

Data File: /chem/gcms/mz.i/Z040706.b/h2hc01aa.d

Date : 07-APR-2006 11:34

Client ID: C-3101-R3-VOST TENA

Instrument: mz.i

Sample Info: H2HC01AA,1,0,,

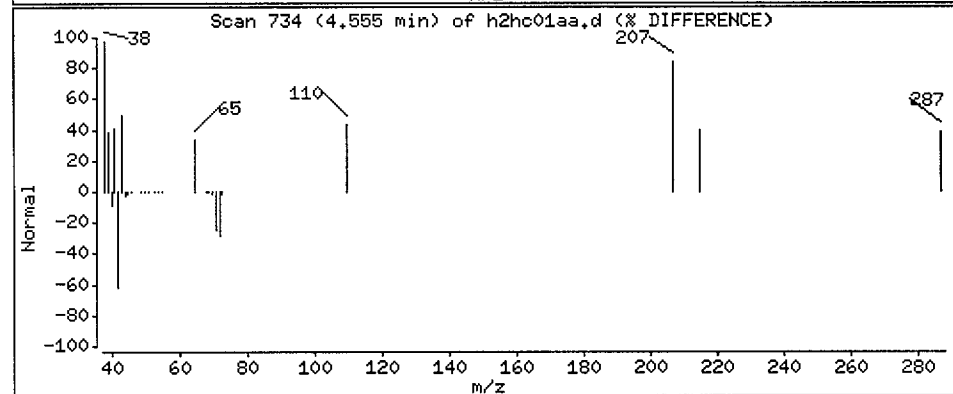
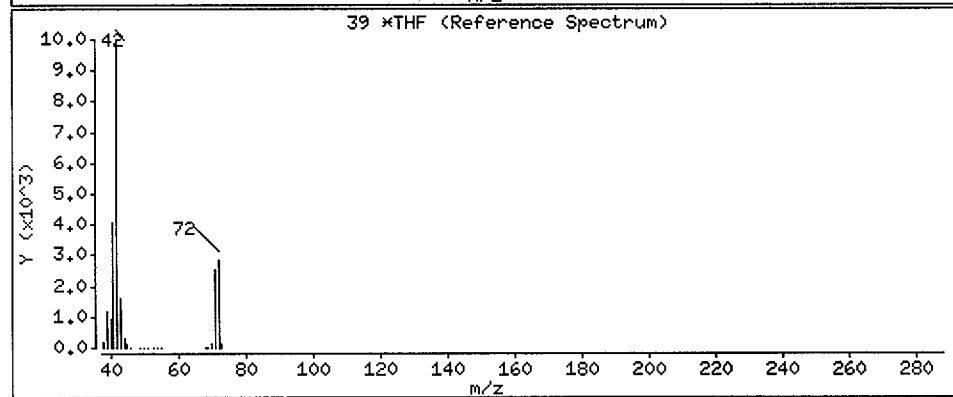
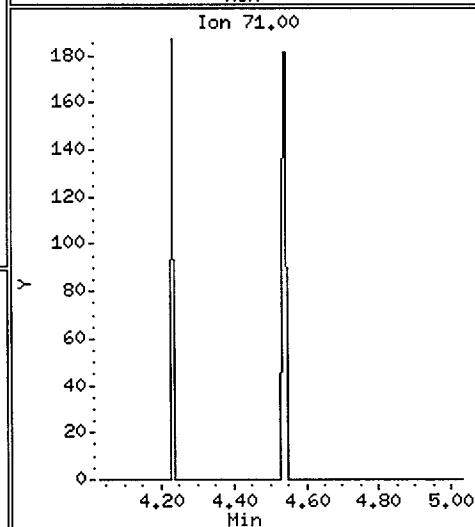
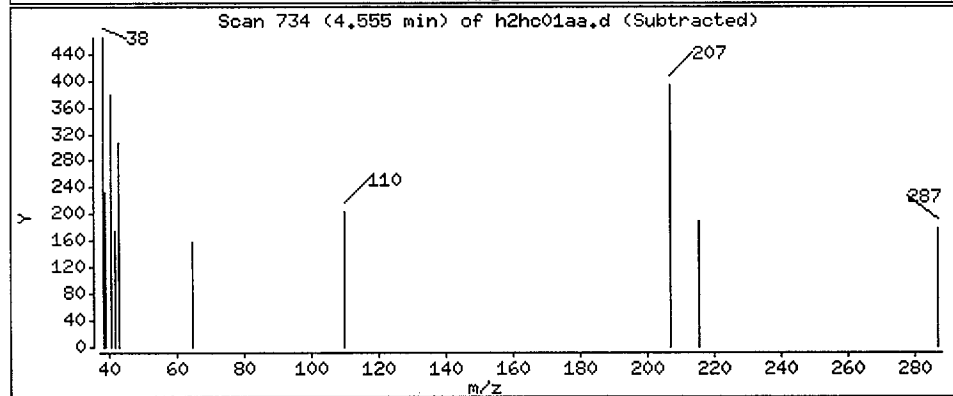
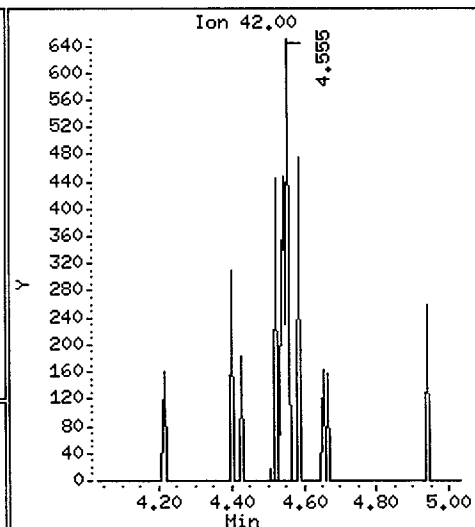
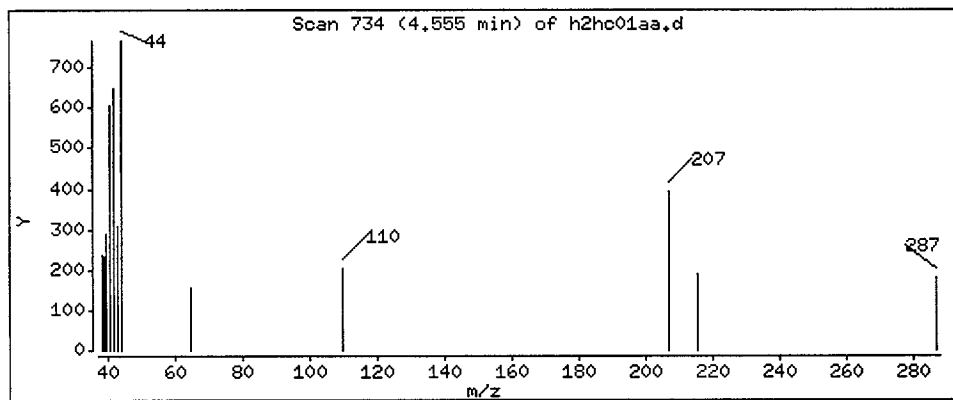
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

Concentration: 0.010061 ug

39 \*THF



Data File: /chem/gcms/mz.i/Z040706.b/h2hc01aa.d

Date : 07-APR-2006 11:34

Client ID: C-3101-R3-V0ST TENA

Instrument: mz.i

Sample Info: H2HC01AA,1,0,,

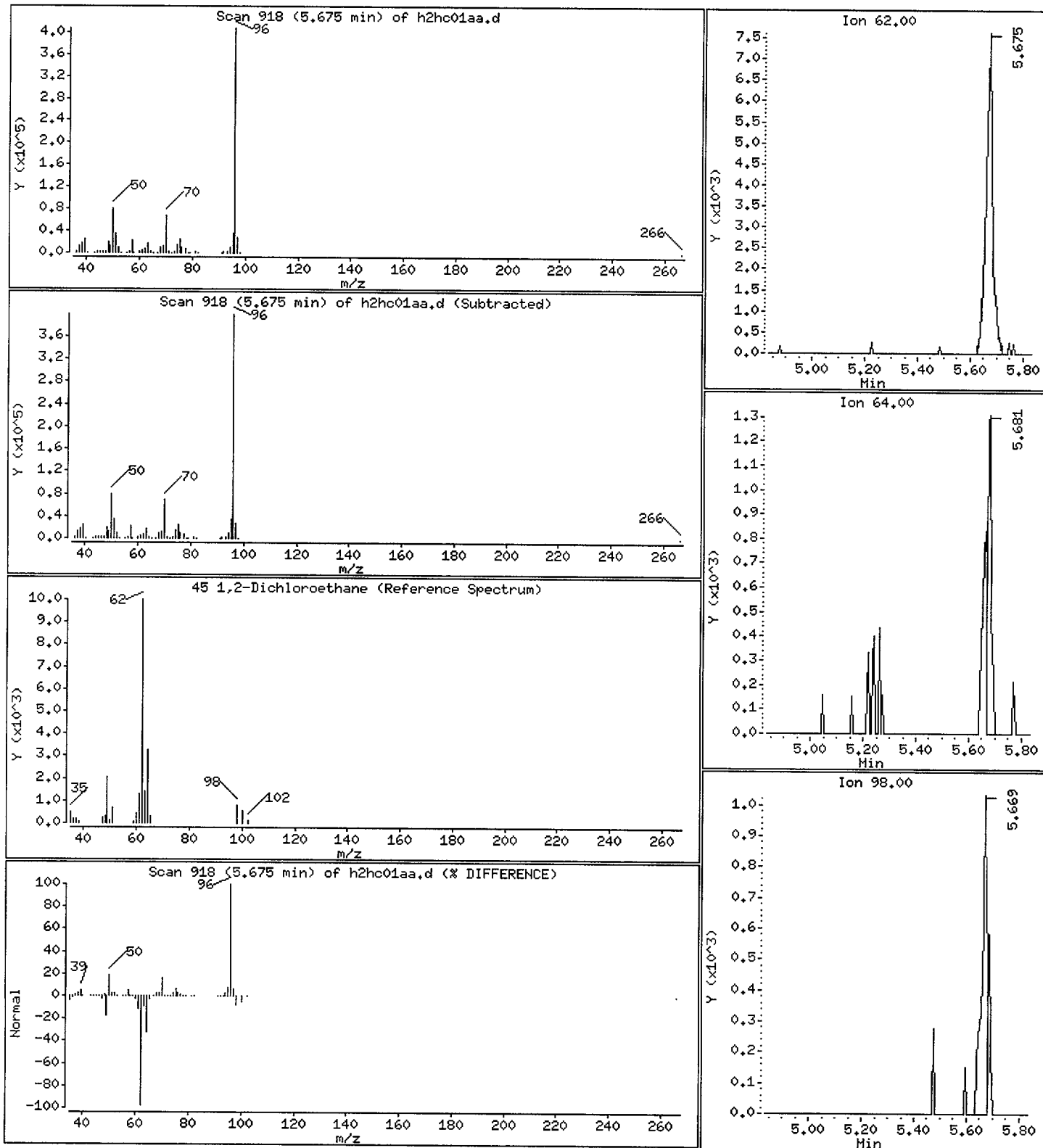
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

45 1,2-Dichloroethane

Concentration: 0.018706 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2hc01aa.d

Date : 07-APR-2006 11:34

Client ID: C-3101-R3-VOST TENA

Instrument: mz.i

Sample Info: H2HC01AA,1,0,,

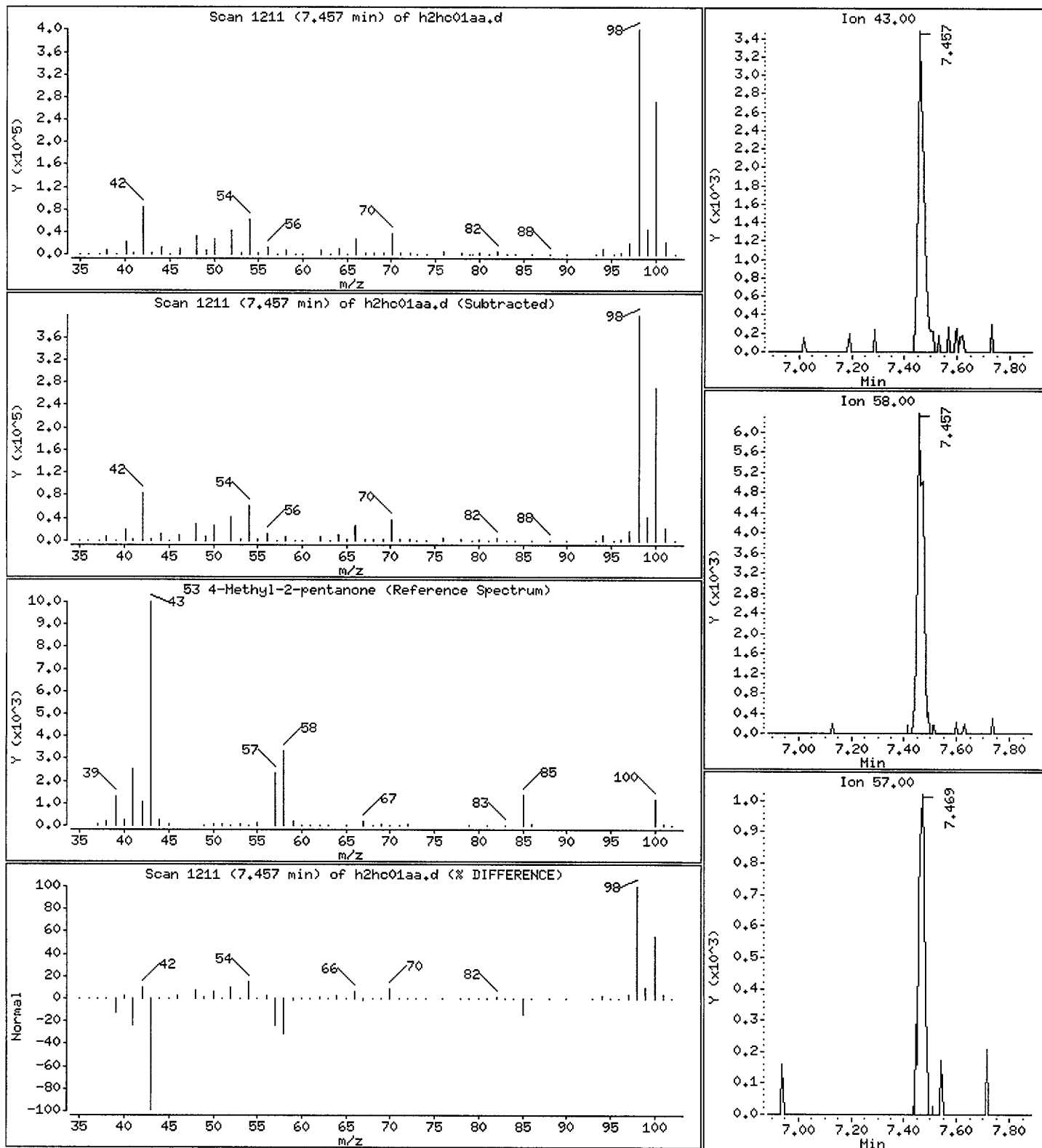
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

53 4-Methyl-2-pentanone

Concentration: 0.017867 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2hc01aa.d

Date : 07-APR-2006 11:34

Client ID: G-3101-R3-VOST TENA

Instrument: mz.i

Sample Info: H2HC01AA,1,0,,

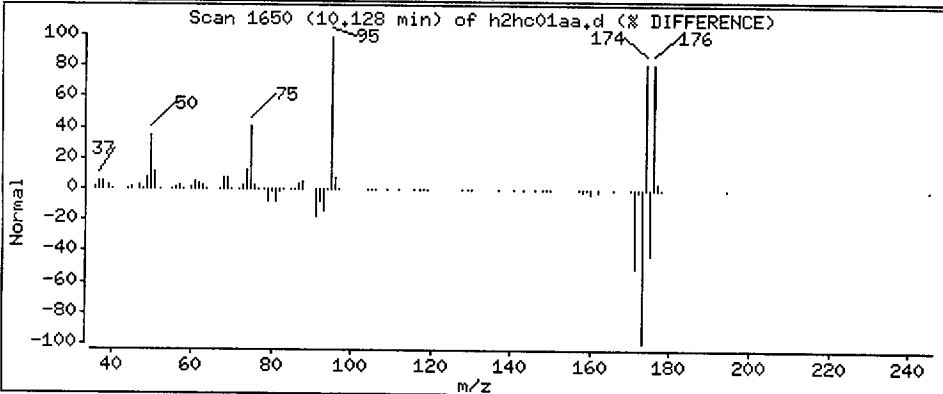
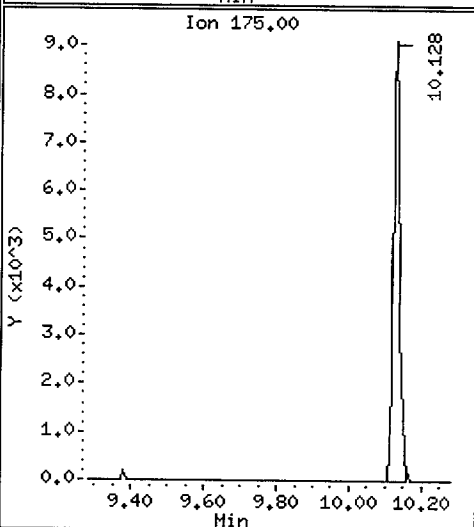
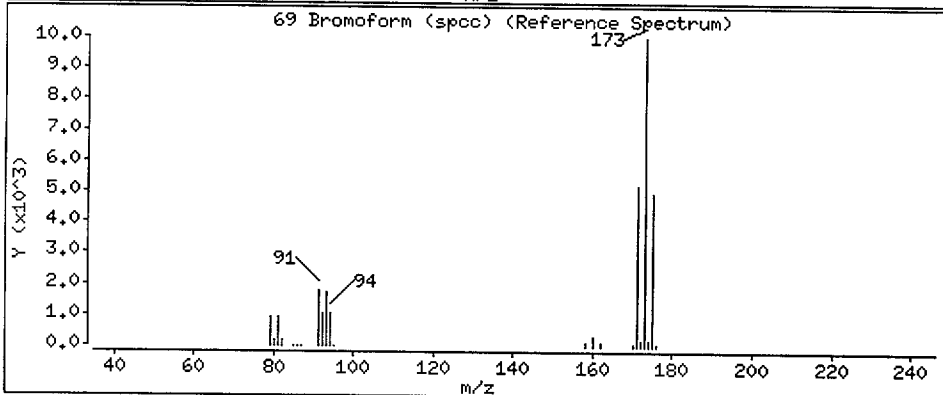
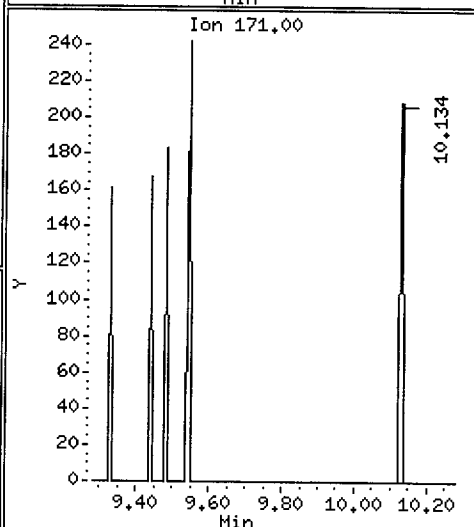
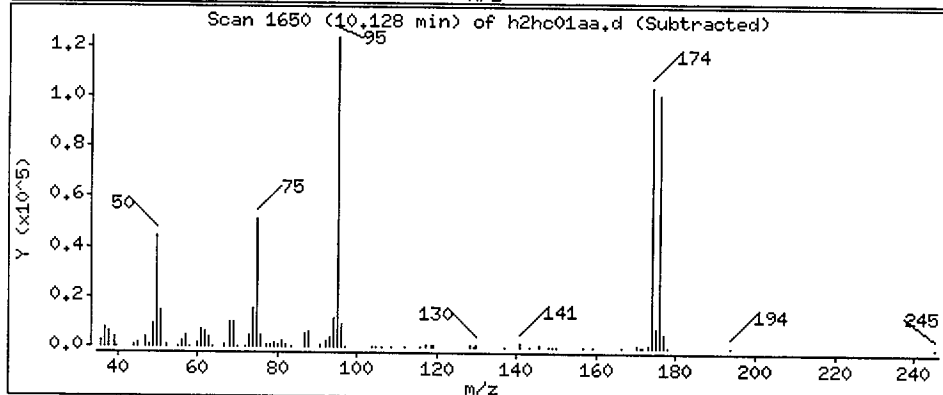
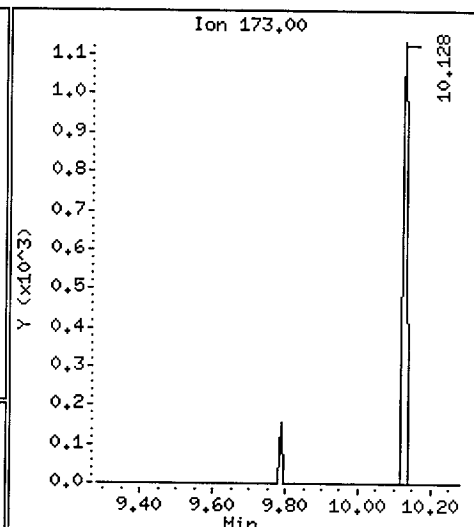
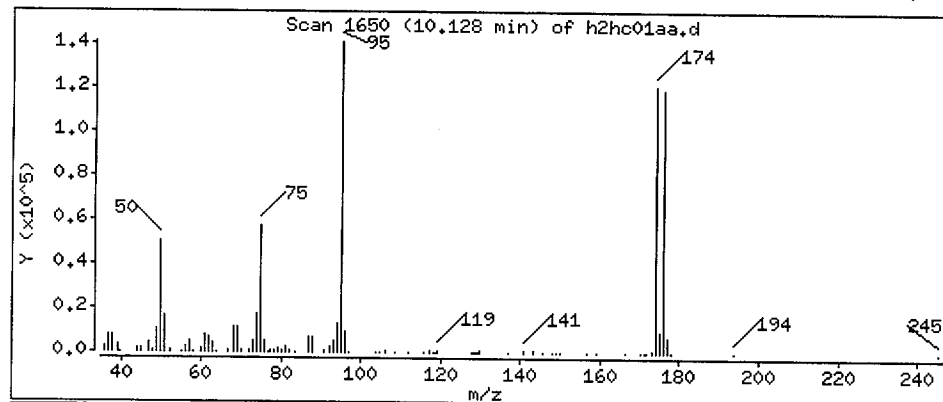
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

69 Bromoform (spcc)

Concentration: 0.029396 ug



Data File: /var/chem/gcms/mz.i/Z040706.b/h2hc01aa.d  
 Report Date: 14-Apr-2006 17:01

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z040706.b/h2hc01aa.d  
 Lab Smp Id: H2HC01AA Client Smp ID: G-3101-R3-VOST TENA  
 Inj Date : 07-APR-2006 11:34  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : H2HC01AA,1,0,,  
 Misc Info : Z040706,8260B\_LM,focus.sub  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
 Meth Date : 14-Apr-2006 15:48 wilesd Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: focus.sub  
 Target Version: 3.50

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable Local Compound Variable

| ISTD              | RT    | HEIGHT | AMOUNT |
|-------------------|-------|--------|--------|
| =====             | ===== | =====  | =====  |
| * 1 Fluorobenzene | 5.675 | 936010 | 10.000 |

| RT    | HEIGHT  | CONCENTRATIONS |            |      | QUANT    |           |   | CPND # |
|-------|---------|----------------|------------|------|----------|-----------|---|--------|
|       |         | ON-COL( ug/L)  | FINAL( ug) | QUAL | LIBRARY  | LIB ENTRY |   |        |
| 0.905 | 6298158 | 67.2872939     | 1.6822     | 5    | NIST05.1 | 80        | 1 |        |

Carbon dioxide CAS #: 124-38-9

*7/24/14-16*

Data File: /var/chem/gcms/mz.i/Z040706.b/h2hc01aa.d

Date : 07-APR-2006 11:34

Client ID: G-3101-R3-VOST TENA

Instrument: mz.i

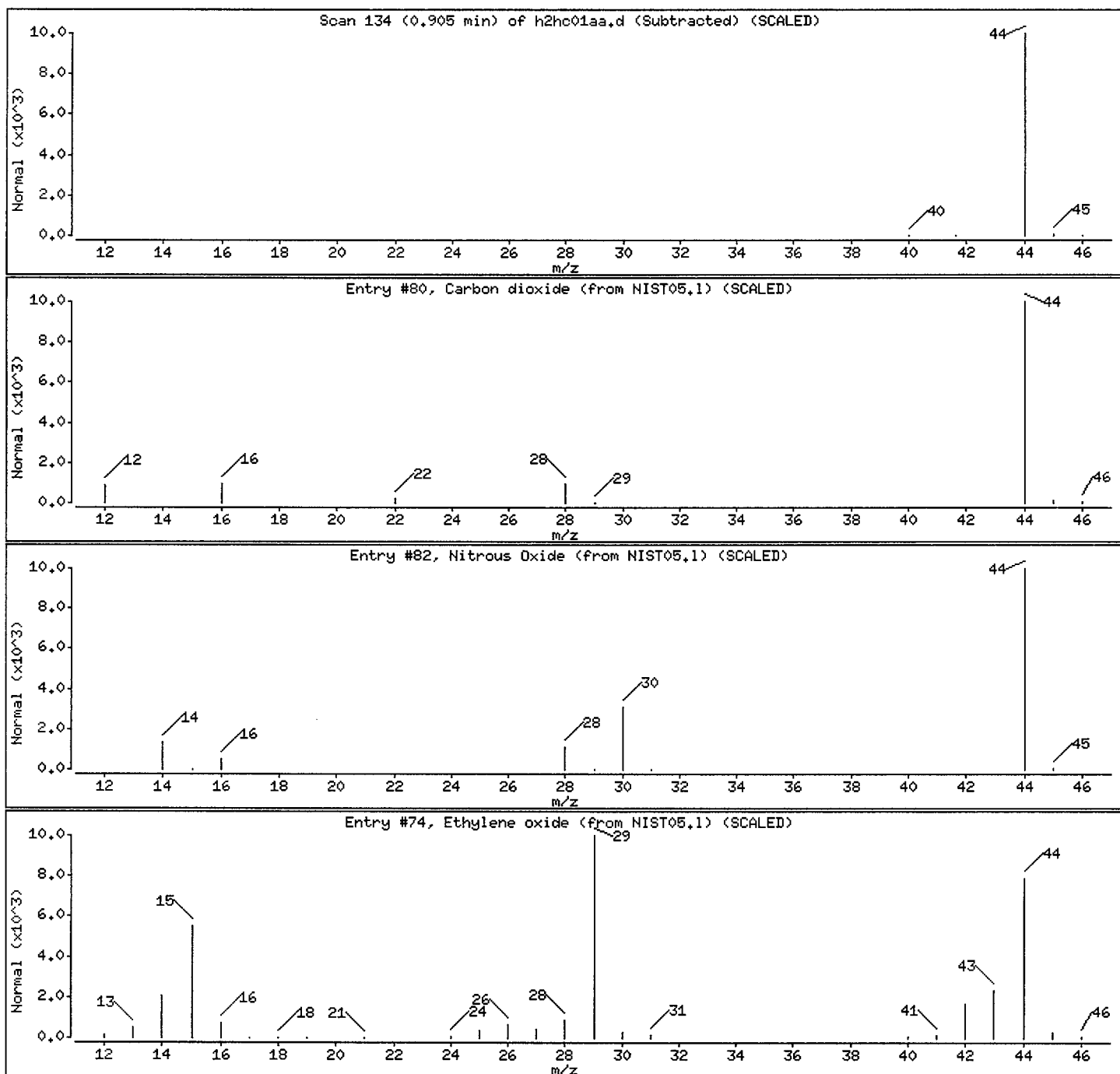
Sample Info: H2HC01AA,1,0,,

Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Carbon dioxide                | 124-38-9   | NIST05.1 | 80    | 5       | CO2     | 44     |
| Nitrous Oxide                 | 10024-97-2 | NIST05.1 | 82    | 3       | N2O     | 44     |
| Ethylene oxide                | 75-21-8    | NIST05.1 | 74    | 2       | C2H4O   | 44     |



## STL Knoxville - ACS

Client Sample ID: G-3102-R3-VOST DI WATER TB

## GC/MS Volatiles

Lot-Sample #...: H6D030169-036    Work Order #...: H2HC11AA    Matrix.....: WATER  
 Date Sampled...: 03/28/06    Date Received...: 04/02/06  
 Prep Date.....: 04/05/06    Analysis Date...: 04/05/06  
 Prep Batch #...: 6095253  
 Dilution Factor: 1    Method.....: SW846 8260B

| PARAMETER                        | RESULT        | REPORTING  |             |             |
|----------------------------------|---------------|------------|-------------|-------------|
|                                  |               | LIMIT      | UNITS       | MDL         |
| <b>Acetone</b>                   | <b>4.1 J</b>  | <b>10</b>  | <b>ug/L</b> | <b>1.4</b>  |
| Acrylonitrile                    | ND            | 20         | ug/L        | 2.7         |
| Benzene                          | ND            | 1.0        | ug/L        | 0.10        |
| Bromobenzene                     | ND            | 1.0        | ug/L        | 0.11        |
| Bromochloromethane               | ND            | 1.0        | ug/L        | 0.24        |
| <b>Bromodichloromethane</b>      | <b>2.7</b>    | <b>1.0</b> | <b>ug/L</b> | <b>0.10</b> |
| <b>Bromoform</b>                 | <b>0.86 J</b> | <b>1.0</b> | <b>ug/L</b> | <b>0.14</b> |
| Bromomethane                     | ND            | 2.0        | ug/L        | 0.38        |
| 2-Butanone                       | ND            | 5.0        | ug/L        | 0.75        |
| n-Butylbenzene                   | ND            | 1.0        | ug/L        | 0.10        |
| sec-Butylbenzene                 | ND            | 1.0        | ug/L        | 0.10        |
| tert-Butylbenzene                | ND            | 1.0        | ug/L        | 0.24        |
| Carbon disulfide                 | ND            | 1.0        | ug/L        | 0.10        |
| Carbon tetrachloride             | ND            | 1.0        | ug/L        | 0.12        |
| Chlorobenzene                    | ND            | 1.0        | ug/L        | 0.10        |
| <b>Chlorodibromomethane</b>      | <b>1.1</b>    | <b>1.0</b> | <b>ug/L</b> | <b>0.20</b> |
| Chloroethane                     | ND            | 2.0        | ug/L        | 0.24        |
| <b>Chloroform</b>                | <b>8.0</b>    | <b>1.0</b> | <b>ug/L</b> | <b>0.10</b> |
| Chloromethane                    | ND            | 2.0        | ug/L        | 0.12        |
| 2-Chlorotoluene                  | ND            | 1.0        | ug/L        | 0.24        |
| 4-Chlorotoluene                  | ND            | 1.0        | ug/L        | 0.21        |
| 1,2-Dibromo-3-chloro-<br>propane | ND            | 2.0        | ug/L        | 0.45        |
| 1,2-Dibromoethane                | ND            | 1.0        | ug/L        | 0.24        |
| Dibromomethane                   | ND            | 1.0        | ug/L        | 0.21        |
| 1,2-Dichlorobenzene              | ND            | 1.0        | ug/L        | 0.10        |
| 1,3-Dichlorobenzene              | ND            | 1.0        | ug/L        | 0.10        |
| 1,4-Dichlorobenzene              | ND            | 1.0        | ug/L        | 0.12        |
| Dichlorodifluoromethane          | ND            | 2.0        | ug/L        | 0.15        |
| 1,1-Dichloroethane               | ND            | 1.0        | ug/L        | 0.10        |
| 1,2-Dichloroethane               | ND            | 1.0        | ug/L        | 0.10        |
| cis-1,2-Dichloroethene           | ND            | 1.0        | ug/L        | 0.12        |
| trans-1,2-Dichloroethene         | ND            | 1.0        | ug/L        | 0.10        |
| 1,1-Dichloroethene               | ND            | 1.0        | ug/L        | 0.10        |
| 1,2-Dichloropropane              | ND            | 1.0        | ug/L        | 0.10        |
| 1,3-Dichloropropane              | ND            | 1.0        | ug/L        | 0.17        |
| 2,2-Dichloropropane              | ND            | 1.0        | ug/L        | 0.11        |
| cis-1,3-Dichloropropene          | ND            | 1.0        | ug/L        | 0.10        |
| trans-1,3-Dichloropropene        | ND            | 1.0        | ug/L        | 0.11        |

(Continued on next page)

## STL Knoxville - ACS

Client Sample ID: G-3102-R3-VOST DI WATER TB

## GC/MS Volatiles

Lot-Sample #...: H6D030169-036 Work Order #...: H2HC11AA Matrix.....: WATER

| PARAMETER                                 | RESULT        | REPORTING<br>LIMIT | UNITS       | MDL         |
|-------------------------------------------|---------------|--------------------|-------------|-------------|
| 1,1-Dichloropropene                       | ND            | 1.0                | ug/L        | 0.10        |
| Ethylbenzene                              | ND            | 1.0                | ug/L        | 0.10        |
| Hexachlorobutadiene                       | ND            | 2.0                | ug/L        | 0.12        |
| 2-Hexanone                                | ND            | 5.0                | ug/L        | 0.76        |
| Iodomethane                               | ND            | 2.0                | ug/L        | 0.12        |
| Isopropylbenzene                          | ND            | 1.0                | ug/L        | 0.10        |
| p-Isopropyltoluene                        | ND            | 1.0                | ug/L        | 0.10        |
| <b>Methylene chloride</b>                 | <b>1.2 J</b>  | <b>2.0</b>         | <b>ug/L</b> | <b>0.23</b> |
| 4-Methyl-2-pentanone                      | ND            | 5.0                | ug/L        | 0.40        |
| Naphthalene                               | ND            | 1.0                | ug/L        | 0.17        |
| n-Propylbenzene                           | ND            | 1.0                | ug/L        | 0.10        |
| Styrene                                   | ND            | 1.0                | ug/L        | 0.10        |
| 1,1,1,2-Tetrachloroethane                 | ND            | 1.0                | ug/L        | 0.12        |
| 1,1,2,2-Tetrachloroethane                 | ND            | 1.0                | ug/L        | 0.15        |
| Tetrachloroethene                         | ND            | 1.0                | ug/L        | 0.10        |
| Tetrahydrofuran                           | ND            | 4.0                | ug/L        | 1.2         |
| Toluene                                   | ND            | 1.0                | ug/L        | 0.10        |
| 1,2,3-Trichlorobenzene                    | ND            | 1.0                | ug/L        | 0.23        |
| 1,2,4-Trichloro-<br>benzene               | ND            | 1.0                | ug/L        | 0.15        |
| 1,1,1-Trichloroethane                     | ND            | 1.0                | ug/L        | 0.10        |
| 1,1,2-Trichloroethane                     | ND            | 1.0                | ug/L        | 0.25        |
| <b>Trichloroethene</b>                    | <b>0.91 J</b> | <b>1.0</b>         | <b>ug/L</b> | <b>0.10</b> |
| Trichlorofluoromethane                    | ND            | 2.0                | ug/L        | 0.12        |
| 1,2,3-Trichloropropane                    | ND            | 1.0                | ug/L        | 0.36        |
| 1,1,2-Trichloro-<br>1,2,2-trifluoroethane | ND            | 1.0                | ug/L        | 0.13        |
| 1,2,4-Trimethylbenzene                    | ND            | 1.0                | ug/L        | 0.11        |
| 1,3,5-Trimethylbenzene                    | ND            | 1.0                | ug/L        | 0.10        |
| Vinyl acetate                             | ND            | 2.0                | ug/L        | 0.24        |
| Vinyl chloride                            | ND            | 1.0                | ug/L        | 0.24        |
| m-Xylene & p-Xylene                       | ND            | 1.0                | ug/L        | 0.20        |
| o-Xylene                                  | ND            | 1.0                | ug/L        | 0.14        |
| Xylenes (total)                           | ND            | 1.0                | ug/L        | 0.30        |

| SURROGATE             | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |
|-----------------------|---------------------|--------------------|
| Dibromofluoromethane  | 111                 | (79 - 120)         |
| 1,2-Dichloroethane-d4 | 113                 | (71 - 127)         |
| Toluene-d8            | 100                 | (80 - 120)         |
| Bromofluorobenzene    | 95                  | (69 - 126)         |

**NOTE (S) :**

J Estimated result. Result is less than RL.



STL Knoxville - ACS

G-3102-R3-VOST DI WATER TB

GC/MS Volatiles

Lot-Sample #: H6D030169-036

Work Order #: H2HC11AA

Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug/L         |

Data File: /var/chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Report Date: 07-Apr-2006 14:27

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z040506.b/h2hc11aa.d  
 Lab Smp Id: H2HC11AA Client Smp ID: G-3102-R3-VOST DI W  
 Inj Date : 05-APR-2006 17:49  
 Operator : 063605 Inst ID: mz.i  
 Smp Info : H2HC11AA,1,0,,  
 Misc Info : Z040506,8260B\_LM,focus.sub  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z040506.b/8260B\_LM.m  
 Meth Date : 06-Apr-2006 17:11 tillerm Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: focus.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf\*Vt/(Vo\*1000) \* CpndVariable

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                  | QUANT SIG |        | CONCENTRATIONS |         |          |                      |                  |
|----------------------------|-----------|--------|----------------|---------|----------|----------------------|------------------|
|                            | MASS      | RT     | EXP RT         | REL RT  | RESPONSE | ON-COLUMN<br>( ug/L) | FINAL<br>( ug/L) |
| =====                      | =====     | ==     | =====          | =====   | =====    | =====                | =====            |
| * 1 Fluorobenzene          | 96        | 5.669  | 5.667          | (1.000) | 959281   | 10.0000              |                  |
| * 2 Chlorobenzene-d5       | 119       | 8.929  | 8.933          | (1.000) | 180093   | 10.0000              |                  |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 11.484 | 11.488         | (1.000) | 218576   | 10.0000              |                  |
| \$ 5 1,2-Dichloroethane-d4 | 65        | 5.231  | 5.229          | (0.923) | 150460   | 11.3195              | 11.319           |
| \$ 4 Dibromofluoromethane  | 113       | 4.823  | 4.821          | (0.851) | 170820   | 11.1130              | 11.113           |
| \$ 6 Toluene-d8            | 98        | 7.457  | 7.455          | (0.835) | 791989   | 10.0087              | 10.009           |
| \$ 7 4-Bromofluorobenzene  | 95        | 10.122 | 10.126         | (0.881) | 208680   | 9.46675              | 9.4668           |
| 22 Acetone                 | 43        | 2.152  | 2.126          | (0.380) | 4711     | 4.07690              | 4.0769 (M)       |
| 27 Methylene Chloride      | 84        | 2.511  | 2.503          | (0.443) | 19991    | 1.24605              | 1.2460           |
| 40 Chloroform (ccc)        | 83        | 4.610  | 4.608          | (0.813) | 277177   | 7.99694              | 7.9969           |
| 46 Trichloroethene         | 130       | 6.113  | 6.105          | (1.078) | 24234    | 0.91068              | 0.91068          |
| 50 Bromodichloromethane    | 83        | 6.685  | 6.683          | (1.179) | 34462    | 2.65428              | 2.6543           |
| 61 Chlorodibromomethane    | 129       | 8.345  | 8.349          | (0.935) | 3199     | 1.10842              | 1.1084           |
| 69 Bromoform (spcc)        | 173       | 9.781  | 9.779          | (1.095) | 178      | 0.86320              | 0.86320          |

Data File: /chem/gcms/mz.i/Z040506.b/h2hc11aa.d  
Report Date: 05-Apr-2006 18:06

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /chem/gcms/mz.i/Z040506.b/h2hc11aa.d  
Lab Smp Id: H2HC11AA Client Smp ID: G-3102-R3-VOST DI W  
Inj Date : 05-APR-2006 17:49  
Operator : 063605 Inst ID: mz.i  
Smp Info : H2HC11AA,1,0,,  
Misc Info : Z040506,8260B\_LM,focus.sub  
Comment : Volatile Organics by GC/MS  
Method : /var/chem/gcms/mz.i/Z040506.b/8260B\_LM.m  
Meth Date : 05-Apr-2006 15:47 tillerm Quant Type: ISTD  
Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf\*Vt/(Vo\*1000) \* CpndVariable

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                  | QUANT | SIG | MASS   | RT     | EXP RT  | REL RT | RESPONSE           | CONCENTRATIONS       |                  |
|----------------------------|-------|-----|--------|--------|---------|--------|--------------------|----------------------|------------------|
|                            |       |     |        |        |         |        |                    | ON-COLUMN<br>( ug/L) | FINAL<br>( ug/L) |
| * 1 Fluorobenzene          | 96    |     | 5.669  | 5.667  | (1.000) | 959281 | 10.0000            |                      |                  |
| * 2 Chlorobenzene-d5       | 119   |     | 8.929  | 8.933  | (1.000) | 180093 | 10.0000            |                      |                  |
| * 3 1,4 Dichlorobenzene-d4 | 152   |     | 11.484 | 11.488 | (1.000) | 218576 | 10.0000            |                      |                  |
| \$ 5 1,2-Dichloroethane-d4 | 65    |     | 5.231  | 5.229  | (0.923) | 150460 | 11.3195            | 11.320               |                  |
| \$ 4 Dibromofluoromethane  | 113   |     | 4.823  | 4.821  | (0.851) | 170820 | 11.1130            | 11.113               |                  |
| \$ 6 Toluene-d8            | 98    |     | 7.457  | 7.455  | (0.835) | 791989 | 10.0087            | 10.009               |                  |
| \$ 7 4-Bromofluorobenzene  | 95    |     | 10.122 | 10.126 | (0.881) | 208680 | 9.46677            | 9.4668               |                  |
| 22 Acetone                 | 43    |     | 2.134  | 2.126  | (0.376) | 1817   | 3.56196            | 3.5620 m             |                  |
| 23 *Iodomethane            | 142   |     | 2.195  | 2.181  | (0.387) | 1236   | <del>0.57168</del> | <del>0.57168</del>   |                  |
| 27 Methylene Chloride      | 84    |     | 2.511  | 2.503  | (0.443) | 19991  | 1.24608            | 1.2461               |                  |
| 39 *THF                    | 42    |     | 4.561  | 4.529  | (0.805) | 1027   | <del>0.45143</del> | <del>0.45143</del>   |                  |
| 40 Chloroform (ccc)        | 83    |     | 4.610  | 4.608  | (0.813) | 277177 | 7.99695            | 7.9970               |                  |
| 42 Carbon Tetrachloride    | 117   |     | 4.610  | 5.028  | (0.813) | 3442   | <del>0.47388</del> | <del>0.47388</del>   |                  |
| 45 1,2-Dichloroethane      | 62    |     | 5.662  | 5.326  | (0.999) | 14019  | <del>0.69984</del> | <del>0.69984</del>   |                  |

ms  
4/3/06

Data File: /chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Report Date: 05-Apr-2006 18:06

| Compounds                    | QUANT SIG |       |        |         |          |                    | CONCENTRATIONS     |  |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|--------------------|--|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | ON-COLUMN          | FINAL              |  |
| =====                        | =====     | ==    | =====  | =====   | =====    | ( ug/L)            | ( ug/L)            |  |
| 46 Trichloroethene           | 130       | 6.113 | 6.105  | (1.078) | 24234    | 0.91070            | 0.91070            |  |
| 50 Bromodichloromethane      | 83        | 6.685 | 6.683  | (1.179) | 34462    | 2.65432            | 2.6543             |  |
| 53 4-Methyl-2-pentanone      | 43        | 7.457 | 7.376  | (1.316) | 6180     | <del>0.73783</del> | <del>0.73783</del> |  |
| 55 trans-1,3-Dichloropropene | 75        | 7.469 | 7.784  | (0.836) | 209      | <del>0.63807</del> | <del>0.63807</del> |  |
| 61 Chlorodibromomethane      | 129       | 8.345 | 8.349  | (0.935) | 3199     | 1.10844            | 1.1084             |  |
| 69 Bromoform (spcc)          | 173       | 9.781 | 9.779  | (1.095) | 178      | 0.86336            | 0.86336            |  |

MA  
4/7/06

Data File: /chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Report Date: 05-Apr-2006 18:06

## STL Knoxville

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: mz.i

Lab File ID: h2hc11aa.d

Lab Smp Id: H2HC11AA

Analysis Type: VOA

Quant Type: ISTD

Operator: 063605

Method File: /var/chem/gcms/mz.i/Z040506.b/8260B\_LM.m

Misc Info: Z040506,8260B\_LM,focus.sub

Calibration Date: 05-APR-2006

Calibration Time: 14:42

Client Smp ID: G-3102-R3-VOST DI W

Level: LOW

Sample Type: WATER

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE | %DIFF  |
|---------------------|----------|------------|---------|--------|--------|
|                     |          | LOWER      | UPPER   |        |        |
| 1 Fluorobenzene     | 1078707  | 539354     | 2157414 | 959281 | -11.07 |
| 2 Chlorobenzene-d5  | 188899   | 94450      | 377798  | 180093 | -4.66  |
| 3 1,4 Dichlorobenze | 220143   | 110072     | 440286  | 218576 | -0.71  |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 5.67     | 5.17     | 6.17  | 5.67   | 0.04  |
| 2 Chlorobenzene-d5  | 8.93     | 8.43     | 9.43  | 8.93   | -0.05 |
| 3 1,4 Dichlorobenze | 11.49    | 10.99    | 11.99 | 11.48  | -0.04 |

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Report Date: 05-Apr-2006 18:06

## STL Knoxville

## RECOVERY REPORT

Client Name: STL Knoxville - ACS

Client SDG: H6D030169

Sample Matrix: LIQUID

Fraction: VOA

Lab Smp Id: H2HC11AA

Client Smp ID: G-3102-R3-VOST DI W

Level: LOW

Operator: 063605

Data Type: MS DATA

SampleType: SAMPLE

SpikeList File: allcmpds.spk

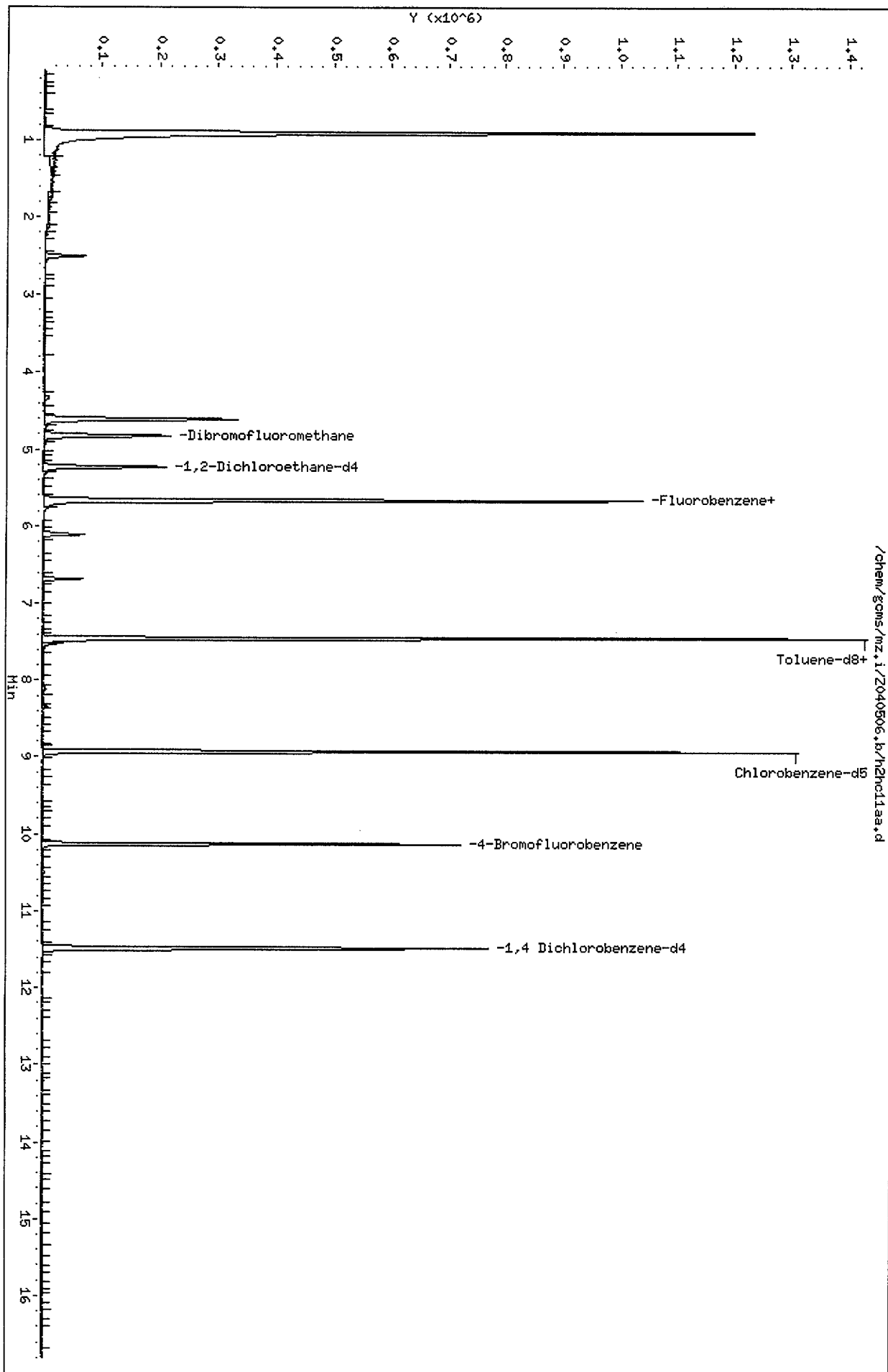
Quant Type: ISTD

Sublist File: focus.sub

Method File: /var/chem/gcms/mz.i/Z040506.b/8260B\_LM.m

Misc Info: Z040506,8260B\_LM,focus.sub

| SURROGATE COMPOUND      | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|-------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 5 1,2-Dichloroethane | 10.000                | 11.320                    | 113.20         | 71-127 |
| \$ 4 Dibromofluorometha | 10.000                | 11.113                    | 111.13         | 79-120 |
| \$ 6 Toluene-d8         | 10.000                | 10.009                    | 100.09         | 80-120 |
| \$ 7 4-Bromofluorobenze | 10.000                | 9.4668                    | 94.67          | 69-126 |



Data File: /var/chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Date: 05-APR-2006 17:49

Client ID: G-3102-R3-VOST DI W

Instrument: mz.i

Sample Info: H2HC11AA,1,0,,

Purge Volume: 25.0

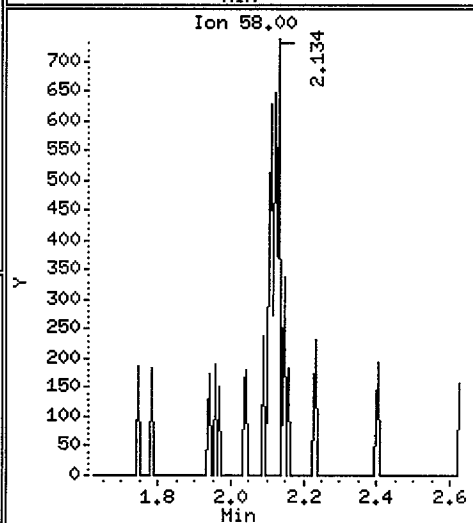
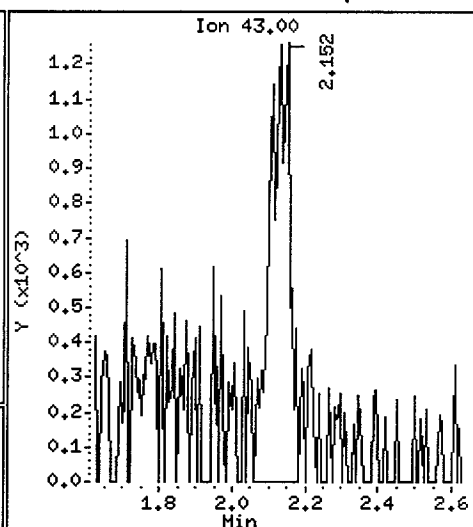
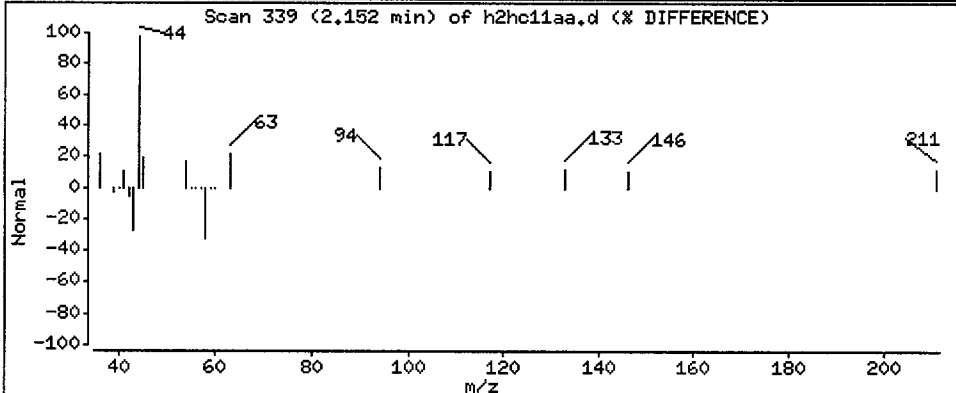
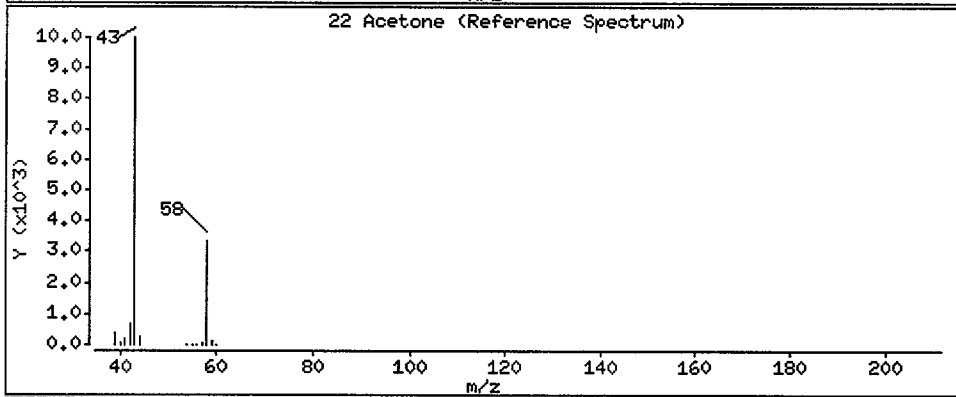
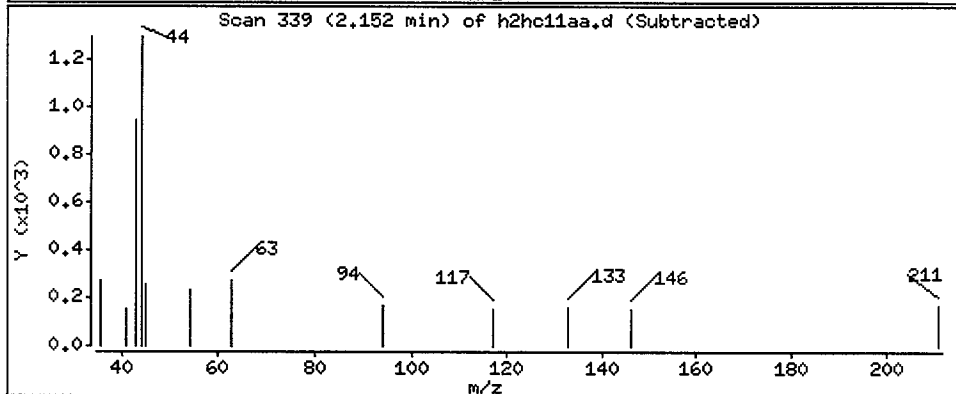
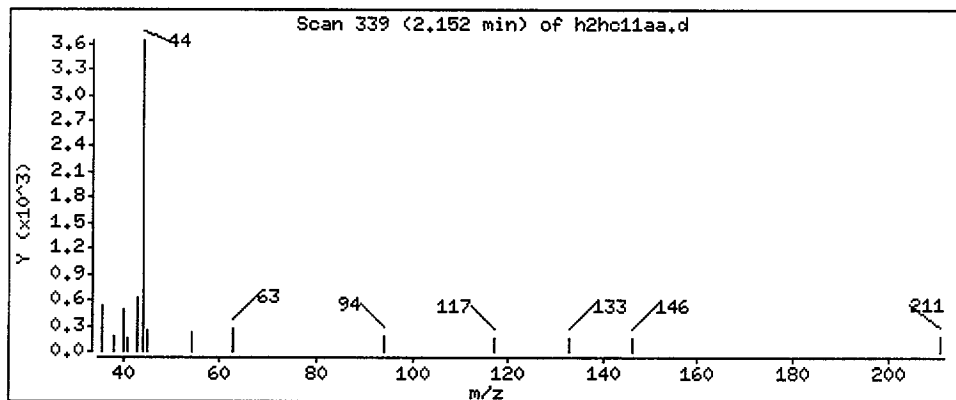
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

22 Acetone

Concentration: 4.0769 ug/L

*not 4/7/06  
split peak*



Data File: /chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Date : 05-APR-2006 17:49

Client ID: G-3102-R3-VOST DI W

Instrument: mz.i

Sample Info: H2HC11AA,1,0,,

Purge Volume: 25.0

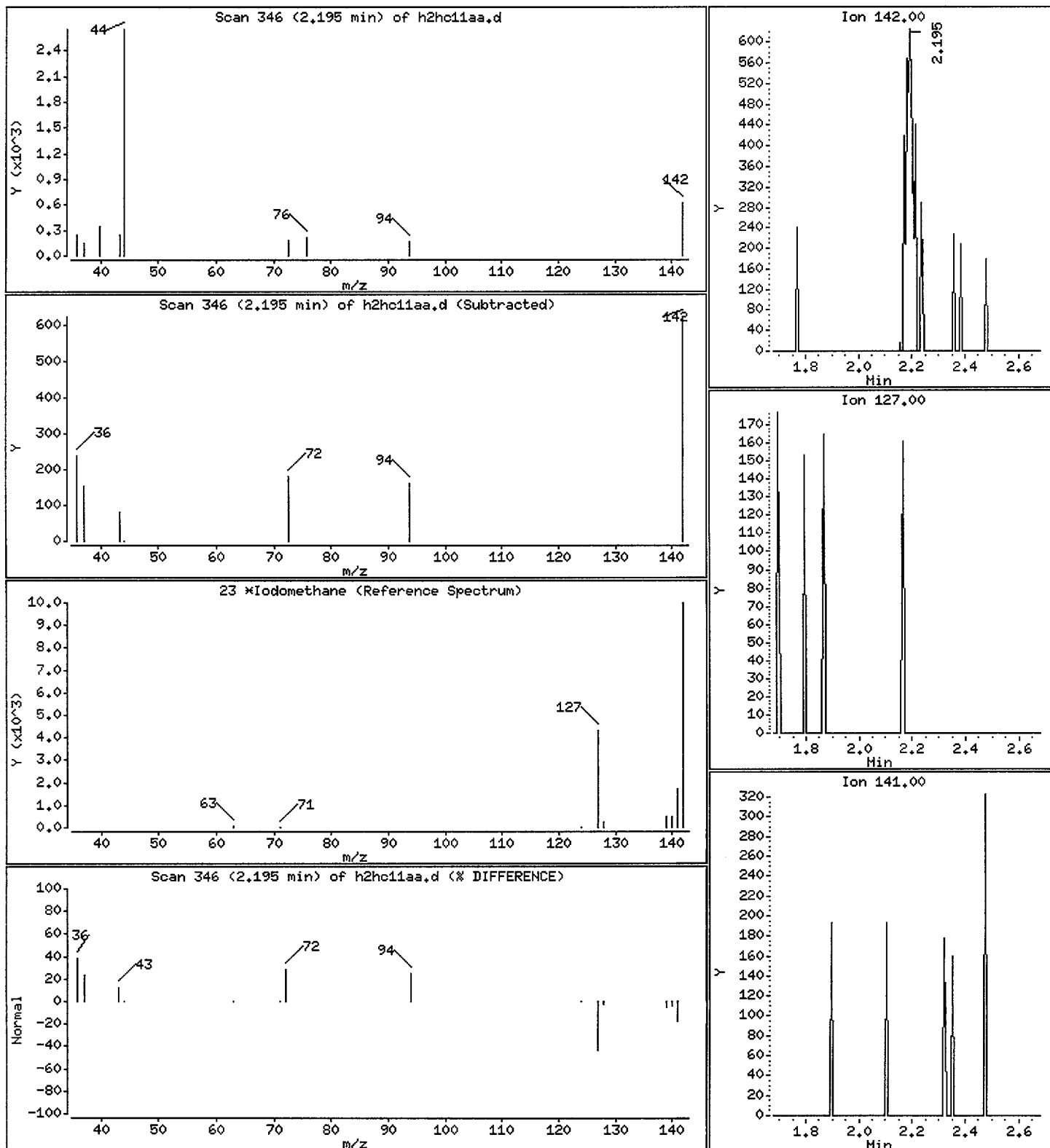
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

23 \*Iodomethane

Concentration: 0.57168 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Date : 05-APR-2006 17:49

Client ID: G-3102-R3-VOST DI W

Instrument: mz.i

Sample Info: H2HC11AA,1,0,,

Purge Volume: 25.0

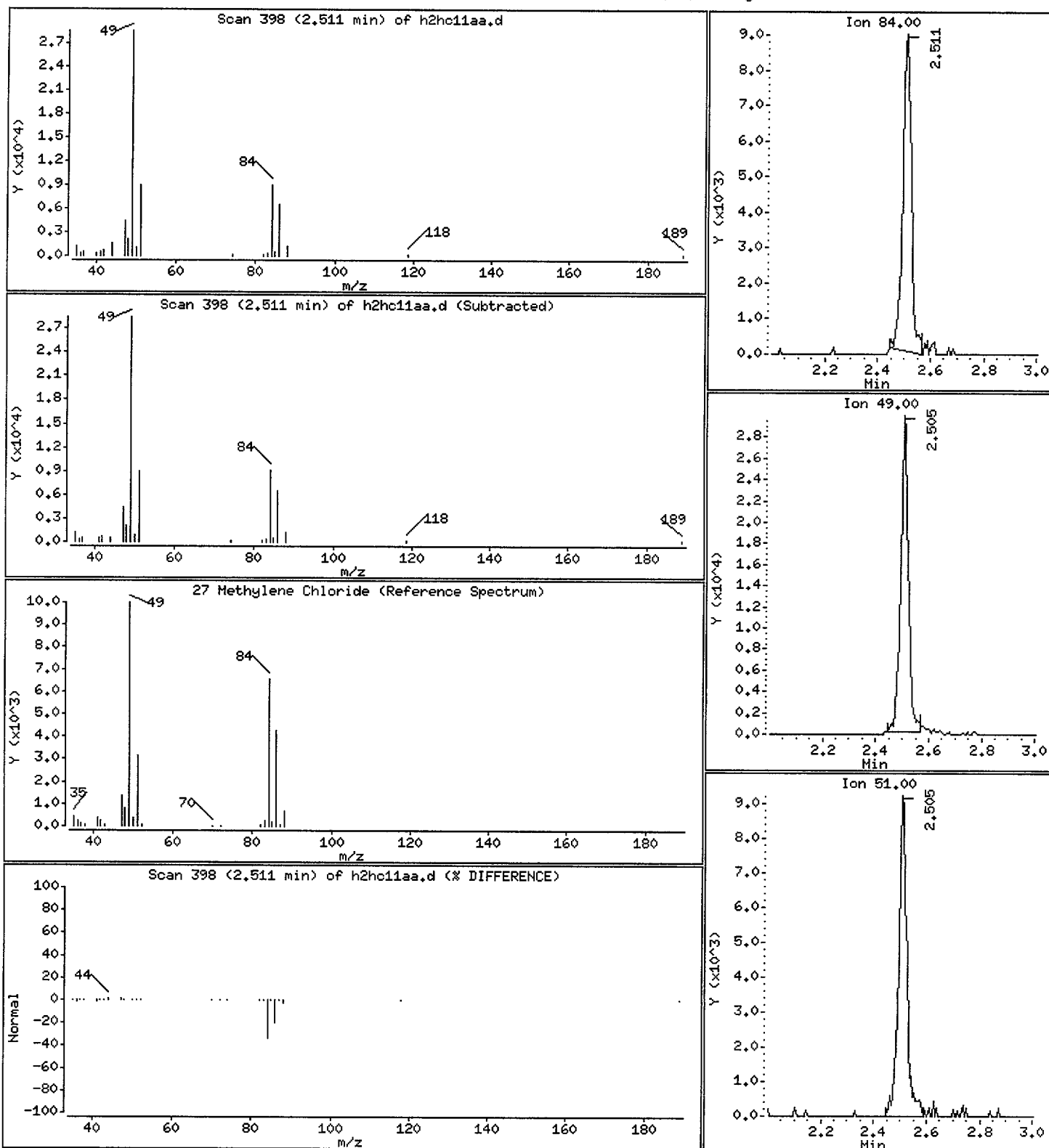
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

27 Methylene Chloride

Concentration: 1.2461 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Date : 05-APR-2006 17:49

