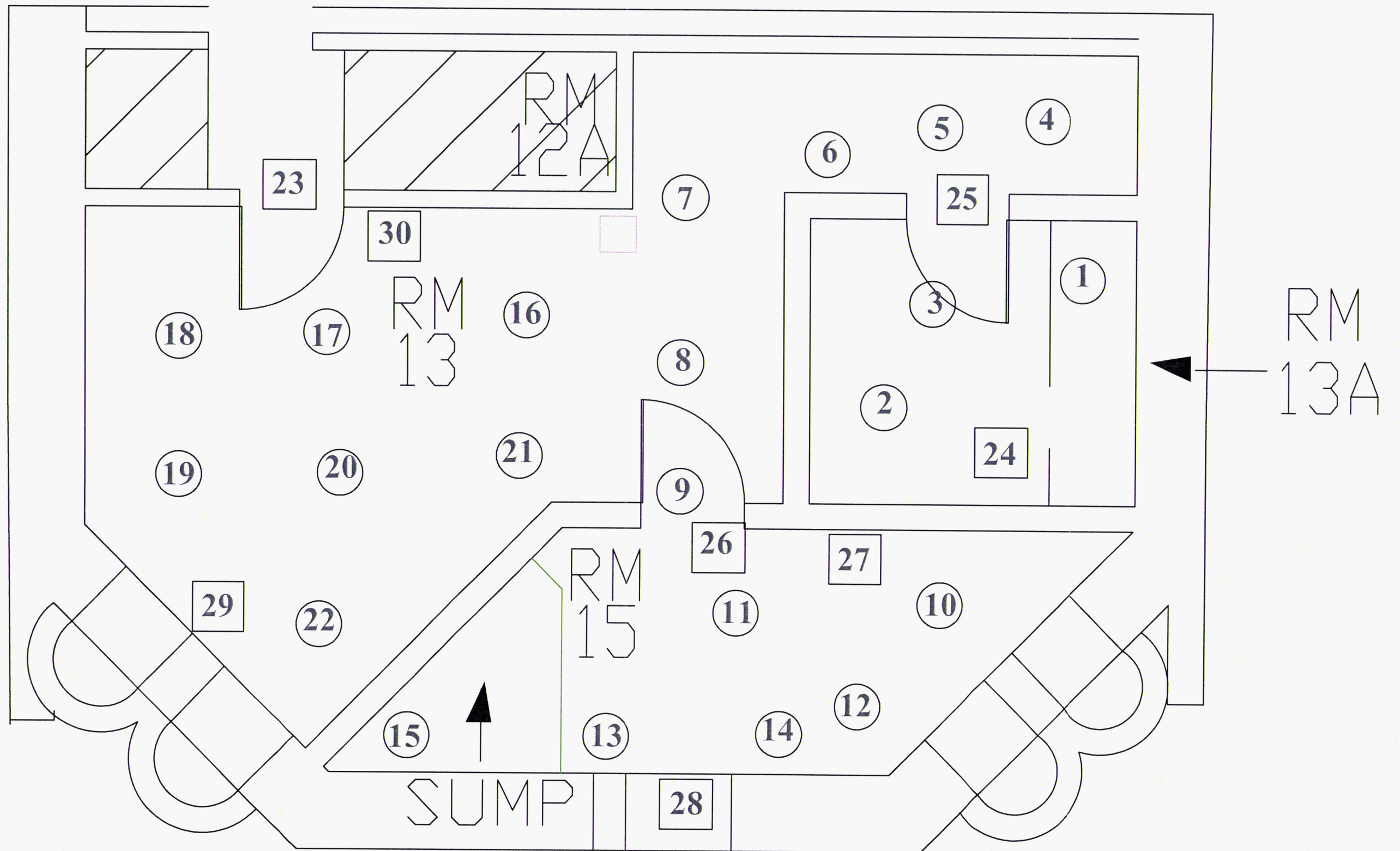


Project: MU Pickard Hall, C0911021			Survey Unit: Basement			Type of Survey: Characterization			Surveyor 1: Brendan Mize					Surveyor 2: Mike Culp					Date: 6/23/2010			Page: 1 of 1	
Instrument / Serial # Detector / Serial #		Source Check	Cal. Due	Type	Total/ Removable	Bkgd (cpm)	Efficiency	Surface Efficiency	Total Efficiency	Count Time (min) Sample Bkg.		Area (cm ²)	MDC (dpm/100cm ²)	IL (dpm/100cm ²)	MDC % of IL	Comments: 2-pi efficiency for total surfce activity measurements, 4-pi efficiency used for removable surface activity measurements. Surveys performed after encapsulation.							
