

## APPENDIX B-2

Allen Park (261630001), Speciated PM <sub>2.5</sub> (µg/m <sup>3</sup> )								
Chemical Name	Num Obs	Obs > MDL	Average (ND=0)	Average (ND=MDL/2)	MDL	Max 1	Max 2	Max 3
Aluminum Pm2.5 Lc	117	82	0.0242	0.0301	0.0374	0.104	0.0935	0.0809
Ammonium Ion Pm2.5 Lc	117	112	0.459	0.46	0.0154	2.8	2.62	2.04
Antimony Pm2.5 Lc	117	69	0.00857	0.0181	0.0464	0.0509	0.0495	0.0401
Arsenic Pm2.5 Lc	117	26	0.000364	0.0015	0.00292	0.00827	0.00656	0.00542
Barium Pm2.5 Lc	117	62	0.0164	0.0363	0.0847	0.117	0.109	0.0964
Bromine Pm2.5 Lc	117	101	0.00257	0.00288	0.00448	0.0273	0.0118	0.0112
Cadmium Pm2.5 Lc	117	63	0.00394	0.00926	0.0235	0.0293	0.0257	0.0213
Calcium Pm2.5 Lc	117	117	0.0584	0.0584	0.0286	0.287	0.217	0.211
Cerium Pm2.5 Lc	117	64	0.0189	0.0452	0.117	0.128	0.116	0.103
Cesium Pm2.5 Lc	117	74	0.0143	0.0284	0.0776	0.0648	0.0622	0.0605
Chlorine Pm2.5 Lc	117	85	0.0067	0.0073	0.00439	0.0636	0.0583	0.0362
Chromium Pm2.5 Lc	117	94	0.00229	0.00273	0.00396	0.0213	0.0142	0.0109
Cobalt Pm2.5 Lc	117	46	0.000388	0.00131	0.00305	0.00348	0.00307	0.00243
Copper Pm2.5 Lc	117	113	0.00976	0.00995	0.00907	0.0456	0.0416	0.0414
Ec Csn_Rev Unadjusted Pm2.5 Lc Tot	117	116	0.314	0.314	0.0126	1.22	0.991	0.761
Indium Pm2.5 Lc	117	55	0.00334	0.0114	0.0304	0.0189	0.0185	0.0182
Iron Pm2.5 Lc	117	117	0.11	0.11	0.0225	0.358	0.285	0.278
Lead Pm2.5 Lc	117	80	0.00471	0.00707	0.0152	0.0247	0.0198	0.0178
Magnesium Pm2.5 Lc	117	75	0.0151	0.0249	0.0548	0.0768	0.0713	0.0671
Manganese Pm2.5 Lc	117	87	0.00219	0.00304	0.00664	0.0133	0.00898	0.00727
Nickel Pm2.5 Lc	117	83	0.000821	0.00117	0.00235	0.00516	0.00424	0.00373
Oc Csn_Rev Unadjusted Pm2.5 Lc Tot	117	117	1.96	1.96	0.188	7.26	4.9	4.6
Phosphorus Pm2.5 Lc	117	117	0.000165	0.000165	0.00204	0.00377	0.00277	0.0027
Potassium Ion Pm2.5 Lc	117	117	0.0336	0.0336	0.00765	0.332	0.148	0.125
Potassium Pm2.5 Lc	117	117	0.057	0.057	0.016	0.285	0.178	0.152
Rubidium Pm2.5 Lc	117	61	0.00134	0.00331	0.0081	0.00956	0.00923	0.00633
Selenium Pm2.5 Lc	117	88	0.00172	0.00241	0.00563	0.0063	0.0063	0.00605
Silicon Pm2.5 Lc	117	117	0.0576	0.0576	0.0156	0.247	0.227	0.214
Silver Pm2.5 Lc	117	49	0.00234	0.00791	0.019	0.0233	0.0147	0.0137
Sodium Ion Pm2.5 Lc	117	117	0.0417	0.0417	0.0438	0.212	0.179	0.16
Sodium Pm2.5 Lc	117	54	0.0251	0.0437	0.0697	0.177	0.172	0.116
Strontium Pm2.5 Lc	117	65	0.00145	0.00291	0.00649	0.00887	0.00785	0.00712
