

TETRA TECH EM, INC.
BOISE, ID

CLIENT # T029
REPORT # 09-016

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: February 4, 2009

General Information

Client: Tetra Tech EM, Inc.
Client Number: T029
Report Number: 09-016
Sample Description: 47mm Teflon filter

Analysis

Analytes: Particulate Mass, XRF Metals (Na - Pb)
Analytical Protocols: Gravimetry, X-Ray Fluorescence protocol 6
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.



Project Manager
Paul Duda

2/4/09

Date

Client: T029 - Tetra Tech EMI
Report Number: 09-016

Lab ID: 08-T6905
Client ID: BMI11-011609
Filter ID: P8013312
Site: BMI11
Sample Date: 1/16/09
Filter Lot #: 8070002
Volume: 24.04 +/- 2.404 m³
Deposit Area: 11.3 cm²
Size Fraction: TSP

Analyte	µg/filter	percent	µg/m ³
Gravimetry			
Net Mass	126. ± 10.		5.241 ± 0.6691
XRF			
* Na	0.4181 ± 0.3232	0.3318 ± 0.2578	0.0174 ± 0.0136
* Mg	0.7605 ± 0.3458	0.6036 ± 0.2786	0.0316 ± 0.0147
Al	0.9368 ± 0.1627	0.7435 ± 0.1420	0.0390 ± 0.0078
Si	3.650 ± 0.2757	2.897 ± 0.3174	0.1518 ± 0.0190
* P	0.0192 ± 0.0237	0.0152 ± 0.0189	0.0008 ± 0.0010
S	1.000 ± 0.0848	0.7937 ± 0.0922	0.0416 ± 0.0055
Cl	0.3141 ± 0.0463	0.2493 ± 0.0418	0.0131 ± 0.0023
K	0.8215 ± 0.0542	0.6520 ± 0.0673	0.0342 ± 0.0041
Ca	4.065 ± 0.2113	3.226 ± 0.3061	0.1691 ± 0.0191
Ti	0.2102 ± 0.0158	0.1668 ± 0.0182	0.0087 ± 0.0011
* V	0.0045 ± 0.0068	0.0036 ± 0.0054	0.0002 ± 0.0003
* Cr	0.0215 ± 0.0079	0.0170 ± 0.0064	0.0009 ± 0.0003
Mn	0.3424 ± 0.0441	0.2717 ± 0.0411	0.0142 ± 0.0023
Fe	1.412 ± 0.0757	1.121 ± 0.1074	0.0588 ± 0.0067
* Co	0.0565 ± 0.0203	0.0448 ± 0.0165	0.0024 ± 0.0009
* Ni	0.0362 ± 0.0147	0.0287 ± 0.0119	0.0015 ± 0.0006
Cu	0.1119 ± 0.0170	0.0888 ± 0.0152	0.0047 ± 0.0008
Zn	0.0960 ± 0.0136	0.0762 ± 0.0123	0.0040 ± 0.0007
* Ga	0.0000 ± 0.0090	0.0000 ± 0.0072	0.0000 ± 0.0004
* Ge	0.0000 ± 0.0079	0.0000 ± 0.0063	0.0000 ± 0.0003
* As	0.0000 ± 0.0124	0.0000 ± 0.0099	0.0000 ± 0.0005
* Se	0.0034 ± 0.0068	0.0027 ± 0.0054	0.0001 ± 0.0003
Br	0.0271 ± 0.0056	0.0215 ± 0.0048	0.0011 ± 0.0003
* Rb	0.0034 ± 0.0068	0.0027 ± 0.0054	0.0001 ± 0.0003
Sr	0.0249 ± 0.0079	0.0197 ± 0.0065	0.0010 ± 0.0003
* Y	0.0079 ± 0.0090	0.0063 ± 0.0072	0.0003 ± 0.0004
* Zr	0.0124 ± 0.0113	0.0099 ± 0.0090	0.0005 ± 0.0005
* Mo	0.0113 ± 0.0170	0.0090 ± 0.0135	0.0005 ± 0.0007
* Pd	0.0203 ± 0.0475	0.0161 ± 0.0377	0.0008 ± 0.0020
* Ag	0.0000 ± 0.0497	0.0000 ± 0.0395	0.0000 ± 0.0021
* Cd	0.0000 ± 0.0531	0.0000 ± 0.0422	0.0000 ± 0.0022
* In	0.0588 ± 0.0610	0.0466 ± 0.0486	0.0024 ± 0.0026
* Sn	0.0282 ± 0.0701	0.0224 ± 0.0556	0.0012 ± 0.0029
* Sb	0.2260 ± 0.1412	0.1794 ± 0.1130	0.0094 ± 0.0060
* Ba	0.0667 ± 0.0305	0.0529 ± 0.0246	0.0028 ± 0.0013
* La	0.0000 ± 0.0203	0.0000 ± 0.0161	0.0000 ± 0.0008
* Hg	0.0000 ± 0.0181	0.0000 ± 0.0143	0.0000 ± 0.0008
Pb	0.0825 ± 0.0215	0.0655 ± 0.0178	0.0034 ± 0.0010

* - Concentration is less than three times the uncertainty

Client: T029 - Tetra Tech EMI
 Report Number: 09-016

Lab ID: 08-T6907
 Client ID: BMI06-011609
 Filter ID: P8013314
 Site: BMI06
 Sample Date: 1/16/09
 Filter Lot #: 8070002
 Volume: 17.62 +/- 1.762 m³
 Deposit Area: 11.3 cm²
 Size Fraction: TSP

Analyte	µg/filter	percent	µg/m ³
Gravimetry			
Net Mass	316. ± 10.		17.93 ± 1.881
XRF			
* Na	1.785 ± 1.149	0.5650 ± 0.3641	0.1013 ± 0.0660
Mg	3.381 ± 0.5492	1.070 ± 0.1771	0.1919 ± 0.0366
Al	4.319 ± 0.3842	1.367 ± 0.1290	0.2451 ± 0.0328
Si	14.32 ± 0.9458	4.531 ± 0.3319	0.8125 ± 0.0974
* P	0.0000 ± 0.0316	0.0000 ± 0.0100	0.0000 ± 0.0018
S	2.642 ± 0.1650	0.8361 ± 0.0585	0.1499 ± 0.0177
Cl	2.112 ± 0.1288	0.6683 ± 0.0459	0.1199 ± 0.0140
K	2.466 ± 0.1356	0.7803 ± 0.0495	0.1399 ± 0.0160
Ca	14.75 ± 0.7469	4.667 ± 0.2787	0.8369 ± 0.0938
Ti	0.8452 ± 0.0712	0.2675 ± 0.0241	0.0480 ± 0.0063
* V	0.0362 ± 0.0215	0.0114 ± 0.0068	0.0021 ± 0.0012
* Cr	0.0011 ± 0.0102	0.0004 ± 0.0032	0.0001 ± 0.0006
Mn	1.174 ± 0.0960	0.3715 ± 0.0326	0.0666 ± 0.0086
Fe	5.309 ± 0.2689	1.680 ± 0.1003	0.3013 ± 0.0338
* Co	0.0407 ± 0.0237	0.0129 ± 0.0075	0.0023 ± 0.0014
Ni	0.0520 ± 0.0170	0.0164 ± 0.0054	0.0030 ± 0.0010
Cu	0.8113 ± 0.0486	0.2568 ± 0.0174	0.0460 ± 0.0054
Zn	0.2441 ± 0.0192	0.0772 ± 0.0066	0.0139 ± 0.0018
* Ga	0.0045 ± 0.0113	0.0014 ± 0.0036	0.0003 ± 0.0006
* Ge	0.0000 ± 0.0090	0.0000 ± 0.0029	0.0000 ± 0.0005
* As	0.0000 ± 0.0136	0.0000 ± 0.0043	0.0000 ± 0.0008
* Se	0.0068 ± 0.0079	0.0021 ± 0.0025	0.0004 ± 0.0005
Br	0.0599 ± 0.0079	0.0190 ± 0.0026	0.0034 ± 0.0006
* Rb	0.0079 ± 0.0079	0.0025 ± 0.0025	0.0004 ± 0.0005
Sr	0.0825 ± 0.0102	0.0261 ± 0.0033	0.0047 ± 0.0007
* Y	0.0090 ± 0.0102	0.0029 ± 0.0032	0.0005 ± 0.0006
Zr	0.1085 ± 0.0147	0.0343 ± 0.0048	0.0062 ± 0.0010
* Mo	0.0000 ± 0.0192	0.0000 ± 0.0061	0.0000 ± 0.0011
* Pd	0.0305 ± 0.0497	0.0097 ± 0.0157	0.0017 ± 0.0028
* Ag	0.0497 ± 0.0520	0.0157 ± 0.0165	0.0028 ± 0.0030
* Cd	0.1141 ± 0.0565	0.0361 ± 0.0179	0.0065 ± 0.0033
* In	0.0757 ± 0.0633	0.0240 ± 0.0200	0.0043 ± 0.0036
* Sn	0.0203 ± 0.0734	0.0064 ± 0.0232	0.0012 ± 0.0042
* Sb	0.1785 ± 0.1492	0.0565 ± 0.0472	0.0101 ± 0.0085
Ba	0.3853 ± 0.0520	0.1219 ± 0.0169	0.0219 ± 0.0037
* La	0.0000 ± 0.0508	0.0000 ± 0.0161	0.0000 ± 0.0029
* Hg	0.0000 ± 0.0203	0.0000 ± 0.0064	0.0000 ± 0.0012
Pb	0.0972 ± 0.0237	0.0308 ± 0.0076	0.0055 ± 0.0015

