



LABORATORY DATA CONSULTANTS, INC.

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October 9, 2003

Mr. Bruce Lewis
ERM-West
2525 Natomas Park Drive
Sacramento, CA 95833

SUBJECT: Validation of Data for Soil Vapor Samples Collected as Part of the Aerojet PGOU
Soils RI

Dear Mr. Lewis,

Enclosed are the final validation reports for the analysis listed below.

SDG #

0307148, 0307168A, 0307168B,
0307200, 0307209, 0307254,
0307274, 0307299, 0307323,
0307349, 0307388, 0307410,
0307449, 0307505, 307523,
0307609, 0307611, 0308162,
0308190

Analysis

Modified EPA Method TO-14A

The data validation was performed under EPA Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999,
- Quality Assurance Project Plan, Aerojet Superfund Site, Aerojet-General Corporation, 29 May 2003, and
- Quality Assurance Project Plan, Aerojet Superfund Site, Aerojet-General Corporation, 14 June 2002, Revised 25 September 2002

Please feel free to contact us if you have any questions.

Sincerely,

Nanny Estrada
Senior Chemist

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 7, 2003
LDC Report Date: October 9, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0307148

Sample Identification

FCS-SP05-10
FCS-SP05-20
FCS-SP05-20 Duplicate
FCS-SP05D-20
FCS-SP04-10
FCS-SP04-20
FCS-SP01-10
FCS-SP01-20
FCS-SP02-10
FCS-SP03-10
FCS-SP03-20
FCS-SP15-10
FCS-SP15-20

Introduction

This data review covers thirteen air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within the 70% - 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD).

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control

samples were reported by the laboratory. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307148-15A	Bromoform	76 (80-120)	FCS-SP05-10 FCS-SP05-20 FCS-SP05-20 Duplicate	J detects, UJ nondetects	A
0307148-15A	4-Ethyltoluene	132 (80-120)	FCS-SP05-10 FCS-SP05-20 FCS-SP05-20 Duplicate	J detects	A
0307148-15B	Bromoform	75 (80-120)	FCS-SP05D-20 FCS-SP04-10 FCS-SP04-20 FCS-SP01-10 FCS-SP01-20 FCS-SP02-10 FCS-SP03-10 FCS-SP03-20 FCS-SP15-10 FCS-SP15-20	J detects, UJ nondetects	A
0307148-15B	4-Ethyltoluene	132 (80-120)	FCS-SP05D-20 FCS-SP04-10 FCS-SP04-20 FCS-SP01-10 FCS-SP01-20 FCS-SP02-10 FCS-SP03-10 FCS-SP03-20 FCS-SP15-10 FCS-SP15-20	J detects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples FCS-SP05-20 and FCS-SP05D-20 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ppbv)		RPD
	FCS-SP05-20	FCS-SP05D-20	
Freon 113	2600	3300	24
Cis-1,2-Dichloroethene	8.6	11	24
Chloroform	26	35	30
1,1,1-Trichloroethane	8.7	10	14
Trichloroethene	9.1	12	28
Tetrachloroethene	19	28	38
Acetone	70	71	1

XVII. Field Blanks

There were no field blank samples identified in this SDG.

Aerojet

Volatiles (TO-14) - Data Qualification Summary - SDG 0307148

SDG	Sample	Compound	Flag	A or P	Reason
0307148	All samples in the SDG	Bromoform	J detects, UJ nondetects	A	LCS recovery below QC limits
0307148	All samples in the SDG	4-Ethyltoluene	J detects	A	LCS recovery above QC limits

Aerojet

Volatiles (TO-14) - Laboratory Blank Data Qualification Summary - SDG 0307148

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP05-10

ID#: 0307148-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071214	Date of Collection: 7/7/03
Dil. Factor:	16.4	Date of Analysis: 7/12/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	8.2	0.041	Not Detected	Not Detected
Freon 114	8.2	0.058	Not Detected	Not Detected
Vinyl Chloride	8.2	0.021	Not Detected	Not Detected
Bromomethane	8.2	0.032	Not Detected	Not Detected
Chloroethane	8.2	0.022	Not Detected	Not Detected
Freon 11	8.2	0.047	Not Detected	Not Detected
1,1-Dichloroethene	8.2	0.033	Not Detected	Not Detected
Freon 113	8.2	0.064	2900	23
Methylene Chloride	8.2	0.029	15	0.052
1,1-Dichloroethane	8.2	0.034	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.2	0.033	Not Detected	Not Detected
Chloroform	8.2	0.041	17	0.085
1,1,1-Trichloroethane	8.2	0.045	Not Detected	Not Detected
Carbon Tetrachloride	8.2	0.052	Not Detected	Not Detected
Benzene	8.2	0.027	Not Detected	Not Detected
1,2-Dichloroethane	8.2	0.034	Not Detected	Not Detected
Trichloroethene	8.2	0.045	35	0.19
1,2-Dichloropropane	8.2	0.038	Not Detected	Not Detected
cis-1,3-Dichloropropene	8.2	0.038	Not Detected	Not Detected
Toluene	8.2	0.031	Not Detected	Not Detected
trans-1,3-Dichloropropene	8.2	0.038	Not Detected	Not Detected
1,1,2-Trichloroethane	8.2	0.045	Not Detected	Not Detected
Tetrachloroethene	8.2	0.056	280	2.0
1,2-Dibromoethane (EDB)	8.2	0.064	Not Detected	Not Detected
Chlorobenzene	8.2	0.038	Not Detected	Not Detected
Ethyl Benzene	8.2	0.036	Not Detected	Not Detected
m,p-Xylene	8.2	0.036	Not Detected	Not Detected
o-Xylene	8.2	0.036	Not Detected	Not Detected
Styrene	8.2	0.035	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.2	0.057	Not Detected	Not Detected
1,3,5-Trimethylbenzene	8.2	0.041	Not Detected	Not Detected
1,2,4-Trimethylbenzene	8.2	0.041	Not Detected	Not Detected
1,3-Dichlorobenzene	8.2	0.050	Not Detected	Not Detected
1,4-Dichlorobenzene	8.2	0.050	Not Detected	Not Detected
alpha-Chlorotoluene	8.2	0.043	Not Detected	Not Detected
1,2-Dichlorobenzene	8.2	0.050	Not Detected	Not Detected
1,3-Butadiene	8.2	0.018	Not Detected	Not Detected
Hexane	8.2	0.029	Not Detected	Not Detected
Cyclohexane	8.2	0.029	Not Detected	Not Detected
Heptane	8.2	0.034	Not Detected	Not Detected
Bromodichloromethane	8.2	0.056	Not Detected	Not Detected
Dibromochloromethane	8.2	0.071	Not Detected	Not Detected

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SAMPLE NAME: FCS-SP05-10

ID#: 0307148-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071214	Date of Collection: 7/7/03
Dil. Factor:	16.4	Date of Analysis: 7/12/03

D Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	8.2	0.041	Not Detected	Not Detected
Propylbenzene	8.2	0.041	Not Detected	Not Detected
Chloromethane	33	0.069	Not Detected	Not Detected
1,2,4-Trichlorobenzene	33	0.25	Not Detected	Not Detected
Hexachlorobutadiene	33	0.36	Not Detected	Not Detected
Acetone	33	0.079	35	0.084
Carbon Disulfide	33	0.10	Not Detected	Not Detected
2-Propanol	33	0.082	Not Detected	Not Detected
trans-1,2-Dichloroethene	33	0.13	Not Detected	Not Detected
Vinyl Acetate	33	0.12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	33	0.098	Not Detected	Not Detected
Tetrahydrofuran	33	0.098	Not Detected	Not Detected
1,4-Dioxane	33	0.12	Not Detected	Not Detected
4-Methyl-2-pentanone	33	0.14	Not Detected	Not Detected
2-Hexanone	33	0.14	Not Detected	Not Detected
Bromoform	33	0.34	Not Detected	Not Detected
4-Ethyltoluene	33	0.16	Not Detected	Not Detected
Methyl tert-butyl ether	33	0.12	Not Detected	Not Detected
Ethanol	33	0.063	Not Detected	Not Detected

UJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

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SAMPLE NAME: FCS-SP05-20

ID#: 0307148-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071215	Date of Collection:	7/7/03
Dil. Factor:	17.0	Date of Analysis:	7/12/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	8.5	0.043	Not Detected	Not Detected
Freon 114	8.5	0.060	Not Detected	Not Detected
Vinyl Chloride	8.5	0.022	Not Detected	Not Detected
Bromomethane	8.5	0.034	Not Detected	Not Detected
Chloroethane	8.5	0.023	Not Detected	Not Detected
Freon 11	8.5	0.048	Not Detected	Not Detected
1,1-Dichloroethene	8.5	0.034	Not Detected	Not Detected
Freon 113	8.5	0.066	2600	20
Methylene Chloride	8.5	0.030	Not Detected	Not Detected
1,1-Dichloroethane	8.5	0.035	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.5	0.034	8.6	0.035
Chloroform	8.5	0.042	26	0.13
1,1,1-Trichloroethane	8.5	0.047	8.7	0.048
Carbon Tetrachloride	8.5	0.054	Not Detected	Not Detected
Benzene	8.5	0.028	Not Detected	Not Detected
1,2-Dichloroethane	8.5	0.035	Not Detected	Not Detected
Trichloroethene	8.5	0.046	9.1	0.050
1,2-Dichloropropane	8.5	0.040	Not Detected	Not Detected
cis-1,3-Dichloropropene	8.5	0.039	Not Detected	Not Detected
Toluene	8.5	0.032	Not Detected	Not Detected
trans-1,3-Dichloropropene	8.5	0.039	Not Detected	Not Detected
1,1,2-Trichloroethane	8.5	0.047	Not Detected	Not Detected
Tetrachloroethene	8.5	0.059	19	0.13
1,2-Dibromoethane (EDB)	8.5	0.066	Not Detected	Not Detected
Chlorobenzene	8.5	0.040	Not Detected	Not Detected
Ethyl Benzene	8.5	0.038	Not Detected	Not Detected
m,p-Xylene	8.5	0.038	Not Detected	Not Detected
o-Xylene	8.5	0.038	Not Detected	Not Detected
Styrene	8.5	0.037	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.5	0.059	Not Detected	Not Detected
1,3,5-Trimethylbenzene	8.5	0.042	Not Detected	Not Detected
1,2,4-Trimethylbenzene	8.5	0.042	Not Detected	Not Detected
1,3-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
1,4-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
alpha-Chlorotoluene	8.5	0.045	Not Detected	Not Detected
1,2-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
1,3-Butadiene	8.5	0.019	Not Detected	Not Detected
Hexane	8.5	0.030	Not Detected	Not Detected
Cyclohexane	8.5	0.030	Not Detected	Not Detected
Heptane	8.5	0.035	Not Detected	Not Detected
Bromodichloromethane	8.5	0.058	Not Detected	Not Detected
Dibromochloromethane	8.5	0.074	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP05-20

ID#: 0307148-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071215	Date of Collection: 7/7/03
Dil. Factor:	17.0	Date of Analysis: 7/12/03

W Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	8.5	0.042	Not Detected	Not Detected
Propylbenzene	8.5	0.042	Not Detected	Not Detected
Chloromethane	34	0.071	Not Detected	Not Detected
1,2,4-Trichlorobenzene	34	0.26	Not Detected	Not Detected
Hexachlorobutadiene	34	0.37	Not Detected	Not Detected
Acetone	34	0.082	70	0.17
Carbon Disulfide	34	0.11	Not Detected	Not Detected
2-Propanol	34	0.085	Not Detected	Not Detected
trans-1,2-Dichloroethene	34	0.14	Not Detected	Not Detected
Vinyl Acetate	34	0.12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	34	0.10	Not Detected	Not Detected
Tetrahydrofuran	34	0.10	Not Detected	Not Detected
1,4-Dioxane	34	0.12	Not Detected	Not Detected
4-Methyl-2-pentanone	34	0.14	Not Detected	Not Detected
2-Hexanone	34	0.14	Not Detected	Not Detected
Bromoform	34	0.36	Not Detected	Not Detected
4-Ethyltoluene	34	0.17	Not Detected	Not Detected
Methyl tert-butyl ether	34	0.12	Not Detected	Not Detected
Ethanol	34	0.065	Not Detected	Not Detected

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP05-20 Duplicate

ID#: 0307148-02AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071216	Date of Collection:	7/7/03
Dil. Factor:	17.0	Date of Analysis:	7/12/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	8.5	0.043	Not Detected	Not Detected
Freon 114	8.5	0.060	Not Detected	Not Detected
Vinyl Chloride	8.5	0.022	Not Detected	Not Detected
Bromomethane	8.5	0.034	Not Detected	Not Detected
Chloroethane	8.5	0.023	Not Detected	Not Detected
Freon 11	8.5	0.048	Not Detected	Not Detected
1,1-Dichloroethene	8.5	0.034	Not Detected	Not Detected
Freon 113	8.5	0.066	2300	18
Methylene Chloride	8.5	0.030	11	0.038
1,1-Dichloroethane	8.5	0.035	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.5	0.034	Not Detected	Not Detected
Chloroform	8.5	0.042	22	0.11
1,1,1-Trichloroethane	8.5	0.047	Not Detected	Not Detected
Carbon Tetrachloride	8.5	0.054	Not Detected	Not Detected
Benzene	8.5	0.028	Not Detected	Not Detected
1,2-Dichloroethane	8.5	0.035	Not Detected	Not Detected
Trichloroethene	8.5	0.046	Not Detected	Not Detected
1,2-Dichloropropane	8.5	0.040	Not Detected	Not Detected
cis-1,3-Dichloropropene	8.5	0.039	Not Detected	Not Detected
Toluene	8.5	0.032	Not Detected	Not Detected
trans-1,3-Dichloropropene	8.5	0.039	Not Detected	Not Detected
1,1,2-Trichloroethane	8.5	0.047	Not Detected	Not Detected
Tetrachloroethene	8.5	0.059	16	0.11
1,2-Dibromoethane (EDB)	8.5	0.066	Not Detected	Not Detected
Chlorobenzene	8.5	0.040	Not Detected	Not Detected
Ethyl Benzene	8.5	0.038	Not Detected	Not Detected
m,p-Xylene	8.5	0.038	Not Detected	Not Detected
o-Xylene	8.5	0.038	Not Detected	Not Detected
Styrene	8.5	0.037	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.5	0.059	Not Detected	Not Detected
1,3,5-Trimethylbenzene	8.5	0.042	Not Detected	Not Detected
1,2,4-Trimethylbenzene	8.5	0.042	Not Detected	Not Detected
1,3-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
1,4-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
alpha-Chlorotoluene	8.5	0.045	Not Detected	Not Detected
1,2-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
1,3-Butadiene	8.5	0.019	Not Detected	Not Detected
Hexane	8.5	0.030	Not Detected	Not Detected
Cyclohexane	8.5	0.030	Not Detected	Not Detected
Heptane	8.5	0.035	Not Detected	Not Detected
Bromodichloromethane	8.5	0.058	Not Detected	Not Detected
Dibromochloromethane	8.5	0.074	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP05-20 Duplicate

ID#: 0307148-02AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071216	Date of Collection: 7/7/03
Dil. Factor:	17.0	Date of Analysis: 7/12/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	8.5	0.042	Not Detected	Not Detected
Propylbenzene	8.5	0.042	Not Detected	Not Detected
Chloromethane	34	0.071	Not Detected	Not Detected
1,2,4-Trichlorobenzene	34	0.26	Not Detected	Not Detected
Hexachlorobutadiene	34	0.37	Not Detected	Not Detected
Acetone	34	0.082	64	0.15
Carbon Disulfide	34	0.11	Not Detected	Not Detected
2-Propanol	34	0.085	Not Detected	Not Detected
trans-1,2-Dichloroethene	34	0.14	Not Detected	Not Detected
Vinyl Acetate	34	0.12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	34	0.10	Not Detected	Not Detected
Tetrahydrofuran	34	0.10	Not Detected	Not Detected
1,4-Dioxane	34	0.12	Not Detected	Not Detected
4-Methyl-2-pentanone	34	0.14	Not Detected	Not Detected
2-Hexanone	34	0.14	Not Detected	Not Detected
Bromoform	34	0.36	Not Detected	Not Detected
4-Ethyltoluene	34	0.17	Not Detected	Not Detected
Methyl tert-butyl ether	34	0.12	Not Detected	Not Detected
Ethanol	34	0.065	Not Detected	Not Detected

UJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP05D-20

ID#: 0307148-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071306	Date of Collection: 7/7/03
Dil. Factor:	21.3	Date of Analysis: 7/13/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	11	0.054	Not Detected	Not Detected
Freon 114	11	0.076	Not Detected	Not Detected
Vinyl Chloride	11	0.028	Not Detected	Not Detected
Bromomethane	11	0.042	Not Detected	Not Detected
Chloroethane	11	0.028	Not Detected	Not Detected
Freon 11	11	0.061	Not Detected	Not Detected
1,1-Dichloroethene	11	0.043	Not Detected	Not Detected
Freon 113	11	0.083	3300	26
Methylene Chloride	11	0.038	11	0.038
1,1-Dichloroethane	11	0.044	Not Detected	Not Detected
cis-1,2-Dichloroethene	11	0.043	11	0.043
Chloroform	11	0.053	35	0.17
1,1,1-Trichloroethane	11	0.059	10 J	0.058 J
Carbon Tetrachloride	11	0.068	Not Detected	Not Detected
Benzene	11	0.034	Not Detected	Not Detected
1,2-Dichloroethane	11	0.044	Not Detected	Not Detected
Trichloroethene	11	0.058	12	0.068
1,2-Dichloropropane	11	0.050	Not Detected	Not Detected
cis-1,3-Dichloropropene	11	0.049	Not Detected	Not Detected
Toluene	11	0.041	Not Detected	Not Detected
trans-1,3-Dichloropropene	11	0.049	Not Detected	Not Detected
1,1,2-Trichloroethane	11	0.059	Not Detected	Not Detected
Tetrachloroethene	11	0.073	28	0.19
1,2-Dibromoethane (EDB)	11	0.083	Not Detected	Not Detected
Chlorobenzene	11	0.050	Not Detected	Not Detected
Ethyl Benzene	11	0.047	Not Detected	Not Detected
m,p-Xylene	11	0.047	Not Detected	Not Detected
o-Xylene	11	0.047	Not Detected	Not Detected
Styrene	11	0.046	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	11	0.074	Not Detected	Not Detected
1,3,5-Trimethylbenzene	11	0.053	Not Detected	Not Detected
1,2,4-Trimethylbenzene	11	0.053	Not Detected	Not Detected
1,3-Dichlorobenzene	11	0.065	Not Detected	Not Detected
1,4-Dichlorobenzene	11	0.065	Not Detected	Not Detected
alpha-Chlorotoluene	11	0.056	Not Detected	Not Detected
1,2-Dichlorobenzene	11	0.065	Not Detected	Not Detected
1,3-Butadiene	11	0.024	Not Detected	Not Detected
Hexane	11	0.038	Not Detected	Not Detected
Cyclohexane	11	0.037	Not Detected	Not Detected
Heptane	11	0.044	Not Detected	Not Detected
Bromodichloromethane	11	0.072	Not Detected	Not Detected
Dibromochloromethane	11	0.092	Not Detected	Not Detected

NE
10/9/03

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP05D-20

ID#: 0307148-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071306	Date of Collection: 7/7/03
Dil. Factor:	21.3	Date of Analysis: 7/13/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	11	0.053	Not Detected	Not Detected
Propylbenzene	11	0.053	Not Detected	Not Detected
Chloromethane	43	0.089	Not Detected	Not Detected
1,2,4-Trichlorobenzene	43	0.32	Not Detected	Not Detected
Hexachlorobutadiene	43	0.46	Not Detected	Not Detected
Acetone	43	0.10	71	0.17
Carbon Disulfide	43	0.13	Not Detected	Not Detected
2-Propanol	43	0.11	Not Detected	Not Detected
trans-1,2-Dichloroethene	43	0.17	Not Detected	Not Detected
Vinyl Acetate	43	0.15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	43	0.13	Not Detected	Not Detected
Tetrahydrofuran	43	0.13	Not Detected	Not Detected
1,4-Dioxane	43	0.16	Not Detected	Not Detected
4-Methyl-2-pentanone	43	0.18	Not Detected	Not Detected
2-Hexanone	43	0.18	Not Detected	Not Detected
Bromoform	43	0.45	Not Detected	Not Detected
4-Ethyltoluene	43	0.21	Not Detected	Not Detected
Methyl tert-butyl ether	43	0.16	Not Detected	Not Detected
Ethanol	43	0.082	Not Detected	Not Detected

UJ

J = Estimated value.

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP04-10

ID#: 0307148-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071307	Date of Collection: 7/7/03
Dil. Factor:	16.7	Date of Analysis: 7/13/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	8.4	0.042	Not Detected	Not Detected
Freon 114	8.4	0.059	Not Detected	Not Detected
Vinyl Chloride	8.4	0.022	Not Detected	Not Detected
Bromomethane	8.4	0.033	Not Detected	Not Detected
Chloroethane	8.4	0.022	Not Detected	Not Detected
Freon 11	8.4	0.048	Not Detected	Not Detected
1,1-Dichloroethene	8.4	0.034	Not Detected	Not Detected
Freon 113	8.4	0.065	1900	14
Methylene Chloride	8.4	0.029	11	0.038
1,1-Dichloroethane	8.4	0.034	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.4	0.034	Not Detected	Not Detected
Chloroform	8.4	0.041	Not Detected	Not Detected
1,1,1-Trichloroethane	8.4	0.046	Not Detected	Not Detected
Carbon Tetrachloride	8.4	0.053	Not Detected	Not Detected
Benzene	8.4	0.027	Not Detected	Not Detected
1,2-Dichloroethane	8.4	0.034	Not Detected	Not Detected
Trichloroethene	8.4	0.046	13	0.072
1,2-Dichloropropane	8.4	0.039	Not Detected	Not Detected
cis-1,3-Dichloropropene	8.4	0.038	Not Detected	Not Detected
Toluene	8.4	0.032	Not Detected	Not Detected
trans-1,3-Dichloropropene	8.4	0.038	Not Detected	Not Detected
1,1,2-Trichloroethane	8.4	0.046	Not Detected	Not Detected
Tetrachloroethene	8.4	0.058	350	2.4
1,2-Dibromoethane (EDB)	8.4	0.065	Not Detected	Not Detected
Chlorobenzene	8.4	0.039	Not Detected	Not Detected
Ethyl Benzene	8.4	0.037	Not Detected	Not Detected
m,p-Xylene	8.4	0.037	Not Detected	Not Detected
o-Xylene	8.4	0.037	Not Detected	Not Detected
Styrene	8.4	0.036	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.4	0.058	Not Detected	Not Detected
1,3,5-Trimethylbenzene	8.4	0.042	Not Detected	Not Detected
1,2,4-Trimethylbenzene	8.4	0.042	Not Detected	Not Detected
1,3-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
1,4-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
alpha-Chlorotoluene	8.4	0.044	Not Detected	Not Detected
1,2-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
1,3-Butadiene	8.4	0.019	Not Detected	Not Detected
Hexane	8.4	0.030	Not Detected	Not Detected
Cyclohexane	8.4	0.029	Not Detected	Not Detected
Heptane	8.4	0.035	Not Detected	Not Detected
Bromodichloromethane	8.4	0.057	Not Detected	Not Detected
Dibromochloromethane	8.4	0.072	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP04-10

ID#: 0307148-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071307	Date of Collection: 7/7/03
Dil. Factor:	16.7	Date of Analysis: 7/13/03

D Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	8.4	0.042	Not Detected	Not Detected
Propylbenzene	8.4	0.042	Not Detected	Not Detected
Chloromethane	33	0.070	Not Detected	Not Detected
1,2,4-Trichlorobenzene	33	0.25	Not Detected	Not Detected
Hexachlorobutadiene	33	0.36	Not Detected	Not Detected
Acetone	33	0.081	Not Detected	Not Detected
Carbon Disulfide	33	0.10	Not Detected	Not Detected
2-Propanol	33	0.083	Not Detected	Not Detected
trans-1,2-Dichloroethene	33	0.13	Not Detected	Not Detected
Vinyl Acetate	33	0.12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	33	0.10	Not Detected	Not Detected
Tetrahydrofuran	33	0.10	Not Detected	Not Detected
1,4-Dioxane	33	0.12	Not Detected	Not Detected
4-Methyl-2-pentanone	33	0.14	Not Detected	Not Detected
2-Hexanone	33	0.14	Not Detected	Not Detected
Bromoform	33	0.35	Not Detected	Not Detected
4-Ethyltoluene	33	0.17	Not Detected	Not Detected
Methyl tert-butyl ether	33	0.12	Not Detected	Not Detected
Ethanol	33	0.064	Not Detected	Not Detected

UJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP04-20

ID#: 0307148-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	1071309	Date of Collection: 7/7/03
Dil. Factor:	8.52	Date of Analysis: 7/13/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	26	0.21
Methylene Chloride	4.3	0.015	8.9	0.032
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	13	0.043
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	72	0.28
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	18	0.081
m,p-Xylene	4.3	0.019	76	0.34
o-Xylene	4.3	0.019	34	0.15
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	12	0.058
1,2,4-Trimethylbenzene	4.3	0.021	41	0.20
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	21	0.046
Hexane	4.3	0.015	38	0.14
Cyclohexane	4.3	0.015	27	0.093
Heptane	4.3	0.018	32	0.14
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP04-20

ID#: 0307148-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071309	Date of Collection: 7/7/03
Dil. Factor:	8.52	Date of Analysis: 7/13/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	6.5	0.033
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	1000	2.4
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	26	0.066
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	190	0.57
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	44	0.22
Methyl tert-butyl ether	17	0.062	17	0.064
Ethanol	17	0.033	31	0.060

UJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	97	70-130

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10/19/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP01-10

ID#: 0307148-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071310	Date of Collection: 7/7/03
Dil. Factor:	8.36	Date of Analysis: 7/13/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	1000	8.2
Methylene Chloride	4.2	0.015	5.6	0.020
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	5.1	0.016
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	200	1.4
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	15	0.033
Hexane	4.2	0.015	4.5	0.016
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP01-10

ID#: 0307148-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071310	Date of Collection: 7/7/03
Dil. Factor:	8.36	Date of Analysis: 7/13/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	130	0.30
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	22	0.067
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

UJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	96	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP01-20

ID#: 0307148-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071312	Date of Collection: 7/7/03
Dil. Factor:	8.36	Date of Analysis: 7/13/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	1200	9.2
Methylene Chloride	4.2	0.015	9.0	0.032
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	4.3	0.024
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	5.8	0.019
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	7.0	0.027
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	210	1.5
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	4.8	0.021
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	6.4	0.032
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	21	0.048
Hexane	4.2	0.015	11	0.039
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP01-20

ID#: 0307148-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071312	Date of Collection: 7/7/03
Dil. Factor:	8.36	Date of Analysis: 7/13/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	940	2.3
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	160	0.50
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

UJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	97	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP02-10

ID#: 0307148-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071313	Date of Collection:	7/7/03
Dil. Factor:	16.7	Date of Analysis:	7/13/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	8.4	0.042	Not Detected	Not Detected
Freon 114	8.4	0.059	Not Detected	Not Detected
Vinyl Chloride	8.4	0.022	Not Detected	Not Detected
Bromomethane	8.4	0.033	Not Detected	Not Detected
Chloroethane	8.4	0.022	Not Detected	Not Detected
Freon 11	8.4	0.048	Not Detected	Not Detected
1,1-Dichloroethene	8.4	0.034	Not Detected	Not Detected
Freon 113	8.4	0.065	3200	25
Methylene Chloride	8.4	0.029	Not Detected	Not Detected
1,1-Dichloroethane	8.4	0.034	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.4	0.034	Not Detected	Not Detected
Chloroform	8.4	0.041	76	0.37
1,1,1-Trichloroethane	8.4	0.046	Not Detected	Not Detected
Carbon Tetrachloride	8.4	0.053	Not Detected	Not Detected
Benzene	8.4	0.027	Not Detected	Not Detected
1,2-Dichloroethane	8.4	0.034	Not Detected	Not Detected
Trichloroethene	8.4	0.046	17	0.092
1,2-Dichloropropane	8.4	0.039	Not Detected	Not Detected
cis-1,3-Dichloropropene	8.4	0.038	Not Detected	Not Detected
Toluene	8.4	0.032	Not Detected	Not Detected
trans-1,3-Dichloropropene	8.4	0.038	Not Detected	Not Detected
1,1,2-Trichloroethane	8.4	0.046	Not Detected	Not Detected
Tetrachloroethene	8.4	0.058	95	0.66
1,2-Dibromoethane (EDB)	8.4	0.065	Not Detected	Not Detected
Chlorobenzene	8.4	0.039	Not Detected	Not Detected
Ethyl Benzene	8.4	0.037	Not Detected	Not Detected
m,p-Xylene	8.4	0.037	Not Detected	Not Detected
o-Xylene	8.4	0.037	Not Detected	Not Detected
Styrene	8.4	0.036	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.4	0.058	Not Detected	Not Detected
1,3,5-Trimethylbenzene	8.4	0.042	Not Detected	Not Detected
1,2,4-Trimethylbenzene	8.4	0.042	Not Detected	Not Detected
1,3-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
1,4-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
alpha-Chlorotoluene	8.4	0.044	Not Detected	Not Detected
1,2-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
1,3-Butadiene	8.4	0.019	Not Detected	Not Detected
Hexane	8.4	0.030	Not Detected	Not Detected
Cyclohexane	8.4	0.029	Not Detected	Not Detected
Heptane	8.4	0.035	Not Detected	Not Detected
Bromodichloromethane	8.4	0.057	Not Detected	Not Detected
Dibromochloromethane	8.4	0.072	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP02-10

ID#: 0307148-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071313	Date of Collection:	7/7/03
Dil. Factor:	16.7	Date of Analysis:	7/13/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	8.4	0.042	Not Detected	Not Detected
Propylbenzene	8.4	0.042	Not Detected	Not Detected
Chloromethane	33	0.070	Not Detected	Not Detected
1,2,4-Trichlorobenzene	33	0.25	Not Detected	Not Detected
Hexachlorobutadiene	33	0.36	Not Detected	Not Detected
Acetone	33	0.081	Not Detected	Not Detected
Carbon Disulfide	33	0.10	Not Detected	Not Detected
2-Propanol	33	0.083	Not Detected	Not Detected
trans-1,2-Dichloroethene	33	0.13	Not Detected	Not Detected
Vinyl Acetate	33	0.12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	33	0.10	Not Detected	Not Detected
Tetrahydrofuran	33	0.10	Not Detected	Not Detected
1,4-Dioxane	33	0.12	Not Detected	Not Detected
4-Methyl-2-pentanone	33	0.14	Not Detected	Not Detected
2-Hexanone	33	0.14	Not Detected	Not Detected
Bromoform	33	0.35	Not Detected	Not Detected
4-Ethyltoluene	33	0.17	Not Detected	Not Detected
Methyl tert-butyl ether	33	0.12	Not Detected	Not Detected
Ethanol	33	0.064	Not Detected	Not Detected

WJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	96	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP03-10

ID#: 0307148-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	1071314	Date of Collection:	7/7/03
Dil. Factor:	8.80	Date of Analysis:	7/14/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.4	0.022	Not Detected	Not Detected
Freon 114	4.4	0.031	Not Detected	Not Detected
Vinyl Chloride	4.4	0.011	Not Detected	Not Detected
Bromomethane	4.4	0.017	Not Detected	Not Detected
Chloroethane	4.4	0.012	Not Detected	Not Detected
Freon 11	4.4	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.4	0.018	Not Detected	Not Detected
Freon 113	4.4	0.034	950	7.4
Methylene Chloride	4.4	0.016	25	0.089
1,1-Dichloroethane	4.4	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.4	0.018	Not Detected	Not Detected
Chloroform	4.4	0.022	20	0.099
1,1,1-Trichloroethane	4.4	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.4	0.028	Not Detected	Not Detected
Benzene	4.4	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.4	0.018	Not Detected	Not Detected
Trichloroethene	4.4	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.4	0.021	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.4	0.020	Not Detected	Not Detected
Toluene	4.4	0.017	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.4	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.4	0.024	Not Detected	Not Detected
Tetrachloroethene	4.4	0.030	5.8	0.040
1,2-Dibromoethane (EDB)	4.4	0.034	Not Detected	Not Detected
Chlorobenzene	4.4	0.020	Not Detected	Not Detected
Ethyl Benzene	4.4	0.019	Not Detected	Not Detected
m,p-Xylene	4.4	0.019	Not Detected	Not Detected
o-Xylene	4.4	0.019	Not Detected	Not Detected
Styrene	4.4	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.4	0.031	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.4	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.4	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
1,4-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
alpha-Chlorotoluene	4.4	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
1,3-Butadiene	4.4	0.0099	17	0.039
Hexane	4.4	0.016	6.8	0.024
Cyclohexane	4.4	0.015	Not Detected	Not Detected
Heptane	4.4	0.018	Not Detected	Not Detected
Bromodichloromethane	4.4	0.030	Not Detected	Not Detected
Dibromochloromethane	4.4	0.038	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP03-10

ID#: 0307148-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071314	Date of Collection: 7/7/03
Dil. Factor:	8.80	Date of Analysis: 7/14/03

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Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.4	0.022	Not Detected	Not Detected
Propylbenzene	4.4	0.022	Not Detected	Not Detected
Chloromethane	18	0.037	Not Detected	Not Detected
1,2,4-Trichlorobenzene	18	0.13	Not Detected	Not Detected
Hexachlorobutadiene	18	0.19	Not Detected	Not Detected
Acetone	18	0.042	24	0.059
Carbon Disulfide	18	0.056	Not Detected	Not Detected
2-Propanol	18	0.044	Not Detected	Not Detected
trans-1,2-Dichloroethene	18	0.071	Not Detected	Not Detected
Vinyl Acetate	18	0.063	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	18	0.053	Not Detected	Not Detected
Tetrahydrofuran	18	0.053	Not Detected	Not Detected
1,4-Dioxane	18	0.064	Not Detected	Not Detected
4-Methyl-2-pentanone	18	0.073	Not Detected	Not Detected
2-Hexanone	18	0.073	Not Detected	Not Detected
Bromoform	18	0.18	Not Detected	Not Detected
4-Ethyltoluene	18	0.088	Not Detected	Not Detected
Methyl tert-butyl ether	18	0.064	Not Detected	Not Detected
Ethanol	18	0.034	Not Detected	Not Detected

UJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP03-20

ID#: 0307148-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071315	Date of Collection: 7/7/03
Dil. Factor:	53.2	Date of Analysis: 7/14/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	27	0.13	Not Detected	Not Detected
Freon 114	27	0.19	Not Detected	Not Detected
Vinyl Chloride	27	0.069	Not Detected	Not Detected
Bromomethane	27	0.10	Not Detected	Not Detected
Chloroethane	27	0.071	Not Detected	Not Detected
Freon 11	27	0.15	Not Detected	Not Detected
1,1-Dichloroethene	27	0.11	Not Detected	Not Detected
Freon 113	27	0.21	8700	68
Methylene Chloride	27	0.094	Not Detected	Not Detected
1,1-Dichloroethane	27	0.11	Not Detected	Not Detected
cis-1,2-Dichloroethene	27	0.11	Not Detected	Not Detected
Chloroform	27	0.13	120	0.59
1,1,1-Trichloroethane	27	0.15	Not Detected	Not Detected
Carbon Tetrachloride	27	0.17	Not Detected	Not Detected
Benzene	27	0.086	Not Detected	Not Detected
1,2-Dichloroethane	27	0.11	Not Detected	Not Detected
Trichloroethene	27	0.14	Not Detected	Not Detected
1,2-Dichloropropane	27	0.12	Not Detected	Not Detected
cis-1,3-Dichloropropene	27	0.12	Not Detected	Not Detected
Toluene	27	0.10	Not Detected	Not Detected
trans-1,3-Dichloropropene	27	0.12	Not Detected	Not Detected
1,1,2-Trichloroethane	27	0.15	Not Detected	Not Detected
Tetrachloroethene	27	0.18	64	0.44
1,2-Dibromoethane (EDB)	27	0.21	Not Detected	Not Detected
Chlorobenzene	27	0.12	Not Detected	Not Detected
Ethyl Benzene	27	0.12	Not Detected	Not Detected
m,p-Xylene	27	0.12	Not Detected	Not Detected
o-Xylene	27	0.12	Not Detected	Not Detected
Styrene	27	0.12	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	27	0.18	Not Detected	Not Detected
1,3,5-Trimethylbenzene	27	0.13	Not Detected	Not Detected
1,2,4-Trimethylbenzene	27	0.13	Not Detected	Not Detected
1,3-Dichlorobenzene	27	0.16	Not Detected	Not Detected
1,4-Dichlorobenzene	27	0.16	Not Detected	Not Detected
alpha-Chlorotoluene	27	0.14	Not Detected	Not Detected
1,2-Dichlorobenzene	27	0.16	Not Detected	Not Detected
1,3-Butadiene	27	0.060	Not Detected	Not Detected
Hexane	27	0.095	Not Detected	Not Detected
Cyclohexane	27	0.093	Not Detected	Not Detected
Heptane	27	0.11	Not Detected	Not Detected
Bromodichloromethane	27	0.18	Not Detected	Not Detected
Dibromochloromethane	27	0.23	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP03-20

ID#: 0307148-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	1071315	Date of Collection: 7/7/03
Dil. Factor:	53.2	Date of Analysis: 7/14/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	27	0.13	Not Detected	Not Detected
Propylbenzene	27	0.13	Not Detected	Not Detected
Chloromethane	110	0.22	Not Detected	Not Detected
1,2,4-Trichlorobenzene	110	0.80	Not Detected	Not Detected
Hexachlorobutadiene	110	1.2	Not Detected	Not Detected
Acetone	110	0.26	Not Detected	Not Detected
Carbon Disulfide	110	0.34	Not Detected	Not Detected
2-Propanol	110	0.26	Not Detected	Not Detected
trans-1,2-Dichloroethene	110	0.43	Not Detected	Not Detected
Vinyl Acetate	110	0.38	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	110	0.32	Not Detected	Not Detected
Tetrahydrofuran	110	0.32	Not Detected	Not Detected
1,4-Dioxane	110	0.39	Not Detected	Not Detected
4-Methyl-2-pentanone	110	0.44	Not Detected	Not Detected
2-Hexanone	110	0.44	Not Detected	Not Detected
Bromoform	110	1.1	Not Detected	Not Detected
4-Ethyltoluene	110	0.53	Not Detected	Not Detected
Methyl tert-butyl ether	110	0.39	Not Detected	Not Detected
Ethanol	110	0.20	Not Detected	Not Detected

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP15-10

ID#: 0307148-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071316	Date of Collection: 7/7/03
Dil. Factor:	8.36	Date of Analysis: 7/14/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	4.9	0.038
Methylene Chloride	4.2	0.015	17	0.061
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	34	0.14
Chloroform	4.2	0.021	21	0.10
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	9.2	0.050
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	9.0	0.062
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	4.2	0.015
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP15-10

ID#: 0307148-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071316	Date of Collection: 7/7/03
Dil. Factor:	8.36	Date of Analysis: 7/14/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	70	0.17
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

UJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP15-20

ID#: 0307148-12A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071317	Date of Collection: 7/7/03
Dil. Factor:	8.36	Date of Analysis: 7/14/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	9.2	0.032
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	20	0.080
Chloroform	4.2	0.021	14	0.068
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	5.4	0.018
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	36	0.14
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	9.2	0.041
m,p-Xylene	4.2	0.018	39	0.17
o-Xylene	4.2	0.018	17	0.076
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	6.0	0.030
1,2,4-Trimethylbenzene	4.2	0.021	20	0.10
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	5.8	0.013
Hexane	4.2	0.015	21	0.076
Cyclohexane	4.2	0.015	20	0.071
Heptane	4.2	0.017	14	0.060
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP15-20

ID#: 0307148-12A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071317	Date of Collection: 7/7/03
Dil. Factor:	8.36	Date of Analysis: 7/14/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	270	0.65
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	45	0.14
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	23	0.11
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

45

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	99	70-130

*NE
10/9/03*

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Aerojet
Collection Date: July 8, 2003
LDC Report Date: October 9, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III & IV Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0307168A

Sample Identification

FCS-SP16-10
FCS-SP16-20
FCS-SP17-10
FCS-SP17-20
FCS-SP11-10
FCS-SP11-20
FCS-SP07-10
FCS-SP07-20
FCS-SP10-10**
FCS-SP10-20**
FCS-SP10-20 Duplicate**

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers eleven air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds with the following exceptions:

Date	Compound	%RSD	Associated Samples	Flag	A or P
7/7/03	Chloromethane	31	All samples in this SDG	J detects UJ nondetects	A

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within the 70% - 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD) with the following exception:

Compound	Concentration (ppbv)		RPD
	FCS-SP10-20	FCS-SP10-20 Duplicate	
Methylene Chloride	180	80	77

Qualification of laboratory duplicate outliers was not specified in the QAPP.

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307168A-13A	Freon 114 Carbon Tetrachloride cis-1,3-Dichloropropene trans-1,3-Dichloropropene Styrene Heptane Chloromethane 2-Propanol Vinyl Acetate 2-Butanone (MEK) 4-Methyl-2-pentanone 2-Hexanone 4-Ethyltoluene	124 (80-120) 132 (70-130) 139 (70-130) 127 (80-120) 123 (80-120) 123 (80-120) 124 (80-120) 124 (80-120) 124 (80-120) 127 (80-120) 130 (80-120) 125 (80-120) 128 (80-120)	FCS-SP16-10, FCS-SP16-20, FCS-SP17-10, FCS-SP17-20, FCS-SP11-10, and FCS-SP11-20	J detects	A
0307168A-13A	1,2,4-Trimethylbenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene	74 (80-120) 74 (70-130) 79 (70-130)	FCS-SP16-10, FCS-SP16-20, FCS-SP17-10, FCS-SP17-20, FCS-SP11-10, and FCS-SP11-20	J detects, UJ nondetects	A
0307168A-13B	Bromomethane 1,2,4-Trimethylbenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene	67 (70-130) 74 (70-130) 75 (70-130) 79 (70-130)	FCS-SP07-20, FCS-SP10-10, FCS-SP10-20, and FCS-SP10-20 Duplicate	J detects, UJ nondetects	A

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307168A-13B	Carbon Tetrachloride Trichloroethene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Styrene Heptane 2-Butanone (MEK) 4-Methyl-2-pentanone 2-Hexanone 4-Ethyltoluene	128 (70-130) 121 (70-130) 137 (70-130) 126 (70-130) 122 (70-130) 122 (70-130) 124 (70-130) 128 (70-130) 124 (70-130) 126 (70-130)	FCS-SP07-20, FCS-SP10-10, FCS-SP10-20, and FCS-SP10-20 Duplicate	J detects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

The system performance was within validation criteria for samples on which an EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples FCS-SP10-20 and FCS-SP10D-20 (from SDG 0307168B) were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ppbv)		RPD
	FCS-SP10-20	FCS-SP10D-20	
Freon 113	15000	14000	6.9
Methylene Chloride	180	120	40
Tetrachloroethene	820	790	3.7

XVII. Field Blanks

There were no field blank samples identified in this SDG.