Sulfate Pm2.5 Lc	117	117	1.11	1.11	0.14	2.97	2.82	2.7
Sulfur Pm2.5 Lc	117	117	0.453	0.453	0.00857	1.12	1.07	0.978
Tin Pm2.5 Lc	117	67	0.00833	0.0181	0.0467	0.0609	0.0576	0.0498
Titanium Pm2.5 Lc	117	110	0.00356	0.00366	0.00344	0.0137	0.0105	0.00945
Total Nitrate Pm2.5 Lc	117	117	1.43	1.43	0.09	10.9	8.13	6.48
Vanadium Pm2.5 Lc	117	70	0.000513	0.000938	0.00208	0.00289	0.00258	0.00215
Zinc Pm2.5 Lc	117	117	0.0159	0.0159	0.0036	0.12	0.0583	0.048
Zirconium Pm2.5 Lc	117	61	0.0053	0.0142	0.0373	0.0396	0.0283	0.0267

Dearborn (261630033), Speciated PM <sub>2.5</sub> (µg/m <sup>3</sup> )								
Chemical Name	Num Obs	Obs > MDL	Average (ND=0)	Average (ND=MDL/2)	MDL	Max 1	Max 2	Max 3
Aluminum Pm2.5 Lc	59	40	0.0277	0.034	0.0375	0.135	0.125	0.112
Ammonium Ion Pm2.5 Lc	59	58	0.481	0.481	0.0154	2.69	1.93	1.68
Antimony Pm2.5 Lc	59	37	0.0121	0.0208	0.0466	0.0555	0.0506	0.0464
Arsenic Pm2.5 Lc	59	16	0.000833	0.0019	0.00293	0.00754	0.00551	0.00512
Barium Pm2.5 Lc	59	33	0.0168	0.0358	0.085	0.0809	0.0728	0.0697
Bromine Pm2.5 Lc	59	48	0.00304	0.00346	0.00448	0.0119	0.0116	0.00868
Cadmium Pm2.5 Lc	59	28	0.00351	0.00976	0.0236	0.027	0.0208	0.0167
Calcium Pm2.5 Lc	59	59	0.113	0.113	0.0282	0.524	0.473	0.277
Cerium Pm2.5 Lc	59	30	0.0245	0.0526	0.116	0.12	0.117	0.109
Cesium Pm2.5 Lc	59	33	0.014	0.0313	0.0777	0.0732	0.0727	0.0634
Chlorine Pm2.5 Lc	59	52	0.026	0.0262	0.00443	0.15	0.129	0.111
Chromium Pm2.5 Lc	59	44	0.00188	0.00244	0.00397	0.01	0.01	0.0063
Cobalt Pm2.5 Lc	59	26	0.000698	0.00156	0.00306	0.00649	0.00586	0.00556
Copper Pm2.5 Lc	59	59	0.00981	0.00981	0.00914	0.0405	0.0264	0.026
Ec Csn_Rev Unadjusted Pm2.5 Lc Tot	59	59	0.503	0.503	0.0126	1.56	1.45	1.38
Indium Pm2.5 Lc	59	30	0.00298	0.0104	0.0304	0.015	0.0148	0.0129
Iron Pm2.5 Lc	59	59	0.332	0.332	0.0225	1.39	1.19	1.01
Lead Pm2.5 Lc	59	41	0.00653	0.00873	0.0152	0.0251	0.0235	0.02
Magnesium Pm2.5 Lc	59	47	0.026	0.0315	0.0547	0.14	0.137	0.0797
Manganese Pm2.5 Lc	59	53	0.0072	0.00753	0.00667	0.0324	0.0231	0.021
Nickel Pm2.5 Lc	59	48	0.00114	0.00136	0.00236	0.00609	0.00387	0.00351
Oc Csn_Rev Unadjusted Pm2.5 Lc Tot	59	59	2.42	2.42	0.18	5.53	5.16	4.86
Phosphorus Pm2.5 Lc	59	58	0.000284	0.000303	0.00205	0.00418	0.00249	0.00162
Potassium Ion Pm2.5 Lc	59	59	0.0523	0.0523	0.00767	0.547	0.165	0.141
Potassium Pm2.5 Lc	59	58	0.0875	0.0877	0.016	0.854	0.196	0.169