Client ID: G-3102-R3-VOST DI W

Instrument: mz.i

Sample Info: H2HC11AA,1,0,,

Purge Volume: 25.0

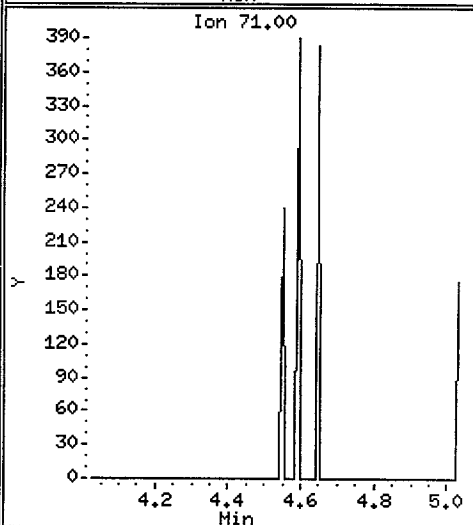
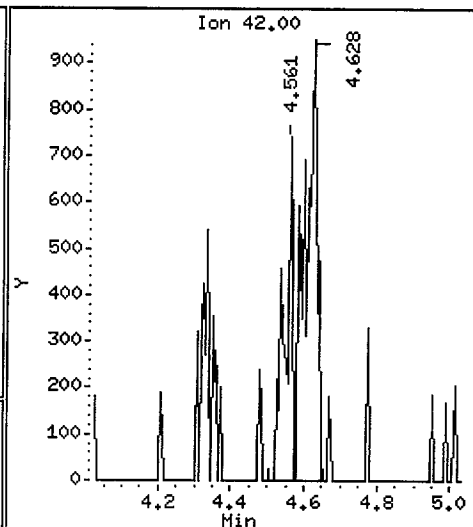
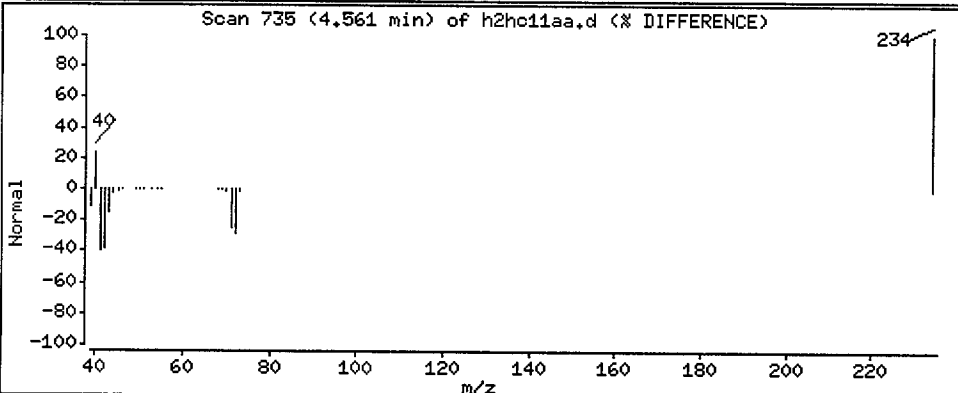
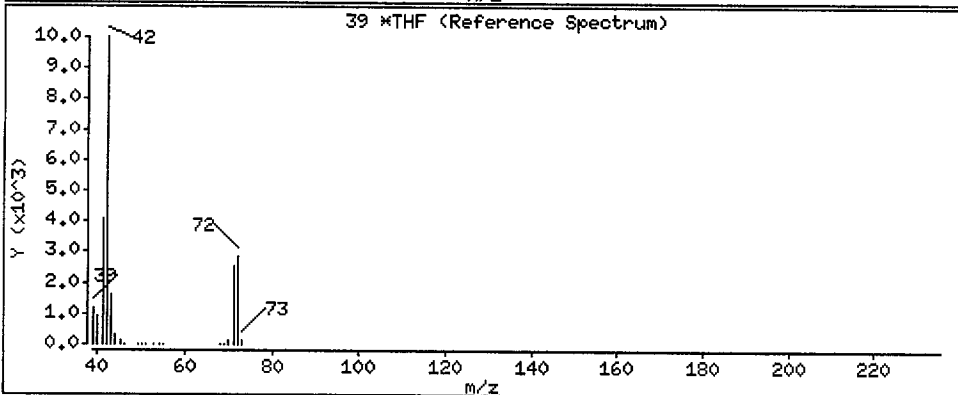
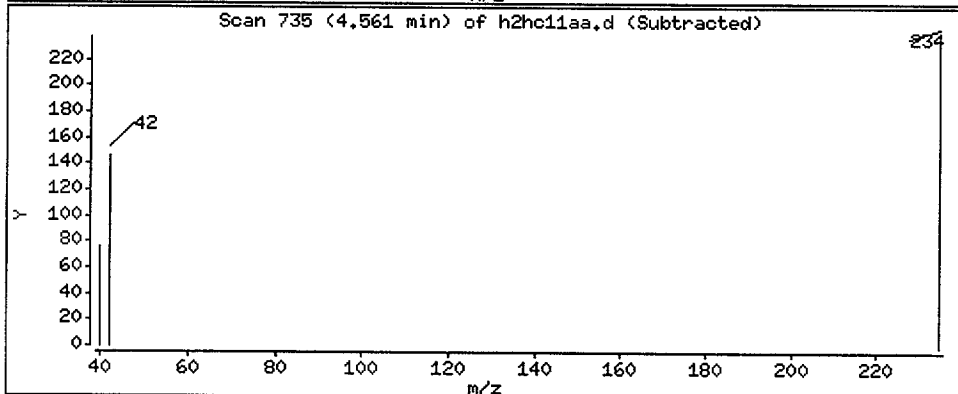
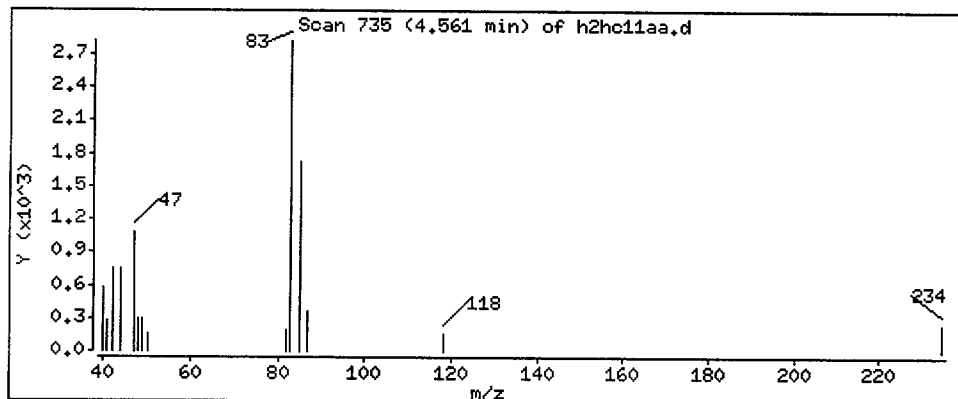
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

39 \*THF

Concentration: 0.45143 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Date : 05-APR-2006 17:49

Client ID: G-3102-R3-VOST DI W

Instrument: mz.i

Sample Info: H2HC11AA,1,0,,

Purge Volume: 25.0

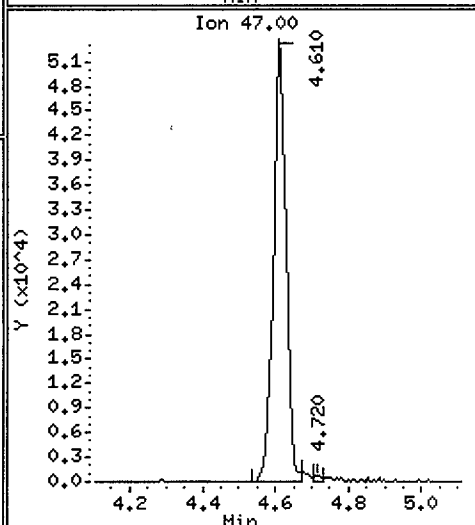
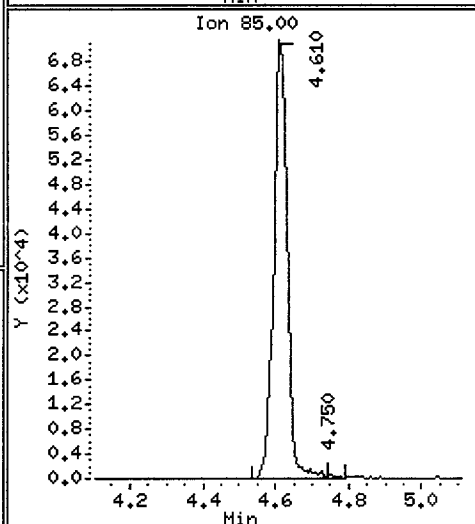
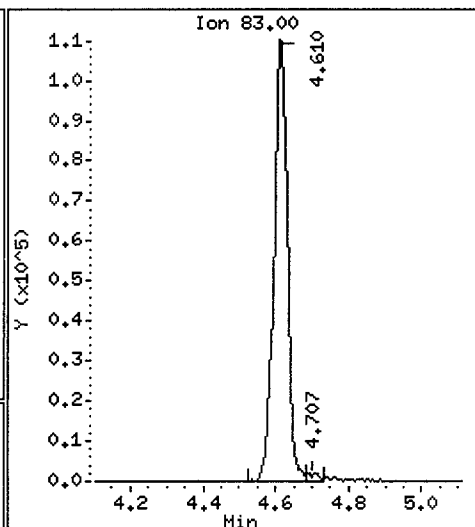
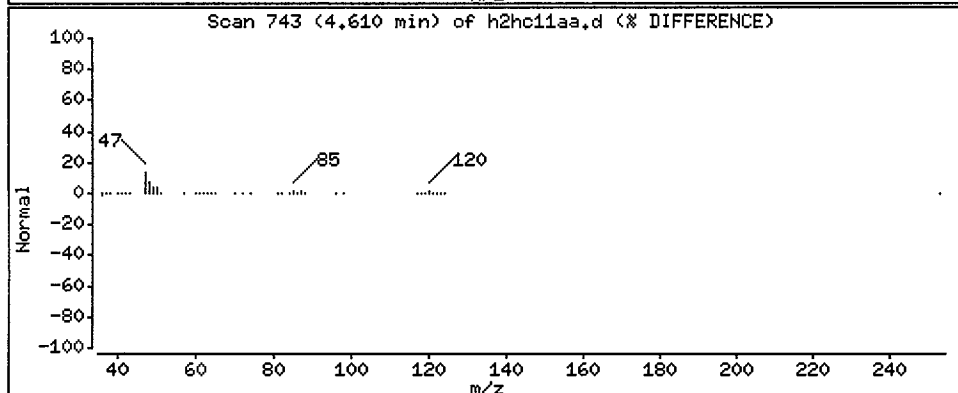
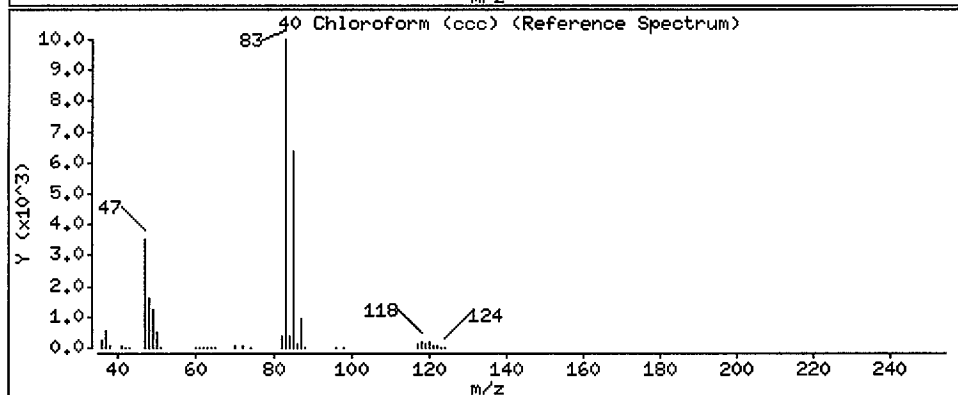
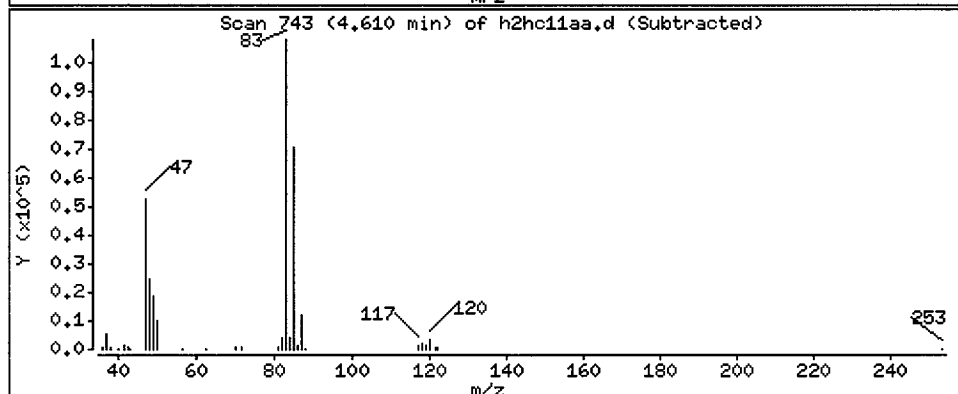
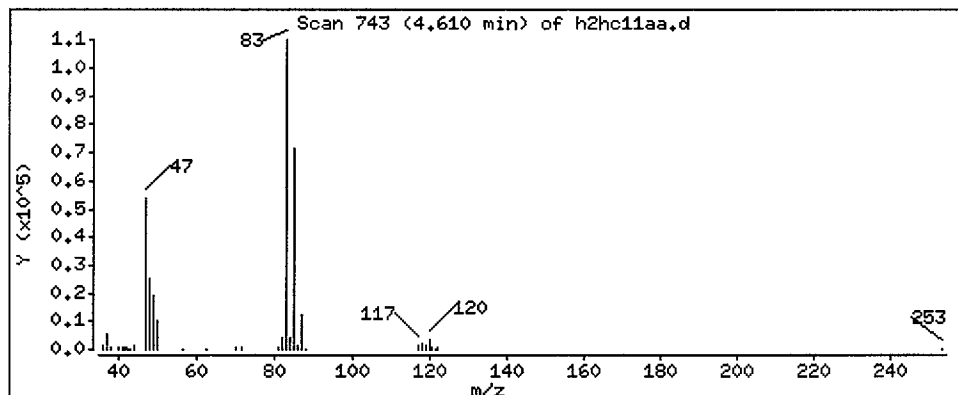
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

40 Chloroform (ccc)

Concentration: 7.9970 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Date : 05-APR-2006 17:49

Client ID: G-3102-R3-VOST DI W

Instrument: mz.i

Sample Info: H2HC11AA,1,0,,

Purge Volume: 25.0

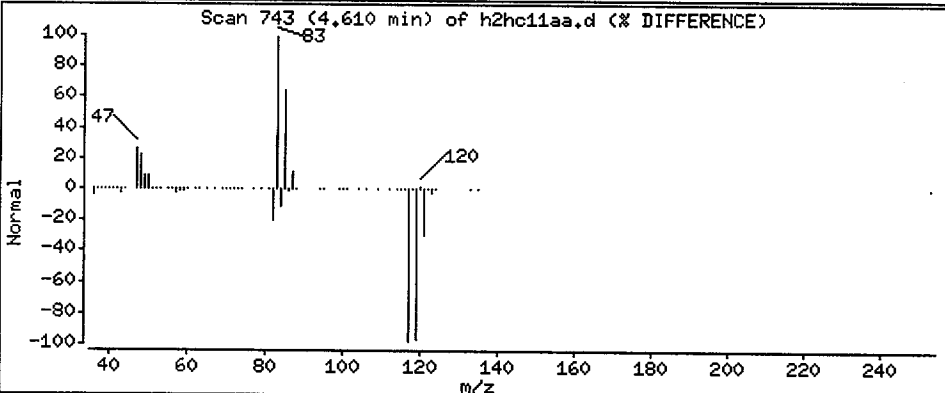
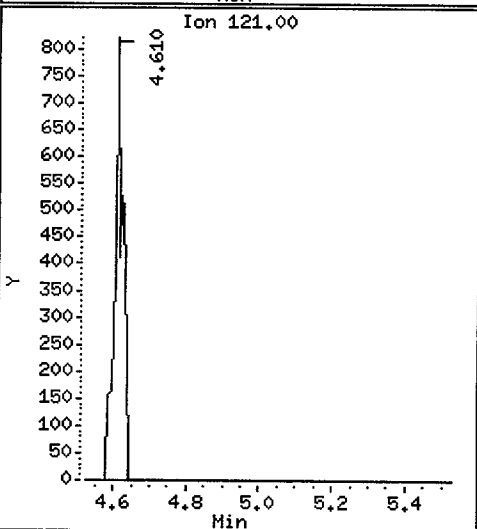
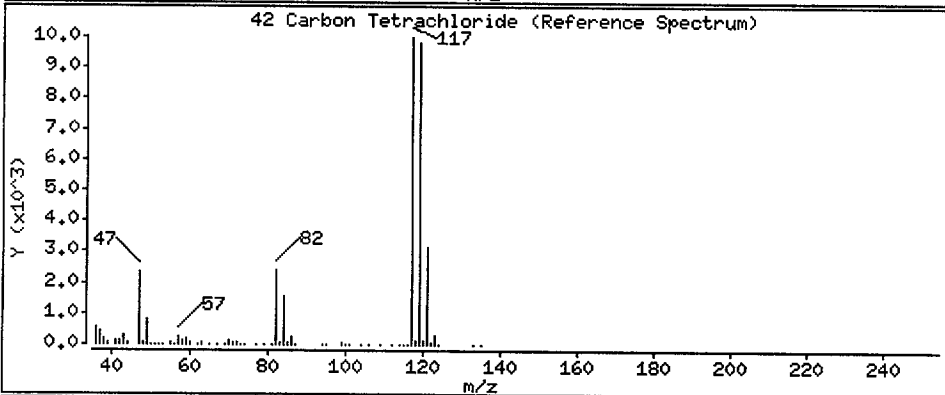
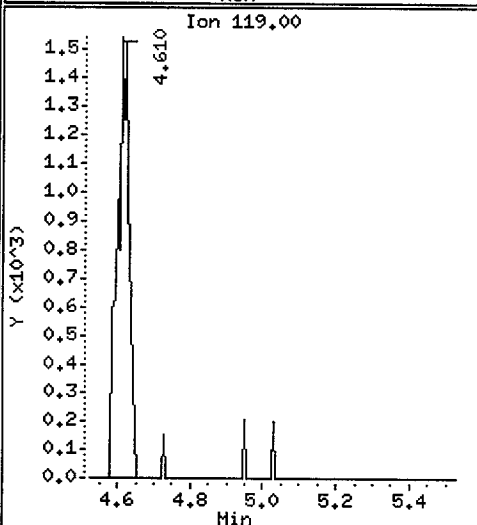
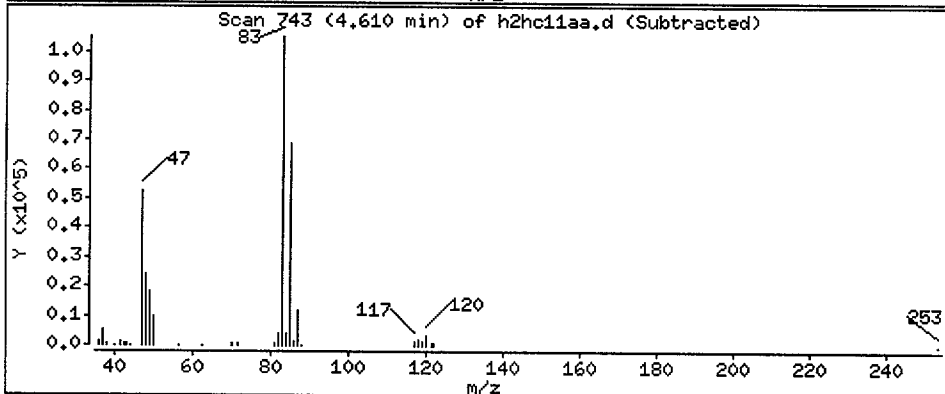
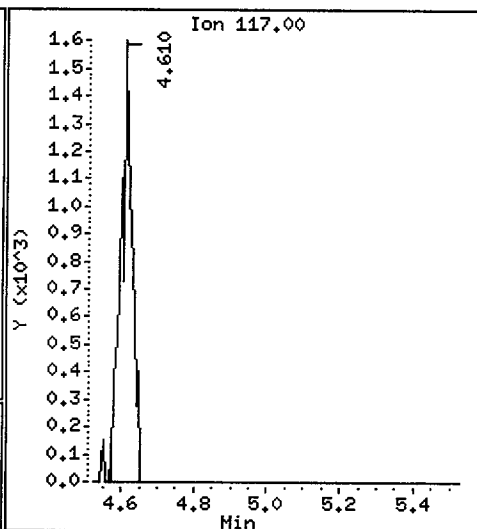
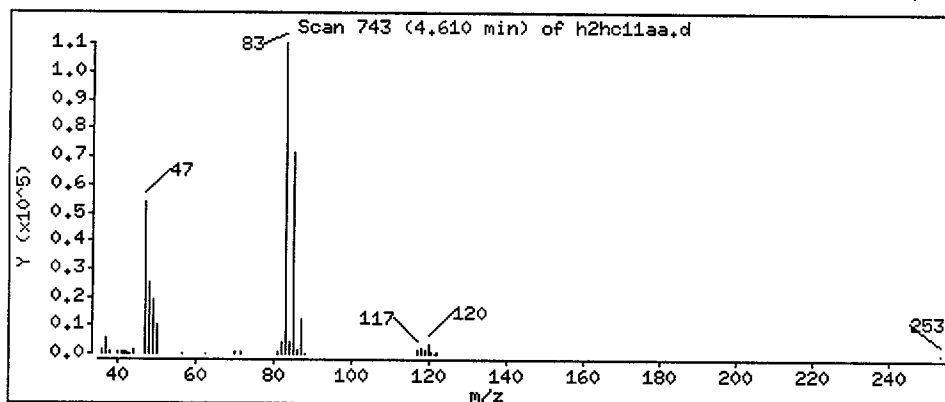
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

42 Carbon Tetrachloride

Concentration: 0.47388 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Date : 05-APR-2006 17:49

Client ID: G-3102-R3-VOST DI W

Instrument: mz.i

Sample Info: H2HC11AA,1,0,,

Purge Volume: 25.0

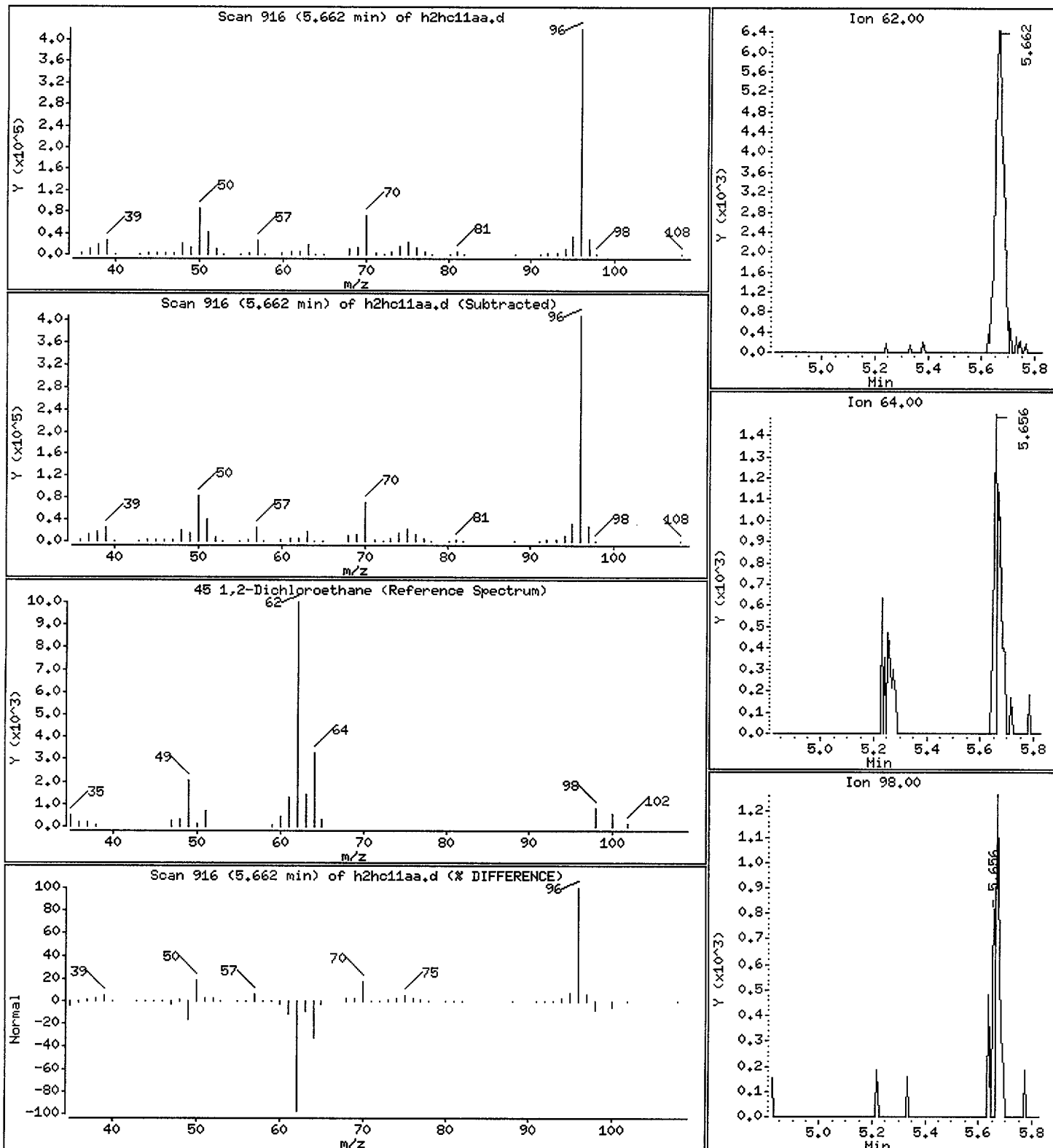
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

45 1,2-Dichloroethane

Concentration: 0.69984 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Date : 05-APR-2006 17:49

Client ID: G-3102-R3-VOST DI W

Instrument: mz.i

Sample Info: H2HC11AA,1,0,,

Purge Volume: 25.0

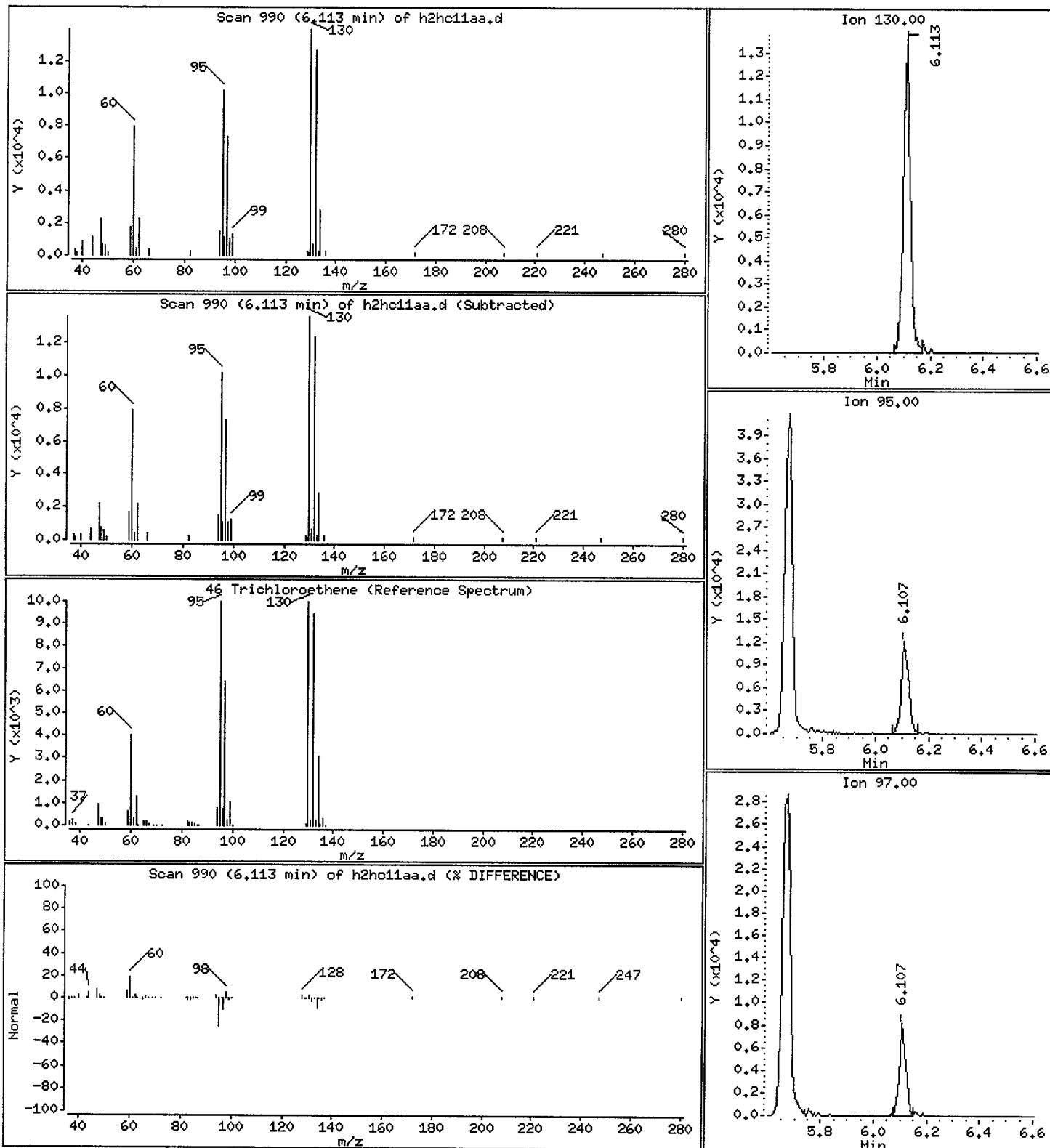
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

46 Trichloroethene

Concentration: 0.91070 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Date: 05-APR-2006 17:49

Client ID: G-3102-R3-VOST DI W

Instrument: mz.i

Sample Info: H2HC11AA,1,0,,

Purge Volume: 25.0

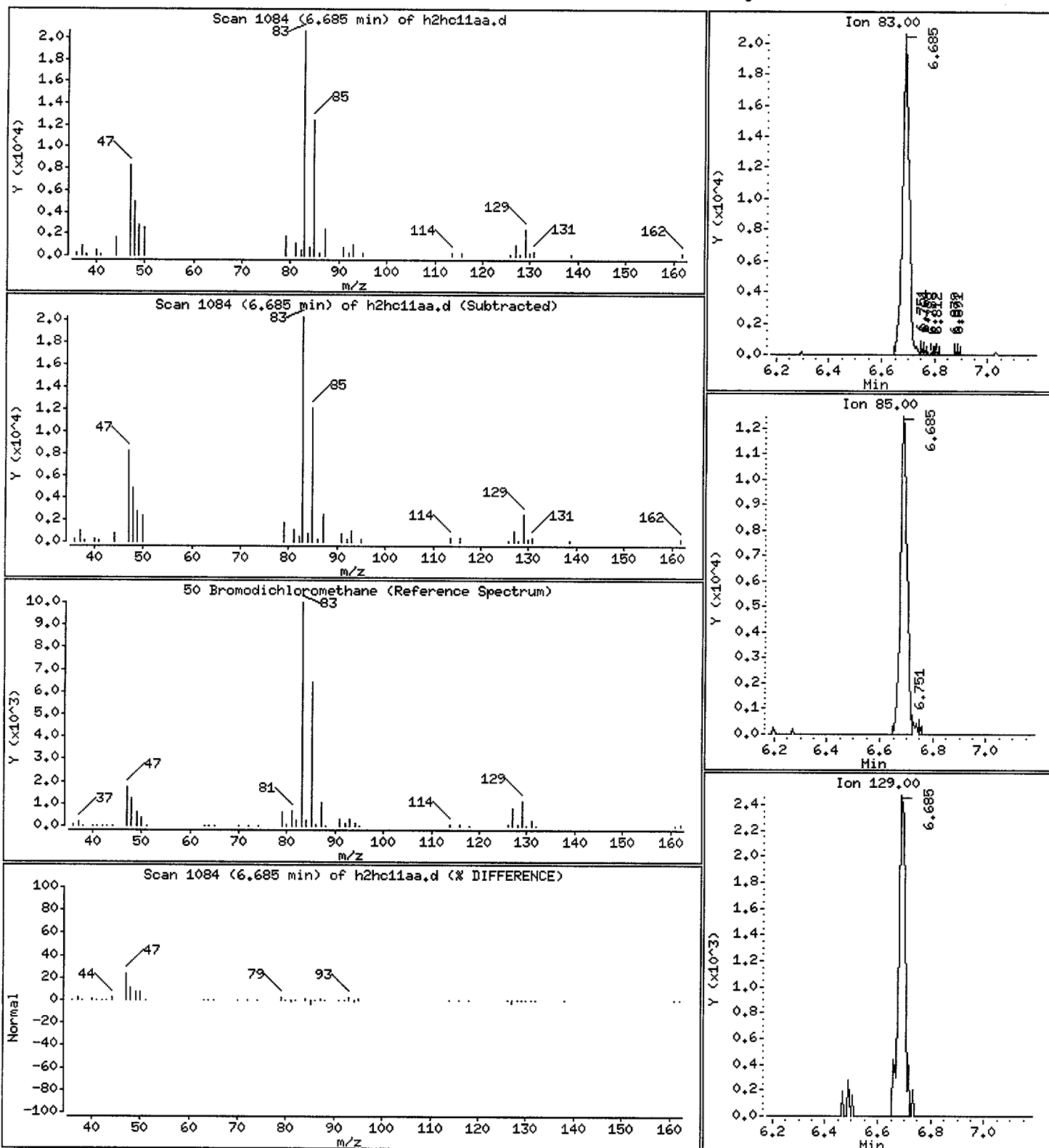
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

50 Bromodichloromethane

Concentration: 2.6543 ug/L





Data File: /chem/gcms/mz.i/2040506.b/h2hc11aa.d

Date : 05-APR-2006 17:49

Client ID: G-3102-R3-VOST DI W

Instrument: mz.i

Sample Info: H2HC11AA,1,0,,

Purge Volume: 25.0

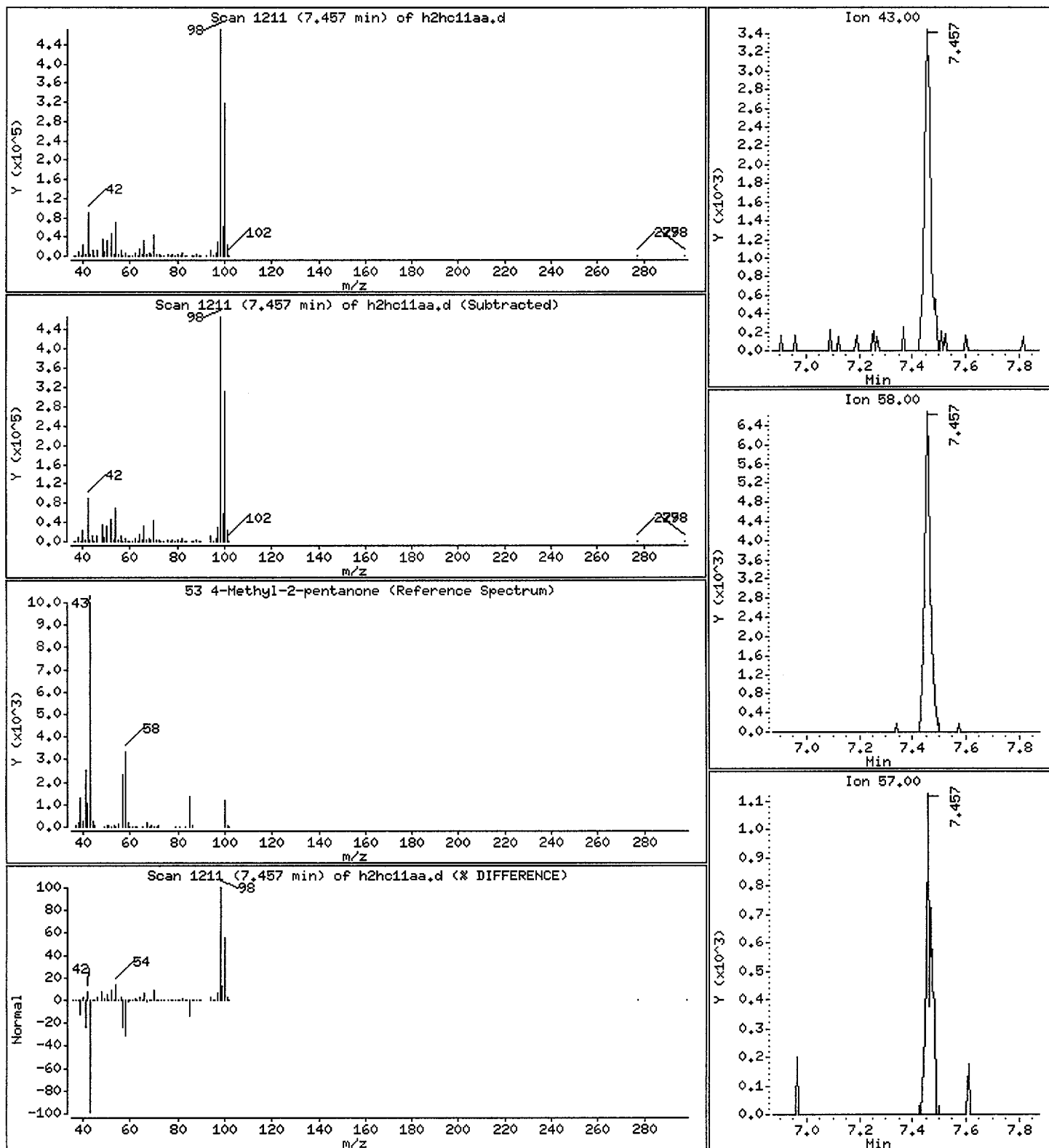
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

53 4-Methyl-2-pentanone

Concentration: 0.73783 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Date: 05-APR-2006 17:49

Client ID: G-3102-R3-VOST DI W

Instrument: mz.i

Sample Info: H2HC11AA,1.0,,

Purge Volume: 25.0

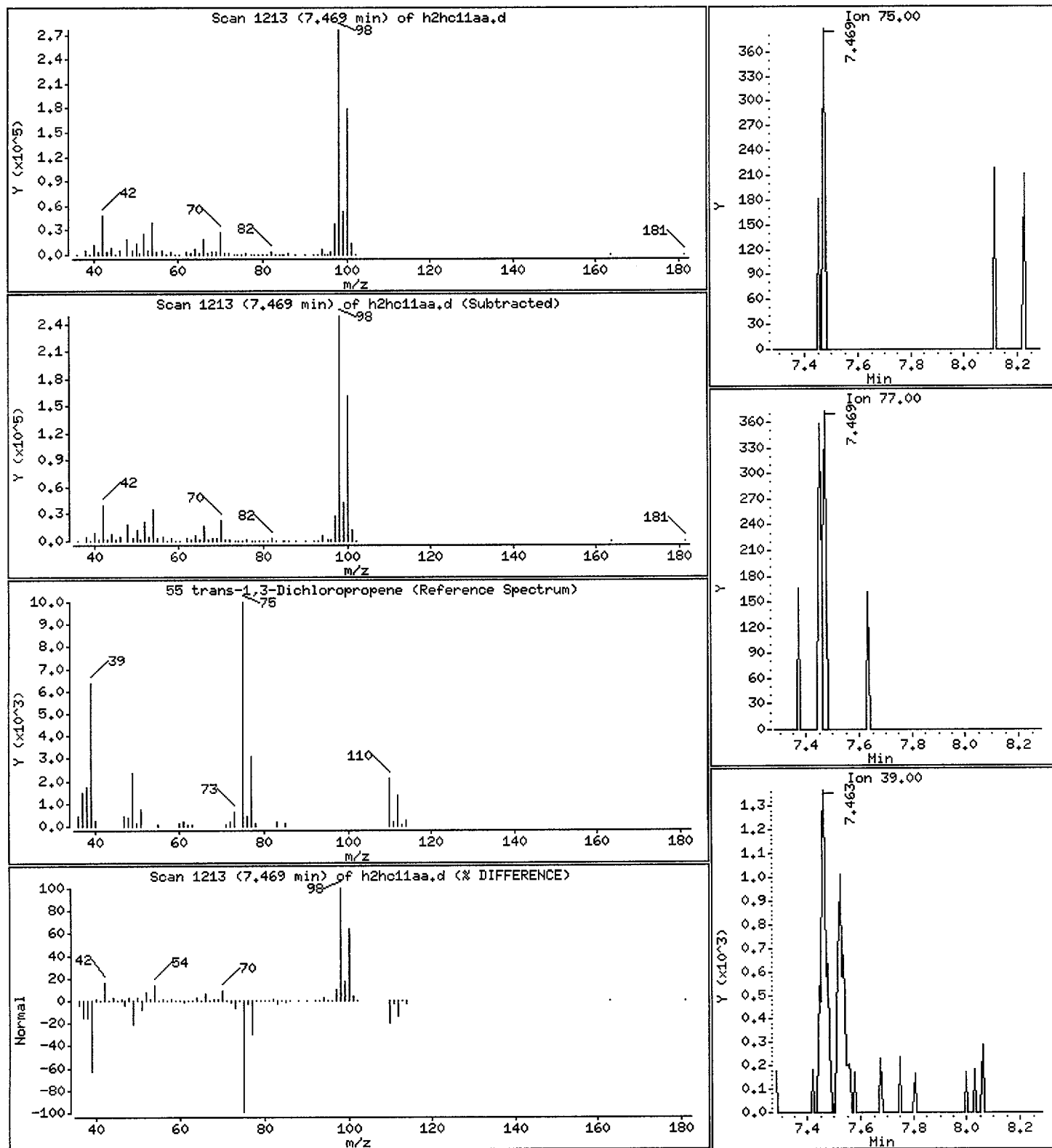
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

55 trans-1,3-Dichloropropene

Concentration: 0.63807 ug/L



Data File: /chem/gcms/mz.i/2040506.b/h2hc11aa.d

Date : 05-APR-2006 17:49

Client ID: G-3102-R3-VOST DI W

Instrument: mz.i

Sample Info: H2HC11AA,1,0,,

Purge Volume: 25.0

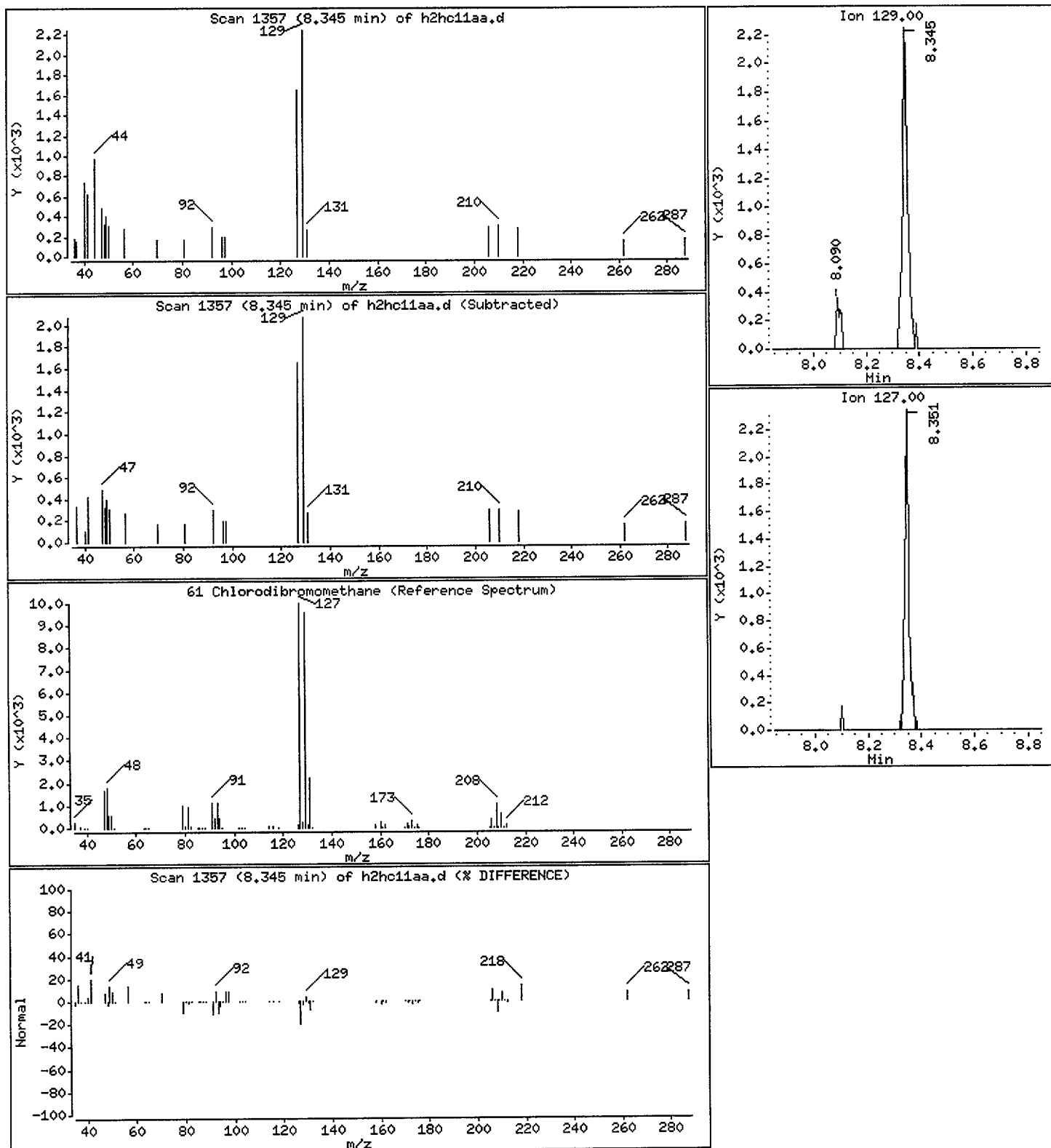
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

61 Chlorodibromomethane

Concentration: 1.1084 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Date : 05-APR-2006 17:49

Client ID: G-3102-R3-VOST DI W

Instrument: mz.i

Sample Info: H2HC11AA,1,0,,

Purge Volume: 25.0

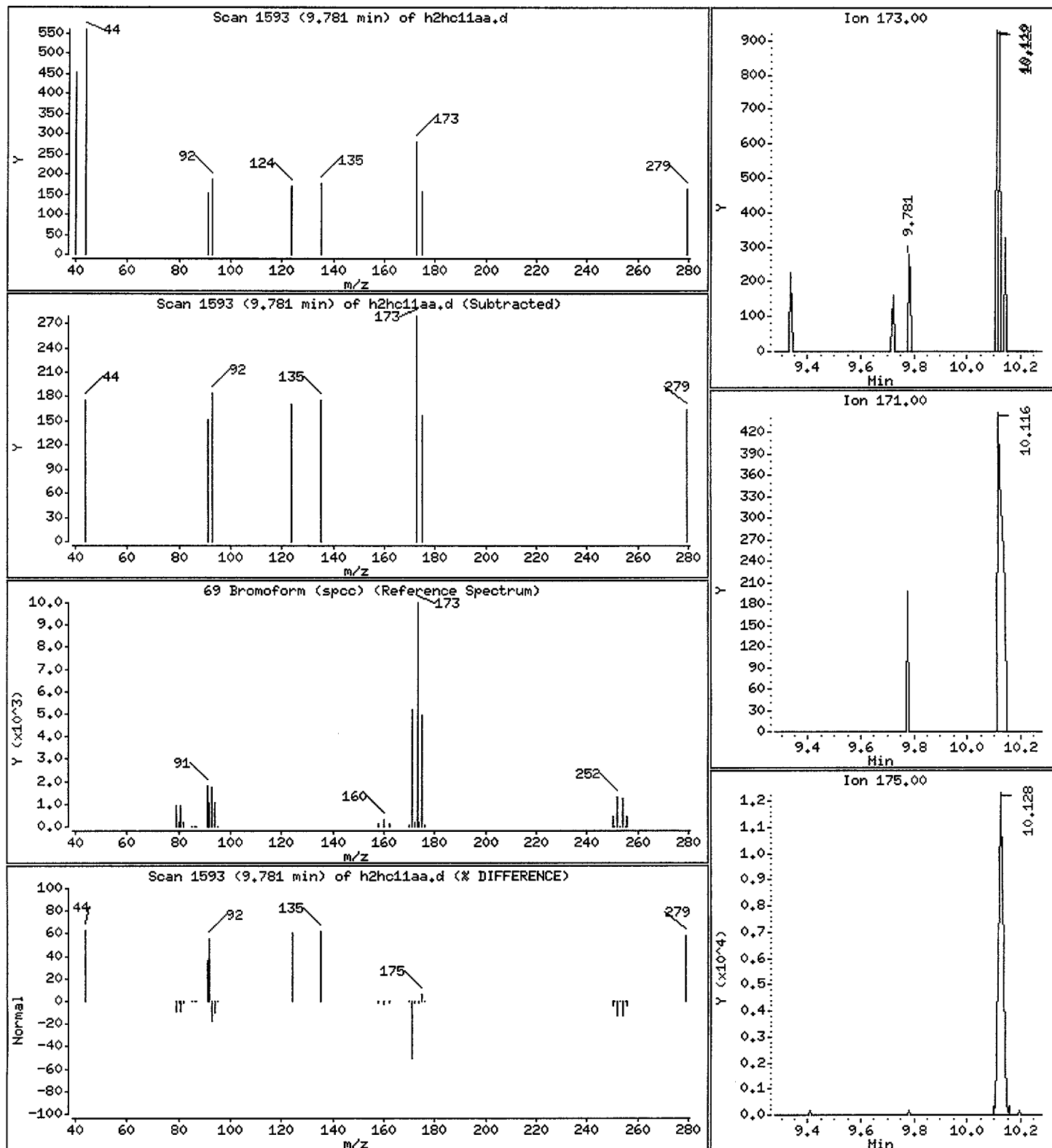
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

69 Bromoform (spcc)

Concentration: 0.86336 ug/L



Data File: /var/chem/gcms/mz.i/Z040506.b/h2hc11aa.d  
 Report Date: 07-Apr-2006 14:27

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z040506.b/h2hc11aa.d  
 Lab Smp Id: H2HC11AA Client Smp ID: G-3102-R3-VOST DI W  
 Inj Date : 05-APR-2006 17:49  
 Operator : 063605 Inst ID: mz.i  
 Smp Info : H2HC11AA,1,0,,  
 Misc Info : Z040506,8260B\_LM,focus.sub  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z040506.b/8260B\_LM.m  
 Meth Date : 06-Apr-2006 17:11 tillerm Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: focus.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf\*Vt/(Vo\*1000) \* CpndVariable

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| ISTD              | RT    | HEIGHT  | AMOUNT |
|-------------------|-------|---------|--------|
| =====             | ===== | =====   | =====  |
| * 1 Fluorobenzene | 5.669 | 1040862 | 10.000 |

| CONCENTRATIONS |        |               |              | QUANT  |         |           |        |
|----------------|--------|---------------|--------------|--------|---------|-----------|--------|
| RT             | HEIGHT | ON-COL( ug/L) | FINAL( ug/L) | QUAL   | LIBRARY | LIB ENTRY | CPND # |
| ----           | -----  | -----         | -----        | ----   | -----   | -----     | -----  |
| Carbon dioxide | 0.905  | 1232776       | 11.8437987   | 11.844 | 5       | NIST05.1  | 80 1   |

CAS #: 124-38-9

not 4/7/06

Data File: /var/chem/gcms/mz.i/Z040506.b/h2hc11aa.d

Date : 05-APR-2006 17:49

Client ID: G-3102-R3-VOST DI W

Instrument: mz.i

Sample Info: H2HC11AA,1,0,,

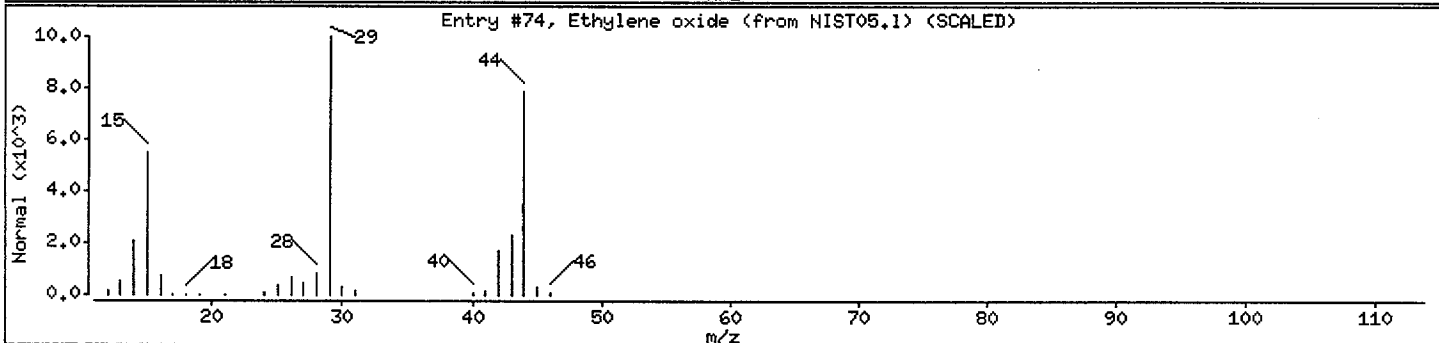
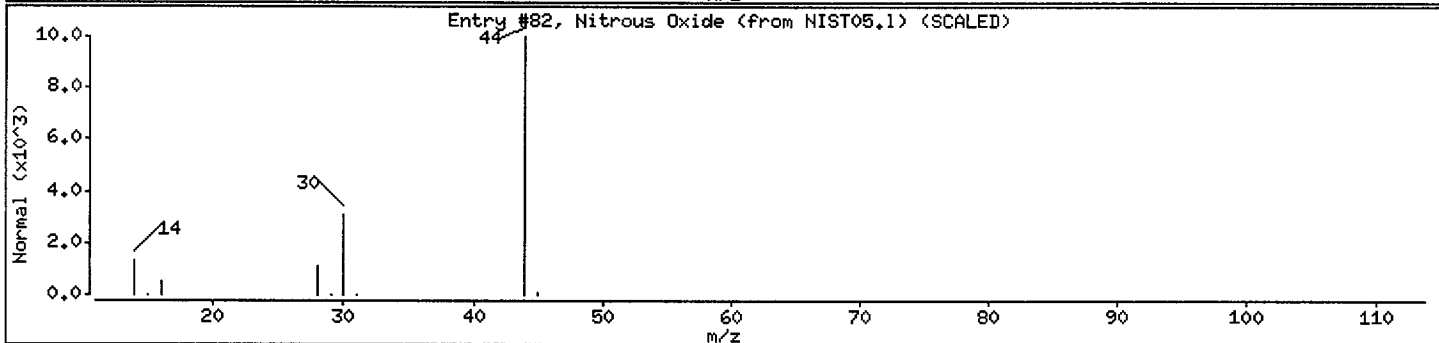
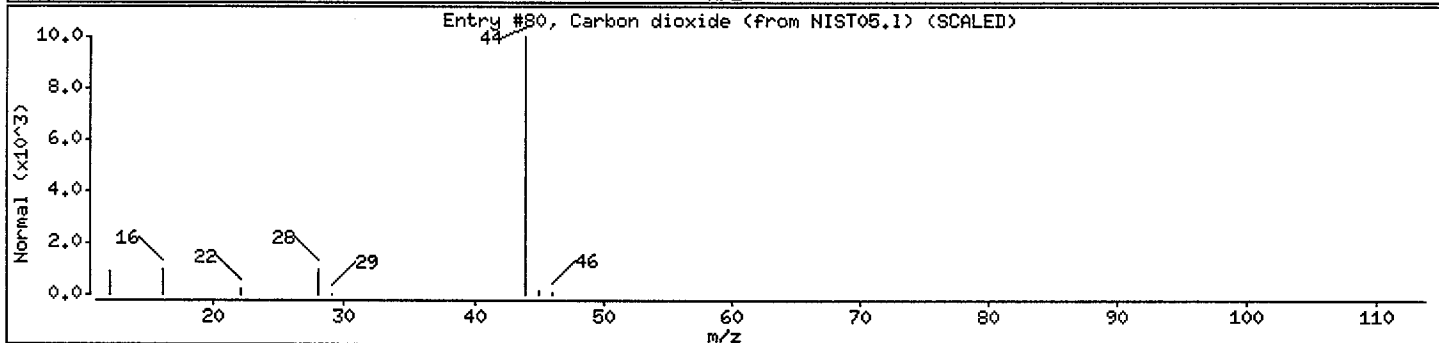
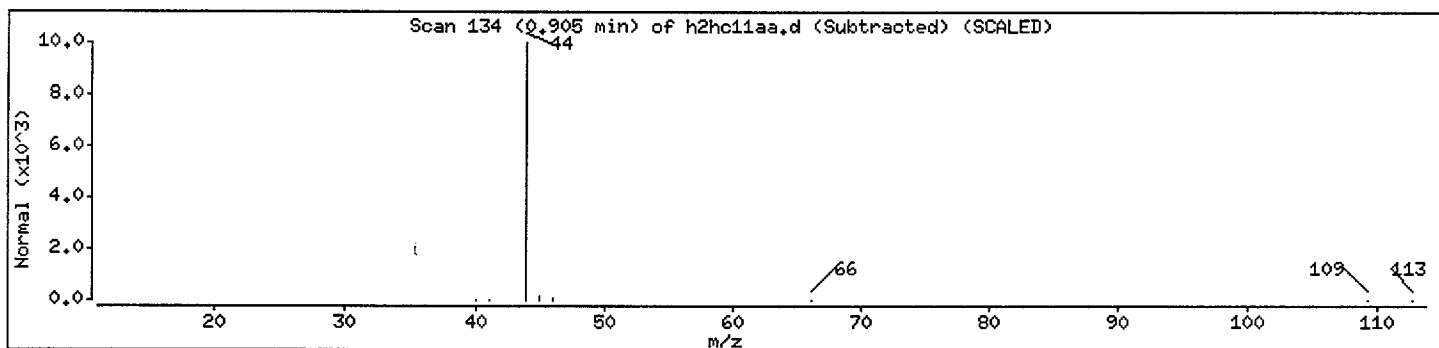
Purge Volume: 25.0

Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Carbon dioxide                | 124-38-9   | NIST05.1 | 80    | 5       | CO2     | 44     |
| Nitrous Oxide                 | 10024-97-2 | NIST05.1 | 82    | 3       | N2O     | 44     |
| Ethylene oxide                | 75-21-8    | NIST05.1 | 74    | 2       | C2H4O   | 44     |



## STL Knoxville - ACS

Client Sample ID: A-5363 MEDIA CHECK TENAX

## GC/MS Volatiles

Lot-Sample #....: H6D030169-037    Work Order #....: H2HC21AA    Matrix.....: AIR  
 Date Sampled....: 03/28/06    Date Received...: 04/02/06  
 Prep Date.....: 04/06/06    Analysis Date...: 04/07/06  
 Prep Batch #....: 6096033  
 Dilution Factor: 1    Method.....: SW846 VOST

| PARAMETER                        | RESULT           | REPORTING<br>LIMIT | UNITS     | MDL          |
|----------------------------------|------------------|--------------------|-----------|--------------|
| <b>Acetone</b>                   | <b>0.094 J,B</b> | <b>0.10</b>        | <b>ug</b> | <b>0.085</b> |
| Acrylonitrile                    | ND               | 0.50               | ug        | 0.076        |
| Benzene                          | ND               | 0.010              | ug        | 0.0032       |
| Bromobenzene                     | ND               | 0.010              | ug        | 0.0036       |
| Bromochloromethane               | ND               | 0.025              | ug        | 0.012        |
| Bromodichloromethane             | ND               | 0.010              | ug        | 0.0016       |
| Bromoform                        | ND               | 0.025              | ug        | 0.0066       |
| <b>Bromomethane</b>              | <b>0.025 J,B</b> | <b>0.050</b>       | <b>ug</b> | <b>0.022</b> |
| 2-Butanone                       | ND               | 0.10               | ug        | 0.035        |
| n-Butylbenzene                   | ND               | 0.010              | ug        | 0.0047       |
| sec-Butylbenzene                 | ND               | 0.010              | ug        | 0.0036       |
| tert-Butylbenzene                | ND               | 0.010              | ug        | 0.0030       |
| Carbon disulfide                 | ND               | 0.010              | ug        | 0.0011       |
| Carbon tetrachloride             | ND               | 0.010              | ug        | 0.0011       |
| Chlorobenzene                    | ND               | 0.010              | ug        | 0.0013       |
| Chlorodibromomethane             | ND               | 0.025              | ug        | 0.010        |
| Chloroethane                     | ND               | 0.050              | ug        | 0.010        |
| Chloroform                       | ND               | 0.010              | ug        | 0.0019       |
| Chloromethane                    | ND               | 0.010              | ug        | 0.0032       |
| 2-Chlorotoluene                  | ND               | 0.010              | ug        | 0.0023       |
| 4-Chlorotoluene                  | ND               | 0.010              | ug        | 0.0020       |
| 1,2-Dibromo-3-chloro-<br>propane | ND               | 0.050              | ug        | 0.020        |
| 1,2-Dibromoethane                | ND               | 0.025              | ug        | 0.010        |
| Dibromomethane                   | ND               | 0.025              | ug        | 0.010        |
| 1,2-Dichlorobenzene              | ND               | 0.010              | ug        | 0.0030       |
| 1,3-Dichlorobenzene              | ND               | 0.010              | ug        | 0.0031       |
| 1,4-Dichlorobenzene              | ND               | 0.010              | ug        | 0.0043       |
| Dichlorodifluoromethane          | ND               | 0.025              | ug        | 0.0050       |
| 1,1-Dichloroethane               | ND               | 0.010              | ug        | 0.0019       |
| 1,2-Dichloroethane               | ND               | 0.010              | ug        | 0.0022       |
| cis-1,2-Dichloroethene           | ND               | 0.010              | ug        | 0.0025       |
| trans-1,2-Dichloroethene         | ND               | 0.010              | ug        | 0.0017       |
| 1,1-Dichloroethene               | ND               | 0.010              | ug        | 0.0023       |
| 1,2-Dichloropropane              | ND               | 0.010              | ug        | 0.0027       |
| 1,3-Dichloropropane              | ND               | 0.010              | ug        | 0.0018       |
| 2,2-Dichloropropane              | ND               | 0.010              | ug        | 0.0015       |
| cis-1,3-Dichloropropene          | ND               | 0.010              | ug        | 0.0030       |
| trans-1,3-Dichloropropene        | ND               | 0.010              | ug        | 0.0020       |

(Continued on next page)

## STL Knoxville - ACS

Client Sample ID: A-5363 MEDIA CHECK TENAX

## GC/MS Volatiles

Lot-Sample #...: H6D030169-037 Work Order #...: H2HC21AA Matrix.....: AIR

| PARAMETER                                 | RESULT    | REPORTING |            |        |
|-------------------------------------------|-----------|-----------|------------|--------|
|                                           |           | LIMIT     | UNITS      | MDL    |
| 1,1-Dichloropropene                       | ND        | 0.010     | ug         | 0.0010 |
| Ethylbenzene                              | ND        | 0.010     | ug         | 0.0013 |
| Hexachlorobutadiene                       | ND        | 0.025     | ug         | 0.0048 |
| 2-Hexanone                                | ND        | 0.10      | ug         | 0.0099 |
| Iodomethane                               | 0.014 J,B | 0.050     | ug         | 0.0016 |
| Isopropylbenzene                          | ND        | 0.010     | ug         | 0.0023 |
| p-Isopropyltoluene                        | ND        | 0.010     | ug         | 0.0038 |
| Methylene chloride                        | ND        | 0.025     | ug         | 0.013  |
| 4-Methyl-2-pentanone                      | ND        | 0.10      | ug         | 0.014  |
| Naphthalene                               | ND        | 0.025     | ug         | 0.010  |
| n-Propylbenzene                           | ND        | 0.010     | ug         | 0.0029 |
| Styrene                                   | ND        | 0.010     | ug         | 0.0017 |
| 1,1,1,2-Tetrachloroethane                 | ND        | 0.010     | ug         | 0.0010 |
| 1,1,2,2-Tetrachloroethane                 | ND        | 0.025     | ug         | 0.011  |
| Tetrachloroethene                         | ND        | 0.010     | ug         | 0.0021 |
| Tetrahydrofuran                           | ND        | 0.10      | ug         | 0.031  |
| Toluene                                   | ND        | 0.010     | ug         | 0.0022 |
| 1,2,3-Trichlorobenzene                    | ND        | 0.025     | ug         | 0.014  |
| 1,2,4-Trichloro-<br>benzene               | ND        | 0.025     | ug         | 0.0030 |
| 1,1,1-Trichloroethane                     | ND        | 0.025     | ug         | 0.0016 |
| 1,1,2-Trichloroethane                     | ND        | 0.025     | ug         | 0.0050 |
| Trichloroethene                           | ND        | 0.010     | ug         | 0.0050 |
| Trichlorofluoromethane                    | ND        | 0.050     | ug         | 0.0049 |
| 1,2,3-Trichloropropane                    | ND        | 0.025     | ug         | 0.0081 |
| 1,1,2-Trichloro-<br>1,2,2-trifluoroethane | ND        | 0.050     | ug         | 0.0018 |
| 1,2,4-Trimethylbenzene                    | ND        | 0.010     | ug         | 0.0048 |
| 1,3,5-Trimethylbenzene                    | ND        | 0.010     | ug         | 0.0028 |
| Vinyl acetate                             | ND        | 0.050     | ug         | 0.012  |
| Vinyl chloride                            | ND        | 0.010     | ug         | 0.0032 |
| m-Xylene & p-Xylene                       | ND        | 0.020     | ug         | 0.0034 |
| o-Xylene                                  | ND        | 0.010     | ug         | 0.0017 |
| Xylenes (total)                           | ND        | 0.030     | ug         | 0.0048 |
| SURROGATE                                 | PERCENT   |           | RECOVERY   |        |
|                                           | RECOVERY  |           | LIMITS     |        |
| Dibromofluoromethane                      | 101       |           | (50 - 134) |        |
| 1,2-Dichloroethane-d4                     | 96        |           | (50 - 134) |        |
| Toluene-d8                                | 95        |           | (57 - 127) |        |
| Bromofluorobenzene                        | 83        |           | (50 - 125) |        |

## NOTE (S) :

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.



