Radiological Survey Sheet

Job Location Pfizer, Inc. Groton, Ct. 06340 Page 1 of 2

Survey Purpose Radiological Assessment 118/252B Date 2/14/13

Performed by David Deeze
(Print) (Sign)

Instrument (Model/S/N)	Packard Tri-Carb S/N 431521	Packard Tri-Carb S/N 431520	Ludlum 2241-2 163603	
Det. (Model/SN)	Internal	Internal	Ludlum 43-68 PR 149613	
Type Rad.	β	β	β	
Cal. Due:	03/05/2013	03/05/2013	04/17/2013	
Check Instruments Used	✓		✓	

No.	Time	Locations See attached LSC printout for Total Activity (cpm/100 cm^2)
1.	1153	BACKGROUND
2.		F1 Floor
3.		F2 Floor ✓ (See #157)
4.		F3 Floor
5.		F4 Floor
6.		W1 WALL
7.		W2 WALL
8.		W3 WALL
9.		W4 WALL
10.		W5 WALL
11.		W6 WALL
12.		W7 WALL
13.		W8 WALL
14.		W9 WALL
15.		W10 WALL
16.		W11 WALL
17.		W12 WALL
18.	↓	W13 WALL

Radiological Survey Continuation Sheet

Date 2/14/13

No.	Time	Locations	See attached LSC printout for Total Activity (cpm/100 cm^2)
19		WM WALL	✓ (SEE #158)
20		W15 WALL	
21		Pump STAND	✓ (SEE #159)
22		VD1 IN DUCT	
23		VD2 IN DUCT	✓ (radwaste)
24		VD3 IN DUCT	
25		VD4 DUCT	
26		VD5 DUCT	✓ (SEE #160)
27		VD6 DUCT	
28		VD7 DUCT	
29		VD8 DUCT	✓ (SEE #161)
30		VD9 DUCT	✓ (SEE #162)
31		VD10 DUCT	✓ (SEE #163)
32		VD11 DUCT	✓ (SEE #164)
33		VD12 IN DUCT	
34		VD13 DUCT	✓ (SEE #165)
35		VD14 DUCT	
36		VD15 DUCT	
37		VD16 DUCT	✓ (SEE #166)
38		L1 TOP LIGHT	✓ (SEE #167)
39		L1 BOTTOM LIGHT	
40		VD17 IN DUCT	
41		F5 FLOOR	
42		F6 FLOOR	
43		F7 FLOOR	
44		F8 FLOOR	
45	↓	F9 FLOOR	

Radiological Survey Continuation Sheet

Date 2/14/13

No.	Time	Locations	See attached LSC printout for Total Activity (cpm/100 cm^2)
46		F10 Floor	✓ (SEE #168)
47		F11 Floor	✓ (SEE #169)
48		F12 Floor	✓ (SEE #170)
49		F13 Floor	
50		F14 Floor	✓ (SEE #171)
51		F15 Floor	
52		F16 Floor	✓ (SEE #172)
53		F17 Floor	
54		F18 Floor	
55		F19 Floor	✓ (SEE #173)
56		F20 Floor	✓ (SEE #174)
57		F21 Floor	
58		F22 Floor	
59		F23 Floor	✓ (SEE #175)
60		F24 Floor	✓✓ (SEE #176)
61		W16 WALL	✓ (SEE #177)
62		W17 WALL	
63		W18 WALL	
64		W19 WALL	
65		W20 WALL	
66		W21 WALL	
67		W22 WALL	
68		W23 WALL	✓ (SEE #178)
69		W24 WALL	✓ (SEE #179)
70		W25 WALL	
71		W26 WALL	
72	↓	W27 WALL	✓ (SEE #180)

Radiological Survey Continuation Sheet

Date 2/14/13

No.	Time	Locations	See attached LSC printout for Total Activity (cpm/100 cm^2)
73		W28 WALL	✓ (SEE # 181)
74		W29 WALL	✓ (SEE #182)
75		W30 WALL	
76		V18 IN DUCT	✓ (end-scans)
77		V19 DUCT	✓
78		V20 IN DUCT	✓
79		V21 DUCT	✓
80		V22 IN DUCT	✓
81		V23 DUCT	✓
82		V24 IN DUCT	✓
83		V25 DUCT	✓
84		V26 DUCT	✓
85		V27 DUCT	✓
86		V28 DUCT	✓
87		VD29 DUCT	✓ (SEE # 202)
88		VD30 IN DUCT	
89		VD31 DUCT	
90		L2 TOP LIGHT	
91		L2 Bottom LIGHT	✓ (SEE # 183)
92		VD32 DUCT	✓ (SEE #184)
93		P1 pipe	✓ (SEE #185)
94		P2 pipe	✓ (SEE #186)
95		P3 pipe	✓ (SEE #187)
96		P4 pipe	✓ (SEE #188)
97		VD33 DUCT	
98		VD34 IN DUCT	
99	↓	VD35 IN DUCT	