Rubidium Pm2.5 Lc	59	29	0.00108	0.00317	0.00805	0.00668	0.00571	0.00455
Selenium Pm2.5 Lc	59	39	0.00161	0.00256	0.00565	0.00667	0.00621	0.00591
Silicon Pm2.5 Lc	59	58	0.0793	0.0794	0.0155	0.402	0.22	0.202
Silver Pm2.5 Lc	59	29	0.00322	0.0081	0.019	0.0184	0.0179	0.017
Sodium Ion Pm2.5 Lc	59	59	0.0616	0.0616	0.0442	0.254	0.191	0.177
Sodium Pm2.5 Lc	59	38	0.0449	0.0568	0.0699	0.344	0.298	0.261
Strontium Pm2.5 Lc	59	36	0.00192	0.00322	0.00649	0.0209	0.00761	0.00631
Sulfate Pm2.5 Lc	59	58	1.33	1.33	0.14	3.18	2.84	2.83
Sulfur Pm2.5 Lc	59	58	0.521	0.522	0.00857	1.25	1.09	1.05
Tin Pm2.5 Lc	59	36	0.0101	0.0194	0.0466	0.0609	0.0393	0.0316
Titanium Pm2.5 Lc	59	55	0.00458	0.0047	0.00345	0.0356	0.0241	0.0142
Total Nitrate Pm2.5 Lc	59	58	1.51	1.51	0.0906	7.56	5.46	5.37
Vanadium Pm2.5 Lc	59	33	0.000821	0.00128	0.00207	0.00381	0.00376	0.00322
Zinc Pm2.5 Lc	59	59	0.0654	0.0654	0.0036	0.336	0.257	0.206
Zirconium Pm2.5 Lc	59	31	0.00466	0.0136	0.0374	0.0413	0.0216	0.0212

Detroit, W Fort St. (N. Delray-SWHS) (261630015), Speciated PM <sub>2.5</sub> (µg/m <sup>3</sup> )								
Chemical Name	Num Obs	Obs > MDL	Average (ND=0)	Average (ND=MDL/2)	MDL	Max 1	Max 2	Max 3
Aluminum Pm2.5 Lc	57	48	0.0515	0.0545	0.037	0.317	0.31	0.223
Ammonium Ion Pm2.5 Lc	58	57	0.477	0.477	0.0168	3.02	2.46	1.43
Antimony Pm2.5 Lc	57	34	0.00909	0.0184	0.0462	0.0461	0.0393	0.0302
Arsenic Pm2.5 Lc	57	10	0.000471	0.00166	0.00288	0.005	0.00439	0.00437
Barium Pm2.5 Lc	57	28	0.0128	0.0342	0.0844	0.086	0.0655	0.062
Bromine Pm2.5 Lc	57	49	0.00295	0.00326	0.00447	0.0117	0.00856	0.00801
Cadmium Pm2.5 Lc	57	31	0.00246	0.00788	0.0235	0.014	0.013	0.0118
Calcium Pm2.5 Lc	57	56	0.246	0.246	0.0285	1.56	1.39	1.01
Cerium Pm2.5 Lc	57	33	0.0158	0.04	0.117	0.0964	0.0838	0.0776
Cesium Pm2.5 Lc	57	28	0.00986	0.0296	0.0776	0.0557	0.0554	0.0455
Chlorine Pm2.5 Lc	57	52	0.0319	0.032	0.00436	0.264	0.219	0.183
Chromium Pm2.5 Lc	57	43	0.00211	0.00264	0.00394	0.0107	0.00967	0.0084
Cobalt Pm2.5 Lc	57	25	0.000364	0.00121	0.00305	0.0028	0.00187	0.00182
Copper Pm2.5 Lc	57	54	0.0109	0.0112	0.00901	0.0308	0.0306	0.0301
Ec Csn_Rev Unadjusted Pm2.5 Lc Tot	56	56	0.552	0.552	0.0127	2.78	1.64	1.38
Indium Pm2.5 Lc	57	29	0.00389	0.0112	0.0304	0.0174	0.0168	0.016
Iron Pm2.5 Lc	57	57	0.232	0.232	0.0225	0.886	0.654	0.637
Lead Pm2.5 Lc	57	48	0.00675	0.00794	0.0152	0.0243	0.0197	0.0171
Magnesium Pm2.5 Lc	57	47	0.0435	0.0484	0.055	0.287	0.246	0.245