2241-3 / 253346 43-37 / 259902		SAT	4/7/2011	Beta	Total	1382	43.87%	0.25	10.97%	1	1	582	276	1000	28%								
2241-3 /253363 43-37 / 2665548		SAT	4/11/2011	Alpha	Total	16	45.64%	0.25	11.41%	1	1	582	33	100	33%								
2929 / 160013 43-10-1 / 167231		SAT	8/18/2010	Beta	Removable	55	23.47%	N/A	23.47%	2	10	100	87	200	43%								
2929 / 160013 43-10-1 / 167231		SAT	8/18/2010	Alpha	Removable	0.4	35.25%	N/A	35.25%	2	10	100	9	20	44%	Reviewed: Ken Gavlik					Date: 6/23/2010		
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 ²)	Notes	Fraction of IL	Gross Counts	Net cpm	Activity (dpm/100cm ²)	Notes	Fraction of IL		Gross Counts	Net cpm	Activity (dpm/100cm ²)	Notes	Fraction of IL	Gross Counts	Net cpm	Activity (dpm/100cm ²)	Notes	Fraction of IL		
1 - 13A Closet	6,126	4,744	7,432		7.43	76	60	90		0.90	N/A	116	3	13	<MDC	0.06	9	4.1	12		0.58	N/A	
2 - 13A	2,676	1,294	2,027		2.03	16	0	0	<MDC	0.00	N/A	122	6	26	<MDC	0.13	3	1.1	3	<MDC	0.16	N/A	
3 - 13A	2,597	1,215	1,903		1.90	19	3	5	<MDC	0.05	N/A	107	-1.5	-6	<MDC	0.00	2	0.6	2	<MDC	0.09	N/A	
4 - 13	2,588	1,206	1,889		1.89	19	3	5	<MDC	0.05	N/A	113	1.5	6	<MDC	0.03	6	2.6	7	<MDC	0.37	N/A	
5 - 13	2,234	852	1,335		1.33	42	26	39		0.39	N/A	114	2	9	<MDC	0.04	2	0.6	2	<MDC	0.09	N/A	
6 - 13	9,605	8,223	12,882		12.88	62	46	69		0.69	N/A	105	-2.5	-11	<MDC	0.00	4	1.6	5	<MDC	0.23	N/A	
7 - 13	10,231	8,849	13,863		13.86	138	122	184		1.84	N/A	115	2.5	11	<MDC	0.05	3	1.1	3	<MDC	0.16	N/A	
8 - 13	59,839	58,457	91,581		91.58	60	44	66		0.66	N/A	112	1	4	<MDC	0.02	4	1.6	5	<MDC	0.23	N/A	
9-13	4,680	3,298	5,167		5.17	31	15	23	<MDC	0.23	N/A	118	4	17	<MDC	0.09	7	3.1	9	<MDC	0.44	N/A	
10-15	7,632	6,250	9,792		9.79	55	39	59		0.59	N/A	102	-4	-17	<MDC	0.00	4	1.6	5	<MDC	0.23	N/A	
11-15	2,949	1,567	2,455		2.45	56	40	60		0.60	N/A	120	5	21	<MDC	0.11	6	2.6	7	<MDC	0.37	N/A	
12-15	9,331	7,949	12,453		12.45	119	103	155		1.55	N/A	110	0	0	<MDC	0.00	5	2.1	6	<MDC	0.30	N/A	
13-15	4,074	2,692	4,217		4.22	46	30	45		0.45	N/A	116	3	13	<MDC	0.06	4	1.6	5	<MDC	0.23	N/A	
14-15	3,382	2,000	3,133		3.13	100	84	126		1.26	N/A	124	7	30	<MDC	0.15	2	0.6	2	<MDC	0.09	N/A	
