

Table 17: Number of Valid Measurements for the Target Species by Type

	Regular Sample	Duplicate	Trip + Field Blanks	% Duplicate ^a	% Trip + Field Blanks ^b	% Valid Regular Sample
Aldehydes						
Valid	201	26	18	13%	9% ^c	91%
Invalid	19	2	0			
Elements						
Valid	199	22	8	11%	4%	93%
Invalid	16	5	11			
Hexavalent Chromium						
Valid	201	25	13	12%	6%	92%
Invalid	18	9	6			
EC						
Valid	202	9	13	4%	6%	92%
Invalid	18	3	6			
OC						
Valid	203	9	13	4%	6% ^c	92%
Invalid	17	3	6			
PAHs						
Valid	197	10	12	5%	6%	89%
Invalid	25	0	8			
PM₁₀						
Valid	205	22	13	11%	6%	92%
Invalid	18	5	6			
VOC						
Valid	206	24	0	12%	0	92%
Invalid	14	1	0			

^aObtained from the number of valid duplicate samples divided by the number of valid regular samples.

^bObtained from the number of valid trip (~1-2%) and field blank samples (3-4%) divided by the number of valid regular samples.

^cAll field blanks.

Table 18: Number of Valid Regular Samples for the Target Species break-down by Location, Season, Weekday and Weekend^a

	Spring		Summer		Fall		Winter	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
Aldehydes								
Background	8	3	11	4	11	4	6	3
Commercial	8	3	11	4	12	4	6	3
Industrial	8	2	11	4	12	4	6	3
Mobile	7	3	11	4	12	4	6	3
Elements								
Background	6	4	11	4	13	4	8	3
Commercial	6	4	10	4	13	4	8	3
Industrial	6	3	11	3	13	4	6	3
Mobile	6	3	5	3	13	4	8	3
Hexavalent Chromium								
Background	8	4	11	4	12	4	8	3
Commercial	6	4	10	4	13	4	8	3
Industrial	7	3	11	3	13	3	6	3
Mobile	7	3	5	3	13	4	8	3
EC								
Background	8	4	11	4	12	4	8	3
Commercial	8	4	10	4	12	4	8	3
Industrial	8	3	11	3	12	3	6	3
Mobile	8	3	5	3	12	4	8	3
OC								
Background	8	4	11	4	12	4	8	3
Commercial	8	4	10	4	12	4	8	3
Industrial	8	3	11	3	13	3	6	3
Mobile	8	3	5	3	12	4	8	3
PAHs								
Background	8	4	10	4	12	4	8	4
Commercial	7	4	9	4	11	4	8	3
Industrial	8	3	11	3	11	4	6	3
Mobile	8	2	5	3	11	3	8	4
PM₁₀								
Background	7	4	11	4	13	4	8	4
Commercial	7	4	10	4	13	4	8	3
Industrial	7	3	11	3	13	4	6	3
Mobile	7	3	5	3	13	4	8	4

Table 18: Continued

	Spring		Summer		Fall		Winter	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
VOC								
Background	9	5	10	4	15	6	12	5
Commercial	7	1	10	3	12	4	6	2
Industrial	7	3	11	2	11	4	5	2
Mobile	7	4	9	4	12	4	7	3
^a The number of samples does not include either duplicate or field blank samples.								

Table 19. Method Detection Limits ($\mu\text{g}/\text{m}^3$ for aldehydes, EC/OC, VOCs, PM_{10} and ng/m^3 for Elements, Hexavalent Chromium & PAHs)

	MDL		%Detected ^a	%ND ^b
Aldehydes	11/18/2005-02/22/2006	02/22/2006-12/19/2006		
Acetaldehyde	0.21	0.14	76.12	23.88
Acrolein	0.28	0.23	84.10	15.92
Formaldehyde	0.20	0.27	96.52	3.48
Propionaldehyde	0.17	0.55	86.57	13.43
Elements				
Aluminum	12.2		99.5	0.50
Antimony	17.6		10.05	89.95
Arsenic	0.8		88.94	11.06
Barium	4.4		44.22	55.78
Bromine	0.7		100.00	0.00
Cadmium	7.3		25.63	74.37
Calcium	2.1		100.00	0.00
Cerium	3.0		28.65	71.35
Cesium	15.3		0.00	100.00
Chlorine	2.3		94.98	5.02
Chromium	0.9		45.23	54.77
Cobalt	0.5		6.03	93.97
Copper	0.6		100.00	0.00
Europium	2.0		0.00	100.00
Gallium	1.1		56.28	43.72
Gold	2.2		17.59	82.41
Hafnium	1.7		32.16	67.84
Indium	9.8		13.07	86.93
Iridium	3.2		21.61	78.39
Iron	0.6		100.00	0.00

Table 19: Continued

	MDL	%Detected ^a	%ND ^b
Lanthanum	3.4	29.65	70.35
Lead	2.2	97.99	2.01
Magnesium	5.1	91.96	8.04
Manganese	0.7	100.00	0.00
Mercury	3.8	22.61	77.39
Molybdenum	4.1	0.00	100.00
Nickel	0.4	94.98	5.02
Niobium	2.0	26.63	73.37
Phosphorus	5.1	45.73	54.27
Potassium	1.7	100.00	0.00
Rubidium	0.7	60.80	39.20
Samarium	2.0	16.08	83.92
Scandium	16.6	0.00	100.00
Selenium	0.8	85.93	14.07
Silicon	5.8	100.00	0.00
Silver	6.2	13.07	86.93
Sodium	18.7	95.48	4352
Strontium	0.9	93.97	6.03
Sulfur	3.1	100.00	0.00
Tantalum	4.4	13.06	86.94
Terbium	1.5	45.23	54.77
Tin	13.1	44.23	55.77
Titanium	1.4	85.93	14.07
Vanadium	1.2	97.49	2.51
Wolfram	3.0	31.66	68.34
Yttrium	1.1	57.79	42.21
Zinc	0.7	100.00	0.00
Zirconium	1.9	82.92	17.08
Hexavalent Chromium	0.16	86.07	13.93
EC	0.16	99.5	0.49
OC	0.16	100	0
PAHs			
Acenaphthene	1.43	89.34	10.66
Acenaphthylene	0.18	94.92	5.08
Anthracene	0.33	89.34	10.66
Benzo(a)anthracene	0.01	83.25	16.75
Benzo(a)pyrene	0.01	52.79	47.21
Benzo(b)fluoranthene	0.02	77.67	22.33
Benzo(ghi)perylene	0.02	31.48	68.52

Table 19: Continued

	MDL		%Detected ^a	%ND ^b
Benzo(k)fluoranthene	0.02		75.13	24.87
Chrysene	0.01		86.80	13.20
Dibenzo(a,h)anthracene	0.02		60.41	39.59
Fluoranthene	0.21		97.97	2.03
Fluorene	0.57		99.49	.051
Indeno(1,2,3,-cd)pyrene	0.02		46.19	53.81
Naphthalene	2.95		95.94	4.06
Phenanthrene	0.43		98.48	1.52
Pyrene	0.17		96.45	3.55
PM10	N/A		99.3	0.49
VOC	mdl2005	mdl2006		
1,1,1-Trichloroethane	0.11	0.02	100	0
1,1,2,2-Tetrachloroethane	0.28	0.09	0	100
1,1,2-Trichloroethane	0.11	0.03	0	100
1,1-Dichloroethane	0.08	0.02	0	100
1,1-Dichloroethene	0.16	0.06	0	100
1,2,4-Trichlorobenzene	1.04	0.11	1.94	94.17
1,2,4-Trimethylbenzene	0.3	0.01	88.83	8.74
1,2-Dibromoethane	0.23	0.14	0	100
1,2-Dichloroethane	0.12	0.06	0	98.54
1,2-Dichloropropane	0.14	0.15	0	99.51
1,3,5-Trimethylbenzene	0.15	0.02	85	12.62
1,3-Butadiene	0.11	0.01	84	13.59
Acetonitrile	0.05	0.17	52.91	43.69
Acetylene	0.04	0.02	99.51	0.49
Acrolein	0.07	0.25	76.21	19.42
Acrylonitrile	0.09	0.12	1.46	98.06
Benzene	0.06	0.02	100	0
Bromochloromethane	0.11	0.1	0	100
Bromodichloromethane	0.2	0.05	0	100
Bromoform	0.21	0.18	0	100
Bromomethane	0.19	0.04	84.47	8.25
Carbon Disulfide	n/a	0.03	65.05	27.67
Carbon Tetrachloride	0.25	0.06	100	0
Chlorobenzene	0.09	0.02	3.88	95.15
Chloroethane	0.13	0.02	59.71	34.47
Chloroform	0.15	0.02	76.7	21.84
Chloromethane	0.12	0.03	100	0
Chloromethylbenzene	0.16	0.03	0.49	99.51
Chloroprene	0.11	0.08	0	99.51

Table 19: Continued

	MDL		%Detected ^a	%ND ^b
cis-1,2-Dichloroethylene	0.08	0.06	0.97	99.03
cis-1,3-Dichloropropene	0.09	0.06	0	100
Dibromochloromethane	0.17	0.09	1.94	98.06
Dichlorodifluoromethane	0.05	0.02	100	0
Dichloromethane	0.14	0.06	98.06	1.46
Dichlorotetrafluoroethane	0.07	0.02	100	0
Ethyl Acrylate	0.2	0.05	0	100
Ethyl tert-Butyl Ether	0.17	0.03	0	100
Ethylbenzene	0.09	0.02	100	0
Hexachloro-1,3-butadiene	3.53	0.14	0.97	92.72
m-Dichlorobenzene	0.24	0.02	4.37	95.14
Methyl Ethyl Ketone	0.09	0.13	91.26	8.25
Methyl Isobutyl Ketone	0.2	0.03	78.64	20.87
Methyl Methacrylate	0.16	0.02	0.49	99.51
Methyl tert-Butyl Ether	0.22	0.01	67.96	13.1
m,p-Xylene	0.13	0.04	100	0
n-Octane	0.14	0.03	84.95	13.1
o-Dichlorobenzene	0.36	0.03	3.4	93.69
o-Xylene	0.13	0.02	98.54	0.97
p-Dichlorobenzene	0.36	0.04	77.19	20.87
Propylene	0.07	0.02	100	0
Styrene	0.13	0.04	83.98	13.59
tert-Amyl Methyl Ether	0.21	0.05	67.96	99.51
Tetrachloroethylene	0.14	0.07	84.47	13.59
Toluene	0.08	0.02	100	0
trans-1,2-Dichloroethylene	0.16	0.07	0	100
trans-1,3-Dichloropropene	0.18	0.04	0	100
Trichloroethylene	0.22	0.05	42.72	53.4
Trichlorofluoromethane	0.11	0.04	100	0
Trichlorotrifluoroethane	0.23	0.09	100	0
Vinyl chloride	0.1	0.02	13.59	84.47
^a Percentage of regular field samples with blank subtracted concentrations that were quantifiable (>0).				
^b Percentage of regular field samples with blank subtracted concentrations equal or lower than 0.				

Table 20: Measurement Precision^a

	N	%Difference ^b
Aldehydes		
Acetaldehyde	17	54.0
Acrolein	10	13.2
Formaldehyde	22	30.0
Propionaldehyde	9	50.1
Elements		
Aluminum	20	18.2
Antimony	0	N/A
Arsenic	10	33.6
Barium	10	20.7
Bromine	19	25.6
Cadmium	0	N/A
Calcium	21	8.3
Cerium	8	24.7
Cesium	0	N/A
Chlorine	19	15.4
Chromium	3	47.9
Cobalt	0	N/A
Copper	21	18.6
Europium	0	N/A
Gallium	0	N/A
Gold	0	N/A
Hafnium	2	54.1
Indium	0	N/A
Iridium	0	N/A
Iron	21	9.2
Lanthanum	7	17.4
Lead	14	31.6
Magnesium	18	14.1
Manganese	20	15.0
Mercury	0	N/A
Molybdenum	0	N/A
Nickel	13	23.5
Niobium	0	N/A
Phosphorus	5	25.2
Potassium	21	8.9
Rubidium	1	10.9
Samarium	1	21.7
Scandium	0	N/A
Selenium	10	32.8

Table 20: Continued

Elements		N	%Difference^b
	Silicon	22	13.5
	Silver	0	N/A
	Sodium	18	20.7
	Strontium	12	21.4
	Sulfur	21	6.1
	Tantalum	0	N/A
	Terbium	7	22.9
	Tin	0	N/A
	Titanium	19	24.2
	Vanadium	19	10.7
	Wolfram	0	N/A
	Yttrium	0	N/A
	Zinc	21	11.9
	Zirconium	8	18.6
Hexavalent Chromium		13	23.0
EC		7	14.7
OC		7	3.7
PAHs			
	Naphthalene	4	32.9
	Acenaphthylene	6	23.1
	Acenaphthene	5	28.9
	Fluorene	7	27.7
	Anthracene	5	19.6
	Phenanthrene	8	25.0
	Fluoranthene	9	25.7
	Pyrene	7	28.5
	Benzo(a)anthracene	8	28.5
	Chrysene	7	29.2
	Benzo(a)pyrene	5	31.7
	Benzo(b)fluoranthene	3	66.5
	Benzo(k)fluoranthene	2	NA
	Benzo(ghi)perylene	0	NA
	Indeno(1,2,3,-cd)pyrene	3	20.9
	Dibenzo(a,h)anthracene	6	31.1
PM10		21	7.8
Volatile Organic Compounds			
	1,1,1-Trichloroethane	23	8.94
	1,2,4-Trimethylbenzene	20	13.32
	1,3,5-Trimethylbenzene	17	13.86
	1,3-Butadiene	19	16.66

Table 20: Continued

Volatile Organic Compounds		N	%Difference ^b
	Acetonitrile	8	44.91
	Acetylene	23	11.62
	Acrolein	11	54.86
	Benzene	24	13.81
	Bromomethane	3	8.60
	Carbon Disulfide	13	36.80
	Carbon Tetrachloride	24	25.42
	Chloroethane	7	18.25
	Chloroform	15	11.98
	Chloromethane	24	5.99
	Dichlorodifluoromethane	24	9.19
	Dichloromethane	23	13.74
	Dichlorotetrafluoroethane	24	2.78
	Ethylbenzene	24	15.53
	Methyl Ethyl Ketone	23	44.91
	Methyl Isobutyl Ketone	17	40.48
	Methyl tert-Butyl Ether	15	16.07
	Propylene	24	15.98
	Styrene	13	7.73
	Tetrachloroethylene	19	11.17
	Toluene	24	17.86
	Trichloroethylene	4	25.47
	Trichlorofluoromethane	24	9.38
	Trichlorotrifluoroethane	24	9.96
	Vinyl chloride	1	0.00
	m,p-Xylene	24	20.39
	n-Octane	18	16.82
	o-Xylene	22	14.33
	p-Dichlorobenzene	16	9.72
^a Values are the average of %difference between regular field sample and duplicate measurement. N is the total number of pairs.			
^b %Difference was obtained after exclusion of outliers, which are greater than 3 times of the standard deviation of the %differences for all duplicate analysis.			

APPENDIX II: Tables 21-27: Statistics

Table 21: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Aldehydes, units are $\mu\text{g}/\text{m}^3$.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Acetaldehyde ¹													
Background	50	7.74	8.39	4.52	ND	ND	1.54	13.23	19.61	39.18	80	NS	N/A
Commercial	51	7.49	8.93	4.80	ND	ND	0.54	12.87	16.73	47.09	76		
Industrial	50	7.23	8.14	5.25	ND	ND	ND	10.31	18.85	38.15	74		
Mobile	50	9.70	22.51	4.60	ND	ND	ND	10.73	17.24	157.09	74		
Background	50	7.74	8.39	4.52	ND	ND	1.54	13.23	19.61	39.18	80	NS	N/A
Paterson	151	8.14	14.66	4.80	ND	ND	ND	11.46	17.65	157.09	75		
Background													
Spring	11	8.46	8.76	3.79	ND	ND	1.11	14.32	22.93	23.53	82	NS	N/A
Summer	15	6.88	8.32	2.85	ND	ND	ND	17.26	20.39	22.82	67		
Fall	15	8.46	10.31	4.78	ND	ND	2.06	14.81	18.82	39.18	87		
Winter	9	7.09	4.97	8.19	ND	ND	2.93	10.23	14.85	14.85	89		
Weekday	36	8.20	8.68	4.70	ND	ND	2.17	14.57	18.82	39.18	81	NS	N/A
Weekend	14	6.56	7.76	4.11	ND	ND	0.88	8.19	22.82	23.53	79		
Paterson													
Spring	31	8.44	8.94	5.22	ND	ND	ND	14.28	22.88	25.04	71	NS	N/A
Summer	45	6.12	7.33	2.67	ND	ND	ND	10.73	16.86	24.97	67		
Fall	48	11.00	23.60	5.01	ND	ND	1.39	11.31	17.65	157.09	81		
Winter	27	6.03	4.87	5.67	ND	ND	1.02	9.84	14.12	14.45	81		
Weekday	110	8.83	16.60	5.01	ND	ND	ND	11.85	18.14	157.09	74	NS	N/A
Weekend	41	6.26	7.10	3.92	ND	ND	0.52	9.84	14.28	24.97	78		
Acetaldehyde ²													
Background	50	7.77	8.36	4.52	ND	ND	1.54	13.23	19.61	39.18	80	NS	N/A
Commercial	51	7.53	8.90	4.80	ND	ND	0.54	12.87	16.73	47.09	76		
Industrial	50	7.27	8.11	5.25	ND	ND	ND	10.31	18.85	38.15	74		
Mobile	50	9.73	22.50	4.60	ND	ND	ND	10.73	17.24	157.09	74		
Background	50	7.77	8.36	4.52	ND	ND	1.54	13.23	19.61	39.18	80	NS	N/A
Paterson	151	8.17	14.64	4.80	ND	ND	ND	11.46	17.65	157.09	75		
Background													
Spring	11	8.48	8.73	3.79	ND	ND	1.11	14.32	22.93	23.53	82	NS	N/A
Summer	15	6.93	8.27	2.85	ND	ND	ND	17.26	20.39	22.82	67		
Fall	15	8.48	10.29	4.78	ND	ND	2.06	14.81	18.82	39.18	87		
Winter	9	7.11	4.95	8.19	ND	ND	2.93	10.23	14.85	14.85	89		
Weekday	36	8.22	8.66	4.70	ND	ND	2.17	14.57	18.82	39.18	81	NS	N/A
Weekend	14	6.59	7.73	4.11	ND	ND	ND	8.19	22.82	23.53	79		
Paterson													
Spring	31	8.49	8.90	5.22	ND	ND	ND	14.28	22.88	25.04	71	NS	N/A
Summer	45	6.17	7.29	2.67	ND	ND	ND	10.73	16.86	24.97	67		
Fall	48	11.03	23.59	5.01	ND	ND	1.39	11.31	17.65	157.09	81		
Winter	27	6.06	4.83	5.67	ND	ND	1.02	9.84	14.12	14.45	81		
Weekday	110	8.87	16.58	5.01	ND	ND	ND	11.85	18.14	157.09	74	NS	N/A
Weekend	41	6.29	7.08	3.92	ND	ND	0.52	9.84	14.28	24.97	78		

Table 21: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Aldehydes, units are $\mu\text{g}/\text{m}^3$.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Acrolein ¹													
Background	50	0.28	0.39	0.13	ND	ND	0.03	0.29	0.77	1.88	80	NS	N/A
Commercial	51	0.30	0.27	0.23	ND	ND	0.08	0.46	0.63	1.11	84		
Industrial	50	0.37	0.60	0.16	ND	ND	0.05	0.39	0.93	3.38	84		
Mobile	50	0.35	0.40	0.26	ND	ND	0.11	0.46	0.72	2.23	88		
Background	50	0.28	0.39	0.13	ND	ND	0.03	0.29	0.77	1.88	80	NS	N/A
Paterson	151	0.34	0.44	0.23	ND	ND	0.08	0.45	0.66	3.38	85		
Background													
Spring	11	0.19	0.31	0.11	ND	ND	ND	0.24	0.24	1.08	64	NS	N/A
Summer	15	0.41	0.42	0.25	ND	ND	0.06	0.75	1.09	1.31	87		
Fall	15	0.22	0.20	0.13	0.01	0.03	0.08	0.38	0.48	0.76	100		
Winter	9	0.28	0.61	0.09	ND	ND	ND	0.20	1.88	1.88	56		
Weekday	36	0.32	0.43	0.13	ND	ND	0.02	0.40	1.08	1.88	81	NS	N/A
Weekend	14	0.17	0.19	0.15	ND	ND	0.09	0.20	0.24	0.78	79		
Paterson													
Spring	31	0.25	0.24	0.16	ND	ND	0.06	0.42	0.60	0.82	77	0.0232	A B
Summer	45	0.40	0.42	0.32	ND	0.04	0.13	0.45	1.04	2.23	93		A
Fall	48	0.39	0.54	0.25	ND	0.02	0.08	0.49	0.82	3.38	92		A B
Winter	27	0.26	0.47	0.12	ND	ND	0.00	0.27	0.49	2.33	70		B
Weekday	110	0.38	0.46	0.28	ND	ND	0.11	0.49	0.82	3.38	87	0.0103	N/A
Weekend	41	0.24	0.38	0.15	ND	ND	0.04	0.28	0.46	2.33	80		
Acrolein ²													
Background	50	0.33	0.36	0.23	ND	ND	0.12	0.29	0.77	1.88	80	NS	N/A
Commercial	51	0.34	0.24	0.28	ND	ND	0.13	0.46	0.63	1.11	84		
Industrial	50	0.41	0.59	0.23	ND	ND	0.15	0.39	0.93	3.38	84		
Mobile	50	0.38	0.39	0.27	ND	ND	0.20	0.46	0.72	2.23	88		
Background	50	0.33	0.36	0.23	ND	ND	0.12	0.29	0.77	1.88	80	NS	N/A
Paterson	151	0.38	0.43	0.25	ND	ND	0.16	0.45	0.66	3.38	85		
Background													
Spring	11	0.28	0.27	0.23	ND	ND	ND	0.24	0.24	1.08	64	NS	N/A
Summer	15	0.44	0.39	0.25	ND	ND	0.20	0.75	1.09	1.31	87		
Fall	15	0.22	0.20	0.13	0.01	0.03	0.08	0.38	0.48	0.76	100		
Winter	9	0.39	0.56	0.23	ND	ND	ND	0.23	1.88	1.88	56		
Weekday	36	0.37	0.41	0.23	ND	ND	0.12	0.40	1.08	1.88	81	NS	N/A
Weekend	14	0.22	0.17	0.20	ND	ND	0.13	0.23	0.24	0.78	79		
Paterson													
Spring	31	0.30	0.20	0.23	ND	ND	0.15	0.42	0.60	0.82	77	NS	N/A
Summer	45	0.42	0.41	0.32	ND	0.11	0.19	0.45	1.04	2.23	93		
Fall	48	0.41	0.53	0.25	ND	0.05	0.15	0.49	0.82	3.38	92		
Winter	27	0.34	0.45	0.23	ND	ND	ND	0.28	0.49	2.33	70		
Weekday	110	0.41	0.44	0.28	ND	ND	0.16	0.49	0.82	3.38	87	0.0193	N/A
Weekend	41	0.28	0.36	0.23	ND	ND	0.11	0.28	0.46	2.33	80		

Table 21: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Aldehydes, units are $\mu\text{g}/\text{m}^3$.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Formaldehyde													
Background	50	10.94	7.35	10.82	ND	0.75	5.36	16.01	20.61	27.26	96	NS	N/A
Commercial	51	11.26	7.67	11.34	ND	1.50	4.93	16.39	19.81	30.73	94		
Industrial	50	10.70	6.71	10.80	ND	2.29	5.72	13.21	20.04	29.55	98		
Mobile	50	9.94	6.52	8.89	ND	2.99	4.42	14.13	20.64	24.14	98		
Background	50	10.94	7.35	10.82	ND	0.75	5.36	16.01	20.61	27.26	96	NS	N/A
Paterson	151	10.63	6.96	9.82	ND	2.31	4.86	14.76	20.02	30.73	97		
Background													
Spring	11	10.96	7.96	8.59	ND	0.76	3.59	19.70	20.66	22.20	91	NS	N/A
Summer	15	9.55	8.21	6.92	0.19	0.53	1.23	16.01	17.91	27.26	100		
Fall	15	13.73	6.10	13.50	2.27	7.34	10.35	15.75	23.23	26.89	100		
Winter	9	8.61	6.61	7.25	ND	ND	4.68	10.91	20.57	20.57	89		
Weekday	36	11.43	7.83	10.91	ND	0.76	5.02	17.00	22.20	27.26	97	NS	N/A
Weekend	14	9.69	6.00	10.54	ND	0.53	6.06	12.68	16.51	20.66	93		
Paterson													
Spring	31	10.98	8.82	8.22	0.99	2.43	4.42	15.63	24.68	30.73	100	NS	N/A
Summer	45	10.42	7.77	11.32	ND	ND	3.39	16.39	20.06	26.06	89		
Fall	48	11.39	5.74	10.99	1.50	3.31	7.48	14.43	19.84	24.18	100		
Winter	27	9.27	5.00	7.68	3.43	4.72	5.49	11.41	18.79	21.69	100		
Weekday	110	10.84	7.10	10.38	ND	2.02	5.00	15.54	20.04	30.73	96	NS	N/A
Weekend	41	10.09	6.63	9.44	ND	3.31	4.72	13.22	19.29	30.01	98		
Propionaldehyde													
Background	50	1.11	1.65	0.73	ND	ND	0.39	1.21	1.84	11.55	84	NS	N/A
Commercial	51	1.42	4.00	0.54	ND	0.16	0.28	1.07	1.99	28.05	92		
Industrial	50	0.86	0.94	0.53	ND	ND	0.28	1.07	1.69	5.78	84		
Mobile	50	0.96	1.41	0.66	ND	ND	0.28	1.09	1.60	9.64	86		
Background	50	1.11	1.65	0.73	ND	ND	0.39	1.21	1.84	11.55	84	NS	N/A
Paterson	151	1.08	2.52	0.55	ND	ND	0.28	1.07	1.73	28.05	87		
Background													
Spring	11	1.82	3.29	0.79	ND	ND	0.28	1.76	1.84	11.55	64	NS	N/A
Summer	15	0.95	0.84	0.71	ND	ND	0.28	1.46	1.83	3.27	87		
Fall	15	0.74	0.36	0.68	0.07	0.45	0.56	0.91	1.13	1.66	100		
Winter	9	1.09	0.80	1.00	ND	ND	0.51	1.41	2.51	2.51	78		
Weekday	36	0.92	0.75	0.72	ND	ND	0.28	1.33	1.84	3.27	78	NS	N/A
Weekend	14	1.59	2.89	0.80	0.39	0.46	0.56	1.01	1.68	11.55	100		
Paterson													
Spring	31	1.42	1.94	0.70	ND	ND	ND	1.99	2.46	9.64	71	NS	N/A
Summer	45	1.58	4.24	0.65	ND	0.28	0.40	1.11	1.73	28.05	93		
Fall	48	0.62	0.42	0.53	ND	0.16	0.36	0.85	1.09	2.47	98		
Winter	27	0.70	0.62	0.51	ND	ND	0.28	0.88	1.49	2.46	78		
Weekday	110	1.18	2.93	0.52	ND	ND	0.28	1.07	2.25	28.05	83	NS	N/A
Weekend	41	0.82	0.48	0.69	0.16	0.33	0.47	1.12	1.45	2.11	100		

