
Air
Toxics LTD.
Laboratory Services Since 1989
Electronic Comprehensive Validation Package (eCVP)

AN ENVIRONMENTAL ANALYTICAL LABORATORY

# COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 0711487

| | Page Nos. | |
|---|---|---|
| | From | To |
| 1. Work Order Cover Page & Laboratory Narrative | 1 | 4 |
| a. Lumen Validation Report | -- | -- |
| 2. Sample Results and Raw Data (Organized by Sample) | 5 | 29 |
| a. ATL Sample Results Form | | |
| b. Target Compound Raw Data | | |
| -Internal Standard Area and Retention Time Summary | | |
| -Surrogate Recovery Summary (If Applicable) | | |
| -Chromatogram(s) and Ion Profiles (If Applicable) | | |
| 3. QC Results and Raw Data | | |
| a. Method Blank (Results+ Raw Data) | 30 | 37 |
| b. Surrogate Recover Summary Form (If Applicable) | 38 | 38 |
| c. Internal Standard Summary Form (If Applicable) | 39 | 39 |
| d. Duplicate Results Summary Sheet | -- | -- |
| e. Matrix Spike/Matrix Spike Duplicate (Results + Raw Data | -- | -- |
| f. Initial Calibration Data (Summary Sheet + Raw Data) | 40 | 168 |
| g. MDL Study (If Applicable) | -- | -- |
| h. Continuing Calibration Verification Data (Summary Sheet | 169 | 182 |
| i. Second Source LCS(Summary + Raw Data) | 183 | 196 |
| j. Extraction Logs | -- | -- |
| k. Instrument Run Logs/Software Verification | 197 | 198 |
| l. GC/MS Tune (Results + Raw Data) | 199 | 215 |
| 4. Shipping/Receiving Documents | | |
| a. Login Receipt Summary Sheet | 216 | 217 |
| b. Chain-of-Custody Records | 218 | 218 |
| c. Sample Log-In Sheet | 219 | 219 |
| d. Misc Shipping/Receiving Records (list of individual records) | | |
| Sample Receipt Discrepancy Report | 220 | 220 |
| 5. Other Records (describe or list) | | |
| a. Manual Spectral Defense | -- | -- |
| b. Manual Integrations | -- | -- |
| c. Manual Calculations | -- | -- |
| d. Canister Dilution Factors | 221 | 223 |
| e. Laboratory Corrective Action Request | -- | -- |
| f. CAS Number Reference | 224 | 225 |
| g. Variance Table | -- | -- |
| h. Canister Certification | -- | -- |
| i. Data Review Check Sheet | 226 | 226 |

Comments:

Completed by:

*Kara McKiernan* Kara McKiernan / Document Control 12/12/07

(Signature) ( Print Name & Title) (Date)

AN ENVIRONMENTAL ANALYTICAL LABORATORY

# WORK ORDER #: 0711487

Work Order Summary

| | | | |
|---|---|---|---|
| **CLIENT:** | Ms. Sarah Aldridge<br>GEI Consultants, Inc.<br>455 Winding Brook Drive<br>Suite 201<br>Glastonbury, CT 06033 | **BILL TO:** | Ms. Sarah Aldridge<br>GEI Consultants, Inc.<br>455 Winding Brook Drive<br>Suite 201<br>Glastonbury, CT 06033 |
| **PHONE:** | 860-368-5300 | **P.O. #** | NR |
| **FAX:** | 860-368-5307 | **PROJECT #** | 061140-8-1703 BayShore OU1 Southern cell Air Monitori |
| **DATE RECEIVED:** | 11/26/2007 | **CONTACT:** | Bryanna Langley |
| **DATE COMPLETED:** | 12/07/2007 | | |

| FRACTION # | NAME | TEST | RECEIPT VAC./PRES. |
|---|---|---|---|
| 01A | UW-AMS-1 | Modified TO-15 | 2.5 "Hg |
| 02A | DW-AMS-5 | Modified TO-15 | 1.0 "Hg |
| 03A | Lab Blank | Modified TO-15 | NA |
| 04A | CCV | Modified TO-15 | NA |
| 05A | LCS | Modified TO-15 | NA |

CERTIFIED BY: Linda D. Fruman DATE: 12/07/07

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards



180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

AN ENVIRONMENTAL ANALYTICAL LABORATORY

**LABORATORY NARRATIVE**
**Modified TO-15**
**GEI Consultants, Inc.**
**Workorder# 0711487**

Two 6 Liter Summa Canister samples were received on November 26, 2007. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

| ***Requirement*** | ***TO-15*** | ***ATL Modifications*** |
|---|---|---|
| Daily CCV | +- 30% Difference | </= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers |
| Sample collection media | Summa canister | ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request |
| Method Detection Limit | Follow 40CFR Pt.136 App. B | The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases |

## Receiving Notes

The Chain of Custody (COC) information for samples UW-AMS-1 and DW-AMS-5 did not match the entries on the sample tags with regard to sample identification. Therefore the information on the COC was used to process and report the samples.

## Analytical Notes

There were no analytical discrepancies.

## Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

## Table 1

| Client Sample ID | Lab Sample ID | Date Collected | Date Received | Date Extracted | Sample Holding Time (Days) | Sample Extract Date Analyzed | Sample Extract Holding Time (Days) | Sample Condition |
|---|---|---|---|---|---|---|---|---|
| UW-AMS-1 | 0711487-01A | 11/21/2007 | 11/26/2007 | NA | 14 | 12/ 5/2007 | NA | Good |
| DW-AMS-5 | 0711487-02A | 11/21/2007 | 11/26/2007 | NA | 14 | 12/ 5/2007 | NA | Good |
| Lab Blank | 0711487-03A | NA | NA | NA | NA | 12/ 4/2007 | NA | Good |
| CCV | 0711487-04A | NA | NA | NA | NA | 12/ 4/2007 | NA | Good |
| LCS | 0711487-05A | NA | NA | NA | NA | 12/ 4/2007 | NA | Good |

# Sample Results and Raw Data

AN ENVIRONMENTAL ANALYTICAL LABORATORY

# Summary of Detected Compounds
# MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

**Client Sample ID: UW-AMS-1**

**Lab ID#: 0711487-01A**

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (uG/m3) | Amount (uG/m3) |
|---|---|---|---|---|
| Freon 12 | 0.73 | 0.91 | 3.6 | 4.5 |
| Methylene Chloride | 0.73 | 1.0 | 2.5 | 3.6 |
| Benzene | 0.73 | 0.85 | 2.3 | 2.7 |
| Toluene | 0.73 | 2.4 | 2.8 | 9.0 |
| Acetone | 2.9 | 5.8 | 6.9 | 14 |

AN ENVIRONMENTAL ANALYTICAL LABORATORY

**Client Sample ID: UW-AMS-1**

**Lab ID#: 0711487-01A**

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **t120417** | **Date of Collection:** | **11/21/07** |
| **Dil. Factor:** | **1.46** | **Date of Analysis:** | **12/5/07 12:42 AM** |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (uG/m3) | Amount (uG/m3) |
|---|---|---|---|---|
| Freon 12 | 0.73 | 0.91 | 3.6 | 4.5 |
| Freon 114 | 0.73 | Not Detected | 5.1 | Not Detected |
| Vinyl Chloride | 0.73 | Not Detected | 1.9 | Not Detected |
| Bromomethane | 0.73 | Not Detected | 2.8 | Not Detected |
| Chloroethane | 0.73 | Not Detected | 1.9 | Not Detected |
| Freon 11 | 0.73 | Not Detected | 4.1 | Not Detected |
| 1,1-Dichloroethene | 0.73 | Not Detected | 2.9 | Not Detected |
| Freon 113 | 0.73 | Not Detected | 5.6 | Not Detected |
| Methylene Chloride | 0.73 | 1.0 | 2.5 | 3.6 |
| 1,1-Dichloroethane | 0.73 | Not Detected | 3.0 | Not Detected |
| cis-1,2-Dichloroethene | 0.73 | Not Detected | 2.9 | Not Detected |
| Chloroform | 0.73 | Not Detected | 3.6 | Not Detected |
| 1,1,1-Trichloroethane | 0.73 | Not Detected | 4.0 | Not Detected |
| Carbon Tetrachloride | 0.73 | Not Detected | 4.6 | Not Detected |
| Benzene | 0.73 | 0.85 | 2.3 | 2.7 |
| 1,2-Dichloroethane | 0.73 | Not Detected | 3.0 | Not Detected |
| Trichloroethene | 0.73 | Not Detected | 3.9 | Not Detected |
| 1,2-Dichloropropane | 0.73 | Not Detected | 3.4 | Not Detected |
| cis-1,3-Dichloropropene | 0.73 | Not Detected | 3.3 | Not Detected |
| Toluene | 0.73 | 2.4 | 2.8 | 9.0 |
| trans-1,3-Dichloropropene | 0.73 | Not Detected | 3.3 | Not Detected |
| 1,1,2-Trichloroethane | 0.73 | Not Detected | 4.0 | Not Detected |
| Tetrachloroethene | 0.73 | Not Detected | 5.0 | Not Detected |
| 1,2-Dibromoethane (EDB) | 0.73 | Not Detected | 5.6 | Not Detected |
| Chlorobenzene | 0.73 | Not Detected | 3.4 | Not Detected |
| Ethyl Benzene | 0.73 | Not Detected | 3.2 | Not Detected |
| m,p-Xylene | 0.73 | Not Detected | 3.2 | Not Detected |
| o-Xylene | 0.73 | Not Detected | 3.2 | Not Detected |
| Styrene | 0.73 | Not Detected | 3.1 | Not Detected |
| 1,1,2,2-Tetrachloroethane | 0.73 | Not Detected | 5.0 | Not Detected |
| 1,3,5-Trimethylbenzene | 0.73 | Not Detected | 3.6 | Not Detected |
| 1,2,4-Trimethylbenzene | 0.73 | Not Detected | 3.6 | Not Detected |
| 1,3-Dichlorobenzene | 0.73 | Not Detected | 4.4 | Not Detected |
| 1,4-Dichlorobenzene | 0.73 | Not Detected | 4.4 | Not Detected |
| alpha-Chlorotoluene | 0.73 | Not Detected | 3.8 | Not Detected |
| 1,2-Dichlorobenzene | 0.73 | Not Detected | 4.4 | Not Detected |
| 1,3-Butadiene | 0.73 | Not Detected | 1.6 | Not Detected |
| Hexane | 0.73 | Not Detected | 2.6 | Not Detected |
| Cyclohexane | 0.73 | Not Detected | 2.5 | Not Detected |

AN ENVIRONMENTAL ANALYTICAL LABORATORY

**Client Sample ID: UW-AMS-1**

**Lab ID#: 0711487-01A**

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **t120417** | **Date of Collection: 11/21/07** | |
| **Dil. Factor:** | **1.46** | **Date of Analysis: 12/5/07 12:42 AM** | |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (uG/m3) | Amount (uG/m3) |
|---|---|---|---|---|
| Heptane | 0.73 | Not Detected | 3.0 | Not Detected |
| Bromodichloromethane | 0.73 | Not Detected | 4.9 | Not Detected |
| Dibromochloromethane | 0.73 | Not Detected | 6.2 | Not Detected |
| Cumene | 0.73 | Not Detected | 3.6 | Not Detected |
| Propylbenzene | 0.73 | Not Detected | 3.6 | Not Detected |
| Chloromethane | 2.9 | Not Detected | 6.0 | Not Detected |
| 1,2,4-Trichlorobenzene | 2.9 | Not Detected | 22 | Not Detected |
| Hexachlorobutadiene | 2.9 | Not Detected | 31 | Not Detected |
| Acetone | 2.9 | 5.8 | 6.9 | 14 |
| Carbon Disulfide | 0.73 | Not Detected | 2.3 | Not Detected |
| 2-Propanol | 2.9 | Not Detected | 7.2 | Not Detected |
| trans-1,2-Dichloroethene | 0.73 | Not Detected | 2.9 | Not Detected |
| 2-Butanone (Methyl Ethyl Ketone) | 0.73 | Not Detected | 2.2 | Not Detected |
| Tetrahydrofuran | 0.73 | Not Detected | 2.2 | Not Detected |
| 1,4-Dioxane | 2.9 | Not Detected | 10 | Not Detected |
| 4-Methyl-2-pentanone | 0.73 | Not Detected | 3.0 | Not Detected |
| 2-Hexanone | 2.9 | Not Detected | 12 | Not Detected |
| Bromoform | 0.73 | Not Detected | 7.5 | Not Detected |
| 4-Ethyltoluene | 0.73 | Not Detected | 3.6 | Not Detected |
| Ethanol | 2.9 | Not Detected | 5.5 | Not Detected |
| Methyl tert-butyl ether | 0.73 | Not Detected | 2.6 | Not Detected |
| 3-Chloropropene | 2.9 | Not Detected | 9.1 | Not Detected |
| 2,2,4-Trimethylpentane | 0.73 | Not Detected | 3.4 | Not Detected |
| Naphthalene | 2.9 | Not Detected | 15 | Not Detected |

**Container Type: 6 Liter Summa Canister**

| Surrogates | %Recovery | Method Limits |
|---|---|---|
| Toluene-d8 | 111 | 70-130 |
| 1,2-Dichloroethane-d4 | 100 | 70-130 |
| 4-Bromofluorobenzene | 102 | 70-130 |

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/04Dec2007.b/t120417.d
Lab Smp Id: 0711487-01A
Inj Date : 05-DEC-2007 00:42
Operator : ab Inst ID: msdt.i
Smp Info : 200mL #35125
Misc Info : 2.5"Hg -> 5psi
Comment :
Method : /chem/msdt.i/04Dec2007.b/t14q1121b.m
Meth Date : 04-Dec-2007 13:33 sruth Quant Type: ISTD
Cal Date : 26-NOV-2007 15:28 Cal File: t112608.d
Als bottle: 1
Dil Factor: 1.46000
Integrator: HP RTE Compound Sublist: AT04.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | CONCENTRATIONS ON-COL | CONCENTRATIONS FINAL | | |
|---|---|---|---|---|---|---|---|
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| * 81 Bromochloromethane | | | | | CAS #: 74-97-5 | | |
| 13.886 | 13.858 (1.000) | 130 | 251136 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 13.886 | 13.858 (1.000) | 128 | 186269 | | | 29.93- 129.93 | 74.17 |
| 13.858 | 13.858 (1.000) | 49 | 289964 | | | 108.51- 208.51 | 115.46 |
| * 97 1,4-Difluorobenzene | | | | | CAS #: 540-36-3 | | |
| 15.628 | 15.600 (1.000) | 114 | 1149864 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 15.628 | 15.600 (1.000) | 88 | 185195 | | | 0.00- 66.48 | 16.11 |
| * 126 Chlorobenzene-d5 | | | | | CAS #: 3114-55-4 | | |
| 20.798 | 20.798 (1.000) | 117 | 956844 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 20.798 | 20.798 (1.000) | 82 | 541934 | | | 4.93- 104.93 | 56.64 |
| $ 90 1,2-Dichloroethane-d4 | | | | | CAS #: 17060-07-0 | | |
| 14.936 | 14.937 (1.076) | 65 | 405299 | 25.0358 | 25.036 | 80.00- 120.00 | 100.00 |
| 14.936 | 14.937 (1.076) | 67 | 194791 | | | 5.03- 105.03 | 48.06 |
| $ 113 Toluene-d8 | | | | | CAS #: 2037-26-5 | | |
| 18.199 | 18.199 (1.165) | 98 | 1080193 | 27.7514 | 27.751 | 80.00- 120.00 | 100.00 |
| 18.199 | 18.199 (1.165) | 70 | 120008 | | | 0.00- 61.02 | 11.11 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| $ 113 Toluene-d8 (continued) | | | | | | | |
| 18.199 | 18.199 (1.165) | 100 | 732528 | | | 19.45- 119.45 | 67.81 |
| $ 137 Bromofluorobenzene | | | | | CAS #: 460-00-4 | | |
| 22.789 | 22.789 (1.096) | 174 | 612535 | 25.4842 | 25.484 | 80.00- 120.00 | 100.00 |
| 22.789 | 22.789 (1.096) | 95 | 779519 | | | 78.56- 178.56 | 127.26 |
| 22.789 | 22.789 (1.096) | 176 | 598195 | | | 47.64- 147.64 | 97.66 |
| 12 Dichlorodifluoromethane/Fr12 | | | | | CAS #: 75-71-8 | | |
| 5.923 | 5.923 (0.427) | 85 | 23016 | 0.62412 | 0.9112 | 80.00- 120.00 | 100.00 |
| 5.923 | 5.923 (0.427) | 87 | 7125 | | | 0.00- 82.07 | 30.96 |
| 45 Acetone | | | | | CAS #: 67-64-1 | | |
| 10.181 | 10.181 (0.733) | 58 | 31756 | 3.98582 | 5.819 | 80.00- 120.00 | 100.00 |
| 10.208 | 10.181 (0.735) | 43 | 100745 | | | 259.05- 359.05 | 317.25 |
| 54 Methylene Chloride | | | | | CAS #: 75-09-2 | | |
| 11.121 | 11.093 (0.801) | 49 | 9267 | 0.70537 | 1.030 | 80.00- 120.00 | 100.00 |
| 11.093 | 11.093 (0.799) | 84 | 8193 | | | 47.12- 147.12 | 88.41 |
| 11.121 | 11.093 (0.801) | 51 | 3653 | | | 0.00- 81.08 | 39.42 |
| 91 Benzene | | | | | CAS #: 71-43-2 | | |
| 14.964 | 14.964 (0.958) | 78 | 28602 | 0.58304 | 0.8512 | 80.00- 120.00 | 100.00 |
| 14.964 | 14.937 (0.958) | 77 | 6722 | | | 0.00- 72.49 | 23.50 |
| 114 Toluene | | | | | CAS #: 108-88-3 | | |
| 18.337 | 18.337 (1.173) | 91 | 89394 | 1.64237 | 2.398 | 80.00- 120.00 | 100.00 |
| 18.337 | 18.310 (1.173) | 92 | 54023 | | | 11.41- 111.41 | 60.43 |

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t120417.d
Lab Smp Id: 0711487-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msdt.i/04Dec2007.b/t14q1121b.m
Misc Info: 2.5"Hg -> 5psi

Calibration Date: 04-DEC-2007
Calibration Time: 09:44
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 355566 | 213340 | 497792 | 251136 | -29.37 |
| 97 1,4-Difluorobenze | 1769240 | 1061544 | 2476936 | 1149864 | -35.01 |
| 126 Chlorobenzene-d5 | 1250441 | 750265 | 1750617 | 956844 | -23.48 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.86 | 13.53 | 14.19 | 13.89 | 0.20 |
| 97 1,4-Difluorobenze | 15.60 | 15.27 | 15.93 | 15.63 | 0.18 |
| 126 Chlorobenzene-d5 | 20.80 | 20.47 | 21.13 | 20.80 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 04Dec2007
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0711487-01A
Level: LOW Operator: ab
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT04.sub
Method File: /chem/msdt.i/04Dec2007.b/t14q1121b.m
Misc Info: 2.5"Hg -> 5psi

| SURROGATE COMPOUND | CONC ADDED PPBV | CONC RECOVERED PPBV | % RECOVERED | LIMITS |
|---|---|---|---|---|
| $ 90 1,2-Dichloroethane | 25.000 | 25.036 | 100.14 | 70-130 |
| $ 113 Toluene-d8 | 25.000 | 27.751 | 111.01 | 70-130 |
| $ 137 Bromofluorobenzene | 25.000 | 25.484 | 101.94 | 70-130 |

Data File: /chem/msdt.i/04Dec2007.b/t120417.d

Date : 05-DEC-2007 00:42

Client ID:

Sample Info: 200mL #35125

Column phase: RTx-624

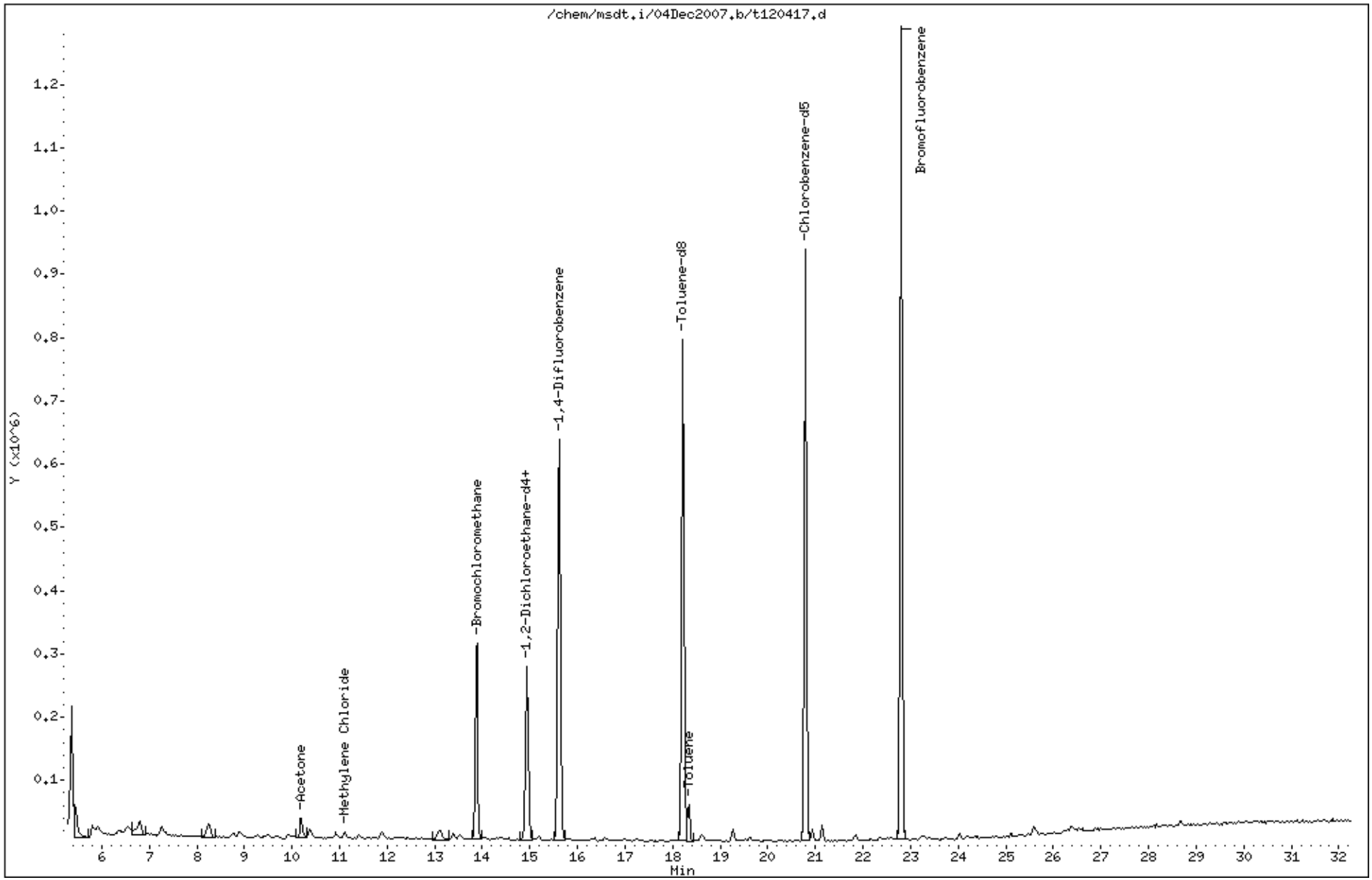
Instrument: msdt.i

Operator: ab

Column diameter: 0.53



0013



Data File: /chem/msdt.i/04Dec2007.b/t120417.d

Date : 05-DEC-2007 00:42

Client ID:

Instrument: msdt.i

Sample Info: 200mL #35125

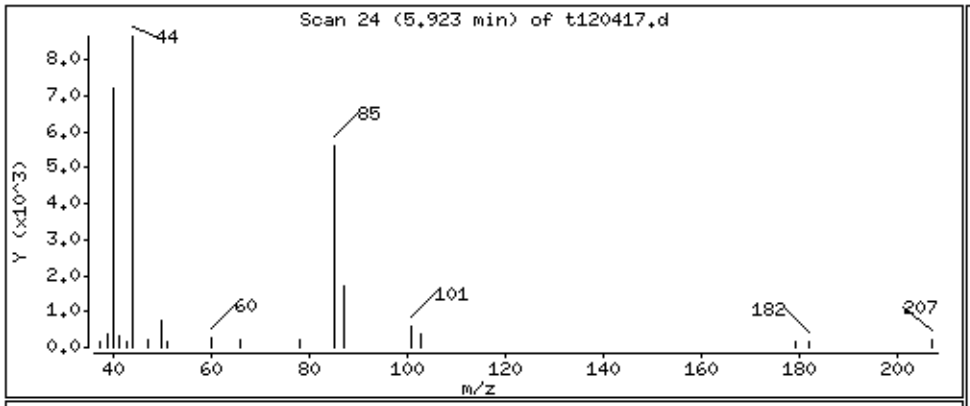
Operator: ab

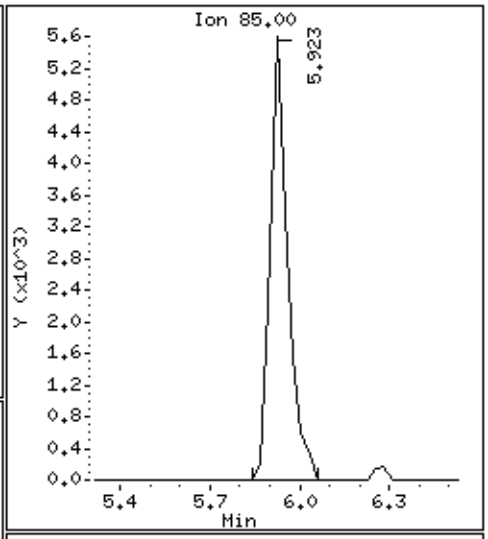
Column phase: RTx-624

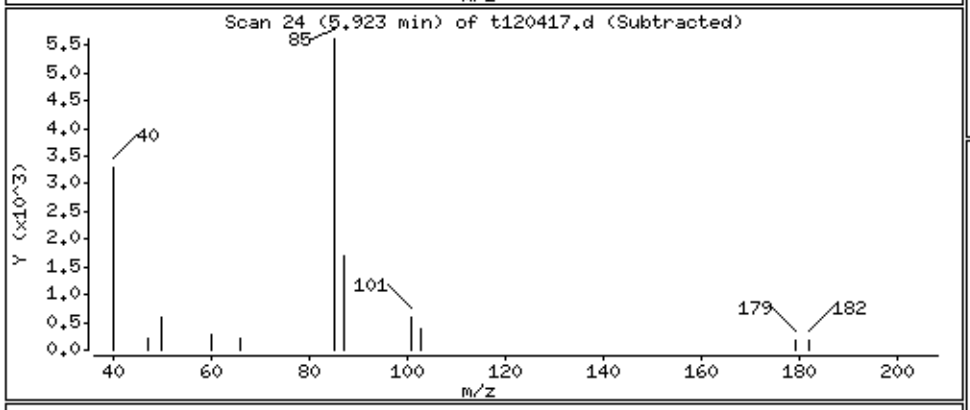
Column diameter: 0.53

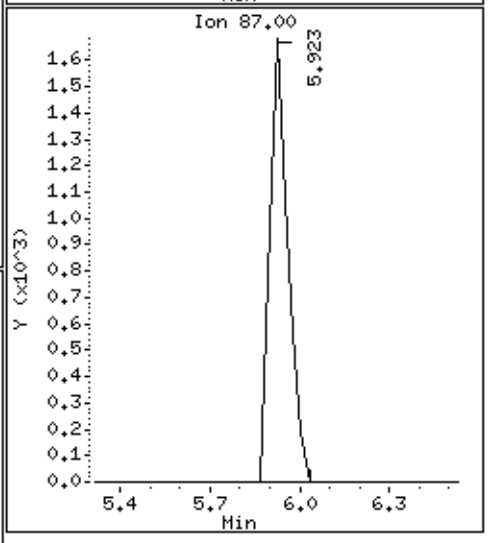
12 Dichlorodifluoromethane/Fr12

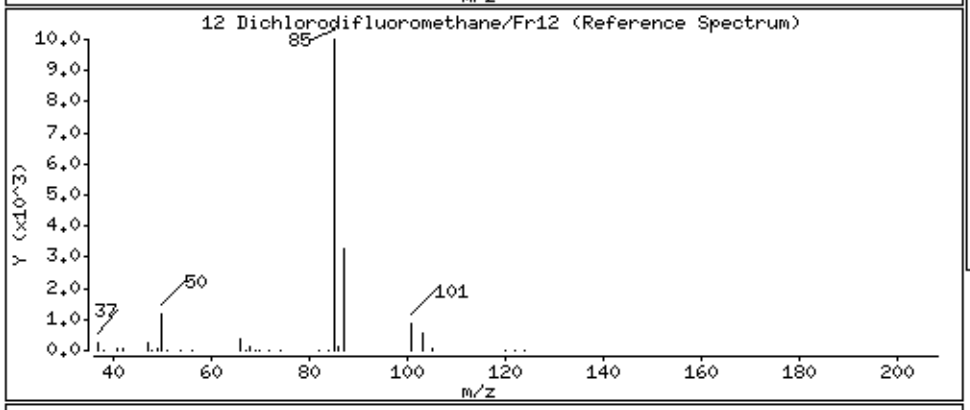
Concentration: 0.9112 PPBV

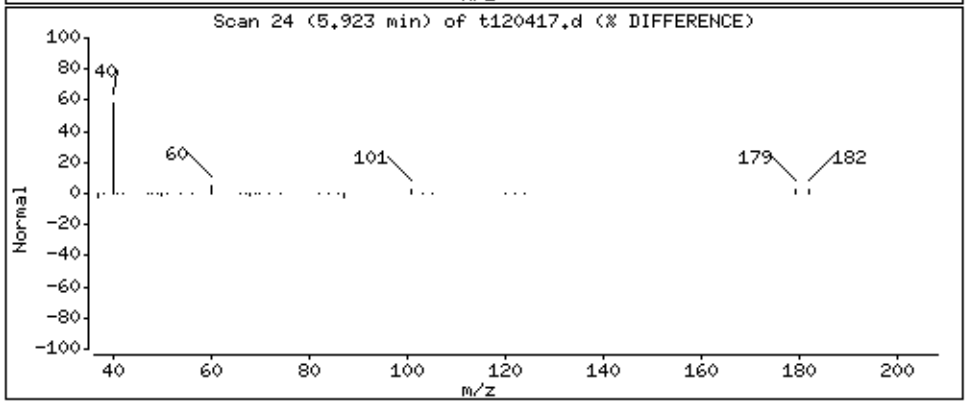


Data File: /chem/msdt.i/04Dec2007.b/t120417.d

Date : 05-DEC-2007 00:42

Client ID:

Instrument: msdt.i

Sample Info: 200mL #35125

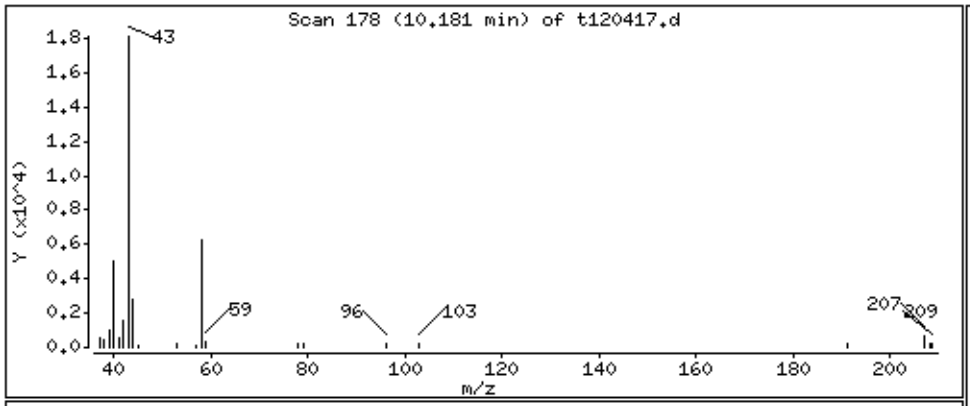
Operator: ab

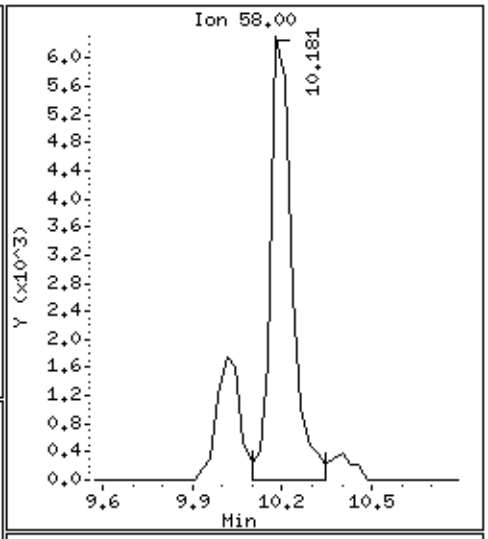
Column phase: RTx-624

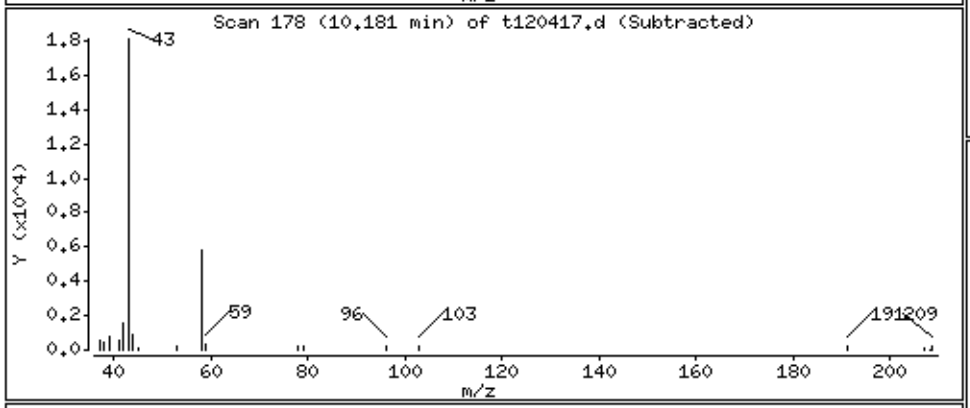
Column diameter: 0.53

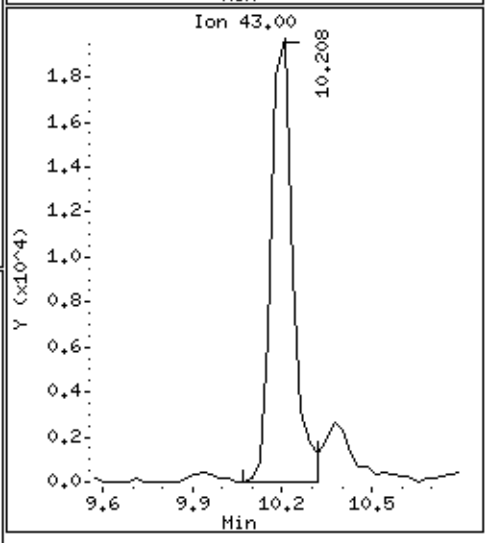
45 Acetone

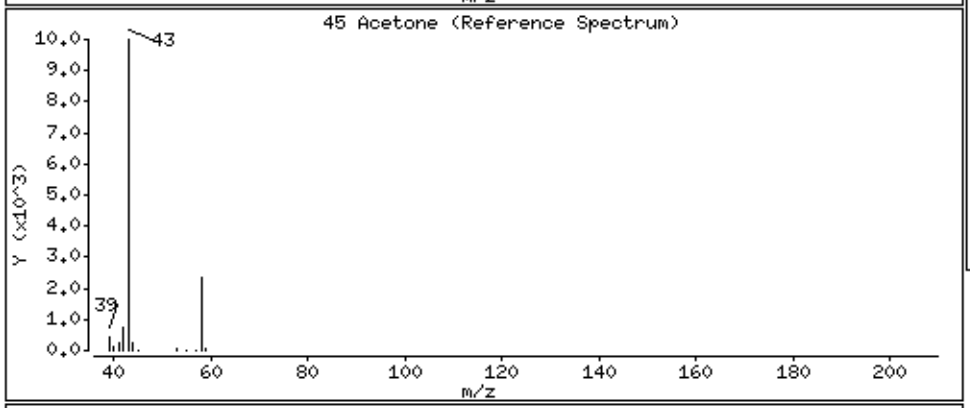
Concentration: 5.819 PPBV

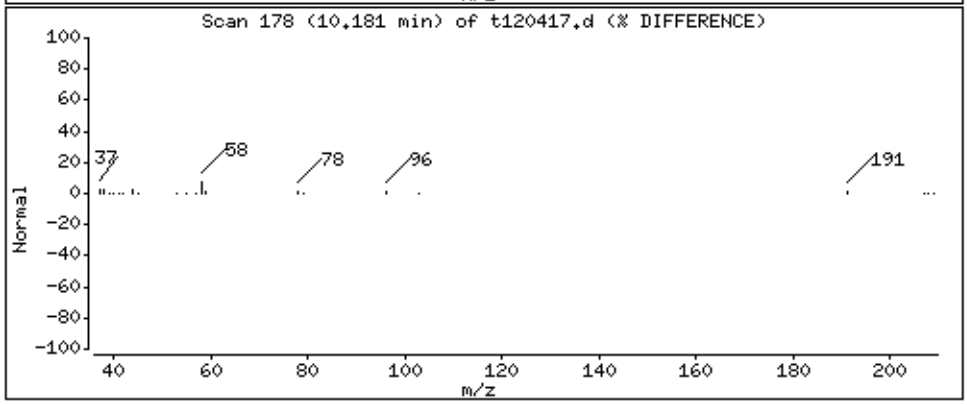


Data File: /chem/msdt.i/04Dec2007.b/t120417.d

Date : 05-DEC-2007 00:42

Client ID:

Instrument: msdt.i

Sample Info: 200mL #35125

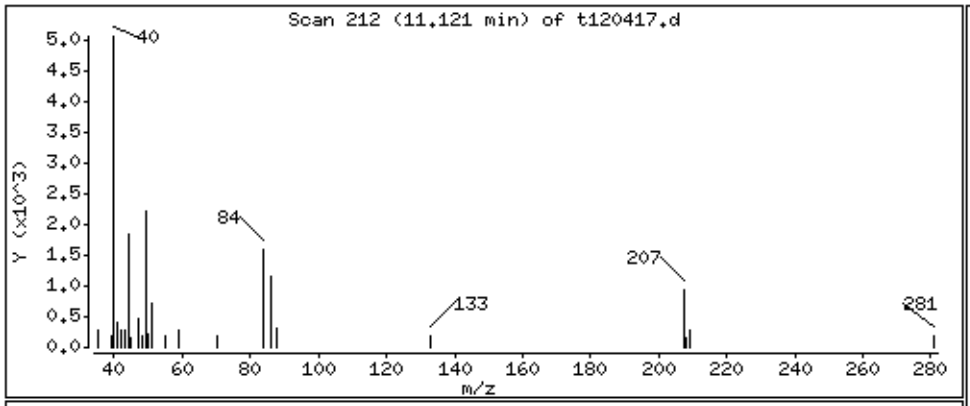
Operator: ab

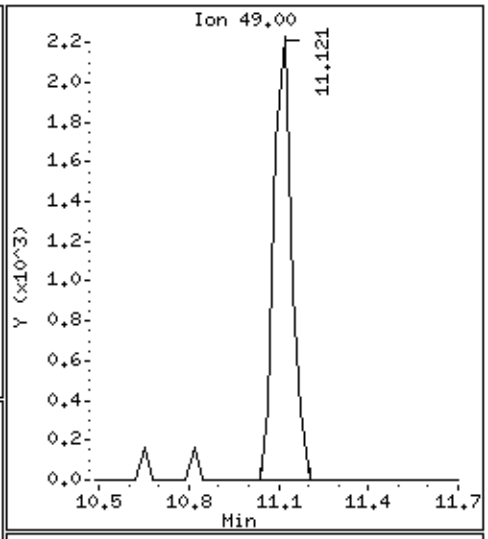
Column phase: RTx-624

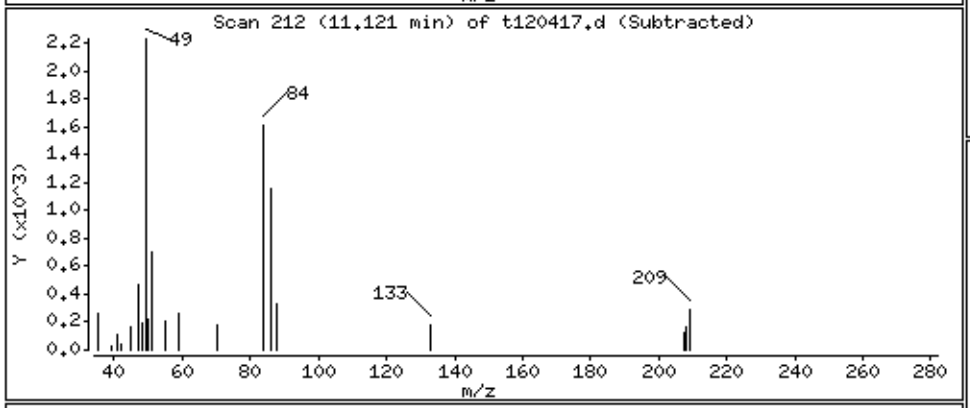
Column diameter: 0.53

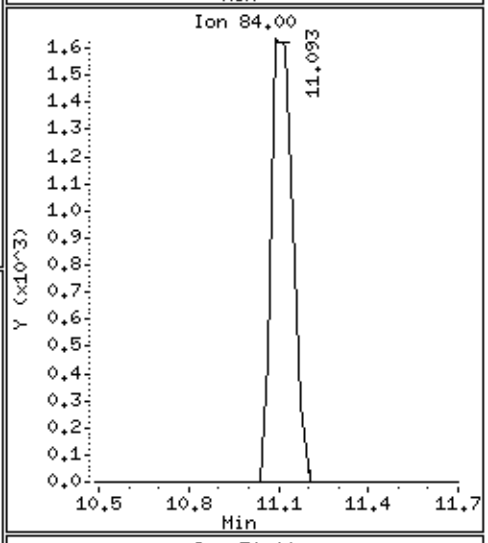
54 Methylene Chloride

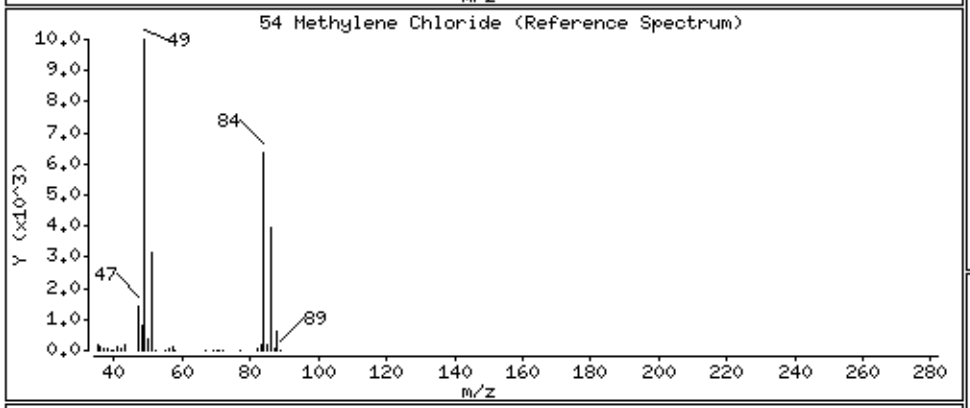
Concentration: 1.030 PPBV

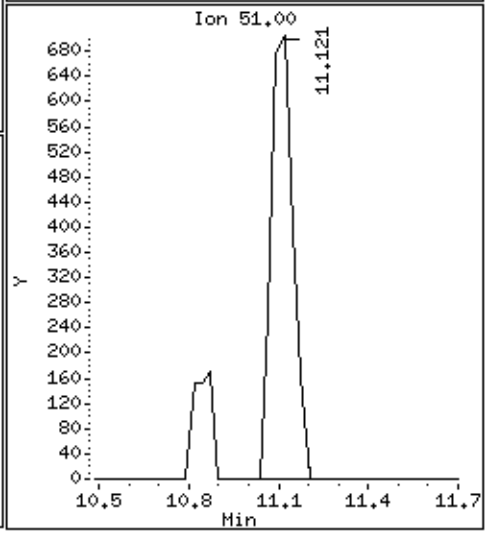


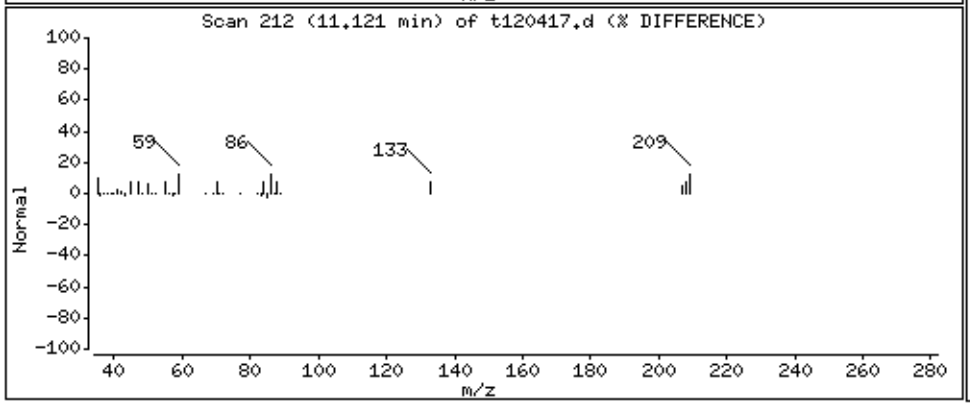



Data File: /chem/msdt.i/04Dec2007.b/t120417.d

Date : 05-DEC-2007 00:42

Client ID:

Instrument: msdt.i

Sample Info: 200mL #35125

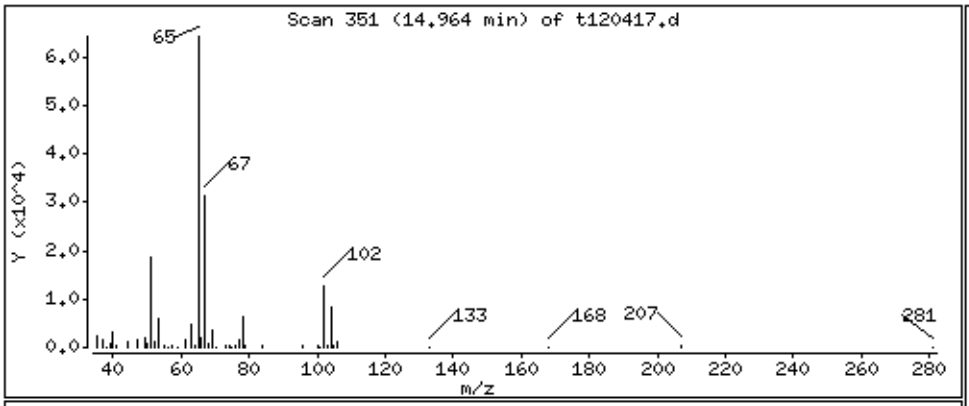
Operator: ab

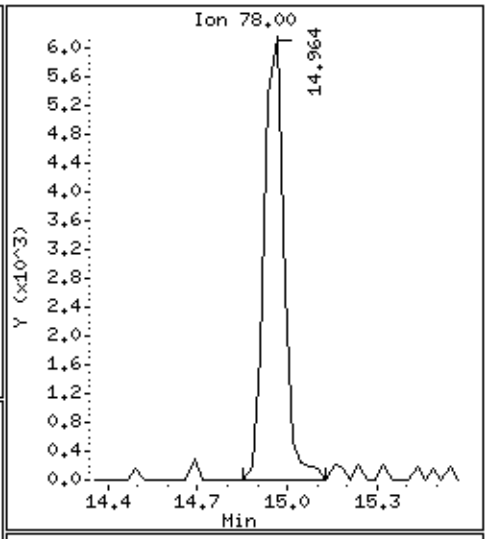
Column phase: RTx-624

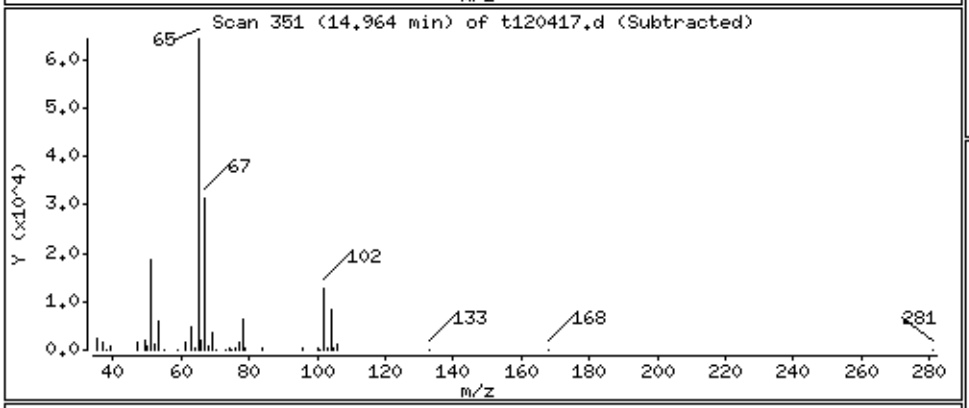
Column diameter: 0.53

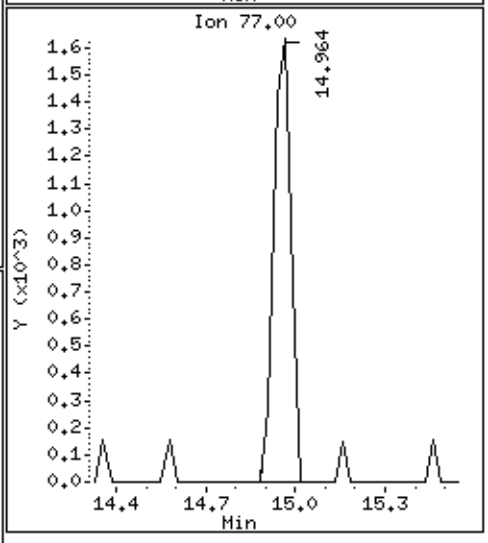
91 Benzene

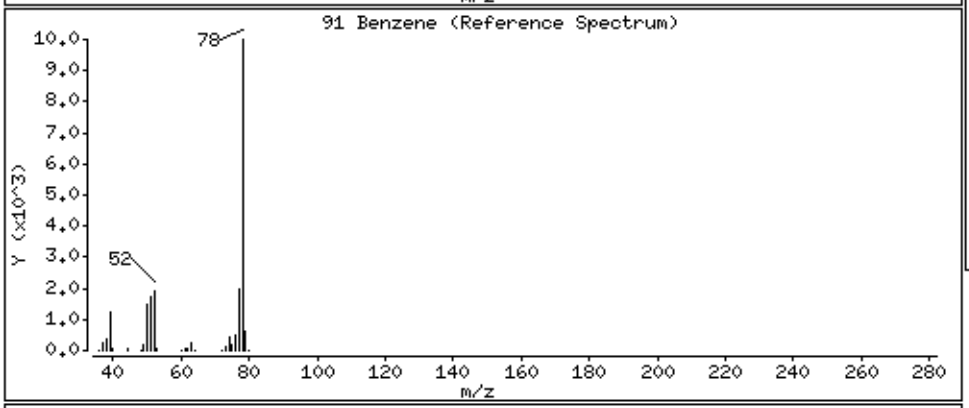
Concentration: 0.8512 PPBV

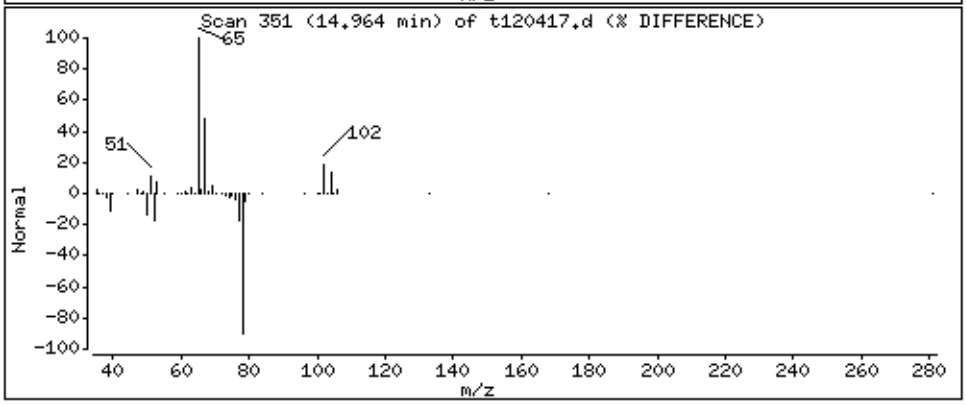


Data File: /chem/msdt.i/04Dec2007.b/t120417.d

Date : 05-DEC-2007 00:42

Client ID:

Instrument: msdt.i

Sample Info: 200mL #35125

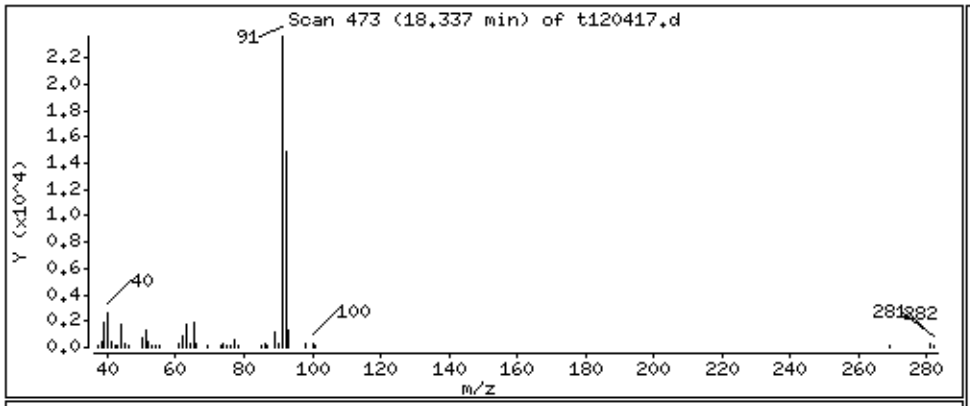
Operator: ab

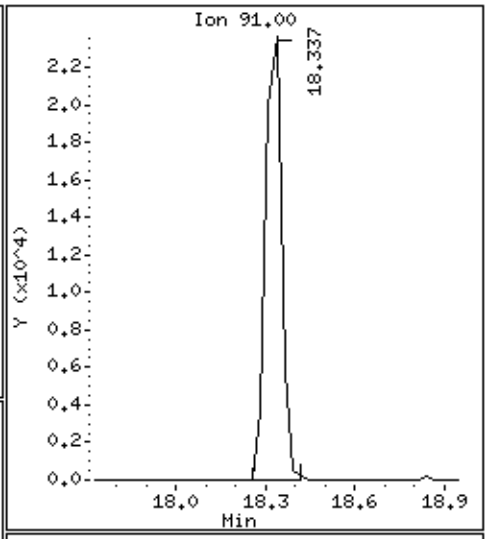
Column phase: RTx-624

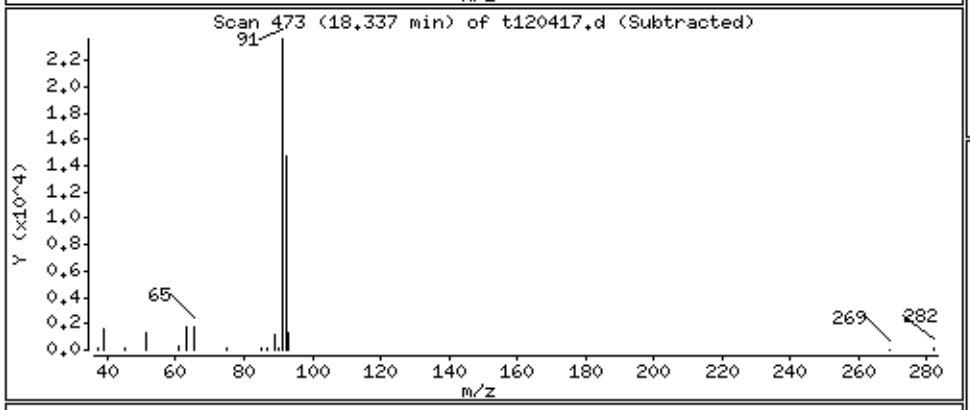
Column diameter: 0.53

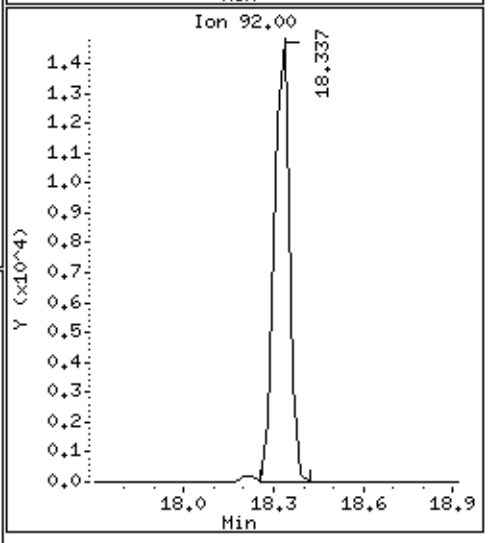
114 Toluene

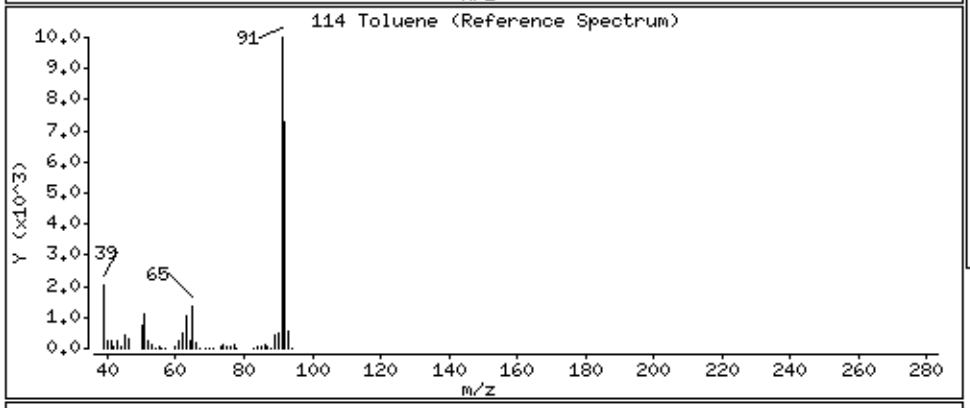
Concentration: 2.398 PPBV

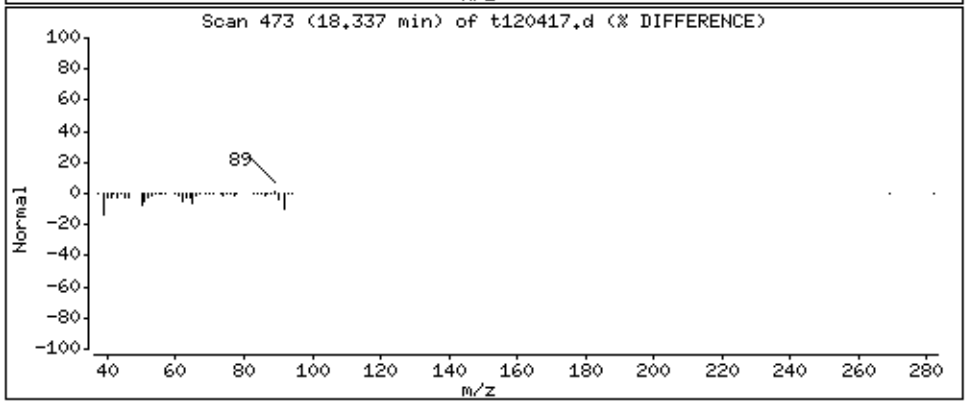


AN ENVIRONMENTAL ANALYTICAL LABORATORY

# Summary of Detected Compounds
# MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

**Client Sample ID: DW-AMS-5**

**Lab ID#: 0711487-02A**

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (uG/m3) | Amount (uG/m3) |
|---|---|---|---|---|
| Freon 12 | 0.70 | 0.82 | 3.4 | 4.0 |
| Toluene | 0.70 | 1.2 | 2.6 | 4.6 |
| Acetone | 2.8 | 3.0 | 6.6 | 7.3 |

AN ENVIRONMENTAL ANALYTICAL LABORATORY

**Client Sample ID: DW-AMS-5**

**Lab ID#: 0711487-02A**

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **t120418** | **Date of Collection:** | **11/21/07** |
| **Dil. Factor:** | **1.39** | **Date of Analysis:** | **12/5/07 01:34 AM** |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (uG/m3) | Amount (uG/m3) |
|---|---|---|---|---|
| Freon 12 | 0.70 | 0.82 | 3.4 | 4.0 |
| Freon 114 | 0.70 | Not Detected | 4.8 | Not Detected |
| Vinyl Chloride | 0.70 | Not Detected | 1.8 | Not Detected |
| Bromomethane | 0.70 | Not Detected | 2.7 | Not Detected |
| Chloroethane | 0.70 | Not Detected | 1.8 | Not Detected |
| Freon 11 | 0.70 | Not Detected | 3.9 | Not Detected |
| 1,1-Dichloroethene | 0.70 | Not Detected | 2.8 | Not Detected |
| Freon 113 | 0.70 | Not Detected | 5.3 | Not Detected |
| Methylene Chloride | 0.70 | Not Detected | 2.4 | Not Detected |
| 1,1-Dichloroethane | 0.70 | Not Detected | 2.8 | Not Detected |
| cis-1,2-Dichloroethene | 0.70 | Not Detected | 2.8 | Not Detected |
| Chloroform | 0.70 | Not Detected | 3.4 | Not Detected |
| 1,1,1-Trichloroethane | 0.70 | Not Detected | 3.8 | Not Detected |
| Carbon Tetrachloride | 0.70 | Not Detected | 4.4 | Not Detected |
| Benzene | 0.70 | Not Detected | 2.2 | Not Detected |
| 1,2-Dichloroethane | 0.70 | Not Detected | 2.8 | Not Detected |
| Trichloroethene | 0.70 | Not Detected | 3.7 | Not Detected |
| 1,2-Dichloropropane | 0.70 | Not Detected | 3.2 | Not Detected |
| cis-1,3-Dichloropropene | 0.70 | Not Detected | 3.2 | Not Detected |
| Toluene | 0.70 | 1.2 | 2.6 | 4.6 |
| trans-1,3-Dichloropropene | 0.70 | Not Detected | 3.2 | Not Detected |
| 1,1,2-Trichloroethane | 0.70 | Not Detected | 3.8 | Not Detected |
| Tetrachloroethene | 0.70 | Not Detected | 4.7 | Not Detected |
| 1,2-Dibromoethane (EDB) | 0.70 | Not Detected | 5.3 | Not Detected |
| Chlorobenzene | 0.70 | Not Detected | 3.2 | Not Detected |
| Ethyl Benzene | 0.70 | Not Detected | 3.0 | Not Detected |
| m,p-Xylene | 0.70 | Not Detected | 3.0 | Not Detected |
| o-Xylene | 0.70 | Not Detected | 3.0 | Not Detected |
| Styrene | 0.70 | Not Detected | 3.0 | Not Detected |
| 1,1,2,2-Tetrachloroethane | 0.70 | Not Detected | 4.8 | Not Detected |
| 1,3,5-Trimethylbenzene | 0.70 | Not Detected | 3.4 | Not Detected |
| 1,2,4-Trimethylbenzene | 0.70 | Not Detected | 3.4 | Not Detected |
| 1,3-Dichlorobenzene | 0.70 | Not Detected | 4.2 | Not Detected |
| 1,4-Dichlorobenzene | 0.70 | Not Detected | 4.2 | Not Detected |
| alpha-Chlorotoluene | 0.70 | Not Detected | 3.6 | Not Detected |
| 1,2-Dichlorobenzene | 0.70 | Not Detected | 4.2 | Not Detected |
| 1,3-Butadiene | 0.70 | Not Detected | 1.5 | Not Detected |
| Hexane | 0.70 | Not Detected | 2.4 | Not Detected |
| Cyclohexane | 0.70 | Not Detected | 2.4 | Not Detected |

AN ENVIRONMENTAL ANALYTICAL LABORATORY

**Client Sample ID: DW-AMS-5**

**Lab ID#: 0711487-02A**

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **t120418** | **Date of Collection: 11/21/07** | |
| **Dil. Factor:** | **1.39** | **Date of Analysis: 12/5/07 01:34 AM** | |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (uG/m3) | Amount (uG/m3) |
|---|---|---|---|---|
| Heptane | 0.70 | Not Detected | 2.8 | Not Detected |
| Bromodichloromethane | 0.70 | Not Detected | 4.6 | Not Detected |
| Dibromochloromethane | 0.70 | Not Detected | 5.9 | Not Detected |
| Cumene | 0.70 | Not Detected | 3.4 | Not Detected |
| Propylbenzene | 0.70 | Not Detected | 3.4 | Not Detected |
| Chloromethane | 2.8 | Not Detected | 5.7 | Not Detected |
| 1,2,4-Trichlorobenzene | 2.8 | Not Detected | 21 | Not Detected |
| Hexachlorobutadiene | 2.8 | Not Detected | 30 | Not Detected |
| Acetone | 2.8 | 3.0 | 6.6 | 7.3 |
| Carbon Disulfide | 0.70 | Not Detected | 2.2 | Not Detected |
| 2-Propanol | 2.8 | Not Detected | 6.8 | Not Detected |
| trans-1,2-Dichloroethene | 0.70 | Not Detected | 2.8 | Not Detected |
| 2-Butanone (Methyl Ethyl Ketone) | 0.70 | Not Detected | 2.0 | Not Detected |
| Tetrahydrofuran | 0.70 | Not Detected | 2.0 | Not Detected |
| 1,4-Dioxane | 2.8 | Not Detected | 10 | Not Detected |
| 4-Methyl-2-pentanone | 0.70 | Not Detected | 2.8 | Not Detected |
| 2-Hexanone | 2.8 | Not Detected | 11 | Not Detected |
| Bromoform | 0.70 | Not Detected | 7.2 | Not Detected |
| 4-Ethyltoluene | 0.70 | Not Detected | 3.4 | Not Detected |
| Ethanol | 2.8 | Not Detected | 5.2 | Not Detected |
| Methyl tert-butyl ether | 0.70 | Not Detected | 2.5 | Not Detected |
| 3-Chloropropene | 2.8 | Not Detected | 8.7 | Not Detected |
| 2,2,4-Trimethylpentane | 0.70 | Not Detected | 3.2 | Not Detected |
| Naphthalene | 2.8 | Not Detected | 14 | Not Detected |

**Container Type: 6 Liter Summa Canister**

| Surrogates | %Recovery | Method Limits |
|---|---|---|
| Toluene-d8 | 110 | 70-130 |
| 1,2-Dichloroethane-d4 | 99 | 70-130 |
| 4-Bromofluorobenzene | 104 | 70-130 |

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/04Dec2007.b/t120418.d
Lab Smp Id: 0711487-02A
Inj Date : 05-DEC-2007 01:34
Operator : ab Inst ID: msdt.i
Smp Info : 200mL #21015
Misc Info : 1.0"Hg -> 5psi
Comment :
Method : /chem/msdt.i/04Dec2007.b/t14q1121b.m
Meth Date : 04-Dec-2007 13:33 sruth Quant Type: ISTD
Cal Date : 26-NOV-2007 15:28 Cal File: t112608.d
Als bottle: 1
Dil Factor: 1.39000
Integrator: HP RTE Compound Sublist: AT04.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | CONCENTRATIONS ON-COL | FINAL | | |
|---|---|---|---|---|---|---|---|
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| * 81 Bromochloromethane | | | | | CAS #: 74-97-5 | | |
| 13.886 | 13.858 (1.000) | 130 | 245906 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 13.886 | 13.858 (1.000) | 128 | 189515 | | | 29.93- 129.93 | 77.07 |
| 13.858 | 13.858 (1.000) | 49 | 285115 | | | 108.51- 208.51 | 115.94 |
| * 97 1,4-Difluorobenzene | | | | | CAS #: 540-36-3 | | |
| 15.628 | 15.600 (1.000) | 114 | 1108046 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 15.628 | 15.600 (1.000) | 88 | 183613 | | | 0.00- 66.48 | 16.57 |
| * 126 Chlorobenzene-d5 | | | | | CAS #: 3114-55-4 | | |
| 20.798 | 20.798 (1.000) | 117 | 899532 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 20.798 | 20.798 (1.000) | 82 | 519694 | | | 4.93- 104.93 | 57.77 |
| $ 90 1,2-Dichloroethane-d4 | | | | | CAS #: 17060-07-0 | | |
| 14.936 | 14.937 (1.076) | 65 | 394124 | 24.8633 | 24.863 | 80.00- 120.00 | 100.00 |
| 14.936 | 14.937 (1.076) | 67 | 195788 | | | 5.03- 105.03 | 49.68 |
| $ 113 Toluene-d8 | | | | | CAS #: 2037-26-5 | | |
| 18.199 | 18.199 (1.165) | 98 | 1030702 | 27.4793 | 27.479 | 80.00- 120.00 | 100.00 |
| 18.199 | 18.199 (1.165) | 70 | 114770 | | | 0.00- 61.02 | 11.14 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | CONCENTRATIONS FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| $ 113 Toluene-d8 (continued) | | | | | | | |
| 18.199 | 18.199 (1.165) | 100 | 719358 | | | 19.45- 119.45 | 69.79 |
| $ 137 Bromofluorobenzene | | | | | CAS #: 460-00-4 | | |
| 22.789 | 22.789 (1.096) | 174 | 586016 | 25.9343 | 25.934 | 80.00- 120.00 | 100.00 |
| 22.789 | 22.789 (1.096) | 95 | 765767 | | | 78.56- 178.56 | 130.67 |
| 22.789 | 22.789 (1.096) | 176 | 573375 | | | 47.64- 147.64 | 97.84 |
| 12 Dichlorodifluoromethane/Fr12 | | | | | CAS #: 75-71-8 | | |
| 5.950 | 5.923 (0.429) | 85 | 21290 | 0.58960 | 0.8195 | 80.00- 120.00 | 100.00 |
| 5.950 | 5.923 (0.429) | 87 | 6879 | | | 0.00- 82.07 | 32.31 |
| 45 Acetone | | | | | CAS #: 67-64-1 | | |
| 10.208 | 10.181 (0.735) | 58 | 17160 | 2.19963 | 3.057 | 80.00- 120.00 | 100.00 |
| 10.208 | 10.181 (0.735) | 43 | 62331 | | | 259.05- 359.05 | 363.23 |
| 114 Toluene | | | | | CAS #: 108-88-3 | | |
| 18.337 | 18.337 (1.173) | 91 | 46640 | 0.88922 | 1.236 | 80.00- 120.00 | 100.00 |
| 18.337 | 18.310 (1.173) | 92 | 28488 | | | 11.41- 111.41 | 61.08 |

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t120418.d
Lab Smp Id: 0711487-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: ab
Method File: /chem/msdt.i/04Dec2007.b/t14q1121b.m
Misc Info: 1.0"Hg -> 5psi

Calibration Date: 04-DEC-2007
Calibration Time: 09:44
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 355566 | 213340 | 497792 | 245906 | -30.84 |
| 97 1,4-Difluorobenze | 1769240 | 1061544 | 2476936 | 1108046 | -37.37 |
| 126 Chlorobenzene-d5 | 1250441 | 750265 | 1750617 | 899532 | -28.06 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.86 | 13.53 | 14.19 | 13.89 | 0.20 |
| 97 1,4-Difluorobenze | 15.60 | 15.27 | 15.93 | 15.63 | 0.18 |
| 126 Chlorobenzene-d5 | 20.80 | 20.47 | 21.13 | 20.80 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 04Dec2007
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0711487-02A
Level: LOW Operator: ab
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT04.sub
Method File: /chem/msdt.i/04Dec2007.b/t14q1121b.m
Misc Info: 1.0"Hg -> 5psi

| SURROGATE COMPOUND | CONC ADDED PPBV | CONC RECOVERED PPBV | % RECOVERED | LIMITS |
|---|---|---|---|---|
| $ 90 1,2-Dichloroethane | 25.000 | 24.863 | 99.45 | 70-130 |
| $ 113 Toluene-d8 | 25.000 | 27.479 | 109.92 | 70-130 |
| $ 137 Bromofluorobenzene | 25.000 | 25.934 | 103.74 | 70-130 |

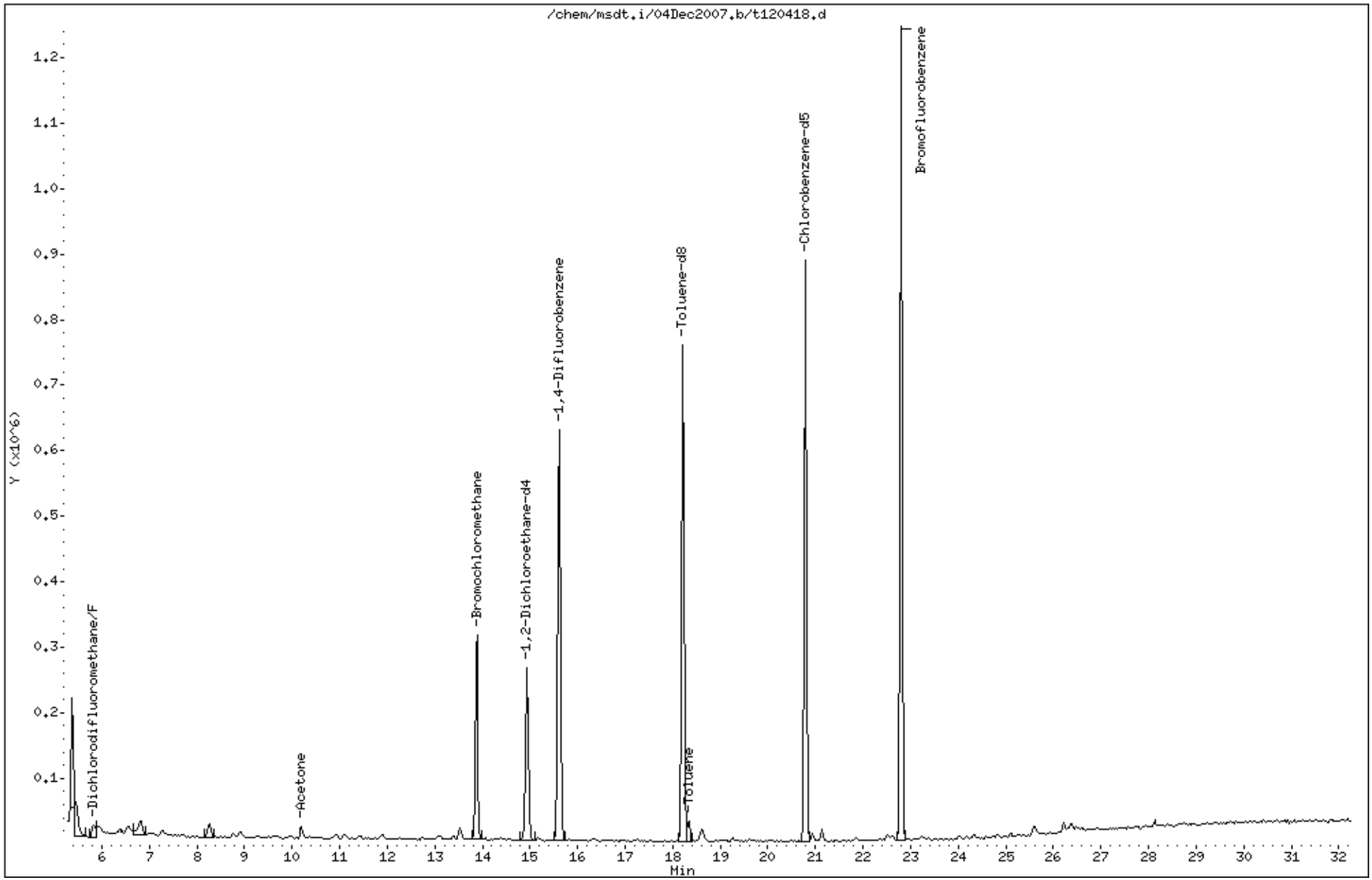
0026

Data File: /chem/msdt.i/04Dec2007.b/t120418.d
Date : 05-DEC-2007 01:34
Client ID:
Sample Info: 200mL #21015

Instrument: msdt.i

Operator: ab
Column diameter: 0.53

Column phase: RTx-624



Data File: /chem/msdt.i/04Dec2007.b/t120418.d

Date : 05-DEC-2007 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #21015

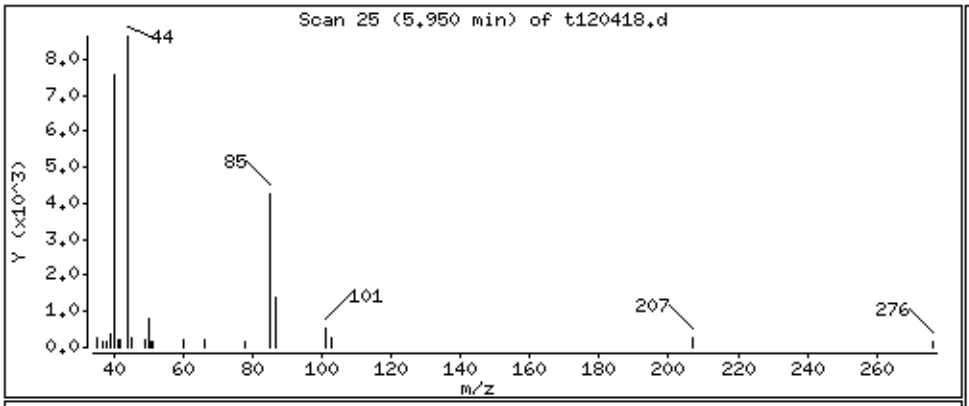
Operator: ab

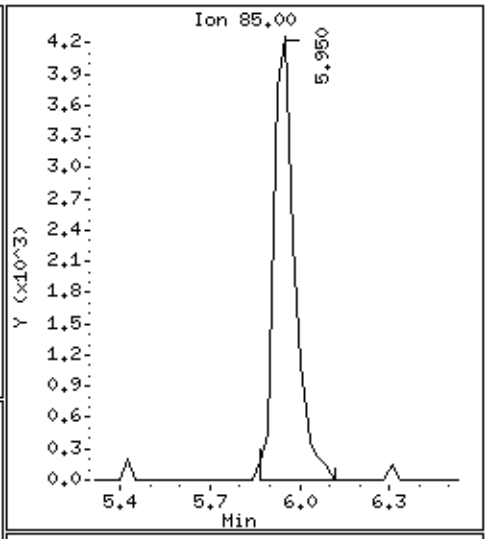
Column phase: RTx-624

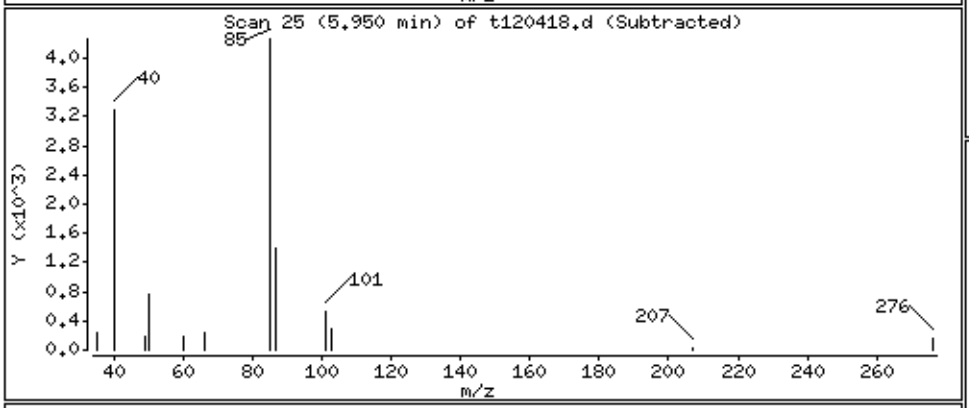
Column diameter: 0.53

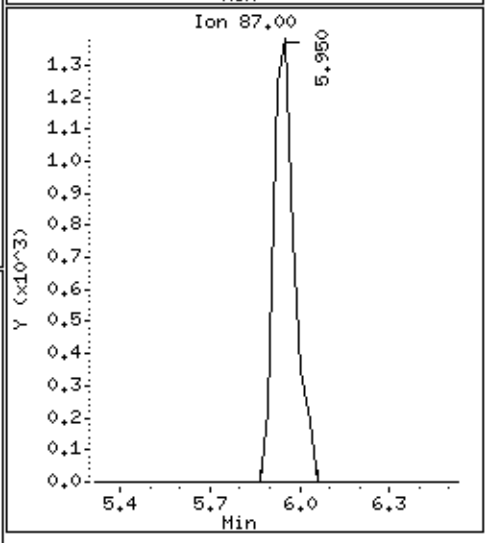
12 Dichlorodifluoromethane/Fr12

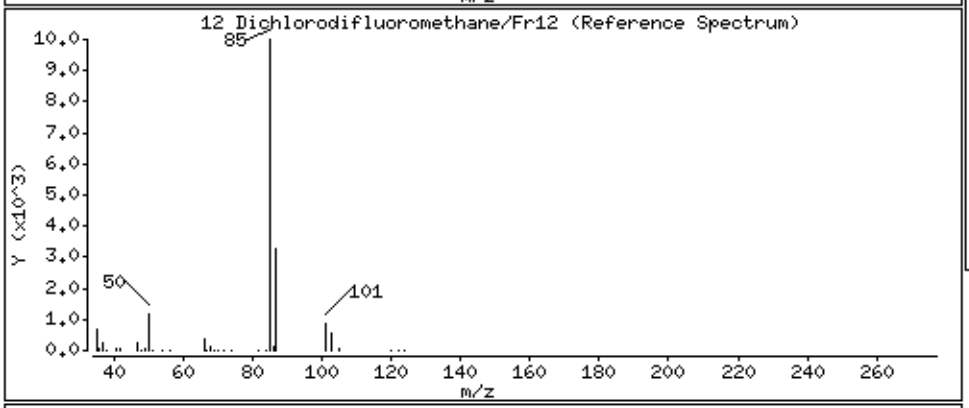
Concentration: 0.8195 PPBV

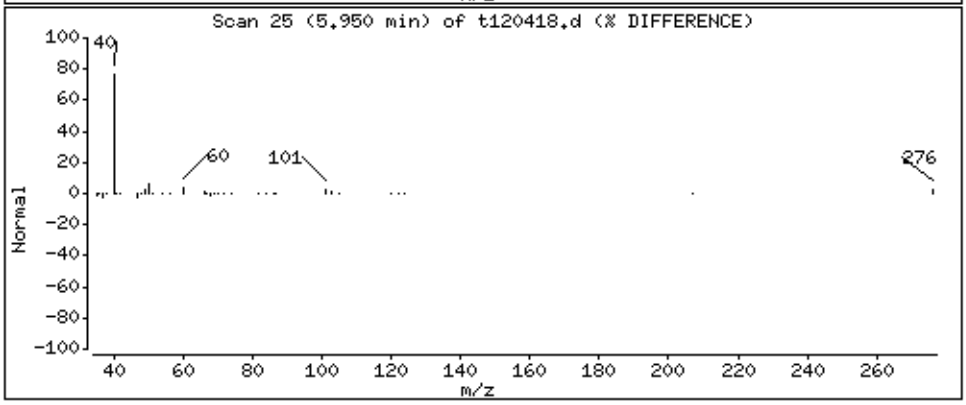


Data File: /chem/msdt.i/04Dec2007.b/t120418.d

Date : 05-DEC-2007 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #21015

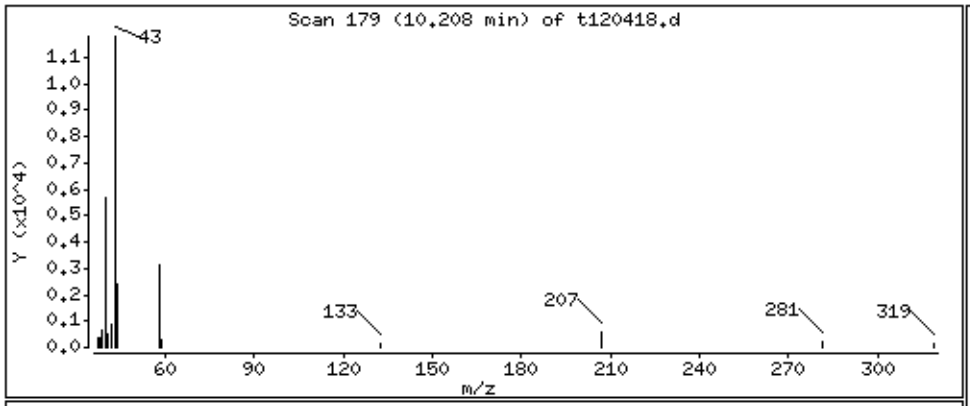
Operator: ab

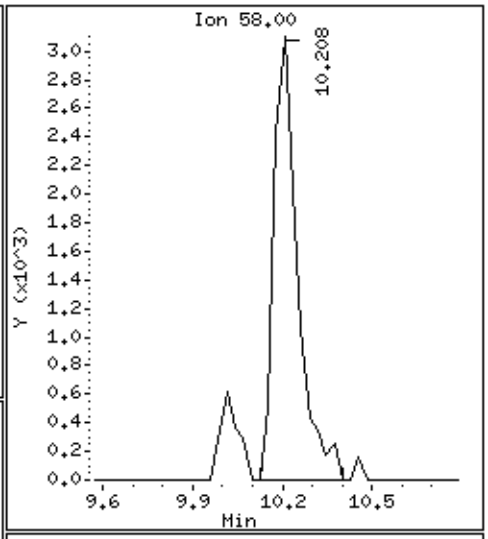
Column phase: RTx-624

Column diameter: 0.53

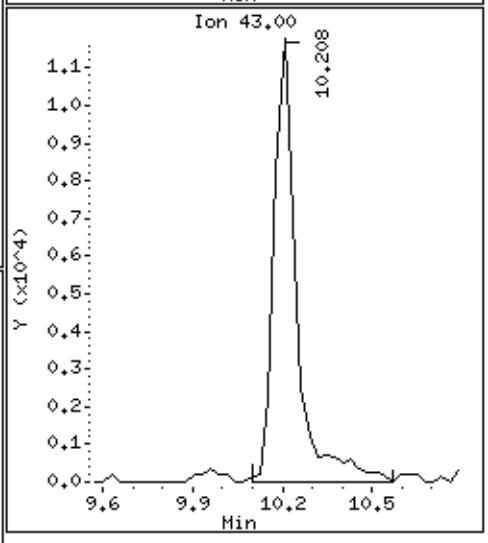
45 Acetone

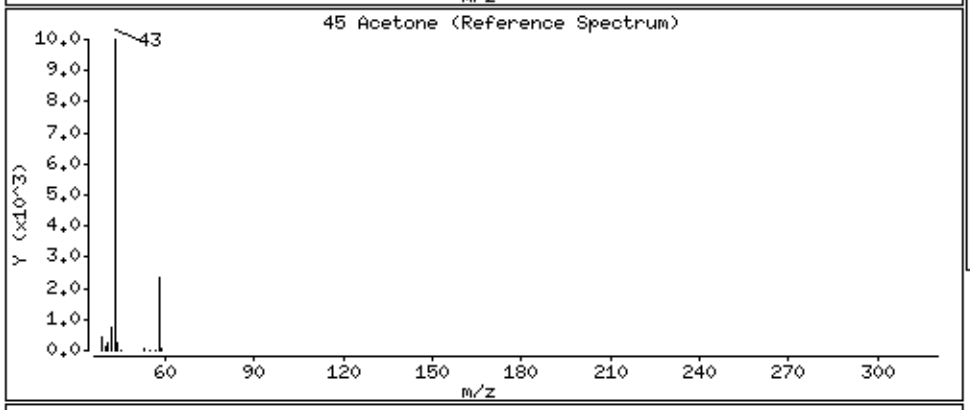
Concentration: 3.057 PPBV

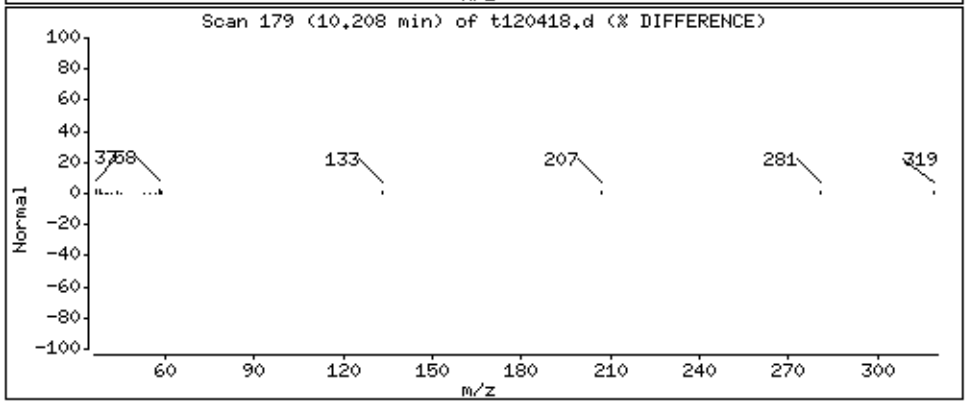






Data File: /chem/msdt.i/04Dec2007.b/t120418.d

Date : 05-DEC-2007 01:34

Client ID:

Instrument: msdt.i

Sample Info: 200mL #21015

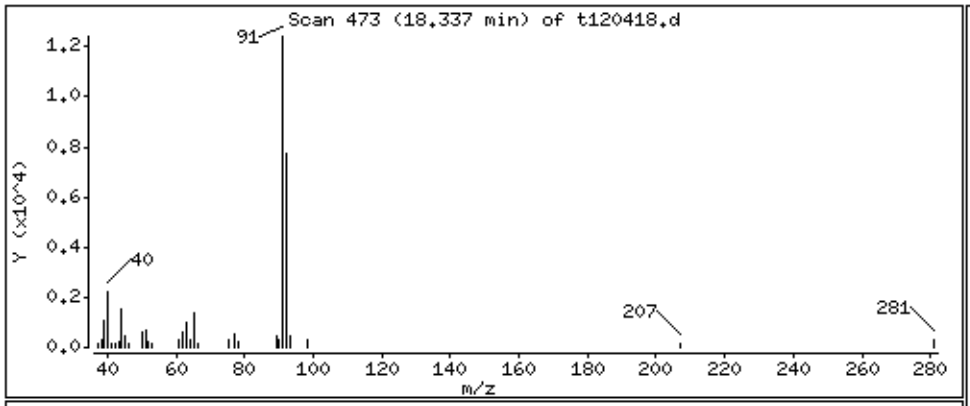
Operator: ab

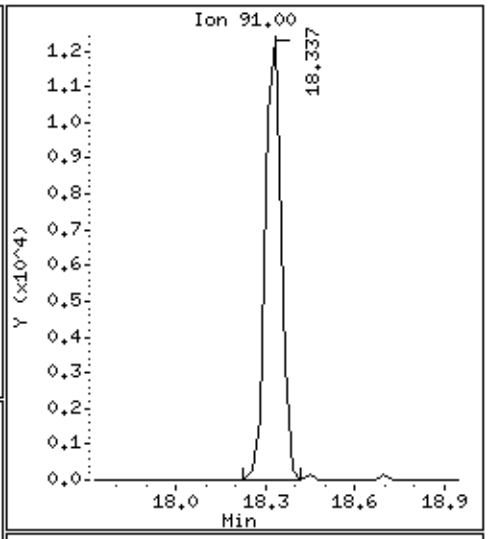
Column phase: RTx-624

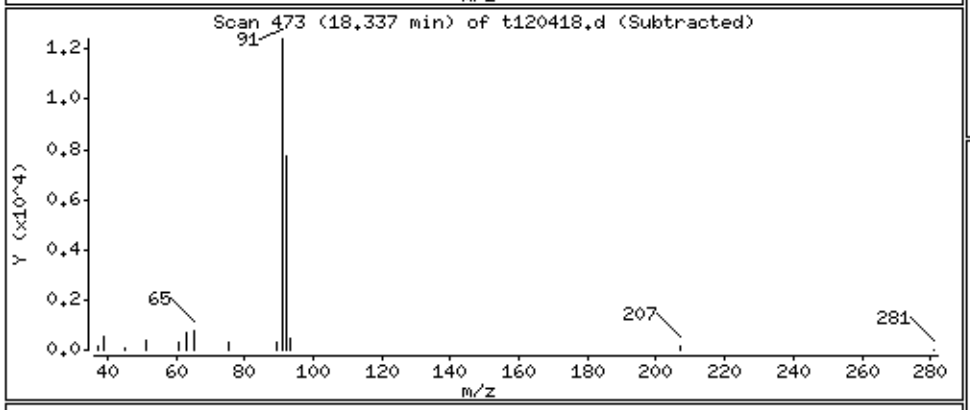
Column diameter: 0.53

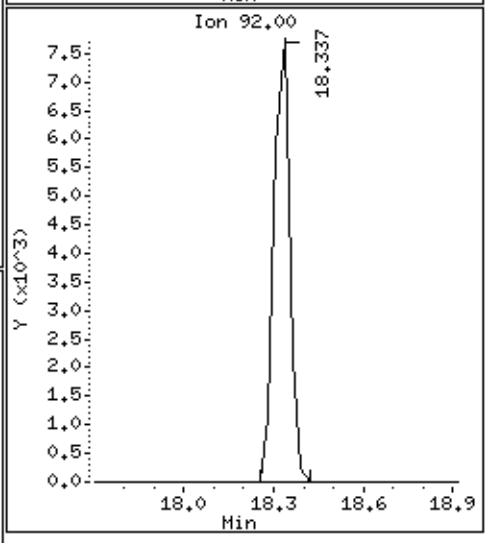
114 Toluene

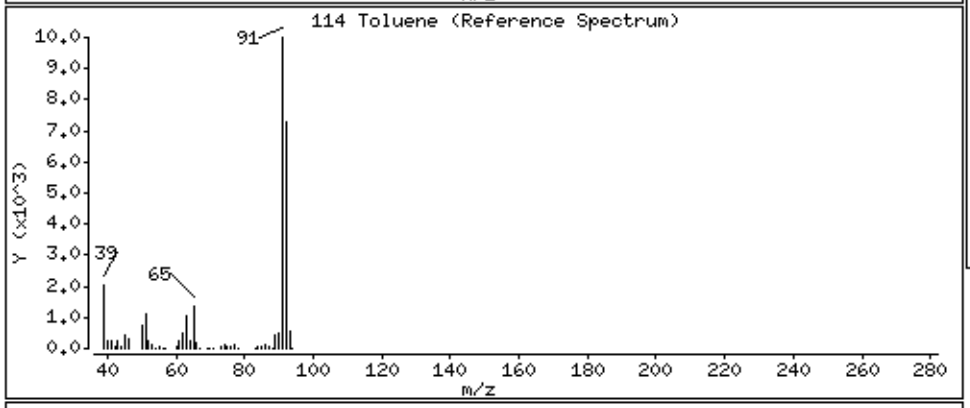
Concentration: 1.236 PPBV

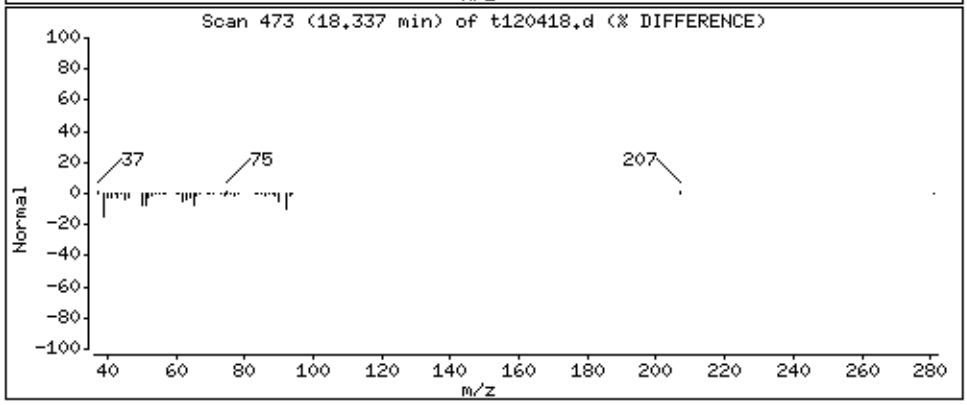


# QC Results and Raw Data

AN ENVIRONMENTAL ANALYTICAL LABORATORY

**Client Sample ID: Lab Blank**

**Lab ID#: 0711487-03A**

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **t120405** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 12/4/07 12:40 PM** | |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (uG/m3) | Amount (uG/m3) |
|---|---|---|---|---|
| Freon 12 | 0.50 | Not Detected | 2.5 | Not Detected |
| Freon 114 | 0.50 | Not Detected | 3.5 | Not Detected |
| Vinyl Chloride | 0.50 | Not Detected | 1.3 | Not Detected |
| Bromomethane | 0.50 | Not Detected | 1.9 | Not Detected |
| Chloroethane | 0.50 | Not Detected | 1.3 | Not Detected |
| Freon 11 | 0.50 | Not Detected | 2.8 | Not Detected |
| 1,1-Dichloroethene | 0.50 | Not Detected | 2.0 | Not Detected |
| Freon 113 | 0.50 | Not Detected | 3.8 | Not Detected |
| Methylene Chloride | 0.50 | Not Detected | 1.7 | Not Detected |
| 1,1-Dichloroethane | 0.50 | Not Detected | 2.0 | Not Detected |
| cis-1,2-Dichloroethene | 0.50 | Not Detected | 2.0 | Not Detected |
| Chloroform | 0.50 | Not Detected | 2.4 | Not Detected |
| 1,1,1-Trichloroethane | 0.50 | Not Detected | 2.7 | Not Detected |
| Carbon Tetrachloride | 0.50 | Not Detected | 3.1 | Not Detected |
| Benzene | 0.50 | Not Detected | 1.6 | Not Detected |
| 1,2-Dichloroethane | 0.50 | Not Detected | 2.0 | Not Detected |
| Trichloroethene | 0.50 | Not Detected | 2.7 | Not Detected |
| 1,2-Dichloropropane | 0.50 | Not Detected | 2.3 | Not Detected |
| cis-1,3-Dichloropropene | 0.50 | Not Detected | 2.3 | Not Detected |
| Toluene | 0.50 | Not Detected | 1.9 | Not Detected |
| trans-1,3-Dichloropropene | 0.50 | Not Detected | 2.3 | Not Detected |
| 1,1,2-Trichloroethane | 0.50 | Not Detected | 2.7 | Not Detected |
| Tetrachloroethene | 0.50 | Not Detected | 3.4 | Not Detected |
| 1,2-Dibromoethane (EDB) | 0.50 | Not Detected | 3.8 | Not Detected |
| Chlorobenzene | 0.50 | Not Detected | 2.3 | Not Detected |
| Ethyl Benzene | 0.50 | Not Detected | 2.2 | Not Detected |
| m,p-Xylene | 0.50 | Not Detected | 2.2 | Not Detected |
| o-Xylene | 0.50 | Not Detected | 2.2 | Not Detected |
| Styrene | 0.50 | Not Detected | 2.1 | Not Detected |
| 1,1,2,2-Tetrachloroethane | 0.50 | Not Detected | 3.4 | Not Detected |
| 1,3,5-Trimethylbenzene | 0.50 | Not Detected | 2.4 | Not Detected |
| 1,2,4-Trimethylbenzene | 0.50 | Not Detected | 2.4 | Not Detected |
| 1,3-Dichlorobenzene | 0.50 | Not Detected | 3.0 | Not Detected |
| 1,4-Dichlorobenzene | 0.50 | Not Detected | 3.0 | Not Detected |
| alpha-Chlorotoluene | 0.50 | Not Detected | 2.6 | Not Detected |
| 1,2-Dichlorobenzene | 0.50 | Not Detected | 3.0 | Not Detected |
| 1,3-Butadiene | 0.50 | Not Detected | 1.1 | Not Detected |
| Hexane | 0.50 | Not Detected | 1.8 | Not Detected |
| Cyclohexane | 0.50 | Not Detected | 1.7 | Not Detected |

AN ENVIRONMENTAL ANALYTICAL LABORATORY

**Client Sample ID: Lab Blank**

**Lab ID#: 0711487-03A**

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **t120405** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 12/4/07 12:40 PM** | |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (uG/m3) | Amount (uG/m3) |
|---|---|---|---|---|
| Heptane | 0.50 | Not Detected | 2.0 | Not Detected |
| Bromodichloromethane | 0.50 | Not Detected | 3.4 | Not Detected |
| Dibromochloromethane | 0.50 | Not Detected | 4.2 | Not Detected |
| Cumene | 0.50 | Not Detected | 2.4 | Not Detected |
| Propylbenzene | 0.50 | Not Detected | 2.4 | Not Detected |
| Chloromethane | 2.0 | Not Detected | 4.1 | Not Detected |
| 1,2,4-Trichlorobenzene | 2.0 | Not Detected | 15 | Not Detected |
| Hexachlorobutadiene | 2.0 | Not Detected | 21 | Not Detected |
| Acetone | 2.0 | Not Detected | 4.8 | Not Detected |
| Carbon Disulfide | 0.50 | Not Detected | 1.6 | Not Detected |
| 2-Propanol | 2.0 | Not Detected | 4.9 | Not Detected |
| trans-1,2-Dichloroethene | 0.50 | Not Detected | 2.0 | Not Detected |
| 2-Butanone (Methyl Ethyl Ketone) | 0.50 | Not Detected | 1.5 | Not Detected |
| Tetrahydrofuran | 0.50 | Not Detected | 1.5 | Not Detected |
| 1,4-Dioxane | 2.0 | Not Detected | 7.2 | Not Detected |
| 4-Methyl-2-pentanone | 0.50 | Not Detected | 2.0 | Not Detected |
| 2-Hexanone | 2.0 | Not Detected | 8.2 | Not Detected |
| Bromoform | 0.50 | Not Detected | 5.2 | Not Detected |
| 4-Ethyltoluene | 0.50 | Not Detected | 2.4 | Not Detected |
| Ethanol | 2.0 | Not Detected | 3.8 | Not Detected |
| Methyl tert-butyl ether | 0.50 | Not Detected | 1.8 | Not Detected |
| 3-Chloropropene | 2.0 | Not Detected | 6.3 | Not Detected |
| 2,2,4-Trimethylpentane | 0.50 | Not Detected | 2.3 | Not Detected |
| Naphthalene | 2.0 | Not Detected | 10 | Not Detected |

**Container Type: NA - Not Applicable**

| Surrogates | %Recovery | Method Limits |
|---|---|---|
| Toluene-d8 | 112 | 70-130 |
| 1,2-Dichloroethane-d4 | 88 | 70-130 |
| 4-Bromofluorobenzene | 102 | 70-130 |

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/04Dec2007.b/t120405.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 04-DEC-2007 12:40
Operator : sjr Inst ID: msdt.i
Smp Info : 200mL #12009
Misc Info : Humid
Comment :
Method : /chem/msdt.i/04Dec2007.b/t14q1121b.m
Meth Date : 04-Dec-2007 13:33 sruth Quant Type: ISTD
Cal Date : 26-NOV-2007 15:28 Cal File: t112608.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04fr152a.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | CONCENTRATIONS ON-COL | CONCENTRATIONS FINAL | | |
|---|---|---|---|---|---|---|---|
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| * 81 Bromochloromethane | | | | | CAS #: 74-97-5 | | |
| 13.858 | 13.858 (1.000) | 130 | 309796 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 13.858 | 13.858 (1.000) | 128 | 233457 | | | 29.93- 129.93 | 75.36 |
| 13.858 | 13.858 (1.000) | 49 | 322201 | | | 108.51- 208.51 | 104.00 |
| * 97 1,4-Difluorobenzene | | | | | CAS #: 540-36-3 | | |
| 15.628 | 15.600 (1.000) | 114 | 1353296 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 15.600 | 15.600 (1.000) | 88 | 216069 | | | 0.00- 66.48 | 15.97 |
| * 126 Chlorobenzene-d5 | | | | | CAS #: 3114-55-4 | | |
| 20.798 | 20.798 (1.000) | 117 | 1136261 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 20.798 | 20.798 (1.000) | 82 | 641207 | | | 4.93- 104.93 | 56.43 |
| $ 90 1,2-Dichloroethane-d4 | | | | | CAS #: 17060-07-0 | | |
| 14.936 | 14.937 (1.078) | 65 | 441330 | 22.0995 | 22.100 | 80.00- 120.00 | 100.00 |
| 14.936 | 14.937 (1.078) | 67 | 222566 | | | 5.03- 105.03 | 50.43 |
| $ 113 Toluene-d8 | | | | | CAS #: 2037-26-5 | | |
| 18.199 | 18.199 (1.165) | 98 | 1285515 | 28.0617 | 28.062 | 80.00- 120.00 | 100.00 |
| 18.199 | 18.199 (1.165) | 70 | 142727 | | | 0.00- 61.02 | 11.10 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | CONCENTRATIONS FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| $ 113 Toluene-d8 (continued) | | | | | | | |
| 18.199 | 18.199 (1.165) | 100 | 892643 | | | 19.45- 119.45 | 69.44 |
| $ 137 Bromofluorobenzene | | | | | CAS #: 460-00-4 | | |
| 22.789 | 22.789 (1.096) | 174 | 730922 | 25.6079 | 25.608 | 80.00- 120.00 | 100.00 |
| 22.789 | 22.789 (1.096) | 95 | 934013 | | | 78.56- 178.56 | 127.79 |
| 22.789 | 22.789 (1.096) | 176 | 707324 | | | 47.64- 147.64 | 96.77 |

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t120405.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/04Dec2007.b/t14q1121b.m
Misc Info: Humid

Calibration Date: 04-DEC-2007
Calibration Time: 09:44
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 355566 | 213340 | 497792 | 309796 | -12.87 |
| 97 1,4-Difluorobenze | 1769240 | 1061544 | 2476936 | 1353296 | -23.51 |
| 126 Chlorobenzene-d5 | 1250441 | 750265 | 1750617 | 1136261 | -9.13 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.86 | 13.53 | 14.19 | 13.86 | 0.00 |
| 97 1,4-Difluorobenze | 15.60 | 15.27 | 15.93 | 15.63 | 0.18 |
| 126 Chlorobenzene-d5 | 20.80 | 20.47 | 21.13 | 20.80 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 04-Dec-2007 13:35

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 04Dec2007
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Level: LOW Operator: sjr
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT04fr152a.sub
Method File: /chem/msdt.i/04Dec2007.b/t14q1121b.m
Misc Info: Humid

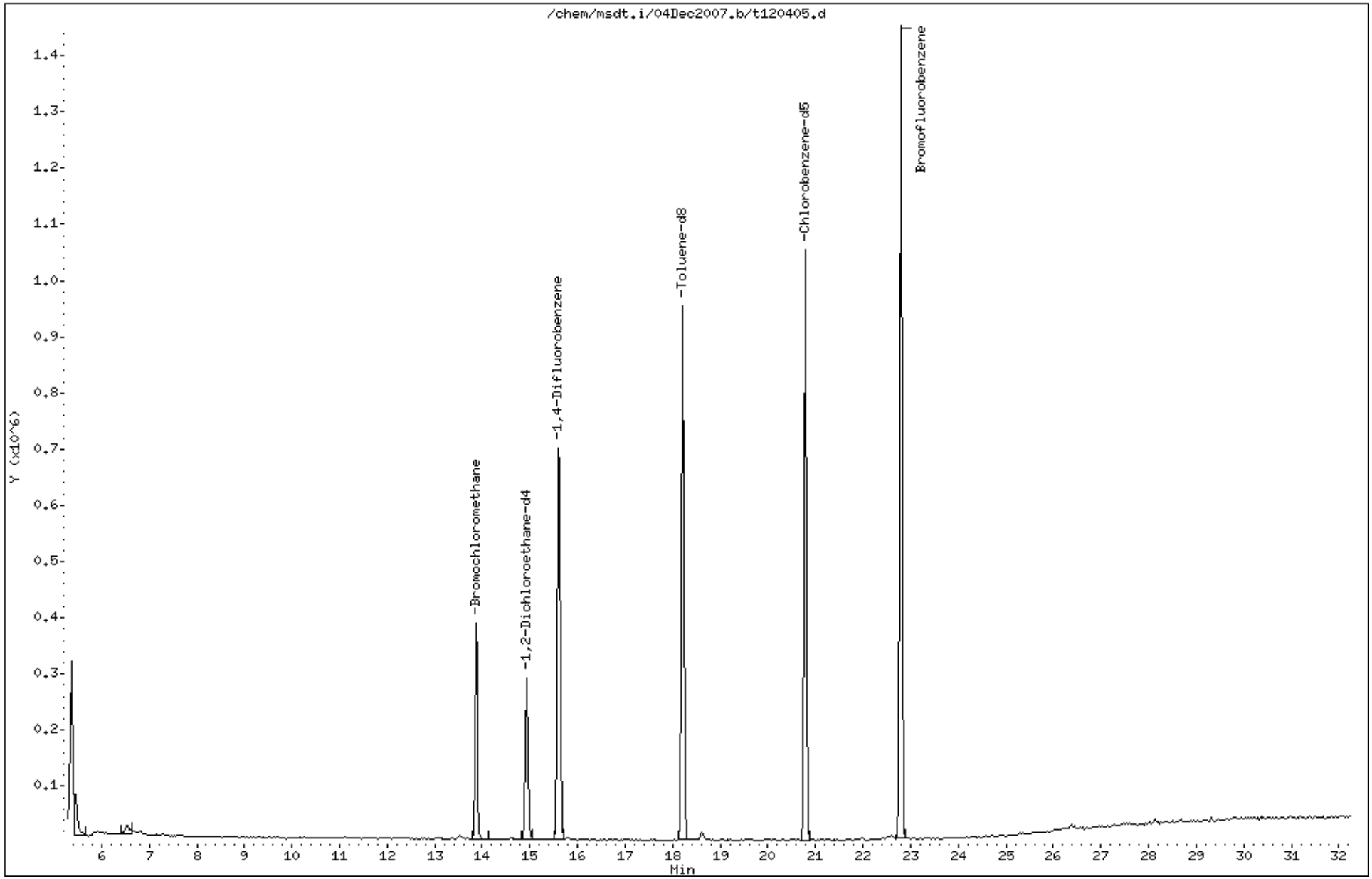
| SURROGATE COMPOUND | CONC ADDED PPBV | CONC RECOVERED PPBV | % RECOVERED | LIMITS |
|---|---|---|---|---|
| $ 90 1,2-Dichloroethane | 25.000 | 22.100 | 88.40 | 70-130 |
| $ 113 Toluene-d8 | 25.000 | 28.062 | 112.25 | 70-130 |
| $ 137 Bromofluorobenzene | 25.000 | 25.608 | 102.43 | 70-130 |

0037

Data File: /chem/msdt.i/04Dec2007.b/t120405.d
Date : 04-DEC-2007 12:40
Client ID: Lab Blank
Sample Info: 200mL #12009

Instrument: msdt.i
Operator: sjr
Column diameter: 0.53

Column phase: RTx-624



# LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 0711487

| | CLIENT SAMPLE NO. | SURROGATE % RECOVERY | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1,2-Dichloroethane-d4 | # | Toluene-d8 | # | 4-Bromofluorobenzene | # | | # | TOTAL OUT |
| 01 | UW-AMS-1 | 100 | | 111 | | 102 | | | | 0 |
| 02 | DW-AMS-5 | 99 | | 110 | | 104 | | | | 0 |
| 03 | Lab Blank | 88 | | 112 | | 102 | | | | 0 |
| 04 | CCV | 108 | | 101 | | 98 | | | | 0 |
| 05 | LCS | 107 | | 97 | | 100 | | | | 0 |
| 06 | | | | | | | | | | 0 |
| 07 | | | | | | | | | | 0 |
| 08 | | | | | | | | | | 0 |
| 09 | | | | | | | | | | 0 |
| 10 | | | | | | | | | | 0 |
| 11 | | | | | | | | | | 0 |
| 12 | | | | | | | | | | 0 |
| 13 | | | | | | | | | | 0 |
| 14 | | | | | | | | | | 0 |
| 15 | | | | | | | | | | 0 |
| 16 | | | | | | | | | | 0 |
| 17 | | | | | | | | | | 0 |
| 18 | | | | | | | | | | 0 |
| 19 | | | | | | | | | | 0 |
| 20 | | | | | | | | | | 0 |
| 21 | | | | | | | | | | 0 |
| 22 | | | | | | | | | | 0 |
| 23 | | | | | | | | | | 0 |
| 24 | | | | | | | | | | 0 |

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

# LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD | SDG No: 0711487

Lab File ID: t120402.d | Date Analyzed: 12/04/2007

Instrument ID: msdt.i | Time Analyzed: 09:44 AM

| | | Chlorobenzene-d5 Area | # | RT | # | 1,4-Difluorobenzene Area | # | RT | # | Bromochloromethane Area | # | RT | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 24-HOUR STD | 1250441 | | 20.8 | | 1769240 | | 15.6 | | 355566 | | 13.86 | |
| | UPPER LIMIT | 1750617 | | 21.13 | | 2476936 | | 15.93 | | 497792 | | 14.19 | |
| | LOWER LIMIT | 750265 | | 20.47 | | 1061544 | | 15.27 | | 213340 | | 13.53 | |
| | CLIENT SAMPLE NO | | | | | | | | | | | | |
| 01 | UW-AMS-1 | 956844 | | 20.8 | | 1149864 | | 15.63 | | 251136 | | 13.89 | |
| 02 | DW-AMS-5 | 899532 | | 20.8 | | 1108046 | | 15.63 | | 245906 | | 13.89 | |
| 03 | Lab Blank | 1136261 | | 20.8 | | 1353296 | | 15.63 | | 309796 | | 13.86 | |
| 04 | CCV | 1250441 | | 20.8 | | 1769240 | | 15.6 | | 355566 | | 13.86 | |
| 05 | LCS | 1264162 | | 20.8 | | 1905131 | | 15.63 | | 376079 | | 13.86 | |
| 06 | | | | | | | | | | | | | |
| 07 | | | | | | | | | | | | | |
| 08 | | | | | | | | | | | | | |
| 09 | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | |

'Area Upper Limit=+40% of internal standard area'

'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

Calibration File Names:
Level 1: /chem/msdt.i/23Nov2007.b/t112302.d
Level 2: /chem/msdt.i/21Nov2007.b/t112103.d
Level 3: /chem/msdt.i/26Nov2007.b/t112602.d
Level 4: /chem/msdt.i/26Nov2007.b/t112608.d
Level 5: /chem/msdt.i/26Nov2007.b/t112603.d
Level 6: /chem/msdt.i/21Nov2007.b/t112107.d
Level 7: /chem/msdt.i/26Nov2007.b/t112604.d

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | 200.000 Level 7 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| 1 Dimethyl Ether | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 204 Propane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 2 Isobutylene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 3 Acetaldehyde | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 4 2-Methyl-1-Butene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 5 Freon 143a | +++++ | +++++ | 1.54655 | 1.31158 | 1.60651 | +++++ | 1.96677 | 1.60785 | 16.856 |
| 6 Freon142b | +++++ | +++++ | 2.21817 | 2.00205 | 2.55010 | +++++ | 2.78722 | 2.38938 | 14.567 |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | 200.000 Level 7 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| 7 Propanal | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 8 Freon 14 | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 9 Freon 13 | +++++ | +++++ | 2.29492 | 2.11800 | 2.54471 | +++++ | 1.76394 | 2.18039 | 15.053 |
| 199 Vinyl Fluoride | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 13 Freon 134a | +++++ | +++++ | 1.09127 | 0.94650 | 1.16608 | +++++ | 1.32228 | 1.13153 | 13.827 |
| 10 Bromoethane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 11 Propylene | +++++ | +++++ | 0.72558 | 0.65992 | 0.62849 | 0.59709 | 0.71954 | 0.66613 | 8.428 |
| 15 Freon 152a | +++++ | +++++ | 0.56426 | 0.47439 | 0.60412 | +++++ | 0.69961 | 0.58560 | 15.947 |
| 12 Dichlorodifluoromethane/Fr12 | +++++ | 3.50242 | 3.60064 | 3.77635 | 3.57377 | 3.47716 | 4.09604 | 3.67107 | 6.355 |
| 17 Freon 22 | +++++ | +++++ | 0.28504 | 0.25517 | 0.30782 | +++++ | 0.34774 | 0.29894 | 13.054 |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|
| | 200.000 Level 7 | | | | | | | |
| 14 2,3-Dimethylbutane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 16 Freon 114 | +++++ | 2.33292 | 2.14875 | 2.49476 | 2.30497 | 2.24733 | | |
| | 2.75549 | | | | | | 2.38070 | 9.069 |
| 18 Chloromethane | +++++ | +++++ | 0.90394 | 0.83722 | 0.79563 | 0.77526 | | |
| | 0.92274 | | | | | | 0.84696 | 7.666 |
| 21 Isobutane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 20 Vinyl Chloride | +++++ | 0.94156 | 1.11057 | 1.20736 | 1.17561 | 1.15564 | | |
| | 1.36031 | | | | | | 1.15851 | 11.758 |
| 19 Butane | +++++ | +++++ | 0.21370 | 0.25678 | 0.22426 | 0.20885 | | |
| | 0.23020 | | | | | | 0.22676 | 8.282 |
| 22 1,3-Butadiene | +++++ | 0.81436 | 0.89224 | 1.12603 | 0.97142 | 0.90013 | | |
| | 0.95504 | | | | | | 0.94320 | 11.162 |
| 26 Methanol | +++++ | +++++ | +++++ | 0.23807 | 0.24297 | +++++ | | |
| | 0.28987 | | | | | | 0.25697 | 11.129 |
| 25 Bromomethane | +++++ | 0.79613 | 0.87758 | 1.09925 | 1.08838 | 1.09367 | | |
| | 1.33975 | | | | | | 1.04913 | 18.282 |
| 28 2,4-Dimethylpentane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|
| | 200.000 Level 7 | | | | | | | |
| 27 Chloroethane | +++++ | 0.38297 | 0.51840 | 0.59779 | 0.58379 | 0.59717 | | |
| | 0.72760 | | | | | | 0.56795 | 19.944 |
| 29 Isopentane | +++++ | +++++ | 1.72717 | 2.05345 | 1.86900 | 1.79074 | | |
| | 1.72025 | | | | | | 1.83212 | 7.503 |
| 30 2-Butanol | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 34 Dichlorofluoromethane/Fr21 | +++++ | +++++ | 1.93431 | 1.62716 | 2.10340 | +++++ | | |
| | 2.34386 | | | | | | 2.00218 | 15.046 |
| 35 1-Pentene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 31 Trichlorofluoromethane/Fr11 | +++++ | 4.10981 | 4.59215 | 5.53054 | 4.91882 | 4.68522 | | |
| | 4.75085 | | | | | | 4.76457 | 9.734 |
| 37 Pentane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 32 3-Methyl-1-Hexene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 33 Vinyl Bromide | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 36 Methacrylonitrile | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | 200.000 Level 7 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| 38 Ethanol | +++++ | +++++ | 0.54721 | 0.63212 | 0.54684 | 0.49185 | 0.49695 | 0.54299 | 10.382 |
| 39 Ethyl Ether | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 40 Freon123a | +++++ | +++++ | 1.94260 | 1.69019 | 2.19782 | +++++ | 2.01184 | 1.96061 | 10.713 |
| 41 Freon123 | +++++ | +++++ | 2.75451 | 2.36366 | 2.98234 | +++++ | 2.75813 | 2.71466 | 9.472 |
| 44 Acrolein | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 42 Freon 113 | +++++ | 2.31078 | 2.82918 | 3.24683 | 2.98951 | 2.96199 | 2.88629 | 2.87076 | 10.786 |
| 43 1,1-Dichloroethene | +++++ | 1.64263 | 2.10226 | 2.52865 | 2.31020 | 2.24547 | 2.21345 | 2.17378 | 13.623 |
| 45 Acetone | +++++ | +++++ | 0.82475 | 0.86416 | 0.77868 | 0.75376 | 0.74424 | 0.79312 | 6.365 |
| 46 2-Propanol | +++++ | +++++ | 3.62035 | 4.41221 | 4.08278 | 4.01334 | 3.80219 | 3.98617 | 7.518 |
| 48 Ethyl acrylate | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | 200.000 Level 7 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| 47 Carbon Disulfide | +++++ | 2.86485 | 3.42390 | 4.04234 | 3.82908 | 3.83880 | 4.33590 | 3.72248 | 13.845 |
| 49 Iodomethane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 50 Methyl Methacrylate | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 23 Methyl acetate | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 51 3-Chloropropene | +++++ | +++++ | 0.60369 | 0.85195 | 0.80655 | 0.80664 | 0.78926 | 0.77162 | 12.533 |
| 52 Acetonitrile | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 53 2-Methylpentane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 55 Cyclopentene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 56 Cyclopentane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 54 Methylene Chloride | +++++ | 1.32453 | 1.31636 | 1.41328 | 1.27362 | 1.21197 | 1.30724 | 1.30783 | 5.052 |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | 200.000 Level 7 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| 57 tert-Butyl-Alcohol | +++++ | +++++ | 1.88380 | 1.14965 | 1.21554 | +++++ | 1.04786 | 1.32421 | 28.650 |
| 58 Freon143a | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 59 2,3,4-Trimethylpentane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 60 MTBE | +++++ | 1.78296 | 1.82181 | 2.10300 | 1.88646 | 2.15582 | 2.52558 | 2.04594 | 13.654 |
| 61 trans-1,2-Dichloroethene | +++++ | 1.44448 | 1.64779 | 1.95222 | 1.88004 | 1.88406 | 1.85676 | 1.77756 | 10.862 |
| 62 Acrylonitrile | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 66 1-Hexene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 63 2-Pentanone | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 64 Pentanal | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 65 Hexane | +++++ | 2.27569 | 2.67533 | 3.21369 | 3.05738 | 3.02708 | 3.24441 | 2.91560 | 12.803 |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | 200.000 Level 7 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| 67 2,4,4-Trimethyl-1-pentene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 68 Isopropyl ether | +++++ | +++++ | 3.84074 | 3.37153 | 4.58385 | +++++ | 4.62518 | 4.10532 | 14.801 |
| 69 Vinyl Acetate | +++++ | +++++ | 0.36829 | 0.49620 | 0.48367 | 0.50840 | 0.52899 | 0.47711 | 13.222 |
| 70 1,1-Dichloroethane | +++++ | 2.30431 | 2.79046 | 3.43078 | 3.19713 | 3.19847 | 3.20270 | 3.02064 | 13.490 |
| 71 1-Propanol | +++++ | +++++ | 0.23636 | 0.15769 | 0.23530 | +++++ | 0.23478 | 0.21603 | 18.006 |
| 24 Chloroprene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 72 2,4,4-Trimethyl-2-pentene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 73 t-Butylethyl Ether | +++++ | +++++ | 2.09818 | 1.71005 | 2.06590 | +++++ | 2.10676 | 1.99522 | 9.569 |
| 74 Butanal | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 77 Ethyl Acetate | +++++ | +++++ | 0.39633 | 0.37031 | 0.49078 | +++++ | 0.47326 | 0.43267 | 13.499 |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | 200.000 Level 7 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| 78 2,2-Dichloropropane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 75 2-Butanone | +++++ | 0.68206 | 0.89205 | 1.09161 | 1.05019 | 1.07110 | 1.11493 | 0.98366 | 17.030 |
| 76 cis-1,2-Dichloroethene | +++++ | 1.60324 | 1.99804 | 2.46268 | 2.29353 | 2.32637 | 2.30679 | 2.16511 | 14.528 |
| 79 Methyl Acrylate | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 80 Tetrahydrofuran | +++++ | 1.34629 | 1.48377 | 1.84256 | 1.70788 | 1.69733 | 1.70782 | 1.63094 | 11.095 |
| 82 Chloroform | 2.29391 | 2.59340 | 3.36210 | 4.01510 | 3.73382 | 3.77471 | 3.80208 | 3.36787 | 19.771 |
| 84 2,3-Dimethylpentane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 83 1,1,1-Trichloroethane | +++++ | 2.80116 | 3.56183 | 3.85429 | 3.63065 | 3.61986 | 3.93333 | 3.56685 | 11.285 |
| 85 Cyclohexane | +++++ | 1.49426 | 1.73022 | 2.14652 | 2.09597 | 2.14083 | 2.39566 | 2.00058 | 16.360 |
| 86 1-Bromo-2-Chloroethane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | 200.000 Level 7 | ___ RRF | % RSD | |
|---|---|---|---|---|---|---|---|---|---|---|
| 88 1,1-Dichloropropene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | |
| 87 Carbon Tetrachloride | +++++ | 2.50109 | 3.24928 | 3.71050 | 3.48084 | 3.44130 | 3.70382 | 3.34780 | 13.434 | |
| 99 Isobutanol | +++++ | +++++ | 0.00453 | 0.00425 | 0.00712 | +++++ | 0.00888 | 0.00620 | 35.680 | |
| 89 2,2,4-Trimethylpentane | +++++ | 6.01625 | 7.00493 | 8.08998 | 7.15766 | 6.95976 | 7.40121 | 7.10496 | 9.498 | |
| 91 Benzene | 0.95618 | 0.88915 | 1.00030 | 1.21177 | 1.14717 | 1.11999 | 1.14151 | 1.06658 | 11.101 | |
| 92 tert-amyl-Methyl Ether | +++++ | +++++ | 2.71530 | 2.18238 | 2.43527 | +++++ | 2.10997 | 2.36073 | 11.626 | |
| 96 2-Heptanone | +++++ | +++++ | 1.03462 | 1.13205 | 2.01717 | +++++ | 2.45903 | 1.66072 | 41.658 | <- |
| 93 1,2-Dichloroethane | +++++ | 0.41019 | 0.46753 | 0.58346 | 0.53344 | 0.51824 | 0.49587 | 0.50146 | 11.811 | |
| 94 Heptane | +++++ | 0.28573 | 0.32331 | 0.43539 | 0.42104 | 0.40486 | 0.43870 | 0.38484 | 16.750 | |
| 95 Thiophene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | 200.000 Level 7 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| 98 1-Butanol | +++++ | +++++ | 0.10085 | 0.09838 | 0.18297 | +++++ | +++++ | 0.12740 | 37.789 |
| 100 trans-1,4-dichloro-2-butene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 101 Trichloroethene | +++++ | 0.35627 | 0.47140 | 0.56368 | 0.51858 | 0.50233 | 0.50926 | 0.48692 | 14.505 |
| 102 Methyl Cyclohexane | +++++ | 2.05069 | 2.27887 | 2.76087 | 2.68838 | 2.70069 | 3.06190 | 2.59023 | 14.042 |
| 103 Alphamethylstyrene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 104 1,2-Dichloropropane | +++++ | 0.31528 | 0.35519 | 0.40116 | 0.37409 | 0.36079 | 0.38169 | 0.36470 | 7.999 |
| 106 1,4-Dioxane | +++++ | +++++ | 0.25082 | 0.33304 | 0.33487 | 0.31599 | 0.34689 | 0.31632 | 12.089 |
| 105 Dibromomethane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 107 Bromodichloromethane | +++++ | 0.58909 | 0.73929 | 0.91743 | 0.84992 | 0.82371 | 0.84741 | 0.79448 | 14.579 |
| 108 Epichlorohydrin | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|
| | 200.000 Level 7 | | | | | | | |
| 200 2-Chloroethyl vinyl ether | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 109 Dodecane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 110 cis-1,3-Dichloropropene | +++++ | 0.39434 | 0.51807 | 0.66809 | 0.63512 | 0.60521 | | |
| | 0.66529 | | | | | | 0.58102 | 18.377 |
| 111 4-Methyl-2-pentanone | +++++ | 0.23698 | 0.27864 | 0.41546 | 0.40815 | 0.39500 | | |
| | 0.44714 | | | | | | 0.36356 | 23.304 |
| 112 Octane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 114 Toluene | +++++ | 0.91840 | 1.08008 | 1.30553 | 1.24428 | 1.19251 | | |
| | 1.35961 | | | | | | 1.18340 | 13.660 |
| 115 Undecane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 116 trans-1,3-Dichloropropene | +++++ | 0.53829 | 0.77024 | 1.01467 | 0.94964 | 0.89862 | | |
| | 0.88526 | | | | | | 0.84279 | 20.127 |
| 117 1,1,2-Trichloroethane | +++++ | 0.40104 | 0.55971 | 0.71133 | 0.65246 | 0.61446 | | |
| | 0.60301 | | | | | | 0.59034 | 17.929 |
| 120 Tetrachloroethene | +++++ | 0.55819 | 0.75235 | 0.94980 | 0.87163 | 0.81833 | | |
| | 0.78610 | | | | | | 0.78940 | 16.822 |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | 200.000 Level 7 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| 121 2-Hexanone | +++++ | +++++ | 0.53366 | 0.84422 | 0.83171 | 0.79943 | 0.81867 | 0.76554 | 17.070 |
| 118 1,3-Dichloropropane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 119 Butyl Acetate | +++++ | +++++ | 0.19184 | 0.18494 | 0.29204 | +++++ | 0.36585 | 0.25867 | 33.483 |
| 122 Dibromochloromethane | +++++ | 0.66292 | 0.89136 | 1.19834 | 1.10324 | 1.04375 | 0.99444 | 0.98234 | 19.072 |
| 123 1,2-Dibromoethane | +++++ | 0.65991 | 0.85652 | 1.12598 | 1.05468 | 1.00759 | 0.98964 | 0.94905 | 17.612 |
| 127 Chlorobenzene | +++++ | 1.05245 | 1.19171 | 1.52058 | 1.44322 | 1.37153 | 1.36077 | 1.32338 | 12.988 |
| 124 Nonane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 128 Ethyl Benzene | +++++ | 0.45011 | 0.63535 | 0.79402 | 0.76511 | 0.73019 | 0.73269 | 0.68458 | 18.507 |
| 125 1,1,1,2-Tetrachloroethane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 129 m,p-Xylene | +++++ | 0.57463 | 0.72712 | 0.99793 | 0.95797 | 0.92446 | 0.92128 | 0.85057 | 19.325 |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | ___ RRF | % RSD | |
|---|---|---|---|---|---|---|---|---|---|
| | 200.000 Level 7 | | | | | | | | |
| 130 o-Xylene | +++++ | 0.54263 | 0.65293 | 0.92409 | 0.88543 | 0.85337 | | | |
| | 0.84399 | | | | | | 0.78374 | 19.246 | |
| 131 Styrene | 0.61568 | 0.83130 | 1.04212 | 1.58519 | 1.55527 | 1.51726 | | | |
| | 1.52483 | | | | | | 1.23881 | 32.499 | <- |
| 132 alpha-Pinene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | | |
| | +++++ | | | | | | +++++ | +++++ | |
| 133 Bromoform | +++++ | 0.64342 | 0.79330 | 1.07280 | 1.04595 | 1.02177 | | | |
| | 1.00056 | | | | | | 0.92963 | 18.510 | |
| 134 Cumene | 1.32332 | 1.52327 | 1.86225 | 2.53730 | 2.43673 | 2.35124 | | | |
| | 2.37283 | | | | | | 2.05813 | 23.656 | |
| 135 Cyclohexanone | +++++ | +++++ | 0.25675 | 0.25096 | 0.38587 | +++++ | | | |
| | 0.44027 | | | | | | 0.33346 | 28.368 | |
| 140 1,1,2,2-Tetrachloroethane | +++++ | 0.87915 | 1.14560 | 1.41240 | 1.36539 | 1.34501 | | | |
| | 1.33559 | | | | | | 1.24719 | 16.212 | |
| 136 Bromobenzene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | | |
| | +++++ | | | | | | +++++ | +++++ | |
| 138 1,2,3-Trichloropropane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | | |
| | +++++ | | | | | | +++++ | +++++ | |
| 142 Propylbenzene | +++++ | 1.90562 | 2.29708 | 3.12509 | 3.04444 | 2.95229 | | | |
| | 2.94975 | | | | | | 2.71238 | 18.195 | |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|
| | 200.000 Level 7 | | | | | | | |
| 139 Decane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 144 beta-Pinene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 145 4-Ethyltoluene | +++++ | 1.57859 | 1.97893 | 2.67059 | 2.58333 | 2.51806 | | |
| | 2.51156 | | | | | | 2.30684 | 18.727 |
| 141 2-Chlorotoluene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 147 1,3,5-Trimethylbenzene | +++++ | 1.25786 | 1.68230 | 2.21802 | 2.14192 | 2.07872 | | |
| | 2.08133 | | | | | | 1.91002 | 19.359 |
| 143 4-Chlorotoluene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 146 Diisobutyl Ketone | +++++ | +++++ | 0.57298 | 0.59865 | 1.00553 | +++++ | | |
| | 1.11376 | | | | | | 0.82273 | 33.705 |
| 148 tert-Butylbenzene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |
| 150 1,2,4-Trimethylbenzene | +++++ | 1.20977 | 1.51065 | 2.13392 | 2.07891 | 2.00252 | | |
| | 1.99497 | | | | | | 1.82179 | 20.503 |
| 201 Pentachloroethane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | | |
| | +++++ | | | | | | +++++ | +++++ |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | 200.000 Level 7 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| 152 D-Limonene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 149 sec-Butylbenzene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 151 bis(2-chloroethyl)ether | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 153 p-Cymene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 155 1,3-Dichlorobenzene | +++++ | 1.00350 | 1.16648 | 1.44481 | 1.39055 | 1.34941 | 1.32623 | 1.28016 | 12.868 |
| 154 1,2,3-Trimethylbenzene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 156 1,4-Dichlorobenzene | +++++ | 0.99204 | 1.23462 | 1.47365 | 1.43574 | 1.38986 | 1.38305 | 1.31816 | 13.600 |
| 157 Indan | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 159 alpha-Chlorotoluene | +++++ | 1.20671 | 1.49327 | 2.14205 | 2.11516 | 2.09463 | 2.13159 | 1.86390 | 21.920 |
| 158 Butylbenzene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | 200.000 Level 7 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| 160 Indene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 161 1,2-Dichlorobenzene | +++++ | 0.94916 | 1.20554 | 1.42015 | 1.38921 | 1.32430 | 1.32138 | 1.26829 | 13.630 |
| 203 Hexachloroethane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 162 1,2-Dibromo-3-Chloropropane | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 163 Aniline | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 164 Isooctyl Alcohol | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 165 1,2,4-Trichlorobenzene | +++++ | +++++ | 1.18734 | 1.20115 | 1.32931 | 1.13822 | 1.20929 | 1.21306 | 5.819 |
| 166 Hexachlorobutadiene | +++++ | +++++ | 0.92568 | 0.86990 | 0.92370 | 0.84984 | 0.86531 | 0.88689 | 3.981 |
| 167 Naphthalene | +++++ | +++++ | 1.58028 | 1.69783 | 1.98661 | 1.66153 | 1.79853 | 1.74496 | 8.950 |
| 202 1,2,3-Trichlorobenzene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Cal Date : 27-Nov-2007 14:03 lover
Curve Type : Average

| Compound | 0.20000 Level 1 | 0.50000 Level 2 | 2.000 Level 3 | 25.000 Level 4 | 50.000 Level 5 | 100.000 Level 6 | 200.000 Level 7 | ___ RRF | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| 168 Quinoline | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 169 1,3,5-Trichlorobenzene | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| 170 Isooctyl Acrylate | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ | +++++ |
| $ 90 1,2-Dichloroethane-d4 | 1.55234 | 1.60269 | 1.58244 | 1.57657 | 1.57184 | 1.65678 | 1.73821 | 1.61155 | 4.031 |
| $ 113 Toluene-d8 | 0.82244 | 0.85056 | 0.84326 | 0.82462 | 0.82887 | 0.82348 | 0.93069 | 0.84627 | 4.580 |
| $ 137 Bromofluorobenzene | 0.57952 | 0.63358 | 0.62503 | 0.62525 | 0.63434 | 0.65043 | 0.64784 | 0.62800 | 3.754 |

Calibration History

Method : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Start Cal Date: 21-NOV-2007 14:44
End Cal Date : 26-NOV-2007 15:28

Initial Calibration

| Injection Date | Sublist | Calibration File |
|---|---|---|
| Cal Level: 1 , Cal Amount: 0.20000 | | |
| 23-NOV-2007 08:54 | AFCEElow | /chem/msdt.i/23Nov2007.b/t112302.d |
| Cal Level: 2 , Cal Amount: 0.50000 | | |
| 21-NOV-2007 14:44 | AT04low+ENSR | /chem/msdt.i/21Nov2007.b/t112103.d |
| Cal Level: 3 , Cal Amount: 2.00000 | | |
| 26-NOV-2007 09:59 | sp22b | /chem/msdt.i/26Nov2007.b/t112602.d |
| 21-NOV-2007 15:48 | AT04mdl+ENSR | /chem/msdt.i/21Nov2007.b/t112104.d |
| Cal Level: 4 , Cal Amount: 25.00000 | | |
| 26-NOV-2007 15:28 | sp22b | /chem/msdt.i/26Nov2007.b/t112608.d |
| 21-NOV-2007 16:33 | AT04ENSR | /chem/msdt.i/21Nov2007.b/t112105.d |
| Cal Level: 5 , Cal Amount: 50.00000 | | |
| 26-NOV-2007 10:49 | sp22b | /chem/msdt.i/26Nov2007.b/t112603.d |
| 21-NOV-2007 17:45 | AT04ENSR | /chem/msdt.i/21Nov2007.b/t112106.d |
| Cal Level: 6 , Cal Amount: 100.00000 | | |
| 21-NOV-2007 18:24 | AT04mdl+ENSR | /chem/msdt.i/21Nov2007.b/t112107.d |
| Cal Level: 7 , Cal Amount: 200.00000 | | |
| 26-NOV-2007 11:39 | sp22b | /chem/msdt.i/26Nov2007.b/t112604.d |
| 21-NOV-2007 19:02 | AT04mdl+ENSR | /chem/msdt.i/21Nov2007.b/t112108.d |

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

| Ccal Level: 5 , Ccal Amount: 50.000 | | |
|---|---|---|
| 26-NOV-2007 12:34 | AT04ENSR | /chem/msdt.i/26Nov2007.b/t112605.d |
| Ccal Level: 5 , Ccal Amount: 50.000 | | |
| 26-NOV-2007 10:49 | sp22b | /chem/msdt.i/26Nov2007.b/t112603.d |
| Ccal Level: 5 , Ccal Amount: 50.000 | | |
| 26-NOV-2007 10:49 | sp22bccv | /chem/msdt.i/26Nov2007.b/t112603a.d |

# Initial Calibration Narrative

A 7 point initial calibration was analyzed on MSD-T on November 21, 2007.

1. The following compounds used 0.2 ppbv as the lowest calibration concentration: Chloroform, Benzene, Cumene, and Styrene.

2. As noted on the accompanying analytical run logs, the 0.2ppbv, Level 1 point was re-analyzed due to:
   a. anomalous unacceptable linearity for Cumene and Styrene.

@ Air Toxics Ltd.

# MSD-T

Logbook #: 1599

| m/z | ION ABUNDANCE CRITERIA | % REL. ABUNDANCE |
|---|---|---|
| 50 | 15.0 – 40.0% of mass 95 | 16.19 |
| 75 | 30.0 – 60.0% of mass 95 | 48.59 |
| 95 | Base peak, 100.00% relative abundance | 100.00 |
| 96 | 5.0 – 9.0% of mass 95 | 4.52 |
| 173 | Less than 2.0% of mass 174 | (0.75)[1] |
| 174 | Greater than 50.0% of mass 95 | 76.68 |
| 175 | 5.0 – 9.0% of mass 174 | (7.15)[1] |
| 176 | Greater than 95.0% but less than 101.0% of mass 174 | (96.60)[1] |
| 177 | 5.0 – 9.0% of mass 176 | (6.53)[2] |

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 11/21/07
BFB Injection Time: 1334
BFB File ID: T112101
Tekmar Purge Flow: Zero 11/21/07
Vacuum:

| | | |
|---|---|---|
| IS/S Std.#: | 1443-355 | Exp. Date: 2/5/08 |
| BCM | 306974 | |
| 1,4-DFB | 1370844 | |
| CB-d5 | 968009 | |

*Verified CCV IS vs ICAL mid-point (- 40%D)* LO *initials*

**Verify 176/174 m/z Ratio:** 980730/1015296 x100 = 96.595%.

**NOAH Cart #:** AA **File #:** AA

**Calculation Check:**

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(1136245)}{(1370844)} \times \frac{(25.00)}{(0.84627)} =$ 24.48584

| | |
|---|---|
| File ID: | T112106a |
| Compound: | Tol-d8 |
| Initials: | LO |

*Reported Result* 24.486

| | Use | File # | Sample / Client Name | Can # | Pressure | Amt Loaded | DF | Date Analyzed | Time Analyzed | Review Init. | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ✓ | T112101 | BFB TUNE CHECK | 1467-58 | 50ng | 20uL | 1.00 | 11/21/07 | 1334 | tA | |
| 2 | X | 02 | ICAL level 1 | 1576-92 | 0.2ppbv | 0.2mL | | | 1406 | AA | ICAL +14 11121a |
| 3 | V | 03 | 2 | | 0.5ppbv | 0.5 mL | | | 1444 | | |
| 4 | V | 04 | 3 | | 2.0ppbv | 2.0 mL | | | 1548 | | |
| 5 | V | 05 | 4 | | 25ppbv | 25mL | | | 1633 | | |
| 6 | V | 06 | 5 | | 50ppbv | 50mL | | | 1745 | | |
| 7 | V | 07 | 6 | | 100ppbv | 100mL | | | 1824 | | |
| 8 | V | 08 | 7 | ↓ | 200ppbv | 200mL | | | 1902 | | iv level 2 |
| 9 | X | 09 | System Blank | 3490 | Humid | 20mL | | | 2232 | LO | |

Signature

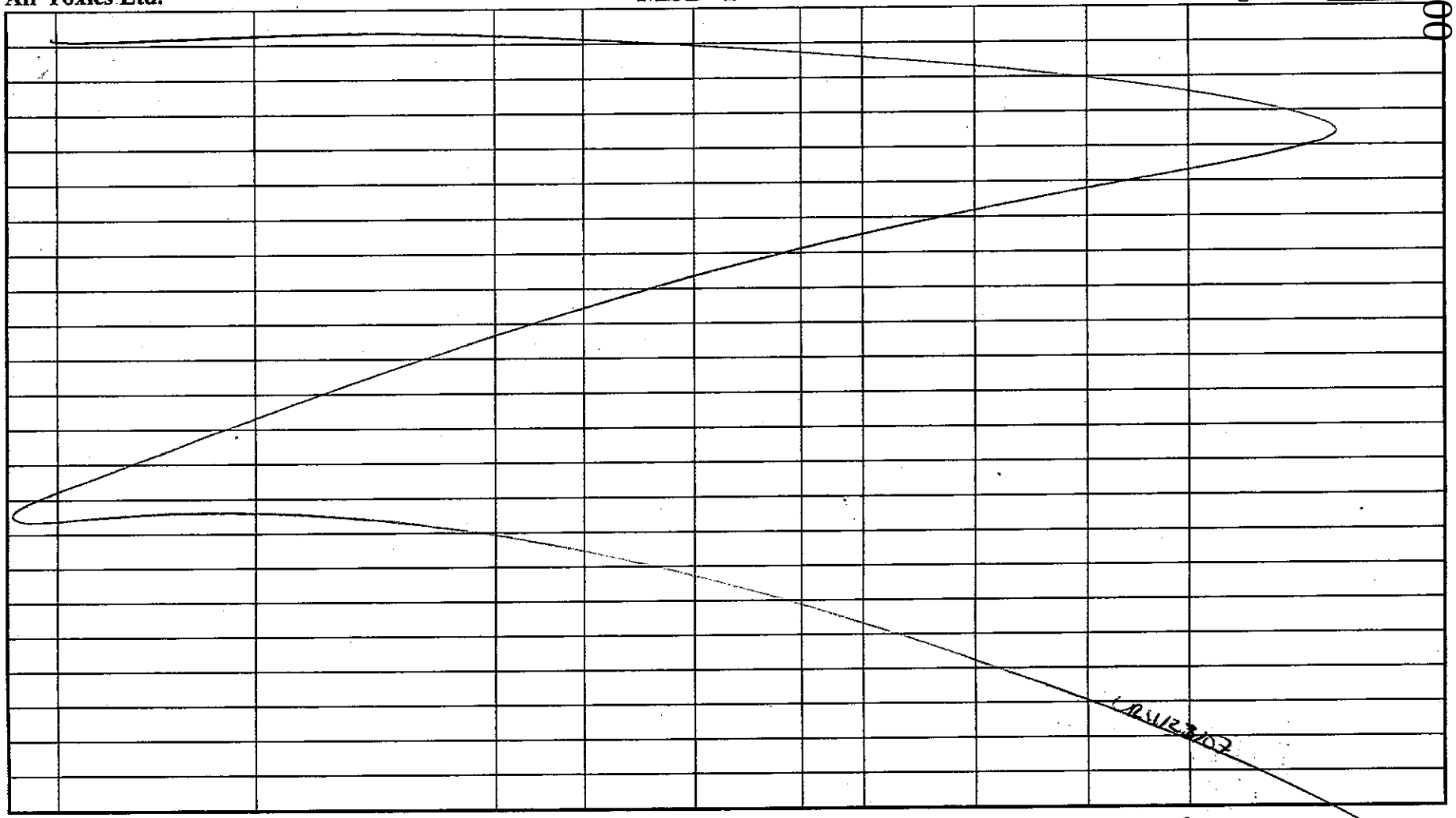
11/23/07
Date

@ Air Toxics Ltd.

**MSD-T**

Logbook #: 1599

0062




**Comments:** Flow controller #AA98123220 Actual Nominal

Flow Meter #118812 Exp 7/11/08 25mL/min 22.9mL/min

Signature

11/23/07
Date

@ Air Toxics Ltd.

# MSD-T

Logbook #: 1599

| m/z | ION ABUNDANCE CRITERIA | % REL. ABUNDANCE |
|---|---|---|
| 50 | 15.0 – 40.0% of mass 95 | 16.15 |
| 75 | 30.0 – 60.0% of mass 95 | 45.87 |
| 95 | Base peak, 100.00% relative abundance | 100.00 |
| 96 | 5.0 – 9.0% of mass 95 | 6.44 |
| 173 | Less than 2.0% of mass 174 | ( 0.78 )[1] |
| 174 | Greater than 50.0% of mass 95 | 74.26 |
| 175 | 5.0 – 9.0% of mass 174 | ( 7.21 )[1] |
| 176 | Greater than 95.0% but less than 101.0% of mass 174 | ( 96.45 )[1] |
| 177 | 5.0 – 9.0% of mass 176 | ( 6.50 )[2] |

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 11/23/07

BFB Injection Time: 0828

BFB File ID: T112301

Tekmar Purge Flow: 2

Vacuum: LR 11/21/07

| | |
|---|---|
| IS/S Std.#: 1443-355 | Exp. Date: 2/5/08 |
| BCM 3048998 | |
| 1,4-DFB 17168160 | |
| CB-d5 1199182 | |

*Verified CCV IS vs ICAL mid-point (- 40%D)* LR *initials*

**Verify 176/174 m/z Ratio:** 1105920/1146880 x100 = 96.43

**NOAH Cart #:** NA **File #:** LR

**Calculation Check:**

ppbv of compound $= \frac{Area_{Sample}}{Area_{IS}} \times \frac{Conc._{IS}}{RRF} = \frac{(\ 1459719\ )}{(\ 1716816\ )} \times \frac{(\ 25.0\ )}{(\ 6.84627\ )} = 25.118$

*Reported Result* 25.117

| | |
|---|---|
| File ID: T112303 | |
| Compound: Tol-d8 | |
| Initials: LR | |

| | Use | File # | Sample / Client Name | Can # | Pressure | Amt Loaded | DF | Date Analyzed | Time Analyzed | Review Init. | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ✓ | T112301 | BFB Tune Check | 1476-58 | 50mg | 2µl | 1.00 | 11/23/07 | 0828 | LR | |
| 2 | ✓ | 02 | ICAL Lvl 1 | 1576-92 | 0.2ppbv | 0.2mL | | | 0854 | LR | |
| 3 | ✓ | 03 | CCV-1 (200ppbv) | ↓ | 50ppbv | 50mL | | | 0932 | LR | |
| 4 | ✓ | 04 | LCS-1 (200ppbv) | 1576-108 | ↓ | ↓ | | | 1012 | LR | ICAL LCS |
| 5 | X | 05 | Lab Blank | 34190 | humid | 200mL | | | 1055 | LR | |
| 6 | ✓ | 06 | Lab Blank | 1579 | ↓ | ↓ | ↓ | | 1143 | LR | |
| 7 | X | 07 | 071328-01A | 13385 | 6.0"Hg→15psi | 50mL | 8.08 | | 1225 | LR | RR @ 35mL |
| 8 | ✓ | 08 | 071328A-01A | 03788 | 6.0"Hg→5psi | 200mL | 1.68 | | 1303 | LR | |
| 9 | ✓ | 09 | 071092A-02A | 35155 | 5.0"Hg→5psi | ↓ | 1.61 | ↓ | 1351 | XP/LR | |

Signature

11/29/07
Date

@ Air Toxics Ltd.

# MSD-T

Logbook #: 1599

0900

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | ✓ | T112310 | 071109 2A | -03A | 33962 | 8.0 | 200ml | 1.83 | 11-23-2007 | 1472 | XP/QA |
| 11 | ✓ | 11 | | -04A | 34725 | 7.0 | | 1.75 | | 1511 | XP/QA |
| 12 | ✓ | 12 | | -05A | 34242 | 21.0 | | 4.67 | | 1650 | XP/QA |
| 13 | ✓ | 13 | | -06A | 05864 | 21.0 | | 4.47 | | 1629 | XP/QA |
| 14 | ✓ | 14 | 071120 3A | -01A | 34431 | 4.0 | 200ml | 2.33 | | 1714 | XP/QA |
| 15 | ✓ | 15 | | -02A | 33386 | 4.0 | 200ml | 2.33 | | 1752 | XP/QA |
| 16 | ✓ | 16 | | -03A | 53324 | 4.0 | 200ml | 2.33 | | 1834 | XP/QA |
| 17 | ✓ | 17 | | -04A | 2061 | 25 | 200ml | 2.20 | | 1914 | XP/QA |
| 18 | ✓ | 18 | | -05A | 34124 | 5.0 | 200ml | 2.42 | | 2006 | XP/QA |
| 19 | ✓ | 19 | | -06A | 9464 | 25 | 200ml | 2.20 | | 2049 | XP/QA |
| 20 | ✓ | 20 | | -07A | 9443 | 5.0 | 200ml | 2.47 | | 2127 | XP/QA |
| 21 | ✓ | 21 | | -08A | 2203 | 0.0 | 200ml | 2.03 | | 2208 | XP/QA |
| 22 | | | | | | | | | | | |
| 23 | | | | | | | | | | | |
| 24 | | | | | | | | | | | |
| 25 | | | | | | | | | | | |
| 26 | | | | | | | | | | | |
| 27 | | | | | | | | | | | |
| 28 | | | | | | | | | | | |
| 29 | | | | | | | | | | | |
| 30 | | | | | | | | | | | |
| 31 | | | | | | | | | | | |
| 32 | | | | | | | | | | | |

QA 11/27/07

**Comments:**

QA 11/27/07

Signature

11/24/07
Date

@ Air Toxics Ltd.

# MSD-T

Logbook #: 1599

| m/z | ION ABUNDANCE CRITERIA | % REL. ABUNDANCE |
|---|---|---|
| 50 | 15.0 – 40.0% of mass 95 | 17.59 |
| 75 | 30.0 – 60.0% of mass 95 | 48.58 |
| 95 | Base peak, 100.00% relative abundance | 100.00 |
| 96 | 5.0 – 9.0% of mass 95 | 6.55 |
| 173 | Less than 2.0% of mass 174 | (0.74)[1] |
| 174 | Greater than 50.0% of mass 95 | 73.17 |
| 175 | 5.0 – 9.0% of mass 174 | (7.27)[1] |
| 176 | Greater than 95.0% but less than 101.0% of mass 174 | (96.78)[1] |
| 177 | 5.0 – 9.0% of mass 176 | (6.52)[2] |

[1] - value in parenthesis is % mass 174

[2] - value in parenthesis is % mass 176

BFB Injection Date: 11/26/14

BFB Injection Time: 0857

BFB File ID: T112601

Tekmar Purge Flow: 4/20/07

Vacuum:

| | | |
|---|---|---|
| IS/S Std.#: | 1443-355 | Exp. Date: 7/5/2008 |
| BCM | 328029 | |
| 1,4-DFB | 1590892 | |
| CB-d5 | 1179054 | |

*Verified CCV IS vs ICAL mid-point (- 40%D)* DJ (initials)

**Verify 176/174 m/z Ratio:** 1190058 / 1229653 X 100 = 96.78

**NOAH Cart #:** NA **File #:** NA

**Calculation Check:**

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc.}_{\text{IS}}}{\text{RRF}}$ = $\frac{(\ 135352\ )}{(\ 1590892\ )} \times \frac{(\ 25.00\ )}{(\ 1284627\ )}$ = 25.00

11/26/14

*Reported Result* 25.00

| | |
|---|---|
| File ID: | T112605 |
| Compound: | Tol-d8 |
| Initials: | DJ |

| | Use | File # | Sample / Client Name | Can # | Pressure | Amt Loaded | DF | Date Analyzed | Time Analyzed | Review Init. | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ✓ | T112601 | BFB TUNE CHECK | 1467-58 | 50 ng | 2.0 mL | 1.00 | 11/26/14 | 0857 | DJ/KR | |
| 2 | ✓ | 02 | ICAL level 3 | 1467-62 | 2.0 ppbv | 2.0 mL | | | 0959 | KR | |
| 3 | ✓ | 03 | " 5 | | 50 ppbv | 50 mL | | | 1049 | KR | 4p22bcv |
| 4 | ✓ | 04 | " 7 | | 200 ppbv | 200 mL | | | 1139 | KR | |
| 5 | ✓ | 05 | LCS-1 (200 ppbv) | 1576-92 | 50 ppbv | 50 mL | | | 1234 | DJ/KR | |
| 6 | ✓ | 06 | LCSD-1 (200 ppbv) | 1576-108 | " | " | | | 1321 | DJ/KR | |
| 7 | X | 07 | System Blank | N/D | 0 ml | 200 mL | | | 1409 | KR | |
| 8 | ✓ | 08 | ICAL level 4 | 1467-42 | 8 ppbv | 8.0 mL | | | 1528 | KR | |
| 9 | X | 09 | System Blank | 1579 | Humid | 200 mL | ↓ | ↓ | 1609 | KR | |

@ Air Toxics Ltd.