15-15	39,443	38,061	59,628		59.63	89	73	110		1.10	N/A	101	-4.5	-19	<MDC	0.00	6	2.6	7	<MDC	0.37	N/A	
16-13	12,271	10,889	17,059		17.06	77	61	92		0.92	N/A	126	8	34	<MDC	0.17	1	0.1	0	<MDC	0.01	N/A	
17-13	19,940	18,558	29,074		29.07	106	90	136		1.36	N/A	121	5.5	23	<MDC	0.12	5	2.1	6	<MDC	0.30	N/A	
18-13	80,610	79,228	124,122		124.12	281	265	399		3.99	N/A	116	3	13	<MDC	0.06	4	1.6	5	<MDC	0.23	N/A	
19-13	35,229	33,847	53,026		53.03	392	376	566		5.66	N/A	114	2	9	<MDC	0.04	0	-0.4	-1	<MDC	0.00	N/A	
20-13	93,649	92,267	144,549		144.55	82	66	99		0.99	N/A	112	1	4	<MDC	0.02	5	2.1	6	<MDC	0.30	N/A	
21-13	33,339	31,957	50,065		50.07	147	131	197		1.97	N/A	136	13	55	<MDC	0.28	6	2.6	7	<MDC	0.37	N/A	
22-13	81,549	80,167	125,593		125.59	447	431	649		6.49	N/A	129	9.5	40	<MDC	0.20	8	3.6	10		0.51	N/A	
23-13 Door	3,240	1,858	2,911		2.91	34	18	27	<MDC	0.27	N/A	120	5	21	<MDC	0.11	1	0.1	0	<MDC	0.01	N/A	
24-13A Door Frame	8,004	6,622	10,374		10.37	124	108	163		1.63	N/A	110	0	0	<MDC	0.00	4	1.6	5	<MDC	0.23	N/A	
25-13A Door	1,390	8	13	<MDC	0.01	27	11	17	<MDC	0.17	N/A	128	9	38	<MDC	0.19	5	2.1	6	<MDC	0.30	N/A	
26-15 Door	1,880	498	780		0.78	27	11	17	<MDC	0.17	N/A	111	0.5	2	<MDC	0.01	4	1.6	5	<MDC	0.23	N/A	
27-15 Wall	4,275	2,893	4,532		4.53	29	13	20	<MDC	0.20	N/A	118	4	17	<MDC	0.09	1	0.1	0	<MDC	0.01	N/A	
28-15 Door	2,243	861	1,349		1.35	50	34	51		0.51	N/A	114	2	9	<MDC	0.04	4	1.6	5	<MDC	0.23	N/A	
29-13 Electrical Panel	1,930	548	859		0.86	47	31	47		0.47	N/A	121	5.5	23	<MDC	0.12	1	0.1	0	<MDC	0.01	N/A	
30-13 Wall	1,793	411	644		0.64	31	15	23	<MDC	0.23	N/A	120	5	21	<MDC	0.11	2	0.6	2	<MDC	0.09	N/A	

Pickard Hall Basement Post - Encapsulation Dose Rate Measurements

Location	Distance	NaI Static (cpm)	Bicron Instantaneous Measurements (µRem/hr)														Annual Occupancy (hrs)	
			1	2	3	4	5	6	7	8	9	10	STDEV	Max	Mean	Corrected Mean	25 mrem/yr	100 mrem/yr
1	1 m	4,271	10	10	9	10	9	9	8	8	9	10	0.8	10	9.2	2.5	>2500	>2500
2	1 m	6,337	12	13	13	13	12	13	12	13	14	14	0.7	14	12.9	6.2	>2500	>2500
