

SACRAMENTO METROPOLITAN
AIR QUALITY MANAGEMENT DISTRICT

CLIENT # S061
REPORT # 21-413

SUBMITTED BY:
CHESTER LabNet
12242 S.W. GARDEN PLACE
TIGARD, OR 97223
(503)624-2183/FAX (503)624-2653
www.ChesterLab.Net

CHESTER LabNet

12242 SW Garden Place ♦ Tigard, OR 97223-8246 ♦ USA
Telephone 503-624-2183 ♦ Fax 503-624-2653 ♦ www.chesterlab.net

Case Narrative

Date: September 20, 2021

General Information

Client: Sacramento Metropolitan Air Quality Management District
Client Number: S061
Report Number: 21-413
Sample Description: 47mm Teflon filters
Sample Numbers: 21-T2448 – 21-T2457, 21-T2462, 21-T2464 – 21-T2467, 21-T2566, 21-T2567,
21-T2693 – 21-T2700, 21-T2710 – 21-T2713, 21-T2954 – 21-T2956, 21-T2958
– 21-T2960

Analysis

Analytes:	Particulate Mass, XRF Metals (Na – Pb)
Analytical Protocols:	Gravimetry (PM _{2.5}): 40 CFR 50 Appendix L (10/17/06 version) Gravimetry (PM ₁₀): 40 CFR 50 Appendix J (8/7/87 version) X-Ray Fluorescence: EPA IO-3.3 (June 1999 version)
Analytical Notes:	No problems were encountered during the analyses. Results have not been blank corrected.
QA/QC Review:	All of the data have been reviewed by the analysts performing the analyses and the project manager. All of the quality control and sample-specific information in this package is complete and meets or exceeds the minimum requirements for acceptability.
Comments:	If you have any questions or concerns regarding this analysis, please feel free to contact the project manager.
Disclaimer:	This report shall not be reproduced, except in full, without the written approval of the laboratory. The results only represent that of the samples as received into the laboratory.

Paul Duda 9/20/21
Project Manager Date
Paul Duda

Lab ID: 21-T2697
Filter ID: P7325831
Site: VFW PM2.5
Sample Date: 8/20/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	271. ± 10.				37.64	± 2.339
XRF						
Na	4.087	± 0.6226	1.508	± 0.2364	0.5677	± 0.0910
Mg	1.074	± 0.1514	0.3961	± 0.0578	0.1491	± 0.0223
Al	1.728	± 0.1074	0.6376	± 0.0461	0.2400	± 0.0191
Si	4.070	± 0.2102	1.502	± 0.0953	0.5653	± 0.0406
P	0.2045	± 0.0237	0.0755	± 0.0092	0.0284	± 0.0036
S	5.239	± 0.2667	1.933	± 0.1215	0.7276	± 0.0519
Cl	0.4226	± 0.0384	0.1559	± 0.0153	0.0587	± 0.0061
K	1.344	± 0.0689	0.4958	± 0.0313	0.1866	± 0.0134
Ca	1.904	± 0.0960	0.7026	± 0.0439	0.2645	± 0.0188
Sc	0.0396	± 0.0124	0.0146	± 0.0046	0.0055	± 0.0017
Ti	0.1153	± 0.0090	0.0425	± 0.0037	0.0160	± 0.0015
* V	0.0068	± 0.0079	0.0025	± 0.0029	0.0009	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0025	0.0000	± 0.0009
Mn	0.1367	± 0.0147	0.0505	± 0.0057	0.0190	± 0.0023
Fe	1.547	± 0.0780	0.5708	± 0.0357	0.2149	± 0.0153
* Co	0.0000	± 0.0090	0.0000	± 0.0033	0.0000	± 0.0013
* Ni	0.0000	± 0.0045	0.0000	± 0.0017	0.0000	± 0.0006
Cu	0.0531	± 0.0045	0.0196	± 0.0018	0.0074	± 0.0007
Zn	0.1028	± 0.0068	0.0379	± 0.0029	0.0143	± 0.0012
* Ga	0.0034	± 0.0034	0.0013	± 0.0013	0.0005	± 0.0005
* As	0.0090	± 0.0045	0.0033	± 0.0017	0.0013	± 0.0006
* Se	0.0000	± 0.0034	0.0000	± 0.0013	0.0000	± 0.0005
Br	0.0633	± 0.0045	0.0234	± 0.0019	0.0088	± 0.0008
Rb	0.0192	± 0.0034	0.0071	± 0.0013	0.0027	± 0.0005
Sr	0.0373	± 0.0045	0.0138	± 0.0017	0.0052	± 0.0007
Y	0.0282	± 0.0056	0.0104	± 0.0021	0.0039	± 0.0008
Zr	0.0316	± 0.0068	0.0117	± 0.0025	0.0044	± 0.0010
* Nb	0.0034	± 0.0090	0.0013	± 0.0033	0.0005	± 0.0013
* Mo	0.0000	± 0.0113	0.0000	± 0.0042	0.0000	± 0.0016
* Ag	0.0124	± 0.0215	0.0046	± 0.0079	0.0017	± 0.0030
* Cd	0.0000	± 0.0305	0.0000	± 0.0113	0.0000	± 0.0042
* In	0.0000	± 0.0339	0.0000	± 0.0125	0.0000	± 0.0047
* Sn	0.0791	± 0.0373	0.0292	± 0.0138	0.0110	± 0.0052
* Sb	0.0565	± 0.0576	0.0208	± 0.0213	0.0078	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0050	0.0000	± 0.0019
Ba	0.0972	± 0.0203	0.0359	± 0.0076	0.0135	± 0.0029
* La	0.0418	± 0.0170	0.0154	± 0.0063	0.0058	± 0.0024
* Ce	0.0000	± 0.0147	0.0000	± 0.0054	0.0000	± 0.0020
* Sm	0.0000	± 0.0215	0.0000	± 0.0079	0.0000	± 0.0030
* Eu	0.0000	± 0.0249	0.0000	± 0.0092	0.0000	± 0.0035
* Tb	0.0000	± 0.0418	0.0000	± 0.0154	0.0000	± 0.0058
* Hf	0.0000	± 0.0102	0.0000	± 0.0038	0.0000	± 0.0014
Ta	0.0282	± 0.0090	0.0104	± 0.0034	0.0039	± 0.0013
* W	0.0000	± 0.0079	0.0000	± 0.0029	0.0000	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0025	0.0000	± 0.0009
Au	0.0215	± 0.0056	0.0079	± 0.0021	0.0030	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0033	0.0000	± 0.0013
* Pb	0.0124	± 0.0102	0.0046	± 0.0038	0.0017	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2700
Filter ID: P7325834
Site: Impact PM2.5
Sample Date: 8/20/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	233. ± 10.				32.36	± 2.132
XRF						
Na	4.389	± 0.6226	1.884	± 0.2792	0.6096	± 0.0917
Mg	0.7831	± 0.1458	0.3361	± 0.0642	0.1088	± 0.0210
Al	1.301	± 0.0904	0.5582	± 0.0456	0.1806	± 0.0155
Si	2.617	± 0.1367	1.123	± 0.0759	0.3635	± 0.0263
P	0.1571	± 0.0226	0.0674	± 0.0101	0.0218	± 0.0033
S	5.079	± 0.2576	2.180	± 0.1448	0.7055	± 0.0502
Cl	0.3187	± 0.0350	0.1368	± 0.0161	0.0443	± 0.0053
K	1.124	± 0.0576	0.4826	± 0.0323	0.1562	± 0.0112
Ca	1.371	± 0.0701	0.5883	± 0.0393	0.1904	± 0.0136
* Sc	0.0000	± 0.0124	0.0000	± 0.0053	0.0000	± 0.0017
Ti	0.0915	± 0.0079	0.0393	± 0.0038	0.0127	± 0.0013
* V	0.0011	± 0.0079	0.0005	± 0.0034	0.0002	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0029	0.0000	± 0.0009
Mn	0.0610	± 0.0124	0.0262	± 0.0055	0.0085	± 0.0018
Fe	0.9831	± 0.0497	0.4219	± 0.0280	0.1365	± 0.0097
* Co	0.0000	± 0.0079	0.0000	± 0.0034	0.0000	± 0.0011
* Ni	0.0023	± 0.0045	0.0010	± 0.0019	0.0003	± 0.0006
Cu	0.0588	± 0.0045	0.0252	± 0.0022	0.0082	± 0.0007
Zn	0.1141	± 0.0068	0.0490	± 0.0036	0.0159	± 0.0012
* Ga	0.0090	± 0.0034	0.0039	± 0.0015	0.0013	± 0.0005
* As	0.0090	± 0.0045	0.0039	± 0.0019	0.0013	± 0.0006
* Se	0.0000	± 0.0034	0.0000	± 0.0015	0.0000	± 0.0005
Br	0.0328	± 0.0045	0.0141	± 0.0020	0.0046	± 0.0007
* Rb	0.0023	± 0.0034	0.0010	± 0.0015	0.0003	± 0.0005
Sr	0.0181	± 0.0045	0.0078	± 0.0020	0.0025	± 0.0006
* Y	0.0000	± 0.0056	0.0000	± 0.0024	0.0000	± 0.0008
* Zr	0.0000	± 0.0079	0.0000	± 0.0034	0.0000	± 0.0011
* Nb	0.0147	± 0.0102	0.0063	± 0.0044	0.0020	± 0.0014
* Mo	0.0000	± 0.0113	0.0000	± 0.0048	0.0000	± 0.0016
* Ag	0.0000	± 0.0282	0.0000	± 0.0121	0.0000	± 0.0039
* Cd	0.0000	± 0.0305	0.0000	± 0.0131	0.0000	± 0.0042
In	0.1017	± 0.0339	0.0436	± 0.0147	0.0141	± 0.0048
* Sn	0.0814	± 0.0418	0.0349	± 0.0180	0.0113	± 0.0058
* Sb	0.0000	± 0.0576	0.0000	± 0.0247	0.0000	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0058	0.0000	± 0.0019
* Ba	0.0000	± 0.0203	0.0000	± 0.0087	0.0000	± 0.0028
* La	0.0068	± 0.0158	0.0029	± 0.0068	0.0009	± 0.0022
Ce	0.0452	± 0.0147	0.0194	± 0.0064	0.0063	± 0.0021
* Sm	0.0000	± 0.0215	0.0000	± 0.0092	0.0000	± 0.0030
* Eu	0.0000	± 0.0249	0.0000	± 0.0107	0.0000	± 0.0035
* Tb	0.0260	± 0.0362	0.0112	± 0.0155	0.0036	± 0.0050
* Hf	0.0000	± 0.0102	0.0000	± 0.0044	0.0000	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0039	0.0000	± 0.0013
* W	0.0192	± 0.0079	0.0082	± 0.0034	0.0027	± 0.0011
* Ir	0.0124	± 0.0068	0.0053	± 0.0029	0.0017	± 0.0009
* Au	0.0090	± 0.0056	0.0039	± 0.0024	0.0013	± 0.0008
* Hg	0.0023	± 0.0090	0.0010	± 0.0039	0.0003	± 0.0013
* Pb	0.0000	± 0.0102	0.0000	± 0.0044	0.0000	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2452
Filter ID: P7325002
Site: Florin PM2.5
Sample Date: 8/20/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	224. ± 10.				31.11	± 2.085
XRF						
Na	4.066	± 0.5944	1.815	± 0.2774	0.5647	± 0.0872
Mg	0.6441	± 0.1379	0.2875	± 0.0629	0.0895	± 0.0197
Al	0.6000	± 0.0655	0.2679	± 0.0316	0.0833	± 0.0100
Si	1.095	± 0.0633	0.4888	± 0.0357	0.1521	± 0.0116
P	0.0622	± 0.0203	0.0277	± 0.0092	0.0086	± 0.0029
S	4.683	± 0.2373	2.090	± 0.1412	0.6504	± 0.0463
Cl	0.3130	± 0.0350	0.1397	± 0.0168	0.0435	± 0.0053
K	0.8938	± 0.0463	0.3990	± 0.0273	0.1241	± 0.0089
Ca	0.3842	± 0.0226	0.1715	± 0.0127	0.0534	± 0.0041
* Sc	0.0113	± 0.0090	0.0050	± 0.0040	0.0016	± 0.0013
Ti	0.0407	± 0.0068	0.0182	± 0.0031	0.0056	± 0.0010
* V	0.0068	± 0.0068	0.0030	± 0.0030	0.0009	± 0.0009
Cr	0.0486	± 0.0068	0.0217	± 0.0032	0.0067	± 0.0010
* Mn	0.0068	± 0.0124	0.0030	± 0.0056	0.0009	± 0.0017
Fe	0.4181	± 0.0226	0.1867	± 0.0131	0.0581	± 0.0043
* Co	0.0136	± 0.0056	0.0061	± 0.0025	0.0019	± 0.0008
* Ni	0.0045	± 0.0045	0.0020	± 0.0020	0.0006	± 0.0006
Cu	0.0429	± 0.0045	0.0192	± 0.0022	0.0060	± 0.0007
Zn	0.0893	± 0.0056	0.0399	± 0.0031	0.0124	± 0.0010
* Ga	0.0045	± 0.0034	0.0020	± 0.0015	0.0006	± 0.0005
* As	0.0124	± 0.0045	0.0055	± 0.0020	0.0017	± 0.0006
* Se	0.0000	± 0.0034	0.0000	± 0.0015	0.0000	± 0.0005
Br	0.0441	± 0.0045	0.0197	± 0.0022	0.0061	± 0.0007
Rb	0.0124	± 0.0034	0.0055	± 0.0015	0.0017	± 0.0005
* Sr	0.0011	± 0.0045	0.0005	± 0.0020	0.0002	± 0.0006
* Y	0.0000	± 0.0056	0.0000	± 0.0025	0.0000	± 0.0008
* Zr	0.0170	± 0.0068	0.0076	± 0.0030	0.0024	± 0.0009
* Nb	0.0000	± 0.0090	0.0000	± 0.0040	0.0000	± 0.0013
* Mo	0.0124	± 0.0113	0.0055	± 0.0051	0.0017	± 0.0016
* Ag	0.0486	± 0.0215	0.0217	± 0.0096	0.0067	± 0.0030
* Cd	0.0396	± 0.0305	0.0177	± 0.0136	0.0055	± 0.0042
* In	0.0000	± 0.0339	0.0000	± 0.0151	0.0000	± 0.0047
* Sn	0.0000	± 0.0373	0.0000	± 0.0166	0.0000	± 0.0052
* Sb	0.1356	± 0.0588	0.0605	± 0.0264	0.0188	± 0.0082
Cs	0.0441	± 0.0147	0.0197	± 0.0066	0.0061	± 0.0021
Ba	0.0531	± 0.0147	0.0237	± 0.0066	0.0074	± 0.0021
* La	0.0226	± 0.0136	0.0101	± 0.0061	0.0031	± 0.0019
* Ce	0.0000	± 0.0147	0.0000	± 0.0066	0.0000	± 0.0020
* Sm	0.0000	± 0.0203	0.0000	± 0.0091	0.0000	± 0.0028
* Eu	0.0000	± 0.0249	0.0000	± 0.0111	0.0000	± 0.0035
* Tb	0.0000	± 0.0260	0.0000	± 0.0116	0.0000	± 0.0036
* Hf	0.0192	± 0.0102	0.0086	± 0.0046	0.0027	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0040	0.0000	± 0.0013
* W	0.0000	± 0.0079	0.0000	± 0.0035	0.0000	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0030	0.0000	± 0.0009
* Au	0.0102	± 0.0056	0.0045	± 0.0025	0.0014	± 0.0008
* Hg	0.0056	± 0.0090	0.0025	± 0.0040	0.0008	± 0.0013
* Pb	0.0000	± 0.0102	0.0000	± 0.0045	0.0000	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2450
Filter ID: P7324959
Site: Sump50 PM2.5
Sample Date: 8/20/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	217. ± 10.				30.14	± 2.049
XRF						
Na	4.474	± 0.5831	2.062	± 0.2850	0.6213	± 0.0867
Mg	0.7729	± 0.1333	0.3562	± 0.0636	0.1074	± 0.0193
Al	0.7322	± 0.0678	0.3374	± 0.0349	0.1017	± 0.0107
Si	1.081	± 0.0622	0.4983	± 0.0367	0.1502	± 0.0114
* P	0.0576	± 0.0203	0.0266	± 0.0095	0.0080	± 0.0029
S	4.814	± 0.2441	2.218	± 0.1520	0.6686	± 0.0476
Cl	0.2667	± 0.0339	0.1229	± 0.0166	0.0370	± 0.0051
K	0.9436	± 0.0486	0.4348	± 0.0300	0.1310	± 0.0094
Ca	0.3424	± 0.0203	0.1578	± 0.0119	0.0476	± 0.0037
* Sc	0.0000	± 0.0090	0.0000	± 0.0042	0.0000	± 0.0013
Ti	0.0407	± 0.0068	0.0187	± 0.0032	0.0056	± 0.0010
* V	0.0011	± 0.0068	0.0005	± 0.0031	0.0002	± 0.0009
* Cr	0.0000	± 0.0056	0.0000	± 0.0026	0.0000	± 0.0008
* Mn	0.0113	± 0.0124	0.0052	± 0.0057	0.0016	± 0.0017
Fe	0.3661	± 0.0192	0.1687	± 0.0118	0.0508	± 0.0037
* Co	0.0124	± 0.0056	0.0057	± 0.0026	0.0017	± 0.0008
* Ni	0.0023	± 0.0045	0.0010	± 0.0021	0.0003	± 0.0006
Cu	0.0497	± 0.0045	0.0229	± 0.0023	0.0069	± 0.0007
Zn	0.0836	± 0.0056	0.0385	± 0.0032	0.0116	± 0.0010
* Ga	0.0000	± 0.0034	0.0000	± 0.0016	0.0000	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0021	0.0000	± 0.0006
* Se	0.0034	± 0.0034	0.0016	± 0.0016	0.0005	± 0.0005
Br	0.0452	± 0.0045	0.0208	± 0.0023	0.0063	± 0.0007
* Rb	0.0000	± 0.0034	0.0000	± 0.0016	0.0000	± 0.0005
* Sr	0.0124	± 0.0045	0.0057	± 0.0021	0.0017	± 0.0006
* Y	0.0056	± 0.0056	0.0026	± 0.0026	0.0008	± 0.0008
* Zr	0.0000	± 0.0068	0.0000	± 0.0031	0.0000	± 0.0009
* Nb	0.0056	± 0.0090	0.0026	± 0.0042	0.0008	± 0.0013
* Mo	0.0305	± 0.0113	0.0141	± 0.0052	0.0042	± 0.0016
* Ag	0.0463	± 0.0215	0.0214	± 0.0099	0.0064	± 0.0030
* Cd	0.0000	± 0.0305	0.0000	± 0.0141	0.0000	± 0.0042
* In	0.0000	± 0.0339	0.0000	± 0.0156	0.0000	± 0.0047
* Sn	0.1130	± 0.0384	0.0521	± 0.0179	0.0157	± 0.0054
* Sb	0.1243	± 0.0588	0.0573	± 0.0272	0.0173	± 0.0082
* Cs	0.0000	± 0.0136	0.0000	± 0.0062	0.0000	± 0.0019
* Ba	0.0000	± 0.0147	0.0000	± 0.0068	0.0000	± 0.0020
* La	0.0000	± 0.0136	0.0000	± 0.0062	0.0000	± 0.0019
* Ce	0.0000	± 0.0147	0.0000	± 0.0068	0.0000	± 0.0020
* Sm	0.0000	± 0.0192	0.0000	± 0.0089	0.0000	± 0.0027
* Eu	0.0000	± 0.0249	0.0000	± 0.0115	0.0000	± 0.0035
* Tb	0.0000	± 0.0260	0.0000	± 0.0120	0.0000	± 0.0036
* Hf	0.0203	± 0.0102	0.0094	± 0.0047	0.0028	± 0.0014
Ta	0.0655	± 0.0090	0.0302	± 0.0044	0.0091	± 0.0013
* W	0.0000	± 0.0079	0.0000	± 0.0036	0.0000	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0031	0.0000	± 0.0009
* Au	0.0079	± 0.0056	0.0036	± 0.0026	0.0011	± 0.0008
* Hg	0.0045	± 0.0090	0.0021	± 0.0042	0.0006	± 0.0013
* Pb	0.0136	± 0.0102	0.0062	± 0.0047	0.0019	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2449
Filter ID: P7324958
Site: ST56 PM2.5
Sample Date: 8/20/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	277. ± 10.				38.47	± 2.373
XRF						
Na	4.961	± 0.5842	1.791	± 0.2206	0.6890	± 0.0882
Mg	0.7594	± 0.1345	0.2741	± 0.0495	0.1055	± 0.0194
Al	0.8317	± 0.0712	0.3002	± 0.0279	0.1155	± 0.0115
Si	1.558	± 0.0848	0.5626	± 0.0367	0.2164	± 0.0160
P	0.0622	± 0.0192	0.0224	± 0.0070	0.0086	± 0.0027
S	4.612	± 0.2339	1.665	± 0.1036	0.6405	± 0.0456
Cl	0.2689	± 0.0339	0.0971	± 0.0127	0.0374	± 0.0051
K	0.9910	± 0.0508	0.3578	± 0.0224	0.1376	± 0.0099
Ca	0.7288	± 0.0373	0.2631	± 0.0165	0.1012	± 0.0072
* Sc	0.0000	± 0.0090	0.0000	± 0.0033	0.0000	± 0.0013
Ti	0.0362	± 0.0068	0.0131	± 0.0025	0.0050	± 0.0010
* V	0.0158	± 0.0068	0.0057	± 0.0025	0.0022	± 0.0009
* Cr	0.0000	± 0.0056	0.0000	± 0.0020	0.0000	± 0.0008
Mn	0.0384	± 0.0124	0.0139	± 0.0045	0.0053	± 0.0017
Fe	0.6305	± 0.0328	0.2276	± 0.0144	0.0876	± 0.0063
* Co	0.0000	± 0.0056	0.0000	± 0.0020	0.0000	± 0.0008
* Ni	0.0000	± 0.0045	0.0000	± 0.0016	0.0000	± 0.0006
Cu	0.0418	± 0.0045	0.0151	± 0.0017	0.0058	± 0.0007
Zn	0.0870	± 0.0056	0.0314	± 0.0023	0.0121	± 0.0010
* Ga	0.0023	± 0.0034	0.0008	± 0.0012	0.0003	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0016	0.0000	± 0.0006
* Se	0.0011	± 0.0023	0.0004	± 0.0008	0.0002	± 0.0003
Br	0.0475	± 0.0045	0.0171	± 0.0017	0.0066	± 0.0007
* Rb	0.0079	± 0.0034	0.0029	± 0.0012	0.0011	± 0.0005
* Sr	0.0000	± 0.0045	0.0000	± 0.0016	0.0000	± 0.0006
Y	0.0203	± 0.0045	0.0073	± 0.0017	0.0028	± 0.0006
* Zr	0.0170	± 0.0068	0.0061	± 0.0025	0.0024	± 0.0009
* Nb	0.0000	± 0.0090	0.0000	± 0.0033	0.0000	± 0.0013
Mo	0.0328	± 0.0102	0.0118	± 0.0037	0.0046	± 0.0014
* Ag	0.0000	± 0.0203	0.0000	± 0.0073	0.0000	± 0.0028
* Cd	0.0000	± 0.0305	0.0000	± 0.0110	0.0000	± 0.0042
In	0.1017	± 0.0339	0.0367	± 0.0123	0.0141	± 0.0048
* Sn	0.0565	± 0.0373	0.0204	± 0.0135	0.0078	± 0.0052
* Sb	0.0915	± 0.0599	0.0330	± 0.0217	0.0127	± 0.0083
* Cs	0.0000	± 0.0136	0.0000	± 0.0049	0.0000	± 0.0019
Ba	0.0734	± 0.0147	0.0265	± 0.0054	0.0102	± 0.0021
* La	0.0271	± 0.0136	0.0098	± 0.0049	0.0038	± 0.0019
* Ce	0.0045	± 0.0147	0.0016	± 0.0053	0.0006	± 0.0020
* Sm	0.0000	± 0.0192	0.0000	± 0.0069	0.0000	± 0.0027
* Eu	0.0102	± 0.0249	0.0037	± 0.0090	0.0014	± 0.0035
* Tb	0.0000	± 0.0294	0.0000	± 0.0106	0.0000	± 0.0041
* Hf	0.0079	± 0.0102	0.0029	± 0.0037	0.0011	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0033	0.0000	± 0.0013
* W	0.0000	± 0.0079	0.0000	± 0.0029	0.0000	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0024	0.0000	± 0.0009
* Au	0.0023	± 0.0056	0.0008	± 0.0020	0.0003	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0033	0.0000	± 0.0013
* Pb	0.0000	± 0.0102	0.0000	± 0.0037	0.0000	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2455
Filter ID: P7325005
Site: CRC PM2.5
Sample Date: 8/20/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	226. ± 10.				31.39	± 2.096
XRF						
Na	3.253	± 0.5978	1.440	± 0.2721	0.4518	± 0.0860
Mg	0.6305	± 0.1379	0.2790	± 0.0622	0.0876	± 0.0196
Al	0.5198	± 0.0644	0.2300	± 0.0303	0.0722	± 0.0096
Si	0.7966	± 0.0508	0.3525	± 0.0274	0.1106	± 0.0090
* P	0.0294	± 0.0203	0.0130	± 0.0090	0.0041	± 0.0028
S	5.132	± 0.2599	2.271	± 0.1527	0.7128	± 0.0507
Cl	0.3119	± 0.0282	0.1380	± 0.0139	0.0433	± 0.0045
K	0.9063	± 0.0475	0.4010	± 0.0275	0.1259	± 0.0091
Ca	0.2452	± 0.0158	0.1085	± 0.0085	0.0341	± 0.0028
* Sc	0.0000	± 0.0090	0.0000	± 0.0040	0.0000	± 0.0013
* Ti	0.0079	± 0.0068	0.0035	± 0.0030	0.0011	± 0.0009
* V	0.0090	± 0.0068	0.0040	± 0.0030	0.0013	± 0.0009
* Cr	0.0000	± 0.0068	0.0000	± 0.0030	0.0000	± 0.0009
* Mn	0.0350	± 0.0124	0.0155	± 0.0055	0.0049	± 0.0017
Fe	0.2633	± 0.0147	0.1165	± 0.0083	0.0366	± 0.0027
* Co	0.0000	± 0.0056	0.0000	± 0.0025	0.0000	± 0.0008
* Ni	0.0000	± 0.0045	0.0000	± 0.0020	0.0000	± 0.0006
Cu	0.0452	± 0.0045	0.0200	± 0.0022	0.0063	± 0.0007
Zn	0.0870	± 0.0056	0.0385	± 0.0030	0.0121	± 0.0010
* Ga	0.0000	± 0.0034	0.0000	± 0.0015	0.0000	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0020	0.0000	± 0.0006
* Se	0.0023	± 0.0034	0.0010	± 0.0015	0.0003	± 0.0005
Br	0.0452	± 0.0045	0.0200	± 0.0022	0.0063	± 0.0007
* Rb	0.0068	± 0.0034	0.0030	± 0.0015	0.0009	± 0.0005
* Sr	0.0000	± 0.0045	0.0000	± 0.0020	0.0000	± 0.0006
* Y	0.0147	± 0.0056	0.0065	± 0.0025	0.0020	± 0.0008
Zr	0.0339	± 0.0068	0.0150	± 0.0031	0.0047	± 0.0010
* Nb	0.0000	± 0.0090	0.0000	± 0.0040	0.0000	± 0.0013
* Mo	0.0158	± 0.0113	0.0070	± 0.0050	0.0022	± 0.0016
* Ag	0.0000	± 0.0282	0.0000	± 0.0125	0.0000	± 0.0039
* Cd	0.0000	± 0.0305	0.0000	± 0.0135	0.0000	± 0.0042
* In	0.0000	± 0.0339	0.0000	± 0.0150	0.0000	± 0.0047
* Sn	0.0339	± 0.0373	0.0150	± 0.0165	0.0047	± 0.0052
* Sb	0.0000	± 0.0576	0.0000	± 0.0255	0.0000	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0060	0.0000	± 0.0019
* Ba	0.0000	± 0.0147	0.0000	± 0.0065	0.0000	± 0.0020
* La	0.0034	± 0.0136	0.0015	± 0.0060	0.0005	± 0.0019
* Ce	0.0215	± 0.0147	0.0095	± 0.0065	0.0030	± 0.0020
* Sm	0.0000	± 0.0203	0.0000	± 0.0090	0.0000	± 0.0028
* Eu	0.0000	± 0.0249	0.0000	± 0.0110	0.0000	± 0.0035
* Tb	0.0000	± 0.0215	0.0000	± 0.0095	0.0000	± 0.0030
* Hf	0.0034	± 0.0102	0.0015	± 0.0045	0.0005	± 0.0014
* Ta	0.0068	± 0.0090	0.0030	± 0.0040	0.0009	± 0.0013
* W	0.0000	± 0.0079	0.0000	± 0.0035	0.0000	± 0.0011
* Ir	0.0034	± 0.0068	0.0015	± 0.0030	0.0005	± 0.0009
Au	0.0170	± 0.0056	0.0075	± 0.0025	0.0024	± 0.0008
* Hg	0.0068	± 0.0090	0.0030	± 0.0040	0.0009	± 0.0013
* Pb	0.0034	± 0.0102	0.0015	± 0.0045	0.0005	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2711
Filter ID: P7325845
Site: VFW PM10
Sample Date: 8/20/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	365. ± 10.				50.69	± 2.890
XRF						
Na	7.402	± 0.7153	2.028	± 0.2037	1.0280	± 0.1119
Mg	2.260	± 0.1831	0.6192	± 0.0529	0.3139	± 0.0299
Al	4.436	± 0.2407	1.215	± 0.0739	0.6162	± 0.0455
Si	12.19	± 0.6328	3.340	± 0.1960	1.6934	± 0.1220
P	0.2825	± 0.0260	0.0774	± 0.0074	0.0392	± 0.0041
S	5.653	± 0.2904	1.549	± 0.0902	0.7852	± 0.0563
Cl	1.590	± 0.0836	0.4356	± 0.0258	0.2208	± 0.0160
K	2.003	± 0.1017	0.5489	± 0.0317	0.2783	± 0.0198
Ca	3.531	± 0.1774	0.9675	± 0.0554	0.4905	± 0.0348
* Sc	0.0000	± 0.0158	0.0000	± 0.0043	0.0000	± 0.0022
Ti	0.3819	± 0.0203	0.1046	± 0.0063	0.0530	± 0.0039
V	0.0316	± 0.0079	0.0087	± 0.0022	0.0044	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0019	0.0000	± 0.0009
Mn	0.1514	± 0.0147	0.0415	± 0.0042	0.0210	± 0.0023
Fe	4.358	± 0.2181	1.194	± 0.0681	0.6053	± 0.0428
* Co	0.0000	± 0.0124	0.0000	± 0.0034	0.0000	± 0.0017
* Ni	0.0056	± 0.0045	0.0015	± 0.0012	0.0008	± 0.0006
Cu	0.0814	± 0.0056	0.0223	± 0.0017	0.0113	± 0.0010
Zn	0.1571	± 0.0090	0.0430	± 0.0027	0.0218	± 0.0017
* Ga	0.0000	± 0.0034	0.0000	± 0.0009	0.0000	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0012	0.0000	± 0.0006
Se	0.0136	± 0.0023	0.0037	± 0.0006	0.0019	± 0.0003
Br	0.0554	± 0.0045	0.0152	± 0.0013	0.0077	± 0.0007
Rb	0.0203	± 0.0034	0.0056	± 0.0009	0.0028	± 0.0005
Sr	0.0373	± 0.0045	0.0102	± 0.0013	0.0052	± 0.0007
* Y	0.0068	± 0.0056	0.0019	± 0.0015	0.0009	± 0.0008
Zr	0.0362	± 0.0068	0.0099	± 0.0019	0.0050	± 0.0010
* Nb	0.0000	± 0.0090	0.0000	± 0.0025	0.0000	± 0.0013
* Mo	0.0170	± 0.0113	0.0046	± 0.0031	0.0024	± 0.0016
* Ag	0.0000	± 0.0282	0.0000	± 0.0077	0.0000	± 0.0039
* Cd	0.0056	± 0.0305	0.0015	± 0.0084	0.0008	± 0.0042
* In	0.0463	± 0.0350	0.0127	± 0.0096	0.0064	± 0.0049
* Sn	0.0791	± 0.0373	0.0217	± 0.0102	0.0110	± 0.0052
* Sb	0.0023	± 0.0588	0.0006	± 0.0161	0.0003	± 0.0082
* Cs	0.0000	± 0.0136	0.0000	± 0.0037	0.0000	± 0.0019
* Ba	0.0000	± 0.0294	0.0000	± 0.0080	0.0000	± 0.0041
* La	0.0429	± 0.0192	0.0118	± 0.0053	0.0060	± 0.0027
Ce	0.0678	± 0.0170	0.0186	± 0.0047	0.0094	± 0.0024
* Sm	0.0000	± 0.0203	0.0000	± 0.0056	0.0000	± 0.0028
* Eu	0.0000	± 0.0350	0.0000	± 0.0096	0.0000	± 0.0049
* Tb	0.0000	± 0.0678	0.0000	± 0.0186	0.0000	± 0.0094
* Hf	0.0000	± 0.0102	0.0000	± 0.0028	0.0000	± 0.0014
Ta	0.0362	± 0.0090	0.0099	± 0.0025	0.0050	± 0.0013
* W	0.0158	± 0.0079	0.0043	± 0.0022	0.0022	± 0.0011
* Ir	0.0011	± 0.0068	0.0003	± 0.0019	0.0002	± 0.0009
* Au	0.0000	± 0.0056	0.0000	± 0.0015	0.0000	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0025	0.0000	± 0.0013
Pb	0.0350	± 0.0102	0.0096	± 0.0028	0.0049	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2710
Filter ID: P7325844
Site: Impact PM10
Sample Date: 8/20/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	350. ± 10.				48.61	± 2.799
XRF						
Na	6.878	± 0.6938	1.965	± 0.2060	0.9553	± 0.1076
Mg	1.910	± 0.1706	0.5456	± 0.0512	0.2652	± 0.0272
Al	3.597	± 0.1978	1.028	± 0.0637	0.4996	± 0.0371
Si	9.002	± 0.4667	2.572	± 0.1522	1.2502	± 0.0900
P	0.2452	± 0.0249	0.0701	± 0.0074	0.0341	± 0.0038
S	5.702	± 0.2915	1.629	± 0.0954	0.7919	± 0.0566
Cl	1.825	± 0.0949	0.5214	± 0.0309	0.2535	± 0.0183
K	1.771	± 0.0904	0.5059	± 0.0296	0.2459	± 0.0176
Ca	3.243	± 0.1627	0.9266	± 0.0535	0.4504	± 0.0319
* Sc	0.0000	± 0.0147	0.0000	± 0.0042	0.0000	± 0.0020
Ti	0.2622	± 0.0158	0.0749	± 0.0050	0.0364	± 0.0029
V	0.0294	± 0.0079	0.0084	± 0.0023	0.0041	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0019	0.0000	± 0.0009
Mn	0.1785	± 0.0158	0.0510	± 0.0047	0.0248	± 0.0025
Fe	3.161	± 0.1582	0.9030	± 0.0520	0.4390	± 0.0311
* Co	0.0000	± 0.0113	0.0000	± 0.0032	0.0000	± 0.0016
* Ni	0.0068	± 0.0045	0.0019	± 0.0013	0.0009	± 0.0006
Cu	0.0791	± 0.0056	0.0226	± 0.0017	0.0110	± 0.0010
Zn	0.1718	± 0.0090	0.0491	± 0.0029	0.0239	± 0.0017
Ga	0.0147	± 0.0034	0.0042	± 0.0010	0.0020	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0013	0.0000	± 0.0006
* Se	0.0000	± 0.0034	0.0000	± 0.0010	0.0000	± 0.0005
Br	0.0497	± 0.0045	0.0142	± 0.0014	0.0069	± 0.0007
* Rb	0.0000	± 0.0034	0.0000	± 0.0010	0.0000	± 0.0005
Sr	0.0350	± 0.0045	0.0100	± 0.0013	0.0049	± 0.0007
Y	0.0215	± 0.0045	0.0061	± 0.0013	0.0030	± 0.0006
* Zr	0.0136	± 0.0068	0.0039	± 0.0019	0.0019	± 0.0009
* Nb	0.0023	± 0.0090	0.0006	± 0.0026	0.0003	± 0.0013
* Mo	0.0260	± 0.0113	0.0074	± 0.0032	0.0036	± 0.0016
* Ag	0.0384	± 0.0294	0.0110	± 0.0084	0.0053	± 0.0041
* Cd	0.0023	± 0.0305	0.0006	± 0.0087	0.0003	± 0.0042
* In	0.0452	± 0.0350	0.0129	± 0.0100	0.0063	± 0.0049
* Sn	0.0000	± 0.0373	0.0000	± 0.0107	0.0000	± 0.0052
* Sb	0.0452	± 0.0576	0.0129	± 0.0165	0.0063	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0039	0.0000	± 0.0019
Ba	0.2938	± 0.0282	0.0839	± 0.0084	0.0408	± 0.0044
La	0.1356	± 0.0181	0.0387	± 0.0053	0.0188	± 0.0027
* Ce	0.0282	± 0.0170	0.0081	± 0.0048	0.0039	± 0.0024
* Sm	0.0000	± 0.0203	0.0000	± 0.0058	0.0000	± 0.0028
* Eu	0.0090	± 0.0350	0.0026	± 0.0100	0.0013	± 0.0049
* Tb	0.0000	± 0.0588	0.0000	± 0.0168	0.0000	± 0.0082
* Hf	0.0124	± 0.0102	0.0036	± 0.0029	0.0017	± 0.0014
Ta	0.0588	± 0.0090	0.0168	± 0.0026	0.0082	± 0.0013
* W	0.0136	± 0.0079	0.0039	± 0.0023	0.0019	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0019	0.0000	± 0.0009
* Au	0.0000	± 0.0056	0.0000	± 0.0016	0.0000	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0026	0.0000	± 0.0013
* Pb	0.0158	± 0.0079	0.0045	± 0.0023	0.0022	± 0.0011