* - Concentration is less than three times the uncertainty

Client: T029 - Tetra Tech EMI
Report Number: 09-016

Lab ID: 08-T6908
Client ID: BMI03-011609
Filter ID: P8013315
Site: BMI03
Sample Date: 1/16/09
Filter Lot #: 8070002
Volume: 24.04 +/- 2.404 m³
Deposit Area: 11.3 cm²
Size Fraction: TSP

Analyte	µg/filter	percent	µg/m ³
Gravimetry			
Net Mass	377. ± 10.		15.68 ± 1.622
XRF			
* Na	1.888 ± 1.191	0.5009 ± 0.3162	0.0785 ± 0.0502
Mg	4.600 ± 0.6407	1.220 ± 0.1730	0.1914 ± 0.0328
Al	5.679 ± 0.4791	1.506 ± 0.1332	0.2362 ± 0.0309
Si	18.86 ± 1.236	5.003 ± 0.3537	0.7845 ± 0.0938
* P	0.0023 ± 0.0339	0.0006 ± 0.0090	0.0001 ± 0.0014
S	3.470 ± 0.2057	0.9205 ± 0.0598	0.1444 ± 0.0168
Cl	1.555 ± 0.1040	0.4124 ± 0.0297	0.0647 ± 0.0078
K	3.123 ± 0.1684	0.8285 ± 0.0498	0.1299 ± 0.0148
Ca	20.27 ± 1.523	5.377 ± 0.4285	0.8433 ± 0.1055
Ti	0.8113 ± 0.0701	0.2152 ± 0.0194	0.0337 ± 0.0045
* V	0.0034 ± 0.0215	0.0009 ± 0.0057	0.0001 ± 0.0009
* Cr	0.0192 ± 0.0090	0.0051 ± 0.0024	0.0008 ± 0.0004
Mn	1.233 ± 0.1006	0.3270 ± 0.0281	0.0513 ± 0.0066
Fe	6.294 ± 0.3187	1.670 ± 0.0954	0.2618 ± 0.0293
* Co	0.0045 ± 0.0249	0.0012 ± 0.0066	0.0002 ± 0.0010
* Ni	0.0396 ± 0.0170	0.0105 ± 0.0045	0.0016 ± 0.0007
Cu	0.2588 ± 0.0226	0.0686 ± 0.0063	0.0108 ± 0.0014
Zn	0.3435 ± 0.0237	0.0911 ± 0.0067	0.0143 ± 0.0017
* Ga	0.0000 ± 0.0113	0.0000 ± 0.0030	0.0000 ± 0.0005
* Ge	0.0034 ± 0.0090	0.0009 ± 0.0024	0.0001 ± 0.0004
* As	0.0000 ± 0.0136	0.0000 ± 0.0036	0.0000 ± 0.0006
* Se	0.0045 ± 0.0079	0.0012 ± 0.0021	0.0002 ± 0.0003
Br	0.0588 ± 0.0079	0.0156 ± 0.0021	0.0024 ± 0.0004
* Rb	0.0147 ± 0.0079	0.0039 ± 0.0021	0.0006 ± 0.0003
Sr	0.1345 ± 0.0113	0.0357 ± 0.0031	0.0056 ± 0.0007
* Y	0.0000 ± 0.0102	0.0000 ± 0.0027	0.0000 ± 0.0004
Zr	0.0904 ± 0.0147	0.0240 ± 0.0039	0.0038 ± 0.0007
* Mo	0.0000 ± 0.0192	0.0000 ± 0.0051	0.0000 ± 0.0008
* Pd	0.0384 ± 0.0497	0.0102 ± 0.0132	0.0016 ± 0.0021
* Ag	0.0983 ± 0.0531	0.0261 ± 0.0141	0.0041 ± 0.0022
* Cd	0.0000 ± 0.0554	0.0000 ± 0.0147	0.0000 ± 0.0023
* In	0.0000 ± 0.0633	0.0000 ± 0.0168	0.0000 ± 0.0026
* Sn	0.0000 ± 0.0734	0.0000 ± 0.0195	0.0000 ± 0.0031
* Sb	0.0000 ± 0.1514	0.0000 ± 0.0402	0.0000 ± 0.0063
Ba	0.2701 ± 0.0508	0.0716 ± 0.0136	0.0112 ± 0.0024
* La	0.0000 ± 0.0396	0.0000 ± 0.0105	0.0000 ± 0.0016
* Hg	0.0000 ± 0.0203	0.0000 ± 0.0054	0.0000 ± 0.0008
Pb	0.1300 ± 0.0237	0.0345 ± 0.0064	0.0054 ± 0.0011

* - Concentration is less than three times the uncertainty

Client: T029 - Tetra Tech EMI
Report Number: 09-016

Lab ID: 08-T6909
Client ID: CAMU03-011609
Filter ID: P8013316
Site: CAMU03
Sample Date: 1/16/09
Filter Lot #: 8070002
Volume: 24.04 +/- 2.404 m³
Deposit Area: 11.3 cm²
Size Fraction: TSP

Analyte	µg/filter	percent	µg/m ³
Gravimetry			
Net Mass	212. ± 10.		8.819 ± 0.9750
XRF			
* Na	1.423 ± 1.020	0.6711 ± 0.4824	0.0592 ± 0.0429
Mg	1.835 ± 0.4181	0.8656 ± 0.2014	0.0763 ± 0.0190
Al	2.027 ± 0.2294	0.9562 ± 0.1172	0.0843 ± 0.0127
Si	7.213 ± 0.4961	3.402 ± 0.2837	0.3000 ± 0.0364
* P	0.0226 ± 0.0260	0.0107 ± 0.0123	0.0009 ± 0.0011
S	1.611 ± 0.1153	0.7601 ± 0.0651	0.0670 ± 0.0082
Cl	0.9379 ± 0.0746	0.4424 ± 0.0409	0.0390 ± 0.0050
K	1.018 ± 0.0644	0.4802 ± 0.0379	0.0424 ± 0.0050
Ca	6.942 ± 0.3548	3.274 ± 0.2277	0.2888 ± 0.0324
Ti	0.1978 ± 0.0542	0.0933 ± 0.0260	0.0082 ± 0.0024
* V	0.0000 ± 0.0192	0.0000 ± 0.0091	0.0000 ± 0.0008
* Cr	0.0158 ± 0.0079	0.0075 ± 0.0037	0.0007 ± 0.0003
Mn	0.1051 ± 0.0124	0.0496 ± 0.0063	0.0044 ± 0.0007
Fe	2.946 ± 0.1514	1.390 ± 0.0969	0.1225 ± 0.0138
* Co	0.0056 ± 0.0226	0.0027 ± 0.0107	0.0002 ± 0.0009
* Ni	0.0316 ± 0.0158	0.0149 ± 0.0075	0.0013 ± 0.0007
Cu	0.1288 ± 0.0181	0.0608 ± 0.0090	0.0054 ± 0.0009
Zn	0.1175 ± 0.0147	0.0554 ± 0.0074	0.0049 ± 0.0008
* Ga	0.0000 ± 0.0102	0.0000 ± 0.0048	0.0000 ± 0.0004
* Ge	0.0158 ± 0.0090	0.0075 ± 0.0043	0.0007 ± 0.0004
* As	0.0000 ± 0.0136	0.0000 ± 0.0064	0.0000 ± 0.0006
* Se	0.0102 ± 0.0079	0.0048 ± 0.0037	0.0004 ± 0.0003
Br	0.0203 ± 0.0068	0.0096 ± 0.0032	0.0008 ± 0.0003
* Rb	0.0113 ± 0.0068	0.0053 ± 0.0032	0.0005 ± 0.0003
Sr	0.0271 ± 0.0079	0.0128 ± 0.0038	0.0011 ± 0.0003
* Y	0.0124 ± 0.0102	0.0059 ± 0.0048	0.0005 ± 0.0004
Zr	0.0441 ± 0.0124	0.0208 ± 0.0059	0.0018 ± 0.0005
* Mo	0.0068 ± 0.0181	0.0032 ± 0.0085	0.0003 ± 0.0008
* Pd	0.0328 ± 0.0486	0.0155 ± 0.0229	0.0014 ± 0.0020
* Ag	0.1074 ± 0.0520	0.0506 ± 0.0246	0.0045 ± 0.0022
* Cd	0.1469 ± 0.0565	0.0693 ± 0.0269	0.0061 ± 0.0024
* In	0.0531 ± 0.0610	0.0251 ± 0.0288	0.0022 ± 0.0025
* Sn	0.1480 ± 0.0734	0.0698 ± 0.0348	0.0062 ± 0.0031
* Sb	0.2848 ± 0.1469	0.1343 ± 0.0696	0.0118 ± 0.0062
Ba	0.1469 ± 0.0429	0.0693 ± 0.0205	0.0061 ± 0.0019
* La	0.0000 ± 0.0328	0.0000 ± 0.0155	0.0000 ± 0.0014
* Hg	0.0000 ± 0.0181	0.0000 ± 0.0085	0.0000 ± 0.0008
Pb	0.1062 ± 0.0226	0.0501 ± 0.0109	0.0044 ± 0.0010