STL Knoxville - ACS

A-5363 MEDIA CHECK TENAX

GC/MS Volatiles

Lot-Sample #: H6D030169-037

Work Order #: H2HC21AA

Matrix: AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug           |

Data File: /chem/gcms/mz.i/Z040706.b/h2hc21aa.d  
Report Date: 07-Apr-2006 11:27

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /chem/gcms/mz.i/Z040706.b/h2hc21aa.d  
Lab Smp Id: H2HC21AA Client Smp ID: A-5363 MEDIA CHECK  
Inj Date : 07-APR-2006 11:10  
Operator : 22980 Inst ID: mz.i  
Smp Info : H2HC21AA,1,0,,  
Misc Info : Z040706,8260B\_LM,focus.sub  
Comment : Volatile Organics by GC/MS  
Method : /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
Meth Date : 07-Apr-2006 09:40 gosss Quant Type: ISTD  
Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable

Local Compound Variable

*Handwritten signature*

|                              |       |        |        |         |          | CONCENTRATIONS |          |
|------------------------------|-------|--------|--------|---------|----------|----------------|----------|
| QUANT SIG                    |       |        |        |         |          | ON-COLUMN      | FINAL    |
| Compounds                    | MASS  | RT     | EXP RT | REL RT  | RESPONSE | ( ug/L)        | ( ug)    |
| =====                        | ===== | ==     | =====  | =====   | =====    | =====          | =====    |
| * 1 Fluorobenzene            | 96    | 5.675  | 5.676  | (1.000) | 868441   | 10.0000        |          |
| * 2 Chlorobenzene-d5         | 119   | 8.936  | 8.937  | (1.000) | 179778   | 10.0000        |          |
| * 3 1,4 Dichlorobenzene-d4   | 152   | 11.491 | 11.492 | (1.000) | 237573   | 10.0000        |          |
| \$ 4 Dibromofluoromethane    | 113   | 4.830  | 4.831  | (0.851) | 141170   | 10.1448        | 0.25362  |
| \$ 5 1,2-Dichloroethane-d4   | 65    | 5.237  | 5.238  | (0.923) | 115123   | 9.56694        | 0.23917  |
| \$ 6 Toluene-d8              | 98    | 7.464  | 7.465  | (0.835) | 754265   | 9.54866        | 0.23872  |
| \$ 7 4-Bromofluorobenzene    | 95    | 10.128 | 10.129 | (0.881) | 198169   | 8.27107        | 0.20678  |
| 15 Bromomethane              | 94    | 1.417  | 1.418  | (0.250) | 1575     | 1.00432        | 0.025108 |
| 22 Acetone                   | 43    | 2.129  | 2.123  | (0.375) | 1265     | 3.49093        | 0.087273 |
| 23 *Iodomethane              | 142   | 2.177  | 2.184  | (0.384) | 791      | 0.55718        | 0.013930 |
| 39 *THF                      | 42    | 4.556  | 4.532  | (0.803) | 886      | 0.43010        | 0.010752 |
| 45 1,2-Dichloroethane        | 62    | 5.669  | 5.335  | (0.999) | 14494    | 0.79924        | 0.019981 |
| 53 4-Methyl-2-pentanone      | 43    | 7.464  | 7.386  | (1.315) | 5517     | 0.72753        | 0.018188 |
| 55 trans-1,3-Dichloropropene | 75    | 7.926  | 7.793  | (0.887) | 68       | 0.62946        | 0.015736 |
| 69 Bromoform (spcc)          | 173   | 10.128 | 9.782  | (1.133) | 968      | 1.13845        | 0.028461 |

*Handwritten note: -see report for (u)*

*Handwritten note: 7/24/06*

Data File: /var/chem/gcms/mz.i/Z040706.b/h2hc21aa.d

Report Date: 14-Apr-2006 16:52

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z040706.b/h2hc21aa.d

Lab Smp Id: H2HC21AA

Client Smp ID: A-5363 MEDIA CHECK

Inj Date : 07-APR-2006 11:10

Operator : 22980

Inst ID: mz.i

Smp Info : H2HC21AA,1,0,,

Misc Info : Z040706,8260B\_LM,focus.sub

Comment : Volatile Organics by GC/MS

Method : /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m

Meth Date : 14-Apr-2006 15:48 wilesd

Quant Type: ISTD

Cal Date : 24-MAR-2006 13:51

Cal File: icvzc248.d

Als bottle: 1

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: focus.sub

Target Version: 3.50

Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable

Local Compound Variable

| Compounds                  | QUANT SIG<br>MASS | RT     | EXP RT | REL RT  | RESPONSE | CONCENTRATIONS       |                |
|----------------------------|-------------------|--------|--------|---------|----------|----------------------|----------------|
|                            |                   |        |        |         |          | ON-COLUMN<br>( ug/L) | FINAL<br>( ug) |
| * 1 Fluorobenzene          | 96                | 5.675  | 5.676  | (1.000) | 868441   | 10.0000              |                |
| * 2 Chlorobenzene-d5       | 119               | 8.936  | 8.937  | (1.000) | 179778   | 10.0000              |                |
| * 3 1,4 Dichlorobenzene-d4 | 152               | 11.491 | 11.492 | (1.000) | 237573   | 10.0000              |                |
| \$ 4 Dibromofluoromethane  | 113               | 4.830  | 4.831  | (0.851) | 141170   | 10.1447              | 0.25362        |
| \$ 5 1,2-Dichloroethane-d4 | 65                | 5.237  | 5.238  | (0.923) | 115123   | 9.56693              | 0.23917        |
| \$ 6 Toluene-d8            | 98                | 7.464  | 7.465  | (0.835) | 754265   | 9.54871              | 0.23872        |
| \$ 7 4-Bromofluorobenzene  | 95                | 10.128 | 10.129 | (0.881) | 198169   | 8.27106              | 0.20678        |
| 15 Bromomethane            | 94                | 1.417  | 1.418  | (0.250) | 1575     | 1.00428              | 0.025107       |
| 22 Acetone                 | 43                | 2.129  | 2.123  | (0.375) | 2612     | 3.74686              | 0.093672 (M)   |
| 23 *Iodomethane            | 142               | 2.177  | 2.184  | (0.384) | 791      | 0.55717              | 0.013929       |
| 39 *THF                    | 42                | 4.556  | 4.532  | (0.803) | 886      | 0.42999              | 0.010750       |

## QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/gcms/mz.i/Z040706.b/h2hc21aa.d  
 Report Date: 07-Apr-2006 11:27

## STL Knoxville

 INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                       |                                   |
|-------------------------------------------------------|-----------------------------------|
| Instrument ID: mz.i                                   | Calibration Date: 07-APR-2006     |
| Lab File ID: h2hc21aa.d                               | Calibration Time: 07:35           |
| Lab Smp Id: H2HC21AA                                  | Client Smp ID: A-5363 MEDIA CHECK |
| Analysis Type: VOA                                    | Level: LOW                        |
| Quant Type: ISTD                                      | Sample Type: AIR                  |
| Operator: 22980                                       |                                   |
| Method File: /var/chem/gcms/mz.i/Z040706.b/8260B_LM.m |                                   |
| Misc Info: Z040706,8260B_LM,focus.sub                 |                                   |

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE | %DIFF |
|---------------------|----------|------------|---------|--------|-------|
|                     |          | LOWER      | UPPER   |        |       |
| 1 Fluorobenzene     | 952581   | 476290     | 1905162 | 868441 | -8.83 |
| 2 Chlorobenzene-d5  | 164101   | 82050      | 328202  | 179778 | 9.55  |
| 3 1,4 Dichlorobenze | 204390   | 102195     | 408780  | 237573 | 16.24 |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 5.68     | 5.18     | 6.18  | 5.68   | -0.01 |
| 2 Chlorobenzene-d5  | 8.94     | 8.44     | 9.44  | 8.94   | -0.01 |
| 3 1,4 Dichlorobenze | 11.49    | 10.99    | 11.99 | 11.49  | -0.01 |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mz.i/Z040706.b/h2hc21aa.d  
Report Date: 07-Apr-2006 11:27

## STL Knoxville

## RECOVERY REPORT

Client Name: STL Knoxville - ACS

Sample Matrix: GAS

Lab Smp Id: H2HC21AA

Level: LOW

Data Type: MS DATA

SpikeList File: allcmpds.spk

Sublist File: focus.sub

Method File: /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m

Misc Info: Z040706,8260B\_LM,focus.sub

Client SDG: H6D030169

Fraction: VOA

Client Smp ID: A-5363 MEDIA CHECK

Operator: 22980

SampleType: SAMPLE

Quant Type: ISTD

| SURROGATE COMPOUND      | CONC<br>ADDED<br>ug | CONC<br>RECOVERED<br>ug | %<br>RECOVERED | LIMITS |
|-------------------------|---------------------|-------------------------|----------------|--------|
| \$ 4 Dibromofluorometha | 0.25000             | 0.25362                 | 101.45         | 50-150 |
| \$ 5 1,2-Dichloroethane | 0.25000             | 0.23917                 | 95.67          | 50-150 |
| \$ 6 Toluene-d8         | 0.25000             | 0.23872                 | 95.49          | 50-150 |
| \$ 7 4-Bromofluorobenze | 0.25000             | 0.20678                 | 82.71          | 50-150 |

Data File: /chem/gcms/mz.i/Z040706.b/h2hc21aa.d

Date : 07-APR-2006 11:10

Client ID: A-5363 MEDIA CHECK

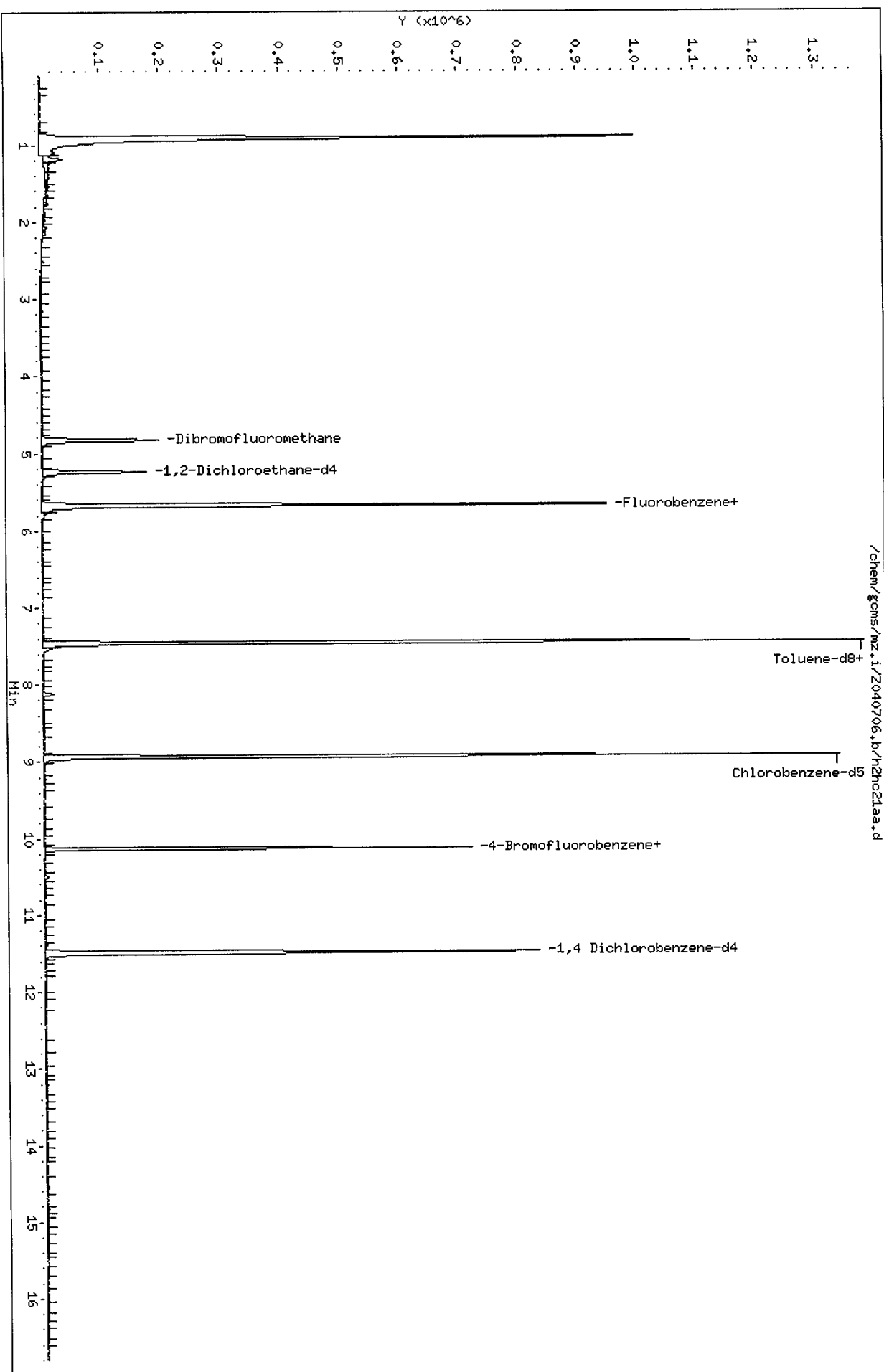
Sample Info: H2HC21AA,1,0,,

Column phase: JMW 624

Instrument: mz.i

Operator: 22980

Column diameter: 0.18



Data File: /chem/gcms/mz.i/Z040706.b/h2hc21aa.d

Date : 07-APR-2006 11:10

Client ID: A-5363 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC21AA,1,0,,

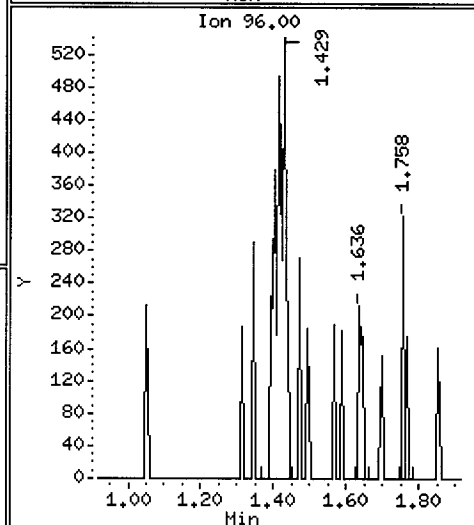
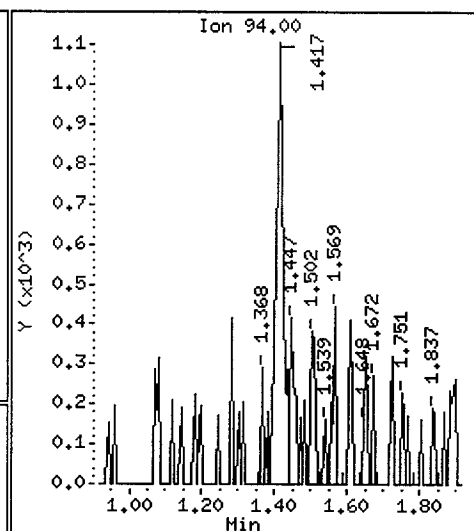
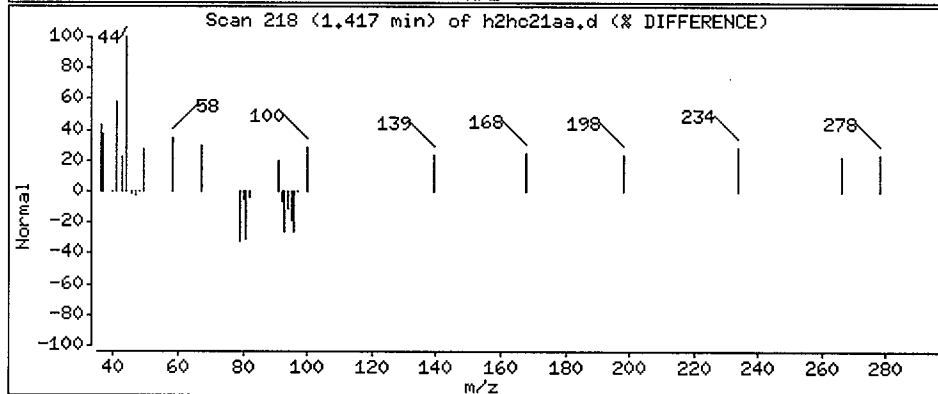
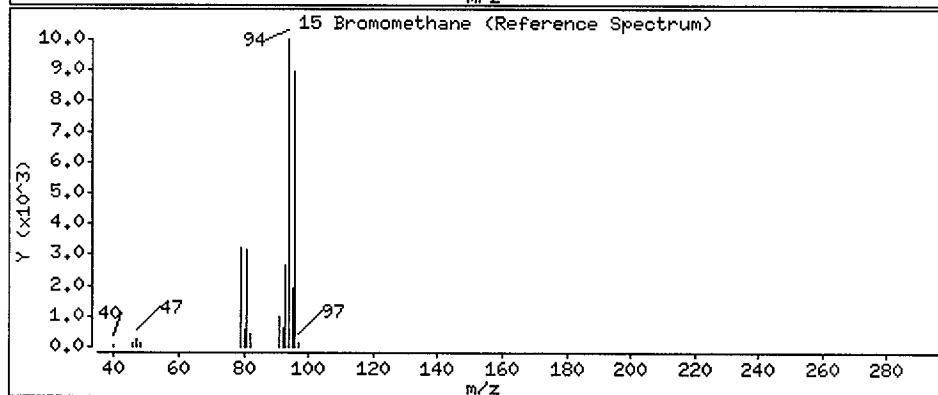
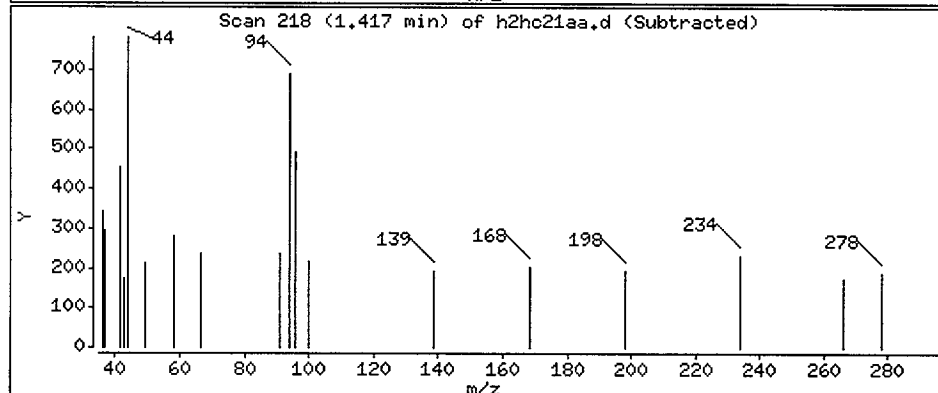
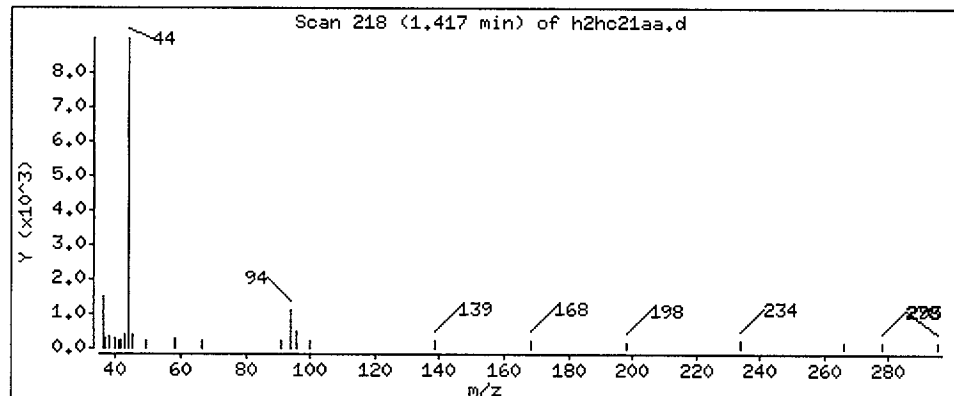
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

15 Bromomethane

Concentration: 0.025108 ug



Data File: /var/chem/gcms/mz.i/Z040706.b/h2hc21aa.d

Date : 07-APR-2006 11:10

Client ID: A-5363 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC21AA,1,0,,

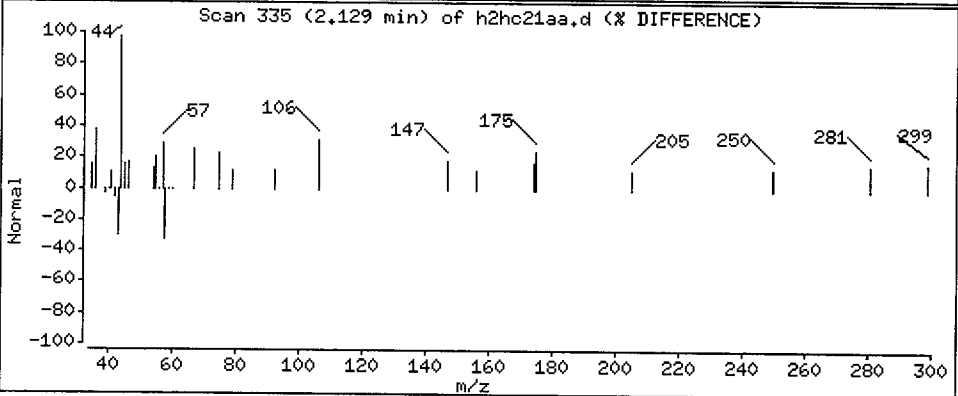
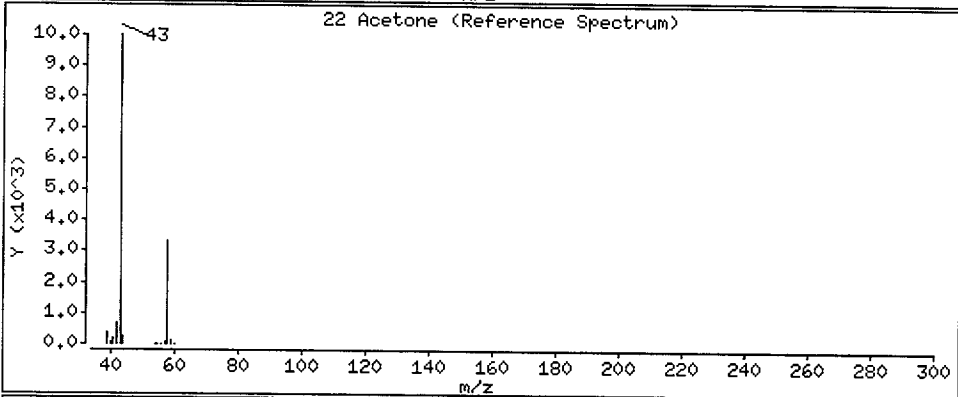
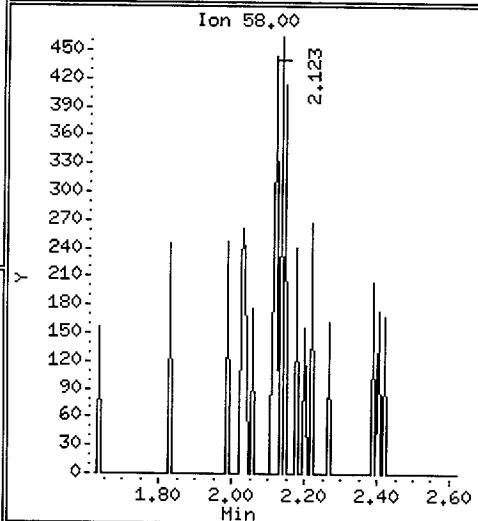
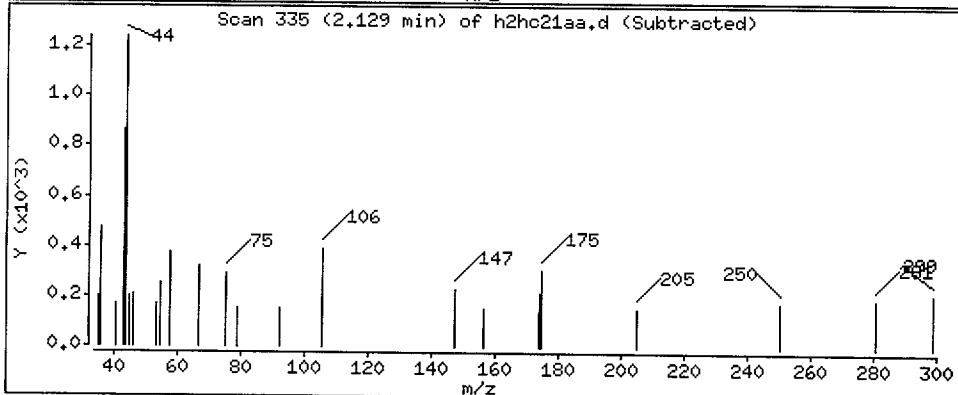
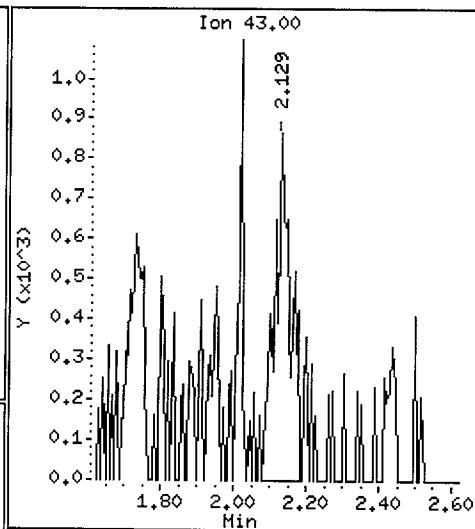
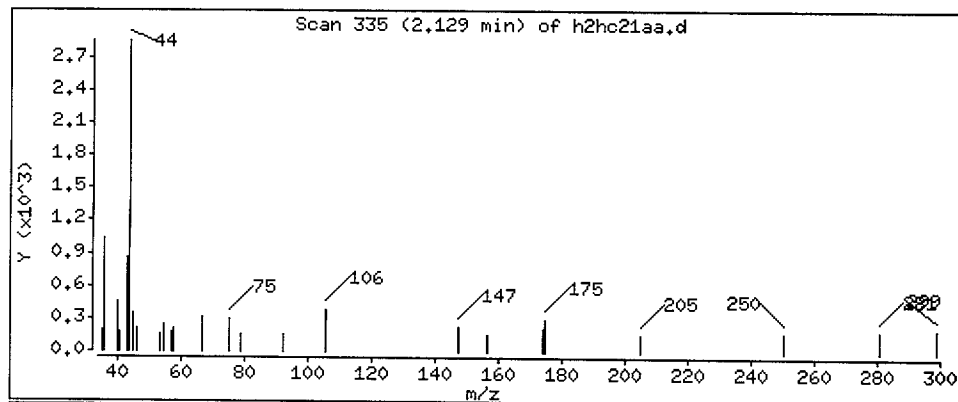
Column phase: J+W 624

Operator: 22980

Column diameter: 0.18

22 Acetone

Concentration: 0.093672 ug

2004-14-06  
(1)



Data File: /chem/gcms/mz.i/Z040706.b/h2hc21aa.d

Date : 07-APR-2006 11:10

Client ID: A-5363 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC21AA,1,0,,

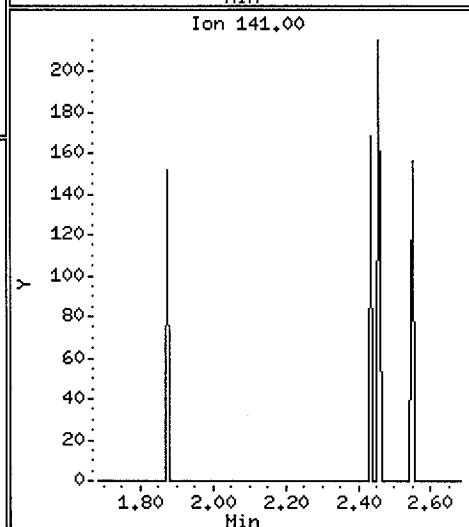
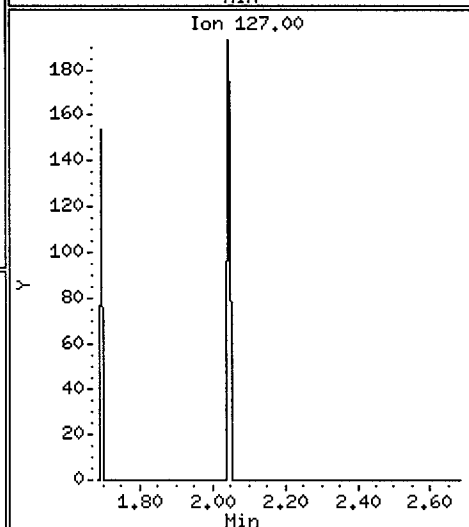
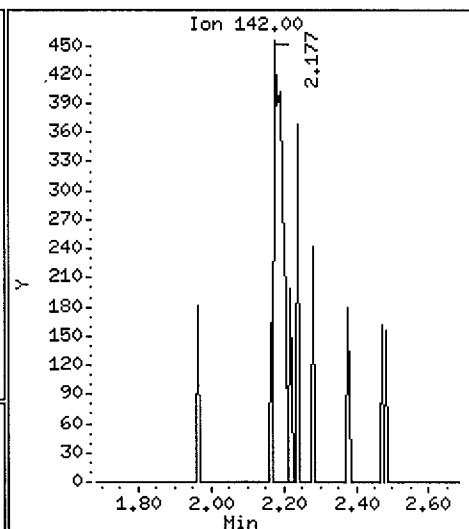
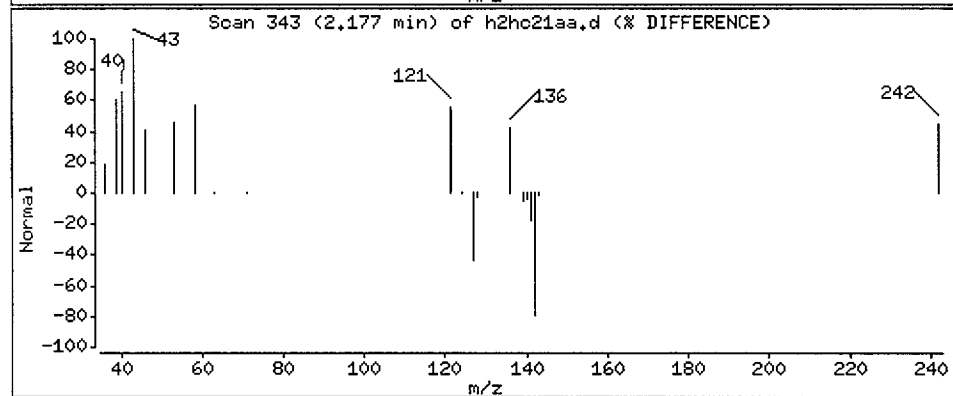
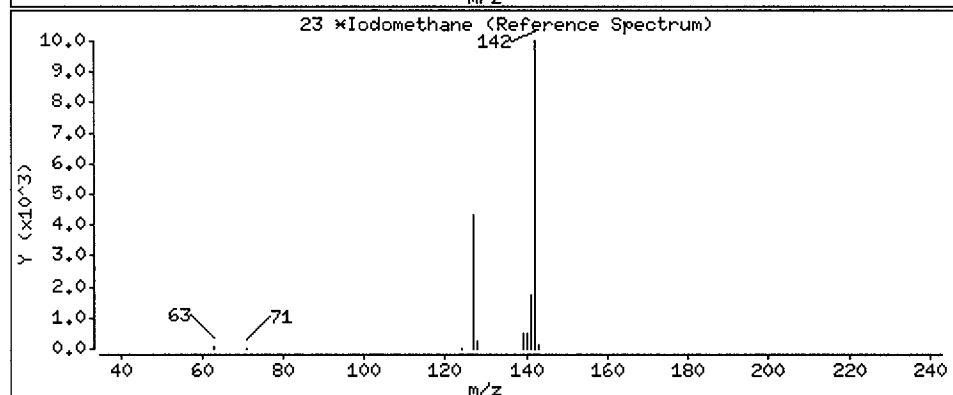
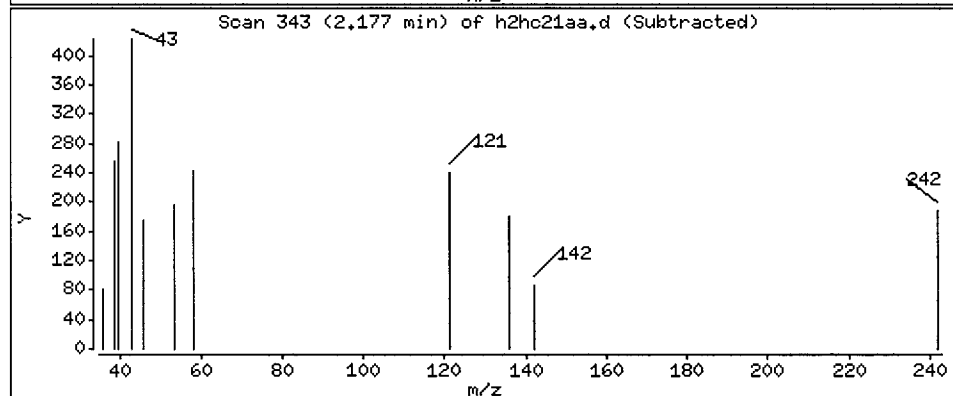
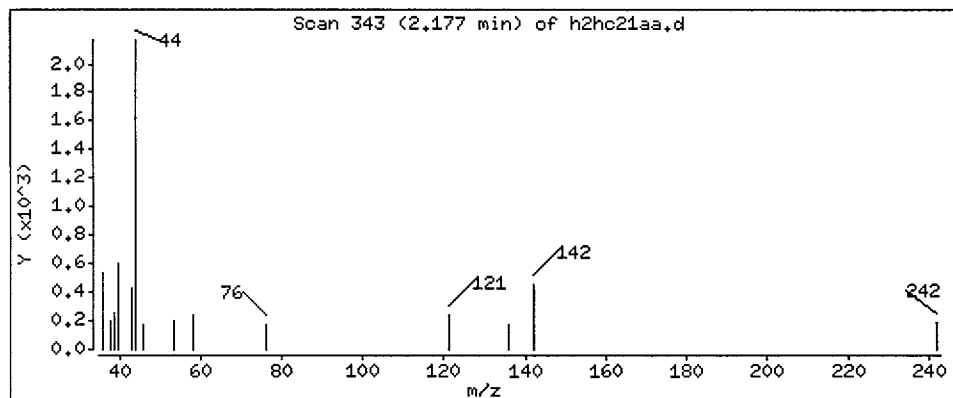
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

23 \*Iodomethane

Concentration: 0.013930 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2hc21aa.d

Date : 07-APR-2006 11:10

Client ID: A-5363 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC21AA,1,0,,

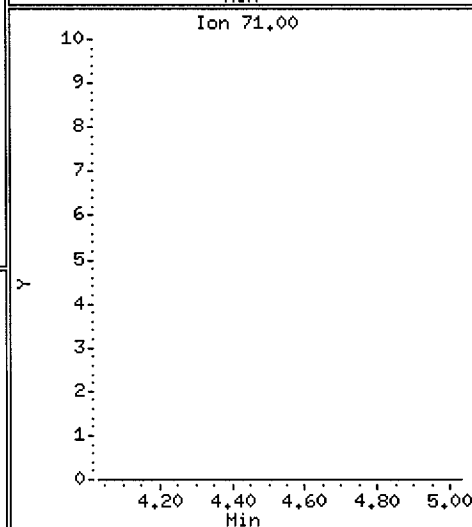
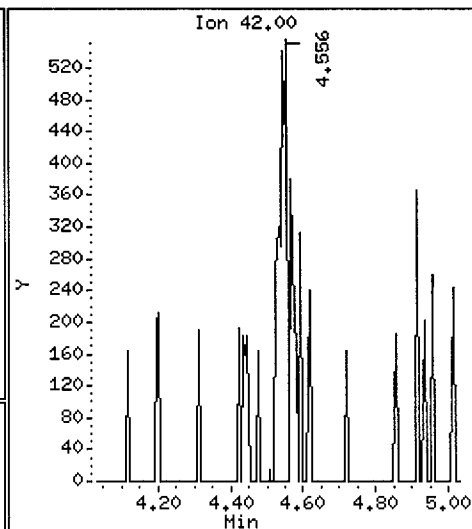
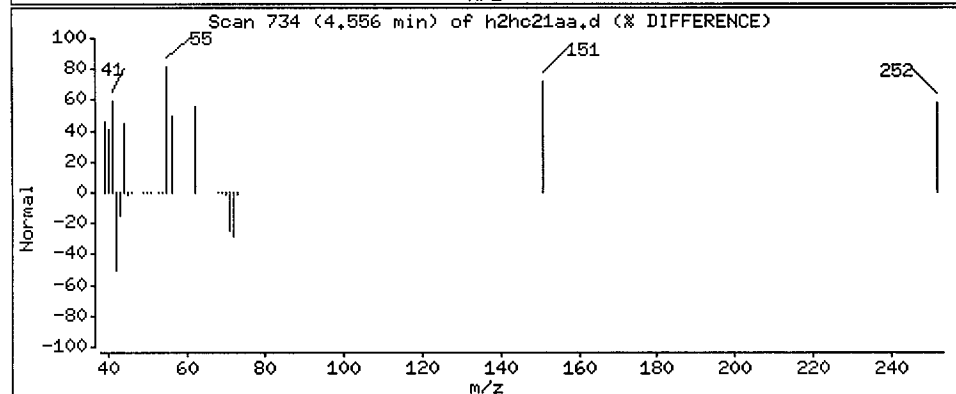
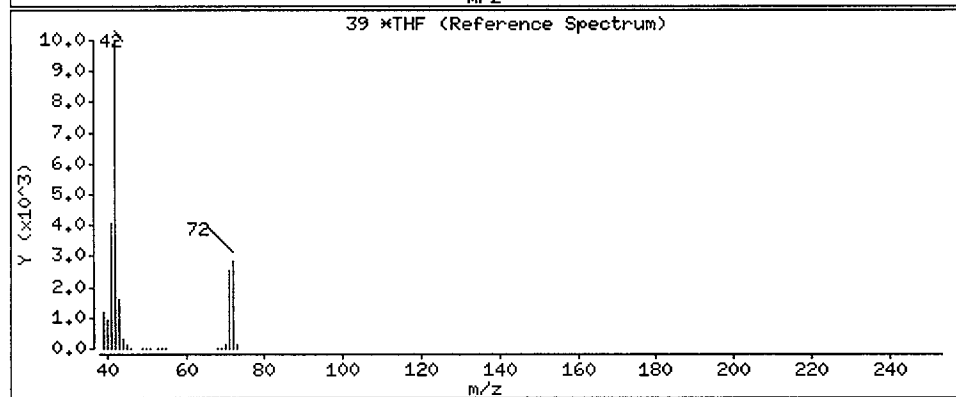
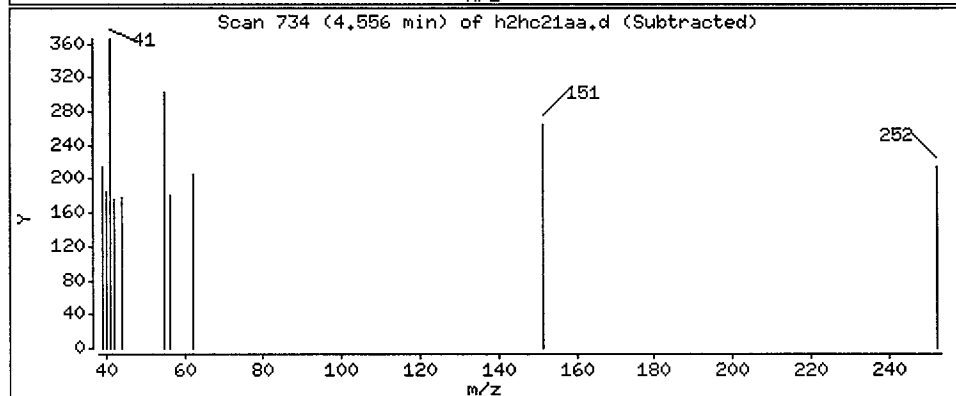
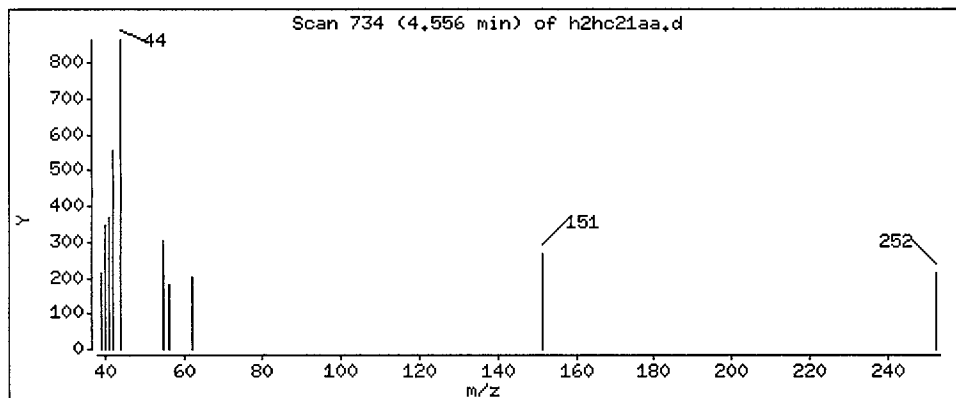
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

39 \*THF

Concentration: 0.010752 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2hc21aa.d

Date : 07-APR-2006 11:10

Client ID: A-5363 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC21AA,1,0,,

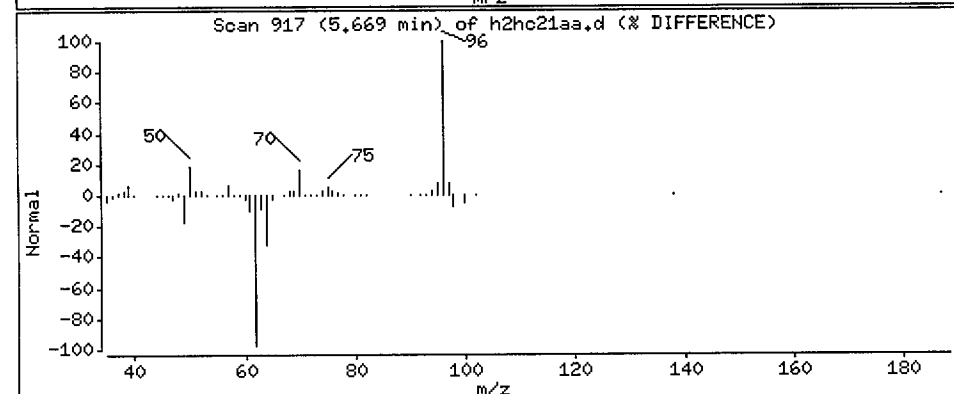
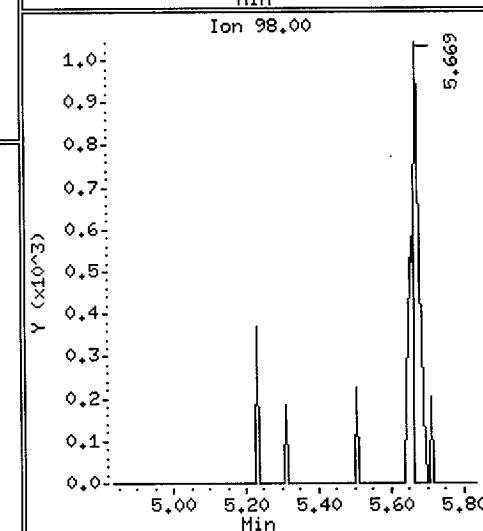
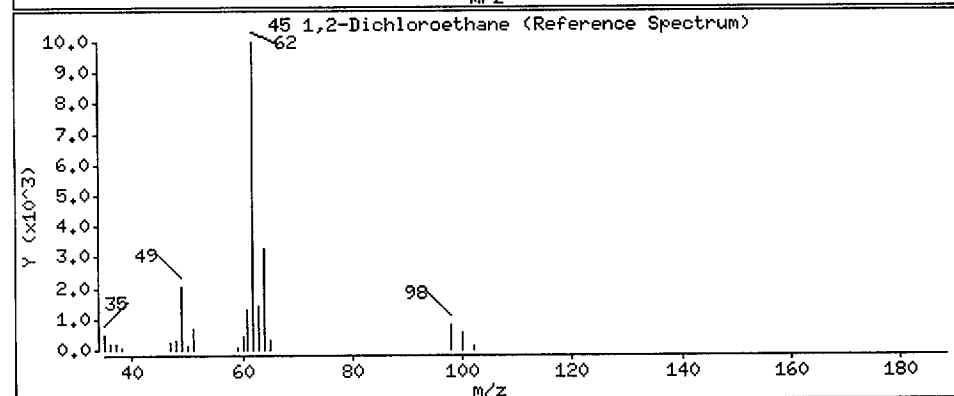
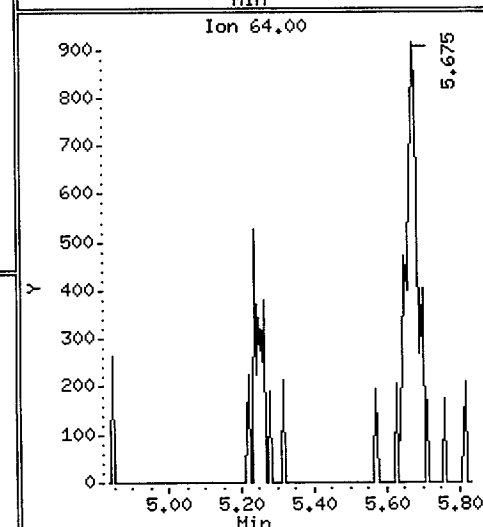
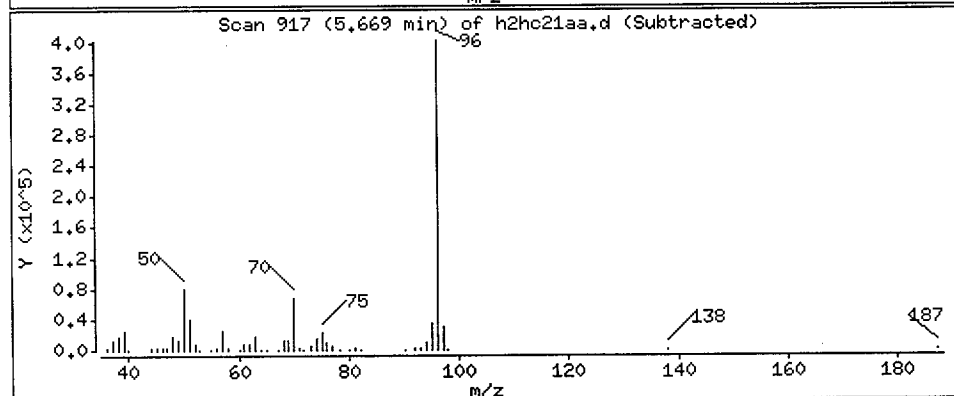
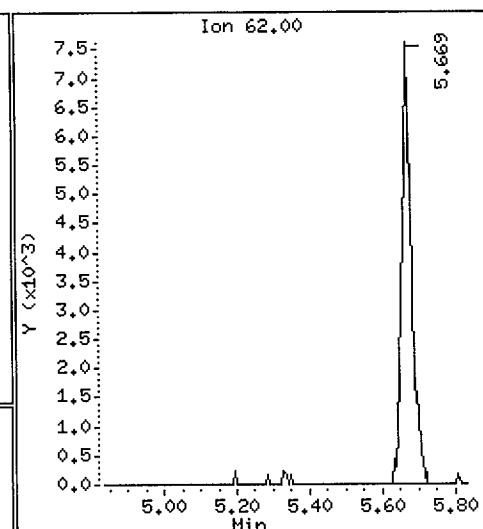
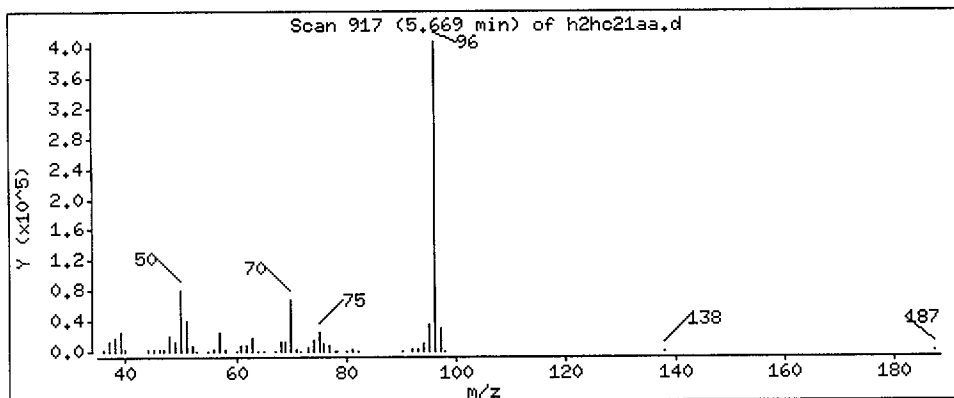
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

45 1,2-Dichloroethane

Concentration: 0.019981 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2hc21aa.d

Date : 07-APR-2006 11:10

Client ID: A-5363 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC21AA,1,0,,

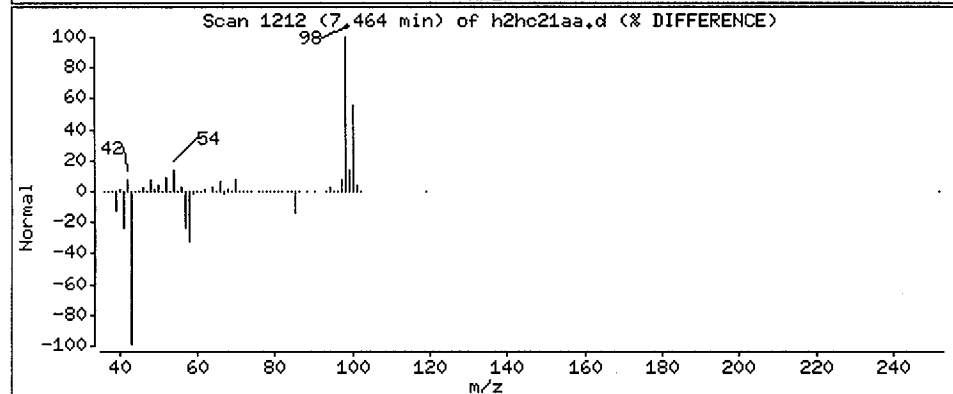
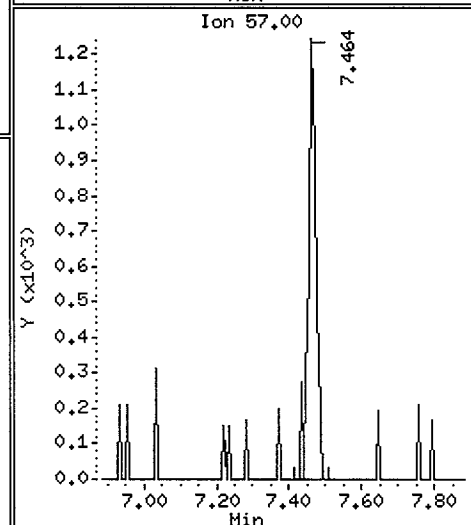
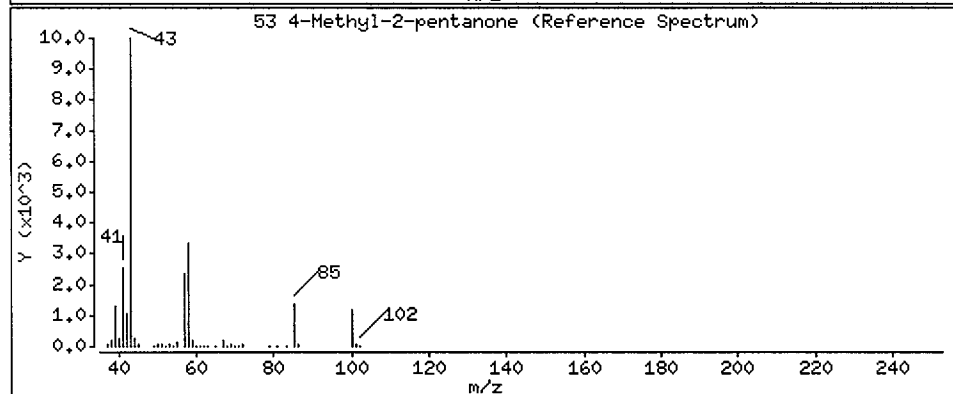
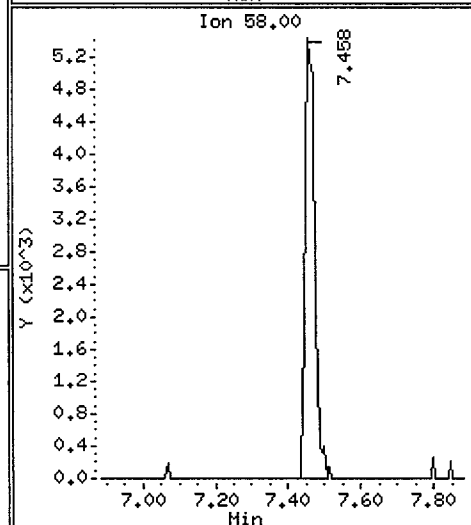
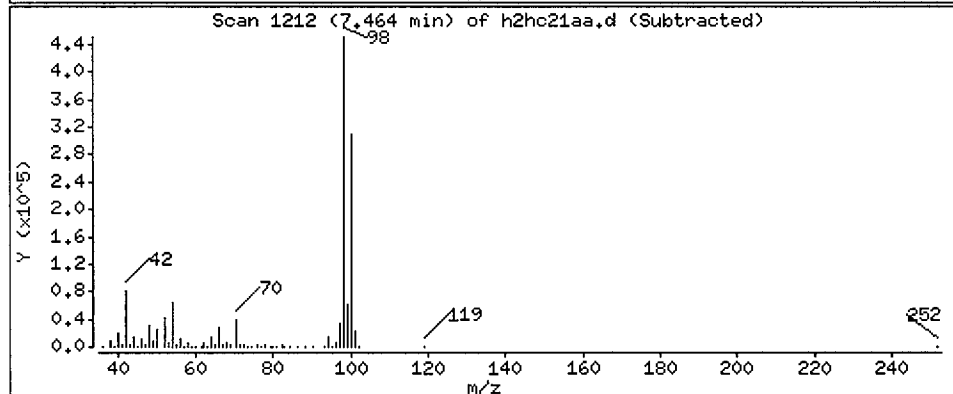
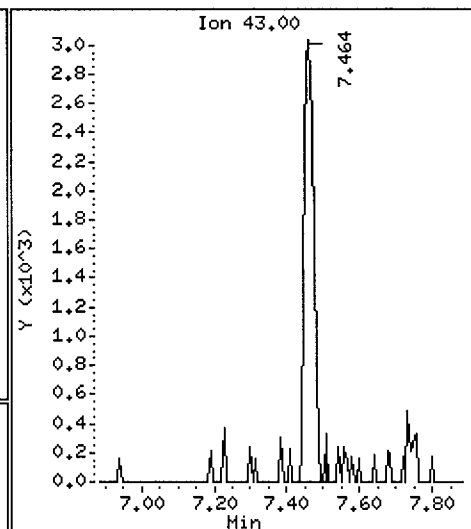
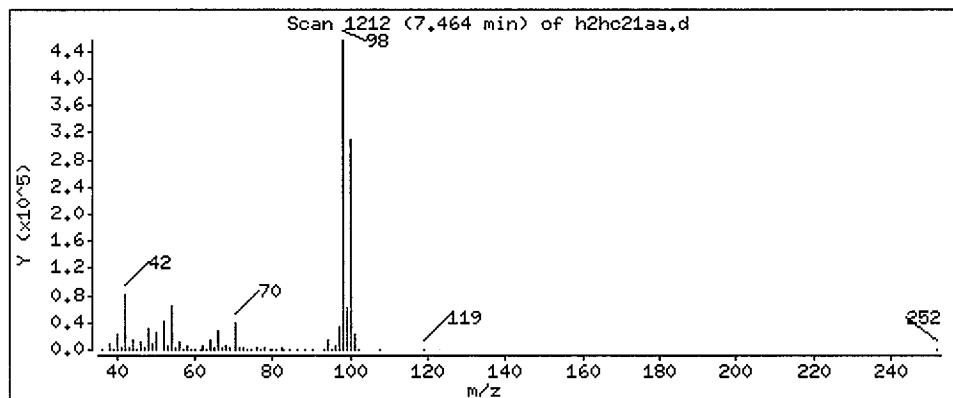
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

53 4-Methyl-2-pentanone

Concentration: 0.018188 ug



Data File: /chem/gcms/mz,i/Z040706,b/h2hc21aa,d

Date : 07-APR-2006 11:10

Client ID: A-5363 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC21AA,1,0,,

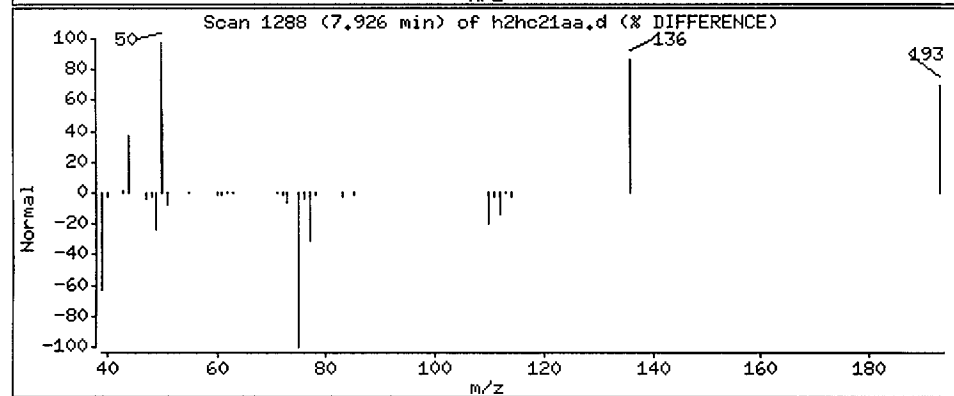
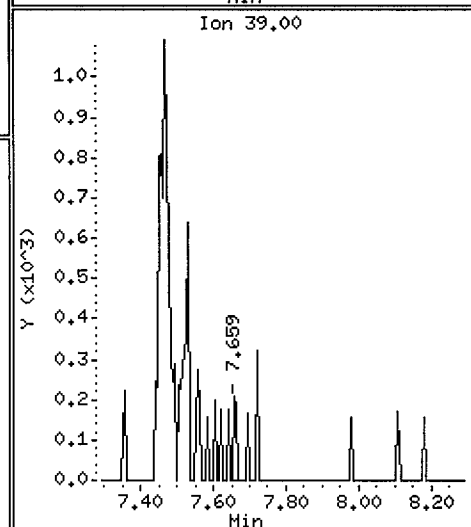
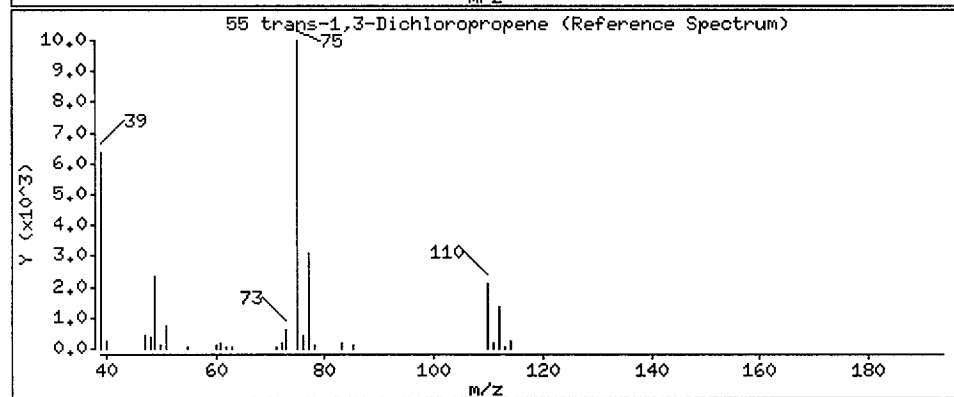
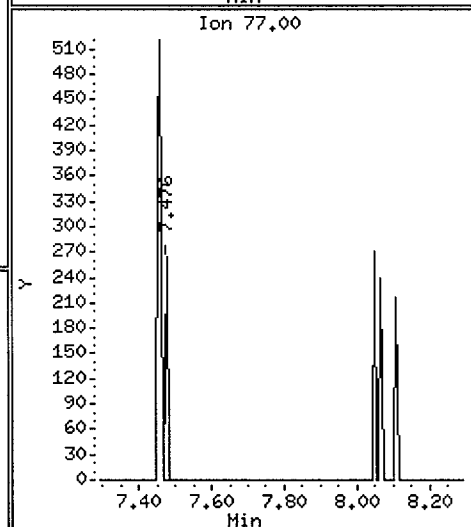
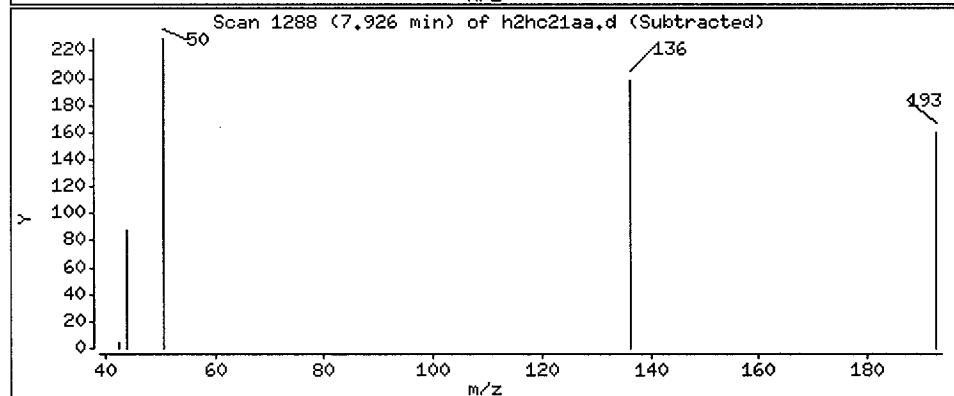
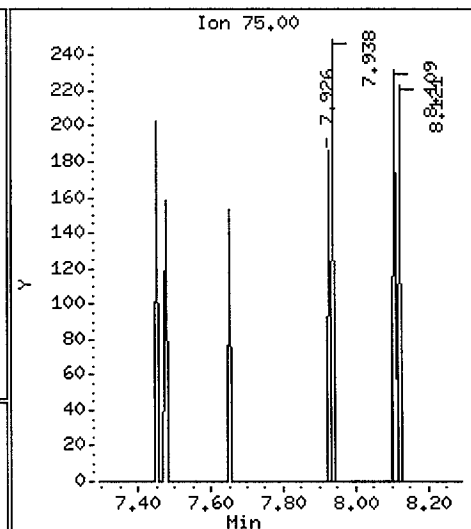
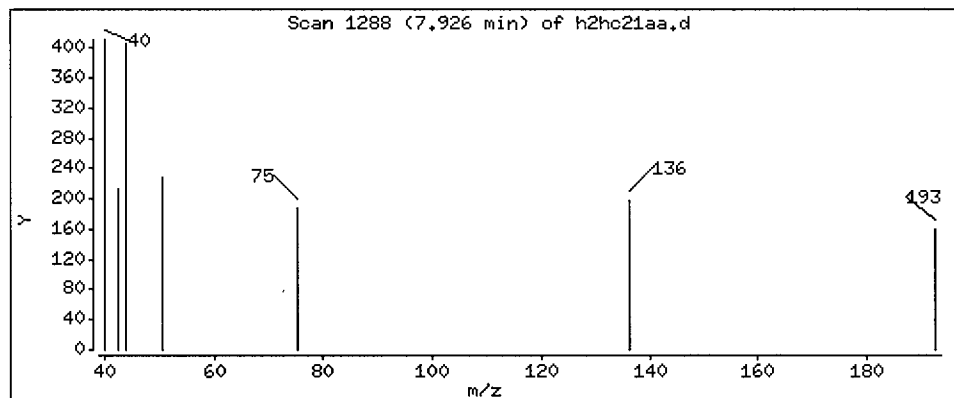
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

55 trans-1,3-Dichloropropene

Concentration: 0.015736 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2hc21aa.d

Date : 07-APR-2006 11:10

Client ID: A-5363 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC21AA,1,0,,

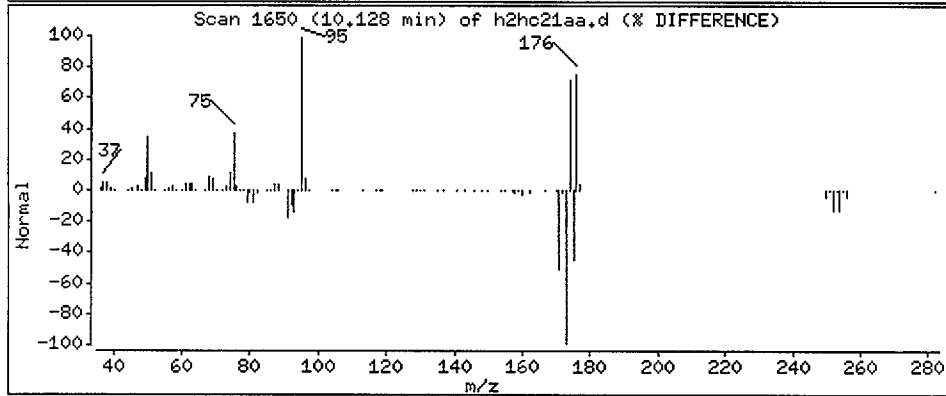
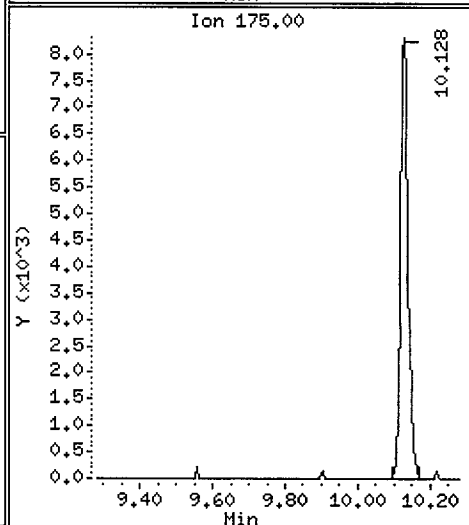
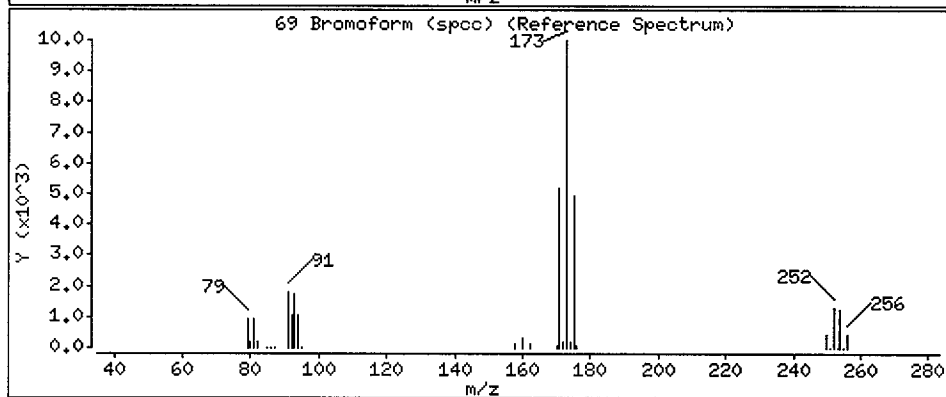
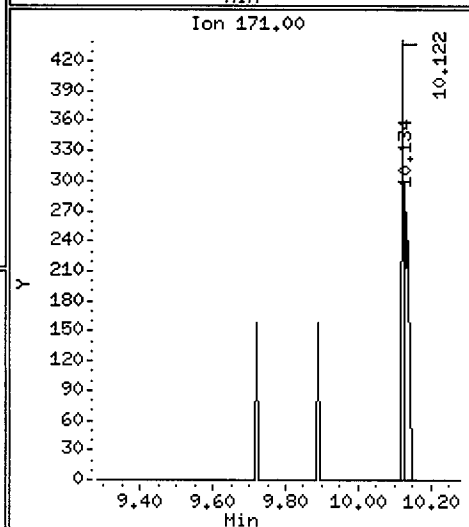
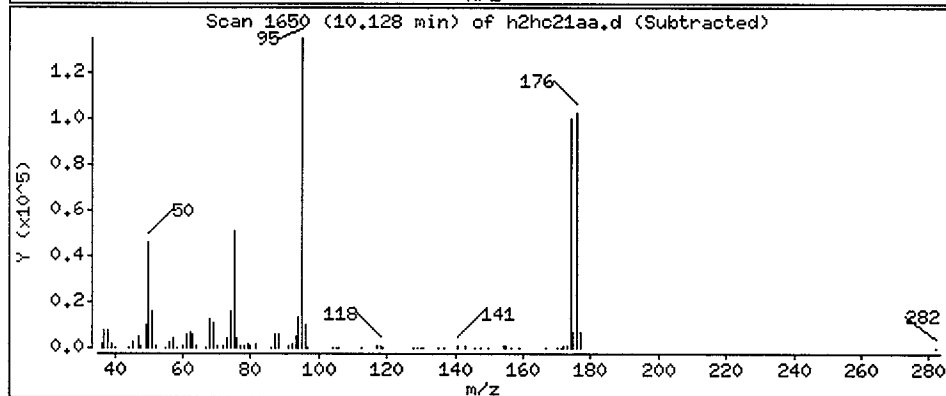
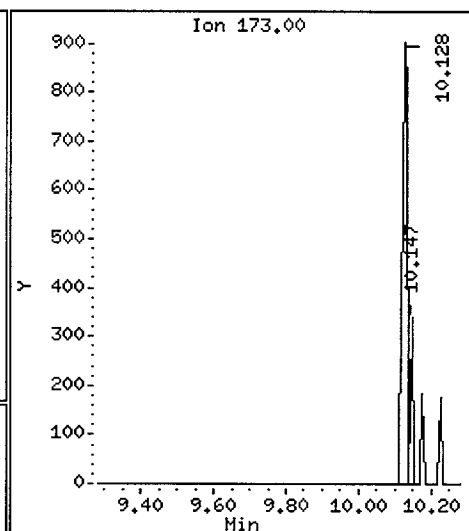
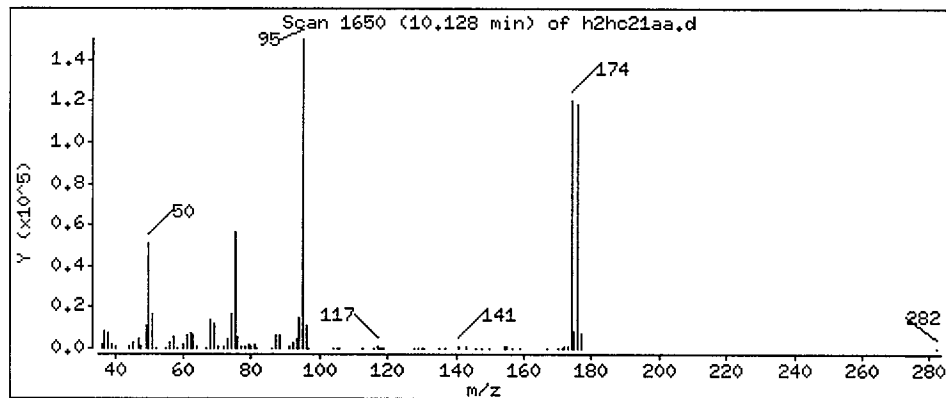
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

