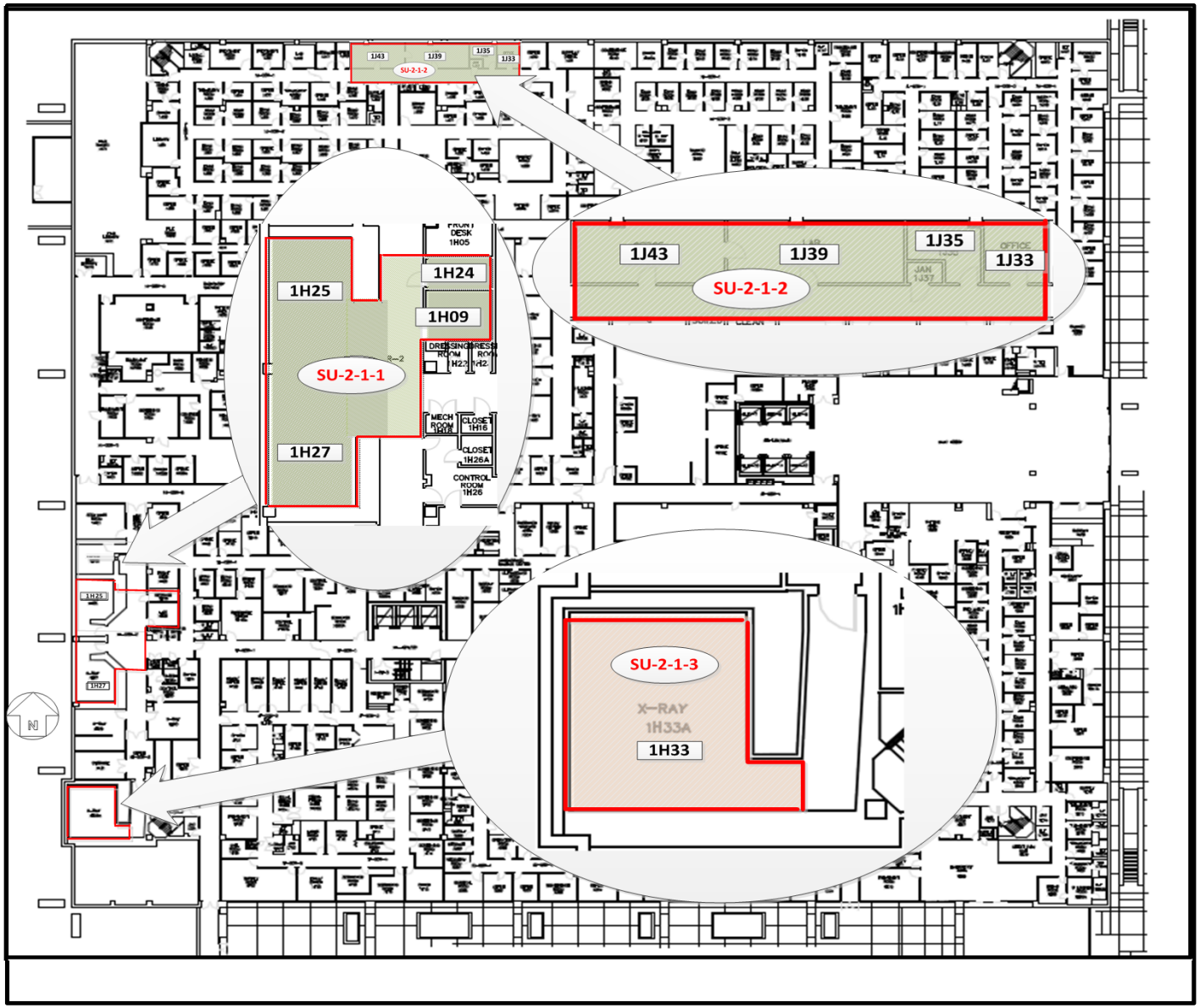
Building: 1
Survey Unit: 1-B-1
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	3	1	2	6	30
2	Concrete	1	0	2	-3	30
3	Floor Tile	5	2	2	16	30
				Maximum:	16	
				Average:	6	
				STDEV:	9	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Concrete	Floor Tile
Instrument:	2360	253237	Background (cpm):	0.82	1
Detector:	43-68	PR-216834	Background σ (cpm):	1.77	0.91
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2



SURVEY UNITS LEGEND

- # Room Number
- Class 1 SU
- Class 2 SU
- Class 3 SU

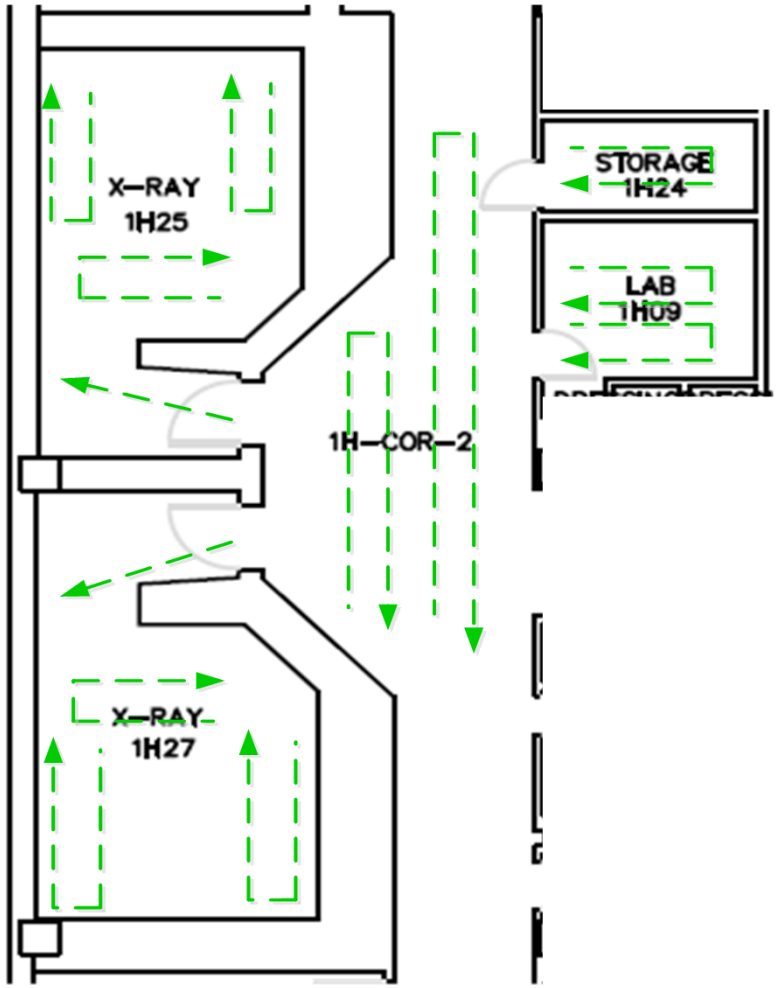
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 2 First Floor

Date: 3-26-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

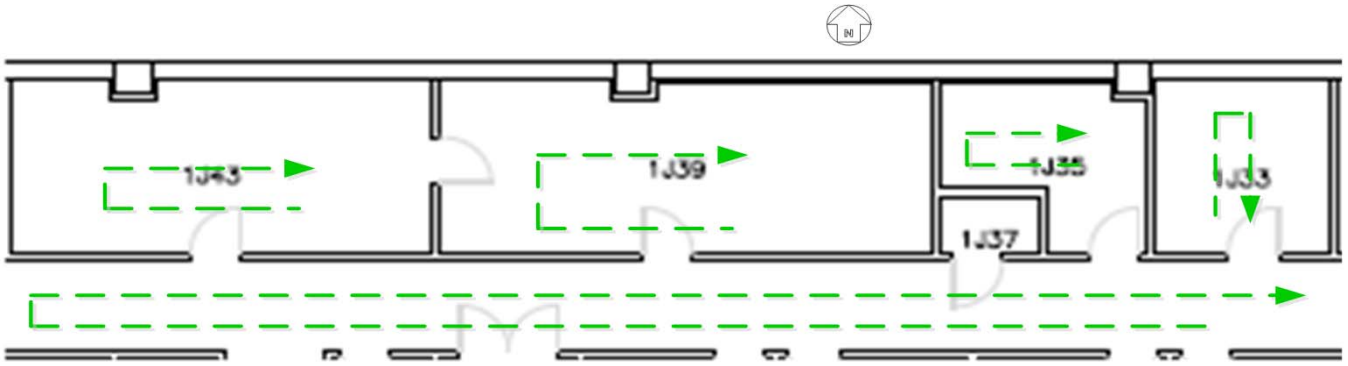
SU2-1-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 First Floor

Date: 3-26-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

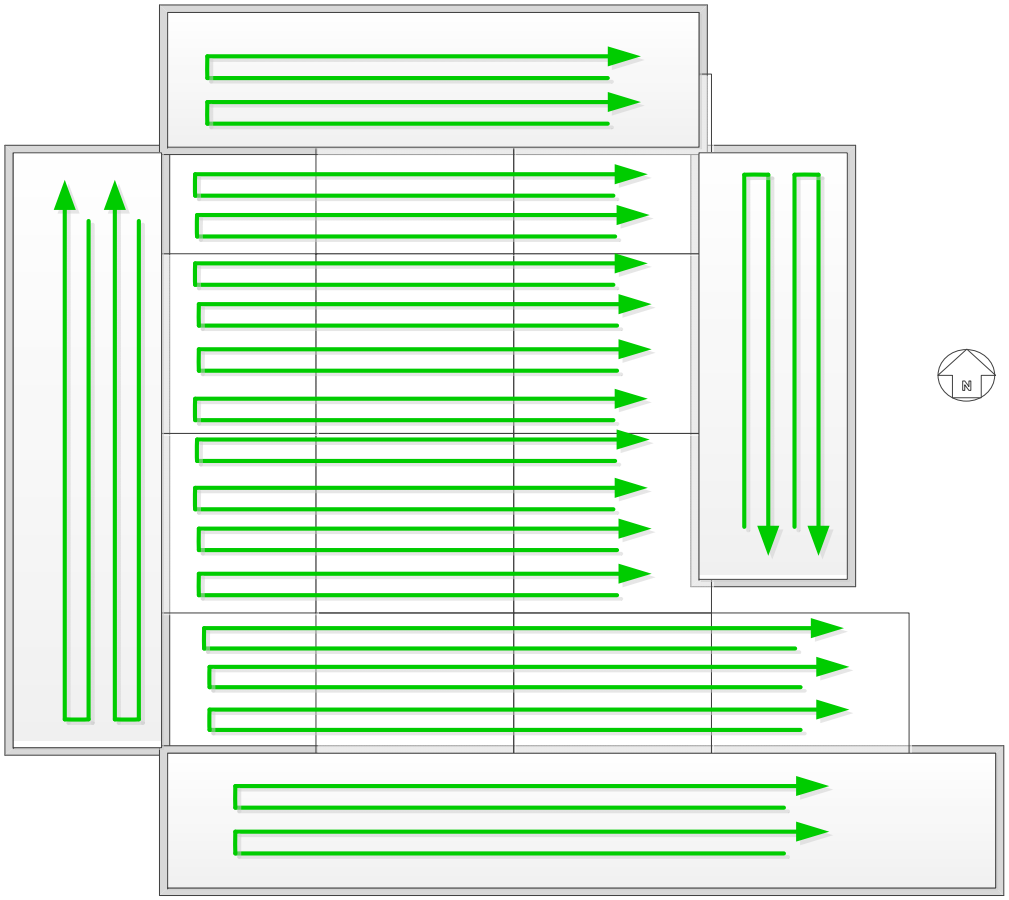
SU2-1-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 First Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 1

Scan Path

Survey Unit Identifier

SU2-1-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 First Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 2, 1st Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
SU2-1-1	158	90	362	156	51	-123	682	71	151
SU2-1-2	272	95	239	154	27	-109	318	66	80
SU2-1-3	191	105	209	148	20	-79	229	49	58

Area Scanned (ft^2) 389

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 2, 1st Level

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU2-1-1	158	0	18.0	2.5	3.6	-5	27	-1	7
SU2-1-2	272	0	16.0	2.2	3.6	-5	23	-1	6
SU2-1-3	191	0	18.0	2.5	4.0	-5	27	-1	7

Area Scanned (ft^2) 389

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	3	cpm
Probe Area:	582	cm^2	Background σ:	7.32	cpm
			Scan speed:	1 detector width / 2sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	720	dpm/100 cm^2

Summary of Scan Results - Beta

Location: Building 2, First Level

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-2-1-1	1323	15	397	71	27	-196	6120	735	447
SU-2-1-2	1642	0	173	33	24	-444	2416	107	398
SU-2-1-3	897	6	169	56	27	-345	2350	475	451

Area Scanned (ft^2) 524

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm^2

Reference Material: Counter
Background: 27 cpm
Background σ: 5.95 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.048 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 916 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 2, First Level

Non-Floor Items

Location	Number of records	Gross CPM				Activity (dpm/100cm^2)			
		Minimum	Maximum	Average	STDEV	Minimum	Maximum	Average	STDEV
SU-2-1-1	1323	0	20	1	3	-4	158	5	23
SU-2-1-2	1642	0	24	1	3	-4	190	5	22
SU-2-1-3	897	0	12	0	2	-4	93	-1	14

Area Scanned (ft^2) 524

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm2

Reference Material: Counter
Background: 1 cpm
Background σ: 0.8 cpm
Scan speed: 1 detector width / 2sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.098 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 705 dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 2

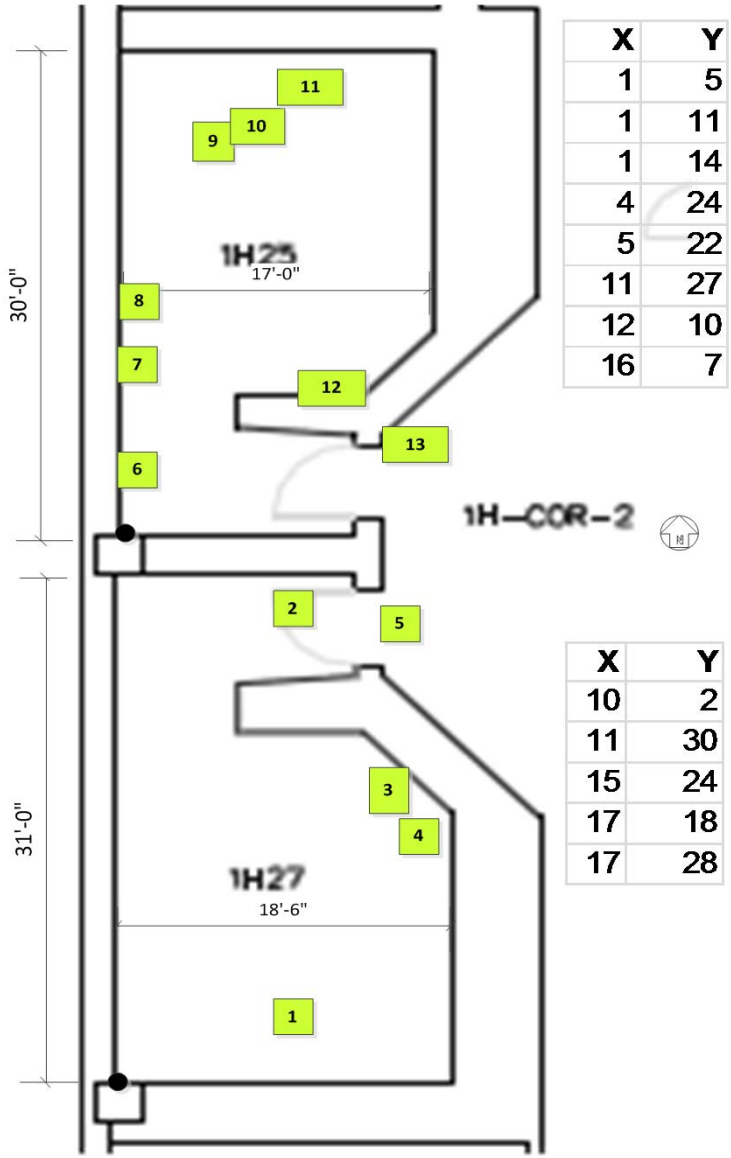
All measurements in µR/hour

Date: 12/28/2011

Location	2-1-1	2-1-2	2-1-3
1	3	7	3
2	2	7	3
3	2	7	3
4	3	8	3
5	2	7	3
6	4	8	3
7	2	8	3
8	2	8	3
9	3	7	3
10	4	7	3
11	3	7	3
12	3	7	3
13	3	6	3
14	2	6	3
15	2	6	3
16	3	9	3
17			3
18			3
19			3
20			3
21			3
22			3

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012



X	Y
1	5
1	11
1	14
4	24
5	22
11	27
12	10
16	7

X	Y
10	2
11	30
15	24
17	18
17	28

SURVEY UNITS LEGEND

Class 3

\# Measurement Number

Origin

Survey Unit Identifier

SU2-1-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 First Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 2
Survey Unit: SU2-1-1
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Linoleum (Blue)	43	38	11	95	60
2	Linoleum (Blue)	52	56	12	140	60
3	Linoleum (Blue)	49	50	12	125	60
4	White Tile	51	54	12	135	60
5	Linoleum (White)	38	28	11	70	50
6	White Tile	49	50	12	125	60
7	Linoleum (Blue)	45	42	12	105	60
8	Drywall	44	40	12	100	60
9	Wood Floor	43	38	11	95	60
10	Drywall	51	54	12	135	60
11	Cabinet Panel	54	60	12	150	60
12	Drywall	48	48	12	120	60
13	Drywall	39	30	11	75	50
QC5	Linoleum	60	72	13	180	60
				Maximum:	180	
				Average:	113	
				STDEV:	25	

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	141321	Reference Material:	Tile Floor
Detector:	44-110	PR-258430	Background (cpm):	47.8
Probe Area:	126	cm^2	Background σ (cpm):	6.66
			Sample Analysis Time:	0.5 min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 2
Survey Unit: SU2-1-1
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	X-Ray Table (Head)	43	38	11	95	60
2	X-Ray Table (Feet)	37	26	11	65	50
3	Drywall	62	76	13	190	60
4	Blade Calibration Tool	55	62	12	155	60
5	Clinac	69	90	14	224	70
				Maximum:	224	
				Average:	146	
				STDEV:	66	

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	184935	Reference Material:	Tile Floor
Detector:	43-68	PR-181739	Background (cpm):	47.80
Probe Area:	126	cm^2	Background σ (cpm):	6.66
			Sample Analysis Time:	0.5 min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 2
Survey Unit: SU2-1-1
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Linoleum (Blue)	43	0	6	0	180
2	Linoleum (Blue)	36	-4	5	-54	170
3	Linoleum (Blue)	39	-2	6	-31	170
4	White Tile	47	2	6	31	180
5	Linoleum (White)	43	0	6	0	180
6	White Tile	49	3	6	47	180
7	Linoleum (Blue)	43	0	6	0	180
8	Drywall	39	-2	6	-31	170
9	Wood Floor	41	-1	6	-16	170
10	Drywall	51	4	6	62	190
11	Cabinet Panel	29	-7	5	-109	160
12	Drywall	57	7	6	109	190
13	Drywall	48	3	6	39	180
QC		43	0	6	4	180
		43				
				Maximum:	109	
				Average:	4	
				STDEV:	56	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Tile Floor	
Instrument:	2360	253237	Background (cpm):	21.5	
Detector:	43-68	PR-216834	Background σ (cpm):	3.44	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 2
Survey Unit: SU2-1-1
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	X-Ray Table (Head)	23	-10	5	-156	150
2	X-Ray Table (Feet)	34	-5	5	-70	160
3	Drywall	41	-1	6	-16	170
				Maximum:	-16	
				Average:	-80	
				STDEV:	71	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Tile Floor	
Instrument:	2360	253237	Background (cpm):	21.5	
Detector:	43-68	PR-216834	Background σ (cpm):	3.44	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 2
Survey Unit: SU2-1-1
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Linoleum (Blue)	1	0	1	-1	10
2	Linoleum (Blue)	0	-1	1	-5	10
3	Linoleum (Blue)	0	-1	1	-5	10
4	White Tile	2	0	1	3	20
5	Linoleum (White)	4	1	2	12	20
6	White Tile	0	-1	1	-5	10
7	Linoleum (Blue)	1	0	1	-1	10
8	Drywall	1	0	1	-1	10
9	Wood Floor	2	0	1	3	20
10	Drywall	2	0	1	3	20
11	Cabinet Panel	1	0	1	-1	10
12	Drywall	1	0	1	-1	10
13	Drywall	0	-1	1	-5	10
QC			-1	1	-5	10

Maximum: 12
Average: 0
STDEV: 5

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material: Tile Floor
Background (cpm): 0.59
Background σ (cpm): 0.51
Sample Analysis Time: 2 min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 2
Survey Unit: SU2-1-1
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	X-Ray Table (Head)	0	-1	1	-5	10
2	X-Ray Table (Feet)	1	0	1	-1	10
3	Drywall	1	0	1	-1	10
				Maximum:	-1	
				Average:	-2	
				STDEV:	2	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Tile Floor	
Detector:	43-68	PR-216834	Background (cpm):	0.59	
Probe Area:	126	cm^2	Background σ (cpm):	0.51	
			Sample Analysis Time:	2	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2

SURVEY UNITS LEGEND

Room Number
Class 2 SU
Class 3 SU

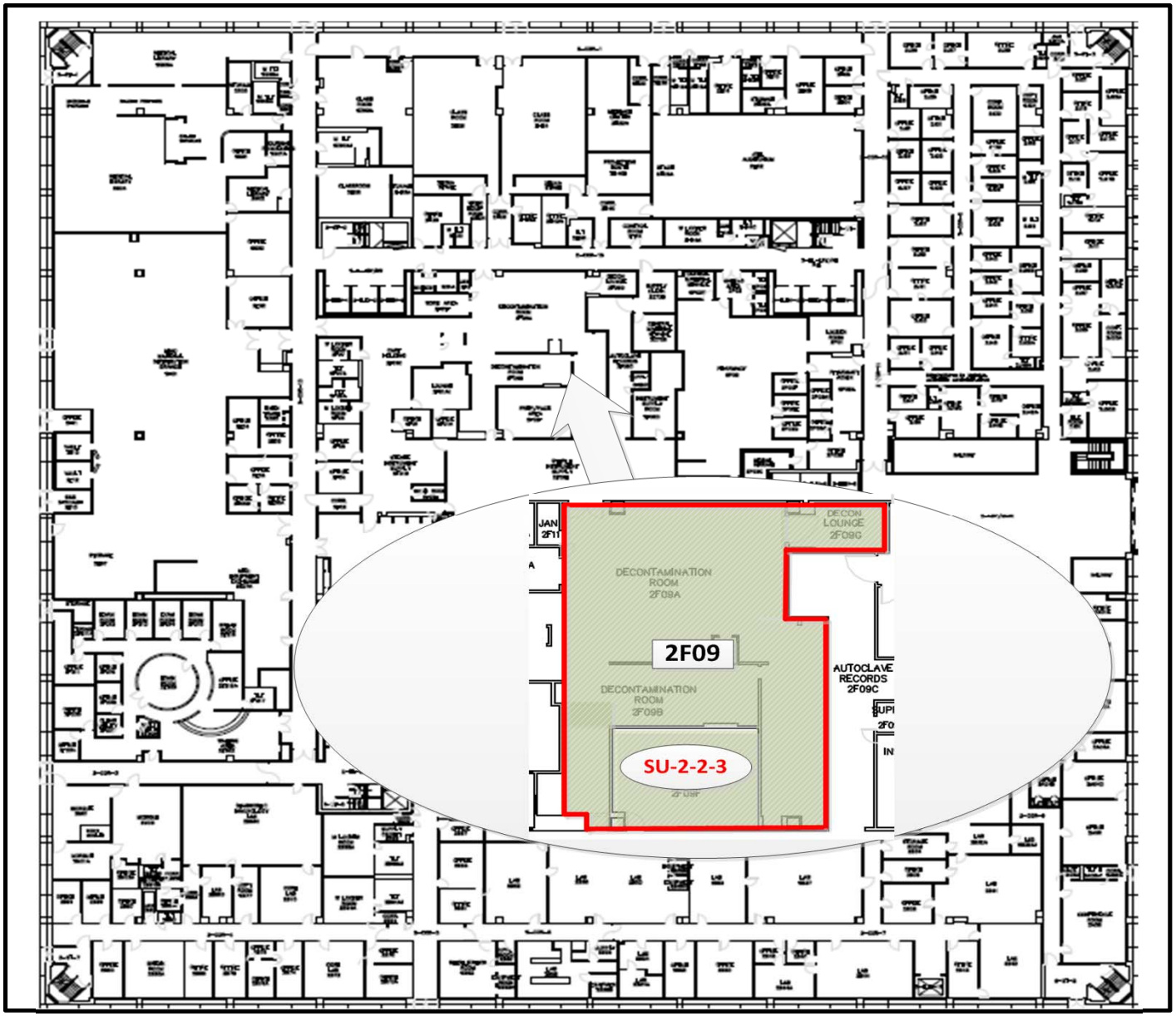
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 2 Second Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS LEGEND

Room Number
Class 2 SU
Class 3 SU

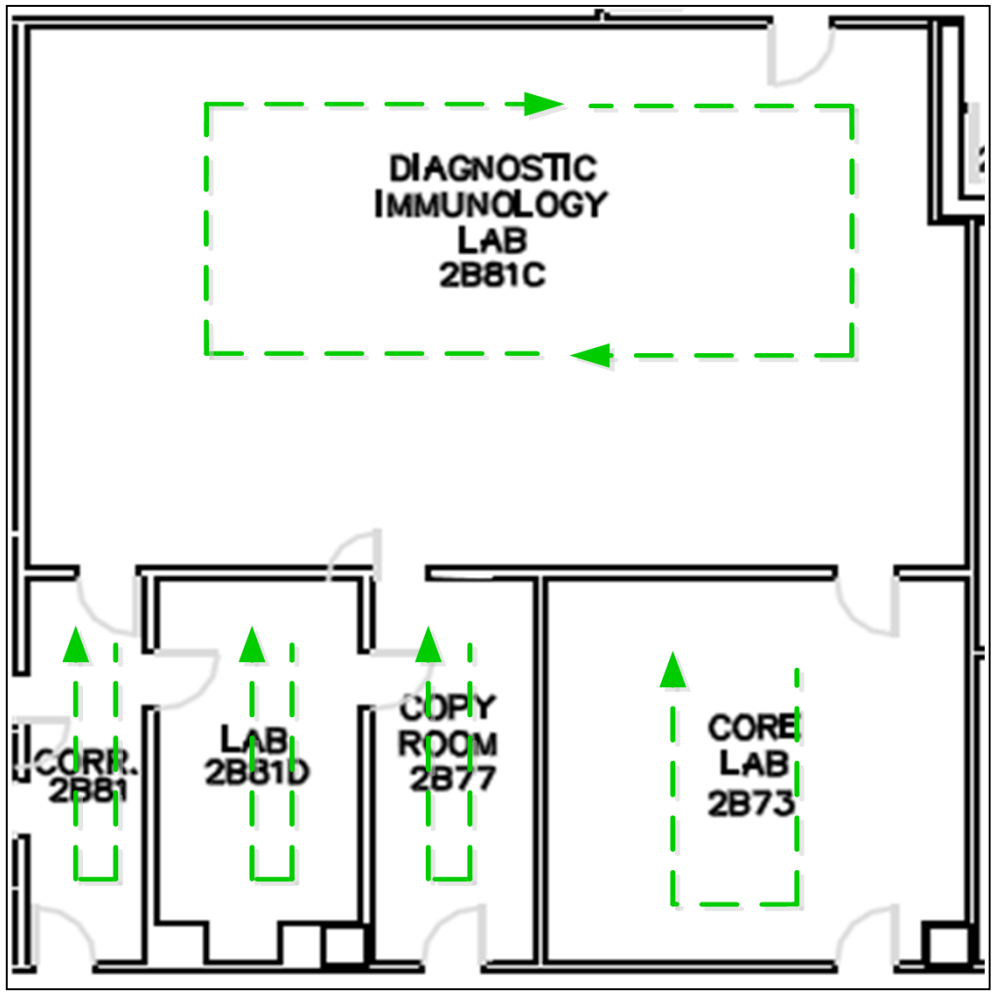
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 2 Second Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

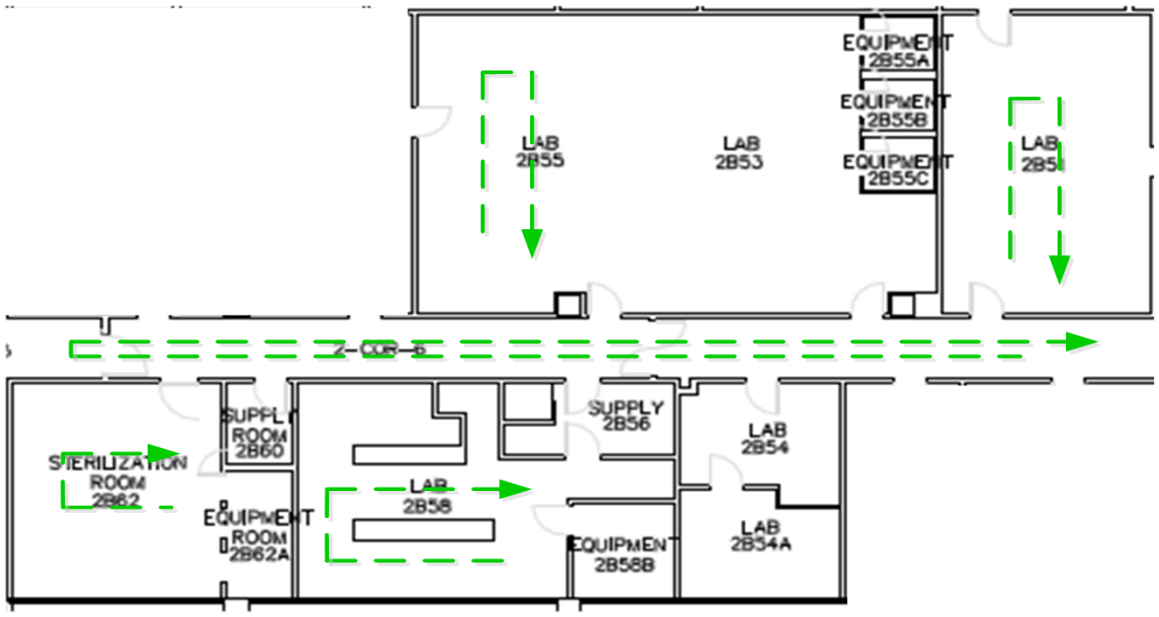
SU2-2-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Second Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

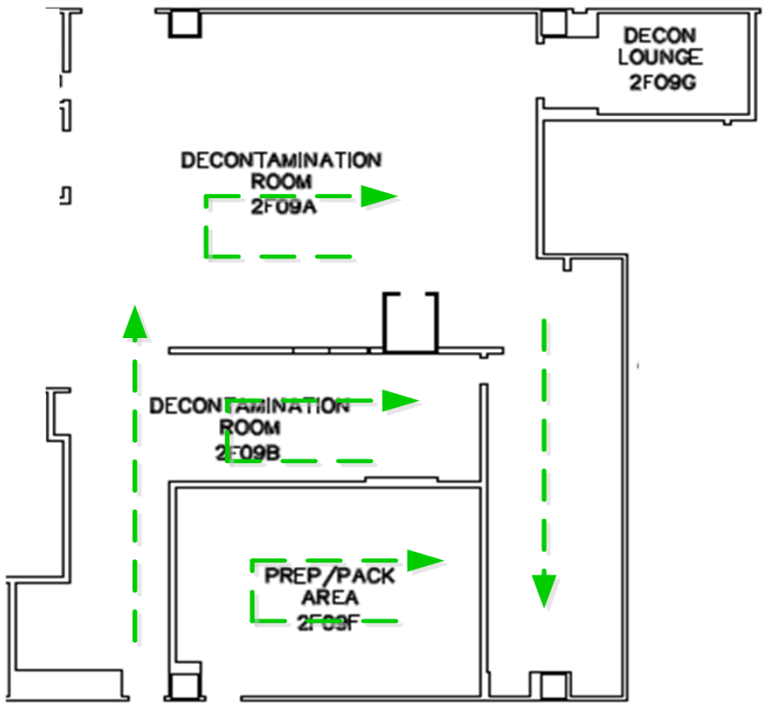
SU2-2-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Second Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU2-2-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Second Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 2, 2nd Level

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU2-2-1	2109	90	423	190	39	-123	863	174	116
SU2-2-2	802	20	398	151	69	-331	789	58	204
SU2-2-3	369	78	261	160	32	-159	383	85	94

Area Scanned (ft^2) 2055

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	132	cpm
Probe Area:	582	cm^2	Background σ:	32.21	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.058	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	363	dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 2, 2nd Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU2-2-1	2109	0	42	3	5	-5	70	0	9
SU2-2-2	802	0	40	7	7	-5	66	6	13
SU2-2-3	369	0	20	2	4	-5	30	-2	6

Area Scanned (ft^2) 2055

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 3 cpm
Background σ: 7.32 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 720 dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 2

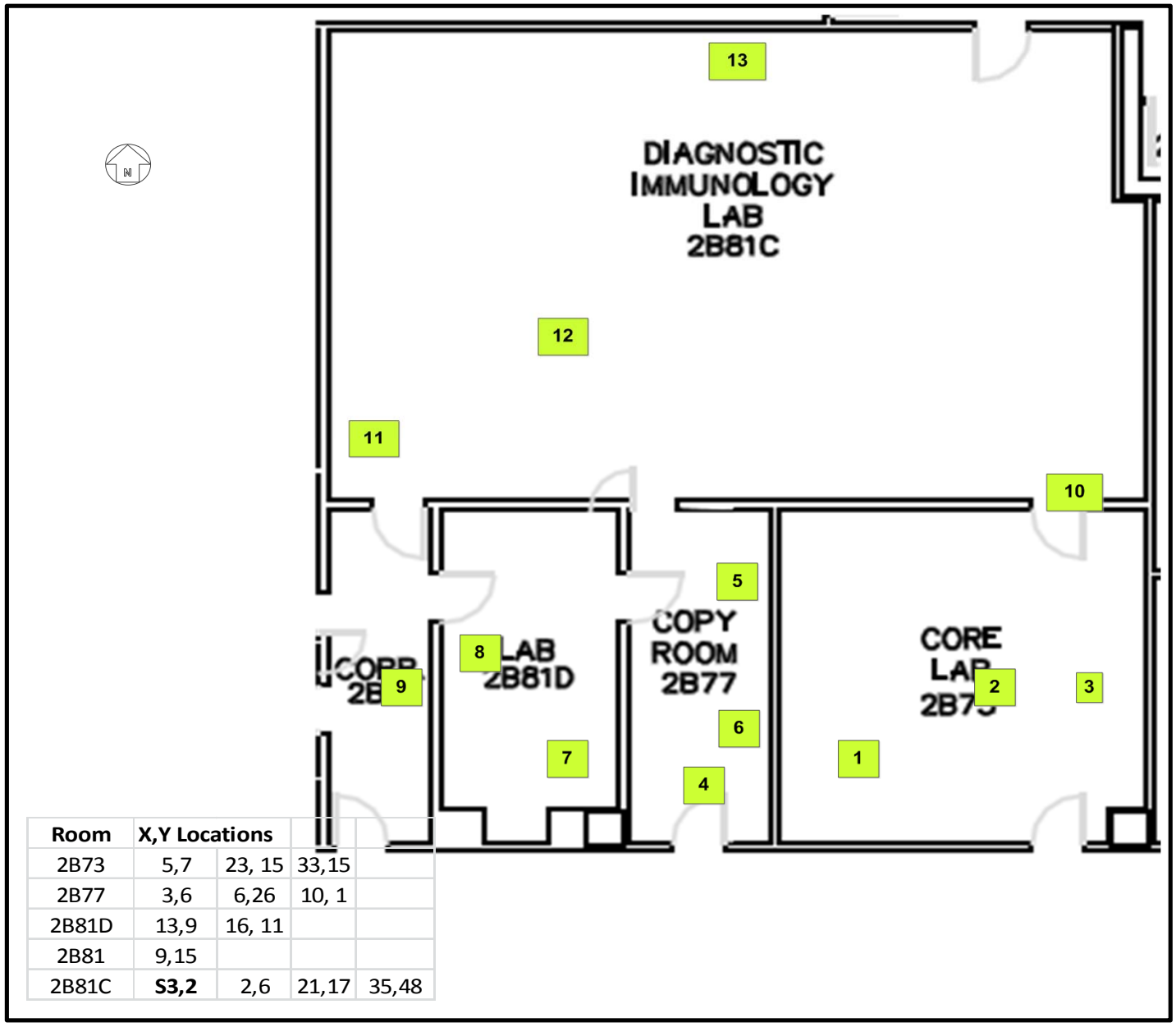
All measurements in µR/hour

Date: 12/28/2011

Location	2-2-1	2-2-2	2-2-3
1	3	8	9
2	6	8	9
3	8	9	8
4	9	9	8
5	13	8	10
6	9	7	9
7	9	8	8
8	10	7	7
9	9	7	8
10	7	9	6
11	7	9	7
12	9	7	8
13	8	8	6
14	7	7	9
15	7	8	9
16		7	9
17		7	

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012



Room	X,Y Locations			
2B73	5,7	23, 15	33,15	
2B77	3,6	6,26	10, 1	
2B81D	13,9	16, 11		
2B81	9,15			
2B81C	**S3,2**	2,6	21,17	35,48

SURVEY UNITS
LEGEND

Class 3
Measurement Number

Survey Unit Identifier

SU2-2-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Second Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 2
Survey Unit: SU2-2-1
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Tan Tile	83	118	15	294	70
2	Tan Tile	117	186	17	463	80
3	Tan Tile	90	132	15	329	70
4	Tan Tile	83	118	15	294	70
5	Tan Tile	105	162	16	404	80
6	Tan Tile	76	104	14	259	70
7	Tan Tile	102	156	16	389	80
8	Tan Tile	94	140	15	349	70
9	Tan Tile	108	168	16	418	80
10	Drywall	94	140	15	349	70
11	Tan Tile	111	174	16	433	80
12	Tan Tile	100	152	16	379	80
13	Tan Tile	110	172	16	428	80
QC11	Tan Tile	65	82	13	205	60
				Maximum:	463	
				Average:	368	
				STDEV:	62	

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	141321	Reference Material:	Tile Floor
Detector:	44-110	PR-258430	Background (cpm):	47.8
Probe Area:	126	cm^2	Background σ (cpm):	6.66
			Sample Analysis Time:	0.5 min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 2
Survey Unit: SU2-2-1
Survey Date: 12/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	74	100	14	249	70
2	Metal Safe	65	82	13	205	60
				Maximum:	249	
				Average:	227	
				STDEV:	32	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	184935	Reference Material:	Tile Floor	
Detector:	43-68	PR-181739	Background (cpm):	47.8	
Probe Area:	126	cm^2	Background σ (cpm):	6.66	
			Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 2
Survey Unit: SU2-2-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Tan Tile	100	3	9	53	280
2	Tan Tile	124	15	10	240	300
3	Tan Tile	118	12	10	193	300
4	Tan Tile	106	6	9	100	290
5	Tan Tile	125	16	10	248	300
6	Tan Tile	125	16	10	248	300
7	Tan Tile	92	-1	9	-9	280
8	Tan Tile	112	9	10	146	290
9	Tan Tile	121	14	10	216	300
10	Drywall	113	10	10	154	290
11	Tan Tile	104	5	9	84	290
12	Tan Tile	133	20	10	310	310
13	Tan Tile	118	12	10	193	300
QC	Tile Floor					

Maximum: 310
Average: 167
STDEV: 91

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	253237	Reference Material:	Tile Floor
Detector:	43-68	PR-216834	Background (cpm):	46.59
Probe Area:	126	cm^2	Background σ (cpm):	6.05
			Sample Analysis Time:	2 min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 2
Survey Unit: SU2-2-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	96	1	9	22	280
2	Metal Safe	94	0	9	6	280
				Maximum:	22	
				Average:	14	
				STDEV:	11	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Tile Floor	
Instrument:	2360	253237	Background (cpm):	46.59	
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 2
Survey Unit: SU2-2-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Tan Tile	1	0	1	-1	10
2	Tan Tile	3	1	1	8	20
3	Tan Tile	4	1	2	12	20
4	Tan Tile	0	-1	1	-5	10
5	Tan Tile	1	0	1	-1	10
6	Tan Tile	5	2	2	16	30
7	Tan Tile	0	-1	1	-5	10
8	Tan Tile	1	0	1	-1	10
9	Tan Tile	3	1	1	8	20
10	Drywall	4	1	2	12	20
11	Tan Tile	2	0	1	3	20
12	Tan Tile	0	-1	1	-5	10
13	Tan Tile	1	0	1	-1	10

Maximum: 16
Average: 3
STDEV: 7

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	253237	Reference Material:	Tile Floor
Detector:	43-68	PR-216834	Background (cpm):	0.59
Probe Area:	126	cm^2	Background σ (cpm):	0.51
			Sample Analysis Time:	2 min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

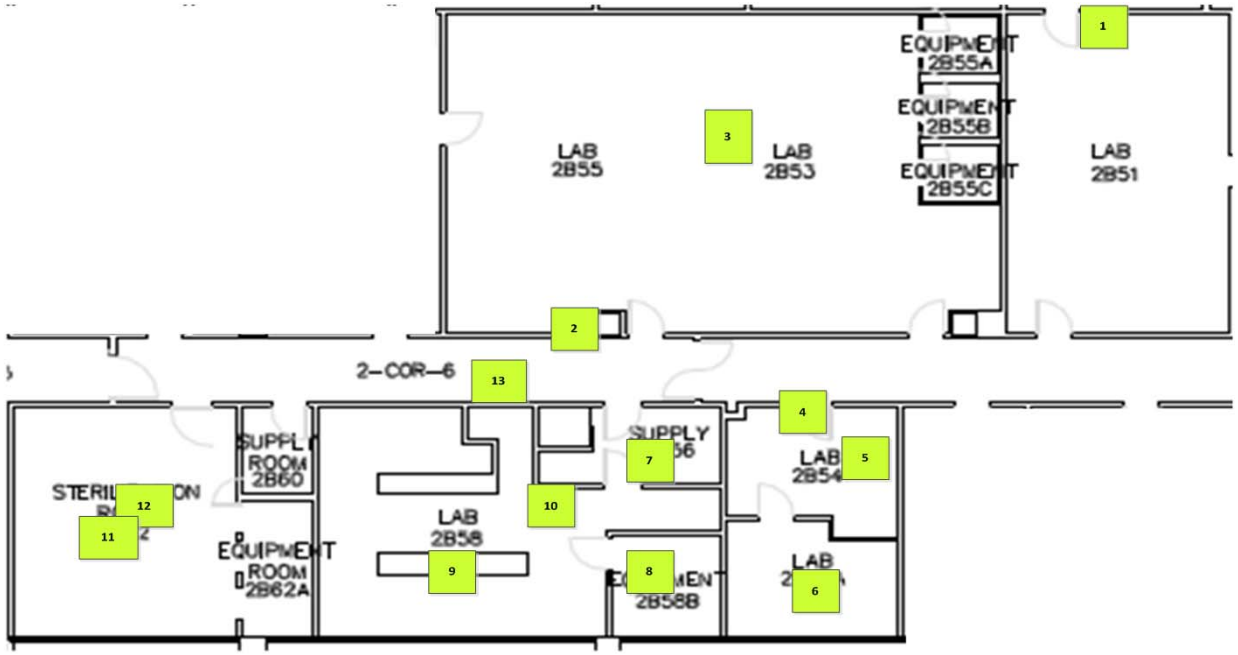
Building: 2
Survey Unit: SU2-2-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	1	0	1	-1	10
2	Metal Safe	3	1	1	8	20
				Maximum:	8	
				Average:	3	
				STDEV:	6	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Tile Floor	
Instrument:	2360	253237	Background (cpm):	0.59	
Detector:	43-68	PR-216834	Background σ (cpm):	0.51	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2



Room	X,Y Locations	
2B51	12,35	
2B53&55	**S 32,5**	40,35
2B54	**N 8,4**	20,9
2B54A	15,4	
2B56	18,6	
2B56B	10,9	
2B58	10,6	35,20
2B62	15,16	20,20
HALL	75, 3	

SURVEY UNITS LEGEND

Class 3

Measurement Number

Survey Unit Identifier

SU2-2-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Second Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 2
Survey Unit: SU2-2-2
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Tan Tile	107	166	16	413	80
2	White Tile	82	116	14	289	70
3	Drywall	90	132	15	329	70
4	Tan Tile	128	208	17	518	80
5	Wood Door	81	114	14	284	70
6	Epoxy Coated Concrete	115	182	17	453	80
7	Epoxy Coated Concrete	114	180	17	448	80
8	Epoxy Coated Concrete	108	168	16	418	80
9	Epoxy Coated Concrete	75	102	14	254	70
10	Drywall	87	126	15	314	70
11	Drywall	93	138	15	344	70
12	Linoleum	110	172	16	428	80
13	Linoleum	105	162	16	404	80
QC5	Wood Door	58	68	13	170	60
				Maximum:	518	
				Average:	377	
				STDEV:	80	

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	141321	Reference Material:	Tile Floor
Detector:	44-110	PR-258430	Background (cpm):	47.8
Probe Area:	126	cm^2	Background σ (cpm):	6.66
			Sample Analysis Time:	0.5 min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 2
Survey Unit: SU2-2-2
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Aluminum Sheeting	74	100	14	249	70
2	Stainless Sink	65	82	13	205	60
3	Stainless Sink	84	120	15	299	70
4	Hood	90	132	15	329	70

Maximum: 329
Average: 227
STDEV: 32

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	184935	Reference Material:	Tile Floor
Detector:	43-68	PR-181739	Background (cpm):	47.8
Probe Area:	126	cm^2	Background σ (cpm):	6.66
			Sample Analysis Time:	0.5 min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 2
Survey Unit: SU2-2-2
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Tan Tile	134	20	10	318	310
2	White Tile	103	5	9	76	290
3	Drywall	94	0	9	6	280
4	Tan Tile	114	10	10	162	300
5	Wood Door	124	15	10	240	300
6	Epoxy Coated Concrete	119	13	10	201	300
7	Epoxy Coated Concrete	100	3	9	53	280
8	Epoxy Coated Concrete	136	21	10	333	310
9	Epoxy Coated Concrete	135	21	10	325	310
10	Drywall	90	-2	9	-25	280
11	Drywall	97	2	9	30	280
12	Linoleum	125	16	10	248	300
13	Linoleum	123	15	10	232	300

Maximum: 333
Average: 169
STDEV: 128

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	253237	Reference Material:	Tile Floor
Detector:	43-68	PR-216834	Background (cpm):	46.59
Probe Area:	126	cm^2	Background σ (cpm):	6.05
			Sample Analysis Time:	2 min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 2
Survey Unit: SU2-2-2
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Aluminum Sheeting	96	14	8	214	250
2	Stainless Sink	94	13	8	199	250
3	Stainless Sink	67	-1	7	-11	220
4	Hood	122	27	9	417	270
				Maximum:	417	
				Average:	207	
				STDEV:	11	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material: Metal
Background (cpm): 34.23
Background σ (cpm): 4.21
Sample Analysis Time: 2 min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 2
Survey Unit: SU2-2-2
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Tan Tile	2	0	1	3	20
2	White Tile	2	0	1	3	20
3	Drywall	1	0	1	-1	10
4	Tan Tile	6	2	2	20	30
5	Wood Door	2	0	1	3	20
6	Epoxy Coated Concrete	3	1	1	8	20
7	Epoxy Coated Concrete	3	1	1	8	20
8	Epoxy Coated Concrete	3	1	1	8	20
9	Epoxy Coated Concrete	4	1	2	12	20
10	Drywall	2	0	1	3	20
11	Drywall	1	0	1	-1	10
12	Linoleum	5	2	2	16	30
13	Linoleum	4	1	2	12	20
QC			-1	1	-5	10

Maximum: 20
Average: 7
STDEV: 6

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	253237	Reference Material:	Tile Floor
Detector:	43-68	PR-216834	Background (cpm):	0.59
Probe Area:	126	cm^2	Background σ (cpm):	0.51
			Sample Analysis Time:	2 min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

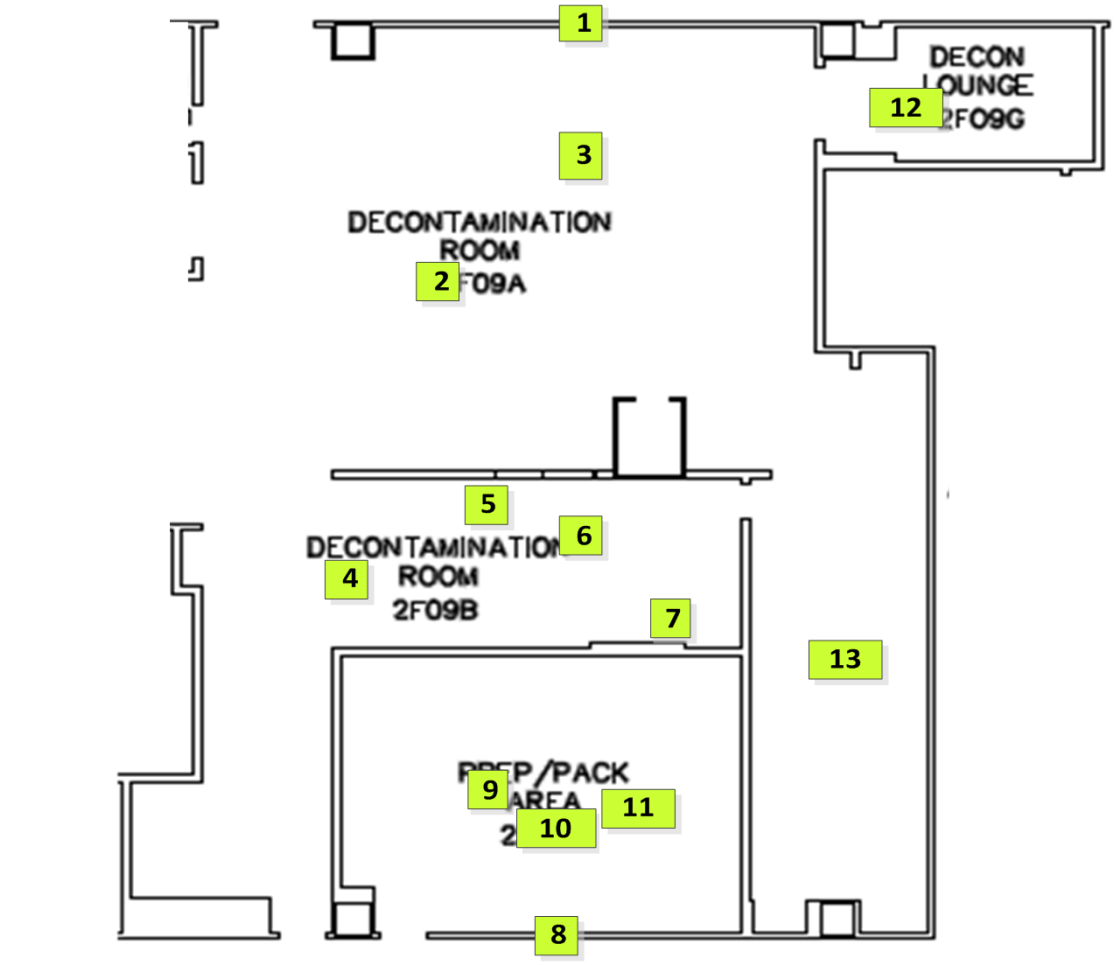
Building: 2
Survey Unit: SU2-2-2
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Aluminum Sheeting	1	0	1	-1	20
2	Stainless Sink	5	2	2	15	30
3	Stainless Sink	2	0	1	3	20
4	Hood	12	5	3	44	40
				Maximum:	44	
				Average:	7	
				STDEV:	12	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	253237	Background (cpm):	0.64	
Detector:	43-68	PR-216834	Background σ (cpm):	0.73	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2



Room	X,Y Locations			
2F09A	**N30,7**	15,16	20,32	
2F09B	10,17	20,18	30,15	35,2
2F09F	**S 20,5**	10,17	15,12	21,14
2F09G	9,8			
HALL	6,33			

SURVEY UNITS
LEGEND

Class 3
Measurement Number

Survey Unit Identifier

SU2-2-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Second Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 2
Survey Unit: SU2-2-3
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Linoleum	107	115	19	285	90
2	Linoleum	99	99	19	245	90
3	Linoleum	101	103	19	255	90
4	Linoleum	102	105	19	260	90
5	Glass Door	117	135	20	335	100
6	Linoleum	88	77	18	190	90
7	Linoleum	124	149	20	370	100
8	Linoleum	88	77	18	190	90
9	Metal Door	88	77	18	190	90
10	Linoleum	102	105	19	260	90
11	Linoleum	95	91	19	225	90
12	Linoleum	93	87	19	215	90
13	Linoleum	90	81	18	200	90
				Maximum:	370	
				Average:	248	
				STDEV:	56	

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	141321	Reference Material:	Painted Concrete/Linoleum
Detector:	44-110	PR-258430	Background (cpm):	99.5
Probe Area:	126	cm^2	Background σ (cpm):	12.73
			Sample Analysis Time:	0.5 min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 2
Survey Unit: SU2-2-3
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Stainless Sink	74	85	15	211	70
2	Glass Sterile Dryer	65	67	14	167	70
3	Stainless Cart Wash	84	105	16	261	80
				Maximum:	261	
				Average:	189	
				STDEV:	32	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	184935	Background (cpm):	63.1	
Detector:	43-68	PR-181739	Background σ (cpm):	8.52	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 2
Survey Unit: SU2-2-3
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Linoleum	96	9	13	146	400
2	Linoleum	102	12	13	192	400
3	Linoleum	116	19	13	301	410
4	Linoleum	120	21	14	332	410
5	Glass Door	99	11	13	169	400
6	Linoleum	121	22	14	340	410
7	Linoleum	107	15	13	231	400
8	Linoleum	107	15	13	231	400
9	Metal Door	227	75	15	1165	470
10	Linoleum	119	21	13	325	410
11	Linoleum	106	14	13	223	400
12	Linoleum	119	21	13	325	410
13	Linoleum	84	3	13	52	390
QC	Tile Floor					

Maximum: 1165
Average: 310
STDEV: 271

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	253237	Reference Material:	Painted Concrete/Linoleum
Detector:	43-68	PR-216834	Background (cpm):	38.64
Probe Area:	126	cm^2	Background σ (cpm):	11.07
			Sample Analysis Time:	2 min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 2
Survey Unit: SU2-2-3
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Stainless Sink	89	10	8	160	240
2	Glass Sterile Dryer	79	5	8	82	230
				Maximum:	160	
				Average:	121	
				STDEV:	55	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Metal	
Detector:	43-68	PR-216834	Background (cpm):	34.23	
Probe Area:	126	cm^2	Background σ (cpm):	4.21	
			Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 2
Survey Unit: SU2-2-3
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Linoleum	1	0	2	-3	30
2	Linoleum	0	-1	2	-7	30
3	Linoleum	0	-1	2	-7	30
4	Linoleum	3	1	2	6	30
5	Glass Door	0	-1	2	-7	30
6	Linoleum	1	0	2	-3	30
7	Linoleum	0	-1	2	-7	30
8	Linoleum	0	-1	2	-7	30
9	Metal Door	5	2	2	14	40
10	Linoleum	1	0	2	-3	30
11	Linoleum	1	0	2	-3	30
12	Linoleum	2	0	2	1	30
13	Linoleum	2	0	2	1	30
QC			-1	2	-7	30
				Maximum:	14	
				Average:	-2	
				STDEV:	6	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material: Painted Concrete/Linoleum
Background (cpm): 0.82
Background σ (cpm): 1.77
Sample Analysis Time: 2 min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

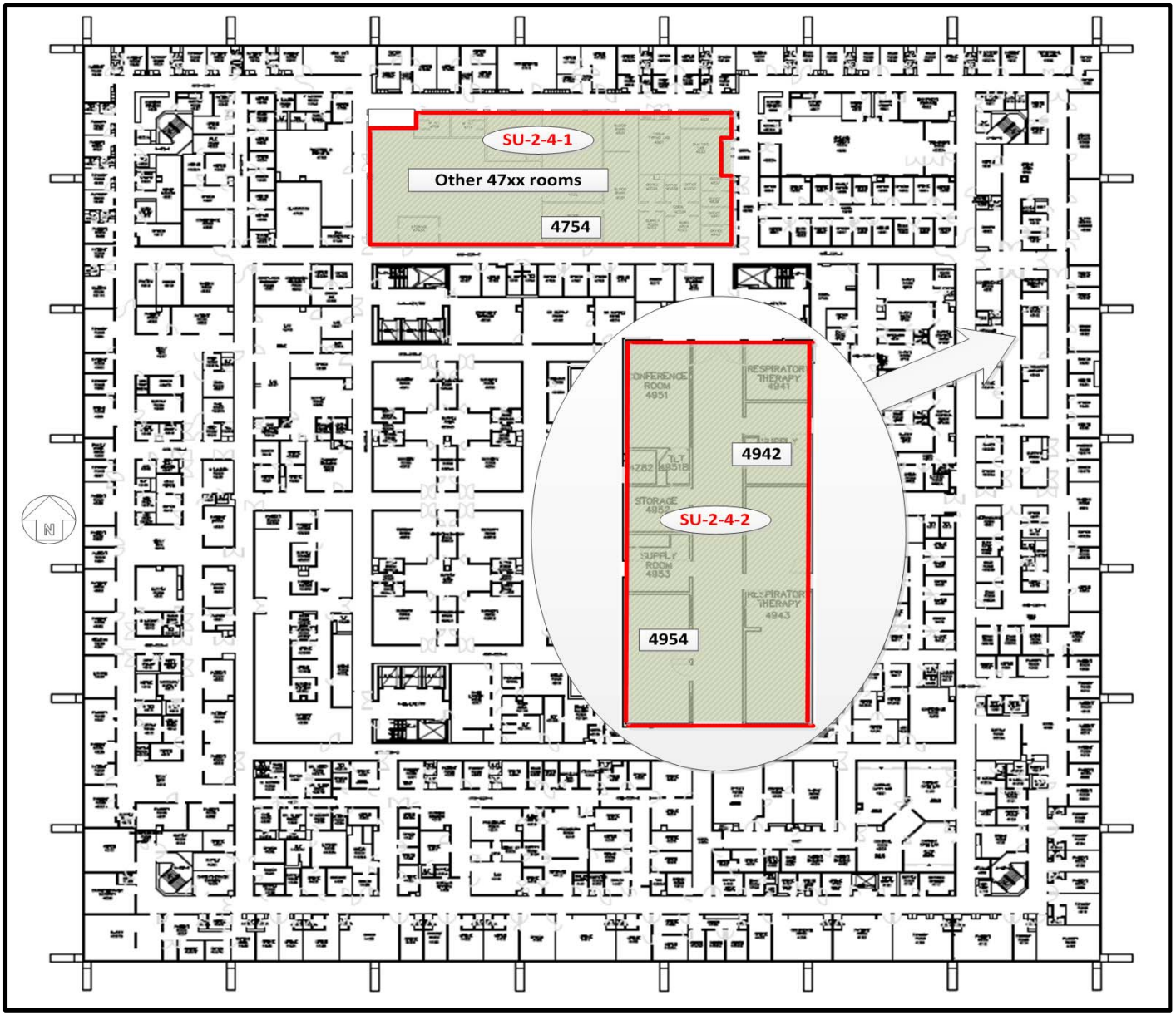
Building: 2
Survey Unit: SU2-2-3
Survey Date: 12/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Stainless Sink	0	-1	1	-5	10
2	Glass Sterile Dryer	2	0	1	3	20
				Maximum:	3	
				Average:	-1	
				STDEV:	6	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	253237	Background (cpm):	0.64	
Detector:	43-68	PR-216834	Background σ (cpm):	0.73	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2



SURVEY UNITS LEGEND

Room Number
Class 2 SU
Class 3 SU

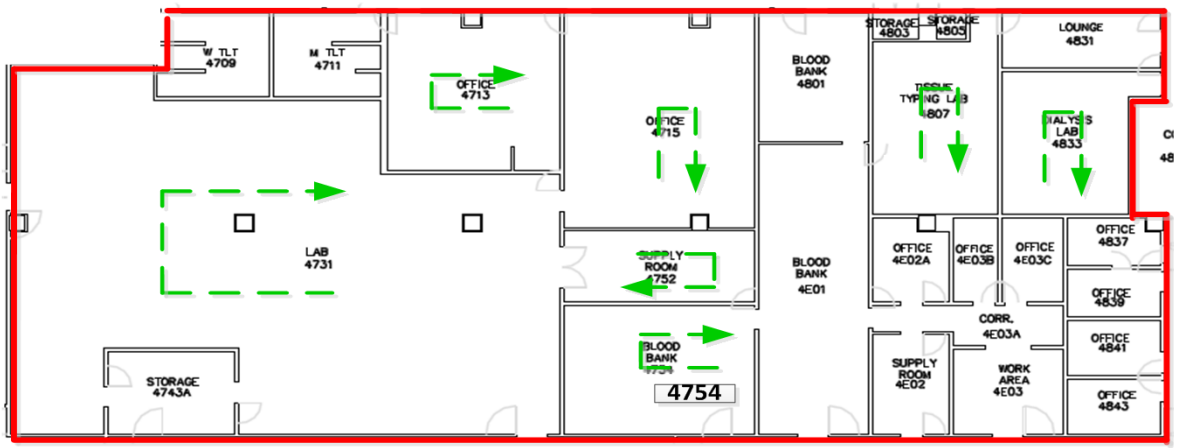
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 2 Fourth Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS LEGEND

Class 3

Scan Path

Survey Unit Identifier

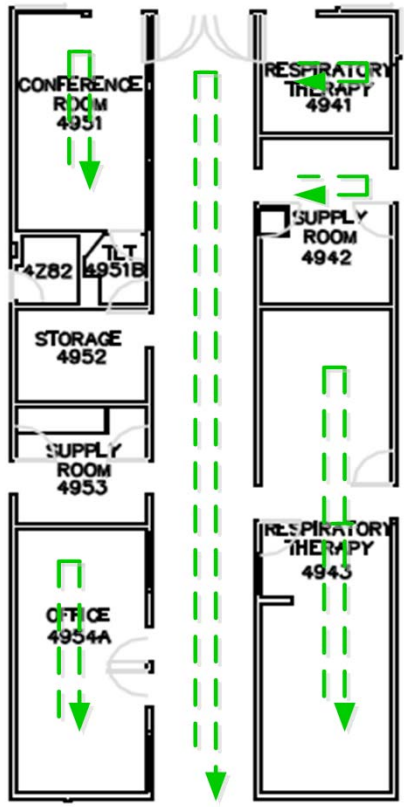
SU2-4-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Fourth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU2-4-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Fourth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 2, 4th Level

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU2-4-1	946	90	301	185	35	-123	502	158	104
SU2-4-2	386	97	302	174	32	-103	505	126	94

Area Scanned (ft^2) 834

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	132	cpm
Probe Area:	582	cm^2	Background σ:	32.21	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.058	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	363	dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 2, 4th Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU2-4-1	946	0	34	3	5	-5	55	1	8
SU2-4-2	386	0	24	3	5	-5	38	0	8

Area Scanned (ft^2) 834

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 3 cpm
Background σ: 7.32 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 720 dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 2

All measurements in µR/hour

Date: 12/27/2011

Location	2-4-1	2-4-2
1	9	8
2	10	10
3	10	10
4	9	10
5	9	9
6	10	9
7	10	9
8	9	10
9	9	10
10	9	10
11	9	9
12	9	8
13	9	9
14	9	9
15	10	
16	9	

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012

Room	X,Y Locations		
4743A	5,4		
4731	21,8	23,38	35,5
4713	15,10		
4715	20,7		
4752	18,8		
4754	20,4		
4801	5,4		
4E01	8,32		
4807	5,11		
4833	**N 7,4**		
4E03	10,5		

SURVEY UNITS
LEGEND

Class 3
\# Measurement Number

Survey Unit Identifier

SU2-4-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Fourth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 2
Survey Unit: SU2-4-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Linoleum	104	109	16	270	80
2	Linoleum	110	121	16	300	80
3	Linoleum	127	155	17	384	80
4	Linoleum	96	93	15	230	70
5	Concrete Under Carpet Tile	170	241	20	598	100
6	Concrete Under Carpet Tile	146	193	18	479	90
7	Tan Tile	63	78	13	195	60
8	Bleached Tile	121	194	17	483	80
9	White Tile	91	134	15	334	70
10	Tan Tile	82	116	14	289	70
11	White Tile	63	78	13	195	60
12	Drywall	111	174	16	433	80
13	White Tile	92	136	15	339	70

Maximum: 598
Average: 348
STDEV: 122

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Tile Floor	Painted Concrete/Linoleum
Instrument:	2360	141321		Background (cpm):	47.8	99.5
Detector:	44-110	PR-258430		Background σ (cpm):	6.66	12.73
Probe Area:	126	cm^2		Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 2
Survey Unit: SU2-4-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	83	103	15	256	80
2	Stainless Sink	87	111	16	276	80
3	Stainless Sink	70	77	15	191	70
				Maximum:	276	
				Average:	266	
				STDEV:	14	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	184935	Background (cpm):	63.1	
Detector:	43-68	PR-181739	Background σ (cpm):	8.52	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 2
Survey Unit: SU2-4-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Linoleum	106	14	9	223	290
2	Linoleum	108	15	10	239	290
3	Linoleum	108	15	10	239	290
4	Linoleum	90	6	9	99	280
5	Concrete Under Carpet Tile	152	37	11	581	320
6	Concrete Under Carpet Tile	147	35	10	542	320
7	Tan Tile	117	12	10	185	300
8	Bleached Tile	85	-4	9	-64	270
9	White Tile	119	13	10	201	300
10	Tan Tile	111	9	10	139	290
11	White Tile	103	5	9	76	290
12	Drywall	83	-5	9	-79	270
13	White Tile	122	14	10	224	300

Maximum: 581
Average: 201
STDEV: 192

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Tile Floor	Painted Concrete/Linoleum
Instrument:	2360	253237		Background (cpm):	46.59	38.64
Detector:	43-68	PR-216834		Background σ (cpm):	6.05	11.07
Probe Area:	126	cm^2		Sample Analysis Time:	2	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 2
Survey Unit: SU2-4-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	117	24	9	378	270
2	Stainless Sink	95	13	8	207	250
3	Stainless Sink	98	15	8	230	250
				Maximum:	378	
				Average:	292	
				STDEV:	121	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	253237	Background (cpm):	34.23	
Detector:	43-68	PR-216834	Background σ (cpm):	4.21	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 2
Survey Unit: SU2-4-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Linoleum	2	0	1	1	20
2	Linoleum	0	-1	1	-7	10
3	Linoleum	2	0	1	1	20
4	Linoleum	0	-1	1	-7	10
5	Concrete Under Carpet Tile	0	-1	1	-7	10
6	Concrete Under Carpet Tile	0	-1	1	-5	10
7	Tan Tile	0	-1	1	-5	10
8	Bleached Tile	2	0	1	3	20
9	White Tile	1	0	1	-1	10
10	Tan Tile	2	0	1	3	20
11	White Tile	2	0	1	3	20
12	Drywall	2	0	1	3	20
13	White Tile	0	-1	1	-5	10

Maximum: 3
Average: -1
STDEV: 4

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Painted Concrete/Linoleum
Instrument:	2360	253237	Background (cpm):	0.59	0.82
Detector:	43-68	PR-216834	Background σ (cpm):	0.51	1.77
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 2
Survey Unit: SU2-4-1

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	2	0	1	3	20
2	Stainless Sink	1	0	1	-1	20
3	Stainless Sink	0	-1	1	-5	10
				Maximum:	3	
				Average:	1	
				STDEV:	3	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	253237	Background (cpm):	0.64	
Detector:	43-68	PR-216834	Background σ (cpm):	0.73	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2

Room	X,Y Locations			
4954A	**E 6,10**	5,10		
4953	7,9			
4952	3,7			
4951	9,16			
4941	4,9			
4942	8,12			
4943	**S 2,34**	5,41	7,66	10, 30
HALL	3,52	4,60		

SURVEY UNITS LEGEND

Class 3

Measurement Number

Survey Unit Identifier

SU2-4-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Fourth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 2
Survey Unit: SU2-4-2
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Tile Under Carpet	75	102	14	254	70
2	White Tile	66	84	13	209	60
3	Tan Tile	95	142	15	354	70
4	Drywall	91	134	15	334	70
5	Drywall	101	154	16	384	80
6	Tan Tile	101	154	16	384	80
7	Tan Tile	84	120	15	299	70
8	Tan Tile	73	98	14	244	70
9	Tan Tile	110	172	16	428	80
10	Tan Tile	120	192	17	478	80
11	Tan Tile	102	156	16	389	80
QC4	Drywall	56	64	13	160	60
				Maximum:	478	
				Average:	342	
				STDEV:	83	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	141321	Reference Material:	Tile Floor	
Detector:	44-110	PR-258430	Background (cpm):	47.8	
Probe Area:	126	cm^2	Background σ (cpm):	6.66	
			Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 2
Survey Unit: SU2-4-2
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Painted Wood	82	87	16	216	80
				Maximum:	216	
				Average:	216	
				STDEV:	40	

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	184935	Reference Material:	Wood/Composite
Detector:	43-68	PR-181739	Background (cpm):	77.2
Probe Area:	126	cm^2	Background σ (cpm):	10.11
			Sample Analysis Time:	0.5 min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 2
Survey Unit: SU2-4-2
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Tile Under Carpet	103	5	9	76	290
2	White Tile	73	-10	9	-157	260
3	Tan Tile	98	2	9	37	280
4	Drywall	89	-2	9	-33	270
5	Drywall	99	3	9	45	280
6	Tan Tile	97	2	9	30	280
7	Tan Tile	71	-11	8	-173	260
8	Tan Tile	108	7	10	115	290
9	Tan Tile	89	-2	9	-33	270
10	Tan Tile	108	7	10	115	290
11	Tan Tile	112	9	10	146	290
QC	Tile Floor					

Maximum: 146
Average: 16
STDEV: 106

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material: Tile Floor
Background (cpm): 46.59
Background σ (cpm): 6.05
Sample Analysis Time: 2 min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 2
Survey Unit: SU2-4-2
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Painted Wood	71	9	8	134	260
				Maximum:	134	
				Average:	134	
				STDEV:	130	

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	253237	Reference Material:	Wood Composite
Detector:	43-68	PR-216834	Background (cpm):	26.86
Probe Area:	126	cm^2	Background σ (cpm):	5.95
			Sample Analysis Time:	2 min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 2
Survey Unit: SU2-4-2
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Tile Under Carpet	2	0	1	3	20
2	White Tile	0	-1	1	-5	10
3	Tan Tile	0	-1	1	-5	10
4	Drywall	0	-1	1	-5	10
5	Drywall	1	0	1	-1	10
6	Tan Tile	1	0	1	-1	10
7	Tan Tile	1	0	1	-1	10
8	Tan Tile	0	-1	1	-5	10
9	Tan Tile	2	0	1	3	20
10	Tan Tile	0	-1	1	-5	10
11	Tan Tile	3	1	1	8	20

Maximum: 8
Average: -1
STDEV: 4

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Tile Floor	
Instrument:	2360	253237	Background (cpm):	0.59	
Detector:	43-68	PR-216834	Background σ (cpm):	0.51	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 2
Survey Unit: SU2-4-2
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Painted Wood	2	0.5	1	4	20
				Maximum:	4	
				Average:	4	
				STDEV:	10	

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	253237	Reference Material:	Wood Composite
Detector:	43-68	PR-216834	Background (cpm):	0.55
Probe Area:	126	cm^2	Background σ (cpm):	0.8
			Sample Analysis Time:	2 min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2

SURVEY UNITS
LEGEND

- # Room Number
- Class 2 SU
- Class 3 SU

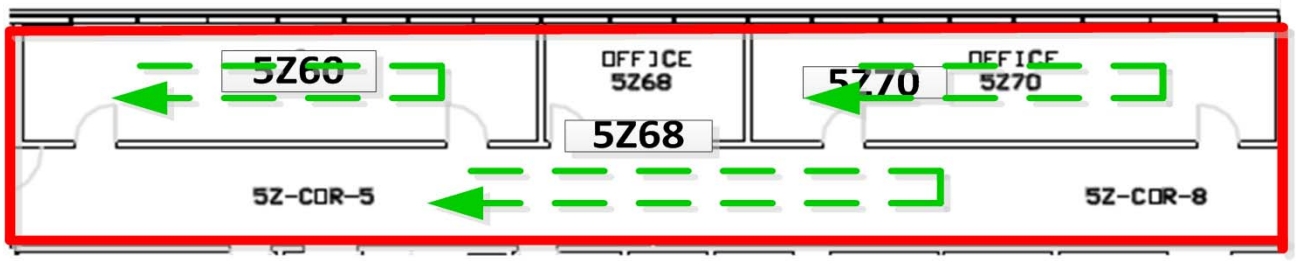
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 2 Fifth Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU2-5-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Fifth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 2, 5th Level

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU2-5-1	83	111	273	185	37	-61	419	159	109
Area Scanned (ft^2)	52								

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	132	cpm
Probe Area:	582	cm^2	Background σ:	32.21	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.058	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	363	dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 2, 5th Level

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU2-5-1	83	0	22	3	4	-5	34	-1	8
Area Scanned (ft^2)	52								

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	253258	Reference Material:	Tile Floor
Detector:	43-37	265544	Background:	3 cpm
Probe Area:	582 cm^2		Background σ:	7.32 cpm
			Scan speed:	1 detector width / 2 sec
			Observation interval:	1 recorded measurement / 2 sec

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	720	dpm/100 cm^2

Summary of Exposure Rate Measurements

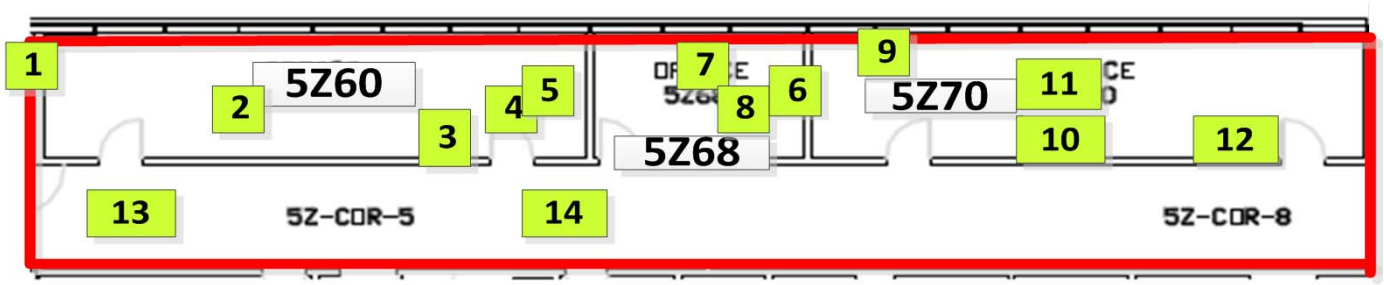
Location: Building 2

All measurements in µR/hour

Date:	12/27/2011
Location	2-5-1
1	5
2	8
3	12
4	14
5	9
6	9
7	9
8	9
9	9
10	10
11	10
12	10
13	9
14	10

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012



Room	X,Y Locations				
5Z60	**W 10,5**	14,3	29,2	34,3	35,5
5Z68	**E 7,2**	7,9	10,4		
5Z70	5,10	22,1	22,6	33,1	
Hall	4,2	35,4			

SURVEY UNITS
LEGEND

Class 3
Measurement Number

Survey Unit Identifier

SU2-5-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Fifth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 2
Survey Unit: SU2-5-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drywall	75	102	14	254	70
2	Tile Under Carpet Tile	87	126	15	314	70
3	Tile Under Carpet Tile	105	162	16	404	80
4	Tile Under Carpet Tile	111	174	16	433	80
5	Tile Under Carpet Tile	81	114	14	284	70
6	Tile Under Carpet Tile	112	176	16	438	80
7	Tile Under Carpet Tile	125	202	17	503	80
8	Tile Under Carpet Tile	96	144	15	359	80
9	Tile Under Carpet Tile	116	184	17	458	80
10	Tan Tile	105	162	16	404	80
11	Tan Tile	125	202	17	503	80
QC5	Tile Under Carpet Tile	71	94	14	234	70
				Maximum:	503	
				Average:	396	
				STDEV:	84	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	141321	Reference Material:	Tile Floor	
Detector:	44-110	PR-258430	Background (cpm):	47.8	
Probe Area:	126	cm^2	Background σ (cpm):	6.66	
			Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 2
Survey Unit: SU2-5-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	67	-13	8	-204	260
2	Tile Under Carpet Tile	106	6	9	100	290
3	Tile Under Carpet Tile	91	-1	9	-17	280
4	Tile Under Carpet Tile	101	4	9	61	280
5	Tile Under Carpet Tile	87	-3	9	-48	270
6	Tile Under Carpet Tile	100	3	9	53	280
7	Tile Under Carpet Tile	99	3	9	45	280
8	Tile Under Carpet Tile	101	4	9	61	280
9	Tile Under Carpet Tile	113	10	10	154	290
10	Tan Tile	120	13	10	209	300
11	Tan Tile	97	2	9	30	280

Maximum: 209
Average: 40
STDEV: 108

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Tile Floor	
Instrument:	2360	253237	Background (cpm):	46.59	
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 2
Survey Unit: SU2-5-1
Survey Date: 12/27/2011

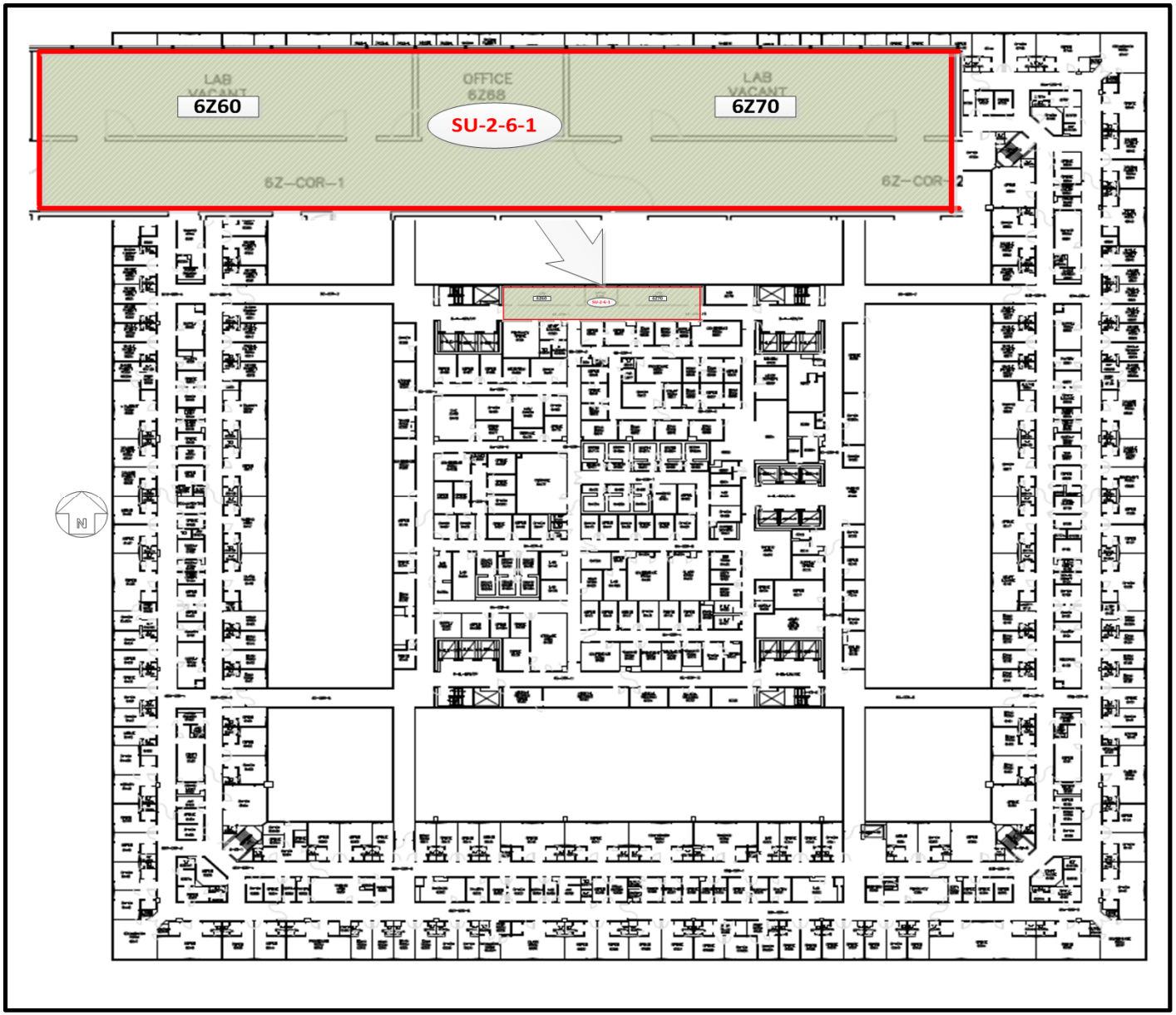
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drywall	3	1	1	8	20
2	Tile Under Carpet Tile	1	0	1	-1	10
3	Tile Under Carpet Tile	2	0	1	3	20
4	Tile Under Carpet Tile	1	0	1	-1	10
5	Tile Under Carpet Tile	0	-1	1	-5	10
6	Tile Under Carpet Tile	1	0	1	-1	10
7	Tile Under Carpet Tile	2	0	1	3	20
8	Tile Under Carpet Tile	2	0	1	3	20
9	Tile Under Carpet Tile	1	0	1	-1	10
10	Tan Tile	1	0	1	-1	10
11	Tan Tile	1	0	1	-1	10

Maximum: 8
Average: 1
STDEV: 3

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Tile Floor	
Instrument:	2360	253237	Background (cpm):	0.59	
Detector:	43-68	PR-216834	Background σ (cpm):	0.51	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2



SURVEY UNITS
LEGEND

Room Number
Class 2 SU
Class 3 SU

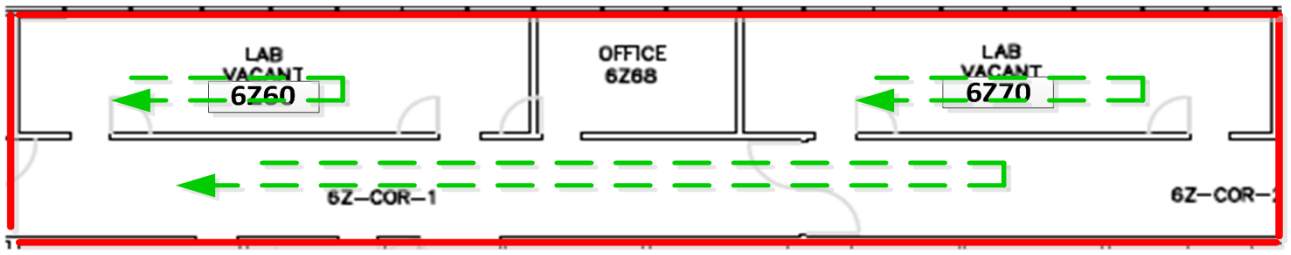
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 2 Sixth Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU2-6-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Sixth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 2, 6th Level

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU2-6-1	1153	85	303	179	35	-138	508	141	104

Area Scanned (ft^2) 722

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	132	cpm
Probe Area:	582	cm^2	Background σ:	32.21	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.058	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	363	dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 2, 6th Level

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU2-6-1	1153	0	32	3	5	-5	52	0	9

Area Scanned (ft^2) 722

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	3	cpm
Probe Area:	582	cm^2	Background σ:	7.32	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	720	dpm/100 cm^2

Summary of Exposure Rate Measurements

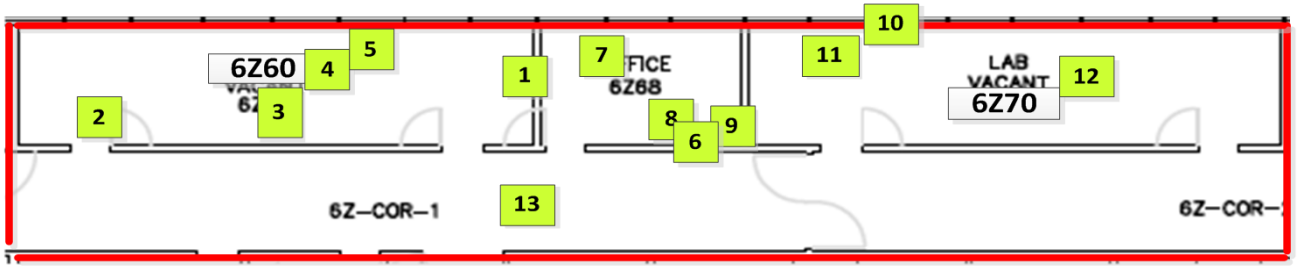
Location: Building 2

All measurements in µR/hour

Date:	12/29/2011
Location	2-6-1
1	9
2	9
3	9
4	9
5	9
6	8
7	8
8	9
9	8
10	8
11	10
12	9
13	7
14	7

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012



Room	X,Y Locations				
6Z60	**E 3,3**	7,2	26,4	32,7	34,9
6Z68	**S 2,3**	4,8	9,2	14,1	
6Z70	N 25, 5	7,8	35,6		
Hall	53,5				

SURVEY UNITS
LEGEND

Class 3
Measurement Number

Survey Unit Identifier

SU2-6-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Sixth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 2
Survey Unit: SU2-6-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drywall	82	116	14	289	70
2	Tile Under Carpet	66	84	13	209	60
3	Tile Under Carpet	67	86	13	214	70
4	Tile Under Carpet	61	74	13	185	60
5	Tile Under Carpet	61	74	13	185	60
6	Drywall	66	84	13	209	60
7	Tan Tile	103	158	16	394	80
8	Tan Tile	97	146	15	364	80
9	Tan Tile	93	138	15	344	70
10	Tan Tile	72	96	14	239	70
11	Tan Tile	87	126	15	314	70
12	Tan Tile	71	94	14	234	70
13	Tan Tile	69	90	14	224	70
QC9	Tan Tile	78	108	14	269	70
				Maximum:	394	
				Average:	268	
				STDEV:	76	

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	141321	Reference Material:	Tile Floor
Detector:	44-110	PR-258430	Background (cpm):	47.8
Probe Area:	126	cm^2	Background σ (cpm):	6.66
			Sample Analysis Time:	0.5 min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 2
Survey Unit: SU2-6-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Stainless Sink	100	137	17	341	80
				Maximum:	341	
				Average:	341	
				STDEV:	40	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	184935	Background (cpm):	63.1	
Detector:	43-68	PR-181739	Background σ (cpm):	8.52	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 2
Survey Unit: SU2-6-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drywall	116	11	10	178	300
2	Tile Under Carpet	93	0	9	-1	280
3	Tile Under Carpet	114	10	10	162	300
4	Tile Under Carpet	79	-7	9	-110	270
5	Tile Under Carpet	92	-1	9	-9	280
6	Drywall	89	-2	9	-33	270
7	Tan Tile	97	2	9	30	280
8	Tan Tile	89	-2	9	-33	270
9	Tan Tile	89	-2	9	-33	270
10	Tan Tile	87	-3	9	-48	270
11	Tan Tile	90	-2	9	-25	280
12	Tan Tile	85	-4	9	-64	270
13	Tan Tile	104	5	9	84	290

Maximum: 178
Average: 7
STDEV: 87

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	253237	Reference Material:	Tile Floor
Detector:	43-68	PR-216834	Background (cpm):	46.59
Probe Area:	126	cm^2	Background σ (cpm):	6.05
			Sample Analysis Time:	2 min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 2
Survey Unit: SU2-6-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Stainless Sink	69	0.3	7	4	220
				Maximum:	4	
				Average:	4	
				STDEV:	110	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	253237	Background (cpm):	34.23	
Detector:	43-68	PR-216834	Background σ (cpm):	4.21	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 2
Survey Unit: SU2-6-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	1	0	1	-1	10
2	Tile Under Carpet	3	1	1	8	20
3	Tile Under Carpet	7	3	2	24	30
4	Tile Under Carpet	1	0	1	-1	10
5	Tile Under Carpet	2	0	1	3	20
6	Drywall	0	-1	1	-5	10
7	Tan Tile	0	-1	1	-5	10
8	Tan Tile	2	0	1	3	20
9	Tan Tile	2	0	1	3	20
10	Tan Tile	0	-1	1	-5	10
11	Tan Tile	1	0	1	-1	10
12	Tan Tile	0	-1	1	-5	10
13	Tan Tile	4	1	2	12	20

Maximum: 24
Average: 2
STDEV: 8

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	253237	Reference Material:	Tile Floor
Detector:	43-68	PR-216834	Background (cpm):	0.59
Probe Area:	126	cm^2	Background σ (cpm):	0.51
			Sample Analysis Time:	2 min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

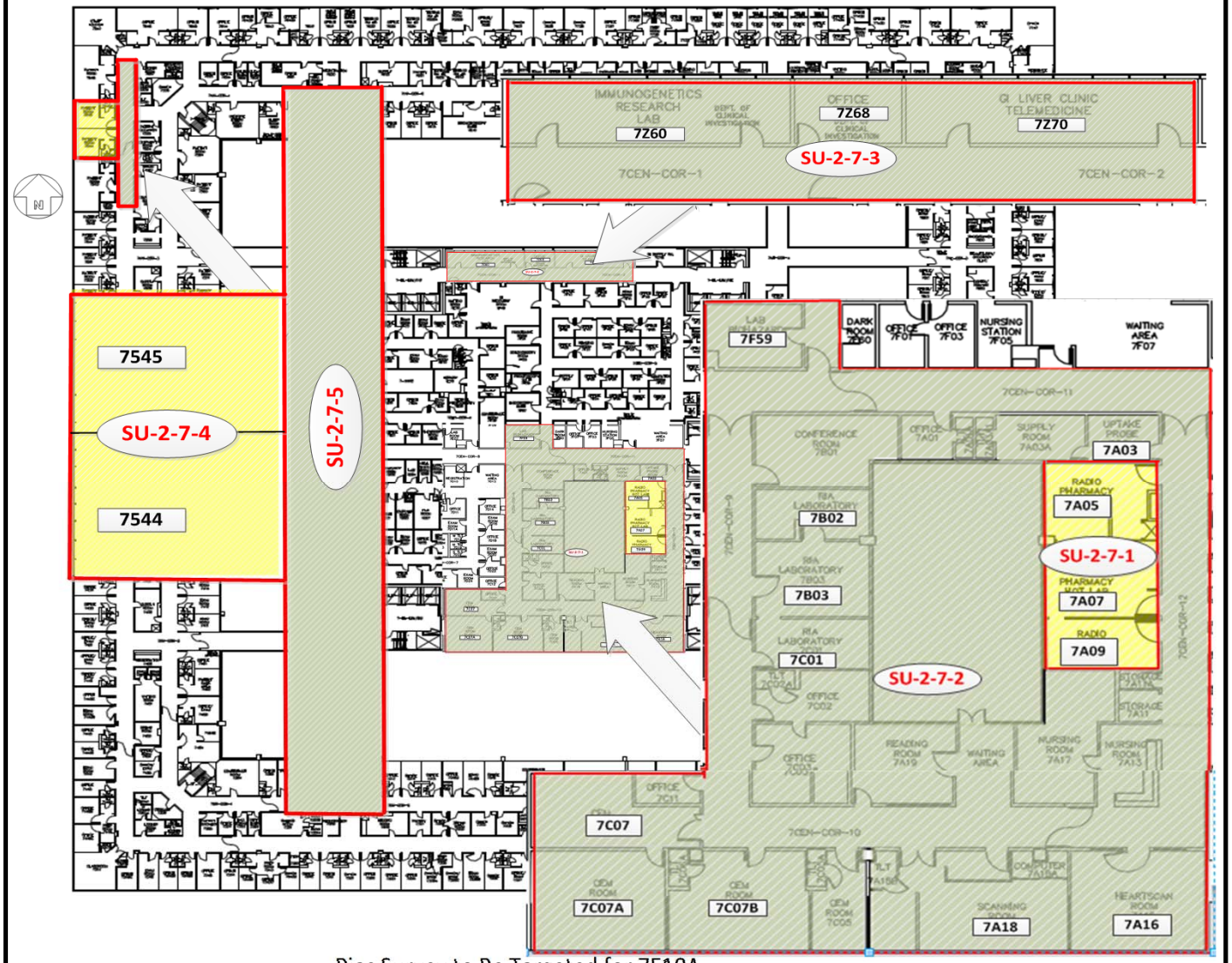
Building: 2
Survey Unit: SU2-6-1
Survey Date: 12/27/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Stainless Sink	0	-0.6	1	-5	10
				Maximum:	-5	
				Average:	-5	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	253237	Background (cpm):	0.64	
Detector:	43-68	PR-216834	Background σ (cpm):	0.73	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2



Bias Survey to Be Targeted for 7E10A.