* - Concentration is less than three times the uncertainty

Client: T029 - Tetra Tech EMI
Report Number: 09-016

Lab ID: 08-T6910
Client ID: BMI06-012009
Filter ID: P8013317
Site: BMI06
Sample Date: 1/20/09
Filter Lot #: 8070002
Volume: 24.04 +/- 2.404 m³
Deposit Area: 11.3 cm²
Size Fraction: TSP

Analyte	µg/filter	percent	µg/m ³
Gravimetry			
Net Mass	390. ± 10.		16.22 ± 1.675
XRF			
* Na	1.775 ± 1.163	0.4552 ± 0.2984	0.0738 ± 0.0489
Mg	4.492 ± 0.6283	1.152 ± 0.1638	0.1868 ± 0.0321
Al	5.197 ± 0.4475	1.333 ± 0.1197	0.2162 ± 0.0285
Si	17.09 ± 1.125	4.381 ± 0.3097	0.7107 ± 0.0851
* P	0.0486 ± 0.0328	0.0125 ± 0.0084	0.0020 ± 0.0014
S	3.088 ± 0.1876	0.7919 ± 0.0522	0.1285 ± 0.0150
Cl	1.199 ± 0.0893	0.3074 ± 0.0242	0.0499 ± 0.0062
K	2.663 ± 0.3311	0.6829 ± 0.0867	0.1108 ± 0.0177
Ca	20.29 ± 1.026	5.204 ± 0.2950	0.8442 ± 0.0946
Ti	1.077 ± 0.0791	0.2761 ± 0.0215	0.0448 ± 0.0056
V	0.0689 ± 0.0215	0.0177 ± 0.0055	0.0029 ± 0.0009
* Cr	0.0203 ± 0.0102	0.0052 ± 0.0026	0.0008 ± 0.0004
Mn	0.9718 ± 0.0825	0.2492 ± 0.0221	0.0404 ± 0.0053
Fe	6.199 ± 0.3130	1.590 ± 0.0900	0.2579 ± 0.0289
* Co	0.0000 ± 0.0237	0.0000 ± 0.0061	0.0000 ± 0.0010
* Ni	0.0090 ± 0.0170	0.0023 ± 0.0043	0.0004 ± 0.0007
Cu	0.6904 ± 0.0429	0.1770 ± 0.0119	0.0287 ± 0.0034
Zn	0.2576 ± 0.0203	0.0661 ± 0.0055	0.0107 ± 0.0014
* Ga	0.0000 ± 0.0102	0.0000 ± 0.0026	0.0000 ± 0.0004
* Ge	0.0000 ± 0.0090	0.0000 ± 0.0023	0.0000 ± 0.0004
* As	0.0000 ± 0.0136	0.0000 ± 0.0035	0.0000 ± 0.0006
* Se	0.0079 ± 0.0068	0.0020 ± 0.0017	0.0003 ± 0.0003
Br	0.0667 ± 0.0079	0.0171 ± 0.0021	0.0028 ± 0.0004
* Rb	0.0000 ± 0.0068	0.0000 ± 0.0017	0.0000 ± 0.0003
Sr	0.1051 ± 0.0102	0.0269 ± 0.0027	0.0044 ± 0.0006
* Y	0.0102 ± 0.0102	0.0026 ± 0.0026	0.0004 ± 0.0004
Zr	0.1367 ± 0.0147	0.0351 ± 0.0039	0.0057 ± 0.0008
* Mo	0.0000 ± 0.0181	0.0000 ± 0.0046	0.0000 ± 0.0008
* Pd	0.0316 ± 0.0497	0.0081 ± 0.0128	0.0013 ± 0.0021
* Ag	0.0983 ± 0.0531	0.0252 ± 0.0136	0.0041 ± 0.0022
* Cd	0.0203 ± 0.0554	0.0052 ± 0.0142	0.0008 ± 0.0023
* In	0.0000 ± 0.0622	0.0000 ± 0.0159	0.0000 ± 0.0026
* Sn	0.0960 ± 0.0746	0.0246 ± 0.0191	0.0040 ± 0.0031
* Sb	0.2113 ± 0.1492	0.0542 ± 0.0383	0.0088 ± 0.0063
Ba	0.3729 ± 0.0520	0.0956 ± 0.0136	0.0155 ± 0.0027
* La	0.0000 ± 0.0520	0.0000 ± 0.0133	0.0000 ± 0.0022
* Hg	0.0000 ± 0.0192	0.0000 ± 0.0049	0.0000 ± 0.0008
* Pb	0.0644 ± 0.0226	0.0165 ± 0.0058	0.0027 ± 0.0010

* - Concentration is less than three times the uncertainty

Client: T029 - Tetra Tech EMI
Report Number: 09-016

Lab ID: 08-T7076
Client ID: BMI01-011609
Filter ID: P8013736
Site: BMI01
Sample Date: 1/16/09
Filter Lot #: 8070002
Volume: 20.76 +/- 2.076 m³
Deposit Area: 11.3 cm²
Size Fraction: TSP

Analyte	µg/filter	percent	µg/m ³
Gravimetry			
Net Mass	362. ± 10.		17.44 ± 1.809
XRF			
* Na	1.290 ± 1.155	0.3565 ± 0.3192	0.0622 ± 0.0560
Mg	3.367 ± 0.5503	0.9302 ± 0.1542	0.1622 ± 0.0311
Al	3.345 ± 0.3232	0.9240 ± 0.0929	0.1611 ± 0.0224
Si	10.45 ± 0.7074	2.887 ± 0.2111	0.5034 ± 0.0608
* P	0.0226 ± 0.0294	0.0062 ± 0.0081	0.0011 ± 0.0014
S	3.730 ± 0.2170	1.030 ± 0.0663	0.1797 ± 0.0208
Cl	3.824 ± 0.2124	1.056 ± 0.0655	0.1842 ± 0.0211
K	1.696 ± 0.0972	0.4685 ± 0.0298	0.0817 ± 0.0094
Ca	11.45 ± 0.5820	3.162 ± 0.1830	0.5514 ± 0.0619
Ti	0.9842 ± 0.0746	0.2719 ± 0.0219	0.0474 ± 0.0059
V	0.0667 ± 0.0203	0.0184 ± 0.0056	0.0032 ± 0.0010
* Cr	0.0215 ± 0.0090	0.0059 ± 0.0025	0.0010 ± 0.0004
Mn	2.965 ± 0.2181	0.8191 ± 0.0644	0.1428 ± 0.0177
Fe	5.051 ± 0.2565	1.395 ± 0.0807	0.2433 ± 0.0273
Co	0.0734 ± 0.0237	0.0203 ± 0.0066	0.0035 ± 0.0012
* Ni	0.0192 ± 0.0158	0.0053 ± 0.0044	0.0009 ± 0.0008
Cu	0.2237 ± 0.0215	0.0618 ± 0.0062	0.0108 ± 0.0015
Zn	0.2113 ± 0.0181	0.0584 ± 0.0052	0.0102 ± 0.0013
* Ga	0.0000 ± 0.0102	0.0000 ± 0.0028	0.0000 ± 0.0005
* Ge	0.0181 ± 0.0090	0.0050 ± 0.0025	0.0009 ± 0.0004
* As	0.0000 ± 0.0124	0.0000 ± 0.0034	0.0000 ± 0.0006
* Se	0.0090 ± 0.0068	0.0025 ± 0.0019	0.0004 ± 0.0003
Br	0.0667 ± 0.0079	0.0184 ± 0.0022	0.0032 ± 0.0005
* Rb	0.0136 ± 0.0068	0.0037 ± 0.0019	0.0007 ± 0.0003
Sr	0.0520 ± 0.0090	0.0144 ± 0.0025	0.0025 ± 0.0005
* Y	0.0023 ± 0.0102	0.0006 ± 0.0028	0.0001 ± 0.0005
Zr	0.1198 ± 0.0136	0.0331 ± 0.0039	0.0058 ± 0.0009
* Mo	0.0000 ± 0.0181	0.0000 ± 0.0050	0.0000 ± 0.0009
* Pd	0.0825 ± 0.0486	0.0228 ± 0.0134	0.0040 ± 0.0024
* Ag	0.1074 ± 0.0520	0.0297 ± 0.0144	0.0052 ± 0.0026
* Cd	0.0090 ± 0.0554	0.0025 ± 0.0153	0.0004 ± 0.0027
* In	0.0915 ± 0.0622	0.0253 ± 0.0172	0.0044 ± 0.0030
* Sn	0.1774 ± 0.0746	0.0490 ± 0.0206	0.0085 ± 0.0037
* Sb	0.3605 ± 0.1469	0.0996 ± 0.0407	0.0174 ± 0.0073
Ba	0.3017 ± 0.0486	0.0833 ± 0.0136	0.0145 ± 0.0028
* La	0.0000 ± 0.0497	0.0000 ± 0.0137	0.0000 ± 0.0024
* Hg	0.0000 ± 0.0181	0.0000 ± 0.0050	0.0000 ± 0.0009
Pb	0.0757 ± 0.0215	0.0209 ± 0.0060	0.0036 ± 0.0011