69 Bromoform (spcc)

Concentration: 0.028461 ug



Data File: /var/chem/gcms/mz.i/Z040706.b/h2hc21aa.d  
 Report Date: 14-Apr-2006 17:01

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z040706.b/h2hc21aa.d  
 Lab Smp Id: H2HC21AA Client Smp ID: A-5363 MEDIA CHECK  
 Inj Date : 07-APR-2006 11:10  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : H2HC21AA,1,0,,  
 Misc Info : Z040706,8260B\_LM,focus.sub  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
 Meth Date : 14-Apr-2006 15:48 wilesd Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: focus.sub  
 Target Version: 3.50

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable Local Compound Variable

| ISTD              | RT    | HEIGHT | AMOUNT |
|-------------------|-------|--------|--------|
| =====             | ===== | =====  | =====  |
| * 1 Fluorobenzene | 5.675 | 948173 | 10.000 |

| RT             | HEIGHT | CONCENTRATIONS |            | QUAL  | QUANT           |           |        |
|----------------|--------|----------------|------------|-------|-----------------|-----------|--------|
|                |        | ON-COL( ug/L)  | FINAL( ug) |       | LIBRARY         | LIB ENTRY | CPND # |
| =====          | =====  | =====          | =====      | ===== | =====           | =====     | =====  |
| Carbon dioxide |        |                |            |       | CAS #: 124-38-9 |           |        |
| 0.906          | 996657 | 10.5113413     | 0.26278    | 5     | NIST05.1        | 80        | 1      |

*Handwritten:* 7/24/14-08

Data File: /var/chem/gcms/mz.i/Z040706.b/h2hc21aa.d

Date : 07-APR-2006 11:10

Client ID: A-5363 MEDIA CHECK

Instrument: mz.i

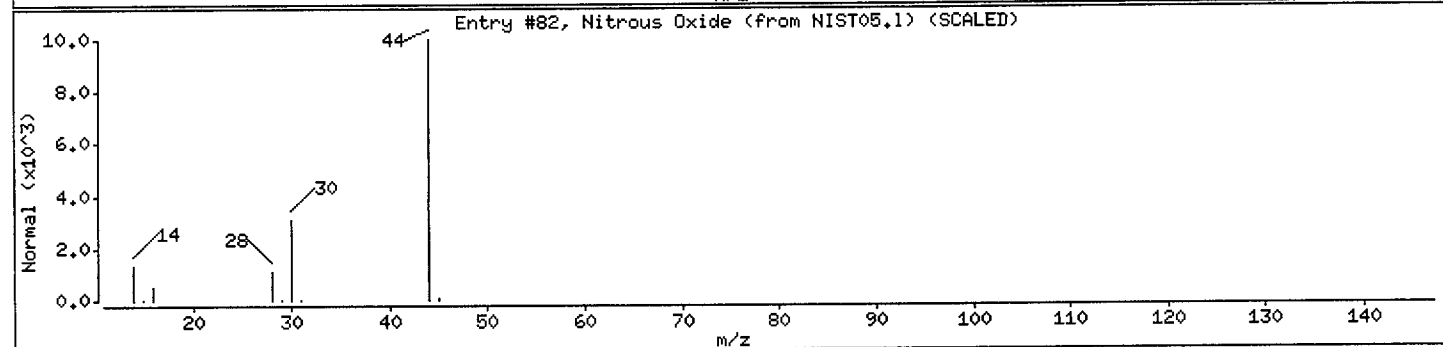
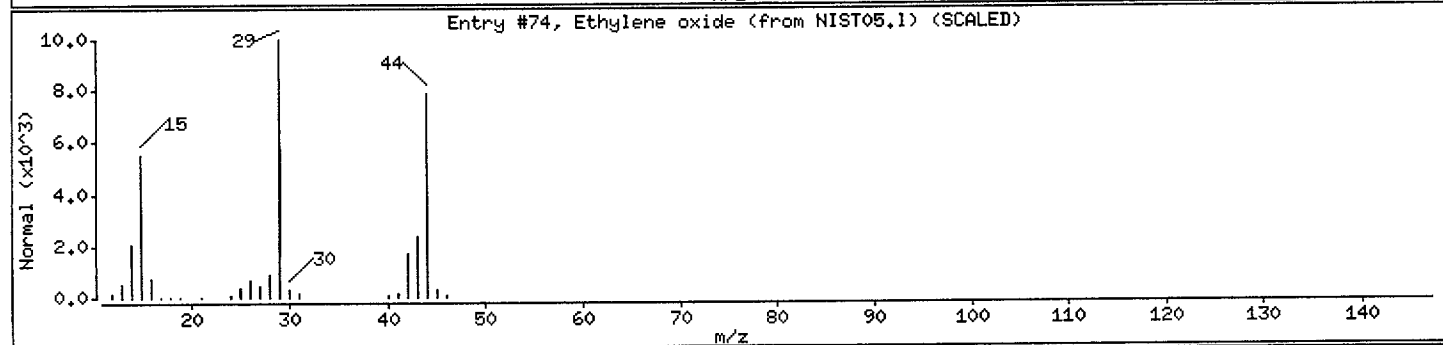
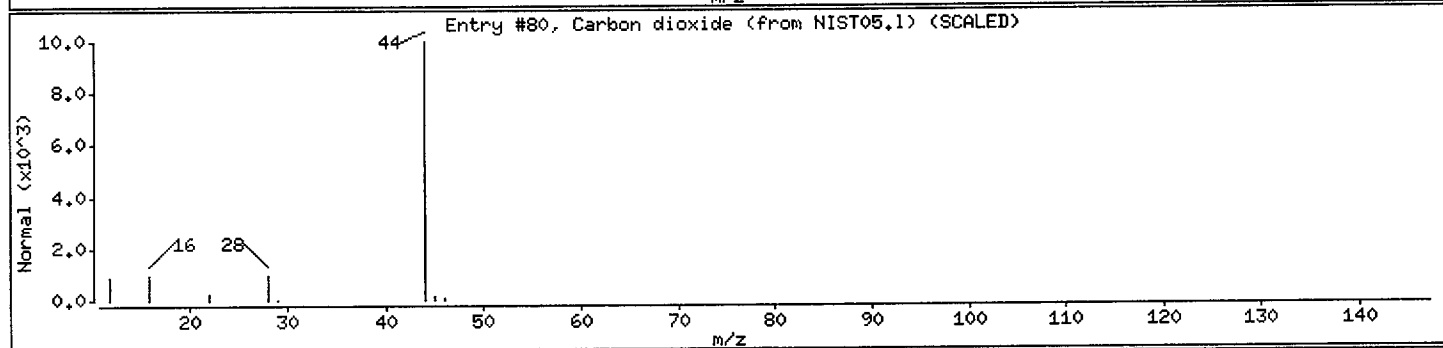
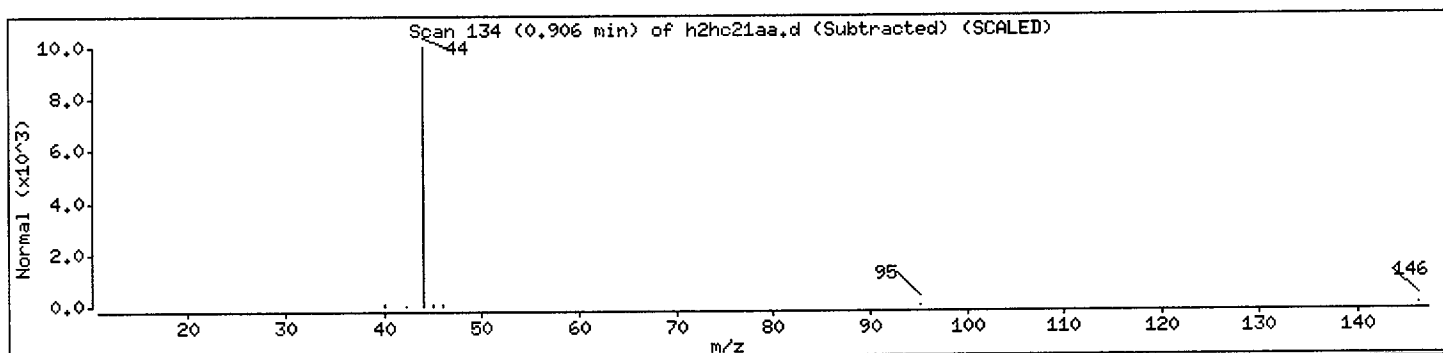
Sample Info: H2HC21AA,1,0,,

Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Carbon dioxide                | 124-38-9   | NIST05.1 | 80    | 5       | CO2     | 44     |
| Ethylene oxide                | 75-21-8    | NIST05.1 | 74    | 3       | C2H4O   | 44     |
| Nitrous Oxide                 | 10024-97-2 | NIST05.1 | 82    | 3       | N2O     | 44     |





## STL Knoxville - ACS

Client Sample ID: A-5364 MEDIA CHECK TENAX/CHARCOAL

## GC/MS Volatiles

Lot-Sample #....: H6D030169-038    Work Order #....: H2HC41AA    Matrix.....: AIR  
 Date Sampled....: 03/28/06    Date Received...: 04/02/06  
 Prep Date.....: 04/06/06    Analysis Date...: 04/07/06  
 Prep Batch #....: 6096033  
 Dilution Factor: 1    Method.....: SW846 VOST

| PARAMETER                        | RESULT           | REPORTING<br>LIMIT | UNITS     | MDL           |
|----------------------------------|------------------|--------------------|-----------|---------------|
| <b>Acetone</b>                   | <b>0.094 J,B</b> | <b>0.10</b>        | <b>ug</b> | <b>0.085</b>  |
| Acrylonitrile                    | ND               | 0.50               | ug        | 0.076         |
| Benzene                          | ND               | 0.010              | ug        | 0.0032        |
| Bromobenzene                     | ND               | 0.010              | ug        | 0.0036        |
| Bromochloromethane               | ND               | 0.025              | ug        | 0.012         |
| Bromodichloromethane             | ND               | 0.010              | ug        | 0.0016        |
| Bromoform                        | ND               | 0.025              | ug        | 0.0066        |
| <b>Bromomethane</b>              | <b>0.029 J,B</b> | <b>0.050</b>       | <b>ug</b> | <b>0.022</b>  |
| 2-Butanone                       | ND               | 0.10               | ug        | 0.035         |
| n-Butylbenzene                   | ND               | 0.010              | ug        | 0.0047        |
| sec-Butylbenzene                 | ND               | 0.010              | ug        | 0.0036        |
| tert-Butylbenzene                | ND               | 0.010              | ug        | 0.0030        |
| Carbon disulfide                 | ND               | 0.010              | ug        | 0.0011        |
| Carbon tetrachloride             | ND               | 0.010              | ug        | 0.0011        |
| Chlorobenzene                    | ND               | 0.010              | ug        | 0.0013        |
| Chlorodibromomethane             | ND               | 0.025              | ug        | 0.010         |
| Chloroethane                     | ND               | 0.050              | ug        | 0.010         |
| Chloroform                       | ND               | 0.010              | ug        | 0.0019        |
| <b>Chloromethane</b>             | <b>0.011</b>     | <b>0.010</b>       | <b>ug</b> | <b>0.0032</b> |
| 2-Chlorotoluene                  | ND               | 0.010              | ug        | 0.0023        |
| 4-Chlorotoluene                  | ND               | 0.010              | ug        | 0.0020        |
| 1,2-Dibromo-3-chloro-<br>propane | ND               | 0.050              | ug        | 0.020         |
| 1,2-Dibromoethane                | ND               | 0.025              | ug        | 0.010         |
| Dibromomethane                   | ND               | 0.025              | ug        | 0.010         |
| 1,2-Dichlorobenzene              | ND               | 0.010              | ug        | 0.0030        |
| 1,3-Dichlorobenzene              | ND               | 0.010              | ug        | 0.0031        |
| 1,4-Dichlorobenzene              | ND               | 0.010              | ug        | 0.0043        |
| Dichlorodifluoromethane          | ND               | 0.025              | ug        | 0.0050        |
| 1,1-Dichloroethane               | ND               | 0.010              | ug        | 0.0019        |
| 1,2-Dichloroethane               | ND               | 0.010              | ug        | 0.0022        |
| cis-1,2-Dichloroethene           | ND               | 0.010              | ug        | 0.0025        |
| trans-1,2-Dichloroethene         | ND               | 0.010              | ug        | 0.0017        |
| 1,1-Dichloroethene               | ND               | 0.010              | ug        | 0.0023        |
| 1,2-Dichloropropane              | ND               | 0.010              | ug        | 0.0027        |
| 1,3-Dichloropropane              | ND               | 0.010              | ug        | 0.0018        |
| 2,2-Dichloropropane              | ND               | 0.010              | ug        | 0.0015        |
| cis-1,3-Dichloropropene          | ND               | 0.010              | ug        | 0.0030        |
| trans-1,3-Dichloropropene        | ND               | 0.010              | ug        | 0.0020        |

(Continued on next page)

## STL Knoxville - ACS

Client Sample ID: A-5364 MEDIA CHECK TENAX/CHARCOAL

## GC/MS Volatiles

Lot-Sample #...: H6D030169-038 Work Order #...: H2HC41AA Matrix.....: AIR

| PARAMETER                                 | RESULT           | REPORTING    |            |               |
|-------------------------------------------|------------------|--------------|------------|---------------|
|                                           |                  | LIMIT        | UNITS      | MDL           |
| 1,1-Dichloropropene                       | ND               | 0.010        | ug         | 0.0010        |
| Ethylbenzene                              | ND               | 0.010        | ug         | 0.0013        |
| Hexachlorobutadiene                       | ND               | 0.025        | ug         | 0.0048        |
| 2-Hexanone                                | ND               | 0.10         | ug         | 0.0099        |
| <b>Iodomethane</b>                        | <b>0.014 J,B</b> | <b>0.050</b> | <b>ug</b>  | <b>0.0016</b> |
| Isopropylbenzene                          | ND               | 0.010        | ug         | 0.0023        |
| p-Isopropyltoluene                        | ND               | 0.010        | ug         | 0.0038        |
| Methylene chloride                        | ND               | 0.025        | ug         | 0.013         |
| 4-Methyl-2-pentanone                      | ND               | 0.10         | ug         | 0.014         |
| Naphthalene                               | ND               | 0.025        | ug         | 0.010         |
| n-Propylbenzene                           | ND               | 0.010        | ug         | 0.0029        |
| Styrene                                   | ND               | 0.010        | ug         | 0.0017        |
| 1,1,1,2-Tetrachloroethane                 | ND               | 0.010        | ug         | 0.0010        |
| 1,1,2,2-Tetrachloroethane                 | ND               | 0.025        | ug         | 0.011         |
| Tetrachloroethene                         | ND               | 0.010        | ug         | 0.0021        |
| Tetrahydrofuran                           | ND               | 0.10         | ug         | 0.031         |
| Toluene                                   | ND               | 0.010        | ug         | 0.0022        |
| 1,2,3-Trichlorobenzene                    | ND               | 0.025        | ug         | 0.014         |
| 1,2,4-Trichloro-<br>benzene               | ND               | 0.025        | ug         | 0.0030        |
| 1,1,1-Trichloroethane                     | ND               | 0.025        | ug         | 0.0016        |
| 1,1,2-Trichloroethane                     | ND               | 0.025        | ug         | 0.0050        |
| Trichloroethene                           | ND               | 0.010        | ug         | 0.0050        |
| Trichlorofluoromethane                    | ND               | 0.050        | ug         | 0.0049        |
| 1,2,3-Trichloropropane                    | ND               | 0.025        | ug         | 0.0081        |
| 1,1,2-Trichloro-<br>1,2,2-trifluoroethane | ND               | 0.050        | ug         | 0.0018        |
| 1,2,4-Trimethylbenzene                    | ND               | 0.010        | ug         | 0.0048        |
| 1,3,5-Trimethylbenzene                    | ND               | 0.010        | ug         | 0.0028        |
| Vinyl acetate                             | ND               | 0.050        | ug         | 0.012         |
| Vinyl chloride                            | ND               | 0.010        | ug         | 0.0032        |
| m-Xylene & p-Xylene                       | ND               | 0.020        | ug         | 0.0034        |
| o-Xylene                                  | ND               | 0.010        | ug         | 0.0017        |
| Xylenes (total)                           | ND               | 0.030        | ug         | 0.0048        |
| SURROGATE                                 | PERCENT          |              | RECOVERY   |               |
|                                           | RECOVERY         |              | LIMITS     |               |
| Dibromofluoromethane                      | 105              |              | (50 - 134) |               |
| 1,2-Dichloroethane-d4                     | 99               |              | (50 - 134) |               |
| Toluene-d8                                | 91               |              | (57 - 127) |               |
| Bromofluorobenzene                        | 83               |              | (50 - 125) |               |

**NOTE(S) :**

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

STL Knoxville - ACS

A-5364 MEDIA CHECK TENAX/CHARCOAL

GC/MS Volatiles

Lot-Sample #: H6D030169-038

Work Order #: H2HC41AA

Matrix: AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug           |

Data File: /chem/gcms/mz.i/Z040706.b/h2hc41aa.d  
Report Date: 07-Apr-2006 11:05

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /chem/gcms/mz.i/Z040706.b/h2hc41aa.d  
Lab Smp Id: H2HC41AA Client Smp ID: A-5364 MEDIA CHECK  
Inj Date : 07-APR-2006 10:47  
Operator : 22980 Inst ID: mz.i  
Smp Info : H2HC41AA,1,0,,  
Misc Info : Z040706,8260B\_LM,focus.sub  
Comment : Volatile Organics by GC/MS  
Method : /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
Meth Date : 07-Apr-2006 09:40 gosss Quant Type: ISTD  
Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable

Local Compound Variable

✓  
4/10/06

| Compounds                    | QUANT SIG | MASS   | RT     | EXP RT  | REL RT | RESPONSE | CONCENTRATIONS       |                |
|------------------------------|-----------|--------|--------|---------|--------|----------|----------------------|----------------|
|                              |           |        |        |         |        |          | ON-COLUMN<br>( ug/L) | FINAL<br>( ug) |
| * 1 Fluorobenzene            | 96        | 5.674  | 5.676  | (1.000) | 874983 | 10.0000  |                      |                |
| * 2 Chlorobenzene-d5         | 119       | 8.935  | 8.937  | (1.000) | 187631 | 10.0000  |                      |                |
| * 3 1,4 Dichlorobenzene-d4   | 152       | 11.490 | 11.492 | (1.000) | 245860 | 10.0000  |                      |                |
| \$ 4 Dibromofluoromethane    | 113       | 4.829  | 4.831  | (0.851) | 147252 | 10.5027  | 0.26257              |                |
| \$ 5 1,2-Dichloroethane-d4   | 65        | 5.236  | 5.238  | (0.923) | 119590 | 9.86387  | 0.24660              |                |
| \$ 6 Toluene-d8              | 98        | 7.463  | 7.465  | (0.835) | 748252 | 9.07612  | 0.22690              |                |
| \$ 7 4-Bromofluorobenzene    | 95        | 10.127 | 10.129 | (0.881) | 205517 | 8.28862  | 0.20722              |                |
| 11 Chloromethane (spcc)      | 50        | 1.124  | 1.126  | (0.198) | 49585  | 0.43627  | 0.010907             |                |
| 15 Bromomethane              | 94        | 1.428  | 1.418  | (0.252) | 3071   | 1.16337  | 0.029084             |                |
| 22 Acetone                   | 43        | 2.115  | 2.123  | (0.373) | 1845   | 3.59710  | 0.089927             |                |
| 23 *Iodomethane              | 142       | 2.170  | 2.184  | (0.382) | 817    | 0.55809  | 0.013952             |                |
| 39 *THF                      | 42        | 4.537  | 4.532  | (0.800) | 1247   | 0.60111  | 0.015028             |                |
| 45 1,2-Dichloroethane        | 62        | 5.668  | 5.335  | (0.999) | 13870  | 0.75913  | 0.018978             |                |
| 53 4-Methyl-2-pentanone      | 43        | 7.457  | 7.386  | (1.314) | 6390   | 0.83634  | 0.020908             |                |
| 55 trans-1,3-Dichloropropene | 75        | 8.101  | 7.793  | (0.907) | 71     | 0.62948  | 0.015737             |                |
| 69 Bromoform (spcc)          | 173       | 10.115 | 9.782  | (1.132) | 90     | 0.83149  | 0.020787             |                |

- See reprint (m)

7/11/14-06

Data File: /var/chem/gcms/mz.i/Z040706.b/h2hc41aa.d  
 Report Date: 14-Apr-2006 16:54

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z040706.b/h2hc41aa.d  
 Lab Smp Id: H2HC41AA Client Smp ID: A-5364 MEDIA CHECK  
 Inj Date : 07-APR-2006 10:47  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : H2HC41AA,1,0,,  
 Misc Info : Z040706,8260B\_LM,focus.sub  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
 Meth Date : 14-Apr-2006 15:48 wile sd Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: focus.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable Local Compound Variable

| Compounds                  | QUANT | SIG | MASS   | RT     | EXP RT  | REL RT | RESPONSE | CONCENTRATIONS       |                |
|----------------------------|-------|-----|--------|--------|---------|--------|----------|----------------------|----------------|
|                            |       |     |        |        |         |        |          | ON-COLUMN<br>( ug/L) | FINAL<br>( ug) |
| * 1 Fluorobenzene          | 96    |     | 5.674  | 5.676  | (1.000) | 874983 | 10.0000  |                      |                |
| * 2 Chlorobenzene-d5       | 119   |     | 8.935  | 8.937  | (1.000) | 187631 | 10.0000  |                      |                |
| * 3 1,4 Dichlorobenzene-d4 | 152   |     | 11.490 | 11.492 | (1.000) | 245860 | 10.0000  |                      |                |
| \$ 4 Dibromofluoromethane  | 113   |     | 4.829  | 4.831  | (0.851) | 147252 | 10.5027  | 0.26257              |                |
| \$ 5 1,2-Dichloroethane-d4 | 65    |     | 5.236  | 5.238  | (0.923) | 119590 | 9.86384  | 0.24660              |                |
| \$ 6 Toluene-d8            | 98    |     | 7.463  | 7.465  | (0.835) | 748252 | 9.07613  | 0.22690              |                |
| \$ 7 4-Bromofluorobenzene  | 95    |     | 10.127 | 10.129 | (0.881) | 205517 | 8.28863  | 0.20722              |                |
| 11 Chloromethane (spcc)    | 50    |     | 1.124  | 1.126  | (0.198) | 49585  | 0.43626  | 0.010906             |                |
| 15 Bromomethane            | 94    |     | 1.428  | 1.418  | (0.252) | 3071   | 1.16328  | 0.029082             |                |
| 22 Acetone                 | 43    |     | 2.140  | 2.123  | (0.377) | 2672   | 3.75476  | 0.093869(M)          |                |
| 23 *Iodomethane            | 142   |     | 2.170  | 2.184  | (0.382) | 817    | 0.55805  | 0.013951             |                |
| 39 *THF                    | 42    |     | 4.537  | 4.532  | (0.800) | 1247   | 0.60066  | 0.015016             |                |

Data File: /var/chem/gcms/mz.i/Z040706.b/h2hc41aa.d  
Report Date: 14-Apr-2006 16:54

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/gcms/mz.i/Z040706.b/h2hc41aa.d  
 Report Date: 07-Apr-2006 11:05

STL Knoxville

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                       |                                   |
|-------------------------------------------------------|-----------------------------------|
| Instrument ID: mz.i                                   | Calibration Date: 07-APR-2006     |
| Lab File ID: h2hc41aa.d                               | Calibration Time: 07:35           |
| Lab Smp Id: H2HC41AA                                  | Client Smp ID: A-5364 MEDIA CHECK |
| Analysis Type: VOA                                    | Level: LOW                        |
| Quant Type: ISTD                                      | Sample Type: AIR                  |
| Operator: 22980                                       |                                   |
| Method File: /var/chem/gcms/mz.i/Z040706.b/8260B_LM.m |                                   |
| Misc Info: Z040706,8260B_LM,focus.sub                 |                                   |

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE | %DIFF |
|---------------------|----------|------------|---------|--------|-------|
|                     |          | LOWER      | UPPER   |        |       |
| 1 Fluorobenzene     | 952581   | 476290     | 1905162 | 874983 | -8.15 |
| 2 Chlorobenzene-d5  | 164101   | 82050      | 328202  | 187631 | 14.34 |
| 3 1,4 Dichlorobenze | 204390   | 102195     | 408780  | 245860 | 20.29 |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 5.68     | 5.18     | 6.18  | 5.67   | -0.03 |
| 2 Chlorobenzene-d5  | 8.94     | 8.44     | 9.44  | 8.93   | -0.02 |
| 3 1,4 Dichlorobenze | 11.49    | 10.99    | 11.99 | 11.49  | -0.02 |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mz.i/Z040706.b/h2hc41aa.d  
Report Date: 07-Apr-2006 11:05

## STL Knoxville

## RECOVERY REPORT

Client Name: STL Knoxville - ACS      Client SDG: H6D030169  
Sample Matrix: GAS      Fraction: VOA  
Lab Smp Id: H2HC41AA      Client Smp ID: A-5364 MEDIA CHECK  
Level: LOW      Operator: 22980  
Data Type: MS DATA      SampleType: SAMPLE  
SpikeList File: allcmpds.spk      Quant Type: ISTD  
Sublist File: focus.sub  
Method File: /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
Misc Info: Z040706,8260B\_LM,focus.sub

| SURROGATE COMPOUND      | CONC<br>ADDED<br>ug | CONC<br>RECOVERED<br>ug | %<br>RECOVERED | LIMITS |
|-------------------------|---------------------|-------------------------|----------------|--------|
| \$ 4 Dibromofluorometha | 0.25000             | 0.26257                 | 105.03         | 50-150 |
| \$ 5 1,2-Dichloroethane | 0.25000             | 0.24660                 | 98.64          | 50-150 |
| \$ 6 Toluene-d8         | 0.25000             | 0.22690                 | 90.76          | 50-150 |
| \$ 7 4-Bromofluorobenze | 0.25000             | 0.20722                 | 82.89          | 50-150 |



Data File: /chem/gcms/mz.i/Z040706.b/h2hc41aa.d

Date : 07-APR-2006 10:47

Client ID: A-5364 MEDIA CHECK

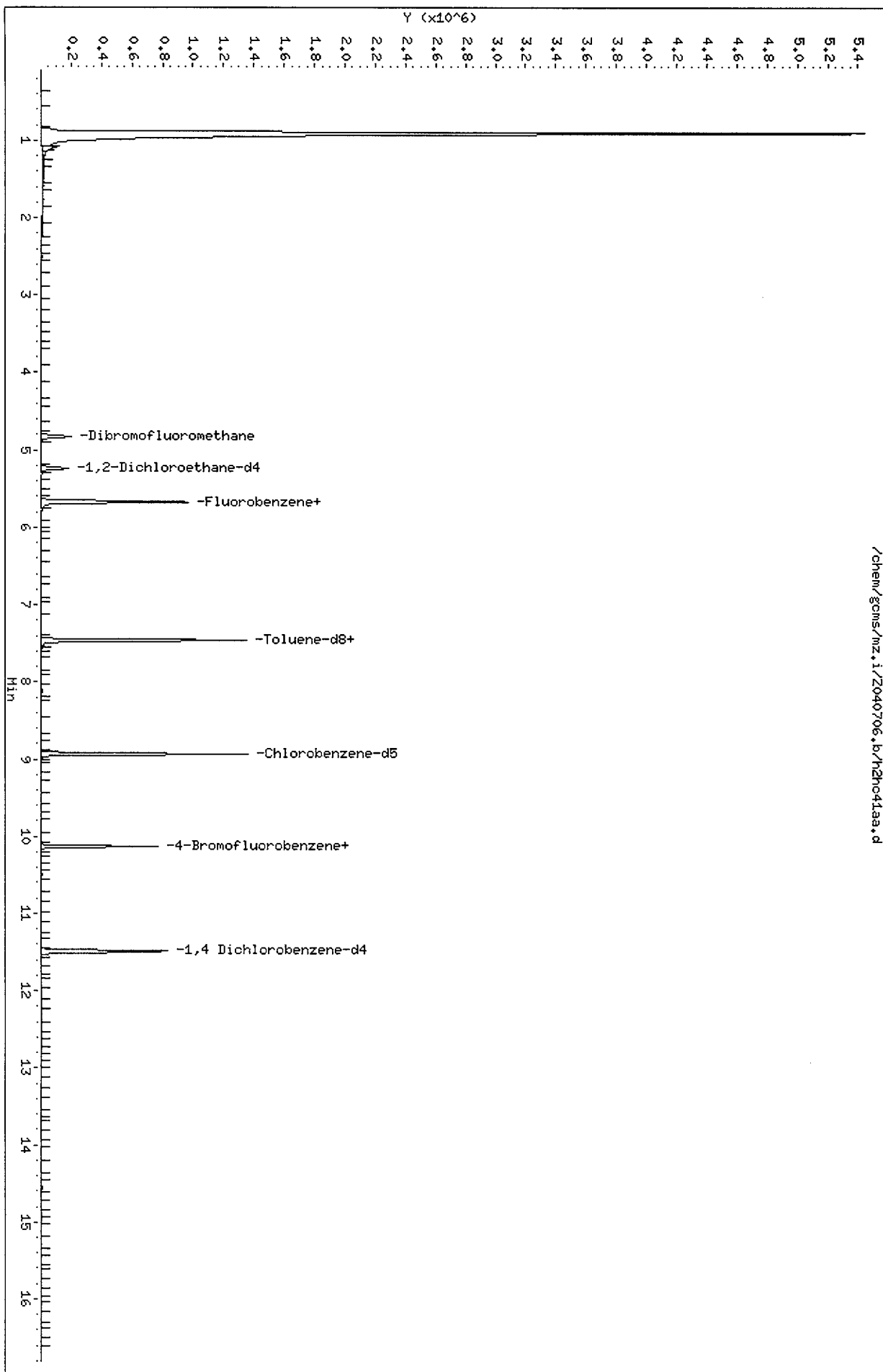
Sample Info: H2HC41AA,1,0,,

Column phase: J+M 624

Instrument: mz.i

Operator: 22980

Column diameter: 0.18



Data File: /chem/gcms/mz,i/Z040706,b/h2hc41aa,d

Date : 07-APR-2006 10:47

Client ID: A-5364 MEDIA CHECK

Instrument: mz,i

Sample Info: H2HC41AA,1,0,,

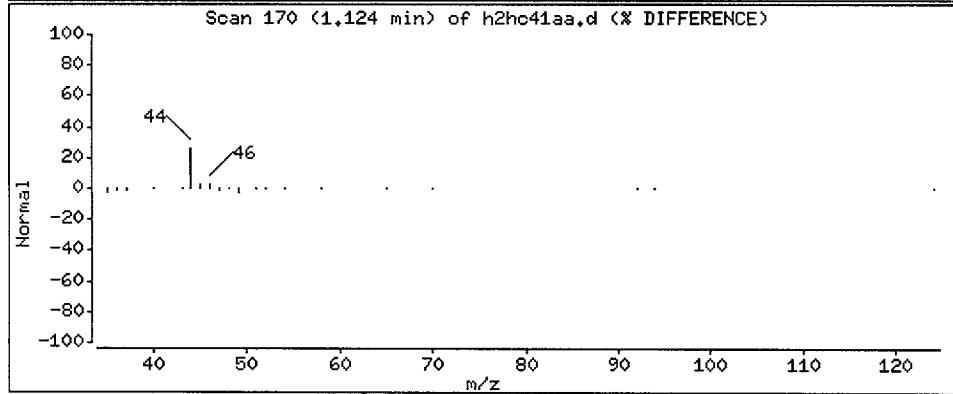
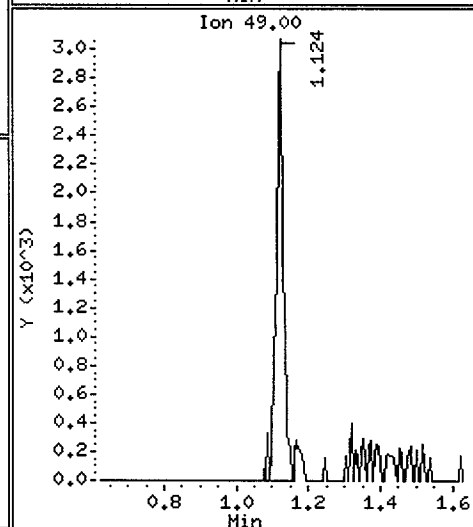
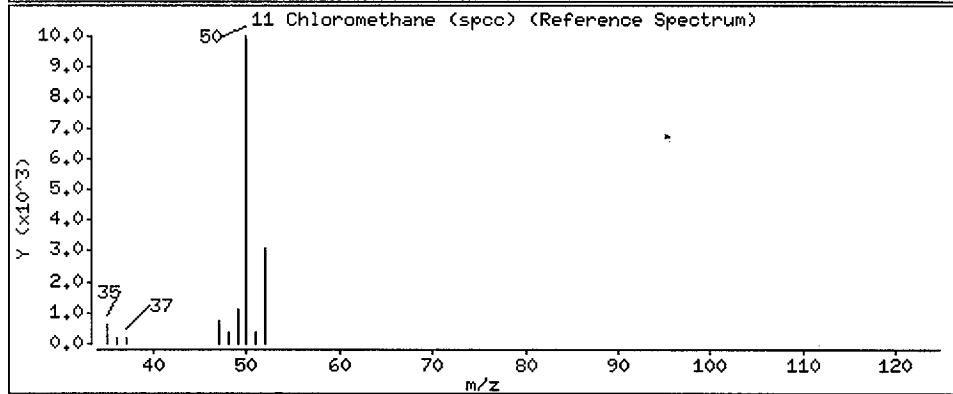
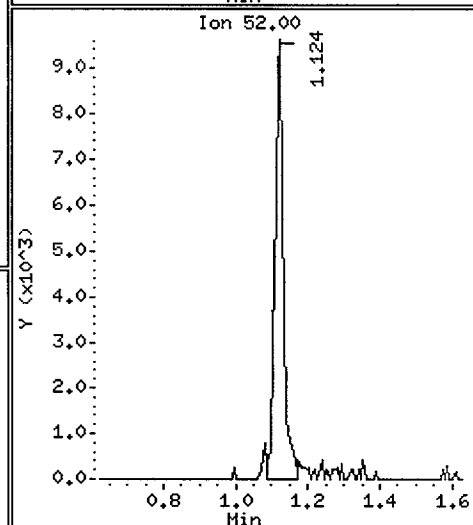
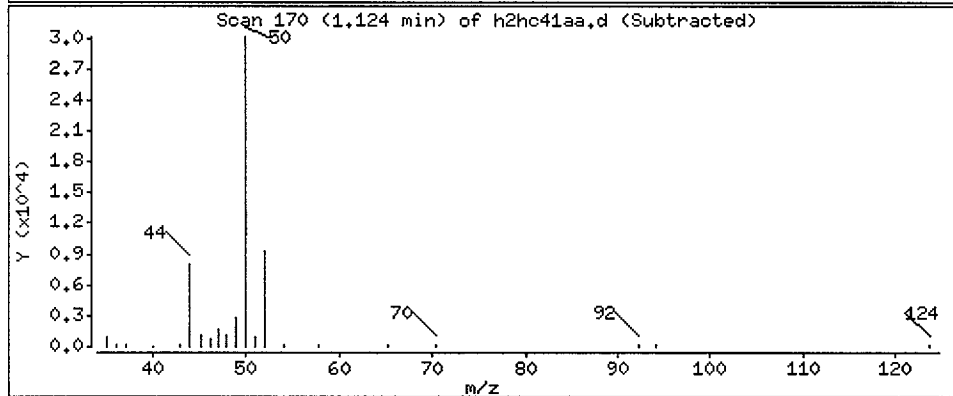
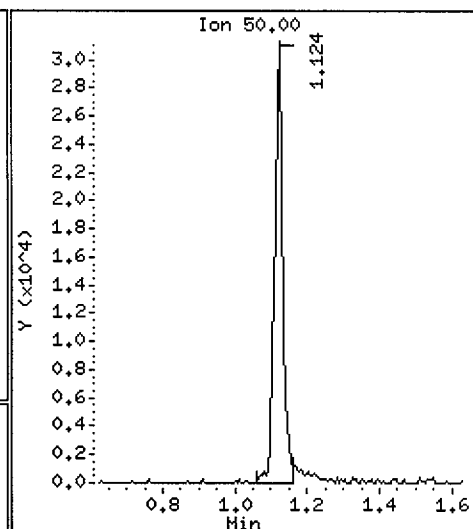
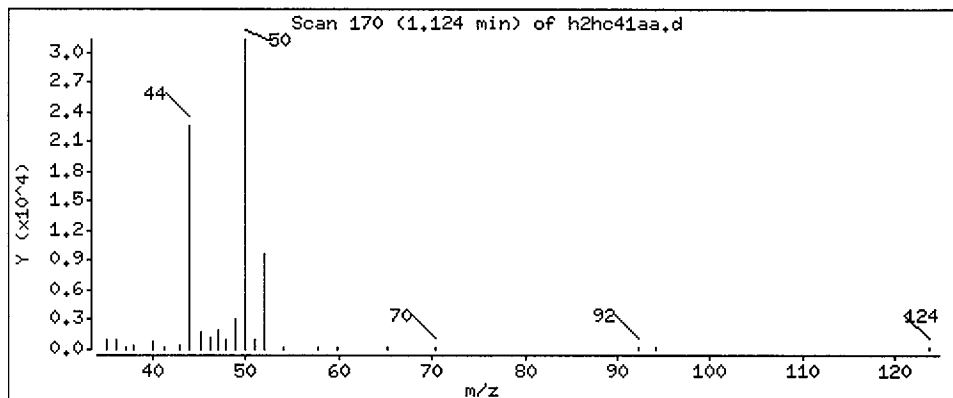
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

11 Chloromethane (spcc)

Concentration: 0.010907 ug



Data File: /chem/gcms/mz.i/Z040706,b/h2hc41aa.d

Date : 07-APR-2006 10:47

Client ID: A-5364 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC41AA,1,0,,

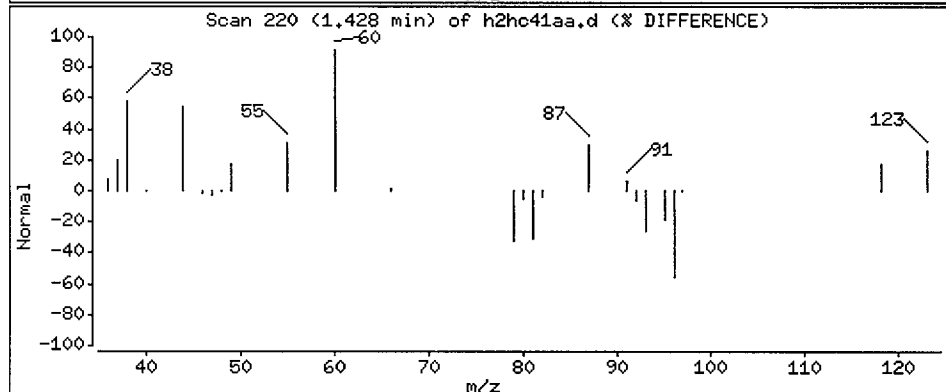
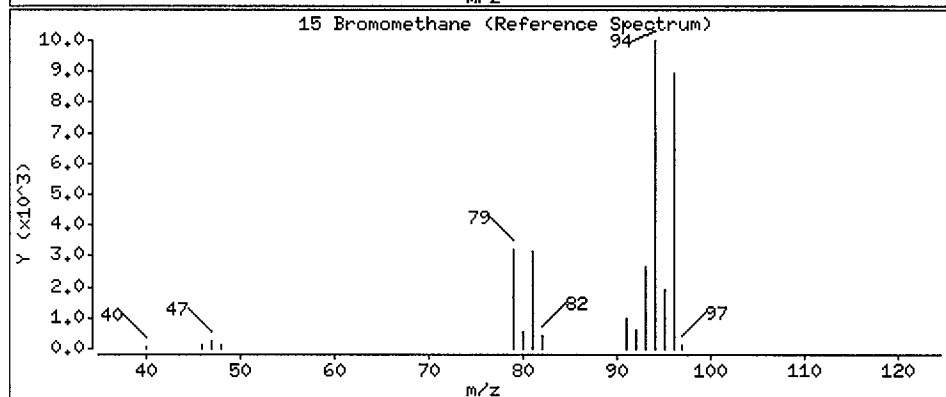
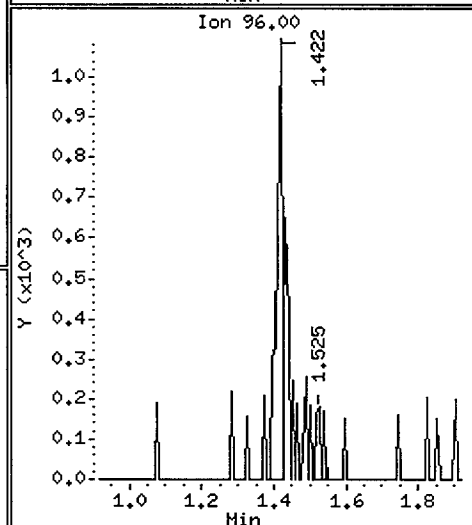
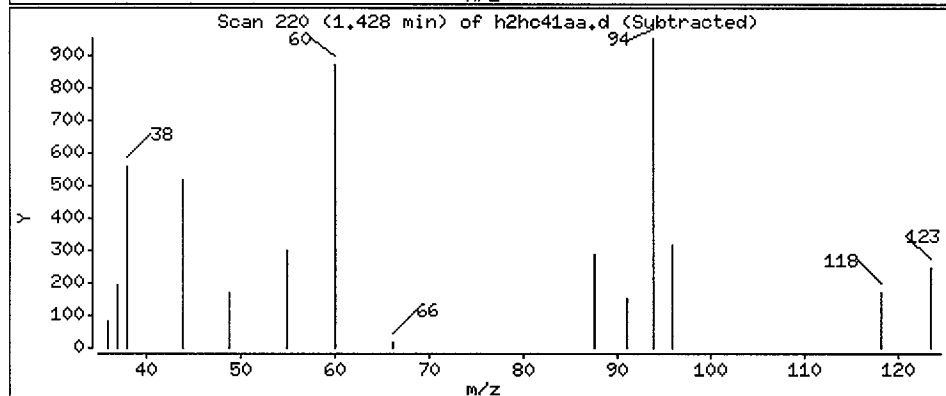
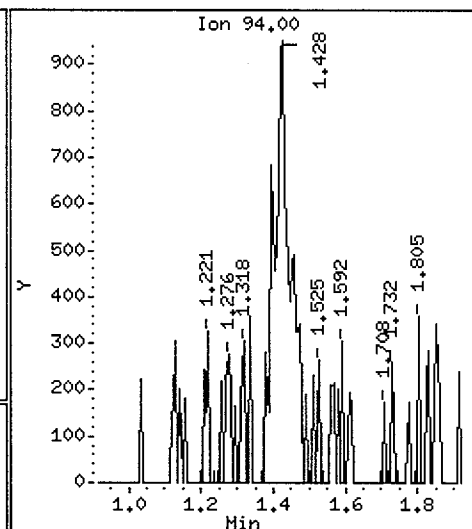
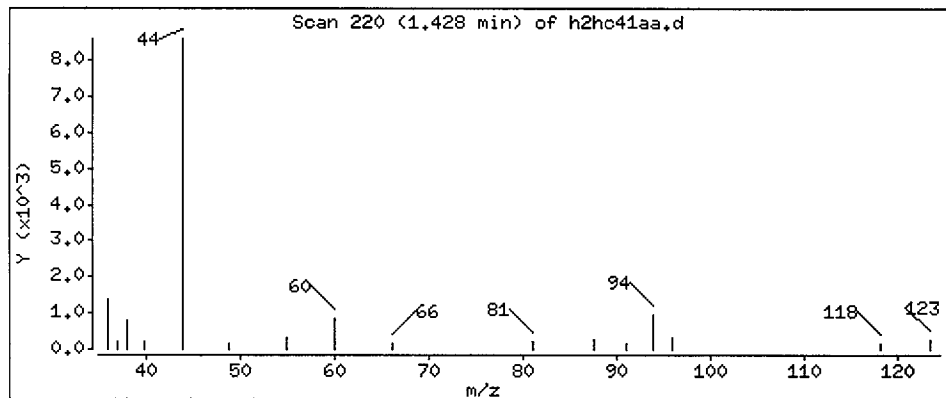
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

15 Bromomethane

Concentration: 0.029084 ug



Data File: /var/chem/gcms/mz.i/Z040706.b/h2hc41aa.d

Date: 07-APR-2006 10:47

Client ID: A-5364 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC41AA,1,0,,

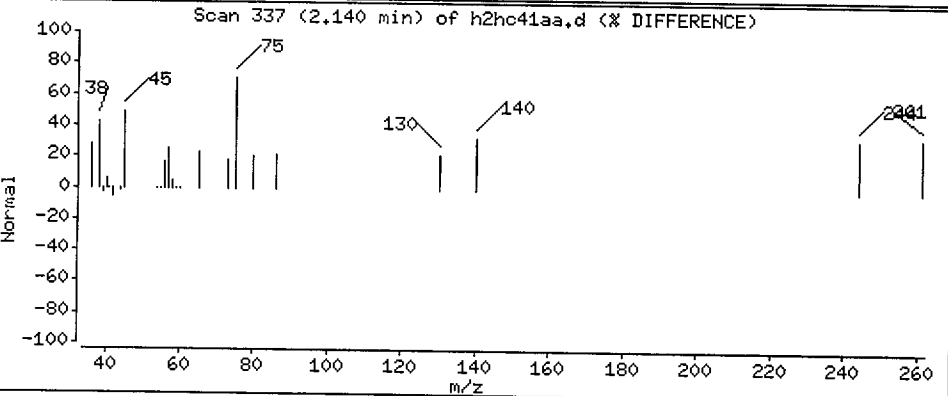
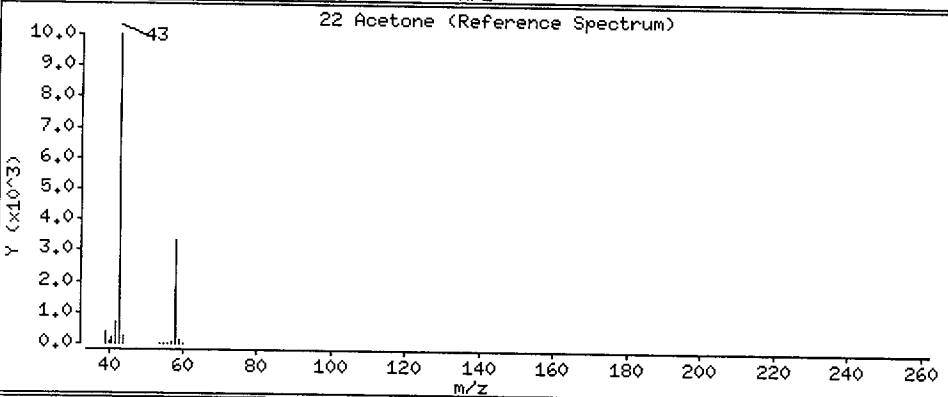
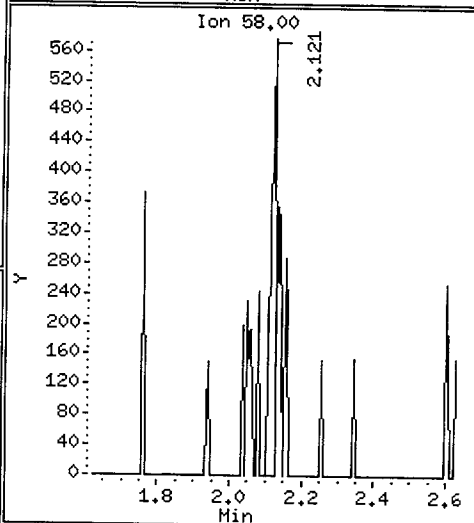
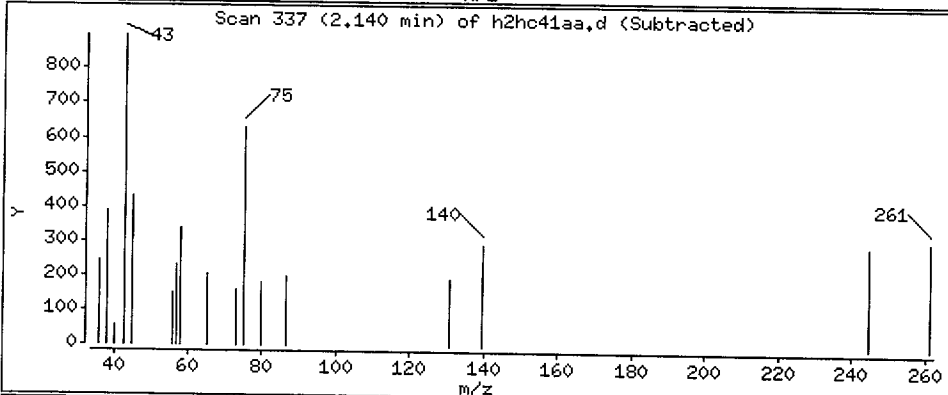
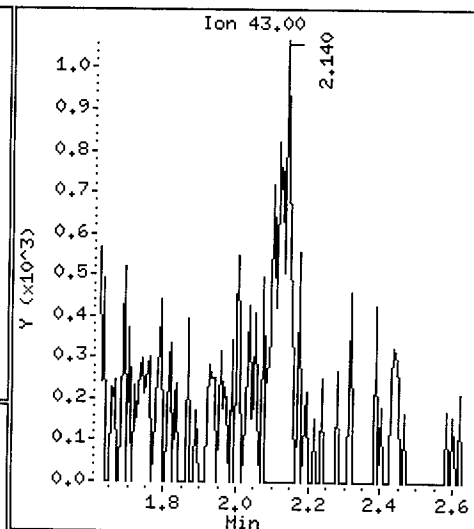
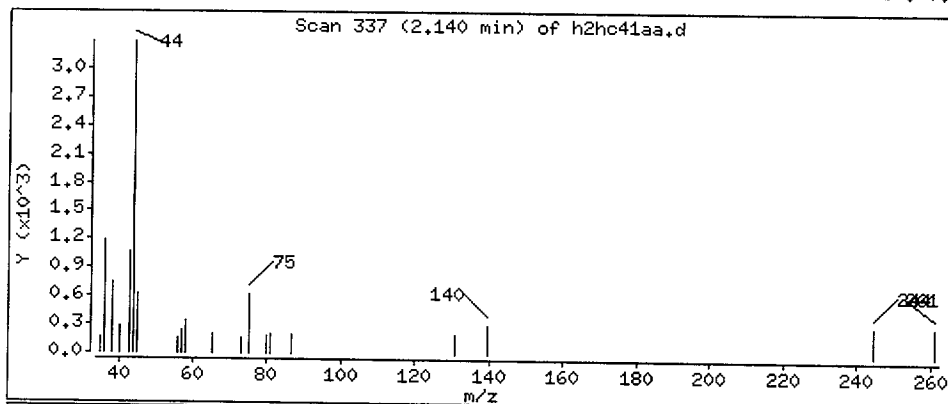
Column phase: J+W 624

Operator: 22980

Column diameter: 0.18

22 Acetone

Concentration: 0.093869 ug

2004.14.08  
(1)

Data File: /chem/gcms/mz.i/Z040706.b/h2hc41aa.d

Date : 07-APR-2006 10:47

Client ID: A-5364 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC41AA,1,0,,

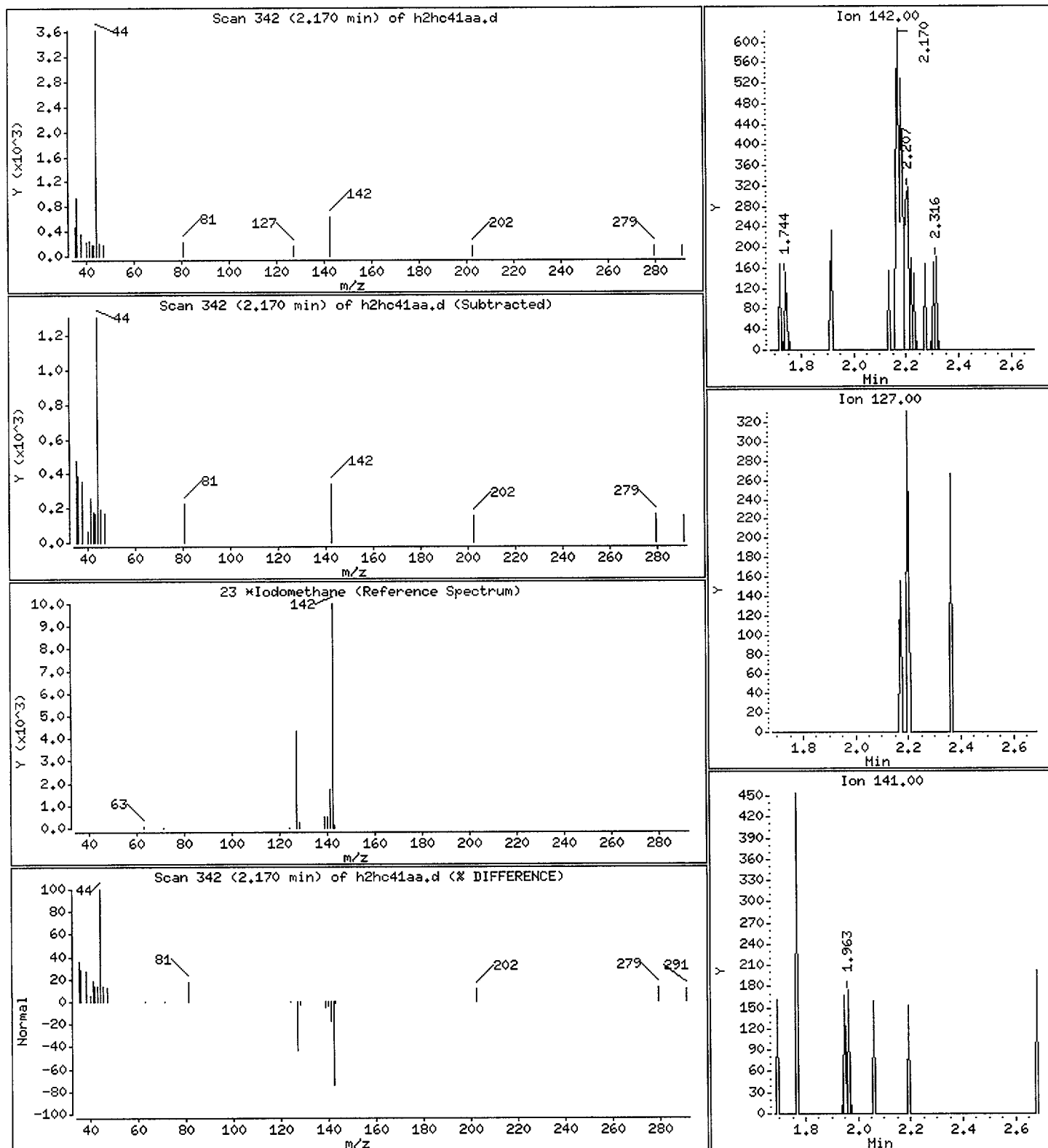
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

23 \*Iodomethane

Concentration: 0.013952 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2hc41aa.d

Date : 07-APR-2006 10:47

Client ID: A-5364 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC41AA,1,0,,

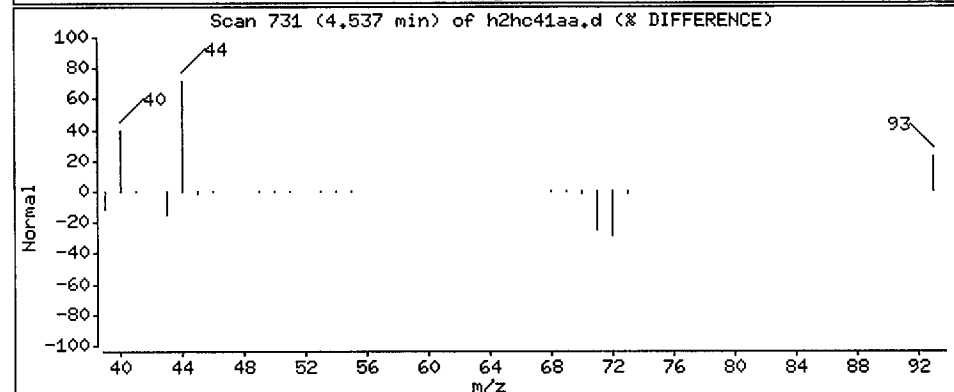
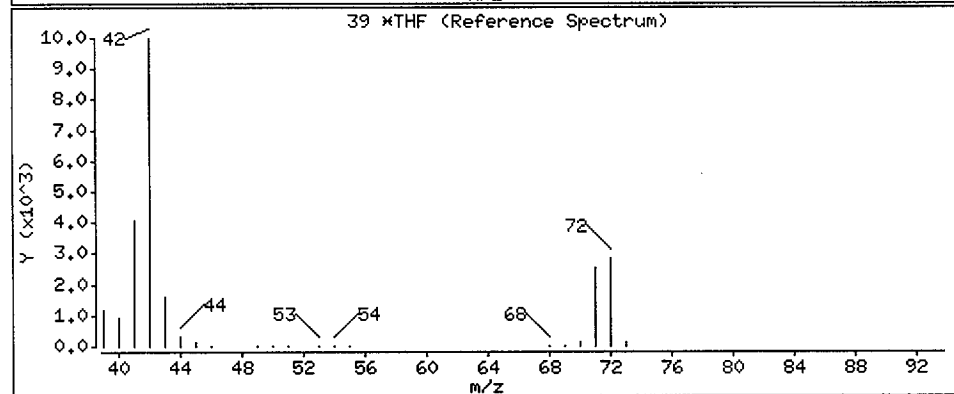
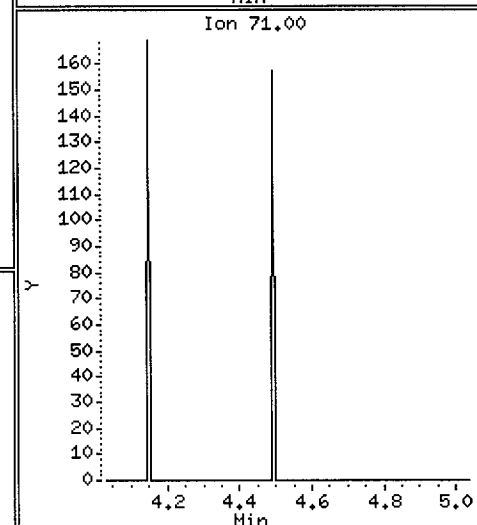
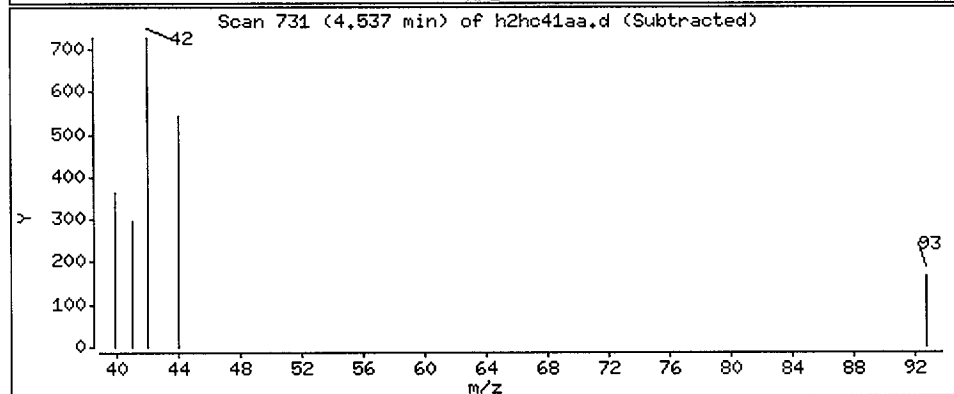
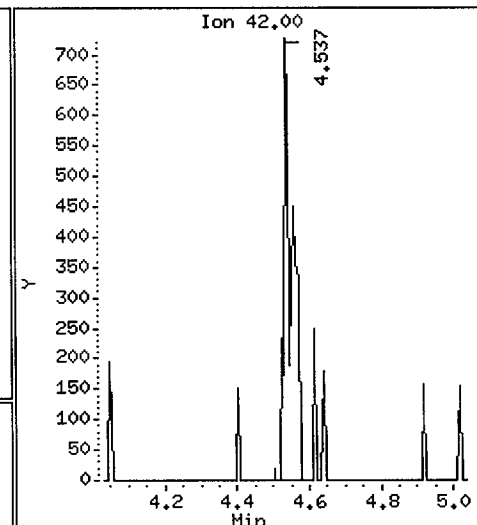
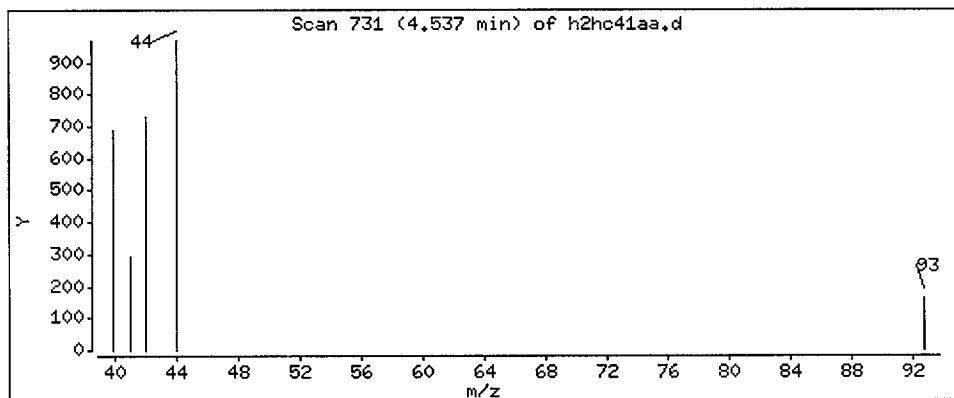
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

39 \*THF

Concentration: 0.015028 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2hc41aa.d

Date : 07-APR-2006 10:47

Client ID: A-5364 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC41AA,1,0,,

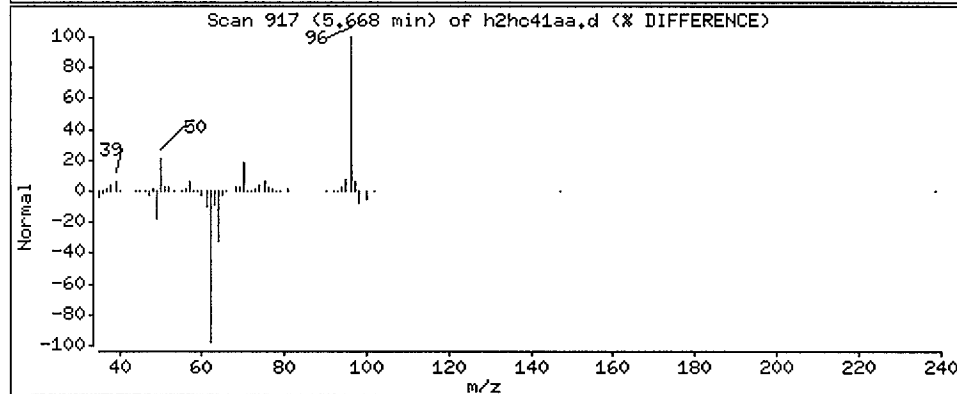
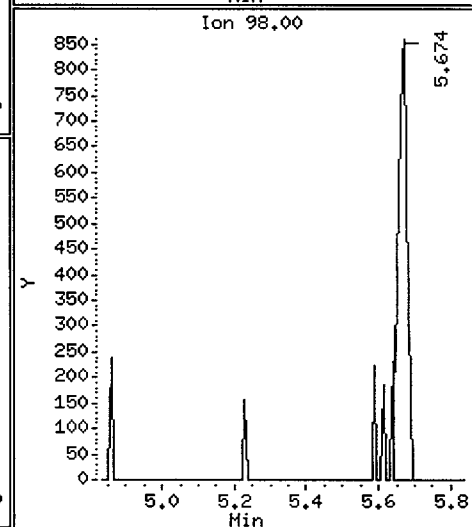
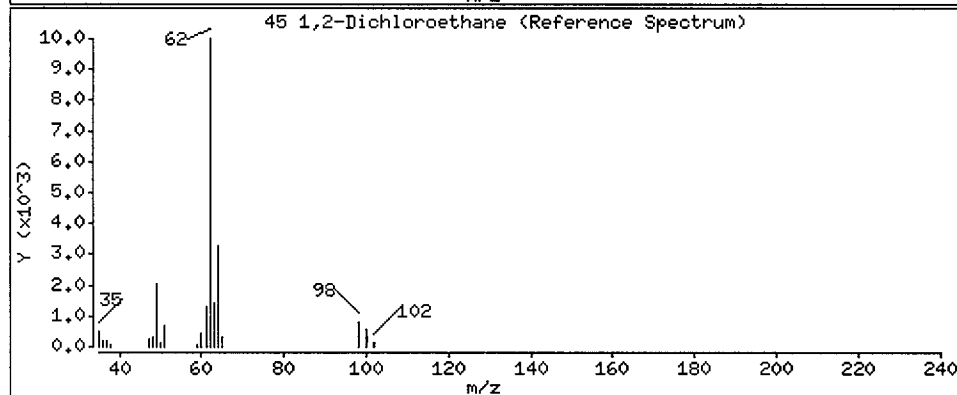
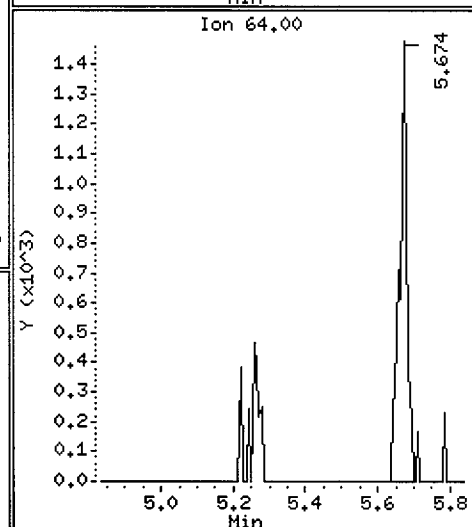
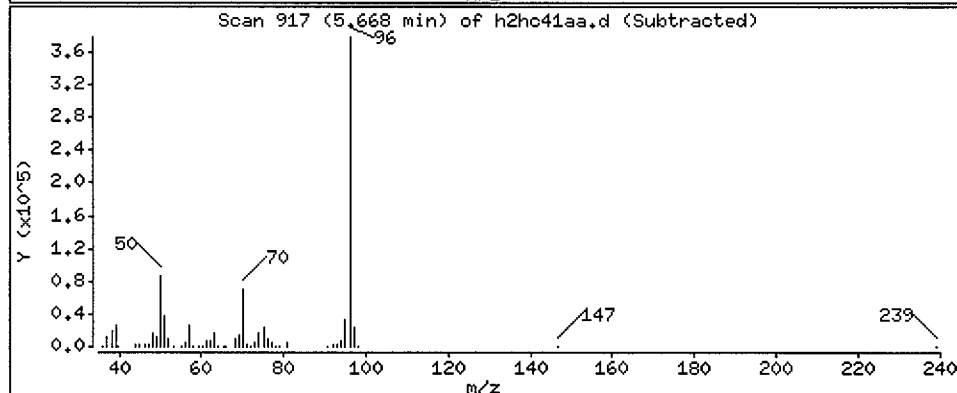
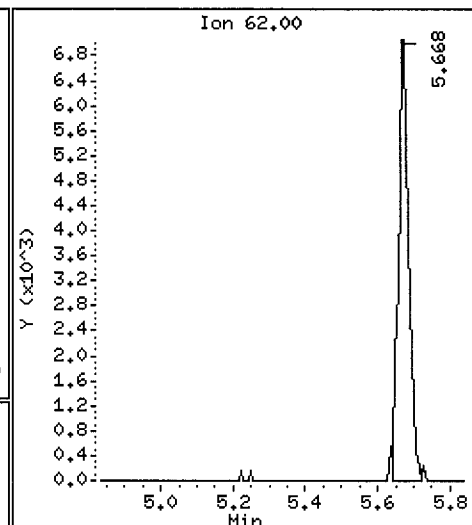
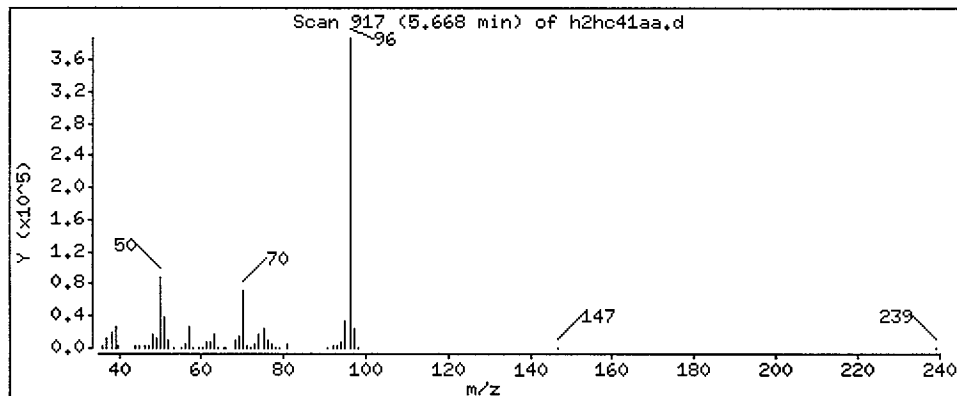
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