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Aluminum													
Background	53	105.76	109.78	64.50	0.05	6.82	38.28	156.34	182.54	579.23	100	0.0015	A
Commercial	52	193.90	158.66	171.20	8.87	29.75	83.73	236.15	436.72	686.12	100		B
Industrial	49	175.99	146.07	156.07	ND	24.97	78.10	217.92	384.69	648.24	98		B
Mobile	45	162.51	147.95	131.93	2.77	33.94	83.55	174.42	379.15	680.45	100		A B
Background	53	105.76	109.78	64.50	0.05	6.82	38.28	156.34	182.54	579.23	100	0.0003	N/A
Paterson	146	178.22	150.75	150.04	ND	25.57	81.91	216.99	398.18	686.12	99		
Background													
Spring	10	124.32	142.09	92.58	0.05	0.81	30.89	177.32	348.31	468.99	100	NS	N/A
Summer	15	135.61	143.47	125.93	11.07	16.79	22.17	164.21	253.35	579.23	100		
Fall	17	86.46	78.07	55.09	2.10	2.41	42.50	127.48	181.00	292.72	100		
Winter	11	78.01	52.64	60.84	6.82	38.28	41.43	113.30	160.53	176.21	100		
Weekday	38	119.88	121.44	84.71	2.10	11.07	42.50	164.21	253.35	579.23	100	NS	N/A
Weekend	15	69.98	62.29	56.14	0.05	1.57	17.31	125.93	160.53	177.32	100		
Paterson													
Spring	28	203.19	203.91	116.05	1.67	8.87	66.97	266.14	558.99	607.91	100	NS	N/A
Summer	36	197.16	179.60	154.48	9.94	24.97	60.80	244.65	436.72	686.12	100		
Fall	51	136.17	90.48	112.35	ND	25.57	68.13	208.13	262.14	398.18	98		
Winter	31	202.83	128.47	174.42	33.94	85.57	125.76	215.52	420.73	488.86	100		
Weekday	105	204.59	162.23	156.07	19.30	56.18	89.74	246.08	486.67	686.12	100	0.0013	N/A
Weekend	41	110.67	86.34	106.11	ND	8.87	25.57	181.60	216.99	271.89	98		
Antimony													
Background	53	N/A	N/A	ND	ND	ND	ND	ND	ND	12.59	8	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	ND	ND	20.87	10		
Industrial	49	N/A	N/A	ND	ND	ND	ND	ND	3.12	14.58	10		
Mobile	45	N/A	N/A	ND	ND	ND	ND	ND	6.28	24.55	13		
Background	53	N/A	N/A	ND	ND	ND	ND	ND	ND	12.59	8	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	ND	3.12	24.55	11		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	ND	ND	12.59	10	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Fall	17	N/A	N/A	ND	ND	ND	ND	ND	1.57	3.15	12		
Winter	11	N/A	N/A	ND	ND	ND	ND	ND	ND	6.29	9		
Weekday	38	N/A	N/A	ND	ND	ND	ND	ND	ND	12.59	11	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	ND	9.89	13.06	11	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Fall	51	N/A	N/A	ND	ND	ND	ND	ND	ND	20.87	8		
Winter	31	N/A	N/A	ND	ND	ND	ND	3.12	10.97	24.55	29		
Weekday	105	N/A	N/A	ND	ND	ND	ND	ND	3.12	24.55	10	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	ND	1.04	18.28	12		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Arsenic													
Background	53	0.99	0.70	0.86	ND	0.23	0.41	1.47	1.82	3.30	92	NS	N/A
Commercial	52	1.39	1.33	0.90	ND	ND	0.41	1.67	3.59	5.63	87		
Industrial	49	1.59	1.82	1.07	ND	ND	0.41	2.49	3.16	11.55	88		
Mobile	45	1.31	1.08	1.08	ND	ND	0.43	1.63	3.27	4.70	89		
Background	53	0.99	0.70	0.86	ND	0.23	0.41	1.47	1.82	3.30	92	NS	N/A
Paterson	146	1.43	1.44	0.95	ND	ND	0.41	1.93	3.37	11.55	88		
Background													
Spring	10	0.79	0.49	0.72	ND	ND	0.36	1.35	1.50	1.53	90	NS	N/A
Summer	15	1.02	0.70	0.86	ND	ND	0.41	1.59	2.01	2.25	80		
Fall	17	1.00	0.72	0.98	0.12	0.14	0.34	1.57	2.05	2.46	100		
Winter	11	1.12	0.87	0.87	0.22	0.39	0.59	1.58	1.73	3.30	100		
Weekday	38	0.86	0.59	0.72	ND	0.16	0.36	1.39	1.60	2.25	97	NS	N/A
Weekend	15	1.31	0.86	1.35	ND	ND	0.41	1.82	2.46	3.30	80		
Paterson													
Spring	28	1.25	1.11	0.90	ND	0.30	0.41	1.61	3.59	4.01	93	NS	N/A
Summer	36	1.31	1.20	1.02	ND	ND	ND	1.94	2.84	5.63	69		
Fall	51	1.17	0.89	0.83	ND	0.28	0.46	1.72	2.55	3.73	94		
Winter	31	2.18	2.29	1.43	ND	0.15	0.48	3.38	4.11	11.55	94		
Weekday	105	1.38	1.50	0.92	ND	0.21	0.41	1.86	3.12	11.55	90	NS	N/A
Weekend	41	1.56	1.29	1.43	ND	ND	0.41	2.26	3.38	5.15	80		
Barium													
Background	53	N/A	N/A	ND	ND	ND	ND	ND	19.20	144.53	21	N/A	N/A
Commercial	52	N/A	N/A	12.31	ND	ND	ND	73.78	147.89	290.11	58		
Industrial	49	N/A	N/A	2.50	ND	ND	ND	56.34	118.54	190.54	51		
Mobile	45	N/A	N/A	ND	ND	ND	ND	34.68	93.90	197.84	49		
Background	53	N/A	N/A	ND	ND	ND	ND	ND	19.20	144.53	21	N/A	N/A
Paterson	146	N/A	N/A	3.19	ND	ND	ND	56.34	118.54	290.11	53		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	ND	78.43	144.53	20	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	19.20	45.07	66.52	47		
Fall	17	N/A	N/A	ND	ND	ND	ND	ND	12.96	71.50	12		
Winter	11	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	38	N/A	N/A	ND	ND	ND	ND	ND	26.38	144.53	24	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	ND	12.33	71.50	13		
Paterson													
Spring	28	N/A	N/A	18.71	ND	ND	ND	74.36	190.54	219.94	71	N/A	N/A
Summer	36	N/A	N/A	52.78	ND	ND	3.19	88.81	111.51	147.89	81		
Fall	51	N/A	N/A	ND	ND	ND	ND	31.41	73.27	166.78	41		
Winter	31	N/A	N/A	ND	ND	ND	ND	ND	166.05	290.11	23		
Weekday	105	N/A	N/A	10.04	ND	ND	ND	65.75	118.58	290.11	58	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	31.89	64.49	166.78	39		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Bromine													
Background	53	2.98	1.86	2.79	0.46	0.83	1.35	4.34	5.61	7.56	100	0.0385	NS
Commercial	52	4.58	3.60	3.70	0.21	1.11	2.34	5.62	9.51	16.50	100		
Industrial	49	4.73	3.78	3.61	0.41	0.91	2.09	5.80	10.86	16.73	100		
Mobile	45	4.59	3.41	3.58	0.77	1.36	2.42	4.99	9.37	15.43	100		
Background	53	2.98	1.86	2.79	0.46	0.83	1.35	4.34	5.61	7.56	100	0.0031	N/A
Paterson	146	4.63	3.58	3.60	0.21	1.11	2.37	5.80	9.51	16.73	100		
Background													
Spring	10	2.45	1.36	2.46	0.46	0.57	1.58	3.24	4.41	4.48	100	NS	N/A
Summer	15	2.95	1.63	2.89	0.80	1.13	1.35	4.43	5.17	5.75	100		
Fall	17	3.39	2.16	3.80	0.64	0.77	1.27	5.11	6.54	6.79	100		
Winter	11	2.88	2.14	2.16	0.83	0.88	0.92	4.12	5.61	7.56	100		
Weekday	38	2.91	1.76	2.49	0.77	0.84	1.35	4.34	5.61	6.79	100	NS	N/A
Weekend	15	3.17	2.14	2.88	0.46	0.64	1.28	4.43	6.54	7.56	100		
Paterson													
Spring	28	3.23	2.45	2.75	0.41	0.77	1.72	3.60	8.87	9.60	100	0.0005	A
Summer	36	3.80	1.62	3.70	0.87	1.67	2.63	4.80	6.18	7.43	100		A
Fall	51	4.26	3.31	3.45	0.21	1.02	1.61	5.85	9.02	15.19	100		A
Winter	31	7.47	4.90	6.29	0.93	2.65	3.46	11.11	15.43	16.73	100		
Weekday	105	4.48	3.48	3.45	0.21	1.23	2.41	5.18	9.42	16.73	100	NS	N/A
Weekend	41	5.01	3.84	4.48	0.41	0.91	1.36	7.43	9.51	16.00	100		
Cadmium													
Background	53	N/A	N/A	ND	ND	ND	ND	ND	3.53	8.25	23	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	ND	0.90	6.80	15		
Industrial	49	N/A	N/A	ND	ND	ND	ND	0.90	5.00	6.88	35		
Mobile	45	N/A	N/A	ND	ND	ND	ND	0.22	3.26	3.67	31		
Background	53	N/A	N/A	ND	ND	ND	ND	ND	3.53	8.25	23	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	0.12	3.26	6.88	27		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	3.53	5.07	6.10	30	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	ND	ND	2.01	7		
Fall	17	N/A	N/A	ND	ND	ND	ND	0.59	3.53	5.94	29		
Winter	11	N/A	N/A	ND	ND	ND	ND	3.05	7.46	8.25	27		
Weekday	38	N/A	N/A	ND	ND	ND	ND	ND	3.53	8.25	18	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	2.01	4.05	5.94	33		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	ND	2.52	5.95	25	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	ND	1.47	3.47	11		
Fall	51	N/A	N/A	ND	ND	ND	ND	ND	3.56	6.80	24		
Winter	31	N/A	N/A	0.06	ND	ND	ND	1.21	3.67	6.88	52		
Weekday	105	N/A	N/A	ND	ND	ND	ND	0.12	3.26	6.80	27	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	0.06	2.84	6.88	27		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Calcium													
Background	53	131.38	104.60	108.02	3.91	22.90	56.92	191.20	270.66	552.85	100	<0.0001	
Commercial	52	285.58	234.08	219.21	27.22	89.55	136.38	328.21	544.69	1290.35	100		A
Industrial	49	262.52	191.02	201.16	2.16	70.56	129.53	328.11	600.85	778.48	100		A
Mobile	45	249.31	174.40	192.48	34.03	74.95	138.30	299.43	502.64	746.06	100		A
Background	53	131.38	104.60	108.02	3.91	22.90	56.92	191.20	270.66	552.85	100	<0.0001	N/A
Paterson	146	266.66	202.01	203.83	2.16	75.50	136.35	327.26	571.88	1290.35	100		
Background													
Spring	10	141.85	165.74	88.32	3.91	10.70	46.92	171.05	419.18	552.85	100	NS	N/A
Summer	15	117.92	82.10	121.28	9.11	22.90	37.44	203.91	218.32	238.02	100		
Fall	17	143.96	106.85	95.77	9.89	43.36	73.07	235.38	293.70	370.89	100		
Winter	11	120.80	60.72	129.01	9.89	56.92	70.67	178.69	199.37	202.88	100		
Weekday	38	141.47	102.90	118.65	9.89	40.48	73.07	202.88	270.66	552.85	100	NS	N/A
Weekend	15	105.83	108.06	67.24	3.91	9.11	17.49	171.05	272.95	370.89	100		
Paterson													
Spring	28	268.43	253.75	159.69	2.16	39.66	89.46	310.11	679.76	843.43	100	NS	N/A
Summer	36	227.05	118.06	213.03	44.43	75.50	134.37	308.34	400.24	476.25	100		
Fall	51	245.21	162.95	192.48	8.35	103.17	136.35	299.43	502.64	712.93	100		
Winter	31	346.36	263.71	259.99	81.65	119.92	179.45	361.77	746.06	1290.35	100		
Weekday	105	296.46	212.88	211.11	74.95	119.92	150.67	348.65	670.09	1290.35	100	0.0037	N/A
Weekend	41	190.34	147.65	181.20	2.16	34.03	61.14	271.05	361.77	571.88	100		
Cerium													
Background	53	N/A	N/A	ND	ND	ND	ND	ND	10.18	150.77	13	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	40.68	114.56	380.65	37		
Industrial	49	N/A	N/A	ND	ND	ND	ND	33.51	90.63	206.89	37		
Mobile	45	N/A	N/A	ND	ND	ND	ND	5.43	97.57	199.41	29		
Background	53	N/A	N/A	ND	ND	ND	ND	ND	10.18	150.77	13	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	32.68	97.57	380.65	34		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	ND	25.39	150.77	10	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	10.18	19.05	24.03	27		
Fall	17	N/A	N/A	ND	ND	ND	ND	ND	2.57	75.22	12		
Winter	11	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	38	N/A	N/A	ND	ND	ND	ND	ND	10.81	150.77	16	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	ND	ND	75.22	7		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	49.60	199.41	208.41	39	N/A	N/A
Summer	36	N/A	N/A	25.99	ND	ND	ND	53.33	83.10	114.56	56		
Fall	51	N/A	N/A	ND	ND	ND	ND	ND	39.53	159.55	24		
Winter	31	N/A	N/A	ND	ND	ND	ND	ND	145.14	380.65	23		
Weekday	105	N/A	N/A	ND	ND	ND	ND	39.53	114.56	380.65	38	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	ND	37.76	159.55	24		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Chlorine													
Background	53	80.24	163.99	33.06	ND	ND	14.27	69.23	226.65	1051.12	87	<0.0001	
Commercial	52	380.39	667.03	71.57	0.68	16.44	33.84	479.80	1007.71	4014.88	100		A
Industrial	49	323.47	539.28	69.15	ND	7.80	20.13	413.95	969.93	2941.48	94		A
Mobile	45	413.35	704.65	114.15	0.10	22.50	42.44	525.34	1073.18	4122.43	100		A
Background	53	80.24	163.99	33.06	ND	ND	14.27	69.23	226.65	1051.12	87	<0.0001	N/A
Paterson	146	371.45	636.23	80.41	ND	12.12	33.59	500.96	1018.82	4122.43	98		
Background													
Spring	10	29.87	30.70	29.61	ND	ND	ND	42.07	76.03	96.16	70	NS	N/A
Summer	15	43.20	33.83	43.34	ND	ND	6.35	58.35	94.63	108.68	87		
Fall	17	99.78	250.90	28.70	ND	0.84	14.27	62.64	226.65	1051.12	94		
Winter	11	146.36	163.17	69.23	ND	19.52	21.50	246.24	363.14	484.64	91		
Weekday	38	95.74	190.73	33.89	ND	ND	14.27	73.70	246.24	1051.12	89	NS	N/A
Weekend	15	40.99	37.98	33.06	ND	ND	1.16	69.23	106.18	108.68	80		
Paterson													
Spring	28	122.43	148.91	45.74	ND	1.67	10.19	216.66	396.61	420.98	96	<0.0001	A
Summer	36	260.01	360.22	68.68	11.60	16.44	33.03	426.67	931.07	1018.82	100		A
Fall	51	296.85	460.47	71.98	ND	20.13	33.49	222.67	1026.45	1605.69	96		A
Winter	31	848.49	1055.63	500.96	7.80	52.94	212.44	1073.18	1534.65	4122.43	100		
Weekday	105	390.01	696.60	89.93	7.80	17.85	33.59	501.28	1026.45	4122.43	100	NS	N/A
Weekend	41	323.91	449.99	68.20	ND	1.16	33.78	464.63	1007.71	1534.65	93		
Chromium													
Background	53	N/A	N/A	ND	ND	ND	ND	0.91	1.59	2.93	47	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	1.79	2.85	4.98	42		
Industrial	49	N/A	N/A	ND	ND	ND	ND	1.61	2.79	9.35	49		
Mobile	45	N/A	N/A	ND	ND	ND	ND	1.10	1.92	5.52	42		
Background	53	N/A	N/A	ND	ND	ND	ND	0.91	1.59	2.93	47	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	1.58	2.38	9.35	45		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	0.23	1.14	1.53	40	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	1.09	1.71	2.93	47		
Fall	17	N/A	N/A	0.47	ND	ND	ND	0.88	1.25	1.63	53		
Winter	11	N/A	N/A	ND	ND	ND	ND	1.53	1.73	2.59	45		
Weekday	38	N/A	N/A	ND	ND	ND	ND	0.88	1.71	2.93	47	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	1.25	1.59	1.63	47		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	0.38	0.89	1.42	29	N/A	N/A
Summer	36	N/A	N/A	0.51	ND	ND	ND	1.78	2.39	3.90	56		
Fall	51	N/A	N/A	ND	ND	ND	ND	0.79	1.86	4.46	33		
Winter	31	N/A	N/A	1.79	ND	ND	ND	2.85	4.93	9.35	65		
Weekday	105	N/A	N/A	ND	ND	ND	ND	1.58	2.34	9.35	44	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	1.58	2.38	4.93	46		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Cobalt													
Background	53	N/A	N/A	ND	ND	ND	ND	ND	0.06	0.57	13	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	ND	ND	0.13	2		
Industrial	49	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	4		
Mobile	45	N/A	N/A	ND	ND	ND	ND	ND	ND	0.05	4		
Background	53	N/A	N/A	ND	ND	ND	ND	ND	0.06	0.57	13	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	3		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	ND	0.11	0.22	20	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	ND	0.06	0.39	13		
Fall	17	N/A	N/A	ND	ND	ND	ND	ND	ND	0.57	6		
Winter	11	N/A	N/A	ND	ND	ND	ND	ND	0.17	0.49	18		
Weekday	38	N/A	N/A	ND	ND	ND	ND	ND	0.17	0.49	13	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	ND	0.00	0.57	13		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	7	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	ND	ND	0.01	3		
Fall	51	N/A	N/A	ND	ND	ND	ND	ND	ND	0.01	2		
Winter	31	N/A	N/A	ND	ND	ND	ND	ND	ND	0.13	3		
Weekday	105	N/A	N/A	ND	ND	ND	ND	ND	ND	0.13	3	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	5		
Copper													
Background	53	3.35	2.85	2.62	0.46	0.86	1.54	4.39	6.24	16.17	100	<0.0001	
Commercial	52	18.02	12.83	13.13	2.65	7.12	9.86	23.02	35.63	67.84	100		B
Industrial	49	12.35	11.26	8.81	0.20	2.18	5.58	14.12	27.00	55.97	100		A
Mobile	45	13.40	12.05	10.36	2.05	3.22	6.16	15.27	28.26	67.65	100		A B
Background	53	3.35	2.85	2.62	0.46	0.86	1.54	4.39	6.24	16.17	100	<0.0001	N/A
Paterson	146	14.69	12.26	11.00	0.20	3.92	7.12	18.31	28.58	67.84	100		
Background													
Spring	10	2.71	2.12	1.98	0.57	0.68	1.08	4.33	6.17	6.35	100	NS	N/A
Summer	15	3.76	3.84	2.92	0.52	0.87	1.54	4.39	6.24	16.17	100		
Fall	17	3.49	2.69	3.22	0.55	0.98	1.71	4.72	5.19	11.98	100		
Winter	11	3.16	2.32	2.29	0.46	0.86	1.27	4.80	6.52	7.54	100		
Weekday	38	3.63	3.10	2.67	0.46	0.87	1.71	4.80	6.35	16.17	100	NS	N/A
Weekend	15	2.64	2.03	1.73	0.52	0.57	1.24	4.22	4.88	7.54	100		
Paterson													
Spring	28	10.25	8.55	8.20	1.51	2.19	4.52	12.06	28.26	37.02	100	0.0012	A
Summer	36	12.69	7.84	11.20	1.89	3.48	7.99	15.86	26.62	30.84	100		A B
Fall	51	13.55	10.29	11.26	0.20	4.26	6.41	17.97	25.50	52.11	100		A
Winter	31	22.92	17.81	15.91	6.04	6.70	9.81	28.58	51.03	67.84	100		B
Weekday	105	15.01	12.37	11.15	3.22	4.55	7.83	17.97	28.58	67.84	100	NS	N/A
Weekend	41	13.87	12.10	10.85	0.20	2.05	5.58	20.51	27.89	51.03	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Gallium ¹													
Background	53	0.26	0.32	0.14	ND	ND	ND	0.44	0.68	1.17	62	NS	N/A
Commercial	52	0.32	0.35	0.23	ND	ND	ND	0.56	0.76	1.29	62		
Industrial	49	0.18	0.31	0.01	ND	ND	ND	0.20	0.86	1.24	51		
Mobile	45	N/A	N/A	ND	ND	ND	ND	0.48	0.83	1.69	49		
Background	53	0.26	0.32	0.14	ND	ND	ND	0.44	0.68	1.17	62	NS	N/A
Paterson	146	0.26	0.36	0.08	ND	ND	ND	0.43	0.82	1.69	54		
Background													
Spring	10	0.22	0.28	0.05	ND	ND	ND	0.50	0.62	0.68	60	NS	N/A
Summer	15	0.27	0.35	0.01	ND	ND	ND	0.50	0.97	0.99	53		
Fall	17	0.27	0.35	0.23	ND	ND	ND	0.37	1.02	1.17	65		
Winter	11	0.26	0.28	0.15	ND	ND	ND	0.56	0.56	0.84	73		
Weekday	38	0.25	0.32	0.12	ND	ND	ND	0.50	0.57	1.17	58	NS	N/A
Weekend	15	0.27	0.32	0.20	ND	ND	ND	0.42	0.84	0.99	73		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	0.33	0.69	1.02	46	NS	N/A
Summer	36	0.26	0.32	0.15	ND	ND	ND	0.42	0.76	1.08	61		
Fall	51	0.29	0.37	0.13	ND	ND	ND	0.44	0.83	1.29	59		
Winter	31	N/A	N/A	ND	ND	ND	ND	0.54	0.86	1.69	45		
Weekday	105	0.26	0.37	0.07	ND	ND	ND	0.44	0.83	1.69	53	NS	N/A
Weekend	41	0.25	0.34	0.11	ND	ND	ND	0.42	0.70	1.24	56		
Gallium ²													
Background	53	0.67	0.41	0.57	ND	ND	ND	1.08	1.08	1.17	62	NS	N/A
Commercial	52	0.73	0.37	0.73	ND	ND	ND	1.08	1.08	1.29	62		
Industrial	49	0.71	0.45	1.08	ND	ND	ND	1.08	1.08	1.24	51		
Mobile	45	N/A	N/A	ND	ND	ND	ND	1.08	1.08	1.69	49		
Background	53	0.67	0.41	0.57	ND	ND	ND	1.08	1.08	1.17	62	NS	N/A
Paterson	146	0.75	0.41	1.08	ND	ND	ND	1.08	1.08	1.69	54		
Background													
Spring	10	0.65	0.42	0.62	ND	ND	ND	1.08	1.08	1.08	60	NS	N/A
Summer	15	0.77	0.39	0.99	ND	ND	ND	1.08	1.08	1.08	53		
Fall	17	0.66	0.43	0.50	ND	ND	ND	1.08	1.08	1.17	65		
Winter	11	0.55	0.41	0.56	ND	ND	ND	1.08	1.08	1.08	73		
Weekday	38	0.71	0.40	0.77	ND	ND	ND	1.08	1.08	1.17	58	NS	N/A
Weekend	15	0.56	0.43	0.42	ND	ND	ND	1.08	1.08	1.08	73		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	1.08	1.08	1.08	46	NS	N/A
Summer	36	0.68	0.40	0.73	ND	ND	ND	1.08	1.08	1.08	61		
Fall	51	0.73	0.41	0.87	ND	ND	ND	1.08	1.08	1.29	59		
Winter	31	N/A	N/A	ND	ND	ND	ND	1.08	1.08	1.69	45		
Weekday	105	0.77	0.41	1.08	ND	ND	ND	1.08	1.08	1.69	53	NS	N/A
Weekend	41	0.73	0.40	0.95	ND	ND	ND	1.08	1.08	1.24	56		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Gold													
Background	53	N/A	N/A	ND	ND	ND	ND	ND	0.42	1.05	23	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	ND	0.58	1.41	12		
Industrial	49	N/A	N/A	ND	ND	ND	ND	ND	0.42	1.62	16		
Mobile	45	N/A	N/A	ND	ND	ND	ND	ND	0.84	3.30	20		
Background	53	N/A	N/A	ND	ND	ND	ND	ND	0.42	1.05	23	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	ND	0.68	3.30	16		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	ND	0.66	0.90	20	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	ND	0.32	0.53	20		
Fall	17	N/A	N/A	ND	ND	ND	ND	0.37	0.58	1.05	29		
Winter	11	N/A	N/A	ND	ND	ND	ND	ND	0.06	0.21	18		
Weekday	38	N/A	N/A	ND	ND	ND	ND	ND	0.48	1.05	21	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	0.06	0.42	0.90	27		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	ND	0.84	1.62	21	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	ND	0.79	2.36	19		
Fall	51	N/A	N/A	ND	ND	ND	ND	ND	0.58	3.30	16		
Winter	31	N/A	N/A	ND	ND	ND	ND	ND	ND	0.84	6		
Weekday	105	N/A	N/A	ND	ND	ND	ND	ND	0.68	3.30	15	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	ND	0.42	1.63	17		
Hafnium													
Background	53	N/A	N/A	ND	ND	ND	ND	ND	0.58	2.94	17	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	1.41	2.61	7.88	38		
Industrial	49	N/A	N/A	ND	ND	ND	ND	0.89	3.64	8.33	39		
Mobile	45	N/A	N/A	ND	ND	ND	ND	1.41	2.04	6.63	36		
Background	53	N/A	N/A	ND	ND	ND	ND	ND	0.58	2.94	17	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	1.25	2.50	8.33	38		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	10	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	ND	ND	0.89	7		
Fall	17	N/A	N/A	ND	ND	ND	ND	ND	0.58	1.10	12		
Winter	11	N/A	N/A	ND	ND	ND	ND	0.68	0.94	2.94	45		
Weekday	38	N/A	N/A	ND	ND	ND	ND	ND	0.68	2.94	18	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	ND	0.10	1.10	13		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	ND	4.44	6.31	18	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	ND	0.62	1.88	19		
Fall	51	N/A	N/A	ND	ND	ND	ND	0.83	1.51	2.61	29		
Winter	31	N/A	N/A	1.93	ND	0.52	1.10	3.39	6.61	8.33	90		
Weekday	105	N/A	N/A	ND	ND	ND	ND	0.99	2.40	8.33	37	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	1.25	2.87	4.48	39		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Indium													
Background	53	N/A	N/A	ND	ND	ND	ND	ND	ND	8.38	8	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	ND	ND	5.83	10		
Industrial	49	N/A	N/A	ND	ND	ND	ND	ND	2.58	9.72	18		
Mobile	45	N/A	N/A	ND	ND	ND	ND	ND	3.23	8.13	18		
Background	53	N/A	N/A	ND	ND	ND	ND	ND	ND	8.38	8	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	ND	2.06	9.72	15		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	ND	ND	7.80	7		
Fall	17	N/A	N/A	ND	ND	ND	ND	ND	2.87	3.24	12		
Winter	11	N/A	N/A	ND	ND	ND	ND	ND	ND	8.38	9		
Weekday	38	N/A	N/A	ND	ND	ND	ND	ND	ND	8.38	8	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	ND	ND	7.80	7		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	ND	ND	0.45	4	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	ND	0.61	4.26	14		
Fall	51	N/A	N/A	ND	ND	ND	ND	ND	3.10	5.83	16		
Winter	31	N/A	N/A	ND	ND	ND	ND	0.45	7.19	9.72	26		
Weekday	105	N/A	N/A	ND	ND	ND	ND	ND	0.61	7.30	12	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	ND	5.03	9.72	22		
Iridium													
Background	53	N/A	N/A	ND	ND	ND	ND	ND	1.03	3.55	19	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	ND	0.14	3.95	15		
Industrial	49	N/A	N/A	ND	ND	ND	ND	0.66	1.86	3.10	29		
Mobile	45	N/A	N/A	ND	ND	ND	ND	ND	1.08	3.38	24		
Background	53	N/A	N/A	ND	ND	ND	ND	ND	1.03	3.55	19	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	ND	1.13	3.95	23		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	ND	1.56	1.87	20	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	0.30	2.55	3.55	33		
Fall	17	N/A	N/A	ND	ND	ND	ND	ND	ND	0.51	6		
Winter	11	N/A	N/A	ND	ND	ND	ND	ND	1.03	1.71	18		
Weekday	38	N/A	N/A	ND	ND	ND	ND	0.09	1.71	3.55	26	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	ND	1.60	3.95	21	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	ND	0.97	1.86	19		
Fall	51	N/A	N/A	ND	ND	ND	ND	0.40	1.76	3.10	29		
Winter	31	N/A	N/A	ND	ND	ND	ND	ND	0.09	3.38	16		
Weekday	105	N/A	N/A	ND	ND	ND	ND	ND	1.03	3.10	20	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	0.40	1.60	3.95	29		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Iron													
Background	53	137.15	108.24	105.03	11.32	35.88	49.64	201.77	256.87	458.66	100	<0.0001	
Commercial	52	520.92	344.37	426.57	81.85	163.83	324.88	643.88	924.82	1792.30	100		A
Industrial	49	395.65	301.61	278.23	8.78	99.30	227.63	478.22	819.17	1497.27	100		A
Mobile	45	387.73	291.19	290.36	52.60	144.67	223.73	436.70	751.35	1572.79	100		A
Background	53	137.15	108.24	105.03	11.32	35.88	49.64	201.77	256.87	458.66	100	<0.0001	N/A
Paterson	146	437.83	318.45	355.87	8.78	152.32	235.88	547.88	845.05	1792.30	100		
Background													
Spring	10	137.19	133.89	96.64	11.32	14.63	39.89	194.33	348.15	439.43	100	NS	N/A
Summer	15	154.02	114.99	139.52	27.21	39.69	49.64	203.96	323.24	423.53	100		
Fall	17	138.83	109.35	110.30	20.66	35.88	57.68	206.30	244.98	458.66	100		
Winter	11	111.54	77.44	92.19	18.19	44.38	57.03	141.18	216.47	283.91	100		
Weekday	38	153.58	115.11	109.21	18.19	40.27	66.76	206.30	323.24	458.66	100	NS	N/A
Weekend	15	95.54	76.90	64.34	11.32	17.94	27.21	157.74	216.47	230.04	100		
Paterson													
Spring	28	391.89	351.64	268.82	10.30	66.97	158.24	482.49	1079.08	1391.28	100	0.0094	B
Summer	36	386.59	211.43	362.82	55.90	120.13	233.13	477.00	726.86	845.05	100		A B
Fall	51	388.67	256.14	355.83	8.78	163.01	232.47	478.22	727.25	1415.45	100		A
Winter	31	619.69	417.08	504.51	157.58	262.74	283.59	819.17	1057.70	1792.30	100		
Weekday	105	475.54	334.18	356.65	114.12	191.10	243.71	580.44	912.59	1792.30	100	0.0353	N/A
Weekend	41	341.24	252.91	347.04	8.78	55.90	120.13	497.52	641.06	1000.01	100		
Lanthanum													
Background	53	N/A	N/A	ND	ND	ND	ND	ND	2.83	255.80	13	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	71.39	194.47	638.95	38		
Industrial	49	N/A	N/A	ND	ND	ND	ND	62.06	161.01	345.21	39		
Mobile	45	N/A	N/A	ND	ND	ND	ND	6.37	164.67	339.99	29		
Background	53	N/A	N/A	ND	ND	ND	ND	ND	2.83	255.80	13	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	61.27	164.67	638.95	36		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	ND	77.90	255.80	10	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	1.89	42.24	46.27	27		
Fall	17	N/A	N/A	ND	ND	ND	ND	ND	2.83	124.95	12		
Winter	11	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	38	N/A	N/A	ND	ND	ND	ND	ND	18.52	255.80	16	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	ND	ND	124.95	7		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	88.09	342.52	354.12	39	N/A	N/A
Summer	36	N/A	N/A	51.09	ND	ND	ND	88.81	147.42	194.47	56		
Fall	51	N/A	N/A	ND	ND	ND	ND	ND	72.59	267.21	24		
Winter	31	N/A	N/A	ND	ND	ND	ND	6.37	268.51	638.95	29		
Weekday	105	N/A	N/A	ND	ND	ND	ND	72.59	194.47	638.95	37	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	6.37	61.61	267.21	32		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Lead													
Background	53	2.95	2.76	2.41	ND	0.78	1.26	3.56	5.56	16.16	96	<0.0001	
Commercial	52	6.58	5.43	4.72	0.78	1.88	2.97	7.59	15.44	25.25	100		A
Industrial	49	6.48	5.67	4.11	ND	1.19	2.39	9.51	17.42	21.19	98		A
Mobile	45	5.61	5.23	4.18	ND	0.83	1.78	7.01	12.92	20.78	98		A
Background	53	2.95	2.76	2.41	ND	0.78	1.26	3.56	5.56	16.16	96	<0.0001	N/A
Paterson	146	6.25	5.43	4.45	ND	1.20	2.39	7.56	14.78	25.25	99		
Background													
Spring	10	2.34	1.41	2.15	ND	ND	1.10	3.56	4.22	4.51	90	NS	N/A
Summer	15	2.85	2.89	1.78	ND	0.84	1.15	2.57	8.02	10.59	93		
Fall	17	2.91	1.68	2.99	0.31	0.78	1.52	4.25	5.56	5.77	100		
Winter	11	3.70	4.53	2.57	0.31	1.05	1.20	3.35	7.23	16.16	100		
Weekday	38	2.92	2.19	2.52	ND	0.84	1.36	3.56	5.77	10.59	95	NS	N/A
Weekend	15	3.02	3.93	1.78	0.10	0.42	1.05	4.25	4.93	16.16	100		
Paterson													
Spring	28	5.05	6.32	3.02	ND	0.78	1.53	4.88	20.26	25.25	93	0.0007	A
Summer	36	5.59	4.55	4.36	0.36	1.36	2.47	6.70	12.59	18.42	100		A
Fall	51	5.16	3.81	3.90	0.26	1.41	2.34	6.89	11.96	15.44	100		A
Winter	31	9.90	6.37	8.56	1.20	2.50	4.38	14.78	19.64	21.80	100		
Weekday	105	6.14	5.27	4.27	ND	1.67	2.86	7.10	12.92	25.25	99	NS	N/A
Weekend	41	6.53	5.88	5.06	ND	0.78	1.78	11.24	16.33	20.78	98		
Magnesium													
Background	53	35.77	34.31	29.16	ND	ND	9.08	47.90	71.70	144.34	87	<0.0001	
Commercial	52	76.74	51.95	60.05	ND	18.42	40.85	105.84	161.59	184.98	96		A
Industrial	49	69.65	46.89	58.83	ND	6.56	38.19	96.96	153.19	172.32	92		A
Mobile	45	70.53	51.04	61.21	ND	14.08	29.51	98.98	167.70	181.08	93		A
Background	53	35.77	34.31	29.16	ND	ND	9.08	47.90	71.70	144.34	87	<0.0001	N/A
Paterson	146	72.45	49.78	60.02	ND	14.08	35.82	99.33	153.89	184.98	94		
Background													
Spring	10	35.11	44.93	15.03	ND	ND	ND	58.13	106.85	142.01	70	NS	N/A
Summer	15	40.55	33.24	33.20	ND	2.57	16.48	62.94	76.96	130.27	93		
Fall	17	38.21	37.99	34.35	ND	ND	ND	48.16	102.87	144.34	82		
Winter	11	26.08	17.38	28.21	ND	5.09	8.18	34.52	42.64	60.63	100		
Weekday	38	39.83	37.66	32.50	ND	ND	10.23	51.78	102.87	144.34	89	NS	N/A
Weekend	15	25.46	21.57	27.00	ND	ND	2.57	38.76	58.13	67.95	80		
Paterson													
Spring	28	61.18	64.04	35.59	ND	ND	ND	98.88	172.32	184.98	82	0.015	NS
Summer	36	83.41	37.92	85.23	22.30	38.03	50.70	107.10	127.84	167.70	100		
Fall	51	66.41	49.48	49.35	ND	14.08	28.42	93.10	139.93	181.45	92		
Winter	31	79.82	46.34	62.24	24.44	37.88	47.83	105.17	153.19	182.83	100		
Weekday	105	79.44	51.62	62.24	4.33	23.14	38.19	107.63	169.55	184.98	100	0.019	N/A
Weekend	41	54.54	39.96	48.17	ND	ND	4.91	92.61	105.17	127.84	78		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Manganese													
Background	53	3.92	2.59	3.38	0.27	1.17	1.72	5.17	7.41	12.37	100	0.001	
Commercial	52	7.78	5.69	6.35	0.73	1.96	4.06	9.67	14.22	28.09	100		A
Industrial	49	6.99	4.71	5.59	0.14	1.82	3.75	9.17	14.47	22.03	100		A
Mobile	45	6.47	4.60	5.46	0.63	2.51	3.59	7.74	12.32	21.89	100		A
Background	53	3.92	2.59	3.38	0.27	1.17	1.72	5.17	7.41	12.37	100	<0.0001	N/A
Paterson	146	7.11	5.04	5.80	0.14	1.96	3.75	9.16	14.17	28.09	100		
Background													
Spring	10	4.15	3.55	3.36	0.56	0.69	1.25	4.86	9.89	12.37	100	NS	N/A
Summer	15	3.66	2.12	3.63	0.45	1.17	1.70	5.58	6.72	6.73	100		
Fall	17	4.34	2.78	4.15	0.48	1.27	2.37	6.28	8.41	10.15	100		
Winter	11	3.40	2.05	3.18	0.27	1.42	1.72	4.93	5.11	7.56	100		
Weekday	38	4.19	2.52	3.50	0.27	1.36	2.27	5.58	7.56	12.37	100	NS	N/A
Weekend	15	3.23	2.72	3.09	0.45	0.48	0.82	4.86	6.41	10.15	100		
Paterson													
Spring	28	6.70	5.72	4.59	0.72	1.42	2.95	7.98	16.63	20.04	100	0.0413	NS
Summer	36	6.40	3.39	5.76	0.97	2.03	3.70	8.86	11.24	13.26	100		
Fall	51	6.30	3.90	5.48	0.14	1.96	3.54	8.43	12.32	16.08	100		
Winter	31	9.64	6.79	7.74	0.88	4.18	5.41	10.22	21.89	28.09	100		
Weekday	105	7.81	5.30	5.89	0.88	3.21	4.18	9.34	15.90	28.09	100	0.0125	N/A
Weekend	41	5.34	3.83	5.51	0.14	0.76	1.82	7.94	10.22	14.17	100		
Mercury													
Background	53	N/A	N/A	ND	ND	ND	ND	0.10	1.47	2.88	26	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	ND	0.78	3.24	23		
Industrial	49	N/A	N/A	ND	ND	ND	ND	ND	1.51	3.64	20		
Mobile	45	N/A	N/A	ND	ND	ND	ND	ND	0.52	4.13	20		
Background	53	N/A	N/A	ND	ND	ND	ND	0.10	1.47	2.88	26	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	ND	1.30	4.13	21		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	ND	0.87	1.31	20	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	0.89	1.47	1.52	27		
Fall	17	N/A	N/A	ND	ND	ND	ND	ND	2.57	2.88	18		
Winter	11	N/A	N/A	ND	ND	ND	ND	1.36	1.68	1.89	45		
Weekday	38	N/A	N/A	ND	ND	ND	ND	0.42	1.52	2.88	26	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	0.10	1.36	2.57	27		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	ND	0.31	1.56	11	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	ND	0.47	3.64	14		
Fall	51	N/A	N/A	ND	ND	ND	ND	0.37	1.51	4.13	31		
Winter	31	N/A	N/A	ND	ND	ND	ND	ND	1.62	3.59	23		
Weekday	105	N/A	N/A	ND	ND	ND	ND	ND	1.40	4.13	24	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	ND	1.20	3.59	15		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Nickel													
Background	53	0.78	0.80	0.63	ND	0.11	0.21	1.06	1.97	3.17	91	<0.0001	
Commercial	52	2.09	2.83	1.33	ND	0.25	0.61	2.74	3.39	19.09	98		A
Industrial	49	2.01	3.04	1.15	ND	0.21	0.38	2.60	4.07	19.67	94		A
Mobile	45	1.95	2.60	1.09	ND	0.23	0.49	2.48	3.99	15.81	98		A
Background	53	0.78	0.80	0.63	ND	0.11	0.21	1.06	1.97	3.17	91	<0.0001	N/A
Paterson	146	2.02	2.82	1.22	ND	0.22	0.49	2.66	3.99	19.67	97		
Background													
Spring	10	0.63	0.94	0.31	ND	ND	0.05	0.73	2.04	3.17	90	NS	N/A
Summer	15	0.89	0.76	0.78	0.09	0.12	0.24	1.21	2.32	2.56	100		
Fall	17	0.74	0.79	0.39	ND	ND	0.21	0.70	1.97	3.09	76		
Winter	11	0.85	0.81	0.80	0.08	0.11	0.14	1.17	1.24	2.93	100		
Weekday	38	0.82	0.87	0.37	ND	ND	0.21	1.11	2.56	3.17	89	NS	N/A
Weekend	15	0.69	0.57	0.65	ND	0.05	0.21	0.90	1.24	2.32	93		
Paterson													
Spring	28	1.38	1.75	0.81	ND	0.21	0.27	1.57	5.24	6.44	96	0.0018	C
Summer	36	1.96	1.17	1.99	ND	0.31	0.87	2.88	3.31	4.06	97		B C
Fall	51	1.40	1.48	0.87	ND	0.21	0.28	2.09	3.33	6.28	94		A B
Winter	31	3.70	5.13	1.76	0.12	0.39	0.74	3.99	6.62	19.67	100		A
Weekday	105	2.16	3.17	1.09	ND	0.23	0.52	2.81	4.06	19.67	98	NS	N/A
Weekend	41	1.68	1.59	1.41	ND	0.21	0.26	2.48	3.26	6.62	93		
Niobium													
Background	53	N/A	N/A	ND	ND	ND	ND	ND	0.59	1.22	21	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	ND	0.80	1.58	25		
Industrial	49	N/A	N/A	ND	ND	ND	ND	0.11	0.90	2.04	33		
Mobile	45	N/A	N/A	ND	ND	ND	ND	0.28	0.95	1.53	29		
Background	53	N/A	N/A	ND	ND	ND	ND	ND	0.59	1.22	21	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	0.12	0.90	2.04	29		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	0.22	0.85	1.06	30	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	ND	0.22	0.85	13		
Fall	17	N/A	N/A	ND	ND	ND	ND	ND	0.43	1.22	24		
Winter	11	N/A	N/A	ND	ND	ND	ND	ND	0.59	1.12	18		
Weekday	38	N/A	N/A	ND	ND	ND	ND	ND	0.43	1.22	18	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	0.38	0.85	1.12	27		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	0.67	1.16	2.04	36	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	ND	0.64	1.58	19		
Fall	51	N/A	N/A	ND	ND	ND	ND	ND	0.59	1.68	22		
Winter	31	N/A	N/A	ND	ND	ND	ND	0.59	1.32	1.53	45		
Weekday	105	N/A	N/A	ND	ND	ND	ND	0.01	0.80	1.68	26	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	0.48	1.32	2.04	37		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Phosphorus													
Background	53	N/A	N/A	ND	ND	ND	ND	7.61	19.16	43.76	32	N/A	N/A
Commercial	52	N/A	N/A	1.31	ND	ND	ND	26.66	42.28	95.93	56		
Industrial	49	N/A	N/A	ND	ND	ND	ND	20.36	39.21	100.07	49		
Mobile	45	N/A	N/A	ND	ND	ND	ND	17.29	32.71	83.78	47		
Background	53	N/A	N/A	ND	ND	ND	ND	7.61	19.16	43.76	32	N/A	N/A
Paterson	146	N/A	N/A	0.71	ND	ND	ND	22.08	40.28	100.07	51		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	ND	25.68	30.06	20	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	13.12	34.00	43.76	33		
Fall	17	N/A	N/A	ND	ND	ND	ND	ND	7.61	11.02	12		
Winter	11	N/A	N/A	5.20	ND	ND	ND	11.65	17.89	27.44	73		
Weekday	38	N/A	N/A	ND	ND	ND	ND	9.34	27.44	43.76	37	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	ND	11.65	13.12	20		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	6.81	72.64	100.07	36	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	20.70	39.28	48.48	42		
Fall	51	N/A	N/A	ND	ND	ND	ND	9.17	21.29	45.08	41		
Winter	31	N/A	N/A	23.02	ND	1.16	13.32	39.21	76.48	95.93	90		
Weekday	105	N/A	N/A	3.15	ND	ND	ND	27.55	45.08	100.07	56	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	6.82	24.79	79.08	37		
Potassium													
Background	53	86.39	80.66	67.81	13.40	33.49	45.07	103.05	132.85	570.82	100	0.0004	
Commercial	52	137.76	123.83	111.38	25.23	55.18	74.66	174.03	239.67	866.47	100		A
Industrial	49	130.63	131.10	106.97	2.52	45.07	64.89	158.70	232.49	903.78	100		A
Mobile	45	111.13	64.43	95.74	22.94	45.20	64.05	123.27	226.74	290.00	100		A
Background	53	86.39	80.66	67.81	13.40	33.49	45.07	103.05	132.85	570.82	100	<0.0001	N/A
Paterson	146	127.16	111.66	107.28	2.52	47.76	66.66	158.46	232.49	903.78	100		
Background													
Spring	10	77.97	55.50	58.75	18.39	31.50	51.90	99.96	162.25	218.42	100	NS	N/A
Summer	15	121.99	132.69	86.81	36.11	39.52	54.17	112.00	222.69	570.82	100		
Fall	17	77.71	37.45	79.20	19.85	23.11	50.76	103.05	132.85	139.32	100		
Winter	11	58.93	35.14	49.23	13.40	39.10	42.03	57.20	118.45	132.70	100		
Weekday	38	92.81	92.50	65.21	13.40	33.49	45.07	106.08	139.32	570.82	100	NS	N/A
Weekend	15	70.13	34.01	67.81	18.39	19.85	42.03	99.96	106.11	132.70	100		
Paterson													
Spring	28	103.81	78.39	67.00	27.60	34.28	49.54	120.72	248.50	262.97	100	0.0167	NS
Summer	36	159.13	186.08	112.25	36.70	60.82	79.85	174.11	231.48	903.78	100		
Fall	51	103.28	51.29	106.97	2.52	44.54	66.81	129.54	168.87	273.22	100		
Winter	31	150.42	81.75	121.87	43.59	59.97	90.10	224.33	239.67	316.18	100		
Weekday	105	134.09	125.15	104.35	34.28	53.40	69.12	168.87	239.56	903.78	100	NS	N/A
Weekend	41	109.43	63.41	114.03	2.52	27.60	59.67	138.09	207.35	238.42	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Rubidium ¹													
Background	53	0.20	0.26	0.09	ND	ND	ND	0.37	0.48	1.14	57	NS	N/A
Commercial	52	0.33	0.39	0.23	ND	ND	ND	0.58	0.95	1.40	67		
Industrial	49	0.26	0.34	0.07	ND	ND	ND	0.43	0.81	1.30	55		
Mobile	45	0.34	0.40	0.17	ND	ND	ND	0.57	0.87	1.69	64		
Background	53	0.20	0.26	0.09	ND	ND	ND	0.37	0.48	1.14	57	NS	N/A
Paterson	146	0.31	0.38	0.16	ND	ND	ND	0.56	0.84	1.69	62		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	0.48	0.83	1.14	40	NS	N/A
Summer	15	0.23	0.26	0.15	ND	ND	ND	0.37	0.42	0.93	73		
Fall	17	0.19	0.25	0.01	ND	ND	ND	0.38	0.60	0.71	53		
Winter	11	0.13	0.14	0.14	ND	ND	ND	0.23	0.31	0.32	55		
Weekday	38	0.22	0.27	0.13	ND	ND	ND	0.38	0.48	1.14	63	NS	N/A
Weekend	15	N/A	N/A	0.00	ND	ND	ND	0.23	0.53	0.71	40		
Paterson													
Spring	28	0.33	0.42	0.18	ND	ND	ND	0.60	0.89	1.69	61	NS	N/A
Summer	36	0.42	0.43	0.33	ND	ND	ND	0.69	1.09	1.40	67		
Fall	51	0.19	0.26	0.07	ND	ND	ND	0.32	0.48	1.24	57		
Winter	31	0.35	0.40	0.25	ND	ND	ND	0.67	0.87	1.39	68		
Weekday	105	0.34	0.40	0.17	ND	ND	ND	0.60	0.89	1.69	66	NS	N/A
Weekend	41	0.23	0.28	0.06	ND	ND	ND	0.41	0.63	0.95	54		
Rubidium ²													
Background	53	0.51	0.26	0.60	ND	ND	ND	0.71	0.71	1.14	57	NS	N/A
Commercial	52	0.57	0.33	0.68	ND	ND	ND	0.71	0.95	1.40	67		
Industrial	49	0.58	0.28	0.71	ND	ND	ND	0.71	0.81	1.30	55		
Mobile	45	0.59	0.32	0.71	ND	ND	ND	0.71	0.87	1.69	64		
Background	53	0.51	0.26	0.60	ND	ND	ND	0.71	0.71	1.14	57	NS	N/A
Paterson	146	0.58	0.31	0.71	ND	ND	ND	0.71	0.84	1.69	62		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	0.71	0.93	1.14	40	NS	N/A
Summer	15	0.42	0.28	0.37	ND	ND	ND	0.71	0.71	0.93	73		
Fall	17	0.52	0.25	0.71	ND	ND	ND	0.71	0.71	0.71	53		
Winter	11	0.46	0.25	0.32	ND	ND	ND	0.71	0.71	0.71	55		
Weekday	38	0.49	0.27	0.45	ND	ND	ND	0.71	0.71	1.14	63	NS	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	0.71	0.71	0.71	40		
Paterson													
Spring	28	0.61	0.32	0.71	ND	ND	ND	0.71	0.89	1.69	61	NS	N/A
Summer	36	0.66	0.31	0.71	ND	ND	ND	0.71	1.09	1.40	67		
Fall	51	0.50	0.28	0.61	ND	ND	ND	0.71	0.71	1.24	57		
Winter	31	0.58	0.32	0.71	ND	ND	ND	0.71	0.87	1.39	68		
Weekday	105	0.58	0.33	0.71	ND	ND	ND	0.71	0.89	1.69	66	NS	N/A
Weekend	41	0.56	0.24	0.71	ND	ND	ND	0.71	0.71	0.95	54		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Samarium													
Background	53	N/A	N/A	ND	ND	ND	ND	0.77	2.97	4.28	26	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	ND	ND	15.29	8		
Industrial	49	N/A	N/A	ND	ND	ND	ND	ND	4.09	8.77	16		
Mobile	45	N/A	N/A	ND	ND	ND	ND	ND	3.12	10.32	13		
Background	53	N/A	N/A	ND	ND	ND	ND	0.77	2.97	4.28	26	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	ND	3.12	15.29	12		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	0.77	1.87	2.76	30	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	ND	2.19	2.76	13		
Fall	17	N/A	N/A	ND	ND	ND	ND	2.18	4.02	4.28	41		
Winter	11	N/A	N/A	ND	ND	ND	ND	ND	2.97	3.81	18		
Weekday	38	N/A	N/A	ND	ND	ND	ND	ND	2.76	4.28	24	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	0.98	3.34	4.02	33		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	ND	ND	4.09	4	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	ND	5.11	6.76	19		
Fall	51	N/A	N/A	ND	ND	ND	ND	ND	ND	8.77	6		
Winter	31	N/A	N/A	ND	ND	ND	ND	ND	4.99	15.29	23		
Weekday	105	N/A	N/A	ND	ND	ND	ND	ND	3.83	15.29	14	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	ND	ND	5.11	7		
Selenium													
Background	53	1.06	0.87	0.73	ND	ND	0.40	1.74	2.24	3.17	87	NS	N/A
Commercial	52	1.29	1.22	0.82	ND	ND	0.40	1.91	3.23	5.07	85		
Industrial	49	1.19	1.19	0.64	ND	ND	0.40	1.72	3.19	5.03	84		
Mobile	45	1.25	1.11	0.97	ND	ND	0.40	1.58	3.32	4.28	89		
Background	53	1.06	0.87	0.73	ND	ND	0.40	1.74	2.24	3.17	87	NS	N/A
Paterson	146	1.24	1.17	0.81	ND	ND	0.40	1.75	3.23	5.07	86		
Background													
Spring	10	0.73	0.48	0.52	ND	ND	0.40	1.21	1.48	1.54	80	NS	N/A
Summer	15	1.21	0.89	1.00	ND	ND	0.40	2.04	2.24	2.91	80		
Fall	17	1.19	0.86	0.98	ND	0.21	0.49	1.79	2.45	3.17	94		
Winter	11	0.98	1.14	0.40	ND	0.13	0.14	1.83	2.93	3.17	91		
Weekday	38	1.03	0.85	0.76	ND	ND	0.40	1.54	2.24	3.17	87	NS	N/A
Weekend	15	1.16	0.95	0.73	ND	ND	0.40	2.00	2.45	3.17	87		
Paterson													
Spring	28	0.67	0.60	0.40	ND	ND	ND	1.01	1.66	2.15	68	0.0014	C
Summer	36	1.13	0.90	0.95	ND	ND	0.40	1.75	2.49	3.23	89		A B C
Fall	51	1.18	1.07	0.80	ND	ND	0.40	1.60	2.20	4.72	86		A B C
Winter	31	2.00	1.58	1.36	ND	0.40	0.61	3.61	4.25	5.07	97		B
Weekday	105	1.23	1.13	0.85	ND	ND	0.40	1.71	3.19	5.07	88	NS	N/A
Weekend	41	1.27	1.29	0.60	ND	ND	0.40	1.83	3.61	4.72	80		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Silicon													
Background	53	274.92	268.86	182.38	14.36	50.67	91.43	374.71	571.06	1344.54	100	0.0002	
Commercial	52	543.69	430.91	482.27	42.83	79.45	230.72	689.30	1273.10	1714.14	100		A
Industrial	49	489.60	390.11	417.77	7.63	68.96	207.67	623.85	1053.07	1610.20	100		A
Mobile	45	446.86	380.75	360.75	28.03	99.54	201.49	504.90	1121.77	1568.81	100		A
Background	53	274.92	268.86	182.38	14.36	50.67	91.43	374.71	571.06	1344.54	100	<0.0001	N/A
Paterson	146	495.69	401.57	399.22	7.63	79.45	211.64	617.58	1167.38	1714.14	100		
Background													
Spring	10	345.67	401.37	223.92	14.36	19.50	89.47	517.19	975.94	1344.54	100	NS	N/A
Summer	15	325.55	309.11	293.39	52.49	55.66	61.74	415.17	626.81	1222.99	100		
Fall	17	239.99	200.34	145.66	23.80	40.44	116.93	342.09	571.06	696.10	100		
Winter	11	195.52	122.69	174.68	16.56	89.02	91.03	270.34	374.71	420.75	100		
Weekday	38	309.01	294.80	218.96	16.56	52.49	117.35	415.17	626.81	1344.54	100	NS	N/A
Weekend	15	188.55	166.34	145.66	14.36	23.80	56.09	314.46	465.90	517.19	100		
Paterson													
Spring	28	581.78	581.35	296.47	12.43	42.83	203.11	769.72	1610.20	1714.14	100	NS	N/A
Summer	36	509.50	416.96	426.99	47.70	68.96	150.72	668.81	1273.10	1490.68	100		
Fall	51	398.99	262.90	314.74	7.63	99.54	200.15	600.50	772.79	1167.38	100		
Winter	31	560.98	360.23	484.10	66.50	221.42	327.38	583.03	1187.72	1356.77	100		
Weekday	105	569.64	428.70	440.78	66.50	152.38	266.07	713.78	1353.06	1714.14	100	0.0001	N/A
Weekend	41	306.31	235.83	287.61	7.63	42.83	68.96	484.10	611.40	780.68	100		
Silver													
Background	53	N/A	N/A	ND	ND	ND	ND	ND	0.89	3.46	15	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	ND	0.31	6.34	12		
Industrial	49	N/A	N/A	ND	ND	ND	ND	ND	2.03	3.75	16		
Mobile	45	N/A	N/A	ND	ND	ND	ND	ND	ND	2.25	9		
Background	53	N/A	N/A	ND	ND	ND	ND	ND	0.89	3.46	15	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	ND	0.78	6.34	12		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	ND	0.55	0.89	20	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	ND	0.63	1.10	13		
Fall	17	N/A	N/A	ND	ND	ND	ND	ND	ND	1.57	6		
Winter	11	N/A	N/A	ND	ND	ND	ND	1.68	1.84	3.46	27		
Weekday	38	N/A	N/A	ND	ND	ND	ND	ND	1.10	3.46	16	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	ND	0.89	1.84	13		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	ND	0.26	1.15	11	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	ND	ND	3.75	8		
Fall	51	N/A	N/A	ND	ND	ND	ND	ND	1.61	6.34	14		
Winter	31	N/A	N/A	ND	ND	ND	ND	ND	0.78	3.44	16		
Weekday	105	N/A	N/A	ND	ND	ND	ND	ND	1.61	6.34	16	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	ND	ND	0.31	2		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Sodium													
Background	53	125.64	170.94	75.56	ND	9.34	33.57	148.99	339.84	1062.45	94	0.0005	
Commercial	52	301.95	339.09	171.16	ND	34.97	89.56	357.40	741.40	1680.65	96		B C
Industrial	49	267.23	308.87	131.60	ND	9.37	42.17	432.65	684.02	1276.78	92		A B
Mobile	45	319.33	357.87	164.34	9.92	36.03	78.34	388.55	742.70	1719.37	100		A B C
Background	53	125.64	170.94	75.56	ND	9.34	33.57	148.99	339.84	1062.45	94	<0.0001	N/A
Paterson	146	295.65	333.69	160.26	ND	23.48	73.28	388.55	729.86	1719.37	96		
Background													
Spring	10	53.49	54.61	35.67	ND	ND	6.82	84.99	140.57	148.99	90	NS	N/A
Summer	15	131.72	109.10	99.66	ND	33.57	50.37	153.22	352.05	357.84	93		
Fall	17	161.71	267.17	47.22	ND	9.34	21.51	165.26	423.39	1062.45	94		
Winter	11	127.21	104.52	114.85	ND	23.07	44.05	196.15	273.81	339.84	100		
Weekday	38	133.06	189.88	72.40	ND	9.34	33.57	153.22	339.84	1062.45	95	NS	N/A
Weekend	15	106.85	112.79	79.22	ND	6.82	10.49	148.47	352.05	357.84	93		
Paterson													
Spring	28	132.30	124.13	88.21	ND	ND	29.22	232.84	336.05	349.43	89	<0.0001	C
Summer	36	326.95	268.26	198.85	25.49	62.61	106.89	619.83	729.86	863.43	100		B C
Fall	51	269.03	356.29	106.69	ND	19.76	58.96	275.58	884.06	1300.61	94		A B
Winter	31	450.65	420.31	330.71	10.92	102.44	193.61	620.38	724.82	1719.37	100		A
Weekday	105	300.81	356.05	169.57	9.37	35.37	75.73	336.79	742.70	1719.37	100	NS	N/A
Weekend	41	282.45	271.61	142.82	2.61	9.34	71.77	499.49	681.75	863.43	85		
Strontium													
Background	53	1.14	1.58	0.70	ND	ND	0.46	1.26	2.07	11.01	89	<0.0001	
Commercial	52	2.72	3.04	2.13	ND	0.57	1.24	3.06	4.34	20.90	94		A
Industrial	49	2.48	3.02	1.77	ND	0.46	0.94	3.26	4.19	20.47	96		A
Mobile	45	2.01	1.35	1.62	ND	0.61	0.98	2.96	3.90	5.56	98		A
Background	53	1.14	1.58	0.70	ND	ND	0.46	1.26	2.07	11.01	89	<0.0001	N/A
Paterson	146	2.42	2.63	1.80	ND	0.46	0.98	3.24	4.19	20.90	96		
Background													
Spring	10	1.07	1.09	0.66	0.19	0.25	0.54	1.22	2.93	3.80	100	NS	N/A
Summer	15	1.73	2.69	0.81	ND	ND	0.46	1.94	2.97	11.01	87		
Fall	17	0.87	0.71	0.56	ND	ND	0.46	1.00	2.04	2.43	82		
Winter	11	0.81	0.51	0.82	ND	0.20	0.46	1.03	1.26	1.89	91		
Weekday	38	1.26	1.82	0.77	ND	0.20	0.46	1.26	2.43	11.01	92	NS	N/A
Weekend	15	0.83	0.61	0.56	ND	ND	0.46	1.27	1.89	2.07	80		
Paterson													
Spring	28	1.73	1.60	1.12	ND	ND	0.54	2.86	4.70	6.35	86	0.0168	B
Summer	36	3.38	4.40	2.25	0.57	0.97	1.46	3.56	4.70	20.90	100		C
Fall	51	1.98	1.27	1.75	ND	0.46	0.94	2.84	3.56	5.62	98		A B C
Winter	31	2.65	1.96	2.05	ND	0.72	1.02	3.73	5.56	7.71	97		A B C
Weekday	105	2.62	2.98	1.94	ND	0.61	0.98	3.26	4.70	20.90	99	NS	N/A
Weekend	41	1.92	1.27	1.75	ND	0.46	1.06	2.84	3.69	4.31	88		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Sulfur													
Background	53	1093.07	983.07	805.44	134.35	286.64	393.21	1331.38	2418.43	5144.39	100	NS	N/A
Commercial	52	1328.17	1020.56	915.49	222.91	397.74	603.39	1849.09	2558.81	5053.16	100		
Industrial	49	1230.56	992.96	877.18	23.81	364.12	504.65	1652.99	2442.36	5372.38	100		
Mobile	45	1116.19	681.45	891.02	222.88	393.68	623.25	1584.84	2326.21	2544.94	100		
Background	53	1093.07	983.07	805.44	134.35	286.64	393.21	1331.38	2418.43	5144.39	100	NS	N/A
Paterson	146	1230.08	917.12	890.94	23.81	394.46	597.45	1673.91	2467.42	5372.38	100		
Background													
Spring	10	950.66	839.80	575.84	217.04	245.58	294.81	1478.48	2160.39	2820.48	100	NS	N/A
Summer	15	1740.86	1486.87	1012.33	134.35	364.64	393.21	2960.41	3544.36	5144.39	100		
Fall	17	907.21	374.68	805.44	383.31	471.62	624.18	1257.98	1461.70	1694.85	100		
Winter	11	626.39	350.68	576.47	220.55	267.71	286.64	950.29	970.28	1137.22	100		
Weekday	38	1156.07	1028.46	845.76	220.55	360.51	471.62	1387.26	2820.48	5144.39	100	NS	N/A
Weekend	15	933.46	869.53	731.22	134.35	217.04	274.12	1137.22	2198.38	3265.85	100		
Paterson													
Spring	28	1109.04	826.23	722.46	258.15	364.12	413.95	1378.36	2442.36	2874.16	100	NS	N/A
Summer	36	1563.11	1359.74	1006.52	222.88	356.97	468.57	2293.41	3445.51	5372.38	100		
Fall	51	1026.67	574.66	877.18	23.81	397.74	680.49	1511.29	1744.15	2558.81	100		
Winter	31	1287.27	723.23	1174.93	405.58	539.11	696.89	1855.63	2467.42	2553.25	100		
Weekday	105	1330.88	959.07	911.35	277.99	433.87	680.49	1792.51	2535.44	5372.38	100	0.0109	N/A
Weekend	41	971.92	750.02	801.93	23.81	258.15	397.74	1577.42	1855.63	3694.36	100		
Tantalum													
Background	53	N/A	N/A	ND	ND	ND	ND	ND	ND	3.73	9	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	ND	0.21	4.75	13		
Industrial	49	N/A	N/A	ND	ND	ND	ND	ND	0.52	1.51	12		
Mobile	45	N/A	N/A	ND	ND	ND	ND	ND	1.46	3.81	18		
Background	53	N/A	N/A	ND	ND	ND	ND	ND	ND	3.73	9	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	ND	0.42	4.75	14		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	ND	ND	0.16	10	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Fall	17	N/A	N/A	ND	ND	ND	ND	ND	0.68	3.73	24		
Winter	11	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	38	N/A	N/A	ND	ND	ND	ND	ND	0.10	3.73	11	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	ND	ND	0.68	7		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	ND	0.78	1.62	18	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	ND	0.37	4.75	11		
Fall	51	N/A	N/A	ND	ND	ND	ND	ND	0.21	1.62	16		
Winter	31	N/A	N/A	ND	ND	ND	ND	ND	0.05	3.81	13		
Weekday	105	N/A	N/A	ND	ND	ND	ND	ND	0.52	4.75	17	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	ND	ND	1.98	7		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Terbium													
Background	53	N/A	N/A	ND	ND	ND	ND	1.21	4.30	14.01	36	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	4.85	14.61	34.44	42		
Industrial	49	N/A	N/A	ND	ND	ND	ND	4.63	8.90	28.11	47		
Mobile	45	N/A	N/A	1.78	ND	ND	ND	5.28	14.70	25.59	58		
Background	53	N/A	N/A	ND	ND	ND	ND	1.21	4.30	14.01	36	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	4.94	14.61	34.44	49		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	0.94	9.78	14.01	30	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	0.85	4.30	4.93	27		
Fall	17	N/A	N/A	ND	ND	ND	ND	0.68	4.14	11.28	41		
Winter	11	N/A	N/A	ND	ND	ND	ND	1.89	2.15	4.35	45		
Weekday	38	N/A	N/A	ND	ND	ND	ND	1.73	4.93	14.01	37	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	0.94	1.47	1.89	33		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	5.79	20.87	28.11	50	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	2.81	5.43	7.33	28		
Fall	51	N/A	N/A	2.66	ND	ND	ND	6.71	18.47	34.44	65		
Winter	31	N/A	N/A	ND	ND	ND	ND	6.01	19.79	27.65	45		
Weekday	105	N/A	N/A	0.16	ND	ND	ND	5.28	19.79	34.44	51	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	4.58	8.04	26.09	41		
Tin													
Background	53	N/A	N/A	ND	ND	ND	ND	2.64	7.41	11.82	30	N/A	N/A
Commercial	52	N/A	N/A	1.76	ND	ND	ND	7.24	10.40	23.07	56		
Industrial	49	N/A	N/A	ND	ND	ND	ND	1.89	9.53	14.49	41		
Mobile	45	N/A	N/A	0.02	ND	ND	ND	5.98	9.42	12.58	51		
Background	53	N/A	N/A	ND	ND	ND	ND	2.64	7.41	11.82	30	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	5.50	9.73	23.07	49		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	7.41	9.96	11.82	50	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	ND	8.46	9.67	20		
Fall	17	N/A	N/A	ND	ND	ND	ND	3.17	5.37	6.94	29		
Winter	11	N/A	N/A	ND	ND	ND	ND	0.02	5.00	7.78	27		
Weekday	38	N/A	N/A	ND	ND	ND	ND	2.64	7.78	11.82	29	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	5.00	6.94	9.67	33		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	4.29	7.95	9.82	50	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	2.96	10.40	14.00	47		
Fall	51	N/A	N/A	ND	ND	ND	ND	5.44	8.63	13.39	47		
Winter	31	N/A	N/A	2.26	ND	ND	ND	8.83	12.46	23.07	55		
Weekday	105	N/A	N/A	0.75	ND	ND	ND	5.86	9.53	23.07	53	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	2.68	9.73	14.49	39		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Titanium													
Background	53	7.31	8.31	4.56	ND	ND	0.68	10.85	17.88	41.23	79	<0.0001	
Commercial	52	21.50	18.25	17.84	ND	1.04	9.05	26.48	46.53	81.37	90		A
Industrial	49	18.28	16.40	14.78	ND	ND	4.63	22.68	45.11	61.80	86		A
Mobile	45	15.28	15.28	11.72	ND	ND	2.97	19.93	40.00	64.70	89		A
Background	53	7.31	8.31	4.56	ND	ND	0.68	10.85	17.88	41.23	79	<0.0001	N/A
Paterson	146	18.50	16.83	14.85	ND	ND	5.30	23.41	44.67	81.37	88		
Background													
Spring	10	8.35	8.40	6.05	0.33	0.37	1.30	12.22	21.92	25.96	100	NS	N/A
Summer	15	10.98	11.10	8.49	ND	ND	4.03	14.47	28.11	41.23	87		
Fall	17	5.31	6.23	1.09	ND	ND	ND	8.34	15.68	19.14	53		
Winter	11	4.46	4.92	3.04	ND	0.68	1.72	4.82	6.45	18.35	91		
Weekday	38	8.22	9.22	4.93	ND	ND	0.68	12.95	19.14	41.23	76	NS	N/A
Weekend	15	5.00	4.90	3.14	ND	ND	0.68	8.34	12.27	15.68	87		
Paterson													
Spring	28	20.32	18.53	13.67	1.09	2.97	7.21	25.48	57.31	64.70	100	0.0024	A B C
Summer	36	20.03	15.73	16.95	ND	ND	9.69	25.84	45.11	57.39	86		A B C
Fall	51	13.26	15.25	8.47	ND	ND	0.68	20.80	33.29	65.38	76		B
Winter	31	23.71	17.43	20.20	3.97	9.37	13.46	26.40	40.00	81.37	100		C
Weekday	105	20.72	18.14	15.29	ND	0.68	8.32	25.79	47.42	81.37	90	0.0286	N/A
Weekend	41	12.82	11.20	10.23	ND	ND	2.71	21.86	28.90	36.66	83		
Vanadium													
Background	53	7.49	6.65	5.83	ND	0.66	2.61	10.67	15.28	33.10	91	<0.0001	
Commercial	52	17.54	14.85	14.53	1.60	2.81	8.82	21.05	29.32	68.33	100		A
Industrial	49	15.86	12.92	12.03	0.70	3.08	7.34	20.81	31.13	61.60	100		A
Mobile	45	14.98	12.12	11.33	0.86	2.82	7.81	18.22	29.66	62.41	100		A
Background	53	7.49	6.65	5.83	ND	0.66	2.61	10.67	15.28	33.10	91	<0.0001	N/A
Paterson	146	16.19	13.36	12.60	0.70	2.82	7.75	20.54	30.78	68.33	100		
Background													
Spring	10	8.57	9.50	5.34	ND	0.94	2.31	11.03	22.55	33.10	90	NS	N/A
Summer	15	8.02	5.41	9.07	1.09	1.24	2.82	11.81	14.58	18.90	100		
Fall	17	8.54	7.06	6.63	ND	ND	3.42	14.27	21.40	22.61	88		
Winter	11	4.16	3.55	3.29	ND	ND	0.66	6.11	10.00	10.67	82		
Weekday	38	7.98	6.88	6.31	ND	0.66	2.85	10.70	16.36	33.10	92	NS	N/A
Weekend	15	6.25	6.08	4.56	ND	ND	1.09	10.67	14.27	21.40	87		
Paterson													
Spring	28	16.26	15.97	9.14	1.15	2.16	4.45	19.83	43.03	52.02	100	NS	N/A
Summer	36	15.48	7.49	16.33	2.81	6.47	8.74	20.86	27.34	29.03	100		
Fall	51	14.58	10.33	13.11	0.70	2.49	7.75	17.47	28.86	49.42	100		
Winter	31	19.59	19.32	12.26	1.60	2.82	7.50	24.59	61.60	68.33	100		
Weekday	105	17.68	14.45	12.95	1.60	5.27	8.76	20.92	40.93	68.33	100	NS	N/A
Weekend	41	12.36	9.12	12.15	0.70	1.77	3.65	18.57	24.59	30.78	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Wolfram													
Background	53	N/A	N/A	ND	ND	ND	ND	ND	1.02	3.75	15	N/A	N/A
Commercial	52	N/A	N/A	ND	ND	ND	ND	2.50	4.15	15.62	50		
Industrial	49	N/A	N/A	ND	ND	ND	ND	1.07	2.26	6.38	39		
Mobile	45	N/A	N/A	ND	ND	ND	ND	ND	2.54	5.20	22		
Background	53	N/A	N/A	ND	ND	ND	ND	ND	1.02	3.75	15	N/A	N/A
Paterson	146	N/A	N/A	ND	ND	ND	ND	1.07	3.42	15.62	38		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	ND	2.18	3.33	20	N/A	N/A
Summer	15	N/A	N/A	ND	ND	ND	ND	ND	1.23	3.75	13		
Fall	17	N/A	N/A	ND	ND	ND	ND	ND	2.60	2.96	24		
Winter	11	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	38	N/A	N/A	ND	ND	ND	ND	ND	2.60	3.75	18	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	ND	ND	0.55	7		
Paterson													
Spring	28	N/A	N/A	ND	ND	ND	ND	0.65	2.32	3.93	39	N/A	N/A
Summer	36	N/A	N/A	ND	ND	ND	ND	0.65	3.42	4.04	39		
Fall	51	N/A	N/A	ND	ND	ND	ND	0.97	2.54	4.88	31		
Winter	31	N/A	N/A	ND	ND	ND	ND	2.79	5.97	15.62	45		
Weekday	105	N/A	N/A	ND	ND	ND	ND	1.38	3.47	15.62	41	N/A	N/A
Weekend	41	N/A	N/A	ND	ND	ND	ND	0.08	2.32	5.97	29		
Yttrium ¹													
Background	53	0.33	0.44	0.11	ND	ND	ND	0.60	1.10	1.64	55	NS	N/A
Commercial	52	0.45	0.52	0.21	ND	ND	ND	0.85	1.23	1.68	62		
Industrial	49	0.39	0.46	0.23	ND	ND	ND	0.66	1.11	1.51	61		
Mobile	45	0.34	0.49	0.05	ND	ND	ND	0.59	1.07	2.01	53		
Background	53	0.33	0.44	0.11	ND	ND	ND	0.60	1.10	1.64	55	NS	N/A
Paterson	146	0.40	0.49	0.17	ND	ND	ND	0.71	1.11	2.01	59		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	0.13	0.28	0.31	30	NS	N/A
Summer	15	0.48	0.46	0.30	ND	ND	ND	1.02	1.11	1.12	67		
Fall	17	0.42	0.53	0.14	ND	ND	ND	0.81	1.21	1.64	65		
Winter	11	N/A	N/A	ND	ND	ND	ND	0.57	0.60	1.09	45		
Weekday	38	0.40	0.47	0.26	ND	ND	ND	0.76	1.11	1.64	58	NS	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	0.13	0.83	1.12	47		
Paterson													
Spring	28	0.34	0.47	0.04	ND	ND	ND	0.65	1.06	1.56	54	NS	N/A
Summer	36	0.45	0.51	0.25	ND	ND	ND	0.78	1.29	1.68	64		
Fall	51	0.37	0.52	0.06	ND	ND	ND	0.73	1.11	2.01	57		
Winter	31	0.44	0.46	0.42	ND	ND	ND	0.94	1.00	1.65	61		
Weekday	105	0.43	0.50	0.22	ND	ND	ND	0.76	1.23	1.68	62	NS	N/A
Weekend	41	0.32	0.47	0.01	ND	ND	ND	0.53	0.96	2.01	51		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Yttrium ²													
Background	53	0.83	0.40	1.10	ND	ND	ND	1.10	1.10	1.64	55	NS	N/A
Commercial	52	0.87	0.42	1.10	ND	ND	ND	1.10	1.23	1.68	62		
Industrial	49	0.82	0.40	1.09	ND	ND	ND	1.10	1.11	1.51	61		
Mobile	45	0.85	0.44	1.10	ND	ND	ND	1.10	1.10	2.01	53		
Background	53	0.83	0.40	1.10	ND	ND	ND	1.10	1.10	1.64	55	NS	N/A
Paterson	146	0.85	0.42	1.10	ND	ND	ND	1.10	1.11	2.01	59		
Background													
Spring	10	N/A	N/A	ND	ND	ND	ND	1.10	1.10	1.10	30	NS	N/A
Summer	15	0.84	0.36	1.10	ND	ND	ND	1.10	1.11	1.12	67		
Fall	17	0.80	0.48	1.10	ND	ND	ND	1.10	1.21	1.64	65		
Winter	11	0.86	0.35	ND	ND	ND	ND	1.10	1.10	1.10	45		
Weekday	38	0.86	0.37	1.10	ND	ND	ND	1.10	1.11	1.64	58	NS	N/A
Weekend	15	0.75	0.47	ND	ND	ND	ND	1.10	1.10	1.12	47		
Paterson													
Spring	28	0.85	0.41	1.10	ND	ND	ND	1.10	1.10	1.56	54	NS	N/A
Summer	36	0.84	0.42	1.09	ND	ND	ND	1.10	1.29	1.68	64		
Fall	51	0.85	0.46	1.10	ND	ND	ND	1.10	1.11	2.01	57		
Winter	31	0.86	0.35	1.00	ND	ND	ND	1.10	1.10	1.65	61		
Weekday	105	0.85	0.41	1.09	ND	ND	ND	1.10	1.23	1.68	62	NS	N/A
Weekend	41	0.85	0.43	1.10	ND	ND	ND	1.10	1.10	2.01	51		
Zinc													
Background	53	10.60	8.18	8.81	1.26	2.58	4.42	15.51	21.03	39.48	100	<0.0001	
Commercial	52	34.01	42.13	20.37	2.88	8.74	12.89	39.66	71.43	270.97	100		A
Industrial	49	22.70	18.96	15.15	1.99	4.04	10.49	31.18	51.59	93.23	100		A
Mobile	45	22.86	19.85	15.24	2.52	5.82	11.82	28.49	53.41	101.25	100		A
Background	53	10.60	8.18	8.81	1.26	2.58	4.42	15.51	21.03	39.48	100	<0.0001	N/A
Paterson	146	26.78	29.87	16.38	1.99	6.36	11.52	31.82	59.65	270.97	100		
Background													
Spring	10	6.48	3.41	5.69	2.00	2.32	3.77	9.71	10.95	11.03	100	NS	N/A
Summer	15	8.21	5.83	6.05	1.26	2.21	4.22	13.04	18.02	19.50	100		
Fall	17	13.87	10.18	9.23	2.00	2.96	6.03	20.69	28.04	39.48	100		
Winter	11	12.53	8.76	11.43	2.40	3.80	3.99	20.28	25.03	27.02	100		
Weekday	38	11.22	8.36	9.08	2.00	2.58	5.52	15.98	23.44	39.48	100	NS	N/A
Weekend	15	9.02	7.78	5.86	1.26	2.00	3.77	14.90	21.03	27.02	100		
Paterson													
Spring	28	14.26	12.39	11.33	2.42	3.47	6.52	14.99	43.00	50.64	100	<0.0001	A
Summer	36	17.47	12.75	13.85	2.52	6.95	11.12	22.21	30.62	71.65	100		A B
Fall	51	26.78	22.98	19.33	1.99	8.20	11.17	37.13	53.41	128.32	100		B
Winter	31	48.90	48.46	34.18	12.85	15.24	19.44	61.97	93.23	270.97	100		
Weekday	105	28.21	32.96	15.78	4.99	9.31	12.85	30.38	60.08	270.97	100	NS	N/A
Weekend	41	23.12	19.77	18.74	1.99	3.04	5.34	34.97	51.59	68.83	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 22: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Elements, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Zirconium ¹													
Background	53	0.79	1.12	0.32	ND	ND	ND	1.16	2.78	4.41	57	<0.0001	
Commercial	52	5.28	4.45	4.02	ND	1.04	2.48	7.20	11.23	19.31	98		A
Industrial	49	3.33	3.26	2.29	ND	ND	0.99	4.27	8.32	12.12	88		B
Mobile	45	4.14	3.80	3.03	ND	0.05	1.99	5.18	9.11	16.30	91		A B
Background	53	0.79	1.12	0.32	ND	ND	ND	1.16	2.78	4.41	57	<0.0001	N/A
Paterson	146	4.27	3.94	3.18	ND	0.31	1.56	5.79	10.07	19.31	92		
Background													
Spring	10	0.70	0.91	0.42	ND	ND	0.11	1.00	2.10	3.04	80	NS	N/A
Summer	15	0.91	1.15	0.42	ND	ND	ND	1.42	2.89	3.67	60		
Fall	17	0.93	1.38	0.26	ND	ND	ND	1.31	3.31	4.41	53		
Winter	11	0.51	0.86	0.00	ND	ND	ND	1.00	1.94	2.31	36		
Weekday	38	0.83	1.21	0.32	ND	ND	ND	1.31	2.89	4.41	55	NS	N/A
Weekend	15	0.70	0.90	0.26	ND	ND	ND	1.16	1.94	3.04	60		
Paterson													
Spring	28	2.97	3.01	2.04	ND	ND	0.57	4.14	8.57	10.49	86	0.0106	A
Summer	36	3.77	2.71	3.42	ND	0.05	1.90	4.94	7.93	11.43	92		A B
Fall	51	4.00	3.90	3.08	ND	0.16	1.25	4.81	9.73	16.44	92		A B
Winter	31	6.49	5.07	4.64	0.57	1.67	2.35	10.07	14.08	19.31	100		B
Weekday	105	4.33	3.80	3.23	ND	0.57	1.61	5.79	10.07	16.44	94	<0.0001	N/A
Weekend	41	4.14	4.32	3.08	ND	ND	1.04	5.57	9.11	19.31	88		
Zirconium ²													
Background	53	1.61	0.91	1.88	ND	ND	ND	1.88	2.78	4.41	57	<0.0001	
Commercial	52	5.31	4.41	4.02	ND	1.04	2.48	7.20	11.23	19.31	98		A
Industrial	49	3.56	3.07	2.29	ND	ND	1.56	4.27	8.32	12.12	88		A
Mobile	45	4.31	3.65	3.03	ND	1.05	1.99	5.18	9.11	16.30	91		A
Background	53	1.61	0.91	1.88	ND	ND	ND	1.88	2.78	4.41	57	<0.0001	N/A
Paterson	146	4.42	3.81	3.18	ND	0.99	1.88	5.79	10.07	19.31	92		
Background													
Spring	10	1.08	0.94	0.84	ND	ND	0.37	1.88	2.46	3.04	80	NS	N/A
Summer	15	1.66	0.88	1.88	ND	ND	ND	1.88	2.89	3.67	60		
Fall	17	1.82	1.04	1.88	ND	ND	ND	1.88	3.31	4.41	53		
Winter	11	1.70	0.55	ND	ND	ND	ND	1.88	1.94	2.31	36		
Weekday	38	1.67	0.96	1.88	ND	ND	ND	1.88	2.89	4.41	55	NS	N/A
Weekend	15	1.46	0.77	1.88	ND	ND	ND	1.88	1.94	3.04	60		
Paterson													
Spring	28	3.24	2.81	2.17	ND	ND	1.38	4.14	8.57	10.49	86	0.0224	A
Summer	36	3.93	2.53	3.42	ND	1.20	2.04	4.94	7.93	11.43	92		A B
Fall	51	4.15	3.78	3.08	ND	0.68	1.88	4.81	9.73	16.44	92		A B
Winter	31	6.49	5.07	4.64	0.57	1.67	2.35	10.07	14.08	19.31	100		B
Weekday	105	4.43	3.70	3.23	ND	1.04	1.88	5.79	10.07	16.44	94	NS	N/A
Weekend	41	4.37	4.14	3.08	ND	ND	1.88	5.57	9.11	19.31	88		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 23: Descriptive Statistics for Measured Ambient Air Concentrations of Hexavalent Chromium, units are ng/m³