* - Concentration is less than three times the uncertainty

Client: T029 - Tetra Tech EMI
Report Number: 09-016

Lab ID: 08-T7077
Client ID: CAMU06-011609
Filter ID: P8013737
Site: CAMU06
Sample Date: 1/16/09
Filter Lot #: 8070002
Volume: 22.57 +/- 2.257 m³
Deposit Area: 11.3 cm²
Size Fraction: TSP

Analyte	µg/filter	percent	µg/m ³
Gravimetry			
Net Mass	404. ± 10.		17.90 ± 1.844
XRF			
* Na	3.176 ± 1.198	0.7862 ± 0.2971	0.1407 ± 0.0549
Mg	6.960 ± 0.7978	1.723 ± 0.2020	0.3084 ± 0.0469
Al	7.539 ± 0.6068	1.866 ± 0.1571	0.3340 ± 0.0429
Si	27.15 ± 1.765	6.721 ± 0.4675	1.203 ± 0.1435
* P	0.0215 ± 0.0350	0.0053 ± 0.0087	0.0010 ± 0.0016
S	2.643 ± 0.1672	0.6542 ± 0.0445	0.1171 ± 0.0139
Cl	1.516 ± 0.1040	0.3754 ± 0.0274	0.0672 ± 0.0081
K	3.121 ± 0.3752	0.7725 ± 0.0948	0.1383 ± 0.0216
Ca	25.64 ± 1.295	6.346 ± 0.3570	1.136 ± 0.1273
Ti	0.6125 ± 0.0633	0.1516 ± 0.0161	0.0271 ± 0.0039
* V	0.0102 ± 0.0203	0.0025 ± 0.0050	0.0005 ± 0.0009
* Cr	0.0170 ± 0.0090	0.0042 ± 0.0022	0.0008 ± 0.0004
Mn	0.1706 ± 0.0147	0.0422 ± 0.0038	0.0076 ± 0.0010
Fe	7.233 ± 0.3650	1.790 ± 0.1006	0.3205 ± 0.0359
* Co	0.0667 ± 0.0249	0.0165 ± 0.0062	0.0030 ± 0.0011
* Ni	0.0384 ± 0.0170	0.0095 ± 0.0042	0.0017 ± 0.0008
Cu	0.1921 ± 0.0203	0.0475 ± 0.0052	0.0085 ± 0.0012
Zn	0.2791 ± 0.0203	0.0691 ± 0.0053	0.0124 ± 0.0015
* Ga	0.0000 ± 0.0102	0.0000 ± 0.0025	0.0000 ± 0.0005
* Ge	0.0011 ± 0.0090	0.0003 ± 0.0022	0.0001 ± 0.0004
* As	0.0000 ± 0.0136	0.0000 ± 0.0034	0.0000 ± 0.0006
* Se	0.0045 ± 0.0068	0.0011 ± 0.0017	0.0002 ± 0.0003
Br	0.0407 ± 0.0068	0.0101 ± 0.0017	0.0018 ± 0.0004
Rb	0.0226 ± 0.0068	0.0056 ± 0.0017	0.0010 ± 0.0003
Sr	0.1311 ± 0.0113	0.0324 ± 0.0029	0.0058 ± 0.0008
* Y	0.0000 ± 0.0102	0.0000 ± 0.0025	0.0000 ± 0.0005
Zr	0.0475 ± 0.0136	0.0117 ± 0.0034	0.0021 ± 0.0006
* Mo	0.0136 ± 0.0181	0.0034 ± 0.0045	0.0006 ± 0.0008
* Pd	0.0170 ± 0.0497	0.0042 ± 0.0123	0.0008 ± 0.0022
* Ag	0.0034 ± 0.0520	0.0008 ± 0.0129	0.0002 ± 0.0023
* Cd	0.0915 ± 0.0565	0.0227 ± 0.0140	0.0041 ± 0.0025
* In	0.0565 ± 0.0633	0.0140 ± 0.0157	0.0025 ± 0.0028
* Sn	0.1040 ± 0.0746	0.0257 ± 0.0185	0.0046 ± 0.0033
* Sb	0.3232 ± 0.1514	0.0800 ± 0.0375	0.0143 ± 0.0069
Ba	0.2961 ± 0.0486	0.0733 ± 0.0122	0.0131 ± 0.0025
* La	0.0000 ± 0.0362	0.0000 ± 0.0090	0.0000 ± 0.0016
* Hg	0.0000 ± 0.0192	0.0000 ± 0.0048	0.0000 ± 0.0009
Pb	0.0768 ± 0.0226	0.0190 ± 0.0056	0.0034 ± 0.0011

* - Concentration is less than three times the uncertainty

Client: T029 - Tetra Tech EMI
Report Number: 09-016

Lab ID: 08-T7078
Client ID: BMI11-012009
Filter ID: P8013738
Site: BMI11
Sample Date: 1/20/09
Filter Lot #: 8070002
Volume: 24.04 +/- 2.404 m³
Deposit Area: 11.3 cm²
Size Fraction: TSP

Analyte	µg/filter	percent	µg/m ³
Gravimetry			
Net Mass	724. ± 10.		30.12 ± 3.040
XRF			
Na	7.990 ± 1.683	1.104 ± 0.2329	0.3324 ± 0.0775
Mg	13.31 ± 1.356	1.839 ± 0.1890	0.5537 ± 0.0790
Al	15.47 ± 1.202	2.137 ± 0.1687	0.6435 ± 0.0815
Si	51.43 ± 3.390	7.103 ± 0.4784	2.139 ± 0.2562
* P	0.0000 ± 0.0463	0.0000 ± 0.0064	0.0000 ± 0.0019
S	6.163 ± 0.3458	0.8512 ± 0.0492	0.2564 ± 0.0294
Cl	2.685 ± 0.1638	0.3708 ± 0.0232	0.1117 ± 0.0131
K	8.370 ± 0.4339	1.156 ± 0.0620	0.3482 ± 0.0392
Ca	57.29 ± 2.894	7.913 ± 0.4144	2.383 ± 0.2670
Ti	1.907 ± 0.1141	0.2635 ± 0.0162	0.0793 ± 0.0092
* V	0.0508 ± 0.0237	0.0070 ± 0.0033	0.0021 ± 0.0010
Cr	0.0418 ± 0.0113	0.0058 ± 0.0016	0.0017 ± 0.0005
Mn	1.739 ± 0.1345	0.2402 ± 0.0189	0.0723 ± 0.0091
Fe	14.40 ± 0.7232	1.988 ± 0.1036	0.5988 ± 0.0670
Co	0.1040 ± 0.0282	0.0144 ± 0.0039	0.0043 ± 0.0013
Ni	0.0610 ± 0.0181	0.0084 ± 0.0025	0.0025 ± 0.0008
Cu	0.5594 ± 0.0373	0.0773 ± 0.0053	0.0233 ± 0.0028
Zn	0.5435 ± 0.0565	0.0751 ± 0.0079	0.0226 ± 0.0033
* Ga	0.0034 ± 0.0113	0.0005 ± 0.0016	0.0001 ± 0.0005
* Ge	0.0170 ± 0.0102	0.0023 ± 0.0014	0.0007 ± 0.0004
* As	0.0000 ± 0.0147	0.0000 ± 0.0020	0.0000 ± 0.0006
* Se	0.0023 ± 0.0079	0.0003 ± 0.0011	0.0001 ± 0.0003
Br	0.1492 ± 0.0113	0.0206 ± 0.0016	0.0062 ± 0.0008
* Rb	0.0158 ± 0.0079	0.0022 ± 0.0011	0.0007 ± 0.0003
Sr	0.3085 ± 0.0192	0.0426 ± 0.0027	0.0128 ± 0.0015
* Y	0.0271 ± 0.0113	0.0037 ± 0.0016	0.0011 ± 0.0005
Zr	0.2531 ± 0.0192	0.0350 ± 0.0027	0.0105 ± 0.0013
* Mo	0.0294 ± 0.0192	0.0041 ± 0.0027	0.0012 ± 0.0008
* Pd	0.1141 ± 0.0531	0.0158 ± 0.0073	0.0047 ± 0.0023
* Ag	0.0960 ± 0.0554	0.0133 ± 0.0076	0.0040 ± 0.0023
* Cd	0.0610 ± 0.0599	0.0084 ± 0.0083	0.0025 ± 0.0025
* In	0.1412 ± 0.0678	0.0195 ± 0.0094	0.0059 ± 0.0029
* Sn	0.1638 ± 0.0780	0.0226 ± 0.0108	0.0068 ± 0.0033
Sb	0.6475 ± 0.1616	0.0894 ± 0.0224	0.0269 ± 0.0072
Ba	0.8452 ± 0.0633	0.1167 ± 0.0089	0.0352 ± 0.0044
* La	0.0000 ± 0.0622	0.0000 ± 0.0086	0.0000 ± 0.0026
* Hg	0.0000 ± 0.0203	0.0000 ± 0.0028	0.0000 ± 0.0008
Pb	0.1390 ± 0.0249	0.0192 ± 0.0034	0.0058 ± 0.0012