SURVEY UNITS LEGEND

- # Room Number
- Class 2 SU
- Class 3 SU

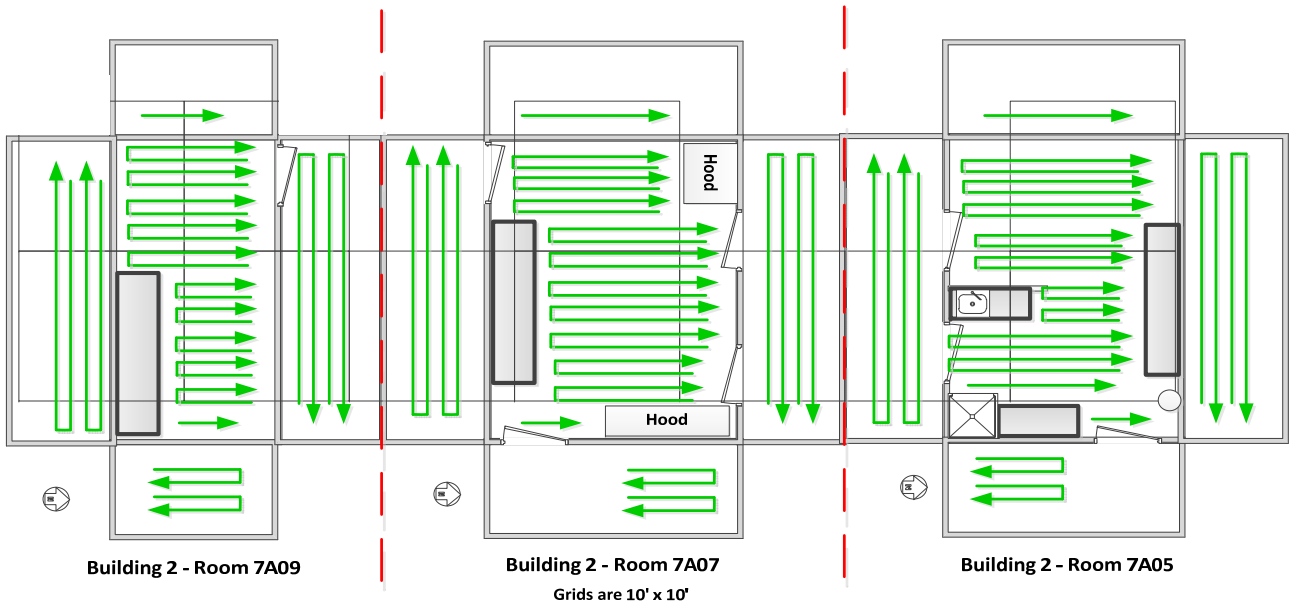
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 2 Seventh Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 2

Scan Path

Survey Unit Identifier

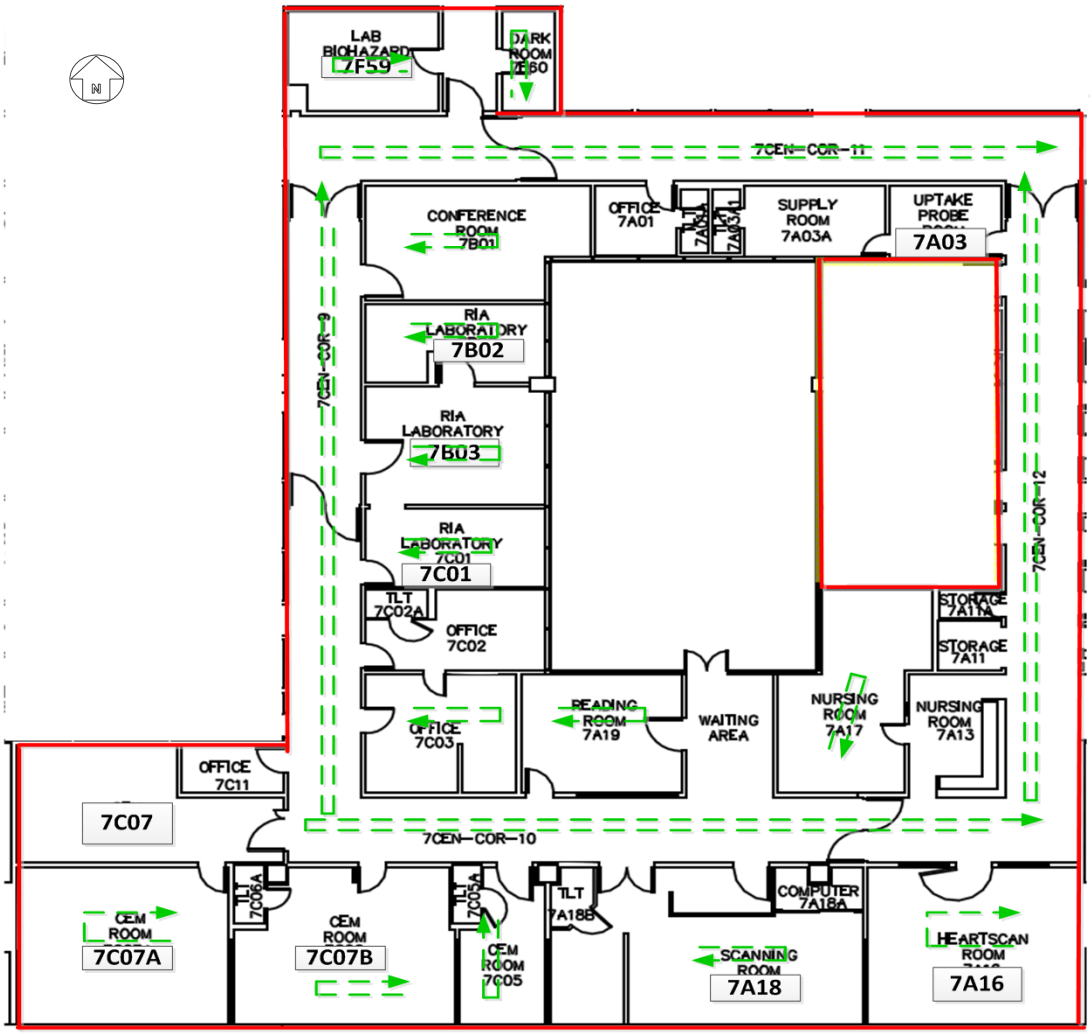
SU2-7-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Seventh Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

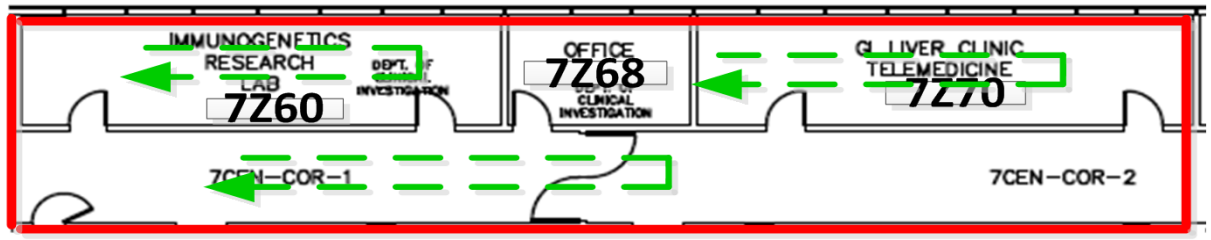
SU2-7-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Seventh Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

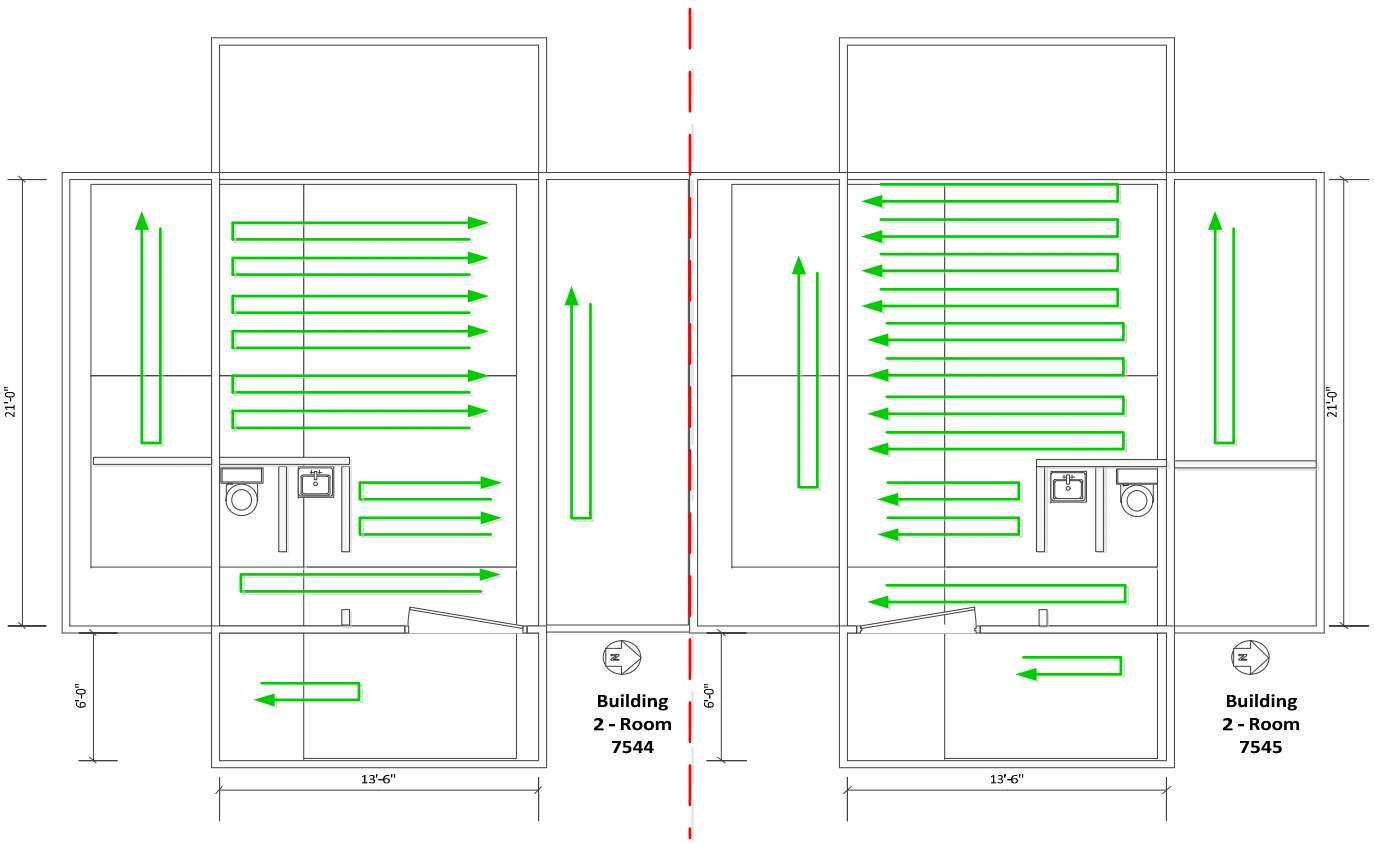
SU2-7-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Seventh Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 2

Scan Path

Survey Unit Identifier

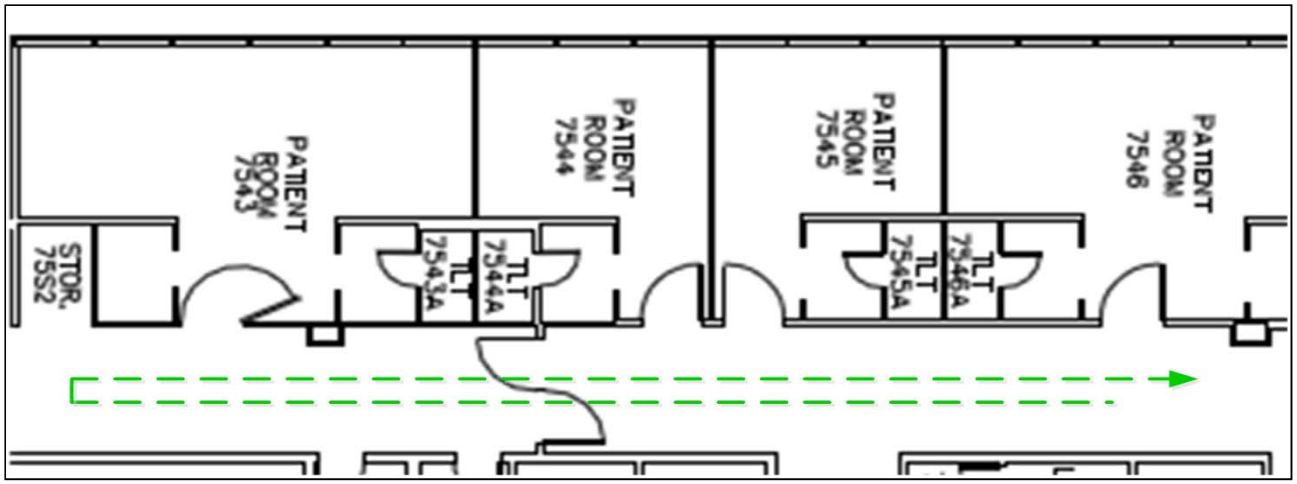
SU2-7-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Seventh Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



Hallway is the survey unit.

SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU2-7-5

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Seventh Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 2, 7th Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU2-7-1	283	135	326	222	33	10	576	268	98
SU2-7-2	1641	61	310	171	37	-209	528	116	110
SU2-7-3	838	99	372	208	43	-97	712	225	127
SU2-7-4	767	89	320	180	33	-126	558	144	99
SU2-7-5	85	107	248	171	32	-73	345	117	95

Area Scanned (ft^2) 2264

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	132	cpm
Probe Area:	582	cm^2	Background σ:	32.21	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.058	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	363	dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 2, 7th Level

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU2-7-1	283	0	13	1	3	-5	18	-3	5
SU2-7-2	1641	0	29	2	4	-5	47	-2	7
SU2-7-3	838	0	24	3	4	-5	38	-1	7
SU2-7-4	767	0	18	1	3	-5	27	-3	5
SU2-7-5	85	0	13	2	3	-5	18	-2	5

Area Scanned (ft^2) 2264

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	3	cpm
Probe Area:	582	cm^2	Background σ:	7.32	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	720	dpm/100 cm^2

Summary of Scan Results - Beta

Location: Building 2, 7th Level

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU2-7-1	602	23	140	69	23	-64	1871	690	382
SU2-7-2	720	11	148	61	22	-262	2003	566	359
SU2-7-4	84	18	111	64	19	-146	1391	614	311

Area Scanned (ft^2) 191

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm^2

Reference Material: Counter
Background: 27 cpm
Background σ: 5.95 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.048 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 916 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 2, 7th Level

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU2-7-1	602	0	18	1	2	-4	141	3	20
SU2-7-2	720	0	13	1	2	-4	101	2	19
SU2-7-4	84	0	34	1	5	-4	271	5	40

Area Scanned (ft^2) 191

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm2

Reference Material: Counter
Background: 1 cpm
Background σ: 0.8 cpm
Scan speed: 1 detector width / 2sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.098 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 705 dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 2

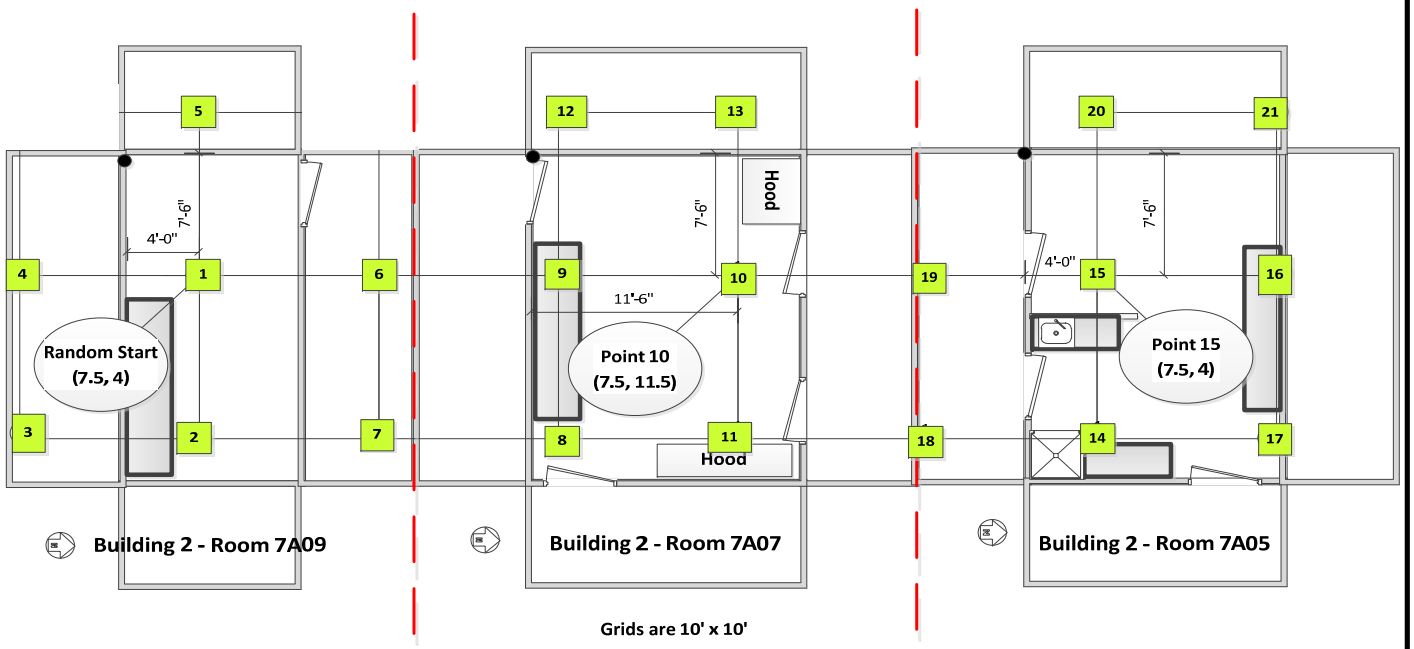
All measurements in µR/hour

Date: 12/28/2011

Location	2-7-1	2-7-2	2-7-3
1	6	7	3
2	5	7	3
3	2	7	3
4	6	8	3
5	4	7	3
6	6	8	3
7	6	8	3
8	7	8	3
9	8	7	3
10	9	7	3
11	7	7	3
12	5	7	3
13	2	6	3
14	4	6	3
15	2	6	3
16	6	9	3
17	5		3
18	7		3
19	9		3
20	9		3
21	8		3
22	7		3
23	6		
24	6		
25	8		
26	7		
27	7		
28	9		
29	8		
30	8		
31	8		

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012



SURVEY UNITS
LEGEND

Class 2
\# Measurement Number

Origin

Survey Unit Identifier

SU2-7-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Seventh Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 2
Survey Unit: SU2-7-1
Survey Date: 12/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Gray Tile	115	182	17	453	80
2	White Tile	77	106	14	264	70
3	Metal Cabinet	52	56	12	140	60
4	Glass	88	128	15	319	70
5	Drywall	80	75	14	186	70
6	Drywall	97	109	15	271	80
7	Drywall	87	89	15	221	70
8	Grey Tile	136	224	18	558	90
9	Formica Counter	62	76	13	190	60
10	Grey Tile	115	182	17	453	80
11	White Tile	120	192	17	478	80
12	Drywall	70	55	14	136	70
13	Painted Glass	66	84	13	209	60
14	Gray Tile	116	184	17	458	80
15	Gray Tile	129	210	17	523	80
16	Gray Tile	68	88	13	219	70
17	Gray Tile	93	138	15	344	70
18	Shower	88	128	15	319	70
19	Drywall	99	113	16	281	80
20	Painted Glass	76	104	14	259	70
21	Drywall	78	71	14	176	70
QC4	Drywall	78	71	14	176	70
				Maximum:	558	
				Average:	321	
				STDEV:	141	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Tile Floor	Drywall
Instrument:	2360	141321		Background (cpm):	47.8	85.2
Detector:	44-110	PR-258430		Background σ (cpm):	6.66	10.86
Probe Area:	126	cm^2		Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 2
Survey Unit: SU2-7-1
Survey Date: 12/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	115	167	17	415	80
2	Lead Lined Shield Plug	77	91	15	226	70
3	Lead Shielded Cabinet	52	41	13	102	60
4	Lead Lined Shield Plug	57	51	14	127	70
5	Lead Shielded Cabinet	97	131	16	326	80
6	Black Hood	55	47	14	117	70
7	Hood	98	133	16	331	80
8	Stainless Hood	97	131	16	326	80
9	Black Lab Sink	87	111	16	276	80
10	Shower	100	137	17	341	80
				Maximum:	415	
				Average:	259	
				STDEV:	110	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	184935	Background (cpm):	63.1	
Detector:	43-68	PR-181739	Background σ (cpm):	8.52	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 2
Survey Unit: SU2-7-1
Survey Date: 12/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Gray Tile	111	9	10	139	290
2	White Tile	88	-3	9	-40	270
3	Metal Cabinet	80	6	9	90	270
4	Glass	92	-1	9	-9	280
5	Drywall	95	-7	9	-101	280
6	Drywall	115	4	10	54	300
7	Drywall	95	-7	9	-101	280
8	Grey Tile	104	5	9	84	290
9	Formica Counter	71	-11	8	-173	260
10	Grey Tile	98	2	9	37	280
11	White Tile	101	4	9	61	280
12	Drywall	108	0	10	0	290
13	Painted Glass	89	-2	9	-33	270
14	Gray Tile	107	7	9	108	290
15	Gray Tile	105	6	9	92	290
16	Gray Tile	70	-12	8	-180	260
17	Gray Tile	110	8	10	131	290
18	Shower	94	0	9	6	280
19	Drywall	86	-11	9	-171	270
20	Painted Glass	127	17	10	263	310
21	Drywall	105	-2	9	-23	290
QC17	Gray Tile	114	10	10	162	300

Maximum: 263
Average: 4
STDEV: 97

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Metal	Drywall
Instrument:	2360	253237	Background (cpm):	46.59	34.23	54.0
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	4.21	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	2	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 2
Survey Unit: SU2-7-1
Survey Date: 12/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	104	18	8	277	250
2	Lead Lined Shield Plug	69	0	7	4	220
3	Lead Shielded Cabinet	179	55	10	860	320
4	Lead Lined Shield Plug	59	-5	7	-74	210
5	Lead Shielded Cabinet	39	-15	6	-229	190
6	Black Hood	68	0	7	-4	220
7	Hood	93	12	8	191	240
8	Stainless Hood	81	6	8	98	230
9	Black Lab Sink	79	5	8	82	230
10	Shower	111	21	9	331	260
				Maximum:	860	
				Average:	139	
				STDEV:	389	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Metal	
Detector:	43-68	PR-216834	Background (cpm):	34.23	
Probe Area:	126	cm^2	Background σ (cpm):	4.21	
			Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 2
Survey Unit: SU2-7-1
Survey Date: 12/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Gray Tile	0	-1	1	-5	10
2	White Tile	1	0	1	-1	10
3	Metal Cabinet	2	0	1	3	20
4	Glass	1	0	1	-1	10
5	Drywall	0	-1	1	-10	10
6	Drywall	5	1	2	10	30
7	Drywall	0	-1	1	-10	10
8	Grey Tile	1	0	1	-1	10
9	Formica Counter	3	1	1	8	20
10	Grey Tile	2	0	1	3	20
11	White Tile	1	0	1	-1	10
12	Drywall	0	-1	1	-10	10
13	Painted Glass	0	-1	1	-5	10
14	Gray Tile	4	1	2	12	20
15	Gray Tile	1	0	1	-1	10
16	Gray Tile	1	0	1	-1	10
17	Gray Tile	2	0	1	3	20
18	Shower	2	0	1	3	20
19	Drywall	2	0	1	-2	20
20	Painted Glass	3	1	1	8	20
21	Drywall	0	-1	1	-10	10
QC17	Gray Tile	3	1	1	8	20

Maximum: 12
Average: 0
STDEV: 7

Instrument Data and Analysis Parameters

	Model	Serial No		Tile Floor	Drywall
Instrument:	2360	253237	Reference Material:		
Detector:	43-68	PR-216834	Background (cpm):	0.59	1.27
Probe Area:	126	cm^2	Background σ (cpm):	0.51	1.26
			Sample Analysis Time:	2	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 2
Survey Unit: SU2-7-1
Survey Date: 12/22/2011

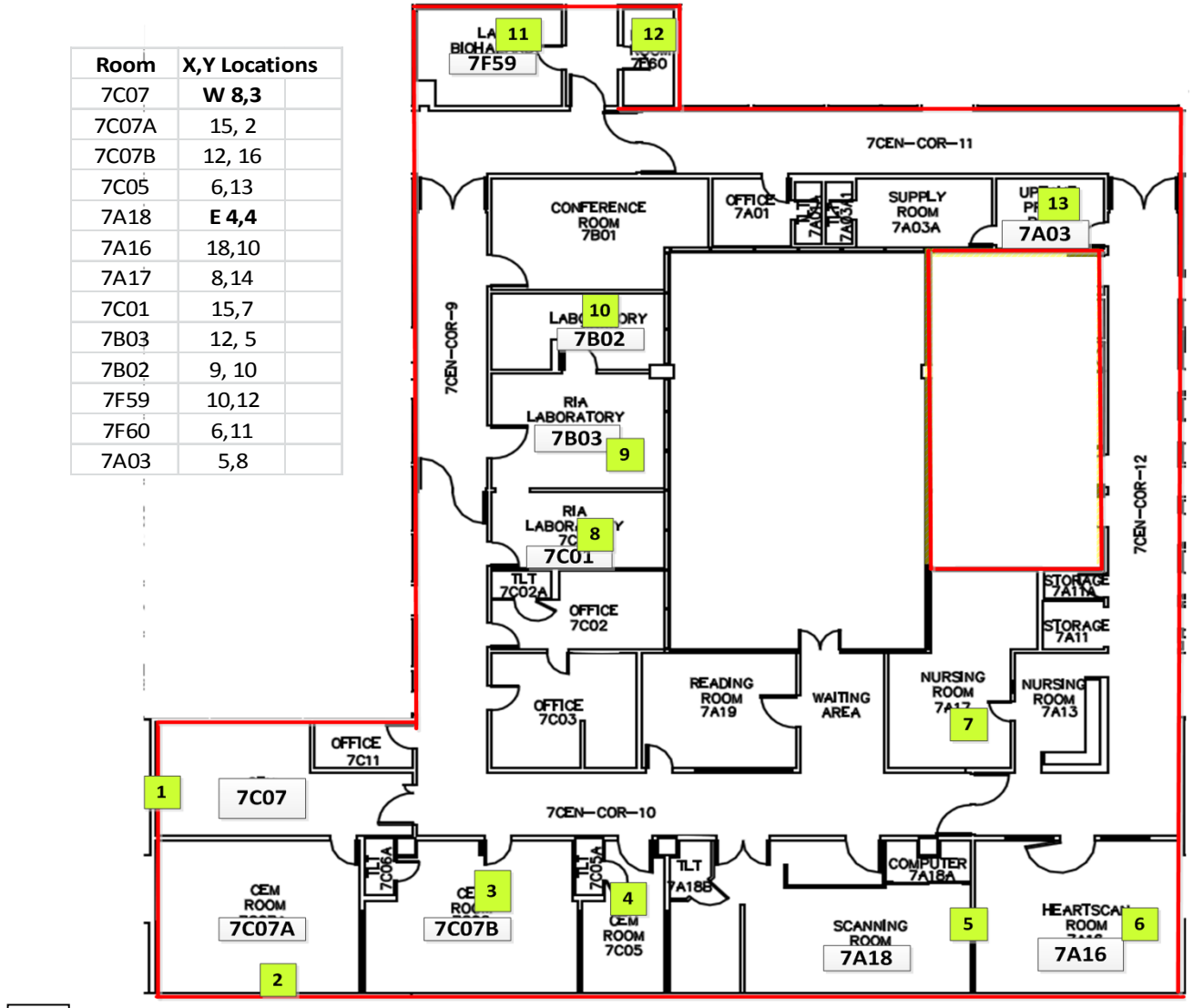
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	1	0	1	-1	20
2	Lead Lined Shield Plug	1	0	1	-1	20
3	Lead Shielded Cabinet	0	-1	1	-5	10
4	Lead Lined Shield Plug	0	-1	1	-5	10
5	Lead Shielded Cabinet	1	0	1	-1	20
6	Black Hood	0	-1	1	-5	10
7	Hood	0	-1	1	-5	10
8	Stainless Hood	1	0	1	-1	20
9	Black Lab Sink	0	-1	1	-5	10
10	Shower	1	0	1	-1	20
				Maximum:	-1	
				Average:	-3	
				STDEV:	2	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Metal	
Detector:	43-68	PR-216834	Background (cpm):	0.64	
Probe Area:	126	cm^2	Background σ (cpm):	0.73	
			Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2

Room	X,Y Locations
7C07	**W 8,3**
7C07A	15, 2
7C07B	12, 16
7C05	6,13
7A18	**E 4,4**
7A16	18,10
7A17	8,14
7C01	15,7
7B03	12, 5
7B02	9, 10
7F59	10,12
7F60	6,11
7A03	5,8



SURVEY UNITS LEGEND

Class 3

\# Measurement Number

Survey Unit Identifier

SU2-7-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Seventh Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 2
Survey Unit: SU2-7-2
Survey Date: 12/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Gray Tile	90	132	15	329	70
2	White Tile	105	162	16	404	80
3	Drywall	55	25	12	62	60
4	White Tile	134	220	18	548	90
5	Drywall	72	96	14	239	70
6	White Tile	99	150	16	374	80
7	White Tile	121	194	17	483	80
8	Tan Tile	94	140	15	349	70
9	Tan Tile	69	90	14	224	70
10	Black Lab Counter	104	160	16	399	80
11	Black Lab Counter	104	160	16	399	80
12	Plastic Storage Cabinet	94	140	15	349	70
13	Tan Tile	121	194	17	483	80
QC4	Drywall	58	31	13	77	60
				Maximum:	548	
				Average:	346	
				STDEV:	133	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Drywall
Instrument:	2360	141321	Background (cpm):	47.8	85.2
Detector:	44-110	PR-258430	Background σ (cpm):	6.66	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 2
Survey Unit: SU2-7-2
Survey Date: 12/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Stainless Sink	80	97	15	241	70
2	Lead Lined Can	88	113	16	281	80
5	Formica Counter	87	111	16	276	80
7	CT Machine	70	77	15	191	70
8	CT Machine	97	131	16	326	80
9	Formica Counter	94	125	16	311	80
				Maximum:	326	
				Average:	241	
				STDEV:	49	

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	184935	Reference Material:	Metal
Detector:	43-68	PR-181739	Background (cpm):	63.1
Probe Area:	126	cm^2	Background σ (cpm):	8.52
			Sample Analysis Time:	0.5 min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 2
Survey Unit: SU2-7-2
Survey Date: 12/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Gray Tile	84	-5	9	-71	270
2	White Tile	113	10	10	154	290
3	Drywall	70	-19	8	-296	260
4	White Tile	101	4	9	61	280
5	Drywall	74	-17	9	-265	260
6	White Tile	111	9	10	139	290
7	White Tile	114	10	10	162	300
8	Tan Tile	112	9	10	146	290
9	Tan Tile	99	3	9	45	280
10	Black Lab Counter	87	-3	9	-48	270
11	Black Lab Counter	103	5	9	76	290
12	Plastic Storage Cabinet	84	-5	9	-71	270
13	Tan Tile	100	3	9	53	280
QC	Tile Floor					
				Maximum:	162	
				Average:	9	
				STDEV:	163	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Tile Floor	Drywall
Instrument:	2360	253237		Background (cpm):	46.59	54.0
Detector:	43-68	PR-216834		Background σ (cpm):	6.05	6.86
Probe Area:	126	cm^2		Sample Analysis Time:	2	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 2
Survey Unit: SU2-7-2
Survey Date: 12/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Stainless Sink	97	14	8	222	250
2	Lead Lined Can	249	90	12	1405	370
5	Formica Counter	76	4	7	59	230
7	CT Machine	69	0	7	4	220
8	CT Machine	69	0	7	4	220
9	Formica Counter	84	8	8	121	240
				Maximum:	1405	
				Average:	302	
				STDEV:	546	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Metal	
Detector:	43-68	PR-216834	Background (cpm):	34.23	
Probe Area:	126	cm^2	Background σ (cpm):	4.21	
			Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 2
Survey Unit: SU2-7-2
Survey Date: 12/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Gray Tile	0	-1	1	-5	10
2	White Tile	1	0	1	-1	10
3	Drywall	0	-1	1	-10	10
4	White Tile	2	0	1	3	20
5	Drywall	1	-1	1	-6	10
6	White Tile	1	0	1	-1	10
7	White Tile	1	0	1	-1	10
8	Tan Tile	2	0	1	3	20
9	Tan Tile	1	0	1	-1	10
10	Black Lab Counter	1	0	1	-1	10
11	Black Lab Counter	4	1	2	12	20
12	Plastic Storage Cabinet	1	0	1	-1	10
13	Tan Tile	0	-1	1	-5	10

Maximum: 12
Average: -1
STDEV: 6

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Tile Floor	Drywall
Instrument:	2360	253237		Background (cpm):	0.59	1.27
Detector:	43-68	PR-216834		Background σ (cpm):	0.51	1.26
Probe Area:	126	cm^2		Sample Analysis Time:	2	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

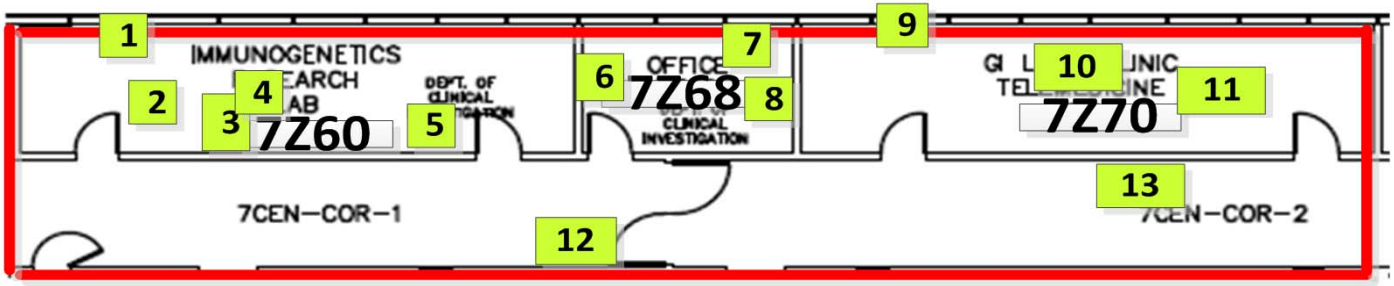
Building: 2
Survey Unit: SU2-7-2
Survey Date: 12/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Stainless Sink	0	-1	1	-5	10
2	Lead Lined Can	1	0	1	-1	20
5	Formica Counter	0	-1	1	-5	10
7	CT Machine	2	0	1	3	20
8	CT Machine	2	0	1	3	20
9	Formica Counter	1	0	1	-1	20
				Maximum:	3	
				Average:	-1	
				STDEV:	4	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	253237	Background (cpm):	0.64	
Detector:	43-68	PR-216834	Background σ (cpm):	0.73	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2



Room	X,Y Locations				
7Z60	N 4, 6	8,6	16,1	17,3	28,2
7Z68	W 5,3	11, 11	14,5		
7Z70	N 15, 6	21,9	31,5		
Hall	41,1	79,7			

SURVEY UNITS
LEGEND

Class 3
Measurement Number

Survey Unit Identifier

SU2-7-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Seventh Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 2
Survey Unit: SU2-7-3
Survey Date: 12/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	74	63	14	156	70
2	Tile Under Carpet	113	178	16	443	80
3	Tile Under Carpet	127	206	17	513	80
4	Drywall	102	119	16	296	80
5	Tile Under Carpet	115	182	17	453	80
6	Tile Under Carpet	103	158	16	394	80
7	Drywall	94	103	15	256	70
8	Tile Under Carpet	113	178	16	443	80
9	Tile Under Carpet	128	208	17	518	80
10	Tile Under Carpet	118	188	17	468	80
11	Tile Under Carpet	101	154	16	384	80
12	Off White Tile	109	170	16	423	80
13	Off White Tile	87	126	15	314	70
QC4	Drywall	78	71	14	176	70
				Maximum:	518	
				Average:	393	
				STDEV:	113	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Tile Floor	Drywall
Instrument:	2360	141321		Background (cpm):	47.8	85.2
Detector:	44-110	PR-258430		Background σ (cpm):	6.66	10.86
Probe Area:	126	cm^2		Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 2
Survey Unit: SU2-7-3
Survey Date: 12/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Stainless Sink	93	123	16	306	80
				Maximum:	306	
				Average:	306	
				STDEV:	40	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	184935	Reference Material:	Metal	
Detector:	43-68	PR-181739	Background (cpm):	63.1	
Probe Area:	126	cm^2	Background σ (cpm):	8.52	
			Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 2
Survey Unit: SU2-7-3
Survey Date: 12/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drywall	95	-7	9	-101	280
2	Tile Under Carpet	97	2	9	30	280
3	Tile Under Carpet	79	-7	9	-110	270
4	Drywall	88	-10	9	-156	270
5	Tile Under Carpet	85	-4	9	-64	270
6	Tile Under Carpet	99	3	9	45	280
7	Drywall	101	-4	9	-54	280
8	Tile Under Carpet	98	2	9	37	280
9	Tile Under Carpet	90	-2	9	-25	280
10	Tile Under Carpet	99	3	9	45	280
11	Tile Under Carpet	101	4	9	61	280
12	Off White Tile	81	-6	9	-95	270
13	Off White Tile	94	0	9	6	280
QC	Tile Floor					

Maximum: 61
Average: -26
STDEV: 75

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Tile Floor	Drywall
Instrument:	2360	253237		Background (cpm):	46.59	54.0
Detector:	43-68	PR-216834		Background σ (cpm):	6.05	6.86
Probe Area:	126	cm^2		Sample Analysis Time:	2	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 2
Survey Unit: SU2-7-3
Survey Date: 12/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Stainless Sink	97	14	8	222	250
				Maximum:	222	
				Average:	222	
				STDEV:	125	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	253237	Background (cpm):	34.23	
Detector:	43-68	PR-216834	Background σ (cpm):	4.21	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 2
Survey Unit: SU2-7-3
Survey Date: 12/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drywall	0	-1	1	-10	10
2	Tile Under Carpet	0	-1	1	-5	10
3	Tile Under Carpet	2	0	1	3	20
4	Drywall	1	-1	1	-6	10
5	Tile Under Carpet	3	1	1	8	20
6	Tile Under Carpet	0	-1	1	-5	10
7	Drywall	1	-1	1	-6	10
8	Tile Under Carpet	0	-1	1	-5	10
9	Tile Under Carpet	3	1	1	8	20
10	Tile Under Carpet	2	0	1	3	20
11	Tile Under Carpet	0	-1	1	-5	10
12	Off White Tile	1	0	1	-1	10
13	Off White Tile	1	0	1	-1	10

Maximum: 8
Average: -2
STDEV: 6

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Tile Floor	Drywall
Instrument:	2360	253237		Background (cpm):	0.59	1.27
Detector:	43-68	PR-216834		Background σ (cpm):	0.51	1.26
Probe Area:	126	cm^2		Sample Analysis Time:	2	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

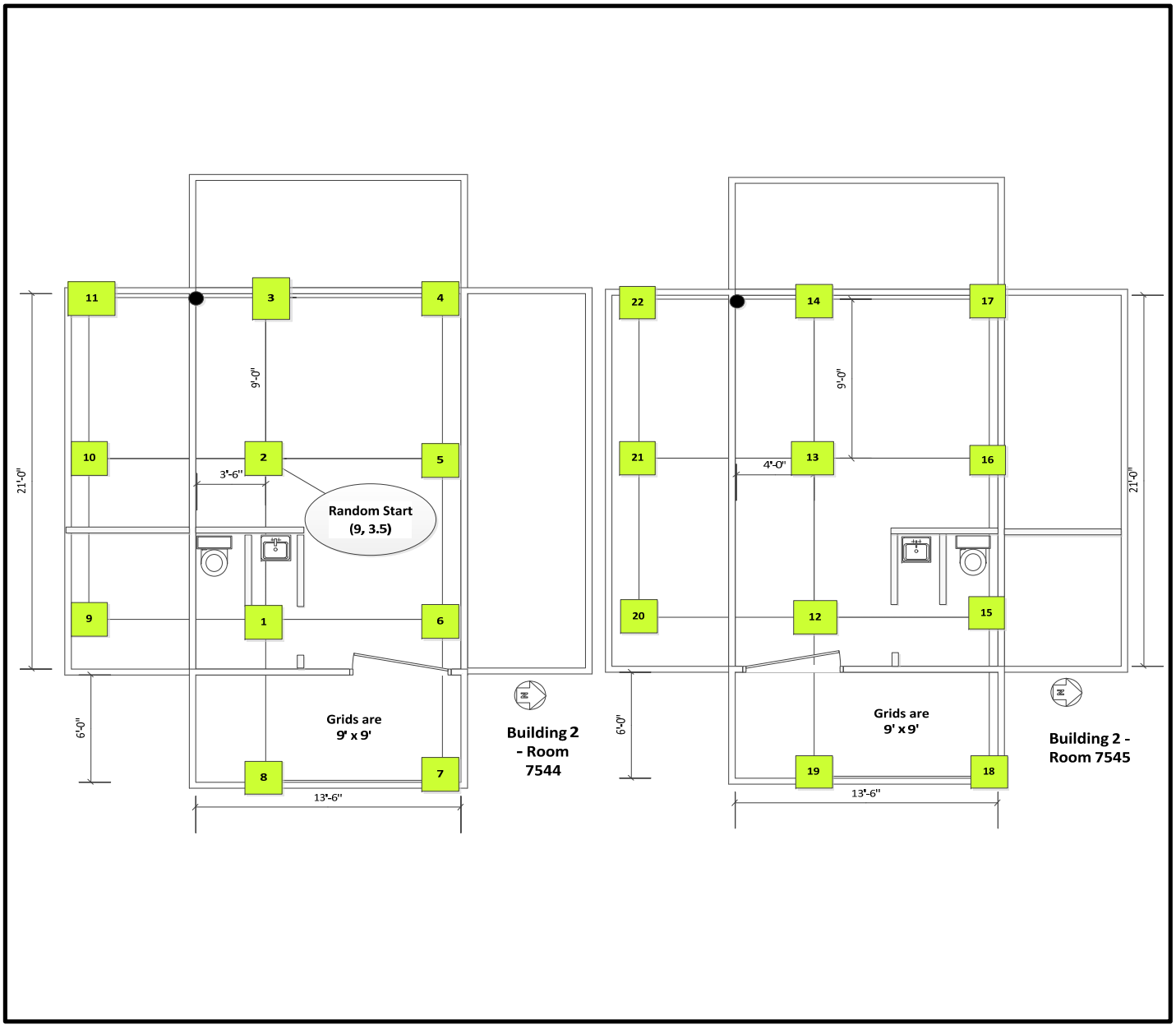
Building: 2
Survey Unit: SU2-7-3
Survey Date: 12/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Stainless Sink	1	0	1	-1	20
				Maximum:	-1	
				Average:	-1	
				STDEV:	10	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	253237	Background (cpm):	0.64	
Detector:	43-68	PR-216834	Background σ (cpm):	0.73	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2



SURVEY UNITS
LEGEND

Class 2

\# Measurement Number

origin

Survey Unit Identifier

SU2-7-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Seventh Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 2
Survey Unit: SU2-7-4
Survey Date: 12/23/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Gray Tile	117	186	17	463	80
2	Gray Tile	121	194	17	483	80
3	Gray Tile	92	136	15	339	70
4	Drywall	101	117	16	291	80
5	Gray Tile	117	186	17	463	80
6	Gray Tile	90	132	15	329	70
7	Door	93	138	15	344	70
8	Metal Locker	81	99	14	246	70
9	Shower Wall	103	158	16	394	80
10	Drywall	100	115	16	286	80
11	Drywall	90	95	15	236	70
12	Gray Tile	129	210	17	523	80
13	Gray Tile	110	172	16	428	80
14	Drywall	96	107	15	266	70
15	Shower Floor	110	172	16	428	80
16	Gray Tile	103	158	16	394	80
17	Gray Tile	119	190	17	473	80
18	Shower Wall	111	174	16	433	80
19	Door	91	134	15	334	70
20	Drywall	92	99	15	246	70
21	Drywall	104	123	16	306	80
22	Drywall	98	111	16	276	80
QC16	Gray Tile	87	126	15	314	70
				Maximum:	523	
				Average:	352	
				STDEV:	88	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Drywall	Metal
Instrument:	2360	141321	Background (cpm):	47.8	85.2	63.1
Detector:	44-110	PR-258430	Background σ (cpm):	6.66	10.86	8.52
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 2
Survey Unit: SU2-7-4
Survey Date: 12/23/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Gray Tile	89	-2	9	-33	270
2	Gray Tile	104	5	9	84	290
3	Gray Tile	97	2	9	30	280
4	Drywall	129	11	10	163	310
5	Gray Tile	114	10	10	162	300
6	Gray Tile	94	0	9	6	280
7	Door	112	9	10	146	290
8	Metal Locker	113	22	10	347	290
9	Shower Wall	77	-8	9	-126	260
10	Drywall	110	1	10	16	290
11	Drywall	101	-4	9	-54	280
12	Gray Tile	104	5	9	84	290
13	Gray Tile	119	13	10	201	300
14	Drywall	95	-7	9	-101	280
15	Shower Floor	97	2	9	30	280
16	Gray Tile	125	16	10	248	300
17	Gray Tile	121	14	10	216	300
18	Shower Wall	118	12	10	193	300
19	Door	102	4	9	69	290
20	Drywall	114	3	10	47	300
21	Drywall	113	3	10	39	290
22	Drywall	130	11	10	171	310

Maximum: 347
Average: 67
STDEV: 131

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Tile Floor	Drywall	Metal
Background (cpm):	46.59	54.0	34.23
Background σ (cpm):	6.05	6.86	4.21
Sample Analysis Time:	2 min		

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 2
Survey Unit: SU2-7-4
Survey Date: 12/23/2011

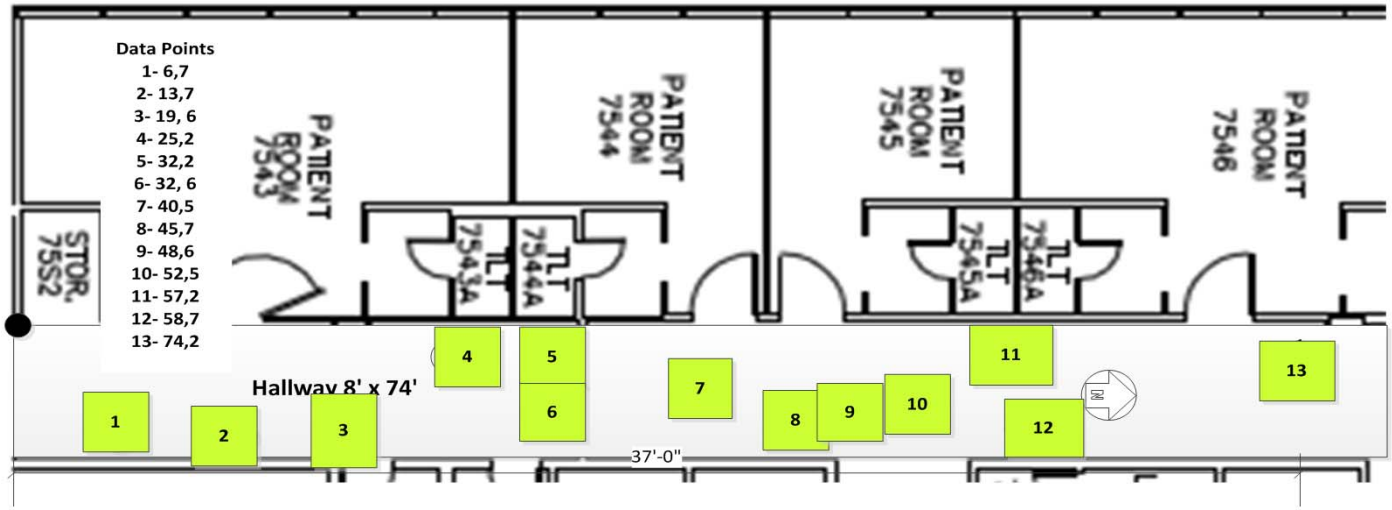
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Gray Tile	1	0	1	-1	10
2	Gray Tile	1	0	1	-1	10
3	Gray Tile	1	0	1	-1	10
4	Drywall	13	5	3	43	40
5	Gray Tile	2	0	1	3	20
6	Gray Tile	0	-1	1	-5	10
7	Door	0	-1	1	-5	10
8	Metal Locker	1	0	1	-1	10
9	Shower Wall	0	-1	1	-5	10
10	Drywall	1	-1	1	-6	10
11	Drywall	1	-1	1	-6	10
12	Gray Tile	1	0	1	-1	10
13	Gray Tile	0	-1	1	-5	10
14	Drywall	2	0	1	-2	20
15	Shower Floor	2	0	1	3	20
16	Gray Tile	2	0	1	3	20
17	Gray Tile	2	0	1	3	20
18	Shower Wall	2	0	1	3	20
19	Door	2	0	1	3	20
20	Drywall	1	-1	1	-6	10
21	Drywall	1	-1	1	-6	10
22	Drywall	0	-1	1	-10	10

Maximum: 43
Average: 1
STDEV: 14

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Drywall	Metal
Instrument:	2360	253237	Background (cpm):	0.59	1.27	0.64
Detector:	43-68	PR-216834	Background σ (cpm):	0.51	1.26	0.73
Probe Area:	126	cm^2	Sample Analysis Time:	2	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2



SURVEY UNITS
LEGEND

Class 3

\# Measurement Number

Origin

Survey Unit Identifier

SU2-7-5

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 2 Seventh Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 2
Survey Unit: SU2-7-5
Survey Date: 12/23/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Gray Tile	129	210	17	523	80
2	Gray Tile	127	206	17	513	80
3	Gray Tile	111	174	16	433	80
4	Gray Tile	135	222	18	553	90
5	Gray Tile	114	180	17	448	80
6	Gray Tile	137	226	18	563	90
7	Gray Tile	124	200	17	498	80
8	Gray Tile	107	166	16	413	80
9	Gray Tile	156	264	19	657	90
10	Brown Tile	111	174	16	433	80
11	Gray Tile	113	178	16	443	80
12	Brown Tile	132	216	18	538	90
13	Gray Tile	121	194	17	483	80
QC10	Brown Tile	73	98	14	244	70
				Maximum:	657	
				Average:	498	
				STDEV:	74	

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	141321	Reference Material:	Tile Floor
Detector:	44-110	PR-258430	Background (cpm):	47.8
Probe Area:	126	cm^2	Background σ (cpm):	6.66
			Sample Analysis Time:	0.5 min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 2
Survey Unit: SU2-7-5
Survey Date: 12/23/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Gray Tile	132	19	10	302	310
2	Gray Tile	108	7	10	115	290
3	Gray Tile	121	14	10	216	300
4	Gray Tile	129	18	10	279	310
5	Gray Tile	115	11	10	170	300
6	Gray Tile	137	22	10	341	310
7	Gray Tile	125	16	10	248	300
8	Gray Tile	130	18	10	286	310
9	Gray Tile	108	7	10	115	290
10	Brown Tile	124	15	10	240	300
11	Gray Tile	121	14	10	216	300
12	Brown Tile	119	13	10	201	300
13	Gray Tile	104	5	9	84	290

Maximum: 341
Average: 230
STDEV: 73

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	253237	Reference Material:	Tile Floor
Detector:	43-68	PR-216834	Background (cpm):	46.59
Probe Area:	126	cm^2	Background σ (cpm):	6.05
			Sample Analysis Time:	2 min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 2
Survey Unit: SU2-7-5
Survey Date: 12/23/2011

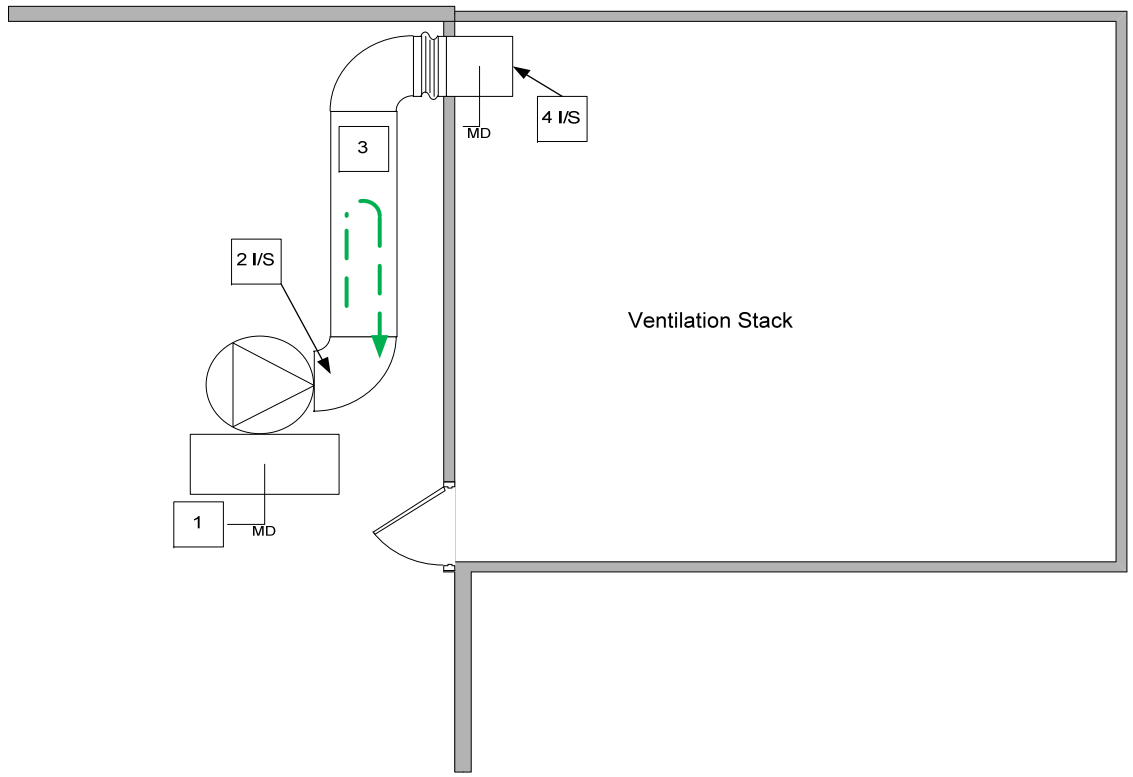
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Gray Tile	4	1	2	12	20
2	Gray Tile	1	0	1	-1	10
3	Gray Tile	6	2	2	20	30
4	Gray Tile	1	0	1	-1	10
5	Gray Tile	3	1	1	8	20
6	Gray Tile	4	1	2	12	20
7	Gray Tile	0	-1	1	-5	10
8	Gray Tile	1	0	1	-1	10
9	Gray Tile	2	0	1	3	20
10	Brown Tile	2	0	1	3	20
11	Gray Tile	1	0	1	-1	10
12	Brown Tile	3	1	1	8	20
13	Gray Tile	4	1	2	12	20

Maximum: 20
Average: 5
STDEV: 7

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	253237	Reference Material:	Tile Floor
Detector:	43-68	PR-216834	Background (cpm):	0.59
Probe Area:	126	cm^2	Background σ (cpm):	0.51
			Sample Analysis Time:	2 min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2



SURVEY UNITS
LEGEND

Scan Path

\# Data Point

Building 2
Roof

No Scale

Building 2 Roof

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 2 Roof

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
SU-2-Roof	64	53	118	79	16	310	1385	745	263

Area Scanned (ft^2) 9

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	253258	Background:	34	cpm
Detector:	43-68	148454	Background σ:	4.21	cpm
Probe Area:	126	cm^2	Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.048	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	916	dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 2 Roof

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
SU-2-Roof	64	0	11	1	2	-5.18	83.90	1.65	18.26

Area Scanned (ft^2) 9

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm2

Reference Material: Counter
Background: 1 cpm
Background σ: 0.73 cpm
Scan speed: 1 detector width / 2sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.098 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 705 dpm/100 cm^2

Summary of Random H3 Static Measurements

Location: Building 2 Roof
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Surface						
1	Ductwork	62	61	14	152	70
2	Ductwork	76	89	15	221	70
3	Ductwork	66	69	14	172	70
4	Ductwork	57	51	14	127	70
				Maximum:	221	
				Average:	168	
				STDEV:	40	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	141321	Background:	63	cpm
Detector:	44-110	PR-258430	Background σ:	8.52	cpm
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	epm/dpm
Total Efficiency Uncertainty:	0.001	epm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Location: Building 2 Roof
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Surface						
1	Ductwork	259	31	9	475	280
2	Ductwork	329	48	10	747	310
3	Ductwork	280	36	9	557	290
4	Ductwork	229	23	9	358	260
				Maximum:	747	
				Average:	534	
				STDEV:	164	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	253237	Background:	34	cpm
Detector:	43-68	PR-216834	Background σ:	4.21	cpm
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.051	epm/dpm
Total Efficiency Uncertainty:	0.001	epm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

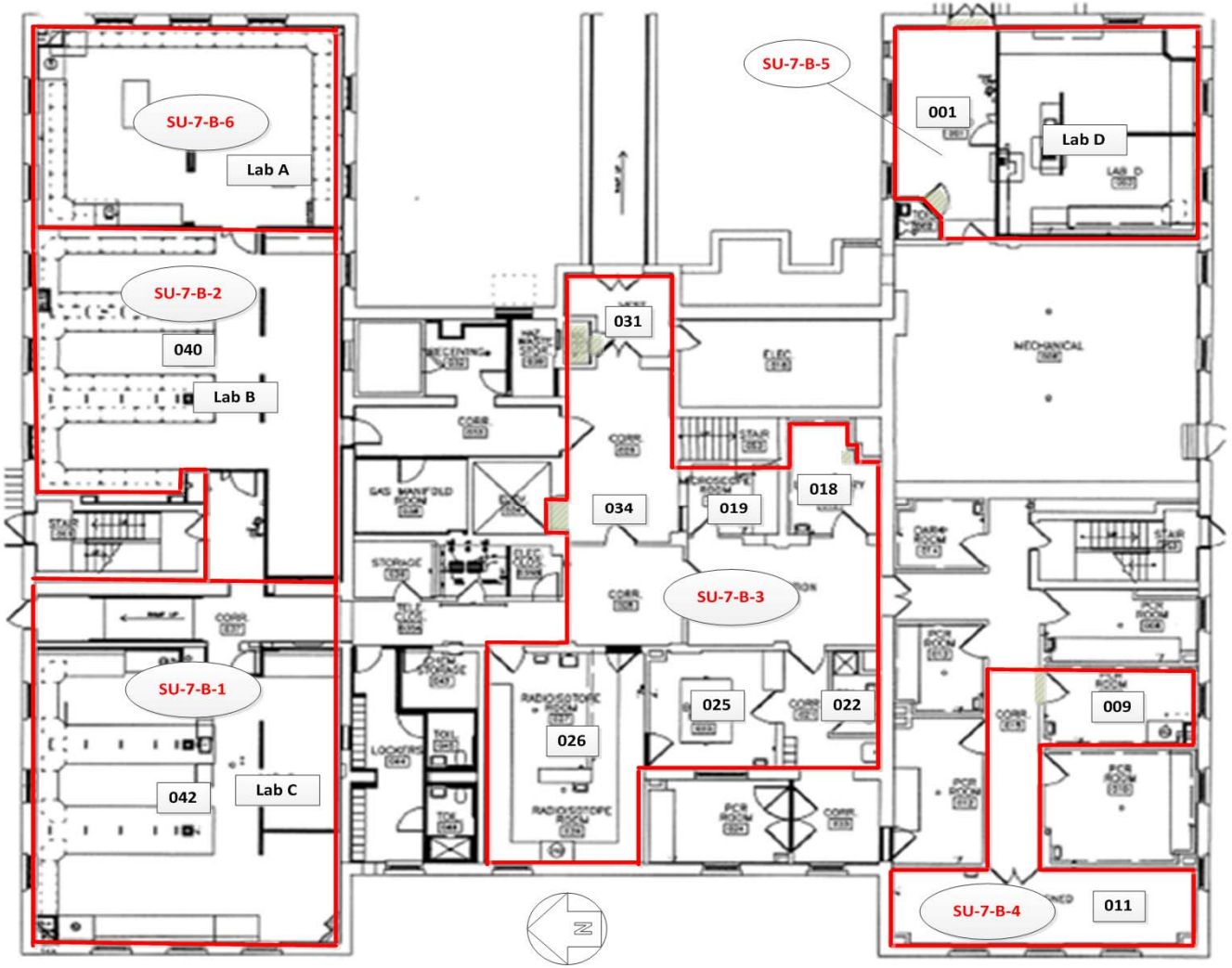
Location: Building 2 Roof
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Surface						
1	Ductwork	5	1	1	5	20
2	Ductwork	9	2	2	13	30
3	Ductwork	6	1	1	7	20
4	Ductwork	5	1	1	5	20
				Maximum:	13	
				Average:	8	
				STDEV:	4	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	253237	Background:	1	cpm
Detector:	43-68	PR-216834	Background σ:	0.73	cpm
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.096	epm/dpm
Total Efficiency Uncertainty:	0.001	epm/dpm
MDC:	39	dpm/100 cm^2



SURVEY UNITS LEGEND

Class 3
Survey Units

Survey Unit Identifier

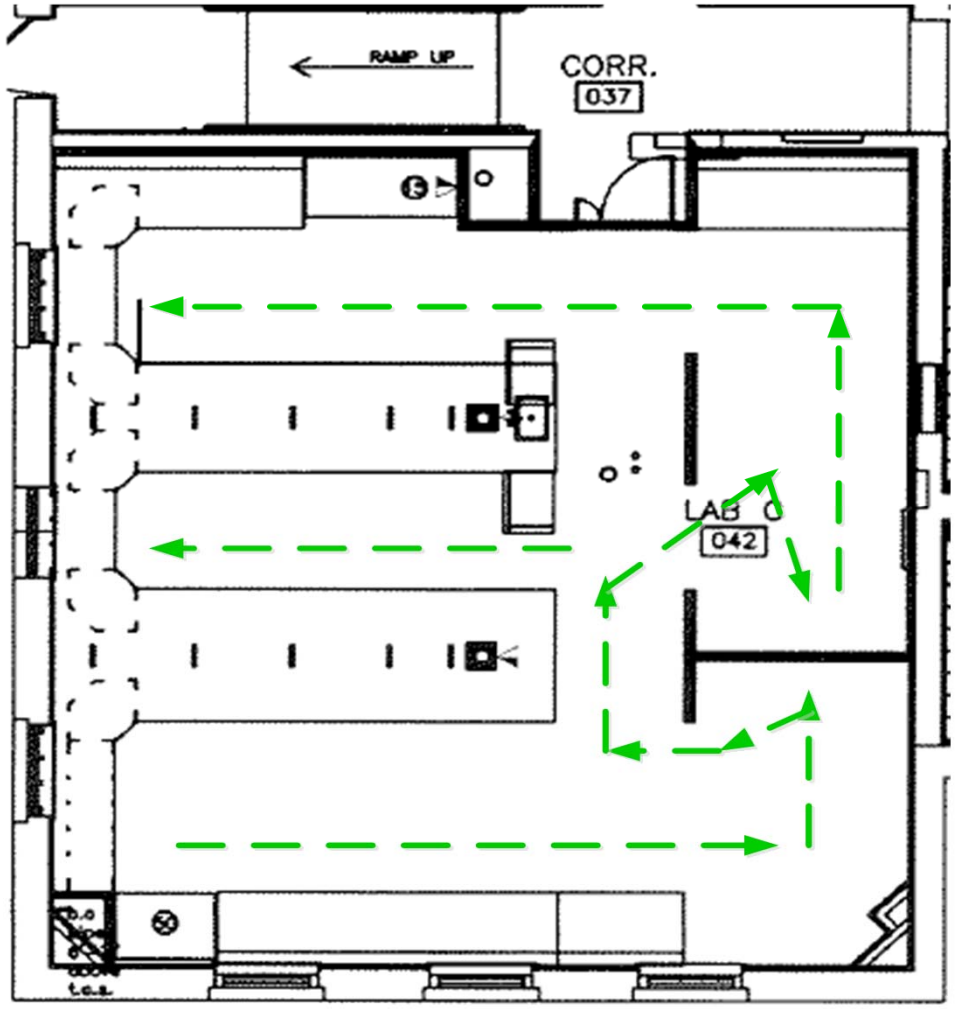
SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

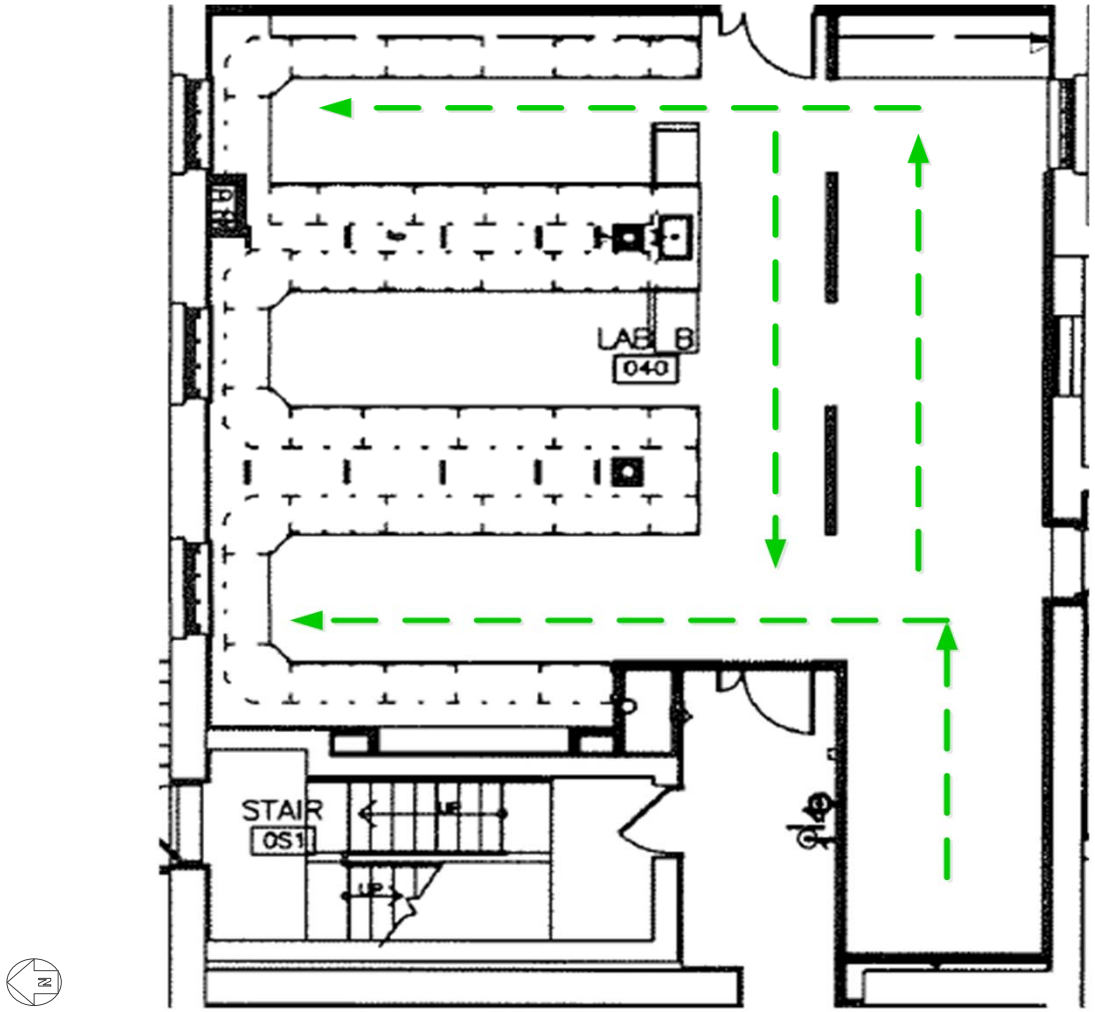
SU-7-B-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

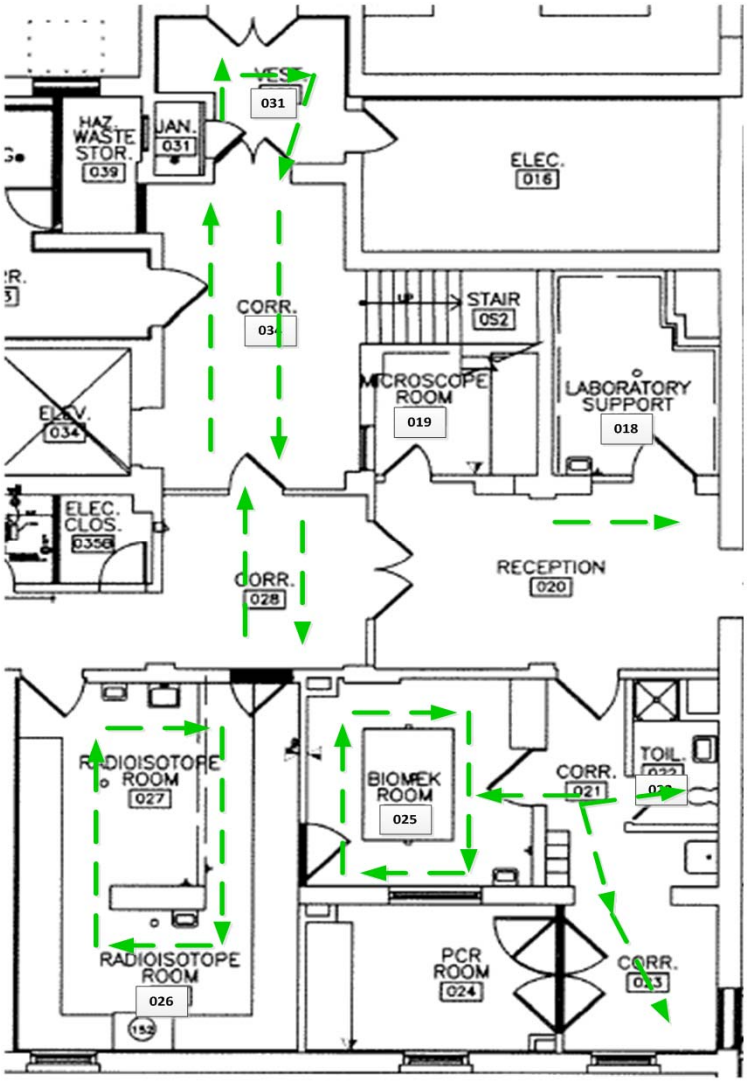
SU-7-B-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

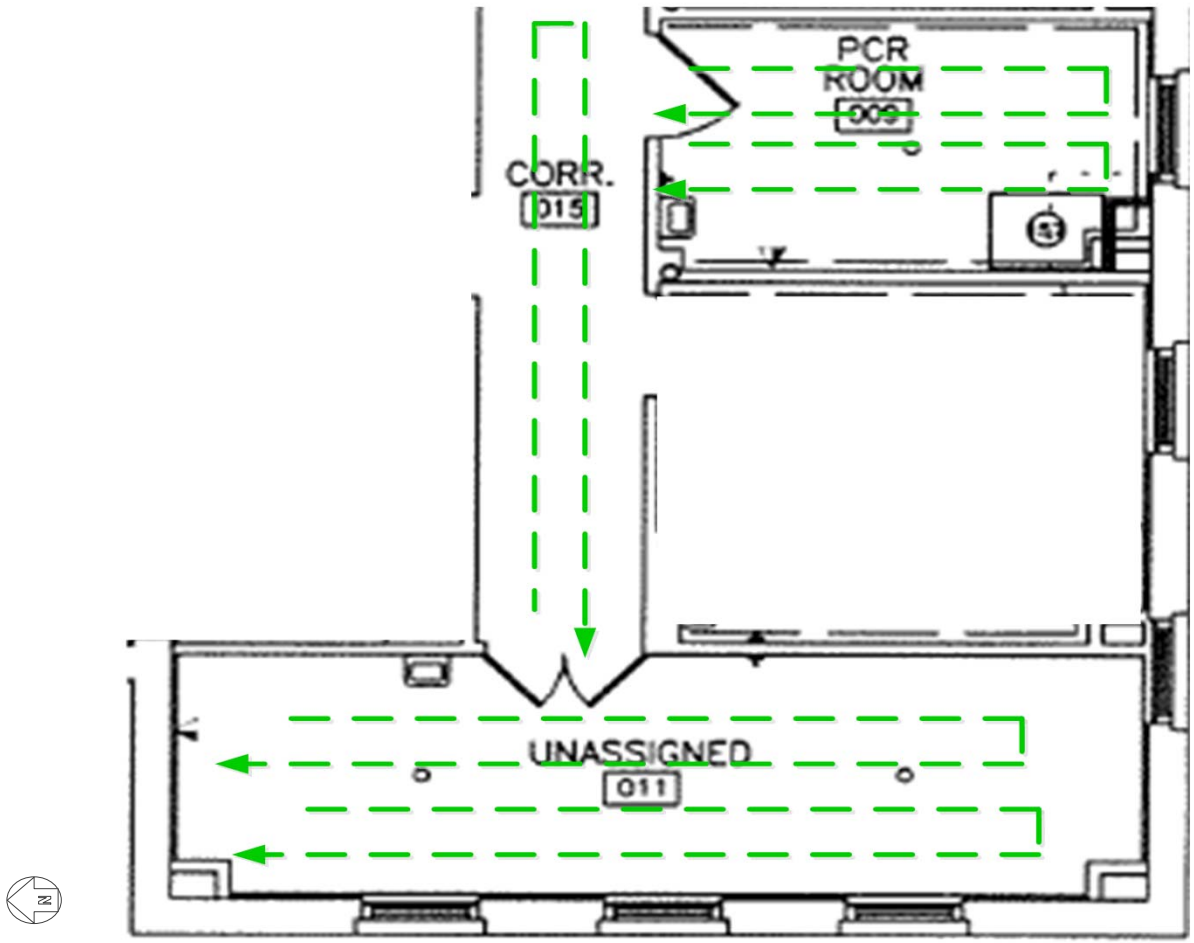
SU-7-B-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

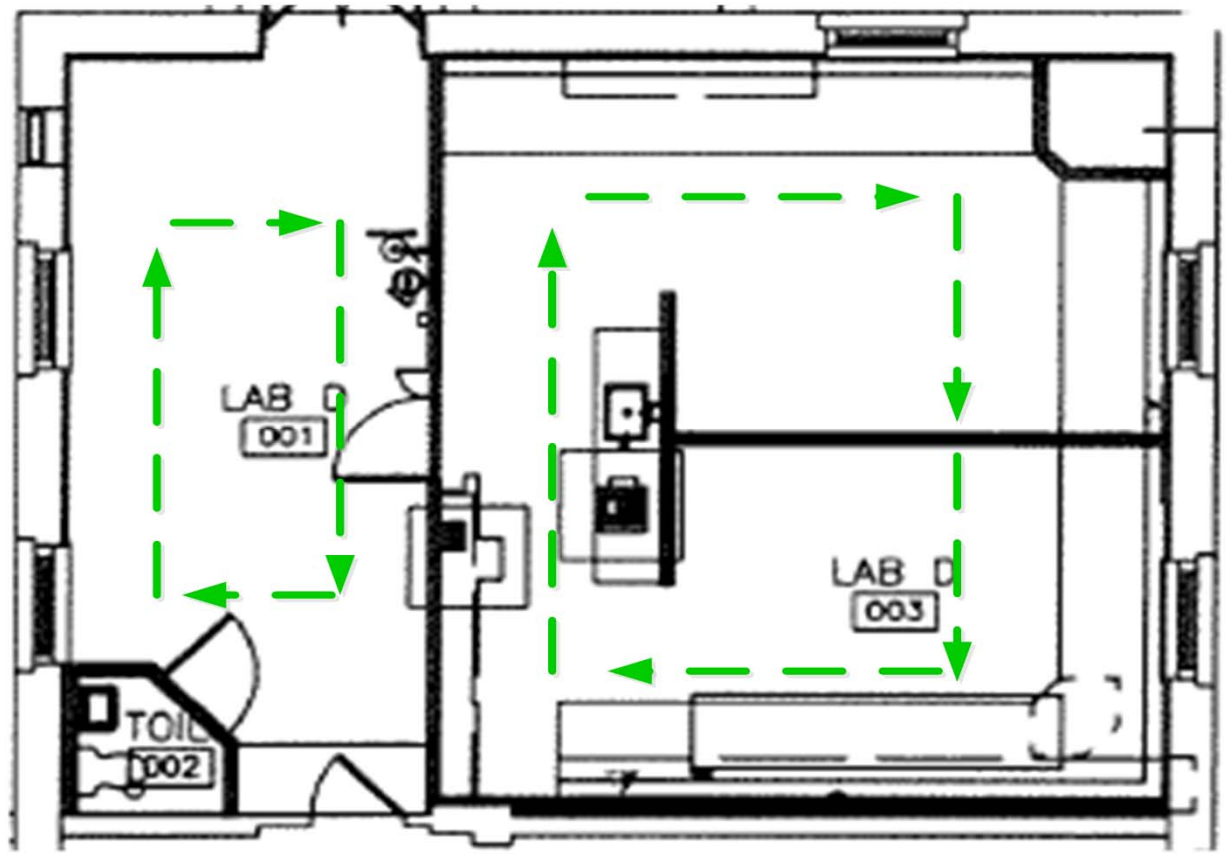
SU-7-B-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU-7-B-5

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 7 Basement Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU7-B-1	579	50	295	125	54	-242	484	-19	159
SU7-B-2	678	88	335	191	34	-129	602	177	102
SU7-B-3	1061	101	373	216	44	-91	715	251	129
SU7-B-4	332	116	307	190	33	-46	519	171	97
SU7-B-5	498	97	312	187	40	-103	534	164	117
SU7-B-6	376	91	299	166	36	-120	496	103	105

Area Scanned ft^2): 2,207

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 7 Basement Level

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU7-B-1	579	0	22	2.3	3.8	-5	34	-1	7
SU7-B-2	678	0	30	5.3	6.0	-5	48	4	11
SU7-B-3	1061	0	32	5.8	6.5	-5	52	5	12
SU7-B-4	332	0	27	2.2	3.8	-5	43	-2	7
SU7-B-5	498	0	23	4.1	4.9	-5	36	2	9
SU7-B-6	376	0	28	8.2	6.5	-5	45	9	12

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	3	cpm
Probe Area:	582	cm^2	Background σ:	7.32	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	720	dpm/100 cm^2

Summary of Scan Results - Beta

Location: Building 7 Basement Level

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU7-B-1	90	22	98	67	17	-80	1176	662	286
SU7-B-2	416	23	166	69	23	-64	2301	700	378
SU7-B-3	141	20	69	41	15	-113	697	235	246
SU7-B-5	356	16	130	47	18	-180	1705	339	302
SU7-B-6	408	20	74	44	14	-113	779	282	235

Area Scanned (ft^2): 191

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm^2

Reference Material: Counter
Background: 27 cpm
Background σ: 5.95 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.048 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 916 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 7 Basement Level

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU7-B-1	90	0	10	0	1	-4	77	-2	11
SU7-B-2	416	0	16	2	3	-4	125	11	27
SU7-B-3	141	0	24	3	5	-4	190	19	42
SU7-B-5	356	0	27	1	3	-4	214	7	27
SU7-B-6	408	0	17	3	4	-4	133	19	31

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm2

Reference Material: Counter
Background: 1 cpm
Background σ: 0.8 cpm
Scan speed: 1 detector width / 2sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.098 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 705 dpm/100 cm^2

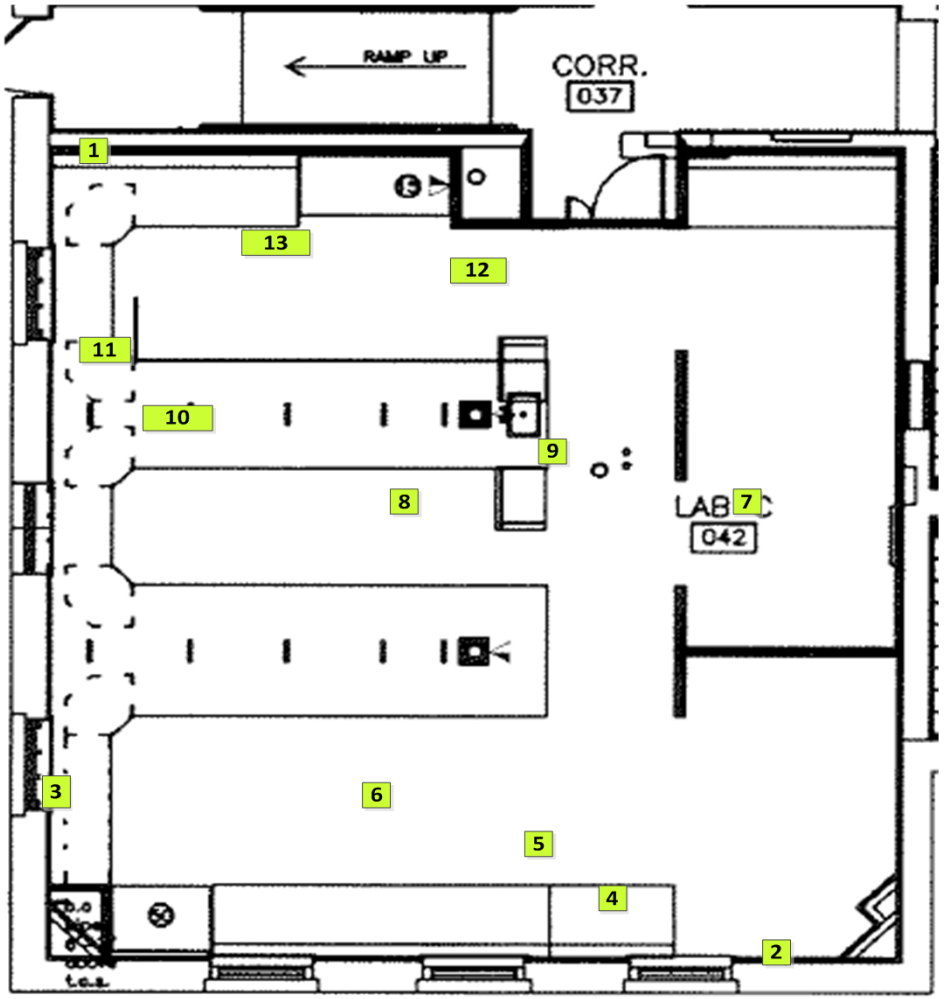
Summary of Exposure Rate Measurements

Location: Building 7
All measu
Date: 12/12/2011

Location	7-B-1	7-B-2	7-B-3	7-B-4	7-B-5	7-B-6
1	8	12	12	6	7	8
2	12	7	8	10	8	11
3	8	6	11	6	9	6
4	9	7	10	7	8	4
5	8	7	9	8	7	7
6	7	7	7	8	11	8
7	8	8	6	7	10	6
8	4	7	5	5	10	9
9	4	4	6	11	3	7
10	10	6	11	9	5	4
11	9	8	10	6	8	9
12	8	6	11	6	8	9
13	11	5	12	5	7	5
14	9	4	6	8	12	3
15	4	6	7	7	11	8
16	8	10	6	9	7	5
17			8		7	

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012



X,Y Locations				
E-1,5	W-4,4	N-8,3	2,10	7,13
10,18	20,5	20, 17	22, 12	23,5
25,24	28,15	30,21		

SURVEY UNITS
LEGEND

Class 3

Data Point

Survey Unit Identifier

SU-7-B-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 7
Survey Unit: 7-B-1
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	105	125	18	311	90
2	Drywall	141	197	20	490	100
3	Drywall	126	167	19	415	90
4	Linoleum	98	97	19	240	90
5	Linoleum	170	241	22	598	110
6	Linoleum	136	173	21	429	100
7	Linoleum	157	215	22	534	110
8	Linoleum	138	177	21	439	100
9	Linoleum	117	135	20	335	100
10	Linoleum	97	95	19	235	90
11	Linoleum	104	109	19	270	90
12	Linoleum	115	131	20	325	100
13	Black Lab Counter	109	141	18	350	90
				Maximum:	598	
				Average:	382	
				STDEV:	113	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Drywall	Linoleum	Composite
Instrument:	2360	141321	Background (cpm):	85.2	99	77
Detector:	44-110	PR-258430	Background σ (cpm):	10.86	12.73	10.11
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 7
Survey Unit: 7-B-1
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Hood	120	163	18	405	90
2	Composite Hood Drain	104	131	18	325	90
3	Black Lab Sink	123	169	19	420	90
				Maximum:	420	
				Average:	383	
				STDEV:	51	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Composite	
Instrument:	2360	184935	Background (cpm):	77.2	
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building:	7		
Survey Unit:	7-B-1		
Survey Date:	12/7/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Drywall	212	-1	10	-16	310
2	Drywall	290	19	11	288	330
3	Drywall	266	13	11	195	330
4	Floor Tile	172	-4	9	-56	270
5	Floor Tile	193	2	9	26	280
6	Floor Tile	208	5	9	84	290
7	Floor Tile	222	9	10	139	290
8	Floor Tile	173	-3	9	-52	270
9	Floor Tile	173	-3	9	-52	270
10	Floor Tile	198	3	9	45	280
11	Floor Tile	201	4	9	57	280
12	Floor Tile	178	-2	9	-33	270
13	Black Lab Counter	138	8	8	119	260
QC10	Floor Tile	214	7	9	108	290
QC12	Floor Tile	187	0	9	2	280
				Maximum:	288	
				Average:	57	
				STDEV:	106	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Drywall	Composite
Instrument:	2360	253237	Background (cpm):	46.59	54	27
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	6.86	5.95
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building:	7	
Survey Unit:	7-B-1	
Survey Date:	12/7/2011	2/3/2012

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Stainless Hood	139	1	7	8	220
2	Stainless Hood Drain	242	26	9	409	270
3	Black Lab Sink	327	48	10	739	310
				Maximum:	739	
				Average:	385	
				STDEV:	366	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Composite
Instrument:	2360	253237	Background (cpm):	34.23	27
Detector:	43-68	PR-216834	Background σ (cpm):	4.21	5.95
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building:	7		
Survey Unit:	7-B-1		
Survey Date:	12/7/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Drywall	4	0	2	-2	30
2	Drywall	5	0	2	0	30
3	Drywall	4	0	2	-2	30
4	Floor Tile	4	0	1	3	20
5	Floor Tile	3	0	1	1	20
6	Floor Tile	6	1	1	8	20
7	Floor Tile	11	2	2	18	30
8	Floor Tile	3	0	1	1	20
9	Floor Tile	3	0	1	1	20
10	Floor Tile	7	1	1	10	20
11	Floor Tile	4	0	1	3	20
12	Floor Tile	4	0	1	3	20
13	Black Lab Counter	6	1	1	8	20
QC10	Floor Tile	6	1	1	8	20
QC12	Floor Tile	9	2	2	14	30
				Maximum:	18	
				Average:	4	
				STDEV:	6	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Drywall	Composite
Instrument:	2360	253237	Background (cpm):	0.59	1.3	0.6
Detector:	43-68	PR-216834	Background σ (cpm):	0.51	1.26	0.8
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

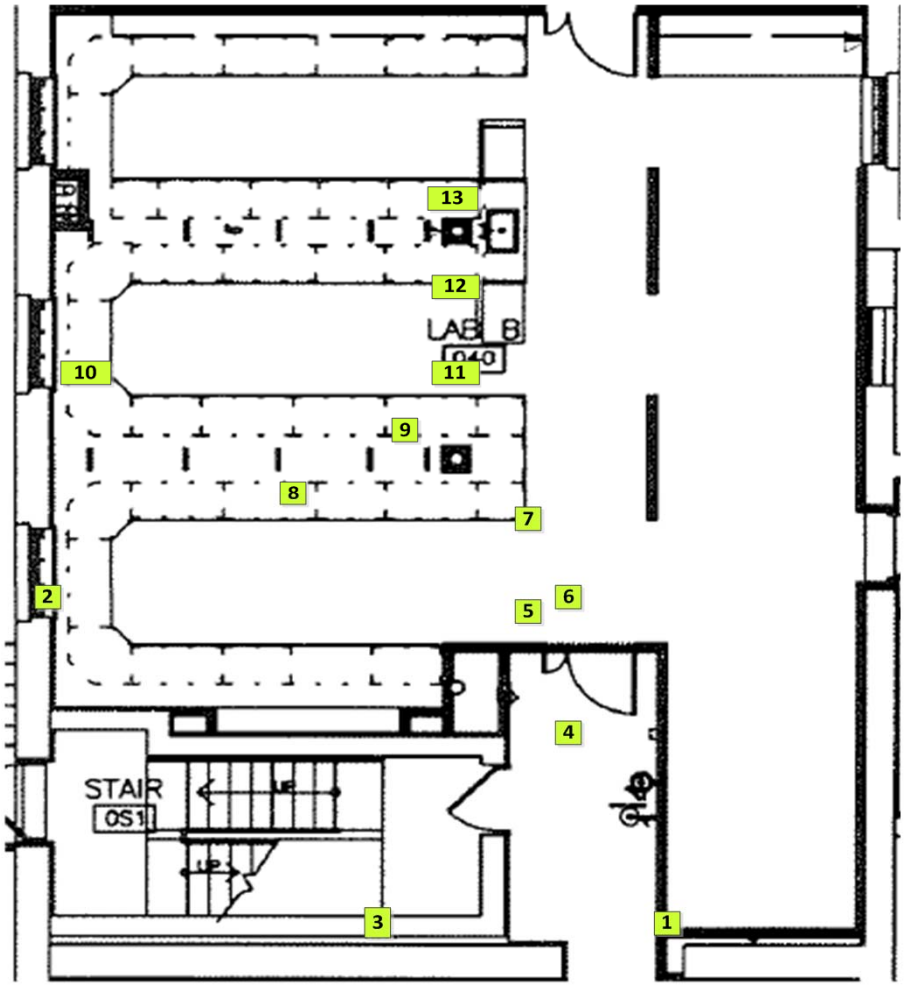
Building:	7		
Survey Unit:	7-B-1		
Survey Date:	12/7/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Stainless Hood	4	0	1	3	20
2	Black Lab Sink	7	1	2	10	30
3	Black Lab Sink	10	2	2	16	30
				Maximum:	16	
				Average:	10	
				STDEV:	7	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal
Instrument:	2360	253237	Background (cpm):	0.55	0.64
Detector:	43-68	PR-216834	Background σ (cpm):	0.8	0.73
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2



X,Y Locations				
W-6,5	N-8,3	W-16,5	9,11	13,12
14,10	16, 11	18,20	21,16	22,30
22,13	25,13	28,13		

SURVEY UNITS
LEGEND

Class 3

\# Data Point

Survey Unit Identifier

SU-7-B-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 7
Survey Unit: 7-B-2
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	105	125	18	311	90
2	Drywall	122	159	19	395	90
3	Drywall	126	167	19	415	90
4	Linoleum	50	1	16	1	80
5	Linoleum	66	33	17	81	80
6	Linoleum	63	27	17	66	80
7	Linoleum	61	23	17	56	80
8	Linoleum	66	33	17	81	80
9	Linoleum	83	67	18	166	90
10	Linoleum	66	33	17	81	80
11	Linoleum	76	53	18	131	90
12	Linoleum	76	53	18	131	90
13	Linoleum	78	57	18	141	90
				Maximum:	415	
				Average:	158	
				STDEV:	132	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Drywall	Linoleum
Instrument:	2360	141321	Background (cpm):	85.2	99
Detector:	44-110	PR-258430	Background σ (cpm):	10.86	12.73
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 7
Survey Unit: 7-B-2
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Hood	79	81	16	201	80
2	Composite Hood Drain	98	119	17	296	80
3	Black Lab Sink	74	71	16	176	80
				Maximum:	296	
				Average:	224	
				STDEV:	63	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Composite	
Instrument:	2360	184935	Background (cpm):	77.2	
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building:	7		
Survey Unit:	7-B-2		
Survey Date:	12/7/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Green Ceramic Tile Wall	600	-29	18	-458	560
2	Drywall	255	10	11	152	320
3	Drywall	224	2	10	31	310
4	Floor Tile	195	2	9	34	280
5	Floor Tile	151	-9	9	-138	260
6	Floor Tile	166	-5	9	-79	270
7	Floor Tile	160	-7	9	-103	270
8	Floor Tile	136	-13	8	-196	260
9	Floor Tile	156	-8	9	-118	270
10	Floor Tile	179	-2	9	-29	280
11	Floor Tile	130	-14	8	-219	250
12	Floor Tile	171	-4	9	-60	270
13	Floor Tile	185	0	9	-5	280
QC4	Floor Tile	186	0	9	-1	280
				Maximum:	152	
				Average:	-91	
				STDEV:	149	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Green Ceramic	Drywall
Instrument:	2360	253237	Background (cpm):	46.59	179	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	13.66	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building:	7		
Survey Unit:	7-B-2		
Survey Date:	12/7/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
1	Stainless Hood	148	3	7	43	230
2	Stainless Hood Drain	127	-2	7	-39	210
3	Black Lab Sink	316	52	11	811	330
				Maximum:	811	
				Average:	272	
				STDEV:	469	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Composite
Instrument:	2360	253237	Background (cpm):	34.23	27
Detector:	43-68	PR-216834	Background σ (cpm):	4.21	5.95
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building:	7			
Survey Unit:	7-B-2			
Survey Date:	12/7/2011	2/3/2012		

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Green Ceramic Tile Wall	8	-8	3	-68	50
2	Drywall	7	0	2	4	30
3	Drywall	2	-1	1	-6	20
4	Linoleum	10	2	2	14	30
5	Linoleum	13	2	2	20	30
6	Linoleum	7	1	2	8	30
7	Linoleum	7	1	2	8	30
8	Linoleum	4	0	2	2	20
9	Linoleum	5	0	2	4	30
10	Linoleum	3	0	1	-1	20
11	Linoleum	9	1	2	12	30
12	Linoleum	11	2	2	16	30
13	Linoleum	8	1	2	10	30
QC4	Linoleum	2	0	1	-3	20
				Maximum:	20	
				Average:	2	
				STDEV:	22	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Linoleum	Drywall	Green Ceramic
Instrument:	2360	253237	Background (cpm):	0.82	1.27	10
Detector:	43-68	PR-216834	Background σ (cpm):	1.17	1.26	2.89
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

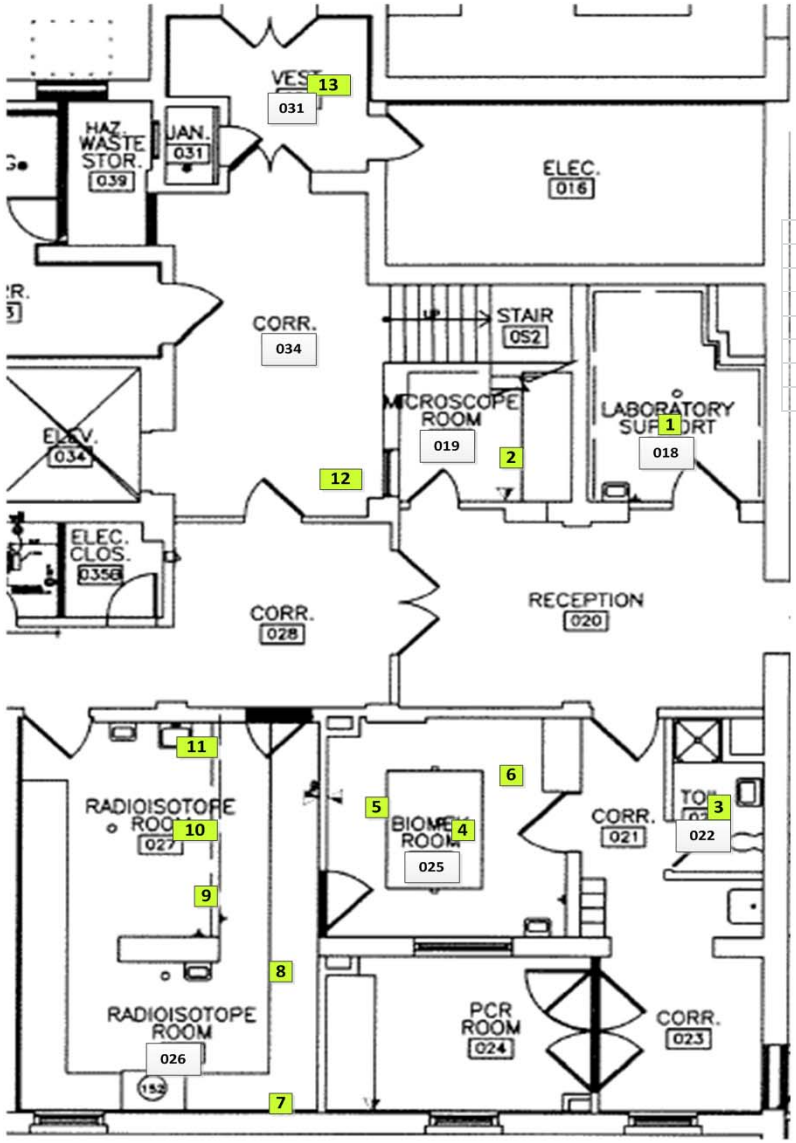
Building:	7		
Survey Unit:	7-B-2		
Survey Date:	12/7/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
4	Stainless Hood	11	2	2	17	30
5	Stainless Hood Drain	9	2	2	13	30
14	Black Lab Sink	6	1	1	8	20
				Maximum:	17	
				Average:	13	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Composite
Instrument:	2360	253237	Background (cpm):	0.64	0.6
Detector:	43-68	PR-216834	Background σ (cpm):	0.73	0.8
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2



Room	X,Y Locations				
18	4,8				
19	S-3,7				
22	5,4				
25	10,7	12,15	15,3		
26	W-1, 2	10, 3	13, 7	18, 9	25, 10
34	5,2				
31	E-3,5				

