2008 BASELINE AIR QUALITY MONITORING ASSESSMENT

FARO MINE COMPLEX

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EXECUTIVE SUMMARY

A baseline air quality monitoring program was conducted at the Faro Mine Complex in the summer of 2008 to establish existing levels of particulate matter and trace heavy metals. A total of nine sampling sites were established in July of 2008 to sample for total suspended particulate (TSP) matter and respirable particulate matter (PM_{10}). Five sites were located in the vicinity of the Faro mine pit and tailings areas, three in the vicinity of the Grum and Vangorda pits, and one site was located in the Town of Faro to provide estimates of background air quality away from the mine site. A dustfall sampling site was also located near the tailings area at the Faro mine site.

TSP and PM_{10} sampling was conducted using battery-operated MiniVol™ samplers during the period July 17th to October 3rd on a 1-in-6 day sampling schedule, for a total of 13 sampling periods (24 hour averages). All TSP and PM_{10} levels were within established ambient air quality objectives defined by Environment Canada or other provincial jurisdictions. The highest and second highest TSP concentrations of 95.5 $\mu g/m^3$ and 70.6 $\mu g/m^3$ were recorded on September 9th near the Grum pit and the Faro mine, respectively. The major elemental constituents of the two TSP samples on that date consisted of aluminium, boron, calcium, chromium, iron, magnesium, phosphorus, potassium and sodium. All other sampling sites had low TSP concentrations (<8 $\mu g/m^3$) on that date. The only other date with TSP concentrations in the range of 35-40 $\mu g/m^3$ occurred on August 4th. One sample was recorded near the Faro mine, while the other two were collected near the Vangorda and Grum pits. The major elemental constituent of one sample was sodium, with smaller concentrations of aluminium, calcium, iron and magnesium in all three samples.

The highest PM_{10} concentration of 24.7 $\mu g/m^3$ was recorded at Rose Creek downwind of the tailings area on July 23rd. All other PM_{10} concentrations were less than 20 $\mu g/m^3$, and there was little difference in PM_{10} concentrations between the mine site and the Town of Faro. The major elemental constituent of the July 23rd sample on Rose Creek was sodium, with smaller quantities of aluminium, calcium, chromium, copper, iron, phosphorus and potassium.

Overall, particulate matter and trace inorganic element concentrations at the Faro Mine Complex were very low, and were often similar to levels recorded in the Town of Faro. Even during the periods with the highest TSP loadings, the composition of the particulate matter was primarily made up of trace elements which either have no ambient air quality criteria or are not of concern for human health exposure. The exception may be chromium which had a relatively high concentration in one sample collected near the Faro pit, but this value is considered anomalous because sample collection did not extend over a full 24-hour period. The 24-hour averaged chromium concentrations in all other samples remained well below any level of concern.

The maximum observed concentrations for inorganic elements with established ambient air quality criteria are listed in Table ES.1 (excluding samples collected near the Faro mine pit which were considered outlier values).

Table ES.1
Comparison of Maximum Observed Elemental Concentrations
And AAQC Values

Element	**Maximum Observed Concentration**	**Sampling Location**	**PM Size Fraction**	**Ambient Air Quality Criteria**	
	(µg/m^3)			(µg/m^3)	**Rationale**
Antimony	0.00185	TL1	PM_{10}	25	health
Arsenic	0.00738	TL2	PM_{10}	0.3	health
Barium	0.04565	TL3	TSP	10	health
Beryllium	0.00185	TL1	PM_{10}	0.01	health
Boron	0.09243	TL1	PM_{10}	120	particulate matter
Cadmium	0.00246	RC1	TSP	2	health
Chromium	0.327	TL2	PM_{10}	1.5	health
Cobalt	0.0007	TL3	PM_{10}	0.1	health
Copper	0.477	TL3	TSP	50	health
Iron	1.733	VG2	PM_{10}	4	soiling
Lead	0.0839	TL3	TSP	2	health
Manganese	0.021	TL3	TSP	2.5	health
Molybdenum	0.0011	TL3	TSP	120	particulate matter
Nickel	0.0099	VG1	TSP	2	vegetation
Selenium	0.00185	TL1	PM_{10}	10	health
Silver	0.000896	VG2	TSP	1	health
Strontium	0.00419	TL3	TSP	120	particulate matter
Tellurium	0.00185	TL1	PM_{10}	10	health
Tin	0.0108	VG1	TSP	10	health
Titanium	0.0271	TL3	TSP	120	particulate matter
Vanadium	0.00185	TL1	PM_{10}	2	health
Zinc	0.101	TL3	TSP	120	particulate matter

The total dustfall near the tailings area of the Faro mine was very low, with two of the samples (July and September) having dustfall levels at the method detection limit. The maximum total dustfall deposition rate occurred in August with a rate of 0.12 mg/dm^2.day, although July's rate might have been higher if the sample had been collected over the entire month. This maximum deposition rate is an order of magnitude lower than the dustfall criteria adopted by various provinces in Canada, as well as criteria for new mines in Australia and residential areas of the

United Kingdom and the State of New York. The low dustfall levels are consistent with the generally low particulate matter concentrations observed in the TSP and PM_{10} samples.

With respect to elemental composition, most of the trace inorganic constituents were below the method detection limits for all three dustfall samples. The only contaminants that were observed to be higher than the detection limits included arsenic, barium, cadmium, calcium, copper, iron, lead, manganese, molybdenum, silver, strontium, zinc. With the exception of arsenic and zinc, the remainder of these elements were also noted to have somewhat elevated concentrations relative to the Town of Faro in the TSP and PM_{10} samples. This indicates a reasonable degree of consistency between the TSP/PM_{10} samples and the dustfall samples. The highest concentrations of these 12 constituents in dustfall samples occurred either in July or August. All elemental concentrations in the September dustfall sample were lower than in the previous two sampling periods.

Although there were some difficulties with data recovery in the initial part of the sampling program due to operator error on the part of on-site staff, the overall sampling program was successful in establishing baseline levels of particulate matter and trace inorganic elements. It is recommended that the particulate matter sampling program be continued in 2009 with the following changes:

1. The sampling program should be initiated as soon as possible after the loss of snow cover in late May or early June, depending on site conditions. The continuation of the sampling program to the end of September should be reconsidered, with a termination date in early September at the latest.
2. The same nine sampling sites should be retained for 2009, but the sampling periods should be extended to 48 hours in order to obtain higher particle loadings on the filters.
3. It would be preferable to add at least three additional dustfall sampling sites to the program. These could be established at sites Rose Creek (site RC1), the Faro pit (site A1) and between the Vangorda and Grum pits (site VG2).
4. In order to minimize material loss or damage to the filters during handling, it is recommended that a 'clean' room be identified for this purpose. If this cannot be done at the mine administration building, consideration should be given to finding a location in the Town of Faro for that purpose.

1.0 INTRODUCTION

A baseline air quality monitoring program was conducted at the Faro Mine Complex in the summer of 2008 to establish existing levels of particulate matter and trace heavy metals. The Complex is located near the Town of Faro, Yukon Territory, and is the site of a former lead/zinc mine operated by the Anvil Range Mining Corporation. The mine site is being decommissioned, and the objective of the air quality monitoring program in 2008 was to provide baseline exposure data for worker health and safety prior to the start of remediation activity at the mine.

A total of nine sampling sites were established in July of 2008 to sample for total suspended particulate (TSP) matter and respirable particulate matter (PM_{10}). Five sites were located in the vicinity of the Faro mine pit and tailings areas, three in the vicinity of the Grum and Vangorda pits, and one site was located in the Town of Faro to provide estimates of background air quality away from the mine site.

TSP/PM_{10} sampling was commenced on July 17th and conducted on a 1-in-6 day sampling schedule, consistent with the National Air Pollution Surveillance (NAPS) network sampling schedule operated by Environment Canada, until October 3rd. A total of 13 24-hour averaged TSP/PM_{10} samples were collected during this period. In addition, three dustfall samples were collected at one location near the Faro mine tailings area: a partial sample for the latter half of July and full monthly samples for August and September.

All samples were analysed for total mass, as well as for elemental composition of trace heavy metals and inorganic constituents.

2.0 MONITORING PROGRAM

2.1 SAMPLING LOCATIONS

Figure 2.1 shows the location of the nine TSP/PM_{10} sampling sites at the mine complex. Five sites were established in the Faro Mine area (TL1, TL2, TL3, RC1 and A1). Three sampling sites were located in the vicinity of the Vangorda and Grum mine pits (VG1, VG2 and G1). One site was located in the Town of Faro (FA1) away from the mine complex to provide a measure of background concentrations. The latitude/longitude and UTM coordinates of each site is listed in Table 2.1.

Figure 2.1
TSP/PM_{10} Sampling Locations

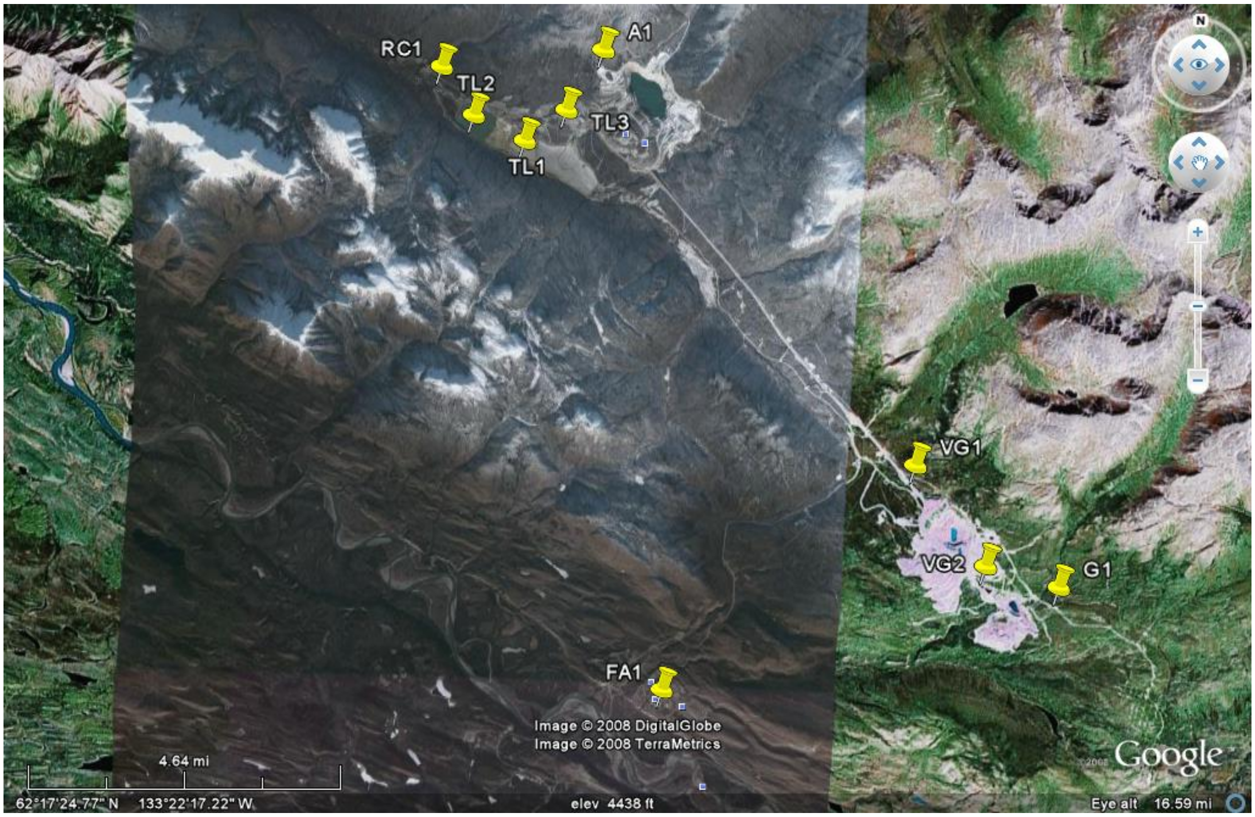

Table 2.1
Sampling Location Coordinates

Site	Latitude N	Longitude W	UTM N (m)	UTM E (m)	Elevation (m)
TL1	62^0 20.566	133^0 25.546	6913359.00	418483.53	1058.6
TL2	62^0 20.866	133^0 26.981	6913886.00	419733.30	1055.5
TL3	62^0 20.973	133^0 24.431	6914124.50	417537.16	1118.9
RC1	62^0 21.474	133^0 27.915	6914980.50	420564.70	1020.2
A1	62^0 21.724	133^0 23.461	6915559.00	415876.30	1293.3
VG1	62^0 16.633	133^0 14.510	6906302.50	408763.66	1282.3
VG2	62^0 15.342	133^0 12.491	6903969.00	406939.25	1178.4
G1	62^0 15.109	133^0 10.478	6903584.00	405196.72	1230.5
FA1	62^0 13.553	133^0 21.185	6900427.50	414383.50	724.8

2.1.1 Faro Mine Site

Figure 2.2 provides an enlarged image of the sampling locations at the Faro mine site. Two sampling sites were located on the southeast side of the tailing area (TL1, TL2) where trace metals concentrations were expected to be elevated. The dustfall sampling site was also located at TL1, along with the meteorological station to record temperature and atmospheric pressure which were used in calculating the TSP/PM_{10} concentrations. Figure 2.3 shows the sampling equipment at TL1, while Figure 2.4 shows the TSP/PM_{10} monitors at TL2. Both Sites are in proximity to the unpaved road running between the tailings areas and Rose Creek.

One sampling site was located at the northwest end of the tailings area beside Rose Creek (RC1) where previous soil sampling had indicate the potential for transport of trace metals along the creek away from the mine complex. The sampling location is shown in Figure 2.5. Although a dirt road runs beside the sampling area, it is seldom used.

One sampling site (TL3) was located below the main mine office complex, between the waste rock dump site to the east and the tailings area. The site is located on the slope beside the main road to the mine administration buildings, and would thus be subject to a fair amount of road dust. The equipment setup at TL3 is depicted in Figure 2.6.

Site A1 is located on the northwest side of the mine pit. The site is beside a road that is no longer in use, in the creek hollow beside an area of exposed soil, and would thus be subject to some potential fugitive dust from the west and southwest. Figure 2.7 shows the equipment set up at the site. The mine pit is located to the left of the samplers in Figure 2.7.

Figure 2.2: Location of Sampling Sites at the Faro Mine Site

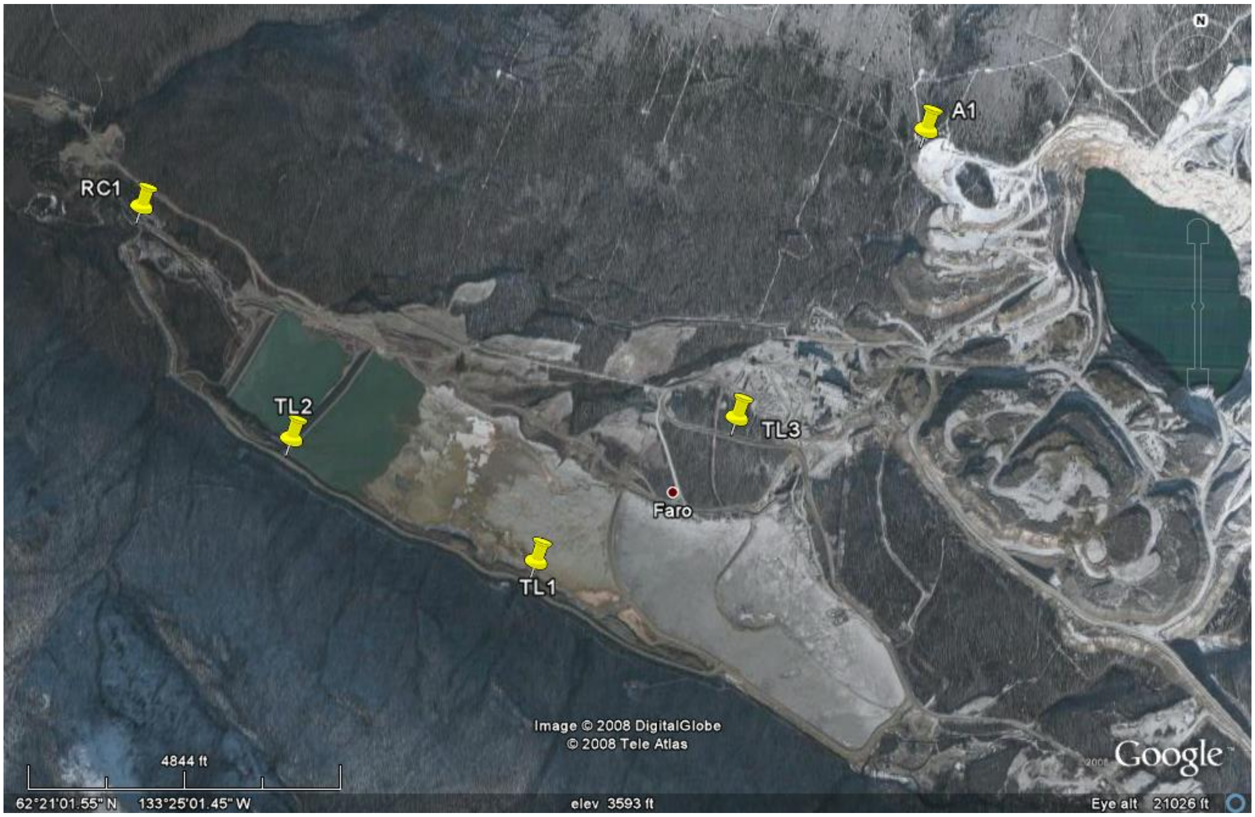

Figure 2.3: TL1 Sampling Site

Figure 2.4: TL2 Sampling Site

Figure 2.5: RC1 Sampling Site

Figure 2.6: TL3 Sampling Site

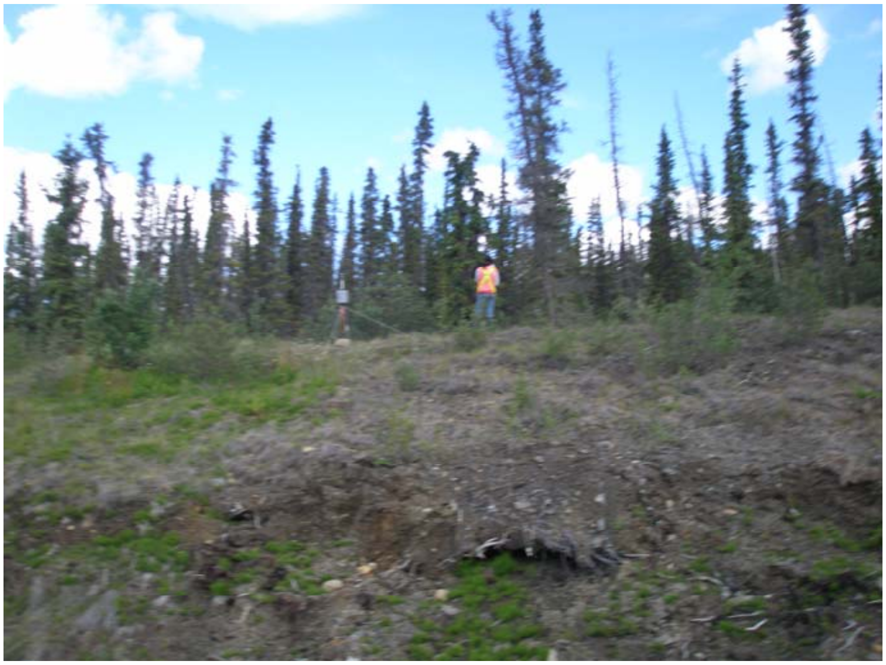

Figure 2.7: A1 Sampling Site

2.1.2 Vangorda and Grum Sites

The three sampling sites near the Vangorda and Grum mine pits were located on the northwest side of the Grum pit (VG1) beside the ore transfer pad, on the breach dam beside the effluent discharge pond between the Vangorda and Grum pits (VG2), and above and to the east of the Vangorda pit (G1) along a road reported to be used by one family in Faro for traditional purposes. All three sites are exposed to fugitive dust from unpaved roads, although VG1 and VG2 would have the greatest potential for exposure to fugitive road dust.

The equipment set up at these three sites is depicted in Figures 2.8, 2.9 and 2.10.

Figure 2.8: VG1 Sampling Site

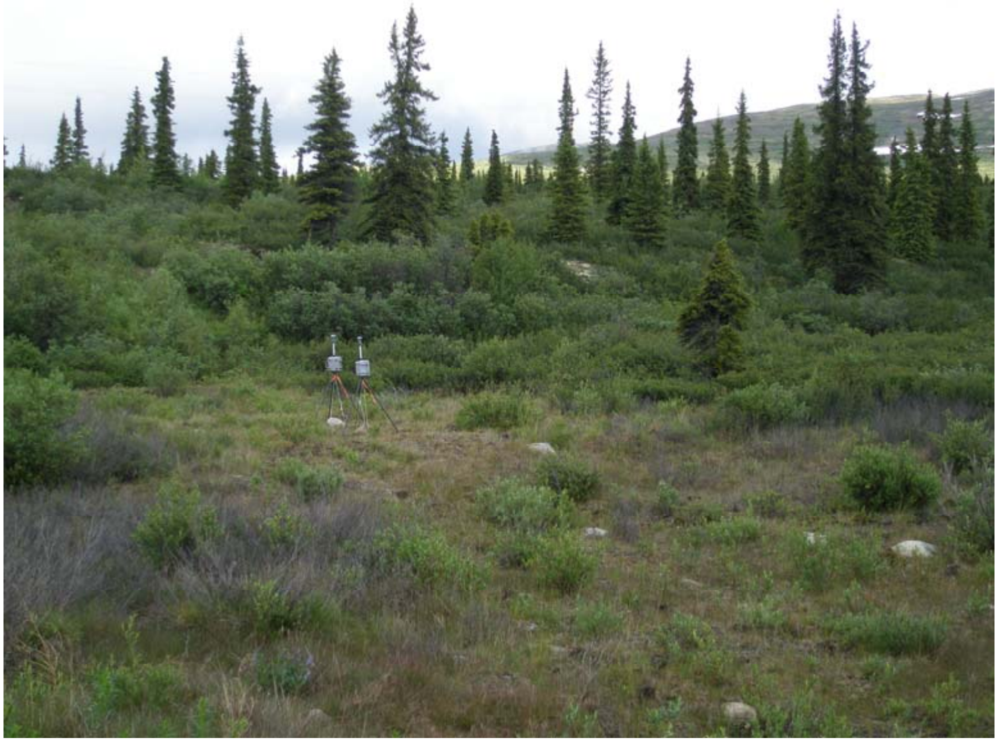

Figure 2.9: VG2 Sampling Site

Figure 2.10: G1 Sampling Site

2.1.3 Faro Town Site

The background sampling site in the Town of Faro was located on the lawn in front of the medical clinic. The location is depicted in Figure 2.11, while the equipment setup is shown in Figure 2.12. The main source of fugitive dust at this location would be from the unpaved road beside the clinic.

Figure 2.11: Town of Faro Sampling Site

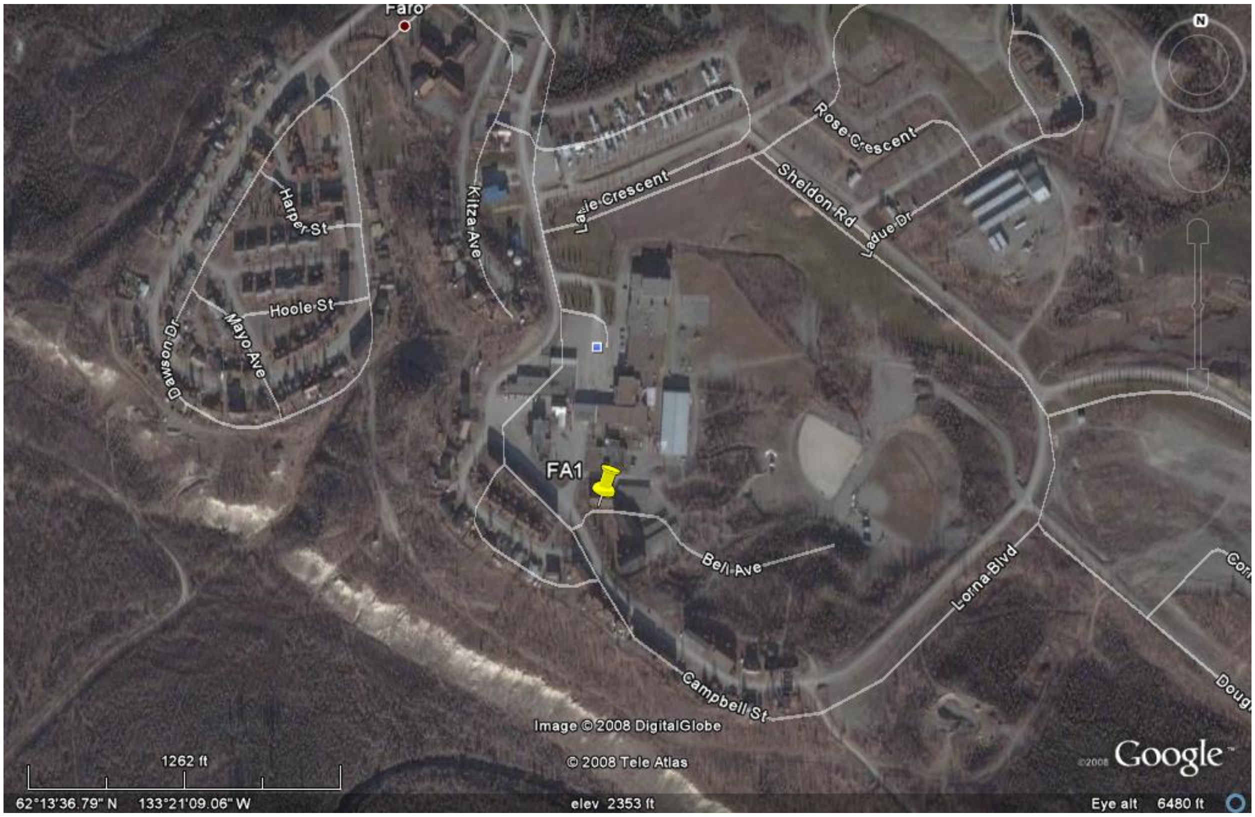

Figure 2.12: FA1 Sampling Site

2.2 SAMPLING METHODOLOGY

2.2.1 TSP/PM_{10} Sampling

The TSP and PM_{10} samples were collected using battery-operated, portable MiniVol™ Tactical Air Samplers (TAS) manufactured by Airmetrics of Eugene, Oregon[1]. The MiniVol™ samplers are designed to operate at a flow rate of 5 litres per minute, and as such provide low volume samples of ambient particulate matter concentrations. While MiniVol™ samplers are not considered a reference sampling method, the mass concentrations derived from MiniVol™ samplers give results that closely agree with reference method concentrations.

Samples were collected on a 1-in-6 day sampling schedule consistent with the National Air Pollution Surveillance (NAPS) particulate matter sampling schedule used by Environment Canada for stations across the country. Appendix A provides details for each set of samples collected during each sampling period.

Samples were collected on 47 mm Teflon filters. Total TSP or PM_{10} concentration was calculated using corrected flow rate (Qact) and the particulate loadings (in mg) on the filters. The following equation to estimate actual flow rate through the filters:

$$Q_{act} \quad = \quad (m_{vol}Q_{ind} + b_{vol}) \times \sqrt{(P_{std}/P_{act}) \times (T_{act}/T_{std})}$$

where

Q_{act}	is the actual flow rate (litres/min)
Q_{ind}	is the rotameter indicated flow rate (litres/min)
m_{vol}	is the slope of the least squares line from the individual sampler calibration report
b_{vol}	is the intercept of the least squares regression line from the individual sampler calibration report
P_{std}	is the standard atmospheric pressure (1013.25 millibars)
P_{act}	is the actual ambient pressure (mbar)
T_{std}	is the standard atmospheric temperature (298^0K)
T_{act}	is the actual ambient temperature (^{0}K)

Total mass of particulate matter on the filters was determined by gravimetric analysis by CANTEST Limited. Elemental composition of the samples was determined by CANTEST using

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[1] http://www.airmetrics.com

inductively coupled plasma mass spectrometry (ICP/MS) methods. The method detection limits for the elemental analysis of the filter samples are listed in Table 2.2.

Table 2.2
Method Detection Limits for Trace Inorganic Elemental Analysis in TSP/PM$_{10}$ Samples

Element	Method Detection Limit (MDL) (µg)
Aluminum (Al)-Total	0.025
Antimony (Sb)-Total	0.005
Arsenic (As)-Total	0.005
Barium (Ba)-Total	0.005
Beryllium (Be)-Total	0.005
Boron (B)-Total	0.25
Cadmium (Cd)-Total	0.001
Calcium (Ca)-Total	0.25
Chromium (Cr)-Total	0.005
Cobalt (Co)-Total	0.005
Copper (Cu)-Total	0.005
Iron (Fe)-Total	0.25
Lead (Pb)-Total	0.005
Magnesium (Mg)-Total	0.25
Manganese (Mn)-Total	0.005
Molybdenum (Mo)-Total	0.0025
Nickel (Ni)-Total	0.005
Phosphorus (P)-Total	0.75
Potassium (K)-Total	0.5
Silver (Ag)-Total	0.00125
Sodium (Na)-Total	0.25
Strontium (Sr)-Total	0.005
Tellurium (Te) - Total	0.005
Thallium (Tl)-Total	0.0005
Tin (Sn)-Total	0.005
Titanium (Ti)-Total	0.005
Vanadium (V) - Total	0.005
Zinc (Zn)-Total	0.025
Zirconium (Zr) - Total	0.05

2.2.2 Dustfall Sampling

Two dustfall canisters were established at site TL1 to measure dustfall and the trace inorganic elemental composition of dustfall. Due to concerns about the amount of dustfall that would be present, one canister was used exclusively to analyse for total mass, while the second canister was used to determine chemical composition. Since the sampling program began on July 17th, only a partial month of data was collected for the period July 17th to 31st. Complete monthly samples were collected for both August and September.

The analysis of the dustfall samples was completed by the ASL Laboratory Group using inductively coupled plasma mass spectrometry (ICP/MS) methods as defined by the B.C. Ministry of Environment.

The method detection limits for the analyses are listed in Table 2.3.

Table 2.3
Method Detection Limits for Trace Inorganic Elemental Analysis in Dustfall Samples

Element	Method Detection Limit (MDL) (mg/dm^2.day)
Aluminum (Al)-Total	0.001
Antimony (Sb)-Total	0.0001
Arsenic (As)-Total	0.0001
Barium (Ba)-Total	0.00005
Beryllium (Be)-Total	0.0005
Bismuth (Bi)-Total	0.0005
Boron (B)-Total	0.01
Cadmium (Cd)-Total	0.00005
Calcium (Ca)-Total	0.05
Chromium (Cr)-Total	0.0005
Cobalt (Co)-Total	0.0001
Copper (Cu)-Total	0.0001
Iron (Fe)-Total	0.03
Lead (Pb)-Total	0.00005
Lithium (Li)-Total	0.005
Magnesium (Mg)-Total	0.1
Manganese (Mn)-Total	0.00005
Mercury (Hg)-Total	0.00005
Molybdenum (Mo)-Total	0.00005
Nickel (Ni)-Total	0.0005
Phosphorus (P)-Total	0.3
Potassium (K)-Total	2

Element	**Method Detection Limit (MDL)** (mg/dm^2.day)
Selenium (Se)-Total	0.001
Silicon (Si)-Total	0.05
Silver (Ag)-Total	0.00001
Sodium (Na)-Total	2
Strontium (Sr)-Total	0.0001
Thallium (Tl)-Total	0.0001
Tin (Sn)-Total	0.0001
Titanium (Ti)-Total	0.01
Uranium (U)-Total	0.00001
Vanadium (V)-Total	0.001
Zinc (Zn)-Total	0.001

2.2.3 Meteorological Sampling

Ambient temperature and barometric pressure were recorded at 5-minute intervals for the duration of the sampling program using a HOBO Micro Station sampler system located at site TL1. The ambient temperature varied from a high of 21.6^{0}C to a low of -8.6^{0}C. Barometric pressure varied from a high of 913.4 mbar to low of 864.9 mbar. The data were used in the calculation of daily TSP and PM$_{10}$ concentrations as discussed in Section 2.2.1, above.

3.0 DISCUSSION OF SAMPLING RESULTS

3.1 TSP/PM$_{10}$ SAMPLES

3.1.1 Data Recovery

Table 3.1 provides a summary of the mass concentrations for TSP and PM$_{10}$ at the nine sampling locations. No sampling data (ND) were recovered for 10.8% of the TSP samples and 8.5% of the PM$_{10}$ samples. This was largely due to some early confusion about instrument operation by field staff at the beginning of the sampling program. The lowest data recovery was for TSP at site A1 where the first five sampling periods were missed for TSP. The second lowest data recovery was for TSP at site FA1 in the Town of Faro where three of the 13 sampling periods did not have recoverable data.

Of the recoverable sampling data, 29.5% of the TSP samples and 43% of the PM$_{10}$ samples had low concentrations that were at the method detection limit (MDL - indicated in italics on Table 3.1) of <5 µg/m^3. The majority of these samples were collected after August 28th. For TSP, six of the 13 samples collected at site TL2 were at the MDL, while five of 13 samples were at the MDL for sites RC1 and A1. In fact, when coupled with the ND samples, only three of 13 samples at site A1 had measurable TSP levels. For PM$_{10}$, site VG2 had seven of 13 samples at the MDL, with five of the seven occurring after September 3rd. Sites TL1, TL2 and VG1 all had six of 13 samples at the MDL, while sites TL3, RC1 and A1 had five samples at the MDL.

Therefore, the relative fraction of samples recovered in which there were measurable concentrations of TSP or PM$_{10}$ was low for many of the sampling sites. As indicated in Figure 3.1, less than 50% of the PM$_{10}$ samples collected at sites TL1, TL2, TL3, VG1 and VG2 had measurable concentrations. All of the sampling sites except A1 had more than 50% of the samples with measurable TSP concentrations, and the low data recovery at A1 was due to the previously mentioned operator error in running the samplers early on in the program. Therefore, TSP sampling was relatively more successful than the PM$_{10}$ sampling, and this should be borne in mind in the interpretation of the sampling results.

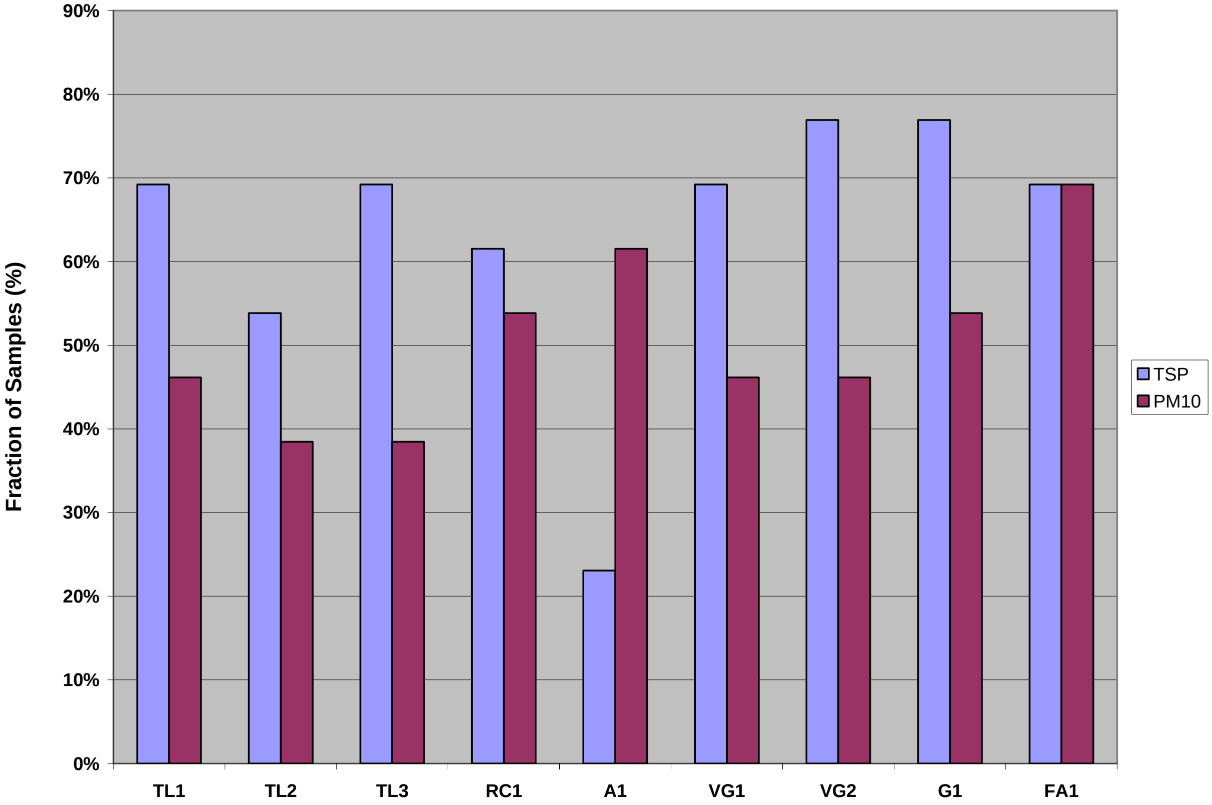
Table 3.1
Summary of TSP and PM_{10} Mass Concentrations

Sampling Date	Total Sampling Time (hours)	Total Suspended Particles (TSP) (µg/m3)									Inhalable Particles (PM10) (µg/m3)								
		TL1	**TL2**	**TL3**	**RC1**	**A1**	**VG1**	**VG2**	**G1**	**FA1**	**TL1**	**TL2**	**TL3**	**RC1**	**A1**	**VG1**	**VG2**	**G1**	**FA1**
17-Jul-08	24	10.97	7.80	28.35	18.74	ND	19.87	23.67	18.04	17.19	8.70	16.17	ND	11.01	11.80	19.33	7.72	6.45	11.16
23-Jul-08	24	7.42	7.63	10.53	7.57	ND	10.04	*5.31*	6.17	11.17	6.41	6.28	*5.09*	24.72	12.33	*4.99*	*4.93*	ND	11.27
29-Jul-08	24	ND	11.71	33.31	17.51	ND	ND	11.20	9.23	ND	ND	ND	17.27	9.80	13.38	ND	9.97	11.62	ND
4-Aug-08	24	12.43	8.89	38.24	7.76	ND	40.08	35.95	11.37	ND	5.30	ND	12.48	ND	*4.90*	12.53	5.02	7.80	12.05
10-Aug-08	24	6.75	5.71	ND	*4.93*	ND	15.01	5.12	8.29	ND	9.25	11.27	ND	8.38	6.24	7.09	7.49	10.30	ND
22-Aug-08	24	*4.89*	*4.94*	ND	7.52	*4.88*	8.10	40.67	11.03	10.72	*4.99*	13.47	ND	8.22	7.10	8.54	4.91	5.66	*4.97*
28-Aug-08	24	8.89	*4.97*	*4.99*	6.30	6.86	*5.03*	6.40	*4.93*	6.86	*5.01*	*5.02*	*4.97*	7.16	7.85	22.32	*4.92*	*4.93*	7.85
3-Sep-08	24	4.95	8.76	13.77	*5.08*	11.85	10.22	13.51	9.05	9.73	9.59	5.56	6.26	4.97	*4.94*	9.23	7.80	5.09	10.57
9-Sep-08	24	70.60	*4.98*	6.97	*5.05*	*4.93*	7.53	95.50	6.29	7.48	*5.02*	*5.03*	10.09	*4.94*	*4.91*	*8.60*	*4.93*	*4.94*	6.64
15-Sep-08	24	6.17	11.18	11.23	10.12	*4.92*	8.80	7.55	6.18	6.22	*5.05*	8.81	7.48	*4.97*	4.92	*5.00*	*4.94*	9.89	10.04
21-Sep-08	24	*4.97*	*6.21*	7.53	*5.11*	*4.95*	*5.06*	*5.06*	4.97	10.00	*5.06*	*5.06*	*5.02*	*4.98*	*4.97*	*5.03*	*4.97*	*4.97*	5.05
27-Sep-08	24	*4.96*	*5.01*	*5.01*	*5.08*	*4.94*	*5.05*	5.08	*4.98*	*8.74*	*5.05*	*5.08*	*5.03*	*4.97*	7.41	*5.02*	*4.96*	*4.97*	*4.68*
3-Oct-08	24	13.40	*4.92*	9.85	4.99	7.28	6.20	7.45	*4.88*	8.59	4.96	*4.97*	*4.92*	*4.89*	*4.86*	*4.93*	*4.89*	ND	13.62
Arithmetic Mean		13.0	7.1	15.4	8.1	6.3	11.7	20.2	8.1	9.7	6.2	7.9	7.9	8.3	7.4	9.4	6.0	7.0	8.9
Geometric Mean		8.8	6.8	12.0	7.2	6.0	9.5	12.2	7.5	9.3	6.0	7.1	7.1	7.2	6.8	8.1	5.8	6.6	8.3
50th Percentile		39.1	11.4	35.8	18.0	10.2	29.0	62.6	14.0	14.5	9.4	14.8	15.1	17.2	12.8	20.7	8.7	11.0	12.8
90th Percentile		58.0	11.6	37.3	18.4	11.2	35.6	82.3	16.4	16.1	9.5	15.6	16.4	21.7	13.1	21.7	9.5	11.4	13.3
Minimum		4.9	4.9	5.0	4.9	4.9	5.0	5.1	4.9	6.2	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.7
Maximum		70.6	11.7	38.2	18.7	11.8	40.1	95.5	18.0	17.2	9.6	16.2	17.3	24.7	13.4	22.3	10.0	11.6	13.6

Note:
ND = No Data
Concentrations in italics were calculated at the method detection limit

As indicated in Table 3.1, there were 21 samples in which measured PM_{10} levels were higher than TSP concentrations. However, only six of the 21 samples had PM_{10} levels greater than 5 µg/m^3, which is considered to be the 'noise' level for the MiniVol™ samplers. At very low concentrations, a difference of 5 µg/m^3 is not considered to be significant. For the remaining six samples, one sample at site FA1 was barely over the 5 µg/m^3 level, three samples at site TL2 were had PM_{10} concentrations that were from 5.6 to 8.5 µg/m^3 higher than TSP, and sites RC1 and VG1 each recorded one PM_{10} level that were 17 µg/m^3 higher than TSP. These differences may be due to operator error in mislabelling samples in the field or to mishandling of the sample filters prior to or after exposure.

Figure 3.1
Fraction of Samples with Measurable TSP and PM_{10} Concentrations



3.1.2 TSP and PM_{10} Mass Concentrations

Figure 3.2 shows the maximum concentrations of TSP and PM_{10} at each of the sampling sites. All TSP samples were below the National Ambient Air Quality Objective (NAAQO) level of 120 µg/m^3. The highest TSP concentration was measured at site VG2 with 95.5 µg/m^3 on September 9th. The second highest concentration was measured at site TL1 with 70.6 µg/m^3 also on September 9th. All other sampling sites had low concentrations (<8 µg/m^3) on that date. The maximum recorded TSP levels at the other sites were at or below 40 µg/m^3. In fact, TSP levels at sites TL2, RC1, A1 and G1 were similar to, or lower than, the levels measured at site FA1 in the Town of Faro.

The highest PM_{10} concentration of 24.7 µg/m^3 recorded at site RC1 was half the objective level of 50 µg/m^3 that has been adopted by many provinces in Canada and recommended as a guideline value by the World Health Organization (WHO). Maximum PM_{10} concentrations at all other sampling sites were less than 20 µg/m^3, indicating that overall PM_{10} levels at the mine complex and in Faro are fairly low.