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. Multiple Comparisons
Hexavalent Chromium													
Background	54	0.23	0.25	0.14	ND	ND	0.08	0.26	0.51	1.15	81	NS	N/A
Commercial	52	0.26	0.21	0.21	ND	ND	0.09	0.34	0.56	0.94	88		
Industrial	49	0.24	0.23	0.17	ND	ND	0.08	0.26	0.59	1.12	90		
Mobile	46	0.25	0.22	0.20	ND	ND	0.08	0.34	0.63	0.94	85		
Background	54	0.23	0.25	0.14	ND	ND	0.08	0.26	0.51	1.15	81	NS	N/A
Paterson	147	0.25	0.22	0.20	ND	ND	0.08	0.33	0.59	1.12	88		
Background													
Spring	12	0.12	0.12	0.08	ND	ND	0.03	0.17	0.26	0.41	75	0.0029	A B C
Summer	15	0.41	0.36	0.32	ND	ND	ND	0.78	0.94	1.15	73		B
Fall	16	0.23	0.19	0.20	ND	0.08	0.14	0.26	0.31	0.89	94		A B C
Winter	11	0.11	0.09	0.08	ND	ND	0.07	0.15	0.17	0.34	82		C
Weekday	39	0.22	0.23	0.14	ND	ND	0.08	0.26	0.51	0.94	82	NS	N/A
Weekend	15	0.25	0.31	0.14	ND	ND	0.08	0.31	0.78	1.15	80		
Paterson													
Spring	30	0.15	0.12	0.11	ND	ND	ND	0.19	0.36	0.43	73	0.0009	B C
Summer	36	0.39	0.28	0.35	ND	ND	0.14	0.59	0.71	1.12	86		
Fall	50	0.23	0.20	0.20	ND	ND	0.08	0.26	0.46	0.94	90		A C
Winter	31	0.22	0.16	0.18	0.04	0.06	0.13	0.29	0.34	0.74	100		A B C
Weekday	107	0.27	0.24	0.21	ND	0.06	0.08	0.35	0.63	1.12	91	NS	N/A
Weekend	40	0.20	0.15	0.17	ND	ND	0.08	0.27	0.40	0.67	80		