* - Concentration is less than three times the uncertainty

Client: T029 - Tetra Tech EMI
Report Number: 09-016

Lab ID: 08-T7079
Client ID: CAMU04-012009
Filter ID: P8013739
Site: CAMU04
Sample Date: 1/20/09
Filter Lot #: 8070002
Volume: 22.88 +/- 2.288 m³
Deposit Area: 11.3 cm²
Size Fraction: TSP

Analyte	µg/filter	percent	µg/m ³
Gravimetry			
Net Mass	1,431. ± 10.		62.54 ± 6.270
XRF			
Na	11.04 ± 2.536	0.7715 ± 0.1773	0.4825 ± 0.1209
Mg	18.69 ± 1.994	1.306 ± 0.1397	0.8169 ± 0.1195
Al	21.93 ± 1.780	1.533 ± 0.1248	0.9586 ± 0.1235
Si	66.69 ± 4.584	4.661 ± 0.3220	2.915 ± 0.3537
* P	0.0000 ± 0.0554	0.0000 ± 0.0039	0.0000 ± 0.0024
S	11.23 ± 0.6102	0.7845 ± 0.0430	0.4907 ± 0.0558
Cl	43.89 ± 2.271	3.067 ± 0.1602	1.918 ± 0.2160
K	8.811 ± 0.4599	0.6157 ± 0.0324	0.3851 ± 0.0434
Ca	77.54 ± 3.939	5.419 ± 0.2779	3.389 ± 0.3801
Ti	1.884 ± 0.1141	0.1316 ± 0.0080	0.0823 ± 0.0096
* V	0.0350 ± 0.0249	0.0024 ± 0.0017	0.0015 ± 0.0011
Cr	0.0848 ± 0.0124	0.0059 ± 0.0009	0.0037 ± 0.0007
Mn	6.698 ± 0.4825	0.4680 ± 0.0339	0.2927 ± 0.0361
Fe	20.84 ± 1.045	1.456 ± 0.0737	0.9107 ± 0.1019
Co	0.1051 ± 0.0305	0.0073 ± 0.0021	0.0046 ± 0.0014
Ni	0.0723 ± 0.0192	0.0051 ± 0.0013	0.0032 ± 0.0009
Cu	0.6305 ± 0.0407	0.0441 ± 0.0029	0.0276 ± 0.0033
Zn	0.9345 ± 0.0825	0.0653 ± 0.0058	0.0408 ± 0.0054
* Ga	0.0000 ± 0.0113	0.0000 ± 0.0008	0.0000 ± 0.0005
* Ge	0.0000 ± 0.0102	0.0000 ± 0.0007	0.0000 ± 0.0004
* As	0.0000 ± 0.0147	0.0000 ± 0.0010	0.0000 ± 0.0006
* Se	0.0203 ± 0.0079	0.0014 ± 0.0006	0.0009 ± 0.0004
Br	0.1729 ± 0.0124	0.0121 ± 0.0009	0.0076 ± 0.0009
Rb	0.0328 ± 0.0079	0.0023 ± 0.0006	0.0014 ± 0.0004
Sr	0.3842 ± 0.0226	0.0268 ± 0.0016	0.0168 ± 0.0019
* Y	0.0090 ± 0.0102	0.0006 ± 0.0007	0.0004 ± 0.0004
Zr	0.2339 ± 0.0181	0.0163 ± 0.0013	0.0102 ± 0.0013
* Mo	0.0011 ± 0.0192	0.0001 ± 0.0013	0.0000 ± 0.0008
* Pd	0.0000 ± 0.0531	0.0000 ± 0.0037	0.0000 ± 0.0023
* Ag	0.0452 ± 0.0554	0.0032 ± 0.0039	0.0020 ± 0.0024
* Cd	0.0554 ± 0.0610	0.0039 ± 0.0043	0.0024 ± 0.0027
* In	0.0475 ± 0.0678	0.0033 ± 0.0047	0.0021 ± 0.0030
* Sn	0.1605 ± 0.0814	0.0112 ± 0.0057	0.0070 ± 0.0036
* Sb	0.3729 ± 0.1627	0.0261 ± 0.0114	0.0163 ± 0.0073
Ba	0.9289 ± 0.0689	0.0649 ± 0.0048	0.0406 ± 0.0051
* La	0.0000 ± 0.0565	0.0000 ± 0.0039	0.0000 ± 0.0025
* Hg	0.0000 ± 0.0181	0.0000 ± 0.0013	0.0000 ± 0.0008
Pb	0.0825 ± 0.0237	0.0058 ± 0.0017	0.0036 ± 0.0011

* - Concentration is less than three times the uncertainty

Client: T029 - Tetra Tech EMI
Report Number: 09-016

Lab ID: 08-T7080
Client ID: BMI03-012009
Filter ID: P8013740
Site: BMI03
Sample Date: 1/20/09
Filter Lot #: 8070002
Volume: 17.50 +/- 1.750 m³
Deposit Area: 11.3 cm²
Size Fraction: TSP

Analyte	µg/filter	percent	µg/m ³
Gravimetry			
Net Mass	583. ± 10.		33.31 ± 3.380
XRF			
* Na	2.627 ± 1.325	0.4506 ± 0.2275	0.1501 ± 0.0772
Mg	6.178 ± 0.7820	1.060 ± 0.1354	0.3530 ± 0.0569
Al	7.522 ± 0.6181	1.290 ± 0.1083	0.4299 ± 0.0556
Si	23.98 ± 1.580	4.113 ± 0.2800	1.370 ± 0.1641
* P	0.0000 ± 0.0373	0.0000 ± 0.0064	0.0000 ± 0.0021
S	3.940 ± 0.2316	0.6759 ± 0.0414	0.2252 ± 0.0261
Cl	1.349 ± 0.0972	0.2314 ± 0.0171	0.0771 ± 0.0095
K	3.779 ± 0.4079	0.6482 ± 0.0708	0.2159 ± 0.0318
Ca	28.42 ± 1.435	4.875 ± 0.2600	1.624 ± 0.1819
Ti	1.201 ± 0.0848	0.2060 ± 0.0150	0.0686 ± 0.0084
* V	0.0328 ± 0.0226	0.0056 ± 0.0039	0.0019 ± 0.0013
* Cr	0.0158 ± 0.0102	0.0027 ± 0.0017	0.0009 ± 0.0006
Mn	0.7944 ± 0.0712	0.1363 ± 0.0124	0.0454 ± 0.0061
Fe	8.018 ± 0.4045	1.375 ± 0.0733	0.4582 ± 0.0513
* Co	0.0576 ± 0.0260	0.0099 ± 0.0045	0.0033 ± 0.0015
* Ni	0.0475 ± 0.0181	0.0081 ± 0.0031	0.0027 ± 0.0011
Cu	0.2983 ± 0.0249	0.0512 ± 0.0044	0.0170 ± 0.0022
Zn	0.2972 ± 0.0215	0.0510 ± 0.0038	0.0170 ± 0.0021
* Ga	0.0045 ± 0.0113	0.0008 ± 0.0019	0.0003 ± 0.0006
* Ge	0.0000 ± 0.0113	0.0000 ± 0.0019	0.0000 ± 0.0006
* As	0.0000 ± 0.0147	0.0000 ± 0.0025	0.0000 ± 0.0008
* Se	0.0023 ± 0.0079	0.0004 ± 0.0014	0.0001 ± 0.0005
Br	0.0983 ± 0.0090	0.0169 ± 0.0016	0.0056 ± 0.0008
* Rb	0.0113 ± 0.0079	0.0019 ± 0.0014	0.0006 ± 0.0005
Sr	0.1774 ± 0.0136	0.0304 ± 0.0024	0.0101 ± 0.0013
* Y	0.0000 ± 0.0102	0.0000 ± 0.0017	0.0000 ± 0.0006
Zr	0.1458 ± 0.0158	0.0250 ± 0.0027	0.0083 ± 0.0012
* Mo	0.0396 ± 0.0192	0.0068 ± 0.0033	0.0023 ± 0.0011
* Pd	0.0237 ± 0.0508	0.0041 ± 0.0087	0.0014 ± 0.0029
* Ag	0.0508 ± 0.0531	0.0087 ± 0.0091	0.0029 ± 0.0030
* Cd	0.0915 ± 0.0576	0.0157 ± 0.0099	0.0052 ± 0.0033
* In	0.0893 ± 0.0655	0.0153 ± 0.0112	0.0051 ± 0.0038
* Sn	0.1627 ± 0.0780	0.0279 ± 0.0134	0.0093 ± 0.0046
* Sb	0.2927 ± 0.1571	0.0502 ± 0.0270	0.0167 ± 0.0091
Ba	0.4780 ± 0.0554	0.0820 ± 0.0096	0.0273 ± 0.0042
* La	0.0000 ± 0.0407	0.0000 ± 0.0070	0.0000 ± 0.0023
* Hg	0.0113 ± 0.0181	0.0019 ± 0.0031	0.0006 ± 0.0010
Pb	0.2011 ± 0.0271	0.0345 ± 0.0047	0.0115 ± 0.0019