Radiological Survey Continuation Sheet

Date 2/14/13

No.	Time	Locations	See attached LSC printout for Total Activity (cpm/100 cm^2)
100		VD36 DUCT	✓ (SEE #189)
101		VD37 DUCT	
102		VD38 DUCT	
103		VD39 IN DUCT	
104		VD40 DUCT	
105		VD41 DUCT	
106		W31 WALL	
107		W32 WALL	✓ (SEE #190)
108		W33 WALL	✓ (SEE #191)
109		W34 WALL	
110		W35 WALL	
111		W36 WALL	✓ (SEE #192)
112		W37 WALL	
113		W38 WALL	
114		W39 WALL	✓ (SEE #193)
115		W40 WALL	
116		W41 WALL	
117		W42 WALL	
118		S1 TOP SHELF	✓ (SEE #194)
119		S1 BOTTOM SHELF	
120		S2 TOP SHELF	
121		S2 BOTTOM SHELF	
122		S3 TOP SHELF	
123		S3 BOTTOM SHELF	
124		S4 TOP SHELF	
125		S4 BOTTOM SHELF	
126	↓	S5 TOP SHELF	✓ (SEE #195)

Radiological Survey Continuation Sheet

Date 2/14/13

No.	Time	Locations	See attached LSC printout for Total Activity (cpm/100 cm^2)
127		S5 Bottom Shelf	✓ (SEE #196)
128		S6 Top Shelf	
129		S6 Bottom Shelf	✓ (SEE #197)
130		W43 WALL	
131		W44 WALL	
132		W45 WALL	
133		W46 WALL	
134		W47 WALL	✓ (SEE #198)
135		W48 WALL	
136		W49 WALL	
137		W50 WALL	
138		W51 WALL	
139		W52 WALL	
140		W53 WALL	
141		W54 WALL	
142		W55 WALL	
143		W56 WALL	
144		W57 WALL	
145		W58 WALL	✓ (SEE #199)
146		W59 WALL	
147		W60 WALL	
148		L3 Top LIGHT	
149		L3 Bottom LIGHT	
150		VD42 DUCT	
151		VD43 W DUCT	
152		Floor Pit	
153	↓	Floor Pit DRAIN	

Radiological Survey Continuation Sheet

Date 2/14/13

No.	Time	Locations	See attached LSC printout for Total Activity (cpm/100 cm²)
154		FLOOR PIT GRATE	
155		P5 PIPE	✓ (SEE # 200)
156	↓	P6 PIPE	✓ (SEE # 201)
4/7/13 157	1358	POST DECON #3	
158		POST DECON #19	
159		POST DECON #21	
160		POST DECON #26	
161		POST DECON #29	
162		POST DECON #30	
163		POST DECON #31	
164		POST DECON #32	
165		POST DECON #34	
166		POST DECON #37	
167		POST DECON #38	
168		POST DECON #46	
169		POST DECON #47	
170		POST DECON #48	
171		POST DECON #50	
172		POST DECON #52	
173		POST DECON #55	
174		POST DECON #56	
175		POST DECON #59	
176		POST DECON #60	
177		POST DECON #61	
178		POST DECON #68	
179		POST DECON #69	
180	↓	POST DECON #72	

Radiological Survey Continuation Sheet

Date 4/7/13

No.	Time	Locations	See attached LSC printout for Total Activity (cpm/100 cm²)
181		POST DECON # 73	
182		POST DECON # 74	
183		POST DECON # 91	
184		POST DECON # 92	
185		POST DECON # 93	
186		POST DECON # 94	
187		POST DECON # 95	
188		POST DECON # 96	
189		POST DECON # 100	
190		POST DECON # 107	
191		POST DECON # 108	
192		POST DECON # 111	
193		POST DECON # 114	
194		POST DECON # 118	
195		POST DECON # 126	
196		POST DECON # 127	
197		POST DECON # 129	
198		POST DECON # 134	
199		POST DECON # 145	
200		POST DECON # 155	
201		POST DECON # 156	
202		POST DECON # 87	
203		INSIDE VD29 (radwaste)	
204		BACKGROUND	
205		POST DECON △1	
206		POST DECON △2	
207		POST DECON △3	