Figure 3.2
Maximum TSP and PM_{10} Concentrations in 2008

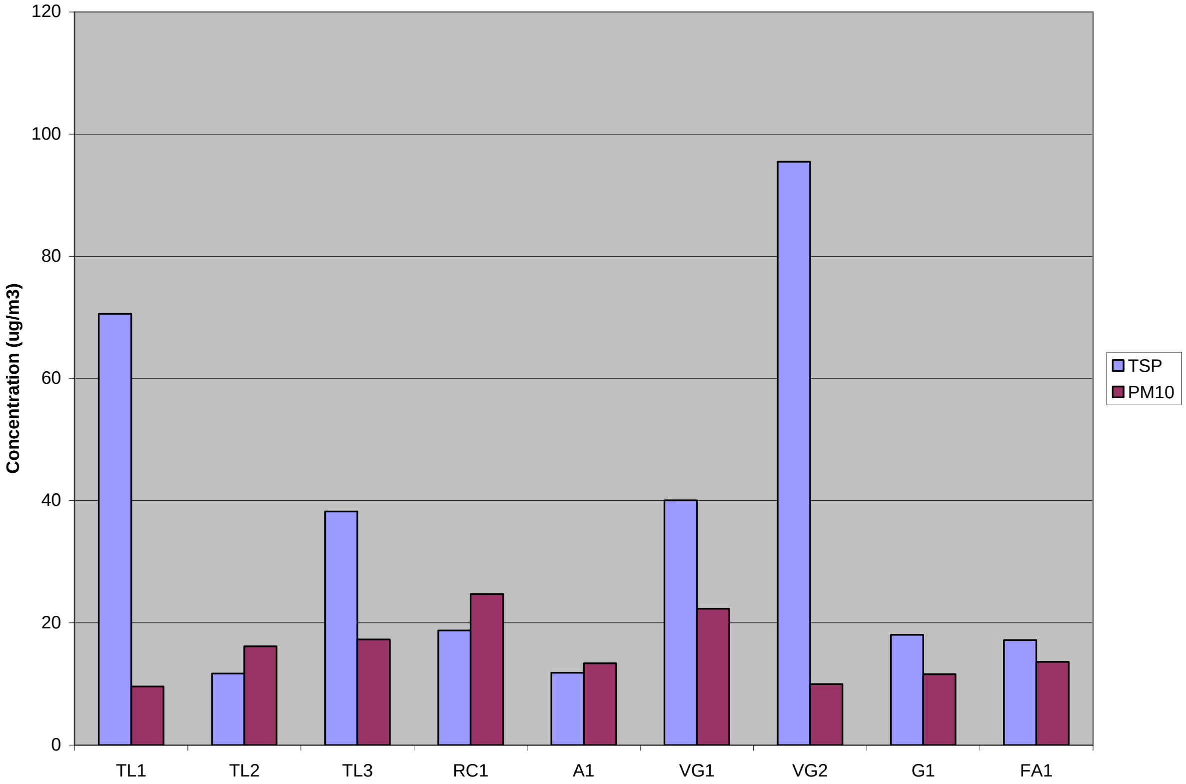
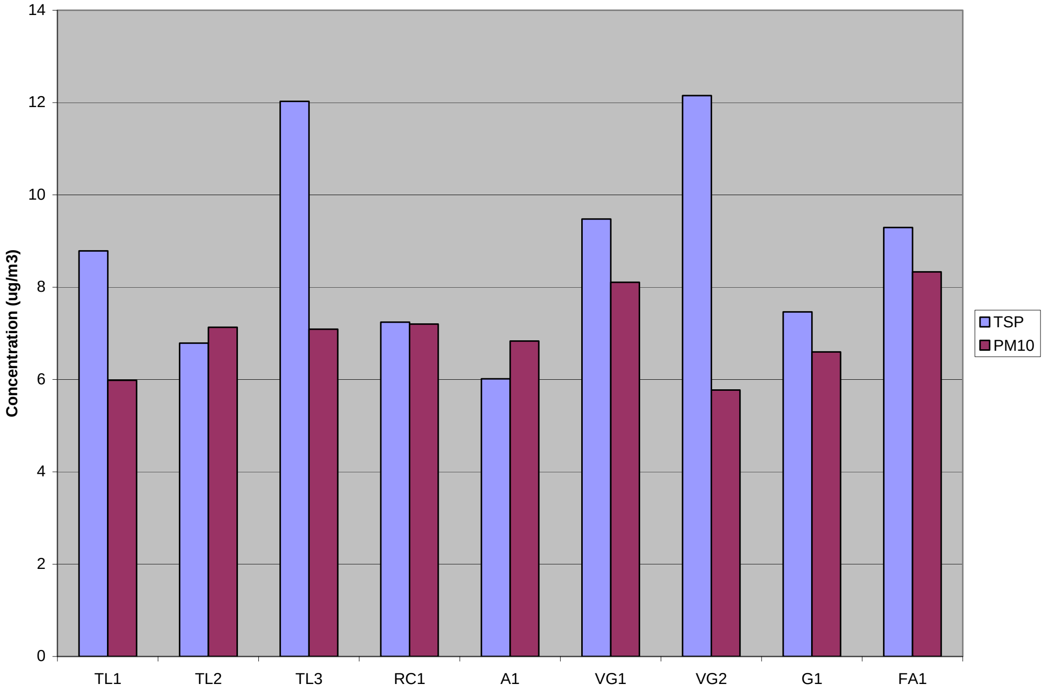


Figure 3.3 shows the geometric mean TSP and PM_{10} concentrations at the sampling sites. The geometric mean is the most appropriate measure of mean concentrations for log-normally

distributed data. Overall, the data show that mean TSP concentrations were very low at 12 µg/m^3 at sites TL3 and VG2, perhaps due to road dust emissions at these two sites. Mean PM$_{10}$ levels were approximately 8 µg/m^3 or lower. In fact, given a MDL of <5 µg/m^3, the mean concentrations at several of the sites were <3 µg/m^3 above the MDL. Therefore, average TSP and PM$_{10}$ concentrations at all sites were very low.

Figure 3.3
Geometric Mean TSP and PM$_{10}$ Concentrations in 2008



3.1.3 Inorganic Trace Element Concentrations

Tables 3.2a, 3.2b and 3.2c summarize the maximum, minimum and geometric mean concentrations of trace inorganic species from the TSP and PM$_{10}$ samples. The highest maximum and geometric mean values are indicated for each element. It should be noted that the highest concentrations are often indicated for site A1, and that these values are not truly representative of 24-hour average concentrations. The high values relate to one TSP sample collected at site A1 on August 4th for a sampling period lasting only 114 minutes (see Appendix A). Therefore, the highest values at site A1 should be regarded as outliers.

Table 3.2a
Summary of Trace Inorganic Element Concentrations

Element	Statistical Parameter	Concentration (µg/m3)																	
		TL1 - TSP	TL1 - PM10	TL2 - TSP	TL2 - PM10	TL3 - TSP	TL3 - PM10	RC1 - TSP	RC1 - PM10	A1 - TSP	A1 - PM10	VG1 - TSP	VG1 - PM10	VG2 - TSP	VG2 - PM10	G1 - TSP	G1 - PM10	FA1 - TSP	FA1 - PM10
Aluminum Al	Maximum	1.40E-01	2.00E-01	7.74E-02	9.14E-02	6.59E-01	1.19E-01	7.76E-02	9.02E-02	**1.01E+00**	5.64E-02	5.61E-01	1.45E-01	3.73E-01	3.04E-01	9.03E-02	9.36E-02	1.45E-01	8.43E-02
	Minimum	1.49E-02	1.26E-02	2.24E-02	1.27E-02	2.13E-02	1.76E-02	1.40E-02	9.96E-03	1.61E-02	1.85E-02	1.77E-02	1.26E-02	1.65E-02	1.24E-02	1.97E-02	1.24E-02	3.59E-02	2.57E-02
	Geomertic Mean	3.88E-02	3.93E-02	4.10E-02	3.80E-02	**9.23E-02**	4.32E-02	3.46E-02	3.17E-02	8.62E-02	3.22E-02	6.84E-02	3.58E-02	4.80E-02	3.72E-02	4.06E-02	3.09E-02	7.27E-02	4.00E-02
Antimony Sb	Maximum	1.35E-03	1.85E-03	7.76E-04	1.76E-03	1.12E-03	1.25E-03	6.47E-04	1.22E-03	**9.18E-03**	6.55E-04	1.46E-03	1.18E-03	6.66E-04	6.44E-04	6.59E-04	6.52E-04	6.25E-04	6.31E-04
	Minimum	6.09E-04	5.30E-04	4.46E-04	6.21E-04	6.16E-04	6.15E-04	6.16E-04	6.11E-04	6.07E-04	6.07E-04	6.20E-04	6.16E-04	6.21E-04	6.11E-04	6.10E-04	6.15E-04	6.13E-04	5.85E-04
	Geomertic Mean	6.66E-04	6.86E-04	6.23E-04	6.84E-04	6.79E-04	7.00E-04	6.30E-04	6.83E-04	**1.60E-03**	6.17E-04	6.69E-04	6.71E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04
Arsenic As	Maximum	5.12E-03	7.03E-03	3.61E-03	7.38E-03	3.08E-03	3.94E-03	4.92E-03	5.78E-03	**4.16E-02**	3.06E-03	5.53E-03	3.76E-03	3.39E-03	3.27E-03	2.77E-03	2.47E-03	5.11E-03	3.13E-03
	Minimum	6.12E-04	6.31E-04	5.36E-04	6.24E-04	6.16E-04	6.24E-04	6.16E-04	6.11E-04	6.15E-04	6.07E-04	6.28E-04	6.19E-04	6.24E-04	6.11E-04	6.13E-04	6.52E-04	6.22E-04	6.22E-04
	Geomertic Mean	1.44E-03	1.50E-03	1.46E-03	1.46E-03	1.55E-03	1.61E-03	1.48E-03	1.68E-03	**3.91E-03**	1.22E-03	1.62E-03	1.52E-03	1.38E-03	1.37E-03	1.36E-03	1.35E-03	1.87E-03	1.56E-03
Barium Ba	Maximum	7.90E-03	2.11E-02	6.77E-03	6.68E-03	**4.56E-02**	2.74E-02	8.13E-03	4.04E-03	3.49E-02	7.78E-03	2.76E-02	5.71E-03	1.60E-02	1.06E-02	5.15E-03	7.93E-03	1.75E-02	6.03E-03
	Minimum	6.21E-04	6.31E-04	4.46E-04	6.27E-04	6.26E-04	6.29E-04	6.16E-04	6.16E-04	8.50E-04	6.07E-04	6.31E-04	6.16E-04	6.33E-04	6.11E-04	6.16E-04	6.16E-04	1.60E-03	5.85E-04
	Geomertic Mean	3.04E-03	2.02E-03	1.34E-03	1.38E-03	**7.75E-03**	2.84E-03	1.65E-03	1.22E-03	3.62E-03	1.57E-03	3.06E-03	1.39E-03	2.09E-03	2.01E-03	1.39E-03	1.09E-03	4.11E-03	1.92E-03
Beryllium Be	Maximum	1.35E-03	1.85E-03	7.76E-04	1.76E-03	9.22E-04	1.25E-03	6.47E-04	1.16E-03	**9.18E-03**	6.55E-04	1.46E-03	1.18E-03	6.66E-04	6.44E-04	6.59E-04	6.52E-04	6.25E-04	6.31E-04
	Minimum	6.09E-04	5.30E-04	4.46E-04	6.21E-04	6.16E-04	6.15E-04	6.16E-04	6.11E-04	6.07E-04	6.07E-04	6.20E-04	6.16E-04	6.21E-04	6.11E-04	6.10E-04	6.15E-04	6.13E-04	5.85E-04
	Geomertic Mean	6.66E-04	6.77E-04	6.23E-04	6.84E-04	6.47E-04	7.00E-04	6.30E-04	6.48E-04	**1.60E-03**	6.17E-04	6.69E-04	6.71E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04
Boron B	Maximum	6.73E-02	9.24E-02	3.88E-02	8.79E-02	4.61E-02	6.23E-02	3.23E-02	5.78E-02	**4.59E-01**	3.28E-02	7.28E-02	5.88E-02	3.33E-02	3.22E-02	3.30E-02	3.26E-02	3.13E-02	3.15E-02
	Minimum	3.05E-02	2.65E-02	2.26E-02	3.11E-02	3.08E-02	3.08E-02	3.08E-02	3.05E-02	3.03E-02	3.03E-02	3.10E-02	3.08E-02	3.11E-02	3.06E-02	3.05E-02	3.08E-02	3.07E-02	2.92E-02
	Geomertic Mean	3.33E-02	3.39E-02	3.12E-02	3.42E-02	3.23E-02	3.50E-02	3.15E-02	3.24E-02	**7.99E-02**	3.09E-02	3.34E-02	3.36E-02	3.18E-02	3.10E-02	3.12E-02	3.15E-02	3.10E-02	3.11E-02
Cadmium Cd	Maximum	1.08E-03	3.85E-04	6.21E-04	1.05E-03	1.71E-03	6.37E-04	2.46E-03	9.25E-04	**3.67E-03**	1.36E-03	6.26E-04	4.71E-04	4.97E-04	1.73E-03	3.87E-04	2.61E-04	3.68E-04	4.96E-04
	Minimum	1.22E-04	1.06E-04	1.23E-04	1.24E-04	1.23E-04	3.11E-05	1.23E-04	1.22E-04	1.21E-04	1.21E-04	1.23E-04	1.23E-04	1.23E-04	1.22E-04	1.22E-04	1.23E-04	1.23E-04	1.17E-04
	Geomertic Mean	2.08E-04	1.73E-04	1.94E-04	2.18E-04	1.86E-04	1.81E-04	2.22E-04	2.04E-04	**3.96E-04**	1.84E-04	1.73E-04	1.81E-04	2.03E-04	1.90E-04	1.68E-04	1.43E-04	1.51E-04	1.77E-04
Calcium Ca	Maximum	5.38E-01	3.33E-01	2.34E-01	2.81E-01	9.75E-01	2.96E-01	1.90E-01	2.23E-01	**1.46E+00**	1.23E-01	6.51E-01	1.95E-01	3.55E-01	2.12E-01	1.62E-01	1.85E-01	2.25E-01	2.15E-01
	Minimum	7.65E-03	1.42E-02	1.09E-02	9.51E-03	1.25E-02	7.78E-03	1.12E-02	1.07E-02	1.21E-02	7.57E-03	9.52E-03	6.27E-03	9.51E-03	7.62E-03	7.64E-03	9.18E-03	1.24E-02	6.30E-03
	Geomertic Mean	8.79E-02	9.65E-02	1.12E-01	9.20E-02	1.57E-01	1.01E-01	9.12E-02	9.01E-02	**2.16E-01**	7.80E-02	1.23E-01	8.71E-02	1.03E-01	8.61E-02	8.64E-02	8.33E-02	1.24E-01	8.71E-02
Chromium Cr	Maximum	2.61E-01	2.51E-01	9.92E-02	3.27E-01	1.40E-01	1.60E-01	1.13E-01	1.30E-01	**1.16E+00**	1.25E-01	1.46E-01	1.15E-01	8.28E-02	2.61E-01	1.04E-01	1.02E-01	7.74E-02	8.55E-02
	Minimum	5.40E-02	5.47E-02	5.36E-02	5.71E-02	5.21E-02	5.10E-02	5.42E-02	5.17E-02	4.85E-02	5.19E-02	5.00E-02	5.12E-02	4.99E-02	5.01E-02	4.88E-02	3.72E-02	5.17E-02	4.41E-02
	Geomertic Mean	7.36E-02	7.55E-02	6.85E-02	7.91E-02	7.08E-02	7.80E-02	7.42E-02	7.50E-02	**1.70E-01**	7.12E-02	7.33E-02	6.59E-02	6.44E-02	7.06E-02	6.56E-02	6.85E-02	6.29E-02	6.61E-02
Cobalt Co	Maximum	1.35E-03	1.85E-03	7.76E-04	1.76E-03	9.22E-04	1.25E-03	6.47E-04	1.16E-03	9.18E-03	6.55E-04	1.46E-03	1.18E-03	6.66E-04	6.59E-04	6.52E-04	6.25E-04	1.12E-03	**1.05E-01**
	Minimum	6.09E-04	5.30E-04	4.46E-04	6.21E-04	6.16E-04	6.15E-04	6.16E-04	6.11E-04	6.07E-04	6.07E-04	6.20E-04	6.16E-04	6.21E-04	6.10E-04	6.15E-04	6.13E-04	5.85E-04	6.18E-04
	Geomertic Mean	6.66E-04	6.77E-04	6.23E-04	6.84E-04	6.57E-04	7.00E-04	6.30E-04	6.48E-04	1.60E-03	6.17E-04	6.69E-04	6.71E-04	6.37E-04	6.24E-04	6.29E-04	6.20E-04	6.56E-04	**2.94E-03**

▭ denotes highest concentration level for maximum and geometric means for each element

Table 3.2b
Summary of Trace Inorganic Element Concentrations

Element	Statistical Parameter	Concentration (µg/m3)																	
		TL1 - TSP	TL1 - PM10	TL2 - TSP	TL2 - PM10	TL3 - TSP	TL3 - PM10	RC1 - TSP	RC1 - PM10	A1 - TSP	A1 - PM10	VG1 - TSP	VG1 - PM10	VG2 - TSP	VG2 - PM10	G1 - TSP	G1 - PM10	FA1 - TSP	FA1 - PM10
Copper Cu	Maximum	1.05E-01	2.48E-02	1.55E-02	1.55E-01	4.77E-01	1.36E-01	6.12E-02	3.23E-01	2.43E-01	3.23E-02	9.65E-03	1.67E-02	9.97E-03	6.04E-02	7.47E-03	1.21E-02	8.72E-03	1.51E-02
	Minimum	6.18E-04	7.53E-04	7.46E-04	6.27E-04	1.11E-03	7.55E-04	6.34E-04	6.18E-04	7.35E-04	6.13E-04	7.48E-04	6.20E-04	6.28E-04	6.15E-04	7.44E-04	6.20E-04	1.24E-03	6.25E-04
	Geomertic Mean	2.94E-03	2.58E-03	3.14E-03	1.99E-03	4.45E-03	2.73E-03	2.65E-03	2.45E-03	3.97E-03	2.34E-03	2.63E-03	2.18E-03	2.04E-03	2.26E-03	2.78E-03	1.77E-03	2.37E-03	1.81E-03
Iron Fe	Maximum	3.70E-01	4.07E-01	1.65E-01	3.87E-01	1.39E+00	2.47E-01	7.36E-01	2.08E-01	1.47E+00	6.88E-01	1.18E+00	3.06E-01	6.92E-01	1.73E+00	1.93E-01	1.69E-01	3.49E-01	2.89E-01
	Minimum	3.72E-02	3.78E-02	4.97E-02	3.79E-02	5.01E-02	3.76E-02	3.81E-02	3.74E-02	3.68E-02	3.69E-02	6.27E-02	3.10E-02	3.78E-02	3.72E-02	3.08E-02	3.10E-02	6.19E-02	3.75E-02
	Geomertic Mean	1.16E-01	8.50E-02	9.31E-02	6.89E-02	1.91E-01	9.79E-02	9.93E-02	7.34E-02	1.43E-01	8.81E-02	1.43E-01	8.41E-02	1.12E-01	1.04E-01	7.96E-02	6.48E-02	1.50E-01	9.90E-02
Lead Pb	Maximum	5.26E-03	1.81E-02	2.79E-03	3.87E-03	8.39E-02	2.13E-02	1.63E-02	9.67E-03	6.24E-02	6.74E-03	2.38E-02	1.07E-02	1.23E-02	7.85E-03	5.08E-03	2.60E-03	3.96E-03	5.40E-03
	Minimum	1.36E-04	6.20E-04	1.49E-04	1.09E-04	1.00E-03	5.02E-04	3.47E-04	2.12E-04	6.15E-04	4.04E-04	5.77E-04	3.44E-04	6.21E-04	3.81E-04	5.56E-04	6.15E-04	7.77E-05	5.28E-04
	Geomertic Mean	1.46E-03	1.65E-03	8.85E-04	7.77E-04	9.84E-03	2.85E-03	1.25E-03	1.09E-03	3.56E-03	1.56E-03	1.99E-03	1.11E-03	1.63E-03	1.30E-03	1.27E-03	1.05E-03	8.89E-04	1.16E-03
Magnesium Mg	Maximum	8.08E-02	9.24E-02	5.08E-02	8.79E-02	4.93E-01	8.74E-02	3.88E-02	5.78E-02	4.59E-01	3.93E-02	6.26E-01	1.25E-01	3.46E-01	4.86E-01	3.87E-02	3.26E-02	1.37E-01	4.96E-02
	Minimum	3.06E-02	3.10E-02	6.21E-04	3.12E-02	3.08E-02	3.08E-02	3.08E-02	3.05E-02	3.03E-02	3.03E-02	3.10E-02	3.08E-02	3.11E-02	3.06E-02	3.05E-02	3.08E-02	3.10E-02	2.92E-02
	Geomertic Mean	3.74E-02	3.43E-02	2.42E-02	3.58E-02	7.35E-02	4.39E-02	3.24E-02	3.28E-02	8.11E-02	3.17E-02	6.18E-02	3.84E-02	5.21E-02	4.38E-02	3.21E-02	3.15E-02	5.24E-02	3.35E-02
Manganese Mn	Maximum	4.19E-03	4.81E-03	1.37E-02	3.51E-03	2.10E-02	3.99E-03	3.17E-03	2.54E-03	1.62E-02	2.36E-03	1.63E-02	4.59E-03	1.17E-02	7.11E-03	2.83E-03	3.71E-03	7.98E-03	5.02E-03
	Minimum	6.18E-04	1.72E-04	1.84E-04	1.10E-04	1.57E-04	3.10E-04	2.84E-04	1.36E-04	9.13E-05	9.17E-05	1.88E-04	6.20E-04	2.03E-04	1.51E-04	6.16E-04	6.16E-04	1.98E-04	1.42E-04
	Geomertic Mean	1.30E-03	1.16E-03	1.37E-03	9.20E-04	2.08E-03	1.24E-03	1.26E-03	9.53E-04	1.73E-03	7.37E-04	2.07E-03	1.17E-03	1.62E-03	1.18E-03	1.16E-03	1.02E-03	1.91E-03	1.16E-03
Molybdenum Mo	Maximum	6.73E-04	9.24E-04	3.88E-04	8.79E-04	1.11E-03	6.23E-04	5.01E-04	5.78E-04	4.59E-03	3.93E-04	7.53E-04	5.88E-04	5.26E-04	3.74E-04	5.15E-04	3.26E-04	3.13E-04	3.77E-04
	Minimum	3.05E-04	3.10E-04	2.23E-04	3.11E-04	3.08E-04	3.08E-04	3.08E-04	3.05E-04	3.03E-04	3.03E-04	3.10E-04	3.08E-04	3.11E-04	3.06E-04	3.05E-04	3.08E-04	3.07E-04	2.92E-04
	Geomertic Mean	3.33E-04	3.43E-04	3.11E-04	3.42E-04	3.65E-04	3.50E-04	3.36E-04	3.36E-04	7.99E-04	3.17E-04	3.63E-04	3.36E-04	3.30E-04	3.14E-04	3.28E-04	3.15E-04	3.10E-04	3.16E-04
Nickel Ni	Maximum	5.85E-03	8.50E-03	4.55E-03	7.38E-03	8.51E-03	4.19E-03	7.77E-03	4.04E-03	3.08E-02	4.20E-03	9.90E-03	4.18E-03	4.87E-03	5.24E-03	3.96E-03	2.84E-03	3.44E-03	4.79E-03
	Minimum	6.17E-04	6.20E-04	6.21E-04	6.21E-04	6.16E-04	6.15E-04	6.24E-04	6.11E-04	6.07E-04	6.07E-04	6.23E-04	6.16E-04	6.21E-04	6.11E-04	6.10E-04	6.17E-04	6.24E-04	6.19E-04
	Geomertic Mean	1.44E-03	1.47E-03	1.46E-03	1.31E-03	1.49E-03	1.24E-03	1.43E-03	1.19E-03	2.70E-03	1.42E-03	1.45E-03	1.13E-03	1.37E-03	1.21E-03	1.27E-03	1.04E-03	1.12E-03	1.26E-03
Phosphorus P	Maximum	2.69E-01	3.33E-01	1.52E-01	3.16E-01	1.48E-01	1.97E-01	1.55E-01	2.31E-01	1.65E+00	1.47E-01	2.91E-01	2.35E-01	1.46E-01	1.37E-01	1.58E-01	1.56E-01	1.37E-01	1.50E-01
	Minimum	9.18E-02	9.31E-02	6.70E-02	9.36E-02	9.23E-02	9.32E-02	9.24E-02	9.20E-02	9.14E-02	9.18E-02	9.34E-02	9.29E-02	9.44E-02	9.17E-02	9.19E-02	9.23E-02	9.32E-02	9.33E-02
	Geomertic Mean	1.20E-01	1.11E-01	1.08E-01	1.15E-01	1.12E-01	1.18E-01	1.08E-01	1.17E-01	2.60E-01	1.03E-01	1.16E-01	1.12E-01	1.14E-01	1.04E-01	1.09E-01	1.08E-01	1.12E-01	1.03E-01
Potassium K	Maximum	4.39E-01	1.85E-01	1.38E-01	1.76E-01	1.73E-01	1.99E-01	2.01E-01	1.47E-01	9.18E-01	9.87E-02	1.75E-01	1.73E-01	1.50E-01	1.11E-01	1.23E-01	1.23E-01	1.49E-01	1.49E-01
	Minimum	5.30E-02	6.15E-02	6.21E-02	6.16E-02	6.15E-02	6.24E-02	6.11E-02	6.07E-02	6.07E-02	6.20E-02	6.16E-02	6.21E-02	6.11E-02	6.10E-02	6.17E-02	6.13E-02	5.85E-02	6.09E-04
	Geomertic Mean	9.41E-02	7.53E-02	7.82E-02	7.98E-02	9.03E-02	8.16E-02	7.87E-02	7.75E-02	1.78E-01	6.74E-02	8.65E-02	7.75E-02	7.62E-02	7.08E-02	6.95E-02	7.43E-02	7.74E-02	7.33E-02
Selenium Se	Maximum	1.35E-03	1.85E-03	7.76E-04	1.76E-03	9.22E-04	1.25E-03	6.47E-04	1.16E-03	9.18E-03	6.55E-04	1.46E-03	1.18E-03	6.66E-04	6.44E-04	6.59E-04	6.52E-04	6.25E-04	6.31E-04
	Minimum	6.09E-04	5.30E-04	4.46E-04	6.21E-04	6.16E-04	6.15E-04	6.16E-04	6.11E-04	6.07E-04	6.07E-04	6.20E-04	6.16E-04	6.21E-04	6.11E-04	6.10E-04	6.15E-04	6.13E-04	5.85E-04
	Geomertic Mean	6.66E-04	6.77E-04	6.23E-04	6.84E-04	6.47E-04	7.00E-04	6.30E-04	6.48E-04	1.60E-03	6.17E-04	6.69E-04	6.71E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04

☐ denotes highest concentration level for maximum and geometric means for each element

Table 3.2c
Summary of Trace Inorganic Element Concentrations

Element	**Statistical Parameter**	**Concentration (µg/m3)**																	
		TL1 - TSP	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
Silver Ag	Maximum	3.37E-04	4.62E-04	1.94E-04	4.39E-04	2.30E-04	3.12E-04	2.52E-04	4.63E-04	2.30E-03	3.68E-04	5.82E-04	2.94E-04	8.96E-04	5.02E-04	6.32E-04	2.58E-04	3.68E-04	8.68E-04
	Minimum	1.52E-04	1.32E-04	1.12E-04	1.55E-04	1.54E-04	1.54E-04	1.54E-04	1.53E-04	1.52E-04	1.52E-04	1.55E-04	1.54E-04	1.55E-04	1.53E-04	1.52E-04	1.54E-04	1.53E-04	1.46E-04
	Geomertic Mean	1.66E-04	1.69E-04	1.56E-04	1.78E-04	1.62E-04	1.75E-04	1.63E-04	1.74E-04	4.14E-04	1.65E-04	1.92E-04	1.87E-04	2.17E-04	1.88E-04	1.97E-04	1.64E-04	1.69E-04	1.82E-04
Sodium Na	Maximum	1.50E+01	2.03E+01	8.70E+00	1.89E+01	6.69E+00	1.21E+01	8.58E+00	1.08E+01	8.40E+01	8.64E+00	1.30E+01	1.10E+01	8.85E+00	8.78E+00	8.63E+00	8.38E+00	7.06E+00	7.67E+00
	Minimum	1.37E-02	1.58E-02	1.25E-02	1.43E-02	1.25E-02	1.40E-02	1.28E-02	1.54E-02	1.37E-02	1.21E-02	1.58E-02	1.26E-02	1.43E-02	1.07E-02	1.53E-02	7.66E-03	1.40E-02	9.46E-03
	Geomertic Mean	5.29E-01	4.76E-01	4.96E-01	4.24E-01	3.40E-01	3.64E-01	4.46E-01	5.32E-01	1.02E+00	4.49E-01	4.70E-01	4.47E-01	4.77E-01	4.02E-01	4.42E-01	3.42E-01	1.91E-01	2.43E-01
Strontium Sr	Maximum	1.35E-03	1.85E-03	1.48E-03	1.76E-03	4.19E-03	1.25E-03	6.47E-04	1.16E-03	9.18E-03	6.55E-04	3.26E-03	1.18E-03	1.33E-03	1.12E-03	6.59E-04	6.52E-04	1.37E-03	6.31E-04
	Minimum	6.09E-04	5.30E-04	4.46E-04	6.22E-04	6.16E-04	6.15E-04	6.16E-04	6.12E-04	6.07E-04	6.07E-04	4.07E-04	6.16E-04	6.21E-04	6.11E-04	6.10E-04	6.15E-04	6.13E-04	5.85E-04
	Geomertic Mean	6.66E-04	6.86E-04	6.66E-04	7.25E-04	1.03E-03	7.00E-04	6.30E-04	6.57E-04	1.60E-03	6.17E-04	7.72E-04	6.81E-04	7.06E-04	6.48E-04	6.24E-04	6.29E-04	6.96E-04	6.22E-04
Tellurium Te	Maximum	1.35E-03	1.85E-03	7.76E-04	1.76E-03	9.22E-04	1.25E-03	6.47E-04	1.16E-03	9.18E-03	6.55E-04	1.46E-03	1.18E-03	6.66E-04	6.44E-04	6.59E-04	6.52E-04	6.25E-04	6.31E-04
	Minimum	6.09E-04	5.30E-04	4.46E-04	6.21E-04	6.16E-04	6.15E-04	6.16E-04	6.11E-04	6.07E-04	6.07E-04	6.20E-04	6.16E-04	6.21E-04	6.11E-04	6.10E-04	6.15E-04	6.13E-04	5.85E-04
	Geomertic Mean	6.66E-04	6.77E-04	6.23E-04	6.84E-04	6.47E-04	7.00E-04	6.30E-04	6.48E-04	1.60E-03	6.17E-04	6.69E-04	6.71E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04
Thallium Tl	Maximum	3.45E-04	3.98E-04	1.69E-04	1.99E-04	1.47E-04	1.75E-04	1.63E-04	2.08E-04	9.18E-04	8.58E-05	9.21E-04	1.98E-04	1.37E-04	1.35E-04	1.35E-04	1.48E-04	1.11E-04	1.24E-04
	Minimum	6.09E-05	5.30E-05	4.46E-05	6.21E-05	6.16E-05	6.15E-05	6.24E-05	6.11E-05	6.07E-05	6.07E-05	6.20E-05	6.16E-05	6.21E-05	6.11E-05	6.10E-05	6.16E-05	6.13E-05	5.85E-05
	Geomertic Mean	9.38E-05	8.76E-05	7.32E-05	7.99E-05	7.10E-05	7.96E-05	7.96E-05	7.63E-05	1.66E-04	6.51E-05	9.02E-05	8.09E-05	6.76E-05	6.59E-05	6.63E-05	6.81E-05	6.58E-05	6.91E-05
Tin Sn	Maximum	9.50E-03	3.98E-03	2.41E-03	4.92E-03	3.58E-03	3.99E-03	3.53E-03	3.24E-03	8.63E-02	1.48E-02	1.08E-02	6.82E-03	2.82E-03	5.58E-03	2.14E-03	1.55E-03	1.08E-02	3.84E-03
	Minimum	1.84E-04	6.31E-04	7.38E-04	7.97E-05	7.83E-05	1.88E-04	2.42E-04	6.23E-04	7.61E-05	6.07E-04	7.95E-05	6.25E-04	6.33E-04	7.66E-05	6.22E-04	1.08E-04	7.77E-05	1.27E-04
	Geomertic Mean	1.44E-03	1.29E-03	1.22E-03	1.11E-03	9.00E-04	1.19E-03	1.28E-03	1.23E-03	3.20E-03	1.48E-03	1.27E-03	1.50E-03	1.33E-03	1.24E-03	1.25E-03	8.42E-04	9.89E-04	1.06E-03
Titanium Ti	Maximum	8.88E-03	1.44E-02	7.45E-03	1.30E-02	2.71E-02	8.73E-03	6.37E-03	7.17E-03	5.69E-02	5.64E-03	2.00E-02	7.10E-03	8.26E-03	1.99E-02	5.93E-03	6.31E-03	9.73E-03	5.85E-03
	Minimum	3.32E-03	3.41E-03	1.87E-03	3.63E-03	4.21E-03	4.10E-03	1.60E-03	2.09E-03	3.78E-03	2.69E-03	4.02E-03	2.50E-03	2.94E-03	2.46E-03	3.08E-03	2.36E-03	3.72E-03	3.26E-03
	Geomertic Mean	5.11E-03	4.81E-03	4.85E-03	4.88E-03	8.05E-03	5.71E-03	4.46E-03	4.55E-03	1.11E-02	4.30E-03	6.64E-03	4.92E-03	5.12E-03	5.03E-03	4.48E-03	4.24E-03	6.31E-03	5.03E-03
Vanadium V	Maximum	1.35E-03	1.85E-03	7.80E-04	1.76E-03	1.48E-03	1.25E-03	6.47E-04	1.16E-03	9.23E-03	6.55E-04	1.46E-03	1.18E-03	6.66E-04	6.44E-04	6.59E-04	6.52E-04	6.25E-04	6.31E-04
	Minimum	6.09E-04	5.30E-04	4.46E-04	6.21E-04	6.16E-04	6.15E-04	6.16E-04	6.11E-04	6.07E-04	6.07E-04	6.20E-04	6.16E-04	6.21E-04	6.11E-04	6.10E-04	6.15E-04	6.13E-04	5.85E-04
	Geomertic Mean	6.66E-04	6.77E-04	6.32E-04	6.84E-04	7.07E-04	7.00E-04	6.30E-04	6.48E-04	1.62E-03	6.17E-04	6.86E-04	6.71E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04
Zinc Zn	Maximum	7.54E-02	6.66E-02	3.77E-02	9.84E-02	1.01E-01	6.66E-02	4.00E-02	7.15E-02	6.80E-01	2.43E-02	8.02E-02	2.59E-02	4.08E-02	3.22E-02	2.53E-02	3.13E-02	1.84E-02	3.39E-02
	Minimum	3.77E-04	2.55E-03	3.08E-03	1.72E-03	3.08E-03	3.08E-03	1.42E-03	2.12E-03	3.03E-03	1.78E-03	3.10E-03	1.03E-03	3.11E-03	3.06E-03	6.08E-04	3.10E-03	2.29E-03	1.71E-03
	Geomertic Mean	5.89E-03	6.95E-03	6.88E-03	6.59E-03	1.57E-02	8.35E-03	6.52E-03	8.18E-03	1.68E-02	6.08E-03	1.07E-02	5.87E-03	8.07E-03	7.56E-03	5.82E-03	6.18E-03	6.13E-03	5.61E-03
Zirconium Zr	Maximum	1.35E-02	1.85E-02	7.76E-03	1.76E-02	9.22E-03	1.25E-02	6.47E-03	1.16E-02	9.18E-02	6.55E-03	1.46E-02	1.18E-02	6.66E-03	6.44E-03	6.59E-03	6.52E-03	6.25E-03	6.31E-03
	Minimum	6.09E-03	5.30E-03	4.46E-03	6.21E-03	6.16E-03	6.15E-03	6.16E-03	6.11E-03	6.07E-03	6.07E-03	6.20E-03	6.16E-03	6.21E-03	6.11E-03	6.10E-03	6.15E-03	6.13E-03	5.85E-03
	Geomertic Mean	6.66E-03	6.77E-03	6.23E-03	7.11E-03	6.47E-03	7.00E-03	6.30E-03	6.48E-03	1.60E-02	6.17E-03	6.69E-03	6.71E-03	6.37E-03	6.20E-03	6.24E-03	6.29E-03	6.20E-03	6.22E-03

☐ denotes highest concentration level for maximum and geometric means for each element

All of the values in Tables 3.2 a, 3.2b and 3.2c fall below the ambient air quality criteria listed in Table 3.3 that have been established for trace element concentrations in the Province of Ontario (N.B. Manitoba has adopted 24-hour average criteria for arsenic, cadmium, copper, lead nickel and zinc that are identical to those in Ontario, while the objective in British Columbia for lead is less stringent than the ones adopted by Ontario and Manitoba). All of the elemental concentrations listed in Tables 3.2a to 3.2c were below the AAQC levels in Table 3.3.

Table 3.3
Ambient Air Quality Criteria (AAQC) for Trace Inorganic Elements

Element	**AAQC** 24-h average (μg/m^3)	**Rationale**
Aluminium	n/a	
Antimony	25	health
Arsenic	0.3	health
Barium	10	health
Beryllium	0.01	health
Boron	120	particulate matter
Cadmium	2	health
Calcium	n/a	
Chromium	1.5	health
Cobalt	0.1	health
Copper	50	health
Iron	4	soiling
Lead	2	health
Magnesium	n/a	
Manganese	2.5	health
Molybdenum	120	particulate matter
Nickel	2	vegetation
Phosphorus	n/a	
Potassium	n/a	
Selenium	10	health
Silver	1	health
Sodium	n/a	
Strontium	120	particulate matter
Tellurium	10	health
Thallium	n/a	
Tin	10	health
Titanium	120	particulate matter
Vanadium	2	health
Zinc	120	particulate matter
Zirconium	n/a	

n/a – not applicable

Table 3.4 lists the highest concentration level measured for each element (excluding values for site A1), the sampling location and particulate matter fraction in which it was measured. Also listed are the AAQC for each element for comparison.

Table 3.4
Comparison of Maximum Observed Elemental Concentrations And AAQC Values

Element	Maximum Observed Concentration	Sampling Location	PM Size Fraction	Ambient Air Quality Criteria	
	(μg/m^3)			(μg/m^3)	**Rationale**
Antimony	0.00185	TL1	PM_{10}	25	health
Arsenic	0.00738	TL2	PM_{10}	0.3	health
Barium	0.04565	TL3	TSP	10	health
Beryllium	0.00185	TL1	PM_{10}	0.01	health
Boron	0.09243	TL1	PM_{10}	120	particulate matter
Cadmium	0.00246	RC1	TSP	2	health
Chromium	0.327	TL2	PM_{10}	1.5	health
Cobalt	0.0007	TL3	PM_{10}	0.1	health
Copper	0.477	TL3	TSP	50	health
Iron	1.733	VG2	PM_{10}	4	soiling
Lead	0.0839	TL3	TSP	2	health
Manganese	0.021	TL3	TSP	2.5	health
Molybdenum	0.0011	TL3	TSP	120	particulate matter
Nickel	0.0099	VG1	TSP	2	vegetation
Selenium	0.00185	TL1	PM_{10}	10	health
Silver	0.000896	VG2	TSP	1	health
Strontium	0.00419	TL3	TSP	120	particulate matter
Tellurium	0.00185	TL1	PM_{10}	10	health
Tin	0.0108	VG1	TSP	10	health
Titanium	0.0271	TL3	TSP	120	particulate matter
Vanadium	0.00185	TL1	PM_{10}	2	health
Zinc	0.101	TL3	TSP	120	particulate matter

Table 3.4 shows that the highest concentrations of antimony, arsenic beryllium, boron, chromium, selenium tellurium and vanadium were recorded in the PM_{10} size fraction near the tailing areas at sites TL1 and TL2. The highest concentrations of barium, copper, lead, manganese, molybdenum, strontium, titanium and zinc were recorded in the TSP size fraction at site TL3. Only the highest concentration of cobalt was recorded at site TL3 in a PM_{10} sample. Site VG1 had the highest levels of nickel and tin in the TSP size fraction, while site VG2 had the highest iron concentration in the PM_{10} size fraction. The highest cadmium concentration was recorded in TSP at site RC1.

The concentrations of the following elements showed little variation between sites, and, excluding the anomalously high value at site A1, some were either frequently or almost always below the method detection limit:

Antimony (Sb)
Arsenic (As)
Beryllium (Be)
Boron (B)
Cobalt (Co)
Selenium (Se)
Tellurium (Te)
Tin (Sn)
Vanadium (V)
Zinc (Zn)
Zirconium (Zr)

The trace elements that showed the largest degree of variation between sites were:

Aluminium (Al)
Barium (Ba)
Cadmium (Cd)
Calcium (Ca)
Copper (Cu)
Iron (Fe)
Lead (Pb)
Magnesium (Mg)
Manganese (Mn)
Sodium (Na)
Thallium (Th)

The group of elements consisting of Al, Ca, Fe and Mg would all be consistent with surface soil-derived fugitive dust emissions, and are not necessarily associated with the Faro Mine Complex *per se*. There was some evidence of slightly elevated concentrations of the following elements in the vicinity of the mine complex compared with the Town of Faro:

Chromium (Cr)
Molybdenum (Mo)
Nickel (Ni)
Phosphorus (P)
Potassium (K)
Strontium (Sr)
Titanium (Ti)
Vanadium (V)

Figures 3.4 to 3.33 show the range of concentrations recorded at each of the sites using the values in Tables 3.2a to 3.2c. (Note that the anomalously high values at site A1 are included in Figures 3.4 to 3.33).

