

USGS

G-5000W Standard Two Analysis Report

Machine Name: PEPPER MILL 2
 JSER ID: GSTR

Group Date/Time: 2019/08/01 13:11:59.00
 System Serial #: 071302 upgrade kit

Sample Position	Sample Ident	Sample Type	Elapsed Count Time	Alpha Counts	Alpha Net cpm	Alpha Conc.	Beta Counts	Beta Net cpm	Beta Conc.
1	121 M-2037	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	13	2.5	3.052 pCi/swp
2	122	Swipes	2 Min 0 Sec	4	1.00	1.078 pCi/swp	17	4.5	5.493 pCi/swp
3	123	Swipes	2 Min 0 Sec	2	0.0	0.0 pCi/swp	17	4.5	5.493 pCi/swp
4	124	Swipes	2 Min 0 Sec	2	0.0	0.0 pCi/swp	12	2.0	2.441 pCi/swp
5	125	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	14	3.0	3.662 pCi/swp
6	126	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	9	0.50	0.6104 pCi/swp
7	127	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	18	5.0	6.104 pCi/swp
8	128	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	18	5.0	6.104 pCi/swp
9	129	Swipes	2 Min 0 Sec	2	0.0	0.0 pCi/swp	12	2.0	2.441 pCi/swp
10	130	Swipes	2 Min 0 Sec	4	1.00	1.078 pCi/swp	13	2.5	3.052 pCi/swp
11	131	Swipes	2 Min 0 Sec	4	1.00	1.078 pCi/swp	14	3.0	3.662 pCi/swp
12	132	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	15	3.5	4.273 pCi/swp
13	133	Swipes	2 Min 0 Sec	2	0.0	0.0 pCi/swp	9	0.50	0.6104 pCi/swp
14	134	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	12	2.0	2.441 pCi/swp
15	135	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	8	0.0	0.0 pCi/swp
16	136	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	9	0.50	0.6104 pCi/swp
17	137	Swipes	2 Min 0 Sec	2	0.0	0.0 pCi/swp	11	1.5	1.831 pCi/swp
18	138	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	11	1.5	1.831 pCi/swp
19	139	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	11	1.5	1.831 pCi/swp
20	140	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	18	5.0	6.104 pCi/swp
21	141	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	9	0.50	0.6104 pCi/swp
22	142	Swipes	2 Min 0 Sec	2	0.0	0.0 pCi/swp	17	4.5	5.493 pCi/swp
23	143	Swipes	2 Min 0 Sec	2	0.0	0.0 pCi/swp	14	3.0	3.662 pCi/swp
24	144	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	10	1.00	1.221 pCi/swp
25	145	Swipes	2 Min 0 Sec	2	0.0	0.0 pCi/swp	11	1.5	1.831 pCi/swp
26	146	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	12	2.0	2.441 pCi/swp
27	147	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	7	0.0	0.0 pCi/swp
28	148	Swipes	2 Min 0 Sec	2	0.0	0.0 pCi/swp	12	2.0	2.441 pCi/swp
29	149	Swipes	2 Min 0 Sec	3	0.50	0.5388 pCi/swp	17	4.5	5.493 pCi/swp
30	150	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	6	0.0	0.0 pCi/swp
31	151	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	11	1.5	1.831 pCi/swp
32	152	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	9	0.50	0.6104 pCi/swp
33	153	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	8	0.0	0.0 pCi/swp
34	154	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	12	2.0	2.441 pCi/swp
35	155	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	8	0.0	0.0 pCi/swp
36	156	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	12	2.0	2.441 pCi/swp
37	157	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	13	2.5	3.052 pCi/swp
38	158	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	9	0.50	0.6104 pCi/swp
39	159	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	12	2.0	2.441 pCi/swp
40	160	Swipes	2 Min 0 Sec	3	0.50	0.5388 pCi/swp	16	4.0	4.883 pCi/swp
41	161	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	15	3.5	4.273 pCi/swp
42	162	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	7	0.0	0.0 pCi/swp
43	163	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	10	1.00	1.221 pCi/swp
44	164	Swipes	2 Min 0 Sec	2	0.0	0.0 pCi/swp	9	0.50	0.6104 pCi/swp
45	165	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	13	2.5	3.052 pCi/swp
46	166	Swipes	2 Min 0 Sec	2	0.0	0.0 pCi/swp	16	4.0	4.883 pCi/swp
47	167	Swipes	2 Min 0 Sec	2	0.0	0.0 pCi/swp	14	3.0	3.662 pCi/swp
48	168	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	7	0.0	0.0 pCi/swp
49	169	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	7	0.0	0.0 pCi/swp
50	170	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	8	0.0	0.0 pCi/swp
51	LT1 Lab Truck Outside	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	9	0.50	0.6104 pCi/swp
52	LT2	Swipes	2 Min 0 Sec	2	0.0	0.0 pCi/swp	8	0.0	0.0 pCi/swp
53	LT3	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	9	0.50	0.6104 pCi/swp
54	LT4	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	31	11.5	14.038 pCi/swp
55	LT5	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	24	8.0	9.766 pCi/swp
56	LT6	Swipes	2 Min 0 Sec	2	0.0	0.0 pCi/swp	152	72.0	87.893 pCi/swp
57	LT7	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	23	7.5	9.155 pCi/swp
58	LT8	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	19	5.5	6.714 pCi/swp
59	LT9	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	19	5.5	6.714 pCi/swp

