

Appendix A

Air and Wipe Sample Results

Table 1: Analytical Air Sample Results

Performance Validation Study – Phase I – Ashland, Virginia – February 24-28, 2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Background	Hydrar	All	E. bay by center bay door	0.209	278	58.24	0.0047	3705-B-225-04
Background	MCEF	All	E. bay by center bay door	0.209	278	58.24	<0.00017	3705-B-225-03
Background	Hydrar	All	Middle of E. bay	0.212	278	58.94	0.0039	3705-B-225-02
Background	MCEF	All	Middle of E. bay	0.212	278	58.94	<0.00017	3705-B-225-01
Personal	Hydrar	Manufacturer A	Device operation	0.1535	112	17.19	0.012	3705-RA-227-22
Personal	MCEF	Manufacturer A	Device operation	0.1535	112	17.19	<0.00058	3705-RA-227-21
Personal	Hydrar	Manufacturer A	Device operation	0.154	112	17.25	0.011	3705-RA-227-24
Personal	MCEF	Manufacturer A	Device operation	0.154	112	17.25	<0.00058	3705-RA-227-23
Personal	Hydrar	Manufacturer A	Drum change	0.2525	12	3.03	0.02	3705-RA-227-34
Personal	MCEF	Manufacturer A	Drum change	0.2525	12	3.03	<0.0033	3705-RA-227-33
Area	Hydrar	Manufacturer A	By device exhaust	0.1515	112	16.97	0.0028	3705-RA-227-30
Area	MCEF	Manufacturer A	By device exhaust	0.1515	112	16.97	<0.00059	3705-RA-227-29
Area	Hydrar	Manufacturer A	By device exhaust	0.1535	112	17.19	0.011	3705-RA-227-32
Area	MCEF	Manufacturer A	By device exhaust	0.1535	112	17.19	<0.00058	3705-RA-227-31
Area	Hydrar	Manufacturer A	By device feed tube	0.1515	112	16.97	0.013	3705-RA-227-26
Area	MCEF	Manufacturer A	By device feed tube	0.1515	112	16.97	<0.00059	3705-RA-227-25
Area	Hydrar	Manufacturer A	By device feed tube	0.1545	112	17.3	0.011	3705-RA-227-28
Area	MCEF	Manufacturer A	By device feed tube	0.1545	112	17.3	<0.00058	3705-RA-227-27
Personal	Hydrar	Manufacturer B	Device operation	0.153	86	13.16	0.012	3705-DA-228-50
Personal	MCEF	Manufacturer B	Device operation	0.153	86	13.16	<0.00076	3705-DA-228-49
Personal	Hydrar	Manufacturer B	Device operation	0.151	86	12.99	0.013	3705-DA-228-52
Personal	MCEF	Manufacturer B	Device operation	0.151	86	12.99	<0.00077	3705-DA-228-51
Personal	Hydrar	Manufacturer B	Drum change	0.253	13	3.29	0.025	3705-DA-228-62
Personal	MCEF	Manufacturer B	Drum change	0.253	13	3.29	<0.0030	3705-DA-228-61

Performance Validation Study – Phase I – Ashland, Virginia – February 24-28, 2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Area	Hydrar	Manufacturer B	By device exhaust	0.1535	86	13.2	0.012	3705-DA-228-58
Area	MCEF	Manufacturer B	By device exhaust	0.1535	86	13.2	<0.00076	3705-DA-228-57
Area	Hydrar	Manufacturer B	By device exhaust	0.1515	86	13.03	0.012	3705-DA-228-60
Area	MCEF	Manufacturer B	By device exhaust	0.1515	86	13.03	<0.00077	3705-DA-228-59
Area	Hydrar	Manufacturer B	By device feed tube	0.145	86	12.47	0.0039	3705-DA-228-54
Area	MCEF	Manufacturer B	By device feed tube	0.145	86	12.47	<0.00080	3705-DA-228-53
Area	Hydrar	Manufacturer B	By device feed tube	0.1515	86	13.03	0.012	3705-DA-228-56
Area	MCEF	Manufacturer B	By device feed tube	0.1515	86	13.03	<0.00077	3705-DA-228-55
Personal	Hydrar	Manufacturer C	Device operation	0.153	100	15.3	0.012	3705-AA-226-06
Personal	MCEF	Manufacturer C	Device operation	0.153	100	15.3	<0.00065	3705-AA-226-05
Personal	Hydrar	Manufacturer C	Device operation	0.1505	100	15.05	0.015	3705-AA-226-08
Personal	MCEF	Manufacturer C	Device operation	0.1505	100	15.05	<0.00066	3705-AA-226-07
Personal	Hydrar	Manufacturer C	Drum change	0.2545	18	4.58	0.019	3705-AA-226-20
Personal	MCEF	Manufacturer C	Drum change	0.2545	18	4.58	<0.0022	3705-AA-226-19
Personal	Hydrar	Manufacturer C	Filter change	0.2555	12	3.07	0.019	3705-AA-226-18
Personal	MCEF	Manufacturer C	Filter change	0.2555	12	3.07	<0.00033	3705-AA-226-17
Area	Hydrar	Manufacturer C	By device exhaust	0.1209	100	12.09	0.0055	3705-AA-226-10
Area	MCEF	Manufacturer C	By device exhaust	0.1209	100	12.09	<0.00083	3705-AA-226-09
Area	Hydrar	Manufacturer C	By device exhaust	0.15	100	15	0.01	3705-AA-226-12
Area	MCEF	Manufacturer C	By device exhaust	0.15	100	15	<0.00067	3705-AA-226-11
Area	Hydrar	Manufacturer C	By device feed tube	0.125	100	12.56	0.0095	3705-AA-226-14
Area	MCEF	Manufacturer C	By device feed tube	0.125	100	12.56	<0.00080	3705-AA-226-13
Area	Hydrar	Manufacturer C	By device feed tube	0.158	100	15.8	0.013	3705-AA-226-16
Area	MCEF	Manufacturer C	By device feed tube	0.158	100	15.8	<0.00063	3705-AA-226-15
Personal	Hydrar	Manufacturer D	Device operation	0.153	55	8.42	0.04	3705-HA-227-36
Personal	MCEF	Manufacturer D	Device operation	0.153	55	8.42	<0.0012	3705-HA-227-35

Performance Validation Study – Phase I – Ashland, Virginia – February 24-28, 2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Personal	Hydrar	Manufacturer D	Device operation	0.156	55	8.58	0.13	3705-HA-227-38
Personal	MCEF	Manufacturer D	Device operation	0.156	55	8.58	<0.0012	3705-HA-227-37
Personal	Hydrar	Manufacturer D	Drum change	0.154	6	0.924	0.19	3705-HA-227-48
Personal	MCEF	Manufacturer D	Drum change	0.154	6	0.924	<0.011	3705-HA-227-47
Area	Hydrar	Manufacturer D	By device exhaust	0.1505	55	8.28	0.33	370-5-HA-227-44
Area	MCEF	Manufacturer D	By device exhaust	0.1505	55	8.28	<0.0012	3705-HA-227-43
Area	Hydrar	Manufacturer D	By device exhaust	0.253	55	13.92	0.36	3705-HA-227-46
Area	MCEF	Manufacturer D	By device exhaust	0.253	55	13.92	<0.00072	3705-HA-227-45
Area	Hydrar	Manufacturer D	By device feed tube	0.1515	55	8.33	0.58	3705-HA-227-40
Area	MCEF	Manufacturer D	By device feed tube	0.1515	55	8.33	<0.0013	3705-HA-227-39
Area	Hydrar	Manufacturer D	By device feed tube	0.155	53	8.23	0.64	3705-HA-227-42
Area	MCEF	Manufacturer D	By device feed tube	0.155	53	8.23	<0.0012	3705-HA-227-41

Performance Validation Study – Phase II – Ashland, Virginia – June 9-13, 2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Personal	Hydrar	Manufacturer A	Device operation (RS)	0.195	64	12.5	0.012	3705-RA-610-33
Personal	MCEF	Manufacturer A	Device operation (RS)	0.195	64	12.5	<0.00080	3705-RA-610-34
Personal	Hydrar	Manufacturer A	Device operation (LS)	0.196	64	12.5	0.013	3705-RA-610-35
Personal	MCEF	Manufacturer A	Device operation (LS)	0.196	64	12.5	<0.00080	3705-RA-610-36
Personal	Hydrar	Manufacturer A	Drum change	0.261	12	3.1	0.031	3705-RA-610-45
Personal	MCEF	Manufacturer A	Drum change	0.261	12	3.1	<0.0032	3705-RA-610-46
Personal	Hydrar	Manufacturer A	Ceiling #1	0.247	4	1	0.067	3705-RA-610-51
Personal	MCEF	Manufacturer A	Ceiling #1	0.247	4	1	<0.010	3705-RA-610-52

Performance Validation Study – Phase II – Ashland, Virginia – June 9-13, 2003

Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Personal	Hydrar	Manufacturer A	Ceiling #2	0.247	4	1	0.042	3705-RA-610-53
Personal	MCEF	Manufacturer A	Ceiling #2	0.247	4	1	<0.010	3705-RA-610-54
Area	Hydrar	Manufacturer A	By device exhaust	0.197	58	11.4	0.015	3705-RA-610-37
Area	MCEF	Manufacturer A	By device exhaust	0.197	58	11.4	<0.00088	3705-RA-610-38
Area	Hydrar	Manufacturer A	By device exhaust	0.198	58	11.5	0.014	3705-RA-610-39
Area	MCEF	Manufacturer A	By device exhaust	0.198	58	11.5	<0.00087	3705-RA0610-40
Area	Hydrar	Manufacturer A	By device feed tube	0.2	58	11.6	0.015	3705-RA-610-41
Area	MCEF	Manufacturer A	By device feed tube	0.2	58	11.6	<0.00086	3705-RA-610-42
Area	Hydrar	Manufacturer A	By device feed tube	0.186	58	10.8	0.013	3705-RA-610-43
Area	MCEF	Manufacturer A	By device feed tube	0.186	58	10.8	<0.00093	3705-RA-610-44
Personal	Hydrar	Manufacturer B	Device operation (RS)	0.2	34	6.8	0.034	3705-DA-611-91
Personal	MCEF	Manufacturer B	Device operation (RS)	0.2	34	6.8	<0.0015	3705-DA-611-92
Personal	Hydrar	Manufacturer B	Device operation (LS)	0.2	34	6.8	0.034	3705-DA-611-93
Personal	MCEF	Manufacturer B	Device operation (LS)	0.2	34	6.8	<0.0015	3705-DA-611-94
Personal	Hydrar	Manufacturer B	Drum change	0.257	12	3.1	0.074	3705-DA-611-103
Personal	MCEF	Manufacturer B	Drum change	0.257	12	3.1	<0.0032	3705-DA-611-104
Personal	Hydrar	Manufacturer B	Ceiling #1	0.26	4	1	0.094	3705-DA-611-105
Personal	MCEF	Manufacturer B	Ceiling #1	0.26	4	1	<0.010	3705-DA-611-106
Personal	Hydrar	Manufacturer B	Ceiling #2	0.26	4	1	0.11	3705-DA-611-107
Personal	MCEF	Manufacturer B	Ceiling #2	0.26	4	1	<0.010	3705-DA-611-108
Area	Hydrar	Manufacturer B	By device exhaust	0.212	34	7.2	0.026	3705-DA-611-95
Area	MCEF	Manufacturer B	By device exhaust	0.212	34	7.2	<0.0014	3705-DA-611-96
Area	Hydrar	Manufacturer B	By device exhaust	0.198	34	6.7	0.034	3705-DA-611-97
Area	MCEF	Manufacturer B	By device exhaust	0.198	34	6.7	<0.0015	3705-DA-611-98
Area	Hydrar	Manufacturer B	By device feed tube	0.202	34	6.9	0.033	3705-DA-611-99
Area	MCEF	Manufacturer B	By device feed tube	0.202	34	6.9	<0.0014	3705-DA-611-100

Performance Validation Study – Phase II – Ashland, Virginia – June 9-13, 2003

Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Area	Hydrar	Manufacturer B	By device feed tube	0.2	34	6.8	0.034	3705-DA-611-101
Area	MCEF	Manufacturer B	By device feed tube	0.2	34	6.8	<0.0015	3705-DA-611-102
Personal	Hydrar	Manufacturer C	Device operation (LS)	0.203	37	7.5	0.039	3705-AA-612-147
Personal	MCEF	Manufacturer C	Device operation (LS)	0.203	37	7.5	<0.0013	3705-AA-612-148
Personal	Hydrar	Manufacturer C	Device operation (RS)	0.199	37	7.4	0.018	3705-AA-612-145
Personal	MCEF	Manufacturer C	Device operation (RS)	0.199	37	7.4	<0.0013	3507-AA-612-146
Personal	Hydrar	Manufacturer C	Filter change	0.255	12	3.1	0.039	3705-AA-612-157
Personal	MCEF	Manufacturer C	Filter change	0.255	12	3.1	<0.0032	3705-AA-612-158
Personal	Hydrar	Manufacturer C	Drum change	0.255	14	3.6	0.072	3705-AA-612-159
Personal	MCEF	Manufacturer C	Drum change	0.255	14	3.6	<0.0028	3705-AA-612-160
Personal	Hydrar	Manufacturer C	Ceiling #1	0.254	4	1	0.1	3705-AA-612-161
Personal	MCEF	Manufacturer C	Ceiling #1	0.254	4	1	<0.010	3705-AA-612-162
Personal	Hydrar	Manufacturer C	Ceiling #2	0.254	4	1	0.21	3705-AA-612-163
Personal	MCEF	Manufacturer C	Ceiling #2	0.254	4	1	<0.010	3705-AA-612-164
Area	Hydrar	Manufacturer C	By device exhaust	0.2	37	7.4	0.039	3705-AA-612-149
Area	MCEF	Manufacturer C	By device exhaust	0.2	37	7.4	<0.0013	3705-AA-612-150
Area	Hydrar	Manufacturer C	By device exhaust	0.206	37	7.6	0.042	3705-AA-612-151
Area	MCEF	Manufacturer C	By device exhaust	0.206	37	7.6	<0.0013	3705-AA-612-152
Area	Hydrar	Manufacturer C	By device feed tube	0.209	37	7.7	0.042	3705-AA-612-153
Area	MCEF	Manufacturer C	By device feed tube	0.209	37	7.7	<0.0013	3705-AA-612-154
Area	Hydrar	Manufacturer C	By device feed tube	0.203	37	7.5	0.039	3705-AA-612-155
Area	MCEF	Manufacturer C	By device feed tube	0.203	37	7.5	<0.0013	3705-AA-612-156

Extended Field Test #1 – Phoenix, Arizona – March 24-28, 2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Background	Hydrar	All	E. of containment in warehouse	0.1365	205	27.98	0.0059	3705-B-324-03
Background	MCEF	All	E. of containment in warehouse	0.1365	205	27.98	<0.00036	3705-B-324-04
Background	Hydrar	All	N. of containment in warehouse	0.155	205	31.78	0.014	3705-B-324-01
Background	MCEF	All	N. of containment in warehouse	0.155	205	31.78	<0.00031	3705-B-324-02
Personal	Hydrar	Manufacturer A	Device operation - 2 drums	0.1635	162	26.49	0.074	3705-RA-324-05
Personal	MCEF	Manufacturer A	Device operation - 2 drums	0.1635	162	26.49	0.00053	3705-RA-324-06
Personal	Hydrar	Manufacturer A	Device operation - 2 drums	0.1505	162	24.38	0.043	3705-RA-324-07
Personal	MCEF	Manufacturer A	Device operation - 2 drums	0.1505	162	24.38	<0.00041	3705-RA-324-08
Personal	Hydrar	Manufacturer A	2nd drum change	0.257	22	5.65	0.075	3705-RA-324-13
Personal	MCEF	Manufacturer A	2nd drum change	0.257	22	5.65	<0.0018	3705-RA-324-14
Area	Hydrar	Manufacturer A	By device exhaust	0.156	162	25.27	0.045	3705-RA-324-09
Area	MCEF	Manufacturer A	By device exhaust	0.156	162	25.27	<0.00040	3705-RA-324-10
Area	Hydrar	Manufacturer A	By device feed tube	0.1765	162	28.59	0.11	3705-RA-324-11
Area	MCEF	Manufacturer A	By device feed tube	0.1765	162	28.59	0.0022	3705-RA-324-12
Overnight	Hydrar	Manufacturer A	By device exhaust	0.163	418	68.13	0.086	3705-RA-324-15
Overnight	MCEF	Manufacturer A	By device exhaust	0.163	418	68.13	<0.00015	3705-RA-324-16
Overnight	Hydrar	Manufacturer A	By device feed tube	0.1515	438	66.36	0.021	3705-RA-324-17
Overnight	MCEF	Manufacturer A	By device feed tube	0.1515	438	66.36	<0.00015	3705-RA-324-18
Personal	Hydrar	Manufacturer B	Device operation - 2 drums	0.23	125	28.75	0.084	3705-DA-325-19
Personal	MCEF	Manufacturer B	Device operation - 2 drums	0.23	125	28.75	0.00059	3705-DA-325-20
Personal	Hydrar	Manufacturer B	Device operation - 2 drums	0.1355	125	16.94	0.016	3705-DA-325-21
Personal	MCEF	Manufacturer B	Device operation - 2 drums	0.1355	125	16.94	<0.00059	3705-DA-325-22
Personal	Hydrar	Manufacturer B	1st drum change	0.2115	12	2.54	0.13	3705-DA-325-27
Personal	MCEF	Manufacturer B	1st drum change	0.2115	12	2.54	<0.0039	3705-DA-325-28
Personal	Hydrar	Manufacturer B	2nd drum change	0.2275	13	2.96	0.078	3705-DA-325-33
Personal	MCEF	Manufacturer B	2nd drum change	0.2275	13	2.96	<0.0034	3705-DA-325-34

Extended Field Test #1 – Phoenix, Arizona – March 24-28, 2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Area	Hydrar	Manufacturer B	By device exhaust	0.136	125	17	0.035	3705-DA-325-23
Area	MCEF	Manufacturer B	By device exhaust	0.136	125	17	<0.00059	3705-DA-325-24
Area	Hydrar	Manufacturer B	By device feed tube	0.1995	125	24.94	0.07	3705-DA-325-25
Area	MCEF	Manufacturer B	By device feed tube	0.1995	125	24.94	<0.00040	3705-DA-325-26
Overnight	Hydrar	Manufacturer B	By device exhaust	0.1218	516	62.85	0.027	3705-DA-325-29
Overnight	MCEF	Manufacturer B	By device exhaust	0.1218	516	62.85	<0.00016	3705-DA-325-30
Overnight	Hydrar	Manufacturer B	By device feed tube	0.1345	516	69.4	0.026	3705-DA-325-31
Overnight	MCEF	Manufacturer B	By device feed tube	0.1345	516	69.4	<0.00014	3705-DA-325-32
Personal	Hydrar	Manufacturer C	Device operation - 2 drums	0.1515	196	29.69	0.03	3705-AA-327-43
Personal	MCEF	Manufacturer C	Device operation - 2 drums	0.1515	196	29.69	<0.00034	3705-AA-327-44
Personal	Hydrar	Manufacturer C	Device operation - 2 drums	0.162	196	31.75	0.074	3705-AA-327-45
Personal	MCEF	Manufacturer C	Device operation - 2 drums	0.162	196	31.75	<0.00031	3705-AA-327-46
Personal	Hydrar	Manufacturer C	1st filter change	0.2455	22	5.4	0.076	3705-AA-327-51
Personal	MCEF	Manufacturer C	1st filter change	0.2455	22	5.4	<0.0018	3705-AA-327-52
Personal	Hydrar	Manufacturer C	1st drum change	0.2425	14	3.4	0.16	3705-AA-327-53
Personal	MCEF	Manufacturer C	1st drum change	0.2425	14	3.4	<0.0029	3705-AA-327-54
Personal	Hydrar	Manufacturer C	3rd filter change	0.2545	12	3.05	0.021	3705-AA-327-59
Personal	MCEF	Manufacturer C	3rd filter change	0.2454	12	3.05	<0.0033	3705-AA-327-60
Area	Hydrar	Manufacturer C	By device exhaust	0.149	196	29.2	0.014	3705-AA-327-47
Area	MCEF	Manufacturer C	By device exhaust	0.149	196	29.2	<0.00034	3705-AA-327-48
Area	Hydrar	Manufacturer C	By device feed tube	0.1395	196	27.34	0.071	3705-AA-327-49
Area	MCEF	Manufacturer C	By device feed tube	0.1395	196	27.34	<0.00037	3705-AA-327-50
Overnight	Hydrar	Manufacturer C	By device exhaust	0.1	776	77.6	0.0095	3705-AA-327-55
Overnight	MCEF	Manufacturer C	By device exhaust	0.1	776	77.6	<0.00013	3705-AA-327-56
Overnight	Hydrar	Manufacturer C	By device feed tube	0.1012	776	78.53	0.014	3705-AA-327-57
Overnight	MCEF	Manufacturer C	By device feed tube	0.1012	776	78.53	<0.00013	3705-AA-327-58

Extended Field Test #1 – Phoenix, Arizona – March 24-28, 2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Personal	Hydrar	Manufacturer D	Device operation - 2 drums	0.189	21	3.97	0.13	3705-HA-326-35
Personal	MCEF	Manufacturer D	Device operation - 2 drums	0.189	21	3.97	<0.0025	3705-HA-326-36
Personal	Hydrar	Manufacturer D	Device operation - 2 drums	0.1485	21	3.12	0.11	3705-HA-326-37
Personal	MCEF	Manufacturer D	Device operation - 2 drums	0.1485	21	3.12	<0.0032	3705-HA-326-38
Area	Hydrar	Manufacturer D	By device exhaust	0.1555	186	28.92	0.065	3705-HA-326-39
Area	MCEF	Manufacturer D	By device exhaust	0.1555	186	28.92	<0.00035	3705-HA-326-40
Area	Hydrar	Manufacturer D	By device feed tube	0.1605	186	29.85	0.022	3705-HA-326-41
Area	MCEF	Manufacturer D	By device feed tube	0.1605	186	29.85	<0.00034	3705-HA-326-42

Extended Field Test #2 – Melbourne, Florida – April 28 - May 2, 2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Background	Hydrar	All	18 ft N. of dock door	0.2175	298	64.8	0.012	3705-B-429-03
Background	MCEF	All	18 ft N. of dock door	0.2175	298	64.8	<0.00015	3705-B-429-04
Background	Hydrar	All	24 ft. E. of dock door	0.20525	298	61.16	0.016	3705-B-429-01
Background	MCEF	All	24 ft. E. of dock door	0.20525	298	61.16	<0.00016	3705-B-429-02
Personal	Hydrar	Manufacturer A	Device operation (LS) - 2 drums	0.154	142	21.87	0.018	3705-RA-51-61
Personal	MCEF	Manufacturer A	Device operation (LS) - 2 drums	0.154	142	21.87	<0.00046	3705-RA-51-62
Personal	Hydrar	Manufacturer A	Device operation (RS) - 1st drum	0.1515	79	11.97	0.026	3705-RA-51-65
Personal	MCEF	Manufacturer A	Device operation (RS) - 1st drum	0.1515	79	11.97	<0.00083	3705-RA-51-66
Personal	Hydrar	Manufacturer A	Device operation (LS) - 1st drum	0.1495	79	11.81	0.024	3705-RA-51-63
Personal	MCEF	Manufacturer A	Device operation (LS) - 1st drum	0.1495	79	11.81	<0.00085	3705-RA-51-64
Personal	Hydrar	Manufacturer A	Device operation (RS) - 2nd drum	0.15	63	9.45	0.016	3705-RA-51-81
Personal	MCEF	Manufacturer A	Device operation (RS) - 2nd drum	0.15	63	9.45	<0.0011	3705-RA-51-82

Extended Field Test #2 – Melbourne, Florida – April 28 - May 2, 2003

Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Personal	Hydrar	Manufacturer A	Device operation (LS) - 2nd drum	0.148	63	9.32	0.017	3705-RA-51-79
Personal	MCEF	Manufacturer A	Device operation (LS) - 2nd drum	0.148	63	9.32	<0.0011	3705-RA-51-80
Personal	Hydrar	Manufacturer A	1st drum change	0.256	12	3.07	0.075	3705-RA-51-71
Personal	MCEF	Manufacturer A	1st drum change	0.256	12	3.07	<0.0033	3705-RA-51-72
Personal	Hydrar	Manufacturer A	2nd drum change	0.2485	12	2.98	0.081	3705-RA-52-43
Personal	MCEF	Manufacturer A	2nd drum change	0.2485	12	2.98	<0.0034	3705-RA-52-44
Personal	Hydrar	Manufacturer A	Ceiling #1 - 1st drum change	0.253	4	1.01	0.17	3705-RA-51-75
Personal	MCEF	Manufacturer A	Ceiling #1 - 1st drum change	0.253	4	1.01	<0.0099	3705-RA-51-76
Personal	Hydrar	Manufacturer A	Ceiling #2 - 1st drum change	0.253	4	1.01	0.11	3705-RA-51-77
Personal	MCEF	Manufacturer A	Ceiling #2 - 1st drum change	0.253	4	1.01	<0.0099	3705-RA-51-78
Area	Hydrar	Manufacturer A	By device exhaust	0.1565	142	22.22	0.018	3705-RA-51-67
Area	MCEF	Manufacturer A	By device exhaust	0.1565	142	22.22	<0.00045	3705-RA-51-68
Area	Hydrar	Manufacturer A	By device feed tube	0.1555	142	22.08	0.0063	3705-RA-51-69
Area	MCEF	Manufacturer A	By device feed tube	0.1555	142	22.08	<0.00045	3705-RA-51-70
Overnight	Hydrar	Manufacturer A	By device exhaust	0.154	874	134.6	0.013	3705-RA-51-83
Overnight	MCEF	Manufacturer A	By device exhaust	0.154	874	134.6	<0.00007	3705-RA-51-84
Overnight	Hydrar	Manufacturer A	By device feed tube	0.154	874	134.6	0.013	3705-RA-51-85
Overnight	MCEF	Manufacturer A	By device feed tube	0.154	874	134.6	<0.00007	3705-RA-51-86
Overnight	Hydrar	Manufacturer A	Outside containment	0.1575	874	137.66	0.017	3705-RA-51-87
Overnight	MCEF	Manufacturer A	Outside containment	0.1575	874	137.66	<0.00007	3705-RA-51-88
Personal	Hydrar	Manufacturer B	Device operation (RS) - 2 drums ¹	0.15833	163	25.81	0.14	3705-DA-429-05
Personal	MCEF	Manufacturer B	Device operation (RS) - 2 drums ¹	0.15833	163	25.81	0.00066	3705-DA-429-06
Personal	Hydrar	Manufacturer B	Device operation (LS) - 2 drums ¹	0.14867	163	24.23	0.12	3705-DA-429-07
Personal	MCEF	Manufacturer B	Device operation (LS) - 2 drums ¹	0.14867	163	24.23	<0.00041	3705-DA-429-08
Personal	Hydrar	Manufacturer B	1st drum change ¹	0.2535	12	3.04	0.015	3705-DA-429-13
Personal	MCEF	Manufacturer B	1st drum change ¹	0.2535	12	3.04	<0.0033	3705-DA-429-14

Extended Field Test #2 – Melbourne, Florida – April 28 - May 2, 2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Personal	Hydrar	Manufacturer B	2nd drum change ¹	0.254	20	5.08	0.041	3705-DA-429-15
Personal	MCEF	Manufacturer B	2nd drum change ¹	0.254	20	5.08	<0.0020	3705-DA-429-16
Personal	Hydrar	Manufacturer B	Ceiling #1 - 2nd drum change ¹	0.2535	4	1.01	0.23	3705-DA-429-23
Personal	MCEF	Manufacturer B	Ceiling #1 - 2nd drum change ¹	0.2535	4	1.01	<0.0099	3705-DA-429-24
Personal	Hydrar	Manufacturer B	Ceiling #2 - 2nd drum change ¹	0.2535	4	1.01	0.64	3705-DA-429-25
Personal	MCEF	Manufacturer B	Ceiling #2 - 2nd drum change ¹	0.2535	4	1.01	<0.0099	3705-DA-429-26
Area	Hydrar	Manufacturer B	By device exhaust ¹	0.153	163	24.94	0.13	3705-DA-429-09
Area	MCEF	Manufacturer B	By device exhaust ¹	0.153	163	24.94	0.00072	3705-DA-429-10
Area	Hydrar	Manufacturer B	By device feed tube ¹	0.154	163	25.1	0.27	3705-DA-429-11
Area	MCEF	Manufacturer B	By device feed tube ¹	0.154	163	25.1	0.0019	3705-DA-429-12
Overnight	Hydrar	Manufacturer B	By device exhaust ¹	0.147	714	104.96	0.035	3705-DA-429-17
Overnight	MCEF	Manufacturer B	By device exhaust ¹	0.147	714	104.96	<0.00009	3705-DA-429-18
Overnight	Hydrar	Manufacturer B	By device feed tube ¹	0.149	714	106.39	0.036	3705-DA-429-19
Overnight	MCEF	Manufacturer B	By device feed tube ¹	0.149	714	106.39	<0.00009	3705-DA-429-20
Overnight	Hydrar	Manufacturer B	Outside containment ¹	0.153	714	109.24	0.021	3705-DA-429-21
Overnight	MCEF	Manufacturer B	Outside containment ¹	0.153	714	109.24	<0.00009	3705-DA-429-22
Personal	Hydrar	Manufacturer B	Device operation (RS) - 1 drum ²	0.1535	56	8.6	0.088	3705-DA-52-91
Personal	MCEF	Manufacturer B	Device operation (RS) - 1 drum ²	0.1535	56	8.6	<0.0012	3705-DA-52-92
Personal	Hydrar	Manufacturer B	Device operation (LS) - 1 drum ²	0.1535	56	8.6	0.094	3705-DA-52-89
Personal	MCEF	Manufacturer B	Device operation (LS) - 1 drum ²	0.1535	56	8.6	<0.0012	3705-DA-52-90
Area	Hydrar	Manufacturer B	By device exhaust ²	0.1525	57	8.69	0.076	3705-DA-52-93
Area	MCEF	Manufacturer B	By device exhaust ²	0.1525	57	8.69	<0.0012	3705-DA-52-94
Area	Hydrar	Manufacturer B	By device feed tube ²	0.152	57	8.66	0.09	3705-DA-52-95
Area	MCEF	Manufacturer B	By device feed tube ²	0.152	57	8.66	<0.0012	3705-DA-52-96
Personal	Hydrar	Manufacturer B	3rd drum change ²	0.256	12	3.07	0.2	3705-DA-52-97
Personal	MCEF	Manufacturer B	3rd drum change ²	0.256	12	3.07	<0.0033	3705-DA-52-98

Extended Field Test #2 – Melbourne, Florida – April 28 - May 2, 2003

Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Personal	Hydrar	Manufacturer C	Device operation (LS) - 2 drums	0.154	145	22.33	0.063	3705-AA-430-27
Personal	MCEF	Manufacturer C	Device operation (LS) - 2 drums	0.154	145	22.33	<0.00045	3705-AA-430-28
Personal	Hydrar	Manufacturer C	Device operation (RS) - 1st drum	0.1545	81	12.51	0.0047	3705-AA-430-29
Personal	MCEF	Manufacturer C	Device operation (RS) - 1st drum	0.1545	81	12.51	<0.00080	3705-AA-430-30
Personal	Hydrar	Manufacturer C	Device operation (LS) - 1st drum	0.153	81	12.39	0.07	3705-AA-430-31
Personal	MCEF	Manufacturer C	Device operation (LS) - 1st drum	0.153	81	12.39	<0.00081	3705-AA-430-32
Personal	Hydrar	Manufacturer C	Device operation (RS) - 2nd drum	0.1555	67	10.42	0.034	3705-AA-430-55
Personal	MCEF	Manufacturer C	Device operation (RS) - 2nd drum	0.1555	67	10.42	<0.00096	3705-AA-430-56
Personal	Hydrar	Manufacturer C	Device operation (LS) - 2nd drum	0.1505	67	10.08	0.052	3705-AA-430-57
Personal	MCEF	Manufacturer C	Device operation (LS) - 2nd drum	0.1505	67	10.08	<0.00099	3705-AA-430-58
Personal	Hydrar	Manufacturer C	1st filter change	0.2485	12	2.98	0.064	3705-AA-430-37
Personal	MCEF	Manufacturer C	1st filter change	0.2485	12	2.98	<0.0034	3705-AA-430-38
Personal	Hydrar	Manufacturer C	1st drum change	0.2485	17	4.22	0.11	3705-AA-430-39
Personal	MCEF	Manufacturer C	1st drum change	0.2485	17	4.22	<0.0024	3705-AA-430-40
Personal	Hydrar	Manufacturer C	3rd filter change	0.2485	12	2.98	0.06	3705-AA-430-41
Personal	MCEF	Manufacturer C	3rd filter change	0.2485	12	2.98	<0.0034	3705-AA-430-42
Personal	Hydrar	Manufacturer C	2nd drum change	0.2555	12	3.07	0.036	3705-AA-430-59
Personal	MCEF	Manufacturer C	2nd drum change	0.2555	12	3.07	<0.0033	3705-AA-430-60
Personal	Hydrar	Manufacturer C	Ceiling #1 - 1st drum change	0.2475	4	0.99	0.12	3705-AA-430-45
Personal	MCEF	Manufacturer C	Ceiling #1 - 1st drum change	0.2475	4	0.99	<0.010	3705-AA-430-46
Personal	Hydrar	Manufacturer C	Ceiling #2 - 1st drum change	0.2475	4	0.99	0.26	3705-AA-430-47
Personal	MCEF	Manufacturer C	Ceiling #2 - 1st drum change	0.2475	4	0.99	<0.010	3705-AA-430-48
Area	Hydrar	Manufacturer C	By device exhaust	0.154	148	22.79	0.048	3705-AA-430-33
Area	MCEF	Manufacturer C	By device exhaust	0.154	148	22.79	<0.00044	3705-AA-430-34
Area	Hydrar	Manufacturer C	By device feed tube	0.154	148	22.79	0.048	3705-AA-430-35
Area	MCEF	Manufacturer C	By device feed tube	0.154	148	22.79	<0.00044	3705-AA-430-36

Extended Field Test #2 – Melbourne, Florida – April 28 - May 2, 2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Overnight	Hydrar	Manufacturer C	By device exhaust	0.152	991	150.63	0.019	3705-AA-430-49
Overnight	MCEF	Manufacturer C	By device exhaust	0.152	991	150.63	<0.00007	3705-AA-430-50
Overnight	Hydrar	Manufacturer C	By device feed tube	0.1505	991	149.15	0.021	3705-AA-430-51
Overnight	MCEF	Manufacturer C	By device feed tube	0.1505	991	149.15	<0.00007	3705-AA-430-52
Overnight	Hydrar	Manufacturer C	Outside containment	0.1555	991	154.1	0.016	3705-AA-430-53
Overnight	MCEF	Manufacturer C	Outside containment	0.1555	991	154.1	<0.00006	3705-AA-430-54

Extended Field Test #3 – Ashland, Virginia – June 9-13,2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Background	Hydrar	All	E. bay near door to W. bay	0.205	264	54.1	0.0086	3705-BA-69-03
Background	MCEF	All	E. bay near door to W. bay	0.205	264	54.1	<0.00018	3705-BA-69-04
Background	Hydrar	All	Middle of E. bay	0.221	264	58.3	0.013	3705-BA-69-01
Background	MCEF	All	Middle of E. bay	0.221	264	58.3	<0.00017	3705-BA-69-02
Personal	Hydrar	AERC	AERC personnel sample	0.202	89	18	0.089	3705-FA-611-113
Personal	MCEF	AERC	AERC personnel sample	0.202	89	18	0.0023	3705-FA-611-114
Personal	Hydrar	AERC	AERC personnel sample	0.202	89	18	0.073	3705-FA-611-115
Personal	MCEF	AERC	AERC personnel sample	0.202	89	18	0.0023	3705-FA-611-116
Personal	Hydrar	Manufacturer A	Device operation (LS) - 2 drums	0.195	129	25.2	0.0093	3705-RA-610-05
Personal	MCEF	Manufacturer A	Device operation (LS) - 2 drums	0.195	129	25.2	<0.00040	3705-RA-610-06
Personal	Hydrar	Manufacturer A	Device operation (RS) - 1st drum	0.202	67	13.5	0.011	3705-RA-610-09
Personal	MCEF	Manufacturer A	Device operation (RS) - 1st drum	0.202	67	13.5	<0.00074	3705-RA-610-10
Personal	Hydrar	Manufacturer A	Device operation (LS) - 1st drum	0.2	67	13.4	0.0062	3705-RA-610-07
Personal	MCEF	Manufacturer A	Device operation (LS) - 1st drum	0.2	67	13.4	<0.00075	3705-RA-610-08
Personal	Hydrar	Manufacturer A	Device operation (RS) - 2nd drum	0.198	62	12.3	0.015	3705-RA-610-25
Personal	MCEF	Manufacturer A	Device operation (RS) - 2nd drum	0.198	62	12.3	<0.00081	3705-RA-610-26

Extended Field Test #3 – Ashland, Virginia – June 9-13,2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Personal	Hydrar	Manufacturer A	Device operation (LS) - 2nd drum	0.198	62	12.3	0.015	3705-RA-610-23
Personal	MCEF	Manufacturer A	Device operation (LS) - 2nd drum	0.198	62	12.3	<0.00081	3705-RA-610-24
Personal	Hydrar	Manufacturer A	1st drum change	0.259	12	3.1	0.013	3705-RA-610-15
Personal	MCEF	Manufacturer A	1st drum change	0.259	12	3.1	<0.0032	3705-RA-610-16
Personal	Hydrar	Manufacturer A	2nd drum change	0.259	12	3.1	0.025	3705-RA-610-17
Personal	MCEF	Manufacturer A	2nd drum change	0.259	12	3.1	<0.0032	3705-RA-610-18
Personal	Hydrar	Manufacturer A	Ceiling #1 - 1st drum change	0.251	4	1	0.05	3705-RA-610-19
Personal	MCEF	Manufacturer A	Ceiling #1 - 1st drum change	0.251	4	1	<0.010	3705-RA-610-20
Personal	Hydrar	Manufacturer A	Ceiling #2 - 1st drum change	0.251	4	1	0.047	3705-RA-610-21
Personal	MCEF	Manufacturer A	Ceiling #2 - 1st drum change	0.251	4	1	<0.010	3705-RA-610-22
Area	Hydrar	Manufacturer A	By device exhaust	0.201	145	29.1	0.01	3705-RA-610-11
Area	MCEF	Manufacturer A	By device exhaust	0.201	145	29.1	<0.00034	3705-RA-610-12
Area	Hydrar	Manufacturer A	By device feed tube	0.201	145	29.1	0.011	3705-RA-610-13
Area	MCEF	Manufacturer A	By device feed tube	0.201	145	29.1	<0.00034	3705-RA-610-14
Overnight	Hydrar	Manufacturer A	By device exhaust	0.155	360	55.8	0.0066	3705-RA-610-27
Overnight	MCEF	Manufacturer A	By device exhaust	0.155	360	55.8	<0.00018	3705-RA-610-28
Overnight	Hydrar	Manufacturer A	By device feed tube	0.152	360	54.7	0.012	3705-RA-610-29
Overnight	MCEF	Manufacturer A	By device feed tube	0.152	360	54.7	<0.00018	3705-RA-610-30
Overnight	Hydrar	Manufacturer A	Outside containment	0.156	360	56.2	0.017	3705-RA-610-31
Overnight	MCEF	Manufacturer A	Outside containment	0.156	360	56.2	<0.00018	3705-RA-610-32
Personal	Hydrar	Manufacturer B	Device operation (LS) - 2 drums	0.198	97	19.2	0.064	3705-DA-611-55
Personal	MCEF	Manufacturer B	Device operation (LS) - 2 drums	0.198	97	19.2	<0.00052	3705-DA-611-56
Personal	Hydrar	Manufacturer B	Device operation (RS) - 1st drum	0.2	59	11.8	0.076	3705-DA-611-59
Personal	MCEF	Manufacturer B	Device operation (RS) - 1st drum	0.2	59	11.8	<0.00085	3705-DA-611-60
Personal	Hydrar	Manufacturer B	Device operation (LS) - 1st drum	0.198	59	11.7	0.058	3705-DA-611-57
Personal	MCEF	Manufacturer B	Device operation (LS) - 1st drum	0.198	59	11.7	<0.00085	3705-DA-611-58

Extended Field Test #3 – Ashland, Virginia – June 9-13,2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Personal	Hydrar	Manufacturer B	Device operation (RS) - 2nd drum	0.204	27	5.5	0.11	3705-DA-611-75
Personal	MCEF	Manufacturer B	Device operation (RS) - 2nd drum	0.204	27	5.5	<0.0018	3705-DA-611-76
Personal	Hydrar	Manufacturer B	Device operation (LS) - 2nd drum	0.202	38	7.7	0.081	3705-DA-611-73
Personal	MCEF	Manufacturer B	Device operation (LS) - 2nd drum	0.202	38	7.7	<0.0013	3705-DA-611-74
Personal	Hydrar	Manufacturer B	1st drum change	0.26	20	5.2	0.2	3705-DA-611-65
Personal	MCEF	Manufacturer B	1st drum change	0.26	20	5.2	<0.0019	3705-DA-611-66
Personal	Hydrar	Manufacturer B	2nd drum change	0.26	12	3.1	0.065	3705-DA-611-67
Personal	MCEF	Manufacturer B	2nd drum change	0.26	12	3.1	<0.0032	3705-DA-611-68
Personal	Hydrar	Manufacturer B	Ceiling #1 - 1st drum change	0.255	4	1	0.1	3705-DA-611-69
Personal	MCEF	Manufacturer B	Ceiling #1 - 1st drum change	0.255	4	1	<0.010	3705-DA-611-70
Personal	Hydrar	Manufacturer B	Ceiling #2 - 1st drum change	0.255	4	1	0.19	3705-DA-611-71
Personal	MCEF	Manufacturer B	Ceiling #2 - 1st drum change	0.255	4	1	<0.010	3705-DA-611-72
Area	Hydrar	Manufacturer B	By device exhaust	0.203	99	20.1	0.074	3705-DA-611-61
Area	MCEF	Manufacturer B	By device exhaust	0.203	99	20.1	<0.00050	3705-DA-611-62
Area	Hydrar	Manufacturer B	By device feed tube	0.21	99	20.8	0.047	3705-DA-611-63
Area	MCEF	Manufacturer B	By device feed tube	0.21	99	20.8	<0.00048	3705-DA-611-64
Overnight	Hydrar	Manufacturer B	By device exhaust	0.157	802	125.9	0.00052	3705-DA-611-77
Overnight	MCEF	Manufacturer B	By device exhaust	0.157	802	125.9	<0.00008	3705-DA-611-78
Overnight	Hydrar	Manufacturer B	By device feed tube	0.154	802	123.5	0.049	3705-DA-611-79
Overnight	MCEF	Manufacturer B	By device feed tube	0.154	802	123.5	<0.00008	3705-DA-611-80
Overnight	Hydrar	Manufacturer B	Outside containment	0.141	802	113.1	0.00052	3705-DA-611-81
Overnight	MCEF	Manufacturer B	Outside containment	0.141	802	113.1	<0.00009	3705-DA-611-82
Personal	Hydrar	Manufacturer C	Device operation (LS) - 2 drums	0.202	131	26.5	0.029	3705-AA-612-117
Personal	MCEF	Manufacturer C	Device operation (LS) - 2 drums	0.202	131	26.5	<0.00038	3705-AA-612-118
Personal	Hydrar	Manufacturer C	Device operation (RS) - 1st drum	0.211	79	16.7	0.053	3705-AA-612-121
Personal	MCEF	Manufacturer C	Device operation (RS) - 1st drum	0.211	79	16.7	<0.00060	3705-AA-612-122