Figure 3.4: Aluminium in TSP and PM_{10}

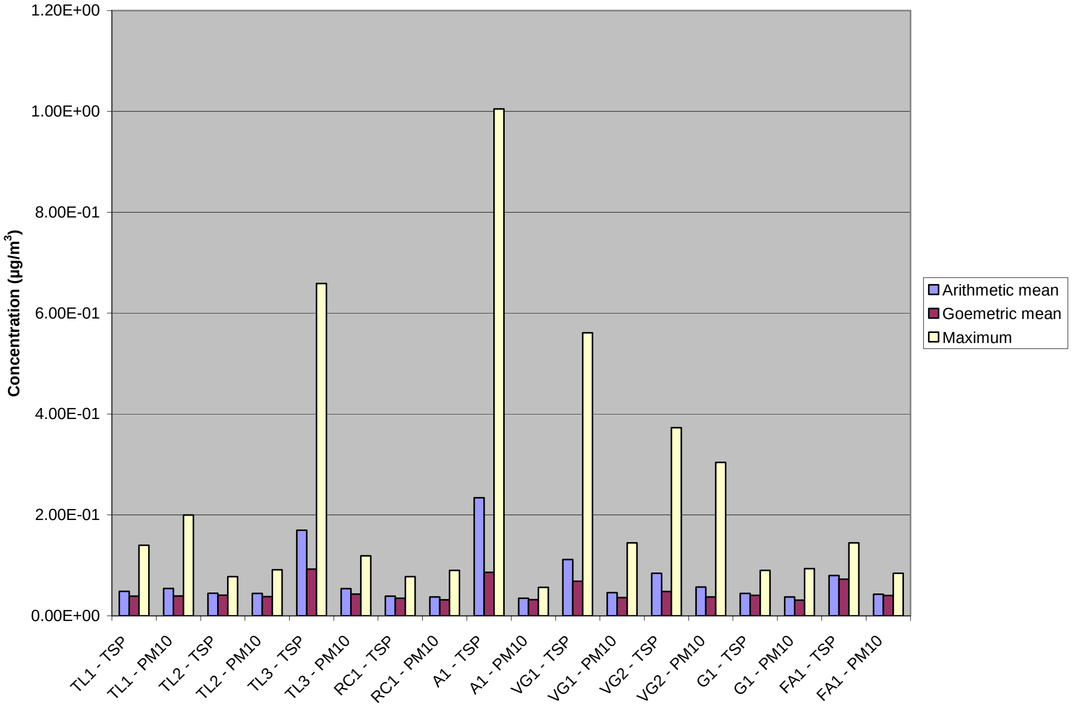


Figure 3.5: Antimony in TSP and PM_{10}

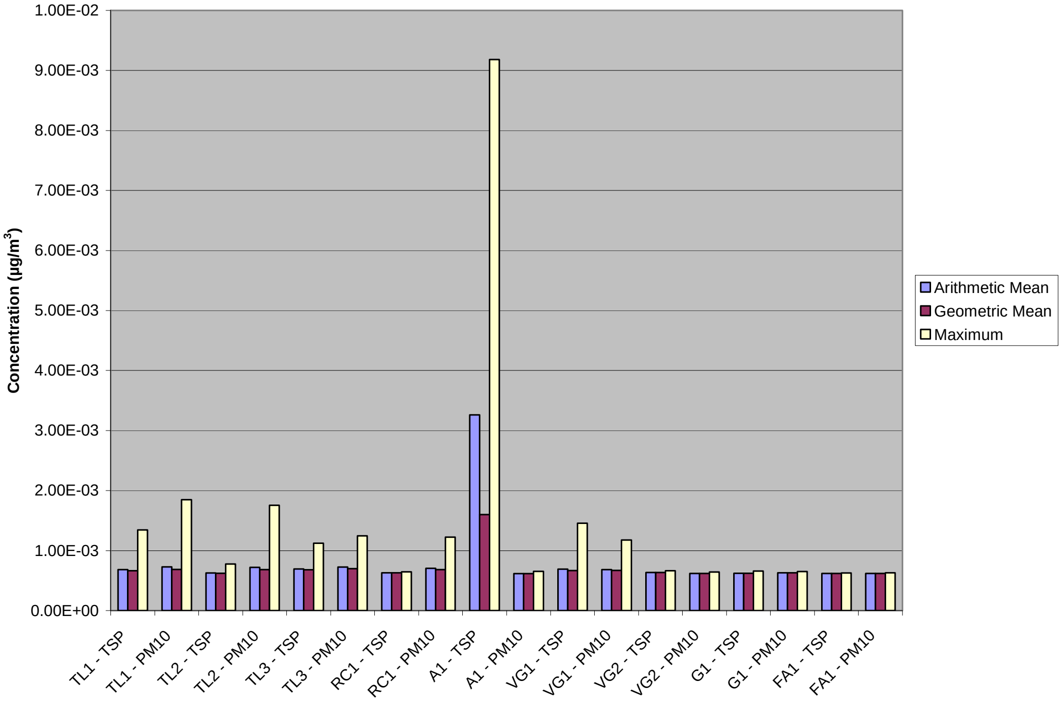


Figure 3.6: Arsenic in TSP and PM_{10}

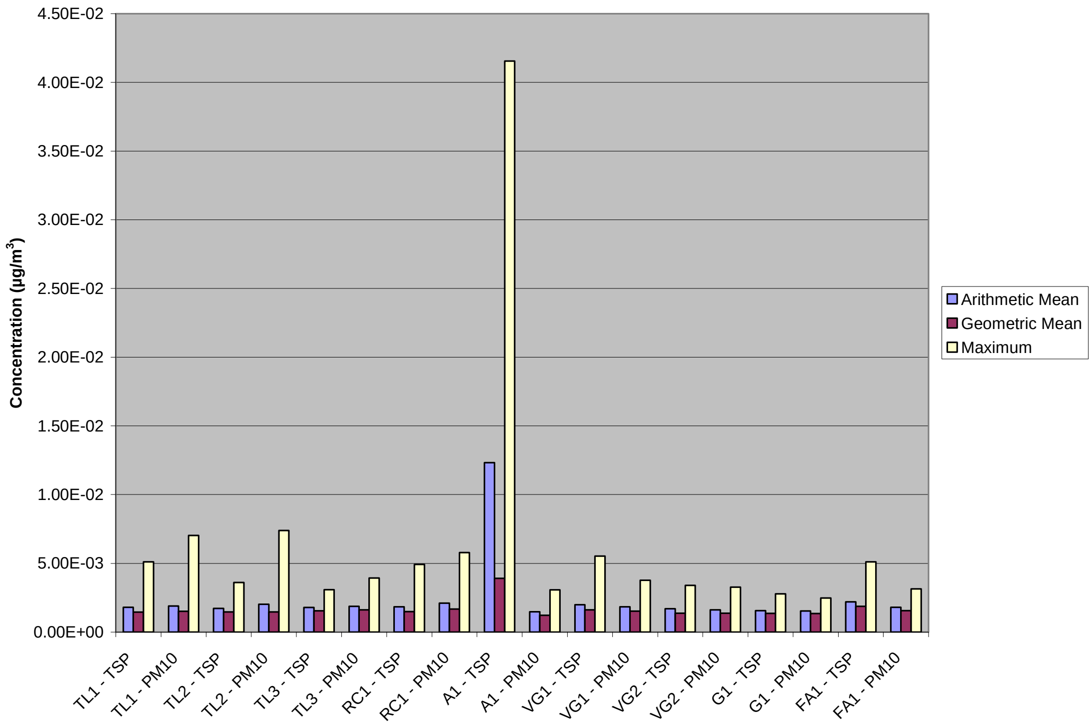


Figure 3.7: Barium in TSP and PM_{10}

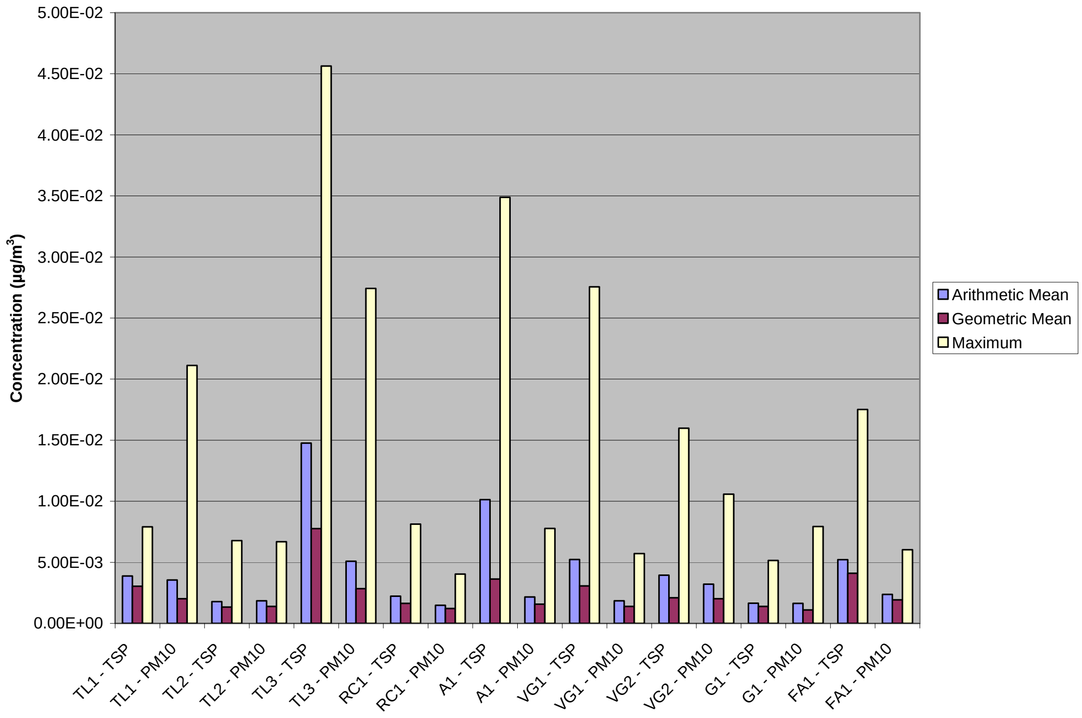


Figure 3.8: Beryllium in TSP and PM_{10}

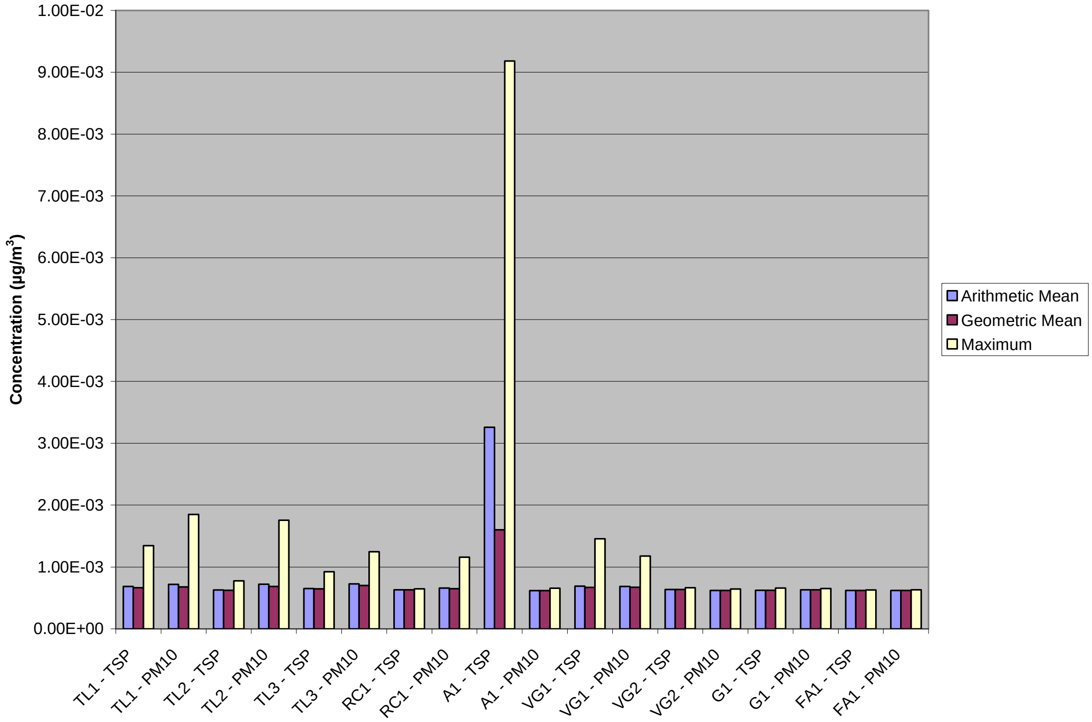


Figure 3.9: Boron in TSP and PM_{10}

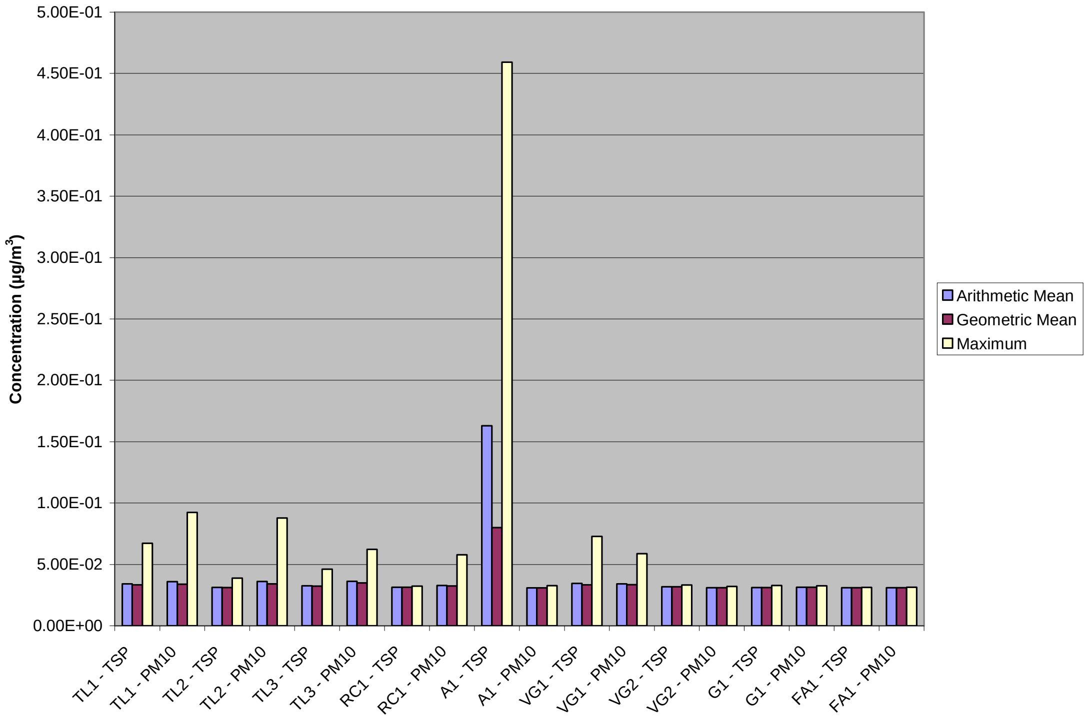


Figure 3.10: Cadmium in TSP and PM_{10}

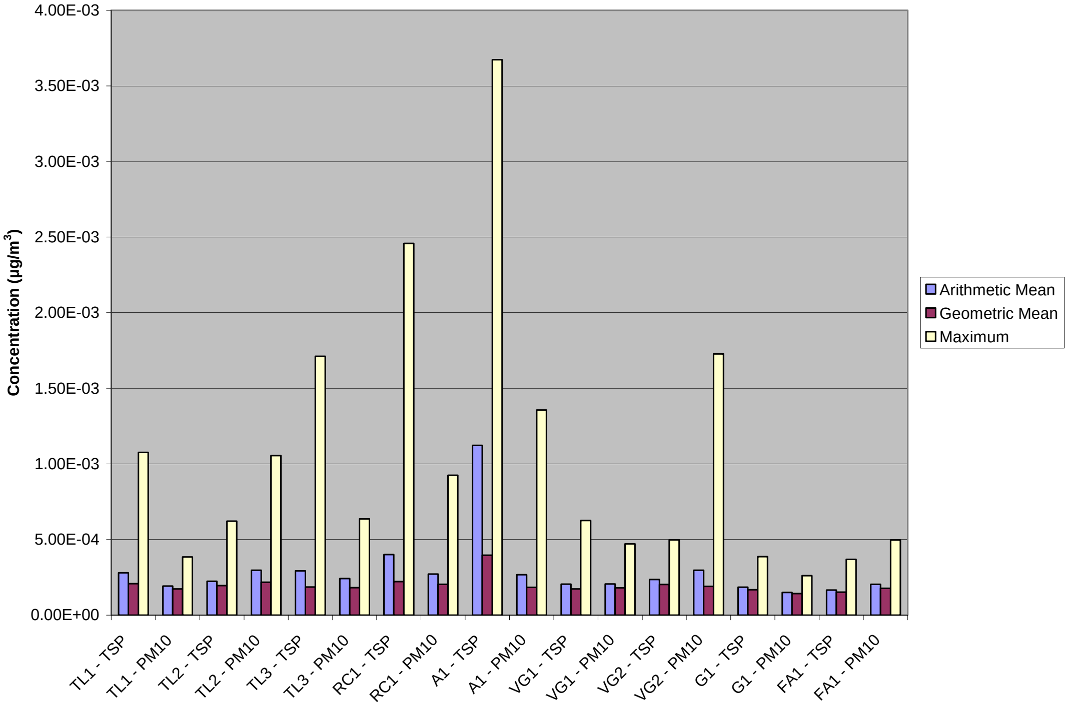


Figure 3.11: Calcium in TSP and PM_{10}

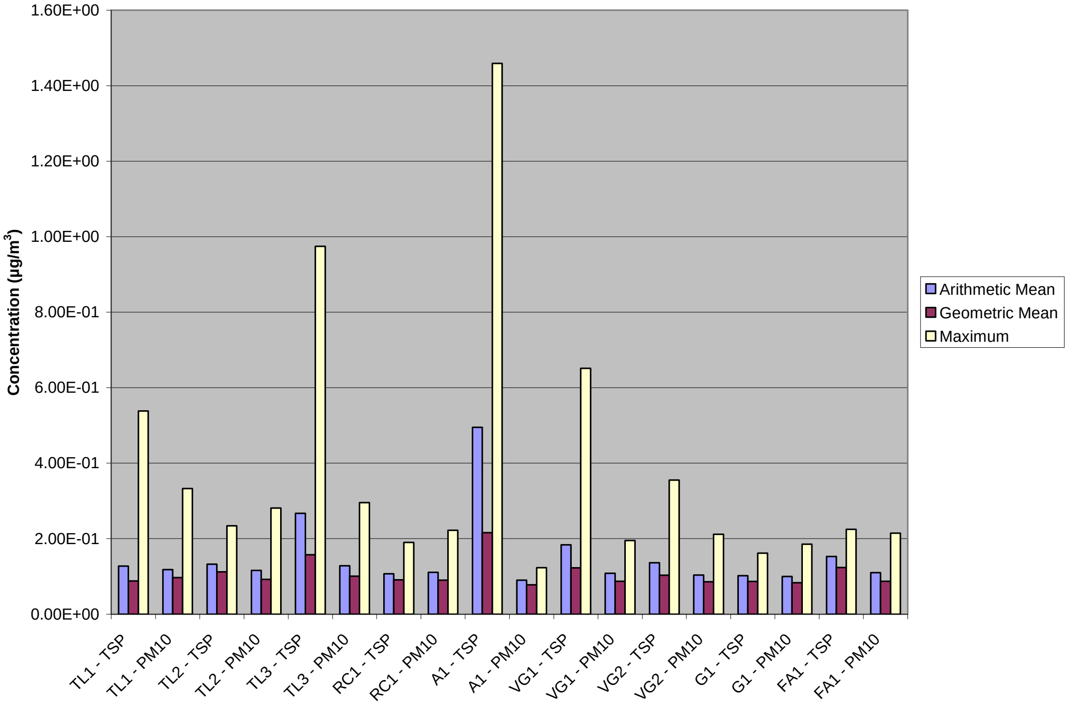


Figure 3.12: Chromium in TSP and PM_{10}

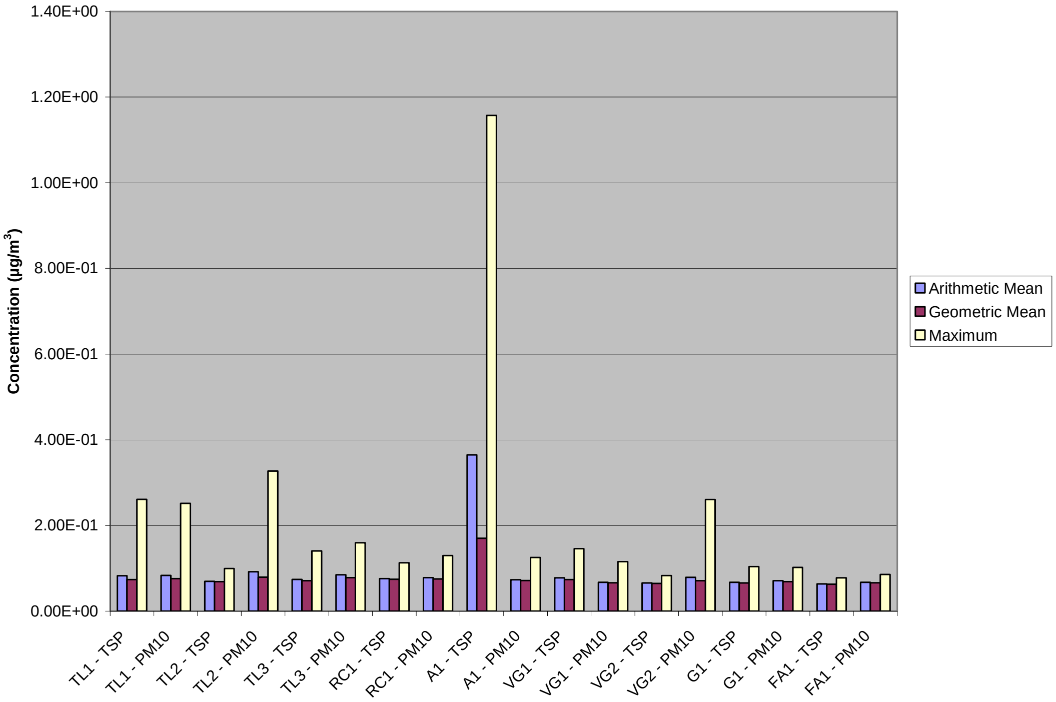


Figure 3.13: Cobalt in TSP and PM_{10}

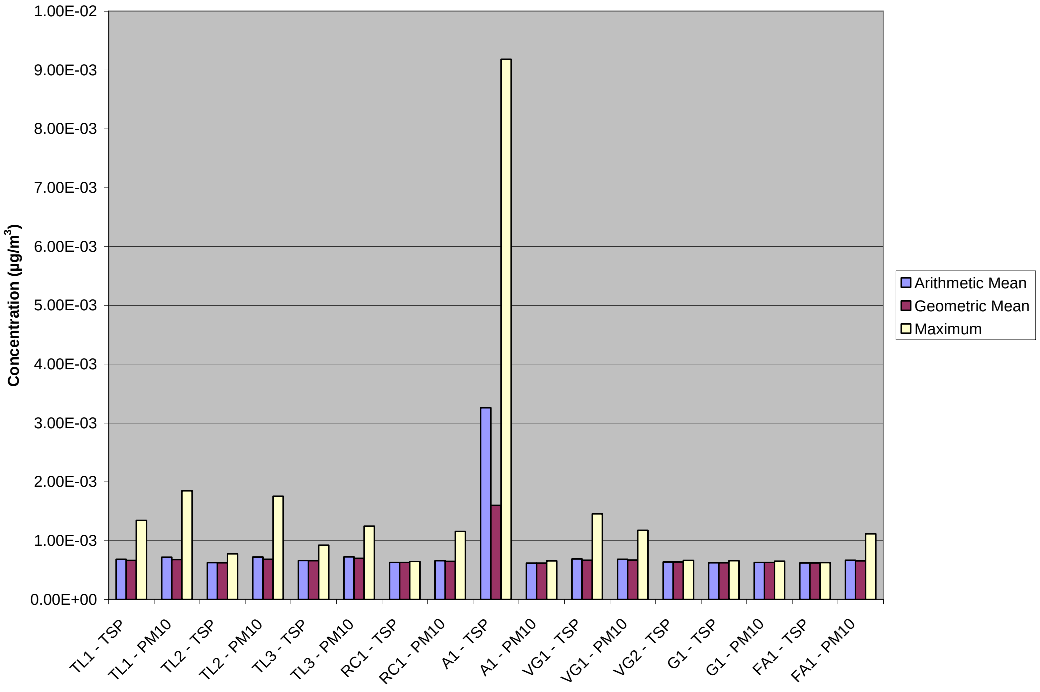


Figure 3.14: Copper in TSP and PM_{10}

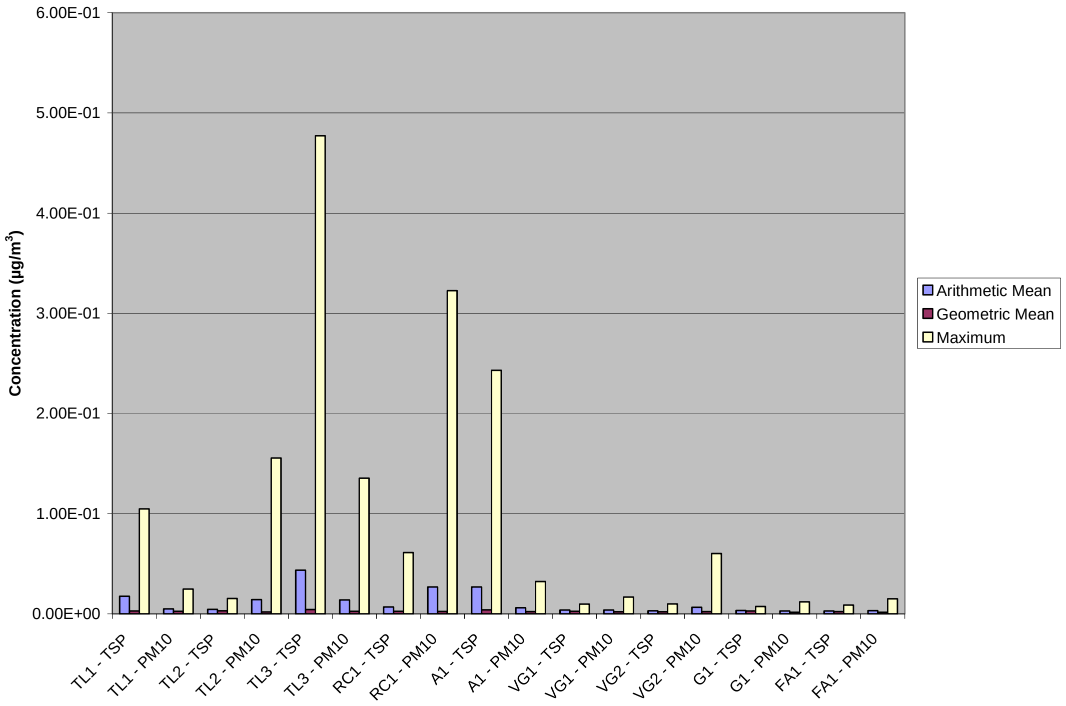


Figure 3.15: Iron in TSP and PM_{10}

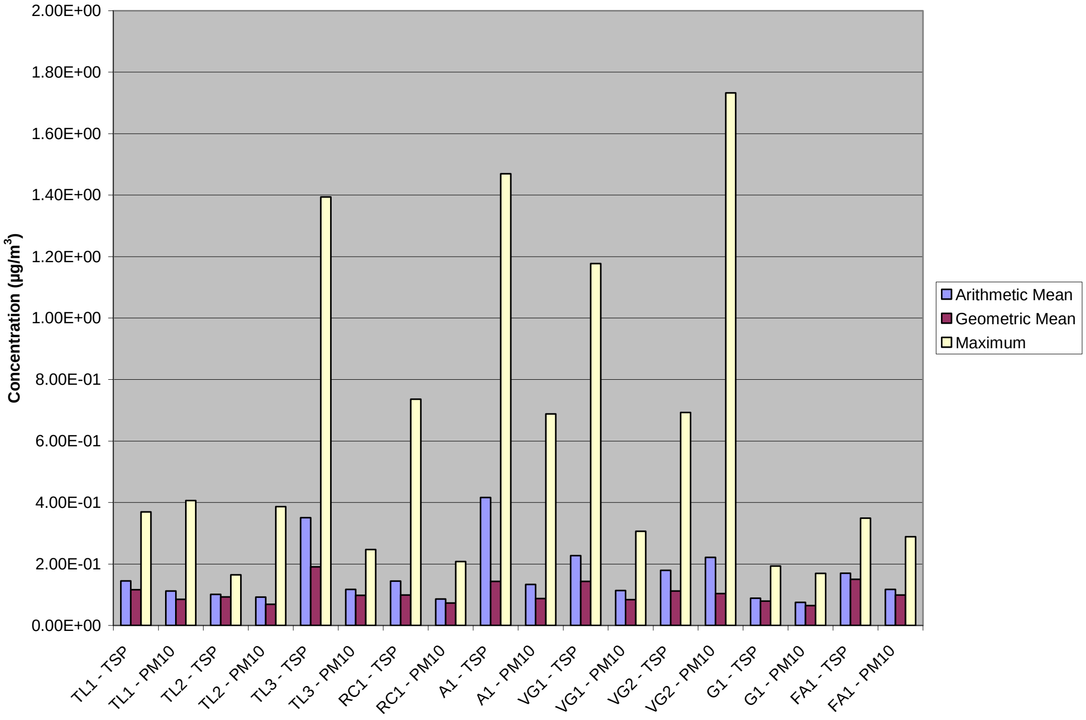


Figure 3.16: Lead in TSP and PM_{10}

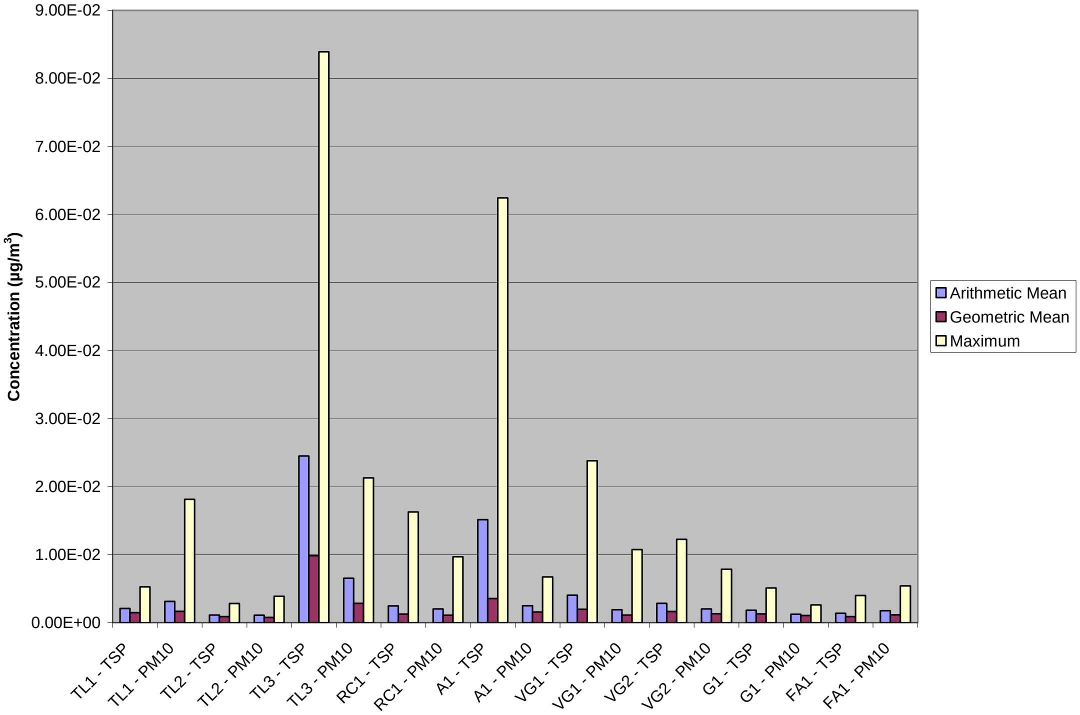


Figure 3.17: Magnesium in TSP and PM_{10}

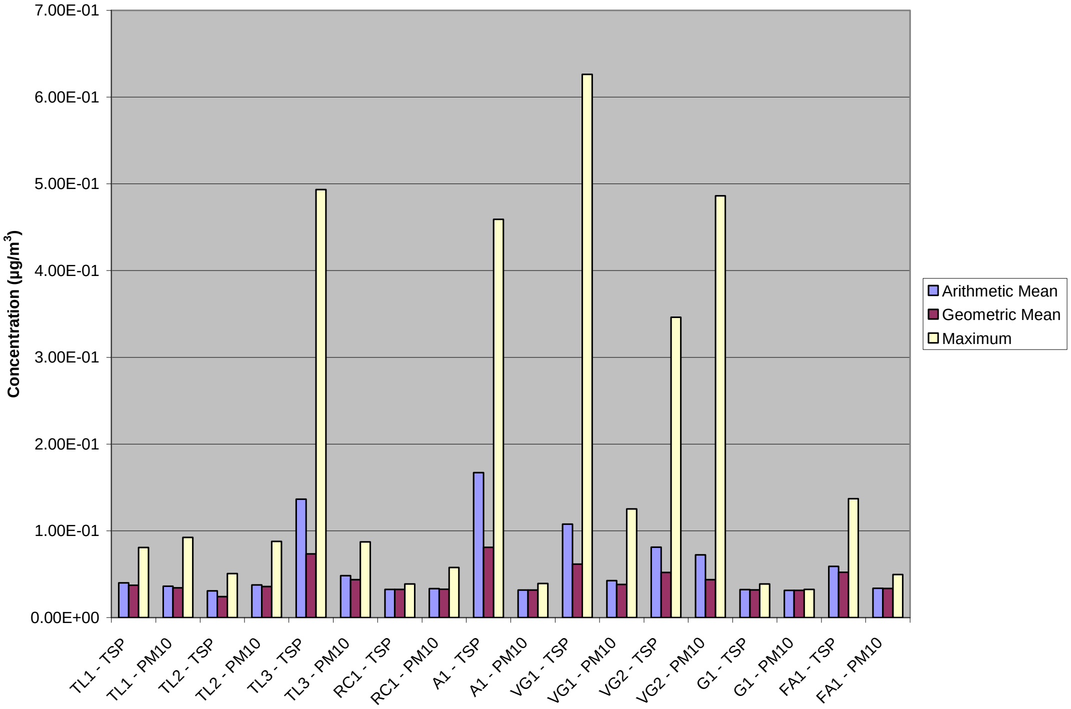


Figure 3.18: Manganese in TSP and PM_{10}

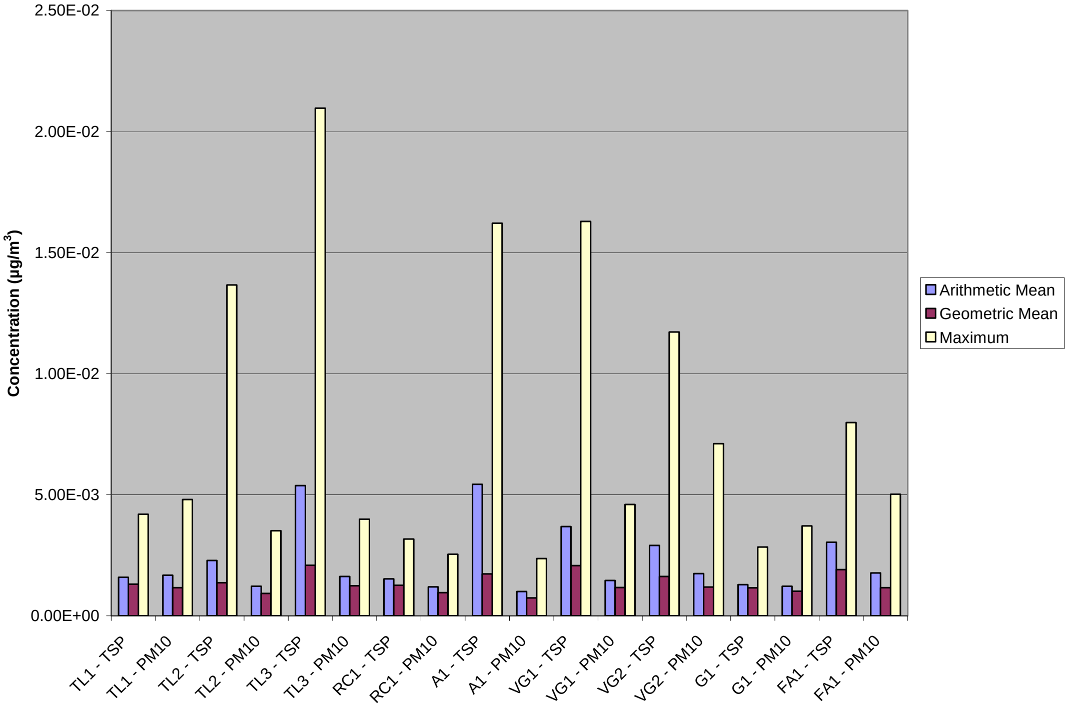


Figure 3.19: Molybdenum in TSP and PM_{10}

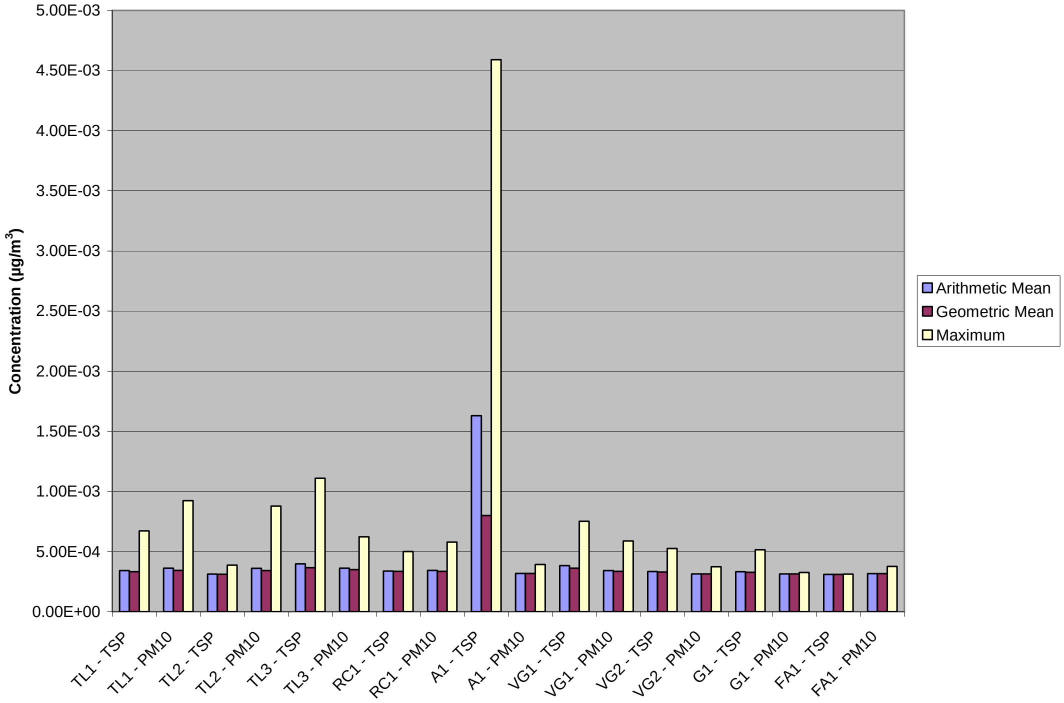


Figure 3.20: Nickel in TSP and PM_{10}

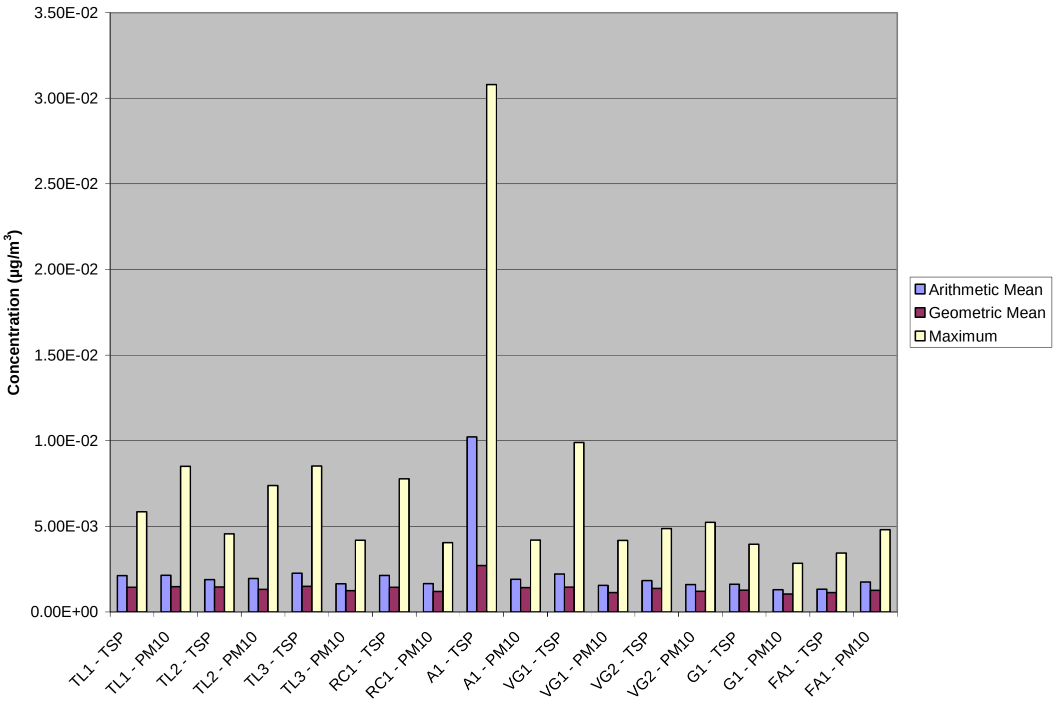


Figure 3.21: Phosphorus in TSP and PM_{10}

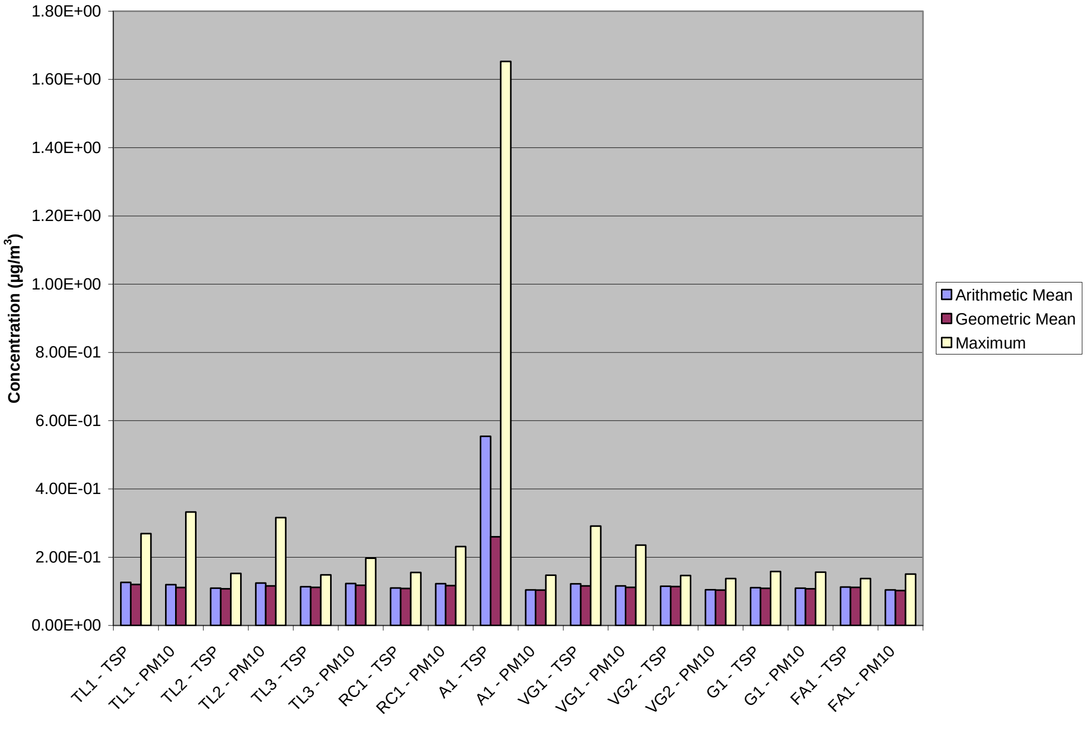


Figure 3.22: Potassium in TSP and PM$_{10}$

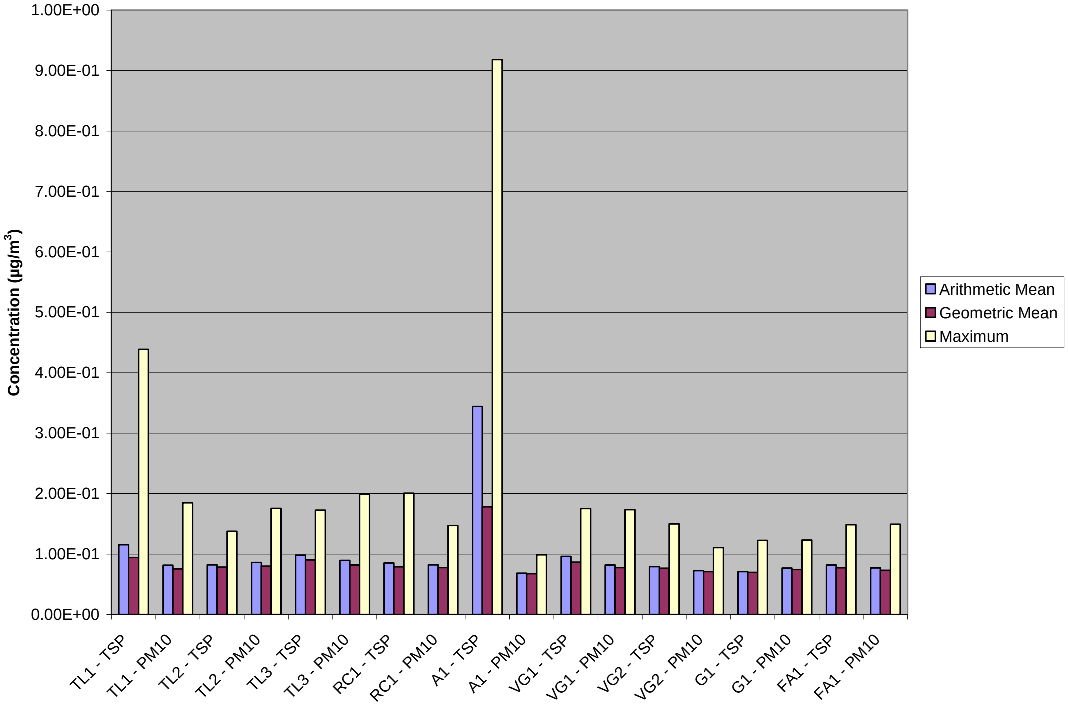


Figure 3.23: Selenium in TSP and PM$_{10}$

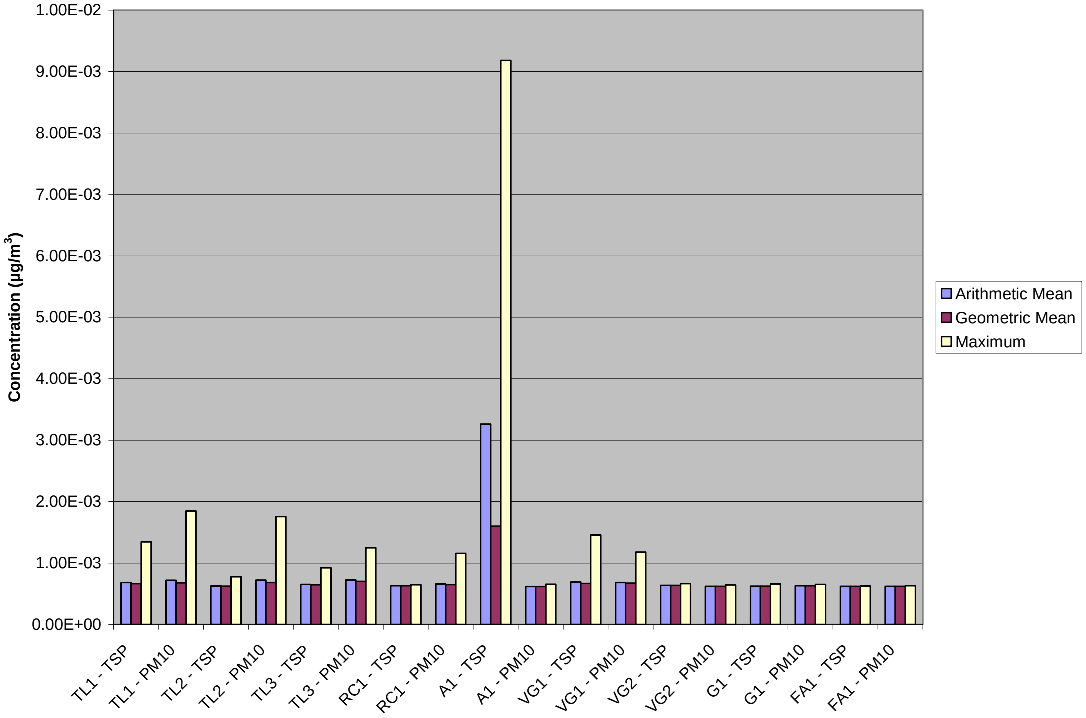


Figure 3.24: Silver in TSP and PM_{10}

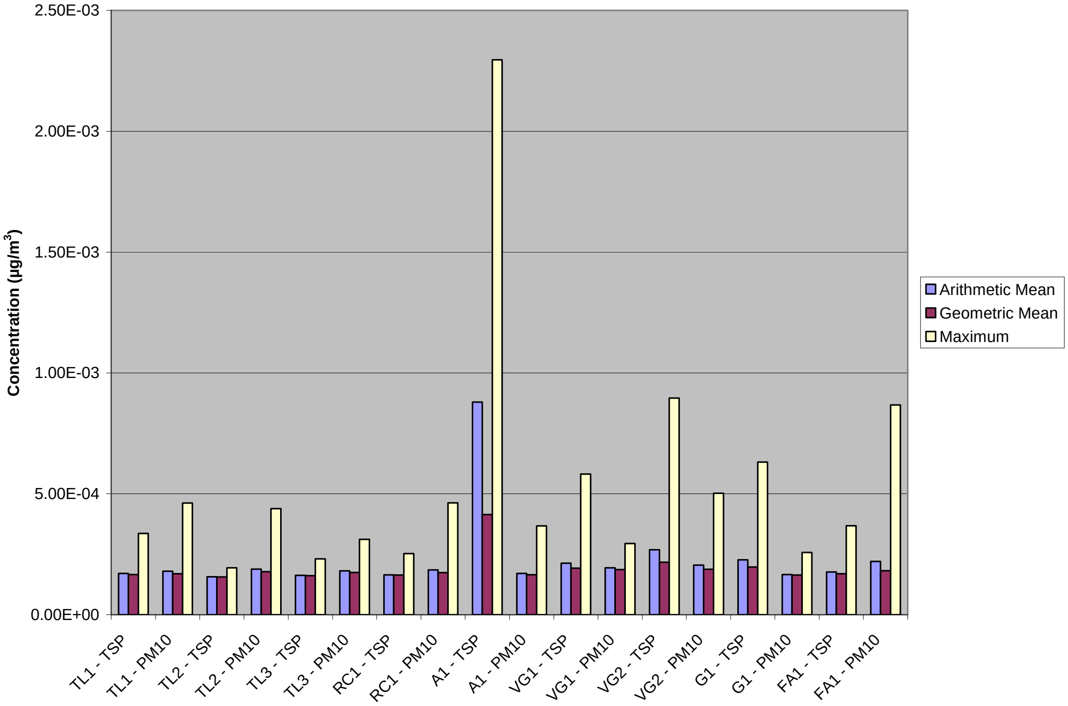


Figure 3.25: Sodium in TSP and PM_{10}

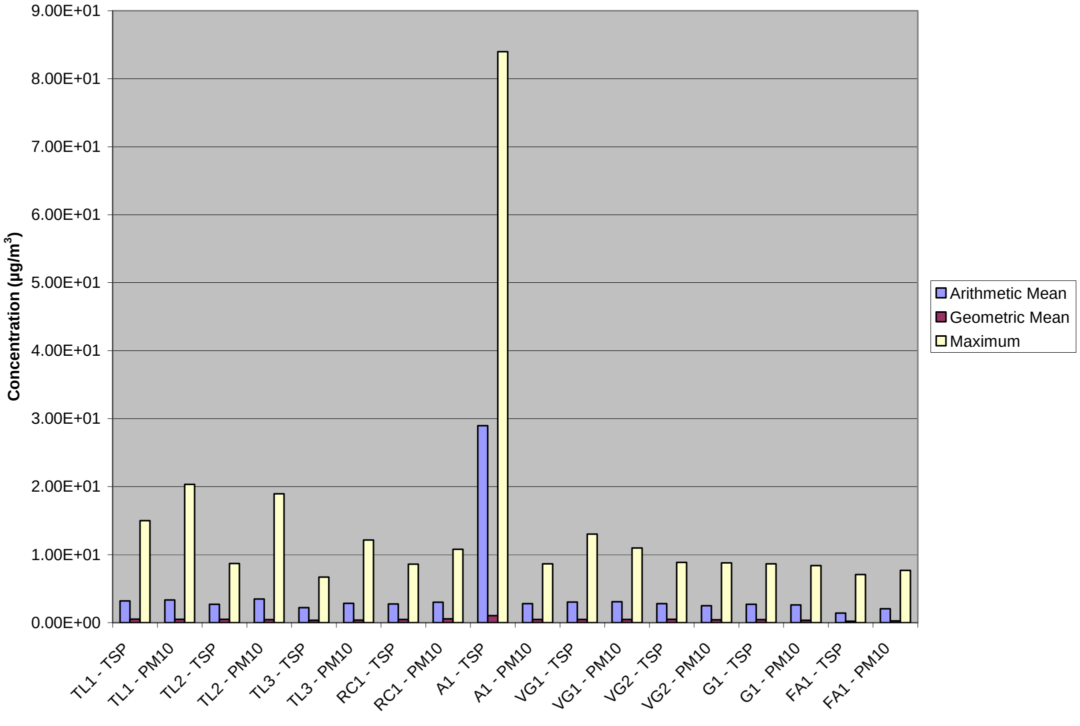


Figure 3.26: Strontium in TSP and PM_{10}

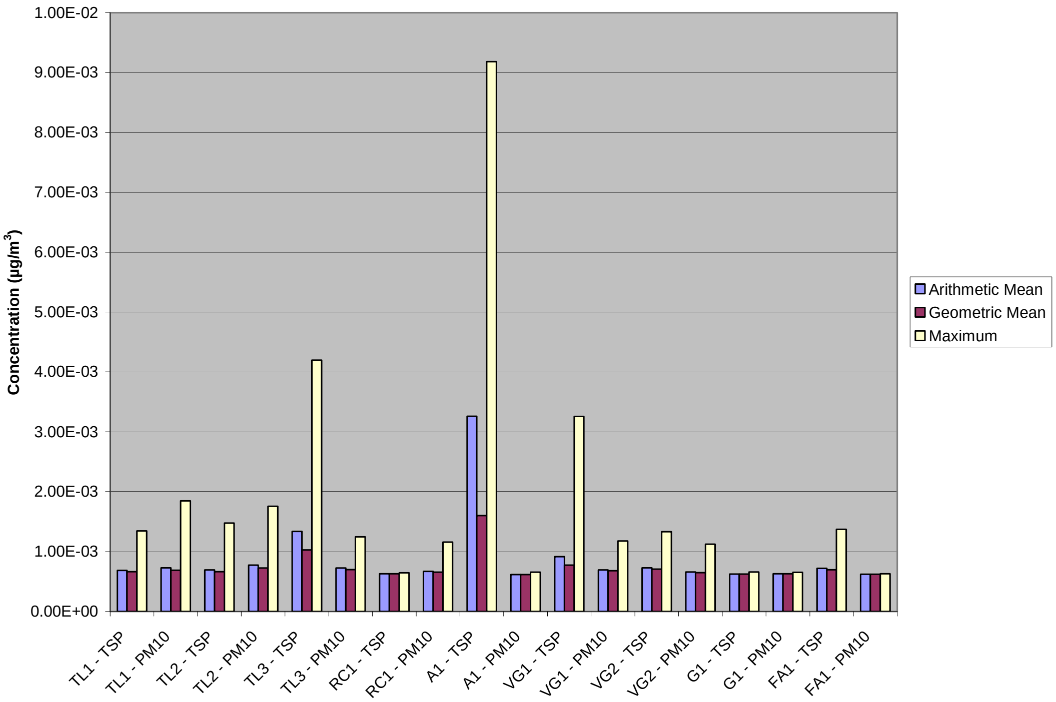


Figure 3.27: Tellurium in TSP and PM_{10}

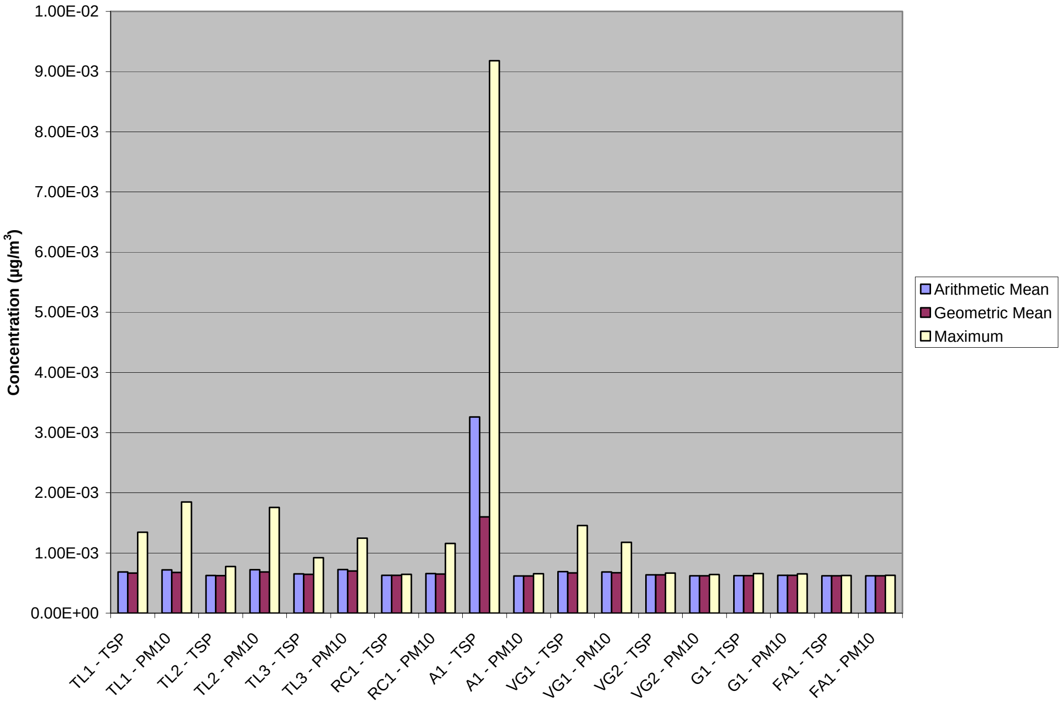


Figure 3.28: Thallium in TSP and PM_{10}

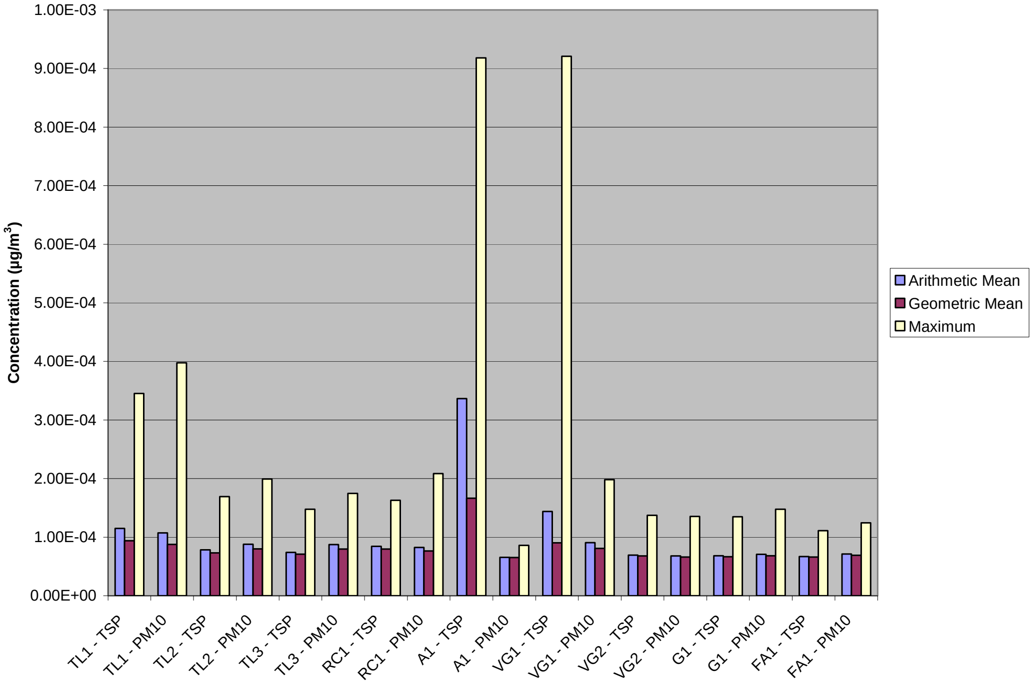


Figure 3.29: Tin in TSP and PM_{10}

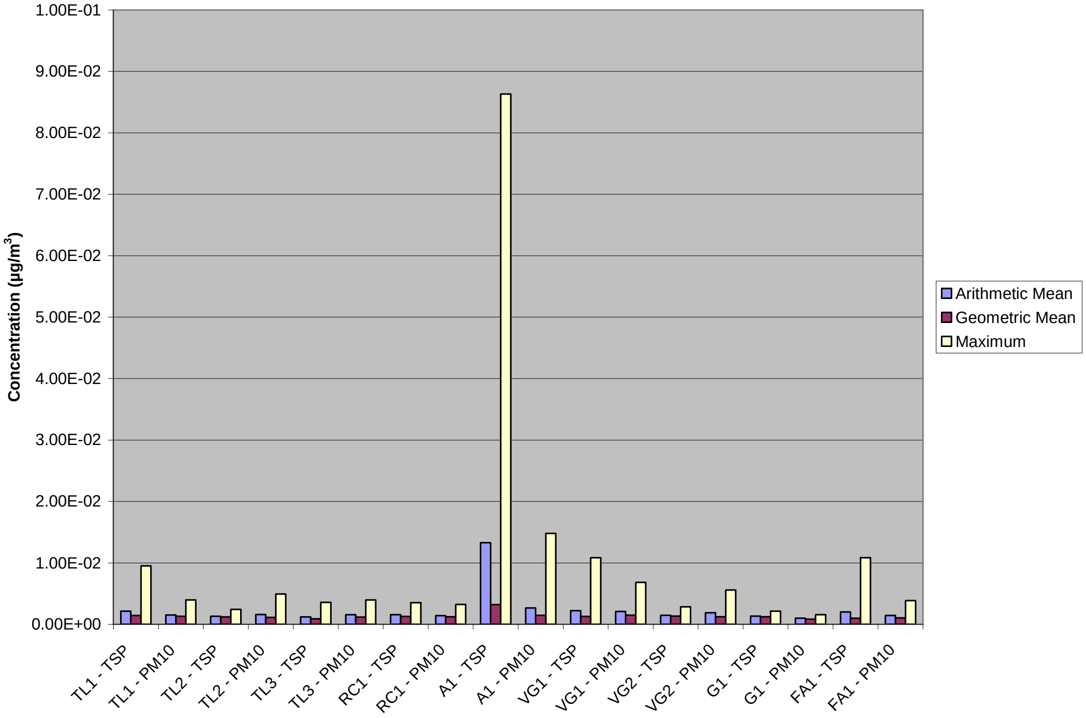


Figure 3.30: Titanium in TSP and PM_{10}

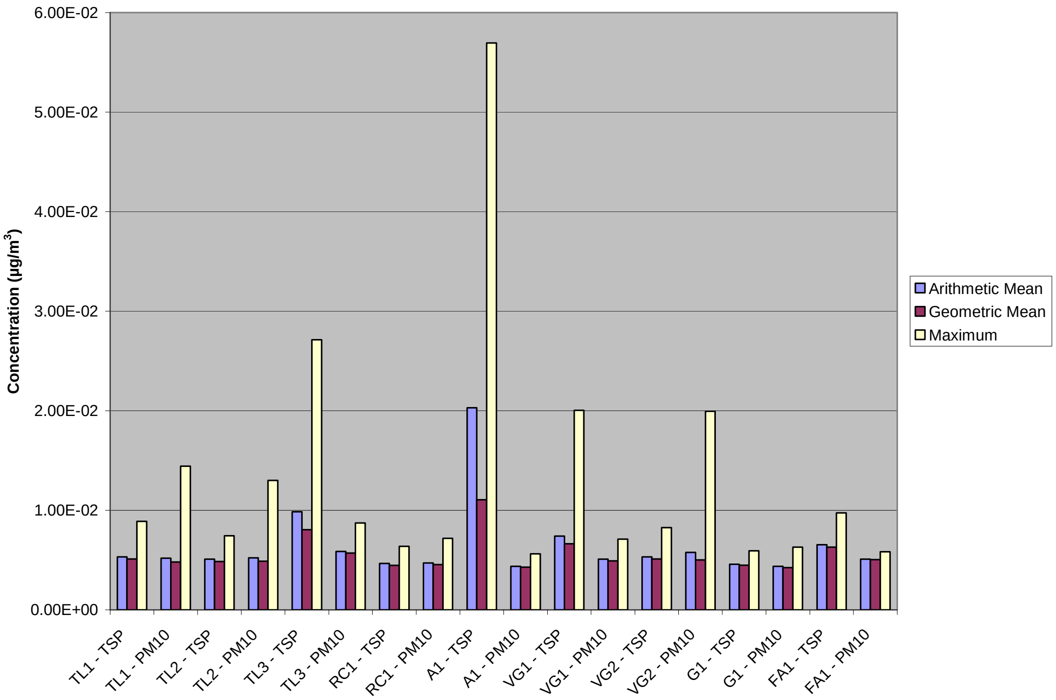


Figure 3.31: Vanadium in TSP and PM_{10}

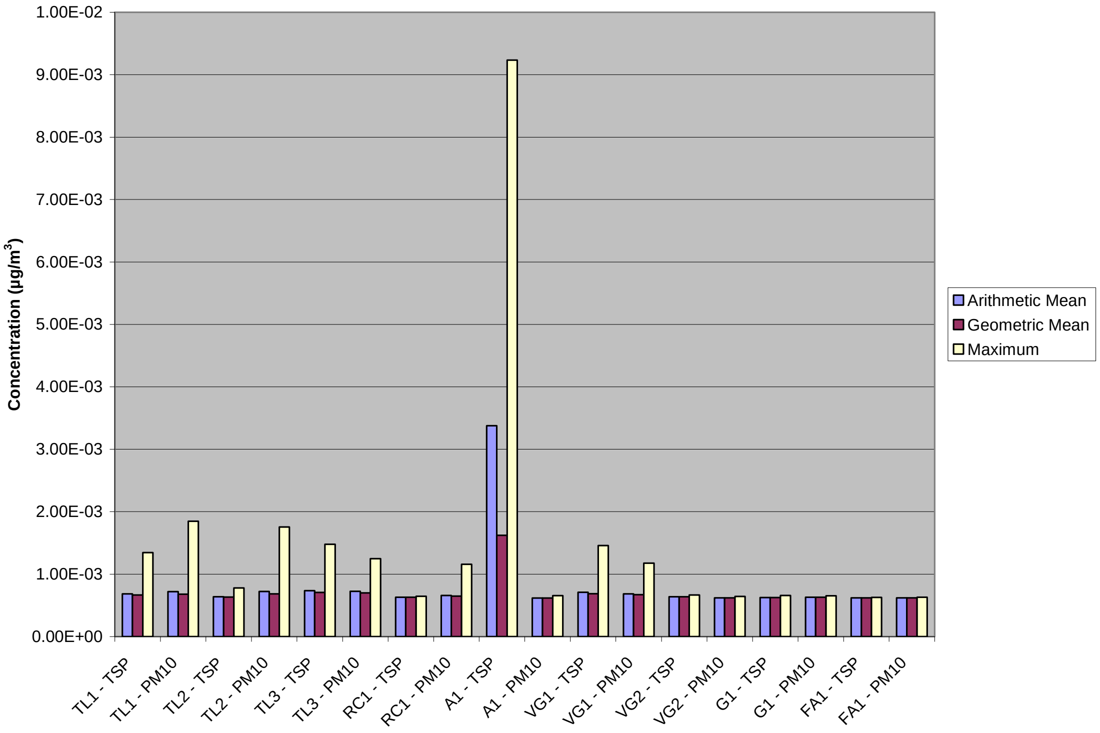


Figure 3.32: Zinc in TSP and PM$_{10}$

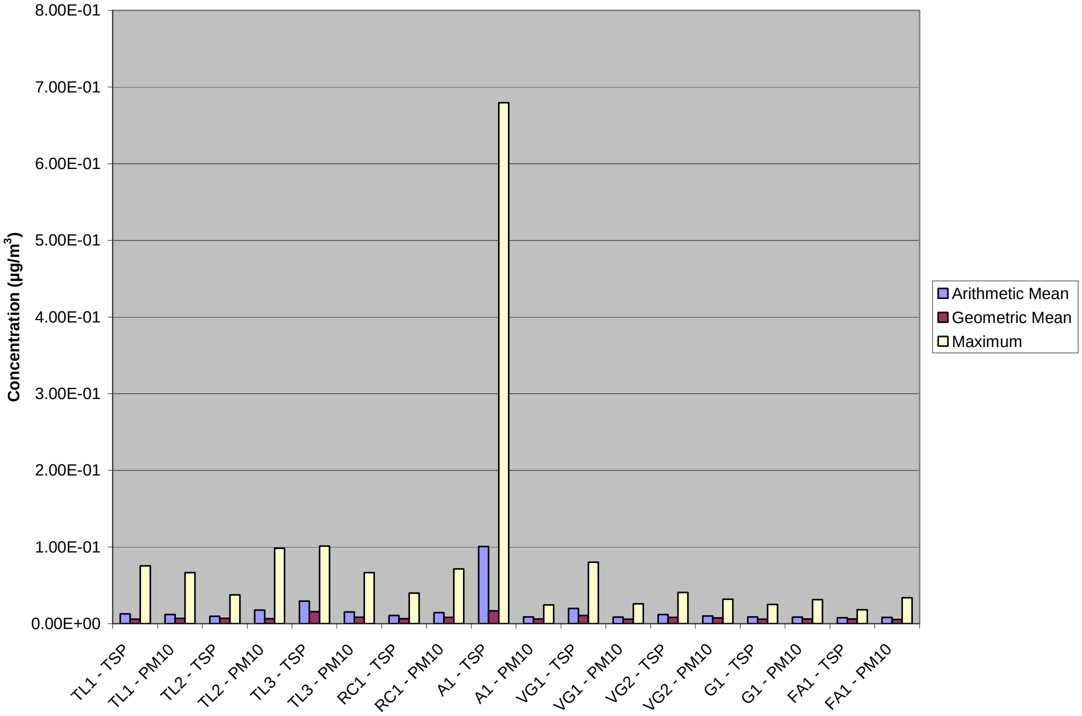
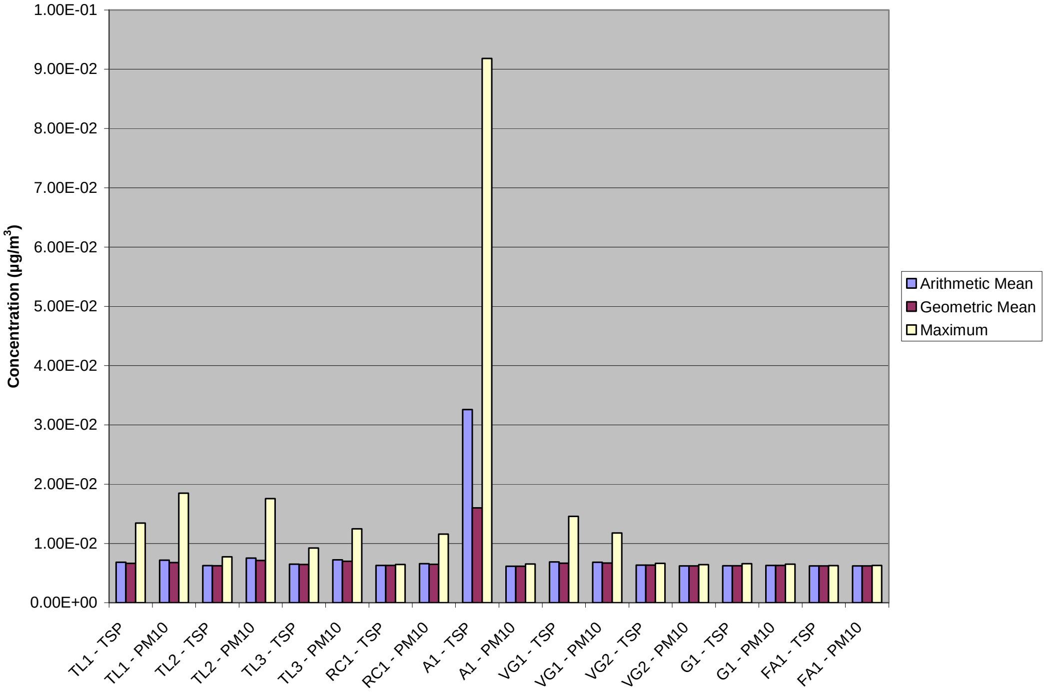


Figure 3.33: Zirconium in TSP and PM$_{10}$



3.1.4 Samples with Elevated Particulate Matter Concentrations

As noted in Section 3.1.2, the highest TSP concentrations were recorded on September 9th with concentrations of 95.5 µg/m^3 at site VG2 and 70.6 5 µg/m^3 at site TL1. The second highest sampling period for TSP concentrations occurred on August 4th with concentrations of 38.2 µg/m^3 at site TL3, 40.1 µg/m^3 at site VG1, and 36 µg/m^3 at site VG2. Figures 3.34 and 3.35 show that the levels of TSP at the other sampling sites were much lower on both days, as were the PM$_{10}$ levels at all 9 sites. Therefore, the higher levels of TSP on August 4th and September 9th were limited to the TL1, TL3, VG1 and VG2 sites.

Figure 3.36 shows the elemental composition of the TSP samples at sites VG2 and TL1 on September 9th. They indicate that the major trace elemental constituents of the TSP consisted of aluminium, boron, calcium, chromium, iron, magnesium, phosphorus, potassium and sodium. Similarly, Figure 3.37 indicates that the elevated TSP samples on August 4th contained large amount of sodium, with smaller concentrations of aluminium, calcium, iron and magnesium.

There are no ambient air quality criteria for aluminium, calcium, magnesium, phosphorus, potassium or sodium as these are not of concern to human health (see Table 3.3, Section 3.1.3). Boron is only of concern with respect to exposure as particulate matter, while the AAQC for iron is based on soiling effects, not health concerns. Therefore, of the major constituents present on the TSP samples on August 4th and September 9th, only chromium is of concern to human health, and the maximum chromium concentration of 0.0752 µg/m^3 on September 9th was only 1/20th of the AAQC of 1.5 µg/m^3.

This level of chromium was comparable to the highest concentrations measured at any of the sites during the sampling program (see Figure 3.12), with the exception of the anomalous value recorded at site A1 on August 4th during an abbreviated sampling period lasting less than 2 hours. During that brief sampling period, the TSP level was 110.2 µg/m^3 (see Table A.1, Appendix A), with a chromium concentration of 1.16 µg/m^3. This suggests that both the TSP and chromium levels at A1 could have approached their criteria levels of 120 µg/m^3 and 1.5 µg/m^3, respectively, if the sampling period had been completed over the entire 24-hour period. Therefore, while the sampling program at site A1 was largely unsuccessful, with only 3 complete samples of the 13 sampling periods in 2008, the values on August 4th suggest that elevated concentrations at that location may be present and that sampling should be continued at this site in the future.

Figure 3.36: Elemental Composition of TSP Samples at Sites TL1 and VG2 September 9, 2008

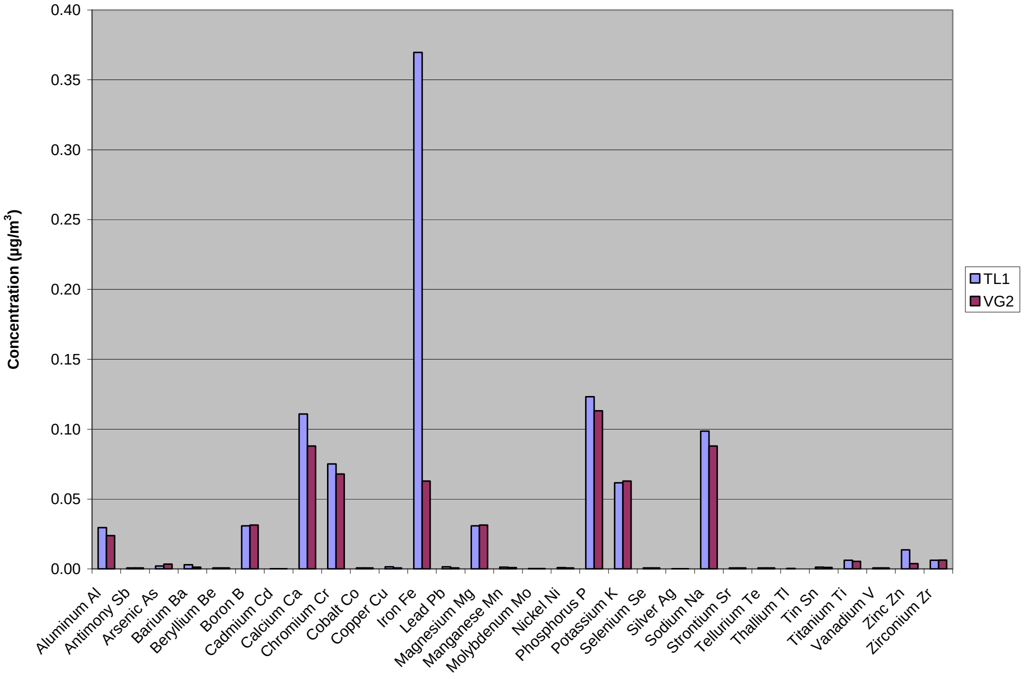
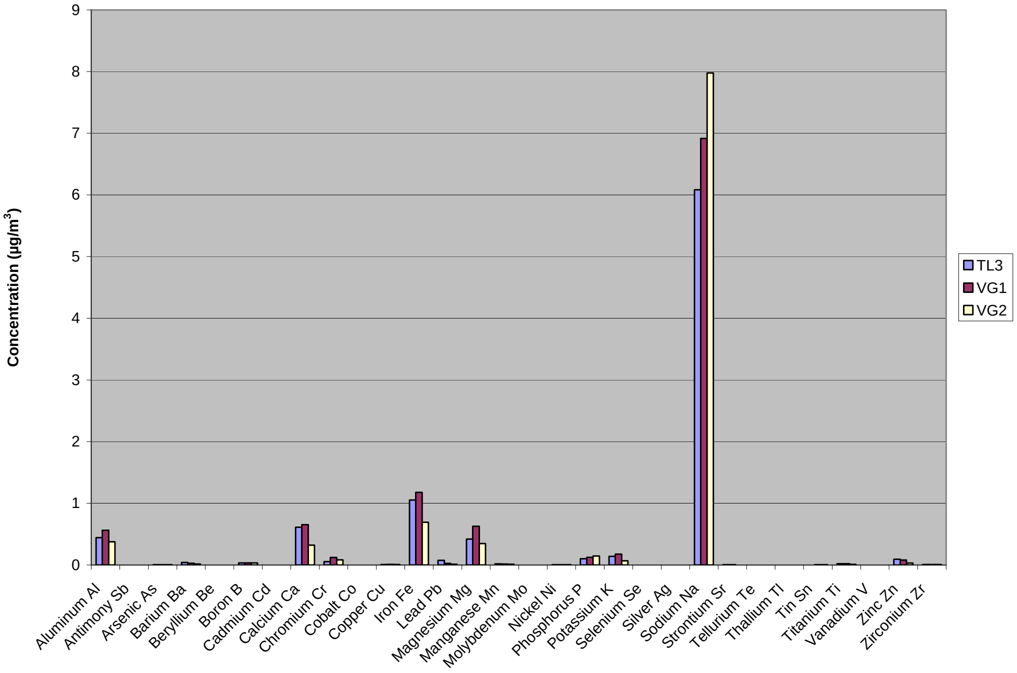
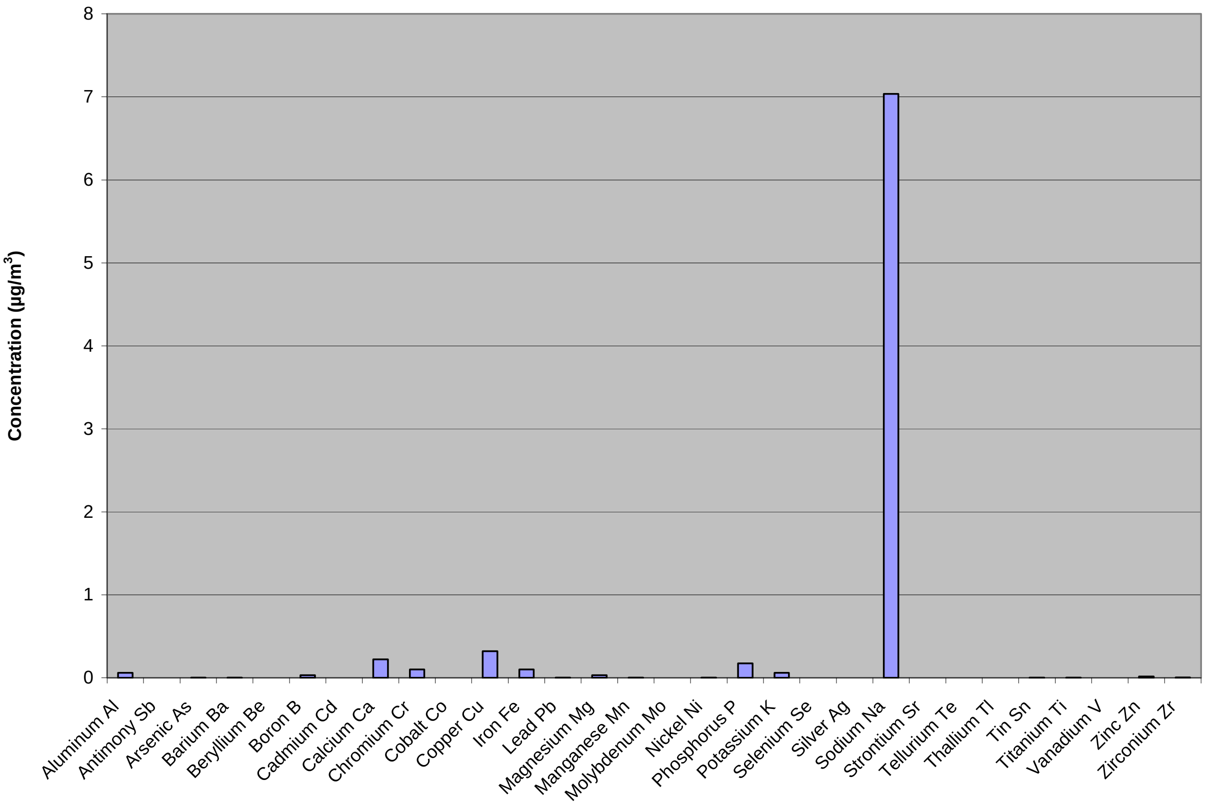


Figure 3.37: Elemental Composition of TSP Samples at Sites TL3, VG1 and VG2 August 4, 2008



The highest PM_{10} concentration during the sampling program was 24.7 µg/m^3 and was recorded at site RC1 on July 23rd. All other PM_{10} samples on that date were much lower at $\leq$12 µg/m^3. Figure 3.38 indicates that sodium was the major elemental constituent of the sample at RC1 on that date. Smaller quantities of aluminium, calcium, chromium, copper, iron, phosphorus and potassium were also present.

Figure 3.38
Elemental Composition of PM_{10} Sample at Site RC1
July 23, 2008



3.2 DUSTFALL SAMPLES

Table 3.5 lists the concentrations of total particulate matter and trace inorganic elements derived from the three sets of dustfall samples collected at site TL1 in 2008. The total dustfall was very low, with two of the samples (July and September) having dustfall levels at the method detection limit. The low value in July was not surprising because the sample represented only about half the month's potential dustfall deposition (i.e., from July 17th to 31st).

The maximum total dustfall deposition rate occurred in August with a rate of 0.12 mg/dm^2.day, although July's rate might have been higher if the sample had been collected over the entire month. This maximum deposition rate is an order of magnitude lower than the established dustfall criteria in British Columbia, Alberta and Ontario, as well as for new mines in Australia (see Table 3.6). It is also well below the most stringent dustfall depositions rates considered acceptable in residential areas of the United Kingdom and New York State.

The low dustfall levels are consistent with the generally low particulate matter concentrations observed in the TSP and PM_{10} samples.

With respect to elemental composition, most of the trace inorganic constituents were below the method detection limits for all three samples. The only contaminants that were observed to be higher than the detection limits included:

- Arsenic (As)
- Barium (Ba)
- Cadmium (Cd)
- Calcium (Ca)
- Copper (Cu)
- Iron (Fe)
- Lead (Pb)
- Manganese (Mn)
- Molybdenum (Mo)
- Silver (Ag)
- Strontium (Sr)
- Zinc (Zn)

With the exception of As and Zn, the remainder of the above elements were also noted to have somewhat elevated concentrations relative to the Town of Faro in the TSP and PM_{10} samples. This indicates a reasonable degree of consistency between the TSP/PM_{10} samples and the dustfall samples.

The highest concentrations of these 12 constituents in dustfall samples occurred either in July or August. All concentrations in the September sample were lower than in the previous two sampling periods.

Table 3.5