SURVEY UNITS LEGEND

Class 3

\# Data Point

Survey Unit Identifier

SU-7-B-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 7
Survey Unit: 7-B-3
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Linoleum	91	83	19	205	90
2	Linoleum	89	79	18	195	90
3	Linoleum	98	97	19	240	90
4	Linoleum	111	123	20	305	100
5	Linoleum	113	127	20	315	100
6	Linoleum	125	151	20	375	100
7	Linoleum	111	123	20	305	100
8	Drywall	138	191	20	475	100
9	Linoleum	109	119	19	295	100
10	Drywall	97	109	18	271	90
11	Drywall	104	123	18	306	90
12	Linoleum	89	79	18	195	90
13	Linoleum	91	83	19	205	90
				Maximum:	475	
				Average:	284	
				STDEV:	80	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Drywall	Linoleum
Instrument:	2360	141321		Background (cpm):	85.2	99
Detector:	44-110	PR-258430		Background σ (cpm):	10.86	12.73
Probe Area:	126	cm^2		Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 7
Survey Unit: 7-B-3
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Hood	113	149	18	370	90
2	Composite Hood Drain	79	81	16	201	80
3	Black Lab Sink	91	105	17	261	80
				Maximum:	370	
				Average:	277	
				STDEV:	86	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Composite	
Instrument:	2360	184935	Background (cpm):	77.2	
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

	Building:	7				
	Survey Unit:	7-B-3				
	Survey Date:	12/7/2011	2/3/2012			
					Net (dpm/100 cm^2)	
Location	**Material**	**Gross (counts)**	**NCPM**	**NCPM Uncertainty (1σ)**	**Activity**	**Uncertainty (2σ)**
1	Concrete	241	22	14	336	410
2	Painted Ceramic Tile	349	-92	17	-1435	510
3	Concrete	207	13	13	204	400
4	Linoleum	171	4	13	64	390
5	Linoleum	233	20	13	305	410
6	Linoleum	331	44	14	686	440
7	Painted Ceramic Tile	363	-89	17	-1380	510
8	Drywall	231	4	10	58	310
9	Floor Tile	192	9	13	146	400
10	Drywall	211	-1	10	-19	300
11	Drywall	266	13	11	195	330
12	Linoleum	218	16	13	247	410
13	Painted Ceramic Tile	505	-53	18	-828	540
QC12	Linoleum	195	10	13	157	400
				Maximum:	686	
				Average:	-109	
				STDEV:	667	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Linoleum	Green Ceramic	Drywall	Concrete
Instrument:	2360	253237	Background (cpm):	38.64	179	54	39
Detector:	43-68	PR-216834	Background σ (cpm):	11.07	13.66	6.86	11.07
Probe Area:	126	cm^2	Sample Analysis Time:	4	min		

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building:	7	
Survey Unit:	7-B-3	
Survey Date:	12/7/2011	2/3/2012

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
1	Black Hood Base	235	-9	9	-145	270
2	Porcelean Shower Basin	638	-20	19	-310	570
3	Stainless Hood Drain	211	19	8	288	260
4	Porcelean Shower Wall	569	-37	18	-579	550
				Maximum:	288	
				Average:	-187	
				STDEV:	363	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Green Ceramic	Black Hood
Instrument:	2360	253237	Background (cpm):	34.23	179	68.1
Detector:	43-68	PR-216834	Background σ (cpm):	4.21	13.66	14.5
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

	Building:	7				
	Survey Unit:	7-B-3				
	Survey Date:	12/7/2011	2/3/2012			
					Net (dpm/100 cm^2)	
Location	**Material**	**Gross (counts)**	**NCPM**	**NCPM Uncertainty (1σ)**	**Activity**	**Uncertainty (2σ)**
1	Concrete	1	-1	1	-5	20
2	Painted Ceramic Tile	6	-9	3	-72	50
3	Concrete	6	1	2	6	30
4	Linoleum	3	0	1	-1	20
5	Linoleum	6	1	2	6	30
6	Linoleum	3	0	1	-1	20
7	Painted Ceramic Tile	7	-8	3	-70	50
8	Drywall	10	1	2	10	30
9	Linoleum	4	0	2	1	20
10	Drywall	2	-1	1	-6	20
11	Drywall	1	-1	1	-8	20
12	Floor Tile	8	1	2	10	30
13	Painted Ceramic Tile	11	-7	3	-61	50
QC12	Linoleum	10	2	2	14	30
				Maximum:	14	
				Average:	-15	
				STDEV:	31	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Linoleum	Green Ceramic	Drywall	Concrete
Instrument:	2360	253237	Background (cpm):	0.82	10	1.27	0.82
Detector:	43-68	PR-216834	Background σ (cpm):	1.17	2.89	1.26	1.17
Probe Area:	126	cm^2	Sample Analysis Time:	4	min		

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building:	7	
Survey Unit:	7-B-3	
Survey Date:	12/7/2011	2/3/2012

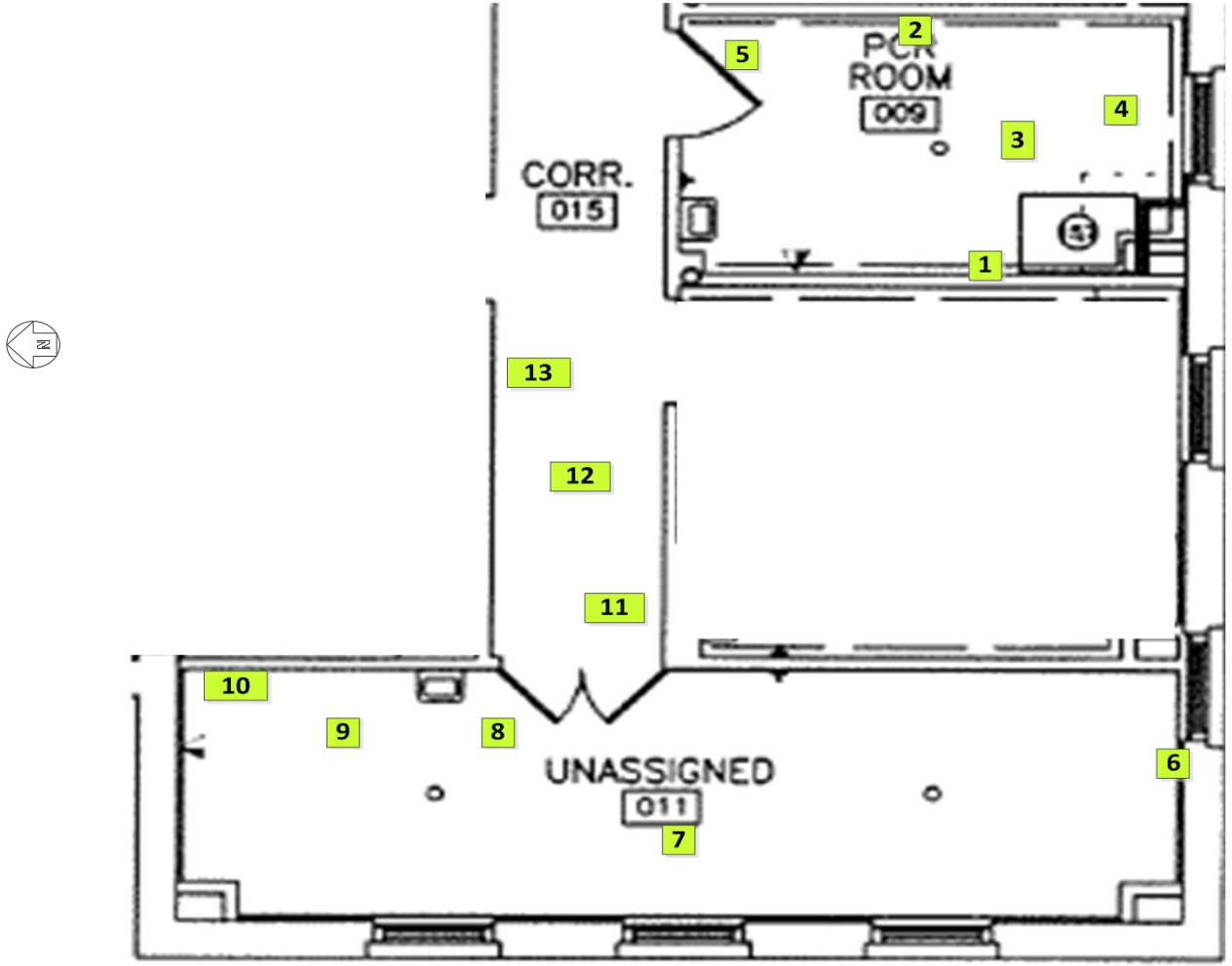
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
1	Black Hood Base	20	-6	2	-53	40
2	Porcelean Shower Basin	8	-8	3	-68	50
3	Stainless Hood Drain	5	1	1	5	20
4	Porcelean Shower Wall	13	-7	3	-57	60
				Maximum:	5	
				Average:	-43	
				STDEV:	33	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Green Ceramic	Black Hood
Instrument:	2360	253237	Background (cpm):	0.64	10	11.45
Detector:	43-68	PR-216834	Background σ (cpm):	0.73	2.89	5.52
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Room	X,Y Locations				
9	W-6, 3	E-7, 3	8,8	9, 1	9,15
11	S-3,4	5, 15	8, 20	8,25	9, 30
Hall	3,1	6,2	9,5		



SURVEY UNITS
LEGEND

Class 3

Data Point

Survey Unit Identifier

SU-7-B-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 7
Survey Unit: 7-B-4
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	87	89	17	221	80
2	Drywall	74	63	16	156	80
3	Linoleum	118	137	20	340	100
4	Linoleum	119	139	20	345	100
5	Linoleum	106	113	19	280	90
6	Drywall	71	57	16	141	80
7	Linoleum	103	107	19	265	90
8	Linoleum	103	107	19	265	90
9	Linoleum	117	135	20	335	100
10	Linoleum	104	109	19	270	90
11	Linoleum	114	129	20	320	100
12	Linoleum	94	89	19	220	90
13	Linoleum	120	141	20	350	100
				Maximum:	350	
				Average:	270	
				STDEV:	69	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Drywall	Linoleum
Instrument:	2360	141321		Background (cpm):	85.2	99
Detector:	44-110	PR-258430		Background σ (cpm):	10.86	12.73
Probe Area:	126	cm^2		Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 7
Survey Unit: 7-B-4
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Hood	78	79	16	196	80
2	Composite Hood Drain	86	95	17	236	80
3	Black Lab Sink	104	131	18	325	90
				Maximum:	325	
				Average:	252	
				STDEV:	66	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Composite	
Instrument:	2360	184935	Background (cpm):	77.2	
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building:	7		
Survey Unit:	7-B-4		
Survey Date:	12/7/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Painted Ceramic Tile	315	40	9	624	270
2	Painted Ceramic Tile	288	33	8	519	260
3	Concrete	178	6	13	91	390
4	Floor Tile	182	-1	9	-17	280
5	Floor Tile	174	-3	9	-48	270
6	Painted Ceramic Tile	264	27	8	426	250
7	Linoleum	155	0	13	2	390
8	Linoleum	159	1	13	17	390
9	Linoleum	173	5	13	72	390
10	Linoleum	198	11	13	169	400
11	Painted Concrete	145	-2	13	-37	380
12	Painted Concrete	175	5	13	80	390
13	Painted Concrete	181	7	13	103	400
QC13	Painted Concrete	199	11	13	173	400
				Maximum:	624	
				Average:	154	
				STDEV:	223	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Concrete/Linoleum	Floor Tile
Instrument:	2360	253237	Background (cpm):	38.64	47
Detector:	43-68	PR-216834	Background σ (cpm):	11.07	6.05
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building:	7		
Survey Unit:	7-B-4		
Survey Date:	12/7/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
1	Stainless Hood	251	29	9	444	270
2	Hood	161	13	9	208	270
3	Stainless Sink	469	83	12	1292	360
				Maximum:	1292	
				Average:	648	
				STDEV:	570	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Composite
Instrument:	2360	253237	Background (cpm):	34.23	27
Detector:	43-68	PR-216834	Background σ (cpm):	4.21	5.95
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building:	7		
Survey Unit:	7-B-4		
Survey Date:	12/7/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
1	Painted Ceramic Tile	4	0	1	1	20
2	Painted Ceramic Tile	4	0	1	1	20
3	Concrete	4	0	2	1	30
4	Floor Tile	2	0	1	-1	20
5	Floor Tile	4	0	1	3	20
6	Painted Ceramic Tile	2	0	1	-3	10
7	Linoleum	2	0	2	-3	30
8	Linoleum	0	-1	2	-7	30
9	Linoleum	2	0	2	-3	30
10	Linoleum	1	-1	2	-5	30
11	Painted Concrete	3	0	2	-1	30
12	Painted Concrete	3	0	2	-1	30
13	Painted Concrete	2	0	2	-3	30
QC13	Painted Concrete	6	1	2	6	30
				Maximum:	6	
				Average:	-1	
				STDEV:	3	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Concrete/Linoleum	Floor Tile
Instrument:	2360	253237	Background (cpm):	0.82	0.59
Detector:	43-68	PR-216834	Background σ (cpm):	1.77	0.91
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

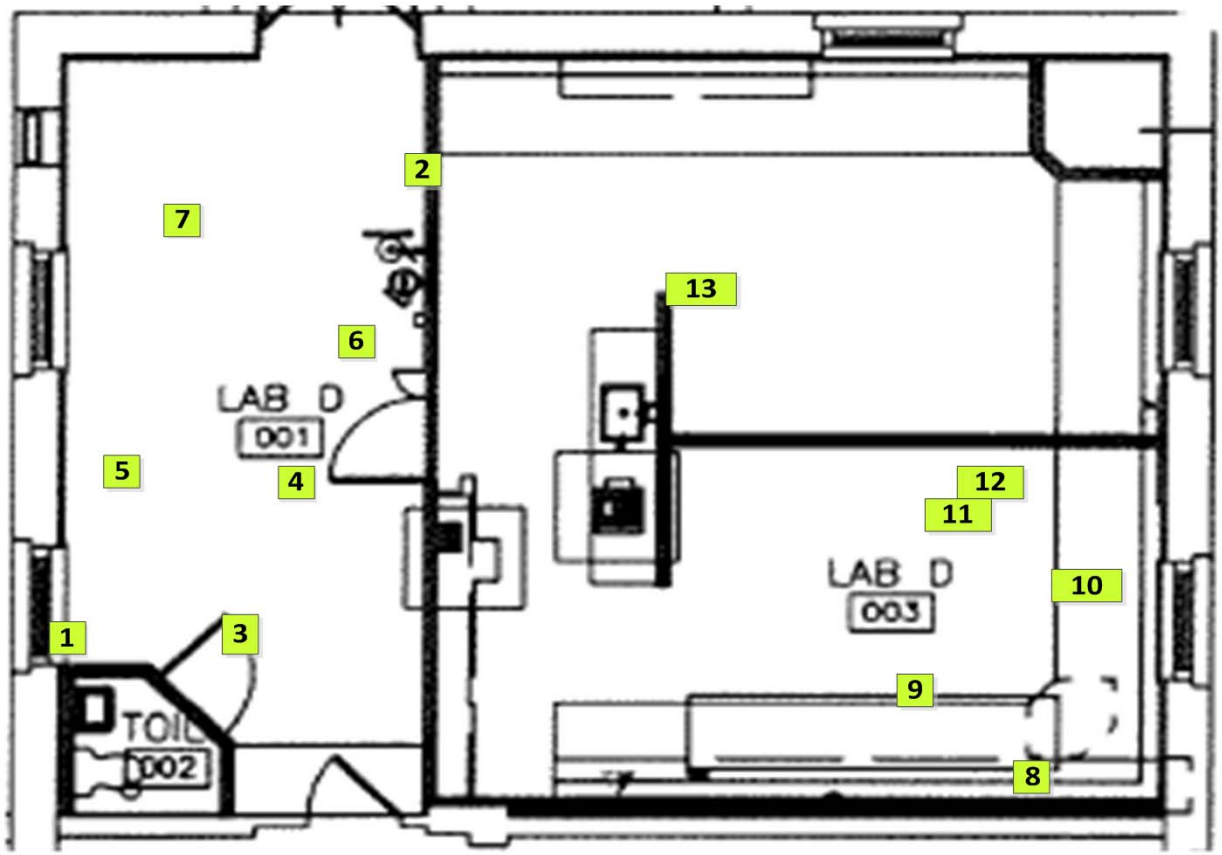
Building:	7		
Survey Unit:	7-B-4		
Survey Date:	12/7/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Stainless Hood	4	0	1	3	20
2	Hood	4	0	1	4	20
3	Stainless Sink	11	2	2	17	30
				Maximum:	17	
				Average:	8	
				STDEV:	8	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Composite
Instrument:	2360	253237	Background (cpm):	0.64	0.55
Detector:	43-68	PR-216834	Background σ (cpm):	0.73	0.8
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2



Room	X,Y Locations				
Lab D - 1	N-2,4	S-3,6	4,8	10,4	11,8
	15,2	18,8			
Lab D - 3	W-2,5	3,8	7,1	9,7	10,6
	15,13				

SURVEY UNITS
LEGEND

Class 3

Data Point

Survey Unit Identifier

SU-7-B-5

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 7
Survey Unit: 7-B-5
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drywall	91	97	17	241	80
2	Drywall	73	61	16	151	80
3	Linoleum	72	45	17	111	90
4	Linoleum	110	121	20	300	100
5	Linoleum	86	73	18	180	90
6	Linoleum	108	117	19	290	90
7	Linoleum	109	119	19	295	100
8	Drywall	102	119	18	296	90
9	Linoleum	103	107	19	265	90
10	Linoleum	88	77	18	190	90
11	Linoleum	68	37	17	91	80
12	Linoleum	95	91	19	225	90
13	Linoleum	70	41	17	101	80
				Maximum:	300	
				Average:	210	
				STDEV:	78	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Drywall	Linoleum
Instrument:	2360	141321		Background (cpm):	85.2	99
Detector:	44-110	PR-258430		Background σ (cpm):	10.86	12.73
Probe Area:	126	cm^2		Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 7
Survey Unit: 7-B-5
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Hood	85	93	16	231	80
2	Composite Hood Drain	98	119	17	296	80
3	Black Lab Sink	88	99	17	246	80
				Maximum:	296	
				Average:	257	
				STDEV:	34	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Composite	
Instrument:	2360	184935	Background (cpm):	77.2	
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building:	7	
Survey Unit:	7-B-5	
Survey Date:	12/8/2011	2/3/2012

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
1	Drywall	150	-17	9	-257	280
2	Drywall	248	8	10	124	320
3	Floor Tile	191	1	9	18	280
4	Floor Tile	177	-2	9	-36	270
5	Floor Tile	193	2	9	26	280
6	Drywall	151	-16	9	-253	280
7	Floor Tile	178	-2	9	-33	270
8	Painted Concrete	192	9	13	146	400
9	Painted Concrete	168	3	13	52	390
10	Painted Concrete	194	10	13	153	400
11	Painted Concrete	168	3	13	52	390
12	Painted Concrete	180	6	13	99	390
13	Painted Concrete	209	14	13	212	400
				Maximum:	212	
				Average:	23	
				STDEV:	143	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Drywall	Concrete
Instrument:	2360	253237	Background (cpm):	46.59	54	39
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	6.86	11.07
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building:	7		
Survey Unit:	7-B-5		
Survey Date:	12/8/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
1	Hood	184	19	9	298	280
2	Hood Drain	199	23	9	356	280
3	Black Lab Sink	167	15	9	232	270
4	Black Lab Sink	153	11	9	177	260
				Maximum:	356	
				Average:	266	
				STDEV:	78	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Composite	
Background (cpm):	26.86	
Background σ (cpm):	5.95	
Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building:	7		
Survey Unit:	7-B-5		
Survey Date:	12/8/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Drywall	0	-1	1	-10	20
2	Drywall	9	1	2	8	30
3	Floor Tile	4	0	1	3	20
4	Floor Tile	1	0	1	-3	10
5	Floor Tile	3	0	1	1	20
6	Drywall	8	1	2	6	30
7	Floor Tile	0	-1	1	-5	10
8	Painted Concrete	2	0	1	-3	20
9	Painted Concrete	2	0	1	-3	20
10	Painted Concrete	12	2	2	18	30
11	Painted Concrete	2	0	1	-3	20
12	Painted Concrete	6	1	2	6	30
13	Painted Concrete	4	0	2	1	20
				Maximum:	18	
				Average:	1	
				STDEV:	7	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Drywall	Concrete
Instrument:	2360	253237	Background (cpm):	0.59	1.27	0.82
Detector:	43-68	PR-216834	Background σ (cpm):	0.51	1.27	1.17
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building:	7		
Survey Unit:	7-B-5		
Survey Date:	12/8/2011	2/3/2012	

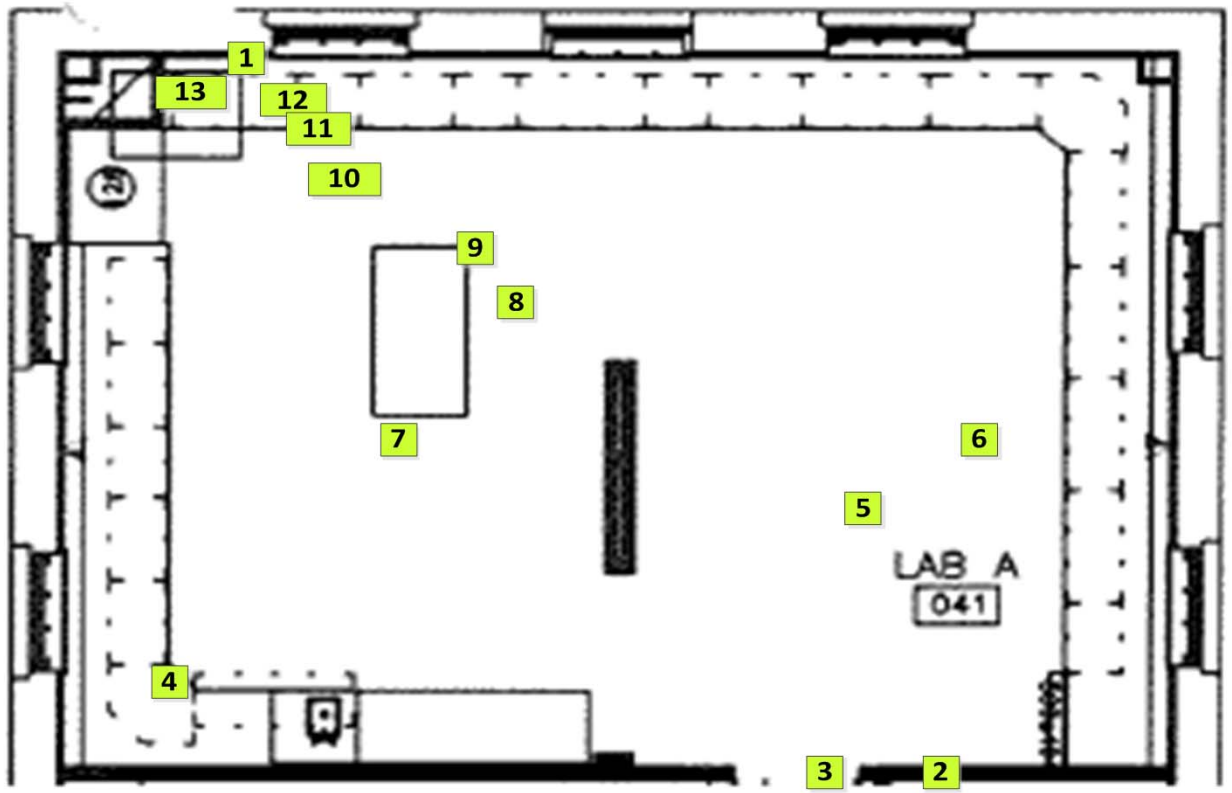
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Hood	8	1	2	12	30
2	Hood Drain	4	0	1	4	20
3	Black Lab Sink	3	0	1	2	20
4	Black Lab Sink	4	0	1	4	20
				Maximum:	12	
				Average:	5	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Wood Composite	
Background (cpm):	0.55	
Background σ (cpm):	0.8	
Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2



Room	X,Y Locations				
Lab A	E-3,6	W-5,2	W-9,3	3,28	8,8
	10,5	10, 20	13, 16	16, 17	18, 21
	22, 30	24, 7	25, 25		

SURVEY UNITS
LEGEND

Class 3

Data Point

Survey Unit Identifier

SU-7-B-6

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 7
Survey Unit: 7-B-6
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drywall	106	127	18	316	90
2	Drywall	77	69	16	171	80
3	Drywall	87	89	17	221	80
4	Linoleum	87	75	18	185	90
5	Linoleum	90	81	18	200	90
6	Linoleum	126	153	20	379	100
7	Linoleum	87	75	18	185	90
8	Linoleum	86	73	18	180	90
9	Linoleum	101	103	19	255	90
10	Linoleum	105	111	19	275	90
11	Linoleum	123	147	20	365	100
12	Linoleum	95	91	19	225	90
13	Linoleum	104	109	19	270	90
				Maximum:	379	
				Average:	248	
				STDEV:	70	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Drywall	Linoleum
Instrument:	2360	141321		Background (cpm):	85.2	99
Detector:	44-110	PR-258430		Background σ (cpm):	10.86	12.73
Probe Area:	126	cm^2		Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 7
Survey Unit: 7-B-6
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Hood	88	99	17	246	80
2	Composite Hood Drain	92	107	17	266	80
3	Black Lab Sink	75	73	16	181	80
				Maximum:	266	
				Average:	231	
				STDEV:	44	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Composite	
Instrument:	2360	184935	Background (cpm):	77.2	
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building:	7	
Survey Unit:	7-B-6	
Survey Date:	12/7/2011	2/3/2012

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Painted Ceramic Tile	341	47	14	385	230
2	Drywall	199	-4	10	-35	160
3	Drywall	206	-3	10	-21	160
4	Lineolium	203	50	7	415	120
5	Lineolium	170	42	7	346	110
6	Lineolium	161	40	6	328	100
7	Lineolium	184	45	7	375	110
8	Lineolium	171	42	7	349	110
9	Lineolium	179	44	7	365	110
10	Lineolium	192	47	7	392	110
11	Lineolium	206	51	7	421	120
12	Lineolium	205	51	7	419	120
13	Black Counter	191	47	7	390	110
QC5	Lineolium	196	48	7	400	110
QC6	Lineolium	166	41	6	338	100
				Maximum:	421	
				Average:	318	
				STDEV:	156	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Drywall	Painted Concrete
Instrument:	2360	253237	Background (cpm):	0.59	54	38.64
Detector:	43-68	PR-216834	Background σ (cpm):	0.51	6.86	11.07
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency:	0.096 cpm/dpm
Total Efficiency Uncertainty:	0.001 cpm/dpm
MDC:	39 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building:	7		
Survey Unit:	7-B-6		
Survey Date:	12/7/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
1	Black Lab Sink	225	29	10	457	290
2	Black Hood Base	263	-2	10	-37	310
3	Hood	139	8	8	123	260
				Maximum:	457	
				Average:	210	
				STDEV:	349	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Black Hood
Instrument:	2360	253237	Background (cpm):	26.86	68.10
Detector:	43-68	PR-216834	Background σ (cpm):	5.95	14.5
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

	Building:	7				
	Survey Unit:	7-B-6				
	Survey Date:	12/7/2011	2/3/2012			
					Net (dpm/100 cm^2)	
Location	**Material**	**Gross (counts)**	**NCPM**	**NCPM Uncertainty (1σ)**	**Activity**	**Uncertainty (2σ)**
1	Painted Ceramic Tile	9	1	2	12	40
2	Drywall	11	1	2	12	30
3	Drywall	9	1	2	8	30
4	Lineolium	9	1	2	12	30
5	Lineolium	9	1	2	12	30
6	Lineolium	9	1	2	12	30
7	Lineolium	10	2	2	14	30
8	Lineolium	9	1	2	12	30
9	Lineolium	7	1	2	8	30
10	Lineolium	9	1	2	12	30
11	Lineolium	7	1	2	8	30
12	Lineolium	7	1	2	8	30
13	Black Counter	10	2	2	18	30
QC5	Lineolium	9	1	2	12	30
QC6	Lineolium	13	2	2	20	30
				Maximum:	20	
				Average:	11	
				STDEV:	3	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Lineolium	Painted Concrete	Drywall	Composite
Instrument:	2360	253237	Background (cpm):	0.82	0.82	1.27	0.364
Detector:	43-68	PR-216834	Background σ (cpm):	1.17	1.77	1.26	0.504
Probe Area:	126	cm^2	Sample Analysis Time:	4	min		

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

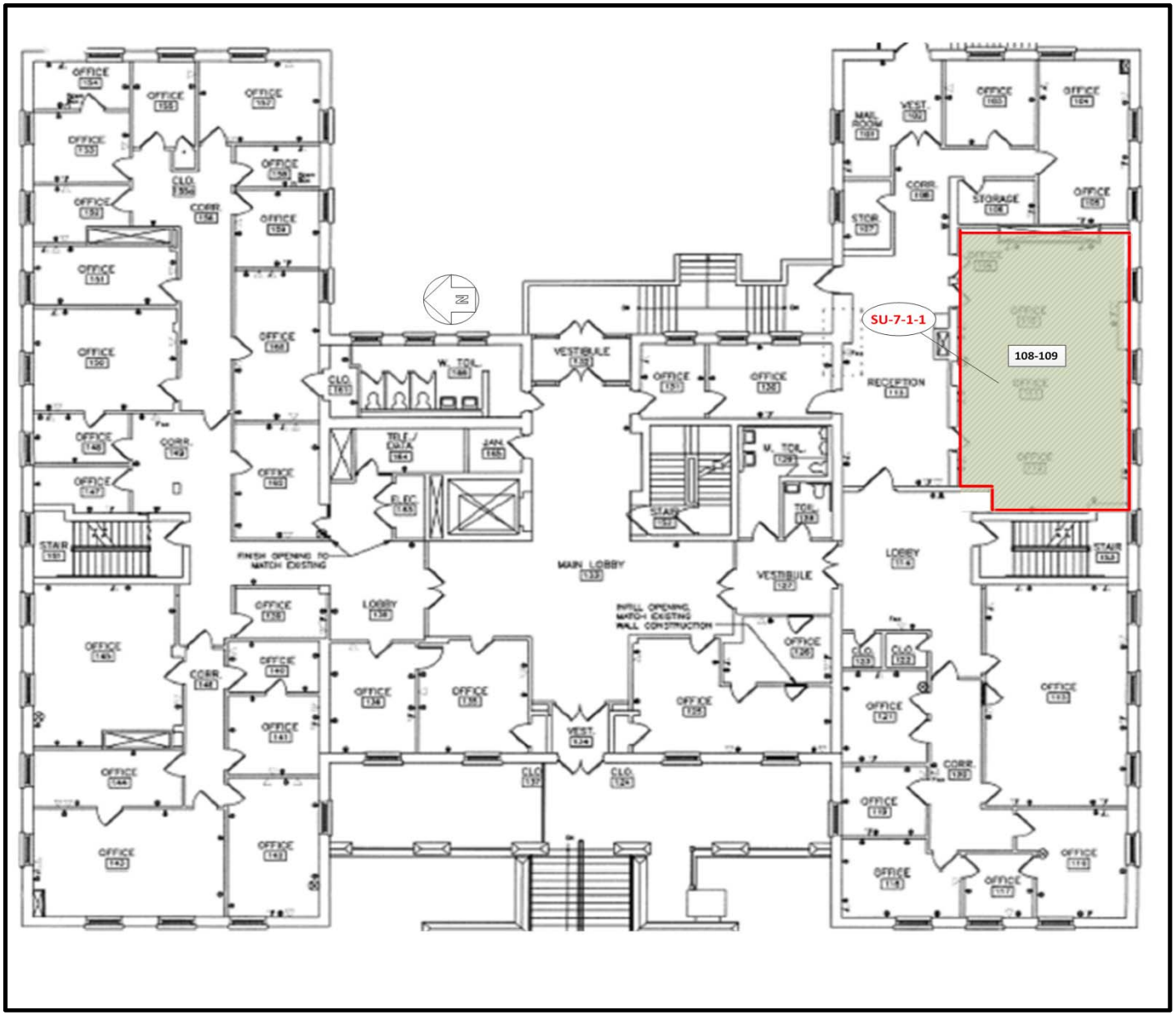
Building:	7		
Survey Unit:	7-B-6		
Survey Date:	12/7/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Black Lab Sink	7	1.2	2	10	30
2	Black Hood Base	23	-5.7	3	-47	40
3	Hood	8	1.5	2	12	30
				Maximum:	12	
				Average:	-19	
				STDEV:	40	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Composite	Black Hood
Instrument:	2360	253237	Background (cpm):	0.55	11.45
Detector:	43-68	PR-216834	Background σ (cpm):	0.8	5.52
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2



SURVEY UNITS LEGEND

- # Room Number
- Class 2 SU
- Class 3 SU

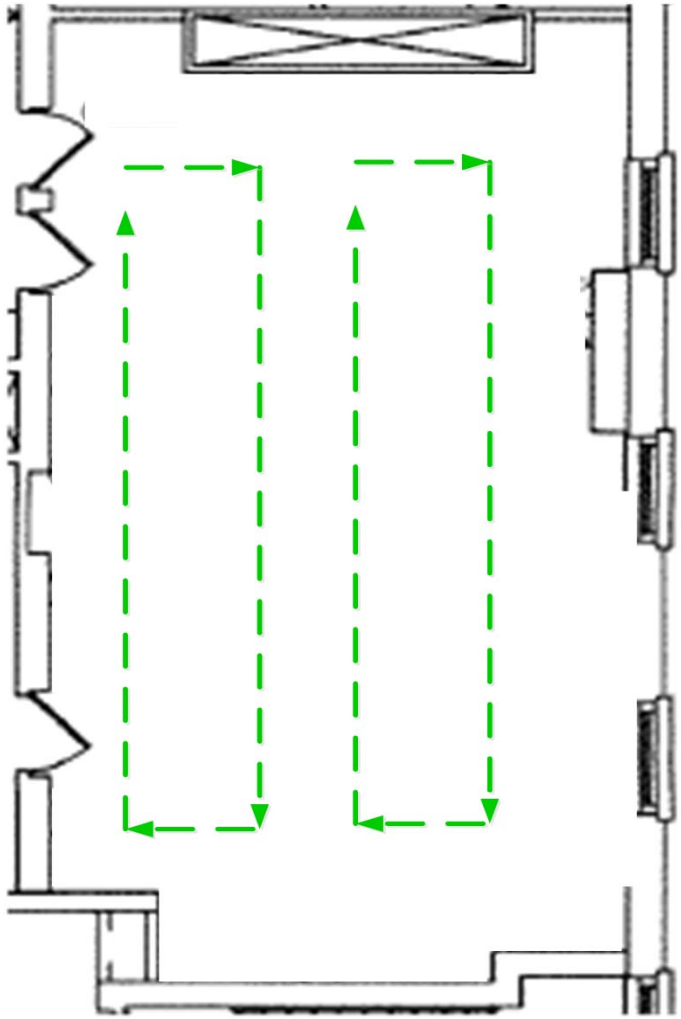
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 7 First Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU-7-1-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 First Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 7 1st Level

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU7-1-1	483	96	385	184	38	-106	751	154	114

Area Scanned (ft^2): 303

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 7 1st Level

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU7-1-1	483	0	35	6.2	6.7	-5	57	6	12

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 3 cpm
Background σ: 7.32 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 720 dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 7

All measurements in µR/hour

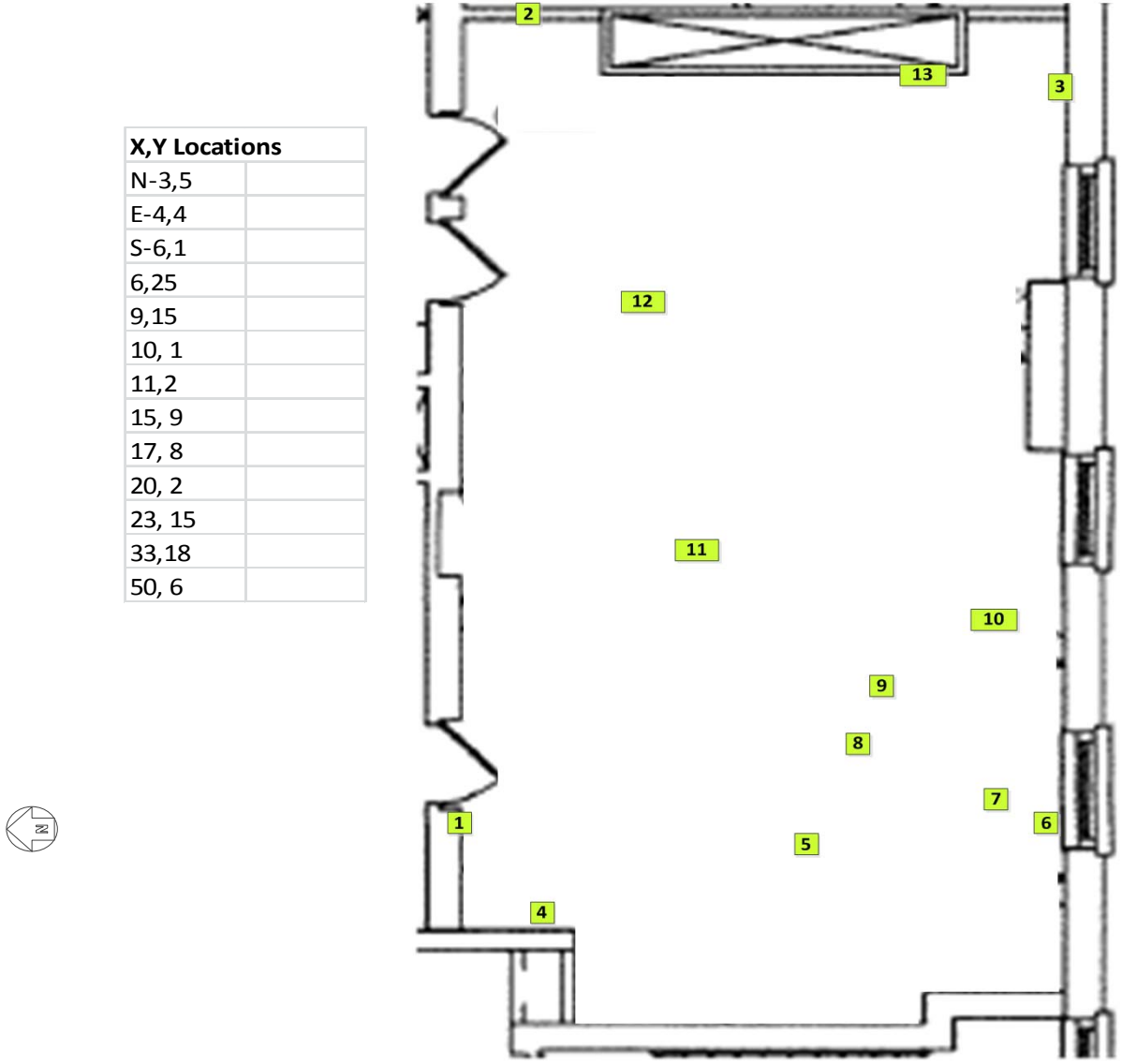
Date: 12/12/2011

Location	7-1-1
1	7
2	6
3	11
4	9
5	6
6	8
7	8
8	7
9	7
10	9
11	5
12	6
13	8
14	7
15	6
16	7

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012

X,Y Locations	
N-3,5	
E-4,4	
S-6,1	
6,25	
9,15	
10, 1	
11,2	
15, 9	
17, 8	
20, 2	
23, 15	
33,18	
50, 6	



SURVEY UNITS LEGEND

Class 3

\# Data Point

Survey Unit Identifier

SU-7-1-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 First Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 7
Survey Unit: SU7-1-1
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	106	127	18	316	90
2	Drywall	111	137	18	340	90
3	Drywall	100	115	18	286	90
4	Wood	60	43	15	106	70
5	Wood	48	19	14	47	70
6	Wood	48	19	14	47	70
7	Wood	59	41	15	102	70
8	Wood	43	9	14	22	70
9	Wood	55	33	15	82	70
10	Wood	54	31	14	77	70
11	Wood	69	61	15	151	80
12	Wood	62	47	15	116	70
13	Wood	57	37	15	92	70
				Maximum:	340	
				Average:	137	
				STDEV:	107	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Drywall	Wood
Instrument:	2360	141321		Background (cpm):	85.2	77
Detector:	44-110	PR-258430		Background σ (cpm):	10.86	10.11
Probe Area:	126	cm^2		Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 7
Survey Unit: SU7-1-1
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Wood	86	95	17	236	80
2	Wood	94	111	17	276	80
3	Wood	82	87	16	216	80
				Maximum:	276	
				Average:	242	
				STDEV:	30	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Wood	
Instrument:	2360	184935	Background (cpm):	77.2	
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building:	7	
Survey Unit:	SU7-1-1	
Survey Date:	12/8/2011	2/3/2012

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Drywall	215	0	10	-4	310
2	Drywall	175	-10	10	-160	290
3	Drywall	254	10	11	148	320
4	Concrete	174	5	13	76	390
5	Concrete	170	4	13	60	390
6	Concrete	198	11	13	169	400
7	Concrete	203	12	13	188	400
8	Concrete	173	5	13	72	390
9	Concrete	161	2	13	25	390
10	Concrete	219	16	13	251	410
11	Concrete	197	11	13	165	400
12	Concrete	173	5	13	72	390
13	Concrete	167	3	13	48	390
QC5	Concrete	146	-2	13	-33	380
QC9	Concrete	157	1	13	9	390
				Maximum:	251	
				Average:	85	
				STDEV:	104	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Concrete	Drywall
Background (cpm):	38.64	54
Background σ (cpm):	11.07	6.86
Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building:	7		
Survey Unit:	SU7-1-1		
Survey Date:	12/8/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Concrete	181	7	13	103	400
2	Concrete	163	2	13	33	390
3	Concrete	166	3	13	45	390
				Maximum:	103	
				Average:	60	
				STDEV:	38	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Concrete	
Detector:	43-68	PR-216834	Background (cpm):	38.64	
Probe Area:	126	cm^2	Background σ (cpm):	11.07	
			Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building:	7		
Survey Unit:	SU7-1-1		
Survey Date:	12/8/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Drywall	2	-1	1	-6	20
2	Drywall	6	0	2	2	30
3	Drywall	1	-1	1	-8	20
4	Concrete	8	1	2	10	40
5	Concrete	7	1	2	8	40
6	Concrete	4	0	2	1	30
7	Concrete	3	0	2	-1	30
8	Concrete	6	1	2	6	30
9	Concrete	4	0	2	1	30
10	Concrete	2	0	2	-3	30
11	Concrete	1	-1	2	-5	30
12	Concrete	2	0	2	-3	30
13	Concrete	2	0	2	-3	30
QC5	Concrete	5	0	2	4	30
QC9	Concrete	6	1	2	6	30
				Maximum:	10	
				Average:	0	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Concrete	Drywall
Instrument:	2360	253237		Background (cpm):	0.82	1.27
Detector:	43-68	PR-216834		Background σ (cpm):	1.77	1.26
Probe Area:	126	cm^2		Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

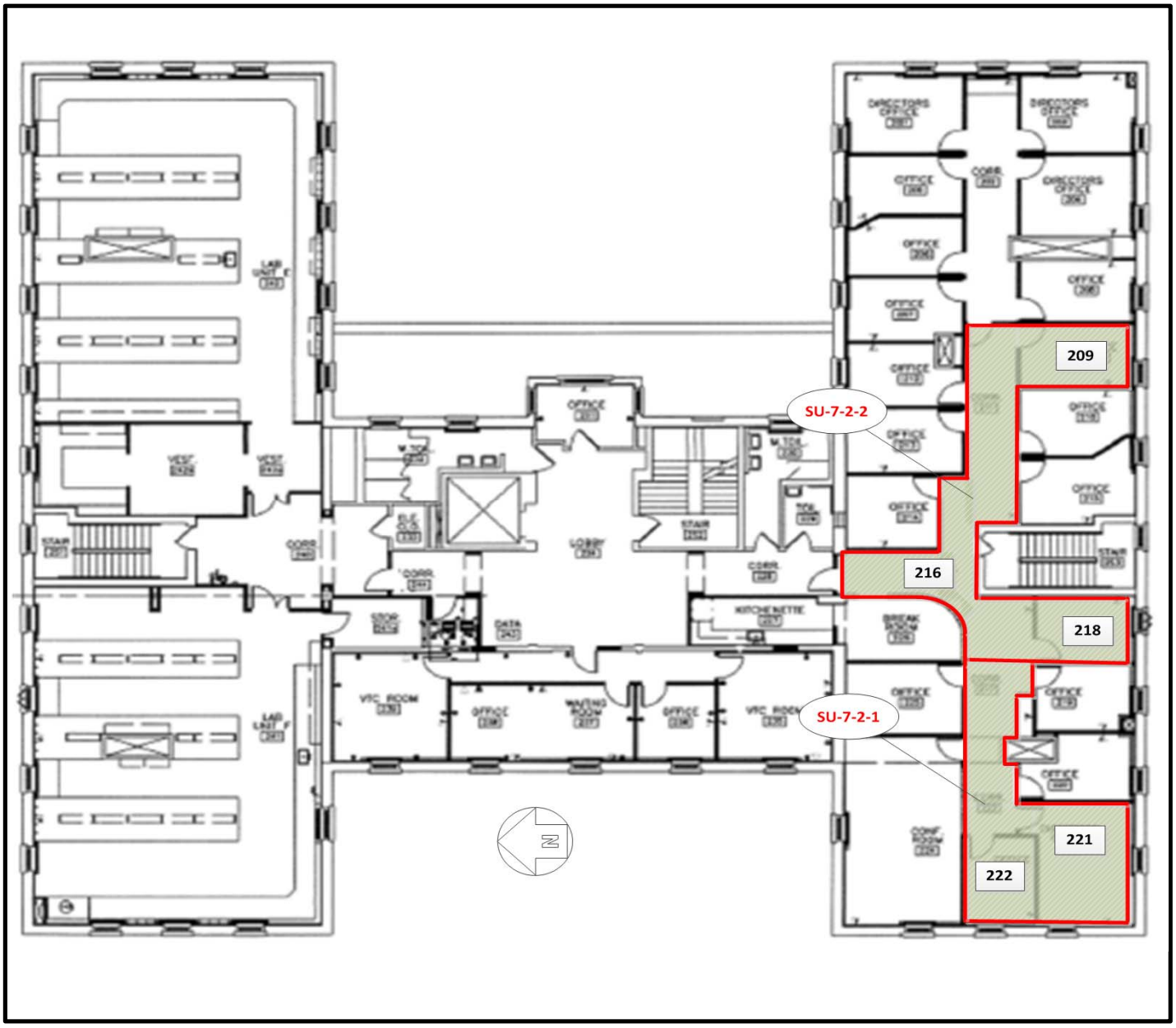
Building:	7		
Survey Unit:	SU7-1-1		
Survey Date:	12/8/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Concrete	13	2	3	20	40
2	Concrete	6	1	2	6	30
3	Concrete	2	0	2	-3	30
				Maximum:	20	
				Average:	8	
				STDEV:	12	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete	
Instrument:	2360	253237	Background (cpm):	0.82	
Detector:	43-68	PR-216834	Background σ (cpm):	1.77	
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2



SURVEY UNITS LEGEND

Room Number
Class 2 SU
Class 3 SU

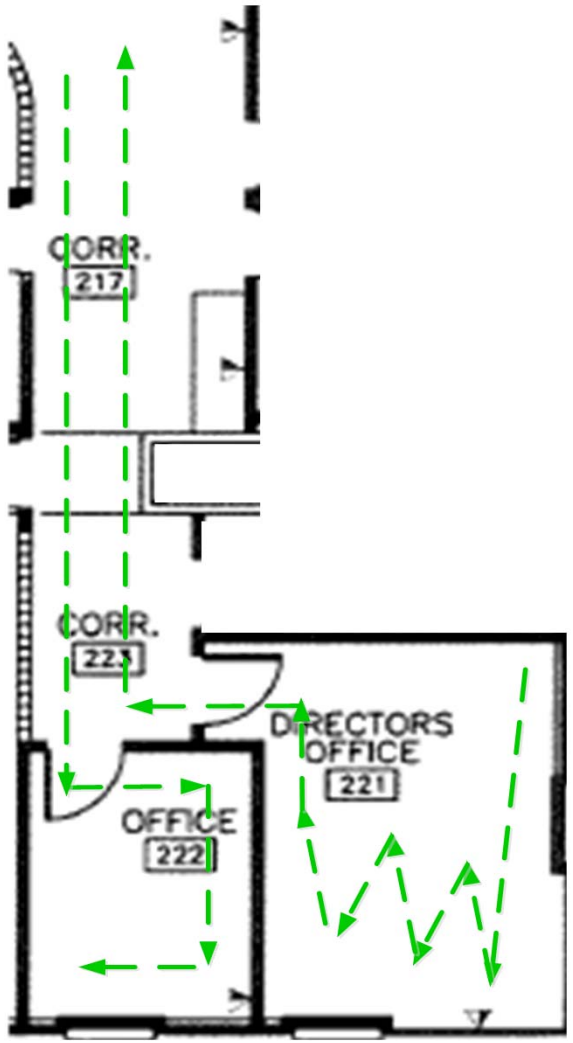
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 7 Second Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

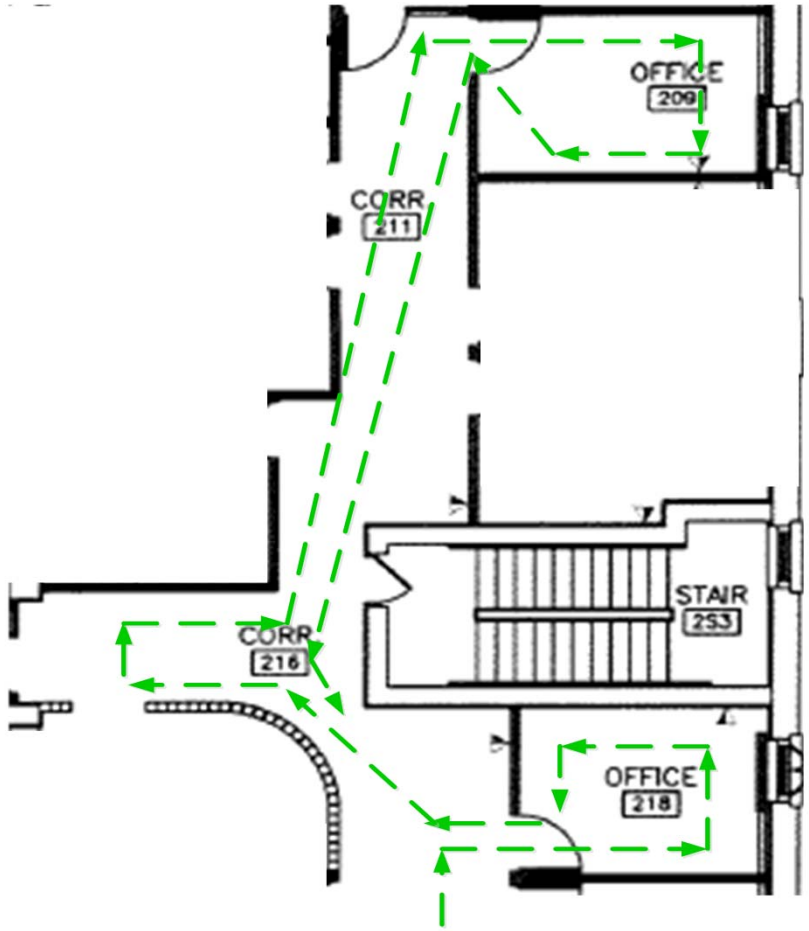
SU-7-2-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Second Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

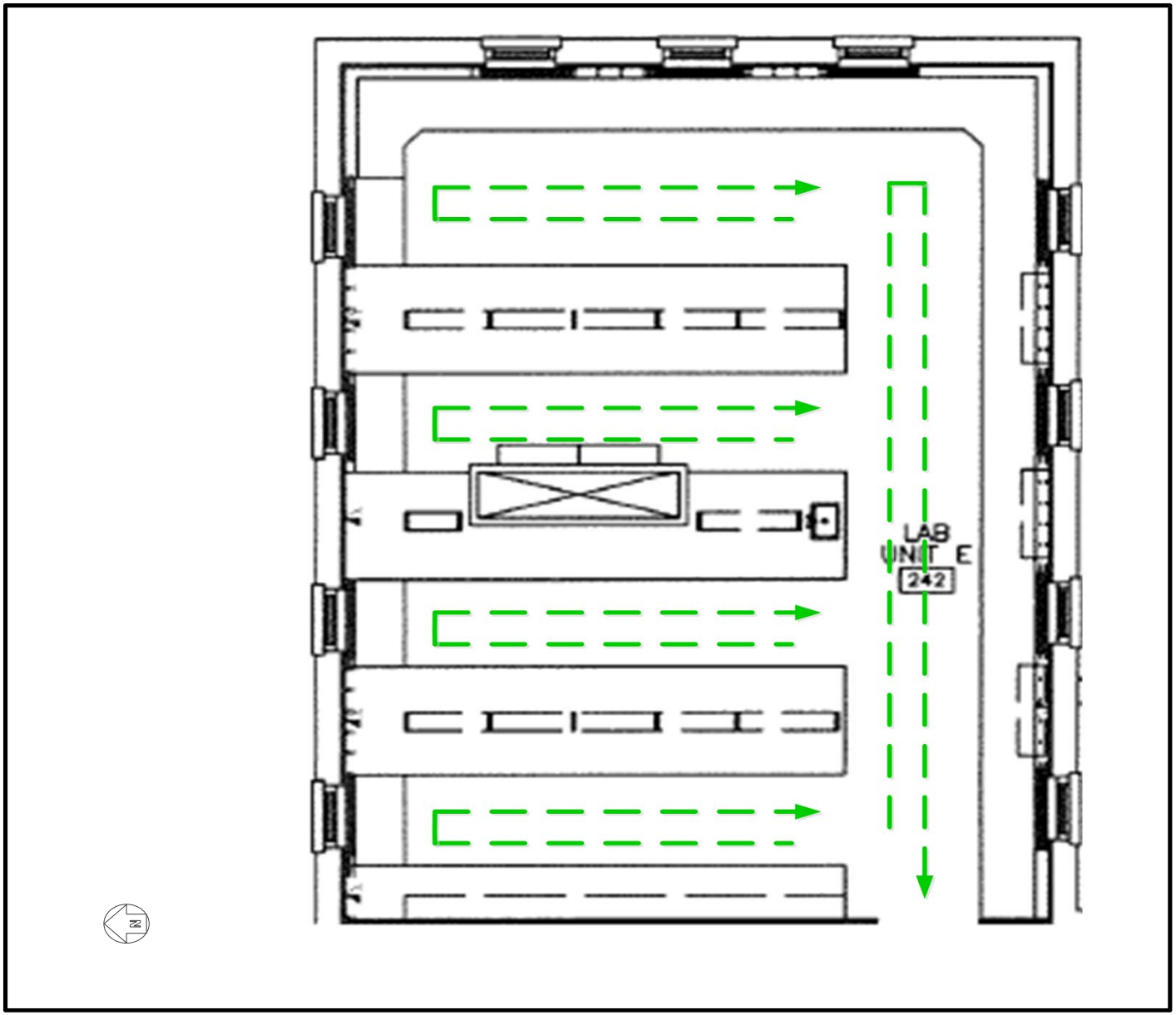
SU-7-2-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Second Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

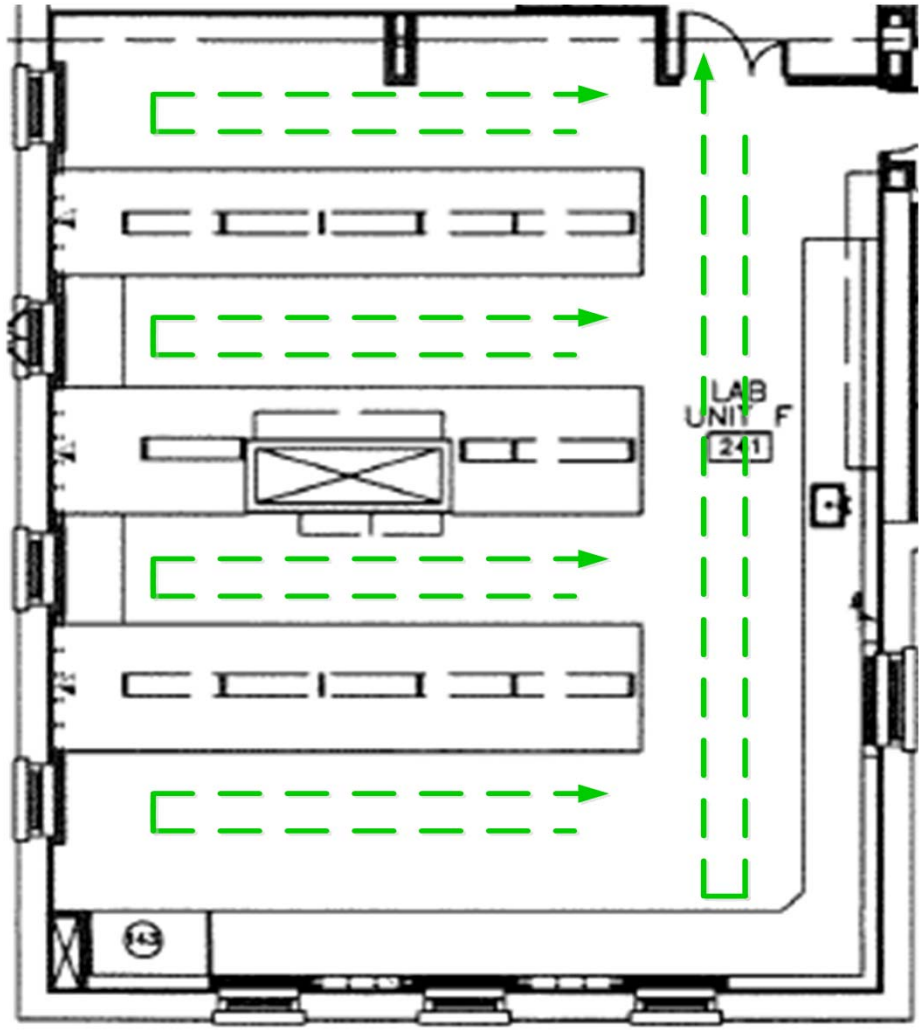
SU-7-2-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Second Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU-7-2-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Second Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 7 2nd Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU7-2-1	494	70	249	147	34	-183	348	47	102
SU7-2-2	988	48	251	140	33	-248	354	25	98
SU7-2-3	516	61	270	161	35	-209	410	87	105
SU7-2-4	669	73	275	153	33	-174	425	64	98

Area Scanned (ft^2): 1,671

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 7 2nd Level

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU7-2-1	494	0	22	3.8	4.7	-5	34	1	8
SU7-2-2	988	0	34	5.2	5.9	-5	55	4	11
SU7-2-3	516	0	33	8.2	6.7	-5	54	9	12
SU7-2-4	669	0	34	3.7	5.3	-5	55	1	9

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	3	cpm
Probe Area:	582	cm^2	Background σ:	7.32	cpm
			Scan speed:	1 detector width / 8sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	720	dpm/100 cm^2

Summary of Scan Results - Beta

Location: Building7, 2nd Level

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-7-2-3	513	17	116	64	20	-163	1474	607	325
SU-7-2-4	927	18	168	74	22	-146	2334	788	372

Area Scanned ft^2): 195

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm^2

Reference Material: Counter
Background: 27 cpm
Background σ: 5.95 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.048 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 916 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building7, 2nd Level

Non-Floor Items

Location	Number of records	Gross CPM				Activity (dpm/100cm^2)			
		Minimum	Maximum	Average	STDEV	Minimum	Maximum	Average	STDEV
SU-7-2-3	513	0	28	1	3	-4	222	6	25
SU-7-2-4	927	0	17	1	3	-4	133	6	23

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm2

Reference Material: Counter
Background: 1 cpm
Background σ: 0.8 cpm
Scan speed: 1 detector width / 2sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.098 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 705 dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 7

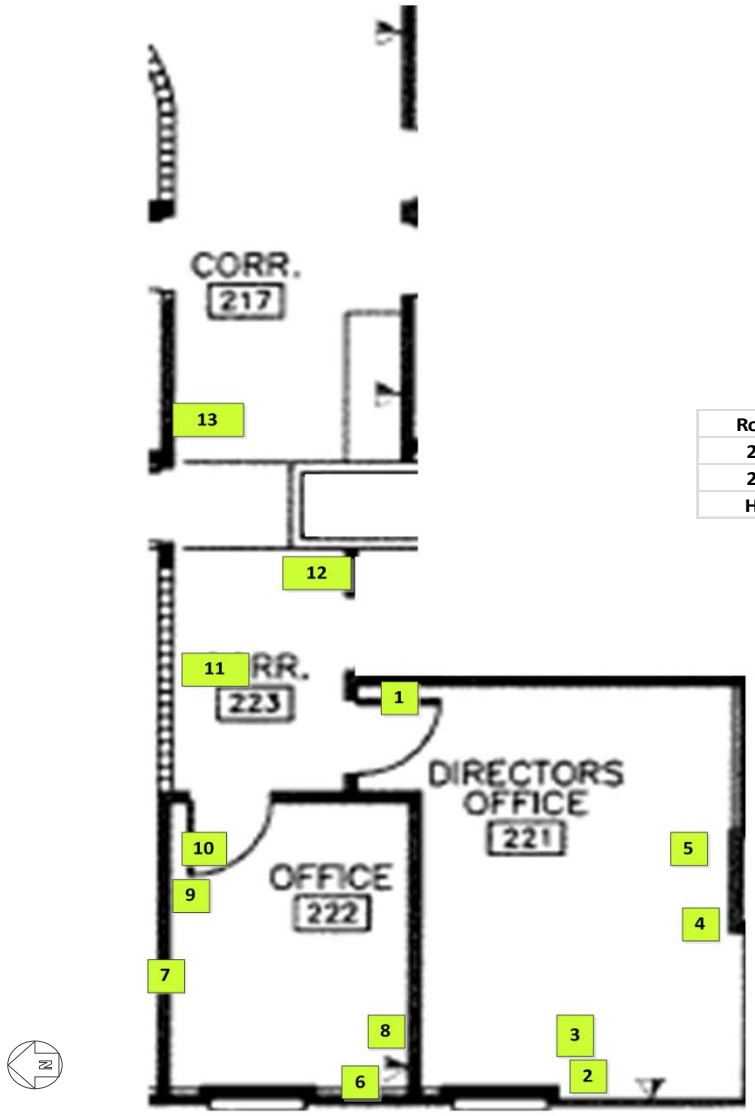
All measurements in µR/hour

Date: 12/28/2011

Location	7-2-1	7-2-2	7-2-3	7-2-4
1	6	5	8	7
2	7	8	5	5
3	8	8	6	8
4	6	10	5	5
5	5	11	7	7
6	7	6	6	8
7	5	6	4	8
8	8	8	3	6
9	7	6	6	7
10	8	8	3	5
11	10	7	4	6
12	10	9	8	8
13	7	6	10	8
14	8	6	6	7
15	8	8	6	7
16	5	10	7	9

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012



Room	X,Y Locations				
221	E-1,2	1,7	2,9	8,3	11,2
222	W-2,5	N-5,8	3,1	9,11	10,10
Hall	4,6	9,2	15,7		

SURVEY UNITS
LEGEND

Class 3

\# Data Point

Survey Unit Identifier

SU-7-2-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Second Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 7
Survey Unit: SU7-2-1
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	47	9	15	22	70
2	Drywall	43	1	14	2	70
3	Drywall	68	51	16	127	80
4	Wood	83	89	16	221	80
5	Wood	120	163	18	405	90
6	Wood	108	139	18	345	90
7	Wood	84	91	16	226	80
8	Wood	100	123	17	306	80
9	Wood	115	153	18	380	90
10	Wood	84	91	16	226	80
11	Wood	100	123	17	306	80
12	Wood	90	103	17	256	80
13	Wood	118	159	18	395	90
				Maximum:	405	
				Average:	247	
				STDEV:	132	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Drywall	Wood
Instrument:	2360	141321		Background (cpm):	85.2	77
Detector:	44-110	PR-258430		Background σ (cpm):	10.86	10.11
Probe Area:	126	cm^2		Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 7
Survey Unit: SU7-2-1
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Wood	86	95	17	236	80
2	Wood	94	111	17	276	80
3	Wood	82	87	16	216	80
				Maximum:	276	
				Average:	242	
				STDEV:	30	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Wood	
Instrument:	2360	184935	Background (cpm):	77.2	
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 7
Survey Unit: SU7-2-1
Survey Date: 12/8/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Drywall	171	-11	9	-175	290
2	Drywall	216	0	10	0	310
3	Drywall	214	-1	10	-8	310
4	Concrete	153	0	13	-6	390
5	Concrete	152	-1	13	-10	390
6	Concrete	178	6	13	91	390
7	Concrete	158	1	13	13	390
8	Concrete	167	3	13	48	390
9	Concrete	169	4	13	56	390
10	Concrete	159	1	13	17	390
11	Concrete	182	7	13	107	400
12	Concrete	162	2	13	29	390
13	Concrete	212	14	13	223	400
QC8	Concrete	161	2	13	25	390
				Maximum:	223	
				Average:	30	
				STDEV:	89	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Concrete	Drywall
Background (cpm):	38.64	54
Background σ (cpm):	11.07	6.86
Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building:	7		
Survey Unit:	SU7-2-1		
Survey Date:	12/8/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Concrete	205	13	13	196	400
				Maximum:	196	
				Average:	196	
				STDEV:	200	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Concrete	
Detector:	43-68	PR-216834	Background (cpm):	38.64	
Probe Area:	126	cm^2	Background σ (cpm):	11.07	
			Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 7
Survey Unit: SU7-2-1
Survey Date: 12/8/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Drywall	4	0	2	-2	30
2	Drywall	3	-1	2	-4	20
3	Drywall	1	-1	1	-8	20
4	Concrete	1	-1	2	-5	30
5	Concrete	5	0	2	4	30
6	Concrete	3	0	2	-1	30
7	Concrete	3	0	2	-1	30
8	Concrete	2	0	2	-3	30
9	Concrete	2	0	2	-3	30
10	Concrete	5	0	2	4	30
11	Concrete	5	0	2	4	30
12	Concrete	1	-1	2	-5	30
13	Concrete	4	0	2	1	30
QC8	Concrete	3	0	2	-1	30
				Maximum:	4	
				Average:	-1	
				STDEV:	4	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Concrete	Drywall
Background (cpm):	0.82	1.27
Background σ (cpm):	1.77	1.26
Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

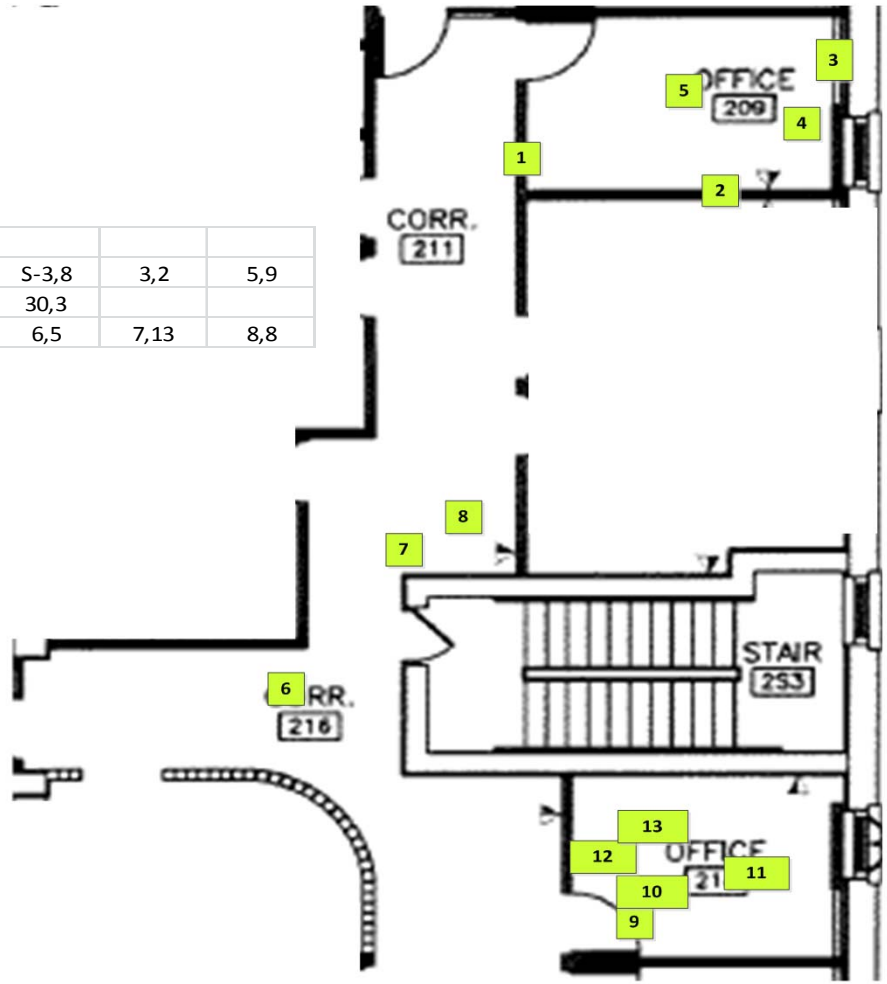
Building:	7		
Survey Unit:	SU7-2-1		
Survey Date:	12/8/2011	2/3/2012	

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Concrete	3	0	2	-1	30
				Maximum:	-1	
				Average:	-1	
				STDEV:	15	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete	
Instrument:	2360	253237	Background (cpm):	0.82	
Detector:	43-68	PR-216834	Background σ (cpm):	1.77	
Probe Area:	126	cm^2	Sample Analysis Time:	4	min
			Total Efficiency:	0.096	cpm/dpm
			Total Efficiency Uncertainty:	0.001	cpm/dpm
			MDC:	39	dpm/100 cm^2

Room	X,Y Locations				
209	N-2,2	W-6,6	S-3,8	3,2	5,9
216 (Hall)	22,7	28,5	30,3		
218	2,10	4,8	6,5	7,13	8,8



SURVEY UNITS
LEGEND

Class 3

Data Point

Survey Unit Identifier

SU-7-2-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Second Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 7
Survey Unit: SU7-2-2
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	72	59	16	146	80
2	Wood	89	101	17	251	80
3	Wood	93	109	17	271	80
4	Wood	91	105	17	261	80
5	Wood	120	163	18	405	90
6	Drywall	69	53	16	131	80
7	Drywall	73	61	16	151	80
8	Wood	89	101	17	251	80
9	Wood	93	109	17	271	80
10	Wood	115	153	18	380	90
11	Wood	110	143	18	355	90
12	Wood	126	175	19	435	90
13	Wood	100	123	17	306	80
				Maximum:	435	
				Average:	278	
				STDEV:	98	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Drywall	Wood
Instrument:	2360	141321		Background (cpm):	85.2	77
Detector:	44-110	PR-258430		Background σ (cpm):	10.86	10.11
Probe Area:	126	cm^2		Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 7
Survey Unit: SU7-2-2
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Wood	126	175	19	435	90
2	Wood	96	115	17	286	80
3	Wood	90	103	17	256	80
				Maximum:	435	
				Average:	325	
				STDEV:	96	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Wood	
Instrument:	2360	184935	Background (cpm):	77.2	
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 7
Survey Unit: SU7-2-2
Survey Date: 12/9/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Painted Ceramic Tile	253	25	8	383	240
2	Concrete	163	2	13	33	390
3	Concrete	145	-2	13	-37	380
4	Concrete	199	11	13	173	400
5	Concrete	233	20	13	305	410
6	Painted Ceramic Tile	248	23	8	364	240
7	Painted Ceramic Tile	202	12	7	185	220
8	Concrete	180	6	13	99	390
9	Concrete	130	-6	12	-96	380
10	Concrete	153	0	13	-6	390
11	Concrete	132	-6	12	-88	380
12	Concrete	142	-3	13	-49	380
13	Concrete	167	3	13	48	390
QC8	Concrete	161	2	13	25	390
				Maximum:	383	
				Average:	101	
				STDEV:	168	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material: Painted Concrete
Background (cpm): 38.64
Background σ (cpm): 11.07
Sample Analysis Time: 4 min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 7
Survey Unit: SU7-2-2
Survey Date: 12/9/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Concrete	228	18	13	286	410
2	Concrete	198	11	13	169	400
3	Concrete	163	2	13	33	390
				Maximum:	286	
				Average:	163	
				STDEV:	127	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete	
Instrument:	2360	253237	Background (cpm):	38.64	
Detector:	43-68	PR-216834	Background σ (cpm):	11.07	
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 7
Survey Unit: SU7-2-2
Survey Date: 12/9/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Painted Ceramic Tile	4	0	1	1	20
2	Concrete	1	-1	2	-5	30
3	Concrete	3	0	2	-1	30
4	Concrete	4	0	2	1	30
5	Concrete	0	-1	2	-7	30
6	Painted Ceramic Tile	0	-1	0	-7	0
7	Painted Ceramic Tile	1	-1	1	-5	10
8	Concrete	3	0	2	-1	30
9	Concrete	3	0	2	-1	30
10	Concrete	1	-1	2	-5	30
11	Concrete	8	1	2	10	40
12	Concrete	2	0	2	-3	30
13	Concrete	7	1	2	8	40
QC8	Concrete	3	0	2	-1	30
				Maximum:	10	
				Average:	-1	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material: Concrete/Linoleum
Background (cpm): 0.82
Background σ (cpm): 1.77
Sample Analysis Time: 4 min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 7
Survey Unit: SU7-2-2
Survey Date: 12/9/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Concrete	11	2	2	16	40
2	Concrete	4	0	2	1	30
3	Concrete	12	2	2	18	40
				Maximum:	18	
				Average:	12	
				STDEV:	9	

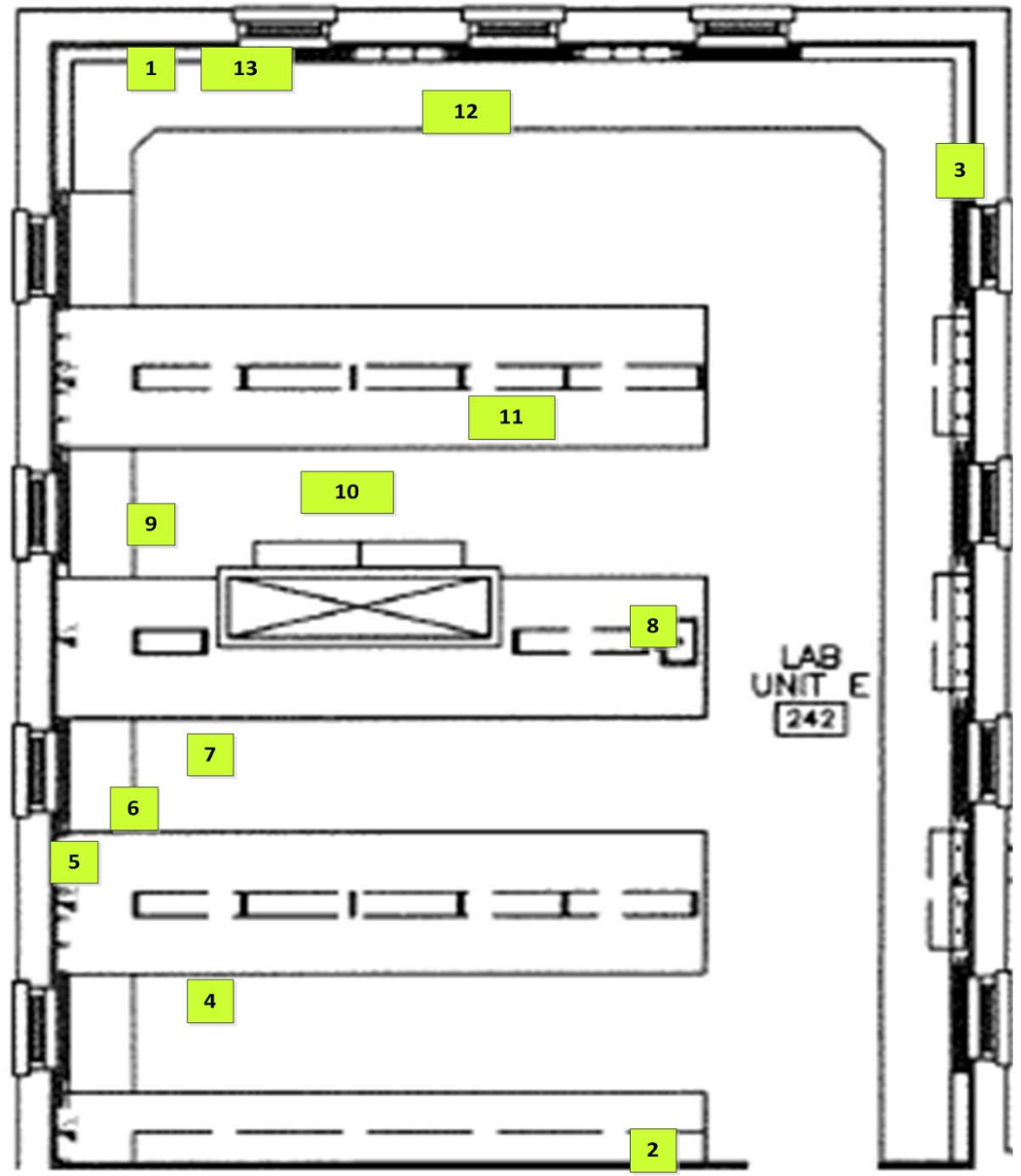
Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material: Concrete/Linoleum
Background (cpm): 0.82
Background σ (cpm): 1.77
Sample Analysis Time: 4 min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

X,Y Locations	
E-2,7	
W-10, 6	
S-3,4	
7,25	
11,33	
13,28	
15,25	
20,10	
24,28	
25,21	
28,13	
42,17	
45, 18	



SURVEY UNITS
LEGEND

Class 3

Data Point

Survey Unit Identifier

SU-7-2-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Second Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 7
Survey Unit: SU7-2-3
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	70	55	16	136	80
2	Drywall	48	11	15	27	70
3	Drywall	50	15	15	37	70
4	Linoleum	104	109	19	270	90
5	Linoleum	111	123	20	305	100
6	Linoleum	94	89	19	220	90
7	Linoleum	87	75	18	185	90
8	Linoleum	103	107	19	265	90
9	Linoleum	88	77	18	190	90
10	Linoleum	96	93	19	230	90
11	Linoleum	88	77	18	190	90
12	Linoleum	100	101	19	250	90
13	Linoleum	99	99	19	245	90
				Maximum:	305	
				Average:	196	
				STDEV:	85	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Drywall	Linoleum
Instrument:	2360	141321		Background (cpm):	85.2	99
Detector:	44-110	PR-258430		Background σ (cpm):	10.86	12.73
Probe Area:	126	cm^2		Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 7
Survey Unit: SU7-2-3
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	123	169	19	420	90
2	Ceiling Tile	66	47	16	116	80
				Maximum:	420	
				Average:	268	
				STDEV:	215	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Drywall
Instrument:	2360	184935	Background (cpm):	77.2	85
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 7
Survey Unit: SU7-2-3
Survey Date: 12/8/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Drywall	243	7	10	105	320
2	Drywall	185	-8	10	-121	290
3	Drywall	148	-17	9	-265	280
4	Linoleum	149	-1	13	-22	390
5	Linoleum	148	-2	13	-26	390
6	Linoleum	125	-7	12	-115	380
7	Linoleum	119	-9	12	-138	380
8	Linoleum	143	-3	13	-45	380
9	Linoleum	128	-7	12	-103	380
10	Linoleum	141	-3	13	-53	380
11	Linoleum	133	-5	12	-84	380
12	Linoleum	151	-1	13	-14	390
13	Linoleum	194	10	13	153	400
QC10	Linoleum	127	-7	12	-107	380
				Maximum:	153	
				Average:	-56	
				STDEV:	106	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Lineoleum	Drywall
Background (cpm):	38.64	54
Background σ (cpm):	11.07	6.86
Sample Analysis Time:	4 min	

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 7
Survey Unit: SU7-2-3
Survey Date: 12/8/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Stainless Hood Drain	140	1	7	12	220
2	Stainless Hood	119	-4	7	-70	210
3	Ceiling Tile	240	-21	12	-331	370
				Maximum:	12	
				Average:	-130	
				STDEV:	179	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Ceiling Tile
Instrument:	2360	253237	Background (cpm):	34.23	81
Detector:	43-68	PR-216834	Background σ (cpm):	4.21	9.4
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 7
Survey Unit: SU7-2-3
Survey Date: 12/8/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Drywall	5	0	2	0	30
2	Drywall	5	0	2	0	30
3	Drywall	10	1	2	10	30
4	Linoleum	3	0	2	-1	30
5	Linoleum	4	0	2	1	30
6	Linoleum	8	1	2	10	40
7	Linoleum	3	0	2	-1	30
8	Linoleum	9	1	2	12	40
9	Linoleum	3	0	2	-1	30
10	Linoleum	8	1	2	10	40
11	Linoleum	6	1	2	6	30
12	Linoleum	5	0	2	4	30
13	Linoleum	13	2	3	20	40
QC10	Linoleum	3	0	2	-1	30
				Maximum:	20	
				Average:	5	
				STDEV:	6	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Linoleum	Drywall
Background (cpm):	0.82	1.27
Background σ (cpm):	1.77	1.26
Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building:	7		
Survey Unit:	SU7-2-3		
Survey Date:	12/8/2011	2/3/2012	

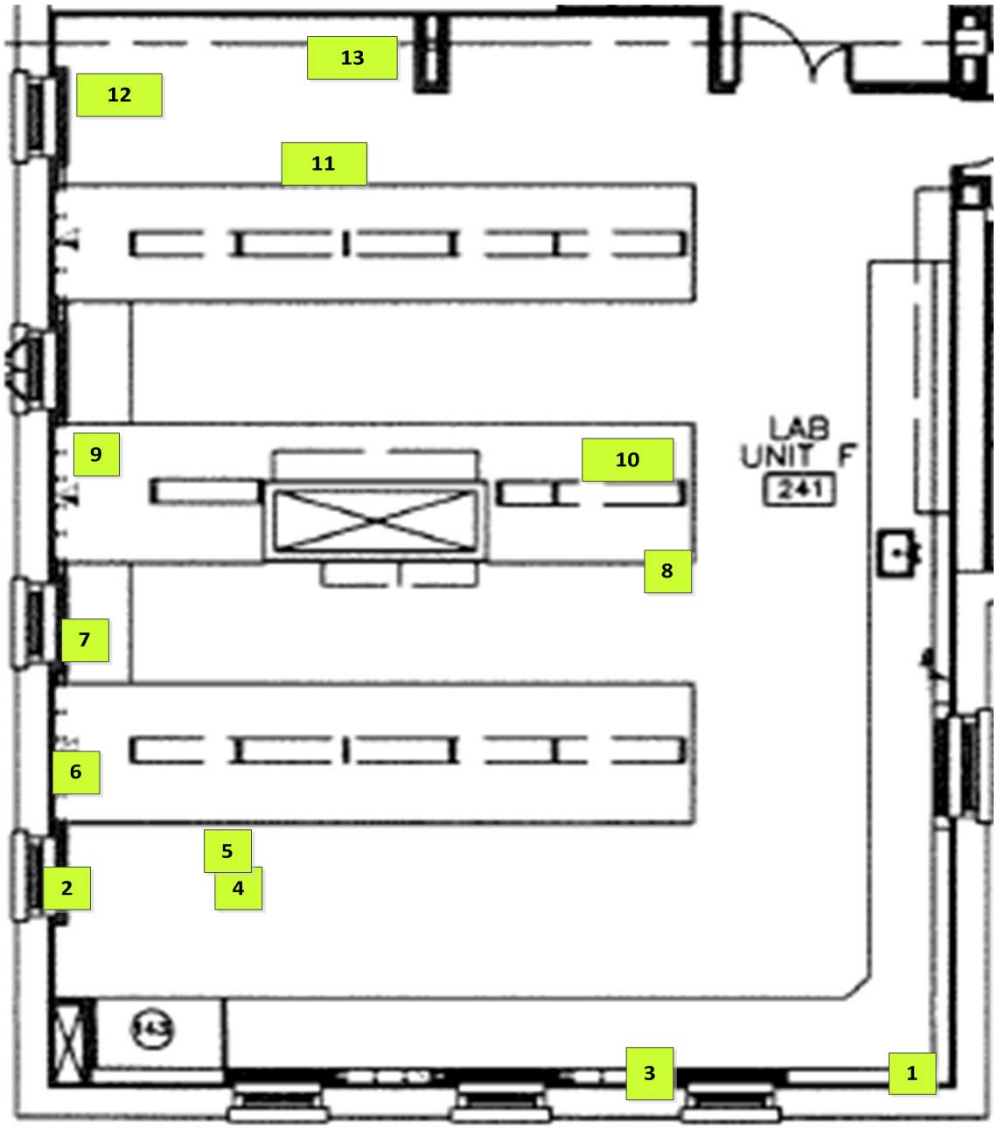
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Stainless Hood Drain	7	1	2	9	20
2	Stainless Hood	3	0	1	1	20
3	Ceiling Tile	19	1	3	5	40
				Maximum:	9	
				Average:	5	
				STDEV:	4	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Ceiling Tile
Instrument:	2360	253237	Background (cpm):	0.64	4.18
Detector:	43-68	PR-216834	Background σ (cpm):	0.73	1.6
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

X,Y Locations	
W-1,6	
N-8,5	
W-5,2	
8,21	
10, 22	
13, 30	
17, 30	
21, 9	
25, 29	
29, 10	
36,22	
40,30	
45, 15	



SURVEY UNITS
LEGEND

Class 3

Data Point

Survey Unit Identifier

SU-7-2-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 7 Second Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 7
Survey Unit: SU7-2-4
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	70	55	16	136	80
2	Drywall	52	19	15	47	70
3	Drywall	59	33	15	82	70
4	Linoleum	102	105	19	260	90
5	Linoleum	84	69	18	170	90
6	Linoleum	94	89	19	220	90
7	Linoleum	87	75	18	185	90
8	Linoleum	94	89	19	220	90
9	Linoleum	84	69	18	170	90
10	Linoleum	102	105	19	260	90
11	Linoleum	84	69	18	170	90
12	Linoleum	121	143	20	355	100
13	Linoleum	105	111	19	275	90
				Maximum:	355	
				Average:	196	
				STDEV:	83	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Drywall	Linoleum
Instrument:	2360	141321		Background (cpm):	85.2	99
Detector:	44-110	PR-258430		Background σ (cpm):	10.86	12.73
Probe Area:	126	cm^2		Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 7
Survey Unit: SU7-2-4
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	114	151	18	375	90
2	Ceiling Tile	75	65	16	161	80
				Maximum:	375	
				Average:	268	
				STDEV:	151	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Drywall
Instrument:	2360	184935	Background (cpm):	77.2	85
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 7
Survey Unit: SU7-2-4
Survey Date: 12/9/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Drywall	218	1	10	8	310
2	Drywall	175	-10	10	-160	290
3	Drywall	198	-5	10	-70	300
4	Linoleum	167	3	13	48	390
5	Linoleum	161	2	13	25	390
6	Linoleum	140	-4	13	-57	380
7	Linoleum	173	5	13	72	390
8	Linoleum	163	2	13	33	390
9	Linoleum	147	-2	13	-29	380
10	Linoleum	142	-3	13	-49	380
11	Linoleum	169	4	13	56	390
12	Linoleum	173	5	13	72	390
13	Linoleum	173	5	13	72	390
QC11	Linoleum	127	-7	12	-107	380
QC12	Linoleum	168	3	13	52	390
				Maximum:	72	
				Average:	2	
				STDEV:	70	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Lineoleum	Drywall
Background (cpm):	38.64	54
Background σ (cpm):	11.07	6.86
Sample Analysis Time:	4 min	

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 7
Survey Unit: SU7-2-4
Survey Date: 12/9/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Stainless Hood Drain	161	6	8	94	230
2	Stainless Hood	151	4	7	55	230
3	Black Lab Sink	186	20	9	306	280
				Maximum:	306	
				Average:	151	
				STDEV:	135	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Composite
Instrument:	2360	253237	Background (cpm):	34.23	27
Detector:	43-68	PR-216834	Background σ (cpm):	4.21	5.95
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 7
Survey Unit: SU7-2-4
Survey Date: 12/9/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Drywall	5	0	2	0	30
2	Drywall	3	-1	2	-4	20
3	Drywall	4	0	2	-2	30
4	Linoleum	3	0	2	-1	30
5	Linoleum	3	0	2	-1	30
6	Linoleum	6	1	2	6	30
7	Linoleum	5	0	2	4	30
8	Linoleum	5	0	2	4	30
9	Linoleum	4	0	2	1	30
10	Linoleum	2	0	2	-3	30
11	Linoleum	5	0	2	4	30
12	Linoleum	9	1	2	12	40
13	Linoleum	3	0	2	-1	30
QC11	Linoleum	2	0	2	-3	30
QC12	Linoleum	1	-1	2	-5	30
				Maximum:	12	
				Average:	1	
				STDEV:	4	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Linoleum	Drywall
Background (cpm):	0.82	1.27
Background σ (cpm):	1.77	1.26
Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

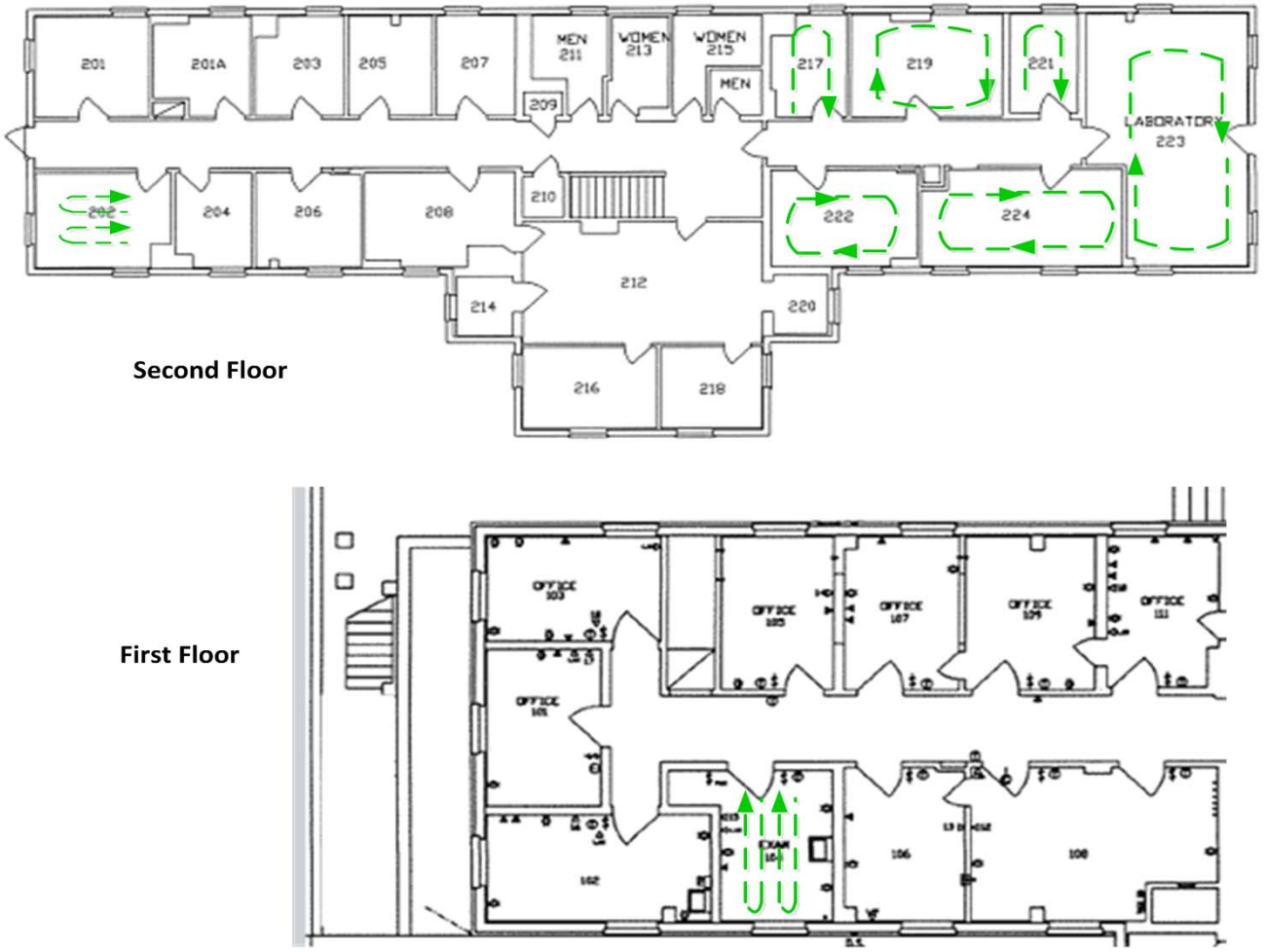
Building: 7
Survey Unit: SU7-2-4
Survey Date: 12/9/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
1	Stainless Hood Drain	4	0	1	3	20
2	Stainless Hood	4	0	1	3	20
3	Black Lab Sink	9	2	2	13	30
				Maximum:	13	
				Average:	6	
				STDEV:	6	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Composite
Instrument:	2360	253237	Background (cpm):	0.64	0.55
Detector:	43-68	PR-216834	Background σ (cpm):	0.73	0.8
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU-38-1-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 38

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 38, 1st and 2nd levels

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU38 First Floor	79	132	269	200	34	1	407	204	101
SU38 Second Floor	594	74	247	141	29	-171	342	29	85

Area Scanned (ft^2): 422

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	132	cpm
Probe Area:	582	cm^2	Background σ:	32.21	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.058	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	363	dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 38, 1st and 2nd levels

		Gross CPM				Activity (dpm/100cm^2)		
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**
SU38 First Floor	79	0	22	5.8	5.8	-5	34	5
SU38 Second Floor	594	0	39	8.0	7.4	-5	64	9

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	3	cpm
Probe Area:	582	cm^2	Background σ:	7.32	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	720	dpm/100 cm^2

SURVEY UNITS
LEGEND

Class 3

Data Point

Survey Unit Identifier

SU-38-1-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 38

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Exposure Rate Measurements

Location: Building 38

All measurements in µR/hour

Date:	12/12/2011
Location	38-0-1
1	5
2	10
3	6
4	9
5	7
6	8
7	7
8	4
9	5
10	9
11	6
12	8
13	8
14	4
15	4
16	4

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012

Summary of Random H3 Static Measurements

Building: 1
Survey Unit: 1-B-1
Survey Date:

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	105	111	19	275	90
2	Concrete	141	183	21	454	100
3	Drywall	126	153	20	379	100
4	Concrete	98	97	19	240	90
5	Concrete	170	241	22	598	110
6	Concrete	136	173	21	429	100
7	Concrete	157	215	22	534	110
8	Plaster Wall	138	177	21	439	100
9	Concrete	117	135	20	335	100
10	Concrete	97	95	19	235	90
11	Concrete	104	109	19	270	90
12	Concrete	115	131	20	325	100
13	Drywall	109	119	19	295	100
					0	0
QC12	Concrete	110	121	20	300	100
QC13	Drywall	121	143	20	355	100
				Maximum:	598	
				Average:	370	
				STDEV:	115	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete/Linoleum	
Instrument:	2360	141321	Background (cpm):	99.5	
Detector:	44-110	PR-258430	Background σ (cpm):	12.73	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 38
Survey Unit: 1-B-1
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Carpet over Concrete	120	141	20	350	100
2	Carpet over Concrete	104	109	19	270	90
3	Tile Floor	123	147	20	365	100
				Maximum:	365	
				Average:	328	
				STDEV:	51	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete/Linoleum	
Instrument:	2360	184935	Background (cpm):	99.5	
Detector:	43-68	PR-181739	Background σ (cpm):	12.73	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 38
Survey Unit: SU-38
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	80	1	13	21	390
2	Drywall	127	10	11	148	320
3	Floor Tile	67	-13	8	-204	260
4	Floor Tile	71	-11	8	-173	260
5	Concrete	72	-3	13	-41	380
6	Concrete	75	-1	13	-18	390
7	Concrete	76	-1	13	-10	390
8	Concrete	76	-1	13	-10	390
9	Floor Tile	40	-27	8	-414	230
10	Concrete	75	-1	13	-18	390
11	Concrete	80	1	13	21	390
12	Drywall	82	-13	9	-202	290
13	Concrete	78	0	13	6	390
					0	0
QC1	Concrete	85	4	13	60	390
QC2	Drywall	122	7	10	109	320
				Maximum:	148	
				Average:	-69	
				STDEV:	144	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Concrete/Linoleum	Drywall	Floor Tile
Instrument:	2360	253237	Background (cpm):	38.64	54	47
Detector:	43-68	PR-216834	Background σ (cpm):	11.07	6.86	6.05
Probe Area:	126	cm^2	Sample Analysis Time:	2	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 38
Survey Unit: SU-38
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	75	-1	13	-18	390
2	Floor Tile	54	-20	8	-305	240
3	Floor Tile	43	-25	8	-390	230
				Maximum:	-18	
				Average:	-238	
				STDEV:	195	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete/Linoleum	Floor Tile
Instrument:	2360	253237	Background (cpm):	38.64	47
Detector:	43-68	PR-216834	Background σ (cpm):	11.07	6.05
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 38
Survey Unit: SU-38
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	6	2	2	18	40
2	Drywall	6	2	2	14	30
3	Floor Tile	0	-1	1	-5	10
4	Floor Tile	1	0	1	-1	20
5	Concrete	1	0	2	-3	30
6	Concrete	0	-1	2	-7	30
7	Concrete	1	0	2	-3	30
8	Concrete	5	2	2	14	40
9	Floor Tile	1	0	1	-1	20
10	Concrete	2	0	2	1	30
11	Concrete	4	1	2	10	40
12	Drywall	5	1	2	10	30
13	Concrete	2	0	2	1	30
QC1	Concrete	4	1	2	10	40
QC2	Drywall	4	1	2	6	30
				Maximum:	18	
				Average:	4	
				STDEV:	8	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Concrete/Linoleum	Drywall	Floor Tile
Instrument:	2360	253237	Background (cpm):	0.82	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	1.77	1.27	0.91
Probe Area:	126	cm^2	Sample Analysis Time:	2	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

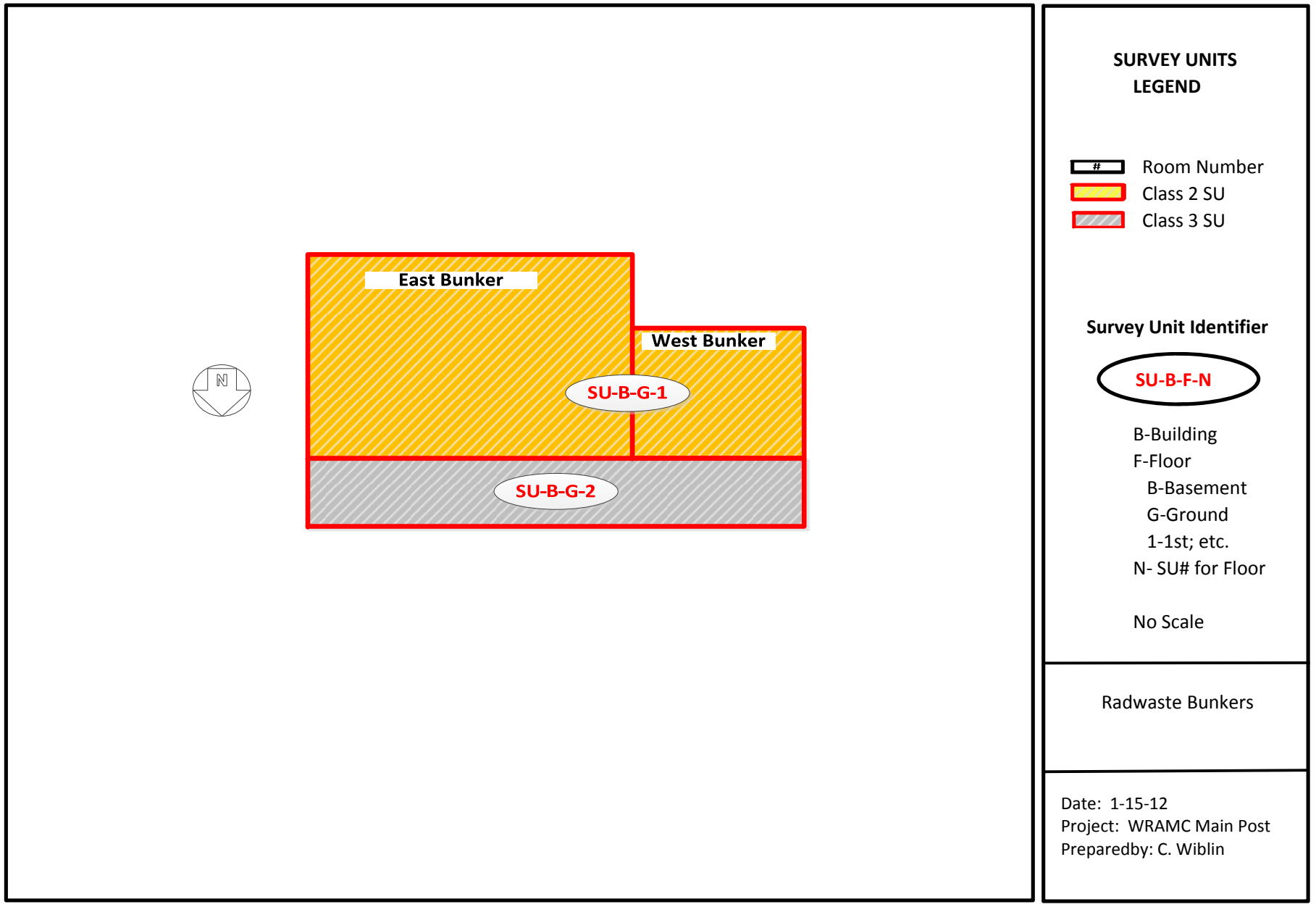
Building: 38
Survey Unit: SU-38
Survey Date: 12/12/2011

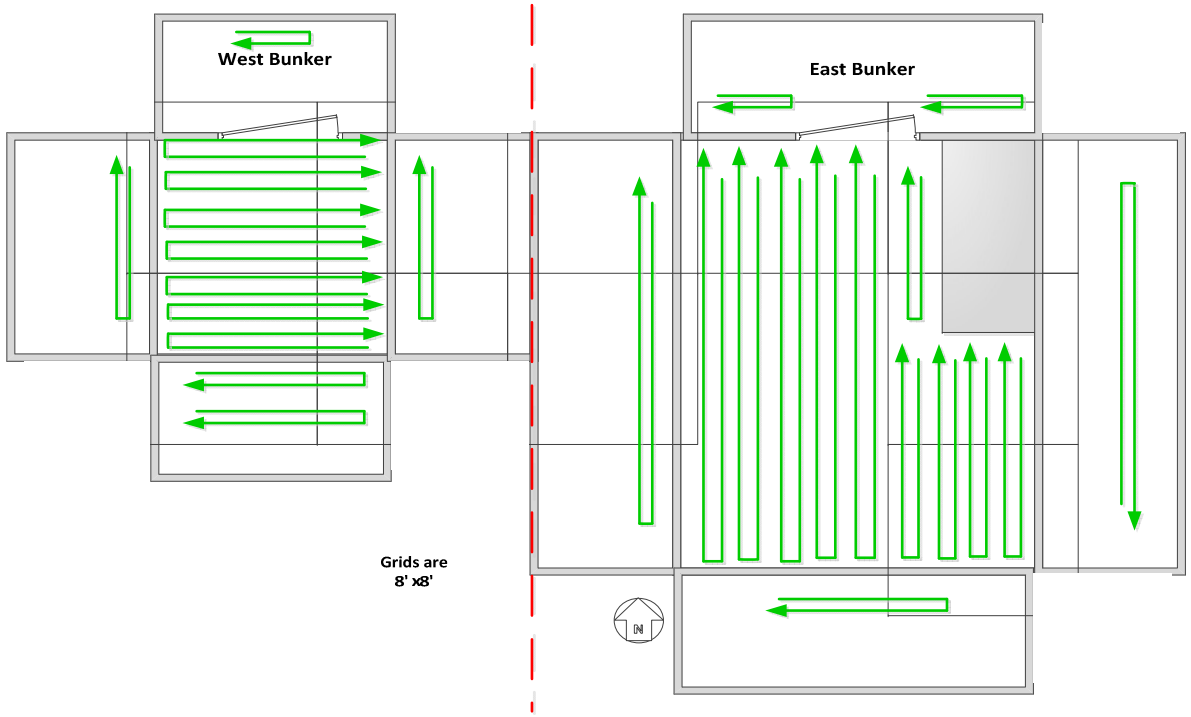
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	12	5	3	43	50
2	Floor Tile	1	0	1	-1	20
3	Floor Tile	2	0	1	3	20
				Maximum:	43	
				Average:	15	
				STDEV:	24	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material: Concrete/Linoleum	Floor Tile
Instrument:	2360	253237	Background (cpm):	0.82	1
Detector:	43-68	PR-216834	Background σ (cpm):	1.77	0.91
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2


East Bunker
West Bunker
SU-B-G-1
SU-B-G-2
N
SURVEY UNITS
LEGEND
#
Room Number
Class 2 SU
Class 3 SU
Survey Unit Identifier
SU-B-F-N
B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor
No Scale
Radwaste Bunkers
Date: 1-15-12
Project: WRAMC Main Post
Preparedby: C. Wiblin



SURVEY UNITS
LEGEND

Class 2

Scan Path

Survey Unit Identifier

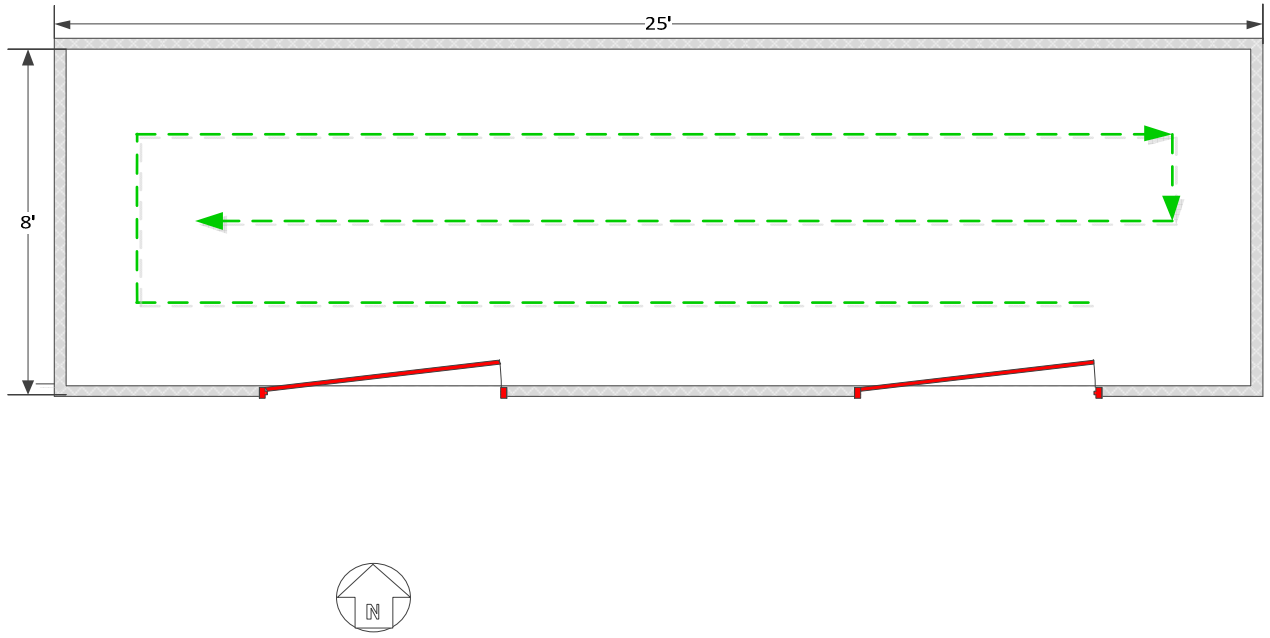
SU-B-G-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Waste Bunkers

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU-B-G-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Waste Bunkers

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Bunkers

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
East Bunker	212	50	211	105	29	-242	235	-79	87
West Bunker	221	73	254	150	33	-174	362	53	98
Outside Area	73	95	265	167	37	-109	395	106	108

Area Scanned (ft^2) 317

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Bunkers

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
East Bunker	212	0	33	5	6	-5	54	3	11
West Bunker	221	0	30	3	5	-5	48	0	9
Outside Area	73	0	15	2	3	-5	21	-1	6

Area Scanned (ft^2) 317

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 3 cpm
Background σ: 7.32 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 720 dpm/100 cm^2

Summary of Scan Results - Beta

Location: Bunkers

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
East Bunker Shelves	442	5	90	35	16	-361	1044	132	261
Area Scanned (ft^2)	60								

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm^2

Reference Material: Counter
Background: 27 cpm
Background σ: 5.95 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.048 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 916 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Bunkers

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
East Bunker Shelves	442	0	18	1	3	-4.45	141.32	4.78	23.55
Area Scanned (ft^2)	60								

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm2

Reference Material: Counter
Background: 1 cpm
Background σ: 0.8 cpm
Scan speed: 1 detector width / 2sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.098 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 705 dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Bunkers

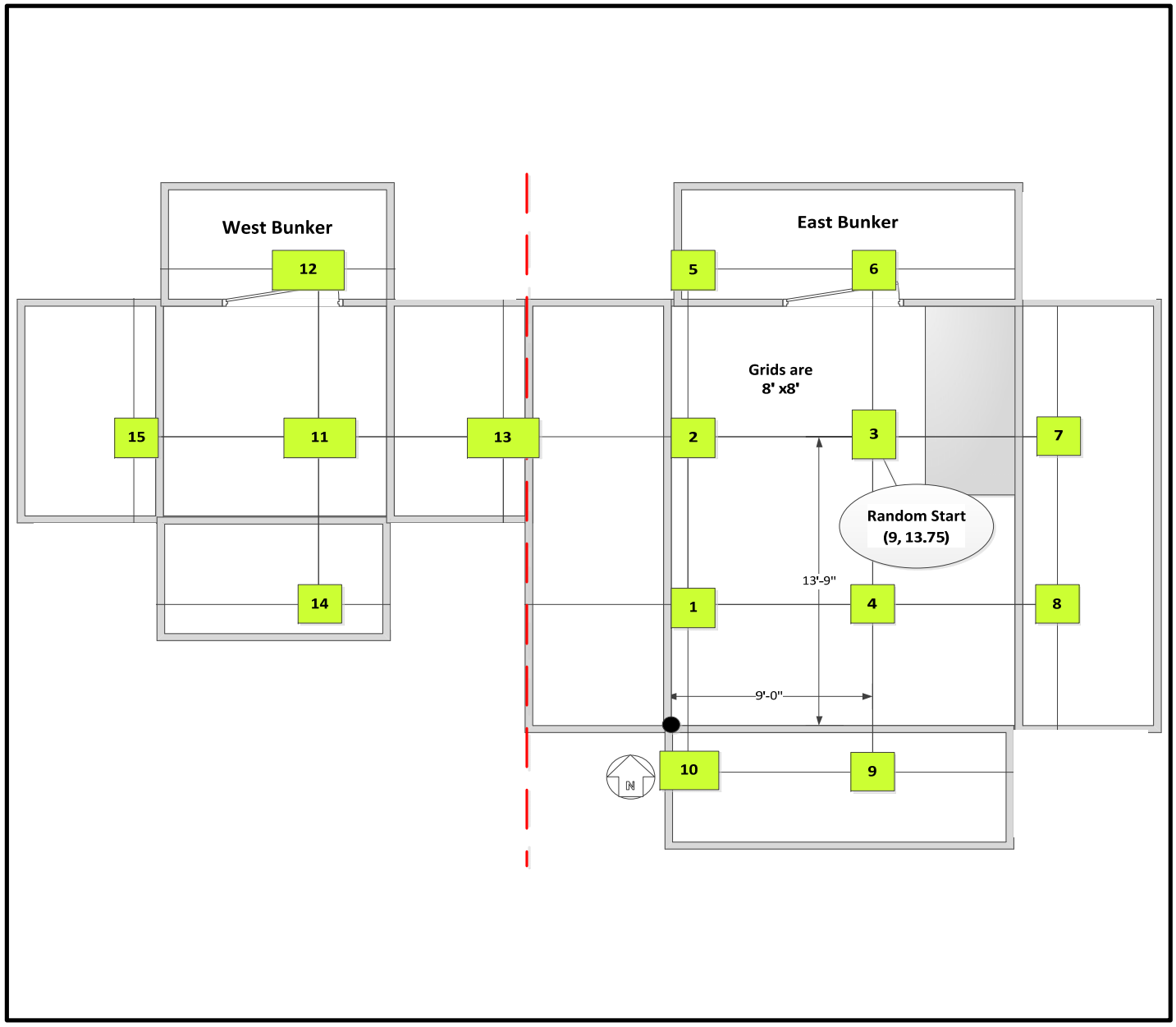
All measurements in µR/hour

Date: 12/14/2011

Location	B-1-1	B-1-2
1	5	2
2	3	2
3	5	5
4	4	4
5	4	4
6	3	5
7	3	4
8	2	5
9	4	2
10	2	2
11	5	3
12	2	3
13	5	5
14	4	
15	3	

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012



SURVEY UNITS
LEGEND

Class 2

\# Measurement Number

Origin

Survey Unit Identifier

SU-B-G-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Waste Bunkers

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: Bunkers
Survey Unit: B-1-1
Survey Date: 12/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	97	95	19	235	90
2	Concrete	88	77	18	190	90
3	Concrete	86	73	18	180	90
4	Concrete	95	91	19	225	90
5	Concrete	85	71	18	175	90
6	Concrete	105	111	19	275	90
7	Concrete	229	359	25	892	120
8	Concrete	169	239	22	593	110
9	Concrete	104	109	19	270	90
10	Concrete	81	63	18	156	90
11	Concrete	92	85	19	210	90
12	Concrete	108	117	19	290	90
13	Concrete	82	65	18	161	90
14	Concrete	101	103	19	255	90
15	Concrete	92	85	19	210	90
				Maximum:	892	
				Average:	296	
				STDEV:	197	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	141321
Detector:	44-110	PR-258430
Probe Area:	126	cm^2

Reference Material: Concrete
Background (cpm): 99.5
Background σ (cpm): 12.73
Sample Analysis Time: 0.5 min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: Bunkers
Survey Unit: B-1-1
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	58	-10	12	-150	380
2	Concrete	72	-3	13	-41	380
3	Concrete	71	-3	13	-49	380
4	Concrete	64	-7	12	-103	380
5	Concrete	58	-10	12	-150	380
6	Concrete	80	1	13	21	390
7	Concrete	53	-12	12	-189	370
8	Concrete	76	-1	13	-10	390
9	Concrete	64	-7	12	-103	380
10	Concrete	68	-5	13	-72	380
11	Concrete	84	3	13	52	390
12	Concrete	99	11	13	169	400
13	Concrete	64	-7	12	-103	380
14	Concrete	80	1	13	21	390
15	Concrete	78	0	13	6	390
QC3	Concrete	50	-14	12	-212	370
QC11	Concrete	107	15	13	231	400
				Maximum:	231	
				Average:	-56	
				STDEV:	93	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material: Painted Concrete/Linoleum
Background (cpm): 38.64
Background σ (cpm): 11.07
Sample Analysis Time: 2 min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: Bunkers
Survey Unit: B-1-1
Survey Date: 12/14/2011

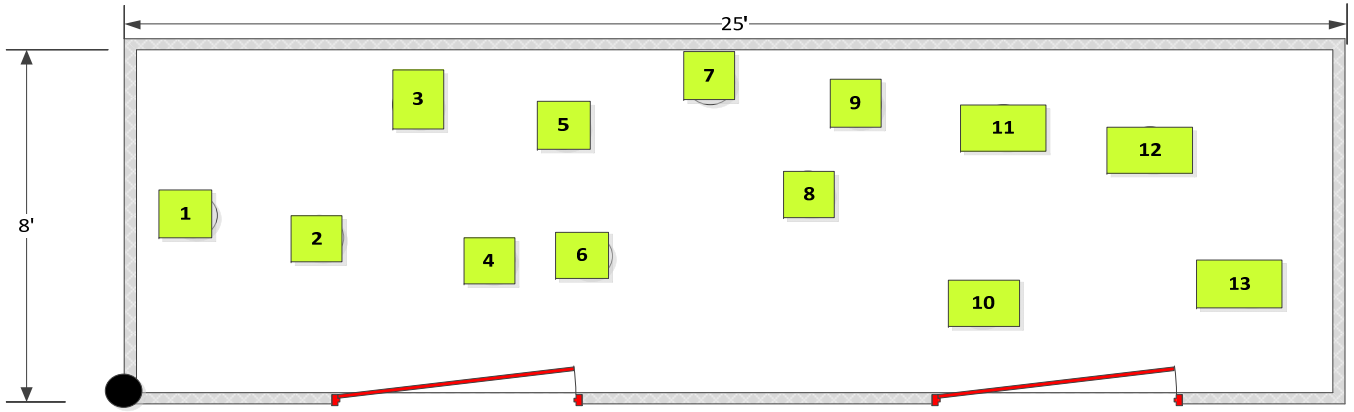
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	2	0	2	1	30
2	Concrete	3	1	2	6	30
3	Concrete	3	1	2	6	30
4	Concrete	3	1	2	6	30
5	Concrete	1	0	2	-3	30
6	Concrete	2	0	2	1	30
7	Concrete	0	-1	2	-7	30
8	Concrete	2	0	2	1	30
9	Concrete	1	0	2	-3	30
10	Concrete	1	0	2	-3	30
11	Concrete	3	1	2	6	30
12	Concrete	6	2	2	18	40
13	Concrete	1	0	2	-3	30
14	Concrete	4	1	2	10	40
15	Concrete	4	1	2	10	40
QC3	Concrete	3	1	2	6	30
QC11	Concrete	2	0	2	1	30
				Maximum:	18	
				Average:	2	
				STDEV:	6	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material: Concrete
Background (cpm): 0.82
Background σ (cpm): 1.77
Sample Analysis Time: 2 min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2



Point	X,Y Locations	
1	1.5,4	
2	4,3.5	
3	6,6.5	
4	7.5,3	
5	9,6	
6	9.5,3	
7	12,7	
8	14,4.5	
9	15,6.5	
10	17.5,2	
11	18,6	
12	21,5.5	
13	23,2.5	

SURVEY UNITS
LEGEND

Class 3
\# Measurement Number

Origin

Survey Unit Identifier

SU-B-G-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Waste Bunkers
Outside Asphalt Area

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random Beta Static Measurements

Building: Bunkers
Survey Unit: B-1-2
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Asphalt	92	7	10	115	300
2	Asphalt	94	8	10	130	300
3	Asphalt	82	2	10	37	290
4	Asphalt	88	5	10	84	300
5	Asphalt	100	11	10	177	310
6	Asphalt	60	-9	9	-134	270
7	Asphalt	75	-1	9	-17	290
8	Asphalt	70	-4	9	-56	280
9	Asphalt	68	-5	9	-72	280
10	Asphalt	83	3	10	45	290
11	Asphalt	65	-6	9	-95	280
12	Asphalt	75	-1	9	-17	290
13	Asphalt	55	-11	9	-173	270
QC3	Asphalt	96	9	10	146	300
				Maximum:	177	
				Average:	2	
				STDEV:	107	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Asphalt	
Detector:	43-68	PR-216834	Background (cpm):	38.62	
Probe Area:	126	cm^2	Background σ (cpm):	7.07	
			Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

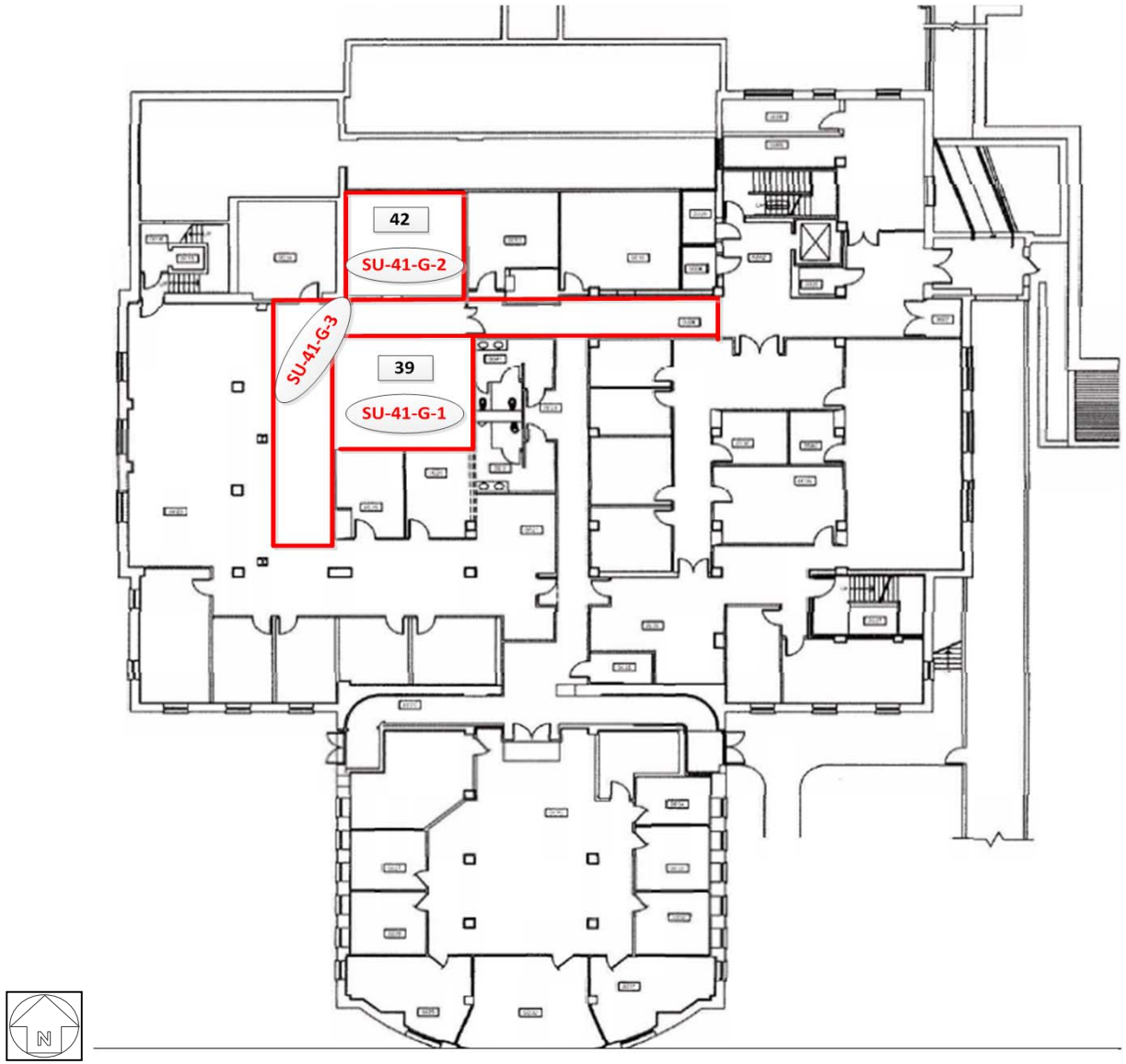
Building: Bunkers
Survey Unit: B-1-2
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Asphalt	2	0	1	-1	20
2	Asphalt	5	1	2	12	30
3	Asphalt	0	-1	1	-9	10
4	Asphalt	6	2	2	16	30
5	Asphalt	3	0	2	3	20
6	Asphalt	3	0	2	3	20
7	Asphalt	2	0	1	-1	20
8	Asphalt	1	-1	1	-5	20
9	Asphalt	0	-1	1	-9	10
10	Asphalt	1	-1	1	-5	20
11	Asphalt	1	-1	1	-5	20
12	Asphalt	3	0	2	3	20
13	Asphalt	1	-1	1	-5	20
QC3	Asphalt	4	1	2	8	30
				Maximum:	16	
				Average:	0	
				STDEV:	8	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Asphalt	
Detector:	43-68	PR-216834	Background:	1.1	cpm
Probe Area:	126	cm^2	Background σ:	0.9078	cpm
			Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2



SURVEY UNITS
LEGEND

Survey Unit Identifier

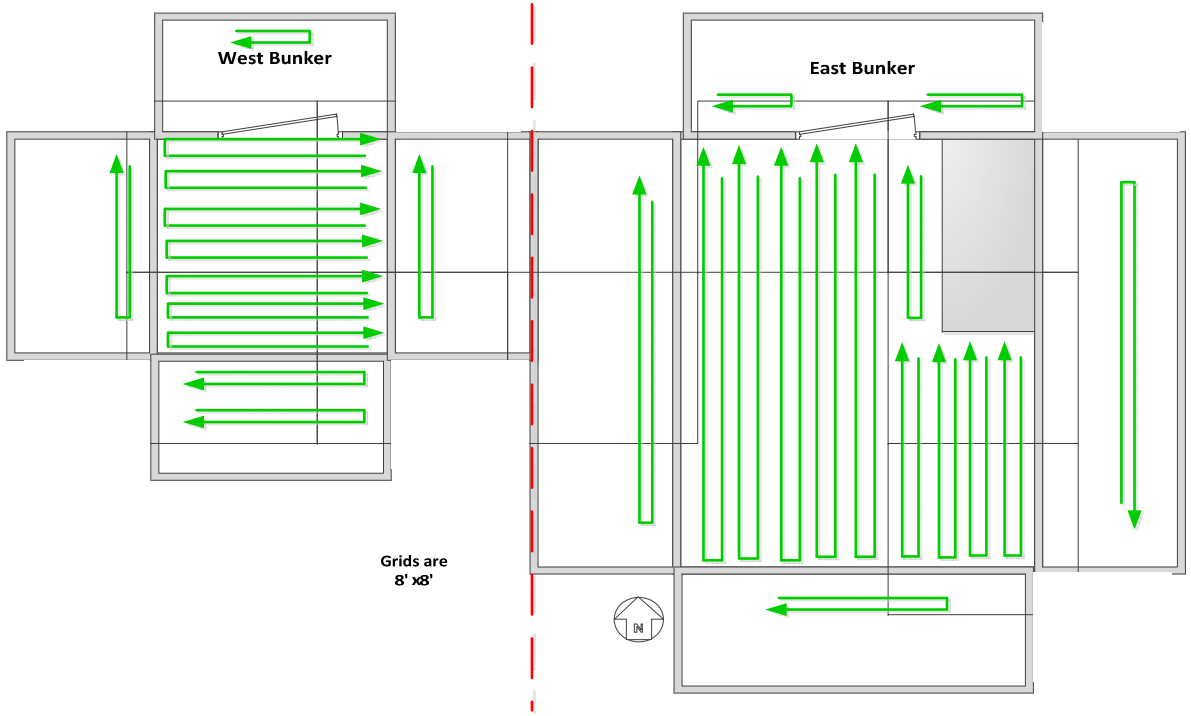
SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 41 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 2

Scan Path

Survey Unit Identifier

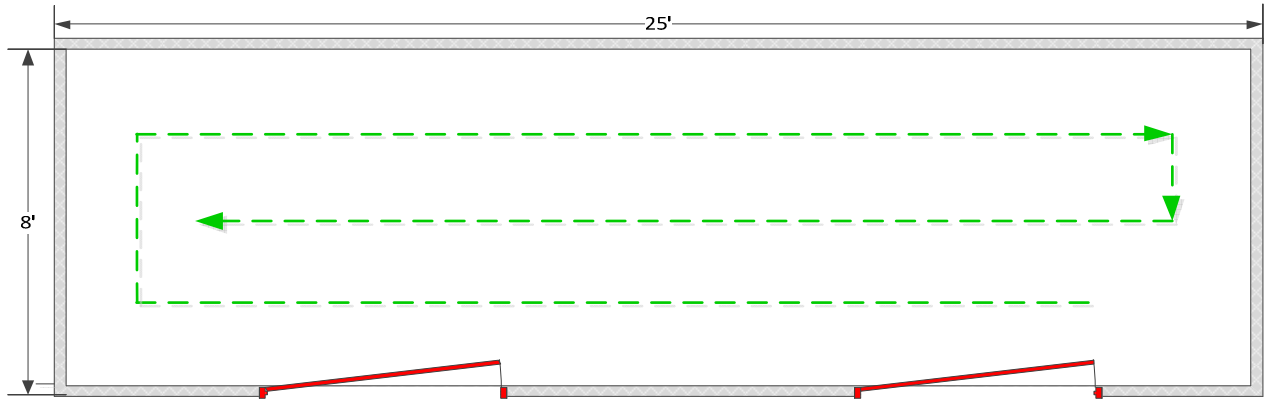
SU-B-G-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Waste Bunkers

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU-B-G-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Waste Bunkers

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Bunkers

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
East Bunker	212	50	211	105	29	-242	235	-79	87
West Bunker	221	73	254	150	33	-174	362	53	98
Outside Area	73	95	265	167	37	-109	395	106	108

Area Scanned (ft^2) 317

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Bunkers

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
East Bunker	212	0	33	5	6	-5	54	3	11
West Bunker	221	0	30	3	5	-5	48	0	9
Outside Area	73	0	15	2	3	-5	21	-1	6

Area Scanned (ft^2) 317

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 3 cpm
Background σ: 7.32 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 720 dpm/100 cm^2

Summary of Scan Results - Beta

Location: Bunkers

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
East Bunker Shelves	442	5	90	35	16	-361	1044	132	261
Area Scanned (ft^2)	60								

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm^2

Reference Material: Counter
Background: 27 cpm
Background σ: 5.95 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.048 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 916 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Bunkers

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
East Bunker Shelves	442	0	18	1	3	-4.45	141.32	4.78	23.55
Area Scanned (ft^2)	60								

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Counter	
Detector:	43-68	148454	Background:	1	cpm
Probe Area:	126	cm2	Background σ:	0.8	cpm
			Scan speed:	1 detector width / 2sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.098	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	705	dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Bunkers

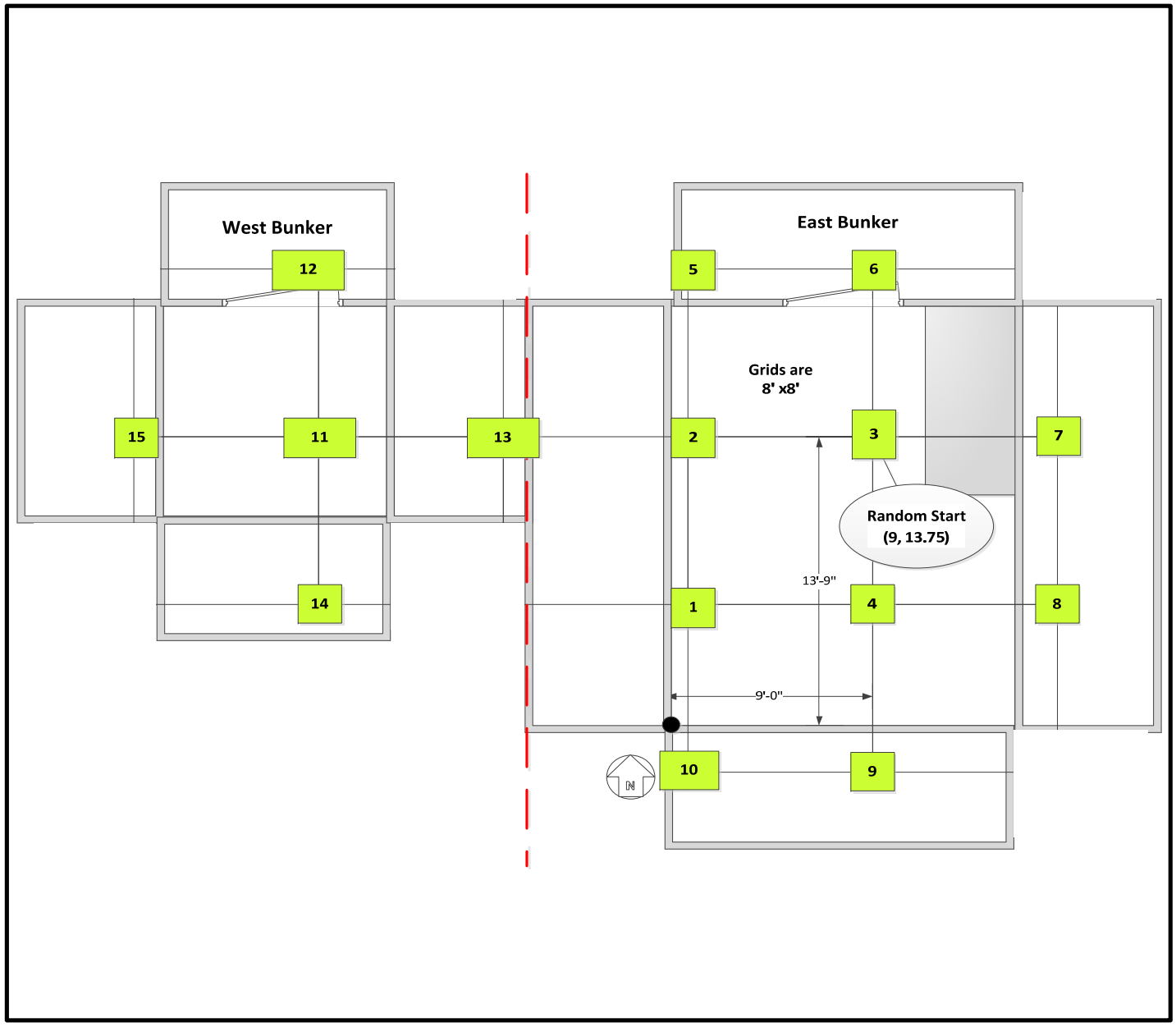
All measurements in µR/hour

Date: 12/14/2011

Location	B-1-1	B-1-2
1	5	2
2	3	2
3	5	5
4	4	4
5	4	4
6	3	5
7	3	4
8	2	5
9	4	2
10	2	2
11	5	3
12	2	3
13	5	5
14	4	
15	3	

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012



SURVEY UNITS
LEGEND

Class 2

\# Measurement Number

Origin

Survey Unit Identifier

SU-B-G-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Waste Bunkers

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: Bunkers
Survey Unit: B-1-1
Survey Date: 12/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	97	95	19	235	90
2	Concrete	88	77	18	190	90
3	Concrete	86	73	18	180	90
4	Concrete	95	91	19	225	90
5	Concrete	85	71	18	175	90
6	Concrete	105	111	19	275	90
7	Concrete	229	359	25	892	120
8	Concrete	169	239	22	593	110
9	Concrete	104	109	19	270	90
10	Concrete	81	63	18	156	90
11	Concrete	92	85	19	210	90
12	Concrete	108	117	19	290	90
13	Concrete	82	65	18	161	90
14	Concrete	101	103	19	255	90
15	Concrete	92	85	19	210	90
				Maximum:	892	
				Average:	296	
				STDEV:	197	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	141321
Detector:	44-110	PR-258430
Probe Area:	126	cm^2

Reference Material: Concrete
Background (cpm): 99.5
Background σ (cpm): 12.73
Sample Analysis Time: 0.5 min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: Bunkers
Survey Unit: B-1-1
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	58	-10	12	-150	380
2	Concrete	72	-3	13	-41	380
3	Concrete	71	-3	13	-49	380
4	Concrete	64	-7	12	-103	380
5	Concrete	58	-10	12	-150	380
6	Concrete	80	1	13	21	390
7	Concrete	53	-12	12	-189	370
8	Concrete	76	-1	13	-10	390
9	Concrete	64	-7	12	-103	380
10	Concrete	68	-5	13	-72	380
11	Concrete	84	3	13	52	390
12	Concrete	99	11	13	169	400
13	Concrete	64	-7	12	-103	380
14	Concrete	80	1	13	21	390
15	Concrete	78	0	13	6	390
QC3	Concrete	50	-14	12	-212	370
QC11	Concrete	107	15	13	231	400
				Maximum:	231	
				Average:	-56	
				STDEV:	93	

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	253237	Reference Material:	Painted Concrete/Linoleum
Detector:	43-68	PR-216834	Background (cpm):	38.64
Probe Area:	126	cm^2	Background σ (cpm):	11.07
			Sample Analysis Time:	2 min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: Bunkers
Survey Unit: B-1-1
Survey Date: 12/14/2011

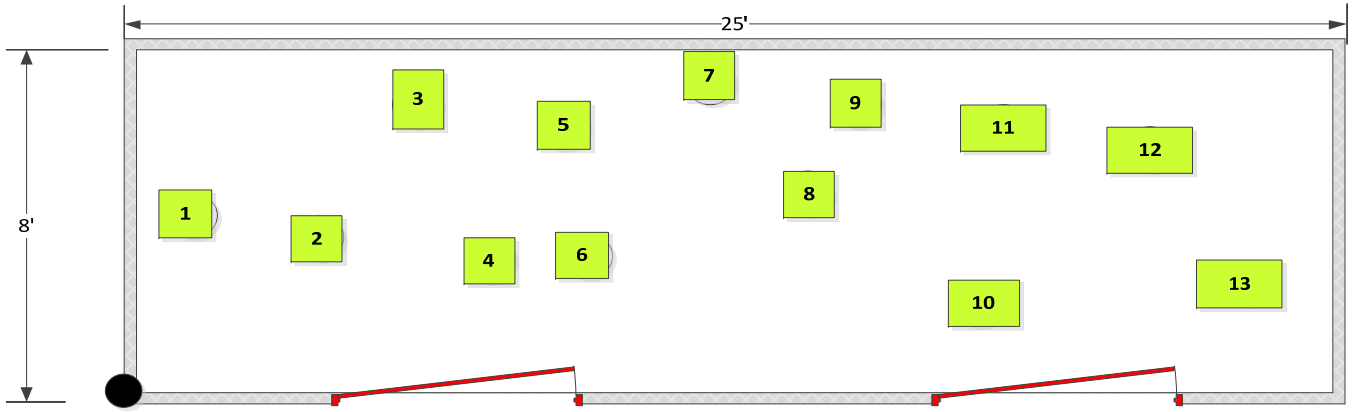
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	2	0	2	1	30
2	Concrete	3	1	2	6	30
3	Concrete	3	1	2	6	30
4	Concrete	3	1	2	6	30
5	Concrete	1	0	2	-3	30
6	Concrete	2	0	2	1	30
7	Concrete	0	-1	2	-7	30
8	Concrete	2	0	2	1	30
9	Concrete	1	0	2	-3	30
10	Concrete	1	0	2	-3	30
11	Concrete	3	1	2	6	30
12	Concrete	6	2	2	18	40
13	Concrete	1	0	2	-3	30
14	Concrete	4	1	2	10	40
15	Concrete	4	1	2	10	40
QC3	Concrete	3	1	2	6	30
QC11	Concrete	2	0	2	1	30
				Maximum:	18	
				Average:	2	
				STDEV:	6	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material: Concrete
Background (cpm): 0.82
Background σ (cpm): 1.77
Sample Analysis Time: 2 min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2



Point	X,Y Locations	
1	1.5,4	
2	4,3.5	
3	6,6.5	
4	7.5,3	
5	9,6	
6	9.5,3	
7	12,7	
8	14,4.5	
9	15,6.5	
10	17.5,2	
11	18,6	
12	21,5.5	
13	23,2.5	

SURVEY UNITS
LEGEND

Class 3
\# Measurement Number

Origin

Survey Unit Identifier

SU-B-G-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Waste Bunkers
Outside Asphalt Area

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random Beta Static Measurements

Building: Bunkers
Survey Unit: B-1-2
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Asphalt	92	7	10	115	300
2	Asphalt	94	8	10	130	300
3	Asphalt	82	2	10	37	290
4	Asphalt	88	5	10	84	300
5	Asphalt	100	11	10	177	310
6	Asphalt	60	-9	9	-134	270
7	Asphalt	75	-1	9	-17	290
8	Asphalt	70	-4	9	-56	280
9	Asphalt	68	-5	9	-72	280
10	Asphalt	83	3	10	45	290
11	Asphalt	65	-6	9	-95	280
12	Asphalt	75	-1	9	-17	290
13	Asphalt	55	-11	9	-173	270
QC3	Asphalt	96	9	10	146	300
				Maximum:	177	
				Average:	2	
				STDEV:	107	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Asphalt	
Detector:	43-68	PR-216834	Background (cpm):	38.62	
Probe Area:	126	cm^2	Background σ (cpm):	7.07	
			Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

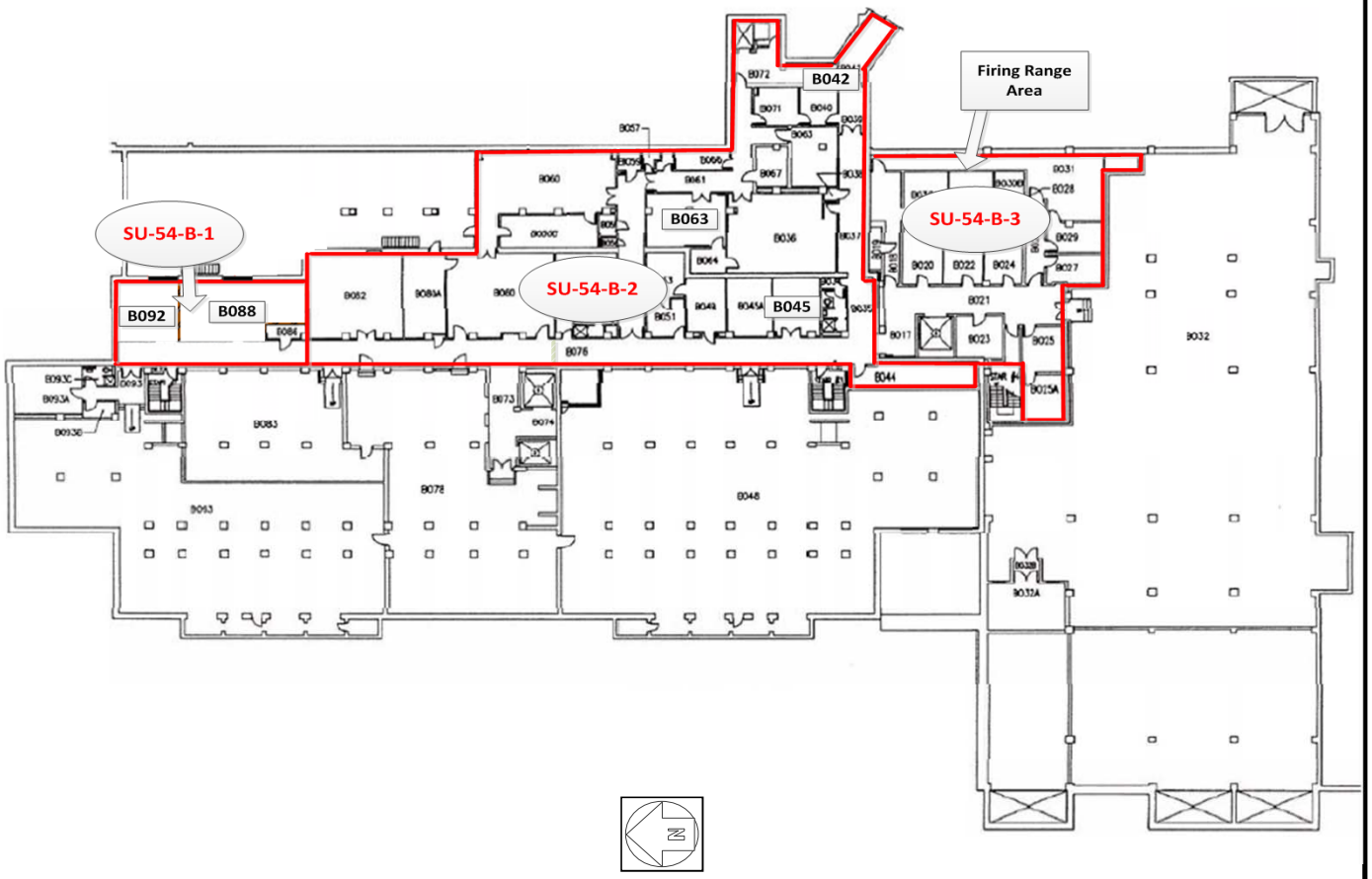
Building: Bunkers
Survey Unit: B-1-2
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Asphalt	2	0	1	-1	20
2	Asphalt	5	1	2	12	30
3	Asphalt	0	-1	1	-9	10
4	Asphalt	6	2	2	16	30
5	Asphalt	3	0	2	3	20
6	Asphalt	3	0	2	3	20
7	Asphalt	2	0	1	-1	20
8	Asphalt	1	-1	1	-5	20
9	Asphalt	0	-1	1	-9	10
10	Asphalt	1	-1	1	-5	20
11	Asphalt	1	-1	1	-5	20
12	Asphalt	3	0	2	3	20
13	Asphalt	1	-1	1	-5	20
QC3	Asphalt	4	1	2	8	30
				Maximum:	16	
				Average:	0	
				STDEV:	8	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Asphalt	
Detector:	43-68	PR-216834	Background:	1.1	cpm
Probe Area:	126	cm^2	Background σ:	0.9078	cpm
			Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2



SURVEY UNITS LEGEND

No Scale

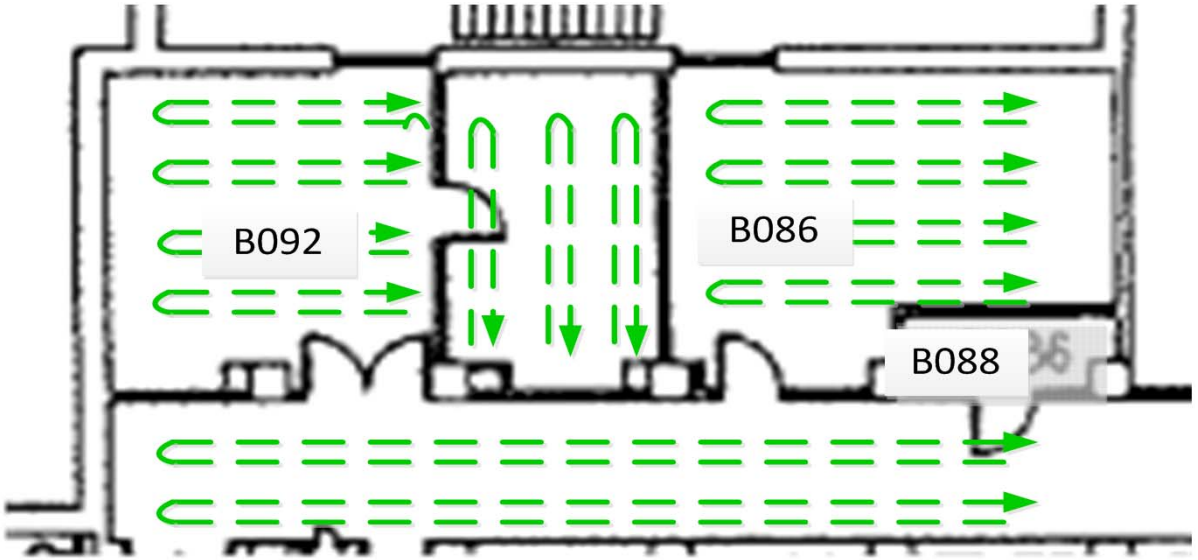
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

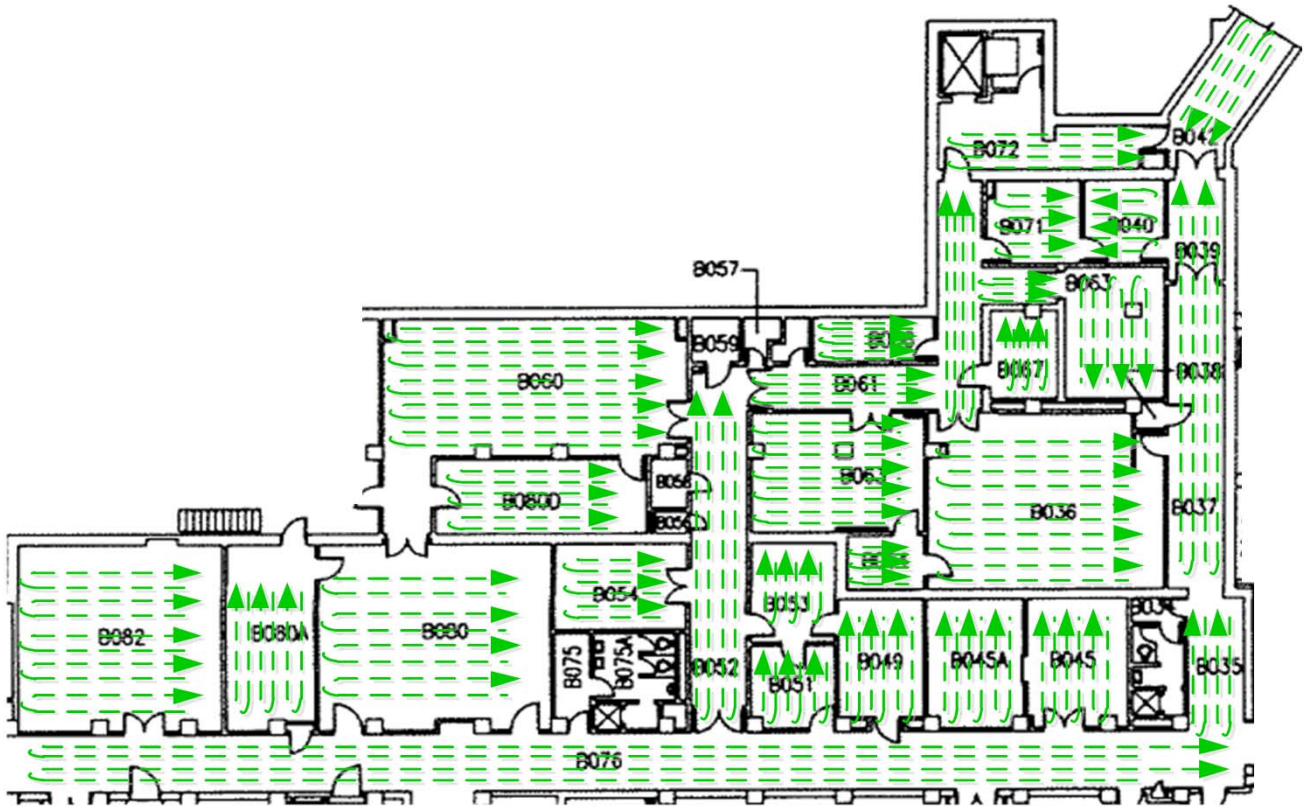
SU 54-B-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

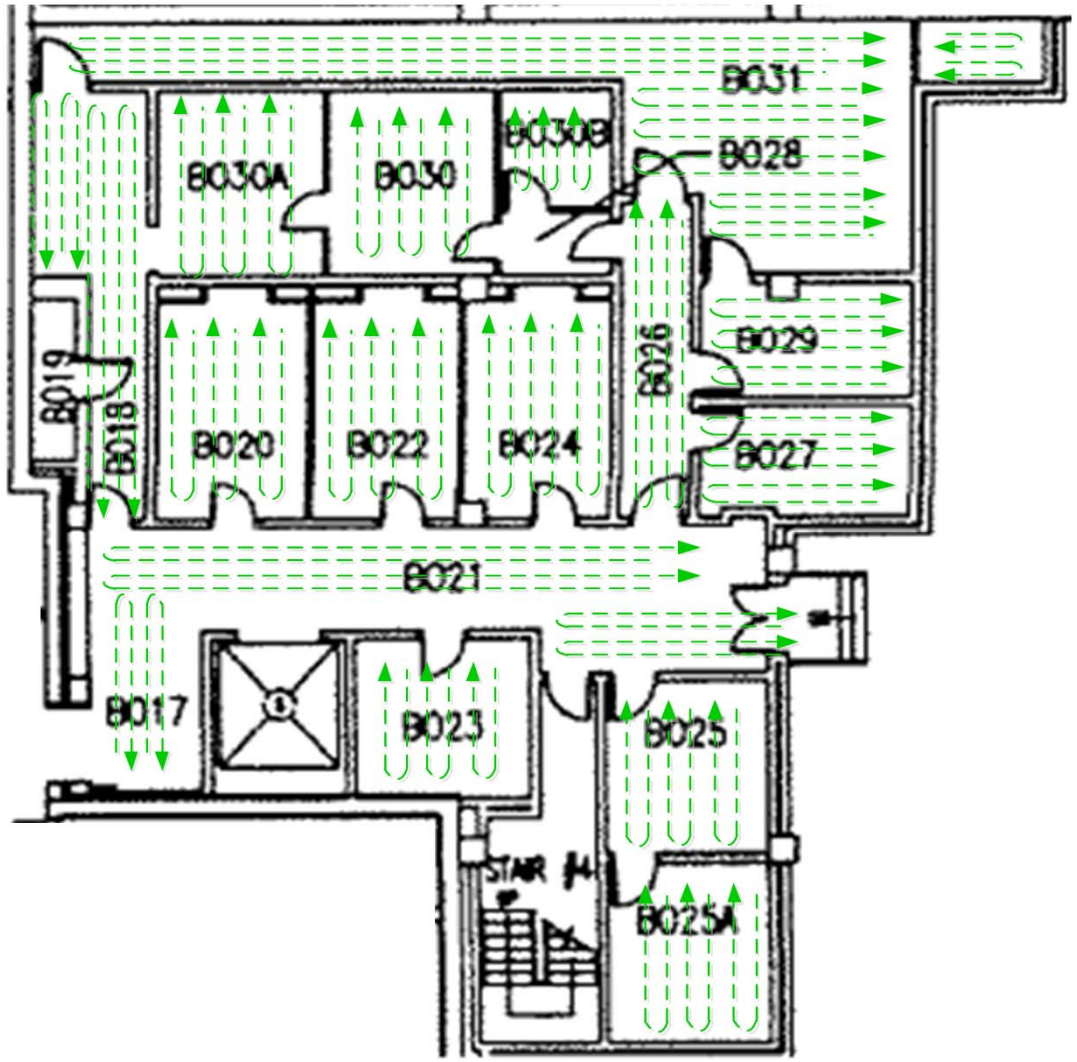
SU 54-B-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU 54-B-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 54 Basement Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU54-B-1	393	49	310	133	41	-245	528	4	122
SU54-B-2	1564	39	500	232	115	-274	1091	297	340
SU54-B-3	1213	33	251	131	35	-292	354	-3	105

Area Scanned (ft^2) 1,986

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 54 Basement Level

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU54-B-1	393	0	15	3.3	4.4	-5	21	1	8
SU54-B-2	1564	0	14	3.7	4.2	-5	20	1	7
SU54-B-3	1213	0	23	3.5	4.4	-5	36	1	8

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 3 cpm
Background σ: 7.32 cpm
Scan speed: 1 detector width / 2sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 720 dpm/100 cm^2

Summary of Scan Results - Beta

Location: Building 54 Level 2

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-54-2-2	956	6	101	37	15	-345	1226	166	254
SU-54-2-3	1225	6	342	52	23	-345	5211	418	377
SU-54-2-4 (2094)	897	6	169	56	27	-345	2350	475	451
Area Scanned (ft^2)	417								

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm^2

Reference Material: Counter
Background: 27 cpm
Background σ: 5.95 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.048 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 916 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 54 Level 2

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-54-2-2	956	0	20	1	2	-4	158	1	18
SU-54-2-3	1225	0	21	1	2	-4	166	1	18
SU-54-2-4 (2094)	897	0	12	0	2	-4	93	-1	14

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm2

Reference Material: Counter
Background: 1 cpm
Background σ: 0.8 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.098 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 705 dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 54

All measurements in µR/hour

Date: 11/16/2011

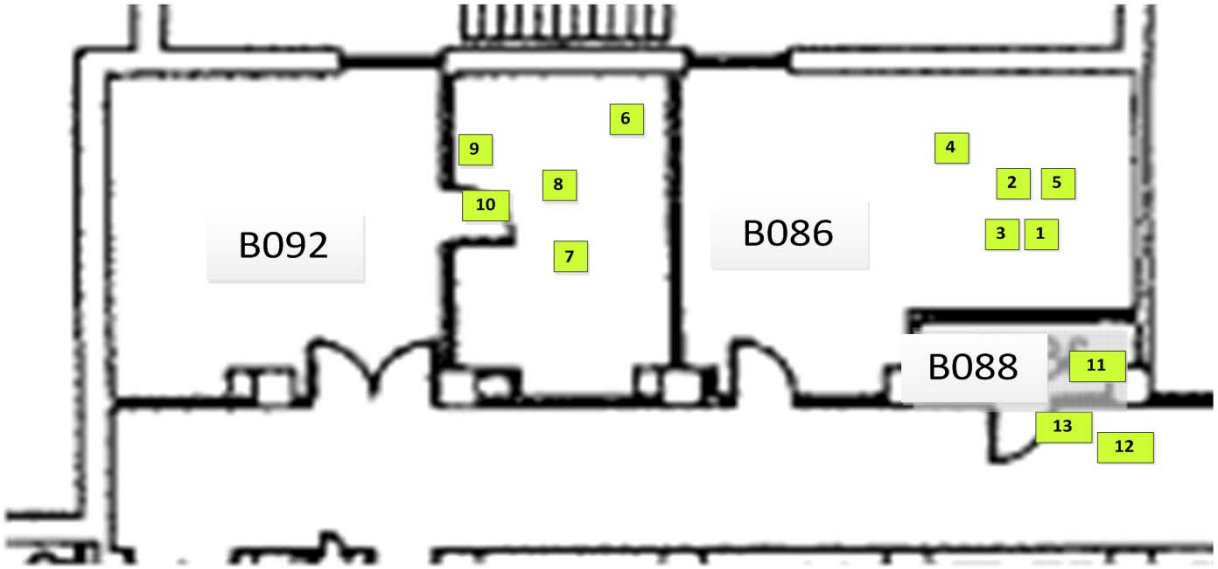
Location	54-B-1	54-B-2	54-B-3
1	5	5	10
2	7	10	9
3	10	10	8
4	11	5	8
5	8	10	8
6	10	5	5
7	9	6	8
8	6	6	8
9	11	11	7
10	9	5	5
11	7	6	7
12	10	5	7
13	5	11	8
14	9	6	5
15	5	9	11
16		5	5
17		11	5
18		9	7
19		11	8
20		10	11
21		6	10
22		5	8
23		9	6
24		7	11
25		11	10
26		8	9
27		11	9
28		5	6
29		10	
30		8	
31		7	
32		8	
33		5	
34		7	
35		11	
36		7	
37		11	
38		7	
39		8	
40		9	
41		10	
42		10	

43	6
44	8
45	11
46	8
47	8
48	6
49	8
50	10
51	7
52	5
53	6

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012

Room	X,Y Locations				
B088	3,2	6,3	3,4	8,5	6,2
B092	9,1	3,3	6,5	8,8	5,9
B086	2,1				
Hall	5,1	6,2			



SURVEY UNITS
LEGEND
Class 3
\# Measurement Number

No Scale

Survey Unit Identifier

SU-54-B-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-B-1
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Floor Tile	71	94	19	234	90
2	Floor Tile	69	90	19	224	90
3	Floor Tile	72	96	19	239	90
4	Drywall	38	-9	14	-23	70
5	Floor Tile	123	198	21	492	100
6	Floor Tile	108	168	21	418	100
7	Drywall	109	133	18	330	90
8	Concrete	227	355	25	881	120
9	Concrete	174	249	23	618	110
10	Concrete	169	239	22	593	110
11	Floor Tile	121	194	21	483	100
12	Floor Tile	351	654	30	1626	150
13	Green Ceramic Wall	323	347	29	861	140

Maximum: 1626
Average: 537
STDEV: 416

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Drywall	Green Ceramic	Concrete
Instrument:	2360	141321	Background (cpm):	48	85	299	99
Detector:	44-110	PR-258430	Background σ (cpm):	14.35	10.86	14.28	12.73
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min		

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-B-1
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Floor Tile	98	148	20	368	100
2	Concrete	127	155	20	384	100
				Maximum:	384	
				Average:	376	
				STDEV:	11	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Floor Tile	Concrete
Instrument:	2360	184935	Background (cpm):	48	99
Detector:	43-68	PR-181739	Background σ (cpm):	14.35	12.73
Probe Area:	126	cm^2	Sample Analysis Time (min) :	0.5	

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-B-1
Survey Date: 11/16/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Floor Tile	120	-17	8	-258	250
2	Floor Tile	117	-17	8	-270	250
3	Floor Tile	103	-21	8	-324	240
4	Drywall	187	-7	9	-113	280
5	Floor Tile	131	-14	8	-215	250
6	Floor Tile	119	-17	8	-262	250
7	Drywall	159	-14	9	-222	270
8	Concrete	124	-8	12	-119	380
9	Concrete	138	-4	13	-64	380
10	Concrete	199	11	13	173	400
11	Floor Tile	203	4	9	65	290
12	Floor Tile	201	4	9	57	280
13	Green Ceramic Wall	752	9	19	133	590
QC12	Floor Tile	158	-7	9	-110	270
				Maximum:	173	
				Average:	-109	
				STDEV:	168	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Floor Tile	Drywall	Green Ceramic	Concrete
Background (cpm):	47	54	179	39
Background σ (cpm):	6.05	6.86	13.66	11.07
Sample Analysis Time:	4	min		

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-B-1
Survey Date: 11/16/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Floor Tile	336	37	11	582	340
2	Concrete	223	17	13	266	410
				Maximum:	582	
				Average:	424	
				STDEV:	223	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Floor Tile	Concrete
Instrument:	2360	253237	Background (cpm):	47	38.64
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	11.07
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-B-1
Survey Date: 11/16/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Floor Tile	1	0	1	-3	20
2	Floor Tile	0	-1	1	-5	10
3	Floor Tile	3	0	1	1	20
4	Drywall	3	-1	2	-4	20
5	Floor Tile	0	-1	1	-5	10
6	Floor Tile	2	0	1	-1	20
7	Drywall	4	0	2	-2	30
8	Concrete	3	0	1	-1	20
9	Concrete	6	1	2	6	30
10	Concrete	2	0	1	-3	20
11	Floor Tile	1	0	1	-3	20
12	Floor Tile	2	0	1	-1	20
13	Green Ceramic Wall	22	-5	4	-39	60
QC12	Floor Tile	3	0	1	1	20

Maximum: 6
Average: -4
STDEV: 11

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Drywall	Green Ceramic	Concrete
Instrument:	2360	253237	Background (cpm):	1	1	10	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.27	2.89	1.17
Probe Area:	126	cm^2	Sample Analysis Time:	4	min		

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-B-1
Survey Date: 11/16/2011

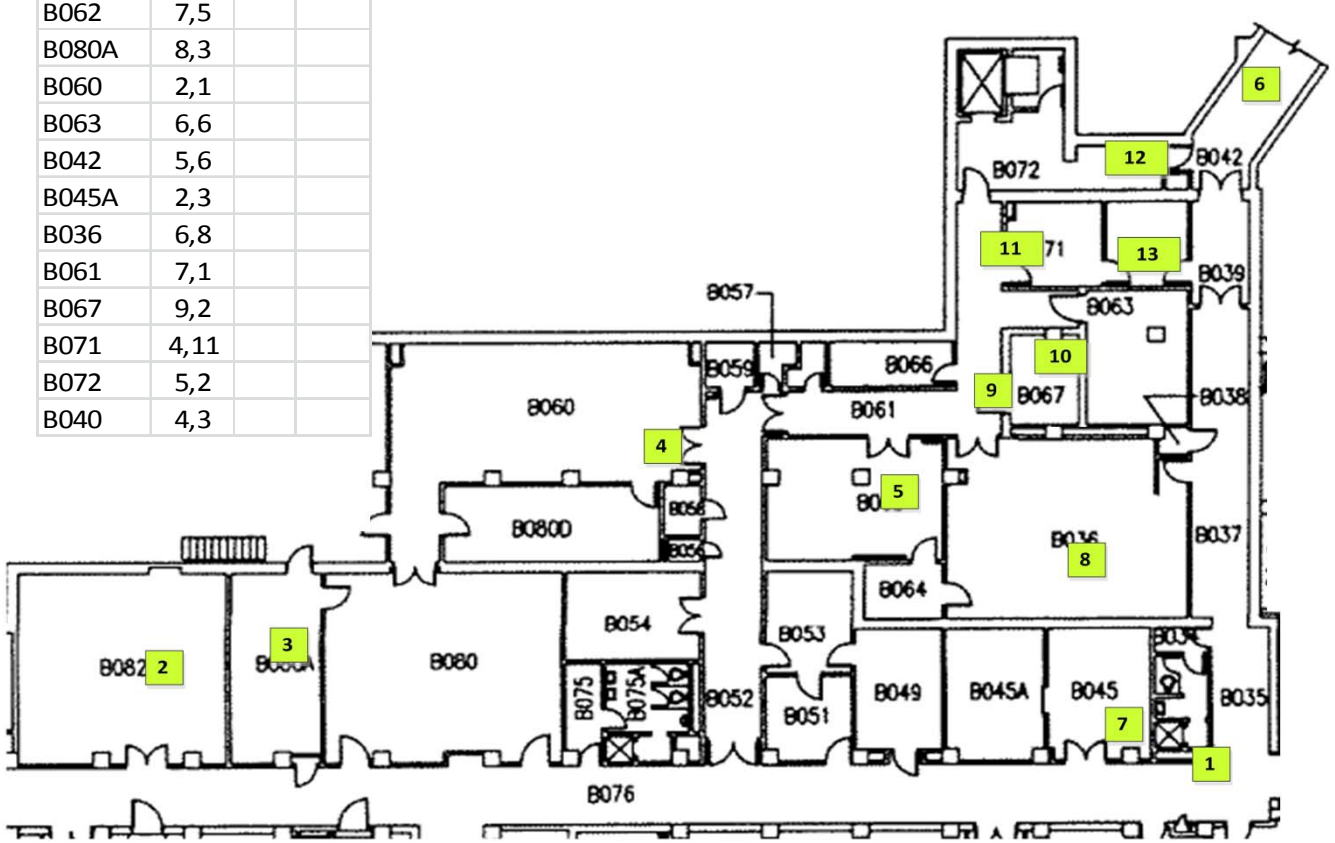
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Floor Tile	90	22	5	181	80
2	Concrete	4	0	2	1	20
				Maximum:	181	
				Average:	91	
				STDEV:	127	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Floor Tile	Concrete
Instrument:	2360	253237	Background (cpm):	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.17
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Room	X,Y Locations		
Hall	10,2		
B062	7,5		
B080A	8,3		
B060	2,1		
B063	6,6		
B042	5,6		
B045A	2,3		
B036	6,8		
B061	7,1		
B067	9,2		
B071	4,11		
B072	5,2		
B040	4,3		



SURVEY UNITS LEGEND

Class 3

\# Measurement Number

No Scale

Survey Unit Identifier

SU-54-B-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-B-2
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Floor Tile	122	196	21	488	100
2	Red Ceramic Floor	193	181	25	450	120
3	Floor Tile	63	78	18	195	90
4	Floor Tile	63	78	18	195	90
5	Red Ceramic Floor	199	193	25	479	120
6	Red Ceramic Floor	179	153	24	380	120
7	Concrete	93	87	19	215	90
8	Green Ceramic Tile	140	-19	22	-48	110
9	Red Ceramic Floor	218	231	26	574	130
10	Red Ceramic Floor	213	221	26	549	130
11	Floor Tile	75	102	19	254	90
12	Green Ceramic Tile	276	253	27	629	130
13	Drywall	140	195	20	485	100
				Maximum:	629	
				Average:	373	
				STDEV:	196	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Green Ceramic	Drywall	Red Ceramic
Instrument:	2360	141321	Background (cpm):	48	99	299	85	205
Detector:	44-110	PR-258430	Background σ (cpm):	14.35	12.73	14.28	10.86	15.55
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min			

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-B-2
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Peg Board Ceiling		-48	14	-119	70
2	Stainless Steel Sink	65	67	14	167	70
3	Peg Board Ceiling		-48	14	-119	70
4	Stainless Steel Under Sink	56	49	14	122	70
5	Drywall Ceiling	57	66	18	165	90
6	Floor Tile	40	32	17	80	80
7	Red Ceramic Tile	199	193	25	479	120
8	Stainless Steel Sink	62	61	14	152	70
9	Drywall Ceiling	90	95	17	236	80
10	Floor Tile	64	80	18	200	90
11	Red Ceramic Tile	196	187	25	465	120
12	Stainless Steel Sink	70	77	15	191	70
13	Water Stained Concrete	179	259	23	643	110
14	Stainless Steel Sink	91	119	16	296	80
15	Red Ceramic Tile	241	277	27	688	130
16	Red Ceramic Tile	204	203	25	504	120
17	Matte Black Hood	52	27	14	67	70
18	Stainless Steel Hood	97	131	16	326	80
19	Chemical Stained Stainless Steel Sink	82	101	15	251	80
20	Rusted Under Sink	78	93	15	231	70
21	Painted Hood	62	61	14	152	70
22	Black Lab Sink	62	47	15	116	70
23	Floor Tile	87	126	19	314	100
24	Stainless Steel Sink	75	87	15	216	70
25	Mirror	93	123	16	306	80
26	Stainless Steel Sink	68	73	14	181	70
27	Stainless Steel Hood	68	73	14	181	70
28	Stainless Steel Under Sink	94	125	16	311	80
29	Stainless Steel Sink	80	97	15	241	70
30	Stainless Steel Hood	67	71	14	177	70
31	Stainless Steel Under Sink	91	119	16	296	80
32	Stainless Steel Sink	70	77	15	191	70
33	Stainless Steel Hood	79	95	15	236	70
34	Stainless Steel Sink	101	139	17	346	80
35	Stainless Steel Hood	91	119	16	296	80
36	Autopsy Drain (Stainless)	51	39	13	97	60
37	Black Lab Sink	116	155	18	385	90
38	Rusted Under Sink	118	173	18	430	90
39	Stainless Steel Under Sink	89	115	16	286	80
40	Concrete	94	89	19	220	90
				Maximum:	688	
				Average:	241	
				STDEV:	173	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Metal	Composite	Concrete	Drywall	Red Ceramic
Instrument:	2360	184935	Background (cpm):	48	63	77	99	85	205.27
Detector:	43-68	PR-181739	Background σ (cpm):	14.35	8.52	10.11	12.73	10.86	15.55
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min				

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-B-2
Survey Date: 11/16/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Floor Tile	107	-20	8	-309	240
2	Red Ceramic Floor	342	-20	12	-306	380
3	Floor Tile	169	-4	9	-68	270
4	Floor Tile	183	-1	9	-13	280
5	Red Ceramic Floor	387	-8	13	-131	390
6	Red Ceramic Floor	348	-18	12	-283	380
7	Concrete	236	20	13	317	410
8	Green Ceramic Tile	308	-102	16	-1594	500
9	Red Ceramic Floor	493	18	14	281	420
10	Red Ceramic Floor	453	8	13	126	410
11	Floor Tile	214	7	9	108	290
12	Green Ceramic Tile	720	1	19	9	580
13	Drywall	375	40	12	619	360
QC11	Floor Tile	158	-7	9	-110	270

Maximum: 619
Average: -96
STDEV: 525

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Floor Tile	Concrete	Green Ceramic	Drywall	Red Ceramic
Background (cpm):	47	39	179	54	105
Background σ (cpm):	6.05	11.07	13.66	6.86	8.3
Sample Analysis Time:	4	min			

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-B-2
Survey Date: 11/16/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Peg Board Ceiling	236	32	10	500	300
2	Stainless Steel Sink	306	42	10	658	300
3	Peg Board Ceiling	148	10	9	158	260
4	Stainless Steel Under Sink	145	2	7	31	220
5	Drywall Ceiling	244	7	10	109	320
6	Floor Tile	105	-20	8	-317	240
7	Red Ceramic Tile	118	-76	10	-1178	310
8	Stainless Steel Sink	151	4	7	55	230
9	Drywall Ceiling	420	51	12	794	380
10	Floor Tile	203	4	9	65	290
11	Red Ceramic Tile	141	-70	10	-1088	310
12	Stainless Steel Sink	147	3	7	39	230
13	Water Stained Concrete	364	52	15	815	450
14	Stainless Steel Sink	179	11	8	164	240
15	Red Ceramic Tile	452	8	13	122	410
16	Red Ceramic Tile	359	-15	13	-240	380
17	Matte Black Hood	197	22	9	348	280
18	Stainless Steel Hood	244	27	9	417	270
19	Chemical Stained Stainless Steel Sink	167	8	8	117	240
20	Rusted Under Sink	179	11	8	164	240
21	Painted Hood	197	15	8	234	250
22	Black Lab Sink	97	-3	8	-41	240
23	Floor Tile	171	-4	9	-60	270
24	Stainless Steel Sink	204	17	8	261	250
25	Mirror	246	27	9	424	270
26	Stainless Steel Sink	168	8	8	121	240
27	Stainless Steel Hood	199	16	8	242	250
28	Stainless Steel Under Sink	200	16	8	245	250
29	Stainless Steel Sink	172	9	8	136	240
30	Stainless Steel Hood	207	18	8	273	250
31	Stainless Steel Under Sink	207	18	8	273	250
32	Stainless Steel Sink	191	14	8	210	250
33	Stainless Steel Hood	209	18	8	280	260
34	Stainless Steel Sink	191	14	8	210	250
35	Stainless Steel Hood	226	22	9	347	260
36	Autopsy Drain (Stainless)	223	22	9	335	260
37	Black Lab Sink	213	26	9	411	290
38	Rusted Under Sink	237	25	9	389	270
39	Stainless Steel Under Sink	212	19	8	292	260
40	Concrete	132	-6	12	-88	380
				Maximum:	815	
				Average:	145	
				STDEV:	392	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Metal	Composite	Concrete	Drywall	Red Ceramic
Instrument:	2360	253237	Background (cpm):	47	34	27	39	54	105
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	4.21	5.95	11.07	6.86	8.3
Probe Area:	126	cm^2	Sample Analysis Time:	4	min				

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-B-2
Survey Date: 11/16/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Floor Tile	3	0	1	1	20
2	Red Ceramic Floor	10	2	2	14	30
3	Floor Tile	10	2	2	16	30
4	Floor Tile	8	1	2	12	30
5	Red Ceramic Floor	9	1	2	12	30
6	Red Ceramic Floor	11	2	2	16	30
7	Concrete	11	2	2	16	30
8	Green Ceramic Tile	10	-8	3	-63	50
9	Red Ceramic Floor	10	2	2	14	30
10	Red Ceramic Floor	7	1	2	8	30
11	Floor Tile	8	1	2	12	30
12	Green Ceramic Tile	18	-6	4	-47	60
13	Drywall	5	0	2	0	30
QC11	Floor Tile	3	0	1	1	20
				Maximum:	16	
				Average:	1	
				STDEV:	26	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Green Ceramic	Drywall	Red Ceramic
Instrument:	2360	253237	Background (cpm):	1	1	10	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.17	2.89	1.27	0.87
Probe Area:	126	cm^2	Sample Analysis Time:	4	min			

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-B-2
Survey Date: 11/16/2011

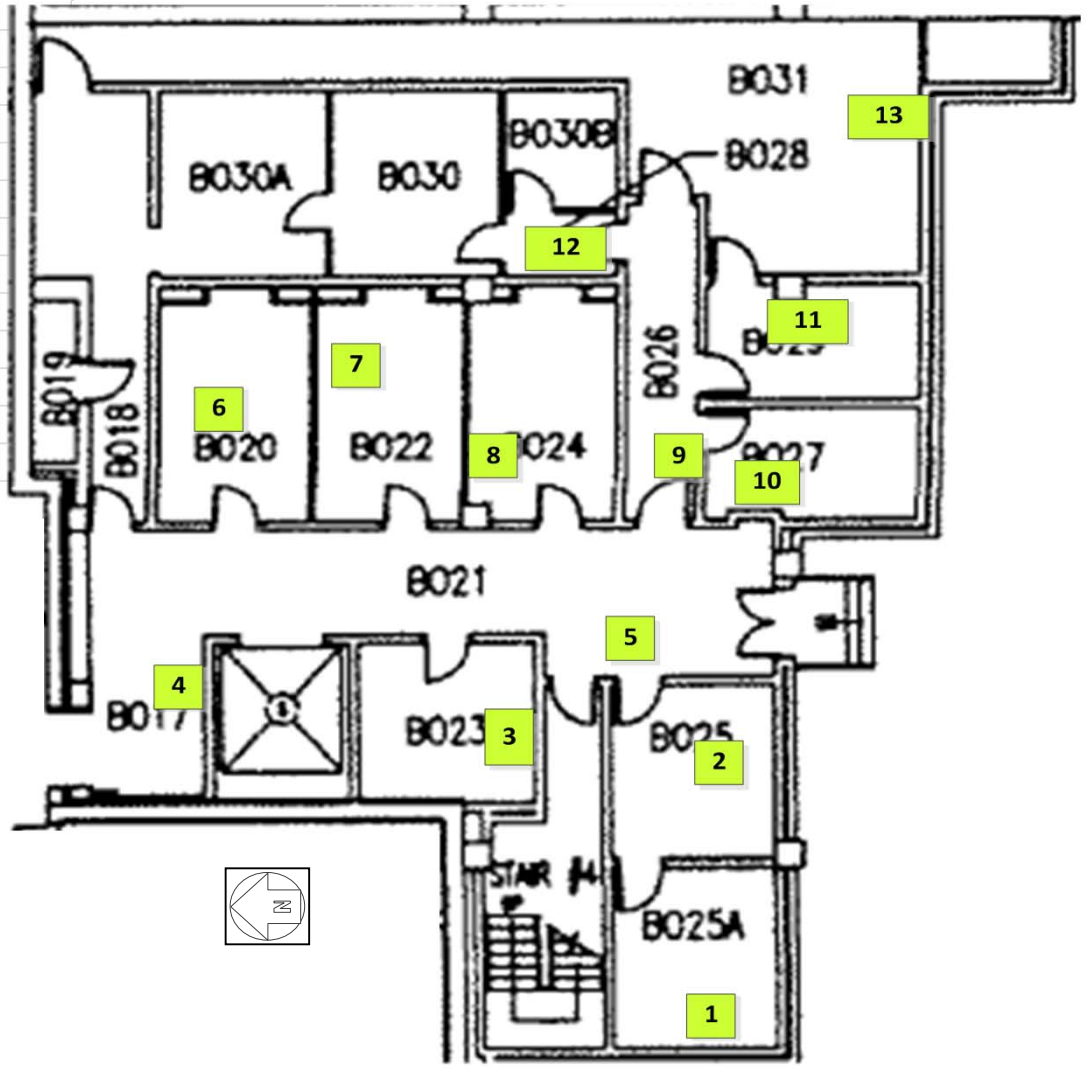
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Peg Board Ceiling	23	5	3	43	40
2	Stainless Steel Sink	52	12	4	102	60
3	Peg Board Ceiling	3	0	1	2	20
4	Stainless Steel Under Sink	4	0	1	3	20
5	Drywall Ceiling	53	12	4	99	60
6	Floor Tile	5	1	1	5	20
7	Red Ceramic Tile	4	0	1	1	20
8	Stainless Steel Sink	4	0	1	3	20
9	Drywall Ceiling	71	16	4	136	70
10	Floor Tile	17	4	2	30	40
11	Red Ceramic Tile	7	1	2	8	30
12	Stainless Steel Sink	7	1	2	9	20
13	Water Stained Concrete	9	1	2	12	30
14	Stainless Steel Sink	7	1	2	9	20
15	Red Ceramic Tile	31	7	3	57	50
16	Red Ceramic Tile	7	1	2	8	30
17	Matte Black Hood	16	3	2	29	30
18	Stainless Steel Hood	16	3	2	28	30
19	Chemical Stained Stainless Steel Sink	7	1	2	9	20
20	Rusted Under Sink	7	1	2	9	20
21	Painted Hood	7	1	2	9	20
22	Black Lab Sink	4	0	1	4	20
23	Floor Tile	6	1	2	8	20
24	Stainless Steel Sink	7	1	2	9	20
25	Mirror	23	5	3	42	40
26	Stainless Steel Sink	6	1	1	7	20
27	Stainless Steel Hood	12	2	2	20	30
28	Stainless Steel Under Sink	5	1	1	5	20
29	Stainless Steel Sink	2	0	1	-1	20
30	Stainless Steel Hood	11	2	2	17	30
31	Stainless Steel Under Sink	4	0	1	3	20
32	Stainless Steel Sink	3	0	1	1	20
33	Stainless Steel Hood	13	3	2	22	30
34	Stainless Steel Sink	5	1	1	5	20
35	Stainless Steel Hood	14	3	2	24	30
36	Autopsy Drain (Stainless)	22	5	2	40	40
37	Black Lab Sink	5	1	1	6	20
38	Rusted Under Sink	9	2	2	13	30
39	Stainless Steel Under Sink	9	2	2	13	30
40	Concrete	3	0	1	-1	20
				Maximum:	136	
				Average:	22	
				STDEV:	31	

Instrument Data and Analysis Parameters

	Model	Serial No				Metal	Composite	Concrete	Drywall	Red Ceramic
Instrument:	2360	253237	Reference Material:	Floor Tile						
Detector:	43-68	PR-216834	Background (cpm):	1	cpm	1	1	1	1	1
Probe Area:	126	cm^2	Background σ (cpm):	0.91	cpm	0.73	0.8	1.17	1.27	0.87
			Sample Analysis Time:	4	min					

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Room	X,Y Locations
B025A	2,5
B025	8,4
B023	5,1
B017	6,2
B021	1,9
B020	8,6
B022	9,8
B024	3,10
B026	5,1
B027	4,10
B029	7,9
B028	3,5
B031	1,1



SURVEY UNITS
LEGEND

Class 3

[#] Measurement Number

No Scale

Survey Unit Identifier

SU-54-B-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Class 3

Building 54 Basement

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-B-3
Survey Date: 12/7/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Floor Tile	69	90	19	224	90
2	Floor Tile	71	94	19	234	90
3	Floor Tile	56	64	18	160	90
4	Concrete	85	71	18	175	90
5	Concrete	105	111	19	275	90
6	Floor Tile	63	78	18	195	90
7	Floor Tile	72	96	19	239	90
8	Floor Tile	87	126	19	314	100
9	Floor Tile	73	98	19	244	90
10	Floor Tile	65	82	18	205	90
11	Drywall	94	103	17	256	90
12	Wooden Wall	40	3	13	7	70
13	Metal Wall	49	35	13	87	60

Maximum: 314
Average: 201
STDEV: 81

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall	Metal	Wood
Instrument:	2360	141321	Background (cpm):	48	99	85	63	77
Detector:	44-110	PR-258430	Background σ (cpm):	14.35	12.73	10.86	8.52	10.11
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min			

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-B-3
Survey Date: 12/7/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drywall	70	55	16	136	80
2	Stainless Hood Drain	69	75	15	186	70
3	Black Sink	63	49	15	121	70
4	Tan Rusted Paint Under Sink	52	41	13	102	60
5	Hood	69	61	15	151	80
6	Floor Tile	34	20	17	50	80
7	Black Sink	65	53	15	131	70
8	Tan Paint Under Sink	58	53	14	132	70
9	Drywall	80	75	17	186	80
10	Black Sink	70	63	16	156	80
11	Tan Paint Under Sink	54	45	13	112	70
12	Hood	77	77	16	191	80
13	Stainless Hood Drain	56	49	14	122	70
14	Drywall	92	99	17	246	80
15	Dishwasher	88	113	16	281	80
				Maximum:	281	
				Average:	154	
				STDEV:	58	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Metal	Composite	Drywall
Instrument:	2360	184935	Background (cpm):	48	63	77	85
Detector:	43-68	PR-181739	Background σ (cpm):	14.35	8.52	10.11	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min		

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-B-3
Survey Date: 11/17/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Floor Tile	143	-11	9	-169	270
2	Floor Tile	98	-22	8	-344	250
3	Floor Tile	147	-10	9	-153	270
4	Concrete	127	-7	12	-107	380
5	Concrete	126	-7	12	-111	380
6	Floor Tile	89	-24	8	-379	250
7	Floor Tile	109	-19	8	-301	260
8	Floor Tile	147	-10	9	-153	270
9	Floor Tile	169	-4	9	-68	280
10	Floor Tile	133	-13	9	-208	270
11	Drywall	172	-11	9	-171	290
12	Wooden Wall	78	-7	7	-115	230
13	Metal Wall	100	-9	7	-144	200
QC3	Floor Tile	141	-11	9	-176	270
QC4	Concrete	145	-2	13	-37	380
				Maximum:	-37	
				Average:	-186	
				STDEV:	96	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall	Metal	Wood
Instrument:	2360	253237	Background (cpm):	47	39	54	34	27
Detector:	43-68	PR-216834	Background σ (cpm):	6.66	11.07	6.86	4.21	5.95
Probe Area:	126	cm^2	Sample Analysis Time:	4	min			

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-B-3
Survey Date: 11/17/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drywall	165	-13	9	-198	290
2	Stainless Hood Drain	148	3	7	43	230
3	Black Sink	118	3	8	41	250
4	Tan Rusted Paint Under Sink	97	-10	6	-155	200
5	Hood	162	14	9	212	270
6	Floor Tile	88	-25	8	-383	230
7	Black Sink	95	-3	8	-48	230
8	Tan Paint Under Sink	94	-11	6	-167	200
9	Drywall	175	-10	10	-160	290
10	Black Sink	85.0	-6	8	-87	230
11	Tan Paint Under Sink	113	-6	7	-93	210
12	Hood	114	2	8	26	240
13	Stainless Hood Drain	132	-1	7	-19	220
14	Drywall	206	-3	10	-39	300
15	Dishwasher	150	3	7	51	230
				Maximum:	212	
				Average:	-65	
				STDEV:	139	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Metal	Composite	Drywall
Instrument:	2360	253237	Background (cpm):	47	34.23	26.86	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	4.21	5.95	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min		

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-B-3
Survey Date: 11/17/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Floor Tile	4	0	1	3	20
2	Floor Tile	2	0	1	-1	20
3	Floor Tile	2	0	1	-1	20
4	Concrete	3	0	1	-1	20
5	Concrete	1	-1	1	-5	20
6	Floor Tile	2	0	1	-1	20
7	Floor Tile	2	0	1	-1	20
8	Floor Tile	4	0	1	3	20
9	Floor Tile	8	1	2	12	30
10	Floor Tile	1	0	1	-3	20
11	Drywall	3	-1	2	-4	20
12	Wooden Wall	3	0	1	2	20
13	Metal Wall	3	0	1	1	20
QC3	Floor Tile	3	0	1	1	20
QC4	Concrete	2	0	1	-3	20
				Maximum:	12	
				Average:	0	
				STDEV:	4	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall	Metal	Wood
Instrument:	2360	253237	Background (cpm):	1	1	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.17	1.27	0.73	0.8
Probe Area:	126	cm^2	Sample Analysis Time:	4	min			

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

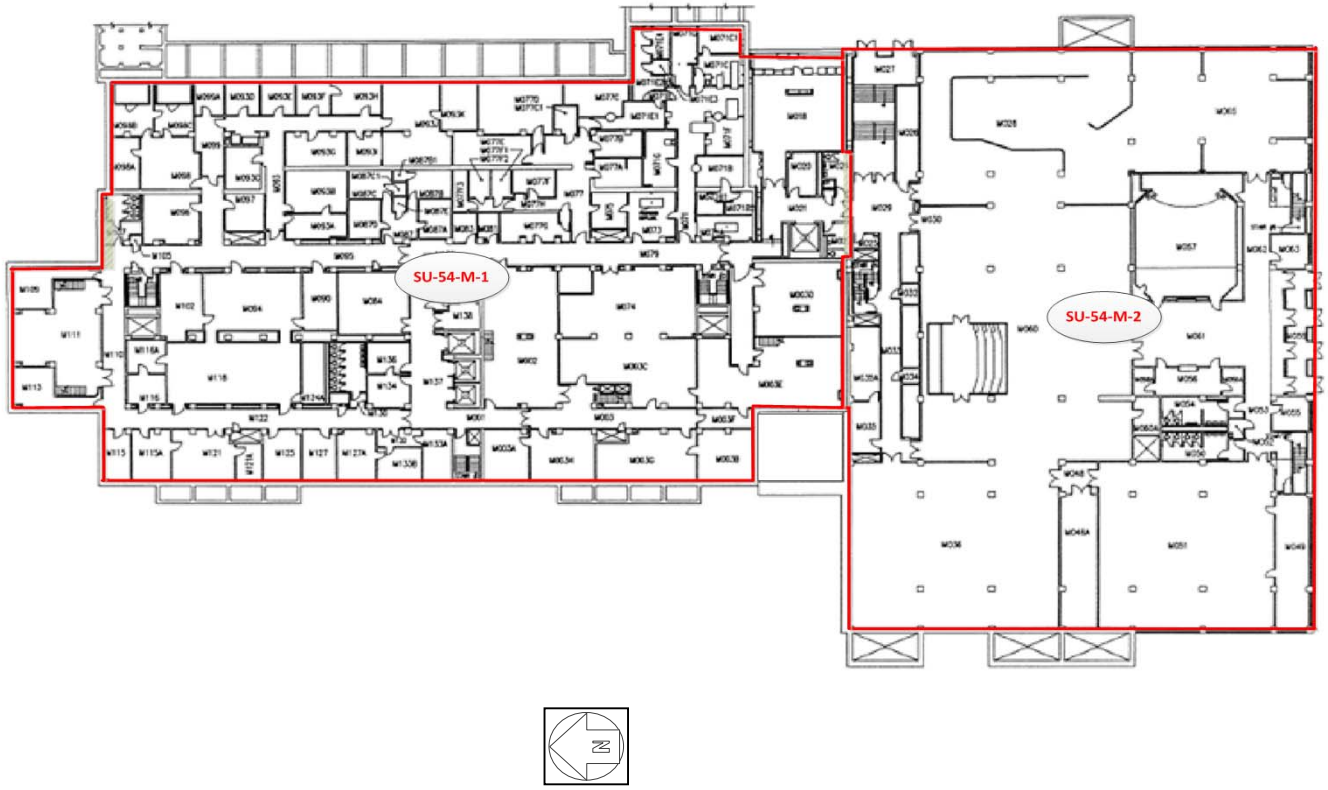
Building: 54
Survey Unit: 54-B-3
Survey Date: 11/17/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	15	2	2	21	40
2	Stainless Hood Drain	3	0	1	1	20
3	Black Sink	2	0	1	0	20
4	Tan Rusted Paint Under Sink	4	0	1	3	20
5	Hood	2	0	1	0	20
6	Floor Tile	4	0	1	3	20
7	Black Sink	1	0	1	-2	20
8	Tan Paint Under Sink	2	0	1	-1	20
9	Drywall	11	1	2	12	30
10	Black Sink	4	0	1	4	20
11	Tan Paint Under Sink	4	0	1	3	20
12	Hood	0	-1	1	-5	10
13	Stainless Hood Drain	2	0	1	-1	20
14	Drywall	18	3	2	27	40
15	Dishwasher	2	0	1	-1	20
				Maximum:	27	
				Average:	5	
				STDEV:	9	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Metal	Composite	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	0.73	0.8	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min		

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2



SURVEY UNITS
LEGEND

Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Museum Level

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin

SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU 54-M-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Museum Level

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU 54-M-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Museum Level

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 54 Museum Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU54-M-1	1698	75	273	134	37	-168	419	6	110
SU54-M-2 Tile	1127	52	262	138	35	-236	386	20	103
SU54-M-2 Ceramic	685	151	655	448	67	-754	739	125	199
SU54-M-2 Carpet	2385.0	24	243	98	29	-255	393	-35	86
Area Scanned (ft^2)	3,693								