Extended Field Test #3 – Ashland, Virginia – June 9-13,2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Personal	Hydrar	Manufacturer C	Device operation (LS) - 1st drum	0.2	79	15.8	0.049	3705-AA-612-119
Personal	MCEF	Manufacturer C	Device operation (LS) - 1st drum	0.2	79	15.8	<0.00063	3705-AA-612-120
Personal	Hydrar	Manufacturer C	Device operation (RS) - 2nd drum	0.212	52	11	0.039	3705-AA-612-137
Personal	MCEF	Manufacturer C	Device operation (RS) - 2nd drum	0.212	52	11	<0.00091	3705-AA-612-138
Personal	Hydrar	Manufacturer C	Device operation (LS) - 2nd drum	0.198	52	10.3	0.039	3705-AA-612-135
Personal	MCEF	Manufacturer C	Device operation (LS) - 2nd drum	0.198	52	10.3	<0.00097	3705-AA-612-136
Personal	Hydrar	Manufacturer C	1st filter change	0.255	12	3.1	0.055	3705-AA-612-127
Personal	MCEF	Manufacturer C	1st filter change	0.255	12	3.1	<0.0032	3705-AA-612-128
Personal	Hydrar	Manufacturer C	1st drum change	0.255	12	3.1	0.15	3705-AA-612-129
Personal	MCEF	Manufacturer C	1st drum change	0.255	12	3.1	<0.0032	3705-AA-612-130
Personal	Hydrar	Manufacturer C	3rd filter change	0.255	12	3.1	0.17	3705-AA-612-165
Personal	MCEF	Manufacturer C	3rd filter change	0.255	12	3.1	<0.0032	3705-AA-612-166
Personal	Hydrar	Manufacturer C	2nd drum change	0.255	13	3.3	0.094	3705-AA-612-167
Personal	MCEF	Manufacturer C	2nd drum change	0.255	13	3.3	<0.0030	3705-AA-612-168
Personal	Hydrar	Manufacturer C	Ceiling #1 - 1st drum change	0.26	4	1	0.19	3705-AA-612-131
Personal	MCEF	Manufacturer C	Ceiling #1 - 1st drum change	0.26	4	1	<0.010	3705-AA-612-132
Personal	Hydrar	Manufacturer C	Ceiling #2 - 1st drum change	0.26	4	1	0.22	3705-AA-612-133
Personal	MCEF	Manufacturer C	Ceiling #2 - 1st drum change	0.26	4	1	<0.010	3705-AA-612-134
Area	Hydrar	Manufacturer C	By device exhaust	0.2	132	26.4	0.041	3705-AA-612-123
Area	MCEF	Manufacturer C	By device exhaust	0.2	132	26.4	<0.00038	3705-AA-612-124
Area	Hydrar	Manufacturer C	By device feed tube	0.201	132	26.5	0.00075	3705-AA-612-125
Area	MCEF	Manufacturer C	By device feed tube	0.201	132	26.5	<0.00038	3705-AA-612-126
Overnight	Hydrar	Manufacturer C	By device exhaust	0.144	821	118.2	0.057	3705-AA-612-139
Overnight	MCEF	Manufacturer C	By device exhaust	0.144	821	118.2	<0.00008	3705-AA-612-140
Overnight	Hydrar	Manufacturer C	By device feed tube	0.157	821	128.9	0.058	3705-AA-612-141
Overnight	MCEF	Manufacturer C	By device feed tube	0.157	821	128.9	<0.00008	3705-AA-612-142

Extended Field Test #3 – Ashland, Virginia – June 9-13,2003								
Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Overnight	Hydrar	Manufacturer C	Outside containment	0.15	821	123.1	0.044	3705-AA-612-143
Overnight	MCEF	Manufacturer C	Outside containment	0.15	821	123.1	<0.00008	3705-AA-612-144
Box Test – Ashland, Virginia								
Box test	Hydrar	Manufacturer A	E. side of containment	0.199	64	12.7	0.018	3705-TA-610-47
Box test	MCEF	Manufacturer A	E. side of containment	0.199	64	12.7	<0.00079	3705-TA-610-48
Box test	Hydrar	Manufacturer A	W. side of containment	0.203	64	13	0.1	3705-TA-610-49
Box test	MCEF	Manufacturer A	W. side of containment	0.203	64	13	<0.00077	3705-TA-610-50
Box test	Hydrar	Manufacturer B	E. side of containment	0.201	36	7.2	0.12	3705-TA-611-109
Box test	MCEF	Manufacturer B	E. side of containment	0.201	36	7.2	<0.0014	3705-TA-611-110
Box test	Hydrar	Manufacturer B	W. side of containment	0.199	36	7.2	0.12	3705-TA-611-111
Box test	MCEF	Manufacturer B	W. side of containment	0.199	36	7.2	<0.0014	3705-TA-611-112
Box test	Hydrar	Manufacturer C	E. side of containment	0.201	45	9	0.05	3705-TA-612-167
Box test	MCEF	Manufacturer C	E. side of containment	0.201	45	9	<0.0011	3705-TA-612-168
Box test	Hydrar	Manufacturer C	W. side of containment	0.201	45	9	0.014	3705-TA-612-169
Box test	MCEF	Manufacturer C	W. side of containment	0.201	45	9	<0.0010	3705-TA-612-170
"U" Tube Test – Ashland, Virginia								
Personal	Hydrar	Manufacturer B	"U" tubes - device operation (LS)	0.2	12	2.4	0.1	3705-DA-611-83
Personal	MCEF	Manufacturer B	"U" tubes - device operation (LS)	0.2	12	2.4	<0.0042	3705-DA-611-84
Personal	Hydrar	Manufacturer B	"U" tubes - device operation (RS)	0.197	12	2.4	0.018	3705-DA-611-85
Personal	MCEF	Manufacturer B	"U" tubes - device operation (RS)	0.197	12	2.4	<0.0042	3705-DA-611-86
Area	Hydrar	Manufacturer B	"U" tubes - by device exhaust	0.198	12	2.4	0.083	3705-DA-611-87
Area	MCEF	Manufacturer B	"U" tubes - by device exhaust	0.198	12	2.4	<0.0042	3705-DA-611-88
Area	Hydrar	Manufacturer B	"U" tubes - by device feed tube	0.205	12	2.5	0.092	3705-DA-611-89
Area	MCEF	Manufacturer B	"U" tubes - by device feed tube	0.205	12	2.5	<0.0040	3705-DA-611-90
Personal	Hydrar	Manufacturer C	"U" tubes - device operation (LS)	0.209	14	2.9	0.11	3705-AA-612-171
Personal	MCEF	Manufacturer C	"U" tubes - device operation (LS)	0.209	14	2.9	<0.0034	3705-AA-612-172

Extended Field Test #3 – Ashland, Virginia – June 9-13,2003

Type	Media	Device	Location	Flow Rate (lpm)	Sample time (min)	Volume (liters)	Result (mg/m ³)	Sample #
Personal	Hydrar	Manufacturer C	"U" tubes - device operation (RS)	0.207	14	2.9	0.026	3705-AA-612-173
Personal	MCEF	Manufacturer C	"U" tubes - device operation (RS)	0.207	14	2.9	<0.0034	3705-AA-612-174
Area	Hydrar	Manufacturer C	"U" tubes - by device exhaust	0.205	14	2.8	0.046	3705-AA-612-175
Area	MCEF	Manufacturer C	"U" tubes - by device exhaust	0.205	14	2.8	<0.0036	3705-AA-612-176
Area	Hydrar	Manufacturer C	"U" tubes - by device feed tube	0.201	14	2.8	0.05	3705-AA-612-177
Area	MCEF	Manufacturer C	"U" tubes - by device feed tube	0.201	14	2.8	<0.0036	3705-AA-612-178

Table 2: Wipe Sample Results

Performance Validation Study – Phase I – Ashland, Virginia – February 24-28, 2003						
Device	Date	Sample Location	Pre-Wipe #1	Post-Wipe #1	Pre-Wipe #2	Post-Wipe #2
Blank	2/27/2003	Blank	<0.01	<0.01	<0.01	<0.01
Blank	2/27/2003	Blank	<0.01	<0.01	<0.01	<0.01
Manufacturer A	2/27/2003	Floor-2 ft from device	0.36	0.14	0.16	0.19
Manufacturer A	2/27/2003	Floor-5 ft from device	0.21	0.11	0.18	0.15
Manufacturer A	2/27/2003	Ceiling	0.49	0.071	0.16	0.049
Manufacturer A	2/27/2003	East wall of containment	0.026	0.033	0.014	0.024
Manufacturer A	2/27/2003	West wall of containment	0.11	0.032	0.071	0.013
Manufacturer A	2/27/2003	Exterior drum surface-side	0.059	0.12	0.017	0.046
Manufacturer A	2/27/2003	DTC device	0.4	0.2	0.32	0.17
Manufacturer A	2/27/2003	DTC device feed tube exterior	0.48	0.053	0.055	0.062
Manufacturer A	2/27/2003	Floor at device exhaust	0.14	0.14	0.048	0.11
Blank	2/28/2003	Blank	<0.01	<0.01	<0.01	<0.01
Blank	2/28/2003	Blank	<0.01	<0.01	<0.01	<0.01
Manufacturer B	2/28/2003	Floor-2 ft from device	0.065	0.054	0.064	0.13
Manufacturer B	2/28/2003	Floor-5 ft from device	0.14	0.074	0.12	0.067
Manufacturer B	2/28/2003	Ceiling	0.053	0.2	0.045	0.097
Manufacturer B	2/28/2003	East wall of containment	0.017	0.02	0.029	<0.01
Manufacturer B	2/28/2003	West wall of containment	0.044	0.015	0.015	0.015
Manufacturer B	2/28/2003	Exterior drum surface-side	0.17	0.073	0.038	0.053
Manufacturer B	2/28/2003	DTC device	0.017	0.18	0.019	1.2
Manufacturer B	2/28/2003	DTC device feed tube exterior	<0.01	0.33	<0.01	0.64
Manufacturer B	2/28/2003	Floor at device exhaust	0.049	0.27	0.048	0.12
Blank	2/26/2003	Blank	<0.01	<0.01	<0.01	<0.01
Blank	2/26/2003	Blank	<0.01	<0.01	<0.01	<0.01
Manufacturer C	2/26/2003	Floor-2 ft from device	0.13	3.1	0.43	0.33
Manufacturer C	2/26/2003	Floor-5 ft from device	0.11	0.62	0.11	0.15
Manufacturer C	2/26/2003	Ceiling	0.71	0.27	0.2	0.15
Manufacturer C	2/26/2003	East wall of containment	<0.01	0.12	0.02	0.024
Manufacturer C	2/26/2003	West wall of containment	<0.01	0.034	<0.01	0.021
Manufacturer C	2/26/2003	Exterior drum surface-side	0.067	0.027	0.051	0.044
Manufacturer C	2/26/2003	DTC device	0.041	0.27	0.037	0.93
Manufacturer C	2/26/2003	DTC device feed tube exterior	0.02	0.052	0.017	0.047
Manufacturer C	2/26/2003	Floor at device exhaust	0.12	0.45	0.072	0.48
Manufacturer D	2/27/2003	Floor-2 ft from device	0.088	0.06	0.076	0.041
Manufacturer D	2/27/2003	Floor-5 ft from device	0.053	0.063	0.088	0.072

Performance Validation Study – Phase I – Ashland, Virginia – February 24-28, 2003						
Device	Date	Sample Location	Pre-Wipe #1	Post-Wipe #1	Pre-Wipe #2	Post-Wipe #2
Manufacturer D	2/27/2003	Ceiling	0.63	0.1	0.25	0.082
Manufacturer D	2/27/2003	East wall of containment	0.39	0.019	0.41	0.015
Manufacturer D	2/27/2003	West wall of containment	0.11	<0.01	0.028	0.017
Manufacturer D	2/27/2003	Exterior drum surface-side	0.31	0.052	0.4	0.037
Manufacturer D	2/27/2003	DTC device	0.067	0.067	0.049	0.051
Manufacturer D	2/27/2003	DTC device feed tube exterior	0.069	0.027	0.039	0.029
Manufacturer D	2/27/2003	Floor at device exhaust	0.27	0.097	0.31	0.085

Performance Validation Study – Phase II – Ashland, Virginia – June 9-13, 2003				
Device	Date	Sample Location	Pre-Wipe	Post-Wipe
Manufacturer A	6/10/2003	Floor-2 ft from device	0.22	0.98
Manufacturer A	6/10/2003	Floor-5 ft from device	0.093	0.47
Manufacturer A	6/10/2003	Ceiling	0.011	0.029
Manufacturer A	6/10/2003	East wall of containment	0.019	0.026
Manufacturer A	6/10/2003	West wall of containment	0.012	0.026
Manufacturer A	6/10/2003	Exterior drum surface-side	0.052	0.024
Manufacturer A	6/10/2003	DTC device	1.7	1.1
Manufacturer A	6/10/2003	DTC device feed tube exterior	0.39	0.36
Manufacturer A	6/10/2003	Floor at device exhaust	0.45	0.37
Manufacturer B	6/11/2003	Floor-2 ft from device	0.49	0.41
Manufacturer B	6/11/2003	Floor-5 ft from device	0.17	0.31
Manufacturer B	6/11/2003	Ceiling	0.081	0.16
Manufacturer B	6/11/2003	East wall of containment	0.039	0.068
Manufacturer B	6/11/2003	West wall of containment	0.048	0.073
Manufacturer B	6/11/2003	Exterior drum surface-side	0.31	0.043
Manufacturer B	6/11/2003	DTC device	0.98	0.45
Manufacturer B	6/11/2003	DTC device feed tube exterior	0.49	0.24
Manufacturer B	6/11/2003	Floor at device exhaust	0.54	0.22
Manufacturer C	6/12/2003	Floor-2 ft from device	0.13	0.17
Manufacturer C	6/12/2003	Floor-5 ft from device	0.19	0.22
Manufacturer C	6/12/2003	Ceiling	0.046	0.019
Manufacturer C	6/12/2003	East wall of containment	0.016	0.023
Manufacturer C	6/12/2003	West wall of containment	0.024	0.022
Manufacturer C	6/12/2003	Exterior drum surface-side	0.57	0.31
Manufacturer C	6/12/2003	DTC device	0.98	0.43
Manufacturer C	6/12/2003	DTC device feed tube exterior	0.25	0.17
Manufacturer C	6/12/2003	Floor at device exhaust	0.069	0.41

Extended Field Test #1 – Phoenix, Arizona – March 24-28, 2003				
Device	Date	Sample Location	Pre Wipe	Post Wipe
Background	3/24/2003	Ground in front of containment	1.4	
Background	3/24/2003	Ground in front of containment	0.69	
Blank	3/24/2003	Blank	<0.01	
Blank	3/24/2003	Blank	<0.01	
Manufacturer A	3/24/2003	Floor-2 ft from device	0.22	0.41
Manufacturer A	3/24/2003	Floor-5 ft from device	0.034	1.3
Manufacturer A	3/24/2003	Ceiling	<0.01	0.81
Manufacturer A	3/24/2003	East wall of containment	0.011	0.11
Manufacturer A	3/24/2003	West wall of containment	0.053	0.058
Manufacturer A	3/24/2003	Exterior drum surface-side	0.037	0.22
Manufacturer A	3/24/2003	DTC device	0.94	0.53
Manufacturer A	3/24/2003	DTC device feed tube exterior	0.16	0.17
Manufacturer A	3/24/2003	Floor at device exhaust	0.26	5
Blank	3/25/2003	Blank	<0.01	
Blank	3/25/2003	Blank	<0.01	
Manufacturer B	3/25/2003	Floor-2 ft from device	0.73	0.44
Manufacturer B	3/25/2003	Floor-5 ft from device	0.43	1.6
Manufacturer B	3/25/2003	Ceiling	0.18	0.51
Manufacturer B	3/25/2003	East wall of containment	0.21	0.8
Manufacturer B	3/25/2003	West wall of containment	0.088	0.11
Manufacturer B	3/25/2003	Exterior drum surface-side	0.14	0.05
Manufacturer B	3/25/2003	DTC device	0.8	0.61
Manufacturer B	3/25/2003	DTC device feed tube exterior	0.091	0.48
Manufacturer B	3/25/2003	Floor at device exhaust	0.17	0.45
Blank	3/27/2003	Blank	<0.01	
Blank	3/27/2003	Blank	<0.01	
Manufacturer C	3/27/2003	Floor-2 ft from device	0.17	1.3
Manufacturer C	3/27/2003	Floor-5 ft from device	0.042	0.17
Manufacturer C	3/27/2003	Ceiling	0.071	0.14
Manufacturer C	3/27/2003	East wall of containment	0.019	2.7
Manufacturer C	3/27/2003	West wall of containment	0.032	1
Manufacturer C	3/27/2003	Exterior drum surface-side	0.065	0.36
Manufacturer C	3/27/2003	DTC device	0.067	0.85
Manufacturer C	3/27/2003	DTC device feed tube exterior	0.11	0.23
Manufacturer C	3/27/2003	Floor at device exhaust	0.083	2.6

Extended Field Test #1 – Phoenix, Arizona – March 24-28, 2003				
Device	Date	Sample Location	Pre Wipe	Post Wipe
Blank	3/26/2003	Blank	<0.01	
Blank	3/26/2003	Blank	0.018	
Manufacturer D	3/26/2003	Floor-2 ft from device	0.28	3.1
Manufacturer D	3/26/2003	Floor-5 ft from device	0.18	0.23
Manufacturer D	3/26/2003	Ceiling	0.034	0.038
Manufacturer D	3/26/2003	East wall of containment	5.3	4.5
Manufacturer D	3/26/2003	West wall of containment	0.96	0.4
Manufacturer D	3/26/2003	Exterior drum surface-side	1.1	0.88
Manufacturer D	3/26/2003	DTC device	2.1	1.2
Manufacturer D	3/26/2003	DTC device feed tube exterior	1.3	0.56
Manufacturer D	3/26/2003	Floor at device exhaust	0.33	4.5

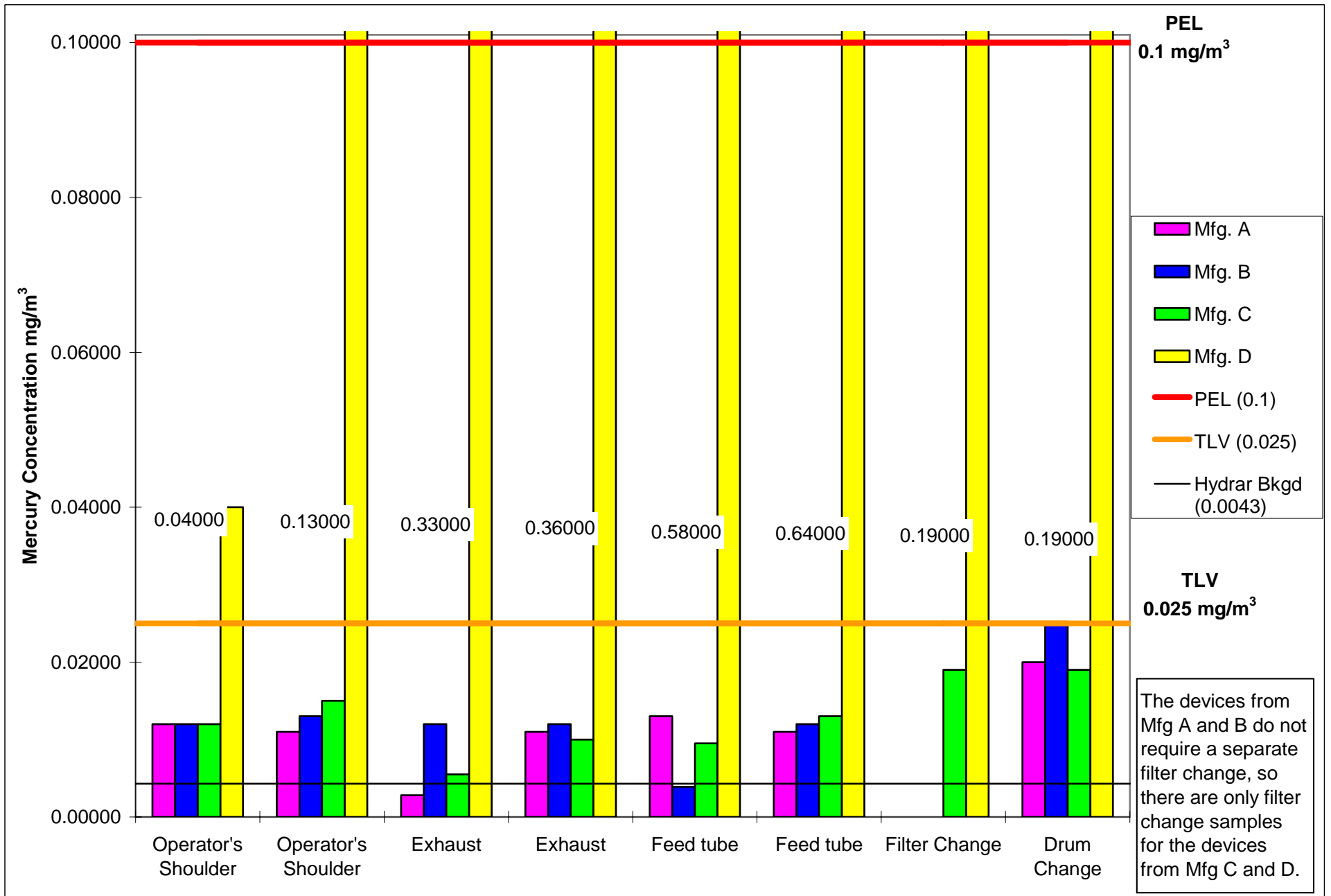
Extended Field Test #2 – Melbourne, Florida – April 28 - May 2, 2003				
Device	Date	Sample Location	Pre-Wipe	Post-Wipe
Blank	5/1/2003	Blank	<0.01	
Blank	5/1/2003	Blank	<0.01	
Manufacturer A	5/1/2003	Floor-2 ft from device	0.095	0.61
Manufacturer A	5/1/2003	Floor-5 ft from device	0.083	0.46
Manufacturer A	5/1/2003	Ceiling	0.036	0.1
Manufacturer A	5/1/2003	East wall of containment	0.015	0.14
Manufacturer A	5/1/2003	West wall of containment	0.019	0.052
Manufacturer A	5/1/2003	Exterior drum surface-side	0.036	0.18
Manufacturer A	5/1/2003	DTC device	0.54	1.3
Manufacturer A	5/1/2003	DTC device feed tube exterior	0.2	0.2
Manufacturer A	5/1/2003	Floor at device exhaust	0.1	3.6
Manufacturer A	5/2/2003	Next day: Floor-2 ft from device		0.86
Manufacturer A	5/2/2003	Next day: E. wall of containment		0.078
Blank	4/29/2003	Blank	<0.01	
Blank	4/29/2003	Blank	<0.01	
Manufacturer B	4/29/2003	Floor-2 ft from device	0.67	17
Manufacturer B	4/29/2003	Floor-5 ft from device	0.46	6
Manufacturer B	4/29/2003	Ceiling	0.057	0.39
Manufacturer B	4/29/2003	East wall of containment	0.074	0.28
Manufacturer B	4/29/2003	West wall of containment	0.035	0.17
Manufacturer B	4/29/2003	Exterior drum surface-side	0.13	0.12
Manufacturer B	4/29/2003	DTC device	0.3	2.2

Extended Field Test #2 – Melbourne, Florida – April 28 - May 2, 2003				
Device	Date	Sample Location	Pre-Wipe	Post-Wipe
Manufacturer B	4/29/2003	DTC device feed tube exterior	0.63	0.63
Manufacturer B	4/29/2003	Floor at device exhaust	0.1	11
Manufacturer B	4/29/2003	Inside drum before crushing	0.024	
Manufacturer B	4/30/2003	Next day: Floor-2 ft from device		17.00
Manufacturer B	4/30/2003	Next day: E. wall of containment		0.550
Blank	4/30/2003	Blank	<0.01	
Blank	4/30/2003	Blank	0.017	
Manufacturer C	4/30/2003	Floor-2 ft from device	0.21	0.16
Manufacturer C	4/30/2003	Floor-5 ft from device	0.17	0.18
Manufacturer C	4/30/2003	Ceiling	0.11	0.1
Manufacturer C	4/30/2003	East wall of containment	0.11	0.02
Manufacturer C	4/30/2003	West wall of containment	0.086	0.022
Manufacturer C	4/30/2003	Exterior drum surface-side	0.11	0.046
Manufacturer C	4/30/2003	DTC device	0.25	0.24
Manufacturer C	4/30/2003	DTC device feed tube exterior	0.18	0.15
Manufacturer C	4/30/2003	Floor at device exhaust	0.08	0.49
Manufacturer C	5/1/2003	Next day: Floor-2 ft from device		0.650
Manufacturer C	5/1/2003	Next day: E. wall of containment		0.026

Extended Field Test #3 – Ashland, Virginia – June 9-13,2003				
Device	Date	Sample Location	Pre-Wipe	Post-Wipe
Blank	6/10/2003	Blank	<0.01	
Blank	6/10/2003	Blank	<0.01	
Manufacturer A	6/10/2003	Floor-2 ft from device	0.055	1.6
Manufacturer A	6/10/2003	Floor-5 ft from device	0.21	1.4
Manufacturer A	6/10/2003	Ceiling	0.025	0.19
Manufacturer A	6/10/2003	East wall of containment	<0.01	0.21
Manufacturer A	6/10/2003	West wall of containment	0.1	0.11
Manufacturer A	6/10/2003	Exterior drum surface-side	0.73	0.13
Manufacturer A	6/10/2003	DTC device	0.5	1.1
Manufacturer A	6/10/2003	DTC device feed tube exterior	0.061	0.32
Manufacturer A	6/10/2003	Floor at device exhaust	0.12	1.7
Manufacturer A	6/11/2003	Next day: Floor-2 ft from device		1.00
Manufacturer A	6/11/2003	Next day: E. wall of containment		0.022
Operator	6/10/2003	Tad's Hands	1.8	
Operator	6/10/2003	Steve's Hands	1.9	

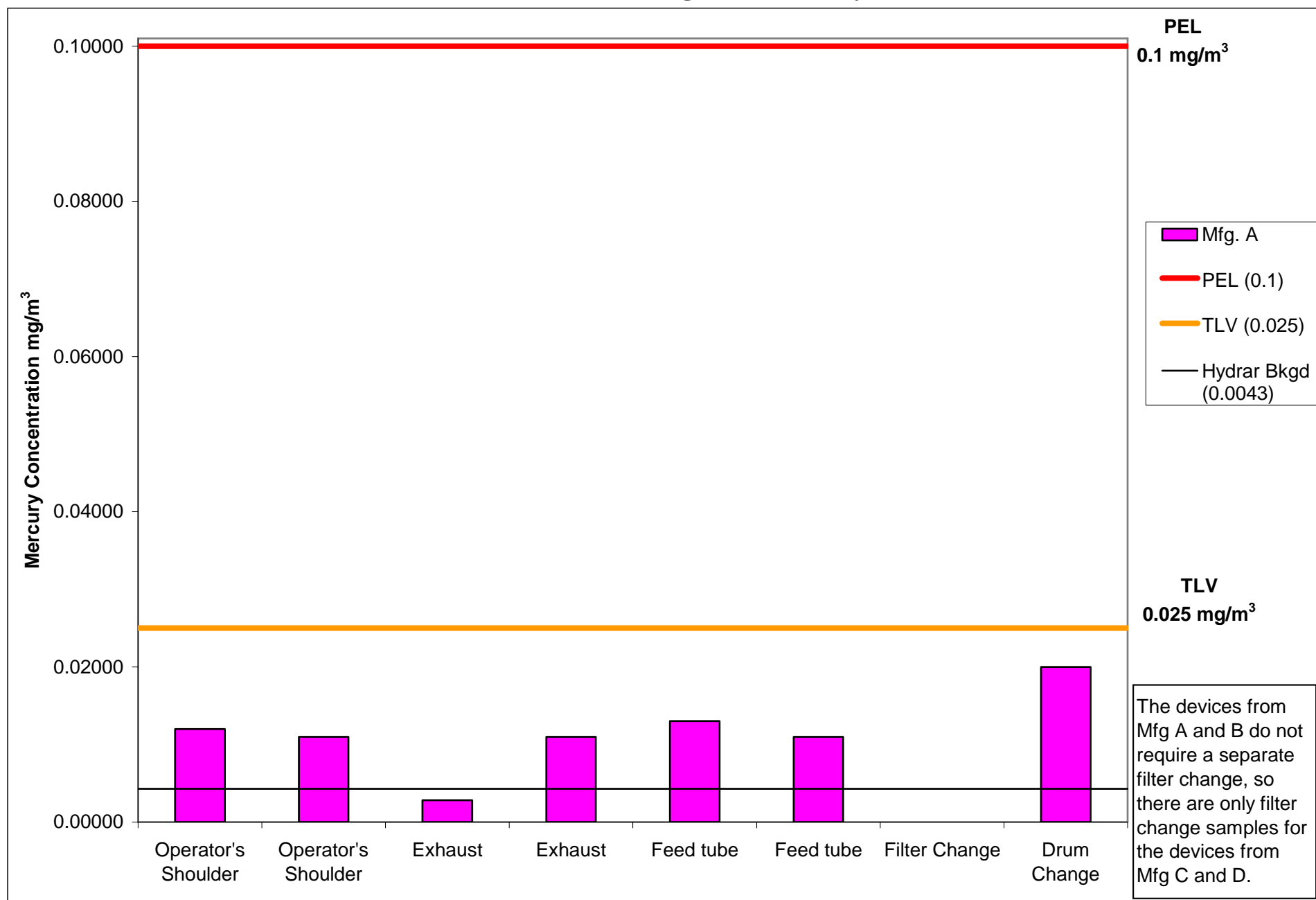
Extended Field Test #3 – Ashland, Virginia – June 9-13,2003				
Device	Date	Sample Location	Pre-Wipe	Post-Wipe
Operator	6/10/2003	Tad's Face	0.055	
Operator	6/10/2003	Steve's Face	0.53	
Blank	6/11/2003	Blank	<0.01	
Blank	6/11/2003	Blank	<0.01	
Manufacturer B	6/11/2003	Floor-2 ft from device	0.14	1.1
Manufacturer B	6/11/2003	Floor-5 ft from device	0.048	0.79
Manufacturer B	6/11/2003	Ceiling	0.031	0.099
Manufacturer B	6/11/2003	East wall of containment	0.035	0.072
Manufacturer B	6/11/2003	West wall of containment	0.024	0.055
Manufacturer B	6/11/2003	Exterior drum surface-side	0.14	0.058
Manufacturer B	6/11/2003	DTC device	0.23	3.8
Manufacturer B	6/11/2003	DTC device feed tube exterior	0.22	0.8
Manufacturer B	6/11/2003	Floor at device exhaust	0.17	1.5
Manufacturer B	6/12/2003	Next day: Floor-2 ft from device		0.230
Manufacturer B	6/12/2003	Next day: E. wall of containment		0.065
Blank	6/12/2003	Blank	<0.01	
Blank	6/12/2003	Blank	0.012	
Manufacturer C	6/12/2003	Floor-2 ft from device	0.051	1.1
Manufacturer C	6/12/2003	Floor-5 ft from device	0.059	0.12
Manufacturer C	6/12/2003	Ceiling	0.061	0.44
Manufacturer C	6/12/2003	East wall of containment	0.02	0.097
Manufacturer C	6/12/2003	West wall of containment	0.034	0.092
Manufacturer C	6/12/2003	Exterior drum surface-side	0.2	0.12
Manufacturer C	6/12/2003	DTC device	1.7	1.8
Manufacturer C	6/12/2003	DTC device feed tube exterior	0.096	0.36
Manufacturer C	6/12/2003	Floor at device exhaust	0.22	2.8
Manufacturer C	6/13/2003	Next day: Floor-2 ft from device		0.830
Manufacturer C	6/13/2003	Next day: E. wall of containment		0.017
Blank	6/13/2003	Blank	<0.01	
Blank	6/13/2003	Blank	<0.01	

**Figure 1: Performance Validation Study – Phase I Analytical Air Results
All Devices – Ashland, Virginia – February 24-28, 2003**



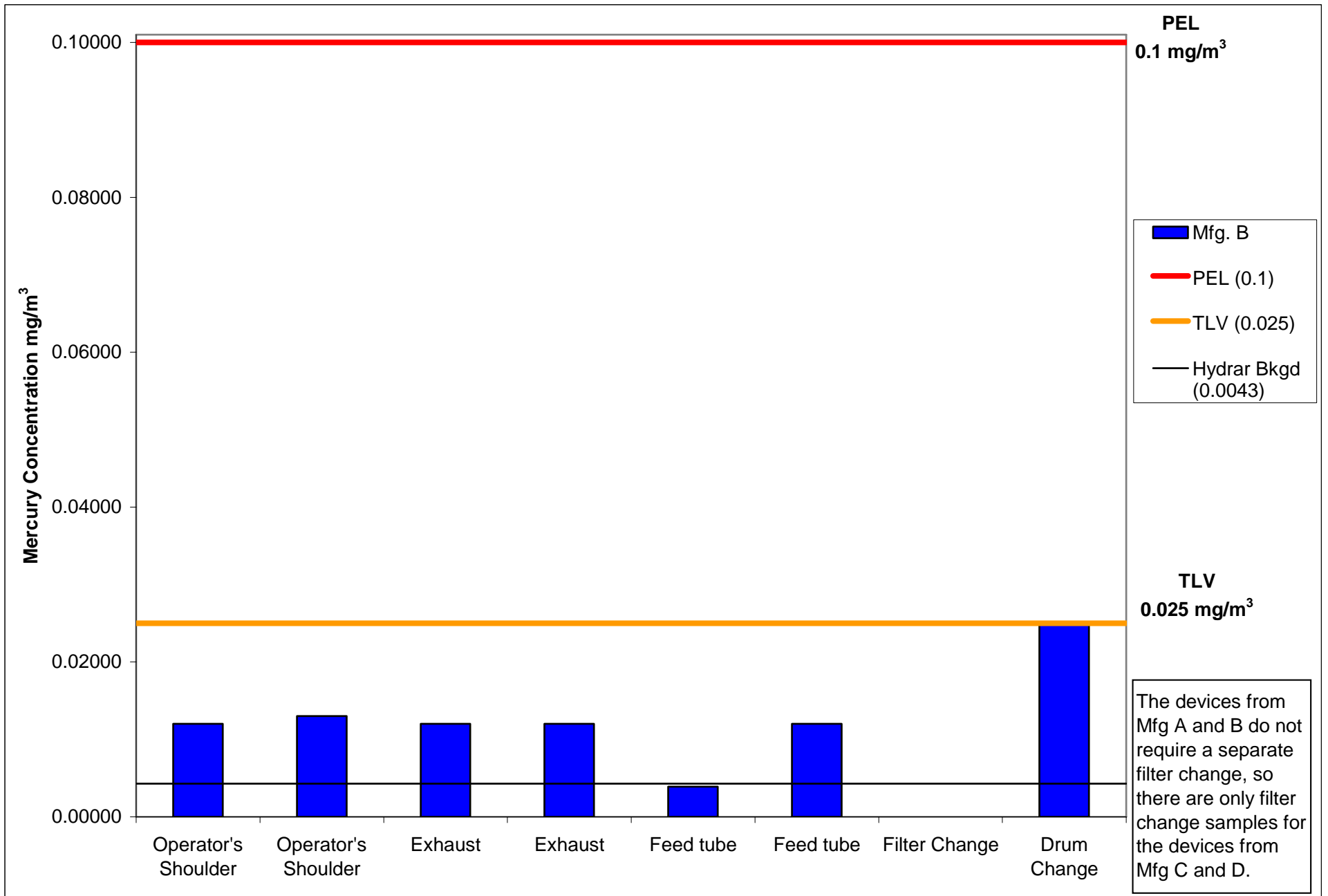
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 2: Performance Validation Study – Phase I Analytical Air Results
 Manufacturer A – Ashland, Virginia – February 24-28, 2003**



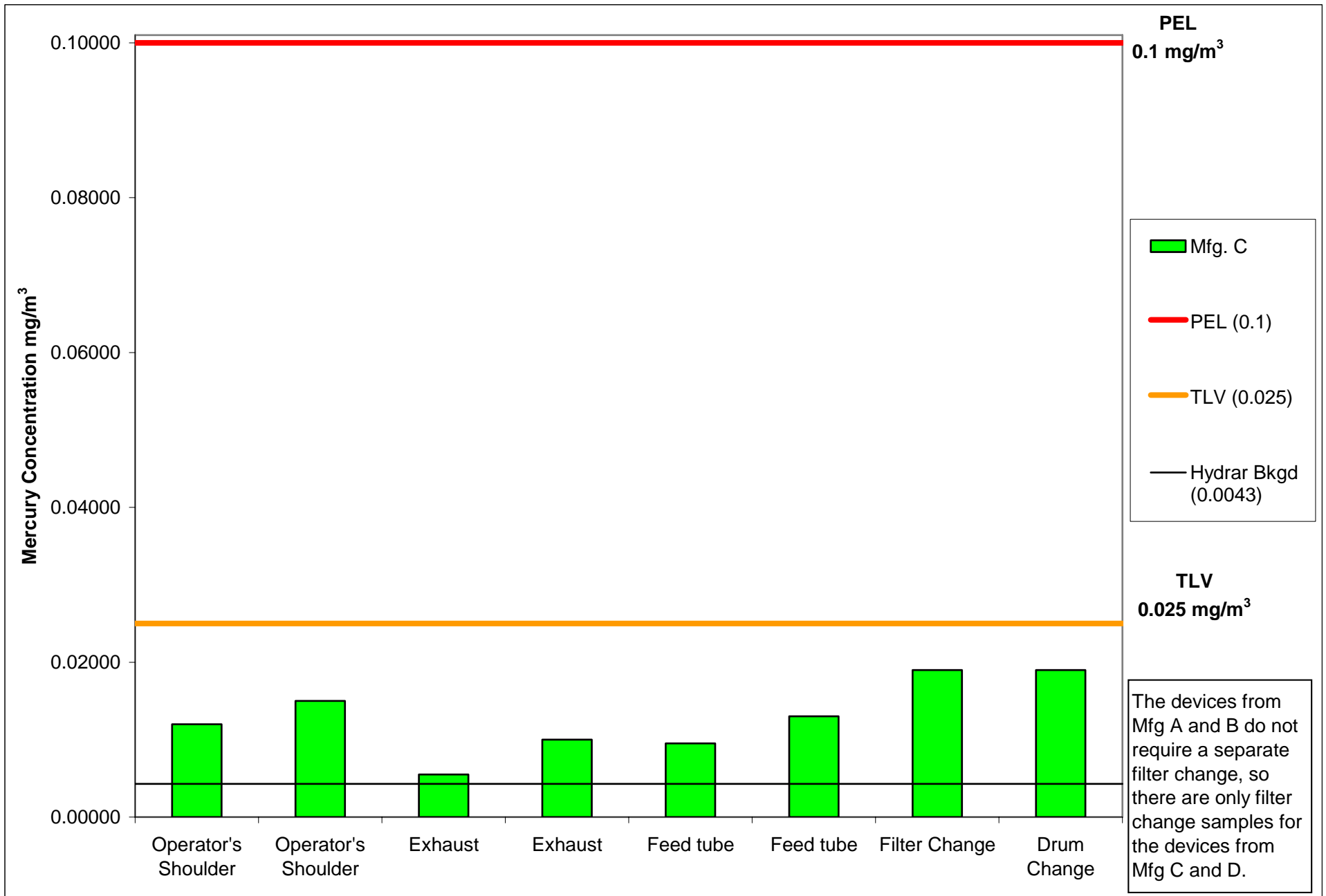
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 3: Performance Validation Study – Phase I Analytical Air Results
 Manufacturer B – Ashland, Virginia – February 24-28, 2003**



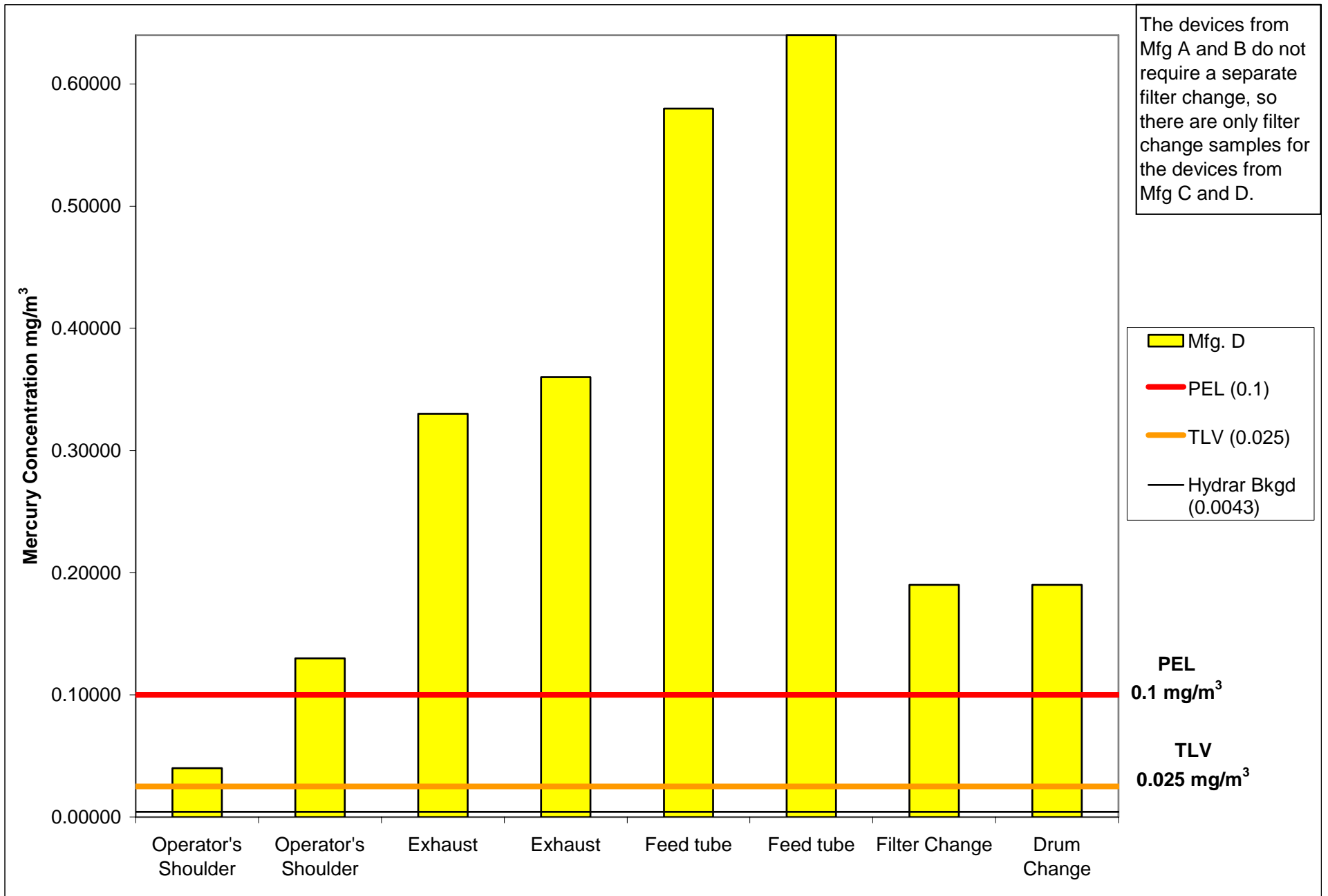
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 4: Performance Validation Study – Phase I Analytical Air Results
 Manufacturer C – Ashland, Virginia – February 24-28, 2003**



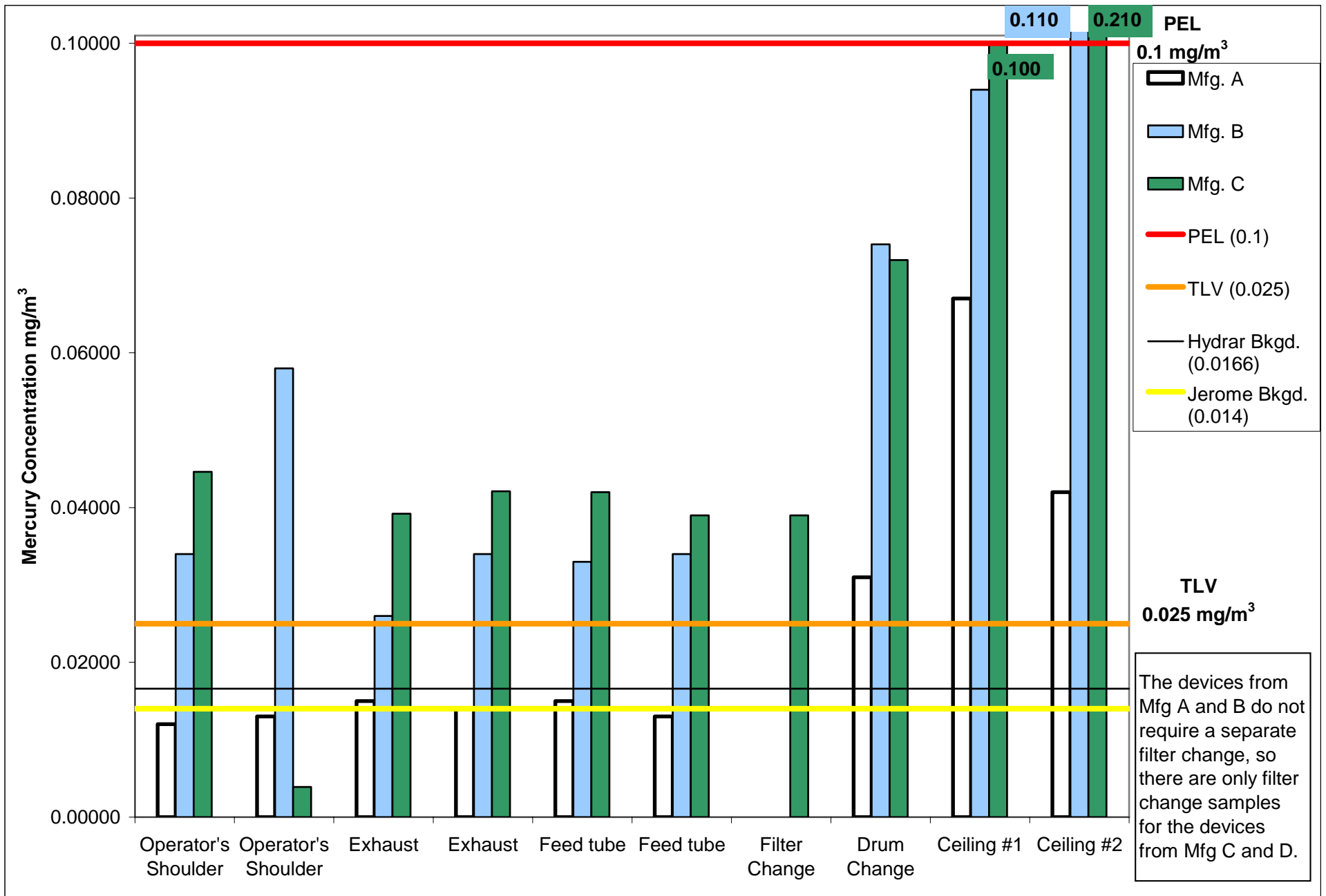
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 5: Performance Validation Study – Phase I Analytical Air Results
 Manufacturer D – Ashland, Virginia – February 24-28, 2003**