Summary of Dustfall Sampling Results

Contaminant	**Date Sampled**			**Maximum**	**MDL**
	17-31 Jul 08	1-31 Aug 08	1-30 Sep 08		
Particulate Matter					
Total Dustfall	<0.18	0.12	<0.10	0.12	
Total Insoluble Dustfall	<0.18	<0.10	<0.10	<0.18	
Total Soluble Dustfall	<0.18	<0.10	<0.10	<0.18	
Trace Inorganic Elements					
Aluminum (Al)-Total	0.000578	0.000700	0.000338	0.000700	0.00002
Antimony (Sb)-Total	<0.0000020	<0.0000020	<0.0000020	<0.0000020	0.000002
Arsenic (As)-Total	0.0000027	0.0000040	<0.0000020	0.0000040	0.000002
Barium (Ba)-Total	0.000157	0.000245	0.000153	0.000245	0.000001
Beryllium (Be)-Total	<0.000010	<0.000010	<0.000010	<0.000010	0.00001
Bismuth (Bi)-Total	<0.000010	<0.000010	<0.000010	<0.000010	0.00001
Boron (B)-Total	<0.00020	<0.00020	<0.00020	<0.00020	0.0002
Cadmium (Cd)-Total	0.0000014	<0.0000010	<0.0000010	0.0000014	0.000001
Calcium (Ca)-Total	0.0051	0.0015	0.0028	0.0051	0.001
Chromium (Cr)-Total	<0.000010	<0.000010	<0.000010	<0.000010	0.00001
Cobalt (Co)-Total	<0.0000020	<0.0000020	<0.0000020	<0.0000020	0.000002
Copper (Cu)-Total	0.00664	0.00316	0.00302	0.00664	0.000002
Iron (Fe)-Total	<0.00070	0.00075	<0.00070	0.00075	0.0007
Lead (Pb)-Total	0.0000675	0.0000553	0.0000238	0.0000675	0.000001
Lithium (Li)-Total	<0.00010	<0.00010	<0.00010	<0.00010	0.0001
Magnesium (Mg)-Total	<0.0020	<0.0020	<0.0020	<0.0020	0.002
Manganese (Mn)-Total	0.0000590	0.0000360	0.0000286	0.0000590	0.000001
Mercury (Hg)-Total	<0.0000010	<0.0000010	<0.0000020	<0.0000020	0.000001
Molybdenum (Mo)-Total	0.0000022	0.0000041	<0.0000010	0.0000041	0.000001
Nickel (Ni)-Total	<0.000010	<0.000010	<0.000010	<0.000010	0.00001
Phosphorus (P)-Total	<0.0070	<0.0070	<0.0070	<0.0070	0.007
Potassium (K)-Total	<0.050	<0.050	<0.050	<0.050	0.05
Selenium (Se)-Total	<0.000020	<0.000020	<0.000020	<0.000020	0.00002
Silicon (Si)-Total	<0.0010	<0.0010	<0.0010	<0.0010	0.001
Silver (Ag)-Total	0.00000037	0.00000041	<0.00000020	0.00000041	0.0000002
Sodium (Na)-Total	<0.050	<0.050	<0.050	<0.050	0.05
Strontium (Sr)-Total	0.0000174	0.0000077	0.0000066	0.0000174	0.000002
Thallium (Tl)-Total	<0.0000020	<0.0000020	<0.0000020	<0.0000020	0.000002
Tin (Sn)-Total	<0.0000020	<0.0000020	<0.0000020	<0.0000020	0.000002
Titanium (Ti)-Total	<0.00020	<0.00020	<0.00020	<0.00020	0.0002
Uranium (U)-Total	<0.00000020	<0.00000020	<0.00000020	<0.00000020	0.0000002
Vanadium (V)-Total	<0.000020	<0.000020	<0.000020	<0.000020	0.00002
Zinc (Zn)-Total	0.000267	0.000068	0.000071	0.000267	0.00002

Elements in **bold** indicate those which had concentrations above the MDL

Table 3.6
Dustfall Criteria from Various Jurisdictions

Jurisdiction	Application	Dustfall Criteria (mg/dm^2.day)	Comments
British Columbia	desirable	1.75	
Alberta	residential & recreational areas	1.75	averaged over 30 days
	commercial & recreational areas	5.3	averaged over 30 days
Ontario		2.3	averaged over 30 days
Australia	new mines	1.3	pro-rata compensation if level exceeded
		3.3	total compensation if level exceeded
United Kingdom	open country	1	95th percentile - complaints likely if exceeded
	residential areas	1.5	95th percentile - complaints likely if exceeded
	commercial areas	1.9	95th percentile - complaints likely if exceeded
New York	Level I	1	
	Level II	1	
	Level III	1.3	
	Level IV	2	

The amount of dustfall in a month strongly depends on precipitation rates during that time. Since summer 2008 was noted to be a relatively wet summer, the dustfall amounts recorded and presented in this report may be lower than would be found in other years.

4.0 SUMMARY AND RECOMMENDATIONS

The TSP and PM_{10} sampling program was successfully completed at nine locations over the period July 17th to October 3rd, 2008. In addition, dustfall sampling was conducted at one of the TSP/PM_{10} sampling sites.

Data recovery of the TSP samples ranged between 54% and 77% for eight of the sampling sites, but only 24% at the key A1 site near the Faro mine pit. Data recovery was lower for PM_{10} samples than for TSP samples, ranging from 39% to 69%. Part of the reason for the low data recovery at some sites was due to operator error in the early part of the program due to unfamiliarity of the operator with the equipment. This was corrected after the initial period with help from an individual at the mine site who had previously operated similar samplers. It is hoped that the data recovery will be improved in 2009 if the same operator can be retained in order to minimize operational errors.

Many of the samples collected in 2008 had very low particulate matter loadings on the filters. This was also true of the dustfall samples collected at site TL1. Especially during sampling periods in September, many TSP/ PM_{10} samples were close to the 'noise' level of the MiniVol™ samplers of 5 $\mu g/m^3$, while two of the three dustfall samples were essentially below the method detection limit for dustfall sampling. These low particulate matter concentrations affected the degree to which trace elemental analysis could be used to determine concentrations of heavy metals in the samples. Although the standard TSP/PM_{10} sampling period for particulate matter is 24 hours, the program should consider increasing the sampling period to 48 hours in 2009 in order to provide higher filter loadings for laboratory analysis. The battery packs on the MiniVol™ samplers can be run for longer periods of up to 48 hours, so there is no operational limitation for increasing the sampling period.

There were some concerns related to a few samples where the measured PM_{10} concentrations were higher than the TSP levels at a given location. While operator error in mislabelling samples may be one cause for such discrepancies, it is also possible that some filters were damaged during handling. Furthermore, the space at the administration complex at the mine site that was made available for use in loading/unloading filters was not ideal with respect to minimizing dust levels during sample handling. It would benefit the monitoring program if a more suitable location could be identified for the 2009 sampling program.

Based on the results of the 2008 sampling program, all measured TSP, PM_{10} and trace inorganic elements were well within established ambient air quality criteria for all elements. Trace elemental concentrations were generally higher in July and August than in September, indicating that sampling in the early part of the summer season (June, July and early August) may be more important than sampling in late September or October.

The overall conclusion of the 2008 sampling program is that particulate matter and trace inorganic element concentrations at the Faro Mine Complex were very low, and were often similar to levels recorded in the Town of Faro. Even during the periods with the highest TSP loadings, the composition of the particulate matter is primarily made up of trace elements which either have no ambient air quality criteria or are not of concern for human health exposure. The exception may be chromium, although the concentrations of this trace metal remained well below any level of concern.

It is recommended that the particulate matter sampling program be continued in 2009 with the following changes:

1. The sampling program should be initiated as soon as possible after the loss of snow cover in late May or early June, depending on site conditions. The continuation of the sampling program to the end of September should be reconsidered, with a termination date in early September at the latest.
2. The same nine sampling sites should be retained for 2009, but the sampling periods should be extended to 48 hours in order to obtain higher particle loadings on the filters.
3. It would be preferable to add at least three additional dustfall sampling sites to the program. These should be established at sites RC1, A1 and VG2.
4. In order to minimize material loss or damage to the filters during handling, it is recommended that a ‘clean’ room be identified for this purpose. If this cannot be done at the mine administration building, consideration should be given to finding a location in the Town of Faro for that purpose.