Aerojet

Volatiles (TO-14A) - Data Qualification Summary - SDG 0307168A

SDG	Sample	Compound	Flag	A or P	Reason
0307168A	All samples in the SDG	Chloromethane	J detects, UJ nondetects	A	ICAL %RSD outside QC limits
0307168A	FCS-SP16-10, FCS-SP16-20, FCS-SP17-10, FCS-SP17-20, FCS-SP11-10, and FCS-SP11-20	Freon 114 Carbon Tetrachloride cis-1,3-Dichloropropene trans-1,3-Dichloropropene Styrene Heptane Chloromethane 2-Propanol Vinyl Acetate 2-Butanone (MEK) 4-Methyl-2-pentanone 2-Hexanone 4-Ethyltoluene	J detects	A	LCS recoveries above QC limits
0307168A	FCS-SP16-10, FCS-SP16-20, FCS-SP17-10, FCS-SP17-20, FCS-SP11-10, and FCS-SP11-20	1,2,4-Trimethylbenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene	J detects, UJ nondetects	A	LCS recoveries below QC limits
0307168A	FCS-SP07-20, FCS-SP10-10, FCS-SP10-20, and FCS-SP10-20 Duplicate	Carbon Tetrachloride Trichloroethene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Styrene Heptane 2-Butanone (MEK) 4-Methyl-2-pentanone 2-Hexanone 4-Ethyltoluene	J detects	A	LCS recovery above QC limits
0307168A	FCS-SP07-20, FCS-SP10-10, FCS-SP10-20, and FCS-SP10-20 Duplicate	Bromomethane 1,2,4-Trimethylbenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene	J detects, UJ nondetects	A	LCS recovery below QC limits

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Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307168A

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP16-10

ID#: 0307168A-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071415	Date of Collection: 7/8/03
Dil. Factor:	8.20	Date of Analysis: 7/14/03

DW Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.1	0.021	Not Detected	Not Detected
Freon 114	4.1	0.029	Not Detected	Not Detected
Vinyl Chloride	4.1	0.011	Not Detected	Not Detected
Bromomethane	4.1	0.016	Not Detected	Not Detected
Chloroethane	4.1	0.011	Not Detected	Not Detected
Freon 11	4.1	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Freon 113	4.1	0.032	310	2.4
Methylene Chloride	4.1	0.014	Not Detected	Not Detected
1,1-Dichloroethane	4.1	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Chloroform	4.1	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.1	0.026	Not Detected	Not Detected
Benzene	4.1	0.013	Not Detected	Not Detected
1,2-Dichloroethane	4.1	0.017	Not Detected	Not Detected
Trichloroethene	4.1	0.022	Not Detected	Not Detected
1,2-Dichloropropane	4.1	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
Toluene	4.1	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Tetrachloroethene	4.1	0.028	160	1.1
1,2-Dibromoethane (EDB)	4.1	0.032	Not Detected	Not Detected
Chlorobenzene	4.1	0.019	Not Detected	Not Detected
Ethyl Benzene	4.1	0.018	Not Detected	Not Detected
m,p-Xylene	4.1	0.018	Not Detected	Not Detected
o-Xylene	4.1	0.018	Not Detected	Not Detected
Styrene	4.1	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.1	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,3-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.1	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,3-Butadiene	4.1	0.0092	13	0.029
Hexane	4.1	0.015	Not Detected	Not Detected
Cyclohexane	4.1	0.014	Not Detected	Not Detected
Heptane	4.1	0.017	Not Detected	Not Detected
Bromodichloromethane	4.1	0.028	Not Detected	Not Detected
Dibromochloromethane	4.1	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP16-10

ID#: 0307168A-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071415	Date of Collection: 7/8/03
Dil. Factor:	8.20	Date of Analysis: 7/14/03

DQual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.1	0.020	Not Detected	Not Detected
Propylbenzene	4.1	0.020	Not Detected	Not Detected
Chloromethane	16	0.034	Not Detected	Not Detected
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected
Acetone	16	0.040	22	0.054
Carbon Disulfide	16	0.052	Not Detected	Not Detected
2-Propanol	16	0.041	Not Detected	Not Detected
trans-1,2-Dichloroethene	16	0.066	Not Detected	Not Detected
Vinyl Acetate	16	0.059	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	0.049	Not Detected	Not Detected
Tetrahydrofuran	16	0.049	Not Detected	Not Detected
1,4-Dioxane	16	0.060	Not Detected	Not Detected
4-Methyl-2-pentanone	16	0.068	Not Detected	Not Detected
2-Hexanone	16	0.068	Not Detected	Not Detected
Bromoform	16	0.17	Not Detected	Not Detected
4-Ethyltoluene	16	0.082	Not Detected	Not Detected
Methyl tert-butyl ether	16	0.060	Not Detected	Not Detected
Ethanol	16	0.031	Not Detected	Not Detected

UJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	82	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP16-20

ID#: 0307168A-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071419	Date of Collection: 7/8/03
Dil. Factor:	8.20	Date of Analysis: 7/14/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.1	0.021	Not Detected	Not Detected
Freon 114	4.1	0.029	Not Detected	Not Detected
Vinyl Chloride	4.1	0.011	Not Detected	Not Detected
Bromomethane	4.1	0.016	Not Detected	Not Detected
Chloroethane	4.1	0.011	Not Detected	Not Detected
Freon 11	4.1	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Freon 113	4.1	0.032	750	5.8
Methylene Chloride	4.1	0.014	Not Detected	Not Detected
1,1-Dichloroethane	4.1	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Chloroform	4.1	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.1	0.026	Not Detected	Not Detected
Benzene	4.1	0.013	Not Detected	Not Detected
1,2-Dichloroethane	4.1	0.017	Not Detected	Not Detected
Trichloroethene	4.1	0.022	8.3	0.046
1,2-Dichloropropane	4.1	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
Toluene	4.1	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Tetrachloroethene	4.1	0.028	170	1.2
1,2-Dibromoethane (EDB)	4.1	0.032	Not Detected	Not Detected
Chlorobenzene	4.1	0.019	Not Detected	Not Detected
Ethyl Benzene	4.1	0.018	Not Detected	Not Detected
m,p-Xylene	4.1	0.018	Not Detected	Not Detected
o-Xylene	4.1	0.018	Not Detected	Not Detected
Styrene	4.1	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.1	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,3-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.1	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,3-Butadiene	4.1	0.0092	8.5	0.019
Hexane	4.1	0.015	4.8	0.017
Cyclohexane	4.1	0.014	Not Detected	Not Detected
Heptane	4.1	0.017	Not Detected	Not Detected
Bromodichloromethane	4.1	0.028	Not Detected	Not Detected
Dibromochloromethane	4.1	0.036	Not Detected	Not Detected

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10/19/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP16-20

ID#: 0307168A-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071419	Date of Collection: 7/8/03
Dil. Factor:	8.20	Date of Analysis: 7/14/03

TV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.1	0.020	Not Detected	Not Detected
Propylbenzene	4.1	0.020	Not Detected	Not Detected
Chloromethane	16	0.034	Not Detected	Not Detected
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected
Acetone	16	0.040	83	0.20
Carbon Disulfide	16	0.052	Not Detected	Not Detected
2-Propanol	16	0.041	Not Detected	Not Detected
trans-1,2-Dichloroethene	16	0.066	Not Detected	Not Detected
Vinyl Acetate	16	0.059	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	0.049	19	0.057
Tetrahydrofuran	16	0.049	Not Detected	Not Detected
1,4-Dioxane	16	0.060	Not Detected	Not Detected
4-Methyl-2-pentanone	16	0.068	Not Detected	Not Detected
2-Hexanone	16	0.068	Not Detected	Not Detected
Bromoform	16	0.17	Not Detected	Not Detected
4-Ethyltoluene	16	0.082	Not Detected	Not Detected
Methyl tert-butyl ether	16	0.060	Not Detected	Not Detected
Ethanol	16	0.031	31	0.060

UJ

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	82	70-130

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10/19/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP17-10

ID#: 0307168A-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071420	Date of Collection:	7/8/03
Dil. Factor:	8.52	Date of Analysis:	7/14/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	480	3.7
Methylene Chloride	4.3	0.015	6.5	0.023
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	180	0.92
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	6.6	0.036
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	120	0.83
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	5.2	0.012
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP17-10

ID#: 0307168A-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071420	Date of Collection: 7/8/03
Dil. Factor:	8.52	Date of Analysis: 7/14/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	94	0.23
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	25	0.075
Tetrahydrofuran	17	0.051	23	0.070
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	33	0.063

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	82	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP17-20

ID#: 0307168A-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071421	Date of Collection: 7/8/03
Dil. Factor:	8.36	Date of Analysis: 7/15/03

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Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	460	3.6
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	43	0.21
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	4.7	0.026
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	130	0.92
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP17-20

ID#: 0307168A-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071421	Date of Collection: 7/8/03
Dil. Factor:	8.36	Date of Analysis: 7/15/03

DVQual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	62	0.15
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	19	0.036

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	84	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP11-10

ID#: 0307168A-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071422	Date of Collection: 7/8/03
Dil. Factor:	8.52	Date of Analysis: 7/15/03

DV. Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	160	1.3
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	81	0.56
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	4.9	0.011
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP11-10

ID#: 0307168A-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071422	Date of Collection:	7/8/03
Dil. Factor:	8.52	Date of Analysis:	7/15/03

TV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	140	0.35
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	28	0.083
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	26	0.050

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	81	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP11-20

ID#: 0307168A-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071423	Date of Collection: 7/8/03
Dil. Factor:	8.52	Date of Analysis: 7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	200	1.6
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	120	0.84
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	6.4	0.014
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP11-20

ID#: 0307168A-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071423	Date of Collection: 7/8/03
Dil. Factor:	8.52	Date of Analysis: 7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	120	0.29
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	22	0.066
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	21	0.040

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	85	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP07-10

ID#: 0307168A-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071505	Date of Collection:	7/8/03
Dil. Factor:	17.0	Date of Analysis:	7/15/03

D Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	8.5	0.043	Not Detected	Not Detected
Freon 114	8.5	0.060	Not Detected	Not Detected
Vinyl Chloride	8.5	0.022	Not Detected	Not Detected
Bromomethane	8.5	0.034	Not Detected	Not Detected
Chloroethane	8.5	0.023	Not Detected	Not Detected
Freon 11	8.5	0.048	Not Detected	Not Detected
1,1-Dichloroethene	8.5	0.034	Not Detected	Not Detected
Freon 113	8.5	0.066	2400	18
Methylene Chloride	8.5	0.030	25	0.090
1,1-Dichloroethane	8.5	0.035	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.5	0.034	Not Detected	Not Detected
Chloroform	8.5	0.042	19	0.093
1,1,1-Trichloroethane	8.5	0.047	Not Detected	Not Detected
Carbon Tetrachloride	8.5	0.054	Not Detected	Not Detected
Benzene	8.5	0.028	Not Detected	Not Detected
1,2-Dichloroethane	8.5	0.035	Not Detected	Not Detected
Trichloroethene	8.5	0.046	22	0.12
1,2-Dichloropropane	8.5	0.040	Not Detected	Not Detected
cis-1,3-Dichloropropene	8.5	0.039	Not Detected	Not Detected
Toluene	8.5	0.032	24	0.090
trans-1,3-Dichloropropene	8.5	0.039	Not Detected	Not Detected
1,1,2-Trichloroethane	8.5	0.047	Not Detected	Not Detected
Tetrachloroethene	8.5	0.059	150	1.0
1,2-Dibromoethane (EDB)	8.5	0.066	Not Detected	Not Detected
Chlorobenzene	8.5	0.040	Not Detected	Not Detected
Ethyl Benzene	8.5	0.038	Not Detected	Not Detected
m,p-Xylene	8.5	0.038	18	0.080
o-Xylene	8.5	0.038	Not Detected	Not Detected
Styrene	8.5	0.037	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.5	0.059	Not Detected	Not Detected
1,3,5-Trimethylbenzene	8.5	0.042	Not Detected	Not Detected
1,2,4-Trimethylbenzene	8.5	0.042	Not Detected	Not Detected
1,3-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
1,4-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
alpha-Chlorotoluene	8.5	0.045	Not Detected	Not Detected
1,2-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
1,3-Butadiene	8.5	0.019	13	0.029
Hexane	8.5	0.030	24	0.084
Cyclohexane	8.5	0.030	9.5	0.033
Heptane	8.5	0.035	15	0.064
Bromodichloromethane	8.5	0.058	Not Detected	Not Detected
Dibromochloromethane	8.5	0.074	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP07-10

ID#: 0307168A-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071505	Date of Collection: 7/8/03
Dil. Factor:	17.0	Date of Analysis: 7/15/03

WQual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	8.5	0.042	Not Detected	Not Detected
Propylbenzene	8.5	0.042	Not Detected	Not Detected
Chloromethane	34	0.071	Not Detected	Not Detected
1,2,4-Trichlorobenzene	34	0.26	Not Detected	Not Detected
Hexachlorobutadiene	34	0.37	Not Detected	Not Detected
Acetone	34	0.082	330	0.79
Carbon Disulfide	34	0.11	Not Detected	Not Detected
2-Propanol	34	0.085	Not Detected	Not Detected
trans-1,2-Dichloroethene	34	0.14	Not Detected	Not Detected
Vinyl Acetate	34	0.12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	34	0.10	68	0.20
Tetrahydrofuran	34	0.10	Not Detected	Not Detected
1,4-Dioxane	34	0.12	Not Detected	Not Detected
4-Methyl-2-pentanone	34	0.14	Not Detected	Not Detected
2-Hexanone	34	0.14	Not Detected	Not Detected
Bromoform	34	0.36	Not Detected	Not Detected
4-Ethyltoluene	34	0.17	Not Detected	Not Detected
Methyl tert-butyl ether	34	0.12	Not Detected	Not Detected
Ethanol	34	0.065	75	0.14

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	88	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP07-20

ID#: 0307168A-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071508	Date of Collection:	7/8/03
Dil. Factor:	17.3	Date of Analysis:	7/15/03

W Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	8.6	0.043	Not Detected	Not Detected
Freon 114	8.6	0.061	Not Detected	Not Detected
Vinyl Chloride	8.6	0.022	Not Detected	Not Detected
Bromomethane	8.6	0.034	Not Detected	Not Detected
Chloroethane	8.6	0.023	Not Detected	Not Detected
Freon 11	8.6	0.049	Not Detected	Not Detected
1,1-Dichloroethene	8.6	0.035	Not Detected	Not Detected
Freon 113	8.6	0.067	2000	15
Methylene Chloride	8.6	0.030	49	0.17
1,1-Dichloroethane	8.6	0.036	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.6	0.035	Not Detected	Not Detected
Chloroform	8.6	0.043	10	0.051
1,1,1-Trichloroethane	8.6	0.048	Not Detected	Not Detected
Carbon Tetrachloride	8.6	0.055	Not Detected	Not Detected
Benzene	8.6	0.028	9.8	0.032
1,2-Dichloroethane	8.6	0.036	Not Detected	Not Detected
Trichloroethene	8.6	0.047	23	0.12
1,2-Dichloropropane	8.6	0.041	Not Detected	Not Detected
cis-1,3-Dichloropropene	8.6	0.040	9.0	0.041
Toluene	8.6	0.033	12	0.045
trans-1,3-Dichloropropene	8.6	0.040	16	0.075
1,1,2-Trichloroethane	8.6	0.048	Not Detected	Not Detected
Tetrachloroethene	8.6	0.060	160	1.1
1,2-Dibromoethane (EDB)	8.6	0.068	Not Detected	Not Detected
Chlorobenzene	8.6	0.040	Not Detected	Not Detected
Ethyl Benzene	8.6	0.038	Not Detected	Not Detected
m,p-Xylene	8.6	0.038	Not Detected	Not Detected
o-Xylene	8.6	0.038	Not Detected	Not Detected
Styrene	8.6	0.037	14	0.059
1,1,2,2-Tetrachloroethane	8.6	0.060	Not Detected	Not Detected
1,3,5-Trimethylbenzene	8.6	0.043	Not Detected	Not Detected
1,2,4-Trimethylbenzene	8.6	0.043	Not Detected	Not Detected
1,3-Dichlorobenzene	8.6	0.053	Not Detected	Not Detected
1,4-Dichlorobenzene	8.6	0.053	Not Detected	Not Detected
alpha-Chlorotoluene	8.6	0.046	20	0.11
1,2-Dichlorobenzene	8.6	0.053	Not Detected	Not Detected
1,3-Butadiene	8.6	0.019	40	0.091
Hexane	8.6	0.031	18	0.066
Cyclohexane	8.6	0.030	Not Detected	Not Detected
Heptane	8.6	0.036	12	0.049
Bromodichloromethane	8.6	0.059	Not Detected	Not Detected
Dibromochloromethane	8.6	0.075	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP07-20

ID#: 0307168A-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071508	Date of Collection:	7/8/03
Dil. Factor:	17.3	Date of Analysis:	7/15/03

WQual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	8.6	0.043	28	0.14
Propylbenzene	8.6	0.043	26	0.13
Chloromethane	35	0.073	Not Detected	Not Detected
1,2,4-Trichlorobenzene	35	0.26	Not Detected	Not Detected
Hexachlorobutadiene	35	0.38	Not Detected	Not Detected
Acetone	35	0.084	120	0.29
Carbon Disulfide	35	0.11	42	0.13
2-Propanol	35	0.086	Not Detected	Not Detected
trans-1,2-Dichloroethene	35	0.14	Not Detected	Not Detected
Vinyl Acetate	35	0.12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	35	0.10	Not Detected	Not Detected
Tetrahydrofuran	35	0.10	Not Detected	Not Detected
1,4-Dioxane	35	0.13	Not Detected	Not Detected
4-Methyl-2-pentanone	35	0.14	Not Detected	Not Detected
2-Hexanone	35	0.14	Not Detected	Not Detected
Bromoform	35	0.36	Not Detected	Not Detected
4-Ethyltoluene	35	0.17	38	0.19
Methyl tert-butyl ether	35	0.13	Not Detected	Not Detected
Ethanol	35	0.066	68	0.13

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	94	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP10-10

ID#: 0307168A-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071512	Date of Collection: 7/8/03
Dil. Factor:	20.2	Date of Analysis: 7/15/03

DW Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	10	0.051	Not Detected	Not Detected
Freon 114	10	0.072	Not Detected	Not Detected
Vinyl Chloride	10	0.026	Not Detected	Not Detected
Bromomethane	10	0.040	Not Detected	Not Detected
Chloroethane	10	0.027	Not Detected	Not Detected
Freon 11	10	0.058	Not Detected	Not Detected
1,1-Dichloroethene	10	0.041	Not Detected	Not Detected
Freon 113	10	0.079	2300	18
Methylene Chloride	10	0.036	110	0.40
1,1-Dichloroethane	10	0.042	Not Detected	Not Detected
cis-1,2-Dichloroethene	10	0.041	Not Detected	Not Detected
Chloroform	10	0.050	Not Detected	Not Detected
1,1,1-Trichloroethane	10	0.056	Not Detected	Not Detected
Carbon Tetrachloride	10	0.064	Not Detected	Not Detected
Benzene	10	0.033	Not Detected	Not Detected
1,2-Dichloroethane	10	0.042	Not Detected	Not Detected
Trichloroethene	10	0.055	Not Detected	Not Detected
1,2-Dichloropropane	10	0.047	Not Detected	Not Detected
cis-1,3-Dichloropropene	10	0.046	Not Detected	Not Detected
Toluene	10	0.039	Not Detected	Not Detected
trans-1,3-Dichloropropene	10	0.046	Not Detected	Not Detected
1,1,2-Trichloroethane	10	0.056	Not Detected	Not Detected
Tetrachloroethene	10	0.070	150	1.0
1,2-Dibromoethane (EDB)	10	0.079	Not Detected	Not Detected
Chlorobenzene	10	0.047	Not Detected	Not Detected
Ethyl Benzene	10	0.044	Not Detected	Not Detected
m,p-Xylene	10	0.044	Not Detected	Not Detected
o-Xylene	10	0.044	Not Detected	Not Detected
Styrene	10	0.044	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	10	0.070	Not Detected	Not Detected
1,3,5-Trimethylbenzene	10	0.050	Not Detected	Not Detected
1,2,4-Trimethylbenzene	10	0.050	Not Detected	Not Detected
1,3-Dichlorobenzene	10	0.062	Not Detected	Not Detected
1,4-Dichlorobenzene	10	0.062	Not Detected	Not Detected
alpha-Chlorotoluene	10	0.053	Not Detected	Not Detected
1,2-Dichlorobenzene	10	0.062	Not Detected	Not Detected
1,3-Butadiene	10	0.023	Not Detected	Not Detected
Hexane	10	0.036	12	0.044
Cyclohexane	10	0.035	Not Detected	Not Detected
Heptane	10	0.042	Not Detected	Not Detected
Bromodichloromethane	10	0.069	Not Detected	Not Detected
Dibromochloromethane	10	0.087	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP10-10

ID#: 0307168A-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071512	Date of Collection: 7/8/03
Dil. Factor:	20.2	Date of Analysis: 7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	10	0.050	Not Detected	Not Detected
Propylbenzene	10	0.050	Not Detected	Not Detected
Chloromethane	40	0.085	Not Detected	Not Detected
1,2,4-Trichlorobenzene	40	0.30	Not Detected	Not Detected
Hexachlorobutadiene	40	0.44	Not Detected	Not Detected
Acetone	40	0.098	60	0.14
Carbon Disulfide	40	0.13	Not Detected	Not Detected
2-Propanol	40	0.10	Not Detected	Not Detected
trans-1,2-Dichloroethene	40	0.16	Not Detected	Not Detected
Vinyl Acetate	40	0.14	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	40	0.12	Not Detected	Not Detected
Tetrahydrofuran	40	0.12	Not Detected	Not Detected
1,4-Dioxane	40	0.15	Not Detected	Not Detected
4-Methyl-2-pentanone	40	0.17	Not Detected	Not Detected
2-Hexanone	40	0.17	Not Detected	Not Detected
Bromoform	40	0.42	Not Detected	Not Detected
4-Ethyltoluene	40	0.20	Not Detected	Not Detected
Methyl tert-butyl ether	40	0.15	Not Detected	Not Detected
Ethanol	40	0.077	200	0.38

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	84	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP10-20

ID#: 0307168A-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071507	Date of Collection: 7/8/03
Dil. Factor:	83.6	Date of Analysis: 7/15/03

TV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	42	0.21	Not Detected	Not Detected
Freon 114	42	0.30	Not Detected	Not Detected
Vinyl Chloride	42	0.11	Not Detected	Not Detected
Bromomethane	42	0.16	Not Detected	Not Detected
Chloroethane	42	0.11	Not Detected	Not Detected
Freon 11	42	0.24	Not Detected	Not Detected
1,1-Dichloroethene	42	0.17	Not Detected	Not Detected
Freon 113	42	0.32	15000	110
Methylene Chloride	42	0.15	180	0.63
1,1-Dichloroethane	42	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	42	0.17	Not Detected	Not Detected
Chloroform	42	0.21	Not Detected	Not Detected
1,1,1-Trichloroethane	42	0.23	Not Detected	Not Detected
Carbon Tetrachloride	42	0.27	Not Detected	Not Detected
Benzene	42	0.14	Not Detected	Not Detected
1,2-Dichloroethane	42	0.17	Not Detected	Not Detected
Trichloroethene	42	0.23	Not Detected	Not Detected
1,2-Dichloropropane	42	0.20	Not Detected	Not Detected
cis-1,3-Dichloropropene	42	0.19	Not Detected	Not Detected
Toluene	42	0.16	Not Detected	Not Detected
trans-1,3-Dichloropropene	42	0.19	Not Detected	Not Detected
1,1,2-Trichloroethane	42	0.23	Not Detected	Not Detected
Tetrachloroethene	42	0.29	820	5.6
1,2-Dibromoethane (EDB)	42	0.33	Not Detected	Not Detected
Chlorobenzene	42	0.20	Not Detected	Not Detected
Ethyl Benzene	42	0.18	Not Detected	Not Detected
m,p-Xylene	42	0.18	Not Detected	Not Detected
o-Xylene	42	0.18	Not Detected	Not Detected
Styrene	42	0.18	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	42	0.29	Not Detected	Not Detected
1,3,5-Trimethylbenzene	42	0.21	Not Detected	Not Detected
1,2,4-Trimethylbenzene	42	0.21	Not Detected	Not Detected
1,3-Dichlorobenzene	42	0.26	Not Detected	Not Detected
1,4-Dichlorobenzene	42	0.26	Not Detected	Not Detected
alpha-Chlorotoluene	42	0.22	Not Detected	Not Detected
1,2-Dichlorobenzene	42	0.26	Not Detected	Not Detected
1,3-Butadiene	42	0.094	Not Detected	Not Detected
Hexane	42	0.15	Not Detected	Not Detected
Cyclohexane	42	0.15	Not Detected	Not Detected
Heptane	42	0.17	Not Detected	Not Detected
Bromodichloromethane	42	0.28	Not Detected	Not Detected
Dibromochloromethane	42	0.36	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP10-20

ID#: 0307168A-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071507	Date of Collection: 7/8/03
Dil. Factor:	83.6	Date of Analysis: 7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	42	0.21	Not Detected	Not Detected
Propylbenzene	42	0.21	Not Detected	Not Detected
Chloromethane	170	0.35	Not Detected	Not Detected
1,2,4-Trichlorobenzene	170	1.3	Not Detected	Not Detected
Hexachlorobutadiene	170	1.8	Not Detected	Not Detected
Acetone	170	0.40	Not Detected	Not Detected
Carbon Disulfide	170	0.53	Not Detected	Not Detected
2-Propanol	170	0.42	Not Detected	Not Detected
trans-1,2-Dichloroethene	170	0.67	Not Detected	Not Detected
Vinyl Acetate	170	0.60	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	170	0.50	Not Detected	Not Detected
Tetrahydrofuran	170	0.50	Not Detected	Not Detected
1,4-Dioxane	170	0.61	Not Detected	Not Detected
4-Methyl-2-pentanone	170	0.70	Not Detected	Not Detected
2-Hexanone	170	0.70	Not Detected	Not Detected
Bromoform	170	1.8	Not Detected	Not Detected
4-Ethyltoluene	170	0.84	Not Detected	Not Detected
Methyl tert-butyl ether	170	0.61	Not Detected	Not Detected
Ethanol	170	0.32	180	0.34

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	86	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP10-20 Duplicate

ID#: 0307168A-10AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071513	Date of Collection: 7/8/03
Dil. Factor:	83.6	Date of Analysis: 7/15/03

TV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	42	0.21	Not Detected	Not Detected
Freon 114	42	0.30	Not Detected	Not Detected
Vinyl Chloride	42	0.11	Not Detected	Not Detected
Bromomethane	42	0.16	Not Detected	Not Detected
Chloroethane	42	0.11	Not Detected	Not Detected
Freon 11	42	0.24	Not Detected	Not Detected
1,1-Dichloroethene	42	0.17	Not Detected	Not Detected
Freon 113	42	0.32	15000	120
Methylene Chloride	42	0.15	80	0.28
1,1-Dichloroethane	42	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	42	0.17	Not Detected	Not Detected
Chloroform	42	0.21	Not Detected	Not Detected
1,1,1-Trichloroethane	42	0.23	Not Detected	Not Detected
Carbon Tetrachloride	42	0.27	Not Detected	Not Detected
Benzene	42	0.14	Not Detected	Not Detected
1,2-Dichloroethane	42	0.17	Not Detected	Not Detected
Trichloroethene	42	0.23	Not Detected	Not Detected
1,2-Dichloropropane	42	0.20	Not Detected	Not Detected
cis-1,3-Dichloropropene	42	0.19	Not Detected	Not Detected
Toluene	42	0.16	Not Detected	Not Detected
trans-1,3-Dichloropropene	42	0.19	Not Detected	Not Detected
1,1,2-Trichloroethane	42	0.23	Not Detected	Not Detected
Tetrachloroethene	42	0.29	840	5.8
1,2-Dibromoethane (EDB)	42	0.33	Not Detected	Not Detected
Chlorobenzene	42	0.20	Not Detected	Not Detected
Ethyl Benzene	42	0.18	Not Detected	Not Detected
m,p-Xylene	42	0.18	Not Detected	Not Detected
o-Xylene	42	0.18	Not Detected	Not Detected
Styrene	42	0.18	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	42	0.29	Not Detected	Not Detected
1,3,5-Trimethylbenzene	42	0.21	Not Detected	Not Detected
1,2,4-Trimethylbenzene	42	0.21	Not Detected	Not Detected
1,3-Dichlorobenzene	42	0.26	Not Detected	Not Detected
1,4-Dichlorobenzene	42	0.26	Not Detected	Not Detected
alpha-Chlorotoluene	42	0.22	Not Detected	Not Detected
1,2-Dichlorobenzene	42	0.26	Not Detected	Not Detected
1,3-Butadiene	42	0.094	Not Detected	Not Detected
Hexane	42	0.15	Not Detected	Not Detected
Cyclohexane	42	0.15	Not Detected	Not Detected
Heptane	42	0.17	Not Detected	Not Detected
Bromodichloromethane	42	0.28	Not Detected	Not Detected
Dibromochloromethane	42	0.36	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP10-20 Duplicate

ID#: 0307168A-10AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071513	Date of Collection: 7/8/03
Dil. Factor:	83.6	Date of Analysis: 7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	42	0.21	Not Detected	Not Detected
Propylbenzene	42	0.21	Not Detected	Not Detected
Chloromethane	170	0.35	Not Detected	Not Detected
1,2,4-Trichlorobenzene	170	1.3	Not Detected	Not Detected
Hexachlorobutadiene	170	1.8	Not Detected	Not Detected
Acetone	170	0.40	Not Detected	Not Detected
Carbon Disulfide	170	0.53	Not Detected	Not Detected
2-Propanol	170	0.42	Not Detected	Not Detected
trans-1,2-Dichloroethene	170	0.67	Not Detected	Not Detected
Vinyl Acetate	170	0.60	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	170	0.50	Not Detected	Not Detected
Tetrahydrofuran	170	0.50	Not Detected	Not Detected
1,4-Dioxane	170	0.61	Not Detected	Not Detected
4-Methyl-2-pentanone	170	0.70	Not Detected	Not Detected
2-Hexanone	170	0.70	Not Detected	Not Detected
Bromoform	170	1.8	Not Detected	Not Detected
4-Ethyltoluene	170	0.84	Not Detected	Not Detected
Methyl tert-butyl ether	170	0.61	Not Detected	Not Detected
Ethanol	170	0.32	Not Detected	Not Detected

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	113	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	88	70-130

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10/9/03*

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 8 and 9, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0307168B

Sample Identification

FCS-SP10D-20
FCS-SP09-10
FCS-SP09-20
FCS-SP08-10
FCS-TB7803
FCS-SP08-20
FCS-SP06-10
FCS-SP06-10 Duplicate
FCS-SP06-20
FCS-TB7903
FCS-SVE1-10
FCS-SVE2-10

Introduction

This data review covers twelve air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds with the following exceptions:

Date	Compound	%RSD	Associated Samples	Flag	A or P
7/7/03	Chloromethane	31	All samples in this SDG	J detects UJ nondetects	A

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within the 70% - 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD).

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307168B-24A	Bromomethane 1,2,4-Trimethylbenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene	67 (80-120) 74 (80-120) 75 (80-120) 79 (80-120)	All samples in the SDG	J detects UJ nondetects	A
0307168B-24A	Carbon Tetrachloride Trichloroethene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Styrene Heptane 2-Propanol 2-Butanone (MEK) 4-Methyl-2-pentanone 2-Hexanone 4-Ethyltoluene	128 (80-120) 121 (80-120) 137 (80-120) 126 (80-120) 122 (80-120) 122 (80-120) 121 (80-120) 124 (80-120) 128 (80-120) 124 (80-120) 126 (80-120)	All samples in the SDG	J detects UJ nondetects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not evaluated for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not evaluated for this SDG.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

Raw data were not evaluated for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples FCS-SP10-20 (from SDG 0307168A) and FCS-SP10D-20 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ppbv)		RPD
	FCS-SP10-20	FCS-SP10D-20	
Freon 113	15000	14000	6.9
Methylene Chloride	180	120	40
Tetrachloroethene	820	790	3.7

XVII. Field Blanks

Samples FCS-TB07803 and FCS-TB07903 were identified as field blank samples. No volatile contaminants were found in these blanks above the reporting limits.

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307168B**

SDG	Sample	Compound	Flag	A or P	Reason
0307168B	All samples in the SDG	Chloromethane	J detects, UJ nondetects	A	ICAL %RSD outside QC limits
0307168B	All samples in the SDG	Bromomethane 1,2,4-Trimethylbenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene	J detects, UJ nondetects	A	LCS recovery below QC limits
0307168B	All samples in the SDG	Carbon Tetrachloride Trichloroethene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Styrene Heptane 2-Propanol 2-Butanone (MEK) 4-Methyl-2-pentanone 2-Hexanone 4-Ethyltoluene	J detects	A	LCS recovery above QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307168B**

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP10D-20

ID#: 0307168B-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071514	Date of Collection: 7/8/03
Dil. Factor:	83.6	Date of Analysis: 7/15/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	42	0.21	Not Detected	Not Detected
Freon 114	42	0.30	Not Detected	Not Detected
Vinyl Chloride	42	0.11	Not Detected	Not Detected
Bromomethane	42	0.16	Not Detected	Not Detected
Chloroethane	42	0.11	Not Detected	Not Detected
Freon 11	42	0.24	Not Detected	Not Detected
1,1-Dichloroethene	42	0.17	Not Detected	Not Detected
Freon 113	42	0.32	14000	110
Methylene Chloride	42	0.15	120	0.43
1,1-Dichloroethane	42	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	42	0.17	Not Detected	Not Detected
Chloroform	42	0.21	Not Detected	Not Detected
1,1,1-Trichloroethane	42	0.23	Not Detected	Not Detected
Carbon Tetrachloride	42	0.27	Not Detected	Not Detected
Benzene	42	0.14	Not Detected	Not Detected
1,2-Dichloroethane	42	0.17	Not Detected	Not Detected
Trichloroethene	42	0.23	Not Detected	Not Detected
1,2-Dichloropropane	42	0.20	Not Detected	Not Detected
cis-1,3-Dichloropropene	42	0.19	Not Detected	Not Detected
Toluene	42	0.16	Not Detected	Not Detected
trans-1,3-Dichloropropene	42	0.19	Not Detected	Not Detected
1,1,2-Trichloroethane	42	0.23	Not Detected	Not Detected
Tetrachloroethene	42	0.29	790	5.4
1,2-Dibromoethane (EDB)	42	0.33	Not Detected	Not Detected
Chlorobenzene	42	0.20	Not Detected	Not Detected
Ethyl Benzene	42	0.18	Not Detected	Not Detected
m,p-Xylene	42	0.18	Not Detected	Not Detected
o-Xylene	42	0.18	Not Detected	Not Detected
Styrene	42	0.18	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	42	0.29	Not Detected	Not Detected
1,3,5-Trimethylbenzene	42	0.21	Not Detected	Not Detected
1,2,4-Trimethylbenzene	42	0.21	Not Detected	Not Detected
1,3-Dichlorobenzene	42	0.26	Not Detected	Not Detected
1,4-Dichlorobenzene	42	0.26	Not Detected	Not Detected
alpha-Chlorotoluene	42	0.22	Not Detected	Not Detected
1,2-Dichlorobenzene	42	0.26	Not Detected	Not Detected
1,3-Butadiene	42	0.094	Not Detected	Not Detected
Hexane	42	0.15	Not Detected	Not Detected
Cyclohexane	42	0.15	Not Detected	Not Detected
Heptane	42	0.17	Not Detected	Not Detected
Bromodichloromethane	42	0.28	Not Detected	Not Detected
Dibromochloromethane	42	0.36	Not Detected	Not Detected

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP10D-20

ID#: 0307168B-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071514	Date of Collection: 7/8/03
Dil. Factor:	83.6	Date of Analysis: 7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	42	0.21	Not Detected	Not Detected
Propylbenzene	42	0.21	Not Detected	Not Detected
Chloromethane	170	0.35	Not Detected	Not Detected
1,2,4-Trichlorobenzene	170	1.3	Not Detected	Not Detected
Hexachlorobutadiene	170	1.8	Not Detected	Not Detected
Acetone	170	0.40	Not Detected	Not Detected
Carbon Disulfide	170	0.53	Not Detected	Not Detected
2-Propanol	170	0.42	Not Detected	Not Detected
trans-1,2-Dichloroethene	170	0.67	Not Detected	Not Detected
Vinyl Acetate	170	0.60	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	170	0.50	Not Detected	Not Detected
Tetrahydrofuran	170	0.50	Not Detected	Not Detected
1,4-Dioxane	170	0.61	Not Detected	Not Detected
4-Methyl-2-pentanone	170	0.70	Not Detected	Not Detected
2-Hexanone	170	0.70	Not Detected	Not Detected
Bromoform	170	1.8	Not Detected	Not Detected
4-Ethyltoluene	170	0.84	Not Detected	Not Detected
Methyl tert-butyl ether	170	0.61	Not Detected	Not Detected
Ethanol	170	0.32	200	0.38

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	86	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP09-10

ID#: 0307168B-12A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071515	Date of Collection: 7/8/03
Dil. Factor:	41.8	Date of Analysis: 7/15/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	21	0.10	Not Detected	Not Detected
Freon 114	21	0.15	Not Detected	Not Detected
Vinyl Chloride	21	0.054	Not Detected	Not Detected
Bromomethane	21	0.082	Not Detected	Not Detected
Chloroethane	21	0.056	Not Detected	Not Detected
Freon 11	21	0.12	Not Detected	Not Detected
1,1-Dichloroethene	21	0.084	Not Detected	Not Detected
Freon 113	21	0.16	6400	50
Methylene Chloride	21	0.074	45	0.16
1,1-Dichloroethane	21	0.086	Not Detected	Not Detected
cis-1,2-Dichloroethene	21	0.084	Not Detected	Not Detected
Chloroform	21	0.10	Not Detected	Not Detected
1,1,1-Trichloroethane	21	0.12	Not Detected	Not Detected
Carbon Tetrachloride	21	0.13	Not Detected	Not Detected
Benzene	21	0.068	Not Detected	Not Detected
1,2-Dichloroethane	21	0.086	Not Detected	Not Detected
Trichloroethene	21	0.11	Not Detected	Not Detected
1,2-Dichloropropane	21	0.098	Not Detected	Not Detected
cis-1,3-Dichloropropene	21	0.096	Not Detected	Not Detected
Toluene	21	0.080	Not Detected	Not Detected
trans-1,3-Dichloropropene	21	0.096	Not Detected	Not Detected
1,1,2-Trichloroethane	21	0.12	Not Detected	Not Detected
Tetrachloroethene	21	0.14	480	3.3
1,2-Dibromoethane (EDB)	21	0.16	Not Detected	Not Detected
Chlorobenzene	21	0.098	Not Detected	Not Detected
Ethyl Benzene	21	0.092	Not Detected	Not Detected
m,p-Xylene	21	0.092	Not Detected	Not Detected
o-Xylene	21	0.092	Not Detected	Not Detected
Styrene	21	0.090	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	21	0.14	Not Detected	Not Detected
1,3,5-Trimethylbenzene	21	0.10	Not Detected	Not Detected
1,2,4-Trimethylbenzene	21	0.10	Not Detected	Not Detected
1,3-Dichlorobenzene	21	0.13	Not Detected	Not Detected
1,4-Dichlorobenzene	21	0.13	Not Detected	Not Detected
alpha-Chlorotoluene	21	0.11	Not Detected	Not Detected
1,2-Dichlorobenzene	21	0.13	Not Detected	Not Detected
1,3-Butadiene	21	0.047	Not Detected	Not Detected
Hexane	21	0.075	Not Detected	Not Detected
Cyclohexane	21	0.073	Not Detected	Not Detected
Heptane	21	0.087	Not Detected	Not Detected
Bromodichloromethane	21	0.14	Not Detected	Not Detected
Dibromochloromethane	21	0.18	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP09-10

ID#: 0307168B-12A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071515	Date of Collection: 7/8/03
Dil. Factor:	41.8	Date of Analysis: 7/15/03

TV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	21	0.10	Not Detected	Not Detected
Propylbenzene	21	0.10	Not Detected	Not Detected
Chloromethane	84	0.18	Not Detected	Not Detected
1,2,4-Trichlorobenzene	84	0.63	Not Detected	Not Detected
Hexachlorobutadiene	84	0.91	Not Detected	Not Detected
Acetone	84	0.20	87	0.21
Carbon Disulfide	84	0.26	Not Detected	Not Detected
2-Propanol	84	0.21	Not Detected	Not Detected
trans-1,2-Dichloroethene	84	0.34	Not Detected	Not Detected
Vinyl Acetate	84	0.30	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	84	0.25	Not Detected	Not Detected
Tetrahydrofuran	84	0.25	Not Detected	Not Detected
1,4-Dioxane	84	0.31	Not Detected	Not Detected
4-Methyl-2-pentanone	84	0.35	Not Detected	Not Detected
2-Hexanone	84	0.35	Not Detected	Not Detected
Bromoform	84	0.88	Not Detected	Not Detected
4-Ethyltoluene	84	0.42	Not Detected	Not Detected
Methyl tert-butyl ether	84	0.31	Not Detected	Not Detected
Ethanol	84	0.16	83 J	0.16 J

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J = Estimated value.

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	86	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP09-20

ID#: 0307168B-13A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071516	Date of Collection: 7/8/03
Dil. Factor:	8.52	Date of Analysis: 7/15/03

Dual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	1100	8.4
Methylene Chloride	4.3	0.015	10	0.036
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	5.4	0.017
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	18	0.067
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	46	0.32
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	7.3	0.032
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	13	0.029
Hexane	4.3	0.015	22	0.079
Cyclohexane	4.3	0.015	18	0.063
Heptane	4.3	0.018	12	0.050
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP09-20

ID#: 0307168B-13A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071516	Date of Collection: 7/8/03
Dil. Factor:	8.52	Date of Analysis: 7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	97	0.23
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	20	0.039

UJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	85	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP08-10

ID#: 0307168B-14A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071517	Date of Collection: 7/8/03
Dil. Factor:	20.9	Date of Analysis: 7/15/03

DV Actual

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	10	0.052	Not Detected	Not Detected
Freon 114	10	0.074	Not Detected	Not Detected
Vinyl Chloride	10	0.027	Not Detected	Not Detected
Bromomethane	10	0.041	Not Detected	Not Detected
Chloroethane	10	0.028	Not Detected	Not Detected
Freon 11	10	0.060	Not Detected	Not Detected
1,1-Dichloroethene	10	0.042	Not Detected	Not Detected
Freon 113	10	0.081	3900	30
Methylene Chloride	10	0.037	29	0.10
1,1-Dichloroethane	10	0.043	Not Detected	Not Detected
cis-1,2-Dichloroethene	10	0.042	Not Detected	Not Detected
Chloroform	10	0.052	Not Detected	Not Detected
1,1,1-Trichloroethane	10	0.058	Not Detected	Not Detected
Carbon Tetrachloride	10	0.067	Not Detected	Not Detected
Benzene	10	0.034	Not Detected	Not Detected
1,2-Dichloroethane	10	0.043	Not Detected	Not Detected
Trichloroethene	10	0.057	Not Detected	Not Detected
1,2-Dichloropropane	10	0.049	Not Detected	Not Detected
cis-1,3-Dichloropropene	10	0.048	Not Detected	Not Detected
Toluene	10	0.040	Not Detected	Not Detected
trans-1,3-Dichloropropene	10	0.048	Not Detected	Not Detected
1,1,2-Trichloroethane	10	0.058	Not Detected	Not Detected
Tetrachloroethene	10	0.072	160	1.1
1,2-Dibromoethane (EDB)	10	0.082	Not Detected	Not Detected
Chlorobenzene	10	0.049	Not Detected	Not Detected
Ethyl Benzene	10	0.046	Not Detected	Not Detected
m,p-Xylene	10	0.046	Not Detected	Not Detected
o-Xylene	10	0.046	Not Detected	Not Detected
Styrene	10	0.045	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	10	0.073	Not Detected	Not Detected
1,3,5-Trimethylbenzene	10	0.052	Not Detected	Not Detected
1,2,4-Trimethylbenzene	10	0.052	Not Detected	Not Detected
1,3-Dichlorobenzene	10	0.064	Not Detected	Not Detected
1,4-Dichlorobenzene	10	0.064	Not Detected	Not Detected
alpha-Chlorotoluene	10	0.055	Not Detected	Not Detected
1,2-Dichlorobenzene	10	0.064	Not Detected	Not Detected
1,3-Butadiene	10	0.023	Not Detected	Not Detected
Hexane	10	0.037	Not Detected	Not Detected
Cyclohexane	10	0.036	Not Detected	Not Detected
Heptane	10	0.044	Not Detected	Not Detected
Bromodichloromethane	10	0.071	Not Detected	Not Detected
Dibromochloromethane	10	0.090	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP08-10

ID#: 0307168B-14A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071517	Date of Collection: 7/8/03
Dil. Factor:	20.9	Date of Analysis: 7/15/03

tv qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	10	0.052	Not Detected	Not Detected
Propylbenzene	10	0.052	Not Detected	Not Detected
Chloromethane	42	0.088	Not Detected	Not Detected
1,2,4-Trichlorobenzene	42	0.32	Not Detected	Not Detected
Hexachlorobutadiene	42	0.45	Not Detected	Not Detected
Acetone	42	0.10	68	0.16
Carbon Disulfide	42	0.13	Not Detected	Not Detected
2-Propanol	42	0.10	Not Detected	Not Detected
trans-1,2-Dichloroethene	42	0.17	Not Detected	Not Detected
Vinyl Acetate	42	0.15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	42	0.12	Not Detected	Not Detected
Tetrahydrofuran	42	0.12	Not Detected	Not Detected
1,4-Dioxane	42	0.15	Not Detected	Not Detected
4-Methyl-2-pentanone	42	0.17	Not Detected	Not Detected
2-Hexanone	42	0.17	Not Detected	Not Detected
Bromoform	42	0.44	Not Detected	Not Detected
4-Ethyltoluene	42	0.21	Not Detected	Not Detected
Methyl tert-butyl ether	42	0.15	Not Detected	Not Detected
Ethanol	42	0.080	45	0.086

WJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	84	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-TB7803

ID#: 0307168B-15A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071518	Date of Collection: 7/8/03
Dil. Factor:	8.36	Date of Analysis: 7/15/03

DV dual

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-TB7803

ID#: 0307168B-15A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071518	Date of Collection: 7/8/03
Dil. Factor:	8.36	Date of Analysis: 7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	Not Detected	Not Detected
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	82	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP08-20

ID#: 0307168B-16A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071519	Date of Collection:	7/8/03
Dil. Factor:	20.9	Date of Analysis:	7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	10	0.052	Not Detected	Not Detected
Freon 114	10	0.074	Not Detected	Not Detected
Vinyl Chloride	10	0.027	Not Detected	Not Detected
Bromomethane	10	0.041	Not Detected	Not Detected
Chloroethane	10	0.028	Not Detected	Not Detected
Freon 11	10	0.060	Not Detected	Not Detected
1,1-Dichloroethene	10	0.042	Not Detected	Not Detected
Freon 113	10	0.081	3400	26
Methylene Chloride	10	0.037	Not Detected	Not Detected
1,1-Dichloroethane	10	0.043	Not Detected	Not Detected
cis-1,2-Dichloroethene	10	0.042	Not Detected	Not Detected
Chloroform	10	0.052	Not Detected	Not Detected
1,1,1-Trichloroethane	10	0.058	Not Detected	Not Detected
Carbon Tetrachloride	10	0.067	Not Detected	Not Detected
Benzene	10	0.034	Not Detected	Not Detected
1,2-Dichloroethane	10	0.043	Not Detected	Not Detected
Trichloroethene	10	0.057	Not Detected	Not Detected
1,2-Dichloropropane	10	0.049	Not Detected	Not Detected
cis-1,3-Dichloropropene	10	0.048	Not Detected	Not Detected
Toluene	10	0.040	Not Detected	Not Detected
trans-1,3-Dichloropropene	10	0.048	Not Detected	Not Detected
1,1,2-Trichloroethane	10	0.058	Not Detected	Not Detected
Tetrachloroethene	10	0.072	210	1.4
1,2-Dibromoethane (EDB)	10	0.082	Not Detected	Not Detected
Chlorobenzene	10	0.049	Not Detected	Not Detected
Ethyl Benzene	10	0.046	Not Detected	Not Detected
m,p-Xylene	10	0.046	Not Detected	Not Detected
o-Xylene	10	0.046	Not Detected	Not Detected
Styrene	10	0.045	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	10	0.073	Not Detected	Not Detected
1,3,5-Trimethylbenzene	10	0.052	Not Detected	Not Detected
1,2,4-Trimethylbenzene	10	0.052	Not Detected	Not Detected
1,3-Dichlorobenzene	10	0.064	Not Detected	Not Detected
1,4-Dichlorobenzene	10	0.064	Not Detected	Not Detected
alpha-Chlorotoluene	10	0.055	Not Detected	Not Detected
1,2-Dichlorobenzene	10	0.064	Not Detected	Not Detected
1,3-Butadiene	10	0.023	Not Detected	Not Detected
Hexane	10	0.037	Not Detected	Not Detected
Cyclohexane	10	0.036	Not Detected	Not Detected
Heptane	10	0.044	Not Detected	Not Detected
Bromodichloromethane	10	0.071	Not Detected	Not Detected
Dibromochloromethane	10	0.090	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP08-20

ID#: 0307168B-16A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071519	Date of Collection: 7/8/03
Dil. Factor:	20.9	Date of Analysis: 7/15/03