Table 24: Descriptive Statistics for Measured Ambient Air Concentrations for Elemental Carbon and Organic Carbon, units are $\mu\text{g}/\text{m}^3$

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Elemental Carbon													
Background	54	0.34	0.17	0.31	0.00	0.15	0.24	0.45	0.56	0.82	100	<0.0001	
Commercial	53	0.91	0.63	0.74	0.18	0.38	0.59	1.02	1.44	4.27	100		A
Industrial	49	0.72	0.52	0.61	ND	0.25	0.40	0.85	1.25	3.12	98		A
Mobile	46	0.76	0.55	0.65	0.11	0.25	0.43	0.84	1.35	3.23	100		A
Background	54	0.34	0.17	0.31	0.00	0.15	0.24	0.45	0.56	0.82	100	<0.0001	N/A
Paterson	148	0.80	0.57	0.68	ND	0.30	0.45	0.95	1.36	4.27	99		
Background													
Spring	12	0.30	0.12	0.32	0.13	0.15	0.19	0.42	0.45	0.47	100	NS	N/A
Summer	15	0.34	0.19	0.29	0.00	0.15	0.23	0.50	0.55	0.82	100		
Fall	16	0.32	0.15	0.30	0.07	0.12	0.23	0.44	0.56	0.60	100		
Winter	11	0.43	0.20	0.40	0.15	0.25	0.26	0.59	0.63	0.81	100		
Weekday	39	0.37	0.16	0.33	0.12	0.19	0.24	0.45	0.56	0.82	100	NS	N/A
Weekend	15	0.29	0.18	0.28	0.00	0.07	0.15	0.42	0.59	0.63	100		
Paterson													
Spring	34	0.61	0.34	0.58	0.15	0.25	0.32	0.84	1.18	1.40	100	0.0045	A
Summer	36	0.70	0.36	0.66	ND	0.23	0.47	0.98	1.22	1.60	97		A B
Fall	47	0.77	0.47	0.69	0.17	0.34	0.50	0.90	1.22	2.43	100		A B
Winter	31	1.16	0.90	0.80	0.32	0.44	0.64	1.36	1.78	4.27	100		B
Weekday	108	0.87	0.61	0.71	0.20	0.37	0.53	1.02	1.40	4.27	100	0.0018	N/A
Weekend	40	0.61	0.43	0.53	ND	0.18	0.29	0.74	1.26	1.78	98		
Organic Carbon													
Background	54	2.82	1.58	2.51	0.54	1.22	1.59	3.69	4.73	8.84	100	<0.0001	
Commercial	53	5.17	3.14	4.44	0.32	2.04	3.22	6.36	9.64	17.69	100		A
Industrial	50	4.91	3.24	4.17	1.07	1.60	2.65	5.66	9.23	18.44	100		A
Mobile	46	4.82	2.89	4.16	1.43	2.08	3.20	5.79	8.71	16.00	100		A
Background	54	2.82	1.58	2.51	0.54	1.22	1.59	3.69	4.73	8.84	100	<0.0001	N/A
Paterson	149	4.98	3.08	4.30	0.32	1.88	3.14	5.92	9.29	18.44	100		
Background													
Spring	12	1.80	0.94	1.61	0.54	0.95	1.17	2.20	3.13	3.85	100	0.0116	B
Summer	15	3.47	1.56	3.65	1.24	1.28	2.35	4.57	5.81	6.15	100		C
Fall	16	2.60	1.13	2.86	0.69	1.18	1.70	3.25	3.69	5.07	100		A B C
Winter	11	3.36	2.15	2.54	1.56	1.59	1.64	4.24	4.73	8.84	100		A B C
Weekday	39	2.94	1.69	2.75	0.69	1.22	1.59	3.69	5.46	8.84	100	NS	N/A
Weekend	15	2.49	1.25	2.35	0.54	1.18	1.28	3.78	4.24	4.73	100		
Paterson													
Spring	34	3.63	2.29	2.89	1.07	1.47	1.91	4.81	6.99	9.64	100	<0.0001	A
Summer	36	4.78	1.92	4.49	1.47	2.20	3.46	5.69	7.33	9.12	100		B
Fall	48	4.42	2.31	4.04	0.32	1.76	3.34	4.84	8.71	10.52	100		A B
Winter	31	7.54	4.37	5.79	2.32	3.64	4.34	9.78	12.63	18.44	100		
Weekday	109	5.12	3.03	4.42	1.07	2.09	3.39	5.72	9.12	18.44	100	NS	N/A
Weekend	40	4.59	3.24	3.61	0.32	1.45	2.06	6.34	9.80	12.63	100		

Table 25: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Polycyclic Aromatic Hydrocarbons, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Acenaphthene													
Background	54	1.94	3.88	0.71	ND	ND	0.45	1.63	4.14	25.51	81	0.0001	
Commercial	50	3.50	4.28	2.26	ND	0.43	0.91	3.63	8.66	21.23	96		A
Industrial	49	3.51	4.30	2.00	ND	0.41	0.71	3.52	11.13	17.36	90		A
Mobile	44	3.77	7.42	1.79	ND	0.71	0.92	3.12	7.40	48.40	91		A
Background	54	1.94	3.88	0.71	ND	ND	0.45	1.63	4.14	25.51	81	<0.0001	N/A
Paterson	143	3.59	5.41	2.08	ND	0.54	0.91	3.60	9.01	48.40	92		
Background													
Spring	12	1.05	1.17	0.67	0.04	0.18	0.23	1.30	2.33	4.14	100	NS	N/A
Summer	14	2.54	3.11	1.19	ND	0.62	0.66	2.54	7.83	10.49	93		
Fall	16	3.04	6.33	0.71	ND	ND	0.34	2.60	8.23	25.51	81		
Winter	12	0.68	0.42	0.71	ND	ND	ND	0.79	1.02	1.63	50		
Weekday	39	1.61	2.31	0.71	ND	ND	ND	1.56	4.14	10.49	74	NS	N/A
Weekend	15	2.81	6.43	0.86	0.01	0.08	0.18	2.33	5.24	25.51	100		
Paterson													
Spring	32	3.06	2.65	2.35	ND	0.74	1.22	3.24	7.24	10.24	97	NS	N/A
Summer	35	2.83	2.44	2.41	0.32	0.77	1.54	3.30	4.60	12.67	100		
Fall	44	4.20	8.11	1.07	ND	ND	0.71	3.92	11.48	48.40	89		
Winter	32	4.09	5.25	2.42	ND	ND	0.71	4.38	11.13	21.23	84		
Weekday	104	3.65	5.86	2.04	ND	0.57	0.92	3.52	8.29	48.40	93	NS	N/A
Weekend	39	3.42	4.02	2.09	ND	ND	0.77	4.33	10.16	18.52	90		
Acenaphthylene													
Background	54	0.77	2.03	0.11	ND	ND	0.08	0.59	1.55	13.53	81	<0.0001	
Commercial	50	10.37	33.12	3.17	0.13	0.40	1.01	9.32	13.16	232.83	100		A
Industrial	49	7.01	19.54	2.01	0.04	0.21	0.57	5.33	12.12	116.06	100		A
Mobile	44	9.68	35.98	3.87	0.17	0.33	0.62	6.20	11.49	240.95	100		A
Background	54	0.77	2.03	0.11	ND	ND	0.08	0.59	1.55	13.53	81	<0.0001	N/A
Paterson	143	9.00	30.03	2.57	0.04	0.32	0.74	6.60	12.12	240.95	100		
Background													
Spring	12	0.11	0.08	0.09	ND	ND	ND	0.11	0.21	0.31	58	<0.0001	A
Summer	14	0.08	0.07	0.09	ND	ND	ND	0.09	0.11	0.31	71		A
Fall	16	1.61	3.29	0.57	ND	0.08	0.34	1.57	3.09	13.53	94		B
Winter	12	1.09	1.73	0.81	0.01	0.09	0.16	1.06	1.19	6.42	100		B
Weekday	39	0.45	0.65	0.14	ND	ND	0.09	0.57	1.55	3.09	82	NS	N/A
Weekend	15	1.58	3.68	0.09	ND	ND	0.06	0.79	6.42	13.53	80		
Paterson													
Spring	32	1.32	1.39	0.81	0.10	0.28	0.51	1.30	3.11	5.87	100	<0.0001	A
Summer	35	1.06	1.06	0.73	0.11	0.24	0.37	1.42	2.26	4.69	100		A
Fall	44	14.20	37.43	5.45	0.21	2.01	2.66	9.07	13.30	240.95	100		B
Winter	32	18.24	43.88	6.72	0.04	2.09	4.00	12.18	14.91	232.83	100		B
Weekday	104	7.51	24.99	2.64	0.11	0.33	0.77	6.42	11.49	240.95	100	NS	N/A
Weekend	39	13.00	40.67	2.10	0.04	0.24	0.60	8.52	13.47	232.83	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 25: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Polycyclic Aromatic Hydrocarbons, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Anthracene													
Background	54	0.23	0.70	0.10	ND	ND	0.04	0.17	0.29	5.10	76	<0.0001	
Commercial	50	2.02	6.81	0.77	ND	0.20	0.41	1.43	2.41	48.68	94		A
Industrial	49	0.98	1.54	0.57	ND	0.11	0.24	0.84	2.33	10.10	94		A
Mobile	44	1.07	1.65	0.63	ND	0.16	0.22	1.24	2.28	10.60	95		A
Background	54	0.23	0.70	0.10	ND	ND	0.04	0.17	0.29	5.10	76	<0.0001	N/A
Paterson	143	1.37	4.23	0.64	ND	0.16	0.30	1.25	2.33	48.68	94		
Background													
Spring	12	0.07	0.05	0.06	ND	ND	0.04	0.10	0.17	0.17	83	0.0094	A
Summer	14	0.09	0.06	0.11	ND	ND	ND	0.17	0.17	0.17	71		A
Fall	16	0.27	0.32	0.17	ND	ND	ND	0.34	0.48	1.38	75		B
Winter	12	0.51	1.45	0.06	ND	ND	ND	0.17	0.28	5.10	75		A B
Weekday	39	0.15	0.23	0.09	ND	ND	0.04	0.17	0.39	1.38	77	NS	N/A
Weekend	15	0.44	1.29	0.11	ND	ND	ND	0.17	0.28	5.10	73		
Paterson													
Spring	32	0.53	0.40	0.44	0.06	0.11	0.22	0.78	1.00	1.63	100	0.0387	B
Summer	35	0.93	0.68	0.68	ND	ND	0.55	1.25	1.97	2.86	89		C
Fall	44	1.50	2.25	0.97	ND	0.11	0.24	1.67	2.42	10.60	95		A B C
Winter	32	2.51	8.48	0.62	ND	0.17	0.32	2.20	2.51	48.68	94		A B C
Weekday	104	1.58	4.92	0.72	ND	0.17	0.37	1.30	2.15	48.68	95	NS	N/A
Weekend	39	0.82	0.84	0.47	ND	0.11	0.17	1.15	2.40	2.58	92		
Benzo(a)anthracene ¹													
Background	54	0.03	0.05	0.02	ND	ND	ND	0.05	0.08	0.21	67	<0.0001	
Commercial	50	0.08	0.09	0.06	ND	0.01	0.03	0.12	0.19	0.38	94		A
Industrial	49	0.12	0.21	0.06	ND	ND	0.02	0.09	0.34	1.00	84		A
Mobile	44	0.12	0.22	0.05	ND	0.01	0.02	0.11	0.23	1.35	91		A
Background	54	0.03	0.05	0.02	ND	ND	0.00	0.05	0.08	0.21	67	<0.0001	N/A
Paterson	143	0.11	0.18	0.05	ND	ND	0.02	0.11	0.25	1.35	90		
Background													
Spring	12	0.02	0.02	0.01	ND	ND	ND	0.03	0.03	0.09	67	<0.0001	A B
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	0.04	0.05	21		A
Fall	16	0.07	0.07	0.05	ND	ND	0.02	0.10	0.21	0.21	88		B
Winter	12	0.04	0.02	0.04	ND	0.01	0.02	0.05	0.06	0.08	92		B
Weekday	39	0.03	0.04	0.02	ND	ND	ND	0.05	0.08	0.21	67	NS	N/A
Weekend	15	0.04	0.05	0.02	ND	ND	ND	0.05	0.09	0.21	67		
Paterson													
Spring	32	0.05	0.08	0.03	ND	0.01	0.02	0.07	0.11	0.38	94	<0.0001	A
Summer	35	0.04	0.11	0.02	ND	ND	ND	0.04	0.05	0.66	69		A
Fall	44	0.18	0.27	0.09	ND	0.03	0.05	0.14	0.40	1.35	98		B
Winter	32	0.14	0.12	0.12	ND	0.03	0.06	0.18	0.30	0.57	97		B
Weekday	104	0.12	0.20	0.06	ND	0.01	0.03	0.11	0.23	1.35	91	NS	N/A
Weekend	39	0.09	0.12	0.03	ND	ND	0.01	0.11	0.30	0.57	85		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 25: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Polycyclic Aromatic Hydrocarbons, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Benzo(a)anthracene ²													
Background	54	0.04	0.04	0.02	ND	ND	ND	0.05	0.08	0.21	67	0.0002	
Commercial	50	0.08	0.09	0.06	ND	0.01	0.03	0.12	0.19	0.38	94		A
Industrial	49	0.12	0.21	0.06	ND	ND	0.02	0.09	0.34	1.00	84		A
Mobile	44	0.12	0.22	0.05	ND	0.01	0.02	0.11	0.23	1.35	91		A
Background	54	0.04	0.04	0.02	ND	ND	ND	0.05	0.08	0.21	67	<0.0001	N/A
Paterson	143	0.11	0.18	0.05	ND	ND	0.02	0.11	0.25	1.35	90		
Background													
Spring	12	0.02	0.02	0.01	ND	ND	ND	0.03	0.03	0.09	67	0.0003	A B
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	0.04	0.05	21		A
Fall	16	0.07	0.06	0.05	ND	ND	0.02	0.10	0.21	0.21	88		B
Winter	12	0.04	0.02	0.04	ND	0.01	0.02	0.05	0.06	0.08	92		B
Weekday	39	0.04	0.04	0.02	ND	ND	ND	0.05	0.08	0.21	67	NS	N/A
Weekend	15	0.04	0.05	0.02	ND	ND	ND	0.05	0.09	0.21	67		
Paterson													
Spring	32	0.06	0.07	0.03	ND	0.01	0.02	0.07	0.11	0.38	94	<0.0001	A
Summer	35	0.04	0.11	0.02	ND	ND	ND	0.04	0.05	0.66	69		A
Fall	44	0.18	0.27	0.09	ND	0.03	0.05	0.14	0.40	1.35	98		B
Winter	32	0.14	0.12	0.12	ND	0.03	0.06	0.18	0.30	0.57	97		B
Weekday	104	0.12	0.20	0.06	ND	0.01	0.03	0.11	0.23	1.35	91	NS	N/A
Weekend	39	0.09	0.12	0.03	ND	ND	0.01	0.11	0.30	0.57	85		
Benzo(a)pyrene ¹													
Background	54	N/A	N/A	ND	ND	ND	ND	0.06	0.11	0.41	37	NS	N/A
Commercial	50	0.08	0.13	0.03	ND	ND	ND	0.09	0.25	0.58	62		
Industrial	49	0.09	0.23	0.03	ND	ND	ND	0.09	0.23	1.57	57		
Mobile	44	0.09	0.16	0.02	ND	ND	ND	0.11	0.41	0.77	57		
Background	54	0.04	0.07	ND	ND	ND	ND	0.06	0.11	0.41	37	0.0158	N/A
Paterson	143	0.09	0.18	0.03	ND	ND	ND	0.09	0.25	1.57	59		
Background													
Spring	12	N/A	N/A	ND	ND	ND	ND	0.06	0.08	0.13	42	0.0008	A B C
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		B
Fall	16	N/A	N/A	ND	ND	ND	ND	0.05	0.11	0.41	38		A B C
Winter	12	0.08	0.07	0.07	ND	ND	ND	0.13	0.18	0.21	75		C
Weekday	39	N/A	N/A	ND	ND	ND	ND	0.06	0.11	0.41	41	NS	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	0.06	0.15	0.21	27		
Paterson													
Spring	32	0.06	0.11	0.03	ND	ND	ND	0.07	0.11	0.58	75	<0.0001	A
Summer	35	N/A	N/A	ND	ND	ND	ND	ND	ND	0.22	6		
Fall	44	0.09	0.24	0.03	ND	ND	ND	0.07	0.18	1.57	68		A
Winter	32	0.18	0.18	0.12	ND	ND	0.07	0.29	0.41	0.77	88		
Weekday	104	0.09	0.18	0.03	ND	ND	ND	0.09	0.22	1.57	65	NS	N/A
Weekend	39	N/A	N/A	ND	ND	ND	ND	0.07	0.41	0.77	41		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 25: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Polycyclic Aromatic Hydrocarbons, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)			
Benzo(a)pyrene ²																
Background	54	N/A	N/A	ND	ND	ND	ND	0.06	0.11	0.41	37	NS	N/A			
Commercial	50	0.08	0.12	0.03	ND	ND	ND	0.09	0.25	0.58	62					
Industrial	49	0.10	0.23	0.03	ND	ND	ND	0.09	0.23	1.57	57					
Mobile	44	0.10	0.16	0.02	ND	ND	ND	0.11	0.41	0.77	57					
Background	54	N/A	N/A	ND	ND	ND	ND	0.06	0.11	0.41	37	0.0288	N/A			
Paterson	143	0.09	0.18	0.03	ND	ND	ND	0.09	0.25	1.57	59					
Background																
Spring	12	N/A	N/A	ND	ND	ND	ND	0.06	0.08	0.13	42	0.0008	A	B	C	
Summer	14	N/A	N/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0			B		
Fall	16	N/A	N/A	ND	ND	ND	ND	0.05	0.11	0.41	38			A	B	C
Winter	12	0.08	0.07	0.07	ND	ND	ND	0.13	0.18	0.21	75				C	
Weekday	39	N/A	N/A	ND	ND	ND	ND	0.06	0.11	0.41	41	NS	N/A			
Weekend	15	N/A	N/A	ND	ND	ND	ND	0.06	0.15	0.21	27					
Paterson																
Spring	32	0.06	0.11	ND	ND	ND	ND	0.07	0.11	0.58	75	<0.0001	A			
Summer	35	N/A	N/A	ND	ND	ND	ND	ND	ND	0.22	6					
Fall	44	0.10	0.24	0.03	ND	ND	ND	0.07	0.18	1.57	68		A			
Winter	32	0.18	0.18	0.12	ND	ND	0.07	0.29	0.41	0.77	88					
Weekday	104	0.09	0.18	0.03	ND	ND	ND	0.09	0.22	1.57	65	NS	N/A			
Weekend	39	N/A	N/A	ND	ND	ND	ND	0.07	0.41	0.77	41					
Benzo(b)fluoranthene ¹																
Background	54	0.55	3.45	0.02	ND	ND	ND	0.11	0.30	25.44	67	NS	N/A			
Commercial	50	0.13	0.23	0.04	ND	ND	0.01	0.20	0.34	1.00	84					
Industrial	49	0.15	0.35	0.04	ND	ND	0.01	0.14	0.45	2.25	78					
Mobile	44	0.16	0.31	0.03	ND	ND	0.01	0.18	0.35	1.70	84					
Background	54	0.55	3.45	0.02	ND	ND	ND	0.11	0.30	25.44	67	0.0425	N/A			
Paterson	143	0.15	0.30	0.04	ND	ND	0.01	0.17	0.35	2.25	82					
Background																
Spring	12	N/A	N/A	ND	ND	ND	ND	0.06	0.12	0.12	33	0.0001	A	B		
Summer	14	0.01	0.01	2.9x10 ⁻⁴	ND	ND	ND	4.4x10 ⁻³	0.02	0.05	57		A			
Fall	16	1.66	6.34	0.03	ND	ND	0.02	0.13	0.44	25.44	88			B	C	
Winter	12	0.21	0.21	0.17	ND	ND	0.06	0.33	0.45	0.68	83				C	
Weekday	39	0.07	0.11	0.02	ND	ND	ND	0.08	0.21	0.45	69	NS	N/A			
Weekend	15	1.79	6.54	0.00	ND	ND	ND	0.17	0.68	25.44	60					
Paterson																
Spring	32	0.09	0.15	0.04	ND	ND	ND	0.16	0.20	0.80	75	<0.0001	A			
Summer	35	0.01	0.02	0.01	ND	ND	ND	0.02	0.04	0.08	71					
Fall	44	0.14	0.35	0.05	ND	0.01	0.03	0.12	0.23	2.25	91		A			
Winter	32	0.35	0.38	0.26	ND	ND	0.06	0.46	0.84	1.70	88					
Weekday	104	0.14	0.28	0.04	ND	ND	0.01	0.17	0.35	2.25	83	NS	N/A			
Weekend	39	0.16	0.33	0.02	ND	ND	0.00	0.13	0.47	1.70	79					