# MSD-T

Logbook #: 1599

9900

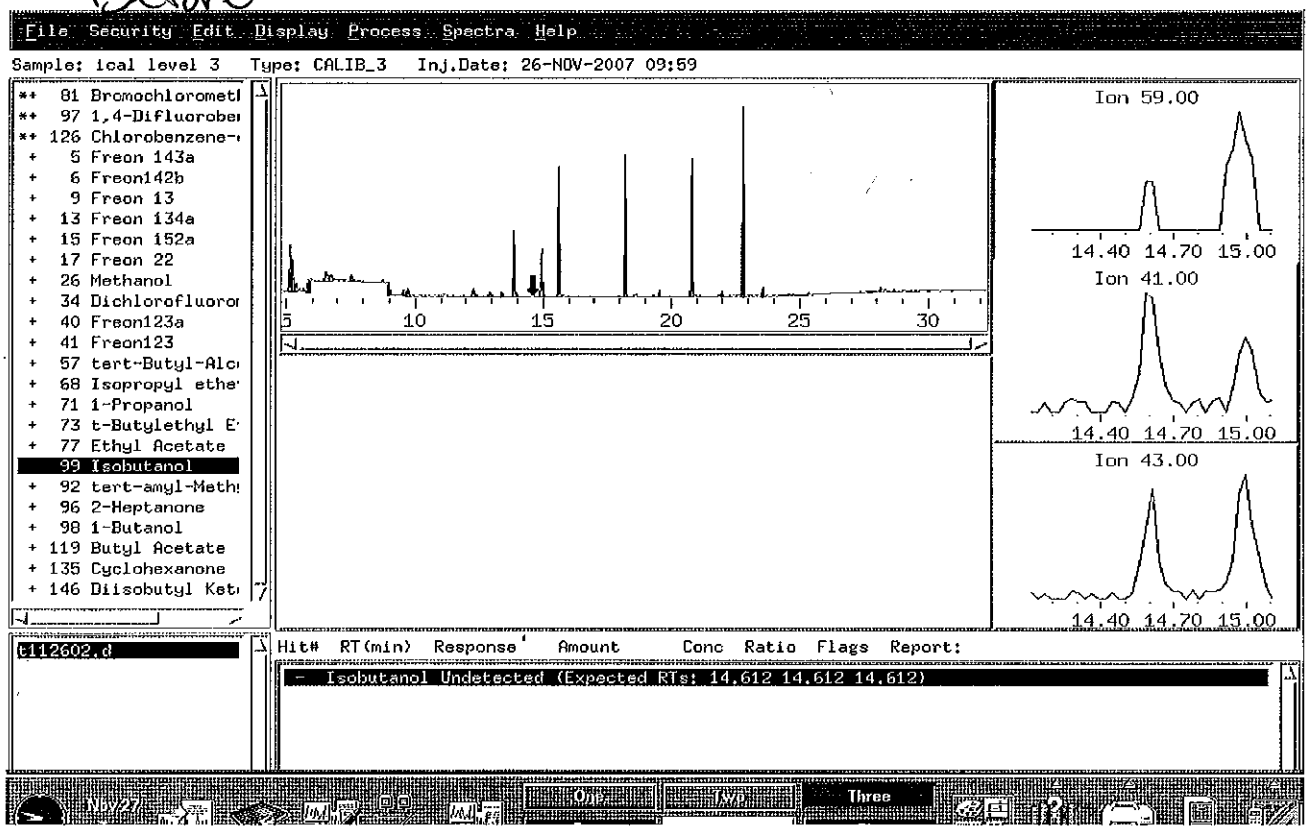
| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | ✓ | T112610 | Lab Blank | 12941 | Humid | 200mL | 1.00 | 11/26/07 | 1703 | KR | | |
| 11 | X | 11 | 0711218 - 01A | 94600 | 6.0"Hg-5psi | 6mL | 56.0 | | 1753 | KR | RR 3mL | |
| 12 | ✓ | 12 | -01A | ↓ | ↓ | 3mL | 112 | | 1841 | KR | | |
| 13 | ✓ | 13 | -02A | 9414 | 3.5"Hg-5psi | 200mL | 1.52 | | 2017 | KR | | |
| 14 | ✓ | 14 | -03A | 436 | 2.5"Hg-5psi | 200mL | 1.46 | | 2115 | KR | | |
| 15 | ✓ | 15 | -04A | 3730 | 6.0"Hg-5psi | 2mL | 168 | | 2206 | KR/LO | | |
| 16 | ✓ | 16 | 0711237A-02A | 1734 | 3.0"Hg-15psi | 200mL | 2.24 | | 2305 | KR/ | | |
| 17 | X | 17 | -01A | 31776 | 2.5"Hg-15psi | 50mL | 8.80 | | 2350 | KR/ | RR@200mL | |
| 18 | ✓ | 18 | -01A | ↓ | ↓ | 200mL | 2.20 | 11/27/07 | 0042 | KR/ | | |
| 19 | ✓ | 19 | -04A | 1361 | 0.0"Hg-15psi | 200mL | 202 | | 0135 | KR/ | | |
| 20 | ✓ | 20 | -06A | 1352 | ↓ | 200mL | ↓ | | 0232 | KR/ | | |
| 21 | ✓ | 21 | -07A | 12382 | 2.0"Hg-15psi | 200mL | 2.16 | | 0337 | KR/ | | |
| 22 | X | 22 | -05A | 34096 | 0.0"Hg-15psi | 1.0mL | 404 | | 0448 | KR/ | RR@2mL | |
| 23 | ✓ | 23 | -05A | ↓ | ↓ | 2.0mL | 202 | | 0545 | LO | | |
| 24 | X | 24 | 03A | 122816 | 3.5"Hg-15psi | 50mL | 916 | | 0710 | LO | 100X RR 15mL | |
| 25 | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | |
| 30 | | | LO 11/27/07 | | | | | | | | | |
| 31 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | |

**Comments:**

Laura Desmyn
Signature

11/27/07
Date

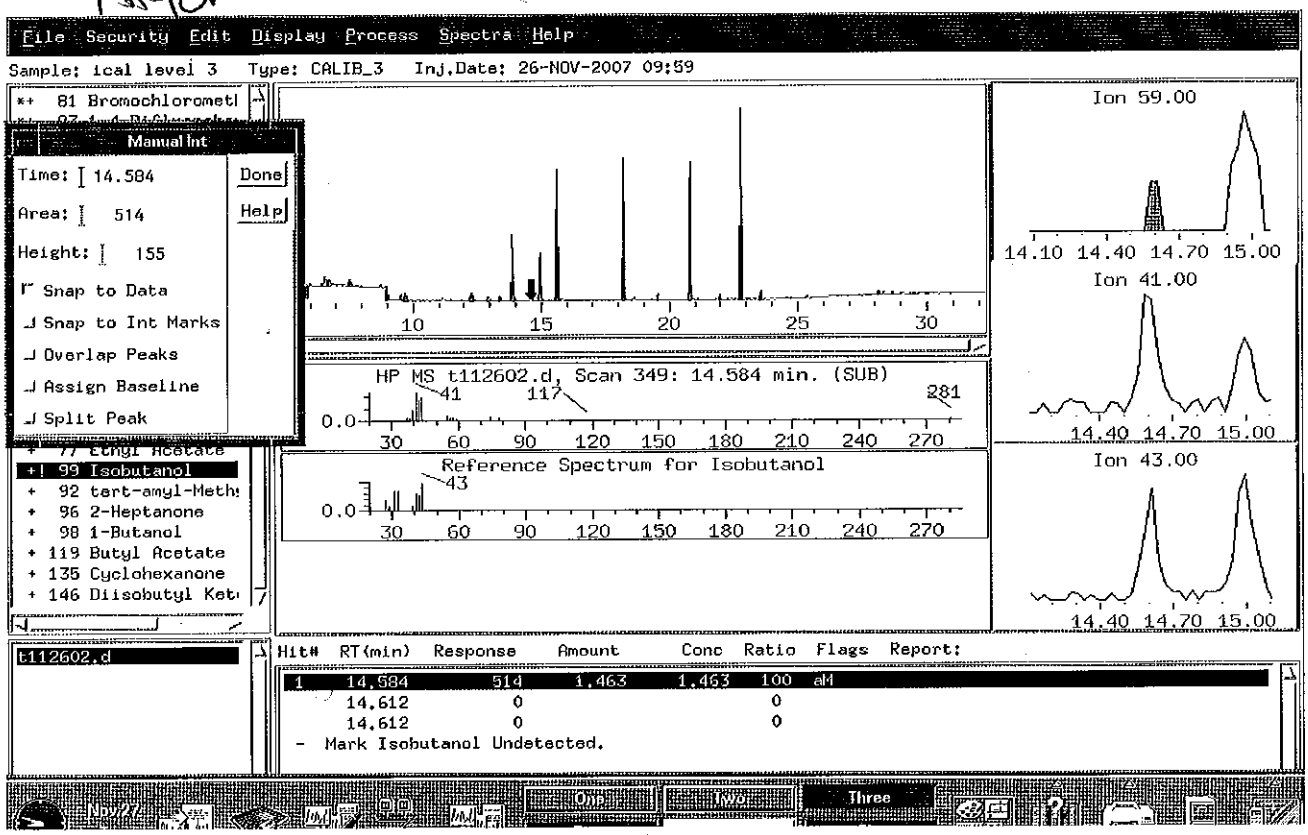
Before


File Security Edit Display Process Spectra Help
Sample: ical level 3 Type: CALIB_3 Inj.Date: 26-NOV-2007 09:59
** 81 Bromochlorometl
** 97 1,4-Difluorobe
** 126 Chlorobenzene-
+ 5 Freon 143a
+ 6 Freon142b
+ 9 Freon 13
+ 13 Freon 134a
+ 15 Freon 152a
+ 17 Freon 22
+ 26 Methanol
+ 34 Dichlorofluoro
+ 40 Freon123a
+ 41 Freon123
+ 57 tert-Butyl-Alc
+ 68 Isopropyl ethe
+ 71 1-Propanol
+ 73 t-Butylethyl E
+ 77 Ethyl Acetate
99 Isobutanol
+ 92 tert-amyl-Meth
+ 96 2-Heptanone
+ 98 1-Butanol
+ 119 Butyl Acetate
+ 135 Cyclohexanone
+ 146 Diisobutyl Ket
5 10 15 20 25 30
Ion 59.00
14.40 14.70 15.00
Ion 41.00
14.40 14.70 15.00
Ion 43.00
14.40 14.70 15.00
t112602.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
- Isobutanol Undetected (Expected RTs: 14.612 14.612 14.612)
Three

Team VOC

| | |
|---|---|
| Date / Initial | 11/27/07 BD / NE |
| Poor Integration | |
| Split Peak | |
| Peak Tailing | |
| Background Subtraction | |
| Zoom In | |
| Missed Peak | ✓ |
| Merged Peaks | |

After



Air Toxics Ltd.
Modified EPA Methods TO-14A/TO-15
Internal Standard and Associated Target Compounds and Surrogates

| Bromochloromethane |
|---|
| **Target Compounds:** |
| Freon 12 |
| Freon 114 |
| Chloromethane |
| Vinyl Chloride |
| 1,3-Butadiene |
| Bromomethane |
| Chloroethane |
| Freon 11 |
| Ethanol |
| Freon 113 |
| 1,1-Dichloroethene |
| Acetone |
| 2-Propanol |
| Carbon Disulfide |
| 3-Chloropropene |
| Methylene Chloride |
| Methyl tert-butyl ether |
| trans-1,2-Dichloroethene |
| Hexane |
| 1,1-Dichloroethane |
| 2-Butanone (Methyl Ethyl Ketone) |
| cis-1,2-Dichloroethene |
| Tetrahydrofuran |
| Chloroform |
| 1,1,1-Trichloroethane |
| Cyclohexane |
| Carbon Tetrachloride |
| 2,2,4-Trimethylpentane |
| **Surrogates:** |
| 1,2-Dichloroethane-d4 |

| 1,4-Difluorobenzene |
|---|
| **Target Compounds:** |
| Benzene |
| 1,2-Dichloroethane |
| Heptane |
| Trichloroethene |
| 1,2-Dichloropropane |
| 1,4-Dioxane |
| Bromodichloromethane |
| cis-1,3-Dichloropropene |
| 4-Methyl-2-pentanone |
| Toluene |
| **Surrogates:** |
| Toluene-d8 |

| Chlorobenzene-d5 |
|---|
| **Target Compounds:** |
| trans-1,3-Dichloropropene |
| 1,1,2-Trichloroethane |
| Tetrachloroethene |
| 2-Hexanone |
| Dibromochloromethane |
| 1,2-Dibromoethane (EDB) |
| Chlorobenzene |
| Ethyl Benzene |
| m,p-Xylene |
| o-Xylene |
| Styrene |
| Bromoform |
| Cumene |
| 1,1,2,2-Tetrachloroethane |
| Propylbenzene |
| 4-Ethyltoluene |
| 1,3,5-Trimethylbenzene |
| 1,2,4-Trimethylbenzene |
| 1,3-Dichlorobenzene |
| 1,4-Dichlorobenzene |
| alpha-Chlorotoluene |
| 1,2-Dichlorobenzene |
| 1,2,4-Trichlorobenzene |
| Hexachlorobutadiene |
| **Surrogates:** |
| Bromofluorobenzene |

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/23Nov2007.b/t112304.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 23-NOV-2007 10:12
Operator : lmr Inst ID: msdt.i
Smp Info : 50mL #1576-108
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/23Nov2007.b/t14q1121a.m
Meth Date : 23-Nov-2007 09:58 lrandolp Quant Type: ISTD
Cal Date : 21-NOV-2007 19:02 Cal File: t112108.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | CONCENTRATIONS ON-COL | CONCENTRATIONS FINAL | | |
|---|---|---|---|---|---|---|---|
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| * 81 Bromochloromethane | | | | | CAS #: 74-97-5 | | |
| 13.886 | 13.886 (1.000) | 130 | 345602 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 13.886 | 13.886 (1.000) | 128 | 267261 | | | 28.46- 128.46 | 77.33 |
| 13.858 | 13.886 (1.000) | 49 | 527805 | | | 102.52- 202.52 | 152.72 |
| * 97 1,4-Difluorobenzene | | | | | CAS #: 540-36-3 | | |
| 15.628 | 15.628 (1.000) | 114 | 1616421 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 15.628 | 15.628 (1.000) | 88 | 253705 | | | 0.00- 65.88 | 15.70 |
| * 126 Chlorobenzene-d5 | | | | | CAS #: 3114-55-4 | | |
| 20.798 | 20.798 (1.000) | 117 | 1161110 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 20.798 | 20.798 (1.000) | 82 | 631332 | | | 5.79- 105.79 | 54.37 |
| $ 90 1,2-Dichloroethane-d4 | | | | | CAS #: 17060-07-0 | | |
| 14.936 | 14.936 (1.076) | 65 | 520016 | 23.3419 | 23.342 | 80.00- 120.00 | 100.00 |
| 14.936 | 14.936 (1.076) | 67 | 309915 | | | 5.03- 105.03 | 59.60 |
| $ 113 Toluene-d8 | | | | | CAS #: 2037-26-5 | | |
| 18.199 | 18.199 (1.165) | 98 | 1383318 | 25.2812 | 25.281 | 80.00- 120.00 | 100.00 |
| 18.199 | 18.199 (1.165) | 70 | 143669 | | | 0.00- 61.02 | 10.39 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | CONCENTRATIONS FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| $ 113 Toluene-d8 (continued) | | | | | | | |
| 18.199 | 18.199 (1.165) | 100 | 947577 | | | 19.45- 119.45 | 68.50 |
| $ 137 Bromofluorobenzene | | | | | CAS #: 460-00-4 | | |
| 22.789 | 22.789 (1.096) | 174 | 727133 | 24.9300 | 24.930 | 80.00- 120.00 | 100.00 |
| 22.789 | 22.789 (1.096) | 95 | 921888 | | | 76.90- 176.90 | 126.78 |
| 22.789 | 22.789 (1.096) | 176 | 711661 | | | 47.13- 147.13 | 97.87 |
| 11 Propylene | | | | | CAS #: 115-07-1 | | |
| 5.840 | 5.840 (0.421) | 41 | 441628 | 47.9584 | 47.958 | 80.00- 120.00 | 100.00 |
| 5.840 | 5.840 (0.421) | 42 | 308557 | | | 17.24- 117.24 | 69.87 |
| 5.840 | 5.840 (0.421) | 39 | 348929 | | | 27.83- 127.83 | 79.01 |
| 12 Dichlorodifluoromethane/Fr12 | | | | | CAS #: 75-71-8 | | |
| 5.950 | 5.950 (0.429) | 85 | 2546833 | 50.1848 | 50.185 | 80.00- 120.00 | 100.00 |
| 5.950 | 5.950 (0.429) | 87 | 817789 | | | 0.00- 82.07 | 32.11 |
| 16 Freon 114 | | | | | CAS #: 76-14-2 | | |
| 6.337 | 6.337 (0.456) | 135 | 1699441 | 51.6374 | 51.637 | 80.00- 120.00 | 100.00 |
| 6.337 | 6.337 (0.456) | 137 | 540263 | | | 0.00- 81.55 | 31.79 |
| 18 Chloromethane | | | | | CAS #: 74-87-3 | | |
| 6.559 | 6.559 (0.472) | 50 | 550071 | 46.9808 | 46.981 | 80.00- 120.00 | 100.00 |
| 6.559 | 6.559 (0.472) | 52 | 184235 | | | 0.00- 84.03 | 33.49 |
| 20 Vinyl Chloride | | | | | CAS #: 75-01-4 | | |
| 6.918 | 6.918 (0.498) | 62 | 846205 | 52.8373 | 52.837 | 80.00- 120.00 | 100.00 |
| 6.918 | 6.918 (0.498) | 64 | 275651 | | | 0.00- 93.71 | 32.57 |
| 22 1,3-Butadiene | | | | | CAS #: 106-99-0 | | |
| 6.973 | 7.001 (0.502) | 54 | 667534 | 51.1954 | 51.195 | 80.00- 120.00 | 100.00 |
| 6.973 | 7.001 (0.502) | 39 | 579885 | | | 54.52- 154.52 | 86.87 |
| 25 Bromomethane | | | | | CAS #: 74-83-9 | | |
| 7.941 | 7.941 (0.572) | 94 | 831993 | 57.3662 | 57.366 | 80.00- 120.00 | 100.00 |
| 7.941 | 7.941 (0.572) | 96 | 771099 | | | 42.21- 142.21 | 92.68 |
| 27 Chloroethane | | | | | CAS #: 75-00-3 | | |
| 8.218 | 8.245 (0.592) | 64 | 433284 | 55.1854 | 55.185 | 80.00- 120.00 | 100.00 |
| 8.218 | 8.245 (0.592) | 49 | 103282 | | | 0.00- 74.88 | 23.84 |
| 8.218 | 8.245 (0.592) | 66 | 146740 | | | 0.00- 80.84 | 33.87 |
| 31 Trichlorofluoromethane/Fr11 | | | | | CAS #: 75-69-4 | | |
| 8.771 | 8.798 (0.632) | 101 | 3479448 | 52.8264 | 52.826 | 80.00- 120.00 | 100.00 |
| 8.771 | 8.798 (0.632) | 103 | 2260146 | | | 14.84- 114.84 | 64.96 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | CONCENTRATIONS FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 38 Ethanol | | | | | CAS #: 64-17-5 | | |
| 9.241 | 9.268 (0.665) | 45 | 301748 | 40.1988 | 40.199 | 80.00- 120.00 | 100.00 |
| 9.241 | 9.268 (0.665) | 43 | 71898 | | | 0.00- 72.67 | 23.83 |
| 9.241 | 9.268 (0.665) | 46 | 110076 | | | 0.00- 86.29 | 36.48 |
| 42 Freon 113 | | | | | CAS #: 76-13-1 | | |
| 9.959 | 9.959 (0.717) | 151 | 2497929 | 62.9429 | 62.943 | 80.00- 120.00 | 100.00 |
| 9.959 | 9.959 (0.717) | 153 | 1592524 | | | 13.75- 113.75 | 63.75 |
| 9.959 | 9.959 (0.717) | 101 | 3151153 | | | 76.91- 176.91 | 126.15 |
| 43 1,1-Dichloroethene | | | | | CAS #: 75-35-4 | | |
| 10.042 | 10.042 (0.723) | 61 | 1791719 | 59.6237 | 59.624 | 80.00- 120.00 | 100.00 |
| 10.042 | 10.042 (0.723) | 96 | 1232856 | | | 17.55- 117.55 | 68.81 |
| 10.042 | 10.042 (0.723) | 98 | 788754 | | | 0.00- 93.10 | 44.02 |
| 45 Acetone | | | | | CAS #: 67-64-1 | | |
| 10.208 | 10.208 (0.735) | 58 | 549683 | 50.1346 | 50.134 | 80.00- 120.00 | 100.00 |
| 10.208 | 10.208 (0.735) | 43 | 1544480 | | | 259.05- 359.05 | 280.98 |
| 46 2-Propanol | | | | | CAS #: 67-63-0 | | |
| 10.374 | 10.402 (0.747) | 45 | 1753750 | 31.8255 | 31.826 | 80.00- 120.00 | 100.00 |
| 10.374 | 10.402 (0.747) | 43 | 397471 | | | 0.00- 73.80 | 22.66 |
| 10.374 | 10.402 (0.747) | 59 | 79996 | | | 0.00- 54.08 | 4.56 |
| 47 Carbon Disulfide | | | | | CAS #: 75-15-0 | | |
| 10.540 | 10.568 (0.759) | 76 | 2872861 | 55.8272 | 55.827 | 80.00- 120.00 | 100.00 |
| 51 3-Chloropropene | | | | | CAS #: 107-05-1 | | |
| 10.817 | 10.844 (0.779) | 76 | 604360 | 56.6573 | 56.657 | 80.00- 120.00 | 100.00 |
| 10.817 | 10.844 (0.779) | 41 | 1196047 | | | 185.00- 285.00 | 197.90 |
| 54 Methylene Chloride | | | | | CAS #: 75-09-2 | | |
| 11.121 | 11.121 (0.801) | 49 | 944253 | 52.2275 | 52.228 | 80.00- 120.00 | 100.00 |
| 11.121 | 11.121 (0.801) | 84 | 945467 | | | 48.72- 148.72 | 100.13 |
| 11.121 | 11.121 (0.801) | 51 | 287755 | | | 0.00- 81.08 | 30.47 |
| 60 MTBE | | | | | CAS #: 1634-04-4 | | |
| 11.453 | 11.480 (0.825) | 73 | 1462094 | 51.6948 | 51.695 | 80.00- 120.00 | 100.00 |
| 11.453 | 11.480 (0.825) | 57 | 274181 | | | 0.00- 68.82 | 18.75 |
| 11.453 | 11.480 (0.825) | 41 | 249624 | | | 0.00- 69.31 | 17.07 |
| 61 trans-1,2-Dichloroethene | | | | | CAS #: 156-60-5 | | |
| 11.563 | 11.563 (0.833) | 96 | 1401932 | 57.0515 | 57.051 | 80.00- 120.00 | 100.00 |
| 11.563 | 11.563 (0.833) | 61 | 1782798 | | | 77.06- 177.06 | 127.17 |
| 11.563 | 11.563 (0.833) | 98 | 898305 | | | 11.49- 111.49 | 64.08 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | CONCENTRATIONS FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 65 Hexane | | | | | CAS #: 110-54-3 | | |
| 11.895 | 11.895 (0.857) | 57 | 2205711 | 54.7248 | 54.725 | 80.00- 120.00 | 100.00 |
| 11.895 | 11.895 (0.857) | 43 | 1188234 | | | 6.67- 106.67 | 53.87 |
| 11.895 | 11.895 (0.857) | 86 | 421990 | | | 0.00- 66.53 | 19.13 |
| 69 Vinyl Acetate | | | | | CAS #: 108-05-4 | | |
| 12.365 | 12.365 (0.890) | 86 | 377512 | 57.2367 | 57.237 | 80.00- 120.00 | 100.00 |
| 12.365 | 12.365 (0.890) | 43 | 3030208 | | | 869.92- 969.92 | 802.68 |
| 70 1,1-Dichloroethane | | | | | CAS #: 75-34-3 | | |
| 12.393 | 12.393 (0.892) | 63 | 2362793 | 56.5835 | 56.584 | 80.00- 120.00 | 100.00 |
| 12.393 | 12.393 (0.892) | 65 | 765127 | | | 0.00- 82.09 | 32.38 |
| 75 2-Butanone | | | | | CAS #: 78-93-3 | | |
| 13.388 | 13.388 (0.964) | 72 | 698251 | 51.3489 | 51.349 | 80.00- 120.00 | 100.00 |
| 13.388 | 13.388 (0.964) | 43 | 2087453 | | | 322.34- 422.34 | 298.95 |
| 13.388 | 13.388 (0.964) | 57 | 195319 | | | 0.00- 79.31 | 27.97 |
| 76 cis-1,2-Dichloroethene | | | | | CAS #: 156-59-2 | | |
| 13.416 | 13.443 (0.966) | 61 | 1555310 | 51.9638 | 51.964 | 80.00- 120.00 | 100.00 |
| 13.416 | 13.443 (0.966) | 96 | 1340281 | | | 32.62- 132.62 | 86.17 |
| 13.416 | 13.443 (0.966) | 98 | 868118 | | | 2.46- 102.46 | 55.82 |
| 80 Tetrahydrofuran | | | | | CAS #: 109-99-9 | | |
| 13.858 | 13.858 (0.998) | 42 | 965405 | 42.8189 | 42.819 | 80.00- 120.00 | 100.00 |
| 13.858 | 13.858 (0.998) | 71 | 559013 | | | 6.07- 106.07 | 57.90 |
| 13.858 | 13.858 (0.998) | 72 | 604819 | | | 4.67- 104.67 | 62.65 |
| 82 Chloroform | | | | | CAS #: 67-66-3 | | |
| 13.941 | 13.941 (1.004) | 83 | 2771731 | 59.5332 | 59.533 | 80.00- 120.00 | 100.00 |
| 13.941 | 13.941 (1.004) | 85 | 1792166 | | | 15.97- 115.97 | 64.66 |
| 83 1,1,1-Trichloroethane | | | | | CAS #: 71-55-6 | | |
| 14.300 | 14.300 (1.030) | 97 | 2655666 | 53.8582 | 53.858 | 80.00- 120.00 | 100.00 |
| 14.300 | 14.300 (1.030) | 99 | 1725115 | | | 14.66- 114.66 | 64.96 |
| 85 Cyclohexane | | | | | CAS #: 110-82-7 | | |
| 14.300 | 14.300 (1.030) | 84 | 1599416 | 57.8322 | 57.832 | 80.00- 120.00 | 100.00 |
| 14.300 | 14.300 (1.030) | 56 | 1476963 | | | 44.25- 144.25 | 92.34 |
| 14.300 | 14.300 (1.030) | 41 | 713830 | | | 0.00- 95.33 | 44.63 |
| 87 Carbon Tetrachloride | | | | | CAS #: 56-23-5 | | |
| 14.549 | 14.549 (1.048) | 119 | 2464228 | 53.2457 | 53.246 | 80.00- 120.00 | 100.00 |
| 14.549 | 14.549 (1.048) | 117 | 2630843 | | | 55.80- 155.80 | 106.76 |
| 89 2,2,4-Trimethylpentane | | | | | CAS #: 540-84-1 | | |
| 14.881 | 14.881 (1.072) | 57 | 5057034 | 51.4870 | 51.487 | 80.00- 120.00 | 100.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 89 2,2,4-Trimethylpentane (continued) | | | | | | | |
| 14.881 | 14.881 (1.072) | 56 | 1636562 | | | 0.00- 82.34 | 32.36 |
| 14.881 | 14.881 (1.072) | 41 | 1178685 | | | 0.00- 76.30 | 23.31 |
| 91 Benzene | | | | | CAS #: 71-43-2 | | |
| 14.964 | 14.964 (0.958) | 78 | 3845240 | 55.7590 | 55.759 | 80.00- 120.00 | 100.00 |
| 14.964 | 14.964 (0.958) | 77 | 867043 | | | 0.00- 72.49 | 22.55 |
| 93 1,2-Dichloroethane | | | | | CAS #: 107-06-2 | | |
| 15.075 | 15.075 (0.965) | 62 | 1685050 | 51.9716 | 51.972 | 80.00- 120.00 | 100.00 |
| 15.075 | 15.075 (0.965) | 64 | 550676 | | | 0.00- 84.21 | 32.68 |
| 94 Heptane | | | | | CAS #: 142-82-5 | | |
| 15.185 | 15.185 (0.972) | 71 | 1419982 | 57.0677 | 57.068 | 80.00- 120.00 | 100.00 |
| 15.185 | 15.185 (0.972) | 43 | 1758564 | | | 86.68- 186.68 | 123.84 |
| 15.185 | 15.185 (0.972) | 57 | 1110922 | | | 32.20- 132.20 | 78.23 |
| 101 Trichloroethene | | | | | CAS #: 79-01-6 | | |
| 16.098 | 16.098 (1.030) | 95 | 1736961 | 55.1719 | 55.172 | 80.00- 120.00 | 100.00 |
| 16.098 | 16.098 (1.030) | 130 | 1629796 | | | 44.61- 144.61 | 93.83 |
| 16.098 | 16.098 (1.030) | 97 | 1112123 | | | 13.47- 113.47 | 64.03 |
| 104 1,2-Dichloropropane | | | | | CAS #: 78-87-5 | | |
| 16.568 | 16.568 (1.060) | 63 | 1239973 | 52.5851 | 52.585 | 80.00- 120.00 | 100.00 |
| 16.568 | 16.568 (1.060) | 62 | 883668 | | | 20.86- 120.86 | 71.27 |
| 16.568 | 16.568 (1.060) | 41 | 585062 | | | 0.00- 97.96 | 47.18 |
| 106 1,4-Dioxane | | | | | CAS #: 123-91-1 | | |
| 16.706 | 16.706 (1.069) | 88 | 892397 | 43.6329 | 43.633 | 80.00- 120.00 | 100.00 |
| 16.706 | 16.706 (1.069) | 58 | 485579 | | | 4.14- 104.14 | 54.41 |
| 16.706 | 16.706 (1.069) | 57 | 161744 | | | 0.00- 69.74 | 18.12 |
| 107 Bromodichloromethane | | | | | CAS #: 75-27-4 | | |
| 17.010 | 17.010 (1.088) | 83 | 2828699 | 55.0671 | 55.067 | 80.00- 120.00 | 100.00 |
| 17.010 | 17.010 (1.088) | 85 | 1829439 | | | 14.51- 114.51 | 64.67 |
| 110 cis-1,3-Dichloropropene | | | | | CAS #: 10061-01-5 | | |
| 17.784 | 17.784 (1.138) | 75 | 2143985 | 57.0711 | 57.071 | 80.00- 120.00 | 100.00 |
| 17.784 | 17.784 (1.138) | 77 | 685583 | | | 0.00- 81.98 | 31.98 |
| 17.784 | 17.784 (1.138) | 39 | 818285 | | | 0.00- 88.23 | 38.17 |
| 111 4-Methyl-2-pentanone | | | | | CAS #: 108-10-1 | | |
| 17.978 | 17.978 (1.150) | 58 | 983446 | 41.8370 | 41.837 | 80.00- 120.00 | 100.00 |
| 17.978 | 17.978 (1.150) | 43 | 2083482 | | | 169.12- 269.12 | 211.86 |
| 17.978 | 17.978 (1.150) | 85 | 523255 | | | 0.58- 100.58 | 53.21 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 114 Toluene | | | | | CAS #: 108-88-3 | | |
| 18.337 | 18.337 (1.173) | 91 | 4533918 | 59.2554 | 59.255 | 80.00- 120.00 | 100.00 |
| 18.337 | 18.337 (1.173) | 92 | 2772849 | | | 11.75- 111.75 | 61.16 |
| 116 trans-1,3-Dichloropropene | | | | | CAS #: 10061-02-6 | | |
| 18.780 | 18.780 (0.903) | 75 | 2255005 | 57.6099 | 57.610 | 80.00- 120.00 | 100.00 |
| 18.780 | 18.780 (0.903) | 77 | 721978 | | | 0.00- 82.00 | 32.02 |
| 18.752 | 18.780 (0.902) | 39 | 798118 | | | 0.00- 86.11 | 35.39 |
| 117 1,1,2-Trichloroethane | | | | | CAS #: 79-00-5 | | |
| 19.111 | 19.111 (0.919) | 97 | 1564732 | 57.0700 | 57.070 | 80.00- 120.00 | 100.00 |
| 19.111 | 19.111 (0.919) | 99 | 988995 | | | 13.51- 113.51 | 63.21 |
| 19.111 | 19.111 (0.919) | 83 | 1311677 | | | 34.03- 134.03 | 83.83 |
| 120 Tetrachloroethene | | | | | CAS #: 127-18-4 | | |
| 19.277 | 19.277 (0.927) | 166 | 2089727 | 56.9979 | 56.998 | 80.00- 120.00 | 100.00 |
| 19.277 | 19.277 (0.927) | 129 | 1451434 | | | 19.14- 119.14 | 69.46 |
| 19.277 | 19.277 (0.927) | 131 | 1392509 | | | 15.56- 115.56 | 66.64 |
| 121 2-Hexanone | | | | | CAS #: 591-78-6 | | |
| 19.416 | 19.416 (0.934) | 58 | 1268673 | 35.6820 | 35.682 | 80.00- 120.00 | 100.00 |
| 19.416 | 19.416 (0.934) | 43 | 1963258 | | | 107.04- 207.04 | 154.75 |
| 19.416 | 19.416 (0.934) | 100 | 290751 | | | 0.00- 71.95 | 22.92 |
| 122 Dibromochloromethane | | | | | CAS #: 124-48-1 | | |
| 19.803 | 19.803 (0.952) | 129 | 2549202 | 55.8738 | 55.874 | 80.00- 120.00 | 100.00 |
| 19.803 | 19.803 (0.952) | 127 | 1958255 | | | 26.41- 126.41 | 76.82 |
| 123 1,2-Dibromoethane | | | | | CAS #: 106-93-4 | | |
| 20.079 | 20.079 (0.965) | 107 | 2381551 | 54.0301 | 54.030 | 80.00- 120.00 | 100.00 |
| 20.079 | 20.079 (0.965) | 109 | 2244720 | | | 42.79- 142.79 | 94.25 |
| 127 Chlorobenzene | | | | | CAS #: 108-90-7 | | |
| 20.853 | 20.853 (1.003) | 112 | 3378462 | 54.9670 | 54.967 | 80.00- 120.00 | 100.00 |
| 20.853 | 20.853 (1.003) | 114 | 1063952 | | | 0.00- 81.38 | 31.49 |
| 20.853 | 20.853 (1.003) | 77 | 1974920 | | | 7.76- 107.76 | 58.46 |
| 128 Ethyl Benzene | | | | | CAS #: 100-41-4 | | |
| 20.936 | 20.936 (1.007) | 106 | 1760889 | 55.3828 | 55.383 | 80.00- 120.00 | 100.00 |
| 20.936 | 20.936 (1.007) | 91 | 5478340 | | | 265.06- 365.06 | 311.11 |
| 129 m,p-Xylene | | | | | CAS #: 108-38-3 | | |
| 21.130 | 21.130 (1.016) | 106 | 2203949 | 55.7905 | 55.790 | 80.00- 120.00 | 100.00 |
| 21.130 | 21.130 (1.016) | 91 | 4325255 | | | 147.41- 247.41 | 196.25 |
| 130 o-Xylene | | | | | CAS #: 95-47-6 | | |
| 21.849 | 21.849 (1.051) | 106 | 2057004 | 56.5107 | 56.511 | 80.00- 120.00 | 100.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 130 o-Xylene (continued) | | | | | | | |
| 21.849 | 21.849 (1.051) | 91 | 4220982 | | | 154.00- 254.00 | 205.20 |
| 131 Styrene | | | | | CAS #: 100-42-5 | | |
| 21.876 | 21.876 (1.052) | 104 | 3252711 | 56.5339 | 56.534 | 80.00- 120.00 | 100.00 |
| 21.876 | 21.876 (1.052) | 78 | 1595513 | | | 0.00- 97.90 | 49.05 |
| 133 Bromoform | | | | | CAS #: 75-25-2 | | |
| 22.291 | 22.291 (1.072) | 173 | 2370180 | 54.8955 | 54.895 | 80.00- 120.00 | 100.00 |
| 22.291 | 22.291 (1.072) | 171 | 1222351 | | | 1.18- 101.18 | 51.57 |
| 134 Cumene | | | | | CAS #: 98-82-8 | | |
| 22.429 | 22.429 (1.078) | 105 | 5779932 | 60.4666 | 60.467 | 80.00- 120.00 | 100.00 |
| 22.429 | 22.429 (1.078) | 120 | 1525287 | | | 0.00- 75.99 | 26.39 |
| 22.429 | 22.429 (1.078) | 51 | 425933 | | | 9.74- 109.74 | 7.37 |
| 140 1,1,2,2-Tetrachloroethane | | | | | CAS #: 79-34-5 | | |
| 23.010 | 23.010 (1.106) | 83 | 2924488 | 50.4876 | 50.488 | 80.00- 120.00 | 100.00 |
| 23.010 | 23.010 (1.106) | 85 | 1919687 | | | 14.69- 114.69 | 65.64 |
| 142 Propylbenzene | | | | | CAS #: 103-65-1 | | |
| 23.121 | 23.121 (1.112) | 91 | 6968077 | 55.3133 | 55.313 | 80.00- 120.00 | 100.00 |
| 23.121 | 23.121 (1.112) | 120 | 1560379 | | | 0.00- 72.67 | 22.39 |
| 23.121 | 23.121 (1.112) | 105 | 256403 | | | 0.00- 53.69 | 3.68 |
| 145 4-Ethyltoluene | | | | | CAS #: 622-96-8 | | |
| 23.287 | 23.286 (1.120) | 105 | 5826772 | 54.3847 | 54.385 | 80.00- 120.00 | 100.00 |
| 23.287 | 23.286 (1.120) | 120 | 1766633 | | | 0.00- 80.23 | 30.32 |
| 147 1,3,5-Trimethylbenzene | | | | | CAS #: 108-67-8 | | |
| 23.397 | 23.397 (1.125) | 105 | 4726738 | 53.2831 | 53.283 | 80.00- 120.00 | 100.00 |
| 23.397 | 23.397 (1.125) | 120 | 2374015 | | | 1.60- 101.60 | 50.23 |
| 150 1,2,4-Trimethylbenzene | | | | | CAS #: 95-63-6 | | |
| 24.033 | 24.033 (1.156) | 105 | 4511582 | 53.3208 | 53.321 | 80.00- 120.00 | 100.00 |
| 24.033 | 24.033 (1.156) | 120 | 2112554 | | | 0.00- 96.88 | 46.83 |
| 155 1,3-Dichlorobenzene | | | | | CAS #: 541-73-1 | | |
| 24.586 | 24.586 (1.182) | 146 | 3081146 | 51.8220 | 51.822 | 80.00- 120.00 | 100.00 |
| 24.586 | 24.586 (1.182) | 148 | 1958779 | | | 14.03- 114.03 | 63.57 |
| 24.586 | 24.586 (1.182) | 111 | 1260891 | | | 0.00- 91.33 | 40.92 |
| 156 1,4-Dichlorobenzene | | | | | CAS #: 106-46-7 | | |
| 24.724 | 24.724 (1.189) | 146 | 3142006 | 51.3222 | 51.322 | 80.00- 120.00 | 100.00 |
| 24.724 | 24.724 (1.189) | 148 | 2017964 | | | 15.04- 115.04 | 64.23 |
| 24.724 | 24.724 (1.189) | 111 | 1240729 | | | 0.00- 89.92 | 39.49 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | CONCENTRATIONS FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 159 alpha-Chlorotoluene | | | | | CAS #: 100-44-7 | | |
| 24.945 | 24.945 (1.199) | 91 | 4914198 | 56.7671 | 56.767 | 80.00- 120.00 | 100.00 |
| 24.945 | 24.945 (1.199) | 126 | 954106 | | | 0.00- 70.12 | 19.42 |
| 161 1,2-Dichlorobenzene | | | | | CAS #: 95-50-1 | | |
| 25.360 | 25.360 (1.219) | 146 | 2991993 | 50.7935 | 50.794 | 80.00- 120.00 | 100.00 |
| 25.360 | 25.360 (1.219) | 148 | 1911494 | | | 14.74- 114.74 | 63.89 |
| 25.360 | 25.360 (1.219) | 111 | 1281862 | | | 0.00- 92.92 | 42.84 |
| 165 1,2,4-Trichlorobenzene | | | | | CAS #: 120-82-1 | | |
| 28.153 | 28.153 (1.354) | 180 | 2583898 | 45.8626 | 45.863 | 80.00- 120.00 | 100.00 |
| 28.153 | 28.153 (1.354) | 182 | 2439198 | | | 46.14- 146.14 | 94.40 |
| 166 Hexachlorobutadiene | | | | | CAS #: 87-68-3 | | |
| 28.319 | 28.319 (1.362) | 225 | 1876496 | 45.5561 | 45.556 | 80.00- 120.00 | 100.00 |
| 28.319 | 28.319 (1.362) | 223 | 1159566 | | | 14.10- 114.10 | 61.79 |
| 29 Isopentane | | | | | CAS #: 78-78-4 | | |
| 8.273 | 8.273 (0.596) | 43 | 1224639 | 48.3524 | 48.352 | 80.00- 120.00 | 100.00 |
| 8.273 | 8.273 (0.596) | 57 | 976699 | | | 26.21- 126.21 | 79.75 |
| 19 Butane | | | | | CAS #: 106-97-8 | | |
| 6.807 | 6.835 (0.490) | 58 | 155438 | 49.5857 | 49.586 | 80.00- 120.00 | 100.00 |
| 6.807 | 6.835 (0.490) | 43 | 1049185 | | | 668.04- 768.04 | 674.99 |
| 102 Methyl Cyclohexane | | | | | CAS #: 108-87-2 | | |
| 16.346 | 16.346 (1.177) | 83 | 2031971 | 56.7469 | 56.747 | 80.00- 120.00 | 100.00 |
| 16.346 | 16.346 (1.177) | 98 | 937052 | | | 0.00- 92.45 | 46.12 |
| 16.346 | 16.346 (1.177) | 55 | 1315575 | | | 18.10- 118.10 | 64.74 |
| 167 Naphthalene | | | | | CAS #: 91-20-3 | | |
| 28.678 | 28.678 (1.379) | 128 | 4290476 | 52.9405 | 52.940 | 80.00- 120.00 | 100.00 |
| 28.678 | 28.678 (1.379) | 127 | 521052 | | | 0.00- 62.43 | 12.14 |

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t112304.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: lmr
Method File: /chem/msdt.i/23Nov2007.b/t14q1121a.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 23-NOV-2007
Calibration Time: 09:32
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 364898 | 218939 | 510857 | 345602 | -5.29 |
| 97 1,4-Difluorobenze | 1716816 | 1030090 | 2403542 | 1616421 | -5.85 |
| 126 Chlorobenzene-d5 | 1199182 | 719509 | 1678855 | 1161110 | -3.17 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.89 | 13.56 | 14.22 | 13.89 | 0.00 |
| 97 1,4-Difluorobenze | 15.63 | 15.30 | 15.96 | 15.63 | 0.00 |
| 126 Chlorobenzene-d5 | 20.80 | 20.47 | 21.13 | 20.80 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Nov-2007 10:33

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 23Nov2007
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Level: LOW Operator: lmr
Data Type: MS DATA SampleType: LCS
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT04ENSR.sub
Method File: /chem/msdt.i/23Nov2007.b/t14q1121a.m
Misc Info: 200ppbv -> 50ppbv

| SPIKE COMPOUND | CONC ADDED PPBV | CONC RECOVERED PPBV | % RECOVERED | LIMITS |
|---|---|---|---|---|
| 12 Dichlorodifluorome | 50.000 | 50.185 | 100.37 | 70-130 |
| 16 Freon 114 | 50.000 | 51.637 | 103.27 | 70-130 |
| 18 Chloromethane | 50.000 | 46.981 | 93.96 | 70-130 |
| 20 Vinyl Chloride | 50.000 | 52.837 | 105.67 | 70-130 |
| 22 1,3-Butadiene | 50.000 | 51.195 | 102.39 | 60-140 |
| 25 Bromomethane | 50.000 | 57.366 | 114.73 | 70-130 |
| 27 Chloroethane | 50.000 | 55.185 | 110.37 | 70-130 |
| 31 Trichlorofluoromet | 50.000 | 52.826 | 105.65 | 70-130 |
| 38 Ethanol | 50.000 | 40.199 | 80.40 | 60-140 |
| 42 Freon 113 | 50.000 | 62.943 | 125.89 | 70-130 |
| 43 1,1-Dichloroethene | 50.000 | 59.624 | 119.25 | 70-130 |
| 45 Acetone | 50.000 | 50.134 | 100.27 | 60-140 |
| 47 Carbon Disulfide | 50.000 | 55.827 | 111.65 | 60-140 |
| 46 2-Propanol | 50.000 | 31.826 | 63.65 | 60-140 |
| 54 Methylene Chloride | 50.000 | 52.228 | 104.46 | 70-130 |
| 60 MTBE | 50.000 | 51.695 | 103.39 | 60-140 |
| 61 trans-1,2-Dichloro | 50.000 | 57.051 | 114.10 | 60-140 |
| 65 Hexane | 50.000 | 54.725 | 109.45 | 60-140 |
| 70 1,1-Dichloroethane | 50.000 | 56.584 | 113.17 | 70-130 |
| 76 cis-1,2-Dichloroet | 50.000 | 51.964 | 103.93 | 70-130 |
| 75 2-Butanone | 50.000 | 51.349 | 102.70 | 60-140 |
| 80 Tetrahydrofuran | 50.000 | 42.819 | 85.64 | 60-140 |
| 82 Chloroform | 50.000 | 59.533 | 119.07 | 70-130 |
| 85 Cyclohexane | 50.000 | 57.832 | 115.66 | 60-140 |
| 83 1,1,1-Trichloroeth | 50.000 | 53.858 | 107.72 | 70-130 |
| 87 Carbon Tetrachlori | 50.000 | 53.246 | 106.49 | 70-130 |
| 91 Benzene | 50.000 | 55.759 | 111.52 | 70-130 |
| 93 1,2-Dichloroethane | 50.000 | 51.972 | 103.94 | 70-130 |
| 94 Heptane | 50.000 | 57.068 | 114.14 | 60-140 |
| 101 Trichloroethene | 50.000 | 55.172 | 110.34 | 70-130 |
| 104 1,2-Dichloropropan | 50.000 | 52.585 | 105.17 | 70-130 |
| 106 1,4-Dioxane | 50.000 | 43.633 | 87.27 | 60-140 |
| 107 Bromodichlorometha | 50.000 | 55.067 | 110.13 | 60-140 |

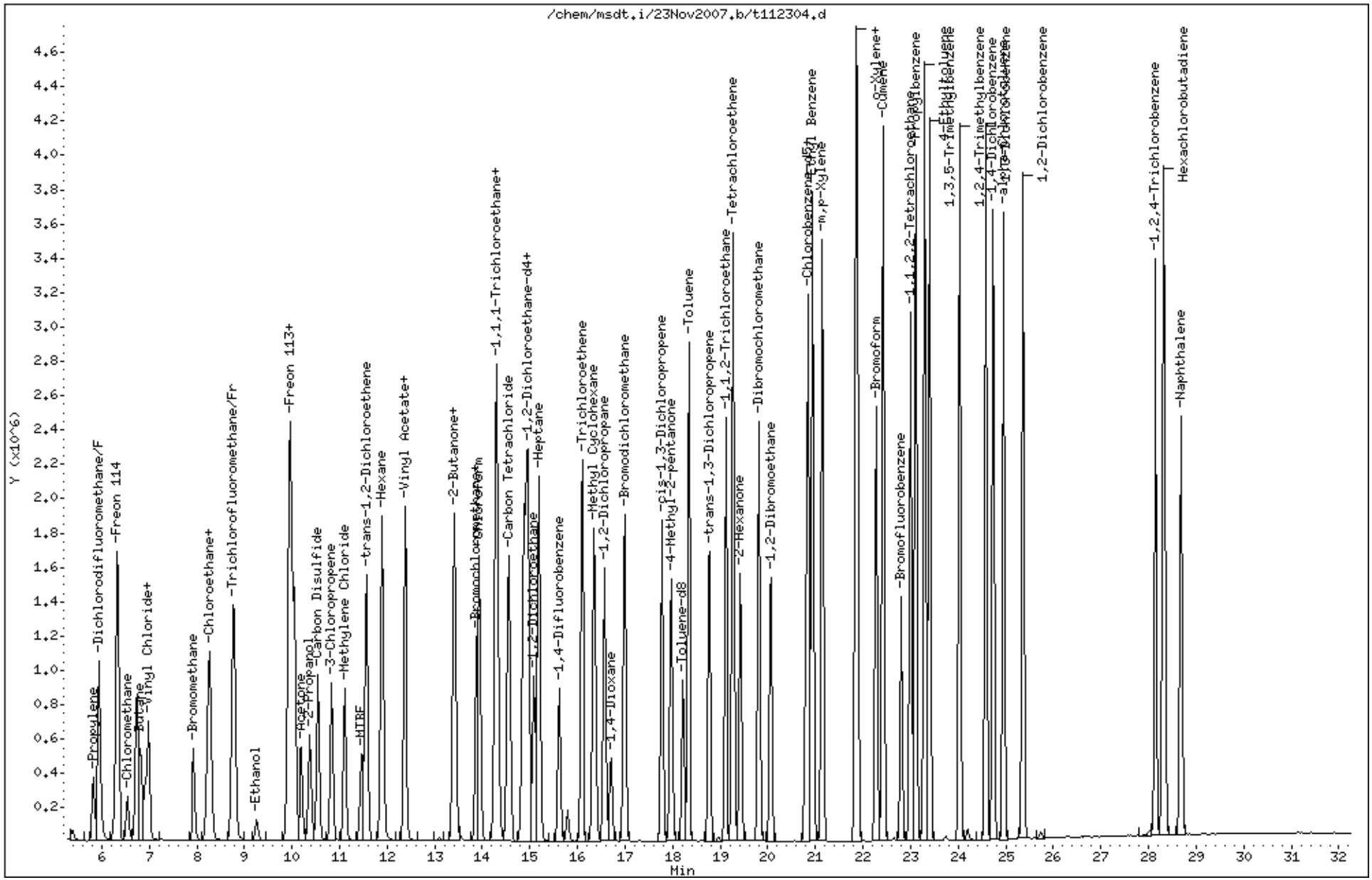
| SPIKE COMPOUND | CONC ADDED PPBV | CONC RECOVERED PPBV | % RECOVERED | LIMITS |
|---|---|---|---|---|
| 110 cis-1,3-Dichloropr | 50.000 | 57.071 | 114.14 | 70-130 |
| 111 4-Methyl-2-pentano | 50.000 | 41.837 | 83.67 | 60-140 |
| 114 Toluene | 50.000 | 59.255 | 118.51 | 70-130 |
| 116 trans-1,3-Dichloro | 50.000 | 57.610 | 115.22 | 70-130 |
| 117 1,1,2-Trichloroeth | 50.000 | 57.070 | 114.14 | 70-130 |
| 120 Tetrachloroethene | 50.000 | 56.998 | 114.00 | 70-130 |
| 121 2-Hexanone | 50.000 | 35.682 | 71.36 | 60-140 |
| 122 Dibromochlorometha | 50.000 | 55.874 | 111.75 | 60-140 |
| 123 1,2-Dibromoethane | 50.000 | 54.030 | 108.06 | 70-130 |
| 127 Chlorobenzene | 50.000 | 54.967 | 109.93 | 70-130 |
| 128 Ethyl Benzene | 50.000 | 55.383 | 110.77 | 70-130 |
| 129 m,p-Xylene | 50.000 | 55.790 | 111.58 | 70-130 |
| 130 o-Xylene | 50.000 | 56.511 | 113.02 | 70-130 |
| 131 Styrene | 50.000 | 56.534 | 113.07 | 70-130 |
| 133 Bromoform | 50.000 | 54.895 | 109.79 | 60-140 |
| 140 1,1,2,2-Tetrachlor | 50.000 | 50.488 | 100.98 | 70-130 |
| 145 4-Ethyltoluene | 50.000 | 54.385 | 108.77 | 60-140 |
| 147 1,3,5-Trimethylben | 50.000 | 53.283 | 106.57 | 70-130 |
| 150 1,2,4-Trimethylben | 50.000 | 53.321 | 106.64 | 70-130 |
| 155 1,3-Dichlorobenzen | 50.000 | 51.822 | 103.64 | 70-130 |
| 156 1,4-Dichlorobenzen | 50.000 | 51.322 | 102.64 | 70-130 |
| 159 alpha-Chlorotoluen | 50.000 | 56.767 | 113.53 | 70-130 |
| 161 1,2-Dichlorobenzen | 50.000 | 50.794 | 101.59 | 70-130 |
| 165 1,2,4-Trichloroben | 50.000 | 45.863 | 91.73 | 70-130 |
| 166 Hexachlorobutadien | 50.000 | 45.556 | 91.11 | 70-130 |
| 142 Propylbenzene | 50.000 | 55.313 | 110.63 | 60-140 |
| 134 Cumene | 50.000 | 60.467 | 120.93 | 60-140 |
| 51 3-Chloropropene | 50.000 | 56.657 | 113.31 | 60-140 |
| 89 2,2,4-Trimethylpen | 50.000 | 51.487 | 102.97 | 60-140 |
| 19 Butane | 50.000 | 49.586 | 99.17 | 70-130 |
| 29 Isopentane | 50.000 | 48.352 | 96.70 | 70-130 |
| 102 Methyl Cyclohexane | 50.000 | 56.747 | 113.49 | 70-130 |
| 11 Propylene | 50.000 | 47.958 | 95.92 | 60-140 |
| 167 Naphthalene | 50.000 | 52.940 | 105.88 | 60-140 |

| SURROGATE COMPOUND | CONC ADDED PPBV | CONC RECOVERED PPBV | % RECOVERED | LIMITS |
|---|---|---|---|---|
| $ 90 1,2-Dichloroethane | 25.000 | 23.342 | 93.37 | 70-130 |
| $ 113 Toluene-d8 | 25.000 | 25.281 | 101.12 | 70-130 |
| $ 137 Bromofluorobenzene | 25.000 | 24.930 | 99.72 | 70-130 |

Data File: /chem/msdt.i/23Nov2007.b/t112304.d
Date : 23-NOV-2007 10:12
Client ID: LCS-1
Sample Info: 50mL #1576-108

Instrument: msdt.i
Operator: lmr
Column diameter: 0.53

Column phase: RTx-624




0081

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/23Nov2007.b/t112302.d
Lab Smp Id: ICAL Client Smp ID: Level 1
Inj Date : 23-NOV-2007 08:54
Operator : lmr Inst ID: msdt.i
Smp Info : 0.2ml #1576-92
Misc Info : 200ppbv-0.2ppbv
Comment :
Method : /chem/msdt.i/23Nov2007.b/t14q1121a.m
Meth Date : 26-Nov-2007 15:03 cleonard Quant Type: ISTD
Cal Date : 23-NOV-2007 08:54 Cal File: t112302.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AFCEElow.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | AMOUNTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| * 81 Bromochloromethane | | | | | CAS #: 74-97-5 | | |
| 13.858 | 13.858 (1.000) | 130 | 321558 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 13.858 | 13.858 (1.000) | 128 | 249117 | | | 26.38- 126.38 | 77.47 |
| 13.858 | 13.858 (1.000) | 49 | 321177 | | | 91.95- 191.95 | 99.88 |
| * 97 1,4-Difluorobenzene | | | | | CAS #: 540-36-3 | | |
| 15.628 | 15.628 (1.000) | 114 | 1636328 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 15.600 | 15.600 (1.000) | 88 | 257171 | | | 0.00- 65.95 | 15.72 |
| * 126 Chlorobenzene-d5 | | | | | CAS #: 3114-55-4 | | |
| 20.798 | 20.798 (1.000) | 117 | 1105079 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 20.798 | 20.798 (1.000) | 82 | 600415 | | | 5.79- 105.79 | 54.33 |
| $ 90 1,2-Dichloroethane-d4 | | | | | CAS #: 17060-07-0 | | |
| 14.936 | 14.936 (1.078) | 65 | 499168 | 25.0000 | 24.081 | 50.00- 150.00 | 100.00 |
| 14.936 | 14.936 (1.078) | 67 | 258807 | | | 5.03- 105.03 | 51.85 |
| $ 113 Toluene-d8 | | | | | CAS #: 2037-26-5 | | |
| 18.199 | 18.199 (1.165) | 98 | 1345784 | 25.0000 | 24.296 | 50.00- 150.00 | 100.00 |
| 18.199 | 18.199 (1.165) | 70 | 143075 | | | 0.00- 61.02 | 10.63 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| $ 113 Toluene-d8 (continued) | | | | | | | |
| 18.199 | 18.199 (1.165) | 100 | 926659 | | | 19.45- 119.45 | 68.86 |
| $ 137 Bromofluorobenzene | | | | | CAS #: 460-00-4 | | |
| 22.789 | 22.789 (1.096) | 174 | 640413 | 25.0000 | 23.070 | 50.00- 150.00 | 100.00 |
| 22.789 | 22.789 (1.096) | 95 | 809759 | | | 77.33- 177.33 | 126.44 |
| 22.789 | 22.789 (1.096) | 176 | 619711 | | | 46.56- 146.56 | 96.77 |
| 82 Chloroform | | | | | CAS #: 67-66-3 | | |
| 13.941 | 13.941 (1.006) | 83 | 5901 | 0.20000 | 0.1362 | 50.00- 150.00 | 100.00(a) |
| 13.941 | 13.941 (1.006) | 85 | 4052 | | | 16.84- 116.84 | 68.67 |
| 91 Benzene | | | | | CAS #: 71-43-2 | | |
| 14.964 | 14.964 (0.958) | 78 | 12517 | 0.20000 | 0.1793 | 50.00- 150.00 | 100.00(a) |
| 14.964 | 14.964 (0.958) | 77 | 2589 | | | 0.00- 72.49 | 20.68 |
| 131 Styrene | | | | | CAS #: 100-42-5 | | |
| 21.876 | 21.876 (1.052) | 104 | 5443 | 0.20000 | 0.09940 | 50.00- 150.00 | 100.00(a) |
| 21.876 | 21.876 (1.052) | 78 | 5509 | | | 9.19- 109.19 | 101.21 |
| 134 Cumene | | | | | CAS #: 98-82-8 | | |
| 22.429 | 22.429 (1.078) | 105 | 11699 | 0.20000 | 0.1286 | 50.00- 150.00 | 100.00(a) |
| 22.429 | 22.429 (1.078) | 120 | 2855 | | | 0.00- 75.99 | 24.40 |
| 22.789 | 22.789 (1.096) | 51 | 37259 | | | 9.74- 109.74 | 318.48 |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t112302.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: lmr
Method File: /chem/msdt.i/23Nov2007.b/t14q1121a.m
Misc Info: 200ppbv-0.2ppbv

Calibration Date: 21-NOV-2007
Calibration Time: 17:45
Client Smp ID: Level 1
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 306974 | 184184 | 429764 | 321558 | 4.75 |
| 97 1,4-Difluorobenze | 1370844 | 822506 | 1919182 | 1636328 | 19.37 |
| 126 Chlorobenzene-d5 | 968009 | 580805 | 1355213 | 1105079 | 14.16 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.89 | 13.56 | 14.22 | 13.86 | -0.20 |
| 97 1,4-Difluorobenze | 15.63 | 15.30 | 15.96 | 15.63 | 0.00 |
| 126 Chlorobenzene-d5 | 20.80 | 20.47 | 21.13 | 20.80 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/23Nov2007.b/t112302.d

Date : 23-NOV-2007 08:54

Client ID: Level 1

Sample Info: 0.2ml #1576-92

Column phase: RTx-624

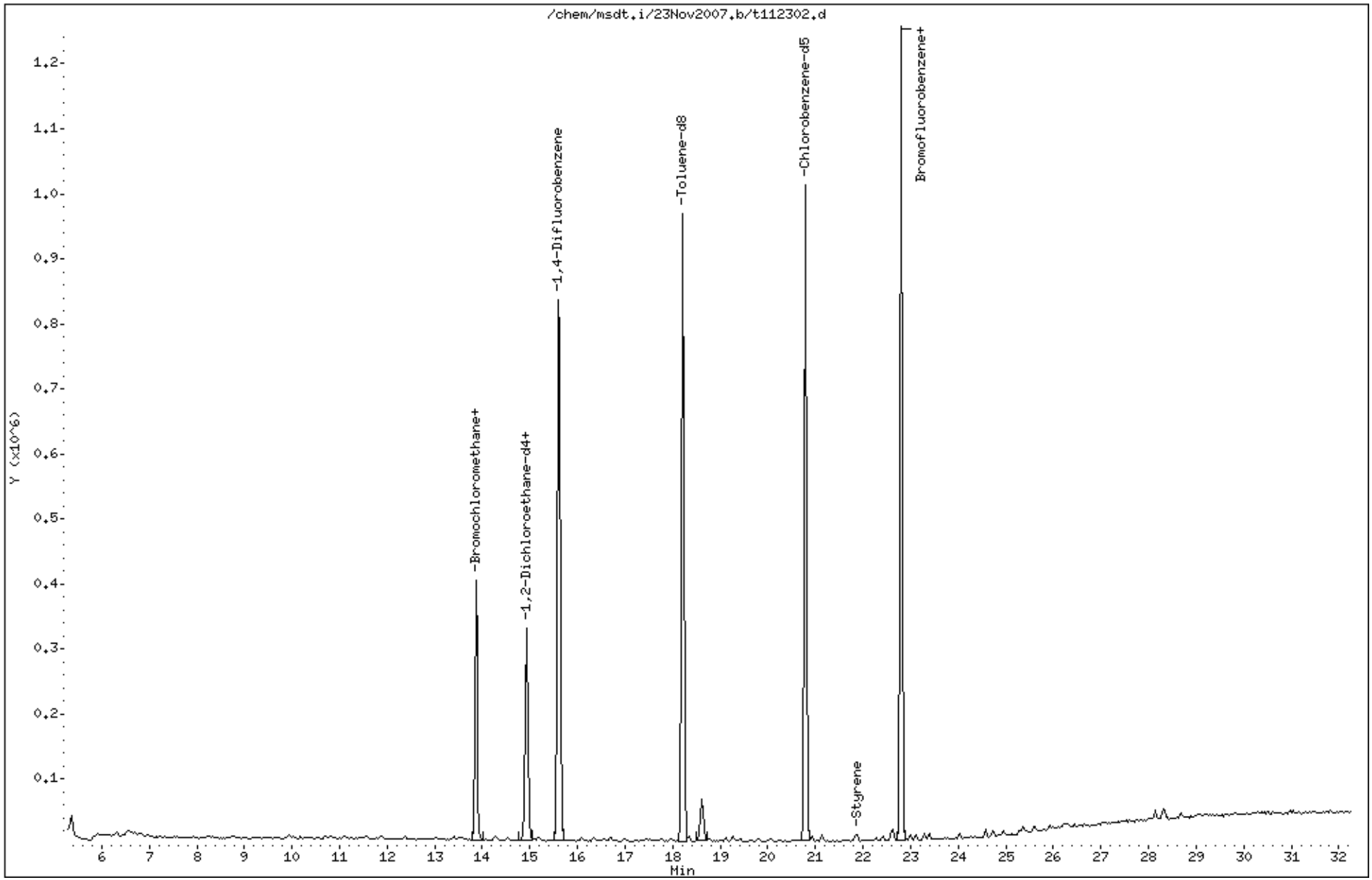
Instrument: msdt.i

Operator: lmr

Column diameter: 0.53







Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Nov2007.b/t112103.d
Lab Smp Id: ical Client Smp ID: Level 2
Inj Date : 21-NOV-2007 14:44
Operator : ea Inst ID: msdt.i
Smp Info : 0.5ml #1576-92
Misc Info : 200ppbv-0.5ppbv
Comment :
Method : /chem/msdt.i/23Nov2007.b/t14q1121a.m
Meth Date : 26-Nov-2007 15:03 cleonard Quant Type: ISTD
Cal Date : 21-NOV-2007 14:44 Cal File: t112103.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04low+ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | AMOUNTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| == | ====== ======== | ==== | ======== | ======= | ======= | ========== | ===== |
| * 81 Bromochloromethane | | | | | | CAS #: 74-97-5 | |
| 13.886 | 13.886 (1.000) | 130 | 255109 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 13.886 | 13.886 (1.000) | 128 | 195113 | | | 26.38- 126.38 | 76.48 |
| 13.886 | 13.886 (1.000) | 49 | 293855 | | | 91.95- 191.95 | 115.19 |
| * 97 1,4-Difluorobenzene | | | | | | CAS #: 540-36-3 | |
| 15.628 | 15.628 (1.000) | 114 | 1179442 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 15.628 | 15.628 (1.000) | 88 | 188742 | | | 0.00- 65.95 | 16.00 |
| * 126 Chlorobenzene-d5 | | | | | | CAS #: 3114-55-4 | |
| 20.798 | 20.798 (1.000) | 117 | 864128 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 20.798 | 20.798 (1.000) | 82 | 482719 | | | 5.79- 105.79 | 55.86 |
| $ 90 1,2-Dichloroethane-d4 | | | | | | CAS #: 17060-07-0 | |
| 14.936 | 14.936 (1.076) | 65 | 408860 | 25.0000 | 24.862 | 50.00- 150.00 | 100.00 |
| 14.936 | 14.936 (1.076) | 67 | 203960 | | | 5.03- 105.03 | 49.89 |
| $ 113 Toluene-d8 | | | | | | CAS #: 2037-26-5 | |
| 18.227 | 18.227 (1.166) | 98 | 1003184 | 25.0000 | 25.127 | 50.00- 150.00 | 100.00 |
| 18.199 | 18.199 (1.165) | 70 | 110544 | | | 0.00- 61.02 | 11.02 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| $ 113 Toluene-d8 (continued) | | | | | | | |
| 18.227 | 18.227 (1.166) | 100 | 696584 | | | 19.45- 119.45 | 69.44 |
| $ 137 Bromofluorobenzene | | | | | CAS #: 460-00-4 | | |
| 22.789 | 22.789 (1.096) | 174 | 547492 | 25.0000 | 25.222 | 50.00- 150.00 | 100.00 |
| 22.789 | 22.789 (1.096) | 95 | 696572 | | | 77.33- 177.33 | 127.23 |
| 22.789 | 22.789 (1.096) | 176 | 524599 | | | 46.56- 146.56 | 95.82 |
| 12 Dichlorodifluoromethane/Fr12 | | | | | CAS #: 75-71-8 | | |
| 5.950 | 5.950 (0.429) | 85 | 17870 | 0.50000 | 0.4770 | 50.00- 150.00 | 100.00(a) |
| 5.950 | 5.950 (0.429) | 87 | 5516 | | | 0.00- 82.07 | 30.87 |
| 16 Freon 114 | | | | | CAS #: 76-14-2 | | |
| 6.310 | 6.310 (0.454) | 135 | 11903 | 0.50000 | 0.4900 | 50.00- 150.00 | 100.00(a) |
| 6.337 | 6.337 (0.456) | 137 | 3146 | | | 0.00- 81.55 | 26.43 |
| 20 Vinyl Chloride | | | | | CAS #: 75-01-4 | | |
| 6.918 | 6.918 (0.498) | 62 | 4804 | 0.50000 | 0.4064 | 50.00- 150.00 | 100.00(a) |
| 6.918 | 6.918 (0.498) | 64 | 3679 | | | 0.00- 93.71 | 76.58 |
| 22 1,3-Butadiene | | | | | CAS #: 106-99-0 | | |
| 6.973 | 6.973 (0.502) | 54 | 4155 | 0.50000 | 0.4317 | 50.00- 150.00 | 100.00(a) |
| 6.973 | 6.973 (0.502) | 39 | 5909 | | | 54.52- 154.52 | 142.21 |
| 25 Bromomethane | | | | | CAS #: 74-83-9 | | |
| 7.913 | 7.913 (0.570) | 94 | 4062 | 0.50000 | 0.3794 | 50.00- 150.00 | 100.00(a) |
| 7.941 | 7.941 (0.572) | 96 | 4986 | | | 50.48- 150.48 | 122.75 |
| 27 Chloroethane | | | | | CAS #: 75-00-3 | | |
| 8.218 | 8.218 (0.592) | 64 | 1954 | 0.50000 | 0.3372 | 50.00- 150.00 | 100.00(a) |
| 0.000 | 1.000 (0.000) | 49 | 0 | | | 0.00- 74.88 | 0.00 |
| 0.000 | 1.000 (0.000) | 66 | 0 | | | 0.00- 80.84 | 0.00 |
| 31 Trichlorofluoromethane/Fr11 | | | | | CAS #: 75-69-4 | | |
| 8.771 | 8.771 (0.632) | 101 | 20969 | 0.50000 | 0.4313 | 50.00- 150.00 | 100.00(a) |
| 8.798 | 8.798 (0.634) | 103 | 14795 | | | 16.26- 116.26 | 70.56 |
| 42 Freon 113 | | | | | CAS #: 76-13-1 | | |
| 9.959 | 9.959 (0.717) | 151 | 11790 | 0.50000 | 0.4025 | 50.00- 150.00 | 100.00(a) |
| 9.959 | 9.959 (0.717) | 153 | 8372 | | | 15.23- 115.23 | 71.01 |
| 9.932 | 9.932 (0.715) | 101 | 17052 | | | 83.14- 183.14 | 144.63 |
| 43 1,1-Dichloroethene | | | | | CAS #: 75-35-4 | | |
| 10.042 | 10.042 (0.723) | 61 | 8381 | 0.50000 | 0.3778 | 50.00- 150.00 | 100.00(a) |
| 10.042 | 10.042 (0.723) | 96 | 6976 | | | 16.79- 116.79 | 83.24 |
| 10.042 | 10.042 (0.723) | 98 | 3490 | | | 0.00- 90.88 | 41.64 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 47 Carbon Disulfide | | | | | | CAS #: 75-15-0 | |
| 10.540 | 10.540 (0.759) | 76 | 14617 | 0.50000 | 0.3848 | 50.00- 150.00 | 100.00(a) |
| 54 Methylene Chloride | | | | | | CAS #: 75-09-2 | |
| 11.121 | 11.121 (0.801) | 49 | 6758 | 0.50000 | 0.5064 | 50.00- 150.00 | 100.00 |
| 11.121 | 11.121 (0.801) | 84 | 6176 | | | 40.01- 140.01 | 91.39 |
| 11.121 | 11.121 (0.801) | 51 | 2199 | | | 0.00- 81.08 | 32.54 |
| 60 MTBE | | | | | | CAS #: 1634-04-4 | |
| 11.453 | 11.453 (0.825) | 73 | 9097 | 0.50000 | 0.4357 | 50.00- 150.00 | 100.00(a) |
| 11.453 | 11.453 (0.825) | 57 | 1688 | | | 0.00- 69.28 | 18.56 |
| 11.425 | 11.425 (0.823) | 41 | 1640 | | | 0.00- 69.31 | 18.03 |
| 61 trans-1,2-Dichloroethene | | | | | | CAS #: 156-60-5 | |
| 11.563 | 11.563 (0.833) | 96 | 7370 | 0.50000 | 0.4063 | 50.00- 150.00 | 100.00(a) |
| 11.563 | 11.563 (0.833) | 61 | 9179 | | | 83.34- 183.34 | 124.55 |
| 11.563 | 11.563 (0.833) | 98 | 3805 | | | 11.49- 111.49 | 51.63 |
| 65 Hexane | | | | | | CAS #: 110-54-3 | |
| 11.895 | 11.895 (0.857) | 57 | 11611 | 0.50000 | 0.3903 | 50.00- 150.00 | 100.00(a) |
| 11.923 | 11.923 (0.859) | 43 | 6045 | | | 6.67- 106.67 | 52.06 |
| 11.895 | 11.895 (0.857) | 86 | 1416 | | | 0.00- 66.53 | 12.20 |
| 70 1,1-Dichloroethane | | | | | | CAS #: 75-34-3 | |
| 12.393 | 12.393 (0.892) | 63 | 11757 | 0.50000 | 0.3814 | 50.00- 150.00 | 100.00(a) |
| 12.393 | 12.393 (0.892) | 65 | 3648 | | | 0.00- 81.73 | 31.03 |
| 75 2-Butanone | | | | | | CAS #: 78-93-3 | |
| 13.416 | 13.416 (0.966) | 72 | 3480 | 0.50000 | 0.3467 | 50.00- 150.00 | 100.00(a) |
| 13.416 | 13.416 (0.966) | 43 | 15183 | | | 362.73- 462.73 | 436.29 |
| 13.388 | 13.388 (0.964) | 57 | 1068 | | | 0.00- 79.31 | 30.69 |
| 76 cis-1,2-Dichloroethene | | | | | | CAS #: 156-59-2 | |
| 13.416 | 13.416 (0.966) | 61 | 8180 | 0.50000 | 0.3702 | 50.00- 150.00 | 100.00(a) |
| 13.443 | 13.443 (0.968) | 96 | 7497 | | | 30.20- 130.20 | 91.65 |
| 13.443 | 13.443 (0.968) | 98 | 4213 | | | 0.03- 100.03 | 51.50 |
| 80 Tetrahydrofuran | | | | | | CAS #: 109-99-9 | |
| 13.858 | 13.858 (0.998) | 42 | 6869 | 0.50000 | 0.4127 | 50.00- 150.00 | 100.00(a) |
| 13.858 | 13.858 (0.998) | 71 | 2948 | | | 0.15- 100.15 | 42.92 |
| 13.886 | 13.886 (1.000) | 72 | 3389 | | | 4.67- 104.67 | 49.34 |
| 82 Chloroform | | | | | | CAS #: 67-66-3 | |
| 13.941 | 13.941 (1.004) | 83 | 13232 | 0.50000 | 0.3850 | 50.00- 150.00 | 100.00(a) |
| 13.941 | 13.941 (1.004) | 85 | 9736 | | | 16.84- 116.84 | 73.58 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 83 1,1,1-Trichloroethane | | | | | CAS #: 71-55-6 | | |
| 14.300 | 14.300 (1.030) | 97 | 14292 | 0.50000 | 0.3927 | 50.00- 150.00 | 100.00(a) |
| 14.300 | 14.300 (1.030) | 99 | 8590 | | | 13.29- 113.29 | 60.10 |
| 85 Cyclohexane | | | | | CAS #: 110-82-7 | | |
| 14.300 | 14.300 (1.030) | 84 | 7624 | 0.50000 | 0.3734 | 50.00- 150.00 | 100.00(a) |
| 14.300 | 14.300 (1.030) | 56 | 7649 | | | 49.76- 149.76 | 100.33 |
| 14.328 | 14.328 (1.032) | 41 | 4605 | | | 3.69- 103.69 | 60.40 |
| 87 Carbon Tetrachloride | | | | | CAS #: 56-23-5 | | |
| 14.549 | 14.549 (1.048) | 119 | 12761 | 0.50000 | 0.3735 | 50.00- 150.00 | 100.00(a) |
| 14.549 | 14.549 (1.048) | 117 | 13106 | | | 54.35- 154.35 | 102.70 |
| 91 Benzene | | | | | CAS #: 71-43-2 | | |
| 14.964 | 14.964 (0.958) | 78 | 20974 | 0.50000 | 0.4168 | 50.00- 150.00 | 100.00(a) |
| 14.964 | 14.964 (0.958) | 77 | 4797 | | | 0.00- 72.49 | 22.87 |
| 89 2,2,4-Trimethylpentane | | | | | CAS #: 540-84-1 | | |
| 14.881 | 14.881 (1.072) | 57 | 30696 | 0.50000 | 0.4234 | 50.00- 150.00 | 100.00(a) |
| 14.881 | 14.881 (1.072) | 56 | 9763 | | | 0.00- 82.34 | 31.81 |
| 14.881 | 14.881 (1.072) | 41 | 9210 | | | 0.00- 76.30 | 30.00 |
| 93 1,2-Dichloroethane | | | | | CAS #: 107-06-2 | | |
| 15.102 | 15.102 (0.966) | 62 | 9676 | 0.50000 | 0.4090 | 50.00- 150.00 | 100.00(a) |
| 15.102 | 15.102 (0.966) | 64 | 3507 | | | 0.00- 84.21 | 36.24 |
| 94 Heptane | | | | | CAS #: 142-82-5 | | |
| 15.185 | 15.185 (0.972) | 71 | 6740 | 0.50000 | 0.3712 | 50.00- 150.00 | 100.00(a) |
| 15.185 | 15.185 (0.972) | 43 | 9197 | | | 86.68- 186.68 | 136.45 |
| 15.185 | 15.185 (0.972) | 57 | 5330 | | | 32.20- 132.20 | 79.08 |
| 101 Trichloroethene | | | | | CAS #: 79-01-6 | | |
| 16.098 | 16.098 (1.030) | 95 | 8404 | 0.50000 | 0.3658 | 50.00- 150.00 | 100.00(a) |
| 16.098 | 16.098 (1.030) | 130 | 8844 | | | 47.47- 147.47 | 105.24 |
| 16.098 | 16.098 (1.030) | 97 | 5852 | | | 14.52- 114.52 | 69.63 |
| 104 1,2-Dichloropropane | | | | | CAS #: 78-87-5 | | |
| 16.568 | 16.568 (1.060) | 63 | 7437 | 0.50000 | 0.4322 | 50.00- 150.00 | 100.00(a) |
| 16.568 | 16.568 (1.060) | 62 | 4207 | | | 17.52- 117.52 | 56.57 |
| 16.568 | 16.568 (1.060) | 41 | 3749 | | | 0.97- 100.97 | 50.41 |
| 107 Bromodichloromethane | | | | | CAS #: 75-27-4 | | |
| 17.010 | 17.010 (1.088) | 83 | 13896 | 0.50000 | 0.3707 | 50.00- 150.00 | 100.00(a) |
| 17.010 | 17.010 (1.088) | 85 | 9035 | | | 14.67- 114.67 | 65.02 |
| 110 cis-1,3-Dichloropropene | | | | | CAS #: 10061-01-5 | | |
| 17.784 | 17.784 (1.138) | 75 | 9302 | 0.50000 | 0.3394 | 50.00- 150.00 | 100.00(a) |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 110 cis-1,3-Dichloropropene (continued) | | | | | | | |
| 17.784 | 17.784 (1.138) | 77 | 3572 | | | 0.00- 83.04 | 38.40 |
| 17.784 | 17.784 (1.138) | 39 | 4830 | | | 0.00- 93.89 | 51.92 |
| 111 4-Methyl-2-pentanone | | | | | CAS #: 108-10-1 | | |
| 17.978 | 17.978 (1.150) | 58 | 5590 | 0.50000 | 0.3259 | 50.00- 150.00 | 100.00(a) |
| 17.978 | 17.978 (1.150) | 43 | 11462 | | | 169.12- 269.12 | 205.04 |
| 17.978 | 17.978 (1.150) | 85 | 2632 | | | 0.58- 100.58 | 47.08 |
| 114 Toluene | | | | | CAS #: 108-88-3 | | |
| 18.337 | 18.337 (1.173) | 91 | 21664 | 0.50000 | 0.3880 | 50.00- 150.00 | 100.00(a) |
| 18.337 | 18.337 (1.173) | 92 | 12835 | | | 11.10- 111.10 | 59.25 |
| 116 trans-1,3-Dichloropropene | | | | | CAS #: 10061-02-6 | | |
| 18.780 | 18.780 (0.903) | 75 | 9303 | 0.50000 | 0.3194 | 50.00- 150.00 | 100.00(a) |
| 18.780 | 18.780 (0.903) | 77 | 3603 | | | 0.00- 83.38 | 38.73 |
| 18.752 | 18.752 (0.902) | 39 | 5121 | | | 0.00- 92.03 | 55.05 |
| 117 1,1,2-Trichloroethane | | | | | CAS #: 79-00-5 | | |
| 19.111 | 19.111 (0.919) | 97 | 6931 | 0.50000 | 0.3397 | 50.00- 150.00 | 100.00(a) |
| 19.111 | 19.111 (0.919) | 99 | 4696 | | | 14.64- 114.64 | 67.75 |
| 19.111 | 19.111 (0.919) | 83 | 6717 | | | 37.04- 137.04 | 96.91 |
| 120 Tetrachloroethene | | | | | CAS #: 127-18-4 | | |
| 19.277 | 19.277 (0.927) | 166 | 9647 | 0.50000 | 0.3536 | 50.00- 150.00 | 100.00(a) |
| 19.277 | 19.277 (0.927) | 129 | 7518 | | | 21.89- 121.89 | 77.93 |
| 19.277 | 19.277 (0.927) | 131 | 7782 | | | 19.59- 119.59 | 80.67 |
| 122 Dibromochloromethane | | | | | CAS #: 124-48-1 | | |
| 19.803 | 19.803 (0.952) | 129 | 11457 | 0.50000 | 0.3374 | 50.00- 150.00 | 100.00(a) |
| 19.803 | 19.803 (0.952) | 127 | 8666 | | | 26.41- 126.41 | 75.64 |
| 123 1,2-Dibromoethane | | | | | CAS #: 106-93-4 | | |
| 20.079 | 20.079 (0.965) | 107 | 11405 | 0.50000 | 0.3477 | 50.00- 150.00 | 100.00(a) |
| 20.079 | 20.079 (0.965) | 109 | 10987 | | | 43.48- 143.48 | 96.33 |
| 127 Chlorobenzene | | | | | CAS #: 108-90-7 | | |
| 20.853 | 20.853 (1.003) | 112 | 18189 | 0.50000 | 0.3976 | 50.00- 150.00 | 100.00(a) |
| 20.853 | 20.853 (1.003) | 114 | 6753 | | | 0.00- 83.18 | 37.13 |
| 20.853 | 20.853 (1.003) | 77 | 18955 | | | 20.20- 120.20 | 104.21 |
| 128 Ethyl Benzene | | | | | CAS #: 100-41-4 | | |
| 20.936 | 20.936 (1.007) | 106 | 7779 | 0.50000 | 0.3287 | 50.00- 150.00 | 100.00(a) |
| 20.936 | 20.936 (1.007) | 91 | 26854 | | | 265.06- 365.06 | 345.21 |
| 129 m,p-Xylene | | | | | CAS #: 108-38-3 | | |
| 21.130 | 21.130 (1.016) | 106 | 9931 | 0.50000 | 0.3378 | 50.00- 150.00 | 100.00(a) |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 129 m,p-Xylene (continued) | | | | | | | |
| 21.130 | 21.130 (1.016) | 91 | 19834 | | | 147.41- 247.41 | 199.72 |
| 130 o-Xylene | | | | | CAS #: 95-47-6 | | |
| 21.849 | 21.849 (1.051) | 106 | 9378 | 0.50000 | 0.3462 | 50.00- 150.00 | 100.00(a) |
| 21.849 | 21.849 (1.051) | 91 | 18907 | | | 155.82- 255.82 | 201.61 |
| 131 Styrene | | | | | CAS #: 100-42-5 | | |
| 21.876 | 21.876 (1.052) | 104 | 14367 | 0.50000 | 0.3355 | 50.00- 150.00 | 100.00(a) |
| 21.876 | 21.876 (1.052) | 78 | 7723 | | | 9.19- 109.19 | 53.76 |
| 133 Bromoform | | | | | CAS #: 75-25-2 | | |
| 22.291 | 22.291 (1.072) | 173 | 11120 | 0.50000 | 0.3461 | 50.00- 150.00 | 100.00(a) |
| 22.291 | 22.291 (1.072) | 171 | 5648 | | | 0.74- 100.74 | 50.79 |
| 134 Cumene | | | | | CAS #: 98-82-8 | | |
| 22.429 | 22.429 (1.078) | 105 | 26326 | 0.50000 | 0.3701 | 50.00- 150.00 | 100.00(a) |
| 22.429 | 22.429 (1.078) | 120 | 7002 | | | 0.00- 75.99 | 26.60 |
| 22.429 | 22.429 (1.078) | 51 | 2246 | | | 9.74- 109.74 | 8.53 |
| 140 1,1,2,2-Tetrachloroethane | | | | | CAS #: 79-34-5 | | |
| 23.010 | 23.010 (1.106) | 83 | 15194 | 0.50000 | 0.3524 | 50.00- 150.00 | 100.00(a) |
| 23.010 | 23.010 (1.106) | 85 | 10415 | | | 14.88- 114.88 | 68.55 |
| 142 Propylbenzene | | | | | CAS #: 103-65-1 | | |
| 23.121 | 23.121 (1.112) | 91 | 32934 | 0.50000 | 0.3513 | 50.00- 150.00 | 100.00(a) |
| 23.121 | 23.121 (1.112) | 120 | 7508 | | | 0.00- 72.67 | 22.80 |
| 23.121 | 23.121 (1.112) | 105 | 1269 | | | 0.00- 53.69 | 3.85 |
| 145 4-Ethyltoluene | | | | | CAS #: 622-96-8 | | |
| 23.287 | 23.287 (1.120) | 105 | 27282 | 0.50000 | 0.3422 | 50.00- 150.00 | 100.00(a) |
| 23.287 | 23.287 (1.120) | 120 | 8636 | | | 0.00- 80.49 | 31.65 |
| 147 1,3,5-Trimethylbenzene | | | | | CAS #: 108-67-8 | | |
| 23.397 | 23.397 (1.125) | 105 | 21739 | 0.50000 | 0.3293 | 50.00- 150.00 | 100.00(a) |
| 23.397 | 23.397 (1.125) | 120 | 13029 | | | 1.60- 101.60 | 59.93 |
| 150 1,2,4-Trimethylbenzene | | | | | CAS #: 95-63-6 | | |
| 24.033 | 24.033 (1.156) | 105 | 20908 | 0.50000 | 0.3320 | 50.00- 150.00 | 100.00(a) |
| 24.033 | 24.033 (1.156) | 120 | 9676 | | | 0.00- 96.88 | 46.28 |
| 155 1,3-Dichlorobenzene | | | | | CAS #: 541-73-1 | | |
| 24.586 | 24.586 (1.182) | 146 | 17343 | 0.50000 | 0.3919 | 50.00- 150.00 | 100.00(a) |
| 24.586 | 24.586 (1.182) | 148 | 11301 | | | 14.03- 114.03 | 65.16 |
| 24.586 | 24.586 (1.182) | 111 | 6914 | | | 0.00- 91.33 | 39.87 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 156 1,4-Dichlorobenzene | | | | | CAS #: 106-46-7 | | |
| 24.752 | 24.752 (1.190) | 146 | 17145 | 0.50000 | 0.3763 | 50.00- 150.00 | 100.00(a) |
| 24.752 | 24.752 (1.190) | 148 | 12180 | | | 15.04- 115.04 | 71.04 |
| 24.724 | 24.724 (1.189) | 111 | 7019 | | | 0.00- 89.92 | 40.94 |
| 159 alpha-Chlorotoluene | | | | | CAS #: 100-44-7 | | |
| 24.945 | 24.945 (1.199) | 91 | 20855 | 0.50000 | 0.3237 | 50.00- 150.00 | 100.00(a) |
| 24.945 | 24.945 (1.199) | 126 | 4631 | | | 0.00- 70.12 | 22.21 |
| 161 1,2-Dichlorobenzene | | | | | CAS #: 95-50-1 | | |
| 25.360 | 25.360 (1.219) | 146 | 16404 | 0.50000 | 0.3742 | 50.00- 150.00 | 100.00(a) |
| 25.360 | 25.360 (1.219) | 148 | 11223 | | | 14.55- 114.55 | 68.42 |
| 25.360 | 25.360 (1.219) | 111 | 7370 | | | 0.00- 93.18 | 44.93 |
| 102 Methyl Cyclohexane | | | | | CAS #: 108-87-2 | | |
| 16.346 | 16.346 (1.177) | 83 | 10463 | 0.50000 | 0.3958 | 50.00- 150.00 | 100.00(a) |
| 16.374 | 16.374 (1.179) | 98 | 3342 | | | 0.00- 92.45 | 31.94 |
| 16.346 | 16.346 (1.177) | 55 | 7060 | | | 18.10- 118.10 | 67.48 |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t112103.d
Lab Smp Id: ical
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msdt.i/23Nov2007.b/t14q1121a.m
Misc Info: 200ppbv-0.5ppbv

Calibration Date: 23-NOV-2007
Calibration Time: 09:32
Client Smp ID: Level 2
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 364898 | 218939 | 510857 | 255109 | -30.09 |
| 97 1,4-Difluorobenze | 1716816 | 1030090 | 2403542 | 1179442 | -31.30 |
| 126 Chlorobenzene-d5 | 1199182 | 719509 | 1678855 | 864128 | -27.94 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.89 | 13.56 | 14.22 | 13.89 | 0.00 |
| 97 1,4-Difluorobenze | 15.63 | 15.30 | 15.96 | 15.63 | 0.00 |
| 126 Chlorobenzene-d5 | 20.80 | 20.47 | 21.13 | 20.80 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

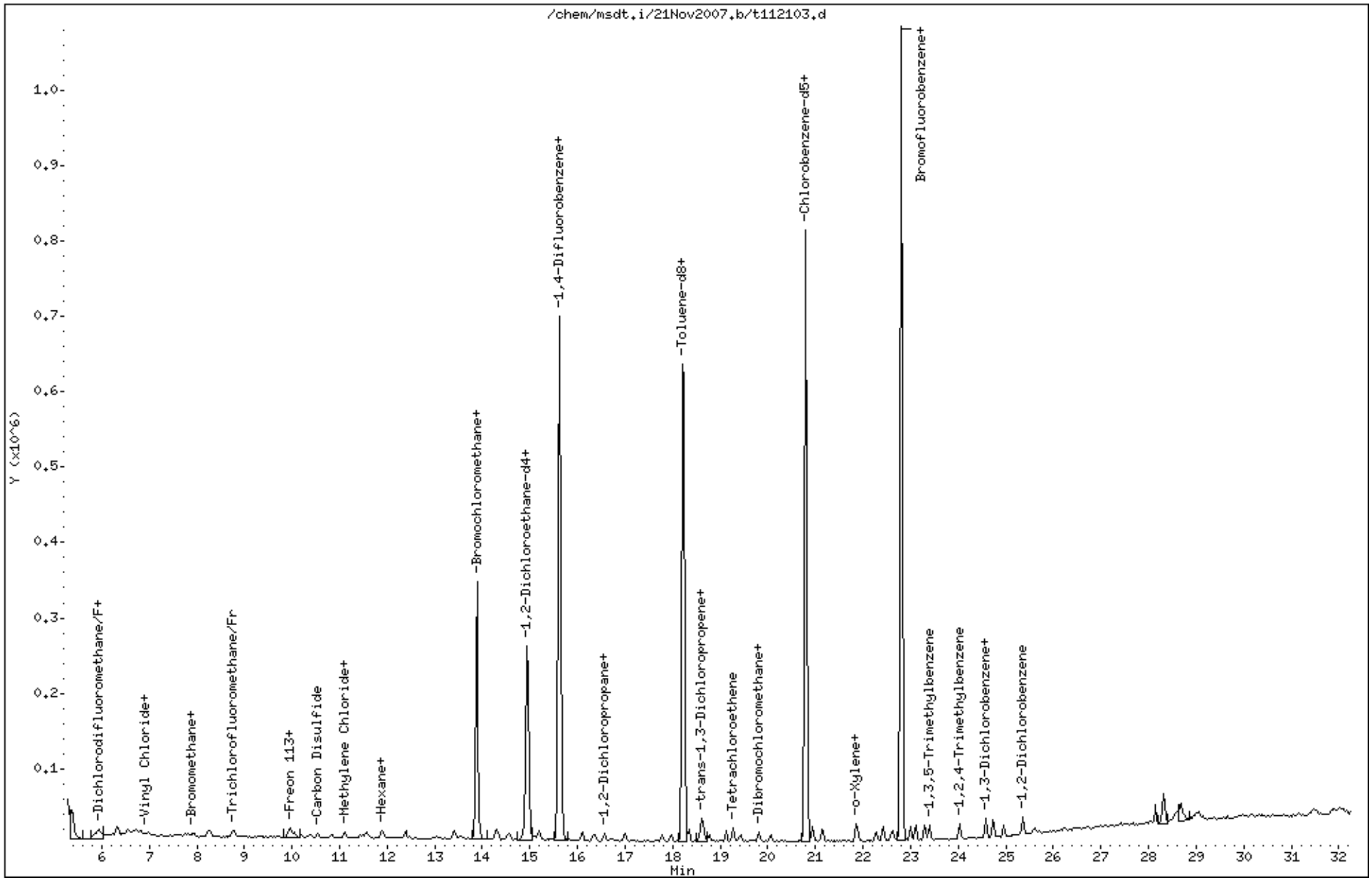
0094

Data File: /chem/msdt.i/21Nov2007.b/t112103.d
Date : 21-NOV-2007 14:44
Client ID: Level 2
Sample Info: 0.5ml #1576-92