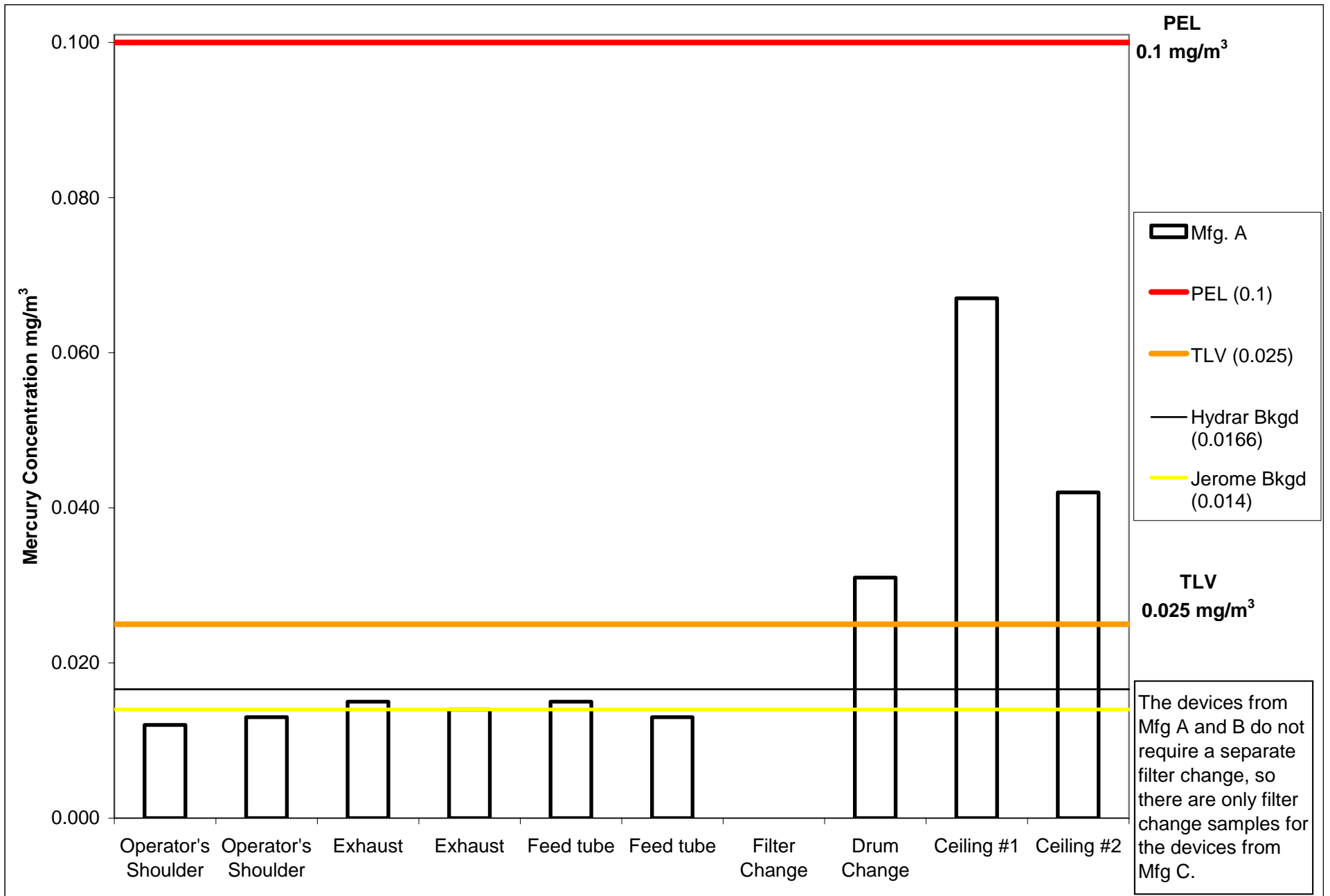
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 6: Performance Validation Study – Phase II Analytical Air Results
All Devices – Ashland, Virginia – June 9-13, 2003**



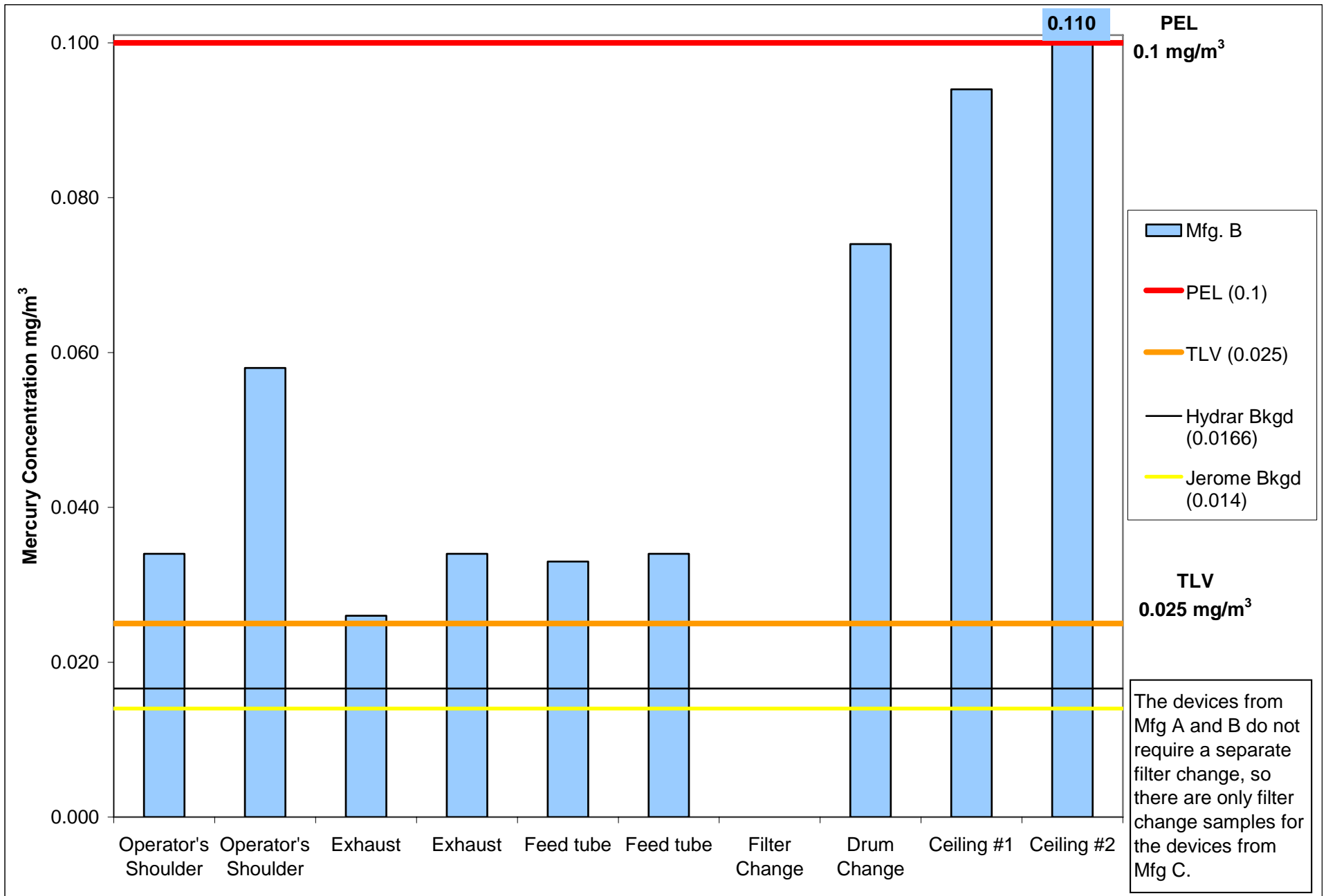
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 7: Performance Validation Study – Phase II Analytical Air Results
 Manufacturer A – Ashland, Virginia – June 9-13, 2003**



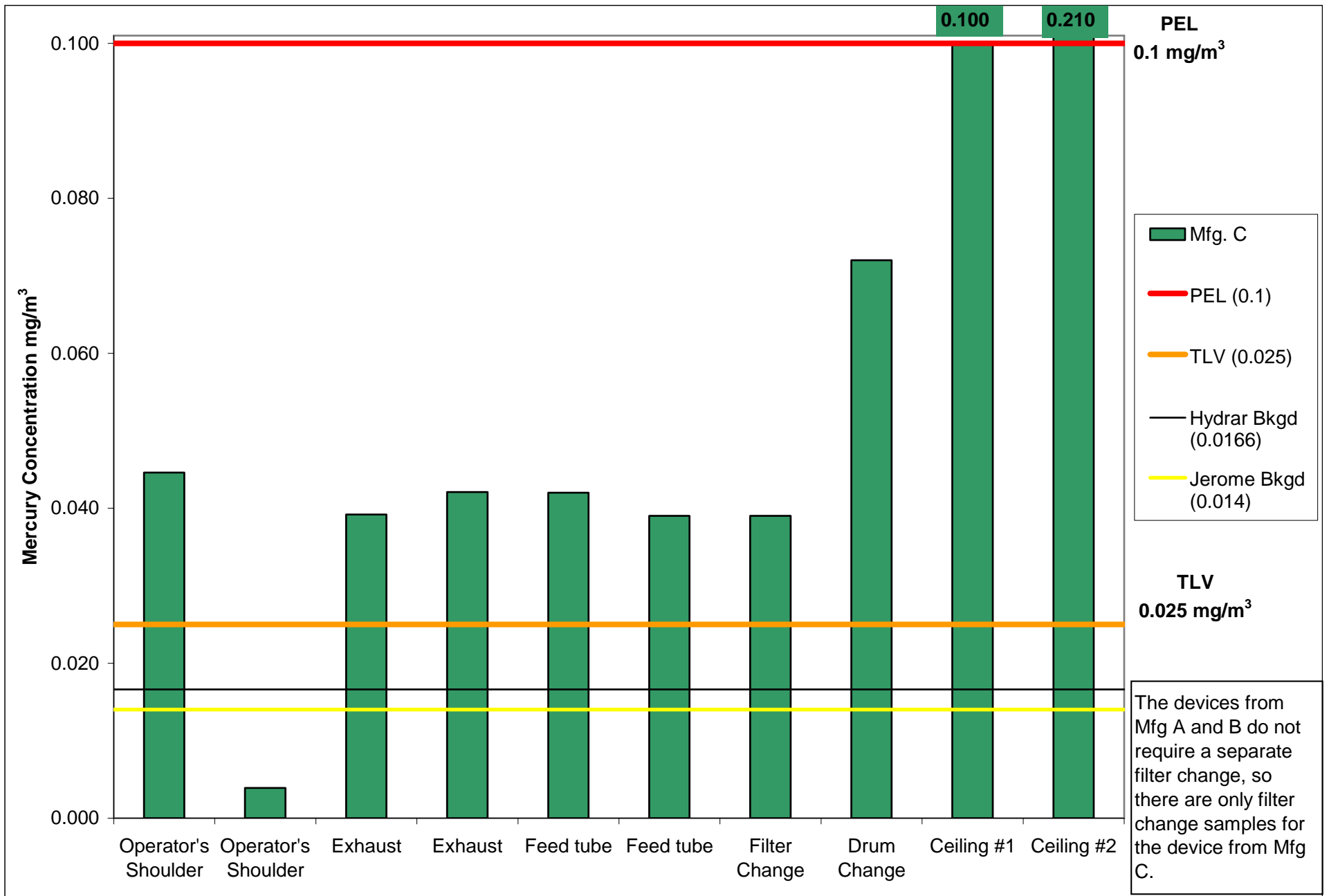
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 8: Performance Validation Study – Phase II Analytical Air Results
 Manufacturer B – Ashland, Virginia – June 9-13, 2003**



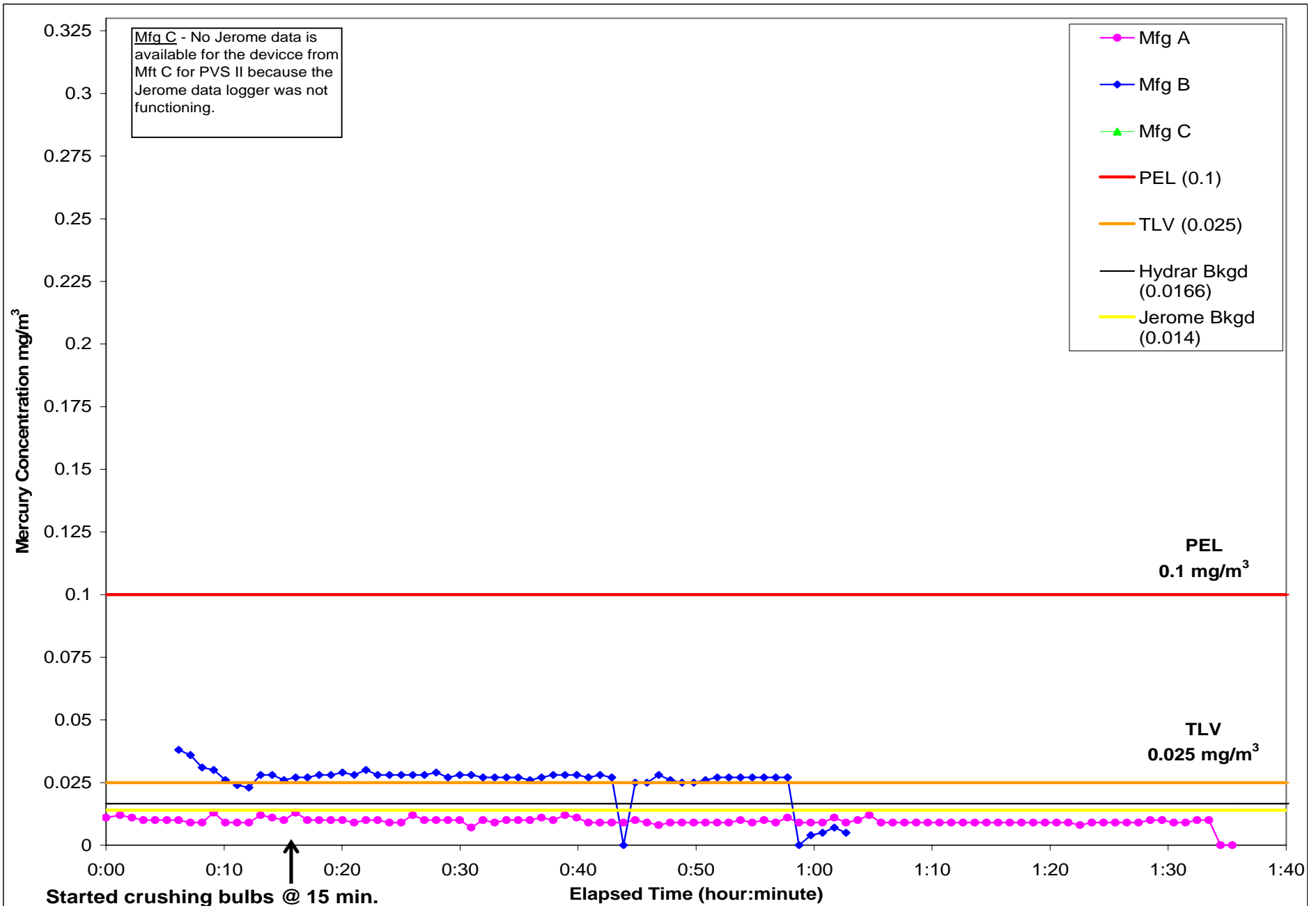
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 9: Performance Validation Study – Phase II Analytical Air Results
 Manufacturer C – Ashland, Virginia – June 9-13, 2003**



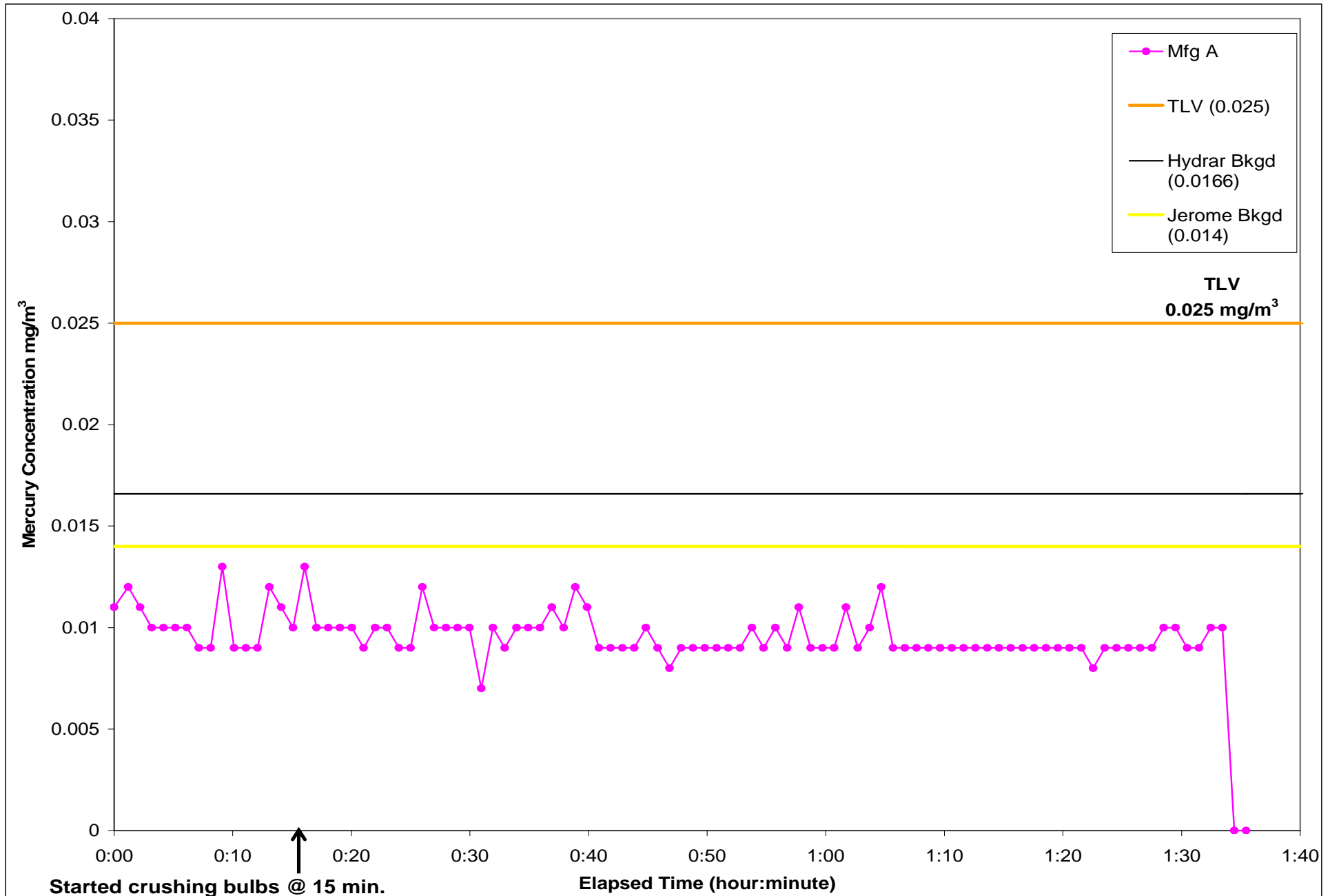
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 10: Performance Validation Study – Phase II Jerome Results
All Devices – Ashland, Virginia – June 9-13, 2003**



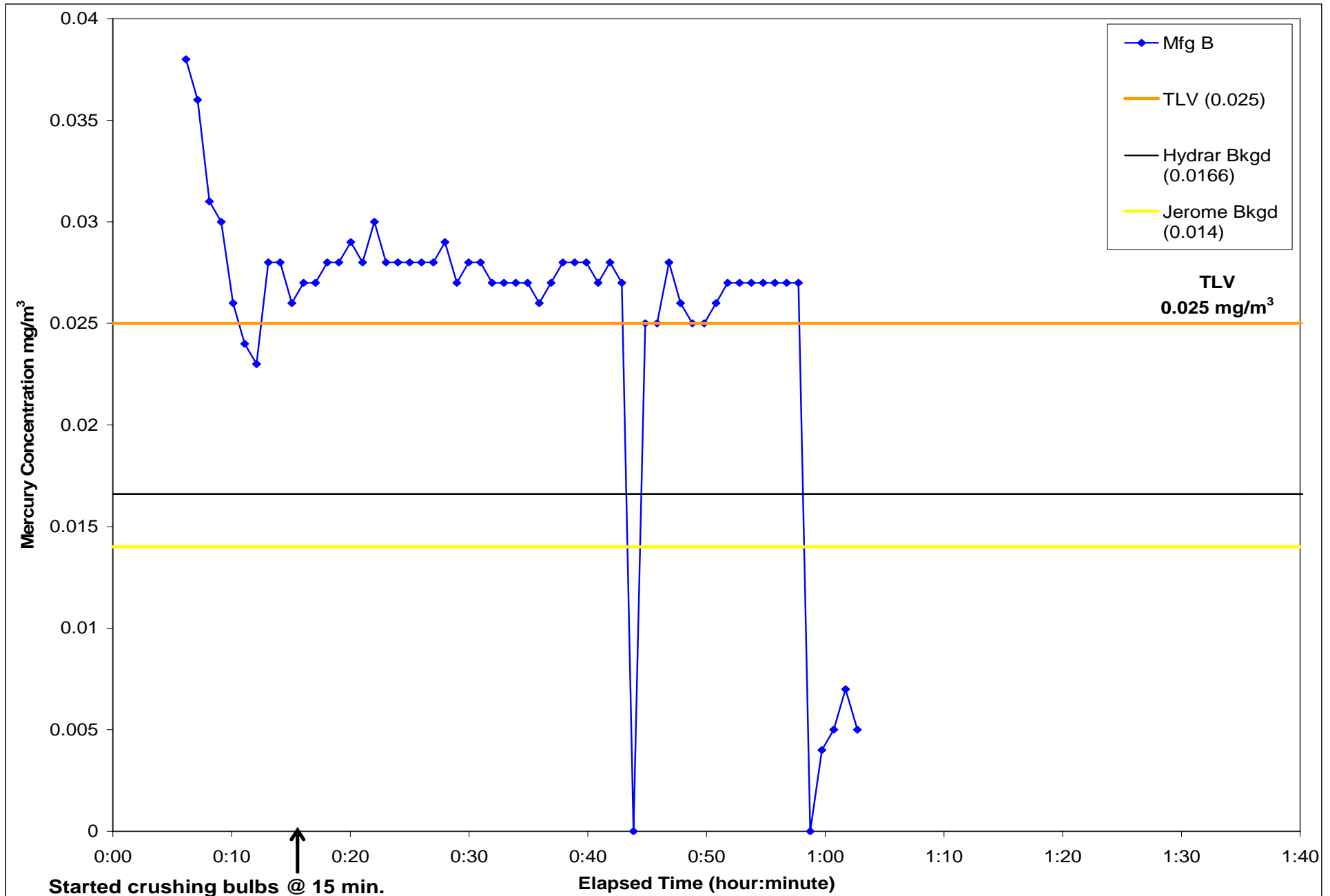
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 11: Performance Validation Study – Phase II Jerome Results
Manufacturer A – Ashland, Virginia – June 9-13, 2003**



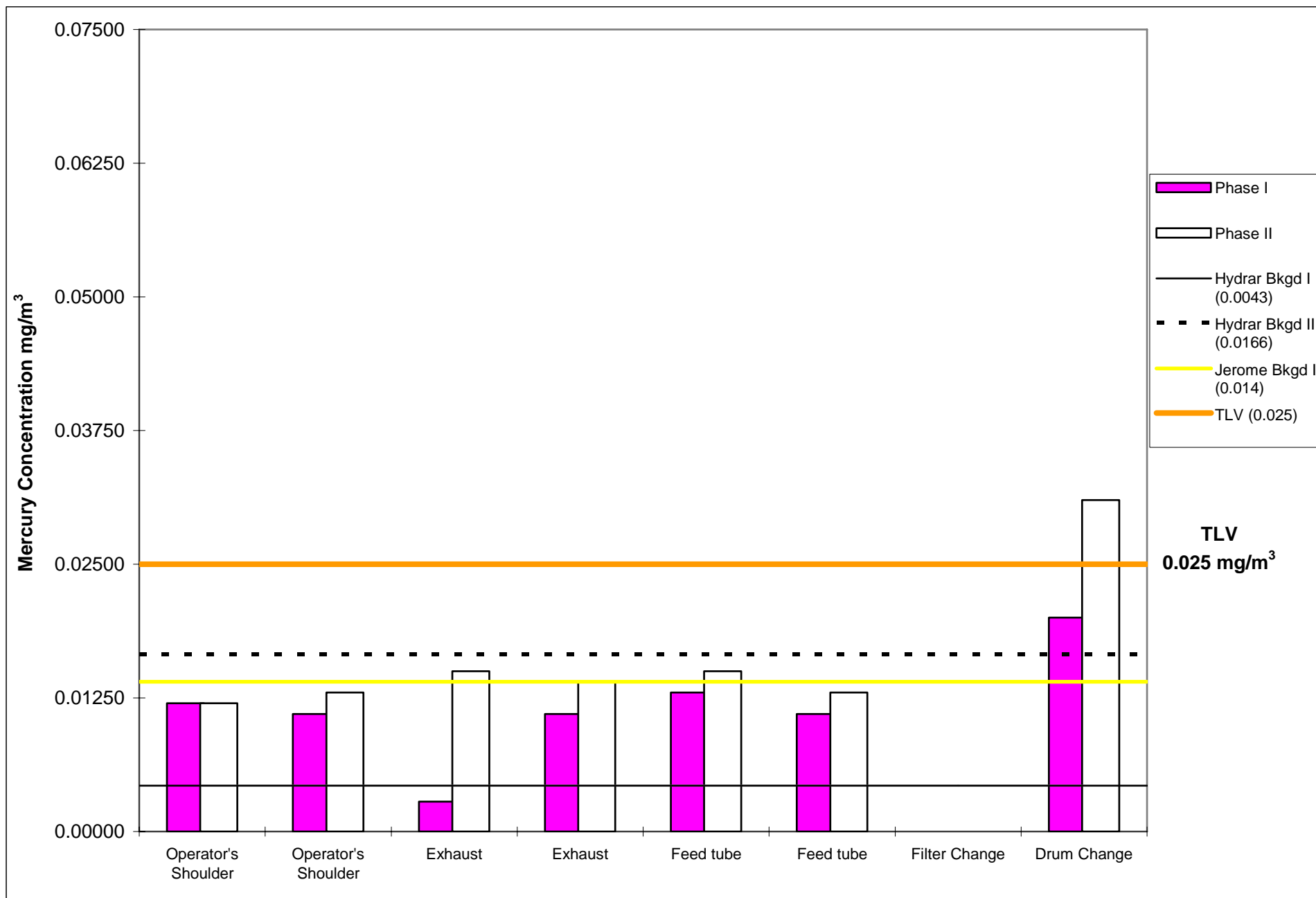
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 12: Performance Validation Study – Phase II Jerome Results
 Manufacturer B – Ashland, Virginia – June 9-13, 2003**



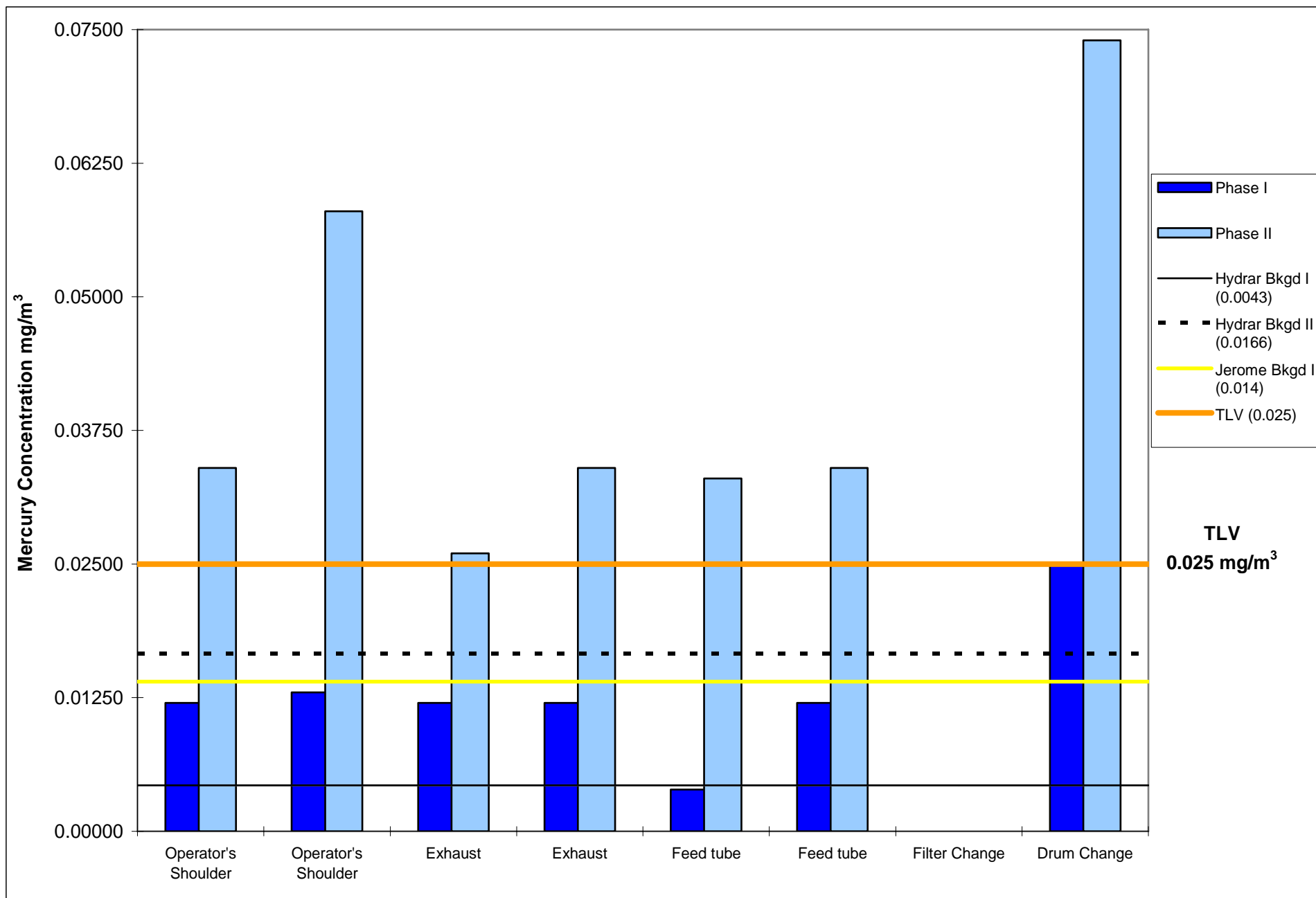
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 13: Performance Validation Study – Phase I and Phase II Analytical Air Results
Manufacturer A Device**



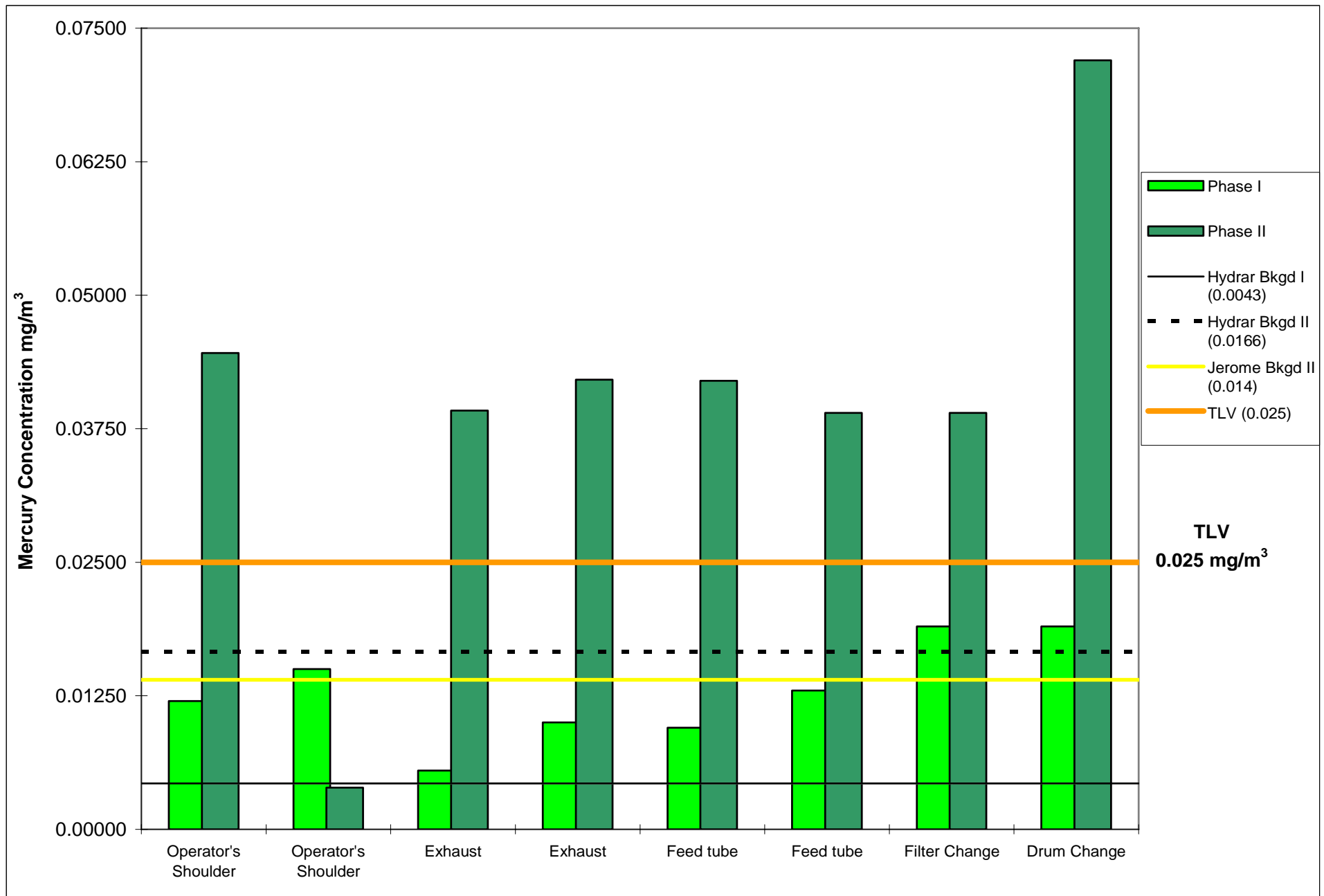
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 14: Performance Validation Study – Phase I and Phase II Analytical Air Results
Manufacturer B Device**



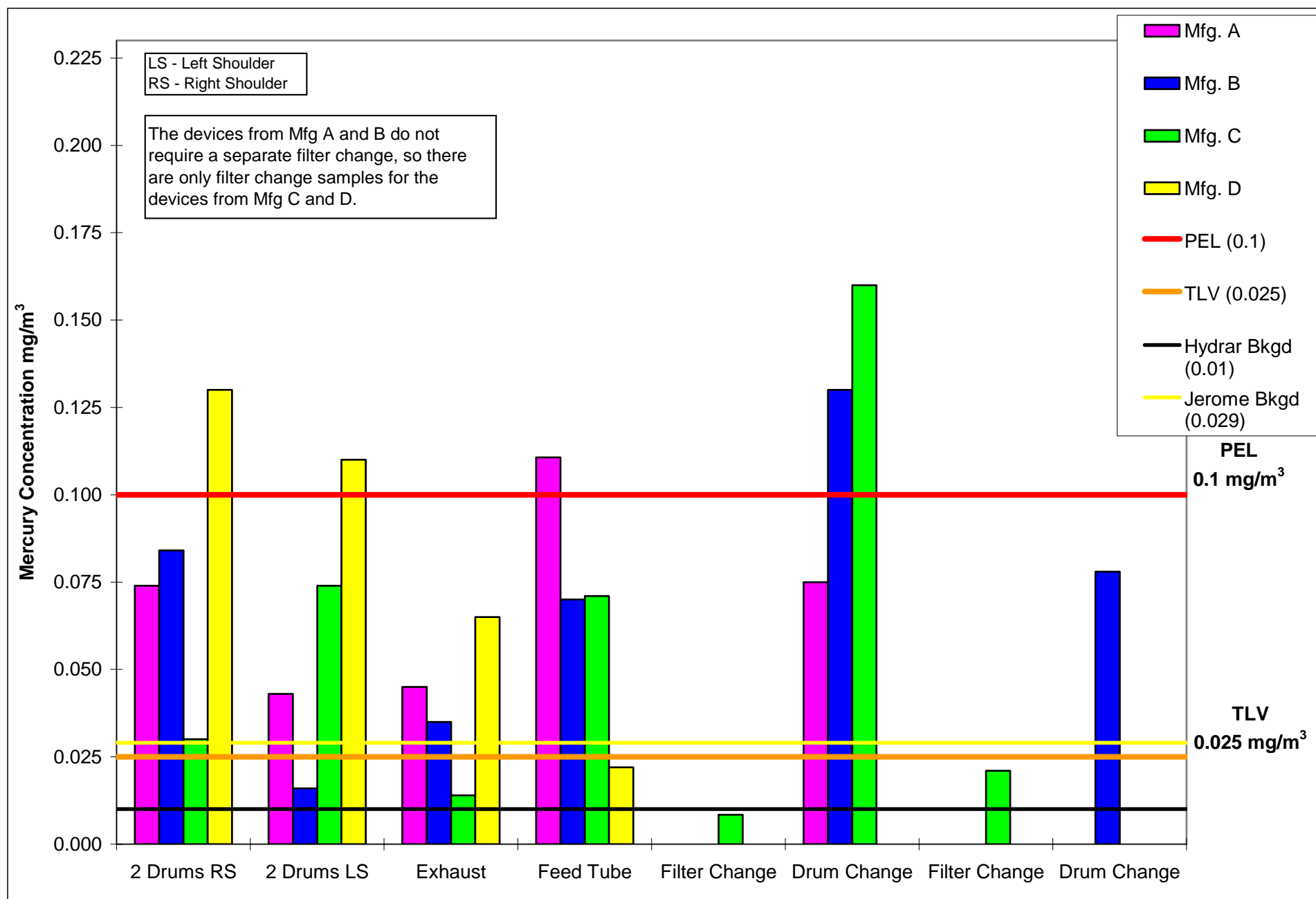
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 15: Performance Validation Study – Phase I and Phase II Analytical Air Results
Manufacturer C Device**



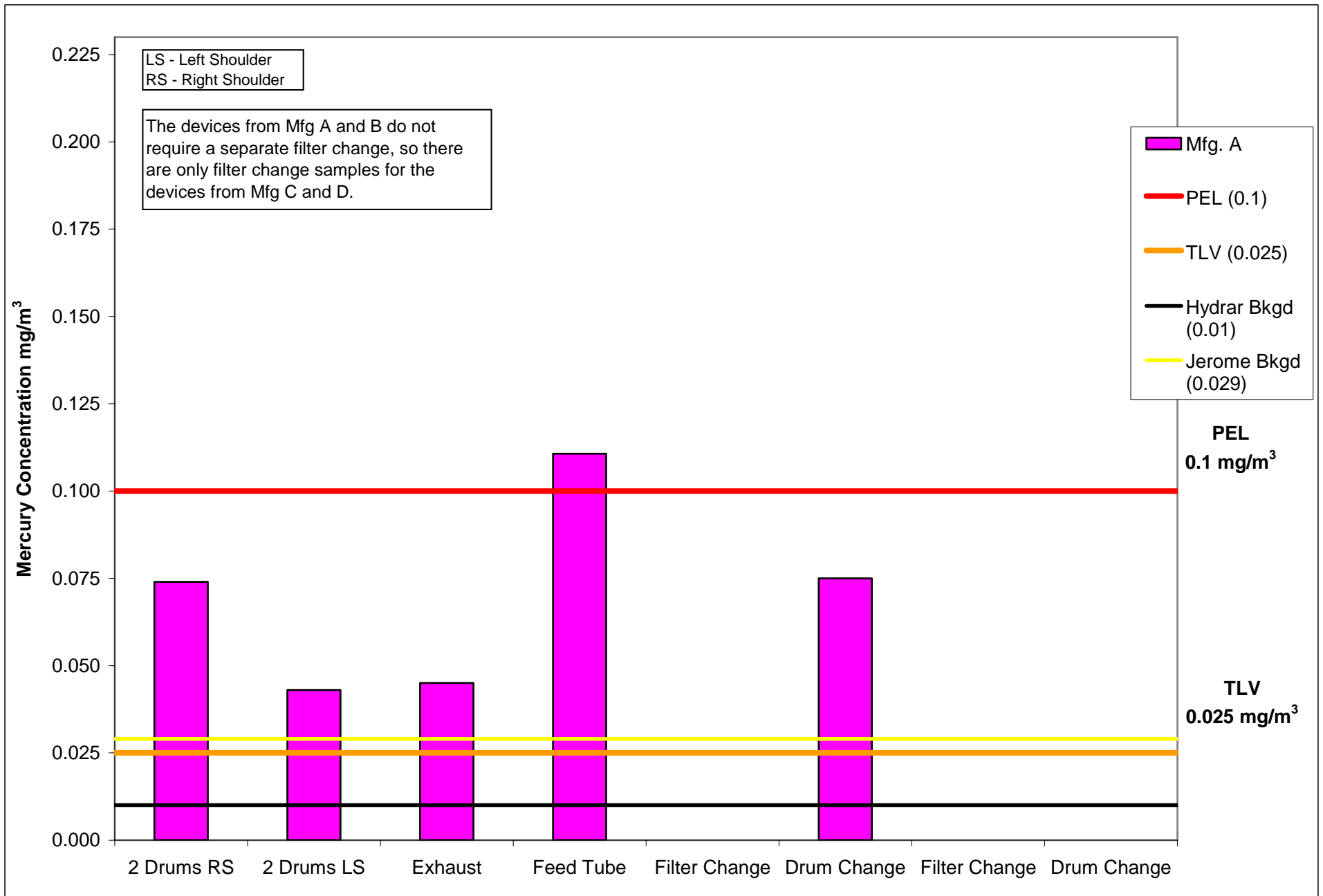
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 16: Extended Field Test #1 Analytical Air Results
All Devices – Phoenix, Arizona – March 24-28, 2003**