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2451
Filter ID: P7325001
Site: Florin PM10
Sample Date: 8/20/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	317. ± 10.				44.03	± 2.603
XRF						
Na	6.670	± 0.6983	2.104	± 0.2301	0.9264	± 0.1075
Mg	1.582	± 0.1650	0.4991	± 0.0544	0.2197	± 0.0254
Al	2.954	± 0.1650	0.9318	± 0.0598	0.4103	± 0.0308
Si	7.808	± 0.4034	2.463	± 0.1491	1.0845	± 0.0780
P	0.2509	± 0.0249	0.0791	± 0.0082	0.0348	± 0.0039
S	5.636	± 0.2882	1.778	± 0.1068	0.7828	± 0.0560
Cl	1.718	± 0.0893	0.5418	± 0.0329	0.2386	± 0.0172
K	1.767	± 0.0893	0.5575	± 0.0332	0.2455	± 0.0174
Ca	2.255	± 0.1141	0.7115	± 0.0424	0.3133	± 0.0223
Sc	0.0644	± 0.0124	0.0203	± 0.0040	0.0089	± 0.0018
Ti	0.2350	± 0.0136	0.0741	± 0.0049	0.0326	± 0.0025
* V	0.0000	± 0.0079	0.0000	± 0.0025	0.0000	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0021	0.0000	± 0.0009
Mn	0.1006	± 0.0136	0.0317	± 0.0044	0.0140	± 0.0020
Fe	2.468	± 0.1232	0.7785	± 0.0460	0.3428	± 0.0242
* Co	0.0000	± 0.0102	0.0000	± 0.0032	0.0000	± 0.0014
Ni	0.0170	± 0.0045	0.0053	± 0.0014	0.0024	± 0.0006
Cu	0.0633	± 0.0045	0.0200	± 0.0016	0.0088	± 0.0008
Zn	0.1322	± 0.0079	0.0417	± 0.0028	0.0184	± 0.0014
Ga	0.0136	± 0.0034	0.0043	± 0.0011	0.0019	± 0.0005
* As	0.0011	± 0.0045	0.0004	± 0.0014	0.0002	± 0.0006
* Se	0.0000	± 0.0034	0.0000	± 0.0011	0.0000	± 0.0005
Br	0.0508	± 0.0045	0.0160	± 0.0015	0.0071	± 0.0007
Rb	0.0113	± 0.0034	0.0036	± 0.0011	0.0016	± 0.0005
Sr	0.0362	± 0.0045	0.0114	± 0.0015	0.0050	± 0.0007
* Y	0.0023	± 0.0056	0.0007	± 0.0018	0.0003	± 0.0008
* Zr	0.0000	± 0.0068	0.0000	± 0.0021	0.0000	± 0.0009
* Nb	0.0203	± 0.0090	0.0064	± 0.0029	0.0028	± 0.0013
* Mo	0.0000	± 0.0113	0.0000	± 0.0036	0.0000	± 0.0016
* Ag	0.0282	± 0.0294	0.0089	± 0.0093	0.0039	± 0.0041
* Cd	0.0294	± 0.0305	0.0093	± 0.0096	0.0041	± 0.0042
* In	0.0339	± 0.0339	0.0107	± 0.0107	0.0047	± 0.0047
* Sn	0.0000	± 0.0373	0.0000	± 0.0118	0.0000	± 0.0052
* Sb	0.0384	± 0.0588	0.0121	± 0.0185	0.0053	± 0.0082
* Cs	0.0000	± 0.0136	0.0000	± 0.0043	0.0000	± 0.0019
* Ba	0.0000	± 0.0260	0.0000	± 0.0082	0.0000	± 0.0036
* La	0.0000	± 0.0181	0.0000	± 0.0057	0.0000	± 0.0025
* Ce	0.0282	± 0.0170	0.0089	± 0.0054	0.0039	± 0.0024
* Sm	0.0000	± 0.0203	0.0000	± 0.0064	0.0000	± 0.0028
* Eu	0.0000	± 0.0249	0.0000	± 0.0078	0.0000	± 0.0035
* Tb	0.0000	± 0.0531	0.0000	± 0.0168	0.0000	± 0.0074
* Hf	0.0000	± 0.0102	0.0000	± 0.0032	0.0000	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0029	0.0000	± 0.0013
* W	0.0000	± 0.0079	0.0000	± 0.0025	0.0000	± 0.0011
* Ir	0.0136	± 0.0068	0.0043	± 0.0021	0.0019	± 0.0009
Au	0.0373	± 0.0056	0.0118	± 0.0018	0.0052	± 0.0008
Hg	0.0271	± 0.0090	0.0086	± 0.0029	0.0038	± 0.0013
Pb	0.0282	± 0.0079	0.0089	± 0.0025	0.0039	± 0.0011

