

Project: MU Pickard Hall. C0911021		Survey Unit: Basement			Type of Survey: Characterization			Surveyor 1: Ken Gavlik				Surveyor 2:			Date: 12/9/09	Page: 1 of 4						
Instrument / Serial # Detector / Serial #	Source Check	Cal. Due	Type	Total/ Removable	Bkgd (cpm)	4 π Efficiency	Surface Efficiency	Total Efficiency	Count Time (min)		Area (cm <sup>2</sup> )	MDC (dpm/wipe)	IL (dpm/100cm <sup>2</sup> )	MDC % of IL	Comments: Large Area Wipes - activity reported as dpm/wipe. All wipes cover areas of 400 ft <sup>2</sup> or more. Rooms 13 and 15 have been encapsulated subsequent to these surveys - see post-encapsulation survey results for current surveys.							
									Sample	Bkg.												
2241-3 / 253351 43-37 / 178300	SAT	8/4/2010	Beta	Removable	1158	26.71%	N/A	26.71%	1	1	582	104	N/A	N/A	Reviewed: Dave Culp Date: 12/11/09							
2241-3 / 253346 43-37 / 259902	SAT	8/18/2010	Alpha	Removable	6	23.04%	N/A	23.04%	1	1	582	11	N/A	N/A								
Location - Room	Total Surface Activity											Removable Surface Activity										
	Beta					Alpha					Sum of Fractions	Beta					Alpha					Sum of Fractions
	Gross Counts	Net cpm	Activity (dpm/100cm <sup>2</sup> )	Notes	Fraction of IL	Gross Counts	Net cpm	Activity (dpm/100cm <sup>2</sup> )	Notes	Fraction of IL		Gross Counts	Net cpm	Activity (dpm/wipe)	Notes	Fraction of IL	Gross Counts	Net cpm	Activity (dpm/wipe)	Notes	Fraction of IL	
1 - 1, 1B											1185	27	101	<MDC	N/A	15	9	39		N/A	N/A	
2 - 1,5,6											1211	53	198		N/A	26	20	87		N/A	N/A	
3 - 1, 4											1294	136	509		N/A	21	15	65		N/A	N/A	
4 - 2, 3, 7, 9, 10											1142	-16	-60	<MDC	N/A	32	26	113		N/A	N/A	
5 - C00A											1275	117	438		N/A	27	21	91		N/A	N/A	
6 - C00B											1962	804	3,010		N/A	68	62	269		N/A	N/A	
7 - 27											1211	53	198		N/A	19	13	56		N/A	N/A	
8 - 28, 28A											1309	151	565		N/A	31	25	109		N/A	N/A	
9 - 23, 25											1297	139	520		N/A	30	24	104		N/A	N/A	
10 - 26											1407	249	932		N/A	32	26	113		N/A	N/A	
11 - 17A, 18											1400	242	906		N/A	48	42	182		N/A	N/A	
12 - 16, 18A											1382	224	839		N/A	41	35	152		N/A	N/A	
13 - 12											2565	1407	5,268		N/A	94	88	382		N/A	N/A	
14 - 13, 15 (Encap)											3497	2339	8,757		N/A	374	368	1,597		N/A	N/A	
15 - 17											1437	279	1,045		N/A	29	23	100		N/A	N/A	

Project: MU Pickard Hall. C0911021		Survey Unit: First Floor			Type of Survey: Characterization			Surveyor 1: Ken Gavlik				Surveyor 2:			Date: 12/9/09	Page: 2 of 4					
Instrument / Serial # Detector / Serial #	Source Check	Cal. Due	Type	Total/ Removable	Bkgd (cpm)	4 π Efficiency	Surface Efficiency	Total Efficiency	Count Time (min)		Area (cm <sup>2</sup> )	MDC (dpm/wipe)	IL (dpm/100cm <sup>2</sup> )	MDC % of IL	Comments: Large Area Wipes - activity reported as dpm/wipe. All wipes cover areas of 400 ft <sup>2</sup> or more.						
									Sample	Bkg.											