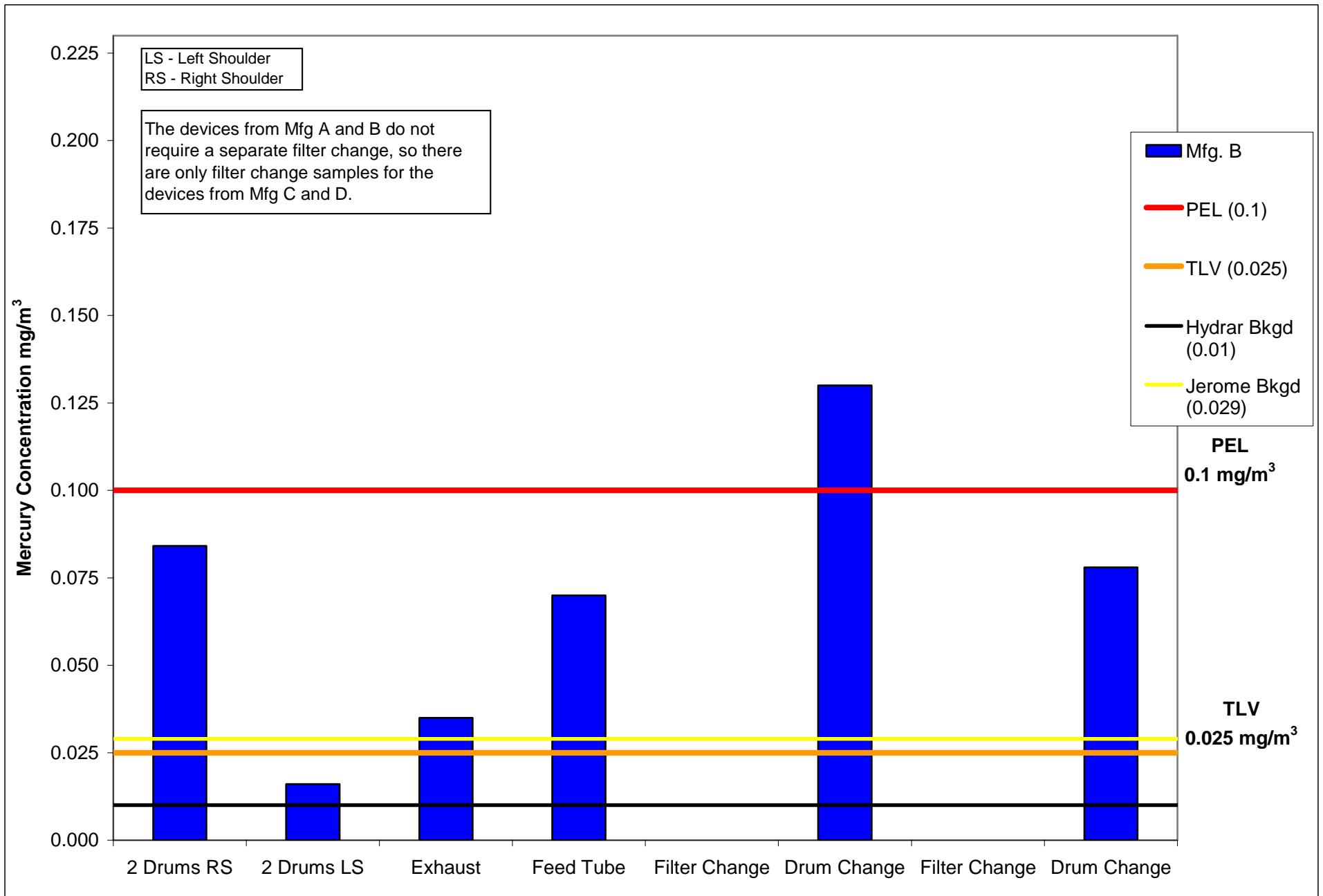
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 17: Extended Field Test #1 Analytical Air Results
 Manufacturer A – Phoenix, Arizona – March 24-28, 2003**



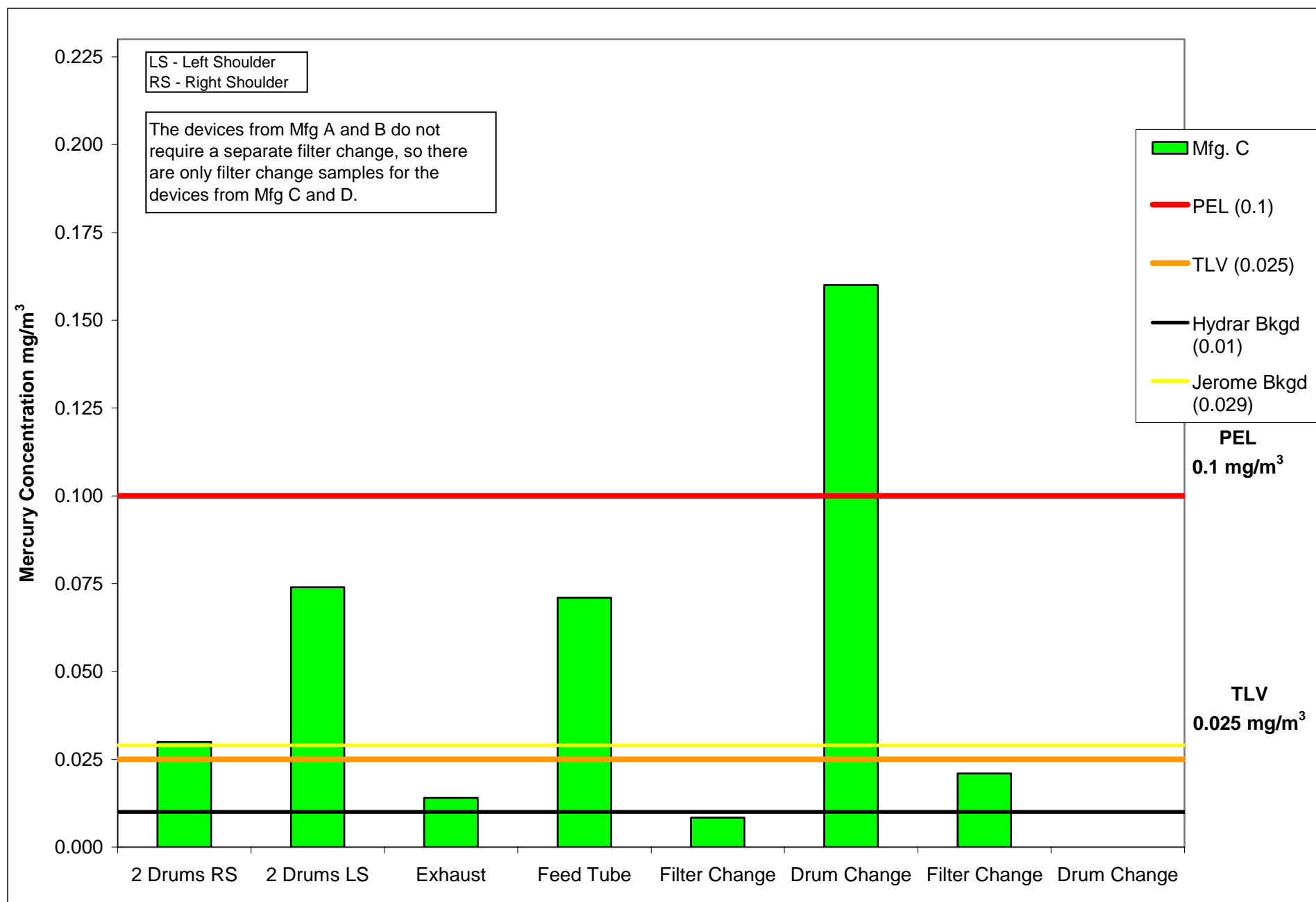
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 18: Extended Field Test #1 Analytical Air Results
 Manufacturer B – Phoenix, Arizona – March 24-28, 2003**



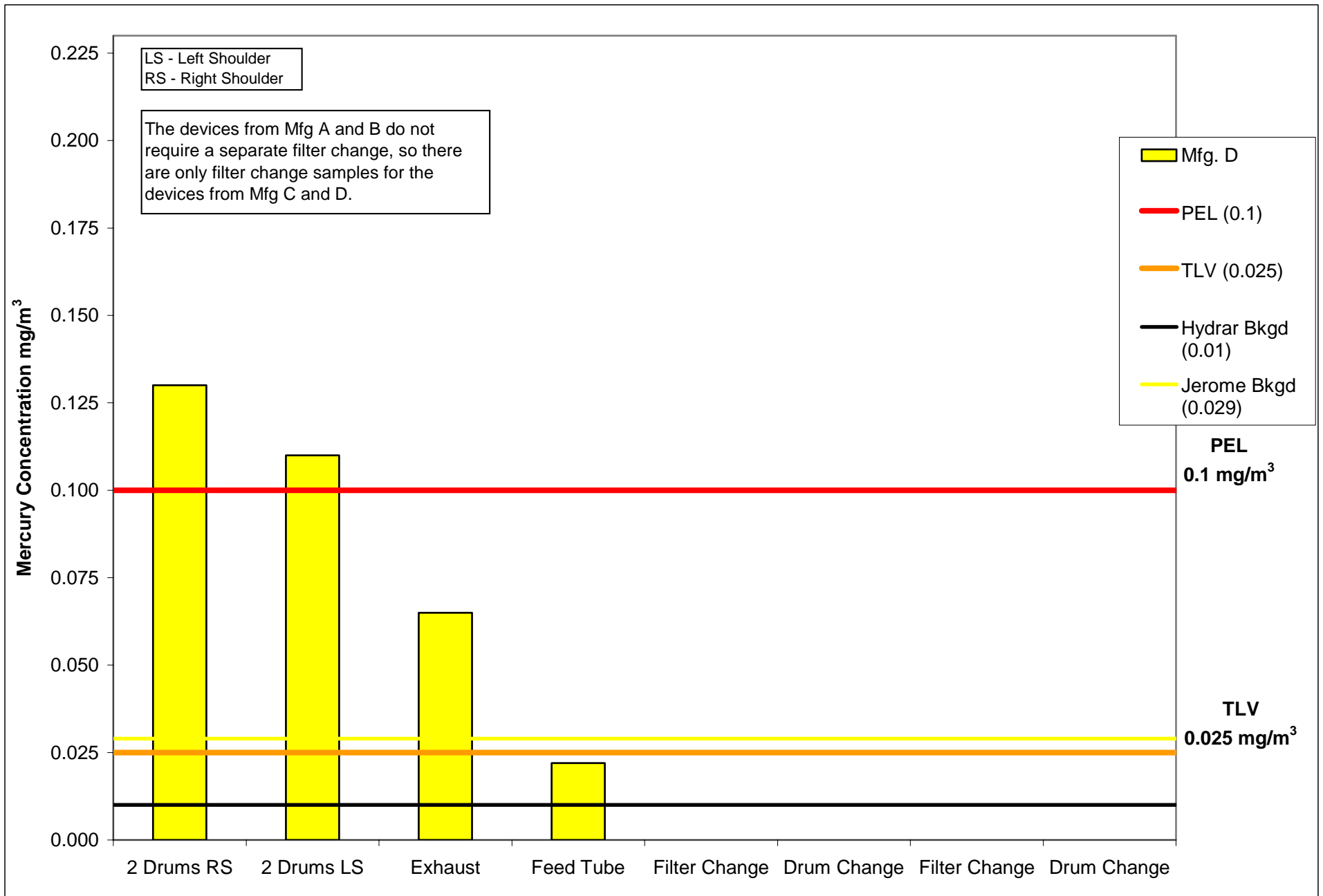
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 19: Extended Field Test #1 Analytical Air Results
 Manufacturer C – Phoenix, Arizona – March 24-28, 2003**



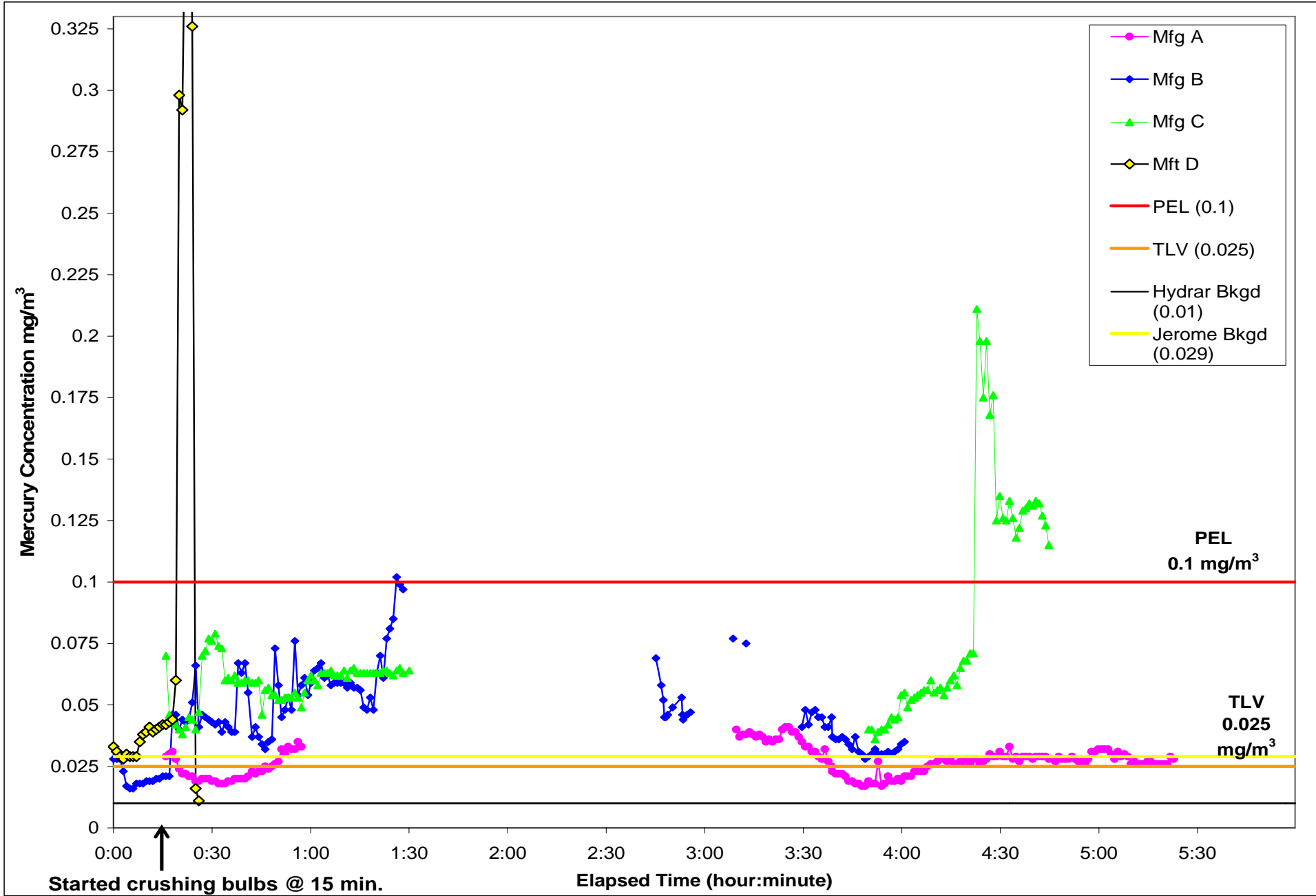
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 20: Extended Field Test #1 Analytical Air Results
 Manufacturer D – Phoenix, Arizona – March 24-28, 2003**



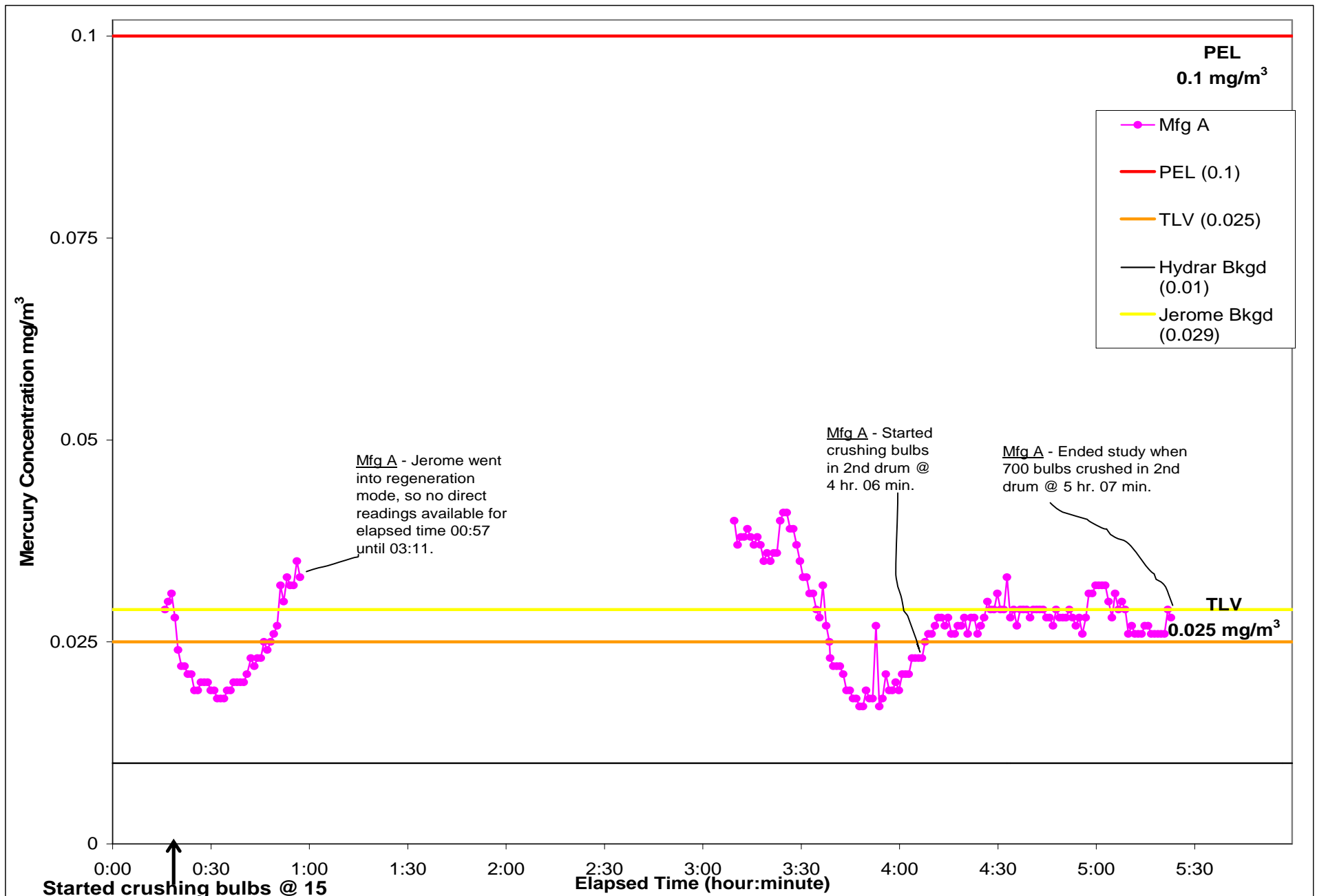
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 21: Extended Field Test #1 Jerome Results
All Devices – Phoenix, Arizona – March 24-28, 2003**



The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 22: Extended Field Test #1 Jerome Results
 Manufacturer A – Phoenix, Arizona – March 24-28, 2003**



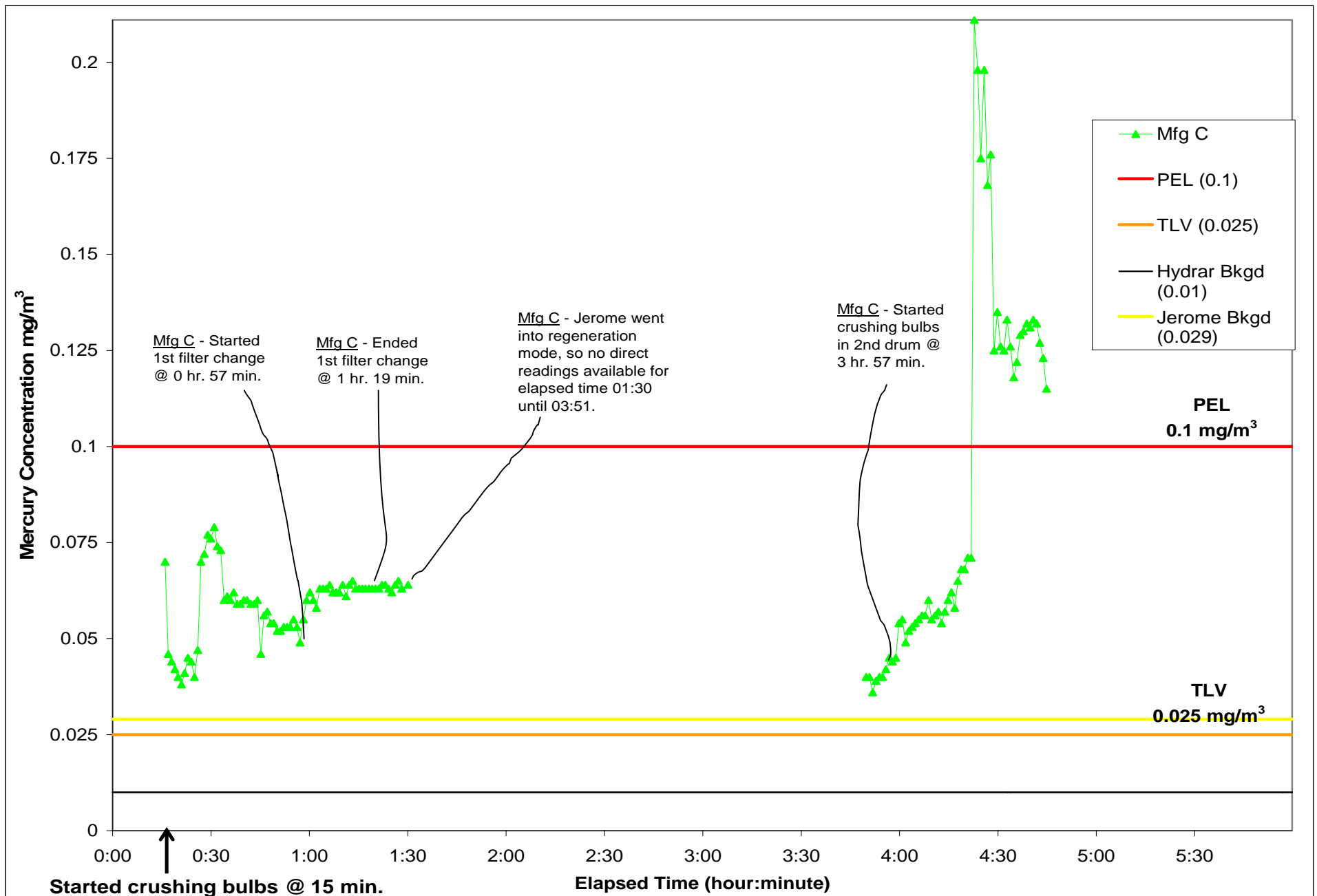
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 23: Extended Field Test #1 Jerome Results
 Manufacturer B – Phoenix, Arizona – March 24-28, 2003**



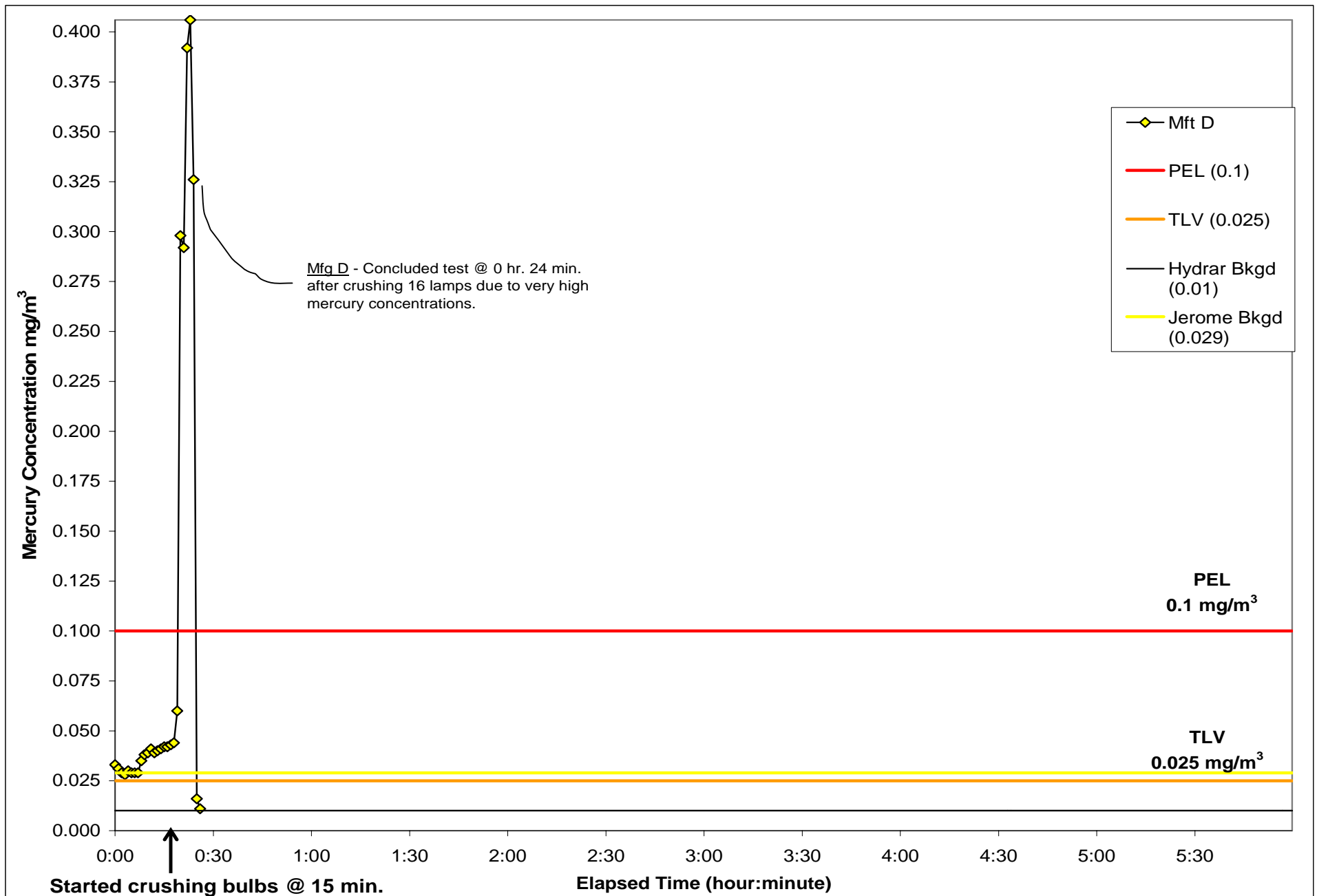
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 24: Extended Field Test #1 Jerome Results
 Manufacturer C – Phoenix, Arizona – March 24-28, 2003**



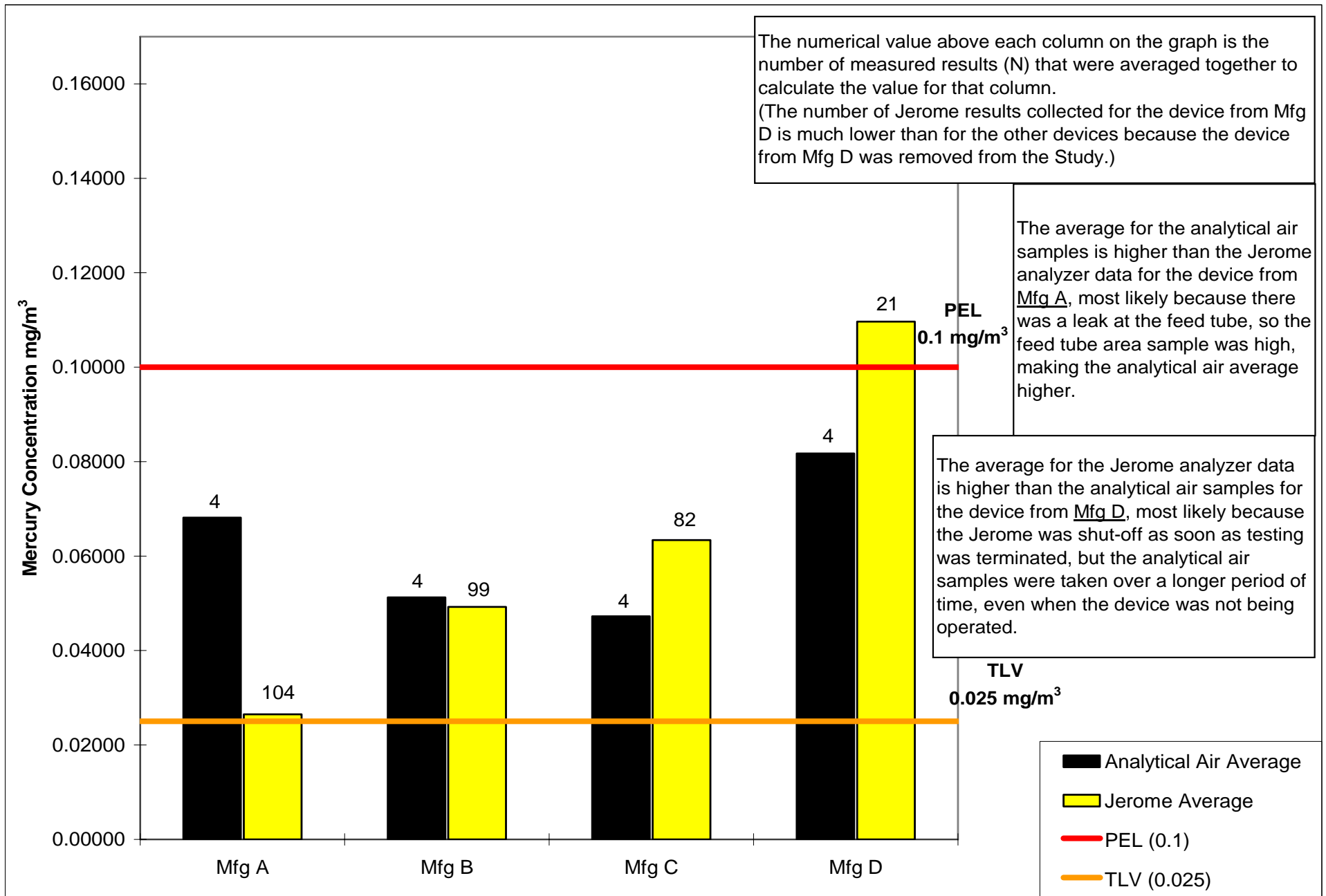
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 25: Extended Field Test #1 Jerome Results
 Manufacturer D – Phoenix, Arizona – March 24-28, 2003**



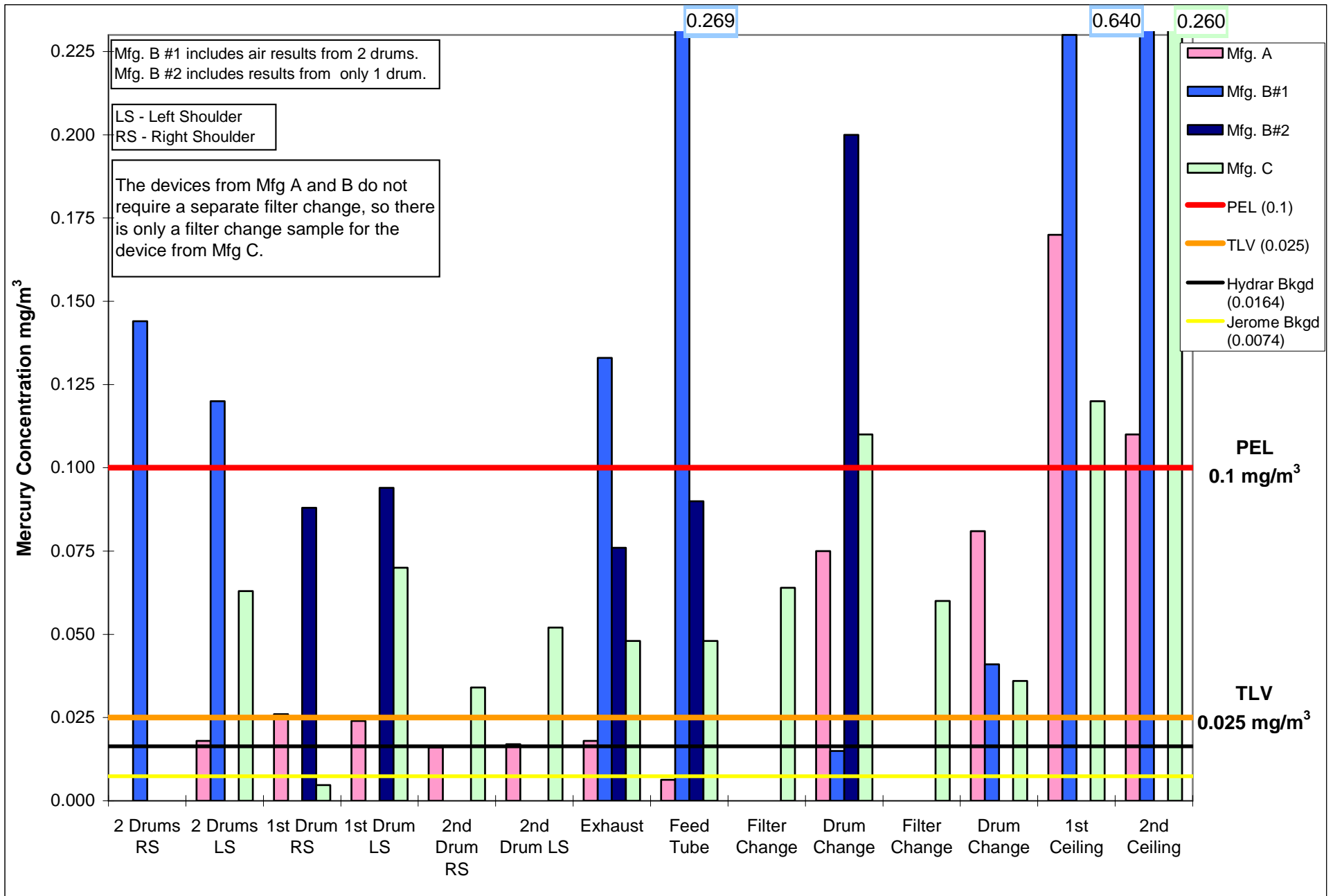
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 26: Extended Field Test #1 – Comparison of Analytical Air and Jerome Results
All Devices – Phoenix, Arizona – March 24-28, 2003**



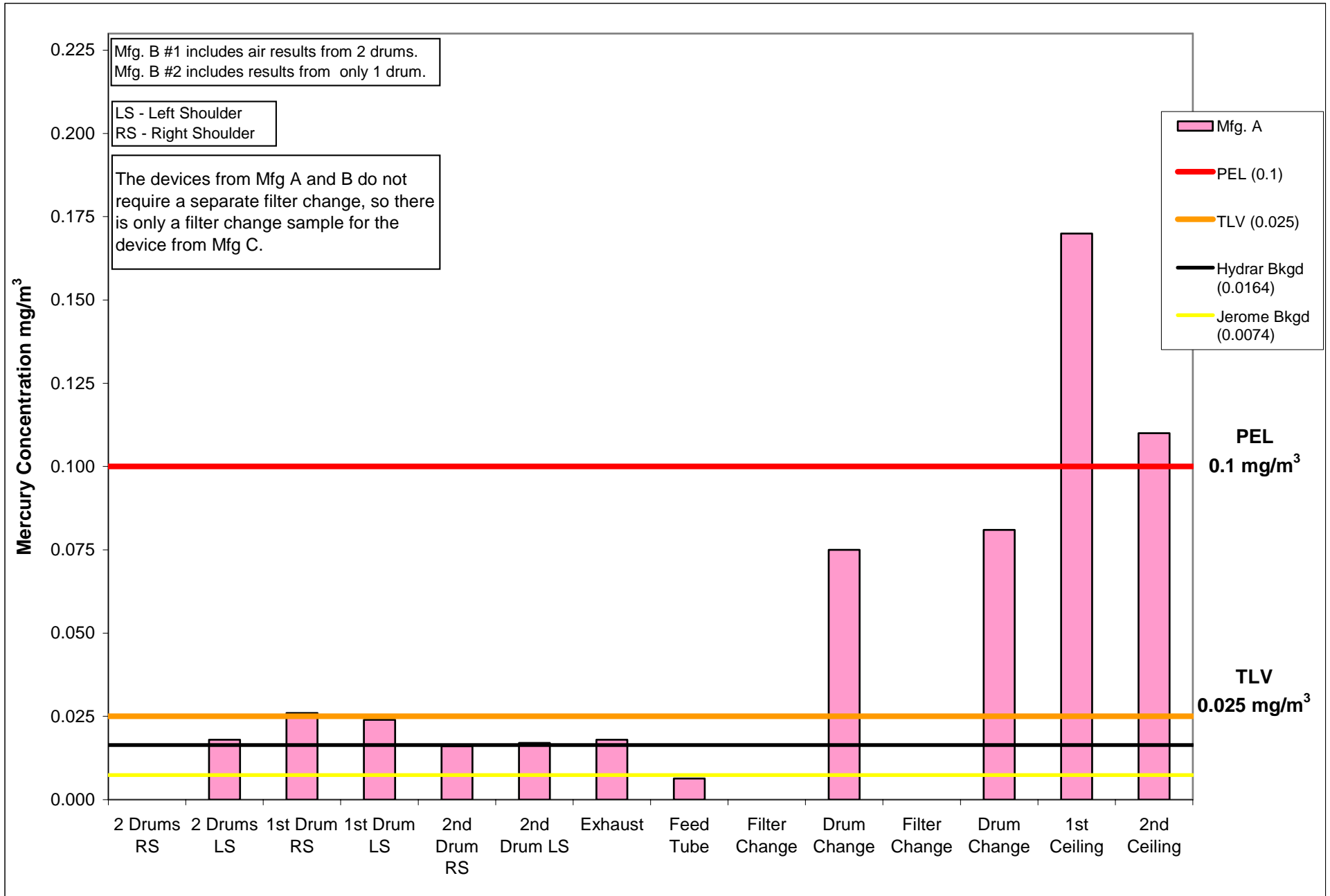
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 27: Extended Field Test #2 Analytical Air Results
All Devices – Melbourne, Florida – April 28-May 2, 2003**



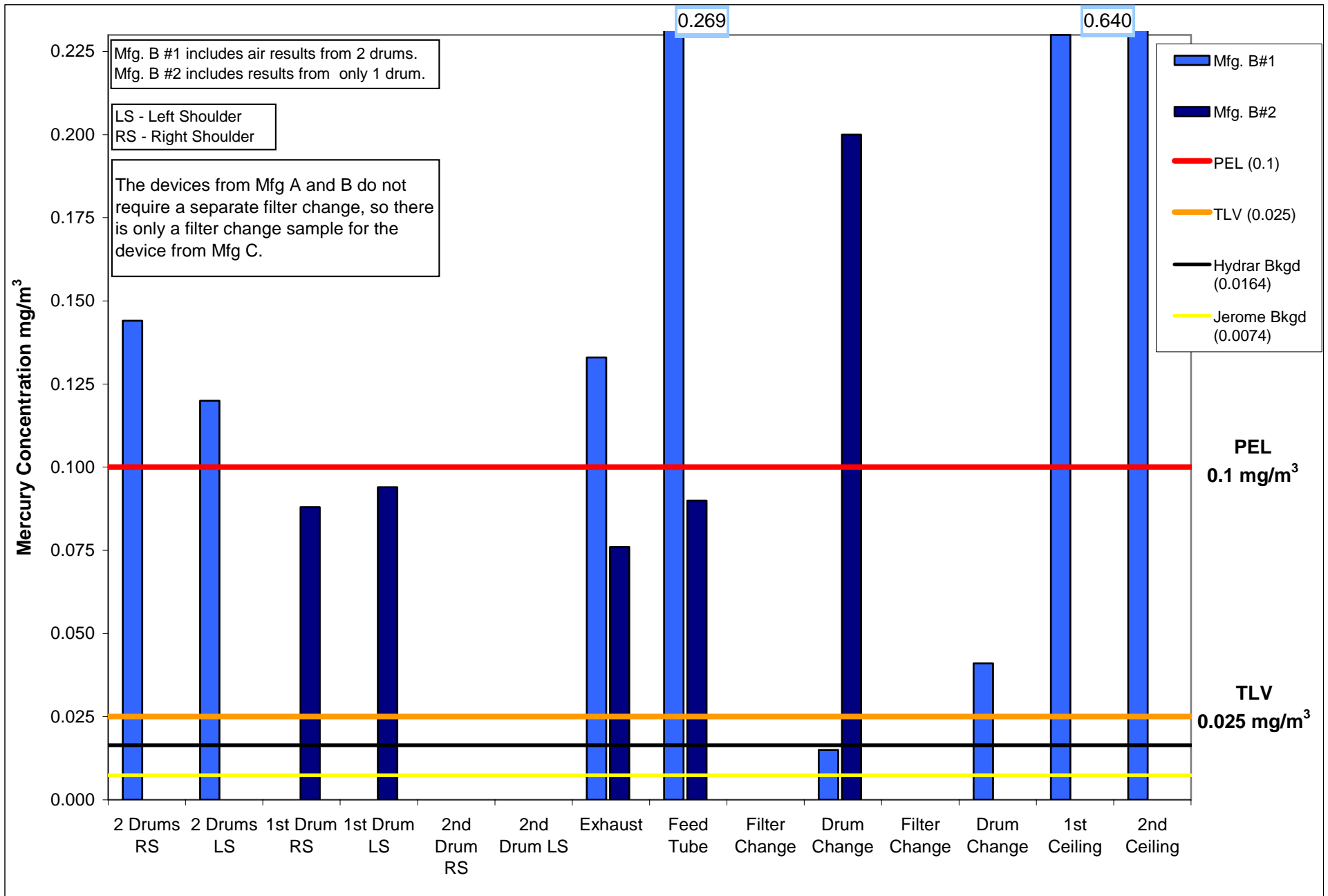
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 28: Extended Field Test #2 Analytical Air Results
 Manufacturer A – Melbourne, Florida – April 28-May 2, 2003**



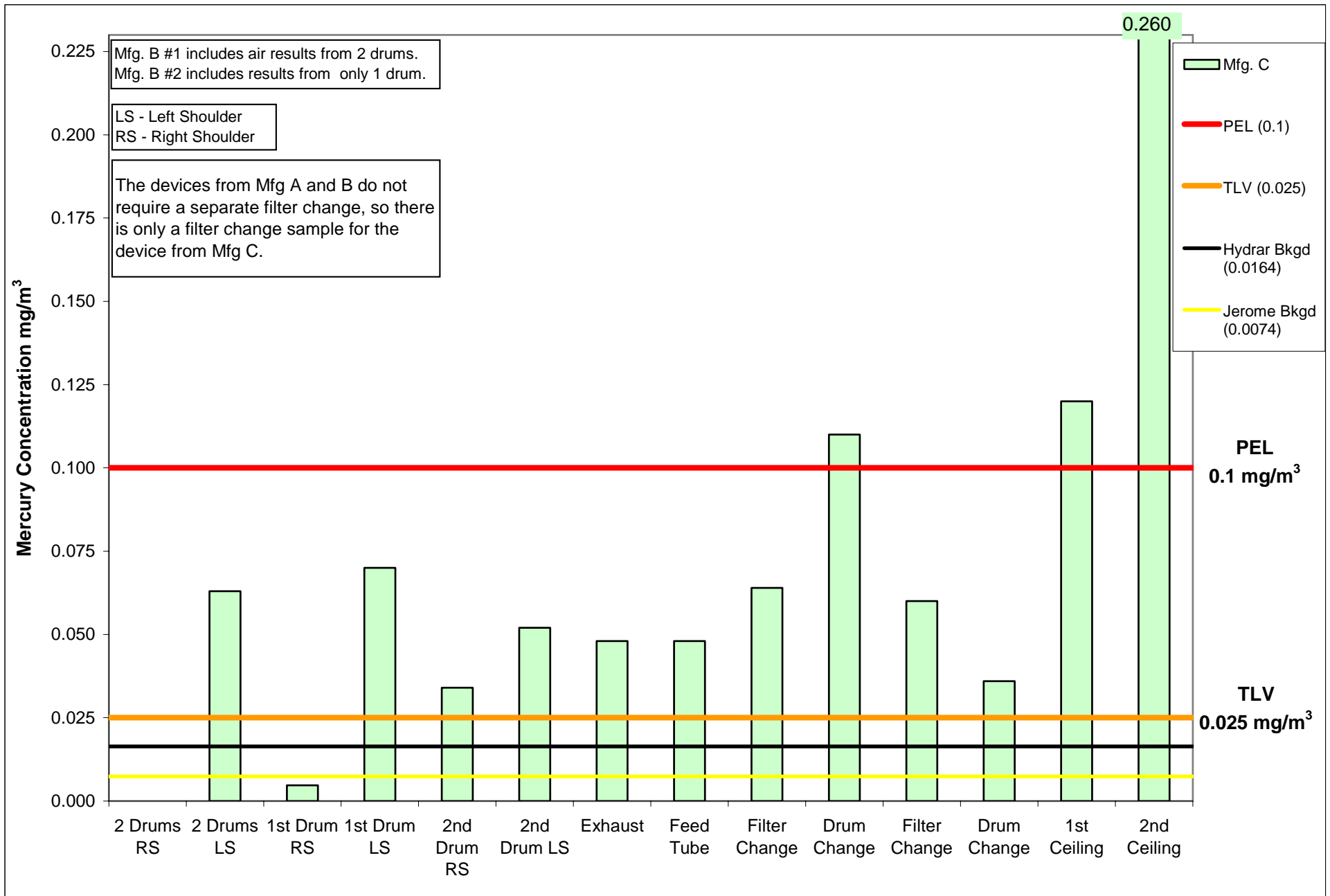
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 29: Extended Field Test #2 Analytical Air Results
 Manufacturer B – Melbourne, Florida – April 28-May 2, 2003**