Instrument: msdt.i

Operator: ea

Column phase: RTx-624
Column diameter: 0.53



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/26Nov2007.b/t112602.d
Lab Smp Id: ical level 3
Inj Date : 26-NOV-2007 09:59
Operator : EA Inst ID: msdt.i
Smp Info : 2.0ml #1487-402
Misc Info : 200ppbv-2.0ppbv
Comment :
Method : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Meth Date : 27-Nov-2007 13:59 lover Quant Type: ISTD
Cal Date : 26-NOV-2007 09:59 Cal File: t112602.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22b.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | AMOUNTS | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | | RATIO |
| == | ====== ======== | ==== | ======== | ======= | ======= | ========== | | ===== |
| * 81 Bromochloromethane | | | | | CAS #: 74-97-5 | | | |
| 13.865 | 13.865 (1.000) | 130 | 307636 | 25.0000 | | 50.00- 150.00 | | 100.00 |
| 13.865 | 13.865 (1.000) | 128 | 239995 | | | 26.64- 126.64 | | 78.01 |
| 13.865 | 13.865 (1.000) | 49 | 316968 | | | 73.62- 173.62 | | 103.03 |
| * 97 1,4-Difluorobenzene | | | | | CAS #: 540-36-3 | | | |
| 15.607 | 15.607 (1.000) | 114 | 1418212 | 25.0000 | | 50.00- 150.00 | | 100.00 |
| 15.607 | 15.607 (1.000) | 88 | 226918 | | | 0.00- 65.84 | | 16.00 |
| * 126 Chlorobenzene-d5 | | | | | CAS #: 3114-55-4 | | | |
| 20.805 | 20.805 (1.000) | 117 | 1043769 | 25.0000 | | 50.00- 150.00 | | 100.00 |
| 20.805 | 20.805 (1.000) | 82 | 573029 | | | 4.93- 104.93 | | 54.90 |
| 5 Freon 143a | | | | | CAS #: 420-46-2 | | | |
| 5.535 | 5.535 (0.399) | 69 | 38062 | 2.00000 | 1.924 | 50.00- 150.00 | | 100.00(a) |
| 6 Freon142b | | | | | CAS #: 75-68-3 | | | |
| 6.436 | 6.436 (0.464) | 65 | 54591 | 2.00000 | 1.857 | 50.00- 150.00 | | 100.00(a) |
| 6.436 | 6.436 (0.464) | 45 | 10818 | | | 0.00- 69.76 | | 19.82 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 9 Freon 13 | | | | | CAS #: 75-72-9 | | |
| 5.394 | 5.394 (0.389) | 69 | 56480 | 2.00000 | 2.105 | 50.00- 150.00 | 100.00 |
| 5.394 | 5.394 (0.389) | 85 | 18780 | | | 0.00- 82.40 | 33.25 |
| 5.394 | 5.394 (0.389) | 87 | 5959 | | | 0.00- 60.56 | 10.55 |
| 13 Freon 134a | | | | | CAS #: 811-97-2 | | |
| 5.675 | 5.675 (0.409) | 83 | 26857 | 2.00000 | 1.929 | 50.00- 150.00 | 100.00(a) |
| 5.675 | 5.675 (0.409) | 69 | 20838 | | | 31.14- 131.14 | 77.59 |
| 15 Freon 152a | | | | | CAS #: 75-37-6 | | |
| 5.844 | 5.844 (0.422) | 65 | 13887 | 2.00000 | 1.927 | 50.00- 150.00 | 100.00(a) |
| 5.844 | 5.844 (0.422) | 51 | 22834 | | | 117.84- 217.84 | 164.43 |
| 5.844 | 5.844 (0.422) | 47 | 4784 | | | 0.00- 88.39 | 34.45 |
| 17 Freon 22 | | | | | CAS #: 75-45-6 | | |
| 6.013 | 6.013 (0.434) | 67 | 7015 | 2.00000 | 1.907 | 50.00- 150.00 | 100.00(a) |
| 5.985 | 5.985 (0.432) | 51 | 32761 | | | 439.12- 539.12 | 467.01 |
| 6.436 | 6.436 (0.464) | 85 | 6962 | | | 0.00- 91.16 | 99.24 |
| 26 Methanol | | | | | CAS #: 67-56-1 | | |
| 7.534 | 7.534 (0.543) | 31 | 112331 | 12.0000 | 35.524 | 50.00- 150.00 | 100.00(a) |
| 7.562 | 7.562 (0.545) | 32 | 146475 | | | 73.38- 173.38 | 130.40 |
| 34 Dichlorofluoromethane/Fr21 | | | | | CAS #: 75-43-4 | | |
| 8.745 | 8.745 (0.631) | 67 | 47605 | 2.00000 | 1.932 | 50.00- 150.00 | 100.00(a) |
| 8.745 | 8.745 (0.631) | 69 | 14457 | | | 0.00- 82.06 | 30.37 |
| 8.717 | 8.717 (0.629) | 35 | 2340 | | | 0.00- 54.92 | 4.92 |
| 40 Freon123a | | | | | CAS #: 354-23-4 | | |
| 9.552 | 9.552 (0.689) | 67 | 47809 | 2.00000 | 1.982 | 50.00- 150.00 | 100.00(a) |
| 9.552 | 9.552 (0.689) | 117 | 39570 | | | 30.97- 130.97 | 82.77 |
| 41 Freon123 | | | | | CAS #: 306-83-2 | | |
| 9.718 | 9.718 (0.701) | 83 | 67791 | 2.00000 | 2.029 | 50.00- 150.00 | 100.00 |
| 9.718 | 9.718 (0.701) | 133 | 13633 | | | 0.00- 70.26 | 20.11 |
| 9.718 | 9.718 (0.701) | 85 | 46138 | | | 17.95- 117.95 | 68.06 |
| 57 tert-Butyl-Alcohol | | | | | CAS #: 75-65-0 | | |
| 11.156 | 11.156 (0.805) | 59 | 46362 | 2.00000 | 2.845 | 50.00- 150.00 | 100.00 |
| 11.156 | 11.156 (0.805) | 41 | 13386 | | | 0.00- 78.87 | 28.87 |
| 11.156 | 11.156 (0.805) | 57 | 5264 | | | 0.00- 61.35 | 11.35 |
| 68 Isopropyl ether | | | | | CAS #: 108-20-3 | | |
| 12.262 | 12.262 (0.884) | 45 | 94524 | 2.00000 | 1.871 | 50.00- 150.00 | 100.00(a) |
| 12.289 | 12.289 (0.886) | 87 | 33151 | | | 0.00- 84.51 | 35.07 |
| 12.289 | 12.289 (0.886) | 59 | 12084 | | | 0.00- 62.64 | 12.78 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 71 1-Propanol | | | | | CAS #: 71-23-8 | | |
| 12.400 | 12.400 (0.894) | 42 | 5817 | 2.00000 | 2.188 | 50.00- 150.00 | 100.00(H) |
| 12.400 | 12.400 (0.894) | 59 | 5701 | | | 75.45- 175.45 | 98.01 |
| 12.400 | 12.400 (0.894) | 41 | 4753 | | | 158.05- 258.05 | 81.71 |
| 73 t-Butylethyl Ether | | | | | CAS #: 637-92-3 | | |
| 12.925 | 12.925 (0.932) | 59 | 51638 | 2.00000 | 2.103 | 50.00- 150.00 | 100.00 |
| 12.925 | 12.925 (0.932) | 87 | 23194 | | | 0.00- 95.70 | 44.92 |
| 12.898 | 12.898 (0.930) | 41 | 11702 | | | 0.00- 69.82 | 22.66 |
| 77 Ethyl Acetate | | | | | CAS #: 141-78-6 | | |
| 13.368 | 13.368 (0.964) | 45 | 9754 | 2.00000 | 1.832 | 50.00- 150.00 | 100.00(a) |
| 13.368 | 13.368 (0.964) | 61 | 11407 | | | 63.70- 163.70 | 116.95 |
| 13.368 | 13.368 (0.964) | 43 | 66817 | | | 641.02- 741.02 | 685.02 |
| 99 Isobutanol | | | | | CAS #: 78-83-1 | | |
| 14.584 | 14.584 (0.934) | 59 | 514 | 2.00000 | 1.462 | 50.00- 150.00 | 100.00(aM) |
| 14.612 | 14.612 (0.936) | 41 | 0 | | | 2254.31-2354.31 | 0.00 |
| 14.612 | 14.612 (0.936) | 43 | 0 | | | 2684.91-2784.91 | 0.00 |
| 92 tert-amyl-Methyl Ether | | | | | CAS #: 994-05-8 | | |
| 14.999 | 14.999 (1.082) | 73 | 66826 | 2.00000 | 2.300 | 50.00- 150.00 | 100.00 |
| 14.999 | 14.999 (1.082) | 87 | 17103 | | | 0.00- 75.09 | 25.59 |
| 14.999 | 14.999 (1.082) | 55 | 17232 | | | 0.00- 74.77 | 25.79 |
| 96 2-Heptanone | | | | | CAS #: 110-43-0 | | |
| 21.967 | 21.967 (1.584) | 58 | 25463 | 2.00000 | 1.246 | 50.00- 150.00 | 100.00(a) |
| 21.967 | 21.967 (1.584) | 43 | 35182 | | | 85.60- 185.60 | 138.17 |
| 98 1-Butanol | | | | | CAS #: 71-36-3 | | |
| 15.773 | 15.773 (1.011) | 56 | 11442 | 2.00000 | 1.583 | 50.00- 150.00 | 100.00(a) |
| 15.801 | 15.801 (1.012) | 41 | 7906 | | | 17.89- 117.89 | 69.10 |
| 15.801 | 15.801 (1.012) | 43 | 5616 | | | 0.00- 99.85 | 49.08 |
| 119 Butyl Acetate | | | | | CAS #: 123-86-4 | | |
| 19.533 | 19.533 (1.252) | 56 | 21766 | 2.00000 | 1.483 | 50.00- 150.00 | 100.00(a) |
| 19.533 | 19.533 (1.252) | 73 | 10174 | | | 0.00- 94.51 | 46.74 |
| 19.533 | 19.533 (1.252) | 43 | 44854 | | | 163.30- 263.30 | 206.07 |
| 135 Cyclohexanone | | | | | CAS #: 108-94-1 | | |
| 22.741 | 22.741 (1.093) | 55 | 21439 | 2.00000 | 1.540 | 50.00- 150.00 | 100.00(a) |
| 22.741 | 22.741 (1.093) | 98 | 12520 | | | 6.71- 106.71 | 58.40 |
| 22.741 | 22.741 (1.093) | 42 | 13067 | | | 11.68- 111.68 | 60.95 |
| 146 Diisobutyl Ketone | | | | | CAS #: 108-83-8 | | |
| 23.570 | 23.570 (1.133) | 57 | 47845 | 2.00000 | 1.393 | 50.00- 150.00 | 100.00(a) |

| | | | | AMOUNTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| == | ====== ======== | ==== | ======== | ======= | ======= | ========== | ===== |
| 146 Diisobutyl Ketone (continued) | | | | | | | |
| 23.570 | 23.570 (1.133) | 85 | 51453 | | | 53.67- 153.67 | 107.54 |
| 0.000 | 1.000 (0.000) | 0 | 0 | | | 0.00- 50.00 | 0.00 |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t112602.d
Lab Smp Id: ical level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: EA
Method File: /chem/msdt.i/26Nov2007.b/t14q1121b.m
Misc Info: 200ppbv-2.0ppbv

Calibration Date: 26-NOV-2007
Calibration Time: 10:49
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 301939 | 181163 | 422715 | 307636 | 1.89 |
| 97 1,4-Difluorobenze | 1427711 | 856627 | 1998795 | 1418212 | -0.67 |
| 126 Chlorobenzene-d5 | 1047767 | 628660 | 1466874 | 1043769 | -0.38 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.87 | 13.54 | 14.20 | 13.87 | 0.00 |
| 97 1,4-Difluorobenze | 15.61 | 15.28 | 15.94 | 15.61 | 0.00 |
| 126 Chlorobenzene-d5 | 20.80 | 20.48 | 21.13 | 20.81 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

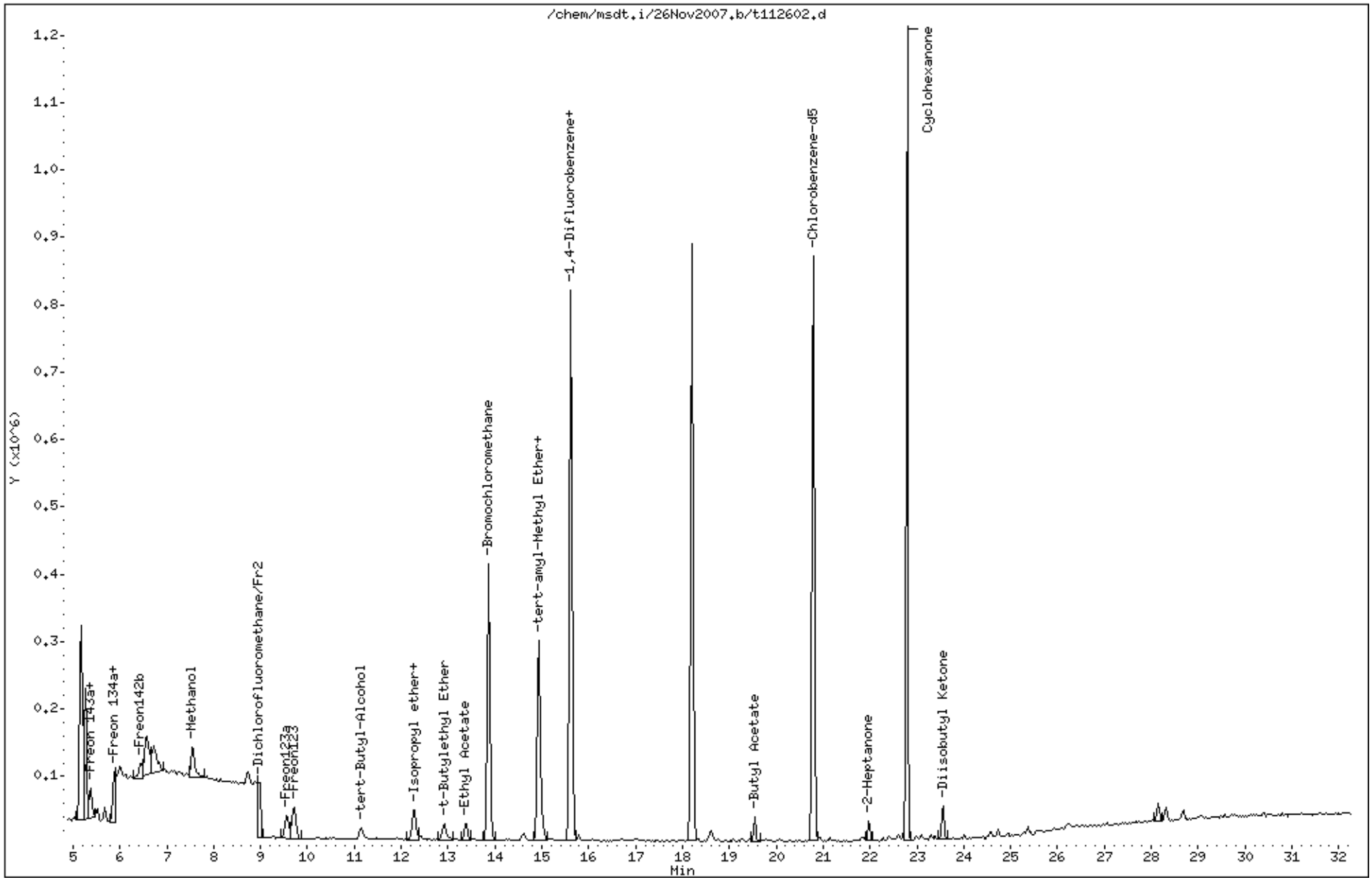
0100

Data File: /chem/msdt.i/26Nov2007.b/t112602.d
Date : 26-NOV-2007 09:59
Client ID:
Sample Info: 2.0ml #1487-402

Instrument: msdt.i

Operator: EA

Column phase: RTx-624
Column diameter: 0.53



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Nov2007.b/t112104.d
Lab Smp Id: ical Client Smp ID: Level 3
Inj Date : 21-NOV-2007 15:48
Operator : dm Inst ID: msdt.i
Smp Info : 2.0ml #1576-92
Misc Info : 200ppbv-2.0ppbv
Comment :
Method : /chem/msdt.i/23Nov2007.b/t14q1121a.m
Meth Date : 26-Nov-2007 15:03 cleonard Quant Type: ISTD
Cal Date : 21-NOV-2007 15:48 Cal File: t112104.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | AMOUNTS | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | | RATIO |
| == | ====== ======== | ==== | ======== | ======= | ======= | ========== | | ===== |
| * 81 Bromochloromethane | | | | | CAS #: 74-97-5 | | | |
| 13.886 | 13.886 (1.000) | 130 | 270233 | 25.0000 | | 50.00- 150.00 | | 100.00 |
| 13.886 | 13.886 (1.000) | 128 | 205254 | | | 26.38- 126.38 | | 75.95 |
| 13.858 | 13.858 (1.000) | 49 | 318117 | | | 91.95- 191.95 | | 117.72 |
| * 97 1,4-Difluorobenzene | | | | | CAS #: 540-36-3 | | | |
| 15.628 | 15.628 (1.000) | 114 | 1278371 | 25.0000 | | 50.00- 150.00 | | 100.00 |
| 15.628 | 15.628 (1.000) | 88 | 206294 | | | 0.00- 65.95 | | 16.14 |
| * 126 Chlorobenzene-d5 | | | | | CAS #: 3114-55-4 | | | |
| 20.798 | 20.798 (1.000) | 117 | 905933 | 25.0000 | | 50.00- 150.00 | | 100.00 |
| 20.798 | 20.798 (1.000) | 82 | 513430 | | | 5.79- 105.79 | | 56.67 |
| $ 90 1,2-Dichloroethane-d4 | | | | | CAS #: 17060-07-0 | | | |
| 14.936 | 14.936 (1.076) | 65 | 427628 | 25.0000 | 24.548 | 50.00- 150.00 | | 100.00 |
| 14.936 | 14.936 (1.076) | 67 | 218146 | | | 5.03- 105.03 | | 51.01 |
| $ 113 Toluene-d8 | | | | | CAS #: 2037-26-5 | | | |
| 18.199 | 18.199 (1.165) | 98 | 1077996 | 25.0000 | 24.911 | 50.00- 150.00 | | 100.00 |
| 18.199 | 18.199 (1.165) | 70 | 121007 | | | 0.00- 61.02 | | 11.23 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| $ 113 Toluene-d8 (continued) | | | | | | | |
| 18.199 | 18.199 (1.165) | 100 | 750536 | | | 19.45- 119.45 | 69.62 |
| $ 137 Bromofluorobenzene | | | | | CAS #: 460-00-4 | | |
| 22.789 | 22.789 (1.096) | 174 | 566238 | 25.0000 | 24.882 | 50.00- 150.00 | 100.00 |
| 22.789 | 22.789 (1.096) | 95 | 725935 | | | 77.33- 177.33 | 128.20 |
| 22.789 | 22.789 (1.096) | 176 | 542502 | | | 46.56- 146.56 | 95.81 |
| 11 Propylene | | | | | CAS #: 115-07-1 | | |
| 5.812 | 5.812 (0.419) | 41 | 15686 | 2.00000 | 2.178 | 50.00- 150.00 | 100.00 |
| 5.812 | 5.812 (0.419) | 42 | 9468 | | | 17.24- 117.24 | 60.36 |
| 5.812 | 5.812 (0.419) | 39 | 11428 | | | 27.83- 127.83 | 72.85 |
| 12 Dichlorodifluoromethane/Fr12 | | | | | CAS #: 75-71-8 | | |
| 5.923 | 5.923 (0.427) | 85 | 77841 | 2.00000 | 1.962 | 50.00- 150.00 | 100.00 |
| 5.923 | 5.923 (0.427) | 87 | 26374 | | | 0.00- 82.07 | 33.88 |
| 16 Freon 114 | | | | | CAS #: 76-14-2 | | |
| 6.310 | 6.310 (0.454) | 135 | 46453 | 2.00000 | 1.805 | 50.00- 150.00 | 100.00 |
| 6.310 | 6.310 (0.454) | 137 | 16721 | | | 0.00- 81.55 | 36.00 |
| 18 Chloromethane | | | | | CAS #: 74-87-3 | | |
| 6.531 | 6.531 (0.470) | 50 | 19542 | 2.00000 | 2.134 | 50.00- 150.00 | 100.00 |
| 6.559 | 6.559 (0.472) | 52 | 6940 | | | 0.00- 84.03 | 35.51 |
| 20 Vinyl Chloride | | | | | CAS #: 75-01-4 | | |
| 6.890 | 6.890 (0.496) | 62 | 24009 | 2.00000 | 1.917 | 50.00- 150.00 | 100.00 |
| 6.890 | 6.890 (0.496) | 64 | 10524 | | | 0.00- 93.71 | 43.83 |
| 22 1,3-Butadiene | | | | | CAS #: 106-99-0 | | |
| 6.973 | 6.973 (0.502) | 54 | 19289 | 2.00000 | 1.892 | 50.00- 150.00 | 100.00 |
| 6.973 | 6.973 (0.502) | 39 | 19305 | | | 54.52- 154.52 | 100.08 |
| 25 Bromomethane | | | | | CAS #: 74-83-9 | | |
| 7.941 | 7.941 (0.572) | 94 | 18972 | 2.00000 | 1.673 | 50.00- 150.00 | 100.00 |
| 7.913 | 7.913 (0.570) | 96 | 19402 | | | 50.48- 150.48 | 102.27 |
| 27 Chloroethane | | | | | CAS #: 75-00-3 | | |
| 8.217 | 8.217 (0.592) | 64 | 11207 | 2.00000 | 1.825 | 50.00- 150.00 | 100.00 |
| 8.217 | 8.217 (0.592) | 49 | 2669 | | | 0.00- 74.88 | 23.82 |
| 8.217 | 8.217 (0.592) | 66 | 2722 | | | 0.00- 80.84 | 24.29 |
| 31 Trichlorofluoromethane/Fr11 | | | | | CAS #: 75-69-4 | | |
| 8.770 | 8.770 (0.632) | 101 | 99276 | 2.00000 | 1.928 | 50.00- 150.00 | 100.00 |
| 8.770 | 8.770 (0.632) | 103 | 66003 | | | 16.26- 116.26 | 66.48 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 38 Ethanol | | | | | CAS #: 64-17-5 | | |
| 9.241 | 9.241 (0.665) | 45 | 11830 | 2.00000 | 2.016 | 50.00- 150.00 | 100.00 |
| 9.241 | 9.241 (0.665) | 43 | 2785 | | | 0.00- 72.67 | 23.54 |
| 9.241 | 9.241 (0.665) | 46 | 4115 | | | 0.00- 86.29 | 34.78 |
| 42 Freon 113 | | | | | CAS #: 76-13-1 | | |
| 9.932 | 9.932 (0.715) | 151 | 61163 | 2.00000 | 1.971 | 50.00- 150.00 | 100.00 |
| 9.959 | 9.959 (0.717) | 153 | 38501 | | | 15.23- 115.23 | 62.95 |
| 9.932 | 9.932 (0.715) | 101 | 82023 | | | 83.14- 183.14 | 134.11 |
| 43 1,1-Dichloroethene | | | | | CAS #: 75-35-4 | | |
| 10.042 | 10.042 (0.723) | 61 | 45448 | 2.00000 | 1.934 | 50.00- 150.00 | 100.00 |
| 10.042 | 10.042 (0.723) | 96 | 28699 | | | 16.79- 116.79 | 63.15 |
| 10.042 | 10.042 (0.723) | 98 | 18735 | | | 0.00- 90.88 | 41.22 |
| 45 Acetone | | | | | CAS #: 67-64-1 | | |
| 10.181 | 10.181 (0.733) | 58 | 17830 | 2.00000 | 2.080 | 50.00- 150.00 | 100.00 |
| 10.181 | 10.181 (0.733) | 43 | 54803 | | | 259.05- 359.05 | 307.36 |
| 46 2-Propanol | | | | | CAS #: 67-63-0 | | |
| 10.374 | 10.374 (0.747) | 45 | 78267 | 2.00000 | 1.816 | 50.00- 150.00 | 100.00(a) |
| 10.374 | 10.374 (0.747) | 43 | 23025 | | | 0.00- 73.80 | 29.42 |
| 10.374 | 10.374 (0.747) | 59 | 2768 | | | 0.00- 54.08 | 3.54 |
| 47 Carbon Disulfide | | | | | CAS #: 75-15-0 | | |
| 10.540 | 10.540 (0.759) | 76 | 74020 | 2.00000 | 1.840 | 50.00- 150.00 | 100.00 |
| 51 3-Chloropropene | | | | | CAS #: 107-05-1 | | |
| 10.817 | 10.817 (0.779) | 76 | 13051 | 2.00000 | 1.565 | 50.00- 150.00 | 100.00 |
| 10.817 | 10.817 (0.779) | 41 | 34903 | | | 185.00- 285.00 | 267.44 |
| 54 Methylene Chloride | | | | | CAS #: 75-09-2 | | |
| 11.093 | 11.093 (0.799) | 49 | 28458 | 2.00000 | 2.013 | 50.00- 150.00 | 100.00 |
| 11.121 | 11.121 (0.801) | 84 | 23660 | | | 40.01- 140.01 | 83.14 |
| 11.093 | 11.093 (0.799) | 51 | 8308 | | | 0.00- 81.08 | 29.19 |
| 60 MTBE | | | | | CAS #: 1634-04-4 | | |
| 11.452 | 11.452 (0.825) | 73 | 39385 | 2.00000 | 1.781 | 50.00- 150.00 | 100.00 |
| 11.452 | 11.452 (0.825) | 57 | 7932 | | | 0.00- 69.28 | 20.14 |
| 11.425 | 11.425 (0.823) | 41 | 8689 | | | 0.00- 69.31 | 22.06 |
| 61 trans-1,2-Dichloroethene | | | | | CAS #: 156-60-5 | | |
| 11.535 | 11.535 (0.831) | 96 | 35623 | 2.00000 | 1.854 | 50.00- 150.00 | 100.00 |
| 11.535 | 11.535 (0.831) | 61 | 47960 | | | 83.34- 183.34 | 134.63 |
| 11.535 | 11.535 (0.831) | 98 | 23301 | | | 11.49- 111.49 | 65.41 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 65 Hexane | | | | | CAS #: 110-54-3 | | |
| 11.895 | 11.895 (0.857) | 57 | 57837 | 2.00000 | 1.835 | 50.00- 150.00 | 100.00 |
| 11.895 | 11.895 (0.857) | 43 | 33997 | | | 6.67- 106.67 | 58.78 |
| 11.895 | 11.895 (0.857) | 86 | 9821 | | | 0.00- 66.53 | 16.98 |
| 69 Vinyl Acetate | | | | | CAS #: 108-05-4 | | |
| 12.365 | 12.365 (0.890) | 86 | 7962 | 2.00000 | 1.544 | 50.00- 150.00 | 100.00(a) |
| 12.365 | 12.365 (0.890) | 43 | 79015 | | | 869.92- 969.92 | 992.40 |
| 70 1,1-Dichloroethane | | | | | CAS #: 75-34-3 | | |
| 12.365 | 12.365 (0.890) | 63 | 60326 | 2.00000 | 1.848 | 50.00- 150.00 | 100.00 |
| 12.365 | 12.365 (0.890) | 65 | 18985 | | | 0.00- 81.73 | 31.47 |
| 75 2-Butanone | | | | | CAS #: 78-93-3 | | |
| 13.388 | 13.388 (0.964) | 72 | 19285 | 2.00000 | 1.814 | 50.00- 150.00 | 100.00 |
| 13.388 | 13.388 (0.964) | 43 | 81219 | | | 362.73- 462.73 | 421.15 |
| 13.388 | 13.388 (0.964) | 57 | 5458 | | | 0.00- 79.31 | 28.30 |
| 76 cis-1,2-Dichloroethene | | | | | CAS #: 156-59-2 | | |
| 13.416 | 13.416 (0.966) | 61 | 43195 | 2.00000 | 1.846 | 50.00- 150.00 | 100.00 |
| 13.416 | 13.416 (0.966) | 96 | 34309 | | | 30.20- 130.20 | 79.43 |
| 13.416 | 13.416 (0.966) | 98 | 21557 | | | 0.03- 100.03 | 49.91 |
| 80 Tetrahydrofuran | | | | | CAS #: 109-99-9 | | |
| 13.858 | 13.858 (0.998) | 42 | 32077 | 2.00000 | 1.820 | 50.00- 150.00 | 100.00 |
| 13.858 | 13.858 (0.998) | 71 | 16512 | | | 0.15- 100.15 | 51.48 |
| 13.858 | 13.858 (0.998) | 72 | 17589 | | | 4.67- 104.67 | 54.83 |
| 82 Chloroform | | | | | CAS #: 67-66-3 | | |
| 13.941 | 13.941 (1.004) | 83 | 72684 | 2.00000 | 1.996 | 50.00- 150.00 | 100.00 |
| 13.941 | 13.941 (1.004) | 85 | 45987 | | | 16.84- 116.84 | 63.27 |
| 83 1,1,1-Trichloroethane | | | | | CAS #: 71-55-6 | | |
| 14.273 | 14.273 (1.028) | 97 | 77002 | 2.00000 | 1.997 | 50.00- 150.00 | 100.00 |
| 14.273 | 14.273 (1.028) | 99 | 48432 | | | 13.29- 113.29 | 62.90 |
| 85 Cyclohexane | | | | | CAS #: 110-82-7 | | |
| 14.300 | 14.300 (1.030) | 84 | 37405 | 2.00000 | 1.730 | 50.00- 150.00 | 100.00 |
| 14.300 | 14.300 (1.030) | 56 | 37684 | | | 49.76- 149.76 | 100.75 |
| 14.300 | 14.300 (1.030) | 41 | 21198 | | | 3.69- 103.69 | 56.67 |
| 87 Carbon Tetrachloride | | | | | CAS #: 56-23-5 | | |
| 14.549 | 14.549 (1.048) | 119 | 70245 | 2.00000 | 1.941 | 50.00- 150.00 | 100.00 |
| 14.549 | 14.549 (1.048) | 117 | 71438 | | | 54.35- 154.35 | 101.70 |
| 91 Benzene | | | | | CAS #: 71-43-2 | | |
| 14.964 | 14.964 (0.958) | 78 | 102300 | 2.00000 | 1.876 | 50.00- 150.00 | 100.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 91 Benzene (continued) | | | | | | | |
| 14.964 | 14.964 (0.958) | 77 | 23703 | | | 0.00- 72.49 | 23.17 |
| 89 2,2,4-Trimethylpentane | | | | | CAS #: 540-84-1 | | |
| 14.881 | 14.881 (1.072) | 57 | 151437 | 2.00000 | 1.972 | 50.00- 150.00 | 100.00 |
| 14.881 | 14.881 (1.072) | 56 | 49574 | | | 0.00- 82.34 | 32.74 |
| 14.881 | 14.881 (1.072) | 41 | 40871 | | | 0.00- 76.30 | 26.99 |
| 93 1,2-Dichloroethane | | | | | CAS #: 107-06-2 | | |
| 15.075 | 15.075 (0.965) | 62 | 47814 | 2.00000 | 1.865 | 50.00- 150.00 | 100.00 |
| 15.075 | 15.075 (0.965) | 64 | 17650 | | | 0.00- 84.21 | 36.91 |
| 94 Heptane | | | | | CAS #: 142-82-5 | | |
| 15.185 | 15.185 (0.972) | 71 | 33065 | 2.00000 | 1.680 | 50.00- 150.00 | 100.00 |
| 15.185 | 15.185 (0.972) | 43 | 48610 | | | 86.68- 186.68 | 147.01 |
| 15.185 | 15.185 (0.972) | 57 | 29672 | | | 32.20- 132.20 | 89.74 |
| 101 Trichloroethene | | | | | CAS #: 79-01-6 | | |
| 16.070 | 16.070 (1.028) | 95 | 48210 | 2.00000 | 1.936 | 50.00- 150.00 | 100.00 |
| 16.098 | 16.098 (1.030) | 130 | 47074 | | | 47.47- 147.47 | 97.64 |
| 16.070 | 16.070 (1.028) | 97 | 29616 | | | 14.52- 114.52 | 61.43 |
| 104 1,2-Dichloropropane | | | | | CAS #: 78-87-5 | | |
| 16.568 | 16.568 (1.060) | 63 | 36325 | 2.00000 | 1.948 | 50.00- 150.00 | 100.00 |
| 16.568 | 16.568 (1.060) | 62 | 23692 | | | 17.52- 117.52 | 65.22 |
| 16.568 | 16.568 (1.060) | 41 | 18467 | | | 0.97- 100.97 | 50.84 |
| 106 1,4-Dioxane | | | | | CAS #: 123-91-1 | | |
| 16.706 | 16.706 (1.069) | 88 | 25651 | 2.00000 | 1.586 | 50.00- 150.00 | 100.00(a) |
| 16.706 | 16.706 (1.069) | 58 | 15206 | | | 6.89- 106.89 | 59.28 |
| 16.678 | 16.678 (1.067) | 57 | 5300 | | | 0.00- 69.74 | 20.66 |
| 107 Bromodichloromethane | | | | | CAS #: 75-27-4 | | |
| 16.982 | 16.982 (1.087) | 83 | 75607 | 2.00000 | 1.861 | 50.00- 150.00 | 100.00 |
| 17.010 | 17.010 (1.088) | 85 | 48721 | | | 14.67- 114.67 | 64.44 |
| 110 cis-1,3-Dichloropropene | | | | | CAS #: 10061-01-5 | | |
| 17.784 | 17.784 (1.138) | 75 | 52983 | 2.00000 | 1.783 | 50.00- 150.00 | 100.00 |
| 17.784 | 17.784 (1.138) | 77 | 16415 | | | 0.00- 83.04 | 30.98 |
| 17.784 | 17.784 (1.138) | 39 | 23843 | | | 0.00- 93.89 | 45.00 |
| 111 4-Methyl-2-pentanone | | | | | CAS #: 108-10-1 | | |
| 17.978 | 17.978 (1.150) | 58 | 28496 | 2.00000 | 1.533 | 50.00- 150.00 | 100.00 |
| 17.978 | 17.978 (1.150) | 43 | 63824 | | | 169.12- 269.12 | 223.98 |
| 17.978 | 17.978 (1.150) | 85 | 14750 | | | 0.58- 100.58 | 51.76 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 114 Toluene | | | | | CAS #: 108-88-3 | | |
| 18.337 | 18.337 (1.173) | 91 | 110459 | 2.00000 | 1.825 | 50.00- 150.00 | 100.00 |
| 18.337 | 18.337 (1.173) | 92 | 67078 | | | 11.10- 111.10 | 60.73 |
| 116 trans-1,3-Dichloropropene | | | | | CAS #: 10061-02-6 | | |
| 18.752 | 18.752 (0.902) | 75 | 55823 | 2.00000 | 1.828 | 50.00- 150.00 | 100.00 |
| 18.780 | 18.780 (0.903) | 77 | 17877 | | | 0.00- 83.38 | 32.02 |
| 18.752 | 18.752 (0.902) | 39 | 22899 | | | 0.00- 92.03 | 41.02 |
| 117 1,1,2-Trichloroethane | | | | | CAS #: 79-00-5 | | |
| 19.111 | 19.111 (0.919) | 97 | 40565 | 2.00000 | 1.896 | 50.00- 150.00 | 100.00 |
| 19.111 | 19.111 (0.919) | 99 | 26631 | | | 14.64- 114.64 | 65.65 |
| 19.111 | 19.111 (0.919) | 83 | 35194 | | | 37.04- 137.04 | 86.76 |
| 120 Tetrachloroethene | | | | | CAS #: 127-18-4 | | |
| 19.277 | 19.277 (0.927) | 166 | 54526 | 2.00000 | 1.906 | 50.00- 150.00 | 100.00 |
| 19.277 | 19.277 (0.927) | 129 | 38721 | | | 21.89- 121.89 | 71.01 |
| 19.277 | 19.277 (0.927) | 131 | 36803 | | | 19.59- 119.59 | 67.50 |
| 121 2-Hexanone | | | | | CAS #: 591-78-6 | | |
| 19.416 | 19.416 (0.934) | 58 | 38677 | 2.00000 | 1.394 | 50.00- 150.00 | 100.00(a) |
| 19.416 | 19.416 (0.934) | 43 | 66721 | | | 114.75- 214.75 | 172.51 |
| 19.443 | 19.443 (0.935) | 100 | 8102 | | | 0.00- 71.95 | 20.95 |
| 122 Dibromochloromethane | | | | | CAS #: 124-48-1 | | |
| 19.803 | 19.803 (0.952) | 129 | 64601 | 2.00000 | 1.815 | 50.00- 150.00 | 100.00 |
| 19.803 | 19.803 (0.952) | 127 | 49230 | | | 26.41- 126.41 | 76.21 |
| 123 1,2-Dibromoethane | | | | | CAS #: 106-93-4 | | |
| 20.079 | 20.079 (0.965) | 107 | 62076 | 2.00000 | 1.805 | 50.00- 150.00 | 100.00 |
| 20.051 | 20.051 (0.964) | 109 | 57247 | | | 43.48- 143.48 | 92.22 |
| 127 Chlorobenzene | | | | | CAS #: 108-90-7 | | |
| 20.853 | 20.853 (1.003) | 112 | 86369 | 2.00000 | 1.801 | 50.00- 150.00 | 100.00 |
| 20.853 | 20.853 (1.003) | 114 | 29287 | | | 0.00- 83.18 | 33.91 |
| 20.853 | 20.853 (1.003) | 77 | 60790 | | | 20.20- 120.20 | 70.38 |
| 128 Ethyl Benzene | | | | | CAS #: 100-41-4 | | |
| 20.936 | 20.936 (1.007) | 106 | 46047 | 2.00000 | 1.856 | 50.00- 150.00 | 100.00 |
| 20.936 | 20.936 (1.007) | 91 | 137670 | | | 265.06- 365.06 | 298.98 |
| 129 m,p-Xylene | | | | | CAS #: 108-38-3 | | |
| 21.130 | 21.130 (1.016) | 106 | 52698 | 2.00000 | 1.710 | 50.00- 150.00 | 100.00 |
| 21.130 | 21.130 (1.016) | 91 | 106531 | | | 147.41- 247.41 | 202.15 |
| 130 o-Xylene | | | | | CAS #: 95-47-6 | | |
| 21.849 | 21.849 (1.051) | 106 | 47321 | 2.00000 | 1.666 | 50.00- 150.00 | 100.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 130 o-Xylene (continued) | | | | | | | |
| 21.849 | 21.849 (1.051) | 91 | 100495 | | | 155.82- 255.82 | 212.37 |
| 131 Styrene | | | | | CAS #: 100-42-5 | | |
| 21.876 | 21.876 (1.052) | 104 | 75527 | 2.00000 | 1.682 | 50.00- 150.00 | 100.00 |
| 21.876 | 21.876 (1.052) | 78 | 40665 | | | 9.19- 109.19 | 53.84 |
| 133 Bromoform | | | | | CAS #: 75-25-2 | | |
| 22.291 | 22.291 (1.072) | 173 | 57494 | 2.00000 | 1.707 | 50.00- 150.00 | 100.00 |
| 22.291 | 22.291 (1.072) | 171 | 27789 | | | 0.74- 100.74 | 48.33 |
| 134 Cumene | | | | | CAS #: 98-82-8 | | |
| 22.429 | 22.429 (1.078) | 105 | 134966 | 2.00000 | 1.810 | 50.00- 150.00 | 100.00 |
| 22.429 | 22.429 (1.078) | 120 | 35077 | | | 0.00- 75.99 | 25.99 |
| 22.429 | 22.429 (1.078) | 51 | 11297 | | | 9.74- 109.74 | 8.37 |
| 140 1,1,2,2-Tetrachloroethane | | | | | CAS #: 79-34-5 | | |
| 23.010 | 23.010 (1.106) | 83 | 83027 | 2.00000 | 1.837 | 50.00- 150.00 | 100.00 |
| 23.010 | 23.010 (1.106) | 85 | 51158 | | | 14.88- 114.88 | 61.62 |
| 142 Propylbenzene | | | | | CAS #: 103-65-1 | | |
| 23.121 | 23.121 (1.112) | 91 | 166480 | 2.00000 | 1.694 | 50.00- 150.00 | 100.00 |
| 23.121 | 23.121 (1.112) | 120 | 38470 | | | 0.00- 72.67 | 23.11 |
| 23.121 | 23.121 (1.112) | 105 | 6241 | | | 0.00- 53.69 | 3.75 |
| 145 4-Ethyltoluene | | | | | CAS #: 622-96-8 | | |
| 23.286 | 23.286 (1.120) | 105 | 143422 | 2.00000 | 1.716 | 50.00- 150.00 | 100.00 |
| 23.286 | 23.286 (1.120) | 120 | 42561 | | | 0.00- 80.49 | 29.68 |
| 147 1,3,5-Trimethylbenzene | | | | | CAS #: 108-67-8 | | |
| 23.397 | 23.397 (1.125) | 105 | 121924 | 2.00000 | 1.762 | 50.00- 150.00 | 100.00 |
| 23.397 | 23.397 (1.125) | 120 | 60226 | | | 1.60- 101.60 | 49.40 |
| 150 1,2,4-Trimethylbenzene | | | | | CAS #: 95-63-6 | | |
| 24.033 | 24.033 (1.156) | 105 | 109484 | 2.00000 | 1.658 | 50.00- 150.00 | 100.00 |
| 24.033 | 24.033 (1.156) | 120 | 52557 | | | 0.00- 96.88 | 48.00 |
| 155 1,3-Dichlorobenzene | | | | | CAS #: 541-73-1 | | |
| 24.586 | 24.586 (1.182) | 146 | 84540 | 2.00000 | 1.822 | 50.00- 150.00 | 100.00 |
| 24.586 | 24.586 (1.182) | 148 | 53837 | | | 14.03- 114.03 | 63.68 |
| 24.586 | 24.586 (1.182) | 111 | 36137 | | | 0.00- 91.33 | 42.75 |
| 156 1,4-Dichlorobenzene | | | | | CAS #: 106-46-7 | | |
| 24.724 | 24.724 (1.189) | 146 | 89479 | 2.00000 | 1.873 | 50.00- 150.00 | 100.00 |
| 24.752 | 24.752 (1.190) | 148 | 55939 | | | 15.04- 115.04 | 62.52 |
| 24.724 | 24.724 (1.189) | 111 | 34706 | | | 0.00- 89.92 | 38.79 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 159 alpha-Chlorotoluene | | | | | CAS #: 100-44-7 | | |
| 24.945 | 24.945 (1.199) | 91 | 108224 | 2.00000 | 1.602 | 50.00- 150.00 | 100.00 |
| 24.945 | 24.945 (1.199) | 126 | 21240 | | | 0.00- 70.12 | 19.63 |
| 161 1,2-Dichlorobenzene | | | | | CAS #: 95-50-1 | | |
| 25.360 | 25.360 (1.219) | 146 | 87371 | 2.00000 | 1.901 | 50.00- 150.00 | 100.00 |
| 25.360 | 25.360 (1.219) | 148 | 54625 | | | 14.55- 114.55 | 62.52 |
| 25.360 | 25.360 (1.219) | 111 | 36061 | | | 0.00- 93.18 | 41.27 |
| 165 1,2,4-Trichlorobenzene | | | | | CAS #: 120-82-1 | | |
| 28.153 | 28.153 (1.354) | 180 | 86052 | 2.00000 | 1.958 | 50.00- 150.00 | 100.00(a) |
| 28.153 | 28.153 (1.354) | 182 | 80453 | | | 44.49- 144.49 | 93.49 |
| 166 Hexachlorobutadiene | | | | | CAS #: 87-68-3 | | |
| 28.319 | 28.319 (1.362) | 225 | 67088 | 2.00000 | 2.087 | 50.00- 150.00 | 100.00 |
| 28.319 | 28.319 (1.362) | 223 | 45189 | | | 14.10- 114.10 | 67.36 |
| 19 Butane | | | | | CAS #: 106-97-8 | | |
| 6.807 | 6.807 (0.490) | 58 | 4620 | 2.00000 | 1.885 | 50.00- 150.00 | 100.00(a) |
| 6.807 | 6.807 (0.490) | 43 | 34782 | | | 668.04- 768.04 | 752.86 |
| 29 Isopentane | | | | | CAS #: 78-78-4 | | |
| 8.245 | 8.245 (0.594) | 43 | 37339 | 2.00000 | 1.885 | 50.00- 150.00 | 100.00(a) |
| 8.273 | 8.273 (0.596) | 57 | 28657 | | | 26.21- 126.21 | 76.75 |
| 102 Methyl Cyclohexane | | | | | CAS #: 108-87-2 | | |
| 16.346 | 16.346 (1.177) | 83 | 49266 | 2.00000 | 1.760 | 50.00- 150.00 | 100.00 |
| 16.346 | 16.346 (1.177) | 98 | 21906 | | | 0.00- 92.45 | 44.46 |
| 16.346 | 16.346 (1.177) | 55 | 34981 | | | 18.10- 118.10 | 71.00 |
| 167 Naphthalene | | | | | CAS #: 91-20-3 | | |
| 28.678 | 28.678 (1.379) | 128 | 114530 | 2.00000 | 1.811 | 50.00- 150.00 | 100.00(a) |
| 28.678 | 28.678 (1.379) | 127 | 15017 | | | 0.00- 62.43 | 13.11 |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t112104.d
Lab Smp Id: ical
Analysis Type: VOA
Quant Type: ISTD
Operator: dm
Method File: /chem/msdt.i/23Nov2007.b/t14q1121a.m
Misc Info: 200ppbv-2.0ppbv

Calibration Date: 23-NOV-2007
Calibration Time: 09:32
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 364898 | 218939 | 510857 | 270233 | -25.94 |
| 97 1,4-Difluorobenze | 1716816 | 1030090 | 2403542 | 1278371 | -25.54 |
| 126 Chlorobenzene-d5 | 1199182 | 719509 | 1678855 | 905933 | -24.45 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.89 | 13.56 | 14.22 | 13.89 | 0.00 |
| 97 1,4-Difluorobenze | 15.63 | 15.30 | 15.96 | 15.63 | 0.00 |
| 126 Chlorobenzene-d5 | 20.80 | 20.47 | 21.13 | 20.80 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

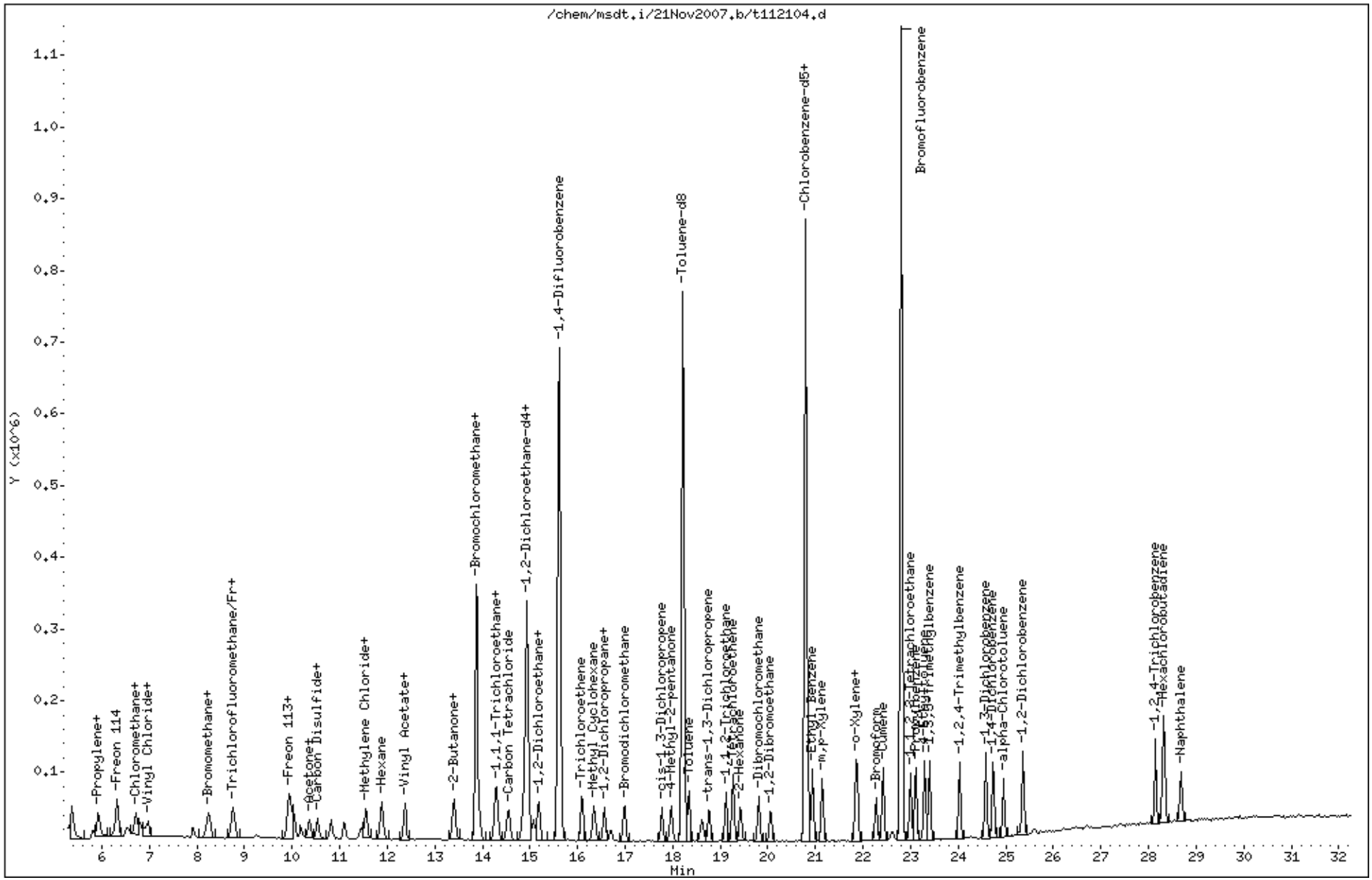
0110

Data File: /chem/msdt.i/21Nov2007.b/t112104.d
Date : 21-NOV-2007 15:48
Client ID: Level 3
Sample Info: 2.0ml #1576-92

Instrument: msdt.i

Operator: dm
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/26Nov2007.b/t112608.d
Lab Smp Id: ical level 4
Inj Date : 26-NOV-2007 15:28
Operator : ea Inst ID: msdt.i
Smp Info : 8.0ml #1487-402
Misc Info : 200ppbv-8ppbv
Comment :
Method : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Meth Date : 27-Nov-2007 14:00 lover Quant Type: ISTD
Cal Date : 26-NOV-2007 15:28 Cal File: t112608.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22b.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | AMOUNTS | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | | RATIO |
| == | ====== ======== | ==== | ======== | ======= | ======= | ========== | | ===== |
| * 81 Bromochloromethane | | | | | CAS #: 74-97-5 | | | |
| 13.865 | 13.865 (1.000) | 130 | 305186 | 25.0000 | | 50.00- 150.00 | | 100.00 |
| 13.865 | 13.865 (1.000) | 128 | 230653 | | | 26.64- 126.64 | | 75.58 |
| 13.865 | 13.865 (1.000) | 49 | 315789 | | | 73.62- 173.62 | | 103.47 |
| * 97 1,4-Difluorobenzene | | | | | CAS #: 540-36-3 | | | |
| 15.607 | 15.607 (1.000) | 114 | 1391788 | 25.0000 | | 50.00- 150.00 | | 100.00 |
| 15.607 | 15.607 (1.000) | 88 | 215127 | | | 0.00- 65.84 | | 15.46 |
| * 126 Chlorobenzene-d5 | | | | | CAS #: 3114-55-4 | | | |
| 20.805 | 20.805 (1.000) | 117 | 1019619 | 25.0000 | | 50.00- 150.00 | | 100.00 |
| 20.805 | 20.805 (1.000) | 82 | 551342 | | | 4.93- 104.93 | | 54.07 |
| 5 Freon 143a | | | | | CAS #: 420-46-2 | | | |
| 5.535 | 5.535 (0.399) | 69 | 128088 | 8.00000 | 6.526 | 50.00- 150.00 | | 100.00 |
| 6 Freon142b | | | | | CAS #: 75-68-3 | | | |
| 6.464 | 6.464 (0.466) | 65 | 195519 | 8.00000 | 6.703 | 50.00- 150.00 | | 100.00 |
| 6.464 | 6.464 (0.466) | 45 | 39080 | | | 0.00- 69.76 | | 19.99 |

| | | | | AMOUNTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| 9 Freon 13 | | | | | CAS #: 75-72-9 | | |
| 5.394 | 5.394 (0.389) | 69 | 206843 | 8.00000 | 7.771 | 50.00- 150.00 | 100.00 |
| 5.394 | 5.394 (0.389) | 85 | 66311 | | | 0.00- 82.40 | 32.06 |
| 5.394 | 5.394 (0.389) | 87 | 22108 | | | 0.00- 60.56 | 10.69 |
| 13 Freon 134a | | | | | CAS #: 811-97-2 | | |
| 5.704 | 5.704 (0.411) | 83 | 92435 | 8.00000 | 6.692 | 50.00- 150.00 | 100.00 |
| 5.675 | 5.675 (0.409) | 69 | 77312 | | | 31.14- 131.14 | 83.64 |
| 15 Freon 152a | | | | | CAS #: 75-37-6 | | |
| 5.844 | 5.844 (0.422) | 65 | 46329 | 8.00000 | 6.481 | 50.00- 150.00 | 100.00 |
| 5.844 | 5.844 (0.422) | 51 | 80641 | | | 117.84- 217.84 | 174.06 |
| 5.872 | 5.872 (0.424) | 47 | 19070 | | | 0.00- 88.39 | 41.16 |
| 17 Freon 22 | | | | | CAS #: 75-45-6 | | |
| 6.013 | 6.013 (0.434) | 67 | 24920 | 8.00000 | 6.829 | 50.00- 150.00 | 100.00 |
| 6.013 | 6.013 (0.434) | 51 | 124488 | | | 439.12- 539.12 | 499.55 |
| 6.013 | 6.013 (0.434) | 85 | 3727 | | | 0.00- 91.16 | 14.96 |
| 26 Methanol | | | | | CAS #: 67-56-1 | | |
| 7.562 | 7.562 (0.545) | 31 | 139497 | 48.0000 | 44.470 | 50.00- 150.00 | 100.00(a) |
| 7.562 | 7.562 (0.545) | 32 | 225660 | | | 73.38- 173.38 | 161.77 |
| 34 Dichlorofluoromethane/Fr21 | | | | | CAS #: 75-43-4 | | |
| 8.745 | 8.745 (0.631) | 67 | 158908 | 8.00000 | 6.502 | 50.00- 150.00 | 100.00 |
| 8.745 | 8.745 (0.631) | 69 | 52258 | | | 0.00- 82.06 | 32.89 |
| 8.745 | 8.745 (0.631) | 35 | 7914 | | | 0.00- 54.92 | 4.98 |
| 40 Freon123a | | | | | CAS #: 354-23-4 | | |
| 9.580 | 9.580 (0.691) | 67 | 165063 | 8.00000 | 6.896 | 50.00- 150.00 | 100.00 |
| 9.580 | 9.580 (0.691) | 117 | 133947 | | | 30.97- 130.97 | 81.15 |
| 41 Freon123 | | | | | CAS #: 306-83-2 | | |
| 9.718 | 9.718 (0.701) | 83 | 230834 | 8.00000 | 6.966 | 50.00- 150.00 | 100.00 |
| 9.718 | 9.718 (0.701) | 133 | 46626 | | | 0.00- 70.26 | 20.20 |
| 9.718 | 9.718 (0.701) | 85 | 156974 | | | 17.95- 117.95 | 68.00 |
| 57 tert-Butyl-Alcohol | | | | | CAS #: 75-65-0 | | |
| 11.156 | 11.156 (0.805) | 59 | 112274 | 8.00000 | 6.945 | 50.00- 150.00 | 100.00 |
| 11.156 | 11.156 (0.805) | 41 | 24251 | | | 0.00- 78.87 | 21.60 |
| 11.156 | 11.156 (0.805) | 57 | 11822 | | | 0.00- 61.35 | 10.53 |
| 68 Isopropyl ether | | | | | CAS #: 108-20-3 | | |
| 12.289 | 12.289 (0.886) | 45 | 329262 | 8.00000 | 6.570 | 50.00- 150.00 | 100.00 |
| 12.289 | 12.289 (0.886) | 87 | 117116 | | | 0.00- 84.51 | 35.57 |
| 12.289 | 12.289 (0.886) | 59 | 42262 | | | 0.00- 62.64 | 12.84 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 71 1-Propanol | | | | | CAS #: 71-23-8 | | |
| 12.400 | 12.400 (0.894) | 42 | 15400 | 8.00000 | 5.840 | 50.00- 150.00 | 100.00(H) |
| 12.400 | 12.400 (0.894) | 59 | 20411 | | | 75.45- 175.45 | 132.54 |
| 12.289 | 12.289 (0.886) | 41 | 70405 | | | 158.05- 258.05 | 457.18 |
| 73 t-Butylethyl Ether | | | | | CAS #: 637-92-3 | | |
| 12.925 | 12.925 (0.932) | 59 | 167003 | 8.00000 | 6.856 | 50.00- 150.00 | 100.00 |
| 12.925 | 12.925 (0.932) | 87 | 77183 | | | 0.00- 95.70 | 46.22 |
| 12.925 | 12.925 (0.932) | 41 | 31852 | | | 0.00- 69.82 | 19.07 |
| 77 Ethyl Acetate | | | | | CAS #: 141-78-6 | | |
| 13.395 | 13.395 (0.966) | 45 | 36164 | 8.00000 | 6.847 | 50.00- 150.00 | 100.00 |
| 13.395 | 13.395 (0.966) | 61 | 39462 | | | 63.70- 163.70 | 109.12 |
| 13.395 | 13.395 (0.966) | 43 | 247242 | | | 641.02- 741.02 | 683.67 |
| 99 Isobutanol | | | | | CAS #: 78-83-1 | | |
| 14.612 | 14.612 (0.936) | 59 | 1891 | 8.00000 | 5.482 | 50.00- 150.00 | 100.00 |
| 14.612 | 14.612 (0.936) | 41 | 47030 | | | 2254.31-2354.31 | 2487.04 |
| 14.612 | 14.612 (0.936) | 43 | 51667 | | | 2684.91-2784.91 | 2732.26 |
| 92 tert-amyl-Methyl Ether | | | | | CAS #: 994-05-8 | | |
| 14.999 | 14.999 (1.082) | 73 | 213130 | 8.00000 | 7.396 | 50.00- 150.00 | 100.00 |
| 14.999 | 14.999 (1.082) | 87 | 52173 | | | 0.00- 75.09 | 24.48 |
| 14.999 | 14.999 (1.082) | 55 | 52659 | | | 0.00- 74.77 | 24.71 |
| 96 2-Heptanone | | | | | CAS #: 110-43-0 | | |
| 21.966 | 21.966 (1.584) | 58 | 110555 | 8.00000 | 5.453 | 50.00- 150.00 | 100.00 |
| 21.966 | 21.966 (1.584) | 43 | 145663 | | | 85.60- 185.60 | 131.76 |
| 98 1-Butanol | | | | | CAS #: 71-36-3 | | |
| 15.801 | 15.801 (1.012) | 56 | 43814 | 8.00000 | 6.178 | 50.00- 150.00 | 100.00 |
| 15.801 | 15.801 (1.012) | 41 | 30834 | | | 17.89- 117.89 | 70.37 |
| 15.801 | 15.801 (1.012) | 43 | 22424 | | | 0.00- 99.85 | 51.18 |
| 119 Butyl Acetate | | | | | CAS #: 123-86-4 | | |
| 19.533 | 19.533 (1.252) | 56 | 82367 | 8.00000 | 5.720 | 50.00- 150.00 | 100.00 |
| 19.533 | 19.533 (1.252) | 73 | 36423 | | | 0.00- 94.51 | 44.22 |
| 19.533 | 19.533 (1.252) | 43 | 180360 | | | 163.30- 263.30 | 218.97 |
| 135 Cyclohexanone | | | | | CAS #: 108-94-1 | | |
| 22.741 | 22.741 (1.093) | 55 | 81884 | 8.00000 | 6.021 | 50.00- 150.00 | 100.00 |
| 22.741 | 22.741 (1.093) | 98 | 44200 | | | 6.71- 106.71 | 53.98 |
| 22.741 | 22.741 (1.093) | 42 | 49745 | | | 11.68- 111.68 | 60.75 |
| 146 Diisobutyl Ketone | | | | | CAS #: 108-83-8 | | |
| 23.570 | 23.570 (1.133) | 57 | 195328 | 8.00000 | 5.821 | 50.00- 150.00 | 100.00 |

| | | | | AMOUNTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| == | ====== ======== | ==== | ======== | ======= | ======= | ========== | ===== |
| 146 Diisobutyl Ketone (continued) | | | | | | | |
| 23.570 | 23.570 (1.133) | 85 | 198925 | | | 53.67- 153.67 | 101.84 |
| 0.000 | 1.000 (0.000) | 0 | 0 | | | 0.00- 50.00 | 0.00 |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t112608.d
Lab Smp Id: ical level 4
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msdt.i/26Nov2007.b/t14q1121b.m
Misc Info: 200ppbv-8ppbv

Calibration Date: 26-NOV-2007
Calibration Time: 10:49
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 301939 | 181163 | 422715 | 305186 | 1.08 |
| 97 1,4-Difluorobenze | 1427711 | 856627 | 1998795 | 1391788 | -2.52 |
| 126 Chlorobenzene-d5 | 1047767 | 628660 | 1466874 | 1019619 | -2.69 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.87 | 13.54 | 14.20 | 13.87 | 0.00 |
| 97 1,4-Difluorobenze | 15.61 | 15.28 | 15.94 | 15.61 | 0.00 |
| 126 Chlorobenzene-d5 | 20.80 | 20.48 | 21.13 | 20.81 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

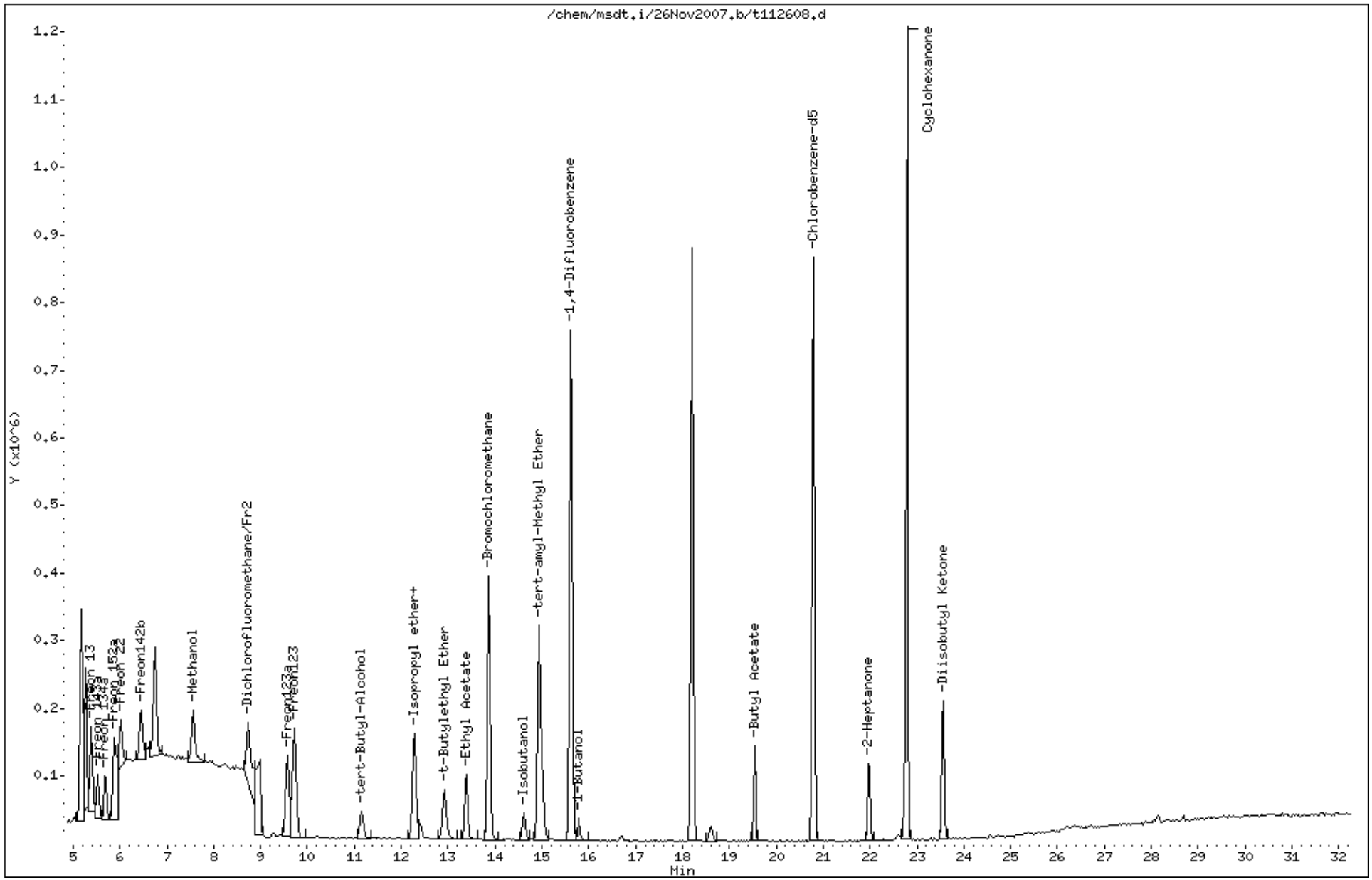
0116

Data File: /chem/msdt.i/26Nov2007.b/t112608.d
Date : 26-NOV-2007 15:28
Client ID:
Sample Info: 8.0ml #1487-402

Instrument: msdt.i

Operator: ea
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Nov2007.b/t112105.d
Lab Smp Id: ical Client Smp ID: Level 4
Inj Date : 21-NOV-2007 16:33
Operator : dm Inst ID: msdt.i
Smp Info : 25ml #1576-92
Misc Info : 200ppbv-25ppbv
Comment :
Method : /chem/msdt.i/23Nov2007.b/t14q1121a.m
Meth Date : 26-Nov-2007 15:03 cleonard Quant Type: ISTD
Cal Date : 21-NOV-2007 16:33 Cal File: t112105.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | AMOUNTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| == | ====== ======== | ==== | ======== | ======= | ======= | ========== | ===== |
| * 81 Bromochloromethane | | | | | | CAS #: 74-97-5 | |
| 13.858 | 13.858 (1.000) | 130 | 307764 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 13.858 | 13.858 (1.000) | 128 | 233821 | | | 26.38- 126.38 | 75.97 |
| 13.858 | 13.858 (1.000) | 49 | 443512 | | | 91.95- 191.95 | 144.11 |
| * 97 1,4-Difluorobenzene | | | | | | CAS #: 540-36-3 | |
| 15.628 | 15.628 (1.000) | 114 | 1370043 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 15.628 | 15.628 (1.000) | 88 | 216005 | | | 0.00- 65.95 | 15.77 |
| * 126 Chlorobenzene-d5 | | | | | | CAS #: 3114-55-4 | |
| 20.798 | 20.798 (1.000) | 117 | 940060 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 20.798 | 20.798 (1.000) | 82 | 521343 | | | 5.79- 105.79 | 55.46 |
| $ 90 1,2-Dichloroethane-d4 | | | | | | CAS #: 17060-07-0 | |
| 14.936 | 14.936 (1.078) | 65 | 485211 | 25.0000 | 24.457 | 50.00- 150.00 | 100.00 |
| 14.936 | 14.936 (1.078) | 67 | 266945 | | | 5.03- 105.03 | 55.02 |
| $ 113 Toluene-d8 | | | | | | CAS #: 2037-26-5 | |
| 18.199 | 18.199 (1.165) | 98 | 1129764 | 25.0000 | 24.360 | 50.00- 150.00 | 100.00 |
| 18.199 | 18.199 (1.165) | 70 | 124723 | | | 0.00- 61.02 | 11.04 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| $ 113 Toluene-d8 (continued) | | | | | | | |
| 18.199 | 18.199 (1.165) | 100 | 772981 | | | 19.45- 119.45 | 68.42 |
| $ 137 Bromofluorobenzene | | | | | CAS #: 460-00-4 | | |
| 22.789 | 22.789 (1.096) | 174 | 587777 | 25.0000 | 24.891 | 50.00- 150.00 | 100.00 |
| 22.789 | 22.789 (1.096) | 95 | 754934 | | | 77.33- 177.33 | 128.44 |
| 22.789 | 22.789 (1.096) | 176 | 572655 | | | 46.56- 146.56 | 97.43 |
| 11 Propylene | | | | | CAS #: 115-07-1 | | |
| 5.812 | 5.812 (0.419) | 41 | 203101 | 25.0000 | 24.767 | 50.00- 150.00 | 100.00 |
| 5.812 | 5.812 (0.419) | 42 | 142941 | | | 17.24- 117.24 | 70.38 |
| 5.812 | 5.812 (0.419) | 39 | 164882 | | | 27.83- 127.83 | 81.18 |
| 12 Dichlorodifluoromethane/Fr12 | | | | | CAS #: 75-71-8 | | |
| 5.923 | 5.923 (0.427) | 85 | 1162226 | 25.0000 | 25.717 | 50.00- 150.00 | 100.00 |
| 5.923 | 5.923 (0.427) | 87 | 368302 | | | 0.00- 82.07 | 31.69 |
| 16 Freon 114 | | | | | CAS #: 76-14-2 | | |
| 6.310 | 6.310 (0.455) | 135 | 767796 | 25.0000 | 26.198 | 50.00- 150.00 | 100.00 |
| 6.310 | 6.310 (0.455) | 137 | 244740 | | | 0.00- 81.55 | 31.88 |
| 18 Chloromethane | | | | | CAS #: 74-87-3 | | |
| 6.531 | 6.531 (0.471) | 50 | 257665 | 25.0000 | 24.712 | 50.00- 150.00 | 100.00 |
| 6.531 | 6.531 (0.471) | 52 | 86986 | | | 0.00- 84.03 | 33.76 |
| 20 Vinyl Chloride | | | | | CAS #: 75-01-4 | | |
| 6.890 | 6.890 (0.497) | 62 | 371581 | 25.0000 | 26.054 | 50.00- 150.00 | 100.00 |
| 6.890 | 6.890 (0.497) | 64 | 123575 | | | 0.00- 93.71 | 33.26 |
| 22 1,3-Butadiene | | | | | CAS #: 106-99-0 | | |
| 6.946 | 6.946 (0.501) | 54 | 346553 | 25.0000 | 29.846 | 50.00- 150.00 | 100.00 |
| 6.946 | 6.946 (0.501) | 39 | 330061 | | | 54.52- 154.52 | 95.24 |
| 25 Bromomethane | | | | | CAS #: 74-83-9 | | |
| 7.913 | 7.913 (0.571) | 94 | 338309 | 25.0000 | 26.194 | 50.00- 150.00 | 100.00 |
| 7.913 | 7.913 (0.571) | 96 | 311427 | | | 50.48- 150.48 | 92.05 |
| 27 Chloroethane | | | | | CAS #: 75-00-3 | | |
| 8.190 | 8.190 (0.591) | 64 | 183978 | 25.0000 | 26.313 | 50.00- 150.00 | 100.00 |
| 8.190 | 8.190 (0.591) | 49 | 46568 | | | 0.00- 74.88 | 25.31 |
| 8.190 | 8.190 (0.591) | 66 | 58516 | | | 0.00- 80.84 | 31.81 |
| 31 Trichlorofluoromethane/Fr11 | | | | | CAS #: 75-69-4 | | |
| 8.771 | 8.771 (0.633) | 101 | 1702100 | 25.0000 | 29.019 | 50.00- 150.00 | 100.00 |
| 8.771 | 8.771 (0.633) | 103 | 1102413 | | | 16.26- 116.26 | 64.77 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 38 Ethanol | | | | | CAS #: 64-17-5 | | |
| 9.241 | 9.241 (0.667) | 45 | 194543 | 25.0000 | 29.103 | 50.00- 150.00 | 100.00 |
| 9.241 | 9.241 (0.667) | 43 | 45550 | | | 0.00- 72.67 | 23.41 |
| 9.241 | 9.241 (0.667) | 46 | 70896 | | | 0.00- 86.29 | 36.44 |
| 42 Freon 113 | | | | | CAS #: 76-13-1 | | |
| 9.932 | 9.932 (0.717) | 151 | 999258 | 25.0000 | 28.275 | 50.00- 150.00 | 100.00 |
| 9.932 | 9.932 (0.717) | 153 | 643765 | | | 15.23- 115.23 | 64.42 |
| 9.932 | 9.932 (0.717) | 101 | 1298899 | | | 83.14- 183.14 | 129.99 |
| 43 1,1-Dichloroethene | | | | | CAS #: 75-35-4 | | |
| 10.015 | 10.015 (0.723) | 61 | 778227 | 25.0000 | 29.081 | 50.00- 150.00 | 100.00 |
| 10.043 | 10.043 (0.725) | 96 | 476604 | | | 16.79- 116.79 | 61.24 |
| 10.043 | 10.043 (0.725) | 98 | 307293 | | | 0.00- 90.88 | 39.49 |
| 45 Acetone | | | | | CAS #: 67-64-1 | | |
| 10.181 | 10.181 (0.735) | 58 | 265958 | 25.0000 | 27.239 | 50.00- 150.00 | 100.00 |
| 10.181 | 10.181 (0.735) | 43 | 843581 | | | 259.05- 359.05 | 317.19 |
| 46 2-Propanol | | | | | CAS #: 67-63-0 | | |
| 10.374 | 10.374 (0.749) | 45 | 1357918 | 25.0000 | 27.672 | 50.00- 150.00 | 100.00 |
| 10.374 | 10.374 (0.749) | 43 | 305750 | | | 0.00- 73.80 | 22.52 |
| 10.374 | 10.374 (0.749) | 59 | 56586 | | | 0.00- 54.08 | 4.17 |
| 47 Carbon Disulfide | | | | | CAS #: 75-15-0 | | |
| 10.540 | 10.540 (0.761) | 76 | 1244087 | 25.0000 | 27.148 | 50.00- 150.00 | 100.00 |
| 51 3-Chloropropene | | | | | CAS #: 107-05-1 | | |
| 10.817 | 10.817 (0.781) | 76 | 262201 | 25.0000 | 27.603 | 50.00- 150.00 | 100.00 |
| 10.817 | 10.817 (0.781) | 41 | 611959 | | | 185.00- 285.00 | 233.39 |
| 54 Methylene Chloride | | | | | CAS #: 75-09-2 | | |
| 11.093 | 11.093 (0.800) | 49 | 434956 | 25.0000 | 27.016 | 50.00- 150.00 | 100.00 |
| 11.093 | 11.093 (0.800) | 84 | 385491 | | | 40.01- 140.01 | 88.63 |
| 11.093 | 11.093 (0.800) | 51 | 135319 | | | 0.00- 81.08 | 31.11 |
| 60 MTBE | | | | | CAS #: 1634-04-4 | | |
| 11.453 | 11.453 (0.826) | 73 | 647227 | 25.0000 | 25.697 | 50.00- 150.00 | 100.00 |
| 11.453 | 11.453 (0.826) | 57 | 125806 | | | 0.00- 69.28 | 19.44 |
| 11.453 | 11.453 (0.826) | 41 | 129401 | | | 0.00- 69.31 | 19.99 |
| 61 trans-1,2-Dichloroethene | | | | | CAS #: 156-60-5 | | |
| 11.536 | 11.536 (0.832) | 96 | 600822 | 25.0000 | 27.456 | 50.00- 150.00 | 100.00 |
| 11.536 | 11.536 (0.832) | 61 | 832371 | | | 83.34- 183.34 | 138.54 |
| 11.536 | 11.536 (0.832) | 98 | 380971 | | | 11.49- 111.49 | 63.41 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 65 Hexane | | | | | CAS #: 110-54-3 | | |
| 11.895 | 11.895 (0.858) | 57 | 989059 | 25.0000 | 27.556 | 50.00- 150.00 | 100.00 |
| 11.895 | 11.895 (0.858) | 43 | 580537 | | | 6.67- 106.67 | 58.70 |
| 11.895 | 11.895 (0.858) | 86 | 173680 | | | 0.00- 66.53 | 17.56 |
| 69 Vinyl Acetate | | | | | CAS #: 108-05-4 | | |
| 12.365 | 12.365 (0.892) | 86 | 152714 | 25.0000 | 26.000 | 50.00- 150.00 | 100.00 |
| 12.337 | 12.337 (0.890) | 43 | 1439290 | | | 869.92- 969.92 | 942.47 |
| 70 1,1-Dichloroethane | | | | | CAS #: 75-34-3 | | |
| 12.365 | 12.365 (0.892) | 63 | 1055871 | 25.0000 | 28.394 | 50.00- 150.00 | 100.00 |
| 12.365 | 12.365 (0.892) | 65 | 337767 | | | 0.00- 81.73 | 31.99 |
| 75 2-Butanone | | | | | CAS #: 78-93-3 | | |
| 13.388 | 13.388 (0.966) | 72 | 335958 | 25.0000 | 27.744 | 50.00- 150.00 | 100.00 |
| 13.388 | 13.388 (0.966) | 43 | 1404803 | | | 362.73- 462.73 | 418.15 |
| 13.388 | 13.388 (0.966) | 57 | 100302 | | | 0.00- 79.31 | 29.86 |
| 76 cis-1,2-Dichloroethene | | | | | CAS #: 156-59-2 | | |
| 13.416 | 13.416 (0.968) | 61 | 757924 | 25.0000 | 28.436 | 50.00- 150.00 | 100.00 |
| 13.416 | 13.416 (0.968) | 96 | 565959 | | | 30.20- 130.20 | 74.67 |
| 13.416 | 13.416 (0.968) | 98 | 371322 | | | 0.03- 100.03 | 48.99 |
| 80 Tetrahydrofuran | | | | | CAS #: 109-99-9 | | |
| 13.858 | 13.858 (1.000) | 42 | 567073 | 25.0000 | 28.244 | 50.00- 150.00 | 100.00 |
| 13.858 | 13.858 (1.000) | 71 | 281975 | | | 0.15- 100.15 | 49.72 |
| 13.858 | 13.858 (1.000) | 72 | 313041 | | | 4.67- 104.67 | 55.20 |
| 82 Chloroform | | | | | CAS #: 67-66-3 | | |
| 13.941 | 13.941 (1.006) | 83 | 1235702 | 25.0000 | 29.804 | 50.00- 150.00 | 100.00 |
| 13.941 | 13.941 (1.006) | 85 | 804653 | | | 16.84- 116.84 | 65.12 |
| 83 1,1,1-Trichloroethane | | | | | CAS #: 71-55-6 | | |
| 14.273 | 14.273 (1.030) | 97 | 1186213 | 25.0000 | 27.015 | 50.00- 150.00 | 100.00 |
| 14.273 | 14.273 (1.030) | 99 | 762914 | | | 13.29- 113.29 | 64.32 |
| 85 Cyclohexane | | | | | CAS #: 110-82-7 | | |
| 14.300 | 14.300 (1.032) | 84 | 660623 | 25.0000 | 26.824 | 50.00- 150.00 | 100.00 |
| 14.300 | 14.300 (1.032) | 56 | 676088 | | | 49.76- 149.76 | 102.34 |
| 14.300 | 14.300 (1.032) | 41 | 349221 | | | 3.69- 103.69 | 52.86 |
| 87 Carbon Tetrachloride | | | | | CAS #: 56-23-5 | | |
| 14.549 | 14.549 (1.050) | 119 | 1141957 | 25.0000 | 27.708 | 50.00- 150.00 | 100.00 |
| 14.549 | 14.549 (1.050) | 117 | 1206884 | | | 54.35- 154.35 | 105.69 |
| 89 2,2,4-Trimethylpentane | | | | | CAS #: 540-84-1 | | |
| 14.881 | 14.881 (1.074) | 57 | 2489804 | 25.0000 | 28.466 | 50.00- 150.00 | 100.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 89 2,2,4-Trimethylpentane (continued) | | | | | | | |
| 14.881 | 14.881 (1.074) | 56 | 810762 | | | 0.00- 82.34 | 32.56 |
| 14.881 | 14.881 (1.074) | 41 | 636707 | | | 0.00- 76.30 | 25.57 |
| 91 Benzene | | | | | CAS #: 71-43-2 | | |
| 14.964 | 14.964 (0.958) | 78 | 1660183 | 25.0000 | 28.403 | 50.00- 150.00 | 100.00 |
| 14.964 | 14.964 (0.958) | 77 | 385311 | | | 0.00- 72.49 | 23.21 |
| 93 1,2-Dichloroethane | | | | | CAS #: 107-06-2 | | |
| 15.075 | 15.075 (0.965) | 62 | 799362 | 25.0000 | 29.088 | 50.00- 150.00 | 100.00 |
| 15.075 | 15.075 (0.965) | 64 | 262062 | | | 0.00- 84.21 | 32.78 |
| 94 Heptane | | | | | CAS #: 142-82-5 | | |
| 15.185 | 15.185 (0.972) | 71 | 596501 | 25.0000 | 28.284 | 50.00- 150.00 | 100.00 |
| 15.185 | 15.185 (0.972) | 43 | 818532 | | | 86.68- 186.68 | 137.22 |
| 15.185 | 15.185 (0.972) | 57 | 484028 | | | 32.20- 132.20 | 81.14 |
| 101 Trichloroethene | | | | | CAS #: 79-01-6 | | |
| 16.070 | 16.070 (1.028) | 95 | 772261 | 25.0000 | 28.941 | 50.00- 150.00 | 100.00 |
| 16.098 | 16.098 (1.030) | 130 | 738216 | | | 47.47- 147.47 | 95.59 |
| 16.070 | 16.070 (1.028) | 97 | 490876 | | | 14.52- 114.52 | 63.56 |
| 104 1,2-Dichloropropane | | | | | CAS #: 78-87-5 | | |
| 16.568 | 16.568 (1.060) | 63 | 549610 | 25.0000 | 27.500 | 50.00- 150.00 | 100.00 |
| 16.568 | 16.568 (1.060) | 62 | 400505 | | | 17.52- 117.52 | 72.87 |
| 16.568 | 16.568 (1.060) | 41 | 287303 | | | 0.97- 100.97 | 52.27 |
| 106 1,4-Dioxane | | | | | CAS #: 123-91-1 | | |
| 16.706 | 16.706 (1.069) | 88 | 456280 | 25.0000 | 26.321 | 50.00- 150.00 | 100.00 |
| 16.678 | 16.678 (1.067) | 58 | 262102 | | | 6.89- 106.89 | 57.44 |
| 16.678 | 16.678 (1.067) | 57 | 92473 | | | 0.00- 69.74 | 20.27 |
| 107 Bromodichloromethane | | | | | CAS #: 75-27-4 | | |
| 17.010 | 17.010 (1.088) | 83 | 1256923 | 25.0000 | 28.869 | 50.00- 150.00 | 100.00 |
| 17.010 | 17.010 (1.088) | 85 | 811506 | | | 14.67- 114.67 | 64.56 |
| 110 cis-1,3-Dichloropropene | | | | | CAS #: 10061-01-5 | | |
| 17.784 | 17.784 (1.138) | 75 | 915311 | 25.0000 | 28.746 | 50.00- 150.00 | 100.00 |
| 17.784 | 17.784 (1.138) | 77 | 288098 | | | 0.00- 83.04 | 31.48 |
| 17.784 | 17.784 (1.138) | 39 | 386195 | | | 0.00- 93.89 | 42.19 |
| 111 4-Methyl-2-pentanone | | | | | CAS #: 108-10-1 | | |
| 17.978 | 17.978 (1.150) | 58 | 569196 | 25.0000 | 28.569 | 50.00- 150.00 | 100.00 |
| 17.978 | 17.978 (1.150) | 43 | 1290577 | | | 169.12- 269.12 | 226.74 |
| 17.978 | 17.978 (1.150) | 85 | 289445 | | | 0.58- 100.58 | 50.85 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 114 Toluene | | | | | CAS #: 108-88-3 | | |
| 18.337 | 18.337 (1.173) | 91 | 1788626 | 25.0000 | 27.580 | 50.00- 150.00 | 100.00 |
| 18.337 | 18.337 (1.173) | 92 | 1106169 | | | 11.10- 111.10 | 61.84 |
| 116 trans-1,3-Dichloropropene | | | | | CAS #: 10061-02-6 | | |
| 18.780 | 18.780 (0.903) | 75 | 953850 | 25.0000 | 30.099 | 50.00- 150.00 | 100.00 |
| 18.780 | 18.780 (0.903) | 77 | 309448 | | | 0.00- 83.38 | 32.44 |
| 18.752 | 18.752 (0.902) | 39 | 371463 | | | 0.00- 92.03 | 38.94 |
| 117 1,1,2-Trichloroethane | | | | | CAS #: 79-00-5 | | |
| 19.112 | 19.112 (0.919) | 97 | 668692 | 25.0000 | 30.124 | 50.00- 150.00 | 100.00 |
| 19.112 | 19.112 (0.919) | 99 | 421262 | | | 14.64- 114.64 | 63.00 |
| 19.112 | 19.112 (0.919) | 83 | 553240 | | | 37.04- 137.04 | 82.73 |
| 120 Tetrachloroethene | | | | | CAS #: 127-18-4 | | |
| 19.277 | 19.277 (0.927) | 166 | 892868 | 25.0000 | 30.080 | 50.00- 150.00 | 100.00 |
| 19.277 | 19.277 (0.927) | 129 | 628626 | | | 21.89- 121.89 | 70.41 |
| 19.277 | 19.277 (0.927) | 131 | 595581 | | | 19.59- 119.59 | 66.70 |
| 121 2-Hexanone | | | | | CAS #: 591-78-6 | | |
| 19.416 | 19.416 (0.934) | 58 | 793615 | 25.0000 | 27.569 | 50.00- 150.00 | 100.00 |
| 19.416 | 19.416 (0.934) | 43 | 1310507 | | | 114.75- 214.75 | 165.13 |
| 19.416 | 19.416 (0.934) | 100 | 176970 | | | 0.00- 71.95 | 22.30 |
| 122 Dibromochloromethane | | | | | CAS #: 124-48-1 | | |
| 19.803 | 19.803 (0.952) | 129 | 1126515 | 25.0000 | 30.497 | 50.00- 150.00 | 100.00 |
| 19.803 | 19.803 (0.952) | 127 | 857120 | | | 26.41- 126.41 | 76.09 |
| 123 1,2-Dibromoethane | | | | | CAS #: 106-93-4 | | |
| 20.079 | 20.079 (0.965) | 107 | 1058488 | 25.0000 | 29.661 | 50.00- 150.00 | 100.00 |
| 20.079 | 20.079 (0.965) | 109 | 982242 | | | 43.48- 143.48 | 92.80 |
| 127 Chlorobenzene | | | | | CAS #: 108-90-7 | | |
| 20.853 | 20.853 (1.003) | 112 | 1429441 | 25.0000 | 28.725 | 50.00- 150.00 | 100.00 |
| 20.853 | 20.853 (1.003) | 114 | 456716 | | | 0.00- 83.18 | 31.95 |
| 20.853 | 20.853 (1.003) | 77 | 843032 | | | 20.20- 120.20 | 58.98 |
| 128 Ethyl Benzene | | | | | CAS #: 100-41-4 | | |
| 20.936 | 20.936 (1.007) | 106 | 746430 | 25.0000 | 28.997 | 50.00- 150.00 | 100.00 |
| 20.936 | 20.936 (1.007) | 91 | 2313958 | | | 265.06- 365.06 | 310.00 |
| 129 m,p-Xylene | | | | | CAS #: 108-38-3 | | |
| 21.130 | 21.130 (1.016) | 106 | 938114 | 25.0000 | 29.331 | 50.00- 150.00 | 100.00 |
| 21.130 | 21.130 (1.016) | 91 | 1826519 | | | 147.41- 247.41 | 194.70 |
| 130 o-Xylene | | | | | CAS #: 95-47-6 | | |
| 21.849 | 21.849 (1.051) | 106 | 868697 | 25.0000 | 29.477 | 50.00- 150.00 | 100.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 130 o-Xylene (continued) | | | | | | | |
| 21.849 | 21.849 (1.051) | 91 | 1782003 | | | 155.82- 255.82 | 205.14 |
| 131 Styrene | | | | | CAS #: 100-42-5 | | |
| 21.876 | 21.876 (1.052) | 104 | 1490172 | 25.0000 | 31.990 | 50.00- 150.00 | 100.00 |
| 21.876 | 21.876 (1.052) | 78 | 734187 | | | 9.19- 109.19 | 49.27 |
| 133 Bromoform | | | | | CAS #: 75-25-2 | | |
| 22.291 | 22.291 (1.072) | 173 | 1008497 | 25.0000 | 28.850 | 50.00- 150.00 | 100.00 |
| 22.291 | 22.291 (1.072) | 171 | 512105 | | | 0.74- 100.74 | 50.78 |
| 134 Cumene | | | | | CAS #: 98-82-8 | | |
| 22.429 | 22.429 (1.078) | 105 | 2385218 | 25.0000 | 30.820 | 50.00- 150.00 | 100.00 |
| 22.429 | 22.429 (1.078) | 120 | 626586 | | | 0.00- 75.99 | 26.27 |
| 22.429 | 22.429 (1.078) | 51 | 187659 | | | 9.74- 109.74 | 7.87 |
| 140 1,1,2,2-Tetrachloroethane | | | | | CAS #: 79-34-5 | | |
| 23.010 | 23.010 (1.106) | 83 | 1327737 | 25.0000 | 28.312 | 50.00- 150.00 | 100.00 |
| 23.010 | 23.010 (1.106) | 85 | 864174 | | | 14.88- 114.88 | 65.09 |
| 142 Propylbenzene | | | | | CAS #: 103-65-1 | | |
| 23.121 | 23.121 (1.112) | 91 | 2937772 | 25.0000 | 28.804 | 50.00- 150.00 | 100.00 |
| 23.121 | 23.121 (1.112) | 120 | 670514 | | | 0.00- 72.67 | 22.82 |
| 23.121 | 23.121 (1.112) | 105 | 105034 | | | 0.00- 53.69 | 3.58 |
| 145 4-Ethyltoluene | | | | | CAS #: 622-96-8 | | |
| 23.287 | 23.287 (1.120) | 105 | 2510514 | 25.0000 | 28.942 | 50.00- 150.00 | 100.00 |
| 23.287 | 23.287 (1.120) | 120 | 769258 | | | 0.00- 80.49 | 30.64 |
| 147 1,3,5-Trimethylbenzene | | | | | CAS #: 108-67-8 | | |
| 23.397 | 23.397 (1.125) | 105 | 2085075 | 25.0000 | 29.031 | 50.00- 150.00 | 100.00 |
| 23.397 | 23.397 (1.125) | 120 | 1036589 | | | 1.60- 101.60 | 49.71 |
| 150 1,2,4-Trimethylbenzene | | | | | CAS #: 95-63-6 | | |
| 24.033 | 24.033 (1.156) | 105 | 2006013 | 25.0000 | 29.283 | 50.00- 150.00 | 100.00 |
| 24.033 | 24.033 (1.156) | 120 | 933491 | | | 0.00- 96.88 | 46.53 |
| 155 1,3-Dichlorobenzene | | | | | CAS #: 541-73-1 | | |
| 24.586 | 24.586 (1.182) | 146 | 1358210 | 25.0000 | 28.215 | 50.00- 150.00 | 100.00 |
| 24.586 | 24.586 (1.182) | 148 | 865122 | | | 14.03- 114.03 | 63.70 |
| 24.586 | 24.586 (1.182) | 111 | 560571 | | | 0.00- 91.33 | 41.27 |
| 156 1,4-Dichlorobenzene | | | | | CAS #: 106-46-7 | | |
| 24.724 | 24.724 (1.189) | 146 | 1385318 | 25.0000 | 27.949 | 50.00- 150.00 | 100.00 |
| 24.752 | 24.752 (1.190) | 148 | 889542 | | | 15.04- 115.04 | 64.21 |
| 24.724 | 24.724 (1.189) | 111 | 557925 | | | 0.00- 89.92 | 40.27 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 159 alpha-Chlorotoluene | | | | | CAS #: 100-44-7 | | |
| 24.946 | 24.946 (1.199) | 91 | 2013651 | 25.0000 | 28.731 | 50.00- 150.00 | 100.00 |
| 24.946 | 24.946 (1.199) | 126 | 392538 | | | 0.00- 70.12 | 19.49 |
| 161 1,2-Dichlorobenzene | | | | | CAS #: 95-50-1 | | |
| 25.360 | 25.360 (1.219) | 146 | 1335025 | 25.0000 | 27.993 | 50.00- 150.00 | 100.00 |
| 25.360 | 25.360 (1.219) | 148 | 862150 | | | 14.55- 114.55 | 64.58 |
| 25.360 | 25.360 (1.219) | 111 | 582972 | | | 0.00- 93.18 | 43.67 |
| 165 1,2,4-Trichlorobenzene | | | | | CAS #: 120-82-1 | | |
| 28.153 | 28.153 (1.354) | 180 | 1129157 | 25.0000 | 24.754 | 50.00- 150.00 | 100.00 |
| 28.153 | 28.153 (1.354) | 182 | 1078030 | | | 44.49- 144.49 | 95.47 |
| 166 Hexachlorobutadiene | | | | | CAS #: 87-68-3 | | |
| 28.319 | 28.319 (1.362) | 225 | 817762 | 25.0000 | 24.521 | 50.00- 150.00 | 100.00 |
| 28.319 | 28.319 (1.362) | 223 | 520302 | | | 14.10- 114.10 | 63.63 |
| 29 Isopentane | | | | | CAS #: 78-78-4 | | |
| 8.245 | 8.245 (0.595) | 43 | 631978 | 25.0000 | 28.020 | 50.00- 150.00 | 100.00 |
| 8.245 | 8.245 (0.595) | 57 | 475192 | | | 26.21- 126.21 | 75.19 |
| 19 Butane | | | | | CAS #: 106-97-8 | | |
| 6.808 | 6.808 (0.491) | 58 | 79028 | 25.0000 | 28.310 | 50.00- 150.00 | 100.00 |
| 6.808 | 6.808 (0.491) | 43 | 568956 | | | 668.04- 768.04 | 719.94 |
| 102 Methyl Cyclohexane | | | | | CAS #: 108-87-2 | | |
| 16.347 | 16.347 (1.180) | 83 | 849696 | 25.0000 | 26.647 | 50.00- 150.00 | 100.00 |
| 16.347 | 16.347 (1.180) | 98 | 382502 | | | 0.00- 92.45 | 45.02 |
| 16.347 | 16.347 (1.180) | 55 | 585600 | | | 18.10- 118.10 | 68.92 |
| 167 Naphthalene | | | | | CAS #: 91-20-3 | | |
| 28.678 | 28.678 (1.379) | 128 | 1596060 | 25.0000 | 24.325 | 50.00- 150.00 | 100.00 |
| 28.678 | 28.678 (1.379) | 127 | 196302 | | | 0.00- 62.43 | 12.30 |