Radiological Survey Continuation Sheet

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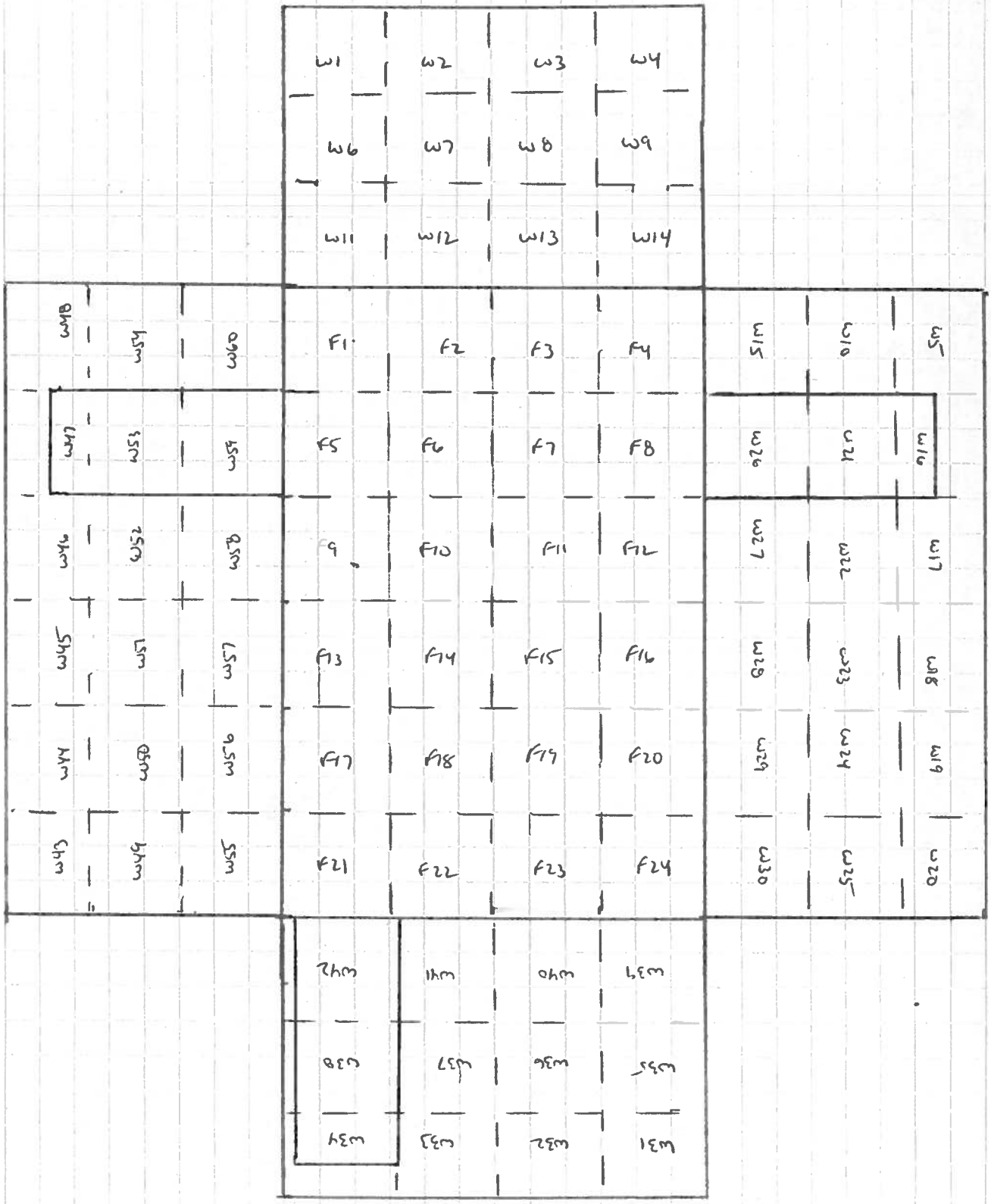
Date 6/21/13