Manganese Pm2.5 Lc	57	50	0.00565	0.00606	0.00663	0.0243	0.0212	0.019
Nickel Pm2.5 Lc	57	45	0.000914	0.00117	0.00234	0.0037	0.00356	0.00291
Oc Csn_Rev Unadjusted Pm2.5 Lc Tot	56	56	2.23	2.23	0.182	6.67	4.49	4.08
Phosphorus Pm2.5 Lc	57	57	0.000217	0.000217	0.00202	0.00209	0.00201	0.00157
Potassium Ion Pm2.5 Lc	58	57	0.0638	0.0638	0.00816	0.876	0.288	0.197
Potassium Pm2.5 Lc	57	57	0.0933	0.0933	0.016	0.887	0.255	0.24
Rubidium Pm2.5 Lc	57	33	0.00128	0.00298	0.00816	0.00698	0.00503	0.0049
Selenium Pm2.5 Lc	57	34	0.00148	0.00259	0.00561	0.00732	0.006	0.00493
Silicon Pm2.5 Lc	57	57	0.156	0.156	0.0157	0.873	0.746	0.574
Silver Pm2.5 Lc	57	27	0.00259	0.00758	0.0189	0.018	0.0152	0.0122
Sodium Ion Pm2.5 Lc	58	58	0.0673	0.0673	0.0446	0.415	0.224	0.218
Sodium Pm2.5 Lc	57	33	0.0376	0.0524	0.0692	0.309	0.196	0.138
Strontium Pm2.5 Lc	57	31	0.00185	0.00335	0.00651	0.0175	0.00786	0.0071
Sulfate Pm2.5 Lc	58	58	1.57	1.57	0.151	5.26	4.06	3.87
Sulfur Pm2.5 Lc	57	57	0.516	0.516	0.00857	1.35	1.19	1.1
Tin Pm2.5 Lc	57	35	0.0108	0.0196	0.0464	0.0748	0.0495	0.038
Titanium Pm2.5 Lc	57	52	0.00532	0.00548	0.00345	0.0224	0.0201	0.0184
Total Nitrate Pm2.5 Lc	58	58	1.69	1.69	0.094	7.32	6.91	5.67
Vanadium Pm2.5 Lc	57	36	0.000705	0.00109	0.00209	0.00374	0.00315	0.00292
Zinc Pm2.5 Lc	57	57	0.0273	0.0273	0.00363	0.143	0.0928	0.0657
Zirconium Pm2.5 Lc	57	28	0.00679	0.0162	0.0371	0.0357	0.0296	0.0264

Tecumseh (260910007), Speciated PM <sub>2.5</sub> (µg/m <sup>3</sup> )								
Chemical Name	Num Obs	Obs > MDL	Average (ND=0)	Average (ND=MDL/2)	MDL	Max 1	Max 2	Max 3
Aluminum Pm2.5 Lc	61	44	0.035	0.0404	0.0371	0.337	0.283	0.113
Ammonium Ion Pm2.5 Lc	61	58	0.466	0.466	0.0165	1.88	1.84	1.76
Antimony Pm2.5 Lc	61	31	0.00766	0.0191	0.0462	0.054	0.0444	0.0351
Arsenic Pm2.5 Lc	61	12	0.000252	0.00143	0.00289	0.00576	0.00443	0.00323
Barium Pm2.5 Lc	61	38	0.0178	0.0339	0.0845	0.0806	0.0732	0.0698
Bromine Pm2.5 Lc	61	48	0.00248	0.00295	0.00448	0.0134	0.00847	0.00826
Cadmium Pm2.5 Lc	61	37	0.00426	0.00887	0.0236	0.0208	0.0201	0.0184
Calcium Pm2.5 Lc	61	61	0.0915	0.0915	0.0282	0.635	0.521	0.267
Cerium Pm2.5 Lc	61	32	0.0212	0.0488	0.117	0.0909	0.0832	0.081
Cesium Pm2.5 Lc	61	31	0.0114	0.0305	0.0776	0.0724	0.0566	0.0565
Chlorine Pm2.5 Lc	61	32	0.0046	0.00566	0.00438	0.0342	0.0275	0.0274
Chromium Pm2.5 Lc	61	49	0.00316	0.00358	0.00396	0.0827	0.018	0.00485