APPENDIX A

MiniVol™ Sampler Data
and Mass Concentration Calculation Data

Table A.1: TSP/PM_{10} Sampler Data – July 2008

Start Date	Location	MiniVol Unit #	Filter ID	RotoFlow (start)	RotoFlow (end)	Average	Daily Average Temperature (K)	Daily Average Pressure (mm Hg)	Qact (L/min)	Elasped Time Start	Elasped Time End	Sampling Duration (min)	Volume Sampled (m^3)	TSP Result (mg)	TSP Result (µg)	TSP Concentration (µg/m3)	Comments
17-Jul-08	TL1 - PM10	4854	P8634	5	5	5	286.1	668.6	5.590	0.0	24.0	1,440	8.1	0.07	70	8.7	
	TL1 - TSP	4841	P8633	5	5	5	286.1	668.6	5.695	0.0	24.0	1,440	8.2	0.09	90	11.0	
	TL2 - PM10	4848	P8632	5	5	5	286.1	668.6	5.584	0.0	24.0	1,440	8.0	0.13	130	16.2	
	TL2 - TSP	4858	P8631	5	4.5	4.75	286.1	668.6	5.340	0.0	24.0	1,440	7.7	0.06	60	7.8	
	TL3 - PM10	4849	8682	5	5	5	286.1	668.6	5.636	0.0	12.0	720	4.1	0.08	80	19.7	Elapsed time was lower than the others.
	TL3 - TSP	4844	8696	5	5	5	286.1	668.6	5.634	0.0	24.0	1,440	8.1	0.23	230	28.3	
	RC1 - PM10	4843	8630	5	5	5	286.1	668.6	5.677	0.0	24.0	1,440	8.2	0.09	90	11.0	
	RC1 - TSP	4857	8627	5	5	5	286.1	668.6	5.559	0.0	24.0	1,440	8.0	0.15	150	18.7	
	A1 - PM10	4845	8629	5	4.3	4.65	286.1	668.6	5.297	0.0	24.0	1,440	7.6	0.09	90	11.8	Filter was put in upside down.
	A1 - TSP	4853	8622	5	3	4	286.1	668.6	4.517	0.0	3.3	198	0.9	0.12	120	134.2	Elapsed time and Rotoflow was lower than the others.
	VG1 - PM10	4852	8623	5	4	4.5	286.1	668.6	5.030	0.0	24.0	1,440	7.2	0.14	140	19.3	
	VG1 - TSP	4855	8620	5	5	5	286.1	668.6	5.592	0.0	24.0	1,440	8.1	0.16	160	19.9	
	VG2 - PM10	4856	8624	5	4.5	4.75	286.1	668.6	5.395	0.0	24.0	1,440	7.8	0.06	60	7.7	
	VG2 - TSP	4850	8628	5	4.5	4.75	286.1	668.6	5.281	0.0	24.0	1,440	7.6	0.18	180	23.7	Filter was put in upside down.
	G1 - PM10	4842	8618	5	4.5	4.75	286.1	668.6	5.385	0.0	24.0	1,440	7.8	0.05	50	6.4	
	G1 - TSP	4846	8621	5	4.5	4.75	286.1	668.6	5.389	0.0	24.0	1,440	7.8	0.14	140	18.0	
	FA1 - PM10	4851	8616	5	5	5	286.1	668.6	5.602	0.0	24.0	1,440	8.1	0.09	90	11.2	
	FA1 - TSP	4847	8613	5	5	5	286.1	668.6	5.655	0.0	24.0	1,440	8.1	0.14	140	17.2	
23-Jul-08	TL1 - PM10	4854	P8700	5	4.8	4.9	280.5	669.3	5.414	24.0	48.0	1,440	7.8	0.05	50.00	6.4	
	TL1 - TSP	4841	P8679	5	5	5	280.5	669.3	5.636	24.1	48.0	1,434	8.1	0.06	60.00	7.4	
	TL2 - PM10	4848	P8661	5	5	5	280.5	669.3	5.526	24.0	48.0	1,440	8.0	0.05	50.00	6.3	In field log, the elasped time is zero but this appears to be a written error.
	TL2 -TSP	4858	P8702	5	4.8	4.9	280.5	669.3	5.460	24.0	48.0	1,440	7.9	0.06	60.00	7.6	
	TL3 - PM10	4849	P8626	5	4.8	4.9	280.5	669.3	5.455	12.0	36.0	1,440	7.9	< 0.04	40.00	*5.1*	
	TL3 - TSP	4844	P8657	5	4.5	4.75	280.5	669.3	5.275	24.0	48.0	1,440	7.6	0.08	80.00	10.5	
	RC1 - PM10	4843	P8701	5	5	5	280.5	669.3	5.618	24.0	48.0	1,440	8.1	0.2	200.00	24.7	
	RC1 - TSP	4857	P8699	5	5	5	280.5	669.3	5.501	24.0	48.0	1,440	7.9	0.06	60.00	7.6	
	A1 - PM10	4845	P8697	5	5	5	280.5	669.3	5.655	24.0	47.9	1,434	8.1	0.1	100.00	12.3	
	A1 - TSP	4853	P8680	5	3	4	280.5	669.3	4.470	3.3	5.6	138	0.6	< 0.04	40.00	*64.8*	
	VG1 - PM10	4852	P8681	5	5	5	280.5	669.3	5.569	24.0	48.0	1,440	8.0	< 0.04	40.00	*5.0*	
	VG1 - TSP	4855	P8656	5	5	5	280.5	669.3	5.534	24.0	48.0	1,440	8.0	0.08	80.00	10.0	
	VG2 - PM10	4856	P8653	5	5	5	280.5	669.3	5.636	24.0	48.0	1,440	8.1	< 0.04	40.00	*4.9*	
	VG2 - TSP	4850	P8660	5	4.5	4.75	280.5	669.3	5.226	24.0	48.0	1,440	7.5	< 0.04	40.00	*5.3*	
	G1 - PM10	4842	P8654	5	4	4.5	280.5	669.3	5.034	24.0	24.0	0	0.0	0.04	40.00	#DIV/0!	
	G1 - TSP	4846	P8655	5	5	5	280.5	669.3	5.628	24.0	48.0	1,440	8.1	0.05	50.00	6.2	
	FA1 - PM10	4851	P8676	5	5	5	280.5	669.3	5.544	24.0	48.0	1,440	8.0	0.09	90.00	11.3	
	FA1 - TSP	4847	P8658	5	5	5	280.5	669.3	5.596	24.0	48.0	1,440	8.1	0.09	90.00	11.2	
29-Jul-08	TL1 - PM10	4854	P8698	5	0	2.5	283.5	663.7	2.591	48.0	65.4	1,044	2.7	0.09	90.00	33.3	No Rotoflow, no noise.
	TL1 - TSP	4841	P8688	5	0	2.5	283.5	663.7	2.764	48.0	70.4	1,344	3.7	< 0.04	40.00	*10.8*	No Rotoflow, no noise.
	TL2 - PM10	4848	P8683	5	5	5	283.5	663.7	5.579	24.0	32.5	510	2.8	0.1	100.00	35.1	Dead battery
	TL2 -TSP	4858	P8695	5	4.5	4.75	283.5	663.7	5.335	48.0	72.0	1,440	7.7	0.09	90.00	11.7	
	TL3 - PM10	4849	P8686	5	5	5	283.5	663.7	5.630	36.0	60.0	1,440	8.1	0.14	140.00	17.3	
	TL3 - TSP	4844	P8693	5	5	5	283.5	663.7	5.629	48.0	72.0	1,440	8.1	0.27	270.00	33.3	
	RC1 - PM10	4843	P8684	5	5	5	283.5	663.7	5.671	48.0	72.0	1,440	8.2	0.08	80.00	9.8	
	RC1 - TSP	4857	P8687	5	5	5	283.5	663.7	5.553	48.0	72.0	1,440	8.0	0.14	140.00	17.5	
	A1 - PM10	4845	P8685	5	5	5	283.5	663.7	5.709	47.9	71.9	1,440	8.2	0.11	110.00	13.4	
	A1 - TSP	4853	P8650	5	3	4	283.5	663.7	4.513	5.6	8.0	144	0.6	< 0.04	40.00	*61.6*	
	VG1 - PM10	4852	P8649	5	5	5	283.5	663.7	5.622	48.0	60.6	756	4.3	0.04	40.00	9.4	Battery was dead when arrived on site.
	VG1 - TSP	4855	P8643	5	0	2.5	283.5	663.7	2.556	48.0	70.4	1,344	3.4	0.06	60.00	17.5	No Rotoflow, no noise.
	VG2 - PM10	4856	P8651	5	4.8	4.9	283.5	663.7	5.570	48.0	72.0	1,440	8.0	0.08	80.00	10.0	
	VG2 - TSP	4850	P8644	5	5	5	283.5	663.7	5.579	48.0	72.0	1,440	8.0	0.09	90.00	11.2	
	G1 - PM10	4842	P8646	5	4.5	4.75	283.5	663.7	5.380	24.0	48.0	1,440	7.7	0.09	90.00	11.6	
	G1 - TSP	4846	P8645	5	4.3	4.65	283.5	663.7	5.265	48.0	72.0	1,440	7.6	0.07	70.00	9.2	
	FA1 - PM10	4851	P8691	5	5	5	283.5	663.7	5.597	48.0	72.0	1,440	8.1		0.00	0.0	
	FA1 - TSP	4847	P8694	5	5	5	283.5	663.7	5.649	48.0	72.0	1,440	8.1		0.00	0.0	

Notes:

Cells highlighted in yellow indicate that MiniVols did not run for a 24 hr sampling period

Cells highlighted in green indicate that samples were not submitted for analysis.

Cells highlighted in blue indicate that hand writing on sampling log was not legible

Concentrations in italics were calculated at the method detection limit

Table A.2: TSP/PM_{10} Sampler Data – August 2008

Start Date	Location	MiniVol Unit #	Filter ID	RotoFlow (start)	RotoFlow (end)	Average	Daily Average Temperature (K)	Daily Average Pressure (mm Hg)	Qact (L/min)	Elasped Time Start	Elasped Time End	Sampling Duration (min)	Volume Sampled (m^3)	TSP Result (mg)	TSP Result (µg)	TSP Concentration (µg/m3)	Comments
4-Aug-08	TL1 - PM10	4854	P8662	5	4.8	4.9	283.6	674.0	4.652	65.4	94.4	1,740	8.1	0.05	50.00	6.2	
	TL1 - TSP	4841	P8664	5	5	5	283.6	674.0	5.066	70.4	89.4	1,140	5.8	0.08	80.00	13.9	
	TL2 - PM10	4848	P8665	5	5	5	283.6	674.0	5.537	32.5	32.5	0	0.0	0.05	50.00	#DIV/0!	
	TL2 - TSP	4858	P8666	5	4.8	4.9	283.6	674.0	5.471	72.0	96.0	1,440	7.9	0.07	70.00	8.9	
	TL3 - PM10	4849	P8670	5	5	5	283.6	674.0	5.588	60.0	83.9	1,434	8.0	0.1	100.00	12.5	
	TL3 - TSP	4844	P8669	5	4.8	4.9	283.6	674.0	5.466	72.0	96.0	1,440	7.9	0.301	301.00	38.2	
	RC1 - PM10	4843	P8668	5	5	5	283.6	674.0	5.629	72.0	84.8	768	4.3	0.07	70.00	16.2	
	RC1 - TSP	4857	P8667	5	4.8	4.9	283.6	674.0	5.392	72.0	95.9	1,434	7.7	0.06	60.00	7.8	
	A1 - PM10	4845	P8642	5	5	5	283.6	674.0	5.666	71.9	95.9	1,440	8.2	< 0.04	40.00	*4.9*	
	A1 - TSP	4853	P8647	5	3.5	4.25	283.6	674.0	4.776	8.0	9.9	114	0.5	0.06	60.00	110.2	
	VG1 - PM10	4852	P8641	5	4	4.5	283.6	674.0	4.988	60.6	84.6	1,440	7.2	0.09	90.00	12.5	
	VG1 - TSP	4855	P8703	5	5	5	283.6	674.0	5.545	70.4	94.4	1,440	8.0	0.32	320.00	40.1	
	VG2 - PM10	4856	P8648	5	4.8	4.9	283.6	674.0	5.528	72.0	96.0	1,440	8.0	0.04	40.00	5.0	Ripped filter.
	VG2 - TSP	4850	P8614	5	4.5	4.75	283.6	674.0	5.237	72.0	95.9	1,434	7.5	0.27	270.00	36.0	
	G1 - PM10	4842	P8690	5	4.5	4.75	283.6	674.0	5.340	48.0	72.0	1,440	7.7	0.06	60.00	7.8	
	G1 - TSP	4846	P8615	5	4.8	4.9	283.6	674.0	5.521	72.0	95.9	1,434	7.9	0.09	90.00	11.4	
	FA1 - PM10	4851	P8692	5	5	5	283.6	674.0	5.555	72.0	95.9	1,434	8.0	0.096	96.00	12.1	
	FA1 - TSP	4847	P8619	5	5	5	283.6	674.0	5.607	72.0	72.0	0	0.0	0.045	45.00	#DIV/0!	
10-Aug-08	TL1 - PM10	4854	P8678	5	4.5	4.75	282.3	669.2	5.253	94.4	118.4	1,440	7.6	0.07	70.00	9.3	
	TL1 - TSP	4841	P8635	5	5	5	282.3	669.2	5.654	89.4	113.4	1,440	8.1	0.055	55.00	6.8	
	TL2 - PM10	4848	P8675	5	5	5	282.3	669.2	5.545	32.5	56.5	1,440	8.0	0.09	90.00	11.3	
	TL2 - TSP	4858	P8677	5	9	7	282.3	669.2	7.944	96.0	119.5	1,410	11.2	0.064	64.00	5.7	
	TL3 - PM10	4849				#DIV/0!	282.3	669.2				0	0.0		0.00	#DIV/0!	No Filter
	TL3 - TSP	4844				#DIV/0!	282.3	669.2				0	0.0		0.00	#DIV/0!	No Filter
	RC1 - PM10	4843	P8672	5	5	5	282.3	669.2	5.636	84.8	108.8	1,440	8.1	0.068	68.00	8.4	
	RC1 - TSP	4857	P8671	5	5	5	282.3	669.2	5.519	95.4	119.9	1,470	8.1	< 0.04	40.00	*4.9*	
	A1 - PM10	4845	P8674	5	5	5	282.3	669.2	5.673	95.9	119.9	1,440	8.2	0.051	51.00	6.2	
	A1 - TSP	4853	P8673	5	3	4	282.3	669.2	4.485	9.9	12.6	162	0.7	< 0.04	40.00	*55.1*	
	VG1 - PM10	4852	P8638	5	4	4.5	282.3	669.2	4.994	84.6	108.6	1,440	7.2	0.051	51.00	7.1	
	VG1 - TSP	4855	P8639	5	5	5	282.3	669.2	5.552	94.4	118.4	1,440	8.0	0.12	120.00	15.0	
	VG2 - PM10	4856	P8652	5	5	5	282.3	669.2	5.655	96.0	120.0	1,440	8.1	0.061	61.00	7.5	
	VG2 - TSP	4850	P8640	5	4.8	4.9	282.3	669.2	5.424	95.9	119.9	1,440	7.8	0.04	40.00	5.1	
	G1 - PM10	4842	P8636	5	4.5	4.75	282.3	669.2	5.347	72.0	95.9	1,434	7.7	0.079	79.00	10.3	
	G1 - TSP	4846	P8637	5	4.8	4.9	282.3	669.2	5.528	95.9	119.9	1,440	8.0	0.066	66.00	8.3	
	FA1 - PM10	4851				#DIV/0!	282.3	669.2				0	0.0		0.00	#DIV/0!	No filter
	FA1 - TSP	4847				#DIV/0!	282.3	669.2				0	0.0		0.00	#DIV/0!	No filter
22-Aug-08	TL1 - PM10	4854	8941	5	5	5	282.3	664.1	5.572	118.4	142.4	1,440	8.0	< 0.04	40.00	*5.0*	
	TL1 - TSP	4841	8949	5	5	5	282.3	664.1	5.676	113.4	137.4	1,440	8.2	< 0.04	40.00	*4.9*	
	TL2 - PM10	4848	8938	5	5	5	282.3	664.1	5.566	56.5	80.5	1,440	8.0	0.108	108.00	13.5	
	TL2 - TSP	4858	8936	5	5	5	282.3	664.1	5.617	119.5	143.5	1,440	8.1	< 0.04	40.00	*4.9*	
	TL3 - PM10	4849	8951	5	5	5	282.3	664.1	5.617	96.0	107.9	714	4.0	0.052	52.00	13.0	
	TL3 - TSP	4844	8950	5	5	5	282.3	664.1	5.616	103.9	120.0	966	5.4	< 0.04	40.00	*7.4*	
	RC1 - PM10	4843	8937	5	5	5	282.3	664.1	5.658	108.8	132.8	1,440	8.1	0.067	67.00	8.2	
	RC1 - TSP	4857	8945	5	5	5	282.3	664.1	5.540	119.9	143.9	1,440	8.0	0.06	60.00	7.5	
	A1 - PM10	4845	8944	5	5	5	282.3	664.1	5.695	119.9	143.8	1,434	8.2	0.058	58.00	7.1	
	A1 - TSP	4853	8940	5	5	5	282.3	664.1	5.697	12.6	36.6	1,440	8.2	< 0.04	40.00	*4.9*	
	VG1 - PM10	4852	8946	5	5	5	282.3	664.1	5.609	108.6	132.6	1,440	8.1	0.069	69.00	8.5	
	VG1 - TSP	4855	8942	5	5	5	282.3	664.1	5.574	118.4	142.4	1,440	8.0	0.065	65.00	8.1	
	VG2 - PM10	4856	8935	5	5	5	282.3	664.1	5.677	120.0	143.9	1,434	8.1	0.04	40.00	4.9	
	VG2 - TSP	4850	8947	5	5	5	282.3	664.1	5.566	119.9	143.9	1,440	8.0	0.326	326.00	40.7	
	G1 - PM10	4842	8939	5	5	5	282.3	664.1	5.666	96.0	119.9	1,434	8.1	0.046	46.00	5.7	
	G1 - TSP	4846	8948	5	5	5	282.3	664.1	5.668	119.9	143.9	1,440	8.2	0.09	90.00	11.0	
	FA1 - PM10	4851	8953	5	5	5	282.3	664.1	5.584	95.9	119.9	1,440	8.0	< 0.04	40.00	*5.0*	
	FA1 - TSP	4847	8952	5	5	5	282.3	664.1	5.636	72.0	96.0	1,440	8.1	0.087	87.00	10.7	

Notes:

Cells highlighted in yellow indicate that MiniVols did not run for a 24 hr sampling period

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Cells highlighted in blue indicate that hand writing on sampling log was not legible

Concentrations in italics were calculated at the method detection limit

Table A.2: TSP/PM$_{10}$ Sampler Data – August 2008 (continued)

Start Date	Location	MiniVol Unit #	Filter ID	RotoFlow (start)	RotoFlow (end)	Average	Daily Average Temperature (K)	Daily Average Pressure (mm Hg)	Qact (L/min)	Elasped Time Start	Elasped Time End	Sampling Duration (min)	Volume Sampled (m^3)	TSP Result (mg)	TSP Result (µg)	TSP Concentration (µg/m3)	Comments
28-Aug-08	TL1 - PM10	4854	P8999	5	5	5	278.6	662.7	5.541	142.4	166.4	1,440	8.0	< 0.04	40.00	*5.0*	
	TL1 - TSP	4841	P8998	5	5	5	278.6	662.7	5.645	137.4	161.3	1,434	8.1	0.072	72.00	8.9	
	TL2 - PM10	4848	P8992	5	5	5	278.6	662.7	5.535	80.5	104.5	1,440	8.0	< 0.04	40.00	*5.0*	
	TL2 - TSP	4858	P8991	5	5	5	278.6	662.7	5.586	143.5	167.5	1,440	8.0	< 0.04	40.00	*5.0*	
	TL3 - PM10	4849	P8988	5	5	5	278.6	662.7	5.586	107.9	131.9	1,440	8.0	< 0.04	40.00	*5.0*	
	TL3 - TSP	4844	P8989	5	5	5	278.6	662.7	5.585	120.0	143.9	1,434	8.0	< 0.04	40.00	*5.0*	
	RC1 - PM10	4843	P8995	5	5	5	278.6	662.7	5.627	132.8	156.8	1,440	8.1	0.058	58.00	7.2	
	RC1 - TSP	4857	P8997	5	5	5	278.6	662.7	5.510	143.9	167.9	1,440	7.9	0.05	50.00	6.3	
	A1 - PM10	4845	P8984	5	5	5	278.6	662.7	5.664	143.8	167.8	1,440	8.2	0.064	64.00	7.8	
	A1 - TSP	4853	P8985	5	5	5	278.6	662.7	5.666	36.6	60.6	1,440	8.2	0.056	56.00	6.9	
	VG1 - PM10	4852	P8983	5	5	5	278.6	662.7	5.578	132.6	156.7	1,446	8.1	0.18	180.00	22.3	
	VG1 - TSP	4855	P8982	5	5	5	278.6	662.7	5.543	142.4	166.3	1,434	7.9	< 0.04	40.00	*5.0*	
	VG2 - PM10	4856	P8990	5	5	5	278.6	662.7	5.646	143.9	167.9	1,440	8.1	< 0.04	40.00	*4.9*	
	VG2 - TSP	4850	P8943	5	5	5	278.6	662.7	5.535	143.9	167.9	1,440	8.0	0.051	51.00	6.4	
	G1 - PM10	4842	P8994	5	5	5	278.6	662.7	5.634	119.9	143.9	1,440	8.1	< 0.04	40.00	*4.9*	
	G1 - TSP	4846	P8993	5	5	5	278.6	662.7	5.637	143.9	167.9	1,440	8.1	< 0.04	40.00	*4.9*	
	FA1 - PM10	4851	P8987	5	5	5	278.6	662.7	5.553	119.9	143.9	1,440	8.0	0.054	54.00	6.8	
	FA1 - TSP	4847	P8986	5	5	5	278.6	662.7	5.605	96.0	120.0	1,440	8.1	0.467	467.00	57.9	

Notes:

Cells highlighted in yellow indicate that MiniVols did not run for a 24 hr sampling period

Cells highlighted in green indicate that samples were not submitted for analysis.

Cells highlighted in blue indicate that hand writing on sampling log was not legible

Concentrations in italics were calculated at the method detection limit

Table A.3: TSP/PM$_{10}$ Sampler Data – September 2008

				(start)	(end)		Temperature (K)	Pressure (mm Hg)	(L/min)	Time Start	Time End	Duration (min)	Sampled (m^3)	(mg)	(µg)	Concentration (µg/m3)
3-Sep-08	TL1 - PM10	4854	P8959	5	5	5	278.9	672.3	5.505	166.4	190.4	1,440	7.9	0.076	76.00	9.6
	TL1 - TSP	4841	P8981	5	5	5	#REF!	#REF!	5.636	161.3	185.3	1,440	8.1	0.04	40.00	4.9
	TL2 - PM10	4848	P8958	5	5	5	278.9	672.3	5.499	104.5	128.5	1,440	7.9	0.044	44.00	5.6
	TL2 - TSP	4858	P8957	5	5	5	278.9	672.3	5.549	167.5	191.5	1,440	8.0	0.07	70.00	8.8
	TL3 - PM10	4849	P8979	5	5	5	278.9	672.3	5.549	131.9	155.9	1,440	8.0	0.05	50.00	6.3
	TL3 - TSP	4844	P8980	5	5	5	278.9	672.3	5.548	143.9	167.9	1,440	8.0	0.11	110.00	13.8
	RC1 - PM10	4843	P8956	5	5	5	278.9	672.3	5.590	156.8	180.8	1,440	8.0	0.04	40.00	5.0
	RC1 - TSP	4857	P8955	5	5	5	278.9	672.3	5.473	167.9	191.9	1,440	7.9	< 0.04	40.00	*5.1*
	A1 - PM10	4845	P8954	5	5	5	278.9	672.3	5.626	167.8	191.8	1,440	8.1	< 0.04	40.00	*4.9*
	A1 - TSP	4853	P8963	5	5	5	278.9	672.3	5.628	60.6	84.6	1,440	8.1	0.096	96.00	11.8
	VG1 - PM10	4852	P8964	5	5	5	278.9	672.3	5.541	156.7	180.5	1,428	7.9	0.073	73.00	9.2
	VG1 - TSP	4855	P8965	5	5	5	278.9	672.3	5.506	166.3	190.3	1,440	7.9	0.081	81.00	10.2
	VG2 - PM10	4856	P8966	5	5	5	278.9	672.3	5.608	167.9	191.9	1,440	8.1	0.063	63.00	7.8
	VG2 - TSP	4850	P8961	5	5	5	278.9	672.3	5.499	167.9	191.9	1,440	7.9	0.107	107.00	13.5
	G1 - PM10	4842	P8962	5	5	5	278.9	672.3	5.597	143.9	167.9	1,440	8.1	0.041	41.00	5.1
	G1 - TSP	4846	P8960	5	5	5	278.9	672.3	5.600	167.9	191.9	1,440	8.1	0.073	73.00	9.1
	FA1 - PM10	4851	P8978	5	5	5	278.9	672.3	5.516	143.9	167.9	1,440	7.9	0.084	84.00	10.6
	FA1 - TSP	4847	P8977	5	5	5	278.9	672.3	5.568	120.0	144.0	1,440	8.0	0.078	78.00	9.7
9-Sep-08	TL1 - PM10	4854	P8973	5	5	5	279.8	667.7	5.533	190.4	214.4	1,440	8.0	< 0.04	40.00	*5.0*
	TL1 - TSP	4841	P8974	5	5	5	279.8	667.7	5.636	185.3	209.3	1,440	8.1	0.573	573.00	70.6
	TL2 - PM10	4848	P8975	5	5	5	279.8	667.7	5.527	128.5	152.5	1,440	8.0	< 0.04	40.00	*5.0*
	TL2 - TSP	4858	P8976	5	5	5	279.8	667.7	5.578	191.5	215.5	1,440	8.0	< 0.04	40.00	*5.0*
	TL3 - PM10	4849	P8903	5	5	5	279.8	667.7	5.577	155.9	179.9	1,440	8.0	0.081	81.00	10.1
	TL3 - TSP	4844	P8901	5	5	5	279.8	667.7	5.576	167.9	191.9	1,440	8.0	0.056	56.00	7.0
	RC1 - PM10	4843	P8972	5	5	5	279.8	667.7	5.618	180.8	204.8	1,440	8.1	< 0.04	40.00	*4.9*
	RC1 - TSP	4857	P8971	5	5	5	279.8	667.7	5.501	191.9	215.9	1,440	7.9	< 0.04	40.00	*5.0*
	A1 - PM10	4845	P8933	5	5	5	279.8	667.7	5.655	191.8	215.8	1,440	8.1	< 0.04	40.00	*4.9*
	A1 - TSP	4853	P8931	5	5	5	279.8	667.7	5.657	84.6	108.5	1,434	8.1	< 0.04	40.00	*4.9*
	VG1 - PM10	4852	P8967	5	5	5	279.8	667.7	5.569	180.5	204.5	1,440	8.0	0.069	69.00	8.6
	VG1 - TSP	4855	P8968	5	5	5	279.8	667.7	5.534	190.3	214.3	1,440	8.0	0.06	60.00	7.5
	VG2 - PM10	4856	P8970	5	5	5	279.8	667.7	5.637	191.9	215.9	1,440	8.1	< 0.04	40.00	*4.9*
	VG2 - TSP	4850	P8969	5	5	5	279.8	667.7	5.527	191.9	215.9	1,440	8.0	0.76	760.00	95.5
	G1 - PM10	4842	P8934	5	5	5	279.8	667.7	5.625	167.9	191.9	1,440	8.1	< 0.04	40.00	*4.9*
	G1 - TSP	4846	P8932	5	5	5	279.8	667.7	5.628	191.9	215.9	1,440	8.1	0.051	51.00	6.3
	FA1 - PM10	4851	P8902	5	5	5	279.8	667.7	5.544	167.9	191.9	1,440	8.0	0.053	53.00	6.6
	FA1 - TSP	4847	P8900	5	5	5	279.8	667.7	5.596	144.0	167.9	1,434	8.0	0.06	60.00	7.5
15-Sep-08	TL1 - PM10	4854	P8915	5	5	5	279.9	670.0	5.523	214.4	238.3	1,434	7.9	< 0.04	40.00	*5.1*
	TL1 - TSP	4841	P8914	5	5	5	279.9	670.0	5.627	209.3	233.3	1,440	8.1	0.05	50.00	6.2
	TL2 - PM10	4848	P8913	5	5	5	279.9	670.0	5.517	152.5	176.5	1,440	7.9	0.07	70.00	8.8
	TL2 - TSP	4858	P8911	5	5	5	279.9	670.0	5.568	215.3	239.4	1,446	8.1	0.09	90.00	11.2
	TL3 - PM10	4849	P8920	5	5	5	279.9	670.0	5.568	179.9	203.9	1,440	8.0	0.06	60.00	7.5
	TL3 - TSP	4844	P8916	5	5	5	279.9	670.0	5.567	191.9	215.9	1,440	8.0	0.09	90.00	11.2
	RC1 - PM10	4843	P8912	5	5	5	279.9	670.0	5.609	204.8	228.7	1,434	8.0	< 0.04	40.00	*5.0*
	RC1 - TSP	4857	P8908	5	5	5	279.9	670.0	5.492	215.9	239.9	1,440	7.9	0.08	80.00	10.1
	A1 - PM10	4845	P8917	5	5	5	279.9	670.0	5.645	215.8	239.8	1,440	8.1	0.04	40.00	4.9
	A1 - TSP	4853	P8918	5	5	5	279.9	670.0	5.647	108.5	132.5	1,440	8.1	< 0.04	40.00	*4.9*
	VG1 - PM10	4852	P8910	5	5	5	279.9	670.0	5.560	204.5	228.5	1,440	8.0	< 0.04	40.00	*5.0*
	VG1 - TSP	4855	P8907	5	5	5	279.9	670.0	5.525	214.3	238.3	1,440	8.0	0.07	70.00	8.8
	VG2 - PM10	4856	P8906	5	5	5	279.9	670.0	5.627	215.9	239.9	1,440	8.1	< 0.04	40.00	*4.9*
	VG2 - TSP	4850	P8909	5	5	5	279.9	670.0	5.517	215.9	239.9	1,440	7.9	0.06	60.00	7.6
	G1 - PM10	4842	P8905	5	5	5	279.9	670.0	5.616	191.9	215.9	1,440	8.1	0.08	80.00	9.9
	G1 - TSP	4846	P8904	5	5	5	279.9	670.0	5.619	215.9	239.9	1,440	8.1	0.05	50.00	6.2
	FA1 - PM10	4851	P8919	5	5	5	279.9	670.0	5.535	191.9	215.9	1,440	8.0	0.08	80.00	10.0
	FA1 - TSP	4847	P8923	5	5	5	279.9	670.0	5.587	167.9	191.9	1,440	8.0	0.05	50.00	6.2

Notes:

Cells highlighted in yellow indicate that MiniVols did not run for a 24 hr sampling period

Cells highlighted in green indicate that samples were not submitted for analysis.

Cells highlighted in blue indicate that hand writing on sampling log was not legible

Concentrations in italics were calculated at the method detection limit

Table A.3: TSP/PM$_{10}$ Sampler Data – September 2008 (continued)

				(start)	(end)		Temperature (K)	Pressure (mm Hg)	(L/min)	Time Start	Time End	Duration (min)	Sampled (m^3)	(mg)	(µg)	Concentration (µg/m3)	
21-Sep-08	TL1 - PM10	4854	P9072	5	5	5	275.8	668.1	5.491	238.3	262.3	1,440	7.9	< 0.04	40.00	*5.1*	
	TL1 - TSP	4841	P9071	5	5	5	275.8	668.1	5.594	233.3	257.3	1,440	8.1	< 0.04	40.00	*5.0*	
	TL2 - PM10	4848	P9074	5	5	5	275.8	668.1	5.485	176.5	200.5	1,440	7.9	< 0.04	40.00	*5.1*	
	TL2 - TSP	4858	P9073	5	5	5	275.8	668.1	5.536	239.4	258.8	1,164	6.4	< 0.04	40.00	*6.2*	
	TL3 - PM10	4849	P8928	5	5	5	275.8	668.1	5.536	203.9	227.9	1,440	8.0	< 0.04	40.00	*5.0*	
	TL3 - TSP	4844	P8927	5	5	5	275.8	668.1	5.535	215.9	239.9	1,440	8.0	0.06	60.00	7.5	
	RC1 - PM10	4843	P9076	5	5	5	275.8	668.1	5.576	228.7	252.7	1,440	8.0	< 0.04	40.00	*5.0*	
	RC1 - TSP	4857	P9075	5	5	5	275.8	668.1	5.460	239.9	263.8	1,434	7.8	< 0.04	40.00	*5.1*	
	A1 - PM10	4845	P8926	5	5	5	275.8	668.1	5.613	239.8	263.7	1,434	8.0	< 0.04	40.00	*5.0*	
	A1 - TSP	4853	P8925	5	5	5	275.8	668.1	5.614	132.5	156.5	1,440	8.1	< 0.04	40.00	*4.9*	
	VG1 - PM10	4852	P9078	5	5	5	275.8	668.1	5.527	228.5	252.5	1,440	8.0	< 0.04	40.00	*5.0*	
	VG1 - TSP	4855	P9077	5	5	5	275.8	668.1	5.493	238.3	262.3	1,440	7.9	< 0.04	40.00	*5.1*	
	VG2 - PM10	4856	P8921	5	5	5	275.8	668.1	5.595	239.9	263.9	1,440	8.1	< 0.04	40.00	*5.0*	
	VG2 - TSP	4850	P9079	5	5	5	275.8	668.1	5.485	239.9	263.9	1,440	7.9	< 0.04	40.00	*5.1*	
	G1 - PM10	4842	P8924	5	5	5	275.8	668.1	5.584	215.9	239.9	1,440	8.0	< 0.04	40.00	*5.0*	
	G1 - TSP	4846	P8922	5	5	5	275.8	668.1	5.586	239.9	263.9	1,440	8.0	0.04	40.00	5.0	
	FA1 - PM10	4851	P8930	5	5	5	275.8	668.1	5.503	215.9	239.9	1,440	7.9	0.04	40.00	5.0	
	FA1 - TSP	4847	P8929	5	5	5	275.8	668.1	5.554	191.9	215.9	1,440	8.0	0.08	80.00	10.0	
27-Sep-08	TL1 - PM10	4854	P9034	5	5	5	275.5	664.9	5.501	262.3	286.3	1,440	7.9	< 0.04	40.00	*5.0*	
	TL1 - TSP	4841	P9035	5	5	5	275.5	664.9	5.604	257.3	281.3	1,440	8.1	< 0.04	40.00	*5.0*	
	TL2 - PM10	4848	P9070	5	5	5	275.5	664.9	5.495	200.5	224.4	1,434	7.9	< 0.04	40.00	*5.1*	
	TL2 - TSP	4858	P9033	5	5	5	275.5	664.9	5.545	258.8	282.8	1,440	8.0	< 0.04	40.00	*5.0*	
	TL3 - PM10	4849	P9058	5	5	5	275.5	664.9	5.545	227.9	251.8	1,434	8.0	< 0.04	40.00	*5.0*	
	TL3 - TSP	4844	P9057	5	5	5	275.5	664.9	5.544	239.9	263.9	1,440	8.0	< 0.04	40.00	*5.0*	
	RC1 - PM10	4843	P9068	5	5	5	275.5	664.9	5.586	252.7	276.7	1,440	8.0	< 0.04	40.00	*5.0*	
	RC1 - TSP	4857	P9069	5	5	5	275.5	664.9	5.469	263.8	287.8	1,440	7.9	< 0.04	40.00	*5.1*	
	A1 - PM10	4845	P9060	5	5	5	275.5	664.9	5.622	263.7	287.7	1,440	8.1	0.06	60.00	7.4	
	A1 - TSP	4853	P9059	5	5	5	275.5	664.9	5.624	156.5	180.5	1,440	8.1	< 0.04	40.00	*4.9*	
	VG1 - PM10	4852	P9065	5	5	5	275.5	664.9	5.537	252.5	276.5	1,440	8.0	< 0.04	40.00	*5.0*	
	VG1 - TSP	4855	P9066	5	5	5	275.5	664.9	5.502	262.3	286.3	1,440	7.9	< 0.04	40.00	*5.0*	
	VG2 - PM10	4856	P9063	5	5	5	275.5	664.9	5.604	263.9	287.9	1,440	8.1	< 0.04	40.00	*5.0*	
	VG2 - TSP	4850	P9064	5	5	5	275.5	664.9	5.495	263.9	287.8	1,434	7.9	0.04	40.00	5.1	
	G1 - PM10	4842	P9062	5	5	5	275.5	664.9	5.593	239.9	263.9	1,440	8.1	< 0.04	40.00	*5.0*	
	G1 - TSP	4846	P9061	5	5	5	275.5	664.9	5.596	263.9	287.8	1,434	8.0	< 0.04	40.00	*5.0*	
	FA1 - PM10	4851	P9056	5	5	5	275.5	664.9	5.963	239.9	263.8	1,434	8.6	< 0.04	40.00	*4.7*	
	FA1 - TSP	4847	P9067	5	5	5	275.5	664.9	5.564	215.9	239.9	1,440	8.0	0.07	70.00	8.7	
3-Oct-08	TL1 - PM10	4854	P9052	5	5	5	280.4	653.8	5.597	286.3	310.3	1,440	8.1	0.04	40.00	5.0	
	TL1 - TSP	4841	P9053	5	5	5	280.4	653.8	5.701	281.3	305.3	1,440	8.2	0.11	110.00	13.4	
	TL2 - PM10	4848	P9050	5	5	5	280.4	653.8	5.591	224.4	248.4	1,440	8.1	< 0.04	40.00	*5.0*	
	TL2 - TSP	4858	P9051	5	5	5	280.4	653.8	5.642	282.8	306.8	1,440	8.1	< 0.04	40.00	*4.9*	
	TL3 - PM10	4849	P9038	5	5	5	280.4	653.8	5.642	251.8	275.8	1,440	8.1	< 0.04	40.00	*4.9*	
	TL3 - TSP	4844	P9039	5	5	5	280.4	653.8	5.641	263.9	287.9	1,440	8.1	0.08	80.00	9.8	
	RC1 - PM10	4843	P9048	5	5	5	280.4	653.8	5.683	276.7	300.7	1,440	8.2	< 0.04	40.00	*4.9*	
	RC1 - TSP	4857	P9049	5	5	5	280.4	653.8	5.565	287.8	311.8	1,440	8.0	0.04	40.00	5.0	
	A1 - PM10	4845	P9040	5	5	5	280.4	653.8	5.720	287.7	311.7	1,440	8.2	< 0.04	40.00	*4.9*	
	A1 - TSP	4853	P9041	5	5	5	280.4	653.8	5.722	180.5	204.5	1,440	8.2	0.06	60.00	7.3	
	VG1 - PM10	4852	P9046	5	5	5	280.4	653.8	5.633	276.5	300.5	1,440	8.1	< 0.04	40.00	*4.9*	
	VG1 - TSP	4855	P9047	5	5	5	280.4	653.8	5.598	286.3	310.3	1,440	8.1	0.05	50.00	6.2	
	VG2 - PM10	4856	P9044	5	5	5	280.4	653.8	5.702	287.9	311.8	1,434	8.2	< 0.04	40.00	*4.9*	
	VG2 - TSP	4850	P9045	5	5	5	280.4	653.8	5.591	287.8	311.8	1,440	8.1	0.06	60.00	7.5	
	G1 - PM10	4842	P9042	5	5	5	280.4	653.8	5.691	263.9	263.9	0	0.0	< 0.04	40.00	#DIV/0!	Battery failure? Battery indicates o.k.; may be computer battery.
	G1 - TSP	4846	P9043	5	5	5	280.4	653.8	5.693	287.8	311.8	1,440	8.2	< 0.04	40.00	*4.9*	
	FA1 - PM10	4851	P9036	5	5	5	280.4	653.8	5.609	263.8	287.8	1,440	8.1	0.110	110.00	13.6	
	FA1 - TSP	4847	P9037	5	5	5	280.4	653.8	5.661	239.9	263.9	1,440	8.2	0.07	70.00	8.6	

Notes:

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Concentrations in italics were calculated at the method detection limit

APPENDIX B

Summary Data for Sample Trace Inorganic Elemental Composition

	Aluminium																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	7.56E-02	9.81E-02	7.28E-02	6.47E-02	3.43E-01	7.15E-02	6.87E-02	5.63E-02	3.69E-01	5.64E-02	1.56E-01	8.56E-02	2.37E-01	9.01E-02	6.83E-02	3.22E-02	1.34E-01	8.43E-02
23-Jul-08	5.20E-02	1.00E-01	4.58E-02	5.65E-02	6.58E-02	5.86E-02	4.92E-02	5.93E-02	1.01E+00	3.95E-02	4.77E-02	5.61E-02	4.25E-02	3.57E-02	4.20E-02	**ND**	1.04E-01	4.63E-02
29-Jul-08	9.96E-02	2.00E-01	5.21E-02	9.14E-02	6.59E-01	1.18E-01	5.75E-02	5.14E-02	7.23E-01	4.99E-02	1.25E-01	8.47E-02	3.86E-02	3.04E-01	4.35E-02	4.78E-02	ND	ND
4-Aug-08	1.40E-01	5.30E-02	7.74E-02	ND	4.41E-01	1.19E-01	7.76E-02	9.02E-02	4.22E-01	4.29E-02	5.61E-01	1.45E-01	3.73E-01	5.65E-02	5.18E-02	9.36E-02	ND	5.90E-02
10-Aug-08	3.81E-02	3.97E-02	2.32E-02	6.14E-02	ND	ND	2.71E-02	2.71E-02	2.75E-01	3.55E-02	1.44E-01	3.34E-02	3.97E-02	3.56E-02	5.15E-02	5.09E-02	ND	ND
22-Aug-08	3.55E-02	3.99E-02	3.21E-02	3.12E-02	6.45E-02	7.98E-02	3.26E-02	3.31E-02	5.73E-02	4.90E-02	5.48E-02	3.84E-02	4.49E-02	3.69E-02	4.04E-02	3.82E-02	4.93E-02	5.10E-02
28-Aug-08	2.22E-02	2.63E-02	2.24E-02	3.64E-02	3.62E-02	2.86E-02	2.52E-02	2.34E-02	2.70E-02	2.82E-02	3.40E-02	2.23E-02	2.63E-02	2.09E-02	1.97E-02	2.10E-02	3.59E-02	3.13E-02
3-Sep-08	3.10E-02	5.30E-02	3.88E-02	4.04E-02	2.03E-01	5.76E-02	2.66E-02	3.35E-02	2.71E-02	1.97E-02	1.49E-01	2.91E-02	1.78E-01	5.57E-02	2.48E-02	1.61E-02	1.45E-01	4.66E-02
9-Sep-08	2.96E-02	2.01E-02	2.86E-02	4.40E-02	6.48E-02	2.49E-02	3.41E-02	1.85E-02	2.10E-02	2.21E-02	2.76E-02	2.00E-02	2.39E-02	1.60E-02	3.21E-02	1.73E-02	6.60E-02	2.76E-02
15-Sep-08	1.85E-02	1.64E-02	5.09E-02	2.27E-02	5.24E-02	2.12E-02	2.78E-02	2.36E-02	*3.07E-02*	*1.85E-02*	4.90E-02	2.75E-02	2.14E-02	2.47E-02	5.07E-02	6.43E-02	4.97E-02	2.76E-02
21-Sep-08	1.49E-02	1.26E-02	3.26E-02	1.27E-02	4.77E-02	1.76E-02	1.79E-02	9.96E-03	4.21E-02	2.73E-02	1.77E-02	1.26E-02	1.65E-02	1.24E-02	1.99E-02	1.24E-02	7.88E-02	3.66E-02
27-Sep-08	2.11E-02	2.02E-02	3.26E-02	1.27E-02	2.13E-02	2.39E-02	1.40E-02	1.49E-02	1.61E-02	4.08E-02	2.52E-02	1.88E-02	1.90E-02	2.35E-02	4.24E-02	1.86E-02	5.49E-02	2.57E-02
3-Oct-08	5.12E-02	2.73E-02	6.89E-02	5.96E-02	3.57E-02	2.46E-02	4.74E-02	4.64E-02	2.55E-02	1.94E-02	5.71E-02	2.47E-02	3.73E-02	2.69E-02	9.03E-02	ND	8.10E-02	3.47E-02
Arithmetic Mean	4.84E-02	5.43E-02	4.45E-02	4.45E-02	1.69E-01	5.38E-02	3.89E-02	3.75E-02	2.34E-01	3.45E-02	1.11E-01	4.60E-02	8.44E-02	5.69E-02	4.44E-02	3.75E-02	7.98E-02	4.28E-02
Geomertic Mean	3.88E-02	3.93E-02	4.10E-02	3.80E-02	9.23E-02	4.32E-02	3.46E-02	3.17E-02	8.62E-02	3.22E-02	6.84E-02	3.58E-02	4.80E-02	3.72E-02	4.06E-02	3.09E-02	7.27E-02	4.00E-02
95th Percentile	1.16E-01	1.40E-01	7.47E-02	7.67E-02	5.39E-01	1.18E-01	7.23E-02	7.17E-02	8.36E-01	5.25E-02	3.18E-01	1.09E-01	2.91E-01	1.76E-01	7.71E-02	7.90E-02	1.40E-01	7.16E-02
98th Percentile	1.30E-01	1.76E-01	7.63E-02	8.55E-02	6.11E-01	1.19E-01	7.55E-02	8.28E-02	9.37E-01	5.48E-02	4.64E-01	1.31E-01	3.40E-01	2.53E-01	8.50E-02	8.78E-02	1.43E-01	7.92E-02
Maximum	1.40E-01	2.00E-01	7.74E-02	9.14E-02	6.59E-01	1.19E-01	7.76E-02	9.02E-02	1.01E+00	5.64E-02	5.61E-01	1.45E-01	3.73E-01	3.04E-01	9.03E-02	9.36E-02	1.45E-01	8.43E-02
Minimum	1.49E-02	1.26E-02	2.24E-02	1.27E-02	2.13E-02	1.76E-02	1.40E-02	9.96E-03	1.61E-02	1.85E-02	1.77E-02	1.26E-02	1.65E-02	1.24E-02	1.97E-02	1.24E-02	3.59E-02	2.57E-02