45 1,2-Dichloroethane

Concentration: 0.018978 ug



Data File: /chem/gcms/mz.i/2040706.b/h2hc41aa.d

Date : 07-APR-2006 10:47

Client ID: A-5364 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC41AA,1,0,,

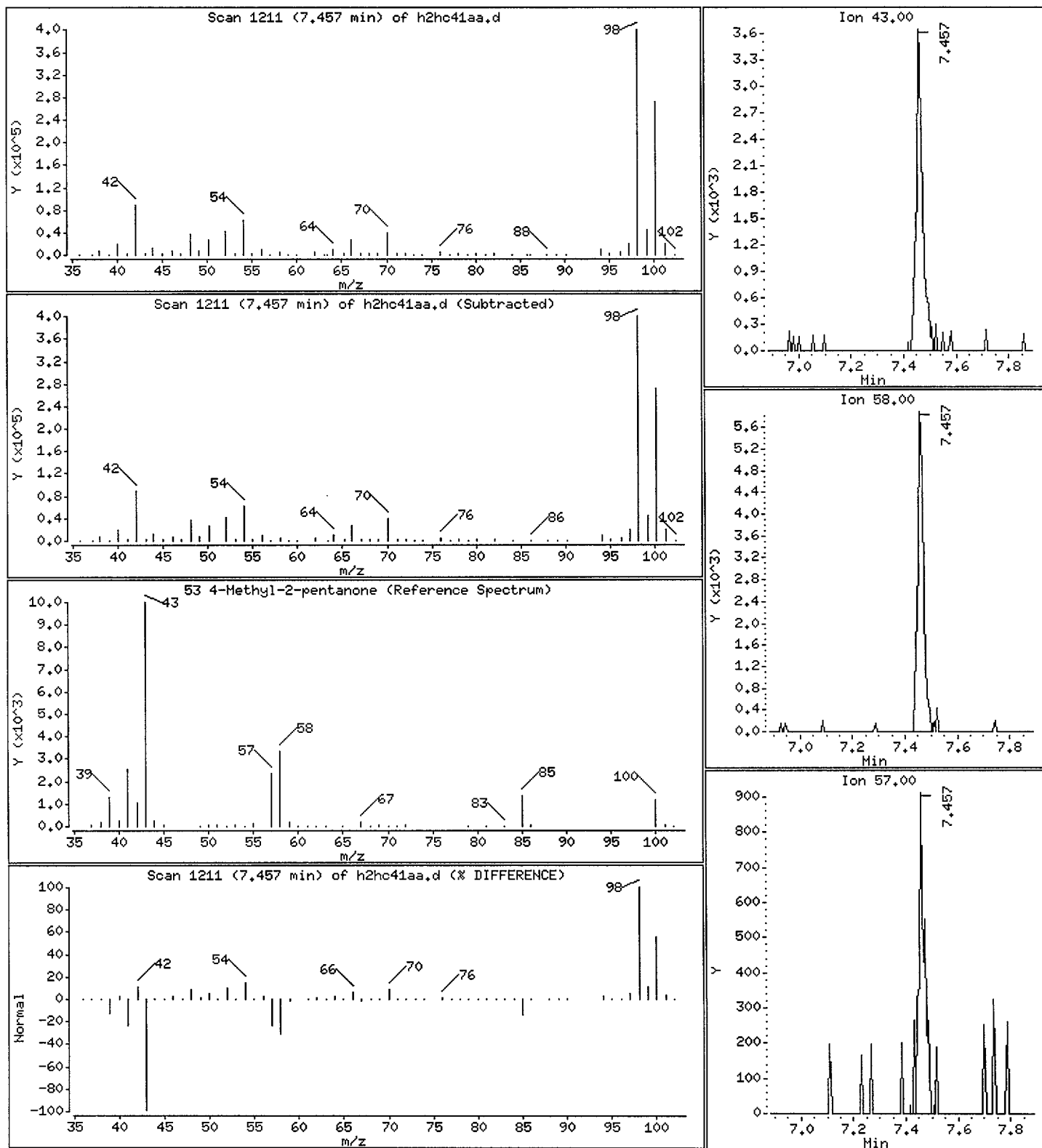
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

53 4-Methyl-2-pentanone

Concentration: 0.020908 ug





Data File: /chem/gcms/mz.i/Z040706.b/h2hc41aa.d

Date : 07-APR-2006 10:47

Client ID: A-5364 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC41AA,1,0,,

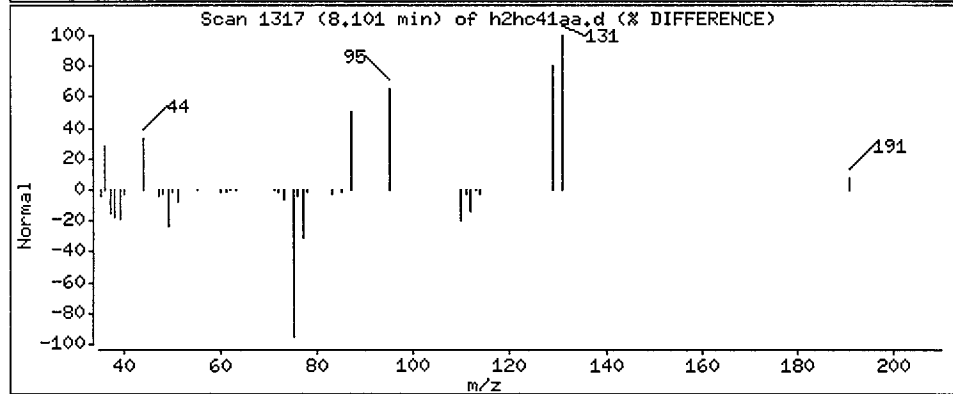
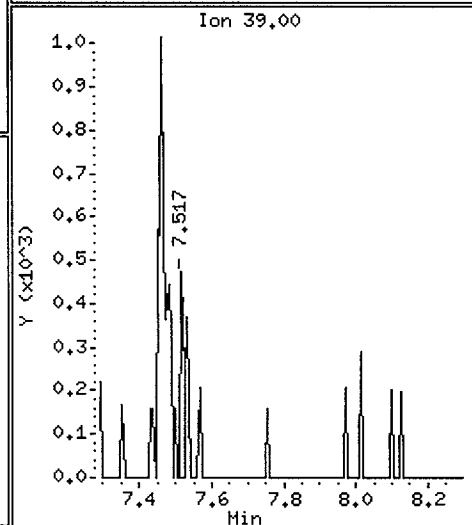
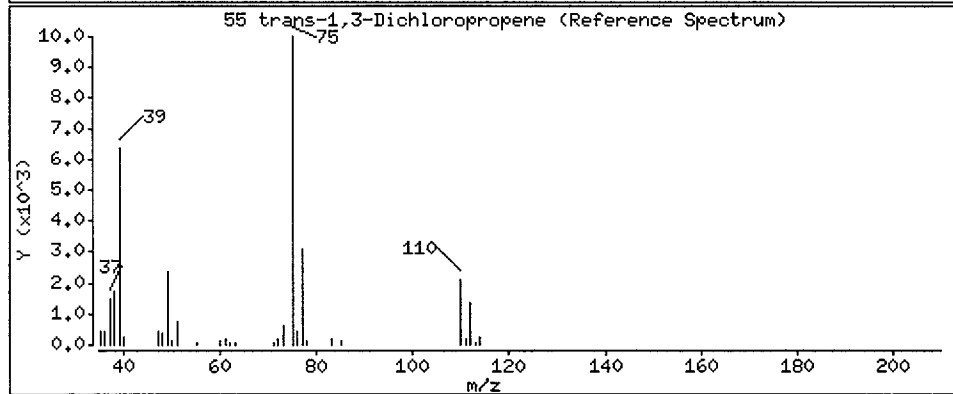
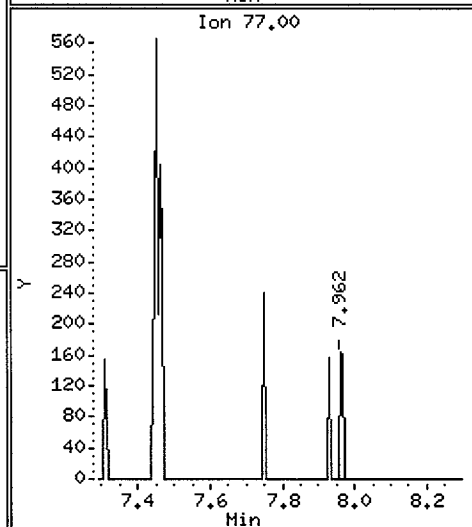
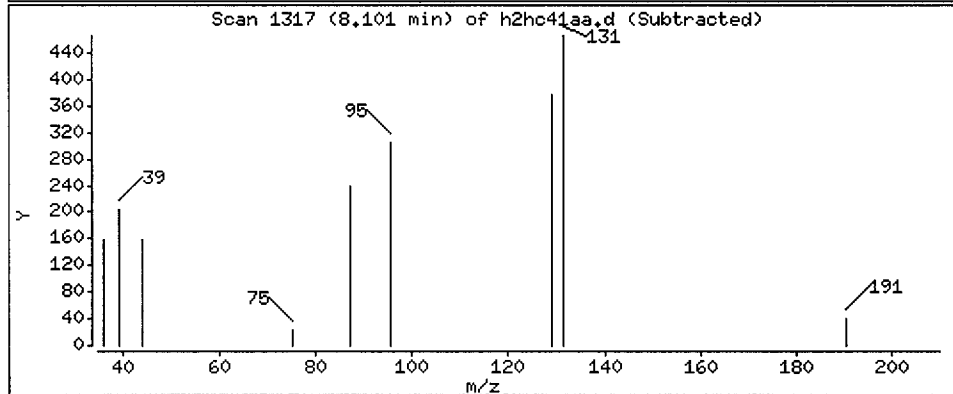
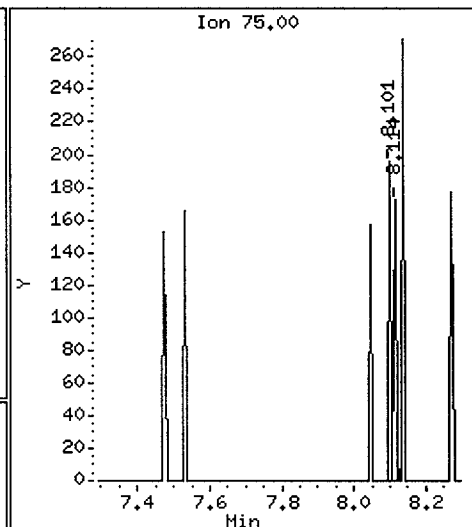
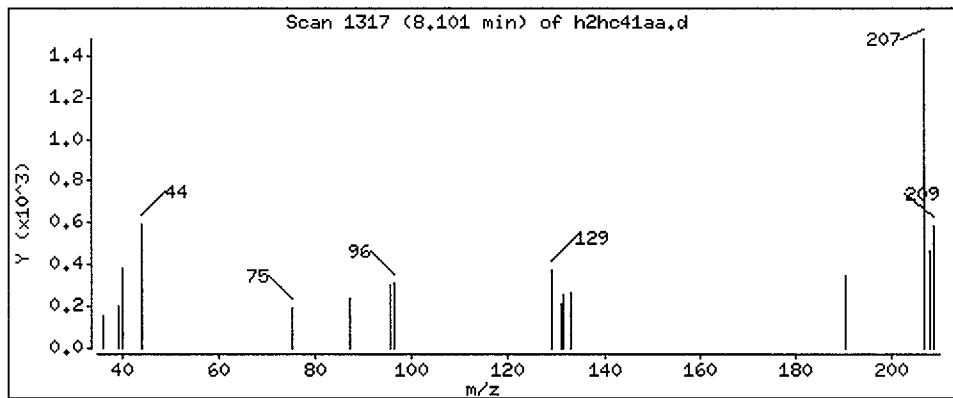
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

55 trans-1,3-Dichloropropene

Concentration: 0.015737 ug



Data File: /chem/gcms/mz.i/2040706.b/h2hc41aa.d

Date : 07-APR-2006 10:47

Client ID: A-5364 MEDIA CHECK

Instrument: mz.i

Sample Info: H2HC41AA,1,0,,

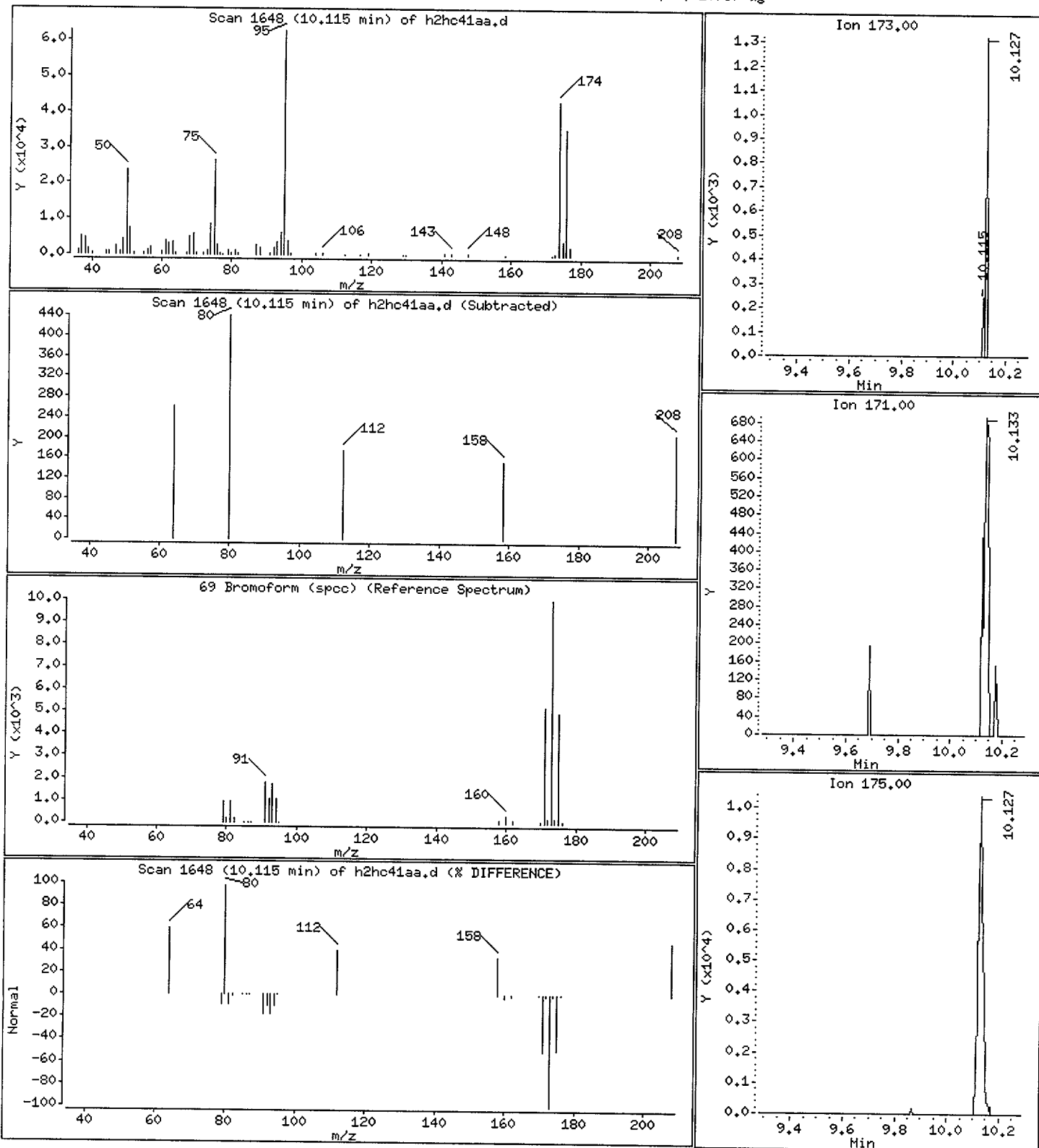
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

69 Bromoform (spcc)

Concentration: 0.020787 ug



Data File: /var/chem/gcms/mz.i/Z040706.b/h2hc41aa.d  
 Report Date: 14-Apr-2006 17:01

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z040706.b/h2hc41aa.d  
 Lab Smp Id: H2HC41AA Client Smp ID: A-5364 MEDIA CHECK  
 Inj Date : 07-APR-2006 10:47  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : H2HC41AA,1,0,,  
 Misc Info : Z040706,8260B\_LM,focus.sub  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
 Meth Date : 14-Apr-2006 15:48 wilesd Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: focus.sub  
 Target Version: 3.50

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable Local Compound Variable

| ISTD              | RT    | HEIGHT | AMOUNT |
|-------------------|-------|--------|--------|
| =====             | ===== | =====  | =====  |
| * 1 Fluorobenzene | 5.674 | 966388 | 10.000 |

| RT    | HEIGHT  | CONCENTRATIONS |             |      | QUANT    |           |        |
|-------|---------|----------------|-------------|------|----------|-----------|--------|
|       |         | ON-COL ( ug/L) | FINAL ( ug) | QUAL | LIBRARY  | LIB ENTRY | CPND # |
| 0.905 | 5439937 | 56.2914378     | 1.4073      | 5    | NIST05.1 | 80        | 1      |

Carbon dioxide CAS #: 124-38-9

*CO2*

*7/14/06*

Data File: /var/chem/gcms/mz.i/Z040706.b/h2hc41aa.d

Date : 07-APR-2006 10:47

Client ID: A-5364 MEDIA CHECK

Instrument: mz.i

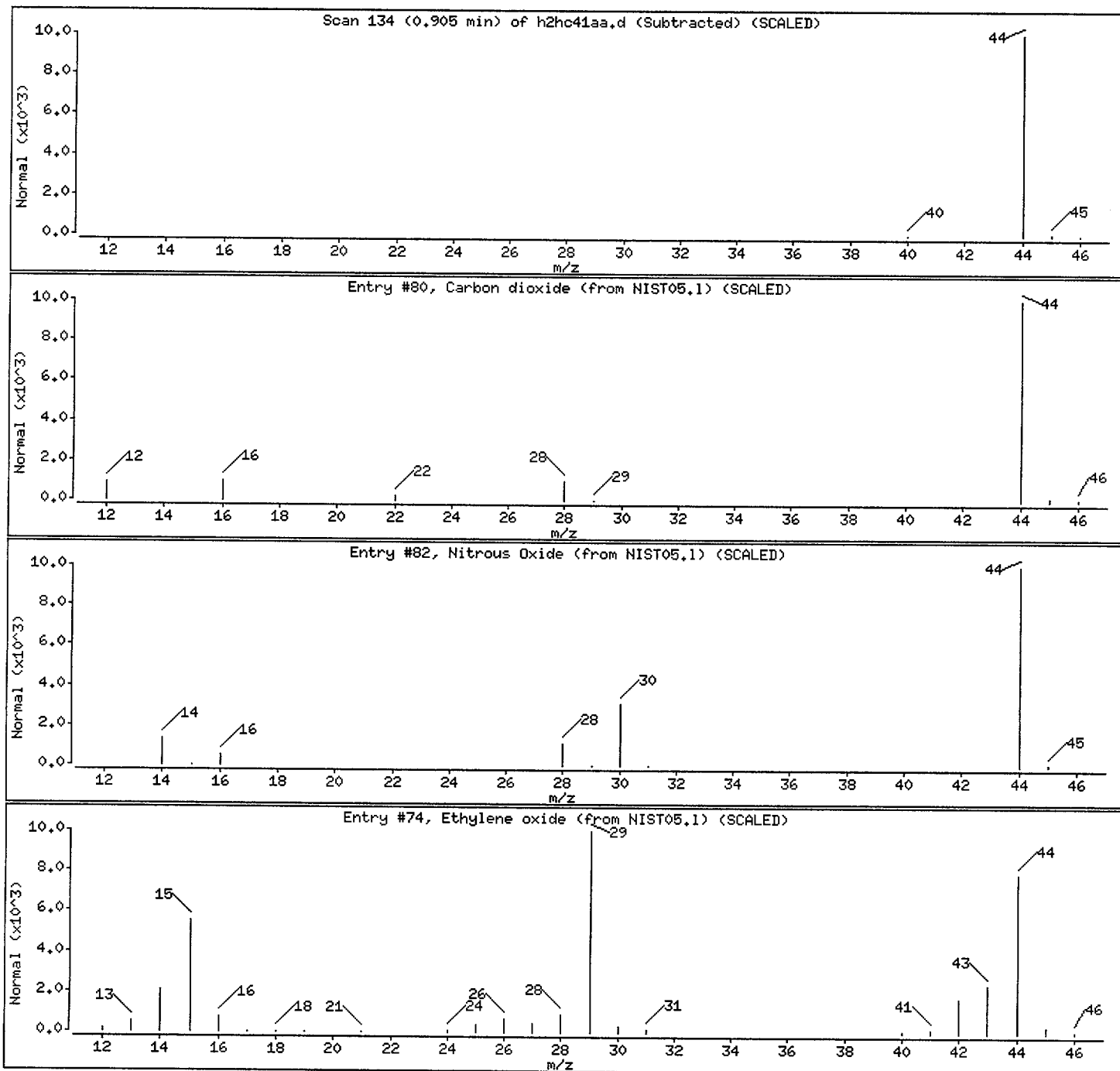
Sample Info: H2HC41AA,1,0,,

Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Carbon dioxide                | 124-38-9   | NIST05.1 | 80    | 5       | CO2     | 44     |
| Nitrous Oxide                 | 10024-97-2 | NIST05.1 | 82    | 3       | N2O     | 44     |
| Ethylene oxide                | 75-21-8    | NIST05.1 | 74    | 2       | C2H4O   | 44     |



## STL Knoxville - ACS

Client Sample ID: AUDIT VOST #1

## GC/MS Volatiles

Lot-Sample #....: H6D030169-039    Work Order #....: H2KHL1AA    Matrix.....: AIR  
 Date Sampled....: 03/28/06    Date Received...: 04/02/06  
 Prep Date.....: 04/07/06    Analysis Date...: 04/07/06  
 Prep Batch #....: 6097054  
 Dilution Factor: 1    Method.....: SW846 VOST

| PARAMETER                        | RESULT         | REPORTING<br>LIMIT | UNITS     | MDL           |
|----------------------------------|----------------|--------------------|-----------|---------------|
| <b>Acetone</b>                   | <b>0.31</b>    | <b>0.10</b>        | <b>ug</b> | <b>0.085</b>  |
| Acrylonitrile                    | ND             | 0.50               | ug        | 0.076         |
| <b>Benzene</b>                   | <b>0.054</b>   | <b>0.010</b>       | <b>ug</b> | <b>0.0032</b> |
| Bromobenzene                     | ND             | 0.010              | ug        | 0.0036        |
| Bromochloromethane               | ND             | 0.025              | ug        | 0.012         |
| Bromodichloromethane             | ND             | 0.010              | ug        | 0.0016        |
| Bromoform                        | ND             | 0.025              | ug        | 0.0066        |
| Bromomethane                     | ND             | 0.050              | ug        | 0.022         |
| <b>2-Butanone</b>                | <b>0.082 J</b> | <b>0.10</b>        | <b>ug</b> | <b>0.035</b>  |
| n-Butylbenzene                   | ND             | 0.010              | ug        | 0.0047        |
| sec-Butylbenzene                 | ND             | 0.010              | ug        | 0.0036        |
| tert-Butylbenzene                | ND             | 0.010              | ug        | 0.0030        |
| <b>Carbon disulfide</b>          | <b>0.015</b>   | <b>0.010</b>       | <b>ug</b> | <b>0.0011</b> |
| <b>Carbon tetrachloride</b>      | <b>0.041</b>   | <b>0.010</b>       | <b>ug</b> | <b>0.0011</b> |
| Chlorobenzene                    | ND             | 0.010              | ug        | 0.0013        |
| Chlorodibromomethane             | ND             | 0.025              | ug        | 0.010         |
| Chloroethane                     | ND             | 0.050              | ug        | 0.010         |
| <b>Chloroform</b>                | <b>0.065</b>   | <b>0.010</b>       | <b>ug</b> | <b>0.0019</b> |
| Chloromethane                    | ND             | 0.025              | ug        | 0.0032        |
| 2-Chlorotoluene                  | ND             | 0.010              | ug        | 0.0023        |
| 4-Chlorotoluene                  | ND             | 0.010              | ug        | 0.0020        |
| 1,2-Dibromo-3-chloro-<br>propane | ND             | 0.050              | ug        | 0.020         |
| 1,2-Dibromoethane                | ND             | 0.025              | ug        | 0.010         |
| Dibromomethane                   | ND             | 0.025              | ug        | 0.010         |
| 1,2-Dichlorobenzene              | ND             | 0.010              | ug        | 0.0030        |
| 1,3-Dichlorobenzene              | ND             | 0.010              | ug        | 0.0031        |
| 1,4-Dichlorobenzene              | ND             | 0.010              | ug        | 0.0043        |
| Dichlorodifluoromethane          | ND             | 0.025              | ug        | 0.0050        |
| 1,1-Dichloroethane               | ND             | 0.010              | ug        | 0.0019        |
| 1,2-Dichloroethane               | ND             | 0.010              | ug        | 0.0022        |
| cis-1,2-Dichloroethene           | ND             | 0.010              | ug        | 0.0025        |
| trans-1,2-Dichloroethene         | ND             | 0.010              | ug        | 0.0017        |
| 1,1-Dichloroethene               | ND             | 0.010              | ug        | 0.0023        |
| 1,2-Dichloropropane              | ND             | 0.010              | ug        | 0.0027        |
| 1,3-Dichloropropane              | ND             | 0.010              | ug        | 0.0018        |
| 2,2-Dichloropropane              | ND             | 0.010              | ug        | 0.0015        |
| cis-1,3-Dichloropropene          | ND             | 0.010              | ug        | 0.0030        |
| trans-1,3-Dichloropropene        | ND             | 0.010              | ug        | 0.0020        |

(Continued on next page)

## STL Knoxville - ACS

Client Sample ID: AUDIT VOST #1

## GC/MS Volatiles

Lot-Sample #...: H6D030169-039 Work Order #...: H2KHL1AA Matrix.....: AIR

| PARAMETER                                 | RESULT          | REPORTING    |            |               |
|-------------------------------------------|-----------------|--------------|------------|---------------|
|                                           |                 | LIMIT        | UNITS      | MDL           |
| 1,1-Dichloropropene                       | ND              | 0.010        | ug         | 0.0010        |
| Ethylbenzene                              | ND              | 0.010        | ug         | 0.0013        |
| Hexachlorobutadiene                       | ND              | 0.025        | ug         | 0.0048        |
| 2-Hexanone                                | ND              | 0.10         | ug         | 0.0099        |
| Iodomethane                               | ND              | 0.050        | ug         | 0.0016        |
| Isopropylbenzene                          | ND              | 0.010        | ug         | 0.0023        |
| p-Isopropyltoluene                        | ND              | 0.010        | ug         | 0.0038        |
| <b>Methylene chloride</b>                 | <b>0.075</b>    | <b>0.025</b> | <b>ug</b>  | <b>0.013</b>  |
| 4-Methyl-2-pentanone                      | ND              | 0.10         | ug         | 0.014         |
| Naphthalene                               | ND              | 0.025        | ug         | 0.010         |
| n-Propylbenzene                           | ND              | 0.010        | ug         | 0.0029        |
| Styrene                                   | ND              | 0.010        | ug         | 0.0017        |
| 1,1,1,2-Tetrachloroethane                 | ND              | 0.010        | ug         | 0.0010        |
| 1,1,2,2-Tetrachloroethane                 | ND              | 0.025        | ug         | 0.011         |
| <b>Tetrachloroethene</b>                  | <b>0.14</b>     | <b>0.010</b> | <b>ug</b>  | <b>0.0021</b> |
| Tetrahydrofuran                           | ND              | 0.10         | ug         | 0.031         |
| <b>Toluene</b>                            | <b>0.0032 J</b> | <b>0.010</b> | <b>ug</b>  | <b>0.0022</b> |
| 1,2,3-Trichlorobenzene                    | ND              | 0.025        | ug         | 0.014         |
| 1,2,4-Trichloro-<br>benzene               | ND              | 0.025        | ug         | 0.0030        |
| 1,1,1-Trichloroethane                     | ND              | 0.025        | ug         | 0.0016        |
| 1,1,2-Trichloroethane                     | ND              | 0.025        | ug         | 0.0050        |
| Trichloroethene                           | ND              | 0.010        | ug         | 0.0050        |
| Trichlorofluoromethane                    | ND              | 0.050        | ug         | 0.0049        |
| 1,2,3-Trichloropropane                    | ND              | 0.025        | ug         | 0.0081        |
| 1,1,2-Trichloro-<br>1,2,2-trifluoroethane | ND              | 0.050        | ug         | 0.0018        |
| 1,2,4-Trimethylbenzene                    | ND              | 0.010        | ug         | 0.0048        |
| 1,3,5-Trimethylbenzene                    | ND              | 0.010        | ug         | 0.0028        |
| Vinyl acetate                             | ND              | 0.050        | ug         | 0.012         |
| Vinyl chloride                            | ND              | 0.010        | ug         | 0.0032        |
| m-Xylene & p-Xylene                       | ND              | 0.020        | ug         | 0.0034        |
| o-Xylene                                  | ND              | 0.010        | ug         | 0.0017        |
| Xylenes (total)                           | ND              | 0.030        | ug         | 0.0048        |
| SURROGATE                                 | PERCENT         |              | RECOVERY   |               |
|                                           | RECOVERY        |              | LIMITS     |               |
| Dibromofluoromethane                      | 85              |              | (50 - 134) |               |
| 1,2-Dichloroethane-d4                     | 88              |              | (50 - 134) |               |
| Toluene-d8                                | 85              |              | (57 - 127) |               |
| Bromofluorobenzene                        | 77              |              | (50 - 125) |               |

**NOTE(S) :**

J Estimated result. Result is less than RL.

STL Knoxville - ACS

AUDIT VOST #1

GC/MS Volatiles

Lot-Sample #: H6D030169-039

Work Order #: H2KHL1AA

Matrix: AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug           |

Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d  
Report Date: 07-Apr-2006 20:30

## STL Knoxville

SW-846 Method 8260A - Volatile Organics

Data file : /chem/gcms/mx.i/X040706.b/h2khl1aa.d  
Lab Smp Id: H2KHL1AA Client Smp ID: AUDIT VOST #1  
Inj Date : 07-APR-2006 20:14  
Operator : 22980 Inst ID: mx.i  
Smp Info : H2KHL1AA,1,0,,  
Misc Info : X040706,8260B\_LM,focus.sub  
Comment :  
Method : /var/chem/gcms/mx.i/X040706.b/8260B\_LM.m  
Meth Date : 07-Apr-2006 11:23 gosss Quant Type: ISTD  
Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

| Compounds                  | QUANT SIG |        |        |         |          |           | CONCENTRATIONS       |  |
|----------------------------|-----------|--------|--------|---------|----------|-----------|----------------------|--|
|                            | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL                |  |
|                            | ====      | ==     | =====  | =====   | =====    | ( ug/L)   | ( ug)                |  |
| * 1 Fluorobenzene          | 96        | 4.851  | 4.851  | (1.000) | 1014147  | 10.0000   |                      |  |
| * 2 Chlorobenzene-d5       | 119       | 7.582  | 7.582  | (1.000) | 205742   | 10.0000   |                      |  |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.746 | 10.746 | (1.000) | 209206   | 10.0000   |                      |  |
| \$ 4 Dibromofluoromethane  | 113       | 4.273  | 4.273  | (0.881) | 147222   | 8.53830   | 0.21346              |  |
| \$ 5 1,2-Dichloroethane-d4 | 65        | 4.553  | 4.553  | (0.939) | 118400   | 8.80934   | 0.22023              |  |
| \$ 6 Toluene-d8            | 98        | 6.250  | 6.250  | (0.824) | 857028   | 8.50800   | 0.21270              |  |
| \$ 7 4-Bromofluorobenzene  | 95        | 8.872  | 8.872  | (0.826) | 190721   | 7.68890   | 0.19222              |  |
| 11 Chloromethane (spcc)    | 50        | 1.256  | 1.262  | (0.259) | 2130     | 0.04509   | 0.0011273            |  |
| 21 Acetone                 | 43        | 2.381  | 2.381  | (0.491) | 17697    | 12.3211   | 0.30803              |  |
| 23 Carbon Disulfide        | 76        | 2.497  | 2.497  | (0.515) | 47107    | 0.60950   | 0.015237             |  |
| 26 Methylene Chloride      | 84        | 2.746  | 2.746  | (0.566) | 47196    | 3.01006   | 0.075251             |  |
| 33 *Vinyl Acetate          | 86        | 3.257  | 3.421  | (0.671) | 1181     | 1.02385   | <del>0.025536</del>  |  |
| 36 2-Butanone              | 43        | 3.884  | 3.871  | (0.801) | 7348     | 3.28004   | 0.082001             |  |
| 38 *THF                    | 42        | 4.127  | 4.109  | (0.851) | 1126     | 0.82042   | <del>0.020510</del>  |  |
| 39 Chloroform (ccc)        | 83        | 4.139  | 4.139  | (0.853) | 100922   | 2.61829   | 0.065457             |  |
| 41 Carbon Tetrachloride    | 117       | 4.437  | 4.437  | (0.915) | 60147    | 1.65217   | 0.041304             |  |
| 42 1,1-Dichloropropene     | 75        | 4.614  | 4.437  | (0.951) | 4123     | 0.10269   | <del>0.0025673</del> |  |
| 43 Benzene                 | 78        | 4.608  | 4.607  | (0.950) | 219967   | 2.14167   | 0.053542             |  |
| 44 1,2-Dichloroethane      | 62        | 4.608  | 4.620  | (0.950) | 1960     | 0.11340   | <del>0.0020331</del> |  |
| 52 4-Methyl-2-pentanone    | 43        | 6.250  | 6.147  | (1.288) | 7010     | 1.30646   | <del>0.032662</del>  |  |

✓  
04/21/06

4/19/06

59



Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d  
Report Date: 07-Apr-2006 20:30

| Compounds                    | QUANT SIG |       |        |         |          |           |                      | CONCENTRATIONS |       |
|------------------------------|-----------|-------|--------|---------|----------|-----------|----------------------|----------------|-------|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL                | ( ug/L)        | ( ug) |
| =====                        | ====      | ==    | =====  | =====   | =====    | =====     | =====                |                |       |
| 53 Toluene (ccc)             | 91        | 6.311 | 6.311  | (0.832) | 15495    | 0.12858   | 0.0032144            |                |       |
| 54 trans-1,3-Dichloropropene | 75        | 6.718 | 6.506  | (0.886) | 1332     | 0.06307   | <del>0.0015768</del> |                |       |
| 56 1,1,2-Trichloroethane     | 97        | 6.816 | 6.670  | (0.899) | 1251     | 0.13151   | <del>0.0032877</del> |                |       |
| 57 Tetrachloroethene         | 164       | 6.816 | 6.816  | (0.899) | 141949   | 5.48184   | 0.13705              |                |       |
| 60 Chlorodibromomethane      | 129       | 6.816 | 7.035  | (0.899) | 128261   | 10.8743   | <del>0.27186</del>   |                |       |

4/11/06

Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d  
 Report Date: 07-Apr-2006 20:30

STL Knoxville

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                       |                               |
|-------------------------------------------------------|-------------------------------|
| Instrument ID: mx.i                                   | Calibration Date: 07-APR-2006 |
| Lab File ID: h2khl1aa.d                               | Calibration Time: 09:16       |
| Lab Smp Id: H2KHL1AA                                  | Client Smp ID: AUDIT VOST #1  |
| Analysis Type: VOA                                    | Level: LOW                    |
| Quant Type: ISTD                                      | Sample Type: AIR              |
| Operator: 22980                                       |                               |
| Method File: /var/chem/gcms/mx.i/X040706.b/8260B_LM.m |                               |
| Misc Info: X040706,8260B_LM,focus.sub                 |                               |

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE  | %DIFF  |
|---------------------|----------|------------|---------|---------|--------|
|                     |          | LOWER      | UPPER   |         |        |
| 1 Fluorobenzene     | 1149191  | 574596     | 2298382 | 1014147 | -11.75 |
| 2 Chlorobenzene-d5  | 214194   | 107097     | 428388  | 205742  | -3.95  |
| 3 1,4 Dichlorobenze | 242601   | 121300     | 485202  | 209206  | -13.77 |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 4.85     | 4.35     | 5.35  | 4.85   | 0.00  |
| 2 Chlorobenzene-d5  | 7.58     | 7.08     | 8.08  | 7.58   | 0.00  |
| 3 1,4 Dichlorobenze | 10.75    | 10.25    | 11.25 | 10.75  | 0.00  |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d  
Report Date: 07-Apr-2006 20:30

## STL Knoxville

## RECOVERY REPORT

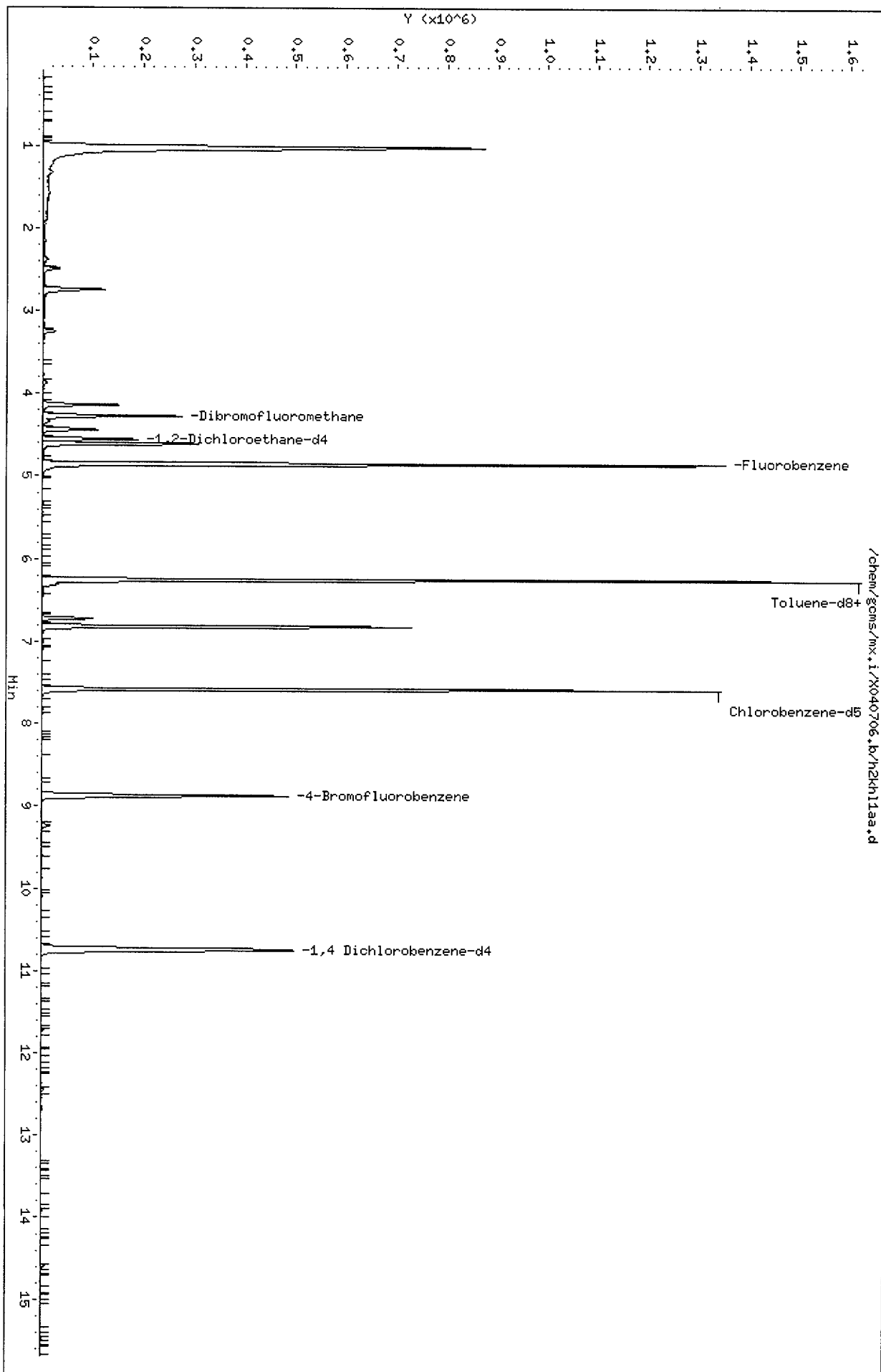
Client Name: STL Knoxville - ACS      Client SDG: H6D030169  
Sample Matrix: GAS      Fraction: VOA  
Lab Smp Id: H2KHL1AA      Client Smp ID: AUDIT VOST #1  
Level: LOW      Operator: 22980  
Data Type: MS DATA      SampleType: SAMPLE  
SpikeList File: allcmpds.spk      Quant Type: ISTD  
Sublist File: focus.sub  
Method File: /var/chem/gcms/mx.i/X040706.b/8260B\_LM.m  
Misc Info: X040706,8260B\_LM,focus.sub

| SURROGATE COMPOUND      | CONC<br>ADDED<br>ug | CONC<br>RECOVERED<br>ug | %<br>RECOVERED | LIMITS |
|-------------------------|---------------------|-------------------------|----------------|--------|
| \$ 4 Dibromofluorometha | 0.25000             | 0.21346                 | 85.38          | 50-150 |
| \$ 5 1,2-Dichloroethane | 0.25000             | 0.22023                 | 88.09          | 50-150 |
| \$ 6 Toluene-d8         | 0.25000             | 0.21270                 | 85.08          | 50-150 |
| \$ 7 4-Bromofluorobenze | 0.25000             | 0.19222                 | 76.89          | 50-150 |

Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d  
Date : 07-APR-2006 20:14  
Client ID: AUDIT VOST #1  
Sample Info: H2KHL1A0,1,0,,,

Column phase: J+W 624

Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18



Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

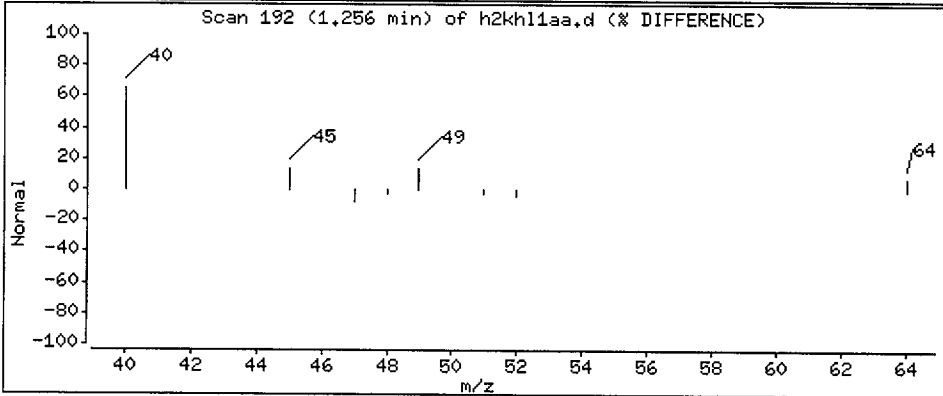
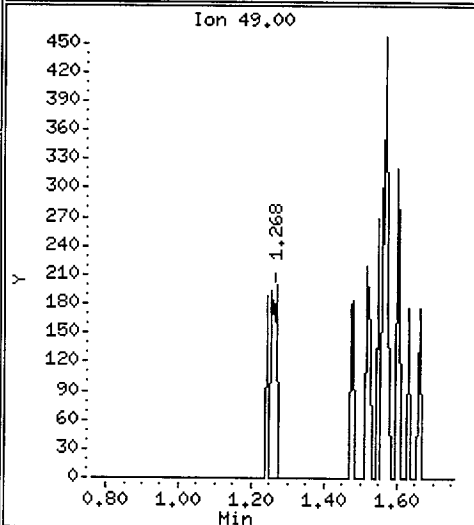
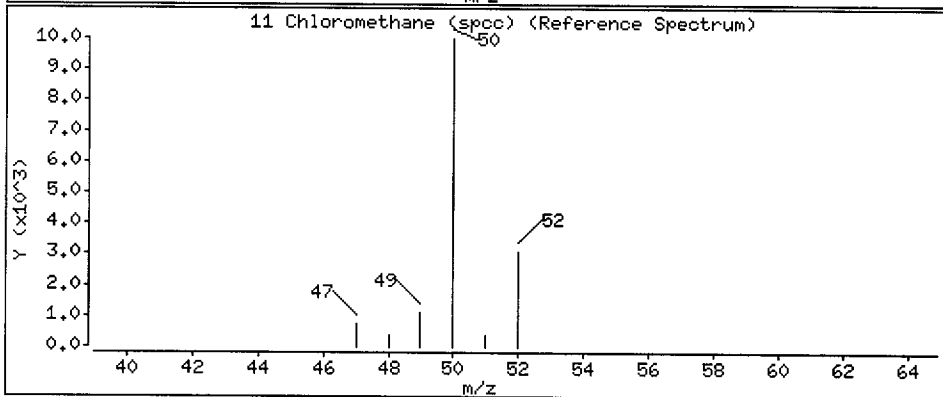
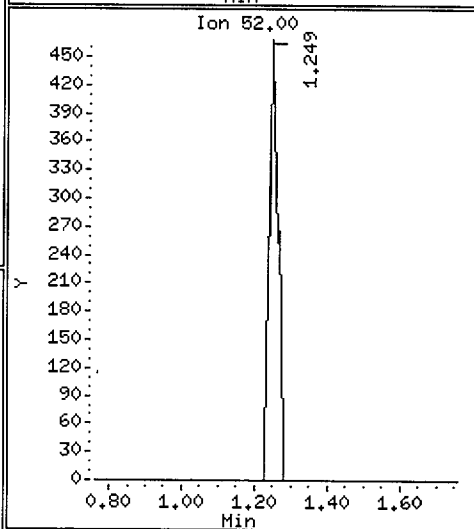
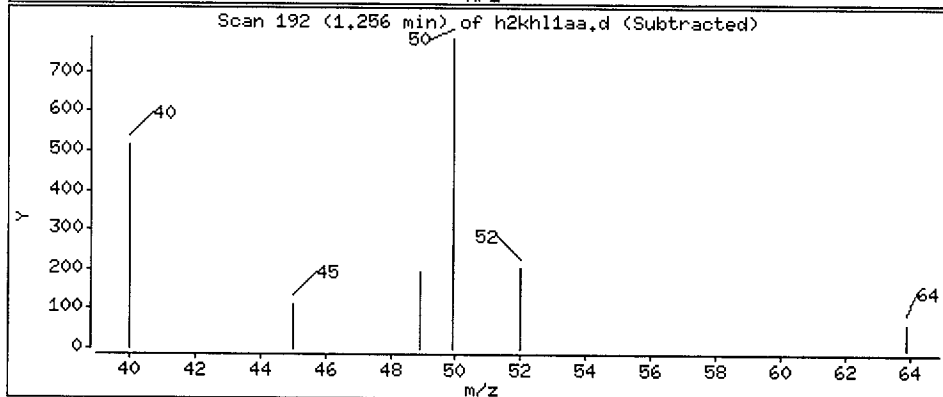
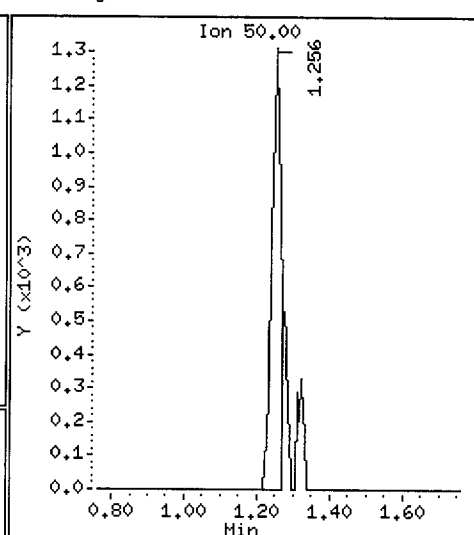
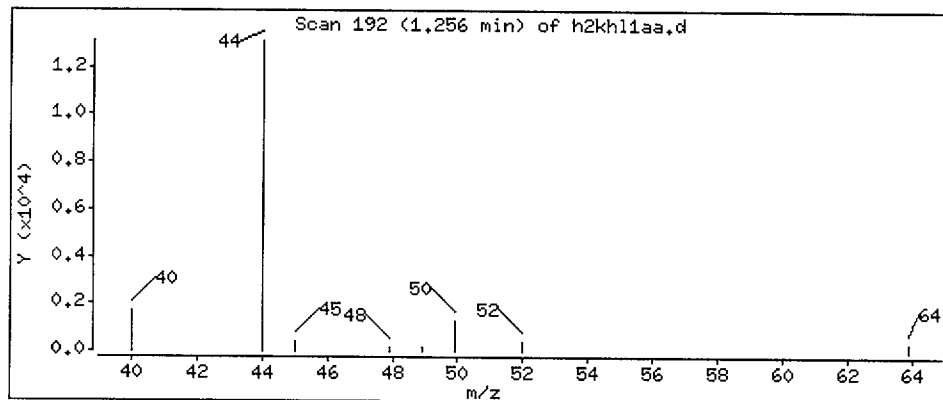
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

11 Chloromethane (spcc)

Concentration: 0.0011273 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

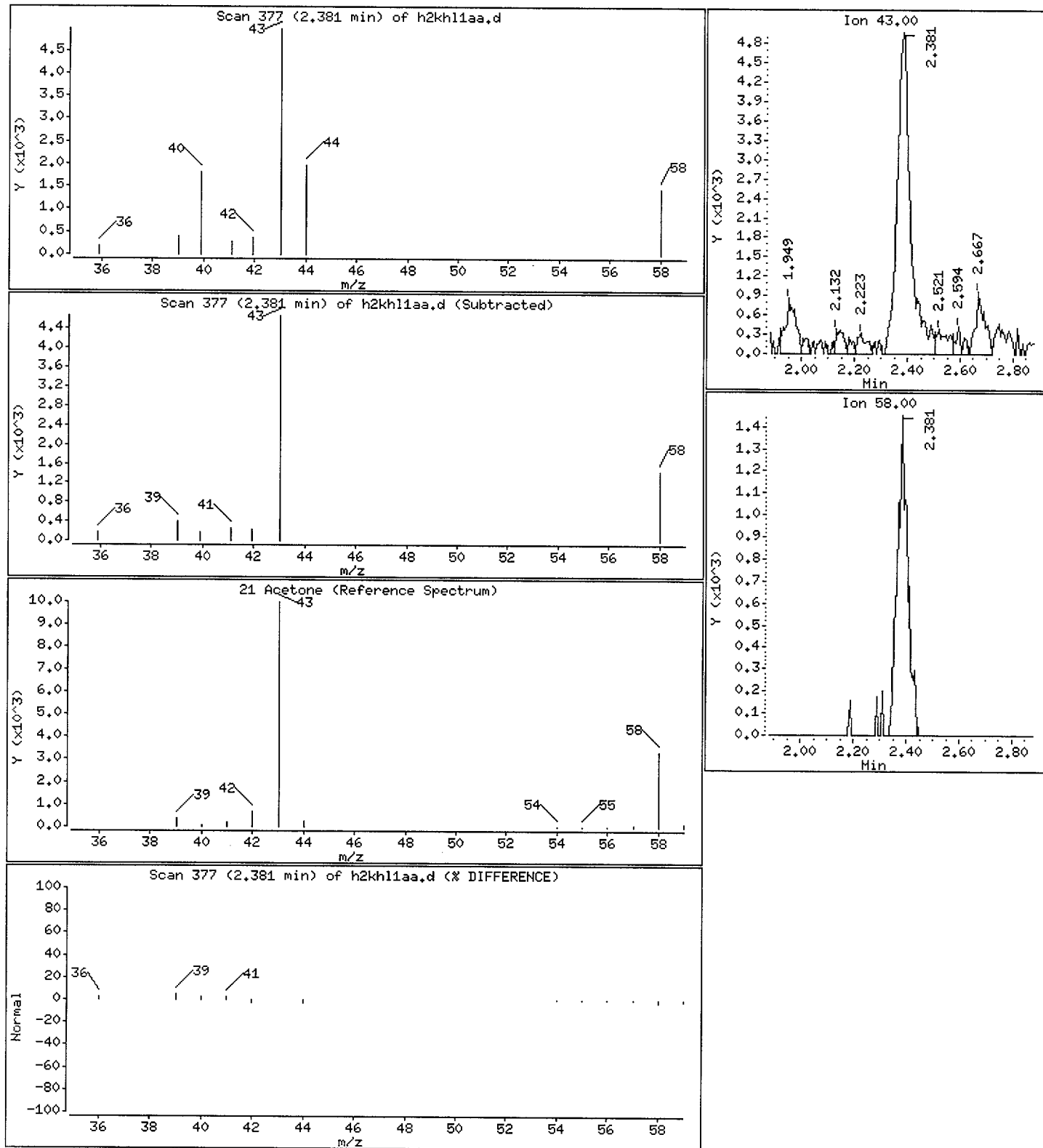
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

21 Acetone

Concentration: 0.30803 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

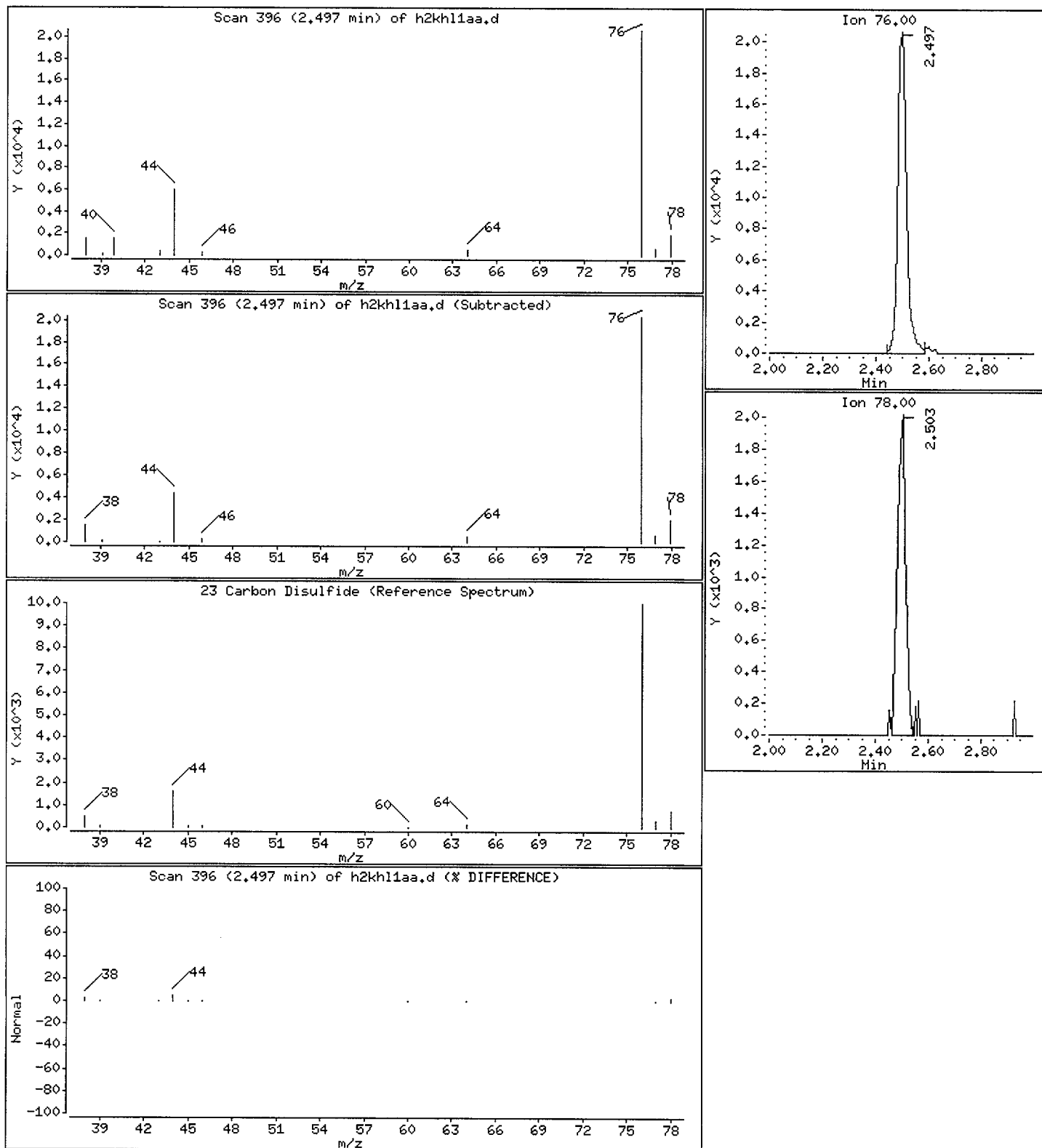
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

23 Carbon Disulfide

Concentration: 0.015237 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

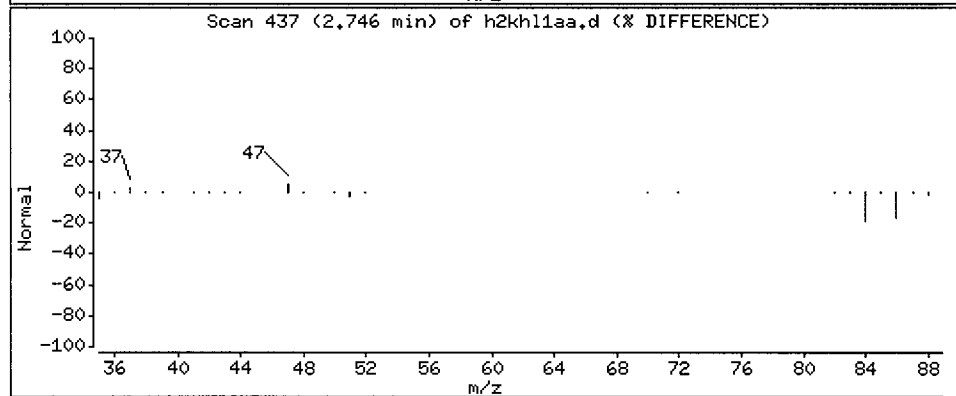
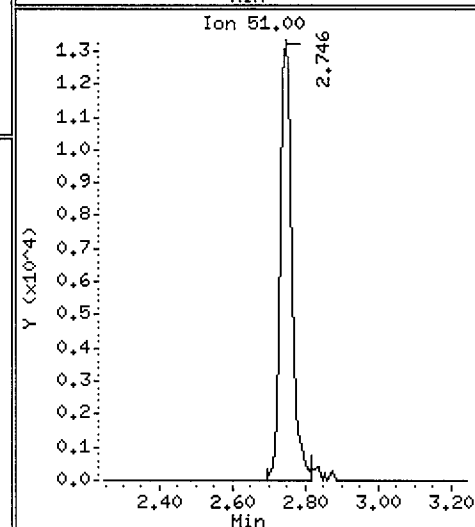
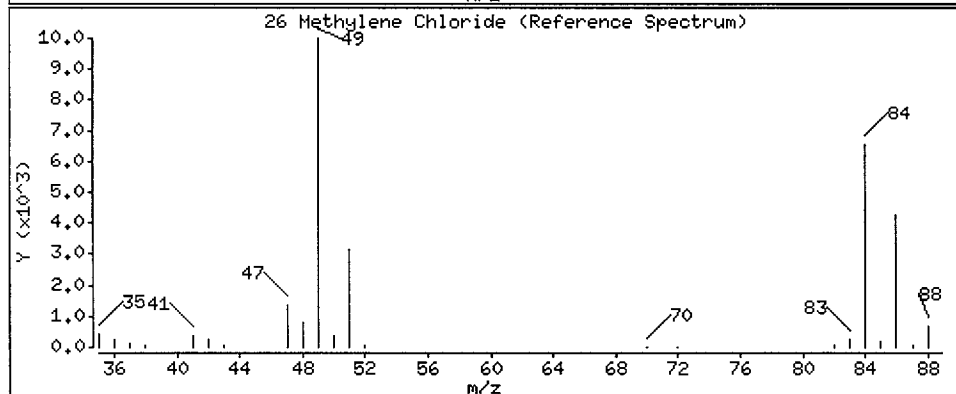
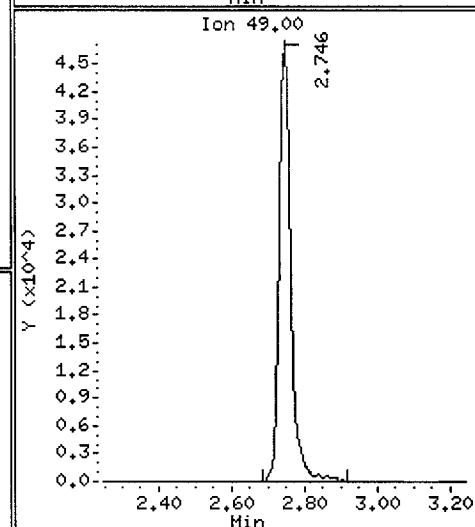
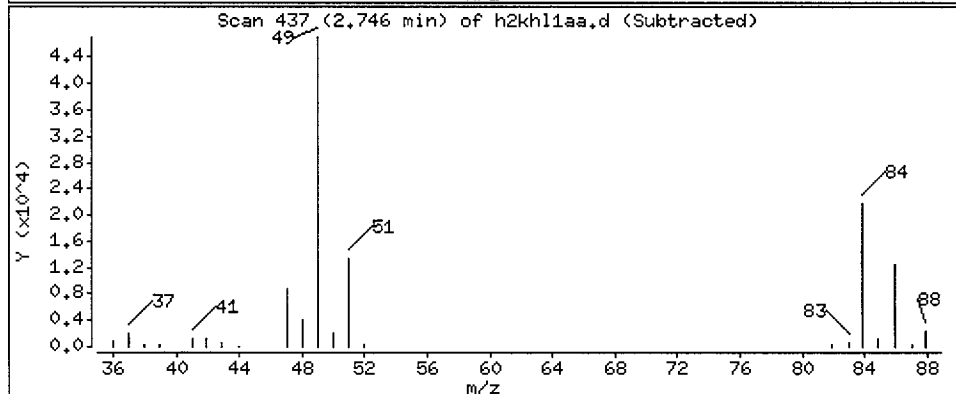
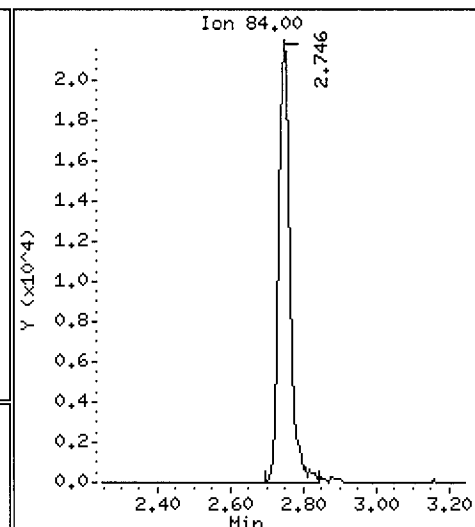
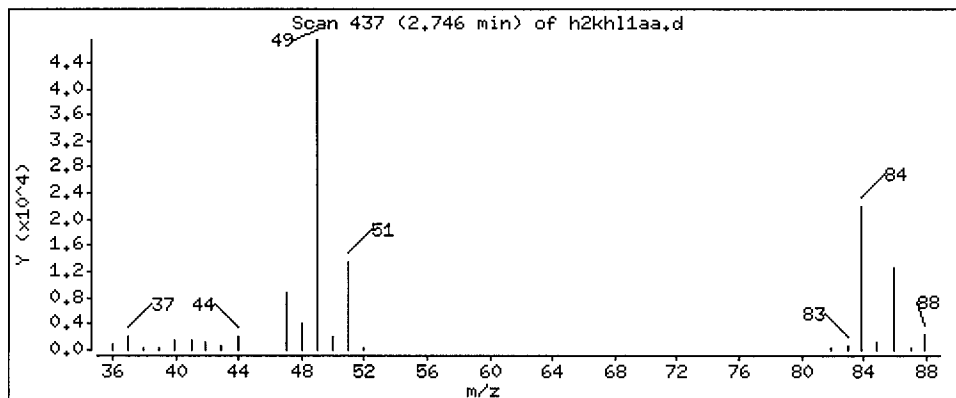
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