* - Concentration is less than three times the uncertainty

Client: T029 - Tetra Tech EMI
Report Number: 09-016

Lab ID: 08-T7081
Client ID: BMI01-0012009
Filter ID: P8013741
Site: BMI01
Sample Date: 1/20/09
Filter Lot #: 8070002
Volume: 24.04 +/- 2.404 m³
Deposit Area: 11.3 cm²
Size Fraction: TSP

Analyte	µg/filter	percent	µg/m ³
Gravimetry			
Net Mass	1,150. ± 10.		47.84 ± 4.802
XRF			
Na	7.518 ± 2.304	0.6537 ± 0.2004	0.3127 ± 0.1008
Mg	24.97 ± 2.458	2.172 ± 0.2146	1.039 ± 0.1458
Al	20.05 ± 1.610	1.743 ± 0.1408	0.8339 ± 0.1070
Si	65.40 ± 4.445	5.687 ± 0.3897	2.721 ± 0.3290
* P	0.0000 ± 0.0588	0.0000 ± 0.0051	0.0000 ± 0.0024
S	14.80 ± 0.7921	1.287 ± 0.0698	0.6158 ± 0.0698
Cl	29.54 ± 1.532	2.569 ± 0.1351	1.229 ± 0.1384
K	10.65 ± 0.5537	0.9265 ± 0.0488	0.4432 ± 0.0499
Ca	94.86 ± 4.813	8.249 ± 0.4246	3.946 ± 0.4425
Ti	4.179 ± 0.2204	0.3634 ± 0.0194	0.1738 ± 0.0197
V	0.0881 ± 0.0271	0.0077 ± 0.0024	0.0037 ± 0.0012
Cr	0.2226 ± 0.0181	0.0194 ± 0.0016	0.0093 ± 0.0012
Mn	13.67 ± 0.9786	1.189 ± 0.0857	0.5688 ± 0.0699
Fe	25.26 ± 1.267	2.196 ± 0.1118	1.051 ± 0.1175
Co	0.1605 ± 0.0339	0.0140 ± 0.0030	0.0067 ± 0.0016
Ni	0.1412 ± 0.0215	0.0123 ± 0.0019	0.0059 ± 0.0011
Cu	0.8882 ± 0.0520	0.0772 ± 0.0046	0.0369 ± 0.0043
Zn	1.219 ± 0.0655	0.1060 ± 0.0058	0.0507 ± 0.0058
* Ga	0.0011 ± 0.0113	0.0001 ± 0.0010	0.0000 ± 0.0005
* Ge	0.0000 ± 0.0102	0.0000 ± 0.0009	0.0000 ± 0.0004
* As	0.0000 ± 0.0147	0.0000 ± 0.0013	0.0000 ± 0.0006
* Se	0.0045 ± 0.0079	0.0004 ± 0.0007	0.0002 ± 0.0003
Br	0.2260 ± 0.0147	0.0197 ± 0.0013	0.0094 ± 0.0011
* Rb	0.0113 ± 0.0079	0.0010 ± 0.0007	0.0005 ± 0.0003
Sr	0.4430 ± 0.0249	0.0385 ± 0.0022	0.0184 ± 0.0021
* Y	0.0158 ± 0.0102	0.0014 ± 0.0009	0.0007 ± 0.0004
Zr	0.3548 ± 0.0237	0.0309 ± 0.0021	0.0148 ± 0.0018
* Mo	0.0000 ± 0.0192	0.0000 ± 0.0017	0.0000 ± 0.0008
* Pd	0.0780 ± 0.0542	0.0068 ± 0.0047	0.0032 ± 0.0023
* Ag	0.0000 ± 0.0565	0.0000 ± 0.0049	0.0000 ± 0.0024
Cd	0.2249 ± 0.0633	0.0196 ± 0.0055	0.0094 ± 0.0028
* In	0.0588 ± 0.0678	0.0051 ± 0.0059	0.0024 ± 0.0028
* Sn	0.1367 ± 0.0814	0.0119 ± 0.0071	0.0057 ± 0.0034
* Sb	0.2825 ± 0.1650	0.0246 ± 0.0143	0.0118 ± 0.0070
Ba	1.240 ± 0.0814	0.1078 ± 0.0071	0.0516 ± 0.0062
* La	0.0000 ± 0.0791	0.0000 ± 0.0069	0.0000 ± 0.0033
* Hg	0.0000 ± 0.0181	0.0000 ± 0.0016	0.0000 ± 0.0008
Pb	0.1254 ± 0.0249	0.0109 ± 0.0022	0.0052 ± 0.0012

* - Concentration is less than three times the uncertainty

Client: T029 - Tetra Tech EMI
Report Number: 09-016

Lab ID: 08-T7082
Client ID: CAMU06-012009
Filter ID: P8013742
Site: CAMU06
Sample Date: 1/20/09
Filter Lot #: 8070002
Volume: 24.04 +/- 2.404 m³
Deposit Area: 11.3 cm²
Size Fraction: TSP

Analyte	µg/filter	percent	µg/m ³
Gravimetry			
Net Mass	389. ± 10.		16.18 ± 1.671
XRF			
* Na	2.390 ± 1.165	0.6144 ± 0.2999	0.0994 ± 0.0495
Mg	4.781 ± 0.6373	1.229 ± 0.1669	0.1989 ± 0.0331
Al	5.051 ± 0.4350	1.298 ± 0.1167	0.2101 ± 0.0277
Si	17.45 ± 1.148	4.485 ± 0.3169	0.7258 ± 0.0869
* P	0.0000 ± 0.0316	0.0000 ± 0.0081	0.0000 ± 0.0013
S	2.648 ± 0.1672	0.6806 ± 0.0464	0.1101 ± 0.0130
Cl	4.284 ± 0.2350	1.101 ± 0.0667	0.1782 ± 0.0203
K	2.382 ± 0.1311	0.6124 ± 0.0372	0.0991 ± 0.0113
Ca	21.93 ± 1.109	5.638 ± 0.3197	0.9124 ± 0.1022
Ti	0.4814 ± 0.0599	0.1237 ± 0.0157	0.0200 ± 0.0032
* V	0.0113 ± 0.0203	0.0029 ± 0.0052	0.0005 ± 0.0008
* Cr	0.0158 ± 0.0090	0.0041 ± 0.0023	0.0007 ± 0.0004
Mn	0.9334 ± 0.0486	0.2399 ± 0.0139	0.0388 ± 0.0044
Fe	5.999 ± 0.3040	1.542 ± 0.0876	0.2496 ± 0.0280
* Co	0.0599 ± 0.0237	0.0154 ± 0.0061	0.0025 ± 0.0010
* Ni	0.0226 ± 0.0158	0.0058 ± 0.0041	0.0009 ± 0.0007
Cu	0.1706 ± 0.0192	0.0439 ± 0.0051	0.0071 ± 0.0011
Zn	0.2746 ± 0.0203	0.0706 ± 0.0055	0.0114 ± 0.0014
* Ga	0.0000 ± 0.0102	0.0000 ± 0.0026	0.0000 ± 0.0004
* Ge	0.0102 ± 0.0090	0.0026 ± 0.0023	0.0004 ± 0.0004
* As	0.0000 ± 0.0124	0.0000 ± 0.0032	0.0000 ± 0.0005
Se	0.0215 ± 0.0068	0.0055 ± 0.0017	0.0009 ± 0.0003
Br	0.0655 ± 0.0079	0.0168 ± 0.0021	0.0027 ± 0.0004
* Rb	0.0023 ± 0.0068	0.0006 ± 0.0017	0.0001 ± 0.0003
Sr	0.1096 ± 0.0102	0.0282 ± 0.0027	0.0046 ± 0.0006
Y	0.0429 ± 0.0102	0.0110 ± 0.0026	0.0018 ± 0.0005
Zr	0.0576 ± 0.0124	0.0148 ± 0.0032	0.0024 ± 0.0006
* Mo	0.0170 ± 0.0181	0.0044 ± 0.0046	0.0007 ± 0.0008
* Pd	0.0565 ± 0.0497	0.0145 ± 0.0128	0.0024 ± 0.0021
* Ag	0.0305 ± 0.0508	0.0078 ± 0.0131	0.0013 ± 0.0021
* Cd	0.0170 ± 0.0554	0.0044 ± 0.0142	0.0007 ± 0.0023
* In	0.0486 ± 0.0610	0.0125 ± 0.0157	0.0020 ± 0.0025
* Sn	0.0520 ± 0.0723	0.0134 ± 0.0186	0.0022 ± 0.0030
* Sb	0.3571 ± 0.1480	0.0918 ± 0.0381	0.0149 ± 0.0063
Ba	0.2904 ± 0.0475	0.0747 ± 0.0124	0.0121 ± 0.0023
* La	0.0000 ± 0.0362	0.0000 ± 0.0093	0.0000 ± 0.0015
* Hg	0.0000 ± 0.0192	0.0000 ± 0.0049	0.0000 ± 0.0008
* Pb	0.0520 ± 0.0215	0.0134 ± 0.0055	0.0022 ± 0.0009

* - Concentration is less than three times the uncertainty

Client: T029 - Tetra Tech EMI
Report Number: 09-016

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Lab ID: 08-T7083
Client ID: BMI11-012009BS
Filter ID: P8013743
Site: BMI11
Sample Date: 1/20/09
Filter Lot #: 8070002
Deposit Area: 11.3 cm²
Size Fraction: TSP

Analyte	µg/filter
Gravimetry	
Net Mass	-2. ± 10.