Gamma Products Inc 7730 w 114 Pl Palos Hills IL 60465 Phone 708-974-4100 Website www.gammaproducts.com

USGS

G-5000W Standard Two Analysis Report

Machine Name: PEPPER MILL 2
USER ID: GSTR

Group Date/Time: 2019/08/01 13:11:59.00
System Serial #: 071302 upgrade kit

Sample Position	Sample Ident	Sample Type	Elapsed Count Time	Alpha Counts	Alpha Net cpm	Alpha Conc.	Beta Counts	Beta Net cpm	Beta Conc.
60	LT10	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	12	2.0	2.441 pCi/swp

USGS

G-5000W Standard Two Analysis Report

Machine Name: PEPPER MILL 2
 JSER ID: GSTR

Group Date/Time: 2019/08/01 07:00:29.00
 System Serial #: 071302 upgrade kit

Sample Position	Sample Ident	Sample Type	Elapsed Count Time	Alpha Counts	Alpha Net cpm	Alpha Conc.	Beta Counts	Beta Net cpm	Beta Conc.
1	Background	eff	2 Min 0 Sec	2	1.00	0.4505 pCi/swp	8	4.0	1.802 pCi/swp
2	Beta Tc-99 S/N 1795-94	eff	2 Min 0 Sec	2	1.00	0.4505 pCi/swp	10170	5085.0	2290.54 pCi/swp
3	Alpha Am-241 S/N S-3512	eff	2 Min 0 Sec	13461	6730.5	3031.76 pCi/swp	4287	2143.5	965.54 pCi/swp