No.	Time	Locations See attached LSC printout for Total Activity (cpm/100 cm^2)
208		POST DECON 4
209		POST DECON 5
210		POST DECON 6
211		POST DECON 7
212		POST DECON 8
213		POST DECON 9
214		POST DECON 10
215	↓	POST DECON 10


W1
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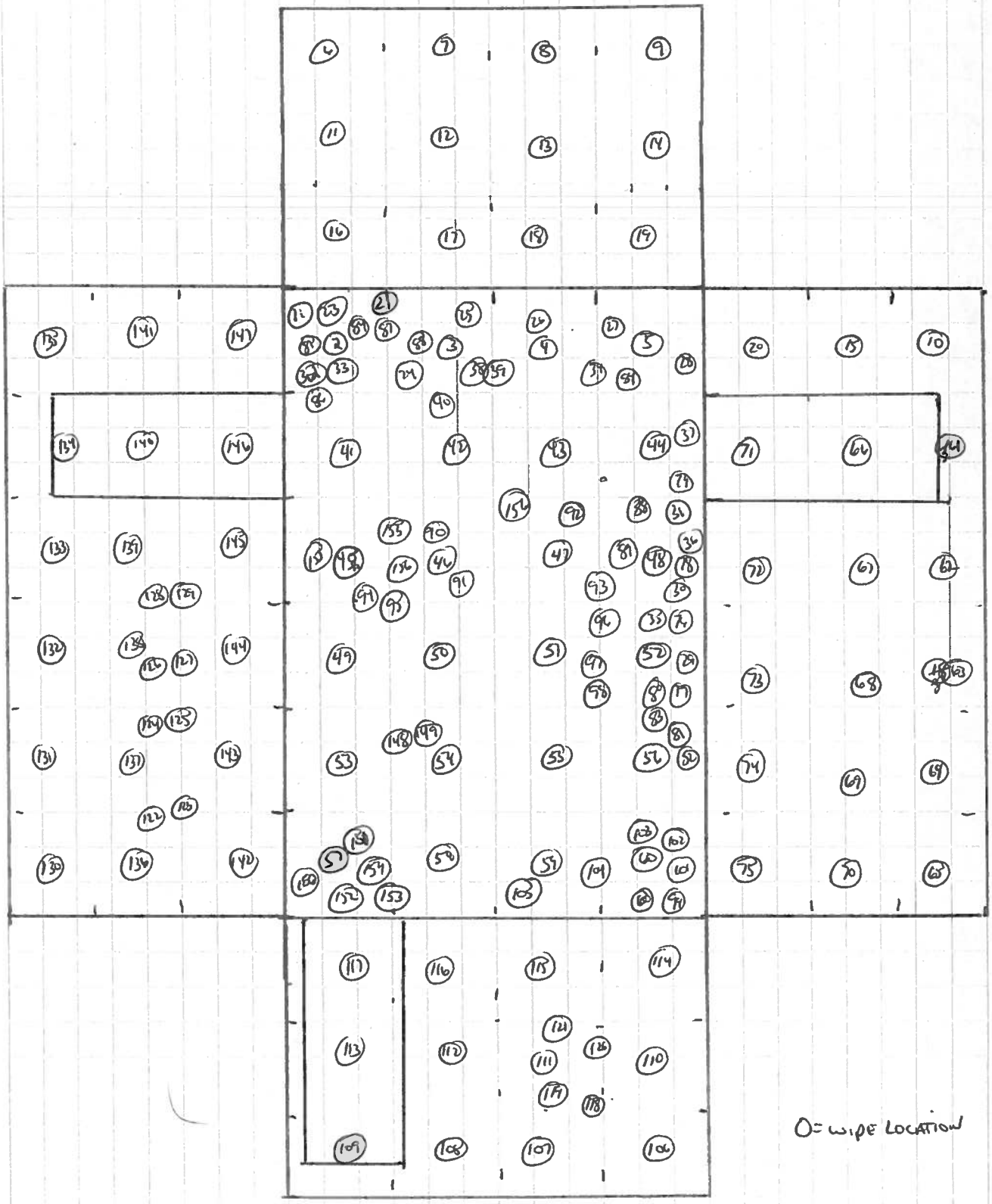
118 / 252 B