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Ceramic Floor	Carpet	
Instrument:	2360	253258	Background:	132	405	110	cpm
Detector:	43-37	265544	Background σ:	32.2	64.2	30.9	cpm
Probe Area:	582	cm^2					
			Total Efficiency:	0.058	cpm/dpm		
			Total Efficiency Uncertainty:	0.001	cpm/dpm		
			MDC_{scan} (dpm/100 cm^2):	363	638	332	
			Scan speed:	1 detector width / 2 sec			
			Observation interval:	1 recorded measurement / 2 sec			

Summary of Scan Results - Alpha

Location: Building 54 Museum Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU54-M-1	1698	0	31	2.5	4.1	-5	50	-1	7
SU54-M-2 Tile	1127	0	26	2.5	4.4	-5	41	-1	8
SU54-M-2 Ceramic	685	0	22	3.4	4.7	-5	34	1	8
SU54-M-2 Carpet	2385	0	30	2.9	4.5	-5	48	0	8

Instrument Data and Analysis Parameters

	Model	Serial No					
Instrument:	2360	253258	Reference Material:	Tile Floor	Ceramic Floor	Carpet	
Detector:	43-37	265544	Background:	3	3	3	cpm
Probe Area:	582	cm^2	Background σ:	7.32	8.01	6.38	cpm
			Scan speed:	1 detector width / 8sec			
			Observation interval:	1 recorded measurement / 2 sec			

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	720	dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 54
All measurements in µR/hour
Date: 11/17/2011

Location	54-M-1	54-M-2
1	6	7
2	5	6
3	9	8
4	5	6
5	8	6
6	9	9
7	6	9
8	8	9
9	6	5
10	8	8
11	5	6
12	9	6
13	9	7
14	9	8
15	5	6
16	7	
17	7	
18	7	
19	6	
20	5	
21	6	
22	9	
23	9	
24	5	
25	5	
26	7	
27	5	
28	6	

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-M-1
Survey Date: 12/7/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	90	81	18	200	90
2	Concrete	117	135	20	335	100
3	Drywall	65	45	16	112	80
4	Floor Tile	48	48	17	120	80
5	Floor Tile	74	100	19	249	90
6	Floor Tile	66	84	18	209	90
7	Floor Tile	48	48	17	120	80
8	Floor Tile	69	90	19	224	90
9	Linoleum	36	-27	15	-68	70
10	Floor Tile	56	64	18	160	90
11	Floor Tile	68	88	18	219	90
12	Drywall	72	59	16	146	80
13	Plaster Wall	89	93	17	231	80

Maximum: 335
Average: 174
STDEV: 96

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete/ Linoleum	Drywall
Instrument:	2360	141321	Background (cpm):	48	99	85
Detector:	44-110	PR-258430	Background σ (cpm):	14.35	12.73	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-M-1
Survey Date: 12/7/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drywall	67	49	16	121	80
2	Drywall	59	33	15	82	70
3	Plaster Wall	66	47	16	116	80
4	Plaster Wall	63	41	16	102	80
5	Plaster Wall	83	81	17	201	80
6	Drop Ceiling	83	81	17	201	80
7	Plaster Wall	62	39	16	97	80
8	Plaster Wall	72	59	16	146	80
9	Linoleum	85	71	18	175	90
10	Plaster Wall	72	59	16	146	80
11	Drop Ceiling	92	99	17	246	80
12	Drop Ceiling	375	665	29	1654	140
13	Black Sink	78	79	16	196	80
14	Gray Paint Under Sink	94	125	16	311	80
15	Composite Lab Table	89	101	17	251	80
16	Drop Ceiling	90	95	17	236	80
				Maximum:	1654	
				Average:	270	
				STDEV:	388	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Drywall	Linoleum	Composite	Metal
Instrument:	2360	184935	Background (cpm):	85	99	77	63
Detector:	43-68	PR-181739	Background σ (cpm):	10.86	12.73	10.11	8.52
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min		

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-M-1
Survey Date: 11/17/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	186	8	13	122	400
2	Concrete	166	3	13	45	390
3	Drywall	182	-9	10	-132	290
4	Floor Tile	126	-15	8	-235	250
5	Floor Tile	171	-4	9	-60	270
6	Floor Tile	138	-12	8	-188	260
7	Floor Tile	109	-19	8	-301	240
8	Floor Tile	117	-17	8	-270	250
9	Linoleum	76	-20	12	-306	360
10	Floor Tile	114	-18	8	-282	250
11	Floor Tile	99	-22	8	-340	240
12	Drywall	112	-26	9	-405	260
13	Plaster Wall	164	-13	9	-202	290
QC1	Concrete	170	4	13	60	390
QC6	Floor Tile	107	-20	8	-309	240
QC10	Floor Tile	87	-25	8	-387	230
				Maximum:	122	
				Average:	-196	
				STDEV:	154	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete/ Linoleum	Drywall
Instrument:	2360	253237	Background (cpm):	47	39	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	11.07	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-M-1
Survey Date: 11/17/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	166	-13	9	-195	290
2	Drywall	151	-16	9	-253	280
3	Plaster Wall	227	3	10	43	310
4	Plaster Wall	168	-12	9	-187	290
5	Plaster Wall	169	-12	9	-183	290
6	Drop Ceiling	183	-8	10	-128	290
7	Plaster Wall	150	-17	9	-257	280
8	Plaster Wall	146	-18	9	-272	280
9	Linoleum	188	8	13	130	400
10	Plaster Wall	165	-13	9	-198	290
11	Drop Ceiling	171	-11	9	-175	290
12	Drop Ceiling	321	26	11	408	340
13	Black Sink	121	3	8	53	250
14	Gray Paint Under Sink	182	11	8	175	240
15	Drop Ceiling	164	-13	9	-202	290
				Maximum:	408	
				Average:	-83	
				STDEV:	199	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Drywall	Linoleum	Composite	Metal
Background (cpm):	54	39	27	34
Background σ (cpm):	6.86	11.07	5.95	4.21
Sample Analysis Time:	4	min		

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-M-1
Survey Date: 11/17/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	5	0	2	4	30
2	Concrete	6	1	2	6	30
3	Drywall	2	-1	1	-6	20
4	Floor Tile	3	0	1	1	20
5	Floor Tile	3	0	1	1	20
6	Floor Tile	0	-1	1	-5	10
7	Floor Tile	6	1	2	8	20
8	Floor Tile	5	1	1	5	20
9	Linoleum	2	0	1	-3	20
10	Floor Tile	2	0	1	-1	20
11	Floor Tile	0	-1	1	-5	10
12	Drywall	2	-1	1	-6	20
13	Plaster Wall	5	0	2	0	30
QC1	Concrete	8	1	2	10	30
QC6	Floor Tile	3	0	1	1	20
QC10	Floor Tile	0	-1	1	-5	10
				Maximum:	10	
				Average:	0	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete/ Linoleum	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.17	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-M-1
Survey Date: 11/17/2011

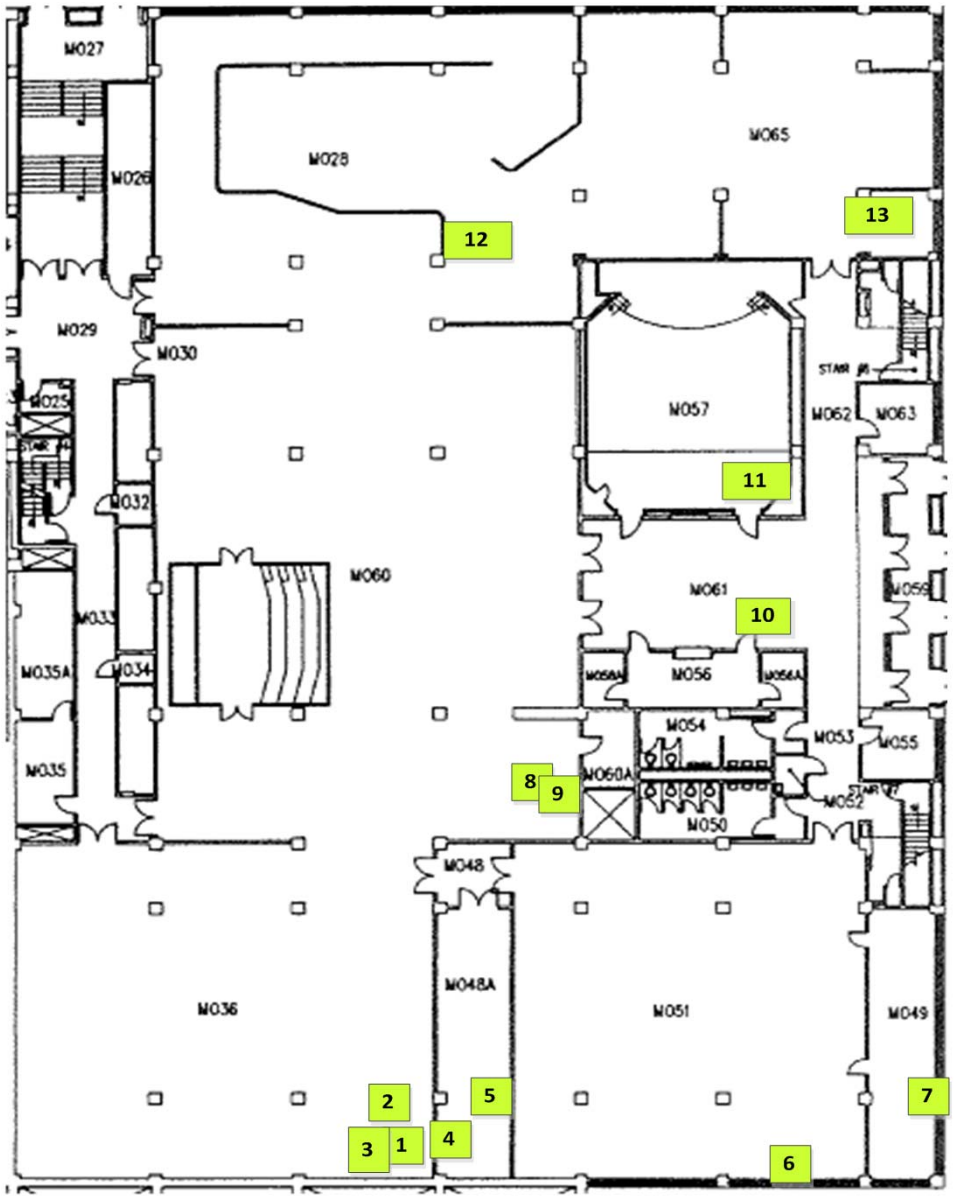
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	23	4	3	37	40
2	Drywall	6	0	2	2	30
3	Plaster Wall	18	3	2	27	40
4	Plaster Wall	7	0	2	4	30
5	Plaster Wall	13	2	2	16	40
6	Drop Ceiling	17	3	2	25	40
7	Plaster Wall	4	0	2	-2	30
8	Plaster Wall	13	2	2	16	40
9	Linoleum	9	1	2	12	30
10	Plaster Wall	10	1	2	10	30
11	Drop Ceiling	18	3	2	27	40
12	Drop Ceiling	12	2	2	14	30
13	Black Sink	5	1	1	6	20
14	Gray Paint Under Sink	1	0	1	-3	10
15	Drop Ceiling	8	1	2	6	30
				Maximum:	37	
				Average:	14	
				STDEV:	12	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Drywall	Linoleum	Composite	Metal
Instrument:	2360	253237	Background (cpm):	1	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	1.27	1.17	0.8	0.73
Probe Area:	126	cm^2	Sample Analysis Time:	4	min		

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Room	X,Y		
M036	3,4	7,5	2,2
M048A	1,7	6,3	
M051	1,5		
M049	8,1		
M060	9,3	7,2	
M061	3,5		
M057	4,4		
M028	7,7		
M065	7,5		



SURVEY UNITS LEGEND

Class 3

\# Measurement Number

No Scale

Survey Unit Identifier

SU-54-M-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Museum Level

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-M-2
Survey Date: 12/7/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	White Tile	60	72	18	180	90
2	White Tile	62	76	18	190	90
3	White Tile	71	94	19	234	90
4	White Tile	49	50	17	125	90
5	Black Tile	60	72	18	180	90
6	Black Tile	74	100	19	249	90
7	White Tile	71	94	19	234	90
8	Wood Floor	82	87	16	216	80
9	Wood Floor	57	37	15	92	70
10	Marble Floor	77	106	19	264	90
11	Plaster Wall	143	201	20	500	100
12	Drywall	96	107	18	266	90
13	Black Tile	75	102	19	254	90

Maximum: 500
Average: 229
STDEV: 97

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Wood	Drywall
Instrument:	2360	141321	Background (cpm):	48	77	85
Detector:	44-110	PR-258430	Background σ (cpm):	14.35	10.11	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-M-1
Survey Date: 12/7/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Tile	133	218	22	543	110
2	Black Tile	219	390	25	971	120
2	Black Tile Recount	214	380	25	946	120
2	Black Tile Recount	194	340	24	846	120
				Maximum:	971	
				Average:	826	
				STDEV:	197	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	184935	Reference Material:	Tile Floor	
Detector:	43-68	PR-181739	Background (cpm):	48	
Probe Area:	126	cm^2	Background σ (cpm):	14.35	
			Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-M-1
Survey Date: 11/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	White Tile	75	-28	7	-433	230
2	White Tile	77	-27	7	-425	230
3	White Tile	87	-25	8	-387	230
4	White Tile	76	-28	7	-429	230
5	Black Tile	81	-26	8	-410	230
6	Black Tile	88	-25	8	-383	230
7	White Tile	104	-21	8	-320	240
8	Wood Floor	140	8	8	127	260
9	Wood Floor	90	-4	8	-68	230
10	Marble Floor	154	-8	9	-126	260
11	Plaster Wall	247	8	10	121	320
12	Drywall	145	-18	9	-276	280
13	Black Tile	105	-20	8	-317	240

Maximum: 127
Average: -256
STDEV: 203

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Floor Tile	Wood	Drywall
Background (cpm):	47	27	54
Background σ (cpm):	6.05	5.95	6.86
Sample Analysis Time:	4 min		

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-M-1
Survey Date: 11/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Tile	105	-20	8	-317	240
2	Black Tile	94	-23	8	-359	240
				Maximum:	-317	
				Average:	-338	
				STDEV:	30	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Floor Tile	
Detector:	43-68	PR-216834	Background (cpm):	47	
Probe Area:	126	cm^2	Background σ (cpm):	6.05	
			Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-M-1
Survey Date: 11/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	White Tile	2	0	1	-1	20
2	White Tile	2	0	1	-1	20
3	White Tile	1	0	1	-3	20
4	White Tile	2	0	1	-1	20
5	Black Tile	4	0	1	3	20
6	Black Tile	3	0	1	1	20
7	White Tile	0	-1	1	-5	10
8	Wood Floor	3	0	1	2	20
9	Wood Floor	3	0	1	2	20
10	Marble Floor	3	0	1	1	20
11	Plaster Wall	6	0	2	2	30
12	Drywall	1	-1	1	-8	20
13	Black Tile	3	0	1	1	20
				Maximum:	3	
				Average:	0	
				STDEV:	3	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Wood	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	0.8	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-M-1
Survey Date: 11/21/2011

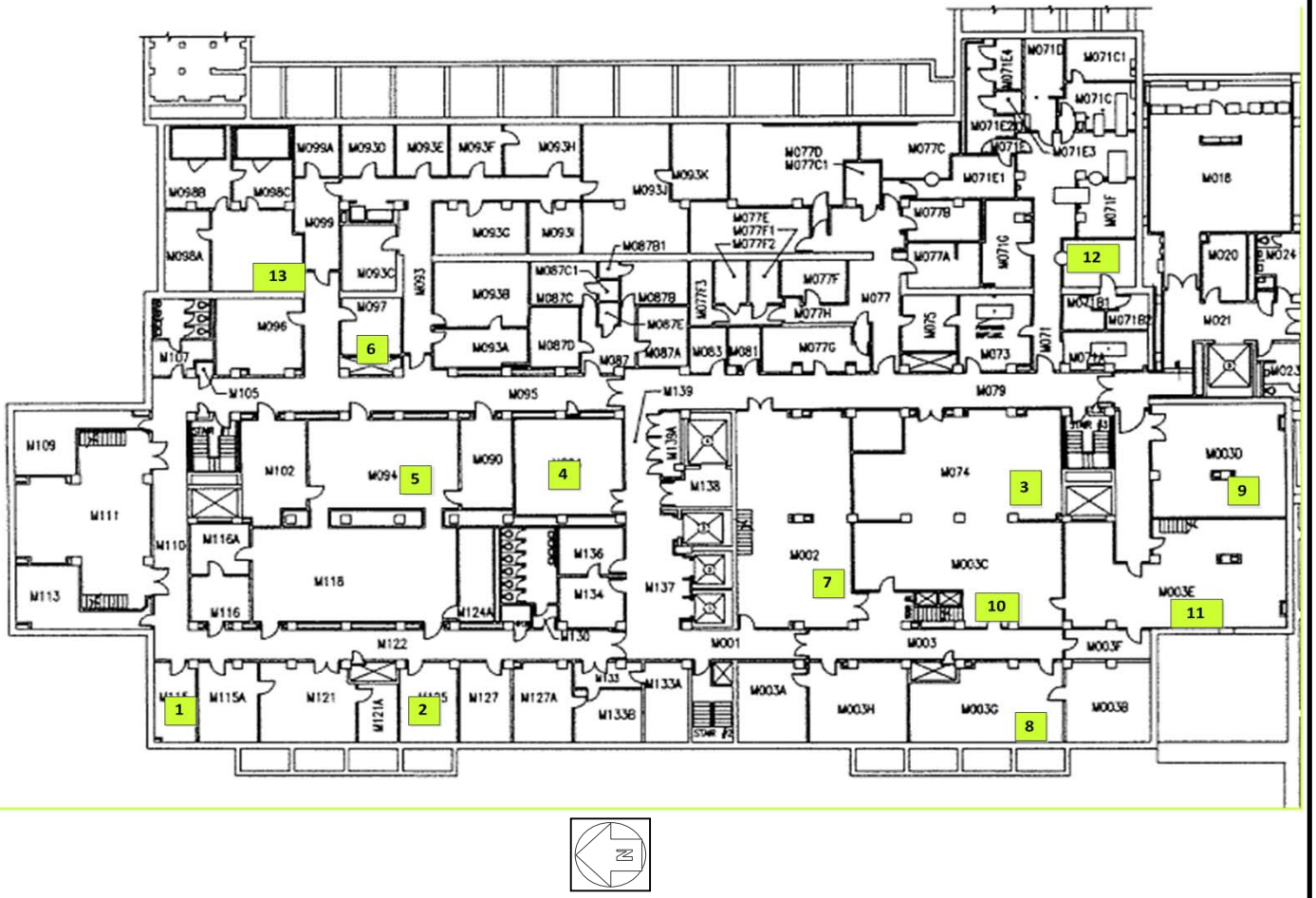
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Tile	2	0	1	-1	20
2	Black Tile	2	0	1	-1	20
				Maximum:	-1	
				Average:	-1	
				STDEV:	0	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Floor Tile	
Instrument:	2360	253237	Background (cpm):	1	cpm
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	cpm
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Room	X,Y		Room	X,Y	Room	X,Y
M115	6,4		M097	1,6	M093C	3,7
M125	7,5		M002	7,3	M093E	2,9
M074	8,3		M003G	2,5	M071B	8,8
M084	9.9		M003D	4,4	M098	1,1
M094	4,5					



SURVEY UNITS LEGEND

Class 3

[#] Measurement Number

No Scale

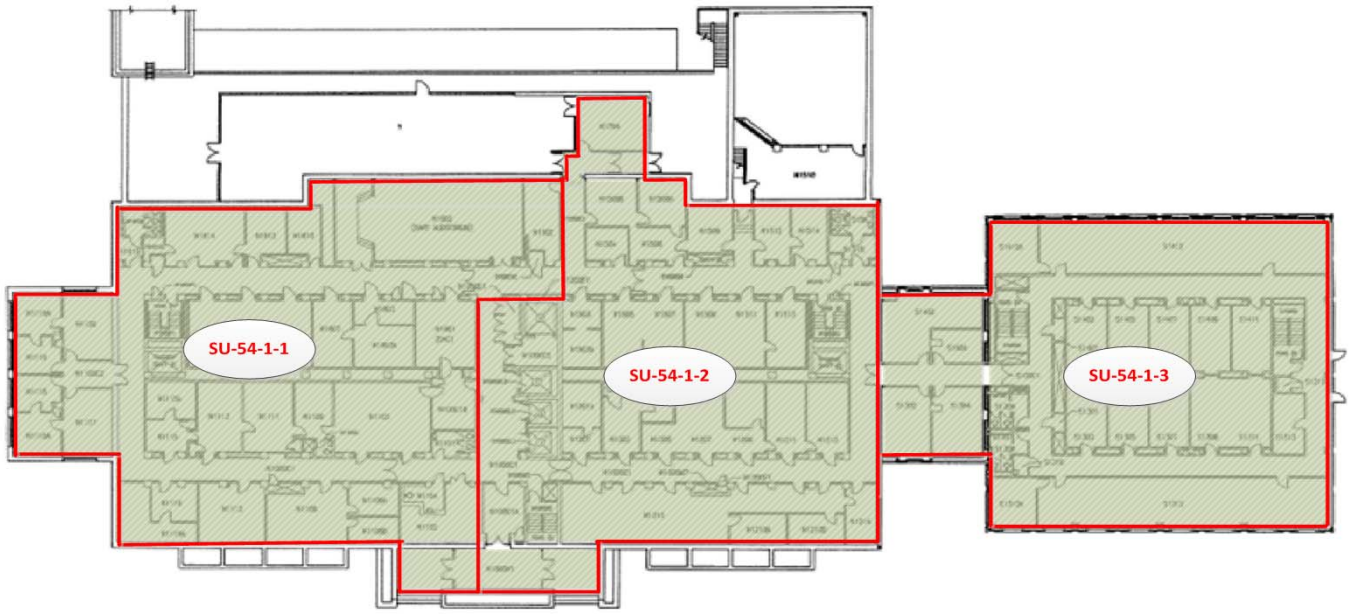
Survey Unit Identifier

SU-54-M-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Museum Level

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Room Number
Class 2 SU
Class 3 SU

No Scale

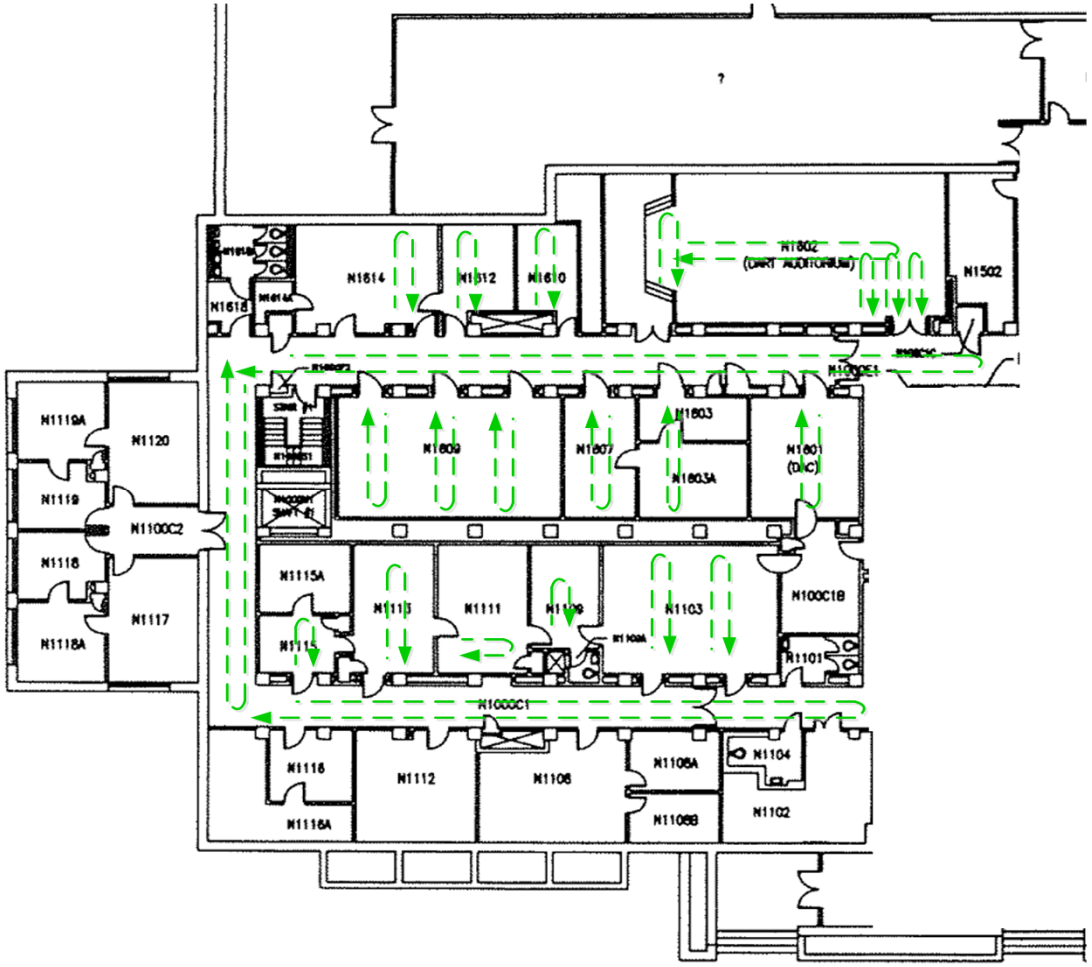
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 First Floor

Date: 1-19-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

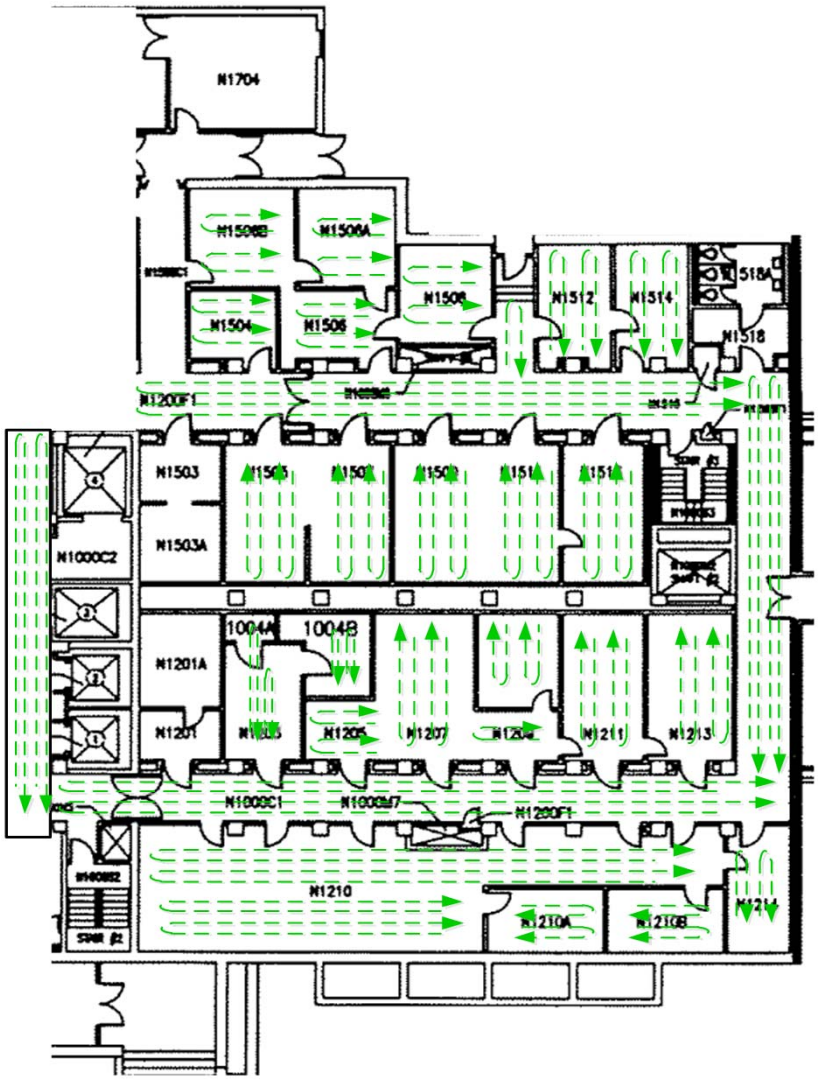
SU 54-1-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 First Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

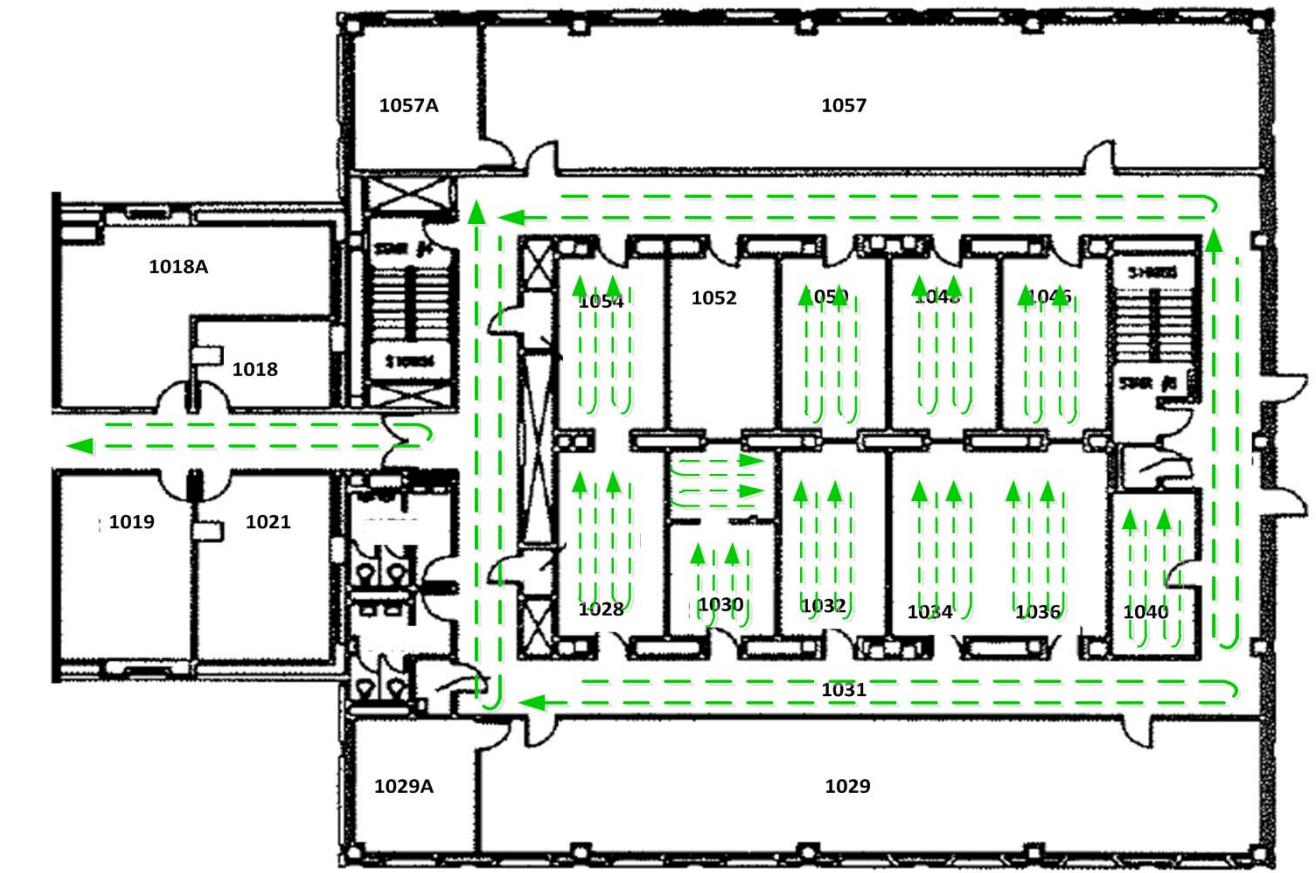
SU 54-1-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 First Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU 54-1-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 First Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 54 Level 1

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU54-1-1 Ceramic	980	270	567	414	69	-401	479	25	204
SU54-1-1 Tile	1412	53	266	146	37	-233	398	42	109
SU54-1-2	2599	38	302	135	39	-277	505	10	115
SU54-1-3	2410	42	265	134	33	-266	395	8	99

Area Scanned (ft^2) 4,636

Instrument Data and Analysis Parameters

	Model	Serial No				
Instrument:	2360	253258	Reference Material:	Tile Floor	Ceramic	
Detector:	43-37	265544	Background:	132	405.5	cpm
Probe Area:	582	cm^2	Background σ:	32.21	64.2	cpm
			Scan speed:	1 detector width / 2 sec		
			Observation interval:	1 recorded measurement / 2 sec		

Total Efficiency:	0.058	cpm/dpm	
Total Efficiency Uncertainty:	0.001	cpm/dpm	
MDC_{scan}:	363	638	dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 54 Level 1

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU54-1-1 Ceramic	980	0	18	1.9	4.3	-5	27	-2	8
SU54-1-1 Tile	1412	0	29	1.9	3.6	-5	47	-2	6
SU54-1-2	2599	0	37	2.2	3.9	-5	61	-1	7
SU54-1-3	2410	0	31	2.9	4.4	-5	50	0	8

Instrument Data and Analysis Parameters

	Model	Serial No				
Instrument:	2360	253258	Reference Material:	Tile Floor	Ceramic	
Detector:	43-37	265544	Background:	3	3	cpm
Probe Area:	582	cm^2	Background σ:	7.32	8.01	cpm
			Scan speed:	1 detector width / 2sec		
			Observation interval:	1 recorded measurement / 2 sec		

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	720	dpm/100 cm^2

Summary of Scan Results - Beta

Location: Building 54 Level 1

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-54-1-3	1070	9	135	59	20	-295	1788	536	329

Area Scanned (ft^2) 145

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm^2

Reference Material: Counter
Background: 27 cpm
Background σ: 5.95 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.048 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 916 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 54 Level 1

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-54-1-3	1070	0	23	1	3	-4	182	3	22

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm2

Reference Material: Counter
Background: 1 cpm
Background σ: 0.8 cpm
Scan speed: 1 detector width / 2sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.098 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 705 dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 54

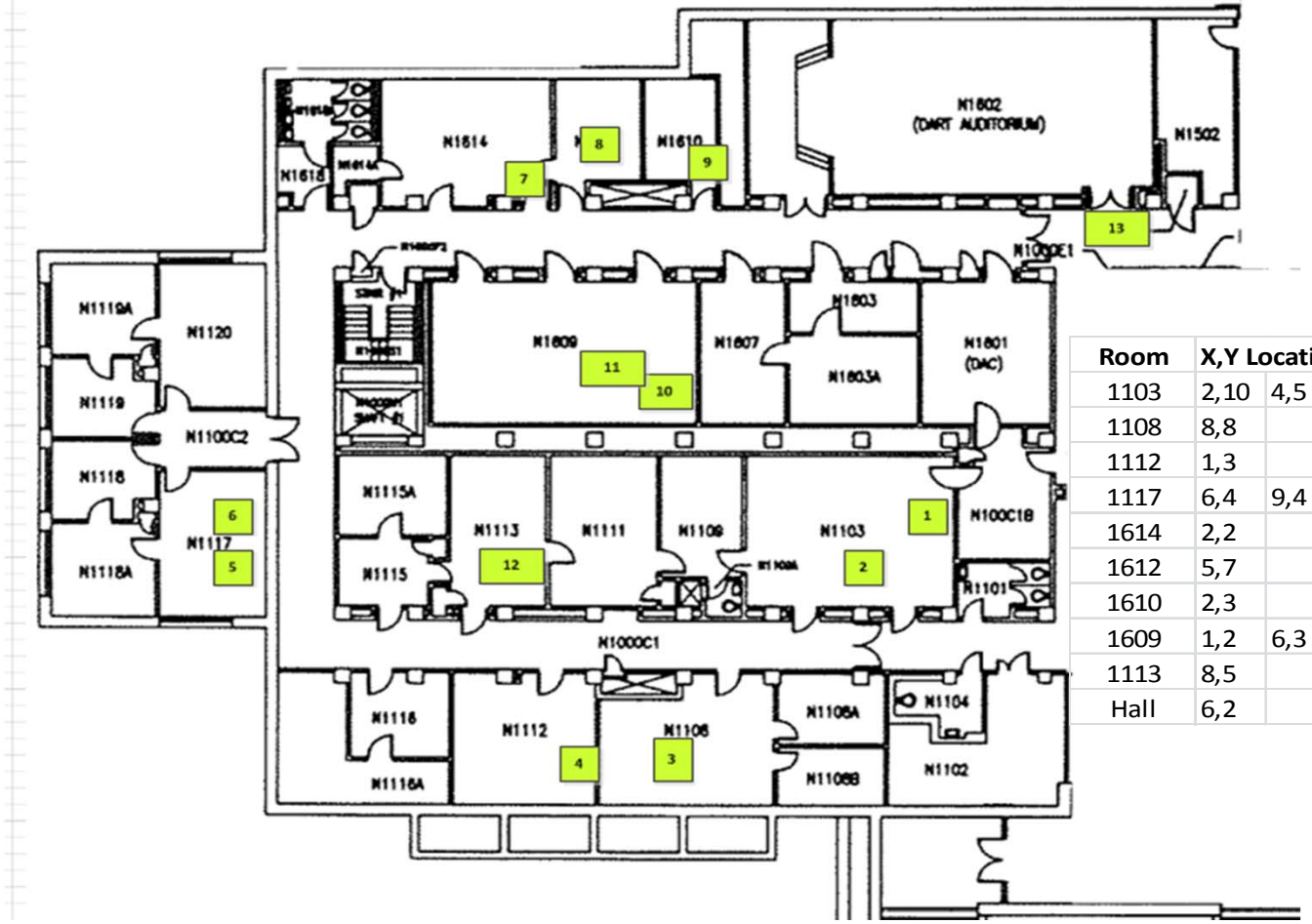
All measurements in µR/hour

Date: 11/23/2011

Location	54-1-1	54-1-2	54-1-3
1	7	5	6
2	7	6	7
3	5	5	5
4	5	7	5
5	6	7	7
6	7	6	5
7	6	7	5
8	7	5	7
9	5	7	4
10	4	6	6
11	4	4	7
12	7	6	4
13	5	7	7
14	6	6	6
15		5	5
16			5
17			7
18			5
19			5
20			4
21			7
22			7
23			4
24			6
25			4
26			6
27			5
28			7
29			6
30			7
31			4
32			7
33			5
34			5
35			5
36			6
37			6
38			6
39			4
40			5

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012



Room	X,Y Locations	
1103	2,10	4,5
1108	8,8	
1112	1,3	
1117	6,4	9,4
1614	2,2	
1612	5,7	
1610	2,3	
1609	1,2	6,3
1113	8,5	
Hall	6,2	

SURVEY UNITS
LEGEND

Class 3
[#] Measurement Number

No Scale

Survey Unit Identifier

SU54-1-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 First Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-1-1
Survey Date: 12/8/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	90	81	18	200	90
2	Concrete	85	71	18	175	90
3	Concrete	85	71	18	175	90
4	Concrete	94	89	19	220	90
5	Concrete	46	-7	16	-19	80
6	Concrete	84	69	18	170	90
7	Floor Tile	53	58	18	145	90
8	Drywall	67	49	16	121	80
9	Drywall	60	35	15	87	80
10	Floor Tile	61	74	18	185	90
11	Floor Tile	63	78	18	195	90
12	Foam Under Carpet	63	78	18	195	90
13	Plaster Wall	87	89	17	221	80
				Maximum:	221	
				Average:	151	
				STDEV:	66	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall
Instrument:	2360	141321	Background (cpm):	48	99	85
Detector:	44-110	PR-258430	Background σ (cpm):	14.35	12.73	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building:	54
Survey Unit:	54-1-1
Survey Date:	12/8/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Marble	337	375	30	932	140
				Maximum:	932	
				Average:	932	
				STDEV:	70	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Green Ceramic	
Instrument:	2360	184935	Background (cpm):	299	
Detector:	43-68	PR-181739	Background σ (cpm):	14.28	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-1-1
Survey Date: 11/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	153	0	13	-6	390
2	Concrete	184	7	13	115	400
3	Concrete	162	2	13	29	390
4	Concrete	172	4	13	68	390
5	Concrete	139	-4	13	-61	380
6	Concrete	182	7	13	107	400
7	Floor Tile	146	-10	9	-157	260
8	Drywall	152	-16	9	-249	280
9	Drywall	175	-10	10	-160	290
10	Floor Tile	112	-19	8	-289	250
11	Floor Tile	92	-24	8	-367	240
12	Foam Under Carpet	164	-6	9	-87	270
13	Plaster Wall	306	23	11	350	340
QC1	Concrete	161	2	13	25	390
QC2	Concrete	161	2	13	25	390
				Maximum:	350	
				Average:	-54	
				STDEV:	195	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall
Instrument:	2360	253237	Background (cpm):	47	39	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	11.07	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building:	54
Survey Unit:	54-1-1
Survey Date:	11/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Marble	722	1	19	16	580
				Maximum:	16	
				Average:	16	
				STDEV:	290	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Green Ceramic	
Instrument:	2360	253237	Background (cpm):	179	
Detector:	43-68	PR-216834	Background σ (cpm):	13.66	
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-1-1
Survey Date: 11/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	7	1	2	8	30
2	Concrete	7	1	2	8	30
3	Concrete	1	-1	1	-5	20
4	Concrete	2	0	1	-3	20
5	Concrete	3	0	1	-1	20
6	Concrete	3	0	1	-1	20
7	Floor Tile	3	0	1	1	20
8	Drywall	1	-1	1	-8	20
9	Drywall	3	-1	2	-4	20
10	Floor Tile	9	2	2	14	30
11	Floor Tile	2	0	1	-1	20
12	Foam Under Carpet	5	1	1	5	20
13	Plaster Wall	3	-1	2	-4	20
QC1	Concrete	3	0	1	-1	20
QC2	Concrete	6	1	2	6	30
				Maximum:	14	
				Average:	1	
				STDEV:	6	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.17	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building:	54
Survey Unit:	54-1-1
Survey Date:	11/22/2011

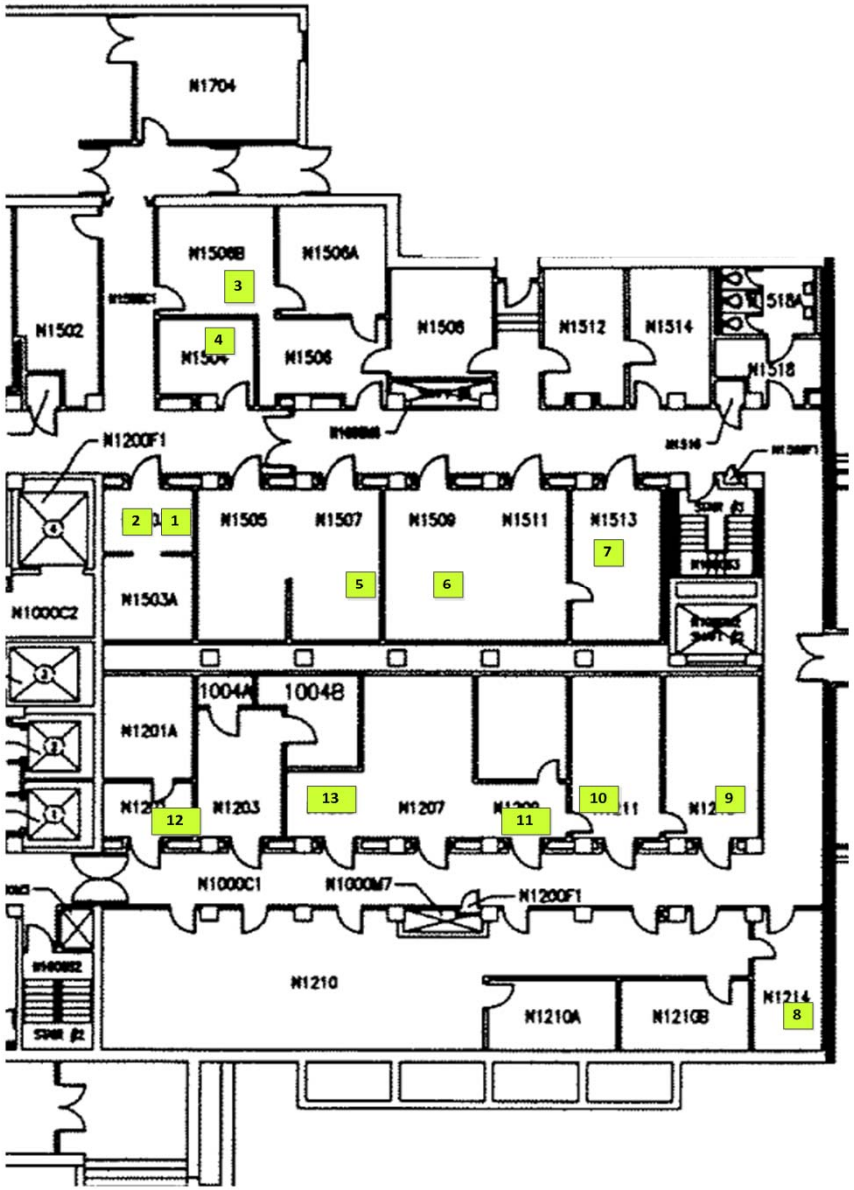
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Marble	14	-7	3	-55	60
				Maximum:	-55	
				Average:	-55	
				STDEV:	30	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Green Ceramic	
Detector:	43-68	PR-216834	Background (cpm):	10	cpm
Probe Area:	126	cm^2	Background σ (cpm):	2.89	cpm
			Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Room	X,Y Locations	
1503	5,6	5,7
1506B	3,2	
1507	8,1	
1504	7,3	
1509	9,5	
1513	10,8	
1205	11,6	
1209	2,10	
1211	4,8	
1213	5,2	
1214	4,3	



SURVEY UNITS LEGEND

Class 3

\# Measurement Number

No Scale

Survey Unit Identifier

SU54-1-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 First Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-1-2
Survey Date: 12/9/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	81	63	18	156	90
2	Concrete	73	47	18	116	90
3	Floor Tile	53	58	18	145	90
4	Concrete	77	55	18	136	90
5	Floor Tile	34	20	17	50	80
6	Floor Tile	24	0	16	0	80
7	Floor Tile	31	14	16	35	80
8	Concrete	61	23	17	56	80
9	Concrete	84	69	18	170	90
10	Concrete	57	15	17	36	80
11	Drywall	32	-21	13	-53	70
12	Drywall	45	5	14	12	70
13	Plaster Wall	79	73	17	181	80

Maximum: 181
Average: 77
STDEV: 75

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall
Instrument:	2360	141321	Background (cpm):	48	99	85
Detector:	44-110	PR-258430	Background σ (cpm):	14.35	12.73	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-1-2
Survey Date: 12/9/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Floor Tile	111	174	21	433	100
2	Marble	326	353	29	877	140
				Maximum:	877	
				Average:	433	
				STDEV:	314	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Green Ceramic
Instrument:	2360	184935	Background (cpm):	48	299
Detector:	43-68	PR-181739	Background σ (cpm):	14.35	14.28
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-1-2
Survey Date: 11/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	149	-1	13	-22	390
2	Concrete	141	-3	13	-53	380
3	Floor Tile	120	-17	8	-258	250
4	Concrete	181	7	13	103	400
5	Floor Tile	100	-22	8	-336	240
6	Floor Tile	106	-20	8	-313	240
7	Floor Tile	95	-23	8	-355	240
8	Concrete	172	4	13	68	390
9	Concrete	208	13	13	208	400
10	Concrete	95	-15	12	-232	370
11	Drywall	104	-28	9	-436	260
12	Drywall	116	-25	9	-389	270
13	Plaster Wall	140	-19	9	-296	280
QC7	Floor Tile	131	-14	8	-215	250
				Maximum:	208	
				Average:	-178	
				STDEV:	212	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall
Instrument:	2360	253237	Background (cpm):	47	39	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	11.07	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building:	54
Survey Unit:	54-1-2
Survey Date:	11/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Marble	821	26	20	401	600
				Maximum:	401	
				Average:	401	
				STDEV:	300	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Green Ceramic	
Detector:	43-68	PR-216834	Background (cpm):	179	
Probe Area:	126	cm^2	Background σ (cpm):	13.66	
			Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-1-2
Survey Date: 11/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	5	0	2	4	30
2	Concrete	3	0	1	-1	20
3	Floor Tile	6	1	2	8	20
4	Concrete	1	-1	1	-5	20
5	Floor Tile	5	1	1	5	20
6	Floor Tile	4	0	1	3	20
7	Floor Tile	0	-1	1	-5	10
8	Concrete	4	0	2	1	20
9	Concrete	6	1	2	6	30
10	Concrete	4	0	2	1	20
11	Drywall	5	0	2	0	30
12	Drywall	1	-1	1	-8	20
13	Plaster Wall	4	0	2	-2	30
QC7	Floor Tile	2	0	1	-1	20
				Maximum:	8	
				Average:	1	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.17	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building:	54
Survey Unit:	54-1-2
Survey Date:	11/22/2011

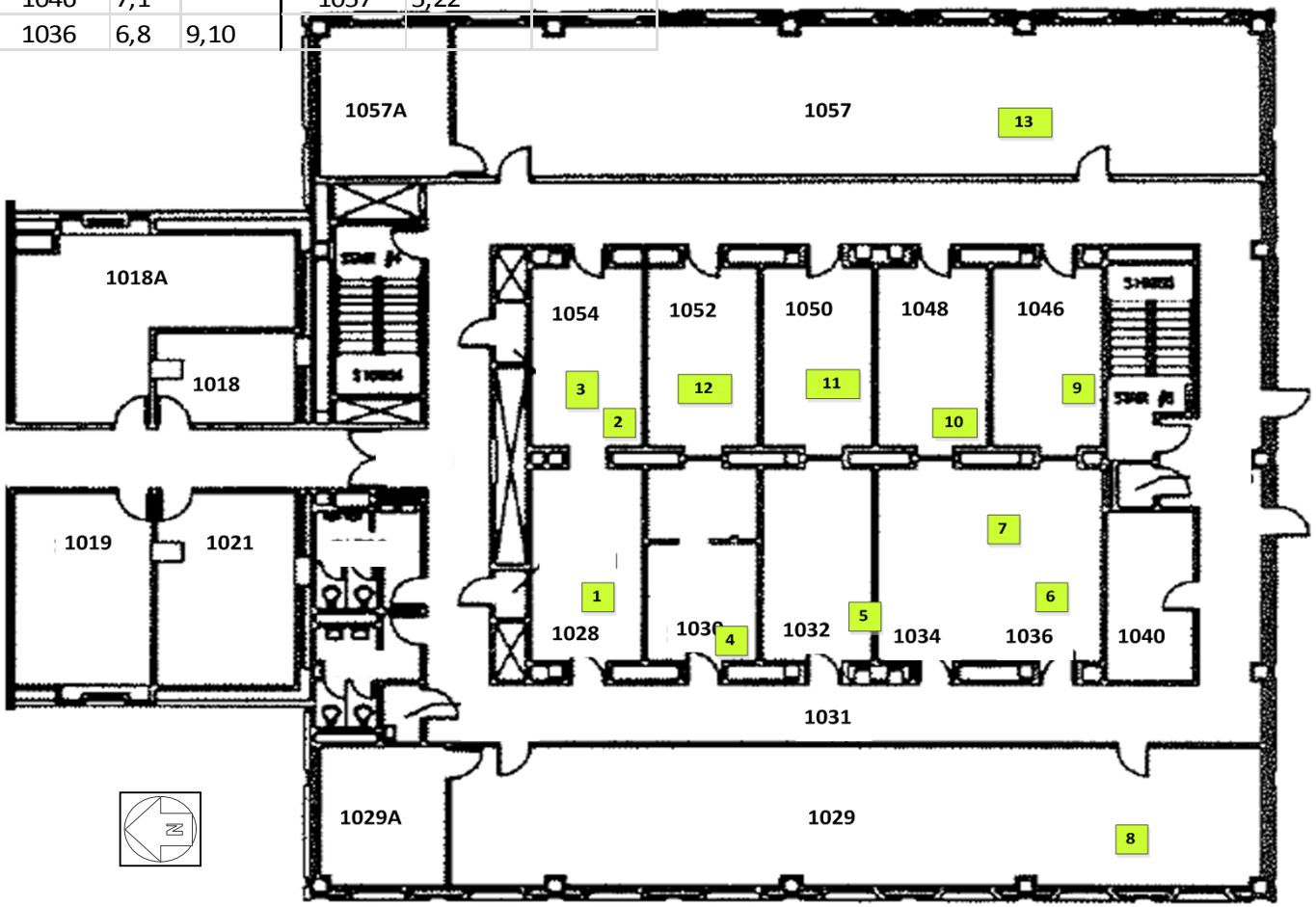
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Marble	27	-3	4	-28	60
				Maximum:	-28	
				Average:	-28	
				STDEV:	30	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Green Ceramic	
Detector:	43-68	PR-216834	Background (cpm):	10	
Probe Area:	126	cm^2	Background σ (cpm):	2.89	
			Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Room	X,Y Locations		Room	X,Y Locations	
1054	9,2	8,9	1032	4,1	
1052	6,6		1030	2,1	
1050	8,3		1028	7,5	
1048	2,3		1029	4,16	
1046	7,1		1057	5,22	
1036	6,8	9,10			



SURVEY UNITS LEGEND

Class 3

[#] Measurement Number

No Scale

Survey Unit Identifier

SU54-1-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 First Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-1-3
Survey Date: 12/9/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Tan Tile	58	68	18	170	90
2	Tan Tile	42	36	17	90	80
3	Tan Tile	41	34	17	85	80
4	Tan Tile	31	14	16	35	80
5	Tan Tile	41	34	17	85	80
6	Tan Tile	59	70	18	175	90
7	Drywall	54	23	15	57	70
8	Concrete	105	111	19	275	90
9	White Tile	34	20	17	50	80
10	White Tile	28	8	16	20	80
11	White Tile	21	-6	16	-14	80
12	White Tile	26	4	16	10	80
13	Drywall	95	105	18	261	90
				Maximum:	275	
				Average:	93	
				STDEV:	93	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Drywall	Concrete
Instrument:	2360	141321	Background (cpm):	48	85	99
Detector:	44-110	PR-258430	Background σ (cpm):	14.35	10.86	12.73
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-1-3
Survey Date: 12/9/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	71	65	16	161	80
2	Tan Painted Metal Under Sink	70	77	15	191	70
3	Stainless Hood Drain	63	63	14	157	70
4	Hood	67	57	15	141	70
5	Drywall	72	59	16	146	80
6	Black Lab Sink	45	13	14	32	70
7	Tan Painted Metal Under Sink	42	21	13	52	60
8	Drywall	72	59	16	146	80
9	Black Lab Sink	52	27	14	67	70
10	Rusted Paint Under Sink	34	5	12	12	60
11	Stainless Hood Drain	67	71	14	177	70
12	Hood	49	21	14	52	70
13	Drywall	47	9	15	22	70
14	Drywall	50	15	15	37	70
15	Black Lab Sink	47	17	14	42	70
16	Gray Painted Metal Under Sink	57	51	14	127	70
17	Black Lab Sink	74	71	16	176	80
18	Rusted Paint Under Sink	49	35	13	87	60
19	Drywall	55	25	15	62	70
20	Black Lab Sink	40	3	13	7	70
21	Rusted Paint Under Sink	31	-1	12	-3	60
22	Drywall	44	3	14	7	70
23	Stainless Hood Drain	67	71	14	177	70
24	Hood	64	51	15	126	70
25	Black Lab Sink	59	41	15	102	70
26	Painted Under Sink	48	33	13	82	60
27	Black Lab Counter	34	-9	13	-23	60
				Maximum:	191	
				Average:	161	
				STDEV:	21	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal	Drywall
Instrument:	2360	184935	Background (cpm):	77	63	85
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	8.52	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 203 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-1-3
Survey Date: 11/23/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Tan Tile	135	-13	8	-200	260
2	Tan Tile	119	-17	8	-262	250
3	Tan Tile	127	-15	8	-231	250
4	Tan Tile	123	-16	8	-246	250
5	Tan Tile	129	-14	8	-223	250
6	Tan Tile	149	-9	9	-145	260
7	Drywall	154	-16	9	-241	280
8	Concrete	201	12	13	181	400
9	White Tile	126	-15	8	-235	250
10	White Tile	128	-15	8	-227	250
11	White Tile	110	-19	8	-297	240
12	White Tile	136	-13	8	-196	260
13	Drywall	180	-9	10	-140	290
QC12	White Tile	128	-15	8	-227	250
				Maximum:	181	
				Average:	-189	
				STDEV:	119	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall
Instrument:	2360	253237	Background (cpm):	47	39	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	11.07	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-1-3
Survey Date: 11/23/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Lab Sink	113	1	8	22	240
2	Tan Painted Metal Under Sink	150	3	7	51	230
3	Stainless Hood Drain	155	5	8	70	230
4	Hood	133	6	8	99	250
5	Drywall	155	-15	9	-237	280
6	Black Lab Sink	114	2	8	26	240
7	Tan Painted Metal Under Sink	117	-5	7	-77	210
8	Drywall	244	7	10	109	320
9	Black Lab Sink	104	-1	8	-13	240
10	Rusted Paint Under Sink	104	-8	7	-128	200
11	Stainless Hood Drain	118	-5	7	-74	210
12	Hood	126	5	8	72	250
13	Drywall	161	-14	9	-214	290
14	Drywall	162	-14	9	-210	290
15	Black Lab Sink	146	10	8	150	260
16	Gray Painted Metal Under Sink	140	1	7	12	220
17	Black Lab Sink	181	18	9	286	270
18	Rusted Paint Under Sink	138	0	7	4	220
19	Drywall	233	4	10	66	310
20	Black Lab Sink	110	1	8	10	240
21	Rusted Paint Under Sink	140	1	7	12	220
22	Drywall	181	-9	10	-136	290
23	Stainless Hood Drain	130	-2	7	-27	220
24	Hood	145	9	8	146	260
25	Black Lab Sink	109	0	8	6	240
26	Painted Under Sink	96	-10	6	-159	200
27	Black Lab Counter	111	1	8	14	240
				Maximum:	286	
				Average:	22	
				STDEV:	122	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal	Drywall
Instrument:	2360	253237	Background (cpm):	27	34	54
Detector:	43-68	PR-216834	Background σ (cpm):	5.95	4.21	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-1-3
Survey Date: 11/23/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Tan Tile	2	0	1	-1	20
2	Tan Tile	3	0	1	1	20
3	Tan Tile	2	0	1	-1	20
4	Tan Tile	5	1	1	5	20
5	Tan Tile	3	0	1	1	20
6	Tan Tile	6	1	2	8	20
7	Drywall	6	0	2	2	30
8	Concrete	2	0	1	-3	20
9	White Tile	5	1	1	5	20
10	White Tile	1	0	1	-3	20
11	White Tile	7	1	2	10	30
12	White Tile	6	1	2	8	20
13	Drywall	5	0	2	0	30
QC12	White Tile	6	1	2	8	20
				Maximum:	10	
				Average:	3	
				STDEV:	4	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.17	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

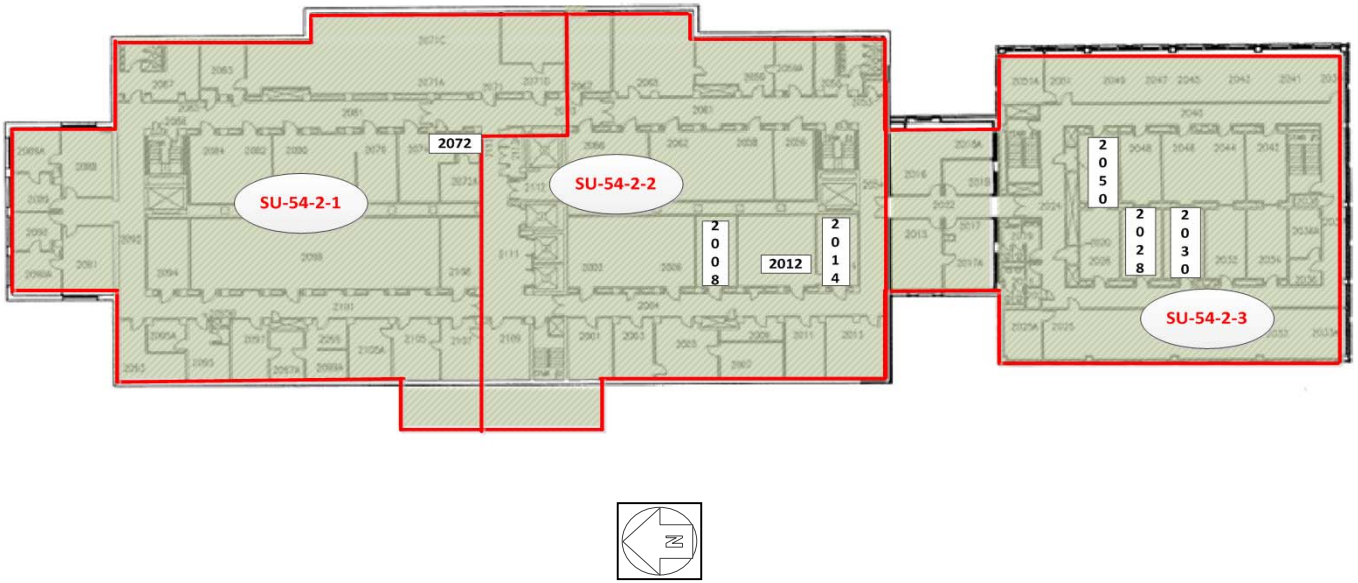
Building: 54
Survey Unit: 54-1-3
Survey Date: 11/23/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Lab Sink	3	0	1	2	20
2	Tan Painted Metal Under Sink	1	0	1	-3	10
3	Stainless Hood Drain	4	0	1	3	20
4	Hood	3	0	1	2	20
5	Drywall	6	0	2	2	30
6	Black Lab Sink	1	0	1	-2	20
7	Tan Painted Metal Under Sink	1	0	1	-3	10
8	Drywall	41	9	3	74	60
9	Black Lab Sink	3	0	1	2	20
10	Rusted Paint Under Sink	5	1	1	5	20
11	Stainless Hood Drain	2	0	1	-1	20
12	Hood	3	0	1	2	20
13	Drywall	10	1	2	10	30
14	Drywall	4	0	2	-2	30
15	Black Lab Sink	14	3	2	24	30
16	Gray Painted Metal Under Sink	5	1	1	5	20
17	Black Lab Sink	3	0	1	2	20
18	Rusted Paint Under Sink	8	1	2	11	30
19	Drywall	18	3	2	27	40
20	Black Lab Sink	6	1	1	8	20
21	Rusted Paint Under Sink	7	1	2	9	20
22	Drywall	12	2	2	14	30
23	Stainless Hood Drain	2	0	1	-1	20
24	Hood	5	1	1	6	20
25	Black Lab Sink	12	2	2	20	30
26	Painted Under Sink	6	1	1	7	20
27	Black Lab Counter	3	0	1	2	20
				Maximum:	74	
				Average:	2	
				STDEV:	15	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.8	0.73	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2



SURVEY UNITS LEGEND

Room Number
Class 2 SU
Class 3 SU

No Scale

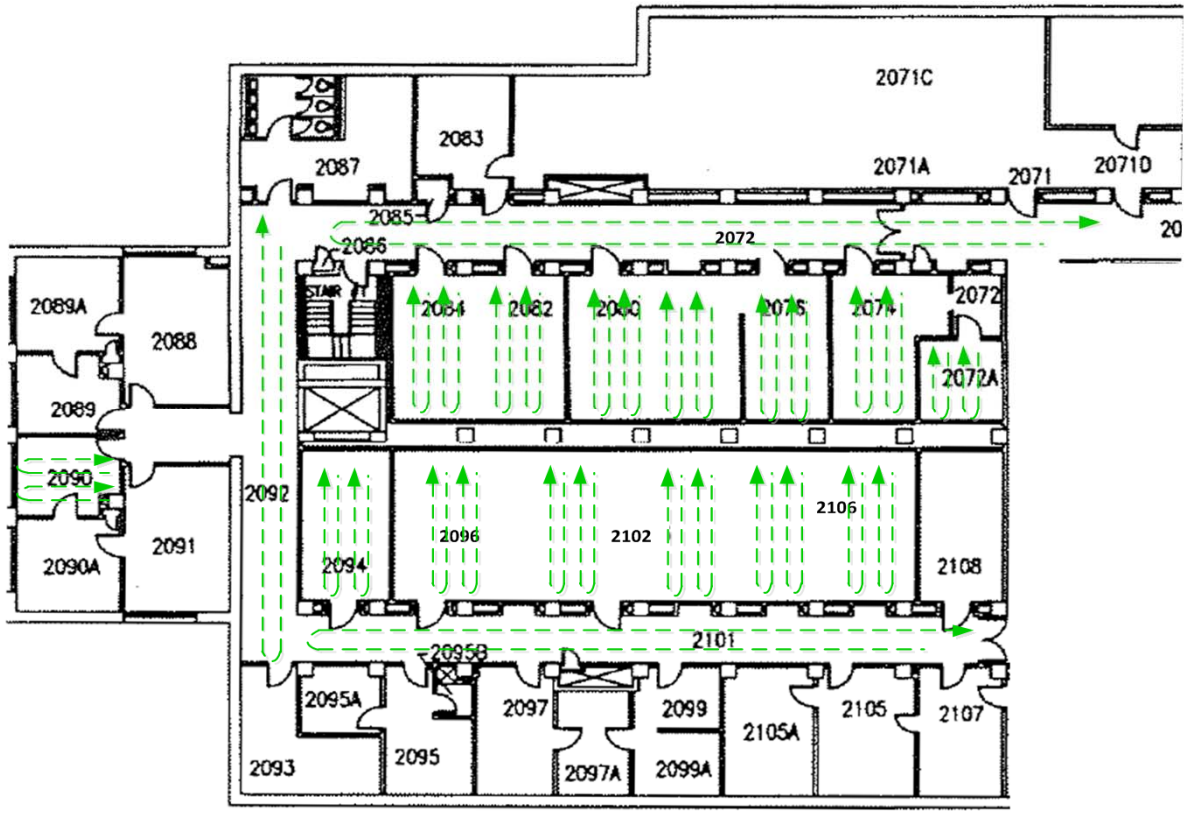
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Second Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

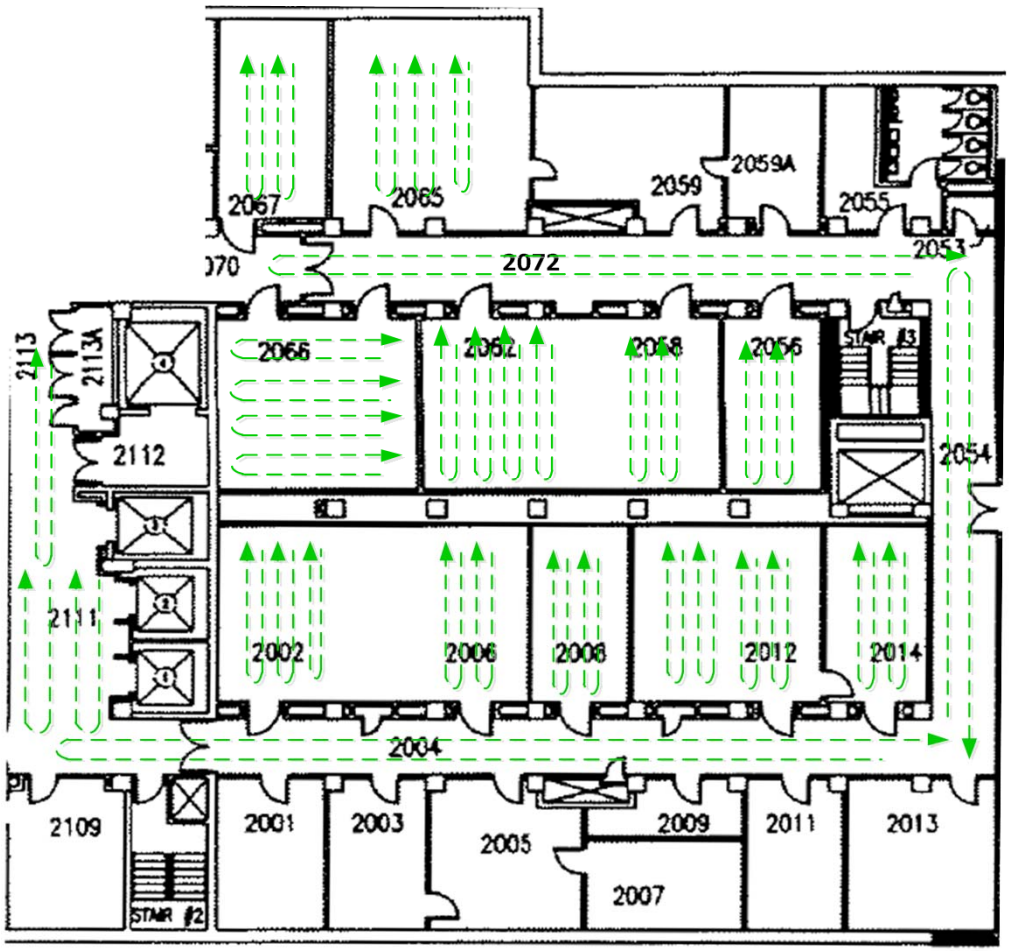
SU 54-2-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Second Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

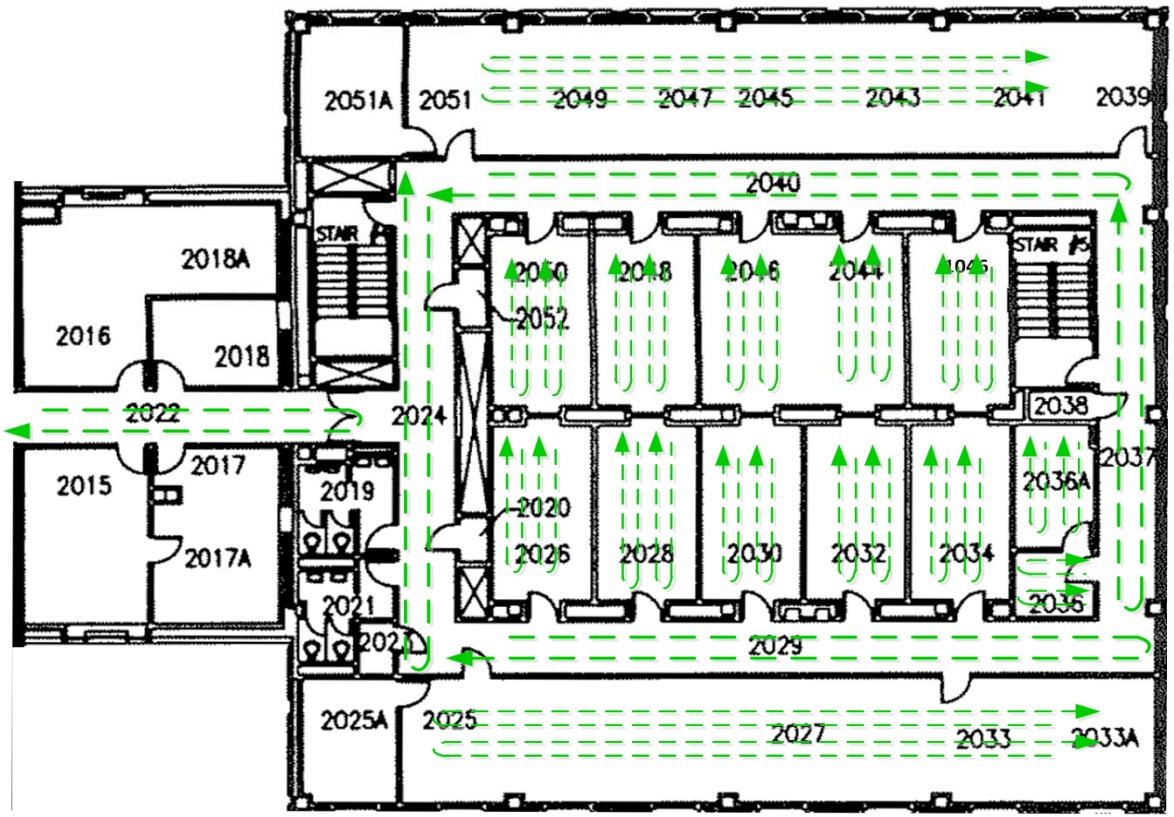
SU 54-2-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Second Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

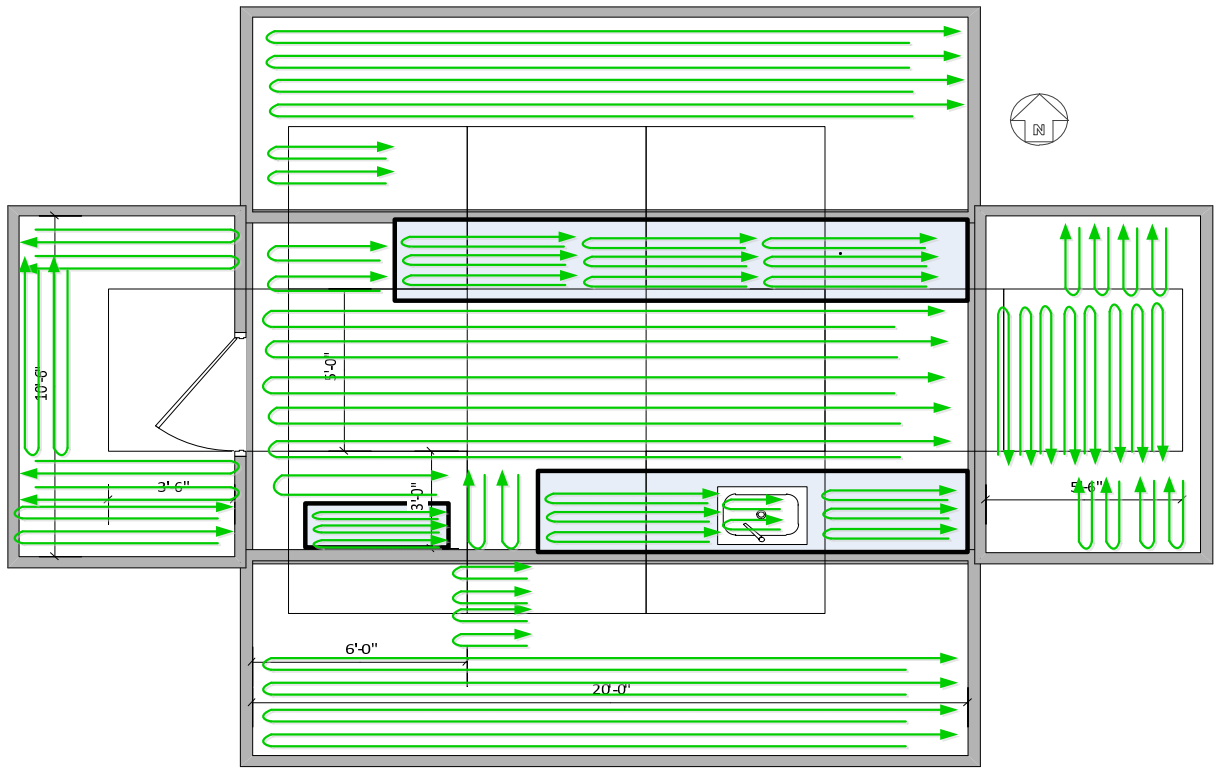
SU 54-2-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Second Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 1

Scan Path

Survey Unit Identifier

SU 54-2-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Second Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 54 Level 2

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU54-2-1	2316	29	320	139	44	-304	558	23	131
SU54-2-2	1653	32	277	122	36	-295	431	-28	108
SU54-2-3	977.0	69	275	160	33	-186	425	83	97
SU54-2-4 (2094)	484	52	233	120	32	-236	300	-36	96
Area Scanned (ft^2)	3,098								

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 54 Level 2

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU54-2-1	2316	0	28	2.3	4.0	-5	45	-1	7
SU54-2-2	1653	0	29	1.9	3.6	-5	47	-2	7
SU54-2-3	977.0	0	26	2.5	4.1	-5	41	-1	7
SU54-2-4 (2094)	484	0	49	6.7	7.4	-5	82	7	13

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 3 cpm
Background σ: 7.32 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 720 dpm/100 cm^2

Summary of Scan Results - Beta

Location: Building 54 Level 2

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-54-2-2	956	6	101	37	15	-345	1226	166	254
SU-54-2-3	1225	6	342	52	23	-345	5211	418	377
SU-54-2-4 (2094)	897	6	169	56	27	-345	2350	475	451
Area Scanned (ft^2)	417								

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm^2

Reference Material: Counter
Background: 27 cpm
Background σ: 5.95 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.048 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 916 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 54 Level 2

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-54-2-2	956	0	20	1	2	-4	158	1	18
SU-54-2-3	1225	0	21	1	2	-4	166	1	18
SU-54-2-4 (2094)	897	0	12	0	2	-4	93	-1	14

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm2

Reference Material: Counter
Background: 1 cpm
Background σ: 0.8 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.098 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 705 dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 54

All measurements in µR/hour

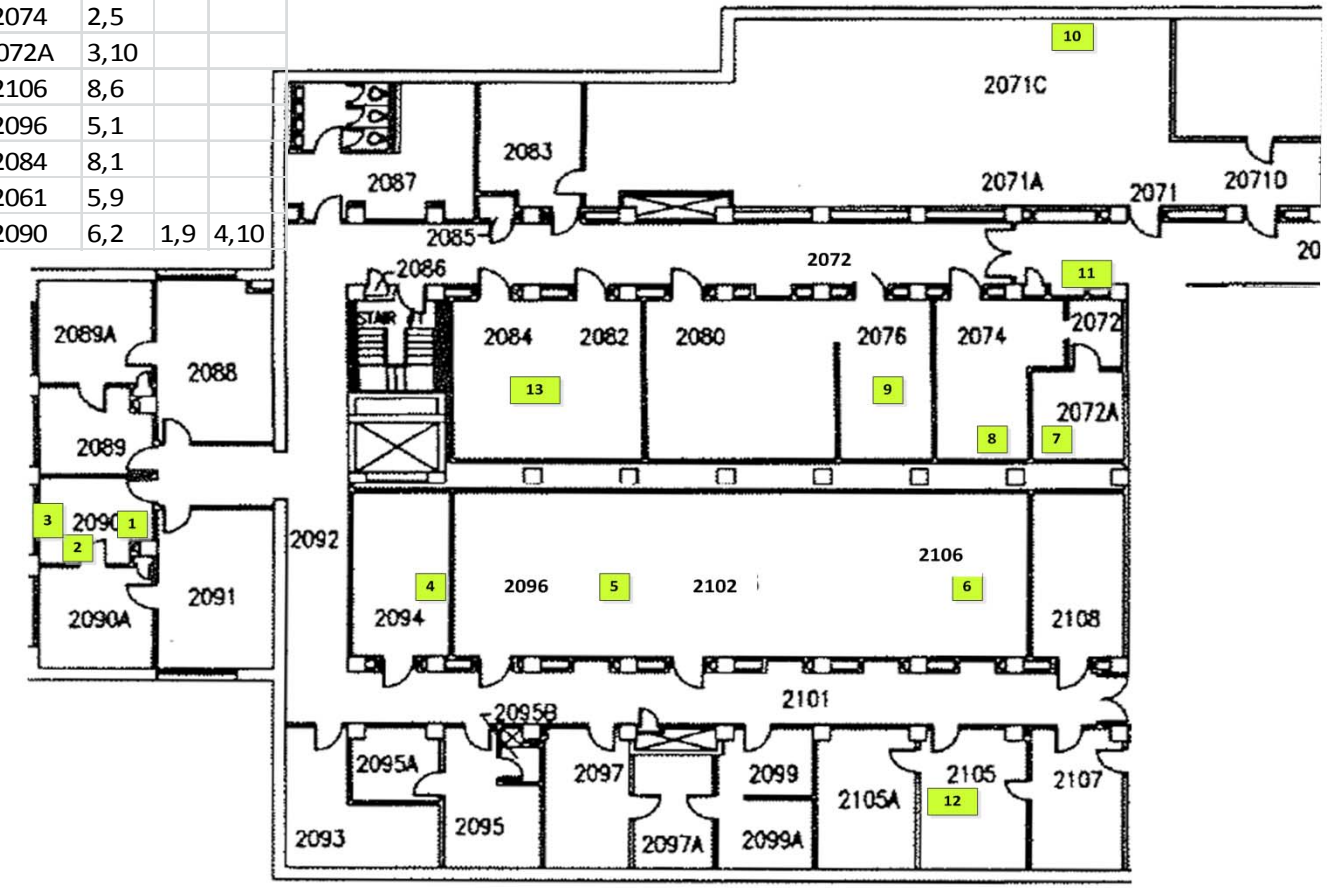
Date: 11/28/2011

Location	54-2-1	54-2-2	54-2-3	54-2-4
1	3	6	6	3
2	3	5	5	6
3	5	4	3	3
4	3	3	3	5
5	5	5	3	6
6	4	3	5	3
7	3	4	5	3
8	3	6	5	5
9	4	6	3	3
10	5	4	3	3
11	6	4	3	6
12	4	6	4	5
13	4	4	3	6
14	4	3	5	5
15		3	5	6
16		4	5	4
17		3	3	4
18		6	3	6
19		6	6	6
20		4	4	3
21		4	3	6
22		3	6	3
23		6	6	
24		3	4	
25			4	

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012

Room	X,Y Locations		
2072	7,1		
2060	8,3	8,4	
2076	9,8		
2074	2,5		
2072A	3,10		
2106	8,6		
2096	5,1		
2084	8,1		
2061	5,9		
2090	6,2	1,9	4,10



SURVEY UNITS LEGEND

Class 3

[#] Measurement Number

No Scale

Survey Unit Identifier

SU54-2-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Second Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-2-1
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Floor Tile	42	36	17	90	80
2	Floor Tile	60	72	18	180	90
3	Floor Tile	60	72	18	180	90
4	Tan Tile	61	74	18	185	90
5	Linoleum	58	17	17	41	80
6	Linoleum	48	-3	16	-9	80
7	Drywall	23	-39	13	-97	60
8	Linoleum	49	-1	16	-4	80
9	Linoleum	64	29	17	71	80
10	Plaster Wall	84	83	17	206	80
11	White Tile	37	26	17	65	80
12	Green Ceramic	302	305	28	758	140
13	Textured Concrete	73	47	18	116	90
				Maximum:	758	
				Average:	82	
				STDEV:	207	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Linoleum/ Concrete	Drywall	Green Ceramic
Instrument:	2360	141321	Background (cpm):	48	99	85	299
Detector:	44-110	PR-258430	Background σ (cpm):	14.35	12.73	10.86	14.28
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min		

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-2-1
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Black Lab Table	50	23	14	57	70
				Maximum:	57	
				Average:	57	
				STDEV:	35	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	184935
Detector:	43-68	PR-181739
Probe Area:	126	cm^2

Reference Material:	Composite	
Background (cpm):	77	
Background σ (cpm):	10.11	
Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-2-1
Survey Date: 11/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Floor Tile	105	-20	8	-317	240
2	Floor Tile	112	-19	8	-289	250
3	Floor Tile	102	-21	8	-328	240
4	Tan Tile	107	-20	8	-309	240
5	Linoleum	90	-16	12	-251	370
6	Linoleum	87	-17	12	-263	370
7	Drywall	138	-20	9	-303	280
8	Linoleum	82	-18	12	-282	360
9	Linoleum	93	-15	12	-239	370
10	Plaster Wall	181	-9	10	-136	290
11	White Tile	139	-12	8	-184	260
12	Green Ceramic	706	-3	19	-46	580
13	Textured Concrete	88	-17	12	-259	370
QC4	Tan Tile	87	-25	8	-387	230
				Maximum:	-46	
				Average:	-247	
				STDEV:	81	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Linoleum/ Concrete	Drywall	Green Ceramic
Instrument:	2360	253237	Background (cpm):	47	39	54	179
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	11.07	6.86	13.66
Probe Area:	126	cm^2	Sample Analysis Time:	4	min		

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-2-1
Survey Date: 11/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Black Lab Table	148	-2	13	-26	390
				Maximum:	-26	
				Average:	-26	
				STDEV:	195	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Composite	
Background (cpm):	39	cpm
Background σ (cpm):	11.07	cpm
Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-2-1
Survey Date: 11/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Floor Tile	4	0	1	3	20
2	Floor Tile	0	-1	1	-5	10
3	Floor Tile	6	1	2	8	20
4	Tan Tile	3	0	1	1	20
5	Linoleum	0	-1	1	-7	20
6	Linoleum	0	-1	1	-7	20
7	Drywall	1	-1	1	-8	20
8	Linoleum	2	0	1	-3	20
9	Linoleum	1	-1	1	-5	20
10	Plaster Wall	4	0	2	-2	30
11	White Tile	1	0	1	-3	20
12	Green Ceramic	36	-1	4	-10	70
13	Textured Concrete	3	0	1	-1	20
QC4	Tan Tile	3	0	1	1	20
				Maximum:	8	
				Average:	-3	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Linoleum/ Concrete	Drywall	Green Ceramic
Instrument:	2360	253237	Background (cpm):	1	1	1	10
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.17	1.27	2.89
Probe Area:	126	cm^2	Sample Analysis Time:	4	min		

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-2-1
Survey Date: 11/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Black Lab Table	3	0	1	2	20
				Maximum:	2	
				Average:	2	
				STDEV:	10	

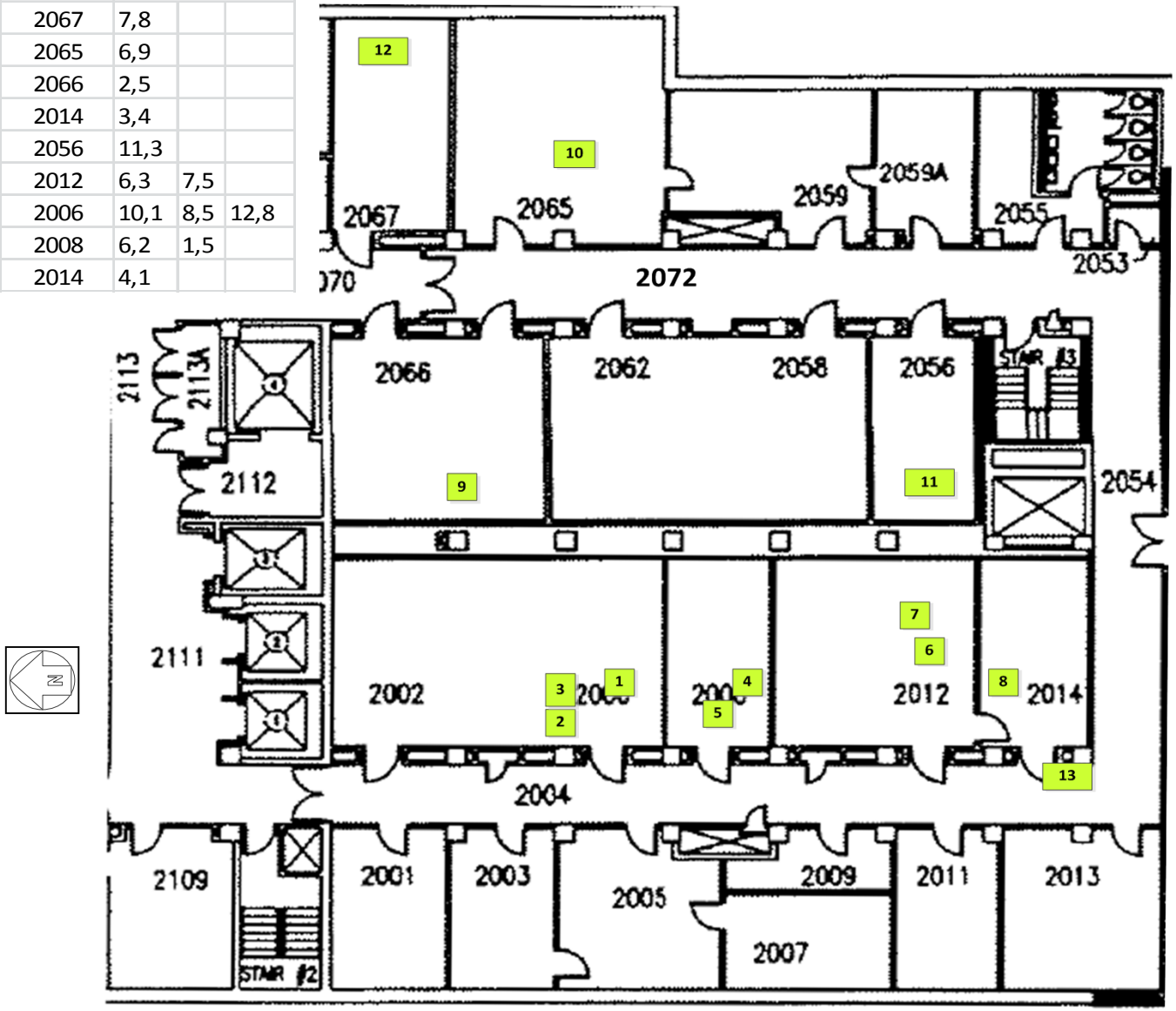
Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material: Composite
Background (cpm): 1
Background σ (cpm): 0.8
Sample Analysis Time: 4 min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Room	X,Y Locations		
2067	7,8		
2065	6,9		
2066	2,5		
2014	3,4		
2056	11,3		
2012	6,3	7,5	
2006	10,1	8,5	12,8
2008	6,2	1,5	
2014	4,1		



SURVEY UNITS LEGEND

Class 3

[#] Measurement Number

No Scale

Survey Unit Identifier

SU54-2-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Second Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-2-2
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Linoleum	66	33	17	81	80
2	Linoleum	51	3	16	6	80
3	Linoleum	55	11	16	26	80
4	Brown Tile	31	14	16	35	80
5	Brown Tile	29	10	16	25	80
6	Tan Tile	24	0	16	0	80
7	Tan Tile	35	22	17	55	80
8	Drywall	38	-9	14	-23	70
9	Linoleum	75	51	18	126	90
10	Floor Tile	68	88	18	219	90
11	Drywall	23	-39	13	-97	60
12	Plaster Wall	76	67	16	166	80
13	Tan Tile	65	82	18	205	90
				Maximum:	219	
				Average:	41	
				STDEV:	93	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	141321
Detector:	44-110	PR-258430
Probe Area:	126	cm^2

Reference Material:	Floor Tile	Linoleum	Drywall
Background (cpm):	48	99	85
Background σ (cpm):	14.35	12.73	10.86
Sample Analysis Time:	0.5	min	

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-2-2
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Painted Metal Ceiling Tile	31	-1	12	-3	60
2	Black Lab Sink	38	-1	13	-3	70
3	Rusted Metal	39	15	12	37	60
4	Black Lab Sink	38	-1	13	-3	70
5	Painted Metal Under Sink	28	-7	11	-18	60
6	Stainless Hood	42	21	13	52	60
7	Stainless Hood	35	7	12	17	60
8	Painted Metal Ceiling Tile	38	13	12	32	60
9	Black Lab Sink	28	-21	13	-53	60
10	Rusted Metal	39	15	12	37	60
11	Hood	48	19	14	47	70
				Maximum:	52	
				Average:	-3	
				STDEV:	32	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Composite
Instrument:	2360	184935	Background (cpm):	63	77
Detector:	43-68	PR-181739	Background σ (cpm):	8.52	10.11
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-2-2
Survey Date: 11/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Linoleum	79	-19	12	-294	360
2	Linoleum	91	-16	12	-247	370
3	Linoleum	118	-9	12	-142	380
4	Brown Tile	108	-20	8	-305	240
5	Brown Tile	144	-11	9	-165	260
6	Tan Tile	107	-20	8	-309	240
7	Tan Tile	114	-18	8	-282	250
8	Drywall	135	-20	9	-315	270
9	Linoleum	128	-7	12	-103	380
10	Floor Tile	94	-23	8	-359	240
11	Drywall	183	-8	10	-128	290
12	Plaster Wall	151	-16	9	-253	280
13	Tan Tile	149	-9	9	-145	260
QC10	Floor Tile	102	-21	8	-328	240
QC11	Drywall	143	-18	9	-284	280
				Maximum:	-103	
				Average:	-234	
				STDEV:	86	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Linoleum	Drywall
Instrument:	2360	253237	Background (cpm):	47	39	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	11.07	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-2-2
Survey Date: 11/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Painted Metal Ceiling Tile	125	-3	7	-46	210
2	Black Lab Sink	61	-12	7	-181	220
3	Rusted Metal	69	-17	6	-264	180
4	Black Lab Sink	81	-7	7	-103	230
5	Painted Metal Under Sink	103	-8	7	-132	200
6	Stainless Hood	83	-13	6	-210	190
7	Stainless Hood	97	-10	6	-155	200
8	Painted Metal Ceiling Tile	113	-6	7	-93	210
9	Black Lab Sink	73	-9	7	-134	220
10	Rusted Metal	97	-10	6	-155	200
11	Hood	138	8	8	119	260
				Maximum:	119	
				Average:	-46	
				STDEV:	99	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Metal	Composite
Instrument:	2360	253237		Background (cpm):	34	27
Detector:	43-68	PR-216834		Background σ (cpm):	4.21	5.95
Probe Area:	126	cm^2		Sample Analysis Time:	4	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-2-2
Survey Date: 11/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Linoleum	0	-1	1	-7	20
2	Linoleum	3	0	1	-1	20
3	Linoleum	2	0	1	-3	20
4	Brown Tile	2	0	1	-1	20
5	Brown Tile	1	0	1	-3	20
6	Tan Tile	1	0	1	-3	20
7	Tan Tile	2	0	1	-1	20
8	Drywall	1	-1	1	-8	20
9	Linoleum	0	-1	1	-7	20
10	Floor Tile	1	0	1	-3	20
11	Drywall	2	-1	1	-6	20
12	Plaster Wall	1	-1	1	-8	20
13	Tan Tile	1	0	1	-3	20
QC10	Floor Tile	2	0	1	-1	20
QC11	Drywall	4	0	2	-2	30
				Maximum:	-1	
				Average:	-4	
				STDEV:	3	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Linoleum	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.17	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-2-2
Survey Date: 11/28/2011