	Antimony																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	*6.10E-04*	*6.21E-04*	*6.50E-04*	*6.22E-04*	*6.16E-04*	*1.23E-03*	*6.25E-04*	1.22E-03	*5.59E-03*	*6.55E-04*	*6.21E-04*	*6.90E-04*	*6.57E-04*	*6.44E-04*	*6.44E-04*	*6.45E-04*	*6.14E-04*	*6.20E-04*
23-Jul-08	*6.19E-04*	7.70E-04	*6.36E-04*	*6.28E-04*	*6.58E-04*	*6.37E-04*	*6.31E-04*	*6.18E-04*	*8.11E-03*	*6.17E-04*	*6.27E-04*	*6.24E-04*	*6.64E-04*	*6.16E-04*	*6.17E-04*	**ND**	*6.21E-04*	*6.26E-04*
29-Jul-08	*1.35E-03*	*1.85E-03*	*6.51E-04*	*1.76E-03*	*6.17E-04*	*6.17E-04*	*6.25E-04*	*6.12E-04*	*7.69E-03*	*6.08E-04*	*1.46E-03*	*1.18E-03*	*6.22E-04*	*6.23E-04*	*6.59E-04*	*6.45E-04*	**ND**	**ND**
4-Aug-08	*7.77E-04*	*5.30E-04*	*6.35E-04*	**ND**	*6.35E-04*	*6.24E-04*	*6.47E-04*	*1.16E-03*	*9.18E-03*	*6.13E-04*	*6.26E-04*	*6.96E-04*	*6.66E-04*	*6.28E-04*	*6.32E-04*	*6.50E-04*	**ND**	6.28E-04
10-Aug-08	*6.14E-04*	*6.61E-04*	*4.46E-04*	*6.26E-04*	**ND**	**ND**	*6.16E-04*	*6.16E-04*	*6.88E-03*	*6.12E-04*	*6.25E-04*	*6.95E-04*	*6.40E-04*	*6.14E-04*	*6.28E-04*	*6.52E-04*	**ND**	**ND**
22-Aug-08	*6.12E-04*	*6.23E-04*	*6.18E-04*	*6.24E-04*	*9.22E-04*	*1.25E-03*	*6.27E-04*	*6.14E-04*	*6.09E-04*	*6.12E-04*	*6.23E-04*	*6.19E-04*	*6.24E-04*	*6.14E-04*	*6.13E-04*	*6.15E-04*	*6.16E-04*	*6.22E-04*
28-Aug-08	*6.18E-04*	*6.27E-04*	*6.22E-04*	*6.27E-04*	1.12E-03	*6.22E-04*	*6.30E-04*	*6.17E-04*	*6.13E-04*	*6.13E-04*	*6.29E-04*	*6.20E-04*	*6.27E-04*	*6.15E-04*	*6.16E-04*	*6.16E-04*	*6.19E-04*	*6.25E-04*
3-Sep-08	*6.19E-04*	*6.31E-04*	*6.26E-04*	*6.31E-04*	*6.26E-04*	*6.26E-04*	*6.34E-04*	*6.21E-04*	*6.17E-04*	*6.17E-04*	*6.31E-04*	*6.32E-04*	*6.31E-04*	*6.19E-04*	*6.20E-04*	*6.20E-04*	*6.24E-04*	*6.29E-04*
9-Sep-08	*6.16E-04*	*6.28E-04*	*6.23E-04*	*6.28E-04*	*6.23E-04*	*6.23E-04*	*6.31E-04*	*6.18E-04*	*6.16E-04*	*6.14E-04*	*6.27E-04*	*6.23E-04*	*6.28E-04*	*6.16E-04*	*6.17E-04*	*6.17E-04*	*6.23E-04*	*6.26E-04*
15-Sep-08	*6.17E-04*	*6.31E-04*	*6.21E-04*	*6.29E-04*	*6.24E-04*	*6.24E-04*	*6.32E-04*	*6.22E-04*	*6.15E-04*	*6.15E-04*	*6.28E-04*	*6.25E-04*	*6.29E-04*	*6.17E-04*	*6.18E-04*	*6.18E-04*	*6.22E-04*	*6.27E-04*
21-Sep-08	*6.21E-04*	*6.32E-04*	*7.76E-04*	*6.33E-04*	*6.27E-04*	*6.27E-04*	*6.39E-04*	*6.23E-04*	*6.18E-04*	*6.21E-04*	*6.32E-04*	*6.28E-04*	*6.33E-04*	*6.21E-04*	*6.22E-04*	*6.22E-04*	*6.25E-04*	*6.31E-04*
27-Sep-08	*6.20E-04*	*6.31E-04*	*6.26E-04*	*6.35E-04*	*6.26E-04*	*6.29E-04*	*6.35E-04*	*6.22E-04*	*6.17E-04*	*6.18E-04*	*6.31E-04*	*6.27E-04*	*6.35E-04*	*6.20E-04*	*6.23E-04*	*6.21E-04*	*6.24E-04*	*5.85E-04*
3-Oct-08	*6.09E-04*	*6.20E-04*	*6.15E-04*	*6.21E-04*	*6.16E-04*	*6.15E-04*	*6.24E-04*	*6.11E-04*	*6.07E-04*	*6.07E-04*	*6.20E-04*	*6.16E-04*	*6.21E-04*	*6.11E-04*	*6.10E-04*	**ND**	*6.13E-04*	*6.19E-04*
Arithmetic Mean	6.84E-04	7.27E-04	6.26E-04	7.22E-04	6.93E-04	7.27E-04	6.30E-04	7.06E-04	3.26E-03	6.17E-04	6.91E-04	6.82E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04
Geomertic Mean	6.66E-04	6.86E-04	6.23E-04	6.84E-04	6.79E-04	7.00E-04	6.30E-04	6.83E-04	1.60E-03	6.17E-04	6.69E-04	6.71E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04
95th Percentile	1.00E-03	1.20E-03	7.01E-04	1.14E-03	1.01E-03	1.24E-03	6.42E-04	1.18E-03	8.54E-03	6.35E-04	9.62E-04	8.88E-04	6.65E-04	6.34E-04	6.50E-04	6.51E-04	6.25E-04	6.30E-04
98th Percentile	1.21E-03	1.59E-03	7.46E-04	1.51E-03	1.08E-03	1.24E-03	6.45E-04	1.21E-03	8.92E-03	6.47E-04	1.26E-03	1.06E-03	6.65E-04	6.40E-04	6.56E-04	6.52E-04	6.25E-04	6.31E-04
Maximum	1.35E-03	1.85E-03	7.76E-04	1.76E-03	1.12E-03	1.25E-03	6.47E-04	1.22E-03	9.18E-03	6.55E-04	1.46E-03	1.18E-03	6.66E-04	6.44E-04	6.59E-04	6.52E-04	6.25E-04	6.31E-04
Minimum	6.09E-04	5.30E-04	4.46E-04	6.21E-04	6.16E-04	6.15E-04	6.16E-04	6.11E-04	6.07E-04	6.07E-04	6.20E-04	6.16E-04	6.21E-04	6.11E-04	6.10E-04	6.15E-04	6.13E-04	5.85E-04

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit

	Arsenic																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	1.95E-03	1.74E-03	1.56E-03	1.62E-03	2.59E-03	3.94E-03	1.75E-03	2.32E-03	1.45E-02	1.18E-03	2.24E-03	1.79E-03	3.02E-03	2.06E-03	2.45E-03	2.32E-03	2.95E-03	2.97E-03
23-Jul-08	3.46E-03	2.31E-03	2.80E-03	1.88E-03	2.37E-03	2.67E-03	2.52E-03	2.72E-03	3.89E-02	2.84E-03	2.51E-03	3.12E-03	2.66E-03	2.22E-03	1.97E-03	**ND**	2.48E-03	3.13E-03
29-Jul-08	5.12E-03	7.03E-03	2.47E-03	7.38E-03	3.08E-03	2.71E-03	2.63E-03	2.69E-03	4.16E-02	1.70E-03	5.53E-03	3.76E-03	2.36E-03	2.37E-03	2.77E-03	1.81E-03	**ND**	**ND**
4-Aug-08	2.80E-03	2.01E-03	2.28E-03	**ND**	1.65E-03	1.12E-03	2.72E-03	5.78E-03	4.04E-02	3.06E-03	3.01E-03	2.92E-03	2.80E-03	3.27E-03	1.89E-03	2.47E-03	**ND**	1.00E-03
10-Aug-08	6.14E-04	1.19E-03	5.36E-04	1.25E-03	**ND**	**ND**	6.16E-04	9.86E-04	1.38E-02	9.79E-04	7.50E-04	1.11E-03	6.40E-04	6.14E-04	1.26E-03	6.52E-04	**ND**	**ND**
22-Aug-08	6.12E-04	9.97E-04	6.18E-04	6.24E-04	9.22E-04	2.74E-03	1.00E-03	9.82E-04	8.53E-04	6.12E-04	9.97E-04	6.19E-04	6.24E-04	1.23E-03	6.13E-04	8.62E-04	9.86E-04	6.22E-04
28-Aug-08	7.41E-04	1.75E-03	1.99E-03	2.26E-03	1.37E-03	7.46E-04	6.30E-04	1.60E-03	7.35E-04	6.13E-04	1.01E-03	8.68E-04	6.27E-04	1.72E-03	1.85E-03	1.60E-03	1.12E-03	6.25E-04
3-Sep-08	1.49E-03	8.83E-04	1.50E-03	1.39E-03	2.75E-03	1.75E-03	2.16E-03	1.86E-03	1.73E-03	1.11E-03	1.64E-03	1.26E-03	1.77E-03	1.61E-03	9.92E-04	7.44E-04	5.11E-03	2.90E-03
9-Sep-08	2.09E-03	2.76E-03	3.61E-03	4.65E-03	2.49E-03	2.74E-03	4.92E-03	4.70E-03	2.34E-03	2.09E-03	3.01E-03	2.74E-03	3.39E-03	2.83E-03	2.59E-03	2.22E-03	2.87E-03	2.38E-03
15-Sep-08	7.41E-04	6.31E-04	6.21E-04	6.29E-04	6.24E-04	6.24E-04	6.32E-04	7.46E-04	6.15E-04	6.15E-04	6.28E-04	6.25E-04	6.29E-04	6.17E-04	6.18E-04	8.66E-04	6.22E-04	1.00E-03
21-Sep-08	8.69E-04	6.32E-04	7.76E-04	6.33E-04	8.78E-04	1.00E-03	6.39E-04	9.96E-04	6.18E-04	8.70E-04	7.59E-04	6.28E-04	6.33E-04	6.21E-04	6.22E-04	8.71E-04	2.25E-03	2.02E-03
27-Sep-08	1.49E-03	1.26E-03	2.13E-03	1.02E-03	2.13E-03	1.26E-03	1.52E-03	1.37E-03	1.48E-03	2.84E-03	2.40E-03	1.76E-03	1.40E-03	1.24E-03	8.72E-04	2.36E-03	1.62E-03	1.87E-03
3-Oct-08	1.46E-03	1.36E-03	1.48E-03	8.70E-04	6.16E-04	1.23E-03	2.12E-03	6.11E-04	2.67E-03	6.07E-04	1.36E-03	2.59E-03	1.49E-03	6.11E-04	1.83E-03	**ND**	1.96E-03	1.36E-03
Arithmetic Mean	1.80E-03	1.89E-03	1.72E-03	2.02E-03	1.79E-03	1.88E-03	1.84E-03	2.11E-03	1.23E-02	1.47E-03	1.99E-03	1.83E-03	1.70E-03	1.62E-03	1.56E-03	1.53E-03	2.20E-03	1.81E-03
Geomertic Mean	1.44E-03	1.50E-03	1.46E-03	1.46E-03	1.55E-03	1.61E-03	1.48E-03	1.68E-03	3.91E-03	1.22E-03	1.62E-03	1.52E-03	1.38E-03	1.37E-03	1.36E-03	1.35E-03	1.87E-03	1.56E-03
95th Percentile	4.13E-03	4.47E-03	3.12E-03	5.88E-03	2.90E-03	3.28E-03	3.60E-03	5.13E-03	4.09E-02	2.93E-03	4.02E-03	3.38E-03	3.17E-03	3.01E-03	2.66E-03	2.41E-03	4.14E-03	3.05E-03
98th Percentile	4.72E-03	6.00E-03	3.42E-03	6.78E-03	3.01E-03	3.68E-03	4.39E-03	5.52E-03	4.13E-02	3.01E-03	4.93E-03	3.61E-03	3.30E-03	3.16E-03	2.73E-03	2.45E-03	4.72E-03	3.10E-03
Maximum	5.12E-03	7.03E-03	3.61E-03	7.38E-03	3.08E-03	3.94E-03	4.92E-03	5.78E-03	4.16E-02	3.06E-03	5.53E-03	3.76E-03	3.39E-03	3.27E-03	2.77E-03	2.47E-03	5.11E-03	3.13E-03
Minimum	6.12E-04	6.31E-04	5.36E-04	6.24E-04	6.16E-04	6.24E-04	6.16E-04	6.11E-04	6.15E-04	6.07E-04	6.28E-04	6.19E-04	6.24E-04	6.11E-04	6.13E-04	6.52E-04	6.22E-04	6.22E-04

	Barium																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.0015	0.0211	0.0008	0.0010	0.0357	0.0017	0.0022	0.0022	0.0302	0.0017	0.0061	0.0025	0.0113	0.0032	0.0052	0.0012	0.0061	0.0038
23-Jul-08	4.95E-03	2.57E-03	1.27E-03	8.80E-04	6.85E-03	2.16E-03	3.66E-03	1.48E-03	2.27E-02	2.10E-03	2.76E-03	4.12E-03	3.06E-03	9.86E-04	1.85E-03	**ND**	3.60E-03	2.00E-03
29-Jul-08	5.65E-03	4.07E-03	2.21E-03	6.68E-03	4.56E-02	6.29E-03	8.13E-03	4.04E-03	1.54E-02	3.53E-03	4.37E-03	2.82E-03	9.96E-04	1.01E-02	1.58E-03	7.74E-04	ND	ND
4-Aug-08	6.84E-03	1.80E-03	3.30E-03	ND	4.07E-02	7.74E-03	2.46E-03	2.31E-03	3.49E-02	4.53E-03	2.76E-02	5.71E-03	1.60E-02	3.64E-03	1.89E-03	7.93E-03	ND	6.03E-03
10-Aug-08	0.0017	0.0008	0.0004	0.0016	**ND**	**ND**	*0.0006*	*0.0006*	0.0193	0.0010	0.0044	0.0017	0.0013	0.0037	0.0018	0.0009	**ND**	**ND**
22-Aug-08	6.85E-03	3.99E-03	1.61E-03	1.87E-03	6.64E-03	2.74E-02	2.38E-03	2.33E-03	9.75E-04	1.71E-03	5.61E-03	7.43E-04	2.74E-03	2.95E-03	1.47E-03	1.11E-03	1.60E-03	2.11E-03
28-Aug-08	0.0052	0.0034	0.0006	*0.0006*	0.0049	0.0026	0.0006	*0.0006*	0.0013	0.0015	0.0016	0.0012	0.0011	0.0106	*0.0006*	0.0006	0.0030	0.0006
3-Sep-08	2.97E-03	7.57E-04	1.50E-03	1.39E-03	2.00E-02	5.51E-03	1.40E-03	1.37E-03	1.60E-03	1.60E-03	8.45E-03	1.01E-03	9.85E-03	2.60E-03	1.74E-03	8.69E-04	6.98E-03	2.64E-03
9-Sep-08	0.0031	0.0011	0.0015	0.0009	0.0042	0.0031	0.0009	*0.0006*	0.0012	0.0006	0.0016	0.0007	0.0013	0.0007	0.0012	*0.0006*	0.0046	0.0020
15-Sep-08	7.90E-03	2.90E-03	1.61E-03	2.64E-03	3.49E-03	1.62E-03	3.16E-03	1.49E-03	1.23E-03	8.61E-04	2.51E-03	1.50E-03	1.38E-03	1.48E-03	1.98E-03	2.84E-03	1.99E-03	3.39E-03
21-Sep-08	*0.0006*	*0.0006*	*0.0008*	*0.0006*	0.0041	0.0010	0.0011	*0.0006*	0.0011	*0.0006*	*0.0006*	*0.0006*	0.0006	*0.0006*	*0.0006*	*0.0006*	0.0175	0.0016
27-Sep-08	0.0014	*0.0006*	0.0008	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0009	0.0078	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0036	*0.0006*
3-Oct-08	0.0018	0.0022	0.0068	0.0034	0.0042	0.0012	0.0015	0.0010	0.0008	*0.0006*	0.0019	*0.0006*	0.0010	*0.0006*	0.0010	**ND**	0.0032	0.0012
Arithmetic Mean	3.88E-03	3.54E-03	1.78E-03	1.85E-03	1.48E-02	5.09E-03	2.22E-03	1.48E-03	1.01E-02	2.16E-03	5.24E-03	1.84E-03	3.94E-03	3.22E-03	1.65E-03	1.64E-03	5.22E-03	2.37E-03
Geomertic Mean	3.04E-03	2.02E-03	1.34E-03	1.38E-03	7.75E-03	2.84E-03	1.65E-03	1.22E-03	3.62E-03	1.57E-03	3.06E-03	1.39E-03	2.09E-03	2.01E-03	1.39E-03	1.09E-03	4.11E-03	1.92E-03
95th Percentile	7.27E-03	1.09E-02	4.69E-03	4.85E-03	4.29E-02	1.66E-02	5.45E-03	3.02E-03	3.21E-02	5.83E-03	1.61E-02	4.75E-03	1.32E-02	1.03E-02	3.25E-03	5.39E-03	1.28E-02	4.93E-03
98th Percentile	7.65E-03	1.70E-02	5.94E-03	5.95E-03	4.45E-02	2.31E-02	7.06E-03	3.63E-03	3.38E-02	7.00E-03	2.30E-02	5.33E-03	1.49E-02	1.05E-02	4.39E-03	6.92E-03	1.56E-02	5.59E-03
Maximum	7.90E-03	2.11E-02	6.77E-03	6.68E-03	4.56E-02	2.74E-02	8.13E-03	4.04E-03	3.49E-02	7.78E-03	2.76E-02	5.71E-03	1.60E-02	1.06E-02	5.15E-03	7.93E-03	1.75E-02	6.03E-03
Minimum	6.21E-04	6.31E-04	4.46E-04	6.27E-04	6.26E-04	6.29E-04	6.16E-04	6.16E-04	8.50E-04	6.07E-04	6.31E-04	6.16E-04	6.33E-04	6.11E-04	6.16E-04	6.16E-04	1.60E-03	5.85E-04

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit

	Beryllium																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	*0.0012*	*0.0006*	*0.0006*	*0.0056*	*0.0007*	*0.0006*	*0.0007*	*0.0007*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
23-Jul-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	*0.0006*	*0.0081*	*0.0006*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	**ND**	*0.0006*	*0.0006*
29-Jul-08	*0.0013*	*0.0018*	*0.0007*	*0.0018*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0077*	*0.0006*	*0.0015*	*0.0012*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	**ND**	**ND**
4-Aug-08	*0.0008*	*0.0005*	*0.0006*	**ND**	*0.0006*	*0.0006*	*0.0006*	*0.0012*	*0.0092*	*0.0006*	*0.0006*	*0.0007*	*0.0007*	*0.0006*	*0.0006*	*0.0007*	**ND**	*0.0006*
10-Aug-08	*0.0006*	*0.0007*	*0.0004*	*0.0006*	**ND**	**ND**	*0.0006*	*0.0006*	*0.0069*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	*0.0006*	*0.0007*	**ND**	**ND**
22-Aug-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0009*	*0.0012*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
28-Aug-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
3-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
9-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
15-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
21-Sep-08	*0.0006*	*0.0006*	*0.0008*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
27-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
3-Oct-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	**ND**	*0.0006*	*0.0006*
Arithmetic Mean	6.84E-04	7.17E-04	6.26E-04	7.22E-04	6.51E-04	7.27E-04	6.30E-04	6.59E-04	3.26E-03	6.17E-04	6.91E-04	6.82E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04
Geomertic Mean	6.66E-04	6.77E-04	6.23E-04	6.84E-04	6.47E-04	7.00E-04	6.30E-04	6.48E-04	1.60E-03	6.17E-04	6.69E-04	6.71E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04
95th Percentile	1.00E-03	1.14E-03	7.01E-04	1.14E-03	7.77E-04	1.24E-03	6.42E-04	8.36E-04	8.54E-03	6.35E-04	9.62E-04	8.88E-04	6.65E-04	6.34E-04	6.50E-04	6.51E-04	6.25E-04	6.30E-04
98th Percentile	1.21E-03	1.56E-03	7.46E-04	1.51E-03	8.64E-04	1.24E-03	6.45E-04	1.03E-03	8.92E-03	6.47E-04	1.26E-03	1.06E-03	6.65E-04	6.40E-04	6.56E-04	6.52E-04	6.25E-04	6.31E-04
Maximum	1.35E-03	1.85E-03	7.76E-04	1.76E-03	9.22E-04	1.25E-03	6.47E-04	1.16E-03	9.18E-03	6.55E-04	1.46E-03	1.18E-03	6.66E-04	6.44E-04	6.59E-04	6.52E-04	6.25E-04	6.31E-04
Minimum	6.09E-04	5.30E-04	4.46E-04	6.21E-04	6.16E-04	6.15E-04	6.16E-04	6.11E-04	6.07E-04	6.07E-04	6.20E-04	6.16E-04	6.21E-04	6.11E-04	6.10E-04	6.15E-04	6.13E-04	5.85E-04

	Boron																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	*0.0305*	*0.0311*	*0.0325*	*0.0311*	*0.0308*	*0.0616*	*0.0312*	*0.0306*	*0.2795*	*0.0328*	*0.0310*	*0.0345*	*0.0329*	*0.0322*	*0.0322*	*0.0322*	*0.0307*	*0.0310*
23-Jul-08	*0.0309*	*0.0321*	*0.0318*	*0.0314*	*0.0329*	*0.0318*	*0.0316*	*0.0309*	*0.4053*	*0.0308*	*0.0314*	*0.0312*	*0.0332*	*0.0308*	*0.0308*	**ND**	*0.0310*	*0.0313*
29-Jul-08	*0.0673*	*0.0924*	*0.0325*	*0.0879*	*0.0308*	*0.0308*	*0.0313*	*0.0306*	*0.3847*	*0.0304*	*0.0728*	*0.0588*	*0.0311*	*0.0312*	*0.0330*	*0.0323*	**ND**	**ND**
4-Aug-08	*0.0388*	*0.0265*	*0.0317*	**ND**	*0.0318*	*0.0312*	*0.0323*	*0.0578*	*0.4592*	*0.0306*	*0.0313*	*0.0348*	*0.0333*	*0.0314*	*0.0316*	*0.0325*	**ND**	*0.0314*
10-Aug-08	*0.0311*	*0.0334*	*0.0226*	*0.0317*	**ND**	**ND**	*0.0308*	*0.0308*	*0.3441*	*0.0306*	*0.0313*	*0.0348*	*0.0320*	*0.0307*	*0.0314*	*0.0326*	**ND**	**ND**
22-Aug-08	*0.0306*	*0.0312*	*0.0309*	*0.0312*	*0.0461*	*0.0623*	*0.0313*	*0.0307*	*0.0305*	*0.0306*	*0.0311*	*0.0310*	*0.0312*	*0.0307*	*0.0306*	*0.0308*	*0.0308*	*0.0311*
28-Aug-08	*0.0309*	*0.0313*	*0.0311*	*0.0314*	*0.0312*	*0.0311*	*0.0315*	*0.0309*	*0.0306*	*0.0307*	*0.0315*	*0.0310*	*0.0314*	*0.0308*	*0.0308*	*0.0308*	*0.0310*	*0.0313*
3-Sep-08	*0.0310*	*0.0315*	*0.0313*	*0.0316*	*0.0313*	*0.0313*	*0.0317*	*0.0311*	*0.0308*	*0.0309*	*0.0315*	*0.0316*	*0.0316*	*0.0310*	*0.0310*	*0.0310*	*0.0312*	*0.0315*
9-Sep-08	*0.0308*	*0.0314*	*0.0311*	*0.0314*	*0.0311*	*0.0311*	*0.0316*	*0.0309*	*0.0308*	*0.0307*	*0.0314*	*0.0312*	*0.0314*	*0.0308*	*0.0308*	*0.0309*	*0.0312*	*0.0313*
15-Sep-08	*0.0309*	*0.0316*	*0.0310*	*0.0315*	*0.0312*	*0.0312*	*0.0316*	*0.0311*	*0.0307*	*0.0308*	*0.0314*	*0.0312*	*0.0315*	*0.0309*	*0.0309*	*0.0309*	*0.0311*	*0.0314*
21-Sep-08	*0.0310*	*0.0316*	*0.0388*	*0.0316*	*0.0314*	*0.0314*	*0.0319*	*0.0311*	*0.0309*	*0.0311*	*0.0316*	*0.0314*	*0.0316*	*0.0310*	*0.0311*	*0.0311*	*0.0313*	*0.0315*
27-Sep-08	*0.0310*	*0.0316*	*0.0313*	*0.0317*	*0.0313*	*0.0314*	*0.0317*	*0.0311*	*0.0309*	*0.0309*	*0.0316*	*0.0314*	*0.0317*	*0.0310*	*0.0312*	*0.0310*	*0.0312*	*0.0292*
3-Oct-08	*0.0305*	*0.0310*	*0.0308*	*0.0311*	*0.0308*	*0.0308*	*0.0312*	*0.0305*	*0.0303*	*0.0303*	*0.0310*	*0.0308*	*0.0311*	*0.0306*	*0.0305*	**ND**	*0.0307*	*0.0310*
Arithmetic Mean	3.42E-02	3.59E-02	3.13E-02	3.61E-02	3.26E-02	3.63E-02	3.15E-02	3.29E-02	1.63E-01	3.09E-02	3.45E-02	3.41E-02	3.18E-02	3.10E-02	3.12E-02	3.15E-02	3.10E-02	3.11E-02
Geomertic Mean	3.33E-02	3.39E-02	3.12E-02	3.42E-02	3.23E-02	3.50E-02	3.15E-02	3.24E-02	7.99E-02	3.09E-02	3.34E-02	3.36E-02	3.18E-02	3.10E-02	3.12E-02	3.15E-02	3.10E-02	3.11E-02
95th Percentile	5.02E-02	5.70E-02	3.50E-02	5.70E-02	3.88E-02	6.19E-02	3.21E-02	4.18E-02	4.27E-01	3.17E-02	4.81E-02	4.44E-02	3.32E-02	3.17E-02	3.25E-02	3.26E-02	3.12E-02	3.15E-02
98th Percentile	6.05E-02	7.83E-02	3.73E-02	7.55E-02	4.32E-02	6.22E-02	3.22E-02	5.14E-02	4.46E-01	3.24E-02	6.29E-02	5.31E-02	3.33E-02	3.20E-02	3.28E-02	3.26E-02	3.12E-02	3.15E-02
Maximum	6.73E-02	9.24E-02	3.88E-02	8.79E-02	4.61E-02	6.23E-02	3.23E-02	5.78E-02	4.59E-01	3.28E-02	7.28E-02	5.88E-02	3.33E-02	3.22E-02	3.30E-02	3.26E-02	3.13E-02	3.15E-02
Minimum	3.05E-02	2.65E-02	2.26E-02	3.11E-02	3.08E-02	3.08E-02	3.08E-02	3.05E-02	3.03E-02	3.03E-02	3.10E-02	3.08E-02	3.11E-02	3.06E-02	3.05E-02	3.08E-02	3.07E-02	2.92E-02

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit

	Cadmium																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.0004	0.0002	0.0003	0.0004	0.0002	0.0005	0.0002	0.0004	0.0022	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0001	0.0004	0.0005
23-Jul-08	3.71E-04	3.85E-04	2.54E-04	6.28E-04	1.71E-03	6.37E-04	3.79E-04	2.47E-04	3.24E-03	1.36E-03	1.25E-04	2.49E-04	2.66E-04	1.23E-04	2.47E-04	**ND**	2.48E-04	2.51E-04
29-Jul-08	1.08E-03	3.70E-04	2.60E-04	1.05E-03	3.70E-04	3.70E-04	2.50E-04	3.67E-04	3.08E-03	2.43E-04	2.91E-04	4.71E-04	3.73E-04	3.74E-04	2.64E-04	1.29E-04	ND	ND
4-Aug-08	4.66E-04	1.06E-04	2.54E-04	ND	1.27E-04	1.25E-04	2.46E-03	9.25E-04	3.67E-03	1.23E-04	6.26E-04	2.78E-04	3.99E-04	2.51E-04	2.53E-04	2.60E-04	ND	2.51E-04
10-Aug-08	*0.0001*	0.0003	0.0004	0.0003	**ND**	**ND**	0.0009	0.0006	*0.0014*	0.0002	*0.0001*	0.0001	0.0003	*0.0001*	0.0003	0.0003	**ND**	**ND**
22-Aug-08	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0002*	*0.0002*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*
28-Aug-08	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	0.0000	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*		*0.0001*
3-Sep-08	*0.0001*	0.0003	*0.0001*	*0.0001*	0.0001	*0.0001*	*0.0001*	*0.0001*	*0.0001*	0.0001	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*
9-Sep-08	0.0001	0.0001	0.0001	0.0004	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
15-Sep-08	*0.0001*	*0.0001*	0.0006	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	0.0017	*0.0001*	*0.0001*	*0.0001*	*0.0001*
21-Sep-08	*0.0001*	*0.0001*	*0.0002*	*0.0001*	*0.0001*	0.0004	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	0.0003	0.0001	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*
27-Sep-08	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*
3-Oct-08	0.0004	*0.0001*	*0.0001*	0.0001	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	0.0002	0.0001	0.0005	*0.0001*	*0.0001*	**ND**	*0.0001*	0.0004
Arithmetic Mean	2.80E-04	1.92E-04	2.24E-04	2.97E-04	2.93E-04	2.42E-04	4.00E-04	2.70E-04	1.12E-03	2.67E-04	2.05E-04	2.06E-04	2.36E-04	2.96E-04	1.84E-04	1.50E-04	1.65E-04	2.03E-04
Geomertic Mean	2.08E-04	1.73E-04	1.94E-04	2.18E-04	1.86E-04	1.81E-04	2.22E-04	2.04E-04	3.96E-04	1.84E-04	1.73E-04	1.81E-04	2.03E-04	1.90E-04	1.68E-04	1.43E-04	1.51E-04	1.77E-04
95th Percentile	7.10E-04	3.76E-04	4.63E-04	8.20E-04	9.74E-04	5.58E-04	1.50E-03	7.40E-04	3.41E-03	8.57E-04	4.74E-04	4.37E-04	4.38E-04	9.23E-04	3.13E-04	2.60E-04	3.20E-04	4.34E-04
98th Percentile	9.30E-04	3.81E-04	5.58E-04	9.61E-04	1.42E-03	6.05E-04	2.07E-03	8.51E-04	3.57E-03	1.16E-03	5.65E-04	4.57E-04	4.73E-04	1.41E-03	3.57E-04	2.61E-04	3.49E-04	4.71E-04
Maximum	1.08E-03	3.85E-04	6.21E-04	1.05E-03	1.71E-03	6.37E-04	2.46E-03	9.25E-04	3.67E-03	1.36E-03	6.26E-04	4.71E-04	4.97E-04	1.73E-03	3.87E-04	2.61E-04	3.68E-04	4.96E-04
Minimum	1.22E-04	1.06E-04	1.23E-04	1.24E-04	1.23E-04	3.11E-05	1.23E-04	1.22E-04	1.21E-04	1.21E-04	1.23E-04	1.23E-04	1.23E-04	1.22E-04	1.22E-04	1.23E-04	1.23E-04	1.17E-04

	Calcium																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.1463	0.1863	0.1430	0.1492	0.6163	0.2957	0.1374	0.1223	1.2300	0.1180	0.2235	0.1381	0.3550	0.1545	0.1289	0.0903	0.2211	0.1487
23-Jul-08	0.0990	0.1283	0.1526	0.0880	0.1448	0.0891	0.1262	0.2225	1.4590	0.1233	0.1255	0.1496	0.1727	0.1109	0.0864	**ND**	0.1737	0.1002
29-Jul-08	0.5385	0.3328	0.1041	0.2812	0.9746	0.2097	0.1125	0.1224	1.2311	0.1095	0.4367	0.1882	0.1494	0.2119	0.1055	0.1162	**ND**	**ND**
4-Aug-08	0.1864	0.0954	0.1396	**ND**	0.6098	0.1373	0.1293	0.1851	1.1020	0.1226	0.6513	0.1949	0.3196	0.1507	0.1137	0.1561	**ND**	0.1130
10-Aug-08	0.0614	0.0661	0.1875	0.1002	**ND**	**ND**	0.0493	0.0493	0.6882	0.0734	0.2251	0.0834	0.0896	0.0860	0.1131	0.1043	**ND**	**ND**
22-Aug-08	0.0734	0.0748	0.0865	0.0873	0.1106	0.1745	0.0752	0.0736	0.0975	0.0980	0.0748	0.0743	0.0873	0.0737	0.0980	0.0738	0.0862	0.0871
28-Aug-08	0.0618	0.1128	0.0870	0.0753	0.0999	0.0622	0.0882	0.0864	0.0981	0.0613	0.0755	0.0496	0.0753	0.0615	0.0616	0.0740	0.0991	0.0500
3-Sep-08	0.0076	0.0142	0.0109	0.0095	0.0125	0.0078	0.0112	0.0107	0.0121	0.0076	0.0095	0.0063	0.0095	0.0076	0.0076	0.0092	0.0124	0.0063
9-Sep-08	0.1109	0.0879	0.1121	0.0880	0.1619	0.0996	0.1389	0.0989	0.0986	0.0860	0.0878	0.0998	0.0880	0.0862	0.1234	0.0864	0.1869	0.1127
15-Sep-08	0.0741	0.0758	0.1987	0.1133	0.1372	0.1122	0.1897	0.0870	0.1230	0.0861	0.1257	0.0999	0.1007	0.0864	0.0989	0.1855	0.1367	0.1506
21-Sep-08	0.0745	0.0759	0.1242	0.0886	0.1255	0.1004	0.1022	0.0623	0.0990	0.1118	0.0885	0.0879	0.1013	0.0869	0.0746	0.0871	0.2250	0.2145
27-Sep-08	0.0620	0.1515	0.1378	0.0761	0.1002	0.1509	0.0889	0.1119	0.0864	0.0865	0.0883	0.0878	0.0635	0.1239	0.1620	0.1117	0.1623	0.1169
3-Oct-08	0.1583	0.1365	0.2339	0.2360	0.1108	0.0985	0.1373	0.2077	0.1092	0.0850	0.1737	0.1479	0.1615	0.1101	0.1464	**ND**	0.2208	0.1114
Arithmetic Mean	1.27E-01	1.18E-01	1.32E-01	1.16E-01	2.67E-01	1.28E-01	1.07E-01	1.11E-01	4.95E-01	8.99E-02	1.84E-01	1.08E-01	1.36E-01	1.04E-01	1.02E-01	9.95E-02	1.52E-01	1.10E-01
Geomertic Mean	8.79E-02	9.65E-02	1.12E-01	9.20E-02	1.57E-01	1.01E-01	9.12E-02	9.01E-02	2.16E-01	7.80E-02	1.23E-01	8.71E-02	1.03E-01	8.61E-02	8.64E-02	8.33E-02	1.24E-01	8.71E-02
95th Percentile	3.27E-01	2.45E-01	2.13E-01	2.56E-01	7.78E-01	2.48E-01	1.59E-01	2.14E-01	1.32E+00	1.23E-01	5.23E-01	1.91E-01	3.34E-01	1.77E-01	1.53E-01	1.71E-01	2.23E-01	1.83E-01
98th Percentile	4.54E-01	2.98E-01	2.25E-01	2.71E-01	8.96E-01	2.77E-01	1.77E-01	2.19E-01	1.40E+00	1.23E-01	6.00E-01	1.93E-01	3.47E-01	1.98E-01	1.58E-01	1.80E-01	2.24E-01	2.02E-01
Maximum	5.38E-01	3.33E-01	2.34E-01	2.81E-01	9.75E-01	2.96E-01	1.90E-01	2.23E-01	1.46E+00	1.23E-01	6.51E-01	1.95E-01	3.55E-01	2.12E-01	1.62E-01	1.85E-01	2.25E-01	2.15E-01
Minimum	7.65E-03	1.42E-02	1.09E-02	9.51E-03	1.25E-02	7.78E-03	1.12E-02	1.07E-02	1.21E-02	7.57E-03	9.52E-03	6.27E-03	9.51E-03	7.62E-03	7.64E-03	9.18E-03	1.24E-02	6.30E-03

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit

	Chromium																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.0683	0.0547	0.0715	0.0696	0.0752	0.1553	0.0762	0.0673	0.6038	0.0747	0.0969	0.0773	0.0802	0.0734	0.0928	0.1019	0.0700	0.0855
23-Jul-08	0.0767	0.0834	0.0992	0.0578	0.0619	0.0751	0.0858	0.1001	1.0375	0.0826	0.0577	0.0786	0.0558	0.0579	0.0518	**ND**	0.0583	0.0827
29-Jul-08	0.2612	0.2514	0.0807	0.3268	0.0913	0.1270	0.1125	0.1139	0.8156	0.1253	0.1456	0.1153	0.0597	0.2606	0.0607	0.0594	**ND**	**ND**
4-Aug-08	0.1041	0.0583	0.0597	**ND**	0.0521	0.0549	0.0711	0.1295	1.1571	0.0539	0.1202	0.0585	0.0826	0.0616	0.1036	0.0923	**ND**	0.0803
10-Aug-08	0.0540	0.0846	0.0536	0.0726	**ND**	**ND**	0.0542	0.0517	0.6056	0.0808	0.0500	0.0556	0.0499	0.0565	0.0553	0.0704	**ND**	**ND**
22-Aug-08	0.0673	0.0798	0.0692	0.0661	0.1401	0.1596	0.0777	0.0687	0.0768	0.0612	0.0760	0.0731	0.0649	0.0614	0.0735	0.0677	0.0517	0.0672
28-Aug-08	0.0568	0.0702	0.0634	0.0790	0.0674	0.0721	0.0693	0.0839	0.0821	0.0711	0.0654	0.0595	0.0828	0.0640	0.0702	0.0801	0.0632	0.0513
3-Sep-08	0.0619	0.0757	0.0751	0.0619	0.0551	0.0701	0.0622	0.0658	0.0543	0.0753	0.0542	0.0543	0.0530	0.0557	0.0620	0.0372	0.0649	0.0441
9-Sep-08	0.0752	0.0665	0.0585	0.0704	0.0548	0.0510	0.0745	0.0569	0.0641	0.0712	0.0577	0.0623	0.0679	0.0788	0.0790	0.0790	0.0548	0.0526
15-Sep-08	0.0666	0.0745	0.0671	0.0931	0.0661	0.0599	0.1024	0.0746	0.0738	0.0713	0.0553	0.0512	0.0680	0.0716	0.0507	0.0482	0.0547	0.0740
21-Sep-08	0.0571	0.0594	0.0900	0.0848	0.0803	0.0627	0.0792	0.0635	0.0594	0.0683	0.0683	0.0666	0.0684	0.0633	0.0522	0.0634	0.0713	0.0669
27-Sep-08	0.0545	0.0656	0.0601	0.0609	0.0852	0.0729	0.0609	0.0522	0.0605	0.0519	0.0669	0.0602	0.0596	0.0719	0.0760	0.0807	0.0774	0.0655
3-Oct-08	0.0658	0.0558	0.0566	0.0571	0.0554	0.0554	0.0587	0.0868	0.0485	0.0607	0.0918	0.0641	0.0559	0.0501	0.0488	**ND**	0.0675	0.0718
Arithmetic Mean	8.23E-02	8.31E-02	6.96E-02	9.17E-02	7.37E-02	8.47E-02	7.58E-02	7.81E-02	3.65E-01	7.30E-02	7.74E-02	6.74E-02	6.53E-02	7.90E-02	6.74E-02	7.09E-02	6.34E-02	6.74E-02
Geomertic Mean	7.36E-02	7.55E-02	6.85E-02	7.91E-02	7.08E-02	7.80E-02	7.42E-02	7.50E-02	1.70E-01	7.12E-02	7.33E-02	6.59E-02	6.44E-02	7.06E-02	6.56E-02	6.85E-02	6.29E-02	6.61E-02
95th Percentile	1.67E-01	1.51E-01	9.37E-02	1.98E-01	1.13E-01	1.57E-01	1.06E-01	1.20E-01	1.09E+00	9.97E-02	1.30E-01	9.33E-02	8.27E-02	1.52E-01	9.71E-02	9.71E-02	7.46E-02	8.41E-02
98th Percentile	2.23E-01	2.11E-01	9.70E-02	2.75E-01	1.29E-01	1.59E-01	1.10E-01	1.26E-01	1.13E+00	1.15E-01	1.39E-01	1.06E-01	8.27E-02	2.17E-01	1.01E-01	1.00E-01	7.63E-02	8.50E-02
Maximum	2.61E-01	2.51E-01	9.92E-02	3.27E-01	1.40E-01	1.60E-01	1.13E-01	1.30E-01	1.16E+00	1.25E-01	1.46E-01	1.15E-01	8.28E-02	2.61E-01	1.04E-01	1.02E-01	7.74E-02	8.55E-02
Minimum	5.40E-02	5.47E-02	5.36E-02	5.71E-02	5.21E-02	5.10E-02	5.42E-02	5.17E-02	4.85E-02	5.19E-02	5.00E-02	5.12E-02	4.99E-02	5.01E-02	4.88E-02	3.72E-02	5.17E-02	4.41E-02

	Cobalt																
	Concentration (µg/m3)																
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	*0.0012*	*0.0006*	*0.0006*	*0.0056*	*0.0007*	*0.0006*	*0.0007*	*0.0007*	*0.0006*	*0.0006*	*0.0006*	0.0011
23-Jul-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	*0.0006*	*0.0081*	*0.0006*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	**ND**	*0.0006*	*0.0006*
29-Jul-08	*0.0013*	*0.0018*	*0.0007*	*0.0018*	0.0007	*0.0006*	*0.0006*	*0.0006*	*0.0077*	*0.0006*	*0.0015*	*0.0012*	*0.0006*	*0.0007*	*0.0006*	**ND**	**ND**
4-Aug-08	*0.0008*	*0.0005*	*0.0006*	**ND**	*0.0006*	*0.0006*	*0.0006*	*0.0012*	*0.0092*	*0.0006*	*0.0006*	*0.0007*	*0.0007*	*0.0006*	*0.0007*	**ND**	*0.0006*
10-Aug-08	*0.0006*	*0.0007*	*0.0004*	*0.0006*	**ND**	**ND**	*0.0006*	*0.0006*	*0.0069*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	*0.0007*	**ND**	**ND**
22-Aug-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0009*	*0.0012*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
28-Aug-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
3-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
9-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
15-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
21-Sep-08	*0.0006*	*0.0006*	*0.0008*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0006	*0.0006*	*0.0006*	*0.0006*	*0.0006*
27-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
3-Oct-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	**ND**	*0.0006*	*0.0006*
Arithmetic Mean	6.84E-04	7.17E-04	6.26E-04	7.22E-04	6.61E-04	7.27E-04	6.30E-04	6.59E-04	3.26E-03	6.17E-04	6.91E-04	6.82E-04	6.37E-04	6.24E-04	6.29E-04	6.20E-04	6.67E-04
Geomertic Mean	6.66E-04	6.77E-04	6.23E-04	6.84E-04	6.57E-04	7.00E-04	6.30E-04	6.48E-04	1.60E-03	6.17E-04	6.69E-04	6.71E-04	6.37E-04	6.24E-04	6.29E-04	6.20E-04	6.56E-04
95th Percentile	1.00E-03	1.14E-03	7.01E-04	1.14E-03	8.22E-04	1.24E-03	6.42E-04	8.36E-04	8.54E-03	6.35E-04	9.62E-04	8.88E-04	6.65E-04	6.50E-04	6.51E-04	6.25E-04	8.73E-04
98th Percentile	1.21E-03	1.56E-03	7.46E-04	1.51E-03	8.82E-04	1.24E-03	6.45E-04	1.03E-03	8.92E-03	6.47E-04	1.26E-03	1.06E-03	6.65E-04	6.56E-04	6.52E-04	6.25E-04	1.02E-03
Maximum	1.35E-03	1.85E-03	7.76E-04	1.76E-03	9.22E-04	1.25E-03	6.47E-04	1.16E-03	9.18E-03	6.55E-04	1.46E-03	1.18E-03	6.66E-04	6.59E-04	6.52E-04	6.25E-04	1.12E-03
Minimum	6.09E-04	5.30E-04	4.46E-04	6.21E-04	6.16E-04	6.15E-04	6.16E-04	6.11E-04	6.07E-04	6.07E-04	6.20E-04	6.16E-04	6.21E-04	6.10E-04	6.15E-04	6.13E-04	5.85E-04