26 Methylene Chloride

Concentration: 0.075251 ug





Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

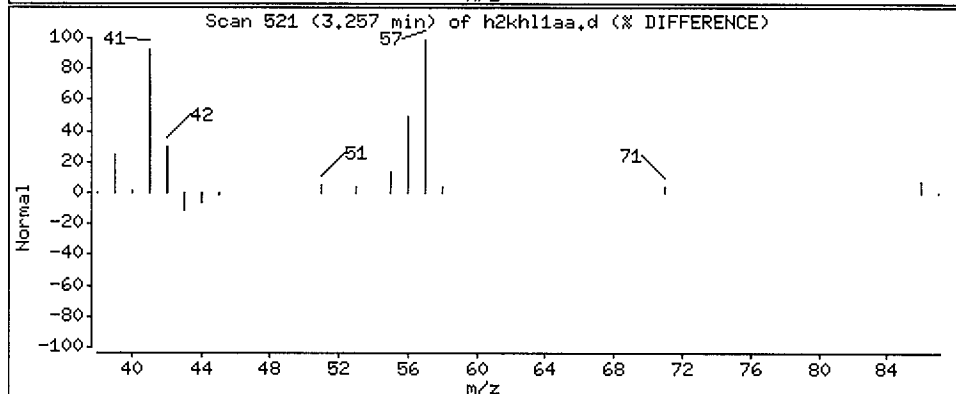
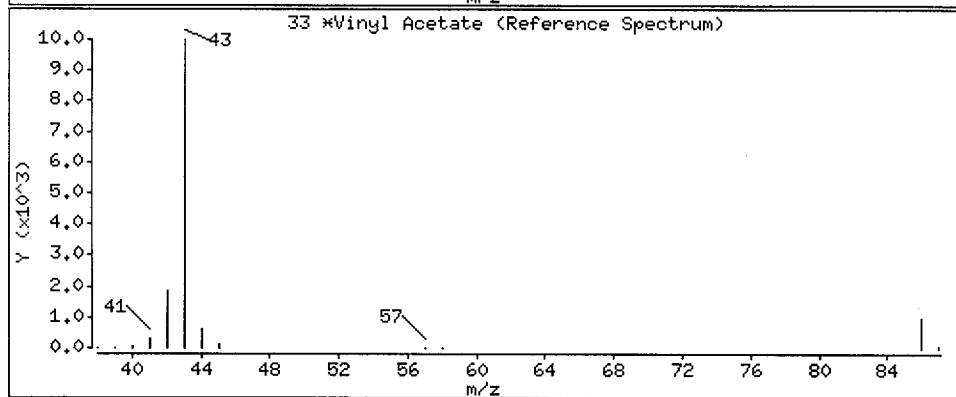
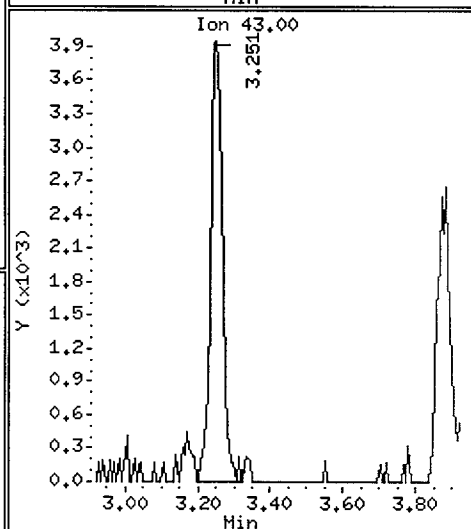
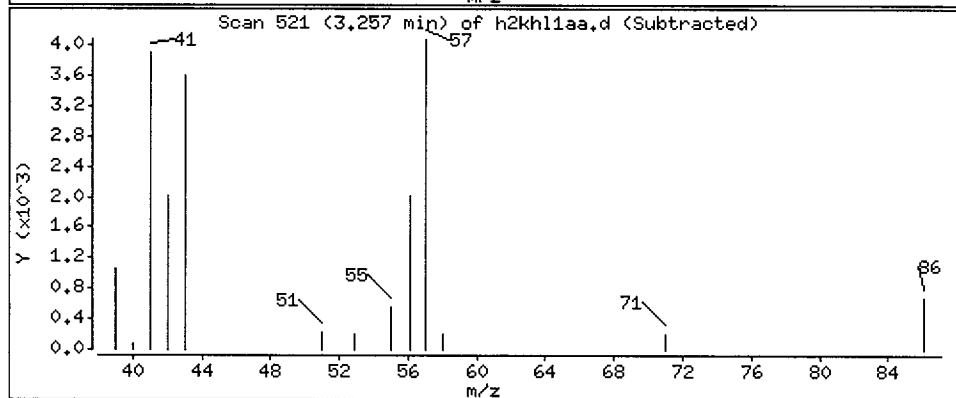
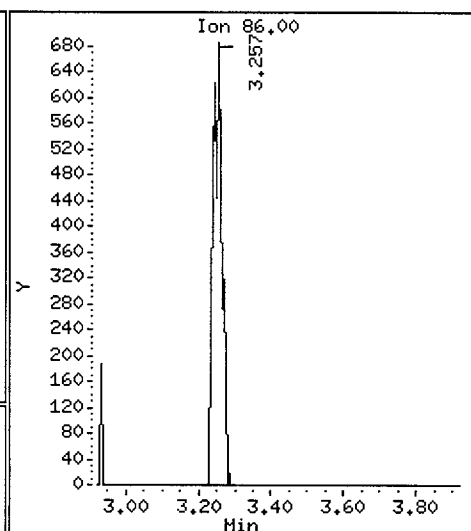
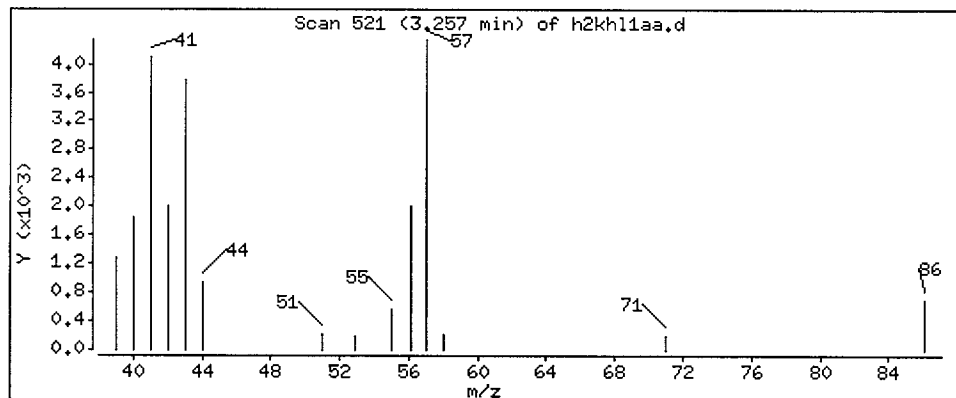
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

33 \*Vinyl Acetate

Concentration: 0.025596 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

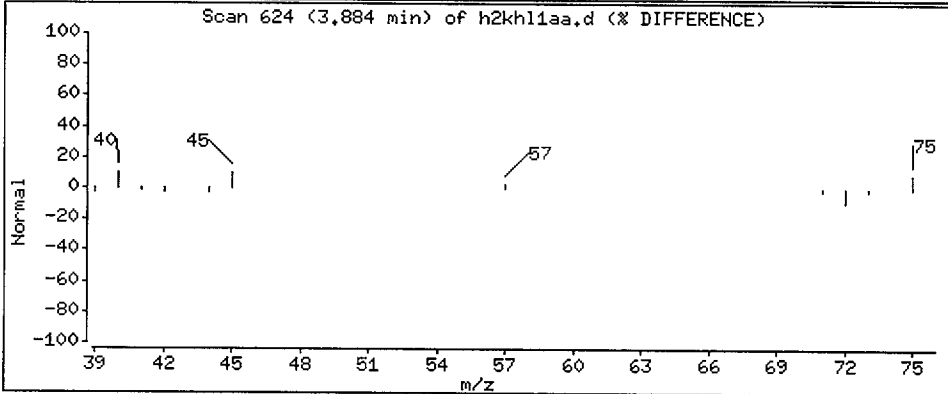
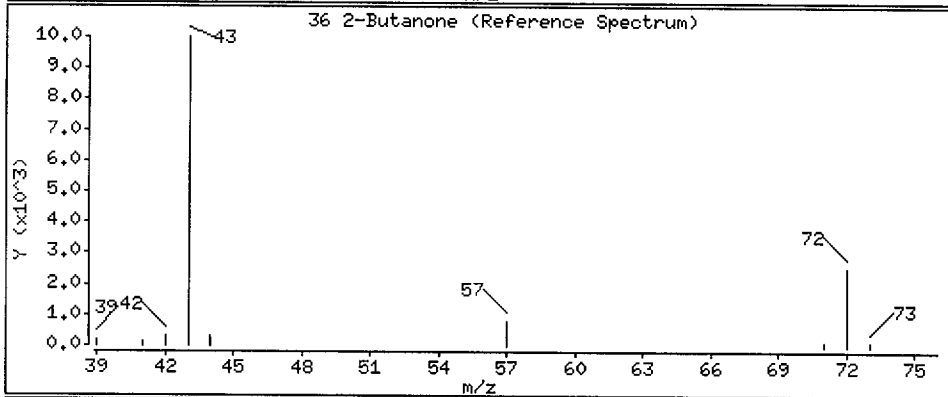
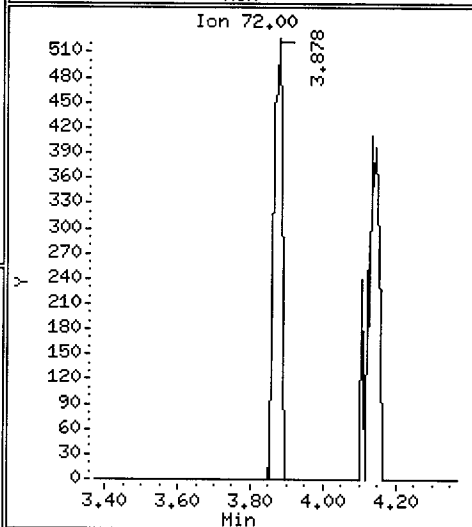
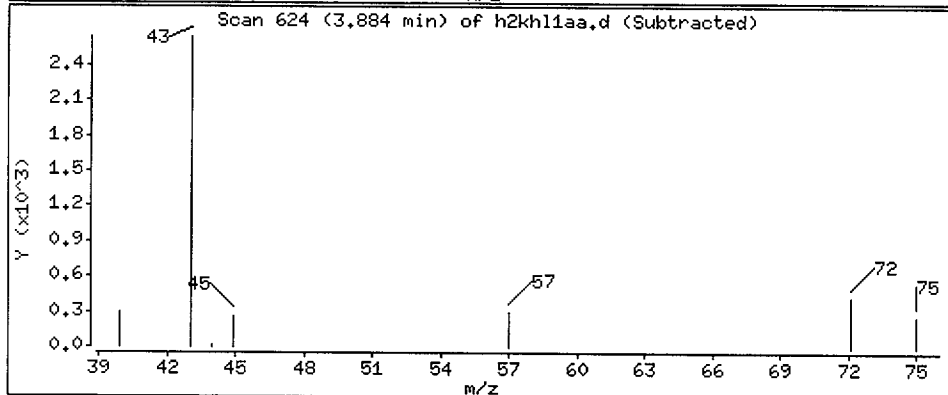
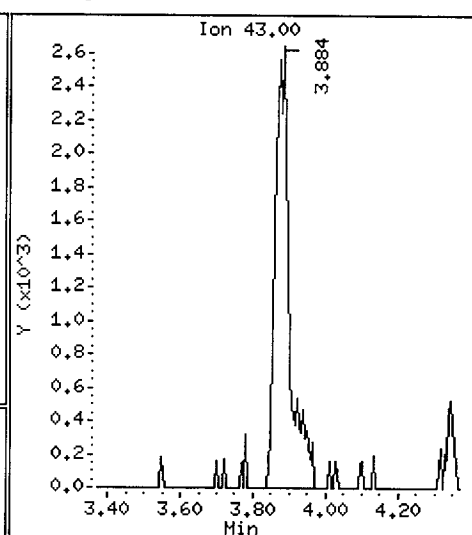
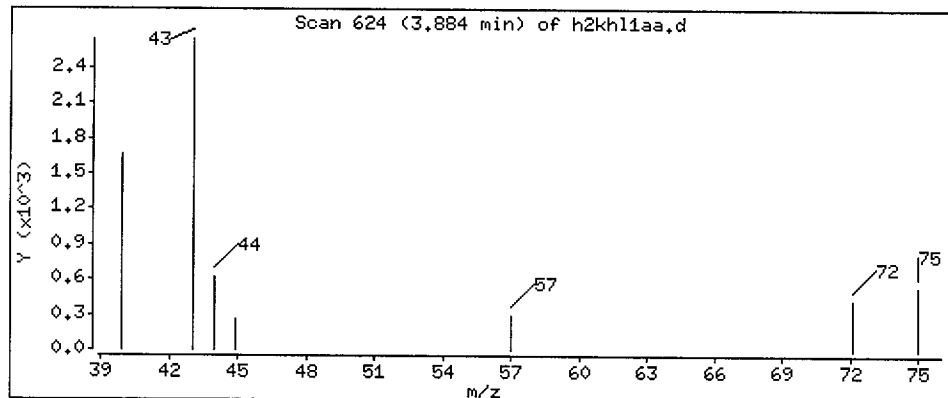
Operator: 22980

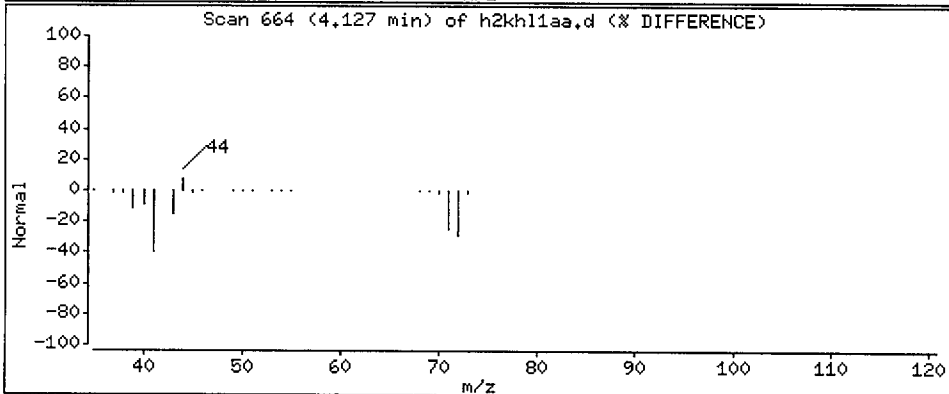
Column phase: J+W 624

Column diameter: 0.18

36 2-Butanone

Concentration: 0.082001 ug





Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

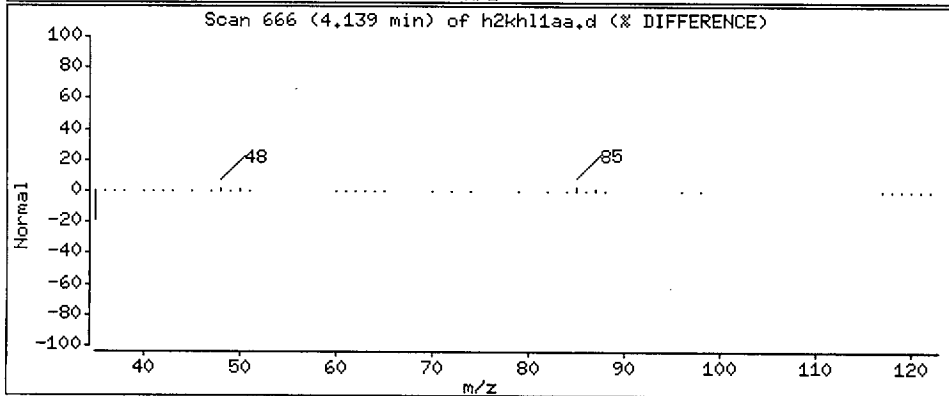
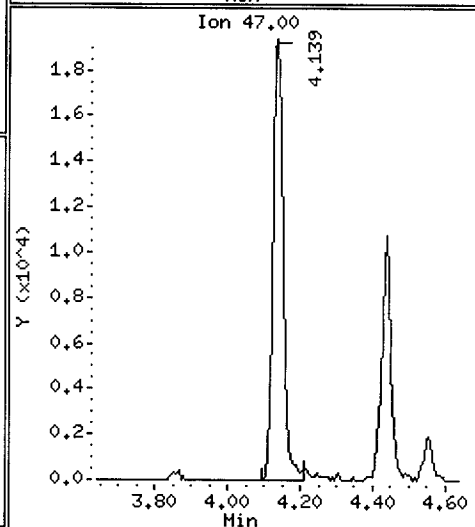
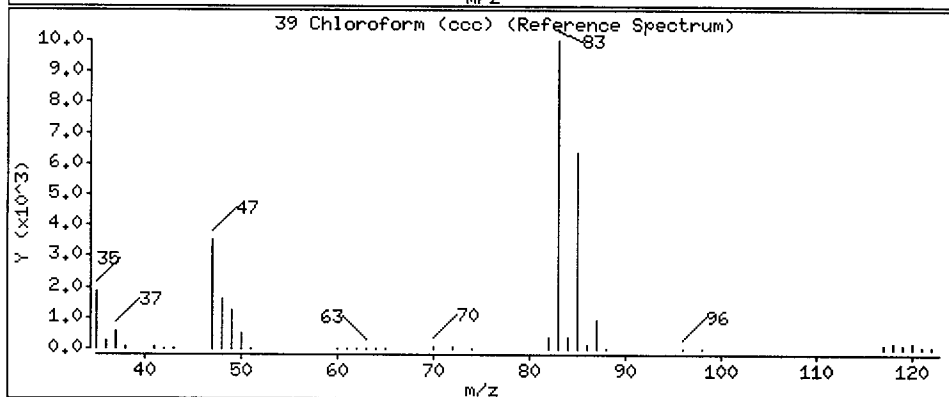
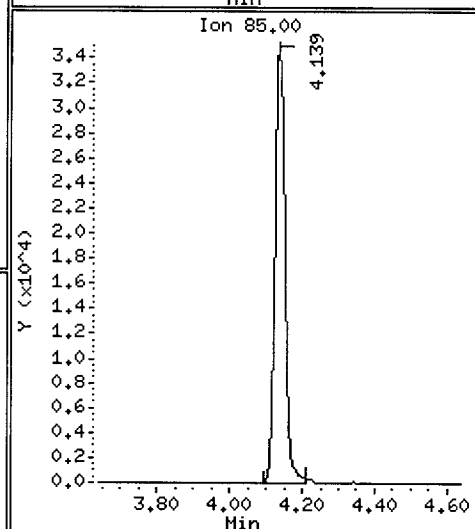
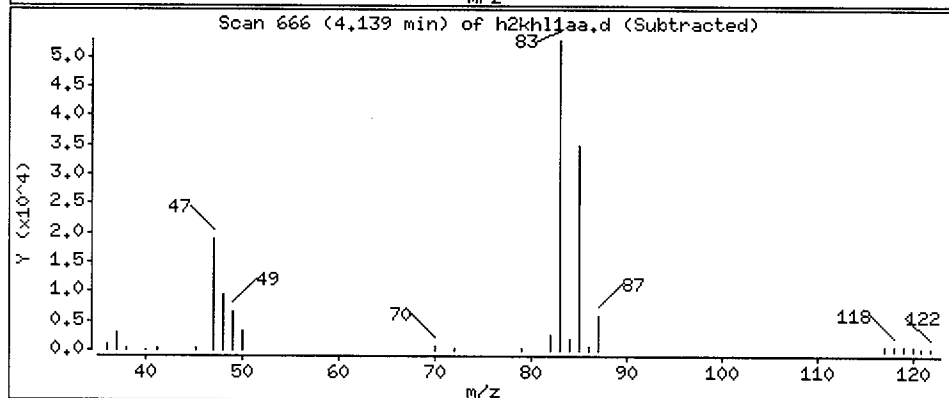
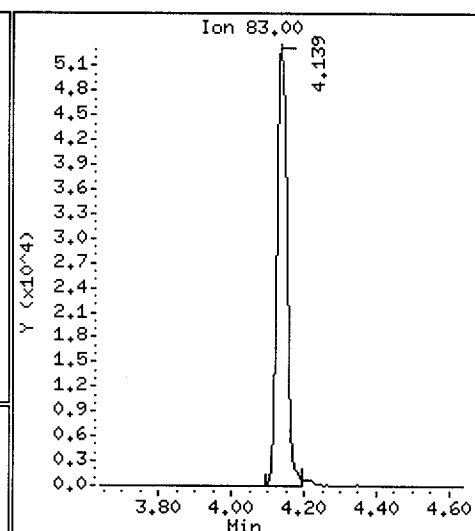
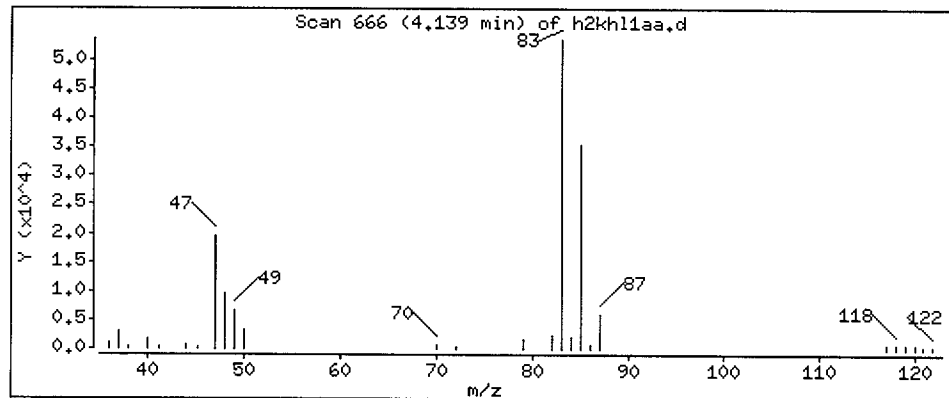
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

39 Chloroform (ccc)

Concentration: 0.065457 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

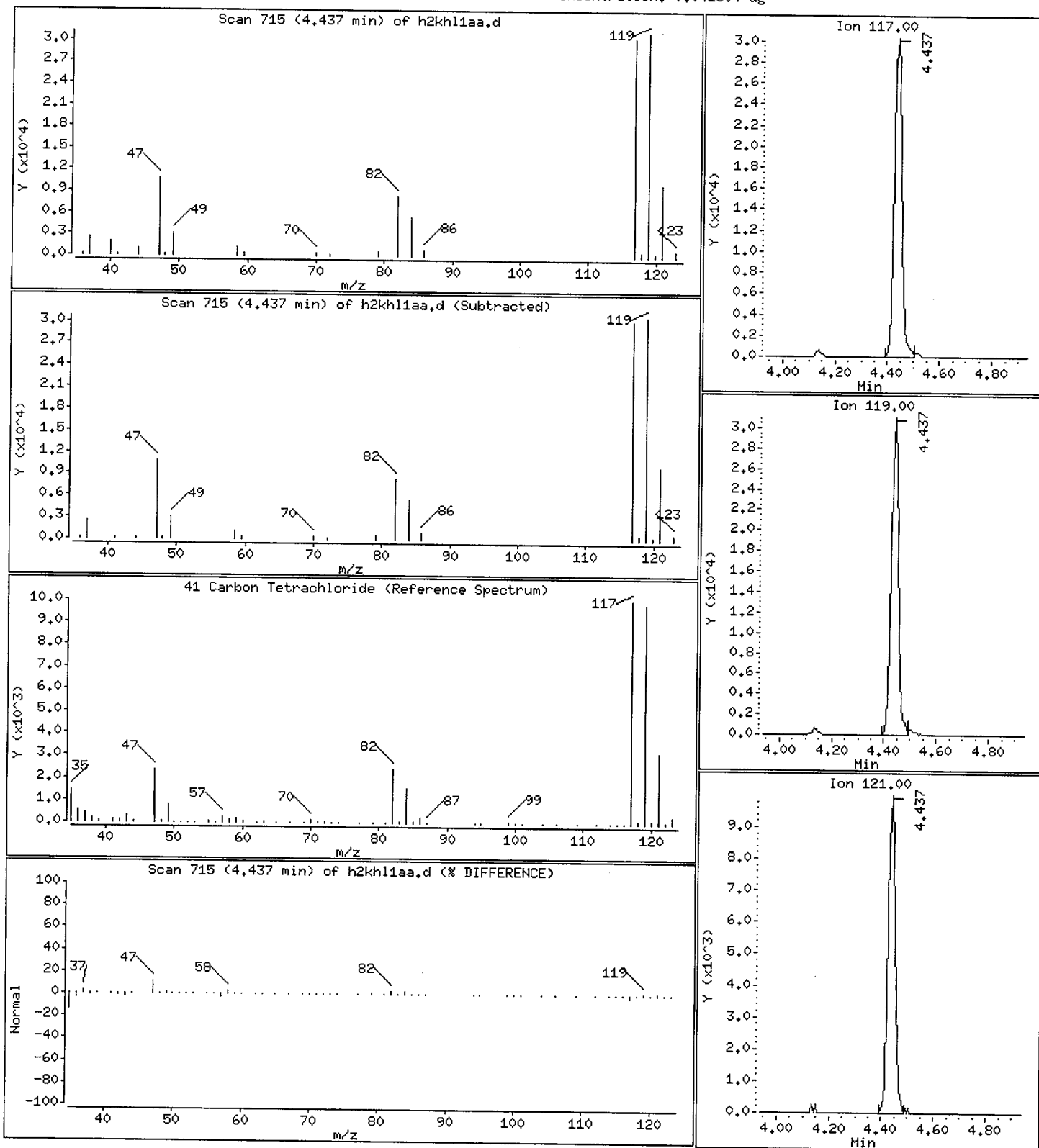
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

41 Carbon Tetrachloride

Concentration: 0.041304 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

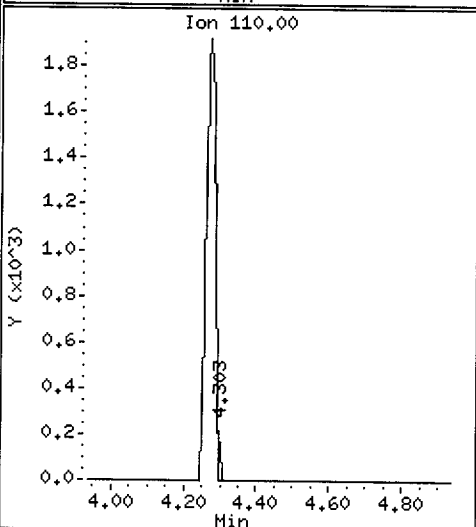
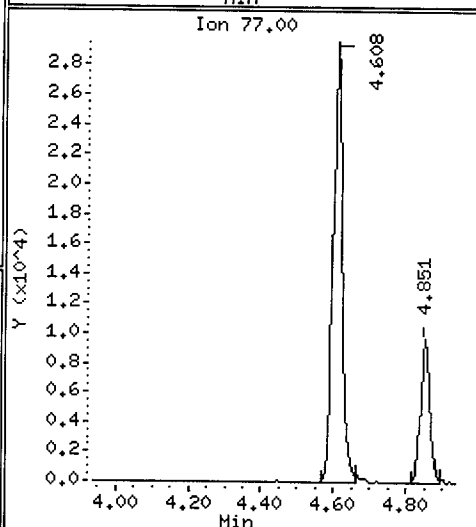
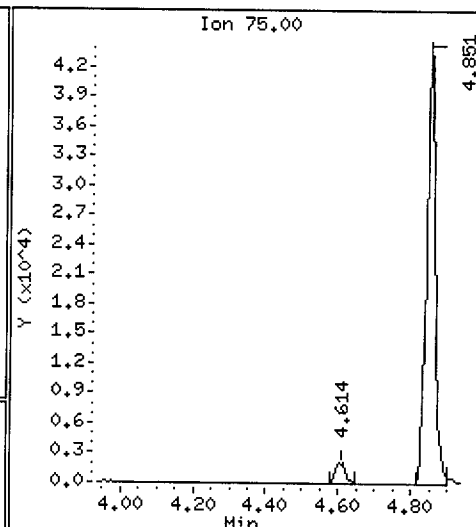
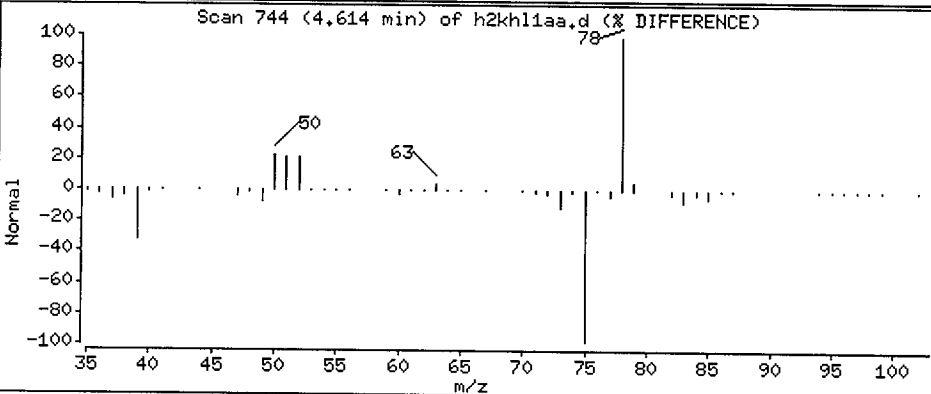
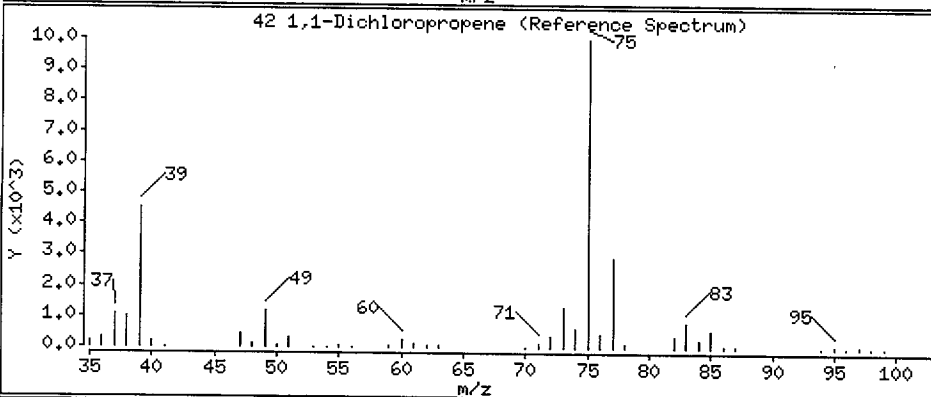
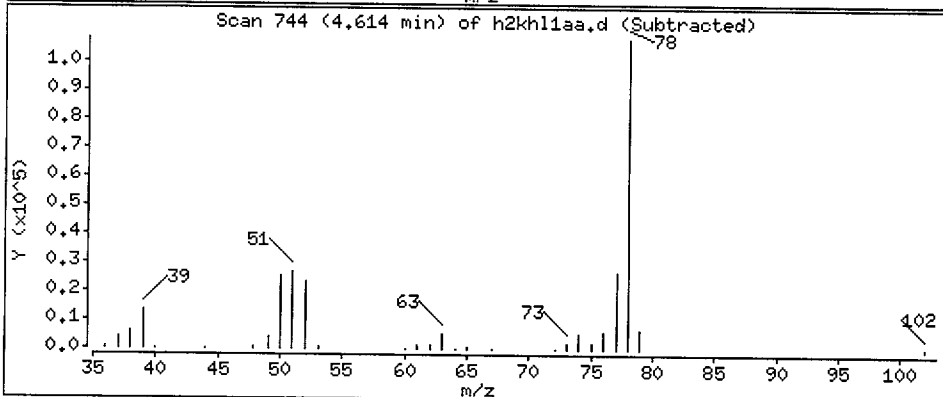
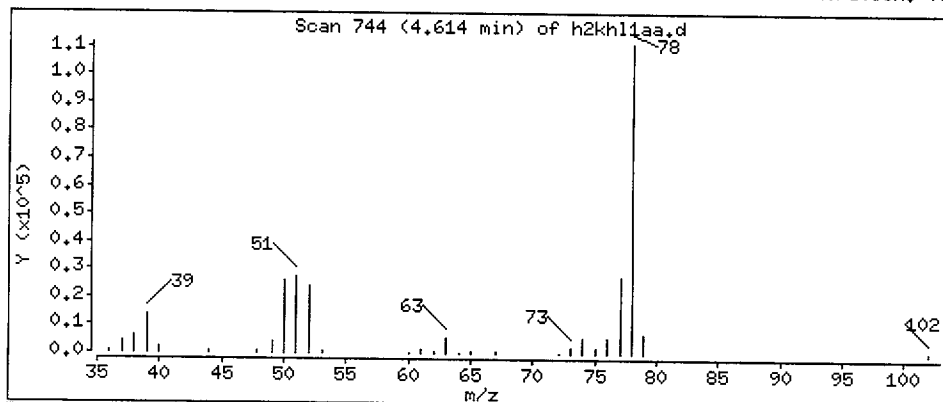
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

42 1,1-Dichloropropene

Concentration: 0.0025673 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date: 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

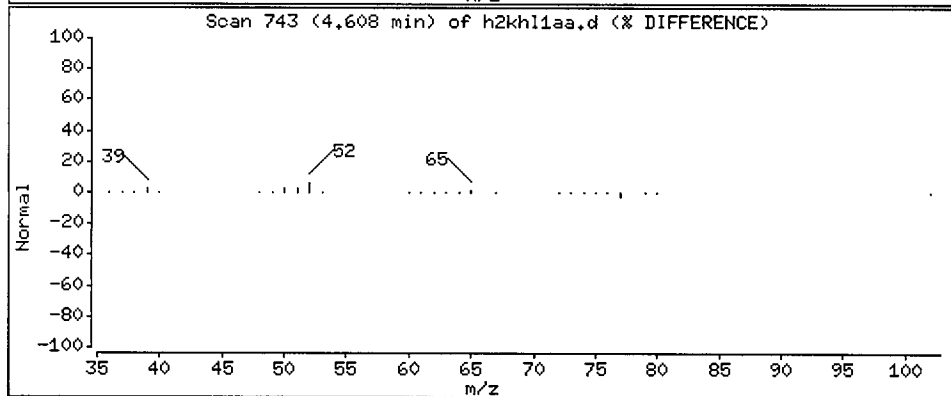
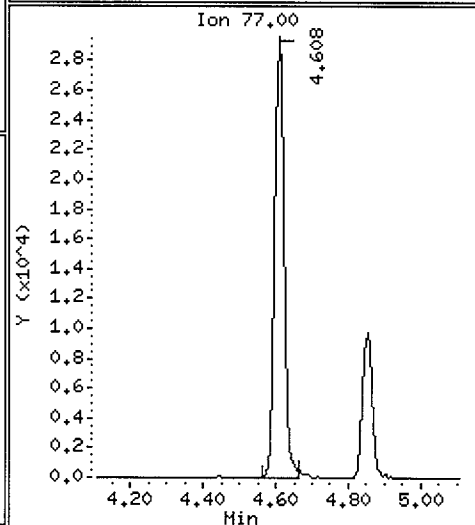
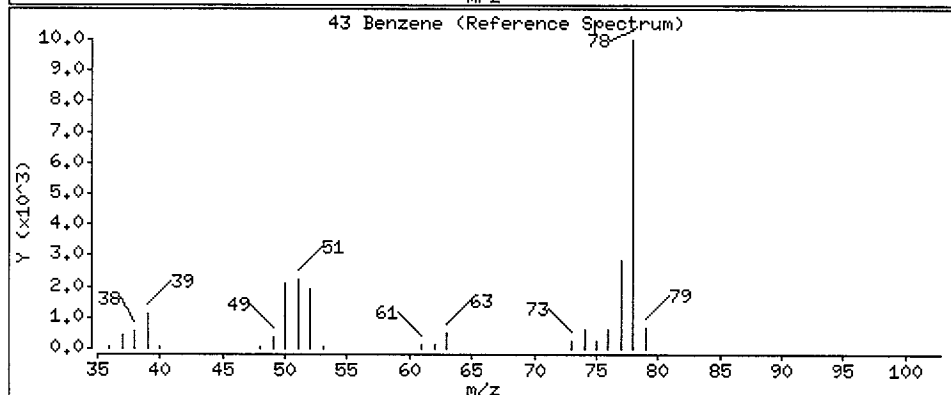
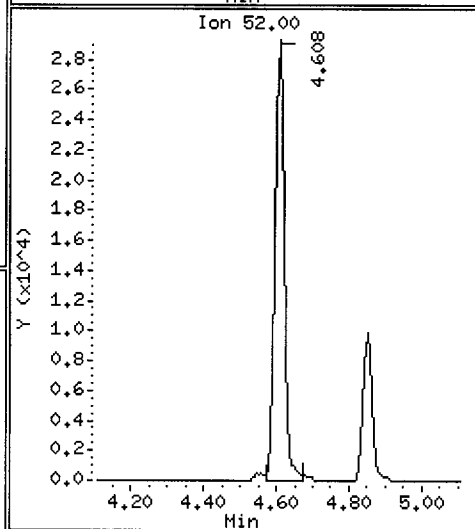
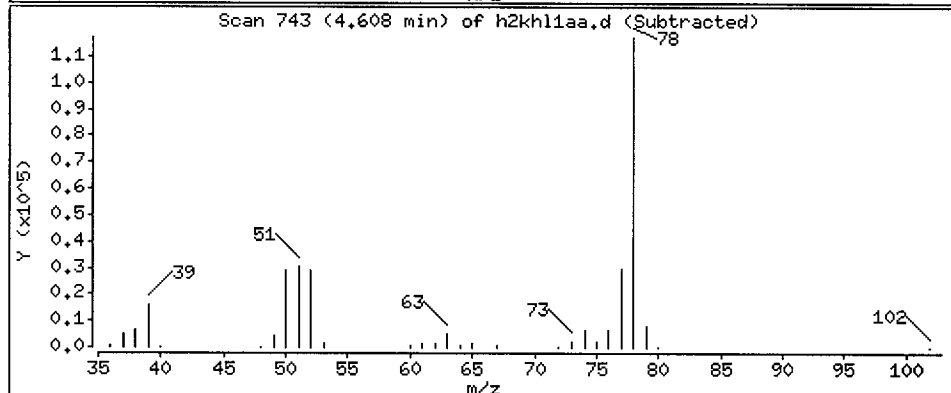
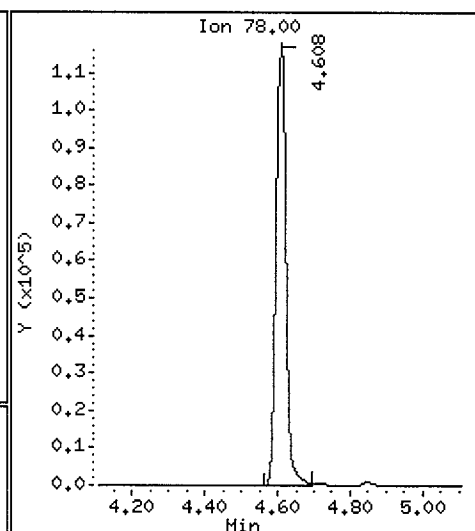
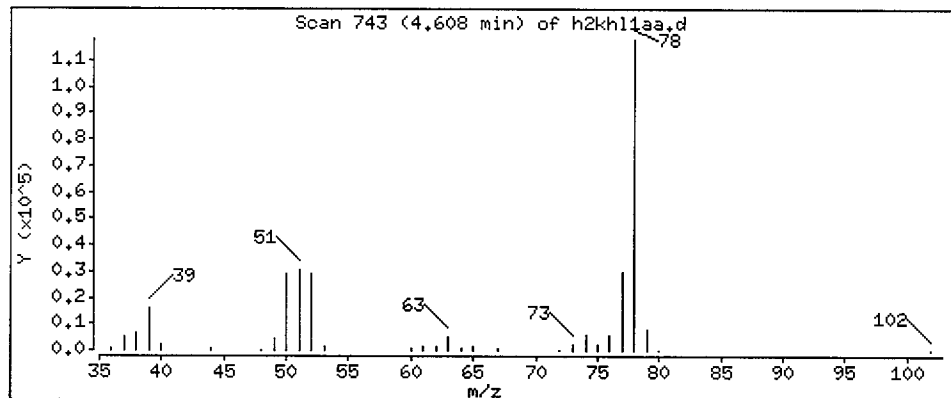
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

43 Benzene

Concentration: 0.053542 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

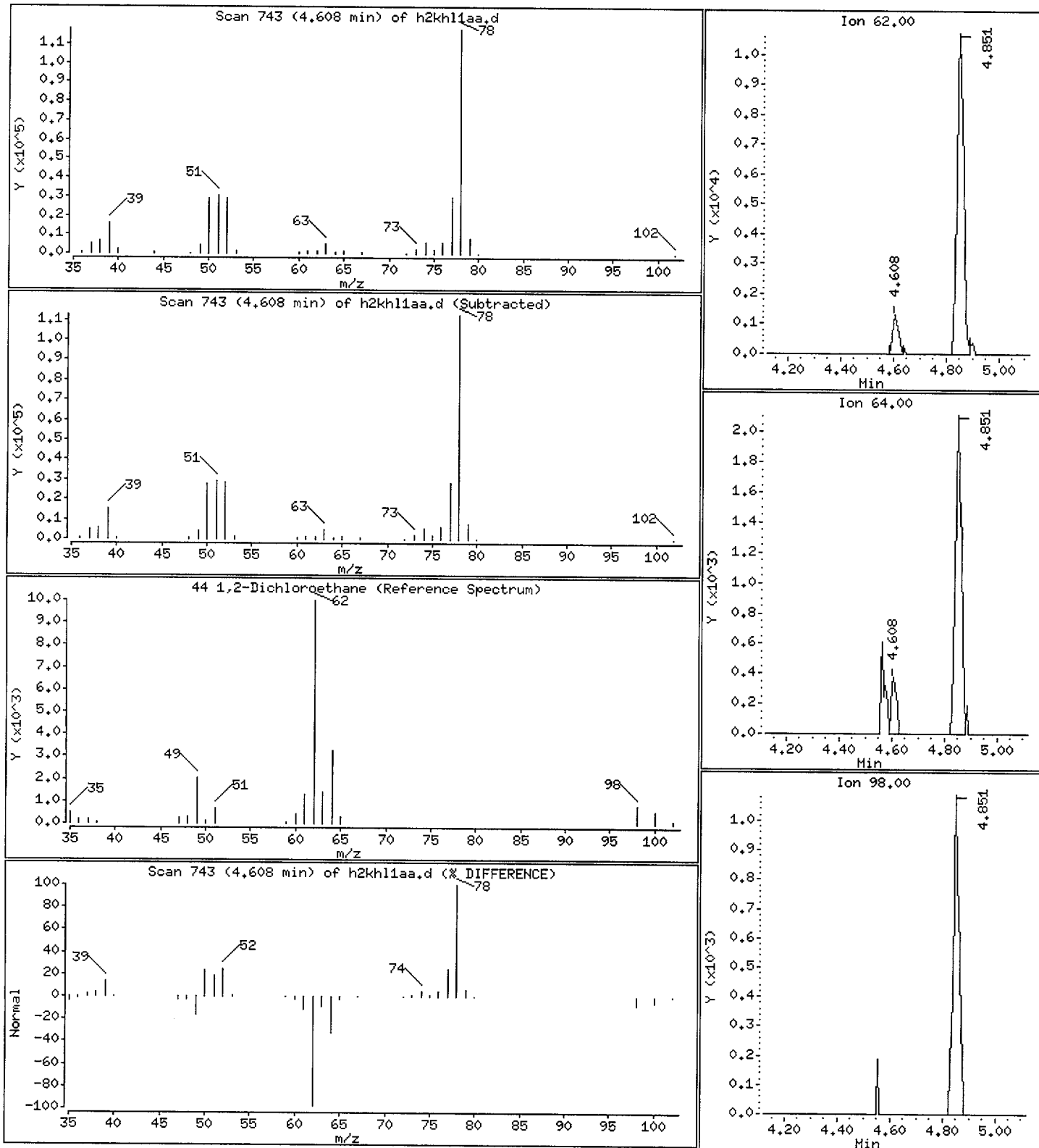
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

44 1,2-Dichloroethane

Concentration: 0.0028351 ug





Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date: 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

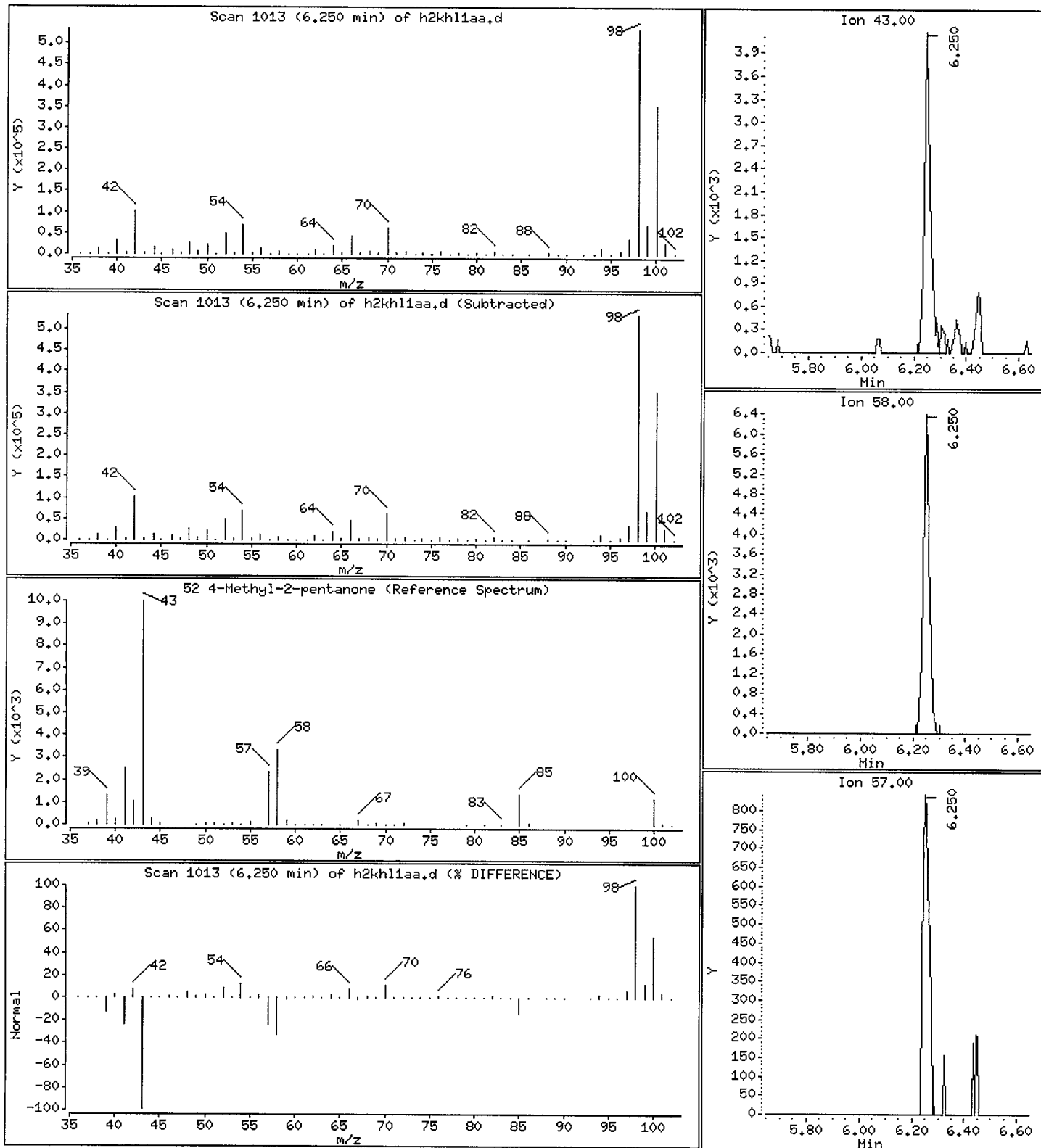
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

52 4-Methyl-2-pentanone

Concentration: 0.032662 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

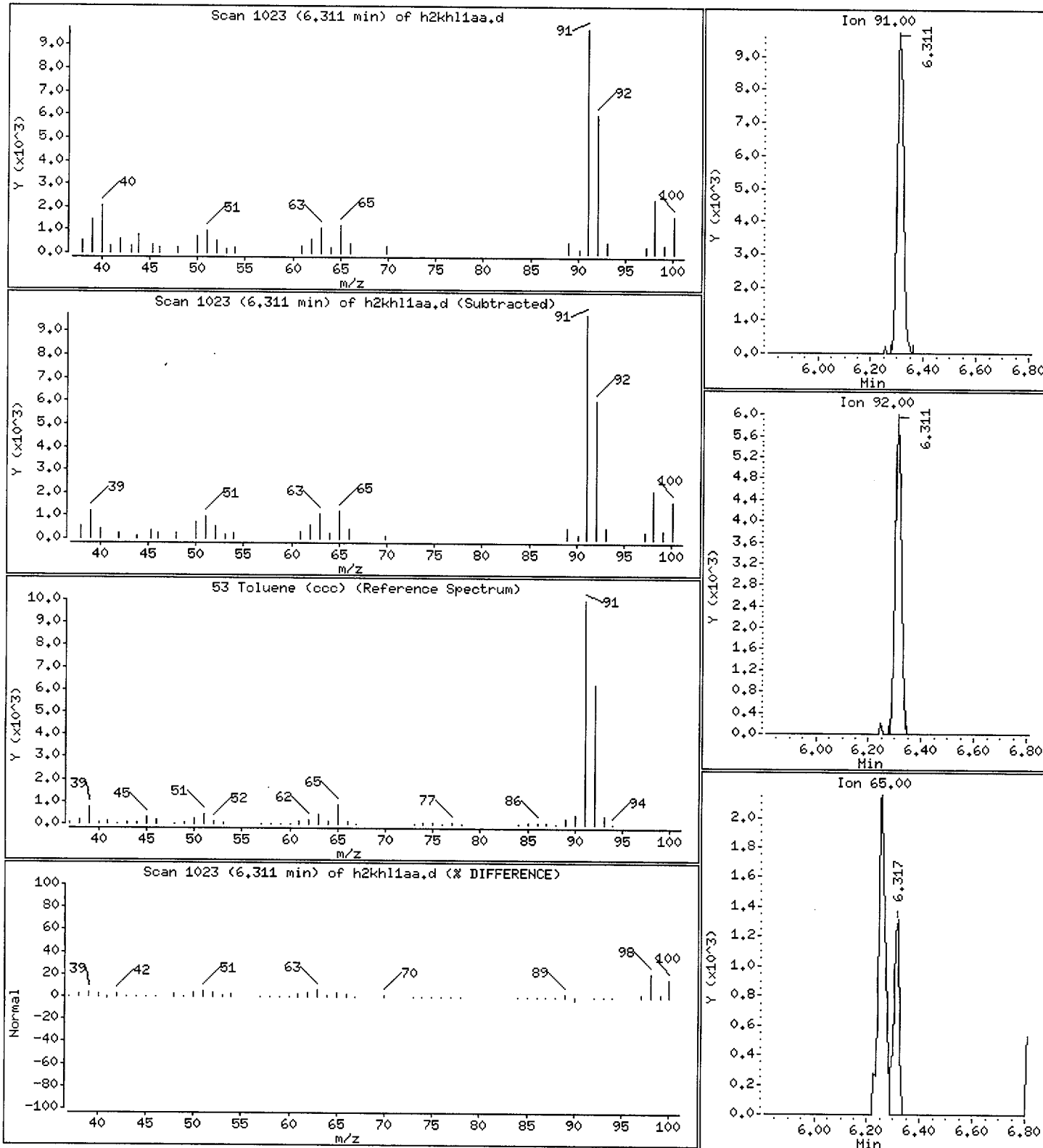
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

53 Toluene (ccc)

Concentration: 0.0032144 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

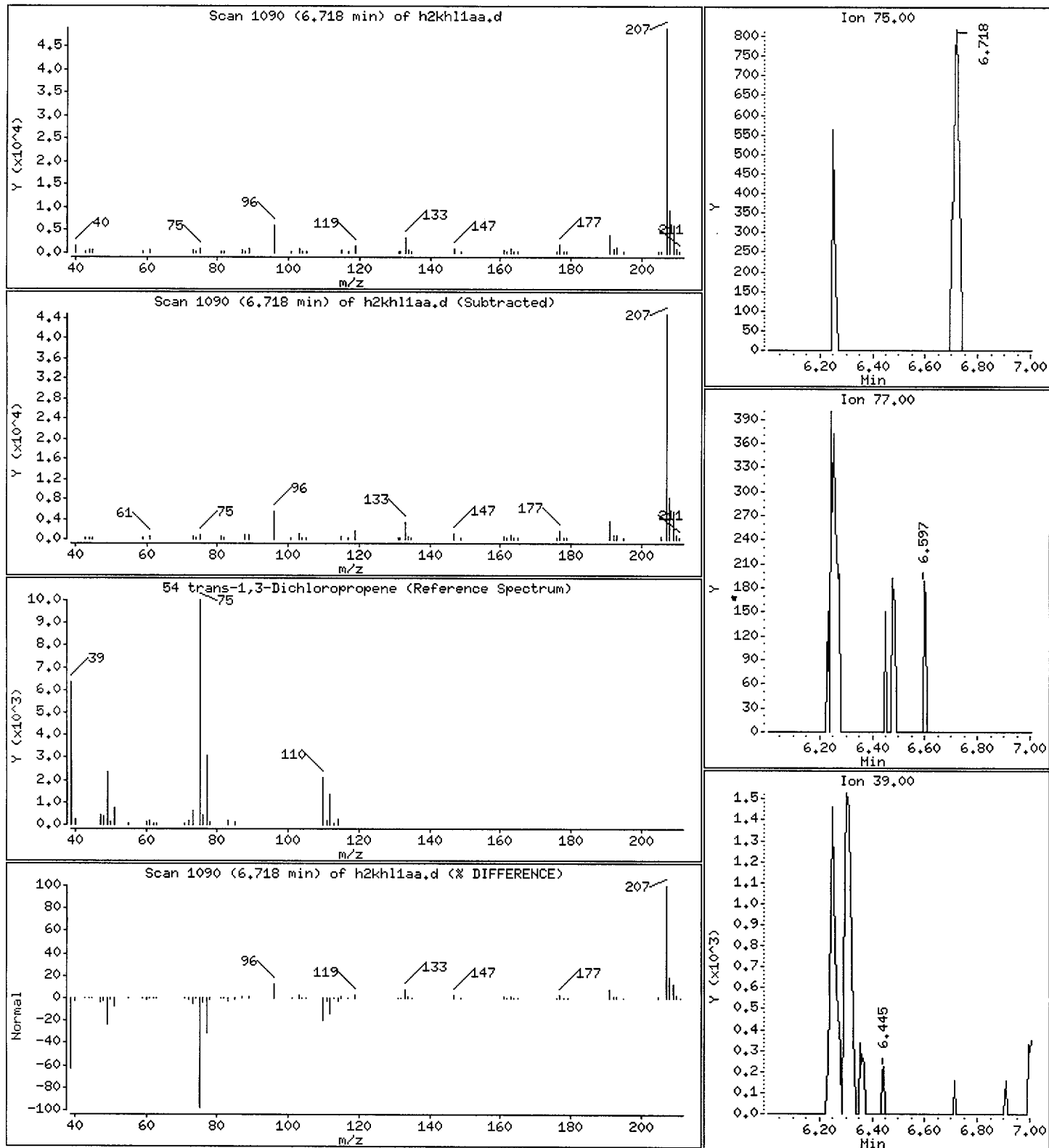
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

54 trans-1,3-Dichloropropene

Concentration: 0.0015768 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

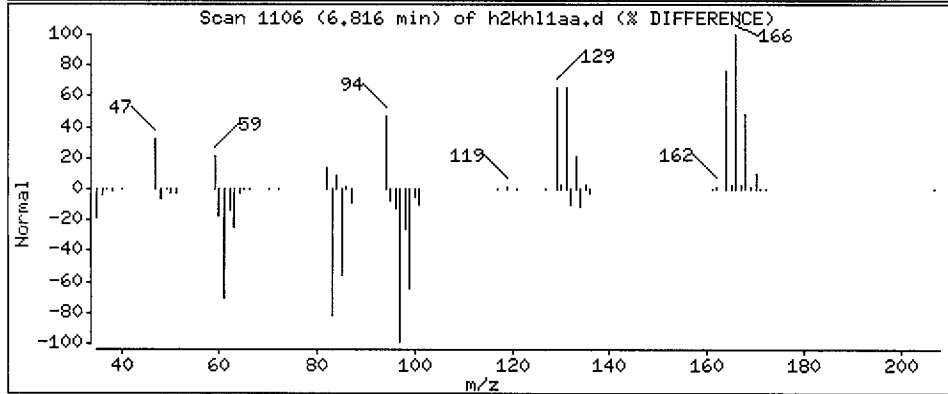
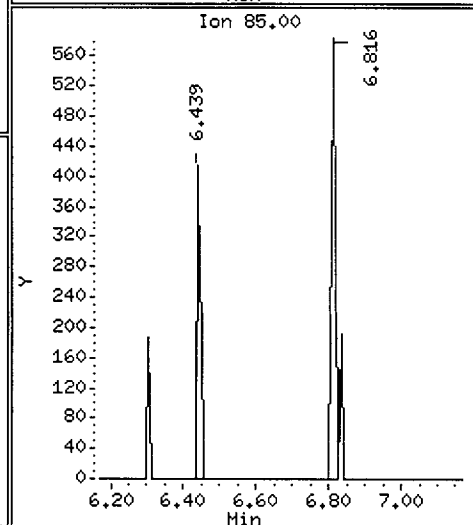
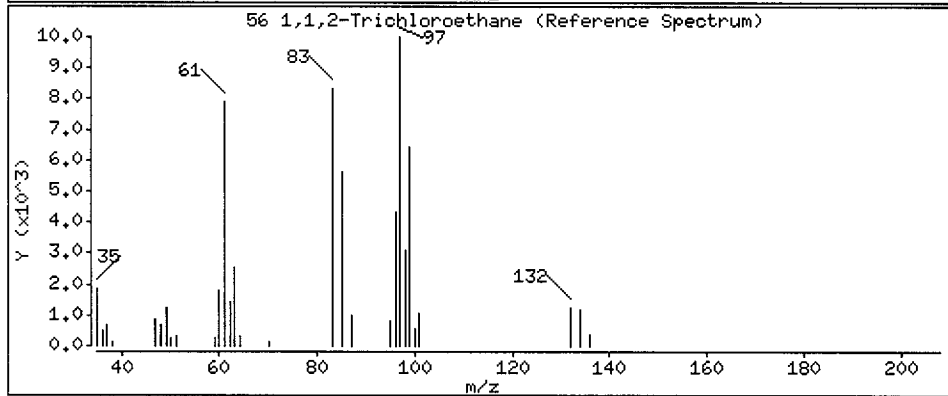
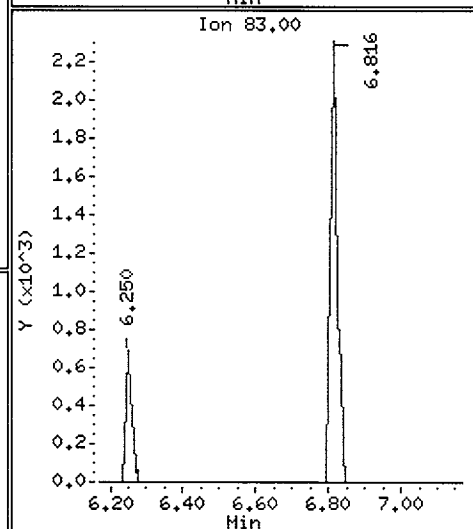
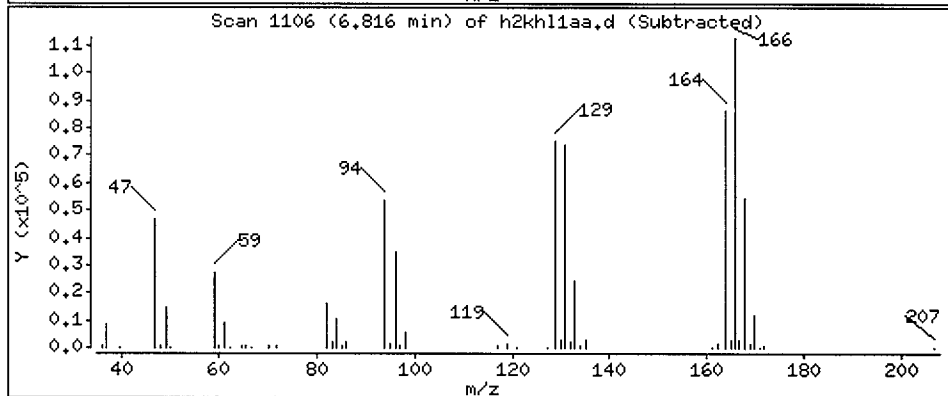
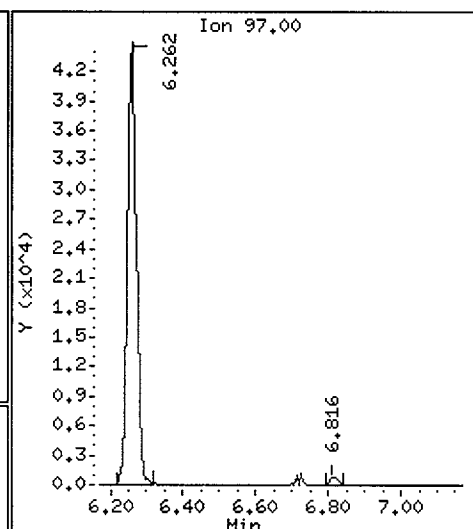
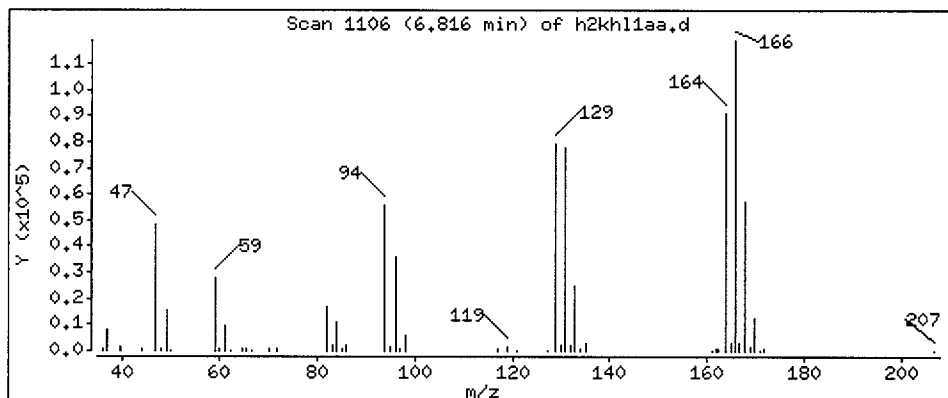
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

56 1,1,2-Trichloroethane

Concentration: 0.0032877 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

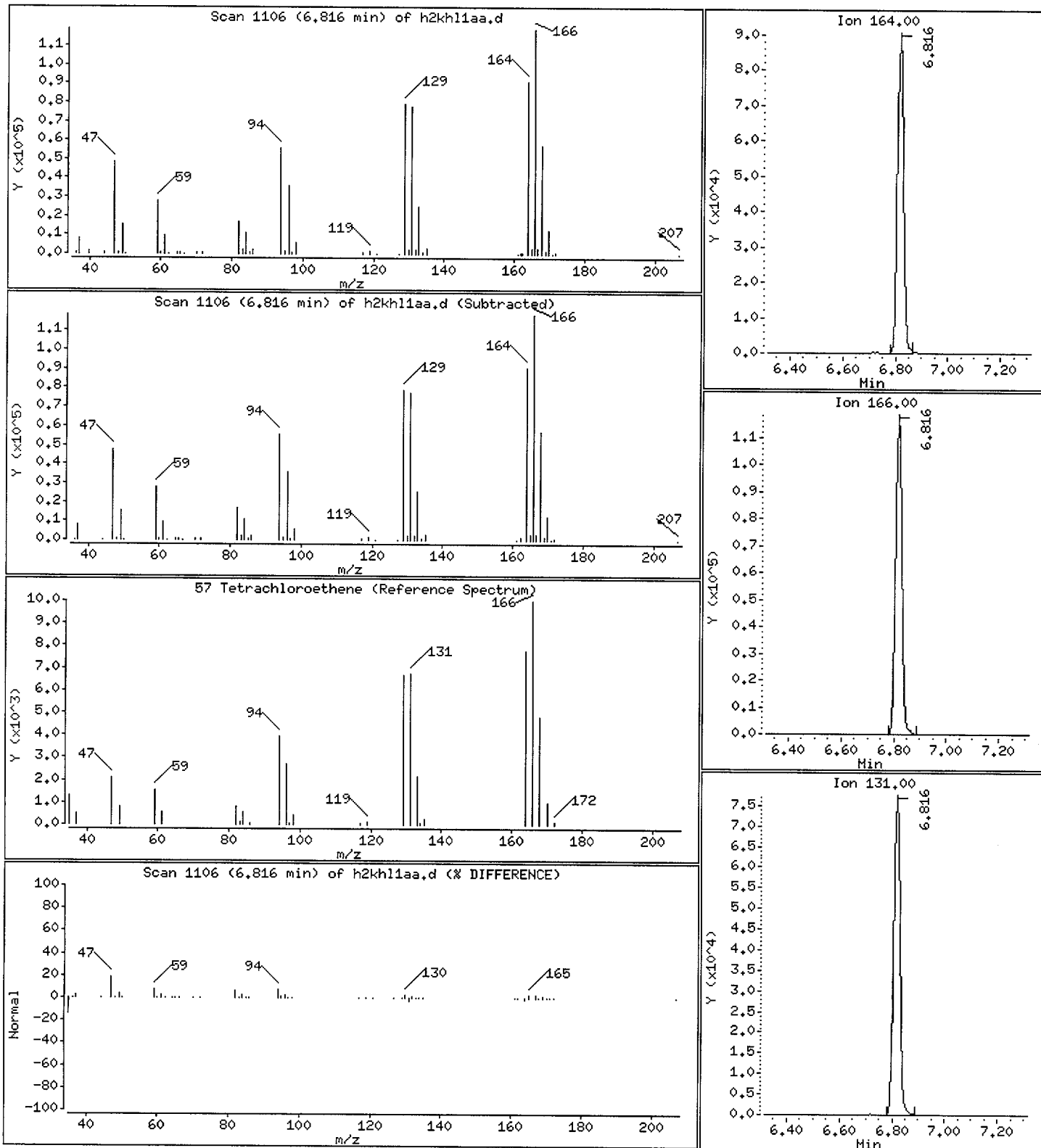
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

57 Tetrachloroethene

Concentration: 0.13705 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khl1aa.d

Date : 07-APR-2006 20:14

Client ID: AUDIT VOST #1

Instrument: mx.i

Sample Info: H2KHL1AA,1,0,,,

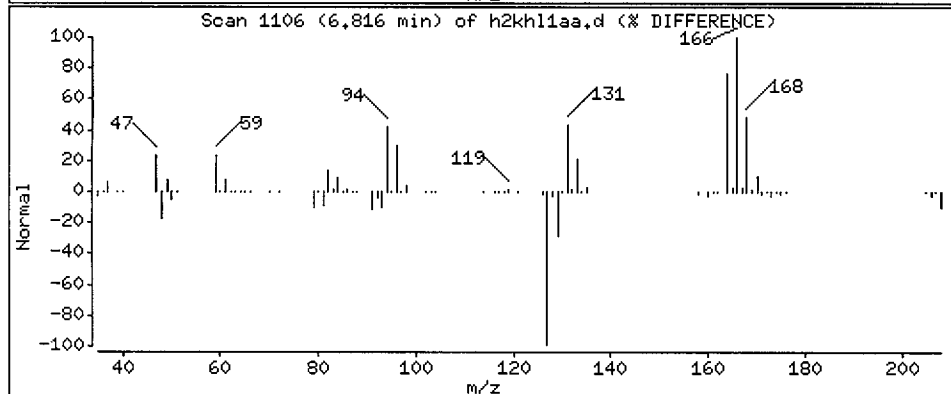
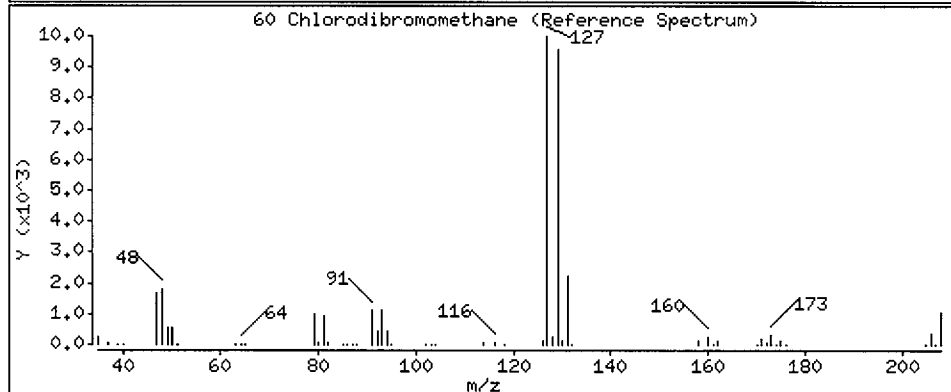
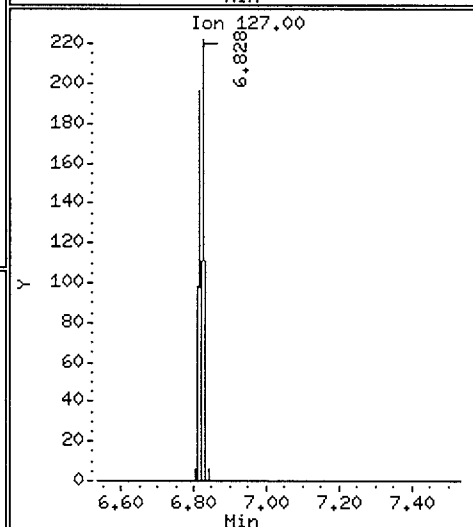
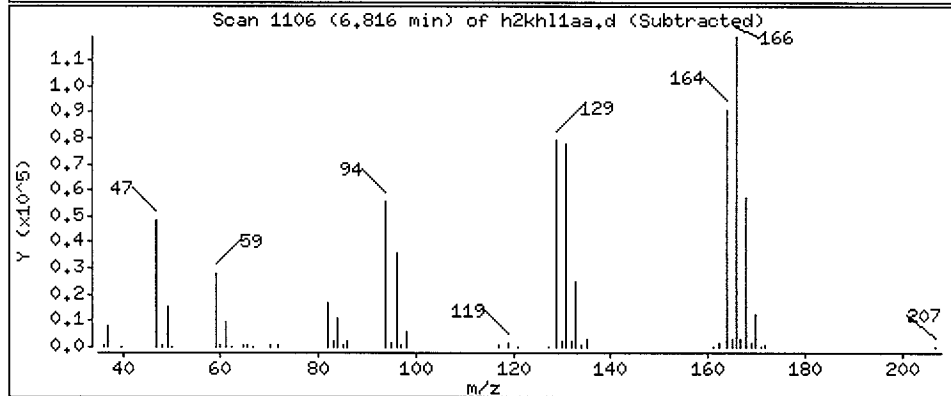
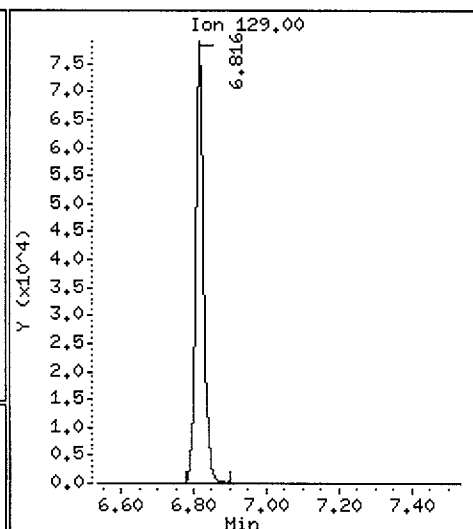
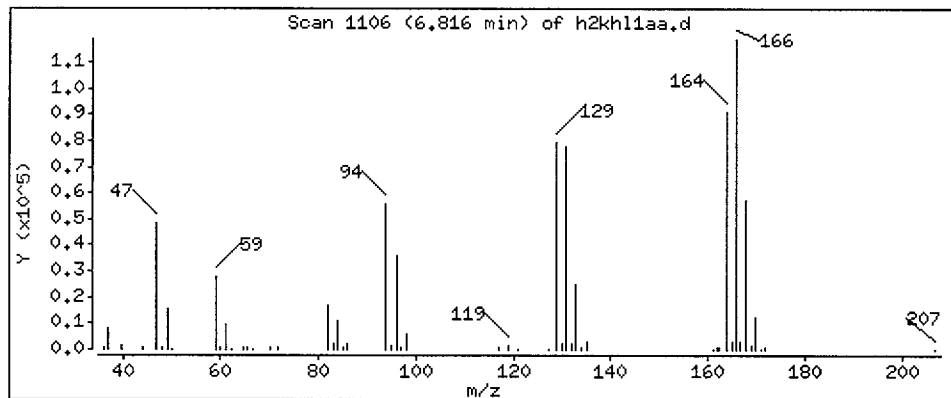
Operator: 22980