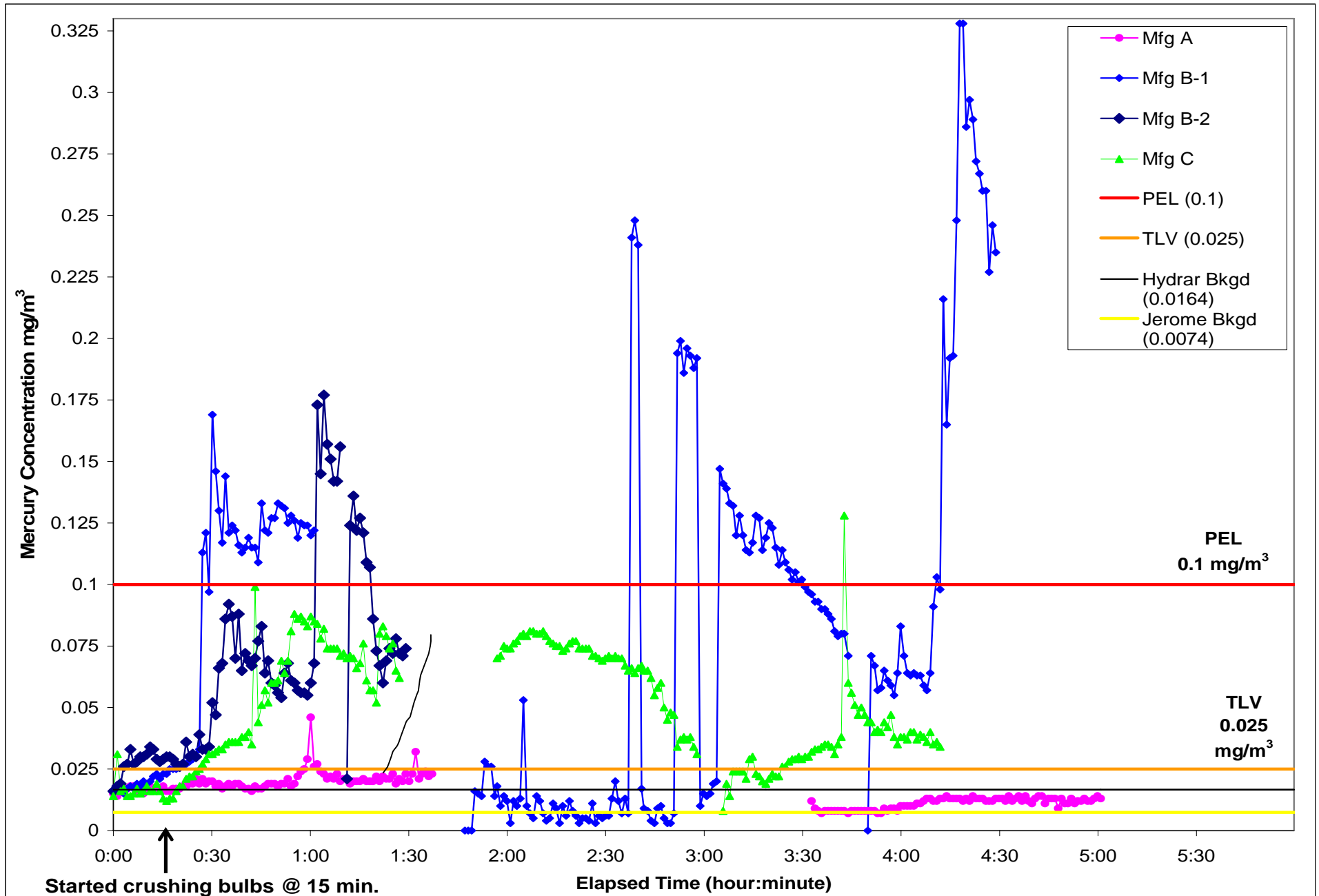
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 30: Extended Field Test #2 Analytical Air Results
 Manufacturer C – Melbourne, Florida – April 28-May 2, 2003**



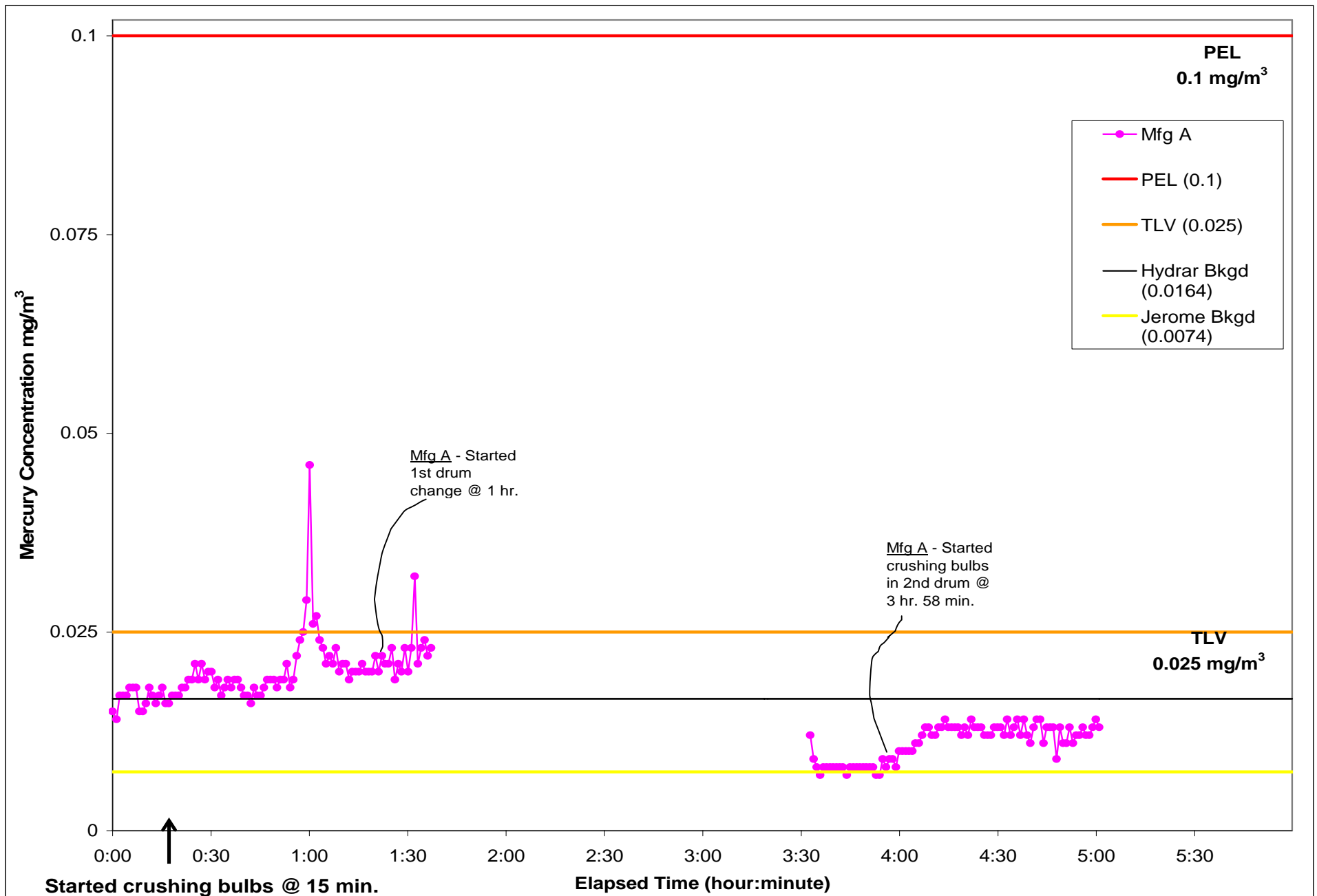
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

Figure 31: Extended Field Test #2 Jerome Results
All Devices – Melbourne, Florida – April 28-May 2, 2003



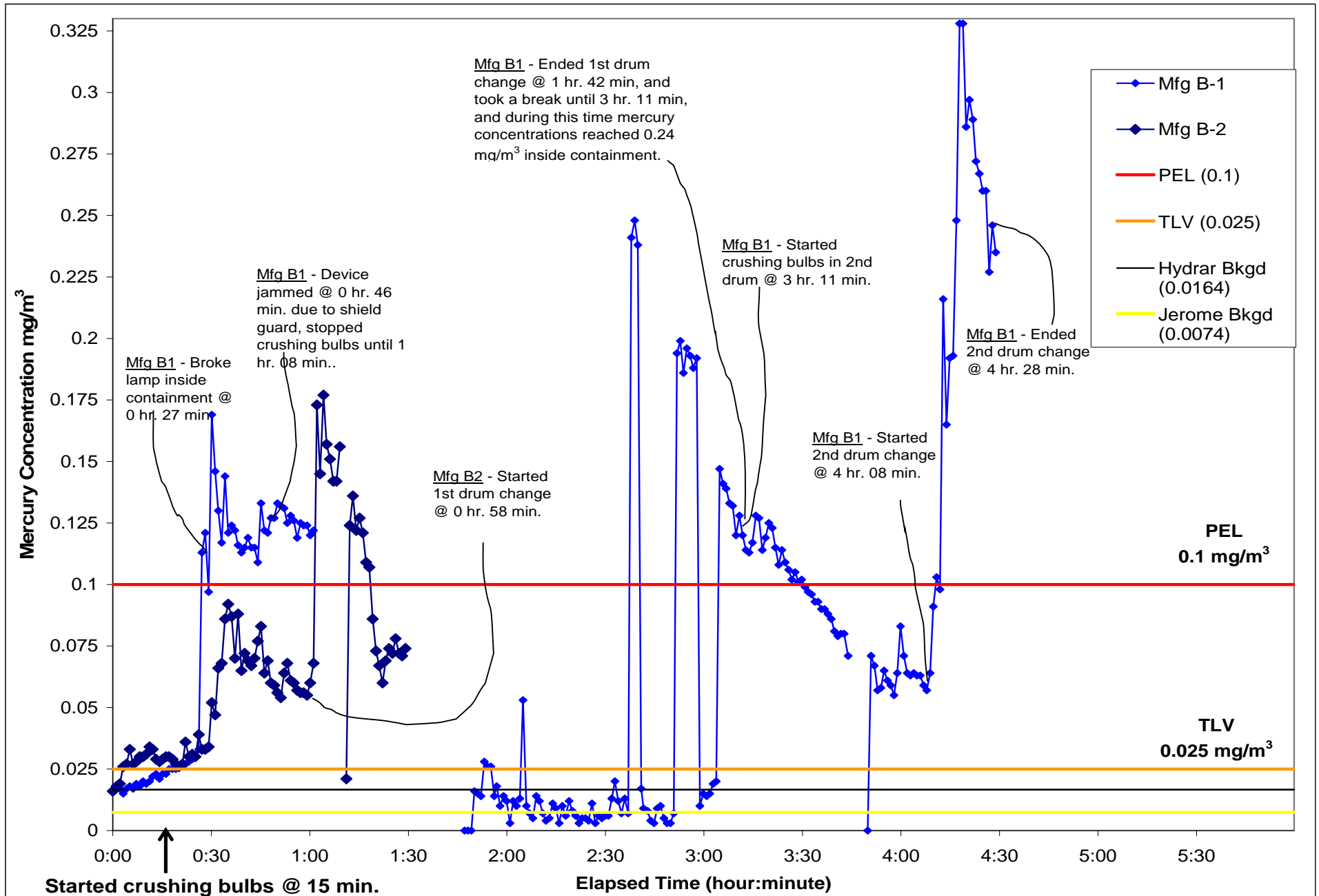
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 32: Extended Field Test #2 Jerome Results
 Manufacturer A – Melbourne, Florida – April 28-May 2, 2003**



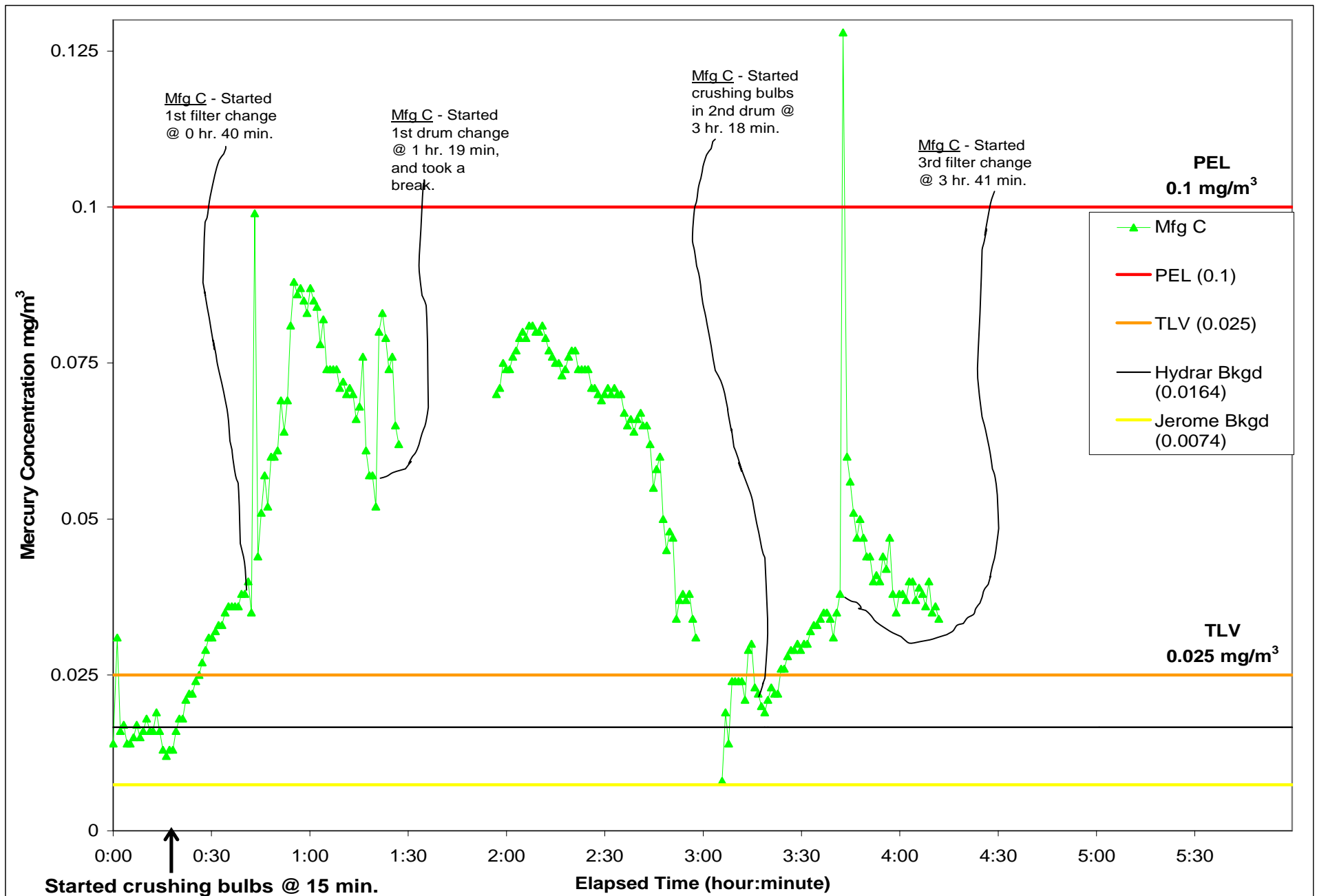
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 33: Extended Field Test #2 Jerome Results
 Manufacturer B – Melbourne, Florida – April 28-May 2, 2003**



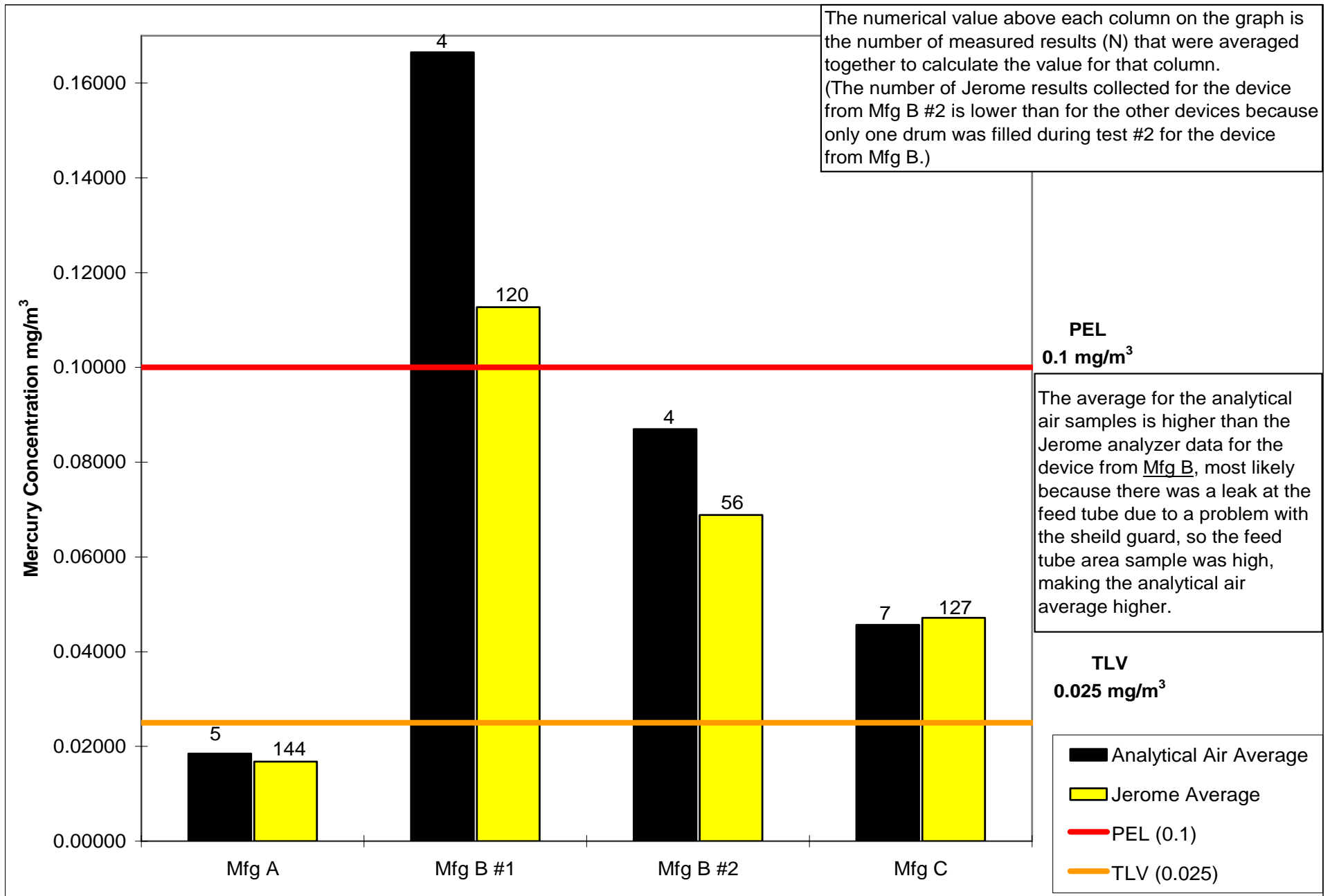
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 34: Extended Field Test #2 Jerome Results
 Manufacturer C – Melbourne, Florida – April 28-May 2, 2003**



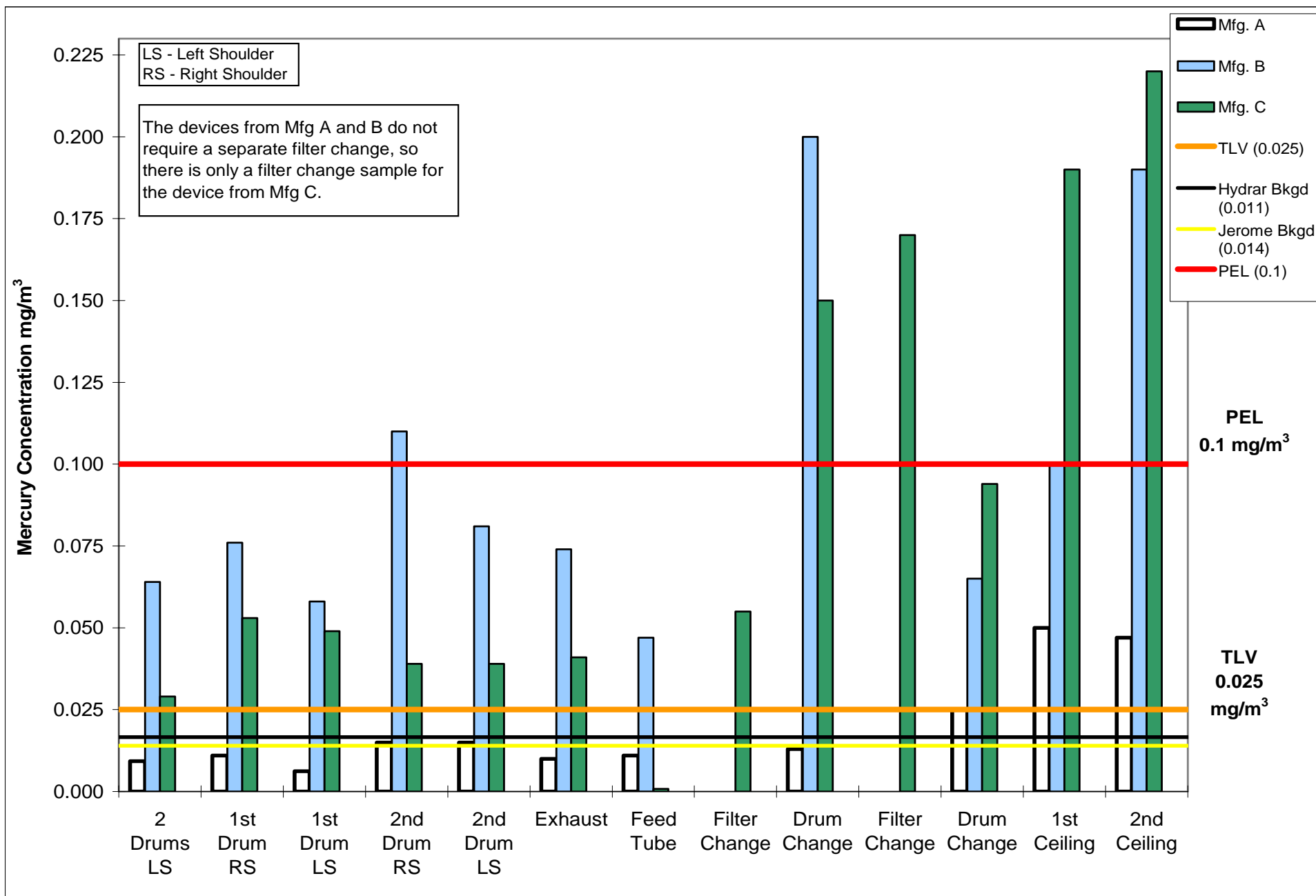
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 35: Extended Field Test #2 – Comparison of Analytical Air and Jerome Results
All Devices – Melbourne, Florida – April 28-May 2, 2003**



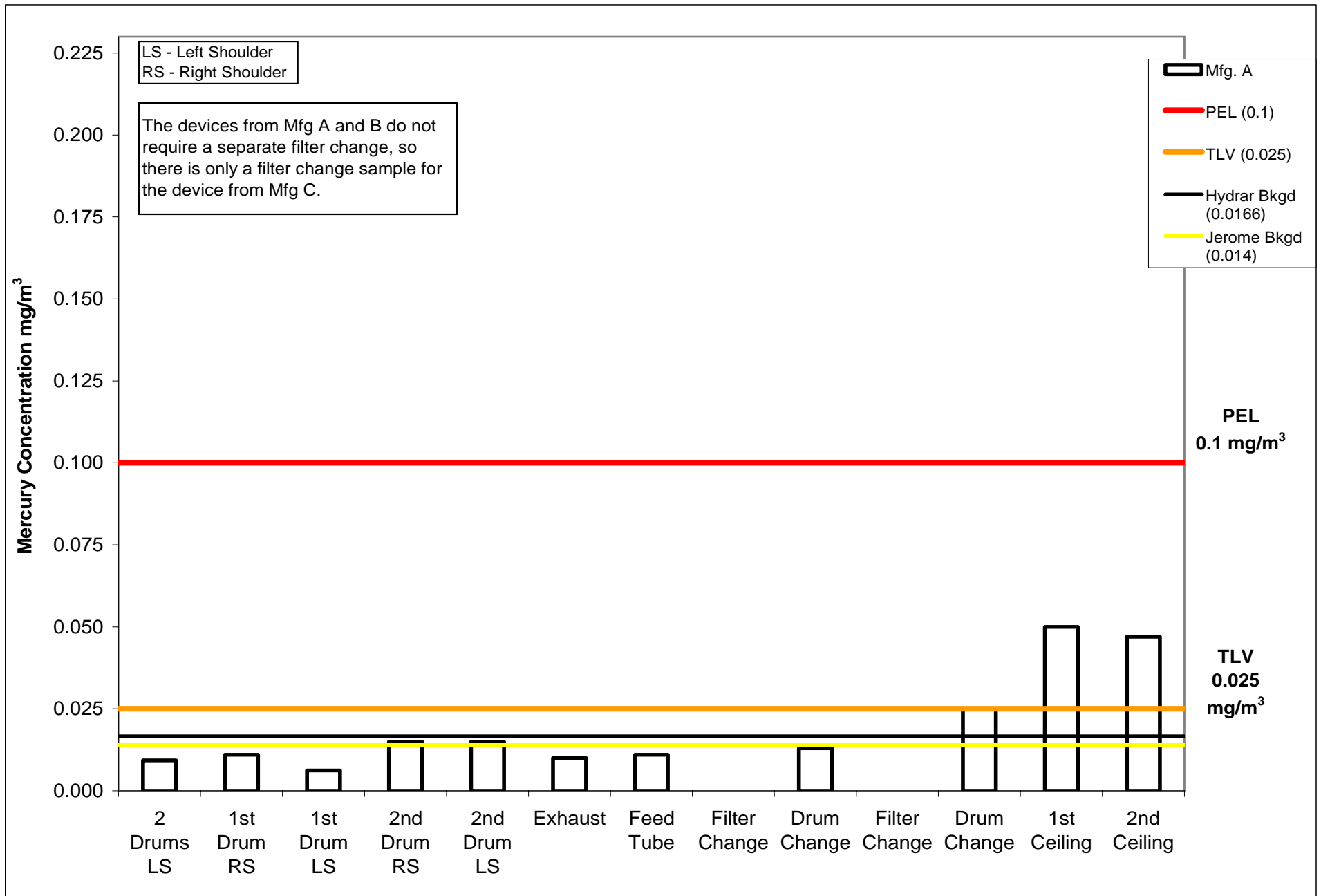
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

Figure 36: Extended Field Test #3 Analytical Air Results
All Devices – Ashland, Virginia – June 9-13, 2003



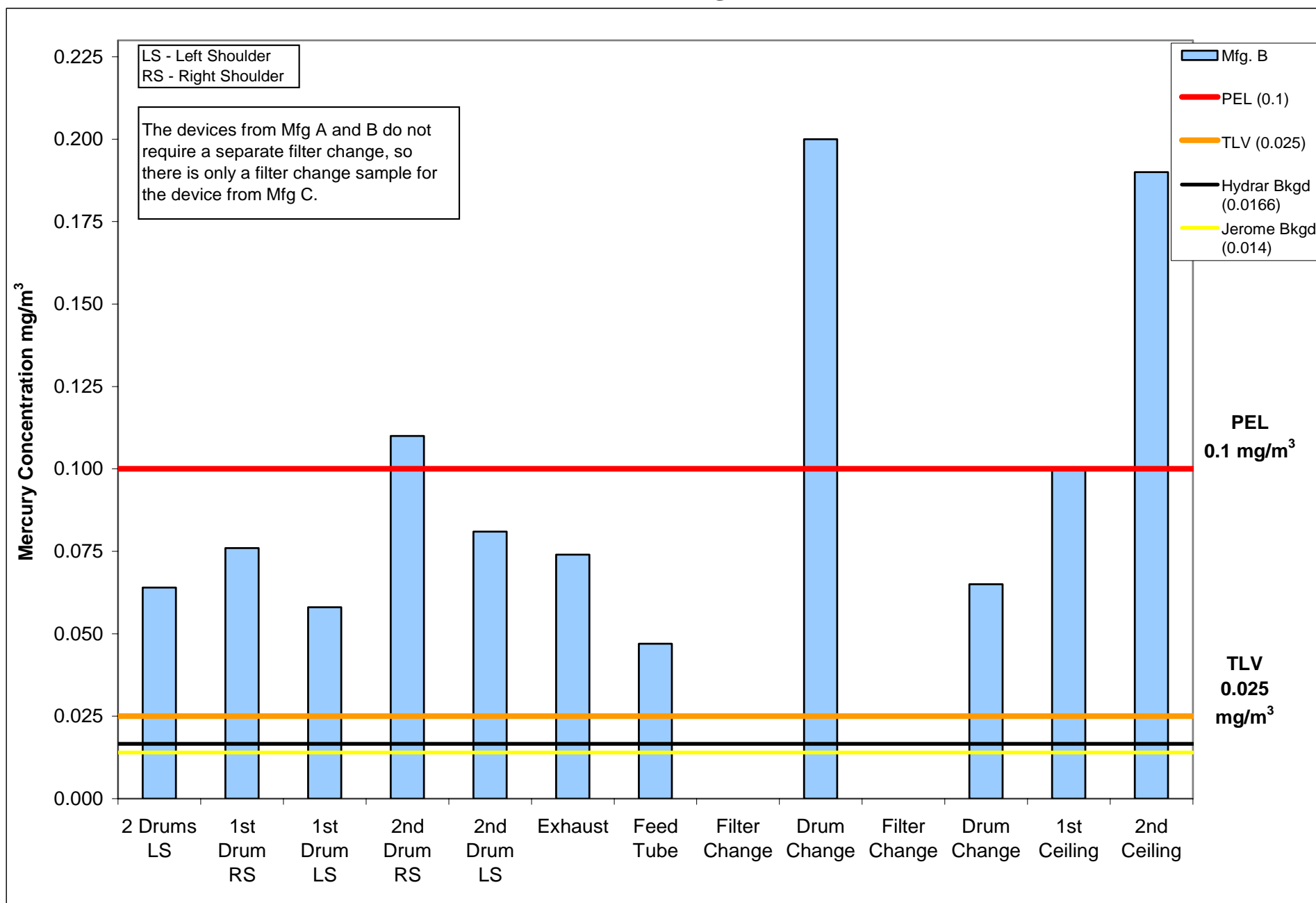
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 37: Extended Field Test #3 Analytical Air Results
 Manufacturer A – Ashland, Virginia – June 9-13, 2003**



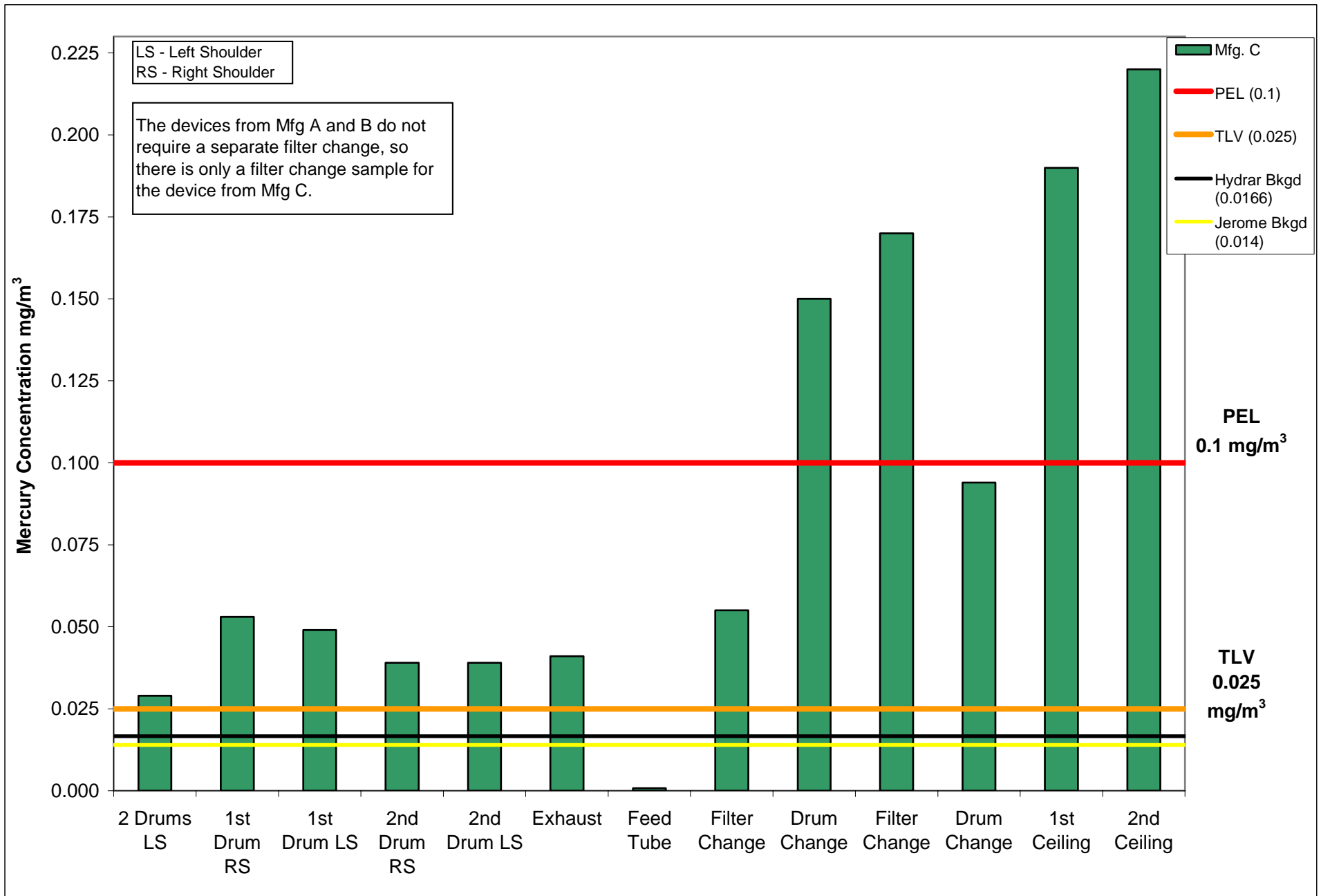
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 38: Extended Field Test #3 Analytical Air Results
 Manufacturer B – Ashland, Virginia – June 9-13, 2003**



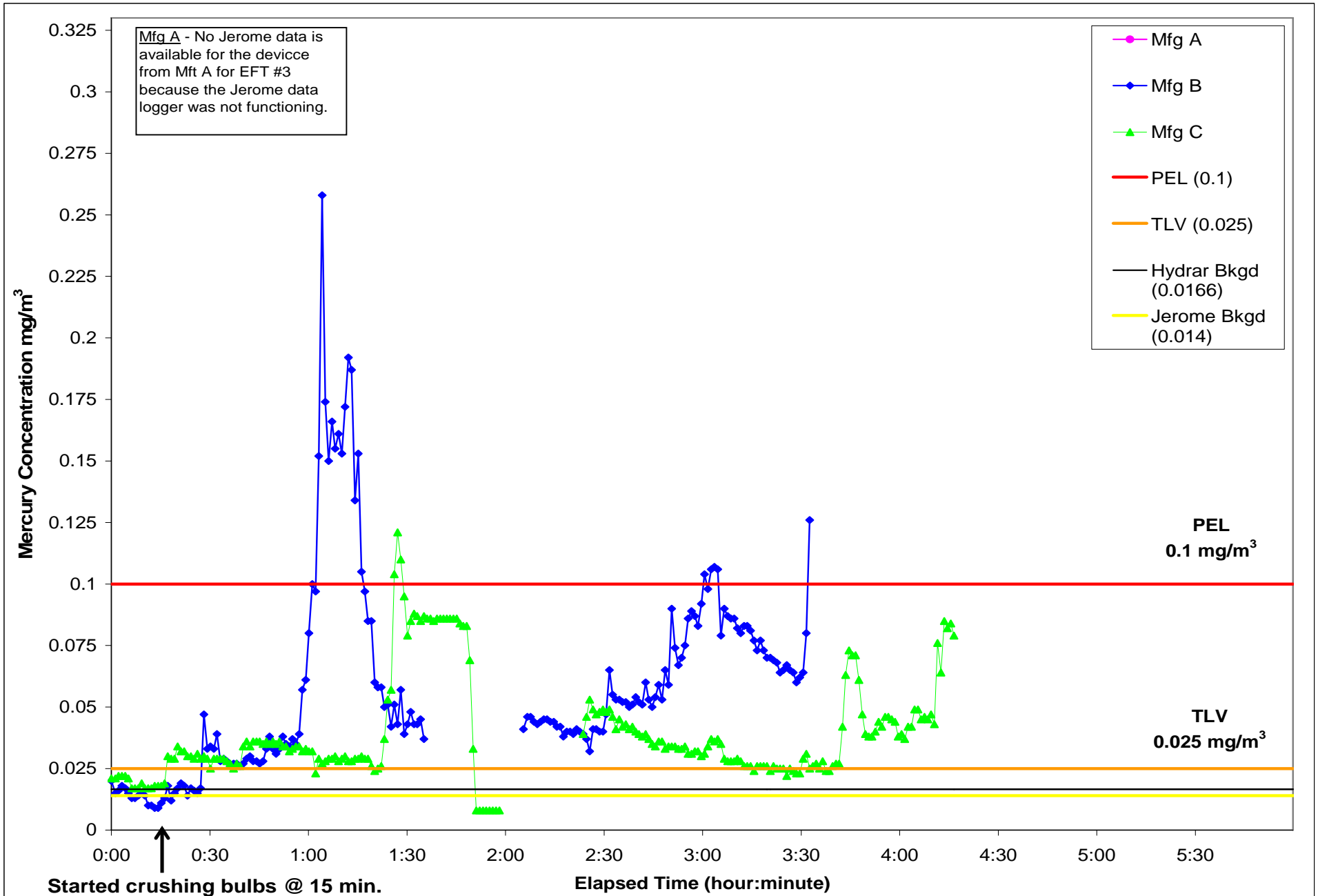
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 39: Extended Field Test #3 Analytical Air Results
 Manufacturer C – Ashland, Virginia – June 9-13, 2003**



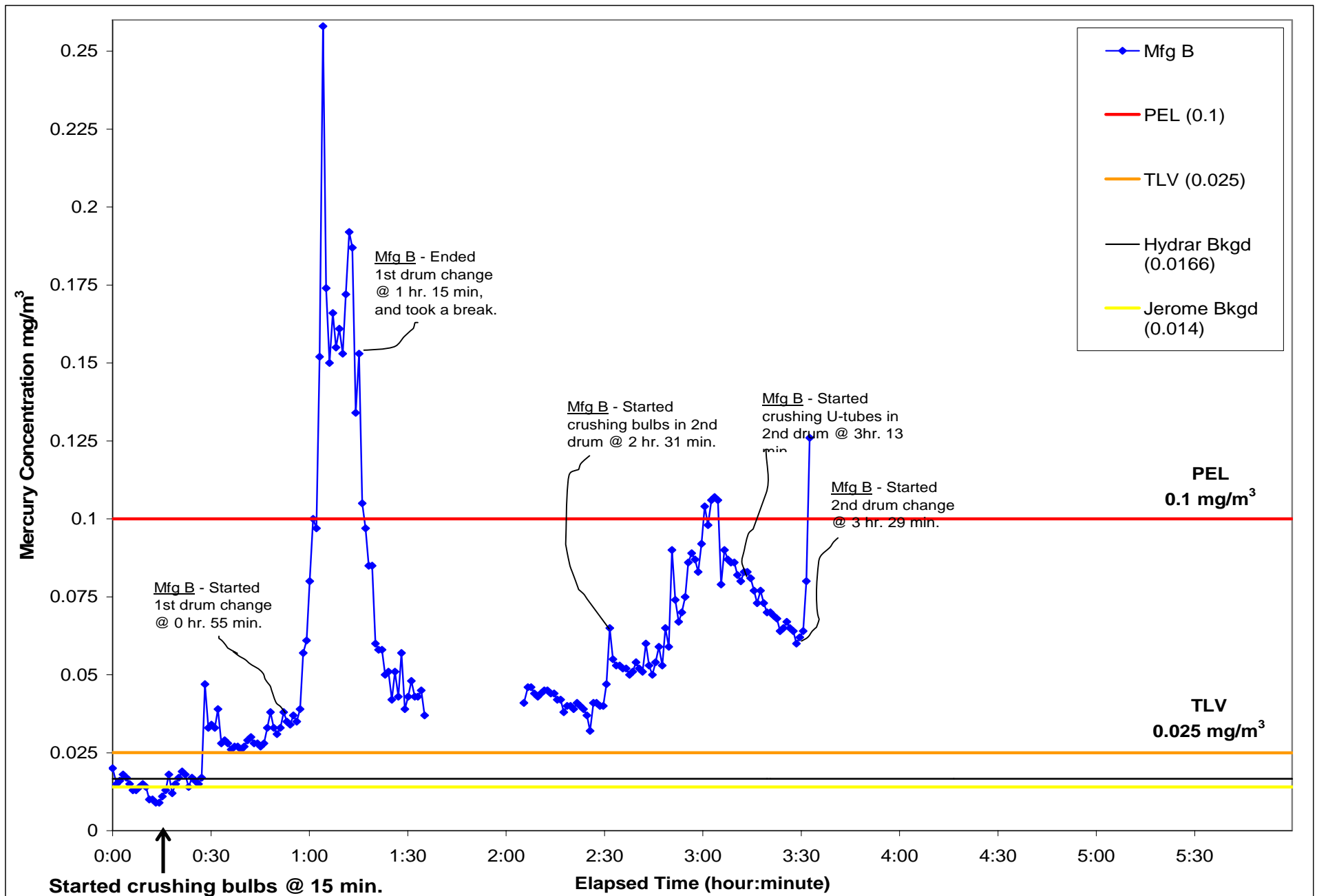
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 40: Extended Field Test #3 Jerome Results
All Devices – Ashland, Virginia – June 9-13, 2003**



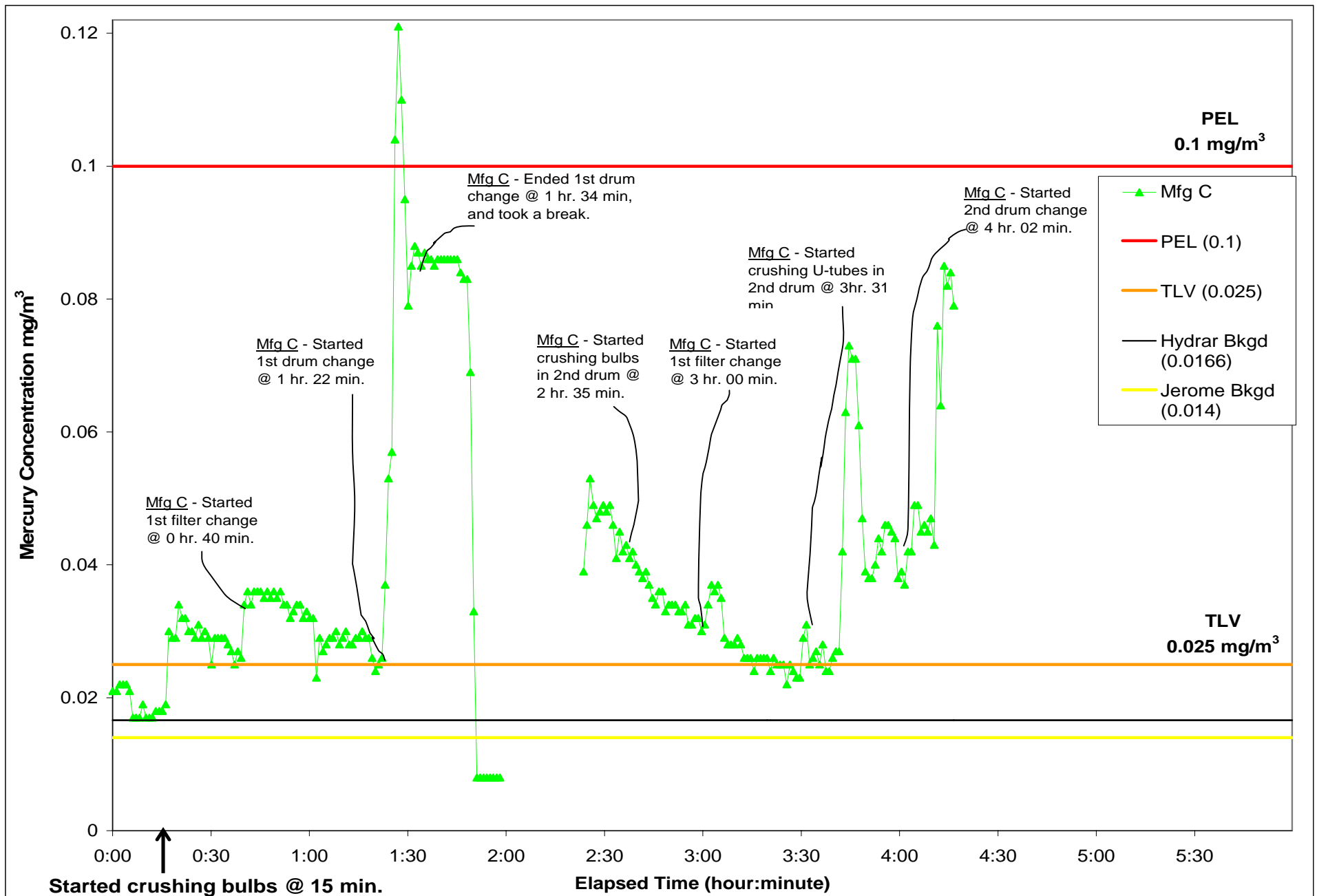
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 41: Extended Field Test #3 Jerome Results
 Manufacturer B – Ashland, Virginia – June 9-13, 2003**