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit

	Copper																	
	(µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.0024	0.0248	0.0055	0.1554	0.0069	0.1355	0.0612	0.0044	0.0302	0.0068	0.0045	0.0052	0.0060	0.0033	0.0075	0.0039	0.0087	0.0071
23-Jul-08	0.0032	0.0049	0.0036	0.0028	0.0145	0.0023	0.0045	0.3226	0.2432	0.0048	0.0054	0.0036	0.0027	0.0604	0.0048	**ND**	0.0035	0.0034
29-Jul-08	0.1035	0.0048	0.0155	0.0026	0.4773	0.0136	0.0033	0.0035	0.0027	0.0323	0.0096	0.0093	0.0100	0.0034	0.0053	0.0046	**ND**	**ND**
4-Aug-08	0.0054	0.0159	0.0037	**ND**	0.0057	0.0030	0.0036	0.0083	0.0459	0.0245	0.0093	0.0167	0.0072	0.0050	0.0032	0.0031	**ND**	0.0151
10-Aug-08	0.0020	0.0022	0.0027	0.0029	**ND**	**ND**	0.0026	0.0022	0.0165	0.0021	0.0021	0.0028	0.0040	0.0016	0.0026	0.0020	**ND**	**ND**
22-Aug-08	0.0012	0.0021	0.0014	0.0011	0.0065	0.0020	0.0016	0.0014	0.0023	0.0012	0.0007	0.0011	0.0019	0.0023	0.0010	0.0011	0.0014	0.0012
28-Aug-08	*0.0006*	0.0010	0.0007	*0.0006*	0.0014	0.0009	0.0030	0.0017	0.0007	0.0006	0.0013	*0.0006*	0.0008	0.0006	0.0010	0.0007	0.0012	*0.0006*
3-Sep-08	*0.0006*	0.0010	0.0025	0.0009	0.0029	0.0010	0.0006	*0.0006*	0.0021	0.0023	0.0015	*0.0006*	0.0013	0.0028	0.0007	*0.0006*	0.0019	0.0006
9-Sep-08	0.0015	0.0008	0.0009	0.0008	0.0025	0.0026	0.0010	0.0006	0.0009	0.0012	0.0008	0.0020	0.0006	*0.0006*	0.0030	0.0012	0.0046	0.0024
15-Sep-08	0.0012	0.0034	0.0094	0.0024	0.0012	0.0012	0.0038	0.0011	0.0015	*0.0006*	0.0068	0.0032	0.0019	0.0027	0.0046	0.0121	0.0017	0.0011
21-Sep-08	0.0016	0.0013	0.0033	0.0009	0.0023	0.0015	0.0018	*0.0006*	0.0011	0.0010	0.0019	0.0009	0.0008	0.0009	0.0026	0.0009	0.0026	0.0013
27-Sep-08	0.0010	0.0014	0.0083	0.0008	0.0011	0.0008	0.0011	0.0012	0.0007	0.0012	0.0014	0.0013	*0.0006*	0.0011	0.0025	0.0007	0.0019	0.0009
3-Oct-08	0.1048	0.0011	0.0017	0.0016	0.0011	0.0021	0.0015	0.0016	0.0011	0.0007	0.0032	0.0010	0.0022	0.0011	0.0059	**ND**	0.0015	0.0012
Arithmetic Mean	1.76E-02	4.98E-03	4.54E-03	1.44E-02	4.36E-02	1.39E-02	6.91E-03	2.69E-02	2.68E-02	6.12E-03	3.73E-03	3.72E-03	3.07E-03	6.61E-03	3.43E-03	2.82E-03	2.90E-03	3.18E-03
Geomertic Mean	2.94E-03	2.58E-03	3.14E-03	1.99E-03	4.45E-03	2.73E-03	2.65E-03	2.45E-03	3.97E-03	2.34E-03	2.63E-03	2.18E-03	2.04E-03	2.26E-03	2.78E-03	1.77E-03	2.37E-03	1.81E-03
95th Percentile	1.04E-01	1.95E-02	1.18E-02	7.15E-02	2.23E-01	6.85E-02	2.72E-02	1.34E-01	1.25E-01	2.76E-02	9.42E-03	1.23E-02	8.30E-03	2.72E-02	6.50E-03	8.37E-03	6.87E-03	1.11E-02
98th Percentile	1.04E-01	2.27E-02	1.40E-02	1.22E-01	3.75E-01	1.09E-01	4.76E-02	2.47E-01	1.96E-01	3.04E-02	9.56E-03	1.49E-02	9.31E-03	4.71E-02	7.09E-03	1.06E-02	7.98E-03	1.35E-02
Maximum	1.05E-01	2.48E-02	1.55E-02	1.55E-01	4.77E-01	1.36E-01	6.12E-02	3.23E-01	2.43E-01	3.23E-02	9.65E-03	1.67E-02	9.97E-03	6.04E-02	7.47E-03	1.21E-02	8.72E-03	1.51E-02
Minimum	6.18E-04	7.53E-04	7.46E-04	6.27E-04	1.11E-03	7.55E-04	6.34E-04	6.18E-04	7.35E-04	6.13E-04	7.48E-04	6.20E-04	6.28E-04	6.15E-04	7.44E-04	6.20E-04	1.24E-03	6.25E-04

	Iron																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.1463	0.2609	0.1561	0.1368	0.7272	0.1725	0.1749	0.1468	0.8945	0.1311	0.3229	0.1795	0.4997	0.2060	0.1933	0.0903	0.2825	0.2107
23-Jul-08	1.24E-01	1.03E-01	1.14E-01	1.26E-01	1.45E-01	1.53E-01	1.01E-01	9.89E-02	1.30E+00	1.11E-01	1.76E-01	1.12E-01	1.06E-01	1.72E-01	8.64E-02	**ND**	1.74E-01	1.50E-01
29-Jul-08	2.69E-01	4.07E-01	1.56E-01	3.87E-01	1.39E+00	2.47E-01	1.63E-01	1.59E-01	1.23E+00	2.43E-01	3.49E-01	1.88E-01	9.96E-02	1.73E+00	1.32E-01	9.04E-02	ND	ND
4-Aug-08	3.11E-01	1.38E-01	1.65E-01	ND	1.05E+00	2.37E-01	1.29E-01	2.08E-01	1.47E+00	1.23E-01	1.18E+00	3.06E-01	6.92E-01	1.51E-01	1.26E-01	1.69E-01	ND	2.89E-01
10-Aug-08	0.1378	0.0860	**ND**	0.0446	0.06160326	**ND**	0.1346	0.0493	0.0834	0.6882	0.0737	0.2877	0.0913	0.0896	**ND**	0.1131		**ND**
22-Aug-08	0.0856	0.0748	0.0618	0.0499	0.1290	0.1247	0.1128	0.0491	0.0488	0.0612	0.0748	0.0619	0.0749	0.0860	0.0613	0.0615	0.0862	0.0871
28-Aug-08	0.0741	0.0627	0.0497	0.0753	0.1124	0.0622	0.0504	0.0494	0.0368	0.0490	0.0755	*0.0310*	0.0878	0.0492	*0.0308*	0.0370	0.0619	0.0375
3-Sep-08	0.0495	0.0378	0.0751	0.0379	0.4381	0.1251	0.7359	0.0497	0.0617	0.0494	0.2649	0.0506	0.3915	0.1362	0.0620	*0.0310*	0.3492	0.1385
9-Sep-08	0.3697	0.0502	0.0623	0.0503	0.1370	0.0747	0.0631	0.0494	0.0493	0.0491	0.0627	0.0499	0.0628	0.0493	0.0740	0.0494	0.1495	0.0752
15-Sep-08	0.1111	0.0884	0.1366	0.0503	0.1247	0.0748	0.0759	0.0622	0.0615	0.0369	0.1257	0.0749	0.0378	0.0494	0.0989	0.1113	0.1243	0.0753
21-Sep-08	0.0372	0.0379	0.0621	0.0380	0.1004	0.0376	0.0383	0.0374	0.0618	0.0994	0.0759	0.0377	0.0760	0.0372	0.0497	0.0373	0.2000	0.0883
27-Sep-08	0.0744	0.0631	0.0877	0.0381	0.0501	0.0503	0.0381	0.0497	0.0494	0.0494	0.0631	0.0376	0.0381	0.0496	0.0748	0.0372	0.0998	0.0585
3-Oct-08	0.0974	0.0496	0.0862	0.0745	0.0862	0.0492	0.0624	0.1100	0.0607	0.0486	0.1116	0.0616	0.0745	0.0734	0.0732	**ND**	0.1717	0.0743
Arithmetic Mean	1.45E-01	1.12E-01	1.01E-01	9.23E-02	3.51E-01	1.17E-01	1.45E-01	8.61E-02	4.16E-01	1.34E-01	2.27E-01	1.14E-01	1.79E-01	2.22E-01	8.85E-02	7.52E-02	1.70E-01	1.17E-01
Geomertic Mean	1.16E-01	8.50E-02	9.31E-02	6.89E-02	1.91E-01	9.79E-02	9.93E-02	7.34E-02	1.43E-01	8.81E-02	1.43E-01	8.41E-02	1.12E-01	1.04E-01	7.96E-02	6.48E-02	1.50E-01	9.90E-02
95th Percentile	3.34E-01	3.19E-01	1.60E-01	2.49E-01	1.19E+00	2.41E-01	3.99E-01	1.79E-01	1.37E+00	4.21E-01	6.81E-01	2.95E-01	5.77E-01	8.17E-01	1.60E-01	1.41E-01	3.19E-01	2.50E-01
98th Percentile	3.55E-01	3.72E-01	1.63E-01	3.32E-01	1.31E+00	2.45E-01	6.01E-01	1.96E-01	1.43E+00	5.81E-01	9.79E-01	3.02E-01	6.46E-01	1.37E+00	1.80E-01	1.58E-01	3.37E-01	2.73E-01
Maximum	3.70E-01	4.07E-01	1.65E-01	3.87E-01	1.39E+00	2.47E-01	7.36E-01	2.08E-01	1.47E+00	6.88E-01	1.18E+00	3.06E-01	6.92E-01	1.73E+00	1.93E-01	1.69E-01	3.49E-01	2.89E-01
Minimum	3.72E-02	3.78E-02	4.97E-02	3.79E-02	5.01E-02	3.76E-02	3.81E-02	3.74E-02	3.68E-02	3.69E-02	6.27E-02	3.10E-02	3.78E-02	3.72E-02	3.08E-02	3.10E-02	6.19E-02	3.75E-02

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit

	Lead																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.0011	0.0076	0.0012	0.0009	0.0456	0.0039	0.0027	0.0017	0.0212	0.0033	0.0046	0.0028	0.0068	0.0031	0.0045	0.0017	0.0020	0.0042
23-Jul-08	0.0001	0.0010	0.0001	0.0001	0.0060	0.0005	0.0003	0.0002	0.0344	0.0004	0.0006	0.0003	0.0009	0.0004	0.0006	**ND**	0.0002	0.0005
29-Jul-08	0.0035	0.0181	0.0027	0.0039	0.0839	0.0160	0.0163	0.0097	0.0554	0.0064	0.0058	0.0031	0.0017	0.0079	0.0040	0.0021	**ND**	**ND**
4-Aug-08	0.0037	0.0022	0.0028	**ND**	0.0737	0.0200	0.0043	0.0051	0.0624	0.0067	0.0238	0.0107	0.0123	0.0038	0.0019	0.0026	**ND**	0.0054
10-Aug-08	0.0017	0.0017	0.0008	0.0023	**ND**	**ND**	0.0012	0.0011	0.0151	0.0016	0.0051	0.0017	0.0026	0.0016	0.0025	0.0014	**ND**	**ND**
22-Aug-08	0.0053	0.0029	0.0015	0.0015	0.0090	0.0080	0.0016	0.0037	0.0009	0.0031	0.0015	*0.0006*	0.0012	0.0018	*0.0006*	*0.0006*	0.0023	0.0039
28-Aug-08	0.0026	0.0024	0.0007	0.0006	0.0050	0.0025	0.0009	*0.0006*	0.0027	0.0053	0.0026	0.0016	0.0021	0.0010	*0.0006*	0.0007	0.0040	0.0009
3-Sep-08	*0.0006*	*0.0006*	0.0013	0.0006	0.0501	0.0213	0.0013	0.0007	0.0014	*0.0006*	0.0047	0.0008	0.0062	0.0035	0.0051	0.0020	0.0015	0.0014
9-Sep-08	0.0015	0.0009	0.0007	*0.0006*	0.0061	0.0010	0.0008	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0012	*0.0006*
15-Sep-08	0.0028	0.0014	*0.0006*	*0.0006*	0.0087	0.0031	*0.0006*	*0.0006*	0.0006	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0006
21-Sep-08	*0.0006*	*0.0006*	*0.0008*	*0.0006*	0.0011	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0006	*0.0006*	*0.0006*	*0.0006*	0.0001	*0.0006*
27-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0010	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0026	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0007	*0.0006*	*0.0006*	*0.0006*
3-Oct-08	0.0029	*0.0006*	*0.0006*	*0.0006*	0.0037	0.0009	0.0006	*0.0006*	0.0008	*0.0006*	0.0014	*0.0006*	0.0006	*0.0006*	0.0015	**ND**	0.0012	*0.0006*
Arithmetic Mean	2.09E-03	3.13E-03	1.12E-03	1.08E-03	2.45E-02	6.53E-03	2.46E-03	2.00E-03	1.51E-02	2.50E-03	4.05E-03	1.90E-03	2.85E-03	2.01E-03	1.83E-03	1.24E-03	1.38E-03	1.76E-03
Geomertic Mean	1.46E-03	1.65E-03	8.85E-04	7.77E-04	9.84E-03	2.85E-03	1.25E-03	1.09E-03	3.56E-03	1.56E-03	1.99E-03	1.11E-03	1.63E-03	1.30E-03	1.27E-03	1.05E-03	8.89E-04	1.16E-03
95th Percentile	4.34E-03	1.18E-02	2.76E-03	2.98E-03	7.83E-02	2.06E-02	9.06E-03	6.92E-03	5.82E-02	6.56E-03	1.30E-02	6.12E-03	9.00E-03	5.40E-03	4.74E-03	2.33E-03	3.23E-03	4.81E-03
98th Percentile	4.89E-03	1.56E-02	2.78E-03	3.51E-03	8.16E-02	2.10E-02	1.34E-02	8.57E-03	6.08E-02	6.67E-03	1.95E-02	8.88E-03	1.10E-02	6.87E-03	4.95E-03	2.49E-03	3.67E-03	5.16E-03
Maximum	5.26E-03	1.81E-02	2.79E-03	3.87E-03	8.39E-02	2.13E-02	1.63E-02	9.67E-03	6.24E-02	6.74E-03	2.38E-02	1.07E-02	1.23E-02	7.85E-03	5.08E-03	2.60E-03	3.96E-03	5.40E-03
Minimum	1.36E-04	6.20E-04	1.49E-04	1.09E-04	1.00E-03	5.02E-04	3.47E-04	2.12E-04	6.15E-04	4.04E-04	5.77E-04	3.44E-04	6.21E-04	3.81E-04	5.56E-04	6.15E-04	7.77E-05	5.28E-04

	Magnesium																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.0366	*0.0311*	0.0390	0.0373	0.2588	*0.0616*	0.0375	0.0367	0.3354	0.0393	0.1118	0.0552	0.1972	0.0644	0.0387	*0.0322*	0.0860	0.0496
23-Jul-08	*0.0309*	*0.0321*	*0.0318*	*0.0314*	0.0395	*0.0318*	*0.0316*	*0.0309*	*0.4053*	*0.0308*	*0.0314*	*0.0312*	0.0399	*0.0308*	*0.0308*	**ND**	0.0621	*0.0313*
29-Jul-08	0.0808	*0.0924*	*0.0325*	*0.0879*	0.4935	0.0863	*0.0313*	*0.0306*	*0.3847*	*0.0304*	0.1165	*0.0588*	0.0373	0.4862	*0.0330*	*0.0323*	**ND**	**ND**
4-Aug-08	0.0777	0.0318	0.0508	**ND**	0.4192	0.0874	0.0388	*0.0578*	*0.4592*	0.0368	0.6262	0.1253	0.3462	0.0377	*0.0316*	*0.0325*	**ND**	*0.0314*
10-Aug-08	*0.0307*	*0.0330*	*0.0223*	*0.0313*	**ND**	**ND**	*0.0308*	*0.0308*	*0.3441*	*0.0306*	0.1501	*0.0348*	*0.0320*	*0.0307*	*0.0314*	*0.0326*	**ND**	**ND**
22-Aug-08	*0.0306*	*0.0312*	*0.0309*	*0.0312*	*0.0461*	0.0748	*0.0313*	*0.0307*	*0.0305*	*0.0306*	0.0374	*0.0310*	0.0374	*0.0307*	0.0368	*0.0308*	0.0370	0.0373
28-Aug-08	*0.0309*	*0.0313*	*0.0311*	*0.0314*	*0.0312*	*0.0311*	*0.0315*	*0.0309*	*0.0306*	*0.0307*	*0.0315*	*0.0310*	*0.0314*	*0.0308*	*0.0308*	*0.0308*	*0.0310*	*0.0313*
3-Sep-08	*0.0310*	*0.0315*	*0.0313*	0.0379	0.1752	0.0501	*0.0317*	*0.0311*	*0.0308*	*0.0309*	0.1387	*0.0316*	0.1768	0.0743	*0.0310*	*0.0310*	0.1372	0.0378
9-Sep-08	*0.0308*	*0.0314*	*0.0311*	*0.0314*	0.0498	*0.0311*	*0.0316*	*0.0309*	*0.0308*	*0.0307*	*0.0314*	*0.0312*	*0.0314*	*0.0308*	*0.0308*	*0.0309*	0.0623	*0.0313*
15-Sep-08	*0.0309*	*0.0316*	0.0006	*0.0315*	*0.0312*	*0.0312*	*0.0316*	*0.0311*	*0.0307*	*0.0308*	*0.0314*	*0.0312*	*0.0315*	*0.0309*	*0.0309*	*0.0309*	*0.0311*	*0.0314*
21-Sep-08	*0.0310*	*0.0316*	0.0388	*0.0316*	*0.0314*	*0.0314*	*0.0319*	*0.0311*	*0.0309*	*0.0311*	*0.0316*	*0.0314*	*0.0316*	*0.0310*	*0.0311*	*0.0311*	0.0500	*0.0315*
27-Sep-08	*0.0310*	*0.0316*	*0.0313*	*0.0317*	*0.0313*	*0.0314*	*0.0317*	*0.0311*	*0.0309*	*0.0309*	*0.0316*	*0.0314*	*0.0317*	*0.0310*	*0.0312*	*0.0310*	*0.0312*	*0.0292*
3-Oct-08	0.0487	*0.0310*	*0.0308*	0.0373	*0.0308*	*0.0308*	*0.0312*	*0.0305*	*0.0303*	*0.0303*	*0.0310*	*0.0308*	*0.0311*	*0.0306*	*0.0305*	**ND**	0.0613	*0.0310*
Arithmetic Mean	4.01E-02	3.63E-02	3.09E-02	3.77E-02	1.37E-01	4.82E-02	3.25E-02	3.34E-02	1.67E-01	3.18E-02	1.08E-01	4.27E-02	8.12E-02	7.23E-02	3.22E-02	3.15E-02	5.89E-02	3.39E-02
Geomertic Mean	3.74E-02	3.43E-02	2.42E-02	3.58E-02	7.35E-02	4.39E-02	3.24E-02	3.28E-02	8.11E-02	3.17E-02	6.18E-02	3.84E-02	5.21E-02	4.38E-02	3.21E-02	3.15E-02	5.24E-02	3.35E-02
95th Percentile	7.89E-02	5.68E-02	4.37E-02	6.04E-02	4.53E-01	8.68E-02	3.80E-02	4.52E-02	4.27E-01	3.78E-02	3.41E-01	8.54E-02	2.57E-01	2.39E-01	3.75E-02	3.26E-02	1.14E-01	4.37E-02
98th Percentile	8.00E-02	7.82E-02	4.79E-02	7.69E-02	4.77E-01	8.71E-02	3.85E-02	5.28E-02	4.46E-01	3.87E-02	5.12E-01	1.09E-01	3.10E-01	3.87E-01	3.82E-02	3.26E-02	1.28E-01	4.72E-02
Maximum	8.08E-02	9.24E-02	5.08E-02	8.79E-02	4.93E-01	8.74E-02	3.88E-02	5.78E-02	4.59E-01	3.93E-02	6.26E-01	1.25E-01	3.46E-01	4.86E-01	3.87E-02	3.26E-02	1.37E-01	4.96E-02
Minimum	3.06E-02	3.10E-02	6.21E-04	3.12E-02	3.08E-02	3.08E-02	3.08E-02	3.05E-02	3.03E-02	3.03E-02	3.10E-02	3.08E-02	3.11E-02	3.06E-02	3.05E-02	3.08E-02	3.10E-02	2.92E-02

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit

	Manganese																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.0022	0.0026	0.0023	0.0019	0.0106	0.0020	0.0024	0.0021	0.0112	0.0024	0.0046	0.0026	0.0079	0.0031	0.0028	0.0010	0.0061	0.0036
23-Jul-08	1.48E-03	1.15E-03	1.40E-03	1.01E-03	2.24E-03	1.53E-03	1.39E-03	1.48E-03	1.62E-02	1.48E-03	1.63E-03	1.50E-03	1.86E-03	1.48E-03	1.23E-03	**ND**	3.72E-03	1.88E-03
29-Jul-08	3.23E-03	4.81E-03	1.95E-03	3.51E-03	2.10E-02	3.58E-03	2.63E-03	2.08E-03	1.23E-02	1.46E-03	7.86E-03	2.12E-03	2.49E-03	7.11E-03	1.71E-03	1.03E-03	ND	ND
4-Aug-08	4.19E-03	1.91E-03	2.16E-03	ND	1.65E-02	3.99E-03	2.20E-03	2.54E-03	1.47E-02	1.96E-03	1.63E-02	4.59E-03	1.17E-02	2.39E-03	1.64E-03	1.69E-03	ND	5.02E-03
10-Aug-08	0.0015	0.0016	0.0010	0.0020	**ND**	**ND**	0.0009	0.0010	0.0110	0.0011	0.0043	0.0010	0.0012	0.0012	0.0019	0.0016	**ND**	**ND**
22-Aug-08	0.0013	0.0014	0.0015	0.0009	0.0018	0.0025	0.0023	0.0011	0.0012	0.0011	0.0015	0.0011	0.0016	0.0012	0.0013	0.0011	0.0016	0.0016
28-Aug-08	*0.0006*	0.0002	0.0002	0.0001	0.0002	0.0003	0.0003	0.0001	0.0001	0.0001	0.0002	*0.0006*	0.0002	0.0002	*0.0006*	*0.0006*	0.0002	0.0002
3-Sep-08	*0.0006*	*0.0006*	0.0013	*0.0006*	0.0068	0.0018	0.0032	0.0009	0.0007	*0.0006*	0.0039	0.0006	0.0062	0.0020	0.0010	*0.0006*	0.0080	0.0026
9-Sep-08	0.0014	*0.0006*	0.0011	*0.0006*	0.0024	0.0012	0.0010	*0.0006*	0.0010	0.0007	0.0011	0.0006	0.0009	*0.0006*	0.0014	0.0007	0.0034	0.0013
15-Sep-08	0.0009	0.0048	0.0137	0.0011	0.0012	0.0007	0.0011	*0.0006*	0.0007	0.0007	0.0033	0.0019	0.0011	0.0010	0.0011	0.0037	0.0022	0.0011
21-Sep-08	*0.0006*	*0.0006*	*0.0008*	*0.0006*	0.0002	*0.0006*	*0.0006*	*0.0006*	0.0001	0.0001	*0.0006*	*0.0006*	0.0006	*0.0006*	*0.0006*	*0.0006*	0.0003	0.0001
27-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0016	0.0007
3-Oct-08	0.0021	0.0009	0.0017	0.0016	0.0010	*0.0006*	0.0012	0.0017	*0.0006*	*0.0006*	0.0020	0.0010	0.0014	0.0011	0.0007	**ND**	0.0032	0.0012
Arithmetic Mean	1.59E-03	1.68E-03	2.28E-03	1.22E-03	5.38E-03	1.62E-03	1.53E-03	1.19E-03	5.43E-03	1.00E-03	3.68E-03	1.45E-03	2.91E-03	1.74E-03	1.29E-03	1.21E-03	3.03E-03	1.77E-03
Geomertic Mean	1.30E-03	1.16E-03	1.37E-03	9.20E-04	2.08E-03	1.24E-03	1.26E-03	9.53E-04	1.73E-03	7.37E-04	2.07E-03	1.17E-03	1.62E-03	1.18E-03	1.16E-03	1.02E-03	1.91E-03	1.16E-03
95th Percentile	3.62E-03	4.80E-03	6.87E-03	2.68E-03	1.85E-02	3.76E-03	2.84E-03	2.27E-03	1.53E-02	2.12E-03	1.12E-02	3.41E-03	9.42E-03	4.70E-03	2.26E-03	2.70E-03	7.15E-03	4.31E-03
98th Percentile	3.96E-03	4.80E-03	1.09E-02	3.18E-03	2.00E-02	3.90E-03	3.04E-03	2.43E-03	1.58E-02	2.26E-03	1.43E-02	4.12E-03	1.08E-02	6.14E-03	2.61E-03	3.31E-03	7.65E-03	4.74E-03
Maximum	4.19E-03	4.81E-03	1.37E-02	3.51E-03	2.10E-02	3.99E-03	3.17E-03	2.54E-03	1.62E-02	2.36E-03	1.63E-02	4.59E-03	1.17E-02	7.11E-03	2.83E-03	3.71E-03	7.98E-03	5.02E-03
Minimum	6.18E-04	1.72E-04	1.84E-04	1.10E-04	1.57E-04	3.10E-04	2.84E-04	1.36E-04	9.13E-05	9.17E-05	1.88E-04	6.20E-04	2.03E-04	1.51E-04	6.16E-04	6.16E-04	1.98E-04	1.42E-04

	Molybdenum																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	*0.0003*	*0.0003*	*0.0003*	*0.0003*	0.0004	*0.0006*	0.0004	*0.0003*	*0.0028*	0.0004	0.0004	*0.0003*	0.0005	*0.0003*	0.0005	*0.0003*	*0.0003*	*0.0003*
23-Jul-08	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	0.0004	*0.0003*	*0.0041*	0.0004	0.0008	*0.0003*	*0.0003*	*0.0003*	*0.0003*	**ND**	*0.0003*	*0.0003*
29-Jul-08	*0.0007*	*0.0009*	*0.0003*	*0.0009*	0.0011	*0.0003*	*0.0003*	*0.0003*	*0.0038*	*0.0003*	*0.0007*	*0.0006*	*0.0003*	0.0004	0.0004	*0.0003*	**ND**	**ND**
4-Aug-08	*0.0004*	0.0003	*0.0003*	**ND**	*0.0003*	*0.0003*	*0.0003*	*0.0006*	*0.0046*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	**ND**	0.0004
10-Aug-08	*0.0003*	*0.0003*	*0.0002*	*0.0003*	**ND**	**ND**	*0.0003*	*0.0003*	*0.0034*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	**ND**	**ND**
22-Aug-08	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0005*	*0.0006*	0.0005	0.0005	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*
28-Aug-08	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*
3-Sep-08	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*
9-Sep-08	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*
15-Sep-08	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*
21-Sep-08	*0.0003*	*0.0003*	*0.0004*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*
27-Sep-08	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*
3-Oct-08	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	*0.0003*	**ND**	*0.0003*	*0.0003*
Arithmetic Mean	3.42E-04	3.63E-04	3.13E-04	3.61E-04	3.98E-04	3.63E-04	3.39E-04	3.43E-04	1.63E-03	3.18E-04	3.84E-04	3.41E-04	3.34E-04	3.15E-04	3.32E-04	3.15E-04	3.10E-04	3.17E-04
Geomertic Mean	3.33E-04	3.43E-04	3.11E-04	3.42E-04	3.65E-04	3.50E-04	3.36E-04	3.36E-04	7.99E-04	3.17E-04	3.63E-04	3.36E-04	3.30E-04	3.14E-04	3.28E-04	3.15E-04	3.10E-04	3.16E-04
95th Percentile	5.02E-04	5.68E-04	3.50E-04	5.70E-04	7.53E-04	6.19E-04	4.28E-04	5.26E-04	4.27E-03	3.79E-04	7.38E-04	4.44E-04	4.10E-04	3.43E-04	4.44E-04	3.26E-04	3.12E-04	3.46E-04
98th Percentile	6.05E-04	7.82E-04	3.73E-04	7.55E-04	9.67E-04	6.22E-04	4.72E-04	5.57E-04	4.46E-03	3.88E-04	7.47E-04	5.31E-04	4.80E-04	3.61E-04	4.87E-04	3.26E-04	3.12E-04	3.64E-04
Maximum	6.73E-04	9.24E-04	3.88E-04	8.79E-04	1.11E-03	6.23E-04	5.01E-04	5.78E-04	4.59E-03	3.93E-04	7.53E-04	5.88E-04	5.26E-04	3.74E-04	5.15E-04	3.26E-04	3.13E-04	3.77E-04
Minimum	3.05E-04	3.10E-04	2.23E-04	3.11E-04	3.08E-04	3.08E-04	3.08E-04	3.05E-04	3.03E-04	3.03E-04	3.10E-04	3.08E-04	3.11E-04	3.06E-04	3.05E-04	3.08E-04	3.07E-04	2.92E-04

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit

	Nickel																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.0044	0.0027	0.0046	0.0046	0.0041	0.0042	0.0049	0.0037	0.0224	0.0042	0.0036	0.0033	0.0049	0.0030	0.0028	0.0028	0.0034	0.0033
23-Jul-08	0.0022	0.0024	0.0034	0.0019	0.0026	0.0036	0.0029	0.0022	0.0308	0.0041	0.0024	0.0019	0.0021	0.0018	0.0022	**ND**	0.0026	0.0031
29-Jul-08	0.0057	0.0085	0.0039	0.0074	0.0085	0.0027	0.0025	0.0040	0.0200	0.0035	0.0099	0.0035	0.0034	0.0052	0.0040	0.0021	**ND**	**ND**
4-Aug-08	0.0026	0.0024	0.0023	**ND**	0.0038	0.0026	0.0022	0.0039	0.0294	0.0029	0.0036	0.0042	0.0039	0.0025	0.0035	0.0027	**ND**	0.0029
10-Aug-08	0.0020	0.0048	0.0026	0.0029	**ND**	**ND**	0.0026	0.0022	0.0248	0.0029	0.0026	0.0022	0.0026	0.0017	0.0023	0.0020	**ND**	**ND**
22-Aug-08	0.0007	0.0012	0.0019	*0.0006*	0.0013	0.0015	0.0078	0.0010	0.0012	*0.0006*	0.0006	*0.0006*	0.0009	*0.0006*	0.0007	0.0007	0.0007	0.0007
28-Aug-08	0.0007	0.0013	0.0016	0.0016	0.0006	*0.0006*	0.0008	0.0006	*0.0006*	0.0010	0.0009	0.0006	*0.0006*	0.0017	0.0007	0.0007	0.0007	*0.0006*
3-Sep-08	0.0006	0.0009	0.0009	0.0008	0.0011	0.0010	0.0009	0.0006	*0.0006*	0.0006	0.0013	*0.0006*	0.0013	0.0010	0.0007	*0.0006*	0.0011	0.0008
9-Sep-08	0.0009	*0.0006*	*0.0006*	*0.0006*	0.0026	0.0006	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0006	*0.0006*	*0.0006*	0.0007	0.0006	0.0009	0.0010
15-Sep-08	*0.0006*	*0.0006*	*0.0006*	0.0011	*0.0006*	0.0009	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0016	*0.0006*	0.0010	0.0006	0.0012	*0.0006*
21-Sep-08	*0.0006*	0.0009	*0.0008*	*0.0006*	0.0006	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0011	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0011	*0.0006*
27-Sep-08	*0.0006*	0.0008	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0019	*0.0006*	*0.0006*	*0.0006*	0.0006	0.0010	*0.0006*	*0.0006*	0.0048
3-Oct-08	0.0058	*0.0006*	0.0007	0.0006	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0014	0.0006	0.0006	*0.0006*	*0.0006*	**ND**	0.0007	*0.0006*
Arithmetic Mean	2.12E-03	2.14E-03	1.88E-03	1.95E-03	2.26E-03	1.63E-03	2.13E-03	1.65E-03	1.02E-02	1.90E-03	2.21E-03	1.55E-03	1.82E-03	1.59E-03	1.61E-03	1.29E-03	1.33E-03	1.74E-03
Geomertic Mean	1.44E-03	1.47E-03	1.46E-03	1.31E-03	1.49E-03	1.24E-03	1.43E-03	1.19E-03	2.70E-03	1.42E-03	1.45E-03	1.13E-03	1.37E-03	1.21E-03	1.27E-03	1.04E-03	1.12E-03	1.26E-03
95th Percentile	5.73E-03	6.26E-03	4.16E-03	5.85E-03	6.07E-03	3.85E-03	6.03E-03	3.98E-03	3.00E-02	4.12E-03	6.14E-03	3.79E-03	4.26E-03	3.87E-03	3.70E-03	2.78E-03	3.06E-03	4.07E-03
98th Percentile	5.80E-03	7.61E-03	4.40E-03	6.77E-03	7.53E-03	4.05E-03	7.08E-03	4.01E-03	3.05E-02	4.16E-03	8.39E-03	4.02E-03	4.62E-03	4.69E-03	3.86E-03	2.82E-03	3.29E-03	4.51E-03
Maximum	5.85E-03	8.50E-03	4.55E-03	7.38E-03	8.51E-03	4.19E-03	7.77E-03	4.04E-03	3.08E-02	4.20E-03	9.90E-03	4.18E-03	4.87E-03	5.24E-03	3.96E-03	2.84E-03	3.44E-03	4.79E-03
Minimum	6.17E-04	6.20E-04	6.21E-04	6.21E-04	6.16E-04	6.15E-04	6.24E-04	6.11E-04	6.07E-04	6.07E-04	6.23E-04	6.16E-04	6.21E-04	6.11E-04	6.10E-04	6.17E-04	6.24E-04	6.19E-04

	Phosphorus																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.1341	0.1242	0.1300	0.1368	0.1356	0.1972	0.1249	0.1223	0.8945	0.1049	0.1242	0.1243	0.1315	0.1287	0.1417	0.1290	0.1228	0.1240
23-Jul-08	1.24E-01	1.28E-01	1.27E-01	1.13E-01	1.18E-01	1.27E-01	1.26E-01	1.73E-01	1.46E+00	1.23E-01	1.25E-01	1.25E-01	1.46E-01	1.23E-01	1.23E-01	**ND**	1.37E-01	1.50E-01
29-Jul-08	2.69E-01	3.33E-01	1.30E-01	3.16E-01	1.48E-01	1.73E-01	1.25E-01	9.80E-02	1.39E+00	1.09E-01	2.91E-01	2.35E-01	1.37E-01	1.37E-01	1.58E-01	1.42E-01	ND	ND
4-Aug-08	0.1398	0.0954	0.1523	**ND**	0.1016	*0.0936*	0.1552	0.2313	1.6530	0.1471	0.1252	0.1253	0.1465	0.1256	0.1137	0.1561	**ND**	*0.0942*
10-Aug-08	0.1597	*0.0991*	*0.0670*	*0.0939*	**ND**	**ND**	*0.0924*	*0.0924*	*1.0323*	*0.0918*	*0.0938*	*0.1043*	*0.0960*	*0.0921*	*0.0942*	*0.0978*	**ND**	**ND**
22-Aug-08	*0.0918*	*0.0935*	*0.0927*	*0.0936*	0.1475	*0.1870*	*0.0940*	*0.0920*	*0.0914*	*0.0918*	*0.0934*	*0.0929*	0.0998	*0.0921*	*0.0919*	*0.0923*	0.0986	*0.0933*
28-Aug-08	*0.0927*	*0.0940*	0.0994	*0.0941*	*0.0936*	*0.0932*	0.1008	*0.0926*	*0.0919*	*0.0920*	*0.0944*	*0.0930*	0.1004	0.0984	*0.0924*	0.0986	0.0991	*0.0938*
3-Sep-08	0.0991	*0.0946*	*0.0939*	*0.0947*	0.1127	*0.0939*	*0.0952*	0.1118	*0.0925*	*0.0926*	0.1009	*0.0948*	0.1010	*0.0929*	*0.0930*	*0.0931*	0.1372	*0.0944*
9-Sep-08	0.1232	0.1130	0.1121	0.1257	0.1245	0.1121	0.1136	0.1236	0.1110	0.1105	0.1255	0.1247	0.1131	0.0986	0.1234	0.1111	0.1246	0.1127
15-Sep-08	*0.0926*	*0.0947*	*0.0931*	*0.0944*	*0.0936*	*0.0935*	*0.0948*	*0.0933*	*0.0922*	*0.0923*	*0.0943*	*0.0937*	*0.0944*	*0.0926*	*0.0927*	*0.0927*	*0.0932*	*0.0941*
21-Sep-08	*0.0931*	*0.0948*	*0.1164*	*0.0949*	*0.0941*	*0.0941*	*0.0958*	*0.0934*	*0.0928*	*0.0932*	*0.0948*	*0.0942*	*0.0949*	*0.0931*	*0.0932*	*0.0933*	*0.0938*	*0.0946*
27-Sep-08	0.0991	0.1010	0.1002	*0.0952*	0.1002	0.1006	*0.0952*	0.0995	0.1111	0.1112	0.1010	0.1003	0.1142	0.0991	0.1122	0.0993	0.0998	0.0936
3-Oct-08	0.1218	*0.0931*	0.1108	0.1366	*0.0923*	0.1108	0.1123	0.1711	0.0971	0.0971	0.1240	0.0986	0.1242	*0.0917*	0.1098	**ND**	0.1227	0.0991
Arithmetic Mean	1.26E-01	1.20E-01	1.10E-01	1.24E-01	1.14E-01	1.23E-01	1.10E-01	1.23E-01	5.54E-01	1.04E-01	1.22E-01	1.16E-01	1.15E-01	1.05E-01	1.11E-01	1.10E-01	1.13E-01	1.04E-01
Geomertic Mean	1.20E-01	1.11E-01	1.08E-01	1.15E-01	1.12E-01	1.18E-01	1.08E-01	1.17E-01	2.60E-01	1.03E-01	1.16E-01	1.12E-01	1.14E-01	1.04E-01	1.09E-01	1.08E-01	1.12E-01	1.03E-01
95th Percentile	2.03E-01	2.10E-01	1.39E-01	2.18E-01	1.48E-01	1.92E-01	1.38E-01	1.96E-01	1.54E+00	1.33E-01	1.92E-01	1.69E-01	1.46E-01	1.32E-01	1.48E-01	1.49E-01	1.37E-01	1.37E-01
98th Percentile	2.43E-01	2.84E-01	1.47E-01	2.77E-01	1.48E-01	1.95E-01	1.48E-01	2.17E-01	1.61E+00	1.41E-01	2.51E-01	2.09E-01	1.46E-01	1.35E-01	1.54E-01	1.53E-01	1.37E-01	1.45E-01
Maximum	2.69E-01	3.33E-01	1.52E-01	3.16E-01	1.48E-01	1.97E-01	1.55E-01	2.31E-01	1.65E+00	1.47E-01	2.91E-01	2.35E-01	1.46E-01	1.37E-01	1.58E-01	1.56E-01	1.37E-01	1.50E-01
Minimum	9.18E-02	9.31E-02	6.70E-02	9.36E-02	9.23E-02	9.32E-02	9.24E-02	9.20E-02	9.14E-02	9.18E-02	9.34E-02	9.29E-02	9.44E-02	9.17E-02	9.19E-02	9.23E-02	9.32E-02	9.33E-02

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit

	Potassium																
	Concentration (µg/m3)																
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	*0.0610*	*0.0621*	*0.0650*	*0.0622*	0.0986	*0.1232*	*0.0625*	*0.0612*	*0.5591*	*0.0655*	0.0621	*0.0690*	0.0789	*0.0644*	*0.0644*	*0.0645*	0.0982	*0.0620*
23-Jul-08	*0.0619*	*0.0641*	*0.0636*	*0.0628*	*0.0658*	*0.0637*	*0.0631*	*0.0618*	*0.8106*	*0.0617*	*0.0627*	*0.0624*	*0.0664*	*0.0616*	*0.0617*	**ND**	0.0621	*0.0626*
29-Jul-08	*0.1346*	*0.1849*	*0.0651*	*0.1757*	0.1727	*0.0617*	*0.0625*	*0.0612*	*0.7695*	*0.0608*	*0.1456*	*0.1176*	*0.0622*	0.0873	*0.0659*	*0.0645*	**ND**	**ND**
4-Aug-08	*0.0777*	*0.0530*	*0.0635*	**ND**	0.1397	*0.0624*	*0.0647*	*0.1157*	*0.9183*	*0.0613*	0.1753	0.0835	*0.0666*	*0.0628*	*0.0632*	*0.0650*	**ND**	0.1004
10-Aug-08	0.0860	*0.0661*	0.0982	0.0626	**ND**	**ND**	0.1356	0.0739	0.8258	0.0857	0.1626	*0.0695*	0.0896	0.0982	0.0879	0.0913	**ND**	**ND**
22-Aug-08	0.1223	0.1246	0.1360	0.1123	0.1659	0.1995	0.2005	0.1473	0.0731	0.0612	0.1744	0.1733	0.1497	0.1106	0.1225	0.1231	0.1232	0.1492
28-Aug-08	0.1730	0.1253	0.1119	0.1004	0.1373	0.1119	0.1008	0.1234	0.1226	0.0858	0.0881	0.0744	0.1004	0.0861	0.0739	0.0986	0.1487	0.1000
3-Sep-08	0.0991	*0.0631*	0.1377	0.1389	0.0876	0.1377	0.1015	0.1118	0.0864	0.0987	*0.0631*	0.1011	0.1010	0.0619	*0.0620*	0.0869	0.0748	*0.0629*
9-Sep-08	*0.0616*	*0.0628*	*0.0623*	*0.0628*	*0.0623*	*0.0623*	*0.0631*	*0.0618*	*0.0616*	*0.0614*	*0.0627*	*0.0623*	*0.0628*	*0.0616*	0.0740	*0.0617*	*0.0623*	*0.0626*
15-Sep-08	*0.0617*	*0.0631*	*0.0621*	*0.0629*	*0.0624*	*0.0624*	*0.0632*	*0.0622*	*0.0615*	*0.0615*	*0.0628*	*0.0625*	*0.0629*	*0.0617*	*0.0618*	*0.0618*	*0.0622*	*0.0627*
21-Sep-08	*0.0621*	*0.0632*	*0.0776*	*0.0633*	*0.0627*	*0.0627*	*0.0639*	*0.0623*	*0.0618*	*0.0621*	*0.0632*	*0.0628*	*0.0633*	*0.0621*	*0.0622*	*0.0622*	*0.0625*	*0.0631*
27-Sep-08	*0.0620*	*0.0631*	*0.0626*	*0.0635*	*0.0626*	*0.0629*	*0.0635*	*0.0622*	*0.0617*	*0.0618*	*0.0631*	*0.0627*	*0.0635*	*0.0620*	*0.0623*	*0.0621*	*0.0624*	*0.0585*
3-Oct-08	0.4385	*0.0620*	*0.0615*	*0.0621*	*0.0616*	*0.0615*	*0.0624*	*0.0611*	*0.0607*	*0.0607*	*0.0620*	*0.0616*	*0.0621*	*0.0611*	*0.0610*	**ND**	*0.0613*	*0.0619*
Arithmetic Mean	1.15E-01	8.13E-02	8.21E-02	8.58E-02	9.83E-02	8.93E-02	8.52E-02	8.20E-02	3.44E-01	6.83E-02	9.60E-02	8.18E-02	7.92E-02	7.24E-02	7.10E-02	7.65E-02	8.18E-02	7.69E-02
Geomertic Mean	9.41E-02	7.53E-02	7.82E-02	7.98E-02	9.03E-02	8.16E-02	7.87E-02	7.75E-02	1.78E-01	6.74E-02	8.65E-02	7.75E-02	7.62E-02	7.08E-02	6.95E-02	7.43E-02	7.74E-02	7.33E-02
95th Percentile	2.79E-01	1.49E-01	1.37E-01	1.55E-01	1.69E-01	1.65E-01	1.62E-01	1.33E-01	8.63E-01	9.10E-02	1.75E-01	1.40E-01	1.21E-01	1.03E-01	1.02E-01	1.11E-01	1.37E-01	1.25E-01
98th Percentile	3.75E-01	1.71E-01	1.37E-01	1.68E-01	1.71E-01	1.86E-01	1.85E-01	1.42E-01	8.96E-01	9.56E-02	1.75E-01	1.60E-01	1.38E-01	1.08E-01	1.14E-01	1.18E-01	1.44E-01	1.39E-01
Maximum	4.39E-01	1.85E-01	1.38E-01	1.76E-01	1.73E-01	1.99E-01	2.01E-01	1.47E-01	9.18E-01	9.87E-02	1.75E-01	1.73E-01	1.50E-01	1.11E-01	1.23E-01	1.23E-01	1.49E-01	1.49E-01
Minimum	6.10E-02	5.30E-02	6.15E-02	6.21E-02	6.16E-02	6.15E-02	6.24E-02	6.11E-02	6.07E-02	6.07E-02	6.20E-02	6.16E-02	6.21E-02	6.11E-02	6.10E-02	6.17E-02	6.13E-02	5.85E-02

	Selenium																
	Concentration (µg/m3)																
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	*0.0006*	*0.0006211*	*0.0007*	*0.0006*	*0.0006*	*0.0012*	*0.0006*	*0.0006*	*0.0056*	*0.0007*	*0.0006*	*0.0007*	*0.0007*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
23-Jul-08	*0.0006*	*0.00064138*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	*0.0006*	*0.0081*	*0.0006*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	**ND**	*0.0006*	*0.0006*
29-Jul-08	*0.0013*	*0.00184869*	*0.0007*	*0.0018*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0077*	*0.0006*	*0.0015*	*0.0012*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	**ND**	**ND**
4-Aug-08	*0.0008*	*0.00052974*	*0.0006*	**ND**	*0.0006*	*0.0006*	*0.0006*	*0.0012*	*0.0092*	*0.0006*	*0.0006*	*0.0007*	*0.0007*	*0.0006*	*0.0006*	*0.0007*	**ND**	*0.0006*
10-Aug-08	*0.0006*	*0.00066098*	*0.0004*	*0.0006*	**ND**	**ND**	*0.0006*	*0.0006*	*0.0069*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	*0.0006*	*0.0007*	**ND**	**ND**
22-Aug-08	*0.0006*	*0.00062314*	*0.0006*	*0.0006*	*0.0009*	*0.0012*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
28-Aug-08	*0.0006*	*0.0006266*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
3-Sep-08	*0.0006*	*0.00063077*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
9-Sep-08	*0.0006*	*0.00062759*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
15-Sep-08	*0.0006*	*0.00063127*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
21-Sep-08	*0.0006*	*0.00063231*	*0.0008*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
27-Sep-08	*0.0006*	*0.00063122*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
3-Oct-08	*0.0006*	*0.0006204*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	**ND**	*0.0006*	*0.0006*
Arithmetic Mean	6.84E-04	7.17E-04	6.26E-04	7.22E-04	6.51E-04	7.27E-04	6.30E-04	6.59E-04	3.26E-03	6.17E-04	6.91E-04	6.82E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04
Geomertic Mean	6.66E-04	6.77E-04	6.23E-04	6.84E-04	6.47E-04	7.00E-04	6.30E-04	6.48E-04	1.60E-03	6.17E-04	6.69E-04	6.71E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04
95th Percentile	1.00E-03	1.14E-03	7.01E-04	1.14E-03	7.77E-04	1.24E-03	6.42E-04	8.36E-04	8.54E-03	6.35E-04	9.62E-04	8.88E-04	6.65E-04	6.34E-04	6.50E-04	6.51E-04	6.25E-04	6.30E-04
98th Percentile	1.21E-03	1.56E-03	7.46E-04	1.51E-03	8.64E-04	1.24E-03	6.45E-04	1.03E-03	8.92E-03	6.47E-04	1.26E-03	1.06E-03	6.65E-04	6.40E-04	6.56E-04	6.52E-04	6.25E-04	6.31E-04
Maximum	1.35E-03	1.85E-03	7.76E-04	1.76E-03	9.22E-04	1.25E-03	6.47E-04	1.16E-03	9.18E-03	6.55E-04	1.46E-03	1.18E-03	6.66E-04	6.44E-04	6.59E-04	6.52E-04	6.25E-04	6.31E-04
Minimum	6.09E-04	5.30E-04	4.46E-04	6.21E-04	6.16E-04	6.15E-04	6.16E-04	6.11E-04	6.07E-04	6.07E-04	6.20E-04	6.16E-04	6.21E-04	6.11E-04	6.10E-04	6.15E-04	6.13E-04	5.85E-04