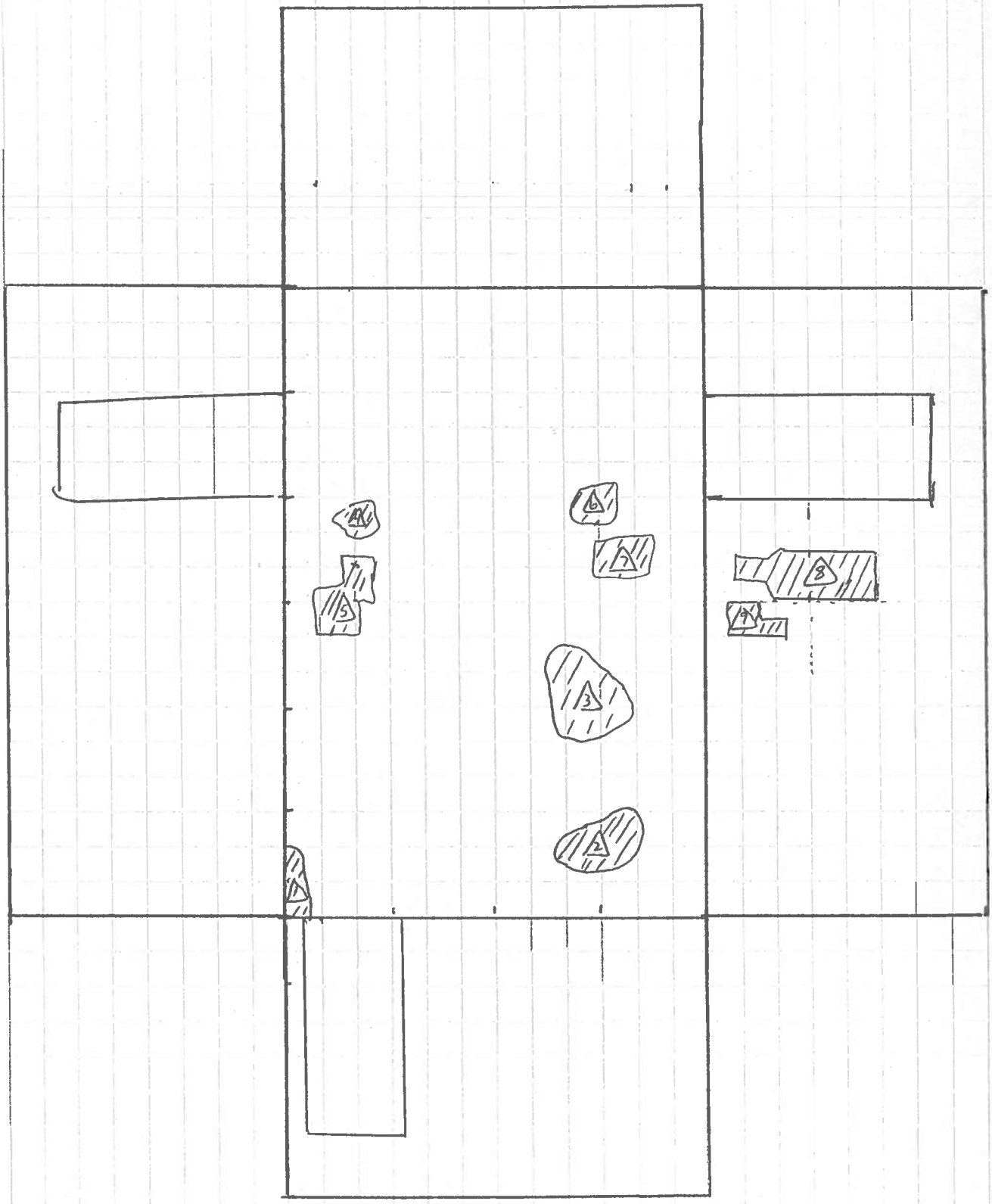
DATE: 2/14/13



O= WIPE LOCATION

118 / 252 B

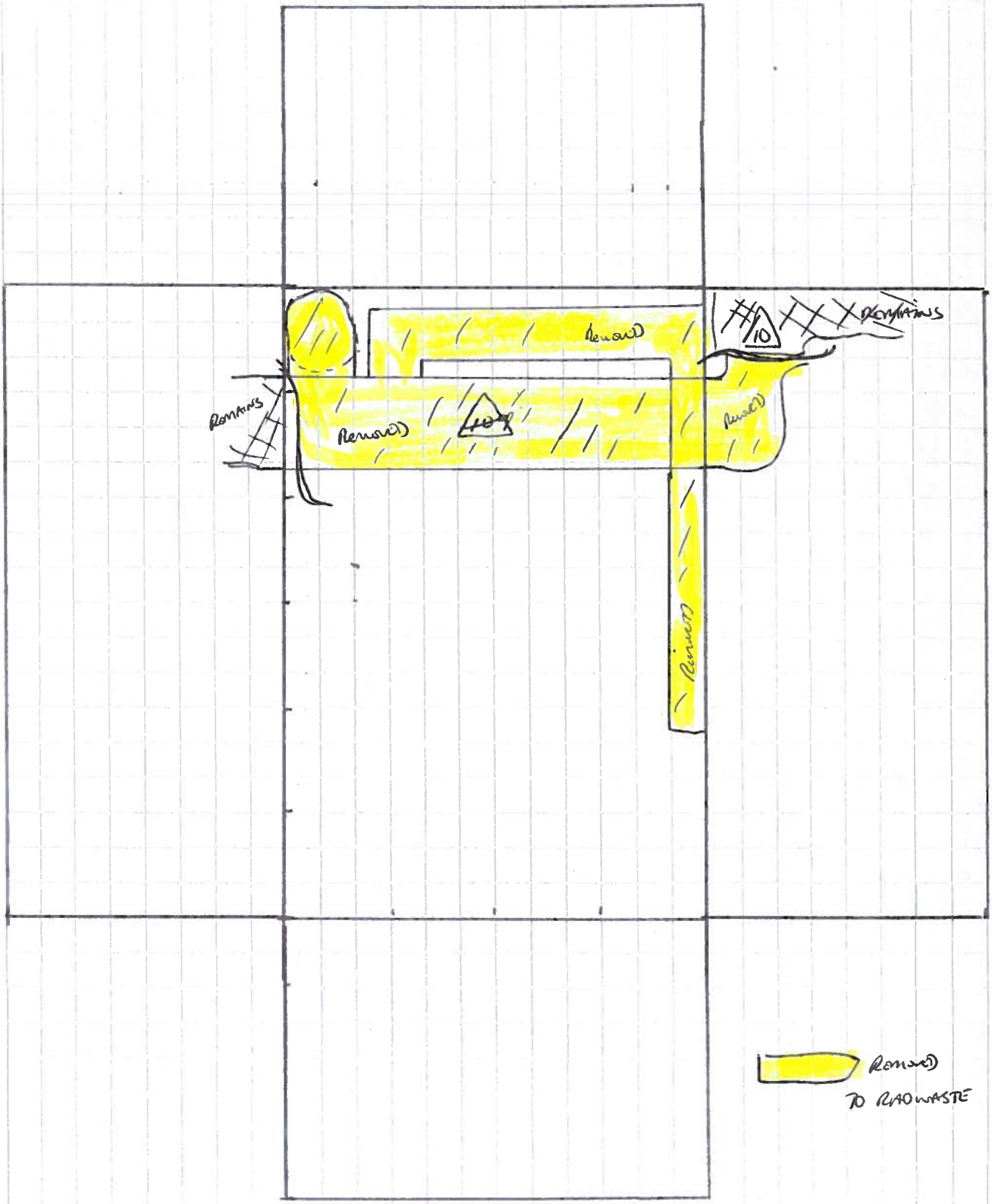
DATE: 2/14/13



DATE: 2/14/13

118 / 252 B

EXHAUST VENT DUCTING



Date: 2/14/13

118/252B

Surveyed approximately 100% of surfaces using the 43-68. All areas were found to be at normal background levels, with the following exceptions:

1. A small area on the floor by the put was found to be contaminated to a maximum level of 29,039 dpm/100cm^2. The area was decontaminated to normal background levels.

2. An area of the floor was found to be contaminated to a maximum level of 25,971 dpm/100 cm^2. The area was decontaminated to normal background levels.

3. An area of the floor was found to be contaminated to a maximum level of 1,528,016 dpm/100 cm^2. The area was decontaminated to normal background levels.

4. An area of the floor was found to be contaminated to a maximum level of 18,814 dpm/100 cm^2. The area was decontaminated to normal background levels.

5. An area of the floor was found to be contaminated to a maximum level of 127,198 dpm/100 cm^2. The area was decontaminated to normal background levels.

6. An area of the floor was found to be contaminated to a maximum level of 9,816 dpm/100 cm^2. The area was decontaminated to normal background levels.