Column phase: J+W 624

Column diameter: 0,18

60 Chlorodibromomethane

Concentration: 0,27186 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khl1aa.d  
Report Date: 18-Apr-2006 14:58

## STL Knoxville

SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X040706.b/h2khl1aa.d  
Lab Smp Id: H2KHL1AA Client Smp ID: AUDIT VOST #1  
Inj Date : 07-APR-2006 20:14  
Operator : 22980 Inst ID: mx.i  
Smp Info : H2KHL1AA,1,0,,,  
Misc Info : X040706,8260B\_LM,focus.sub  
Comment :  
Method : /var/chem/gcms/mx.i/X040706.b/8260B LM.m  
Meth Date : 18-Apr-2006 14:54 tajh Quant Type: ISTD  
Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

## STL Knoxville - ACS

Client Sample ID: AUDIT VOST #2

## GC/MS Volatiles

Lot-Sample #....: H6D030169-040    Work Order #....: H2KHR1AA    Matrix.....: AIR  
 Date Sampled....: 03/28/06    Date Received...: 04/02/06  
 Prep Date.....: 04/07/06    Analysis Date...: 04/07/06  
 Prep Batch #....: 6097054  
 Dilution Factor: 1    Method.....: SW846 VOST

| PARAMETER                        | RESULT  | REPORTING |       |        |
|----------------------------------|---------|-----------|-------|--------|
|                                  |         | LIMIT     | UNITS | MDL    |
| Acetone                          | 0.39    | 0.10      | ug    | 0.085  |
| Acrylonitrile                    | ND      | 0.50      | ug    | 0.076  |
| Benzene                          | 0.058   | 0.010     | ug    | 0.0032 |
| Bromobenzene                     | ND      | 0.010     | ug    | 0.0036 |
| Bromochloromethane               | ND      | 0.025     | ug    | 0.012  |
| Bromodichloromethane             | ND      | 0.010     | ug    | 0.0016 |
| Bromoform                        | ND      | 0.025     | ug    | 0.0066 |
| Bromomethane                     | ND      | 0.050     | ug    | 0.022  |
| 2-Butanone                       | 0.091 J | 0.10      | ug    | 0.035  |
| n-Butylbenzene                   | ND      | 0.010     | ug    | 0.0047 |
| sec-Butylbenzene                 | ND      | 0.010     | ug    | 0.0036 |
| tert-Butylbenzene                | ND      | 0.010     | ug    | 0.0030 |
| Carbon disulfide                 | 0.016   | 0.010     | ug    | 0.0011 |
| Carbon tetrachloride             | 0.046   | 0.010     | ug    | 0.0011 |
| Chlorobenzene                    | ND      | 0.010     | ug    | 0.0013 |
| Chlorodibromomethane             | ND      | 0.025     | ug    | 0.010  |
| Chloroethane                     | ND      | 0.050     | ug    | 0.010  |
| Chloroform                       | 0.074   | 0.010     | ug    | 0.0019 |
| Chloromethane                    | ND      | 0.025     | ug    | 0.0032 |
| 2-Chlorotoluene                  | ND      | 0.010     | ug    | 0.0023 |
| 4-Chlorotoluene                  | ND      | 0.010     | ug    | 0.0020 |
| 1,2-Dibromo-3-chloro-<br>propane | ND      | 0.050     | ug    | 0.020  |
| 1,2-Dibromoethane                | ND      | 0.025     | ug    | 0.010  |
| Dibromomethane                   | ND      | 0.025     | ug    | 0.010  |
| 1,2-Dichlorobenzene              | ND      | 0.010     | ug    | 0.0030 |
| 1,3-Dichlorobenzene              | ND      | 0.010     | ug    | 0.0031 |
| 1,4-Dichlorobenzene              | ND      | 0.010     | ug    | 0.0043 |
| Dichlorodifluoromethane          | ND      | 0.025     | ug    | 0.0050 |
| 1,1-Dichloroethane               | ND      | 0.010     | ug    | 0.0019 |
| 1,2-Dichloroethane               | ND      | 0.010     | ug    | 0.0022 |
| cis-1,2-Dichloroethene           | ND      | 0.010     | ug    | 0.0025 |
| trans-1,2-Dichloroethene         | ND      | 0.010     | ug    | 0.0017 |
| 1,1-Dichloroethene               | ND      | 0.010     | ug    | 0.0023 |
| 1,2-Dichloropropane              | ND      | 0.010     | ug    | 0.0027 |
| 1,3-Dichloropropane              | ND      | 0.010     | ug    | 0.0018 |
| 2,2-Dichloropropane              | ND      | 0.010     | ug    | 0.0015 |
| cis-1,3-Dichloropropene          | ND      | 0.010     | ug    | 0.0030 |
| trans-1,3-Dichloropropene        | ND      | 0.010     | ug    | 0.0020 |

(Continued on next page)



## STL Knoxville - ACS

Client Sample ID: AUDIT VOST #2

## GC/MS Volatiles

Lot-Sample #....: H6D030169-040 Work Order #....: H2KHR1AA Matrix.....: AIR

| PARAMETER                                 | RESULT          | REPORTING    |            |               |
|-------------------------------------------|-----------------|--------------|------------|---------------|
|                                           |                 | LIMIT        | UNITS      | MDL           |
| 1,1-Dichloropropene                       | ND              | 0.010        | ug         | 0.0010        |
| Ethylbenzene                              | ND              | 0.010        | ug         | 0.0013        |
| Hexachlorobutadiene                       | ND              | 0.025        | ug         | 0.0048        |
| 2-Hexanone                                | ND              | 0.10         | ug         | 0.0099        |
| Iodomethane                               | ND              | 0.050        | ug         | 0.0016        |
| Isopropylbenzene                          | ND              | 0.010        | ug         | 0.0023        |
| p-Isopropyltoluene                        | ND              | 0.010        | ug         | 0.0038        |
| <b>Methylene chloride</b>                 | <b>0.077</b>    | <b>0.025</b> | <b>ug</b>  | <b>0.013</b>  |
| 4-Methyl-2-pentanone                      | ND              | 0.10         | ug         | 0.014         |
| Naphthalene                               | ND              | 0.025        | ug         | 0.010         |
| n-Propylbenzene                           | ND              | 0.010        | ug         | 0.0029        |
| Styrene                                   | ND              | 0.010        | ug         | 0.0017        |
| 1,1,1,2-Tetrachloroethane                 | ND              | 0.010        | ug         | 0.0010        |
| 1,1,2,2-Tetrachloroethane                 | ND              | 0.025        | ug         | 0.011         |
| <b>Tetrachloroethene</b>                  | <b>0.16</b>     | <b>0.010</b> | <b>ug</b>  | <b>0.0021</b> |
| Tetrahydrofuran                           | ND              | 0.10         | ug         | 0.031         |
| <b>Toluene</b>                            | <b>0.0035 J</b> | <b>0.010</b> | <b>ug</b>  | <b>0.0022</b> |
| 1,2,3-Trichlorobenzene                    | ND              | 0.025        | ug         | 0.014         |
| 1,2,4-Trichloro-<br>benzene               | ND              | 0.025        | ug         | 0.0030        |
| 1,1,1-Trichloroethane                     | ND              | 0.025        | ug         | 0.0016        |
| 1,1,2-Trichloroethane                     | ND              | 0.025        | ug         | 0.0050        |
| Trichloroethene                           | ND              | 0.010        | ug         | 0.0050        |
| Trichlorofluoromethane                    | ND              | 0.050        | ug         | 0.0049        |
| 1,2,3-Trichloropropane                    | ND              | 0.025        | ug         | 0.0081        |
| 1,1,2-Trichloro-<br>1,2,2-trifluoroethane | ND              | 0.050        | ug         | 0.0018        |
| 1,2,4-Trimethylbenzene                    | ND              | 0.010        | ug         | 0.0048        |
| 1,3,5-Trimethylbenzene                    | ND              | 0.010        | ug         | 0.0028        |
| Vinyl acetate                             | ND              | 0.050        | ug         | 0.012         |
| Vinyl chloride                            | ND              | 0.010        | ug         | 0.0032        |
| m-Xylene & p-Xylene                       | ND              | 0.020        | ug         | 0.0034        |
| o-Xylene                                  | ND              | 0.010        | ug         | 0.0017        |
| Xylenes (total)                           | ND              | 0.030        | ug         | 0.0048        |
| SURROGATE                                 | PERCENT         |              | RECOVERY   |               |
|                                           | RECOVERY        |              | LIMITS     |               |
| Dibromofluoromethane                      | 85              |              | (50 - 134) |               |
| 1,2-Dichloroethane-d4                     | 87              |              | (50 - 134) |               |
| Toluene-d8                                | 88              |              | (57 - 127) |               |
| Bromofluorobenzene                        | 78              |              | (50 - 125) |               |

**NOTE(S) :**

J Estimated result. Result is less than RL.

STL Knoxville - ACS

AUDIT VOST #2

GC/MS Volatiles

Lot-Sample #: H6D030169-040

Work Order #: H2KHR1AA

Matrix: AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug           |

Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d  
Report Date: 19-Apr-2006 08:29

## STL Knoxville

SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d  
Lab Smp Id: H2KHR1AA Client Smp ID: AUDIT VOST #2  
Inj Date : 07-APR-2006 19:49  
Operator : 22980 Inst ID: mx.i  
Smp Info : H2KHR1AA,1,0,,, /  
Misc Info : X040706,8260B\_LM,focus.sub  
Comment :  
Method : /var/chem/gcms/mx.i/X040706.b/8260B LM.m  
Meth Date : 19-Apr-2006 08:29 tajh Quant Type: ISTD  
Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
Als bottle: 15  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable

Local Compound Variable

| Compounds                  | QUANT SIG | CONCENTRATIONS |        |         |         |          |                               |
|----------------------------|-----------|----------------|--------|---------|---------|----------|-------------------------------|
|                            |           | MASS           | RT     | EXP RT  | REL RT  | RESPONSE | ON-COLUMN ( ug/L) FINAL ( ug) |
| =====                      | =====     | =====          | =====  | =====   | =====   | =====    | =====                         |
| * 1 Fluorobenzene          | 96        | 4.852          | 4.851  | (1.000) | 1012380 | 10.0000  |                               |
| * 2 Chlorobenzene-d5       | 119       | 7.583          | 7.582  | (1.000) | 198191  | 10.0000  |                               |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.746         | 10.746 | (1.000) | 212719  | 10.0000  |                               |
| \$ 4 Dibromofluoromethane  | 113       | 4.274          | 4.273  | (0.881) | 145767  | 8.46866  | 0.21172                       |
| \$ 5 1,2-Dichloroethane-d4 | 65        | 4.553          | 4.553  | (0.939) | 116885  | 8.71174  | 0.21779                       |
| \$ 6 Toluene-d8            | 98        | 6.251          | 6.250  | (0.824) | 850477  | 8.76466  | 0.21912                       |
| \$ 7 4-Bromofluorobenzene  | 95        | 8.873          | 8.872  | (0.826) | 195987  | 7.77070  | 0.19427                       |
| 11 Chloromethane (spcc)    | 50        | 1.256          | 1.262  | (0.259) | 2433    | 0.05160  | 0.0012900                     |
| 21 Acetone                 | 43        | 2.382          | 2.381  | (0.491) | 22182   | 15.4702  | 0.38675                       |
| 23 Carbon Disulfide        | 76        | 2.497          | 2.497  | (0.515) | 49079   | 0.63612  | 0.015903                      |
| 26 Methylene Chloride      | 84        | 2.747          | 2.746  | (0.566) | 48044   | 3.06950  | 0.076738                      |
| 33 *Vinyl Acetate          | 86        | 3.252          | 3.421  | (0.670) | 1368    | 1.18791  | <del>0.029698</del>           |
| 36 2-Butanone              | 43        | 3.878          | 3.871  | (0.799) | 8110    | 3.62649  | 0.090662                      |
| 38 *THF                    | 42        | 4.140          | 4.109  | (0.853) | 1420    | 1.03675  | 0.025919                      |
| 39 Chloroform (ccc)        | 83        | 4.140          | 4.139  | (0.853) | 113644  | 2.95351  | 0.073838                      |
| 41 Carbon Tetrachloride    | 117       | 4.438          | 4.437  | (0.915) | 66557   | 1.83142  | 0.045785                      |
| 42 1,1-Dichloropropene     | 75        | 4.602          | 4.437  | (0.949) | 3954    | 0.09866  | <u>0.0024664</u>              |
| 43 Benzene                 | 78        | 4.608          | 4.607  | (0.950) | 239130  | 2.33230  | 0.058308                      |
| 44 1,2-Dichloroethane      | 62        | 4.614          | 4.620  | (0.951) | 2451    | 0.14210  | <del>0.0035524</del>          |
| 52 4-Methyl-2-pentanone    | 43        | 6.251          | 6.147  | (1.288) | 6826    | 1.27454  | <del>0.031863</del>           |

4/19/06

Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d  
Report Date: 19-Apr-2006 08:29

| Compounds                    | QUANT SIG |       |        | CONCENTRATIONS |          |                      |                      |
|------------------------------|-----------|-------|--------|----------------|----------|----------------------|----------------------|
|                              | MASS      | RT    | EXP RT | REL RT         | RESPONSE | ON-COLUMN<br>( ug/L) | FINAL<br>( ug)       |
| =====                        | ====      | ==    | =====  | =====          | =====    | =====                | =====                |
| 53 Toluene (ccc)             | 91        | 6.312 | 6.311  | (0.832)        | 16080    | 0.13852              | 0.0034629            |
| 54 trans-1,3-Dichloropropene | 75        | 6.719 | 6.506  | (0.886)        | 2582     | 0.12690              | <del>0.0031725</del> |
| 56 1,1,2-Trichloroethane     | 97        | 6.719 | 6.670  | (0.886)        | 1122     | 0.12243              | <del>0.0030608</del> |
| 57 Tetrachloroethene         | 164       | 6.817 | 6.816  | (0.899)        | 156859   | 6.28842              | 0.15721              |
| 60 Chlorodibromomethane      | 129       | 6.817 | 7.035  | (0.899)        | 141873   | 12.4866              | <del>0.31217</del>   |
| 62 Chlorobenzene (spcc)      | 112       | 7.613 | 7.607  | (1.004)        | 2698     | 0.04529              | 0.0011322            |

4/19/06/ff

Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d  
 Report Date: 19-Apr-2006 08:29

## STL Knoxville

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

|                                                       |                               |
|-------------------------------------------------------|-------------------------------|
| Instrument ID: mx.i                                   | Calibration Date: 07-APR-2006 |
| Lab File ID: h2khr1aa.d                               | Calibration Time: 09:16       |
| Lab Smp Id: H2KHR1AA                                  | Client Smp ID: AUDIT VOST #2  |
| Analysis Type: VOA                                    | Level: LOW                    |
| Quant Type: ISTD                                      | Sample Type: AIR              |
| Operator: 22980                                       |                               |
| Method File: /var/chem/gcms/mx.i/X040706.b/8260B_LM.m |                               |
| Misc Info: X040706,8260B_LM,focus.sub                 |                               |

| COMPOUND<br>=====   | STANDARD<br>===== | AREA LIMIT     |                | SAMPLE<br>===== | %DIFF<br>===== |
|---------------------|-------------------|----------------|----------------|-----------------|----------------|
|                     |                   | LOWER<br>===== | UPPER<br>===== |                 |                |
| 1 Fluorobenzene     | 1149191           | 574596         | 2298382        | 1012380         | -11.90         |
| 2 Chlorobenzene-d5  | 214194            | 107097         | 428388         | 198191          | -7.47          |
| 3 1,4 Dichlorobenze | 242601            | 121300         | 485202         | 212719          | -12.32         |

| COMPOUND<br>=====   | STANDARD<br>===== | RT LIMIT       |                | SAMPLE<br>===== | %DIFF<br>===== |
|---------------------|-------------------|----------------|----------------|-----------------|----------------|
|                     |                   | LOWER<br>===== | UPPER<br>===== |                 |                |
| 1 Fluorobenzene     | 4.85              | 4.35           | 5.35           | 4.85            | 0.02           |
| 2 Chlorobenzene-d5  | 7.58              | 7.08           | 8.08           | 7.58            | 0.01           |
| 3 1,4 Dichlorobenze | 10.75             | 10.25          | 11.25          | 10.75           | 0.01           |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d  
Report Date: 19-Apr-2006 08:29

## STL Knoxville

## RECOVERY REPORT

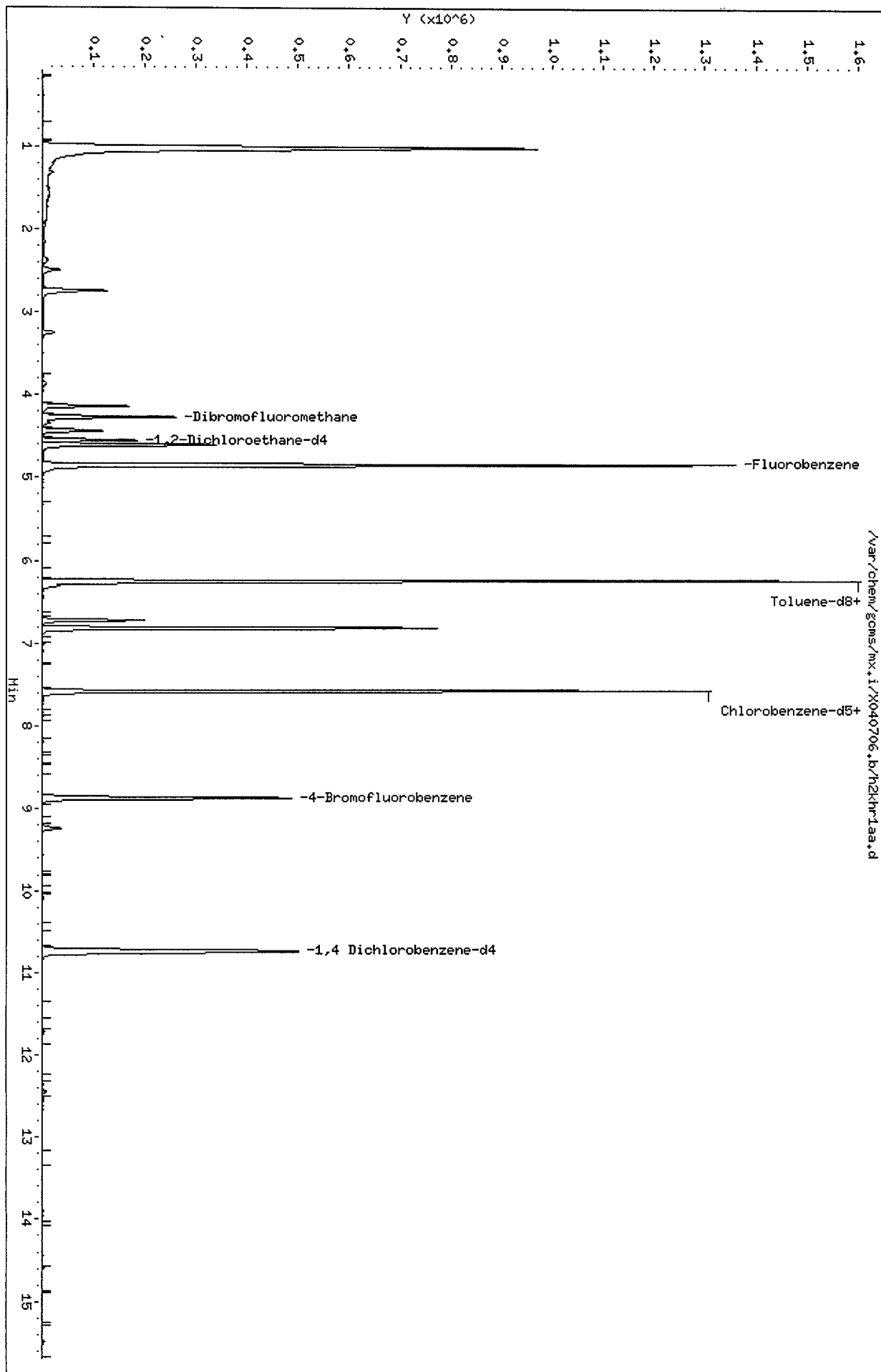
Client Name: STL Knoxville - ACS      Client SDG: H6D030169  
Sample Matrix: GAS      Fraction: VOA  
Lab Smp Id: H2KHR1AA      Client Smp ID: AUDIT VOST #2  
Level: LOW      Operator: 22980  
Data Type: MS DATA      SampleType: SAMPLE  
SpikeList File: allcmpds.spk      Quant Type: ISTD  
Sublist File: focus.sub  
Method File: /var/chem/gcms/mx.i/X040706.b/8260B\_LM.m  
Misc Info: X040706,8260B\_LM,focus.sub

| SURROGATE COMPOUND      | CONC<br>ADDED<br>ug | CONC<br>RECOVERED<br>ug | %<br>RECOVERED | LIMITS |
|-------------------------|---------------------|-------------------------|----------------|--------|
| \$ 4 Dibromofluorometha | 0.25000             | 0.21172                 | 84.69          | 50-150 |
| \$ 5 1,2-Dichloroethane | 0.25000             | 0.21779                 | 87.12          | 50-150 |
| \$ 6 Toluene-d8         | 0.25000             | 0.21912                 | 87.65          | 50-150 |
| \$ 7 4-Bromofluorobenze | 0.25000             | 0.19427                 | 77.71          | 50-150 |

Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d  
Date : 07-APR-2006 19:49  
Client ID: AUDIT VOST #2  
Sample Info: H2KHR1AA,1,0,,

Column phase: J+M 624

Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

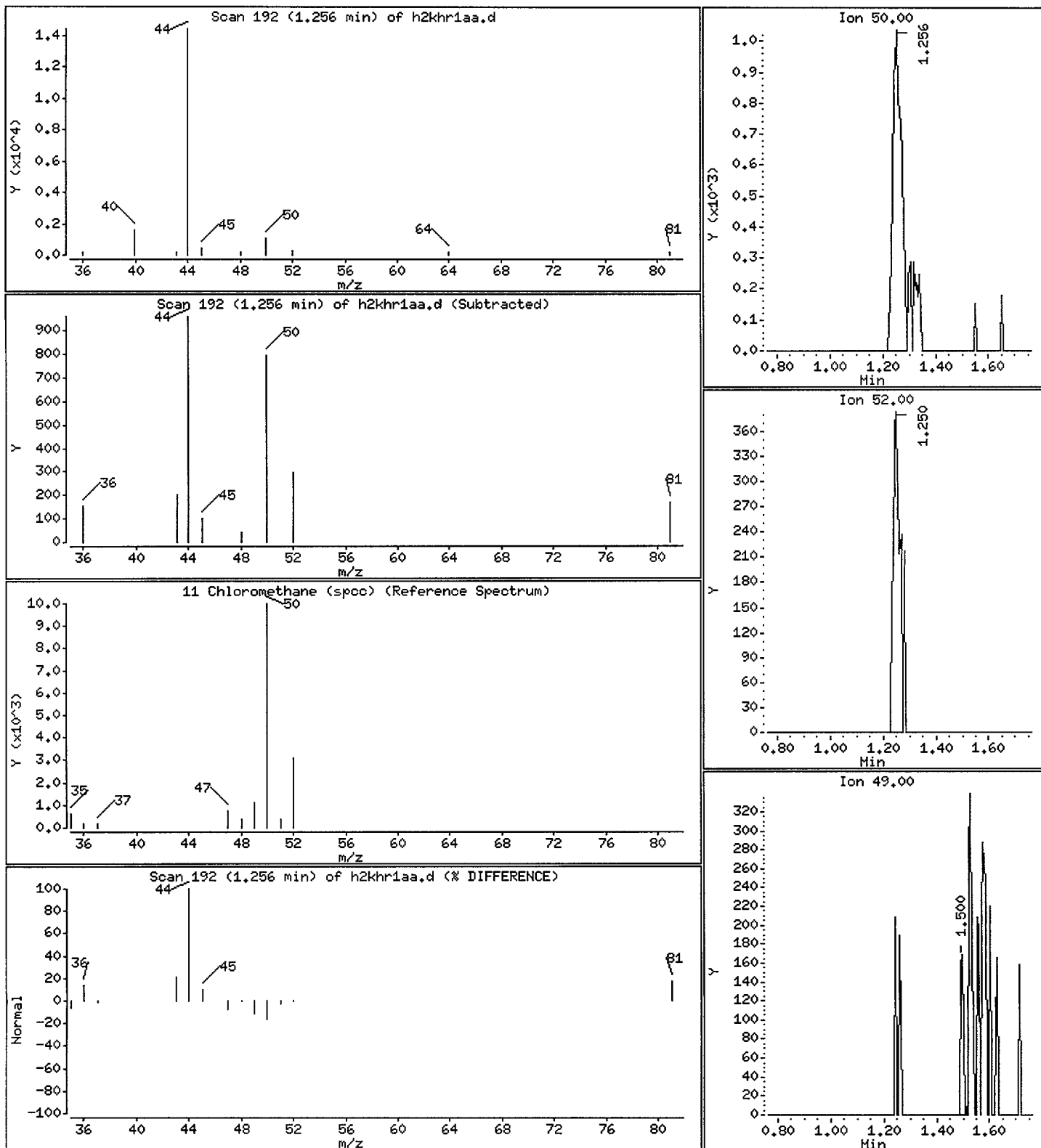
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

11 Chloromethane (spcc)

Concentration: 0.0012900 ug





Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

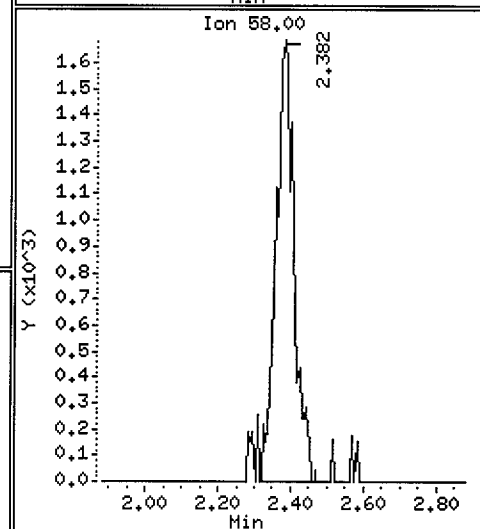
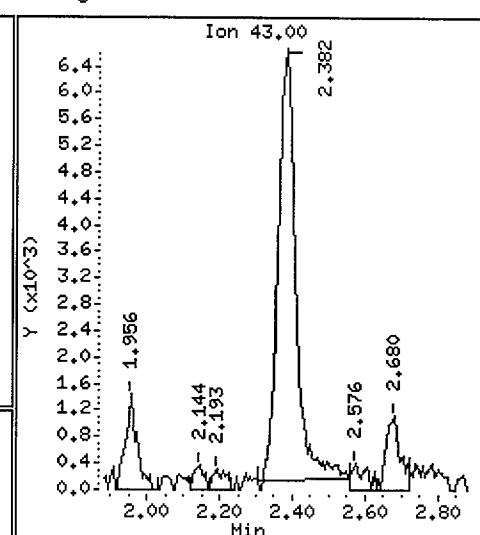
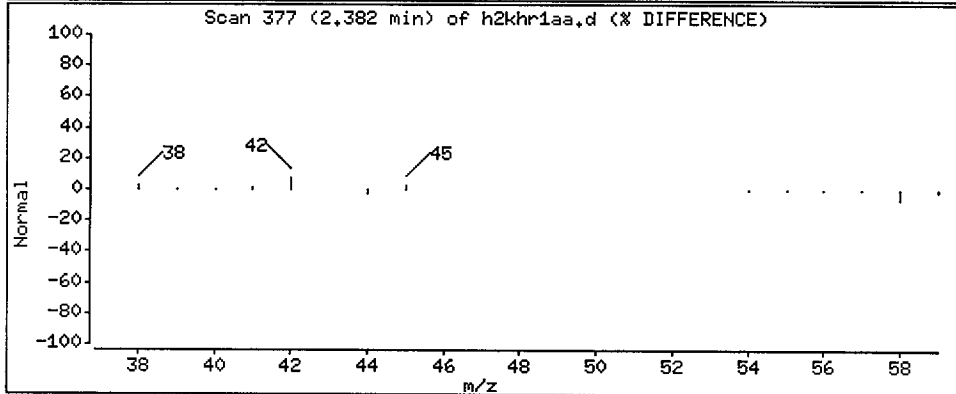
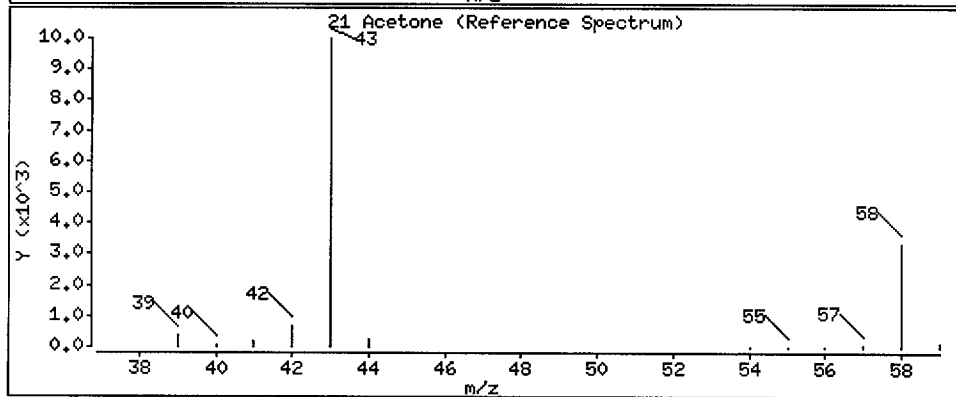
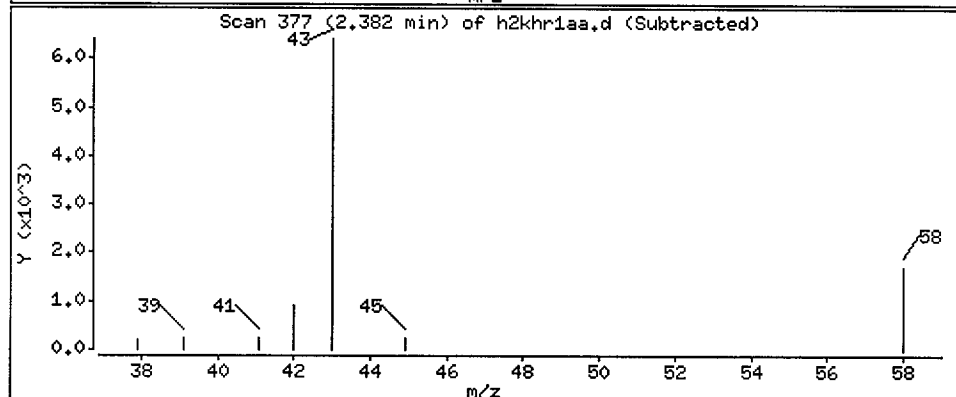
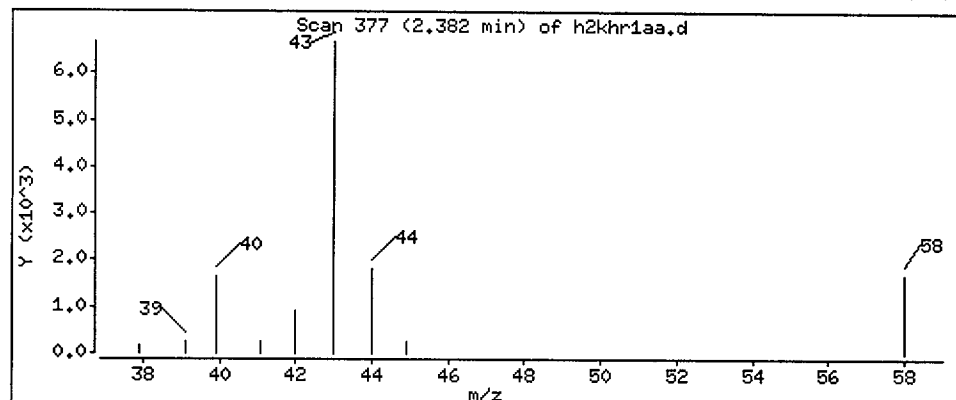
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

21 Acetone

Concentration: 0.38675 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

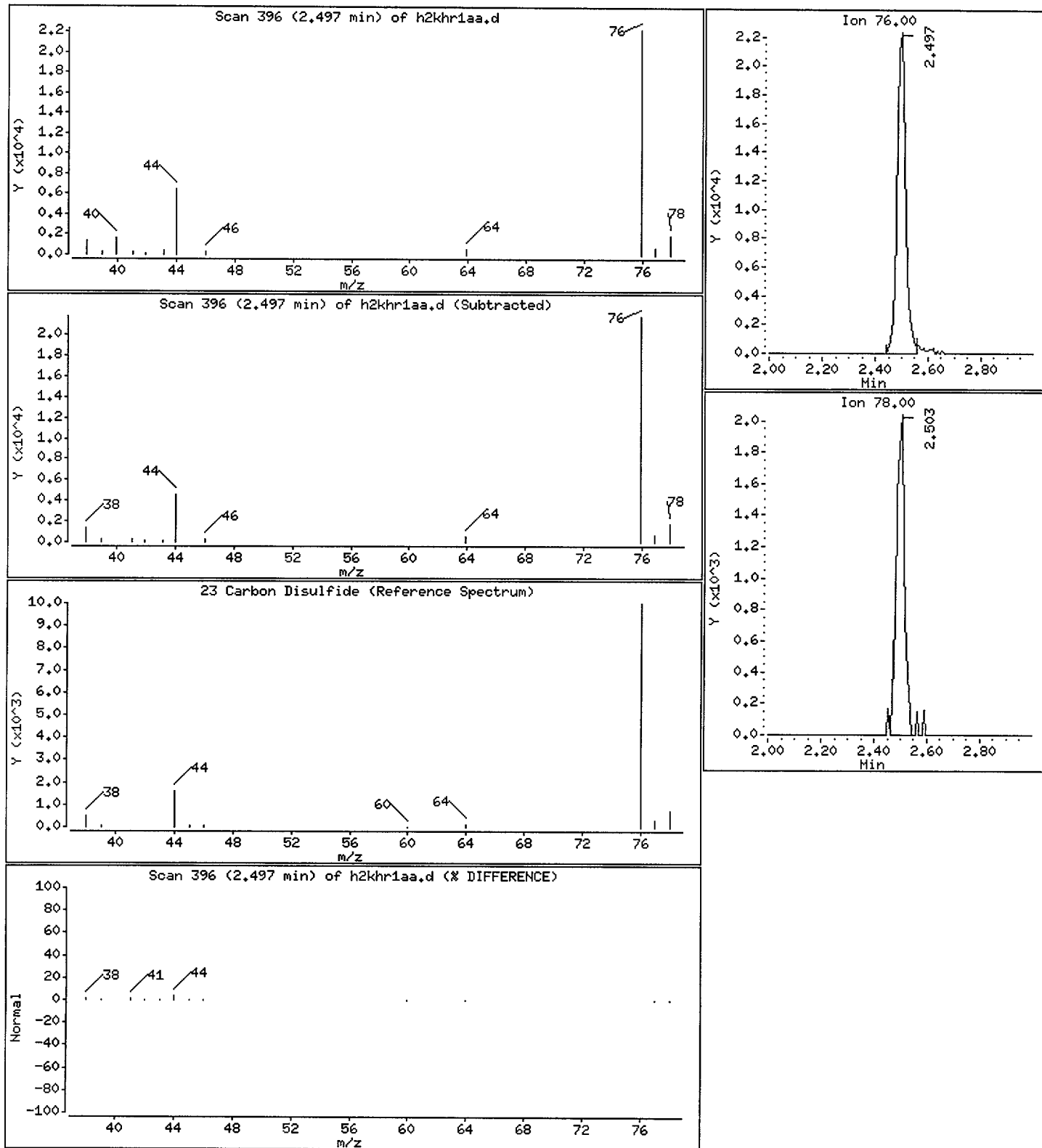
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

23 Carbon Disulfide

Concentration: 0.015903 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

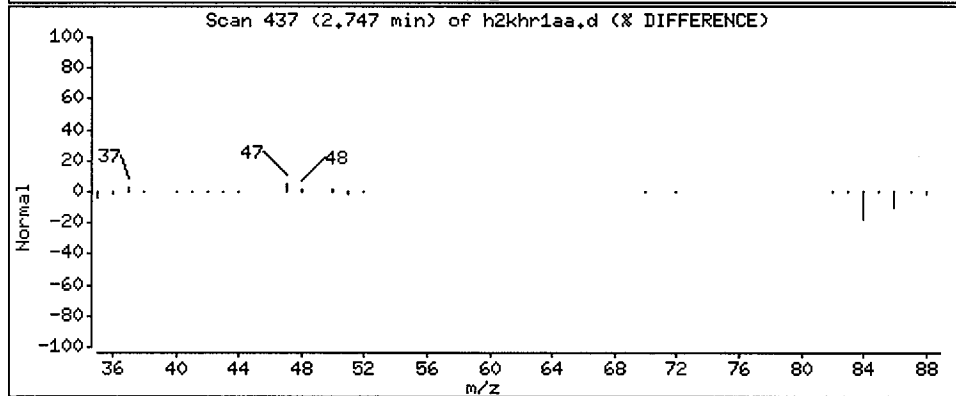
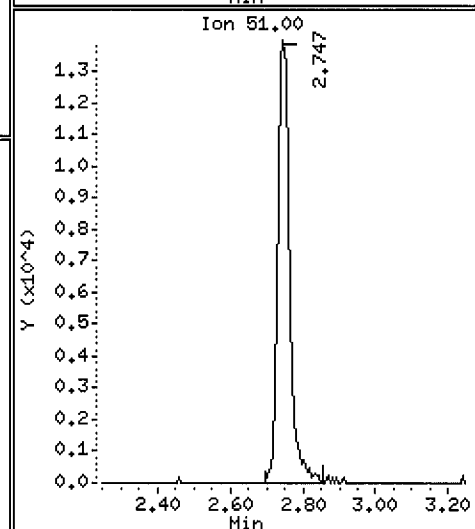
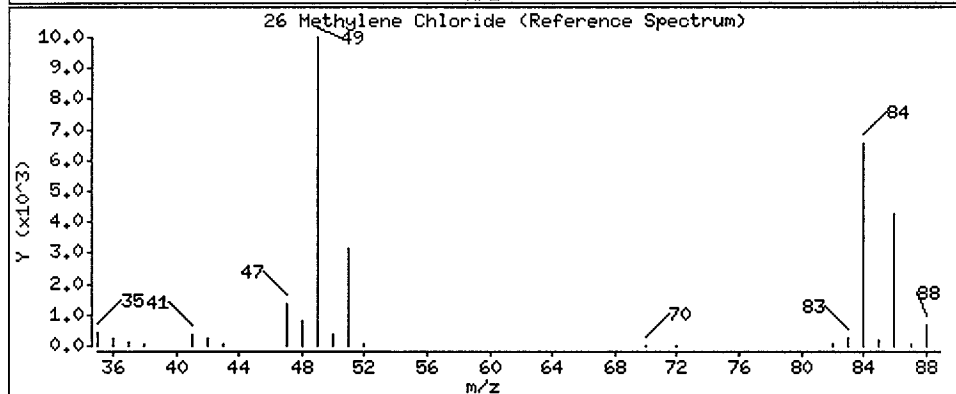
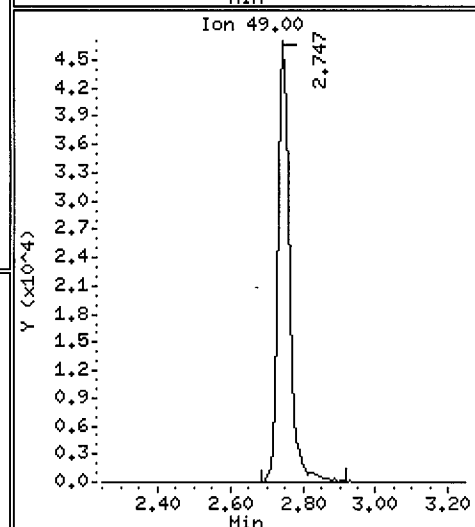
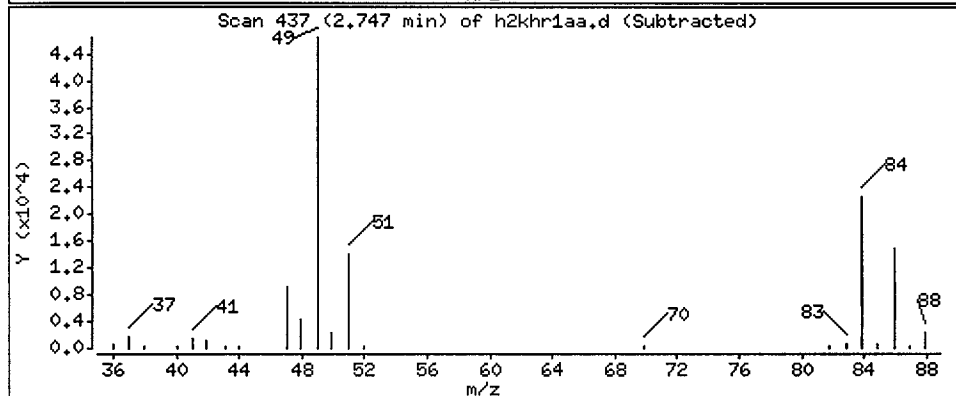
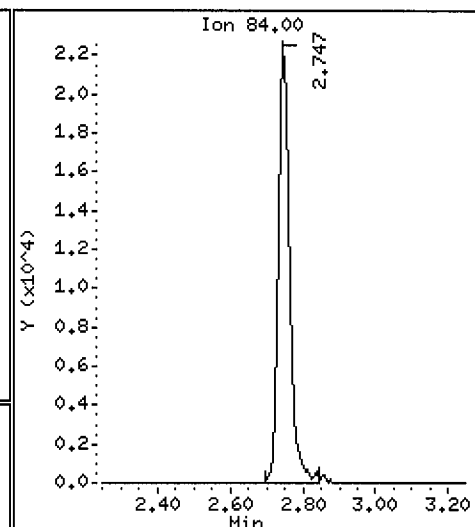
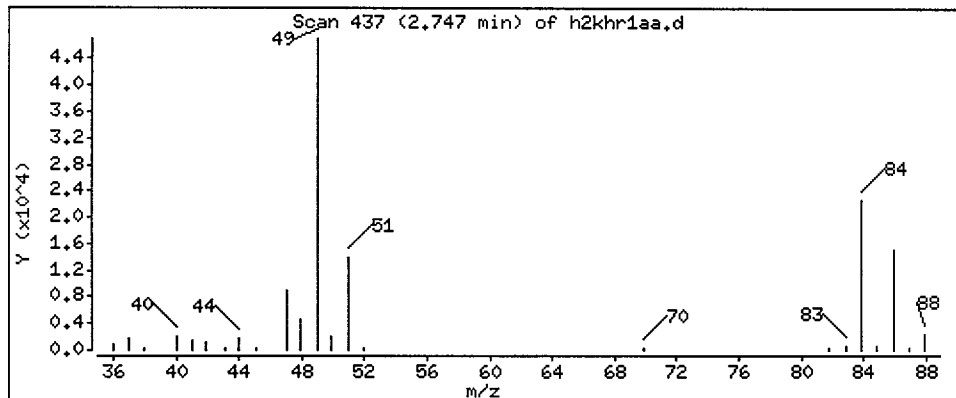
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

26 Methylene Chloride

Concentration: 0.076738 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

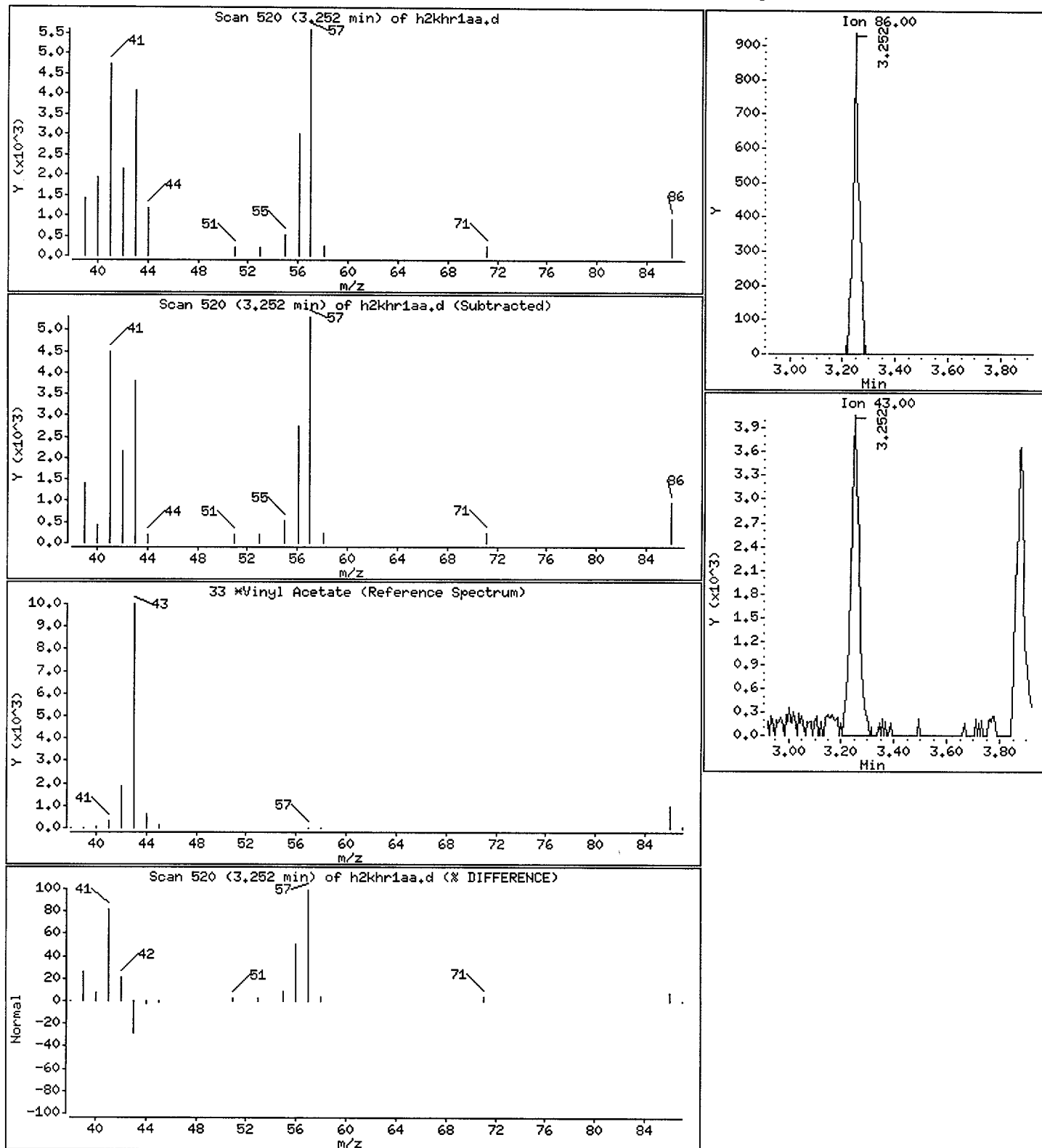
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

33 \*Vinyl Acetate

Concentration: 0.029698 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

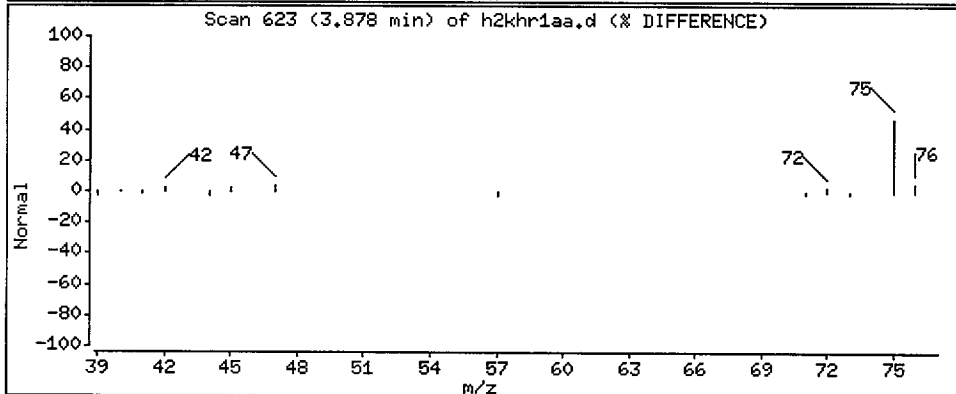
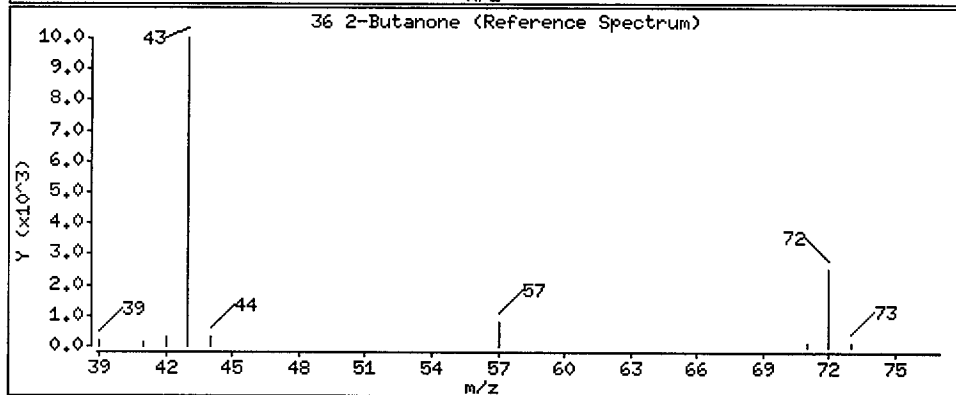
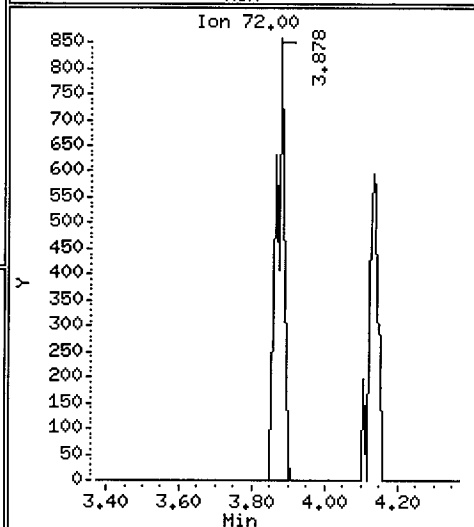
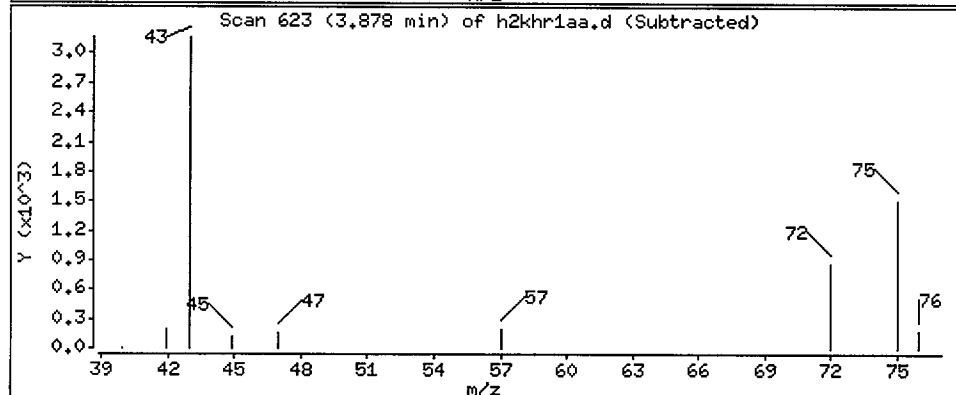
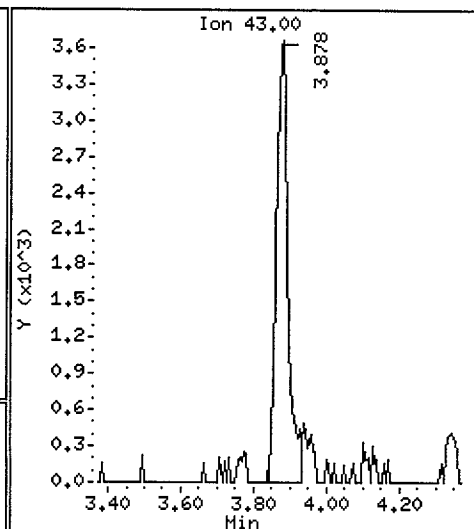
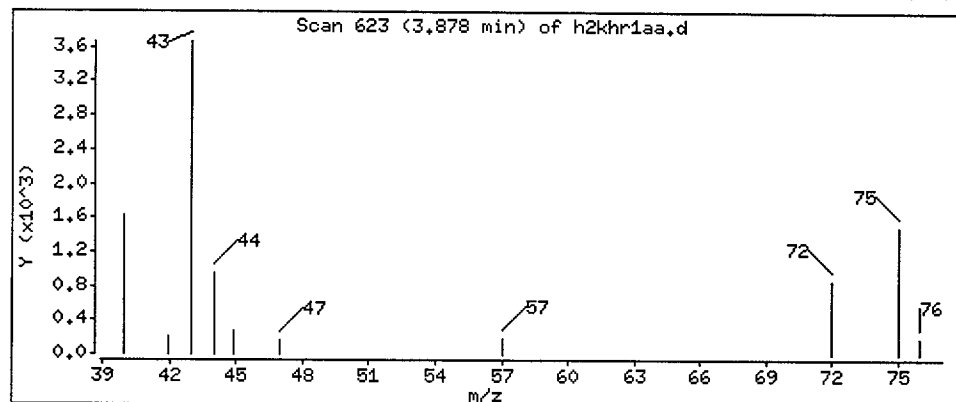
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

36 2-Butanone

Concentration: 0.090662 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1.0,,,

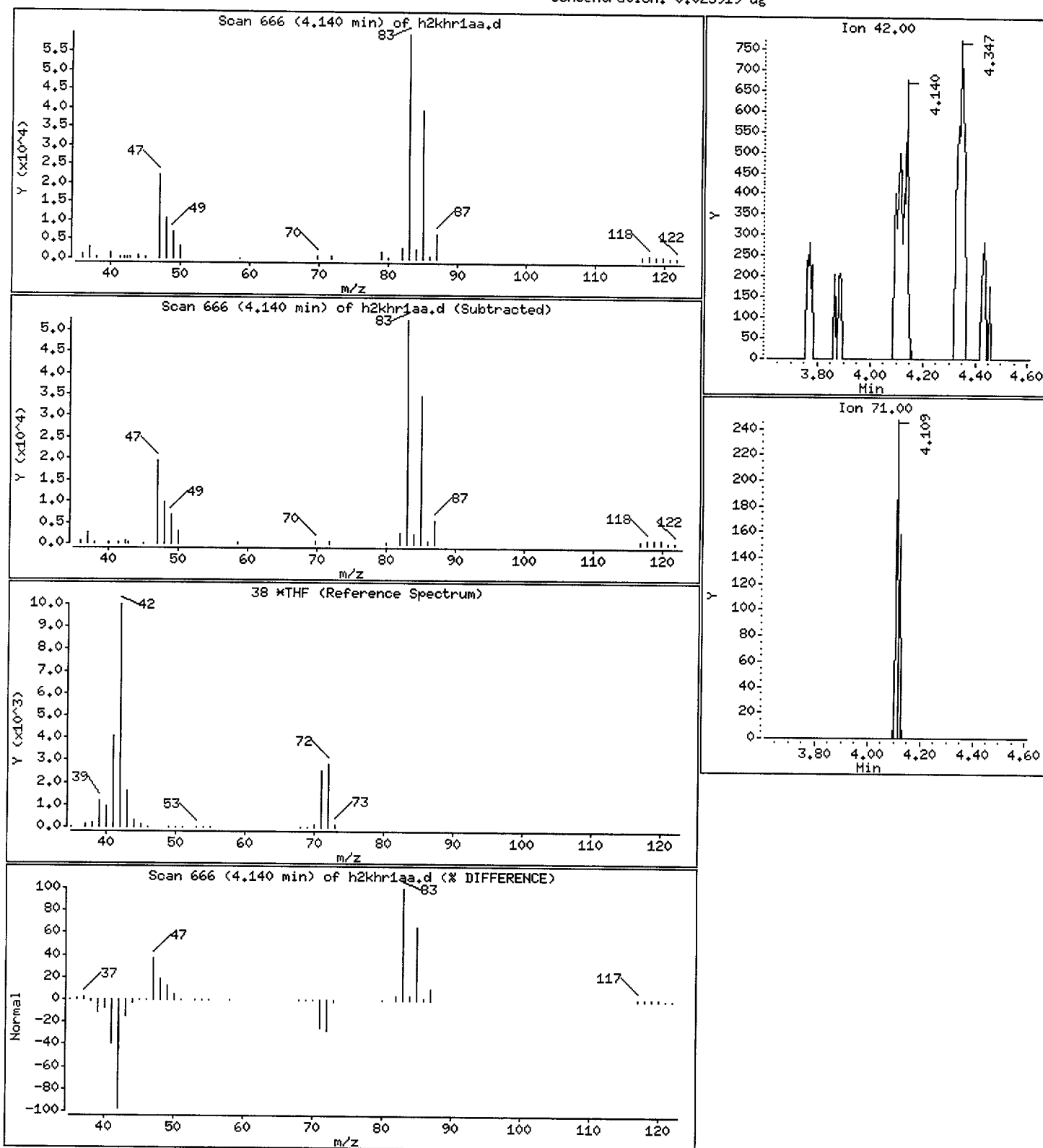
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

38 \*THF

Concentration: 0.025919 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

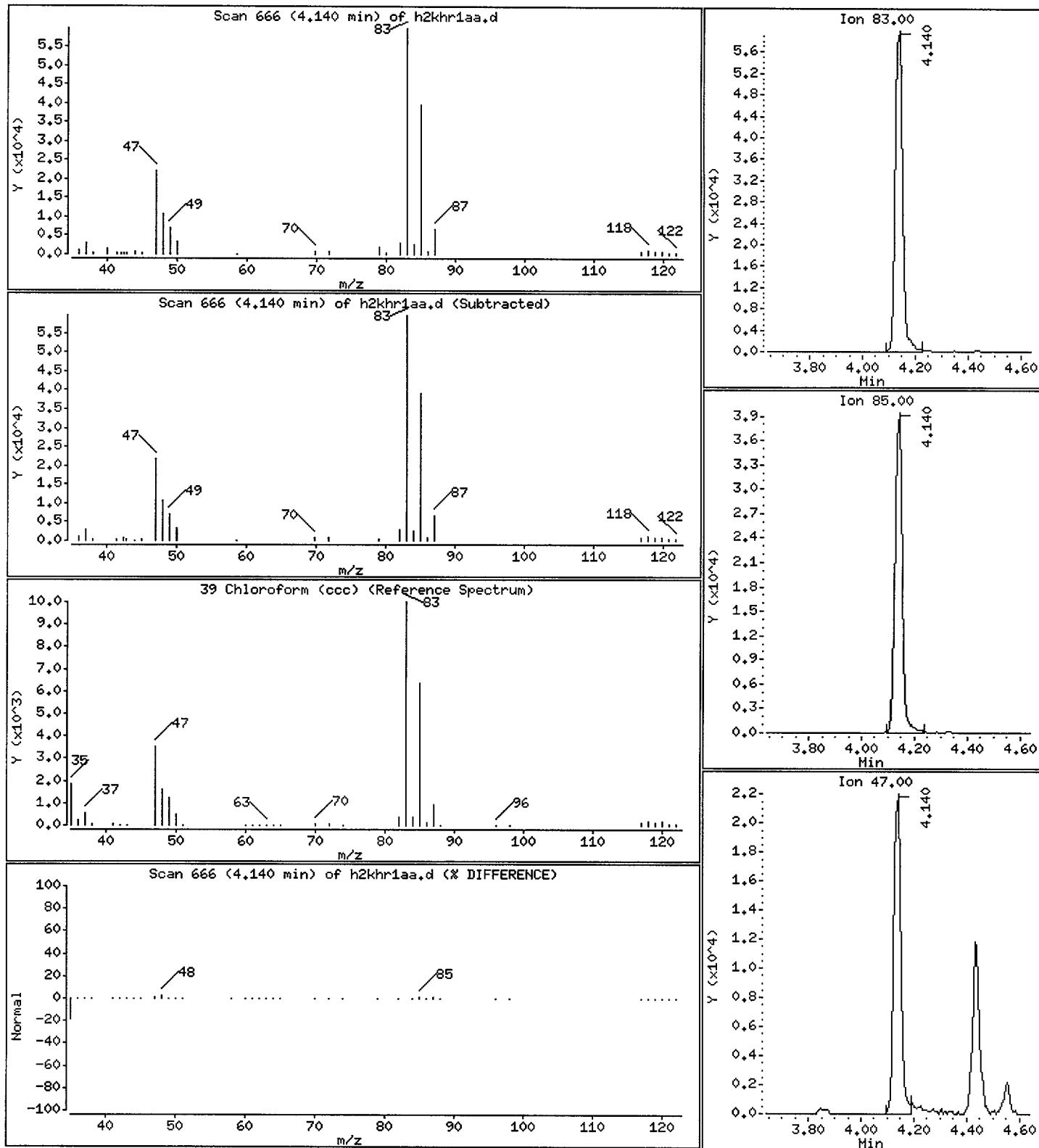
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

39 Chloroform (ccc)

Concentration: 0.073838 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

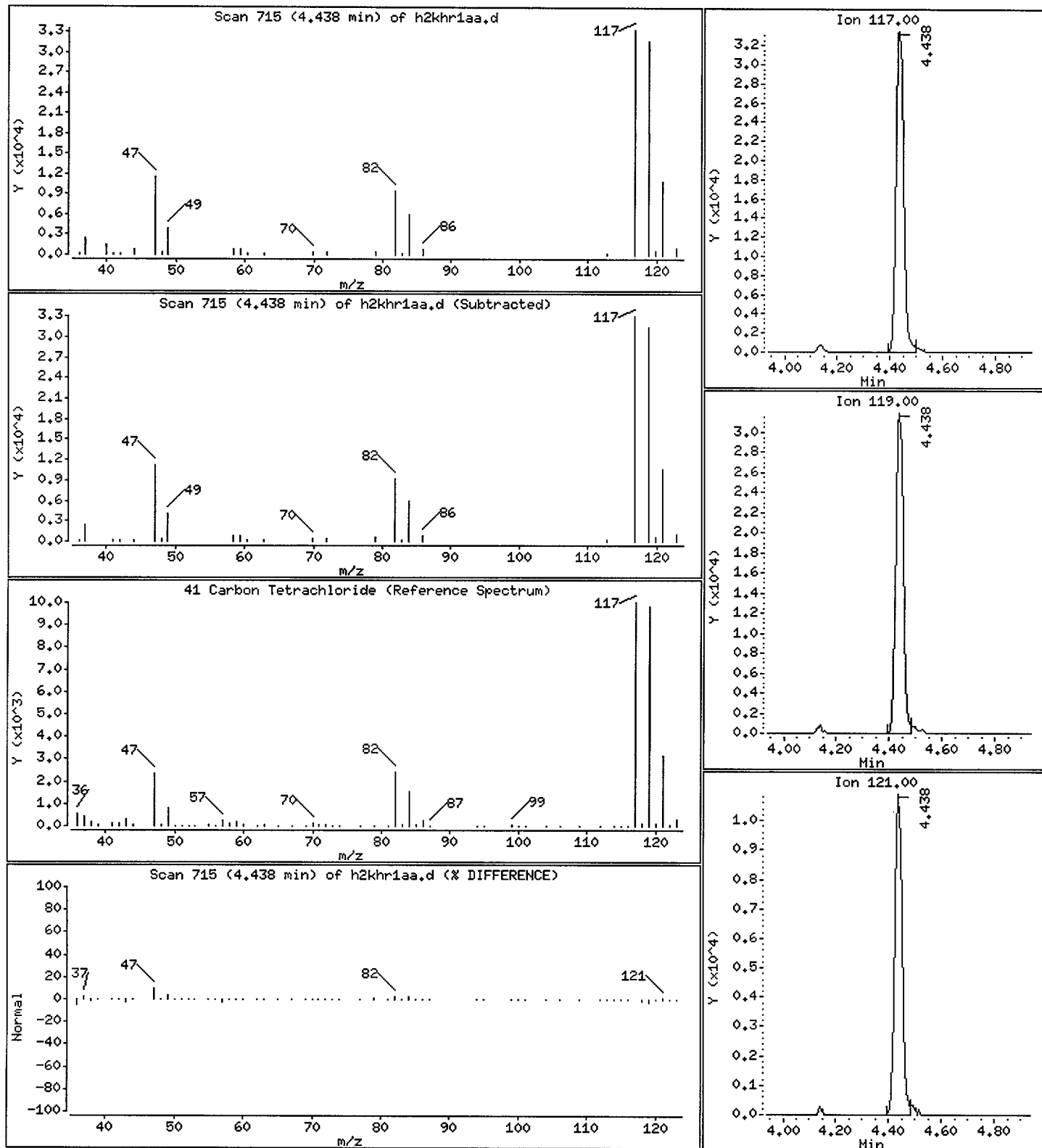
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