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit

	Silver																	
	Concentrations (μg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	*0.0002*	*0.0002*	*0.0002*	0.0002	*0.0002*	*0.0003*	*0.0002*	0.0002	0.0022	*0.0002*	0.0004	0.0003	*0.0002*	0.0003	*0.0002*	0.0003	0.0004	0.0009
23-Jul-08	1.55E-04	1.60E-04	1.59E-04	1.57E-04	1.65E-04	1.59E-04	2.52E-04	1.55E-04	2.03E-03	1.54E-04	1.57E-04	1.56E-04	1.66E-04	3.70E-04	1.54E-04	ND	1.55E-04	1.57E-04
29-Jul-08	*0.0003*	*0.0005*	*0.0002*	*0.0004*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0019*	*0.0002*	0.0006	*0.0003*	0.0002	*0.0002*	0.0003	*0.0002*	**ND**	**ND**
4-Aug-08	*0.0002*	*0.0001*	*0.0002*	**ND**	*0.0002*	*0.0002*	*0.0002*	0.0005	*0.0023*	0.0004	*0.0002*	0.0003	0.0007	0.0005	0.0006	*0.0002*	**ND**	*0.0002*
10-Aug-08	0.0002	*0.0002*	*0.0001*	*0.0002*	**ND**	**ND**	*0.0002*	*0.0002*	*0.0017*	*0.0002*	*0.0003*	*0.0002*	*0.0009*	*0.0002*	*0.0005*	*0.0002*	**ND**	**ND**
22-Aug-08	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0003*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	0.0002	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*
28-Aug-08	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	0.0002	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*
3-Sep-08	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*
9-Sep-08	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*
15-Sep-08	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*
21-Sep-08	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*	*0.0002*
27-Sep-08	0.0002	0.0002	0.0002	*0.0002*	0.0002	0.0002	*0.0002*	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001
3-Oct-08	0.0002	*0.0002*	0.0002	0.0002	*0.0002*	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	*0.0002*	0.0002	**ND**	0.0002	0.0002
Arithmetic Mean	1.71E-04	1.79E-04	1.57E-04	1.88E-04	1.63E-04	1.82E-04	1.65E-04	1.85E-04	8.79E-04	1.71E-04	2.13E-04	1.94E-04	2.69E-04	2.06E-04	2.27E-04	1.66E-04	1.77E-04	2.20E-04
Geomertic Mean	1.66E-04	1.69E-04	1.56E-04	1.78E-04	1.62E-04	1.75E-04	1.63E-04	1.74E-04	4.14E-04	1.65E-04	1.92E-04	1.87E-04	2.17E-04	1.88E-04	1.97E-04	1.64E-04	1.69E-04	1.82E-04
95th Percentile	2.51E-04	2.84E-04	1.75E-04	3.34E-04	1.94E-04	3.10E-04	1.98E-04	3.32E-04	2.26E-03	2.45E-04	4.56E-04	2.85E-04	7.58E-04	4.23E-04	5.54E-04	2.10E-04	2.73E-04	5.13E-04
98th Percentile	3.02E-04	3.91E-04	1.86E-04	3.97E-04	2.16E-04	3.11E-04	2.31E-04	4.10E-04	2.28E-03	3.19E-04	5.32E-04	2.90E-04	8.41E-04	4.71E-04	6.01E-04	2.39E-04	3.30E-04	7.26E-04
Maximum	3.37E-04	4.62E-04	1.94E-04	4.39E-04	2.30E-04	3.12E-04	2.52E-04	4.63E-04	2.30E-03	3.68E-04	5.82E-04	2.94E-04	8.96E-04	5.02E-04	6.32E-04	2.58E-04	3.68E-04	8.68E-04
Minimum	1.52E-04	1.32E-04	1.12E-04	1.55E-04	1.54E-04	1.54E-04	1.54E-04	1.53E-04	1.52E-04	1.52E-04	1.55E-04	1.54E-04	1.55E-04	1.53E-04	1.52E-04	1.54E-04	1.53E-04	1.46E-04

	Sodium																	
	Concentration (μg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	7.7434	2.3850	8.6999	8.0582	6.6925	12.1251	8.5828	8.2819	74.1331	8.6391	7.7619	9.4159	8.8495	8.7788	8.6332	8.3818	7.0616	7.5986
23-Jul-08	6.4840	6.8371	7.1096	6.1951	6.5037	8.5296	7.2590	7.0338	83.9753	7.2886	5.5594	6.4099	6.8563	5.4704	5.4292	**ND**	6.1430	6.3131
29-Jul-08	14.9967	20.3356	6.8337	18.9432	6.5755	6.6727	7.0153	6.4040	72.1747	7.1774	13.0135	10.9645	5.8129	6.2337	5.9483	6.1051	**ND**	**ND**
4-Aug-08	7.8447	5.1173	6.2323	**ND**	6.0852	5.9899	6.5188	10.8026	79.3437	5.4175	6.9135	5.6669	7.9765	5.2883	8.2478	8.0628	**ND**	7.6701
10-Aug-08	2.6651	7.6541	4.9725	7.2391	**ND**	**ND**	5.7068	5.5443	66.4799	6.7078	5.3533	6.4242	5.8123	5.9680	5.8159	5.5949	**ND**	**ND**
22-Aug-08	0.1468	0.1371	0.1113	0.0998	0.1659	0.1745	0.1128	0.1105	0.1097	0.0857	0.0997	0.1114	0.1497	0.0983	0.1103	0.1108	0.0862	0.1244
28-Aug-08	0.0865	0.1128	0.1243	0.1631	0.0999	0.1119	0.1008	0.2962	0.0858	0.0858	0.0881	0.0744	0.1631	0.0984	0.0986	0.1109	0.0991	0.1000
3-Sep-08	0.1115	0.1262	0.1001	0.1137	0.1001	0.1126	0.1015	0.1242	0.1111	0.0987	0.1261	0.1011	0.1137	0.0867	0.1240	0.0620	0.1123	0.0755
9-Sep-08	0.0137	0.0158	0.0125	0.0143	0.0125	0.0140	0.0128	0.0154	0.0137	0.0121	0.0158	0.0126	0.0143	0.0107	0.0153	0.0077	0.0140	0.0095
15-Sep-08	0.2839	0.2020	0.1490	0.1133	0.0499	0.0499	0.1012	0.0746	0.0615	0.2829	0.0754	0.0625	0.0629	0.0494	0.0989	0.0866	0.0622	0.0502
21-Sep-08	0.0745	0.0632	0.0931	0.0633	0.0878	0.0627	0.0894	0.0872	0.0742	0.0621	0.0885	0.0879	0.0760	0.0621	0.0746	0.0746	0.0750	0.0757
27-Sep-08	0.0496	0.0631	0.1503	0.0635	0.1127	0.1006	0.0635	0.0746	0.0864	0.0988	0.1010	0.0878	0.1015	0.1239	0.1246	0.0869	0.1623	0.1052
3-Oct-08	0.7917	0.1985	0.2339	0.4099	0.1354	0.1354	0.1997	0.4032	0.0971	0.1214	0.2233	0.2342	0.2112	0.2201	0.0976	**ND**	0.1472	0.1362
Arithmetic Mean	3.18E+00	3.33E+00	2.68E+00	3.46E+00	2.22E+00	2.84E+00	2.76E+00	3.02E+00	2.90E+01	2.78E+00	3.03E+00	3.05E+00	2.78E+00	2.50E+00	2.68E+00	2.61E+00	1.40E+00	2.02E+00
Geomertic Mean	5.29E-01	4.76E-01	4.96E-01	4.24E-01	3.40E-01	3.64E-01	4.46E-01	5.32E-01	1.02E+00	4.49E-01	4.70E-01	4.47E-01	4.77E-01	4.02E-01	4.42E-01	3.42E-01	1.91E-01	2.43E-01
95th Percentile	1.07E+01	1.27E+01	7.75E+00	1.30E+01	6.63E+00	1.01E+01	7.79E+00	9.29E+00	8.12E+01	7.83E+00	9.86E+00	1.00E+01	8.33E+00	7.25E+00	8.40E+00	8.22E+00	6.65E+00	7.63E+00
98th Percentile	1.33E+01	1.73E+01	8.32E+00	1.65E+01	6.67E+00	1.13E+01	8.27E+00	1.02E+01	8.29E+01	8.31E+00	1.18E+01	1.06E+01	8.64E+00	8.17E+00	8.54E+00	8.32E+00	6.90E+00	7.66E+00
Maximum	1.50E+01	2.03E+01	8.70E+00	1.89E+01	6.69E+00	1.21E+01	8.58E+00	1.08E+01	8.40E+01	8.64E+00	1.30E+01	1.10E+01	8.85E+00	8.78E+00	8.63E+00	8.38E+00	7.06E+00	7.67E+00
Minimum	1.37E-02	1.58E-02	1.25E-02	1.43E-02	1.25E-02	1.40E-02	1.28E-02	1.54E-02	1.37E-02	1.21E-02	1.58E-02	1.26E-02	1.43E-02	1.07E-02	1.53E-02	7.66E-03	1.40E-02	9.46E-03

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit

	Strontium																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	*0.0006*	0.0007	*0.0007*	*0.0006*	0.0022	*0.0012*	*0.0006*	*0.0006*	*0.0056*	*0.0007*	0.0007	*0.0007*	0.0011	*0.0006*	*0.0006*	*0.0006*	0.0007	*0.0006*
23-Jul-08	*0.0006*	*0.00064138*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	*0.0006*	*0.0081*	*0.0006*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	**ND**	*0.0006*	*0.0006*
29-Jul-08	*0.0013*	*0.0018*	*0.0007*	*0.0018*	0.0042	0.0006	*0.0006*	*0.0006*	*0.0077*	*0.0006*	*0.0015*	*0.0012*	*0.0006*	0.0011	*0.0007*	*0.0006*	**ND**	**ND**
4-Aug-08	*0.0008*	*0.0005*	*0.0006*	**ND**	0.0028	0.0006	*0.0006*	*0.0012*	*0.0092*	*0.0006*	0.0033	0.0008	0.0013	*0.0006*	*0.0006*	*0.0007*	**ND**	*0.0006*
10-Aug-08	*0.0006*	*0.0007*	*0.0004*	*0.0006*	**ND**	**ND**	*0.0006*	*0.0006*	*0.0069*	*0.0006*	0.0004	*0.0007*	*0.0006*	*0.0006*	*0.0006*	*0.0007*	**ND**	**ND**
22-Aug-08	*0.0006*	*0.00062314*	*0.0006*	*0.0006*	*0.0009*	*0.0012*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
28-Aug-08	*0.0006*	*0.0006266*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
3-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0015	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0010	*0.0006*	0.0008	*0.0006*	*0.0006*	*0.0006*	0.0014	*0.0006*
9-Sep-08	*0.0006*	*0.00062759*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
15-Sep-08	*0.0006*	*0.00063127*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
21-Sep-08	*0.0006*	*0.00063231*	*0.0008*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0006	*0.0006*
27-Sep-08	*0.0006*	*0.00063122*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0007	*0.0006*
3-Oct-08	*0.0006*	*0.0006*	0.0015	0.0012	*0.0006*	*0.0006*	0.0006	0.0007	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	**ND**	*0.0006*	*0.0006*
Arithmetic Mean	6.84E-04	7.27E-04	6.93E-04	7.74E-04	1.34E-03	7.27E-04	6.30E-04	6.68E-04	3.26E-03	6.17E-04	9.15E-04	6.93E-04	7.28E-04	6.58E-04	6.24E-04	6.29E-04	7.20E-04	6.22E-04
Geomertic Mean	6.66E-04	6.86E-04	6.66E-04	7.25E-04	1.03E-03	7.00E-04	6.30E-04	6.57E-04	1.60E-03	6.17E-04	7.72E-04	6.81E-04	7.06E-04	6.48E-04	6.24E-04	6.29E-04	6.96E-04	6.22E-04
95th Percentile	1.00E-03	1.19E-03	1.06E-03	1.47E-03	3.42E-03	1.24E-03	6.42E-04	9.03E-04	8.54E-03	6.35E-04	2.18E-03	9.72E-04	1.16E-03	8.35E-04	6.50E-04	6.51E-04	1.09E-03	6.30E-04
98th Percentile	1.21E-03	1.58E-03	1.31E-03	1.64E-03	3.89E-03	1.24E-03	6.45E-04	1.05E-03	8.92E-03	6.47E-04	2.82E-03	1.09E-03	1.26E-03	1.01E-03	6.56E-04	6.52E-04	1.26E-03	6.31E-04
Maximum	1.35E-03	1.85E-03	1.48E-03	1.76E-03	4.19E-03	1.25E-03	6.47E-04	1.16E-03	9.18E-03	6.55E-04	3.26E-03	1.18E-03	1.33E-03	1.12E-03	6.59E-04	6.52E-04	1.37E-03	6.31E-04
Minimum	6.09E-04	5.30E-04	4.46E-04	6.22E-04	6.16E-04	6.15E-04	6.16E-04	6.12E-04	6.07E-04	6.07E-04	4.07E-04	6.16E-04	6.21E-04	6.11E-04	6.10E-04	6.15E-04	6.13E-04	5.85E-04

	Telurium																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	*0.0012*	*0.0006*	*0.0006*	*0.0056*	*0.0007*	*0.0006*	*0.0007*	*0.0007*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
23-Jul-08	*6.19E-04*	*6.41E-04*	*6.36E-04*	*6.28E-04*	*6.58E-04*	*6.37E-04*	*6.31E-04*	*6.18E-04*	*8.11E-03*	*6.17E-04*	*6.27E-04*	*6.24E-04*	*6.64E-04*	*6.16E-04*	*6.17E-04*	*ND*	*6.21E-04*	*6.26E-04*
29-Jul-08	*0.0013*	*0.0018*	*0.0007*	*0.0018*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0077*	*0.0006*	*0.0015*	*0.0012*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	**ND**	**ND**
4-Aug-08	*0.0008*	*0.0005*	*0.0006*	**ND**	*0.0006*	*0.0006*	*0.0006*	*0.0012*	*0.0092*	*0.0006*	*0.0006*	*0.0007*	*0.0007*	*0.0006*	*0.0006*	*0.0007*	**ND**	*0.0006*
10-Aug-08	*0.0006*	*0.0007*	*0.0004*	*0.0006*	**ND**	**ND**	*0.0006*	*0.0006*	*0.0069*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	*0.0006*	*0.0007*	**ND**	**ND**
22-Aug-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0009*	*0.0012*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
28-Aug-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
3-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
9-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
15-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
21-Sep-08	*0.0006*	*0.0006*	*0.0008*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
27-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
3-Oct-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	**ND**	*0.0006*	*0.0006*
Arithmetic Mean	6.84E-04	7.17E-04	6.26E-04	7.22E-04	6.51E-04	7.27E-04	6.30E-04	6.59E-04	3.26E-03	6.17E-04	6.91E-04	6.82E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04
Geomertic Mean	6.66E-04	6.77E-04	6.23E-04	6.84E-04	6.47E-04	7.00E-04	6.30E-04	6.48E-04	1.60E-03	6.17E-04	6.69E-04	6.71E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04
95th Percentile	1.00E-03	1.14E-03	7.01E-04	1.14E-03	7.77E-04	1.24E-03	6.42E-04	8.36E-04	8.54E-03	6.35E-04	9.62E-04	8.88E-04	6.65E-04	6.34E-04	6.50E-04	6.51E-04	6.25E-04	6.30E-04
98th Percentile	1.21E-03	1.56E-03	7.46E-04	1.51E-03	8.64E-04	1.24E-03	6.45E-04	1.03E-03	8.92E-03	6.47E-04	1.26E-03	1.06E-03	6.65E-04	6.40E-04	6.56E-04	6.52E-04	6.25E-04	6.31E-04
Maximum	1.35E-03	1.85E-03	7.76E-04	1.76E-03	9.22E-04	1.25E-03	6.47E-04	1.16E-03	9.18E-03	6.55E-04	1.46E-03	1.18E-03	6.66E-04	6.44E-04	6.59E-04	6.52E-04	6.25E-04	6.31E-04
Minimum	6.09E-04	5.30E-04	4.46E-04	6.21E-04	6.16E-04	6.15E-04	6.16E-04	6.11E-04	6.07E-04	6.07E-04	6.20E-04	6.16E-04	6.21E-04	6.11E-04	6.10E-04	6.15E-04	6.13E-04	5.85E-04

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit

	Thallium																	
	Concentration (μg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.0003	0.0004	0.0002	0.0002	0.0001	0.0002	0.0001	0.0001	0.0007	0.0001	0.0001	0.0002	*0.0001*	*0.0001*	*0.0001*	0.0001	*0.0001*	*0.0001*
23-Jul-08	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	0.0001	0.0001	*0.0008*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	**ND**	*0.0001*	0.0001
29-Jul-08	*0.0001*	*0.0002*	*0.0001*	*0.0002*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0008*	*0.0001*	*0.0001*	0.0002	*0.0001*	*0.0001*	*0.0001*	*0.0001*	**ND**	**ND**
4-Aug-08	*0.0001*	*0.0001*	*0.0001*	**ND**	*0.0001*	*0.0001*	*0.0001*	0.0002	*0.0009*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	**ND**	*0.0001*
10-Aug-08	*0.0001*	*0.0001*	*0.0000*	*0.0001*	**ND**	**ND**	0.0001	*0.0001*	*0.0007*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	**ND**	**ND**
22-Aug-08	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	*0.0001*	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
28-Aug-08	0.0001	0.0001	0.0001	*0.0001*	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*
3-Sep-08	*0.0001*	*0.0001*	0.0001	0.0001	*0.0001*	0.0001	0.0001	0.0001	*0.0001*	*0.0001*	0.0009	0.0001	0.0001	0.0001	*0.0001*	*0.0001*	*0.0001*	*0.0001*
9-Sep-08	0.0003	0.0001	0.0001	0.0001	*0.0001*	0.0001	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*
15-Sep-08	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*
21-Sep-08	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*
27-Sep-08	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*
3-Oct-08	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	*0.0001*	**ND**	*0.0001*	*0.0001*
Arithmetic Mean	1.15E-04	1.07E-04	7.83E-05	8.78E-05	7.38E-05	8.72E-05	8.43E-05	8.24E-05	3.36E-04	6.55E-05	1.44E-04	9.05E-05	6.94E-05	6.77E-05	6.81E-05	7.08E-05	6.69E-05	7.12E-05
Geomertic Mean	9.38E-05	8.76E-05	7.32E-05	7.99E-05	7.10E-05	7.96E-05	7.96E-05	7.63E-05	1.66E-04	6.51E-05	9.02E-05	8.09E-05	6.76E-05	6.59E-05	6.63E-05	6.81E-05	6.58E-05	6.91E-05
95th Percentile	2.99E-04	2.70E-04	1.50E-04	1.86E-04	1.21E-04	1.73E-04	1.48E-04	1.50E-04	8.54E-04	8.15E-05	4.58E-04	1.92E-04	9.48E-05	9.27E-05	9.35E-05	1.06E-04	8.91E-05	1.12E-04
98th Percentile	3.27E-04	3.46E-04	1.62E-04	1.94E-04	1.37E-04	1.74E-04	1.57E-04	1.85E-04	8.92E-04	8.41E-05	7.36E-04	1.96E-04	1.20E-04	1.18E-04	1.18E-04	1.31E-04	1.02E-04	1.20E-04
Maximum	3.45E-04	3.98E-04	1.69E-04	1.99E-04	1.47E-04	1.75E-04	1.63E-04	2.08E-04	9.18E-04	8.58E-05	9.21E-04	1.98E-04	1.37E-04	1.35E-04	1.35E-04	1.48E-04	1.11E-04	1.24E-04
Minimum	6.09E-05	5.30E-05	4.46E-05	6.21E-05	6.16E-05	6.15E-05	6.24E-05	6.11E-05	6.07E-05	6.07E-05	6.20E-05	6.16E-05	6.21E-05	6.11E-05	6.10E-05	6.16E-05	6.13E-05	5.85E-05

	Tin																	
	Concentration (μg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.0020	0.0040	0.0014	0.0029	0.0016	0.0032	0.0020	0.0024	0.0145	0.0018	0.0014	0.0019	0.0026	0.0013	0.0019	0.0010	0.0023	0.0038
23-Jul-08	0.0016	0.00230896	0.0018	0.0023	0.0014	0.0024	0.0035	0.0022	0.0340	0.0148	0.0015	0.0015	0.0021	0.0020	0.0015	**ND**	0.0019	0.0018
29-Jul-08	0.0030	0.0030	0.0012	0.0049	0.0036	0.0015	0.0031	0.0012	0.0123	0.0069	0.0049	0.0031	0.0012	0.0027	0.0018	0.0015	**ND**	**ND**
4-Aug-08	0.0019	0.0012	0.0024	**ND**	0.0009	0.0015	0.0019	0.0032	0.0863	0.0028	0.0021	0.0068	0.0017	0.0019	0.0013	0.0014	**ND**	0.0028
10-Aug-08	0.0028	0.0019	0.0018	0.0018	**ND**	**ND**	0.0010	0.0018	0.0151	0.0013	0.0023	0.0021	0.0028	0.0016	0.0021	0.0013	**ND**	**ND**
22-Aug-08	0.0015	0.001246271	0.0014	0.0012	0.0018	0.0040	0.0015	0.0014	0.0020	0.0016	0.0012	0.0010	0.0019	0.0011	0.0013	0.0012	0.0010	0.0009
28-Aug-08	0.0009	0.001503838	0.0016	0.0010	0.0011	0.0009	0.0011	0.0010	0.0011	0.0007	0.0013	0.0007	0.0013	0.0049	0.0009	0.0009	0.0010	0.0015
3-Sep-08	0.0009	0.0011	0.0015	0.0013	0.0011	0.0013	0.0014	0.0010	0.0014	0.0011	0.0108	0.0010	0.0013	0.0009	0.0011	0.0011	0.0009	0.0008
9-Sep-08	0.0014	0.000753106	0.0009	0.0011	0.0009	0.0010	0.0014	0.0010	0.0032	0.0010	0.0011	0.0014	0.0010	0.0010	0.0015	0.0007	0.0108	0.0016
15-Sep-08	0.0015	0.000883772	0.0007	0.0006	0.0006	0.0015	0.0019	0.0007	0.0006	0.0006	0.0006	0.0006	0.0011	0.0006	0.0011	0.0009	0.0006	0.0010
21-Sep-08	0.0002	*0.0006*	*0.0008*	0.0001	0.0001	0.0002	0.0002	*0.0006*	0.0001	*0.0006*	0.0001	*0.0006*	*0.0006*	0.0001	*0.0006*	0.0001	0.0001	0.0001
27-Sep-08	*0.0006*	*0.0006*	0.0009	*0.0006*	*0.0006*	*0.0006*	*0.0006*	0.0009	0.0017	0.0007	*0.0006*	*0.0006*	0.0008	0.0056	0.0010	*0.0006*	*0.0006*	0.0008
3-Oct-08	0.0095	0.0009	0.0007	0.0011	0.0006	*0.0006*	0.0006	0.0007	*0.0006*	*0.0006*	0.0007	0.0060	0.0007	*0.0006*	0.0010	**ND**	0.0007	0.0006
Arithmetic Mean	2.12E-03	1.53E-03	1.31E-03	1.58E-03	1.20E-03	1.55E-03	1.57E-03	1.41E-03	1.33E-02	2.67E-03	2.21E-03	2.11E-03	1.48E-03	1.86E-03	1.32E-03	9.87E-04	1.99E-03	1.43E-03
Geomertic Mean	1.44E-03	1.29E-03	1.22E-03	1.11E-03	9.00E-04	1.19E-03	1.28E-03	1.23E-03	3.20E-03	1.48E-03	1.27E-03	1.50E-03	1.33E-03	1.24E-03	1.25E-03	8.42E-04	9.89E-04	1.06E-03
95th Percentile	5.58E-03	3.36E-03	2.04E-03	3.79E-03	2.62E-03	3.56E-03	3.29E-03	2.76E-03	5.50E-02	1.01E-02	7.31E-03	6.35E-03	2.70E-03	5.18E-03	2.01E-03	1.49E-03	7.01E-03	3.30E-03
98th Percentile	7.93E-03	3.73E-03	2.26E-03	4.47E-03	3.20E-03	3.82E-03	3.44E-03	3.05E-03	7.38E-02	1.29E-02	9.43E-03	6.63E-03	2.77E-03	5.42E-03	2.09E-03	1.53E-03	9.31E-03	3.63E-03
Maximum	9.50E-03	3.98E-03	2.41E-03	4.92E-03	3.58E-03	3.99E-03	3.53E-03	3.24E-03	8.63E-02	1.48E-02	1.08E-02	6.82E-03	2.82E-03	5.58E-03	2.14E-03	1.55E-03	1.08E-02	3.84E-03
Minimum	1.84E-04	6.31E-04	7.38E-04	7.97E-05	7.83E-05	1.88E-04	2.42E-04	6.23E-04	7.61E-05	6.07E-04	7.95E-05	6.25E-04	6.33E-04	7.66E-05	6.22E-04	1.08E-04	7.77E-05	1.27E-04

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit

	Titanium																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.0055	0.0053	0.0064	0.0052	0.0160	0.0079	0.0064	0.0053	0.0391	0.0056	0.0087	0.0066	0.0076	0.0058	0.0059	0.0043	0.0075	0.0058
23-Jul-08	4.33E-03	4.23E-03	3.94E-03	3.64E-03	4.21E-03	4.46E-03	4.67E-03	3.83E-03	5.35E-02	4.19E-03	4.02E-03	4.61E-03	4.25E-03	4.07E-03	3.70E-03	ND	5.09E-03	5.01E-03
29-Jul-08	0.0089	0.0144	0.0051	0.0130	0.0271	0.0070	0.0043	0.0038	0.0569	0.0043	0.0099	0.0071	0.0037	0.0199	0.0040	0.0037	**ND**	**ND**
4-Aug-08	0.0079	0.0039	0.0055	**ND**	0.0203	0.0057	0.0054	0.0072	0.0514	0.0043	0.0200	0.0071	0.0083	0.0043	0.0043	0.0057	**ND**	0.0033
10-Aug-08	0.0033	0.0036	0.0019	0.0036	**ND**	**ND**	0.0016	0.0021	0.0248	0.0027	0.0073	0.0025	0.0029	0.0025	0.0036	0.0037	**ND**	**ND**
22-Aug-08	0.0037	0.0041	0.0038	0.0039	0.0059	0.0087	0.0038	0.0041	0.0038	0.0040	0.0042	0.0056	0.0047	0.0042	0.0042	0.0039	0.0042	0.0045
28-Aug-08	0.0040	0.0044	0.0041	0.0041	0.0044	0.0041	0.0042	0.0041	0.0039	0.0037	0.0040	0.0036	0.0038	0.0041	0.0031	0.0039	0.0037	0.0043
3-Sep-08	0.0050	0.0034	0.0048	0.0038	0.0104	0.0055	0.0044	0.0055	0.0041	0.0038	0.0095	0.0043	0.0061	0.0045	0.0037	0.0024	0.0097	0.0050
9-Sep-08	0.0062	0.0049	0.0055	0.0052	0.0072	0.0062	0.0049	0.0049	0.0059	0.0049	0.0055	0.0047	0.0054	0.0058	0.0057	0.0049	0.0077	0.0056
15-Sep-08	0.0044	0.0049	0.0075	0.0045	0.0060	0.0052	0.0056	0.0046	0.0052	0.0042	0.0067	0.0049	0.0052	0.0046	0.0058	0.0063	0.0073	0.0054
21-Sep-08	0.0048	0.0046	0.0070	0.0048	0.0058	0.0044	0.0050	0.0047	0.0051	0.0047	0.0053	0.0050	0.0062	0.0051	0.0046	0.0041	0.0073	0.0057
27-Sep-08	0.0050	0.0047	0.0053	0.0049	0.0054	0.0057	0.0048	0.0052	0.0052	0.0054	0.0053	0.0050	0.0053	0.0051	0.0056	0.0051	0.0060	0.0058
3-Oct-08	0.0062	0.0051	0.0057	0.0060	0.0055	0.0053	0.0055	0.0061	0.0050	0.0049	0.0058	0.0052	0.0057	0.0051	0.0052	**ND**	0.0070	0.0057
Arithmetic Mean	5.32E-03	5.19E-03	5.10E-03	5.23E-03	9.86E-03	5.85E-03	4.65E-03	4.72E-03	2.03E-02	4.36E-03	7.40E-03	5.09E-03	5.32E-03	5.76E-03	4.57E-03	4.37E-03	6.55E-03	5.10E-03
Geomertic Mean	5.11E-03	4.81E-03	4.85E-03	4.88E-03	8.05E-03	5.71E-03	4.46E-03	4.55E-03	1.11E-02	4.30E-03	6.64E-03	4.92E-03	5.12E-03	5.03E-03	4.48E-03	4.24E-03	6.31E-03	5.03E-03
95th Percentile	8.31E-03	8.97E-03	7.17E-03	9.13E-03	2.34E-02	8.26E-03	5.89E-03	6.53E-03	5.49E-02	5.52E-03	1.40E-02	7.08E-03	7.88E-03	1.15E-02	5.86E-03	6.01E-03	8.83E-03	5.84E-03
98th Percentile	8.65E-03	1.22E-02	7.34E-03	1.15E-02	2.56E-02	8.54E-03	6.18E-03	6.92E-03	5.61E-02	5.59E-03	1.76E-02	7.09E-03	8.11E-03	1.66E-02	5.90E-03	6.19E-03	9.37E-03	5.84E-03
Maximum	8.88E-03	1.44E-02	7.45E-03	1.30E-02	2.71E-02	8.73E-03	6.37E-03	7.17E-03	5.69E-02	5.64E-03	2.00E-02	7.10E-03	8.26E-03	1.99E-02	5.93E-03	6.31E-03	9.73E-03	5.85E-03
Minimum	3.32E-03	3.41E-03	1.87E-03	3.63E-03	4.21E-03	4.10E-03	1.60E-03	2.09E-03	3.78E-03	2.69E-03	4.02E-03	2.50E-03	2.94E-03	2.46E-03	3.08E-03	2.36E-03	3.72E-03	3.26E-03

	Vanadium																	
	Concentrations (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	*0.0006*	*0.0006*	0.0008	*0.0006*	0.0007	*0.0012*	*0.0006*	*0.0006*	*0.0056*	*0.0007*	*0.0006*	*0.0007*	*0.0007*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
23-Jul-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	*0.0006*	*0.0081*	*0.0006*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	**ND**	*0.0006*	*0.0006*
29-Jul-08	*0.0013*	*0.0018*	*0.0007*	*0.0018*	0.0015	*0.0006*	*0.0006*	*0.0006*	0.0092	*0.0006*	*0.0015*	*0.0012*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	**ND**	**ND**
4-Aug-08	*0.0008*	*0.0005*	*0.0006*	**ND**	0.0006	*0.0006*	*0.0006*	*0.0012*	*0.0092*	*0.0006*	0.0009	*0.0007*	0.0007	*0.0006*	*0.0006*	*0.0007*	**ND**	*0.0006*
10-Aug-08	*0.0006*	*0.0007*	*0.0004*	*0.0006*	**ND**	**ND**	*0.0006*	*0.0006*	*0.0069*	*0.0006*	*0.0006*	*0.0007*	*0.0006*	*0.0006*	*0.0006*	*0.0007*	**ND**	**ND**
22-Aug-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0009*	*0.0012*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
28-Aug-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
3-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
9-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
15-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
21-Sep-08	*0.0006*	*0.0006*	*0.0008*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
27-Sep-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*
3-Oct-08	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	*0.0006*	**ND**	*0.0006*	*0.0006*
Arithmetic Mean	6.84E-04	7.17E-04	6.36E-04	7.22E-04	7.33E-04	7.27E-04	6.30E-04	6.59E-04	3.38E-03	6.17E-04	7.10E-04	6.82E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04
Geomertic Mean	6.66E-04	6.77E-04	6.32E-04	6.84E-04	7.07E-04	7.00E-04	6.30E-04	6.48E-04	1.62E-03	6.17E-04	6.86E-04	6.71E-04	6.37E-04	6.20E-04	6.24E-04	6.29E-04	6.20E-04	6.22E-04
95th Percentile	1.00E-03	1.14E-03	7.78E-04	1.14E-03	1.17E-03	1.24E-03	6.42E-04	8.36E-04	9.20E-03	6.35E-04	1.11E-03	8.88E-04	6.65E-04	6.34E-04	6.50E-04	6.51E-04	6.25E-04	6.30E-04
98th Percentile	1.21E-03	1.56E-03	7.79E-04	1.51E-03	1.36E-03	1.24E-03	6.45E-04	1.03E-03	9.22E-03	6.47E-04	1.32E-03	1.06E-03	6.65E-04	6.40E-04	6.56E-04	6.52E-04	6.25E-04	6.31E-04
Maximum	1.35E-03	1.85E-03	7.80E-04	1.76E-03	1.48E-03	1.25E-03	6.47E-04	1.16E-03	9.23E-03	6.55E-04	1.46E-03	1.18E-03	6.66E-04	6.44E-04	6.59E-04	6.52E-04	6.25E-04	6.31E-04
Minimum	6.09E-04	5.30E-04	4.46E-04	6.21E-04	6.16E-04	6.15E-04	6.16E-04	6.11E-04	6.07E-04	6.07E-04	6.20E-04	6.16E-04	6.21E-04	6.11E-04	6.10E-04	6.15E-04	6.13E-04	5.85E-04

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit

	Zinc																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	0.0171	0.0199	0.0377	0.0137	0.0555	0.0271	0.0112	0.0171	0.1342	0.0144	0.0410	0.0083	0.0408	0.0322	0.0142	0.0129	0.0184	0.0136
23-Jul-08	0.0021	0.002549502	0.0048	0.0017	0.0073	0.0035	0.0014	0.0021	0.2175	0.0018	0.0051	0.0010	0.0054	0.0040	0.0017	**ND**	0.0023	0.0017
29-Jul-08	0.0754	0.0666	0.0091	0.0984	0.1012	0.0666	0.0400	0.0208	0.1539	0.0243	0.0262	0.0259	0.0224	0.0199	0.0132	0.0129	**ND**	**ND**
4-Aug-08	0.0202	0.0117	0.0178	**ND**	0.0927	0.0349	0.0116	0.0278	0.6796	0.0233	0.0802	0.0251	0.0306	0.0251	0.0253	0.0143	**ND**	0.0339
10-Aug-08	0.0111	0.0159	0.0196	0.0664	**ND**	**ND**	0.0394	0.0715	0.0963	0.0196	0.0188	0.0153	0.0090	0.0086	0.0201	0.0313	**ND**	**ND**
22-Aug-08	0.0049	0.003738814	0.0049	0.0037	0.0111	0.0150	0.0038	0.0061	0.0049	0.0073	0.0050	0.0037	0.0050	0.0061	0.0061	0.0037	0.0062	0.0099
28-Aug-08	0.0037	0.0088	0.0062	*0.0031*	0.0075	0.0037	0.0063	0.0037	0.0037	0.0061	0.0063	0.0037	0.0063	0.0049	0.0049	0.0037	0.0173	*0.0031*
3-Sep-08	0.0062	0.0050	0.0075	0.0101	0.0388	0.0125	0.0076	0.0050	0.0037	*0.0031*	0.0416	0.0051	0.0164	0.0074	0.0161	0.0037	0.0050	0.0038
9-Sep-08	0.0136	*0.0031*	*0.0031*	0.0038	0.0075	0.0050	0.0050	0.0099	0.0049	0.0037	0.0038	0.0062	0.0038	0.0074	0.0037	0.0037	0.0050	0.0088
15-Sep-08	*0.0031*	*0.0032*	0.0050	*0.0031*	0.0112	0.0050	0.0038	0.0149	*0.0031*	*0.0031*	*0.0031*	*0.0031*	*0.0031*	0.0062	*0.0031*	0.0037	*0.0031*	*0.0031*
21-Sep-08	*0.0031*	0.0089	*0.0039*	*0.0032*	0.0113	*0.0031*	0.0038	*0.0031*	*0.0031*	*0.0031*	0.0202	0.0088	0.0076	*0.0031*	*0.0031*	*0.0031*	0.0063	0.0063
27-Sep-08	*0.0031*	*0.0032*	*0.0031*	*0.0032*	0.0063	*0.0031*	*0.0032*	*0.0031*	*0.0031*	0.0037	*0.0032*	*0.0031*	*0.0032*	0.0050	0.0050	*0.0031*	0.0112	0.0035
3-Oct-08	0.0004	*0.0031*	*0.0031*	*0.0031*	*0.0031*	*0.0031*	*0.0031*	*0.0031*	*0.0030*	*0.0030*	*0.0031*	*0.0031*	*0.0031*	*0.0031*	0.0006	**ND**	*0.0031*	*0.0031*
Arithmetic Mean	1.26E-02	1.20E-02	9.68E-03	1.78E-02	2.94E-02	1.52E-02	1.08E-02	1.45E-02	1.01E-01	8.97E-03	1.98E-02	8.65E-03	1.20E-02	1.02E-02	9.01E-03	8.74E-03	7.78E-03	8.26E-03
Geomertic Mean	5.89E-03	6.95E-03	6.88E-03	6.59E-03	1.57E-02	8.35E-03	6.52E-03	8.18E-03	1.68E-02	6.08E-03	1.07E-02	5.87E-03	8.07E-03	7.56E-03	5.82E-03	6.18E-03	6.13E-03	5.61E-03
95th Percentile	4.23E-02	3.85E-02	2.69E-02	8.08E-02	9.65E-02	4.92E-02	3.97E-02	4.52E-02	4.02E-01	2.37E-02	5.70E-02	2.54E-02	3.47E-02	2.79E-02	2.22E-02	2.28E-02	1.79E-02	2.38E-02
98th Percentile	6.21E-02	5.54E-02	3.34E-02	9.14E-02	9.93E-02	5.96E-02	3.99E-02	6.10E-02	5.69E-01	2.41E-02	7.09E-02	2.57E-02	3.83E-02	3.05E-02	2.40E-02	2.79E-02	1.82E-02	2.98E-02
Maximum	7.54E-02	6.66E-02	3.77E-02	9.84E-02	1.01E-01	6.66E-02	4.00E-02	7.15E-02	6.80E-01	2.43E-02	8.02E-02	2.59E-02	4.08E-02	3.22E-02	2.53E-02	3.13E-02	1.84E-02	3.39E-02
Minimum	3.77E-04	2.55E-03	3.08E-03	1.72E-03	3.08E-03	3.08E-03	1.42E-03	2.12E-03	3.03E-03	1.78E-03	3.10E-03	1.03E-03	3.11E-03	3.06E-03	6.08E-04	3.10E-03	2.29E-03	1.71E-03

	Zirconium																	
	Concentration (µg/m3)																	
Sampling Date	**TL1 - TSP**	**TL1 - PM10**	**TL2 - TSP**	**TL2 - PM10**	**TL3 - TSP**	**TL3 - PM10**	**RC1 - TSP**	**RC1 - PM10**	**A1 - TSP**	**A1 - PM10**	**VG1 - TSP**	**VG1 - PM10**	**VG2 - TSP**	**VG2 - PM10**	**G1 - TSP**	**G1 - PM10**	**FA1 - TSP**	**FA1 - PM10**
17-Jul-08	*0.0061*	*0.0062*	*0.0065*	*0.0062*	*0.0062*	*0.0123*	*0.0062*	*0.0061*	*0.0559*	*0.0066*	*0.0062*	*0.0069*	*0.0066*	*0.0064*	*0.0064*	*0.0064*	*0.0061*	*0.0062*
23-Jul-08	*6.19E-03*	*6.41E-03*	*6.36E-03*	*6.28E-03*	*6.58E-03*	*6.37E-03*	*6.31E-03*	*6.18E-03*	*8.11E-02*	*6.17E-03*	*6.27E-03*	*6.24E-03*	*6.64E-03*	*6.16E-03*	*6.17E-03*	*ND*	*6.21E-03*	*6.26E-03*
29-Jul-08	*0.0135*	*0.0185*	*0.0065*	*0.0176*	*0.0062*	*0.0062*	*0.0063*	*0.0061*	*0.0769*	*0.0061*	*0.0146*	*0.0118*	*0.0062*	*0.0062*	*0.0066*	*0.0065*	**ND**	**ND**
4-Aug-08	*0.0078*	*0.0053*	*0.0063*	**ND**	*0.0064*	*0.0062*	*0.0065*	*0.0116*	*0.0918*	*0.0061*	*0.0063*	*0.0070*	*0.0067*	*0.0063*	*0.0063*	*0.0065*	**ND**	*0.0063*
10-Aug-08	*0.0061*	*0.0066*	*0.0045*	*0.0063*	**ND**	**ND**	*0.0062*	*0.0062*	*0.0688*	*0.0061*	*0.0063*	*0.0070*	*0.0064*	*0.0061*	*0.0063*	*0.0065*	**ND**	**ND**
22-Aug-08	*0.0061*	*0.0062*	*0.0062*	*0.0062*	*0.0092*	*0.0125*	*0.0063*	*0.0061*	*0.0061*	*0.0061*	*0.0062*	*0.0062*	*0.0062*	*0.0061*	*0.0061*	*0.0062*	*0.0062*	*0.0062*
28-Aug-08	*0.0062*	*0.0063*	*0.0062*	*0.0063*	*0.0062*	*0.0062*	*0.0063*	*0.0062*	*0.0061*	*0.0061*	*0.0063*	*0.0062*	*0.0063*	*0.0062*	*0.0062*	*0.0062*	*0.0062*	*0.0063*
3-Sep-08	*0.0062*	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0062*	*0.0062*	*0.0062*	*0.0063*	*0.0063*	*0.0063*	*0.0062*	*0.0062*	*0.0062*	*0.0062*	*0.0063*
9-Sep-08	*0.0062*	*0.0063*	*0.0062*	*0.0101*	*0.0062*	*0.0062*	*0.0063*	*0.0062*	*0.0062*	*0.0061*	*0.0063*	*0.0062*	*0.0063*	*0.0062*	*0.0062*	*0.0062*	*0.0062*	*0.0063*
15-Sep-08	*0.0062*	*0.0063*	*0.0062*	*0.0063*	*0.0062*	*0.0062*	*0.0063*	*0.0062*	*0.0061*	*0.0062*	*0.0063*	*0.0062*	*0.0063*	*0.0062*	*0.0062*	*0.0062*	*0.0062*	*0.0063*
21-Sep-08	*0.0062*	*0.0063*	*0.0078*	*0.0063*	*0.0063*	*0.0063*	*0.0064*	*0.0062*	*0.0062*	*0.0062*	*0.0063*	*0.0063*	*0.0063*	*0.0062*	*0.0062*	*0.0062*	*0.0063*	*0.0063*
27-Sep-08	*0.0062*	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0062*	*0.0062*	*0.0062*	*0.0063*	*0.0063*	*0.0063*	*0.0062*	*0.0062*	*0.0062*	*0.0062*	*0.0058*
3-Oct-08	*0.0061*	*0.0062*	*0.0062*	*0.0062*	*0.0062*	*0.0062*	*0.0062*	*0.0061*	*0.0061*	*0.0061*	*0.0062*	*0.0062*	*0.0062*	*0.0061*	*0.0061*	**ND**	*0.0061*	*0.0062*
Arithmetic Mean	6.84E-03	7.17E-03	6.26E-03	7.53E-03	6.51E-03	7.27E-03	6.30E-03	6.59E-03	3.26E-02	6.17E-03	6.91E-03	6.82E-03	6.37E-03	6.20E-03	6.24E-03	6.29E-03	6.20E-03	6.22E-03
Geomertic Mean	6.66E-03	6.77E-03	6.23E-03	7.11E-03	6.47E-03	7.00E-03	6.30E-03	6.48E-03	1.60E-02	6.17E-03	6.69E-03	6.71E-03	6.37E-03	6.20E-03	6.24E-03	6.29E-03	6.20E-03	6.22E-03
95th Percentile	1.00E-02	1.14E-02	7.01E-03	1.34E-02	7.77E-03	1.24E-02	6.42E-03	8.36E-03	8.54E-02	6.35E-03	9.62E-03	8.88E-03	6.65E-03	6.34E-03	6.50E-03	6.51E-03	6.25E-03	6.30E-03
98th Percentile	1.21E-02	1.56E-02	7.46E-03	1.59E-02	8.64E-03	1.24E-02	6.45E-03	1.03E-02	8.92E-02	6.47E-03	1.26E-02	1.06E-02	6.65E-03	6.40E-03	6.56E-03	6.52E-03	6.25E-03	6.31E-03
Maximum	1.35E-02	1.85E-02	7.76E-03	1.76E-02	9.22E-03	1.25E-02	6.47E-03	1.16E-02	9.18E-02	6.55E-03	1.46E-02	1.18E-02	6.66E-03	6.44E-03	6.59E-03	6.52E-03	6.25E-03	6.31E-03
Minimum	6.09E-03	5.30E-03	4.46E-03	6.21E-03	6.16E-03	6.15E-03	6.16E-03	6.11E-03	6.07E-03	6.07E-03	6.20E-03	6.16E-03	6.21E-03	6.11E-03	6.10E-03	6.15E-03	6.13E-03	5.85E-03

Notes:

ND = No data

Concentrations in italics were calculated at the method detection limit