Cobalt Pm2.5 Lc	61	30	0.000465	0.00125	0.00306	0.0028	0.0022	0.00214
Copper Pm2.5 Lc	61	43	0.00312	0.00446	0.00906	0.0209	0.00946	0.00903
Ec Csn_Rev Unadjusted Pm2.5 Lc Tot	59	59	0.156	0.156	0.0126	0.673	0.384	0.32
Indium Pm2.5 Lc	61	34	0.00441	0.0112	0.0305	0.0213	0.0172	0.0171
Iron Pm2.5 Lc	61	61	0.0764	0.0764	0.0226	0.441	0.307	0.275
Lead Pm2.5 Lc	61	42	0.00533	0.00766	0.0153	0.0219	0.0217	0.0199
Magnesium Pm2.5 Lc	61	48	0.0192	0.025	0.055	0.172	0.0908	0.0694
Manganese Pm2.5 Lc	61	46	0.00486	0.00566	0.00665	0.11	0.0185	0.0146
Nickel Pm2.5 Lc	61	49	0.000832	0.00107	0.00234	0.00363	0.00267	0.00265
Oc Csn_Rev Unadjusted Pm2.5 Lc Tot	59	59	1.7	1.7	0.181	5.45	5.31	3.92
Phosphorus Pm2.5 Lc	61	61	0.00068	0.00068	0.00202	0.00751	0.00559	0.00521
Potassium Ion Pm2.5 Lc	61	61	0.0429	0.0429	0.00809	0.546	0.157	0.132
Potassium Pm2.5 Lc	61	61	0.0791	0.0791	0.016	0.632	0.225	0.186
Rubidium Pm2.5 Lc	61	35	0.00134	0.00313	0.00815	0.0073	0.00709	0.00607
Selenium Pm2.5 Lc	61	33	0.00114	0.00241	0.00561	0.00655	0.00479	0.00474
Silicon Pm2.5 Lc	61	61	0.113	0.113	0.0156	1.13	0.715	0.354
Silver Pm2.5 Lc	61	29	0.00308	0.00797	0.0189	0.0228	0.0182	0.0163
Sodium Ion Pm2.5 Lc	61	60	0.0284	0.0288	0.045	0.145	0.0903	0.0886
Sodium Pm2.5 Lc	61	27	0.02	0.0393	0.0691	0.243	0.128	0.0966
Strontium Pm2.5 Lc	61	33	0.00155	0.00305	0.00653	0.0138	0.00654	0.00526
Sulfate Pm2.5 Lc	61	61	1.03	1.03	0.149	2.3	2.2	2.15
Sulfur Pm2.5 Lc	61	61	0.434	0.434	0.00857	0.89	0.874	0.838
Tin Pm2.5 Lc	61	35	0.00886	0.0188	0.0462	0.0338	0.0332	0.0291
Titanium Pm2.5 Lc	61	56	0.00397	0.00411	0.00345	0.0304	0.0234	0.0118
Total Nitrate Pm2.5 Lc	61	61	1.36	1.36	0.0941	5.71	5.39	5.29
Vanadium Pm2.5 Lc	61	31	0.000487	0.001	0.00209	0.00228	0.00202	0.0019
Zinc Pm2.5 Lc	61	61	0.0152	0.0152	0.00364	0.0436	0.0342	0.0335
Zirconium Pm2.5 Lc	61	30	0.00599	0.0156	0.0371	0.0497	0.0313	0.0254

Grand Rapids-Monroe St. (260810020), Speciated PM <sub>2.5</sub> (µg/m <sup>3</sup> )								
Chemical Name	Num Obs	Obs > MDL	Average (ND=0)	Average (ND=MDL/2)	MDL	Max 1	Max 2	Max 3
Aluminum Pm2.5 Lc	115	81	0.0284	0.0342	0.0372	0.437	0.193	0.112
Ammonium Ion Pm2.5 Lc	115	109	0.409	0.41	0.0171	3.04	2.43	2.08
Antimony Pm2.5 Lc	115	64	0.0085	0.0188	0.0464	0.0524	0.0485	0.0461
Arsenic Pm2.5 Lc	115	26	0.000373	0.0015	0.00286	0.00558	0.00526	0.00484
Barium Pm2.5 Lc	115	72	0.018	0.0337	0.0844	0.0893	0.0717	0.0647