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 25: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Polycyclic Aromatic Hydrocarbons, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Benzo(b)fluoranthene ²													
Background	54	0.55	3.45	0.02	ND	ND	ND	0.11	0.30	25.44	67	NS	N/A
Commercial	50	0.13	0.23	0.04	ND	ND	0.02	0.20	0.34	1.00	84		
Industrial	49	0.16	0.34	0.04	ND	ND	0.02	0.14	0.45	2.25	78		
Mobile	44	0.16	0.31	0.03	ND	ND	0.02	0.18	0.35	1.70	84		
Background	54	0.55	3.45	0.02	ND	ND	ND	0.11	0.30	25.44	67	NS	N/A
Paterson	143	0.15	0.29	0.04	ND	ND	0.02	0.17	0.35	2.25	82		
Background													
Spring	12	N/A	N/A	ND	ND	ND	ND	0.06	0.12	0.12	33	<0.0001	A B
Summer	14	0.01	0.01	0.02	ND	ND	ND	0.02	0.02	0.05	57		A
Fall	16	1.66	6.34	0.03	ND	ND	0.02	0.13	0.44	25.44	88		B C
Winter	12	0.22	0.20	0.17	ND	ND	0.06	0.33	0.45	0.68	83		C
Weekday	39	0.07	0.11	0.02	ND	ND	ND	0.08	0.21	0.45	69	NS	N/A
Weekend	15	1.80	6.54	0.02	ND	ND	ND	0.17	0.68	25.44	60		
Paterson													
Spring	32	0.10	0.15	0.04	ND	ND	ND	0.16	0.20	0.80	75	<0.0001	A
Summer	35	0.02	0.01	0.02	ND	ND	ND	0.02	0.04	0.08	71		
Fall	44	0.14	0.35	0.05	ND	0.02	0.03	0.12	0.23	2.25	91		A
Winter	32	0.36	0.38	0.26	ND	ND	0.06	0.46	0.84	1.70	88		
Weekday	104	0.14	0.28	0.04	ND	ND	0.02	0.17	0.35	2.25	83	NS	N/A
Weekend	39	0.16	0.33	0.02	ND	ND	0.01	0.13	0.47	1.70	79		
Benzo(ghi)perylene													
Background	54	N/A	N/A	ND	ND	ND	ND	ND	0.07	0.77	22	N/A	N/A
Commercial	50	N/A	N/A	ND	ND	ND	ND	0.04	0.14	0.68	36		
Industrial	49	N/A	N/A	ND	ND	ND	ND	0.07	0.33	1.38	37		
Mobile	44	N/A	N/A	ND	ND	ND	ND	0.05	0.17	0.99	32		
Background	54	N/A	N/A	ND	ND	ND	ND	ND	0.07	0.77	22	N/A	N/A
Paterson	143	N/A	N/A	ND	ND	ND	ND	0.06	0.18	1.38	35		
Background													
Spring	12	N/A	N/A	ND	ND	ND	ND	ND	0.04	0.05	17	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Fall	16	N/A	N/A	ND	ND	ND	ND	0.09	0.18	0.77	44		
Winter	12	N/A	N/A	ND	ND	ND	ND	ND	0.05	0.08	25		
Weekday	39	N/A	N/A	ND	ND	ND	ND	ND	0.07	0.77	18	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	0.05	0.08	0.18	33		
Paterson													
Spring	32	N/A	N/A	ND	ND	ND	ND	ND	0.06	0.38	22	N/A	N/A
Summer	35	N/A	N/A	ND	ND	ND	ND	ND	ND	0.22	6		
Fall	44	N/A	N/A	0.06	ND	ND	ND	0.16	0.55	1.38	66		
Winter	32	N/A	N/A	ND	ND	ND	ND	0.06	0.15	0.83	38		
Weekday	104	N/A	N/A	ND	ND	ND	ND	0.05	0.15	1.38	35	N/A	N/A
Weekend	39	N/A	N/A	ND	ND	ND	ND	0.10	0.26	0.83	36		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 25: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Polycyclic Aromatic Hydrocarbons, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Benzo(k)fluoranthene ¹													
Background	54	0.03	0.06	4.2x10-3	ND	ND	ND	0.04	0.12	0.38	57	NS	N/A
Commercial	50	0.07	0.11	0.03	ND	ND	0.01	0.07	0.19	0.55	86		
Industrial	49	0.10	0.23	0.03	ND	ND	0.00	0.07	0.20	1.23	76		
Mobile	44	0.07	0.12	0.02	ND	ND	0.01	0.07	0.22	0.48	84		
Background	54	0.03	0.06	0.00	ND	ND	ND	0.04	0.12	0.38	57	0.001	N/A
Paterson	143	0.08	0.16	0.03	ND	ND	0.01	0.07	0.20	1.23	82		
Background													
Spring	12	0.01	0.02	2.0x10-3	ND	ND	ND	0.03	0.04	0.05	50	0.0209	N/S
Summer	14	N/A	N/A	ND	ND	ND	ND	1.6x10-3	0.01	0.03	43		
Fall	16	0.05	0.10	0.02	ND	ND	ND	0.04	0.15	0.38	69		
Winter	12	0.06	0.06	0.05	ND	ND	ND	0.10	0.12	0.20	67		
Weekday	39	0.03	0.06	0.00	ND	ND	ND	0.03	0.05	0.38	59	NS	N/A
Weekend	15	0.05	0.07	0.00	ND	ND	ND	0.12	0.15	0.20	53		
Paterson													
Spring	32	0.05	0.10	0.02	ND	ND	0.01	0.05	0.08	0.55	88	<0.0001	A
Summer	35	0.02	0.03	0.01	ND	ND	ND	0.02	0.03	0.17	69		
Fall	44	0.09	0.19	0.04	ND	ND	0.02	0.08	0.19	1.23	89		A B
Winter	32	0.16	0.21	0.07	ND	ND	0.04	0.21	0.36	1.05	81		B
Weekday	104	0.07	0.14	0.03	ND	ND	0.01	0.07	0.15	1.23	82	NS	N/A
Weekend	39	0.11	0.20	0.01	ND	ND	0.00	0.13	0.36	1.05	82		
Benzo(k)fluoranthene ²													
Background	54	0.04	0.06	0.02	ND	ND	ND	0.04	0.12	0.38	57	NS	N/A
Commercial	50	0.07	0.11	0.03	ND	ND	0.02	0.07	0.19	0.55	86		
Industrial	49	0.10	0.23	0.03	ND	ND	0.02	0.07	0.20	1.23	76		
Mobile	44	0.08	0.12	0.02	ND	ND	0.01	0.07	0.22	0.48	84		
Background	54	0.04	0.06	0.02	ND	ND	ND	0.04	0.12	0.38	57	NS	N/A
Paterson	143	0.08	0.16	0.03	ND	ND	0.02	0.07	0.20	1.23	82		
Background													
Spring	12	0.02	0.01	0.02	ND	ND	ND	0.03	0.04	0.05	50	0.0001	A B
Summer	14	N/A	N/A	ND	ND	ND	ND	0.02	0.02	0.03	43		A
Fall	16	0.06	0.09	0.02	ND	ND	ND	0.04	0.15	0.38	69		B
Winter	12	0.06	0.06	0.05	ND	ND	ND	0.10	0.12	0.20	67		B
Weekday	39	0.03	0.06	0.02	ND	ND	ND	0.03	0.05	0.38	59	NS	N/A
Weekend	15	0.06	0.06	0.02	ND	ND	ND	0.12	0.15	0.20	53		
Paterson													
Spring	32	0.05	0.10	0.02	ND	ND	0.01	0.05	0.08	0.55	88	<0.0001	A B
Summer	35	0.02	0.03	0.02	ND	ND	ND	0.02	0.03	0.17	69		A
Fall	44	0.10	0.19	0.04	ND	ND	0.02	0.08	0.19	1.23	89		B C
Winter	32	0.16	0.21	0.07	ND	ND	0.04	0.21	0.36	1.05	81		C
Weekday	104	0.07	0.14	0.03	ND	ND	0.02	0.07	0.15	1.23	82	NS	N/A
Weekend	39	0.11	0.20	0.02	ND	ND	0.01	0.13	0.36	1.05	82		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 25: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Polycyclic Aromatic Hydrocarbons, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Chrysene													
Background	54	0.06	0.07	0.03	ND	ND	ND	0.09	0.15	0.34	74	0.0001	
Commercial	50	0.13	0.11	0.10	ND	0.04	0.05	0.16	0.31	0.50	96		A
Industrial	49	0.18	0.28	0.09	ND	ND	0.03	0.15	0.57	1.50	84		A
Mobile	44	0.16	0.29	0.08	ND	0.03	0.04	0.18	0.26	1.79	95		A
Background	54	0.06	0.07	0.03	ND	ND	ND	0.09	0.15	0.34	74	<0.0001	N/A
Paterson	143	0.16	0.24	0.09	ND	0.02	0.05	0.16	0.37	1.79	92		
Background													
Spring	12	0.02	0.03	0.02	ND	ND	0.01	0.03	0.06	0.09	75	<0.0001	A
Summer	14	N/A	N/A	ND	ND	ND	ND	0.02	0.04	0.04	36		A
Fall	16	0.11	0.09	0.10	ND	0.02	0.04	0.16	0.22	0.34	94		B
Winter	12	0.08	0.05	0.08	ND	0.03	0.04	0.10	0.15	0.18	92		B
Weekday	39	0.06	0.06	0.03	ND	ND	ND	0.09	0.15	0.22	74	NS	N/A
Weekend	15	0.07	0.09	0.04	ND	ND	ND	0.09	0.18	0.34	73		
Paterson													
Spring	32	0.07	0.06	0.05	ND	0.02	0.03	0.08	0.16	0.28	91	<0.0001	A
Summer	35	0.07	0.06	0.05	ND	ND	0.04	0.09	0.10	0.37	83		A
Fall	44	0.25	0.37	0.14	ND	0.04	0.08	0.21	0.57	1.79	95		B
Winter	32	0.23	0.18	0.16	ND	0.05	0.13	0.32	0.48	0.83	97		B
Weekday	104	0.16	0.26	0.09	ND	0.03	0.05	0.16	0.34	1.79	92	NS	N/A
Weekend	39	0.15	0.18	0.08	ND	ND	0.04	0.18	0.43	0.83	90		
Dibenzo(a,h)anthracene ¹													
Background	54	N/A	N/A	ND	ND	ND	ND	0.04	0.11	0.87	39	0.0021	A
Commercial	50	0.09	0.16	0.04	ND	ND	0.01	0.12	0.24	0.73	76		B
Industrial	49	0.12	0.28	0.04	ND	ND	ND	0.10	0.37	1.76	59		A B
Mobile	44	0.13	0.26	0.04	ND	ND	ND	0.09	0.40	1.53	70		B
Background	54	N/A	N/A	ND	ND	ND	ND	0.04	0.11	0.87	39	0.0002	N/A
Paterson	143	0.12	0.24	0.04	ND	ND	ND	0.10	0.36	1.76	69		
Background													
Spring	12	N/A	N/A	ND	ND	ND	ND	0.04	0.08	0.11	42	0.009	A B
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	0.01	7		A
Fall	16	N/A	N/A	ND	ND	ND	ND	0.04	0.20	0.87	44		A B
Winter	12	0.06	0.07	0.04	ND	ND	ND	0.10	0.16	0.21	67		B
Weekday	39	N/A	N/A	ND	ND	ND	ND	0.04	0.11	0.87	38	NS	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	0.06	0.16	0.21	40		
Paterson													
Spring	32	0.06	0.11	0.04	ND	ND	ND	0.07	0.11	0.63	69	<0.0001	A
Summer	35	N/A	N/A	ND	ND	ND	ND	0.02	0.04	0.37	31		
Fall	44	0.12	0.28	0.04	ND	ND	0.02	0.09	0.36	1.76	82		A
Winter	32	0.26	0.31	0.15	ND	0.01	0.06	0.39	0.57	1.53	91		
Weekday	104	0.11	0.22	0.04	ND	ND	ND	0.11	0.29	1.76	74	NS	N/A
Weekend	39	0.13	0.28	0.02	ND	ND	ND	0.09	0.52	1.53	54		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 25: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Polycyclic Aromatic Hydrocarbons, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Dibenzo(a,h)anthracene ²													
Background	54	N/A	N/A	ND	ND	ND	ND	0.04	0.11	0.87	39	0.0013	
Commercial	50	0.10	0.16	0.04	ND	ND	0.02	0.12	0.24	0.73	76		A
Industrial	49	0.13	0.28	0.04	ND	ND	ND	0.10	0.37	1.76	59		A
Mobile	44	0.13	0.26	0.04	ND	ND	ND	0.09	0.40	1.53	70		A
Background	54	N/A	N/A	ND	ND	ND	ND	0.04	0.11	0.87	39	0.0001	N/A
Paterson	143	0.12	0.23	0.04	ND	ND	ND	0.10	0.36	1.76	69		
Background													
Spring	12	N/A	N/A	ND	ND	ND	ND	0.04	0.08	0.11	42	0.0444	A B
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	0.02	7		A
Fall	16	N/A	N/A	ND	ND	ND	ND	0.04	0.20	0.87	44		A B
Winter	12	0.07	0.07	ND	ND	ND	ND	0.10	0.16	0.21	67		B
Weekday	39	N/A	N/A	ND	ND	ND	ND	0.04	0.11	0.87	38	NS	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	0.06	0.16	0.21	40		
Paterson													
Spring	32	0.07	0.11	0.04	ND	ND	ND	0.07	0.11	0.63	69	<0.0001	A
Summer	35	N/A	N/A	ND	ND	ND	ND	0.02	0.04	0.37	31		
Fall	44	0.13	0.28	0.04	ND	ND	0.02	0.09	0.36	1.76	82		A
Winter	32	0.26	0.31	0.15	ND	0.02	0.06	0.39	0.57	1.53	91		
Weekday	104	0.11	0.22	0.04	ND	ND	ND	0.11	0.29	1.76	74	NS	N/A
Weekend	39	0.14	0.28	0.02	ND	ND	ND	0.09	0.52	1.53	54		
Fluoranthene													
Background	54	0.56	0.36	0.53	ND	0.14	0.29	0.76	0.96	2.01	96	<0.0001	
Commercial	50	2.37	1.61	1.96	0.48	0.75	1.26	3.04	4.74	7.00	100		A
Industrial	49	2.16	2.13	1.63	ND	0.46	1.01	2.68	3.81	13.31	98		A
Mobile	44	2.71	2.76	2.46	ND	0.55	1.16	3.15	4.60	16.11	98		A
Background	54	0.56	0.36	0.53	ND	0.14	0.29	0.76	0.96	2.01	96	<0.0001	N/A
Paterson	143	2.40	2.19	1.90	ND	0.60	1.17	2.99	4.13	16.11	99		
Background													
Spring	12	0.43	0.30	0.40	0.01	0.06	0.24	0.59	0.81	1.05	100	NS	N/A
Summer	14	0.56	0.25	0.59	ND	0.26	0.33	0.76	0.81	0.95	93		
Fall	16	0.69	0.51	0.59	0.06	0.14	0.33	1.02	1.16	2.01	100		
Winter	12	0.50	0.25	0.55	ND	0.23	0.29	0.70	0.73	0.90	92		
Weekday	39	0.56	0.39	0.43	ND	0.14	0.28	0.76	1.07	2.01	95	NS	N/A
Weekend	15	0.56	0.29	0.64	0.01	0.06	0.33	0.79	0.90	0.95	100		
Paterson													
Spring	32	1.94	1.21	1.60	0.46	0.71	1.24	2.36	3.09	6.13	100	0.0235	A
Summer	35	2.79	1.54	2.52	ND	1.44	1.72	3.17	5.00	7.13	97		B
Fall	44	2.71	3.32	1.89	0.15	0.50	0.75	2.94	5.62	16.11	100		A B
Winter	32	2.02	1.39	1.60	ND	0.79	1.02	2.92	4.08	5.34	97		A B
Weekday	104	2.64	2.43	2.07	ND	0.71	1.37	3.02	5.00	16.11	98	0.0232	N/A
Weekend	39	1.76	1.15	1.40	0.09	0.48	0.91	2.68	3.46	4.90	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 25: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Polycyclic Aromatic Hydrocarbons, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Fluorene													
Background	54	6.00	8.84	3.28	ND	0.50	0.97	8.14	13.88	45.31	98	0.0001	
Commercial	50	20.10	49.82	9.43	0.76	2.52	5.85	12.95	24.35	334.51	100		A
Industrial	49	15.24	27.84	8.44	0.04	1.65	3.18	13.74	24.48	154.74	100		A
Mobile	44	15.88	42.83	8.56	0.06	1.18	3.03	12.45	19.95	287.83	100		A
Background	54	6.00	8.84	3.28	ND	0.50	0.97	8.14	13.88	45.31	98	<0.0001	N/A
Paterson	143	17.14	40.97	8.72	0.04	1.68	3.90	13.31	23.30	334.51	100		
Background													
Spring	12	1.66	2.27	0.70	0.13	0.17	0.48	2.05	3.53	8.14	100	0.0004	A
Summer	14	7.05	5.88	4.03	ND	2.08	2.75	10.20	17.14	19.58	93		B
Fall	16	8.66	10.11	4.64	0.75	0.76	3.84	11.28	15.36	42.54	100		B
Winter	12	5.58	12.59	1.98	0.02	0.81	1.00	3.37	4.95	45.31	100		A B
Weekday	39	4.78	5.17	2.71	ND	0.47	0.81	8.14	13.88	19.58	97	NS	N/A
Weekend	15	9.19	14.43	3.79	0.17	0.71	1.73	9.42	42.54	45.31	100		
Paterson													
Spring	32	4.71	5.05	2.53	0.21	0.79	1.21	6.48	11.01	18.19	100	<0.0001	
Summer	35	9.77	4.69	8.91	1.54	4.87	6.92	12.17	15.72	23.30	100		A
Fall	44	21.80	45.18	10.65	1.82	3.11	7.56	17.99	24.56	287.83	100		A
Winter	32	31.21	65.98	9.19	0.04	2.95	4.37	18.59	71.62	334.51	100		A
Weekday	104	15.80	33.18	8.82	0.06	2.29	4.64	13.53	23.30	287.83	100	NS	N/A
Weekend	39	20.72	57.19	7.81	0.04	0.84	2.24	12.63	24.56	334.51	100		
Indeno(1,2,3,-cd)pyrene													
Background	54	N/A	N/A	ND	ND	ND	ND	0.03	0.07	0.55	31	N/A	N/A
Commercial	50	N/A	N/A	0.01	ND	ND	ND	0.06	0.19	0.51	54		
Industrial	49	N/A	N/A	ND	ND	ND	ND	0.06	0.19	0.99	45		
Mobile	44	N/A	N/A	0.01	ND	ND	ND	0.06	0.28	0.59	57		
Background	54	N/A	N/A	ND	ND	ND	ND	0.03	0.07	0.55	31	N/A	N/A
Paterson	143	N/A	N/A	0.01	ND	ND	ND	0.06	0.19	0.99	52		
Background													
Spring	12	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.05	25	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	0.03	7		
Fall	16	N/A	N/A	ND	ND	ND	ND	0.03	0.07	0.55	31		
Winter	12	N/A	N/A	0.04	ND	ND	ND	0.10	0.11	0.15	67		
Weekday	39	N/A	N/A	ND	ND	ND	ND	0.03	0.07	0.55	28	N/A	N/A
Weekend	15	N/A	N/A	ND	ND	ND	ND	0.05	0.09	0.15	40		
Paterson													
Spring	32	N/A	N/A	0.01	ND	ND	ND	0.02	0.03	0.21	63	N/A	N/A
Summer	35	N/A	N/A	ND	ND	ND	ND	ND	0.11	0.19	17		
Fall	44	N/A	N/A	ND	ND	ND	ND	0.06	0.13	0.99	50		
Winter	32	N/A	N/A	0.10	ND	ND	0.02	0.26	0.37	0.59	81		
Weekday	104	N/A	N/A	0.01	ND	ND	ND	0.06	0.17	0.99	53	N/A	N/A
Weekend	39	N/A	N/A	ND	ND	ND	ND	0.06	0.37	0.59	49		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 25: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Polycyclic Aromatic Hydrocarbons, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Naphthalene													
Background	54	8.49	11.98	3.01	ND	ND	1.47	12.97	20.17	62.61	87	<0.0001	
Commercial	50	38.83	47.32	19.28	0.19	3.43	5.97	55.41	113.14	215.16	100		A
Industrial	49	26.88	33.61	14.15	0.82	2.46	5.12	31.72	68.80	146.21	100		A
Mobile	44	33.42	46.30	17.48	ND	2.36	7.18	50.40	73.17	274.88	98		A
Background	54	8.49	11.98	3.01	ND	ND	1.47	12.97	20.17	62.61	87	<0.0001	N/A
Paterson	143	33.07	42.76	15.61	ND	2.71	5.97	48.13	85.57	274.88	99		
Background													
Spring	12	1.54	1.11	1.47	ND	ND	ND	2.53	3.13	3.22	75	<0.0001	A
Summer	14	1.92	1.89	1.47	ND	ND	ND	2.10	5.03	6.91	71		A
Fall	16	18.32	17.02	13.18	2.67	2.90	6.23	23.52	50.97	62.61	100		B
Winter	12	10.00	6.39	8.79	0.21	2.60	4.94	15.27	17.62	19.96	100		B
Weekday	39	7.09	7.40	3.22	ND	0.21	1.47	12.86	19.96	26.57	90	NS	N/A
Weekend	15	12.14	19.37	2.40	ND	ND	1.47	17.62	50.97	62.61	80		
Paterson													
Spring	32	8.33	7.85	5.29	0.82	2.27	2.96	8.30	22.79	25.17	100	<0.0001	A
Summer	35	7.91	4.73	7.20	0.19	2.46	4.38	11.17	15.14	19.25	100		A
Fall	44	48.76	48.18	33.38	2.48	13.26	16.73	65.51	93.36	274.88	100		B
Winter	32	63.78	49.00	50.40	ND	19.84	30.34	92.90	116.68	215.16	97		B
Weekday	104	35.15	44.98	18.20	ND	3.42	6.47	49.29	90.05	274.88	99	NS	N/A
Weekend	39	27.53	36.15	10.39	0.19	2.28	3.64	46.49	70.44	169.67	100		
Phenanthrene													
Background	54	5.16	4.76	3.28	ND	0.92	1.92	7.86	10.81	23.41	98	<0.0001	
Commercial	50	19.21	15.58	15.16	2.98	5.06	7.18	25.71	39.83	74.34	100		A
Industrial	49	18.36	22.08	11.99	ND	3.04	5.40	25.20	37.20	143.65	98		A
Mobile	44	27.27	42.15	13.54	ND	4.91	6.44	31.09	48.72	242.45	98		A
Background	54	5.16	4.76	3.28	ND	0.92	1.92	7.86	10.81	23.41	98	<0.0001	N/A
Paterson	143	21.40	28.32	14.18	ND	4.34	6.42	27.00	41.18	242.45	99		
Background													
Spring	12	2.85	2.59	2.19	0.80	0.93	1.64	3.07	3.49	10.61	100	0.0012	A
Summer	14	7.70	5.60	7.65	ND	2.96	3.70	9.61	11.80	23.41	93		B
Fall	16	6.61	5.29	4.36	0.77	0.92	2.39	9.73	15.45	16.51	100		A B
Winter	12	2.57	1.68	2.67	0.02	0.89	1.07	3.51	4.13	6.05	100		A
Weekday	39	4.94	4.37	3.14	ND	0.80	1.89	7.86	11.80	16.51	97	NS	N/A
Weekend	15	5.73	5.78	4.13	0.92	0.93	2.37	8.65	10.77	23.41	100		
Paterson													
Spring	32	7.65	3.54	6.50	3.04	4.44	5.35	9.43	11.69	18.96	100	<0.0001	A
Summer	35	29.36	13.96	27.00	ND	14.87	19.14	41.18	49.65	58.96	97		B
Fall	44	31.99	45.17	20.17	1.14	4.12	9.53	31.66	74.34	242.45	100		B C
Winter	32	11.88	9.95	7.41	ND	3.98	5.21	16.57	27.67	34.68	97		A C
Weekday	104	23.16	31.68	15.14	ND	4.53	6.89	27.15	38.23	242.45	98	NS	N/A
Weekend	39	16.71	15.71	8.10	0.11	3.12	5.88	26.13	45.42	58.96	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 25: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Polycyclic Aromatic Hydrocarbons, units are ng/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Pyrene													
Background	54	0.22	0.18	0.16	ND	ND	0.08	0.29	0.45	0.94	89	<0.0001	
Commercial	50	1.51	1.06	1.22	0.22	0.52	0.74	1.77	3.07	5.63	100		A
Industrial	49	1.27	1.38	0.94	0.03	0.22	0.42	1.32	2.35	8.56	100		A
Mobile	44	1.43	1.57	1.00	ND	0.30	0.53	1.35	3.06	7.91	98		A
Background	54	0.22	0.18	0.16	ND	ND	0.08	0.29	0.45	0.94	89	<0.0001	N/A
Paterson	143	1.40	1.34	1.10	ND	0.30	0.65	1.62	3.06	8.56	99		
Background													
Spring	12	0.12	0.09	0.09	ND	ND	0.06	0.14	0.26	0.31	83	0.0248	NS
Summer	14	0.16	0.06	0.16	ND	0.08	0.12	0.20	0.25	0.29	93		
Fall	16	0.33	0.26	0.31	ND	ND	0.08	0.47	0.70	0.94	88		
Winter	12	0.24	0.13	0.23	ND	0.08	0.13	0.35	0.40	0.46	92		
Weekday	39	0.22	0.18	0.19	ND	0.05	0.08	0.29	0.46	0.94	90	NS	N/A
Weekend	15	0.22	0.17	0.14	ND	ND	0.10	0.35	0.40	0.70	87		
Paterson													
Spring	32	0.99	0.66	0.90	0.21	0.26	0.44	1.27	1.77	3.02	100	NS	N/A
Summer	35	1.31	0.68	1.23	0.03	0.53	0.89	1.44	2.35	3.07	100		
Fall	44	1.57	1.88	1.02	0.15	0.27	0.49	1.66	3.55	8.56	100		
Winter	32	1.70	1.43	1.15	ND	0.42	0.66	2.69	3.66	5.63	97		
Weekday	104	1.53	1.44	1.19	ND	0.39	0.74	1.72	3.07	8.56	99	0.0199	N/A
Weekend	39	1.08	0.98	0.89	0.08	0.22	0.40	1.34	3.06	4.93	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 26: Descriptive Statistics for Measured Ambient Air Concentrations for PM₁₀, units are ug/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
PM ₁₀ Mass													
Background	55	11.29	6.98	10.02	1.01	3.69	6.61	14.86	21.36	35.08	100	0.0001	
Commercial	53	18.99	12.03	15.47	4.33	7.95	11.96	22.69	35.64	71.79	100		A
Industrial	49	17.13	11.35	14.13	ND	6.12	9.71	21.97	32.50	65.14	98		A
Mobile	47	17.52	12.47	15.04	1.16	6.29	9.76	20.80	36.87	67.73	100		A
Background	55	11.29	6.98	10.02	1.01	3.69	6.61	14.86	21.36	35.08	100	0.0001	N/A
Paterson	149	17.92	11.90	15.04	ND	6.87	10.11	22.19	35.59	71.79	99		
Background													
Spring	11	9.90	4.76	9.54	3.48	3.71	6.61	13.94	16.28	17.22	100	NS	N/A
Summer	15	15.52	9.34	11.20	3.65	5.11	8.39	23.93	26.64	35.08	100		
Fall	17	10.20	4.72	10.43	3.56	3.88	7.15	13.06	15.30	20.81	100		
Winter	12	8.80	6.33	6.74	1.01	2.27	4.69	11.35	17.82	22.67	100		
Weekday	40	11.54	7.27	10.47	1.01	3.70	6.66	15.08	21.09	35.08	100	NS	N/A
Weekend	15	10.62	6.32	9.54	3.48	3.65	6.61	13.94	22.67	23.93	100		
Paterson													
Spring	30	15.84	9.53	13.43	ND	6.04	7.95	22.72	29.62	38.90	97	NS	N/A
Summer	36	17.04	8.71	14.22	6.12	7.73	9.60	22.34	31.76	38.12	100		
Fall	51	15.83	8.96	15.05	1.52	4.89	10.68	20.10	24.25	51.39	100		
Winter	32	24.16	17.99	18.95	1.16	8.07	12.06	36.47	44.43	71.79	100		
Weekday	108	19.02	12.61	14.98	ND	7.93	11.15	22.63	35.64	71.79	99	NS	N/A
Weekend	41	14.99	9.32	15.47	1.52	4.59	6.87	21.03	23.47	38.59	100		