Report Date: 26-Nov-2007 15:03

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t112105.d
Lab Smp Id: ical
Analysis Type: VOA
Quant Type: ISTD
Operator: dm
Method File: /chem/msdt.i/23Nov2007.b/t14q1121a.m
Misc Info: 200ppbv-25ppbv

Calibration Date: 23-NOV-2007
Calibration Time: 09:32
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 364898 | 218939 | 510857 | 307764 | -15.66 |
| 97 1,4-Difluorobenze | 1716816 | 1030090 | 2403542 | 1370043 | -20.20 |
| 126 Chlorobenzene-d5 | 1199182 | 719509 | 1678855 | 940060 | -21.61 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.89 | 13.56 | 14.22 | 13.86 | -0.20 |
| 97 1,4-Difluorobenze | 15.63 | 15.30 | 15.96 | 15.63 | 0.00 |
| 126 Chlorobenzene-d5 | 20.80 | 20.47 | 21.13 | 20.80 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

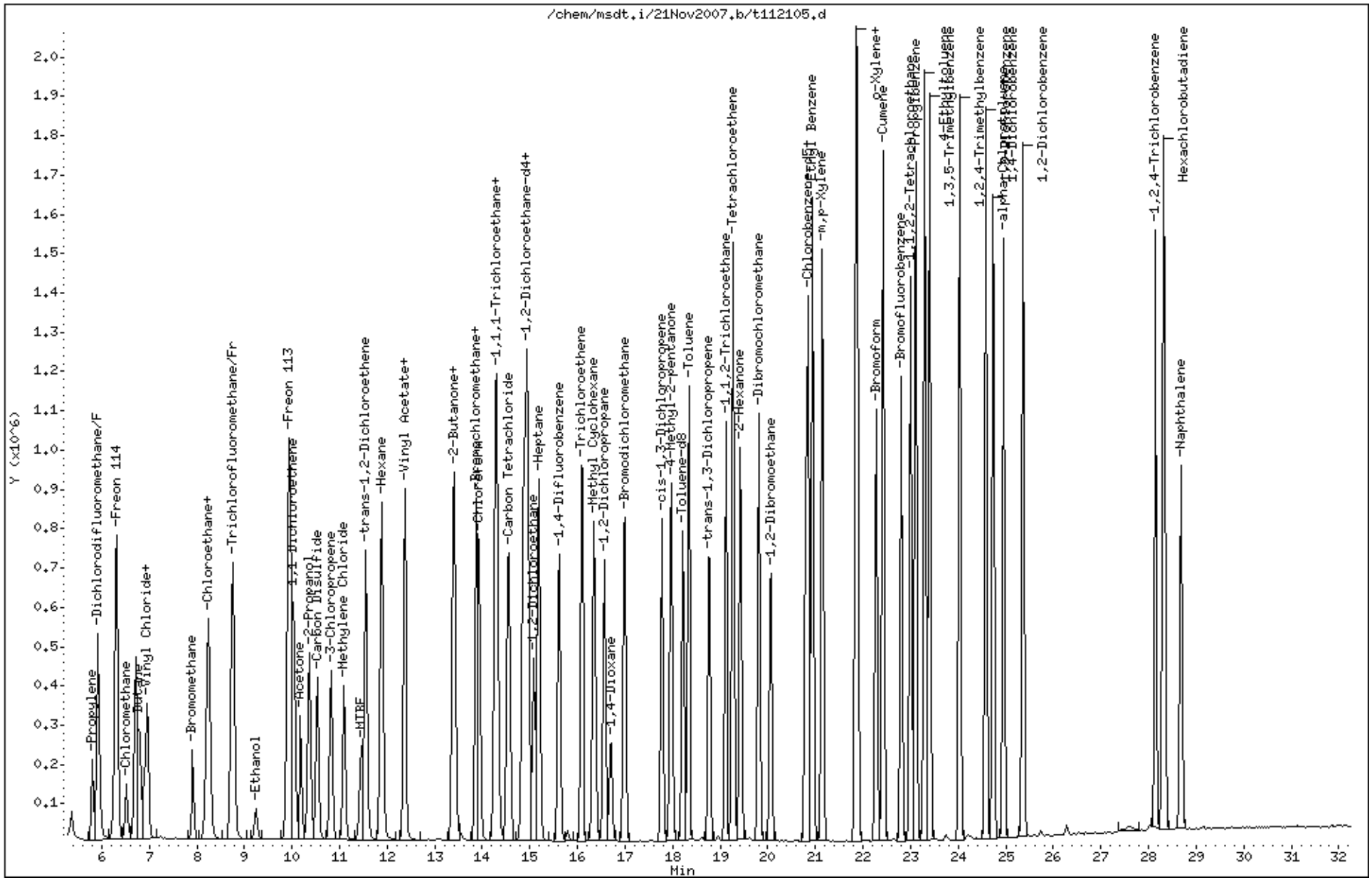
0126

Data File: /chem/msdt.i/21Nov2007.b/t112105.d
Date : 21-NOV-2007 16:33
Client ID: Level 4
Sample Info: 25ml #1576-92

Instrument: msdt.i

Operator: dm
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/26Nov2007.b/t112603.d
Lab Smp Id: ical level 5
Inj Date : 26-NOV-2007 10:49
Operator : ea Inst ID: msdt.i
Smp Info : 50ml #1487-402
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Meth Date : 27-Nov-2007 14:00 lover Quant Type: ISTD
Cal Date : 26-NOV-2007 10:49 Cal File: t112603.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22b.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | AMOUNTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| == | ====== ======== | ==== | ======== | ======= | ======= | ========== | ===== |
| * 81 Bromochloromethane | | | | | CAS #: 74-97-5 | | |
| 13.865 | 13.865 (1.000) | 130 | 301939 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 13.865 | 13.865 (1.000) | 128 | 227251 | | | 25.26- 125.26 | 75.26 |
| 13.865 | 13.865 (1.000) | 49 | 328319 | | | 58.74- 158.74 | 108.74 |
| * 97 1,4-Difluorobenzene | | | | | CAS #: 540-36-3 | | |
| 15.607 | 15.607 (1.000) | 114 | 1427711 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 15.607 | 15.607 (1.000) | 88 | 225620 | | | 0.00- 65.80 | 15.80 |
| * 126 Chlorobenzene-d5 | | | | | CAS #: 3114-55-4 | | |
| 20.805 | 20.805 (1.000) | 117 | 1047767 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 20.805 | 20.805 (1.000) | 82 | 572517 | | | 4.93- 104.93 | 54.64 |
| 5 Freon 143a | | | | | CAS #: 420-46-2 | | |
| 5.534 | 5.534 (0.399) | 69 | 970137 | 50.0000 | 49.958 | 80.00- 120.00 | 100.00 |
| 6 Freon142b | | | | | CAS #: 75-68-3 | | |
| 6.435 | 6.435 (0.464) | 65 | 1539948 | 50.0000 | 53.363 | 80.00- 120.00 | 100.00 |
| 6.435 | 6.435 (0.464) | 45 | 299709 | | | 0.00- 69.76 | 19.46 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 9 Freon 13 | | | | | CAS #: 75-72-9 | | |
| 5.394 | 5.394 (0.389) | 69 | 1536694 | 50.0000 | 58.354 | 80.00- 120.00 | 100.00 |
| 5.394 | 5.394 (0.389) | 85 | 485823 | | | 0.00- 82.40 | 31.61 |
| 5.394 | 5.394 (0.389) | 87 | 160398 | | | 0.00- 60.56 | 10.44 |
| 13 Freon 134a | | | | | CAS #: 811-97-2 | | |
| 5.675 | 5.675 (0.409) | 83 | 704170 | 50.0000 | 51.527 | 80.00- 120.00 | 100.00 |
| 5.675 | 5.675 (0.409) | 69 | 571710 | | | 31.14- 131.14 | 81.19 |
| 15 Freon 152a | | | | | CAS #: 75-37-6 | | |
| 5.844 | 5.844 (0.422) | 65 | 364815 | 50.0000 | 51.582 | 80.00- 120.00 | 100.00 |
| 5.844 | 5.844 (0.422) | 51 | 617020 | | | 117.84- 217.84 | 169.13 |
| 5.844 | 5.844 (0.422) | 47 | 142188 | | | 0.00- 88.39 | 38.98 |
| 17 Freon 22 | | | | | CAS #: 75-45-6 | | |
| 6.013 | 6.013 (0.434) | 67 | 185884 | 50.0000 | 51.485 | 80.00- 120.00 | 100.00 |
| 5.985 | 5.985 (0.432) | 51 | 930890 | | | 439.12- 539.12 | 500.79 |
| 6.013 | 6.013 (0.434) | 85 | 17226 | | | 0.00- 91.16 | 9.27 |
| 26 Methanol | | | | | CAS #: 67-56-1 | | |
| 7.562 | 7.562 (0.545) | 31 | 880334 | 300.000 | 283.66 | 80.00- 120.00 | 100.00 |
| 7.562 | 7.562 (0.545) | 32 | 686349 | | | 27.96- 127.96 | 77.96 |
| 34 Dichlorofluoromethane/Fr21 | | | | | CAS #: 75-43-4 | | |
| 8.745 | 8.745 (0.631) | 67 | 1270200 | 50.0000 | 52.528 | 80.00- 120.00 | 100.00 |
| 8.745 | 8.745 (0.631) | 69 | 418270 | | | 0.00- 82.06 | 32.93 |
| 8.745 | 8.745 (0.631) | 35 | 61603 | | | 0.00- 54.92 | 4.85 |
| 40 Freon123a | | | | | CAS #: 354-23-4 | | |
| 9.579 | 9.579 (0.691) | 67 | 1327213 | 50.0000 | 56.049 | 80.00- 120.00 | 100.00 |
| 9.579 | 9.579 (0.691) | 117 | 1048353 | | | 30.97- 130.97 | 78.99 |
| 41 Freon123 | | | | | CAS #: 306-83-2 | | |
| 9.718 | 9.718 (0.701) | 83 | 1800972 | 50.0000 | 54.930 | 80.00- 120.00 | 100.00 |
| 9.718 | 9.718 (0.701) | 133 | 368793 | | | 0.00- 70.26 | 20.48 |
| 9.718 | 9.718 (0.701) | 85 | 1220714 | | | 17.95- 117.95 | 67.78 |
| 57 tert-Butyl-Alcohol | | | | | CAS #: 75-65-0 | | |
| 11.155 | 11.155 (0.805) | 59 | 734039 | 50.0000 | 45.897 | 80.00- 120.00 | 100.00 |
| 11.155 | 11.155 (0.805) | 41 | 158689 | | | 0.00- 78.87 | 21.62 |
| 11.155 | 11.155 (0.805) | 57 | 73344 | | | 0.00- 61.35 | 9.99 |
| 68 Isopropyl ether | | | | | CAS #: 108-20-3 | | |
| 12.289 | 12.289 (0.886) | 45 | 2768086 | 50.0000 | 55.828 | 80.00- 120.00 | 100.00 |
| 12.289 | 12.289 (0.886) | 87 | 910274 | | | 0.00- 84.51 | 32.88 |
| 12.289 | 12.289 (0.886) | 59 | 340233 | | | 0.00- 62.64 | 12.29 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 71 1-Propanol | | | | | CAS #: 71-23-8 | | |
| 12.400 | 12.400 (0.894) | 42 | 142090 | 50.0000 | 54.459 | 80.00- 120.00 | 100.00(H) |
| 12.400 | 12.400 (0.894) | 59 | 207169 | | | 75.45- 175.45 | 145.80 |
| 12.400 | 12.400 (0.894) | 41 | 121148 | | | 158.05- 258.05 | 85.26 |
| 73 t-Butylethyl Ether | | | | | CAS #: 637-92-3 | | |
| 12.925 | 12.925 (0.932) | 59 | 1247549 | 50.0000 | 51.771 | 80.00- 120.00 | 100.00 |
| 12.925 | 12.925 (0.932) | 87 | 573435 | | | 0.00- 95.70 | 45.96 |
| 12.925 | 12.925 (0.932) | 41 | 221058 | | | 0.00- 69.82 | 17.72 |
| 77 Ethyl Acetate | | | | | CAS #: 141-78-6 | | |
| 13.367 | 13.367 (0.964) | 45 | 296370 | 50.0000 | 56.715 | 80.00- 120.00 | 100.00 |
| 13.395 | 13.395 (0.966) | 61 | 340888 | | | 63.70- 163.70 | 115.02 |
| 13.367 | 13.367 (0.964) | 43 | 2087536 | | | 641.02- 741.02 | 704.37 |
| 99 Isobutanol | | | | | CAS #: 78-83-1 | | |
| 14.612 | 14.612 (0.936) | 59 | 20336 | 50.0000 | 57.476 | 80.00- 120.00 | 100.00 |
| 14.612 | 14.612 (0.936) | 41 | 431442 | | | 2254.31-2354.31 | 2121.57 |
| 14.612 | 14.612 (0.936) | 43 | 556712 | | | 2684.91-2784.91 | 2737.57 |
| 92 tert-amyl-Methyl Ether | | | | | CAS #: 994-05-8 | | |
| 14.999 | 14.999 (1.082) | 73 | 1470603 | 50.0000 | 51.579 | 80.00- 120.00 | 100.00 |
| 14.999 | 14.999 (1.082) | 87 | 370638 | | | 0.00- 75.09 | 25.20 |
| 14.999 | 14.999 (1.082) | 55 | 350216 | | | 0.00- 74.77 | 23.81 |
| 96 2-Heptanone | | | | | CAS #: 110-43-0 | | |
| 21.966 | 21.966 (1.584) | 58 | 1218125 | 50.0000 | 60.732 | 80.00- 120.00 | 100.00 |
| 21.966 | 21.966 (1.584) | 43 | 1667188 | | | 85.60- 185.60 | 136.87 |
| 98 1-Butanol | | | | | CAS #: 71-36-3 | | |
| 15.773 | 15.773 (1.011) | 56 | 522460 | 50.0000 | 71.810 | 80.00- 120.00 | 100.00 |
| 15.773 | 15.773 (1.011) | 41 | 335388 | | | 17.89- 117.89 | 64.19 |
| 15.773 | 15.773 (1.011) | 43 | 257584 | | | 0.00- 99.85 | 49.30 |
| 119 Butyl Acetate | | | | | CAS #: 123-86-4 | | |
| 19.533 | 19.533 (1.252) | 56 | 833903 | 50.0000 | 56.451 | 80.00- 120.00 | 100.00 |
| 19.533 | 19.533 (1.252) | 73 | 355029 | | | 0.00- 92.57 | 42.57 |
| 19.533 | 19.533 (1.252) | 43 | 1791673 | | | 164.85- 264.85 | 214.85 |
| 135 Cyclohexanone | | | | | CAS #: 108-94-1 | | |
| 22.740 | 22.740 (1.093) | 55 | 808609 | 50.0000 | 57.858 | 80.00- 120.00 | 100.00 |
| 22.740 | 22.740 (1.093) | 98 | 460924 | | | 6.71- 106.71 | 57.00 |
| 22.740 | 22.740 (1.093) | 42 | 504515 | | | 11.68- 111.68 | 62.39 |
| 146 Diisobutyl Ketone | | | | | CAS #: 108-83-8 | | |
| 23.570 | 23.570 (1.133) | 57 | 2107113 | 50.0000 | 61.109 | 80.00- 120.00 | 100.00 |

| | | | | | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | | |
|---|---|---|---|---|---|---|---|---|
| RT | EXP RT | (REL RT) | MASS | RESPONSE | | | TARGET RANGE | RATIO |
| 146 Diisobutyl Ketone (continued) | | | | | | | | |
| 23.570 | 23.570 | (1.133) | 85 | 2141357 | | | 51.63- 151.63 | 101.63 |
| 0.000 | 1.000 | (0.000) | 0 | 0 | | | 0.00- 50.00 | 0.00 |

QC Flag Legend

H - Operator selected an alternate compound hit.

Report Date: 27-Nov-2007 14:00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t112603.d
Lab Smp Id: ical level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msdt.i/26Nov2007.b/t14q1121b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 26-NOV-2007
Calibration Time: 10:49
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 301939 | 181163 | 422715 | 301939 | 0.00 |
| 97 1,4-Difluorobenze | 1427711 | 856627 | 1998795 | 1427711 | 0.00 |
| 126 Chlorobenzene-d5 | 1047767 | 628660 | 1466874 | 1047767 | 0.00 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.87 | 13.54 | 14.20 | 13.87 | 0.00 |
| 97 1,4-Difluorobenze | 15.61 | 15.28 | 15.94 | 15.61 | 0.00 |
| 126 Chlorobenzene-d5 | 20.80 | 20.48 | 21.13 | 20.80 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

0132

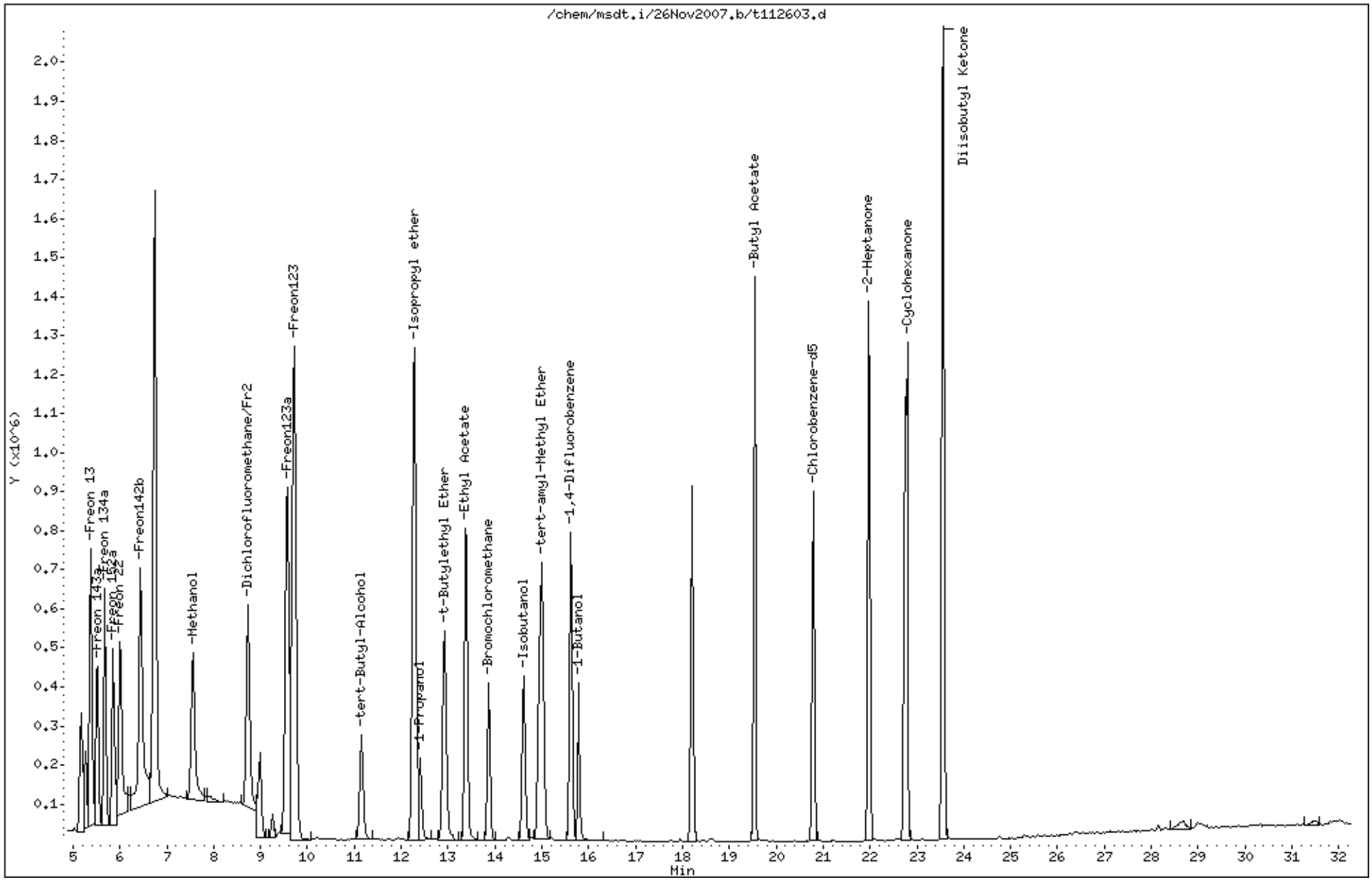
Data File: /chem/msdt.i/26Nov2007.b/t112603.d
Date : 26-NOV-2007 10:49
Client ID:
Sample Info: 50ml #1487-402

Instrument: msdt.i

Operator: ea

Column phase: RTx-624

Column diameter: 0.53



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Nov2007.b/t112106.d
Lab Smp Id: ical Client Smp ID: Level 5
Inj Date : 21-NOV-2007 17:45
Operator : dm Inst ID: msdt.i
Smp Info : 50ml #1576-92
Misc Info : 200ppbv-50ppbv
Comment :
Method : /chem/msdt.i/23Nov2007.b/t14q1121a.m
Meth Date : 26-Nov-2007 15:03 cleonard Quant Type: ISTD
Cal Date : 21-NOV-2007 17:45 Cal File: t112106.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | AMOUNTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| * 81 Bromochloromethane | | | | | CAS #: 74-97-5 | | |
| 13.886 | 13.886 (1.000) | 130 | 306974 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 13.886 | 13.886 (1.000) | 128 | 231444 | | | 25.40- 125.40 | 75.40 |
| 13.858 | 13.858 (1.000) | 49 | 501563 | | | 113.39- 213.39 | 163.39 |
| * 97 1,4-Difluorobenzene | | | | | CAS #: 540-36-3 | | |
| 15.628 | 15.628 (1.000) | 114 | 1370844 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 15.628 | 15.628 (1.000) | 88 | 219266 | | | 0.00- 65.99 | 15.99 |
| * 126 Chlorobenzene-d5 | | | | | CAS #: 3114-55-4 | | |
| 20.798 | 20.798 (1.000) | 117 | 968009 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 20.798 | 20.798 (1.000) | 82 | 548507 | | | 5.79- 105.79 | 56.66 |
| $ 90 1,2-Dichloroethane-d4 | | | | | CAS #: 17060-07-0 | | |
| 14.936 | 14.936 (1.076) | 65 | 482515 | 25.0000 | 24.384 | 80.00- 120.00 | 100.00 |
| 14.936 | 14.936 (1.076) | 67 | 283002 | | | 5.03- 105.03 | 58.65 |
| $ 113 Toluene-d8 | | | | | CAS #: 2037-26-5 | | |
| 18.199 | 18.199 (1.165) | 98 | 1136245 | 25.0000 | 24.486 | 80.00- 120.00 | 100.00 |
| 18.199 | 18.199 (1.165) | 70 | 127751 | | | 0.00- 61.02 | 11.24 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| $ 113 Toluene-d8 (continued) | | | | | | | |
| 18.199 | 18.199 (1.165) | 100 | 801934 | | | 19.45- 119.45 | 70.58 |
| $ 137 Bromofluorobenzene | | | | | CAS #: 460-00-4 | | |
| 22.789 | 22.789 (1.096) | 174 | 614051 | 25.0000 | 25.252 | 80.00- 120.00 | 100.00 |
| 22.789 | 22.789 (1.096) | 95 | 779691 | | | 76.97- 176.97 | 126.97 |
| 22.789 | 22.789 (1.096) | 176 | 598873 | | | 47.53- 147.53 | 97.53 |
| 11 Propylene | | | | | CAS #: 115-07-1 | | |
| 5.840 | 5.840 (0.421) | 41 | 385861 | 50.0000 | 47.175 | 80.00- 120.00 | 100.00 |
| 5.840 | 5.840 (0.421) | 42 | 264082 | | | 17.24- 117.24 | 68.44 |
| 5.840 | 5.840 (0.421) | 39 | 295849 | | | 27.83- 127.83 | 76.67 |
| 12 Dichlorodifluoromethane/Fr12 | | | | | CAS #: 75-71-8 | | |
| 5.950 | 5.950 (0.429) | 85 | 2194110 | 50.0000 | 48.675 | 80.00- 120.00 | 100.00 |
| 5.950 | 5.950 (0.429) | 87 | 698953 | | | 0.00- 82.07 | 31.86 |
| 16 Freon 114 | | | | | CAS #: 76-14-2 | | |
| 6.337 | 6.337 (0.456) | 135 | 1415131 | 50.0000 | 48.409 | 80.00- 120.00 | 100.00 |
| 6.337 | 6.337 (0.456) | 137 | 444794 | | | 0.00- 81.55 | 31.43 |
| 18 Chloromethane | | | | | CAS #: 74-87-3 | | |
| 6.559 | 6.559 (0.472) | 50 | 488474 | 50.0000 | 46.970 | 80.00- 120.00 | 100.00 |
| 6.559 | 6.559 (0.472) | 52 | 162671 | | | 0.00- 84.03 | 33.30 |
| 20 Vinyl Chloride | | | | | CAS #: 75-01-4 | | |
| 6.918 | 6.918 (0.498) | 62 | 721766 | 50.0000 | 50.738 | 80.00- 120.00 | 100.00 |
| 6.918 | 6.918 (0.498) | 64 | 232075 | | | 0.00- 93.71 | 32.15 |
| 22 1,3-Butadiene | | | | | CAS #: 106-99-0 | | |
| 6.973 | 6.973 (0.502) | 54 | 596404 | 50.0000 | 51.496 | 80.00- 120.00 | 100.00 |
| 6.973 | 6.973 (0.502) | 39 | 563277 | | | 54.52- 154.52 | 94.45 |
| 25 Bromomethane | | | | | CAS #: 74-83-9 | | |
| 7.941 | 7.941 (0.572) | 94 | 668207 | 50.0000 | 51.871 | 80.00- 120.00 | 100.00 |
| 7.941 | 7.941 (0.572) | 96 | 616900 | | | 42.32- 142.32 | 92.32 |
| 27 Chloroethane | | | | | CAS #: 75-00-3 | | |
| 8.218 | 8.218 (0.592) | 64 | 358418 | 50.0000 | 51.394 | 80.00- 120.00 | 100.00 |
| 8.218 | 8.218 (0.592) | 49 | 91457 | | | 0.00- 74.88 | 25.52 |
| 8.218 | 8.218 (0.592) | 66 | 115803 | | | 0.00- 80.84 | 32.31 |
| 31 Trichlorofluoromethane/Fr11 | | | | | CAS #: 75-69-4 | | |
| 8.771 | 8.771 (0.632) | 101 | 3019902 | 50.0000 | 51.619 | 80.00- 120.00 | 100.00 |
| 8.771 | 8.771 (0.632) | 103 | 1957279 | | | 14.81- 114.81 | 64.81 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 38 Ethanol | | | | | CAS #: 64-17-5 | | |
| 9.241 | 9.241 (0.665) | 45 | 335731 | 50.0000 | 50.354 | 80.00- 120.00 | 100.00 |
| 9.241 | 9.241 (0.665) | 43 | 74658 | | | 0.00- 72.67 | 22.24 |
| 9.241 | 9.241 (0.665) | 46 | 125664 | | | 0.00- 86.29 | 37.43 |
| 42 Freon 113 | | | | | CAS #: 76-13-1 | | |
| 9.960 | 9.960 (0.717) | 151 | 1835401 | 50.0000 | 52.068 | 80.00- 120.00 | 100.00 |
| 9.960 | 9.960 (0.717) | 153 | 1168018 | | | 13.64- 113.64 | 63.64 |
| 9.960 | 9.960 (0.717) | 101 | 2356538 | | | 78.39- 178.39 | 128.39 |
| 43 1,1-Dichloroethene | | | | | CAS #: 75-35-4 | | |
| 10.042 | 10.042 (0.723) | 61 | 1418340 | 50.0000 | 53.138 | 80.00- 120.00 | 100.00 |
| 10.042 | 10.042 (0.723) | 96 | 887168 | | | 12.55- 112.55 | 62.55 |
| 10.042 | 10.042 (0.723) | 98 | 579752 | | | 0.00- 90.88 | 40.88 |
| 45 Acetone | | | | | CAS #: 67-64-1 | | |
| 10.181 | 10.181 (0.733) | 58 | 478069 | 50.0000 | 49.090 | 80.00- 120.00 | 100.00 |
| 10.181 | 10.181 (0.733) | 43 | 1469854 | | | 259.05- 359.05 | 307.46 |
| 46 2-Propanol | | | | | CAS #: 67-63-0 | | |
| 10.374 | 10.374 (0.747) | 45 | 2506615 | 50.0000 | 51.212 | 80.00- 120.00 | 100.00 |
| 10.374 | 10.374 (0.747) | 43 | 549569 | | | 0.00- 73.80 | 21.92 |
| 10.374 | 10.374 (0.747) | 59 | 106668 | | | 0.00- 54.08 | 4.26 |
| 47 Carbon Disulfide | | | | | CAS #: 75-15-0 | | |
| 10.540 | 10.540 (0.759) | 76 | 2350858 | 50.0000 | 51.432 | 80.00- 120.00 | 100.00 |
| 51 3-Chloropropene | | | | | CAS #: 107-05-1 | | |
| 10.817 | 10.817 (0.779) | 76 | 495181 | 50.0000 | 52.264 | 80.00- 120.00 | 100.00 |
| 10.817 | 10.817 (0.779) | 41 | 1099560 | | | 185.00- 285.00 | 222.05 |
| 54 Methylene Chloride | | | | | CAS #: 75-09-2 | | |
| 11.121 | 11.121 (0.801) | 49 | 781937 | 50.0000 | 48.692 | 80.00- 120.00 | 100.00 |
| 11.121 | 11.121 (0.801) | 84 | 728967 | | | 43.23- 143.23 | 93.23 |
| 11.121 | 11.121 (0.801) | 51 | 247001 | | | 0.00- 81.08 | 31.59 |
| 60 MTBE | | | | | CAS #: 1634-04-4 | | |
| 11.453 | 11.453 (0.825) | 73 | 1158187 | 50.0000 | 46.102 | 80.00- 120.00 | 100.00 |
| 11.453 | 11.453 (0.825) | 57 | 223270 | | | 0.00- 69.28 | 19.28 |
| 11.453 | 11.453 (0.825) | 41 | 215770 | | | 0.00- 69.31 | 18.63 |
| 61 trans-1,2-Dichloroethene | | | | | CAS #: 156-60-5 | | |
| 11.563 | 11.563 (0.833) | 96 | 1154247 | 50.0000 | 52.883 | 80.00- 120.00 | 100.00 |
| 11.536 | 11.536 (0.831) | 61 | 1566623 | | | 85.73- 185.73 | 135.73 |
| 11.563 | 11.563 (0.833) | 98 | 730817 | | | 11.49- 111.49 | 63.32 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 65 Hexane | | | | | CAS #: 110-54-3 | | |
| 11.895 | 11.895 (0.857) | 57 | 1877074 | 50.0000 | 52.431 | 80.00- 120.00 | 100.00 |
| 11.895 | 11.895 (0.857) | 43 | 1073680 | | | 6.67- 106.67 | 57.20 |
| 11.895 | 11.895 (0.857) | 86 | 335031 | | | 0.00- 66.53 | 17.85 |
| 69 Vinyl Acetate | | | | | CAS #: 108-05-4 | | |
| 12.365 | 12.365 (0.890) | 86 | 296951 | 50.0000 | 50.688 | 80.00- 120.00 | 100.00 |
| 12.365 | 12.365 (0.890) | 43 | 2637395 | | | 869.92- 969.92 | 888.16 |
| 70 1,1-Dichloroethane | | | | | CAS #: 75-34-3 | | |
| 12.365 | 12.365 (0.890) | 63 | 1962874 | 50.0000 | 52.921 | 80.00- 120.00 | 100.00 |
| 12.365 | 12.365 (0.890) | 65 | 629061 | | | 0.00- 82.05 | 32.05 |
| 75 2-Butanone | | | | | CAS #: 78-93-3 | | |
| 13.388 | 13.388 (0.964) | 72 | 644762 | 50.0000 | 53.382 | 80.00- 120.00 | 100.00 |
| 13.388 | 13.388 (0.964) | 43 | 2575109 | | | 349.39- 449.39 | 399.39 |
| 13.388 | 13.388 (0.964) | 57 | 184834 | | | 0.00- 79.31 | 28.67 |
| 76 cis-1,2-Dichloroethene | | | | | CAS #: 156-59-2 | | |
| 13.416 | 13.416 (0.966) | 61 | 1408111 | 50.0000 | 52.966 | 80.00- 120.00 | 100.00 |
| 13.416 | 13.416 (0.966) | 96 | 1089296 | | | 27.36- 127.36 | 77.36 |
| 13.416 | 13.416 (0.966) | 98 | 702357 | | | 0.00- 99.88 | 49.88 |
| 80 Tetrahydrofuran | | | | | CAS #: 109-99-9 | | |
| 13.858 | 13.858 (0.998) | 42 | 1048548 | 50.0000 | 52.359 | 80.00- 120.00 | 100.00 |
| 13.858 | 13.858 (0.998) | 71 | 554252 | | | 2.86- 102.86 | 52.86 |
| 13.858 | 13.858 (0.998) | 72 | 591011 | | | 4.67- 104.67 | 56.36 |
| 82 Chloroform | | | | | CAS #: 67-66-3 | | |
| 13.941 | 13.941 (1.004) | 83 | 2292374 | 50.0000 | 55.433 | 80.00- 120.00 | 100.00 |
| 13.941 | 13.941 (1.004) | 85 | 1499462 | | | 15.41- 115.41 | 65.41 |
| 83 1,1,1-Trichloroethane | | | | | CAS #: 71-55-6 | | |
| 14.273 | 14.273 (1.028) | 97 | 2229030 | 50.0000 | 50.894 | 80.00- 120.00 | 100.00 |
| 14.273 | 14.273 (1.028) | 99 | 1442792 | | | 14.73- 114.73 | 64.73 |
| 85 Cyclohexane | | | | | CAS #: 110-82-7 | | |
| 14.300 | 14.300 (1.030) | 84 | 1286814 | 50.0000 | 52.384 | 80.00- 120.00 | 100.00 |
| 14.300 | 14.300 (1.030) | 56 | 1261596 | | | 48.04- 148.04 | 98.04 |
| 14.300 | 14.300 (1.030) | 41 | 648237 | | | 0.38- 100.38 | 50.38 |
| 87 Carbon Tetrachloride | | | | | CAS #: 56-23-5 | | |
| 14.549 | 14.549 (1.048) | 119 | 2137056 | 50.0000 | 51.987 | 80.00- 120.00 | 100.00 |
| 14.549 | 14.549 (1.048) | 117 | 2261592 | | | 55.83- 155.83 | 105.83 |
| 89 2,2,4-Trimethylpentane | | | | | CAS #: 540-84-1 | | |
| 14.881 | 14.881 (1.072) | 57 | 4394428 | 50.0000 | 50.371 | 80.00- 120.00 | 100.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 89 2,2,4-Trimethylpentane (continued) | | | | | | | |
| 14.881 | 14.881 (1.072) | 56 | 1414423 | | | 0.00- 82.34 | 32.19 |
| 14.881 | 14.881 (1.072) | 41 | 1079114 | | | 0.00- 76.30 | 24.56 |
| 91 Benzene | | | | | CAS #: 71-43-2 | | |
| 14.964 | 14.964 (0.958) | 78 | 3145178 | 50.0000 | 53.778 | 80.00- 120.00 | 100.00 |
| 14.964 | 14.964 (0.958) | 77 | 707221 | | | 0.00- 72.49 | 22.49 |
| 93 1,2-Dichloroethane | | | | | CAS #: 107-06-2 | | |
| 15.075 | 15.075 (0.965) | 62 | 1462534 | 50.0000 | 53.189 | 80.00- 120.00 | 100.00 |
| 15.075 | 15.075 (0.965) | 64 | 476594 | | | 0.00- 84.21 | 32.59 |
| 94 Heptane | | | | | CAS #: 142-82-5 | | |
| 15.185 | 15.185 (0.972) | 71 | 1154348 | 50.0000 | 54.703 | 80.00- 120.00 | 100.00 |
| 15.185 | 15.185 (0.972) | 43 | 1536175 | | | 86.68- 186.68 | 133.08 |
| 15.185 | 15.185 (0.972) | 57 | 938839 | | | 32.20- 132.20 | 81.33 |
| 101 Trichloroethene | | | | | CAS #: 79-01-6 | | |
| 16.070 | 16.070 (1.028) | 95 | 1421786 | 50.0000 | 53.251 | 80.00- 120.00 | 100.00 |
| 16.098 | 16.098 (1.030) | 130 | 1349496 | | | 44.92- 144.92 | 94.92 |
| 16.070 | 16.070 (1.028) | 97 | 913111 | | | 14.22- 114.22 | 64.22 |
| 104 1,2-Dichloropropane | | | | | CAS #: 78-87-5 | | |
| 16.568 | 16.568 (1.060) | 63 | 1025638 | 50.0000 | 51.287 | 80.00- 120.00 | 100.00 |
| 16.568 | 16.568 (1.060) | 62 | 733918 | | | 21.56- 121.56 | 71.56 |
| 16.568 | 16.568 (1.060) | 41 | 530420 | | | 1.72- 101.72 | 51.72 |
| 106 1,4-Dioxane | | | | | CAS #: 123-91-1 | | |
| 16.706 | 16.706 (1.069) | 88 | 918112 | 50.0000 | 52.932 | 80.00- 120.00 | 100.00 |
| 16.678 | 16.678 (1.067) | 58 | 509400 | | | 5.48- 105.48 | 55.48 |
| 16.678 | 16.678 (1.067) | 57 | 174053 | | | 0.00- 69.74 | 18.96 |
| 107 Bromodichloromethane | | | | | CAS #: 75-27-4 | | |
| 17.010 | 17.010 (1.088) | 83 | 2330204 | 50.0000 | 53.489 | 80.00- 120.00 | 100.00 |
| 17.010 | 17.010 (1.088) | 85 | 1510910 | | | 14.84- 114.84 | 64.84 |
| 110 cis-1,3-Dichloropropene | | | | | CAS #: 10061-01-5 | | |
| 17.784 | 17.784 (1.138) | 75 | 1741298 | 50.0000 | 54.656 | 80.00- 120.00 | 100.00 |
| 17.784 | 17.784 (1.138) | 77 | 559421 | | | 0.00- 82.13 | 32.13 |
| 17.784 | 17.784 (1.138) | 39 | 703234 | | | 0.00- 90.39 | 40.39 |
| 111 4-Methyl-2-pentanone | | | | | CAS #: 108-10-1 | | |
| 17.978 | 17.978 (1.150) | 58 | 1119007 | 50.0000 | 56.132 | 80.00- 120.00 | 100.00 |
| 17.978 | 17.978 (1.150) | 43 | 2471601 | | | 169.12- 269.12 | 220.87 |
| 17.978 | 17.978 (1.150) | 85 | 573438 | | | 0.58- 100.58 | 51.25 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 114 Toluene | | | | | CAS #: 108-88-3 | | |
| 18.337 | 18.337 (1.173) | 91 | 3411418 | 50.0000 | 52.572 | 80.00- 120.00 | 100.00 |
| 18.337 | 18.337 (1.173) | 92 | 2125137 | | | 12.29- 112.29 | 62.29 |
| 116 trans-1,3-Dichloropropene | | | | | CAS #: 10061-02-6 | | |
| 18.752 | 18.752 (0.902) | 75 | 1838516 | 50.0000 | 56.339 | 80.00- 120.00 | 100.00 |
| 18.780 | 18.780 (0.903) | 77 | 582018 | | | 0.00- 81.66 | 31.66 |
| 18.752 | 18.752 (0.902) | 39 | 696200 | | | 0.00- 87.87 | 37.87 |
| 117 1,1,2-Trichloroethane | | | | | CAS #: 79-00-5 | | |
| 19.111 | 19.111 (0.919) | 97 | 1263176 | 50.0000 | 55.262 | 80.00- 120.00 | 100.00 |
| 19.111 | 19.111 (0.919) | 99 | 804390 | | | 13.68- 113.68 | 63.68 |
| 19.111 | 19.111 (0.919) | 83 | 1060442 | | | 33.95- 133.95 | 83.95 |
| 120 Tetrachloroethene | | | | | CAS #: 127-18-4 | | |
| 19.277 | 19.277 (0.927) | 166 | 1687491 | 50.0000 | 55.208 | 80.00- 120.00 | 100.00 |
| 19.277 | 19.277 (0.927) | 129 | 1182528 | | | 20.08- 120.08 | 70.08 |
| 19.277 | 19.277 (0.927) | 131 | 1122308 | | | 16.51- 116.51 | 66.51 |
| 121 2-Hexanone | | | | | CAS #: 591-78-6 | | |
| 19.416 | 19.416 (0.934) | 58 | 1610205 | 50.0000 | 54.322 | 80.00- 120.00 | 100.00 |
| 19.416 | 19.416 (0.934) | 43 | 2608372 | | | 111.99- 211.99 | 161.99 |
| 19.416 | 19.416 (0.934) | 100 | 357315 | | | 0.00- 71.95 | 22.19 |
| 122 Dibromochloromethane | | | | | CAS #: 124-48-1 | | |
| 19.803 | 19.803 (0.952) | 129 | 2135886 | 50.0000 | 56.153 | 80.00- 120.00 | 100.00 |
| 19.803 | 19.803 (0.952) | 127 | 1647526 | | | 26.41- 126.41 | 77.14 |
| 123 1,2-Dibromoethane | | | | | CAS #: 106-93-4 | | |
| 20.052 | 20.052 (0.964) | 107 | 2041878 | 50.0000 | 55.565 | 80.00- 120.00 | 100.00 |
| 20.079 | 20.079 (0.965) | 109 | 1907903 | | | 43.44- 143.44 | 93.44 |
| 127 Chlorobenzene | | | | | CAS #: 108-90-7 | | |
| 20.853 | 20.853 (1.003) | 112 | 2794094 | 50.0000 | 54.528 | 80.00- 120.00 | 100.00 |
| 20.853 | 20.853 (1.003) | 114 | 880145 | | | 0.00- 81.50 | 31.50 |
| 20.853 | 20.853 (1.003) | 77 | 1644261 | | | 8.85- 108.85 | 58.85 |
| 128 Ethyl Benzene | | | | | CAS #: 100-41-4 | | |
| 20.936 | 20.936 (1.007) | 106 | 1481268 | 50.0000 | 55.882 | 80.00- 120.00 | 100.00 |
| 20.936 | 20.936 (1.007) | 91 | 4576538 | | | 265.06- 365.06 | 308.96 |
| 129 m,p-Xylene | | | | | CAS #: 108-38-3 | | |
| 21.130 | 21.130 (1.016) | 106 | 1854655 | 50.0000 | 56.314 | 80.00- 120.00 | 100.00 |
| 21.130 | 21.130 (1.016) | 91 | 3625989 | | | 147.41- 247.41 | 195.51 |
| 130 o-Xylene | | | | | CAS #: 95-47-6 | | |
| 21.849 | 21.849 (1.051) | 106 | 1714209 | 50.0000 | 56.488 | 80.00- 120.00 | 100.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 130 o-Xylene (continued) | | | | | | | |
| 21.849 | 21.849 (1.051) | 91 | 3512526 | | | 154.91- 254.91 | 204.91 |
| 131 Styrene | | | | | CAS #: 100-42-5 | | |
| 21.876 | 21.876 (1.052) | 104 | 3011030 | 50.0000 | 62.773 | 80.00- 120.00 | 100.00 |
| 21.876 | 21.876 (1.052) | 78 | 1464593 | | | 0.00- 98.64 | 48.64 |
| 133 Bromoform | | | | | CAS #: 75-25-2 | | |
| 22.291 | 22.291 (1.072) | 173 | 2024973 | 50.0000 | 56.256 | 80.00- 120.00 | 100.00 |
| 22.291 | 22.291 (1.072) | 171 | 1051180 | | | 1.91- 101.91 | 51.91 |
| 134 Cumene | | | | | CAS #: 98-82-8 | | |
| 22.429 | 22.429 (1.078) | 105 | 4717551 | 50.0000 | 59.198 | 80.00- 120.00 | 100.00 |
| 22.429 | 22.429 (1.078) | 120 | 1248725 | | | 0.00- 75.99 | 26.47 |
| 22.429 | 22.429 (1.078) | 51 | 359936 | | | 9.74- 109.74 | 7.63 |
| 140 1,1,2,2-Tetrachloroethane | | | | | CAS #: 79-34-5 | | |
| 23.010 | 23.010 (1.106) | 83 | 2643415 | 50.0000 | 54.739 | 80.00- 120.00 | 100.00 |
| 23.010 | 23.010 (1.106) | 85 | 1708300 | | | 14.62- 114.62 | 64.62 |
| 142 Propylbenzene | | | | | CAS #: 103-65-1 | | |
| 23.121 | 23.121 (1.112) | 91 | 5894083 | 50.0000 | 56.121 | 80.00- 120.00 | 100.00 |
| 23.121 | 23.121 (1.112) | 120 | 1314078 | | | 0.00- 72.67 | 22.29 |
| 23.121 | 23.121 (1.112) | 105 | 217164 | | | 0.00- 53.69 | 3.68 |
| 145 4-Ethyltoluene | | | | | CAS #: 622-96-8 | | |
| 23.287 | 23.287 (1.120) | 105 | 5001374 | 50.0000 | 55.993 | 80.00- 120.00 | 100.00 |
| 23.287 | 23.287 (1.120) | 120 | 1515133 | | | 0.00- 80.29 | 30.29 |
| 147 1,3,5-Trimethylbenzene | | | | | CAS #: 108-67-8 | | |
| 23.397 | 23.397 (1.125) | 105 | 4146796 | 50.0000 | 56.070 | 80.00- 120.00 | 100.00 |
| 23.397 | 23.397 (1.125) | 120 | 2074119 | | | 1.60- 101.60 | 50.02 |
| 150 1,2,4-Trimethylbenzene | | | | | CAS #: 95-63-6 | | |
| 24.033 | 24.033 (1.156) | 105 | 4024803 | 50.0000 | 57.057 | 80.00- 120.00 | 100.00 |
| 24.033 | 24.033 (1.156) | 120 | 1884630 | | | 0.00- 96.88 | 46.83 |
| 155 1,3-Dichlorobenzene | | | | | CAS #: 541-73-1 | | |
| 24.586 | 24.586 (1.182) | 146 | 2692128 | 50.0000 | 54.311 | 80.00- 120.00 | 100.00 |
| 24.586 | 24.586 (1.182) | 148 | 1724779 | | | 14.03- 114.03 | 64.07 |
| 24.586 | 24.586 (1.182) | 111 | 1120893 | | | 0.00- 91.33 | 41.64 |
| 156 1,4-Dichlorobenzene | | | | | CAS #: 106-46-7 | | |
| 24.724 | 24.724 (1.189) | 146 | 2779624 | 50.0000 | 54.460 | 80.00- 120.00 | 100.00 |
| 24.724 | 24.724 (1.189) | 148 | 1761078 | | | 15.04- 115.04 | 63.36 |
| 24.724 | 24.724 (1.189) | 111 | 1107951 | | | 0.00- 89.92 | 39.86 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 159 alpha-Chlorotoluene | | | | | CAS #: 100-44-7 | | |
| 24.946 | 24.946 (1.199) | 91 | 4094995 | 50.0000 | 56.740 | 80.00- 120.00 | 100.00 |
| 24.946 | 24.946 (1.199) | 126 | 806210 | | | 0.00- 70.12 | 19.69 |
| 161 1,2-Dichlorobenzene | | | | | CAS #: 95-50-1 | | |
| 25.360 | 25.360 (1.219) | 146 | 2689537 | 50.0000 | 54.767 | 80.00- 120.00 | 100.00 |
| 25.360 | 25.360 (1.219) | 148 | 1714158 | | | 13.73- 113.73 | 63.73 |
| 25.360 | 25.360 (1.219) | 111 | 1162894 | | | 0.00- 93.24 | 43.24 |
| 165 1,2,4-Trichlorobenzene | | | | | CAS #: 120-82-1 | | |
| 28.153 | 28.153 (1.354) | 180 | 2573571 | 50.0000 | 54.792 | 80.00- 120.00 | 100.00 |
| 28.153 | 28.153 (1.354) | 182 | 2431397 | | | 44.48- 144.48 | 94.48 |
| 166 Hexachlorobutadiene | | | | | CAS #: 87-68-3 | | |
| 28.319 | 28.319 (1.362) | 225 | 1788302 | 50.0000 | 52.075 | 80.00- 120.00 | 100.00 |
| 28.319 | 28.319 (1.362) | 223 | 1129433 | | | 14.10- 114.10 | 63.16 |
| 29 Isopentane | | | | | CAS #: 78-78-4 | | |
| 8.273 | 8.273 (0.596) | 43 | 1147470 | 50.0000 | 51.006 | 80.00- 120.00 | 100.00 |
| 8.273 | 8.273 (0.596) | 57 | 862339 | | | 26.21- 126.21 | 75.15 |
| 19 Butane | | | | | CAS #: 106-97-8 | | |
| 6.808 | 6.808 (0.490) | 58 | 137683 | 50.0000 | 49.449 | 80.00- 120.00 | 100.00 |
| 6.808 | 6.808 (0.490) | 43 | 977603 | | | 668.04- 768.04 | 710.04 |
| 102 Methyl Cyclohexane | | | | | CAS #: 108-87-2 | | |
| 16.347 | 16.347 (1.177) | 83 | 1650527 | 50.0000 | 51.895 | 80.00- 120.00 | 100.00 |
| 16.347 | 16.347 (1.177) | 98 | 746918 | | | 0.00- 92.45 | 45.25 |
| 16.347 | 16.347 (1.177) | 55 | 1108676 | | | 18.10- 118.10 | 67.17 |
| 167 Naphthalene | | | | | CAS #: 91-20-3 | | |
| 28.678 | 28.678 (1.379) | 128 | 3846111 | 50.0000 | 56.924 | 80.00- 120.00 | 100.00 |
| 28.678 | 28.678 (1.379) | 127 | 465303 | | | 0.00- 62.43 | 12.10 |

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t112106.d
Lab Smp Id: ical
Analysis Type: VOA
Quant Type: ISTD
Operator: dm
Method File: /chem/msdt.i/23Nov2007.b/t14q1121a.m
Misc Info: 200ppbv-50ppbv

Calibration Date: 21-NOV-2007
Calibration Time: 17:45
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 306974 | 184184 | 429764 | 306974 | 0.00 |
| 97 1,4-Difluorobenze | 1370844 | 822506 | 1919182 | 1370844 | 0.00 |
| 126 Chlorobenzene-d5 | 968009 | 580805 | 1355213 | 968009 | 0.00 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.89 | 13.56 | 14.22 | 13.89 | 0.00 |
| 97 1,4-Difluorobenze | 15.63 | 15.30 | 15.96 | 15.63 | 0.00 |
| 126 Chlorobenzene-d5 | 20.80 | 20.47 | 21.13 | 20.80 | 0.00 |

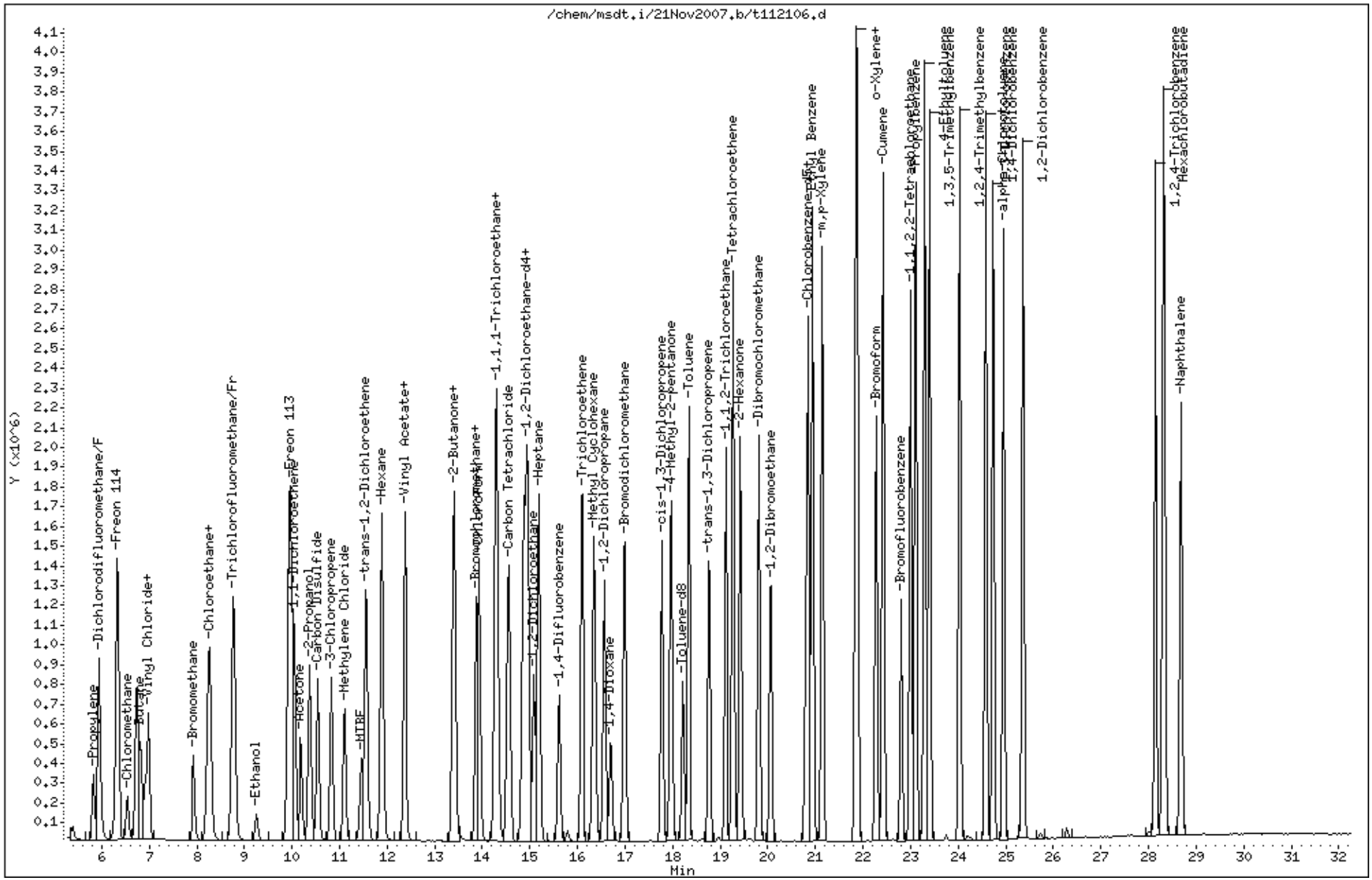
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

0142

Data File: /chem/msdt.i/21Nov2007.b/t112106.d
Date : 21-NOV-2007 17:45
Client ID: Level 5
Sample Info: 50ml #1576-92

Instrument: msdt.i
Operator: dm
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Nov2007.b/t112107.d
Lab Smp Id: ical Client Smp ID: Level 6
Inj Date : 21-NOV-2007 18:24
Operator : dm Inst ID: msdt.i
Smp Info : 100ml #1576-92
Misc Info : 200ppbv-100ppbv
Comment :
Method : /chem/msdt.i/23Nov2007.b/t14q1121a.m
Meth Date : 26-Nov-2007 15:03 cleonard Quant Type: ISTD
Cal Date : 21-NOV-2007 18:24 Cal File: t112107.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | AMOUNTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| == | ====== ======== | ==== | ======== | ======= | ======= | ========== | ===== |
| * 81 Bromochloromethane | | | | | CAS #: 74-97-5 | | |
| 13.886 | 13.886 (1.000) | 130 | 317570 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 13.886 | 13.886 (1.000) | 128 | 244573 | | | 26.38- 126.38 | 77.01 |
| 13.886 | 13.886 (1.000) | 49 | 671350 | | | 91.95- 191.95 | 211.40 |
| * 97 1,4-Difluorobenzene | | | | | CAS #: 540-36-3 | | |
| 15.628 | 15.628 (1.000) | 114 | 1449348 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 15.628 | 15.628 (1.000) | 88 | 232923 | | | 0.00- 65.95 | 16.07 |
| * 126 Chlorobenzene-d5 | | | | | CAS #: 3114-55-4 | | |
| 20.798 | 20.798 (1.000) | 117 | 1025130 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 20.798 | 20.798 (1.000) | 82 | 571651 | | | 5.79- 105.79 | 55.76 |
| $ 90 1,2-Dichloroethane-d4 | | | | | CAS #: 17060-07-0 | | |
| 14.936 | 14.936 (1.076) | 65 | 526143 | 25.0000 | 25.702 | 50.00- 150.00 | 100.00 |
| 14.936 | 14.936 (1.076) | 67 | 335416 | | | 5.03- 105.03 | 63.75 |
| $ 113 Toluene-d8 | | | | | CAS #: 2037-26-5 | | |
| 18.199 | 18.199 (1.165) | 98 | 1193506 | 25.0000 | 24.327 | 50.00- 150.00 | 100.00 |
| 18.199 | 18.199 (1.165) | 70 | 130822 | | | 0.00- 61.02 | 10.96 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| $ 113 Toluene-d8 (continued) | | | | | | | |
| 18.199 | 18.199 (1.165) | 100 | 832711 | | | 19.45- 119.45 | 69.77 |
| $ 137 Bromofluorobenzene | | | | | CAS #: 460-00-4 | | |
| 22.789 | 22.789 (1.096) | 174 | 666776 | 25.0000 | 25.893 | 50.00- 150.00 | 100.00 |
| 22.789 | 22.789 (1.096) | 95 | 844819 | | | 77.33- 177.33 | 126.70 |
| 22.789 | 22.789 (1.096) | 176 | 640372 | | | 46.56- 146.56 | 96.04 |
| 11 Propylene | | | | | CAS #: 115-07-1 | | |
| 5.812 | 5.812 (0.419) | 41 | 758476 | 100.000 | 89.637 | 50.00- 150.00 | 100.00 |
| 5.812 | 5.812 (0.419) | 42 | 529301 | | | 17.24- 117.24 | 69.78 |
| 5.812 | 5.812 (0.419) | 39 | 611315 | | | 27.83- 127.83 | 80.60 |
| 12 Dichlorodifluoromethane/Fr12 | | | | | CAS #: 75-71-8 | | |
| 5.923 | 5.923 (0.427) | 85 | 4416961 | 100.000 | 94.718 | 50.00- 150.00 | 100.00 |
| 5.923 | 5.923 (0.427) | 87 | 1416862 | | | 0.00- 82.07 | 32.08 |
| 16 Freon 114 | | | | | CAS #: 76-14-2 | | |
| 6.310 | 6.310 (0.454) | 135 | 2854734 | 100.000 | 94.398 | 50.00- 150.00 | 100.00 |
| 6.310 | 6.310 (0.454) | 137 | 913695 | | | 0.00- 81.55 | 32.01 |
| 18 Chloromethane | | | | | CAS #: 74-87-3 | | |
| 6.531 | 6.531 (0.470) | 50 | 984803 | 100.000 | 91.535 | 50.00- 150.00 | 100.00 |
| 6.531 | 6.531 (0.470) | 52 | 330325 | | | 0.00- 84.03 | 33.54 |
| 20 Vinyl Chloride | | | | | CAS #: 75-01-4 | | |
| 6.890 | 6.890 (0.496) | 62 | 1467986 | 100.000 | 99.752 | 50.00- 150.00 | 100.00 |
| 6.890 | 6.890 (0.496) | 64 | 480189 | | | 0.00- 93.71 | 32.71 |
| 22 1,3-Butadiene | | | | | CAS #: 106-99-0 | | |
| 6.973 | 6.973 (0.502) | 54 | 1143421 | 100.000 | 95.433 | 50.00- 150.00 | 100.00 |
| 6.973 | 6.973 (0.502) | 39 | 1036260 | | | 54.52- 154.52 | 90.63 |
| 25 Bromomethane | | | | | CAS #: 74-83-9 | | |
| 7.913 | 7.913 (0.570) | 94 | 1389268 | 100.000 | 104.24 | 50.00- 150.00 | 100.00 |
| 7.913 | 7.913 (0.570) | 96 | 1292025 | | | 50.48- 150.48 | 93.00 |
| 27 Chloroethane | | | | | CAS #: 75-00-3 | | |
| 8.218 | 8.218 (0.592) | 64 | 758567 | 100.000 | 105.14 | 50.00- 150.00 | 100.00 |
| 8.218 | 8.218 (0.592) | 49 | 188832 | | | 0.00- 74.88 | 24.89 |
| 8.218 | 8.218 (0.592) | 66 | 248587 | | | 0.00- 80.84 | 32.77 |
| 31 Trichlorofluoromethane/Fr11 | | | | | CAS #: 75-69-4 | | |
| 8.771 | 8.771 (0.632) | 101 | 5951538 | 100.000 | 98.335 | 50.00- 150.00 | 100.00 |
| 8.771 | 8.771 (0.632) | 103 | 3849306 | | | 16.26- 116.26 | 64.68 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 38 Ethanol | | | | | CAS #: 64-17-5 | | |
| 9.241 | 9.241 (0.665) | 45 | 624783 | 100.000 | 90.580 | 50.00- 150.00 | 100.00 |
| 9.241 | 9.241 (0.665) | 43 | 134222 | | | 0.00- 72.67 | 21.48 |
| 9.241 | 9.241 (0.665) | 46 | 228119 | | | 0.00- 86.29 | 36.51 |
| 42 Freon 113 | | | | | CAS #: 76-13-1 | | |
| 9.959 | 9.959 (0.717) | 151 | 3762555 | 100.000 | 103.18 | 50.00- 150.00 | 100.00 |
| 9.959 | 9.959 (0.717) | 153 | 2413297 | | | 15.23- 115.23 | 64.14 |
| 9.932 | 9.932 (0.715) | 101 | 4837345 | | | 83.14- 183.14 | 128.57 |
| 43 1,1-Dichloroethene | | | | | CAS #: 75-35-4 | | |
| 10.042 | 10.042 (0.723) | 61 | 2852377 | 100.000 | 103.30 | 50.00- 150.00 | 100.00 |
| 10.042 | 10.042 (0.723) | 96 | 1818784 | | | 16.79- 116.79 | 63.76 |
| 10.042 | 10.042 (0.723) | 98 | 1174129 | | | 0.00- 90.88 | 41.16 |
| 45 Acetone | | | | | CAS #: 67-64-1 | | |
| 10.181 | 10.181 (0.733) | 58 | 957492 | 100.000 | 95.038 | 50.00- 150.00 | 100.00 |
| 10.181 | 10.181 (0.733) | 43 | 2912564 | | | 259.05- 359.05 | 304.19 |
| 46 2-Propanol | | | | | CAS #: 67-63-0 | | |
| 10.374 | 10.374 (0.747) | 45 | 5098065 | 100.000 | 100.68 | 50.00- 150.00 | 100.00 |
| 10.374 | 10.374 (0.747) | 43 | 1087980 | | | 0.00- 73.80 | 21.34 |
| 10.374 | 10.374 (0.747) | 59 | 221605 | | | 0.00- 54.08 | 4.35 |
| 47 Carbon Disulfide | | | | | CAS #: 75-15-0 | | |
| 10.540 | 10.540 (0.759) | 76 | 4876353 | 100.000 | 103.12 | 50.00- 150.00 | 100.00 |
| 51 3-Chloropropene | | | | | CAS #: 107-05-1 | | |
| 10.817 | 10.817 (0.779) | 76 | 1024662 | 100.000 | 104.54 | 50.00- 150.00 | 100.00 |
| 10.817 | 10.817 (0.779) | 41 | 2224941 | | | 185.00- 285.00 | 217.14 |
| 54 Methylene Chloride | | | | | CAS #: 75-09-2 | | |
| 11.121 | 11.121 (0.801) | 49 | 1539537 | 100.000 | 92.670 | 50.00- 150.00 | 100.00 |
| 11.121 | 11.121 (0.801) | 84 | 1442251 | | | 40.01- 140.01 | 93.68 |
| 11.121 | 11.121 (0.801) | 51 | 476901 | | | 0.00- 81.08 | 30.98 |
| 60 MTBE | | | | | CAS #: 1634-04-4 | | |
| 11.453 | 11.453 (0.825) | 73 | 2738499 | 100.000 | 105.37 | 50.00- 150.00 | 100.00 |
| 11.453 | 11.453 (0.825) | 57 | 520393 | | | 0.00- 69.28 | 19.00 |
| 11.453 | 11.453 (0.825) | 41 | 488927 | | | 0.00- 69.31 | 17.85 |
| 61 trans-1,2-Dichloroethene | | | | | CAS #: 156-60-5 | | |
| 11.563 | 11.563 (0.833) | 96 | 2393283 | 100.000 | 105.99 | 50.00- 150.00 | 100.00 |
| 11.563 | 11.563 (0.833) | 61 | 3189683 | | | 83.34- 183.34 | 133.28 |
| 11.563 | 11.563 (0.833) | 98 | 1523969 | | | 11.49- 111.49 | 63.68 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 65 Hexane | | | | | CAS #: 110-54-3 | | |
| 11.895 | 11.895 (0.857) | 57 | 3845245 | 100.000 | 103.82 | 50.00- 150.00 | 100.00 |
| 11.895 | 11.895 (0.857) | 43 | 2175889 | | | 6.67- 106.67 | 56.59 |
| 11.895 | 11.895 (0.857) | 86 | 694175 | | | 0.00- 66.53 | 18.05 |
| 69 Vinyl Acetate | | | | | CAS #: 108-05-4 | | |
| 12.365 | 12.365 (0.890) | 86 | 645807 | 100.000 | 106.56 | 50.00- 150.00 | 100.00 |
| 12.365 | 12.365 (0.890) | 43 | 5532270 | | | 869.92- 969.92 | 856.64 |
| 70 1,1-Dichloroethane | | | | | CAS #: 75-34-3 | | |
| 12.393 | 12.393 (0.892) | 63 | 4062951 | 100.000 | 105.89 | 50.00- 150.00 | 100.00 |
| 12.393 | 12.393 (0.892) | 65 | 1304759 | | | 0.00- 81.73 | 32.11 |
| 75 2-Butanone | | | | | CAS #: 78-93-3 | | |
| 13.388 | 13.388 (0.964) | 72 | 1360599 | 100.000 | 108.89 | 50.00- 150.00 | 100.00 |
| 13.388 | 13.388 (0.964) | 43 | 5288225 | | | 362.73- 462.73 | 388.67 |
| 13.388 | 13.388 (0.964) | 57 | 395121 | | | 0.00- 79.31 | 29.04 |
| 76 cis-1,2-Dichloroethene | | | | | CAS #: 156-59-2 | | |
| 13.416 | 13.416 (0.966) | 61 | 2955145 | 100.000 | 107.45 | 50.00- 150.00 | 100.00 |
| 13.416 | 13.416 (0.966) | 96 | 2301188 | | | 30.20- 130.20 | 77.87 |
| 13.416 | 13.416 (0.966) | 98 | 1473937 | | | 0.03- 100.03 | 49.88 |
| 80 Tetrahydrofuran | | | | | CAS #: 109-99-9 | | |
| 13.858 | 13.858 (0.998) | 42 | 2156079 | 100.000 | 104.07 | 50.00- 150.00 | 100.00 |
| 13.858 | 13.858 (0.998) | 71 | 1159695 | | | 0.15- 100.15 | 53.79 |
| 13.858 | 13.858 (0.998) | 72 | 1242013 | | | 4.67- 104.67 | 57.61 |
| 82 Chloroform | | | | | CAS #: 67-66-3 | | |
| 13.941 | 13.941 (1.004) | 83 | 4794939 | 100.000 | 112.08 | 50.00- 150.00 | 100.00 |
| 13.941 | 13.941 (1.004) | 85 | 3116049 | | | 16.84- 116.84 | 64.99 |
| 83 1,1,1-Trichloroethane | | | | | CAS #: 71-55-6 | | |
| 14.300 | 14.300 (1.030) | 97 | 4598237 | 100.000 | 101.49 | 50.00- 150.00 | 100.00 |
| 14.300 | 14.300 (1.030) | 99 | 2961328 | | | 13.29- 113.29 | 64.40 |
| 85 Cyclohexane | | | | | CAS #: 110-82-7 | | |
| 14.300 | 14.300 (1.030) | 84 | 2719449 | 100.000 | 107.01 | 50.00- 150.00 | 100.00 |
| 14.300 | 14.300 (1.030) | 56 | 2646864 | | | 49.76- 149.76 | 97.33 |
| 14.300 | 14.300 (1.030) | 41 | 1308553 | | | 3.69- 103.69 | 48.12 |
| 87 Carbon Tetrachloride | | | | | CAS #: 56-23-5 | | |
| 14.549 | 14.549 (1.048) | 119 | 4371413 | 100.000 | 102.79 | 50.00- 150.00 | 100.00 |
| 14.549 | 14.549 (1.048) | 117 | 4625525 | | | 54.35- 154.35 | 105.81 |
| 91 Benzene | | | | | CAS #: 71-43-2 | | |
| 14.964 | 14.964 (0.958) | 78 | 6492998 | 100.000 | 105.01 | 50.00- 150.00 | 100.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 91 Benzene (continued) | | | | | | | |
| 14.964 | 14.964 (0.958) | 77 | 1463588 | | | 0.00- 72.49 | 22.54 |
| 89 2,2,4-Trimethylpentane | | | | | CAS #: 540-84-1 | | |
| 14.881 | 14.881 (1.072) | 57 | 8840839 | 100.000 | 97.956 | 50.00- 150.00 | 100.00 |
| 14.881 | 14.881 (1.072) | 56 | 2864766 | | | 0.00- 82.34 | 32.40 |
| 14.881 | 14.881 (1.072) | 41 | 2156711 | | | 0.00- 76.30 | 24.39 |
| 93 1,2-Dichloroethane | | | | | CAS #: 107-06-2 | | |
| 15.075 | 15.075 (0.965) | 62 | 3004435 | 100.000 | 103.35 | 50.00- 150.00 | 100.00 |
| 15.075 | 15.075 (0.965) | 64 | 977611 | | | 0.00- 84.21 | 32.54 |
| 94 Heptane | | | | | CAS #: 142-82-5 | | |
| 15.185 | 15.185 (0.972) | 71 | 2347146 | 100.000 | 105.20 | 50.00- 150.00 | 100.00 |
| 15.185 | 15.185 (0.972) | 43 | 3042340 | | | 86.68- 186.68 | 129.62 |
| 15.185 | 15.185 (0.972) | 57 | 1870799 | | | 32.20- 132.20 | 79.71 |
| 101 Trichloroethene | | | | | CAS #: 79-01-6 | | |
| 16.098 | 16.098 (1.030) | 95 | 2912228 | 100.000 | 103.16 | 50.00- 150.00 | 100.00 |
| 16.098 | 16.098 (1.030) | 130 | 2736246 | | | 47.47- 147.47 | 93.96 |
| 16.098 | 16.098 (1.030) | 97 | 1856868 | | | 14.52- 114.52 | 63.76 |
| 104 1,2-Dichloropropane | | | | | CAS #: 78-87-5 | | |
| 16.568 | 16.568 (1.060) | 63 | 2091646 | 100.000 | 98.928 | 50.00- 150.00 | 100.00 |
| 16.568 | 16.568 (1.060) | 62 | 1493529 | | | 17.52- 117.52 | 71.40 |
| 16.568 | 16.568 (1.060) | 41 | 1037307 | | | 0.97- 100.97 | 49.59 |
| 106 1,4-Dioxane | | | | | CAS #: 123-91-1 | | |
| 16.706 | 16.706 (1.069) | 88 | 1831915 | 100.000 | 99.895 | 50.00- 150.00 | 100.00 |
| 16.706 | 16.706 (1.069) | 58 | 1013838 | | | 6.89- 106.89 | 55.34 |
| 16.706 | 16.706 (1.069) | 57 | 349306 | | | 0.00- 69.74 | 19.07 |
| 107 Bromodichloromethane | | | | | CAS #: 75-27-4 | | |
| 17.010 | 17.010 (1.088) | 83 | 4775366 | 100.000 | 103.68 | 50.00- 150.00 | 100.00 |
| 17.010 | 17.010 (1.088) | 85 | 3078671 | | | 14.67- 114.67 | 64.47 |
| 110 cis-1,3-Dichloropropene | | | | | CAS #: 10061-01-5 | | |
| 17.784 | 17.784 (1.138) | 75 | 3508657 | 100.000 | 104.16 | 50.00- 150.00 | 100.00 |
| 17.784 | 17.784 (1.138) | 77 | 1130281 | | | 0.00- 83.04 | 32.21 |
| 17.784 | 17.784 (1.138) | 39 | 1402441 | | | 0.00- 93.89 | 39.97 |
| 111 4-Methyl-2-pentanone | | | | | CAS #: 108-10-1 | | |
| 17.978 | 17.978 (1.150) | 58 | 2289944 | 100.000 | 108.65 | 50.00- 150.00 | 100.00 |
| 17.978 | 17.978 (1.150) | 43 | 5014130 | | | 169.12- 269.12 | 218.96 |
| 17.978 | 17.978 (1.150) | 85 | 1189987 | | | 0.58- 100.58 | 51.97 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 114 Toluene | | | | | CAS #: 108-88-3 | | |
| 18.337 | 18.337 (1.173) | 91 | 6913435 | 100.000 | 100.77 | 50.00- 150.00 | 100.00 |
| 18.337 | 18.337 (1.173) | 92 | 4242576 | | | 11.10- 111.10 | 61.37 |
| 116 trans-1,3-Dichloropropene | | | | | CAS #: 10061-02-6 | | |
| 18.780 | 18.780 (0.903) | 75 | 3684793 | 100.000 | 106.62 | 50.00- 150.00 | 100.00 |
| 18.780 | 18.780 (0.903) | 77 | 1180933 | | | 0.00- 83.38 | 32.05 |
| 18.780 | 18.780 (0.903) | 39 | 1372578 | | | 0.00- 92.03 | 37.25 |
| 117 1,1,2-Trichloroethane | | | | | CAS #: 79-00-5 | | |
| 19.111 | 19.111 (0.919) | 97 | 2519624 | 100.000 | 104.09 | 50.00- 150.00 | 100.00 |
| 19.111 | 19.111 (0.919) | 99 | 1590024 | | | 14.64- 114.64 | 63.11 |
| 19.111 | 19.111 (0.919) | 83 | 2137099 | | | 37.04- 137.04 | 84.82 |
| 120 Tetrachloroethene | | | | | CAS #: 127-18-4 | | |
| 19.277 | 19.277 (0.927) | 166 | 3355578 | 100.000 | 103.66 | 50.00- 150.00 | 100.00 |
| 19.277 | 19.277 (0.927) | 129 | 2350484 | | | 21.89- 121.89 | 70.05 |
| 19.277 | 19.277 (0.927) | 131 | 2233846 | | | 19.59- 119.59 | 66.57 |
| 121 2-Hexanone | | | | | CAS #: 591-78-6 | | |
| 19.416 | 19.416 (0.934) | 58 | 3278076 | 100.000 | 104.43 | 50.00- 150.00 | 100.00 |
| 19.416 | 19.416 (0.934) | 43 | 5224831 | | | 114.75- 214.75 | 159.39 |
| 19.443 | 19.443 (0.935) | 100 | 733216 | | | 0.00- 71.95 | 22.37 |
| 122 Dibromochloromethane | | | | | CAS #: 124-48-1 | | |
| 19.803 | 19.803 (0.952) | 129 | 4279928 | 100.000 | 106.25 | 50.00- 150.00 | 100.00 |
| 19.803 | 19.803 (0.952) | 127 | 3294908 | | | 26.41- 126.41 | 76.99 |
| 123 1,2-Dibromoethane | | | | | CAS #: 106-93-4 | | |
| 20.079 | 20.079 (0.965) | 107 | 4131636 | 100.000 | 106.17 | 50.00- 150.00 | 100.00 |
| 20.079 | 20.079 (0.965) | 109 | 3825999 | | | 43.48- 143.48 | 92.60 |
| 127 Chlorobenzene | | | | | CAS #: 108-90-7 | | |
| 20.853 | 20.853 (1.003) | 112 | 5623967 | 100.000 | 103.64 | 50.00- 150.00 | 100.00 |
| 20.853 | 20.853 (1.003) | 114 | 1765473 | | | 0.00- 83.18 | 31.39 |
| 20.853 | 20.853 (1.003) | 77 | 3293263 | | | 20.20- 120.20 | 58.56 |
| 128 Ethyl Benzene | | | | | CAS #: 100-41-4 | | |
| 20.936 | 20.936 (1.007) | 106 | 2994164 | 100.000 | 106.66 | 50.00- 150.00 | 100.00 |
| 20.936 | 20.936 (1.007) | 91 | 9346849 | | | 265.06- 365.06 | 312.17 |
| 129 m,p-Xylene | | | | | CAS #: 108-38-3 | | |
| 21.130 | 21.130 (1.016) | 106 | 3790763 | 100.000 | 108.69 | 50.00- 150.00 | 100.00 |
| 21.130 | 21.130 (1.016) | 91 | 7391775 | | | 147.41- 247.41 | 194.99 |
| 130 o-Xylene | | | | | CAS #: 95-47-6 | | |
| 21.849 | 21.849 (1.051) | 106 | 3499245 | 100.000 | 108.88 | 50.00- 150.00 | 100.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 130 o-Xylene (continued) | | | | | | | |
| 21.849 | 21.849 (1.051) | 91 | 7176195 | | | 155.82- 255.82 | 205.08 |
| 131 Styrene | | | | | CAS #: 100-42-5 | | |
| 21.876 | 21.876 (1.052) | 104 | 6221561 | 100.000 | 122.48 | 50.00- 150.00 | 100.00 |
| 21.876 | 21.876 (1.052) | 78 | 3011290 | | | 9.19- 109.19 | 48.40 |
| 133 Bromoform | | | | | CAS #: 75-25-2 | | |
| 22.291 | 22.291 (1.072) | 173 | 4189777 | 100.000 | 109.91 | 50.00- 150.00 | 100.00 |
| 22.291 | 22.291 (1.072) | 171 | 2174773 | | | 0.74- 100.74 | 51.91 |
| 134 Cumene | | | | | CAS #: 98-82-8 | | |
| 22.429 | 22.429 (1.078) | 105 | 9641309 | 100.000 | 114.24 | 50.00- 150.00 | 100.00 |
| 22.429 | 22.429 (1.078) | 120 | 2525535 | | | 0.00- 75.99 | 26.19 |
| 22.429 | 22.429 (1.078) | 51 | 731351 | | | 9.74- 109.74 | 7.59 |
| 140 1,1,2,2-Tetrachloroethane | | | | | CAS #: 79-34-5 | | |
| 23.010 | 23.010 (1.106) | 83 | 5515221 | 100.000 | 107.84 | 50.00- 150.00 | 100.00 |
| 23.010 | 23.010 (1.106) | 85 | 3558989 | | | 14.88- 114.88 | 64.53 |
| 142 Propylbenzene | | | | | CAS #: 103-65-1 | | |
| 23.121 | 23.121 (1.112) | 91 | 12105925 | 100.000 | 108.84 | 50.00- 150.00 | 100.00 |
| 23.121 | 23.121 (1.112) | 120 | 2699879 | | | 0.00- 72.67 | 22.30 |
| 23.121 | 23.121 (1.112) | 105 | 432078 | | | 0.00- 53.69 | 3.57 |
| 145 4-Ethyltoluene | | | | | CAS #: 622-96-8 | | |
| 23.286 | 23.286 (1.120) | 105 | 10325354 | 100.000 | 109.16 | 50.00- 150.00 | 100.00 |
| 23.286 | 23.286 (1.120) | 120 | 3117064 | | | 0.00- 80.49 | 30.19 |
| 147 1,3,5-Trimethylbenzene | | | | | CAS #: 108-67-8 | | |
| 23.397 | 23.397 (1.125) | 105 | 8523839 | 100.000 | 108.83 | 50.00- 150.00 | 100.00 |
| 23.397 | 23.397 (1.125) | 120 | 4170568 | | | 1.60- 101.60 | 48.93 |
| 150 1,2,4-Trimethylbenzene | | | | | CAS #: 95-63-6 | | |
| 24.033 | 24.033 (1.156) | 105 | 8211375 | 100.000 | 109.92 | 50.00- 150.00 | 100.00 |
| 24.033 | 24.033 (1.156) | 120 | 3840796 | | | 0.00- 96.88 | 46.77 |
| 155 1,3-Dichlorobenzene | | | | | CAS #: 541-73-1 | | |
| 24.586 | 24.586 (1.182) | 146 | 5533285 | 100.000 | 105.41 | 50.00- 150.00 | 100.00 |
| 24.586 | 24.586 (1.182) | 148 | 3515255 | | | 14.03- 114.03 | 63.53 |
| 24.586 | 24.586 (1.182) | 111 | 2275673 | | | 0.00- 91.33 | 41.13 |
| 156 1,4-Dichlorobenzene | | | | | CAS #: 106-46-7 | | |
| 24.752 | 24.752 (1.190) | 146 | 5699141 | 100.000 | 105.44 | 50.00- 150.00 | 100.00 |
| 24.752 | 24.752 (1.190) | 148 | 3651283 | | | 15.04- 115.04 | 64.07 |
| 24.724 | 24.724 (1.189) | 111 | 2264530 | | | 0.00- 89.92 | 39.73 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 159 alpha-Chlorotoluene | | | | | CAS #: 100-44-7 | | |
| 24.945 | 24.945 (1.199) | 91 | 8589075 | 100.000 | 112.38 | 50.00- 150.00 | 100.00 |
| 24.945 | 24.945 (1.199) | 126 | 1680285 | | | 0.00- 70.12 | 19.56 |
| 161 1,2-Dichlorobenzene | | | | | CAS #: 95-50-1 | | |
| 25.360 | 25.360 (1.219) | 146 | 5430331 | 100.000 | 104.42 | 50.00- 150.00 | 100.00 |
| 25.360 | 25.360 (1.219) | 148 | 3447045 | | | 14.55- 114.55 | 63.48 |
| 25.360 | 25.360 (1.219) | 111 | 2323140 | | | 0.00- 93.18 | 42.78 |
| 165 1,2,4-Trichlorobenzene | | | | | CAS #: 120-82-1 | | |
| 28.153 | 28.153 (1.354) | 180 | 4667282 | 100.000 | 93.830 | 50.00- 150.00 | 100.00 |
| 28.153 | 28.153 (1.354) | 182 | 4411534 | | | 44.49- 144.49 | 94.52 |
| 166 Hexachlorobutadiene | | | | | CAS #: 87-68-3 | | |
| 28.319 | 28.319 (1.362) | 225 | 3484780 | 100.000 | 95.823 | 50.00- 150.00 | 100.00 |
| 28.319 | 28.319 (1.362) | 223 | 2169757 | | | 14.10- 114.10 | 62.26 |
| 19 Butane | | | | | CAS #: 106-97-8 | | |
| 6.807 | 6.807 (0.490) | 58 | 265295 | 100.000 | 92.101 | 50.00- 150.00 | 100.00 |
| 6.807 | 6.807 (0.490) | 43 | 1828714 | | | 668.04- 768.04 | 689.31 |
| 29 Isopentane | | | | | CAS #: 78-78-4 | | |
| 8.245 | 8.245 (0.594) | 43 | 2274736 | 100.000 | 97.741 | 50.00- 150.00 | 100.00 |
| 8.245 | 8.245 (0.594) | 57 | 1768258 | | | 26.21- 126.21 | 77.73 |
| 102 Methyl Cyclohexane | | | | | CAS #: 108-87-2 | | |
| 16.346 | 16.346 (1.177) | 83 | 3430627 | 100.000 | 104.26 | 50.00- 150.00 | 100.00 |
| 16.346 | 16.346 (1.177) | 98 | 1562675 | | | 0.00- 92.45 | 45.55 |
| 16.346 | 16.346 (1.177) | 55 | 2261362 | | | 18.10- 118.10 | 65.92 |
| 167 Naphthalene | | | | | CAS #: 91-20-3 | | |
| 28.678 | 28.678 (1.379) | 128 | 6813152 | 100.000 | 95.219 | 50.00- 150.00 | 100.00 |
| 28.678 | 28.678 (1.379) | 127 | 833287 | | | 0.00- 62.43 | 12.23 |