XRF

* Na	0.0000 ± 0.8351
* Mg	0.2791 ± 0.2599
* Al	0.0768 ± 0.1062
* Si	0.0000 ± 0.0576
* P	0.0034 ± 0.0203
* S	0.0000 ± 0.0181
* Cl	0.0000 ± 0.0384
* K	0.0136 ± 0.0215
* Ca	0.0000 ± 0.0136
* Ti	0.0000 ± 0.0079
* V	0.0090 ± 0.0068
* Cr	0.0000 ± 0.0079
* Mn	0.0000 ± 0.0113
* Fe	0.0034 ± 0.0170
* Co	0.0588 ± 0.0215
* Ni	0.0497 ± 0.0170
* Cu	0.0113 ± 0.0147
* Zn	0.0102 ± 0.0113
* Ga	0.0034 ± 0.0102
* Ge	0.0045 ± 0.0090
* As	0.0000 ± 0.0136
* Se	0.0034 ± 0.0079
* Br	0.0000 ± 0.0068
* Rb	0.0023 ± 0.0068
* Sr	0.0090 ± 0.0079
* Y	0.0011 ± 0.0102
* Zr	0.0000 ± 0.0124
* Mo	0.0000 ± 0.0181
* Pd	0.0000 ± 0.0475
* Ag	0.0768 ± 0.0508
* Cd	0.0113 ± 0.0554
* In	0.0814 ± 0.0610
* Sn	0.0181 ± 0.0723
* Sb	0.2961 ± 0.1492
* Ba	0.0000 ± 0.0282
* La	0.0271 ± 0.0158
* Hg	0.0000 ± 0.0192
* Pb	0.0305 ± 0.0215

* - Concentration is less than three times the uncertainty

CHESTER LabNet

XRF-770

XRF Analytical Quality Assurance Report

Client: Tetra Tech

Report: 09-016

Analysis Period: January 29, 2009

Number of Samples: 13

1. Precision Data

Micromatter Multi-elemental Quality Control Standard: QS285

QC Standard Results

Analyte	n	Counts per Second			c.v.	%E
		Calib.	Meas.	S.D.		
Si(0)	1	1785.92	1762.60	na	na	-1.31
Ti(1)	1	591.36	578.24	na	na	-2.22
Fe(1)	1	1321.41	1293.80	na	na	-2.09
Se(3)	1	343.74	323.86	na	na	-5.78
Pb(3)	1	394.75	370.89	na	na	-6.05
Cd(4)	1	277.97	273.66	na	na	-1.55

2. Accuracy Data

NIST Standard Reference Materials: SRM 1832, SRM 1833, SRM 2783

Analyte/ SRM	n	Certified Value(μg/cm²)	Measured Value (μg/cm²)				% Rec.
			High	Low	Average		
Al 1832	4	14.6 +/- .97	15.13	14.12	14.60	+/- 0.40	100.0
Si 1832	4	34.0 +/- 1.1	34.29	33.97	34.11	+/- 0.12	100.3
Si 1833	4	31.5 +/- 2.1	31.79	31.01	31.35	+/- 0.30	99.5
S 2708	4	2.46 +/- .25	2.41	2.31	2.36	+/- 0.04	95.6
K 1833	4	16.4 +/- 1.64	17.50	16.87	17.15	+/- 0.25	104.5
Ca 2783	4	1.33 +/- 0.17	1.38	1.28	1.32	+/- 0.04	99.4
Ti 1833	4	12.1 +/- 1.79	12.45	11.75	11.98	+/- 0.28	99.0
V 1832	4	4.70 +/- .49	4.52	4.31	4.43	+/- 0.09	94.2
Mn 1832	4	4.54 +/- .49	4.63	4.56	4.60	+/- 0.03	101.3
Fe 1833	4	13.6 +/- .45	13.92	13.72	13.77	+/- 0.08	101.3
Cu 1832	4	2.43 +/- .16	2.50	2.47	2.48	+/- 0.01	102.0
Zn 1833	4	3.88 +/- .30	3.80	3.53	3.67	+/- 0.11	94.5
Pb 1833	4	16.1 +/- .75	17.18	16.11	16.57	+/- 0.41	102.9

NIST: National Institute of Standards and Technology

% Rec: Percent Recovery = (Experimental/Given) x 100

n: Number of Observations

S.D.: Standard Deviation

c.v.: Coefficient of Variation = (S.D./Measured) x 100

% E: Percent Error = [(Measured-Calibrated)/Calibrated] x 100

XRF-770 REPLICATE REPORT

5.39

Original ID: 08-T7079

Replicate ID: RT7079

Filter Lot:

Deposit Mass: 1431 µg

Deposit Area: 11.3 cm²

Particle Size: F

Element	Original ug/cm2			Replicate ug/cm2			Difference ug/cm2			RPD		
Na	0.9770	+-	0.2244	0.8634	+-	0.2478	0.1136	+-	0.3344	+	12.3	+- 36.3
Mg	1.6535	+-	0.1765	1.5883	+-	0.1795	0.0652	+-	0.2517	+	4.0	+- 15.5
Al	1.9415	+-	0.1575	1.9098	+-	0.1571	0.0317	+-	0.2225	+	1.6	+- 11.6
Si	5.9018	+-	0.4057	5.9620	+-	0.4104	-0.0603	+-	0.5771	+	-1.0	+- 9.7
P	0.0000	+-	0.0049	0.0008	+-	0.0057	-0.0008	+-	0.0075			
S	0.9935	+-	0.0540	0.9458	+-	0.0539	0.0477	+-	0.0763	+	4.9	+- 7.9
Cl	3.8844	+-	0.2010	3.6392	+-	0.1895	0.2452	+-	0.2762	+	6.5	+- 7.3
K	0.7797	+-	0.0407	0.7977	+-	0.0422	-0.0180	+-	0.0587	+	-2.3	+- 7.4
Ca	6.8619	+-	0.3486	6.8999	+-	0.3509	-0.0380	+-	0.4946	+	-0.6	+- 7.2
Ti	0.1667	+-	0.0101	0.1718	+-	0.0117	-0.0051	+-	0.0155	+	-3.0	+- 9.1
V	0.0031	+-	0.0022	0.0052	+-	0.0031	-0.0021	+-	0.0037			
Cr	0.0075	+-	0.0011	0.0072	+-	0.0016	0.0003	+-	0.0019	+	4.6	+- 26.5
Mn	0.5927	+-	0.0427	0.6075	+-	0.0443	-0.0149	+-	0.0615	+	-2.5	+- 10.3
Fe	1.8443	+-	0.0925	1.8645	+-	0.0936	-0.0202	+-	0.1316	+	-1.1	+- 7.1
Co	0.0093	+-	0.0027	0.0107	+-	0.0039	-0.0014	+-	0.0048	+	-13.8	+- 47.8
Ni	0.0064	+-	0.0017	0.0020	+-	0.0023	0.0043	+-	0.0028			
Cu	0.0558	+-	0.0036	0.0584	+-	0.0040	-0.0026	+-	0.0054	+	-4.5	+- 9.4
Zn	0.0827	+-	0.0073	0.0845	+-	0.0075	-0.0018	+-	0.0105	+	-2.2	+- 12.5
Ga	0.0000	+-	0.0010	0.0000	+-	0.0014	0.0000	+-	0.0017			
Ge	0.0000	+-	0.0009	0.0011	+-	0.0012	-0.0011	+-	0.0015			
As	0.0000	+-	0.0013	0.0000	+-	0.0018	0.0000	+-	0.0022			
Se	0.0018	+-	0.0007	0.0012	+-	0.0009	0.0007	+-	0.0012			
Br	0.0153	+-	0.0011	0.0167	+-	0.0013	-0.0014	+-	0.0017	+	-8.8	+- 10.5
Rb	0.0029	+-	0.0007	0.0026	+-	0.0010	0.0003	+-	0.0012	+	12.3	+- 44.9
Sr	0.0340	+-	0.0020	0.0366	+-	0.0023	-0.0026	+-	0.0030	+	-7.3	+- 8.6
Y	0.0008	+-	0.0009	0.0003	+-	0.0013	0.0004	+-	0.0016			
Zr	0.0207	+-	0.0016	0.0204	+-	0.0020	0.0004	+-	0.0026	+	1.8	+- 12.7
Mo	0.0001	+-	0.0017	0.0079	+-	0.0024	-0.0078	+-	0.0029			
Pd	0.0000	+-	0.0047	0.0053	+-	0.0065	-0.0054	+-	0.0080			
Ag	0.0040	+-	0.0049	0.0000	+-	0.0068	0.0040	+-	0.0084			
Cd	0.0049	+-	0.0054	0.0068	+-	0.0074	-0.0019	+-	0.0091			
In	0.0042	+-	0.0060	0.0249	+-	0.0085	-0.0208	+-	0.0104			
Sn	0.0142	+-	0.0072	0.0219	+-	0.0097	-0.0077	+-	0.0120			
Sb	0.0330	+-	0.0144	0.0745	+-	0.0201	-0.0414	+-	0.0248			
Ba	0.0822	+-	0.0061	0.0802	+-	0.0087	0.0020	+-	0.0106	+	2.4	+- 13.1
La	0.0000	+-	0.0050	0.0000	+-	0.0067	0.0000	+-	0.0084			
Hg	0.0000	+-	0.0016	0.0000	+-	0.0025	0.0000	+-	0.0030			
Pb	0.0073	+-	0.0021	0.0106	+-	0.0029	-0.0033	+-	0.0036	+	-36.4	+- 40.1