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2453
Filter ID: P7325003
Site: Sump50 PM10
Sample Date: 8/20/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	321. ± 10.				44.58	± 2.626
XRF						
Na	7.171	± 0.7130	2.234	± 0.2328	0.9960	± 0.1108
Mg	1.684	± 0.1684	0.5245	± 0.0549	0.2338	± 0.0261
Al	2.701	± 0.1548	0.8413	± 0.0549	0.3751	± 0.0285
Si	6.569	± 0.3401	2.046	± 0.1237	0.9123	± 0.0657
P	0.1966	± 0.0237	0.0613	± 0.0076	0.0273	± 0.0036
S	5.537	± 0.2825	1.725	± 0.1031	0.7690	± 0.0549
Cl	1.642	± 0.0859	0.5115	± 0.0311	0.2280	± 0.0165
K	1.577	± 0.0802	0.4914	± 0.0293	0.2191	± 0.0156
Ca	1.929	± 0.0972	0.6009	± 0.0356	0.2679	± 0.0190
Sc	0.0463	± 0.0124	0.0144	± 0.0039	0.0064	± 0.0018
Ti	0.2158	± 0.0136	0.0672	± 0.0047	0.0300	± 0.0024
* V	0.0056	± 0.0079	0.0018	± 0.0025	0.0008	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0021	0.0000	± 0.0009
Mn	0.0904	± 0.0136	0.0282	± 0.0043	0.0126	± 0.0020
Fe	2.127	± 0.1062	0.6625	± 0.0390	0.2954	± 0.0209
* Co	0.0000	± 0.0102	0.0000	± 0.0032	0.0000	± 0.0014
* Ni	0.0000	± 0.0045	0.0000	± 0.0014	0.0000	± 0.0006
Cu	0.0588	± 0.0045	0.0183	± 0.0015	0.0082	± 0.0007
Zn	0.1153	± 0.0068	0.0359	± 0.0024	0.0160	± 0.0012
* Ga	0.0000	± 0.0034	0.0000	± 0.0011	0.0000	± 0.0005
* As	0.0023	± 0.0045	0.0007	± 0.0014	0.0003	± 0.0006
* Se	0.0000	± 0.0034	0.0000	± 0.0011	0.0000	± 0.0005
Br	0.0508	± 0.0045	0.0158	± 0.0015	0.0071	± 0.0007
Rb	0.0113	± 0.0034	0.0035	± 0.0011	0.0016	± 0.0005
Sr	0.0147	± 0.0045	0.0046	± 0.0014	0.0020	± 0.0006
* Y	0.0000	± 0.0056	0.0000	± 0.0018	0.0000	± 0.0008
Zr	0.0362	± 0.0079	0.0113	± 0.0025	0.0050	± 0.0011
* Nb	0.0000	± 0.0102	0.0000	± 0.0032	0.0000	± 0.0014
* Mo	0.0158	± 0.0113	0.0049	± 0.0035	0.0022	± 0.0016
* Ag	0.0000	± 0.0282	0.0000	± 0.0088	0.0000	± 0.0039
* Cd	0.0802	± 0.0305	0.0250	± 0.0095	0.0111	± 0.0043
* In	0.0000	± 0.0339	0.0000	± 0.0106	0.0000	± 0.0047
* Sn	0.1164	± 0.0396	0.0363	± 0.0124	0.0162	± 0.0056
* Sb	0.0000	± 0.0576	0.0000	± 0.0180	0.0000	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0042	0.0000	± 0.0019
* Ba	0.0554	± 0.0271	0.0172	± 0.0085	0.0077	± 0.0038
La	0.0644	± 0.0170	0.0201	± 0.0053	0.0089	± 0.0024
* Ce	0.0000	± 0.0170	0.0000	± 0.0053	0.0000	± 0.0024
* Sm	0.0000	± 0.0226	0.0000	± 0.0070	0.0000	± 0.0031
* Eu	0.0000	± 0.0249	0.0000	± 0.0077	0.0000	± 0.0035
* Tb	0.0881	± 0.0508	0.0275	± 0.0159	0.0122	± 0.0071
* Hf	0.0000	± 0.0102	0.0000	± 0.0032	0.0000	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0028	0.0000	± 0.0013
* W	0.0000	± 0.0079	0.0000	± 0.0025	0.0000	± 0.0011
* Ir	0.0102	± 0.0068	0.0032	± 0.0021	0.0014	± 0.0009
Au	0.0237	± 0.0056	0.0074	± 0.0018	0.0033	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0028	0.0000	± 0.0013
* Pb	0.0000	± 0.0102	0.0000	± 0.0032	0.0000	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2699
Filter ID: P7325833
Site: ST56 PM10
Sample Date: 8/20/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	405. ± 10.				56.25	± 3.137
XRF						
Na	7.577	± 0.7447	1.871	± 0.1896	1.0523	± 0.1160
Mg	2.102	± 0.1842	0.5190	± 0.0472	0.2919	± 0.0295
Al	4.682	± 0.2542	1.156	± 0.0690	0.6502	± 0.0480
Si	13.22	± 0.6882	3.264	± 0.1881	1.8362	± 0.1325
P	0.2814	± 0.0260	0.0695	± 0.0066	0.0391	± 0.0041
S	5.331	± 0.2746	1.316	± 0.0752	0.7405	± 0.0532
Cl	1.840	± 0.0960	0.4542	± 0.0262	0.2555	± 0.0185
K	2.158	± 0.1096	0.5329	± 0.0301	0.2998	± 0.0214
Ca	3.688	± 0.1853	0.9107	± 0.0510	0.5123	± 0.0363
Sc	0.1006	± 0.0147	0.0248	± 0.0037	0.0140	± 0.0022
Ti	0.4068	± 0.0215	0.1004	± 0.0059	0.0565	± 0.0041
V	0.0316	± 0.0090	0.0078	± 0.0022	0.0044	± 0.0013
* Cr	0.0000	± 0.0068	0.0000	± 0.0017	0.0000	± 0.0009
Mn	0.1831	± 0.0158	0.0452	± 0.0041	0.0254	± 0.0025
Fe	4.156	± 0.2079	1.026	± 0.0573	0.5772	± 0.0408
* Co	0.0000	± 0.0124	0.0000	± 0.0031	0.0000	± 0.0017
* Ni	0.0068	± 0.0045	0.0017	± 0.0011	0.0009	± 0.0006
Cu	0.0588	± 0.0045	0.0145	± 0.0012	0.0082	± 0.0007
Zn	0.1887	± 0.0102	0.0466	± 0.0028	0.0262	± 0.0019
* Ga	0.0000	± 0.0034	0.0000	± 0.0008	0.0000	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0011	0.0000	± 0.0006
* Se	0.0056	± 0.0034	0.0014	± 0.0008	0.0008	± 0.0005
Br	0.0588	± 0.0045	0.0145	± 0.0012	0.0082	± 0.0007
* Rb	0.0011	± 0.0045	0.0003	± 0.0011	0.0002	± 0.0006
Sr	0.0554	± 0.0056	0.0137	± 0.0014	0.0077	± 0.0009
Y	0.0418	± 0.0056	0.0103	± 0.0014	0.0058	± 0.0008
Zr	0.0237	± 0.0068	0.0059	± 0.0017	0.0033	± 0.0010
* Nb	0.0000	± 0.0090	0.0000	± 0.0022	0.0000	± 0.0013
Mo	0.0610	± 0.0113	0.0151	± 0.0028	0.0085	± 0.0016
* Ag	0.0339	± 0.0203	0.0084	± 0.0050	0.0047	± 0.0028
* Cd	0.0000	± 0.0305	0.0000	± 0.0075	0.0000	± 0.0042
* In	0.0000	± 0.0339	0.0000	± 0.0084	0.0000	± 0.0047
* Sn	0.0000	± 0.0373	0.0000	± 0.0092	0.0000	± 0.0052
* Sb	0.0000	± 0.0576	0.0000	± 0.0142	0.0000	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0033	0.0000	± 0.0019
* Ba	0.0000	± 0.0328	0.0000	± 0.0081	0.0000	± 0.0046
* La	0.0000	± 0.0203	0.0000	± 0.0050	0.0000	± 0.0028
Ce	0.0520	± 0.0170	0.0128	± 0.0042	0.0072	± 0.0024
* Sm	0.0000	± 0.0215	0.0000	± 0.0053	0.0000	± 0.0030
* Eu	0.0000	± 0.0249	0.0000	± 0.0061	0.0000	± 0.0035
* Tb	0.0000	± 0.0678	0.0000	± 0.0167	0.0000	± 0.0094
* Hf	0.0000	± 0.0102	0.0000	± 0.0025	0.0000	± 0.0014
Ta	0.0768	± 0.0090	0.0190	± 0.0023	0.0107	± 0.0014
* W	0.0136	± 0.0079	0.0033	± 0.0020	0.0019	± 0.0011
* Ir	0.0079	± 0.0068	0.0020	± 0.0017	0.0011	± 0.0009
* Au	0.0090	± 0.0056	0.0022	± 0.0014	0.0013	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0022	0.0000	± 0.0013
* Pb	0.0079	± 0.0102	0.0020	± 0.0025	0.0011	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2454
Filter ID: P7325004
Site: CRC PM10
Sample Date: 8/20/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	296. ± 10.				41.11	± 2.481
XRF						
Na	6.130	± 0.6950	2.071	± 0.2450	0.8514	± 0.1055
Mg	1.514	± 0.1627	0.5116	± 0.0576	0.2103	± 0.0249
Al	2.836	± 0.1605	0.9582	± 0.0631	0.3939	± 0.0297
Si	7.267	± 0.3752	2.455	± 0.1515	1.0093	± 0.0725
P	0.1638	± 0.0226	0.0554	± 0.0079	0.0228	± 0.0033
S	5.999	± 0.3062	2.027	± 0.1241	0.8332	± 0.0595
Cl	1.657	± 0.0870	0.5597	± 0.0350	0.2301	± 0.0167
K	1.669	± 0.0848	0.5639	± 0.0344	0.2318	± 0.0165
Ca	1.892	± 0.0949	0.6391	± 0.0387	0.2627	± 0.0186
Sc	0.0768	± 0.0113	0.0260	± 0.0039	0.0107	± 0.0017
Ti	0.1955	± 0.0124	0.0660	± 0.0048	0.0272	± 0.0022
* V	0.0068	± 0.0079	0.0023	± 0.0027	0.0009	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0023	0.0000	± 0.0009
Mn	0.1074	± 0.0136	0.0363	± 0.0047	0.0149	± 0.0020
Fe	2.289	± 0.1141	0.7734	± 0.0466	0.3180	± 0.0225
* Co	0.0000	± 0.0102	0.0000	± 0.0034	0.0000	± 0.0014
* Ni	0.0056	± 0.0045	0.0019	± 0.0015	0.0008	± 0.0006
Cu	0.0429	± 0.0045	0.0145	± 0.0016	0.0060	± 0.0007
Zn	0.1198	± 0.0068	0.0405	± 0.0027	0.0166	± 0.0013
* Ga	0.0045	± 0.0034	0.0015	± 0.0011	0.0006	± 0.0005
* As	0.0045	± 0.0045	0.0015	± 0.0015	0.0006	± 0.0006
* Se	0.0000	± 0.0034	0.0000	± 0.0011	0.0000	± 0.0005
Br	0.0463	± 0.0045	0.0157	± 0.0016	0.0064	± 0.0007
Rb	0.0192	± 0.0034	0.0065	± 0.0012	0.0027	± 0.0005
Sr	0.0158	± 0.0045	0.0053	± 0.0015	0.0022	± 0.0006
* Y	0.0000	± 0.0056	0.0000	± 0.0019	0.0000	± 0.0008
Zr	0.0260	± 0.0068	0.0088	± 0.0023	0.0036	± 0.0010
* Nb	0.0181	± 0.0090	0.0061	± 0.0031	0.0025	± 0.0013
* Mo	0.0000	± 0.0113	0.0000	± 0.0038	0.0000	± 0.0016
* Ag	0.0192	± 0.0215	0.0065	± 0.0073	0.0027	± 0.0030
* Cd	0.0000	± 0.0305	0.0000	± 0.0103	0.0000	± 0.0042
* In	0.0000	± 0.0339	0.0000	± 0.0115	0.0000	± 0.0047
* Sn	0.0000	± 0.0373	0.0000	± 0.0126	0.0000	± 0.0052
* Sb	0.0452	± 0.0576	0.0153	± 0.0195	0.0063	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0046	0.0000	± 0.0019
* Ba	0.0000	± 0.0237	0.0000	± 0.0080	0.0000	± 0.0033
* La	0.0000	± 0.0181	0.0000	± 0.0061	0.0000	± 0.0025
* Ce	0.0000	± 0.0170	0.0000	± 0.0057	0.0000	± 0.0024
* Sm	0.0000	± 0.0215	0.0000	± 0.0073	0.0000	± 0.0030
* Eu	0.0000	± 0.0249	0.0000	± 0.0084	0.0000	± 0.0035
* Tb	0.0192	± 0.0508	0.0065	± 0.0172	0.0027	± 0.0071
* Hf	0.0000	± 0.0102	0.0000	± 0.0034	0.0000	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0031	0.0000	± 0.0013
* W	0.0090	± 0.0079	0.0031	± 0.0027	0.0013	± 0.0011
* Ir	0.0181	± 0.0068	0.0061	± 0.0023	0.0025	± 0.0010
* Au	0.0102	± 0.0056	0.0034	± 0.0019	0.0014	± 0.0008
* Hg	0.0045	± 0.0090	0.0015	± 0.0031	0.0006	± 0.0013
* Pb	0.0045	± 0.0102	0.0015	± 0.0034	0.0006	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2693
Filter ID: P7325827
Site: VFW PM2.5
Sample Date: 8/26/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	146. ± 10.				20.28	± 1.720
XRF						
Na	4.040	± 0.5842	2.767	± 0.4428	0.5611	± 0.0859
Mg	0.8125	± 0.1390	0.5565	± 0.1025	0.1128	± 0.0201
Al	1.648	± 0.1006	1.128	± 0.1035	0.2288	± 0.0181
Si	3.349	± 0.1718	2.294	± 0.1963	0.4652	± 0.0333
P	0.0667	± 0.0203	0.0457	± 0.0143	0.0093	± 0.0029
S	4.164	± 0.2102	2.852	± 0.2427	0.5783	± 0.0411
Cl	1.036	± 0.0565	0.7097	± 0.0621	0.1439	± 0.0106
K	0.7130	± 0.0373	0.4884	± 0.0421	0.0990	± 0.0072
Ca	0.7628	± 0.0396	0.5224	± 0.0449	0.1059	± 0.0076
* Sc	0.0237	± 0.0090	0.0163	± 0.0063	0.0033	± 0.0013
Ti	0.0734	± 0.0090	0.0503	± 0.0071	0.0102	± 0.0014
* V	0.0124	± 0.0068	0.0085	± 0.0047	0.0017	± 0.0009
* Cr	0.0000	± 0.0068	0.0000	± 0.0046	0.0000	± 0.0009
* Mn	0.0362	± 0.0124	0.0248	± 0.0087	0.0050	± 0.0017
Fe	1.438	± 0.0723	0.9853	± 0.0837	0.1998	± 0.0142
* Co	0.0079	± 0.0090	0.0054	± 0.0062	0.0011	± 0.0013
* Ni	0.0102	± 0.0045	0.0070	± 0.0031	0.0014	± 0.0006
Cu	0.0689	± 0.0045	0.0472	± 0.0045	0.0096	± 0.0008
Zn	0.0983	± 0.0068	0.0673	± 0.0065	0.0137	± 0.0012
* Ga	0.0056	± 0.0034	0.0039	± 0.0023	0.0008	± 0.0005
* As	0.0034	± 0.0045	0.0023	± 0.0031	0.0005	± 0.0006
* Se	0.0011	± 0.0034	0.0008	± 0.0023	0.0002	± 0.0005
Br	0.0328	± 0.0045	0.0224	± 0.0035	0.0046	± 0.0007
* Rb	0.0000	± 0.0034	0.0000	± 0.0023	0.0000	± 0.0005
* Sr	0.0000	± 0.0045	0.0000	± 0.0031	0.0000	± 0.0006
* Y	0.0034	± 0.0056	0.0023	± 0.0039	0.0005	± 0.0008
* Zr	0.0000	± 0.0068	0.0000	± 0.0046	0.0000	± 0.0009
* Nb	0.0000	± 0.0090	0.0000	± 0.0062	0.0000	± 0.0013
* Mo	0.0000	± 0.0113	0.0000	± 0.0077	0.0000	± 0.0016
* Ag	0.0000	± 0.0203	0.0000	± 0.0139	0.0000	± 0.0028
* Cd	0.0000	± 0.0305	0.0000	± 0.0209	0.0000	± 0.0042
* In	0.0000	± 0.0339	0.0000	± 0.0232	0.0000	± 0.0047
* Sn	0.0339	± 0.0373	0.0232	± 0.0256	0.0047	± 0.0052
* Sb	0.0723	± 0.0610	0.0495	± 0.0419	0.0100	± 0.0085
* Cs	0.0000	± 0.0136	0.0000	± 0.0093	0.0000	± 0.0019
Ba	0.1537	± 0.0192	0.1053	± 0.0150	0.0213	± 0.0029
La	0.0497	± 0.0136	0.0341	± 0.0096	0.0069	± 0.0019
* Ce	0.0181	± 0.0147	0.0124	± 0.0101	0.0025	± 0.0020
* Sm	0.0000	± 0.0215	0.0000	± 0.0147	0.0000	± 0.0030
* Eu	0.0000	± 0.0249	0.0000	± 0.0170	0.0000	± 0.0035
* Tb	0.0000	± 0.0418	0.0000	± 0.0286	0.0000	± 0.0058
* Hf	0.0000	± 0.0102	0.0000	± 0.0070	0.0000	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0062	0.0000	± 0.0013
* W	0.0090	± 0.0079	0.0062	± 0.0054	0.0013	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0046	0.0000	± 0.0009
* Au	0.0124	± 0.0056	0.0085	± 0.0039	0.0017	± 0.0008
* Hg	0.0102	± 0.0090	0.0070	± 0.0062	0.0014	± 0.0013
* Pb	0.0192	± 0.0102	0.0132	± 0.0070	0.0027	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2698
Filter ID: P7325832
Site: Impact PM2.5
Sample Date: 8/26/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	152. ± 10.				21.11	± 1.744
XRF						
Na	3.891	± 0.6012	2.560	± 0.4299	0.5404	± 0.0878
Mg	1.034	± 0.1480	0.6802	± 0.1072	0.1436	± 0.0218
Al	2.051	± 0.1198	1.349	± 0.1187	0.2849	± 0.0219
Si	4.566	± 0.2339	3.004	± 0.2505	0.6342	± 0.0454
P	0.1605	± 0.0215	0.1056	± 0.0157	0.0223	± 0.0032
S	4.205	± 0.2124	2.766	± 0.2295	0.5840	± 0.0415
Cl	1.081	± 0.0588	0.7115	± 0.0607	0.1502	± 0.0111
K	0.9063	± 0.0475	0.5962	± 0.0501	0.1259	± 0.0091
Ca	1.090	± 0.0554	0.7174	± 0.0596	0.1515	± 0.0108
Sc	0.0497	± 0.0102	0.0327	± 0.0070	0.0069	± 0.0015
Ti	0.1220	± 0.0102	0.0803	± 0.0085	0.0170	± 0.0016
* V	0.0226	± 0.0079	0.0149	± 0.0053	0.0031	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0045	0.0000	± 0.0009
Mn	0.0520	± 0.0124	0.0342	± 0.0085	0.0072	± 0.0018
Fe	2.156	± 0.1085	1.418	± 0.1175	0.2994	± 0.0212
* Co	0.0000	± 0.0090	0.0000	± 0.0059	0.0000	± 0.0013
* Ni	0.0102	± 0.0045	0.0067	± 0.0030	0.0014	± 0.0006
Cu	0.0757	± 0.0056	0.0498	± 0.0050	0.0105	± 0.0009
Zn	0.1130	± 0.0068	0.0743	± 0.0066	0.0157	± 0.0012
* Ga	0.0000	± 0.0034	0.0000	± 0.0022	0.0000	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0030	0.0000	± 0.0006
* Se	0.0000	± 0.0034	0.0000	± 0.0022	0.0000	± 0.0005
Br	0.0384	± 0.0045	0.0253	± 0.0034	0.0053	± 0.0007
Rb	0.0113	± 0.0034	0.0074	± 0.0023	0.0016	± 0.0005
* Sr	0.0079	± 0.0045	0.0052	± 0.0030	0.0011	± 0.0006
* Y	0.0000	± 0.0056	0.0000	± 0.0037	0.0000	± 0.0008
* Zr	0.0136	± 0.0068	0.0089	± 0.0045	0.0019	± 0.0009
* Nb	0.0000	± 0.0090	0.0000	± 0.0059	0.0000	± 0.0013
* Mo	0.0192	± 0.0113	0.0126	± 0.0075	0.0027	± 0.0016
* Ag	0.0373	± 0.0294	0.0245	± 0.0194	0.0052	± 0.0041
* Cd	0.0000	± 0.0305	0.0000	± 0.0201	0.0000	± 0.0042
* In	0.0678	± 0.0339	0.0446	± 0.0225	0.0094	± 0.0047
* Sn	0.0000	± 0.0373	0.0000	± 0.0245	0.0000	± 0.0052
* Sb	0.0000	± 0.0576	0.0000	± 0.0379	0.0000	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0089	0.0000	± 0.0019
Ba	0.2294	± 0.0226	0.1509	± 0.0179	0.0319	± 0.0035
La	0.0938	± 0.0170	0.0617	± 0.0119	0.0130	± 0.0024
* Ce	0.0034	± 0.0170	0.0022	± 0.0112	0.0005	± 0.0024
* Sm	0.0000	± 0.0215	0.0000	± 0.0141	0.0000	± 0.0030
* Eu	0.0000	± 0.0249	0.0000	± 0.0164	0.0000	± 0.0035
* Tb	0.0000	± 0.0486	0.0000	± 0.0320	0.0000	± 0.0067
* Hf	0.0000	± 0.0102	0.0000	± 0.0067	0.0000	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0059	0.0000	± 0.0013
* W	0.0090	± 0.0079	0.0059	± 0.0052	0.0013	± 0.0011
* Ir	0.0136	± 0.0068	0.0089	± 0.0045	0.0019	± 0.0009
* Au	0.0068	± 0.0056	0.0045	± 0.0037	0.0009	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0059	0.0000	± 0.0013
Pb	0.0271	± 0.0079	0.0178	± 0.0053	0.0038	± 0.0011

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2456
Filter ID: P7325006
Site: Florin PM2.5
Sample Date: 8/26/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	130. ± 10.				18.06	± 1.657
XRF						
Na	4.035	± 0.5616	3.104	± 0.4936	0.5604	± 0.0829
Mg	0.8396	± 0.1390	0.6458	± 0.1179	0.1166	± 0.0202
Al	0.8328	± 0.0712	0.6406	± 0.0737	0.1157	± 0.0115
Si	1.330	± 0.0734	1.023	± 0.0969	0.1847	± 0.0138
P	0.0734	± 0.0192	0.0565	± 0.0154	0.0102	± 0.0027
S	4.031	± 0.2034	3.101	± 0.2852	0.5598	± 0.0398
Cl	0.8249	± 0.0475	0.6345	± 0.0610	0.1146	± 0.0087
K	0.5661	± 0.0305	0.4355	± 0.0409	0.0786	± 0.0058
Ca	0.3887	± 0.0226	0.2990	± 0.0288	0.0540	± 0.0041
* Sc	0.0000	± 0.0090	0.0000	± 0.0070	0.0000	± 0.0013
Ti	0.0452	± 0.0068	0.0348	± 0.0059	0.0063	± 0.0010
* V	0.0079	± 0.0068	0.0061	± 0.0052	0.0011	± 0.0009
* Cr	0.0000	± 0.0068	0.0000	± 0.0052	0.0000	± 0.0009
* Mn	0.0215	± 0.0124	0.0165	± 0.0096	0.0030	± 0.0017
Fe	0.7594	± 0.0384	0.5841	± 0.0538	0.1055	± 0.0075
Co	0.0181	± 0.0056	0.0139	± 0.0045	0.0025	± 0.0008
* Ni	0.0068	± 0.0045	0.0052	± 0.0035	0.0009	± 0.0006
Cu	0.0542	± 0.0045	0.0417	± 0.0047	0.0075	± 0.0007
Zn	0.0655	± 0.0045	0.0504	± 0.0052	0.0091	± 0.0008
Ga	0.0102	± 0.0034	0.0078	± 0.0027	0.0014	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0035	0.0000	± 0.0006
Se	0.0170	± 0.0023	0.0130	± 0.0020	0.0024	± 0.0003
Br	0.0497	± 0.0045	0.0382	± 0.0046	0.0069	± 0.0007
* Rb	0.0034	± 0.0034	0.0026	± 0.0026	0.0005	± 0.0005
* Sr	0.0068	± 0.0045	0.0052	± 0.0035	0.0009	± 0.0006
* Y	0.0000	± 0.0056	0.0000	± 0.0043	0.0000	± 0.0008
Zr	0.0294	± 0.0068	0.0226	± 0.0055	0.0041	± 0.0010
* Nb	0.0000	± 0.0090	0.0000	± 0.0070	0.0000	± 0.0013
* Mo	0.0102	± 0.0113	0.0078	± 0.0087	0.0014	± 0.0016
* Ag	0.0158	± 0.0203	0.0122	± 0.0157	0.0022	± 0.0028
* Cd	0.0000	± 0.0305	0.0000	± 0.0235	0.0000	± 0.0042
* In	0.0000	± 0.0339	0.0000	± 0.0261	0.0000	± 0.0047
* Sn	0.0000	± 0.0373	0.0000	± 0.0287	0.0000	± 0.0052
* Sb	0.0000	± 0.0576	0.0000	± 0.0443	0.0000	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0104	0.0000	± 0.0019
Ba	0.0644	± 0.0181	0.0495	± 0.0144	0.0089	± 0.0026
* La	0.0000	± 0.0136	0.0000	± 0.0104	0.0000	± 0.0019
* Ce	0.0000	± 0.0147	0.0000	± 0.0113	0.0000	± 0.0020
* Sm	0.0000	± 0.0203	0.0000	± 0.0156	0.0000	± 0.0028
* Eu	0.0102	± 0.0249	0.0078	± 0.0191	0.0014	± 0.0035
* Tb	0.0000	± 0.0328	0.0000	± 0.0252	0.0000	± 0.0046
* Hf	0.0305	± 0.0113	0.0235	± 0.0089	0.0042	± 0.0016
* Ta	0.0034	± 0.0090	0.0026	± 0.0070	0.0005	± 0.0013
* W	0.0011	± 0.0079	0.0009	± 0.0061	0.0002	± 0.0011
* Ir	0.0113	± 0.0068	0.0087	± 0.0053	0.0016	± 0.0009
* Au	0.0090	± 0.0056	0.0070	± 0.0044	0.0013	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0070	0.0000	± 0.0013
* Pb	0.0000	± 0.0068	0.0000	± 0.0052	0.0000	± 0.0009

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2712
Filter ID: P7325846
Site: Sump50 PM2.5
Sample Date: 8/26/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	103. ± 10.				14.31	± 1.562
XRF						
Na	3.578	± 0.5865	3.473	± 0.6618	0.4969	± 0.0852
Mg	0.5311	± 0.1390	0.5156	± 0.1439	0.0738	± 0.0197
Al	0.9074	± 0.0734	0.8810	± 0.1114	0.1260	± 0.0120
Si	1.477	± 0.0802	1.434	± 0.1595	0.2051	± 0.0151
P	0.0689	± 0.0203	0.0669	± 0.0208	0.0096	± 0.0029
S	3.697	± 0.1864	3.590	± 0.3927	0.5135	± 0.0365
Cl	1.274	± 0.0678	1.236	± 0.1369	0.1769	± 0.0129
K	0.6272	± 0.0339	0.6089	± 0.0677	0.0871	± 0.0064
Ca	0.3955	± 0.0226	0.3840	± 0.0433	0.0549	± 0.0042
* Sc	0.0000	± 0.0090	0.0000	± 0.0088	0.0000	± 0.0013
Ti	0.0667	± 0.0079	0.0647	± 0.0099	0.0093	± 0.0012
* V	0.0102	± 0.0068	0.0099	± 0.0067	0.0014	± 0.0009
* Cr	0.0000	± 0.0068	0.0000	± 0.0066	0.0000	± 0.0009
* Mn	0.0316	± 0.0124	0.0307	± 0.0124	0.0044	± 0.0017
Fe	0.6543	± 0.0339	0.6352	± 0.0699	0.0909	± 0.0065
* Co	0.0000	± 0.0056	0.0000	± 0.0055	0.0000	± 0.0008
* Ni	0.0034	± 0.0045	0.0033	± 0.0044	0.0005	± 0.0006
Cu	0.0497	± 0.0045	0.0483	± 0.0064	0.0069	± 0.0007
Zn	0.0893	± 0.0056	0.0867	± 0.0100	0.0124	± 0.0010
* Ga	0.0000	± 0.0034	0.0000	± 0.0033	0.0000	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0044	0.0000	± 0.0006
* Se	0.0000	± 0.0034	0.0000	± 0.0033	0.0000	± 0.0005
Br	0.0373	± 0.0045	0.0362	± 0.0056	0.0052	± 0.0007
* Rb	0.0090	± 0.0034	0.0088	± 0.0034	0.0013	± 0.0005
* Sr	0.0000	± 0.0045	0.0000	± 0.0044	0.0000	± 0.0006
* Y	0.0000	± 0.0056	0.0000	± 0.0055	0.0000	± 0.0008
* Zr	0.0113	± 0.0068	0.0110	± 0.0067	0.0016	± 0.0009
* Nb	0.0000	± 0.0102	0.0000	± 0.0099	0.0000	± 0.0014
* Mo	0.0203	± 0.0113	0.0197	± 0.0111	0.0028	± 0.0016
* Ag	0.0000	± 0.0282	0.0000	± 0.0274	0.0000	± 0.0039
* Cd	0.0610	± 0.0305	0.0592	± 0.0302	0.0085	± 0.0043
* In	0.0452	± 0.0339	0.0439	± 0.0332	0.0063	± 0.0047
* Sn	0.1130	± 0.0396	0.1097	± 0.0398	0.0157	± 0.0055
* Sb	0.0000	± 0.0576	0.0000	± 0.0560	0.0000	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0132	0.0000	± 0.0019
* Ba	0.0000	± 0.0170	0.0000	± 0.0165	0.0000	± 0.0024
La	0.0508	± 0.0136	0.0494	± 0.0140	0.0071	± 0.0019
Ce	0.0565	± 0.0147	0.0549	± 0.0152	0.0078	± 0.0021
* Sm	0.0000	± 0.0215	0.0000	± 0.0208	0.0000	± 0.0030
* Eu	0.0000	± 0.0249	0.0000	± 0.0241	0.0000	± 0.0035
* Tb	0.0237	± 0.0294	0.0230	± 0.0286	0.0033	± 0.0041
* Hf	0.0147	± 0.0102	0.0143	± 0.0100	0.0020	± 0.0014
* Ta	0.0237	± 0.0090	0.0230	± 0.0091	0.0033	± 0.0013
* W	0.0000	± 0.0079	0.0000	± 0.0077	0.0000	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0066	0.0000	± 0.0009
* Au	0.0124	± 0.0056	0.0121	± 0.0056	0.0017	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0088	0.0000	± 0.0013
* Pb	0.0136	± 0.0079	0.0132	± 0.0078	0.0019	± 0.0011