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Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	10	0.052	Not Detected	Not Detected
Propylbenzene	10	0.052	Not Detected	Not Detected
Chloromethane	42	0.088	Not Detected	Not Detected
1,2,4-Trichlorobenzene	42	0.32	Not Detected	Not Detected
Hexachlorobutadiene	42	0.45	Not Detected	Not Detected
Acetone	42	0.10	Not Detected	Not Detected
Carbon Disulfide	42	0.13	Not Detected	Not Detected
2-Propanol	42	0.10	Not Detected	Not Detected
trans-1,2-Dichloroethene	42	0.17	Not Detected	Not Detected
Vinyl Acetate	42	0.15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	42	0.12	Not Detected	Not Detected
Tetrahydrofuran	42	0.12	Not Detected	Not Detected
1,4-Dioxane	42	0.15	Not Detected	Not Detected
4-Methyl-2-pentanone	42	0.17	Not Detected	Not Detected
2-Hexanone	42	0.17	Not Detected	Not Detected
Bromoform	42	0.44	Not Detected	Not Detected
4-Ethyltoluene	42	0.21	Not Detected	Not Detected
Methyl tert-butyl ether	42	0.15	Not Detected	Not Detected
Ethanol	42	0.080	Not Detected	Not Detected

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	113	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	83	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP06-10

ID#: 0307168B-17A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071520	Date of Collection: 7/9/03
Dil. Factor:	164	Date of Analysis: 7/15/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	82	0.41	Not Detected	Not Detected
Freon 114	82	0.58	Not Detected	Not Detected
Vinyl Chloride	82	0.21	Not Detected	Not Detected
Bromomethane	82	0.32	Not Detected	Not Detected
Chloroethane	82	0.22	Not Detected	Not Detected
Freon 11	82	0.47	Not Detected	Not Detected
1,1-Dichloroethene	82	0.33	Not Detected	Not Detected
Freon 113	82	0.64	25000	200
Methylene Chloride	82	0.29	Not Detected	Not Detected
1,1-Dichloroethane	82	0.34	Not Detected	Not Detected
cis-1,2-Dichloroethene	82	0.33	Not Detected	Not Detected
Chloroform	82	0.41	Not Detected	Not Detected
1,1,1-Trichloroethane	82	0.45	Not Detected	Not Detected
Carbon Tetrachloride	82	0.52	Not Detected	Not Detected
Benzene	82	0.27	Not Detected	Not Detected
1,2-Dichloroethane	82	0.34	Not Detected	Not Detected
Trichloroethene	82	0.45	Not Detected	Not Detected
1,2-Dichloropropane	82	0.38	Not Detected	Not Detected
cis-1,3-Dichloropropene	82	0.38	Not Detected	Not Detected
Toluene	82	0.31	Not Detected	Not Detected
trans-1,3-Dichloropropene	82	0.38	Not Detected	Not Detected
1,1,2-Trichloroethane	82	0.45	Not Detected	Not Detected
Tetrachloroethene	82	0.56	220	1.5
1,2-Dibromoethane (EDB)	82	0.64	Not Detected	Not Detected
Chlorobenzene	82	0.38	Not Detected	Not Detected
Ethyl Benzene	82	0.36	Not Detected	Not Detected
m,p-Xylene	82	0.36	Not Detected	Not Detected
o-Xylene	82	0.36	Not Detected	Not Detected
Styrene	82	0.35	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	82	0.57	Not Detected	Not Detected
1,3,5-Trimethylbenzene	82	0.41	Not Detected	Not Detected
1,2,4-Trimethylbenzene	82	0.41	Not Detected	Not Detected
1,3-Dichlorobenzene	82	0.50	Not Detected	Not Detected
1,4-Dichlorobenzene	82	0.50	Not Detected	Not Detected
alpha-Chlorotoluene	82	0.43	Not Detected	Not Detected
1,2-Dichlorobenzene	82	0.50	Not Detected	Not Detected
1,3-Butadiene	82	0.18	Not Detected	Not Detected
Hexane	82	0.29	Not Detected	Not Detected
Cyclohexane	82	0.29	Not Detected	Not Detected
Heptane	82	0.34	Not Detected	Not Detected
Bromodichloromethane	82	0.56	Not Detected	Not Detected
Dibromochloromethane	82	0.71	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP06-10

ID#: 0307168B-17A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071520	Date of Collection:	7/9/03
Dil. Factor:	164	Date of Analysis:	7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	82	0.41	Not Detected	Not Detected
Propylbenzene	82	0.41	Not Detected	Not Detected
Chloromethane	330	0.69	Not Detected	Not Detected
1,2,4-Trichlorobenzene	330	2.5	Not Detected	Not Detected
Hexachlorobutadiene	330	3.6	Not Detected	Not Detected
Acetone	330	0.79	Not Detected	Not Detected
Carbon Disulfide	330	1.0	Not Detected	Not Detected
2-Propanol	330	0.82	Not Detected	Not Detected
trans-1,2-Dichloroethene	330	1.3	Not Detected	Not Detected
Vinyl Acetate	330	1.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	330	0.98	Not Detected	Not Detected
Tetrahydrofuran	330	0.98	Not Detected	Not Detected
1,4-Dioxane	330	1.2	Not Detected	Not Detected
4-Methyl-2-pentanone	330	1.4	Not Detected	Not Detected
2-Hexanone	330	1.4	Not Detected	Not Detected
Bromoform	330	3.4	Not Detected	Not Detected
4-Ethyltoluene	330	1.6	Not Detected	Not Detected
Methyl tert-butyl ether	330	1.2	Not Detected	Not Detected
Ethanol	330	0.63	Not Detected	Not Detected

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	116	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	84	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP06-10 Duplicate

ID#: 0307168B-17AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071521	Date of Collection: 7/9/03
Dil. Factor:	164	Date of Analysis: 7/15/03

DV Anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	82	0.41	Not Detected	Not Detected
Freon 114	82	0.58	Not Detected	Not Detected
Vinyl Chloride	82	0.21	Not Detected	Not Detected
Bromomethane	82	0.32	Not Detected	Not Detected
Chloroethane	82	0.22	Not Detected	Not Detected
Freon 11	82	0.47	Not Detected	Not Detected
1,1-Dichloroethene	82	0.33	Not Detected	Not Detected
Freon 113	82	0.64	26000	200
Methylene Chloride	82	0.29	Not Detected	Not Detected
1,1-Dichloroethane	82	0.34	Not Detected	Not Detected
cis-1,2-Dichloroethene	82	0.33	Not Detected	Not Detected
Chloroform	82	0.41	Not Detected	Not Detected
1,1,1-Trichloroethane	82	0.45	Not Detected	Not Detected
Carbon Tetrachloride	82	0.52	Not Detected	Not Detected
Benzene	82	0.27	Not Detected	Not Detected
1,2-Dichloroethane	82	0.34	Not Detected	Not Detected
Trichloroethene	82	0.45	Not Detected	Not Detected
1,2-Dichloropropane	82	0.38	Not Detected	Not Detected
cis-1,3-Dichloropropene	82	0.38	Not Detected	Not Detected
Toluene	82	0.31	Not Detected	Not Detected
trans-1,3-Dichloropropene	82	0.38	Not Detected	Not Detected
1,1,2-Trichloroethane	82	0.45	Not Detected	Not Detected
Tetrachloroethene	82	0.56	210	1.5
1,2-Dibromoethane (EDB)	82	0.64	Not Detected	Not Detected
Chlorobenzene	82	0.38	Not Detected	Not Detected
Ethyl Benzene	82	0.36	Not Detected	Not Detected
m,p-Xylene	82	0.36	Not Detected	Not Detected
o-Xylene	82	0.36	Not Detected	Not Detected
Styrene	82	0.35	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	82	0.57	Not Detected	Not Detected
1,3,5-Trimethylbenzene	82	0.41	Not Detected	Not Detected
1,2,4-Trimethylbenzene	82	0.41	Not Detected	Not Detected
1,3-Dichlorobenzene	82	0.50	Not Detected	Not Detected
1,4-Dichlorobenzene	82	0.50	Not Detected	Not Detected
alpha-Chlorotoluene	82	0.43	Not Detected	Not Detected
1,2-Dichlorobenzene	82	0.50	Not Detected	Not Detected
1,3-Butadiene	82	0.18	Not Detected	Not Detected
Hexane	82	0.29	Not Detected	Not Detected
Cyclohexane	82	0.29	Not Detected	Not Detected
Heptane	82	0.34	Not Detected	Not Detected
Bromodichloromethane	82	0.56	Not Detected	Not Detected
Dibromochloromethane	82	0.71	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP06-10 Duplicate

ID#: 0307168B-17AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071521	Date of Collection: 7/9/03
Dil. Factor:	164	Date of Analysis: 7/15/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	82	0.41	Not Detected	Not Detected
Propylbenzene	82	0.41	Not Detected	Not Detected
Chloromethane	330	0.69	Not Detected	Not Detected
1,2,4-Trichlorobenzene	330	2.5	Not Detected	Not Detected
Hexachlorobutadiene	330	3.6	Not Detected	Not Detected
Acetone	330	0.79	Not Detected	Not Detected
Carbon Disulfide	330	1.0	Not Detected	Not Detected
2-Propanol	330	0.82	Not Detected	Not Detected
trans-1,2-Dichloroethene	330	1.3	Not Detected	Not Detected
Vinyl Acetate	330	1.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	330	0.98	Not Detected	Not Detected
Tetrahydrofuran	330	0.98	Not Detected	Not Detected
1,4-Dioxane	330	1.2	Not Detected	Not Detected
4-Methyl-2-pentanone	330	1.4	Not Detected	Not Detected
2-Hexanone	330	1.4	Not Detected	Not Detected
Bromoform	330	3.4	Not Detected	Not Detected
4-Ethyltoluene	330	1.6	Not Detected	Not Detected
Methyl tert-butyl ether	330	1.2	Not Detected	Not Detected
Ethanol	330	0.63	Not Detected	Not Detected

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	119	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	84	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP06-20

ID#: 0307168B-18A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071522	Date of Collection: 7/9/03
Dil. Factor:	20.9	Date of Analysis: 7/15/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	10	0.052	Not Detected	Not Detected
Freon 114	10	0.074	Not Detected	Not Detected
Vinyl Chloride	10	0.027	Not Detected	Not Detected
Bromomethane	10	0.041	Not Detected	Not Detected
Chloroethane	10	0.028	Not Detected	Not Detected
Freon 11	10	0.060	Not Detected	Not Detected
1,1-Dichloroethene	10	0.042	Not Detected	Not Detected
Freon 113	10	0.081	3400	26
Methylene Chloride	10	0.037	Not Detected	Not Detected
1,1-Dichloroethane	10	0.043	Not Detected	Not Detected
cis-1,2-Dichloroethene	10	0.042	Not Detected	Not Detected
Chloroform	10	0.052	38	0.19
1,1,1-Trichloroethane	10	0.058	10	0.058
Carbon Tetrachloride	10	0.067	Not Detected	Not Detected
Benzene	10	0.034	Not Detected	Not Detected
1,2-Dichloroethane	10	0.043	Not Detected	Not Detected
Trichloroethene	10	0.057	37	0.20
1,2-Dichloropropane	10	0.049	Not Detected	Not Detected
cis-1,3-Dichloropropene	10	0.048	Not Detected	Not Detected
Toluene	10	0.040	Not Detected	Not Detected
trans-1,3-Dichloropropene	10	0.048	Not Detected	Not Detected
1,1,2-Trichloroethane	10	0.058	Not Detected	Not Detected
Tetrachloroethene	10	0.072	360	2.5
1,2-Dibromoethane (EDB)	10	0.082	Not Detected	Not Detected
Chlorobenzene	10	0.049	Not Detected	Not Detected
Ethyl Benzene	10	0.046	Not Detected	Not Detected
m,p-Xylene	10	0.046	Not Detected	Not Detected
o-Xylene	10	0.046	Not Detected	Not Detected
Styrene	10	0.045	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	10	0.073	Not Detected	Not Detected
1,3,5-Trimethylbenzene	10	0.052	Not Detected	Not Detected
1,2,4-Trimethylbenzene	10	0.052	Not Detected	Not Detected
1,3-Dichlorobenzene	10	0.064	Not Detected	Not Detected
1,4-Dichlorobenzene	10	0.064	Not Detected	Not Detected
alpha-Chlorotoluene	10	0.055	Not Detected	Not Detected
1,2-Dichlorobenzene	10	0.064	Not Detected	Not Detected
1,3-Butadiene	10	0.023	39	0.087
Hexane	10	0.037	10	0.037
Cyclohexane	10	0.036	Not Detected	Not Detected
Heptane	10	0.044	Not Detected	Not Detected
Bromodichloromethane	10	0.071	Not Detected	Not Detected
Dibromochloromethane	10	0.090	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP06-20

ID#: 0307168B-18A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071522	Date of Collection: 7/9/03
Dil. Factor:	20.9	Date of Analysis: 7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	10	0.052	Not Detected	Not Detected
Propylbenzene	10	0.052	Not Detected	Not Detected
Chloromethane	42	0.088	Not Detected	Not Detected
1,2,4-Trichlorobenzene	42	0.32	Not Detected	Not Detected
Hexachlorobutadiene	42	0.45	Not Detected	Not Detected
Acetone	42	0.10	140	0.34
Carbon Disulfide	42	0.13	Not Detected	Not Detected
2-Propanol	42	0.10	Not Detected	Not Detected
trans-1,2-Dichloroethene	42	0.17	Not Detected	Not Detected
Vinyl Acetate	42	0.15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	42	0.12	Not Detected	Not Detected
Tetrahydrofuran	42	0.12	Not Detected	Not Detected
1,4-Dioxane	42	0.15	Not Detected	Not Detected
4-Methyl-2-pentanone	42	0.17	Not Detected	Not Detected
2-Hexanone	42	0.17	Not Detected	Not Detected
Bromoform	42	0.44	Not Detected	Not Detected
4-Ethyltoluene	42	0.21	Not Detected	Not Detected
Methyl tert-butyl ether	42	0.15	Not Detected	Not Detected
Ethanol	42	0.080	41 J	0.079 J

WJ

J = Estimated value.

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	85	70-130

*NE
10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-TB7903

ID#: 0307168B-19A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071523	Date of Collection: 7/9/03
Dil. Factor:	8.20	Date of Analysis: 7/15/03

W Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.1	0.021	Not Detected	Not Detected
Freon 114	4.1	0.029	Not Detected	Not Detected
Vinyl Chloride	4.1	0.011	Not Detected	Not Detected
Bromomethane	4.1	0.016	Not Detected	Not Detected
Chloroethane	4.1	0.011	Not Detected	Not Detected
Freon 11	4.1	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Freon 113	4.1	0.032	Not Detected	Not Detected
Methylene Chloride	4.1	0.014	Not Detected	Not Detected
1,1-Dichloroethane	4.1	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Chloroform	4.1	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.1	0.026	Not Detected	Not Detected
Benzene	4.1	0.013	Not Detected	Not Detected
1,2-Dichloroethane	4.1	0.017	Not Detected	Not Detected
Trichloroethene	4.1	0.022	Not Detected	Not Detected
1,2-Dichloropropane	4.1	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
Toluene	4.1	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Tetrachloroethene	4.1	0.028	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.1	0.032	Not Detected	Not Detected
Chlorobenzene	4.1	0.019	Not Detected	Not Detected
Ethyl Benzene	4.1	0.018	Not Detected	Not Detected
m,p-Xylene	4.1	0.018	Not Detected	Not Detected
o-Xylene	4.1	0.018	Not Detected	Not Detected
Styrene	4.1	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.1	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,3-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.1	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,3-Butadiene	4.1	0.0092	Not Detected	Not Detected
Hexane	4.1	0.015	Not Detected	Not Detected
Cyclohexane	4.1	0.014	Not Detected	Not Detected
Heptane	4.1	0.017	Not Detected	Not Detected
Bromodichloromethane	4.1	0.028	Not Detected	Not Detected
Dibromochloromethane	4.1	0.036	Not Detected	Not Detected

WJ

WJ

WJ

WJ

AIR TOXICS LTD.

SAMPLE NAME: FCS-TB7903

ID#: 0307168B-19A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071523	Date of Collection: 7/9/03
Dil. Factor:	8.20	Date of Analysis: 7/15/03

by Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.1	0.020	Not Detected	Not Detected
Propylbenzene	4.1	0.020	Not Detected	Not Detected
Chloromethane	16	0.034	Not Detected	Not Detected
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected
Acetone	16	0.040	Not Detected	Not Detected
Carbon Disulfide	16	0.052	Not Detected	Not Detected
2-Propanol	16	0.041	Not Detected	Not Detected
trans-1,2-Dichloroethene	16	0.066	Not Detected	Not Detected
Vinyl Acetate	16	0.059	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	0.049	Not Detected	Not Detected
Tetrahydrofuran	16	0.049	Not Detected	Not Detected
1,4-Dioxane	16	0.060	Not Detected	Not Detected
4-Methyl-2-pentanone	16	0.068	Not Detected	Not Detected
2-Hexanone	16	0.068	Not Detected	Not Detected
Bromoform	16	0.17	Not Detected	Not Detected
4-Ethyltoluene	16	0.082	Not Detected	Not Detected
Methyl tert-butyl ether	16	0.060	Not Detected	Not Detected
Ethanol	16	0.031	Not Detected	Not Detected

UJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	83	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-SVE1-10

ID#: 0307168B-20A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071524	Date of Collection: 7/9/03
Dil. Factor:	52.2	Date of Analysis: 7/15/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	26	0.13	Not Detected	Not Detected
Freon 114	26	0.18	Not Detected	Not Detected
Vinyl Chloride	26	0.068	Not Detected	Not Detected
Bromomethane	26	0.10	Not Detected	Not Detected
Chloroethane	26	0.070	Not Detected	Not Detected
Freon 11	26	0.15	Not Detected	Not Detected
1,1-Dichloroethene	26	0.10	Not Detected	Not Detected
Freon 113	26	0.20	8600	67
Methylene Chloride	26	0.092	Not Detected	Not Detected
1,1-Dichloroethane	26	0.11	Not Detected	Not Detected
cis-1,2-Dichloroethene	26	0.10	Not Detected	Not Detected
Chloroform	26	0.13	86	0.43
1,1,1-Trichloroethane	26	0.14	Not Detected	Not Detected
Carbon Tetrachloride	26	0.17	Not Detected	Not Detected
Benzene	26	0.085	Not Detected	Not Detected
1,2-Dichloroethane	26	0.11	Not Detected	Not Detected
Trichloroethene	26	0.14	Not Detected	Not Detected
1,2-Dichloropropane	26	0.12	Not Detected	Not Detected
cis-1,3-Dichloropropene	26	0.12	Not Detected	Not Detected
Toluene	26	0.10	Not Detected	Not Detected
trans-1,3-Dichloropropene	26	0.12	Not Detected	Not Detected
1,1,2-Trichloroethane	26	0.14	Not Detected	Not Detected
Tetrachloroethene	26	0.18	160	1.1
1,2-Dibromoethane (EDB)	26	0.20	Not Detected	Not Detected
Chlorobenzene	26	0.12	Not Detected	Not Detected
Ethyl Benzene	26	0.12	Not Detected	Not Detected
m,p-Xylene	26	0.12	Not Detected	Not Detected
o-Xylene	26	0.12	Not Detected	Not Detected
Styrene	26	0.11	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	26	0.18	Not Detected	Not Detected
1,3,5-Trimethylbenzene	26	0.13	Not Detected	Not Detected
1,2,4-Trimethylbenzene	26	0.13	Not Detected	Not Detected
1,3-Dichlorobenzene	26	0.16	Not Detected	Not Detected
1,4-Dichlorobenzene	26	0.16	Not Detected	Not Detected
alpha-Chlorotoluene	26	0.14	Not Detected	Not Detected
1,2-Dichlorobenzene	26	0.16	Not Detected	Not Detected
1,3-Butadiene	26	0.059	Not Detected	Not Detected
Hexane	26	0.093	Not Detected	Not Detected
Cyclohexane	26	0.091	Not Detected	Not Detected
Heptane	26	0.11	Not Detected	Not Detected
Bromodichloromethane	26	0.18	Not Detected	Not Detected
Dibromochloromethane	26	0.22	Not Detected	Not Detected

UJ

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SVE1-10

ID#: 0307168B-20A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071524	Date of Collection: 7/9/03
Dil. Factor:	52.2	Date of Analysis: 7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	26	0.13	Not Detected	Not Detected
Propylbenzene	26	0.13	Not Detected	Not Detected
Chloromethane	100	0.22	Not Detected	Not Detected
1,2,4-Trichlorobenzene	100	0.79	Not Detected	Not Detected
Hexachlorobutadiene	100	1.1	Not Detected	Not Detected
Acetone	100	0.25	Not Detected	Not Detected
Carbon Disulfide	100	0.33	Not Detected	Not Detected
2-Propanol	100	0.26	Not Detected	Not Detected
trans-1,2-Dichloroethene	100	0.42	Not Detected	Not Detected
Vinyl Acetate	100	0.37	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	100	0.31	Not Detected	Not Detected
Tetrahydrofuran	100	0.31	Not Detected	Not Detected
1,4-Dioxane	100	0.38	Not Detected	Not Detected
4-Methyl-2-pentanone	100	0.43	Not Detected	Not Detected
2-Hexanone	100	0.43	Not Detected	Not Detected
Bromoform	100	1.1	Not Detected	Not Detected
4-Ethyltoluene	100	0.52	Not Detected	Not Detected
Methyl tert-butyl ether	100	0.38	Not Detected	Not Detected
Ethanol	100	0.20	Not Detected	Not Detected

UJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	116	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	83	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-SVE2-10

ID#: 0307168B-21A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071525	Date of Collection: 7/9/03
Dil. Factor:	27.3	Date of Analysis: 7/16/03

DV Qual

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	14	0.069	Not Detected	Not Detected
Freon 114	14	0.097	Not Detected	Not Detected
Vinyl Chloride	14	0.035	Not Detected	Not Detected
Bromomethane	14	0.054	Not Detected	Not Detected
Chloroethane	14	0.037	Not Detected	Not Detected
Freon 11	14	0.078	Not Detected	Not Detected
1,1-Dichloroethene	14	0.055	Not Detected	Not Detected
Freon 113	14	0.11	4500	35
Methylene Chloride	14	0.048	Not Detected	Not Detected
1,1-Dichloroethane	14	0.056	Not Detected	Not Detected
cis-1,2-Dichloroethene	14	0.055	Not Detected	Not Detected
Chloroform	14	0.068	140	0.71
1,1,1-Trichloroethane	14	0.076	Not Detected	Not Detected
Carbon Tetrachloride	14	0.087	Not Detected	Not Detected
Benzene	14	0.044	Not Detected	Not Detected
1,2-Dichloroethane	14	0.056	Not Detected	Not Detected
Trichloroethene	14	0.074	Not Detected	Not Detected
1,2-Dichloropropane	14	0.064	Not Detected	Not Detected
cis-1,3-Dichloropropene	14	0.063	Not Detected	Not Detected
Toluene	14	0.052	Not Detected	Not Detected
trans-1,3-Dichloropropene	14	0.063	Not Detected	Not Detected
1,1,2-Trichloroethane	14	0.076	Not Detected	Not Detected
Tetrachloroethene	14	0.094	53	0.36
1,2-Dibromoethane (EDB)	14	0.11	Not Detected	Not Detected
Chlorobenzene	14	0.064	Not Detected	Not Detected
Ethyl Benzene	14	0.060	Not Detected	Not Detected
m,p-Xylene	14	0.060	Not Detected	Not Detected
o-Xylene	14	0.060	Not Detected	Not Detected
Styrene	14	0.059	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	14	0.095	Not Detected	Not Detected
1,3,5-Trimethylbenzene	14	0.068	Not Detected	Not Detected
1,2,4-Trimethylbenzene	14	0.068	Not Detected	Not Detected
1,3-Dichlorobenzene	14	0.083	Not Detected	Not Detected
1,4-Dichlorobenzene	14	0.083	Not Detected	Not Detected
alpha-Chlorotoluene	14	0.072	Not Detected	Not Detected
1,2-Dichlorobenzene	14	0.083	Not Detected	Not Detected
1,3-Butadiene	14	0.031	Not Detected	Not Detected
Hexane	14	0.049	Not Detected	Not Detected
Cyclohexane	14	0.048	Not Detected	Not Detected
Heptane	14	0.057	Not Detected	Not Detected
Bromodichloromethane	14	0.093	Not Detected	Not Detected
Dibromochloromethane	14	0.12	Not Detected	Not Detected

UJ

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SVE2-10

ID#: 0307168B-21A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071525	Date of Collection: 7/9/03
Dil. Factor:	27.3	Date of Analysis: 7/16/03

Trace

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	14	0.068	Not Detected	Not Detected
Propylbenzene	14	0.068	Not Detected	Not Detected
Chloromethane	55	0.11	Not Detected	Not Detected
1,2,4-Trichlorobenzene	55	0.41	Not Detected	Not Detected
Hexachlorobutadiene	55	0.59	Not Detected	Not Detected
Acetone	55	0.13	Not Detected	Not Detected
Carbon Disulfide	55	0.17	Not Detected	Not Detected
2-Propanol	55	0.14	Not Detected	Not Detected
trans-1,2-Dichloroethene	55	0.22	Not Detected	Not Detected
Vinyl Acetate	55	0.20	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	55	0.16	Not Detected	Not Detected
Tetrahydrofuran	55	0.16	Not Detected	Not Detected
1,4-Dioxane	55	0.20	Not Detected	Not Detected
4-Methyl-2-pentanone	55	0.23	Not Detected	Not Detected
2-Hexanone	55	0.23	Not Detected	Not Detected
Bromoform	55	0.57	Not Detected	Not Detected
4-Ethyltoluene	55	0.27	Not Detected	Not Detected
Methyl tert-butyl ether	55	0.20	Not Detected	Not Detected
Ethanol	55	0.10	Not Detected	Not Detected

WJ

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	83	70-130

*KE
10/9/03*

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 9, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0307200

Sample Identification

FCS-SP12-10
FCS-SP12-20
FCS-SP14-10
FCS-SP14-10 Duplicate
FCS-SP13-10
FCS-SP13-20
7D-SP12-10
7D-SP14-10
7D-SP15-10
10D-SP30-10
10D-SP30D-10
10D-SP31-10

Introduction

This data review covers twelve air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within the 70% - 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD).

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control

samples were reported by the laboratory. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307200-14A	Vinyl Chloride Chloroethane cis-1,3-Dichloropropene trans-1,3-Dichloropropene alpha-Chlorotoluene Chloromethane	121 (80-120) 123 (80-120) 123 (70-130) 128 (70-130) 122 (70-130) 145 (70-130)	All samples in the SDG	J detects	A
0307200-14A	Bromomethane 1,2,4-Trichlorobenzene Hexachlorobutadiene	73 (70-130) 69 (70-130) 74 (70-130)	All samples in the SDG	J detects UJ nondetects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not evaluated for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not evaluated for this SDG.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

Raw data were not evaluated for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples 10D-SP30-10 and 10D-SP30D-10 were identified as field duplicates. No volatiles

were detected in any of the samples with the following exceptions:

Compound	Concentration (ppbv)		RPD
	10D-SP30-10	10D-SP30D-10	
Heptane	5.7	5.2	9.2
Acetone	140	97	36
2-Butanone (MEK)	38	32	17
Ethanol	160	100	46

XVII. Field Blanks

No field blank samples were identified in this SDG.

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307200**

SDG	Sample	Compound	Flag	A or P	Reason
0307200	All samples in the SDG	Vinyl Chloride Chloroethane cis-1,3-Dichloropropene trans-1,3-Dichloropropene alpha-Chlorotoluene Chloromethane	J detects	A	LCS recovery above QC limits
0307200	All samples in the SDG	Bromomethane 1,2,4-Trichlorobenzene Hexachlorobutadiene	J detects, UJ nondetects	A	LCS recovery below QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307200**

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP12-10

ID#: 0307200-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071513	Date of Collection: 7/9/03
Dil. Factor:	8.36	Date of Analysis: 7/15/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	710	5.5
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	4.8	0.024
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	70	0.48
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	8.1	0.018
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP12-10

ID#: 0307200-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071513	Date of Collection: 7/9/03
Dil. Factor:	8.36	Date of Analysis: 7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	82	0.20
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	38	0.072

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	97	70-130

10/9/03

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP12-20

ID#: 0307200-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071514	Date of Collection: 7/9/03
Dil. Factor:	8.20	Date of Analysis: 7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.1	0.021	Not Detected	Not Detected
Freon 114	4.1	0.029	Not Detected	Not Detected
Vinyl Chloride	4.1	0.011	Not Detected	Not Detected
Bromomethane	4.1	0.016	Not Detected	Not Detected
Chloroethane	4.1	0.011	Not Detected	Not Detected
Freon 11	4.1	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Freon 113	4.1	0.032	250	2.0
Methylene Chloride	4.1	0.014	Not Detected	Not Detected
1,1-Dichloroethane	4.1	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Chloroform	4.1	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.1	0.026	Not Detected	Not Detected
Benzene	4.1	0.013	5.7	0.018
1,2-Dichloroethane	4.1	0.017	Not Detected	Not Detected
Trichloroethene	4.1	0.022	Not Detected	Not Detected
1,2-Dichloropropane	4.1	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
Toluene	4.1	0.016	22	0.085
trans-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Tetrachloroethene	4.1	0.028	57	0.39
1,2-Dibromoethane (EDB)	4.1	0.032	Not Detected	Not Detected
Chlorobenzene	4.1	0.019	Not Detected	Not Detected
Ethyl Benzene	4.1	0.018	4.7	0.021
m,p-Xylene	4.1	0.018	20	0.090
o-Xylene	4.1	0.018	9.1	0.040
Styrene	4.1	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.1	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.1	0.020	8.6	0.043
1,3-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.1	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,3-Butadiene	4.1	0.0092	13	0.029
Hexane	4.1	0.015	12	0.044
Cyclohexane	4.1	0.014	9.5	0.033
Heptane	4.1	0.017	12	0.049
Bromodichloromethane	4.1	0.028	Not Detected	Not Detected
Dibromochloromethane	4.1	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP12-20

ID#: 0307200-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071514	Date of Collection: 7/9/03
Dil. Factor:	8.20	Date of Analysis: 7/15/03

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Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.1	0.020	Not Detected	Not Detected
Propylbenzene	4.1	0.020	Not Detected	Not Detected
Chloromethane	16	0.034	Not Detected	Not Detected
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected
Acetone	16	0.040	370	0.90
Carbon Disulfide	16	0.052	Not Detected	Not Detected
2-Propanol	16	0.041	Not Detected	Not Detected
trans-1,2-Dichloroethene	16	0.066	Not Detected	Not Detected
Vinyl Acetate	16	0.059	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	0.049	63	0.19
Tetrahydrofuran	16	0.049	Not Detected	Not Detected
1,4-Dioxane	16	0.060	Not Detected	Not Detected
4-Methyl-2-pentanone	16	0.068	Not Detected	Not Detected
2-Hexanone	16	0.068	Not Detected	Not Detected
Bromoform	16	0.17	Not Detected	Not Detected
4-Ethyltoluene	16	0.082	Not Detected	Not Detected
Methyl tert-butyl ether	16	0.060	Not Detected	Not Detected
Ethanol	16	0.031	64	0.12

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	97	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP14-10

ID#: 0307200-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	1071518	Date of Collection: 7/9/03
Dil. Factor:	17.0	Date of Analysis: 7/16/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	8.5	0.043	Not Detected	Not Detected
Freon 114	8.5	0.060	Not Detected	Not Detected
Vinyl Chloride	8.5	0.022	Not Detected	Not Detected
Bromomethane	8.5	0.034	Not Detected	Not Detected
Chloroethane	8.5	0.023	Not Detected	Not Detected
Freon 11	8.5	0.048	Not Detected	Not Detected
1,1-Dichloroethene	8.5	0.034	Not Detected	Not Detected
Freon 113	8.5	0.066	2800	22
Methylene Chloride	8.5	0.030	Not Detected	Not Detected
1,1-Dichloroethane	8.5	0.035	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.5	0.034	Not Detected	Not Detected
Chloroform	8.5	0.042	Not Detected	Not Detected
1,1,1-Trichloroethane	8.5	0.047	Not Detected	Not Detected
Carbon Tetrachloride	8.5	0.054	Not Detected	Not Detected
Benzene	8.5	0.028	Not Detected	Not Detected
1,2-Dichloroethane	8.5	0.035	Not Detected	Not Detected
Trichloroethene	8.5	0.046	Not Detected	Not Detected
1,2-Dichloropropane	8.5	0.040	Not Detected	Not Detected
cis-1,3-Dichloropropene	8.5	0.039	Not Detected	Not Detected
Toluene	8.5	0.032	Not Detected	Not Detected
trans-1,3-Dichloropropene	8.5	0.039	Not Detected	Not Detected
1,1,2-Trichloroethane	8.5	0.047	Not Detected	Not Detected
Tetrachloroethene	8.5	0.059	320	2.2
1,2-Dibromoethane (EDB)	8.5	0.066	Not Detected	Not Detected
Chlorobenzene	8.5	0.040	Not Detected	Not Detected
Ethyl Benzene	8.5	0.038	Not Detected	Not Detected
m,p-Xylene	8.5	0.038	Not Detected	Not Detected
o-Xylene	8.5	0.038	Not Detected	Not Detected
Styrene	8.5	0.037	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.5	0.059	Not Detected	Not Detected
1,3,5-Trimethylbenzene	8.5	0.042	Not Detected	Not Detected
1,2,4-Trimethylbenzene	8.5	0.042	Not Detected	Not Detected
1,3-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
1,4-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
alpha-Chlorotoluene	8.5	0.045	Not Detected	Not Detected
1,2-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
1,3-Butadiene	8.5	0.019	16	0.036
Hexane	8.5	0.030	Not Detected	Not Detected
Cyclohexane	8.5	0.030	Not Detected	Not Detected
Heptane	8.5	0.035	Not Detected	Not Detected
Bromodichloromethane	8.5	0.058	Not Detected	Not Detected
Dibromochloromethane	8.5	0.074	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP14-10

ID#: 0307200-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071518	Date of Collection: 7/9/03
Dil. Factor:	17.0	Date of Analysis: 7/16/03

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Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	8.5	0.042	Not Detected	Not Detected
Propylbenzene	8.5	0.042	Not Detected	Not Detected
Chloromethane	34	0.071	Not Detected	Not Detected
1,2,4-Trichlorobenzene	34	0.26	Not Detected	Not Detected
Hexachlorobutadiene	34	0.37	Not Detected	Not Detected
Acetone	34	0.082	140	0.33
Carbon Disulfide	34	0.11	Not Detected	Not Detected
2-Propanol	34	0.085	Not Detected	Not Detected
trans-1,2-Dichloroethene	34	0.14	Not Detected	Not Detected
Vinyl Acetate	34	0.12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	34	0.10	Not Detected	Not Detected
Tetrahydrofuran	34	0.10	Not Detected	Not Detected
1,4-Dioxane	34	0.12	Not Detected	Not Detected
4-Methyl-2-pentanone	34	0.14	Not Detected	Not Detected
2-Hexanone	34	0.14	Not Detected	Not Detected
Bromoform	34	0.36	Not Detected	Not Detected
4-Ethyltoluene	34	0.17	Not Detected	Not Detected
Methyl tert-butyl ether	34	0.12	Not Detected	Not Detected
Ethanol	34	0.065	68	0.13

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP14-10 Duplicate

ID#: 0307200-03AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071519	Date of Collection: 7/9/03
Dil. Factor:	17.0	Date of Analysis: 7/16/03

Dual

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	8.5	0.043	Not Detected	Not Detected
Freon 114	8.5	0.060	Not Detected	Not Detected
Vinyl Chloride	8.5	0.022	Not Detected	Not Detected
Bromomethane	8.5	0.034	Not Detected	Not Detected
Chloroethane	8.5	0.023	Not Detected	Not Detected
Freon 11	8.5	0.048	Not Detected	Not Detected
1,1-Dichloroethene	8.5	0.034	Not Detected	Not Detected
Freon 113	8.5	0.066	2700	21
Methylene Chloride	8.5	0.030	Not Detected	Not Detected
1,1-Dichloroethane	8.5	0.035	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.5	0.034	Not Detected	Not Detected
Chloroform	8.5	0.042	Not Detected	Not Detected
1,1,1-Trichloroethane	8.5	0.047	Not Detected	Not Detected
Carbon Tetrachloride	8.5	0.054	Not Detected	Not Detected
Benzene	8.5	0.028	Not Detected	Not Detected
1,2-Dichloroethane	8.5	0.035	Not Detected	Not Detected
Trichloroethene	8.5	0.046	Not Detected	Not Detected
1,2-Dichloropropane	8.5	0.040	Not Detected	Not Detected
cis-1,3-Dichloropropene	8.5	0.039	Not Detected	Not Detected
Toluene	8.5	0.032	Not Detected	Not Detected
trans-1,3-Dichloropropene	8.5	0.039	Not Detected	Not Detected
1,1,2-Trichloroethane	8.5	0.047	Not Detected	Not Detected
Tetrachloroethene	8.5	0.059	310	2.1
1,2-Dibromoethane (EDB)	8.5	0.066	Not Detected	Not Detected
Chlorobenzene	8.5	0.040	Not Detected	Not Detected
Ethyl Benzene	8.5	0.038	Not Detected	Not Detected
m,p-Xylene	8.5	0.038	Not Detected	Not Detected
o-Xylene	8.5	0.038	Not Detected	Not Detected
Styrene	8.5	0.037	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.5	0.059	Not Detected	Not Detected
1,3,5-Trimethylbenzene	8.5	0.042	Not Detected	Not Detected
1,2,4-Trimethylbenzene	8.5	0.042	Not Detected	Not Detected
1,3-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
1,4-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
alpha-Chlorotoluene	8.5	0.045	Not Detected	Not Detected
1,2-Dichlorobenzene	8.5	0.052	Not Detected	Not Detected
1,3-Butadiene	8.5	0.019	15	0.034
Hexane	8.5	0.030	Not Detected	Not Detected
Cyclohexane	8.5	0.030	Not Detected	Not Detected
Heptane	8.5	0.035	Not Detected	Not Detected
Bromodichloromethane	8.5	0.058	Not Detected	Not Detected
Dibromochloromethane	8.5	0.074	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP14-10 Duplicate

ID#: 0307200-03AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071519	Date of Collection: 7/9/03
Dil. Factor:	17.0	Date of Analysis: 7/16/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	8.5	0.042	Not Detected	Not Detected
Propylbenzene	8.5	0.042	Not Detected	Not Detected
Chloromethane	34	0.071	Not Detected	Not Detected
1,2,4-Trichlorobenzene	34	0.26	Not Detected	Not Detected
Hexachlorobutadiene	34	0.37	Not Detected	Not Detected
Acetone	34	0.082	130	0.31
Carbon Disulfide	34	0.11	Not Detected	Not Detected
2-Propanol	34	0.085	Not Detected	Not Detected
trans-1,2-Dichloroethene	34	0.14	Not Detected	Not Detected
Vinyl Acetate	34	0.12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	34	0.10	Not Detected	Not Detected
Tetrahydrofuran	34	0.10	Not Detected	Not Detected
1,4-Dioxane	34	0.12	Not Detected	Not Detected
4-Methyl-2-pentanone	34	0.14	Not Detected	Not Detected
2-Hexanone	34	0.14	Not Detected	Not Detected
Bromoform	34	0.36	Not Detected	Not Detected
4-Ethyltoluene	34	0.17	Not Detected	Not Detected
Methyl tert-butyl ether	34	0.12	Not Detected	Not Detected
Ethanol	34	0.065	69	0.13

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	97	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP13-10

ID#: 0307200-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071515	Date of Collection: 7/9/03
Dil. Factor:	8.52	Date of Analysis: 7/16/03

DV dual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	130	1.0
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	100	0.70
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

US

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP13-10

ID#: 0307200-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071515	Date of Collection:	7/9/03
Dil. Factor:	8.52	Date of Analysis:	7/16/03

DV Qual -

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	30	0.074
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP13-20

ID#: 0307200-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071516	Date of Collection: 7/9/03
Dil. Factor:	8.52	Date of Analysis: 7/16/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	180	1.4
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	4.2 J	0.014 J
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	6.2	0.024
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	96	0.66
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	4.7	0.021
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	4.9	0.024
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	14	0.032
Hexane	4.3	0.015	6.0	0.021
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	5.7	0.024
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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NE 10/19/03

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP13-20

ID#: 0307200-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	1071516	Date of Collection: 7/9/03
Dil. Factor:	8.52	Date of Analysis: 7/16/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	91	0.22
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	22	0.067
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	22	0.043

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J = Estimated value.

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	97	70-130

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10/19/03

AIR TOXICS LTD.

SAMPLE NAME: 7D-SP12-10

ID#: 0307200-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071520	Date of Collection: 7/9/03
Dil. Factor:	17.3	Date of Analysis: 7/16/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	8.6	0.043	Not Detected	Not Detected
Freon 114	8.6	0.061	Not Detected	Not Detected
Vinyl Chloride	8.6	0.022	Not Detected	Not Detected
Bromomethane	8.6	0.034	Not Detected	Not Detected
Chloroethane	8.6	0.023	Not Detected	Not Detected
Freon 11	8.6	0.049	Not Detected	Not Detected
1,1-Dichloroethene	8.6	0.035	Not Detected	Not Detected
Freon 113	8.6	0.067	1800	14
Methylene Chloride	8.6	0.030	Not Detected	Not Detected
1,1-Dichloroethane	8.6	0.036	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.6	0.035	Not Detected	Not Detected
Chloroform	8.6	0.043	13	0.064
1,1,1-Trichloroethane	8.6	0.048	Not Detected	Not Detected
Carbon Tetrachloride	8.6	0.055	Not Detected	Not Detected
Benzene	8.6	0.028	Not Detected	Not Detected
1,2-Dichloroethane	8.6	0.036	Not Detected	Not Detected
Trichloroethene	8.6	0.047	41	0.22
1,2-Dichloropropane	8.6	0.041	Not Detected	Not Detected
cis-1,3-Dichloropropene	8.6	0.040	Not Detected	Not Detected
Toluene	8.6	0.033	Not Detected	Not Detected
trans-1,3-Dichloropropene	8.6	0.040	Not Detected	Not Detected
1,1,2-Trichloroethane	8.6	0.048	Not Detected	Not Detected
Tetrachloroethene	8.6	0.060	160	1.1
1,2-Dibromoethane (EDB)	8.6	0.068	Not Detected	Not Detected
Chlorobenzene	8.6	0.040	Not Detected	Not Detected
Ethyl Benzene	8.6	0.038	Not Detected	Not Detected
m,p-Xylene	8.6	0.038	Not Detected	Not Detected
o-Xylene	8.6	0.038	Not Detected	Not Detected
Styrene	8.6	0.037	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.6	0.060	Not Detected	Not Detected
1,3,5-Trimethylbenzene	8.6	0.043	Not Detected	Not Detected
1,2,4-Trimethylbenzene	8.6	0.043	Not Detected	Not Detected
1,3-Dichlorobenzene	8.6	0.053	Not Detected	Not Detected
1,4-Dichlorobenzene	8.6	0.053	Not Detected	Not Detected
alpha-Chlorotoluene	8.6	0.046	Not Detected	Not Detected
1,2-Dichlorobenzene	8.6	0.053	Not Detected	Not Detected
1,3-Butadiene	8.6	0.019	12	0.027
Hexane	8.6	0.031	Not Detected	Not Detected
Cyclohexane	8.6	0.030	Not Detected	Not Detected
Heptane	8.6	0.036	Not Detected	Not Detected
Bromodichloromethane	8.6	0.059	Not Detected	Not Detected
Dibromochloromethane	8.6	0.075	Not Detected	Not Detected

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NE 10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 7D-SP12-10

ID#: 0307200-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071520	Date of Collection: 7/9/03
Dil. Factor:	17.3	Date of Analysis: 7/16/03

D Qual.

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Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	8.6	0.043	Not Detected	Not Detected
Propylbenzene	8.6	0.043	Not Detected	Not Detected
Chloromethane	35	0.073	Not Detected	Not Detected
1,2,4-Trichlorobenzene	35	0.26	Not Detected	Not Detected
Hexachlorobutadiene	35	0.38	Not Detected	Not Detected
Acetone	35	0.084	320	0.78
Carbon Disulfide	35	0.11	Not Detected	Not Detected
2-Propanol	35	0.086	Not Detected	Not Detected
trans-1,2-Dichloroethene	35	0.14	Not Detected	Not Detected
Vinyl Acetate	35	0.12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	35	0.10	60	0.18
Tetrahydrofuran	35	0.10	Not Detected	Not Detected
1,4-Dioxane	35	0.13	Not Detected	Not Detected
4-Methyl-2-pentanone	35	0.14	Not Detected	Not Detected
2-Hexanone	35	0.14	Not Detected	Not Detected
Bromoform	35	0.36	Not Detected	Not Detected
4-Ethyltoluene	35	0.17	Not Detected	Not Detected
Methyl tert-butyl ether	35	0.13	Not Detected	Not Detected
Ethanol	35	0.066	62	0.12

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: 7D-SP14-10

ID#: 0307200-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071517	Date of Collection: 7/9/03
Dil. Factor:	8.64	Date of Analysis: 7/16/03

DV Qual.

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Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	16	0.12
Methylene Chloride	4.3	0.015	4.5	0.016
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	5.1	0.028
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	13	0.070
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	110	0.79
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	6.4	0.014
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 7D-SP14-10

ID#: 0307200-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071517	Date of Collection: 7/9/03
Dil. Factor:	8.64	Date of Analysis: 7/16/03

DV Dual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	87	0.21
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	26	0.078
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	48	0.093

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	96	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 7D-SP15-10

ID#: 0307200-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071512	Date of Collection: 7/9/03
Dil. Factor:	8.52	Date of Analysis: 7/15/03

DV actual.