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
1,1,1-Trichloroethane													
Background	66	0.11	0.02	0.11	0.05	0.11	0.11	0.11	0.16	0.16	100	<0.0001	B
Commercial	45	0.23	0.16	0.16	0.05	0.11	0.11	0.33	0.38	0.98	100		
Industrial	45	0.13	0.03	0.11	0.05	0.11	0.11	0.16	0.16	0.22	100		A
Mobile	50	0.13	0.04	0.11	0.05	0.11	0.11	0.16	0.19	0.22	100		A B
Background	66	0.11	0.02	0.11	0.05	0.11	0.11	0.11	0.16	0.16	100	<0.0001	N/A
Paterson	140	0.16	0.11	0.11	0.05	0.11	0.11	0.16	0.27	0.98	100		
Background													
Spring	14	0.11	0.03	0.11	0.05	0.11	0.11	0.11	0.16	0.16	100	NS	N/A
Summer	14	0.11	0.00	0.11	0.11	0.11	0.11	0.11	0.11	0.11	100		
Fall	21	0.12	0.02	0.11	0.11	0.11	0.11	0.16	0.16	0.16	100		
Winter	17	0.11	0.03	0.11	0.05	0.05	0.11	0.11	0.16	0.16	100		
Weekday	46	0.11	0.02	0.11	0.05	0.11	0.11	0.11	0.16	0.16	100	NS	N/A
Weekend	20	0.12	0.03	0.11	0.05	0.08	0.11	0.14	0.16	0.16	100		
Paterson													
Spring	29	0.13	0.02	0.11	0.11	0.11	0.11	0.16	0.16	0.16	100	0.0044	A
Summer	39	0.16	0.07	0.11	0.11	0.11	0.11	0.16	0.22	0.38	100		A B
Fall	47	0.21	0.16	0.16	0.11	0.11	0.11	0.27	0.38	0.98	100		B
Winter	25	0.13	0.05	0.11	0.05	0.05	0.11	0.16	0.22	0.22	100		A
Weekday	104	0.17	0.11	0.11	0.05	0.11	0.11	0.16	0.33	0.98	100	NS	N/A
Weekend	36	0.16	0.08	0.11	0.11	0.11	0.11	0.16	0.27	0.49	100		
1,2,4-Trichlorobenzene													
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.37	2	N/A	N/A
Commercial	45	N/A	N/A	ND	ND	ND	ND	ND	0.07	0.15	2		
Industrial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	0.15	2		
Mobile	50	N/A	N/A	ND	ND	ND	ND	ND	ND	0.15	2		
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.37	2	N/A	N/A
Paterson	140	N/A	N/A	ND	ND	ND	ND	ND	ND	0.15	2		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	0.37	7		
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Winter	17	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	46	N/A	N/A	ND	ND	ND	ND	ND	ND	0.37	2	N/A	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	39	N/A	N/A	ND	ND	ND	ND	ND	0.07	0.15	8		
Fall	47	N/A	N/A	ND	ND	ND	ND	ND	ND	0.15	0		
Winter	25	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	104	N/A	N/A	ND	ND	ND	ND	ND	ND	0.15	2	N/A	N/A
Weekend	36	N/A	N/A	ND	ND	ND	ND	ND	ND	0.15	3		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
1,2,4-Trimethylbenzene													
Background	66	0.09	0.08	0.10	ND	ND	0.05	0.15	0.15	0.44	65	<0.0001	
Commercial	45	0.95	0.70	0.79	0.15	0.34	0.54	1.08	1.67	4.38	100		
Industrial	45	0.67	0.59	0.54	0.05	0.20	0.34	0.79	1.28	3.05	100		A
Mobile	50	0.66	0.50	0.59	0.10	0.20	0.39	0.74	1.13	3.25	100		A
Background	66	0.09	0.08	0.10	ND	ND	0.05	0.15	0.15	0.44	65	<0.0001	N/A
Paterson	140	0.76	0.61	0.64	0.05	0.25	0.39	0.93	1.28	4.38	100		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	0.05	0.10	0.15	43	0.0003	A
Summer	14	0.12	0.10	0.10	0.05	0.05	0.05	0.15	0.20	0.44	100		B
Fall	21	0.12	0.06	0.10	ND	ND	0.10	0.15	0.15	0.30	71		B
Winter	17	0.08	0.07	0.10	ND	ND	ND	0.15	0.20	0.20	47		A B
Weekday	46	0.10	0.08	0.10	ND	ND	ND	0.15	0.20	0.44	67	NS	N/A
Weekend	20	0.07	0.06	0.08	ND	ND	ND	0.10	0.15	0.20	60		
Paterson													
Spring	29	0.64	0.41	0.59	0.15	0.15	0.34	0.79	1.28	1.87	100	NS	N/A
Summer	39	0.74	0.42	0.74	0.30	0.30	0.44	0.89	0.98	2.85	100		
Fall	47	0.63	0.41	0.49	0.05	0.20	0.34	0.98	1.28	1.72	100		
Winter	25	1.15	1.07	0.74	0.15	0.39	0.54	1.28	3.05	4.38	100		
Weekday	104	0.78	0.62	0.67	0.15	0.30	0.39	0.98	1.28	4.38	100	NS	N/A
Weekend	36	0.69	0.58	0.59	0.05	0.20	0.34	0.74	0.98	2.85	100		
1,3,5-Trimethylbenzene													
Background	66	0.04	0.03	0.05	ND	ND	ND	0.05	0.08	0.15	55	<0.0001	
Commercial	45	0.30	0.20	0.25	0.05	0.10	0.20	0.34	0.44	1.23	100		
Industrial	45	0.21	0.17	0.20	ND	0.05	0.10	0.25	0.39	0.89	98		A
Mobile	50	0.21	0.14	0.20	0.05	0.08	0.15	0.25	0.34	0.89	100		A
Background	66	0.04	0.03	0.05	ND	ND	ND	0.05	0.08	0.15	55	<0.0001	N/A
Paterson	140	0.24	0.17	0.20	ND	0.10	0.15	0.30	0.39	1.23	99		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	0.05	0.05	0.05	29	0.0006	B
Summer	14	0.05	0.04	0.05	ND	ND	0.05	0.05	0.10	0.15	79		A B
Fall	21	0.05	0.02	0.05	ND	ND	0.05	0.05	0.08	0.10	62		A
Winter	17	0.04	0.03	0.05	ND	ND	ND	0.05	0.10	0.10	47		A B
Weekday	46	0.05	0.03	0.05	ND	ND	ND	0.05	0.10	0.15	59	NS	N/A
Weekend	20	0.04	0.03	0.05	ND	ND	ND	0.05	0.06	0.10	45		
Paterson													
Spring	29	0.20	0.12	0.20	0.05	0.05	0.10	0.25	0.39	0.54	100	NS	N/A
Summer	39	0.23	0.13	0.25	0.10	0.10	0.15	0.25	0.34	0.84	100		
Fall	47	0.21	0.12	0.20	ND	0.05	0.10	0.30	0.39	0.59	98		
Winter	25	0.35	0.29	0.25	0.05	0.15	0.20	0.39	0.89	1.23	100		
Weekday	104	0.24	0.17	0.20	0.05	0.10	0.15	0.30	0.39	1.23	100	NS	N/A
Weekend	36	0.23	0.17	0.20	ND	0.05	0.13	0.25	0.34	0.84	97		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
1,3-Butadiene													
Background	66	0.03	0.04	0.02	ND	ND	ND	0.04	0.07	0.27	55	<0.0001	
Commercial	45	0.29	0.24	0.27	0.04	0.09	0.13	0.35	0.46	1.35	100		A
Industrial	45	0.13	0.13	0.11	ND	0.02	0.07	0.15	0.24	0.80	93		
Mobile	50	0.21	0.18	0.17	0.04	0.08	0.11	0.24	0.35	1.11	100		A
Background	66	0.03	0.04	0.02	ND	ND	ND	0.04	0.07	0.27	55	<0.0001	N/A
Paterson	140	0.21	0.20	0.15	ND	0.04	0.09	0.27	0.38	1.35	98		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	0.02	0.02	0.27	29	0.0019	B
Summer	14	0.02	0.01	0.02	ND	ND	ND	0.02	0.02	0.04	71		A B
Fall	21	0.04	0.03	0.02	ND	ND	ND	0.06	0.07	0.11	52		A
Winter	17	0.04	0.04	0.04	ND	ND	0.02	0.04	0.07	0.15	65		A B
Weekday	46	0.03	0.03	0.02	ND	ND	ND	0.04	0.07	0.15	61	NS	N/A
Weekend	20	0.03	0.06	0.02	ND	ND	ND	0.03	0.04	0.27	40		
Paterson													
Spring	29	0.16	0.12	0.11	ND	0.02	0.09	0.24	0.35	0.44	93	<0.0001	A B
Summer	39	0.13	0.07	0.11	0.04	0.04	0.07	0.18	0.24	0.31	100		A
Fall	47	0.20	0.15	0.15	ND	0.09	0.11	0.27	0.38	0.91	98		B
Winter	25	0.40	0.32	0.33	0.07	0.13	0.18	0.46	0.80	1.35	100		
Weekday	104	0.21	0.21	0.15	ND	0.07	0.10	0.27	0.38	1.35	99	NS	N/A
Weekend	36	0.20	0.17	0.17	ND	0.04	0.09	0.26	0.38	0.71	94		
Acetonitrile ¹													
Background	66	0.91	1.16	0.66	ND	ND	ND	1.21	2.34	6.54	67	0.0001	
Commercial	45	0.28	0.40	0.22	ND	ND	ND	0.39	0.54	2.34	56		A
Industrial	45	0.35	0.74	ND	ND	ND	ND	0.37	0.82	3.61	44		A
Mobile	50	N/A	N/A	ND	ND	ND	ND	0.34	0.70	3.09	40		A
Background	66	0.91	1.16	0.66	ND	ND	ND	1.21	2.34	6.54	67	<0.0001	N/A
Paterson	140	0.30	0.58	0.10	ND	ND	ND	0.36	0.72	3.61	46		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	0.67	0.81	2.76	43	0.0013	A
Summer	14	0.81	0.55	0.86	ND	ND	0.57	1.06	1.53	1.85	79		A B
Fall	21	1.41	1.12	1.16	ND	0.39	0.54	2.20	2.94	4.32	95		B
Winter	17	N/A	N/A	ND	ND	ND	ND	0.87	2.32	6.54	41		A
Weekday	46	0.83	0.87	0.66	ND	ND	ND	1.21	2.34	3.06	70	NS	N/A
Weekend	20	1.12	1.66	0.69	ND	ND	ND	1.35	3.26	6.54	60		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	0.24	0.37	17	<0.0001	A
Summer	39	0.39	0.36	0.34	ND	ND	ND	0.50	0.87	1.55	72		C
Fall	47	0.37	0.67	0.18	ND	ND	ND	0.37	0.87	3.61	53		B C
Winter	25	N/A	N/A	ND	ND	ND	ND	0.27	0.54	3.19	28		A B
Weekday	104	N/A	N/A	ND	ND	ND	ND	0.35	0.52	3.61	42	NS	N/A
Weekend	36	0.34	0.57	0.21	ND	ND	ND	0.43	0.87	3.19	58		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Acetonitrile ²													
Background	66	0.97	1.12	0.66	ND	ND	ND	1.21	2.34	6.54	67	<0.0001	
Commercial	45	0.34	0.36	0.22	ND	ND	ND	0.39	0.54	2.34	56		A
Industrial	45	0.44	0.70	ND	ND	ND	ND	0.37	0.82	3.61	44		A
Mobile	50	N/A	N/A	ND	ND	ND	ND	0.34	0.70	3.09	40		A
Background	66	0.97	1.12	0.66	ND	ND	ND	1.21	2.34	6.54	67	<0.0001	N/A
Paterson	140	0.38	0.54	0.17	ND	ND	ND	0.36	0.72	3.61	46		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	0.67	0.81	2.76	43	0.0042	B
Summer	14	0.84	0.50	0.86	ND	ND	0.57	1.06	1.53	1.85	79		A B C
Fall	21	1.41	1.11	1.16	ND	0.39	0.54	2.20	2.94	4.32	95		C
Winter	17	N/A	N/A	ND	ND	ND	ND	0.87	2.32	6.54	41		A B C
Weekday	46	0.87	0.83	0.66	ND	ND	ND	1.21	2.34	3.06	70	NS	N/A
Weekend	20	1.18	1.61	0.69	ND	ND	ND	1.35	3.26	6.54	60		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	0.24	0.37	17	<0.0001	A B
Summer	39	0.44	0.31	0.34	ND	ND	ND	0.50	0.87	1.55	72		
Fall	47	0.42	0.65	0.18	ND	ND	ND	0.37	0.87	3.61	53		A C
Winter	25	N/A	N/A	ND	ND	ND	ND	0.27	0.54	3.19	28		B C
Weekday	104	N/A	N/A	ND	ND	ND	ND	0.35	0.52	3.61	42	NS	N/A
Weekend	36	0.40	0.54	0.21	ND	ND	ND	0.43	0.87	3.19	58		
Acetylene													
Background	66	0.52	0.36	0.41	ND	0.20	0.28	0.63	1.04	1.76	98	<0.0001	
Commercial	45	1.76	1.72	1.16	0.34	0.52	0.72	1.96	2.81	8.22	100		A
Industrial	45	1.20	1.10	0.97	0.20	0.37	0.62	1.41	2.06	6.89	100		A
Mobile	50	1.41	1.27	1.11	0.27	0.49	0.64	1.59	2.63	6.72	100		A
Background	66	0.52	0.36	0.41	ND	0.20	0.28	0.63	1.04	1.76	98	<0.0001	N/A
Paterson	140	1.45	1.39	1.05	0.20	0.47	0.68	1.61	2.72	8.22	100		
Background													
Spring	14	0.39	0.19	0.39	ND	0.17	0.33	0.47	0.63	0.75	93	<0.0001	A B
Summer	14	0.25	0.08	0.23	0.13	0.18	0.20	0.31	0.35	0.46	100		A
Fall	21	0.50	0.25	0.42	0.21	0.26	0.33	0.58	0.77	1.17	100		B
Winter	17	0.86	0.46	0.68	0.25	0.28	0.61	1.30	1.56	1.76	100		
Weekday	46	0.53	0.38	0.41	ND	0.20	0.28	0.67	1.04	1.76	98	NS	N/A
Weekend	20	0.48	0.32	0.41	0.17	0.20	0.24	0.57	0.97	1.40	100		
Paterson													
Spring	29	1.03	0.64	0.88	0.20	0.27	0.70	1.11	2.06	2.79	100	<0.0001	A B
Summer	39	0.85	0.41	0.70	0.34	0.37	0.53	1.15	1.53	1.68	100		A
Fall	47	1.49	1.39	1.09	0.44	0.61	0.77	1.61	2.75	8.22	100		B
Winter	25	2.82	2.01	1.96	0.42	1.20	1.59	3.59	6.72	7.51	100		
Weekday	104	1.50	1.45	1.09	0.35	0.53	0.70	1.63	2.68	8.22	100	NS	N/A
Weekend	36	1.31	1.22	0.96	0.20	0.34	0.63	1.52	2.75	6.14	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are $\mu\text{g}/\text{m}^3$.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Acrolein ¹													
Background	66	0.56	0.68	0.48	ND	ND	ND	0.74	1.17	3.86	62	<0.0001	B C
Commercial	45	1.04	0.67	0.92	ND	0.39	0.64	1.42	2.02	3.08	91		D
Industrial	45	0.83	0.77	0.64	ND	ND	0.32	1.08	1.93	2.99	80		A B D
Mobile	50	0.76	0.87	0.55	ND	ND	0.30	0.87	1.89	3.68	78		A C
Background	66	0.56	0.68	0.48	ND	ND	ND	0.74	1.17	3.86	62	0.0007	N/A
Paterson	140	0.87	0.78	0.67	ND	ND	0.39	1.13	1.97	3.68	83		
Background													
Spring	14	0.54	0.81	0.12	ND	ND	ND	1.01	1.31	2.80	43	0.011	A B
Summer	14	0.60	0.39	0.54	ND	0.21	0.23	0.80	1.15	1.33	71		A B
Fall	21	0.82	0.85	0.64	ND	0.18	0.44	0.85	1.79	3.86	86		A
Winter	17	N/A	N/A	ND	ND	ND	ND	0.32	0.94	1.06	41		B
Weekday	46	0.48	0.48	0.42	ND	ND	ND	0.64	1.17	1.88	61	0.0001	N/A
Weekend	20	0.76	0.98	0.58	ND	ND	ND	0.90	2.06	3.86	65		
Paterson													
Spring	29	0.66	0.75	0.55	ND	ND	ND	0.94	2.00	2.90	62	NS	N/A
Summer	39	0.90	0.65	0.83	ND	ND	0.64	1.13	1.63	2.99	85		
Fall	47	1.04	0.95	0.62	ND	0.28	0.39	1.47	2.53	3.68	91		
Winter	25	0.76	0.60	0.67	ND	ND	0.37	0.87	1.59	2.78	88		
Weekday	104	0.91	0.79	0.70	ND	ND	0.41	1.15	2.00	3.68	85	NS	N/A
Weekend	36	0.75	0.76	0.58	ND	ND	0.32	0.85	1.77	2.90	78		
Acrolein ²													
Background	66	0.63	0.63	0.48	ND	ND	ND	0.74	1.17	3.86	62	<0.0001	B C
Commercial	45	1.06	0.63	0.92	ND	0.39	0.64	1.42	2.02	3.08	91		D
Industrial	45	0.86	0.74	0.64	ND	ND	0.32	1.08	1.93	2.99	80		A B D
Mobile	50	0.81	0.83	0.55	ND	ND	0.30	0.87	1.89	3.68	78		A C
Background	66	0.63	0.63	0.48	ND	ND	ND	0.74	1.17	3.86	62	0.0001	N/A
Paterson	140	0.91	0.74	0.67	ND	ND	0.39	1.13	1.97	3.68	83		
Background													
Spring	14	0.66	0.72	ND	ND	ND	ND	1.01	1.31	2.80	43	NS	N/A
Summer	14	0.61	0.36	0.54	ND	0.21	0.25	0.80	1.15	1.33	71		
Fall	21	0.82	0.84	0.64	ND	0.18	0.44	0.85	1.79	3.86	86		
Winter	17	N/A	N/A	ND	ND	ND	ND	0.32	0.94	1.06	41		
Weekday	46	0.55	0.42	0.42	ND	ND	ND	0.64	1.17	1.88	61	NS	N/A
Weekend	20	0.82	0.93	0.58	ND	ND	ND	0.90	2.06	3.86	65		
Paterson													
Spring	29	0.75	0.67	0.55	ND	ND	ND	0.94	2.00	2.90	62	NS	N/A
Summer	39	0.94	0.60	0.83	ND	ND	0.64	1.13	1.63	2.99	85		
Fall	47	1.05	0.95	0.62	ND	0.28	0.39	1.47	2.53	3.68	91		
Winter	25	0.79	0.57	0.67	ND	ND	0.37	0.87	1.59	2.78	88		
Weekday	104	0.95	0.75	0.70	ND	ND	0.41	1.15	2.00	3.68	85	NS	N/A
Weekend	36	0.79	0.72	0.58	ND	ND	0.32	0.85	1.77	2.90	78		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Acrylonitrile													
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.13	2	N/A	N/A
Commercial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	0.30	2		
Industrial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	0.28	2		
Mobile	50	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.13	2	N/A	N/A
Paterson	140	N/A	N/A	ND	ND	ND	ND	ND	ND	0.30	1		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	0.13	7		
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Winter	17	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	46	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	ND	ND	0.13	5		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	39	N/A	N/A	ND	ND	ND	ND	ND	ND	0.30	5		
Fall	47	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	0		
Winter	25	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	104	N/A	N/A	ND	ND	ND	ND	ND	ND	0.30	2	N/A	N/A
Weekend	36	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Benzene													
Background	66	0.52	0.22	0.45	0.22	0.26	0.35	0.64	0.80	1.12	100	<0.0001	
Commercial	45	1.81	1.15	1.44	0.54	0.90	1.02	2.14	3.61	6.52	100		A
Industrial	45	1.11	0.68	0.90	0.35	0.48	0.70	1.34	1.89	4.16	100		B
Mobile	50	1.37	0.82	1.22	0.35	0.58	0.93	1.57	2.05	4.99	100		A B
Background	66	0.52	0.22	0.45	0.22	0.26	0.35	0.64	0.80	1.12	100	<0.0001	N/ A
Paterson	140	1.43	0.94	1.20	0.35	0.58	0.88	1.66	2.42	6.52	100		
Background													
Spring	14	0.39	0.11	0.40	0.22	0.26	0.26	0.45	0.48	0.61	100	0.0001	A
Summer	14	0.38	0.12	0.35	0.22	0.26	0.29	0.42	0.58	0.58	100		A
Fall	21	0.55	0.23	0.51	0.26	0.32	0.38	0.64	0.90	1.06	100		A B
Winter	17	0.71	0.21	0.70	0.29	0.42	0.61	0.77	1.06	1.12	100		B
Weekday	46	0.52	0.22	0.47	0.26	0.29	0.35	0.61	0.80	1.12	100	NS	N/A
Weekend	20	0.51	0.24	0.44	0.22	0.24	0.32	0.71	0.82	1.06	100		
Paterson													
Spring	29	1.25	0.81	1.09	0.35	0.42	0.74	1.66	2.46	3.77	100	<0.0001	A B
Summer	39	1.11	0.38	1.09	0.54	0.58	0.80	1.41	1.69	2.01	100		A C
Fall	47	1.30	0.62	1.22	0.38	0.58	0.90	1.57	2.11	3.71	100		B C
Winter	25	2.37	1.48	1.82	0.48	0.93	1.34	3.26	4.16	6.52	100		
Weekday	104	1.45	0.96	1.22	0.35	0.67	0.90	1.66	2.46	6.52	100	NS	N/A
Weekend	36	1.35	0.87	1.17	0.38	0.48	0.79	1.68	2.01	4.00	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Bromomethane													
Background	66	0.05	0.04	0.04	ND	ND	0.04	0.04	0.08	0.23	73	NS	N/A
Commercial	45	0.07	0.07	0.04	ND	0.04	0.04	0.08	0.12	0.35	93		
Industrial	45	0.07	0.09	0.04	ND	0.04	0.04	0.08	0.12	0.62	91		
Mobile	50	0.06	0.05	0.04	ND	0.04	0.04	0.04	0.08	0.31	86		
Background	66	0.05	0.04	0.04	ND	ND	0.04	0.04	0.08	0.23	73	N/S	N/A
Paterson	140	0.06	0.07	0.04	ND	0.04	0.04	0.08	0.12	0.62	90		
Background													
Spring	14	0.05	0.05	ND	ND	ND	ND	0.04	0.08	0.19	50	NS	N/A
Summer	14	0.05	0.01	0.04	0.04	0.04	0.04	0.04	0.08	0.08	100		
Fall	21	0.04	0.02	0.04	ND	ND	0.04	0.04	0.08	0.08	57		
Winter	17	0.07	0.06	0.04	0.04	0.04	0.04	0.08	0.19	0.23	88		
Weekday	46	0.05	0.04	0.04	ND	ND	0.04	0.04	0.08	0.23	74	NS	N/A
Weekend	20	0.05	0.02	0.04	ND	ND	0.04	0.04	0.08	0.08	70		
Paterson													
Spring	29	0.10	0.13	0.04	ND	ND	0.04	0.08	0.31	0.62	86	NS	N/A
Summer	39	0.06	0.03	0.04	0.04	0.04	0.04	0.08	0.08	0.19	100		
Fall	47	0.05	0.05	0.04	ND	0.04	0.04	0.04	0.08	0.31	83		
Winter	25	0.05	0.03	0.04	0.04	0.04	0.04	0.08	0.08	0.12	92		
Weekday	104	0.06	0.06	0.04	ND	0.04	0.04	0.06	0.08	0.35	92	NS	N/A
Weekend	36	0.07	0.10	0.04	ND	ND	0.04	0.08	0.12	0.62	83		
Carbon Disulfide ¹													
Background	58	2.16	2.00	1.83	0.53	1.22	1.50	2.12	2.90	16.04	100	<0.0001	A
Commercial	43	0.11	0.09	0.09	ND	ND	0.00	0.16	0.22	0.31	72		
Industrial	43	0.04	0.05	0.06	ND	ND	ND	0.06	0.09	0.25	56		
Mobile	47	N/A	N/A	ND	ND	ND	ND	0.06	0.09	0.25	45		
Background	58	2.16	2.00	1.83	0.53	1.22	1.50	2.12	2.90	16.04	100	<0.0001	N/A
Paterson	133	0.06	0.07	0.06	ND	ND	ND	0.09	0.16	0.31	57		
Background													
Spring	14	2.76	3.89	1.69	0.53	1.00	1.50	2.03	3.78	16.04	100	NS	N/A
Summer	14	1.73	0.43	1.83	0.72	1.06	1.56	2.00	2.03	2.37	100		
Fall	15	2.30	0.95	2.06	1.25	1.44	1.69	2.37	3.46	5.09	100		
Winter	15	1.85	0.75	1.62	0.75	1.22	1.31	2.34	2.84	3.53	100		
Weekday	41	2.27	2.36	1.69	0.72	1.25	1.44	2.28	3.46	16.04	100	NS	N/A
Weekend	17	1.88	0.56	1.97	0.53	1.06	1.72	2.09	2.75	2.90	100		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	0.06	0.06	10	<0.0001	A
Summer	39	0.08	0.05	0.09	ND	ND	0.06	0.12	0.12	0.25	92		
Fall	42	0.08	0.09	0.06	ND	ND	ND	0.16	0.19	0.31	55		
Winter	23	0.07	0.07	0.06	ND	ND	ND	0.09	0.19	0.25	61		
Weekday	99	0.06	0.08	0.06	ND	ND	ND	0.09	0.16	0.31	56	NS	N/A
Weekend	34	0.06	0.06	0.06	ND	ND	ND	0.09	0.12	0.28	62		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Carbon Disulfide ²													
Background	58	2.16	2.00	1.83	0.53	1.22	1.50	2.12	2.90	16.04	100	<0.0001	
Commercial	43	0.11	0.08	0.09	ND	ND	ND	0.16	0.22	0.31	72		A
Industrial	43	0.06	0.04	0.06	ND	ND	ND	0.06	0.09	0.25	56		A
Mobile	47	N/A	N/A	ND	ND	ND	ND	0.06	0.09	0.25	45		A
Background	58	2.16	2.00	1.83	0.53	1.22	1.50	2.12	2.90	16.04	100	<0.0001	N/A
Paterson	133	0.07	0.06	0.06	ND	ND	ND	0.09	0.16	0.31	57		
Background													
Spring	14	2.76	3.89	1.69	0.53	1.00	1.50	2.03	3.78	16.04	100	NS	N/A
Summer	14	1.73	0.43	1.83	0.72	1.06	1.56	2.00	2.03	2.37	100		
Fall	15	2.30	0.95	2.06	1.25	1.44	1.69	2.37	3.46	5.09	100		
Winter	15	1.85	0.75	1.62	0.75	1.22	1.31	2.34	2.84	3.53	100		
Weekday	41	2.27	2.36	1.69	0.72	1.25	1.44	2.28	3.46	16.04	100	NS	N/A
Weekend	17	1.88	0.56	1.97	0.53	1.06	1.72	2.09	2.75	2.90	100		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	0.06	0.06	10	<0.0001	
Summer	39	0.08	0.05	0.09	ND	0.03	0.06	0.12	0.12	0.25	92		A
Fall	42	0.09	0.08	0.06	ND	ND	ND	0.16	0.19	0.31	55		A
Winter	23	0.08	0.06	0.06	ND	ND	ND	0.09	0.19	0.25	61		A
Weekday	99	0.08	0.07	0.06	ND	ND	ND	0.09	0.16	0.31	56	NS	N/A
Weekend	34	0.07	0.05	0.06	ND	ND	ND	0.09	0.12	0.28	62		
CarbonTetrachloride													
Background	66	0.58	0.19	0.57	0.13	0.32	0.44	0.69	0.82	1.07	100	NS	N/A
Commercial	45	0.61	0.17	0.63	0.19	0.44	0.50	0.76	0.82	1.01	100		
Industrial	45	0.63	0.16	0.63	0.19	0.44	0.50	0.76	0.88	1.01	100		
Mobile	50	0.62	0.19	0.63	0.06	0.38	0.50	0.76	0.85	0.95	100		
Background	66	0.58	0.19	0.57	0.13	0.32	0.44	0.69	0.82	1.07	100	NS	N/A
Paterson	140	0.62	0.17	0.63	0.06	0.44	0.50	0.76	0.82	1.01	100		
Background													
Spring	14	0.57	0.15	0.57	0.32	0.38	0.50	0.63	0.76	0.88	100	0.0035	A B
Summer	14	0.69	0.16	0.66	0.44	0.50	0.57	0.82	0.88	1.01	100		A
Fall	21	0.61	0.21	0.57	0.25	0.32	0.50	0.76	0.82	1.07	100		A B
Winter	17	0.46	0.16	0.44	0.13	0.25	0.44	0.57	0.76	0.76	100		B
Weekday	46	0.56	0.18	0.57	0.13	0.32	0.44	0.69	0.82	0.88	100	NS	N/A
Weekend	20	0.61	0.21	0.57	0.32	0.35	0.47	0.73	0.95	1.07	100		
Paterson													
Spring	29	0.58	0.11	0.63	0.25	0.44	0.57	0.63	0.69	0.82	100	<0.0001	B
Summer	39	0.65	0.17	0.63	0.38	0.44	0.50	0.76	0.88	1.01	100		A B
Fall	47	0.71	0.15	0.69	0.32	0.50	0.57	0.82	0.95	1.01	100		A
Winter	25	0.47	0.18	0.50	0.06	0.19	0.44	0.57	0.76	0.82	100		
Weekday	104	0.62	0.19	0.63	0.06	0.44	0.50	0.76	0.88	1.01	100	NS	N/A
Weekend	36	0.63	0.12	0.63	0.32	0.44	0.57	0.76	0.76	0.82	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Chlorobenzene													
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Commercial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	0.05	0		
Industrial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	9		
Mobile	50	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	8		
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Paterson	140	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	6		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Winter	17	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	46	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	ND	0.05	3	N/A	N/A
Summer	39	N/A	N/A	ND	ND	ND	ND	ND	0.05	0.09	13		
Fall	47	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	2		
Winter	25	N/A	N/A	ND	ND	ND	ND	ND	ND	0.05	4		
Weekday	104	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	6	N/A	N/A
Weekend	36	N/A	N/A	ND	ND	ND	ND	ND	ND	0.05	6		
Chloroethane ¹													
Background	66	0.02	0.03	ND	ND	ND	ND	0.03	0.05	0.16	41	<0.0001	
Commercial	45	0.07	0.10	0.05	ND	ND	0.03	0.08	0.11	0.58	71		B C
Industrial	45	0.04	0.03	0.03	ND	ND	0.03	0.05	0.08	0.16	76		A C
Mobile	50	0.03	0.04	0.03	ND	ND	ND	0.05	0.05	0.26	60		A B C
Background	66	0.02	0.03	ND	ND	ND	ND	0.03	0.05	0.16	41	<0.0001	N/A
Paterson	140	0.05	0.07	0.03	ND	ND	ND	0.05	0.08	0.58	69		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	0.03	0.05	0.16	36	0.0231	A B C
Summer	14	0.03	0.02	0.03	ND	0.03	0.03	0.03	0.05	0.08	93		A
Fall	21	N/A	N/A	ND	ND	ND	ND	0.03	0.03	0.11	19		B C
Winter	17	N/A	N/A	ND	ND	ND	ND	0.03	0.03	0.05	29		A C
Weekday	46	N/A	N/A	ND	ND	ND	ND	0.03	0.05	0.16	43	NS	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	0.03	0.05	0.08	35		
Paterson													
Spring	29	0.02	0.03	ND	ND	ND	ND	0.03	0.05	0.08	38	0.0001	A
Summer	39	0.07	0.07	0.05	0.03	0.03	0.03	0.08	0.16	0.42	100		B
Fall	47	0.05	0.09	0.03	ND	ND	ND	0.05	0.08	0.58	64		B
Winter	25	0.04	0.03	0.03	ND	ND	ND	0.05	0.08	0.11	64		A B
Weekday	104	0.05	0.08	0.03	ND	ND	ND	0.05	0.08	0.58	68	NS	N/A
Weekend	36	0.04	0.03	0.04	ND	ND	ND	0.05	0.08	0.08	69		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Chloroethane ²													
Background	66	0.03	0.03	ND	ND	ND	ND	0.03	0.05	0.16	41	0.0001	
Commercial	45	0.07	0.10	0.05	ND	ND	0.03	0.08	0.11	0.58	71		B C
Industrial	45	0.05	0.03	0.03	ND	ND	0.03	0.05	0.08	0.16	76		A C
Mobile	50	0.04	0.04	0.03	ND	ND	ND	0.05	0.05	0.26	60		A B C
Background	66	0.03	0.03	ND	ND	ND	ND	0.03	0.05	0.16	41	0.0001	N/A
Paterson	140	0.05	0.06	0.03	ND	ND	ND	0.05	0.08	0.58	69		
Background													
Spring	14	0.04	0.04	ND	ND	ND	ND	0.03	0.05	0.16	36	NS	N/A
Summer	14	0.03	0.01	0.03	ND	ND	0.03	0.03	0.05	0.08	93		
Fall	21	0.04	0.04	ND	ND	ND	ND	0.03	0.11	0.13	19		
Winter	17	0.03	0.01	ND	ND	ND	ND	0.03	0.03	0.05	29		
Weekday	46	0.04	0.03	ND	ND	ND	ND	0.03	0.08	0.16	43	NS	N/A
Weekend	20	0.03	0.02	ND	ND	ND	ND	0.03	0.05	0.08	35		
Paterson													
Spring	29	0.03	0.02	ND	ND	ND	ND	0.03	0.05	0.08	38	0.0001	A
Summer	39	0.07	0.07	0.05	0.03	0.03	0.03	0.08	0.16	0.42	100		B
Fall	47	0.05	0.08	0.03	ND	ND	ND	0.05	0.08	0.58	64		B
Winter	25	0.05	0.03	0.03	ND	ND	ND	0.05	0.08	0.11	64		A B
Weekday	104	0.06	0.07	0.03	ND	ND	ND	0.05	0.08	0.58	68	NS	N/A
Weekend	36	0.04	0.02	0.04	ND	ND	ND	0.05	0.08	0.08	69		
Chloroform ¹													
Background	66	0.07	0.08	0.10	ND	ND	ND	0.10	0.10	0.54	61	<0.0001	
Commercial	45	0.33	0.33	0.20	ND	ND	0.10	0.44	0.83	1.52	78		A
Industrial	45	0.16	0.11	0.15	ND	ND	0.10	0.20	0.29	0.54	80		A
Mobile	50	0.24	0.19	0.20	ND	0.10	0.15	0.29	0.37	1.18	94		A
Background	66	0.07	0.08	0.10	ND	ND	ND	0.10	0.10	0.54	61	<0.0001	N/A
Paterson	140	0.24	0.23	0.20	ND	ND	0.10	0.29	0.47	1.52	84		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	0.15	0.54	14	0.0083	A
Summer	14	0.08	0.06	0.10	ND	ND	ND	0.10	0.15	0.20	71		A B
Fall	21	0.08	0.05	0.10	ND	ND	0.05	0.10	0.10	0.15	71		B
Winter	17	0.06	0.04	0.05	ND	ND	0.05	0.10	0.10	0.10	76		B
Weekday	46	0.07	0.09	0.10	ND	ND	ND	0.10	0.10	0.54	59	NS	N/A
Weekend	20	0.07	0.06	0.10	ND	ND	ND	0.10	0.15	0.20	65		
Paterson													
Spring	29	0.11	0.15	0.10	ND	ND	ND	0.15	0.20	0.73	55	<0.0001	A
Summer	39	0.28	0.21	0.24	ND	ND	0.20	0.34	0.54	1.18	87		B
Fall	47	0.32	0.29	0.20	ND	0.10	0.15	0.39	0.83	1.52	96		B
Winter	25	0.18	0.12	0.15	ND	0.05	0.10	0.29	0.34	0.44	92		A B
Weekday	104	0.23	0.24	0.20	ND	ND	0.10	0.29	0.44	1.52	82	NS	N/A
Weekend	36	0.27	0.23	0.20	ND	0.10	0.15	0.32	0.73	0.98	92		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Chloroform ²													
Background	66	0.09	0.07	0.10	ND	ND	ND	0.10	0.15	0.54	61	<0.0001	
Commercial	45	0.33	0.32	0.20	ND	ND	0.10	0.44	0.83	1.52	78		A
Industrial	45	0.16	0.11	0.15	ND	ND	0.10	0.20	0.29	0.54	80		A
Mobile	50	0.24	0.18	0.20	ND	0.10	0.15	0.29	0.37	1.18	94		A
Background	66	0.09	0.07	0.10	ND	ND	ND	0.10	0.15	0.54	61	<0.0001	N/A
Paterson	140	0.24	0.23	0.20	ND	ND	0.10	0.29	0.47	1.52	84		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	0.15	0.54	14	0.0002	A
Summer	14	0.09	0.05	0.10	ND	ND	ND	0.10	0.15	0.20	71		A B
Fall	21	0.11	0.03	0.10	ND	ND	0.10	0.15	0.15	0.15	71		B
Winter	17	0.08	0.04	0.10	ND	ND	0.05	0.10	0.10	0.15	76		B
Weekday	46	0.09	0.08	0.10	ND	ND	ND	0.10	0.15	0.54	59	NS	N/A
Weekend	20	0.09	0.05	0.10	ND	ND	ND	0.13	0.15	0.20	65		
Paterson													
Spring	29	0.12	0.14	0.10	ND	ND	ND	0.15	0.20	0.73	55	<0.0001	A
Summer	39	0.28	0.21	0.24	ND	ND	0.20	0.34	0.54	1.18	87		B
Fall	47	0.32	0.29	0.20	ND	0.10	0.15	0.39	0.83	1.52	96		B
Winter	25	0.18	0.12	0.15	ND	0.05	0.10	0.29	0.34	0.44	92		A B
Weekday	104	0.23	0.23	0.20	ND	ND	0.10	0.29	0.44	1.52	82	NS	N/A
Weekend	36	0.28	0.23	0.20	ND	0.10	0.15	0.32	0.73	0.98	92		
Chloromethane													
Background	66	1.14	0.19	1.16	0.79	0.87	1.04	1.26	1.37	1.78	100	NS	N/A
Commercial	45	1.14	0.22	1.12	0.56	0.85	0.99	1.33	1.39	1.55	100		
Industrial	45	1.15	0.18	1.18	0.79	0.91	1.01	1.28	1.41	1.57	100		
Mobile	50	1.15	0.18	1.18	0.77	0.86	1.06	1.28	1.37	1.61	100		
Background	66	1.14	0.19	1.16	0.79	0.87	1.04	1.26	1.37	1.78	100	N/S	N/A
Paterson	140	1.15	0.20	1.15	0.56	0.87	1.01	1.28	1.39	1.61	100		
Background													
Spring	14	1.06	0.20	1.12	0.79	0.79	0.87	1.16	1.28	1.43	100	NS	N/A
Summer	14	1.19	0.12	1.21	0.91	1.04	1.12	1.28	1.33	1.37	100		
Fall	21	1.16	0.14	1.16	0.91	0.97	1.08	1.28	1.33	1.43	100		
Winter	17	1.14	0.25	1.18	0.81	0.83	0.95	1.22	1.39	1.78	100		
Weekday	46	1.14	0.19	1.15	0.79	0.89	0.99	1.26	1.33	1.78	100	NS	N/A
Weekend	20	1.15	0.19	1.17	0.79	0.82	1.10	1.26	1.38	1.43	100		
Paterson													
Spring	29	1.07	0.19	1.08	0.77	0.79	0.93	1.22	1.35	1.45	100	NS	N/A
Summer	39	1.19	0.20	1.14	0.87	0.93	1.04	1.35	1.47	1.61	100		
Fall	47	1.16	0.15	1.16	0.79	0.97	1.06	1.26	1.35	1.41	100		
Winter	25	1.16	0.25	1.26	0.56	0.79	0.97	1.30	1.43	1.51	100		
Weekday	104	1.17	0.20	1.18	0.56	0.91	1.06	1.29	1.41	1.61	100	NS	N/A
Weekend	36	1.09	0.18	1.09	0.77	0.83	0.95	1.26	1.33	1.43	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are $\mu\text{g}/\text{m}^3$.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Chloromethylbenzene													
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	2	N/A	N/A
Commercial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Industrial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Mobile	50	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	2	N/A	N/A
Paterson	140	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	7		
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Winter	17	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	46	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	2	N/A	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	39	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Fall	47	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Winter	25	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	104	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Weekend	36	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
cis-1,2-Dichloroethylene													
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.20	2	N/A	N/A
Commercial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Industrial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Mobile	50	N/A	N/A	ND	ND	ND	ND	ND	ND	0.24	2		
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.20	2	N/A	N/A
Paterson	140	N/A	N/A	ND	ND	ND	ND	ND	ND	0.24	1		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	0.20	7		
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Winter	17	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	46	N/A	N/A	ND	ND	ND	ND	ND	ND	0.20	2	N/A	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	39	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Fall	47	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Winter	25	N/A	N/A	ND	ND	ND	ND	ND	ND	0.24	4		
Weekday	104	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Weekend	36	N/A	N/A	ND	ND	ND	ND	ND	ND	0.24	3		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Dibromochloromethane													
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	2	N/A	N/A
Commercial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	2		
Industrial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	4		
Mobile	50	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	2	N/A	N/A
Paterson	140	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	2		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	7	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Winter	17	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	46	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	5		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	39	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	5		
Fall	47	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	2		
Winter	25	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	104	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	2	N/A	N/A
Weekend	36	N/A	N/A	ND	ND	ND	ND	ND	ND	0.09	3		
Dichlorodifluoromethane													
Background	66	2.73	0.48	2.71	1.84	2.23	2.43	2.88	3.17	4.81	100	0.0278	C
Commercial	45	3.04	0.93	2.93	1.19	2.18	2.53	3.37	3.87	7.59	100		A B C
Industrial	45	2.87	0.53	2.78	1.93	2.23	2.53	3.08	3.77	4.31	100		A B C
Mobile	50	2.99	0.58	2.93	2.13	2.38	2.63	3.12	4.00	4.66	100		B
Background	66	2.73	0.48	2.71	1.84	2.23	2.43	2.88	3.17	4.81	100	0.0039	N/A