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t112107.d
Lab Smp Id: ical
Analysis Type: VOA
Quant Type: ISTD
Operator: dm
Method File: /chem/msdt.i/23Nov2007.b/t14q1121a.m
Misc Info: 200ppbv-100ppbv

Calibration Date: 21-NOV-2007
Calibration Time: 17:45
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 306974 | 184184 | 429764 | 317570 | 3.45 |
| 97 1,4-Difluorobenze | 1370844 | 822506 | 1919182 | 1449348 | 5.73 |
| 126 Chlorobenzene-d5 | 968009 | 580805 | 1355213 | 1025130 | 5.90 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.89 | 13.56 | 14.22 | 13.89 | 0.00 |
| 97 1,4-Difluorobenze | 15.63 | 15.30 | 15.96 | 15.63 | 0.00 |
| 126 Chlorobenzene-d5 | 20.80 | 20.47 | 21.13 | 20.80 | 0.00 |

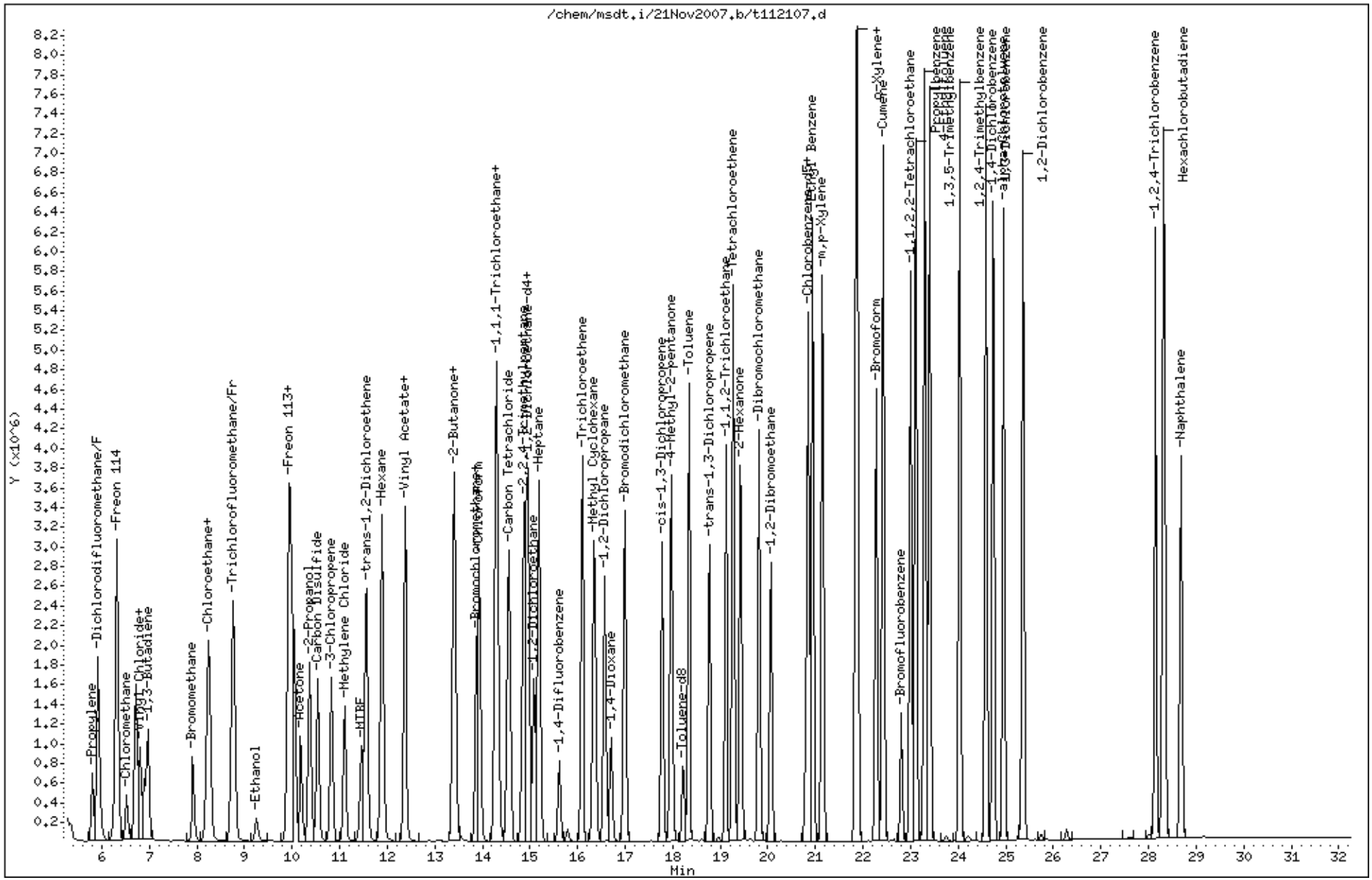
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

0152

Data File: /chem/msdt.i/21Nov2007.b/t112107.d
Date : 21-NOV-2007 18:24
Client ID: Level 6
Sample Info: 100ml #1576-92

Instrument: msdt.i
Operator: dm
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/26Nov2007.b/t112604.d
Lab Smp Id: ical level 7
Inj Date : 26-NOV-2007 11:39
Operator : ea Inst ID: msdt.i
Smp Info : 200ml #1487-402
Misc Info : 200ppbv -> 200ppbv
Comment :
Method : /chem/msdt.i/26Nov2007.b/t14q1121b.m
Meth Date : 27-Nov-2007 14:00 lover Quant Type: ISTD
Cal Date : 26-NOV-2007 11:39 Cal File: t112604.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sp22b.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | AMOUNTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| * 81 Bromochloromethane | | | | | CAS #: 74-97-5 | | |
| 13.865 | 13.865 (1.000) | 130 | 278721 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 13.865 | 13.865 (1.000) | 128 | 211706 | | | 26.64- 126.64 | 75.96 |
| 13.865 | 13.865 (1.000) | 49 | 288312 | | | 73.62- 173.62 | 103.44 |
| * 97 1,4-Difluorobenzene | | | | | CAS #: 540-36-3 | | |
| 15.607 | 15.607 (1.000) | 114 | 1222361 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 15.607 | 15.607 (1.000) | 88 | 195675 | | | 0.00- 65.84 | 16.01 |
| * 126 Chlorobenzene-d5 | | | | | CAS #: 3114-55-4 | | |
| 20.805 | 20.805 (1.000) | 117 | 1036408 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 20.805 | 20.805 (1.000) | 82 | 570145 | | | 4.93- 104.93 | 55.01 |
| 5 Freon 143a | | | | | CAS #: 420-46-2 | | |
| 5.535 | 5.535 (0.399) | 69 | 4385439 | 200.000 | 244.64 | 50.00- 150.00 | 100.00(A) |
| 6 Freon142b | | | | | CAS #: 75-68-3 | | |
| 6.436 | 6.436 (0.464) | 65 | 6214860 | 200.000 | 233.30 | 50.00- 150.00 | 100.00(A) |
| 6.436 | 6.436 (0.464) | 45 | 1191575 | | | 0.00- 69.76 | 19.17 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 9 Freon 13 | | | | | CAS #: 75-72-9 | | |
| 5.394 | 5.394 (0.389) | 69 | 3933175 | 200.000 | 161.80 | 50.00- 150.00 | 100.00 |
| 5.394 | 5.394 (0.389) | 85 | 1284944 | | | 0.00- 82.40 | 32.67 |
| 5.394 | 5.394 (0.389) | 87 | 415334 | | | 0.00- 60.56 | 10.56 |
| 13 Freon 134a | | | | | CAS #: 811-97-2 | | |
| 5.704 | 5.704 (0.411) | 83 | 2948377 | 200.000 | 233.71 | 50.00- 150.00 | 100.00(A) |
| 5.704 | 5.704 (0.411) | 69 | 2422081 | | | 31.14- 131.14 | 82.15 |
| 15 Freon 152a | | | | | CAS #: 75-37-6 | | |
| 5.872 | 5.872 (0.424) | 65 | 1559967 | 200.000 | 238.94 | 50.00- 150.00 | 100.00(A) |
| 5.872 | 5.872 (0.424) | 51 | 2554141 | | | 117.84- 217.84 | 163.73 |
| 5.872 | 5.872 (0.424) | 47 | 607999 | | | 0.00- 88.39 | 38.98 |
| 17 Freon 22 | | | | | CAS #: 75-45-6 | | |
| 6.013 | 6.013 (0.434) | 67 | 775372 | 200.000 | 232.64 | 50.00- 150.00 | 100.00(A) |
| 6.013 | 6.013 (0.434) | 51 | 3988336 | | | 439.12- 539.12 | 514.38 |
| 6.013 | 6.013 (0.434) | 85 | 80595 | | | 0.00- 91.16 | 10.39 |
| 26 Methanol | | | | | CAS #: 67-56-1 | | |
| 7.562 | 7.562 (0.545) | 31 | 3878016 | 1200.00 | 1353.6 | 50.00- 150.00 | 100.00(A) |
| 7.562 | 7.562 (0.545) | 32 | 2827690 | | | 73.38- 173.38 | 72.92 |
| 34 Dichlorofluoromethane/Fr21 | | | | | CAS #: 75-43-4 | | |
| 8.745 | 8.745 (0.631) | 67 | 5226273 | 200.000 | 234.13 | 50.00- 150.00 | 100.00(A) |
| 8.745 | 8.745 (0.631) | 69 | 1694566 | | | 0.00- 82.06 | 32.42 |
| 8.745 | 8.745 (0.631) | 35 | 259938 | | | 0.00- 54.92 | 4.97 |
| 40 Freon123a | | | | | CAS #: 354-23-4 | | |
| 9.580 | 9.580 (0.691) | 67 | 4485934 | 200.000 | 205.22 | 50.00- 150.00 | 100.00(A) |
| 9.580 | 9.580 (0.691) | 117 | 3618530 | | | 30.97- 130.97 | 80.66 |
| 41 Freon123 | | | | | CAS #: 306-83-2 | | |
| 9.718 | 9.718 (0.701) | 83 | 6150000 | 200.000 | 203.20 | 50.00- 150.00 | 100.00 |
| 9.718 | 9.718 (0.701) | 133 | 1253319 | | | 0.00- 70.26 | 20.38 |
| 9.718 | 9.718 (0.701) | 85 | 4155434 | | | 17.95- 117.95 | 67.57 |
| 57 tert-Butyl-Alcohol | | | | | CAS #: 75-65-0 | | |
| 11.156 | 11.156 (0.805) | 59 | 2336495 | 200.000 | 158.26 | 50.00- 150.00 | 100.00 |
| 11.156 | 11.156 (0.805) | 41 | 480203 | | | 0.00- 78.87 | 20.55 |
| 11.156 | 11.156 (0.805) | 57 | 237173 | | | 0.00- 61.35 | 10.15 |
| 68 Isopropyl ether | | | | | CAS #: 108-20-3 | | |
| 12.289 | 12.289 (0.886) | 45 | 10313074 | 200.000 | 225.32 | 50.00- 150.00 | 100.00(A) |
| 12.289 | 12.289 (0.886) | 87 | 3472544 | | | 0.00- 84.51 | 33.67 |
| 12.289 | 12.289 (0.886) | 59 | 1244633 | | | 0.00- 62.64 | 12.07 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 71 1-Propanol | | | | | CAS #: 71-23-8 | | |
| 12.400 | 12.400 (0.894) | 42 | 523507 | 200.000 | 217.36 | 50.00- 150.00 | 100.00(AH) |
| 12.400 | 12.400 (0.894) | 59 | 761145 | | | 75.45- 175.45 | 145.39 |
| 12.400 | 12.400 (0.894) | 41 | 367154 | | | 158.05- 258.05 | 70.13 |
| 73 t-Butylethyl Ether | | | | | CAS #: 637-92-3 | | |
| 12.925 | 12.925 (0.932) | 59 | 4697576 | 200.000 | 211.18 | 50.00- 150.00 | 100.00(A) |
| 12.925 | 12.925 (0.932) | 87 | 2129092 | | | 0.00- 95.70 | 45.32 |
| 12.925 | 12.925 (0.932) | 41 | 756608 | | | 0.00- 69.82 | 16.11 |
| 77 Ethyl Acetate | | | | | CAS #: 141-78-6 | | |
| 13.395 | 13.395 (0.966) | 45 | 1055266 | 200.000 | 218.76 | 50.00- 150.00 | 100.00(A) |
| 13.395 | 13.395 (0.966) | 61 | 1215125 | | | 63.70- 163.70 | 115.15 |
| 13.395 | 13.395 (0.966) | 43 | 7334786 | | | 641.02- 741.02 | 695.07 |
| 99 Isobutanol | | | | | CAS #: 78-83-1 | | |
| 14.612 | 14.612 (0.936) | 59 | 86876 | 200.000 | 286.79 | 50.00- 150.00 | 100.00(A) |
| 14.612 | 14.612 (0.936) | 41 | 1712195 | | | 2254.31-2354.31 | 1970.85 |
| 14.612 | 14.612 (0.936) | 43 | 2262965 | | | 2684.91-2784.91 | 2604.82 |
| 92 tert-amyl-Methyl Ether | | | | | CAS #: 994-05-8 | | |
| 14.999 | 14.999 (1.082) | 73 | 4704738 | 200.000 | 178.76 | 50.00- 150.00 | 100.00 |
| 14.999 | 14.999 (1.082) | 87 | 1168644 | | | 0.00- 75.09 | 24.84 |
| 14.999 | 14.999 (1.082) | 55 | 1058139 | | | 0.00- 74.77 | 22.49 |
| 96 2-Heptanone | | | | | CAS #: 110-43-0 | | |
| 21.966 | 21.966 (1.584) | 58 | 5483071 | 200.000 | 296.14 | 50.00- 150.00 | 100.00(A) |
| 21.966 | 21.966 (1.584) | 43 | 7373377 | | | 85.60- 185.60 | 134.48 |
| 98 1-Butanol | | | | | CAS #: 71-36-3 | | |
| 15.773 | 15.773 (1.011) | 56 | 2236493 | 200.000 | 359.04 | 50.00- 150.00 | 100.00(A) |
| 15.773 | 15.773 (1.011) | 41 | 1406755 | | | 17.89- 117.89 | 62.90 |
| 15.773 | 15.773 (1.011) | 43 | 1077912 | | | 0.00- 99.85 | 48.20 |
| 119 Butyl Acetate | | | | | CAS #: 123-86-4 | | |
| 19.533 | 19.533 (1.252) | 56 | 3577651 | 200.000 | 282.87 | 50.00- 150.00 | 100.00(A) |
| 19.533 | 19.533 (1.252) | 73 | 1526966 | | | 0.00- 94.51 | 42.68 |
| 19.533 | 19.533 (1.252) | 43 | 7725128 | | | 163.30- 263.30 | 215.93 |
| 135 Cyclohexanone | | | | | CAS #: 108-94-1 | | |
| 22.741 | 22.741 (1.093) | 55 | 3650405 | 200.000 | 264.06 | 50.00- 150.00 | 100.00(A) |
| 22.741 | 22.741 (1.093) | 98 | 2097956 | | | 6.71- 106.71 | 57.47 |
| 22.741 | 22.741 (1.093) | 42 | 2286673 | | | 11.68- 111.68 | 62.64 |
| 146 Diisobutyl Ketone | | | | | CAS #: 108-83-8 | | |
| 23.570 | 23.570 (1.133) | 57 | 9234437 | 200.000 | 270.75 | 50.00- 150.00 | 100.00(A) |

| | | | | AMOUNTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| == | ====== ======== | ==== | ======== | ======= | ======= | ========== | ===== |
| 146 Diisobutyl Ketone (continued) | | | | | | | |
| 23.570 | 23.570 (1.133) | 85 | 9407882 | | | 53.67- 153.67 | 101.88 |
| 0.000 | 1.000 (0.000) | 0 | 0 | | | 0.00- 50.00 | 0.00 |

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Report Date: 27-Nov-2007 14:00

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t112604.d
Lab Smp Id: ical level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msdt.i/26Nov2007.b/t14q1121b.m
Misc Info: 200ppbv -> 200ppbv

Calibration Date: 26-NOV-2007
Calibration Time: 10:49
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 301939 | 181163 | 422715 | 278721 | -7.69 |
| 97 1,4-Difluorobenze | 1427711 | 856627 | 1998795 | 1222361 | -14.38 |
| 126 Chlorobenzene-d5 | 1047767 | 628660 | 1466874 | 1036408 | -1.08 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.87 | 13.54 | 14.20 | 13.87 | 0.00 |
| 97 1,4-Difluorobenze | 15.61 | 15.28 | 15.94 | 15.61 | 0.00 |
| 126 Chlorobenzene-d5 | 20.80 | 20.48 | 21.13 | 20.81 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

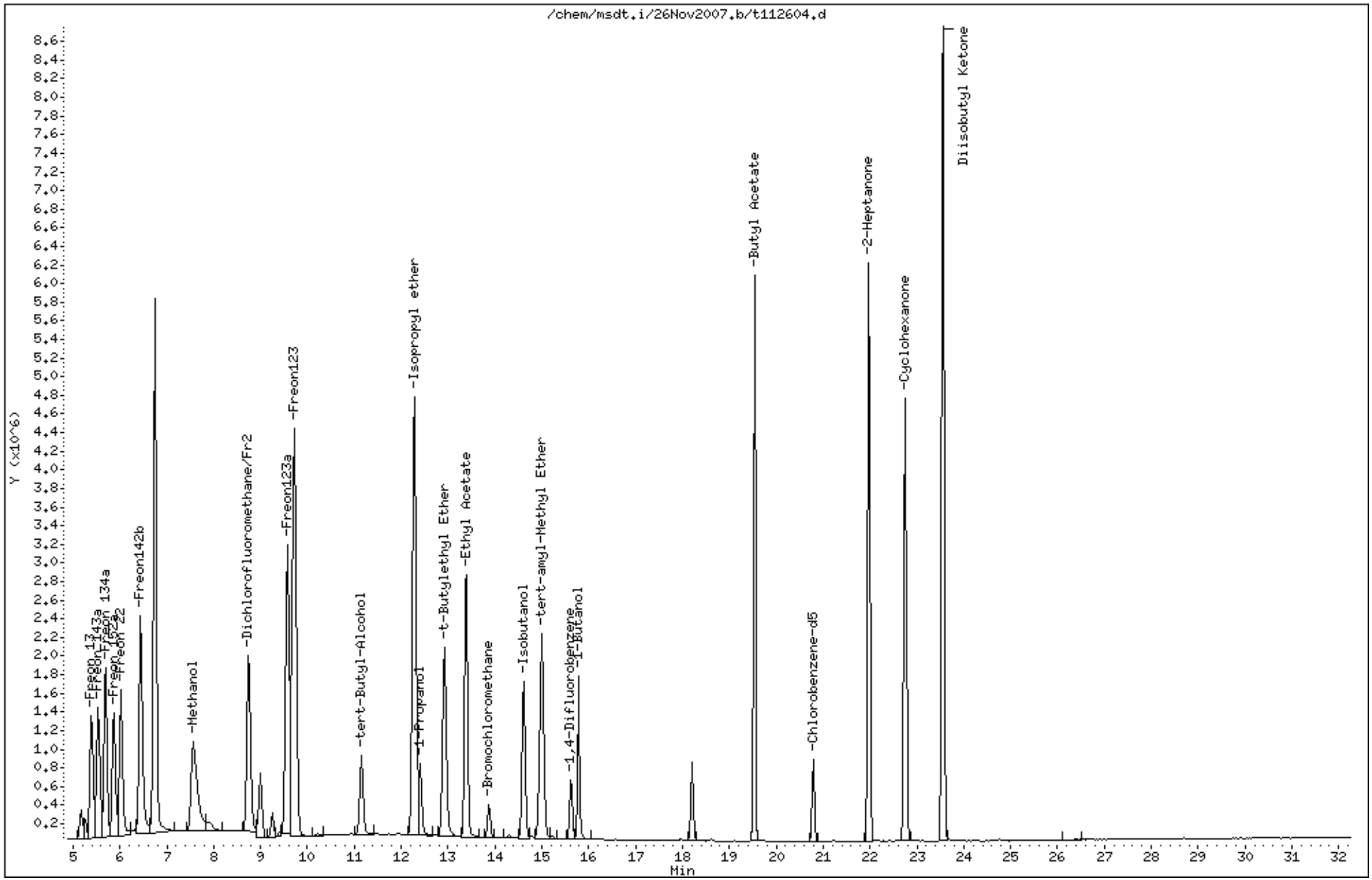
0158

Data File: /chem/msdt.i/26Nov2007.b/t112604.d
Date : 26-NOV-2007 11:39
Client ID:
Sample Info: 200ml #1487-402

Instrument: msdt.i

Operator: ea
Column diameter: 0.53

Column phase: RTx-624



Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/21Nov2007.b/t112108.d
Lab Smp Id: ical Client Smp ID: Level 7
Inj Date : 21-NOV-2007 19:02
Operator : dm Inst ID: msdt.i
Smp Info : 200ml #1576-92
Misc Info : 200ppbv-200ppbv
Comment :
Method : /chem/msdt.i/23Nov2007.b/t14q1121a.m
Meth Date : 26-Nov-2007 15:03 cleonard Quant Type: ISTD
Cal Date : 21-NOV-2007 19:02 Cal File: t112108.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04mdl+ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | AMOUNTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| == | ====== ======== | ==== | ======== | ======= | ======= | ========== | ===== |
| * 81 Bromochloromethane | | | | | CAS #: 74-97-5 | | |
| 13.886 | 13.886 (1.000) | 130 | 261482 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 13.886 | 13.886 (1.000) | 128 | 204602 | | | 26.38- 126.38 | 78.25 |
| 13.941 | 13.941 (1.000) | 49 | 823542 | | | 91.95- 191.95 | 314.95 |
| * 97 1,4-Difluorobenzene | | | | | CAS #: 540-36-3 | | |
| 15.628 | 15.628 (1.000) | 114 | 1257992 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 15.628 | 15.628 (1.000) | 88 | 200990 | | | 0.00- 65.95 | 15.98 |
| * 126 Chlorobenzene-d5 | | | | | CAS #: 3114-55-4 | | |
| 20.798 | 20.798 (1.000) | 117 | 1020523 | 25.0000 | | 50.00- 150.00 | 100.00 |
| 20.798 | 20.798 (1.000) | 82 | 570123 | | | 5.79- 105.79 | 55.87 |
| $ 90 1,2-Dichloroethane-d4 | | | | | CAS #: 17060-07-0 | | |
| 14.936 | 14.936 (1.076) | 65 | 454510 | 25.0000 | 26.965 | 50.00- 150.00 | 100.00 |
| 14.936 | 14.936 (1.076) | 67 | 348906 | | | 5.03- 105.03 | 76.77 |
| $ 113 Toluene-d8 | | | | | CAS #: 2037-26-5 | | |
| 18.227 | 18.227 (1.166) | 98 | 1170796 | 25.0000 | 27.494 | 50.00- 150.00 | 100.00 |
| 18.199 | 18.199 (1.165) | 70 | 124984 | | | 0.00- 61.02 | 10.68 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| $ 113 Toluene-d8 (continued) | | | | | | | |
| 18.227 | 18.227 (1.166) | 100 | 811182 | | | 19.45- 119.45 | 69.28 |
| $ 137 Bromofluorobenzene | | | | | CAS #: 460-00-4 | | |
| 22.789 | 22.789 (1.096) | 174 | 661131 | 25.0000 | 25.790 | 50.00- 150.00 | 100.00 |
| 22.789 | 22.789 (1.096) | 95 | 822026 | | | 77.33- 177.33 | 124.34 |
| 22.789 | 22.789 (1.096) | 176 | 638532 | | | 46.56- 146.56 | 96.58 |
| 11 Propylene | | | | | CAS #: 115-07-1 | | |
| 5.840 | 5.840 (0.421) | 41 | 1505176 | 200.000 | 216.04 | 50.00- 150.00 | 100.00(A) |
| 5.840 | 5.840 (0.421) | 42 | 1050035 | | | 17.24- 117.24 | 69.76 |
| 5.840 | 5.840 (0.421) | 39 | 1178284 | | | 27.83- 127.83 | 78.28 |
| 12 Dichlorodifluoromethane/Fr12 | | | | | CAS #: 75-71-8 | | |
| 5.950 | 5.950 (0.428) | 85 | 8568330 | 200.000 | 223.15 | 50.00- 150.00 | 100.00(A) |
| 5.950 | 5.950 (0.428) | 87 | 2729690 | | | 0.00- 82.07 | 31.86 |
| 16 Freon 114 | | | | | CAS #: 76-14-2 | | |
| 6.337 | 6.337 (0.456) | 135 | 5764093 | 200.000 | 231.48 | 50.00- 150.00 | 100.00(A) |
| 6.337 | 6.337 (0.456) | 137 | 1831723 | | | 0.00- 81.55 | 31.78 |
| 18 Chloromethane | | | | | CAS #: 74-87-3 | | |
| 6.559 | 6.559 (0.472) | 50 | 1930247 | 200.000 | 217.90 | 50.00- 150.00 | 100.00(A) |
| 6.559 | 6.559 (0.472) | 52 | 654586 | | | 0.00- 84.03 | 33.91 |
| 20 Vinyl Chloride | | | | | CAS #: 75-01-4 | | |
| 6.918 | 6.918 (0.498) | 62 | 2845566 | 200.000 | 234.84 | 50.00- 150.00 | 100.00(A) |
| 6.918 | 6.918 (0.498) | 64 | 920131 | | | 0.00- 93.71 | 32.34 |
| 22 1,3-Butadiene | | | | | CAS #: 106-99-0 | | |
| 7.001 | 7.001 (0.504) | 54 | 1997802 | 200.000 | 202.51 | 50.00- 150.00 | 100.00(A) |
| 7.001 | 7.001 (0.504) | 39 | 1789672 | | | 54.52- 154.52 | 89.58 |
| 25 Bromomethane | | | | | CAS #: 74-83-9 | | |
| 7.941 | 7.941 (0.572) | 94 | 2802560 | 200.000 | 255.40 | 50.00- 150.00 | 100.00(A) |
| 7.941 | 7.941 (0.572) | 96 | 2591932 | | | 50.48- 150.48 | 92.48 |
| 27 Chloroethane | | | | | CAS #: 75-00-3 | | |
| 8.217 | 8.217 (0.592) | 64 | 1522039 | 200.000 | 256.22 | 50.00- 150.00 | 100.00(A) |
| 8.217 | 8.217 (0.592) | 49 | 368452 | | | 0.00- 74.88 | 24.21 |
| 8.217 | 8.217 (0.592) | 66 | 502675 | | | 0.00- 80.84 | 33.03 |
| 31 Trichlorofluoromethane/Fr11 | | | | | CAS #: 75-69-4 | | |
| 8.798 | 8.798 (0.634) | 101 | 9938104 | 200.000 | 199.42 | 50.00- 150.00 | 100.00 |
| 8.798 | 8.798 (0.634) | 103 | 6449487 | | | 16.26- 116.26 | 64.90 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 38 Ethanol | | | | | CAS #: 64-17-5 | | |
| 9.268 | 9.268 (0.667) | 45 | 1039555 | 200.000 | 183.04 | 50.00- 150.00 | 100.00 |
| 9.268 | 9.268 (0.667) | 43 | 224837 | | | 0.00- 72.67 | 21.63 |
| 9.268 | 9.268 (0.667) | 46 | 379839 | | | 0.00- 86.29 | 36.54 |
| 42 Freon 113 | | | | | CAS #: 76-13-1 | | |
| 9.959 | 9.959 (0.717) | 151 | 6037693 | 200.000 | 201.08 | 50.00- 150.00 | 100.00(A) |
| 9.959 | 9.959 (0.717) | 153 | 3834789 | | | 15.23- 115.23 | 63.51 |
| 9.959 | 9.959 (0.717) | 101 | 7707198 | | | 83.14- 183.14 | 127.65 |
| 43 1,1-Dichloroethene | | | | | CAS #: 75-35-4 | | |
| 10.042 | 10.042 (0.723) | 61 | 4630214 | 200.000 | 203.65 | 50.00- 150.00 | 100.00(A) |
| 10.042 | 10.042 (0.723) | 96 | 3052165 | | | 16.79- 116.79 | 65.92 |
| 10.070 | 10.070 (0.725) | 98 | 1959657 | | | 0.00- 90.88 | 42.32 |
| 45 Acetone | | | | | CAS #: 67-64-1 | | |
| 10.208 | 10.208 (0.735) | 58 | 1556845 | 200.000 | 187.67 | 50.00- 150.00 | 100.00 |
| 10.208 | 10.208 (0.735) | 43 | 4523890 | | | 259.05- 359.05 | 290.58 |
| 46 2-Propanol | | | | | CAS #: 67-63-0 | | |
| 10.402 | 10.402 (0.749) | 45 | 7953631 | 200.000 | 190.77 | 50.00- 150.00 | 100.00 |
| 10.402 | 10.402 (0.749) | 43 | 1650886 | | | 0.00- 73.80 | 20.76 |
| 10.402 | 10.402 (0.749) | 59 | 356067 | | | 0.00- 54.08 | 4.48 |
| 47 Carbon Disulfide | | | | | CAS #: 75-15-0 | | |
| 10.568 | 10.568 (0.761) | 76 | 9070071 | 200.000 | 232.96 | 50.00- 150.00 | 100.00(A) |
| 51 3-Chloropropene | | | | | CAS #: 107-05-1 | | |
| 10.844 | 10.844 (0.781) | 76 | 1651016 | 200.000 | 204.57 | 50.00- 150.00 | 100.00(A) |
| 10.817 | 10.817 (0.779) | 41 | 3452254 | | | 185.00- 285.00 | 209.10 |
| 54 Methylene Chloride | | | | | CAS #: 75-09-2 | | |
| 11.121 | 11.121 (0.801) | 49 | 2734562 | 200.000 | 199.91 | 50.00- 150.00 | 100.00 |
| 11.121 | 11.121 (0.801) | 84 | 2614097 | | | 40.01- 140.01 | 95.59 |
| 11.121 | 11.121 (0.801) | 51 | 845716 | | | 0.00- 81.08 | 30.93 |
| 60 MTBE | | | | | CAS #: 1634-04-4 | | |
| 11.480 | 11.480 (0.827) | 73 | 5283151 | 200.000 | 246.89 | 50.00- 150.00 | 100.00(A) |
| 11.480 | 11.480 (0.827) | 57 | 991360 | | | 0.00- 69.28 | 18.76 |
| 11.452 | 11.452 (0.825) | 41 | 891223 | | | 0.00- 69.31 | 16.87 |
| 61 trans-1,2-Dichloroethene | | | | | CAS #: 156-60-5 | | |
| 11.563 | 11.563 (0.833) | 96 | 3884077 | 200.000 | 208.91 | 50.00- 150.00 | 100.00(A) |
| 11.563 | 11.563 (0.833) | 61 | 5043253 | | | 83.34- 183.34 | 129.84 |
| 11.563 | 11.563 (0.833) | 98 | 2478084 | | | 11.49- 111.49 | 63.80 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 65 Hexane | | | | | CAS #: 110-54-3 | | |
| 11.895 | 11.895 (0.857) | 57 | 6786841 | 200.000 | 222.56 | 50.00- 150.00 | 100.00(A) |
| 11.895 | 11.895 (0.857) | 43 | 3721720 | | | 6.67- 106.67 | 54.84 |
| 11.895 | 11.895 (0.857) | 86 | 1256145 | | | 0.00- 66.53 | 18.51 |
| 69 Vinyl Acetate | | | | | CAS #: 108-05-4 | | |
| 12.365 | 12.365 (0.890) | 86 | 1106568 | 200.000 | 221.75 | 50.00- 150.00 | 100.00(A) |
| 12.365 | 12.365 (0.890) | 43 | 9140470 | | | 869.92- 969.92 | 826.02 |
| 70 1,1-Dichloroethane | | | | | CAS #: 75-34-3 | | |
| 12.393 | 12.393 (0.892) | 63 | 6699585 | 200.000 | 212.05 | 50.00- 150.00 | 100.00(A) |
| 12.393 | 12.393 (0.892) | 65 | 2158962 | | | 0.00- 81.73 | 32.23 |
| 75 2-Butanone | | | | | CAS #: 78-93-3 | | |
| 13.388 | 13.388 (0.964) | 72 | 2332276 | 200.000 | 226.69 | 50.00- 150.00 | 100.00(A) |
| 13.388 | 13.388 (0.964) | 43 | 8834186 | | | 362.73- 462.73 | 378.78 |
| 13.388 | 13.388 (0.964) | 57 | 656312 | | | 0.00- 79.31 | 28.14 |
| 76 cis-1,2-Dichloroethene | | | | | CAS #: 156-59-2 | | |
| 13.443 | 13.443 (0.968) | 61 | 4825465 | 200.000 | 213.09 | 50.00- 150.00 | 100.00(A) |
| 13.443 | 13.443 (0.968) | 96 | 3846208 | | | 30.20- 130.20 | 79.71 |
| 13.443 | 13.443 (0.968) | 98 | 2462257 | | | 0.03- 100.03 | 51.03 |
| 80 Tetrahydrofuran | | | | | CAS #: 109-99-9 | | |
| 13.858 | 13.858 (0.998) | 42 | 3572517 | 200.000 | 209.43 | 50.00- 150.00 | 100.00(A) |
| 13.858 | 13.858 (0.998) | 71 | 1978703 | | | 0.15- 100.15 | 55.39 |
| 13.858 | 13.858 (0.998) | 72 | 2115505 | | | 4.67- 104.67 | 59.22 |
| 82 Chloroform | | | | | CAS #: 67-66-3 | | |
| 13.941 | 13.941 (1.004) | 83 | 7953400 | 200.000 | 225.78 | 50.00- 150.00 | 100.00(A) |
| 13.941 | 13.941 (1.004) | 85 | 5185796 | | | 16.84- 116.84 | 65.20 |
| 83 1,1,1-Trichloroethane | | | | | CAS #: 71-55-6 | | |
| 14.300 | 14.300 (1.030) | 97 | 8227969 | 200.000 | 220.55 | 50.00- 150.00 | 100.00(A) |
| 14.300 | 14.300 (1.030) | 99 | 5295209 | | | 13.29- 113.29 | 64.36 |
| 85 Cyclohexane | | | | | CAS #: 110-82-7 | | |
| 14.300 | 14.300 (1.030) | 84 | 5011386 | 200.000 | 239.50 | 50.00- 150.00 | 100.00(A) |
| 14.300 | 14.300 (1.030) | 56 | 4791832 | | | 49.76- 149.76 | 95.62 |
| 14.300 | 14.300 (1.030) | 41 | 2331711 | | | 3.69- 103.69 | 46.53 |
| 87 Carbon Tetrachloride | | | | | CAS #: 56-23-5 | | |
| 14.549 | 14.549 (1.048) | 119 | 7747860 | 200.000 | 221.27 | 50.00- 150.00 | 100.00(A) |
| 14.549 | 14.549 (1.048) | 117 | 8245309 | | | 54.35- 154.35 | 106.42 |
| 91 Benzene | | | | | CAS #: 71-43-2 | | |
| 14.964 | 14.964 (0.958) | 78 | 11488082 | 200.000 | 214.05 | 50.00- 150.00 | 100.00(A) |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 91 Benzene (continued) | | | | | | | |
| 14.964 | 14.964 (0.958) | 77 | 2570571 | | | 0.00- 72.49 | 22.38 |
| 89 2,2,4-Trimethylpentane | | | | | CAS #: 540-84-1 | | |
| 14.881 | 14.881 (1.072) | 57 | 15482276 | 200.000 | 208.34 | 50.00- 150.00 | 100.00(A) |
| 14.881 | 14.881 (1.072) | 56 | 4983916 | | | 0.00- 82.34 | 32.19 |
| 14.881 | 14.881 (1.072) | 41 | 3669177 | | | 0.00- 76.30 | 23.70 |
| 93 1,2-Dichloroethane | | | | | CAS #: 107-06-2 | | |
| 15.075 | 15.075 (0.965) | 62 | 4990424 | 200.000 | 197.77 | 50.00- 150.00 | 100.00 |
| 15.075 | 15.075 (0.965) | 64 | 1615439 | | | 0.00- 84.21 | 32.37 |
| 94 Heptane | | | | | CAS #: 142-82-5 | | |
| 15.185 | 15.185 (0.972) | 71 | 4415071 | 200.000 | 227.99 | 50.00- 150.00 | 100.00(A) |
| 15.185 | 15.185 (0.972) | 43 | 5659807 | | | 86.68- 186.68 | 128.19 |
| 15.185 | 15.185 (0.972) | 57 | 3536428 | | | 32.20- 132.20 | 80.10 |
| 101 Trichloroethene | | | | | CAS #: 79-01-6 | | |
| 16.098 | 16.098 (1.030) | 95 | 5125142 | 200.000 | 209.18 | 50.00- 150.00 | 100.00(A) |
| 16.098 | 16.098 (1.030) | 130 | 4763395 | | | 47.47- 147.47 | 92.94 |
| 16.098 | 16.098 (1.030) | 97 | 3248658 | | | 14.52- 114.52 | 63.39 |
| 104 1,2-Dichloropropane | | | | | CAS #: 78-87-5 | | |
| 16.568 | 16.568 (1.060) | 63 | 3841268 | 200.000 | 209.32 | 50.00- 150.00 | 100.00(A) |
| 16.568 | 16.568 (1.060) | 62 | 2719674 | | | 17.52- 117.52 | 70.80 |
| 16.568 | 16.568 (1.060) | 41 | 1836122 | | | 0.97- 100.97 | 47.80 |
| 106 1,4-Dioxane | | | | | CAS #: 123-91-1 | | |
| 16.706 | 16.706 (1.069) | 88 | 3491098 | 200.000 | 219.33 | 50.00- 150.00 | 100.00(A) |
| 16.706 | 16.706 (1.069) | 58 | 1909329 | | | 6.89- 106.89 | 54.69 |
| 16.706 | 16.706 (1.069) | 57 | 651640 | | | 0.00- 69.74 | 18.67 |
| 107 Bromodichloromethane | | | | | CAS #: 75-27-4 | | |
| 17.010 | 17.010 (1.088) | 83 | 8528290 | 200.000 | 213.32 | 50.00- 150.00 | 100.00(A) |
| 17.010 | 17.010 (1.088) | 85 | 5476808 | | | 14.67- 114.67 | 64.22 |
| 110 cis-1,3-Dichloropropene | | | | | CAS #: 10061-01-5 | | |
| 17.784 | 17.784 (1.138) | 75 | 6695398 | 200.000 | 229.01 | 50.00- 150.00 | 100.00(A) |
| 17.784 | 17.784 (1.138) | 77 | 2140873 | | | 0.00- 83.04 | 31.98 |
| 17.784 | 17.784 (1.138) | 39 | 2601443 | | | 0.00- 93.89 | 38.85 |
| 111 4-Methyl-2-pentanone | | | | | CAS #: 108-10-1 | | |
| 17.978 | 17.978 (1.150) | 58 | 4500034 | 200.000 | 245.98 | 50.00- 150.00 | 100.00(A) |
| 17.978 | 17.978 (1.150) | 43 | 9772760 | | | 169.12- 269.12 | 217.17 |
| 17.978 | 17.978 (1.150) | 85 | 2341011 | | | 0.58- 100.58 | 52.02 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 114 Toluene | | | | | CAS #: 108-88-3 | | |
| 18.337 | 18.337 (1.173) | 91 | 13683042 | 200.000 | 229.78 | 50.00- 150.00 | 100.00(A) |
| 18.337 | 18.337 (1.173) | 92 | 8331741 | | | 11.10- 111.10 | 60.89 |
| 116 trans-1,3-Dichloropropene | | | | | CAS #: 10061-02-6 | | |
| 18.780 | 18.780 (0.903) | 75 | 7227455 | 200.000 | 210.08 | 50.00- 150.00 | 100.00(A) |
| 18.780 | 18.780 (0.903) | 77 | 2296509 | | | 0.00- 83.38 | 31.77 |
| 18.780 | 18.780 (0.903) | 39 | 2626173 | | | 0.00- 92.03 | 36.34 |
| 117 1,1,2-Trichloroethane | | | | | CAS #: 79-00-5 | | |
| 19.111 | 19.111 (0.919) | 97 | 4923054 | 200.000 | 204.29 | 50.00- 150.00 | 100.00(A) |
| 19.111 | 19.111 (0.919) | 99 | 3110953 | | | 14.64- 114.64 | 63.19 |
| 19.111 | 19.111 (0.919) | 83 | 4175230 | | | 37.04- 137.04 | 84.81 |
| 120 Tetrachloroethene | | | | | CAS #: 127-18-4 | | |
| 19.277 | 19.277 (0.927) | 166 | 6417881 | 200.000 | 199.16 | 50.00- 150.00 | 100.00 |
| 19.277 | 19.277 (0.927) | 129 | 4459146 | | | 21.89- 121.89 | 69.48 |
| 19.277 | 19.277 (0.927) | 131 | 4249913 | | | 19.59- 119.59 | 66.22 |
| 121 2-Hexanone | | | | | CAS #: 591-78-6 | | |
| 19.416 | 19.416 (0.934) | 58 | 6683784 | 200.000 | 213.88 | 50.00- 150.00 | 100.00(A) |
| 19.416 | 19.416 (0.934) | 43 | 10560772 | | | 114.75- 214.75 | 158.01 |
| 19.443 | 19.443 (0.935) | 100 | 1503065 | | | 0.00- 71.95 | 22.49 |
| 122 Dibromochloromethane | | | | | CAS #: 124-48-1 | | |
| 19.803 | 19.803 (0.952) | 129 | 8118801 | 200.000 | 202.46 | 50.00- 150.00 | 100.00(A) |
| 19.803 | 19.803 (0.952) | 127 | 6252380 | | | 26.41- 126.41 | 77.01 |
| 123 1,2-Dibromoethane | | | | | CAS #: 106-93-4 | | |
| 20.079 | 20.079 (0.965) | 107 | 8079575 | 200.000 | 208.55 | 50.00- 150.00 | 100.00(A) |
| 20.079 | 20.079 (0.965) | 109 | 7475928 | | | 43.48- 143.48 | 92.53 |
| 127 Chlorobenzene | | | | | CAS #: 108-90-7 | | |
| 20.853 | 20.853 (1.003) | 112 | 11109579 | 200.000 | 205.65 | 50.00- 150.00 | 100.00(A) |
| 20.853 | 20.853 (1.003) | 114 | 3440140 | | | 0.00- 83.18 | 30.97 |
| 20.853 | 20.853 (1.003) | 77 | 6541974 | | | 20.20- 120.20 | 58.89 |
| 128 Ethyl Benzene | | | | | CAS #: 100-41-4 | | |
| 20.936 | 20.936 (1.007) | 106 | 5981781 | 200.000 | 214.05 | 50.00- 150.00 | 100.00(A) |
| 20.936 | 20.936 (1.007) | 91 | 18860474 | | | 265.06- 365.06 | 315.30 |
| 129 m,p-Xylene | | | | | CAS #: 108-38-3 | | |
| 21.130 | 21.130 (1.016) | 106 | 7521514 | 200.000 | 216.63 | 50.00- 150.00 | 100.00(A) |
| 21.130 | 21.130 (1.016) | 91 | 14922197 | | | 147.41- 247.41 | 198.39 |
| 130 o-Xylene | | | | | CAS #: 95-47-6 | | |
| 21.849 | 21.849 (1.051) | 106 | 6890459 | 200.000 | 215.37 | 50.00- 150.00 | 100.00(A) |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 130 o-Xylene (continued) | | | | | | | |
| 21.849 | 21.849 (1.051) | 91 | 14428568 | | | 155.82- 255.82 | 209.40 |
| 131 Styrene | | | | | CAS #: 100-42-5 | | |
| 21.876 | 21.876 (1.052) | 104 | 12448952 | 200.000 | 246.18 | 50.00- 150.00 | 100.00(A) |
| 21.876 | 21.876 (1.052) | 78 | 5925128 | | | 9.19- 109.19 | 47.60 |
| 133 Bromoform | | | | | CAS #: 75-25-2 | | |
| 22.291 | 22.291 (1.072) | 173 | 8168757 | 200.000 | 215.26 | 50.00- 150.00 | 100.00(A) |
| 22.291 | 22.291 (1.072) | 171 | 4179261 | | | 0.74- 100.74 | 51.16 |
| 134 Cumene | | | | | CAS #: 98-82-8 | | |
| 22.429 | 22.429 (1.078) | 105 | 19372181 | 200.000 | 230.58 | 50.00- 150.00 | 100.00(A) |
| 22.429 | 22.429 (1.078) | 120 | 5021121 | | | 0.00- 75.99 | 25.92 |
| 22.429 | 22.429 (1.078) | 51 | 1444162 | | | 9.74- 109.74 | 7.45 |
| 140 1,1,2,2-Tetrachloroethane | | | | | CAS #: 79-34-5 | | |
| 23.010 | 23.010 (1.106) | 83 | 10903987 | 200.000 | 214.18 | 50.00- 150.00 | 100.00(A) |
| 23.010 | 23.010 (1.106) | 85 | 7005100 | | | 14.88- 114.88 | 64.24 |
| 142 Propylbenzene | | | | | CAS #: 103-65-1 | | |
| 23.121 | 23.121 (1.112) | 91 | 24082267 | 200.000 | 217.50 | 50.00- 150.00 | 100.00(A) |
| 23.121 | 23.121 (1.112) | 120 | 5272139 | | | 0.00- 72.67 | 21.89 |
| 23.121 | 23.121 (1.112) | 105 | 855002 | | | 0.00- 53.69 | 3.55 |
| 145 4-Ethyltoluene | | | | | CAS #: 622-96-8 | | |
| 23.286 | 23.286 (1.120) | 105 | 20504810 | 200.000 | 217.75 | 50.00- 150.00 | 100.00(A) |
| 23.286 | 23.286 (1.120) | 120 | 6095494 | | | 0.00- 80.49 | 29.73 |
| 147 1,3,5-Trimethylbenzene | | | | | CAS #: 108-67-8 | | |
| 23.397 | 23.397 (1.125) | 105 | 16992345 | 200.000 | 217.94 | 50.00- 150.00 | 100.00(A) |
| 23.397 | 23.397 (1.125) | 120 | 8301290 | | | 1.60- 101.60 | 48.85 |
| 150 1,2,4-Trimethylbenzene | | | | | CAS #: 95-63-6 | | |
| 24.033 | 24.033 (1.156) | 105 | 16287302 | 200.000 | 219.01 | 50.00- 150.00 | 100.00(A) |
| 24.033 | 24.033 (1.156) | 120 | 7556559 | | | 0.00- 96.88 | 46.40 |
| 155 1,3-Dichlorobenzene | | | | | CAS #: 541-73-1 | | |
| 24.586 | 24.586 (1.182) | 146 | 10827568 | 200.000 | 207.20 | 50.00- 150.00 | 100.00(A) |
| 24.586 | 24.586 (1.182) | 148 | 6861597 | | | 14.03- 114.03 | 63.37 |
| 24.586 | 24.586 (1.182) | 111 | 4451405 | | | 0.00- 91.33 | 41.11 |
| 156 1,4-Dichlorobenzene | | | | | CAS #: 106-46-7 | | |
| 24.752 | 24.752 (1.190) | 146 | 11291436 | 200.000 | 209.84 | 50.00- 150.00 | 100.00(A) |
| 24.752 | 24.752 (1.190) | 148 | 7145811 | | | 15.04- 115.04 | 63.29 |
| 24.724 | 24.724 (1.189) | 111 | 4417182 | | | 0.00- 89.92 | 39.12 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 159 alpha-Chlorotoluene | | | | | CAS #: 100-44-7 | | |
| 24.945 | 24.945 (1.199) | 91 | 17402662 | 200.000 | 228.72 | 50.00- 150.00 | 100.00(A) |
| 24.945 | 24.945 (1.199) | 126 | 3358930 | | | 0.00- 70.12 | 19.30 |
| 161 1,2-Dichlorobenzene | | | | | CAS #: 95-50-1 | | |
| 25.360 | 25.360 (1.219) | 146 | 10787952 | 200.000 | 208.37 | 50.00- 150.00 | 100.00(A) |
| 25.360 | 25.360 (1.219) | 148 | 6854943 | | | 14.55- 114.55 | 63.54 |
| 25.360 | 25.360 (1.219) | 111 | 4594691 | | | 0.00- 93.18 | 42.59 |
| 165 1,2,4-Trichlorobenzene | | | | | CAS #: 120-82-1 | | |
| 28.153 | 28.153 (1.354) | 180 | 9872838 | 200.000 | 199.38 | 50.00- 150.00 | 100.00 |
| 28.153 | 28.153 (1.354) | 182 | 9371797 | | | 44.49- 144.49 | 94.93 |
| 166 Hexachlorobutadiene | | | | | CAS #: 87-68-3 | | |
| 28.319 | 28.319 (1.362) | 225 | 7064577 | 200.000 | 195.14 | 50.00- 150.00 | 100.00 |
| 28.319 | 28.319 (1.362) | 223 | 4454710 | | | 14.10- 114.10 | 63.06 |
| 19 Butane | | | | | CAS #: 106-97-8 | | |
| 6.835 | 6.835 (0.492) | 58 | 481552 | 200.000 | 203.04 | 50.00- 150.00 | 100.00(A) |
| 6.835 | 6.835 (0.492) | 43 | 3273555 | | | 668.04- 768.04 | 679.79 |
| 29 Isopentane | | | | | CAS #: 78-78-4 | | |
| 8.273 | 8.273 (0.596) | 43 | 3598505 | 200.000 | 187.79 | 50.00- 150.00 | 100.00 |
| 8.273 | 8.273 (0.596) | 57 | 2837925 | | | 26.21- 126.21 | 78.86 |
| 102 Methyl Cyclohexane | | | | | CAS #: 108-87-2 | | |
| 16.374 | 16.374 (1.179) | 83 | 6405056 | 200.000 | 236.42 | 50.00- 150.00 | 100.00(A) |
| 16.374 | 16.374 (1.179) | 98 | 2886481 | | | 0.00- 92.45 | 45.07 |
| 16.346 | 16.346 (1.177) | 55 | 4201357 | | | 18.10- 118.10 | 65.59 |
| 167 Naphthalene | | | | | CAS #: 91-20-3 | | |
| 28.678 | 28.678 (1.379) | 128 | 14683545 | 200.000 | 206.14 | 50.00- 150.00 | 100.00(A) |
| 28.678 | 28.678 (1.379) | 127 | 1764730 | | | 0.00- 62.43 | 12.02 |

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t112108.d
Lab Smp Id: ical
Analysis Type: VOA
Quant Type: ISTD
Operator: dm
Method File: /chem/msdt.i/23Nov2007.b/t14q1121a.m
Misc Info: 200ppbv-200ppbv

Calibration Date: 21-NOV-2007
Calibration Time: 17:45
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 306974 | 184184 | 429764 | 261482 | -14.82 |
| 97 1,4-Difluorobenze | 1370844 | 822506 | 1919182 | 1257992 | -8.23 |
| 126 Chlorobenzene-d5 | 968009 | 580805 | 1355213 | 1020523 | 5.42 |

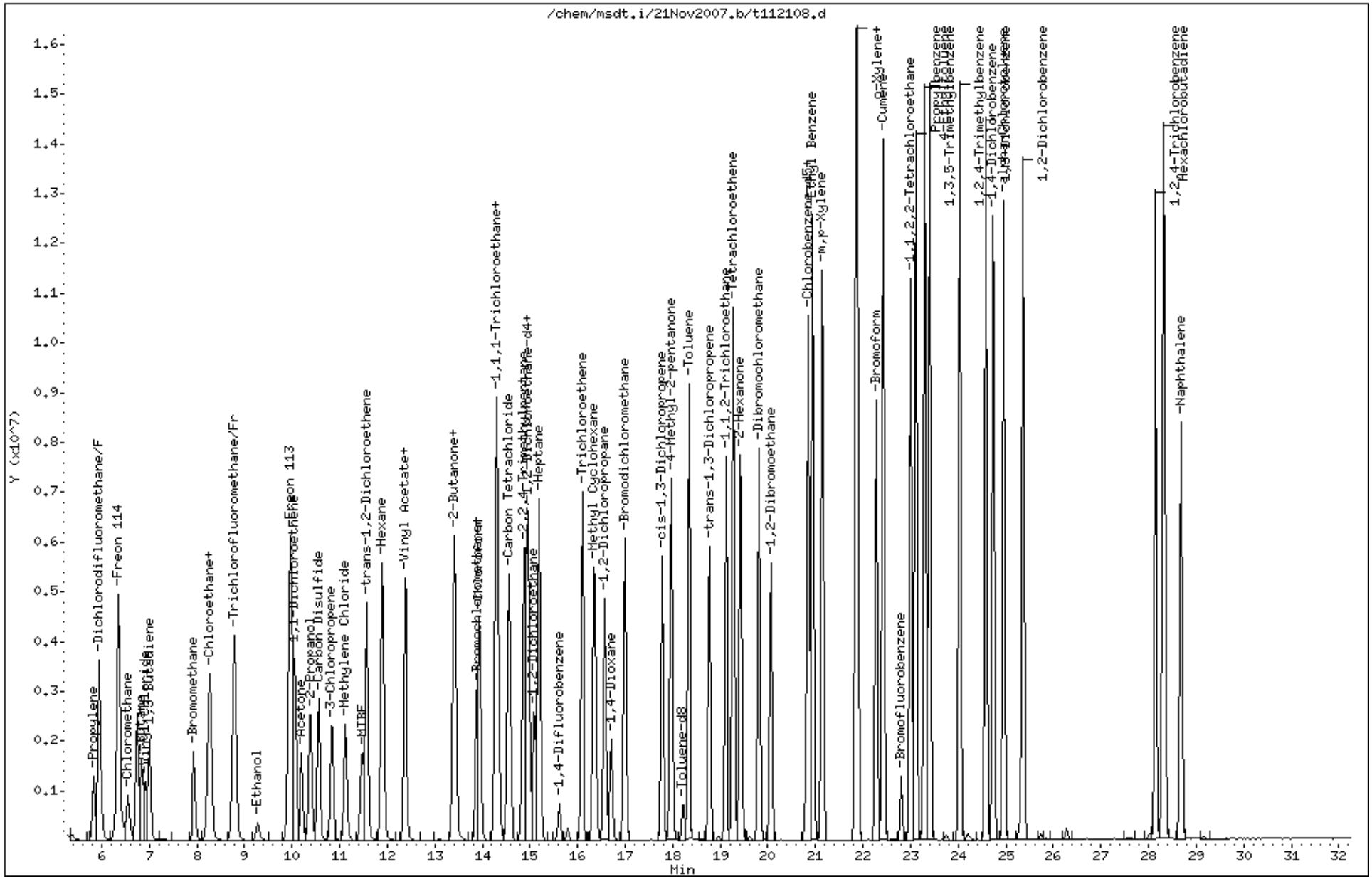
| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.89 | 13.56 | 14.22 | 13.89 | 0.00 |
| 97 1,4-Difluorobenze | 15.63 | 15.30 | 15.96 | 15.63 | 0.00 |
| 126 Chlorobenzene-d5 | 20.80 | 20.47 | 21.13 | 20.80 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/21Nov2007.b/t112108.d
Date : 21-NOV-2007 19:02
Client ID: Level 7
Sample Info: 200ml #1576-92

Instrument: msdt.i
Operator: dm
Column diameter: 0.53

Column phase: RTx-624




0168

AN ENVIRONMENTAL ANALYTICAL LABORATORY

**Client Sample ID: CCV**

**Lab ID#: 0711487-04A**

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **t120402** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 12/4/07 09:44 AM** | |

| Compound | %Recovery |
|---|---|
| Freon 12 | 110 |
| Freon 114 | 108 |
| Vinyl Chloride | 112 |
| Bromomethane | 121 |
| Chloroethane | 117 |
| Freon 11 | 111 |
| 1,1-Dichloroethene | 106 |
| Freon 113 | 111 |
| Methylene Chloride | 96 |
| 1,1-Dichloroethane | 106 |
| cis-1,2-Dichloroethene | 108 |
| Chloroform | 115 |
| 1,1,1-Trichloroethane | 105 |
| Carbon Tetrachloride | 106 |
| Benzene | 102 |
| 1,2-Dichloroethane | 103 |
| Trichloroethene | 105 |
| 1,2-Dichloropropane | 98 |
| cis-1,3-Dichloropropene | 108 |
| Toluene | 102 |
| trans-1,3-Dichloropropene | 109 |
| 1,1,2-Trichloroethane | 109 |
| Tetrachloroethene | 106 |
| 1,2-Dibromoethane (EDB) | 106 |
| Chlorobenzene | 102 |
| Ethyl Benzene | 103 |
| m,p-Xylene | 104 |
| o-Xylene | 104 |
| Styrene | 114 |
| 1,1,2,2-Tetrachloroethane | 104 |
| 1,3,5-Trimethylbenzene | 104 |
| 1,2,4-Trimethylbenzene | 105 |
| 1,3-Dichlorobenzene | 100 |
| 1,4-Dichlorobenzene | 102 |
| alpha-Chlorotoluene | 108 |
| 1,2-Dichlorobenzene | 102 |
| 1,3-Butadiene | 115 |
| Hexane | 109 |
| Cyclohexane | 107 |

AN ENVIRONMENTAL ANALYTICAL LABORATORY

**Client Sample ID: CCV**

**Lab ID#: 0711487-04A**

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **t120402** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 12/4/07 09:44 AM** | |

| Compound | %Recovery |
|---|---|
| Heptane | 106 |
| Bromodichloromethane | 105 |
| Dibromochloromethane | 106 |
| Cumene | 112 |
| Propylbenzene | 104 |
| Chloromethane | 102 |
| 1,2,4-Trichlorobenzene | 104 |
| Hexachlorobutadiene | 100 |
| Acetone | 98 |
| Carbon Disulfide | 110 |
| 2-Propanol | 95 |
| trans-1,2-Dichloroethene | 104 |
| 2-Butanone (Methyl Ethyl Ketone) | 115 |
| Tetrahydrofuran | 102 |
| 1,4-Dioxane | 105 |
| 4-Methyl-2-pentanone | 105 |
| 2-Hexanone | 100 |
| Bromoform | 105 |
| 4-Ethyltoluene | 105 |
| Ethanol | 94 |
| Methyl tert-butyl ether | 108 |
| 3-Chloropropene | 103 |
| 2,2,4-Trimethylpentane | 100 |
| Naphthalene | 105 |

**Container Type: NA - Not Applicable**

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

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i Injection Date: 04-DEC-2007 09:44
Lab File ID: t120402.d Init. Cal. Date(s): 21-NOV-2007 26-NOV-2007
Analysis Type: AIR Init. Cal. Times: 14:44 15:28
Lab Sample ID: CCV-1 Quant Type: ISTD
Method: /chem/msdt.i/04Dec2007.b/t14q1121b.m

| COMPOUND | RRF / AMOUNT | RF50 | MIN RRF | %D / %DRIFT | MAX %D / %DRIFT | CURVE TYPE |
|---|---|---|---|---|---|---|
|$ 90 1,2-Dichloroethane-d4 | 1.61155 | 1.73775 | 0.010 | -7.83065 | 30.00000 | Averaged |
|$ 113 Toluene-d8 | 0.84627 | 0.85614 | 0.010 | -1.16594 | 30.00000 | Averaged |
|$ 137 Bromofluorobenzene | 0.62800 | 0.61576 | 0.010 | 1.94961 | 30.00000 | Averaged |
| 11 Propylene | 0.66613 | 0.64279 | 0.010 | 3.50393 | 30.00000 | Averaged |
| 12 Dichlorodifluoromethane/Fr1 | 3.67107 | 4.02533 | 0.010 | -9.65012 | 30.00000 | Averaged |
| 16 Freon 114 | 2.38070 | 2.58238 | 0.010 | -8.47134 | 30.00000 | Averaged |
| 18 Chloromethane | 0.84696 | 0.86374 | 0.010 | -1.98148 | 30.00000 | Averaged |
| 20 Vinyl Chloride | 1.15851 | 1.29555 | 0.010 | -11.82885 | 30.00000 | Averaged |
| 22 1,3-Butadiene | 0.94320 | 1.08813 | 0.010 | -15.36566 | 30.00000 | Averaged |
| 25 Bromomethane | 1.04913 | 1.27360 | 0.010 | -21.39630 | 30.00000 | Averaged |
| 27 Chloroethane | 0.56795 | 0.66327 | 0.010 | -16.78343 | 30.00000 | Averaged |
| 31 Trichlorofluoromethane/Fr11 | 4.76457 | 5.27799 | 0.010 | -10.77600 | 30.00000 | Averaged |
| 38 Ethanol | 0.54299 | 0.51197 | 0.010 | 5.71331 | 30.00000 | Averaged |
| 42 Freon 113 | 2.87076 | 3.19486 | 0.010 | -11.28978 | 30.00000 | Averaged |
| 43 1,1-Dichloroethene | 2.17378 | 2.29338 | 0.010 | -5.50196 | 30.00000 | Averaged |
| 45 Acetone | 0.79312 | 0.77752 | 0.010 | 1.96713 | 30.00000 | Averaged |
| 46 2-Propanol | 3.98617 | 3.78279 | 0.010 | 5.10213 | 30.00000 | Averaged |
| 47 Carbon Disulfide | 3.72248 | 4.08568 | 0.010 | -9.75705 | 30.00000 | Averaged |
| 51 3-Chloropropene | 0.77162 | 0.79718 | 0.010 | -3.31301 | 30.00000 | Averaged |
| 54 Methylene Chloride | 1.30783 | 1.26254 | 0.010 | 3.46355 | 30.00000 | Averaged |
| 60 MTBE | 2.04594 | 2.20309 | 0.010 | -7.68103 | 30.00000 | Averaged |
| 61 trans-1,2-Dichloroethene | 1.77756 | 1.84101 | 0.010 | -3.56936 | 30.00000 | Averaged |
| 65 Hexane | 2.91560 | 3.18609 | 0.010 | -9.27724 | 30.00000 | Averaged |
| 69 Vinyl Acetate | 0.47711 | 0.53266 | 0.010 | -11.64274 | 30.00000 | Averaged |
| 70 1,1-Dichloroethane | 3.02064 | 3.19443 | 0.010 | -5.75341 | 30.00000 | Averaged |
| 75 2-Butanone | 0.98366 | 1.13290 | 0.010 | -15.17165 | 30.00000 | Averaged |
| 76 cis-1,2-Dichloroethene | 2.16511 | 2.33081 | 0.010 | -7.65321 | 30.00000 | Averaged |
| 80 Tetrahydrofuran | 1.63094 | 1.65541 | 0.010 | -1.50066 | 30.00000 | Averaged |
| 82 Chloroform | 3.36787 | 3.88945 | 0.010 | -15.48687 | 30.00000 | Averaged |
| 83 1,1,1-Trichloroethane | 3.56685 | 3.75652 | 0.010 | -5.31738 | 30.00000 | Averaged |
| 85 Cyclohexane | 2.00058 | 2.14730 | 0.010 | -7.33382 | 30.00000 | Averaged |
| 87 Carbon Tetrachloride | 3.34780 | 3.53521 | 0.010 | -5.59788 | 30.00000 | Averaged |
| 89 2,2,4-Trimethylpentane | 7.10496 | 7.11042 | 0.010 | -0.07673 | 30.00000 | Averaged |
| 91 Benzene | 1.06658 | 1.09086 | 0.010 | -2.27649 | 30.00000 | Averaged |
| 93 1,2-Dichloroethane | 0.50146 | 0.51544 | 0.010 | -2.78851 | 30.00000 | Averaged |

Air Toxics Ltd.