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Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	78	0.61
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	6.9	0.038
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	32	0.17
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	300	2.1
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	8.4	0.019
Hexane	4.3	0.015	4.3	0.015
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 7D-SP15-10

ID#: 0307200-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071512	Date of Collection: 7/9/03
Dil. Factor:	8.52	Date of Analysis: 7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	250	0.62
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	43	0.13
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	45	0.086

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 10D-SP30-10

ID#: 0307200-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071511	Date of Collection:	7/9/03
Dil. Factor:	8.36	Date of Analysis:	7/15/03

Dual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	5.7	0.024
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: 10D-SP30-10

ID#: 0307200-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071511	Date of Collection: 7/9/03
Dil. Factor:	8.36	Date of Analysis: 7/15/03

DV Dual

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	140	0.34
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	38	0.12
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	160	0.31

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: 10D-SP30D-10

ID#: 0307200-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071510	Date of Collection: 7/9/03
Dil. Factor:	8.64	Date of Analysis: 7/15/03

DV Qual -

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	5.2	0.022
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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NE 10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 10D-SP30D-10

ID#: 0307200-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071510	Date of Collection: 7/9/03
Dil. Factor:	8.64	Date of Analysis: 7/15/03

DV Anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	97	0.23
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	32	0.097
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	100	0.20

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	97	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: 10D-SP31-10

ID#: 0307200-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	1071509	Date of Collection: 7/9/03
Dil. Factor:	8.36	Date of Analysis: 7/15/03

WQual

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	5.9	0.022
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	8.8	0.039
o-Xylene	4.2	0.018	4.2	0.018
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	4.7	0.024
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	5.9	0.013
Hexane	4.2	0.015	5.9	0.021
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: 10D-SP31-10

ID#: 0307200-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i071509	Date of Collection: 7/9/03
Dil. Factor:	8.36	Date of Analysis: 7/15/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	87	0.21
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	22	0.065
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	52	0.10

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

0168 *WJ*
10/19/03

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 10, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0307209

Sample Identification

10D-SP34-10
4D-SP23-10
11D-SP22-10
11D-SP25-10
11D-SP25D-10

Introduction

This data review covers five air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds with the following exception:

Date	Compound	%RSD	Associated Samples	Flag	A or P
7/8/03	Chloromethane	31	All samples in this SDG	J detects UJ nondetects	A

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within 70% - 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD).

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307209-14A	Carbon Tetrachloride cis-1,3-Dichloropropene trans-1,3-Dichloropropene 4-Methyl-2-pentanone 2-Hexanone 4-Ethyltoluene	124 (80-120) 136 (70-130) 123 (70-130) 127 (70-130) 122 (70-130) 122 (70-130)	10D-SP34-10 4D-SP23-10 11D-SP22-10 11D-SP25-10	J detects	A
0307209-14A	1,2,4-Trimethylbenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene	69 (70-130) 79 (70-130) 68 (70-130) 79 (70-130)	10D-SP34-10 4D-SP23-10 11D-SP22-10 11D-SP25-10	J detects, UJ nondetects	A
0307209-14B	cis-1,3-Dichloropropene 4-Methyl-2-pentanone 4-Ethyltoluene	130 (70-130) 123 (70-130) 122 (70-130)	11D-SP25D-10	J detects	A
0307209-14B	1,2,4-Trimethylbenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene Propylbenzene	68 (70-130) 78 (70-130) 69 (70-130) 76 (70-130) 79 (70-130)	11D-SP25D-10	J detects, UJ nondetects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not evaluated for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not evaluated for this SDG.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

Raw data were not evaluated for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples 11D-SP25-10 and 11D-SP25D-10 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ppbv)		RPD
	11D-SP25-10	11D-SP25D-10	
Methylene Chloride	10	10	9.5
Tetrachloroethene	10	9.7	3.0
Acetone	65	55	20
Ethanol	49	55	12

XVII. Field Blanks

Although sample 11D-TB71003 was identified as a trip blank sample, it was not selected for validation. Acetone and ethanol were detected in this blank at concentrations of 35 ppbv and 240 ppbv, respectively.

Sample concentrations were compared to concentrations detected in the trip blank. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration (ppbv)	Modified Final Concentration
10D-SP34-10	Acetone	25	25U
10D-SP34-10	Ethanol	23	23U
4D-SP23-10	Acetone	94	94U

Sample	Compound TIC (RT in minutes)	Reported Concentration (ppbv)	Modified Final Concentration
11D-SP22-10	Acetone	290	290U
11D-SP22-10	Ethanol	74	74U
11D-SP25-10	Acetone	65	65U
11D-SP25-10	Ethanol	49	49U
11D-SP25D-10	Acetone	53	53U
11D-SP25D-10	Ethanol	55	55U

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307209**

SDG	Sample	Compound	Flag	A or P	Reason
0307209	All samples in the SDG	Chloromethane	J detects, UJ nondetects	A	ICAL %RSD outside QC limits
0307209	10D-SP34-10 4D-SP23-10 11D-SP22-10 11D-SP25-10	Carbon Tetrachloride cis-1,3-Dichloropropene trans-1,3-Dichloropropene 4-Methyl-2-pentanone 2-Hexanone 4-Ethyltoluene	J detects	A	LCS recovery above QC limits
0307209	10D-SP34-10 4D-SP23-10 11D-SP22-10 11D-SP25-10	1,2,4-Trimethylbenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene	J detects, UJ nondetects	A	LCS recovery above QC limits
0307209	11D-SP25D-10	cis-1,3-Dichloropropene 4-Methyl-2-pentanone 4-Ethyltoluene	J detects	A	LCS recovery above QC limits
0307209	11D-SP25D-10	1,2,4-Trimethylbenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene Propylbenzene	J detects, UJ nondetects	A	LCS recovery below QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307209**

No Sample Data Qualified in this SDG

**Aerojet
Volatiles (TO-14A) - Field Blank Data Qualification Summary - SDG 0307209**

SDG	Sample	Compound	Flag	A or P	Reason
0307209	11D-SP22-10 4D-SP23-10 11D-SP22-10 11D-SP25-10 11D-SP25D-10	Acetone	U	A	Trip blank contamination
0307209	11D-SP22-10 11D-SP22-10 11D-SP25-10 11D-SP25D-10	Ethanol	U	A	Trip blank contamination

AIR TOXICS LTD.

SAMPLE NAME: 10D-SP34-10

ID#: 0307209-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071618	Date of Collection: 7/10/03
Dil. Factor:	8.36	Date of Analysis: 7/16/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	20	0.15
Methylene Chloride	4.2	0.015	7.2	0.025
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	7.5	0.017
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 10D-SP34-10

ID#: 0307209-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071618	Date of Collection: 7/10/03
Dil. Factor:	8.36	Date of Analysis: 7/16/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	25	0.060
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected
Tetrahydrofuran	17	0.050	18	0.053
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	23	0.044

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	86	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 4D-SP23-10

ID#: 0307209-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071619	Date of Collection: 7/10/03
Dil. Factor:	11.0	Date of Analysis: 7/16/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	5.5	0.028	Not Detected	Not Detected
Freon 114	5.5	0.039	Not Detected	Not Detected
Vinyl Chloride	5.5	0.014	Not Detected	Not Detected
Bromomethane	5.5	0.022	Not Detected	Not Detected
Chloroethane	5.5	0.015	Not Detected	Not Detected
Freon 11	5.5	0.031	Not Detected	Not Detected
1,1-Dichloroethene	5.5	0.022	Not Detected	Not Detected
Freon 113	5.5	0.043	34	0.27
Methylene Chloride	5.5	0.019	Not Detected	Not Detected
1,1-Dichloroethane	5.5	0.023	Not Detected	Not Detected
cis-1,2-Dichloroethene	5.5	0.022	Not Detected	Not Detected
Chloroform	5.5	0.027	Not Detected	Not Detected
1,1,1-Trichloroethane	5.5	0.030	Not Detected	Not Detected
Carbon Tetrachloride	5.5	0.035	Not Detected	Not Detected
Benzene	5.5	0.018	10	0.033
1,2-Dichloroethane	5.5	0.023	Not Detected	Not Detected
Trichloroethene	5.5	0.030	Not Detected	Not Detected
1,2-Dichloropropane	5.5	0.026	Not Detected	Not Detected
cis-1,3-Dichloropropene	5.5	0.025	Not Detected	Not Detected
Toluene	5.5	0.021	11	0.042
trans-1,3-Dichloropropene	5.5	0.025	Not Detected	Not Detected
1,1,2-Trichloroethane	5.5	0.030	Not Detected	Not Detected
Tetrachloroethene	5.5	0.038	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	5.5	0.043	Not Detected	Not Detected
Chlorobenzene	5.5	0.026	Not Detected	Not Detected
Ethyl Benzene	5.5	0.024	Not Detected	Not Detected
m,p-Xylene	5.5	0.024	Not Detected	Not Detected
o-Xylene	5.5	0.024	Not Detected	Not Detected
Styrene	5.5	0.024	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	5.5	0.038	Not Detected	Not Detected
1,3,5-Trimethylbenzene	5.5	0.027	Not Detected	Not Detected
1,2,4-Trimethylbenzene	5.5	0.027	Not Detected	Not Detected
1,3-Dichlorobenzene	5.5	0.034	Not Detected	Not Detected
1,4-Dichlorobenzene	5.5	0.034	Not Detected	Not Detected
alpha-Chlorotoluene	5.5	0.029	Not Detected	Not Detected
1,2-Dichlorobenzene	5.5	0.034	Not Detected	Not Detected
1,3-Butadiene	5.5	0.012	34	0.078
Hexane	5.5	0.020	24	0.087
Cyclohexane	5.5	0.019	Not Detected	Not Detected
Heptane	5.5	0.023	12	0.051
Bromodichloromethane	5.5	0.037	Not Detected	Not Detected
Dibromochloromethane	5.5	0.048	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 4D-SP23-10

ID#: 0307209-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071619	Date of Collection: 7/10/03
Dil. Factor:	11.0	Date of Analysis: 7/16/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	5.5	0.027	Not Detected	Not Detected
Propylbenzene	5.5	0.027	Not Detected	Not Detected
Chloromethane	22	0.046	Not Detected	Not Detected
1,2,4-Trichlorobenzene	22	0.16	Not Detected	Not Detected
Hexachlorobutadiene	22	0.24	Not Detected	Not Detected
Acetone	22	0.053	94	0.22
Carbon Disulfide	22	0.070	Not Detected	Not Detected
2-Propanol	22	0.055	Not Detected	Not Detected
trans-1,2-Dichloroethene	22	0.089	Not Detected	Not Detected
Vinyl Acetate	22	0.079	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	22	0.066	Not Detected	Not Detected
Tetrahydrofuran	22	0.066	27	0.081
1,4-Dioxane	22	0.080	Not Detected	Not Detected
4-Methyl-2-pentanone	22	0.092	Not Detected	Not Detected
2-Hexanone	22	0.092	Not Detected	Not Detected
Bromoform	22	0.23	Not Detected	Not Detected
4-Ethyltoluene	22	0.11	Not Detected	Not Detected
Methyl tert-butyl ether	22	0.081	Not Detected	Not Detected
Ethanol	22	0.042	Not Detected	Not Detected

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	85	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 11D-SP22-10

ID#: 0307209-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071620	Date of Collection: 7/10/03
Dil. Factor:	8.52	Date of Analysis: 7/16/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	5.8	0.020
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	93	0.46
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	13	0.029
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	6.1	0.026
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 11D-SP22-10

ID#: 0307209-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071620	Date of Collection: 7/10/03
Dil. Factor:	8.52	Date of Analysis: 7/16/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	290	0.70
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	83	0.25
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	74	0.14

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	82	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 11D-SP25-10

ID#: 0307209-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071624	Date of Collection:	7/10/03
Dil. Factor:	8.64	Date of Analysis:	7/16/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	10	0.037
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	10	0.069
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 11D-SP25-10

ID#: 0307209-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071624	Date of Collection: 7/10/03
Dil. Factor:	8.64	Date of Analysis: 7/16/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	65	0.16
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	Not Detected	Not Detected
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	49	0.094

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Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	113	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	82	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 11D-SP25D-10

ID#: 0307209-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071705	Date of Collection:	7/10/03
Dil. Factor:	8.64	Date of Analysis:	7/17/03

DV Qual -

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	11	0.038
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	9.7	0.067
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 11D-SP25D-10

ID#: 0307209-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071705	Date of Collection: 7/10/03
Dil. Factor:	8.64	Date of Analysis: 7/17/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)	
Cumene	4.3	0.022	Not Detected	Not Detected	
Propylbenzene	4.3	0.022	Not Detected	Not Detected	
Chloromethane	17	0.036	Not Detected	Not Detected	<i>UJ</i>
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected	
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected	
Acetone	17	0.042	53	0.13	<i>U</i>
Carbon Disulfide	17	0.055	Not Detected	Not Detected	
2-Propanol	17	0.043	Not Detected	Not Detected	
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected	
Vinyl Acetate	17	0.062	Not Detected	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	17	0.052	Not Detected	Not Detected	
Tetrahydrofuran	17	0.052	Not Detected	Not Detected	
1,4-Dioxane	17	0.063	Not Detected	Not Detected	
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected	
2-Hexanone	17	0.072	Not Detected	Not Detected	
Bromoform	17	0.18	Not Detected	Not Detected	
4-Ethyltoluene	17	0.086	Not Detected	Not Detected	
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected	
Ethanol	17	0.033	55	0.10	<i>U</i>

Container Type: Sample Cylinder

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	84	70-130

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 11D-TB71003

ID#: 0307209-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071706	Date of Collection: 7/10/03
Dil. Factor:	8.36	Date of Analysis: 7/17/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 11D-TB71003

ID#: 0307209-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b071706	Date of Collection: 7/10/03
Dil. Factor:	8.36	Date of Analysis: 7/17/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)	
Cumene	4.2	0.021	Not Detected	Not Detected	
Propylbenzene	4.2	0.021	Not Detected	Not Detected	<i>UJ</i>
Chloromethane	17	0.035	Not Detected	Not Detected	<i>UJ</i>
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected	
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected	
Acetone	17	0.040	35	0.084	<i>U</i>
Carbon Disulfide	17	0.053	Not Detected	Not Detected	
2-Propanol	17	0.042	Not Detected	Not Detected	
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected	
Vinyl Acetate	17	0.060	Not Detected	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected	
Tetrahydrofuran	17	0.050	Not Detected	Not Detected	
1,4-Dioxane	17	0.061	Not Detected	Not Detected	
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected	
2-Hexanone	17	0.070	Not Detected	Not Detected	
Bromoform	17	0.18	Not Detected	Not Detected	
4-Ethyltoluene	17	0.084	Not Detected	Not Detected	
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected	
Ethanol	17	0.032	240	0.46	<i>U</i>

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	86	70-130

UJ
10/9/03

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 11, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0307254

Sample Identification

11D-SP23-5
11D-SP23-5 Duplicate

Introduction

This data review covers two air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0% with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
7/21/03	Methyl tert-butyl ether (MTBE)	37	All samples in the SDG	J detects UJ nondetects	P

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within the 70% - 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the

method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD).

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307254-09A	1,4-Dichlorobenzene	78 (80-120)	All samples in the SDG	J detects, UJ nondetects	A
	1,2-Dichlorobenzene	79 (80-120)			
	Hexane	69 (80-120)			
	Cyclohexane	76 (80-120)			
	Heptane	77 (80-120)			
	Bromodichloromethane	73 (80-120)			
	Propylbenzene	78 (80-120)			
	Carbon Disulfide	78 (80-120)			
	2-Propanol	77 (80-120)			
	2-Butanone (MEK)	79 (80-120)			
	Tetrahydrofuran	79 (80-120)			
	Bromoform	68 (80-120)			
	MTBE	62 (80-120)			
	Ethanol	70 (80-120)			
0307254-09A	Hexachlorobutadiene	122 (80-120)	All samples in the SDG	J detects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not evaluated for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not evaluated for this SDG.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

Raw data were not evaluated for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicate samples were identified in this SDG.

XVII. Field Blanks

No field blank samples were identified in this SDG.

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307254**

SDG	Sample	Compound	Flag	A or P	Reason
0307254	All samples in the SDG	MTBE	J detects, UJ nondetects	P	CCV %D outside QC limits
0307254	All samples in the SDG	1,4-Dichlorobenzene 1,2-Dichlorobenzene Hexane Cyclohexane Heptane Bromodichloromethane Propylbenzene Carbon Disulfide 2-Propanol 2-Butanone (MEK) Tetrahydrofuran Bromoform MTBE Ethanol	J detects, UJ nondetects	A	LCS recovery below QC limits
0307254	All samples in the SDG	Hexachlorobutadiene	J detects	A	LCS recovery above QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307254**

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: 11D-SP23-5

ID#: 0307254-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d072108	Date of Collection:	7/11/03
Dil. Factor:	8.08	Date of Analysis:	7/21/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.0	0.020	Not Detected	Not Detected
Freon 114	4.0	0.029	Not Detected	Not Detected
Vinyl Chloride	4.0	0.010	Not Detected	Not Detected
Bromomethane	4.0	0.016	Not Detected	Not Detected
Chloroethane	4.0	0.011	Not Detected	Not Detected
Freon 11	4.0	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.0	0.016	Not Detected	Not Detected
Freon 113	4.0	0.031	Not Detected	Not Detected
Methylene Chloride	4.0	0.014	Not Detected	Not Detected
1,1-Dichloroethane	4.0	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.0	0.016	Not Detected	Not Detected
Chloroform	4.0	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.0	0.022	Not Detected	Not Detected
Carbon Tetrachloride	4.0	0.026	Not Detected	Not Detected
Benzene	4.0	0.013	Not Detected	Not Detected
1,2-Dichloroethane	4.0	0.017	Not Detected	Not Detected
Trichloroethene	4.0	0.022	Not Detected	Not Detected
1,2-Dichloropropane	4.0	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.0	0.019	Not Detected	Not Detected
Toluene	4.0	0.015	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.0	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.0	0.022	Not Detected	Not Detected
Tetrachloroethene	4.0	0.028	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.0	0.032	Not Detected	Not Detected
Chlorobenzene	4.0	0.019	Not Detected	Not Detected
Ethyl Benzene	4.0	0.018	Not Detected	Not Detected
m,p-Xylene	4.0	0.018	Not Detected	Not Detected
o-Xylene	4.0	0.018	Not Detected	Not Detected
Styrene	4.0	0.017	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.0	0.028	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.0	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.0	0.020	Not Detected	Not Detected
1,3-Dichlorobenzene	4.0	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.0	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.0	0.021	Not Detected	Not Detected
1,2-Dichlorobenzene	4.0	0.025	Not Detected	Not Detected
1,3-Butadiene	4.0	0.0091	Not Detected	Not Detected
Hexane	4.0	0.014	Not Detected	Not Detected
Cyclohexane	4.0	0.014	Not Detected	Not Detected
Heptane	4.0	0.017	Not Detected	Not Detected
Bromodichloromethane	4.0	0.028	Not Detected	Not Detected
Dibromochloromethane	4.0	0.035	Not Detected	Not Detected

UJ

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AIR TOXICS LTD.

SAMPLE NAME: 11D-SP23-5

ID#: 0307254-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d072108	Date of Collection: 7/11/03
Dil. Factor:	8.08	Date of Analysis: 7/21/03

DV Qual -

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)	
Cumene	4.0	0.020	Not Detected	Not Detected	
Propylbenzene	4.0	0.020	Not Detected	Not Detected	UJ
Chloromethane	16	0.034	Not Detected	Not Detected	
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected	
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected	
Acetone	16	0.039	24	0.059	
Carbon Disulfide	16	0.051	Not Detected	Not Detected	UJ
2-Propanol	16	0.040	Not Detected	Not Detected	UJ
trans-1,2-Dichloroethene	16	0.065	Not Detected	Not Detected	
Vinyl Acetate	16	0.058	Not Detected	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	16	0.048	Not Detected	Not Detected	UJ
Tetrahydrofuran	16	0.048	Not Detected	Not Detected	UJ
1,4-Dioxane	16	0.059	Not Detected	Not Detected	
4-Methyl-2-pentanone	16	0.067	Not Detected	Not Detected	
2-Hexanone	16	0.067	Not Detected	Not Detected	
Bromoform	16	0.17	Not Detected	Not Detected	UJ
4-Ethyltoluene	16	0.081	Not Detected	Not Detected	
Methyl tert-butyl ether	16	0.059	Not Detected U J	Not Detected U J	UJ
Ethanol	16	0.031	Not Detected	Not Detected	UJ

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	85	70-130
4-Bromofluorobenzene	82	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: 11D-SP23-5 Duplicate

ID#: 0307254-01AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d072109	Date of Collection: 7/11/03
Dil. Factor:	8.08	Date of Analysis: 7/21/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.0	0.020	Not Detected	Not Detected
Freon 114	4.0	0.029	Not Detected	Not Detected
Vinyl Chloride	4.0	0.010	Not Detected	Not Detected
Bromomethane	4.0	0.016	Not Detected	Not Detected
Chloroethane	4.0	0.011	Not Detected	Not Detected
Freon 11	4.0	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.0	0.016	Not Detected	Not Detected
Freon 113	4.0	0.031	Not Detected	Not Detected
Methylene Chloride	4.0	0.014	Not Detected	Not Detected
1,1-Dichloroethane	4.0	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.0	0.016	Not Detected	Not Detected
Chloroform	4.0	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.0	0.022	Not Detected	Not Detected
Carbon Tetrachloride	4.0	0.026	Not Detected	Not Detected
Benzene	4.0	0.013	Not Detected	Not Detected
1,2-Dichloroethane	4.0	0.017	Not Detected	Not Detected
Trichloroethene	4.0	0.022	Not Detected	Not Detected
1,2-Dichloropropane	4.0	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.0	0.019	Not Detected	Not Detected
Toluene	4.0	0.015	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.0	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.0	0.022	Not Detected	Not Detected
Tetrachloroethene	4.0	0.028	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.0	0.032	Not Detected	Not Detected
Chlorobenzene	4.0	0.019	Not Detected	Not Detected
Ethyl Benzene	4.0	0.018	Not Detected	Not Detected
m,p-Xylene	4.0	0.018	Not Detected	Not Detected
o-Xylene	4.0	0.018	Not Detected	Not Detected
Styrene	4.0	0.017	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.0	0.028	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.0	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.0	0.020	Not Detected	Not Detected
1,3-Dichlorobenzene	4.0	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.0	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.0	0.021	Not Detected	Not Detected
1,2-Dichlorobenzene	4.0	0.025	Not Detected	Not Detected
1,3-Butadiene	4.0	0.0091	Not Detected	Not Detected
Hexane	4.0	0.014	Not Detected	Not Detected
Cyclohexane	4.0	0.014	Not Detected	Not Detected
Heptane	4.0	0.017	Not Detected	Not Detected
Bromodichloromethane	4.0	0.028	Not Detected	Not Detected
Dibromochloromethane	4.0	0.035	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 11D-SP23-5 Duplicate

ID#: 0307254-01AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d072109	Date of Collection: 7/11/03
Dil. Factor:	8.08	Date of Analysis: 7/21/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)	
Cumene	4.0	0.020	Not Detected	Not Detected	
Propylbenzene	4.0	0.020	Not Detected	Not Detected	UJ
Chloromethane	16	0.034	Not Detected	Not Detected	
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected	
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected	UJ
Acetone	16	0.039	24	0.059	
Carbon Disulfide	16	0.051	Not Detected	Not Detected	UJ
2-Propanol	16	0.040	Not Detected	Not Detected	UJ
trans-1,2-Dichloroethene	16	0.065	Not Detected	Not Detected	
Vinyl Acetate	16	0.058	Not Detected	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	16	0.048	Not Detected	Not Detected	UJ
Tetrahydrofuran	16	0.048	Not Detected	Not Detected	UJ
1,4-Dioxane	16	0.059	Not Detected	Not Detected	
4-Methyl-2-pentanone	16	0.067	Not Detected	Not Detected	
2-Hexanone	16	0.067	Not Detected	Not Detected	
Bromoform	16	0.17	Not Detected	Not Detected	UJ
4-Ethyltoluene	16	0.081	Not Detected	Not Detected	
Methyl tert-butyl ether	16	0.059	Not Detected U J	Not Detected U J	UJ
Ethanol	16	0.031	Not Detected	Not Detected	UJ

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	86	70-130
4-Bromofluorobenzene	83	70-130

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10/19/03*

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 14, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III & IV Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0307274

Sample Identification

35D-SP26-10
35D-SP26-20
35D-SP26-20 Duplicate
35D-SP29-10**
35D-SP29D-10
35D-SP29-20

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers six air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within the 70% - 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD).

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control

samples were reported by the laboratory. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307274-14A	cis-1,3-Dichloropropene trans-1,3- Dichloropropene alpha-Chlorotoluene 1,2,4-Trichlorobenzene Hexachlorobutadiene 4-Ethyltoluene	123 (80-120) 123 (80-120) 130 (80-120) 135 (70-130) 141 (70-131) 142 (70-130)	All samples in the SDG	J detects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

The system performance was within validation criteria for samples on which an EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples 35D-SP29-10 and 35D-SP29D-10 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ppbv)		RPD
	35D-SP29-10	35D-SP29D-10	
Cis-1,2-Dichloroethene	14	13	7.4
1,1,1-Trichloroethane	6.8	5.9	14
Trichloroethene	550	500	9.5
Toluene	17	16	6.1
Tetrachloroethene	240	210	13
m,p-Xylene	14	13	7.4
o-Xylene	6.6	6.5	1.5
Heptane	5.9	4.6	25
Acetone	54	33	48

XVII. Field Blanks

There were no field blank samples identified in this SDG.

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307274**

SDG	Sample	Compound	Flag	A or P	Reason
0307274	All samples in SDG	cis-1,3-Dichloropropene trans-1,3- Dichloropropene alpha-Chlorotoluene 1,2,4-Trichlorobenzene Hexachlorobutadiene 4-Ethyltoluene	J detects	A	LCS recoveries above QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307274**

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: 35D-SP29D-10

ID#: 0307274-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i072224	Date of Collection: 7/14/03
Dil. Factor:	8.52	Date of Analysis: 7/23/03

bv Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	13	0.051
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	5.9	0.033
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	500	2.7
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	16	0.063
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	210	1.4
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	13	0.058
o-Xylene	4.3	0.019	6.5	0.029
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	4.6	0.019
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 35D-SP29D-10

ID#: 0307274-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i072224	Date of Collection:	7/14/03
Dil. Factor:	8.52	Date of Analysis:	7/23/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	33	0.079
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	96	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 35D-SP29-20

ID#: 0307274-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i072226	Date of Collection: 7/14/03
Dil. Factor:	8.52	Date of Analysis: 7/23/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	11	0.044
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	4.6	0.026
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	6.0	0.020
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	370	2.0
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	24	0.090
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	150	1.0
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	6.3	0.028
m,p-Xylene	4.3	0.019	24	0.10
o-Xylene	4.3	0.019	12	0.054
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	4.4	0.022
1,2,4-Trimethylbenzene	4.3	0.021	16	0.080
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	9.6	0.022
Hexane	4.3	0.015	7.8	0.028
Cyclohexane	4.3	0.015	8.8	0.031
Heptane	4.3	0.018	9.0	0.038
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 35D-SP29-20

ID#: 0307274-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	1072226	Date of Collection: 7/14/03
Dil. Factor:	8.52	Date of Analysis: 7/23/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	210	0.52
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	49	0.15
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	35	0.067

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	97	70-130

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 35D-SP26-10

ID#: 0307274-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i072216	Date of Collection: 7/14/03
Dil. Factor:	8.20	Date of Analysis: 7/23/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.1	0.021	Not Detected	Not Detected
Freon 114	4.1	0.029	Not Detected	Not Detected
Vinyl Chloride	4.1	0.011	Not Detected	Not Detected
Bromomethane	4.1	0.016	Not Detected	Not Detected
Chloroethane	4.1	0.011	Not Detected	Not Detected
Freon 11	4.1	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Freon 113	4.1	0.032	Not Detected	Not Detected
Methylene Chloride	4.1	0.014	Not Detected	Not Detected
1,1-Dichloroethane	4.1	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Chloroform	4.1	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.1	0.026	Not Detected	Not Detected
Benzene	4.1	0.013	Not Detected	Not Detected
1,2-Dichloroethane	4.1	0.017	Not Detected	Not Detected
Trichloroethene	4.1	0.022	36	0.20
1,2-Dichloropropane	4.1	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
Toluene	4.1	0.016	16	0.064
trans-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Tetrachloroethene	4.1	0.028	98	0.68
1,2-Dibromoethane (EDB)	4.1	0.032	Not Detected	Not Detected
Chlorobenzene	4.1	0.019	Not Detected	Not Detected
Ethyl Benzene	4.1	0.018	Not Detected	Not Detected
m,p-Xylene	4.1	0.018	17	0.076
o-Xylene	4.1	0.018	7.5	0.033
Styrene	4.1	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.1	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.1	0.020	8.4	0.042
1,3-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.1	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,3-Butadiene	4.1	0.0092	6.1	0.014
Hexane	4.1	0.015	5.6	0.020
Cyclohexane	4.1	0.014	5.7	0.020
Heptane	4.1	0.017	5.4	0.022
Bromodichloromethane	4.1	0.028	Not Detected	Not Detected
Dibromochloromethane	4.1	0.036	Not Detected	Not Detected

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10/19/03

AIR TOXICS LTD.

SAMPLE NAME: 35D-SP26-10

ID#: 0307274-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i072216	Date of Collection: 7/14/03
Dil. Factor:	8.20	Date of Analysis: 7/23/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.1	0.020	Not Detected	Not Detected
Propylbenzene	4.1	0.020	Not Detected	Not Detected
Chloromethane	16	0.034	Not Detected	Not Detected
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected
Acetone	16	0.040	120	0.29
Carbon Disulfide	16	0.052	Not Detected	Not Detected
2-Propanol	16	0.041	Not Detected	Not Detected
trans-1,2-Dichloroethene	16	0.066	Not Detected	Not Detected
Vinyl Acetate	16	0.059	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	0.049	21	0.062
Tetrahydrofuran	16	0.049	Not Detected	Not Detected
1,4-Dioxane	16	0.060	Not Detected	Not Detected
4-Methyl-2-pentanone	16	0.068	Not Detected	Not Detected
2-Hexanone	16	0.068	Not Detected	Not Detected
Bromoform	16	0.17	Not Detected	Not Detected
4-Ethyltoluene	16	0.082	Not Detected	Not Detected
Methyl tert-butyl ether	16	0.060	Not Detected	Not Detected
Ethanol	16	0.031	24	0.045

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	97	70-130

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 35D-SP26-20

ID#: 0307274-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i072217	Date of Collection: 7/14/03
Dil. Factor:	8.20	Date of Analysis: 7/23/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.1	0.021	Not Detected	Not Detected
Freon 114	4.1	0.029	Not Detected	Not Detected
Vinyl Chloride	4.1	0.011	Not Detected	Not Detected
Bromomethane	4.1	0.016	Not Detected	Not Detected
Chloroethane	4.1	0.011	Not Detected	Not Detected
Freon 11	4.1	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Freon 113	4.1	0.032	Not Detected	Not Detected
Methylene Chloride	4.1	0.014	Not Detected	Not Detected
1,1-Dichloroethane	4.1	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Chloroform	4.1	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.1	0.026	Not Detected	Not Detected
Benzene	4.1	0.013	Not Detected	Not Detected
1,2-Dichloroethane	4.1	0.017	Not Detected	Not Detected
Trichloroethene	4.1	0.022	160	0.87
1,2-Dichloropropane	4.1	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
Toluene	4.1	0.016	7.4	0.028
trans-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Tetrachloroethene	4.1	0.028	83	0.57
1,2-Dibromoethane (EDB)	4.1	0.032	Not Detected	Not Detected
Chlorobenzene	4.1	0.019	Not Detected	Not Detected
Ethyl Benzene	4.1	0.018	Not Detected	Not Detected
m,p-Xylene	4.1	0.018	7.1	0.031
o-Xylene	4.1	0.018	Not Detected	Not Detected
Styrene	4.1	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.1	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,3-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.1	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,3-Butadiene	4.1	0.0092	13	0.029
Hexane	4.1	0.015	4.8	0.017
Cyclohexane	4.1	0.014	Not Detected	Not Detected
Heptane	4.1	0.017	4.1 J	0.017 J
Bromodichloromethane	4.1	0.028	Not Detected	Not Detected
Dibromochloromethane	4.1	0.036	Not Detected	Not Detected

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 35D-SP26-20

ID#: 0307274-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i072217	Date of Collection: 7/14/03
Dil. Factor:	8.20	Date of Analysis: 7/23/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.1	0.020	Not Detected	Not Detected
Propylbenzene	4.1	0.020	Not Detected	Not Detected
Chloromethane	16	0.034	Not Detected	Not Detected
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected
Acetone	16	0.040	90	0.22
Carbon Disulfide	16	0.052	Not Detected	Not Detected
2-Propanol	16	0.041	Not Detected	Not Detected
trans-1,2-Dichloroethene	16	0.066	Not Detected	Not Detected
Vinyl Acetate	16	0.059	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	0.049	18	0.054
Tetrahydrofuran	16	0.049	Not Detected	Not Detected
1,4-Dioxane	16	0.060	Not Detected	Not Detected
4-Methyl-2-pentanone	16	0.068	Not Detected	Not Detected
2-Hexanone	16	0.068	Not Detected	Not Detected
Bromoform	16	0.17	Not Detected	Not Detected
4-Ethyltoluene	16	0.082	Not Detected	Not Detected
Methyl tert-butyl ether	16	0.060	Not Detected	Not Detected
Ethanol	16	0.031	16 J	0.031 J

J = Estimated value.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	97	70-130

AIR TOXICS LTD.

SAMPLE NAME: 35D-SP26-20 Duplicate

ID#: 0307274-02AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i072218	Date of Collection:	7/14/03
Dil. Factor:	8.20	Date of Analysis:	7/23/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.1	0.021	Not Detected	Not Detected
Freon 114	4.1	0.029	Not Detected	Not Detected
Vinyl Chloride	4.1	0.011	Not Detected	Not Detected
Bromomethane	4.1	0.016	Not Detected	Not Detected
Chloroethane	4.1	0.011	Not Detected	Not Detected
Freon 11	4.1	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Freon 113	4.1	0.032	Not Detected	Not Detected
Methylene Chloride	4.1	0.014	Not Detected	Not Detected
1,1-Dichloroethane	4.1	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Chloroform	4.1	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.1	0.026	Not Detected	Not Detected
Benzene	4.1	0.013	Not Detected	Not Detected
1,2-Dichloroethane	4.1	0.017	Not Detected	Not Detected
Trichloroethene	4.1	0.022	160	0.86
1,2-Dichloropropane	4.1	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
Toluene	4.1	0.016	7.9	0.030
trans-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Tetrachloroethene	4.1	0.028	82	0.56
1,2-Dibromoethane (EDB)	4.1	0.032	Not Detected	Not Detected
Chlorobenzene	4.1	0.019	Not Detected	Not Detected
Ethyl Benzene	4.1	0.018	Not Detected	Not Detected
m,p-Xylene	4.1	0.018	7.0	0.031
o-Xylene	4.1	0.018	Not Detected	Not Detected
Styrene	4.1	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.1	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,3-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.1	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,3-Butadiene	4.1	0.0092	12	0.027
Hexane	4.1	0.015	4.5	0.016
Cyclohexane	4.1	0.014	Not Detected	Not Detected
Heptane	4.1	0.017	Not Detected	Not Detected
Bromodichloromethane	4.1	0.028	Not Detected	Not Detected
Dibromochloromethane	4.1	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 35D-SP26-20 Duplicate

ID#: 0307274-02AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i072218	Date of Collection:	7/14/03
Dil. Factor:	8.20	Date of Analysis:	7/23/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.1	0.020	Not Detected	Not Detected
Propylbenzene	4.1	0.020	Not Detected	Not Detected
Chloromethane	16	0.034	Not Detected	Not Detected
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected
Acetone	16	0.040	89	0.22
Carbon Disulfide	16	0.052	Not Detected	Not Detected
2-Propanol	16	0.041	Not Detected	Not Detected
trans-1,2-Dichloroethene	16	0.066	Not Detected	Not Detected
Vinyl Acetate	16	0.059	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	0.049	17	0.052
Tetrahydrofuran	16	0.049	Not Detected	Not Detected
1,4-Dioxane	16	0.060	Not Detected	Not Detected
4-Methyl-2-pentanone	16	0.068	Not Detected	Not Detected
2-Hexanone	16	0.068	Not Detected	Not Detected
Bromoform	16	0.17	Not Detected	Not Detected
4-Ethyltoluene	16	0.082	Not Detected	Not Detected
Methyl tert-butyl ether	16	0.060	Not Detected	Not Detected
Ethanol	16	0.031	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 35D-SP29-10

ID#: 0307274-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i072223	Date of Collection:	7/14/03
Dil. Factor:	8.80	Date of Analysis:	7/23/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.4	0.022	Not Detected	Not Detected
Freon 114	4.4	0.031	Not Detected	Not Detected
Vinyl Chloride	4.4	0.011	Not Detected	Not Detected
Bromomethane	4.4	0.017	Not Detected	Not Detected
Chloroethane	4.4	0.012	Not Detected	Not Detected
Freon 11	4.4	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.4	0.018	Not Detected	Not Detected
Freon 113	4.4	0.034	Not Detected	Not Detected
Methylene Chloride	4.4	0.016	Not Detected	Not Detected
1,1-Dichloroethane	4.4	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.4	0.018	14	0.055
Chloroform	4.4	0.022	Not Detected	Not Detected
1,1,1-Trichloroethane	4.4	0.024	6.8	0.038
Carbon Tetrachloride	4.4	0.028	Not Detected	Not Detected
Benzene	4.4	0.014	4.4	0.014
1,2-Dichloroethane	4.4	0.018	Not Detected	Not Detected
Trichloroethene	4.4	0.024	550	3.0
1,2-Dichloropropane	4.4	0.021	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.4	0.020	Not Detected	Not Detected
Toluene	4.4	0.017	17	0.066
trans-1,3-Dichloropropene	4.4	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.4	0.024	Not Detected	Not Detected
Tetrachloroethene	4.4	0.030	240	1.6
1,2-Dibromoethane (EDB)	4.4	0.034	Not Detected	Not Detected
Chlorobenzene	4.4	0.020	Not Detected	Not Detected
Ethyl Benzene	4.4	0.019	Not Detected	Not Detected
m,p-Xylene	4.4	0.019	14	0.062
o-Xylene	4.4	0.019	6.6	0.029
Styrene	4.4	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.4	0.031	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.4	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.4	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
1,4-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
alpha-Chlorotoluene	4.4	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
1,3-Butadiene	4.4	0.0099	Not Detected	Not Detected
Hexane	4.4	0.016	5.1	0.018
Cyclohexane	4.4	0.015	4.5	0.016
Heptane	4.4	0.018	5.9	0.024
Bromodichloromethane	4.4	0.030	Not Detected	Not Detected
Dibromochloromethane	4.4	0.038	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 35D-SP29-10

ID#: 0307274-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i072223	Date of Collection:	7/14/03
Dil. Factor:	8.80	Date of Analysis:	7/23/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.4	0.022	Not Detected	Not Detected
Propylbenzene	4.4	0.022	Not Detected	Not Detected
Chloromethane	18	0.037	Not Detected	Not Detected
1,2,4-Trichlorobenzene	18	0.13	Not Detected	Not Detected
Hexachlorobutadiene	18	0.19	Not Detected	Not Detected
Acetone	18	0.042	54	0.13
Carbon Disulfide	18	0.056	Not Detected	Not Detected
2-Propanol	18	0.044	Not Detected	Not Detected
trans-1,2-Dichloroethene	18	0.071	Not Detected	Not Detected
Vinyl Acetate	18	0.063	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	18	0.053	Not Detected	Not Detected
Tetrahydrofuran	18	0.053	Not Detected	Not Detected
1,4-Dioxane	18	0.064	Not Detected	Not Detected
4-Methyl-2-pentanone	18	0.073	Not Detected	Not Detected
2-Hexanone	18	0.073	Not Detected	Not Detected
Bromoform	18	0.18	Not Detected	Not Detected
4-Ethyltoluene	18	0.088	Not Detected	Not Detected
Methyl tert-butyl ether	18	0.064	Not Detected	Not Detected
Ethanol	18	0.034	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

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10/9/03

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 15, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III & IV Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0307299

Sample Identification

38D-SP22-10
38D-SP22-20
38D-SP25-10**
38D-SP25-20**

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers four air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within the 70% - 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD).

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control

samples were reported by the laboratory. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307299-16A	Freon 12 Freon 114 Vinyl Chloride Bromomethane Chloroethane cis-1,3-Dichloropropene trans-1,3-Dichloropropene Tetrachloroethene Styrene alpha-Chlorotoluene Cumene 4-Ethyltoluene	128 (80-120) 121 (80-120) 129 (80-120) 126 (80-120) 128 (80-120) 128 (80-120) 122 (80-120) 122 (80-120) 134 (70-130) 142 (70-130) 131 (70-130) 141 (70-130)	All samples in the SDG	J detects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

The system performance was within validation criteria for samples on which an EPA Level

IV review was performed. Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

There were no field duplicate samples identified in this SDG.

XVII. Field Blanks

Trip blank sample 38D-TB71503 was not selected for validation. No volatile contaminants were detected in this blank above the reporting limits.

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307299**

SDG	Sample	Compound	Flag	A or P	Reason
0307299	All samples in SDG	Freon 12 Freon 114 Vinyl Chloride Bromomethane Chloroethane cis-1,3-Dichloropropene trans-1,3-Dichloropropene Tetrachloroethene Styrene alpha-Chlorotoluene Cumene 4-Ethyltoluene	J detects	A	LCS recoveries above QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307299**

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: 38D-SP25-20

ID#: 0307299-13A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072330	Date of Collection: 7/15/03
Dil. Factor:	213	Date of Analysis: 7/24/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	110	0.54	Not Detected	Not Detected
Freon 114	110	0.76	Not Detected	Not Detected
Vinyl Chloride	110	0.28	Not Detected	Not Detected
Bromomethane	110	0.42	Not Detected	Not Detected
Chloroethane	110	0.28	Not Detected	Not Detected
Freon 11	110	0.61	Not Detected	Not Detected
1,1-Dichloroethene	110	0.43	130	0.51
Freon 113	110	0.83	Not Detected	Not Detected
Methylene Chloride	110	0.38	Not Detected	Not Detected
1,1-Dichloroethane	110	0.44	Not Detected	Not Detected
cis-1,2-Dichloroethene	110	0.43	1800	7.1
Chloroform	110	0.53	Not Detected	Not Detected
1,1,1-Trichloroethane	110	0.59	Not Detected	Not Detected
Carbon Tetrachloride	110	0.68	Not Detected	Not Detected
Benzene	110	0.34	Not Detected	Not Detected
1,2-Dichloroethane	110	0.44	Not Detected	Not Detected
Trichloroethene	110	0.58	28000	160
1,2-Dichloropropane	110	0.50	Not Detected	Not Detected
cis-1,3-Dichloropropene	110	0.49	Not Detected	Not Detected
Toluene	110	0.41	Not Detected	Not Detected
trans-1,3-Dichloropropene	110	0.49	Not Detected	Not Detected
1,1,2-Trichloroethane	110	0.59	Not Detected	Not Detected
Tetrachloroethene	110	0.73	1200	8.0
1,2-Dibromoethane (EDB)	110	0.83	Not Detected	Not Detected
Chlorobenzene	110	0.50	Not Detected	Not Detected
Ethyl Benzene	110	0.47	Not Detected	Not Detected
m,p-Xylene	110	0.47	Not Detected	Not Detected
o-Xylene	110	0.47	Not Detected	Not Detected
Styrene	110	0.46	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	110	0.74	Not Detected	Not Detected
1,3,5-Trimethylbenzene	110	0.53	Not Detected	Not Detected
1,2,4-Trimethylbenzene	110	0.53	Not Detected	Not Detected
1,3-Dichlorobenzene	110	0.65	Not Detected	Not Detected
1,4-Dichlorobenzene	110	0.65	Not Detected	Not Detected
alpha-Chlorotoluene	110	0.56	Not Detected	Not Detected
1,2-Dichlorobenzene	110	0.65	Not Detected	Not Detected
1,3-Butadiene	110	0.24	Not Detected	Not Detected
Hexane	110	0.38	Not Detected	Not Detected
Cyclohexane	110	0.37	Not Detected	Not Detected
Heptane	110	0.44	Not Detected	Not Detected
Bromodichloromethane	110	0.72	Not Detected	Not Detected
Dibromochloromethane	110	0.92	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 38D-SP25-20

ID#: 0307299-13A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072330	Date of Collection: 7/15/03
Dil. Factor:	213	Date of Analysis: 7/24/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	110	0.53	Not Detected	Not Detected
Propylbenzene	110	0.53	Not Detected	Not Detected
Chloromethane	430	0.89	Not Detected	Not Detected
1,2,4-Trichlorobenzene	430	3.2	Not Detected	Not Detected
Hexachlorobutadiene	430	4.6	Not Detected	Not Detected
Acetone	430	1.0	Not Detected	Not Detected
Carbon Disulfide	430	1.3	Not Detected	Not Detected
2-Propanol	430	1.1	Not Detected	Not Detected
trans-1,2-Dichloroethene	430	1.7	Not Detected	Not Detected
Vinyl Acetate	430	1.5	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	430	1.3	Not Detected	Not Detected
Tetrahydrofuran	430	1.3	Not Detected	Not Detected
1,4-Dioxane	430	1.6	Not Detected	Not Detected
4-Methyl-2-pentanone	430	1.8	Not Detected	Not Detected
2-Hexanone	430	1.8	Not Detected	Not Detected
Bromoform	430	4.5	Not Detected	Not Detected
4-Ethyltoluene	430	2.1	Not Detected	Not Detected
Methyl tert-butyl ether	430	1.6	Not Detected	Not Detected
Ethanol	430	0.82	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	86	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 38D-TB71503

ID#: 0307299-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072324	Date of Collection: 7/15/03
Dil. Factor:	8.36	Date of Analysis: 7/24/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 38D-TB71503

ID#: 0307299-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072324	Date of Collection: 7/15/03
Dil. Factor:	8.36	Date of Analysis: 7/24/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	Not Detected	Not Detected
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	81	70-130

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7/24/03

AIR TOXICS LTD.