Handwritten:
 α 1.0 41.8 5.0
 β 4.0 36.9 9.6

USGS

G-5000W Standard Two Analysis Report

Machine Name: PEPPER MILL 2
 JSER ID: GSTR

Group Date/Time: 2019/08/02 09:03:56.00
 System Serial #: 071302 upgrade kit

Sample Position	Sample Ident	Sample Type	Elapsed Count Time	Alpha Counts	Alpha Net cpm	Alpha Conc.	Beta Counts	Beta Net cpm	Beta Conc.
1	LT11 RUP 83	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	17	5.0	6.038 pCi/swp
2	LT12	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	12	2.5	3.019 pCi/swp
3	LY13	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	15	4.0	4.831 pCi/swp
4	LT14	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	12	2.5	3.019 pCi/swp
5	LT15	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	20	6.5	7.85 pCi/swp
6	LT16	Swipes	2 Min 0 Sec	3	1.00	1.083 pCi/swp	11	2.0	2.415 pCi/swp
7	LT17	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	24	8.5	10.265 pCi/swp
8	LT18	Swipes	2 Min 0 Sec	4	1.5	1.624 pCi/swp	11	2.0	2.415 pCi/swp
9	LT19	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	6	0.0	0.0 pCi/swp
10	LT20	Swipes	2 Min 0 Sec	5	2.0	2.166 pCi/swp	22	7.5	9.057 pCi/swp
11	LT21	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	12	2.5	3.019 pCi/swp
12	LT22	Swipes	2 Min 0 Sec	3	1.00	1.083 pCi/swp	8	0.50	0.6038 pCi/swp
13	LT23	Swipes	2 Min 0 Sec	3	1.00	1.083 pCi/swp	19	6.0	7.246 pCi/swp
14	LT24	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	16	4.5	5.434 pCi/swp
15	LT25	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	14	3.5	4.227 pCi/swp
16	LT26	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	12	2.5	3.019 pCi/swp
17	LT27	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	16	4.5	5.434 pCi/swp
18	LT28	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	11	2.0	2.415 pCi/swp
19	LT29	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	12	2.5	3.019 pCi/swp
20	LT30	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	12	2.5	3.019 pCi/swp
21	LT31	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	9	1.00	1.208 pCi/swp
22	LT32 Lab Truck Cab	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	9	1.00	1.208 pCi/swp
23	LT33	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	13	3.0	3.623 pCi/swp
24	LT34	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	15	4.0	4.831 pCi/swp
25	LT35	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	13	3.0	3.623 pCi/swp
26	LT36	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	9	1.00	1.208 pCi/swp
27	LT37	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	7	0.0	0.0 pCi/swp
28	LT38	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	8	0.50	0.6038 pCi/swp
29	LT39	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	10	1.5	1.811 pCi/swp
30	LT40	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	10	1.5	1.811 pCi/swp
31	LT41	Swipes	2 Min 0 Sec	4	1.5	1.624 pCi/swp	9	1.00	1.208 pCi/swp
32	LT42	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	9	1.00	1.208 pCi/swp
33	LT43	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	6	0.0	0.0 pCi/swp
34	LT44	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	13	3.0	3.623 pCi/swp
35	LT45	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	11	2.0	2.415 pCi/swp
36	LT46	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	10	1.5	1.811 pCi/swp
37	LT47	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	9	1.00	1.208 pCi/swp
38	LT48	Swipes	2 Min 0 Sec	3	1.00	1.083 pCi/swp	9	1.00	1.208 pCi/swp
39	LT49 Lab Truck Inside	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	5	0.0	0.0 pCi/swp
40	LT50	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	7	0.0	0.0 pCi/swp
41	LT51	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	13	3.0	3.623 pCi/swp
42	LT52	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	7	0.0	0.0 pCi/swp
43	LT53	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	9	1.00	1.208 pCi/swp
44	LT54	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	10	1.5	1.811 pCi/swp
45	LT55	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	10	1.5	1.811 pCi/swp
46	LT56	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	13	3.0	3.623 pCi/swp
47	LT57	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	9	1.00	1.208 pCi/swp
48	LT58	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	9	1.00	1.208 pCi/swp
49	LT59	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	15	4.0	4.831 pCi/swp
50	LT60	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	10	1.5	1.811 pCi/swp
51	LT61	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	9	1.00	1.208 pCi/swp
52	LT62	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	13	3.0	3.623 pCi/swp
53	LT63	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	15	4.0	4.831 pCi/swp
54	LT64	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	7	0.0	0.0 pCi/swp
55	LT65	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	10	1.5	1.811 pCi/swp
56	LT66	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	9	1.00	1.208 pCi/swp
57	LT67	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	12	2.5	3.019 pCi/swp
58	LT68	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	12	2.5	3.019 pCi/swp
59	LT69	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	11	2.0	2.415 pCi/swp

Gamma Products Inc 7730 w 114 PI Paos Hills IL 60465 Phone 708-974-4100 Website www.gammaproducts.com

USGS

G-5000W Standard Two Analysis Report

Machine Name: PEPPER MILL 2
JSER ID: GSTR

Group Date/Time: 2019/08/02 09:03:56.00
System Serial #: 071302 upgrade kit

Sample Position	Sample Ident	Sample Type	Elapsed Count Time	Alpha Counts	Alpha Net cpm	Alpha Conc.	Beta Counts	Beta Net cpm	Beta Conc.
60	LT70	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	9	1.00	1.208 pCi/swp