3	1 m	5,881	15	14	14	14	13	13	14	12	12	13	1.0	15	13.4	6.7	>2500	>2500
4	1 m	8,062	11	10	11	10	9	10	11	10	11	10	0.7	11	10.3	3.6	>2500	>2500
5	1 m	9,992	10	11	11	10	10	9	9	9	10	11	0.8	11	10	3.3	>2500	>2500
6	1 m	3,758	13	14	15	15	15	13	14	10	15	15	1.6	15	13.9	7.2	>2500	>2500
7	1 m	8,002	15	16	16	17	17	16	16	15	16	17	0.7	17	16.1	9.4	>2500	>2500
8	1 m	9,043	13	14	15	13	13	14	13	13	13	14	0.7	15	13.5	6.8	>2500	>2500
9	1 m	9,885	16	15	15	15	15	16	16	16	17	16	0.7	17	15.7	9	>2500	>2500
10	1 m	4,826	14	13	13	12	12	13	12	11	12	11	0.9	14	12.3	5.6	>2500	>2500
11	1 m	1,435	12	11	12	11	12	11	13	12	11	11	0.7	13	11.6	4.9	>2500	>2500
12	1m	13,156	11	12	11	12	13	11	13	12	13	14	1.0	14	12.2	5.5	>2500	>2500
13	1 m	22,281	14	14	15	15	16	14	17	17	18	17	1.5	18	15.7	9	>2500	>2500
14	1 m	19,604	20	20	22	20	22	22	20	21	22	22	1.0	22	21.1	14.4	1,736	>2500
15	1 m	15,042	10	11	12	11	11	10	10	11	11	12	0.7	12	10.9	4.2	>2500	>2500
16	1 m	18,883	17	17	16	17	17	18	17	18	18	18	0.7	18	17.3	10.6	2,358	>2500
17	1 m	19,621	18	18	19	19	18	18	17	18	19	20	0.8	20	18.4	11.7	2,137	>2500
18	1m	18,793	22	22	20	20	22	22	20	18	18	20	1.6	22	20.4	13.7	1,825	>2500
19	1 m	19,275	12	13	14	13	14	14	15	14	15	16	1.2	16	14	7.3	>2500	>2500
20	1 m	20,115	19	19	20	20	18	18	18	17	18	19	1.0	20	18.6	11.9	2,101	>2500
21	1 m	18,802	17	18	17	16	16	17	16	17	16	17	0.7	18	16.7	10	2,500	>2500
22	1 m	20,474	17	16	16	16	16	16	15	16	16	16	0.5	17	16	9.3	>2500	>2500
23	1 m	20,507	17	18	17	17	16	17	18	17	17	16	0.7	18	17	10.3	2,427	>2500
24	1 m	4,189	17	17	16	17	16	17	16	15	15	15	0.9	17	16.1	9.4	>2500	>2500
25	1 m	1,999	13	13	13	12	11	12	13	11	11	11	0.9	13	12	5.3	>2500	>2500
26	1 m	19,280	12	13	13	14	14	13	14	13	14	14	0.7	14	13.4	6.7	>2500	>2500
27	1 m	21,245	16	15	16	16	17	16	15	16	16	15	0.6	17	15.8	9.1	>2500	>2500
28	1 m	20,344	18	19	19	19	20	20	19	20	20	20	0.7	20	19.4	12.7	1,969	>2500
29	1 m	20,836	18	19	18	19	19	18	19	19	19	20	0.6	20	18.8	12.1	2,066	>2500
30	1 m	19,714	18	18	18	18	19	19	19	18	19	19	0.5	19	18.5	11.8	2,119	>2500



- (#) - Floor Sample Location Number
 (#) - Wall Sample Location Number