SAMPLE NAME: 38D-SP22-10

ID#: 0307299-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072326	Date of Collection: 7/15/03
Dil. Factor:	16.7	Date of Analysis: 7/24/03

TV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	8.4	0.042	Not Detected	Not Detected
Freon 114	8.4	0.059	Not Detected	Not Detected
Vinyl Chloride	8.4	0.022	Not Detected	Not Detected
Bromomethane	8.4	0.033	Not Detected	Not Detected
Chloroethane	8.4	0.022	Not Detected	Not Detected
Freon 11	8.4	0.048	Not Detected	Not Detected
1,1-Dichloroethene	8.4	0.034	Not Detected	Not Detected
Freon 113	8.4	0.065	Not Detected	Not Detected
Methylene Chloride	8.4	0.029	Not Detected	Not Detected
1,1-Dichloroethane	8.4	0.034	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.4	0.034	Not Detected	Not Detected
Chloroform	8.4	0.041	13	0.063
1,1,1-Trichloroethane	8.4	0.046	93	0.52
Carbon Tetrachloride	8.4	0.053	Not Detected	Not Detected
Benzene	8.4	0.027	Not Detected	Not Detected
1,2-Dichloroethane	8.4	0.034	Not Detected	Not Detected
Trichloroethene	8.4	0.046	2500	14
1,2-Dichloropropane	8.4	0.039	Not Detected	Not Detected
cis-1,3-Dichloropropene	8.4	0.038	Not Detected	Not Detected
Toluene	8.4	0.032	Not Detected	Not Detected
trans-1,3-Dichloropropene	8.4	0.038	Not Detected	Not Detected
1,1,2-Trichloroethane	8.4	0.046	Not Detected	Not Detected
Tetrachloroethene	8.4	0.058	1200	8.4
1,2-Dibromoethane (EDB)	8.4	0.065	Not Detected	Not Detected
Chlorobenzene	8.4	0.039	Not Detected	Not Detected
Ethyl Benzene	8.4	0.037	Not Detected	Not Detected
m,p-Xylene	8.4	0.037	Not Detected	Not Detected
o-Xylene	8.4	0.037	Not Detected	Not Detected
Styrene	8.4	0.036	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.4	0.058	Not Detected	Not Detected
1,3,5-Trimethylbenzene	8.4	0.042	Not Detected	Not Detected
1,2,4-Trimethylbenzene	8.4	0.042	Not Detected	Not Detected
1,3-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
1,4-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
alpha-Chlorotoluene	8.4	0.044	Not Detected	Not Detected
1,2-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
1,3-Butadiene	8.4	0.019	Not Detected	Not Detected
Hexane	8.4	0.030	Not Detected	Not Detected
Cyclohexane	8.4	0.029	Not Detected	Not Detected
Heptane	8.4	0.035	Not Detected	Not Detected
Bromodichloromethane	8.4	0.057	Not Detected	Not Detected
Dibromochloromethane	8.4	0.072	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 38D-SP22-10

ID#: 0307299-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072326	Date of Collection: 7/15/03
Dil. Factor:	16.7	Date of Analysis: 7/24/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	8.4	0.042	Not Detected	Not Detected
Propylbenzene	8.4	0.042	Not Detected	Not Detected
Chloromethane	33	0.070	Not Detected	Not Detected
1,2,4-Trichlorobenzene	33	0.25	Not Detected	Not Detected
Hexachlorobutadiene	33	0.36	Not Detected	Not Detected
Acetone	33	0.081	42	0.10
Carbon Disulfide	33	0.10	Not Detected	Not Detected
2-Propanol	33	0.083	Not Detected	Not Detected
trans-1,2-Dichloroethene	33	0.13	Not Detected	Not Detected
Vinyl Acetate	33	0.12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	33	0.10	Not Detected	Not Detected
Tetrahydrofuran	33	0.10	Not Detected	Not Detected
1,4-Dioxane	33	0.12	Not Detected	Not Detected
4-Methyl-2-pentanone	33	0.14	Not Detected	Not Detected
2-Hexanone	33	0.14	Not Detected	Not Detected
Bromoform	33	0.35	Not Detected	Not Detected
4-Ethyltoluene	33	0.17	Not Detected	Not Detected
Methyl tert-butyl ether	33	0.12	Not Detected	Not Detected
Ethanol	33	0.064	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	84	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 38D-SP22-20

ID#: 0307299-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072328	Date of Collection: 7/15/03
Dil. Factor:	21.3	Date of Analysis: 7/24/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	11	0.054	Not Detected	Not Detected
Freon 114	11	0.076	Not Detected	Not Detected
Vinyl Chloride	11	0.028	Not Detected	Not Detected
Bromomethane	11	0.042	Not Detected	Not Detected
Chloroethane	11	0.028	Not Detected	Not Detected
Freon 11	11	0.061	Not Detected	Not Detected
1,1-Dichloroethene	11	0.043	Not Detected	Not Detected
Freon 113	11	0.083	Not Detected	Not Detected
Methylene Chloride	11	0.038	Not Detected	Not Detected
1,1-Dichloroethane	11	0.044	Not Detected	Not Detected
cis-1,2-Dichloroethene	11	0.043	27	0.11
Chloroform	11	0.053	15	0.074
1,1,1-Trichloroethane	11	0.059	74	0.41
Carbon Tetrachloride	11	0.068	Not Detected	Not Detected
Benzene	11	0.034	Not Detected	Not Detected
1,2-Dichloroethane	11	0.044	Not Detected	Not Detected
Trichloroethene	11	0.058	2600	14
1,2-Dichloropropane	11	0.050	Not Detected	Not Detected
cis-1,3-Dichloropropene	11	0.049	Not Detected	Not Detected
Toluene	11	0.041	Not Detected	Not Detected
trans-1,3-Dichloropropene	11	0.049	Not Detected	Not Detected
1,1,2-Trichloroethane	11	0.059	Not Detected	Not Detected
Tetrachloroethene	11	0.073	1100	7.4
1,2-Dibromoethane (EDB)	11	0.083	Not Detected	Not Detected
Chlorobenzene	11	0.050	Not Detected	Not Detected
Ethyl Benzene	11	0.047	Not Detected	Not Detected
m,p-Xylene	11	0.047	Not Detected	Not Detected
o-Xylene	11	0.047	Not Detected	Not Detected
Styrene	11	0.046	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	11	0.074	Not Detected	Not Detected
1,3,5-Trimethylbenzene	11	0.053	Not Detected	Not Detected
1,2,4-Trimethylbenzene	11	0.053	Not Detected	Not Detected
1,3-Dichlorobenzene	11	0.065	Not Detected	Not Detected
1,4-Dichlorobenzene	11	0.065	Not Detected	Not Detected
alpha-Chlorotoluene	11	0.056	Not Detected	Not Detected
1,2-Dichlorobenzene	11	0.065	Not Detected	Not Detected
1,3-Butadiene	11	0.024	30	0.068
Hexane	11	0.038	13	0.048
Cyclohexane	11	0.037	Not Detected	Not Detected
Heptane	11	0.044	Not Detected	Not Detected
Bromodichloromethane	11	0.072	Not Detected	Not Detected
Dibromochloromethane	11	0.092	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 38D-SP22-20

ID#: 0307299-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072328	Date of Collection: 7/15/03
Dil. Factor:	21.3	Date of Analysis: 7/24/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	11	0.053	Not Detected	Not Detected
Propylbenzene	11	0.053	Not Detected	Not Detected
Chloromethane	43	0.089	Not Detected	Not Detected
1,2,4-Trichlorobenzene	43	0.32	Not Detected	Not Detected
Hexachlorobutadiene	43	0.46	Not Detected	Not Detected
Acetone	43	0.10	130	0.31
Carbon Disulfide	43	0.13	Not Detected	Not Detected
2-Propanol	43	0.11	Not Detected	Not Detected
trans-1,2-Dichloroethene	43	0.17	Not Detected	Not Detected
Vinyl Acetate	43	0.15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	43	0.13	Not Detected	Not Detected
Tetrahydrofuran	43	0.13	Not Detected	Not Detected
1,4-Dioxane	43	0.16	Not Detected	Not Detected
4-Methyl-2-pentanone	43	0.18	Not Detected	Not Detected
2-Hexanone	43	0.18	Not Detected	Not Detected
Bromoform	43	0.45	Not Detected	Not Detected
4-Ethyltoluene	43	0.21	Not Detected	Not Detected
Methyl tert-butyl ether	43	0.16	Not Detected	Not Detected
Ethanol	43	0.082	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	86	70-130

AIR TOXICS LTD.

SAMPLE NAME: 38D-SP25-10

ID#: 0307299-12A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072329	Date of Collection: 7/15/03
Dil. Factor:	16.7	Date of Analysis: 7/24/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	8.4	0.042	Not Detected	Not Detected
Freon 114	8.4	0.059	Not Detected	Not Detected
Vinyl Chloride	8.4	0.022	Not Detected	Not Detected
Bromomethane	8.4	0.033	Not Detected	Not Detected
Chloroethane	8.4	0.022	Not Detected	Not Detected
Freon 11	8.4	0.048	Not Detected	Not Detected
1,1-Dichloroethene	8.4	0.034	11	0.046
Freon 113	8.4	0.065	Not Detected	Not Detected
Methylene Chloride	8.4	0.029	Not Detected	Not Detected
1,1-Dichloroethane	8.4	0.034	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.4	0.034	130	0.52
Chloroform	8.4	0.041	Not Detected	Not Detected
1,1,1-Trichloroethane	8.4	0.046	Not Detected	Not Detected
Carbon Tetrachloride	8.4	0.053	Not Detected	Not Detected
Benzene	8.4	0.027	Not Detected	Not Detected
1,2-Dichloroethane	8.4	0.034	Not Detected	Not Detected
Trichloroethene	8.4	0.046	3100	17
1,2-Dichloropropane	8.4	0.039	Not Detected	Not Detected
cis-1,3-Dichloropropene	8.4	0.038	Not Detected	Not Detected
Toluene	8.4	0.032	12	0.047
trans-1,3-Dichloropropene	8.4	0.038	Not Detected	Not Detected
1,1,2-Trichloroethane	8.4	0.046	Not Detected	Not Detected
Tetrachloroethene	8.4	0.058	140	1.0
1,2-Dibromoethane (EDB)	8.4	0.065	Not Detected	Not Detected
Chlorobenzene	8.4	0.039	Not Detected	Not Detected
Ethyl Benzene	8.4	0.037	Not Detected	Not Detected
m,p-Xylene	8.4	0.037	19	0.085
o-Xylene	8.4	0.037	11	0.049
Styrene	8.4	0.036	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.4	0.058	Not Detected	Not Detected
1,3,5-Trimethylbenzene	8.4	0.042	Not Detected	Not Detected
1,2,4-Trimethylbenzene	8.4	0.042	11	0.055
1,3-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
1,4-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
alpha-Chlorotoluene	8.4	0.044	Not Detected	Not Detected
1,2-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
1,3-Butadiene	8.4	0.019	Not Detected	Not Detected
Hexane	8.4	0.030	Not Detected	Not Detected
Cyclohexane	8.4	0.029	Not Detected	Not Detected
Heptane	8.4	0.035	Not Detected	Not Detected
Bromodichloromethane	8.4	0.057	Not Detected	Not Detected
Dibromochloromethane	8.4	0.072	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 38D-SP25-10

ID#: 0307299-12A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072329	Date of Collection: 7/15/03
Dil. Factor:	16.7	Date of Analysis: 7/24/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	8.4	0.042	Not Detected	Not Detected
Propylbenzene	8.4	0.042	Not Detected	Not Detected
Chloromethane	33	0.070	Not Detected	Not Detected
1,2,4-Trichlorobenzene	33	0.25	Not Detected	Not Detected
Hexachlorobutadiene	33	0.36	Not Detected	Not Detected
Acetone	33	0.081	330	0.80
Carbon Disulfide	33	0.10	Not Detected	Not Detected
2-Propanol	33	0.083	Not Detected	Not Detected
trans-1,2-Dichloroethene	33	0.13	Not Detected	Not Detected
Vinyl Acetate	33	0.12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	33	0.10	56	0.17
Tetrahydrofuran	33	0.10	Not Detected	Not Detected
1,4-Dioxane	33	0.12	Not Detected	Not Detected
4-Methyl-2-pentanone	33	0.14	Not Detected	Not Detected
2-Hexanone	33	0.14	Not Detected	Not Detected
Bromoform	33	0.35	Not Detected	Not Detected
4-Ethyltoluene	33	0.17	Not Detected	Not Detected
Methyl tert-butyl ether	33	0.12	Not Detected	Not Detected
Ethanol	33	0.064	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	87	70-130

0173 ^{UE} 10/19/03

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 16, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III & IV Equivalent
Laboratory: Air Toxics Ltd.

Sample Delivery Group (SDG): 0307323

Sample Identification

36D-TB71603
36D-SP18-20**
36D- SP18-20 Duplicate
34D-SP07-10
34D-SP07-20

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers five air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

Raw data was not provided for level IV review.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within the 70% - 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD) with the following exceptions:

Compound	Concentration (ppbv)		RPD
	36D-SP18-20	36D-SP18-20 Duplicate	
Chloroform	163	202	21
Trichloroethene	7081	8970	24
Tetrachloroethene	1239	1526	21

Qualification of laboratory duplicate precision outliers was not specified in the QAPP.

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307323-19A	1,1-Dichloroethane 1,2-Dibromoethane 1,3,5-Trimethylbenzene 1,2,4-Trimethylbenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene Propylbenzene Hexachlorobutadiene Bromoform	78 (80-120) 79 (80-120) 75 (80-120) 73 (80-120) 76 (80-120) 77 (80-120) 74 (80-120) 75 (80-120) 79 (80-120)	All samples in the SDG	J detects, UJ nondetects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

The system performance was within validation criteria for samples on which an EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

There were no field duplicate samples identified in this SDG.

XVII. Field Blanks

Sample 36D-TB71603 was identified as a field blank sample. No volatile contaminants were found in this blank above the reporting limits.

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307323**

SDG	Sample	Compound	Flag	A or P	Reason
0307323	All samples in the SDG	1,1-Dichloroethane 1,2-Dibromoethane 1,3,5-Trimethylbenzene 1,2,4-Trimethylbenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene Propylbenzene Hexachlorobutadiene Bromoform	J detects, UJ nondetects	A	LCS recoveries below QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307323**

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: 36D-SP18-20 Duplicate

ID#: 0307323-10AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d072426	Date of Collection: 7/16/03
Dil. Factor:	41.8	Date of Analysis: 7/25/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	21	0.10	Not Detected	Not Detected
Freon 114	21	0.15	Not Detected	Not Detected
Vinyl Chloride	21	0.054	Not Detected	Not Detected
Bromomethane	21	0.082	Not Detected	Not Detected
Chloroethane	21	0.056	Not Detected	Not Detected
Freon 11	21	0.12	Not Detected	Not Detected
1,1-Dichloroethene	21	0.084	Not Detected	Not Detected
Freon 113	21	0.16	Not Detected	Not Detected
Methylene Chloride	21	0.074	Not Detected	Not Detected
1,1-Dichloroethane	21	0.086	Not Detected	Not Detected
cis-1,2-Dichloroethene	21	0.084	32	0.13
Chloroform	21	0.10	200	1.0
1,1,1-Trichloroethane	21	0.12	34	0.19
Carbon Tetrachloride	21	0.13	Not Detected	Not Detected
Benzene	21	0.068	Not Detected	Not Detected
1,2-Dichloroethane	21	0.086	Not Detected	Not Detected
Trichloroethene	21	0.11	9000 E	49 E
1,2-Dichloropropane	21	0.098	Not Detected	Not Detected
cis-1,3-Dichloropropene	21	0.096	Not Detected	Not Detected
Toluene	21	0.080	Not Detected	Not Detected
trans-1,3-Dichloropropene	21	0.096	Not Detected	Not Detected
1,1,2-Trichloroethane	21	0.12	Not Detected	Not Detected
Tetrachloroethene	21	0.14	1500	10
1,2-Dibromoethane (EDB)	21	0.16	Not Detected	Not Detected
Chlorobenzene	21	0.098	Not Detected	Not Detected
Ethyl Benzene	21	0.092	Not Detected	Not Detected
m,p-Xylene	21	0.092	Not Detected	Not Detected
o-Xylene	21	0.092	Not Detected	Not Detected
Styrene	21	0.090	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	21	0.14	Not Detected	Not Detected
1,3,5-Trimethylbenzene	21	0.10	Not Detected	Not Detected
1,2,4-Trimethylbenzene	21	0.10	Not Detected	Not Detected
1,3-Dichlorobenzene	21	0.13	Not Detected	Not Detected
1,4-Dichlorobenzene	21	0.13	Not Detected	Not Detected
alpha-Chlorotoluene	21	0.11	Not Detected	Not Detected
1,2-Dichlorobenzene	21	0.13	Not Detected	Not Detected
1,3-Butadiene	21	0.047	Not Detected	Not Detected
Hexane	21	0.075	Not Detected	Not Detected
Cyclohexane	21	0.073	Not Detected	Not Detected
Heptane	21	0.087	Not Detected	Not Detected
Bromodichloromethane	21	0.14	Not Detected	Not Detected
Dibromochloromethane	21	0.18	Not Detected	Not Detected

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10/19/03*

AIR TOXICS LTD.

SAMPLE NAME: 36D-SP18-20 Duplicate

ID#: 0307323-10AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d072426	Date of Collection: 7/16/03
Dil. Factor:	41.8	Date of Analysis: 7/25/03

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Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	21	0.10	Not Detected	Not Detected
Propylbenzene	21	0.10	Not Detected	Not Detected
Chloromethane	84	0.18	Not Detected	Not Detected
1,2,4-Trichlorobenzene	84	0.63	Not Detected	Not Detected
Hexachlorobutadiene	84	0.91	Not Detected	Not Detected
Acetone	84	0.20	Not Detected	Not Detected
Carbon Disulfide	84	0.26	Not Detected	Not Detected
2-Propanol	84	0.21	Not Detected	Not Detected
trans-1,2-Dichloroethene	84	0.34	Not Detected	Not Detected
Vinyl Acetate	84	0.30	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	84	0.25	Not Detected	Not Detected
Tetrahydrofuran	84	0.25	Not Detected	Not Detected
1,4-Dioxane	84	0.31	Not Detected	Not Detected
4-Methyl-2-pentanone	84	0.35	Not Detected	Not Detected
2-Hexanone	84	0.35	Not Detected	Not Detected
Bromoform	84	0.88	Not Detected	Not Detected
4-Ethyltoluene	84	0.42	Not Detected	Not Detected
Methyl tert-butyl ether	84	0.31	Not Detected	Not Detected
Ethanol	84	0.16	Not Detected	Not Detected

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E = Exceeds instrument calibration range.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	100	70-130

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 34D-SP07-10

ID#: 0307323-15A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d072431	Date of Collection: 7/16/03
Dil. Factor:	8.52	Date of Analysis: 7/25/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	45	0.22
1,1,1-Trichloroethane	4.3	0.024	8.7	0.048
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	96	0.52
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	19	0.13
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	7.3	0.016
Hexane	4.3	0.015	4.3	0.016
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	4.2 J	0.018 J
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 34D-SP07-10

ID#: 0307323-15A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d072431	Date of Collection: 7/16/03
Dil. Factor:	8.52	Date of Analysis: 7/25/03

Visual -

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)	
Cumene	4.3	0.021	Not Detected	Not Detected	
Propylbenzene	4.3	0.021	Not Detected	Not Detected	<i>WJ</i>
Chloromethane	17	0.036	Not Detected	Not Detected	
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected	
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected	<i>WJ</i>
Acetone	17	0.041	27	0.065	
Carbon Disulfide	17	0.054	Not Detected	Not Detected	
2-Propanol	17	0.042	Not Detected	Not Detected	
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected	
Vinyl Acetate	17	0.061	Not Detected	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected	
Tetrahydrofuran	17	0.051	Not Detected	Not Detected	
1,4-Dioxane	17	0.062	Not Detected	Not Detected	
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected	
2-Hexanone	17	0.071	Not Detected	Not Detected	
Bromoform	17	0.18	Not Detected	Not Detected	<i>WJ</i>
4-Ethyltoluene	17	0.085	Not Detected	Not Detected	
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected	
Ethanol	17	0.033	Not Detected	Not Detected	

J = Estimated value.

Container Type: 1 Liter Silonite Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	96	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: 34D-SP07-20

ID#: 0307323-16A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d072432	Date of Collection: 7/16/03
Dil. Factor:	8.52	Date of Analysis: 7/25/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	46	0.22
1,1,1-Trichloroethane	4.3	0.024	10	0.059
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	15	0.048
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	100	0.56
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	11	0.043
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	12	0.086
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	32	0.071
Hexane	4.3	0.015	13	0.046
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	6.4	0.027
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 34D-SP07-20

ID#: 0307323-16A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d072432	Date of Collection: 7/16/03
Dil. Factor:	8.52	Date of Analysis: 7/25/03

DV anal.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	48	0.12
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

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Container Type: 1 Liter Silonite Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	100	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 36D-TB71603

ID#: 0307323-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d072421	Date of Collection: 7/16/03
Dil. Factor:	8.80	Date of Analysis: 7/24/03

Dr Qual -

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.4	0.022	Not Detected	Not Detected
Freon 114	4.4	0.031	Not Detected	Not Detected
Vinyl Chloride	4.4	0.011	Not Detected	Not Detected
Bromomethane	4.4	0.017	Not Detected	Not Detected
Chloroethane	4.4	0.012	Not Detected	Not Detected
Freon 11	4.4	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.4	0.018	Not Detected	Not Detected
Freon 113	4.4	0.034	Not Detected	Not Detected
Methylene Chloride	4.4	0.016	Not Detected	Not Detected
1,1-Dichloroethane	4.4	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.4	0.018	Not Detected	Not Detected
Chloroform	4.4	0.022	Not Detected	Not Detected
1,1,1-Trichloroethane	4.4	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.4	0.028	Not Detected	Not Detected
Benzene	4.4	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.4	0.018	Not Detected	Not Detected
Trichloroethene	4.4	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.4	0.021	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.4	0.020	Not Detected	Not Detected
Toluene	4.4	0.017	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.4	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.4	0.024	Not Detected	Not Detected
Tetrachloroethene	4.4	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.4	0.034	Not Detected	Not Detected
Chlorobenzene	4.4	0.020	Not Detected	Not Detected
Ethyl Benzene	4.4	0.019	Not Detected	Not Detected
m,p-Xylene	4.4	0.019	Not Detected	Not Detected
o-Xylene	4.4	0.019	Not Detected	Not Detected
Styrene	4.4	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.4	0.031	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.4	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.4	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
1,4-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
alpha-Chlorotoluene	4.4	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
1,3-Butadiene	4.4	0.0099	Not Detected	Not Detected
Hexane	4.4	0.016	Not Detected	Not Detected
Cyclohexane	4.4	0.015	Not Detected	Not Detected
Heptane	4.4	0.018	Not Detected	Not Detected
Bromodichloromethane	4.4	0.030	Not Detected	Not Detected
Dibromochloromethane	4.4	0.038	Not Detected	Not Detected

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10/19/03

AIR TOXICS LTD.

SAMPLE NAME: 36D-TB71603

ID#: 0307323-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d072421	Date of Collection: 7/16/03
Dil. Factor:	8.80	Date of Analysis: 7/24/03

DV dual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.4	0.022	Not Detected	Not Detected
Propylbenzene	4.4	0.022	Not Detected	Not Detected
Chloromethane	18	0.037	Not Detected	Not Detected
1,2,4-Trichlorobenzene	18	0.13	Not Detected	Not Detected
Hexachlorobutadiene	18	0.19	Not Detected	Not Detected
Acetone	18	0.042	Not Detected	Not Detected
Carbon Disulfide	18	0.056	Not Detected	Not Detected
2-Propanol	18	0.044	Not Detected	Not Detected
trans-1,2-Dichloroethene	18	0.071	Not Detected	Not Detected
Vinyl Acetate	18	0.063	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	18	0.053	Not Detected	Not Detected
Tetrahydrofuran	18	0.053	Not Detected	Not Detected
1,4-Dioxane	18	0.064	Not Detected	Not Detected
4-Methyl-2-pentanone	18	0.073	Not Detected	Not Detected
2-Hexanone	18	0.073	Not Detected	Not Detected
Bromoform	18	0.18	Not Detected	Not Detected
4-Ethyltoluene	18	0.088	Not Detected	Not Detected
Methyl tert-butyl ether	18	0.064	Not Detected	Not Detected
Ethanol	18	0.034	Not Detected	Not Detected

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	95	70-130

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NE 10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 36D-SP18-20

ID#: 0307323-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d072433	Date of Collection:	7/16/03
Dil. Factor:	59.7	Date of Analysis:	7/25/03

DV Dual -

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	30	0.15	Not Detected	Not Detected
Freon 114	30	0.21	Not Detected	Not Detected
Vinyl Chloride	30	0.078	Not Detected	Not Detected
Bromomethane	30	0.12	Not Detected	Not Detected
Chloroethane	30	0.080	Not Detected	Not Detected
Freon 11	30	0.17	Not Detected	Not Detected
1,1-Dichloroethene	30	0.12	Not Detected	Not Detected
Freon 113	30	0.23	Not Detected	Not Detected
Methylene Chloride	30	0.10	Not Detected	Not Detected
1,1-Dichloroethane	30	0.12	Not Detected	Not Detected
cis-1,2-Dichloroethene	30	0.12	Not Detected	Not Detected
Chloroform	30	0.15	160	0.81
1,1,1-Trichloroethane	30	0.16	Not Detected	Not Detected
Carbon Tetrachloride	30	0.19	Not Detected	Not Detected
Benzene	30	0.097	Not Detected	Not Detected
1,2-Dichloroethane	30	0.12	Not Detected	Not Detected
Trichloroethene	30	0.16	7100	39
1,2-Dichloropropane	30	0.14	Not Detected	Not Detected
cis-1,3-Dichloropropene	30	0.14	Not Detected	Not Detected
Toluene	30	0.11	Not Detected	Not Detected
trans-1,3-Dichloropropene	30	0.14	Not Detected	Not Detected
1,1,2-Trichloroethane	30	0.16	Not Detected	Not Detected
Tetrachloroethene	30	0.20	1200	8.5
1,2-Dibromoethane (EDB)	30	0.23	Not Detected	Not Detected
Chlorobenzene	30	0.14	Not Detected	Not Detected
Ethyl Benzene	30	0.13	Not Detected	Not Detected
m,p-Xylene	30	0.13	Not Detected	Not Detected
o-Xylene	30	0.13	Not Detected	Not Detected
Styrene	30	0.13	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	30	0.21	Not Detected	Not Detected
1,3,5-Trimethylbenzene	30	0.15	Not Detected	Not Detected
1,2,4-Trimethylbenzene	30	0.15	Not Detected	Not Detected
1,3-Dichlorobenzene	30	0.18	Not Detected	Not Detected
1,4-Dichlorobenzene	30	0.18	Not Detected	Not Detected
alpha-Chlorotoluene	30	0.16	Not Detected	Not Detected
1,2-Dichlorobenzene	30	0.18	Not Detected	Not Detected
1,3-Butadiene	30	0.067	Not Detected	Not Detected
Hexane	30	0.11	Not Detected	Not Detected
Cyclohexane	30	0.10	Not Detected	Not Detected
Heptane	30	0.12	Not Detected	Not Detected
Bromodichloromethane	30	0.20	Not Detected	Not Detected
Dibromochloromethane	30	0.26	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 36D-SP18-20

ID#: 0307323-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d072433	Date of Collection:	7/16/03
Dil. Factor:	59.7	Date of Analysis:	7/25/03

DV Dual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	30	0.15	Not Detected	Not Detected
Propylbenzene	30	0.15	Not Detected	Not Detected
Chloromethane	120	0.25	Not Detected	Not Detected
1,2,4-Trichlorobenzene	120	0.90	Not Detected	Not Detected
Hexachlorobutadiene	120	1.3	Not Detected	Not Detected
Acetone	120	0.29	Not Detected	Not Detected
Carbon Disulfide	120	0.38	Not Detected	Not Detected
2-Propanol	120	0.30	Not Detected	Not Detected
trans-1,2-Dichloroethene	120	0.48	Not Detected	Not Detected
Vinyl Acetate	120	0.43	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	120	0.36	Not Detected	Not Detected
Tetrahydrofuran	120	0.36	Not Detected	Not Detected
1,4-Dioxane	120	0.44	Not Detected	Not Detected
4-Methyl-2-pentanone	120	0.50	Not Detected	Not Detected
2-Hexanone	120	0.50	Not Detected	Not Detected
Bromoform	120	1.2	Not Detected	Not Detected
4-Ethyltoluene	120	0.60	Not Detected	Not Detected
Methyl tert-butyl ether	120	0.44	Not Detected	Not Detected
Ethanol	120	0.23	Not Detected	Not Detected

UJ

UJ

UJ

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	96	70-130

NE 10/9/03

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 17, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III & IV Equivalent
Laboratory: Air Toxics Ltd.

Sample Delivery Group (SDG): 0307349

Sample Identification

34D-SP08-10**
34D-SP08-20
33D-SP05-10**
33D-SP05-10 Duplicate
33D-SP05-20
33D-TB71703
33D-SP06-10
33D-SP06D-10
49ST07-SP02-10
39D-SP03-15
39D-SP05-15**
39D-SP04-15
39D-SP04-15 Duplicate

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers thirteen air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

Raw data was not provided for level IV review.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within the 70% - 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD) with the following exception:

Compound	Concentration (ppbv)		RPD
	39D-SP04-15	39D-SP04-15 Duplicate	
Acetone	62	51	18

Qualification of laboratory duplicate precision outliers was not specified in the QAPP.

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307349-16A	Freon 12 Vinyl Chloride Chloroethane cis-1,3-Dichloropropene trans-1,3-Dichloropropene Tetrachloroethene Styrene alpha-Chlorotoluene Cumene Chloromethane 4-Ethyltoluene	122 (80-120) 123 (80-120) 130 (80-120) 126 (80-120) 123 (80-120) 125 (80-120) 130 (80-120) 133 (80-120) 131 (80-120) 121 (80-120) 137 (80-120)	34D-SP08-10, 34D-SP08-20, 33D-SP05-10, and 33D-SP05-10 Duplicate	J detects	A
0307349-16B	Vinyl Chloride Chloroethane cis-1,3-Dichloropropene alpha-Chlorotoluene Chloromethane	123 (80-120) 126 (80-120) 125 (80-120) 135 (80-120) 123 (80-120)	33D-SP05-20, 33D-TB71703, 33D-SP06-10, 33D-SP06D-10, 49ST07-SP02-10, 39D-SP03-15, 39D-SP05-15, 39D-SP04-15, and 39D-SP04-15 Duplicate	J detects	A
0307349-16B	4-Ethyltoluene	78 (80-120)	33D-SP05-20, 33D-TB71703, 33D-SP06-10, 33D-SP06D-10, 49ST07-SP02-10, 39D-SP03-15, 39D-SP05-15, 39D-SP04-15, and 39D-SP04-15 Duplicate	J detects, UJ nondetects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

The system performance was within validation criteria for samples on which an EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples 33D-SP06-10 and 33D-SP06D-10 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ppbv)		RPD
	33D-SP06-10	33D-SP06D-10	
Chloroform	29	28	4
Benzene	6.5	6.9	6

Compound	Concentration (ppbv)		RPD
	33D-SP06-10	33D-SP06D-10	
Trichloroethene	100	100	0
Toluene	4.4	4.4	0
Hexane	4.4	4.6	4
Acetone	260	43	143

XVII. Field Blanks

Sample 33D-TB71703 was identified as a field blank sample. No volatile contaminants were found in this blank above the reporting limits.

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307349**

SDG	Sample	Compound	Flag	A or P	Reason
0307349	34D-SP08-10, 34D-SP08-20, 33D-SP05-10, and 33D-SP05-10 Duplicate	Freon 12 Vinyl Chloride Chloroethane cis-1,3-Dichloropropene trans-1,3- Dichloropropene Tetrachloroethene Styrene alpha-Chlorotoluene Cumene Chloromethane 4-Ethyltoluene	J detects	A	LCS recoveries above QC limits
0307349	33D-SP05-20, 33D-TB71703, 33D-SP06-10, 33D-SP06D-10, 49ST07-SP02-10, 39D-SP03-15, 39D-SP05-15, 39D-SP04-15, and 39D-SP04-15 Duplicate	Vinyl Chloride Chloroethane cis-1,3-Dichloropropene alpha-Chlorotoluene Chloromethane	J detects	A	LCS recoveries above QC limits
0307349	33D-SP05-20, 33D-TB71703, 33D-SP06-10, 33D-SP06D-10, 49ST07-SP02-10, 39D-SP03-15, 39D-SP05-15, 39D-SP04-15, and 39D-SP04-15 Duplicate	4-Ethyltoluene	J detects, UJ nondetects	A	LCS recoveries below QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307349**

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: 34D-SP08-10

ID#: 0307349-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072421	Date of Collection: 7/17/03
Dil. Factor:	16.4	Date of Analysis: 7/24/03

tv anal.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	8.2	0.041	Not Detected	Not Detected
Freon 114	8.2	0.058	Not Detected	Not Detected
Vinyl Chloride	8.2	0.021	Not Detected	Not Detected
Bromomethane	8.2	0.032	Not Detected	Not Detected
Chloroethane	8.2	0.022	Not Detected	Not Detected
Freon 11	8.2	0.047	Not Detected	Not Detected
1,1-Dichloroethene	8.2	0.033	Not Detected	Not Detected
Freon 113	8.2	0.064	Not Detected	Not Detected
Methylene Chloride	8.2	0.029	Not Detected	Not Detected
1,1-Dichloroethane	8.2	0.034	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.2	0.033	Not Detected	Not Detected
Chloroform	8.2	0.041	22	0.11
1,1,1-Trichloroethane	8.2	0.045	17	0.094
Carbon Tetrachloride	8.2	0.052	Not Detected	Not Detected
Benzene	8.2	0.027	14	0.044
1,2-Dichloroethane	8.2	0.034	Not Detected	Not Detected
Trichloroethene	8.2	0.045	3100	17
1,2-Dichloropropane	8.2	0.038	Not Detected	Not Detected
cis-1,3-Dichloropropene	8.2	0.038	Not Detected	Not Detected
Toluene	8.2	0.031	15	0.059
trans-1,3-Dichloropropene	8.2	0.038	Not Detected	Not Detected
1,1,2-Trichloroethane	8.2	0.045	Not Detected	Not Detected
Tetrachloroethene	8.2	0.056	700	4.8
1,2-Dibromoethane (EDB)	8.2	0.064	Not Detected	Not Detected
Chlorobenzene	8.2	0.038	Not Detected	Not Detected
Ethyl Benzene	8.2	0.036	Not Detected	Not Detected
m,p-Xylene	8.2	0.036	9.4	0.042
o-Xylene	8.2	0.036	Not Detected	Not Detected
Styrene	8.2	0.035	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.2	0.057	Not Detected	Not Detected
1,3,5-Trimethylbenzene	8.2	0.041	Not Detected	Not Detected
1,2,4-Trimethylbenzene	8.2	0.041	Not Detected	Not Detected
1,3-Dichlorobenzene	8.2	0.050	Not Detected	Not Detected
1,4-Dichlorobenzene	8.2	0.050	Not Detected	Not Detected
alpha-Chlorotoluene	8.2	0.043	Not Detected	Not Detected
1,2-Dichlorobenzene	8.2	0.050	Not Detected	Not Detected
1,3-Butadiene	8.2	0.018	Not Detected	Not Detected
Hexane	8.2	0.029	14	0.051
Cyclohexane	8.2	0.029	Not Detected	Not Detected
Heptane	8.2	0.034	11	0.044
Bromodichloromethane	8.2	0.056	Not Detected	Not Detected
Dibromochloromethane	8.2	0.071	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 34D-SP08-10

ID#: 0307349-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072421	Date of Collection:	7/17/03
Dil. Factor:	16.4	Date of Analysis:	7/24/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	8.2	0.041	Not Detected	Not Detected
Propylbenzene	8.2	0.041	Not Detected	Not Detected
Chloromethane	33	0.069	Not Detected	Not Detected
1,2,4-Trichlorobenzene	33	0.25	Not Detected	Not Detected
Hexachlorobutadiene	33	0.36	Not Detected	Not Detected
Acetone	33	0.079	Not Detected	Not Detected
Carbon Disulfide	33	0.10	Not Detected	Not Detected
2-Propanol	33	0.082	Not Detected	Not Detected
trans-1,2-Dichloroethene	33	0.13	Not Detected	Not Detected
Vinyl Acetate	33	0.12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	33	0.098	Not Detected	Not Detected
Tetrahydrofuran	33	0.098	Not Detected	Not Detected
1,4-Dioxane	33	0.12	Not Detected	Not Detected
4-Methyl-2-pentanone	33	0.14	Not Detected	Not Detected
2-Hexanone	33	0.14	Not Detected	Not Detected
Bromoform	33	0.34	Not Detected	Not Detected
4-Ethyltoluene	33	0.16	Not Detected	Not Detected
Methyl tert-butyl ether	33	0.12	Not Detected	Not Detected
Ethanol	33	0.063	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	81	70-130

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7/24/03

AIR TOXICS LTD.

SAMPLE NAME: 34D-SP08-20

ID#: 0307349-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072422	Date of Collection: 7/17/03
Dil. Factor:	8.36	Date of Analysis: 7/24/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	6.6	0.033
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	750	4.1
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	7.4	0.028
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	170	1.2
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	4.3	0.019
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	4.8	0.020
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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NE 10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 34D-SP08-20

ID#: 0307349-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072422	Date of Collection: 7/17/03
Dil. Factor:	8.36	Date of Analysis: 7/24/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	240	0.59
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	55	0.16
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	50	0.097

Container Type: 1 Liter Silonite Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	78	70-130

AIR TOXICS LTD.

SAMPLE NAME: 33D-SP05-10

ID#: 0307349-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072424	Date of Collection: 7/17/03
Dil. Factor:	8.36	Date of Analysis: 7/24/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	77	0.38
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	4.3	0.014
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	760	4.1
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	6.2	0.022
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: 33D-SP05-10

ID#: 0307349-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072424	Date of Collection:	7/17/03
Dil. Factor:	8.36	Date of Analysis:	7/24/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	93	0.22
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	21	0.063
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	17	0.033

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	78	70-130

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10/1/03

AIR TOXICS LTD.

SAMPLE NAME: 33D-SP05-10 Duplicate

ID#: 0307349-05AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072425	Date of Collection: 7/17/03
Dil. Factor:	8.36	Date of Analysis: 7/25/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	71	0.35
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	720	3.9
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	6.0	0.022
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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10/19/03

AIR TOXICS LTD.

SAMPLE NAME: 33D-SP05-10 Duplicate

ID#: 0307349-05AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072425	Date of Collection: 7/17/03
Dil. Factor:	8.36	Date of Analysis: 7/25/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	84	0.20
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	19	0.057
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	77	70-130

AIR TOXICS LTD.

SAMPLE NAME: 33D-SP05-20

ID#: 0307349-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072506	Date of Collection:	7/17/03
Dil. Factor:	8.80	Date of Analysis:	7/25/03

DV Qual

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.4	0.022	Not Detected	Not Detected
Freon 114	4.4	0.031	Not Detected	Not Detected
Vinyl Chloride	4.4	0.011	Not Detected	Not Detected
Bromomethane	4.4	0.017	Not Detected	Not Detected
Chloroethane	4.4	0.012	13	0.034
Freon 11	4.4	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.4	0.018	Not Detected	Not Detected
Freon 113	4.4	0.034	Not Detected	Not Detected
Methylene Chloride	4.4	0.016	9.5	0.034
1,1-Dichloroethane	4.4	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.4	0.018	Not Detected	Not Detected
Chloroform	4.4	0.022	120	0.58
1,1,1-Trichloroethane	4.4	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.4	0.028	Not Detected	Not Detected
Benzene	4.4	0.014	9.7	0.032
1,2-Dichloroethane	4.4	0.018	Not Detected	Not Detected
Trichloroethene	4.4	0.024	660	3.6
1,2-Dichloropropane	4.4	0.021	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.4	0.020	Not Detected	Not Detected
Toluene	4.4	0.017	86	0.33
trans-1,3-Dichloropropene	4.4	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.4	0.024	Not Detected	Not Detected
Tetrachloroethene	4.4	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.4	0.034	Not Detected	Not Detected
Chlorobenzene	4.4	0.020	Not Detected	Not Detected
Ethyl Benzene	4.4	0.019	14	0.061
m,p-Xylene	4.4	0.019	37	0.16
o-Xylene	4.4	0.019	34	0.15
Styrene	4.4	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.4	0.031	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.4	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.4	0.022	7.6	0.038
1,3-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
1,4-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
alpha-Chlorotoluene	4.4	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
1,3-Butadiene	4.4	0.0099	Not Detected	Not Detected
Hexane	4.4	0.016	Not Detected	Not Detected
Cyclohexane	4.4	0.015	7.4	0.026
Heptane	4.4	0.018	5.0	0.021
Bromodichloromethane	4.4	0.030	Not Detected	Not Detected
Dibromochloromethane	4.4	0.038	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 33D-SP05-20

ID#: 0307349-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072506	Date of Collection: 7/17/03
Dil. Factor:	8.80	Date of Analysis: 7/25/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.4	0.022	Not Detected	Not Detected
Propylbenzene	4.4	0.022	Not Detected	Not Detected
Chloromethane	18	0.037	23	0.049
1,2,4-Trichlorobenzene	18	0.13	Not Detected	Not Detected
Hexachlorobutadiene	18	0.19	Not Detected	Not Detected
Acetone	18	0.042	170	0.42
Carbon Disulfide	18	0.056	26	0.081
2-Propanol	18	0.044	26	0.066
trans-1,2-Dichloroethene	18	0.071	Not Detected	Not Detected
Vinyl Acetate	18	0.063	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	18	0.053	47	0.14
Tetrahydrofuran	18	0.053	Not Detected	Not Detected
1,4-Dioxane	18	0.064	Not Detected	Not Detected
4-Methyl-2-pentanone	18	0.073	Not Detected	Not Detected
2-Hexanone	18	0.073	Not Detected	Not Detected
Bromoform	18	0.18	Not Detected	Not Detected
4-Ethyltoluene	18	0.088	Not Detected	Not Detected
Methyl tert-butyl ether	18	0.064	Not Detected	Not Detected
Ethanol	18	0.034	72	0.14

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	84	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 33D-TB71703

ID#: 0307349-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072507	Date of Collection:	7/17/03
Dil. Factor:	8.52	Date of Analysis:	7/25/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 33D-TB71703

ID#: 0307349-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072507	Date of Collection: 7/17/03
Dil. Factor:	8.52	Date of Analysis: 7/25/03

DV Qu

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	Not Detected	Not Detected
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	83	70-130

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 33D-SP06-10

ID#: 0307349-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072508	Date of Collection: 7/17/03
Dil. Factor:	8.52	Date of Analysis: 7/25/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	29	0.14
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	6.5	0.021
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	100	0.56
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	4.4	0.017
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	Not Detected	Not Detected
Hexane	4.3	0.015	4.4	0.016
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 33D-SP06-10

ID#: 0307349-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072508	Date of Collection: 7/17/03
Dil. Factor:	8.52	Date of Analysis: 7/25/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	260	0.62
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	82	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 33D-SP06D-10

ID#: 0307349-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072509	Date of Collection:	7/17/03
Dil. Factor:	8.64	Date of Analysis:	7/25/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	28	0.14
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	6.9	0.022
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	100	0.57
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	4.4	0.017
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	9.4	0.065
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	Not Detected	Not Detected
Hexane	4.3	0.015	4.6	0.017
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

NE
10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 33D-SP06D-10

ID#: 0307349-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072509	Date of Collection:	7/17/03
Dil. Factor:	8.64	Date of Analysis:	7/25/03

DV Qual

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	43	0.10
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	Not Detected	Not Detected
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

US

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	78	70-130

0143 *NE 10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: 49ST07-SP02-10

ID#: 0307349-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072513	Date of Collection: 7/17/03
Dil. Factor:	8.52	Date of Analysis: 7/25/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	120	0.61
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	6.0	0.019
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	8.0	0.043
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	Not Detected	Not Detected
Hexane	4.3	0.015	6.2	0.022
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	4.4	0.018
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: 49ST07-SP02-10

ID#: 0307349-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072513	Date of Collection: 7/17/03
Dil. Factor:	8.52	Date of Analysis: 7/25/03

Dr. Qual

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	37	0.089
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected
Tetrahydrofuran	17	0.051	20	0.060
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

WJ

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	78	70-130

0157 *NE 10/19/03*

AIR TOXICS LTD.

SAMPLE NAME: 39D-SP03-15

ID#: 0307349-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072514	Date of Collection:	7/17/03
Dil. Factor:	8.20	Date of Analysis:	7/25/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.1	0.021	Not Detected	Not Detected
Freon 114	4.1	0.029	Not Detected	Not Detected
Vinyl Chloride	4.1	0.011	Not Detected	Not Detected
Bromomethane	4.1	0.016	Not Detected	Not Detected
Chloroethane	4.1	0.011	Not Detected	Not Detected
Freon 11	4.1	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Freon 113	4.1	0.032	Not Detected	Not Detected
Methylene Chloride	4.1	0.014	14	0.049
1,1-Dichloroethane	4.1	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Chloroform	4.1	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.1	0.026	Not Detected	Not Detected
Benzene	4.1	0.013	Not Detected	Not Detected
1,2-Dichloroethane	4.1	0.017	Not Detected	Not Detected
Trichloroethene	4.1	0.022	Not Detected	Not Detected
1,2-Dichloropropane	4.1	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
Toluene	4.1	0.016	19	0.074
trans-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Tetrachloroethene	4.1	0.028	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.1	0.032	Not Detected	Not Detected
Chlorobenzene	4.1	0.019	Not Detected	Not Detected
Ethyl Benzene	4.1	0.018	Not Detected	Not Detected
m,p-Xylene	4.1	0.018	Not Detected	Not Detected
o-Xylene	4.1	0.018	Not Detected	Not Detected
Styrene	4.1	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.1	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,3-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.1	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,3-Butadiene	4.1	0.0092	Not Detected	Not Detected
Hexane	4.1	0.015	Not Detected	Not Detected
Cyclohexane	4.1	0.014	15	0.051
Heptane	4.1	0.017	Not Detected	Not Detected
Bromodichloromethane	4.1	0.028	Not Detected	Not Detected
Dibromochloromethane	4.1	0.036	Not Detected	Not Detected

NE
10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 39D-SP03-15

ID#: 0307349-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072514	Date of Collection: 7/17/03
Dil. Factor:	8.20	Date of Analysis: 7/25/03

TV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.1	0.020	Not Detected	Not Detected
Propylbenzene	4.1	0.020	Not Detected	Not Detected
Chloromethane	16	0.034	Not Detected	Not Detected
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected
Acetone	16	0.040	25	0.060
Carbon Disulfide	16	0.052	Not Detected	Not Detected
2-Propanol	16	0.041	Not Detected	Not Detected
trans-1,2-Dichloroethene	16	0.066	Not Detected	Not Detected
Vinyl Acetate	16	0.059	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	0.049	Not Detected	Not Detected
Tetrahydrofuran	16	0.049	Not Detected	Not Detected
1,4-Dioxane	16	0.060	Not Detected	Not Detected
4-Methyl-2-pentanone	16	0.068	Not Detected	Not Detected
2-Hexanone	16	0.068	Not Detected	Not Detected
Bromoform	16	0.17	Not Detected	Not Detected
4-Ethyltoluene	16	0.082	Not Detected	Not Detected
Methyl tert-butyl ether	16	0.060	Not Detected	Not Detected
Ethanol	16	0.031	21	0.041

WJ

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	79	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: 39D-SP05-15

ID#: 0307349-12A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072515	Date of Collection: 7/17/03
Dil. Factor:	8.64	Date of Analysis: 7/25/03

DV Qual

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	17	0.084
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	6.5	0.036
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

NE 10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 39D-SP05-15

ID#: 0307349-12A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072515	Date of Collection: 7/17/03
Dil. Factor:	8.64	Date of Analysis: 7/25/03

Du Real

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	1700	4.1
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	20	0.062
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

UJ

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	81	70-130

AIR TOXICS LTD.