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdt.i Injection Date: 04-DEC-2007 09:44
Lab File ID: t120402.d Init. Cal. Date(s): 21-NOV-2007 26-NOV-2007
Analysis Type: AIR Init. Cal. Times: 14:44 15:28
Lab Sample ID: CCV-1 Quant Type: ISTD
Method: /chem/msdt.i/04Dec2007.b/t14q1121b.m

| COMPOUND | RRF / AMOUNT | RF50 | MIN RRF | %D / %DRIFT | MAX %D / %DRIFT | CURVE TYPE |
|---|---|---|---|---|---|---|
| 94 Heptane | 0.38484 | 0.40672 | 0.010 | -5.68514 | 30.00000 | Averaged |
| 101 Trichloroethene | 0.48692 | 0.50951 | 0.010 | -4.63953 | 30.00000 | Averaged |
| 104 1,2-Dichloropropane | 0.36470 | 0.35784 | 0.010 | 1.87987 | 30.00000 | Averaged |
| 106 1,4-Dioxane | 0.31632 | 0.33327 | 0.010 | -5.35654 | 30.00000 | Averaged |
| 107 Bromodichloromethane | 0.79448 | 0.83630 | 0.010 | -5.26494 | 30.00000 | Averaged |
| 110 cis-1,3-Dichloropropene | 0.58102 | 0.62642 | 0.010 | -7.81334 | 30.00000 | Averaged |
| 111 4-Methyl-2-pentanone | 0.36356 | 0.38126 | 0.010 | -4.86957 | 30.00000 | Averaged |
| 114 Toluene | 1.18340 | 1.21130 | 0.010 | -2.35739 | 30.00000 | Averaged |
| 116 trans-1,3-Dichloropropene | 0.84279 | 0.92142 | 0.010 | -9.33019 | 30.00000 | Averaged |
| 117 1,1,2-Trichloroethane | 0.59034 | 0.64143 | 0.010 | -8.65461 | 30.00000 | Averaged |
| 120 Tetrachloroethene | 0.78940 | 0.83719 | 0.010 | -6.05340 | 30.00000 | Averaged |
| 121 2-Hexanone | 0.76554 | 0.76448 | 0.010 | 0.13765 | 30.00000 | Averaged |
| 122 Dibromochloromethane | 0.98234 | 1.04679 | 0.010 | -6.56071 | 30.00000 | Averaged |
| 123 1,2-Dibromoethane | 0.94905 | 1.00980 | 0.010 | -6.40074 | 30.00000 | Averaged |
| 127 Chlorobenzene | 1.32338 | 1.34743 | 0.010 | -1.81748 | 30.00000 | Averaged |
| 128 Ethyl Benzene | 0.68458 | 0.70784 | 0.010 | -3.39749 | 30.00000 | Averaged |
| 129 m,p-Xylene | 0.85057 | 0.88968 | 0.010 | -4.59860 | 30.00000 | Averaged |
| 130 o-Xylene | 0.78374 | 0.81535 | 0.010 | -4.03361 | 30.00000 | Averaged |
| 131 Styrene | 1.23881 | 1.41204 | 0.010 | -13.98411 | 30.00000 | Averaged |
| 133 Bromoform | 0.92963 | 0.97790 | 0.010 | -5.19209 | 30.00000 | Averaged |
| 134 Cumene | 2.05813 | 2.30131 | 0.010 | -11.81554 | 30.00000 | Averaged |
| 140 1,1,2,2-Tetrachloroethane | 1.24719 | 1.29296 | 0.010 | -3.66959 | 30.00000 | Averaged |
| 142 Propylbenzene | 2.71238 | 2.83522 | 0.010 | -4.52897 | 30.00000 | Averaged |
| 145 4-Ethyltoluene | 2.30684 | 2.42079 | 0.010 | -4.93954 | 30.00000 | Averaged |
| 147 1,3,5-Trimethylbenzene | 1.91002 | 1.98073 | 0.010 | -3.70191 | 30.00000 | Averaged |
| 150 1,2,4-Trimethylbenzene | 1.82179 | 1.91591 | 0.010 | -5.16619 | 30.00000 | Averaged |
| 155 1,3-Dichlorobenzene | 1.28016 | 1.28630 | 0.010 | -0.47978 | 30.00000 | Averaged |
| 156 1,4-Dichlorobenzene | 1.31816 | 1.34372 | 0.010 | -1.93924 | 30.00000 | Averaged |
| 159 alpha-Chlorotoluene | 1.86390 | 2.01466 | 0.010 | -8.08818 | 30.00000 | Averaged |
| 161 1,2-Dichlorobenzene | 1.26829 | 1.29696 | 0.010 | -2.26050 | 30.00000 | Averaged |
| 165 1,2,4-Trichlorobenzene | 1.21306 | 1.25596 | 0.010 | -3.53673 | 30.00000 | Averaged |
| 166 Hexachlorobutadiene | 0.88689 | 0.88891 | 0.010 | -0.22838 | 30.00000 | Averaged |
| 29 Isopentane | 1.83212 | 1.80052 | 0.010 | 1.72481 | 30.00000 | Averaged |
| 19 Butane | 0.22676 | 0.24744 | 0.010 | -9.12243 | 30.00000 | Averaged |
| 102 Methyl Cyclohexane | 2.59023 | 2.73594 | 0.010 | -5.62528 | 30.00000 | Averaged |
| 167 Naphthalene | 1.74496 | 1.83715 | 0.010 | -5.28332 | 30.00000 | Averaged |

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/04Dec2007.b/t120402.d
Lab Smp Id: CCV-1 Client Smp ID: CCV-1
Inj Date : 04-DEC-2007 09:44
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-92
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/04Dec2007.b/t14q1121b.m
Meth Date : 04-Dec-2007 13:33 sruth Quant Type: ISTD
Cal Date : 26-NOV-2007 15:28 Cal File: t112608.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | AMOUNTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| * 81 Bromochloromethane | | | | | | CAS #: 74-97-5 | |
| 13.858 | 13.858 (1.000) | 130 | 355566 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 13.858 | 13.858 (1.000) | 128 | 284191 | | | 29.93- 129.93 | 79.93 |
| 13.858 | 13.858 (1.000) | 49 | 563618 | | | 108.51- 208.51 | 158.51 |
| * 97 1,4-Difluorobenzene | | | | | | CAS #: 540-36-3 | |
| 15.600 | 15.600 (1.000) | 114 | 1769240 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 15.600 | 15.600 (1.000) | 88 | 291541 | | | 0.00- 66.48 | 16.48 |
| * 126 Chlorobenzene-d5 | | | | | | CAS #: 3114-55-4 | |
| 20.798 | 20.798 (1.000) | 117 | 1250441 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 20.798 | 20.798 (1.000) | 82 | 698709 | | | 4.93- 104.93 | 55.88 |
| $ 90 1,2-Dichloroethane-d4 | | | | | | CAS #: 17060-07-0 | |
| 14.937 | 14.937 (1.078) | 65 | 617884 | 25.0000 | 26.958 | 80.00- 120.00 | 100.00 |
| 14.937 | 14.937 (1.078) | 67 | 354722 | | | 5.03- 105.03 | 57.41 |
| $ 113 Toluene-d8 | | | | | | CAS #: 2037-26-5 | |
| 18.199 | 18.199 (1.167) | 98 | 1514716 | 25.0000 | 25.291 | 80.00- 120.00 | 100.00 |
| 18.199 | 18.199 (1.167) | 70 | 161057 | | | 0.00- 61.02 | 10.63 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| $ 113 Toluene-d8 (continued) | | | | | | | |
| 18.199 | 18.199 (1.167) | 100 | 1035061 | | | 19.45- 119.45 | 68.33 |
| $ 137 Bromofluorobenzene | | | | | CAS #: 460-00-4 | | |
| 22.789 | 22.789 (1.096) | 174 | 769966 | 25.0000 | 24.512 | 80.00- 120.00 | 100.00 |
| 22.789 | 22.789 (1.096) | 95 | 989848 | | | 78.56- 178.56 | 128.56 |
| 22.789 | 22.789 (1.096) | 176 | 751782 | | | 47.64- 147.64 | 97.64 |
| 11 Propylene | | | | | CAS #: 115-07-1 | | |
| 5.812 | 5.812 (0.419) | 41 | 457105 | 50.0000 | 48.248 | 80.00- 120.00 | 100.00 |
| 5.812 | 5.812 (0.419) | 42 | 321707 | | | 17.24- 117.24 | 70.38 |
| 5.812 | 5.812 (0.419) | 39 | 359919 | | | 27.83- 127.83 | 78.74 |
| 12 Dichlorodifluoromethane/Fr12 | | | | | CAS #: 75-71-8 | | |
| 5.923 | 5.923 (0.427) | 85 | 2862539 | 50.0000 | 54.825 | 80.00- 120.00 | 100.00 |
| 5.923 | 5.923 (0.427) | 87 | 926974 | | | 0.00- 82.07 | 32.38 |
| 16 Freon 114 | | | | | CAS #: 76-14-2 | | |
| 6.310 | 6.310 (0.455) | 135 | 1836413 | 50.0000 | 54.236 | 80.00- 120.00 | 100.00 |
| 6.310 | 6.310 (0.455) | 137 | 582705 | | | 0.00- 81.55 | 31.73 |
| 18 Chloromethane | | | | | CAS #: 74-87-3 | | |
| 6.531 | 6.531 (0.471) | 50 | 614234 | 50.0000 | 50.991 | 80.00- 120.00 | 100.00 |
| 6.531 | 6.531 (0.471) | 52 | 204871 | | | 0.00- 84.03 | 33.35 |
| 20 Vinyl Chloride | | | | | CAS #: 75-01-4 | | |
| 6.891 | 6.891 (0.497) | 62 | 921304 | 50.0000 | 55.914 | 80.00- 120.00 | 100.00 |
| 6.891 | 6.891 (0.497) | 64 | 308046 | | | 0.00- 93.71 | 33.44 |
| 22 1,3-Butadiene | | | | | CAS #: 106-99-0 | | |
| 6.973 | 6.973 (0.503) | 54 | 773807 | 50.0000 | 57.683 | 80.00- 120.00 | 100.00 |
| 6.973 | 6.973 (0.503) | 39 | 679934 | | | 54.52- 154.52 | 87.87 |
| 25 Bromomethane | | | | | CAS #: 74-83-9 | | |
| 7.914 | 7.914 (0.571) | 94 | 905697 | 50.0000 | 60.698 | 80.00- 120.00 | 100.00 |
| 7.914 | 7.914 (0.571) | 96 | 848457 | | | 43.68- 143.68 | 93.68 |
| 27 Chloroethane | | | | | CAS #: 75-00-3 | | |
| 8.190 | 8.190 (0.591) | 64 | 471676 | 50.0000 | 58.392 | 80.00- 120.00 | 100.00 |
| 8.190 | 8.190 (0.591) | 49 | 116801 | | | 0.00- 74.88 | 24.76 |
| 8.190 | 8.190 (0.591) | 66 | 152110 | | | 0.00- 80.84 | 32.25 |
| 31 Trichlorofluoromethane/Fr11 | | | | | CAS #: 75-69-4 | | |
| 8.771 | 8.771 (0.633) | 101 | 3753351 | 50.0000 | 55.388 | 80.00- 120.00 | 100.00 |
| 8.771 | 8.771 (0.633) | 103 | 2425197 | | | 14.61- 114.61 | 64.61 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 38 Ethanol | | | | | CAS #: 64-17-5 | | |
| 9.241 | 9.241 (0.667) | 45 | 364079 | 50.0000 | 47.143 | 80.00- 120.00 | 100.00 |
| 9.241 | 9.241 (0.667) | 43 | 83444 | | | 0.00- 72.67 | 22.92 |
| 9.241 | 9.241 (0.667) | 46 | 132731 | | | 0.00- 86.29 | 36.46 |
| 42 Freon 113 | | | | | CAS #: 76-13-1 | | |
| 9.932 | 9.932 (0.717) | 151 | 2271970 | 50.0000 | 55.645 | 80.00- 120.00 | 100.00 |
| 9.932 | 9.932 (0.717) | 153 | 1438351 | | | 13.31- 113.31 | 63.31 |
| 9.932 | 9.932 (0.717) | 101 | 2977586 | | | 81.06- 181.06 | 131.06 |
| 43 1,1-Dichloroethene | | | | | CAS #: 75-35-4 | | |
| 10.043 | 10.043 (0.725) | 61 | 1630893 | 50.0000 | 52.751 | 80.00- 120.00 | 100.00 |
| 10.043 | 10.043 (0.725) | 96 | 1051792 | | | 14.49- 114.49 | 64.49 |
| 10.043 | 10.043 (0.725) | 98 | 666166 | | | 0.00- 90.85 | 40.85 |
| 45 Acetone | | | | | CAS #: 67-64-1 | | |
| 10.181 | 10.181 (0.735) | 58 | 552918 | 50.0000 | 49.016 | 80.00- 120.00 | 100.00 |
| 10.181 | 10.181 (0.735) | 43 | 1585765 | | | 259.05- 359.05 | 286.80 |
| 46 2-Propanol | | | | | CAS #: 67-63-0 | | |
| 10.374 | 10.374 (0.749) | 45 | 2690065 | 50.0000 | 47.449 | 80.00- 120.00 | 100.00 |
| 10.374 | 10.374 (0.749) | 43 | 601492 | | | 0.00- 73.80 | 22.36 |
| 10.374 | 10.374 (0.749) | 59 | 120518 | | | 0.00- 54.08 | 4.48 |
| 47 Carbon Disulfide | | | | | CAS #: 75-15-0 | | |
| 10.540 | 10.540 (0.761) | 76 | 2905460 | 50.0000 | 54.878 | 80.00- 120.00 | 100.00 |
| 51 3-Chloropropene | | | | | CAS #: 107-05-1 | | |
| 10.817 | 10.817 (0.781) | 76 | 566903 | 50.0000 | 51.656 | 80.00- 120.00 | 100.00 |
| 10.817 | 10.817 (0.781) | 41 | 1146486 | | | 185.00- 285.00 | 202.24 |
| 54 Methylene Chloride | | | | | CAS #: 75-09-2 | | |
| 11.093 | 11.093 (0.800) | 49 | 897830 | 50.0000 | 48.268 | 80.00- 120.00 | 100.00 |
| 11.093 | 11.093 (0.800) | 84 | 871930 | | | 47.12- 147.12 | 97.12 |
| 11.093 | 11.093 (0.800) | 51 | 283913 | | | 0.00- 81.08 | 31.62 |
| 60 MTBE | | | | | CAS #: 1634-04-4 | | |
| 11.453 | 11.453 (0.826) | 73 | 1566686 | 50.0000 | 53.840 | 80.00- 120.00 | 100.00 |
| 11.453 | 11.453 (0.826) | 57 | 290349 | | | 0.00- 68.53 | 18.53 |
| 11.453 | 11.453 (0.826) | 41 | 276059 | | | 0.00- 69.31 | 17.62 |
| 61 trans-1,2-Dichloroethene | | | | | CAS #: 156-60-5 | | |
| 11.536 | 11.536 (0.832) | 96 | 1309198 | 50.0000 | 51.785 | 80.00- 120.00 | 100.00 |
| 11.536 | 11.536 (0.832) | 61 | 1747801 | | | 83.50- 183.50 | 133.50 |
| 11.536 | 11.536 (0.832) | 98 | 843437 | | | 11.49- 111.49 | 64.42 |

| | | | | AMOUNTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | CAL-AMT | ON-COL | | |
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| 65 Hexane | | | | | | CAS #: 110-54-3 | |
| 11.895 | 11.895 (0.858) | 57 | 2265728 | 50.0000 | 54.639 | 80.00- 120.00 | 100.00 |
| 11.895 | 11.895 (0.858) | 43 | 1234099 | | | 6.67- 106.67 | 54.47 |
| 11.895 | 11.895 (0.858) | 86 | 419287 | | | 0.00- 66.53 | 18.51 |
| 69 Vinyl Acetate | | | | | | CAS #: 108-05-4 | |
| 12.337 | 12.337 (0.890) | 86 | 378792 | 50.0000 | 55.821 | 80.00- 120.00 | 100.00 |
| 12.337 | 12.337 (0.890) | 43 | 3156418 | | | 869.92- 969.92 | 833.29 |
| 70 1,1-Dichloroethane | | | | | | CAS #: 75-34-3 | |
| 12.365 | 12.365 (0.892) | 63 | 2271663 | 50.0000 | 52.877 | 80.00- 120.00 | 100.00 |
| 12.365 | 12.365 (0.892) | 65 | 738538 | | | 0.00- 82.51 | 32.51 |
| 75 2-Butanone | | | | | | CAS #: 78-93-3 | |
| 13.388 | 13.388 (0.966) | 72 | 805638 | 50.0000 | 57.586 | 80.00- 120.00 | 100.00 |
| 13.388 | 13.388 (0.966) | 43 | 3021500 | | | 325.04- 425.04 | 375.04 |
| 13.388 | 13.388 (0.966) | 57 | 228890 | | | 0.00- 79.31 | 28.41 |
| 76 cis-1,2-Dichloroethene | | | | | | CAS #: 156-59-2 | |
| 13.416 | 13.416 (0.968) | 61 | 1657513 | 50.0000 | 53.827 | 80.00- 120.00 | 100.00 |
| 13.416 | 13.416 (0.968) | 96 | 1304793 | | | 28.72- 128.72 | 78.72 |
| 13.416 | 13.416 (0.968) | 98 | 832411 | | | 0.22- 100.22 | 50.22 |
| 80 Tetrahydrofuran | | | | | | CAS #: 109-99-9 | |
| 13.858 | 13.858 (1.000) | 42 | 1177218 | 50.0000 | 50.750 | 80.00- 120.00 | 100.00 |
| 13.858 | 13.858 (1.000) | 71 | 665670 | | | 6.55- 106.55 | 56.55 |
| 13.858 | 13.858 (1.000) | 72 | 705048 | | | 4.67- 104.67 | 59.89 |
| 82 Chloroform | | | | | | CAS #: 67-66-3 | |
| 13.941 | 13.941 (1.006) | 83 | 2765914 | 50.0000 | 57.743 | 80.00- 120.00 | 100.00 |
| 13.941 | 13.941 (1.006) | 85 | 1829973 | | | 16.16- 116.16 | 66.16 |
| 83 1,1,1-Trichloroethane | | | | | | CAS #: 71-55-6 | |
| 14.273 | 14.273 (1.030) | 97 | 2671380 | 50.0000 | 52.659 | 80.00- 120.00 | 100.00 |
| 14.273 | 14.273 (1.030) | 99 | 1725124 | | | 14.58- 114.58 | 64.58 |
| 85 Cyclohexane | | | | | | CAS #: 110-82-7 | |
| 14.301 | 14.301 (1.032) | 84 | 1527011 | 50.0000 | 53.667 | 80.00- 120.00 | 100.00 |
| 14.301 | 14.301 (1.032) | 56 | 1454329 | | | 45.24- 145.24 | 95.24 |
| 14.301 | 14.301 (1.032) | 41 | 705903 | | | 0.00- 96.23 | 46.23 |
| 87 Carbon Tetrachloride | | | | | | CAS #: 56-23-5 | |
| 14.522 | 14.522 (1.048) | 119 | 2514001 | 50.0000 | 52.799 | 80.00- 120.00 | 100.00 |
| 14.522 | 14.522 (1.048) | 117 | 2664857 | | | 56.00- 156.00 | 106.00 |
| 89 2,2,4-Trimethylpentane | | | | | | CAS #: 540-84-1 | |
| 14.881 | 14.881 (1.074) | 57 | 5056444 | 50.0000 | 50.038 | 80.00- 120.00 | 100.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | AMOUNTS ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 89 2,2,4-Trimethylpentane (continued) | | | | | | | |
| 14.881 | 14.881 (1.074) | 56 | 1630725 | | | 0.00- 82.34 | 32.25 |
| 14.881 | 14.881 (1.074) | 41 | 1214914 | | | 0.00- 76.30 | 24.03 |
| 91 Benzene | | | | | CAS #: 71-43-2 | | |
| 14.964 | 14.964 (0.959) | 78 | 3859991 | 50.0000 | 51.138 | 80.00- 120.00 | 100.00 |
| 14.937 | 14.937 (0.957) | 77 | 882881 | | | 0.00- 72.49 | 22.87 |
| 93 1,2-Dichloroethane | | | | | CAS #: 107-06-2 | | |
| 15.075 | 15.075 (0.966) | 62 | 1823870 | 50.0000 | 51.394 | 80.00- 120.00 | 100.00 |
| 15.075 | 15.075 (0.966) | 64 | 592598 | | | 0.00- 84.21 | 32.49 |
| 94 Heptane | | | | | CAS #: 142-82-5 | | |
| 15.185 | 15.185 (0.973) | 71 | 1439159 | 50.0000 | 52.842 | 80.00- 120.00 | 100.00 |
| 15.158 | 15.158 (0.972) | 43 | 1761473 | | | 86.68- 186.68 | 122.40 |
| 15.158 | 15.158 (0.972) | 57 | 1128933 | | | 32.20- 132.20 | 78.44 |
| 101 Trichloroethene | | | | | CAS #: 79-01-6 | | |
| 16.070 | 16.070 (1.030) | 95 | 1802894 | 50.0000 | 52.320 | 80.00- 120.00 | 100.00 |
| 16.070 | 16.070 (1.030) | 130 | 1691891 | | | 43.84- 143.84 | 93.84 |
| 16.070 | 16.070 (1.030) | 97 | 1146830 | | | 13.61- 113.61 | 63.61 |
| 104 1,2-Dichloropropane | | | | | CAS #: 78-87-5 | | |
| 16.568 | 16.568 (1.062) | 63 | 1266221 | 50.0000 | 49.060 | 80.00- 120.00 | 100.00 |
| 16.568 | 16.568 (1.062) | 62 | 898700 | | | 20.97- 120.97 | 70.97 |
| 16.568 | 16.568 (1.062) | 41 | 620470 | | | 0.00- 99.00 | 49.00 |
| 106 1,4-Dioxane | | | | | CAS #: 123-91-1 | | |
| 16.678 | 16.678 (1.069) | 88 | 1179255 | 50.0000 | 52.678 | 80.00- 120.00 | 100.00 |
| 16.678 | 16.678 (1.069) | 58 | 639204 | | | 4.20- 104.20 | 54.20 |
| 16.678 | 16.678 (1.069) | 57 | 220603 | | | 0.00- 69.74 | 18.71 |
| 107 Bromodichloromethane | | | | | CAS #: 75-27-4 | | |
| 16.983 | 16.983 (1.089) | 83 | 2959245 | 50.0000 | 52.632 | 80.00- 120.00 | 100.00 |
| 16.983 | 16.983 (1.089) | 85 | 1909865 | | | 14.54- 114.54 | 64.54 |
| 110 cis-1,3-Dichloropropene | | | | | CAS #: 10061-01-5 | | |
| 17.784 | 17.784 (1.140) | 75 | 2216563 | 50.0000 | 53.907 | 80.00- 120.00 | 100.00 |
| 17.784 | 17.784 (1.140) | 77 | 703750 | | | 0.00- 81.75 | 31.75 |
| 17.784 | 17.784 (1.140) | 39 | 858209 | | | 0.00- 88.72 | 38.72 |
| 111 4-Methyl-2-pentanone | | | | | CAS #: 108-10-1 | | |
| 17.950 | 17.950 (1.151) | 58 | 1349092 | 50.0000 | 52.435 | 80.00- 120.00 | 100.00 |
| 17.950 | 17.950 (1.151) | 43 | 2836014 | | | 169.12- 269.12 | 210.22 |
| 17.950 | 17.950 (1.151) | 85 | 699864 | | | 0.58- 100.58 | 51.88 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 114 Toluene | | | | | CAS #: 108-88-3 | | |
| 18.337 | 18.337 (1.175) | 91 | 4286150 | 50.0000 | 51.179 | 80.00- 120.00 | 100.00 |
| 18.310 | 18.310 (1.174) | 92 | 2632288 | | | 11.41- 111.41 | 61.41 |
| 116 trans-1,3-Dichloropropene | | | | | CAS #: 10061-02-6 | | |
| 18.752 | 18.752 (0.902) | 75 | 2304362 | 50.0000 | 54.665 | 80.00- 120.00 | 100.00 |
| 18.752 | 18.752 (0.902) | 77 | 739461 | | | 0.00- 82.09 | 32.09 |
| 18.752 | 18.752 (0.902) | 39 | 826177 | | | 0.00- 85.85 | 35.85 |
| 117 1,1,2-Trichloroethane | | | | | CAS #: 79-00-5 | | |
| 19.112 | 19.112 (0.919) | 97 | 1604133 | 50.0000 | 54.327 | 80.00- 120.00 | 100.00 |
| 19.112 | 19.112 (0.919) | 99 | 1012116 | | | 13.09- 113.09 | 63.09 |
| 19.112 | 19.112 (0.919) | 83 | 1339961 | | | 33.53- 133.53 | 83.53 |
| 120 Tetrachloroethene | | | | | CAS #: 127-18-4 | | |
| 19.277 | 19.277 (0.927) | 166 | 2093702 | 50.0000 | 53.027 | 80.00- 120.00 | 100.00 |
| 19.277 | 19.277 (0.927) | 129 | 1460314 | | | 19.75- 119.75 | 69.75 |
| 19.277 | 19.277 (0.927) | 131 | 1386666 | | | 16.23- 116.23 | 66.23 |
| 121 2-Hexanone | | | | | CAS #: 591-78-6 | | |
| 19.416 | 19.416 (0.934) | 58 | 1911885 | 50.0000 | 49.931 | 80.00- 120.00 | 100.00 |
| 19.416 | 19.416 (0.934) | 43 | 2994273 | | | 106.61- 206.61 | 156.61 |
| 19.416 | 19.416 (0.934) | 100 | 431428 | | | 0.00- 71.95 | 22.57 |
| 122 Dibromochloromethane | | | | | CAS #: 124-48-1 | | |
| 19.803 | 19.803 (0.952) | 129 | 2617902 | 50.0000 | 53.280 | 80.00- 120.00 | 100.00 |
| 19.803 | 19.803 (0.952) | 127 | 2022919 | | | 26.41- 126.41 | 77.27 |
| 123 1,2-Dibromoethane | | | | | CAS #: 106-93-4 | | |
| 20.052 | 20.052 (0.964) | 107 | 2525389 | 50.0000 | 53.200 | 80.00- 120.00 | 100.00 |
| 20.052 | 20.052 (0.964) | 109 | 2357402 | | | 43.35- 143.35 | 93.35 |
| 127 Chlorobenzene | | | | | CAS #: 108-90-7 | | |
| 20.853 | 20.853 (1.003) | 112 | 3369760 | 50.0000 | 50.909 | 80.00- 120.00 | 100.00 |
| 20.853 | 20.853 (1.003) | 114 | 1049989 | | | 0.00- 81.16 | 31.16 |
| 20.853 | 20.853 (1.003) | 77 | 2040273 | | | 10.55- 110.55 | 60.55 |
| 128 Ethyl Benzene | | | | | CAS #: 100-41-4 | | |
| 20.936 | 20.936 (1.007) | 106 | 1770217 | 50.0000 | 51.699 | 80.00- 120.00 | 100.00 |
| 20.936 | 20.936 (1.007) | 91 | 5564179 | | | 265.06- 365.06 | 314.32 |
| 129 m,p-Xylene | | | | | CAS #: 108-38-3 | | |
| 21.130 | 21.130 (1.016) | 106 | 2224984 | 50.0000 | 52.299 | 80.00- 120.00 | 100.00 |
| 21.130 | 21.130 (1.016) | 91 | 4385778 | | | 147.41- 247.41 | 197.12 |
| 130 o-Xylene | | | | | CAS #: 95-47-6 | | |
| 21.849 | 21.849 (1.051) | 106 | 2039097 | 50.0000 | 52.017 | 80.00- 120.00 | 100.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 130 o-Xylene (continued) | | | | | | | |
| 21.849 | 21.849 (1.051) | 91 | 4257320 | | | 158.78- 258.78 | 208.78 |
| 131 Styrene | | | | | CAS #: 100-42-5 | | |
| 21.876 | 21.876 (1.052) | 104 | 3531350 | 50.0000 | 56.992 | 80.00- 120.00 | 100.00 |
| 21.876 | 21.876 (1.052) | 78 | 1737599 | | | 0.00- 99.20 | 49.20 |
| 133 Bromoform | | | | | CAS #: 75-25-2 | | |
| 22.291 | 22.291 (1.072) | 173 | 2445613 | 50.0000 | 52.596 | 80.00- 120.00 | 100.00 |
| 22.291 | 22.291 (1.072) | 171 | 1250350 | | | 1.13- 101.13 | 51.13 |
| 134 Cumene | | | | | CAS #: 98-82-8 | | |
| 22.430 | 22.430 (1.078) | 105 | 5755315 | 50.0000 | 55.908 | 80.00- 120.00 | 100.00 |
| 22.430 | 22.430 (1.078) | 120 | 1490054 | | | 0.00- 75.99 | 25.89 |
| 22.402 | 22.402 (1.077) | 51 | 432911 | | | 9.74- 109.74 | 7.52 |
| 140 1,1,2,2-Tetrachloroethane | | | | | CAS #: 79-34-5 | | |
| 23.010 | 23.010 (1.106) | 83 | 3233528 | 50.0000 | 51.835 | 80.00- 120.00 | 100.00 |
| 23.010 | 23.010 (1.106) | 85 | 2100524 | | | 14.96- 114.96 | 64.96 |
| 142 Propylbenzene | | | | | CAS #: 103-65-1 | | |
| 23.093 | 23.093 (1.110) | 91 | 7090550 | 50.0000 | 52.264 | 80.00- 120.00 | 100.00 |
| 23.121 | 23.121 (1.112) | 120 | 1569223 | | | 0.00- 72.67 | 22.13 |
| 23.121 | 23.121 (1.112) | 105 | 259278 | | | 0.00- 53.69 | 3.66 |
| 145 4-Ethyltoluene | | | | | CAS #: 622-96-8 | | |
| 23.287 | 23.287 (1.120) | 105 | 6054107 | 50.0000 | 52.470 | 80.00- 120.00 | 100.00 |
| 23.287 | 23.287 (1.120) | 120 | 1817026 | | | 0.00- 80.01 | 30.01 |
| 147 1,3,5-Trimethylbenzene | | | | | CAS #: 108-67-8 | | |
| 23.397 | 23.397 (1.125) | 105 | 4953578 | 50.0000 | 51.851 | 80.00- 120.00 | 100.00 |
| 23.397 | 23.397 (1.125) | 120 | 2443964 | | | 1.60- 101.60 | 49.34 |
| 150 1,2,4-Trimethylbenzene | | | | | CAS #: 95-63-6 | | |
| 24.033 | 24.033 (1.156) | 105 | 4791460 | 50.0000 | 52.583 | 80.00- 120.00 | 100.00 |
| 24.033 | 24.033 (1.156) | 120 | 2211534 | | | 0.00- 96.88 | 46.16 |
| 155 1,3-Dichlorobenzene | | | | | CAS #: 541-73-1 | | |
| 24.586 | 24.586 (1.182) | 146 | 3216895 | 50.0000 | 50.240 | 80.00- 120.00 | 100.00 |
| 24.586 | 24.586 (1.182) | 148 | 2065897 | | | 14.03- 114.03 | 64.22 |
| 24.586 | 24.586 (1.182) | 111 | 1350935 | | | 0.00- 91.33 | 41.99 |
| 156 1,4-Dichlorobenzene | | | | | CAS #: 106-46-7 | | |
| 24.724 | 24.724 (1.189) | 146 | 3360491 | 50.0000 | 50.970 | 80.00- 120.00 | 100.00 |
| 24.724 | 24.724 (1.189) | 148 | 2137095 | | | 15.04- 115.04 | 63.59 |
| 24.724 | 24.724 (1.189) | 111 | 1344189 | | | 0.00- 89.92 | 40.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | AMOUNTS CAL-AMT ( PPBV) | ON-COL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 159 alpha-Chlorotoluene | | | | | CAS #: 100-44-7 | | |
| 24.946 | 24.946 (1.199) | 91 | 5038416 | 50.0000 | 54.044 | 80.00- 120.00 | 100.00 |
| 24.946 | 24.946 (1.199) | 126 | 964285 | | | 0.00- 70.12 | 19.14 |
| 161 1,2-Dichlorobenzene | | | | | CAS #: 95-50-1 | | |
| 25.360 | 25.360 (1.219) | 146 | 3243544 | 50.0000 | 51.130 | 80.00- 120.00 | 100.00 |
| 25.360 | 25.360 (1.219) | 148 | 2085273 | | | 14.29- 114.29 | 64.29 |
| 25.360 | 25.360 (1.219) | 111 | 1404177 | | | 0.00- 93.29 | 43.29 |
| 165 1,2,4-Trichlorobenzene | | | | | CAS #: 120-82-1 | | |
| 28.153 | 28.153 (1.354) | 180 | 3141019 | 50.0000 | 51.768 | 80.00- 120.00 | 100.00 |
| 28.153 | 28.153 (1.354) | 182 | 2966346 | | | 44.44- 144.44 | 94.44 |
| 166 Hexachlorobutadiene | | | | | CAS #: 87-68-3 | | |
| 28.319 | 28.319 (1.362) | 225 | 2223064 | 50.0000 | 50.114 | 80.00- 120.00 | 100.00 |
| 28.319 | 28.319 (1.362) | 223 | 1386059 | | | 14.10- 114.10 | 62.35 |
| 29 Isopentane | | | | | CAS #: 78-78-4 | | |
| 8.245 | 8.245 (0.595) | 43 | 1280407 | 50.0000 | 49.138 | 80.00- 120.00 | 100.00 |
| 8.245 | 8.245 (0.595) | 57 | 1026916 | | | 26.21- 126.21 | 80.20 |
| 19 Butane | | | | | CAS #: 106-97-8 | | |
| 6.808 | 6.808 (0.491) | 58 | 175966 | 50.0000 | 54.561 | 80.00- 120.00 | 100.00 |
| 6.808 | 6.808 (0.491) | 43 | 1201761 | | | 668.04- 768.04 | 682.95 |
| 102 Methyl Cyclohexane | | | | | CAS #: 108-87-2 | | |
| 16.347 | 16.347 (1.180) | 83 | 1945615 | 50.0000 | 52.813 | 80.00- 120.00 | 100.00 |
| 16.347 | 16.347 (1.180) | 98 | 890352 | | | 0.00- 92.45 | 45.76 |
| 16.347 | 16.347 (1.180) | 55 | 1271411 | | | 18.10- 118.10 | 65.35 |
| 167 Naphthalene | | | | | CAS #: 91-20-3 | | |
| 28.678 | 28.678 (1.379) | 128 | 4594489 | 50.0000 | 52.642 | 80.00- 120.00 | 100.00 |
| 28.678 | 28.678 (1.379) | 127 | 563656 | | | 0.00- 62.43 | 12.27 |

Report Date: 04-Dec-2007 13:34

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t120402.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/04Dec2007.b/t14q1121b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 04-DEC-2007
Calibration Time: 11:23
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 331730 | 199038 | 464422 | 355566 | 7.19 |
| 97 1,4-Difluorobenze | 1668782 | 1001269 | 2336295 | 1769240 | 6.02 |
| 126 Chlorobenzene-d5 | 1226112 | 735667 | 1716557 | 1250441 | 1.98 |

| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.86 | 13.53 | 14.19 | 13.86 | 0.00 |
| 97 1,4-Difluorobenze | 15.60 | 15.27 | 15.93 | 15.60 | 0.00 |
| 126 Chlorobenzene-d5 | 20.80 | 20.47 | 21.13 | 20.80 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

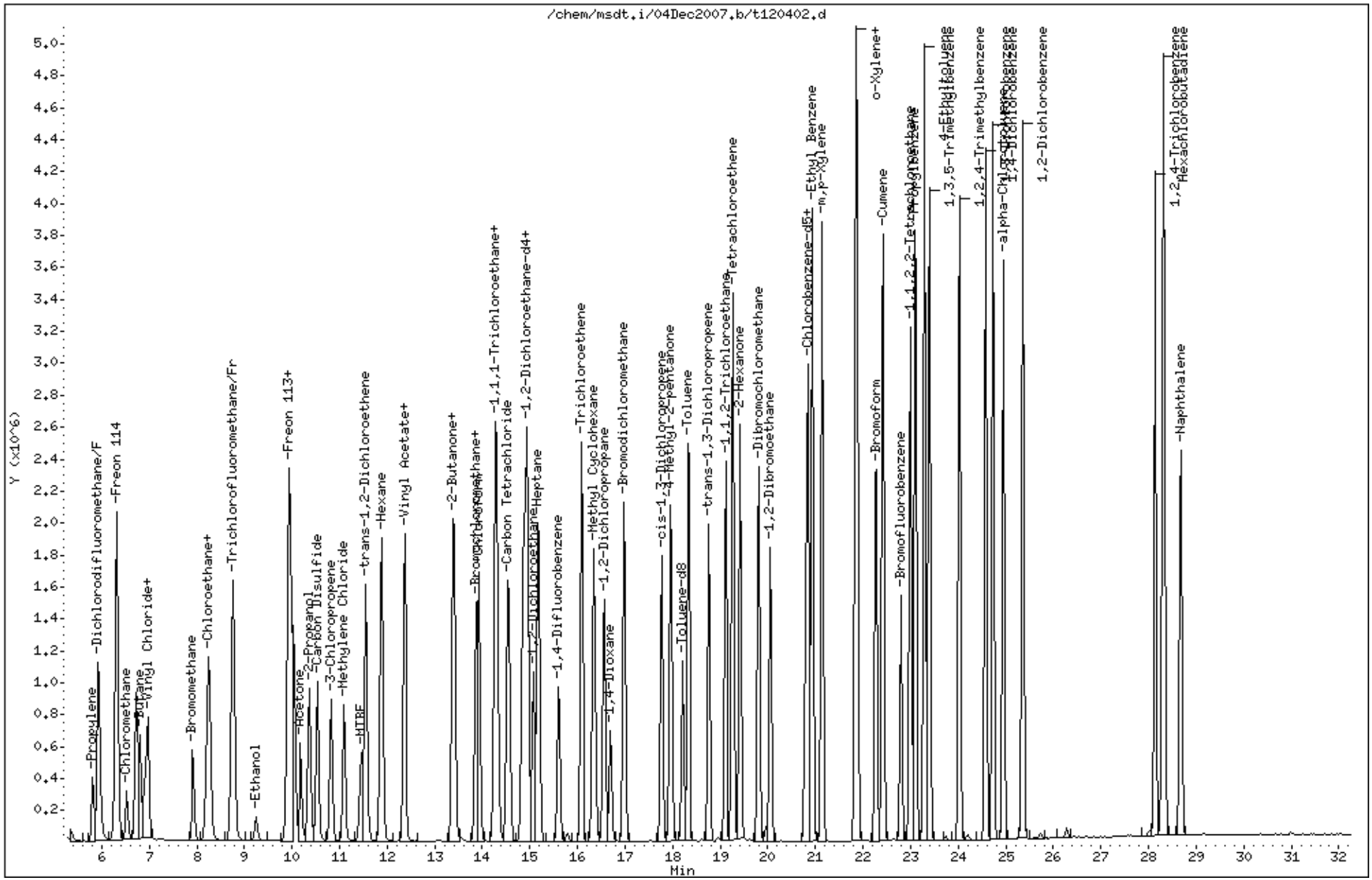
0182

Data File: /chem/msdt.i/04Dec2007.b/t120402.d
Date : 04-DEC-2007 09:44
Client ID: CCV-1
Sample Info: 50mL #1576-92

Instrument: msdt.i

Operator: sjr
Column diameter: 0.53

Column phase: RTx-624



AN ENVIRONMENTAL ANALYTICAL LABORATORY

**Client Sample ID: LCS**

**Lab ID#: 0711487-05A**

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **t120403** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 12/4/07 10:24 AM** | |

| Compound | %Recovery |
|---|---|
| Freon 12 | 107 |
| Freon 114 | 110 |
| Vinyl Chloride | 112 |
| Bromomethane | 123 |
| Chloroethane | 116 |
| Freon 11 | 117 |
| 1,1-Dichloroethene | 124 |
| Freon 113 | 134 Q |
| Methylene Chloride | 107 |
| 1,1-Dichloroethane | 118 |
| cis-1,2-Dichloroethene | 109 |
| Chloroform | 127 |
| 1,1,1-Trichloroethane | 114 |
| Carbon Tetrachloride | 113 |
| Benzene | 110 |
| 1,2-Dichloroethane | 109 |
| Trichloroethene | 111 |
| 1,2-Dichloropropane | 101 |
| cis-1,3-Dichloropropene | 110 |
| Toluene | 110 |
| trans-1,3-Dichloropropene | 117 |
| 1,1,2-Trichloroethane | 116 |
| Tetrachloroethene | 113 |
| 1,2-Dibromoethane (EDB) | 107 |
| Chlorobenzene | 107 |
| Ethyl Benzene | 107 |
| m,p-Xylene | 108 |
| o-Xylene | 110 |
| Styrene | 110 |
| 1,1,2,2-Tetrachloroethane | 103 |
| 1,3,5-Trimethylbenzene | 106 |
| 1,2,4-Trimethylbenzene | 106 |
| 1,3-Dichlorobenzene | 105 |
| 1,4-Dichlorobenzene | 104 |
| alpha-Chlorotoluene | 117 |
| 1,2-Dichlorobenzene | 103 |
| 1,3-Butadiene | 114 |
| Hexane | 118 |
| Cyclohexane | 116 |

AN ENVIRONMENTAL ANALYTICAL LABORATORY

**Client Sample ID: LCS**

**Lab ID#: 0711487-05A**

**MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **t120403** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 12/4/07 10:24 AM** | |

| **Compound** | **%Recovery** |
|---|---|
| Heptane | 110 |
| Bromodichloromethane | 110 |
| Dibromochloromethane | 113 |
| Cumene | 121 |
| Propylbenzene | 112 |
| Chloromethane | 97 |
| 1,2,4-Trichlorobenzene | 83 |
| Hexachlorobutadiene | 91 |
| Acetone | 101 |
| Carbon Disulfide | 114 |
| 2-Propanol | 64 |
| trans-1,2-Dichloroethene | 112 |
| 2-Butanone (Methyl Ethyl Ketone) | 111 |
| Tetrahydrofuran | 92 |
| 1,4-Dioxane | 84 |
| 4-Methyl-2-pentanone | 78 |
| 2-Hexanone | 69 |
| Bromoform | 111 |
| 4-Ethyltoluene | 111 |
| Ethanol | 87 |
| Methyl tert-butyl ether | 129 |
| 3-Chloropropene | 113 |
| 2,2,4-Trimethylpentane | 109 |
| Naphthalene | 89 |

Q = Exceeds Quality Control limits.

**Container Type: NA - Not Applicable**

| **Surrogates** | **%Recovery** | **Method Limits** |
|---|---|---|
| Toluene-d8 | 97 | 70-130 |
| 1,2-Dichloroethane-d4 | 107 | 70-130 |
| 4-Bromofluorobenzene | 100 | 70-130 |

Report Date: 04-Dec-2007 10:52

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 04Dec2007
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Level: LOW Operator: sjr
Data Type: MS DATA SampleType: LCS
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT04ENSR.sub
Method File: /chem/msdt.i/04Dec2007.b/t14q1121b.m
Misc Info: 200ppbv -> 50ppbv

| SPIKE COMPOUND | CONC ADDED PPBV | CONC RECOVERED PPBV | % RECOVERED | LIMITS |
|---|---|---|---|---|
| 12 Dichlorodifluorome | 50.000 | 53.745 | 107.49 | 70-130 |
| 16 Freon 114 | 50.000 | 55.110 | 110.22 | 70-130 |
| 18 Chloromethane | 50.000 | 48.716 | 97.43 | 70-130 |
| 20 Vinyl Chloride | 50.000 | 56.029 | 112.06 | 70-130 |
| 22 1,3-Butadiene | 50.000 | 56.965 | 113.93 | 60-140 |
| 25 Bromomethane | 50.000 | 61.376 | 122.75 | 70-130 |
| 27 Chloroethane | 50.000 | 58.039 | 116.08 | 70-130 |
| 31 Trichlorofluoromet | 50.000 | 58.610 | 117.22 | 70-130 |
| 38 Ethanol | 50.000 | 43.440 | 86.88 | 60-140 |
| 42 Freon 113 | 50.000 | 67.260 | 134.52* | 70-130 |
| 43 1,1-Dichloroethene | 50.000 | 61.775 | 123.55 | 70-130 |
| 45 Acetone | 50.000 | 50.658 | 101.32 | 60-140 |
| 47 Carbon Disulfide | 50.000 | 56.774 | 113.55 | 60-140 |
| 46 2-Propanol | 50.000 | 31.874 | 63.75 | 60-140 |
| 54 Methylene Chloride | 50.000 | 53.464 | 106.93 | 70-130 |
| 60 MTBE | 50.000 | 64.593 | 129.19 | 60-140 |
| 61 trans-1,2-Dichloro | 50.000 | 56.157 | 112.31 | 60-140 |
| 65 Hexane | 50.000 | 58.823 | 117.65 | 60-140 |
| 69 Vinyl Acetate | 50.000 | 62.246 | 124.49 | 60-140 |
| 70 1,1-Dichloroethane | 50.000 | 59.255 | 118.51 | 70-130 |
| 76 cis-1,2-Dichloroet | 50.000 | 54.623 | 109.25 | 70-130 |
| 75 2-Butanone | 50.000 | 55.349 | 110.70 | 60-140 |
| 80 Tetrahydrofuran | 50.000 | 45.803 | 91.61 | 60-140 |
| 82 Chloroform | 50.000 | 63.411 | 126.82 | 70-130 |
| 85 Cyclohexane | 50.000 | 58.173 | 116.35 | 60-140 |
| 83 1,1,1-Trichloroeth | 50.000 | 57.135 | 114.27 | 70-130 |
| 87 Carbon Tetrachlori | 50.000 | 56.701 | 113.40 | 70-130 |
| 91 Benzene | 50.000 | 54.881 | 109.76 | 70-130 |
| 93 1,2-Dichloroethane | 50.000 | 54.309 | 108.62 | 70-130 |
| 94 Heptane | 50.000 | 54.895 | 109.79 | 60-140 |
| 101 Trichloroethene | 50.000 | 55.403 | 110.81 | 70-130 |
| 104 1,2-Dichloropropan | 50.000 | 50.422 | 100.84 | 70-130 |
| 106 1,4-Dioxane | 50.000 | 42.106 | 84.21 | 60-140 |

| SPIKE COMPOUND | CONC ADDED PPBV | CONC RECOVERED PPBV | % RECOVERED | LIMITS |
|---|---|---|---|---|
| 107 Bromodichlorometha | 50.000 | 55.283 | 110.57 | 60-140 |
| 110 cis-1,3-Dichloropr | 50.000 | 54.840 | 109.68 | 70-130 |
| 111 4-Methyl-2-pentano | 50.000 | 38.898 | 77.80 | 60-140 |
| 114 Toluene | 50.000 | 55.080 | 110.16 | 70-130 |
| 116 trans-1,3-Dichloro | 50.000 | 58.690 | 117.38 | 70-130 |
| 117 1,1,2-Trichloroeth | 50.000 | 57.893 | 115.79 | 70-130 |
| 120 Tetrachloroethene | 50.000 | 56.605 | 113.21 | 70-130 |
| 121 2-Hexanone | 50.000 | 34.407 | 68.81 | 60-140 |
| 122 Dibromochlorometha | 50.000 | 56.418 | 112.84 | 60-140 |
| 123 1,2-Dibromoethane | 50.000 | 53.735 | 107.47 | 70-130 |
| 127 Chlorobenzene | 50.000 | 53.407 | 106.81 | 70-130 |
| 128 Ethyl Benzene | 50.000 | 53.562 | 107.12 | 70-130 |
| 129 m,p-Xylene | 50.000 | 53.976 | 107.95 | 70-130 |
| 130 o-Xylene | 50.000 | 55.145 | 110.29 | 70-130 |
| 131 Styrene | 50.000 | 54.780 | 109.56 | 70-130 |
| 133 Bromoform | 50.000 | 55.449 | 110.90 | 60-140 |
| 140 1,1,2,2-Tetrachlor | 50.000 | 51.542 | 103.08 | 70-130 |
| 145 4-Ethyltoluene | 50.000 | 55.327 | 110.65 | 60-140 |
| 147 1,3,5-Trimethylben | 50.000 | 52.755 | 105.51 | 70-130 |
| 150 1,2,4-Trimethylben | 50.000 | 53.282 | 106.56 | 70-130 |
| 155 1,3-Dichlorobenzen | 50.000 | 52.402 | 104.80 | 70-130 |
| 156 1,4-Dichlorobenzen | 50.000 | 52.084 | 104.17 | 70-130 |
| 159 alpha-Chlorotoluen | 50.000 | 58.620 | 117.24 | 70-130 |
| 161 1,2-Dichlorobenzen | 50.000 | 51.345 | 102.69 | 70-130 |
| 165 1,2,4-Trichloroben | 50.000 | 41.555 | 83.11 | 70-130 |
| 166 Hexachlorobutadien | 50.000 | 45.300 | 90.60 | 70-130 |
| 142 Propylbenzene | 50.000 | 55.832 | 111.66 | 60-140 |
| 134 Cumene | 50.000 | 60.570 | 121.14 | 60-140 |
| 51 3-Chloropropene | 50.000 | 56.415 | 112.83 | 60-140 |
| 89 2,2,4-Trimethylpen | 50.000 | 54.677 | 109.35 | 60-140 |
| 19 Butane | 50.000 | 58.591 | 117.18 | 70-130 |
| 29 Isopentane | 50.000 | 51.350 | 102.70 | 70-130 |
| 102 Methyl Cyclohexane | 50.000 | 58.145 | 116.29 | 70-130 |
| 11 Propylene | 50.000 | 48.787 | 97.57 | 60-140 |
| 167 Naphthalene | 50.000 | 44.433 | 88.87 | 60-140 |

| SURROGATE COMPOUND | CONC ADDED PPBV | CONC RECOVERED PPBV | % RECOVERED | LIMITS |
|---|---|---|---|---|
| $ 90 1,2-Dichloroethane | 25.000 | 26.821 | 107.28 | 70-130 |
| $ 113 Toluene-d8 | 25.000 | 24.304 | 97.22 | 70-130 |
| $ 137 Bromofluorobenzene | 25.000 | 24.945 | 99.78 | 70-130 |

Air Toxics Ltd.

AMBIENT AIR METHOD TO14

Data file : /chem/msdt.i/04Dec2007.b/t120403.d
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Inj Date : 04-DEC-2007 10:24
Operator : sjr Inst ID: msdt.i
Smp Info : 50mL #1576-108
Misc Info : 200ppbv -> 50ppbv
Comment :
Method : /chem/msdt.i/04Dec2007.b/t14q1121b.m
Meth Date : 04-Dec-2007 10:49 sruth Quant Type: ISTD
Cal Date : 26-NOV-2007 15:28 Cal File: t112608.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT04ENSR.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

| | | | | CONCENTRATIONS ON-COL | FINAL | | |
|---|---|---|---|---|---|---|---|
| RT | EXP RT (REL RT) | MASS | RESPONSE | ( PPBV) | ( PPBV) | TARGET RANGE | RATIO |
| * 81 Bromochloromethane | | | | | CAS #: 74-97-5 | | |
| 13.858 | 13.858 (1.000) | 130 | 376079 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 13.858 | 13.858 (1.000) | 128 | 291717 | | | 29.93- 129.93 | 77.57 |
| 13.858 | 13.858 (1.000) | 49 | 611059 | | | 108.51- 208.51 | 162.48 |
| * 97 1,4-Difluorobenzene | | | | | CAS #: 540-36-3 | | |
| 15.628 | 15.600 (1.000) | 114 | 1905131 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 15.600 | 15.600 (1.000) | 88 | 304999 | | | 0.00- 66.48 | 16.01 |
| * 126 Chlorobenzene-d5 | | | | | CAS #: 3114-55-4 | | |
| 20.798 | 20.798 (1.000) | 117 | 1264162 | 25.0000 | | 80.00- 120.00 | 100.00 |
| 20.798 | 20.798 (1.000) | 82 | 711583 | | | 4.93- 104.93 | 56.29 |
| $ 90 1,2-Dichloroethane-d4 | | | | | CAS #: 17060-07-0 | | |
| 14.936 | 14.937 (1.078) | 65 | 650221 | 26.8212 | 26.821 | 80.00- 120.00 | 100.00 |
| 14.936 | 14.937 (1.078) | 67 | 381753 | | | 5.03- 105.03 | 58.71 |
| $ 113 Toluene-d8 | | | | | CAS #: 2037-26-5 | | |
| 18.199 | 18.199 (1.165) | 98 | 1567393 | 24.3043 | 24.304 | 80.00- 120.00 | 100.00 |
| 18.199 | 18.199 (1.165) | 70 | 171990 | | | 0.00- 61.02 | 10.97 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | CONCENTRATIONS FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| $ 113 Toluene-d8 (continued) | | | | | | | |
| 18.199 | 18.199 (1.165) | 100 | 1093853 | | | 19.45- 119.45 | 69.79 |
| $ 137 Bromofluorobenzene | | | | | CAS #: 460-00-4 | | |
| 22.789 | 22.789 (1.096) | 174 | 792145 | 24.9450 | 24.945 | 80.00- 120.00 | 100.00 |
| 22.789 | 22.789 (1.096) | 95 | 1024449 | | | 78.56- 178.56 | 129.33 |
| 22.789 | 22.789 (1.096) | 176 | 760182 | | | 47.64- 147.64 | 95.97 |
| 11 Propylene | | | | | CAS #: 115-07-1 | | |
| 5.812 | 5.812 (0.419) | 41 | 488873 | 48.7866 | 48.787 | 80.00- 120.00 | 100.00 |
| 5.812 | 5.812 (0.419) | 42 | 340213 | | | 17.24- 117.24 | 69.59 |
| 5.812 | 5.812 (0.419) | 39 | 379938 | | | 27.83- 127.83 | 77.72 |
| 12 Dichlorodifluoromethane/Fr12 | | | | | CAS #: 75-71-8 | | |
| 5.923 | 5.923 (0.427) | 85 | 2968017 | 53.7446 | 53.745 | 80.00- 120.00 | 100.00 |
| 5.923 | 5.923 (0.427) | 87 | 962193 | | | 0.00- 82.07 | 32.42 |
| 16 Freon 114 | | | | | CAS #: 76-14-2 | | |
| 6.310 | 6.310 (0.455) | 135 | 1973684 | 55.1104 | 55.110 | 80.00- 120.00 | 100.00 |
| 6.310 | 6.310 (0.455) | 137 | 632714 | | | 0.00- 81.55 | 32.06 |
| 18 Chloromethane | | | | | CAS #: 74-87-3 | | |
| 6.531 | 6.531 (0.471) | 50 | 620694 | 48.7165 | 48.716 | 80.00- 120.00 | 100.00 |
| 6.531 | 6.531 (0.471) | 52 | 207605 | | | 0.00- 84.03 | 33.45 |
| 20 Vinyl Chloride | | | | | CAS #: 75-01-4 | | |
| 6.890 | 6.891 (0.497) | 62 | 976449 | 56.0288 | 56.029 | 80.00- 120.00 | 100.00 |
| 6.890 | 6.891 (0.497) | 64 | 310868 | | | 0.00- 93.71 | 31.84 |
| 22 1,3-Butadiene | | | | | CAS #: 106-99-0 | | |
| 6.946 | 6.973 (0.501) | 54 | 808263 | 56.9650 | 56.965 | 80.00- 120.00 | 100.00 |
| 6.946 | 6.973 (0.501) | 39 | 719572 | | | 54.52- 154.52 | 89.03 |
| 25 Bromomethane | | | | | CAS #: 74-83-9 | | |
| 7.913 | 7.914 (0.571) | 94 | 968641 | 61.3757 | 61.376 | 80.00- 120.00 | 100.00 |
| 7.913 | 7.914 (0.571) | 96 | 903774 | | | 43.68- 143.68 | 93.30 |
| 27 Chloroethane | | | | | CAS #: 75-00-3 | | |
| 8.190 | 8.190 (0.591) | 64 | 495871 | 58.0386 | 58.039 | 80.00- 120.00 | 100.00 |
| 8.190 | 8.190 (0.591) | 49 | 121753 | | | 0.00- 74.88 | 24.55 |
| 8.190 | 8.190 (0.591) | 66 | 167086 | | | 0.00- 80.84 | 33.70 |
| 31 Trichlorofluoromethane/Fr11 | | | | | CAS #: 75-69-4 | | |
| 8.770 | 8.771 (0.633) | 101 | 4200858 | 58.6105 | 58.610 | 80.00- 120.00 | 100.00 |
| 8.770 | 8.771 (0.633) | 103 | 2709815 | | | 14.61- 114.61 | 64.51 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | CONCENTRATIONS FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 38 Ethanol | | | | | CAS #: 64-17-5 | | |
| 9.241 | 9.241 (0.667) | 45 | 354836 | 43.4404 | 43.440 | 80.00- 120.00 | 100.00 |
| 9.241 | 9.241 (0.667) | 43 | 78449 | | | 0.00- 72.67 | 22.11 |
| 9.241 | 9.241 (0.667) | 46 | 133486 | | | 0.00- 86.29 | 37.62 |
| 42 Freon 113 | | | | | CAS #: 76-13-1 | | |
| 9.932 | 9.932 (0.717) | 151 | 2904624 | 67.2595 | 67.260 | 80.00- 120.00 | 100.00(R) |
| 9.932 | 9.932 (0.717) | 153 | 1842023 | | | 13.31- 113.31 | 63.42 |
| 9.932 | 9.932 (0.717) | 101 | 3829070 | | | 81.06- 181.06 | 131.83 |
| 43 1,1-Dichloroethene | | | | | CAS #: 75-35-4 | | |
| 10.042 | 10.043 (0.725) | 61 | 2020059 | 61.7746 | 61.775 | 80.00- 120.00 | 100.00 |
| 10.042 | 10.043 (0.725) | 96 | 1317912 | | | 14.49- 114.49 | 65.24 |
| 10.042 | 10.043 (0.725) | 98 | 852998 | | | 0.00- 90.85 | 42.23 |
| 45 Acetone | | | | | CAS #: 67-64-1 | | |
| 10.181 | 10.181 (0.735) | 58 | 604408 | 50.6585 | 50.658 | 80.00- 120.00 | 100.00 |
| 10.181 | 10.181 (0.735) | 43 | 1740765 | | | 259.05- 359.05 | 288.01 |
| 46 2-Propanol | | | | | CAS #: 67-63-0 | | |
| 10.374 | 10.374 (0.749) | 45 | 1911301 | 31.8738 | 31.874 | 80.00- 120.00 | 100.00 |
| 10.374 | 10.374 (0.749) | 43 | 447832 | | | 0.00- 73.80 | 23.43 |
| 10.374 | 10.374 (0.749) | 59 | 84398 | | | 0.00- 54.08 | 4.42 |
| 47 Carbon Disulfide | | | | | CAS #: 75-15-0 | | |
| 10.540 | 10.540 (0.761) | 76 | 3179213 | 56.7738 | 56.774 | 80.00- 120.00 | 100.00 |
| 51 3-Chloropropene | | | | | CAS #: 107-05-1 | | |
| 10.817 | 10.817 (0.781) | 76 | 654843 | 56.4150 | 56.415 | 80.00- 120.00 | 100.00 |
| 10.817 | 10.817 (0.781) | 41 | 1293487 | | | 185.00- 285.00 | 197.53 |
| 54 Methylene Chloride | | | | | CAS #: 75-09-2 | | |
| 11.093 | 11.093 (0.800) | 49 | 1051860 | 53.4646 | 53.464 | 80.00- 120.00 | 100.00 |
| 11.093 | 11.093 (0.800) | 84 | 1050716 | | | 47.12- 147.12 | 99.89 |
| 11.093 | 11.093 (0.800) | 51 | 331469 | | | 0.00- 81.08 | 31.51 |
| 60 MTBE | | | | | CAS #: 1634-04-4 | | |
| 11.452 | 11.453 (0.826) | 73 | 1987996 | 64.5928 | 64.593 | 80.00- 120.00 | 100.00 |
| 11.452 | 11.453 (0.826) | 57 | 372344 | | | 0.00- 68.53 | 18.73 |
| 11.452 | 11.453 (0.826) | 41 | 328823 | | | 0.00- 69.31 | 16.54 |
| 61 trans-1,2-Dichloroethene | | | | | CAS #: 156-60-5 | | |
| 11.535 | 11.536 (0.832) | 96 | 1501655 | 56.1574 | 56.157 | 80.00- 120.00 | 100.00 |
| 11.535 | 11.536 (0.832) | 61 | 1976263 | | | 83.50- 183.50 | 131.61 |
| 11.535 | 11.536 (0.832) | 98 | 954668 | | | 11.49- 111.49 | 63.57 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | CONCENTRATIONS FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 65 Hexane | | | | | CAS #: 110-54-3 | | |
| 11.895 | 11.895 (0.858) | 57 | 2579972 | 58.8231 | 58.823 | 80.00- 120.00 | 100.00 |
| 11.895 | 11.895 (0.858) | 43 | 1397274 | | | 6.67- 106.67 | 54.16 |
| 11.895 | 11.895 (0.858) | 86 | 479066 | | | 0.00- 66.53 | 18.57 |
| 69 Vinyl Acetate | | | | | CAS #: 108-05-4 | | |
| 12.365 | 12.337 (0.892) | 86 | 446754 | 62.2457 | 62.246 | 80.00- 120.00 | 100.00 |
| 12.337 | 12.337 (0.890) | 43 | 3650080 | | | 869.92- 969.92 | 817.02 |
| 70 1,1-Dichloroethane | | | | | CAS #: 75-34-3 | | |
| 12.365 | 12.365 (0.892) | 63 | 2692530 | 59.2546 | 59.255 | 80.00- 120.00 | 100.00 |
| 12.365 | 12.365 (0.892) | 65 | 882087 | | | 0.00- 82.51 | 32.76 |
| 75 2-Butanone | | | | | CAS #: 78-93-3 | | |
| 13.388 | 13.388 (0.966) | 72 | 819020 | 55.3492 | 55.349 | 80.00- 120.00 | 100.00 |
| 13.388 | 13.388 (0.966) | 43 | 2480462 | | | 325.04- 425.04 | 302.86 |
| 13.388 | 13.388 (0.966) | 57 | 229690 | | | 0.00- 79.31 | 28.04 |
| 76 cis-1,2-Dichloroethene | | | | | CAS #: 156-59-2 | | |
| 13.416 | 13.416 (0.968) | 61 | 1779076 | 54.6230 | 54.623 | 80.00- 120.00 | 100.00 |
| 13.416 | 13.416 (0.968) | 96 | 1500258 | | | 28.72- 128.72 | 84.33 |
| 13.416 | 13.416 (0.968) | 98 | 975387 | | | 0.22- 100.22 | 54.83 |
| 80 Tetrahydrofuran | | | | | CAS #: 109-99-9 | | |
| 13.858 | 13.858 (1.000) | 42 | 1123749 | 45.8028 | 45.803 | 80.00- 120.00 | 100.00 |
| 13.858 | 13.858 (1.000) | 71 | 639627 | | | 6.55- 106.55 | 56.92 |
| 13.858 | 13.858 (1.000) | 72 | 692642 | | | 4.67- 104.67 | 61.64 |
| 82 Chloroform | | | | | CAS #: 67-66-3 | | |
| 13.941 | 13.941 (1.006) | 83 | 3212641 | 63.4114 | 63.411 | 80.00- 120.00 | 100.00 |
| 13.941 | 13.941 (1.006) | 85 | 2096915 | | | 16.16- 116.16 | 65.27 |
| 83 1,1,1-Trichloroethane | | | | | CAS #: 71-55-6 | | |
| 14.273 | 14.273 (1.030) | 97 | 3065694 | 57.1353 | 57.135 | 80.00- 120.00 | 100.00 |
| 14.273 | 14.273 (1.030) | 99 | 1975555 | | | 14.58- 114.58 | 64.44 |
| 85 Cyclohexane | | | | | CAS #: 110-82-7 | | |
| 14.300 | 14.301 (1.032) | 84 | 1750712 | 58.1728 | 58.173 | 80.00- 120.00 | 100.00 |
| 14.300 | 14.301 (1.032) | 56 | 1643952 | | | 45.24- 145.24 | 93.90 |
| 14.300 | 14.301 (1.032) | 41 | 789592 | | | 0.00- 96.23 | 45.10 |
| 87 Carbon Tetrachloride | | | | | CAS #: 56-23-5 | | |
| 14.549 | 14.522 (1.050) | 119 | 2855565 | 56.7013 | 56.701 | 80.00- 120.00 | 100.00 |
| 14.549 | 14.522 (1.050) | 117 | 3045100 | | | 56.00- 156.00 | 106.64 |
| 89 2,2,4-Trimethylpentane | | | | | CAS #: 540-84-1 | | |
| 14.881 | 14.881 (1.074) | 57 | 5843986 | 54.6774 | 54.677 | 80.00- 120.00 | 100.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | CONCENTRATIONS FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 89 2,2,4-Trimethylpentane (continued) | | | | | | | |
| 14.881 | 14.881 (1.074) | 56 | 1882086 | | | 0.00- 82.34 | 32.21 |
| 14.881 | 14.881 (1.074) | 41 | 1383662 | | | 0.00- 76.30 | 23.68 |
| 91 Benzene | | | | | CAS #: 71-43-2 | | |
| 14.964 | 14.964 (0.958) | 78 | 4460653 | 54.8807 | 54.881 | 80.00- 120.00 | 100.00 |
| 14.964 | 14.964 (0.958) | 77 | 1011245 | | | 0.00- 72.49 | 22.67 |
| 93 1,2-Dichloroethane | | | | | CAS #: 107-06-2 | | |
| 15.075 | 15.075 (0.965) | 62 | 2075326 | 54.3086 | 54.309 | 80.00- 120.00 | 100.00 |
| 15.075 | 15.075 (0.965) | 64 | 673505 | | | 0.00- 84.21 | 32.45 |
| 94 Heptane | | | | | CAS #: 142-82-5 | | |
| 15.185 | 15.185 (0.972) | 71 | 1609883 | 54.8948 | 54.895 | 80.00- 120.00 | 100.00 |
| 15.185 | 15.185 (0.972) | 43 | 1991463 | | | 86.68- 186.68 | 123.70 |
| 15.185 | 15.185 (0.972) | 57 | 1283629 | | | 32.20- 132.20 | 79.73 |
| 101 Trichloroethene | | | | | CAS #: 79-01-6 | | |
| 16.070 | 16.070 (1.028) | 95 | 2055769 | 55.4028 | 55.403 | 80.00- 120.00 | 100.00 |
| 16.070 | 16.070 (1.028) | 130 | 1879590 | | | 43.84- 143.84 | 91.43 |
| 16.070 | 16.070 (1.028) | 97 | 1313586 | | | 13.61- 113.61 | 63.90 |
| 104 1,2-Dichloropropane | | | | | CAS #: 78-87-5 | | |
| 16.568 | 16.568 (1.060) | 63 | 1401315 | 50.4216 | 50.422 | 80.00- 120.00 | 100.00 |
| 16.568 | 16.568 (1.060) | 62 | 1009539 | | | 20.97- 120.97 | 72.04 |
| 16.568 | 16.568 (1.060) | 41 | 683931 | | | 0.00- 99.00 | 48.81 |
| 106 1,4-Dioxane | | | | | CAS #: 123-91-1 | | |
| 16.678 | 16.678 (1.067) | 88 | 1014986 | 42.1062 | 42.106 | 80.00- 120.00 | 100.00 |
| 16.678 | 16.678 (1.067) | 58 | 548350 | | | 4.20- 104.20 | 54.03 |
| 16.678 | 16.678 (1.067) | 57 | 192035 | | | 0.00- 69.74 | 18.92 |
| 107 Bromodichloromethane | | | | | CAS #: 75-27-4 | | |
| 16.982 | 16.983 (1.087) | 83 | 3347020 | 55.2832 | 55.283 | 80.00- 120.00 | 100.00 |
| 16.982 | 16.983 (1.087) | 85 | 2170166 | | | 14.54- 114.54 | 64.84 |
| 110 cis-1,3-Dichloropropene | | | | | CAS #: 10061-01-5 | | |
| 17.784 | 17.784 (1.138) | 75 | 2428150 | 54.8403 | 54.840 | 80.00- 120.00 | 100.00 |
| 17.784 | 17.784 (1.138) | 77 | 779491 | | | 0.00- 81.75 | 32.10 |
| 17.784 | 17.784 (1.138) | 39 | 947934 | | | 0.00- 88.72 | 39.04 |
| 111 4-Methyl-2-pentanone | | | | | CAS #: 108-10-1 | | |
| 17.950 | 17.950 (1.149) | 58 | 1077668 | 38.8978 | 38.898 | 80.00- 120.00 | 100.00 |
| 17.950 | 17.950 (1.149) | 43 | 2292276 | | | 169.12- 269.12 | 212.71 |
| 17.978 | 17.950 (1.150) | 85 | 559952 | | | 0.58- 100.58 | 51.96 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | CONCENTRATIONS FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 114 Toluene | | | | | CAS #: 108-88-3 | | |
| 18.337 | 18.337 (1.173) | 91 | 4967190 | 55.0801 | 55.080 | 80.00- 120.00 | 100.00 |
| 18.337 | 18.337 (1.173) | 92 | 3033542 | | | 11.41- 111.41 | 61.07 |
| 116 trans-1,3-Dichloropropene | | | | | CAS #: 10061-02-6 | | |
| 18.752 | 18.752 (0.902) | 75 | 2501176 | 58.6900 | 58.690 | 80.00- 120.00 | 100.00 |
| 18.752 | 18.752 (0.902) | 77 | 803518 | | | 0.00- 82.09 | 32.13 |
| 18.752 | 18.752 (0.902) | 39 | 888557 | | | 0.00- 85.85 | 35.53 |
| 117 1,1,2-Trichloroethane | | | | | CAS #: 79-00-5 | | |
| 19.111 | 19.112 (0.919) | 97 | 1728177 | 57.8931 | 57.893 | 80.00- 120.00 | 100.00 |
| 19.111 | 19.112 (0.919) | 99 | 1095076 | | | 13.09- 113.09 | 63.37 |
| 19.111 | 19.112 (0.919) | 83 | 1466615 | | | 33.53- 133.53 | 84.86 |
| 120 Tetrachloroethene | | | | | CAS #: 127-18-4 | | |
| 19.277 | 19.277 (0.927) | 166 | 2259501 | 56.6047 | 56.605 | 80.00- 120.00 | 100.00 |
| 19.277 | 19.277 (0.927) | 129 | 1589965 | | | 19.75- 119.75 | 70.37 |
| 19.277 | 19.277 (0.927) | 131 | 1517930 | | | 16.23- 116.23 | 67.18 |
| 121 2-Hexanone | | | | | CAS #: 591-78-6 | | |
| 19.416 | 19.416 (0.934) | 58 | 1331903 | 34.4067 | 34.407 | 80.00- 120.00 | 100.00 |
| 19.416 | 19.416 (0.934) | 43 | 2057672 | | | 106.61- 206.61 | 154.49 |
| 19.416 | 19.416 (0.934) | 100 | 297843 | | | 0.00- 71.95 | 22.36 |
| 122 Dibromochloromethane | | | | | CAS #: 124-48-1 | | |
| 19.803 | 19.803 (0.952) | 129 | 2802493 | 56.4181 | 56.418 | 80.00- 120.00 | 100.00 |
| 19.803 | 19.803 (0.952) | 127 | 2173457 | | | 26.41- 126.41 | 77.55 |
| 123 1,2-Dibromoethane | | | | | CAS #: 106-93-4 | | |
| 20.051 | 20.052 (0.964) | 107 | 2578766 | 53.7352 | 53.735 | 80.00- 120.00 | 100.00 |
| 20.051 | 20.052 (0.964) | 109 | 2405068 | | | 43.35- 143.35 | 93.26 |
| 127 Chlorobenzene | | | | | CAS #: 108-90-7 | | |
| 20.853 | 20.853 (1.003) | 112 | 3573942 | 53.4074 | 53.407 | 80.00- 120.00 | 100.00 |
| 20.853 | 20.853 (1.003) | 114 | 1124843 | | | 0.00- 81.16 | 31.47 |
| 20.853 | 20.853 (1.003) | 77 | 2132758 | | | 10.55- 110.55 | 59.68 |
| 128 Ethyl Benzene | | | | | CAS #: 100-41-4 | | |
| 20.936 | 20.936 (1.007) | 106 | 1854151 | 53.5623 | 53.562 | 80.00- 120.00 | 100.00 |
| 20.936 | 20.936 (1.007) | 91 | 5887550 | | | 265.06- 365.06 | 317.53 |
| 129 m,p-Xylene | | | | | CAS #: 108-38-3 | | |
| 21.130 | 21.130 (1.016) | 106 | 2321515 | 53.9760 | 53.976 | 80.00- 120.00 | 100.00 |
| 21.130 | 21.130 (1.016) | 91 | 4614321 | | | 147.41- 247.41 | 198.76 |
| 130 o-Xylene | | | | | CAS #: 95-47-6 | | |
| 21.849 | 21.849 (1.051) | 106 | 2185437 | 55.1448 | 55.145 | 80.00- 120.00 | 100.00 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 130 o-Xylene (continued) | | | | | | | |
| 21.849 | 21.849 (1.051) | 91 | 4563138 | | | 158.78- 258.78 | 208.80 |
| 131 Styrene | | | | | CAS #: 100-42-5 | | |
| 21.876 | 21.876 (1.052) | 104 | 3431535 | 54.7801 | 54.780 | 80.00- 120.00 | 100.00 |
| 21.876 | 21.876 (1.052) | 78 | 1713901 | | | 0.00- 99.20 | 49.95 |
| 133 Bromoform | | | | | CAS #: 75-25-2 | | |
| 22.291 | 22.291 (1.072) | 173 | 2606577 | 55.4493 | 55.449 | 80.00- 120.00 | 100.00 |
| 22.291 | 22.291 (1.072) | 171 | 1329464 | | | 1.13- 101.13 | 51.00 |
| 134 Cumene | | | | | CAS #: 98-82-8 | | |
| 22.429 | 22.430 (1.078) | 105 | 6303641 | 60.5696 | 60.570 | 80.00- 120.00 | 100.00 |
| 22.429 | 22.430 (1.078) | 120 | 1630954 | | | 0.00- 75.99 | 25.87 |
| 22.402 | 22.430 (1.077) | 51 | 480554 | | | 9.74- 109.74 | 7.62 |
| 140 1,1,2,2-Tetrachloroethane | | | | | CAS #: 79-34-5 | | |
| 23.010 | 23.010 (1.106) | 83 | 3250571 | 51.5424 | 51.542 | 80.00- 120.00 | 100.00 |
| 23.010 | 23.010 (1.106) | 85 | 2115866 | | | 14.96- 114.96 | 65.09 |
| 142 Propylbenzene | | | | | CAS #: 103-65-1 | | |
| 23.121 | 23.093 (1.112) | 91 | 7657660 | 55.8320 | 55.832 | 80.00- 120.00 | 100.00 |
| 23.121 | 23.093 (1.112) | 120 | 1682099 | | | 0.00- 72.67 | 21.97 |
| 23.121 | 23.093 (1.112) | 105 | 274058 | | | 0.00- 53.69 | 3.58 |
| 145 4-Ethyltoluene | | | | | CAS #: 622-96-8 | | |
| 23.286 | 23.287 (1.120) | 105 | 6453792 | 55.3267 | 55.327 | 80.00- 120.00 | 100.00 |
| 23.286 | 23.287 (1.120) | 120 | 1920224 | | | 0.00- 80.01 | 29.75 |
| 147 1,3,5-Trimethylbenzene | | | | | CAS #: 108-67-8 | | |
| 23.397 | 23.397 (1.125) | 105 | 5095238 | 52.7549 | 52.755 | 80.00- 120.00 | 100.00 |
| 23.397 | 23.397 (1.125) | 120 | 2479990 | | | 1.60- 101.60 | 48.67 |
| 150 1,2,4-Trimethylbenzene | | | | | CAS #: 95-63-6 | | |
| 24.033 | 24.033 (1.156) | 105 | 4908405 | 53.2818 | 53.282 | 80.00- 120.00 | 100.00 |
| 24.033 | 24.033 (1.156) | 120 | 2286981 | | | 0.00- 96.88 | 46.59 |
| 155 1,3-Dichlorobenzene | | | | | CAS #: 541-73-1 | | |
| 24.586 | 24.586 (1.182) | 146 | 3392151 | 52.4019 | 52.402 | 80.00- 120.00 | 100.00 |
| 24.586 | 24.586 (1.182) | 148 | 2149424 | | | 14.03- 114.03 | 63.36 |
| 24.586 | 24.586 (1.182) | 111 | 1413856 | | | 0.00- 91.33 | 41.68 |
| 156 1,4-Dichlorobenzene | | | | | CAS #: 106-46-7 | | |
| 24.724 | 24.724 (1.189) | 146 | 3471615 | 52.0836 | 52.084 | 80.00- 120.00 | 100.00 |
| 24.724 | 24.724 (1.189) | 148 | 2219400 | | | 15.04- 115.04 | 63.93 |
| 24.724 | 24.724 (1.189) | 111 | 1394641 | | | 0.00- 89.92 | 40.17 |

| RT | EXP RT (REL RT) | MASS | RESPONSE | CONCENTRATIONS ON-COL ( PPBV) | CONCENTRATIONS FINAL ( PPBV) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|
| 159 alpha-Chlorotoluene | | | | | CAS #: 100-44-7 | | |
| 24.945 | 24.946 (1.199) | 91 | 5525029 | 58.6205 | 58.620 | 80.00- 120.00 | 100.00 |
| 24.945 | 24.946 (1.199) | 126 | 1042152 | | | 0.00- 70.12 | 18.86 |
| 161 1,2-Dichlorobenzene | | | | | CAS #: 95-50-1 | | |
| 25.360 | 25.360 (1.219) | 146 | 3292901 | 51.3449 | 51.345 | 80.00- 120.00 | 100.00 |
| 25.360 | 25.360 (1.219) | 148 | 2107476 | | | 14.29- 114.29 | 64.00 |
| 25.360 | 25.360 (1.219) | 111 | 1441023 | | | 0.00- 93.29 | 43.76 |
| 165 1,2,4-Trichlorobenzene | | | | | CAS #: 120-82-1 | | |
| 28.153 | 28.153 (1.354) | 180 | 2549010 | 41.5553 | 41.555 | 80.00- 120.00 | 100.00 |
| 28.153 | 28.153 (1.354) | 182 | 2443089 | | | 44.44- 144.44 | 95.84 |
| 166 Hexachlorobutadiene | | | | | CAS #: 87-68-3 | | |
| 28.319 | 28.319 (1.362) | 225 | 2031576 | 45.3004 | 45.300 | 80.00- 120.00 | 100.00 |
| 28.319 | 28.319 (1.362) | 223 | 1253469 | | | 14.10- 114.10 | 61.70 |
| 29 Isopentane | | | | | CAS #: 78-78-4 | | |
| 8.245 | 8.245 (0.595) | 43 | 1415261 | 51.3504 | 51.350 | 80.00- 120.00 | 100.00 |
| 8.245 | 8.245 (0.595) | 57 | 1137908 | | | 26.21- 126.21 | 80.40 |
| 19 Butane | | | | | CAS #: 106-97-8 | | |
| 6.807 | 6.808 (0.491) | 58 | 199864 | 58.5910 | 58.591 | 80.00- 120.00 | 100.00 |
| 6.807 | 6.808 (0.491) | 43 | 1313850 | | | 668.04- 768.04 | 657.37 |
| 102 Methyl Cyclohexane | | | | | CAS #: 108-87-2 | | |
| 16.346 | 16.347 (1.180) | 83 | 2265642 | 58.1451 | 58.145 | 80.00- 120.00 | 100.00 |
| 16.346 | 16.347 (1.180) | 98 | 1016013 | | | 0.00- 92.45 | 44.84 |
| 16.346 | 16.347 (1.180) | 55 | 1477864 | | | 18.10- 118.10 | 65.23 |
| 167 Naphthalene | | | | | CAS #: 91-20-3 | | |
| 28.678 | 28.678 (1.379) | 128 | 3920645 | 44.4335 | 44.433 | 80.00- 120.00 | 100.00 |
| 28.678 | 28.678 (1.379) | 127 | 479295 | | | 0.00- 62.43 | 12.22 |

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 04-Dec-2007 10:52

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdt.i
Lab File ID: t120403.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: sjr
Method File: /chem/msdt.i/04Dec2007.b/t14q1121b.m
Misc Info: 200ppbv -> 50ppbv

Calibration Date: 04-DEC-2007
Calibration Time: 09:44
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

| | | AREA LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 355566 | 213340 | 497792 | 376079 | 5.77 |
| 97 1,4-Difluorobenze | 1769240 | 1061544 | 2476936 | 1905131 | 7.68 |
| 126 Chlorobenzene-d5 | 1250441 | 750265 | 1750617 | 1264162 | 1.10 |

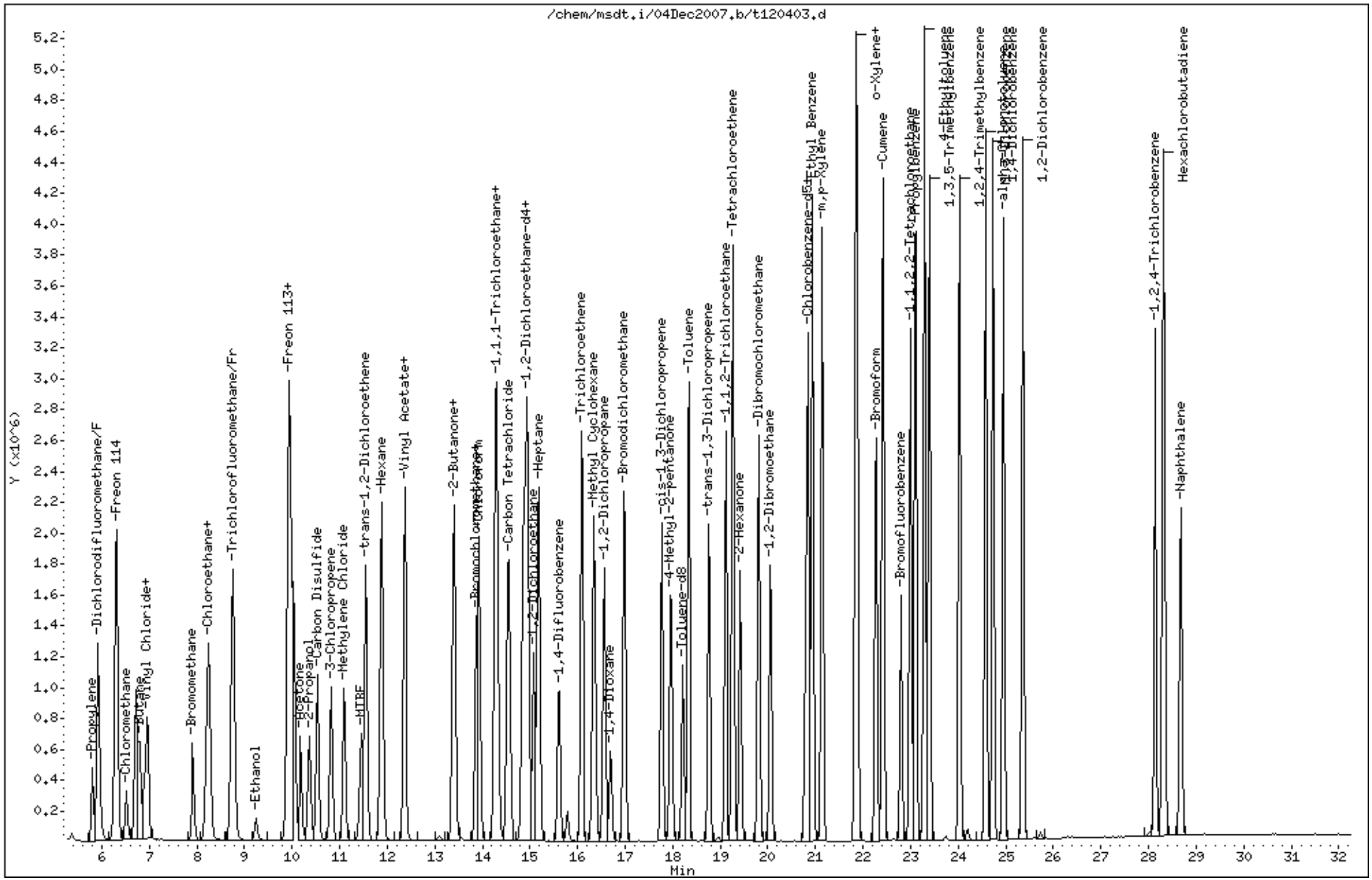
| | | RT LIMIT | | | |
|---|---|---|---|---|---|
| COMPOUND | STANDARD | LOWER | UPPER | SAMPLE | %DIFF |
| 81 Bromochloromethan | 13.86 | 13.53 | 14.19 | 13.86 | 0.00 |
| 97 1,4-Difluorobenze | 15.60 | 15.27 | 15.93 | 15.63 | 0.18 |
| 126 Chlorobenzene-d5 | 20.80 | 20.47 | 21.13 | 20.80 | 0.00 |

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdt.i/04Dec2007.b/t120403.d
Date : 04-DEC-2007 10:24
Client ID: LCS-1
Sample Info: 50mL #1576-108

Instrument: msdt.i
Operator: sjr
Column diameter: 0.53

Column phase: RTx-624




0196

**@ Air Toxics Ltd.** **MSD-T** **Logbook #: 1599**

| m/z | ION ABUNDANCE CRITERIA | % REL. ABUNDANCE |
|---|---|---|
| 50 | 15.0 – 40.0% of mass 95 | 17.77 |
| 75 | 30.0 – 60.0% of mass 95 | 49.07 |
| 95 | Base peak, 100.00% relative abundance | 100 |
| 96 | 5.0 – 9.0% of mass 95 | 6.39 |
| 173 | Less than 2.0% of mass 174 | (0.73)[1] |
| 174 | Greater than 50.0% of mass 95 | 70.69 |
| 175 | 5.0 – 9.0% of mass 174 | (7.12)[1] |
| 176 | Greater than 95.0% but less than 101.0% of mass 174 | (96.55)[1] |
| 177 | 5.0 – 9.0% of mass 176 | (6.48)[2] |

[1] - value in parenthesis is % mass 174 [2] - value in parenthesis is % mass 176

BFB Injection Date: 12/4/07
BFB Injection Time: 0854
BFB File ID: t120401
Tekmar Purge Flow: 17.4 mL/min
Vacuum: 4.24e-5

| | | |
|---|---|---|
| IS/S Std.#: | 1443-355 | Exp. Date: 2/5/08 |
| BCM | 355566 | |
| 1,4-DFB | 1769240 | |
| CB-d5 | 1250441 | |

*Verified CCV IS vs ICAL mid-point (- 40%D)* initials

**Verify 176/174 m/z Ratio:** 1065712/1103808 x100 = 96.55 **NOAH Cart #:** NA **File #:** NA

**Calculation Check:**

ppbv of compound $= \frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc.}_{\text{IS}}}{\text{RRF}} = \frac{(1514716)}{(1769240)} \times \frac{(25.0)}{(0.84627)} = 25.291$

| | |
|---|---|
| File ID: | t120402 |
| Compound: | Tol-d8 |
| Initials: | |

*Reported Result* 25.291

| | Use | File # | Sample / Client Name | Can # | Pressure | Amt Loaded | DF | Date Analyzed | Time Analyzed | Review Init. | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ✓ | t120401 | BFB Tune Check | 1467-64 | 50 ng | 2 µL | 1.00 | 12/4/07 | 0854 | | |
| 2 | ✓ | 02 | CCV-1 (20ppbv) | 1576-92 | 50 ppbv | 50 mL | | | 0944 | | @ cut |
| 3 | ✓ | 03 | LCS-1 | 1576-106 | | | | | 1024 | | |
| 4 | ✓ | 04 | CCVsp (20ppbv) | 1487-105A | | 100 mL | | | 1123 | | sp226CCV |
| 5 | ✓ | 05 | Lab blank | 12009 | Humid | 200 mL | | | 1240 | | |
| 6 | ✓ | 06 | 07111123A-02A | 4288 | 21.5"Hg-5psi | 200mL | 4.73 | | 1505 | | |
| 7 | ✓ | 07 | 03A | 07244e | 21.5"Hg-5psi | | 4.73 | | 1544 | | |
| 8 | ✓ | 08 | 04A | 12078 | 21.5"Hg-5psi | | 4.73 | | 1632 | | |
| 9 | ✓ | 09 | 05A | 4334 | 21.5"Hg-5psi | | 4.73 | | 1743 | | |

Signature

12/4/07
Date



0197

@ Air Toxics Ltd.

# MSD-T

Logbook #: 1599

0198

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | ✓ | T120410 | 0711423A-06A | 05703 | 26.0"Hg-5psi | 200mL | 1.00 | 12/4/07 | 1822 | JMS | TB | |
| 11 | ✓ | 11 | 0711468-01A | 33867 | 10.0"Hg-5psi | 200mL | 1.34 | | 1543 | JMS | | |
| 12 | ✓ | 12 | 0711423A-06A | 05703 | 28.0"Hg-5psi | 200mL | 1.00 | | 2022 | JMS | TB - Contamination Run | |
| 13 | ✓ | 13 | 0711468-02A | 33879 | 8.0"Hg-5psi | 200mL | 1.83 | | 2110 | JMS | | |
| 14 | X | 14 | 0712036-01A | 33905 | 5.5"Hg-5psi | 50mL | 6.56 | | 2148 | JMS/LO | re e 4mL | |
| 15 | ✓ | 15 | System Blank | 12009 | Humid | 200mL | 1.00 | | 2308 | JMS | | |
| 16 | ✓ | ~~17~~ 16 | 0712036-01A | 33905 | 5.5"Hg-5psi | 4.0mL | 82.0 | 12/5/07 | 0001 | JMS | | |
| 17 | ✓ | ~~18~~ 17 | 0711487-01A | ~~33725~~ 33725 | 2.5"Hg-5psi | 200mL | 1.46 | | 0042 | JMS | Can # 35136 | |
| 18 | ✓ | ~~19~~ ~~20~~ 18 | -02A | 21015 | 1.0"Hg-5psi | 200mL | 1.39 | | 0134 | JMS | | |
| 19 | ✓ | 19 | 0712021A-01A | 2223 | 0.5"Hg-15psi | 25mL | 16.4 | | 0231 | JMS | | |
| 20 | ✓ | 20 | -01AA | ↓ | ↓ | ↓ | ↓ | | 0327 | JMS | | |
| 21 | ✓ | 21 | 0711417-03A | 1445 | 6.0"Hg-15psi | 200mL | 2.53 | | 0420 | JMS | | |
| 22 | ✓ | 22 | -10A | 31792 | 6.5"Hg-15psi | 200mL | 2.58 | | 0517 | JMS | | |
| 23 | ✓ | 23 | -11A | 34120 | 5.5"Hg-15psi | 200mL | 2.47 | | 0605 | LO | | |
| 24 | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | |
| 29 | | | LO 12/5/07 | | | | | | | | | |
| 30 | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | |

**Comments:**

Laura Oramajan
Signature

12/5/07
Date

Air Toxics Ltd.