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2566
Filter ID: P7325569
Site: ST56 PM2.5
Sample Date: 8/26/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	124.	± 10.			17.22	± 1.634
XRF						
Na	3.844	± 0.5582	3.100	± 0.5149	0.5339	± 0.0820
Mg	0.7232	± 0.1367	0.5832	± 0.1199	0.1004	± 0.0196
Al	1.210	± 0.0848	0.9760	± 0.1042	0.1681	± 0.0145
Si	2.450	± 0.1277	1.976	± 0.1897	0.3403	± 0.0246
* P	0.0452	± 0.0192	0.0365	± 0.0158	0.0063	± 0.0027
S	4.075	± 0.2057	3.286	± 0.3126	0.5659	± 0.0402
Cl	1.124	± 0.0610	0.9067	± 0.0881	0.1562	± 0.0115
K	0.6238	± 0.0350	0.5030	± 0.0494	0.0866	± 0.0065
Ca	0.6859	± 0.0350	0.5532	± 0.0528	0.0953	± 0.0068
* Sc	0.0000	± 0.0102	0.0000	± 0.0082	0.0000	± 0.0014
Ti	0.1017	± 0.0079	0.0820	± 0.0092	0.0141	± 0.0013
* V	0.0000	± 0.0079	0.0000	± 0.0064	0.0000	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0055	0.0000	± 0.0009
Mn	0.0497	± 0.0124	0.0401	± 0.0105	0.0069	± 0.0018
Fe	1.155	± 0.0576	0.9313	± 0.0883	0.1604	± 0.0113
* Co	0.0000	± 0.0079	0.0000	± 0.0064	0.0000	± 0.0011
* Ni	0.0011	± 0.0045	0.0009	± 0.0036	0.0002	± 0.0006
Cu	0.0701	± 0.0045	0.0565	± 0.0058	0.0097	± 0.0008
Zn	0.1141	± 0.0068	0.0920	± 0.0092	0.0159	± 0.0012
* Ga	0.0000	± 0.0034	0.0000	± 0.0027	0.0000	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0036	0.0000	± 0.0006
* Se	0.0023	± 0.0034	0.0018	± 0.0027	0.0003	± 0.0005
Br	0.0429	± 0.0045	0.0346	± 0.0046	0.0060	± 0.0007
Rb	0.0124	± 0.0034	0.0100	± 0.0029	0.0017	± 0.0005
Sr	0.0192	± 0.0045	0.0155	± 0.0039	0.0027	± 0.0006
* Y	0.0136	± 0.0056	0.0109	± 0.0046	0.0019	± 0.0008
* Zr	0.0045	± 0.0068	0.0036	± 0.0055	0.0006	± 0.0009
* Nb	0.0000	± 0.0090	0.0000	± 0.0073	0.0000	± 0.0013
Mo	0.0542	± 0.0113	0.0437	± 0.0098	0.0075	± 0.0016
* Ag	0.0000	± 0.0203	0.0000	± 0.0164	0.0000	± 0.0028
* Cd	0.0090	± 0.0305	0.0073	± 0.0246	0.0013	± 0.0042
* In	0.0339	± 0.0339	0.0273	± 0.0274	0.0047	± 0.0047
* Sn	0.0791	± 0.0373	0.0638	± 0.0305	0.0110	± 0.0052
* Sb	0.0000	± 0.0576	0.0000	± 0.0465	0.0000	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0109	0.0000	± 0.0019
* Ba	0.0000	± 0.0203	0.0000	± 0.0164	0.0000	± 0.0028
* La	0.0000	± 0.0158	0.0000	± 0.0128	0.0000	± 0.0022
* Ce	0.0350	± 0.0147	0.0282	± 0.0121	0.0049	± 0.0021
* Sm	0.0000	± 0.0203	0.0000	± 0.0164	0.0000	± 0.0028
* Eu	0.0000	± 0.0249	0.0000	± 0.0200	0.0000	± 0.0035
* Tb	0.0000	± 0.0396	0.0000	± 0.0319	0.0000	± 0.0055
* Hf	0.0000	± 0.0102	0.0000	± 0.0082	0.0000	± 0.0014
Ta	0.0531	± 0.0090	0.0428	± 0.0081	0.0074	± 0.0013
W	0.0237	± 0.0079	0.0191	± 0.0066	0.0033	± 0.0011
* Ir	0.0113	± 0.0068	0.0091	± 0.0055	0.0016	± 0.0009
* Au	0.0000	± 0.0056	0.0000	± 0.0046	0.0000	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0073	0.0000	± 0.0013
* Pb	0.0102	± 0.0079	0.0082	± 0.0064	0.0014	± 0.0011

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2457
Filter ID: P7325007
Site: CRC PM2.5
Sample Date: 8/26/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	136. ± 10.				18.89	± 1.680
XRF						
Na	3.904	± 0.5786	2.871	± 0.4749	0.5422	± 0.0848
Mg	0.6803	± 0.1367	0.5002	± 0.1071	0.0945	± 0.0196
Al	0.6644	± 0.0667	0.4886	± 0.0608	0.0923	± 0.0103
Si	1.302	± 0.0723	0.9572	± 0.0882	0.1808	± 0.0135
* P	0.0170	± 0.0203	0.0125	± 0.0150	0.0024	± 0.0028
S	4.047	± 0.2045	2.975	± 0.2655	0.5620	± 0.0400
Cl	0.7266	± 0.0429	0.5343	± 0.0504	0.1009	± 0.0078
K	0.5108	± 0.0282	0.3756	± 0.0346	0.0709	± 0.0053
Ca	0.3560	± 0.0203	0.2617	± 0.0244	0.0494	± 0.0038
* Sc	0.0000	± 0.0090	0.0000	± 0.0066	0.0000	± 0.0013
Ti	0.0407	± 0.0068	0.0299	± 0.0054	0.0056	± 0.0010
* V	0.0068	± 0.0068	0.0050	± 0.0050	0.0009	± 0.0009
* Cr	0.0000	± 0.0068	0.0000	± 0.0050	0.0000	± 0.0009
* Mn	0.0136	± 0.0124	0.0100	± 0.0092	0.0019	± 0.0017
Fe	0.5379	± 0.0282	0.3955	± 0.0357	0.0747	± 0.0054
* Co	0.0000	± 0.0056	0.0000	± 0.0042	0.0000	± 0.0008
* Ni	0.0000	± 0.0045	0.0000	± 0.0033	0.0000	± 0.0006
Cu	0.0554	± 0.0045	0.0407	± 0.0045	0.0077	± 0.0007
Zn	0.1006	± 0.0068	0.0739	± 0.0074	0.0140	± 0.0012
* Ga	0.0000	± 0.0034	0.0000	± 0.0025	0.0000	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0033	0.0000	± 0.0006
* Se	0.0034	± 0.0034	0.0025	± 0.0025	0.0005	± 0.0005
Br	0.0305	± 0.0045	0.0224	± 0.0037	0.0042	± 0.0007
* Rb	0.0034	± 0.0034	0.0025	± 0.0025	0.0005	± 0.0005
* Sr	0.0068	± 0.0045	0.0050	± 0.0033	0.0009	± 0.0006
* Y	0.0000	± 0.0056	0.0000	± 0.0042	0.0000	± 0.0008
Zr	0.0260	± 0.0068	0.0191	± 0.0052	0.0036	± 0.0010
* Nb	0.0000	± 0.0090	0.0000	± 0.0066	0.0000	± 0.0013
* Mo	0.0056	± 0.0113	0.0042	± 0.0083	0.0008	± 0.0016
* Ag	0.0396	± 0.0203	0.0291	± 0.0151	0.0055	± 0.0028
* Cd	0.0000	± 0.0305	0.0000	± 0.0224	0.0000	± 0.0042
* In	0.0452	± 0.0339	0.0332	± 0.0250	0.0063	± 0.0047
* Sn	0.1017	± 0.0373	0.0748	± 0.0280	0.0141	± 0.0052
* Sb	0.1469	± 0.0588	0.1080	± 0.0439	0.0204	± 0.0082
* Cs	0.0000	± 0.0136	0.0000	± 0.0100	0.0000	± 0.0019
* Ba	0.0000	± 0.0170	0.0000	± 0.0125	0.0000	± 0.0024
* La	0.0000	± 0.0136	0.0000	± 0.0100	0.0000	± 0.0019
* Ce	0.0328	± 0.0147	0.0241	± 0.0109	0.0046	± 0.0021
* Sm	0.0000	± 0.0215	0.0000	± 0.0158	0.0000	± 0.0030
* Eu	0.0000	± 0.0249	0.0000	± 0.0183	0.0000	± 0.0035
* Tb	0.0701	± 0.0260	0.0515	± 0.0195	0.0097	± 0.0036
* Hf	0.0102	± 0.0102	0.0075	± 0.0075	0.0014	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0066	0.0000	± 0.0013
* W	0.0192	± 0.0079	0.0141	± 0.0059	0.0027	± 0.0011
* Ir	0.0079	± 0.0068	0.0058	± 0.0050	0.0011	± 0.0009
* Au	0.0011	± 0.0056	0.0008	± 0.0042	0.0002	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0066	0.0000	± 0.0013
* Pb	0.0158	± 0.0079	0.0116	± 0.0059	0.0022	± 0.0011