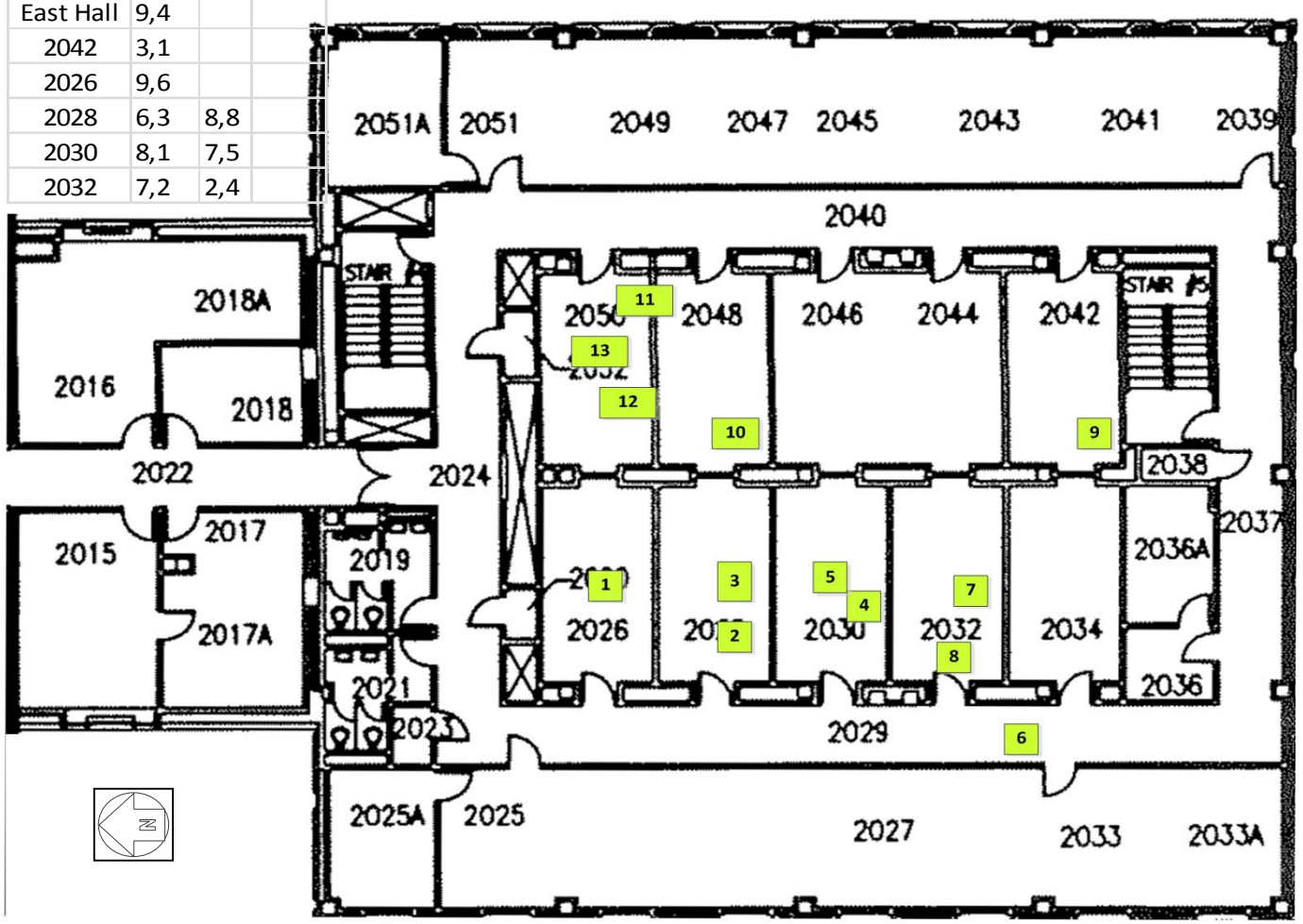
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Painted Metal Ceiling Tile	8	1	2	11	30
2	Black Lab Sink	5	1	1	6	20
3	Rusted Metal	3	0	1	1	20
4	Black Lab Sink	1	0	1	-2	20
5	Painted Metal Under Sink	2	0	1	-1	20
6	Stainless Hood	0	-1	1	-5	10
7	Stainless Hood	3	0	1	1	20
8	Painted Metal Ceiling Tile	8	1	2	11	30
9	Black Lab Sink	0	-1	1	-5	10
10	Rusted Metal	0	-1	1	-5	10
11	Hood	3	0	1	2	20
				Maximum:	11	
				Average:	11	
				STDEV:	6	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Metal	Composite
Detector:	43-68	PR-216834	Background (cpm):	1	1
Probe Area:	126	cm^2	Background σ (cpm):	0.73	0.8
			Sample Analysis Time:	4	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Room	X,Y Locations		
2050	12,1	5,2	10,3
2048	4,2		
East Hall	9,4		
2042	3,1		
2026	9,6		
2028	6,3	8,8	
2030	8,1	7,5	
2032	7,2	2,4	



SURVEY UNITS LEGEND

Class 3

[#] Measurement Number

No Scale

Survey Unit Identifier

SU54-2-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Second Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-2-3
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Linoleum	37	-25	15	-63	70
2	Linoleum	35	-29	15	-73	70
3	Linoleum	36	-27	15	-68	70
4	Drywall	35	-15	14	-38	70
5	Linoleum	26	-47	15	-118	70
6	Plaster Wall	53	21	15	52	70
7	Linoleum	27	-45	15	-113	70
8	Linoleum	41	-17	16	-43	80
9	Blue Tile	45	42	17	105	80
10	Floor Tile	37	26	17	65	80
11	Plaster Wall	59	33	15	82	70
12	Tan Tile	49	50	17	125	90
13	Tan Tile	34	20	17	50	80
				Maximum:	125	
				Average:	-19	
				STDEV:	85	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	141321
Detector:	44-110	PR-258430
Probe Area:	126	cm^2

Reference Material:	Floor Tile	Linoleum	Drywall
Background (cpm):	48	99	85
Background σ (cpm):	14.35	12.73	10.86
Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-2-3
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Lab Sink	50	23	14	57	70
2	Painted Metal Under Sink	37	11	12	27	60
3	Stainless Hood	56	49	14	122	70
4	Drywall	49	13	15	32	70
5	Black Lab Sink	45	13	14	32	70
6	Painted Metal Under Sink	34	5	12	12	60
7	Drywall	52	19	15	47	70
8	Stainless Lab Sink	64	65	14	162	70
9	Painted Metal Under Sink	57	51	14	127	70
10	Stainless Hood Drain	56	49	14	122	70
11	Hood	65	53	15	131	70
12	Drywall	58	31	15	77	70
				Maximum:	162	
				Average:	57	
				STDEV:	53	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal	Drywall
Instrument:	2360	184935	Background (cpm):	77	63	85
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	8.52	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-2-3
Survey Date: 11/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Linoleum	190	9	13	138	400
2	Linoleum	87	-17	12	-263	370
3	Linoleum	77	-19	12	-302	360
4	Drywall	142	-19	9	-288	280
5	Linoleum	106	-12	12	-189	370
6	Plaster Wall	190	-7	10	-101	300
7	Linoleum	99	-14	12	-216	370
8	Linoleum	127	-7	12	-107	380
9	Blue Tile	110	-19	8	-297	240
10	Floor Tile	91	-24	8	-371	240
11	Plaster Wall	173	-11	10	-167	290
12	Tan Tile	113	-18	8	-285	250
13	Tan Tile	125	-15	8	-239	250
QC1	Linoleum	111	-11	12	-169	370
				Maximum:	138	
				Average:	-207	
				STDEV:	130	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Linoleum	Drywall
Instrument:	2360	253237	Background (cpm):	47	39	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	11.07	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-2-3
Survey Date: 11/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Lab Sink	85	-6	8	-87	230
2	Painted Metal Under Sink	103	-8	7	-132	200
3	Stainless Hood	110	-7	7	-105	210
4	Drywall	148	-17	9	-265	280
5	Black Lab Sink	112	1	8	18	240
6	Painted Metal Under Sink	88	-12	6	-190	190
7	Drywall	161	-14	9	-214	290
8	Stainless Lab Sink	131	-1	7	-23	220
9	Painted Metal Under Sink	99	-9	7	-148	200
10	Stainless Hood Drain	129	-2	7	-31	220
11	Hood	139	8	8	123	260
12	Drywall	180	-9	10	-140	290
				Maximum:	123	
				Average:	-87	
				STDEV:	108	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal	Drywall
Instrument:	2360	253237	Background (cpm):	27	34	54
Detector:	43-68	PR-216834	Background σ (cpm):	5.95	4.21	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-2-3
Survey Date: 11/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Linoleum	3	0	1	-1	20
2	Linoleum	2	0	1	-3	20
3	Linoleum	0	-1	1	-7	20
4	Drywall	2	-1	1	-6	20
5	Linoleum	0	-1	1	-7	20
6	Plaster Wall	4	0	2	-2	30
7	Linoleum	2	0	1	-3	20
8	Linoleum	2	0	1	-3	20
9	Blue Tile	1	0	1	-3	20
10	Floor Tile	2	0	1	-1	20
11	Plaster Wall	4	0	2	-2	30
12	Tan Tile	0	-1	1	-5	10
13	Tan Tile	2	0	1	-1	20
QC1	Linoleum	2	0	1	-3	20
				Maximum:	-1	
				Average:	-3	
				STDEV:	2	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Linoleum	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.17	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

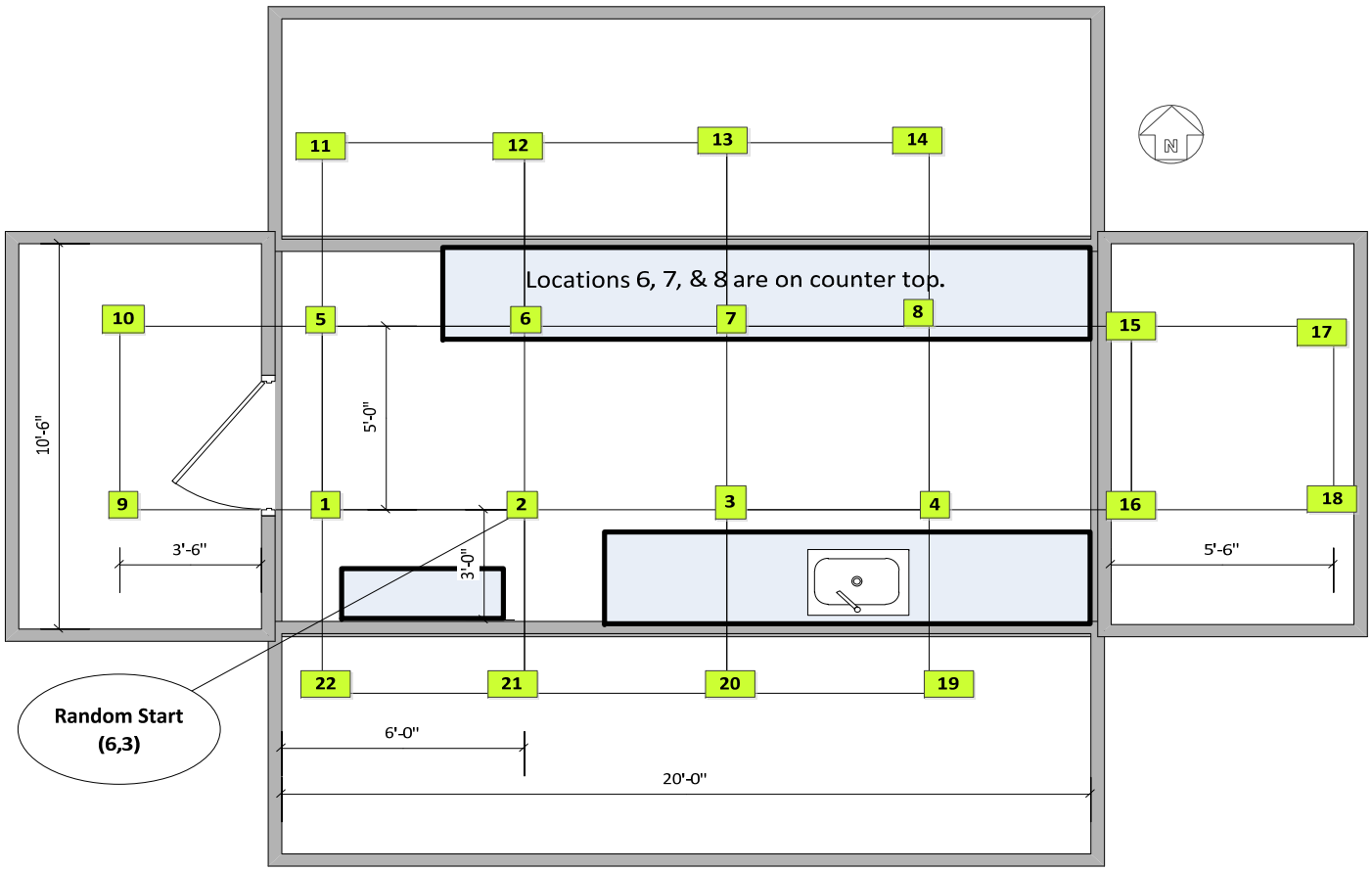
Building: 54
Survey Unit: 54-2-3
Survey Date: 11/28/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Lab Sink	3	0	1	2	20
2	Painted Metal Under Sink	0	-1	1	-5	10
3	Stainless Hood	2	0	1	-1	20
4	Drywall	8	1	2	6	30
5	Black Lab Sink	0	-1	1	-5	10
6	Painted Metal Under Sink	0	-1	1	-5	10
7	Drywall	18	3	2	27	40
8	Stainless Lab Sink	4	0	1	3	20
9	Painted Metal Under Sink	1	0	1	-3	10
10	Stainless Hood Drain	4	0	1	3	20
11	Hood	5	1	1	6	20
12	Drywall	22	4	3	35	40
				Maximum:	35	
				Average:	2	
				STDEV:	13	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.8	0.73	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2



SURVEY UNITS
LEGEND

Class 1
[#] Measurement Number

No Scale

Survey Unit Identifier

SU54-2-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Second Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Survey Unit:1 Building 54 Room 2094
Survey Date: 12/19/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Tile Floor	54	60	12	150	60
2	Tile Floor	39	30	11	75	50
3	Tile Floor	46	44	12	110	60
4	Tile Floor	48	48	12	120	60
5	Tile Floor	69	90	14	224	70
6	Counter Top	51	25	12	62	60
7	Counter Top	59	41	13	102	60
8	Counter Top	43	9	11	22	60
9	Drywall	60	35	13	87	60
10	Drywall	65	45	13	112	60
11	Drywall	71	57	14	141	70
12	Drywall	74	63	14	156	70
13	Drywall	54	23	12	57	60
14	Drywall	60	35	13	87	60
15	Drywall	45	5	12	12	60
16	Drywall	39	-7	11	-18	50
17	Drywall	28	-29	10	-73	50
18	Drywall	23	-39	10	-97	50
19	Drywall	57	29	13	72	60
20	Drywall	41	-3	11	-8	50
21	Drywall	67	49	13	122	70
22	Drywall	44	3	12	7	60
				Maximum:	224	
				Average:	109	
				STDEV:	52	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Composite	Drywall
Instrument:	2360	141321	Background (cpm):	47.8	77.2	85.2
Detector:	44-110	PR-258430	Background σ (cpm):	6.66	10.11	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Survey Unit:1 Building 54 Room 2094
Survey Date: 12/19/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Tile Floor	143	-11	9	-169	260
2	Tile Floor	107	-20	8	-309	240
3	Tile Floor	108	-20	8	-305	240
4	Tile Floor	105	-20	8	-317	240
5	Tile Floor	122	-16	8	-250	250
6	Counter Top	148	10	9	158	260
7	Counter Top	108	0	8	2	240
8	Counter Top	113	1	8	22	250
9	Drywall	171	-11	9	-175	270
10	Drywall	185	-8	9	-121	280
11	Drywall	236	5	10	78	300
12	Drywall	169	-12	9	-183	270
13	Drywall	158	-15	9	-226	270
14	Drywall	146	-18	9	-272	260
15	Drywall	125	-23	8	-354	250
16	Drywall	121	-24	8	-370	250
17	Drywall	116	-25	8	-389	250
18	Drywall	115	-25	8	-393	250
19	Drywall	102	-29	8	-444	240
20	Drywall	107	-27	8	-424	240
21	Drywall	125	-23	8	-354	250
22	Drywall	148	-17	9	-265	260
				Maximum:	158	
				Average:	-138	
				STDEV:	156	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Composite	Drywall
Instrument:	2360	253237	Background (cpm):	46.59	26.86	54.0
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	5.95	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

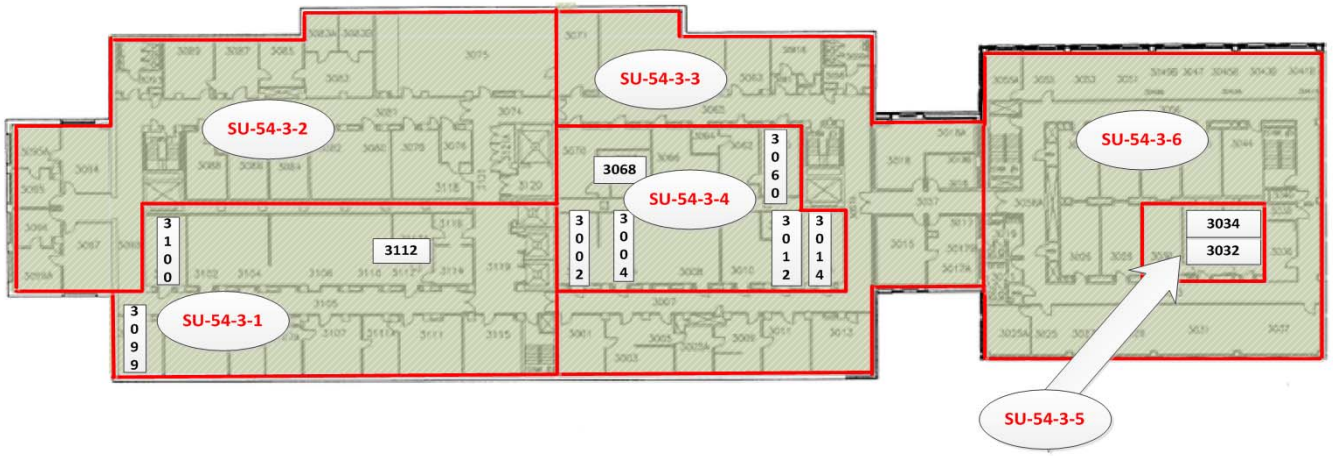
Survey Unit:1 Building 54 Room 2094
Survey Date: 12/19/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Tile Floor	9	2	2	14	30
2	Tile Floor	4	0	1	3	20
3	Tile Floor	3	0	1	1	20
4	Tile Floor	6	1	1	8	20
5	Tile Floor	5	1	1	5	20
6	Counter Top	2	0	1	0	10
7	Counter Top	4	0	1	4	20
8	Counter Top	5	1	1	6	20
9	Drywall	2	-1	1	-6	10
10	Drywall	5	0	1	0	20
11	Drywall	6	0	1	2	20
12	Drywall	5	0	1	0	20
13	Drywall	7	0	1	4	20
14	Drywall	3	-1	1	-4	20
15	Drywall	2	-1	1	-6	10
16	Drywall	9	1	2	8	30
17	Drywall	0	-1	1	-10	10
18	Drywall	3	-1	1	-4	20
19	Drywall	2	-1	1	-6	10
20	Drywall	3	-1	1	-4	20
21	Drywall	6	0	1	2	20
22	Drywall	2	-1	1	-6	10
				Maximum:	14	
				Average:	3	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Composite	Drywall
Instrument:	2360	253237	Background (cpm):	0.59	0.55	1.27
Detector:	43-68	PR-216834	Background σ (cpm):	0.51	0.8	1.26
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2



SURVEY UNITS LEGEND

Room Number
Class 2 SU
Class 3 SU

No Scale

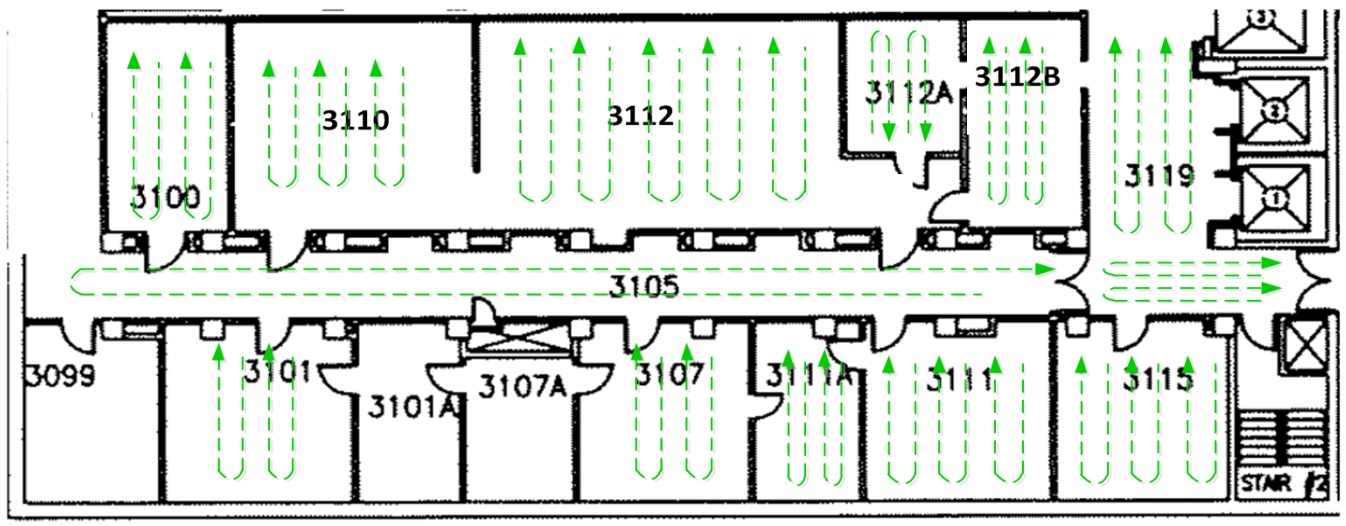
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Third Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

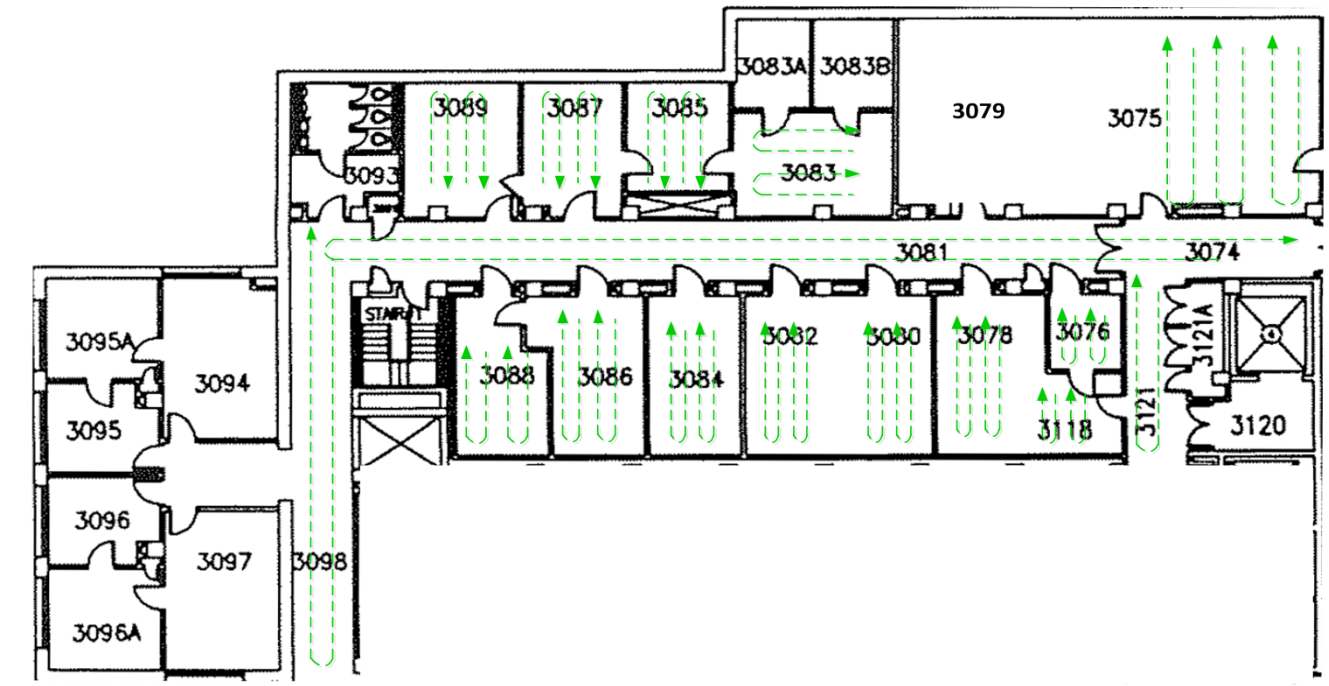
SU 54-3-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Third Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

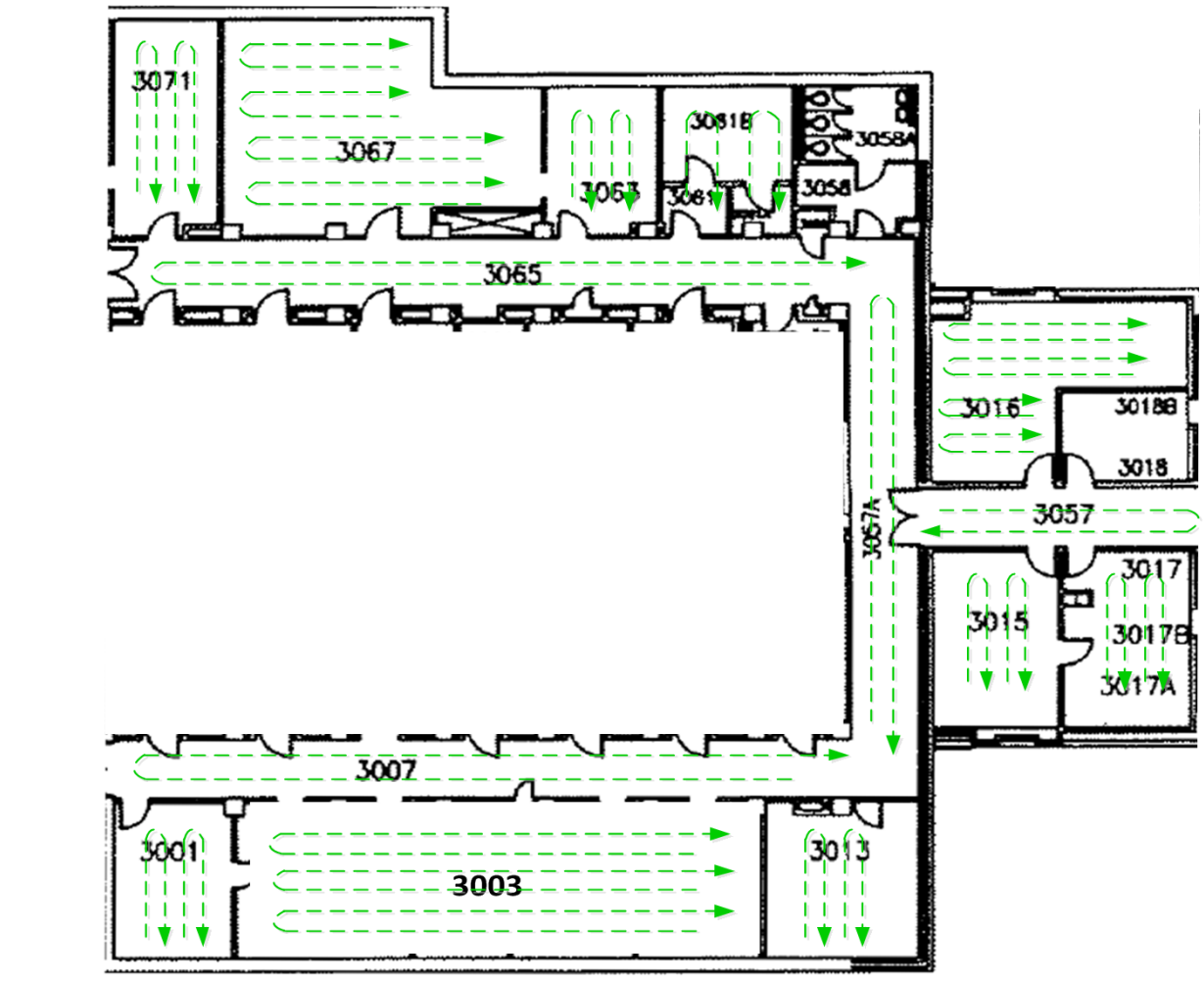
SU 54-3-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Third Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

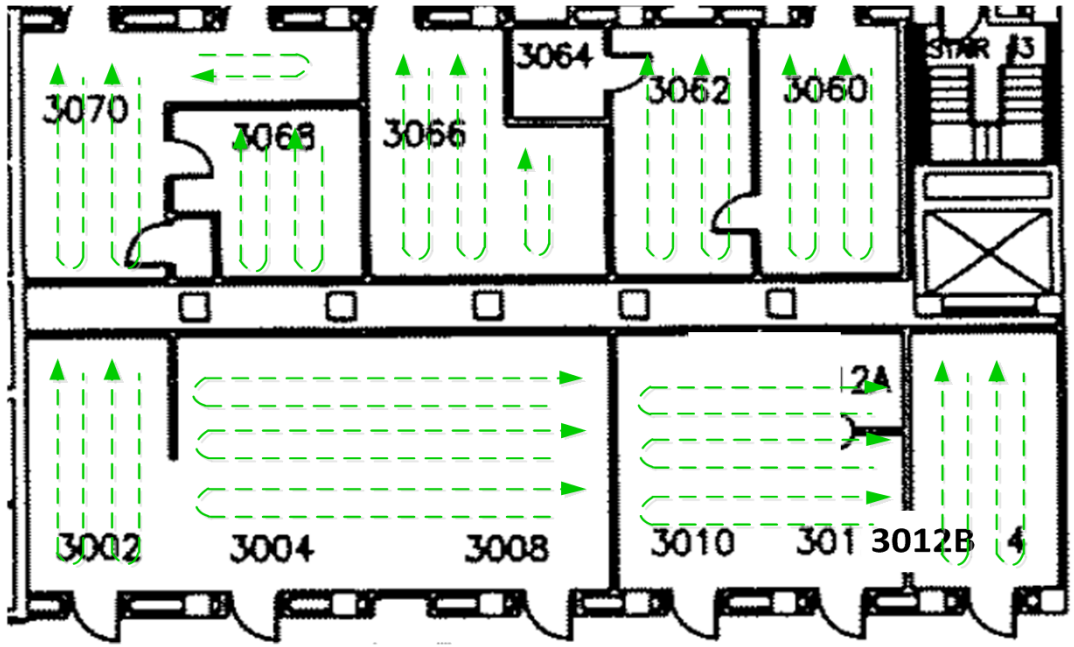
SU 54-3-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Third Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

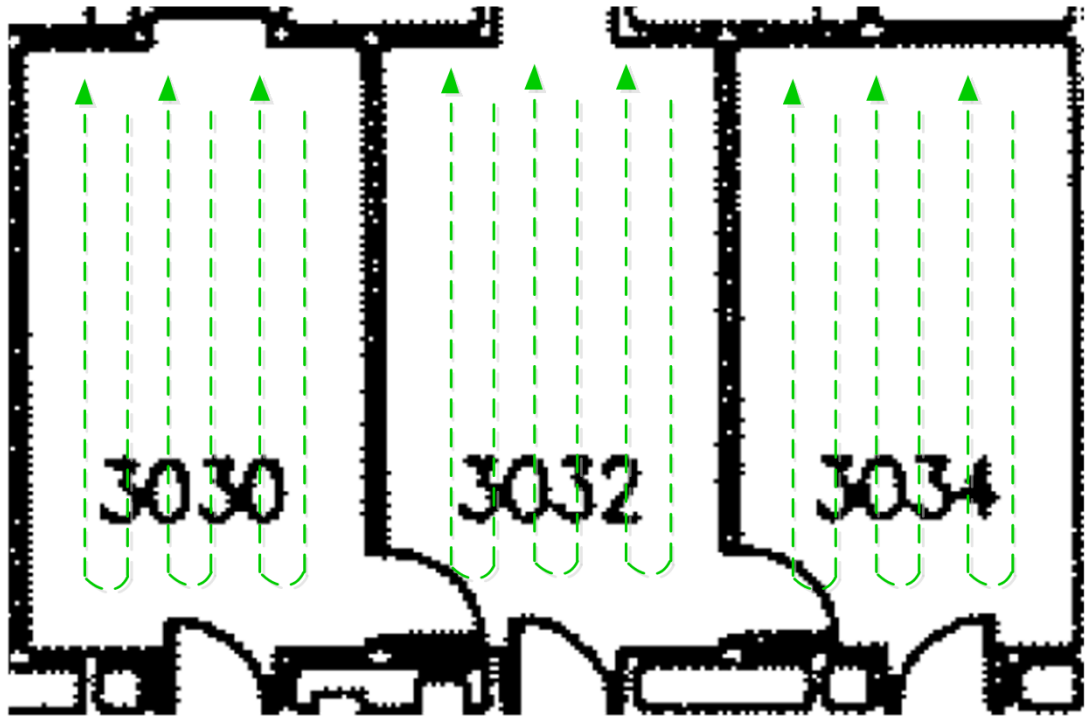
SU 54-3-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Third Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

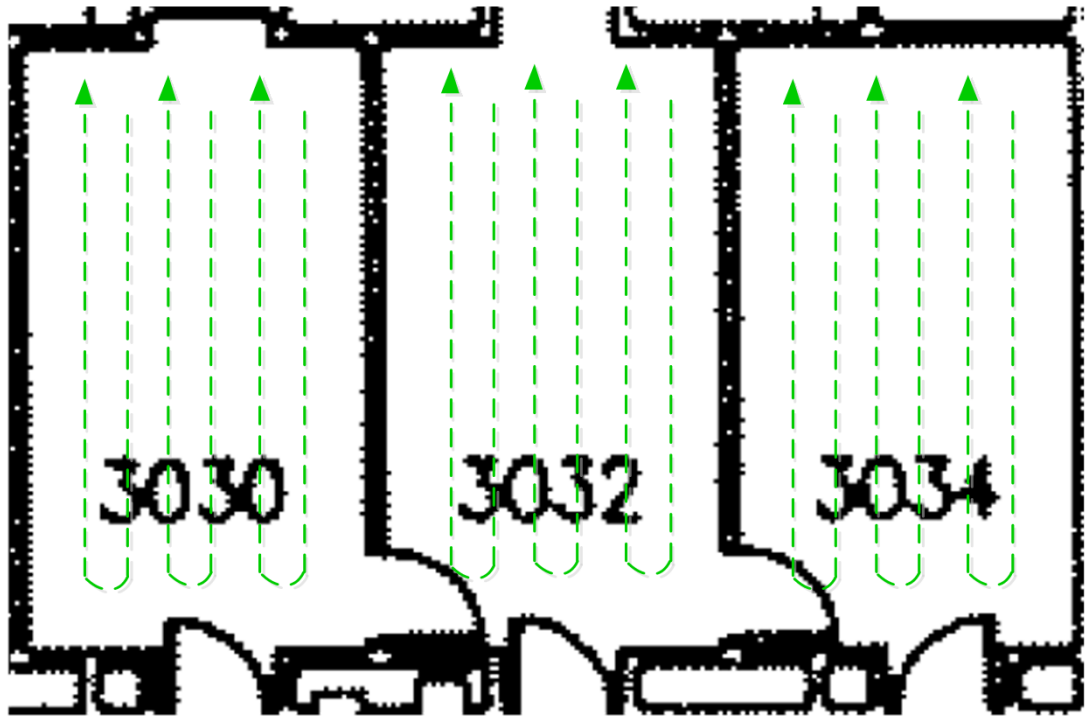
SU 54-3-5

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Third Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

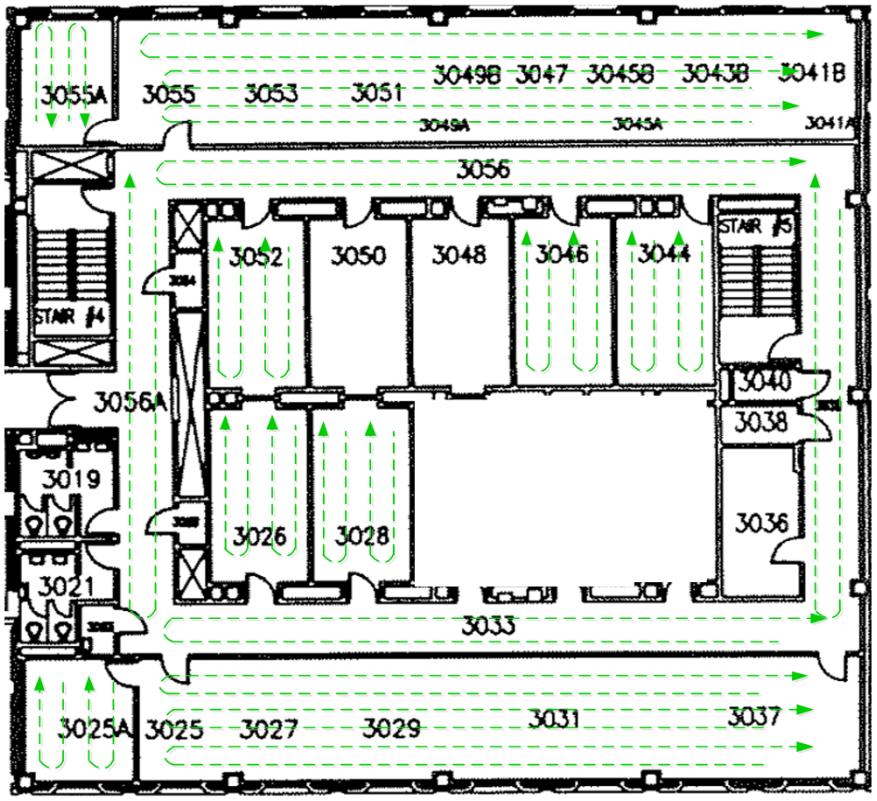
SU 54-3-5

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Third Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU 54-3-6

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Third Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 54 Level 3

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU54-3-1	2678	43	288	142	39	-263	463	31	116
SU54-3-2	1614	39	234	117	30	-274	303	-44	90
SU54-3-3	2655	53	316	158	42	-233	546	78	125
SU54-3-4	1893	30	244	123	30	-301	333	-24	89
SU54-3-5	2044	26	256	136	33	-313	368	14	96
SU54-3-6	2004	52	253	129	30	-236	360	-9	88

Area Scanned (ft^2) 8,073

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 54 Level 3

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU54-3-1	2678	0	22	1.4	3.1	-5	34	-3	6
SU54-3-2	1614	0	29	1.8	3.5	-5	47	-2	6
SU54-3-3	2655	0	33	3.0	4.7	-5	54	0	8
SU54-3-4	1893	0	42	4.7	5.7	-5	70	3	10
SU54-3-5	2044	0	37	1.9	3.5	-5	61	-2	6
SU54-3-6	2004	0	28	2.2	3.8	-5	45	-1	7

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	3	cpm
Probe Area:	582	cm^2	Background σ:	7.32	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	720	dpm/100 cm^2

Summary of Scan Results - Beta

Location: Building 54 Level 3

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-54-3-1	923	7	113	50	20	-328	1424	379	326
SU-54-3-2	457	5	89	42	16	-361	1027	244	265
SU-54-3-3	623	7	122	42	18	-328	1573	254	295
SU-54-3-4	1066	8	233	60	33	-312	3408	551	547
SU-54-3-6	2741	6	156	49	21	-345	2135	365	339

Area Scanned (ft^2) 788

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm^2

Reference Material: Counter
Background: 27 cpm
Background σ: 5.95 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.048 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 916 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 54 Level 3

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-54-3-1	923	0	14	1	2	-4	109	0	16
SU-54-3-2	457	0	17	0	2	-4	133	-1	14
SU-54-3-3	623	0	14	1	2	-4	109	1	17
SU-54-3-4	1066	0	25	2	4	-4	198	13	34
SU-54-3-6	2741	0	23	1	2	-4	182	2	19

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm2

Reference Material: Counter
Background: 1 cpm
Background σ: 0.8 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.098 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 705 dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 54

All measurements in µR/hour

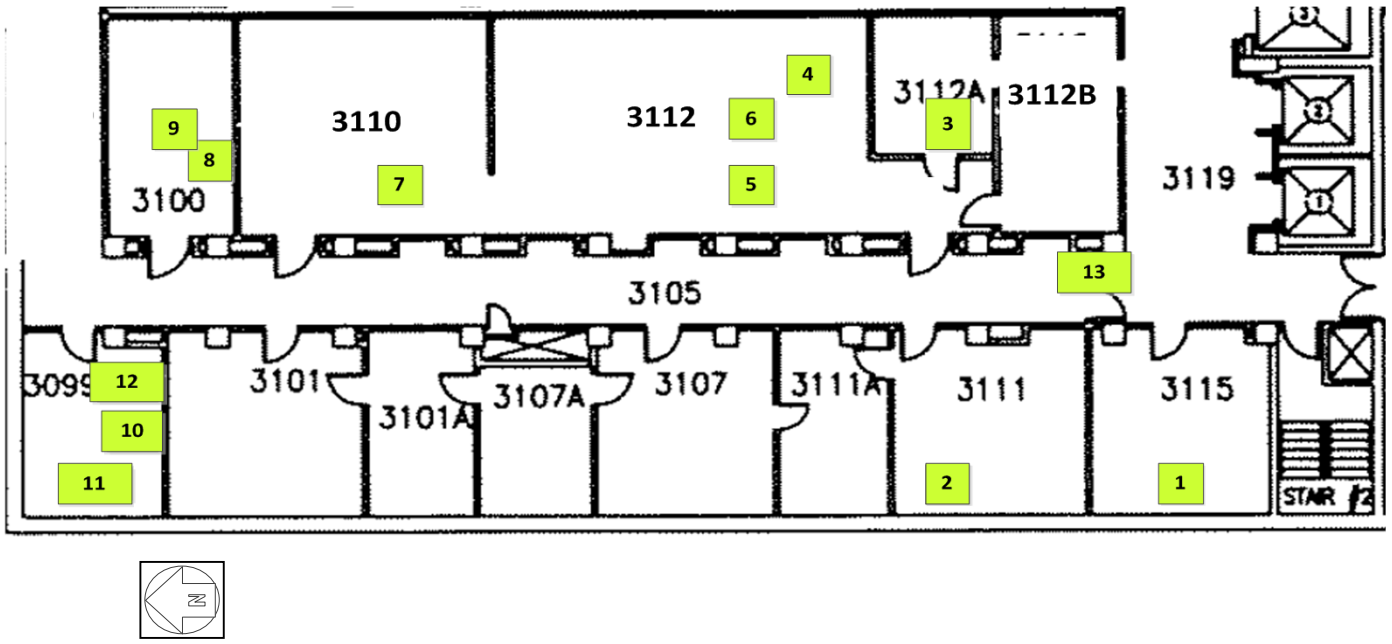
Date: 11/30/2011

Location	54-3-1	54-3-2	54-3-3	54-3-4	54-3-5	54-3-6
1	4	4	6	6	6	7
2	7	6	5	4	5	5
3	6	6	6	7	6	5
4	5	7	7	4	5	5
5	5	6	5	6	5	6
6	4	4	5	7	6	6
7	6	5	7	4	4	7
8	7	6	6	7	5	6
9	6	7	6	7	4	4
10	6	7	5	7	5	6
11	6	7	7	7	5	4
12	6	7	7	5	6	6
13	5	4	7	4	7	4
14	7	6	7	5	5	5
15	5	7	4	7	7	6
16	5	7	4	4	6	7
17	5	7		4	7	6
18	7	5		6		5
19	5			6		4
20	4			4		
21	4			5		
22	4			4		
23	7			7		
24	6			7		
25	6			7		
26	6			6		
27				7		
28				7		
29				4		
30				7		
31				4		
32				6		
33				5		
34				6		
35				6		
36				6		
37				5		
38				7		
39				7		
40				7		
41				6		
42				4		
43				6		
44				6		

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012

Room	X,Y Locations		
3099	6,3	3,4	7,5
3100	8,1	7,2	
3104	7,3		
3110	2,5		
3112	9,3	1,5	3,5
3112A	4,4		
3111	2,9		
3115	1,6		



SURVEY UNITS
LEGEND

Class 3
[#] Measurement Number

No Scale

Survey Unit Identifier

SU54-3-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Third Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-3-1
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	118	137	20	340	100
2	Concrete	97	95	19	235	90
3	White Tile	49	50	17	125	90
4	White Tile	70	92	19	229	90
5	White Tile	78	108	19	269	90
6	White Tile	61	74	18	185	90
7	White Tile	57	66	18	165	90
8	Drywall	99	113	18	281	90
9	White Tile	51	54	18	135	90
10	Concrete	97	95	19	235	90
11	Concrete	95	91	19	225	90
12	Plaster Wall	57	29	15	72	70
13	Painted Green Ceramic Tile	222	145	25	360	120
				Maximum:	360	
				Average:	220	
				STDEV:	83	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Green Ceramic	Drywall
Instrument:	2360	141321	Background (cpm):	48	99	299	85
Detector:	44-110	PR-258430	Background σ (cpm):	14.35	12.73	14.28	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min		

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-3-1
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Lab Sink	55	33	15	82	70
2	Painted Metal Under Sink	66	69	14	172	70
3	Black Lab Sink	73	69	16	171	80
4	Painted Metal Under Sink	54	45	13	112	70
5	Black Lab Sink	54	31	14	77	70
6	Painted Metal Under Sink	49	35	13	87	60
7	Stainless Hood	66	69	14	172	70
8	Drywall Ceiling Tile	69	53	16	131	80
9	Drywall Ceiling Tile	84	83	17	206	80
10	Drywall Ceiling Tile	63	41	16	102	80
11	Drywall Ceiling Tile	35	-15	14	-38	70
12	Black Lab Sink	62	47	15	116	70
13	Painted Metal Under Sink	66	69	14	172	70
				Maximum:	206	
				Average:	82	
				STDEV:	67	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	184935	Reference Material:	Composite	Metal	Drywall
Detector:	43-68	PR-181739	Background (cpm):	77	63	85
Probe Area:	126	cm^2	Background σ (cpm):	10.11	8.52	10.86
			Sample Analysis Time:	0.5 min		

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-3-1
Survey Date: 11/29/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	180	6	13	99	390
2	Concrete	186	8	13	122	400
3	White Tile	117	-17	8	-270	250
4	White Tile	102	-21	8	-328	240
5	White Tile	108	-20	8	-305	240
6	White Tile	119	-17	8	-262	250
7	White Tile	119	-17	8	-262	250
8	Drywall	231	4	10	58	310
9	White Tile	105	-20	8	-317	240
10	Concrete	173	5	13	72	390
11	Concrete	168	3	13	52	390
12	Plaster Wall	161	-14	9	-214	290
13	Painted Green Ceramic Tile	609	-27	18	-423	560
QC13	Painted Green Ceramic Tile	592	-31	18	-489	560
				Maximum:	122	
				Average:	-152	
				STDEV:	198	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Green Ceramic	Drywall
Instrument:	2360	253237	Background (cpm):	47	39	179	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	11.07	13.66	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min		

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-3-1
Survey Date: 11/29/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Lab Sink	80	-7	7	-107	230
2	Painted Metal Under Sink	93	-11	6	-171	200
3	Black Lab Sink	109	0	8	6	240
4	Painted Metal Under Sink	87	-12	6	-194	190
5	Black Lab Sink	102	-1	8	-21	240
6	Painted Metal Under Sink	107	-7	7	-116	200
7	Stainless Hood	79	-14	6	-225	190
8	Drywall Ceiling Tile	100	-29	8	-451	260
9	Drywall Ceiling Tile	100	-29	8	-451	260
10	Drywall Ceiling Tile	102	-29	9	-444	260
11	Drywall Ceiling Tile	98	-30	8	-459	260
12	Black Lab Sink	105	-1	8	-9	240
13	Painted Metal Under Sink	86	-13	6	-198	190
				Maximum:	6	
				Average:	-107	
				STDEV:	177	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal	Drywall
Instrument:	2360	253237	Background (cpm):	27	34	54
Detector:	43-68	PR-216834	Background σ (cpm):	5.95	4.21	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-3-1
Survey Date: 11/29/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	3	0	1	-1	20
2	Concrete	4	0	2	1	20
3	White Tile	0	-1	1	-5	10
4	White Tile	2	0	1	-1	20
5	White Tile	2	0	1	-1	20
6	White Tile	0	-1	1	-5	10
7	White Tile	3	0	1	1	20
8	Drywall	2	-1	1	-6	20
9	White Tile	0	-1	1	-5	10
10	Concrete	3	0	1	-1	20
11	Concrete	5	0	2	4	30
12	Plaster Wall	1	-1	1	-8	20
13	Painted Green Ceramic Tile	0	-10	3	-84	50
QC13	Painted Green Ceramic Tile	6	-9	3	-72	50
				Maximum:	4	
				Average:	-8	
				STDEV:	23	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Green Ceramic	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	10	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.17	2.89	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min		

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-3-1
Survey Date: 11/29/2011

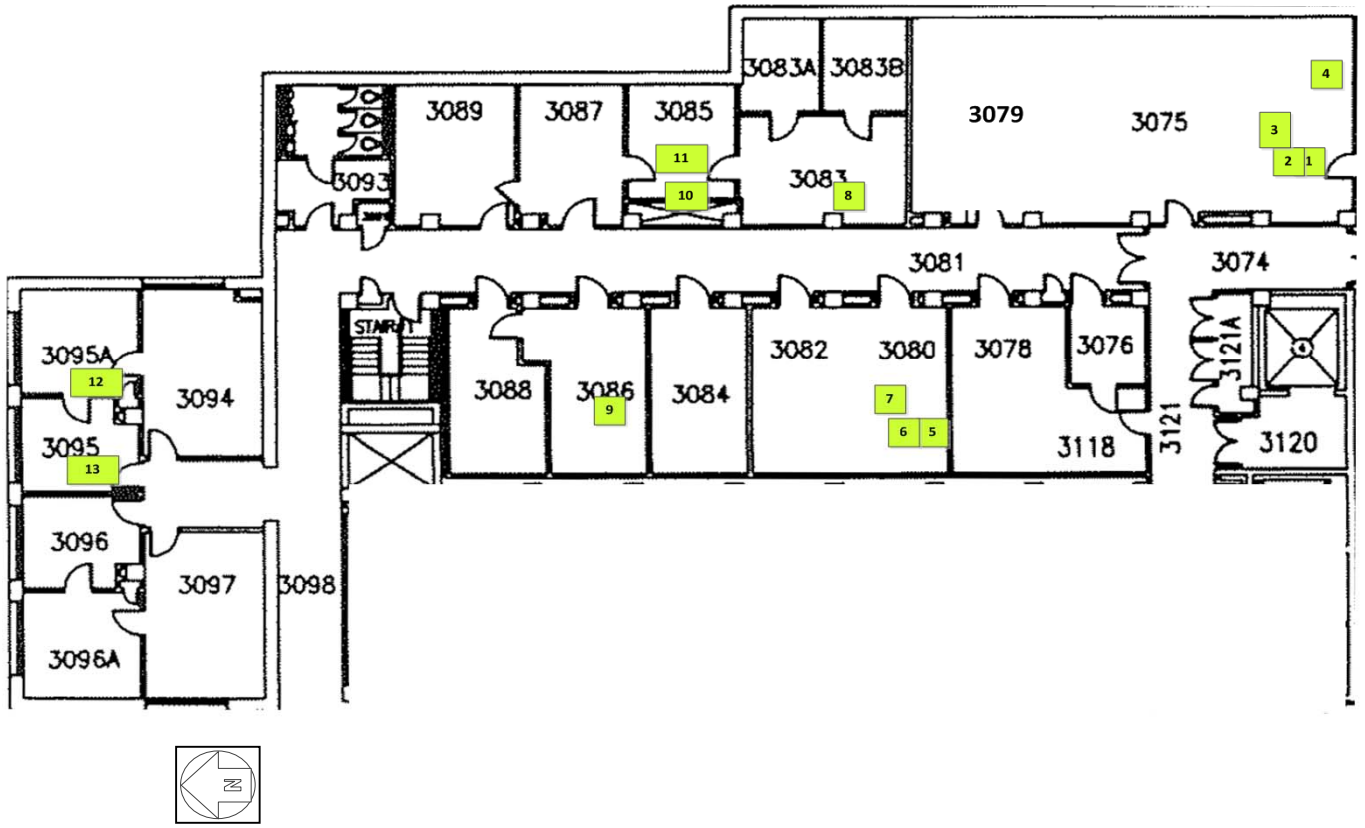
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Lab Sink	5	0	2	4	30
2	Painted Metal Under Sink	2	0	1	-1	20
3	Black Lab Sink	24	5	3	43	40
4	Painted Metal Under Sink	3	0	1	1	20
5	Black Lab Sink	10	2	2	14	30
6	Painted Metal Under Sink	2	0	1	-1	20
7	Stainless Hood	0	-1	1	-5	10
8	Drywall Ceiling Tile	11	1	2	12	30
9	Drywall Ceiling Tile	6	0	2	2	30
10	Drywall Ceiling Tile	9	1	2	8	30
11	Drywall Ceiling Tile	5	0	2	0	30
12	Black Lab Sink	2	0	1	-3	20
13	Painted Metal Under Sink	2	0	1	-1	20
				Maximum:	43	
				Average:	4	
				STDEV:	13	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	1.17	0.73	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Room	X,Y Locations			
3095	14,9			
3095A	2,3			
3083	1,7			
3080	2,2	2,4	3,7	
3086	8,5			
3085	2,5	6,7		
3075	7,5	7,7	9,1	13.9



SURVEY UNITS
LEGEND

Class 3
Measurement Number

No Scale

Survey Unit Identifier

SU54-3-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Third Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-3-2
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	91	83	19	205	90
2	Concrete	77	55	18	136	90
3	Concrete	86	73	18	180	90
4	Concrete	88	77	18	190	90
5	White Tile	43	38	17	95	80
6	White Tile	29	10	16	25	80
7	White Tile	28	8	16	20	80
8	Concrete	76	53	18	131	90
9	White Tile	66	84	18	209	90
10	Concrete	87	75	18	185	90
11	Concrete	72	45	17	111	90
12	Concrete	85	71	18	175	90
13	Drywall	58	31	15	77	70
				Maximum:	209	
				Average:	135	
				STDEV:	65	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	141321
Detector:	44-110	PR-258430
Probe Area:	126	cm^2

Reference Material:	Floor Tile	Concrete	Drywall
Background (cpm):	48	99	85
Background σ (cpm):	14.35	12.73	10.86
Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-3-2
Survey Date: 12/12/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Lab Sink	63	49	15	121	70
2	Painted Metal Under Sink	51	39	13	97	60
3	Drywall Ceiling Tile	62	39	16	97	80
4	Drywall Ceiling Tile	50	15	15	37	70
5	Drywall Ceiling Tile	61	37	15	92	80
				Maximum:	121	
				Average:	121	
				STDEV:	31	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal	Drywall
Instrument:	2360	184935	Background (cpm):	77	63	85
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	8.52	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-3-2
Survey Date: 11/29/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	167	3	13	48	390
2	Concrete	170	4	13	60	390
3	Concrete	178	6	13	91	390
4	Concrete	151	-1	13	-14	390
5	White Tile	107	-20	8	-309	240
6	White Tile	99	-22	8	-340	240
7	White Tile	119	-17	8	-262	250
8	Concrete	178	6	13	91	390
9	White Tile	89	-24	8	-379	230
10	Concrete	202	12	13	185	400
11	Concrete	186	8	13	122	400
12	Concrete	184	7	13	115	400
13	Drywall	137	-20	9	-307	280
QC3	Concrete	147	-2	13	-29	380
				Maximum:	185	
				Average:	-69	
				STDEV:	212	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall
Instrument:	2360	253237	Background (cpm):	47	39	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	11.07	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-3-2
Survey Date: 11/29/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	92	-4	8	-60	230
2	Painted Metal Under Sink	77	-15	6	-233	190
3	Black Lab Sink	85	-6	8	-87	230
4	Painted Metal Under Sink	86	-13	6	-198	190
5	Black Lab Sink	89	-5	8	-72	230
				Maximum:	-60	
				Average:	-60	
				STDEV:	93	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Composite	Metal
Background (cpm):	27	34
Background σ (cpm):	5.95	4.21
Sample Analysis Time:	4 min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-3-2
Survey Date: 11/29/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	3	0	1	-1	20
2	Concrete	4	0	2	1	20
3	Concrete	6	1	2	6	30
4	Concrete	3	0	1	-1	20
5	White Tile	2	0	1	-1	20
6	White Tile	3	0	1	1	20
7	White Tile	1	0	1	-3	20
8	Concrete	3	0	1	-1	20
9	White Tile	1	0	1	-3	20
10	Concrete	3	0	1	-1	20
11	Concrete	5	0	2	4	30
12	Concrete	2	0	1	-3	20
13	Drywall	1	-1	1	-8	20
QC3	Concrete	3	0	1	-1	20
				Maximum:	6	
				Average:	-1	
				STDEV:	3	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.17	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-3-2
Survey Date: 11/29/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	2	0	1	0	20
2	Painted Metal Under Sink	1	0	1	-3	10
3	Black Lab Sink	4	0	1	4	20
4	Painted Metal Under Sink	5	1	1	5	20
5	Black Lab Sink	4	0	1	4	20
				Maximum:	5	
				Average:	0	
				STDEV:	3	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal
Instrument:	2360	253237	Background (cpm):	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.8	0.73
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Room	X,Y Locations		
3071	8,3	7,1	
3067	9,9		
3015	1,1	2,2	3,4
3016	2,5	2,9	
3001	8,6		
3005	1,5	3,7	
3009	7,3	4,4	

SURVEY UNITS
LEGEND

Class 3
[#] Measurement Number

No Scale

Survey Unit Identifier

SU54-3-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Third Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-3-3
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	108	117	19	290	90
2	Concrete	87	75	18	185	90
3	Concrete	79	59	18	146	90
4	Concrete	88	77	18	190	90
5	Concrete	95	91	19	225	90
6	Concrete	93	87	19	215	90
7	Concrete	84	69	18	170	90
8	Concrete	79	59	18	146	90
9	Concrete	75	51	18	126	90
10	Plaster Wall	95	105	18	261	90
11	Concrete	62	25	17	61	80
12	Painted Green Ceramic Tile	191	83	24	206	120
13	Painted Green Ceramic Tile	210	121	25	300	120
				Maximum:	300	
				Average:	183	
				STDEV:	67	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Concrete	Drywall	Green Ceramic
Instrument:	2360	141321	Background (cpm):	99	85	299
Detector:	44-110	PR-258430	Background σ (cpm):	12.73	10.86	14.28
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-3-3
Survey Date: 11/30/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	194	10	13	153	400
2	Concrete	160	1	13	21	390
3	Concrete	163	2	13	33	390
4	Concrete	183	7	13	111	400
5	Concrete	179	6	13	95	390
6	Concrete	168	3	13	52	390
7	Concrete	168	3	13	52	390
8	Concrete	184	7	13	115	400
9	Concrete	186	8	13	122	400
10	Plaster Wall	258	11	11	163	320
11	Concrete	191	9	13	142	400
12	Painted Green Ceramic Tile	594	-31	18	-482	560
13	Painted Green Ceramic Tile	647	-18	19	-275	570
QC9	Concrete	160	1	13	21	390
QC11	Concrete	156	0	13	6	390
				Maximum:	163	
				Average:	23	
				STDEV:	189	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Concrete		Drywall	Green Ceramic
Instrument:	2360	253237	Background (cpm):	39	cpm	54	179
Detector:	43-68	PR-216834	Background σ (cpm):	11.07	cpm	6.86	13.66
Probe Area:	126	cm^2	Sample Analysis Time:	4	min		

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-3-3
Survey Date: 11/30/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	122	4	8	57	250
2	Painted Metal Under Sink	142	1	7	20	220
3	Black Lab Sink	126	5	8	72	250
				Maximum:	72	
				Average:	57	
				STDEV:	27	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal
Instrument:	2360	253237	Background (cpm):	27	34
Detector:	43-68	PR-216834	Background σ (cpm):	5.95	4.21
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-3-3
Survey Date: 11/30/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	9	1	2	12	30
2	Concrete	5	0	2	4	30
3	Concrete	3	0	1	-1	20
4	Concrete	2	0	1	-3	20
5	Concrete	0	-1	1	-7	20
6	Concrete	2	0	1	-3	20
7	Concrete	3	0	1	-1	20
8	Concrete	2	0	1	-3	20
9	Concrete	3	0	1	-1	20
10	Plaster Wall	8	1	2	6	30
11	Concrete	4	0	2	1	20
12	Painted Green Ceramic Tile	2	-10	3	-80	50
13	Painted Green Ceramic Tile	3	-9	3	-78	50
QC9	Concrete	5	0	2	4	30
QC11	Concrete	5	0	2	4	30
				Maximum:	12	
				Average:	-12	
				STDEV:	30	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Concrete	Drywall	Green Ceramic
Instrument:	2360	253237	Background (cpm):	1	1	10
Detector:	43-68	PR-216834	Background σ (cpm):	1.17	1.27	2.89
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-3-3
Survey Date: 11/30/2011

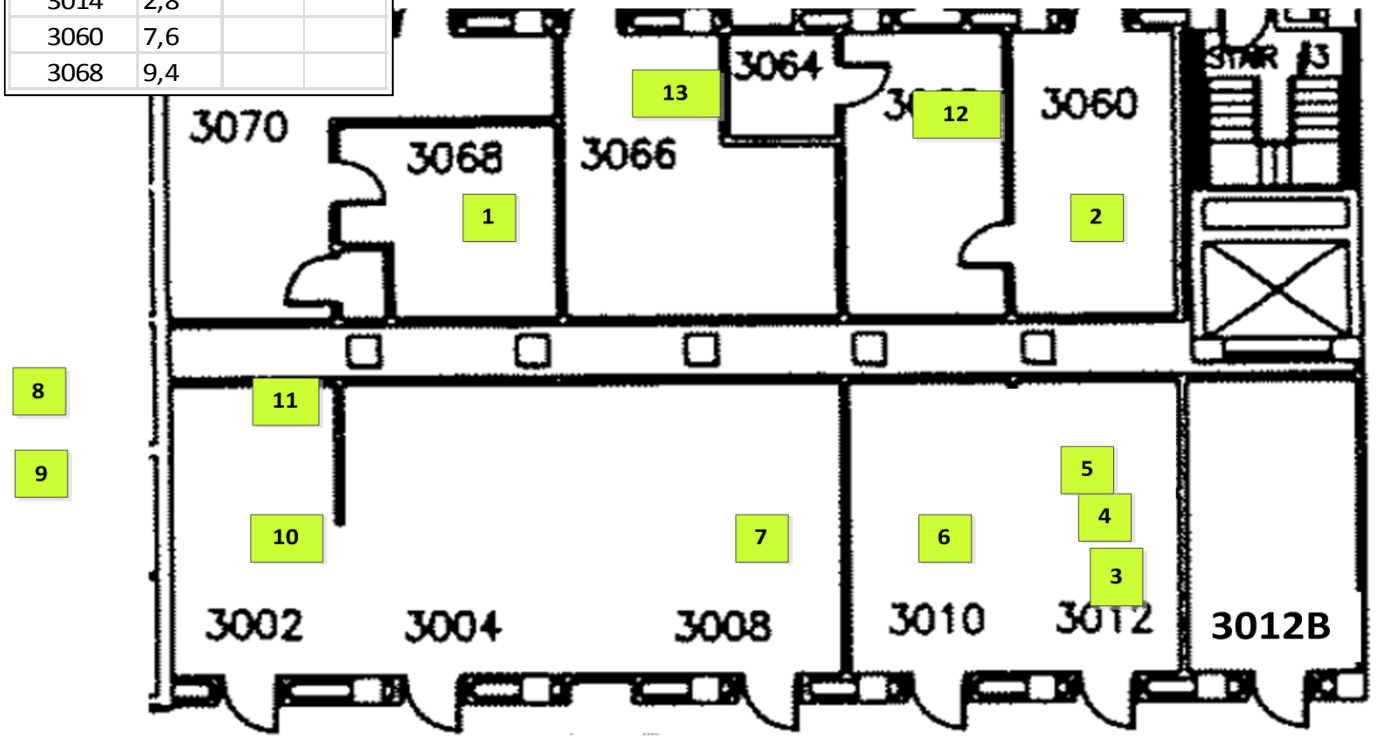
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	4	0	1	4	20
2	Painted Metal Under Sink	7	1	2	9	20
3	Black Lab Sink	5	1	1	6	20
				Maximum:	9	
				Average:	4	
				STDEV:	3	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal
Instrument:	2360	253237	Background (cpm):	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.8	0.73
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Room	X,Y Locations		
3002	6,4	10,8	
3004	4,5	1,6	
3006	12,4		
3008	8,1		
3010	7,7		
3012	2,5	7,5	8,8
3014	2,8		
3060	7,6		
3068	9,4		



SURVEY UNITS LEGEND

Class 3

[#] Measurement Number

No Scale

Survey Unit Identifier

SU54-3-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Third Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-3-4
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	White Tile	27	6	16	15	80
2	White Tile	32	16	16	40	80
3	White Tile	44	40	17	100	80
4	White Tile	39	30	17	75	80
5	White Tile	37	26	17	65	80
6	White Tile	36	24	17	60	80
7	White Tile	55	62	18	155	90
8	White Tile	29	10	16	25	80
9	White Tile	48	48	17	120	80
10	White Tile	37	26	17	65	80
11	Drywall	52	19	15	47	70
12	Drywall	63	41	16	102	80
13	Drywall	64	43	16	107	80

Maximum: 155
Average: 70
STDEV: 40

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	141321
Detector:	44-110	PR-258430
Probe Area:	126	cm^2

	Floor Tile	Drywall
Reference Material:		
Background (cpm):	48	85
Background σ (cpm):	14.35	10.86
Sample Analysis Time:	0.5 min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-3-4
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Lab Sink	42	7	14	17	70
2	Painted Metal Under Sink	25	-13	11	-32	50
3	Black Lab Sink	50	23	14	57	70
4	Painted Metal Under Sink	34	5	12	12	60
5	Hood	33	-11	13	-28	60
6	Black Lab Sink	32	-13	13	-33	60
7	Painted Metal Under Sink	41	19	12	47	60
10	Black Lab Sink	37	-3	13	-8	60
11	Rusted Painted Metal Under Sink	44	25	13	62	60
15	Black Lab Sink	55	33	15	82	70
16	Painted Metal Under Sink	63	63	14	157	70
17	Hood	56	35	15	87	70
21	Black Lab Sink	50	23	14	57	70
22	Painted Metal Under Sink	36	9	12	22	60
28	Black Lab Sink	42	7	14	17	70
29	Painted Metal Under Sink	47	31	13	77	60
30	Black Lab Sink	49	21	14	52	70
31	Painted Metal Under Sink	35	7	12	17	60
				Maximum:	157	
				Average:	17	
				STDEV:	49	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	184935
Detector:	43-68	PR-181739
Probe Area:	126	cm^2

Reference Material:	Composite	Metal
Background (cpm):	77	63
Background σ (cpm):	10.11	8.52
Sample Analysis Time:	0.5 min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-3-4
Survey Date: 11/30/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	White Tile	114	-18	8	-282	250
2	White Tile	104	-21	8	-320	240
3	White Tile	123	-16	8	-246	250
4	White Tile	112	-19	8	-289	250
5	White Tile	113	-18	8	-285	250
6	White Tile	118	-17	8	-266	250
7	White Tile	112	-19	8	-289	250
8	White Tile	137	-12	8	-192	260
9	White Tile	119	-17	8	-262	250
10	White Tile	107	-20	8	-309	240
11	Drywall	102	-29	9	-444	260
12	Drywall	199	-4	10	-66	300
13	Drywall	171	-11	9	-175	290
QC4	White Tile	109	-19	8	-301	240
				Maximum:	-66	
				Average:	-264	
				STDEV:	88	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Floor Tile	Drywall
Detector:	43-68	PR-216834	Background (cpm):	47	54
Probe Area:	126	cm^2	Background σ (cpm):	6.05	6.86
			Sample Analysis Time:	4 min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-3-4
Survey Date: 11/30/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Lab Sink	93	-4	8	-56	230
2	Painted Metal Under Sink	100	-11	7	-175	200
3	Black Lab Sink	85	-6	8	-87	230
4	Painted Metal Under Sink	100	-11	7	-175	200
5	Hood	88	-5	8	-76	230
6	Black Lab Sink	115	2	8	29	240
7	Painted Metal Under Sink	115	-7	7	-116	210
10	Black Lab Sink	89	-5	8	-72	230
11	Rusted Painted Metal Under Sink	87	-14	6	-225	190
15	Black Lab Sink	116	2	8	33	240
16	Painted Metal Under Sink	96	-12	6	-190	200
17	Hood	97	-3	8	-41	240
21	Black Lab Sink	85	-6	8	-87	230
22	Painted Metal Under Sink	90	-14	6	-214	190
28	Black Lab Sink	100	-2	8	-29	240
29	Painted Metal Under Sink	115	-7	7	-116	210
30	Black Lab Sink	98	-2	8	-37	240
31	Painted Metal Under Sink	112	-8	7	-128	210
				Maximum:	33	
				Average:	-56	
				STDEV:	77	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

	Composite	Metal
Reference Material:		
Background (cpm):	27	36
Background σ (cpm):	5.95	4.21
Sample Analysis Time:	4 min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-3-4
Survey Date: 11/30/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	White Tile	3	0	1	1	20
2	White Tile	2	0	1	-1	20
3	White Tile	5	1	1	5	20
4	White Tile	4	0	1	3	20
5	White Tile	2	0	1	-1	20
6	White Tile	4	0	1	3	20
7	White Tile	5	1	1	5	20
8	White Tile	8	1	2	12	30
9	White Tile	5	1	1	5	20
10	White Tile	3	0	1	1	20
11	Drywall	2	-1	1	-6	20
12	Drywall	1	-1	1	-8	20
13	Drywall	5	0	2	0	30
QC4	White Tile	4	0	1	3	20
				Maximum:	12	
				Average:	2	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No		Floor Tile	Drywall
Instrument:	2360	253237	Reference Material:		
Detector:	43-68	PR-216834	Background (cpm):	1	1
Probe Area:	126	cm^2	Background σ (cpm):	0.91	1.27
			Sample Analysis Time:	4 min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-3-4
Survey Date: 11/30/2011

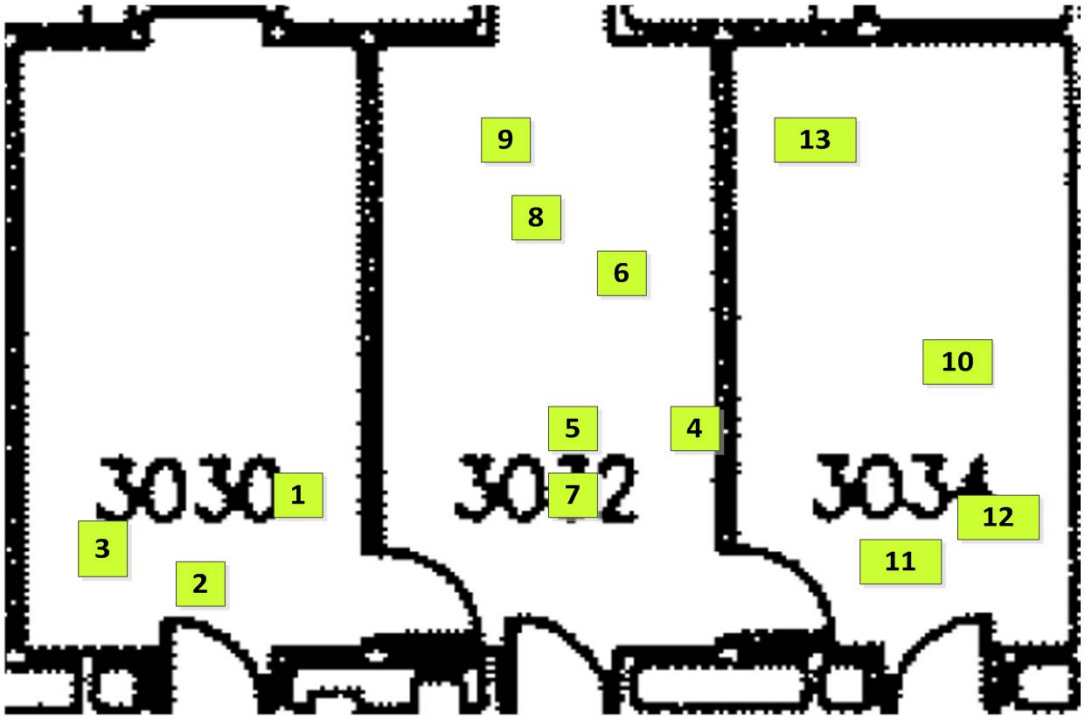
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	1	0	1	-2	20
2	Painted Metal Under Sink	1	0	1	-3	10
3	Black Lab Sink	0	-1	1	-5	10
4	Painted Metal Under Sink	2	0	1	-1	20
5	Hood	4	0	1	4	20
6	Black Lab Sink	0	-1	1	-5	10
7	Painted Metal Under Sink	4	0	1	3	20
10	Black Lab Sink	9	2	2	14	30
11	Rusted Painted Metal Under Sink	1	0	1	-3	10
15	Black Lab Sink	6	1	1	8	20
16	Painted Metal Under Sink	4	0	1	3	20
17	Hood	4	0	1	4	20
21	Black Lab Sink	0	-1	1	-5	10
22	Painted Metal Under Sink	3	0	1	1	20
28	Black Lab Sink	5	1	1	6	20
29	Painted Metal Under Sink	4	0	1	3	20
30	Black Lab Sink	5	1	1	6	20
31	Painted Metal Under Sink	0	-1	1	-5	10
				Maximum:	14	
				Average:	-2	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal
Instrument:	2360	253237	Background (cpm):	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.8	0.73
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Room	X,Y Locations					
3032	7,2	9,3	7,5	6,6	10,7	11,9
3034	6,3	4,4	3,5	11,8		
3030	3,4	1,5	2,8			



SURVEY UNITS
LEGEND

Class 3
\# Measurement Number

No Scale

Survey Unit Identifier

SU54-3-5

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Third Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-3-5
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Tan Tile	51	54	18	135	90
2	Plaster Wall	55	25	15	62	70
3	White Tile	47	46	17	115	80
4	Tan Tile	42	36	17	90	80
5	Tan Tile	44	40	17	100	80
6	Tan Tile	40	32	17	80	80
7	Drywall	41	-3	14	-8	70
8	Tan Tile	47	46	17	115	80
9	Tan Tile	45	42	17	105	80
10	Tan Tile	51	54	18	135	90
11	Tan Tile	52	56	18	140	90
12	Drywall	44	3	14	7	70
13	Tan Tile	48	48	17	120	80

Maximum: 140
Average: 97
STDEV: 47

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	141321
Detector:	44-110	PR-258430
Probe Area:	126	cm^2

Reference Material:	Floor Tile	Drywall
Background (cpm):	48	85
Background σ (cpm):	14.35	10.86
Sample Analysis Time:	0.5 min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-3-5
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	52	27	14	67	70
2	Painted Metal Under Sink	41	19	12	47	60
3	Hood	69	61	15	151	80
4	Stainless Hood Drain	76	89	15	221	70
				Maximum:	221	
				Average:	67	
				STDEV:	80	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal
Instrument:	2360	184935	Background (cpm):	77	63
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	8.52
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-3-5
Survey Date: 12/1/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Tan Tile	135	-13	8	-200	260
2	Plaster Wall	202	-4	10	-54	300
3	White Tile	146	-10	9	-157	260
4	Tan Tile	109	-19	8	-301	240
5	Tan Tile	110	-19	8	-297	240
6	Tan Tile	99	-22	8	-340	240
7	Drywall	128	-22	9	-342	270
8	Tan Tile	132	-14	8	-211	250
9	Tan Tile	115	-18	8	-278	250
10	Tan Tile	128	-15	8	-227	250
11	Tan Tile	129	-14	8	-223	250
12	Drywall	140	-19	9	-296	280
13	Tan Tile	122	-16	8	-250	250
QC10	Tan Tile	146	-10	9	-157	260
				Maximum:	-54	
				Average:	-244	
				STDEV:	80	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Floor Tile	Drywall
Detector:	43-68	PR-216834	Background (cpm):	47	54
Probe Area:	126	cm^2	Background σ (cpm):	6.05	6.86
			Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-3-5
Survey Date: 12/1/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	89	-5	8	-72	230
2	Painted Metal Under Sink	116	-5	7	-81	210
3	Hood	120	3	8	49	250
4	Stainless Hood Drain	139	1	7	8	220
				Maximum:	49	
				Average:	-72	
				STDEV:	63	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal
Instrument:	2360	253237	Background (cpm):	27	34
Detector:	43-68	PR-216834	Background σ (cpm):	5.95	4.21
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-3-5
Survey Date: 12/1/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Tan Tile	3	0	1	1	20
2	Plaster Wall	2	-1	1	-6	20
3	White Tile	0	-1	1	-5	10
4	Tan Tile	0	-1	1	-5	10
5	Tan Tile	2	0	1	-1	20
6	Tan Tile	1	0	1	-3	20
7	Drywall	3	-1	2	-4	20
8	Tan Tile	2	0	1	-1	20
9	Tan Tile	0	-1	1	-5	10
10	Tan Tile	1	0	1	-3	20
11	Tan Tile	2	0	1	-1	20
12	Drywall	2	-1	1	-6	20
13	Tan Tile	1	0	1	-3	20
QC10	Tan Tile	8	1	2	12	30
				Maximum:	12	
				Average:	-3	
				STDEV:	2	

Instrument Data and Analysis Parameters

	Model	Serial No		Floor Tile	Drywall
Instrument:	2360	253237	Reference Material:		
Detector:	43-68	PR-216834	Background (cpm):	1	1
Probe Area:	126	cm^2	Background σ (cpm):	0.91	1.27
			Sample Analysis Time:	4 min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-3-5
Survey Date: 12/1/2011

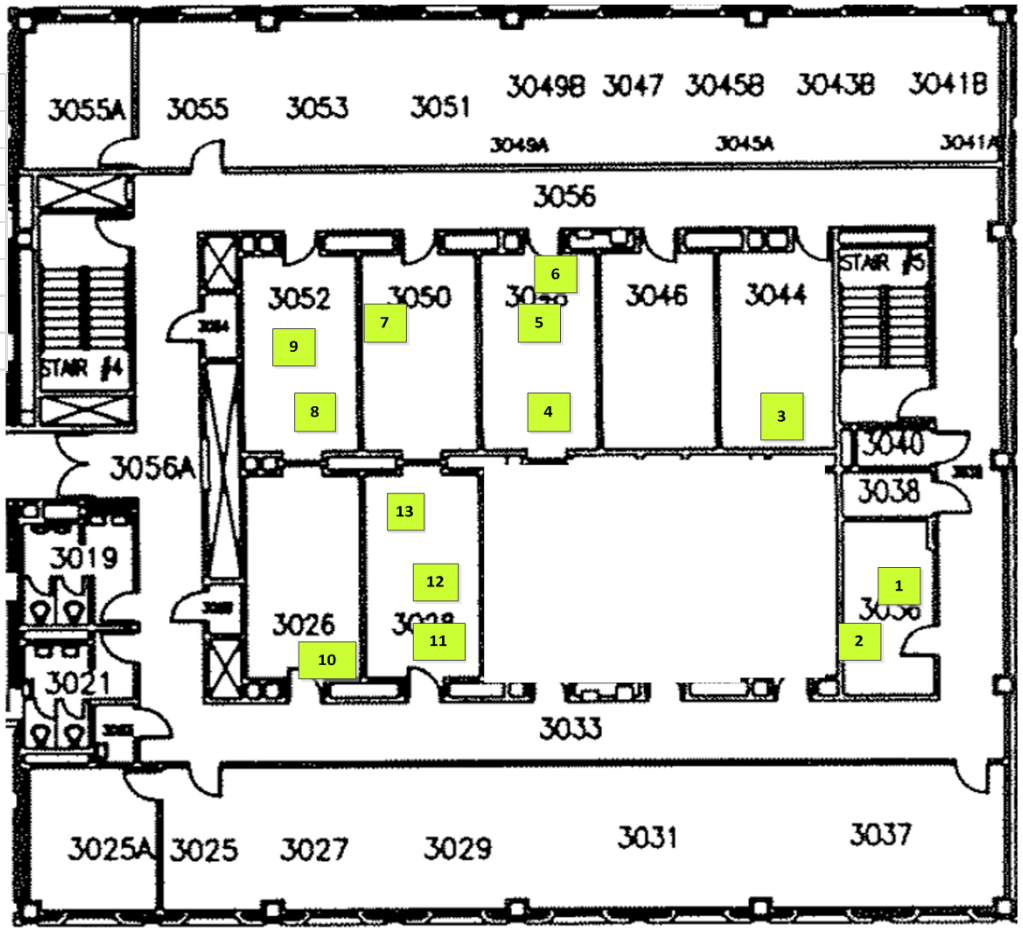
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	4	0	1	4	20
2	Painted Metal Under Sink	1	0	1	-3	10
3	Hood	0	-1	1	-5	10
4	Stainless Hood Drain	1	0	1	-3	10
				Maximum:	4	
				Average:	-2	
				STDEV:	4	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal
Instrument:	2360	253237	Background (cpm):	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.8	0.73
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Room	X,Y Locations		
3052	3,3	6,6	
3050	9,11		
3048	2,3	11,3	9,6
3044	1,6		
3036	10,2	1,7	
3028	3,4	2,5	8,6
3026	1,1		



SURVEY UNITS LEGEND

Class 3

[#] Measurement Number

No Scale

Survey Unit Identifier

SU54-3-6

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Third Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-3-6
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Tan Tile	47	46	17	115	80
2	Tan Tile	44	40	17	100	80
3	Drywall	58	31	15	77	70
4	Tan Tile	29	10	16	25	80
5	Tan Tile	56	64	18	160	90
6	Tan Tile	44	40	17	100	80
7	Tan Tile	40	32	17	80	80
8	Tan Tile	45	42	17	105	80
9	Drywall	61	37	15	92	80
10	Gray Tile	36	24	17	60	80
11	Gray Tile	36	24	17	60	80
12	Gray Tile	52	56	18	140	90
13	Plaster Wall	71	57	16	141	80

Maximum: 160
Average: 89
STDEV: 37

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	141321
Detector:	44-110	PR-258430
Probe Area:	126	cm^2

	Floor Tile	Drywall
Reference Material:		
Background (cpm):	48	85
Background σ (cpm):	14.35	10.86
Sample Analysis Time:	0.5 min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-3-6
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	51	25	14	62	70
2	Painted Metal Under Sink	69	75	15	186	70
3	Hood	70	63	16	156	80
4	Stainless Hood Drain	63	63	14	157	70
5	Black Lab Sink	44	11	14	27	70
6	Painted Metal Under Sink	35	7	12	17	60
				Maximum:	186	
				Average:	62	
				STDEV:	74	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	184935	Reference Material:	Composite	Metal
Detector:	43-68	PR-181739	Background (cpm):	77	63
Probe Area:	126	cm^2	Background σ (cpm):	10.11	8.52
			Sample Analysis Time:	0.5 min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-3-6
Survey Date: 12/1/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Tan Tile	220	8	10	131	290
2	Tan Tile	242	14	10	216	300
3	Drywall	280	16	11	249	330
4	Tan Tile	200	3	9	53	280
5	Tan Tile	256	17	10	271	310
6	Tan Tile	220	8	10	131	290
7	Tan Tile	238	13	10	201	300
8	Tan Tile	238	13	10	201	300
9	Drywall	312	24	11	373	340
10	Gray Tile	250	16	10	248	300
11	Gray Tile	264	19	10	302	310
12	Gray Tile	250	16	10	248	300
13	Plaster Wall	358	36	12	552	360
QC1	Tan Tile	290	26	10	403	320
				Maximum:	552	
				Average:	244	
				STDEV:	123	

Instrument Data and Analysis Parameters

	Model	Serial No		Floor Tile	Drywall
Instrument:	2360	253237	Reference Material:		
Detector:	43-68	PR-216834	Background (cpm):	47	54
Probe Area:	126	cm^2	Background σ (cpm):	6.05	6.86
			Sample Analysis Time:	4 min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-3-6
Survey Date: 12/1/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	180	-18	11	-281	330
2	Painted Metal Under Sink	214	-10	11	-149	340
3	Hood	194	-15	11	-226	340
4	Stainless Hood Drain	234	-5	11	-71	350
5	Black Lab Sink	308	14	12	217	370
6	Painted Metal Under Sink	318	16	12	256	380
				Maximum:	256	
				Average:	-281	
				STDEV:	92	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Metal	
Detector:	43-68	PR-216834	Background (cpm):	63	
Probe Area:	126	cm^2	Background σ (cpm):	8.52	
			Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-3-6
Survey Date: 12/1/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Tan Tile	1	0	1	-3	20
2	Tan Tile	2	0	1	-1	20
3	Drywall	2	-1	1	-6	20
4	Tan Tile	4	0	1	3	20
5	Tan Tile	3	0	1	1	20
6	Tan Tile	1	0	1	-3	20
7	Tan Tile	1	0	1	-3	20
8	Tan Tile	0	-1	1	-5	10
9	Drywall	4	0	2	-2	30
10	Gray Tile	5	1	1	5	20
11	Gray Tile	3	0	1	1	20
12	Gray Tile	2	0	1	-1	20
13	Plaster Wall	3	-1	2	-4	20
QC1	Tan Tile	3	0	1	1	20
				Maximum:	5	
				Average:	-1	
				STDEV:	3	

Instrument Data and Analysis Parameters

	Model	Serial No				
			Reference Material:	Floor Tile		Drywall
Instrument:	2360	253237	Background (cpm):	1	cpm	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	cpm	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

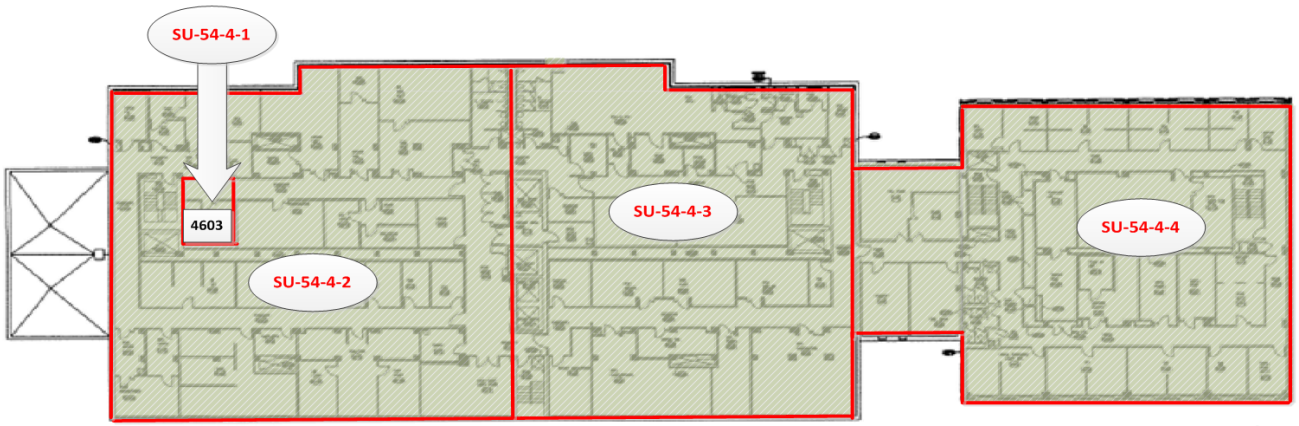
Building: 54
Survey Unit: 54-3-6
Survey Date: 12/1/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	4	0	1	4	20
2	Painted Metal Under Sink	4	0	1	3	20
3	Hood	2	0	1	0	20
4	Stainless Hood Drain	0	-1	1	-5	10
5	Black Lab Sink	9	2	2	14	30
6	Painted Metal Under Sink	5	1	1	5	20
				Maximum:	14	
				Average:	4	
				STDEV:	4	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal
Instrument:	2360	253237	Background (cpm):	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.8	0.73
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2



SURVEY UNITS
LEGEND

Room Number
Class 2 SU
Class 3 SU

No Scale

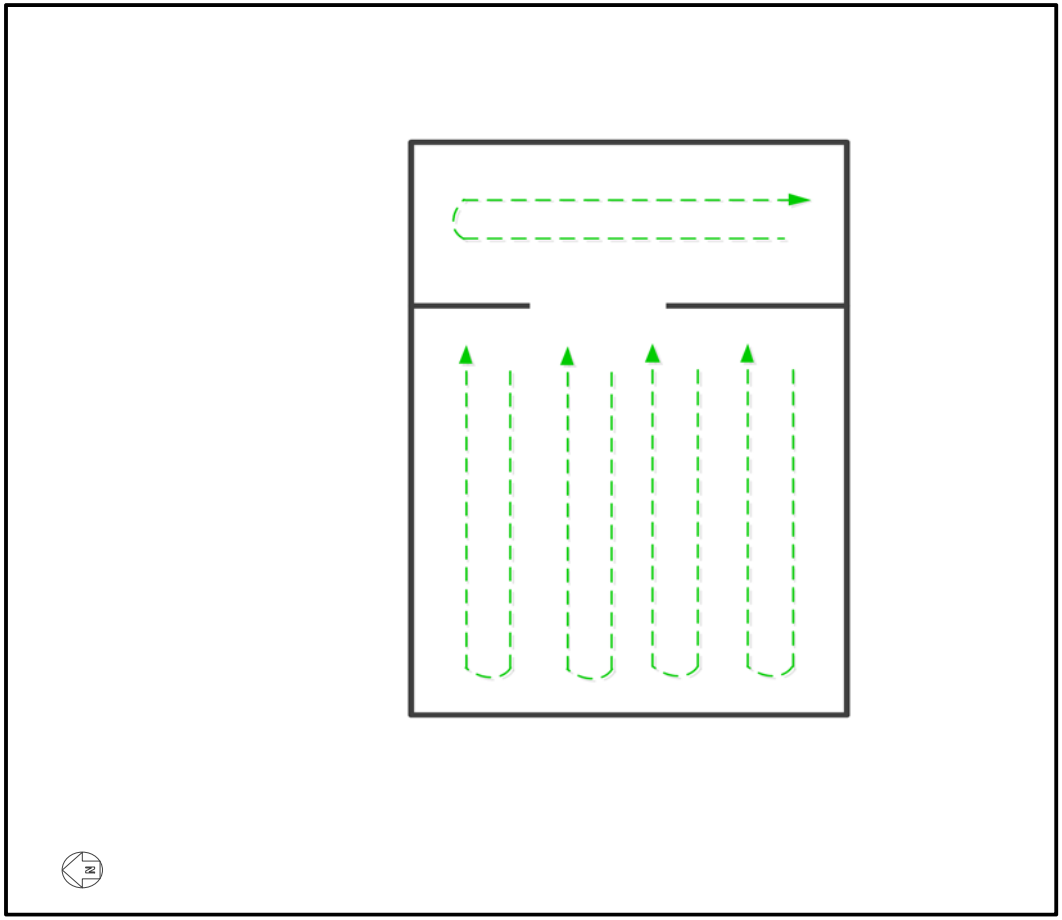
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Fourth Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

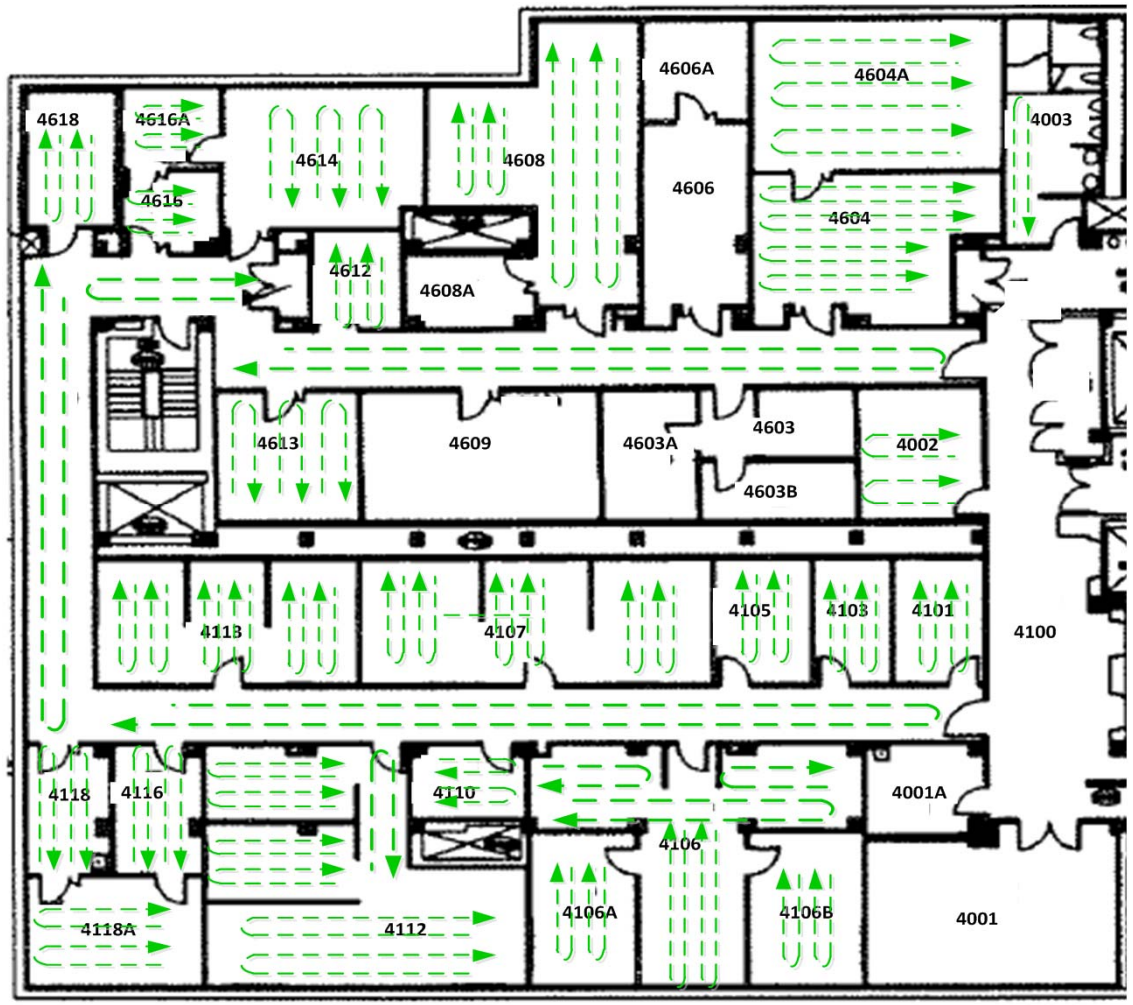
SU 54-4-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Fourth Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

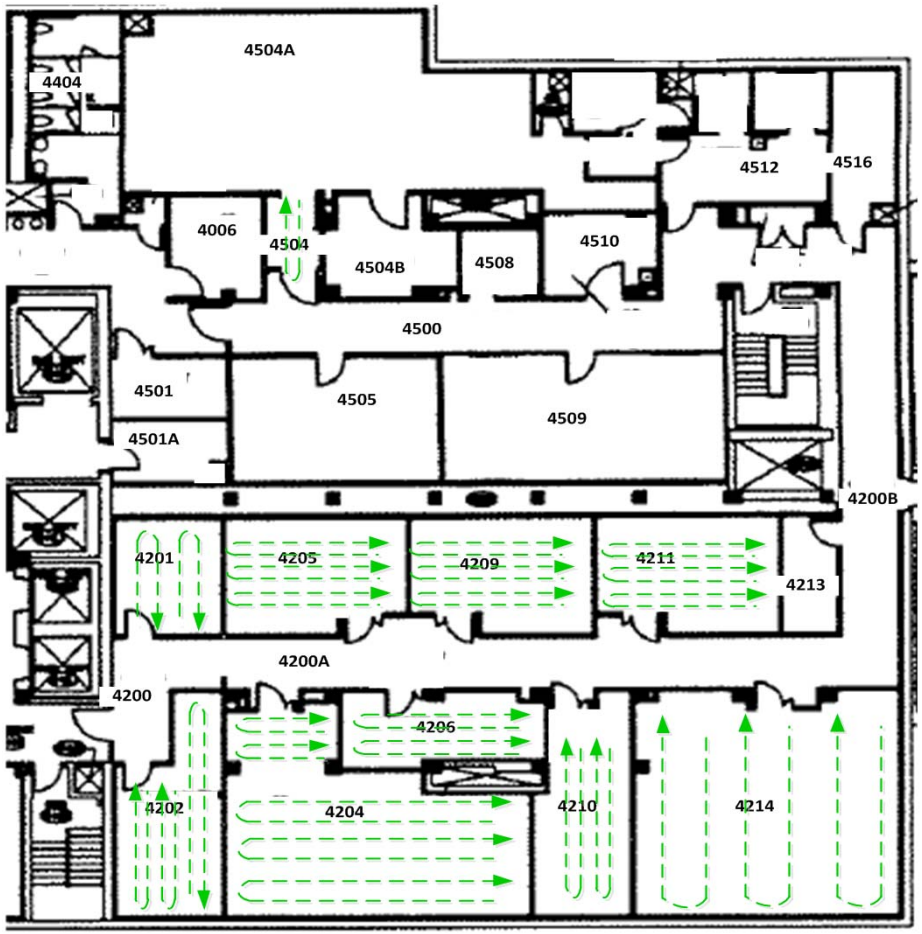
SU 54-4-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Fourth Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU 54-4-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Fourth Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU 54-4-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Fourth Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 54 Level 4