7. An area of the floor was found to be contaminated to a maximum level of 17,791 dpm/100 cm^2. The area was decontaminated to normal background levels.

8. An area of the wall was found to be contaminated to a maximum level of 101,636 dpm/100 cm^2. The area was decontaminated to normal background levels.

9. An area of the wall was found to be contaminated to a maximum level of 174,233 dpm/100 cm^2. The area was decontaminated to normal background levels.

10. Exhaust ducting was found to be contaminated to a maximum level 116,973 dpm/100 cm^2. This ducting was removed and disposed of as radioactive waste.

Equipment Swipes 220 236 Area

Assay Definition-

Assay Description:
Decon D408-410

Assay Type: CPM
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\Bill Calver\Room Decon\20130214_1309
Raw Results Path: C:\Packard\Tricarb\Results\Bill Calver\Room Decon\20130214_1309\20130214_1309.results
RTF File Name: C:\Packard\Tricarb\Results\Bill Calver\Room Decon\20130214_1309\Lab Decon 118 237.rtf
Assay File Name: C:\Packard\TriCarb\Assays\Room Decon.lsa

Count Conditions-

Nuclide: Triple
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set: n/a
Count Time (min): 1.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: Off

Regions	LL	UL
A	0.0	18.6
B	18.6	156.0
C	0.0	2000.0

Count Corrections-

Static Controller: On Luminescence Correction: On
Colored Samples: n/a Heterogeneity Monitor: n/a
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time
A				
B				
C				

Cycle 1 Results

S#	CPMA	CPMB	CPMC	MESSAGES
1	10	7	22	
2	74	10	91	
3	92	18	122	
4	24	9	36	
5	46	28	81	
6	16	11	32	
7	27	12	42	
8	37	23	67	
9	10	12	25	
10	28	19	51	

Equipment Swipes 220 236 Area

11	23	15	41
12	11	7	25
13	36	27	66
14	20	10	40
15	19	18	39
16	46	25	75
17	28	17	51
18	47	34	85
19	76	38	120
20	30	27	60
21	73	43	123
22	43	34	88
23	89	49	143
24	34	27	61
25	41	28	71
26	49	45	101
27	36	14	59
28	42	50	96
29	93	37	135
30	238	139	383
31	110	64	176
32	61	42	109
33	9	5	19
34	95	60	158
35	45	21	70
36	47	43	99
37	63	35	104
38	74	48	125
39	15	10	31
40	38	18	58
41	19	12	34
42	18	21	44
43	22	19	48
44	28	15	48
45	29	25	60
46	71	54	128
47	96	14	117
48	92	44	141
49	29	18	54
50	202	110	318
51	46	16	65
52	185	91	288
53	51	36	93
54	29	19	54
55	75	37	121
56	206	119	347
57	28	21	56
58	51	29	82
59	324	175	503
60	862	449	1322
61	54	43	105
62	26	26	56
63	27	16	45
64	41	48	94
65	25	12	44
66	24	19	51
67	22	30	55
68	96	55	154
69	100	98	202
70	32	23	62
71	46	25	80
72	83	77	164
73	149	136	292

Equipment Swipes 220 236 Area

74	151	134	293
75	29	33	67
76	185	112	306
77	123	83	212
78	262	169	444
79	140	123	273
80	284	182	524
81	64	55	129
82	731	531	1279
83	166	268	436
84	95	72	172
85	224	163	391
86	159	150	319
87	66	52	128
88	8	5	17
89	39	16	60
90	28	9	40
91	220	157	388
92	111	73	187
93	79	49	134
94	144	72	218
95	97	68	170
96	132	64	200
97	25	16	46
98	18	7	30
99	41	24	72
100	76	49	129
101	35	20	59
102	22	9	34
103	7	13	23
104	19	18	46
105	27	15	46
106	27	24	54
107	106	87	198
108	54	49	105
109	12	7	23
110	24	34	59
111	71	60	138
112	15	6	24
113	18	14	40
114	67	75	149
115	49	39	95
116	15	10	27
117	10	12	26
118	78	36	120
119	50	30	90
120	58	36	97
121	23	35	64
122	22	29	58
123	56	35	96
124	33	37	76
125	30	26	62
126	83	52	139
127	62	42	108
128	20	30	54
129	77	61	147
130	13	17	35
131	24	22	50
132	27	28	57
133	24	24	55
134	70	72	145
135	28	29	61
136	16	15	35