2241-3 / 253351 43-37 / 178300	SAT	8/4/2010	Beta	Removable	1685	26.71%	N/A	26.71%	1	1	582	125	N/A	N/A	Reviewed: Dave Culp Date: 12/11/09						
2241-3 / 253346 43-37 / 259902	SAT	8/18/2010	Alpha	Removable	6	23.04%	N/A	23.04%	1	1	582	11	N/A	N/A							
Location - Room	Total Surface Activity										Removable Surface Activity										
	Beta					Alpha					Sum of Fractions	Beta					Alpha				
	Gross Counts	Net cpm	Activity (dpm/100cm <sup>2</sup> )	Notes	Fraction of IL	Gross Counts	Net cpm	Activity (dpm/100cm <sup>2</sup> )	Notes	Fraction of IL		Gross Counts	Net cpm	Activity (dpm/wipe)	Notes	Fraction of IL	Gross Counts	Net cpm	Activity (dpm/wipe)	Notes	Fraction of IL
1 - 104											1692	7	26	<MDC	N/A	29	23	100		N/A	N/A
2 - 104											1711	26	97	<MDC	N/A	34	28	122		N/A	N/A
3 - 104											1988	303	1,134		N/A	36	30	130		N/A	N/A
4 - 104											1872	187	700		N/A	29	23	100		N/A	N/A
5 - 104											1942	257	962		N/A	24	18	78		N/A	N/A
6 - C100											1691	6	22	<MDC	N/A	48	42	182		N/A	N/A
7 - C100											1728	43	161		N/A	51	45	195		N/A	N/A
8 - C100											1822	137	513		N/A	39	33	143		N/A	N/A
9 - 109											1901	216	809		N/A	51	45	195		N/A	N/A
10 - 115B,115C, 119											1976	291	1,089		N/A	47	41	178		N/A	N/A
11 - 115, 118											1811	126	472		N/A	46	40	174		N/A	N/A
12 - 117											1595	-90	-337	<MDC	N/A	41	35	152		N/A	N/A
13 - 111											1611	-74	-277	<MDC	N/A	39	33	143		N/A	N/A
14 - 114											1724	39	146		N/A	22	16	69		N/A	N/A
15 - C101, 112, 113											1802	117	438		N/A	36	30	130		N/A	N/A
16 - 110											1630	-55	-206	<MDC	N/A	41	35	152		N/A	N/A
17 - 106											1568	-117	-438	<MDC	N/A	26	20	87		N/A	N/A
18 - Stairs											1718	33	124	<MDC	N/A	36	30	130		N/A	N/A

Project: MU Pickard Hall, C0911021		Survey Unit: Second Floor			Type of Survey: Characterization			Surveyor 1: Ken Gavlik				Surveyor 2:			Date: 12/9/09	Page: 3 of 4						
Instrument / Serial # Detector / Serial #	Source Check	Cal. Due	Type	Total/ Removable	Bkgd (cpm)	4 π Efficiency	Surface Efficiency	Total Efficiency	Count Time (min)		Area (cm <sup>2</sup> )	MDC (dpm/wipe)	IL (dpm/100cm <sup>2</sup> )	MDC % of IL	Comments: Large Area Wipes - activity reported as dpm/wipe. All wipes cover areas of 400 ft <sup>2</sup> or more.							
									Sample	Bkg.												