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	DPM/100cm^2 Minimum	DPM/100cm^2 Maximum	DPM/100cm^2 Average	DPM/100cm^2 STDEV
SU54-4-1	680	50	171	99	28	-242	117	-97	82
SU54-4-2	2683	30	195	94	24	-301	188	-112	71
SU54-4-3	1051	36	214	103	26	-283	244	-85	77
SU54-4-4	1035	28	229	108	30	-307	288	-70	90

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 54 Level 4

		Gross CPM				DPM/100cm^2			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU54-4-1	680	0	30	1.88	4.02	-5.37	48.32	-2.01	7.19
SU54-4-2	2683	0	33	2.83	4.49	-5.37	53.69	-0.31	8.03
SU54-4-3	1051	0	26	2.77	4.50	-5.37	41.17	-0.40	8.05
SU54-4-4	1035	0	23	3	5	-5	36	0	8

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 3 cpm
Background σ: 7.32 cpm
Scan speed: 1 detector width / 8sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 720 dpm/100 cm^2

Summary of Scan Results - Beta

Location: Building 54 Level 4

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-54-4-1	146	1	78	35	16	-428	846	127	263
SU-54-4-2	743	4	120	49	18	-378	1540	373	304
SU-54-4-3	2716	2	232	76	36	-411	3392	805	601
SU-54-4-4	574	11	124	54	21	-262	1606	444	340

Area Scanned (ft^2) 567

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm^2

Reference Material: Counter
Background: 27 cpm
Background σ: 5.95 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.048 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 916 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 54 Level 4

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-54-4-1	1323	0	20	1	3	-4	158	5	23
SU-54-4-2	743	0	18	1	3	-4	141	4	21
SU-54-4-3	2716	0	27	2	4	-4	214	13	32
SU-54-4-4	574	0	20	1	3	-4	158	4	22

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm2

Reference Material: Counter
Background: 1 cpm
Background σ: 0.8 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.098 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 705 dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 54

All measurements in µR/hour

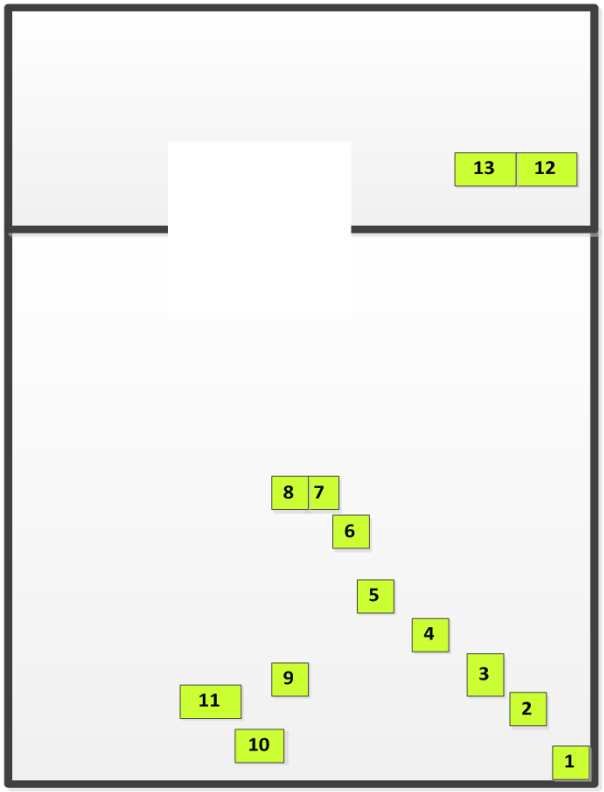
Date: 12/5/2011

Location	54-4-1	54-4-2	54-4-3	54-4-4
1	4	4	4	3
2	4	3	4	4
3	4	3	4	3
4	3	3	3	4
5	3	4	3	4
6	4	4	4	4
7	3	3	3	4
8	3	4	3	3
9	3	4	4	4
10	3	3	4	3
11	3	3	4	3
12	3	3	4	4
13	3	4	4	3
14	3	4	4	4
15		4	4	3
16		4	3	3
17		4	3	4
18		3	3	4
19		3	3	3
20		3	3	3
21		3	3	3
22		3	3	3
23		3	3	3
24			3	
25			4	
26			4	
27			4	
28			3	
29			3	
30			3	

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012

Room	X,Y Locations			
4613	1,1	6,3	4,4	5,5
	7,6	10,6	8,7	8,8
	3,9	1,10	3,11	
Hall	3,2	3,4		



SURVEY UNITS
LEGEND

Class 3
\# Measurement Number

No Scale

Survey Unit Identifier

SU54-4-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Fourth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-4-1
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	White Tile	39	30	17	75	80
2	Drywall	60	35	15	87	80
3	Linoleum	54	9	16	21	80
4	Linoleum	77	55	18	136	90
5	Linoleum	54	9	16	21	80
6	Linoleum	53	7	16	16	80
7	Linoleum	64	29	17	71	80
8	Linoleum	68	37	17	91	80
9	Linoleum	57	15	17	36	80
10	Linoleum	70	41	17	101	80
11	Linoleum	54	9	16	21	80
12	Drywall	50	15	15	37	70
13	Drywall	75	65	16	161	80
				Maximum:	161	
				Average:	61	
				STDEV:	47	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	141321
Detector:	44-110	PR-258430
Probe Area:	126	cm^2

Reference Material:	Linoleum	Drywall	Floor Tile
Background (cpm):	99	85	48
Background σ (cpm):	12.73	10.86	14.35
Sample Analysis Time:	0.5 min		

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building:	54
Survey Unit:	54-4-1
Survey Date:	12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Black Lab Sink	69	61	15	151	80
				Maximum:	151	
				Average:	151	
				STDEV:	40	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	184935	Reference Material:	Composite	
Detector:	43-68	PR-181739	Background (cpm):	77	cpm
Probe Area:	126	cm^2	Background σ (cpm):	10.11	cpm
			Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-4-1
Survey Date: 12/2/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	White Tile	230	11	10	170	300
2	Drywall	266	13	11	195	330
3	Linoleum	188	8	13	130	400
4	Linoleum	228	18	13	286	410
5	Linoleum	204	12	13	192	400
6	Linoleum	236	20	13	317	410
7	Linoleum	180	6	13	99	390
8	Linoleum	242	22	14	340	410
9	Linoleum	164	2	13	37	390
10	Linoleum	216	15	13	239	410
11	Linoleum	212	14	13	223	400
12	Drywall	254	10	11	148	320
13	Drywall	284	17	11	265	330
QC1	White Tile	204	4	9	69	290
QC2	Drywall	254	10	11	148	320
				Maximum:	340	
				Average:	203	
				STDEV:	88	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Linoleum	Floor Tile	Drywall
Instrument:	2360	253237	Background (cpm):	39	47	54
Detector:	43-68	PR-216834	Background σ (cpm):	11.07	6.05	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-4-1
Survey Date: 12/2/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Black Lab Sink	186	20	9	306	280
				Maximum:	306	
				Average:	306	
				STDEV:	140	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Composite	
Background (cpm):	27	
Background σ (cpm):	5.95	
Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-4-1
Survey Date: 12/2/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	White Tile	4	0	1	3	20
2	Drywall	2	-1	1	-6	20
3	Linoleum	1	-1	1	-5	20
4	Linoleum	3	0	1	-1	20
5	Linoleum	3	0	1	-1	20
6	Linoleum	3	0	1	-1	20
7	Linoleum	4	0	2	1	20
8	Linoleum	7	1	2	8	30
9	Linoleum	1	-1	1	-5	20
10	Linoleum	1	-1	1	-5	20
11	Linoleum	1	-1	1	-5	20
12	Drywall	2	-1	1	-6	20
13	Drywall	1	-1	1	-8	20
QC1	White Tile	4	0	1	3	20
QC2	Drywall	7	0	2	4	30
				Maximum:	8	
				Average:	-2	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Linoleum	Floor Tile	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	1.17	0.91	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-4-1
Survey Date: 12/2/2011

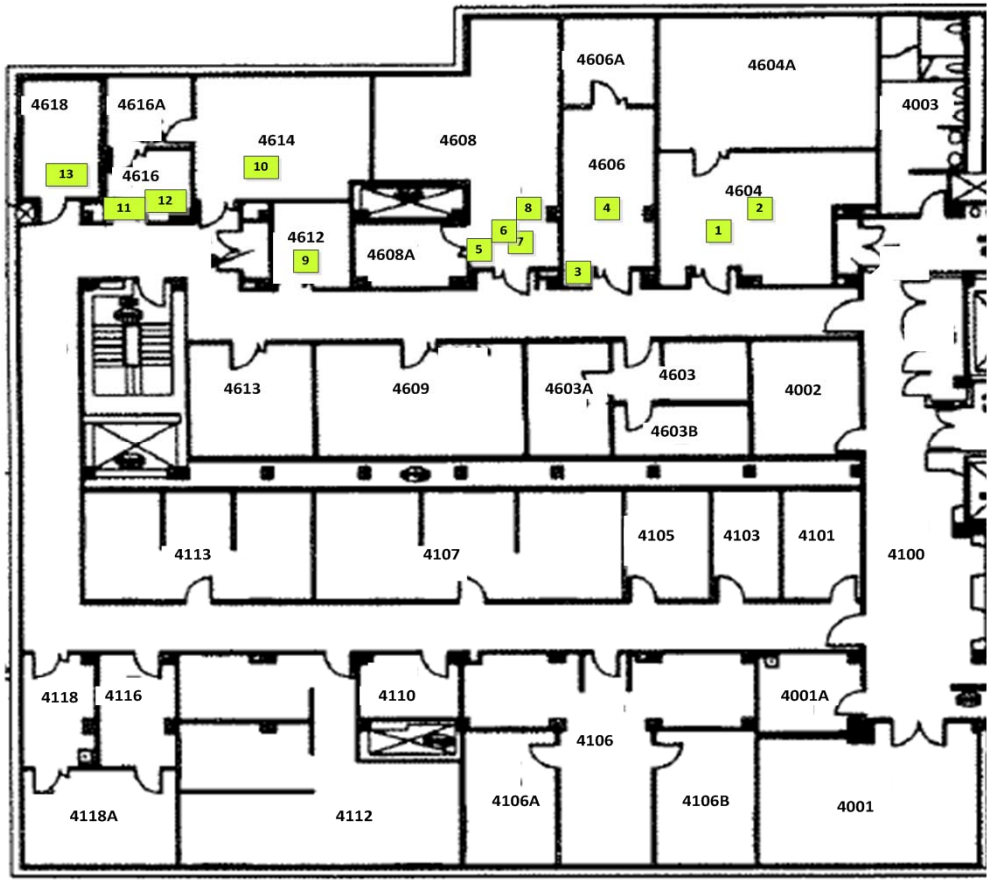
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Black Lab Sink	1	0	1	-2	20
				Maximum:	-2	
				Average:	-2	
				STDEV:	10	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Composite	
Detector:	43-68	PR-216834	Background (cpm):	1	
Probe Area:	126	cm^2	Background σ (cpm):	0.8	
			Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Room	X,Y Locations			
4604	7,6	8,8		
4606	1,2	6,8		
4608	1,9	4,4	6,3	8,7
4612	6,3			
4614	8,3			
4616	2,1	8,3		
4618	8,4			



SURVEY UNITS
LEGEND

Class 3
\# Measurement Number

No Scale

Survey Unit Identifier

SU54-4-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Fourth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-4-2
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	54	23	15	57	70
2	Linoleum	36	-27	15	-68	70
3	Linoleum	50	1	16	1	80
4	Linoleum	64	29	17	71	80
5	Drywall	42	-1	14	-3	70
6	Drywall	50	15	15	37	70
7	Black Lab Counter	62	47	15	116	70
8	Linoleum	39	-21	15	-53	80
9	Linoleum	51	3	16	6	80
10	Drywall	58	31	15	77	70
11	Black Lab Table	52	27	14	67	70
12	Linoleum	59	19	17	46	80
13	Drywall	50	15	15	37	70
				Maximum:	116	
				Average:	28	
				STDEV:	52	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	141321
Detector:	44-110	PR-258430
Probe Area:	126	cm^2

Reference Material:	Linoleum	Drywall	Composite
Background (cpm):	99	85	77
Background σ (cpm):	12.73	10.86	10.11
Sample Analysis Time:	0.5	min	

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-4-2
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Lab Sink	63	49	15	121	70
2	Painted Metal Under Sink	48	33	13	82	60
3	Stainless Hood	53	43	13	107	70
9	Black Lab Sink	59	41	15	102	70
10	Painted Metal Under Sink	43	23	13	57	60
16	Black Lab Sink	53	29	14	72	70
17	Painted Metal Under Sink	53	43	13	107	70
20	Black Lab Sink	68	59	15	146	80
23	Black Lab Sink	51	25	14	62	70
27	Black Lab Sink	49	21	14	52	70
				Maximum:	146	
				Average:	121	
				STDEV:	31	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	184935
Detector:	43-68	PR-181739
Probe Area:	126	cm^2

	Composite	Metal
Reference Material:		
Background (cpm):	77	63
Background σ (cpm):	10.11	8.52
Sample Analysis Time:	0.5 min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-4-2
Survey Date: 12/5/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	266	13	11	195	330
2	Linoleum	170	4	13	60	390
3	Linoleum	176	5	13	83	390
4	Linoleum	256	25	14	395	420
5	Drywall	192	-6	10	-93	300
6	Drywall	228	3	10	47	310
7	Black Lab Counter	216	27	9	422	290
8	Linoleum	188	8	13	130	400
9	Linoleum	204	12	13	192	400
10	Drywall	198	-5	10	-70	300
11	Black Lab Table	194	22	9	337	280
12	Linoleum	200	11	13	177	400
13	Drywall	248	8	10	124	320
QC3	Linoleum	178	6	13	91	390
				Maximum:	422	
				Average:	154	
				STDEV:	159	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Linoleum	Drywall	Composite
Instrument:	2360	253237	Background (cpm):	39	54	27
Detector:	43-68	PR-216834	Background σ (cpm):	11.07	6.86	5.95
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-4-2
Survey Date: 12/5/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	96	-3	8	-45	240
2	Painted Metal Under Sink	93	-11	6	-171	200
3	Stainless Hood	72	-16	6	-253	180
9	Black Lab Sink	90	-4	8	-68	230
10	Painted Metal Under Sink	90	-12	6	-183	190
16	Black Lab Sink	80	-7	7	-107	230
17	Painted Metal Under Sink	99	-9	7	-148	200
20	Black Lab Sink	80	-7	7	-107	230
23	Black Lab Sink	118	3	8	41	250
27	Black Lab Sink	105	-1	8	-9	240
				Maximum:	41	
				Average:	-45	
				STDEV:	88	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Composite	Metal
Background (cpm):	27	34
Background σ (cpm):	5.95	4.21
Sample Analysis Time:	4 min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-4-2
Survey Date: 12/5/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	8	1	2	6	30
2	Linoleum	6	1	2	6	30
3	Linoleum	3	0	1	-1	20
4	Linoleum	2	0	1	-3	20
5	Drywall	6	0	2	2	30
6	Drywall	0	-1	1	-10	20
7	Black Lab Counter	6	1	1	8	20
8	Linoleum	3	0	1	-1	20
9	Linoleum	1	-1	1	-5	20
10	Drywall	0	-1	1	-10	20
11	Black Lab Table	4	0	1	4	20
12	Linoleum	3	0	1	-1	20
13	Drywall	2	-1	1	-6	20
QC3	Linoleum	1	-1	1	-5	20
				Maximum:	8	
				Average:	-1	
				STDEV:	6	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Linoleum	Drywall	Composite
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	1.17	1.27	0.8
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 epm/dpm
Total Efficiency Uncertainty: 0.001 epm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-4-2
Survey Date: 12/5/2011

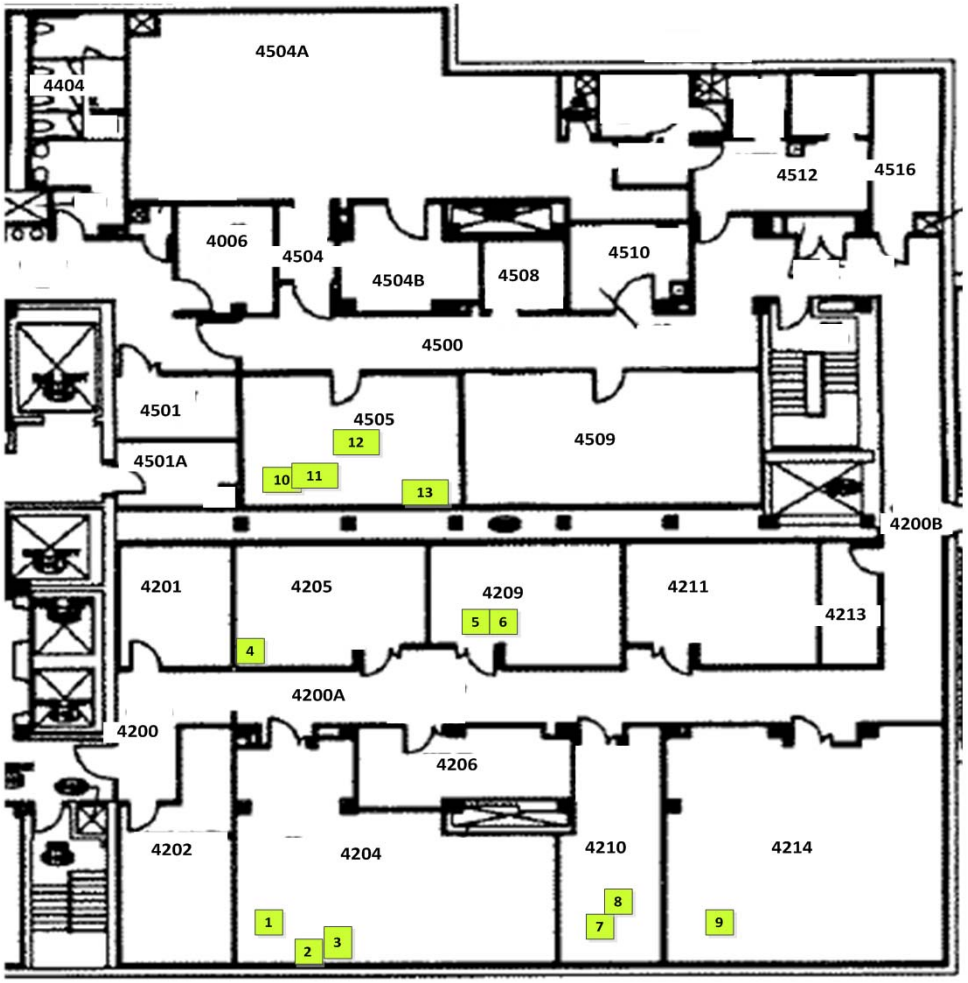
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	0	-1	1	-5	10
2	Painted Metal Under Sink	1	0	1	-3	10
3	Stainless Hood	3	0	1	1	20
9	Black Lab Sink	7	1	2	10	30
10	Painted Metal Under Sink	3	0	1	1	20
16	Black Lab Sink	4	0	1	4	20
17	Painted Metal Under Sink	6	1	1	7	20
20	Black Lab Sink	4	0	1	4	20
23	Black Lab Sink	1	0	1	-2	20
27	Black Lab Sink	4	0	1	4	20
				Maximum:	10	
				Average:	-5	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Composite	Metal
Background (cpm):	1	1
Background σ (cpm):	0.8	0.73
Sample Analysis Time:	4 min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2



Room	X,Y Locations			
4204	2,5	4,1	5,2	
4205	2,2			
4209	4,3	6,3		
4210	6,6	9,7		
4214	6,5			
4504	3,5	5,6	7,10	9,2

SURVEY UNITS
LEGEND

Class 3
Measurement Number

No Scale

Survey Unit Identifier

SU54-4-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Fourth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-4-3
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Lab Counter	52	27	14	67	70
2	Linoleum	53	7	16	16	80
3	Drywall	71	57	16	141	80
4	Linoleum	45	-9	16	-24	80
5	Linoleum	56	13	17	31	80
6	Drywall	62	39	16	97	80
7	Black Lab Table	115	153	18	380	90
8	Linoleum	79	59	18	146	90
9	Linoleum	149	199	21	494	100
10	Linoleum	65	31	17	76	80
11	Black Lab Table	67	57	15	141	70
12	Linoleum	73	47	18	116	90
13	Drywall	66	47	16	116	80
				Maximum:	494	
				Average:	142	
				STDEV:	144	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Linoleum	Composite	Drywall
Instrument:	2360	141321	Background (cpm):	99	77	85
Detector:	44-110	PR-258430	Background σ (cpm):	12.73	10.11	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-4-3
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
41	Black Lab Sink	64	51	15	126	70
42	Painted Metal Under Sink	69	75	15	186	70
43	Stainless Hood	50	37	13	92	60
46	Black Lab Sink	31	-15	13	-38	60
47	Painted Metal Under Sink	46	29	13	72	60
49	Black Lab Sink	77	77	16	191	80
50	Painted Metal Under Sink	65	67	14	167	70
51	Stainless Hood	44	25	13	62	60
30	Black Lab Sink	71	65	16	161	80
31	Painted Metal Under Sink	53	43	13	107	70
33	Hood	76	75	16	186	80
55	Black Lab Sink	158	239	20	594	100
56	Painted Metal Under Sink	62	61	14	152	70
23	Stainless Hood	52	41	13	102	60
24	Black Lab Sink	65	53	15	131	70
1	Stainless Hood	47	31	13	77	60
3	Black Lab Sink	36	-5	13	-13	60
				Maximum:	594	
				Average:	126	
				STDEV:	70	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Composite
Instrument:	2360	184935	Background (cpm):	63	77
Detector:	43-68	PR-181739	Background σ (cpm):	8.52	10.11
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-4-3
Survey Date: 12/5/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Counter	92	-4	8	-60	230
2	Linoleum	95	-15	12	-232	370
3	Drywall	126	-23	9	-350	270
4	Linoleum	92	-16	12	-243	370
5	Linoleum	87	-17	12	-263	370
6	Drywall	125	-23	9	-354	270
7	Black Lab Table	84	-6	8	-91	230
8	Linoleum	89	-16	12	-255	370
9	Linoleum	93	-15	12	-239	370
10	Linoleum	74	-20	12	-313	360
11	Black Lab Table	106	0	8	-6	240
12	Linoleum	99	-14	12	-216	370
13	Drywall	142	-19	9	-288	280
QC10	Linoleum	89	-16	12	-255	370
				Maximum:	-6	
				Average:	-224	
				STDEV:	108	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Linoleum	Composite	Drywall
Instrument:	2360	253237	Background (cpm):	39	27	54
Detector:	43-68	PR-216834	Background σ (cpm):	11.07	5.95	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-4-3
Survey Date: 12/5/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
41	Black Lab Sink	38	-17	7	-270	200
42	Painted Metal Under Sink	300	41	10	634	290
43	Stainless Hood	87	-12	6	-194	190
46	Black Lab Sink	106	0	8	-6	240
47	Painted Metal Under Sink	75	-15	6	-241	180
48	Black Lab Sink	108	0	8	2	240
49	Painted Metal Under Sink	110	-7	7	-105	210
50	Stainless Hood	80	-14	6	-221	190
51	Black Lab Sink	89	-5	8	-72	230
30	Painted Metal Under Sink	104	-8	7	-128	200
31	Hood	81	-7	7	-103	230
33	Black Lab Sink	82	-6	7	-99	230
55	Painted Metal Under Sink	86	-13	6	-198	190
57	Stainless Hood	88	-12	6	-190	190
24	Black Lab Sink	88	-5	8	-76	230
23	Stainless Hood	101	-9	7	-140	200
1	Black Lab Sink	102	-1	8	-21	240
3	Black Lab Sink	109	0	8	6	240
				Maximum:	634	
				Average:	-270	
				STDEV:	197	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Composite
Instrument:	2360	253237	Background (cpm):	34	27
Detector:	43-68	PR-216834	Background σ (cpm):	4.21	5.95
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-4-3
Survey Date: 12/5/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Counter	2	0	1	0	20
2	Linoleum	1	-1	1	-5	20
3	Drywall	6	0	2	2	30
4	Linoleum	5	0	2	4	30
5	Linoleum	5	0	2	4	30
6	Drywall	2	-1	1	-6	20
7	Black Lab Table	7	1	2	10	30
8	Linoleum	1	-1	1	-5	20
9	Linoleum	1	-1	1	-5	20
10	Linoleum	2	0	1	-3	20
11	Black Lab Table	2	0	1	0	20
12	Linoleum	0	-1	1	-7	20
13	Drywall	2	-1	1	-6	20
QC10	Linoleum	0	-1	1	-7	20
				Maximum:	10	
				Average:	-1	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Linoleum	Composite	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	1.17	0.8	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-4-3
Survey Date: 12/5/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
41	Black Lab Sink	8	1	2	12	30
42	Painted Metal Under Sink	1	0	1	-3	10
43	Stainless Hood	7	1	2	9	20
46	Black Lab Sink	2	0	1	0	20
47	Painted Metal Under Sink	1	0	1	-3	10
48	Black Lab Sink	27	6	3	51	40
49	Painted Metal Under Sink	2	0	1	-1	20
50	Stainless Hood	1	0	1	-3	10
51	Black Lab Sink	2	0	1	0	20
30	Painted Metal Under Sink	2	0	1	-1	20
31	Hood	3	0	1	2	20
33	Black Lab Sink	3	0	1	2	20
55	Painted Metal Under Sink	5	1	1	5	20
57	Stainless Hood	0	-1	1	-5	10
24	Black Lab Sink	0	-1	1	-5	10
23	Stainless Hood	1	0	1	-3	10
1	Black Lab Sink	6	1	1	8	20
3	Black Lab Sink	3	0	1	2	20
				Maximum:	51	
				Average:	12	
				STDEV:	13	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Composite
Instrument:	2360	253237	Background (cpm):	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.73	0.8
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Room	X,Y Locations		
4312	5,1	8,10	
4314	7,2	3,11	
4404	1,12	2,3	4,4
	7,2	7,10	10,10
4405	2,6	7,1	

SURVEY UNITS LEGEND

Class 3

[#] Measurement Number

No Scale

Survey Unit Identifier

SU54-4-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Fourth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-4-4
Survey Date: 12/16/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Linoleum	95	91	19	225	90
2	Drywall	79	73	17	181	80
3	Linoleum	49	-1	16	-4	80
4	Drywall	73	61	16	151	80
5	Linoleum	62	25	17	61	80
6	Black Lab Table	80	83	16	206	80
7	Linoleum	58	17	17	41	80
8	Drywall	69	53	16	131	80
9	Linoleum	52	5	16	11	80
10	Black Lab Table	54	31	14	77	70
11	Linoleum	49	-1	16	-4	80
12	Drywall	100	115	18	286	90
13	Drywall	83	81	17	201	80
				Maximum:	286	
				Average:	98	
				STDEV:	96	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	141321
Detector:	44-110	PR-258430
Probe Area:	126	cm^2

Reference Material:	Linoleum	Drywall	Composite
Background (cpm):	99	85	77
Background σ (cpm):	12.73	10.86	10.11
Sample Analysis Time:	0.5 min		

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-4-4
Survey Date: 12/16/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	49	21	14	52	70
2	Painted Metal Under Sink	48	33	13	82	60
3	Hood	63	49	15	121	70
6	Black Lab Sink	40	3	13	7	70
8	Stainless Hood	52	41	13	102	60
9	Rusted Sterilizer	47	31	13	77	60
13	Black Lab Sink	69	61	15	151	80
14	Painted Metal Under Sink	53	43	13	107	70
15	Black Lab Sink	70	63	16	156	80
17	Stainless Hood	50	37	13	92	60
				Maximum:	156	
				Average:	52	
				STDEV:	45	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	184935	Reference Material:	Composite	Metal
Detector:	43-68	PR-181739	Background (cpm):	77	63
Probe Area:	126	cm^2	Background σ (cpm):	10.11	8.52
			Sample Analysis Time:	0.5 min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-4-4
Survey Date: 12/5/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Linoleum	95	-15	12	-232	370
2	Drywall	123	-23	9	-362	270
3	Linoleum	122	-8	12	-127	380
4	Drywall	136	-20	9	-311	270
5	Linoleum	136	-5	13	-72	380
6	Black Lab Table	126	5	8	72	250
7	Linoleum	133	-5	12	-84	380
8	Drywall	143	-18	9	-284	280
9	Linoleum	97	-14	12	-224	370
10	Black Lab Table	112	1	8	18	240
11	Linoleum	124	-8	12	-119	380
12	Drywall	184	-8	10	-124	290
13	Drywall	120	-24	9	-373	270
QC5	Linoleum	128	-7	12	-103	380
				Maximum:	72	
				Average:	-171	
				STDEV:	140	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Linoleum	Drywall	Composite
Instrument:	2360	253237	Background (cpm):	39	54	27
Detector:	43-68	PR-216834	Background σ (cpm):	11.07	6.86	5.95
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-4-4
Survey Date: 12/5/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Lab Sink	106	0	8	-6	240
2	Painted Metal Under Sink	107	-7	7	-116	200
3	Hood	106	0	8	-6	240
6	Black Lab Sink	93	-4	8	-56	230
8	Stainless Hood	69	-17	6	-264	180
9	Rusted Sterilizer	102	-9	7	-136	200
13	Black Lab Sink	110	1	8	10	240
14	Painted Metal Under Sink	103	-8	7	-132	200
15	Black Lab Sink	117	2	8	37	250
17	Stainless Hood	132	-1	7	-19	220
				Maximum:	37	
				Average:	-6	
				STDEV:	92	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Composite	Metal
Background (cpm):	27	34
Background σ (cpm):	5.95	4.21
Sample Analysis Time:	4 min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-4-4
Survey Date: 12/5/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Linoleum	2	0	1	-3	20
2	Drywall	4	0	2	-2	30
3	Linoleum	3	0	1	-1	20
4	Drywall	2	-1	1	-6	20
5	Linoleum	2	0	1	-3	20
6	Black Lab Table	1	0	1	-2	20
7	Linoleum	1	-1	1	-5	20
8	Drywall	2	-1	1	-6	20
9	Linoleum	2	0	1	-3	20
10	Black Lab Table	3	0	1	2	20
11	Linoleum	2	0	1	-3	20
12	Drywall	1	-1	1	-8	20
13	Drywall	3	-1	2	-4	20
QC5	Linoleum	3	0	1	-1	20
				Maximum:	2	
				Average:	-3	
				STDEV:	3	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Linoleum	Drywall	Composite
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	1.17	1.27	0.8
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

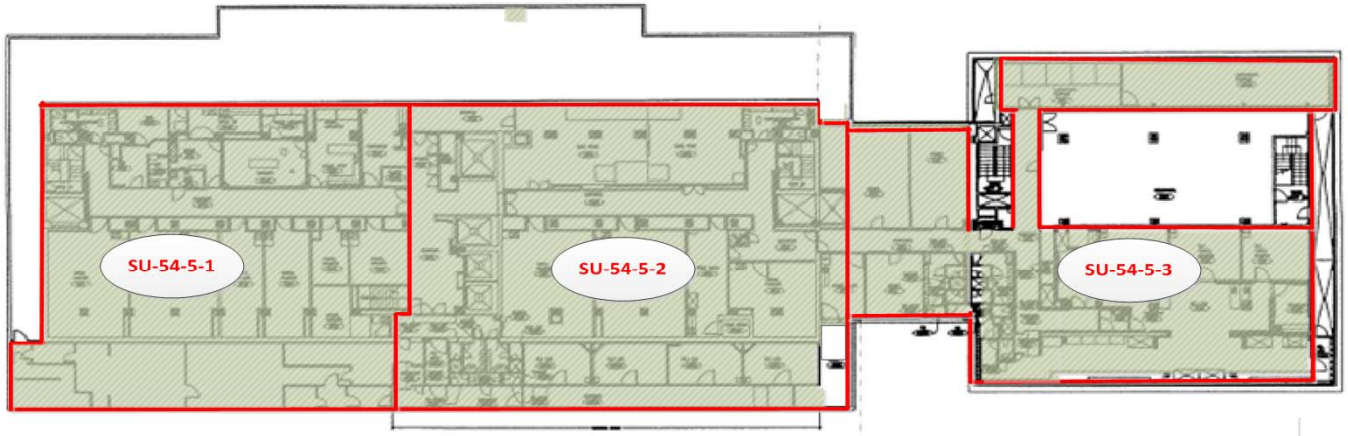
Building: 54
Survey Unit: 54-4-4
Survey Date: 12/5/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Black Lab Sink	1	0	1	-2	20
2	Painted Metal Under Sink	1	0	1	-3	10
3	Hood	3	0	1	2	20
6	Black Lab Sink	2	0	1	0	20
8	Stainless Hood	1	0	1	-3	10
9	Rusted Sterilizer	4	0	1	3	20
13	Black Lab Sink	1	0	1	-2	20
14	Painted Metal Under Sink	4	0	1	3	20
15	Black Lab Sink	0	-1	1	-5	10
17	Stainless Hood	1	0	1	-3	10
				Maximum:	3	
				Average:	-2	
				STDEV:	3	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal
Instrument:	2360	253237	Background (cpm):	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.8	0.73
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2



Bias Surveys to be targeted for: 5007 5044 5050

N

SURVEY UNITS LEGEND

Room Number
Class 2 SU
Class 3 SU

No Scale

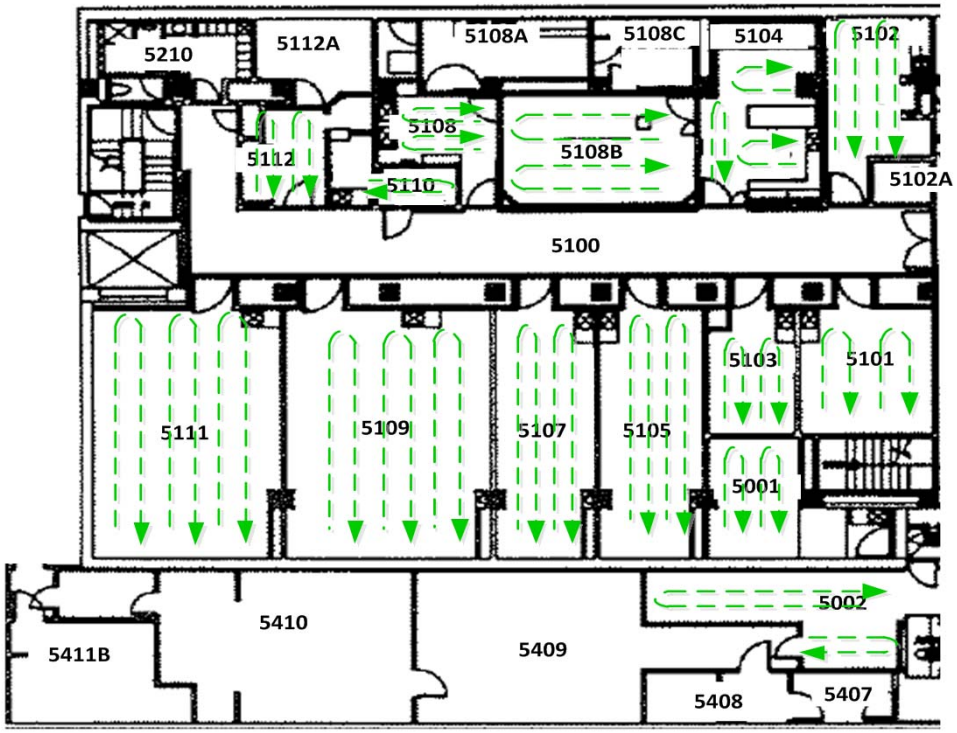
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Fifth Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

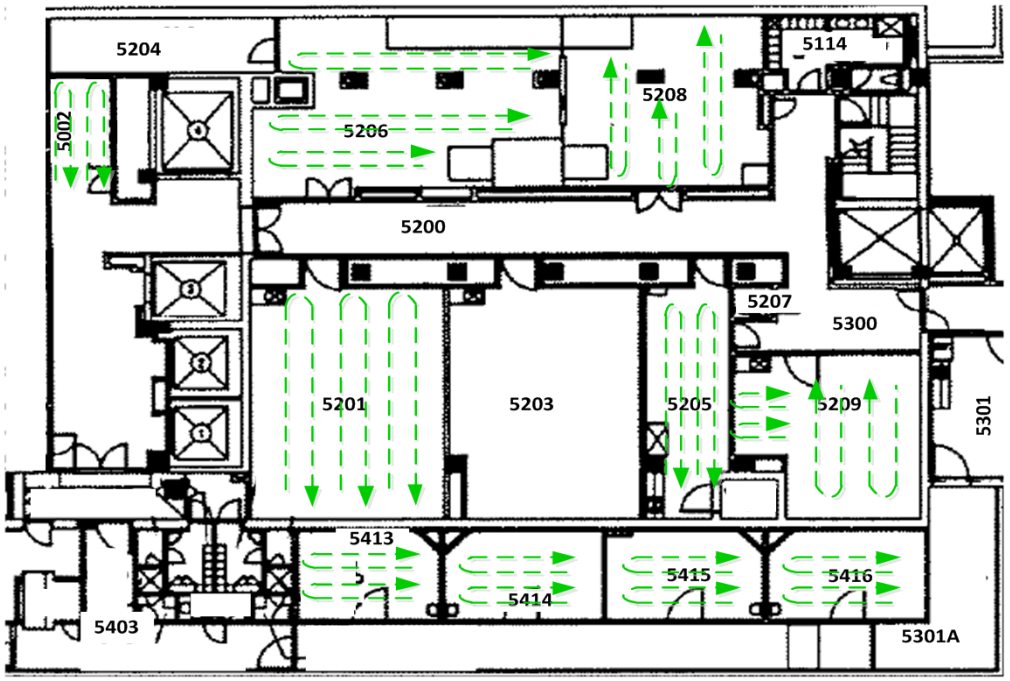
SU 54-5-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Fifth Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

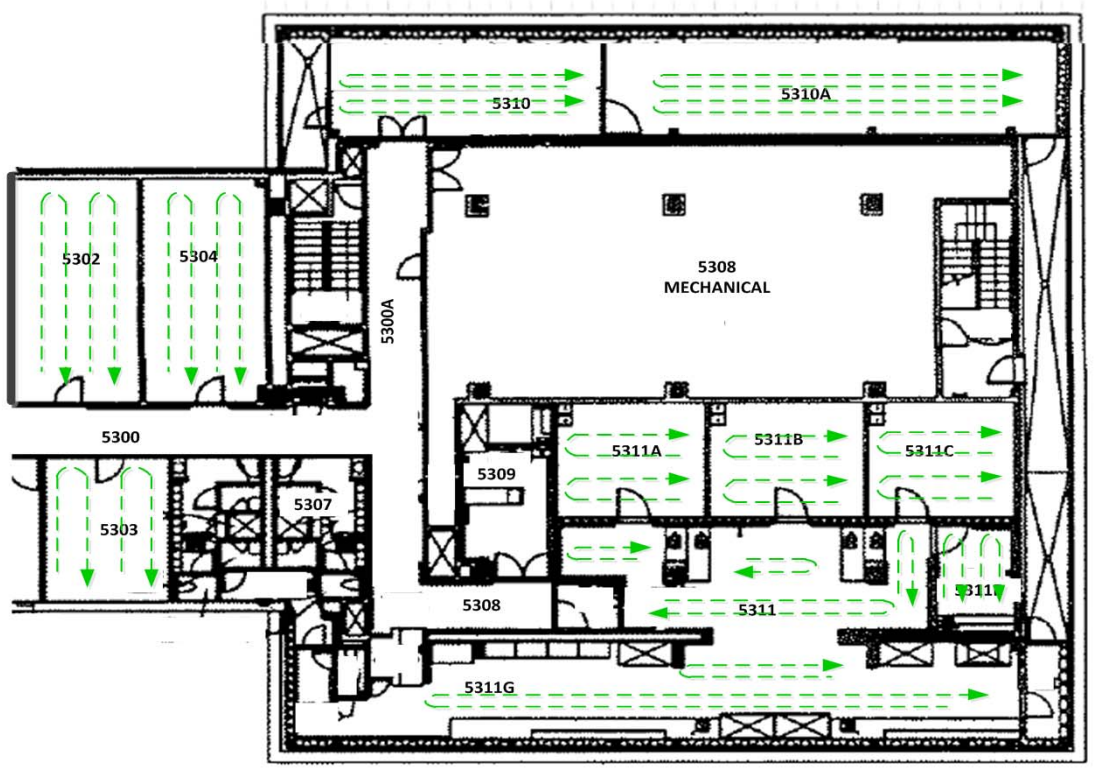
SU 54-5-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Fifth Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU 54-5-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Fifth Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 54 Level 5

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU54-5-1	1135	42	307	120	34	-266	519	-36	101
SU54-5-2	1211	38	398	148	50	-277	789	47	147
SU54-5-3	814	41	236	115	30	-269	309	-49	89

Area Scanned (ft^2) 1,979

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	132	cpm
Probe Area:	582	cm^2	Background σ:	32.21	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.058	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	363	dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 54 Level 5

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU54-5-1	1135	0	39	4.0	5.3	-5	64	2	9
SU54-5-2	1211	0	24	1.5	3.3	-5	38	-3	6
SU54-5-3	814	0	30	1.8	3.6	-5	48	-2	7

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Tile Floor	
Detector:	43-37	265544	Background:	3	cpm
Probe Area:	582	cm^2	Background σ:	7.32	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	720	dpm/100 cm^2

Summary of Scan Results - Beta

Location: Building 54 Level 5

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-54-5-1	851	8	160	57	24	-312	2201	505	394
SU-54-5-2	343	10	148	73	28	-279	2003	761	456
SU-54-5-3	333	11	97	50	18	-262	1160	383	291

Area Scanned (ft^2) 207

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm^2

Reference Material: Counter
Background: 27 cpm
Background σ: 5.95 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.048 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 916 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 54 Level 5

Non-Floor Items

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-54-5-1	851	0	18	1	3	-4	141	3	21
SU-54-5-2	343	0	10	0	1	-4	77	-2	10
SU-54-5-3	333	0	36	1	4	-4	287	6	30

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm2

Reference Material: Counter
Background: 1 cpm
Background σ: 0.8 cpm
Scan speed: 1 detector width / 2sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.098 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 705 dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 54

All measurements in µR/hour

Date: 12/6/2011

Location	54-5-1	54-5-2	54-5-3
1	7	6	8
2	4	3	7
3	8	7	7
4	7	5	6
5	4	6	8
6	3	8	4
7	8	8	7
8	4	9	3
9	5	5	6
10	9	9	4
11	4	7	8
12	7	3	5
13	6	3	4
14	3	9	4
15	7	7	7
16	7	7	5
17	5	5	8
18	3	3	4
19	8	7	
20	7	5	
21	7	6	

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012

Room	X,Y Locations		
5100	2,1	8,3	9,8
5101	6,2	6,8	
5104	1,1		
5102	4,1		
5105	3,2	6,6	
5107	2,5	9,2	
5112	8,4	10,2	

SURVEY UNITS
LEGEND

Class 3
\# Measurement Number

No Scale

Survey Unit Identifier

SU54-5-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Fifth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-5-1
Survey Date: 12/16/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Painted Concrete	44	-11	16	-29	80
2	Painted Concrete	68	37	17	91	80
3	Drywall	72	59	16	146	80
4	Painted Concrete	68	37	17	91	80
5	Painted Concrete	94	89	19	220	90
6	Painted Concrete	46	-7	16	-19	80
7	Drywall	63	41	16	102	80
8	Painted Concrete	57	15	17	36	80
9	Painted Concrete	94	89	19	220	90
10	Painted Concrete	86	73	18	180	90
11	Painted Concrete	20	-59	14	-148	70
12	Painted Concrete	63	27	17	66	80
13	Painted Concrete	62	25	17	61	80

Maximum: 220
Average: 81
STDEV: 104

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	141321
Detector:	44-110	PR-258430
Probe Area:	126	cm^2

	Concrete	Drywall
Reference Material:		
Background (cpm):	99	85
Background σ (cpm):	12.73	10.86
Sample Analysis Time:	0.5 min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-5-1
Survey Date: 12/16/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
4	Black Lab Sink	59	41	15	102	70
5	Painted Metal Under Sink	60	57	14	142	70
6	Stainless Hood	61	59	14	147	70
1	Stainless Hood	52	41	13	102	60
12	Black Lab Sink	64	51	15	126	70
13	Painted Metal Under Sink	76	89	15	221	70
10	Black Lab Sink	66	55	15	136	70
11	Painted Metal Under Sink	54	45	13	112	70
				Maximum:	221	
				Average:	102	
				STDEV:	39	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	184935	Reference Material:	Composite	Metal
Detector:	43-68	PR-181739	Background (cpm):	77	63
Probe Area:	126	cm^2	Background σ (cpm):	10.11	8.52
			Sample Analysis Time:	0.5 min	

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-5-1
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Painted Concrete	127	-7	12	-107	380
2	Painted Concrete	137	-4	13	-68	380
3	Drywall	187	-7	10	-113	300
4	Painted Concrete	155	0	13	2	390
5	Painted Concrete	182	7	13	107	400
6	Painted Concrete	100	-14	12	-212	370
7	Drywall	117	-25	9	-385	270
8	Painted Concrete	197	11	13	165	400
9	Painted Concrete	218	16	13	247	410
10	Painted Concrete	211	14	13	220	400
11	Painted Concrete	428	68	15	1064	460
12	Painted Concrete	115	-10	12	-154	380
13	Painted Concrete	134	-5	12	-80	380
QC1	Painted Concrete	104	-13	12	-197	370
				Maximum:	1064	
				Average:	53	
				STDEV:	353	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Concrete	Drywall
Instrument:	2360	253237		Background (cpm):	39	54
Detector:	43-68	PR-216834		Background σ (cpm):	11.07	6.86
Probe Area:	126	cm^2		Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-5-1
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
4	Black Lab Sink	109	0	8	6	240
5	Painted Metal Under Sink	123	-3	7	-54	210
6	Stainless Hood	100	-9	7	-144	200
1	Stainless Hood	121	-4	7	-62	210
12	Black Lab Sink	86	-5	8	-83	230
13	Painted Metal Under Sink	106	-8	7	-120	200
10	Black Lab Sink	90	-4	8	-68	230
11	Painted Metal Under Sink	110	-7	7	-105	210
				Maximum:	6	
				Average:	6	
				STDEV:	46	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	Composite
Instrument:	2360	253237	Background (cpm):	34	27
Detector:	43-68	PR-216834	Background σ (cpm):	4.21	5.95
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-5-1
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Painted Concrete	1	-1	1	-5	20
2	Painted Concrete	2	0	1	-3	20
3	Drywall	4	0	2	-2	30
4	Painted Concrete	1	-1	1	-5	20
5	Painted Concrete	0	-1	1	-7	20
6	Painted Concrete	2	0	1	-3	20
7	Drywall	0	-1	1	-10	20
8	Painted Concrete	1	-1	1	-5	20
9	Painted Concrete	16	3	2	26	40
10	Painted Concrete	5	0	2	4	30
11	Painted Concrete	1	-1	1	-5	20
12	Painted Concrete	3	0	1	-1	20
13	Painted Concrete	1	-1	1	-5	20
QC1	Painted Concrete	2	0	1	-3	20
				Maximum:	26	
				Average:	-1	
				STDEV:	9	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Concrete	Drywall
Detector:	43-68	PR-216834	Background (cpm):	1	1
Probe Area:	126	cm^2	Background σ (cpm):	1.17	1.27
			Sample Analysis Time:	4	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

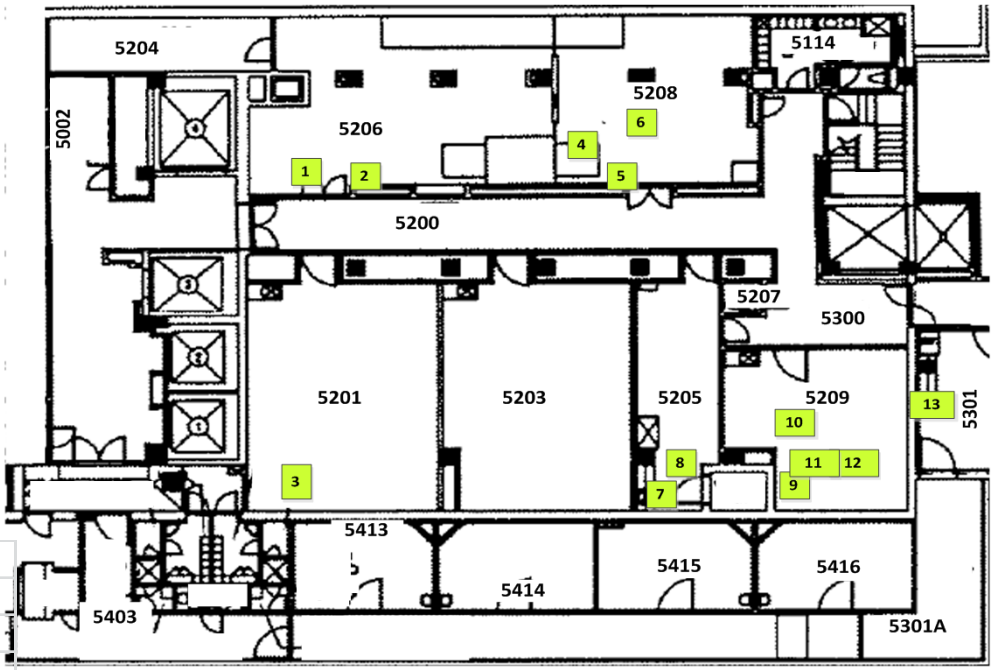
Building: 54
Survey Unit: 54-5-1
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
4	Black Lab Sink	6	1	1	8	20
5	Painted Metal Under Sink	1	0	1	-3	10
6	Stainless Hood	3	0	1	1	20
1	Stainless Hood	10	2	2	15	30
12	Black Lab Sink	1	0	1	-2	20
13	Painted Metal Under Sink	0	-1	1	-5	10
10	Black Lab Sink	1	0	1	-2	20
11	Painted Metal Under Sink	0	-1	1	-5	10
				Maximum:	15	
				Average:	8	
				STDEV:	7	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Composite
Instrument:	2360	253237	Background (cpm):	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.73	0.8
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2



Room	X,Y Locations			
5206	5,2	9,1		
5201	4,3			
5208	2,7	5,1	7,9	
5205	2,1	7,5		
5209	2,3	3,10	5,6	8,6
5301	1,9			

SURVEY UNITS LEGEND

Class 3

\# Measurement Number

No Scale

Survey Unit Identifier

SU54-5-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Fifth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-5-2
Survey Date: 12/16/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Painted Concrete	59	19	17	46	80
2	Painted Green Ceramic Tile	242	185	26	459	130
3	Painted Concrete	85	71	18	175	90
4	Painted Concrete	70	41	17	101	80
5	Painted Concrete	79	59	18	146	90
6	Painted Concrete	63	27	17	66	80
7	Painted Concrete	87	75	18	185	90
8	Plaster Wall	121	157	19	390	90
9	Stainless Counter	151	239	19	594	90
10	Drywall	111	137	18	340	90
11	Painted Concrete	99	99	19	245	90
12	Painted Concrete	117	135	20	335	100
13	Painted Concrete	80	61	18	151	90
				Maximum:	594	
				Average:	250	
				STDEV:	165	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Concrete	Green Ceramic	Drywall	Metal
Instrument:	2360	141321	Background (cpm):	99	299	85	63
Detector:	44-110	PR-258430	Background σ (cpm):	12.73	14.28	10.86	8.52
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min		

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-5-2
Survey Date: 12/16/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
2	Black Lab Sink	72	67	16	166	80
3	Painted Metal Under Sink	75	87	15	216	70
4	Stainless Hood	75	87	15	216	70
22	Stainless Hood	79	95	15	236	70
6	Black Lab Sink	74	71	16	176	80
9	Painted Metal Under Sink	59	55	14	137	70
25	Black Lab Sink	93	109	17	271	80
28	Painted Metal Under Sink	78	93	15	231	70
				Maximum:	271	
				Average:	166	
				STDEV:	43	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	Composite
Instrument:	2360	184935	Background (cpm):	63	77
Detector:	43-68	PR-181739	Background σ (cpm):	8.52	10.11
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-5-2
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Painted Concrete	146	-2	13	-33	380
2	Painted Green Ceramic Tile	461	-64	17	-999	530
3	Painted Concrete	184	7	13	115	400
4	Painted Concrete	196	10	13	161	400
5	Painted Concrete	173	5	13	72	390
6	Painted Concrete	196	10	13	161	400
7	Painted Concrete	162	2	13	29	390
8	Plaster Wall	295	20	11	307	340
9	Stainless Counter	220	21	9	323	260
10	Drywall	277	15	11	237	330
11	Painted Concrete	204	12	13	192	400
12	Painted Concrete	195	10	13	157	400
13	Painted Concrete	143	-3	13	-45	380
QC6	Painted Concrete	120	-9	12	-134	380
				Maximum:	323	
				Average:	52	
				STDEV:	336	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Concrete	Green Ceramic	Drywall	Metal
Instrument:	2360	253237	Background (cpm):	39	179	54	34
Detector:	43-68	PR-216834	Background σ (cpm):	11.07	13.66	6.86	4.21
Probe Area:	126	cm^2	Sample Analysis Time:	4	min		

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-5-2
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
2	Black Lab Sink	167	15	9	232	270
3	Painted Metal Under Sink	154	4	7	66	230
4	Stainless Hood	188	13	8	199	250
22	Stainless Hood	145	2	7	31	220
6	Black Lab Sink	175	17	9	263	270
9	Painted Metal Under Sink	162	6	8	98	230
25	Black Lab Sink	159	13	9	201	260
28	Painted Metal Under Sink	183	12	8	179	240
				Maximum:	263	
				Average:	232	
				STDEV:	83	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Metal	Composite
Instrument:	2360	253237		Background (cpm):	34	27
Detector:	43-68	PR-216834		Background σ (cpm):	4.21	5.95
Probe Area:	126	cm^2		Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-5-2
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Painted Concrete	2	0	1	-3	20
2	Painted Green Ceramic Tile	1	-10	3	-82	50
3	Painted Concrete	0	-1	1	-7	20
4	Painted Concrete	0	-1	1	-7	20
5	Painted Concrete	0	-1	1	-7	20
6	Painted Concrete	1	-1	1	-5	20
7	Painted Concrete	2	0	1	-3	20
8	Plaster Wall	3	-1	2	-4	20
9	Stainless Counter	1	0	1	-3	10
10	Drywall	1	-1	1	-8	20
11	Painted Concrete	3	0	1	-1	20
12	Painted Concrete	1	-1	1	-5	20
13	Painted Concrete	2	0	1	-3	20
QC6	Painted Concrete	8	1	2	10	30
				Maximum:	10	
				Average:	-10	
				STDEV:	22	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Concrete	Green Ceramic	Drywall	Metal
Instrument:	2360	253237	Background (cpm):	1	10	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	1.17	2.89	1.27	0.73
Probe Area:	126	cm^2	Sample Analysis Time:	4	min		

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

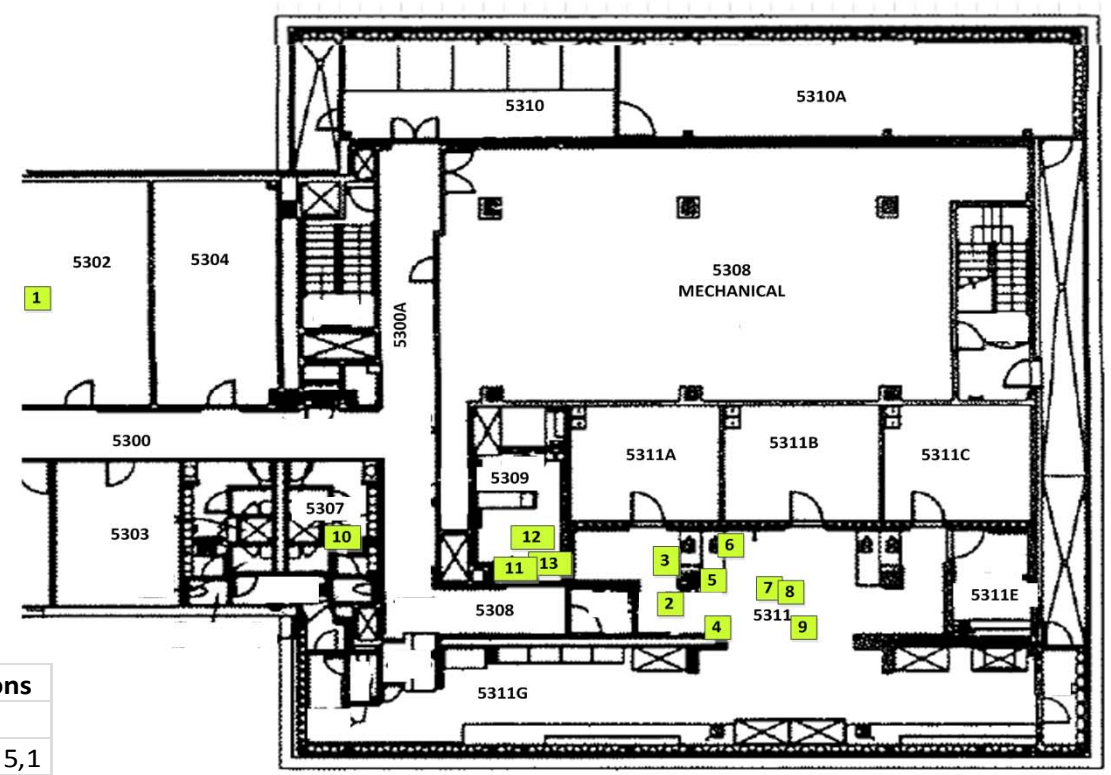
Building: 54
Survey Unit: 54-5-2
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
2	Black Lab Sink	1	0	1	-2	20
3	Painted Metal Under Sink	2	0	1	-1	20
4	Stainless Hood	3	0	1	1	20
22	Stainless Hood	1	0	1	-3	10
6	Black Lab Sink	2	0	1	0	20
9	Painted Metal Under Sink	1	0	1	-3	10
25	Black Lab Sink	1	0	1	-2	20
28	Painted Metal Under Sink	2	0	1	-1	20
				Maximum:	1	
				Average:	-2	
				STDEV:	1	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Metal	Composite
Instrument:	2360	253237	Background (cpm):	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.73	0.8
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2



Room	X,Y Locations		
5302	4,10		
5311	3,5	3,9	5,1
	5,7	6,12	9,9
	10,7	11,1	
5307	2,5		
5309	7,1	8,5	10,3

SURVEY UNITS
LEGEND

Class 3
\# Measurement Number

No Scale

Survey Unit Identifier

SU54-5-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Fifth Floor

Date: 1-18-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-5-3
Survey Date: 12/19/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Plaster Wall	89	93	17	231	80
2	Coated Concrete	57	15	17	36	80
3	Coated Concrete	72	45	17	111	90
4	Drywall	44	3	14	7	70
5	Coated Concrete	68	37	17	91	80
6	Coated Concrete	45	-9	16	-24	80
7	Coated Concrete	62	25	17	61	80
8	Drywall	63	41	16	102	80
9	Coated Concrete	68	37	17	91	80
10	Drywall	96	107	18	266	90
11	Coated Concrete	75	51	18	126	90
12	Coated Concrete	73	47	18	116	90
13	Coated Concrete	61	23	17	56	80

Maximum: 266
Average: 100
STDEV: 80

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	141321
Detector:	44-110	PR-258430
Probe Area:	126	cm^2

	Concrete	Drywall
Reference Material:		
Background (cpm):	99	85
Background σ (cpm):	12.73	10.86
Sample Analysis Time:	0.5 min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-5-3
Survey Date: 12/19/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
4	Black Hood Drain	58	39	15	97	70
5	Black Lab Sink	61	45	15	111	70
14	Stainless Hood	65	67	14	167	70
13	Rusted Painted Metal Under Sink	53	43	13	107	70
17	Black Lab Sink	86	95	17	236	80
				Maximum:	236	
				Average:	97	
				STDEV:	58	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal
Instrument:	2360	184935	Background (cpm):	77	63
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	8.52
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-5-3
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Plaster Wall	225	2	10	35	310
2	Coated Concrete	149	-1	13	-22	390
3	Coated Concrete	134	-5	12	-80	380
4	Drywall	160	-14	9	-218	280
5	Coated Concrete	115	-10	12	-154	380
6	Coated Concrete	97	-14	12	-224	370
7	Coated Concrete	82	-18	12	-282	360
8	Drywall	203	-3	10	-51	300
9	Coated Concrete	122	-8	12	-127	380
10	Drywall	182	-9	10	-132	290
11	Coated Concrete	109	-11	12	-177	370
12	Coated Concrete	119	-9	12	-138	380
13	Coated Concrete	109	-11	12	-177	370
QC9	Coated Concrete	291	34	14	531	430
				Maximum:	531	
				Average:	-134	
				STDEV:	88	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Concrete	Drywall
Instrument:	2360	253237		Background (cpm):	39	54
Detector:	43-68	PR-216834		Background σ (cpm):	11.07	6.86
Probe Area:	126	cm^2		Sample Analysis Time:	4	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-5-3
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
4	Black Hood Drain	143	9	8	138	260
5	Black Lab Sink	109	0	8	6	240
14	Stainless Hood	122	-4	7	-58	210
13	Rusted Painted Metal Under Sink	98	-10	6	-151	200
17	Black Lab Sink	126	5	8	72	250
				Maximum:	138	
				Average:	138	
				STDEV:	113	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Composite	Metal
Background (cpm):	27	34
Background σ (cpm):	5.95	4.21
Sample Analysis Time:	4 min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-5-3
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Plaster Wall	4	0	2	-2	30
2	Coated Concrete	0	-1	1	-7	20
3	Coated Concrete	1	-1	1	-5	20
4	Drywall	3	-1	2	-4	20
5	Coated Concrete	1	-1	1	-5	20
6	Coated Concrete	1	-1	1	-5	20
7	Coated Concrete	4	0	2	1	20
8	Drywall	2	-1	1	-6	20
9	Coated Concrete	3	0	1	-1	20
10	Drywall	1	-1	1	-8	20
11	Coated Concrete	2	0	1	-3	20
12	Coated Concrete	0	-1	1	-7	20
13	Coated Concrete	6	1	2	6	30
QC9	Coated Concrete	5	0	2	4	30
				Maximum:	6	
				Average:	-3	
				STDEV:	4	

Instrument Data and Analysis Parameters

	Model	Serial No		Concrete	Drywall
Instrument:	2360	253237	Reference Material:		
Detector:	43-68	PR-216834	Background (cpm):	1	1
Probe Area:	126	cm^2	Background σ (cpm):	1.17	1.27
			Sample Analysis Time:	4 min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

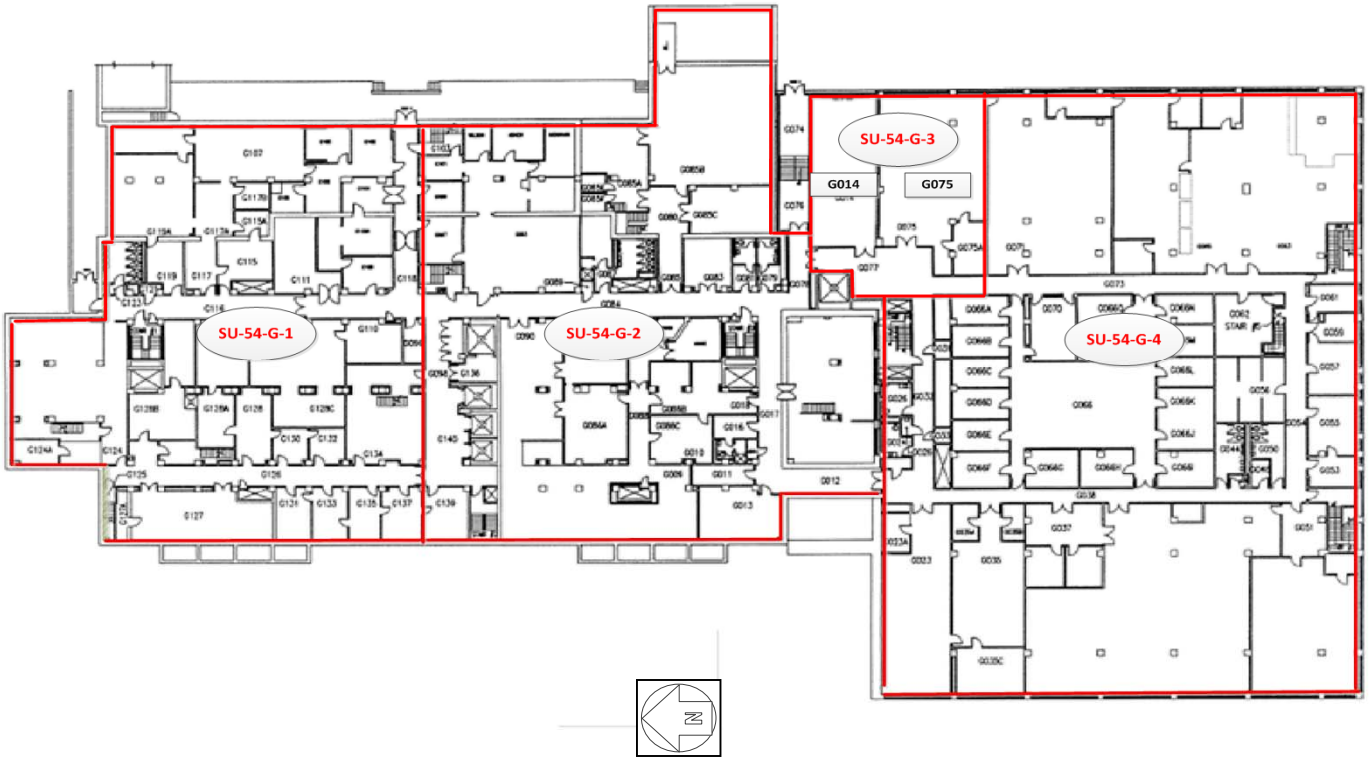
Building: 54
Survey Unit: 54-5-3
Survey Date: 12/6/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
4	Black Hood Drain	1	0	1	-2	20
5	Black Lab Sink	2	0	1	0	20
14	Stainless Hood	11	2	2	17	30
13	Rusted Painted Metal Under Sink	2	0	1	-1	20
17	Black Lab Sink	0	-1	1	-5	10
				Maximum:	17	
				Average:	-2	
				STDEV:	9	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Metal
Instrument:	2360	253237	Background (cpm):	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.8	0.73
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2



SURVEY UNITS
LEGEND

No Scale

Survey Unit Identifier

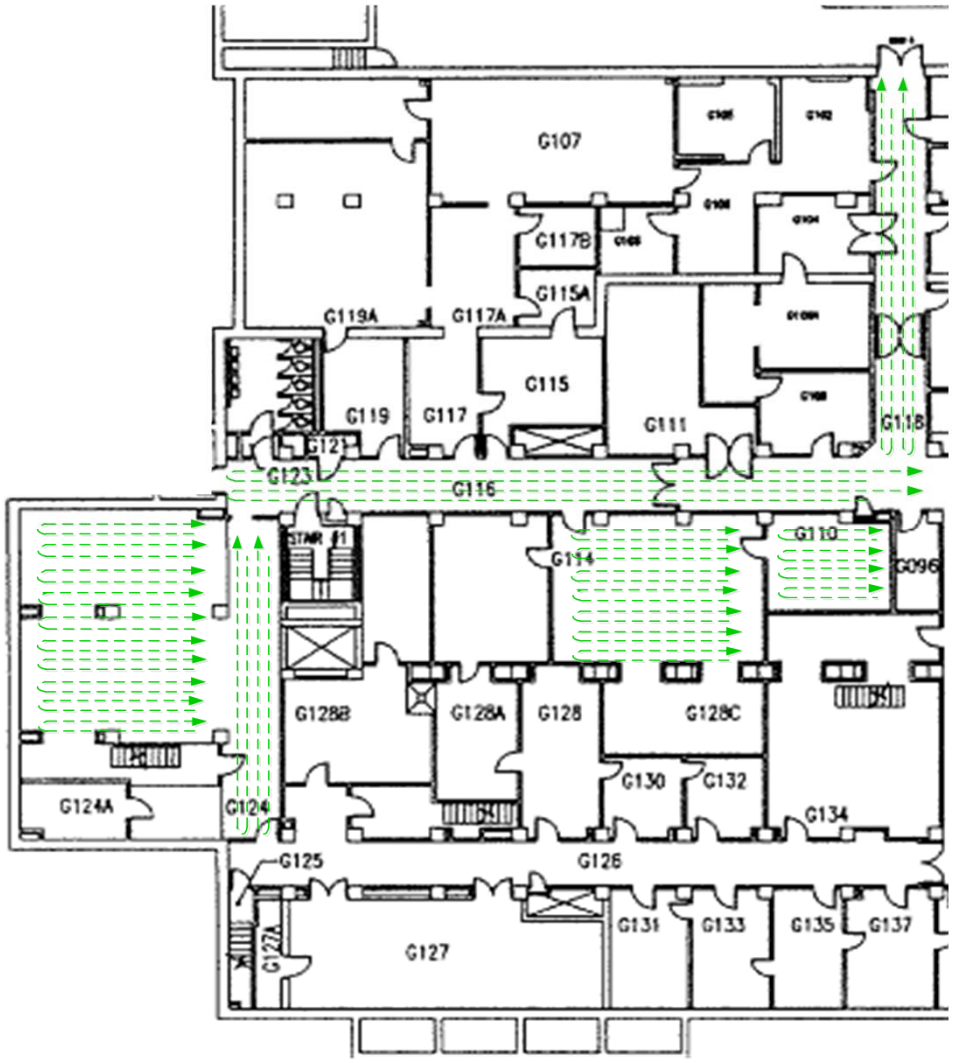
SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Class 3

Building 54 Ground Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU 54-G-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

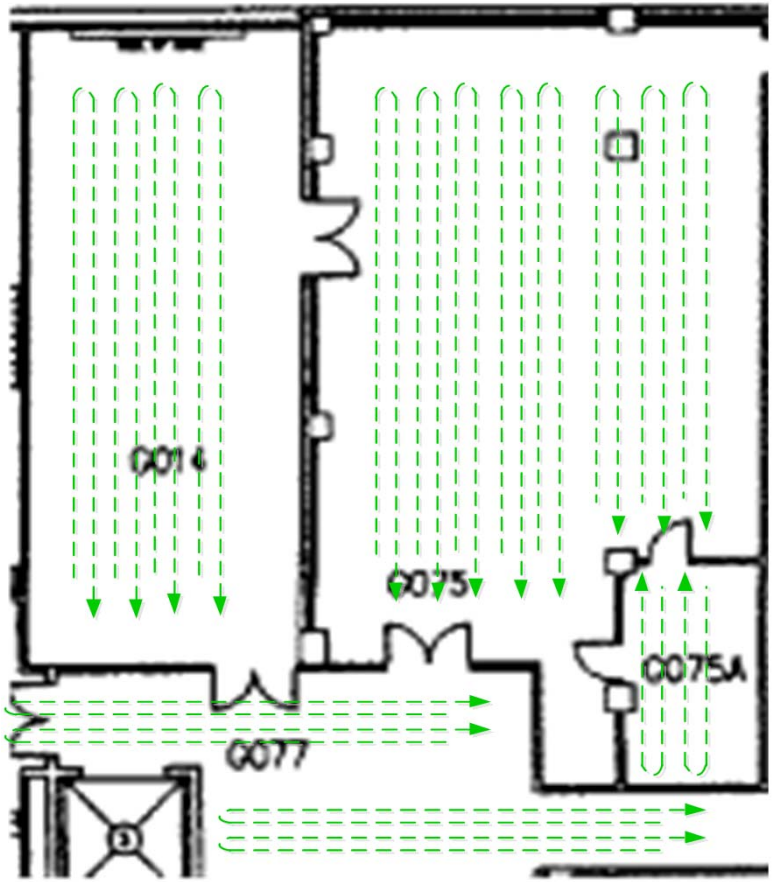
SU 54-G-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

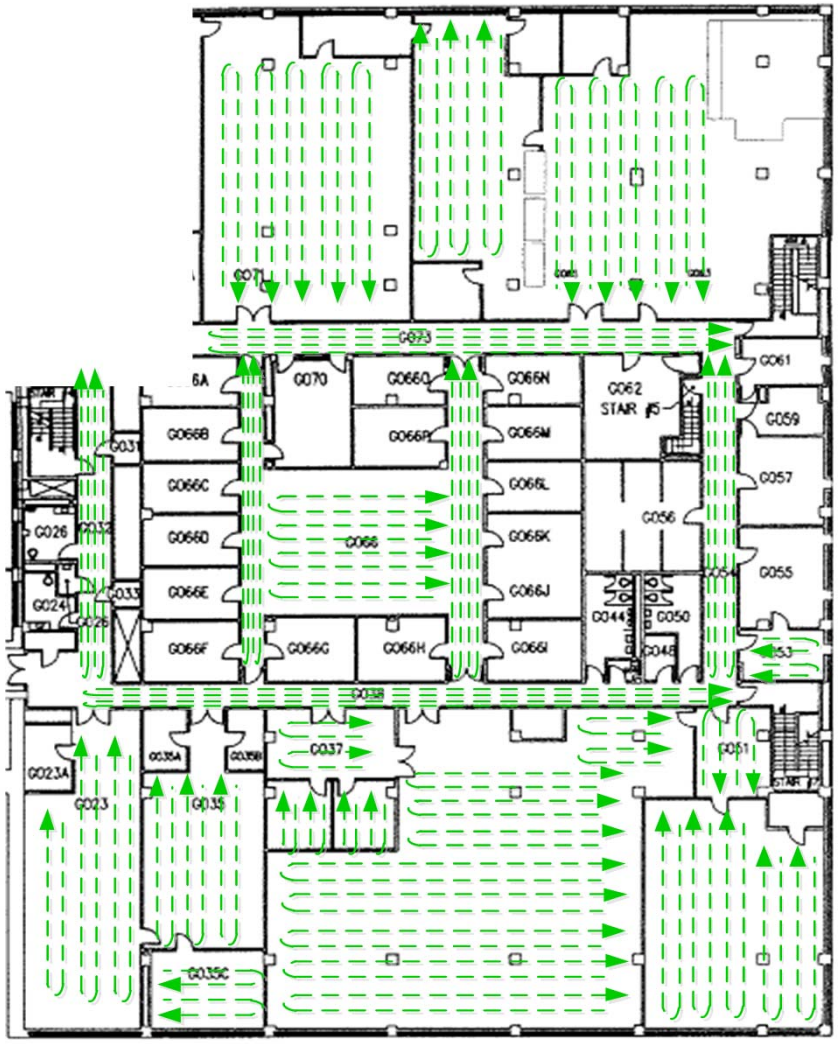
SU 54-G-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU 54-G-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 54 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 54 Ground Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU54-G-1	897	51	228	135	31	-239	285	10	91
SU54-G-2	2462	40	285	141	40	-271	454	27	118
SU54-G-3	4599	34	298	129	36	-289	493	-8	107
SU54-G-4	1485	37	417	159	59	-280	845	81	174

Area Scanned (ft^2) 5,915

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 54 Ground Level

		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU54-G-1	897	0	35	3.6	5.1	-5	57	1	9
SU54-G-2	2462	0	28	2.6	4.2	-5	45	-1	8
SU54-G-3	4599	0	37	2.4	4.1	-5	61	-1	7
SU54-G-4	1485	0	33	2.5	4.2	-5	54	-1	7

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 3 cpm
Background σ: 7.32 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 720 dpm/100 cm^2

Summary of Scan Results - Beta

Location: Building 54 Museum Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU54-M-1	1698	75	273	134	37	-168	419	6	110
SU54-M-2 Tile	1127	52	262	138	35	-236	386	20	103
SU54-M-2 Ceramic	685	151	655	448	67	-754	739	125	199
SU54-M-2 Carpet	2385.0	24	243	98	29	-255	393	-35	86
Area Scanned (ft^2)	3,693								

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Ceramic Floor	Carpet	
Instrument:	2360	253258	Background:	132	405	110	cpm
Detector:	43-37	265544	Background σ:	32.2	64.2	30.9	cpm
Probe Area:	582	cm^2					

Total Efficiency: 0.058 cpm/dpm

Total Efficiency Uncertainty: 0.001 cpm/dpm

	Tile Floor	Ceramic Floor	Carpet
MDC_{scan} (dpm/100 cm^2):	363	638	332

Scan speed: 1 detector width / 2 sec

Observation interval: 1 recorded measurement / 2 sec

Summary of Scan Results - Alpha

Location: Building 54 Museum Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU54-M-1	1698	0	31	2.5	4.1	-5	50	-1	7
SU54-M-2 Tile	1127	0	26	2.5	4.4	-5	41	-1	8
SU54-M-2 Ceramic	685	0	22	3.4	4.7	-5	34	1	8
SU54-M-2 Carpet	2385	0	30	2.9	4.5	-5	48	0	8

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Tile Floor	Ceramic Floor	Carpet	
Instrument:	2360	253258	Background:	3	3	3	cpm
Detector:	43-37	265544	Background σ:	7.32	8.01	6.38	cpm
Probe Area:	582	cm^2	Scan speed:	1 detector width / 8sec			
			Observation interval:	1 recorded measurement / 2 sec			

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	720	dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 54

All measurements in µR/hour

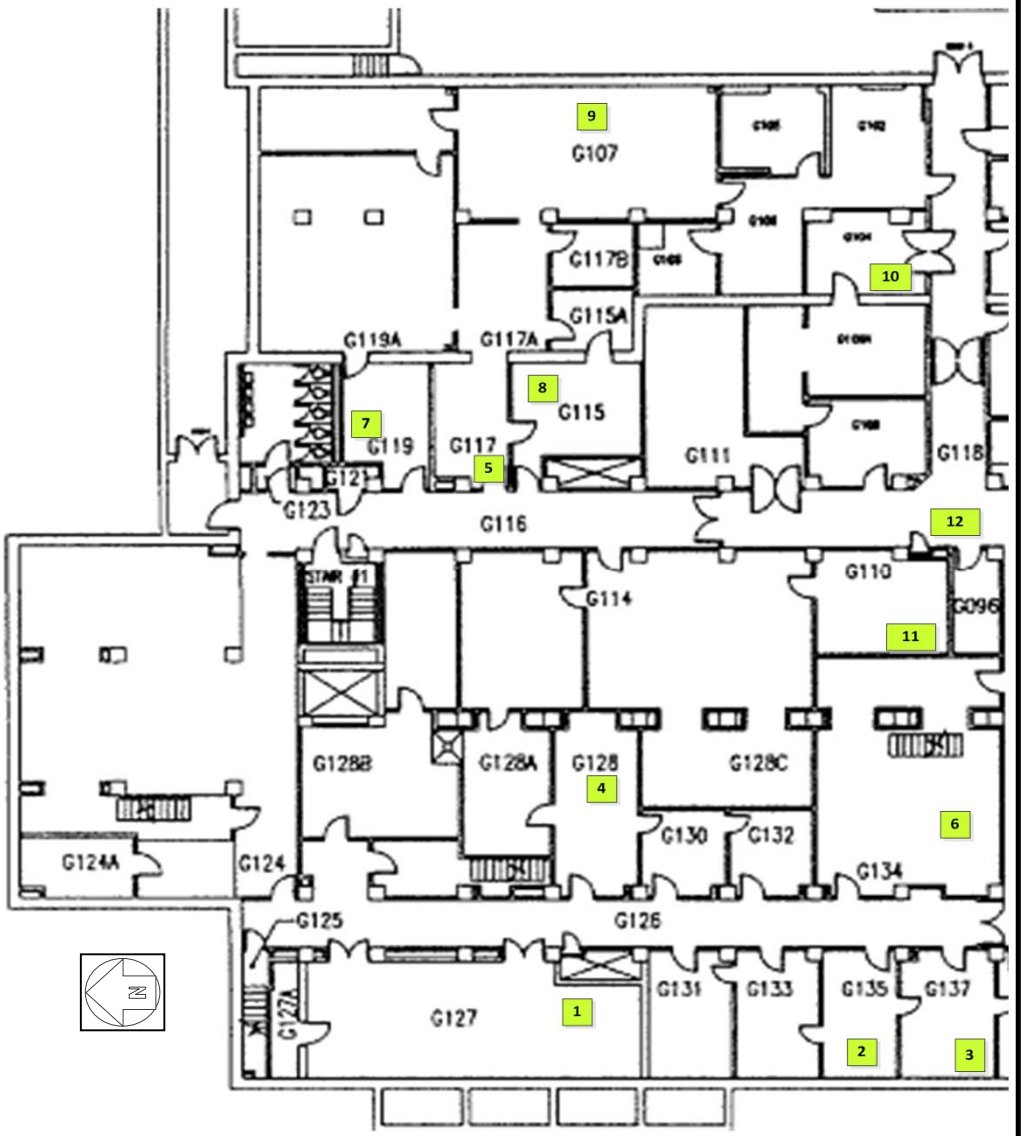
Date: 11/22/2011

Location	54-G-1	54-G-2	54-G-3	54-G-4
1	7	6	12	8
2	12	7	11	6
3	9	6	8	10
4	12	6	11	5
5	7	10	6	9
6	9	5	7	9
7	10	8	6	7
8	9	9	6	11
9	8	12	11	11
10	9	7	7	12
11	6	10	8	9
12	6	12	7	10
13	11	8	8	9
14	10	7	11	9
15	10	6	11	5
16				11
17				7
18				12
19				9
20				11
21				6
22				5

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012

Room	X,Y Locations	
G127	8,5	
G135	2,3	
G137	1,3	
G128	9,5	
G117	2,2	
G134	6,4	
G119	7,7	
G115	9,9	
G107	9,10	
G104	1,2	
G110	1,1	
Hall	2,2	



SURVEY UNITS
LEGEND

Class 3

[#] Measurement Number

No Scale

Survey Unit Identifier

SU54-G-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Class 3

Building 54 Ground Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-G-1
Survey Date: 12/7/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	White Tile	46	44	17	110	80
2	White Tile	52	56	18	140	90
3	White Tile	44	40	17	100	80
4	White Tile	70	92	19	229	90
5	White Tile	115	182	21	453	100
5	White Tile Recount	79	110	19	274	90
6	White Tile	86	124	19	309	90
7	White Tile	88	128	20	319	100
8	White Tile	109	170	21	423	100
9	White Tile	90	132	20	329	100
10	White Tile	93	138	20	344	100
11	White Tile	154	260	23	647	110
11	White Tile Recount	84	120	19	299	90
12	Plaster Wall	117	149	19	370	90
13	Drywall	86	87	17	216	80

Maximum: 647
Average: 306
STDEV: 150

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	141321	Reference Material:	Floor Tile	Drywall
Detector:	44-110	PR-258430	Background (cpm):	48	85
Probe Area:	126	cm^2	Background σ (cpm):	14.35	10.86
			Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-G-1
Survey Date: 12/7/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Plaster	191	297	22	738	110
1	Plaster Recount	153	221	21	549	100
1	Plaster Recount	135	185	20	460	100
2	White Tile	85	122	19	304	90
				Maximum:	738	
				Average:	513	
				STDEV:	181	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Drywall
Instrument:	2360	184935	Background (cpm):	48	85
Detector:	43-68	PR-181739	Background σ (cpm):	14.35	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-G-1
Survey Date: 11/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	White Tile	138	-12	8	-188	260
2	White Tile	114	-18	8	-282	250
3	White Tile	132	-14	8	-211	250
4	White Tile	104	-21	8	-320	240
5	White Tile	120	-17	8	-258	250
6	White Tile	146	-10	9	-157	260
7	White Tile	136	-13	8	-196	260
8	White Tile	174	-3	9	-48	270
9	White Tile	152	-9	9	-134	260
10	White Tile	164	-6	9	-87	270
11	White Tile	168	-5	9	-71	270
12	Plaster Wall	182	-9	10	-132	290
13	Drywall	134	-21	9	-319	270
QC10	White Tile	164	-6	9	-87	270
				Maximum:	-48	
				Average:	-185	
				STDEV:	91	

Instrument Data and Analysis Parameters

	Model	Serial No				Drywall
			Reference Material:	Floor Tile		
Instrument:	2360	253237	Background (cpm):	47	cpm	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	cpm	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-G-1
Survey Date: 11/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Plaster	198	-5	10	-70	300
2	White Tile	128	-15	8	-227	250
				Maximum:	-70	
				Average:	-149	
				STDEV:	111	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Drywall
Instrument:	2360	253237	Background (cpm):	47	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-G-1
Survey Date: 11/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	White Tile	4	0	1	3	20
2	White Tile	2	0	1	-1	20
3	White Tile	3	0	1	1	20
4	White Tile	0	-1	1	-5	10
5	White Tile	3	0	1	1	20
6	White Tile	0	-1	1	-5	10
7	White Tile	4	0	1	3	20
8	White Tile	2	0	1	-1	20
9	White Tile	2	0	1	-1	20
10	White Tile	1	0	1	-3	20
11	White Tile	2	0	1	-1	20
12	Plaster Wall	4	0	2	-2	30
13	Drywall	1	-1	1	-8	20
QC10	White Tile	2	0	1	-1	20
				Maximum:	3	
				Average:	-1	
				STDEV:	3	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Floor Tile	Drywall
Instrument:	2360	253237		Background (cpm):	1	1
Detector:	43-68	PR-216834		Background σ (cpm):	0.91	1.27
Probe Area:	126	cm^2		Sample Analysis Time:	4	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-G-1
Survey Date: 11/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Plaster	0	-1	1	-10	20
2	White Tile	2	0	1	-1	20
				Maximum:	-1	
				Average:	-6	
				STDEV:	7	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Drywall
Instrument:	2360	253237	Background (cpm):	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	542	dpm/100 cm^2

Room	X,Y Locations
G139	8,6
G140	3,5
G090	1,2
G083	6,3
G086A	2,5
G086B	1,11
G086C	8,3
G083	8,4
G081	2,2
G085A	6,6
G016	1,7
G080	3,3
Hall	2,1

SURVEY UNITS
LEGEND

Class 3
Measurement Number

No Scale

Survey Unit Identifier

SU 54-G-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Ground Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-G-2
Survey Date: 12/8/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	No Seal Due to Carpet		-48	14	-119	70
2	Green Ceramic Tile	276	253	27	629	130
3	Concrete	66	33	17	81	80
4	Concrete	109	119	19	295	100
5	Concrete	109	119	19	295	100
6	White Tile	47	46	17	115	80
7	Concrete	84	69	18	170	90
8	Concrete	116	133	20	330	100
9	Concrete	68	37	17	91	80
10	Floor Tile	69	90	19	224	90
11	Floor Tile	54	60	18	150	90
12	Plaster Wall	104	123	18	306	90
13	Drywall	138	191	20	475	100
				Maximum:	629	
				Average:	206	
				STDEV:	189	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Green Ceramic	Drywall
Instrument:	2360	141321	Background (cpm):	48	99	299	85
Detector:	44-110	PR-258430	Background σ (cpm):	14.35	12.73	14.28	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min		

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-G-2
Survey Date: 12/8/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Plaster Wall	87	89	17	221	80
2	Red Ceramic	232	259	27	644	130
				Maximum:	644	
				Average:	432	
				STDEV:	299	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Red Ceramic	Drywall
Instrument:	2360	184935	Background (cpm):	205	85
Detector:	43-68	PR-181739	Background σ (cpm):	15.55	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-G-2
Survey Date: 11/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Carpet	124	1	8	14	230
2	Green Ceramic Tile	712	-1	19	-23	580
3	Concrete	168	3	13	52	390
4	Concrete	192	9	13	146	400
5	Concrete	230	19	13	293	410
6	White Tile	194	2	9	30	280
7	Concrete	188	8	13	130	400
8	Concrete	184	7	13	115	400
9	Concrete	184	7	13	115	400
10	Floor Tile	140	-12	8	-180	260
11	Floor Tile	110	-19	8	-297	240
12	Plaster Wall	262	12	11	179	320
13	Drywall	434	55	12	848	380
QC3	Concrete	184	7	13	115	400
				Maximum:	848	
				Average:	109	
				STDEV:	269	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	·een Ceran	Drywall	Carpet
Instrument:	2360	253237	Background (cpm):	47	39	179	54	30
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	11.07	13.66	6.86	5.07
Probe Area:	126	cm^2	Sample Analysis Time:	4	min			

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-G-2
Survey Date: 11/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Plaster	292	19	11	296	330
2	Red Ceramic	540	30	14	464	440
				Maximum:	464	
				Average:	380	
				STDEV:	119	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Drywall	Red Ceramic
Instrument:	2360	253237	Background (cpm):	54	105
Detector:	43-68	PR-216834	Background σ (cpm):	6.86	8.3
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-G-2
Survey Date: 11/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Carpet	2	0	1	-2	20
2	Green Ceramic Tile	40	0	4	-1	70
3	Concrete	0	-1	1	-7	20
4	Concrete	2	0	1	-3	20
5	Concrete	4	0	2	1	20
6	White Tile	2	0	1	-1	20
7	Concrete	0	-1	1	-7	20
8	Concrete	0	-1	1	-7	20
9	Concrete	2	0	1	-3	20
10	Floor Tile	0	-1	1	-5	10
11	Floor Tile	6	1	2	8	20
12	Plaster Wall	4	0	2	-2	30
13	Drywall	2	-1	1	-6	20
QC3	Concrete	4	0	2	1	20
				Maximum:	8	
				Average:	-3	
				STDEV:	4	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Green Ceramic	Drywall	Carpet
Instrument:	2360	253237	Background (cpm):	1	1	10	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.17	2.89	1.27	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min			

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building: 54
Survey Unit: 54-G-2
Survey Date: 11/21/2011

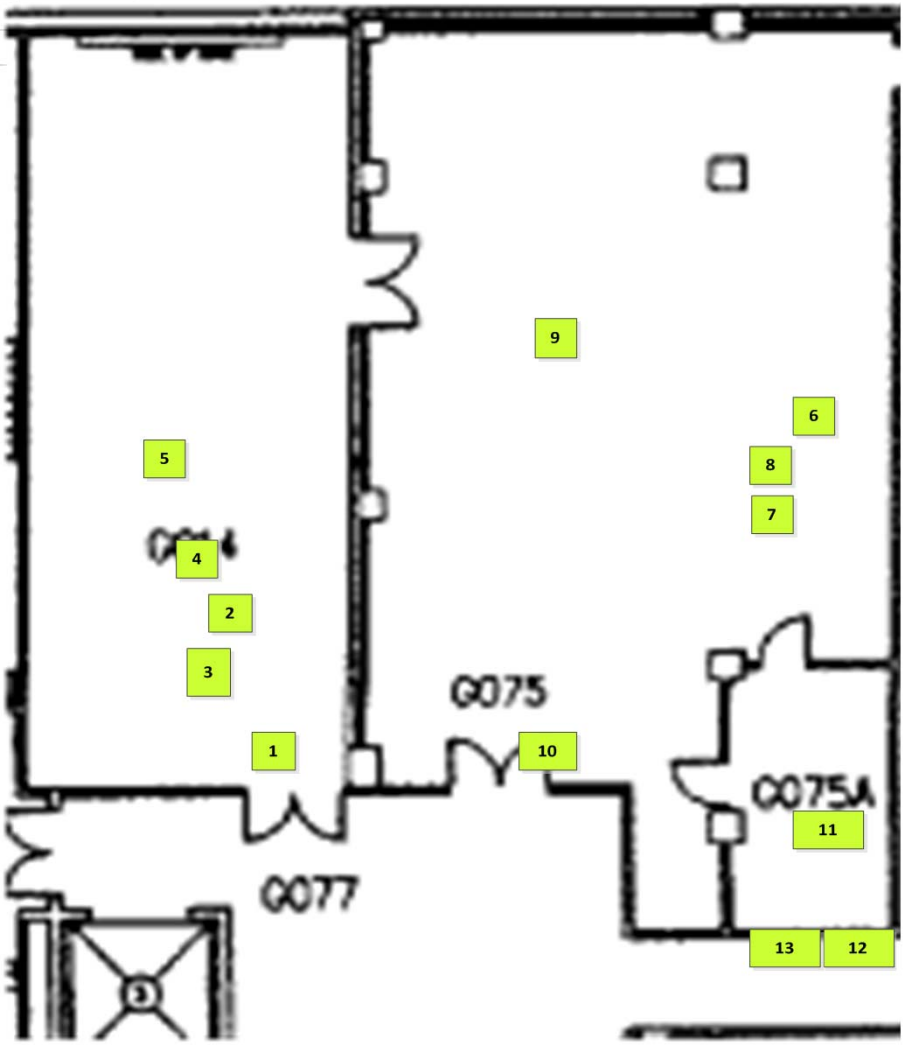
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Plaster	2	-1	1	-6	20
2	Red Ceramic	0	-1	1	-7	10
				Maximum:	-6	
				Average:	-7	
				STDEV:	0	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Drywall	Red Ceramic
Detector:	43-68	PR-216834	Background (cpm):	1	1
Probe Area:	126	cm^2	Background σ (cpm):	1.27	0.87
			Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Room	X,Y Locations				
G014	1,2	6,3	4,4	7,6	8,7
G075	7,2	4,3	6,3	8,8	1,9
G075A	3,2				
Hall	5,1	7,2			



SURVEY UNITS LEGEND

**Class 3** Measurement Number

No Scale

Survey Unit Identifier

SU-54-G-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Ground Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-G-3
Survey Date: 12/8/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	50	1	16	1	80
2	White Tile	62	76	18	190	90
3	No Seal due to Carpet					
4	Floor Tile	44	40	17	100	80
5	Floor Tile	70	92	19	229	90
6	Floor Tile	66	84	18	209	90
7	Tan Tile	49	50	17	125	90
8	No Seal due to Carpet					
9	White Tile	79	110	19	274	90
10	Green Ceramic Tile	284	269	28	668	140
11	Drywall	70	55	16	136	80
12	Tan Tile	36	24	17	60	80
13	Plaster Wall	63	41	16	102	80
				Maximum:	668	
				Average:	215	
				STDEV:	188	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Green Ceramic	Drywall
Instrument:	2360	141321	Background (cpm):	48	99	299	85
Detector:	44-110	PR-258430	Background σ (cpm):	14.35	12.73	14.28	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min		

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-G-3
Survey Date: 12/8/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drain on Painted Concrete	81	63	18	310	180
2	Plaster Wall	46	7	14	34	140
				Maximum:	310	
				Average:	172	
				STDEV:	195	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	184935	Reference Material:	Painted Concrete	Drywall
Detector:	43-68	PR-181739	Background (cpm):	99	85
Probe Area:	126	cm^2	Background σ (cpm):	12.73	10.86
			Sample Analysis Time:	0.5	min

Total Efficiency: 0.160 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-G-3
Survey Date: 11/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	156	0	13	6	390
2	White Tile	154	-8	9	-126	260
3	Carpet	94	-7	7	-103	210
4	Floor Tile	126	-15	8	-235	250
5	Floor Tile	104	-21	8	-320	240
6	Floor Tile	122	-16	8	-250	250
7	Tan Tile	114	-18	8	-282	250
8	Carpet	100	-5	7	-79	220
9	White Tile	142	-11	8	-173	260
10	Green Ceramic Tile	700	-4	19	-69	580
11	Drywall	190	-7	10	-101	300
12	Tan Tile	110	-19	8	-297	240
13	Plaster Wall	148	-17	9	-265	280
QC12	Tan Tile	114	-18	8	-282	250
				Maximum:	6	
				Average:	-176	
				STDEV:	104	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Carpet	en Cera	Drywall
Instrument:	2360	253237	Background (cpm):	47	39	30	179	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	11.07	5.07	13.66	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min			