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2567
Filter ID: P7325570
Site: VFW PM10
Sample Date: 8/26/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	254. ± 10.				35.28	± 2.245
XRF						
Na	6.286	± 0.6803	2.475	± 0.2850	0.8731	± 0.1041
Mg	2.079	± 0.1785	0.8186	± 0.0773	0.2888	± 0.0287
Al	4.441	± 0.2384	1.748	± 0.1164	0.6168	± 0.0453
Si	11.35	± 0.5842	4.467	± 0.2895	1.5757	± 0.1131
P	0.1469	± 0.0226	0.0578	± 0.0092	0.0204	± 0.0033
S	4.779	± 0.2441	1.881	± 0.1213	0.6637	± 0.0474
Cl	3.988	± 0.2023	1.570	± 0.1008	0.5539	± 0.0394
K	1.428	± 0.0734	0.5623	± 0.0364	0.1984	± 0.0142
Ca	2.240	± 0.1130	0.8818	± 0.0564	0.3111	± 0.0221
* Sc	0.0000	± 0.0136	0.0000	± 0.0053	0.0000	± 0.0019
Ti	0.3989	± 0.0215	0.1570	± 0.0105	0.0554	± 0.0041
* V	0.0023	± 0.0090	0.0009	± 0.0036	0.0003	± 0.0013
* Cr	0.0000	± 0.0068	0.0000	± 0.0027	0.0000	± 0.0009
Mn	0.1028	± 0.0136	0.0405	± 0.0056	0.0143	± 0.0020
Fe	4.569	± 0.2283	1.799	± 0.1144	0.6345	± 0.0449
* Co	0.0000	± 0.0124	0.0000	± 0.0049	0.0000	± 0.0017
* Ni	0.0102	± 0.0045	0.0040	± 0.0018	0.0014	± 0.0006
Cu	0.0960	± 0.0056	0.0378	± 0.0027	0.0133	± 0.0010
Zn	0.1853	± 0.0102	0.0730	± 0.0049	0.0257	± 0.0019
* Ga	0.0000	± 0.0034	0.0000	± 0.0013	0.0000	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0018	0.0000	± 0.0006
* Se	0.0011	± 0.0034	0.0004	± 0.0013	0.0002	± 0.0005
Br	0.0497	± 0.0045	0.0196	± 0.0019	0.0069	± 0.0007
* Rb	0.0056	± 0.0034	0.0022	± 0.0013	0.0008	± 0.0005
Sr	0.0373	± 0.0045	0.0147	± 0.0019	0.0052	± 0.0007
* Y	0.0079	± 0.0056	0.0031	± 0.0022	0.0011	± 0.0008
* Zr	0.0181	± 0.0068	0.0071	± 0.0027	0.0025	± 0.0010
* Nb	0.0000	± 0.0090	0.0000	± 0.0036	0.0000	± 0.0013
Mo	0.0588	± 0.0113	0.0231	± 0.0045	0.0082	± 0.0016
* Ag	0.0000	± 0.0282	0.0000	± 0.0111	0.0000	± 0.0039
* Cd	0.0452	± 0.0305	0.0178	± 0.0120	0.0063	± 0.0042
* In	0.0565	± 0.0350	0.0222	± 0.0138	0.0078	± 0.0049
* Sn	0.0689	± 0.0384	0.0271	± 0.0152	0.0096	± 0.0054
* Sb	0.1130	± 0.0588	0.0445	± 0.0232	0.0157	± 0.0082
* Cs	0.0000	± 0.0136	0.0000	± 0.0053	0.0000	± 0.0019
* Ba	0.0000	± 0.0305	0.0000	± 0.0120	0.0000	± 0.0042
* La	0.0000	± 0.0203	0.0000	± 0.0080	0.0000	± 0.0028
* Ce	0.0000	± 0.0192	0.0000	± 0.0076	0.0000	± 0.0027
* Sm	0.0000	± 0.0203	0.0000	± 0.0080	0.0000	± 0.0028
* Eu	0.0000	± 0.0350	0.0000	± 0.0138	0.0000	± 0.0049
* Tb	0.0396	± 0.0712	0.0156	± 0.0280	0.0055	± 0.0099
* Hf	0.0000	± 0.0102	0.0000	± 0.0040	0.0000	± 0.0014
Ta	0.0418	± 0.0124	0.0165	± 0.0049	0.0058	± 0.0018
* W	0.0192	± 0.0079	0.0076	± 0.0031	0.0027	± 0.0011
* Ir	0.0011	± 0.0068	0.0004	± 0.0027	0.0002	± 0.0009
* Au	0.0000	± 0.0056	0.0000	± 0.0022	0.0000	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0036	0.0000	± 0.0013
* Pb	0.0203	± 0.0102	0.0080	± 0.0040	0.0028	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2462
Filter ID: P7325013
Site: Impact PM10
Sample Date: 8/26/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	228. ± 10.				31.67	± 2.106
XRF						
Na	7.848	± 0.7074	3.442	± 0.3450	1.0900	± 0.1124
Mg	2.283	± 0.1763	1.001	± 0.0889	0.3170	± 0.0292
Al	4.392	± 0.2339	1.926	± 0.1329	0.6100	± 0.0446
Si	10.67	± 0.5480	4.679	± 0.3160	1.4816	± 0.1062
P	0.1740	± 0.0226	0.0763	± 0.0105	0.0242	± 0.0034
S	4.773	± 0.2441	2.093	± 0.1410	0.6629	± 0.0474
Cl	3.876	± 0.1966	1.700	± 0.1140	0.5383	± 0.0383
K	1.548	± 0.0791	0.6790	± 0.0457	0.2150	± 0.0154
Ca	2.175	± 0.1096	0.9541	± 0.0637	0.3021	± 0.0214
* Sc	0.0000	± 0.0136	0.0000	± 0.0059	0.0000	± 0.0019
Ti	0.3661	± 0.0192	0.1606	± 0.0110	0.0508	± 0.0037
* V	0.0113	± 0.0090	0.0050	± 0.0040	0.0016	± 0.0013
* Cr	0.0000	± 0.0068	0.0000	± 0.0030	0.0000	± 0.0009
Mn	0.1051	± 0.0136	0.0461	± 0.0063	0.0146	± 0.0020
Fe	4.126	± 0.2068	1.809	± 0.1205	0.5730	± 0.0406
* Co	0.0000	± 0.0124	0.0000	± 0.0055	0.0000	± 0.0017
* Ni	0.0113	± 0.0045	0.0050	± 0.0020	0.0016	± 0.0006
Cu	0.1006	± 0.0068	0.0441	± 0.0035	0.0140	± 0.0012
Zn	0.1684	± 0.0090	0.0738	± 0.0051	0.0234	± 0.0017
* Ga	0.0090	± 0.0034	0.0040	± 0.0015	0.0013	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0020	0.0000	± 0.0006
Se	0.0113	± 0.0034	0.0050	± 0.0015	0.0016	± 0.0005
Br	0.0373	± 0.0045	0.0164	± 0.0021	0.0052	± 0.0007
* Rb	0.0056	± 0.0034	0.0025	± 0.0015	0.0008	± 0.0005
Sr	0.0249	± 0.0045	0.0109	± 0.0020	0.0035	± 0.0007
* Y	0.0034	± 0.0056	0.0015	± 0.0025	0.0005	± 0.0008
Zr	0.0576	± 0.0068	0.0253	± 0.0032	0.0080	± 0.0010
* Nb	0.0000	± 0.0090	0.0000	± 0.0040	0.0000	± 0.0013
* Mo	0.0237	± 0.0113	0.0104	± 0.0050	0.0033	± 0.0016
* Ag	0.0000	± 0.0282	0.0000	± 0.0124	0.0000	± 0.0039
* Cd	0.0000	± 0.0305	0.0000	± 0.0134	0.0000	± 0.0042
* In	0.0000	± 0.0339	0.0000	± 0.0149	0.0000	± 0.0047
* Sn	0.0000	± 0.0373	0.0000	± 0.0164	0.0000	± 0.0052
* Sb	0.0678	± 0.0576	0.0297	± 0.0253	0.0094	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0059	0.0000	± 0.0019
* Ba	0.0000	± 0.0294	0.0000	± 0.0129	0.0000	± 0.0041
* La	0.0000	± 0.0203	0.0000	± 0.0089	0.0000	± 0.0028
* Ce	0.0000	± 0.0192	0.0000	± 0.0084	0.0000	± 0.0027
* Sm	0.0000	± 0.0203	0.0000	± 0.0089	0.0000	± 0.0028
* Eu	0.0000	± 0.0350	0.0000	± 0.0154	0.0000	± 0.0049
* Tb	0.0000	± 0.0678	0.0000	± 0.0297	0.0000	± 0.0094
* Hf	0.0000	± 0.0102	0.0000	± 0.0045	0.0000	± 0.0014
* Ta	0.0000	± 0.0113	0.0000	± 0.0050	0.0000	± 0.0016
* W	0.0113	± 0.0079	0.0050	± 0.0035	0.0016	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0030	0.0000	± 0.0009
* Au	0.0011	± 0.0056	0.0005	± 0.0025	0.0002	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0040	0.0000	± 0.0013
* Pb	0.0000	± 0.0102	0.0000	± 0.0045	0.0000	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2695
Filter ID: P7325829
Site: Florin PM10
Sample Date: 8/26/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	229. ± 10.				31.81	± 2.111
XRF						
Na	6.701	± 0.7040	2.926	± 0.3329	0.9307	± 0.1083
Mg	1.978	± 0.1797	0.8635	± 0.0870	0.2747	± 0.0285
Al	4.793	± 0.2554	2.093	± 0.1442	0.6658	± 0.0486
Si	11.85	± 0.6102	5.176	± 0.3494	1.6464	± 0.1181
P	0.1638	± 0.0237	0.0716	± 0.0108	0.0228	± 0.0035
S	4.604	± 0.2350	2.010	± 0.1351	0.6394	± 0.0457
Cl	3.766	± 0.1910	1.645	± 0.1101	0.5231	± 0.0373
K	1.554	± 0.0802	0.6785	± 0.0459	0.2158	± 0.0155
Ca	2.376	± 0.1198	1.038	± 0.0692	0.3301	± 0.0234
* Sc	0.0000	± 0.0136	0.0000	± 0.0059	0.0000	± 0.0019
Ti	0.4407	± 0.0226	0.1924	± 0.0130	0.0612	± 0.0044
* V	0.0000	± 0.0090	0.0000	± 0.0039	0.0000	± 0.0013
* Cr	0.0000	± 0.0068	0.0000	± 0.0030	0.0000	± 0.0009
Mn	0.1288	± 0.0136	0.0563	± 0.0064	0.0179	± 0.0021
Fe	4.430	± 0.2215	1.934	± 0.1284	0.6152	± 0.0435
* Co	0.0056	± 0.0124	0.0025	± 0.0054	0.0008	± 0.0017
* Ni	0.0102	± 0.0045	0.0044	± 0.0020	0.0014	± 0.0006
Cu	0.0893	± 0.0056	0.0390	± 0.0030	0.0124	± 0.0010
Zn	0.1424	± 0.0079	0.0622	± 0.0044	0.0198	± 0.0015
Ga	0.0147	± 0.0034	0.0064	± 0.0015	0.0020	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0020	0.0000	± 0.0006
* Se	0.0045	± 0.0034	0.0020	± 0.0015	0.0006	± 0.0005
Br	0.0441	± 0.0045	0.0192	± 0.0021	0.0061	± 0.0007
Rb	0.0237	± 0.0034	0.0104	± 0.0015	0.0033	± 0.0005
Sr	0.0249	± 0.0045	0.0109	± 0.0020	0.0035	± 0.0007
* Y	0.0034	± 0.0056	0.0015	± 0.0025	0.0005	± 0.0008
* Zr	0.0158	± 0.0068	0.0069	± 0.0030	0.0022	± 0.0009
* Nb	0.0000	± 0.0102	0.0000	± 0.0044	0.0000	± 0.0014
* Mo	0.0000	± 0.0113	0.0000	± 0.0049	0.0000	± 0.0016
* Ag	0.0000	± 0.0282	0.0000	± 0.0123	0.0000	± 0.0039
* Cd	0.0000	± 0.0305	0.0000	± 0.0133	0.0000	± 0.0042
* In	0.0113	± 0.0339	0.0049	± 0.0148	0.0016	± 0.0047
* Sn	0.0000	± 0.0373	0.0000	± 0.0163	0.0000	± 0.0052
* Sb	0.0000	± 0.0576	0.0000	± 0.0252	0.0000	± 0.0080
* Cs	0.0000	± 0.0170	0.0000	± 0.0074	0.0000	± 0.0024
* Ba	0.0000	± 0.0328	0.0000	± 0.0143	0.0000	± 0.0046
* La	0.0000	± 0.0203	0.0000	± 0.0089	0.0000	± 0.0028
* Ce	0.0000	± 0.0192	0.0000	± 0.0084	0.0000	± 0.0027
* Sm	0.0000	± 0.0226	0.0000	± 0.0099	0.0000	± 0.0031
* Eu	0.0000	± 0.0350	0.0000	± 0.0153	0.0000	± 0.0049
* Tb	0.0000	± 0.0701	0.0000	± 0.0306	0.0000	± 0.0097
* Hf	0.0158	± 0.0102	0.0069	± 0.0045	0.0022	± 0.0014
* Ta	0.0000	± 0.0113	0.0000	± 0.0049	0.0000	± 0.0016
* W	0.0000	± 0.0079	0.0000	± 0.0035	0.0000	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0030	0.0000	± 0.0009
* Au	0.0000	± 0.0079	0.0000	± 0.0035	0.0000	± 0.0011
* Hg	0.0136	± 0.0090	0.0059	± 0.0040	0.0019	± 0.0013
* Pb	0.0260	± 0.0102	0.0113	± 0.0045	0.0036	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2696
Filter ID: P7325830
Site: Sump50 PM10
Sample Date: 8/26/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	213. ± 10.				29.58	± 2.029
XRF						
Na	6.276	± 0.6520	2.946	± 0.3359	0.8717	± 0.1005
Mg	1.887	± 0.1672	0.8860	± 0.0889	0.2621	± 0.0267
Al	3.189	± 0.1740	1.497	± 0.1078	0.4429	± 0.0328
Si	7.458	± 0.3831	3.501	± 0.2437	1.0358	± 0.0742
P	0.1955	± 0.0226	0.0918	± 0.0115	0.0272	± 0.0034
S	4.570	± 0.2328	2.145	± 0.1486	0.6347	± 0.0453
Cl	3.880	± 0.1966	1.822	± 0.1258	0.5389	± 0.0384
K	1.231	± 0.0633	0.5777	± 0.0402	0.1709	± 0.0123
Ca	1.513	± 0.0768	0.7104	± 0.0491	0.2101	± 0.0150
Sc	0.0610	± 0.0113	0.0286	± 0.0055	0.0085	± 0.0016
Ti	0.2283	± 0.0136	0.1072	± 0.0081	0.0317	± 0.0025
* V	0.0170	± 0.0079	0.0080	± 0.0037	0.0024	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0032	0.0000	± 0.0009
Mn	0.0475	± 0.0124	0.0223	± 0.0059	0.0066	± 0.0018
Fe	2.834	± 0.1412	1.331	± 0.0911	0.3936	± 0.0278
* Co	0.0000	± 0.0102	0.0000	± 0.0048	0.0000	± 0.0014
* Ni	0.0102	± 0.0045	0.0048	± 0.0021	0.0014	± 0.0006
Cu	0.0734	± 0.0056	0.0345	± 0.0031	0.0102	± 0.0009
Zn	0.1175	± 0.0068	0.0552	± 0.0041	0.0163	± 0.0012
* Ga	0.0000	± 0.0034	0.0000	± 0.0016	0.0000	± 0.0005
* As	0.0011	± 0.0045	0.0005	± 0.0021	0.0002	± 0.0006
* Se	0.0079	± 0.0034	0.0037	± 0.0016	0.0011	± 0.0005
Br	0.0384	± 0.0045	0.0180	± 0.0023	0.0053	± 0.0007
* Rb	0.0079	± 0.0034	0.0037	± 0.0016	0.0011	± 0.0005
* Sr	0.0113	± 0.0045	0.0053	± 0.0021	0.0016	± 0.0006
* Y	0.0000	± 0.0056	0.0000	± 0.0027	0.0000	± 0.0008
Zr	0.0215	± 0.0068	0.0101	± 0.0032	0.0030	± 0.0010
* Nb	0.0000	± 0.0090	0.0000	± 0.0042	0.0000	± 0.0013
* Mo	0.0000	± 0.0113	0.0000	± 0.0053	0.0000	± 0.0016
* Ag	0.0023	± 0.0203	0.0011	± 0.0095	0.0003	± 0.0028
* Cd	0.0000	± 0.0305	0.0000	± 0.0143	0.0000	± 0.0042
* In	0.0000	± 0.0339	0.0000	± 0.0159	0.0000	± 0.0047
* Sn	0.0000	± 0.0373	0.0000	± 0.0175	0.0000	± 0.0052
* Sb	0.0056	± 0.0588	0.0027	± 0.0276	0.0008	± 0.0082
* Cs	0.0000	± 0.0136	0.0000	± 0.0064	0.0000	± 0.0019
Ba	0.2362	± 0.0271	0.1109	± 0.0138	0.0328	± 0.0041
La	0.0927	± 0.0170	0.0435	± 0.0082	0.0129	± 0.0024
* Ce	0.0249	± 0.0170	0.0117	± 0.0080	0.0035	± 0.0024
* Sm	0.0000	± 0.0203	0.0000	± 0.0095	0.0000	± 0.0028
* Eu	0.0068	± 0.0249	0.0032	± 0.0117	0.0009	± 0.0035
* Tb	0.0000	± 0.0542	0.0000	± 0.0255	0.0000	± 0.0075
* Hf	0.0000	± 0.0102	0.0000	± 0.0048	0.0000	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0042	0.0000	± 0.0013
* W	0.0124	± 0.0079	0.0058	± 0.0037	0.0017	± 0.0011
* Ir	0.0124	± 0.0068	0.0058	± 0.0032	0.0017	± 0.0009
* Au	0.0102	± 0.0056	0.0048	± 0.0027	0.0014	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0042	0.0000	± 0.0013
* Pb	0.0136	± 0.0102	0.0064	± 0.0048	0.0019	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2694
Filter ID: P7325828
Site: ST56 PM10
Sample Date: 8/26/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	290. ± 10.				40.28	± 2.446
XRF						
Na	7.279	± 0.7356	2.510	± 0.2680	1.0110	± 0.1140
Mg	2.882	± 0.2057	0.9936	± 0.0788	0.4002	± 0.0349
Al	6.642	± 0.3526	2.290	± 0.1450	0.9225	± 0.0673
Si	17.28	± 0.8961	5.958	± 0.3711	2.3997	± 0.1729
P	0.1887	± 0.0237	0.0651	± 0.0085	0.0262	± 0.0035
S	4.772	± 0.2452	1.646	± 0.1018	0.6628	± 0.0475
Cl	4.383	± 0.2237	1.511	± 0.0931	0.6088	± 0.0435
K	2.081	± 0.1051	0.7177	± 0.0439	0.2891	± 0.0205
Ca	3.661	± 0.1842	1.262	± 0.0770	0.5085	± 0.0361
Sc	0.1062	± 0.0147	0.0366	± 0.0052	0.0148	± 0.0022
Ti	0.6012	± 0.0316	0.2073	± 0.0130	0.0835	± 0.0061
* V	0.0136	± 0.0090	0.0047	± 0.0031	0.0019	± 0.0013
* Cr	0.0000	± 0.0068	0.0000	± 0.0023	0.0000	± 0.0009
Mn	0.1379	± 0.0147	0.0475	± 0.0053	0.0191	± 0.0023
Fe	6.453	± 0.3232	2.225	± 0.1353	0.8963	± 0.0634
* Co	0.0000	± 0.0158	0.0000	± 0.0055	0.0000	± 0.0022
Ni	0.0170	± 0.0045	0.0058	± 0.0016	0.0024	± 0.0006
Cu	0.1153	± 0.0068	0.0397	± 0.0027	0.0160	± 0.0012
Zn	0.1955	± 0.0102	0.0674	± 0.0042	0.0272	± 0.0020
Ga	0.0124	± 0.0034	0.0043	± 0.0012	0.0017	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0016	0.0000	± 0.0006
* Se	0.0090	± 0.0034	0.0031	± 0.0012	0.0013	± 0.0005
Br	0.0531	± 0.0045	0.0183	± 0.0017	0.0074	± 0.0007
Rb	0.0396	± 0.0034	0.0136	± 0.0013	0.0055	± 0.0005
Sr	0.0622	± 0.0056	0.0214	± 0.0021	0.0086	± 0.0009
* Y	0.0045	± 0.0056	0.0016	± 0.0019	0.0006	± 0.0008
* Zr	0.0147	± 0.0068	0.0051	± 0.0023	0.0020	± 0.0009
* Nb	0.0090	± 0.0090	0.0031	± 0.0031	0.0013	± 0.0013
Mo	0.0520	± 0.0113	0.0179	± 0.0039	0.0072	± 0.0016
* Ag	0.0000	± 0.0282	0.0000	± 0.0097	0.0000	± 0.0039
* Cd	0.0904	± 0.0305	0.0312	± 0.0106	0.0126	± 0.0043
* In	0.0452	± 0.0339	0.0156	± 0.0117	0.0063	± 0.0047
* Sn	0.0429	± 0.0384	0.0148	± 0.0133	0.0060	± 0.0053
* Sb	0.0000	± 0.0576	0.0000	± 0.0199	0.0000	± 0.0080
* Cs	0.0000	± 0.0170	0.0000	± 0.0058	0.0000	± 0.0024
* Ba	0.0000	± 0.0373	0.0000	± 0.0129	0.0000	± 0.0052
* La	0.0000	± 0.0249	0.0000	± 0.0086	0.0000	± 0.0035
Ce	0.0836	± 0.0192	0.0288	± 0.0067	0.0116	± 0.0027
* Sm	0.0000	± 0.0215	0.0000	± 0.0074	0.0000	± 0.0030
* Eu	0.0079	± 0.0350	0.0027	± 0.0121	0.0011	± 0.0049
* Tb	0.0000	± 0.0836	0.0000	± 0.0288	0.0000	± 0.0116
* Hf	0.0000	± 0.0102	0.0000	± 0.0035	0.0000	± 0.0014
* Ta	0.0000	± 0.0113	0.0000	± 0.0039	0.0000	± 0.0016
* W	0.0000	± 0.0079	0.0000	± 0.0027	0.0000	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0023	0.0000	± 0.0009
* Au	0.0102	± 0.0056	0.0035	± 0.0020	0.0014	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0031	0.0000	± 0.0013
* Pb	0.0147	± 0.0102	0.0051	± 0.0035	0.0020	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2448
Filter ID: P7324957
Site: CRC PM10
Sample Date: 8/26/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	214. ± 10.				29.72	± 2.034
XRF						
Na	6.711	± 0.7006	3.136	± 0.3587	0.9321	± 0.1079
Mg	1.808	± 0.1695	0.8449	± 0.0885	0.2511	± 0.0267
Al	4.119	± 0.2204	1.925	± 0.1367	0.5721	± 0.0419
Si	10.10	± 0.5187	4.720	± 0.3277	1.4028	± 0.1005
P	0.2068	± 0.0237	0.0966	± 0.0120	0.0287	± 0.0036
S	4.543	± 0.2316	2.123	± 0.1468	0.6309	± 0.0451
Cl	4.002	± 0.2023	1.870	± 0.1287	0.5559	± 0.0395
K	1.450	± 0.0734	0.6775	± 0.0467	0.2014	± 0.0143
Ca	2.153	± 0.1085	1.006	± 0.0691	0.2990	± 0.0212
* Sc	0.0000	± 0.0136	0.0000	± 0.0063	0.0000	± 0.0019
Ti	0.3367	± 0.0181	0.1574	± 0.0112	0.0468	± 0.0034
* V	0.0000	± 0.0090	0.0000	± 0.0042	0.0000	± 0.0013
* Cr	0.0000	± 0.0068	0.0000	± 0.0032	0.0000	± 0.0009
Mn	0.0791	± 0.0136	0.0370	± 0.0066	0.0110	± 0.0020
Fe	3.502	± 0.1752	1.636	± 0.1120	0.4864	± 0.0344
* Co	0.0000	± 0.0124	0.0000	± 0.0058	0.0000	± 0.0017
* Ni	0.0056	± 0.0045	0.0026	± 0.0021	0.0008	± 0.0006
Cu	0.0667	± 0.0045	0.0312	± 0.0026	0.0093	± 0.0008
Zn	0.1469	± 0.0079	0.0686	± 0.0049	0.0204	± 0.0015
* Ga	0.0000	± 0.0034	0.0000	± 0.0016	0.0000	± 0.0005
* As	0.0113	± 0.0045	0.0053	± 0.0021	0.0016	± 0.0006
Se	0.0147	± 0.0034	0.0069	± 0.0016	0.0020	± 0.0005
Br	0.0497	± 0.0045	0.0232	± 0.0024	0.0069	± 0.0007
Rb	0.0170	± 0.0034	0.0079	± 0.0016	0.0024	± 0.0005
Sr	0.0249	± 0.0045	0.0116	± 0.0022	0.0035	± 0.0007
* Y	0.0079	± 0.0056	0.0037	± 0.0026	0.0011	± 0.0008
Zr	0.0350	± 0.0068	0.0164	± 0.0033	0.0049	± 0.0010
* Nb	0.0237	± 0.0090	0.0111	± 0.0043	0.0033	± 0.0013
* Mo	0.0000	± 0.0113	0.0000	± 0.0053	0.0000	± 0.0016
* Ag	0.0000	± 0.0215	0.0000	± 0.0100	0.0000	± 0.0030
* Cd	0.0271	± 0.0305	0.0127	± 0.0143	0.0038	± 0.0042
* In	0.0000	± 0.0339	0.0000	± 0.0158	0.0000	± 0.0047
* Sn	0.0000	± 0.0384	0.0000	± 0.0180	0.0000	± 0.0053
* Sb	0.1446	± 0.0588	0.0676	± 0.0276	0.0201	± 0.0082
* Cs	0.0000	± 0.0136	0.0000	± 0.0063	0.0000	± 0.0019
* Ba	0.0000	± 0.0294	0.0000	± 0.0137	0.0000	± 0.0041
* La	0.0000	± 0.0203	0.0000	± 0.0095	0.0000	± 0.0028
* Ce	0.0373	± 0.0170	0.0174	± 0.0080	0.0052	± 0.0024
* Sm	0.0000	± 0.0226	0.0000	± 0.0106	0.0000	± 0.0031
* Eu	0.0000	± 0.0249	0.0000	± 0.0116	0.0000	± 0.0035
* Tb	0.0588	± 0.0633	0.0275	± 0.0296	0.0082	± 0.0088
* Hf	0.0000	± 0.0102	0.0000	± 0.0048	0.0000	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0042	0.0000	± 0.0013
* W	0.0102	± 0.0079	0.0048	± 0.0037	0.0014	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0032	0.0000	± 0.0009
* Au	0.0056	± 0.0056	0.0026	± 0.0026	0.0008	± 0.0008
* Hg	0.0034	± 0.0090	0.0016	± 0.0042	0.0005	± 0.0013
* Pb	0.0000	± 0.0102	0.0000	± 0.0048	0.0000	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2956
Filter ID: P7326740
Site: VFW PM2.5
Sample Date: 9/ 1/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	133. ± 10.				18.47	± 1.668
XRF						
Na	9.873	± 0.8294	7.423	± 0.8369	1.3712	± 0.1341
Mg	1.458	± 0.1672	1.096	± 0.1503	0.2025	± 0.0253
Al	1.219	± 0.0893	0.9167	± 0.0962	0.1693	± 0.0150
Si	2.356	± 0.1243	1.771	± 0.1627	0.3272	± 0.0238
* P	0.0316	± 0.0237	0.0238	± 0.0179	0.0044	± 0.0033
S	4.218	± 0.2136	3.172	± 0.2875	0.5859	± 0.0417
Cl	12.70	± 0.6384	9.550	± 0.8637	1.7641	± 0.1251
K	0.7119	± 0.0373	0.5353	± 0.0490	0.0989	± 0.0072
Ca	0.9289	± 0.0475	0.6984	± 0.0635	0.1290	± 0.0092
Sc	0.0373	± 0.0102	0.0280	± 0.0079	0.0052	± 0.0014
Ti	0.0633	± 0.0079	0.0476	± 0.0069	0.0088	± 0.0012
* V	0.0158	± 0.0079	0.0119	± 0.0060	0.0022	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0051	0.0000	± 0.0009
Mn	0.6181	± 0.0328	0.4647	± 0.0428	0.0858	± 0.0063
Fe	1.028	± 0.0520	0.7732	± 0.0700	0.1428	± 0.0102
* Co	0.0000	± 0.0079	0.0000	± 0.0059	0.0000	± 0.0011
* Ni	0.0090	± 0.0045	0.0068	± 0.0034	0.0013	± 0.0006
Cu	0.0723	± 0.0056	0.0544	± 0.0059	0.0100	± 0.0009
Zn	0.0904	± 0.0056	0.0680	± 0.0066	0.0126	± 0.0010
Ga	0.0136	± 0.0034	0.0102	± 0.0027	0.0019	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0034	0.0000	± 0.0006
* Se	0.0090	± 0.0034	0.0068	± 0.0026	0.0013	± 0.0005
Br	0.0384	± 0.0045	0.0289	± 0.0040	0.0053	± 0.0007
* Rb	0.0000	± 0.0034	0.0000	± 0.0025	0.0000	± 0.0005
* Sr	0.0113	± 0.0045	0.0085	± 0.0035	0.0016	± 0.0006
* Y	0.0000	± 0.0056	0.0000	± 0.0042	0.0000	± 0.0008
* Zr	0.0000	± 0.0079	0.0000	± 0.0059	0.0000	± 0.0011
* Nb	0.0192	± 0.0102	0.0144	± 0.0077	0.0027	± 0.0014
* Mo	0.0000	± 0.0113	0.0000	± 0.0085	0.0000	± 0.0016
* Ag	0.0147	± 0.0215	0.0110	± 0.0162	0.0020	± 0.0030
* Cd	0.0282	± 0.0305	0.0212	± 0.0230	0.0039	± 0.0042
* In	0.0000	± 0.0339	0.0000	± 0.0255	0.0000	± 0.0047
* Sn	0.0226	± 0.0373	0.0170	± 0.0281	0.0031	± 0.0052
* Sb	0.0000	± 0.0576	0.0000	± 0.0433	0.0000	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0102	0.0000	± 0.0019
* Ba	0.0000	± 0.0170	0.0000	± 0.0127	0.0000	± 0.0024
* La	0.0000	± 0.0158	0.0000	± 0.0119	0.0000	± 0.0022
* Ce	0.0000	± 0.0147	0.0000	± 0.0110	0.0000	± 0.0020
* Sm	0.0000	± 0.0226	0.0000	± 0.0170	0.0000	± 0.0031
* Eu	0.0102	± 0.0249	0.0076	± 0.0187	0.0014	± 0.0035
* Tb	0.0000	± 0.0362	0.0000	± 0.0272	0.0000	± 0.0050
* Hf	0.0000	± 0.0102	0.0000	± 0.0076	0.0000	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0068	0.0000	± 0.0013
* W	0.0079	± 0.0079	0.0059	± 0.0060	0.0011	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0051	0.0000	± 0.0009
* Au	0.0000	± 0.0056	0.0000	± 0.0042	0.0000	± 0.0008
* Hg	0.0045	± 0.0090	0.0034	± 0.0068	0.0006	± 0.0013
* Pb	0.0147	± 0.0102	0.0110	± 0.0077	0.0020	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2958
Filter ID: P7326742
Site: Impact PM2.5
Sample Date: 9/ 1/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	126. ± 10.				17.50	± 1.642
XRF						
Na	9.187	± 0.8023	7.291	± 0.8604	1.2760	± 0.1284
Mg	1.153	± 0.1650	0.9148	± 0.1497	0.1601	± 0.0243
Al	0.7424	± 0.0757	0.5892	± 0.0761	0.1031	± 0.0117
Si	1.269	± 0.0734	1.007	± 0.0989	0.1762	± 0.0135
* P	0.0294	± 0.0237	0.0233	± 0.0189	0.0041	± 0.0033
S	3.954	± 0.2000	3.138	± 0.2953	0.5491	± 0.0391
Cl	11.79	± 0.5921	9.354	± 0.8786	1.6369	± 0.1160
K	0.6057	± 0.0339	0.4807	± 0.0467	0.0841	± 0.0063
Ca	0.6882	± 0.0362	0.5462	± 0.0520	0.0956	± 0.0069
* Sc	0.0000	± 0.0102	0.0000	± 0.0081	0.0000	± 0.0014
Ti	0.0486	± 0.0068	0.0386	± 0.0062	0.0067	± 0.0010
* V	0.0045	± 0.0079	0.0036	± 0.0063	0.0006	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0054	0.0000	± 0.0009
* Mn	0.0362	± 0.0124	0.0287	± 0.0101	0.0050	± 0.0017
Fe	0.5661	± 0.0294	0.4493	± 0.0426	0.0786	± 0.0057
* Co	0.0124	± 0.0056	0.0099	± 0.0046	0.0017	± 0.0008
* Ni	0.0000	± 0.0045	0.0000	± 0.0036	0.0000	± 0.0006
Cu	0.0520	± 0.0045	0.0413	± 0.0049	0.0072	± 0.0007
Zn	0.0734	± 0.0056	0.0583	± 0.0064	0.0102	± 0.0009
* Ga	0.0045	± 0.0034	0.0036	± 0.0027	0.0006	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0036	0.0000	± 0.0006
* Se	0.0000	± 0.0034	0.0000	± 0.0027	0.0000	± 0.0005
Br	0.0497	± 0.0045	0.0395	± 0.0048	0.0069	± 0.0007
* Rb	0.0000	± 0.0034	0.0000	± 0.0027	0.0000	± 0.0005
* Sr	0.0102	± 0.0045	0.0081	± 0.0036	0.0014	± 0.0006
* Y	0.0000	± 0.0056	0.0000	± 0.0045	0.0000	± 0.0008
* Zr	0.0000	± 0.0079	0.0000	± 0.0063	0.0000	± 0.0011
* Nb	0.0000	± 0.0102	0.0000	± 0.0081	0.0000	± 0.0014
* Mo	0.0000	± 0.0124	0.0000	± 0.0099	0.0000	± 0.0017
* Ag	0.0000	± 0.0282	0.0000	± 0.0224	0.0000	± 0.0039
* Cd	0.0542	± 0.0305	0.0430	± 0.0245	0.0075	± 0.0043
* In	0.0791	± 0.0339	0.0628	± 0.0274	0.0110	± 0.0047
* Sn	0.1130	± 0.0384	0.0897	± 0.0313	0.0157	± 0.0054
* Sb	0.1017	± 0.0576	0.0807	± 0.0462	0.0141	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0108	0.0000	± 0.0019
* Ba	0.0000	± 0.0170	0.0000	± 0.0135	0.0000	± 0.0024
* La	0.0000	± 0.0158	0.0000	± 0.0126	0.0000	± 0.0022
* Ce	0.0192	± 0.0147	0.0152	± 0.0117	0.0027	± 0.0020
* Sm	0.0000	± 0.0226	0.0000	± 0.0179	0.0000	± 0.0031
* Eu	0.0000	± 0.0249	0.0000	± 0.0197	0.0000	± 0.0035
* Tb	0.0000	± 0.0294	0.0000	± 0.0233	0.0000	± 0.0041
* Hf	0.0170	± 0.0102	0.0135	± 0.0081	0.0024	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0072	0.0000	± 0.0013
* W	0.0000	± 0.0079	0.0000	± 0.0063	0.0000	± 0.0011
* Ir	0.0056	± 0.0068	0.0045	± 0.0054	0.0008	± 0.0009
* Au	0.0147	± 0.0079	0.0117	± 0.0063	0.0020	± 0.0011
* Hg	0.0000	± 0.0090	0.0000	± 0.0072	0.0000	± 0.0013
* Pb	0.0226	± 0.0079	0.0179	± 0.0064	0.0031	± 0.0011