Equipment Swipes 220 236 Area

137	31	25	61
138	26	23	54
139	22	16	42
140	23	20	45
141	39	28	70
142	33	21	60
143	33	29	73
144	39	20	63
145	53	48	107
146	25	11	41
147	32	52	91
148	31	11	46
149	19	10	33
150	16	3	24
151	8	7	19
152	41	41	92
153	34	21	61
154	23	13	39
155	137	104	247
156	467	191	666

Assay Definition-

Assay Description:
Background check for PM Lab (Mikey)

Assay Type: CPM
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\bc\bills swipes
Raw Results Path: C:\Packard\Tricarb\Results\bc\bills swipes\20130407_1452\20130407_1452.results
RTF File Name: C:\Packard\Tricarb\Results\bc\bills swipes\Report1.rtf
Assay File Name: C:\Packard\TriCarb\Assays\bills swipes.lsa

Count Conditions-

Nuclide: TRIPLE
  Quench Indicator: tSIE/AEC
  External Std Terminator (sec): 0.5 2s%
  Pre-Count Delay (min): 0.00
Quench Set: n/a
Count Time (min): 1.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: Off

Regions	LL	UL
A	0.0	18.6
B	18.6	156.0
C	0.0	2000.0

Count Corrections-

Static Controller: On Luminescence Correction: On
Colored Samples: n/a Heterogeneity Monitor: n/a
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time
A				
B				
C				

Cycle 1 Results

S#	CPMA	CPMB	CPMC	MESSAGES	PID	Custom1
1	15	4	21		26	
2	6	11	21		26	
3	9	6	16		26	
4	28	5	38		26	
5	14	21	43		26	
6	29	32	64		26	
7	21	22	48		26	
8	30	29	61		26	
9	23	18	44		26	
10	18	14	39		26	
11	34	20	57		26	

160	12	30	25	58	26
	13	11	5	16	26
	14	17	6	27	26
170	15	10	12	22	26
	16	12	10	26	26
	17	19	6	30	26
	18	12	8	26	26
	19	20	17	40	6
175	20	15	13	33	6
	21	14	18	39	6
	22	19	8	31	6
	23	5	4	10	6
	24	71	4	79	6
180	25	20	13	38	6
	26	42	19	69	6
	27	28	17	53	6
	28	20	9	31	6
	29	25	15	44	6
185	30	19	11	36	6
	31	51	16	73	6
	32	16	17	42	6
	33	20	11	35	6
	34	32	39	78	6
190	35	22	24	48	6
	36	10	12	27	6
	37	11	12	29	5
	38	30	12	48	5
	39	11	2	17	5
195	40	13	3	21	5
	41	20	5	30	5
	42	17	9	32	5
	43	20	7	29	5
	44	16	12	30	5
200	45	14	11	27	5
201	46	13	17	31	5
202	47	11	16	29	5
203	48	104	125	239	5
	39				

Assay Definition-

Assay Description:
Background check for PM Lab (Mikey)

Assay Type: CPM
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\bc\bills swipes
Raw Results Path: C:\Packard\Tricarb\Results\bc\bills swipes\20130621_1150\20130621_1150.results
RTF File Name: C:\Packard\Tricarb\Results\bc\bills swipes\Report1.rtf
Assay File Name: C:\Packard\TriCarb\Assays\bills swipes.lsa

Count Conditions-

Nuclide: TRIPLE
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Set: n/a
Count Time (min): 1.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: Off
Low CPM Threshold: Off
2 Sigma % Terminator: Off

Regions	LL	UL
A	0.0	18.6
B	18.6	156.0
C	0.0	2000.0

Count Corrections-

Static Controller: On Luminescence Correction: On
Colored Samples: n/a Heterogeneity Monitor: n/a
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time
A				
B				
C				

Cycle 1 Results

S#	CPMA	CPMB	CPMC	MESSAGES	PID	Custom1
1	9	5	17		10	
2	20	2	27		10	
3	15	9	32		10	
4	10	8	21		10	
5	21	10	31		10	
6	12	11	31		10	
7	42	24	69		10	
8	14	10	28		10	
9	16	13	31		10	
10	22	13	37		10	
11	19	10	36		10	

6/21/2013 12:12:16 PM QuantaSmart (TM) - 2.03 - Serial# 431520

Protocol# 3 - bills swipes.lsa

2151	13	12	29	10