USGS

G-5000W Standard Two Analysis Report

Machine Name: PEPPER MILL 2
 JSER ID: GSTR

Group Date/Time: 2019/08/02 11:37:05.00
 System Serial #: 071302 upgrade kit

Sample Position	Sample Ident	Sample Type	Elapsed Count Time	Alpha Counts	Alpha Net cpm	Alpha Conc.	Beta Counts	Beta Net cpm	Beta Conc.
1	LT71	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	27	10.0	12.076 pCi/swp
2	LT72	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	13	3.0	3.623 pCi/swp
3	LT73	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	9	1.00	1.208 pCi/swp
4	LT74	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	14	3.5	4.227 pCi/swp
5	LT75	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	10	1.5	1.811 pCi/swp
6	LT76	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	10	1.5	1.811 pCi/swp
7	LT77	Swipes	2 Min 0 Sec	3	1.00	1.083 pCi/swp	18	5.5	6.642 pCi/swp
8	LT78	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	15	4.0	4.831 pCi/swp
9	LT79	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	16	4.5	5.434 pCi/swp
10	LT80	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	14	3.5	4.227 pCi/swp
11	LT81	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	10	1.5	1.811 pCi/swp
12	LT82	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	9	1.00	1.208 pCi/swp
13	LT83	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	11	2.0	2.415 pCi/swp
14	LT84	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	14	3.5	4.227 pCi/swp
15	LT85	Swipes	2 Min 0 Sec	4	1.5	1.624 pCi/swp	10	1.5	1.811 pCi/swp
16	LT86	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	11	2.0	2.415 pCi/swp
17	LT87	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	12	2.5	3.019 pCi/swp
18	LT88	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	11	2.0	2.415 pCi/swp
19	LT89	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	11	2.0	2.415 pCi/swp
20	LT90	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	12	2.5	3.019 pCi/swp
21	LT91	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	13	3.0	3.623 pCi/swp
22	LT92	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	14	3.5	4.227 pCi/swp
23	LT93	Swipes	2 Min 0 Sec	3	1.00	1.083 pCi/swp	4	0.0	0.0 pCi/swp
24	LT94	Swipes	2 Min 0 Sec	3	1.00	1.083 pCi/swp	8	0.50	0.6038 pCi/swp
25	LT95	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	9	1.00	1.208 pCi/swp
26	LT96	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	8	0.50	0.6038 pCi/swp
27	LT97	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	13	3.0	3.623 pCi/swp
28	LT98	Swipes	2 Min 0 Sec	2	0.50	0.5414 pCi/swp	13	3.0	3.623 pCi/swp
29	LT99	Swipes	2 Min 0 Sec	1	0.0	0.0 pCi/swp	8	0.50	0.6038 pCi/swp
30	LT100	Swipes	2 Min 0 Sec	0	0.0	0.0 pCi/swp	8	0.50	0.6038 pCi/swp

USGS

G-5000W Standard Two Analysis Report

Machine Name: PEPPER MILL 2
 USER ID: GSTR

Group Date/Time: 2019/08/02 07:38:24.00
 System Serial #: 071302 upgrade kit

Sample Position	Sample Ident	Sample Type	Elapsed Count Time	Alpha Counts	Alpha Net cpm	Alpha Conc.	Beta Counts	Beta Net cpm	Beta Conc.
1	Background	eff	2 Min 0 Sec	1	0.50	0.2252 pCi/swp	7	3.5	1.577 pCi/swp
2	Beta Tc-99 S/N 1795-94	eff	2 Min 0 Sec	1	0.50	0.2252 pCi/swp	10298	5149.0	2319.37 pCi/swp
3	Alpha Am-241 S/N S-3512	eff	2 Min 0 Sec	13397	6698.5	3017.34 pCi/swp	4279	2139.5	963.74 pCi/swp

α 0.5 41.6 3.9
 β 3.5 37.3 9.0