Paterson	140	2.97	0.70	2.88	1.19	2.26	2.58	3.17	3.87	7.59	100		
Background													
Spring	14	2.86	0.61	2.73	2.23	2.38	2.63	2.93	3.17	4.81	100	0.0485	NS
Summer	14	2.49	0.25	2.48	2.03	2.08	2.43	2.68	2.73	2.93	100		
Fall	21	2.82	0.41	2.83	2.08	2.28	2.53	3.03	3.37	3.62	100		
Winter	17	2.71	0.54	2.58	1.84	2.13	2.38	2.88	3.62	4.12	100		
Weekday	46	2.75	0.49	2.73	2.03	2.23	2.43	2.93	3.37	4.81	100	NS	N/A
Weekend	20	2.70	0.46	2.68	1.84	2.18	2.51	2.83	3.10	4.12	100		
Paterson													
Spring	29	3.01	0.44	2.98	2.43	2.58	2.68	3.12	3.92	4.31	100	0.0051	A
Summer	39	2.73	0.49	2.73	2.13	2.18	2.38	2.98	3.57	4.07	100		B
Fall	47	3.21	0.88	2.93	2.13	2.53	2.68	3.57	4.31	7.59	100		A
Winter	25	2.82	0.71	2.73	1.19	2.03	2.33	3.32	3.82	4.12	100		A B
Weekday	104	2.97	0.76	2.83	1.19	2.23	2.58	3.17	3.92	7.59	100	NS	N/A
Weekend	36	2.95	0.51	2.98	2.18	2.28	2.56	3.17	3.57	4.36	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Dichloromethane													
Background	66	0.33	0.26	0.26	ND	0.14	0.21	0.38	0.56	1.60	94	<0.0001	
Commercial	45	1.15	1.26	0.80	0.17	0.38	0.49	1.25	1.81	7.18	100		A
Industrial	45	1.31	1.46	0.70	0.17	0.35	0.52	1.08	3.31	6.34	100		A
Mobile	50	1.14	1.28	0.72	0.24	0.28	0.49	1.22	2.20	6.83	100		A
Background	66	0.33	0.26	0.26	ND	0.14	0.21	0.38	0.56	1.60	94	<0.0001	N/A
Paterson	140	1.20	1.33	0.73	0.17	0.31	0.51	1.24	2.53	7.18	100		
Background													
Spring	14	0.24	0.13	0.25	ND	ND	0.17	0.35	0.38	0.42	86	NS	N/S
Summer	14	0.30	0.24	0.24	0.14	0.17	0.17	0.31	0.45	1.08	100		
Fall	21	0.36	0.25	0.28	0.10	0.17	0.24	0.38	0.56	1.29	95		
Winter	17	0.38	0.35	0.28	ND	0.17	0.21	0.49	0.56	1.60	94		
Weekday	46	0.34	0.23	0.28	ND	0.14	0.21	0.38	0.56	1.29	93	NS	N/A
Weekend	20	0.31	0.32	0.24	ND	0.16	0.17	0.33	0.40	1.60	95		
Paterson													
Spring	29	0.65	0.37	0.56	0.21	0.24	0.38	0.80	1.01	2.02	100	0.0308	A
Summer	39	1.38	1.46	0.77	0.17	0.24	0.52	1.71	3.07	6.34	100		A B
Fall	47	1.27	1.47	0.73	0.17	0.31	0.52	1.22	3.87	6.83	100		A B
Winter	25	1.40	1.43	0.91	0.38	0.49	0.59	1.53	3.17	7.18	100		B
Weekday	104	1.33	1.39	0.80	0.24	0.45	0.56	1.41	3.07	7.18	100	0.0004	N/A
Weekend	36	0.81	1.05	0.59	0.17	0.24	0.28	0.89	1.53	6.34	100		
Dichlorotetrafluoroethane													
Background	66	0.12	0.03	0.14	0.07	0.07	0.14	0.14	0.14	0.14	100	NS	N/A
Commercial	45	0.11	0.03	0.14	0.07	0.07	0.07	0.14	0.14	0.14	100		
Industrial	45	0.12	0.03	0.14	0.07	0.07	0.07	0.14	0.14	0.14	100		
Mobile	50	0.13	0.03	0.14	0.07	0.07	0.14	0.14	0.14	0.14	100		
Background	66	0.12	0.03	0.14	0.07	0.07	0.14	0.14	0.14	0.14	100	NS	N/A
Paterson	140	0.12	0.03	0.14	0.07	0.07	0.07	0.14	0.14	0.14	100		
Background													
Spring	14	0.13	0.03	0.14	0.07	0.07	0.14	0.14	0.14	0.14	100	NS	N/A
Summer	14	0.12	0.03	0.14	0.07	0.07	0.07	0.14	0.14	0.14	100		
Fall	21	0.13	0.03	0.14	0.07	0.07	0.14	0.14	0.14	0.14	100		
Winter	17	0.12	0.03	0.14	0.07	0.07	0.07	0.14	0.14	0.14	100		
Weekday	46	0.12	0.03	0.14	0.07	0.07	0.14	0.14	0.14	0.14	100	NS	N/A
Weekend	20	0.12	0.03	0.14	0.07	0.07	0.11	0.14	0.14	0.14	100		
Paterson													
Spring	29	0.14	0.02	0.14	0.07	0.14	0.14	0.14	0.14	0.14	100	0.015	A
Summer	39	0.11	0.03	0.14	0.07	0.07	0.07	0.14	0.14	0.14	100		B
Fall	47	0.12	0.03	0.14	0.07	0.07	0.07	0.14	0.14	0.14	100		A B
Winter	25	0.11	0.03	0.14	0.07	0.07	0.07	0.14	0.14	0.14	100		A B
Weekday	104	0.12	0.03	0.14	0.07	0.07	0.07	0.14	0.14	0.14	100	NS	N/A
Weekend	36	0.12	0.03	0.14	0.07	0.07	0.11	0.14	0.14	0.14	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Ethylbenzene													
Background	66	0.14	0.08	0.13	0.04	0.04	0.09	0.17	0.22	0.43	100	<0.0001	
Commercial	45	1.28	1.50	0.83	0.17	0.39	0.61	1.39	3.13	9.04	100		
Industrial	45	0.54	0.39	0.48	0.09	0.13	0.30	0.65	1.00	2.22	100		A
Mobile	50	0.54	0.34	0.48	0.13	0.20	0.35	0.65	0.91	2.17	100		A
Background	66	0.14	0.08	0.13	0.04	0.04	0.09	0.17	0.22	0.43	100	<0.0001	N/A
Paterson	140	0.78	0.96	0.56	0.09	0.22	0.35	0.83	1.37	9.04	100		
Background													
Spring	14	0.10	0.05	0.09	0.04	0.04	0.09	0.13	0.13	0.22	100	0.0296	NS
Summer	14	0.13	0.05	0.13	0.04	0.04	0.09	0.17	0.22	0.22	100		
Fall	21	0.15	0.08	0.13	0.09	0.09	0.09	0.17	0.17	0.39	100		
Winter	17	0.17	0.10	0.17	0.04	0.04	0.09	0.22	0.30	0.43	100		
Weekday	46	0.14	0.08	0.13	0.04	0.09	0.09	0.17	0.22	0.43	100	NS	N/A
Weekend	20	0.13	0.08	0.13	0.04	0.04	0.09	0.17	0.22	0.35	100		
Paterson													
Spring	29	0.51	0.34	0.48	0.09	0.13	0.30	0.61	1.00	1.39	100	NS	N/A
Summer	39	0.63	0.29	0.61	0.22	0.26	0.39	0.78	0.96	1.52	100		
Fall	47	1.01	1.50	0.52	0.09	0.17	0.30	0.91	2.26	9.04	100		
Winter	25	0.87	0.71	0.61	0.13	0.30	0.48	1.04	2.17	3.13	100		
Weekday	104	0.83	1.08	0.56	0.13	0.22	0.35	0.87	1.39	9.04	100	NS	N/A
Weekend	36	0.61	0.40	0.57	0.09	0.13	0.37	0.78	1.22	1.61	100		
Hexachloro-1,3-butadiene													
Background	66	N/A	N/A	ND	ND	ND	ND	ND	0.11	0.21	3	N/A	N/A
Commercial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	0		
Industrial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	0		
Mobile	50	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	0		
Background	66	N/A	N/A	ND	ND	ND	ND	ND	0.11	0.21	3	N/A	N/A
Paterson	140	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	0		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	0		
Winter	17	N/A	N/A	ND	ND	ND	ND	0.11	0.21	0.21	12		
Weekday	46	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	4	N/A	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	ND	0.16	0.21	0		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	ND	-100.00	0	N/A	N/A
Summer	39	N/A	N/A	ND	ND	ND	ND	ND	ND	-100.00	0		
Fall	47	N/A	N/A	ND	ND	ND	ND	ND	0.21	0.21	0		
Winter	25	N/A	N/A	ND	ND	ND	ND	ND	0.11	0.21	0		
Weekday	104	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	0	N/A	N/A
Weekend	36	N/A	N/A	ND	ND	ND	ND	ND	ND	0.21	0		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
m-Dichlorobenzene													
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	2	N/A	N/A
Commercial	45	N/A	N/A	ND	ND	ND	ND	ND	0.12	0.30	18		
Industrial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Mobile	50	N/A	N/A	ND	ND	ND	ND	ND	ND	0.06	0		
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	2	N/A	N/A
Paterson	140	N/A	N/A	ND	ND	ND	ND	ND	ND	0.30	6		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	7		
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Winter	17	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	46	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	2	N/A	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	39	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Fall	47	N/A	N/A	ND	ND	ND	ND	ND	0.12	0.30	17		
Winter	25	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	104	N/A	N/A	ND	ND	ND	ND	ND	ND	0.24	5	N/A	N/A
Weekend	36	N/A	N/A	ND	ND	ND	ND	ND	ND	0.30	8		
Methyl Ethyl Ketone													
Background	66	1.08	1.25	0.89	ND	ND	0.35	1.18	1.74	8.09	86	<0.0001	A
Commercial	45	2.76	2.12	2.27	ND	0.62	1.30	3.81	5.37	10.03	96		B
Industrial	45	2.77	3.06	1.77	ND	0.38	1.06	2.69	7.38	13.96	93		B
Mobile	50	1.41	1.09	1.03	ND	0.24	0.74	1.89	2.97	4.72	92		A
Background	66	1.08	1.25	0.89	ND	ND	0.35	1.18	1.74	8.09	86	<0.0001	N/A
Paterson	140	2.28	2.29	1.62	ND	0.44	0.94	2.72	4.77	13.96	94		
Background													
Spring	14	1.78	2.03	1.11	0.56	0.59	0.65	1.59	3.98	8.09	100	0.001	A
Summer	14	1.38	1.04	1.17	ND	0.80	1.06	1.51	1.74	4.72	93		A
Fall	21	0.72	0.85	0.59	ND	ND	ND	1.06	1.12	3.84	71		B
Winter	17	0.71	0.64	0.47	ND	ND	0.24	1.06	1.51	2.51	88		A B
Weekday	46	0.99	0.82	1.06	ND	ND	0.35	1.21	1.59	3.98	89	NS	N/A
Weekend	20	1.29	1.92	0.73	ND	ND	0.34	1.12	3.62	8.09	80		
Paterson													
Spring	29	2.52	2.03	1.92	0.74	0.94	1.06	2.66	7.32	7.82	100	0.0028	A
Summer	39	2.48	2.14	1.89	ND	0.91	1.56	2.77	3.84	12.42	97		A
Fall	47	1.62	1.81	1.03	ND	ND	0.56	1.92	3.75	9.77	87		B
Winter	25	2.94	3.24	1.77	ND	0.18	0.80	4.57	5.13	13.96	92		A B
Weekday	104	2.62	2.51	1.89	ND	0.56	1.03	3.04	5.13	13.96	95	0.0002	N/A
Weekend	36	1.31	1.00	1.03	ND	0.12	0.68	1.61	2.95	4.78	89		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Methyl Isobutyl Ketone ¹													
Background	66	0.11	0.16	0.06	ND	ND	ND	0.16	0.29	0.78	53	<0.0001	
Commercial	45	0.77	0.71	0.57	ND	0.20	0.37	0.86	1.60	3.57	96		
Industrial	45	0.47	0.46	0.37	ND	ND	0.25	0.53	0.90	2.01	89		
Mobile	50	0.26	0.20	0.25	ND	ND	0.16	0.33	0.45	1.07	88		
Background	66	0.11	0.16	0.06	ND	ND	ND	0.16	0.29	0.78	53	<0.0001	N/A
Paterson	140	0.49	0.54	0.33	ND	0.08	0.20	0.57	1.07	3.57	91		
Background													
Spring	14	0.10	0.15	ND	ND	ND	0.00	0.12	0.41	0.41	50	<0.0001	A
Summer	14	0.21	0.18	0.16	0.08	0.12	0.12	0.20	0.37	0.78	100		
Fall	21	N/A	N/A	ND	ND	ND	ND	0.12	0.29	0.61	43		A
Winter	17	N/A	N/A	ND	ND	ND	ND	0.04	0.08	0.16	29		A
Weekday	46	0.12	0.17	0.08	ND	ND	ND	0.16	0.29	0.78	54	NS	N/A
Weekend	20	0.08	0.12	ND	ND	ND	ND	0.12	0.27	0.41	50		
Paterson													
Spring	29	0.38	0.31	0.29	ND	0.16	0.20	0.45	0.82	1.60	97	0.0143	A
Summer	39	0.55	0.36	0.41	0.20	0.29	0.33	0.61	1.15	1.93	100		B
Fall	47	0.54	0.73	0.33	ND	ND	0.12	0.70	1.35	3.57	79		A B
Winter	25	0.44	0.53	0.29	ND	0.08	0.16	0.45	0.82	2.05	92		A
Weekday	104	0.57	0.59	0.37	ND	0.08	0.25	0.70	1.23	3.57	91	0.0001	N/A
Weekend	36	0.27	0.19	0.25	ND	ND	0.12	0.37	0.49	0.78	89		
Methyl Isobutyl Ketone ²													
Background	66	0.14	0.15	0.08	ND	ND	ND	0.20	0.29	0.78	53	<0.0001	
Commercial	45	0.78	0.71	0.57	ND	0.20	0.37	0.86	1.60	3.57	96		
Industrial	45	0.48	0.45	0.37	ND	ND	0.25	0.53	0.90	2.01	89		
Mobile	50	0.27	0.18	0.25	ND	ND	0.16	0.33	0.45	1.07	88		
Background	66	0.14	0.15	0.08	ND	ND	ND	0.20	0.29	0.78	53	<0.0001	N/A
Paterson	140	0.50	0.53	0.33	ND	0.12	0.20	0.57	1.07	3.57	91		
Background													
Spring	14	0.11	0.13	ND	ND	ND	ND	0.12	0.41	0.41	50	0.0004	B C
Summer	14	0.21	0.18	0.16	0.08	0.12	0.12	0.20	0.37	0.78	100		A
Fall	21	N/A	N/A	ND	ND	ND	ND	0.20	0.29	0.61	43		A C
Winter	17	N/A	N/A	ND	ND	ND	ND	0.04	0.16	0.20	29		B
Weekday	46	0.14	0.16	0.08	ND	ND	ND	0.20	0.29	0.78	54	NS	N/A
Weekend	20	0.12	0.11	ND	ND	ND	ND	0.18	0.29	0.41	50		
Paterson													
Spring	29	0.38	0.31	0.29	ND	0.16	0.20	0.45	0.82	1.60	97	0.0123	A
Summer	39	0.55	0.36	0.41	0.20	0.29	0.33	0.61	1.15	1.93	100		B
Fall	47	0.56	0.72	0.33	ND	ND	0.16	0.70	1.35	3.57	79		A B
Winter	25	0.46	0.52	0.29	ND	0.12	0.20	0.45	0.82	2.05	92		A
Weekday	104	0.58	0.58	0.37	ND	0.16	0.25	0.70	1.23	3.57	91	<0.0001	N/A
Weekend	36	0.28	0.18	0.25	ND	ND	0.16	0.37	0.49	0.78	89		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Methyl Methacrylate													
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Commercial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Industrial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Mobile	50	N/A	N/A	ND	ND	ND	ND	ND	ND	0.16	2		
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Paterson	140	N/A	N/A	ND	ND	ND	ND	ND	ND	0.16	1		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Winter	17	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	46	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	39	N/A	N/A	ND	ND	ND	ND	ND	ND	0.16	3		
Fall	47	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Winter	25	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	104	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Weekend	36	N/A	N/A	ND	ND	ND	ND	ND	ND	0.16	3		
Methyl Tert-Butyl Ether ¹													
Background	66	N/A	N/A	ND	ND	ND	ND	0.11	0.22	1.12	32	<0.0001	
Commercial	45	0.72	1.45	0.18	ND	0.04	0.11	0.76	1.48	7.93	91		A
Industrial	45	0.64	1.27	0.25	ND	ND	0.11	0.47	0.87	6.53	87		A
Mobile	50	0.55	1.16	0.14	ND	ND	0.07	0.50	1.12	6.56	78		A
Background	66	N/A	N/A	ND	ND	ND	ND	0.11	0.22	1.12	32	<0.0001	N/A
Paterson	140	0.63	1.28	0.18	ND	ND	0.11	0.56	1.34	7.93	85		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	0.14	0.22	0.40	29	0.0006	A B
Summer	14	N/A	N/A	ND	ND	ND	ND	0.07	0.11	0.14	36		A B
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	ND	0.07	10		A
Winter	17	0.22	0.28	0.18	ND	ND	ND	0.25	0.50	1.12	59		B
Weekday	46	N/A	N/A	0.00	ND	ND	ND	0.14	0.32	1.12	35	NS	N/A
Weekend	20	N/A	N/A	0.00	ND	ND	ND	ND	0.20	0.25	25		
Paterson													
Spring	29	0.84	1.09	0.65	0.07	0.11	0.18	0.83	3.46	4.29	100	<0.0001	A
Summer	39	0.22	0.14	0.18	ND	0.07	0.14	0.32	0.40	0.65	97		
Fall	47	0.14	0.15	0.11	ND	ND	ND	0.22	0.29	0.76	66		
Winter	25	1.98	2.32	1.08	ND	ND	0.14	2.24	6.53	7.93	84		A
Weekday	104	0.71	1.38	0.22	ND	ND	0.11	0.69	1.48	7.93	87	0.0481	N/A
Weekend	36	0.41	0.92	0.14	ND	ND	0.06	0.29	0.72	4.36	81		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Methyl Tert-Butyl Ether ²													
Background	66	N/A	N/A	ND	ND	ND	ND	0.18	0.22	1.12	32	<0.0001	
Commercial	45	0.73	1.44	0.22	ND	0.07	0.14	0.76	1.48	7.93	91		A
Industrial	45	0.65	1.26	0.25	ND	ND	0.11	0.47	0.87	6.53	87		A
Mobile	50	0.57	1.15	0.18	ND	ND	0.11	0.50	1.12	6.56	78		A
Background	66	N/A	N/A	ND	ND	ND	ND	0.18	0.22	1.12	32	<0.0001	N/A
Paterson	140	0.65	1.28	0.22	ND	ND	0.11	0.56	1.34	7.93	85		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	0.14	0.22	0.40	29	0.0125	A B
Summer	14	N/A	N/A	ND	ND	ND	ND	0.07	0.11	0.14	36		A
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	ND	0.22	10		A B
Winter	17	0.24	0.27	0.18	ND	ND	ND	0.25	0.50	1.12	59		B
Weekday	46	N/A	N/A	ND	ND	ND	ND	0.18	0.32	1.12	35	NS	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	ND	0.22	0.25	25		
Paterson													
Spring	29	0.84	1.09	0.65	0.07	0.11	0.18	0.83	3.46	4.29	100	<0.0001	A
Summer	39	0.22	0.14	0.18	ND	0.07	0.14	0.32	0.40	0.65	97		B
Fall	47	0.16	0.14	0.14	ND	ND	ND	0.22	0.29	0.76	66		B
Winter	25	2.00	2.30	1.08	ND	ND	0.22	2.24	6.53	7.93	84		A
Weekday	104	0.72	1.38	0.22	ND	ND	0.13	0.69	1.48	7.93	87	0.0446	N/A
Weekend	36	0.42	0.92	0.18	ND	ND	0.07	0.29	0.72	4.36	81		
m-Dichlorobenzene													
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	2	N/A	N/A
Commercial	45	N/A	N/A	ND	ND	ND	ND	ND	0.12	0.30	18		
Industrial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Mobile	50	N/A	N/A	ND	ND	ND	ND	ND	ND	0.06	0		
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	2	N/A	N/A
Paterson	140	N/A	N/A	ND	ND	ND	ND	ND	ND	0.30	6		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	7		
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Winter	17	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	46	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	2	N/A	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	39	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Fall	47	N/A	N/A	ND	ND	ND	ND	ND	0.12	0.30	17		
Winter	25	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	104	N/A	N/A	ND	ND	ND	ND	ND	ND	0.24	5	N/A	N/A
Weekend	36	N/A	N/A	ND	ND	ND	ND	ND	ND	0.30	8		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are $\mu\text{g}/\text{m}^3$.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
m,p-Xylene													
Background	66	0.30	0.21	0.26	0.04	0.13	0.17	0.39	0.52	1.13	100	<0.0001	
Commercial	45	4.62	6.99	2.39	0.43	0.91	1.74	4.34	10.38	40.88	100		
Industrial	45	1.51	1.28	1.35	0.17	0.35	0.74	1.78	3.22	7.17	100		A
Mobile	50	1.45	1.09	1.24	0.26	0.46	0.74	1.83	2.41	6.82	100		A
Background	66	0.30	0.21	0.26	0.04	0.13	0.17	0.39	0.52	1.13	100	<0.0001	N/A
Paterson	140	2.49	4.31	1.48	0.17	0.50	0.89	2.35	4.43	40.88	100		
Background													
Spring	14	0.21	0.10	0.17	0.09	0.13	0.13	0.22	0.35	0.48	100	NS	N/A
Summer	14	0.33	0.23	0.30	0.09	0.13	0.22	0.35	0.39	1.04	100		
Fall	21	0.29	0.19	0.22	0.09	0.13	0.17	0.30	0.39	0.83	100		
Winter	17	0.38	0.26	0.35	0.04	0.04	0.17	0.48	0.65	1.13	100		
Weekday	46	0.31	0.22	0.26	0.04	0.13	0.17	0.39	0.56	1.13	100	NS	N/A
Weekend	20	0.28	0.18	0.24	0.04	0.11	0.15	0.37	0.48	0.83	100		
Paterson													
Spring	29	1.47	1.16	1.17	0.22	0.30	0.74	1.74	3.22	4.78	100	NS	N/A
Summer	39	1.68	0.93	1.61	0.56	0.70	0.91	2.04	3.35	4.61	100		
Fall	47	3.68	7.00	1.48	0.17	0.35	0.74	2.65	9.21	40.88	100		
Winter	25	2.68	2.39	1.83	0.26	0.91	1.48	3.39	6.82	10.38	100		
Weekday	104	2.74	4.91	1.54	0.26	0.65	0.87	2.50	4.52	40.88	100	NS	N/A
Weekend	36	1.76	1.43	1.46	0.17	0.30	0.94	2.04	4.00	5.69	100		
n-Octane													
Background	66	0.07	0.06	0.07	ND	ND	ND	0.09	0.14	0.33	58	<0.0001	
Commercial	45	0.33	0.25	0.28	0.05	0.14	0.19	0.37	0.61	1.50	100		A
Industrial	45	0.24	0.20	0.19	ND	0.05	0.14	0.33	0.47	1.08	96		A
Mobile	50	0.23	0.16	0.21	ND	0.09	0.14	0.28	0.37	1.03	98		A
Background	66	0.07	0.06	0.07	ND	ND	ND	0.09	0.14	0.33	58	<0.0001	N/A
Paterson	140	0.27	0.21	0.23	ND	0.09	0.14	0.33	0.49	1.50	98		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	0.05	0.09	0.09	36	0.0019	A
Summer	14	0.09	0.05	0.09	ND	0.05	0.05	0.09	0.14	0.19	93		B
Fall	21	0.06	0.05	0.05	ND	ND	ND	0.09	0.09	0.19	38		A B
Winter	17	0.10	0.08	0.09	ND	ND	0.09	0.14	0.19	0.33	71		B
Weekday	46	0.07	0.06	0.08	ND	ND	ND	0.09	0.14	0.33	59	NS	N/A
Weekend	20	0.07	0.05	0.05	ND	ND	ND	0.09	0.14	0.19	55		
Paterson													
Spring	29	0.23	0.16	0.19	ND	0.05	0.14	0.28	0.47	0.61	97	0.0477	NS
Summer	39	0.26	0.13	0.28	0.05	0.09	0.19	0.33	0.42	0.56	100		
Fall	47	0.23	0.16	0.19	ND	0.09	0.14	0.33	0.47	0.70	96		
Winter	25	0.40	0.35	0.23	0.05	0.14	0.23	0.47	1.03	1.50	100		
Weekday	104	0.28	0.22	0.23	0.05	0.09	0.14	0.33	0.51	1.50	100	NS	N/A
Weekend	36	0.23	0.16	0.23	ND	0.05	0.14	0.31	0.42	0.79	92		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
o-Dichlorobenzene													
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	2	N/A	N/A
Commercial	45	N/A	N/A	ND	ND	ND	ND	ND	0.12	0.18	13		
Industrial	45	N/A	N/A	ND	ND	ND	ND	ND	ND	0.06	0		
Mobile	50	N/A	N/A	ND	ND	ND	ND	ND	ND	0.06	0		
Background	66	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	2	N/A	N/A
Paterson	140	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	4		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	7		
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Winter	17	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Weekday	46	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	2	N/A	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	39	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0		
Fall	47	N/A	N/A	ND	ND	ND	ND	ND	0.12	0.18	13		
Winter	25	N/A	N/A	ND	ND	ND	ND	ND	ND	0.06	0		
Weekday	104	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	5	N/A	N/A
Weekend	36	N/A	N/A	ND	ND	ND	ND	ND	ND	0.18	3		
o-Xylene													
Background	66	0.13	0.08	0.13	ND	0.04	0.09	0.17	0.22	0.43	95	<0.0001	
Commercial	45	1.20	1.19	0.87	0.17	0.35	0.65	1.30	1.91	6.65	100		
Industrial	45	0.55	0.42	0.48	0.09	0.13	0.30	0.65	1.13	2.48	100		A
Mobile	50	0.57	0.40	0.48	0.13	0.20	0.30	0.70	0.94	2.56	100		A
Background	66	0.13	0.08	0.13	ND	0.04	0.09	0.17	0.22	0.43	95	<0.0001	N/A
Paterson	140	0.77	0.81	0.61	0.09	0.22	0.35	0.87	1.35	6.65	100		
Background													
Spring	14	0.09	0.05	0.09	ND	ND	0.09	0.09	0.17	0.22	86	0.045	NS
Summer	14	0.12	0.05	0.13	0.04	0.04	0.09	0.13	0.17	0.22	100		
Fall	21	0.13	0.08	0.13	0.04	0.09	0.09	0.13	0.17	0.39	95		
Winter	17	0.15	0.10	0.13	0.04	0.04	0.13	0.17	0.26	0.43	100		
Weekday	46	0.13	0.07	0.13	0.04	0.04	0.09	0.17	0.22	0.43	98	NS	N/A
Weekend	20	0.12	0.09	0.09	ND	ND	0.09	0.15	0.22	0.39	90		
Paterson													
Spring	29	0.56	0.37	0.48	0.09	0.13	0.35	0.65	1.13	1.61	100	NS	N/A
Summer	39	0.60	0.27	0.61	0.22	0.30	0.35	0.70	1.00	1.30	100		
Fall	47	0.91	1.16	0.52	0.09	0.17	0.30	1.00	1.61	6.65	100		
Winter	25	0.98	0.84	0.70	0.13	0.35	0.56	1.17	2.48	3.65	100		
Weekday	104	0.82	0.90	0.61	0.13	0.26	0.35	0.96	1.30	6.65	100	NS	N/A
Weekend	36	0.61	0.42	0.56	0.09	0.13	0.35	0.70	1.39	1.83	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
p-Dichlorobenzene ¹													
Background	66	N/A	N/A	ND	ND	ND	ND	0.06	0.06	0.24	32	<0.0001	
Commercial	45	18.68	45.19	0.54	0.12	0.30	0.36	12.05	55.49	205.44	100		
Industrial	45	0.33	0.20	0.30	ND	0.12	0.18	0.42	0.54	1.02	96		
Mobile	50	0.30	0.17	0.27	0.06	0.12	0.18	0.42	0.48	0.78	100		
Background	66	N/A	N/A	ND	ND	ND	ND	0.06	0.06	0.24	32	<0.0001	N/A
Paterson	140	6.22	26.84	0.36	ND	0.12	0.18	0.48	1.93	205.44	99		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	0.06	7	0.016	A
Summer	14	0.05	0.06	0.06	ND	ND	ND	0.06	0.06	0.24	64		B
Fall	21	N/A	N/A	ND	ND	ND	ND	0.06	0.06	0.24	29		A B
Winter	17	N/A	N/A	ND	ND	ND	ND	0.06	0.06	0.06	29		A B
Weekday	46	N/A	N/A	ND	ND	ND	ND	0.06	0.06	0.24	35	NS	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	0.06	0.06	0.06	25		
Paterson													
Spring	29	0.31	0.18	0.24	0.06	0.12	0.18	0.42	0.66	0.78	100	NS	A
Summer	39	0.41	0.14	0.42	0.18	0.18	0.36	0.48	0.60	0.78	100		B
Fall	47	17.72	44.43	0.30	ND	0.12	0.18	12.05	55.49	205.44	98		A B
Winter	25	0.51	0.51	0.36	0.06	0.12	0.24	0.60	1.02	2.47	96		A B
Weekday	104	4.66	20.89	0.36	0.06	0.18	0.24	0.48	1.02	184.35	100	NS	N/A
Weekend	36	10.72	39.36	0.33	ND	0.12	0.18	0.51	8.43	205.44	94		
p-Dichlorobenzene ²													
Background	66	N/A	N/A	ND	ND	ND	ND	0.06	0.24	0.36	32	<0.0001	
Commercial	45	18.68	45.19	0.54	0.12	0.30	0.36	12.05	55.49	205.44	100		
Industrial	45	0.34	0.20	0.30	ND	0.12	0.18	0.42	0.54	1.02	96		A
Mobile	50	0.30	0.17	0.27	0.06	0.12	0.18	0.42	0.48	0.78	100		A
Background	66	N/A	N/A	ND	ND	ND	ND	0.06	0.24	0.36	32	<0.0001	N/A
Paterson	140	6.22	26.84	0.36	ND	0.12	0.18	0.48	1.93	205.44	99		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	0.06	7	0.0045	A
Summer	14	0.07	0.05	0.06	0.04	0.04	0.04	0.06	0.06	0.24	64		B
Fall	21	N/A	N/A	0.06	ND	ND	ND	0.24	0.36	0.36	29		B
Winter	17	N/A	N/A	ND	ND	ND	ND	0.06	0.06	0.06	29		A B
Weekday	46	N/A	N/A	ND	ND	ND	ND	0.06	0.24	0.36	35	NS	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	0.06	0.06	0.36	25		
Paterson													
Spring	29	0.31	0.18	0.24	0.06	0.12	0.18	0.42	0.66	0.78	100	NS	A
Summer	39	0.41	0.14	0.42	0.18	0.18	0.36	0.48	0.60	0.78	100		B
Fall	47	17.72	44.43	0.30	ND	0.12	0.18	12.05	55.49	205.44	98		A B
Winter	25	0.51	0.51	0.36	0.06	0.12	0.24	0.60	1.02	2.47	96		A B
Weekday	104	4.66	20.89	0.36	0.06	0.18	0.24	0.48	1.02	184.35	100	NS	N/A
Weekend	36	10.73	39.36	0.33	ND	0.12	0.18	0.51	8.43	205.44	94		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are $\mu\text{g}/\text{m}^3$.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Propylene													
Background	66	0.43	0.34	0.35	0.12	0.19	0.24	0.50	0.81	2.39	100	<0.0001	
Commercial	45	1.65	1.17	1.34	0.34	0.57	0.96	2.24	2.91	6.90	100		A
Industrial	45	1.10	0.84	0.95	0.17	0.46	0.60	1.39	1.72	5.46	100		B
Mobile	50	1.32	0.98	1.12	0.29	0.47	0.77	1.46	2.26	6.28	100		A B
Background	66	0.43	0.34	0.35	0.12	0.19	0.24	0.50	0.81	2.39	100	<0.0001	N/A
Paterson	140	1.36	1.02	1.15	0.17	0.47	0.74	1.55	2.55	6.90	100		
Background													
Spring	14	0.38	0.30	0.27	0.12	0.14	0.17	0.52	0.71	1.22	100	NS	N/A
Summer	14	0.31	0.11	0.34	0.17	0.17	0.21	0.40	0.41	0.52	100		
Fall	21	0.50	0.49	0.38	0.21	0.24	0.26	0.45	0.60	2.39	100		
Winter	17	0.48	0.25	0.40	0.19	0.19	0.29	0.53	0.86	0.98	100		
Weekday	46	0.42	0.34	0.35	0.15	0.21	0.26	0.45	0.71	2.39	100	NS	N/A
Weekend	20	0.44	0.34	0.35	0.12	0.16	0.21	0.53	1.10	1.27	100		
Paterson													
Spring	29	1.07	0.76	0.83	0.21	0.29	0.60	1.17	2.62	3.08	100	0.001	A
Summer	39	1.20	0.60	1.08	0.41	0.48	0.86	1.53	2.26	2.70	100		A
Fall	47	1.22	0.71	1.17	0.17	0.46	0.67	1.45	2.24	3.96	100		A
Winter	25	2.20	1.71	1.72	0.34	0.93	1.17	2.53	5.46	6.90	100		
Weekday	104	1.40	1.07	1.15	0.34	0.55	0.85	1.54	2.50	6.90	100	NS	N/A
Weekend	36	1.23	0.87	1.05	0.17	0.29	0.52	1.57	2.62	3.49	100		
Styrene													
Background	66	0.07	0.06	0.04	ND	ND	ND	0.09	0.13	0.34	64	<0.0001	
Commercial	45	0.28	0.24	0.21	ND	0.09	0.13	0.34	0.60	0.98	96		A
Industrial	45	0.16	0.11	0.13	ND	0.04	0.09	0.21	0.30	0.60	96		B
Mobile	50	0.17	0.11	0.13	ND	ND	0.09	0.21	0.26	0.60	90		A B
Background	66	0.07	0.06	0.04	ND	ND	ND	0.09	0.13	0.34	64	<0.0001	N/A
Paterson	140	0.20	0.17	0.17	ND	0.04	0.09	0.21	0.36	0.98	94		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	0.04	0.09	0.09	29	0.0003	A
Summer	14	0.06	0.04	0.04	ND	ND	ND	0.09	0.09	0.13	64		A B
Fall	21	0.07	0.05	0.04	ND	ND	0.04	0.09	0.09	0.26	67		B
Winter	17	0.10	0.08	0.09	ND	ND	0.09	0.13	0.21	0.34	88		B
Weekday	46	0.07	0.06	0.04	ND	ND	ND	0.09	0.13	0.34	65	NS	N/A
Weekend	20	0.06	0.04	0.04	ND	ND	ND	0.09	0.11	0.13	60		
Paterson													
Spring	29	0.19	0.22	0.13	ND	ND	0.09	0.21	0.38	0.98	79	0.0152	NS
Summer	39	0.17	0.06	0.17	0.04	0.09	0.13	0.21	0.26	0.34	100		
Fall	47	0.19	0.16	0.17	ND	0.04	0.09	0.26	0.38	0.94	98		
Winter	25	0.29	0.22	0.21	ND	0.13	0.13	0.34	0.60	0.94	92		
Weekday	104	0.21	0.19	0.17	ND	0.04	0.11	0.21	0.38	0.98	93	NS	N/A
Weekend	36	0.17	0.11	0.13	ND	0.04	0.09	0.24	0.30	0.60	94		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Tetrachloroethylene													
Background	66	0.13	0.12	0.14	ND	ND	ND	0.14	0.27	0.75	53	<0.0001	
Commercial	45	0.75	0.83	0.54	0.14	0.20	0.34	0.88	1.23	5.10	100		A
Industrial	45	0.69	0.54	0.54	0.14	0.14	0.27	0.95	1.43	2.45	100		A
Mobile	50	0.53	0.41	0.41	ND	0.17	0.27	0.54	1.02	2.25	98		A
Background	66	0.13	0.12	0.14	ND	ND	ND	0.14	0.27	0.75	53	<0.0001	N/A
Paterson	140	0.65	0.62	0.48	ND	0.20	0.27	0.82	1.26	5.10	99		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	0.14	0.27	0.75	29	NS	N/A
Summer	14	0.09	0.06	0.11	ND	ND	ND	0.14	0.14	0.20	57		
Fall	21	0.12	0.07	0.14	ND	ND	0.07	0.14	0.20	0.34	57		
Winter	17	0.17	0.14	0.14	ND	ND	ND	0.20	0.41	0.48	65		
Weekday	46	0.14	0.14	0.14	ND	ND	ND	0.14	0.27	0.75	59	NS	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	0.14	0.21	0.34	40		
Paterson													
Spring	29	0.48	0.34	0.41	ND	0.14	0.20	0.61	1.02	1.29	97	NS	N/A
Summer	39	0.60	0.46	0.41	0.14	0.20	0.27	0.82	1.36	2.11	100		
Fall	47	0.71	0.76	0.54	0.14	0.14	0.27	0.88	1.23	5.10	100		
Winter	25	0.82	0.75	0.54	0.20	0.27	0.41	0.88	2.25	3.20	100		
Weekday	104	0.72	0.68	0.54	0.14	0.20	0.34	0.85	1.43	5.10	100	0.0084	N/A
Weekend	36	0.46	0.31	0.34	ND	0.14	0.20	0.65	0.88	1.23	97		
Toluene													
Background	66	0.70	0.55	0.53	0.19	0.26	0.38	0.90	1.09	3.17	100	<0.0001	
Commercial	45	7.98	6.06	6.37	1.06	2.94	3.85	9.80	16.36	32.39	100		A
Industrial	45	6.46	4.94	5.47	0.45	1.73	3.47	8.71	10.44	25.64	100		A
Mobile	50	8.07	6.60	6.49	0.87	2.21	3.62	8.90	18.04	31.37	100		A
Background	66	0.70	0.55	0.53	0.19	0.26	0.38	0.90	1.09	3.17	100	<0.0001	N/A
Paterson	140	7.52	5.94	6.11	0.45	2.08	3.62	9.15	16.36	32.39	100		
Background													
Spring	14	0.43	0.25	0.32	0.19	0.19	0.26	0.53	0.60	1.13	100	0.331	A
Summer	14	0.70	0.25	0.63	0.34	0.38	0.53	0.94	1.06	1.09	100		B
Fall	21	0.76	0.66	0.53	0.23	0.30	0.45	0.87	1.24	3.17	100		A B
Winter	17	0.86	0.68	0.72	0.19	0.26	0.45	0.98	1.70	3.09	100		A B
Weekday	46	0.74	0.60	0.53	0.19	0.26	0.45	0.90	1.09	3.17	100	NS	N/A
Weekend	20	0.63	0.41	0.51	0.19	0.23	0.32	0.79	1.13	1.85	100		
Paterson													
Spring	29	7.23	3.71	7.13	1.73	2.38	4.64	8.90	13.05	16.33	100	<0.0001	A B
Summer	39	6.05	2.11	5.84	2.04	3.47	4.15	7.58	9.50	10.18	100		A
Fall	47	6.46	6.90	3.70	0.45	1.13	2.45	6.83	18.55	31.37	100		A
Winter	25	12.17	7.83	9.92	1.06	4.45	6.52	17.27	22.81	32.39	100		B
Weekday	104	8.04	6.23	6.47	1.02	2.45	3.72	9.79	16.36	32.39	100	0.0342	N/A
Weekend	36	6.05	4.78	4.92	0.45	1.96	3.10	7.53	16.36	19.12	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Trichloroethylene													
Background	66	N/A	N/A	ND	ND	ND	ND	ND	0.05	0.22	17	N/A	N/A
Commercial	45	N/A	N/A	0.05	ND	ND	ND	0.16	0.16	0.59	53		
Industrial	45	N/A	N/A	0.11	ND	ND	ND	0.16	0.27	1.46	60		
Mobile	50	N/A	N/A	0.11	ND	ND	ND	0.16	0.27	0.49	52		
Background	66	N/A	N/A	ND	ND	ND	ND	ND	0.05	0.22	17	N/A	N/A
Paterson	140	N/A	N/A	0.11	ND	ND	ND	0.16	0.27	1.46	55		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	0.05	0.11	0.22	50		
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	0.05	0.11	10		
Winter	17	N/A	N/A	ND	ND	ND	ND	ND	0.11	0.11	12		
Weekday	46	N/A	N/A	ND	ND	ND	ND	ND	0.11	0.11	22	N/A	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	ND	0.05	0.22	5		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	0.16	0.32	14	N/A	N/A
Summer	39	N/A	N/A	0.11	ND	ND	0.05	0.16	0.22	0.43	85		
Fall	47	N/A	N/A	0.11	ND	ND	ND	0.16	0.27	1.46	55		
Winter	25	N/A	N/A	0.11	ND	ND	ND	0.22	0.49	0.70	56		
Weekday	104	N/A	N/A	0.11	ND	ND	ND	0.16	0.27	1.46	56	N/A	N/A
Weekend	36	N/A	N/A	0.08	ND	ND	ND	0.16	0.22	0.43	53		
Trichlorofluoromethane													
Background	66	1.53	0.30	1.47	1.01	1.24	1.35	1.63	1.80	2.93	100	<0.0001	
Commercial	45	3.10	2.07	2.31	0.68	1.41	1.80	3.66	5.24	11.16	100		A
Industrial	45	2.11	0.60	1.97	1.07	1.52	1.75	2.25	2.87	4.17	100		A
Mobile	50	1.67	0.36	1.58	1.01	1.30	1.41	1.80	2.17	2.71	100		
Background	66	1.53	0.30	1.47	1.01	1.24	1.35	1.63	1.80	2.93	100	<0.0001	N/A
Paterson	140	2.27	1.37	1.80	0.68	1.35	1.58	2.34	3.64	11.16	100		
Background													
Spring	14	1.57	0.42	1.47	1.18	1.24	1.41	1.58	1.80	2.93	100	0.0061	A B
Summer	14	1.36	0.12	1.38	1.13	1.18	1.30	1.47	1.47	1.52	100		A
Fall	21	1.62	0.23	1.58	1.24	1.35	1.47	1.69	1.97	2.09	100		B
Winter	17	1.51	0.31	1.47	1.01	1.18	1.35	1.63	2.03	2.25	100		A B
Weekday	46	1.55	0.31	1.47	1.13	1.24	1.35	1.63	1.97	2.93	100	NS	N/A
Weekend	20	1.47	0.26	1.47	1.01	1.18	1.33	1.58	1.69	2.25	100		
Paterson													
Spring	29	1.88	0.44	1.80	1.30	1.35	1.47	2.20	2.65	2.71	100	0.0125	A B
Summer	39	2.30	1.00	2.09	1.18	1.30	1.58	2.87	3.66	5.24	100		A B
Fall	47	2.79	2.01	1.97	1.47	1.52	1.63	2.99	4.96	11.16	100		B
Winter	25	1.69	0.53	1.75	0.68	1.01	1.30	1.86	2.59	2.87	100		A
Weekday	104	2.26	1.32	1.83	0.68	1.35	1.58	2.34	3.66	11.16	100	NS	N/A
Weekend	36	2.31	1.53	1.80	1.24	1.47	1.58	2.43	3.04	9.19	100		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics