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-G-3
Survey Date: 11/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drain on Painted Concrete	110	-11	12	-173	370
2	Interior Support Wall	180	-9	10	-140	290
				Maximum:	-140	
				Average:	-157	
				STDEV:	24	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Painted Concrete	Drywall
Detector:	43-68	PR-216834	Background (cpm):	39	54
Probe Area:	126	cm^2	Background σ (cpm):	11.07	6.86
			Sample Analysis Time:	4	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-G-3
Survey Date: 11/21/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	0	-1	1	-7	20
2	White Tile	0	-1	1	-5	10
3	Carpet	0	-1	1	-6	20
4	Floor Tile	0	-1	1	-5	10
5	Floor Tile	0	-1	1	-5	10
6	Floor Tile	4	0	1	3	20
7	Tan Tile	6	1	2	8	20
8	Carpet	2	0	1	-2	20
9	White Tile	0	-1	1	-5	10
10	Green Ceramic Tile	32	-2	4	-18	70
11	Drywall	10	1	2	10	30
12	Tan Tile	2	0	1	-1	20
13	Plaster Wall	2	-1	1	-6	20
QC12	Tan Tile	8	1	2	12	30
				Maximum:	12	
				Average:	-3	
				STDEV:	7	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Floor Tile	Concrete	Carpet	Green Ceramic	Drywall
Background (cpm):	1	1	1	10	1
Background σ (cpm):	0.91	1.17	1.27	2.89	1.27
Sample Analysis Time:	4	min			

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

Building:	54
Survey Unit:	54-G-3
Survey Date:	11/21/2011

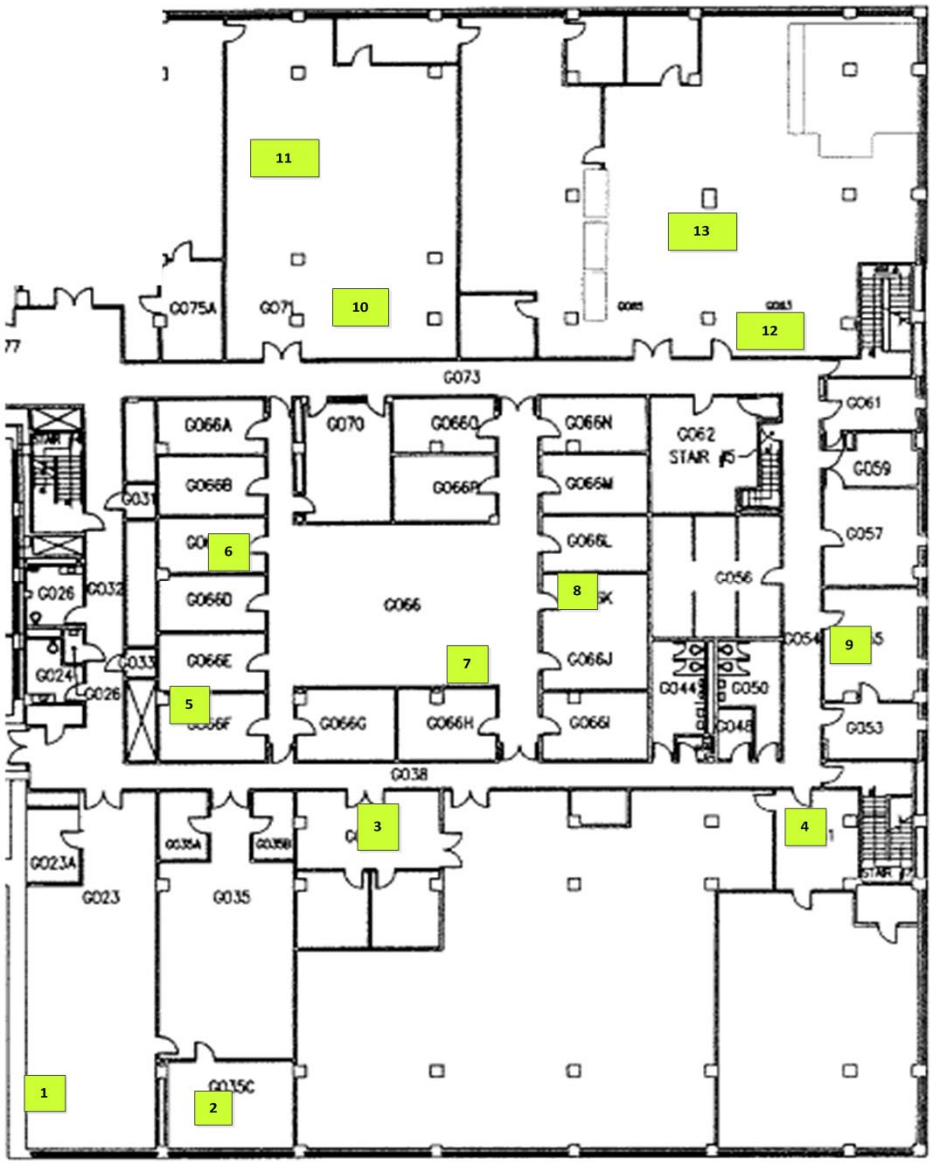
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drain on Painted Concrete	12	2	2	18	30
2	Interior Support Wall	2	-1	1	-6	20
				Maximum:	18	
				Average:	6	
				STDEV:	17	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Painted Concrete	Drywall
Instrument:	2360	253237	Background (cpm):	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	1.17	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	39	dpm/100 cm^2

Room	X,Y Locations	
G023	5,20	
G035C	7,15	
G037	6,10	
G051	11,9	
G066F	12,15	
G066C	7,7	
G066	2,6	
G066K	8,10	
G055	9,13	
G071	7,9	18,21
G065	2,10	13,15



SURVEY UNITS LEGEND

Class 3

[#] Measurement Number

No Scale

Survey Unit Identifier

SU54-G-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 54 Ground Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 54
Survey Unit: 54-G-4
Survey Date: 12/8/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	White Tile	63	78	18	195	90
2	Concrete	64	29	17	71	80
3	Concrete	91	83	19	205	90
4	Concrete	82	65	18	161	90
5	Drywall	98	111	18	276	90
6	Floor Tile	68	88	18	219	90
7	Floor Tile	85	122	19	304	90
8	Plaster Wall	50	15	15	37	70
9	Floor Tile	96	144	20	359	100
10	Floor Tile	81	114	19	284	90
11	Floor Tile	86	124	19	309	90
12	Concrete	114	129	19	320	90
13	Plaster Wall	72	59	16	146	80
				Maximum:	359	
				Average:	220	
				STDEV:	101	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall
Instrument:	2360	141321	Background (cpm):	48	99	85
Detector:	44-110	PR-258430	Background σ (cpm):	14.35	12.73	10.86
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 54
Survey Unit: 54-G-4
Survey Date: 12/8/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Hood Sink	80	83	16	206	80
2	Black Hood	84	91	16	226	80
3	Black Lab Sink	58	39	15	97	70
4	Painted Concrete	80	61	18	151	90
5	Stainless Sink	58	53	14	132	70
6	Rusted Paint Under Sink	83	103	15	256	80
7	Tan Air Duct	71	79	15	196	70
8	Black Lab Sink	46	15	14	37	70
9	Painted Concrete	89	79	18	195	90
				Maximum:	256	
				Average:	216	
				STDEV:	14	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Concrete	Metal
Instrument:	2360	184935	Background (cpm):	77	99	63
Detector:	43-68	PR-181739	Background σ (cpm):	10.11	12.73	8.52
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min	

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 54
Survey Unit: 54-G-4
Survey Date: 11/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	White Tile	91	-24	8	-371	240
2	Concrete	162	2	13	29	390
3	Concrete	174	5	13	76	390
4	Concrete	138	-4	13	-64	380
5	Drywall	114	-26	9	-397	270
6	Floor Tile	94	-23	8	-359	240
7	Floor Tile	116	-18	8	-274	250
8	Plaster Wall	103	-28	9	-440	260
9	Floor Tile	183	-1	9	-13	280
10	Floor Tile	152	-9	9	-134	260
11	Floor Tile	138	-12	8	-188	260
12	Concrete	156	0	13	6	390
13	Plaster Wall	153	-16	9	-245	280
QC3	Concrete	169	4	13	56	390
QC4	Concrete	146	-2	13	-33	380
				Maximum:	76	
				Average:	-183	
				STDEV:	179	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall
Instrument:	2360	253237	Background (cpm):	47	39	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	11.07	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 54
Survey Unit: 54-G-4
Survey Date: 11/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Hood Sink	107	0	8	-2	240
2	Black Hood	180	18	9	282	270
3	Black Lab Sink	125	4	8	68	250
4	Painted Concrete	171	4	13	64	390
5	Stainless Sink	140	1	7	12	220
6	Rusted Paint Under Sink	131	-1	7	-23	220
7	Tan Air Duct	264	32	9	494	280
8	Black Lab Sink	109	0	8	6	240
9	Painted Concrete	174	5	13	76	390
				Maximum:	494	
				Average:	140	
				STDEV:	201	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Concrete	Metal
Instrument:	2360	253237	Background (cpm):	27	39	34
Detector:	43-68	PR-216834	Background σ (cpm):	5.95	11.07	4.21
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 542 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 54
Survey Unit: 54-G-4
Survey Date: 11/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	White Tile	4	0	1	3	20
2	Concrete	7	1	2	8	30
3	Concrete	6	1	2	6	30
4	Concrete	2	0	1	-3	20
5	Drywall	3	-1	2	-4	20
6	Floor Tile	3	0	1	1	20
7	Floor Tile	3	0	1	1	20
8	Plaster Wall	3	-1	2	-4	20
9	Floor Tile	3	0	1	1	20
10	Floor Tile	2	0	1	-1	20
11	Floor Tile	1	0	1	-3	20
12	Concrete	2	0	1	-3	20
13	Plaster Wall	1	-1	1	-8	20
QC3	Concrete	4	0	2	1	20
QC4	Concrete	5	0	2	4	30
				Maximum:	8	
				Average:	0	
				STDEV:	4	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Floor Tile	Concrete	Drywall
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.91	1.17	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

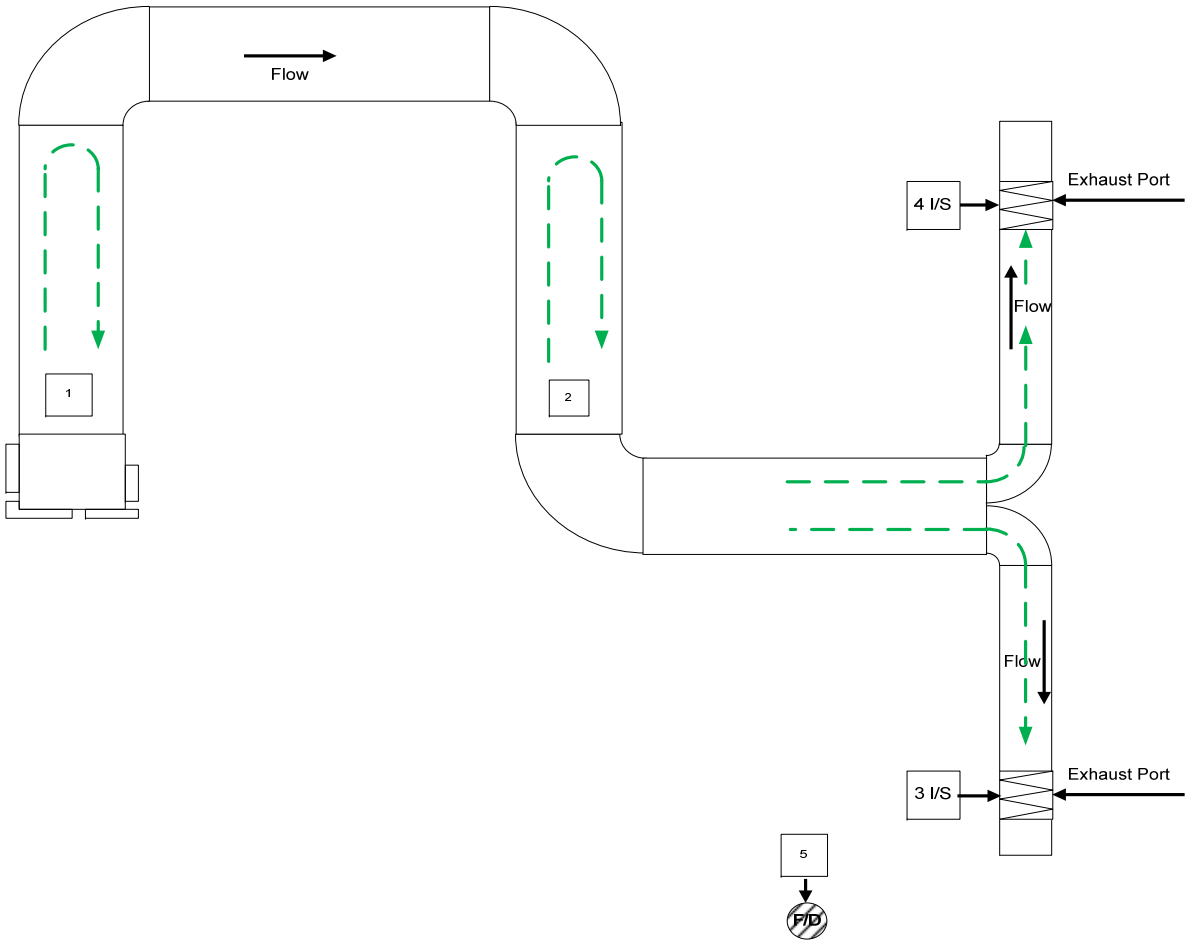
Building: 54
Survey Unit: 54-G-4
Survey Date: 11/22/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Black Hood Sink	2	0	1	0	20
2	Black Hood	2	0	1	0	20
3	Black Lab Sink	4	0	1	4	20
4	Painted Concrete	2	0	1	-3	20
5	Stainless Sink	3	0	1	1	20
6	Rusted Paint Under Sink	2	0	1	-1	20
7	Tan Air Duct	47	11	4	92	60
8	Black Lab Sink	10	2	2	16	30
9	Painted Concrete	2	0	1	-3	20
				Maximum:	92	
				Average:	0	
				STDEV:	0	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Composite	Concrete	Metal
Instrument:	2360	253237	Background (cpm):	1	1	1
Detector:	43-68	PR-216834	Background σ (cpm):	0.8	1.17	0.73
Probe Area:	126	cm^2	Sample Analysis Time:	4	min	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 39 dpm/100 cm^2



SURVEY UNITS LEGEND

Class 3

Scan Path

\# Data Point

Survey Unit Identifier

Building 54 Roof

No Scale

Building 54 Roof

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Alpha

Location: Building 54 Roof

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
SU-54-Roof	246	0	22	3	4	-27.94	150.23	-0.22	35.48

Area Scanned (ft^2) 33

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm2

Reference Material: Mastic
Background: 3 cpm
Background σ: 1.04 cpm
Scan speed: 1 detector width / 2sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.098 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 705 dpm/100 cm^2

Summary of Scan Results - Beta

Location: Building 54 Roof

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm$^{2)}$ Minimum	Activity (dpm/100cm$^{2)}$ Maximum	Activity (dpm/100cm$^{2)}$ Average	Activity (dpm/100cm$^{2)}$ STDEV
SU-54-Roof	246	20	126	66	23	-352	1401	403	381

Area Scanned (ft^2) 33

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253258	Reference Material:	Metal	
Detector:	43-68	148454	Background:	34	cpm
Probe Area:	126	cm^2	Background σ:	4.21	cpm
			Scan speed:	1 detector width / 2 sec	
			Observation interval:	1 recorded measurement / 2 sec	

Total Efficiency:	0.048	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC_{scan}:	916	dpm/100 cm^2

Summary of Random H3 Static Measurements

Location: Building 54 Roof
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Surface						
1	Ductwork	76	89	15	221	70
2	Ductwork	67	71	14	177	70
3	Ductwork	62	61	14	152	70
4	Ductwork	71	79	15	196	70
5	Floor Drain	36	9	12	22	60
				Maximum:	221	
				Average:	154	
				STDEV:	78	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	141321	Reference Material:	Metal	
Detector:	44-110	PR-258430	Background:	63	cpm
Probe Area:	126	cm^2	Background σ:	8.52	cpm
			Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	epm/dpm
Total Efficiency Uncertainty:	0.001	epm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Location: Building 54 Roof
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Surface						
1	Ductwork	275	35	9	537	280
2	Ductwork	198	15	8	238	250
3	Ductwork	201	16	8	249	250
4	Ductwork	217	20	8	312	260
5	Floor Drain	134	-1	7	-11	220
				Maximum:	537	
				Average:	265	
				STDEV:	196	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Metal	
Detector:	43-68	PR-216834	Background:	34	cpm
Probe Area:	126	cm^2	Background σ:	4.21	cpm
			Sample Analysis Time:	4	min

Total Efficiency:	0.051	epm/dpm
Total Efficiency Uncertainty:	0.001	epm/dpm
MDC:	542	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

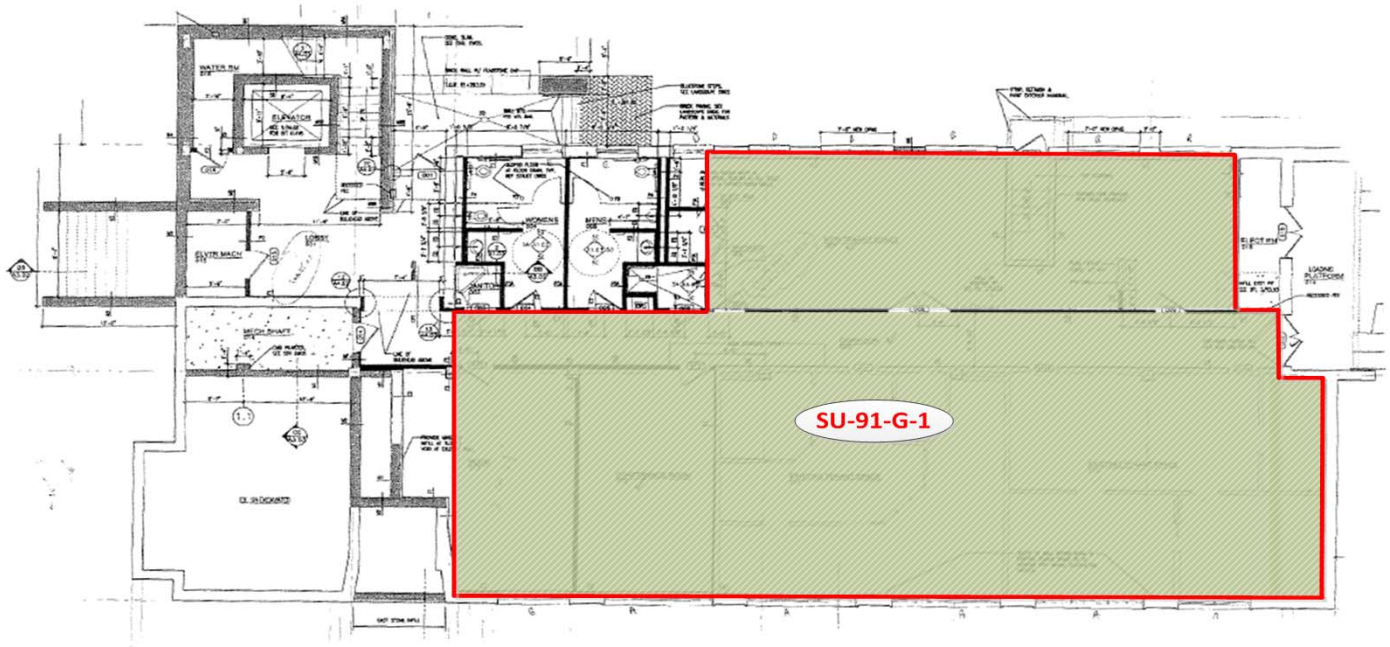
Location: Building 54 Roof
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Surface						
1	Ductwork	5	1	1	5	20
2	Ductwork	7	1	2	9	20
3	Ductwork	8	1	2	11	30
4	Ductwork	6	1	1	7	20
5	Floor Drain	4	0	1	3	20
				Maximum:	11	
				Average:	7	
				STDEV:	3	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Metal	
Instrument:	2360	253237	Background:	1	cpm
Detector:	43-68	PR-216834	Background σ:	0.73	cpm
Probe Area:	126	cm^2	Sample Analysis Time:	4	min

Total Efficiency:	0.096	epm/dpm
Total Efficiency Uncertainty:	0.001	epm/dpm
MDC:	39	dpm/100 cm^2



SURVEY UNITS
LEGEND

Room Number
Class 2 SU
Class 3 SU

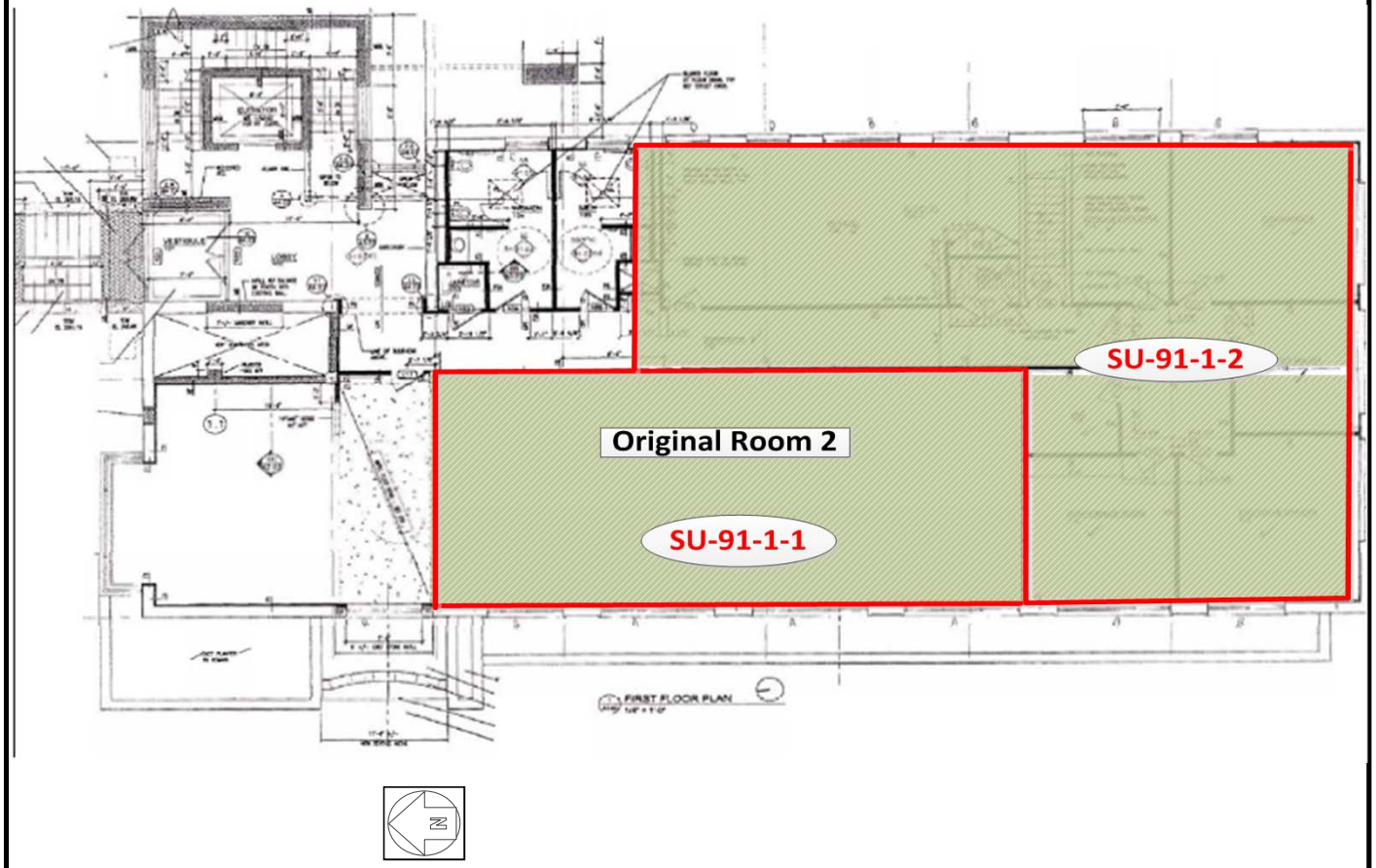
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 91 Ground Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS LEGEND

Room Number
Class 2 SU
Class 3 SU

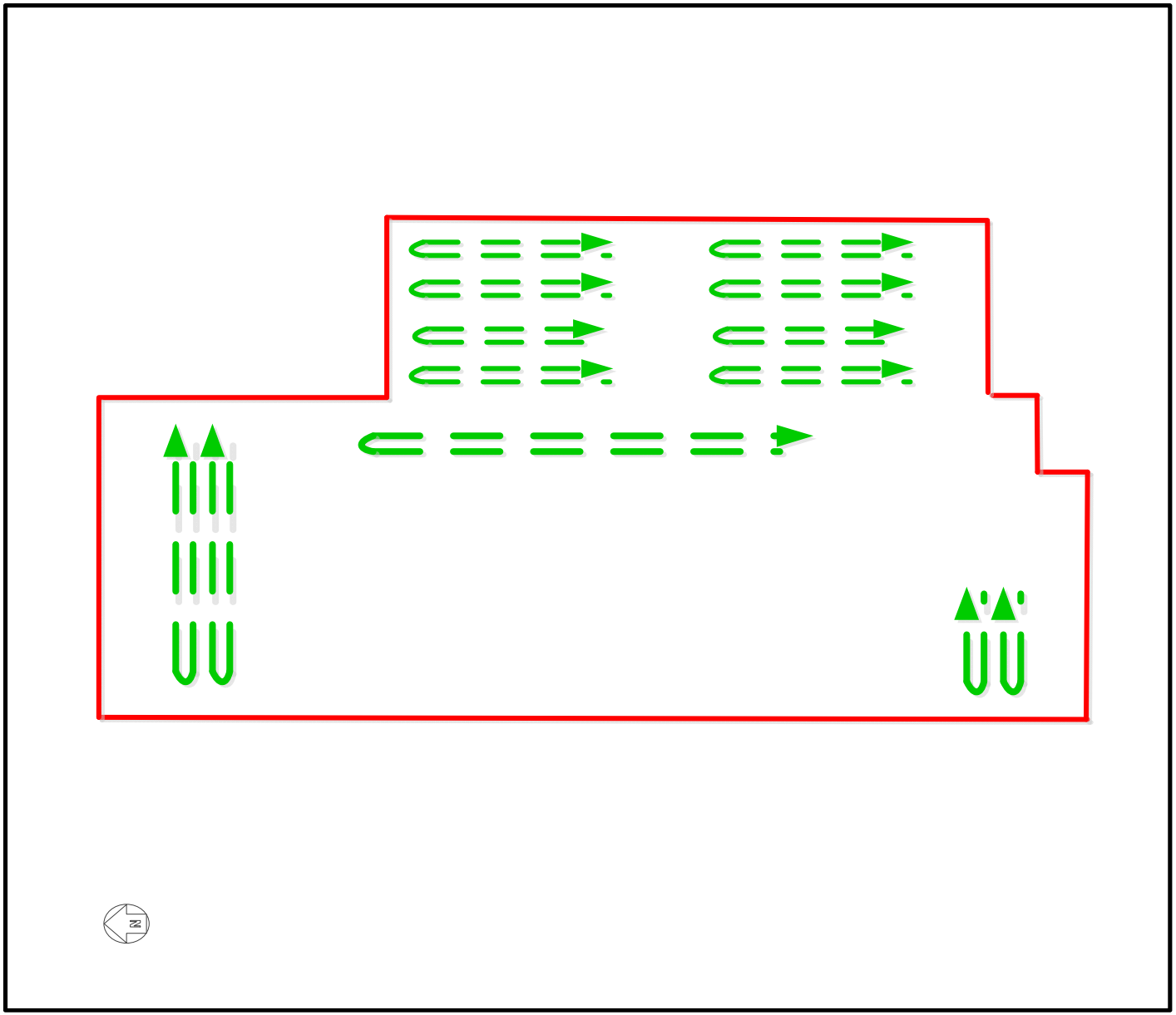
Survey Unit Identifier

SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

Building 91 First Floor

Date: 9-5-2011
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

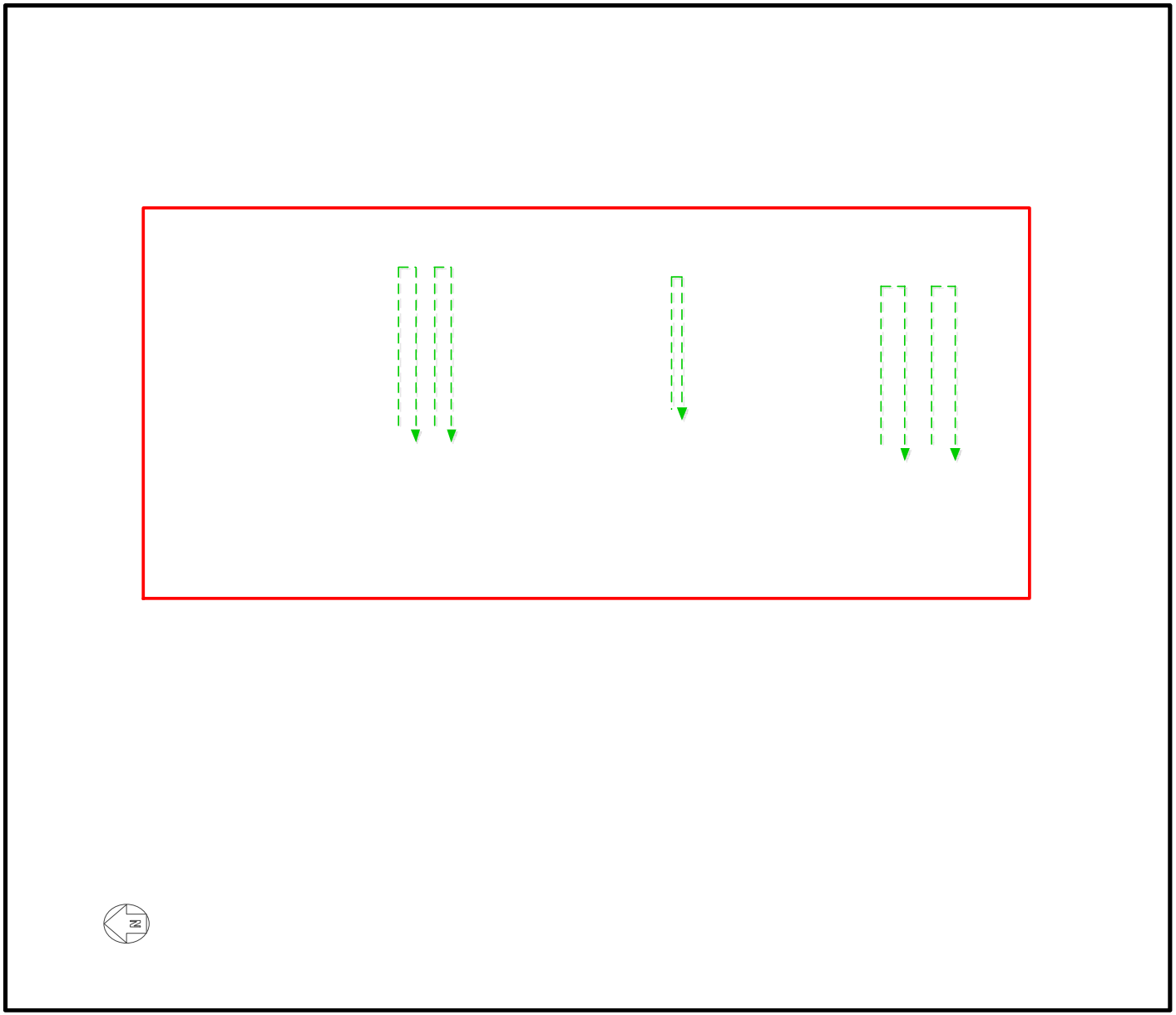
SU-91-G-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 91 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

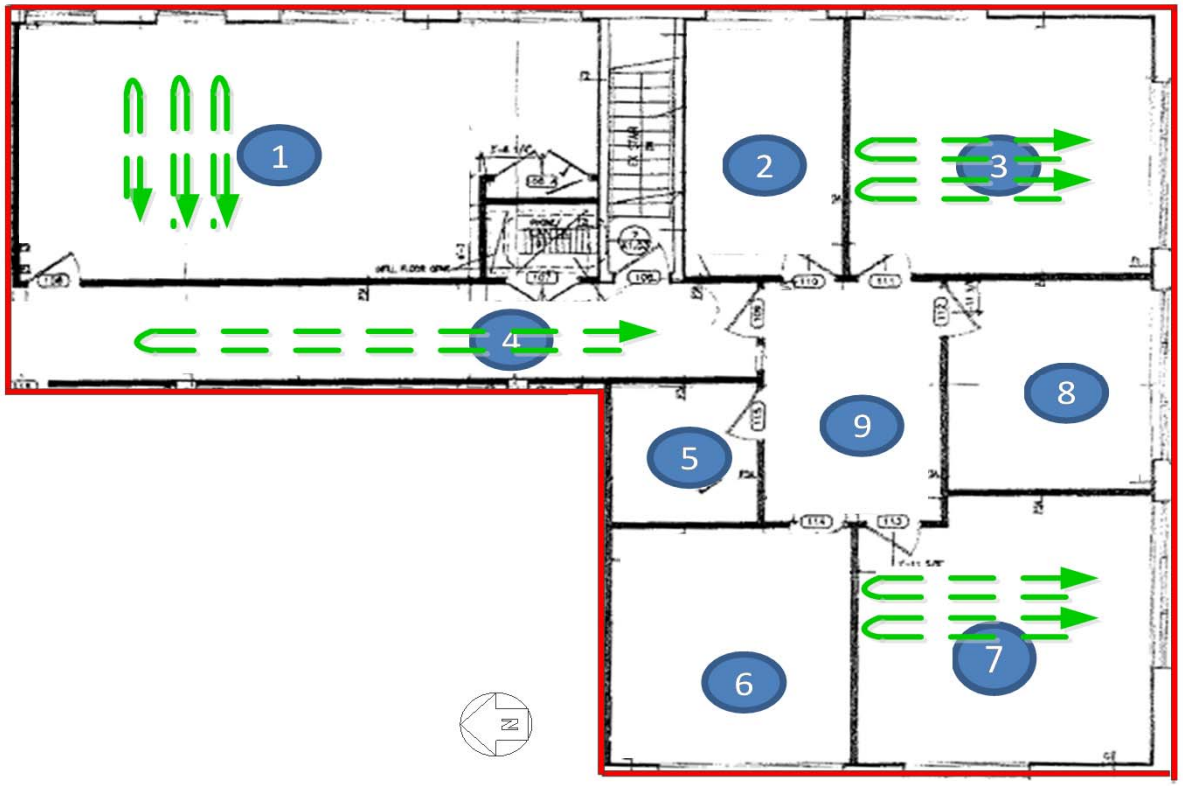
SU-91-1-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 91 First Floor
Original Room 2

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

SU-91-1-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 91 First Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 91

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU91-1-1	754	100	199	151	29	-94	200	57	86
SU91-1-2	692	81	199	147	29	-150	200	45	87
SU91-1-1 Ceramic wall	131	79	378	215	51	-156	730	247	151
SU91-2-1	612	67	247	146	33	-191	342	43	97

Area Scanned (ft^2): 1,371

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 91

Location	Number of records	Gross CPM				Activity (dpm/100cm^2)			
		Minimum	Maximum	Average	STDEV	Minimum	Maximum	Average	STDEV
SU91-1-1	754	0	23	2.1	3.9	-5	36	-2	7
SU91-1-2	692	0	26	2.8	4.2	-5	41	0	8
SU91-1-1 Hidden wall	131	0	31	4.3	6.1	-5	50	2	11
SU91-2-1	612	0	37	5.7	6.5	-5	61	5	12

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 3 cpm
Background σ: 7.32 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 720 dpm/100 cm^2

Summary of Exposure Rate Measurements

Location: Building 91

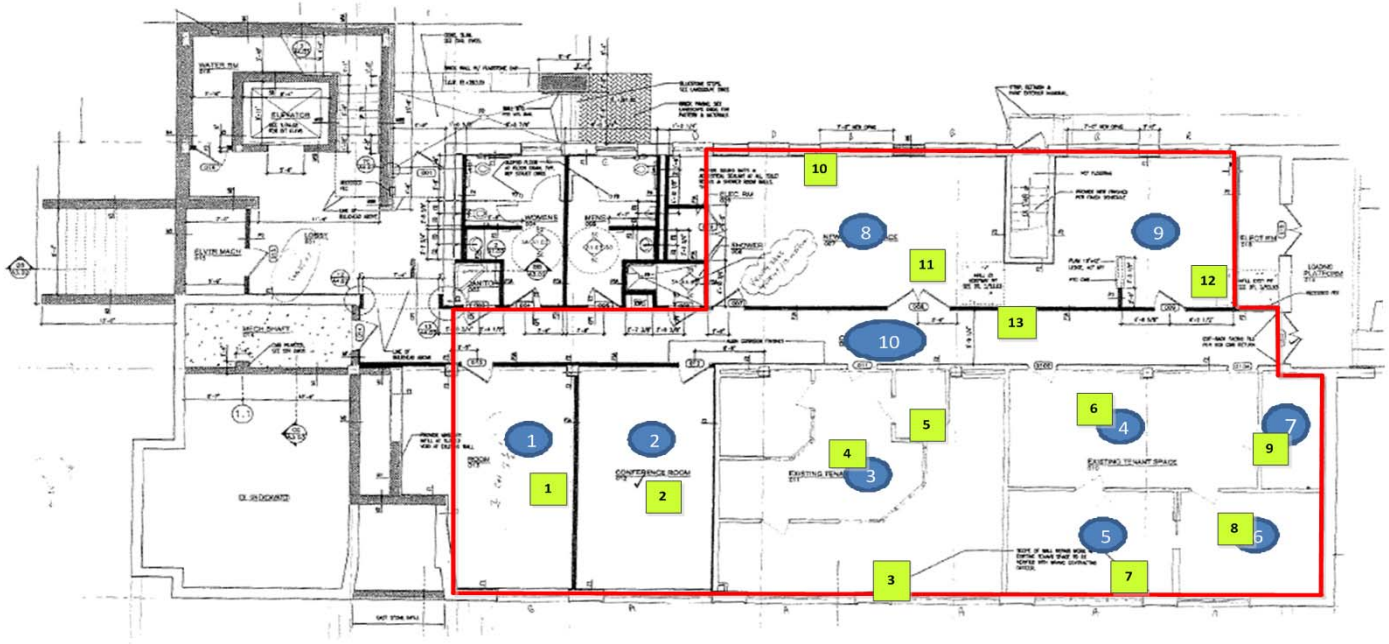
All measurements in µR/hour

Date: 12/15/2011

Location	91-G-1	91-1-1	91-1-2
1	5	6	8
2	6	6	8
3	7	7	7
4	6	6	8
5	8	7	5
6	8	7	5
7	7	8	5
8	8	7	6
9	6	8	6
10	7	8	5
11	8	7	6
12	8	7	6
13	8	6	5
14	6	6	7
15	6		
16	7		

Instrument Data and Analysis Parameters

Model	Serial No	Cal. Due
L19	180302	11/14/2012
L19	156479	5/24/2012



Room	X,Y Locations		
1	12,3		
2	11,6		
3	W-15,2	10,13	13,8
4	10,5		
5	W-4,8		
6	8,10		
7	2,9		
8	N-9,4	3,8	
9	1,2		
10	4,21		

N

SURVEY UNITS
LEGEND

Class 3
Measurement Number

Survey Unit Identifier

SU91-G-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 91 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 91
Survey Unit: 91-G-1
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	105	111	19	275	90
2	Concrete	141	183	21	454	100
3	Concrete	126	153	20	379	100
4	Concrete	98	97	19	240	90
5	Concrete	170	241	22	598	110
6	Concrete	136	173	21	429	100
7	Concrete	157	215	22	534	110
8	Concrete	138	177	21	439	100
9	Concrete	117	135	20	335	100
10	Floor Tile	97	146	20	364	100
11	Concrete	104	109	19	270	90
12	Concrete	115	131	20	325	100
13	Floor Tile	109	170	21	423	100
				Maximum:	598	
				Average:	390	
				STDEV:	105	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	141321	Reference Material:	Concrete	Floor Tile
Detector:	44-110	PR-258430	Background (cpm):	99.5	48
Probe Area:	126	cm^2	Background σ (cpm):	12.73	14.35
			Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 91
Survey Unit: 91-G-1
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	89	79	18	195	90
2	Concrete	86	73	18	180	90
3	Concrete	100	101	19	250	90
				Maximum:	250	
				Average:	209	
				STDEV:	37	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete	
Instrument:	2360	184935	Background (cpm):	99.5	
Detector:	43-68	PR-181739	Background σ (cpm):	12.73	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 91
Survey Unit: 91-G-1
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete Under Carpet	74	-2	13	-26	390
2	Concrete Under Carpet	77	0	13	-2	390
3	Concrete Under Carpet	135	29	14	449	420
4	Concrete Under Carpet	69	-4	13	-64	380
5	Concrete Under Carpet	67	-5	12	-80	380
6	Concrete Under Carpet	175	49	14	760	440
7	Concrete Under Carpet	54	-12	12	-181	370
8	Concrete Under Carpet	92	7	13	115	400
9	Concrete Under Carpet	96	9	13	146	400
10	White Tile	63	-15	12	-235	380
11	Concrete Under Carpet	86	4	13	68	390
12	Concrete Under Carpet	57	-10	12	-158	370
13	White Tile	67	-13	12	-204	380

Maximum: 760
Average: 45
STDEV: 283

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Concrete	Tile Floor
Background (cpm):	38.64	46.59
Background σ (cpm):	11.07	6.05
Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 91
Survey Unit: 91-G-1
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete Under Carpet	85	4	13	60	390
2	Concrete Under Carpet	117	20	13	309	410
3	Concrete Under Carpet	76	-1	13	-10	390
					0	0
				Maximum:	309	
				Average:	120	
				STDEV:	168	

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	253237	Reference Material:	Concrete
Detector:	43-68	PR-216834	Background (cpm):	38.64
Probe Area:	126	cm^2	Background σ (cpm):	11.07
			Sample Analysis Time:	2 min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 91
Survey Unit: 91-G-1
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete Under Carpet	3	1	2	6	30
2	Concrete Under Carpet	3	1	2	6	30
3	Concrete Under Carpet	9	4	3	30	40
4	Concrete Under Carpet	4	1	2	10	40
5	Concrete Under Carpet	5	2	2	14	40
6	Concrete Under Carpet	10	4	3	35	50
7	Concrete Under Carpet	3	1	2	6	30
8	Concrete Under Carpet	7	3	3	22	40
9	Concrete Under Carpet	4	1	2	10	40
10	White Tile	8	3	3	28	40
11	Concrete Under Carpet	10	4	3	35	50
12	Concrete Under Carpet	8	3	3	26	40
13	White Tile	11	5	3	41	50

Maximum: 41
Average: 21
STDEV: 13

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Concrete	Tile Floor
Instrument:	2360	253237	Background (cpm):	0.82	0.59
Detector:	43-68	PR-216834	Background σ (cpm):	1.77	0.51
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2

Summary of Biased Alpha Static Measurements

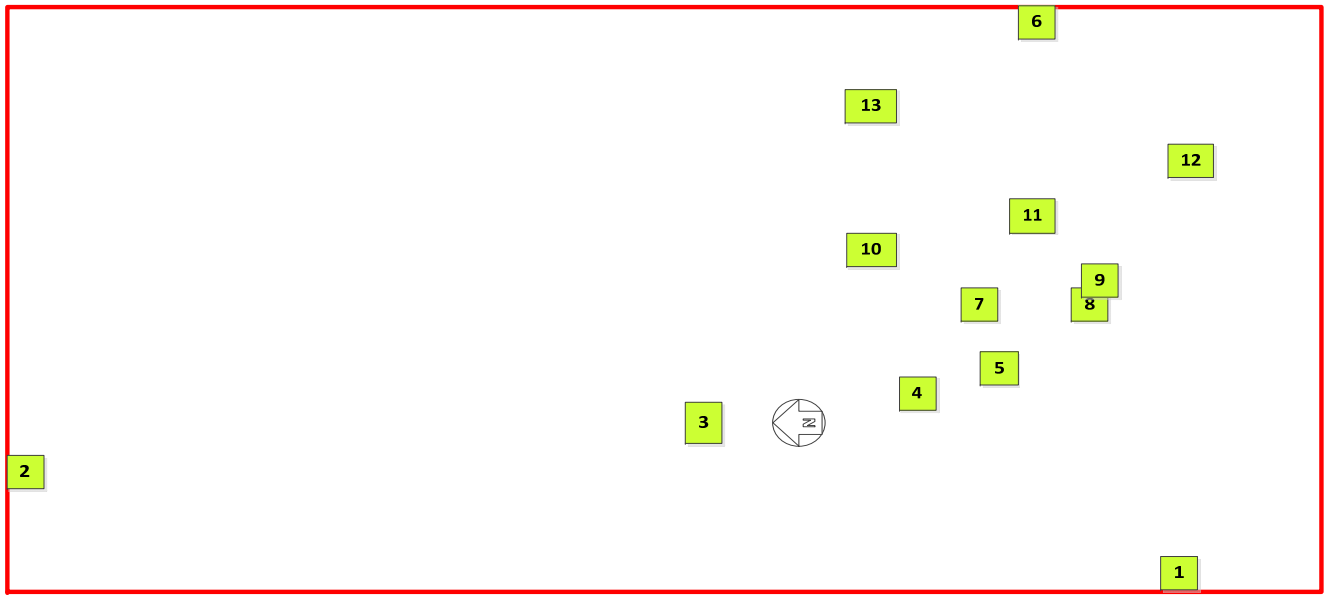
Building: 91
Survey Unit: 91-G-1
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1		9	5	2	37	40
2		9	5	2	37	40
3		11	6	3	45	40
				Maximum:	45	
				Average:	40	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Tile Floor	
Instrument:	2360	253237	Background:		cpm
Detector:	43-68	PR-216834	Background σ:	1.27	cpm
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.096	epm/dpm
Total Efficiency Uncertainty:	0.001	epm/dpm
MDC:		dpm/100 cm^2



X,Y Locations				
W-2,3	N-5,4	7,18	8,13	9,10
E-10,3	10,13	12,7	13,8	14,16
16, 10	18,2	21,16		

SURVEY UNITS
LEGEND

Class 3
\# Measurement Number

Survey Unit Identifier

SU91-1-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 91 First Floor
Original Room 2

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 91
Survey Unit: 91-1-1
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	95	91	19	225	90
2	Concrete	106	113	19	280	90
3	Concrete	106	113	19	280	90
4	Concrete	91	83	19	205	90
5	Concrete	106	113	19	280	90
6	Concrete	115	131	20	325	100
7	Concrete	106	113	19	280	90
8	Concrete	96	93	19	230	90
9	Concrete	101	103	19	255	90
10	Concrete	92	85	19	210	90
11	Concrete	95	91	19	225	90
12	Concrete	87	75	18	185	90
13	Concrete	111	222	15	552	70
				Maximum:	552	
				Average:	272	
				STDEV:	93	

Instrument Data and Analysis Parameters

	Model	Serial No		
Instrument:	2360	141321	Reference Material:	Concrete
Detector:	44-110	PR-258430	Background (cpm):	99.5
Probe Area:	126	cm^2	Background σ (cpm):	12.73
			Sample Analysis Time:	0.5 min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 91
Survey Unit: 91-1-1
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete Under Carpet	97	10	13	153	400
2	Concrete Under Carpet	93	8	13	122	400
3	Concrete Under Carpet	46	-16	12	-243	370
4	Concrete Under Carpet	53	-12	12	-189	370
5	Concrete Under Carpet	62	-8	12	-119	380
6	Concrete Under Carpet	66	-6	12	-88	380
7	Concrete Under Carpet	63	-7	12	-111	380
8	Concrete Under Carpet	51	-13	12	-204	370
9	Concrete Under Carpet	73	-2	13	-33	380
10	Concrete Under Carpet	59	-9	12	-142	380
11	Concrete Under Carpet	68	-5	13	-72	380
12	Concrete Under Carpet	67	-5	12	-80	380
13	Concrete Under Carpet	88	5	13	83	390

Maximum: 153
Average: -71
STDEV: 124

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material: Concrete
Background (cpm): 38.64
Background σ (cpm): 11.07
Sample Analysis Time: 2 min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 91
Survey Unit: 91-1-1
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete Under Carpet	21	10	4	80	60
2	Concrete Under Carpet	15	7	3	55	50
3	Concrete Under Carpet	4	1	2	10	40
4	Concrete Under Carpet	7	3	3	22	40
5	Concrete Under Carpet	5	2	2	14	40
6	Concrete Under Carpet	8	3	3	26	40
7	Concrete Under Carpet	5	2	2	14	40
8	Concrete Under Carpet	6	2	2	18	40
9	Concrete Under Carpet	5	2	2	14	40
10	Concrete Under Carpet	8	3	3	26	40
11	Concrete Under Carpet	11	5	3	39	50
12	Concrete Under Carpet	6	2	2	18	40
13	Concrete Under Carpet	4	1	2	10	40

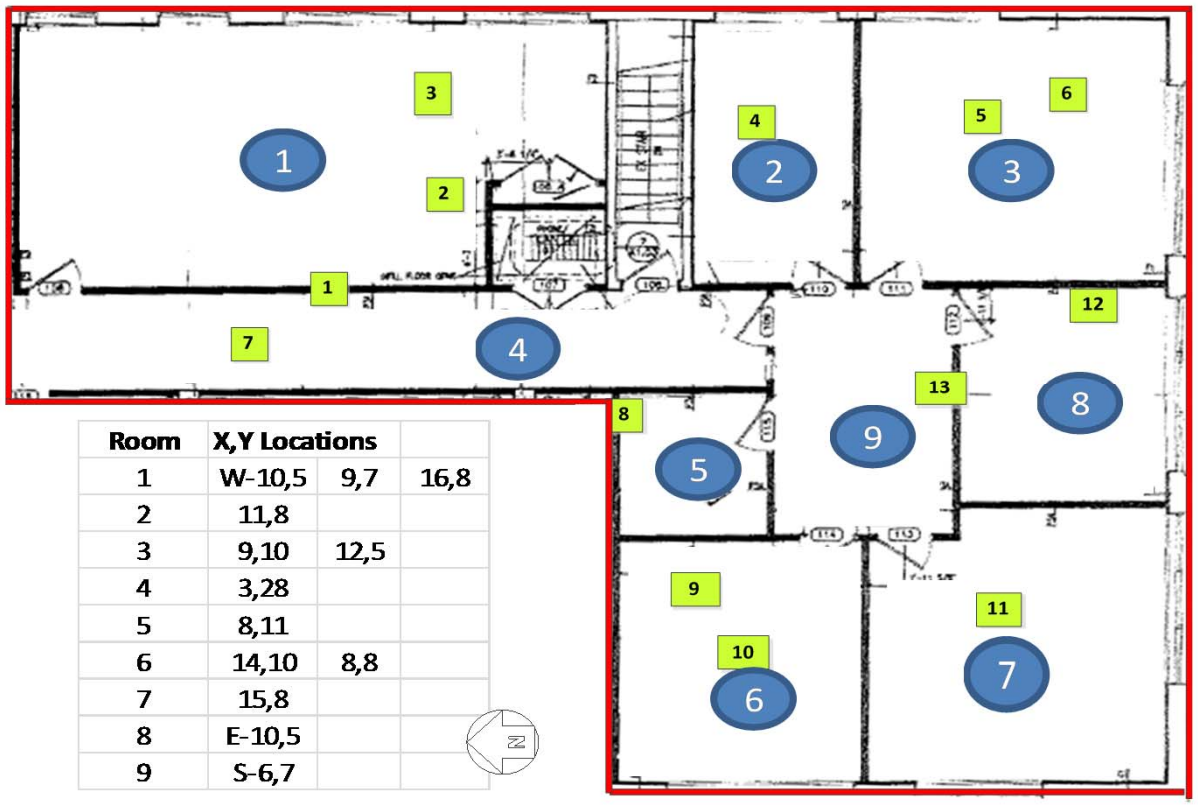
Maximum: 80
Average: 27
STDEV: 20

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material: Concrete
Background (cpm): 0.82
Background σ (cpm): 1.77
Sample Analysis Time: 2 min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2



Room	X,Y Locations		
1	W-10,5	9,7	16,8
2	11,8		
3	9,10	12,5	
4	3,28		
5	8,11		
6	14,10	8,8	
7	15,8		
8	E-10,5		
9	S-6,7		

SURVEY UNITS
LEGEND

Class 3
\# Measurement Number

\# Assigned Room Number

Survey Unit Identifier

SU91-1-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 91 First Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 91
Survey Unit: 91-1-2
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	101	103	19	255	90
2	Concrete	87	75	18	185	90
3	Concrete	95	91	19	225	90
4	Concrete	92	85	19	210	90
5	Concrete	100	101	19	250	90
6	Concrete	105	111	19	275	90
7	Concrete	86	73	18	180	90
8	Concrete	91	83	19	205	90
9	Concrete	102	105	19	260	90
10	Concrete	109	119	19	295	100
11	Concrete	85	71	18	175	90
12	Concrete	102	105	19	260	90
13	Floor Tile	84	120	19	299	90
				Maximum:	299	
				Average:	237	
				STDEV:	43	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	141321	Reference Material:	Concrete	Floor Tile
Detector:	44-110	PR-258430	Background (cpm):	99.5	48
Probe Area:	126	cm^2	Background σ (cpm):	12.73	14.35
			Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 91
Survey Unit: 91-1-2
Survey Date: 12/14/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete Under Carpet	81	2	13	29	390
2	Concrete Under Carpet	74	-2	13	-26	390
3	Concrete Under Carpet	70	-4	13	-57	380
4	Concrete Under Carpet	70	-4	13	-57	380
5	Concrete Under Carpet	76	-1	13	-10	390
6	Concrete Under Carpet	59	-9	12	-142	380
7	Concrete Under Carpet	58	-10	12	-150	380
8	Concrete Under Carpet	70	-4	13	-57	380
9	Concrete Under Carpet	70	-4	13	-57	380
10	Concrete Under Carpet	69	-4	13	-64	380
11	Concrete Under Carpet	49	-14	12	-220	370
12	Concrete Under Carpet	67	-5	12	-80	380
13	White Tile	58	-18	12	-274	380

Maximum: 29
Average: -90
STDEV: 85

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	253237	Reference Material:	Concrete	Tile Floor
Detector:	43-68	PR-216834	Background (cpm):	38.64	46.59
Probe Area:	126	cm^2	Background σ (cpm):	11.07	6.05
			Sample Analysis Time:	2	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 91
Survey Unit: 91-1-2
Survey Date: 12/14/2011

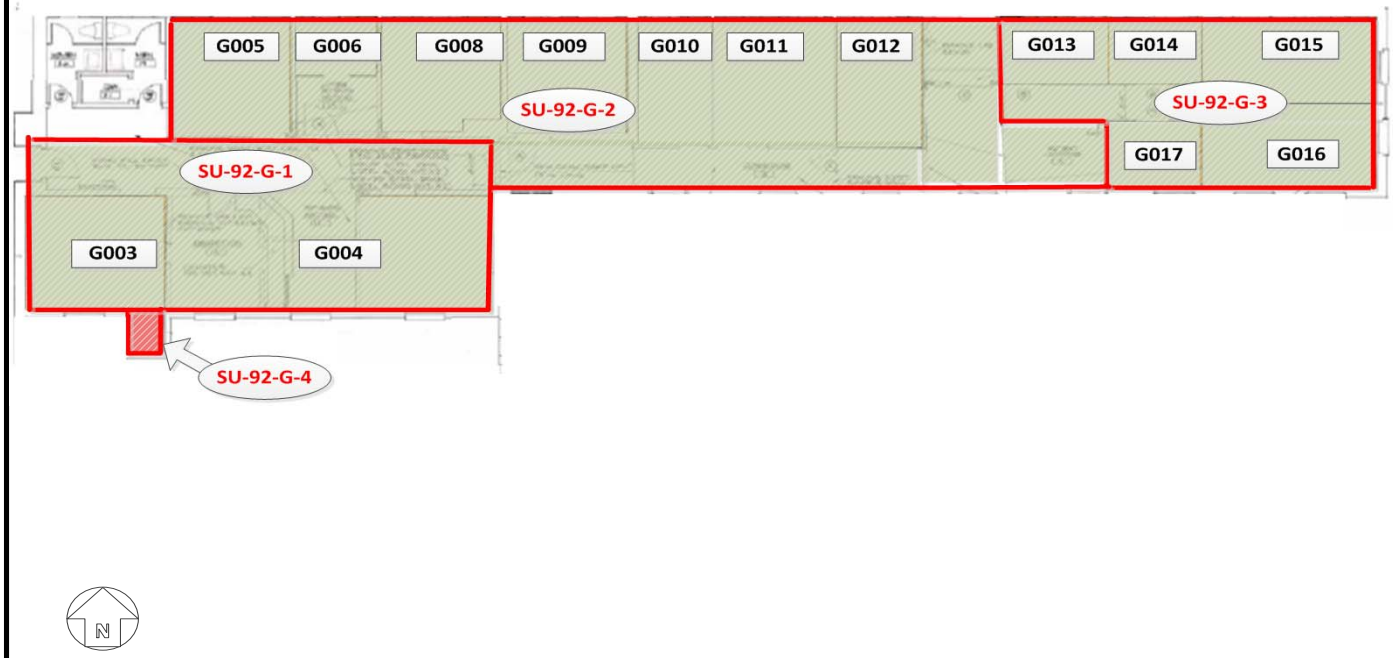
Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete Under Carpet	1	0	2	-3	30
2	Concrete Under Carpet	9	4	3	30	40
3	Concrete Under Carpet	0	-1	2	-7	30
4	Concrete Under Carpet	6	2	2	18	40
5	Concrete Under Carpet	9	4	3	30	40
6	Concrete Under Carpet	1	0	2	-3	30
7	Concrete Under Carpet	7	3	3	22	40
8	Concrete Under Carpet	8	3	3	26	40
9	Concrete Under Carpet	6	2	2	18	40
10	Concrete Under Carpet	6	2	2	18	40
11	Concrete Under Carpet	6	2	2	18	40
12	Concrete Under Carpet	3	1	2	6	30
13	White Tile	13	6	3	49	50

Maximum: 49
Average: 17
STDEV: 16

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Concrete	Tile Floor
Instrument:	2360	253237	Background (cpm):	0.82	0.59
Detector:	43-68	PR-216834	Background σ (cpm):	1.77	0.51
Probe Area:	126	cm^2	Sample Analysis Time:	2	

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2



SURVEY UNITS LEGEND

Class 1 SU
Class 3 SU

Survey Unit Identifier

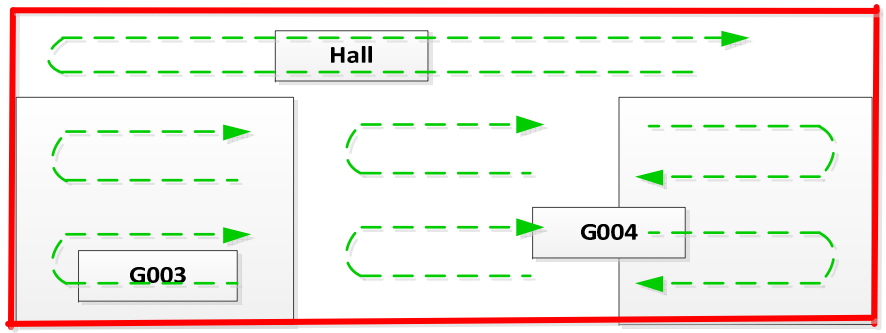
SU-B-F-N

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 92 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

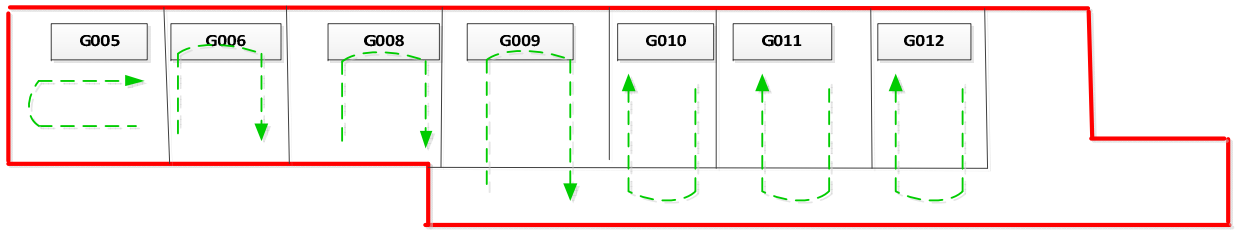
SU 92-G-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 92 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

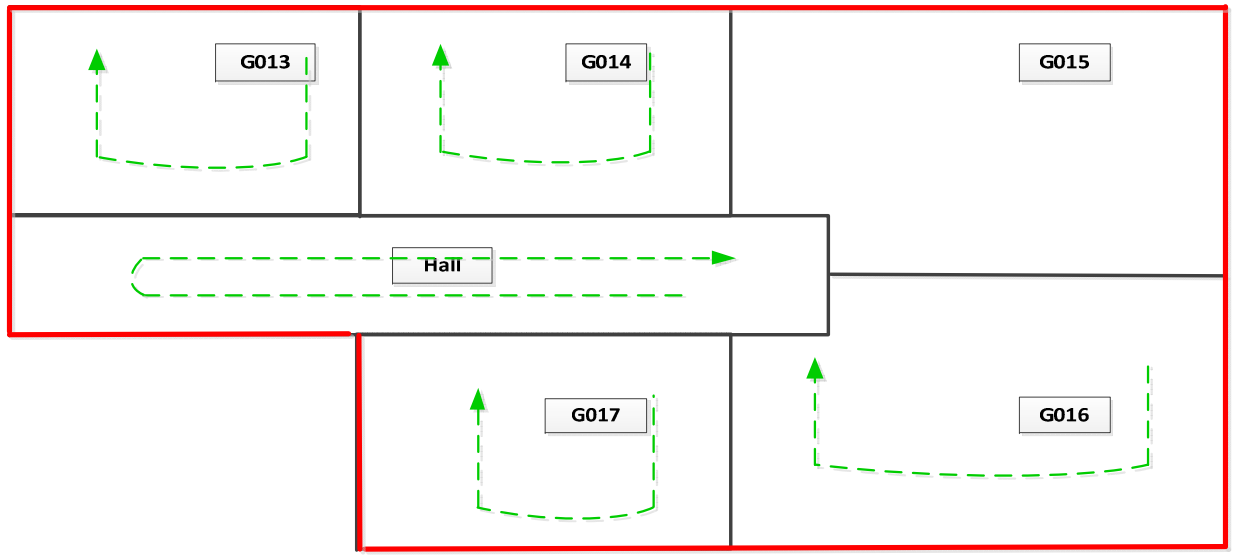
SU 92-G-2

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 92 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



SURVEY UNITS
LEGEND

Class 3

Scan Path

Survey Unit Identifier

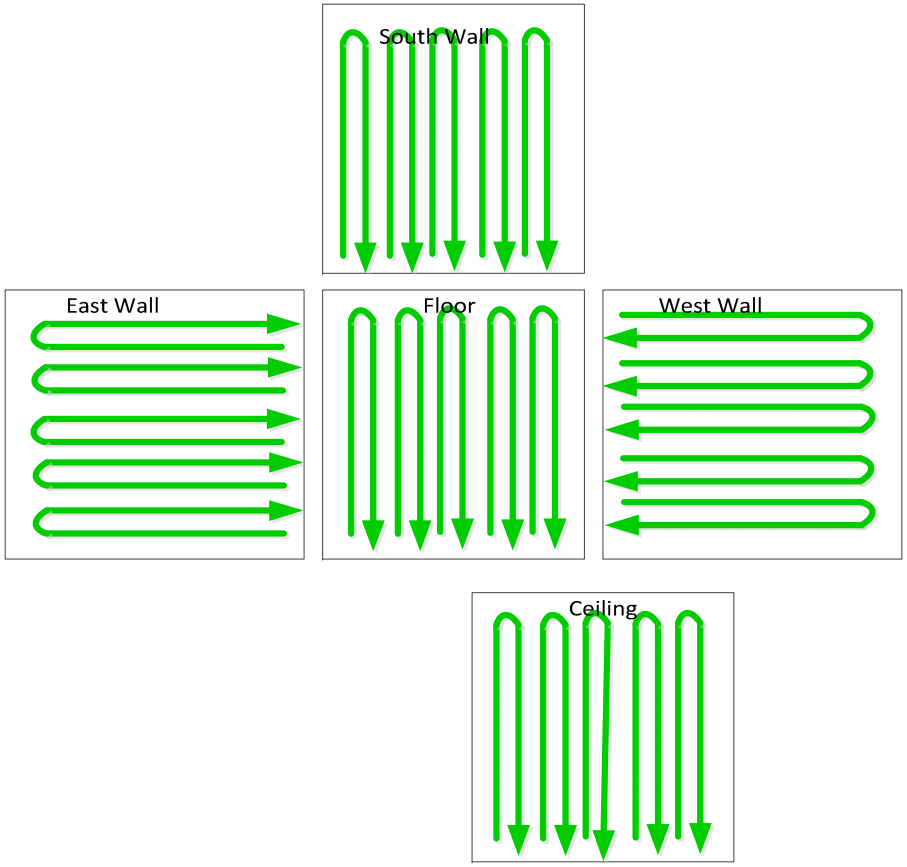
SU 92-G-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 92 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin



The wall on the North Side did not exist.

SURVEY UNITS
LEGEND

Class 1

Scan Path

Survey Unit Identifier

SU 92-G-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 92 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Scan Results - Beta

Location: Building 92, Ground Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU92-G-1	949	71	407	162.0	49.2	-180	816	90	146
SU92-G-2	900	13	626	107.7	56.2	-351	1465	-71	167
SU92-G-3	614	47	231	127.4	31.3	-251	294	-13	93

Area Scanned (ft^2): 1,543

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 132 cpm
Background σ: 32.21 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.058 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 363 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 92, Ground Level

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU92-G-1	949	0	29	3.6	4.8	-5	47	1	9
SU92-G-2	900	0	37	3.4	5.3	-5	61	1	9
SU92-G-3	614	0	28	2.8	4.8	-5	45	0	9

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-37	265544
Probe Area:	582	cm^2

Reference Material: Tile Floor
Background: 3 cpm
Background σ: 7.32 cpm
Scan speed: 1 detector width / 8sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 720 dpm/100 cm^2

Summary of Scan Results - Beta

Location: Building 92

Location	Number of records	Gross CPM Minimum	Gross CPM Maximum	Gross CPM Average	Gross CPM STDEV	Activity (dpm/100cm^2) Minimum	Activity (dpm/100cm^2) Maximum	Activity (dpm/100cm^2) Average	Activity (dpm/100cm^2) STDEV
SU-92-G-4	514	11	105	52	17	-262	1292	422	288

Area Scanned (ft^2): 70

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm^2

Reference Material: Counter
Background: 27 cpm
Background σ: 5.95 cpm
Scan speed: 1 detector width / 2 sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.048 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 916 dpm/100 cm^2

Summary of Scan Results - Alpha

Location: Building 92

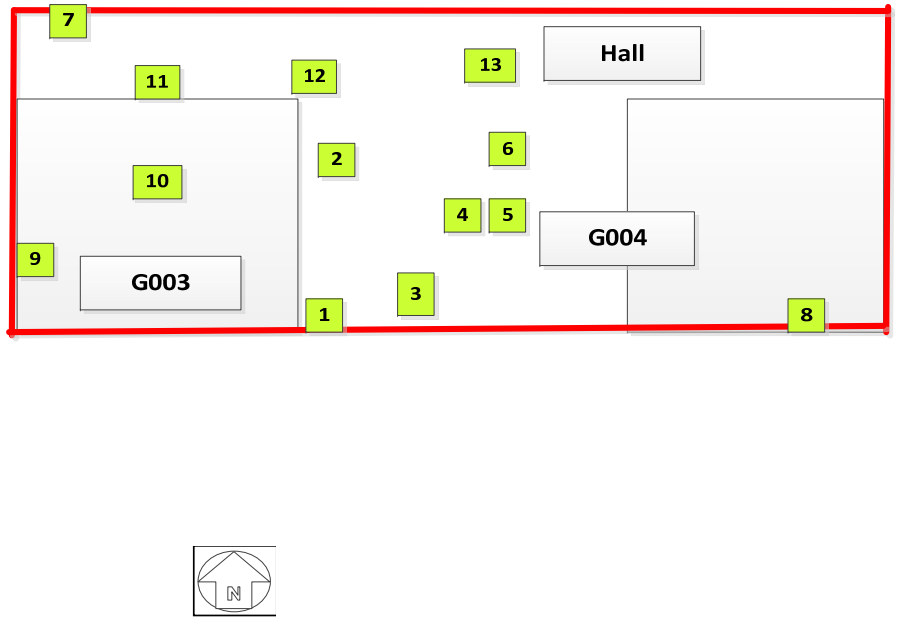
		Gross CPM				Activity (dpm/100cm^2)			
Location	**Number of records**	**Minimum**	**Maximum**	**Average**	**STDEV**	**Minimum**	**Maximum**	**Average**	**STDEV**
SU-92-G-4	514	0	37	5	6	-4	295	34	46

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253258
Detector:	43-68	148454
Probe Area:	126	cm2

Reference Material: Counter
Background: 1 cpm
Background σ: 0.8 cpm
Scan speed: 1 detector width / 2sec
Observation interval: 1 recorded measurement / 2 sec

Total Efficiency: 0.098 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC_{scan}: 705 dpm/100 cm^2



SURVEY UNITS
LEGEND

Class 3

Data Point

Survey Unit Identifier

SU-92-G-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 92 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 1
Survey Unit: 92-G-1
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	105	111	19	275	90
2	Concrete	141	183	21	454	100
3	Drywall	126	153	20	379	100
4	Concrete	98	97	19	240	90
5	Concrete	170	241	22	598	110
6	Concrete	136	173	21	429	100
7	Concrete	157	215	22	534	110
8	Plaster Wall	138	177	21	439	100
9	Concrete	117	135	20	335	100
10	Concrete	97	95	19	235	90
11	Concrete	104	109	19	270	90
12	Concrete	115	131	20	325	100
13	Drywall	109	119	19	295	100
QC12	Tile Floor	110	121	20	300	100
QC13	Tile Floor	121	143	20	355	100
				Maximum:	598	
				Average:	370	
				STDEV:	115	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete/Linoleum	
Instrument:	2360	141321	Background (cpm):	99.5	
Detector:	44-110	PR-258430	Background σ (cpm):	12.73	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 1
Survey Unit: 92-G-1
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Carpet over Concrete	120	141	20	350	100
2	Carpet over Concrete	104	109	19	270	90
3	Tile Floor	123	147	20	365	100
				Maximum:	365	
				Average:	328	
				STDEV:	51	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete/Linoleum	
Instrument:	2360	184935	Background (cpm):	99.5	
Detector:	43-68	PR-181739	Background σ (cpm):	12.73	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 92
Survey Unit: 92-G-1
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	93	8	13	122	400
2	Concrete	81	2	13	29	390
3	Concrete	120	21	14	332	410
4	Concrete	68	-5	13	-72	380
5	Concrete	89	6	13	91	390
6	Drywall	106	-1	10	-16	310
7	Drywall	110	1	10	16	310
8	Concrete	74	-2	13	-26	390
9	Concrete	82	2	13	37	390
10	Concrete	72	-3	13	-41	380
11	Drywall	104	-2	10	-31	300
12	Concrete	111	17	13	262	410
13	Drywall	98	-5	10	-78	300
QC2	Concrete	88	5	13	83	390
QC11	Drywall	111	2	10	23	310
				Maximum:	332	
				Average:	48	
				STDEV:	126	

Instrument Data and Analysis Parameters

	Model	Serial No		Concrete	Drywall
Instrument:	2360	253237	Reference Material:		
Detector:	43-68	PR-216834	Background (cpm):	38.64	54
Probe Area:	126	cm^2	Background σ (cpm):	11.07	6.86
			Sample Analysis Time:	2	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 92
Survey Unit: 92-G-1
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	79	1	13	13	390
2	Concrete	75	-1	13	-18	390
3	Concrete	80	1	13	21	390
					0	0
				Maximum:	21	
				Average:	6	
				STDEV:	21	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete	
Instrument:	2360	253237	Background (cpm):	38.64	
Detector:	43-68	PR-216834	Background σ (cpm):	11.07	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 92
Survey Unit: 92-G-1
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	1	0	2	-3	30
2	Concrete	2	0	2	1	30
3	Concrete	3	1	2	6	30
4	Concrete	2	0	2	1	30
5	Concrete	5	2	2	14	40
6	Drywall	4	1	2	6	30
7	Drywall	5	1	2	10	30
8	Concrete	2	0	2	1	30
9	Concrete	4	1	2	10	40
10	Concrete	3	1	2	6	30
11	Drywall	3	0	2	2	30
12	Concrete	3	1	2	6	30
13	Drywall	3	0	2	2	30
QC2	Concrete	2	0	2	1	30
QC11	Drywall	3	0	2	2	30
				Maximum:	14	
				Average:	5	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No
Instrument:	2360	253237
Detector:	43-68	PR-216834
Probe Area:	126	cm^2

Reference Material:	Concrete	Drywall
Background (cpm):	0.82	1.27
Background σ (cpm):	1.77	1.26
Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

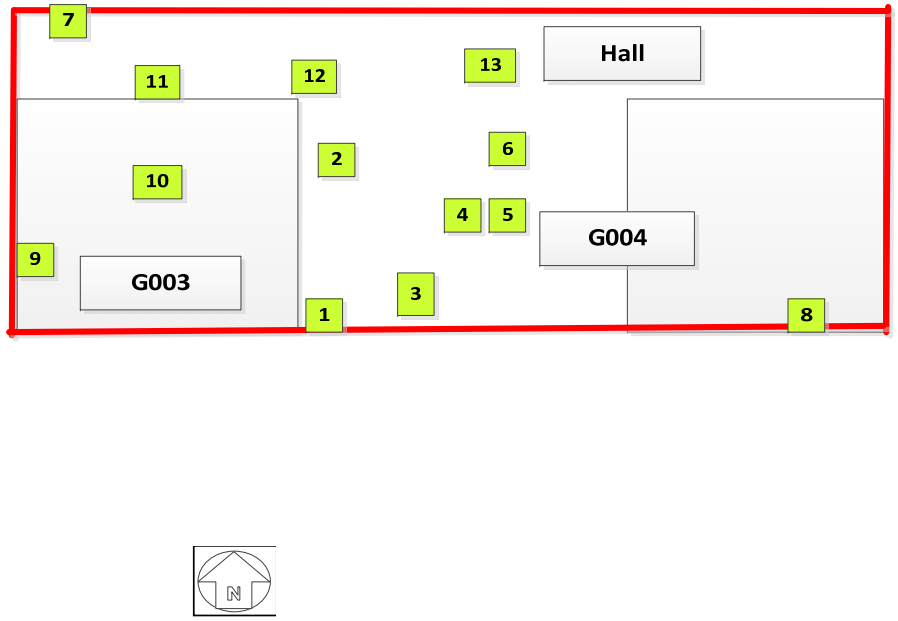
Building: 92
Survey Unit: 92-G-1
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	10	4	3	35	50
2	Concrete	2	0	2	1	30
3	Concrete	3	1	2	6	30
				Maximum:	35	
				Average:	14	
				STDEV:	18	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete	
Instrument:	2360	253237	Background (cpm):	0.82	
Detector:	43-68	PR-216834	Background σ (cpm):	1.77	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2



SURVEY UNITS
LEGEND

Class 3

Data Point

Survey Unit Identifier

SU-92-G-1

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 92 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 92
Survey Unit: 92-G-2
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	105	111	19	275	90
2	Concrete	141	183	21	454	100
3	Drywall	91	97	17	241	80
4	Concrete	98	97	19	240	90
5	Concrete	170	241	22	598	110
6	Concrete	136	173	21	429	100
7	Drywall	106	127	18	316	90
8	Concrete	138	177	21	439	100
9	Concrete	117	135	20	335	100
10	Concrete	97	95	19	235	90
11	Concrete	104	109	19	270	90
12	Concrete	115	131	20	325	100
13	Concrete	109	119	19	295	100
				Maximum:	598	
				Average:	342	
				STDEV:	108	

Instrument Data and Analysis Parameters

	Model	Serial No		Concrete	Drywall
Instrument:	2360	141321	Reference Material:		
Detector:	44-110	PR-258430	Background (cpm):	99.5	85
Probe Area:	126	cm^2	Background σ (cpm):	12.73	10.86
			Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 92
Survey Unit: 92-G-2
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	121	143	20	355	100
2	Concrete	103	107	19	265	90
3	Concrete	115	131	20	325	100
				Maximum:	355	
				Average:	315	
				STDEV:	46	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete	
Instrument:	2360	184935	Background (cpm):	99.5	
Detector:	43-68	PR-181739	Background σ (cpm):	12.73	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 92
Survey Unit: 92-G-2
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	101	12	13	185	400
2	Concrete	67	-5	12	-80	380
3	Drywall	113	3	10	39	310
4	Concrete	86	4	13	68	390
5	Concrete	103	13	13	200	400
6	Concrete	102	12	13	192	400
7	Drywall	120	6	10	93	320
8	Concrete	64	-7	12	-103	380
9	Concrete	77	0	13	-2	390
10	Concrete	94	8	13	130	400
11	Concrete	69	-4	13	-64	380
12	Concrete	67	-5	12	-80	380
13	Concrete	59	-9	12	-142	380
					0	0
QC6	Concrete	88	5	13	83	390
				Maximum:	200	
				Average:	33	
				STDEV:	121	

Instrument Data and Analysis Parameters

	Model	Serial No		Concrete	Drywall
Instrument:	2360	253237	Reference Material:		
Detector:	43-68	PR-216834	Background (cpm):	38.64	54
Probe Area:	126	cm^2	Background σ (cpm):	11.07	6.86
			Sample Analysis Time:	2	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 92
Survey Unit: 92-G-2
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	79	1	13	13	390
2	Concrete	75	-1	13	-18	390
3	Concrete	80	1	13	21	390
				Maximum:	21	
				Average:	6	
				STDEV:	21	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete	
Instrument:	2360	253237	Background (cpm):	38.64	
Detector:	43-68	PR-216834	Background σ (cpm):	11.07	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 92
Survey Unit: SU92-G-2
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	1	0	2	-3	30
2	Concrete	2	0	2	1	30
3	Drywall	3	0	2	2	30
4	Concrete	2	0	2	1	30
5	Concrete	5	2	2	14	40
6	Concrete	4	1	2	10	40
7	Drywall	5	1	2	10	30
8	Concrete	2	0	2	1	30
9	Concrete	4	1	2	10	40
10	Concrete	3	1	2	6	30
11	Concrete	3	1	2	6	30
12	Concrete	3	1	2	6	30
13	Concrete	3	0	2	2	30
QC6	Concrete	2	0	2	1	30
				Maximum:	14	
				Average:	5	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Concrete	Drywall
Instrument:	2360	253237		Background (cpm):	0.82	1.27
Detector:	43-68	PR-216834		Background σ (cpm):	1.77	1.26
Probe Area:	126	cm^2		Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

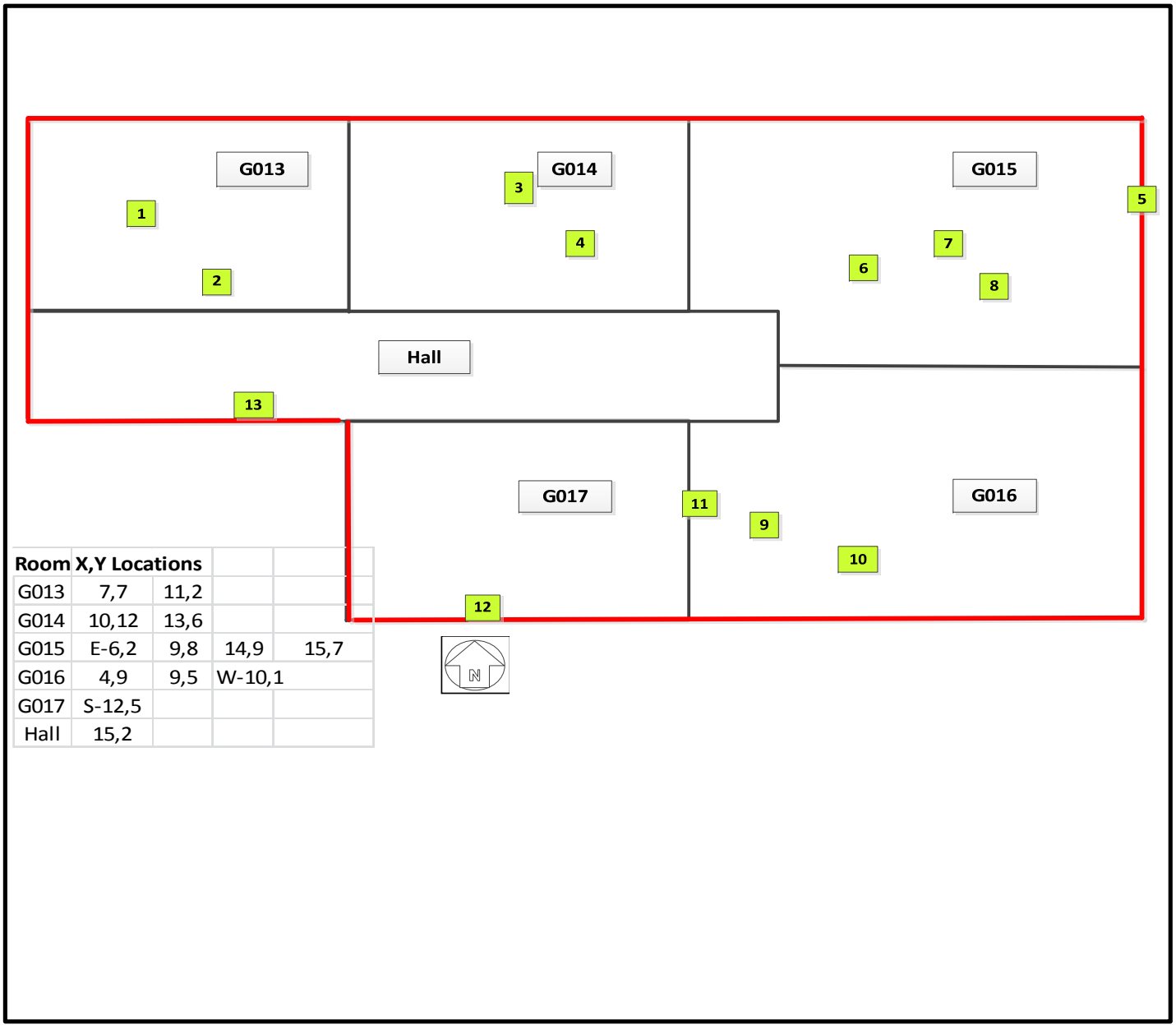
Building: 92
Survey Unit: 92-G-2
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Concrete	10	4	3	35	50
2	Concrete	2	0	2	1	30
3	Concrete	3	1	2	6	30
				Maximum:	35	
				Average:	14	
				STDEV:	18	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete	
Instrument:	2360	253237	Background (cpm):	0.82	
Detector:	43-68	PR-216834	Background σ (cpm):	1.77	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2



Room	X,Y Locations			
G013	7,7	11,2		
G014	10,12	13,6		
G015	E-6,2	9,8	14,9	15,7
G016	4,9	9,5	W-10,1	
G017	S-12,5			
Hall	15,2			

SURVEY UNITS
LEGEND

Class 3

\# Data Point

Survey Unit Identifier

SU-92-G-3

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 92 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 92
Survey Unit: 92-G-3
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Drywall	47	9	15	22	70
2	Floor Tile	85	122	15	304	70
3	Floor Tile	116	184	17	458	80
4	Floor Tile	122	196	17	488	80
5	Drywall	74	63	16	156	80
6	Floor Tile	73	98	14	244	70
7	Floor Tile	103	158	16	394	80
8	Floor Tile	84	120	15	299	70
9	Floor Tile	74	100	14	249	70
10	Floor Tile	119	190	17	473	80
11	Floor Tile	110	172	16	428	80
12	Floor Tile	94	140	15	349	70
13	Floor Tile	81	114	14	284	70
				Maximum:	488	
				Average:	319	
				STDEV:	135	

Instrument Data and Analysis Parameters

	Model	Serial No		Reference Material:	Tile Floor	Drywall
Instrument:	2360	141321		Background (cpm):	47.8	85
Detector:	44-110	PR-258430		Background σ (cpm):	6.66	10.86
Probe Area:	126	cm^2		Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Biased H3 Static Measurements

Building: 92
Survey Unit: 92-G-3
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Drywall	95	105	18	261	90
				Maximum:	261	
				Average:	261	
				STDEV:	45	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Drywall	
Instrument:	2360	184935	Background (cpm):	85.2	
Detector:	43-68	PR-181739	Background σ (cpm):	10.86	
Probe Area:	126	cm^2	Sample Analysis Time:	0.5	min

Total Efficiency:	0.319	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	206	dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 92
Survey Unit: 92-G-3
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	105	-2	10	-23	300
2	Floor Tile	78	-8	9	-118	270
3	Floor Tile	78	-8	9	-118	270
4	Floor Tile	76	-9	9	-134	260
5	Drywall	101	-4	10	-54	300
6	Floor Tile	96	1	9	22	280
7	Floor Tile	76	-9	9	-134	260
8	Floor Tile	81	-6	9	-95	270
9	Floor Tile	81	-6	9	-95	270
10	Floor Tile	47	-23	8	-359	240
11	Floor Tile	66	-14	8	-211	250
12	Floor Tile	55	-19	8	-297	240
13	Floor Tile	69	-12	8	-188	260
					0	0
QC6	Floor Tile	92	-1	9	-9	280
				Maximum:	22	
				Average:	-139	
				STDEV:	105	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Tile Floor	Drywall
Instrument:	2360	253237	Background (cpm):	46.59	54
Detector:	43-68	PR-216834	Background σ (cpm):	6.05	6.86
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency: 0.051 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 773 dpm/100 cm^2

Summary of Biased Beta Static Measurements

Building: 92
Survey Unit: 92-G-3
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Drywall	193	43	12	661	370
				Maximum:	661	
				Average:	661	
				STDEV:	185	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Wood Composite	
Instrument:	2360	253237	Background (cpm):	54.0	
Detector:	43-68	PR-216834	Background σ (cpm):	6.86	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 92
Survey Unit: SU92-G-3
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor						
1	Drywall	1	-1	1	-6	20
2	Floor Tile	2	0	2	1	30
3	Floor Tile	3	1	2	6	30
4	Floor Tile	2	0	2	1	30
5	Drywall	5	1	2	10	30
6	Floor Tile	4	1	2	6	30
7	Floor Tile	5	1	2	10	30
8	Floor Tile	2	0	2	1	30
9	Floor Tile	4	1	2	10	40
10	Floor Tile	3	1	2	6	30
11	Floor Tile	3	1	2	6	30
12	Floor Tile	3	1	2	6	30
13	Floor Tile	3	0	2	2	30
QC6	Floor Tile	2	0	2	1	30
				Maximum:	10	
				Average:	5	
				STDEV:	5	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete	Drywall
Instrument:	2360	253237	Background (cpm):	0.82	1
Detector:	43-68	PR-216834	Background σ (cpm):	1.77	1.27
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2

Summary of Biased Alpha Static Measurements

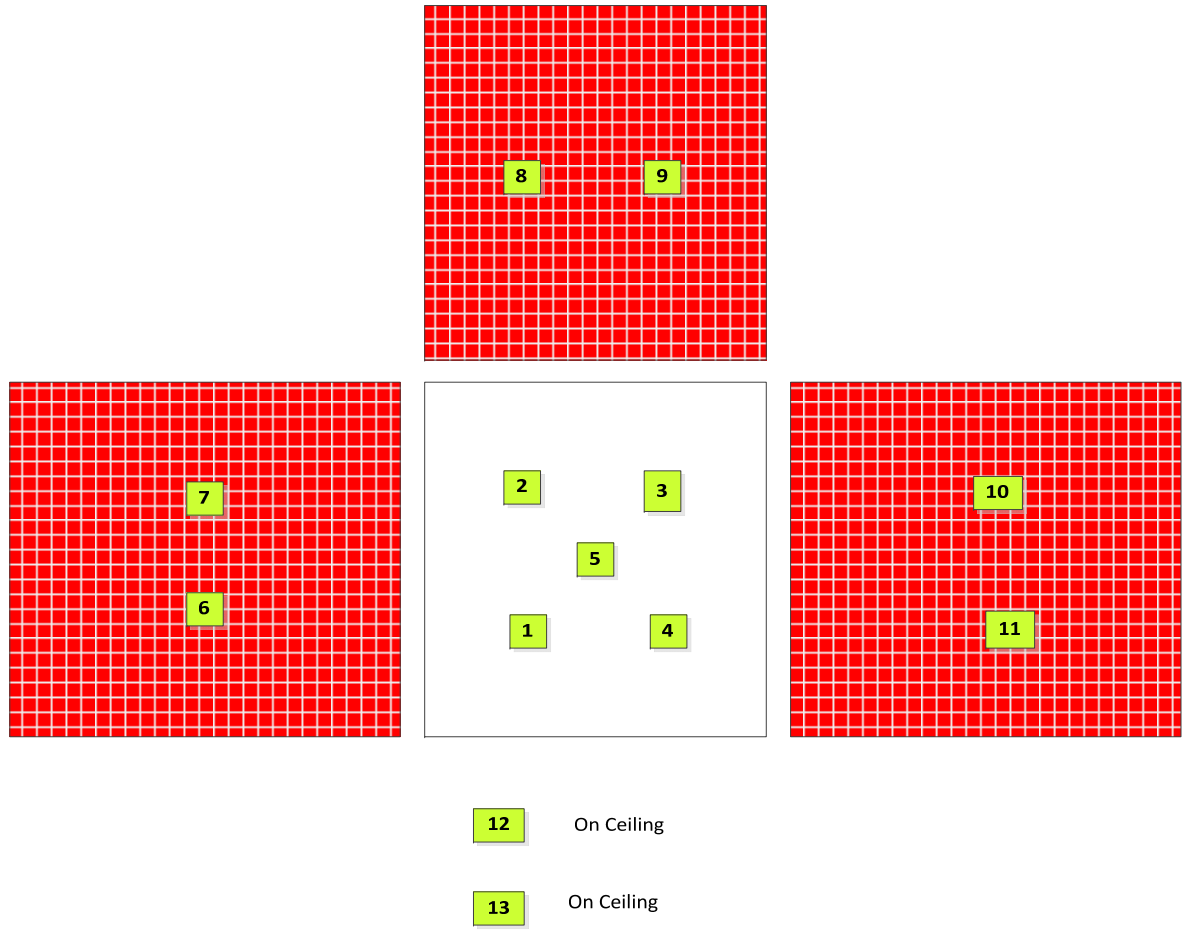
Building: 92
Survey Unit: 92-G-3
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm^2) Activity	Net (dpm/100 cm^2) Uncertainty (2σ)
Floor 1	Drywall	10	4	3	31	40
				Maximum:	31	
				Average:	31	
				STDEV:	20	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete	
Instrument:	2360	253237	Background (cpm):	1.27	
Detector:	43-68	PR-216834	Background σ (cpm):	1.26	
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.096	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	59	dpm/100 cm^2



Dimensions ~ 5' x 6'
There was no wall on the north side.

SURVEY UNITS
LEGEND

Class 1
Concrete Floor
Brick Sides

\# Data Point

No Scale

Survey Unit Identifier

SU-92-G-4

B-Building
F-Floor
B-Basement
G-Ground
1-1st; etc.
N- SU# for Floor

No Scale

Building 92 Ground Floor

Date: 1-15-12
Project: WRAMC Main Post
Prepared by: C. Wiblin

Summary of Random H3 Static Measurements

Building: 92
Survey Unit: 92-G-4
Survey Date: 12/15/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	94	103	17	256	90
2	Concrete	72	96	14	239	70
3	Concrete	121	194	17	483	80
4	Concrete	90	132	15	329	70
5	Concrete	72	59	16	146	80
6	Brick	102	156	16	389	80
7	Brick	110	172	16	428	80
8	Brick	100	152	16	379	80
9	Brick	88	128	15	319	70
10	Brick	116	184	17	458	80
11	Brick	115	182	17	453	80
12	Brick	94	140	15	349	70
13	Brick	98	148	16	369	80
					0	0
				Maximum:	483	
				Average:	354	
				STDEV:	97	

Instrument Data and Analysis Parameters

	Model	Serial No			
Instrument:	2360	141321	Reference Material:	Tile Floor	Drywall
Detector:	44-110	PR-258430	Background (cpm):	47.8	85
Probe Area:	126	cm^2	Background σ (cpm):	6.66	10.86
			Sample Analysis Time:	0.5	min

Total Efficiency: 0.319 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 206 dpm/100 cm^2

Summary of Random Beta Static Measurements

Building: 92
Survey Unit: 92-G-4
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	127	25	9	387	290
2	Concrete	150	36	14	566	430
3	Concrete	136	29	14	457	420
4	Concrete	112	17	13	270	410
5	Concrete	176	49	11	768	320
6	Brick	104	-5	13	-75	400
7	Brick	140	13	14	205	420
8	Brick	98	-8	13	-121	400
9	Brick	138	12	14	190	420
10	Brick	116	1	13	19	410
11	Brick	169	28	14	431	440
12	Brick	149	18	14	275	430
13	Brick	127	7	14	104	420
QC6	Brick	92	-11	13	-168	400
				Maximum:	768	
				Average:	267	
				STDEV:	255	

Instrument Data and Analysis Parameters

	Model	Serial No			
			Reference Material:	Concrete	Brick
Instrument:	2360	253237	Background (cpm):	38.64	56.8
Detector:	43-68	PR-216834	Background σ (cpm):	11.07	4.87
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency:	0.051	cpm/dpm
Total Efficiency Uncertainty:	0.001	cpm/dpm
MDC:	773	dpm/100 cm^2

Summary of Random Alpha Static Measurements

Building: 92
Survey Unit: SU92-G-4
Survey Date: 12/13/2011

Location	Material	Gross (counts)	NCPM	NCPM Uncertainty (1σ)	Net (dpm/100 cm²) Activity	Net (dpm/100 cm²) Uncertainty (2σ)
Floor						
1	Concrete	10	4	3	35	50
2	Concrete	7	3	3	22	40
3	Concrete	10	4	3	35	50
4	Concrete	9	4	3	30	40
5	Concrete	8	3	3	26	40
6	Brick	3	-3	2	-24	30
7	Brick	6	-1	2	-12	40
8	Brick	12	2	3	13	50
9	Brick	11	1	3	9	50
10	Brick	14	3	3	21	50
11	Brick	16	4	3	29	50
12	Brick	13	2	3	17	50
13	Brick	10	1	3	5	50
QC6	Brick	2	-3	2	-29	30
				Maximum:	35	
				Average:	16	
				STDEV:	18	

Instrument Data and Analysis Parameters

	Model	Serial No	Reference Material:	Concrete	Brick
Instrument:	2360	253237	Background (cpm):	0.82	4.45
Detector:	43-68	PR-216834	Background σ (cpm):	1.77	1.69
Probe Area:	126	cm^2	Sample Analysis Time:	2	min

Total Efficiency: 0.096 cpm/dpm
Total Efficiency Uncertainty: 0.001 cpm/dpm
MDC: 59 dpm/100 cm^2