Bromine Pm2.5 Lc	115	93	0.00225	0.00267	0.00446	0.0086	0.00816	0.00662
Cadmium Pm2.5 Lc	115	66	0.00366	0.00872	0.0233	0.0265	0.0239	0.019
Calcium Pm2.5 Lc	115	115	0.0435	0.0435	0.0287	0.195	0.172	0.171
Cerium Pm2.5 Lc	115	62	0.0162	0.0431	0.117	0.121	0.0808	0.0796
Cesium Pm2.5 Lc	115	57	0.0119	0.0316	0.0775	0.112	0.0705	0.0618
Chlorine Pm2.5 Lc	115	77	0.0107	0.0114	0.00434	0.262	0.141	0.134
Chromium Pm2.5 Lc	115	94	0.00692	0.00731	0.00392	0.32	0.059	0.0525
Cobalt Pm2.5 Lc	115	37	0.000445	0.00148	0.00305	0.00576	0.00332	0.00295
Copper Pm2.5 Lc	115	105	0.00646	0.00688	0.00897	0.0427	0.0417	0.025
Ec Csn_Rev Unadjusted Pm2.5 Lc Tot	113	113	0.252	0.252	0.0126	0.792	0.736	0.691
Indium Pm2.5 Lc	115	54	0.00384	0.0118	0.0302	0.0264	0.0227	0.0225
Iron Pm2.5 Lc	115	115	0.0999	0.0999	0.0224	1.22	0.43	0.29
Lead Pm2.5 Lc	115	77	0.00382	0.00629	0.0151	0.0224	0.0185	0.014
Magnesium Pm2.5 Lc	115	65	0.0151	0.0269	0.0549	0.21	0.149	0.0653
Manganese Pm2.5 Lc	115	78	0.00302	0.0041	0.00661	0.0245	0.0175	0.0143
Nickel Pm2.5 Lc	115	94	0.00252	0.00274	0.00234	0.103	0.0263	0.0156
Oc Csn_Rev Unadjusted Pm2.5 Lc Tot	113	113	1.9	1.9	0.184	4.95	4.88	4.8
Phosphorus Pm2.5 Lc	115	114	0.000359	0.00037	0.00203	0.00735	0.00303	0.0027
Potassium Ion Pm2.5 Lc	115	114	0.0404	0.0404	0.00818	1.1	0.607	0.117
Potassium Pm2.5 Lc	115	114	0.0667	0.0667	0.016	1.18	0.85	0.126
Rubidium Pm2.5 Lc	115	52	0.000954	0.00324	0.0081	0.00809	0.00622	0.00585
Selenium Pm2.5 Lc	115	61	0.000985	0.00232	0.00563	0.009	0.00649	0.00554
Silicon Pm2.5 Lc	115	113	0.0553	0.0555	0.0157	0.23	0.227	0.209
Silver Pm2.5 Lc	115	44	0.00211	0.00796	0.0189	0.0165	0.012	0.0118
Sodium Ion Pm2.5 Lc	115	113	0.0346	0.0349	0.0461	0.455	0.27	0.136
Sodium Pm2.5 Lc	115	59	0.0237	0.0405	0.0696	0.166	0.123	0.12
Strontium Pm2.5 Lc	115	61	0.00167	0.00319	0.00647	0.0303	0.0192	0.0122
Sulfate Pm2.5 Lc	115	115	0.878	0.878	0.151	3.44	3.09	2.31
Sulfur Pm2.5 Lc	115	115	0.364	0.364	0.00857	1.13	1.08	0.874
Tin Pm2.5 Lc	115	69	0.00941	0.0187	0.0467	0.0708	0.0449	0.0438
Titanium Pm2.5 Lc	115	108	0.00391	0.00402	0.00345	0.0177	0.0136	0.0129
Total Nitrate Pm2.5 Lc	115	114	1.34	1.34	0.0939	9.32	9	7.36
Vanadium Pm2.5 Lc	115	53	0.000383	0.00096	0.0021	0.00337	0.00244	0.00189
Zinc Pm2.5 Lc	115	114	0.0143	0.0143	0.00359	0.0714	0.0389	0.0363
Zirconium Pm2.5 Lc	115	61	0.00635	0.0151	0.0371	0.0337	0.0301	0.0299