Table 27: Descriptive Statistics for Measured Ambient Air Concentrations for Targeted Volatile Organic Compounds, units are µg/m³.

	N	Mean	SD	Med	Min	P10	P25	P75	P90	Max	%> MDL	p-value	M.C. (Multiple Comparisons)
Trichlorotrifluoroethane													
Background	66	0.79	0.15	0.77	0.38	0.61	0.69	0.85	0.92	1.31	100	NS	N/A
Commercial	45	0.78	0.17	0.77	0.38	0.61	0.69	0.85	0.92	1.31	100		
Industrial	45	0.79	0.15	0.77	0.54	0.61	0.69	0.85	1.00	1.23	100		
Mobile	50	0.83	0.20	0.77	0.54	0.61	0.69	0.85	1.08	1.61	100		
Background	66	0.79	0.15	0.77	0.38	0.61	0.69	0.85	0.92	1.31	100	NS	N/A
Paterson	140	0.80	0.18	0.77	0.38	0.61	0.69	0.85	1.00	1.61	100		
Background													
Spring	14	0.80	0.15	0.77	0.61	0.69	0.69	0.85	0.92	1.23	100	NS	N/A
Summer	14	0.71	0.12	0.77	0.38	0.61	0.69	0.77	0.77	0.85	100		
Fall	21	0.83	0.15	0.77	0.61	0.61	0.77	0.92	1.00	1.15	100		
Winter	17	0.77	0.17	0.77	0.61	0.61	0.69	0.85	0.85	1.31	100		
Weekday	46	0.77	0.15	0.77	0.38	0.61	0.69	0.85	0.92	1.23	100	N/A	N/A
Weekend	20	0.81	0.16	0.77	0.61	0.61	0.77	0.85	1.00	1.31	100		
Paterson													
Spring	29	0.82	0.16	0.77	0.61	0.61	0.69	0.92	1.08	1.15	100	0.0072	A B
Summer	39	0.72	0.12	0.69	0.54	0.54	0.61	0.85	0.92	0.92	100		A
Fall	47	0.85	0.20	0.77	0.61	0.69	0.77	0.85	1.15	1.61	100		B
Winter	25	0.81	0.19	0.85	0.38	0.54	0.77	0.85	1.08	1.31	100		A B
Weekday	104	0.80	0.19	0.77	0.38	0.61	0.69	0.85	1.08	1.61	100	NS	N/A
Weekend	36	0.81	0.15	0.77	0.54	0.69	0.73	0.85	0.92	1.31	100		
Vinyl Chloride													
Background	66	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.03	12	N/A	N/A
Commercial	45	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.05	20		
Industrial	45	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.03	13		
Mobile	50	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.03	10		
Background	66	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.03	12	N/A	N/A
Paterson	140	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.05	14		
Background													
Spring	14	N/A	N/A	ND	ND	ND	ND	ND	ND	0.03	7	N/A	N/A
Summer	14	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.03	14		
Fall	21	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.03	14		
Winter	17	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.03	12		
Weekday	46	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.03	13	N/A	N/A
Weekend	20	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.03	10		
Paterson													
Spring	29	N/A	N/A	ND	ND	ND	ND	ND	ND	0.03	3	N/A	N/A
Summer	39	N/A	N/A	ND	ND	ND	ND	ND	ND	0.03	8		
Fall	47	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.05	19		
Winter	25	N/A	N/A	ND	ND	ND	ND	0.02	0.03	0.03	28		
Weekday	104	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.05	12	N/A	N/A
Weekend	36	N/A	N/A	ND	ND	ND	ND	ND	0.03	0.03	22		

¹NDs are substituted with zero for computation of statistics

²NDs are substituted with MDL for computation of statistics