File #	Original File Name
1	ENVCAN_SHEMP_GAG_JRB_ORG+INORG_VAPS_2000_2002_V1.csv

## Dataset Key Phrases

	Principal Investigator Namelast		File Contents Descriptionshort	
Data Exchange Standard Version	first	Principal Investigator Affiliation	long	Sampling Interval As Reported in Main Table
NARSTO 2002/05/28 (2.301)	Brook ; Jeffrey	Environment Canada, Meteorological	air-filter-meas ; Air filter	Variable interval
		Service of Canada	measurements	

Sampling Frequency Of Data in Main Table	Quality Control Level	Organization Acronym	Organization Name	Data Usage Acknowledgement	Study Or Network Acronym
Variable frequency	1	ENVCAN_MSC	Environment CanadaMeteorological Service of Canada	Environment Canada, Meteorological Service of Canada, 4905 Dufferin St., Toronto, Ont. M3H 5T4	ENVCAN_SHEMP

				Co-investigator Namelast	
Study Or Network Name	Country Code	State Or Province Code	Principal Investigator Contact Information	first	<b>Co-investigator Affiliation</b>
Environment CanadaStudy of	CA	ON	Environment Canada, Meteorological Service of	None ; None	None
the Health Effects of the Mix of			Canada, 4905 Dufferin St., Toronto, Ont. M3H 5T4		
Urban Air Pollutants					

Name And Affiliation Of Person Who Generated This F	ile Date Of Last Modification To Data In Main Table	Name And Version Of Software Used To Create This File
Bill Sukloff, Environment Canada (MSC)	2003/02/10	MS Excel/2002

Companion File Name	Date This File Generated		
format And Version	archive Version Number	Table Explanation Of Zero Or Negative Values	Table Explanation Of Reported Detection Limit Values
None ; None	2004/11/26 ; 1	Zero and negative values are reported and reflect actual	Detection limits determined as 3SD of field blanks divided mean
		laboratory analysis results with blank correction, if required,	sample volume and are reported with each measurement.
		and are flagged as BDL	

Table Explanation Of Reported Uncertainty	Table User Note	Table User Note2	Table User Note3	Table User Note4	Table Name	Table Focus
no uncertainty reported	None	None			air_filter_meas	Surfacefixed

### Site Information

Site ID	Name	State Province code	Latitude: decimal degree	Longitude: decimal degree	Sampling height above ground (m)	Ground elevation above sea level (m)	Site land use
SHEMCAONGAG_	Gage	ON	43.65842	-79.39714	15.0	103.6	Residential

				Co-incident		Lat
Site ID	Site location setting	Measurement start date	Measurement end date	measurements	Study site ID	Ion accuracy
SHEMCAONGAG_	Urban and center city	2000/02/14	2002/07/31	None		

# NARSTO Standard Flags

Flag: NARSTO	Description
M1	Missing value because no value is available
M2	Missing value because invalidated by Data Originator
V0	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
V6	Valid value but qualified due to non-standard sampling conditions

09DEC2004

Site ID: SHEMCAONGAG\_ Variable name: 1,2-Benzenedicarboxylic acid, ion(2-) Common Name: Phthalic Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C3198-29-6 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim



Site ID: SHEMCAONGAG\_ Variable name: Acetic acid, hydroxy-, ion(1-) Common Name: Glycolic Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C666-14-8 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: Capillary electrophoresis Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim



Site ID: SHEMCAONGAG\_ Variable name: Acetic acid, ion(1-) Common Name: Acetate Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C71-50-1 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: Capillary electrophoresis Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim



Site ID: SHEMCAONGAG\_ Variable name: Acetic acid, oxo-, ion(1-) Common Name: Glyoxylic Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C430-75-1 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim



Site ID: SHEMCAONGAG\_ Variable name: Ammonium ion (NH4) Common Name: NH4+ Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C14798-03-9 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim



Site ID: SHEMCAONGAG\_ Variable name: Benzoic acid, ion(1-) Common Name: benzoic acid anion Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C766-76-7 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim



Site ID: SHEMCAONGAG\_ Variable name: Bromide Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C24959-67-9 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim



Site ID: SHEMCAONGAG\_ Variable name: Butanedioic acid, hydroxy-, ion(2-) Common Name: Malic Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C149-61-1 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: Capillary electrophoresis Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim



Site ID: SHEMCAONGAG\_ Variable name: Butanedioic acid, ion(2-) Common Name: Succinic Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C56-14-4 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: Capillary electrophoresis Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_12_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Chloride Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C16887-00-6 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_13_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Ethanedioic acid, ion(2-) Common Name: Oxalic acid, ion Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C338-70-5 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_14_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Formic acid, ion(1-) Common Name: Formate Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C71-47-6 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: Capillary electrophoresis Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_15_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Heptanedioic acid, ion(2-) Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C764-54-5 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: Capillary electrophoresis Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_16_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Hexanedioic acid, ion(2-) Common Name: Adipic Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C764-65-8 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: Capillary electrophoresis Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_17_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Lithium Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C7439-93-2 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_18_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Magnesium Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C7439-95-4 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_19_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Malonic acid, ion(2-) Common Name: Malonic Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C156-80-9 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: Capillary electrophoresis Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_20_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Manganese Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C7439-96-5 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_21_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Methanesulfonic acid, hydroxy-, ion(1-) Common Name: HMSA Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C7494-19-1 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: Capillary electrophoresis Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_22_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Methanesulfonic acid, ion(1-) Common Name: MSA Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C16053-58-0 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_23_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Nitrate Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C14797-55-8 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Nylon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_24_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Nitrate Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C14797-55-8 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_25_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Nitrite Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C14797-65-0 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_26_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Nonanedioic acid, ion(2-) Common Name: Azelaic Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C13479-16-8 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: Capillary electrophoresis Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_27_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Octanedioic acid, ion(2-) Common Name: Suberic Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C764-55-6 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: Capillary electrophoresis Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_28_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Pentanedioic acid, ion(2-) Common Name: Glutaric Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C56-16-6 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: Capillary electrophoresis Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_29_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Phosphate Common Name: Phosphate Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C14265-44-2 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_30_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Potassium Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C7440-09-7 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_31_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Propanoic acid, 2-hydroxy-, ion(1-) Common Name: Lactic Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C113-21-3 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: Capillary electrophoresis Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_32_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Propanoic acid, 2-oxo-, ion(1-) Common Name: Pyruvic Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C57-60-3 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_33_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Propanoic acid, ion(1-) Common Name: Propionate Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C72-03-7 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: Capillary electrophoresis Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_34_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Sample: total volume Units: m3 Sampling interval: Variable interval Sampling frequency: Variable frequency Observation type: Flow Field sampling or measurement principle: Mass flow controller Inlet type: Impactor--virtual/concentrator Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook

![](_page_35_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Sodium Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C7440-23-5 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection Iim

![](_page_36_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Strontium Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C7440-24-6 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_37_Figure_4.jpeg)

Site ID: SHEMCAONGAG\_ Variable name: Sulfate Common Name: Sulphate Units: ug/m3 Sampling interval: Variable interval Sampling frequency: Variable frequency CAS ID: C14808-79-8 Observation type: Particles Particle diameter--lower bound (UM): 0 Particle diameter--upper bound (UM): 2.5 Field sampling or measurement principle: Single filter Medium: Teflon Inlet type: Impactor--virtual/concentrator Laboratory analytical method: IC Sample preparation: Water extraction Blank Correction: Not blank corrected Volume standardization: 0 deg. C; 1 atmosphere Sampling Height above ground (m): 2 Instrument name and model number: University Research Glassware Versatile Air Pollutant Sampler Measurement principal investigator: Jeffrey Brook Detection Limit: Varies--see Detection lim

![](_page_38_Figure_4.jpeg)