2241-3 / 253351 43-37 / 178300	SAT	8/4/2010	Beta	Removable	1390	26.71%	N/A	26.71%	1	1	582	114	N/A	N/A		Reviewed: Dave Culp Date: 12/11/09						
2241-3 / 253346 43-37 / 259902	SAT	8/18/2010	Alpha	Removable	4	23.04%	N/A	23.04%	1	1	582	9	N/A	N/A								
Total Surface Activity											Removable Surface Activity											
Location - Room	Beta					Alpha					Sum of Fractions	Beta					Alpha					Sum of Fractions
	Gross Counts	Net cpm	Activity (dpm/100cm <sup>2</sup> )	Notes	Fraction of IL	Gross Counts	Net cpm	Activity (dpm/100cm <sup>2</sup> )	Notes	Fraction of IL		Gross Counts	Net cpm	Activity (dpm/wipe)	Notes	Fraction of IL	Gross Counts	Net cpm	Activity (dpm/wipe)	Notes	Fraction of IL	
1 - 214											1418	28	105	<MDC	N/A	26	22	95		N/A	N/A	
2 - 214											1525	135	505		N/A	34	30	130		N/A	N/A	
3 - 214											1428	38	142		N/A	32	28	122		N/A	N/A	
4 - 214											1512	122	457		N/A	37	33	143		N/A	N/A	
5 - 214											1535	145	543		N/A	33	29	126		N/A	N/A	
6 - 214											1465	75	281		N/A	29	25	109		N/A	N/A	
7 - C200B											1678	288	1,078		N/A	23	19	82		N/A	N/A	
8 - 213											1612	222	831		N/A	30	26	113		N/A	N/A	
9 - 210											1702	312	1,168		N/A	22	18	78		N/A	N/A	
10 - 209											1906	516	1,932		N/A	42	38	165		N/A	N/A	
11 - 209											1711	321	1,202		N/A	39	35	152		N/A	N/A	
12 - 209											1661	271	1,015		N/A	36	32	139		N/A	N/A	
13 - 209											1721	331	1,239		N/A	33	29	126		N/A	N/A	
14 - 209											1653	263	985		N/A	39	35	152		N/A	N/A	
15 - 208											1692	302	1,131		N/A	41	37	161		N/A	N/A	
16 - 207											1781	391	1,464		N/A	33	29	126		N/A	N/A	
17 - 207											1807	417	1,561		N/A	29	25	109		N/A	N/A	
18 - 207											1611	221	827		N/A	37	33	143		N/A	N/A	
19 - 207											1782	392	1,468		N/A	39	35	152		N/A	N/A	
20 - 206											1693	303	1,134		N/A	35	31	135		N/A	N/A	
21 - 206											1726	336	1,258		N/A	41	37	161		N/A	N/A	
22 - 201											1801	411	1,539		N/A	37	33	143		N/A	N/A	
23 - 205											1580	190	711		N/A	38	34	148		N/A	N/A	
24 - 204											1417	27	101	<MDC	N/A	42	38	165		N/A	N/A	
25 - 202, 203											1565	175	655		N/A	32	28	122		N/A	N/A	
26 - 201, C200A											1663	273	1,022		N/A	37	33	143		N/A	N/A	
27 - 215											1519	129	483		N/A	31	27	117		N/A	N/A	
28 - Stairwell											1658	268	1,003		N/A	29	25	109		N/A	N/A	

Project: MU Pickard Hall, C0911021		Survey Unit: Attic			Type of Survey: Characterization			Surveyor 1: Ken Gavlik				Surveyor 2:			Date: 12/9/09	Page: 4 of 4						
Instrument / Serial # Detector / Serial #	Source Check	Cal. Due	Type	Total/ Removable	Bkgd (cpm)	4 $\pi$ Efficiency	Surface Efficiency	Total Efficiency	Count Time (min) Sample Bkg.		Area (cm <sup>2</sup> )	MDC (dpm/wipe)	IL (dpm/100cm <sup>2</sup> )	MDC % of IL	Comments:							
															Large Area Wipes - activity reported as dpm/wipe. All wipes cover areas of 400 ft <sup>2</sup> or more. Attic mainly open beams and joists, only a very small area has decking.							
2241-3 / 253351 43-37 / 178300	SAT	8/4/2010	Beta	Removable	1382	26.71%	N/A	26.71%	1	1	582	113	N/A	N/A								
2241-3 / 253346 43-37 / 259902	SAT	8/18/2010	Alpha	Removable	6	23.04%	N/A	23.04%	1	1	582	11	N/A	N/A	Reviewed: Dave Culp	Date: 12/11/09						
<b>Total Surface Activity</b>										<b>Removable Surface Activity</b>												
<b>Beta</b>					<b>Alpha</b>					<b>Beta</b>					<b>Alpha</b>							
Location - Room	Gross Counts	Net cpm	Activity (dpm/100cm <sup>2</sup> )	Notes	Fraction of IL	Gross Counts	Net cpm	Activity (dpm/100cm <sup>2</sup> )	Notes	Fraction of IL	Sum of Fractions	Gross Counts	Net cpm	Activity (dpm/wipe)	Notes	Fraction of IL	Gross Counts	Net cpm	Activity (dpm/wipe)	Notes	Fraction of IL	Sum of Fractions
1 - All Floors												1411	29	109	<MDC	N/A	29	23	100		N/A	N/A