SAMPLE NAME: 39D-SP04-15

ID#: 0307349-13A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072516	Date of Collection: 7/17/03
Dil. Factor:	8.64	Date of Analysis: 7/25/03

DW Qual

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	Not Detected	Not Detected
Hexane	4.3	0.015	6.5	0.023
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: 39D-SP04-15

ID#: 0307349-13A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072516	Date of Collection:	7/17/03
Dil. Factor:	8.64	Date of Analysis:	7/25/03

DV Dual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	62	0.15
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	Not Detected	Not Detected
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

WJ

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	80	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: 39D-SP04-15 Duplicate

ID#: 0307349-13AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072517	Date of Collection: 7/17/03
Dil. Factor:	8.64	Date of Analysis: 7/25/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	Not Detected	Not Detected
Hexane	4.3	0.015	6.3	0.022
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 39D-SP04-15 Duplicate

ID#: 0307349-13AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072517	Date of Collection:	7/17/03
Dil. Factor:	8.64	Date of Analysis:	7/25/03

Duplicate

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	51	0.12
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	Not Detected	Not Detected
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

UJ

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	82	70-130

NE 10/9/03

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 18, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III & IV Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0307388

Sample Identification

37D-SP09-10
37D-SP10-10
37D-TB71803
37D-SP11-10
37D-SP11D-10
37D-SP8-10**
37D-SP12-10
37D-SP12-10 Duplicate
49ST22-SP02-10
49ST22-SP05-10
49ST22-SP06-10

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers eleven air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per modified EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within the 70% - 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD).

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control

samples were reported by the laboratory. Percent recoveries (%R) were within the QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307388-13A	Freon 114 Methylene Chloride alpha-Chlorotoluene Chloromethane Ethanol	139 (80 – 120) 127 (80 – 120) 124 (80 – 120) 123 (80 – 120) 126 (80 – 120)	37D-SP09-10, 37D-SP10-10, 37D-TB71803, 37D-SP11-10, 37D-SP11D-10, 37D-SP12-10, and 37D-SP12-10 Duplicate	J detects	A
0307388-13A	Bromomethane	62 (80 – 120)	37D-SP09-10, 37D-SP10-10, 37D-TB71803, 37D-SP11-10, 37D-SP11D-10, 37D-SP12-10, and 37D-SP12-10 Duplicate	J detects, UJ nondetects	A
0307388-13B	Freon 114 Methylene Chloride Ethanol	136 (80 – 120) 128 (80 – 120) 126 (80 – 120)	49ST22-SP02-10 49ST22-SP05-10 49ST22-SP06-10	J detects	A
0307388-13B	Bromomethane MTBE	55 (80 – 120) 75 (80 – 120)	49ST22-SP02-10 49ST22-SP05-10 49ST22-SP06-10	J detects, UJ nondetects	A
0307388-13C	Freon 12 Vinyl Chloride Chloroethane cis-1,3-dichloropropene trans-1,3-dichloropropene Tetrachloroethene Styrene alpha-Chlorotoluene Cumene Chloromethane 4-Ethyltoluene	126 (80 – 120) 127 (80 – 120) 130 (80 – 120) 127 (80 – 120) 121 (80 – 120) 121 (80 – 120) 124 (80 – 120) 125 (80 – 120) 123 (80 – 120) 129 (80 – 120) 122 (80 – 120)	37D-SP8-10	J detects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

The system performance was within validation criteria for samples on which an EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples 37D-SP11-10 and 37D-SP11D-10 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ppbv)		RPD
	37D-SP11-10	37D-SP11D-10	
Trichloroethene	9.0	8.1	10
Acetone	45	48	6.5

XVII. Field Blanks

Sample 37D-TB71803 was identified as a field blank sample. No volatile contaminants were found in this blank.

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307388**

SDG	Sample	Compound	Flag	A or P	Reason
0307388	37D-SP09-10, 37D-SP10-10, 37D-TB71803, 37D-SP11-10, 37D-SP11D-10, 37D-SP12-10, and 37D-SP12-10 Duplicate	Freon 114, Methylene Chloride, alpha-Chlorotoluene, Chloromethane, and Ethanol	J detects	A	LCS recoveries above QC limits
0307388	37D-SP09-10, 37D-SP10-10, 37D-TB71803, 37D-SP11-10, 37D-SP11D-10, 37D-SP12-10, and 37D-SP12-10 Duplicate	Bromomethane	J detects UJ nondetects	A	LCS recovery below QC limits
0307388	49ST22-SP02-10 49ST22-SP05-10 49ST22-SP06-10	Freon 114, Methylene Chloride, and Ethanol	J detects	A	LCS recoveries above QC limits
0307388	49ST22-SP02-10 49ST22-SP05-10 49ST22-SP06-10	Bromomethane	J detects UJ nondetects	A	LCS recovery below QC limits
0307388	37D-SP8-10	Freon 12, Vinyl Chloride, Chloroethane cis-1,3-dichloropropene trans-1,3-dichloropropene Tetrachloroethene Styrene alpha-Chlorotoluene Cumene Chloromethane 4-Ethyltoluene	J detects	A	LCS recoveries above QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307388**

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: 37D-SP09-10

ID#: 0307388-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072517	Date of Collection: 7/18/03
Dil. Factor:	8.36	Date of Analysis: 7/25/03

DV anal

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 37D-SP09-10

ID#: 0307388-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072517	Date of Collection:	7/18/03
Dil. Factor:	8.36	Date of Analysis:	7/25/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	Not Detected	Not Detected
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 37D-SP10-10

ID#: 0307388-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072518	Date of Collection: 7/18/03
Dil. Factor:	8.52	Date of Analysis: 7/25/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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10/21/03*

AIR TOXICS LTD.

SAMPLE NAME: 37D-SP10-10

ID#: 0307388-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072518	Date of Collection:	7/18/03
Dil. Factor:	8.52	Date of Analysis:	7/25/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	40	0.096
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: 37D-TB71803

ID#: 0307388-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072519	Date of Collection:	7/18/03
Dil. Factor:	8.36	Date of Analysis:	7/25/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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NE 10/10/03

AIR TOXICS LTD.

SAMPLE NAME: 37D-TB71803

ID#: 0307388-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072519	Date of Collection: 7/18/03
Dil. Factor:	8.36	Date of Analysis: 7/25/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	Not Detected	Not Detected
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	98	70-130

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 37D-SP11-10

ID#: 0307388-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072520	Date of Collection: 7/18/03
Dil. Factor:	8.64	Date of Analysis: 7/25/03

DV dual

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	9.0	0.049
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	5.4	0.012
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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NE 10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 37D-SP11-10

ID#: 0307388-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072520	Date of Collection: 7/18/03
Dil. Factor:	8.64	Date of Analysis: 7/25/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	45	0.11
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	Not Detected	Not Detected
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: 37D-SP11D-10

ID#: 0307388-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072521	Date of Collection: 7/18/03
Dil. Factor:	8.52	Date of Analysis: 7/25/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	8.1	0.044
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 37D-SP11D-10

ID#: 0307388-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072521	Date of Collection:	7/18/03
Dil. Factor:	8.52	Date of Analysis:	7/25/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	48	0.12
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	100	70-130

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: 37D-SP8-10

ID#: 0307388-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072713	Date of Collection: 7/18/03
Dil. Factor:	8.64	Date of Analysis: 7/27/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	15	0.061
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	210	0.85
cis-1,2-Dichloroethene	4.3	0.017	110	0.44
Chloroform	4.3	0.021	22	0.11
1,1,1-Trichloroethane	4.3	0.024	430	2.4
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	21	0.068
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	110	0.59
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	12	0.046
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	11	0.049
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	43	0.097
Hexane	4.3	0.015	9.2	0.033
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	6.6	0.027
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 37D-SP8-10

ID#: 0307388-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b072713	Date of Collection:	7/18/03
Dil. Factor:	8.64	Date of Analysis:	7/27/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	230	0.55
Carbon Disulfide	17	0.055	52	0.17
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	41	0.12
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	28	0.054

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	88	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 37D-SP12-10

ID#: 0307388-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072523	Date of Collection:	7/18/03
Dil. Factor:	8.64	Date of Analysis:	7/25/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	5.2	0.012
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 37D-SP12-10

ID#: 0307388-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072523	Date of Collection: 7/18/03
Dil. Factor:	8.64	Date of Analysis: 7/25/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	22	0.053
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	Not Detected	Not Detected
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	101	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 37D-SP12-10 Duplicate

ID#: 0307388-07AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072524	Date of Collection: 7/18/03
Dil. Factor:	8.64	Date of Analysis: 7/25/03

DV Qual.

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Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	5.1	0.012
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: 37D-SP12-10 Duplicate

ID#: 0307388-07AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072524	Date of Collection: 7/18/03
Dil. Factor:	8.64	Date of Analysis: 7/25/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	20	0.048
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	Not Detected	Not Detected
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	95	70-130

AIR TOXICS LTD.

SAMPLE NAME: 49ST22-SP02-10

ID#: 0307388-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072616	Date of Collection: 7/18/03
Dil. Factor:	8.80	Date of Analysis: 7/26/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.4	0.022	Not Detected	Not Detected
Freon 114	4.4	0.031	Not Detected	Not Detected
Vinyl Chloride	4.4	0.011	Not Detected	Not Detected
Bromomethane	4.4	0.017	Not Detected	Not Detected
Chloroethane	4.4	0.012	Not Detected	Not Detected
Freon 11	4.4	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.4	0.018	Not Detected	Not Detected
Freon 113	4.4	0.034	Not Detected	Not Detected
Methylene Chloride	4.4	0.016	Not Detected	Not Detected
1,1-Dichloroethane	4.4	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.4	0.018	Not Detected	Not Detected
Chloroform	4.4	0.022	8.7	0.043
1,1,1-Trichloroethane	4.4	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.4	0.028	Not Detected	Not Detected
Benzene	4.4	0.014	4.4	0.014
1,2-Dichloroethane	4.4	0.018	Not Detected	Not Detected
Trichloroethene	4.4	0.024	91	0.50
1,2-Dichloropropane	4.4	0.021	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.4	0.020	Not Detected	Not Detected
Toluene	4.4	0.017	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.4	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.4	0.024	Not Detected	Not Detected
Tetrachloroethene	4.4	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.4	0.034	Not Detected	Not Detected
Chlorobenzene	4.4	0.020	Not Detected	Not Detected
Ethyl Benzene	4.4	0.019	Not Detected	Not Detected
m,p-Xylene	4.4	0.019	Not Detected	Not Detected
o-Xylene	4.4	0.019	Not Detected	Not Detected
Styrene	4.4	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.4	0.031	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.4	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.4	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
1,4-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
alpha-Chlorotoluene	4.4	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
1,3-Butadiene	4.4	0.0099	11	0.025
Hexane	4.4	0.016	Not Detected	Not Detected
Cyclohexane	4.4	0.015	Not Detected	Not Detected
Heptane	4.4	0.018	Not Detected	Not Detected
Bromodichloromethane	4.4	0.030	Not Detected	Not Detected
Dibromochloromethane	4.4	0.038	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 49ST22-SP02-10

ID#: 0307388-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072616	Date of Collection: 7/18/03
Dil. Factor:	8.80	Date of Analysis: 7/26/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.4	0.022	Not Detected	Not Detected
Propylbenzene	4.4	0.022	Not Detected	Not Detected
Chloromethane	18	0.037	Not Detected	Not Detected
1,2,4-Trichlorobenzene	18	0.13	Not Detected	Not Detected
Hexachlorobutadiene	18	0.19	Not Detected	Not Detected
Acetone	18	0.042	23	0.056
Carbon Disulfide	18	0.056	Not Detected	Not Detected
2-Propanol	18	0.044	Not Detected	Not Detected
trans-1,2-Dichloroethene	18	0.071	Not Detected	Not Detected
Vinyl Acetate	18	0.063	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	18	0.053	Not Detected	Not Detected
Tetrahydrofuran	18	0.053	Not Detected	Not Detected
1,4-Dioxane	18	0.064	Not Detected	Not Detected
4-Methyl-2-pentanone	18	0.073	Not Detected	Not Detected
2-Hexanone	18	0.073	Not Detected	Not Detected
Bromoform	18	0.18	Not Detected	Not Detected
4-Ethyltoluene	18	0.088	Not Detected	Not Detected
Methyl tert-butyl ether	18	0.064	Not Detected	Not Detected
Ethanol	18	0.034	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: 49ST15-SP05-10

ID#: 0307388-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072617	Date of Collection: 7/18/03
Dil. Factor:	8.64	Date of Analysis: 7/26/03

DV anal -

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 49ST15-SP05-10

ID#: 0307388-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072617	Date of Collection:	7/18/03
Dil. Factor:	8.64	Date of Analysis:	7/26/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	90	0.22
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	19	0.056
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	96	70-130

AIR TOXICS LTD.

SAMPLE NAME: 49ST15-SP06-10

ID#: 0307388-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072618	Date of Collection: 7/18/03
Dil. Factor:	8.64	Date of Analysis: 7/26/03

DV Anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 49ST15-SP06-10

ID#: 0307388-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072618	Date of Collection:	7/18/03
Dil. Factor:	8.64	Date of Analysis:	7/26/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	48	0.12
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	Not Detected	Not Detected
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130

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**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 21, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III & IV Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0307410

Sample Identification

C14-TB72103
C14-SV03-20
C14-SV05-10
C15-SV07-10
C15-SV07D-10
C15-SV05-10**

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers six air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per modified EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within the 70% - 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

No precision data were reported for this sample batch.

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within the QC

limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307410-12A	Freon 114 Methylene Chloride Ethanol	136 (80 – 120) 128 (80 – 120) 126 (80 – 120)	C14-TB72103, C14-SV03-20, C14-SV05-10, and C15-SV07-10	J detects	A
0307410-12A	Bromomethane	55 (80 – 120)	C14-TB72103, C14-SV03-20, C14-SV05-10, and C15-SV07-10	J detects, UJ nondetects	A
0307410-12B	Freon 114 Methylene Chloride trans-1,3- Dichloropropene Chloromethane 2-Propanol Vinyl Acetate	134 (80 – 120) 124 (80 – 120) 123 (80 – 120) 134 (80 – 120) 123 (80 – 120) 124 (80 – 120)	C15-SV07D-10 C15-SV05-10	J detects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

The system performance was within validation criteria for samples on which an EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C15-SV07-10 and C15-SV07D-10 were identified as field duplicates. No volatiles were detected in any of the samples with the following exception:

Compound	Concentration (ppbv)		RPD
	C15-SV07-10	C15-SV07D-10	
Acetone	82	53	43

XVII. Field Blanks

Sample C14-TB72103 was identified as a field blank sample. No volatile contaminants were found in this blank.

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307410**

SDG	Sample	Compound	Flag	A or P	Reason
0307410	C14-TB72103, C14-SV03-20, C14-SV05-10, and C15-SV07-10	Freon 114, Methylene Chloride, and Ethanol	J detects	A	LCS recoveries above QC limits
0307410	C14-TB72103, C14-SV03-20, C14-SV05-10, and C15-SV07-10	Bromomethane	J detects UJ nondetects	A	LCS recovery below QC limits
0307410	C15-SV07D-10 C15-SV05-10	Freon 114 Methylene Chloride trans-1,3- Dichloropropene Chloromethane 2-Propanol Vinyl Acetate	J detects	A	LCS recoveries above QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307410**

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: C14-TB72103

ID#: 0307410-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072620	Date of Collection:	7/21/03
Dil. Factor:	8.36	Date of Analysis:	7/26/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: C14-TB72103

ID#: 0307410-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072620	Date of Collection: 7/21/03
Dil. Factor:	8.36	Date of Analysis: 7/26/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	Not Detected	Not Detected
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130

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AIR TOXICS LTD.

SAMPLE NAME: C14-SV03-20

ID#: 0307410-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072621	Date of Collection:	7/21/03
Dil. Factor:	10.3	Date of Analysis:	7/26/03

DV anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	5.2	0.026	Not Detected	Not Detected
Freon 114	5.2	0.036	Not Detected	Not Detected
Vinyl Chloride	5.2	0.013	Not Detected	Not Detected
Bromomethane	5.2	0.020	Not Detected	Not Detected
Chloroethane	5.2	0.014	Not Detected	Not Detected
Freon 11	5.2	0.029	Not Detected	Not Detected
1,1-Dichloroethene	5.2	0.021	Not Detected	Not Detected
Freon 113	5.2	0.040	Not Detected	Not Detected
Methylene Chloride	5.2	0.018	Not Detected	Not Detected
1,1-Dichloroethane	5.2	0.021	Not Detected	Not Detected
cis-1,2-Dichloroethene	5.2	0.021	Not Detected	Not Detected
Chloroform	5.2	0.026	Not Detected	Not Detected
1,1,1-Trichloroethane	5.2	0.028	Not Detected	Not Detected
Carbon Tetrachloride	5.2	0.033	Not Detected	Not Detected
Benzene	5.2	0.017	Not Detected	Not Detected
1,2-Dichloroethane	5.2	0.021	Not Detected	Not Detected
Trichloroethene	5.2	0.028	Not Detected	Not Detected
1,2-Dichloropropane	5.2	0.024	Not Detected	Not Detected
cis-1,3-Dichloropropene	5.2	0.024	Not Detected	Not Detected
Toluene	5.2	0.020	Not Detected	Not Detected
trans-1,3-Dichloropropene	5.2	0.024	Not Detected	Not Detected
1,1,2-Trichloroethane	5.2	0.028	Not Detected	Not Detected
Tetrachloroethene	5.2	0.036	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	5.2	0.040	Not Detected	Not Detected
Chlorobenzene	5.2	0.024	Not Detected	Not Detected
Ethyl Benzene	5.2	0.023	Not Detected	Not Detected
m,p-Xylene	5.2	0.023	Not Detected	Not Detected
o-Xylene	5.2	0.023	Not Detected	Not Detected
Styrene	5.2	0.022	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	5.2	0.036	Not Detected	Not Detected
1,3,5-Trimethylbenzene	5.2	0.026	Not Detected	Not Detected
1,2,4-Trimethylbenzene	5.2	0.026	Not Detected	Not Detected
1,3-Dichlorobenzene	5.2	0.031	Not Detected	Not Detected
1,4-Dichlorobenzene	5.2	0.031	Not Detected	Not Detected
alpha-Chlorotoluene	5.2	0.027	Not Detected	Not Detected
1,2-Dichlorobenzene	5.2	0.031	Not Detected	Not Detected
1,3-Butadiene	5.2	0.012	Not Detected	Not Detected
Hexane	5.2	0.018	Not Detected	Not Detected
Cyclohexane	5.2	0.018	Not Detected	Not Detected
Heptane	5.2	0.021	Not Detected	Not Detected
Bromodichloromethane	5.2	0.035	Not Detected	Not Detected
Dibromochloromethane	5.2	0.044	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: C14-SV03-20

ID#: 0307410-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072621	Date of Collection: 7/21/03
Dil. Factor:	10.3	Date of Analysis: 7/26/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	5.2	0.026	Not Detected	Not Detected
Propylbenzene	5.2	0.026	Not Detected	Not Detected
Chloromethane	21	0.043	Not Detected	Not Detected
1,2,4-Trichlorobenzene	21	0.16	Not Detected	Not Detected
Hexachlorobutadiene	21	0.22	Not Detected	Not Detected
Acetone	21	0.050	31	0.076
Carbon Disulfide	21	0.065	Not Detected	Not Detected
2-Propanol	21	0.051	Not Detected	Not Detected
trans-1,2-Dichloroethene	21	0.083	Not Detected	Not Detected
Vinyl Acetate	21	0.074	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	21	0.062	Not Detected	Not Detected
Tetrahydrofuran	21	0.062	Not Detected	Not Detected
1,4-Dioxane	21	0.075	Not Detected	Not Detected
4-Methyl-2-pentanone	21	0.086	Not Detected	Not Detected
2-Hexanone	21	0.086	Not Detected	Not Detected
Bromoform	21	0.22	Not Detected	Not Detected
4-Ethyltoluene	21	0.10	Not Detected	Not Detected
Methyl tert-butyl ether	21	0.075	Not Detected	Not Detected
Ethanol	21	0.039	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	98	70-130

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AIR TOXICS LTD.

SAMPLE NAME: C14-SV05-10

ID#: 0307410-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072622	Date of Collection: 7/21/03
Dil. Factor:	8.36	Date of Analysis: 7/26/03

DV Qual

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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NE 10/9/03

AIR TOXICS LTD.

SAMPLE NAME: C14-SV05-10

ID#: 0307410-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072622	Date of Collection: 7/21/03
Dil. Factor:	8.36	Date of Analysis: 7/26/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	76	0.18
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	19	0.056
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	99	70-130

AIR TOXICS LTD.

SAMPLE NAME: C15-SV07-10

ID#: 0307410-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072623	Date of Collection: 7/21/03
Dil. Factor:	8.52	Date of Analysis: 7/27/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.026	Not Detected	Not Detected
Hexane	4.3	0.0096	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.015	Not Detected	Not Detected
Bromodichloromethane	4.3	0.018	Not Detected	Not Detected
Dibromochloromethane	4.3	0.029	Not Detected	Not Detected
	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: C15-SV07-10

ID#: 0307410-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072623	Date of Collection: 7/21/03
Dil. Factor:	8.52	Date of Analysis: 7/27/03

DV Ouel.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	82	0.20
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	22	0.043

J

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: C15-SV07D-10

ID#: 0307410-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072711	Date of Collection:	7/21/03
Dil. Factor:	8.52	Date of Analysis:	7/27/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: C15-SV07D-10

ID#: 0307410-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072711	Date of Collection: 7/21/03
Dil. Factor:	8.52	Date of Analysis: 7/27/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	53	0.13
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	99	70-130

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: C15-SV05-10

ID#: 0307410-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072713	Date of Collection:	7/21/03
Dil. Factor:	8.64	Date of Analysis:	7/27/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	5.4	0.012
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: C15-SV05-10

ID#: 0307410-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s072713	Date of Collection: 7/21/03
Dil. Factor:	8.64	Date of Analysis: 7/27/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	43	0.10
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	Not Detected	Not Detected
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

NE
10/9/03

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 22, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III & IV Equivalent
Laboratory: Air Toxics Ltd.

Sample Delivery Group (SDG): 0307449

Sample Identification

AJLA-SP06-10
AJLA-SP05-10**
AJLA-SP04-10
AJLA-SP02-10
AJLA-SP03-10
AJLA-SP01D-10
D(e)-SP05-10
D(e)-TB072203
D(e)-SP06-9
D(e)-SP06-9 Duplicate

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers ten air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per modified EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
7/25/03	sec-Butylbenzene	34	All samples in the SDG	J detects, UJ nondetects	A
7/25/03	1,2,3-Trimethylbenzene	37	All samples in the SDG	J detects, UJ nondetects	A

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within the 70% - 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within the QC limits of 15 relative percent difference (RPD) with the following exceptions:

Compound	Concentration (ppbv)		RPD
	D(e)-SP06-9	D(e)-SP06-9 Duplicate	
Toluene	6.0	7.3	19
Ethanol	104	87	18
2-Propanol	17	21	18

Qualification of laboratory duplicate precision outliers was not specified in the QAPP.

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within the QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307449-13A	Chloroethane	132 (80 – 120)	AJLA-SP06-10	J detects	A
	cis-1,3-Dichloropropene	130 (80 – 120)			
	trans-1,3-Dichloropropene	130 (80 – 120)			
	Heptane	126 (80 – 120)			
	Chloromethane	135 (80 – 120)			
	2-Butanone (MEK)	123 (80 – 120)			
	Ethanol	124 (80 – 120)			
0307449-13B	trans-1,3-Dichloropropene	128 (80 – 120)	AJLA-SP05-10, AJLA-SP04-10, AJLA-SP02-10, AJLA-SP03-10, AJLA-SP01D-10, D(e)-SP05-10, D(e)-TB072203, D(e)-SP06-9, and D(e)-SP06-9 Duplicate	J detects	A
	Heptane	125 (80 – 120)			
	Chloromethane	130 (80 – 120)			
	2-Butanone (MEK)	123 (80 – 120)			
	4-Methyl-2-pentanone	124 (80 – 120)			
	Ethanol	123 (80 – 120)			

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

The system performance was within validation criteria for samples on which an EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples AJLA-SP01-10 and AJLA-SP01D-10 were identified as field duplicates. However, as sample AJLA-SP01-10 was received with significant vacuum remaining in the canister, the analysis of this sample was cancelled. Therefore, field duplicate precision was not evaluated for this SDG.

XVII. Field Blanks

Sample D(e)-TB072203 was identified as a trip blank sample. No volatile contaminants were found in this blank with the following exception:

Field Blank ID	Compound	Concentration (ppbv)
D(e)-TB072203	Acetone	27

Sample concentrations were compared to concentrations detected in the trip blank. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated trip blank with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration (ppbv)	Modified Final Concentration (ppbv)
AJLA-SP06-10	Acetone	39	39U
AJLA-SP05-10	Acetone	24	24U
AJLA-SP04-10	Acetone	24	24U
AJLA-SP02-10	Acetone	85	85U
AJLA-SP03-10	Acetone	23	23U
AJLA-SP01D-10	Acetone	110	110U
D(e)-SP05-10	Acetone	130	130U

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307449**

SDG	Sample	Compound	Flag	A or P	Reason
0307449	All samples in the SDG	sec-Butylbenzene 1,2,3-Trimethylbenzene	J detects UJ nondetects	A	ICAL %RSD outside QC limits
0307449	AJLA-SP06-10	Chloroethane cis-1,3-Dichloropropene trans-1,3-Dichloropropene Heptane Chloromethane 2-Butanone (MEK) Ethanol	J detects	A	LCS recoveries above QC limits
0307449	AJLA-SP05-10, AJLA-SP04-10, AJLA-SP02-10, AJLA-SP03-10, AJLA-SP01D-10, D(e)-SP05-10, D(e)-TB072203, D(e)-SP06-9, and D(e)-SP06-9 Duplicate	trans-1,3-Dichloropropene Heptane Chloromethane 2-Butanone (MEK) 4-Methyl-2-pentanone Ethanol	J detects	A	LCS recoveries above QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307449**

No Sample Data Qualified in this SDG

**Aerojet
Volatiles (TO-14A) - Field Blank Data Qualification Summary - SDG 0307449**

SDG	Sample	Compound	Flag	A or P	Reason
0307449	AJLA-SP06-10, AJLA-SP05-10, AJLA-SP04-10, AJLA-SP02-10, AJLA-SP03-10, AJLA-SP01D-10, and D(e)-SP05-10	Acetone	U	A	Trip blank contamination

AIR TOXICS LTD.

SAMPLE NAME: AJLA-SP06-10

ID#: 0307449-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i072820	Date of Collection:	7/22/03
Dil. Factor:	8.20	Date of Analysis:	7/28/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.1	0.021	Not Detected	Not Detected
Freon 114	4.1	0.029	Not Detected	Not Detected
Vinyl Chloride	4.1	0.011	Not Detected	Not Detected
Bromomethane	4.1	0.016	Not Detected	Not Detected
Chloroethane	4.1	0.011	Not Detected	Not Detected
Freon 11	4.1	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Freon 113	4.1	0.032	Not Detected	Not Detected
Methylene Chloride	4.1	0.014	Not Detected	Not Detected
1,1-Dichloroethane	4.1	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Chloroform	4.1	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.1	0.026	Not Detected	Not Detected
Benzene	4.1	0.013	Not Detected	Not Detected
1,2-Dichloroethane	4.1	0.017	Not Detected	Not Detected
Trichloroethene	4.1	0.022	Not Detected	Not Detected
1,2-Dichloropropane	4.1	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
Toluene	4.1	0.016	4.5	0.017
trans-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Tetrachloroethene	4.1	0.028	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.1	0.032	Not Detected	Not Detected
Chlorobenzene	4.1	0.019	Not Detected	Not Detected
Ethyl Benzene	4.1	0.018	Not Detected	Not Detected
m,p-Xylene	4.1	0.018	4.2	0.019
o-Xylene	4.1	0.018	Not Detected	Not Detected
Styrene	4.1	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.1	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,3-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.1	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,3-Butadiene	4.1	0.0092	Not Detected	Not Detected
Hexane	4.1	0.015	Not Detected	Not Detected
Cyclohexane	4.1	0.014	Not Detected	Not Detected
Heptane	4.1	0.017	Not Detected	Not Detected
Bromodichloromethane	4.1	0.028	Not Detected	Not Detected
Dibromochloromethane	4.1	0.036	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: AJLA-SP06-10

ID#: 0307449-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i072820	Date of Collection: 7/22/03
Dil. Factor:	8.20	Date of Analysis: 7/28/03

DV Anal.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.1	0.020	Not Detected	Not Detected
Propylbenzene	4.1	0.020	Not Detected	Not Detected
Chloromethane	16	0.034	Not Detected	Not Detected
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected
Acetone	16	0.040	39	0.094
Carbon Disulfide	16	0.052	Not Detected	Not Detected
2-Propanol	16	0.041	Not Detected	Not Detected
trans-1,2-Dichloroethene	16	0.066	Not Detected	Not Detected
Vinyl Acetate	16	0.059	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	0.049	Not Detected	Not Detected
Tetrahydrofuran	16	0.049	Not Detected	Not Detected
1,4-Dioxane	16	0.060	Not Detected	Not Detected
4-Methyl-2-pentanone	16	0.068	Not Detected	Not Detected
2-Hexanone	16	0.068	Not Detected	Not Detected
Bromoform	16	0.17	Not Detected	Not Detected
4-Ethyltoluene	16	0.082	Not Detected	Not Detected
Methyl tert-butyl ether	16	0.060	Not Detected	Not Detected
Ethanol	16	0.031	27	0.051

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	97	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: AJLA-SP05-10

ID#: 0307449-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	1073007	Date of Collection:	7/22/03
Dil. Factor:	8.36	Date of Analysis:	7/30/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	28	0.15
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: AJLA-SP05-10

ID#: 0307449-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073007	Date of Collection: 7/22/03
Dil. Factor:	8.36	Date of Analysis: 7/30/03

TV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	24	0.057
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: AJLA-SP04-10

ID#: 0307449-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073008	Date of Collection: 7/22/03
Dil. Factor:	8.36	Date of Analysis: 7/30/03

DV anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	16	0.087
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	620	2.6
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: AJLA-SP04-10

ID#: 0307449-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073008	Date of Collection: 7/22/03
Dil. Factor:	8.36	Date of Analysis: 7/30/03

DV Qual

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	24	0.058
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: AJLA-SP02-10

ID#: 0307449-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073010	Date of Collection:	7/22/03
Dil. Factor:	8.36	Date of Analysis:	7/30/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: AJLA-SP02-10

ID#: 0307449-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073010	Date of Collection:	7/22/03
Dil. Factor:	8.36	Date of Analysis:	7/30/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	85	0.20
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	19	0.058
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	23	0.045

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	99	70-130

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10/19/03*

AIR TOXICS LTD.

SAMPLE NAME: AJLA-SP03-10

ID#: 0307449-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073012	Date of Collection: 7/22/03
Dil. Factor:	8.36	Date of Analysis: 7/30/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: AJLA-SP03-10

ID#: 0307449-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073012	Date of Collection:	7/22/03
Dil. Factor:	8.36	Date of Analysis:	7/30/03

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Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	23	0.054
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: AJLA-SP01D-10

ID#: 0307449-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073013	Date of Collection: 7/22/03
Dil. Factor:	8.36	Date of Analysis: 7/30/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	5.8	0.026
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	6.4	0.032
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	550	2.3
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: AJLA-SP01D-10

ID#: 0307449-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073013	Date of Collection: 7/22/03
Dil. Factor:	8.36	Date of Analysis: 7/30/03

DV Qual

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	110	0.27
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	38	0.11
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	54	0.10

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

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AIR TOXICS LTD.

SAMPLE NAME: D(e)-SP05-10

ID#: 0307449-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073015	Date of Collection:	7/22/03
Dil. Factor:	8.52	Date of Analysis:	7/30/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: D(e)-SP05-10

ID#: 0307449-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073015	Date of Collection: 7/22/03
Dil. Factor:	8.52	Date of Analysis: 7/30/03

DV Qual

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	130	0.31
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	31	0.094
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	30	0.057

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	94	70-130

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AIR TOXICS LTD.

SAMPLE NAME: D(e)-TB072203

ID#: 0307449-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073016	Date of Collection: 7/22/03
Dil. Factor:	8.64	Date of Analysis: 7/30/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: D(e)-TB072203

ID#: 0307449-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	1073016	Date of Collection:	7/22/03
Dil. Factor:	8.64	Date of Analysis:	7/30/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	27	0.066
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	Not Detected	Not Detected
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	96	70-130

AIR TOXICS LTD.

SAMPLE NAME: D(e)-SP06-9

ID#: 0307449-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073017	Date of Collection:	7/22/03
Dil. Factor:	8.80	Date of Analysis:	7/30/03

DV Anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.4	0.022	Not Detected	Not Detected
Freon 114	4.4	0.031	Not Detected	Not Detected
Vinyl Chloride	4.4	0.011	Not Detected	Not Detected
Bromomethane	4.4	0.017	Not Detected	Not Detected
Chloroethane	4.4	0.012	Not Detected	Not Detected
Freon 11	4.4	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.4	0.018	Not Detected	Not Detected
Freon 113	4.4	0.034	Not Detected	Not Detected
Methylene Chloride	4.4	0.016	Not Detected	Not Detected
1,1-Dichloroethane	4.4	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.4	0.018	Not Detected	Not Detected
Chloroform	4.4	0.022	Not Detected	Not Detected
1,1,1-Trichloroethane	4.4	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.4	0.028	Not Detected	Not Detected
Benzene	4.4	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.4	0.018	Not Detected	Not Detected
Trichloroethene	4.4	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.4	0.021	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.4	0.020	Not Detected	Not Detected
Toluene	4.4	0.017	6.0	0.023
trans-1,3-Dichloropropene	4.4	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.4	0.024	Not Detected	Not Detected
Tetrachloroethene	4.4	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.4	0.034	Not Detected	Not Detected
Chlorobenzene	4.4	0.020	Not Detected	Not Detected
Ethyl Benzene	4.4	0.019	Not Detected	Not Detected
m,p-Xylene	4.4	0.019	6.4	0.028
o-Xylene	4.4	0.019	5.4	0.024
Styrene	4.4	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.4	0.031	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.4	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.4	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
1,4-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
alpha-Chlorotoluene	4.4	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
1,3-Butadiene	4.4	0.0099	Not Detected	Not Detected
Hexane	4.4	0.016	4.7	0.017
Cyclohexane	4.4	0.015	Not Detected	Not Detected
Heptane	4.4	0.018	5.8	0.024
Bromodichloromethane	4.4	0.030	Not Detected	Not Detected
Dibromochloromethane	4.4	0.038	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: D(e)-SP06-9

ID#: 0307449-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	I073017	Date of Collection: 7/22/03
Dil. Factor:	8.80	Date of Analysis: 7/30/03

DV Anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.4	0.022	Not Detected	Not Detected
Propylbenzene	4.4	0.022	Not Detected	Not Detected
Chloromethane	18	0.037	Not Detected	Not Detected
1,2,4-Trichlorobenzene	18	0.13	Not Detected	Not Detected
Hexachlorobutadiene	18	0.19	Not Detected	Not Detected
Acetone	18	0.042	580	1.4
Carbon Disulfide	18	0.056	Not Detected	Not Detected
2-Propanol	18	0.044	17 J	0.043 J
trans-1,2-Dichloroethene	18	0.071	Not Detected	Not Detected
Vinyl Acetate	18	0.063	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	18	0.053	99	0.30
Tetrahydrofuran	18	0.053	Not Detected	Not Detected
1,4-Dioxane	18	0.064	Not Detected	Not Detected
4-Methyl-2-pentanone	18	0.073	Not Detected	Not Detected
2-Hexanone	18	0.073	Not Detected	Not Detected
Bromoform	18	0.18	Not Detected	Not Detected
4-Ethyltoluene	18	0.088	Not Detected	Not Detected
Methyl tert-butyl ether	18	0.064	Not Detected	Not Detected
Ethanol	18	0.034	100	0.20

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J = Estimated value.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

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AIR TOXICS LTD.

SAMPLE NAME: D(e)-SP06-9 Duplicate

ID#: 0307449-10AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073018	Date of Collection: 7/22/03
Dil. Factor:	8.80	Date of Analysis: 7/30/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.4	0.022	Not Detected	Not Detected
Freon 114	4.4	0.031	Not Detected	Not Detected
Vinyl Chloride	4.4	0.011	Not Detected	Not Detected
Bromomethane	4.4	0.017	Not Detected	Not Detected
Chloroethane	4.4	0.012	Not Detected	Not Detected
Freon 11	4.4	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.4	0.018	Not Detected	Not Detected
Freon 113	4.4	0.034	Not Detected	Not Detected
Methylene Chloride	4.4	0.016	Not Detected	Not Detected
1,1-Dichloroethane	4.4	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.4	0.018	Not Detected	Not Detected
Chloroform	4.4	0.022	Not Detected	Not Detected
1,1,1-Trichloroethane	4.4	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.4	0.028	Not Detected	Not Detected
Benzene	4.4	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.4	0.018	Not Detected	Not Detected
Trichloroethene	4.4	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.4	0.021	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.4	0.020	Not Detected	Not Detected
Toluene	4.4	0.017	7.2	0.028
trans-1,3-Dichloropropene	4.4	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.4	0.024	Not Detected	Not Detected
Tetrachloroethene	4.4	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.4	0.034	Not Detected	Not Detected
Chlorobenzene	4.4	0.020	Not Detected	Not Detected
Ethyl Benzene	4.4	0.019	Not Detected	Not Detected
m,p-Xylene	4.4	0.019	7.1	0.031
o-Xylene	4.4	0.019	6.2	0.027
Styrene	4.4	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.4	0.031	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.4	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.4	0.022	5.8	0.029
1,3-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
1,4-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
alpha-Chlorotoluene	4.4	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.4	0.027	Not Detected	Not Detected
1,3-Butadiene	4.4	0.0099	Not Detected	Not Detected
Hexane	4.4	0.016	4.8	0.017
Cyclohexane	4.4	0.015	Not Detected	Not Detected
Heptane	4.4	0.018	5.4	0.022
Bromodichloromethane	4.4	0.030	Not Detected	Not Detected
Dibromochloromethane	4.4	0.038	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: D(e)-SP06-9 Duplicate

ID#: 0307449-10AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	i073018	Date of Collection: 7/22/03
Dil. Factor:	8.80	Date of Analysis: 7/30/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.4	0.022	Not Detected	Not Detected
Propylbenzene	4.4	0.022	Not Detected	Not Detected
Chloromethane	18	0.037	Not Detected	Not Detected
1,2,4-Trichlorobenzene	18	0.13	Not Detected	Not Detected
Hexachlorobutadiene	18	0.19	Not Detected	Not Detected
Acetone	18	0.042	670	1.6
Carbon Disulfide	18	0.056	Not Detected	Not Detected
2-Propanol	18	0.044	21	0.052
trans-1,2-Dichloroethene	18	0.071	Not Detected	Not Detected
Vinyl Acetate	18	0.063	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	18	0.053	110	0.34
Tetrahydrofuran	18	0.053	Not Detected	Not Detected
1,4-Dioxane	18	0.064	Not Detected	Not Detected
4-Methyl-2-pentanone	18	0.073	Not Detected	Not Detected
2-Hexanone	18	0.073	Not Detected	Not Detected
Bromoform	18	0.18	Not Detected	Not Detected
4-Ethyltoluene	18	0.088	Not Detected	Not Detected
Methyl tert-butyl ether	18	0.064	Not Detected	Not Detected
Ethanol	18	0.034	86	0.16

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	104	70-130

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Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Aerojet
Collection Date: July 23, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III & IV Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0307505

Sample Identification

De-SP07-10
C32-SV05-10
C32-TB72303
C32-SV02-20
C32-SV02D-20
C32-SV03-10**
C32-SV04-10
C10-SV06-10
C10-SV06-10 Duplicate

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers nine air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per modified EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within the 70% - 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD).

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control

samples were reported by the laboratory. Percent recoveries (%R) were within the QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307505-13A	Chloroethane cis-1,3-Dichloropropene trans-1,3-Dichloropropene Tetrachloroethene Styrene Cumene Chloromethane 4-Ethyltoluene	125 (80 – 120) 125 (80 – 120) 126 (80 – 120) 123 (80 – 120) 124 (80 – 120) 127 (80 – 120) 123 (80 – 120) 123 (80 – 120)	De-SP07-10 C32-SV05-10 C32-TB72303	J detects	A
0307505-13B	Freon 12 Vinyl Chloride cis-1,3-Dichloropropene trans-1,3-Dichloropropene Tetrachloroethene Styrene alpha-Chlorotoluene Cumene Chloromethane	128 (80 – 120) 131 (80 – 120) 122 (80 – 120) 121 (80 – 120) 123 (80 – 120) 124 (80 – 120) 140 (80 – 120) 122 (80 – 120) 132 (80 – 120)	C32-SV02-20 C32-SV02D-20 C32-SV03-10 C32-SV04-10 C10-SV06-10 C10-SV06-10 Duplicate	J detects	A
0307505-13B	1,3-Dichlorobenzene 1,4-Dichlorobenzene Bromoform	74 (80 – 120) 70 (80 – 120) 75 (80 – 120)	C32-SV02-20 C32-SV02D-20 C32-SV03-10 C32-SV04-10 C10-SV06-10 C10-SV06-10 Duplicate	J detects, UJ nondetects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

The system performance was within validation criteria for samples on which an EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C32-SV02-20 and C32-SV02D-20 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ppbv)		RPD
	C32-SV02-20	C32-SV02D-20	
1,3-Butadiene	32	16	67
Hexane	28	12	80
Heptane	21	14	40
Acetone	1100	660	50
2-Butanone (MEK)	160	120	29
Ethanol	77	69	11

XVII. Field Blanks

Sample C32-TB72303 was identified as a trip blank sample. No volatile contaminants were found in this blank with the following exception:

Field Blank ID	Compound	Concentration (ppbv)
C32-TB72303	Acetone	18

Sample concentrations were compared to concentrations detected in the trip blank. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated trip blank with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration (ppbv)	Modified Final Concentration (ppbv)
C32-SV04-10	Acetone	44	44U
C10-SV06-10 Duplicate	Acetone	180	180U

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307505**

SDG	Sample	Compound	Flag	A or P	Reason
0307505	De-SP07-10 C32-SV05-10 C32-TB72303	Chloroethane cis-1,3-Dichloropropene trans-1,3-Dichloropropene Tetrachloroethene Styrene Cumene Chloromethane 4-Ethyltoluene	J detects	A	LCS recoveries above QC limits
0307505	C32-SV02-20 C32-SV02D-20 C32-SV03-10 C32-SV04-10 C10-SV06-10 C10-SV06-10	Freon 12 Vinyl Chloride cis-1,3-Dichloropropene trans-1,3-Dichloropropene Tetrachloroethene Styrene alpha-Chlorotoluene Cumene Chloromethane	J detects	A	LCS recoveries above QC limits
0307505	C32-SV02-20 C32-SV02D-20 C32-SV03-10 C32-SV04-10 C10-SV06-10 C10-SV06-10	1,3-Dichlorobenzene 1,4-Dichlorobenzene Bromoform	J detects, UJ nondetects	A	LCS recoveries below QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307505**

No Sample Data Qualified in this SDG

**Aerojet
Volatiles (TO-14A) - Field Blank Data Qualification Summary - SDG 0307505**

SDG	Sample	Compound	Flag	A or P	Reason
0307505	C32-SV04-10 C10-SV06-10 Duplicate	Acetone	U	A	Trip blank contamination

AIR TOXICS LTD.

SAMPLE NAME: De-SP07-10

ID#: 0307505-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073019	Date of Collection: 7/23/03
Dil. Factor:	8.08	Date of Analysis: 7/30/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.0	0.020	Not Detected	Not Detected
Freon 114	4.0	0.029	Not Detected	Not Detected
Vinyl Chloride	4.0	0.010	Not Detected	Not Detected
Bromomethane	4.0	0.016	Not Detected	Not Detected
Chloroethane	4.0	0.011	Not Detected	Not Detected
Freon 11	4.0	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.0	0.016	Not Detected	Not Detected
Freon 113	4.0	0.031	Not Detected	Not Detected
Methylene Chloride	4.0	0.014	Not Detected	Not Detected
1,1-Dichloroethane	4.0	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.0	0.016	Not Detected	Not Detected
Chloroform	4.0	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.0	0.022	Not Detected	Not Detected
Carbon Tetrachloride	4.0	0.026	Not Detected	Not Detected
Benzene	4.0	0.013	4.3	0.014
1,2-Dichloroethane	4.0	0.017	Not Detected	Not Detected
Trichloroethene	4.0	0.022	Not Detected	Not Detected
1,2-Dichloropropane	4.0	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.0	0.019	Not Detected	Not Detected
Toluene	4.0	0.015	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.0	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.0	0.022	Not Detected	Not Detected
Tetrachloroethene	4.0	0.028	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.0	0.032	Not Detected	Not Detected
Chlorobenzene	4.0	0.019	Not Detected	Not Detected
Ethyl Benzene	4.0	0.018	Not Detected	Not Detected
m,p-Xylene	4.0	0.018	Not Detected	Not Detected
o-Xylene	4.0	0.018	Not Detected	Not Detected
Styrene	4.0	0.017	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.0	0.028	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.0	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.0	0.020	Not Detected	Not Detected
1,3-Dichlorobenzene	4.0	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.0	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.0	0.021	Not Detected	Not Detected
1,2-Dichlorobenzene	4.0	0.025	Not Detected	Not Detected
1,3-Butadiene	4.0	0.0091	8.3	0.019
Hexane	4.0	0.014	Not Detected	Not Detected
Cyclohexane	4.0	0.014	Not Detected	Not Detected
Heptane	4.0	0.017	Not Detected	Not Detected
Bromodichloromethane	4.0	0.028	Not Detected	Not Detected
Dibromochloromethane	4.0	0.035	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: De-SP07-10

ID#: 0307505-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073019	Date of Collection: 7/23/03
Dil. Factor:	8.08	Date of Analysis: 7/30/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.0	0.020	Not Detected	Not Detected
Propylbenzene	4.0	0.020	Not Detected	Not Detected
Chloromethane	16	0.034	Not Detected	Not Detected
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected
Acetone	16	0.039	200	0.48
Carbon Disulfide	16	0.051	Not Detected	Not Detected
2-Propanol	16	0.040	Not Detected	Not Detected
trans-1,2-Dichloroethene	16	0.065	Not Detected	Not Detected
Vinyl Acetate	16	0.058	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	0.048	19	0.056
Tetrahydrofuran	16	0.048	Not Detected	Not Detected
1,4-Dioxane	16	0.059	Not Detected	Not Detected
4-Methyl-2-pentanone	16	0.067	Not Detected	Not Detected
2-Hexanone	16	0.067	Not Detected	Not Detected
Bromoform	16	0.17	Not Detected	Not Detected
4-Ethyltoluene	16	0.081	Not Detected	Not Detected
Methyl tert-butyl ether	16	0.059	Not Detected	Not Detected
Ethanol	16	0.031	24	0.046

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	84	70-130

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AIR TOXICS LTD.