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2955
Filter ID: P7326739
Site: Florin PM2.5
Sample Date: 9/ 1/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	106. ± 10.				14.72	± 1.572
XRF						
Na	11.01	± 0.8373	10.39	± 1.259	1.5290	± 0.1392
Mg	1.638	± 0.1661	1.546	± 0.2141	0.2276	± 0.0257
Al	0.5831	± 0.0701	0.5501	± 0.0840	0.0810	± 0.0105
Si	0.5978	± 0.0452	0.5639	± 0.0682	0.0830	± 0.0075
* P	0.0463	± 0.0226	0.0437	± 0.0217	0.0064	± 0.0032
S	4.219	± 0.2136	3.981	± 0.4262	0.5860	± 0.0417
Cl	13.93	± 0.7006	13.14	± 1.405	1.9351	± 0.1372
K	0.5729	± 0.0305	0.5405	± 0.0586	0.0796	± 0.0058
Ca	0.5062	± 0.0271	0.4776	± 0.0518	0.0703	± 0.0052
* Sc	0.0226	± 0.0090	0.0213	± 0.0088	0.0031	± 0.0013
* Ti	0.0136	± 0.0068	0.0128	± 0.0065	0.0019	± 0.0009
* V	0.0181	± 0.0068	0.0171	± 0.0066	0.0025	± 0.0010
Cr	0.0384	± 0.0068	0.0362	± 0.0073	0.0053	± 0.0010
* Mn	0.0000	± 0.0124	0.0000	± 0.0117	0.0000	± 0.0017
Fe	0.2802	± 0.0158	0.2644	± 0.0291	0.0389	± 0.0029
* Co	0.0000	± 0.0056	0.0000	± 0.0053	0.0000	± 0.0008
* Ni	0.0068	± 0.0045	0.0064	± 0.0043	0.0009	± 0.0006
Cu	0.0452	± 0.0045	0.0426	± 0.0059	0.0063	± 0.0007
Zn	0.0644	± 0.0045	0.0608	± 0.0071	0.0089	± 0.0008
* Ga	0.0000	± 0.0034	0.0000	± 0.0032	0.0000	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0043	0.0000	± 0.0006
* Se	0.0000	± 0.0034	0.0000	± 0.0032	0.0000	± 0.0005
Br	0.0316	± 0.0045	0.0298	± 0.0051	0.0044	± 0.0007
* Rb	0.0000	± 0.0034	0.0000	± 0.0032	0.0000	± 0.0005
* Sr	0.0000	± 0.0045	0.0000	± 0.0043	0.0000	± 0.0006
* Y	0.0124	± 0.0056	0.0117	± 0.0054	0.0017	± 0.0008
* Zr	0.0000	± 0.0068	0.0000	± 0.0064	0.0000	± 0.0009
Nb	0.0463	± 0.0090	0.0437	± 0.0095	0.0064	± 0.0013
* Mo	0.0000	± 0.0113	0.0000	± 0.0107	0.0000	± 0.0016
* Ag	0.0237	± 0.0294	0.0224	± 0.0278	0.0033	± 0.0041
* Cd	0.0113	± 0.0305	0.0107	± 0.0288	0.0016	± 0.0042
* In	0.0339	± 0.0339	0.0320	± 0.0321	0.0047	± 0.0047
* Sn	0.0023	± 0.0384	0.0021	± 0.0362	0.0003	± 0.0053
* Sb	0.0000	± 0.0576	0.0000	± 0.0544	0.0000	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0128	0.0000	± 0.0019
Ba	0.0678	± 0.0147	0.0640	± 0.0151	0.0094	± 0.0021
La	0.0723	± 0.0136	0.0682	± 0.0143	0.0100	± 0.0019
* Ce	0.0215	± 0.0147	0.0203	± 0.0140	0.0030	± 0.0020
* Sm	0.0000	± 0.0203	0.0000	± 0.0192	0.0000	± 0.0028
* Eu	0.0339	± 0.0249	0.0320	± 0.0236	0.0047	± 0.0035
* Tb	0.0000	± 0.0215	0.0000	± 0.0203	0.0000	± 0.0030
* Hf	0.0000	± 0.0102	0.0000	± 0.0096	0.0000	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0085	0.0000	± 0.0013
* W	0.0045	± 0.0079	0.0043	± 0.0075	0.0006	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0064	0.0000	± 0.0009
* Au	0.0000	± 0.0056	0.0000	± 0.0053	0.0000	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0085	0.0000	± 0.0013
* Pb	0.0068	± 0.0102	0.0064	± 0.0096	0.0009	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2465
Filter ID: P7325016
Site: Sump50 PM2.5
Sample Date: 9/ 1/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	110. ± 10.				15.28	± 1.585
XRF						
Na	11.20	± 0.8577	10.18	± 1.210	1.5555	± 0.1423
Mg	1.401	± 0.1650	1.274	± 0.1895	0.1946	± 0.0249
Al	0.4396	± 0.0701	0.3996	± 0.0733	0.0611	± 0.0102
Si	0.5740	± 0.0463	0.5219	± 0.0634	0.0797	± 0.0076
* P	0.0000	± 0.0237	0.0000	± 0.0216	0.0000	± 0.0033
S	4.130	± 0.2090	3.755	± 0.3907	0.5736	± 0.0408
Cl	14.75	± 0.7413	13.41	± 1.393	2.0481	± 0.1452
K	0.5763	± 0.0316	0.5239	± 0.0556	0.0800	± 0.0059
Ca	0.5221	± 0.0282	0.4746	± 0.0502	0.0725	± 0.0053
* Sc	0.0249	± 0.0090	0.0226	± 0.0085	0.0035	± 0.0013
* Ti	0.0158	± 0.0068	0.0144	± 0.0063	0.0022	± 0.0009
* V	0.0034	± 0.0068	0.0031	± 0.0062	0.0005	± 0.0009
* Cr	0.0000	± 0.0068	0.0000	± 0.0062	0.0000	± 0.0009
* Mn	0.0170	± 0.0124	0.0154	± 0.0114	0.0024	± 0.0017
Fe	0.2554	± 0.0147	0.2322	± 0.0250	0.0355	± 0.0027
* Co	0.0000	± 0.0056	0.0000	± 0.0051	0.0000	± 0.0008
* Ni	0.0090	± 0.0045	0.0082	± 0.0042	0.0013	± 0.0006
Cu	0.0452	± 0.0045	0.0411	± 0.0056	0.0063	± 0.0007
Zn	0.0655	± 0.0045	0.0596	± 0.0068	0.0091	± 0.0008
* Ga	0.0045	± 0.0034	0.0041	± 0.0031	0.0006	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0041	0.0000	± 0.0006
* Se	0.0000	± 0.0034	0.0000	± 0.0031	0.0000	± 0.0005
Br	0.0497	± 0.0045	0.0452	± 0.0058	0.0069	± 0.0007
* Rb	0.0079	± 0.0034	0.0072	± 0.0032	0.0011	± 0.0005
* Sr	0.0011	± 0.0045	0.0010	± 0.0041	0.0002	± 0.0006
* Y	0.0000	± 0.0056	0.0000	± 0.0051	0.0000	± 0.0008
* Zr	0.0056	± 0.0068	0.0051	± 0.0062	0.0008	± 0.0009
* Nb	0.0000	± 0.0102	0.0000	± 0.0092	0.0000	± 0.0014
* Mo	0.0000	± 0.0113	0.0000	± 0.0103	0.0000	± 0.0016
* Ag	0.0000	± 0.0282	0.0000	± 0.0257	0.0000	± 0.0039
* Cd	0.0000	± 0.0305	0.0000	± 0.0277	0.0000	± 0.0042
* In	0.0000	± 0.0339	0.0000	± 0.0308	0.0000	± 0.0047
* Sn	0.0452	± 0.0384	0.0411	± 0.0351	0.0063	± 0.0053
* Sb	0.0000	± 0.0576	0.0000	± 0.0524	0.0000	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0123	0.0000	± 0.0019
* Ba	0.0000	± 0.0147	0.0000	± 0.0134	0.0000	± 0.0020
* La	0.0102	± 0.0136	0.0092	± 0.0124	0.0014	± 0.0019
* Ce	0.0136	± 0.0147	0.0123	± 0.0134	0.0019	± 0.0020
* Sm	0.0000	± 0.0215	0.0000	± 0.0195	0.0000	± 0.0030
* Eu	0.0000	± 0.0249	0.0000	± 0.0226	0.0000	± 0.0035
* Tb	0.0203	± 0.0215	0.0185	± 0.0196	0.0028	± 0.0030
* Hf	0.0147	± 0.0102	0.0134	± 0.0093	0.0020	± 0.0014
Ta	0.0452	± 0.0090	0.0411	± 0.0090	0.0063	± 0.0013
W	0.0260	± 0.0079	0.0236	± 0.0075	0.0036	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0062	0.0000	± 0.0009
* Au	0.0000	± 0.0056	0.0000	± 0.0051	0.0000	± 0.0008
* Hg	0.0158	± 0.0090	0.0144	± 0.0083	0.0022	± 0.0013
* Pb	0.0192	± 0.0079	0.0175	± 0.0074	0.0027	± 0.0011

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2466
Filter ID: P7325017
Site: ST56 PM2.5
Sample Date: 9/ 1/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	119. ± 10.				16.53	± 1.616
XRF						
Na	11.70	± 0.8532	9.828	± 1.094	1.6244	± 0.1437
Mg	1.548	± 0.1593	1.301	± 0.1729	0.2150	± 0.0246
Al	0.8859	± 0.0768	0.7445	± 0.0899	0.1230	± 0.0123
Si	1.455	± 0.0814	1.223	± 0.1234	0.2021	± 0.0152
* P	0.0000	± 0.0226	0.0000	± 0.0190	0.0000	± 0.0031
S	3.941	± 0.2000	3.312	± 0.3251	0.5474	± 0.0390
Cl	14.18	± 0.7130	11.92	± 1.167	1.9696	± 0.1397
K	0.5537	± 0.0316	0.4653	± 0.0473	0.0769	± 0.0058
Ca	0.7187	± 0.0373	0.6039	± 0.0596	0.0998	± 0.0072
* Sc	0.0158	± 0.0090	0.0133	± 0.0077	0.0022	± 0.0013
Ti	0.0350	± 0.0068	0.0294	± 0.0062	0.0049	± 0.0010
* V	0.0045	± 0.0068	0.0038	± 0.0057	0.0006	± 0.0009
* Cr	0.0000	± 0.0056	0.0000	± 0.0047	0.0000	± 0.0008
* Mn	0.0260	± 0.0124	0.0218	± 0.0106	0.0036	± 0.0017
Fe	0.5594	± 0.0294	0.4700	± 0.0466	0.0777	± 0.0056
* Co	0.0113	± 0.0056	0.0095	± 0.0048	0.0016	± 0.0008
* Ni	0.0000	± 0.0045	0.0000	± 0.0038	0.0000	± 0.0006
Cu	0.0463	± 0.0045	0.0389	± 0.0050	0.0064	± 0.0007
Zn	0.0802	± 0.0056	0.0674	± 0.0074	0.0111	± 0.0010
* Ga	0.0000	± 0.0034	0.0000	± 0.0028	0.0000	± 0.0005
* As	0.0102	± 0.0045	0.0085	± 0.0039	0.0014	± 0.0006
* Se	0.0023	± 0.0034	0.0019	± 0.0029	0.0003	± 0.0005
Br	0.0463	± 0.0045	0.0389	± 0.0050	0.0064	± 0.0007
* Rb	0.0056	± 0.0034	0.0047	± 0.0029	0.0008	± 0.0005
Sr	0.0192	± 0.0045	0.0161	± 0.0040	0.0027	± 0.0006
Y	0.0203	± 0.0045	0.0171	± 0.0041	0.0028	± 0.0006
Zr	0.0305	± 0.0068	0.0256	± 0.0061	0.0042	± 0.0010
* Nb	0.0102	± 0.0090	0.0085	± 0.0076	0.0014	± 0.0013
* Mo	0.0000	± 0.0113	0.0000	± 0.0095	0.0000	± 0.0016
* Ag	0.0000	± 0.0203	0.0000	± 0.0171	0.0000	± 0.0028
* Cd	0.0090	± 0.0226	0.0076	± 0.0190	0.0013	± 0.0031
* In	0.0000	± 0.0339	0.0000	± 0.0285	0.0000	± 0.0047
* Sn	0.0000	± 0.0373	0.0000	± 0.0313	0.0000	± 0.0052
* Sb	0.0712	± 0.0588	0.0598	± 0.0496	0.0099	± 0.0082
* Cs	0.0000	± 0.0136	0.0000	± 0.0114	0.0000	± 0.0019
Ba	0.0904	± 0.0147	0.0760	± 0.0139	0.0126	± 0.0021
La	0.0610	± 0.0136	0.0513	± 0.0122	0.0085	± 0.0019
* Ce	0.0294	± 0.0147	0.0247	± 0.0125	0.0041	± 0.0021
* Sm	0.0000	± 0.0203	0.0000	± 0.0171	0.0000	± 0.0028
* Eu	0.0000	± 0.0249	0.0000	± 0.0209	0.0000	± 0.0035
* Tb	0.0000	± 0.0294	0.0000	± 0.0247	0.0000	± 0.0041
* Hf	0.0000	± 0.0102	0.0000	± 0.0085	0.0000	± 0.0014
Ta	0.0486	± 0.0090	0.0408	± 0.0083	0.0067	± 0.0013
* W	0.0102	± 0.0079	0.0085	± 0.0067	0.0014	± 0.0011
* Ir	0.0045	± 0.0068	0.0038	± 0.0057	0.0006	± 0.0009
* Au	0.0102	± 0.0056	0.0085	± 0.0048	0.0014	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0076	0.0000	± 0.0013
* Pb	0.0011	± 0.0102	0.0009	± 0.0085	0.0002	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2960
 Filter ID: P7326744
 Site: CRC PM2.5
 Sample Date: 9/ 1/21
 Filter Lot #: 7094056
 Volume: 7.200 ± 0.360 m³
 Deposit Area: 11.3 cm²
 Size Fraction: PM2.5

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	104. ± 10.				14.44	± 1.565
XRF						
Na	10.14	± 0.8046	9.746	± 1.215	1.4078	± 0.1321
Mg	1.288	± 0.1526	1.239	± 0.1889	0.1789	± 0.0230
Al	0.5028	± 0.0667	0.4835	± 0.0792	0.0698	± 0.0099
Si	0.5514	± 0.0441	0.5302	± 0.0663	0.0766	± 0.0072
* P	0.0000	± 0.0226	0.0000	± 0.0217	0.0000	± 0.0031
S	4.254	± 0.2147	4.091	± 0.4442	0.5909	± 0.0420
Cl	13.00	± 0.6531	12.50	± 1.356	1.8049	± 0.1280
K	0.4927	± 0.0294	0.4737	± 0.0536	0.0684	± 0.0053
Ca	0.4916	± 0.0260	0.4726	± 0.0519	0.0683	± 0.0050
* Sc	0.0000	± 0.0090	0.0000	± 0.0087	0.0000	± 0.0013
* Ti	0.0181	± 0.0068	0.0174	± 0.0067	0.0025	± 0.0010
* V	0.0147	± 0.0068	0.0141	± 0.0067	0.0020	± 0.0009
* Cr	0.0000	± 0.0068	0.0000	± 0.0065	0.0000	± 0.0009
* Mn	0.0000	± 0.0124	0.0000	± 0.0120	0.0000	± 0.0017
Fe	0.2509	± 0.0147	0.2412	± 0.0272	0.0348	± 0.0027
* Co	0.0000	± 0.0056	0.0000	± 0.0054	0.0000	± 0.0008
* Ni	0.0000	± 0.0045	0.0000	± 0.0043	0.0000	± 0.0006
Cu	0.0520	± 0.0045	0.0500	± 0.0065	0.0072	± 0.0007
Zn	0.0712	± 0.0056	0.0685	± 0.0085	0.0099	± 0.0009
* Ga	0.0023	± 0.0034	0.0022	± 0.0033	0.0003	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0043	0.0000	± 0.0006
Se	0.0068	± 0.0023	0.0065	± 0.0023	0.0009	± 0.0003
Br	0.0497	± 0.0045	0.0478	± 0.0063	0.0069	± 0.0007
* Rb	0.0000	± 0.0034	0.0000	± 0.0033	0.0000	± 0.0005
Sr	0.0136	± 0.0045	0.0130	± 0.0045	0.0019	± 0.0006
* Y	0.0000	± 0.0056	0.0000	± 0.0054	0.0000	± 0.0008
* Zr	0.0192	± 0.0068	0.0185	± 0.0068	0.0027	± 0.0010
* Nb	0.0215	± 0.0090	0.0206	± 0.0089	0.0030	± 0.0013
* Mo	0.0000	± 0.0113	0.0000	± 0.0109	0.0000	± 0.0016
* Ag	0.0249	± 0.0203	0.0239	± 0.0197	0.0035	± 0.0028
* Cd	0.0090	± 0.0305	0.0087	± 0.0293	0.0013	± 0.0042
* In	0.0000	± 0.0339	0.0000	± 0.0326	0.0000	± 0.0047
* Sn	0.0000	± 0.0373	0.0000	± 0.0359	0.0000	± 0.0052
* Sb	0.1017	± 0.0576	0.0978	± 0.0562	0.0141	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0130	0.0000	± 0.0019
* Ba	0.0000	± 0.0147	0.0000	± 0.0141	0.0000	± 0.0020
* La	0.0215	± 0.0136	0.0206	± 0.0132	0.0030	± 0.0019
* Ce	0.0000	± 0.0147	0.0000	± 0.0141	0.0000	± 0.0020
* Sm	0.0000	± 0.0203	0.0000	± 0.0196	0.0000	± 0.0028
* Eu	0.0000	± 0.0249	0.0000	± 0.0239	0.0000	± 0.0035
* Tb	0.0362	± 0.0215	0.0348	± 0.0209	0.0050	± 0.0030
* Hf	0.0000	± 0.0102	0.0000	± 0.0098	0.0000	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0087	0.0000	± 0.0013
* W	0.0158	± 0.0079	0.0152	± 0.0077	0.0022	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0065	0.0000	± 0.0009
Au	0.0170	± 0.0056	0.0163	± 0.0057	0.0024	± 0.0008
* Hg	0.0113	± 0.0090	0.0109	± 0.0088	0.0016	± 0.0013
* Pb	0.0000	± 0.0102	0.0000	± 0.0098	0.0000	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2713
Filter ID: P7325847
Site: VFW PM10
Sample Date: 9/ 1/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter			percent		µg/m ³			
Gravimetry									
Net Mass	312. ± 10.					43.33	± 2.574		
XRF									
Na	20.89	±	1.443	6.697	±	0.5099	2.9019	±	0.2474
Mg	4.113	±	0.2848	1.318	±	0.1006	0.5713	±	0.0488
Al	4.497	±	0.2509	1.441	±	0.0927	0.6246	±	0.0468
Si	11.53	±	0.6034	3.694	±	0.2268	1.6008	±	0.1159
P	0.1627	±	0.0305	0.0522	±	0.0099	0.0226	±	0.0044
S	6.399	±	0.3300	2.051	±	0.1245	0.8888	±	0.0638
Cl	37.67	±	1.912	12.08	±	0.7248	5.2325	±	0.3728
K	1.855	±	0.0949	0.5947	±	0.0359	0.2577	±	0.0184
Ca	3.359	±	0.1695	1.077	±	0.0644	0.4666	±	0.0331
* Sc	0.0000	±	0.0158	0.0000	±	0.0051	0.0000	±	0.0022
Ti	0.3401	±	0.0192	0.1090	±	0.0071	0.0472	±	0.0036
* V	0.0147	±	0.0090	0.0047	±	0.0029	0.0020	±	0.0013
* Cr	0.0000	±	0.0068	0.0000	±	0.0022	0.0000	±	0.0009
Mn	0.0859	±	0.0136	0.0275	±	0.0044	0.0119	±	0.0020
Fe	4.686	±	0.2339	1.502	±	0.0891	0.6508	±	0.0460
* Co	0.0000	±	0.0124	0.0000	±	0.0040	0.0000	±	0.0017
* Ni	0.0034	±	0.0045	0.0011	±	0.0014	0.0005	±	0.0006
Cu	0.0938	±	0.0056	0.0301	±	0.0021	0.0130	±	0.0010
Zn	0.1729	±	0.0090	0.0554	±	0.0034	0.0240	±	0.0017
Ga	0.0124	±	0.0034	0.0040	±	0.0011	0.0017	±	0.0005
* As	0.0000	±	0.0045	0.0000	±	0.0014	0.0000	±	0.0006
* Se	0.0045	±	0.0023	0.0014	±	0.0007	0.0006	±	0.0003
Br	0.0746	±	0.0068	0.0239	±	0.0023	0.0104	±	0.0011
Rb	0.0136	±	0.0034	0.0043	±	0.0011	0.0019	±	0.0005
Sr	0.0226	±	0.0056	0.0072	±	0.0018	0.0031	±	0.0008
* Y	0.0000	±	0.0056	0.0000	±	0.0018	0.0000	±	0.0008
* Zr	0.0079	±	0.0068	0.0025	±	0.0022	0.0011	±	0.0009
* Nb	0.0260	±	0.0102	0.0083	±	0.0033	0.0036	±	0.0014
* Mo	0.0226	±	0.0113	0.0072	±	0.0036	0.0031	±	0.0016
* Ag	0.0000	±	0.0282	0.0000	±	0.0091	0.0000	±	0.0039
* Cd	0.0000	±	0.0305	0.0000	±	0.0098	0.0000	±	0.0042
* In	0.0113	±	0.0339	0.0036	±	0.0109	0.0016	±	0.0047
* Sn	0.0226	±	0.0373	0.0072	±	0.0120	0.0031	±	0.0052
* Sb	0.0339	±	0.0576	0.0109	±	0.0185	0.0047	±	0.0080
* Cs	0.0000	±	0.0170	0.0000	±	0.0054	0.0000	±	0.0024
* Ba	0.0000	±	0.0305	0.0000	±	0.0098	0.0000	±	0.0042
* La	0.0000	±	0.0203	0.0000	±	0.0065	0.0000	±	0.0028
Ce	0.0508	±	0.0170	0.0163	±	0.0055	0.0071	±	0.0024
* Sm	0.0000	±	0.0215	0.0000	±	0.0069	0.0000	±	0.0030
* Eu	0.0429	±	0.0350	0.0138	±	0.0112	0.0060	±	0.0049
* Tb	0.0000	±	0.0712	0.0000	±	0.0228	0.0000	±	0.0099
* Hf	0.0147	±	0.0102	0.0047	±	0.0033	0.0020	±	0.0014
* Ta	0.0000	±	0.0113	0.0000	±	0.0036	0.0000	±	0.0016
W	0.0294	±	0.0079	0.0094	±	0.0026	0.0041	±	0.0011
* Ir	0.0000	±	0.0068	0.0000	±	0.0022	0.0000	±	0.0009
* Au	0.0000	±	0.0056	0.0000	±	0.0018	0.0000	±	0.0008
* Hg	0.0011	±	0.0090	0.0004	±	0.0029	0.0002	±	0.0013
* Pb	0.0170	±	0.0079	0.0054	±	0.0025	0.0024	±	0.0011