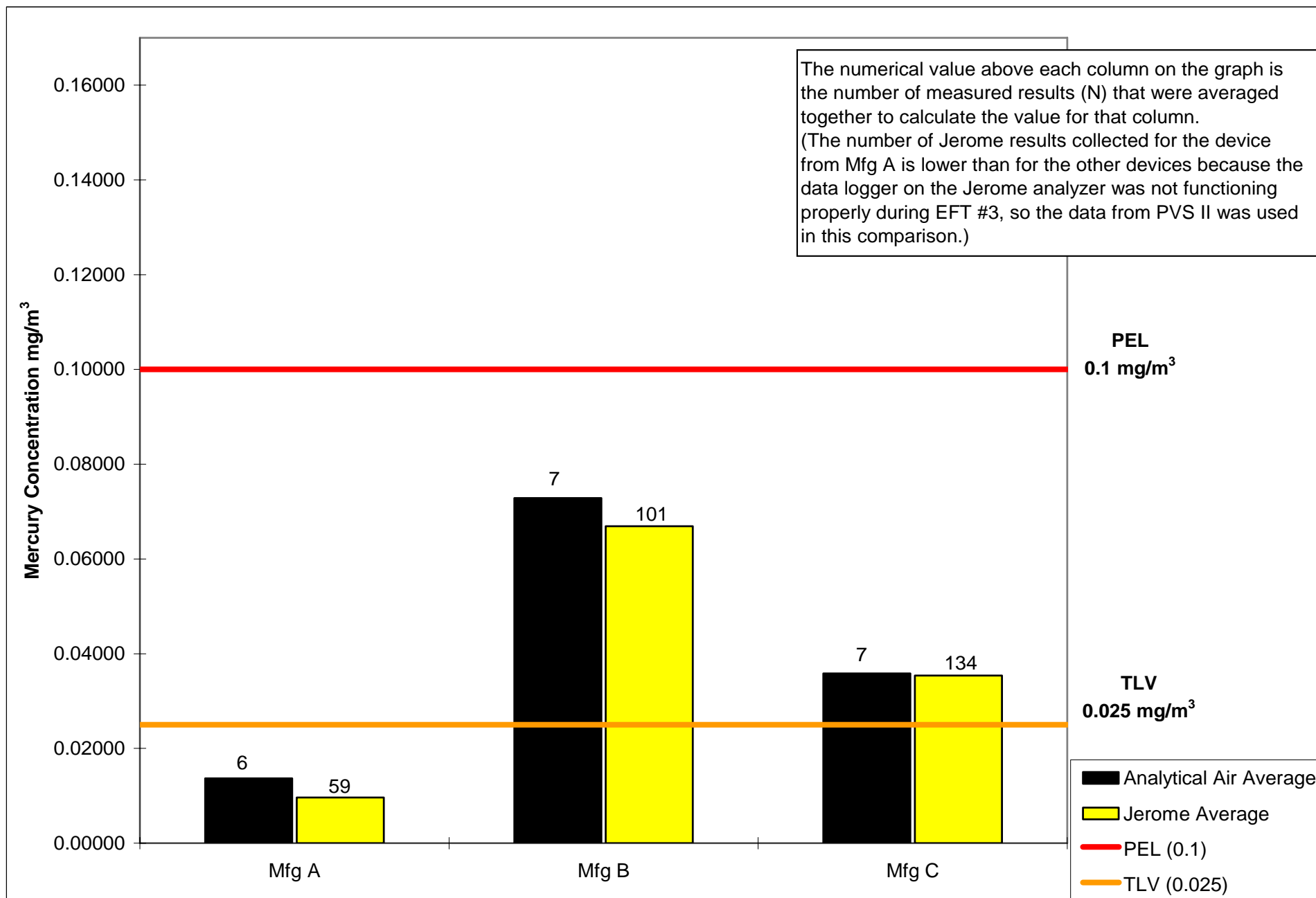
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 42: Extended Field Test #3 Jerome Results
 Manufacturer C – Ashland, Virginia – June 9-13, 2003**



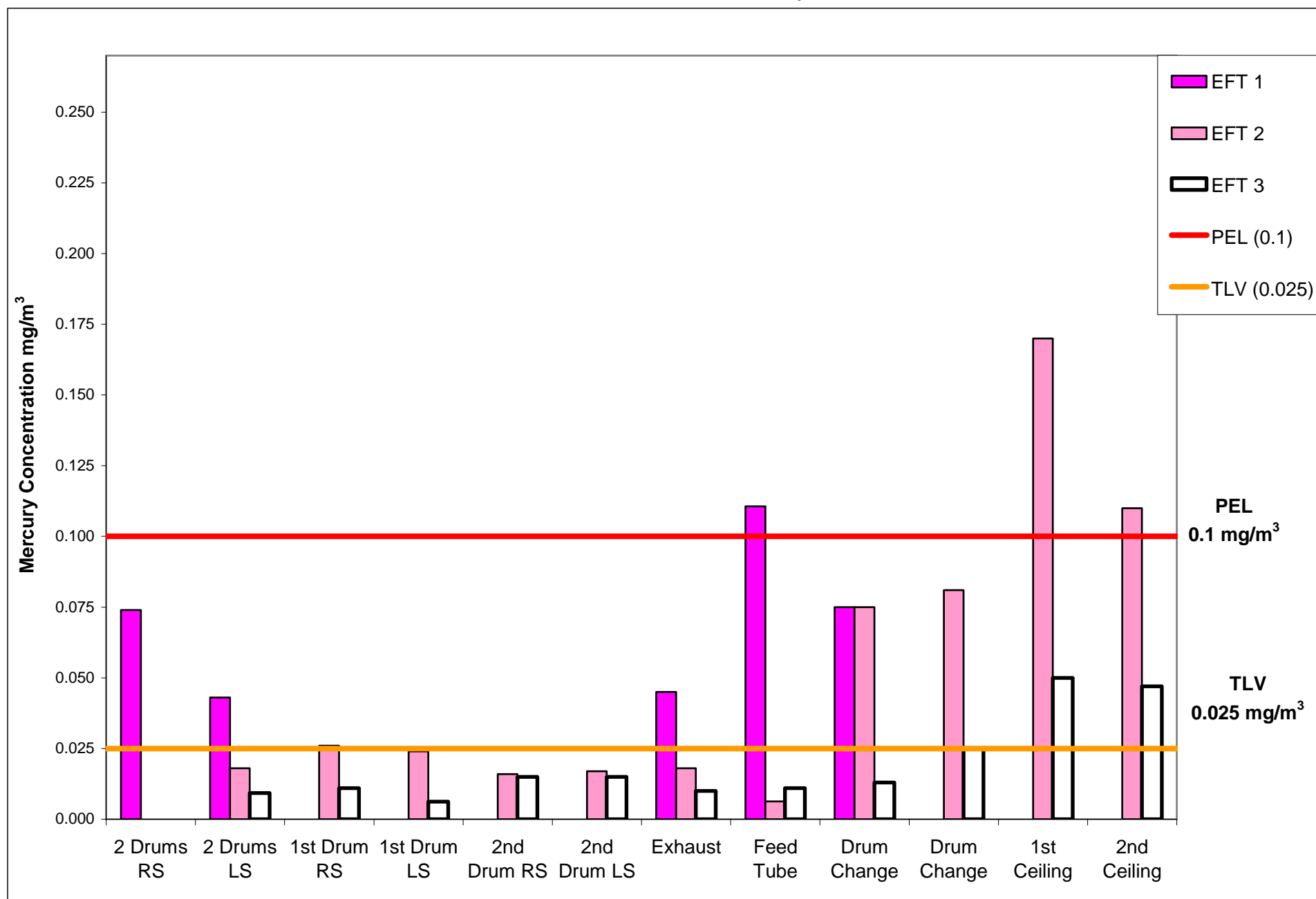
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 43: Extended Field Test #3 – Comparison of Analytical Air and Jerome Results
All Devices – Ashland, Virginia – June 9-13, 2003**



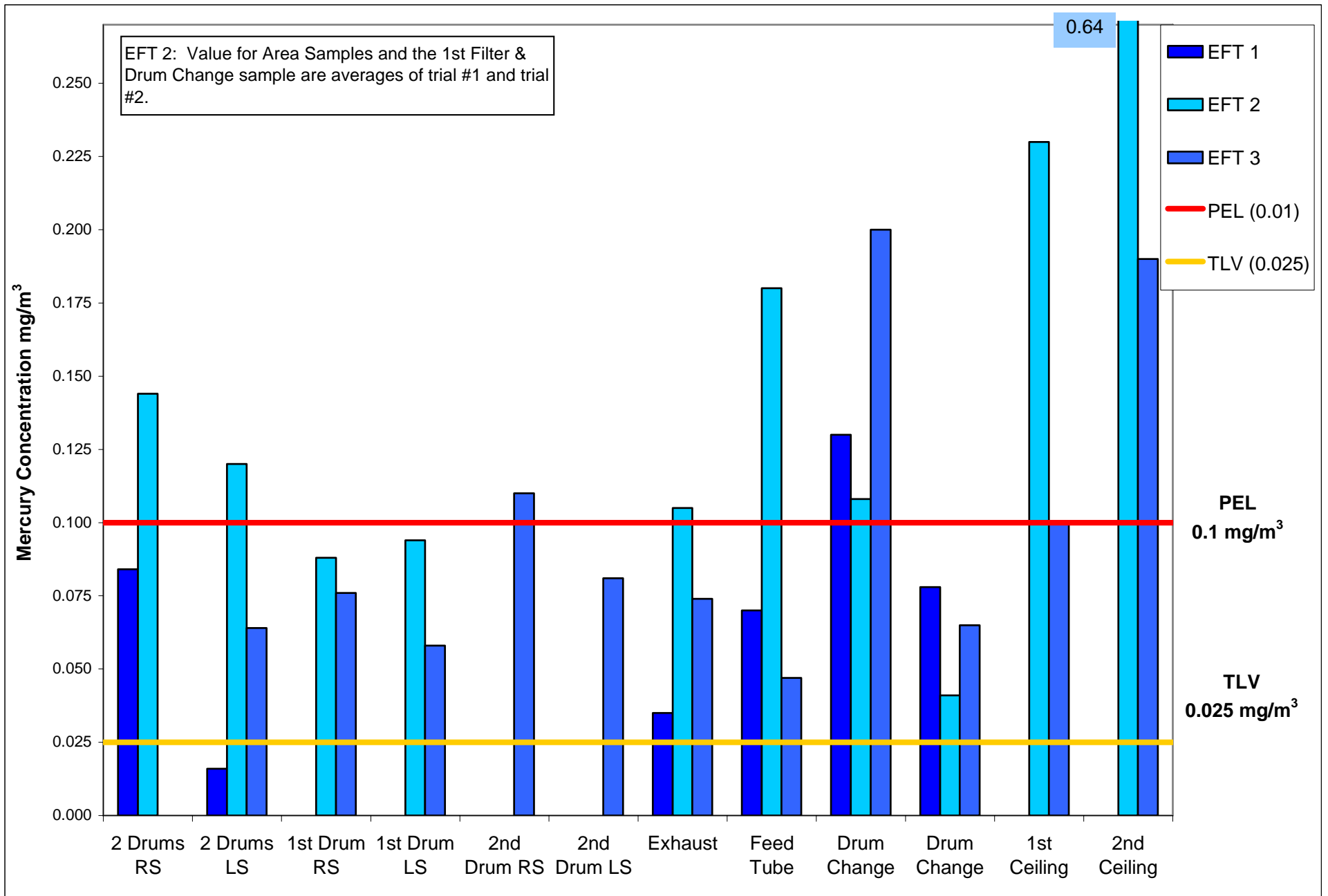
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 44: Analytical Air Results – Manufacturer A
Extended Field Test Study**



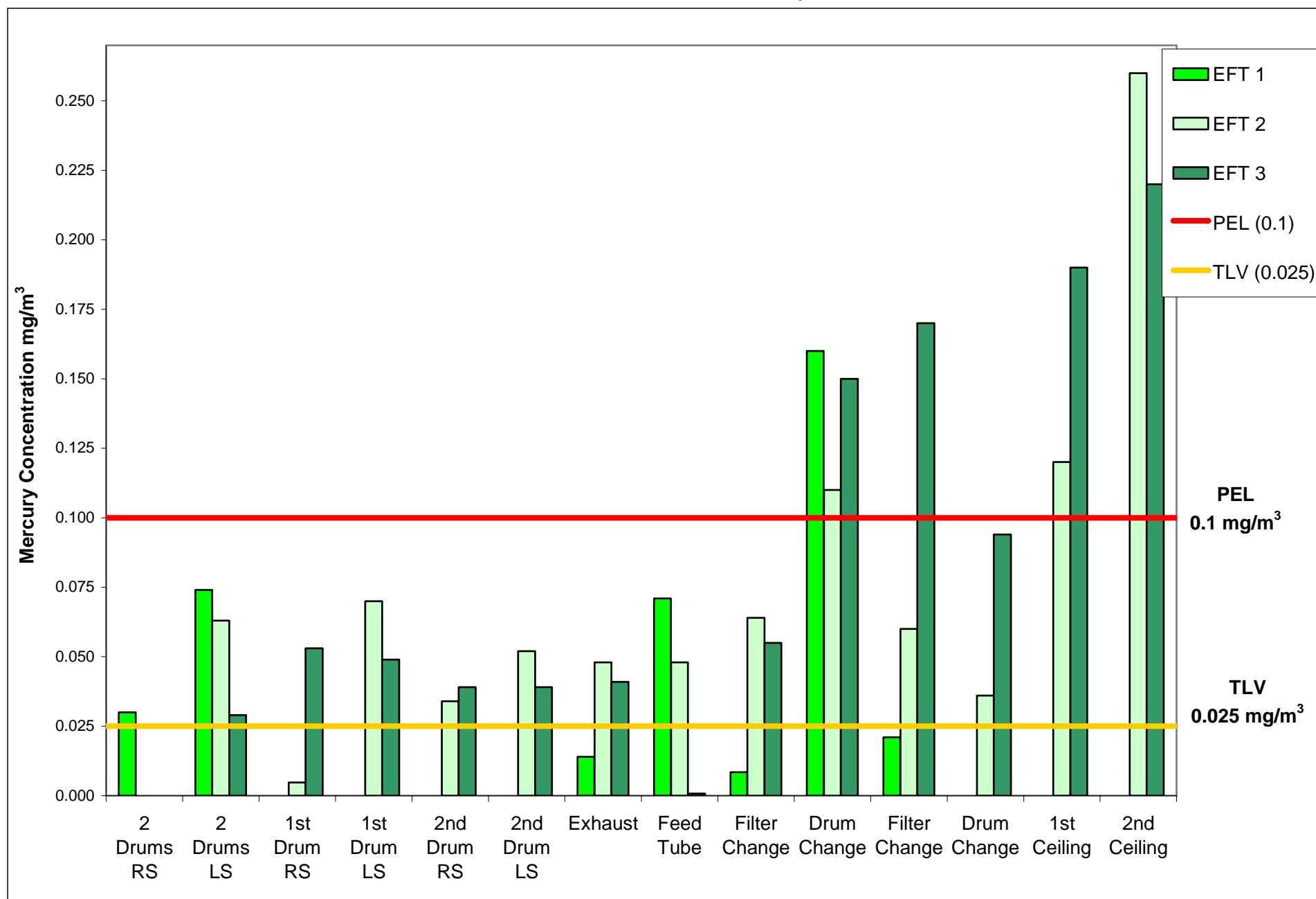
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 45: Analytical Air Results – Manufacturer B
Extended Field Test Study**



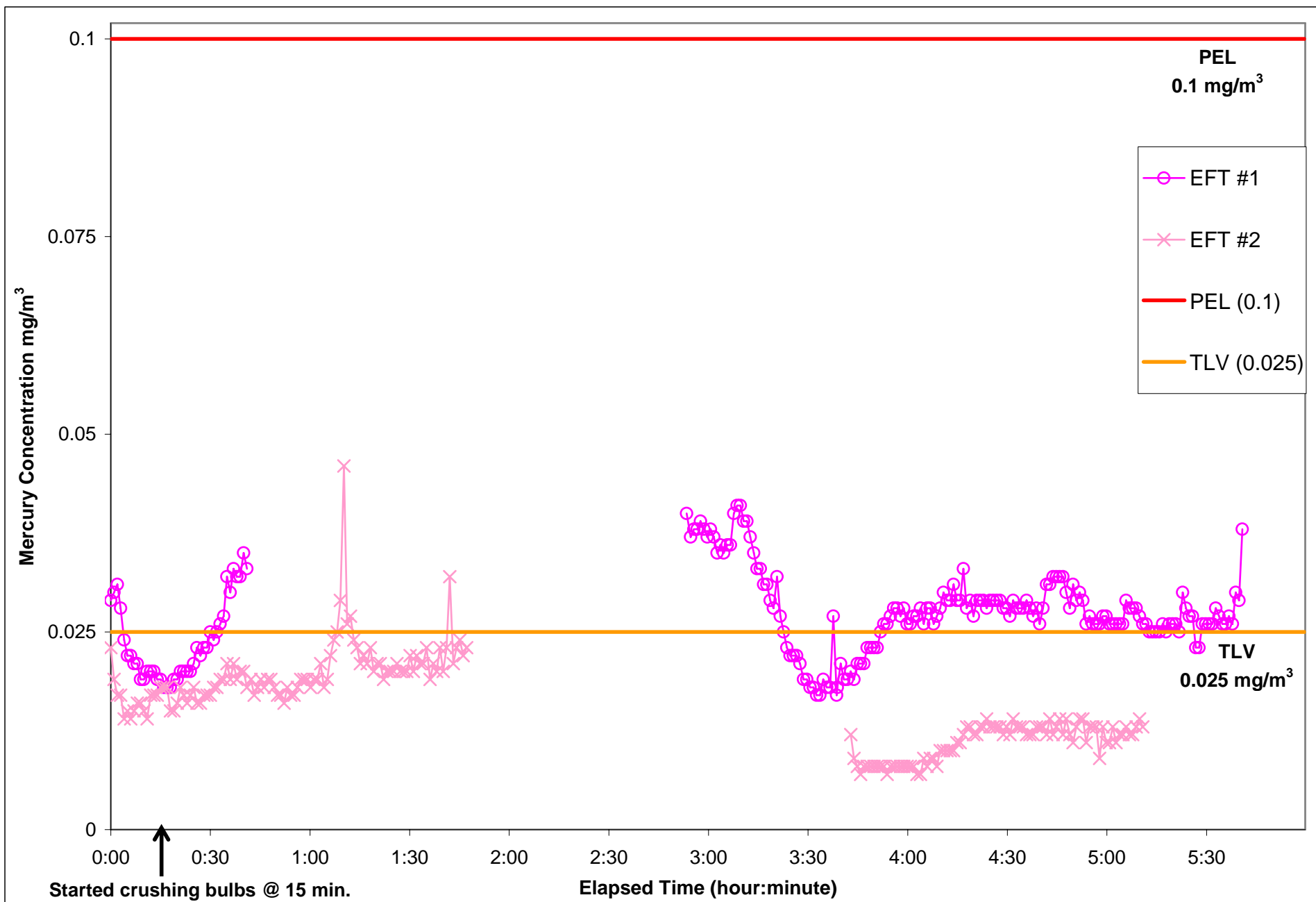
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 46: Analytical Air Results – Manufacturer C
Extended Field Test Study**



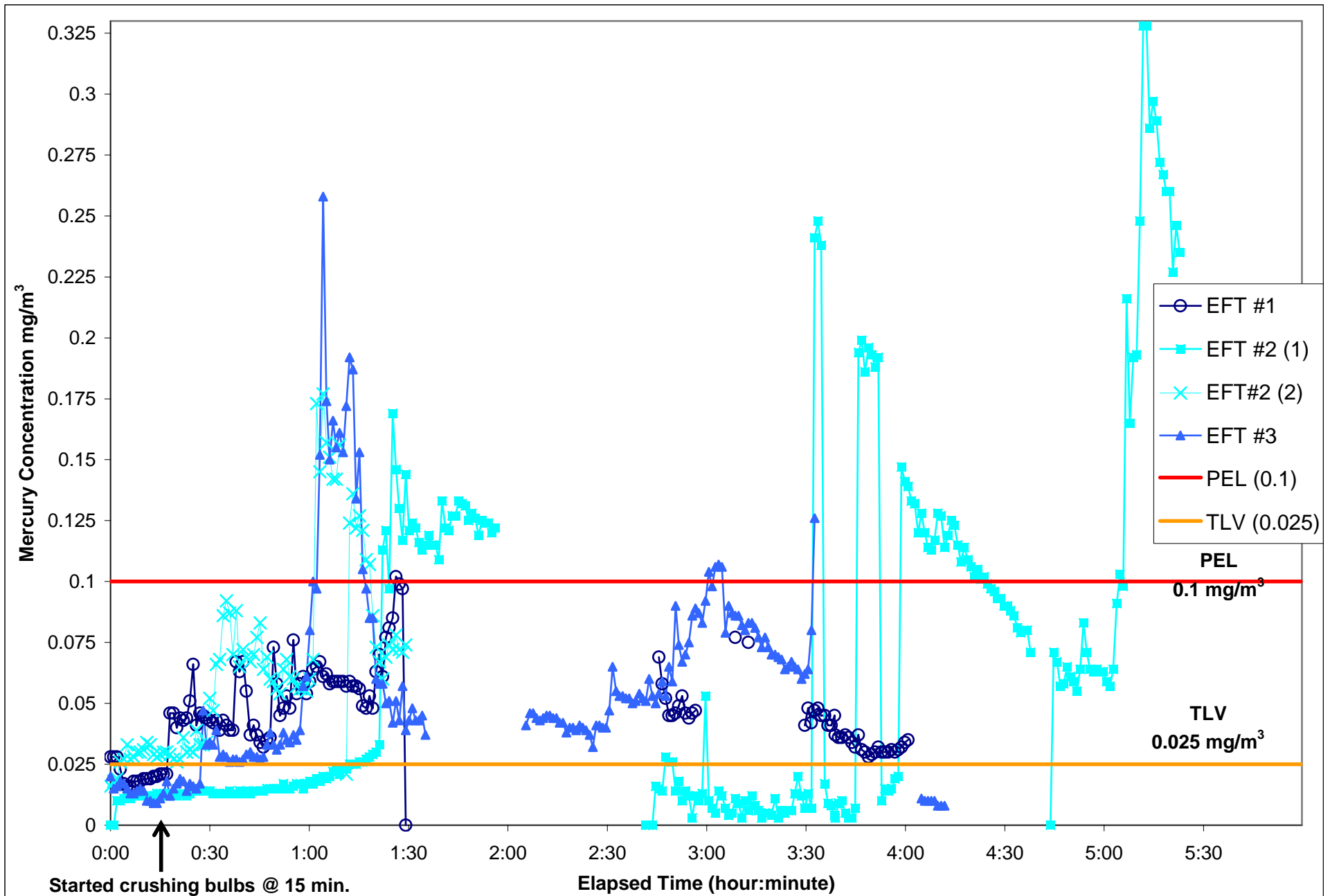
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 47: Jerome Results – Manufacturer A
Extended Field Test Study**



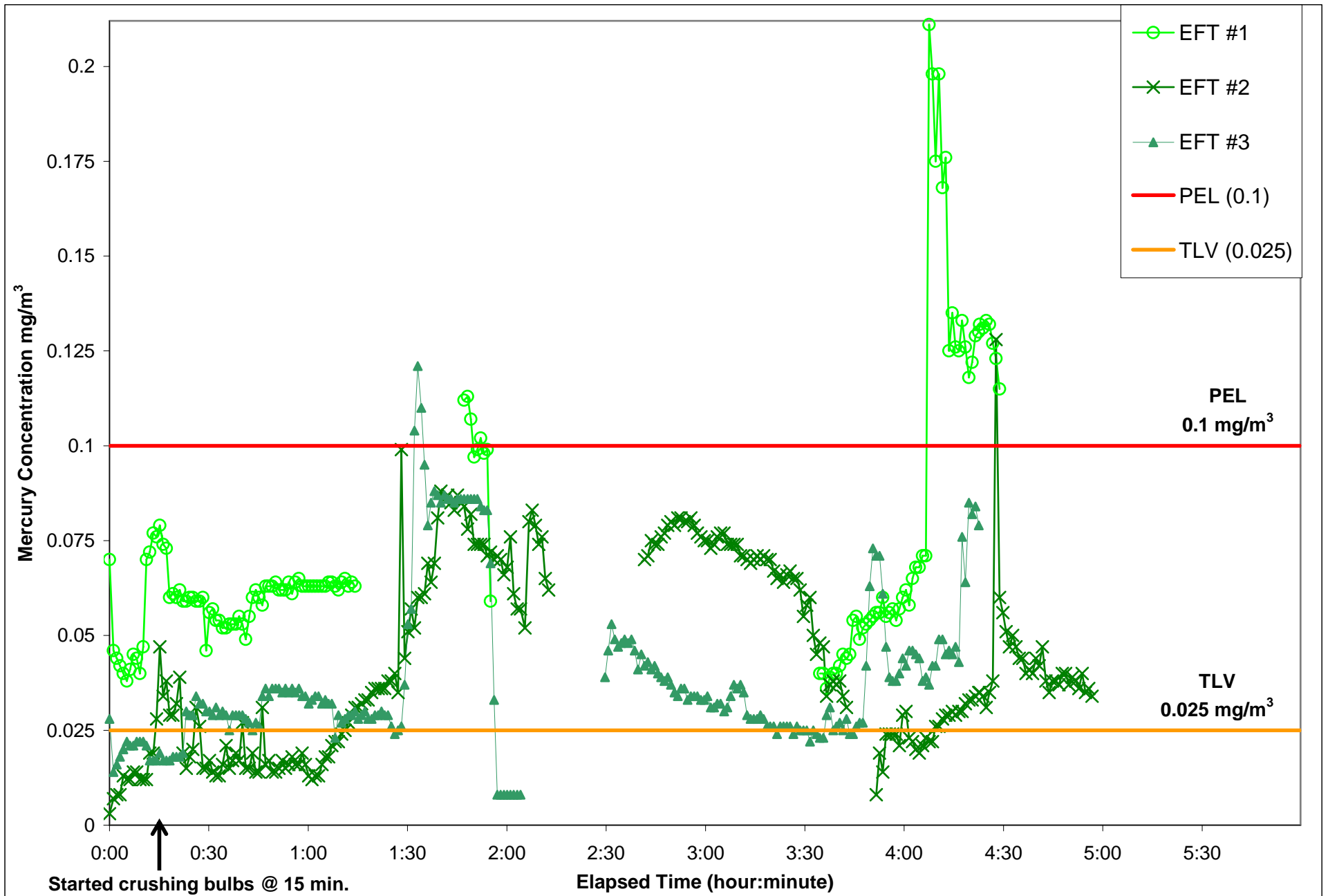
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 48: Jerome Results – Manufacturer B
Extended Field Test Study**



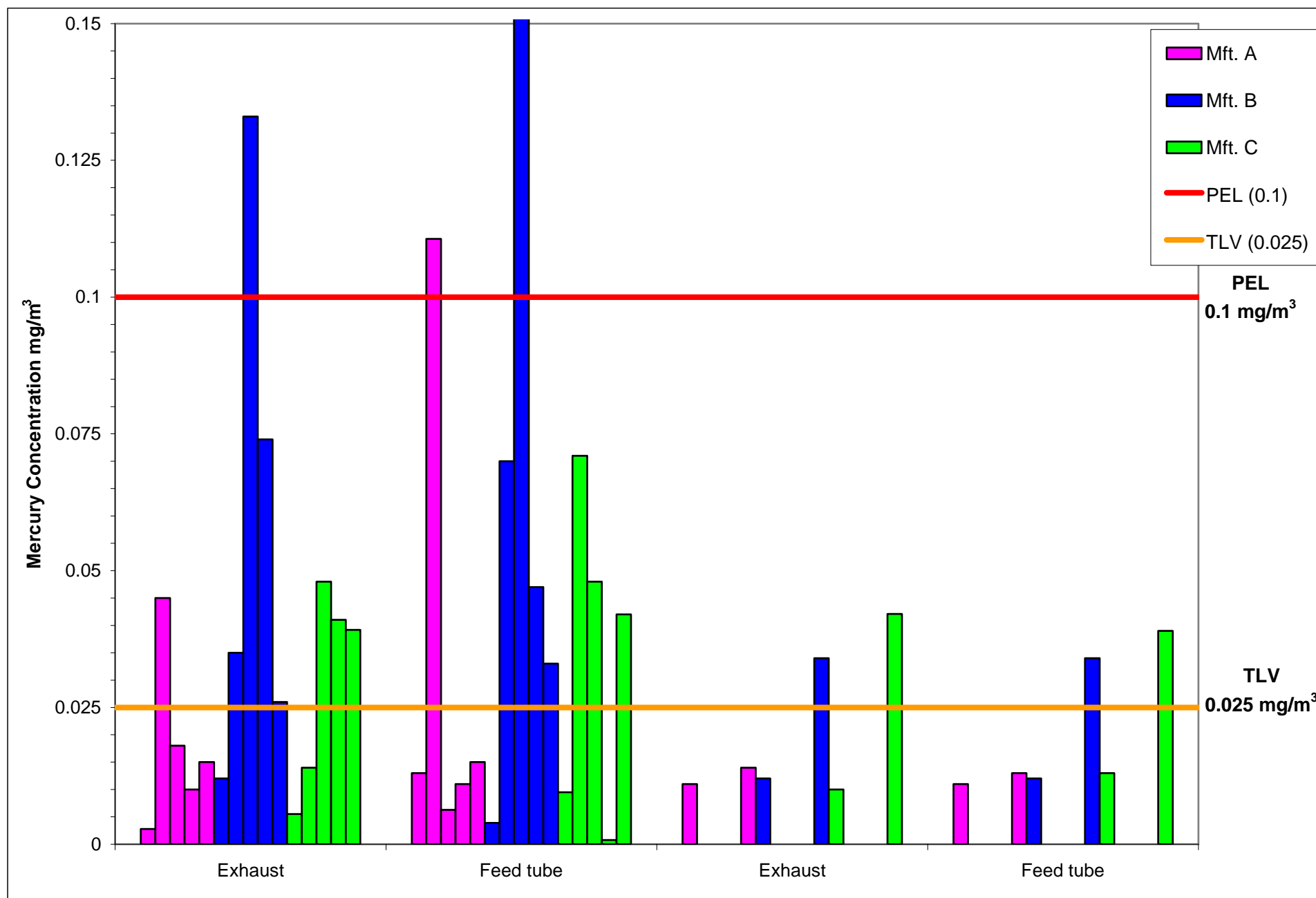
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 49: Jerome Results – Manufacturer C
Extended Field Test Study**



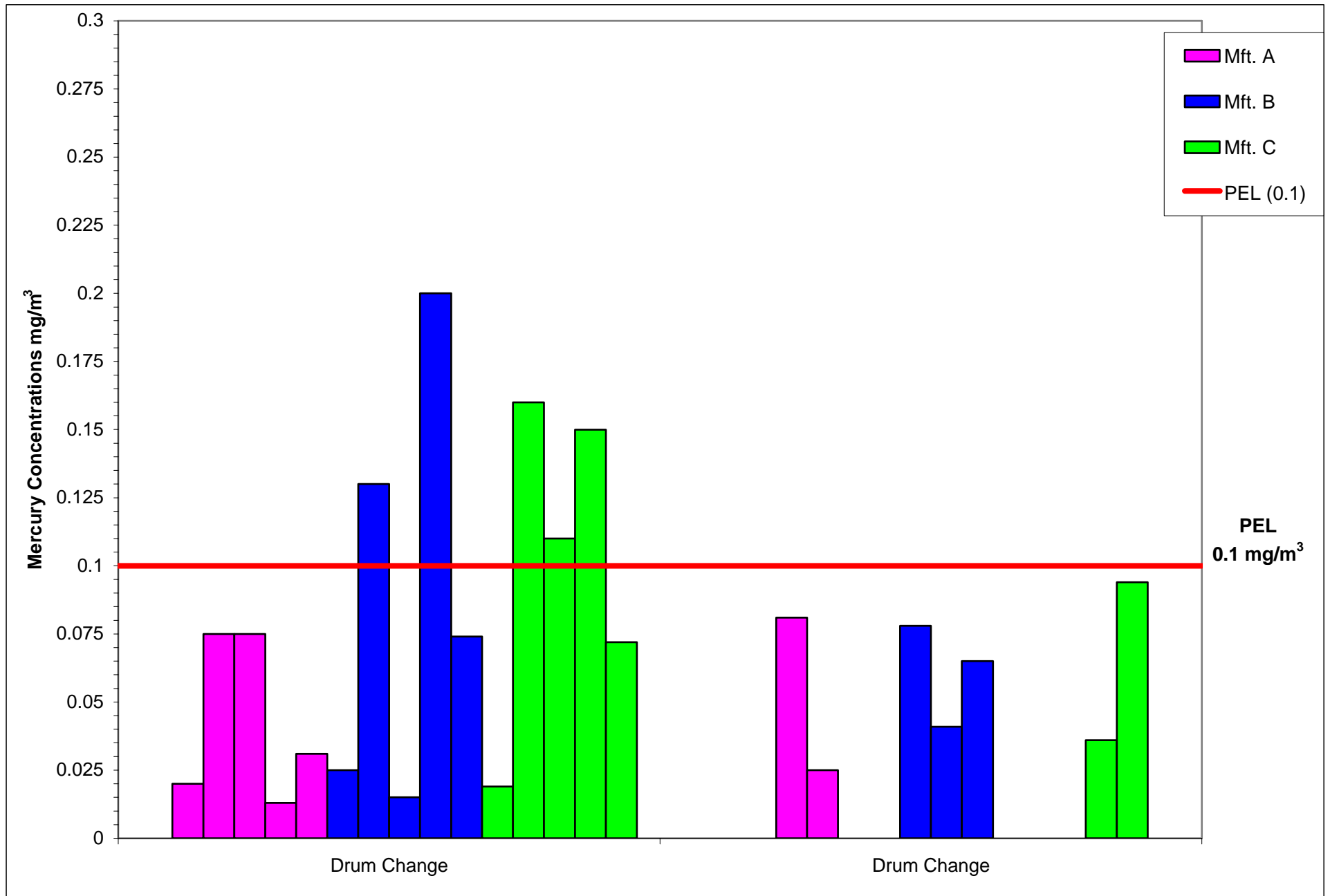
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 51: Analytical Air Results – Area Samples
All Devices – All Locations**



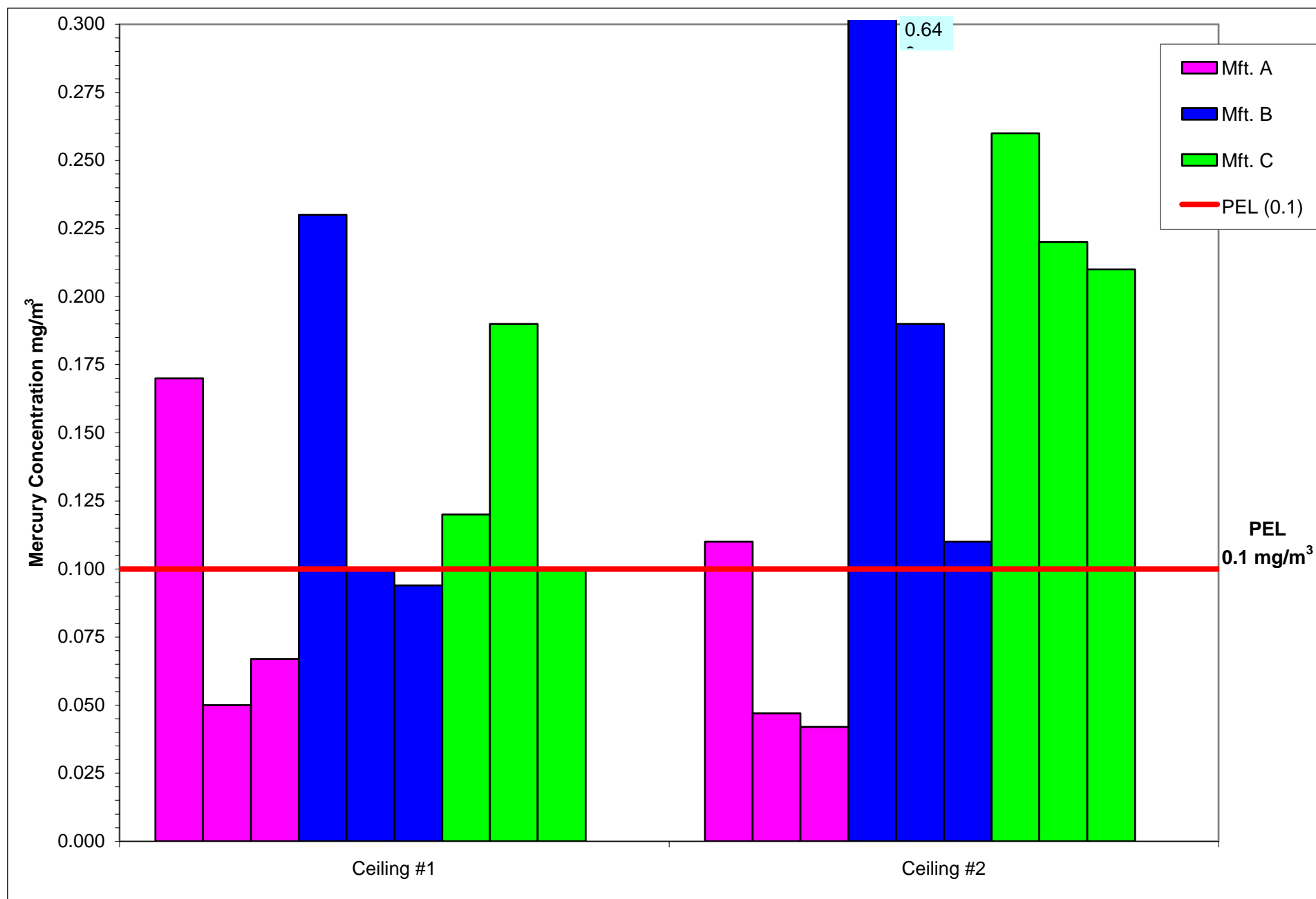
The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 52: Analytical Air Results – Drum Change Samples
All Devices – All Locations**



The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

**Figure 53: Analytical Air Results – Ceiling Samples
All Devices – All Locations**



The TLV is included on the graph as a point of reference. The results shown on this graph do not represent eight-hour, time-weighted averages.

Appendix B
Air Sampling Data Forms

Sample Shipping Information

Samples were placed in an oversized, sturdy box with packing material to fill voids and protect the samples during shipping. The sampling personnel then signed the chain-of-custody forms, and placed them in the box with the samples. Samples were shipped via Federal Express to the laboratory.

AIR SAMPLING DATA FORM

Client FEA Date 2/25/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description BACKGROUND

Work Location EAST MIDDLE OF BAY

Respirators/PPE _____

Controls _____

Sample # 3705-AG-2/25-01 Pump # 13027 Media MCEP + HYDROCAR
3705-SE-2/25-02 Hydro Time: 278 min Volume 58.94 L
Calibration: Pre 201 cc/min Post _____ On 1306 Off _____

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: Peelco 1 & 2

Industrial Hygienist: _____

Reviewed By: _____

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 2/25/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description BACKGROUNDS

Work Location EAST BAY AT DOOR TO WEST BAY

Respirators/PPE _____

Controls _____

Sample # 3705-B6-2/25-03 Pump # 11249 Media LCRF
3705-B6-2/25-04 HYDRAR

Calibration: Pre 208 Post 209-5 Time: On 1306 Off 278 Volume 53.24 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>fta</u>	<u>0.3 mg/m³</u>		

COMMENTS: PHOTO 1

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 2/26/03 Job Code _____

Employee TAD RADEWSKI SSN # _____ Job Title _____

Work Description FEEDING TIL & TUBES INTO AIRCYCLE BUBBLES
TR DEVICE

Work Location E. BAY MIDDLE INSIDE CONTAINMENT

Respirators/PPE GLOVES FSH SAFETY GLASSES TYVEK COVERALLS

Controls _____

Sample # 3705-BA-2/26/03 Pump # 3496 Media MCFE
3705-AA-2/26-06 HYDRAN

Calibration: Pre 153 Post 151 Time: On 1320 Off 100 Volume 10.2 l

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H</u>	<u>2.1 mg/m³</u>	<u>HVE = 0.012 mg/m³</u>	<u>0.0035 mg/m³</u>
		<u>MEE = ND</u>	

COMMENTS: ~~180 MINUTE 2 HRS~~
140 MINUTE 2 HR 20 MIN 100 MIN
(2.33 NL)(0.012 mg/L) / 5 HRS 0.0035

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client e PA Date 2/26/03 Job Code _____
Employee TAD RADEWSKI SSN # _____ Job Title _____
Work Description FEEDING TIZ TUBES INTO AIRCYCLE BUBBATER
DTC DEVICE
Work Location E. BAY MIDDLE INSIDE CONTAINMENT
Respirators/PPE GLOVES SAFETY GLASSES TYVEK COVERALLS
Controls _____

Sample # 3705-A/A-2/26-07 Amp # 12704 Media MCFE
3705-A/A-2/26-08 H7777
Calibration: 1505 0.1505 Time: 710
Pre 101 Post 150 On 1320 off _____ Volume 10.05

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>	<u>AVD 0.015 mg/m³</u>	<u>0.0044 mg/m³</u>
		<u>MGE N/D</u>	

COMMENTS: 140 min 2 hr 30 min 10 min
(2.33 hrs x 0.015) / 8 = 0.0044

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 7/26/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description AIRCYCLE BULB KASPER

Work Location ON FLD ID DTC DEVICE EXHAUST

Respirators/PPE _____

Controls _____

Sample # 3705-A/A-2/26-09 Pump # 13661 Media NICEF

3705-A/A-2/26-10 Calibration: _____ Time: _____

Pre 151 Post 120.9 On 1320 Off _____ Volume 12.79 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>	<u>H₂ 0.0055</u>	<u>0.0111 mg/m³</u>
		<u>N₂ ND</u>	

COMMENTS:

1 hr 140 min = 2 hrs 20 min 100 min

(233 Pa)(0.0055) / 8 hr = 0.0016

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 2/26/05 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description AIRCYCLE BULB EXHAUSTWork Location ON FLR @ DTC DEVICE EXHAUST

Respirators/PPE _____

Controls _____

Sample # 3705-A/A-2/26-11 Pump # 11330 Media MCEP
3705-A/A-2/26-12 #VDRBKCalibration: Pre 150 Post 150 Time: On 1320 Off 100 Volume _____
150 100

Substance _____ OSHA PEL _____ Concentration _____ 8 Hour TWA _____

H 0.1 mg/m³ HYD 0.010 mg/m³ 0.0029 mg/m³MCEP ND

COMMENTS:

140 min = 2 hrs 20 min 100 min

$$(2.33)(0.010)/8 = 0.0029$$

Industrial Hygienist: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 2/26/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description MCEEF FWD ENTER

Work Location BY DTC DEVICE FEED TUBE

Respirators/PPE _____

Controls _____

Sample # 3705-1A-2/26-03 ¹³ 11308 Media MCEEF
3705-1A-2/26-03 ¹⁴ HYDRAR

Calibration: Pre 305 ¹⁵⁸ 12555 Post 12555 Time: On 1320 Off 10V Volume 2.5 L.