SAMPLE NAME: C32-SV05-10

ID#: 0307505-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073020	Date of Collection:	7/23/03
Dil. Factor:	8.96	Date of Analysis:	7/30/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.5	0.022	Not Detected	Not Detected
Freon 114	4.5	0.032	Not Detected	Not Detected
Vinyl Chloride	4.5	0.012	Not Detected	Not Detected
Bromomethane	4.5	0.018	Not Detected	Not Detected
Chloroethane	4.5	0.012	Not Detected	Not Detected
Freon 11	4.5	0.026	Not Detected	Not Detected
1,1-Dichloroethene	4.5	0.018	Not Detected	Not Detected
Freon 113	4.5	0.035	Not Detected	Not Detected
Methylene Chloride	4.5	0.016	Not Detected	Not Detected
1,1-Dichloroethane	4.5	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.5	0.018	Not Detected	Not Detected
Chloroform	4.5	0.022	Not Detected	Not Detected
1,1,1-Trichloroethane	4.5	0.025	Not Detected	Not Detected
Carbon Tetrachloride	4.5	0.029	Not Detected	Not Detected
Benzene	4.5	0.014	4.8	0.016
1,2-Dichloroethane	4.5	0.018	Not Detected	Not Detected
Trichloroethene	4.5	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.5	0.021	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.5	0.021	Not Detected	Not Detected
Toluene	4.5	0.017	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.5	0.021	Not Detected	Not Detected
1,1,2-Trichloroethane	4.5	0.025	Not Detected	Not Detected
Tetrachloroethene	4.5	0.031	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.5	0.035	Not Detected	Not Detected
Chlorobenzene	4.5	0.021	Not Detected	Not Detected
Ethyl Benzene	4.5	0.020	Not Detected	Not Detected
m,p-Xylene	4.5	0.020	Not Detected	Not Detected
o-Xylene	4.5	0.020	Not Detected	Not Detected
Styrene	4.5	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.5	0.031	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.5	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.5	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.5	0.027	Not Detected	Not Detected
1,4-Dichlorobenzene	4.5	0.027	Not Detected	Not Detected
alpha-Chlorotoluene	4.5	0.024	Not Detected	Not Detected
1,2-Dichlorobenzene	4.5	0.027	Not Detected	Not Detected
1,3-Butadiene	4.5	0.010	20	0.044
Hexane	4.5	0.016	12	0.042
Cyclohexane	4.5	0.016	Not Detected	Not Detected
Heptane	4.5	0.019	4.8	0.020
Bromodichloromethane	4.5	0.030	Not Detected	Not Detected
Dibromochloromethane	4.5	0.039	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: C32-SV05-10

ID#: 0307505-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073020	Date of Collection: 7/23/03
Dil. Factor:	8.96	Date of Analysis: 7/30/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.5	0.022	Not Detected	Not Detected
Propylbenzene	4.5	0.022	Not Detected	Not Detected
Chloromethane	18	0.038	Not Detected	Not Detected
1,2,4-Trichlorobenzene	18	0.14	Not Detected	Not Detected
Hexachlorobutadiene	18	0.19	Not Detected	Not Detected
Acetone	18	0.043	200	0.48
Carbon Disulfide	18	0.057	Not Detected	Not Detected
2-Propanol	18	0.045	Not Detected	Not Detected
trans-1,2-Dichloroethene	18	0.072	Not Detected	Not Detected
Vinyl Acetate	18	0.064	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	18	0.054	29	0.086
Tetrahydrofuran	18	0.054	Not Detected	Not Detected
1,4-Dioxane	18	0.066	Not Detected	Not Detected
4-Methyl-2-pentanone	18	0.075	Not Detected	Not Detected
2-Hexanone	18	0.075	Not Detected	Not Detected
Bromoform	18	0.19	Not Detected	Not Detected
4-Ethyltoluene	18	0.090	Not Detected	Not Detected
Methyl tert-butyl ether	18	0.066	Not Detected	Not Detected
Ethanol	18	0.034	32	0.062

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	81	70-130

AIR TOXICS LTD.

SAMPLE NAME: C32-TB72303

ID#: 0307505-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073021	Date of Collection: 7/23/03
Dil. Factor:	8.20	Date of Analysis: 7/30/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.1	0.021	Not Detected	Not Detected
Freon 114	4.1	0.029	Not Detected	Not Detected
Vinyl Chloride	4.1	0.011	Not Detected	Not Detected
Bromomethane	4.1	0.016	Not Detected	Not Detected
Chloroethane	4.1	0.011	Not Detected	Not Detected
Freon 11	4.1	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Freon 113	4.1	0.032	Not Detected	Not Detected
Methylene Chloride	4.1	0.014	Not Detected	Not Detected
1,1-Dichloroethane	4.1	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Chloroform	4.1	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.1	0.026	Not Detected	Not Detected
Benzene	4.1	0.013	Not Detected	Not Detected
1,2-Dichloroethane	4.1	0.017	Not Detected	Not Detected
Trichloroethene	4.1	0.022	Not Detected	Not Detected
1,2-Dichloropropane	4.1	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
Toluene	4.1	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Tetrachloroethene	4.1	0.028	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.1	0.032	Not Detected	Not Detected
Chlorobenzene	4.1	0.019	Not Detected	Not Detected
Ethyl Benzene	4.1	0.018	Not Detected	Not Detected
m,p-Xylene	4.1	0.018	Not Detected	Not Detected
o-Xylene	4.1	0.018	Not Detected	Not Detected
Styrene	4.1	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.1	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,3-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.1	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,3-Butadiene	4.1	0.0092	Not Detected	Not Detected
Hexane	4.1	0.015	Not Detected	Not Detected
Cyclohexane	4.1	0.014	Not Detected	Not Detected
Heptane	4.1	0.017	Not Detected	Not Detected
Bromodichloromethane	4.1	0.028	Not Detected	Not Detected
Dibromochloromethane	4.1	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: C32-TB72303

ID#: 0307505-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073021	Date of Collection:	7/23/03
Dil. Factor:	8.20	Date of Analysis:	7/30/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.1	0.020	Not Detected	Not Detected
Propylbenzene	4.1	0.020	Not Detected	Not Detected
Chloromethane	16	0.034	Not Detected	Not Detected
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected
Acetone	16	0.040	18	0.044
Carbon Disulfide	16	0.052	Not Detected	Not Detected
2-Propanol	16	0.041	Not Detected	Not Detected
trans-1,2-Dichloroethene	16	0.066	Not Detected	Not Detected
Vinyl Acetate	16	0.059	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	0.049	Not Detected	Not Detected
Tetrahydrofuran	16	0.049	Not Detected	Not Detected
1,4-Dioxane	16	0.060	Not Detected	Not Detected
4-Methyl-2-pentanone	16	0.068	Not Detected	Not Detected
2-Hexanone	16	0.068	Not Detected	Not Detected
Bromoform	16	0.17	Not Detected	Not Detected
4-Ethyltoluene	16	0.082	Not Detected	Not Detected
Methyl tert-butyl ether	16	0.060	Not Detected	Not Detected
Ethanol	16	0.031	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	81	70-130

AIR TOXICS LTD.

SAMPLE NAME: C32-SV02-20

ID#: 0307505-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073122	Date of Collection:	7/23/03
Dil. Factor:	16.7	Date of Analysis:	7/31/03

DV Qual

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	8.4	0.042	Not Detected	Not Detected
Freon 114	8.4	0.059	Not Detected	Not Detected
Vinyl Chloride	8.4	0.022	Not Detected	Not Detected
Bromomethane	8.4	0.033	Not Detected	Not Detected
Chloroethane	8.4	0.022	Not Detected	Not Detected
Freon 11	8.4	0.048	Not Detected	Not Detected
1,1-Dichloroethene	8.4	0.034	Not Detected	Not Detected
Freon 113	8.4	0.065	Not Detected	Not Detected
Methylene Chloride	8.4	0.029	Not Detected	Not Detected
1,1-Dichloroethane	8.4	0.034	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.4	0.034	Not Detected	Not Detected
Chloroform	8.4	0.041	Not Detected	Not Detected
1,1,1-Trichloroethane	8.4	0.046	Not Detected	Not Detected
Carbon Tetrachloride	8.4	0.053	Not Detected	Not Detected
Benzene	8.4	0.027	11	0.036
1,2-Dichloroethane	8.4	0.034	Not Detected	Not Detected
Trichloroethene	8.4	0.046	Not Detected	Not Detected
1,2-Dichloropropane	8.4	0.039	Not Detected	Not Detected
cis-1,3-Dichloropropene	8.4	0.038	Not Detected	Not Detected
Toluene	8.4	0.032	Not Detected	Not Detected
trans-1,3-Dichloropropene	8.4	0.038	Not Detected	Not Detected
1,1,2-Trichloroethane	8.4	0.046	Not Detected	Not Detected
Tetrachloroethene	8.4	0.058	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	8.4	0.065	Not Detected	Not Detected
Chlorobenzene	8.4	0.039	Not Detected	Not Detected
Ethyl Benzene	8.4	0.037	Not Detected	Not Detected
m,p-Xylene	8.4	0.037	Not Detected	Not Detected
o-Xylene	8.4	0.037	Not Detected	Not Detected
Styrene	8.4	0.036	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.4	0.058	Not Detected	Not Detected
1,3,5-Trimethylbenzene	8.4	0.042	Not Detected	Not Detected
1,2,4-Trimethylbenzene	8.4	0.042	Not Detected	Not Detected
1,3-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
1,4-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
alpha-Chlorotoluene	8.4	0.044	Not Detected	Not Detected
1,2-Dichlorobenzene	8.4	0.051	Not Detected	Not Detected
1,3-Butadiene	8.4	0.019	32	0.072
Hexane	8.4	0.030	28	0.099
Cyclohexane	8.4	0.029	Not Detected	Not Detected
Heptane	8.4	0.035	21	0.088
Bromodichloromethane	8.4	0.057	Not Detected	Not Detected
Dibromochloromethane	8.4	0.072	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: C32-SV02-20

ID#: 0307505-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073122	Date of Collection: 7/23/03
Dil. Factor:	16.7	Date of Analysis: 7/31/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	8.4	0.042	Not Detected	Not Detected
Propylbenzene	8.4	0.042	Not Detected	Not Detected
Chloromethane	33	0.070	Not Detected	Not Detected
1,2,4-Trichlorobenzene	33	0.25	Not Detected	Not Detected
Hexachlorobutadiene	33	0.36	Not Detected	Not Detected
Acetone	33	0.081	1100	2.6
Carbon Disulfide	33	0.10	Not Detected	Not Detected
2-Propanol	33	0.083	Not Detected	Not Detected
trans-1,2-Dichloroethene	33	0.13	Not Detected	Not Detected
Vinyl Acetate	33	0.12	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	33	0.10	160	0.48
Tetrahydrofuran	33	0.10	Not Detected	Not Detected
1,4-Dioxane	33	0.12	Not Detected	Not Detected
4-Methyl-2-pentanone	33	0.14	Not Detected	Not Detected
2-Hexanone	33	0.14	Not Detected	Not Detected
Bromoform	33	0.35	Not Detected	Not Detected
4-Ethyltoluene	33	0.17	Not Detected	Not Detected
Methyl tert-butyl ether	33	0.12	Not Detected	Not Detected
Ethanol	33	0.064	77	0.15

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	82	70-130

AIR TOXICS LTD.

SAMPLE NAME: C32-SV02D-20

ID#: 0307505-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073123	Date of Collection: 7/23/03
Dil. Factor:	18.0	Date of Analysis: 7/31/03

DV Anal.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	9.0	0.045	Not Detected	Not Detected
Freon 114	9.0	0.064	Not Detected	Not Detected
Vinyl Chloride	9.0	0.023	Not Detected	Not Detected
Bromomethane	9.0	0.036	Not Detected	Not Detected
Chloroethane	9.0	0.024	Not Detected	Not Detected
Freon 11	9.0	0.051	Not Detected	Not Detected
1,1-Dichloroethene	9.0	0.036	Not Detected	Not Detected
Freon 113	9.0	0.070	Not Detected	Not Detected
Methylene Chloride	9.0	0.032	Not Detected	Not Detected
1,1-Dichloroethane	9.0	0.037	Not Detected	Not Detected
cis-1,2-Dichloroethene	9.0	0.036	Not Detected	Not Detected
Chloroform	9.0	0.045	Not Detected	Not Detected
1,1,1-Trichloroethane	9.0	0.050	Not Detected	Not Detected
Carbon Tetrachloride	9.0	0.058	Not Detected	Not Detected
Benzene	9.0	0.029	Not Detected	Not Detected
1,2-Dichloroethane	9.0	0.037	Not Detected	Not Detected
Trichloroethene	9.0	0.049	Not Detected	Not Detected
1,2-Dichloropropane	9.0	0.042	Not Detected	Not Detected
cis-1,3-Dichloropropene	9.0	0.042	Not Detected	Not Detected
Toluene	9.0	0.034	Not Detected	Not Detected
trans-1,3-Dichloropropene	9.0	0.042	Not Detected	Not Detected
1,1,2-Trichloroethane	9.0	0.050	Not Detected	Not Detected
Tetrachloroethene	9.0	0.062	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	9.0	0.070	Not Detected	Not Detected
Chlorobenzene	9.0	0.042	Not Detected	Not Detected
Ethyl Benzene	9.0	0.040	Not Detected	Not Detected
m,p-Xylene	9.0	0.040	Not Detected	Not Detected
o-Xylene	9.0	0.040	Not Detected	Not Detected
Styrene	9.0	0.039	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	9.0	0.063	Not Detected	Not Detected
1,3,5-Trimethylbenzene	9.0	0.045	Not Detected	Not Detected
1,2,4-Trimethylbenzene	9.0	0.045	Not Detected	Not Detected
1,3-Dichlorobenzene	9.0	0.055	Not Detected	Not Detected
1,4-Dichlorobenzene	9.0	0.055	Not Detected	Not Detected
alpha-Chlorotoluene	9.0	0.047	Not Detected	Not Detected
1,2-Dichlorobenzene	9.0	0.055	Not Detected	Not Detected
1,3-Butadiene	9.0	0.020	16	0.035
Hexane	9.0	0.032	12	0.042
Cyclohexane	9.0	0.031	Not Detected	Not Detected
Heptane	9.0	0.037	14	0.057
Bromodichloromethane	9.0	0.061	Not Detected	Not Detected
Dibromochloromethane	9.0	0.078	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: C32-SV02D-20

ID#: 0307505-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073123	Date of Collection: 7/23/03
Dil. Factor:	18.0	Date of Analysis: 7/31/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	9.0	0.045	Not Detected	Not Detected
Propylbenzene	9.0	0.045	Not Detected	Not Detected
Chloromethane	36	0.076	Not Detected	Not Detected
1,2,4-Trichlorobenzene	36	0.27	Not Detected	Not Detected
Hexachlorobutadiene	36	0.39	Not Detected	Not Detected
Acetone	36	0.087	660	1.6
Carbon Disulfide	36	0.11	Not Detected	Not Detected
2-Propanol	36	0.090	Not Detected	Not Detected
trans-1,2-Dichloroethene	36	0.14	Not Detected	Not Detected
Vinyl Acetate	36	0.13	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	36	0.11	120	0.34
Tetrahydrofuran	36	0.11	Not Detected	Not Detected
1,4-Dioxane	36	0.13	Not Detected	Not Detected
4-Methyl-2-pentanone	36	0.15	Not Detected	Not Detected
2-Hexanone	36	0.15	Not Detected	Not Detected
Bromoform	36	0.38	Not Detected	Not Detected
4-Ethyltoluene	36	0.18	Not Detected	Not Detected
Methyl tert-butyl ether	36	0.13	Not Detected	Not Detected
Ethanol	36	0.069	69	0.13

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	83	70-130

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AIR TOXICS LTD.

SAMPLE NAME: C32-SV03-10

ID#: 0307505-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073124	Date of Collection: 7/23/03
Dil. Factor:	8.96	Date of Analysis: 8/1/03

DU Qual -

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.5	0.022	Not Detected	Not Detected
Freon 114	4.5	0.032	Not Detected	Not Detected
Vinyl Chloride	4.5	0.012	Not Detected	Not Detected
Bromomethane	4.5	0.018	Not Detected	Not Detected
Chloroethane	4.5	0.012	Not Detected	Not Detected
Freon 11	4.5	0.026	Not Detected	Not Detected
1,1-Dichloroethene	4.5	0.018	Not Detected	Not Detected
Freon 113	4.5	0.035	Not Detected	Not Detected
Methylene Chloride	4.5	0.016	Not Detected	Not Detected
1,1-Dichloroethane	4.5	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.5	0.018	Not Detected	Not Detected
Chloroform	4.5	0.022	Not Detected	Not Detected
1,1,1-Trichloroethane	4.5	0.025	Not Detected	Not Detected
Carbon Tetrachloride	4.5	0.029	Not Detected	Not Detected
Benzene	4.5	0.014	12	0.038
1,2-Dichloroethane	4.5	0.018	Not Detected	Not Detected
Trichloroethene	4.5	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.5	0.021	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.5	0.021	Not Detected	Not Detected
Toluene	4.5	0.017	8.7	0.033
trans-1,3-Dichloropropene	4.5	0.021	Not Detected	Not Detected
1,1,2-Trichloroethane	4.5	0.025	Not Detected	Not Detected
Tetrachloroethene	4.5	0.031	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.5	0.035	Not Detected	Not Detected
Chlorobenzene	4.5	0.021	Not Detected	Not Detected
Ethyl Benzene	4.5	0.020	Not Detected	Not Detected
m,p-Xylene	4.5	0.020	Not Detected	Not Detected
o-Xylene	4.5	0.020	Not Detected	Not Detected
Styrene	4.5	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.5	0.031	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.5	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.5	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.5	0.027	Not Detected	Not Detected
1,4-Dichlorobenzene	4.5	0.027	Not Detected	Not Detected
alpha-Chlorotoluene	4.5	0.024	Not Detected	Not Detected
1,2-Dichlorobenzene	4.5	0.027	Not Detected	Not Detected
1,3-Butadiene	4.5	0.010	18	0.040
Hexane	4.5	0.016	17	0.062
Cyclohexane	4.5	0.016	Not Detected	Not Detected
Heptane	4.5	0.019	11	0.048
Bromodichloromethane	4.5	0.030	Not Detected	Not Detected
Dibromochloromethane	4.5	0.039	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: C32-SV03-10

ID#: 0307505-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073124	Date of Collection: 7/23/03
Dil. Factor:	8.96	Date of Analysis: 8/1/03

DV Anal.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.5	0.022	Not Detected	Not Detected
Propylbenzene	4.5	0.022	Not Detected	Not Detected
Chloromethane	18	0.038	Not Detected	Not Detected
1,2,4-Trichlorobenzene	18	0.14	Not Detected	Not Detected
Hexachlorobutadiene	18	0.19	Not Detected	Not Detected
Acetone	18	0.043	340	0.82
Carbon Disulfide	18	0.057	Not Detected	Not Detected
2-Propanol	18	0.045	Not Detected	Not Detected
trans-1,2-Dichloroethene	18	0.072	Not Detected	Not Detected
Vinyl Acetate	18	0.064	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	18	0.054	51	0.15
Tetrahydrofuran	18	0.054	Not Detected	Not Detected
1,4-Dioxane	18	0.066	Not Detected	Not Detected
4-Methyl-2-pentanone	18	0.075	Not Detected	Not Detected
2-Hexanone	18	0.075	Not Detected	Not Detected
Bromoform	18	0.19	Not Detected	Not Detected
4-Ethyltoluene	18	0.090	Not Detected	Not Detected
Methyl tert-butyl ether	18	0.066	Not Detected	Not Detected
Ethanol	18	0.034	85	0.16

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	82	70-130

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AIR TOXICS LTD.

SAMPLE NAME: C32-SV04-10

ID#: 0307505-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073125	Date of Collection: 7/23/03
Dil. Factor:	8.20	Date of Analysis: 8/1/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.1	0.021	Not Detected	Not Detected
Freon 114	4.1	0.029	Not Detected	Not Detected
Vinyl Chloride	4.1	0.011	Not Detected	Not Detected
Bromomethane	4.1	0.016	Not Detected	Not Detected
Chloroethane	4.1	0.011	Not Detected	Not Detected
Freon 11	4.1	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Freon 113	4.1	0.032	Not Detected	Not Detected
Methylene Chloride	4.1	0.014	Not Detected	Not Detected
1,1-Dichloroethane	4.1	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Chloroform	4.1	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.1	0.026	Not Detected	Not Detected
Benzene	4.1	0.013	Not Detected	Not Detected
1,2-Dichloroethane	4.1	0.017	Not Detected	Not Detected
Trichloroethene	4.1	0.022	Not Detected	Not Detected
1,2-Dichloropropane	4.1	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
Toluene	4.1	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Tetrachloroethene	4.1	0.028	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.1	0.032	Not Detected	Not Detected
Chlorobenzene	4.1	0.019	Not Detected	Not Detected
Ethyl Benzene	4.1	0.018	Not Detected	Not Detected
m,p-Xylene	4.1	0.018	Not Detected	Not Detected
o-Xylene	4.1	0.018	Not Detected	Not Detected
Styrene	4.1	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.1	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,3-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.1	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,3-Butadiene	4.1	0.0092	4.3	0.0097
Hexane	4.1	0.015	Not Detected	Not Detected
Cyclohexane	4.1	0.014	Not Detected	Not Detected
Heptane	4.1	0.017	Not Detected	Not Detected
Bromodichloromethane	4.1	0.028	Not Detected	Not Detected
Dibromochloromethane	4.1	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: C32-SV04-10

ID#: 0307505-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073125	Date of Collection: 7/23/03
Dil. Factor:	8.20	Date of Analysis: 8/1/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.1	0.020	Not Detected	Not Detected
Propylbenzene	4.1	0.020	Not Detected	Not Detected
Chloromethane	16	0.034	Not Detected	Not Detected
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected
Acetone	16	0.040	44	0.11
Carbon Disulfide	16	0.052	Not Detected	Not Detected
2-Propanol	16	0.041	Not Detected	Not Detected
trans-1,2-Dichloroethene	16	0.066	Not Detected	Not Detected
Vinyl Acetate	16	0.059	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	0.049	Not Detected	Not Detected
Tetrahydrofuran	16	0.049	Not Detected	Not Detected
1,4-Dioxane	16	0.060	Not Detected	Not Detected
4-Methyl-2-pentanone	16	0.068	Not Detected	Not Detected
2-Hexanone	16	0.068	Not Detected	Not Detected
Bromoform	16	0.17	Not Detected	Not Detected
4-Ethyltoluene	16	0.082	Not Detected	Not Detected
Methyl tert-butyl ether	16	0.060	Not Detected	Not Detected
Ethanol	16	0.031	Not Detected	Not Detected

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	83	70-130

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AIR TOXICS LTD.

SAMPLE NAME: C10-SV06-10

ID#: 0307505-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073128	Date of Collection: 7/23/03
Dil. Factor:	8.36	Date of Analysis: 8/1/03

DV Anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: C10-SV06-10

ID#: 0307505-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073128	Date of Collection: 7/23/03
Dil. Factor:	8.36	Date of Analysis: 8/1/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	190	0.45
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	39	0.12
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	38	0.072

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	81	70-130

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10/19/03*

AIR TOXICS LTD.

SAMPLE NAME: C10-SV06-10 Duplicate

ID#: 0307505-10AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073129	Date of Collection: 7/23/03
Dil. Factor:	8.36	Date of Analysis: 8/1/03

OV Anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected	Not Detected
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	4.2	0.018
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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10/19/03*

AIR TOXICS LTD.

SAMPLE NAME: C10-SV06-10 Duplicate

ID#: 0307505-10AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b073129	Date of Collection: 7/23/03
Dil. Factor:	8.36	Date of Analysis: 8/1/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	180	0.44
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	40	0.12
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	36	0.069

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Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	80	70-130

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 25, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III & IV Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0307523

Sample Identification

39D-FLUX 1**
39D-FLUX 2
FCS-FLUX 2**
FCS-FLUX 2 Duplicate
FCS-INFL-FLUX 3
33D-FLUX 2
33D-FLUX N(2)
39D-FLUX 1
39D-FLUX N(1)
FCS-FLUX 1
FCS-FLUX 1-R
FCS-FLUX-N1
FCS-FLUX-N1-R

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers thirteen air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per modified EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds with the following exceptions:

Date	Compound	%RSD	Associated Samples	Flag	A or P
7/17/03	Hexachlorobutadiene	44	39D-FLUX 1 39D-FLUX 2 FCS-FLUX 2 FCS-FLUX 2 Duplicate FCS-INFL-FLUX 3 33D-FLUX 2	J detects, UJ nondetects	A
6/13/03	Methylene Chloride Hexachlorobutadiene	36 34	33D-FLUX N(2) 39D-FLUX 1 39D-FLUX N(1) FCS-FLUX 1 FCS-FLUX 1-R FCS-FLUX-N1 FCS-FLUX-N1-R	J detects, UJ nondetects	A

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0% with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
8/5/03	Vinyl Chloride	40	39D-FLUX 1 39D-FLUX 2 FCS-FLUX 2 FCS-FLUX 2 Duplicate FCS-INFL-FLUX 3 33D-FLUX 2	J detects, UJ nondetects	A

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were not required by the method. However, the laboratory analyzed surrogates. All surrogate percent recoveries (%R) were within QC limits with the following exception:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
FCS-INFL-FLUX 3	4-Bromofluorobenzene	148 (70 – 130)	Tetrachloroethene 1,3-Butadiene trans-1,2-Dichloroethene Methylene Chloride	J detects	A

The laboratory noted that the surrogate recovery exceeded control limits due to matrix interference. The sample was reanalyzed to confirm the result.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision rResults were within QC limits of 15 relative percent difference (RPD) with the following exception:

Compound	Concentration (ppbv)		RPD
	FCS-FLUX 2	FCS-FLUX 2 Duplicate	
1,1-Dichloroethene	0.01845	0.1007	26

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within the QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307523-15A	Vinyl Chloride	149 (80 – 120)	39D-FLUX 1 39D-FLUX 2 FCS-FLUX 2 FCS-FLUX 2 Duplicate FCS-INFL-FLUX 3 33D-FLUX 2	J detects	A
0307523-15B	Vinyl Chloride	124 (80 – 120)	33D-FLUX N(2) 39D-FLUX 1 39D-FLUX N(1) FCS-FLUX 1 FCS-FLUX 1-R FCS-FLUX-N1 FCS-FLUX-N1-R	J detects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

The system performance was within validation criteria for samples on which an EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

The laboratory analyzed a shorter target list by low level SIM analysis than that specified in the QAPP as indicated on the chain-of-custody (COC). Results in this SDG may not be comparable to historical data.

XVI. Field Duplicates

There were no field duplicate samples identified in this SDG.

XVII. Field Blanks

There were no field blank samples identified in this SDG.

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307523**

SDG	Sample	Compound	Flag	A or P	Reason
0307523	All samples in the SDG	Hexachlorobutadiene	J detects UJ nondetects	A	ICAL %RSD outside QC limits
0307523	33D-FLUX N(2) 39D-FLUX 1 39D-FLUX N(1) FCS-FLUX 1 FCS-FLUX 1-R FCS-FLUX-N1 FCS-FLUX-N1-R	Methylene Chloride	J detects	A	ICAL %RSD outside QC limits
0307523	39D-FLUX 1 39D-FLUX 2 FCS-FLUX 2 FCS-FLUX 2 Duplicate FCS-INFL-FLUX 3 33D-FLUX 2	Vinyl Chloride	J detects UJ nondetects	A	CCAL %D outside QC limits
0307523	FCS-INFL-FLUX 3	Tetrachloroethene 1,3-Butadiene trans-1,2-Dichloroethene Methylene Chloride	J detects	A	Surrogate recovery exceeded QC limits
0307523	All samples in the SDG	Vinyl Chloride	J detects	A	LCS recoveries above QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307523**

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: 39D-FLUX 2

ID#: 0307523-02A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080509	Date of Collection: 7/25/03
Dil. Factor:	1.39	Date of Analysis: 8/5/03

DV Anal.

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.028	Not Detected	Not Detected	Not Detected
Chloroform	0.028	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.028	Not Detected	Not Detected	Not Detected
Benzene	0.070	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
Trichloroethene	0.028	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.028	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.28	Not Detected	Not Detected	Not Detected

UJ

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	107	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-FLUX 2

ID#: 0307523-03A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080510	Date of Collection: 7/25/03
Dil. Factor:	1.41	Date of Analysis: 8/5/03

DV Qual.

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	0.018	0.074	0.0029
1,1-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.028	0.043	0.17	0.0066
Chloroform	0.028	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.028	0.037	0.20	0.0078
Benzene	0.070	0.14	0.47	0.018
1,2-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
Trichloroethene	0.028	0.096	0.52	0.020
Tetrachloroethene	0.028	0.14	0.95	0.037
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.28	Not Detected	Not Detected	Not Detected

UJ

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	108	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-FLUX 2 Duplicate

ID#: 0307523-03AA

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080511	Date of Collection: 7/25/03
Dil. Factor:	1.41	Date of Analysis: 8/5/03

DVAnal.

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	0.024	0.096	0.0037
1,1-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.028	0.041	0.16	0.0064
Chloroform	0.028	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.028	0.036	0.20	0.0078
Benzene	0.070	0.15	0.50	0.019
1,2-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
Trichloroethene	0.028	0.10	0.55	0.021
Tetrachloroethene	0.028	0.14	0.96	0.037
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.28	Not Detected	Not Detected	Not Detected

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Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	117	70-130
4-Bromofluorobenzene	110	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-INFL-FLUX 3

ID#: 0307523-04A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080513	Date of Collection: 7/25/03
Dil. Factor:	1.39	Date of Analysis: 8/5/03

DV Dual

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.028	Not Detected	Not Detected	Not Detected
Chloroform	0.028	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.028	Not Detected	Not Detected	Not Detected
Benzene	0.070	0.10	0.34	0.013
1,2-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
Trichloroethene	0.028	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.028	0.061	0.42	0.016
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.28	Not Detected	Not Detected	Not Detected

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Q = Exceeds Quality Control limits of 70% to 130%, due to matrix effects.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	148 Q	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 33D-FLUX 2

ID#: 0307523-05A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080515	Date of Collection:	7/25/03
Dil. Factor:	1.36	Date of Analysis:	8/5/03

DV Qual.

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.027	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.027	Not Detected	Not Detected	Not Detected
Chloroform	0.027	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.027	Not Detected	Not Detected	Not Detected
Benzene	0.068	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.027	Not Detected	Not Detected	Not Detected
Trichloroethene	0.027	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.027	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.27	Not Detected	Not Detected	Not Detected

WJ

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	123	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 33D-FLUX N(2)

ID#: 0307523-06A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	v080708	Date of Collection: 7/25/03
Dil. Factor:	1.41	Date of Analysis: 8/7/03

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.028	Not Detected	Not Detected	Not Detected
Chloroform	0.028	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.028	Not Detected	Not Detected	Not Detected
Benzene	0.070	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
Trichloroethene	0.028	0.038	0.21	0.0081
Tetrachloroethene	0.028	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.28	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	115	70-130

AIR TOXICS LTD.

SAMPLE NAME: 39D-FLUX 1

ID#: 0307523-07A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	v080709	Date of Collection:	7/25/03
Dil. Factor:	1.41	Date of Analysis:	8/7/03

DV Qual

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.028	Not Detected	Not Detected	Not Detected
Chloroform	0.028	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.028	Not Detected	Not Detected	Not Detected
Benzene	0.070	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
Trichloroethene	0.028	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.028	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.28	Not Detected	Not Detected	Not Detected

UJ

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	116	70-130

AIR TOXICS LTD.

SAMPLE NAME: 39D-FLUX N(1)

ID#: 0307523-08A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	v080710	Date of Collection: 7/25/03
Dil. Factor:	1.41	Date of Analysis: 8/7/03

DV Anal.

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.028	0.032	0.13	0.0049
Chloroform	0.028	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.028	Not Detected	Not Detected	Not Detected
Benzene	0.070	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
Trichloroethene	0.028	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.028	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.28	Not Detected	Not Detected	Not Detected

W

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	116	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	115	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-FLUX 1

ID#: 0307523-09A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	v080711	Date of Collection:	7/25/03
Dil. Factor:	1.44	Date of Analysis:	8/7/03

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.029	Not Detected	Not Detected	Not Detected
Chloroform	0.029	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.029	Not Detected	Not Detected	Not Detected
Benzene	0.072	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
Trichloroethene	0.029	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.029	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.29	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	116	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	119	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-FLUX 1-R

ID#: 0307523-10A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	v080712	Date of Collection: 7/25/03
Dil. Factor:	1.46	Date of Analysis: 8/7/03

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.015	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.015	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.029	Not Detected	Not Detected	Not Detected
Chloroform	0.029	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.029	Not Detected	Not Detected	Not Detected
Benzene	0.073	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
Trichloroethene	0.029	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.029	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.15	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.29	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	115	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-FLUX-N1

ID#: 0307523-11A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	v080713	Date of Collection:	7/25/03
Dil. Factor:	1.46	Date of Analysis:	8/7/03

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.015	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.015	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.029	Not Detected	Not Detected	Not Detected
Chloroform	0.029	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.029	Not Detected	Not Detected	Not Detected
Benzene	0.073	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
Trichloroethene	0.029	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.029	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.15	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.29	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	110	70-130

AIR TOXICS LTD.

SAMPLE NAME: FCS-FLUX-N1-R

ID#: 0307523-12A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	v080714	Date of Collection: 7/25/03
Dil. Factor:	1.46	Date of Analysis: 8/7/03

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.015	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.015	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.029	Not Detected	Not Detected	Not Detected
Chloroform	0.029	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.029	Not Detected	Not Detected	Not Detected
Benzene	0.073	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
Trichloroethene	0.029	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.029	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.15	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.29	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	113	70-130

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**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 24, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0307609

Sample Identification

C10-SV04-20
FCS-SP16-5
FCS-SP16-5 Duplicate
FCS-SP07-5
FCS-SP07D-5
FCS-SP10-5

Introduction

This data review covers six air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per modified EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

Sample C10-SV04-20 was received at 0.0" Hg.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds with the following exception:

Date	Compound	%RSD	Associated Samples	Flag	A or P
7/29/03	Chloromethane	37	All samples in the SDG	J detects, UJ nondetects	A

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within QC limits of 70 – 130%.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD).

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307609	Bromomethane Chloroethane	132 (80 – 120) 131 (80 – 120)	All samples in the SDG	J detects	A
0307609	1,2,4-Trimethylbenzene	79 (80 – 120)	All samples in the SDG	J detects, UJ nondetects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not evaluated for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not evaluated for this SDG.

The laboratory noted that sample C10-SV04-20 was over-diluted. No reanalysis was possible.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

Raw data were not evaluated for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples FCS-SP07-5 and FCS-SP07D-5 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ppbv)		RPD
	FCD-SP07-5	FCD-SP07D-5	
Freon 113	3600	4900	31
Chloroform	17	21	21
Trichloroethene	55	62	12
Trichloroethene	480	600	22
Acetone	79	97	20

XVII. Field Blanks

The trip blank sample (10D-TB072403) in this SDG was not selected for validation. No volatile contaminants were found in this blank above the reporting limits.

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307609**

SDG	Sample	Compound	Flag	A or P	Reason
0307609	All samples in the SDG	Chloromethane	J detects, UJ nondetects	A	ICAL %RSD outside QC limits
0307609	All samples in the SDG	Bromomethane Chloroethane	J detects	A	LCS recoveries above QC limits
0307609	All samples in the SDG	1,2,4-Trimethylbenzene	J detects UJ nondetects	A	LCS recovery below QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307609**

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: C10-SV04-20

ID#: 0307609-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d073115	Date of Collection: 7/24/03
Dil. Factor:	20.2	Date of Analysis: 7/31/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	10	0.051	Not Detected	Not Detected
Freon 114	10	0.072	Not Detected	Not Detected
Vinyl Chloride	10	0.026	Not Detected	Not Detected
Bromomethane	10	0.040	Not Detected	Not Detected
Chloroethane	10	0.027	Not Detected	Not Detected
Freon 11	10	0.058	Not Detected	Not Detected
1,1-Dichloroethene	10	0.041	Not Detected	Not Detected
Freon 113	10	0.079	Not Detected	Not Detected
Methylene Chloride	10	0.036	Not Detected	Not Detected
1,1-Dichloroethane	10	0.042	Not Detected	Not Detected
cis-1,2-Dichloroethene	10	0.041	Not Detected	Not Detected
Chloroform	10	0.050	Not Detected	Not Detected
1,1,1-Trichloroethane	10	0.056	Not Detected	Not Detected
Carbon Tetrachloride	10	0.064	Not Detected	Not Detected
Benzene	10	0.033	Not Detected	Not Detected
1,2-Dichloroethane	10	0.042	Not Detected	Not Detected
Trichloroethene	10	0.055	Not Detected	Not Detected
1,2-Dichloropropane	10	0.047	Not Detected	Not Detected
cis-1,3-Dichloropropene	10	0.046	Not Detected	Not Detected
Toluene	10	0.039	Not Detected	Not Detected
trans-1,3-Dichloropropene	10	0.046	Not Detected	Not Detected
1,1,2-Trichloroethane	10	0.056	Not Detected	Not Detected
Tetrachloroethene	10	0.070	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	10	0.079	Not Detected	Not Detected
Chlorobenzene	10	0.047	Not Detected	Not Detected
Ethyl Benzene	10	0.044	Not Detected	Not Detected
m,p-Xylene	10	0.044	Not Detected	Not Detected
o-Xylene	10	0.044	Not Detected	Not Detected
Styrene	10	0.044	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	10	0.070	Not Detected	Not Detected
1,3,5-Trimethylbenzene	10	0.050	Not Detected	Not Detected
1,2,4-Trimethylbenzene	10	0.050	Not Detected	Not Detected
1,3-Dichlorobenzene	10	0.062	Not Detected	Not Detected
1,4-Dichlorobenzene	10	0.062	Not Detected	Not Detected
alpha-Chlorotoluene	10	0.053	Not Detected	Not Detected
1,2-Dichlorobenzene	10	0.062	Not Detected	Not Detected
1,3-Butadiene	10	0.023	28	0.062
Hexane	10	0.036	17	0.061
Cyclohexane	10	0.035	Not Detected	Not Detected
Heptane	10	0.042	Not Detected	Not Detected
Bromodichloromethane	10	0.069	Not Detected	Not Detected
Dibromochloromethane	10	0.087	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: C10-SV04-20

ID#: 0307609-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d073115	Date of Collection: 7/24/03
Dil. Factor:	20.2	Date of Analysis: 7/31/03

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	10	0.050	Not Detected	Not Detected
Propylbenzene	10	0.050	Not Detected	Not Detected
Chloromethane	40	0.085	Not Detected	Not Detected
1,2,4-Trichlorobenzene	40	0.30	Not Detected	Not Detected
Hexachlorobutadiene	40	0.44	Not Detected	Not Detected
Acetone	40	0.098	610	1.5
Carbon Disulfide	40	0.13	Not Detected	Not Detected
2-Propanol	40	0.10	Not Detected	Not Detected
trans-1,2-Dichloroethene	40	0.16	Not Detected	Not Detected
Vinyl Acetate	40	0.14	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	40	0.12	130	0.40
Tetrahydrofuran	40	0.12	Not Detected	Not Detected
1,4-Dioxane	40	0.15	Not Detected	Not Detected
4-Methyl-2-pentanone	40	0.17	Not Detected	Not Detected
2-Hexanone	40	0.17	Not Detected	Not Detected
Bromoform	40	0.42	Not Detected	Not Detected
4-Ethyltoluene	40	0.20	Not Detected	Not Detected
Methyl tert-butyl ether	40	0.15	Not Detected	Not Detected
Ethanol	40	0.077	120	0.23

WJ

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	97	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP16-5

ID#: 0307609-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d073117	Date of Collection:	7/24/03
Dil. Factor:	8.52	Date of Analysis:	7/31/03

DU Anal

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	220	1.8
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	4.6	0.015
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	90	0.62
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	6.4	0.014
Hexane	4.3	0.015	6.2	0.022
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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SAMPLE NAME: FCS-SP16-5

ID#: 0307609-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d073117	Date of Collection: 7/24/03
Dil. Factor:	8.52	Date of Analysis: 7/31/03

by Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	47	0.11
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	17	0.033

WJ

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	97	70-130

*NE
10/10/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP16-5 Duplicate

ID#: 0307609-03AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d073118	Date of Collection: 7/24/03
Dil. Factor:	8.52	Date of Analysis: 7/31/03

DV Anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	230	1.8
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	4.6	0.015
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	91	0.63
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	6.1	0.014
Hexane	4.3	0.015	6.2	0.022
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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*0042 MB
10/19/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP16-5 Duplicate

ID#: 0307609-03AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d073118	Date of Collection: 7/24/03
Dil. Factor:	8.52	Date of Analysis: 7/31/03

DV anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	47	0.11
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	17	0.033

UJ

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP07-5

ID#: 0307609-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d073119	Date of Collection: 7/24/03
Dil. Factor:	20.9	Date of Analysis: 7/31/03

TV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	10	0.052	Not Detected	Not Detected
Freon 114	10	0.074	Not Detected	Not Detected
Vinyl Chloride	10	0.027	Not Detected	Not Detected
Bromomethane	10	0.041	Not Detected	Not Detected
Chloroethane	10	0.028	Not Detected	Not Detected
Freon 11	10	0.060	Not Detected	Not Detected
1,1-Dichloroethene	10	0.042	Not Detected	Not Detected
Freon 113	10	0.081	3600	28
Methylene Chloride	10	0.037	Not Detected	Not Detected
1,1-Dichloroethane	10	0.043	Not Detected	Not Detected
cis-1,2-Dichloroethene	10	0.042	Not Detected	Not Detected
Chloroform	10	0.052	17	0.085
1,1,1-Trichloroethane	10	0.058	Not Detected	Not Detected
Carbon Tetrachloride	10	0.067	Not Detected	Not Detected
Benzene	10	0.034	Not Detected	Not Detected
1,2-Dichloroethane	10	0.043	Not Detected	Not Detected
Trichloroethene	10	0.057	55	0.30
1,2-Dichloropropane	10	0.049	Not Detected	Not Detected
cis-1,3-Dichloropropene	10	0.048	Not Detected	Not Detected
Toluene	10	0.040	Not Detected	Not Detected
trans-1,3-Dichloropropene	10	0.048	Not Detected	Not Detected
1,1,2-Trichloroethane	10	0.058	Not Detected	Not Detected
Tetrachloroethene	10	0.072	480	3.3
1,2-Dibromoethane (EDB)	10	0.082	Not Detected	Not Detected
Chlorobenzene	10	0.049	Not Detected	Not Detected
Ethyl Benzene	10	0.046	Not Detected	Not Detected
m,p-Xylene	10	0.046	Not Detected	Not Detected
o-Xylene	10	0.046	Not Detected	Not Detected
Styrene	10	0.045	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	10	0.073	Not Detected	Not Detected
1,3,5-Trimethylbenzene	10	0.052	Not Detected	Not Detected
1,2,4-Trimethylbenzene	10	0.052	Not Detected	Not Detected
1,3-Dichlorobenzene	10	0.064	Not Detected	Not Detected
1,4-Dichlorobenzene	10	0.064	Not Detected	Not Detected
alpha-Chlorotoluene	10	0.055	Not Detected	Not Detected
1,2-Dichlorobenzene	10	0.064	Not Detected	Not Detected
1,3-Butadiene	10	0.023	Not Detected	Not Detected
Hexane	10	0.037	Not Detected	Not Detected
Cyclohexane	10	0.036	Not Detected	Not Detected
Heptane	10	0.044	Not Detected	Not Detected
Bromodichloromethane	10	0.071	Not Detected	Not Detected
Dibromochloromethane	10	0.090	Not Detected	Not Detected

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10/9/03

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP07-5

ID#: 0307609-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d073119	Date of Collection: 7/24/03
Dil. Factor:	20.9	Date of Analysis: 7/31/03

DV anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	10	0.052	Not Detected	Not Detected
Propylbenzene	10	0.052	Not Detected	Not Detected
Chloromethane	42	0.088	Not Detected	Not Detected
1,2,4-Trichlorobenzene	42	0.32	Not Detected	Not Detected
Hexachlorobutadiene	42	0.45	Not Detected	Not Detected
Acetone	42	0.10	79	0.19
Carbon Disulfide	42	0.13	Not Detected	Not Detected
2-Propanol	42	0.10	Not Detected	Not Detected
trans-1,2-Dichloroethene	42	0.17	Not Detected	Not Detected
Vinyl Acetate	42	0.15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	42	0.12	Not Detected	Not Detected
Tetrahydrofuran	42	0.12	Not Detected	Not Detected
1,4-Dioxane	42	0.15	Not Detected	Not Detected
4-Methyl-2-pentanone	42	0.17	Not Detected	Not Detected
2-Hexanone	42	0.17	Not Detected	Not Detected
Bromoform	42	0.44	Not Detected	Not Detected
4-Ethyltoluene	42	0.21	Not Detected	Not Detected
Methyl tert-butyl ether	42	0.15	Not Detected	Not Detected
Ethanol	42	0.080	Not Detected	Not Detected