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2954
Filter ID: P7326738
Site: Florin PM10
Sample Date: 9/ 1/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	265. ± 10.				36.81	± 2.306
XRF						
Na	21.74	± 1.462	8.204	± 0.6327	3.0196	± 0.2531
Mg	3.706	± 0.2656	1.399	± 0.1133	0.5148	± 0.0450
Al	3.139	± 0.1831	1.185	± 0.0823	0.4360	± 0.0335
Si	6.919	± 0.3616	2.611	± 0.1683	0.9610	± 0.0695
P	0.1514	± 0.0305	0.0571	± 0.0117	0.0210	± 0.0044
S	6.477	± 0.3322	2.444	± 0.1556	0.8996	± 0.0644
Cl	38.30	± 1.940	14.45	± 0.9129	5.3188	± 0.3786
K	1.571	± 0.0814	0.5927	± 0.0380	0.2182	± 0.0157
Ca	2.249	± 0.1141	0.8486	± 0.0537	0.3123	± 0.0223
* Sc	0.0000	± 0.0136	0.0000	± 0.0051	0.0000	± 0.0019
Ti	0.2362	± 0.0136	0.0891	± 0.0061	0.0328	± 0.0025
* V	0.0113	± 0.0079	0.0043	± 0.0030	0.0016	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0026	0.0000	± 0.0009
Mn	0.0531	± 0.0124	0.0200	± 0.0048	0.0074	± 0.0018
Fe	2.402	± 0.1198	0.9066	± 0.0567	0.3337	± 0.0236
* Co	0.0000	± 0.0102	0.0000	± 0.0038	0.0000	± 0.0014
* Ni	0.0034	± 0.0045	0.0013	± 0.0017	0.0005	± 0.0006
Cu	0.0599	± 0.0045	0.0226	± 0.0019	0.0083	± 0.0008
Zn	0.1333	± 0.0079	0.0503	± 0.0035	0.0185	± 0.0014
* Ga	0.0023	± 0.0034	0.0009	± 0.0013	0.0003	± 0.0005
* As	0.0000	± 0.0045	0.0000	± 0.0017	0.0000	± 0.0006
* Se	0.0000	± 0.0034	0.0000	± 0.0013	0.0000	± 0.0005
Br	0.1119	± 0.0068	0.0422	± 0.0030	0.0155	± 0.0012
Rb	0.0249	± 0.0034	0.0094	± 0.0013	0.0035	± 0.0005
Sr	0.0373	± 0.0045	0.0141	± 0.0018	0.0052	± 0.0007
* Y	0.0000	± 0.0056	0.0000	± 0.0021	0.0000	± 0.0008
Zr	0.0226	± 0.0068	0.0085	± 0.0026	0.0031	± 0.0010
* Nb	0.0226	± 0.0102	0.0085	± 0.0039	0.0031	± 0.0014
* Mo	0.0192	± 0.0113	0.0072	± 0.0043	0.0027	± 0.0016
* Ag	0.0362	± 0.0203	0.0136	± 0.0077	0.0050	± 0.0028
* Cd	0.0000	± 0.0305	0.0000	± 0.0115	0.0000	± 0.0042
* In	0.0339	± 0.0339	0.0128	± 0.0128	0.0047	± 0.0047
* Sn	0.0520	± 0.0384	0.0196	± 0.0145	0.0072	± 0.0053
* Sb	0.0000	± 0.0576	0.0000	± 0.0217	0.0000	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0051	0.0000	± 0.0019
* Ba	0.0000	± 0.0237	0.0000	± 0.0090	0.0000	± 0.0033
* La	0.0124	± 0.0192	0.0047	± 0.0073	0.0017	± 0.0027
* Ce	0.0384	± 0.0170	0.0145	± 0.0064	0.0053	± 0.0024
* Sm	0.0000	± 0.0215	0.0000	± 0.0081	0.0000	± 0.0030
* Eu	0.0170	± 0.0249	0.0064	± 0.0094	0.0024	± 0.0035
* Tb	0.0000	± 0.0531	0.0000	± 0.0200	0.0000	± 0.0074
* Hf	0.0000	± 0.0102	0.0000	± 0.0038	0.0000	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0034	0.0000	± 0.0013
* W	0.0090	± 0.0079	0.0034	± 0.0030	0.0013	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0026	0.0000	± 0.0009
* Au	0.0147	± 0.0056	0.0055	± 0.0021	0.0020	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0034	0.0000	± 0.0013
* Pb	0.0011	± 0.0102	0.0004	± 0.0038	0.0002	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2464
Filter ID: P7325015
Site: Sump50 PM10
Sample Date: 9/ 1/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	245. ± 10.				34.03	± 2.196
XRF						
Na	22.22	± 1.477	9.068	± 0.7074	3.0855	± 0.2567
Mg	3.356	± 0.2542	1.370	± 0.1179	0.4661	± 0.0423
Al	2.730	± 0.1638	1.114	± 0.0809	0.3792	± 0.0296
Si	6.536	± 0.3413	2.668	± 0.1768	0.9078	± 0.0656
P	0.1017	± 0.0294	0.0415	± 0.0121	0.0141	± 0.0041
S	6.224	± 0.3198	2.540	± 0.1667	0.8644	± 0.0620
Cl	39.06	± 1.978	15.94	± 1.037	5.4256	± 0.3860
K	1.589	± 0.0814	0.6485	± 0.0425	0.2207	± 0.0158
Ca	2.132	± 0.1074	0.8703	± 0.0564	0.2962	± 0.0210
Sc	0.0542	± 0.0124	0.0221	± 0.0052	0.0075	± 0.0018
Ti	0.2113	± 0.0124	0.0862	± 0.0062	0.0293	± 0.0023
* V	0.0000	± 0.0079	0.0000	± 0.0032	0.0000	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0028	0.0000	± 0.0009
Mn	0.0520	± 0.0124	0.0212	± 0.0051	0.0072	± 0.0018
Fe	2.283	± 0.1141	0.9317	± 0.0601	0.3170	± 0.0224
* Co	0.0011	± 0.0102	0.0005	± 0.0042	0.0002	± 0.0014
* Ni	0.0023	± 0.0045	0.0009	± 0.0018	0.0003	± 0.0006
Cu	0.0542	± 0.0045	0.0221	± 0.0021	0.0075	± 0.0007
Zn	0.0814	± 0.0056	0.0332	± 0.0027	0.0113	± 0.0010
* Ga	0.0090	± 0.0034	0.0037	± 0.0014	0.0013	± 0.0005
* As	0.0068	± 0.0045	0.0028	± 0.0018	0.0009	± 0.0006
* Se	0.0034	± 0.0034	0.0014	± 0.0014	0.0005	± 0.0005
Br	0.1006	± 0.0068	0.0410	± 0.0032	0.0140	± 0.0012
Rb	0.0102	± 0.0034	0.0042	± 0.0014	0.0014	± 0.0005
Sr	0.0475	± 0.0056	0.0194	± 0.0024	0.0066	± 0.0009
* Y	0.0000	± 0.0056	0.0000	± 0.0023	0.0000	± 0.0008
* Zr	0.0034	± 0.0068	0.0014	± 0.0028	0.0005	± 0.0009
* Nb	0.0203	± 0.0090	0.0083	± 0.0037	0.0028	± 0.0013
* Mo	0.0000	± 0.0113	0.0000	± 0.0046	0.0000	± 0.0016
* Ag	0.0000	± 0.0282	0.0000	± 0.0115	0.0000	± 0.0039
* Cd	0.0000	± 0.0305	0.0000	± 0.0125	0.0000	± 0.0042
* In	0.0791	± 0.0339	0.0323	± 0.0139	0.0110	± 0.0047
* Sn	0.0000	± 0.0373	0.0000	± 0.0152	0.0000	± 0.0052
* Sb	0.1017	± 0.0576	0.0415	± 0.0236	0.0141	± 0.0080
* Cs	0.0000	± 0.0136	0.0000	± 0.0055	0.0000	± 0.0019
* Ba	0.0000	± 0.0237	0.0000	± 0.0097	0.0000	± 0.0033
* La	0.0000	± 0.0181	0.0000	± 0.0074	0.0000	± 0.0025
* Ce	0.0000	± 0.0170	0.0000	± 0.0069	0.0000	± 0.0024
* Sm	0.0000	± 0.0215	0.0000	± 0.0088	0.0000	± 0.0030
* Eu	0.0000	± 0.0249	0.0000	± 0.0101	0.0000	± 0.0035
* Tb	0.0170	± 0.0508	0.0069	± 0.0208	0.0024	± 0.0071
* Hf	0.0000	± 0.0102	0.0000	± 0.0042	0.0000	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0037	0.0000	± 0.0013
* W	0.0000	± 0.0079	0.0000	± 0.0032	0.0000	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0028	0.0000	± 0.0009
Au	0.0215	± 0.0056	0.0088	± 0.0023	0.0030	± 0.0008
* Hg	0.0226	± 0.0090	0.0092	± 0.0037	0.0031	± 0.0013
* Pb	0.0000	± 0.0102	0.0000	± 0.0042	0.0000	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2467
Filter ID: P7325018
Site: ST56 PM10
Sample Date: 9/ 1/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	µg/filter		percent		µg/m ³	
Gravimetry						
Net Mass	305. ± 10.				42.36	± 2.533
XRF						
Na	22.07	± 1.487	7.236	± 0.5422	3.0651	± 0.2572
Mg	4.136	± 0.2825	1.356	± 0.1027	0.5744	± 0.0486
Al	4.169	± 0.2339	1.367	± 0.0888	0.5790	± 0.0435
Si	10.82	± 0.5661	3.547	± 0.2190	1.5027	± 0.1088
P	0.0927	± 0.0294	0.0304	± 0.0097	0.0129	± 0.0041
S	6.009	± 0.3096	1.970	± 0.1203	0.8346	± 0.0599
Cl	38.63	± 1.961	12.67	± 0.7653	5.3659	± 0.3823
K	1.888	± 0.0960	0.6191	± 0.0375	0.2623	± 0.0187
Ca	3.023	± 0.1526	0.9911	± 0.0596	0.4198	± 0.0298
Sc	0.0633	± 0.0136	0.0207	± 0.0045	0.0088	± 0.0019
Ti	0.2848	± 0.0170	0.0934	± 0.0063	0.0396	± 0.0031
V	0.0384	± 0.0079	0.0126	± 0.0026	0.0053	± 0.0011
* Cr	0.0000	± 0.0068	0.0000	± 0.0022	0.0000	± 0.0009
Mn	0.0814	± 0.0136	0.0267	± 0.0045	0.0113	± 0.0020
Fe	3.767	± 0.1887	1.235	± 0.0739	0.5233	± 0.0370
* Co	0.0000	± 0.0124	0.0000	± 0.0041	0.0000	± 0.0017
* Ni	0.0113	± 0.0045	0.0037	± 0.0015	0.0016	± 0.0006
Cu	0.0610	± 0.0045	0.0200	± 0.0016	0.0085	± 0.0008
Zn	0.1605	± 0.0090	0.0526	± 0.0034	0.0223	± 0.0017
* Ga	0.0068	± 0.0034	0.0022	± 0.0011	0.0009	± 0.0005
* As	0.0056	± 0.0045	0.0019	± 0.0015	0.0008	± 0.0006
* Se	0.0000	± 0.0034	0.0000	± 0.0011	0.0000	± 0.0005
Br	0.1096	± 0.0068	0.0359	± 0.0025	0.0152	± 0.0012
* Rb	0.0000	± 0.0034	0.0000	± 0.0011	0.0000	± 0.0005
Sr	0.0373	± 0.0045	0.0122	± 0.0015	0.0052	± 0.0007
* Y	0.0000	± 0.0056	0.0000	± 0.0019	0.0000	± 0.0008
* Zr	0.0000	± 0.0068	0.0000	± 0.0022	0.0000	± 0.0009
* Nb	0.0000	± 0.0090	0.0000	± 0.0030	0.0000	± 0.0013
* Mo	0.0000	± 0.0113	0.0000	± 0.0037	0.0000	± 0.0016
* Ag	0.0000	± 0.0282	0.0000	± 0.0093	0.0000	± 0.0039
* Cd	0.0339	± 0.0305	0.0111	± 0.0100	0.0047	± 0.0042
* In	0.0113	± 0.0339	0.0037	± 0.0111	0.0016	± 0.0047
* Sn	0.0023	± 0.0384	0.0007	± 0.0126	0.0003	± 0.0053
* Sb	0.0102	± 0.0588	0.0033	± 0.0193	0.0014	± 0.0082
* Cs	0.0000	± 0.0136	0.0000	± 0.0044	0.0000	± 0.0019
* Ba	0.0904	± 0.0305	0.0296	± 0.0101	0.0126	± 0.0043
La	0.1017	± 0.0192	0.0333	± 0.0064	0.0141	± 0.0028
* Ce	0.0384	± 0.0170	0.0126	± 0.0056	0.0053	± 0.0024
* Sm	0.0000	± 0.0215	0.0000	± 0.0070	0.0000	± 0.0030
* Eu	0.0000	± 0.0249	0.0000	± 0.0082	0.0000	± 0.0035
* Tb	0.0000	± 0.0655	0.0000	± 0.0215	0.0000	± 0.0091
* Hf	0.0023	± 0.0102	0.0007	± 0.0033	0.0003	± 0.0014
* Ta	0.0000	± 0.0090	0.0000	± 0.0030	0.0000	± 0.0013
* W	0.0090	± 0.0079	0.0030	± 0.0026	0.0013	± 0.0011
* Ir	0.0000	± 0.0068	0.0000	± 0.0022	0.0000	± 0.0009
* Au	0.0023	± 0.0056	0.0007	± 0.0019	0.0003	± 0.0008
* Hg	0.0000	± 0.0090	0.0000	± 0.0030	0.0000	± 0.0013
* Pb	0.0192	± 0.0102	0.0063	± 0.0033	0.0027	± 0.0014

* - XRF Concentration is less than three times the uncertainty

Lab ID: 21-T2959
Filter ID: P7326743
Site: CRC PM10
Sample Date: 9/ 1/21
Filter Lot #: 7094056
Volume: 7.200 ± 0.360 m³
Deposit Area: 11.3 cm²
Size Fraction: PM10

Analyte	μg/filter			percent	μg/m ³	
Gravimetry						
Net Mass	213. ± 10.				29.58	± 2.029
XRF						
Na	20.65	±	1.361	9.693	±	0.7843
Mg	3.220	±	0.2407	1.512	±	0.1334
Al	2.094	±	0.1322	0.9830	±	0.0773
Si	4.468	±	0.2339	2.098	±	0.1475
* P	0.0339	±	0.0282	0.0159	±	0.0133
S	6.110	±	0.3119	2.868	±	0.1989
Cl	36.16	±	1.827	16.98	±	1.171
K	1.344	±	0.0689	0.6308	±	0.0439
Ca	1.729	±	0.0881	0.8117	±	0.0563
* Sc	0.0000	±	0.0124	0.0000	±	0.0058
Ti	0.1718	±	0.0113	0.0806	±	0.0065
* V	0.0000	±	0.0079	0.0000	±	0.0037
* Cr	0.0000	±	0.0068	0.0000	±	0.0032
Mn	0.0429	±	0.0124	0.0202	±	0.0059
Fe	1.566	±	0.0791	0.7353	±	0.0507
* Co	0.0000	±	0.0090	0.0000	±	0.0042
* Ni	0.0124	±	0.0045	0.0058	±	0.0021
Cu	0.0599	±	0.0045	0.0281	±	0.0025
Zn	0.0768	±	0.0056	0.0361	±	0.0031
* Ga	0.0079	±	0.0034	0.0037	±	0.0016
* As	0.0023	±	0.0045	0.0011	±	0.0021
* Se	0.0000	±	0.0034	0.0000	±	0.0016
Br	0.0994	±	0.0068	0.0467	±	0.0039
* Rb	0.0079	±	0.0034	0.0037	±	0.0016
Sr	0.0226	±	0.0045	0.0106	±	0.0022
* Y	0.0034	±	0.0056	0.0016	±	0.0027
Zr	0.0226	±	0.0068	0.0106	±	0.0032
* Nb	0.0000	±	0.0090	0.0000	±	0.0042
* Mo	0.0000	±	0.0113	0.0000	±	0.0053
* Ag	0.0000	±	0.0203	0.0000	±	0.0095
* Cd	0.0316	±	0.0305	0.0149	±	0.0143
* In	0.0000	±	0.0339	0.0000	±	0.0159
* Sn	0.0000	±	0.0373	0.0000	±	0.0175
* Sb	0.0000	±	0.0576	0.0000	±	0.0271
* Cs	0.0000	±	0.0136	0.0000	±	0.0064
* Ba	0.0000	±	0.0226	0.0000	±	0.0106
* La	0.0000	±	0.0158	0.0000	±	0.0074
* Ce	0.0000	±	0.0147	0.0000	±	0.0069
* Sm	0.0000	±	0.0203	0.0000	±	0.0095
* Eu	0.0000	±	0.0249	0.0000	±	0.0117
* Tb	0.0520	±	0.0441	0.0244	±	0.0207
* Hf	0.0170	±	0.0102	0.0080	±	0.0048
* Ta	0.0000	±	0.0090	0.0000	±	0.0042
* W	0.0181	±	0.0079	0.0085	±	0.0037
* Ir	0.0079	±	0.0068	0.0037	±	0.0032
* Au	0.0034	±	0.0056	0.0016	±	0.0027
* Hg	0.0000	±	0.0090	0.0000	±	0.0042
* Pb	0.0192	±	0.0079	0.0090	±	0.0037

* - XRF Concentration is less than three times the uncertainty

CHESTER LabNet

Quant'X 1020 XRF Analytical Quality Assurance Report

Client: Sacramento Metro - AQMD

Report: 21-413

Analysis Period: September 14 through 16, 2021

Number of Samples: 35

1. Precision Data

Micromatter Multi-elemental Quality Control Standard: 34103

QC Standard Results

Analyte	n	micrograms per square centimeter			c.v.	%E
		Calib.	Meas.	S.D.		
Si	4	7.91	7.72	0.08	1.08	-2.39
Ti	4	10.84	10.91	0.06	0.53	0.66
Fe	4	11.22	11.35	0.09	0.80	1.10
Se	4	5.19	5.23	0.03	0.51	0.71
Cd	4	6.87	7.20	0.14	1.98	4.84
Pb	4	12.57	12.65	0.11	0.91	0.65

2. Accuracy Data

NIST Standard Reference Materials: SRM 2783

Analyte/ SRM	n	Certified Value($\mu\text{g}/\text{cm}^2$)	Measured Value ($\mu\text{g}/\text{cm}^2$)			% Rec.
			High	Low	Average	
K 2783	4	0.5301	0.4627	0.4511	0.4566 +/- 0.0042	86.1
Ca 2783	4	1.3253	1.1159	1.0786	1.0913 +/- 0.0147	82.3
Ti 2783	4	0.1496	0.1337	0.1277	0.1314 +/- 0.0023	87.9
Fe 2783	4	2.6606	2.5055	2.4595	2.4933 +/- 0.0195	93.7
Cu 2783	4	0.0406	0.0365	0.0325	0.0342 +/- 0.0014	84.3
Zn 2783	4	0.1797	0.2119	0.2065	0.2093 +/- 0.0019	116.5
Pb 2783	4	0.0318	0.0370	0.0278	0.0321 +/- 0.0035	100.8

3. Addendum

Micromatter Certified Reference Materials

CRM	Analytes	Certified Value($\mu\text{g}/\text{cm}^2$)	Measured Value($\mu\text{g}/\text{cm}^2$)	% Rec.
39149	Cr	53.7	51.5	95.8
39150	Cu	49.4	46.0	93.2
39151	Zn, Te	49.8	48.7	97.8
39152	Ga, As	50.9	50.0	98.2
39153	Se, Cd	47.1	46.9	99.5
39154	Pb	47.9	46.3	96.6

NIST: National Institute of Standards and Technology

% Rec: Percent Recovery = $(\text{Experimental}/\text{Given}) \times 100$

n: Number of Observations

S.D.: Standard Deviation

c.v.: Coefficient of Variation = $(S.D./\text{Measured}) \times 100$

% E: Percent Error = $[(\text{Measured}-\text{Calibrated})/\text{Calibrated}] \times 100$

QUANT'X 1020 REPLICATE REPORT

1.88

 Original ID: 21T2453
 Replicate ID: RT2453

Element	Original ug/cm ²			Replicate ug/cm ²			Difference ug/cm ²			RPD			
	Value	U	Value	U	Value	U	Value	U	Value	U	Value	U	
Na	0.6346	+-	0.0631	0.5854	+-	0.0631	0.0492	+-	0.0892	+	8.1	+-	14.6
Mg	0.1490	+-	0.0149	0.1370	+-	0.0145	0.0120	+-	0.0208	+	8.4	+-	14.5
Al	0.2390	+-	0.0137	0.2286	+-	0.0131	0.0103	+-	0.0190	+	4.4	+-	8.1
Si	0.5813	+-	0.0301	0.5872	+-	0.0304	-0.0059	+-	0.0427	+	-1.0	+-	7.3
P	0.0174	+-	0.0021	0.0200	+-	0.0022	-0.0026	+-	0.0030	+	-13.9	+-	16.1
S	0.4900	+-	0.0250	0.4676	+-	0.0239	0.0224	+-	0.0346	+	4.7	+-	7.2
Cl	0.1453	+-	0.0076	0.1469	+-	0.0077	-0.0016	+-	0.0108	+	-1.1	+-	7.4
K	0.1396	+-	0.0071	0.1433	+-	0.0073	-0.0037	+-	0.0102	+	-2.6	+-	7.2
Ca	0.1707	+-	0.0086	0.1684	+-	0.0085	0.0023	+-	0.0121	+	1.4	+-	7.1
Sc	0.0041	+-	0.0011	0.0084	+-	0.0010	-0.0043	+-	0.0015	-	-68.8	+-	23.7
Ti	0.0191	+-	0.0012	0.0205	+-	0.0012	-0.0014	+-	0.0017	+	-7.1	+-	8.5
V	0.0005	+-	0.0007	0.0017	+-	0.0007	-0.0012	+-	0.0010				
Cr	0.0000	+-	0.0006	0.0000	+-	0.0006	0.0000	+-	0.0009				
Mn	0.0080	+-	0.0012	0.0091	+-	0.0012	-0.0011	+-	0.0017	+	-12.9	+-	19.5
Fe	0.1882	+-	0.0094	0.1921	+-	0.0096	-0.0039	+-	0.0135	+	-2.1	+-	7.1
Co	0.0000	+-	0.0009	0.0000	+-	0.0009	0.0000	+-	0.0013				
Ni	0.0000	+-	0.0004	0.0000	+-	0.0004	0.0000	+-	0.0006				
Cu	0.0052	+-	0.0004	0.0058	+-	0.0004	-0.0006	+-	0.0006	+	-10.0	+-	11.0
Zn	0.0102	+-	0.0006	0.0114	+-	0.0007	-0.0012	+-	0.0009	0	-11.2	+-	8.3
Ga	0.0000	+-	0.0003	0.0009	+-	0.0003	-0.0009	+-	0.0004				
As	0.0002	+-	0.0004	0.0000	+-	0.0004	0.0002	+-	0.0006				
Se	0.0000	+-	0.0003	0.0007	+-	0.0003	-0.0007	+-	0.0004				
Br	0.0045	+-	0.0004	0.0061	+-	0.0005	-0.0016	+-	0.0006	-	-29.2	+-	11.6
Rb	0.0010	+-	0.0003	0.0004	+-	0.0003	0.0005	+-	0.0004	0	73.9	+-	57.0
Sr	0.0013	+-	0.0004	0.0007	+-	0.0005	0.0006	+-	0.0006				
Y	0.0000	+-	0.0005	0.0012	+-	0.0005	-0.0012	+-	0.0007				
Zr	0.0032	+-	0.0007	0.0027	+-	0.0006	0.0005	+-	0.0010	+	15.7	+-	32.5
Nb	0.0000	+-	0.0009	0.0000	+-	0.0009	0.0000	+-	0.0012				
Mo	0.0014	+-	0.0010	0.0030	+-	0.0011	-0.0016	+-	0.0015				
Ag	0.0000	+-	0.0025	0.0006	+-	0.0025	-0.0006	+-	0.0036				
Cd	0.0071	+-	0.0027	0.0004	+-	0.0027	0.0067	+-	0.0038				
In	0.0000	+-	0.0030	0.0050	+-	0.0030	-0.0050	+-	0.0042				
Sn	0.0103	+-	0.0035	0.0080	+-	0.0033	0.0023	+-	0.0048				
Sb	0.0000	+-	0.0051	0.0000	+-	0.0051	0.0000	+-	0.0073				
Cs	0.0000	+-	0.0012	0.0000	+-	0.0012	0.0000	+-	0.0018				
Ba	0.0049	+-	0.0024	0.0000	+-	0.0023	0.0049	+-	0.0033				
La	0.0057	+-	0.0015	0.0033	+-	0.0016	0.0024	+-	0.0022	0	53.3	+-	49.1
Ce	0.0000	+-	0.0015	0.0047	+-	0.0015	-0.0047	+-	0.0022				
Sm	0.0000	+-	0.0020	0.0000	+-	0.0019	0.0000	+-	0.0027				
Eu	0.0000	+-	0.0022	0.0000	+-	0.0022	0.0000	+-	0.0032				
Tb	0.0078	+-	0.0045	0.0009	+-	0.0045	0.0069	+-	0.0064				
Hf	0.0000	+-	0.0009	0.0000	+-	0.0009	0.0000	+-	0.0013				
Ta	0.0000	+-	0.0008	0.0000	+-	0.0008	0.0000	+-	0.0011				
W	0.0000	+-	0.0007	0.0000	+-	0.0007	0.0000	+-	0.0010				
Ir	0.0009	+-	0.0006	0.0000	+-	0.0006	0.0009	+-	0.0008				
Au	0.0021	+-	0.0005	0.0020	+-	0.0005	0.0001	+-	0.0007	+	4.9	+-	35.5
Hg	0.0000	+-	0.0008	0.0000	+-	0.0008	0.0000	+-	0.0012				
Pb	0.0000	+-	0.0009	0.0000	+-	0.0009	0.0000	+-	0.0013				

RPD: Relative Percent Difference $(X_1 - X_2) / [(X_1 + X_2) / 2] * 100$. RPD is calculated when original value is greater than three times its uncertainty.