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>	<u>1/40 = 0.0025</u>	<u>0.0027 mg/m³</u>
		<u>MCE = ND</u>	

COMMENTS: 140 min x 2.5 L/min 20 min (excl. min)
(2.35)(0.0025)/8 = 0.0027

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPP Date 2/26/23 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description ~~BOOZ~~ AIRCYCE BLDG ENTER

Work Location BY DTC DEVICE FKED TUBE

Respirators/PPE _____

Controls _____

Sample # 3705-A/A-2/26-15 Pump # 1320 Media MDF 15
3705-A/A-2/26-16

Calibration: Pre 1.58 - 0.1 min Post 1.58 Time: On 1320 Off 104 Volume 15.0 L

Substance	OSHA PEL	Concentration	8 Hour TWA
Hg	0.1 mg/m ³	MMD 0.013	0.0038 mg/m ³
		MDE = MTD	

COMMENTS: MDE = MTD
(2.33 x 0.613) / 30 = 0.0038

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 2/26/03 Job Code _____

Employee TAD RADZINSKI SSN # _____ Job Title _____

Work Description FOR AIRCRAFT BULB FATER

PRE FILTER CHANGE @ 50% DRUM CAPACITY

Work Location _____

Respirators/PPE GLOVES SAFETY GLASSES TYNEK COVERALLS

Controls _____

Sample # 3705-A/A-2/26-17 Pump # 11334 Media MCEP

3705-A/A-2/26-18

HYDRAK

Calibration:

Pre 257 Post 255.5 Time: On 21401 off 1473 Volume 5.01 L

257

255.5

257 L/min

12 ml/min

Substance OSHA PEL Concentration 8 Hour TWA

Hyd

0.1 mg/m³

HYD - 0.09

MCEP = ND

COMMENTS: 12 min

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 2/26/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description Air Cycle Bulb Enter
Pre filter change @ 100% Drum Capacity

Work Location _____

Respirators/PPE Gloves Safety Glasses Tyvek coveralls

Controls _____

Sample # 3705-R/A-2/26-1A Pump # 11334 Media MCEF
3705-R/A-2/26-20

Calibration: Pre 254.5 Post 253.0 Time: On 1442 Off 5:10 Volume 4.58 l
254.5 18

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>	<u>HYD = 0.009</u>	
		<u>MCE = ND</u>	

COMMENTS: 18 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 2/27/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description Feeding in 12 tubes into ~~Air~~ ^{Resource Technology Incorporated} ~~5010~~ ~~8400~~
DTC Device

Work Location E. Bay Middle Inside Containment

Respirators/PPE Gloves Safety Glasses Tyvek Coveralls

Controls _____

Sample # 3705-R-A-2/27-21 Pump # 11308 Media MCEP
3705-R-A-2/27-22 1F YOKAW

Calibration: Pre 154 cc/min Post 153.5 cc/min Time: On 8:30 Off 10:25 Volume 1.191
153.5 113 112

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m3</u>		

COMMENTS: 113 MW

Industrial Hygienist: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 2/27/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description Feeding T12 Tubes into ~~Avydr~~ ^{Resource Technology, Inc.} ~~filter~~ ^{but, cat.} DTC Device

Work Location E. Bay middle Inside Containment

Respirators/PPE Gloves Safety Glasses Tyvek Coveralls

Controls _____

Sample # 3705-R-A-2/27-03 Pump # 13027 Media # 11CEP
1-HDRAR

Calibration: Pre 153 Post 154 Time: On 8:30 Off 10:23 Volume 17.25 L.
113 112

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>		

COMMENTS: 113 ppm

Industrial Hygienist:

Reviewed By:

ROOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 349

Greenwood Village, Colorado 80111

303.694.4159 FAX: 303.694.7367

AIR SAMPLING DATA FORM

Client: EPA Date: 2/27/93 Job Code: _____

Employee: _____ SSN #: _____ Job Title: _____

Work Description: How people walk through kitchen & hallway area

Work Location: by DTT. remove food from

Respiratory/HE: _____

Controls: _____

Sample 1: 1515 Date: 2/27/93 Rep: 1 Method: 1515

Calibration: Pre: 1515 Post: _____ Time: On: _____ Off: _____ Volume: 1515

Substance	OGA PID	Concentration	RANGE TWA
<u>1515</u>	<u>1515</u>		

COMMENTS: 1515

Technician: _____ Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 2/27/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description ~~Air~~ Resource Technology Inc.

Work Location By DTC Device Feed Time

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-2/27-27
3705-R-A-2/27-28 Pump # 1249 Media MCEC HYDRAK

Calibration: Pre 153 - 4 min Post 154 3 min Time: On 3 Off 10:23 Volume 182 L
154.5 112

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 112 min

Industrial Hygienist: _____ Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 2/27/03 Job Code _____
Employee _____ SSN # _____ Job Title _____
Work Description Resource Technology, Inc.
Work Location On floor at DTC Device Exhaust
Respirators/PPE _____
Controls _____

Sample # 3703-R-A-277-29 Pump # 1366 Media 100% HYDRAL

Calibration: Pre 15.2 Post 15.5 Time: On 8:51 Off 10:02 Volume 12.97 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>	<u>102</u>	

COMMENTS: 112

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 2/27/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Resource Technology, Inc.

Work Location 8th floor @ DTC Device Exhaust

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-7(27-31) 3705-R-A-2(27-32) Pump # 13673 Media MF-1
Hydranal

Calibration: Pre 1535 Post 154 Time: On 11:01 Off 11:03 Volume 2.1 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>		

COMMENTS: 112 ppm

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 2/27/03 Job Code _____
Employee Tad Radmski SSN # _____ Job Title _____
Work Description Resource Technology, Inc.
Filter change at 100% drum capacity.
Work Location _____
Respirators/PPE Gloves Safety Glasses Tyvek Coveralls
Controls _____

Sample # 3105-R-H-2/27-33 Pump # 11330 Media 1ALFT
3105-R-H-2/27-34 12 100% DKA

Calibration: Pre 2525 Post 2530 Time: On 10:11 Off 10:29 Volume 3.03 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.2 mg/m</u>		

COMMENTS: 12 min

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 2/27/03 Job Code _____

Employee Jad SSN # _____ Job Title _____

Work Description Hazardous Materials Specialist, Inc.

Work Location _____

Respirators/PPE _____

Controls _____

310 G-H-A-2/27-35

Sample # 4705 H-A 2/27-35 Pump # 11308 Media MCEP HYDRAR

Calibration: Pre 153 cc/min Post 153 cc/min Time: On 1516 Off 1611 Volume 3.42 L.
153 55

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 55 min

Industrial Hygienist: _____ Reviewed By: _____

AIR SAMPLING DATA FORM

Client: EPA Date: 2/27/83 Job: CR-1
Employee: JAD SSN: _____ Job Title: _____
Work Description: Hydrocarbons, methane, by volume
Work Location: _____
Sampling Method: _____
Comments: _____

Sample # 185 H-A 2/27-83 Date: 2/27/83 Time: 1:50 P.M. Media: HYDRAR

Dilution: Flow: 15.5 L/min Test: 150 L/min Time: _____ Off: _____ Volume: 2.1 L
150 55

Distance: _____ (S.D. P.T.) Concentration: _____ B. Temp: 70A
11g 0.1 mg/m³

Comments: See notes

Responsible Analyst: _____ Analyzed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 2/27/03 Job Code _____
Employee _____ SSN # _____ Job Title _____
Work Description Hazardous Materials Specialist
Work Location Feed tube
Respirators/PPE _____
Controls _____

Sample # 325-11-A-2/27-40 Pump # 12708 Media MCF HYDRAR
325-11-A-2/27-39

Calibration: Pre 15 lcc/min Post 15.2 lcc/min Time: On 1.14 off 1.14 Volume 5.45 l
151.5 55

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 55 min

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 2/27/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Hazardous Materials Specialist

Work Location Feed tube

Respirators/PPE _____

Controls _____

Sample # 3705-H-A-2/27-41 Pump # 11249 Media MCEP
3705-H-A-2/27-42

Calibration: Pre 154 cc/min Post 156 cc/min Time: On 1516 Off 1611 Volume 5.15
55 55 (53)

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 55 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 2/27/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Hazardous Materials Specialist, Inc

Work Location Exhaust

Respirators/PPE _____

Controls _____

3705-H-A-2/27-43

Sample # 3705-H-A-2/27-44 Pump # 13661 Media MCEP HYDEAR

Calibration: Pre 151 OE/m³ Post 150 cc/min Time: On 55 off _____ Volume 5.0
150.5 55

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 55 min

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 2/27/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Hazardous Materials Specialist, Inc.

Work Location Exhaust

Respirators/PPE _____

Controls _____

3705-H-A-2/27-45

Sample # 3705-H-A-2/27-4b Pump # 11330 Media MUEF HYDRAR

Calibration:

Pre 253 cc/min Post 253 cc/min Time: On 10:16 off 10:11 Volume 15.2 ± 1

Substance _____ OSHA PEL _____ Concentration _____ 8 Hour TWA _____

Hg 0.1 mg/m³

COMMENTS: 55 min

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 2/28/03 Job Code _____

Employee Tad Ratzinski SSN # _____ Job Title _____

Work Description Feeding cubes into ~~sample~~ Dextro DTC Device

Work Location E Bay Middle Inside Containment

Respirators/PPE Gloves safety glasses goggles Overall

Controls _____

5702-D-A-3/28-50

Sample # 3703-N-A-2/28 Pump # 11332 Media MCEP

HYDRAR

Calibration: Pre 149.1 mm Post 152.0 mm Time: On _____ Off 1132 Volume 15.16 L

153

86

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>114</u>	<u>2.5 mg/m</u>		

COMMENTS: 8/2 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 2/28/03 Job Code _____
 Employee Tad Radzinski SSN # _____ Job Title _____
 Work Description Feeding tubes into Acetone DTC Device
 Work Location E Bay middle Inside Container
 Respirators/PPE Gloves Safety Glasses Tyvek coveralls
 Controls _____

Sample # 1 5705-D-A-2/28-01 Pump # 11249 Media MCFE
-52 14121

Calibration: Pre 151 2:00 Post 151 10:00 Time: 10:00
 On 10:00 OFF 11:30 Volume 12,99 L
151 76 80

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 76 min

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 2/28/05 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description locate DTC Device

Work Location By DTC Device Feed Tube

Respirators/PPE _____

Controls _____

Sample # 3705-D-4 2/28-5B
-54 Pump # 15496 Media 100% F
730K10

Calibration: Pre 145 Post 138cc/min Timer: On 1:30 Off 1:32 Volume 12.470

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 5/6 min

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4154 FX, 303.694.7367

DATE SAMPLED: 10/11/88

Client: IBM Date: 10/25/88 Job Code: _____

Employee: 2024 I Job Title: _____

Work Description: Remove oil - device

Work Location: Up oil - device feed line

Respirators/TPE: _____

Controls: _____

Sample # 1 12 2:54 10/25

Calibration: 15.2 1132 13.096

Signature: _____

Comments: See notes

Industrial Hygienist:

Date: (month) 1988

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 2/28/03 Job Code _____

Employee _____ SSN # 13673 Job Title _____

Work Description Detrinite DTC Device

Work Location On floor next to DTC Device Exhaust

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-2/28-57 Amp # 13673 Media MICEF

Calibration: Pre 153.5 Post 154 cc/min Time: On 10:26 Off 11:32 Volume 13,20 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: See memo

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 2/29/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Decontaminate DTC device

Work Location on flow @ DTC device exhaust

Respirators/PPE _____

Controls _____

Sample # 3103 D-A-2/28 01 Pump # 12704 Media MDEF

Calibration: Pre 151.5 Post 152 cc/min Time: On 2:25 Off 11:32 Volume 13.03 L
HYDRITE

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>tg</u>	<u>3.1 mg/m³</u>		

COMMENTS: SLC, mmm

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 2/28/83 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dextroite DTC Denive

Filter Drum Change when ~~stop~~ Drum Full

Work Location _____

Respirators/PPE Gloves Safety Glasses Tuxedo Overall

Controls _____

1050 H-2/49-61

Sample # 102 Pump # 1930 Media MILFF

MVPEK

Calibration: Pre 253 Post 254 cc/min Time: On 119 Off 132 Volume 3.29 L

Substance CO OSHA PEL 0.1 mg/m³ Concentration _____ 8 Hour TWA _____

COMMENTS: 15 min

Industrial Hygienist: _____

Reviewed By: _____

Appendix B
Air Sampling Data Forms

Sample Shipping Information

Samples were placed in an oversized, sturdy box with packing material to fill voids and protect the samples during shipping. The sampling personnel then signed the chain-of-custody forms, and placed them in the box with the samples. Samples were shipped via Federal Express to the laboratory.

AIR SAMPLING DATA FORM

Client EPA Date 2/28/03 Job Code _____

Employee _____ SSN # ~~13673~~ Job Title _____

Work Description Dextroite DTC Device

Work Location on floor next to DTC Device Exhaust

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-2/28-57
-58 Pump # 13673 Media MCEF

Calibration: Pre 153 cc/min Post 154 cc/min Time: On 1006 OFF 1132 Volume 13.20 L
153.5 86

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: See memo

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client: EPA Date: 2/28/03 Job Code: _____

Employee: _____ SSN #: _____ Job Title: _____

Work Description: Dextrite DTC Device

Work Location: On floor @ DTC device exhaust

Respirators/PPE: _____

Controls: _____

Sample # 3705-D-A-2/28-59 Pump # 12709 Media MCEF

Calibration: Pre 151 Post 152 Time: On 1006 Off 1132 Volume 13.03 L
151.5 SL HYDRATE

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: SL

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client	<u>EPA</u>	Date	<u>2/28/03</u>	Job Code	
Employee		SSN #		Job Title	
Work Description	<u>Dextre DTC Denise</u>				
	<u>Filter drum change ^{when} off Drum Full</u>				
Work Location					
Respirators/PPE	<u>Gloves Safety Glasses Tyvek Overall</u>				
Controls					
<hr/>					
Sample #	<u>1705-A-2/28-61</u>	Ramp #	<u>1830</u>	Media	<u>M LFF</u>
	<u>-62</u>				<u>HYDRAR</u>
Calibration:		Time:			
Pre	<u>252</u>	Post	<u>254</u>	On	<u>1119</u>
	<u>253</u>			Off	<u>1132</u>
				Volume	<u>3.29 L</u>
Substance	OSHA PEL	Concentration	8 Hour TWA		
<u>Hg</u>	<u>0.1 mg/m³</u>				
COMMENTS:	<u>13 min</u>				
Industrial Hygienist:	Reviewed By:				

AIR SAMPLING DATA FORM

Client EPA Date 3/24/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Background

Work Location North of containment in Warehouse on top of

Air Cycle Bulb & crushed Boxed crate

Respirators/PPE _____

Controls _____

Sample # 3705-B-3/24/03 ^{tube} Pump # 13684 Media Hydrex

Calibration: ⁻⁰² Filter Time: _____
Pre 162 cc/min Post 148 cc/min On 7.58 Off 11:23 Volume 31.78 L
~~155~~ 205

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>		

COMMENTS: 205 min

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 3/24/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Background

East of containment warehouse

Work Location on top of boxes of bulbs

Respirators/PPE _____

Controls _____

Sample # 3705-B-3/24-03 Pump # 800 885 Media Hydax
-04 MUEF

Calibration: Pre 151cc/min Post 122cc/min Time: On 7:57 Off 11:23 Volume 27.98L
136.5 205

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 208 min

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client	<u>EPA</u>	Date	<u>3/24/03</u>	Job Code	
Employee	<u>Tad</u>	SSN #		Job Title	
Work Description	<u>Personal RTI</u>				
Work Location					
Respirators/PPE	<u>Respirator, tyvek, safety goggles</u>				
Controls	<u>Jerome</u>				
<hr/>					
Sample #	<u>3705-R-A-3/24-05</u>	Pump #	<u>14959</u>	Media	<u>MCEF Hydrax</u>
Calibration:		Time:			
Pre	<u>16 lcc/min</u>	Post	<u>16 lcc/min</u>	Off	<u>12:26</u>
	<u>163.5</u>		<u>#2 2:56</u>		<u>3:37</u>
			<u>162</u>		
Substance	OSHA PEL	Concentration	8 Hour TWA		
<u>Hg</u>		<u>0.1 mg/m³</u>			
COMMENTS:	<u>175 min</u>				
Industrial Hygienist:	Reviewed By:				

AIR SAMPLING DATA FORM

Client EPA Date 3/24/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Personal

Work Location _____

Respirators/PPE Respirator, tyvek, safety goggles

Controls Jerome

Sample # 3705-R-A3/24-07 Pump # 2018 Media Hydrav MCEF
-08

Calibration: Pre 152 cc/mm Post 149 cc/mm Time: On 10:45 Off 12:26 Volume 24.38L
150.5 2.36 3.37

Substance Hg OSHA PEL 0.1 mg/m³ Concentration 162 8 Hour TWA

COMMENTS: X 15 min.

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 3/24/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Inside containment

Work Location Area sample on fiber drum next to exhaust
-elevated

Respirators/PPE Respirators, tyvek, safety goggles

Controls Jeime

Sample # 3705-R-A-3/24-03 Pump # 12713 Media MCEF
Hydrex

Calibration: Pre 152 cc/min Post 160 cc/min Time: On# 10:45 Off 12:26 Volume 25.27L
156 #2 2:36 3:37

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>	<u>112</u>	

COMMENTS: 17 min.

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 3/24/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Inside containment

Area sample on fiber drum next to inlet feed tube

Work Location _____

Respirators/PPE Respirator, tyvek, safety goggles

Controls None

Sample # 3705-RA-3/24-11 Pump # 13658 Media MCEP Hydrar
-112

Calibration: Pre 148cc/min Post 205cc/min Time: On 10:45 Off 12:26 Volume 28.59L
174-5 #2 2:36 3:37

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>	<u>162</u>	

COMMENTS: 175 min

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 3/24/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Filter change #1 and #2 (see notes below)

Work Location left red cap on for first filter change - soaked some media for filter change #2. only included time for 2nd filter change in total volume.

Respirators/PPE _____

Controls _____

Sample # 3705 R-A-3/24/03 Pump # 11302 Media McEF Hyd

Calibration: Pre 248cc/min Post 266cc/min Time: On #2 7:50am OFF 8:12pm Volume 5.65L

257 on 3/24/03 12:12 pm 12:28 pm (left red cap on) - did not include in L

13 9214 on 3/25/03 22

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 22 min.

Industrial Hygienist:

Reviewed By:

LEN & HAMILTON
1000 E. 10th Ave., Suite 840
Denver, Colorado 80111
4.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

EPA

Date 3/24/03

Job Code

SSN #

Job Title

Description

Overnight m containment - RTJ
Exhaust

Work Location

Respirators/PPE

Controls

Sample # 3705-R-A-3/24-15 Pump #

11252
~~12705~~

Media

Hydran
MCEF

-16

Calibration:

169 cc/min

Time: 4:27pm

Pre ~~157~~ cc/min

Post

~~163~~

On ~~4:07pm~~

Off 11:35pm

Volume 68.13 L

157

163

~~428~~ (418)

Substance

OSHA PEL

Concentration

8 Hour TWA

Hg

0.1 mg/m³

COMMENTS:

428 min.

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 3/24/13 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Overnight in Containment - RTI
field tube

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-3/24-17 Pump # 11179 Media Hydrar
-18 MCEF

Calibration: Pre 157 cc/min Post 146 cc/min Time: On 4:07pm Off 11:35pm Volume 66.36 L
151.5 448 438

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>		

COMMENTS: 448 min.

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 3/25/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Personal - Dextrite

Work Location _____

Respirators/PPE Respirator, tyvek, safety goggles

Controls Jerome

Sample # 3705-D-A-3/25-19 ^{tube} Pump # 12713 Media Hydrar
- 20-ft. line MCEP

Calibration: Pre 159 cc/min Post 301 cc/min Time: On 9:46 OFF 10:56 Volume 28.75L
230 12:29 1:24 125

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>	<u>125</u>	

COMMENTS: 125 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 3/25/83 Job Code _____

Employee Jad SSN # _____ Job Title _____

Work Description Personal - Dextrite

Work Location _____

Respirators/PPE Respirator, tyvek, safety goggles

Controls Jerome

Sample # 3705-D-A-5/25-21 Rep # 13684 Media Hydrar
-22 MCEF

Calibration: Pre 142 cc/min Post 129 cc/min Time: On 9:46 Off 10:56 Volume 16.94L
135.5 12.29 .25 1:24

Substance Hg OSHA PEL 0.1 mg/m³ Concentration _____ 8 Hour TWA _____

Comments: 135 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EDA Date 3/25/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Inside containment - hextrite

area sample on fiber drum next to exhaust

Work Location -elevated

Respirators/PPE _____

Controls Jerome

Sample # 3705-D-A-3/25-23 Pump # ~~800485~~ 3715 800885 Media Hydran
-24 MCEF

Calibration: 152 120cc/min Time: _____
Pre 152 cc/min Post 9:46 On 9:46 Off 10:56 Volume 17.0 L
766 1:24 12:29 1:24

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>		<u>125</u> <u>0.1 mg/m³</u>	

COMMENTS: 125 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 3/25/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Inside containment - Dextrose
area sample on fiber drum next to inlet feed tube

Work Location _____

Respirators/PPE _____

Controls Jerome

Sample # 3705-D-A-3/25-25 Pump # 2018 Media Hydrav
-26 MCEF

Calibration: Pre 156 cc/min Post 243 cc/min Time: On 9:46 Off 10:56 Volume 24.94 L
149.5 12:29 125 1:24

Substance Hg OSHA PEL 0.1 mg/m³ Concentration _____ 8 Hour TWA _____

COMMENTS: 125 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 3/25/03 Job Code _____Employee Tad SSN # _____ Job Title _____Work Description ~~Filter~~ ^{Filter} change. - Dextrite

Work Location _____

Respirators/PPE Respirator, tyvek, safety gogglesControls JeromeSample # 3705-D-A3/25-27 Pump # 14959 Media Hydra
-28 MCEFCalibration: Pre 253 cc/min Post 170 cc/min Time: On 10:44 Off 10:56 Volume 2.54 L
211.5 12

Substance OSHA PEL Concentration 8 Hour TWA

Hg 0.1 mg/m³ _____COMMENTS: 12 min.

Industrial Hygienist: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 3/25/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Overnight in containment Dextroite

Work Location Exhaust

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-3/25-29 Pump # 2018 Media Hydrex

Calibration: Pre 153 cc/min Post 76.8 90.6 cc/min Time: On 1:34pm OFF 10:10pm MCFE 02.852 Volume 39.71 L

Substance Hg OSHA PEL 0.1 mg/m³ Concentration 516 8 Hour TWA

COMMENTS: 576 min

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 3/25/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Overnight in containment - Dextate

Work Location seed tube

Respirators/PPE _____

Controls _____

Sample # 3705-0A-3/25-31 Pump # 3715 Media Hydrar

Calibration: Pre 143 cc/min Post 126 cc/min Time: On 1:34 pm OFF 10:10 pm Volume 69.40 L
134.5 516

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>	<u>516</u>	

COMMENTS: 576 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 3/25/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Second Drum Change, Nextlife

Work Location (^{Area 0} Performed on 3/26/03 - after overnight maintenance)

Respirator/PPE Respirator, tyvek, safety goggles

Controls _____

Sample # 7705 O.P. 3/25/03 Pump # 11202 Media Hydrex
-34 MCP

Calibration: Pre 2.55 sec/min Post 2.00 sec/min Time: On 101 bpm Off 0.29 sec Volume 2.96 L
2275 13

Substance	OSHA PEL	Concentration	# Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 13 min

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 3/26/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Personnel - HMs

Work Location _____

Respirators/PPE Respirator, tyvek, gloves, safety goggles

Controls Jevo

Sample # 3705-H-A-3/26-35 ^{tube} Pump # 2517 Media Hydrar
-36 filter MCEF

Calibration: Pre 187cc/min Post 191cc/min Time: On 8:13 OFF 8:34 Volume 3.97 L
189 21

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>		

COMMENTS: 21 min.

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 3/26/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Personal - HMS

Work Location _____

Respirators/PPE Respirator, tyvek, gloves, goggles

Controls Temp

Sample # 3705-HA-3/26-32 ^{tube} Pump # 3714 Media Hydrax
- 38 filter MCEF

Calibration: Pre 147 cc/min Post 150 cc/min Time: On 8:13 Off 8:34 Volume 3.12 L
148.5 21

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 21 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EIP Date 3/26/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description HMS
Inside containment - on fibre drum near
exhaust

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705 - H-A-246-39 Resp # 2018 Media Hydrex
-40 MCEP

Calibration: Pre 150 cc/min Post 153 cc/min Time: On 8:13 Off 11:19 Volume 28.92 L
1555 186

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 186 min

Industrial Hygienist: _____

Reviewed by: _____

AIR SAMPLING DATA FORM

Client: EPA Date: 3/26/03 Job Code: _____

Employee: _____ SSN #: _____ Job Title: _____

Work Description: HMS
Inside containment - on fiber drum near a lex
tube

Work Location: _____

Respirators/PPE: _____

Controls: _____

Sample # 3705-H-A 3/26-41 Pump # 3715 Media Hydrox
-42 MCFCalibration: Pre 141 cc/min Post 160 cc/min Time 5:13 off 11:19 Volume 29.85 L
1205 1800

Substance: _____ OSHA PEL: _____ Concentration: _____ 8 Hour TWA: _____

Hy 0.1 mg/m³ _____ _____COMMENTS: 144 min

Industrial Hygienist: _____ Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 3/27/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Personal - Air cycle

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-3/27-43 ^{tube} Pump # 80885 Media Hydrav
-44-Filter MCEP

Calibration: Pre 158cc/min Post 151.5 Time: On 10:21 Off 10:42 Volume 29.69L
1310 1503
1650 1752

Substance Hg OSHA PEL 0.1 mg/m³ Concentration 196 8 Hour TWA

COMMENTS:

186 min.

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 3/27/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Personal - Air Cycle

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-3/27-45 Pump # 2517 Media Hydrav
-46 MCEFCalibration: Pre 162 cc/min Post 162 cc/min Time: On 1021 Off 1042 Volume 31.75L
1:02 1310 1503Substance Hg OSHA PEL 0.1 mg/m³ Concentration 1752 8 Hour TWA 196COMMENTS: 162 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 3/27/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Av Cycle - Inside containment - on filter
down near exhaust

Work Location _____

Respirators/PPE _____

Controls _____

Sample # ~~3705 A-A-07/11~~ Pump # 3714 Media Hydrav
2705-A-A-3/27-47 MCEF

Calibration: Pre 155 cc/min Post 143 cc/min Time: On 10:21 Off 10:42 Volume 29,20 L
149 1310 1503

Substance H₂ OSHA PEL 0.1 mg/m³ Concentration 196 8 Hour TWA

COMMENTS: 146 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 3/27/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Av Cycle - Inside containment - on fiber dam
near inlet feed tube

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-3/27-49 Pump # 14959 Media Hydram
-50 MCEFCalibration: Pre 147 cc/min Post 132 cc/min Time: On 1021 Off 1042 Volume 27,34 L
139.5 1310 1503Substance Hg OSHA PEL 0.1 mg/m³ Concentration 196 8 Hour TWACOMMENTS: 18 1/2 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 3/27/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Filter / Pump change #1 Aircycle
Drum #1

Work Location _____

Respirators/PPE Respirators, Tyvek, goggles, gloves

Controls Jerome

Sample # 3705-AA-3/27-51 Pump # 2018 Media Hydax
-52 MCEP 5.401

Calibration: Pre 251 c/min Post 240 c/min Time: On 1350 off 1412 Volume 48.12 L
245-5 22

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 22 min.

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client: EPA Date 3/27/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Fi Her / Drum Change # 2 Arcycle
Drum # 1

Work Location _____

Respirators/PPE Respirators, Tyvek, Goggles, Gloves

Controls Jerome

Sample # 3705-A-A-3/27-53 Pump # 3715 Media Hydrom
54 MCEF

Calibration: Pre 243 cc/min Post 242 cc/min Time: On 1449 Off 1503 Volume 3.90 L
242.5 14

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 14 min

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 3/27/03 Job Code _____
Employee _____ SSN # _____ Job Title _____
Work Description Aircycle - overnight in containment
Let samples run throughout night. ↓ airflow
Work Location because could not get in facility to turn
off in middle of night
Respirators/PPE _____
Controls Exhaust

Sample # 3705-AA-3/27-55 Pump # 2018 Media Hydax
56 MCEP
Calibration: Time: 3/27/03
Pre 105 cc/min Post 95 cc/min On 7:24 pm Off 8:20 am on 3/28/03 Volume 77.6 L
1.0 776

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>		

COMMENTS: Nil min
↓

Industrial Hygienist: _____ Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 3/27/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description air cycle - overnight in containment

let samples run throughout night. ↓

Work Location air flow, because could not get in facility to
turn off in middle of night.

Respirators/PPE _____

Controls feed tube

Sample # 3705-A-A-3/27-57 Pump # 8715 Media Hydrov
-58 MCEF

Calibration: Time: on 3/27/03
Pre 166 cc/min Post 96.4 cc/min On 7:24 Off 8:20 am Volume 78.53 L
101.2 77c

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 714 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 3/27/03 Job Code _____
Employee _____ SSN # _____ Job Title _____
Work Description Filter Change #3 - Air Cycle
Drum #2
Work Location _____
Respirators/PPE _____
Controls _____

Sample # 3205-A-A-3/27-59 Pump # 2018 Media Hydrex
-60 MCEE

Calibration: Pre 248 cc/m Post 261 cc/m Time: On 1749 Off 1801 Volume 3.05 L
254.5 12

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 12 min

Industrial Hygienist: _____ Reviewed By: _____

Appendix B
Air Sampling Data Forms

Sample Shipping Information

Samples were placed in an oversized, sturdy box with packing material to fill voids and protect the samples during shipping. The sampling personnel then signed the chain-of-custody forms, and placed them in the box with the samples. Samples were shipped via Federal Express to the laboratory.

AIR SAMPLING DATA FORM

Client EPA Date 4/29/07 Job Code _____

Employee _____ SSN # ~~12708~~ Job Title 3705

Work Description Background - East Bay 24 feet east of dock door^{man}

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-B-4/29-01 Pump # 12708 Media Hydraz
.02 MCEP

Calibration: Pre 207.5 α /_{min} Post 203 cc/min Time: On 9:41 a.m. Off 2:39 p.m. Volume 61.16 L
205.25 298

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: Photo #6 on my camera is of the background sample
Photo #7 = man dock door
Photo #8 = other background
298 minutes

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 4/29/03 Job Code _____

Employee _____ SSN # _____ Job Title 3705

Work Description Background
East Bay 18ft North of ^{Max} Dock door

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-B-4/29-04 Pump # 13657 Media Hydram
MCEP

Calibration: Pre 206 cc/min Post 229 cc/min Time: On 9:41 am Off 2:39 pm Volume 64.8 L
217.5 298

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 298 minutes

Industrial Hygienist: _____ Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 4/29/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description Feeding Tubes into Dextrose DTC Device

East Bay Inside Containment

Work Location Right shoulder / chest area

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-4/29-05 Pump # 13682 Media Hydrar

-06

Time: 3:07 4:33 6:00

MCEF

Calibration:

Pre 156 cc/min

Post 158 cc/min

Time: 1:20
On 161 cc/min Off _____

Volume 25.81 L

158.3?

Substance OSHA PEL Concentration 8 Hour TWA

Hg 0.1 mg/m³

COMMENTS:

163 minutes

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 4/29/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description Feeding tubes into Dextite DTC Device
East Bay Inside Containment

Work Location Left + Shoulder/chest area

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-4/29-07 Pump # 13914 Media # Hydvar
-08

Calibration: Pre 150 cc/min Post 148 cc/min Time: 3:07 4:33
On 148 cc/min Off _____ Volume 24.23 L

1867 #3

Substance OSHA PEL Concentration 8 Hour TWA

Hg 0.1 mg/m³

COMMENTS: 163 min.

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 4/29/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dextrite DTC Device

Inside Containment - on fiber drum near exhaust

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-4/29-09 Pump # 12671 Media Hydrav

-10

#3 154 cc/min 163 minutes

MCEF

Calibration: 1
Pre 151 cc/min

Post 154 cc/min

Time: 3:07 4:33 6:09 7:20

On _____ Off _____

Volume 24.94L
~~74.82L~~

153

Substance OSHA PEL Concentration 8 Hour TWA

Hg 0.1 mg/m³

COMMENTS: 163 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 4/29/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dextrite DTC Device

Inside containment - on fiber drum near inlet

Work Location feed + 1 be

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-4/29-11 Pump # 13673 Media Hydran

-12 # 156 163 MCEF

Calibration: 152 cc/min Pre 154 cc/min Post 154 cc/min
Time: On 7:01 Off 7:03 Volume 25.10 L

Substance OSHA PEL Concentration 8 Hour TWA

Hg 0.1 mg/m³

COMMENTS: 163 m ~ UTC

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 4/27/07 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dioxin DTC Device

drum change @ 168 bulbs used 347

Work Location _____ 311

698

Respirators/PPE _____

Controls _____

Sample # 3745.0-2-409-15 Prep # 1308 Media Hydrom
-14 ACB+

Calibration: Pre 252 cc/min Post 259 cc/min Time: On 4:23 Off 4:35 Volume 3.14 L
253.5

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 12 min

Industrial Hygienist: _____ Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 4/29/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dextrik DTC Device
Drum-change 1 @ 609 bulb,

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-4/29-15 Pump # 11249 Media Hyd wv
-16 MCEF

Calibration: 258 Time: 7:00pm
Pre 150 cc/min Post 259 cc/min On 2:50 Off 7:20pm Volume 5.08
254

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS: 20 min

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 4/29/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dextrite DTC Device

Work Location Overnight - inside containment on fiber drum near exhaust

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-4/29-17 Pump # 13914 Media Hydrex
-18

Calibration: Pre 148 Post 146 cc/min Time: On 20:18 Off 8:12 Volume 104.96 L
147

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 714 minutes

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 4/29/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dixtite DTC Devic

Work Location Overnight +/- inside containment in
fiber down near inlet feed tube

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-4/29-19 Pump # 12705 Media Hydrex
-20 MCEP

Calibration: Time: 714 minutes
Pre 153 Post 149 cc/min On 2018 Off 8:12 Volume 106.39L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS: 714 min

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 4/29/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dextre DTC Device
overnight + - 0 outside containment

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-4/29²¹ Pump # 13657 Media Hydrex
-22 mCEF

Calibration: Pre 154 Post 153 Time: On 2018 Off 8:12 Volume 109.24L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS: 714 min

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 4/29/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Ceiling - 4 minute sample - (#1)

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-D-4-4/29-23 Pump # 11308 Media Hyd. or MCFF
-29

Calibration: Pre 251 cc/min Post 256 cc/min Time: On 7:03pm Off 7:07pm Volume 1.01 L
253.5

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.6 mg/m³</u>		

COMMENTS: 4 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client: EPA Date: 4/24/97 Job Code: _____

Employee: _____ SSN: _____ Job Title: _____

Work Description: Colony 4 minute samples HD

Work Location: _____

Respirators/PPE: _____

Controls: _____

Sample # 3705-D-11-4/24-25 Pump # 11308 Media Hydram
26 INCEF

Calibration: 251 cc/min Part 56 cc/min Time: On 7:08 Off 7:12 Volume 1.016
2535

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hyg</u>	<u>Colony/m³</u>		

Comments: 4 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 4/30/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description Air cycle

Feeding tubes into Air Cycle Device

Work Location East Bay Inside Containment

Left shoulder - ^{chest}entire 2 drums (1st & 2nd drums)

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-4/30-27 Pump # 12671 Media Hg draw

Calibration: Pre 155 cc/min Post 153 cc/min Time: 11:15 On 12:36 Off 2:18 3:22 Volume 22.33L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 145 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 4/30/03 Job Code _____

Employee Tad Raczinski SSN # _____ Job Title _____

Work Description QWCycle

Work Location Feeding tubes into Air Cycle Device

East Bay Inside Containment
Right shoulder / ^{chest area} Sampling for first drum

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-4/30-29 Pump # 11249 Media Hydram
-30 MCEF 12.51 L

Calibration: 15 81 12.51 L
Pre 156 u/min Post 153 u/min On 11:31 OFF 12:36 Volume 22.40 L
154.5

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 81 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 4/30/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description Air Cycle

Work Location Feeding tubes into Air Cycle Device

East Bay Inside Containment
Left Right shoulder/chest area for air removed drum

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-4/30 Pump # 31 13657 Media Hydrex
 Calibration: -32 Time: 15 min MCFR 12.39L
 Pre 1.56 cc/min Post 1.50 cc/min On 11 min OEE 11 min Volume 27.19L
155

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Ag</u>	<u>0.1 mg/m³</u>		

COMMENTS: SA m/n

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 4/30/03 Job Code _____

Employee ~~Tad Budenath~~ SSN # _____ Job Title _____

Work Description Air Cycle
Inside Containment - on fiber drum near exhaust

Work Location _____

Respiratory/PPE _____

Controls _____

Sample # 3105-A-A-4/30-33 Resp # 11308 Media Hydrax

Calibration: -34 Time: 148 min MCEP
Pre 155 cc/min Post 153 cc/min On 11:15 Off 12:56 Volume 22.79 L
154 On 2:18 Off 3:25

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 148 min

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 4/30/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Air CycleInside Containment - on fiber drum near feedWork Location inlet tube

Respirators/PPE _____

Controls _____

Sample # 5705-A-A-4/30 35 Pump # 11152 Media Hydrus-36 MCE IICalibration: Pre 155 cc/min Post 152 cc/min Tinet On 11:15 Off 2:15 148 min Off 12:30 3:25 Volume 27.796154

Substance _____ OSHA PEL _____ Concentration _____ 8 Hour TWA _____

Hg 0.1 mg/m³ _____ _____Comments: 148 min

Industrial Hygienist: _____ Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 4/30/03 Job Code _____

Employee Ted SSN # _____ Job Title _____

Work Description Air Cycle
Filter change #1

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-AA-4/30-37 Pump # 13682 Media Hydrex
-38 MCEF

Calibration: Pre 250 cc/min Post 247 cc/min Time: On 11:40 Off 11:52 Volume 2,98 L
248 S

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 12 min

Industrial Hygienist: _____ Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 4/30/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Arc Yole

Filter Change #2; Drum Change #1

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-4/30-39 Pump # 13682 Media Hydrac
-40 17 min MCEF

Calibration: Pre 250 cc/min Post 247 cc/min Time: On 12:19 Off 12:36 Volume 4.22 L
248.5

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 17 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 4/30/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Air Cycle
Filter Change #3

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-A-A4/30-41 Pump # 13682 Media Hydrex

Calibration: Pre 250 cc/min Post 247 cc/min Time: 12 min
On 2:41 OFF 2:53 Volume 2.98L
248.5

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 12 min

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date ^{performed on} 5/2/03 Job Code _____
Employee Tad SSN # _____ Job Title _____
Work Description RFI drum change #2
Work Location _____
Respirators/PPE (on accident used same labels for Air Cycle machine)
Controls should be 3705-A-512-73-79

Sample # 3705-A-A-4/30-43 Pump # 11308 Media Hydrex mCEF
Pre 251 Post 2470cc/min Time: On 8:19 Off 8:31 Volume 3.98
250cc/min 2485

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS: 12 min

Industrial Hygienist: _____ Reviewed By: _____

AIR SAMPLING DATA FORM

Client CPA Date 4/30/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Ceiling #1 Air Cycle

4 minute samples

Work Location done at filter change #1

Respirators/PPE _____

Controls _____

Sample # 3705A-A-4/30-45 Pump # 13673 Media Hydrom

-46 4 min MCE F

Calibration: Pre 249 cc/min Post 246 cc/min Time: On 12:19 OFF 12:23 Volume 0.99L

247.5

Substance OSHA PEL Concentration 8 Hour TWA

H₂ 0.1 mg/m³

COMMENTS: 4 min

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 4/30/03 Job Code _____

Employee Ted SSN # _____ Job Title _____

Work Description Ceiling #2 Arcycle

4 minute sample

Work Location done at filter change #2
after ceiling #1

Respirators/PPE _____

Controls _____

Sample # 305-A-A-4/30-47 Pump # 13673 Media Hydrax

Calibration: -48 Time: 4 minutes
Pre 249 cc/min Post 246 cc/min On 12:25 OFF 12:29 Volume 0.99L
747.5

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 4 min

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 4/30/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Air Cycle - DTC Device

Work Location Overnight - inside containment dr

Fiber down near exhaust

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-4/30-49 Pump # 12708 Media Hydrex

Calibration: Pre 152cc/min Post 152cc/min Time: On 4:26pm Off 8:57am Volume 150,63L
-50
next day 991min¹⁵
152
991

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS: 991 min

Industrial Hygienist: _____ Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 4/30/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Air Cycle Service

Work Location Overnight - inside containment on
Fiber drum near inlet feed tube

Respirators/PPE _____

Controls _____

Sample # 3705-AA-4/30-5 Pump # 13914 Media Hydrom

Calibration: Pre 151 cc/min Post 150 cc/min Time: next day 99 minutes MCEP
150.5 On 4:26 pm Off 8:51 am Volume 149.15 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hy</u>	<u>0.1 mg/m³</u>		

COMMENTS: 991

Industrial Hygienist: _____ Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 4/30/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Air Cycle device

overnight - outside containment

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-AA-4/30-53 Pump # 13673 Media Hydrar

-54

MCEF

Calibration:

Pre 157 cc/min Post 154 cc/min

155.5

Time: 991 min. max + day

On 4:26 pm Off 8:57 am

Volume 154.10 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 991 min

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA TADP Date 4/30/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description Air Cycle

Work Location Feeding tubes into Air Cycle Device

East Bay Inside containment

Respirators/PPE Right shoulder / chest area

Controls for (second drum)

Sample # 3705-A-A-4/30-55 Pump # 11249 Media Hydrex

Calibration: Pre 153 cc/min Post 158 cc/min Time: On 2:18 off 3:25 Volume 10.42 L

155.5

Substance OSHA PEL Concentration 8 Hour TWA

Hg 0.1 mg/m³

COMMENTS:

67 min

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client GPA Date 4/30/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description Air Cycle

Feeding tubes into Air Cycle Device

Work Location East Bay, Inside Containment

Left shoulder/chest area

Respirators/PPE for second drum *

Controls _____

Sample # 3705-A-A-4/30-57 Pump # _____ Media Hydram
-58 67 min MCEF

Calibration: Pre 150 cc/min Post 151 cc/min Time: On 2:18 OFF 3:25 Volume 10,08 L
150.5

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 67 min

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 4/31/09 Job Code _____

Employee ted SSN # _____ Job Title _____

Work Description Fitt Drum Change #2 + Filter change #4

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-4/31 ^{A-A-4/31-59} Pump # 11308 Media Hydraw
-60 mCEF

Calibration: Pre 255 cc/min Post 256 cc/min Time: On 9:09:21 Off 9:33 Volume 3.07 L
255.5

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 12 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 5/1/03 Job Code _____
Employee Tad Radzinski SSN # _____ Job Title _____
Work Description RTI
Feeding tubes into RT 1 Device
Work Location East Bay Inside Containment
LEK + Shoulder / chest are
Respirators/PPE Entire 1st + 2nd draw
Controls _____

Sample # 3705-A-A-^{5/1}~~42~~-61 Pump # 13073 Media Hydrar
-62 MCEF
Calibration: Time: 12:08 - 1:27 | 3:50 - 4:53
Pre 154 cc/min Post 154 cc/min On _____ Off _____ Volume 21.87 L
154

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>		

COMMENTS: 142 mV

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 5/1/03 Job Code _____

Employee Jed Radzinski SSN # _____ Job Title _____

Work Description RTI

Work Location Feeding tubes into RTI device

Last leg inside containment
LEFT shoulder/chest area for (1st drum) *

Respirators/PPE _____

Controls _____

Sample # 3705-R-17-5/1-03 Pump # 13914 Media Hydrex
-44 79 min MCEF

Calibration: Pre 150 cc/min Post 149 cc/min Time: On 12:03 OFF 1:27 Volume 11.81 L
149.5

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 79 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 5/1/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description RT 1

Work Location Feeding tubes into RT 1 Denie

East Bay Inside Containment

Right shoulder / chest area sampling for 1st drum

Respirators/PPE _____

Controls _____

Sample # 3705-K-A-5/1/03⁶⁵ Pump # 12708 Media Hydrex
-66 mCEF

Calibration: Pre 152 c/ppm Post 151 c/ppm Time: 79 min
151.5 On 12:08 Off 1:27 Volume 11,97L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hy</u>	<u>0.1 mg/m³</u>		

COMMENTS: 79 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 5/1/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description RTI

Work Location Inside containment - on fiber drum near exhaust

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-5/1-67 Pump # 12671 Media Hydrex

Calibration: Pre 157 cc/min Post 156.5 cc/min Time: On 1200-1:27 Off 3:50-4:53 Volume 22.22

OSHA PEL 0.1 mg/lm?