WJ

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	98	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP07D-5

ID#: 0307609-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d073120	Date of Collection: 7/24/03
Dil. Factor:	41.8	Date of Analysis: 7/31/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	21	0.10	Not Detected	Not Detected
Freon 114	21	0.15	Not Detected	Not Detected
Vinyl Chloride	21	0.054	Not Detected	Not Detected
Bromomethane	21	0.082	Not Detected	Not Detected
Chloroethane	21	0.056	Not Detected	Not Detected
Freon 11	21	0.12	Not Detected	Not Detected
1,1-Dichloroethene	21	0.084	Not Detected	Not Detected
Freon 113	21	0.16	4900	38
Methylene Chloride	21	0.074	Not Detected	Not Detected
1,1-Dichloroethane	21	0.086	Not Detected	Not Detected
cis-1,2-Dichloroethene	21	0.084	Not Detected	Not Detected
Chloroform	21	0.10	21	0.10
1,1,1-Trichloroethane	21	0.12	Not Detected	Not Detected
Carbon Tetrachloride	21	0.13	Not Detected	Not Detected
Benzene	21	0.068	Not Detected	Not Detected
1,2-Dichloroethane	21	0.086	Not Detected	Not Detected
Trichloroethene	21	0.11	62	0.34
1,2-Dichloropropane	21	0.098	Not Detected	Not Detected
cis-1,3-Dichloropropene	21	0.096	Not Detected	Not Detected
Toluene	21	0.080	Not Detected	Not Detected
trans-1,3-Dichloropropene	21	0.096	Not Detected	Not Detected
1,1,2-Trichloroethane	21	0.12	Not Detected	Not Detected
Tetrachloroethene	21	0.14	600	4.1
1,2-Dibromoethane (EDB)	21	0.16	Not Detected	Not Detected
Chlorobenzene	21	0.098	Not Detected	Not Detected
Ethyl Benzene	21	0.092	Not Detected	Not Detected
m,p-Xylene	21	0.092	Not Detected	Not Detected
o-Xylene	21	0.092	Not Detected	Not Detected
Styrene	21	0.090	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	21	0.14	Not Detected	Not Detected
1,3,5-Trimethylbenzene	21	0.10	Not Detected	Not Detected
1,2,4-Trimethylbenzene	21	0.10	Not Detected	Not Detected
1,3-Dichlorobenzene	21	0.13	Not Detected	Not Detected
1,4-Dichlorobenzene	21	0.13	Not Detected	Not Detected
alpha-Chlorotoluene	21	0.11	Not Detected	Not Detected
1,2-Dichlorobenzene	21	0.13	Not Detected	Not Detected
1,3-Butadiene	21	0.047	Not Detected	Not Detected
Hexane	21	0.075	Not Detected	Not Detected
Cyclohexane	21	0.073	Not Detected	Not Detected
Heptane	21	0.087	Not Detected	Not Detected
Bromodichloromethane	21	0.14	Not Detected	Not Detected
Dibromochloromethane	21	0.18	Not Detected	Not Detected

WJ

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP07D-5

ID#: 0307609-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d073120	Date of Collection: 7/24/03
Dil. Factor:	41.8	Date of Analysis: 7/31/03

DV 07/31/03

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	21	0.10	Not Detected	Not Detected
Propylbenzene	21	0.10	Not Detected	Not Detected
Chloromethane	84	0.18	Not Detected	Not Detected
1,2,4-Trichlorobenzene	84	0.63	Not Detected	Not Detected
Hexachlorobutadiene	84	0.91	Not Detected	Not Detected
Acetone	84	0.20	97	0.23
Carbon Disulfide	84	0.26	Not Detected	Not Detected
2-Propanol	84	0.21	Not Detected	Not Detected
trans-1,2-Dichloroethene	84	0.34	Not Detected	Not Detected
Vinyl Acetate	84	0.30	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	84	0.25	Not Detected	Not Detected
Tetrahydrofuran	84	0.25	Not Detected	Not Detected
1,4-Dioxane	84	0.31	Not Detected	Not Detected
4-Methyl-2-pentanone	84	0.35	Not Detected	Not Detected
2-Hexanone	84	0.35	Not Detected	Not Detected
Bromoform	84	0.88	Not Detected	Not Detected
4-Ethyltoluene	84	0.42	Not Detected	Not Detected
Methyl tert-butyl ether	84	0.31	Not Detected	Not Detected
Ethanol	84	0.16	Not Detected	Not Detected

WJ

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	98	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP10-5

ID#: 0307609-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d073121	Date of Collection: 7/24/03
Dil. Factor:	41.8	Date of Analysis: 7/31/03

DV. Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	21	0.10	Not Detected	Not Detected
Freon 114	21	0.15	Not Detected	Not Detected
Vinyl Chloride	21	0.054	Not Detected	Not Detected
Bromomethane	21	0.082	Not Detected	Not Detected
Chloroethane	21	0.056	Not Detected	Not Detected
Freon 11	21	0.12	Not Detected	Not Detected
1,1-Dichloroethene	21	0.084	Not Detected	Not Detected
Freon 113	21	0.16	3400	26
Methylene Chloride	21	0.074	Not Detected	Not Detected
1,1-Dichloroethane	21	0.086	Not Detected	Not Detected
cis-1,2-Dichloroethene	21	0.084	Not Detected	Not Detected
Chloroform	21	0.10	Not Detected	Not Detected
1,1,1-Trichloroethane	21	0.12	Not Detected	Not Detected
Carbon Tetrachloride	21	0.13	Not Detected	Not Detected
Benzene	21	0.068	Not Detected	Not Detected
1,2-Dichloroethane	21	0.086	Not Detected	Not Detected
Trichloroethene	21	0.11	Not Detected	Not Detected
1,2-Dichloropropane	21	0.098	Not Detected	Not Detected
cis-1,3-Dichloropropene	21	0.096	Not Detected	Not Detected
Toluene	21	0.080	Not Detected	Not Detected
trans-1,3-Dichloropropene	21	0.096	Not Detected	Not Detected
1,1,2-Trichloroethane	21	0.12	Not Detected	Not Detected
Tetrachloroethene	21	0.14	250	1.7
1,2-Dibromoethane (EDB)	21	0.16	Not Detected	Not Detected
Chlorobenzene	21	0.098	Not Detected	Not Detected
Ethyl Benzene	21	0.092	Not Detected	Not Detected
m,p-Xylene	21	0.092	Not Detected	Not Detected
o-Xylene	21	0.092	Not Detected	Not Detected
Styrene	21	0.090	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	21	0.14	Not Detected	Not Detected
1,3,5-Trimethylbenzene	21	0.10	Not Detected	Not Detected
1,2,4-Trimethylbenzene	21	0.10	Not Detected	Not Detected
1,3-Dichlorobenzene	21	0.13	Not Detected	Not Detected
1,4-Dichlorobenzene	21	0.13	Not Detected	Not Detected
alpha-Chlorotoluene	21	0.11	Not Detected	Not Detected
1,2-Dichlorobenzene	21	0.13	Not Detected	Not Detected
1,3-Butadiene	21	0.047	Not Detected	Not Detected
Hexane	21	0.075	Not Detected	Not Detected
Cyclohexane	21	0.073	Not Detected	Not Detected
Heptane	21	0.087	Not Detected	Not Detected
Bromodichloromethane	21	0.14	Not Detected	Not Detected
Dibromochloromethane	21	0.18	Not Detected	Not Detected

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP10-5

ID#: 0307609-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d073121	Date of Collection:	7/24/03
Dil. Factor:	41.8	Date of Analysis:	7/31/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	21	0.10	Not Detected	Not Detected
Propylbenzene	21	0.10	Not Detected	Not Detected
Chloromethane	84	0.18	Not Detected	Not Detected
1,2,4-Trichlorobenzene	84	0.63	Not Detected	Not Detected
Hexachlorobutadiene	84	0.91	Not Detected	Not Detected
Acetone	84	0.20	200	0.49
Carbon Disulfide	84	0.26	Not Detected	Not Detected
2-Propanol	84	0.21	Not Detected	Not Detected
trans-1,2-Dichloroethene	84	0.34	Not Detected	Not Detected
Vinyl Acetate	84	0.30	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	84	0.25	Not Detected	Not Detected
Tetrahydrofuran	84	0.25	Not Detected	Not Detected
1,4-Dioxane	84	0.31	Not Detected	Not Detected
4-Methyl-2-pentanone	84	0.35	Not Detected	Not Detected
2-Hexanone	84	0.35	Not Detected	Not Detected
Bromoform	84	0.88	Not Detected	Not Detected
4-Ethyltoluene	84	0.42	Not Detected	Not Detected
Methyl tert-butyl ether	84	0.31	Not Detected	Not Detected
Ethanol	84	0.16	Not Detected	Not Detected

UJ

Container Type: Client Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	97	70-130

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10/9/03*

AIR TOXICS LTD.

SAMPLE NAME: 10D-TB072403

ID#: 0307609-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d080121	Date of Collection: 7/24/03
Dil. Factor:	8.52	Date of Analysis: 8/1/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.021	Not Detected	Not Detected
Freon 114	4.3	0.030	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.011	Not Detected	Not Detected
Freon 11	4.3	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.033	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.027	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.033	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0096	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 10D-TB072403

ID#: 0307609-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d080121	Date of Collection: 7/24/03
Dil. Factor:	8.52	Date of Analysis: 8/1/03

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.021	Not Detected	Not Detected
Propylbenzene	4.3	0.021	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.041	Not Detected	Not Detected
Carbon Disulfide	17	0.054	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.069	Not Detected	Not Detected
Vinyl Acetate	17	0.061	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.051	Not Detected	Not Detected
Tetrahydrofuran	17	0.051	Not Detected	Not Detected
1,4-Dioxane	17	0.062	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.071	Not Detected	Not Detected
2-Hexanone	17	0.071	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.085	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.062	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

UJ

Container Type: Client Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	98	70-130

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**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: July 24, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III & IV Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0307611

Sample Identification

FLUX-B2
C14-FLUX1**
FLUX-B1
36D-FLUX2
37D-FLUX2
36D-FLUX1**
36D-FLUX1 Duplicate
36D-FLUXN
C14-FLUX2
C14-FLUXN2
37D-FLUX1
37D-FLUXN1

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers twelve air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per modified EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds with the following exceptions:

Date	Compound	%RSD	Associated Samples	Flag	A or P
7/17/03	Hexachlorobutadiene	44	FLUX-B2 C14-FLUX1 FLUX-B1 36D-FLUX2 37D-FLUX2 36D-FLUX1 36D-FLUX1 Duplicate 36D-FLUXN C14-FLUX2 C14-FLUXN2 37D-FLUX1 37D-FLUXN1	J detects, UJ nondetects	A

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0% with the following exception:

Date	Compound	%D	Associated Samples	Flag	A or P
8/5/03	Vinyl Chloride	-40	37D-FLUXN1	J detects, UJ nondetects	A

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

Surrogates were not required by the method. However, the laboratory analyzed surrogates. All surrogate percent recoveries (%R) were within QC limits with the following exception:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
LCS (0307611-15A)	1,2-Dichloroethane-d4	150 (70 – 130)	Vinyl Chloride 1,1-Dichloroethene 1,1-Dichloroethane cis-1,2-Dichloroethene Chloroform 1,1,1-Trichloroethane	None	P

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD).

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within the QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307611-15A	Vinyl Chloride	124 (80 – 120)	FLUX-B2 C14-FLUX1 FLUX-B1 36D-FLUX2 37D-FLUX2 36D-FLUX1 36D-FLUX1 Duplicate	J detects	A

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0307611-15B	Vinyl Chloride	141 (80 – 120)	36D-FLUXN C14-FLUX2 C14-FLUXN2 37D-FLUX1	J detects	A
0307611-15C	Vinyl Chloride	149 (80 – 120)	37D-FLUXN1	J detects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
37D-FLUX2	1,4-Difluorobenzene	995609 (996095-1660159)	Chloroform 1,1,1-Trichloroethane Benzene 1,2-Dichloroethane	J detects, UJ nondetects	P

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which an EPA Level IV review was performed.

Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

The system performance was within validation criteria for samples on which an EPA Level

IV review was performed. Raw data were not evaluated for the samples reviewed by EPA Level III criteria.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

The laboratory analyzed a shorter target list by low level SIM than that specified in the QAPP as indicated on the chain-of-custody (COC). Results in this SDG may not be comparable to historical data.

XVI. Field Duplicates

There were no field duplicate samples identified in this SDG.

XVII. Field Blanks

There were no field blank samples identified in this SDG.

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0307611**

SDG	Sample	Compound	Flag	A or P	Reason
0307611	All samples in the SDG	Hexachlorobutadiene	J detects UJ nondetects	A	ICAL %RSD outside QC limits
0307611	37D-FLUXN1	Vinyl Chloride	J detects UJ nondetects	A	CCAL %D outside QC limits
0307611	LCS (0307611-15A)	Vinyl Chloride 1,1-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,1,1-Trichloroethane	None	P	Surrogate recovery exceeded QC limits
0307611	All samples in the SDG	Vinyl Chloride	J detects	A	LCS recoveries above QC limits
0307611	37D-FLUX2	Chloroform 1,1,1-Trichloroethane Benzene 1,2-Dichloroethane	J detects UJ nondetects	A	Internal standard area below QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0307611**

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: FLUX-B2

ID#: 0307611-01A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080107	Date of Collection:	7/24/03
Dil. Factor:	1.44	Date of Analysis:	8/1/03

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.029	Not Detected	Not Detected	Not Detected
Chloroform	0.029	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.029	Not Detected	Not Detected	Not Detected
Benzene	0.072	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
Trichloroethene	0.029	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.029	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.29	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Silonite Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	103	70-130

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AIR TOXICS LTD.

SAMPLE NAME: C14-FLUX1

ID#: 0307611-02A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080108	Date of Collection:	7/24/03
Dil. Factor:	1.44	Date of Analysis:	8/1/03

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.029	Not Detected	Not Detected	Not Detected
Chloroform	0.029	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.029	Not Detected	Not Detected	Not Detected
Benzene	0.072	0.11	0.35	0.014
1,2-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
Trichloroethene	0.029	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.029	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.29	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Silonite Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	123	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	103	70-130

AIR TOXICS LTD.

SAMPLE NAME: FLUX-B1

ID#: 0307611-03A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080109	Date of Collection:	7/24/03
Dil. Factor:	1.41	Date of Analysis:	8/1/03

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.028	Not Detected	Not Detected	Not Detected
Chloroform	0.028	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.028	Not Detected	Not Detected	Not Detected
Benzene	0.070	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
Trichloroethene	0.028	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.028	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.28	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Silonite Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	124	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: 36D-FLUX2

ID#: 0307611-04A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080110	Date of Collection:	7/24/03
Dil. Factor:	1.39	Date of Analysis:	8/1/03

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.028	Not Detected	Not Detected	Not Detected
Chloroform	0.028	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.028	0.040	0.22	0.0085
Benzene	0.070	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
Trichloroethene	0.028	0.037	0.20	0.0079
Tetrachloroethene	0.028	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.28	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Silonite Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	106	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 37D-FLUX2

ID#: 0307611-05A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080111	Date of Collection:	7/24/03
Dil. Factor:	1.46	Date of Analysis:	8/1/03

DV Qual.

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.015	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.015	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.029	Not Detected	Not Detected	Not Detected
Chloroform	0.029	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.029	Not Detected	Not Detected	Not Detected
Benzene	0.073	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
Trichloroethene	0.029	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.029	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.15	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.29	Not Detected	Not Detected	Not Detected

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Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	102	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 36D-FLUX1

ID#: 0307611-06A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080112	Date of Collection:	7/24/03
Dil. Factor:	1.39	Date of Analysis:	8/1/03

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	0.016	0.064	0.0025
1,1-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.028	Not Detected	Not Detected	Not Detected
Chloroform	0.028	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.028	0.045	0.25	0.0096
Benzene	0.070	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
Trichloroethene	0.028	0.035	0.19	0.0074
Tetrachloroethene	0.028	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.28	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Silonite Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	119	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	101	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 36D-FLUX1 Duplicate

ID#: 0307611-06AA

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080113	Date of Collection:	7/24/03
Dil. Factor:	1.39	Date of Analysis:	8/1/03

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	0.015	0.061	0.0023
1,1-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.028	Not Detected	Not Detected	Not Detected
Chloroform	0.028	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.028	0.044	0.24	0.0094
Benzene	0.070	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
Trichloroethene	0.028	0.033	0.18	0.0069
Tetrachloroethene	0.028	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.28	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Silonite Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	101	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 36D-FLUXN

ID#: 0307611-07A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080405	Date of Collection:	7/24/03
Dil. Factor:	1.44	Date of Analysis:	8/4/03

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.029	Not Detected	Not Detected	Not Detected
Chloroform	0.029	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.029	0.041	0.23	0.0087
Benzene	0.072	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
Trichloroethene	0.029	0.031	0.17	0.0066
Tetrachloroethene	0.029	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.29	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Silonite Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	107	70-130

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AIR TOXICS LTD.

SAMPLE NAME: C14-FLUX2

ID#: 0307611-08A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080406	Date of Collection:	7/24/03
Dil. Factor:	1.46	Date of Analysis:	8/4/03

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.015	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.015	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.029	Not Detected	Not Detected	Not Detected
Chloroform	0.029	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.029	Not Detected	Not Detected	Not Detected
Benzene	0.073	0.16	0.52	0.020
1,2-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
Trichloroethene	0.029	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.029	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.15	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.29	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	110	70-130

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AIR TOXICS LTD.

SAMPLE NAME: C14-FLUXN2

ID#: 0307611-09A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080407	Date of Collection:	7/24/03
Dil. Factor:	1.46	Date of Analysis:	8/4/03

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.015	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.015	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.029	Not Detected	Not Detected	Not Detected
Chloroform	0.029	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.029	Not Detected	Not Detected	Not Detected
Benzene	0.073	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
Trichloroethene	0.029	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.029	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.15	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.29	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	109	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 37D-FLUX1

ID#: 0307611-10A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080408	Date of Collection:	7/24/03
Dil. Factor:	1.44	Date of Analysis:	8/4/03

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.029	Not Detected	Not Detected	Not Detected
Chloroform	0.029	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.029	Not Detected	Not Detected	Not Detected
Benzene	0.072	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.029	Not Detected	Not Detected	Not Detected
Trichloroethene	0.029	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.029	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.29	Not Detected	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	119	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	116	70-130

AIR TOXICS LTD.

SAMPLE NAME: 37D-FLUXN(1)

ID#: 0307611-11A

MODIFIED EPA METHOD TO-14A GC/MS SIM

File Name:	x080506	Date of Collection: 7/24/03
Dil. Factor:	1.41	Date of Analysis: 8/5/03

DV anal.

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Amount (ug/m3)	Amount (uG/m2/Min)
Vinyl Chloride	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethene	0.014	Not Detected	Not Detected	Not Detected
1,1-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.028	Not Detected	Not Detected	Not Detected
Chloroform	0.028	Not Detected	Not Detected	Not Detected
1,1,1-Trichloroethane	0.028	Not Detected	Not Detected	Not Detected
Benzene	0.070	Not Detected	Not Detected	Not Detected
1,2-Dichloroethane	0.028	Not Detected	Not Detected	Not Detected
Trichloroethene	0.028	Not Detected	Not Detected	Not Detected
Tetrachloroethene	0.028	Not Detected	Not Detected	Not Detected
1,3-Butadiene	0.14	Not Detected	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	Not Detected	Not Detected
Methylene Chloride	0.28	Not Detected	Not Detected	Not Detected

UJ

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	123	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	104	70-130

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10/9/03*

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: August 7, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0308162

Sample Identification

FCS-SP10-10
FCS-SP10D-10
AJLA-SP05-5
33D-SP05-5
39D-SP05-5

Introduction

This data review covers five air samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per modified EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0% with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
8/10/03	Methyl tert-butyl ether	39	FCS-SP10-10 FCS-SP10D-10	J detects, UJ nondetects	A
8/10/03	Chloroethane	37	33D-SP05-5 39D-SP05-5	J detects, UJ nondetects	A
8/11/03	Methyl tert-butyl ether (MTBE)	31	AJLA-SP05-5	J detects, UJ nondetects	A

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within 70 – 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD).

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0308162-016A	1,3,5-Trimethylbenzene	78 (80 – 120)	FCS-SP10-10 and FCS-SP10D-10	J detects, UJ nondetects	A
	1,2,4-Trimethylbenzene	74 (80 – 120)			
	1,4-Dichlorobenzene	73 (80 – 120)			
	1,2-Dichlorobenzene	74 (80 – 120)			
	Propylbenzene	74 (80 – 120)			
	Bromoform	78 (80 – 120)			
	MTBE	77 (80 – 120)			
	Chloromethane	127 (80 – 120)		J detects	
0308162-16B	1,1-Dichloroethane	78 (80 – 120)	33D-SP05-5 and 39D-SP05-5	J detects, UJ nondetects	A
	1,2,4-Trimethylbenzene	75 (80 – 120)			
	Propylbenzene	78 (80 – 120)			
	Vinyl Acetate	74 (80 – 120)			
	4-Ethyltoluene	79 (80 – 120)			
	MTBE	77 (80 – 120)			
0308162-016C	1,3,5-Trimethylbenzene	76 (80 – 120)	AJLA-SP05-5	J detects, UJ nondetects	A
	1,2,4-Trimethylbenzene	71 (80 – 120)			
	1,3-Dichlorobenzene	78 (80 – 120)			
	1,4-Dichlorobenzene	72 (80 – 120)			
	1,2-Dichlorobenzene	71 (80 – 120)			
	Propylbenzene	76 (80 – 120)			
	Bromoform	77 (80 – 120)			
	MTBE	74 (80 – 120)			
	Freon 114	121 (80 – 120)			
	Chloromethane	124 (80 – 120)			

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not evaluated for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not evaluated for this SDG.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

Raw data were not evaluated for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples FCS-SP10-10 and FCS-SP10D-10 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ppbv)		RPD
	FCS-SP10-10	FCS-SP10D-10	
Freon 113	13000	13000	0
Tetrachloroethene	1100	1100	0

XVII. Field Blanks

There were no field blank samples identified in this SDG.

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0308162**

SDG	Sample	Compound	Flag	A or P	Reason
0308162	FCS-SP10-10 FCS-SP10D-10 AJLA-SP05-5	MTBE	J detects, UJ nondetects	A	CCV %D outside QC limits
0308162	33D-SP05-5 39D-SP05-5	Chloroethane	J detects, UJ nondetects	A	CCV %D outside QC limits
0308162	FCS-SP10-10 FCS-SP10D-10	1,3,5-Trimethylbenzene 1,2,4-Trimethylbenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene Propylbenzene Bromoform MTBE Chloromethane	J detects, UJ nondetects J detects	A	LCS %R below QC limits LCS %R above QC limits
0308162	33D-SP05-5 39D-SP05-5	1,1-Dichloroethane 1,2,4-Trimethylbenzene Propylbenzene Vinyl Acetate 4-Ethyltoluene MTBE	J detects, UJ nondetects	A	LCS %R below QC limits
0308162	AJLA-SP05-5	1,3,5-Trimethylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene Propylbenzene Bromoform MTBE Freon 114 Chloromethane	J detects, UJ nondetects J detects	A	LCS %R below QC limits LCS %R above QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0308162**

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: FCS-SP10-10

ID#: 0308162-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s081005	Date of Collection: 8/7/03
Dil. Factor:	82.0	Date of Analysis: 8/10/03 03:39 PM

DV Anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	41	0.21	Not Detected	Not Detected
Freon 114	41	0.29	Not Detected	Not Detected
Vinyl Chloride	41	0.11	Not Detected	Not Detected
Bromomethane	41	0.16	Not Detected	Not Detected
Chloroethane	41	0.11	Not Detected	Not Detected
Freon 11	41	0.23	Not Detected	Not Detected
1,1-Dichloroethene	41	0.16	Not Detected	Not Detected
Freon 113	41	0.32	13000	100
Methylene Chloride	41	0.14	Not Detected	Not Detected
1,1-Dichloroethane	41	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	41	0.16	Not Detected	Not Detected
Chloroform	41	0.20	Not Detected	Not Detected
1,1,1-Trichloroethane	41	0.23	Not Detected	Not Detected
Carbon Tetrachloride	41	0.26	Not Detected	Not Detected
Benzene	41	0.13	Not Detected	Not Detected
1,2-Dichloroethane	41	0.17	Not Detected	Not Detected
Trichloroethene	41	0.22	Not Detected	Not Detected
1,2-Dichloropropane	41	0.19	Not Detected	Not Detected
cis-1,3-Dichloropropene	41	0.19	Not Detected	Not Detected
Toluene	41	0.16	Not Detected	Not Detected
trans-1,3-Dichloropropene	41	0.19	Not Detected	Not Detected
1,1,2-Trichloroethane	41	0.23	Not Detected	Not Detected
Tetrachloroethene	41	0.28	1100	7.6
1,2-Dibromoethane (EDB)	41	0.32	Not Detected	Not Detected
Chlorobenzene	41	0.19	Not Detected	Not Detected
Ethyl Benzene	41	0.18	Not Detected	Not Detected
m,p-Xylene	41	0.18	Not Detected	Not Detected
o-Xylene	41	0.18	Not Detected	Not Detected
Styrene	41	0.18	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	41	0.29	Not Detected	Not Detected
1,3,5-Trimethylbenzene	41	0.20	Not Detected	Not Detected
1,2,4-Trimethylbenzene	41	0.20	Not Detected	Not Detected
1,3-Dichlorobenzene	41	0.25	Not Detected	Not Detected
1,4-Dichlorobenzene	41	0.25	Not Detected	Not Detected
alpha-Chlorotoluene	41	0.22	Not Detected	Not Detected
1,2-Dichlorobenzene	41	0.25	Not Detected	Not Detected
1,3-Butadiene	41	0.092	Not Detected	Not Detected
Hexane	41	0.15	Not Detected	Not Detected
Cyclohexane	41	0.14	Not Detected	Not Detected
Heptane	41	0.17	Not Detected	Not Detected
Bromodichloromethane	41	0.28	Not Detected	Not Detected
Dibromochloromethane	41	0.36	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP10-10

ID#: 0308162-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s081005	Date of Collection: 8/7/03
Dil. Factor:	82.0	Date of Analysis: 8/10/03 03:39 PM

DV Anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	41	0.20	Not Detected	Not Detected
Propylbenzene	41	0.20	Not Detected	Not Detected
Chloromethane	160	0.34	Not Detected	Not Detected
1,2,4-Trichlorobenzene	160	1.2	Not Detected	Not Detected
Hexachlorobutadiene	160	1.8	Not Detected	Not Detected
Acetone	160	0.40	Not Detected	Not Detected
Carbon Disulfide	160	0.52	Not Detected	Not Detected
2-Propanol	160	0.41	Not Detected	Not Detected
trans-1,2-Dichloroethene	160	0.66	Not Detected	Not Detected
Vinyl Acetate	160	0.59	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	160	0.49	Not Detected	Not Detected
Tetrahydrofuran	160	0.49	Not Detected	Not Detected
1,4-Dioxane	160	0.60	Not Detected	Not Detected
4-Methyl-2-pentanone	160	0.68	Not Detected	Not Detected
2-Hexanone	160	0.68	Not Detected	Not Detected
Bromoform	160	1.7	Not Detected	Not Detected
4-Ethyltoluene	160	0.82	Not Detected	Not Detected
Methyl tert-butyl ether	160	0.60	Not Detected U J	Not Detected U J
Ethanol	160	0.31	Not Detected	Not Detected

UJ

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UJ

UJ

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	101	70-130

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP10D-10

ID#: 0308162-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s081006	Date of Collection: 8/7/03
Dil. Factor:	83.6	Date of Analysis: 8/10/03 04:21 PM

DV Anal.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	42	0.21	Not Detected	Not Detected
Freon 114	42	0.30	Not Detected	Not Detected
Vinyl Chloride	42	0.11	Not Detected	Not Detected
Bromomethane	42	0.16	Not Detected	Not Detected
Chloroethane	42	0.11	Not Detected	Not Detected
Freon 11	42	0.24	Not Detected	Not Detected
1,1-Dichloroethene	42	0.17	Not Detected	Not Detected
Freon 113	42	0.32	13000	100
Methylene Chloride	42	0.15	Not Detected	Not Detected
1,1-Dichloroethane	42	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	42	0.17	Not Detected	Not Detected
Chloroform	42	0.21	Not Detected	Not Detected
1,1,1-Trichloroethane	42	0.23	Not Detected	Not Detected
Carbon Tetrachloride	42	0.27	Not Detected	Not Detected
Benzene	42	0.14	Not Detected	Not Detected
1,2-Dichloroethane	42	0.17	Not Detected	Not Detected
Trichloroethene	42	0.23	Not Detected	Not Detected
1,2-Dichloropropane	42	0.20	Not Detected	Not Detected
cis-1,3-Dichloropropene	42	0.19	Not Detected	Not Detected
Toluene	42	0.16	Not Detected	Not Detected
trans-1,3-Dichloropropene	42	0.19	Not Detected	Not Detected
1,1,2-Trichloroethane	42	0.23	Not Detected	Not Detected
Tetrachloroethene	42	0.29	1100	7.4
1,2-Dibromoethane (EDB)	42	0.33	Not Detected	Not Detected
Chlorobenzene	42	0.20	Not Detected	Not Detected
Ethyl Benzene	42	0.18	Not Detected	Not Detected
m,p-Xylene	42	0.18	Not Detected	Not Detected
o-Xylene	42	0.18	Not Detected	Not Detected
Styrene	42	0.18	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	42	0.29	Not Detected	Not Detected
1,3,5-Trimethylbenzene	42	0.21	Not Detected	Not Detected
1,2,4-Trimethylbenzene	42	0.21	Not Detected	Not Detected
1,3-Dichlorobenzene	42	0.26	Not Detected	Not Detected
1,4-Dichlorobenzene	42	0.26	Not Detected	Not Detected
alpha-Chlorotoluene	42	0.22	Not Detected	Not Detected
1,2-Dichlorobenzene	42	0.26	Not Detected	Not Detected
1,3-Butadiene	42	0.094	Not Detected	Not Detected
Hexane	42	0.15	Not Detected	Not Detected
Cyclohexane	42	0.15	Not Detected	Not Detected
Heptane	42	0.17	Not Detected	Not Detected
Bromodichloromethane	42	0.28	Not Detected	Not Detected
Dibromochloromethane	42	0.36	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: FCS-SP10D-10

ID#: 0308162-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s081006	Date of Collection: 8/7/03
Dil. Factor:	83.6	Date of Analysis: 8/10/03 04:21 PM

DV Qual

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	42	0.21	Not Detected	Not Detected
Propylbenzene	42	0.21	Not Detected	Not Detected
Chloromethane	170	0.35	Not Detected	Not Detected
1,2,4-Trichlorobenzene	170	1.3	Not Detected	Not Detected
Hexachlorobutadiene	170	1.8	Not Detected	Not Detected
Acetone	170	0.40	Not Detected	Not Detected
Carbon Disulfide	170	0.53	Not Detected	Not Detected
2-Propanol	170	0.42	Not Detected	Not Detected
trans-1,2-Dichloroethene	170	0.67	Not Detected	Not Detected
Vinyl Acetate	170	0.60	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	170	0.50	Not Detected	Not Detected
Tetrahydrofuran	170	0.50	Not Detected	Not Detected
1,4-Dioxane	170	0.61	Not Detected	Not Detected
4-Methyl-2-pentanone	170	0.70	Not Detected	Not Detected
2-Hexanone	170	0.70	Not Detected	Not Detected
Bromoform	170	1.8	Not Detected	Not Detected
4-Ethyltoluene	170	0.84	Not Detected	Not Detected
Methyl tert-butyl ether	170	0.61	Not Detected U J	Not Detected U J
Ethanol	170	0.32	Not Detected	Not Detected

UJ

UJ

UJ

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130

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AIR TOXICS LTD.

SAMPLE NAME: AJLA-SP05-5

ID#: 0308162-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s081114	Date of Collection: 8/7/03
Dil. Factor:	8.20	Date of Analysis: 8/11/03 05:16 PM

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.1	0.021	Not Detected	Not Detected
Freon 114	4.1	0.029	Not Detected	Not Detected
Vinyl Chloride	4.1	0.011	Not Detected	Not Detected
Bromomethane	4.1	0.016	Not Detected	Not Detected
Chloroethane	4.1	0.011	Not Detected	Not Detected
Freon 11	4.1	0.023	Not Detected	Not Detected
1,1-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Freon 113	4.1	0.032	Not Detected	Not Detected
Methylene Chloride	4.1	0.014	Not Detected	Not Detected
1,1-Dichloroethane	4.1	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.1	0.016	Not Detected	Not Detected
Chloroform	4.1	0.020	Not Detected	Not Detected
1,1,1-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.1	0.026	Not Detected	Not Detected
Benzene	4.1	0.013	Not Detected	Not Detected
1,2-Dichloroethane	4.1	0.017	Not Detected	Not Detected
Trichloroethene	4.1	0.022	Not Detected	Not Detected
1,2-Dichloropropane	4.1	0.019	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
Toluene	4.1	0.016	4.2	0.016
trans-1,3-Dichloropropene	4.1	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.1	0.023	Not Detected	Not Detected
Tetrachloroethene	4.1	0.028	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.1	0.032	Not Detected	Not Detected
Chlorobenzene	4.1	0.019	Not Detected	Not Detected
Ethyl Benzene	4.1	0.018	Not Detected	Not Detected
m,p-Xylene	4.1	0.018	17	0.074
o-Xylene	4.1	0.018	Not Detected	Not Detected
Styrene	4.1	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.1	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.1	0.020	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.1	0.020	5.8	0.029
1,3-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,4-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
alpha-Chlorotoluene	4.1	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.1	0.025	Not Detected	Not Detected
1,3-Butadiene	4.1	0.0092	Not Detected	Not Detected
Hexane	4.1	0.015	Not Detected	Not Detected
Cyclohexane	4.1	0.014	Not Detected	Not Detected
Heptane	4.1	0.017	Not Detected	Not Detected
Bromodichloromethane	4.1	0.028	Not Detected	Not Detected
Dibromochloromethane	4.1	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: AJLA-SP05-5

ID#: 0308162-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	s081114	Date of Collection: 8/7/03
Dil. Factor:	8.20	Date of Analysis: 8/11/03 05:16 PM

DV Qual.

Compound	Rot. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.1	0.020	Not Detected	Not Detected
Propylbenzene	4.1	0.020	Not Detected	Not Detected
Chloromethane	16	0.034	Not Detected	Not Detected
1,2,4-Trichlorobenzene	16	0.12	Not Detected	Not Detected
Hexachlorobutadiene	16	0.18	Not Detected	Not Detected
Acetone	16	0.040	100	0.25
Carbon Disulfide	16	0.052	Not Detected	Not Detected
2-Propanol	16	0.041	Not Detected	Not Detected
trans-1,2-Dichloroethene	16	0.066	Not Detected	Not Detected
Vinyl Acetate	16	0.059	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	0.049	24	0.071
Tetrahydrofuran	16	0.049	Not Detected	Not Detected
1,4-Dioxane	16	0.060	Not Detected	Not Detected
4-Methyl-2-pentanone	16	0.068	Not Detected	Not Detected
2-Hexanone	16	0.068	Not Detected	Not Detected
Bromoform	16	0.17	Not Detected	Not Detected
4-Ethyltoluene	16	0.082	Not Detected	Not Detected
Methyl tert-butyl ether	16	0.060	Not Detected U J	Not Detected U J
Ethanol	16	0.031	34	0.064

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UJ = Non-detected compound associated with low bias in the CCV

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 33D-SP05-5

ID#: 0308162-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d081008	Date of Collection: 8/7/03
Dil. Factor:	8.36	Date of Analysis: 8/10/03 06:17 PM

DV Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected U J	Not Detected U J
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	35	0.17
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	390	2.1
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	Not Detected	Not Detected
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 33D-SP05-5

ID#: 0308162-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d081008	Date of Collection: 8/7/03
Dil. Factor:	8.36	Date of Analysis: 8/10/03 06:17 PM

Manual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	43	0.10
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

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UJ = Non-detected compound associated with low bias in the CCV

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	95	70-130

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AIR TOXICS LTD.

SAMPLE NAME: 39D-SP05-5

ID#: 0308162-12A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d081009	Date of Collection: 8/7/03
Dil. Factor:	8.36	Date of Analysis: 8/10/03 06:58 PM

DV Qual

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.2	0.021	Not Detected	Not Detected
Freon 114	4.2	0.030	Not Detected	Not Detected
Vinyl Chloride	4.2	0.011	Not Detected	Not Detected
Bromomethane	4.2	0.016	Not Detected	Not Detected
Chloroethane	4.2	0.011	Not Detected U J	Not Detected U J
Freon 11	4.2	0.024	Not Detected	Not Detected
1,1-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Freon 113	4.2	0.032	Not Detected	Not Detected
Methylene Chloride	4.2	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.2	0.017	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.2	0.017	Not Detected	Not Detected
Chloroform	4.2	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Carbon Tetrachloride	4.2	0.027	Not Detected	Not Detected
Benzene	4.2	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.2	0.017	Not Detected	Not Detected
Trichloroethene	4.2	0.023	Not Detected	Not Detected
1,2-Dichloropropane	4.2	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
Toluene	4.2	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.2	0.019	Not Detected	Not Detected
1,1,2-Trichloroethane	4.2	0.023	Not Detected	Not Detected
Tetrachloroethene	4.2	0.029	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.2	0.033	Not Detected	Not Detected
Chlorobenzene	4.2	0.020	Not Detected	Not Detected
Ethyl Benzene	4.2	0.018	Not Detected	Not Detected
m,p-Xylene	4.2	0.018	Not Detected	Not Detected
o-Xylene	4.2	0.018	Not Detected	Not Detected
Styrene	4.2	0.018	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.2	0.029	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.2	0.021	Not Detected	Not Detected
1,3-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.2	0.022	Not Detected	Not Detected
1,2-Dichlorobenzene	4.2	0.026	Not Detected	Not Detected
1,3-Butadiene	4.2	0.0094	4.7	0.010
Hexane	4.2	0.015	Not Detected	Not Detected
Cyclohexane	4.2	0.015	Not Detected	Not Detected
Heptane	4.2	0.017	Not Detected	Not Detected
Bromodichloromethane	4.2	0.028	Not Detected	Not Detected
Dibromochloromethane	4.2	0.036	Not Detected	Not Detected

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AIR TOXICS LTD.

SAMPLE NAME: 39D-SP05-5

ID#: 0308162-12A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	d081009	Date of Collection:	8/7/03
Dil. Factor:	8.36	Date of Analysis:	8/10/03 06:58 PM

DV Anal

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.2	0.021	Not Detected	Not Detected
Propylbenzene	4.2	0.021	Not Detected	Not Detected
Chloromethane	17	0.035	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.18	Not Detected	Not Detected
Acetone	17	0.040	54	0.13
Carbon Disulfide	17	0.053	Not Detected	Not Detected
2-Propanol	17	0.042	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.067	Not Detected	Not Detected
Vinyl Acetate	17	0.060	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.050	Not Detected	Not Detected
Tetrahydrofuran	17	0.050	Not Detected	Not Detected
1,4-Dioxane	17	0.061	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.070	Not Detected	Not Detected
2-Hexanone	17	0.070	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.084	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.061	Not Detected	Not Detected
Ethanol	17	0.032	Not Detected	Not Detected

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UJ = Non-detected compound associated with low bias in the CCV

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	96	70-130

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10/8/03*

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Aerojet
Collection Date: August 7, 2003
LDC Report Date: October 10, 2003
Matrix: Air
Parameters: Volatiles (TO-14A)
Validation Level: EPA Level III Equivalent
Laboratory: Air Toxics Ltd.
Sample Delivery Group (SDG): 0308190

Sample Identification

FB-8803

Introduction

This data review covers one air sample listed on the cover sheet including dilutions and reanalysis as applicable. The analysis was per modified EPA Method TO-14A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 24-hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0%.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blank analyses were performed at the required frequency. No volatile contaminants were found in the method blanks above the reporting limits.

VI. Surrogate Spikes

All surrogate percent recoveries (%R) were within 70 – 130% QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

Duplicate (DUP) sample analyses were analyzed at the required frequency. Precision results were within QC limits of 15 relative percent difference (RPD).

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control

samples were reported by the laboratory. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
0308190-10A	Chloroethane Benzene Trichloroethene 1,2-Dichloropropane Toluene 1,1,2-Trichloroethane Tetrachloroethene Chloromethane Hexachlorobutadiene 4-Methyl-2-pentanone 2-Hexanone 4-Ethyltoluene	130 (80 – 120) 126 (80 – 120) 125 (80 – 120) 121 (80 – 120) 122 (80 – 120) 128 (80 – 120) 135 (80 – 120) 131 (80 – 120) 128 (80 – 120) 128 (80 – 120) 129 (80 – 120) 123 (80 – 120)	FB-8803	J detects	A
0308190-10A	Bromoform	77 (80 – 120)	FB-8803	J detects UJ nondetects	A

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not evaluated for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not evaluated for this SDG.

XIII. Tentatively Identified Compounds (TICs)

No TICs were reported.

XIV. System Performance

Raw data were not evaluated for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

There were no field duplicate samples identified in this SDG.

XVII. Field Blanks

Sample FB-8803 was identified as a field blank sample. No volatile contaminants were found in this blank above the reporting limits.

**Aerojet
Volatiles (TO-14A) - Data Qualification Summary - SDG 0308190**

SDG	Sample	Compound	Flag	A or P	Reason
0308190	FB-8803	Chloroethane Benzene Trichloroethene 1,2-Dichloropropane Toluene 1,1,2-Trichloroethane Tetrachloroethene Chloromethane Hexachlorobutadiene 4-Methyl-2-pentanone 2-Hexanone 4-Ethyltoluene	J detects	A	LCS %R above QC limits
0308190	FB-8803	Bromoform	J detects UJ nondetects	A	LCS %R below QC limits

**Aerojet
Volatiles (TO-14A) - Laboratory Blank Data Qualification Summary - SDG 0308190**

No Sample Data Qualified in this SDG

AIR TOXICS LTD.

SAMPLE NAME: FB-8803

ID#: 0308190-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b081224	Date of Collection: 8/8/03
Dil. Factor:	8.64	Date of Analysis: 8/13/03 07:48 AM

DU Qual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Freon 12	4.3	0.022	Not Detected	Not Detected
Freon 114	4.3	0.031	Not Detected	Not Detected
Vinyl Chloride	4.3	0.011	Not Detected	Not Detected
Bromomethane	4.3	0.017	Not Detected	Not Detected
Chloroethane	4.3	0.012	Not Detected	Not Detected
Freon 11	4.3	0.025	Not Detected	Not Detected
1,1-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Freon 113	4.3	0.034	Not Detected	Not Detected
Methylene Chloride	4.3	0.015	Not Detected	Not Detected
1,1-Dichloroethane	4.3	0.018	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.3	0.017	Not Detected	Not Detected
Chloroform	4.3	0.021	Not Detected	Not Detected
1,1,1-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Carbon Tetrachloride	4.3	0.028	Not Detected	Not Detected
Benzene	4.3	0.014	Not Detected	Not Detected
1,2-Dichloroethane	4.3	0.018	Not Detected	Not Detected
Trichloroethene	4.3	0.024	Not Detected	Not Detected
1,2-Dichloropropane	4.3	0.020	Not Detected	Not Detected
cis-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
Toluene	4.3	0.016	Not Detected	Not Detected
trans-1,3-Dichloropropene	4.3	0.020	Not Detected	Not Detected
1,1,2-Trichloroethane	4.3	0.024	Not Detected	Not Detected
Tetrachloroethene	4.3	0.030	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	4.3	0.034	Not Detected	Not Detected
Chlorobenzene	4.3	0.020	Not Detected	Not Detected
Ethyl Benzene	4.3	0.019	Not Detected	Not Detected
m,p-Xylene	4.3	0.019	Not Detected	Not Detected
o-Xylene	4.3	0.019	Not Detected	Not Detected
Styrene	4.3	0.019	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	4.3	0.030	Not Detected	Not Detected
1,3,5-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,2,4-Trimethylbenzene	4.3	0.022	Not Detected	Not Detected
1,3-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,4-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
alpha-Chlorotoluene	4.3	0.023	Not Detected	Not Detected
1,2-Dichlorobenzene	4.3	0.026	Not Detected	Not Detected
1,3-Butadiene	4.3	0.0097	Not Detected	Not Detected
Hexane	4.3	0.015	Not Detected	Not Detected
Cyclohexane	4.3	0.015	Not Detected	Not Detected
Heptane	4.3	0.018	Not Detected	Not Detected
Bromodichloromethane	4.3	0.029	Not Detected	Not Detected
Dibromochloromethane	4.3	0.037	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: FB-8803

ID#: 0308190-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	b081224	Date of Collection: 8/8/03
Dil. Factor:	8.64	Date of Analysis: 8/13/03 07:48 AM

DWQual.

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/L)	Amount (ppbv)	Amount (uG/L)
Cumene	4.3	0.022	Not Detected	Not Detected
Propylbenzene	4.3	0.022	Not Detected	Not Detected
Chloromethane	17	0.036	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	0.13	Not Detected	Not Detected
Hexachlorobutadiene	17	0.19	Not Detected	Not Detected
Acetone	17	0.042	Not Detected	Not Detected
Carbon Disulfide	17	0.055	Not Detected	Not Detected
2-Propanol	17	0.043	Not Detected	Not Detected
trans-1,2-Dichloroethene	17	0.070	Not Detected	Not Detected
Vinyl Acetate	17	0.062	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	17	0.052	Not Detected	Not Detected
Tetrahydrofuran	17	0.052	Not Detected	Not Detected
1,4-Dioxane	17	0.063	Not Detected	Not Detected
4-Methyl-2-pentanone	17	0.072	Not Detected	Not Detected
2-Hexanone	17	0.072	Not Detected	Not Detected
Bromoform	17	0.18	Not Detected	Not Detected
4-Ethyltoluene	17	0.086	Not Detected	Not Detected
Methyl tert-butyl ether	17	0.063	Not Detected	Not Detected
Ethanol	17	0.033	Not Detected	Not Detected

WJ

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	81	70-130

*KE
10/9/03*