Data file : /chem/msdt.i/21Nov2007.b/t112101.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 21-NOV-2007 13:34
Operator : ea Inst ID: msdt.i
Smp Info : 2uL #1467-58;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/21Nov2007.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Uf | 1.00000 | ng unit correction factor |
| Vf | 1.00000 | Volumetric correction factor |
| Vi | 1.00000 | Injection Volume |

Cpnd Variable Local Compound Variable

| RT | EXP RT | DLT RT | MASS | RESPONSE | CONCENTRATIONS ON-COL ( ug/L) | CONCENTRATIONS FINAL ( ug/L) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|---|
| 1 bfb | | | | | | | CAS #: 460-00-4 | |
| 8.137 | 8.228 | -0.091 | 95 | 1324074 | | | 100.00- 100.00 | 100.00 |
| 8.137 | 8.228 | -0.091 | 50 | 240909 | | | 15.00- 40.00 | 18.19 |
| 8.137 | 8.228 | -0.091 | 75 | 643395 | | | 30.00- 60.00 | 48.59 |
| 8.137 | 8.228 | -0.091 | 96 | 86351 | | | 5.00- 9.00 | 6.52 |
| 8.137 | 8.228 | -0.091 | 173 | 7626 | | | 0.00- 2.00 | 0.75 |
| 8.137 | 8.228 | -0.091 | 174 | 1015296 | | | 50.00- 100.00 | 76.68 |
| 8.137 | 8.228 | -0.091 | 175 | 72603 | | | 5.00- 9.00 | 7.15 |
| 8.137 | 8.228 | -0.091 | 176 | 980730 | | | 95.00- 101.00 | 96.60 |
| 8.137 | 8.228 | -0.091 | 177 | 64069 | | | 5.00- 9.00 | 6.53 |

Data File: /chem/msdt.i/21Nov2007.b/t112101.d 

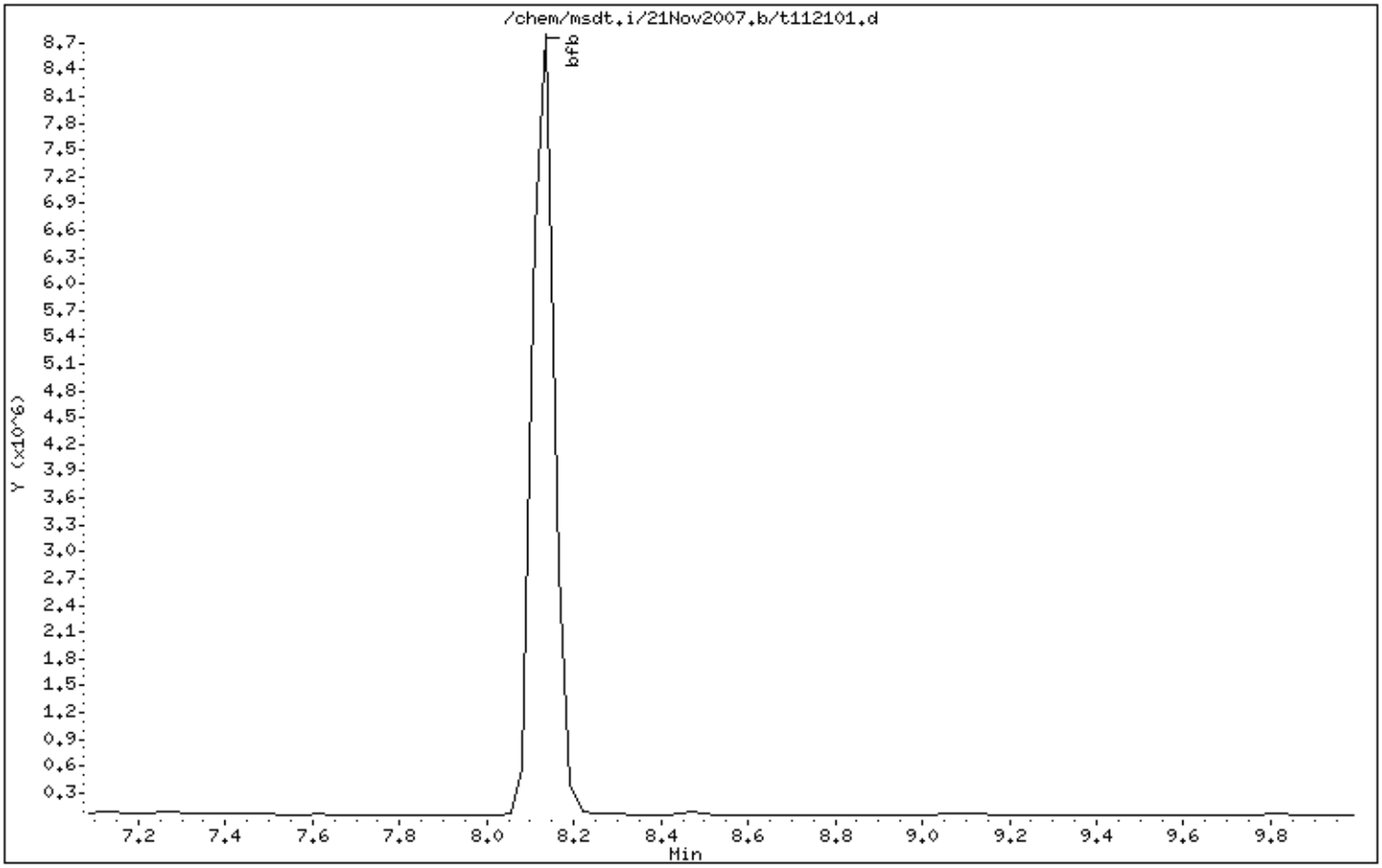
Date : 21-NOV-2007 13:34

Client ID: BFB Instrument: msdt.i

Sample Info: 2uL #1467-58;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0 Operator: ea

Column phase: Column diameter: 2.00



Data File: /chem/msdt.i/21Nov2007.b/t112101.d

Date : 21-NOV-2007 13:34

Client ID: BFB

Instrument: msdt.i

Sample Info: 2uL #1467-58;BFB Tune check;BFB Tune check

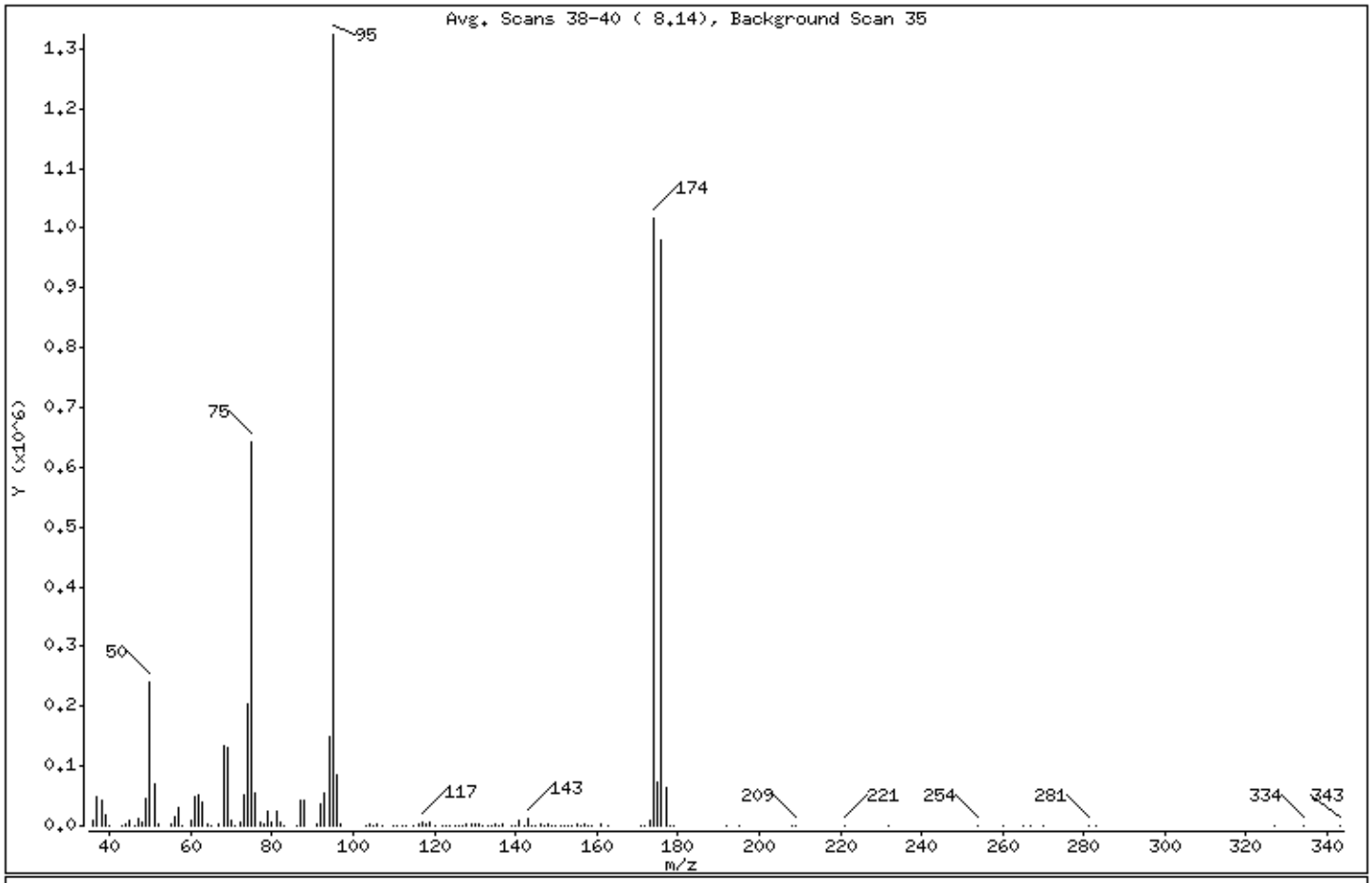
Volume Injected (uL): 1.0

Operator: ea

Column phase:

Column diameter: 2.00

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 15.00 - 40.00% of mass 95 | 18.19 |
| 75 | 30.00 - 60.00% of mass 95 | 48.59 |
| 96 | 5.00 - 9.00% of mass 95 | 6.52 |
| 173 | Less than 2.00% of mass 174 | 0.58 ( 0.75) |
| 174 | 50.00 - 100.00% of mass 95 | 76.68 |
| 175 | 5.00 - 9.00% of mass 174 | 5.48 ( 7.15) |
| 176 | 95.00 - 101.00% of mass 174 | 74.07 ( 96.60) |
| 177 | 5.00 - 9.00% of mass 176 | 4.84 ( 6.53) |

Data File: /chem/msdt.i/21Nov2007.b/t112101.d

Date : 21-NOV-2007 13:34

Client ID: BFB

Instrument: msdt.i

Sample Info: 2uL #1467-58;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: ea

Column phase:

Column diameter: 2.00

Data File: t112101.d
Spectrum: Avg. Scans 38-40 ( 8.14), Background Scan 35
Location of Maximum: 95.00
Number of points: 131

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 8359 | 75.00 | 643392 | 120.00 | 116 | 155.00 | 2943 |
| 37.00 | 48480 | 76.00 | 55440 | 122.00 | 229 | 156.00 | 627 |
| 38.00 | 44072 | 77.00 | 6270 | 123.00 | 322 | 157.00 | 1923 |
| 39.00 | 18648 | 78.00 | 3492 | 124.00 | 693 | 158.00 | 285 |
| 40.00 | 53 | 79.00 | 24424 | 125.00 | 526 | 159.00 | 1437 |
| 43.00 | 32 | 80.00 | 7396 | 126.00 | 537 | 161.00 | 1530 |
| 44.00 | 3908 | 81.00 | 24768 | 127.00 | 614 | 163.00 | 15 |
| 45.00 | 9338 | 82.00 | 5292 | 128.00 | 4229 | 171.00 | 116 |
| 46.00 | 712 | 83.00 | 642 | 129.00 | 2123 | 172.00 | 749 |
| 47.00 | 11836 | 86.00 | 972 | 130.00 | 4242 | 173.00 | 7626 |
| 48.00 | 5386 | 87.00 | 44056 | 131.00 | 1735 | 174.00 | 1015296 |
| 49.00 | 44976 | 88.00 | 42496 | 132.00 | 155 | 175.00 | 72600 |
| 50.00 | 240896 | 91.00 | 3363 | 133.00 | 107 | 176.00 | 980672 |
| 51.00 | 71192 | 92.00 | 35536 | 134.00 | 28 | 177.00 | 64064 |
| 52.00 | 3086 | 93.00 | 56184 | 135.00 | 1572 | 178.00 | 1469 |
| 55.00 | 2406 | 94.00 | 147776 | 136.00 | 463 | 179.00 | 254 |
| 56.00 | 15885 | 95.00 | 1324032 | 137.00 | 1714 | 192.00 | 163 |
| 57.00 | 30872 | 96.00 | 86344 | 139.00 | 435 | 195.00 | 111 |
| 58.00 | 1309 | 97.00 | 2730 | 140.00 | 677 | 208.00 | 37 |
| 60.00 | 9377 | 103.00 | 408 | 141.00 | 10427 | 209.00 | 399 |
| 61.00 | 49888 | 104.00 | 4551 | 142.00 | 1222 | 221.00 | 100 |
| 62.00 | 52984 | 105.00 | 1476 | 143.00 | 11105 | 232.00 | 53 |
| 63.00 | 40856 | 106.00 | 4235 | 144.00 | 576 | 254.00 | 129 |
| 64.00 | 3498 | 107.00 | 1315 | 145.00 | 1019 | 260.00 | 100 |
| 65.00 | 725 | 110.00 | 442 | 146.00 | 1684 | 265.00 | 106 |
| 67.00 | 2785 | 111.00 | 891 | 147.00 | 779 | 267.00 | 54 |
| 68.00 | 134400 | 112.00 | 526 | 148.00 | 2927 | 270.00 | 295 |
| 69.00 | 131264 | 113.00 | 748 | 149.00 | 904 | 281.00 | 362 |
| 70.00 | 9142 | 115.00 | 1364 | 150.00 | 1271 | 283.00 | 128 |
| 71.00 | 329 | 116.00 | 3433 | 151.00 | 108 | 327.00 | 116 |
| 72.00 | 5634 | 117.00 | 6543 | 152.00 | 554 | 334.00 | 215 |
| 73.00 | 50440 | 118.00 | 3528 | 153.00 | 949 | 343.00 | 12 |
| 74.00 | 204288 | 119.00 | 5447 | 154.00 | 593 | | |

Air Toxics Ltd.

Data file : /chem/msdt.i/23Nov2007.b/t112301.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 23-NOV-2007 08:28
Operator : lmr Inst ID: msdt.i
Smp Info : 2uL #1467-58;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/23Nov2007.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Uf | 1.00000 | ng unit correction factor |
| Vf | 1.00000 | Volumetric correction factor |
| Vi | 1.00000 | Injection Volume |

Cpnd Variable Local Compound Variable

| RT | EXP RT | DLT RT | MASS | RESPONSE | CONCENTRATIONS ON-COL ( ug/L) | CONCENTRATIONS FINAL ( ug/L) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|---|
| 1 bfb | | | | | | | CAS #: 460-00-4 | |
| 8.110 | 8.228 | -0.118 | 95 | 1544582 | | | 100.00- 100.00 | 100.00 |
| 8.110 | 8.228 | -0.118 | 50 | 249387 | | | 15.00- 40.00 | 16.15 |
| 8.110 | 8.228 | -0.118 | 75 | 708475 | | | 30.00- 60.00 | 45.87 |
| 8.110 | 8.228 | -0.118 | 96 | 99480 | | | 5.00- 9.00 | 6.44 |
| 8.110 | 8.228 | -0.118 | 173 | 8891 | | | 0.00- 2.00 | 0.78 |
| 8.110 | 8.228 | -0.118 | 174 | 1146976 | | | 50.00- 100.00 | 74.26 |
| 8.110 | 8.228 | -0.118 | 175 | 82689 | | | 5.00- 9.00 | 7.21 |
| 8.110 | 8.228 | -0.118 | 176 | 1106265 | | | 95.00- 101.00 | 96.45 |
| 8.110 | 8.228 | -0.118 | 177 | 71876 | | | 5.00- 9.00 | 6.50 |

Data File: /chem/msdt.i/23Nov2007.b/t112301.d 

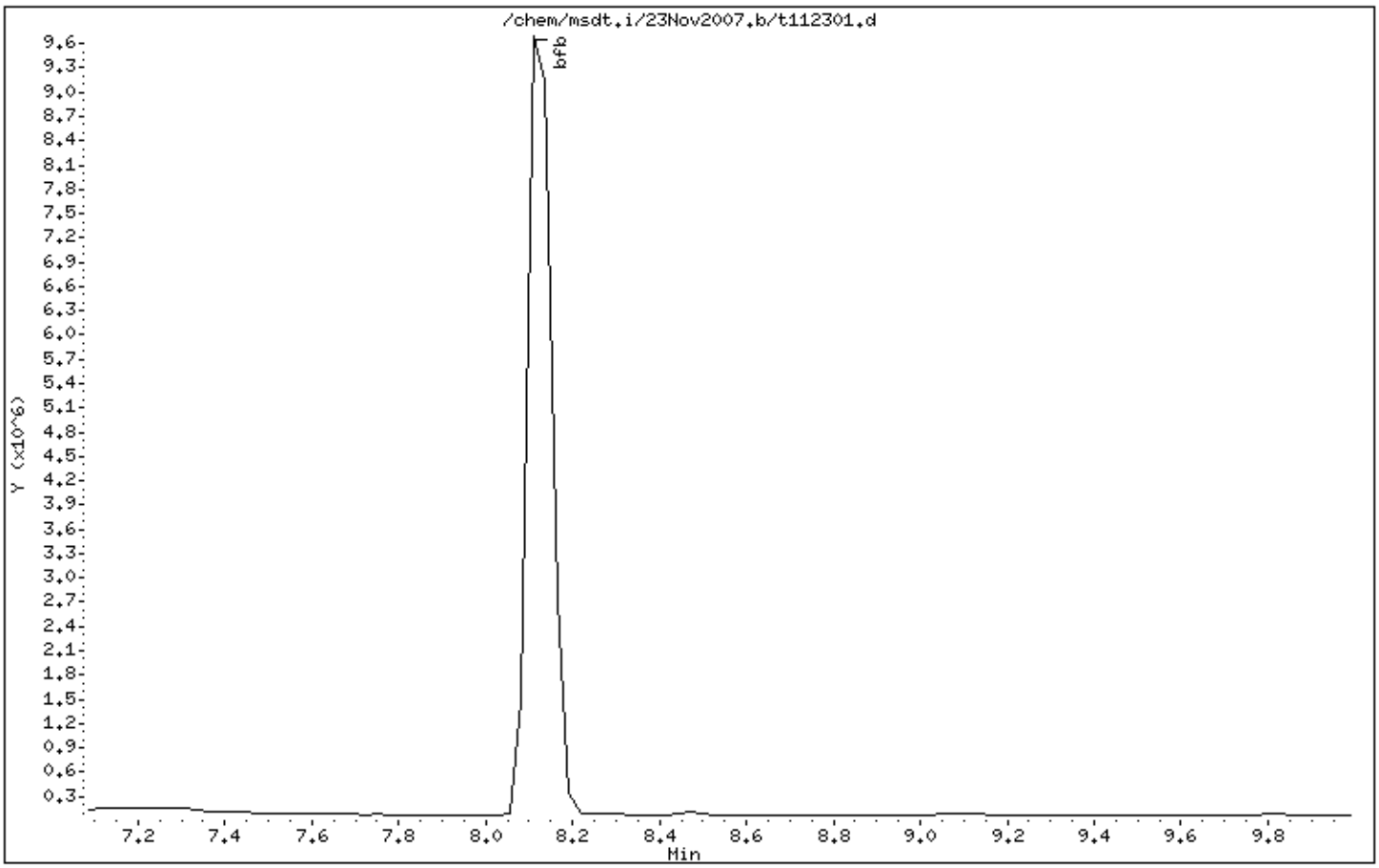
Date : 23-NOV-2007 08:28

Client ID: BFB Instrument: msdt.i

Sample Info: 2uL #1467-58;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0 Operator: lmr

Column phase: Column diameter: 2.00



Data File: /chem/msdt.i/23Nov2007.b/t112301.d

Date : 23-NOV-2007 08:28

Client ID: BFB

Instrument: msdt.i

Sample Info: 2uL #1467-58;BFB Tune check;BFB Tune check

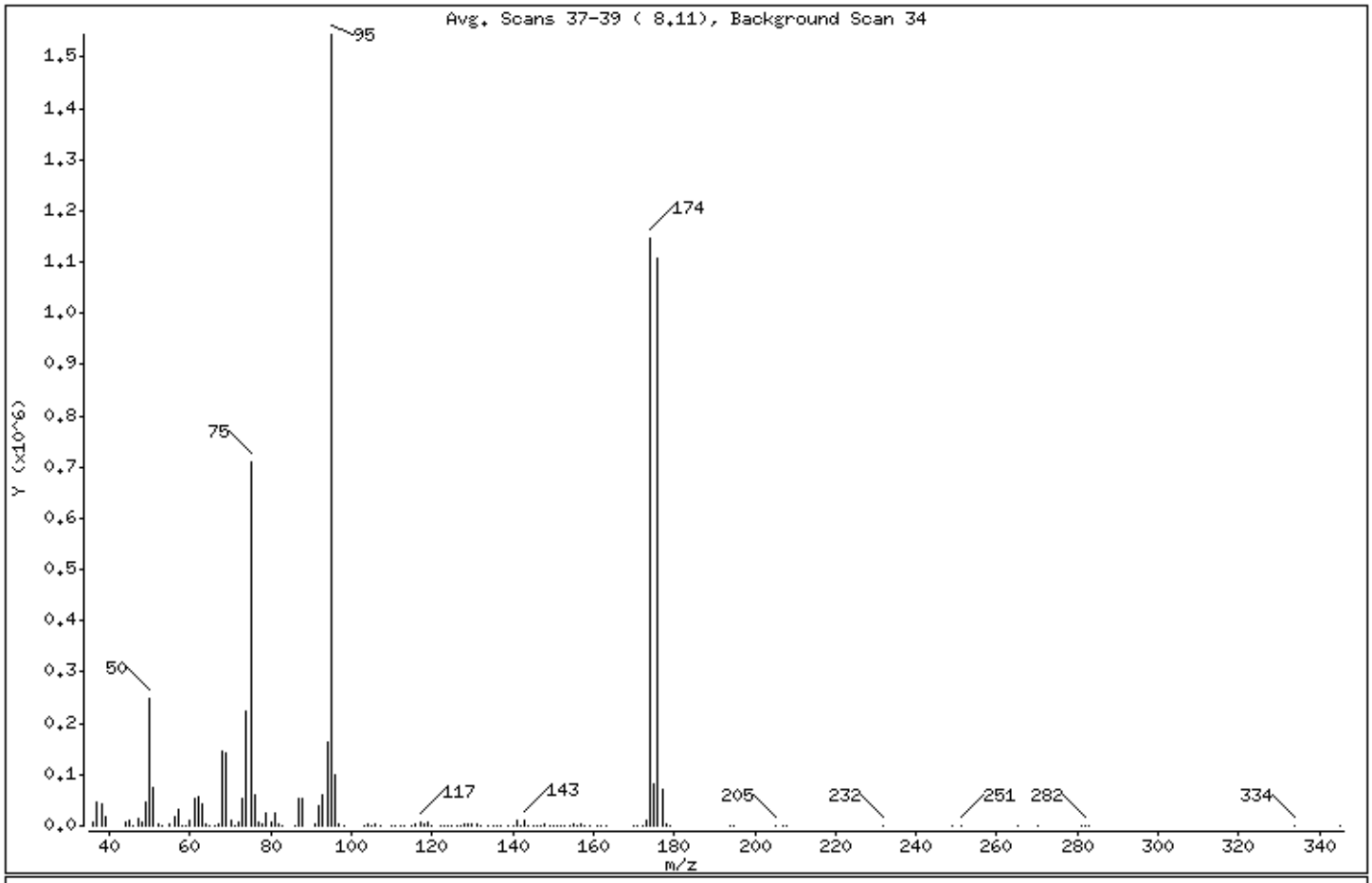
Volume Injected (uL): 1.0

Operator: lmr

Column phase:

Column diameter: 2.00

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 15.00 - 40.00% of mass 95 | 16.15 |
| 75 | 30.00 - 60.00% of mass 95 | 45.87 |
| 96 | 5.00 - 9.00% of mass 95 | 6.44 |
| 173 | Less than 2.00% of mass 174 | 0.58 ( 0.78) |
| 174 | 50.00 - 100.00% of mass 95 | 74.26 |
| 175 | 5.00 - 9.00% of mass 174 | 5.35 ( 7.21) |
| 176 | 95.00 - 101.00% of mass 174 | 71.62 ( 96.45) |
| 177 | 5.00 - 9.00% of mass 176 | 4.65 ( 6.50) |

Data File: /chem/msdt.i/23Nov2007.b/t112301.d

Date : 23-NOV-2007 08:28

Client ID: BFB

Instrument: msdt.i

Sample Info: 2uL #1467-58;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: lmr

Column phase:

Column diameter: 2.00

Data File: t112301.d
Spectrum: Avg. Scans 37-39 ( 8.11), Background Scan 34
Location of Maximum: 95.00
Number of points: 133

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 7347 | 75.00 | 708416 | 120.00 | 268 | 157.00 | 2260 |
| 37.00 | 46552 | 76.00 | 60808 | 122.00 | 396 | 158.00 | 118 |
| 38.00 | 43296 | 77.00 | 6814 | 123.00 | 348 | 159.00 | 1410 |
| 39.00 | 17696 | 78.00 | 4637 | 124.00 | 619 | 161.00 | 1458 |
| 44.00 | 5687 | 79.00 | 24416 | 125.00 | 403 | 162.00 | 107 |
| 45.00 | 9713 | 80.00 | 7616 | 126.00 | 418 | 163.00 | 5 |
| 46.00 | 654 | 81.00 | 26112 | 127.00 | 480 | 170.00 | 109 |
| 47.00 | 13200 | 82.00 | 4774 | 128.00 | 4222 | 171.00 | 147 |
| 48.00 | 5831 | 83.00 | 428 | 129.00 | 2165 | 172.00 | 493 |
| 49.00 | 45528 | 86.00 | 1134 | 130.00 | 4391 | 173.00 | 8891 |
| 50.00 | 249344 | 87.00 | 54248 | 131.00 | 2111 | 174.00 | 1146880 |
| 51.00 | 73384 | 88.00 | 51824 | 132.00 | 217 | 175.00 | 82688 |
| 52.00 | 3180 | 91.00 | 3547 | 134.00 | 407 | 176.00 | 1105920 |
| 53.00 | 66 | 92.00 | 37384 | 135.00 | 1421 | 177.00 | 71872 |
| 55.00 | 2614 | 93.00 | 59568 | 136.00 | 354 | 178.00 | 2073 |
| 56.00 | 17040 | 94.00 | 163968 | 137.00 | 1731 | 179.00 | 261 |
| 57.00 | 32480 | 95.00 | 1544192 | 139.00 | 431 | 194.00 | 101 |
| 58.00 | 1440 | 96.00 | 99480 | 140.00 | 623 | 195.00 | 104 |
| 59.00 | 5 | 97.00 | 3083 | 141.00 | 9617 | 205.00 | 230 |
| 60.00 | 9678 | 98.00 | 110 | 142.00 | 1052 | 207.00 | 199 |
| 61.00 | 54528 | 103.00 | 221 | 143.00 | 10141 | 208.00 | 75 |
| 62.00 | 55712 | 104.00 | 4703 | 144.00 | 499 | 232.00 | 349 |
| 63.00 | 42584 | 105.00 | 1539 | 145.00 | 894 | 249.00 | 55 |
| 64.00 | 3568 | 106.00 | 4553 | 146.00 | 1749 | 251.00 | 206 |
| 65.00 | 316 | 107.00 | 1280 | 147.00 | 766 | 265.00 | 98 |
| 66.00 | 126 | 110.00 | 504 | 148.00 | 3102 | 270.00 | 16 |
| 67.00 | 2565 | 111.00 | 733 | 149.00 | 789 | 281.00 | 84 |
| 68.00 | 145344 | 112.00 | 501 | 150.00 | 1096 | 282.00 | 245 |
| 69.00 | 142912 | 113.00 | 907 | 151.00 | 115 | 283.00 | 15 |
| 70.00 | 10376 | 115.00 | 1328 | 152.00 | 543 | 334.00 | 477 |
| 71.00 | 446 | 116.00 | 4122 | 153.00 | 932 | 345.00 | 103 |
| 72.00 | 6480 | 117.00 | 6699 | 154.00 | 805 | | |
| 73.00 | 54576 | 118.00 | 3979 | 155.00 | 3308 | | |
| 74.00 | 223936 | 119.00 | 5501 | 156.00 | 480 | | |

Air Toxics Ltd.

Data file : /chem/msdt.i/26Nov2007.b/t112601.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 26-NOV-2007 08:57
Operator : ea Inst ID: msdt.i
Smp Info : 2uL #1467-58;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/26Nov2007.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Uf | 1.00000 | ng unit correction factor |
| Vf | 1.00000 | Volumetric correction factor |
| Vi | 1.00000 | Injection Volume |

Cpnd Variable Local Compound Variable

| RT | EXP RT | DLT RT | MASS | RESPONSE | CONCENTRATIONS ON-COL ( ug/L) | CONCENTRATIONS FINAL ( ug/L) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|---|
| 1 bfb | | | | | | CAS #: 460-00-4 | | |
| 8.110 | 8.228 | -0.118 | 95 | 1680625 | | | 100.00- 100.00 | 100.00 |
| 8.110 | 8.228 | -0.118 | 50 | 295583 | | | 15.00- 40.00 | 17.59 |
| 8.110 | 8.228 | -0.118 | 75 | 816391 | | | 30.00- 60.00 | 48.58 |
| 8.110 | 8.228 | -0.118 | 96 | 110109 | | | 5.00- 9.00 | 6.55 |
| 8.110 | 8.228 | -0.118 | 173 | 9302 | | | 0.00- 2.00 | 0.76 |
| 8.110 | 8.228 | -0.118 | 174 | 1229653 | | | 50.00- 100.00 | 73.17 |
| 8.110 | 8.228 | -0.118 | 175 | 89370 | | | 5.00- 9.00 | 7.27 |
| 8.110 | 8.228 | -0.118 | 176 | 1190058 | | | 95.00- 101.00 | 96.78 |
| 8.110 | 8.228 | -0.118 | 177 | 77646 | | | 5.00- 9.00 | 6.52 |

Data File: /chem/msdt.i/26Nov2007.b/t112601.d



Date : 26-NOV-2007 08:57

Client ID: BFB

Instrument: msdt.i

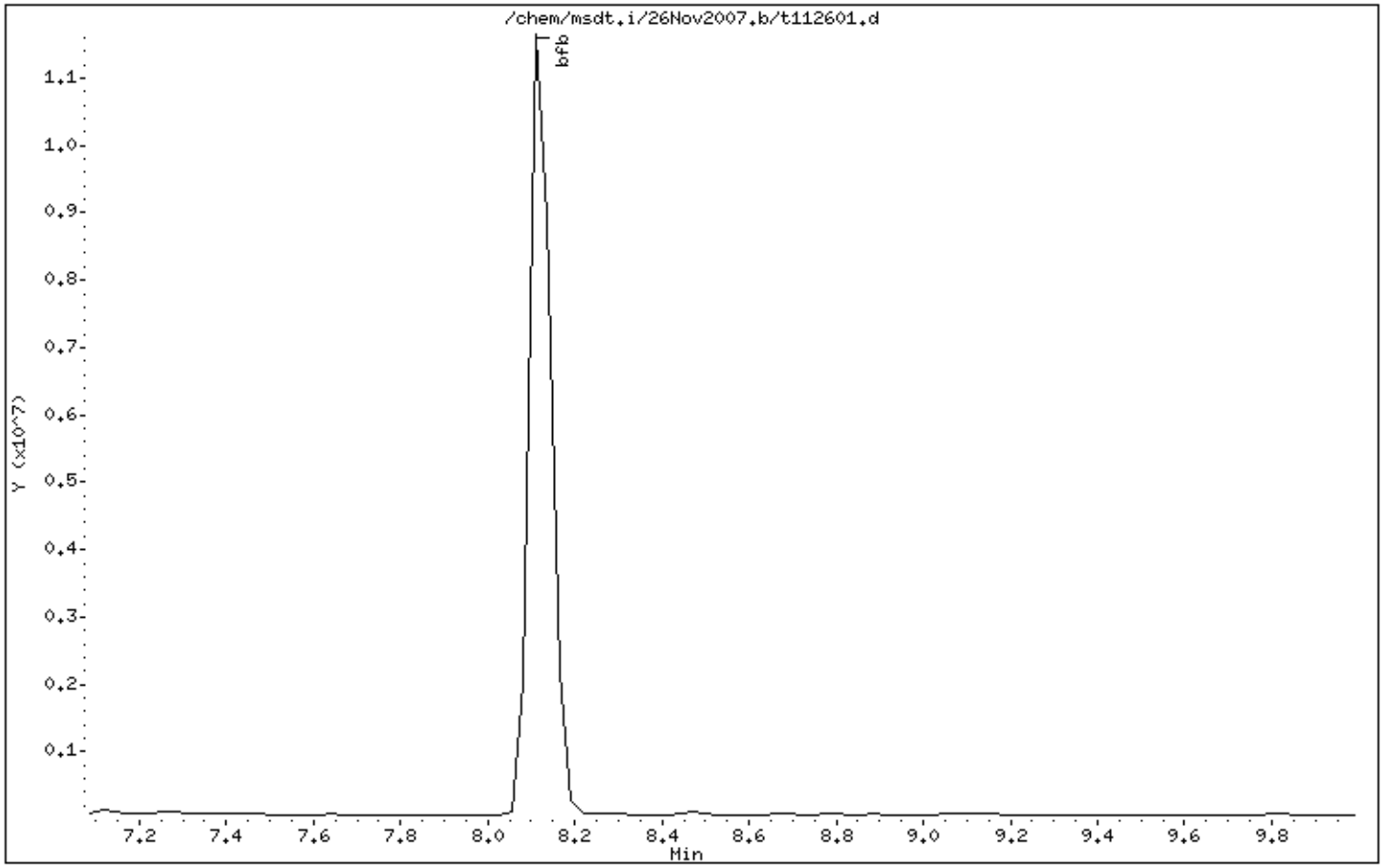
Sample Info: 2uL #1467-58;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0

Operator: ea

Column phase:

Column diameter: 2.00



Data File: /chem/msdt.i/26Nov2007.b/t112601.d

Date : 26-NOV-2007 08:57

Client ID: BFB

Instrument: msdt.i

Sample Info: 2uL #1467-58;BFB Tune check;BFB Tune check

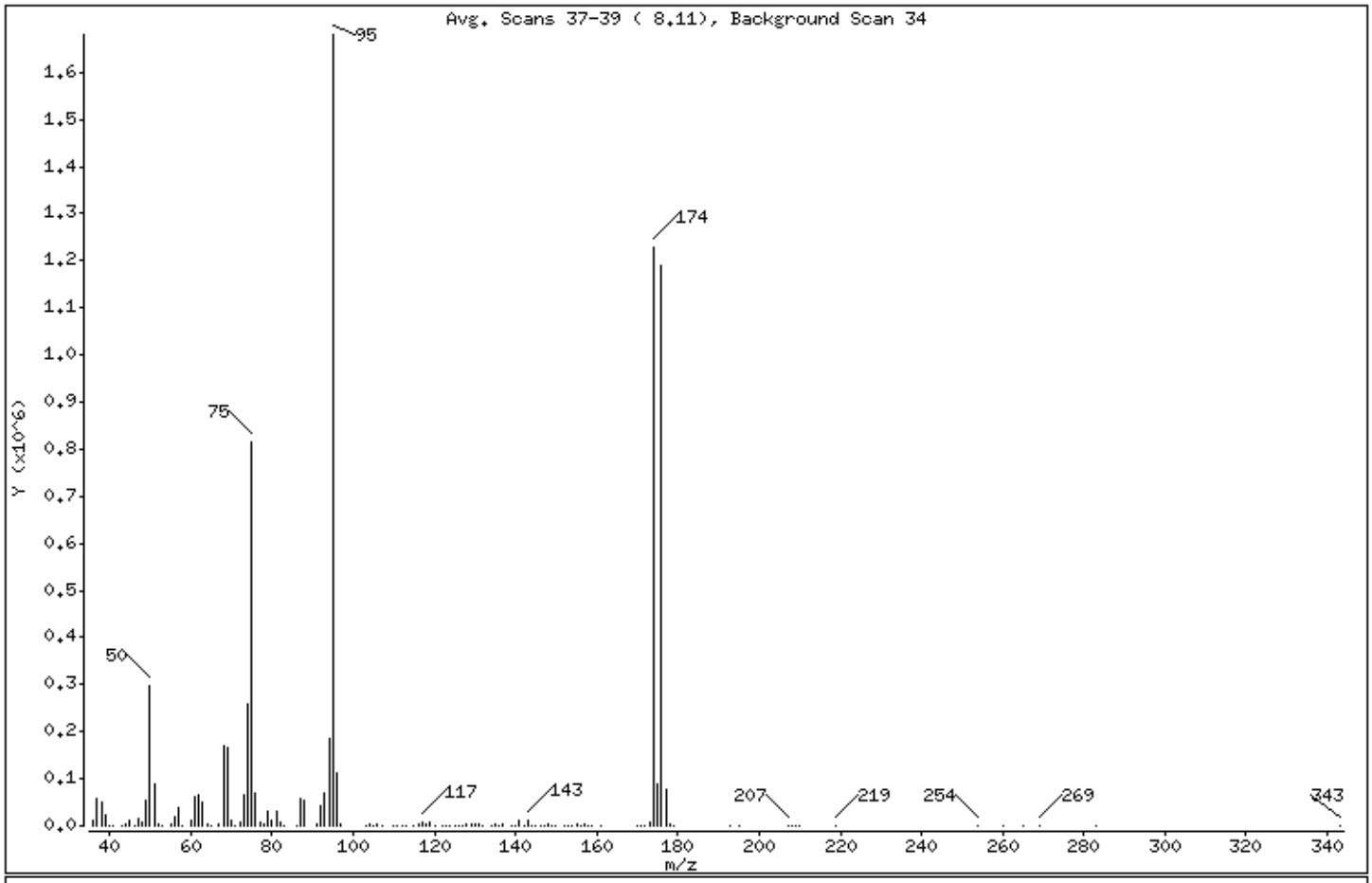
Volume Injected (uL): 1.0

Operator: ea

Column phase:

Column diameter: 2.00

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 15.00 - 40.00% of mass 95 | 17.59 |
| 75 | 30.00 - 60.00% of mass 95 | 48.58 |
| 96 | 5.00 - 9.00% of mass 95 | 6.55 |
| 173 | Less than 2.00% of mass 174 | 0.55 ( 0.76) |
| 174 | 50.00 - 100.00% of mass 95 | 73.17 |
| 175 | 5.00 - 9.00% of mass 174 | 5.32 ( 7.27) |
| 176 | 95.00 - 101.00% of mass 174 | 70.81 ( 96.78) |
| 177 | 5.00 - 9.00% of mass 176 | 4.62 ( 6.52) |

Date : 26-NOV-2007 08:57

Client ID: BFB Instrument: msdt.i

Sample Info: 2uL #1467-58;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0 Operator: ea

Column phase: Column diameter: 2.00

Data File: t112601.d
Spectrum: Avg. Scans 37-39 ( 8.11), Background Scan 34
Location of Maximum: 95.00
Number of points: 128

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 9975 | 73.00 | 64312 | 118.00 | 4454 | 155.00 | 3705 |
| 37.00 | 56856 | 74.00 | 258304 | 119.00 | 6442 | 156.00 | 633 |
| 38.00 | 51368 | 75.00 | 816384 | 120.00 | 316 | 157.00 | 2290 |
| 39.00 | 21288 | 76.00 | 69184 | 122.00 | 338 | 158.00 | 389 |
| 40.00 | 241 | 77.00 | 7692 | 123.00 | 375 | 159.00 | 1791 |
| 41.00 | 92 | 78.00 | 4642 | 124.00 | 749 | 161.00 | 1550 |
| 43.00 | 144 | 79.00 | 31264 | 125.00 | 644 | 170.00 | 252 |
| 44.00 | 5635 | 80.00 | 9849 | 126.00 | 636 | 171.00 | 224 |
| 45.00 | 11500 | 81.00 | 32192 | 127.00 | 301 | 172.00 | 677 |
| 46.00 | 872 | 82.00 | 6684 | 128.00 | 5010 | 173.00 | 9302 |
| 47.00 | 14225 | 83.00 | 679 | 129.00 | 2400 | 174.00 | 1229312 |
| 48.00 | 7444 | 86.00 | 1228 | 130.00 | 4985 | 175.00 | 89368 |
| 49.00 | 54520 | 87.00 | 57024 | 131.00 | 2008 | 176.00 | 1189888 |
| 50.00 | 295552 | 88.00 | 53880 | 132.00 | 253 | 177.00 | 77640 |
| 51.00 | 89008 | 91.00 | 4165 | 134.00 | 473 | 178.00 | 2331 |
| 52.00 | 3949 | 92.00 | 43800 | 135.00 | 2211 | 179.00 | 258 |
| 53.00 | 251 | 93.00 | 68632 | 136.00 | 354 | 193.00 | 514 |
| 55.00 | 3349 | 94.00 | 184064 | 137.00 | 1982 | 195.00 | 231 |
| 56.00 | 20288 | 95.00 | 1680384 | 139.00 | 378 | 207.00 | 1551 |
| 57.00 | 38912 | 96.00 | 110104 | 140.00 | 832 | 208.00 | 357 |
| 58.00 | 1422 | 97.00 | 3378 | 141.00 | 12061 | 209.00 | 203 |
| 60.00 | 11435 | 103.00 | 578 | 142.00 | 1356 | 210.00 | 107 |
| 61.00 | 63704 | 104.00 | 5490 | 143.00 | 12222 | 219.00 | 111 |
| 62.00 | 67056 | 105.00 | 1749 | 144.00 | 601 | 254.00 | 208 |
| 63.00 | 51424 | 106.00 | 5112 | 145.00 | 1021 | 260.00 | 30 |
| 64.00 | 4623 | 107.00 | 1455 | 146.00 | 1745 | 265.00 | 148 |
| 65.00 | 553 | 110.00 | 615 | 147.00 | 1083 | 269.00 | 48 |
| 67.00 | 3551 | 111.00 | 825 | 148.00 | 3338 | 283.00 | 10 |
| 68.00 | 171264 | 112.00 | 544 | 149.00 | 1085 | 343.00 | 193 |
| 69.00 | 167168 | 113.00 | 790 | 150.00 | 1437 | | |
| 70.00 | 11705 | 115.00 | 1293 | 152.00 | 591 | | |
| 71.00 | 329 | 116.00 | 4910 | 153.00 | 928 | | |
| 72.00 | 7062 | 117.00 | 7803 | 154.00 | 837 | | |

Air Toxics Ltd.

Data file : /chem/msdt.i/04Dec2007.b/t120401.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 04-DEC-2007 08:54
Operator : sjr Inst ID: msdt.i
Smp Info : 2uL #1467-64;BFB Tune check;BFB Tune check
Misc Info : 50ng
Comment :
Method : /chem/msdt.i/04Dec2007.b/bfb.m
Meth Date : 23-Mar-2007 09:33 tsanfel Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Uf | 1.00000 | ng unit correction factor |
| Vf | 1.00000 | Volumetric correction factor |
| Vi | 1.00000 | Injection Volume |

Cpnd Variable Local Compound Variable

| RT | EXP RT | DLT RT | MASS | RESPONSE | CONCENTRATIONS ON-COL ( ug/L) | CONCENTRATIONS FINAL ( ug/L) | TARGET RANGE | RATIO |
|---|---|---|---|---|---|---|---|---|
| 1 bfb | | | | | | CAS #: 460-00-4 | | |
| 8.110 | 8.228 | -0.118 | 95 | 1561392 | | | 100.00- 100.00 | 100.00 |
| 8.110 | 8.228 | -0.118 | 50 | 277440 | | | 15.00- 40.00 | 17.77 |
| 8.110 | 8.228 | -0.118 | 75 | 766139 | | | 30.00- 60.00 | 49.07 |
| 8.110 | 8.228 | -0.118 | 96 | 99737 | | | 5.00- 9.00 | 6.39 |
| 8.110 | 8.228 | -0.118 | 173 | 8109 | | | 0.00- 2.00 | 0.73 |
| 8.110 | 8.228 | -0.118 | 174 | 1103808 | | | 50.00- 100.00 | 70.69 |
| 8.110 | 8.228 | -0.118 | 175 | 78563 | | | 5.00- 9.00 | 7.12 |
| 8.110 | 8.228 | -0.118 | 176 | 1065712 | | | 95.00- 101.00 | 96.55 |
| 8.110 | 8.228 | -0.118 | 177 | 69056 | | | 5.00- 9.00 | 6.48 |

Data File: /chem/msdt.i/04Dec2007.b/t120401.d 

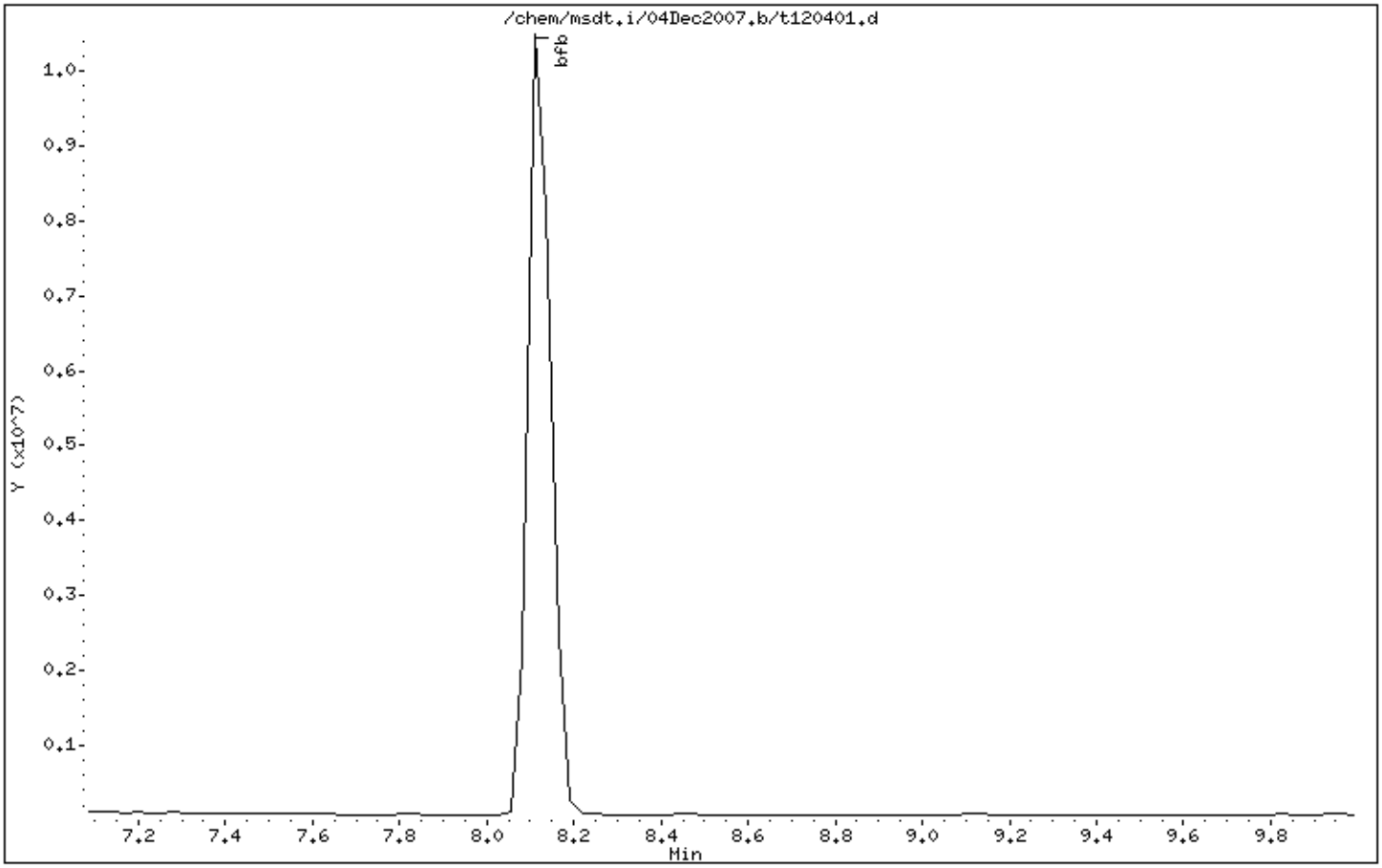
Date : 04-DEC-2007 08:54

Client ID: BFB Instrument: msdt.i

Sample Info: 2uL #1467-64;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0 Operator: sjr

Column phase: Column diameter: 2.00



Data File: /chem/msdt.i/04Dec2007.b/t120401.d

Date : 04-DEC-2007 08:54

Client ID: BFB

Instrument: msdt.i

Sample Info: 2uL #1467-64;BFB Tune check;BFB Tune check

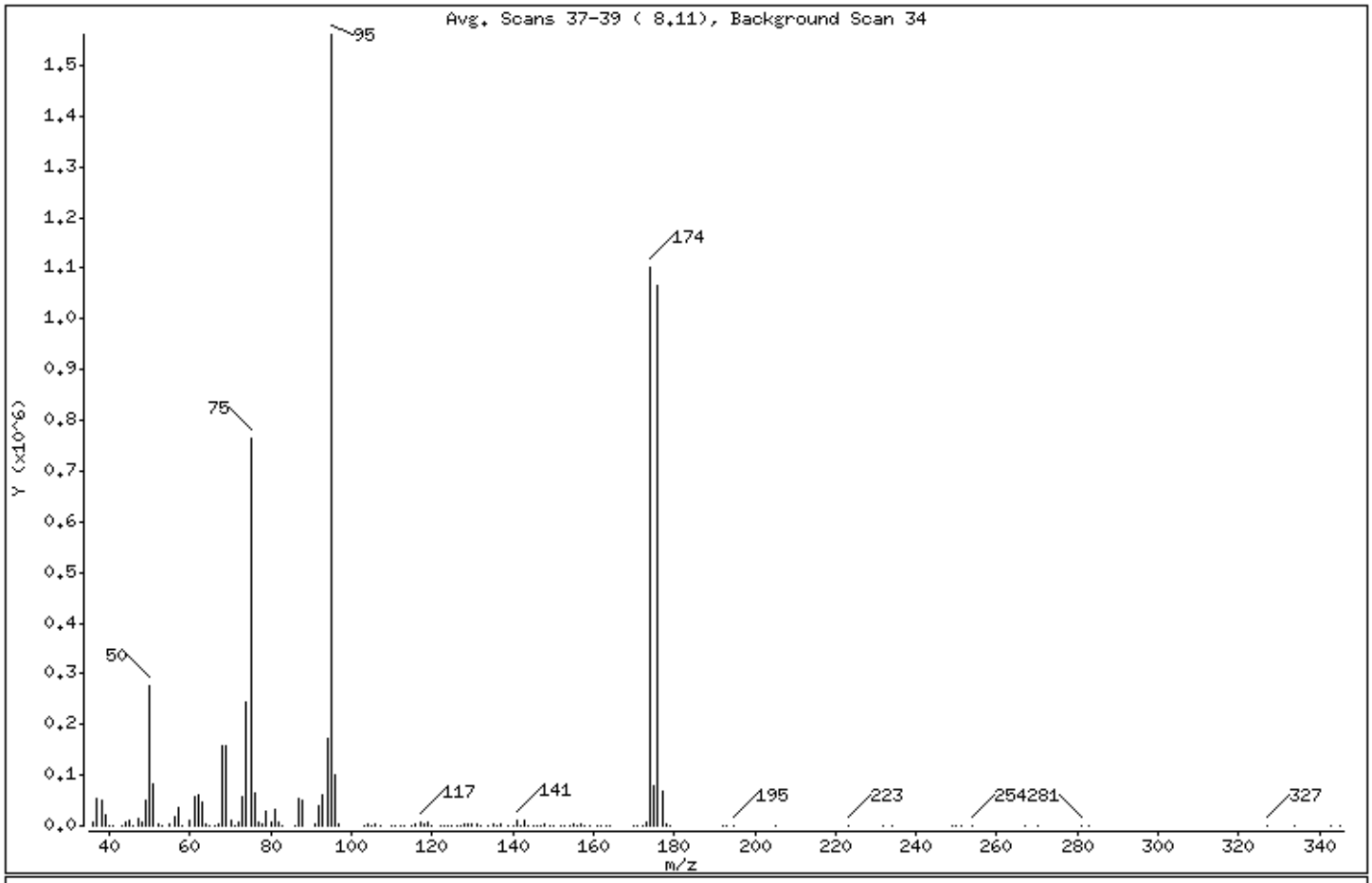
Volume Injected (uL): 1.0

Operator: sjr

Column phase:

Column diameter: 2.00

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 15.00 - 40.00% of mass 95 | 17.77 |
| 75 | 30.00 - 60.00% of mass 95 | 49.07 |
| 96 | 5.00 - 9.00% of mass 95 | 6.39 |
| 173 | Less than 2.00% of mass 174 | 0.52 ( 0.73) |
| 174 | 50.00 - 100.00% of mass 95 | 70.69 |
| 175 | 5.00 - 9.00% of mass 174 | 5.03 ( 7.12) |
| 176 | 95.00 - 101.00% of mass 174 | 68.25 ( 96.55) |
| 177 | 5.00 - 9.00% of mass 176 | 4.42 ( 6.48) |

Date : 04-DEC-2007 08:54

Client ID: BFB Instrument: msdt.i

Sample Info: 2uL #1467-64;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0 Operator: sjr

Column phase: Column diameter: 2.00

Data File: t120401.d
Spectrum: Avg. Scans 37-39 ( 8.11), Background Scan 34
Location of Maximum: 95.00
Number of points: 138

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 8865 | 74.00 | 243136 | 122.00 | 388 | 161.00 | 1277 |
| 37.00 | 52144 | 75.00 | 766080 | 123.00 | 355 | 162.00 | 103 |
| 38.00 | 48784 | 76.00 | 65040 | 124.00 | 544 | 163.00 | 144 |
| 39.00 | 19896 | 77.00 | 7229 | 125.00 | 480 | 164.00 | 125 |
| 40.00 | 500 | 78.00 | 4810 | 126.00 | 474 | 170.00 | 257 |
| 41.00 | 102 | 79.00 | 30312 | 127.00 | 354 | 171.00 | 590 |
| 43.00 | 678 | 80.00 | 8893 | 128.00 | 4334 | 172.00 | 1307 |
| 44.00 | 5754 | 81.00 | 31136 | 129.00 | 2349 | 173.00 | 8109 |
| 45.00 | 10728 | 82.00 | 6556 | 130.00 | 4439 | 174.00 | 1103360 |
| 46.00 | 552 | 83.00 | 799 | 131.00 | 2029 | 175.00 | 78560 |
| 47.00 | 13926 | 86.00 | 1309 | 132.00 | 262 | 176.00 | 1065472 |
| 48.00 | 6539 | 87.00 | 54376 | 134.00 | 15 | 177.00 | 69056 |
| 49.00 | 51920 | 88.00 | 51840 | 135.00 | 2010 | 178.00 | 2257 |
| 50.00 | 277440 | 91.00 | 4055 | 136.00 | 439 | 179.00 | 91 |
| 51.00 | 83424 | 92.00 | 39888 | 137.00 | 2017 | 192.00 | 60 |
| 52.00 | 3593 | 93.00 | 62192 | 139.00 | 276 | 193.00 | 79 |
| 53.00 | 349 | 94.00 | 171712 | 140.00 | 665 | 195.00 | 278 |
| 55.00 | 2845 | 95.00 | 1561088 | 141.00 | 11998 | 205.00 | 107 |
| 56.00 | 18424 | 96.00 | 99736 | 142.00 | 1334 | 223.00 | 223 |
| 57.00 | 36912 | 97.00 | 2832 | 143.00 | 11864 | 232.00 | 10 |
| 58.00 | 1448 | 103.00 | 471 | 144.00 | 659 | 234.00 | 106 |
| 60.00 | 10838 | 104.00 | 5205 | 145.00 | 1038 | 249.00 | 25 |
| 61.00 | 58336 | 105.00 | 1752 | 146.00 | 1738 | 250.00 | 100 |
| 62.00 | 62760 | 106.00 | 4813 | 147.00 | 1034 | 251.00 | 162 |
| 63.00 | 48216 | 107.00 | 1508 | 148.00 | 3029 | 254.00 | 381 |
| 64.00 | 4605 | 110.00 | 558 | 149.00 | 690 | 267.00 | 13 |
| 65.00 | 640 | 111.00 | 734 | 150.00 | 1392 | 270.00 | 53 |
| 66.00 | 130 | 112.00 | 826 | 152.00 | 612 | 281.00 | 571 |
| 67.00 | 3477 | 113.00 | 693 | 153.00 | 992 | 283.00 | 186 |
| 68.00 | 159616 | 115.00 | 1239 | 154.00 | 689 | 327.00 | 277 |
| 69.00 | 156800 | 116.00 | 4398 | 155.00 | 3046 | 334.00 | 274 |
| 70.00 | 11209 | 117.00 | 7547 | 156.00 | 709 | 343.00 | 46 |
| 71.00 | 366 | 118.00 | 4368 | 157.00 | 2359 | 345.00 | 107 |
| 72.00 | 6426 | 119.00 | 5551 | 158.00 | 286 | | |
| 73.00 | 58680 | 120.00 | 390 | 159.00 | 1497 | | |

Date : 04-DEC-2007 08:54

Client ID: BFB Instrument: msdt.i

Sample Info: 2uL #1467-64;BFB Tune check;BFB Tune check

Volume Injected (uL): 1.0 Operator: sjr

Column phase: Column diameter: 2.00

Data File: t120401.d
Spectrum: Avg. Scans 37-39 ( 8.11), Background Scan 34
Location of Maximum: 95.00
Number of points: 138

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|

# Shipping/ Receiving Documents

AN ENVIRONMENTAL ANALYTICAL LABORATORY

**180 Blue Ravine Road, Suite B**
**Folsom, CA 95630**

**Phone (916) 985-1000 FAX (916) 985-1020**
**Hours 8:00 A.M. to 6:00 P.M. Pacific**

COMPANY: GEI Consultants, Inc.
ATTENTION: Ms. Sarah Aldridge
FAX #: 860-368-5307
FROM: Sample Receiving
Workorder #: 0711487
# of pages (Including Cover): 1

12/12/2007

Thank you for selecting Air Toxics Ltd. We have received your samples and have found discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Bryanna Langley at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

The following discrepancy has been observed:

We have found a discrepancy between the Chain of Custody (COC) and the sample tags. The samples labeled UW-AMS-1 and DW-AMS-5 on the COC are labeled as AMS-1 DW and AMS-5 UW on the sample tags. ATL will report the sample identifications on the COC unless otherwise notified.

*Your prompt response is appreciated.*

# AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

## CHAIN-OF-CUSTODY RECORD

**Sample Transportation Notice**

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling, or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Receipt VAR 11/28/07

0218

| | | | |
|---|---|---|---|
| Contact | | **Project Info:** | **Turn Around Time:** |
| Company | GEI Consultants, Inc. | P.O. # | |
| Address | 455 Winding Brook Glastonbury CT 06033 | Project # 061140 - 8 - 1703 | [X] Normal |
| Phone | 860-368-5300 Cell: | Project Name BayShore OU1 Southern cell Air Monitoring | [ ] Rush _____ |
| Collected By: Signature: | | | Specify |

| Lab I.D. | Field Sample I.D. | Date & Time | Analyses Requested | Canister Pressure/Vacuum Initial | Final | Receipt |
|---|---|---|---|---|---|---|
| 01A | UW-AMS-1 CAN# 35136 | 11/21/07 -0615-0615 | TO-15 + Naphthalene | -30 | -3 | 2.5 "Hg |
| 02A | DW-AMS-5 CAN# 21015 | 11/21/07 -0615-1515 | TO-15 + Naphthalene | -29.5 | -1.5 | 1.0 "Hg |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| Relinquished By: (Signature) Date/Time | Received By: (Signature) Date/Time |
|---|---|
| 11-21-07 | |
| Relinquished By: (Signature) Date/Time | Received By: (Signature) Date/Time |
| | Monica Gregson AIL 11/26/07 850 |
| Relinquished By: (Signature) Date/Time | Received By: (Signature) Date/Time |

Notes: used flow controllers included initial and final can pressures in Inches Hg\
Send Data Pack to Lisa McDonough and EDD to datagroup@geiconsultants.com

| Lab Use Only | Shipper Name | Air Bill # | Opened By: | Temp (C) | Condition | Custody Seals Intact? | Work Order # |
|---|---|---|---|---|---|---|---|
| | FedEx | 8635 1257 2558 | MG | MA | Good | Yes No (None) | 0711487 |

AN ENVIRONMENTAL ANALYTICAL LABORATORY

# SAMPLE RECEIPT SUMMARY

## WORKORDER 0711487

**Client**

Ms. Sarah Aldridge
GEI Consultants, Inc.
455 Winding Brook Drive
Suite 201
Glastonbury, CT 06033

**Sales Rep:** ANS

**Phone**

860-368-5300

**Fax**

860-368-5307

**Date Promised:** 12/10/07
**Date Completed:** 12/7/07
**Date Received:** 11/26/07
**PO#:** NR
**Project#:** 061140-8-1703 BayShore OU1 Southern cell Air Monitori
**Total $:** $ 624.00
**Logged By:** MW

| Fraction | Sample # | Analysis | Collected | Receipt Vac./Pres. | Amount$ |
|---|---|---|---|---|---|
| 01A | UW-AMS-1 | Modified TO-15 | 11/21/2007 | 2.5 "Hg | $225.00 |
| 02A | DW-AMS-5 | Modified TO-15 | 11/21/2007 | 1.0 "Hg | $225.00 |
| 03A | Lab Blank | Modified TO-15 | NA | NA | $0.00 |
| 04A | CCV | Modified TO-15 | NA | NA | $0.00 |
| 05A | LCS | Modified TO-15 | NA | NA | $0.00 |

| | | |
|---|---|---|
| Misc. Charges | 6 Liter Summa Canister (2) @ $50.00 each. | $100.00 |
| | Blue Body Flow Controller (2) @ $35.00 each. | $70.00 |
| | Fuel Surcharge (2) @ $2.00 each. | $4.00 |

**Note:** Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: Bay Shore OU1 South Perimeter Air/9699

**BILL TO:** Ms. Sarah Aldridge
GEI Consultants, Inc.
455 Winding Brook Drive
Suite 201
Glastonbury, CT 06033

Analysis Code: TO-14A

**TERMS:**

Reporting Method: Modified TO-15 + Naph

# Sample Discrepancy Report

## Identification

**Initiated By:** MW **Date:** 11/27 **Discrepancy Type:** (circle all that apply) (I.) II. III.

**Workorder(s) affected:** 0711487 **Sample(s) affected:** all

## I. Sample Receipt Discrepancies

*Document on Cover Page of Sample Receipt Confirmation and in Receiving Notes of Lab Narrative*

**Narration not required:**

- ☐ COC was not filled out in ink.
- ☐ Sample container (cartridge/tube/VOA vial) was received broken, however sample was intact.
- ☐ Flow controller used - canister samples received at ambient or under pressure.
- ☐ No brass cap on canister.
- ☐ VOA vial for RSK-175 analysis received with headspace bubble <5mm.

**Narration Required:**

- ☐ COC improperly relinquished / received.
- ☒ Sample tags / can numbers do not match the COC.
- ☐ Samples received at wrong temperature (up to 10°C); ice / blue ice (circle one) was present. A temp. blank was / was not present (circle one).
- ☐ Custody Seal on the outside of the container was broken / improperly placed (circle one).
- ☐ Other (describe below).

**Describe the Discrepancy:** 01A: AMS-1 0W . 02A: AMS-5 0W

## II. Sample Receipt/Screening Discrepancies requiring CSR notification

*Document on Cover Page of Sample Receipt Confirmation and in Receiving Notes of Lab Narrative*

**If Section II. is filled out CSR must be notified within 24 hrs of initiation**

- ☐ COC was not received with samples.
- ☐ Analysis method(s) is not specified / incorrectly specified (circle one) on the COC.
- ☐ Number of samples on the COC does not match the number of samples that were received.
- ☐ Samples were received expired.
- ☐ Sampling date / time (sulfur only) is not documented for *some* / *any* samples (circle one).
- ☐ Sample received with significant (pooling) volume of $H_2O$ in the Tedlar Bag.
- ☐ Sample container (cartridge/tube/VOA vial/DNPH Bottle, etc.) was received broken / leaking (circle one); sample can / cannot be analyzed (circle one).
- ☐ VOA vial for RSK-175 analysis received with headspace bubble >5mm.
- ☐ Samples for RSK-175 $CO_2$ analysis received preserved with HCl.
- ☐ Tedlar Bag received leaking / flat (circle one). Sample can / cannot (circle one) be analyzed.
- ☐ Canister was at ambient pressure at time of pressurization and (check all that apply): ☐ canister failed leak check on two manifolds, ☐ canister valve was open, ☐ brass nut was loose. Sample can / cannot be analyzed (circle one).
- ☐ Tedlar bag / canister received emitting a strong odor; sample can / cannot (circle one) be analyzed.
- ☐ Canister sample received with a vacuum difference >7.0"Hg between the receipt vac. and the final vac. reported on the COC, indicating loss of vacuum.
- ☐ Canister sample received at >15"Hg (*not* identified as a Trip/Field Blank).
- ☐ Trip Blank received at low vacuum (< 25"Hg).
- ☐ Tedlar Bag for Sulfur analysis has metal fitting.
- ☐ Incorrect sampling media / container for analysis requested.
- ☐ Sample was received at ≥ 10°C.
- ☐ Other (describe below)

**Initials:** _____ **Date:** _____ ☐ **CSR Notified** (see section below)
(if not the original initiator)

**Describe the Discrepancy:** _____

# Other Records

# DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} - [(\text{Initial Pressure ("Hg)}) (14.7 \text{ psi} / 30 \text{ "Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} + \text{Initial Pressure (psi)}}$$

| Initial Vacuum ("Hg) | **5 psi** Final Press. Dil. Factor | **10 psi** Final Press. Dil. Factor | **15 psi** Final Press. Dil. Factor |
|---|---|---|---|
| 0.0 | 1.34 | 1.68 | 2.02 |
| 0.5 | 1.36 | 1.71 | 2.05 |
| 1.0 | 1.39 | 1.74 | 2.09 |
| 1.5 | 1.41 | 1.77 | 2.13 |
| 2.0 | 1.44 | 1.80 | 2.16 |
| 2.5 | 1.46 | 1.83 | 2.20 |
| 3.0 | 1.49 | 1.87 | 2.24 |
| 3.5 | 1.52 | 1.90 | 2.29 |
| 4.0 | 1.55 | 1.94 | 2.33 |
| 4.5 | 1.58 | 1.98 | 2.38 |
| 5.0 | 1.61 | 2.02 | 2.42 |
| 5.5 | 1.64 | 2.06 | 2.47 |
| 6.0 | 1.68 | 2.10 | 2.53 |
| 6.5 | 1.71 | 2.15 | 2.58 |
| 7.0 | 1.75 | 2.19 | 2.64 |
| 7.5 | 1.79 | 2.24 | 2.69 |
| 8.0 | 1.83 | 2.29 | 2.76 |
| 8.5 | 1.87 | 2.34 | 2.82 |
| 9.0 | 1.91 | 2.40 | 2.89 |
| 9.5 | 1.96 | 2.46 | 2.96 |
| 10.0 | 2.01 | 2.52 | 3.03 |
| 10.5 | 2.06 | 2.59 | 3.11 |
| 11.0 | 2.12 | 2.65 | 3.19 |
| 11.5 | 2.17 | 2.72 | 3.28 |
| 12.0 | 2.23 | 2.80 | 3.37 |
| 12.5 | 2.30 | 2.88 | 3.46 |
| 13.0 | 2.36 | 2.97 | 3.57 |
| 13.5 | 2.44 | 3.06 | 3.67 |
| 14.0 | 2.51 | 3.15 | 3.79 |
| 14.5 | 2.59 | 3.25 | 3.91 |
| 15.0 | 2.68 | 3.36 | 4.04 |
| 15.5 | 2.77 | 3.48 | 4.18 |
| 16.0 | 2.87 | 3.60 | 4.33 |
| 16.5 | 2.98 | 3.73 | 4.49 |
| 17.0 | 3.09 | 3.88 | 4.66 |
| 17.5 | 3.22 | 4.03 | 4.85 |
| 18.0 | 3.35 | 4.20 | 5.05 |
| 18.5 | 3.50 | 4.38 | 5.27 |
| 19.0 | 3.65 | 4.58 | 5.51 |
| 19.5 | 3.83 | 4.80 | 5.77 |
| 20.0 | 4.02 | 5.04 | 6.06 |
| 20.5 | 4.23 | 5.31 | 6.38 |

| Initial Vacuum ("Hg) | **5 psi** Final Press. Dil. Factor | **10 psi** Final Press. Dil. Factor | **15 psi** Final Press. Dil. Factor |
|---|---|---|---|
| 21.0 | 4.47 | 5.60 | 6.73 |
| 21.5 | 4.73 | 5.93 | 7.13 |
| 22.0 | 5.03 | 6.30 | 7.58 |
| 22.5 | 5.36 | 6.72 | 8.08 |
| 23.0 | 5.74 | 7.20 | 8.66 |
| 23.5 | 6.19 | 7.76 | 9.32 |
| 24.0 | 6.70 | 8.40 | 10.10 |
| 24.5 | 7.31 | 9.17 | 11.02 |
| 25.0 | 8.04 | 10.08 | 12.12 |
| 25.5 | 8.93 | 11.20 | 13.47 |
| 26.0 | 10.05 | 12.60 | 15.15 |
| 26.5 | 11.49 | 14.40 | 17.32 |
| 27.0 | 13.40 | 16.80 | 20.20 |
| 27.5 | 16.08 | 20.16 | 24.24 |
| 28.0 | 20.10 | 25.20 | 30.31 |
| 28.5 | 26.80 | 33.61 | 40.41 |
| 29.0 | 40.20 | 50.41 | 60.61 |

| Initial Pressure (psi) | **5 psi** Final Press. Dil. Factor | **10 psi** Final Press. Dil. Factor | **15 psi** Final Press. Dil. Factor |
|---|---|---|---|
| 0.0 | 1.34 | 1.68 | 2.02 |
| 0.2 | 1.32 | 1.66 | 1.99 |
| 0.4 | 1.30 | 1.64 | 1.97 |
| 0.6 | 1.29 | 1.61 | 1.94 |
| 0.8 | 1.27 | 1.59 | 1.92 |
| 1.0 | 1.25 | 1.57 | 1.89 |
| 1.2 | 1.24 | 1.55 | 1.87 |
| 1.4 | 1.22 | 1.53 | 1.84 |
| 1.6 | 1.21 | 1.52 | 1.82 |
| 1.8 | 1.19 | 1.50 | 1.80 |
| 2.0 | 1.18 | 1.48 | 1.78 |
| 2.2 | 1.17 | 1.46 | 1.76 |
| 2.4 | 1.15 | 1.44 | 1.74 |
| 2.6 | 1.14 | 1.43 | 1.72 |
| 2.8 | 1.13 | 1.41 | 1.70 |
| 3.0 | 1.11 | 1.40 | 1.68 |
| 3.2 | 1.10 | 1.38 | 1.66 |
| 3.4 | 1.09 | 1.36 | 1.64 |
| 3.6 | 1.08 | 1.35 | 1.62 |
| 3.8 | 1.06 | 1.34 | 1.61 |
| 4.0 | 1.05 | 1.32 | 1.59 |

# DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{\text{14.7 psi + Final Pressure (psi)}}{\text{14.7 psi + Initial Pressure (psi)}}$$

| Initial Pressure (psi) | **5 psi** Final Press. Dil. Factor | **10 psi** Final Press. Dil. Factor | **15 psi** Final Press. Dil. Factor |
|---|---|---|---|
| 0.0 | 1.34 | 1.68 | 2.02 |
| 0.2 | 1.32 | 1.66 | 1.99 |
| 0.4 | 1.30 | 1.64 | 1.97 |
| 0.6 | 1.29 | 1.61 | 1.94 |
| 0.8 | 1.27 | 1.59 | 1.92 |
| 1.0 | 1.25 | 1.57 | 1.89 |
| 1.2 | 1.24 | 1.55 | 1.87 |
| 1.4 | 1.22 | 1.53 | 1.84 |
| 1.6 | 1.21 | 1.52 | 1.82 |
| 1.8 | 1.19 | 1.50 | 1.80 |
| 2.0 | 1.18 | 1.48 | 1.78 |
| 2.2 | 1.17 | 1.46 | 1.76 |
| 2.4 | 1.15 | 1.44 | 1.74 |
| 2.6 | 1.14 | 1.43 | 1.72 |
| 2.8 | 1.13 | 1.41 | 1.70 |
| 3.0 | 1.11 | 1.40 | 1.68 |
| 3.2 | 1.10 | 1.38 | 1.66 |
| 3.4 | 1.09 | 1.36 | 1.64 |
| 3.6 | 1.08 | 1.35 | 1.62 |
| 3.8 | 1.06 | 1.34 | 1.61 |
| 4.0 | 1.05 | 1.32 | 1.59 |
| 4.2 | 1.04 | 1.31 | 1.57 |
| 4.4 | 1.03 | 1.29 | 1.55 |
| 4.6 | 1.02 | 1.28 | 1.54 |
| 4.8 | 1.01 | 1.27 | 1.52 |
| 5.0 | 1.00 | 1.25 | 1.51 |
| 5.2 | NA | 1.24 | 1.49 |
| 5.4 | NA | 1.23 | 1.48 |
| 5.6 | NA | 1.22 | 1.46 |
| 5.8 | NA | 1.20 | 1.45 |
| 6.0 | NA | 1.19 | 1.43 |
| 6.2 | NA | 1.18 | 1.42 |
| 6.4 | NA | 1.17 | 1.41 |
| 6.6 | NA | 1.16 | 1.39 |
| 6.8 | NA | 1.15 | 1.38 |
| 7.0 | NA | 1.14 | 1.37 |
| 7.2 | NA | 1.13 | 1.36 |
| 7.4 | NA | 1.12 | 1.34 |

| Initial Pressure (psi) | **5 psi** Final Press. Dil. Factor | **10 psi** Final Press. Dil. Factor | **15 psi** Final Press. Dil. Factor |
|---|---|---|---|
| 7.6 | NA | 1.11 | 1.33 |
| 7.8 | NA | 1.10 | 1.32 |
| 8.0 | NA | 1.09 | 1.31 |
| 8.2 | NA | 1.08 | 1.30 |
| 8.4 | NA | 1.07 | 1.29 |
| 8.6 | NA | 1.06 | 1.27 |
| 8.8 | NA | 1.05 | 1.26 |
| 9.0 | NA | 1.04 | 1.25 |
| 9.2 | NA | 1.03 | 1.24 |
| 9.4 | NA | 1.02 | 1.23 |
| 9.6 | NA | 1.02 | 1.22 |
| 9.8 | NA | 1.01 | 1.21 |
| 10.0 | NA | 1.00 | 1.20 |
| 10.2 | NA | NA | 1.19 |
| 10.4 | NA | NA | 1.18 |
| 10.6 | NA | NA | 1.17 |
| 10.8 | NA | NA | 1.16 |
| 11.0 | NA | NA | 1.16 |
| 11.2 | NA | NA | 1.15 |
| 11.4 | NA | NA | 1.14 |
| 11.6 | NA | NA | 1.13 |
| 11.8 | NA | NA | 1.12 |
| 12.0 | NA | NA | 1.11 |
| 12.2 | NA | NA | 1.10 |
| 12.4 | NA | NA | 1.10 |
| 12.6 | NA | NA | 1.09 |
| 12.8 | NA | NA | 1.08 |
| 13.0 | NA | NA | 1.07 |
| 13.2 | NA | NA | 1.06 |
| 13.4 | NA | NA | 1.06 |
| 13.6 | NA | NA | 1.05 |
| 13.8 | NA | NA | 1.04 |
| 14.0 | NA | NA | 1.03 |
| 14.2 | NA | NA | 1.03 |
| 14.4 | NA | NA | 1.02 |
| 14.6 | NA | NA | 1.01 |
| 14.8 | NA | NA | 1.01 |

# Compound Listing

**Modified TO-15 + Naph**

| CAS Number | Compound | Detection Limit ppbv | Type |
|---|---|---|---|
| 75-71-8 | Freon 12 | 0.50 | |
| 76-14-2 | Freon 114 | 0.50 | |
| 108-38-3 | m,p-Xylene | 0.50 | |
| 95-47-6 | o-Xylene | 0.50 | |
| 100-42-5 | Styrene | 0.50 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.50 | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 0.50 | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.50 | |
| 541-73-1 | 1,3-Dichlorobenzene | 0.50 | |
| 106-46-7 | 1,4-Dichlorobenzene | 0.50 | |
| 100-44-7 | alpha-Chlorotoluene | 0.50 | |
| 95-50-1 | 1,2-Dichlorobenzene | 0.50 | |
| 106-99-0 | 1,3-Butadiene | 0.50 | |
| 110-54-3 | Hexane | 0.50 | |
| 110-82-7 | Cyclohexane | 0.50 | |
| 142-82-5 | Heptane | 0.50 | |
| 75-27-4 | Bromodichloromethane | 0.50 | |
| 124-48-1 | Dibromochloromethane | 0.50 | |
| 98-82-8 | Cumene | 0.50 | |
| 103-65-1 | Propylbenzene | 0.50 | |
| 74-87-3 | Chloromethane | 2.0 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 2.0 | |
| 87-68-3 | Hexachlorobutadiene | 2.0 | |
| 67-64-1 | Acetone | 2.0 | |
| 75-15-0 | Carbon Disulfide | 0.50 | |
| 67-63-0 | 2-Propanol | 2.0 | |
| 156-60-5 | trans-1,2-Dichloroethene | 0.50 | |
| 78-93-3 | 2-Butanone (Methyl Ethyl Ketone) | 0.50 | |
| 109-99-9 | Tetrahydrofuran | 0.50 | |
| 123-91-1 | 1,4-Dioxane | 2.0 | |
| 108-10-1 | 4-Methyl-2-pentanone | 0.50 | |
| 591-78-6 | 2-Hexanone | 2.0 | |
| 75-25-2 | Bromoform | 0.50 | |
| 622-96-8 | 4-Ethyltoluene | 0.50 | |
| 64-17-5 | Ethanol | 2.0 | |
| 1634-04-4 | Methyl tert-butyl ether | 0.50 | |
| 91-20-3 | Naphthalene | 2.0 | |
| 107-05-1 | 3-Chloropropene | 2.0 | |
| 540-84-1 | 2,2,4-Trimethylpentane | 0.50 | |
| 2037-26-5 | Toluene-d8 | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | | |
| 460-00-4 | 4-Bromofluorobenzene | | |
| 75-01-4 | Vinyl Chloride | 0.50 | |
| 74-83-9 | Bromomethane | 0.50 | |
| 75-00-3 | Chloroethane | 0.50 | |
| 75-69-4 | Freon 11 | 0.50 | |

# Compound Listing

**Modified TO-15 + Naph**

| CAS Number | Compound | Detection Limit ppbv | Type |
|---|---|---|---|
| 75-35-4 | 1,1-Dichloroethene | 0.50 | |
| 76-13-1 | Freon 113 | 0.50 | |
| 75-09-2 | Methylene Chloride | 0.50 | |
| 75-34-3 | 1,1-Dichloroethane | 0.50 | |
| 156-59-2 | cis-1,2-Dichloroethene | 0.50 | |
| 67-66-3 | Chloroform | 0.50 | |
| 71-55-6 | 1,1,1-Trichloroethane | 0.50 | |
| 56-23-5 | Carbon Tetrachloride | 0.50 | |
| 71-43-2 | Benzene | 0.50 | |
| 107-06-2 | 1,2-Dichloroethane | 0.50 | |
| 79-01-6 | Trichloroethene | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 0.50 | |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.50 | |
| 108-88-3 | Toluene | 0.50 | |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.50 | |
| 79-00-5 | 1,1,2-Trichloroethane | 0.50 | |
| 127-18-4 | Tetrachloroethene | 0.50 | |
| 106-93-4 | 1,2-Dibromoethane (EDB) | 0.50 | |
| 108-90-7 | Chlorobenzene | 0.50 | |
| 100-41-4 | Ethyl Benzene | 0.50 | |

@Air Toxics Ltd.

# DATA REVIEW CHECKLIST

**Work Order #:** 071148 7

| A | R | T | M | Q | |
|---|---|---|---|---|---|
| ☑ | ☐ | ☐ | ☑ | ☐ | Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc) |
| | ☑ | ☐ | ☑ | ☐ | The final report has the correct reporting list, special units, and header info. |
| | ☑ | ☐ | ☐ | ☐ | Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct) |
| NA | NA | ☐ | NA | ☐ | Corrective Action issued - # _____ |
| ☐ | ☐ | ☐ | ☐ | ☐ | Unusual circumstances have been documented in the notes section below |

**LUMEN** *validation report present and initialed* ***CIRCLE ( YES / NO )***

| | | | | | |
|---|---|---|---|---|---|
| ☑ | ☐ | ☐ | ☐ | ☐ | Lab Blank, CCV, LCS and DUP met QC criteria |
| ☑ | ☐ | ☐ | ☐ | ☐ | Hold time is met for all samples |
| | ☐ | ☐ | ☐ | ☐ | Appropriate data qualifier flags are applied |
| | ☐ | ☐ | ☐ | ☐ | Manual integrations for samples and QC are properly documented |
| ☑ | ☐ | ☐ | | ☐ | Samples analyzed within the project or method specific clock |
| | ☐ | ☐ | | | Retention times have been verified |
| ☑ | ☐ | ☐ | | ☐ | Appropriate ICAL(s) included |
| | ☐ | ☐ | ☐ | ☐ | At least one result per sample is verified against the target quant sheets/raw data |

| | | | | | |
|---|---|---|---|---|---|
| ☑ | ☑ | ☐ | ☐ | ☐ | Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s)) |
| ☑ | | ☐ | ☐ | | Correct amount of sample analyzed (i.e. sample not over-diluted) |
| | ☑ | ☐ | ☐ | | Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg) |
| | ☑ | ☐ | | | TICs resemble reference spectra |
| | ☑ | ☐ | | | TICs between duplicate samples are consistent |
| NA | ☑ | ☐ | ☐ | | Checked samples for trends (i.e. Influent>Effluent, Landfill or Ambient etc) |
| | ☑ | NA | | | Special units for all samples in the final report are correctly calculated |
| | ☑ | ☐ | ☐ | | Manually entered results checked (i.e. special CCV compounds) |
| | ☑ | ☐ | ☐ | | TPH/NMOC (verify calculations and correct reference compound used) |
| | ☑ | | | | Chain of Custody scanned correctly |
| | | | ☐ | | Verify sample id's vs. chain of custody |
| ☑ | ☑ | | | | Samples pressurized w/ appropriate gas (N2 or He) ☐ Tedlar Bag only |
| ☑ | ☑ | | | | Final pressure consistent with canister size (6L vs. 1L) |
| ☑ | ☑ | | | | Verify receipt pressures against logbook and Target |
| ☑ | ☑ | | | | Verify canister ID #'s |
| | ☑ | ☐ | | | Extra printed copies are provided per client profile |
| | ☑ | ☐ | | | Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.) |
| | ☑ | NA | ☐ | | Client LUMEN report reviewed for accuracy and completeness |

*Notes: (to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)*

A/R: ICAL: Styrene out < 40%. Ø out in CCV.
Fr 113 ↑ in LCS.
14 Day HT.

M/Q: _____

| A (Analytical Review/Date) | R/T (Reporting Review/Date) | M (Management Review/Date) | Q (QA Review/Date) |
|---|---|---|---|
| [signature] 12/7/07 | R: NL 12/7/07 | MR 12/7/07 | |
| | T: _____ | | |

**Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply.** Rev. 08/19/05
**Note (2): Management reviewer and reporting reviewer must be separate individuals.**

**Not Applicable**