Substance Ag Concentration _____ 8 Hour TWA _____

Comments: 192 min

Industrial Hygienist: _____ Reviewed By: _____

AIR SAMPLING DATA FORM

Client GPA Date 5/1/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description RTIWork Location Inside containment - on fiber down near feed inlet tube

Respirators/PPE _____

Controls _____

Sample # 3702-R.A-5/1-69ump # 11249 Media HydroCalibration: Pre 156 cc/min Post 155 cc/min Time: 17:00 1:27 3:50 Media 4.53 mCF
On Off Volume 22.06 L

Substance OSHA PEL Concentration 8 Hour TWA

Hg 0.1 mg/m³ _____COMMENTS: 142 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 5/1/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description ATI
drum change #1

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705 R-A.5/1-71 Pump # 11300 Media Hydrol
-72 MCEF

Calibration:

Pre 256 cc/min Post 256 cc/min Time: On 1:15 Off 1:27 Volume 3.07 L
256

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 12 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 5/1/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Ceiling #1 KTI
4 minute samples

Work Location done at drum change for 1st drum

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-5/1-75 Pump # 13682 Media Hydrex
-76 MCEF

Calibration: Pre 253 Post 253 Time: On 1:15 Off 1:19 Volume 1.01 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS: 4 min

Industrial Hygienist: _____ Reviewed By: _____

AIR SAMPLING DATA FORM

Client GPA Date 5/1/03 Job Code _____

Employee TAD SSN # _____ Job Title _____

Work Description ceiling #2 RTI

Work Location 4 minute sample
above a + down change for 1st down

Respirators/PPE _____

Controls _____

Sample # 3705-R-Asis/1-71 13682 Media Hydrox
-78 MDEF

Calibration: Pre 256cc/min Post 256cc/min Time: On 1:20 Off 1:24 Volume 1.01 L
255

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS: 4 min

Industrial Hygienist: _____ Analyzed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 5/1/03 Job Code _____
Employee Tad Radzinski SSN # _____ Job Title _____
Work Description RTZ
Feeding tubes
Work Location East Bay Inside Containment
Left Shoulder / chest area for 2nd down ★
Respirators/PPE _____
Controls _____

Sample # 3705-RA-5/1-79 Pump # 13914 Media Hyd-rav
-80 63 mm MCEA

Calibration: Pre 149 cc/min Post 147 cc/min Time: On 3:50 Off 4:53 Volume 9.32 L
148

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 63 mm

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 5/1/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description RTI

Work Location Feeding Area

East Bay Inside Containment

Right shoulder/chest area for 2nd down *

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-5/1-81 Pump # 12708 Media Hydra
-82 MCEP

Calibration: Pre 151 cc/min Post 149 cc/min Time: On 3:50 off 4:53 Volume 9.45 L
150

Substance	OSHA PEL	Concentration	8 Hour TWA

COMMENTS: 63 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 5/1/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description RTI

Work Location overnight - inside containment dr
fiber drum near exhaust

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-511-83 Pump # 13657 Media Hydra

Calibration: Pre 155 cc/min Post 153 cc/min Time: 874 min
On 5:33pm Off 8:07am Volume 134.6 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 874 min

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client: EPA Date 5/1/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description RTI

Work Location overnight - inside containment on
Aberdeen near inlet feed tube

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-5/1-03 Pump # 1115.2 Media Hydrex

Calibration: -86 Time: 874 m.u.
Pre 154 cc/min Post 152 cc/min On 5:33 pm 5/1/03 Off 8:01 am 5/2/03 Volume 134.60
154

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 474 m.u.

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 5/1/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description RTI
overnight - outside containment

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-5/1-87 Pump # ~~112019~~ ~~112019~~ Media Hydraw
-88

Calibration: Pre ~~150cc/min~~ Post 160cc/min Time: On 5:33pm Off 8:07am Volume 137.66 L

155cc/min 9157.5

Substance Hg OSHA PEL 0.1mg/m³ Concentration _____ 8 Hour TWA _____

COMMENTS: 874 m.w

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 5/2/07 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Tad - Left Shoulder - Draw #1

Work Location Dextrite
only 1 draw for this test

Respiratory/PPE _____

Controls _____

Sample # 3205-0-0-5/2-89 Rep # 13657 Media Hydra
-90 MSFP

Calibration: Pre 1536/min Post 1546/min Time: 56 min.
1535 Off 9:07 Volume 8.60 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.100/m³</u>		

Comments: Skipped

Industrial Hygienist: _____ Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client GPA Date 5/2/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Right shoulder Drum #1

Dextrite

Work Location only 1 drum filled for toxic test

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-5/2-91 Pump # 11249 Media Hydran
-92 MCFE

Calibration: Pre 154 cc/min Post 153 cc/min Time: On 9:07 Off 10:03 Volume 8.60 L
153.5

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 56 min

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 5/2/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dextrite - only 1 drum filled

Inside containment on fiber drum near

Work Location exhaust

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-5/2-93 Pump # 11152 Media MCEP
-94

Calibration: Pre 151cc/min Post 154cc/min Time: on 9:07 off 10:04 Volume 8.69L
152.5

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS: 57 min

Industrial Hygienist: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 5/2/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dextite - only, fill one drum

Work Location Inside containment on fiber drum near inlet feed tube

Respirators/PPE _____

Controls _____

Sample # 3705-DA-5/2-95 Pump # 12708 Media Hydro

-96

mCF

Calibration:

Pre 153 cc/min Post 151 cc/min Time: On 9:07 Off 10:09 Volume 8.66L

152

Substance OSHA PEL Concentration 8 Hour TWA

Hg 0.1 mg/m³

COMMENTS: 57 min

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client GPA Date 5/2/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dextrite

Drum change for 1 drum filled

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-5/2-97 Pump # 11308 Media Hydraw

-98 MCEF

Calibration: Pre 25 bcc/min Post 25 bcc/min Time: On 9:50 Off 10:02 Volume 3.07 L

256

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 12 min

Industrial Hygienist: _____

Reviewed By: _____

Appendix B

Air Sampling Data Forms

Sample Shipping Information

Samples were placed in an oversized, sturdy box with packing material to fill voids and protect the samples during shipping. The sampling personnel then signed the chain-of-custody forms, and placed them in the box with the samples. Samples were shipped via Federal Express to the laboratory.

AIR SAMPLING DATA FORM

Client EPA Date 6/9/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Background Samples taken at AEC Facility in
Ashland Virginia

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3105-BA-6/9-01 Pump # 13681 Media Hydra

Calibration: 221 l/min -02 Time: 204 min MCEE

Pre 207 calibra Post 236 On 4:19 pm Off 9:03 pm Volume 58.3 l

221.5

Substance	OSHA PEL	Concentration	8 Hour TWA
-----------	----------	---------------	------------

COMMENTS:

Industrial Hygienist:

Reviewed By:

JZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client CEA Date 6/19/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description background samples taken at AEEC Facility in
Ashland Virginia

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-B-A-6/19-03 Pump # R 2015 Media Hydrus

Calibration: 205 l/min Time: 264 mi
Pre 204 cc/min Post 207 cc/min On 4:19 pm Off 9:03 pm Volume 54.1 L

Substance	OSHA PEL	Concentration	8 Hour TWA

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/10/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description RTI Device

entire 2 drums - LEFT SHOULDER

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-RA-6/10-05 Pump # 11249 Media Hydr

Calibration: .195 L/min⁻⁰⁶ Time: 9:55-11:02 On
Pre 195 cc/min Post 196 cc/min On 12:11-1:13 Off Volume 25.2 L

129 min

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hy</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/10/09 Job Code _____

Employee Tad Redzinski SSN # _____ Job Title _____

Work Description RTI Denize

Feeding bulbs in drum #1 ONLY -

Work Location LEFT SHOULDER

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-6/0-07 Pump # 11152 Media Hydra

Calibration: 200 cfm - 08 Time: 9:55-11:02 CFM MDF

Pre 201 cfm/min Post 200 cfm/min On Off Volume 13.4

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/10/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description RTI Device

Feeding bulbs in drum #1 ONLY

Work Location RIGHT SHOULDER

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-6/10-09 Pump # 112711 Media Hydram

Calibration: 0.202 $\frac{cc}{min}$ Time: 9:55-10:02 CFM
Pre 203 $\frac{cc}{min}$ Post 202 $\frac{cc}{min}$ On _____ Off _____ Volume 13.5L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hy</u>	<u>0.1 mg/m^3</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/10/05 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description RTI Device

Work Location Inside containment while feeding bulbs - near Exhaust

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-6/10-11 Pump # 12654 Media Hydrav

Calibration: 0.201 μ m⁻¹² Time: 9:39-11:02 83
Pre 202 cc/min Post 201 cc/min On 12:11-1:13 Off 62 min Volume 29.1 l

45

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/10/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description RTI Device

Work Location Inside Containment while feeding bulbs near inlet feed tube

Respirators/PPE _____

Controls _____

Sample # 3705-2-A-6/10-13 Pump # 13681 Media Hydrus

Calibration: 0.201 Time: 9:39-11:02 SB
Pre 200 cc/min Post 202 cc/min On _____ Off _____ 62 Volume 29.1

145

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/16/03 Job Code _____

Employee Tad Redmski SSN # _____ Job Title _____

Work Description On Tad's shoulder while performing Drum change #1

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-610-15 Pump # R 2015 Media Hydrex

Calibration: 0.259 Lpm Time: 10:50-11:02 12min
Pre 260 cc/min Post 259 cc/min On _____ Off _____ Volume 3.1 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/10/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description on Tad's shoulder while performing Drum Change # 2

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-4/10-17 Pump # R2015 Media Hydram MLEF

Calibration: 0.259 lpm Time: 1:01 - 1:13 12 min
Pre 260 cc/min Post 259 cc/min On _____ Off _____ Volume 3.12

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/10/03 Job Code _____

Employee Tad Radeinski SSN # _____ Job Title _____

Work Description on tad's shoulder during drum #1 change
ceiling sample #1

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-6/10-19 Pump # 12708 Media Hydram

Calibration: 0.251 ⁻²⁰ Time: 10:50-10:54 4 min
Pre 252 cc/min Post 250 cc/min On _____ Off _____ Volume 1.02

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client QPA Date 6/10/03 Job Code _____

Employee Tad Rademski SSN # _____ Job Title _____

Work Description on Tad's shoulder during down #2 change ceiling sample #2

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-6/10-21 Pump # 12708 Media Hydrom

Calibration: 0.251 ⁻²² lpm Time: 10:55-10:59 4min
Pre 252 ccfm Post 250 ccfm On _____ Off _____ Volume 1.08

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client ETA Date _____ Job Code _____

Employee Tads SSN # _____ Job Title _____

Work Description On Tads LEFT Shoulder
Drum #2 Welding

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-6/10-23 Pump # 11308 Media Hydra
MCEP

Calibration: 0.198 ⁵²⁴ Open Time: 12:11-1/3 62 min

Pre 198 cc/min Post 199 cc/min On _____ Off _____ Volume 12.32

Substance	OSHA PEL	Concentration	8 Hour TWA

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/10/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description On Tad's ~~shoulder during drum~~ Tad's
RIGHT shoulder Drum #2

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-6/10-25 Pump # R 2992 Media Hydrex

Calibration: 0.198 liter Time: 12:11-1:13 62 ml

Pre 200 cc/min Post 197 cc/min On _____ Off _____ Volume 12.3 l

Substance OSHA PEL Concentration 8 Hour TWA

ltg 0.1 mg/m³

COMMENTS: _____

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/10/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Overnight samples - inside containment
the Near Exhaust

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-6/10-27 Pump # 11254 Media Hydram

Calibration: Pre 155 c/min Post 155 c/min Time: 6:11 pm - 12:11 pm
OFF Volume 55.80

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

72

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date _____ Job Code _____
Employee _____ SSN # _____ Job Title _____
Work Description Overnight samples - inside containment
near feed table
Work Location _____
Respirators/PPE _____
Controls _____

Sample # 3705-R-A-6/10-29 Pump # ~~13911~~ 13681 Media Hydron
Calibration: 0.152 ⁻³⁰ lp Time: 6:11pm-12:11pm MCET
Pre ~~151cc/min~~ Post 153cc/min On _____ Off 360 Volume 54.7l
151cc/min

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

7

AIR SAMPLING DATA FORM

Client: GPA Date _____ Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description: overnight samples - outside containment

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-13-6/10-31 Pump # 12708 Media Hydrar MCEP

Calibration: 0.156 ⁻³² cfm Time: 6:11 pm - 12:11 pm
Pre 157 cfm Post 156 cfm On _____ Off 360 min Volume 56.2 l

Substance	OSHA PEL	Concentration	8 Hour TWA

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/10/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description Personal sampling during maintenance - RTI Equip

Work Location Right Shoulder Compressor

_____ Phase II

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-6/10-33 Pump # 11249 Media Hydram

Calibration: 0.195 ⁻³⁴ Pre 196 column Post 196 Time: 1:16-2:20 On Off 4 min MCEF Volume 12.5L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/10/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description Personal Sampling during one drum - RTI - equip.
Left shoulder Comparison _____

Work Location _____
phase II

Respirators/PPE _____

Controls _____

Sample # 3705 R-A-6/10-35 Pump # R-2992 Media Hydram
mCEF

Calibration: 0.196 ^{-3h} Apr Time: 1:16-2:20
Pre 197 cc/min Post 195 On _____ Off 64 min Volume 12.50

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/10/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description ATE equip comparison phase II - filling 1 drum
Inside Containment - Exhaust

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-6/10-37 Pump # 11308 Media Hydram

Calibration: 0.197 ⁻³⁸ Open Time: 4:14-5:12 58min MCFF
Pre 199 cd/min Post 196 On _____ Off _____ Volume 11.40

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hy</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client GIA Date 6/10/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description RII Equipment Comparison Phase II - filling Idm
Inside Containment - Exhaust

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-6/10-39 Pump # 12664 Media Hydra
mCEF

Calibration: 0.198 ⁻⁴⁰ Open Time: 4:14 - 5:12
Pre 20 lcc/min Post 196 On _____ Off 58 min Volume 11.5 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EIA Date 6/10/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description RTI - Equipment Comparison Phase II - Alling Idema
Inside Containment @ feed tube

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-6/10-41 Pump # ~~13681~~ 13681 Media Hydrom

Calibration: 0.200 ⁴² rpm Time: 13681 4:14 - 5:12 mCEF
Pre ~~302~~ 202 cc/min Post 198 On Off 58 min Volume 11.6 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: _____

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client GPA Date 6/10/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description RTI Equip. Comparison Phase II - filling one drum
Inside container + @ feel like

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-4/10-43 Pump # 112711 Media Hg drum

Calibration: 0.1862pm-168 Time: 4:14-5:12 MCEF
Pre 204 Post 204 On _____ OFF 58 min Volume 10.8 l

Substance	cc/min	OSHA PEL	Concentration	8 Hour TWA
Hg		0.1 mg/m ³		

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/10/83 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description personal sampling - RTI equip. comparison phase during drum change

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-410-45 Pump # R2015 Media Hydrom

Calibration: 0.261 lpm Time: 7:56 - 8:08
Pre 263 cc/min Post 260 cc/min On _____ Off 12 min Volume 3.1 l

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/10/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Box Test

Taken after finished filling 2 drums for RTI.

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-T-A-6/10-47 Pump # 11152 Media Hydra

MCEF

Calibration: 0.199 Lpm Time: 1:16 2:20

Pre 200 cc/min Post 199 cc/min On _____ Off 64 min Volume 12.7 L

Substance OSHA PEL Concentration 8 Hour TWA

Hy

0.1 mg/m³

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EIA Date 6/10/03 Job Code _____
Employee _____ SSN # _____ Job Title _____
Work Description Box Test
Taken after finished filling 2 drums for RTI
Work Location _____
Respirators/PPE _____
Controls _____

Sample # 3705-T-A-6/10-49 Pump # 112711 Media Hy drum
Calibration: 0:203 Time: 1:16-2:20 MCF
Pre 202 cc/min Post 204 cc/min On Off 64 min Volume 13.0 l

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client GFA Date 6/10/03 Job Code _____

Employee Tad Rodzinski SSN # _____ Job Title _____

Work Description RTI - Equip. Comparison Phase II - Filling area above
Ceiling Sample #1

Work Location _____
4 min. Sample

Inspirators/PPE _____

Controls _____

Sample # 3705-LA-6/10-51 Pump # 11177 Media Hydrac
MCE F

Calibration: 0.2470 52 Time: 7:56 - 8:00
Flow 249 c/min off 4 min Volume 1.0 l
246

Substance	OSHA PEL	Concentration	8 HOUR TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client GFA Date 6/10/03 Job Code _____

Employee Tad Radzinski SSN # _____ Job Title _____

Work Description RTF - Equip Comparison Phase II - Filling media
Ceiling sample #2

Work Location _____
4mm sample

Respirators/PPE _____

Controls _____

Sample # 3705-R-A-6/10-⁵³499 Pump # 11177 Media Hydrac
MCEF

Calibration: 0.247 54 Time: 8:01 - 8:05
Pre 246 cc/min Post 248 cc/min On _____ Off 4ms Volume 1.02

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

Appendix B
Air Sampling Data Forms

Sample Shipping Information

Samples were placed in an oversized, sturdy box with packing material to fill voids and protect the samples during shipping. The sampling personnel then signed the chain-of-custody forms, and placed them in the box with the samples. Samples were shipped via Federal Express to the laboratory.

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Dextric device

entire 2 arms - LEFT shoulder

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3105-D-A-611-55 Pump # 11249 Media Hydrom

-56

mCEF

Calibration: 0.198 Open Time: 10:20 - 11:25 59

Rate 198 c/min Post 198 c/min On 12:41 - OFF 19 38 Volume 19.22

97

Substance	OSHA PEL	Concentration	8 Hour TWA
-----------	----------	---------------	------------

<u>Hg</u>	<u>0.1 mg/m³</u>		
-----------	-----------------------------	--	--

COMMENTS:

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Dextrite Device

1st drum - LEFT Shoulder

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-6/11-57 Pump # 11308 Media Hydra

Calibration: 0.198 Open Time: 10:20 - 11:25 -59
Pre 200 cc/min Post 196 cc/min On 12:44 OFF 1:19 38 mCEF Volume 11.72
19.22

Substance	OSHA PEL	Concentration	8 Hour TWA
-----------	----------	---------------	------------

<u>Hg</u>	<u>0.1 mg/m³</u>		
-----------	-----------------------------	--	--

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Dextrok Device

1st Drum RIGHT Shoulder

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-6/11-59 Pump # 12664 Media Hydro

Calibration: 0.200 ⁻⁶⁰ Open Time: 10:20-11:25 59 MCF
Pre 202 cal Post 199 cal On 12:41 Off 59 Volume 11.8 L
19.5 L

Substance OSHA PEL Concentration 8 Hour TWA

Hy 0.1 mg/m³

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dextrite Dense

Work Location Inside Containment - near Exhaust on Road

Work Location fiber drum.

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-6/11-61 Pump # R 2992 Media Hydrex

Calibration: 0.203 Lpm Time: 10:20 - 11:27 61
Pre 203 cc/min Post 203 cc/min On 12:41 Off 1:19 38 MCEF
Volume 20.12

99

Substance OSHA PEL Concentration 8 Hour TWA

Hg 0.1 mg/m³ _____

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Poxite Device

Work Location Inside containment - near inlet feed tube on

round fiber drum

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-6/11-63 Pump # 112711 Media Hydrox

Calibration: 0.210 ⁻⁶⁴ Open Time: 10:26 - 11:27 61
Pre 209 cc/min Post 211 cc/min On 12:41 - 01:19 38 Volume 20.8 l
99

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client GIA Date 6/11/05 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Dextrite Penice

Drum change # 2, 1

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-6/11-65 Pump # R 2015 Media Hydror.

Calibration: 0.2000 Lpm Time: _____
Pre 260 cc/min Post 260 cc/min On 11:05 Off 11:25 Volume 5.28

OSHA PEL 0.1 mg/m³ Concentration _____ 8 Hour TWA _____

Substance Hg OSHA PEL 0.1 mg/m³ Concentration _____ 8 Hour TWA _____

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Dextrok Penite

Drum change #2

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-DA-6/11-67 Pump # R 2015 Media Hydrox

MDEF

Calibration: 0.2000 ppm Time: _____
Pre 260 cal/min Post 261 cal/min On 1:39 Off 1:51 Volume 3.12

12 min

Substance	OSHA PEL	Concentration	8 Hour TWA
-----------	----------	---------------	------------

<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EIA Date 6/11/03 Job Code _____

Employee TAD SSN # _____ Job Title _____

Work Description Dextite Device

Work Location ceiling sample - taken at drum change #1

4 min. sample

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-6/11-69 Pump # 11177 Media Hydra

Calibration: 0.255 ⁻⁷⁰ lpm Time: _____

Pre 254 cc/min Post 257 cc/min On 11:05 Off 11:45 Volume 1.00

4

Substance	OSHA PEL	Concentration	8 Hour TWA
-----------	----------	---------------	------------

<u>Hy</u>	<u>0.1 mg/m³</u>		
-----------	-----------------------------	--	--

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client CAA Date 6/11/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Dextrose device

Ceiling sample - taken at down change #1

Work Location _____

4 min. sample

Respirators/PPE _____

Controls _____

Sample # 3705-DA-6/11-7 Pump # 11177 Media Hydrex MCEF

Calibration: 0.255-72 Time: _____
Pre 254cc/min Post 257cc/min On 11:11 OFF 11:15 Volume 1.02
4

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____

Employee Tal SSN # _____ Job Title _____

Work Description Pesticide Decont

Work Location 2nd Drum LEFT Shoulder

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-6/11-73 Pump # 13681 Media Hydrex

Calibration: 0.202 ⁻⁷⁴ cpm Time: _____
Pre 202 cc/min Post 202 cc/min On 12:41 Off 1:19 Volume 7.7 l
38

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____

Employee TJD SSN # _____ Job Title _____

Work Description Dextite Device

2nd Draw RIGHT Shoulder

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-6/11-75 Pump # 11152 Media Hydra
13914

Calibration: 0.204 76 Time: _____
Pre 206 cc/min Post 206 cc/min On 12:52 Off 1:19 Volume 5.52
202 27

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____ Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/09 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dextrolle device
Overnight air sampler placed near exhaust

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-6/11-77 Pump # 11254 Media Hydram

Calibration: 0.157 ⁻⁷⁸ Post 136 cc/min Time: 5:53 On 7:15 Off 802 min Volume 125.90

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>		

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client GPA Date 6/11/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Pextrite Device

Overnight Air Sample - placed near inlet feed tube

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-6/11-79 Pump # 1177 Media Hydrex

Calibration: 0.154 ppm Time: 5:53 PM Off
Pre 153 cc/min Post 156 cc/min On 7:15 AM Off
-80 802 min Volume 123.50

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: 360 + 420 + 7 + 15

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client GPA Date 6/11/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Pcxrite Device

Overnight air sampler placed outside conference room

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-6/11-81 Pump # 11152 Media # ydrac

Calibration: 0.141 lpm Time: 5:53 pm 6/11
Pre H2 calibration Post 140 c/min On 7:15 pm OFF 6/11/03 Volume 113.1 L
-82 802 ml

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client GPA Date 6/11/03 Job Code _____
Employee Ted SSN # _____ Job Title _____
Work Description Dextrose Penic
U-TUBE Study on Teds Left Shoulder
Work Location _____
Respirators/PPE _____
Controls _____

Sample # 3705-D-A-6/11-83 Pump # 12664 Media Hydram
-84 MCEP
Calibration: 0.200 lpr Time: _____
Pre 199 cc/min Post 201 cc/min On 1:23 Off 1:35 Volume 2.42
12 min

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____ Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Dextrose Dewice

U-TUBE Study on Tad's Right Shoulder

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-0-A-6/11-85 Pump # 11308 Media Hydram

Calibration: 0.197⁻⁸⁶ Open Time: _____

Pre 196 cc/min Post 199 cc/min On 1:23 Off 1:35 Volume 2.42

12

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hy</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____ Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client QPA Date 6/11/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Dextite Device

~~W-TOA Study on Tad's~~

Work Location Inside Containment near Exhaust - D-TUBES

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-6/11-87 Pump # 11177 Media Hydraz

Calibration: 0.198 ⁸⁸ Open Time: _____
Pre 201 cc/min Post 196 cc/min On 1:23 Off 1:35 Volume 2.42
12

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Dextrose dust

Inside containment near feed tube - UTUBE 5

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-DA-6/11-89 Pump # 12708 Media Hydran

MCEF

Calibration: 0.205 ⁻⁹⁰ Open Time: _____
Pre 20 cc/min Post 20 cc/min On 1:23 Off 1:35 Volume 2.5 L
12

Substance: OSHA PEL Concentration 8 Hour TWA

Hg

0.1 mg/m³

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____
Employee Tad SSN # _____ Job Title _____
Work Description Dextrose Dewice
Equip Comparison Phase 2 - one hour
Work Location Personal sampling on RIGHT shoulder
Respirators/PPE _____
Controls _____

Sample # 3705-D-A-611-91 Pump # 13681 Media Hydrex
MCEF
Calibration: 0.200 ⁻⁹² Pre Time: _____
202 cc/min Post 198 cc/min On 4:43 Off 5:17 Volume 10.8 l
34 min

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____ Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____
Employee Teal SSN # _____ Job Title _____
Work Description Dextre Dexte
Equip Comparison Phase 2 - one drum
Work Location Personal sampling on LEFT shoulder
Respirators/PPE _____
Controls _____

Sample # 305-D-A-6/11-93 Pump # R2992 Media Hydrus 1
-94 MCEF
Calibration: 0-200 Lpm Time: _____
Pre 203cc/min Post 198cc/min On 4:43 Off 5:17 Volume 6.82
34

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____ Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dextrite device

Equipment comparison Phase 2

Work Location Inside Containment at Exhaust on
fiber drum

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-4/11-95 Pump # 112711 Media Hydra

Calibration: 0.212 ⁻⁹⁶ Exp Time: _____

Pre 211 cc/min Post 214 cc/min On 4:43 Off 5:17 Volume 7.2 l

_____ 34 _____

Substance	OSHA PEL	Concentration	8 Hour TWA
-----------	----------	---------------	------------

<u>Hg</u>	<u>0.1 mg/m³</u>	_____	_____
-----------	-----------------------------	-------	-------

COMMENTS:

Industrial Hygienist: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Detritus device

Equipment Equipment Comparison Phase 2 - one drum

Work Location Inside Containment near exhaust on fiber drum

Respirators/PPE _____

Controls _____

Sample # 3705-0-A-411-97 Pump # 11249 Media Hydro

Calibration: 0.198 L/min Time: _____
Pre 198 cc/min Post 198 cc/min On 4:43 Off 5:17 Volume 6.7 L
34

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>11g</u>	<u>0.1 mg/mg</u>		

COMMENTS:

Industrial Hygienist: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client GPA Date 6/11/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dextric device

Work Location Equip. room Companion Phase 2 - one drum

Inside containment near feed inlet tube on fiber drum

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-6/11-03 Pump # 13914 Media Hydrom

Calibration: -100 Pre 204 ucc/min Post 201 ucc/min Time: On 4:43 Off 5:17 Volume 6.90

34

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 5/11/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Dextroite Device

Work Location Equipment Comparison phase 2 - one drum

Inside containment near feed tube on
fiber drum

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-411-101 Pump # 11308 Media Hydrax
-102 MCEF

Calibration: 0.200 Pre 200 cc/min Post 200 cc/min Time: On 4:43 Off 5:17 Volume 6.82
351

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hy</u>	<u>0.1 mg/m³</u>		

REMARKS:

Industrial Hygienist: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client SFA Date 6/11/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Dextrot device

Work Location Equipment comparison Phase 2

Dixiey Drum Change

Respirators/PPE _____

Controls _____

Sample # 3705-D-A-6/11-103 Pump # K2015 Media Hydrom.

-104 MCET

Calibration: 0.257 Lpm Time: _____
Pre 258 cc/min Post 2.56 cc/min On 7:46 Off 7:58 Volume 3.10

12

Substance OSHA PEL Concentration 8 Hour TWA

Hg 0.1 mg/m³ _____

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____
Employee Tad SSN # _____ Job Title _____
Work Description Dextre Device
Work Location Equipment Comparison Phase 2 - ore drums
Personal sampling during Ceiling #1
Respirators/PPE 4 min sample
Controls _____

Sample # 3705-D-A-6/11-105 Pump # 12664 Media Hydro
-106 mCF
Calibration: 0.260 lpm Time: _____
Pre 260 cc/min Post 260 cc/min On 7:46 Off 7:50 Volume 1.0 l
cf

Substance	OSHA PEL	Concentration	8 Hour TWA

COMMENTS:

Industrial Hygienist: _____ Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description D-Extrite Device

Work Location Equipment Comparison Phase 2 -modna
Personal Sampling during ceiling H₂

Respirators/PPE _____

Controls 4 min sample

Sample # 3705-D-A-6/11-107 Pump # 12664 Media Hydrex

Calibration: 0-200 ¹⁰⁸ Open Time: _____
Pre 2.60cc/min Post 2.61cc/min On 7:51 Off 7:55 Volume 1.0 l
4

Substance	OSHA PEL	Concentration	8 Hour TWA

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/11/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Box Test

Work Location Taken after finished filling 2 drums for Dextite and doing U-TUBE Study

East containment next to work

Respirators/PPE boxes of tubes on fiber down

Controls _____

Sample # 3705-T-A-6/11-109 Pump # 12664 Media Hydra

-110 mCEF

Calibration: 0.201 lpm Time: _____

Pre 201 cc/min Post 201 cc/min On 2:57 Off 3:13 Volume 722

36

Substance	OSHA PEL	Concentration	8 Hour TWA
-----------	----------	---------------	------------

<u>Hg</u>	<u>0.1 mg/m³</u>		
-----------	-----------------------------	--	--

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client S.P.A. Date 6/11/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Box Test

Work Location Taken after finished filling drums for Dextrite and doing U-TUBE study west containment near Jerome

Respirators/PPE _____

Controls _____

Sample # 3705-T-A-6/11-111 Pump # 11308 Media Hydrex

Calibration: 0.199 ⁻¹¹² Open Time: _____
Pre 199cc/min Post 200cc/min On 2:37 Off 3:13 Volume 7.20
36

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client GPA Date 6/11/03 Job Code _____

Employee Brian SSN # _____ Job Title _____

Work Description Test on Brian, an AERC Facility employee
to wear personal air sample while working

Work Location LEFT shoulder

Respirators/PPE _____

Controls _____

Sample # 3705-F-A-6/11-113 Pump # 12708 Media Hydram

Calibration: 0.202 ⁻¹¹⁴ Open Time: _____
Pre 205 Post 199 On 2:31 Off 4:00 Volume 180 l
59

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPIC Date 6/11/03 Job Code _____

Employee Brian SSN # _____ Job Title _____

Work Description Test on Brian, an AERC Facility Employee

Work Location to wear personal air sample while

working. RIGHT Shoulder

Respirators/PPE _____

Controls _____

Sample # 3705-FA-6/11-115 Pump # 11152 Media Hydrov

Calibration: 0.202 ⁻¹¹⁶ Pre Post 200 cfm Time: 2:31 On 4:00 Off Volume 18.00

89

Substance OSHA PEL Concentration 8 Hour TWA

H3 0.1 mg/m³ _____

COMMENTS:

Industrial Hygienist:

Reviewed By:

Appendix B
Air Sampling Data Forms

Sample Shipping Information

Samples were placed in an oversized, sturdy box with packing material to fill voids and protect the samples during shipping. The sampling personnel then signed the chain-of-custody forms, and placed them in the box with the samples. Samples were shipped via Federal Express to the laboratory.

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client: SFA Date: 6/12/03 Job Code: _____

Employee: Tad SSN: _____ Job Title: _____

Work Description: Air Cycle device - real world

Work Location: LEFT shoulder, entire 2 days

Respirators/PPE: _____

Controls: _____

Sample # 3705-AH-610-117 Pump # 11308 Media Hydrex

Calibration: 0.202 Time: 10:05 11:24 79

Pre 204 Post 12:25 Off 1:17 52 Volume 20.50
131

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Air Cycle Dewa - Real World

LEFT Shoulder - 1st DRUM

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-AA-6/12-119 Pump # 11249 Media Hydram

Calibration: 0.200 ⁻¹²⁰ ppm Time: 7:1
Pre 203 cc/min Post 197 On 10:05 Off 11:24 Volume 15.8.0
MCF F

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: _____

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/09 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Arc yde device - Real world
RIGHT Shoulder - 1st Draw

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-AA-6/12-121 Pump # 112711 Media Hydram
-122 ~~13711~~ mCEF

Calibration: 0.211 Time: 79
Pre 20/10/09 Post 211 On 10:05 Off 11:24 Volume 16.70

212 cc/min

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hy</u>	<u>0.1mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee Wade SSN # _____ Job Title _____

Work Description Air Cycle Device - Real World

LEPA Inside Containment - Exhaust

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-AA-6/12-123 Pump # R2992 Media MCEFF Hydrom

Calibration: 0-200 lb Time: 10:05 11:24 79
Pre 202 cc/min Post 199 cc/min On 12:25 Off 1:18 53 Volume 26.4L

132

Substance	OSHA PEL	Concentration	8 Hour TWA
-----------	----------	---------------	------------

<u>Hg</u>	<u>0.1 mg/m³</u>		
-----------	-----------------------------	--	--

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client CPA Date 6/12/03 Job Code _____

Employee Twd SSN # _____ Job Title _____

Work Description Air Cycle - Real World

Inside containment - Feed Tube

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-PA-6/12-125 Pump # 13914 Media Hydrom

Calibration: 0.201 Time: 10:05 11:24 79
Pre 204 cc/min Post 199 cc/min On 12:25 Off 1:18:53 Volume 26.5 l

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: _____

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client QPA Date 6/13/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description AV Cycle Real world

Filter change #1

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-6/12-127 Pump # 12708 Media Hydra

Calibration: 0.255 ⁻¹²⁸ lpm Time: 12
Pre 256 cc/min Post 255 cc/min On 10:30 Off 10:42 Volume 3.10

Substance	OSHA PEL	Concentration	8 Hour TWA
-----------	----------	---------------	------------

<u>Hg</u>	<u>0.1mg/m³</u>		
-----------	----------------------------	--	--

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/13/03 Job Code _____
Employee Tad SSN # _____ Job Title _____
Work Description Air Cycle - Real World
Filter Change #2 / Drum #1
Work Location _____
Respirators/PPE _____
Controls _____

Sample # 3705-AA-6/a-129 Pump # 12708 Media Hydro
Calibration: 0.255 lpm Time: 12 MCF
Pre 256 c/min Post 255 c/min On 11:12 Off 11:24 Volume 3.10

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____ Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee Tach SSN # _____ Job Title _____

Work Description Air cycle device - Real world
Ceiling #1

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-412-131 Pump # 12664 Media Hy drum
nick

Calibration: 0.260 Time: 4
Pre 261 cal Post 259 cal On 11:12 Off 11:16 Volume 1.02

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Air cycle device - Real World
Ceiling H₂

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3205-AA-6/12-133 Pump # 12664 Media Hydrom
-134 WCF

Calibration: 0.260 Time: 4
Pre 261 cc/min Post 259 cc/min On 11:17 Off 11:21 Volume 1.0 l

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee Ted SSN # _____ Job Title _____

Work Description Air Cycle Device - Real World
LEFT Shoulder - 2nd drum

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-6/12-135 Pump # 11249 Media Hydrom

Calibration: 0.198 lpm Time: 52
Pre 197cc/min Post 199cc/min On 12:25 Off 1:17 Volume 10.3.0

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Itg</u>	<u>0.1mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/07 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Air Cycle Device - Real world
RIGHT SHOULDER, 2nd draw

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-AA6/12-137 Pump # 112711 Media _____

Calibration: -138
Pre 211 cfm Post 214 cfm Time: 52
On 12:25 Off 1:17 Volume 1602

Substance	OSHA PEL	Concentration	8 Hour TWA

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description 2 Air Cycle Device - Real World

Work Location Overnight Sample - placed near exhaust on
fiber drum

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-4/2-139 Pump # R 2992 Media Hydra-MCEP

Calibration: 0.144 liter Time: 5:49 pm 7/6/12
Pre 146cc/min Post 142cc/min On 7:30 AM Off 6/13 Volume 118.2L
821

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS: 11 + 360 + 420 + 30

Industrial Hygienist: _____ Reviewed By: _____

BOUZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description ~~Chromatography~~ Arcycle Device Real World

Work Location Ovenight Sample - placed near feed tube on fiber down

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-6/12-141 Pump # 11249 Media Hydax

Calibration: 0.157 Lpm Time: 5:49 AM 6/12
Pre 157cc/min Post 158cc/min On 7:30 AM Off 6:13 Volume 128.92
821

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Air Cycle Devic - Real world

Work Location Overnight sample placed on fiber drum outside of containment

Respirators/PPE _____

Controls _____

Sample # 3705-AA-6/12.143 Pump # 13914 Media Hydron

Calibration: 0.150 -144 Time: 5:49 pm 6/12
Pre 150 cc/min Post 50 cc/min On 7:30 ADEF 6/13 Volume 123.1 L
821

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367



AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Air Cycle Device - Equipment Comparison Phase II
on Tad's RIGHT Shoulder

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-6/12-145 Pump # 12664 Media Hydram

Calibration: 0.199 ⁻¹⁴⁶ Pre Time: 37 min MCET
200cc/min Post 199 cc/min On 4:30 Off 5:07 Volume 74.8

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/14/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description a.v.cycle Venice Equip Comp. Phase II
on Tad's LEFT shoulder

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-6/14-147 Pump # 11308 Media Hydro

Calibration: 0.203 ⁻¹⁴⁸ lp Time: 37 min MUF
Pre 203 cc/min Post 203 cc/min On 4:30 Off 5:07 Volume 7.5 l

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____



5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client E/A Date 6/12/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Air Cycle Service Equip Comparison Phase II

Inside Containment near Exhaust

Work Location on fiber down

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-412-H1 Part # 13681 Media Hydrom

Calibration: -150 time: 3/20/03 mCF
Pro 201 calibrator rate 199 cfm on 4:20 off _____ Volume 7.18

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

Comments: _____

Industrial Hygienist: _____ Released By: _____

RAND
*

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description avg Cycle Device - Equip Comparison Phase II

Inside Containment near Exhaust

Work Location on fiber drum

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-6/12-151 Pump # 11177 Media Hydro MUEF

Calibration: 0.206 ⁻¹⁵² Open Time: 37 min
Pre 203 cal/mv Post 209 cal/mv On 4:30 Off 5:07 Volume 7.6 l

Substance	OSHA PEL	Concentration	8 Hour TWA

COMMENTS:

Industrial Hygienist: _____ Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Air cycle device - Equip Comparison Phase II
Inside containment near feed inlet tube

Work Location on fiber drum

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-6/12-153 Pump # 11152 Media Hydran

Calibration: 0.209 ⁻¹⁵⁴ 209 cc/min Time: 37 MCEP
Pre 209 cc/min Post 209 cc/min On 4:30 OFF 5:07 Volume 7.7 l

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX, 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/22/07 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description Air Cycle Equip Commission Phase II

Inside containment a feed tube inlet on

Work Location Liberty Ave

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-612-K5 Pump # 11254 Media Hydrom

Calibration: 0.205, len -156 Time: 37 mCF

Pre 20/leafman Post 20/leafman On 4:30 Off 5:07 Volume 7.5L

Substance OSHA PEL Concentration 8 HOUR TWA

H₂ 0.1 mg/m³ _____

COMMENTS: _____

Prepared By: _____

Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Air Cycle Dewice - Equipment Comparison Phase II
on Tad's shoulder for Filterchange #1

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-AA-6/12-157 Pump # 12708 Media Hydro
-158 mCF

Calibration: 0.255 Lpm Time: 12
Pre 256 Post 253cc/min On 4:55 Off 5:07 Volume 3.12

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Air cycle device - equip comparison phase II
on Tad's shoulder for filter Δ #2 & drum Δ #1

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-6/12-159 Pump # 12708 Media Hydian

Calibration: 0.255 14 Time: 14 mCF
Pre 256 Post 255 cc/min On 7:46 Off 8:00 Volume 3.6 l

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee Tal SSN # _____ Job Title _____

Work Description ~~Setting~~ Air Cycle Equip. Comparison Phase I

Work Location Ceiling #1 - living dome A

Respirators/PPE 4 min personal sample

Controls _____

Sample # 3705-A-A-46-161 Amp # 112711 Media Hydrox

Calibration Pre 253 Post 253 Flow 0.254 lpm Time On 7:46 Off 7:51 Volume 1.02

Substance	OSHA PEL	Concentration	8 Hour TW
<u>H₂</u>	<u>0.1 mg/m³</u>		

REMARKS:

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description Air cycle Equip Comparison Phase II
Ceiling #2 - during down Δ

Work Location _____
4 min personal sample

Respirators/PPE _____

Controls _____

Sample # 3705-A-4-6/11-163 Pump # 112711 Media Hydran
mCEF

Calibration: -164 Time: 4
Pre 253 cal/m Post 256 cal/m On 7:51 Off 7:55 Volume 1.0 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>H₂</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____ Reviewed By: _____

AIR SAMPLING DATA FORM

Client EPA Date 6/13/03 Job Code _____
Employee Tal SSN # _____ Job Title _____
Work Description Air Cycle - Real world
Filter Change #3
Work Location _____
Respirators/PPE _____
Controls _____

Sample # 3705-AA-6/12-165 Pump # 12708 Media Hydran
-166 12 MCEF
Calibration: 0.255 liter Time: _____
Pre 256cc/min Post 255cc/min On 12:50 Off 1:02 Volume 3.18

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1mg/m³</u>	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

COMMENTS:

Industrial Hygienist: _____ Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client S/A Date 6/13/07 Job Code _____
Employee Taj SSN # _____ Job Title _____
Work Description Air Cycle - R2al mixed
Draw Δ #2
Work Location _____
Inspirators/PPM _____
Controls _____

Sample # 3705-A-A-6/12-67 PPM # 12708 Media Hydrom
Calibration: 0.255 168 15 NIER
Pre 25 kcal/min Post 255 cal/min Timer On 1:52 Off 2:15 Volume 330

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/13/07 Job Code _____

Employee Tal SSN # _____ Job Title _____

Work Description Air Cycle - Real world

Drum Δ #2

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705-AA-6/12-167 Pump # 12708 Media Hydran

Calibration: 0.255 ¹⁶⁸ lpm Time: 13
Pre 256 ccf/min Post 255 ccf/min On 1:52 Off 2:05 Volume 3.3 l

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

1-A

AIR SAMPLING DATA FORM

Client S.P.A. Date 6/12/03 Job Code _____

Employee _____ SSN # _____ Job Title _____

Work Description BOX TEST in Air Cycle Containment

West containment on fiber down

Work Location _____

Respirators/PPE _____

Controls _____

Sample # 3705 T-A-4/12-169 Pump # 11308 Media Hydram

Calibration: 0.201 ⁻¹⁷⁰ lpm Time: 45 min
Pre 200 cc/min Post 203 cc/min On 2:32 Off 3:17 Volume 9.0 l

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON



5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description UTUBES - AN Cycle

Work Location processing UTubes - on Tad's LEFT shoulder

Respirators/PPE _____

Controls _____

Sample # 3705-AA-6/12-~~171~~ Pump # 11/52 Media Hydro

Calibration: Pre 209 cc/min Post 209 cc/min Time: On 1:21 Off 1:35 Volume 29.8

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0d mg/m³</u>		

COMMENTS: _____

Industrial Hygienist:

Reviewed By:

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367



AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description U TUBES Air Cycle

Work Location Processing UTubes - on Tad's RIGHT Shoulder

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-6/12-¹⁷³~~174~~ Pump # 11254 Media Hydro MCF

Calibration: 207 Pre 209 cfm Post 206 cfm Time: 1:21 ^{4 min} On 1:35 Off 1:35 Volume 29.0

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS: _____

Industrial Hygienist: _____

Reviewed By: _____

BOOZ ALLEN & HAMILTON

5299 DTC Blvd., Suite 840

Greenwood Village, Colorado 80111

303.694.4159 FX. 303.694.7367

AIR SAMPLING DATA FORM

Client EPA Date 6/12/03 Job Code _____

Employee Tad SSN # _____ Job Title _____

Work Description U TUBES Air Cycle

Work Location Inside Containment - near exhaust on fiber drum

Respirators/PPE _____

Controls _____

Sample # 3705-A-A-6/12-14 ¹⁷⁵ Pump # 11177 Media Hydram

Calibration: 0.205 liter Time: 14 min
Pre 208 cc/min Post 203 cc/min On 1:21 Off 1:55 Volume 2.8 l

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____ Reviewed By: _____

BOOZ-ALLEN & HAMILTON

5299 DTC Blvd., Suite 840
Greenwood Village, Colorado 80111
303.694.4159 FX. 303.694.7367

Under
Lant
★

AIR SAMPLING DATA FORM

Client GDA Date 6/12/03 Job Code _____
 Employee Tad SSN # _____ Job Title _____
 Work Description UV TUBES Air Cycle
Inside containment - near feed tube on
 Work Location fiber drum
 Respirators/PPE _____
 Controls _____

Sample # 3705-AA-¹⁷⁷178 Pump # 13681 Media Hydrom
MCEF
 Calibration: 0.201 Lpm Time: 14 min
 Pre 202 u/m² Post 201 u/min On 1:21 Off 1:35 Volume 2.8 L

Substance	OSHA PEL	Concentration	8 Hour TWA
<u>Hg</u>	<u>0.1 mg/m³</u>		

COMMENTS:

Industrial Hygienist: _____ Reviewed By: _____