QUANT'X 1020 REPLICATE REPORT

1.55

Original ID: 21T2467

Replicate ID: RT2467

Element	Original ug/cm ²		Replicate ug/cm ²		Difference ug/cm ²		RPD		
	Value	Unc.	Value	Unc.	Value	Unc.	Value	Unc.	Value
Na	1.9531	+/- 0.1316	1.9967	+/- 0.1332	-0.0436	+/- 0.1872	+	-2.2	+/- 9.5
Mg	0.3660	+/- 0.0250	0.3380	+/- 0.0238	0.0280	+/- 0.0346	+	8.0	+/- 9.8
Al	0.3689	+/- 0.0207	0.3949	+/- 0.0220	-0.0260	+/- 0.0302	+	-6.8	+/- 7.9
Si	0.9575	+/- 0.0501	0.9901	+/- 0.0518	-0.0326	+/- 0.0721	+	-3.3	+/- 7.4
P	0.0082	+/- 0.0026	0.0088	+/- 0.0026	-0.0006	+/- 0.0037	+	-7.1	+/- 43.5
S	0.5318	+/- 0.0274	0.5506	+/- 0.0284	-0.0189	+/- 0.0395	+	-3.5	+/- 7.3
Cl	3.4190	+/- 0.1735	3.4770	+/- 0.1765	-0.0580	+/- 0.2475	+	-1.7	+/- 7.2
K	0.1671	+/- 0.0085	0.1655	+/- 0.0085	0.0016	+/- 0.0120	+	1.0	+/- 7.2
Ca	0.2675	+/- 0.0135	0.2702	+/- 0.0137	-0.0027	+/- 0.0192	+	-1.0	+/- 7.2
Sc	0.0056	+/- 0.0012	0.0026	+/- 0.0013	0.0030	+/- 0.0018	0	74.3	+/- 43.2
Ti	0.0252	+/- 0.0015	0.0295	+/- 0.0017	-0.0043	+/- 0.0022	0	-15.6	+/- 8.2
V	0.0034	+/- 0.0007	0.0019	+/- 0.0007	0.0015	+/- 0.0010	0	56.8	+/- 37.5
Cr	0.0000	+/- 0.0006	0.0000	+/- 0.0006	0.0000	+/- 0.0009			
Mn	0.0072	+/- 0.0012	0.0052	+/- 0.0011	0.0020	+/- 0.0016	0	32.3	+/- 26.0
Fe	0.3334	+/- 0.0167	0.3461	+/- 0.0173	-0.0127	+/- 0.0240	+	-3.7	+/- 7.1
Co	0.0000	+/- 0.0011	0.0000	+/- 0.0011	0.0000	+/- 0.0016			
Ni	0.0010	+/- 0.0004	0.0012	+/- 0.0004	-0.0002	+/- 0.0006			
Cu	0.0054	+/- 0.0004	0.0047	+/- 0.0004	0.0007	+/- 0.0006	0	14.7	+/- 11.6
Zn	0.0142	+/- 0.0008	0.0162	+/- 0.0009	-0.0021	+/- 0.0012	0	-13.6	+/- 7.8
Ga	0.0006	+/- 0.0003	0.0006	+/- 0.0003	0.0000	+/- 0.0004			
As	0.0005	+/- 0.0004	0.0000	+/- 0.0004	0.0005	+/- 0.0006			
Se	0.0000	+/- 0.0003	0.0006	+/- 0.0003	-0.0006	+/- 0.0004			
Br	0.0097	+/- 0.0006	0.0104	+/- 0.0006	-0.0007	+/- 0.0009	+	-7.0	+/- 8.6
Rb	0.0000	+/- 0.0003	0.0019	+/- 0.0003	-0.0019	+/- 0.0004			
Sr	0.0033	+/- 0.0004	0.0044	+/- 0.0005	-0.0011	+/- 0.0006	0	-28.6	+/- 16.3
Y	0.0000	+/- 0.0005	0.0028	+/- 0.0005	-0.0028	+/- 0.0007			
Zr	0.0000	+/- 0.0006	0.0051	+/- 0.0006	-0.0051	+/- 0.0009			
Nb	0.0000	+/- 0.0008	0.0007	+/- 0.0008	-0.0007	+/- 0.0012			
Mo	0.0000	+/- 0.0010	0.0001	+/- 0.0010	-0.0001	+/- 0.0014			
Ag	0.0000	+/- 0.0025	0.0031	+/- 0.0026	-0.0031	+/- 0.0036			
Cd	0.0030	+/- 0.0027	0.0000	+/- 0.0027	0.0030	+/- 0.0038			
In	0.0010	+/- 0.0030	0.0010	+/- 0.0030	0.0000	+/- 0.0042			
Sn	0.0002	+/- 0.0034	0.0060	+/- 0.0033	-0.0058	+/- 0.0047			
Sb	0.0009	+/- 0.0052	0.0000	+/- 0.0051	0.0009	+/- 0.0073			
Cs	0.0000	+/- 0.0012	0.0000	+/- 0.0012	0.0000	+/- 0.0018			
Ba	0.0080	+/- 0.0027	0.0006	+/- 0.0026	0.0074	+/- 0.0037			
La	0.0090	+/- 0.0017	0.0037	+/- 0.0018	0.0053	+/- 0.0025	-	84.2	+/- 39.6
Ce	0.0034	+/- 0.0015	0.0036	+/- 0.0015	-0.0002	+/- 0.0022			
Sm	0.0000	+/- 0.0019	0.0000	+/- 0.0019	0.0000	+/- 0.0027			
Eu	0.0000	+/- 0.0022	0.0000	+/- 0.0022	0.0000	+/- 0.0032			
Tb	0.0000	+/- 0.0058	0.0000	+/- 0.0058	0.0000	+/- 0.0082			
Hf	0.0002	+/- 0.0009	0.0000	+/- 0.0009	0.0002	+/- 0.0013			
Ta	0.0000	+/- 0.0008	0.0009	+/- 0.0008	-0.0009	+/- 0.0011			
W	0.0008	+/- 0.0007	0.0013	+/- 0.0007	-0.0005	+/- 0.0010			
Ir	0.0000	+/- 0.0006	0.0000	+/- 0.0006	0.0000	+/- 0.0008			
Au	0.0002	+/- 0.0005	0.0021	+/- 0.0005	-0.0019	+/- 0.0007			
Hg	0.0000	+/- 0.0008	0.0004	+/- 0.0008	-0.0004	+/- 0.0012			
Pb	0.0017	+/- 0.0009	0.0037	+/- 0.0007	-0.0020	+/- 0.0011			

RPD: Relative Percent Difference $(X_1 - X_2) / [(X_1 + X_2) / 2] * 100$. RPD is calculated when original value is greater than three times its uncertainty.

QUANT'X 1020 REPLICATE REPORT

2.26

Original ID: 21T2713

Replicate ID: RT2713

Element	Original ug/cm ²			Replicate ug/cm ²			Difference ug/cm ²			RPD			
Na	1.8489	+-	0.1277	1.9540	+-	0.1320	-0.1052	+-	0.1836	+	-5.5	+-	9.7
Mg	0.3640	+-	0.0252	0.3750	+-	0.0257	-0.0110	+-	0.0360	+	-3.0	+-	9.7
Al	0.3980	+-	0.0222	0.4135	+-	0.0230	-0.0155	+-	0.0320	+	-3.8	+-	7.9
Si	1.0198	+-	0.0534	1.0238	+-	0.0536	-0.0040	+-	0.0757	+	-0.4	+-	7.4
P	0.0144	+-	0.0027	0.0086	+-	0.0027	0.0058	+-	0.0038	0	50.4	+-	32.9
S	0.5663	+-	0.0292	0.5517	+-	0.0285	0.0146	+-	0.0408	+	2.6	+-	7.3
Cl	3.3340	+-	0.1692	3.3520	+-	0.1702	-0.0180	+-	0.2400	+	-0.5	+-	7.2
K	0.1642	+-	0.0084	0.1620	+-	0.0083	0.0022	+-	0.0118	+	1.3	+-	7.2
Ca	0.2973	+-	0.0150	0.2986	+-	0.0151	-0.0013	+-	0.0213	+	-0.4	+-	7.2
Sc	0.0000	+-	0.0014	0.0110	+-	0.0012	-0.0110	+-	0.0018				
Ti	0.0301	+-	0.0017	0.0246	+-	0.0014	0.0055	+-	0.0022	-	20.0	+-	8.2
V	0.0013	+-	0.0008	0.0042	+-	0.0007	-0.0030	+-	0.0010				
Cr	0.0000	+-	0.0006	0.0000	+-	0.0006	0.0000	+-	0.0009				
Mn	0.0076	+-	0.0012	0.0060	+-	0.0011	0.0016	+-	0.0016	+	23.5	+-	23.9
Fe	0.4147	+-	0.0207	0.4118	+-	0.0206	0.0029	+-	0.0292	+	0.7	+-	7.1
Co	0.0000	+-	0.0011	0.0000	+-	0.0011	0.0000	+-	0.0016				
Ni	0.0003	+-	0.0004	0.0010	+-	0.0004	-0.0007	+-	0.0006				
Cu	0.0083	+-	0.0005	0.0072	+-	0.0005	0.0012	+-	0.0007	0	14.8	+-	9.3
Zn	0.0153	+-	0.0008	0.0146	+-	0.0008	0.0008	+-	0.0012	+	5.3	+-	7.8
Ga	0.0011	+-	0.0003	0.0005	+-	0.0003	0.0005	+-	0.0004	0	67.1	+-	47.5
As	0.0000	+-	0.0004	0.0006	+-	0.0004	-0.0006	+-	0.0006				
Se	0.0004	+-	0.0002	0.0005	+-	0.0003	-0.0001	+-	0.0004				
Br	0.0066	+-	0.0006	0.0069	+-	0.0005	-0.0003	+-	0.0008	+	-5.1	+-	11.4
Rb	0.0012	+-	0.0003	0.0008	+-	0.0003	0.0004	+-	0.0004	+	36.4	+-	43.0
Sr	0.0020	+-	0.0005	0.0022	+-	0.0005	-0.0002	+-	0.0007	+	-7.7	+-	32.3
Y	0.0000	+-	0.0005	0.0004	+-	0.0005	-0.0004	+-	0.0007				
Zr	0.0007	+-	0.0006	0.0009	+-	0.0006	-0.0002	+-	0.0009				
Nb	0.0023	+-	0.0009	0.0000	+-	0.0009	0.0023	+-	0.0012				
Mo	0.0020	+-	0.0010	0.0024	+-	0.0010	-0.0004	+-	0.0014				
Ag	0.0000	+-	0.0025	0.0000	+-	0.0025	0.0000	+-	0.0036				
Cd	0.0000	+-	0.0027	0.0107	+-	0.0027	-0.0107	+-	0.0038				
In	0.0010	+-	0.0030	0.0060	+-	0.0030	-0.0050	+-	0.0043				
Sn	0.0020	+-	0.0033	0.0070	+-	0.0033	-0.0050	+-	0.0047				
Sb	0.0030	+-	0.0051	0.0000	+-	0.0051	0.0030	+-	0.0073				
Cs	0.0000	+-	0.0015	0.0000	+-	0.0012	0.0000	+-	0.0019				
Ba	0.0000	+-	0.0027	0.0061	+-	0.0027	-0.0061	+-	0.0038				
La	0.0000	+-	0.0018	0.0066	+-	0.0017	-0.0066	+-	0.0025				
Ce	0.0045	+-	0.0015	0.0000	+-	0.0017	0.0045	+-	0.0023				
Sm	0.0000	+-	0.0019	0.0000	+-	0.0019	0.0000	+-	0.0027				
Eu	0.0038	+-	0.0031	0.0000	+-	0.0031	0.0038	+-	0.0044				
Tb	0.0000	+-	0.0063	0.0039	+-	0.0063	-0.0039	+-	0.0089				
Hf	0.0013	+-	0.0009	0.0000	+-	0.0009	0.0013	+-	0.0013				
Ta	0.0000	+-	0.0010	0.0025	+-	0.0010	-0.0025	+-	0.0015				
W	0.0026	+-	0.0007	0.0012	+-	0.0007	0.0014	+-	0.0010	0	73.7	+-	54.1
Ir	0.0000	+-	0.0006	0.0000	+-	0.0006	0.0000	+-	0.0008				
Au	0.0000	+-	0.0005	0.0000	+-	0.0005	0.0000	+-	0.0007				
Hg	0.0001	+-	0.0008	0.0019	+-	0.0008	-0.0018	+-	0.0012				
Pb	0.0015	+-	0.0007	0.0027	+-	0.0009	-0.0012	+-	0.0011				

RPD: Relative Percent Difference $(X_1 - X_2) / [(X_1 + X_2) / 2] * 100$. RPD is calculated when original value is greater than three times its uncertainty.

QUANT'X 1020 REPLICATE REPORT

2.10

Original ID: 21T2959

Replicate ID: RT2959

Element	Original ug/cm ²			Replicate ug/cm ²			Difference ug/cm ²			RPD		
Na	1.8273	+/-	0.1204	1.7952	+/-	0.1205	0.0322	+/-	0.1703	+	1.8	+/- 9.4
Mg	0.2850	+/-	0.0213	0.2801	+/-	0.0213	0.0049	+/-	0.0301	+	1.7	+/- 10.6
Al	0.1853	+/-	0.0117	0.1911	+/-	0.0120	-0.0059	+/-	0.0168	+	-3.1	+/- 8.9
Si	0.3954	+/-	0.0207	0.4090	+/-	0.0214	-0.0136	+/-	0.0298	+	-3.4	+/- 7.4
P	0.0030	+/-	0.0025	0.0066	+/-	0.0025	-0.0036	+/-	0.0035			
S	0.5407	+/-	0.0276	0.5384	+/-	0.0275	0.0023	+/-	0.0390	+	0.4	+/- 7.2
Cl	3.2000	+/-	0.1617	3.2700	+/-	0.1653	-0.0700	+/-	0.2313	+	-2.2	+/- 7.1
K	0.1189	+/-	0.0061	0.1191	+/-	0.0061	-0.0002	+/-	0.0086	+	-0.2	+/- 7.3
Ca	0.1530	+/-	0.0078	0.1621	+/-	0.0082	-0.0091	+/-	0.0113	+	-5.8	+/- 7.2
Sc	0.0000	+/-	0.0011	0.0048	+/-	0.0010	-0.0048	+/-	0.0014			
Ti	0.0152	+/-	0.0010	0.0125	+/-	0.0009	0.0027	+/-	0.0013	-	19.8	+/- 9.5
V	0.0000	+/-	0.0007	0.0012	+/-	0.0006	-0.0012	+/-	0.0009			
Cr	0.0000	+/-	0.0006	0.0000	+/-	0.0006	0.0000	+/-	0.0008			
Mn	0.0038	+/-	0.0011	0.0036	+/-	0.0011	0.0002	+/-	0.0016	+	5.4	+/- 42.4
Fe	0.1386	+/-	0.0070	0.1447	+/-	0.0072	-0.0061	+/-	0.0100	+	-4.3	+/- 7.1
Co	0.0000	+/-	0.0008	0.0000	+/-	0.0008	0.0000	+/-	0.0011			
Ni	0.0011	+/-	0.0004	0.0008	+/-	0.0004	0.0002	+/-	0.0006			
Cu	0.0053	+/-	0.0004	0.0038	+/-	0.0004	0.0014	+/-	0.0006	-	31.4	+/- 12.4
Zn	0.0068	+/-	0.0005	0.0075	+/-	0.0005	-0.0008	+/-	0.0007	0	-10.9	+/- 9.7
Ga	0.0007	+/-	0.0003	0.0003	+/-	0.0003	0.0005	+/-	0.0004			
As	0.0002	+/-	0.0004	0.0013	+/-	0.0004	-0.0011	+/-	0.0006			
Se	0.0000	+/-	0.0003	0.0003	+/-	0.0002	-0.0003	+/-	0.0004			
Br	0.0088	+/-	0.0006	0.0080	+/-	0.0005	0.0008	+/-	0.0008	0	9.2	+/- 9.1
Rb	0.0007	+/-	0.0003	0.0011	+/-	0.0003	-0.0004	+/-	0.0004			
Sr	0.0020	+/-	0.0004	0.0016	+/-	0.0004	0.0004	+/-	0.0006	+	23.3	+/- 32.5
Y	0.0003	+/-	0.0005	0.0008	+/-	0.0005	-0.0005	+/-	0.0007			
Zr	0.0020	+/-	0.0006	0.0012	+/-	0.0006	0.0008	+/-	0.0009	+	47.8	+/- 52.7
Nb	0.0000	+/-	0.0008	0.0024	+/-	0.0008	-0.0024	+/-	0.0011			
Mo	0.0000	+/-	0.0010	0.0000	+/-	0.0010	0.0000	+/-	0.0014			
Ag	0.0000	+/-	0.0018	0.0041	+/-	0.0026	-0.0041	+/-	0.0032			
Cd	0.0028	+/-	0.0027	0.0112	+/-	0.0020	-0.0084	+/-	0.0033			
In	0.0000	+/-	0.0030	0.0010	+/-	0.0030	-0.0010	+/-	0.0042			
Sn	0.0000	+/-	0.0033	0.0060	+/-	0.0033	-0.0060	+/-	0.0047			
Sb	0.0000	+/-	0.0051	0.0030	+/-	0.0051	-0.0030	+/-	0.0073			
Cs	0.0000	+/-	0.0012	0.0000	+/-	0.0012	0.0000	+/-	0.0018			
Ba	0.0000	+/-	0.0020	0.0000	+/-	0.0019	0.0000	+/-	0.0027			
La	0.0000	+/-	0.0014	0.0078	+/-	0.0013	-0.0078	+/-	0.0019			
Ce	0.0000	+/-	0.0013	0.0002	+/-	0.0013	-0.0002	+/-	0.0019			
Sm	0.0000	+/-	0.0018	0.0000	+/-	0.0018	0.0000	+/-	0.0026			
Eu	0.0000	+/-	0.0022	0.0000	+/-	0.0022	0.0000	+/-	0.0032			
Tb	0.0046	+/-	0.0039	0.0000	+/-	0.0039	0.0046	+/-	0.0055			
Hf	0.0015	+/-	0.0009	0.0000	+/-	0.0009	0.0015	+/-	0.0013			
Ta	0.0000	+/-	0.0008	0.0000	+/-	0.0008	0.0000	+/-	0.0011			
W	0.0016	+/-	0.0007	0.0000	+/-	0.0007	0.0016	+/-	0.0010			
Ir	0.0007	+/-	0.0006	0.0000	+/-	0.0006	0.0007	+/-	0.0008			
Au	0.0003	+/-	0.0005	0.0005	+/-	0.0005	-0.0002	+/-	0.0007			
Hg	0.0000	+/-	0.0008	0.0000	+/-	0.0008	0.0000	+/-	0.0012			
Pb	0.0017	+/-	0.0007	0.0000	+/-	0.0009	0.0017	+/-	0.0011			

RPD: Relative Percent Difference $(X_1 - X_2) / [(X_1 + X_2) / 2] * 100$. RPD is calculated when original value is greater than three times its uncertainty.

CHESTER LabNet

12242 SW Garden Place ♦ Tigard, OR 97223 ♦ (503) 624-2183 ♦ www.chesterlab.net ♦ cln@chesterlab.net

CHAIN-OFF-CUSTODY RECORD

CLIENT INFORMATION	
Company Name: SMAQMD	
Contact: Levi Ford	Email: iford@airquality.org Office: 916-874-4868
Cell:	Billing Address: 777 12th Street Sacramento, CA 95814
Report To: <u>Levi Ford</u>	777 12th Street Sacramento, CA 95814

Analysis Requested								Turn Around Time Requested		Page 1 of 2 COCs	
Contact: Levi Ford		Email: lford@airquality.org									
Cell: _____		Office: 916-874-4868									
Report To: <u>Levi Ford</u> 777 12th Street Sacramento, CA 95814		Billing Address: 777 12th Street Sacramento, CA 95814									
Project Name: AB617		PO#:									
Gravimetry	LabNet ID	Field Sample ID	Site	Sample Date	Volume (m ³)	Particle Size	XRF	C	C _P	O/C/EC	Sample Specific Notes:
	• 21T2697	#	VFW PM2.5	8/20/21	7.2	2.5µm	X	X			
	• 21T2700	#	Impact PM2.5	8/20/21	7.2	2.5µm	X	X			
	• 21T2452	*	Florin PM2.5	8/20/21	7.2	2.5µm	X	X			
	• 21T2450	#	Sump50 PM2.5	8/20/21	7.2	2.5µm	X	X			
	• 21T2449	*	ST56 PM2.5	8/20/21	7.2	2.5µm	X	X			
	• 21T2455	*	CRC PM2.5	8/20/21	7.2	2.5µm	X	X			
	• 21T2711	,	VFW PM10	8/20/21	7.2	10µm	X	X			
	• 21T2710	*	Impact PM10	8/20/21	7.2	10µm	X	X			
	• 21T2451	3	Florin PM10	8/20/21	7.2	10µm	X	X			
• 21T2453	,	SUMP50 PM10	8/20/21	7.2	10µm	X	X				
Do the samples pose any potential hazards? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No											
If yes please explain:											
Are samples for compliance? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No											
Special Instructions/QC Requirements & Comments:											
Relinquished by: 		Date/Time: 9/16/21 12:15		Received By: 		Date/Time:		Date/Time/Temp: 9/16/21 12:15 C 15.2		Date/Time/Temp:	
Relinquished by: 		Date/Time:		Received By:							
Laboratory Receipt Comments:											

CHESTER LabNet

◆ 112242 SW Garden Place ◆ Tigard, OR 97223 ◆ (503) 624-2183 ◆ www.chesterlab.net ◆ cln@chesterlab.net

CHAIN-OFF-CUSTODY RECORD

For use by Lab:
Report #: _____

Page_2_of_2_COCs

Standard Rush (Specify) _____

Turn Around Time Requested

Rush (Specify)

Sample Specific Notes:

Date/Time/Temp:
9/9/2011 @ 1.8°C

Date/Time/Temp:

CHESTER LabNet

12242 SW Garden Place ◆ Tigard, OR 97223 ◆ (503) 624-2183 ◆ cld@chesterlab.net ◆ www.chesterlab.net

CHAIN-OFF-CUSTODY RECORD

CLIENT INFORMATION	
Company Name: SMAQMD	
Contact: Levi Ford	Email: lf@airquality.org Office: 916-874-4868
Cell:	Billing Address: 777 12th Street Sacramento, CA 95814
Report To: <u>Levi Ford</u>	777 12th Street Sacramento, CA 95814
Project Name: ABC123	

Do the samples pose any potential hazards?

If yes please explain:

Special Instructions/QC Requirements & Comments:

Received By: <u>John Bell</u>	Date/Time/Temp: <u>9/26/11 5:55</u>
Received By:	Date/Time/Temp:

Laboratory Receipt Comments:

CHESTER LabNet

12242 SW Garden Place ♦ Tigard, OR 97223 ♦ (503) 624-2183 ♦ www.chesterlab.net ♦ cln@chesterlab.net

CHAIN-OFF-CUSTODY RECORD

CLIENT INFORMATION	
Company Name:	SIMAQMID
Contact:	Levi Ford
Cell:	
Report To:	Levi Ford 777 12th Street Sacramento, CA 95814
Email:	iford@airquality.org Office: 916-874-4868
Billing Address:	777 12th Street Sacramento, CA 95814

For use by Lab: _____
Report #: _____

Page_2_of_2_COCS
Time Requested

Standard Rush (Specify) _____

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Sample Specific Notes:

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Date/Time/Temp:
1/29/2011 11:00 @ 1.8°C

Date/Time/Temp:

RAW DATA

Available upon request