RPD: Relative Percent Difference $(X1-X2)/[(X1+X2)/2]*100$. RPD is calculated when original value is greater than three times its uncertainty.

XRF-770 REPLICATE REPORT

2.99

Original ID: 08-T7081

Replicate ID: RT7081

Filter Lot:

Deposit Mass: 1150 µg

Deposit Area: 11.3 cm²

Particle Size: F

Element	Original ug/cm2			Replicate ug/cm2			Difference ug/cm2			RPD		
Na	0.6653	+-	0.2039	0.8818	+-	0.2348	-0.2165	+-	0.3110	+	-28.0	+- 40.2
Mg	2.2098	+-	0.2175	2.2351	+-	0.2262	-0.0253	+-	0.3138	+	-1.1	+- 14.1
Al	1.7739	+-	0.1425	1.6621	+-	0.1363	0.1118	+-	0.1972	+	6.5	+- 11.5
Si	5.7880	+-	0.3934	5.6005	+-	0.3811	0.1875	+-	0.5477	+	3.3	+- 9.6
P	0.0000	+-	0.0052	0.0039	+-	0.0058	-0.0039	+-	0.0078			
S	1.3103	+-	0.0701	1.2522	+-	0.0692	0.0580	+-	0.0985	+	4.5	+- 7.7
Cl	2.6142	+-	0.1356	2.5191	+-	0.1319	0.0951	+-	0.1891	+	3.7	+- 7.4
K	0.9429	+-	0.0490	0.9112	+-	0.0480	0.0317	+-	0.0685	+	3.4	+- 7.4
Ca	8.3948	+-	0.4259	8.0524	+-	0.4088	0.3424	+-	0.5904	+	4.2	+- 7.2
Ti	0.3698	+-	0.0195	0.3595	+-	0.0199	0.0103	+-	0.0279	+	2.8	+- 7.6
V	0.0078	+-	0.0024	0.0105	+-	0.0033	-0.0028	+-	0.0041	+	-30.2	+- 44.4
Cr	0.0197	+-	0.0016	0.0178	+-	0.0020	0.0019	+-	0.0026	+	10.1	+- 13.8
Mn	1.2101	+-	0.0866	1.1416	+-	0.0821	0.0684	+-	0.1193	+	5.8	+- 10.1
Fe	2.2355	+-	0.1121	2.1649	+-	0.1087	0.0706	+-	0.1561	+	3.2	+- 7.1
Co	0.0142	+-	0.0030	0.0089	+-	0.0041	0.0053	+-	0.0051	0	45.7	+- 43.8
Ni	0.0125	+-	0.0019	0.0160	+-	0.0026	-0.0035	+-	0.0032	0	-24.3	+- 22.5
Cu	0.0786	+-	0.0046	0.0715	+-	0.0046	0.0071	+-	0.0066	0	9.5	+- 8.7
Zn	0.1079	+-	0.0058	0.1042	+-	0.0059	0.0037	+-	0.0083	+	3.5	+- 7.8
Ga	0.0001	+-	0.0010	0.0000	+-	0.0014	0.0001	+-	0.0017			
Ge	0.0000	+-	0.0009	0.0005	+-	0.0012	-0.0005	+-	0.0015			
As	0.0000	+-	0.0013	0.0000	+-	0.0018	0.0000	+-	0.0022			
Se	0.0004	+-	0.0007	0.0002	+-	0.0010	0.0002	+-	0.0012			
Br	0.0200	+-	0.0013	0.0200	+-	0.0015	0.0000	+-	0.0019	+	0.0	+- 9.6
Rb	0.0010	+-	0.0007	0.0033	+-	0.0010	-0.0023	+-	0.0012			
Sr	0.0392	+-	0.0022	0.0428	+-	0.0025	-0.0036	+-	0.0034	0	-8.8	+- 8.2
Y	0.0014	+-	0.0009	0.0057	+-	0.0013	-0.0043	+-	0.0016			
Zr	0.0314	+-	0.0021	0.0322	+-	0.0024	-0.0008	+-	0.0032	+	-2.4	+- 9.9
Mo	0.0000	+-	0.0017	0.0047	+-	0.0024	-0.0047	+-	0.0029			
Pd	0.0069	+-	0.0048	0.0072	+-	0.0066	-0.0003	+-	0.0082			
Ag	0.0000	+-	0.0050	0.0088	+-	0.0069	-0.0088	+-	0.0086			
Cd	0.0199	+-	0.0056	0.0151	+-	0.0076	0.0048	+-	0.0094	+	27.4	+- 54.1
In	0.0052	+-	0.0060	0.0214	+-	0.0084	-0.0161	+-	0.0103			
Sn	0.0121	+-	0.0072	0.0173	+-	0.0098	-0.0052	+-	0.0121			
Sb	0.0250	+-	0.0146	0.0245	+-	0.0197	0.0005	+-	0.0245			
Ba	0.1097	+-	0.0072	0.1160	+-	0.0099	-0.0063	+-	0.0122	+	-5.5	+- 10.8
La	0.0000	+-	0.0070	0.0000	+-	0.0093	0.0000	+-	0.0116			
Hg	0.0000	+-	0.0016	0.0011	+-	0.0023	-0.0011	+-	0.0028			
Pb	0.0111	+-	0.0022	0.0151	+-	0.0030	-0.0041	+-	0.0038	0	-31.2	+- 28.7

RPD: Relative Percent Difference $(X1-X2)/[(X1+X2)/2]*100$. RPD is calculated when original value is greater than three times its uncertainty.

Company Name TEIRA TECH EM Inc		Phone 208 484 9436	
Contact Doug Herbel		Fax 208 343 4750	
E-Mail Address dougus.herbel@ttemi.com		Report Address 3380 Americana Terrace, Ste 201	
City Boise		State ID	Zip 83704
Billing Address 3380 Americana Terrace, Ste 201			
City Boise		State ID	Zip 83704
PO # 103PO233		Project BMT	

CHESTER LabNet

12242 SW Garden Place
Tigard, OR 97223
(503) 624-2183
Fax (503) 624-2653
cln@chesterlab.net

CHAIN-OF-CUSTODY RECORDPage 1 of 3

LabNet ID	Field Sample ID	Site	Sample Date	Volume (m ³)	Particle Size	Analysis Requested										Turn Around Time <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush _____ Specify _____	Remarks
	BMT03-011609	BMT03	01-16-09	24.04	74469												0876908
	BMT01-011609	BMT01		20.76													0877076
	CAM006-011609	CAM006		22.57													0877077
	CAM003-011609	CAM003		24.04													0876909
	BMT11-011609	BMT11		24.04													0876905
	BMT06-011609	BMT06	✓	17.62													0876907
	BMT03-012009	BMT03	01-20-09	17.50													0877080
	BMT01-012009	BMT01		24.04													0877081
	CAM006-012009	CAM006		24.04													0877082
	CAM004-012009	CAM004		22.88													0877079
	BMT11-012009	BMT11		24.04													0877078
	BMT11-012009 BS	BMT11		—													0877083

Notes:

XRF

Received By: (Signature) Date/Time

Doug Herbel 1/21/09 9:45

Received By: (Signature) Date/Time

Doug Herbel 1-20-09 1702

Company Name TETRA TECH EM INC		Phone ³ 208 484 9434	
Contact Doug Herlocker		Fax 208 343 4750	
E-Mail Address doughis.herlocker@tetra-em.com			
Report Address 3380 Americana Terrace, Ste 201			
City Boise	State ID	Zip 83704	
Billing Address 3350 Americana Terrace, Ste 201			
City Boise	State ID	Zip 83704	
PO # 1030233		Project BNI	

12242 SW Garden Place
Tigard, OR 97223
(503) 624-2183
Fax (503) 624-2653
cln@chesterlab.net

CHAIN-OF-CUSTODY RECORD

[illegible]

RAW DATA

Available upon request