41 Carbon Tetrachloride

Concentration: 0.045785 ug





Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

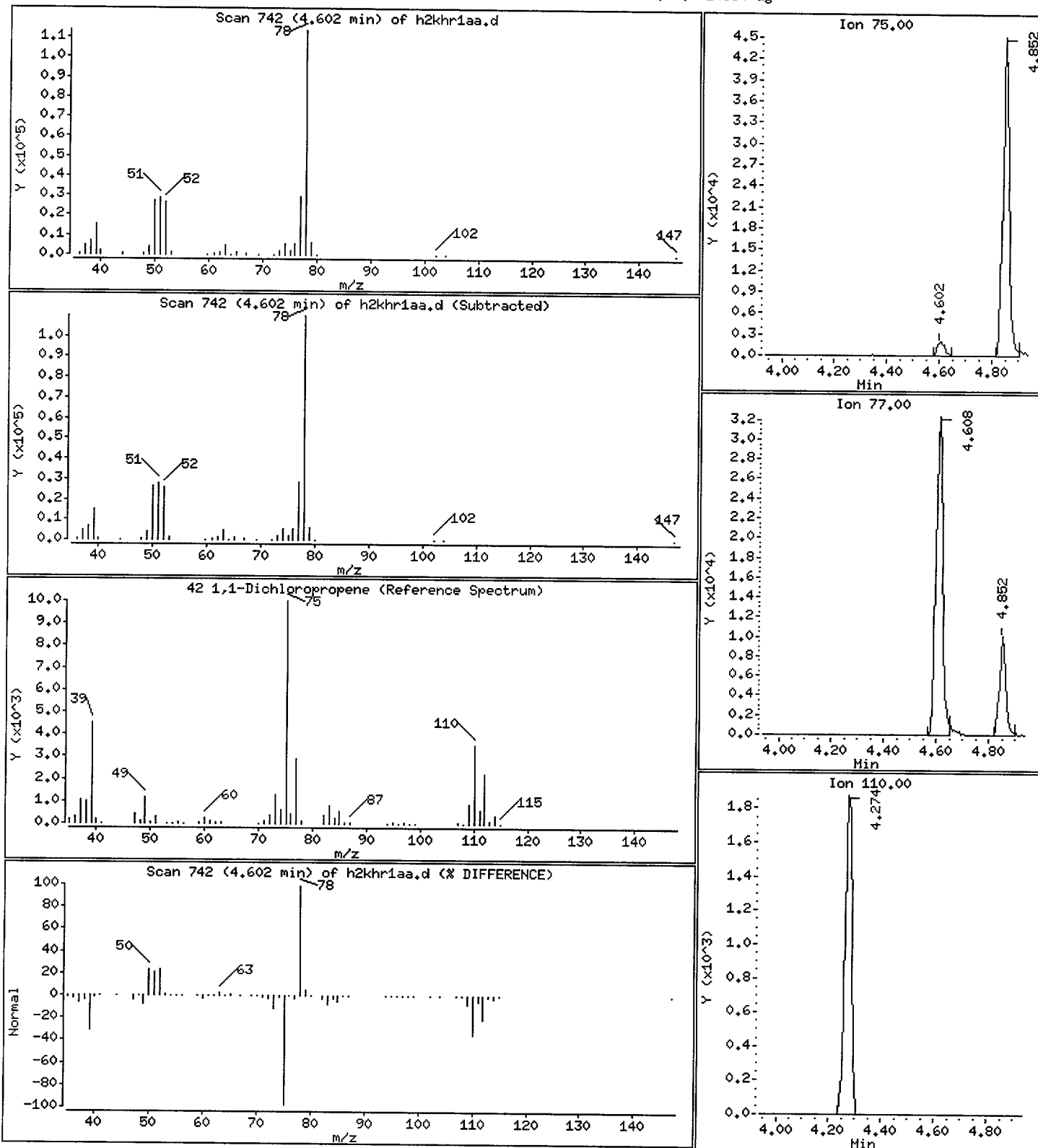
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

42 1,1-Dichloropropene

Concentration: 0.0024664 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

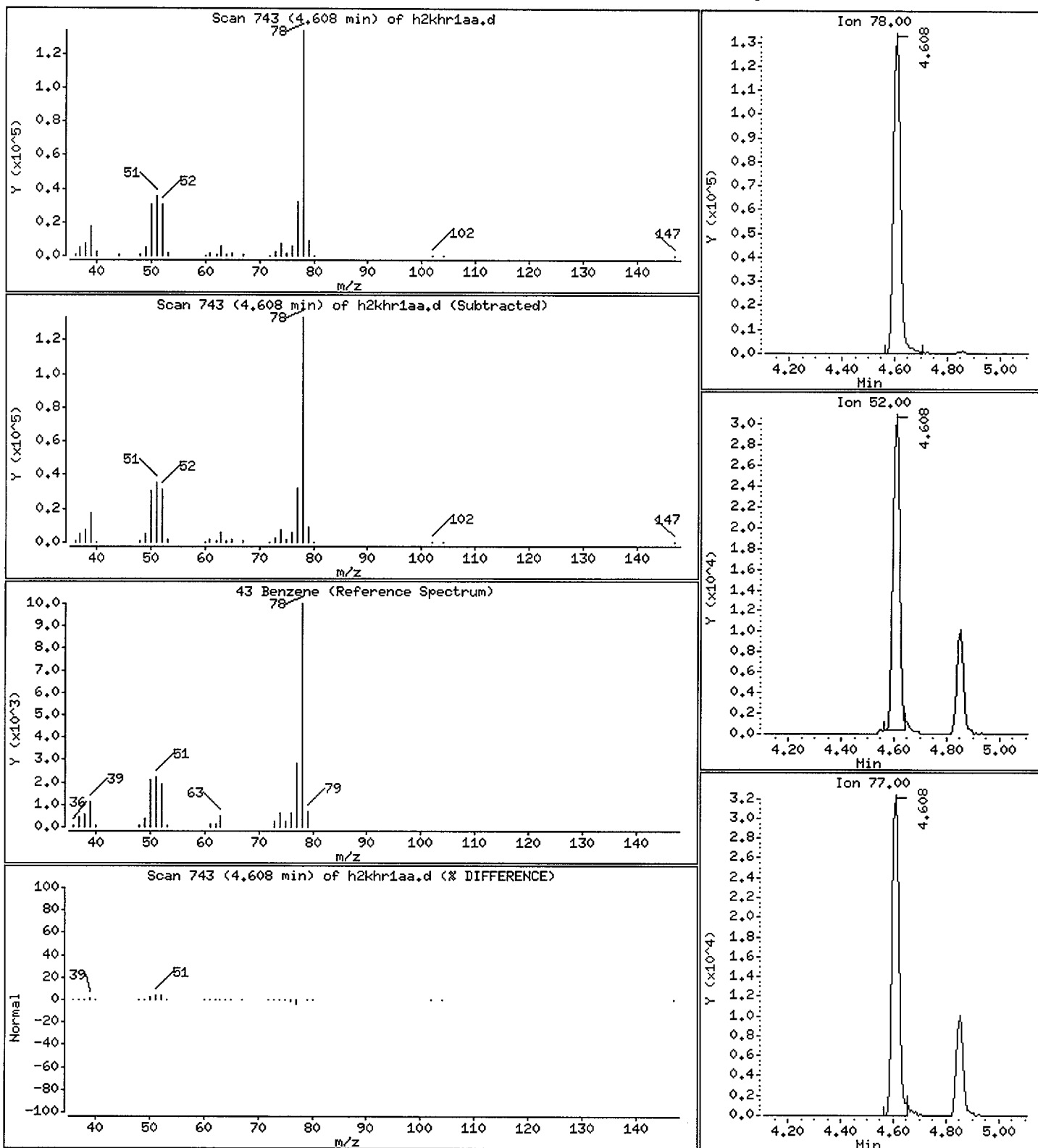
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

43 Benzene

Concentration: 0.058308 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

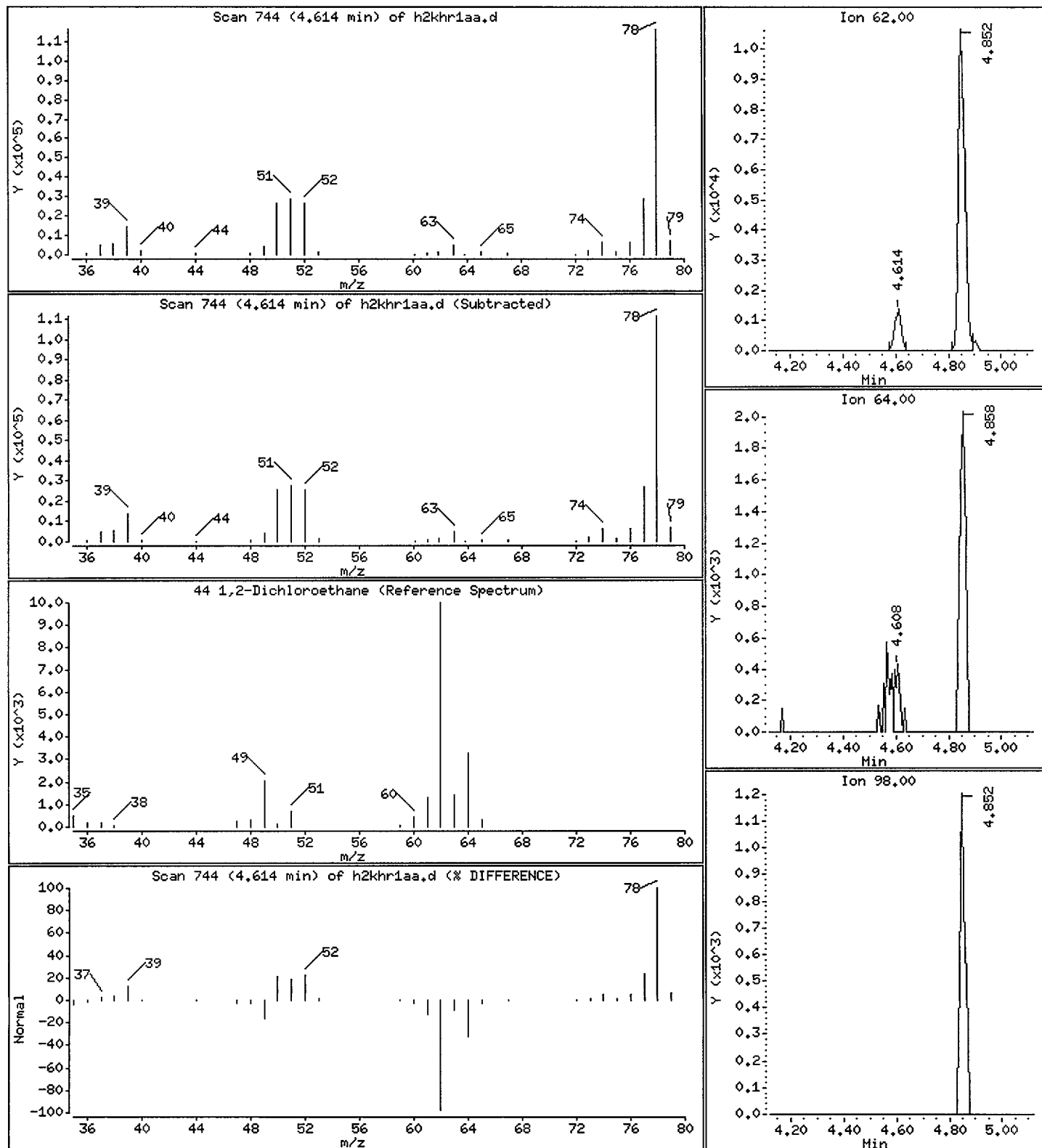
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

44 1,2-Dichloroethane

Concentration: 0.0035524 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date: 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

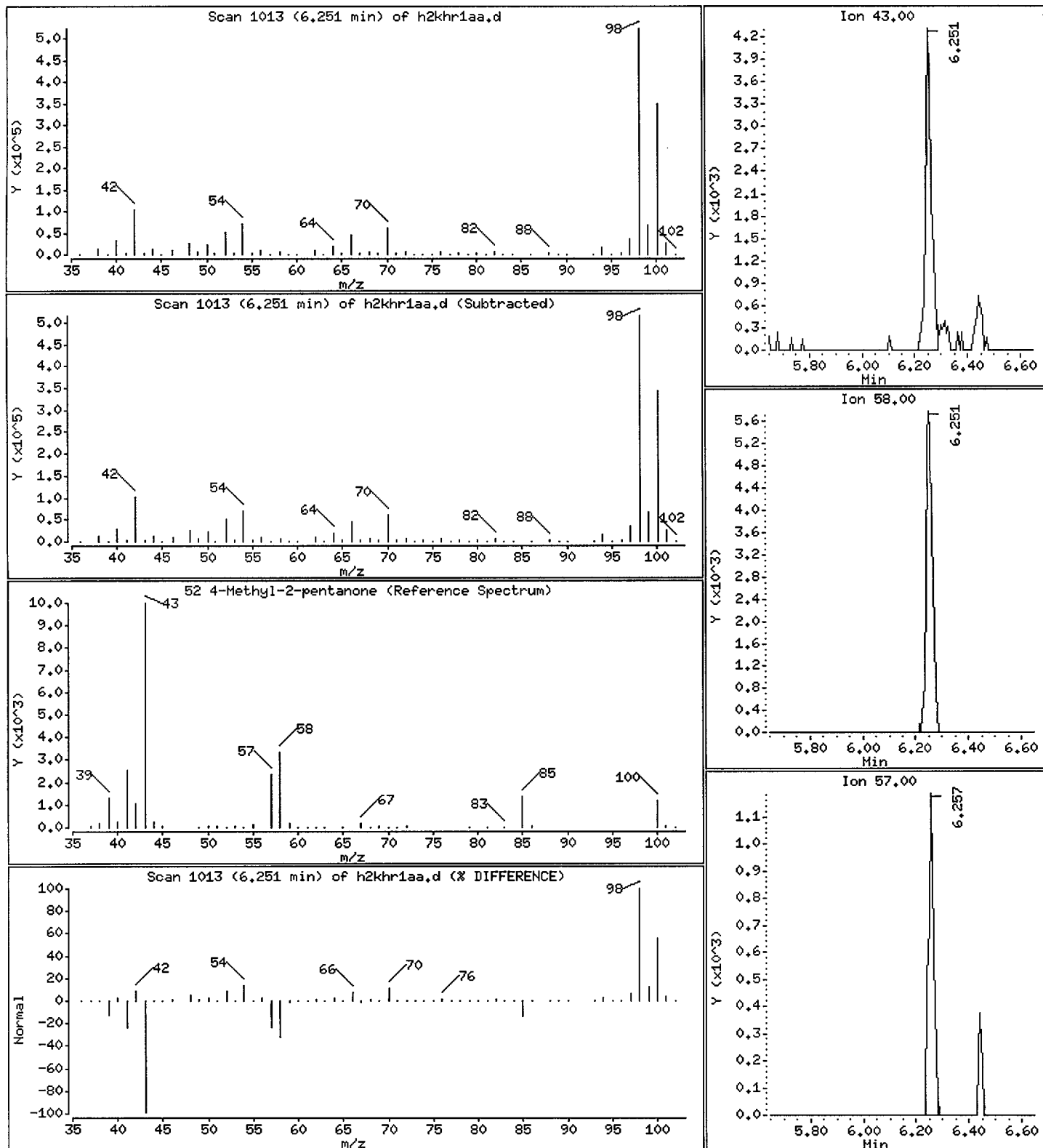
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

52 4-Methyl-2-pentanone

Concentration: 0.031863 ug



Data File: /var/chem/gcms/mx,i/X040706,b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

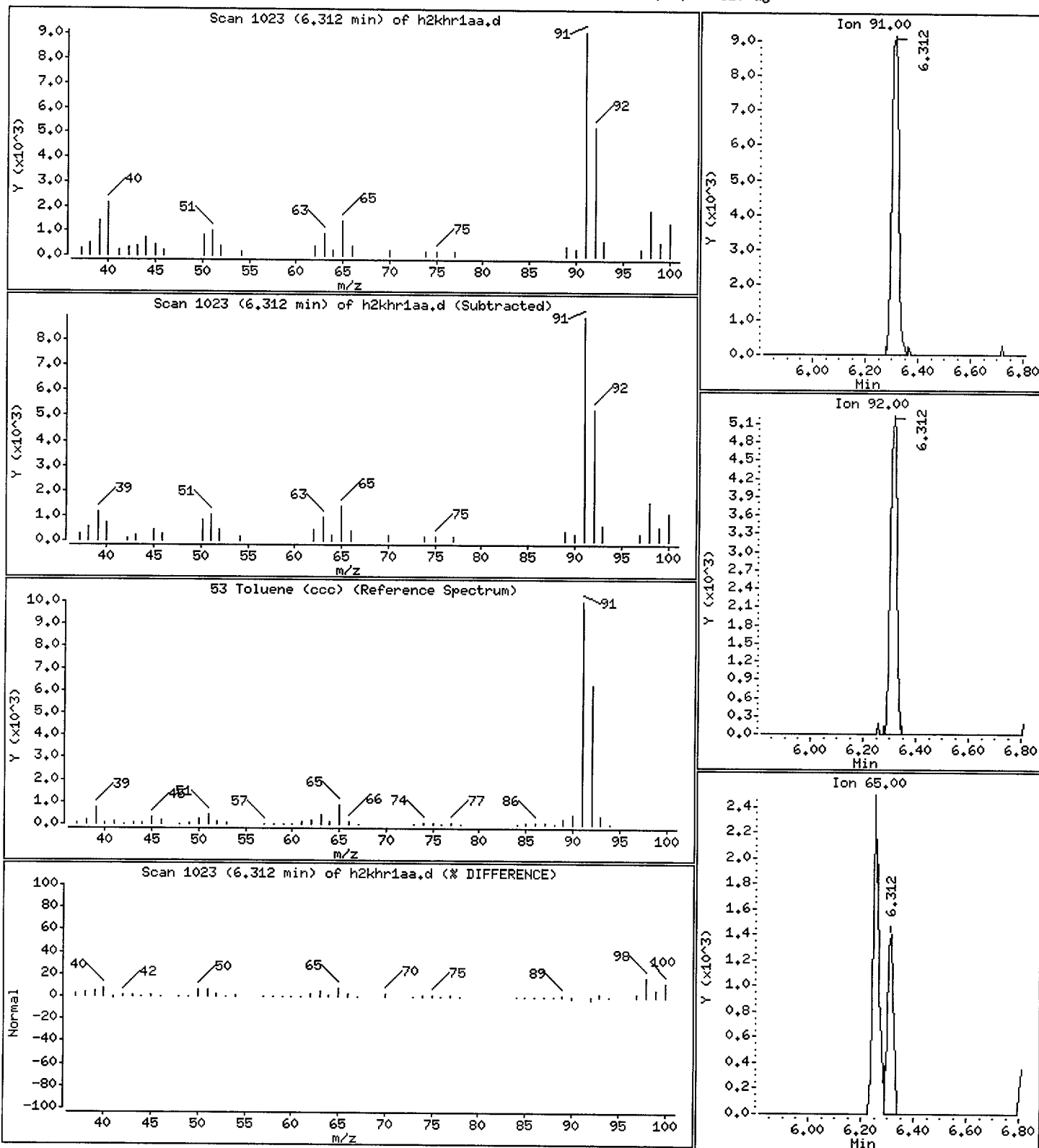
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

53 Toluene (ccc)

Concentration: 0.0034629 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

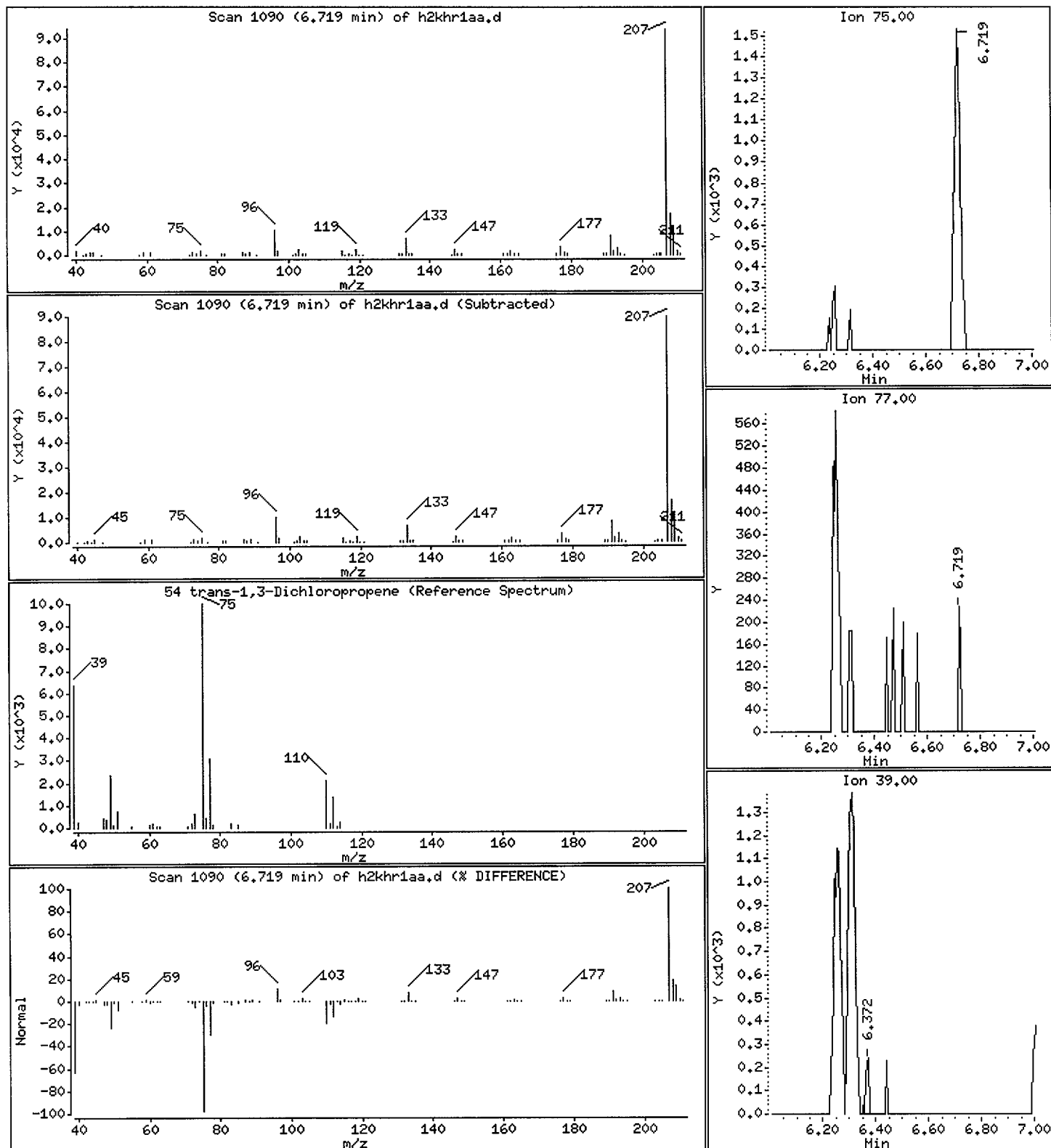
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

54 trans-1,3-Dichloropropene

Concentration: 0.0031725 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

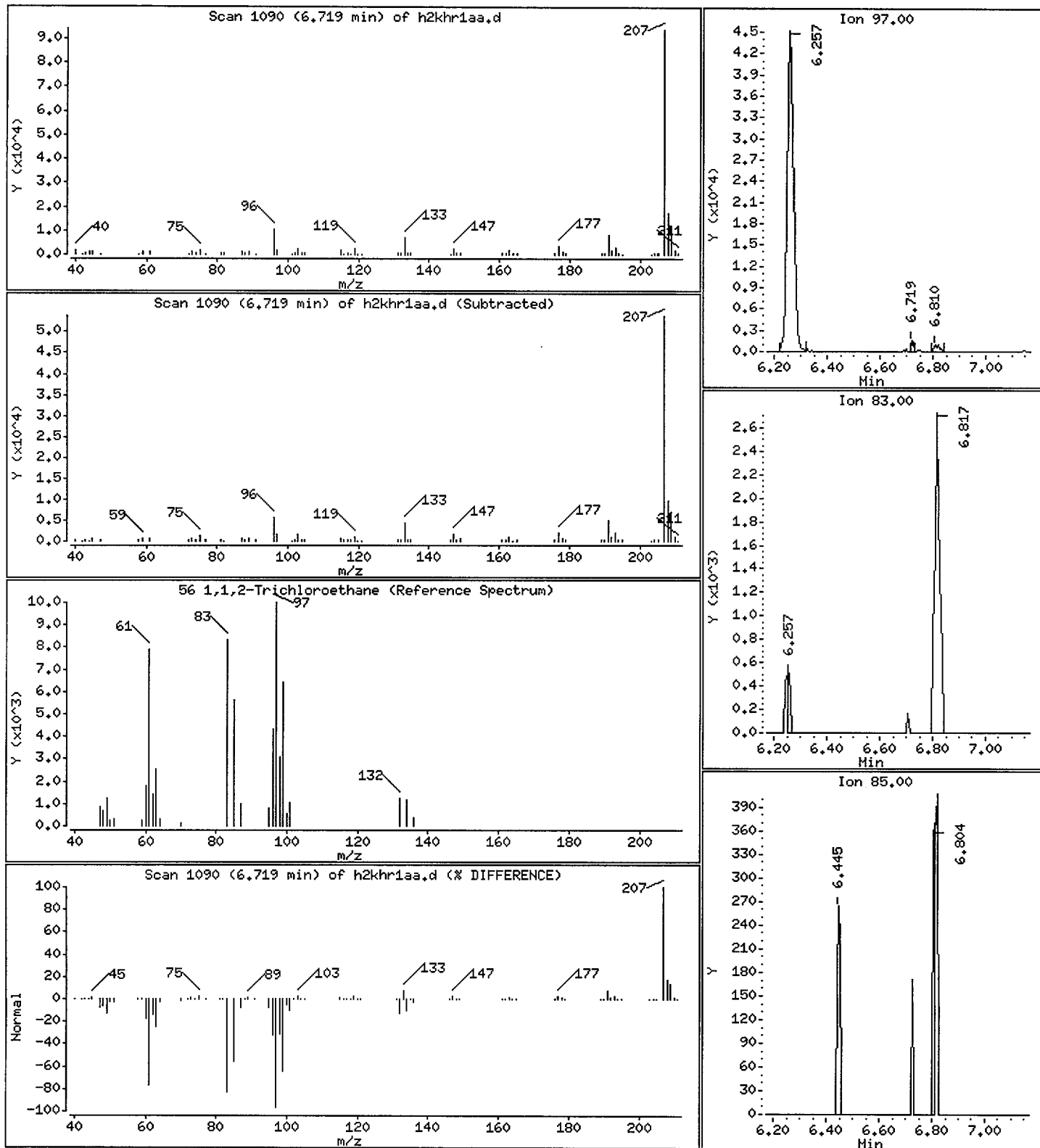
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

56 1,1,2-Trichloroethane

Concentration: 0.0030608 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

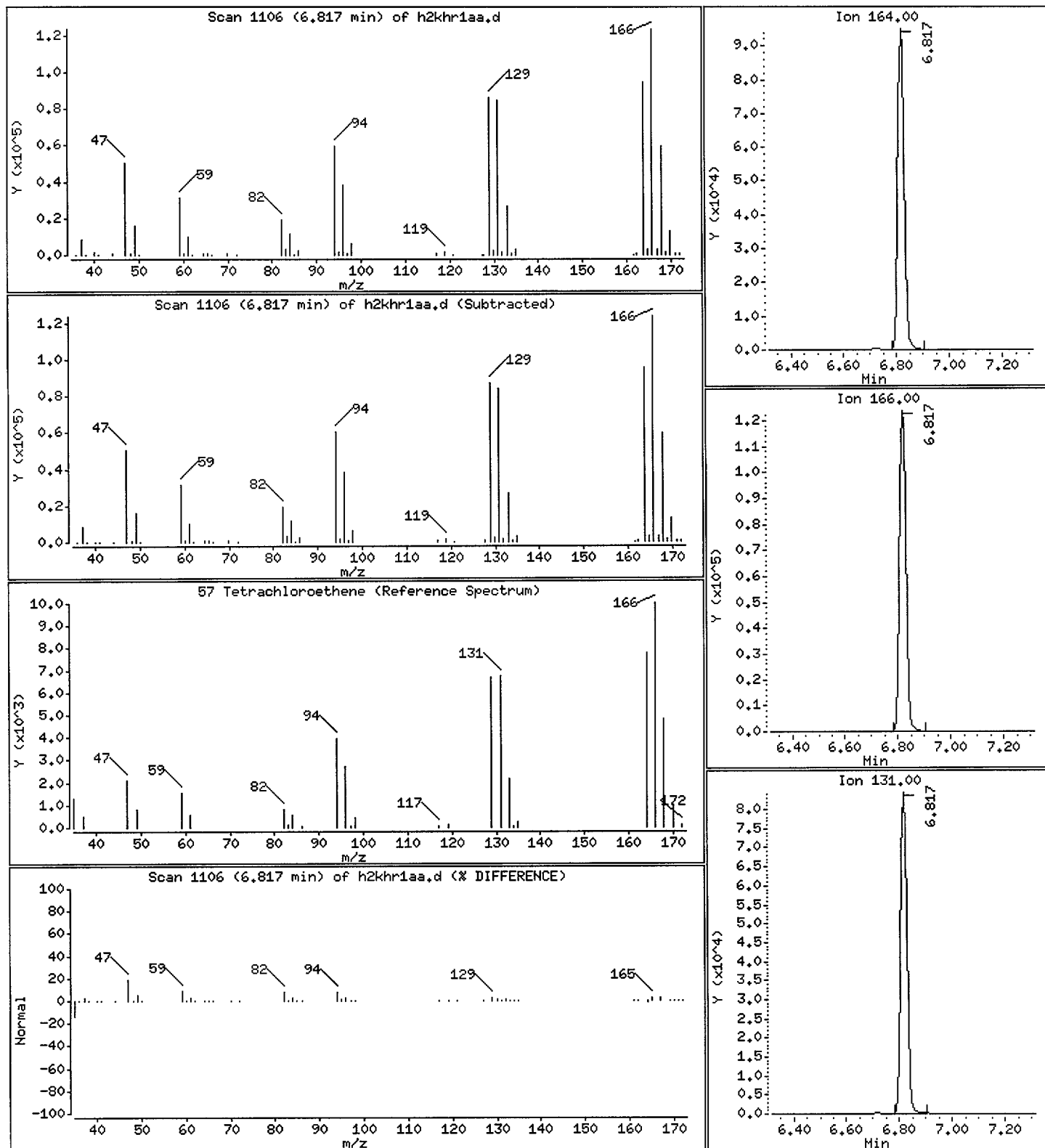
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

57 Tetrachloroethene

Concentration: 0.15721 ug





Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

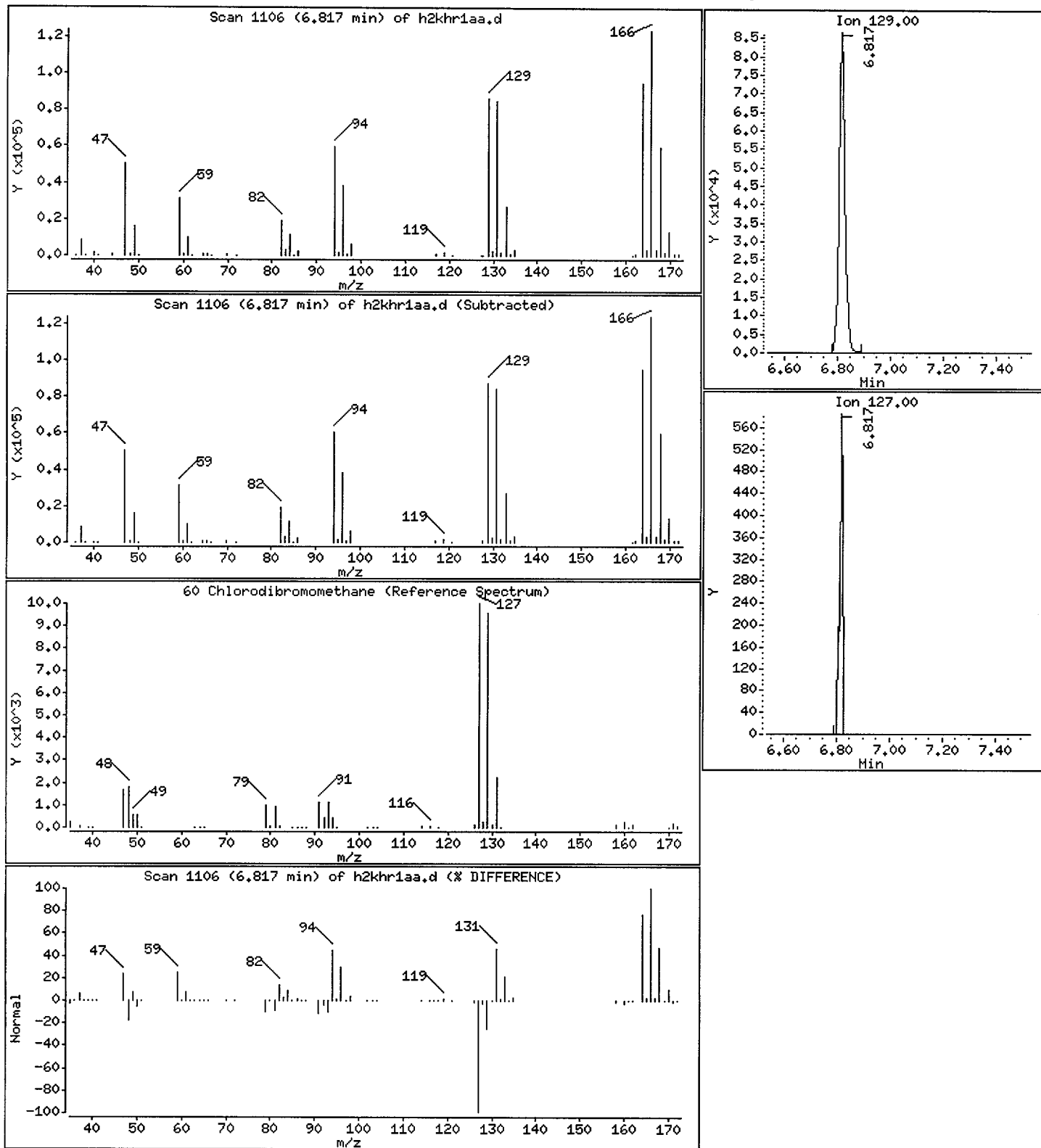
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

60 Chlorodibromomethane

Concentration: 0.31217 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date: 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

Sample Info: H2KHR1AA,1,0,,,

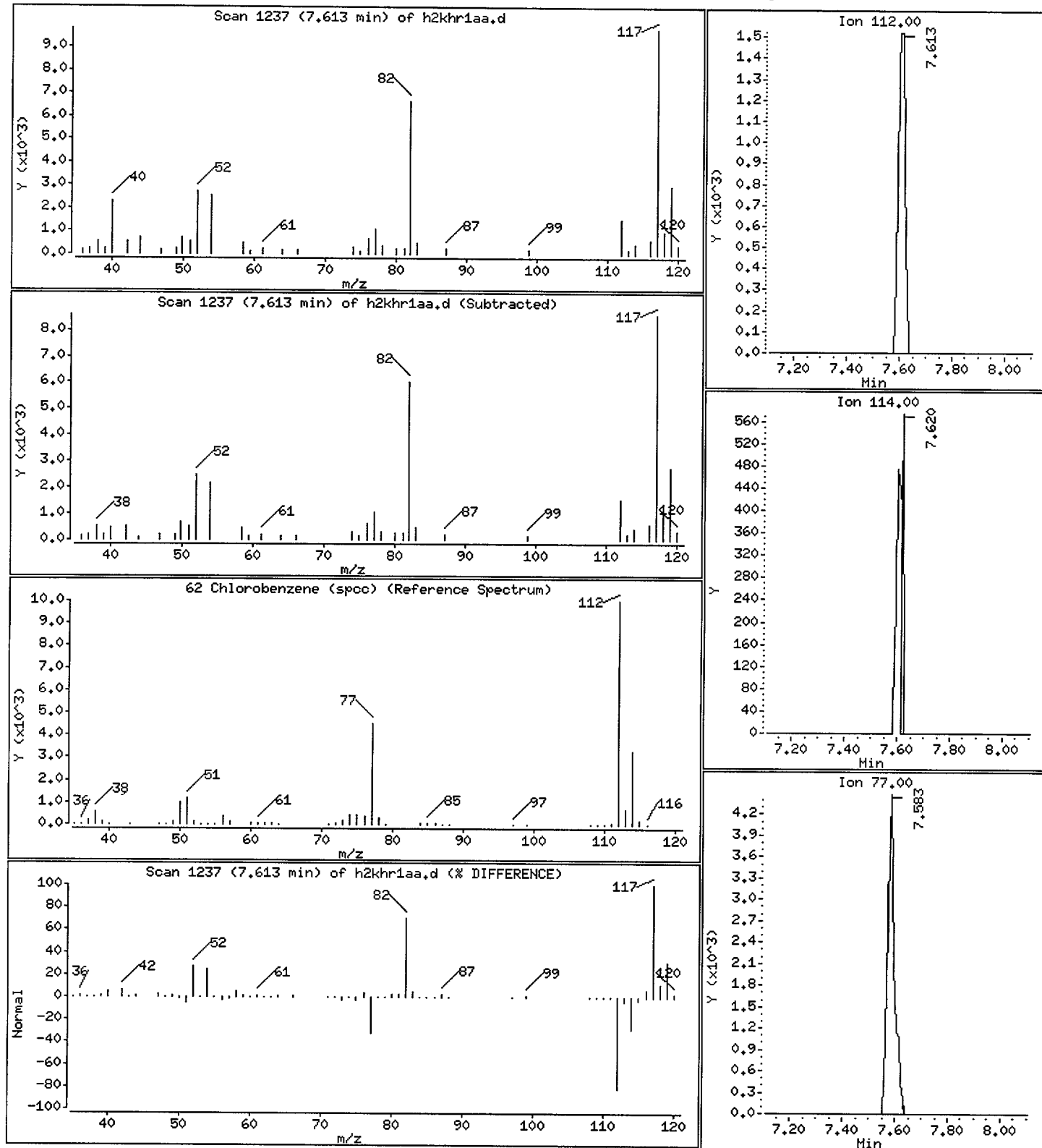
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

62 Chlorobenzene (spcc)

Concentration: 0.0011322 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d  
 Report Date: 18-Apr-2006 14:58

## STL Knoxville

SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d  
 Lab Smp Id: H2KHR1AA Client Smp ID: AUDIT VOST #2  
 Inj Date : 07-APR-2006 19:49  
 Operator : 22980 Inst ID: mx.i  
 Smp Info : H2KHR1AA,1,0,,,  
 Misc Info : X040706,8260B\_LM,focus.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X040706.b/8260B LM.m  
 Meth Date : 18-Apr-2006 14:54 tajh Quant Type: ISTD  
 Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: focus.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
 Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

| ISTD                 | RT    | HEIGHT  | AMOUNT |
|----------------------|-------|---------|--------|
| =====                | ===== | =====   | =====  |
| * 2 Chlorobenzene-d5 | 7.583 | 1310218 | 10.000 |

| CONCENTRATIONS                |        |               |            |       | QUANT                       |           |        |
|-------------------------------|--------|---------------|------------|-------|-----------------------------|-----------|--------|
| RT                            | HEIGHT | ON-COL( ug/L) | FINAL( ug) | QUAL  | LIBRARY                     | LIB ENTRY | CPND # |
| =====                         | =====  | =====         | =====      | ===== | =====                       | =====     | =====  |
| Cyclotrisiloxane, hexamethyl- | 6.719  | 1.50963427    | 0.037741   | 91    | CAS #: 541-05-9<br>NIST02.1 | 71177     | 2      |

Si  
 4/19/06 H

Data File: /var/chem/gcms/mx.i/X040706.b/h2khr1aa.d

Date : 07-APR-2006 19:49

Client ID: AUDIT VOST #2

Instrument: mx.i

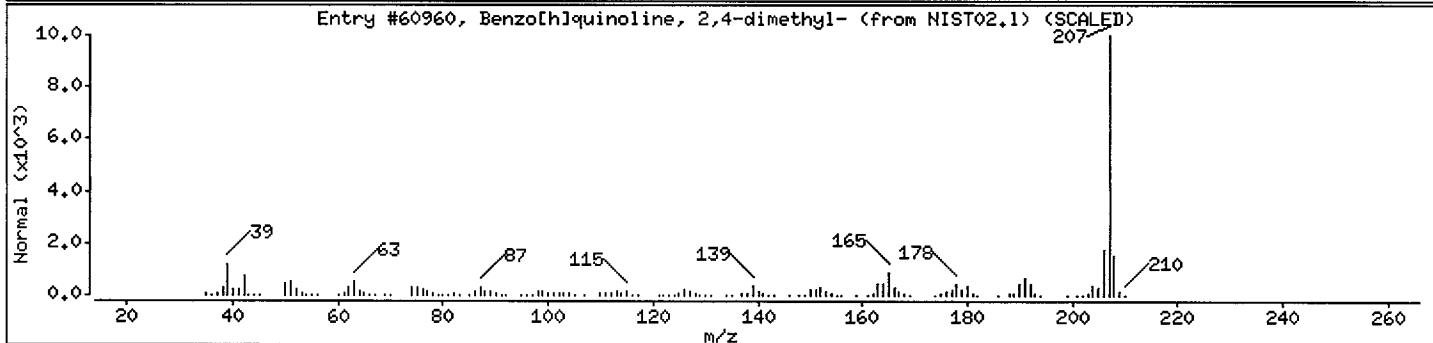
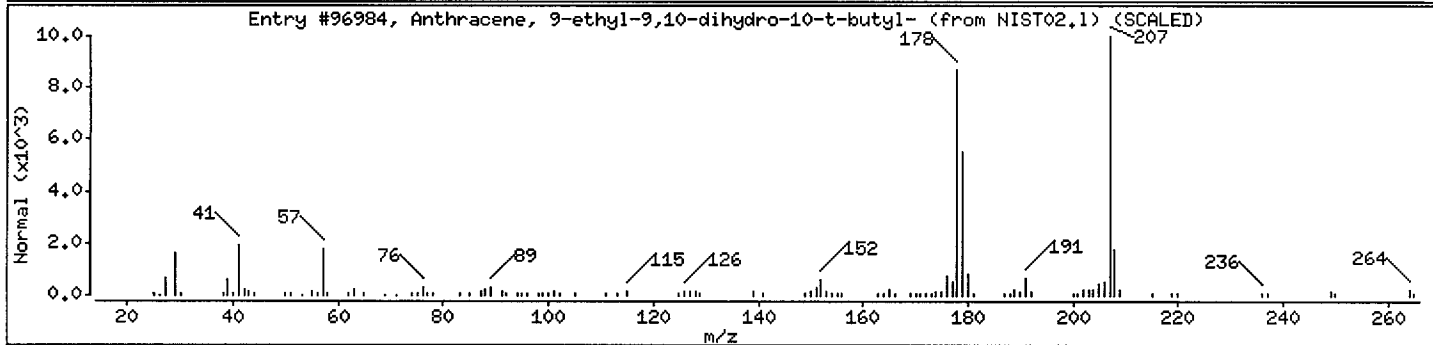
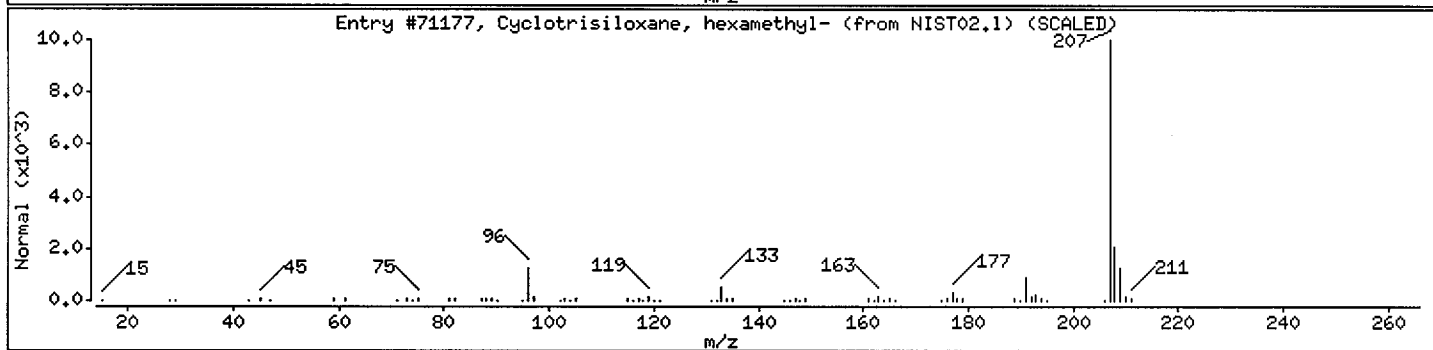
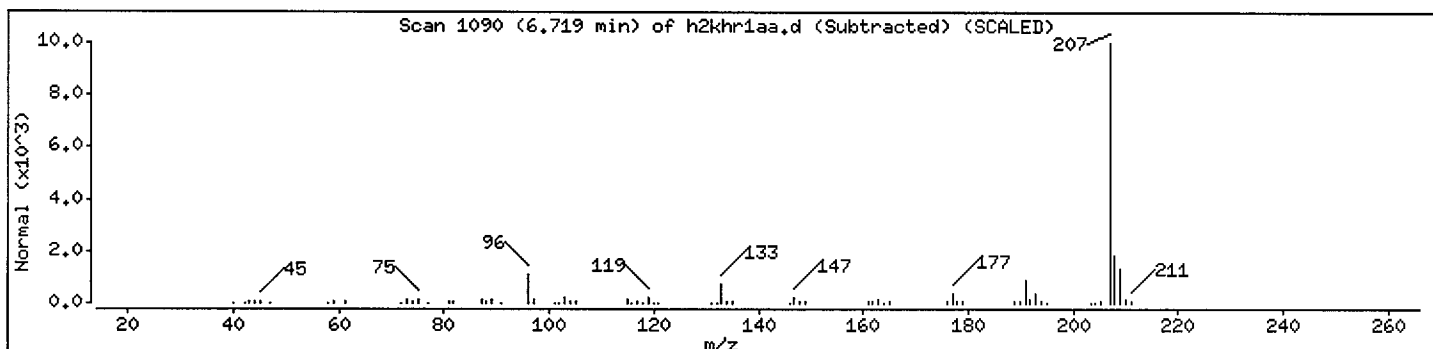
Sample Info: H2KHR1AA,1,0,,,

Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

| Library Search Compound Match            | CAS Number   | Library  | Entry | Quality | Formula                                                       | Weight |
|------------------------------------------|--------------|----------|-------|---------|---------------------------------------------------------------|--------|
| Cyclotrisiloxane, hexamethyl-            | 541-05-9     | NIST02.1 | 71177 | 91      | C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub> | 222    |
| Anthracene, 9-ethyl-9,10-dihydro-10-t-bu | 1000154-57-7 | NIST02.1 | 96984 | 39      | C <sub>20</sub> H <sub>24</sub>                               | 264    |
| Benzo[h]quinoline, 2,4-dimethyl-         | 605-67-4     | NIST02.1 | 60960 | 38      | C <sub>15</sub> H <sub>13</sub> N                             | 207    |



## STL Knoxville - ACS

Client Sample ID: AUDIT VOST #3

## GC/MS Volatiles

Lot-Sample #....: H6D030169-041    Work Order #....: H2KHV1AA    Matrix.....: AIR  
 Date Sampled....: 03/28/06    Date Received...: 04/02/06  
 Prep Date.....: 04/07/06    Analysis Date...: 04/07/06  
 Prep Batch #....: 6097054  
 Dilution Factor: 1    Method.....: SW846 VOST

| PARAMETER                        | RESULT          | REPORTING<br>LIMIT | UNITS     | MDL           |
|----------------------------------|-----------------|--------------------|-----------|---------------|
| <b>Acetone</b>                   | <b>0.39</b>     | <b>0.10</b>        | <b>ug</b> | <b>0.085</b>  |
| Acrylonitrile                    | ND              | 0.50               | ug        | 0.076         |
| <b>Benzene</b>                   | <b>0.057</b>    | <b>0.010</b>       | <b>ug</b> | <b>0.0032</b> |
| Bromobenzene                     | ND              | 0.010              | ug        | 0.0036        |
| Bromochloromethane               | ND              | 0.025              | ug        | 0.012         |
| Bromodichloromethane             | ND              | 0.010              | ug        | 0.0016        |
| Bromoform                        | ND              | 0.025              | ug        | 0.0066        |
| Bromomethane                     | ND              | 0.050              | ug        | 0.022         |
| <b>2-Butanone</b>                | <b>0.084 J</b>  | <b>0.10</b>        | <b>ug</b> | <b>0.035</b>  |
| n-Butylbenzene                   | ND              | 0.010              | ug        | 0.0047        |
| sec-Butylbenzene                 | ND              | 0.010              | ug        | 0.0036        |
| tert-Butylbenzene                | ND              | 0.010              | ug        | 0.0030        |
| <b>Carbon disulfide</b>          | <b>0.016</b>    | <b>0.010</b>       | <b>ug</b> | <b>0.0011</b> |
| <b>Carbon tetrachloride</b>      | <b>0.045</b>    | <b>0.010</b>       | <b>ug</b> | <b>0.0011</b> |
| <b>Chlorobenzene</b>             | <b>0.0013 J</b> | <b>0.010</b>       | <b>ug</b> | <b>0.0013</b> |
| Chlorodibromomethane             | ND              | 0.025              | ug        | 0.010         |
| Chloroethane                     | ND              | 0.050              | ug        | 0.010         |
| <b>Chloroform</b>                | <b>0.069</b>    | <b>0.010</b>       | <b>ug</b> | <b>0.0019</b> |
| Chloromethane                    | ND              | 0.025              | ug        | 0.0032        |
| 2-Chlorotoluene                  | ND              | 0.010              | ug        | 0.0023        |
| 4-Chlorotoluene                  | ND              | 0.010              | ug        | 0.0020        |
| 1,2-Dibromo-3-chloro-<br>propane | ND              | 0.050              | ug        | 0.020         |
| 1,2-Dibromoethane                | ND              | 0.025              | ug        | 0.010         |
| Dibromomethane                   | ND              | 0.025              | ug        | 0.010         |
| 1,2-Dichlorobenzene              | ND              | 0.010              | ug        | 0.0030        |
| 1,3-Dichlorobenzene              | ND              | 0.010              | ug        | 0.0031        |
| 1,4-Dichlorobenzene              | ND              | 0.010              | ug        | 0.0043        |
| Dichlorodifluoromethane          | ND              | 0.025              | ug        | 0.0050        |
| 1,1-Dichloroethane               | ND              | 0.010              | ug        | 0.0019        |
| 1,2-Dichloroethane               | ND              | 0.010              | ug        | 0.0022        |
| cis-1,2-Dichloroethene           | ND              | 0.010              | ug        | 0.0025        |
| trans-1,2-Dichloroethene         | ND              | 0.010              | ug        | 0.0017        |
| 1,1-Dichloroethene               | ND              | 0.010              | ug        | 0.0023        |
| 1,2-Dichloropropane              | ND              | 0.010              | ug        | 0.0027        |
| 1,3-Dichloropropane              | ND              | 0.010              | ug        | 0.0018        |
| 2,2-Dichloropropane              | ND              | 0.010              | ug        | 0.0015        |
| cis-1,3-Dichloropropene          | ND              | 0.010              | ug        | 0.0030        |
| trans-1,3-Dichloropropene        | ND              | 0.010              | ug        | 0.0020        |

(Continued on next page)

## STL Knoxville - ACS

Client Sample ID: AUDIT VOST #3

## GC/MS Volatiles

Lot-Sample #....: H6D030169-041 Work Order #....: H2KHV1AA Matrix.....: AIR

| PARAMETER                                 | RESULT              | REPORTING<br>LIMIT | UNITS     | MDL           |
|-------------------------------------------|---------------------|--------------------|-----------|---------------|
| 1,1-Dichloropropene                       | ND                  | 0.010              | ug        | 0.0010        |
| Ethylbenzene                              | ND                  | 0.010              | ug        | 0.0013        |
| Hexachlorobutadiene                       | ND                  | 0.025              | ug        | 0.0048        |
| 2-Hexanone                                | ND                  | 0.10               | ug        | 0.0099        |
| Iodomethane                               | ND                  | 0.050              | ug        | 0.0016        |
| Isopropylbenzene                          | ND                  | 0.010              | ug        | 0.0023        |
| p-Isopropyltoluene                        | ND                  | 0.010              | ug        | 0.0038        |
| <b>Methylene chloride</b>                 | <b>0.072</b>        | <b>0.025</b>       | <b>ug</b> | <b>0.013</b>  |
| 4-Methyl-2-pentanone                      | ND                  | 0.10               | ug        | 0.014         |
| Naphthalene                               | ND                  | 0.025              | ug        | 0.010         |
| n-Propylbenzene                           | ND                  | 0.010              | ug        | 0.0029        |
| Styrene                                   | ND                  | 0.010              | ug        | 0.0017        |
| 1,1,1,2-Tetrachloroethane                 | ND                  | 0.010              | ug        | 0.0010        |
| 1,1,2,2-Tetrachloroethane                 | ND                  | 0.025              | ug        | 0.011         |
| <b>Tetrachloroethene</b>                  | <b>0.16</b>         | <b>0.010</b>       | <b>ug</b> | <b>0.0021</b> |
| Tetrahydrofuran                           | ND                  | 0.10               | ug        | 0.031         |
| <b>Toluene</b>                            | <b>0.0033 J</b>     | <b>0.010</b>       | <b>ug</b> | <b>0.0022</b> |
| 1,2,3-Trichlorobenzene                    | ND                  | 0.025              | ug        | 0.014         |
| 1,2,4-Trichloro-<br>benzene               | ND                  | 0.025              | ug        | 0.0030        |
| 1,1,1-Trichloroethane                     | ND                  | 0.025              | ug        | 0.0016        |
| 1,1,2-Trichloroethane                     | ND                  | 0.025              | ug        | 0.0050        |
| Trichloroethene                           | ND                  | 0.010              | ug        | 0.0050        |
| Trichlorofluoromethane                    | ND                  | 0.050              | ug        | 0.0049        |
| 1,2,3-Trichloropropane                    | ND                  | 0.025              | ug        | 0.0081        |
| 1,1,2-Trichloro-<br>1,2,2-trifluoroethane | ND                  | 0.050              | ug        | 0.0018        |
| 1,2,4-Trimethylbenzene                    | ND                  | 0.010              | ug        | 0.0048        |
| 1,3,5-Trimethylbenzene                    | ND                  | 0.010              | ug        | 0.0028        |
| Vinyl acetate                             | ND                  | 0.050              | ug        | 0.012         |
| Vinyl chloride                            | ND                  | 0.010              | ug        | 0.0032        |
| m-Xylene & p-Xylene                       | ND                  | 0.020              | ug        | 0.0034        |
| o-Xylene                                  | ND                  | 0.010              | ug        | 0.0017        |
| Xylenes (total)                           | ND                  | 0.030              | ug        | 0.0048        |
| SURROGATE                                 | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |           |               |
| Dibromofluoromethane                      | 77                  | (50 - 134)         |           |               |
| 1,2-Dichloroethane-d4                     | 77                  | (50 - 134)         |           |               |
| Toluene-d8                                | 82                  | (57 - 127)         |           |               |
| Bromofluorobenzene                        | 72                  | (50 - 125)         |           |               |

**NOTE(S) :**

J Estimated result. Result is less than RL.

STL Knoxville - ACS

AUDIT VOST #3

GC/MS Volatiles

Lot-Sample #: H6D030169-041

Work Order #: H2KHV1AA

Matrix: AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug           |

Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d  
Report Date: 07-Apr-2006 19:40

## STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /chem/gcms/mx.i/X040706.b/h2khv1aa.d  
Lab Smp Id: H2KHV1AA Client Smp ID: AUDIT VOST #3  
Inj Date : 07-APR-2006 19:24  
Operator : 22980 Inst ID: mx.i  
Smp Info : H2KHV1AA,1,0,,,  
Misc Info : X040706,8260B\_LM,focus.sub  
Comment :  
Method : /var/chem/gcms/mx.i/X040706.b/8260B\_LM.m  
Meth Date : 07-Apr-2006 11:23 gosss Quant Type: ISTD  
Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable

Local Compound Variable

| Compounds                  | QUANT SIG |        |        |         |          |           | CONCENTRATIONS       |  |
|----------------------------|-----------|--------|--------|---------|----------|-----------|----------------------|--|
|                            | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL                |  |
|                            | =====     | ==     | =====  | =====   | =====    | ( ug/L)   | ( ug)                |  |
| * 1 Fluorobenzene          | 96        | 4.851  | 4.851  | (1.000) | 1028025  | 10.0000   |                      |  |
| * 2 Chlorobenzene-d5       | 119       | 7.582  | 7.582  | (1.000) | 200085   | 10.0000   |                      |  |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.745 | 10.746 | (1.000) | 205884   | 10.0000   |                      |  |
| \$ 4 Dibromofluoromethane  | 113       | 4.273  | 4.273  | (0.881) | 135140   | 7.73177   | 0.19329              |  |
| \$ 5 1,2-Dichloroethane-d4 | 65        | 4.552  | 4.553  | (0.939) | 104746   | 7.68819   | 0.19220              |  |
| \$ 6 Toluene-d8            | 98        | 6.250  | 6.250  | (0.824) | 806687   | 8.23467   | 0.20587              |  |
| \$ 7 4-Bromofluorobenzene  | 95        | 8.872  | 8.872  | (0.826) | 176073   | 7.21289   | 0.18032              |  |
| 11 Chloromethane (spcc)    | 50        | 1.249  | 1.262  | (0.258) | 2160     | 0.04511   | 0.0011276            |  |
| 21 Acetone                 | 43        | 2.381  | 2.381  | (0.491) | 22625    | 15.5395   | 0.38849              |  |
| 23 Carbon Disulfide        | 76        | 2.496  | 2.497  | (0.515) | 49571    | 0.63272   | 0.015818             |  |
| 26 Methylene Chloride      | 84        | 2.746  | 2.746  | (0.566) | 46047    | 2.89715   | 0.072429             |  |
| 33 *Vinyl Acetate          | 86        | 3.263  | 3.421  | (0.673) | 1174     | 1.00410   | <del>0.025102</del>  |  |
| 36 2-Butanone              | 43        | 3.877  | 3.871  | (0.799) | 7635     | 3.36176   | 0.084044             |  |
| 38 *THF                    | 42        | 4.114  | 4.109  | (0.848) | 1195     | 0.85919   | 0.021480             |  |
| 39 Chloroform (ccc)        | 83        | 4.139  | 4.139  | (0.853) | 108018   | 2.76455   | 0.069114             |  |
| 41 Carbon Tetrachloride    | 117       | 4.437  | 4.437  | (0.915) | 66695    | 1.80730   | 0.045182             |  |
| 42 1,1-Dichloropropene     | 75        | 4.607  | 4.437  | (0.950) | 3897     | 0.09577   | <del>0.0023941</del> |  |
| 43 Benzene                 | 78        | 4.607  | 4.607  | (0.950) | 235545   | 2.26238   | 0.056559             |  |
| 44 1,2-Dichloroethane      | 62        | 4.607  | 4.620  | (0.950) | 2463     | 0.14060   | <del>0.0035151</del> |  |
| 52 4-Methyl-2-pentanone    | 43        | 6.256  | 6.147  | (1.290) | 6038     | 1.11013   | <del>0.027753</del>  |  |

✓  
4/27/06

4/29/06



Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d  
Report Date: 07-Apr-2006 19:40

| Compounds                | QUANT SIG |       |        |         |          |           | CONCENTRATIONS   |  |
|--------------------------|-----------|-------|--------|---------|----------|-----------|------------------|--|
|                          | MASS      | RT    | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL            |  |
|                          |           |       |        |         |          | ( ug/L)   | ( ug)            |  |
| =====                    | ====      | ==    | =====  | =====   | =====    | =====     | =====            |  |
| 53 Toluene (ccc)         | 91        | 6.311 | 6.311  | (0.832) | 15369    | 0.13114   | 0.0032785        |  |
| 56 1,1,2-Trichloroethane | 97        | 6.815 | 6.670  | (0.899) | 1239     | 0.13389   | <u>0.0033472</u> |  |
| 57 Tetrachloroethene     | 164       | 6.815 | 6.816  | (0.899) | 159449   | 6.33174   | 0.15829          |  |
| 60 Chlorodibromomethane  | 129       | 6.815 | 7.035  | (0.899) | 142654   | 12.4365   | <u>0.31091</u>   |  |
| 62 Chlorobenzene (spcc)  | 112       | 7.606 | 7.607  | (1.003) | 3219     | 0.05351   | 0.0013377        |  |

4/19/06 H

Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d  
 Report Date: 07-Apr-2006 19:40

## STL Knoxville

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                       |                               |
|-------------------------------------------------------|-------------------------------|
| Instrument ID: mx.i                                   | Calibration Date: 07-APR-2006 |
| Lab File ID: h2khv1aa.d                               | Calibration Time: 09:16       |
| Lab Smp Id: H2KHV1AA                                  | Client Smp ID: AUDIT VOST #3  |
| Analysis Type: VOA                                    | Level: LOW                    |
| Quant Type: ISTD                                      | Sample Type: AIR              |
| Operator: 22980                                       |                               |
| Method File: /var/chem/gcms/mx.i/X040706.b/8260B_LM.m |                               |
| Misc Info: X040706,8260B_LM,focus.sub                 |                               |

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE  | %DIFF  |
|---------------------|----------|------------|---------|---------|--------|
|                     |          | LOWER      | UPPER   |         |        |
| 1 Fluorobenzene     | 1149191  | 574596     | 2298382 | 1028025 | -10.54 |
| 2 Chlorobenzene-d5  | 214194   | 107097     | 428388  | 200085  | -6.59  |
| 3 1,4 Dichlorobenze | 242601   | 121300     | 485202  | 205884  | -15.13 |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 4.85     | 4.35     | 5.35  | 4.85   | -0.01 |
| 2 Chlorobenzene-d5  | 7.58     | 7.08     | 8.08  | 7.58   | 0.00  |
| 3 1,4 Dichlorobenze | 10.75    | 10.25    | 11.25 | 10.75  | 0.00  |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d  
Report Date: 07-Apr-2006 19:40

## STL Knoxville

## RECOVERY REPORT

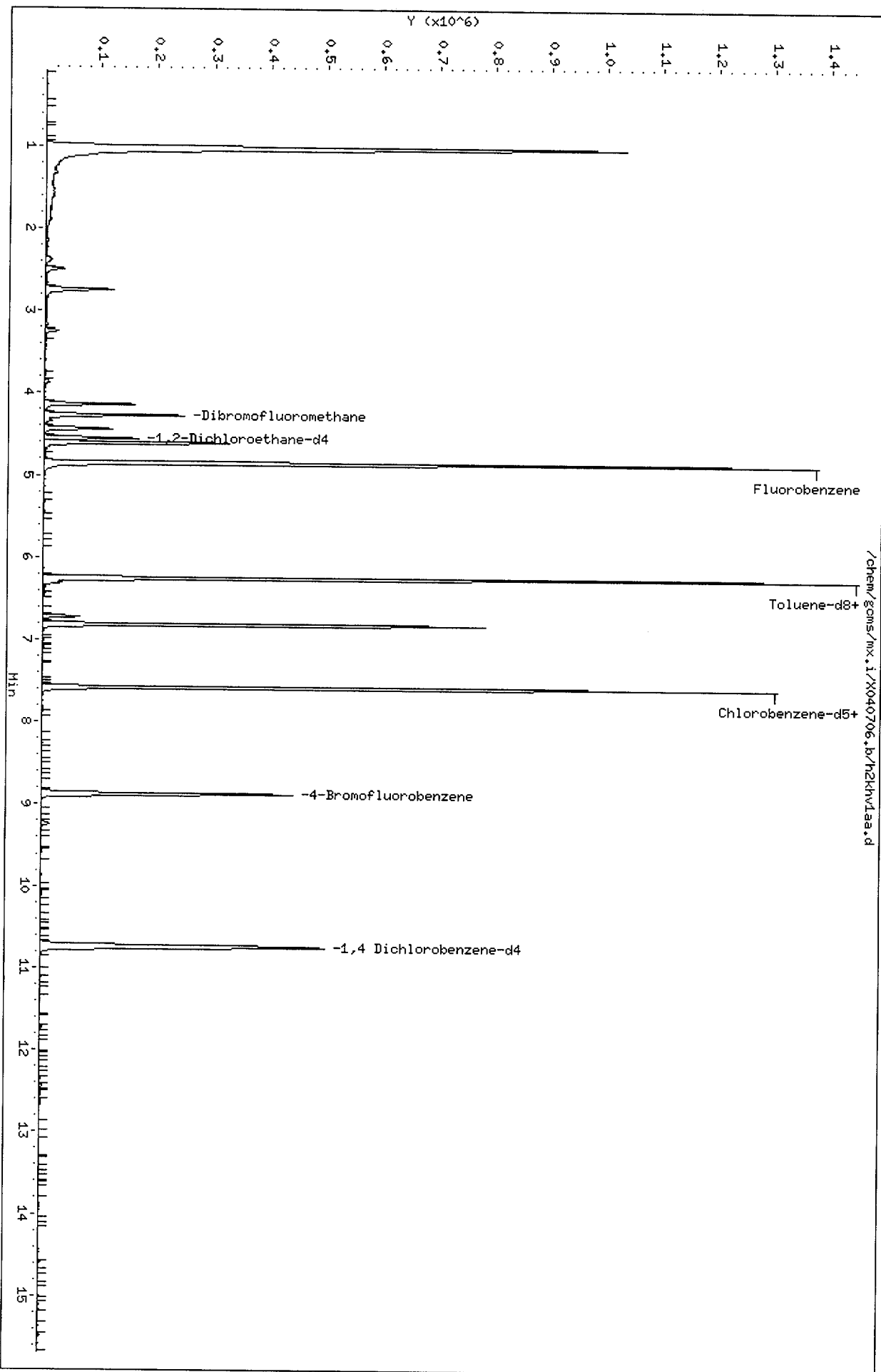
Client Name: STL Knoxville - ACS      Client SDG: H6D030169  
Sample Matrix: GAS      Fraction: VOA  
Lab Smp Id: H2KHV1AA      Client Smp ID: AUDIT VOST #3  
Level: LOW      Operator: 22980  
Data Type: MS DATA      SampleType: SAMPLE  
SpikeList File: allcmpds.spk      Quant Type: ISTD  
Sublist File: focus.sub  
Method File: /var/chem/gcms/mx.i/X040706.b/8260B\_LM.m  
Misc Info: X040706,8260B\_LM,focus.sub

| SURROGATE COMPOUND      | CONC<br>ADDED<br>ug | CONC<br>RECOVERED<br>ug | %<br>RECOVERED | LIMITS |
|-------------------------|---------------------|-------------------------|----------------|--------|
| \$ 4 Dibromofluorometha | 0.25000             | 0.19329                 | 77.32          | 50-150 |
| \$ 5 1,2-Dichloroethane | 0.25000             | 0.19220                 | 76.88          | 50-150 |
| \$ 6 Toluene-d8         | 0.25000             | 0.20587                 | 82.35          | 50-150 |
| \$ 7 4-Bromofluorobenze | 0.25000             | 0.18032                 | 72.13          | 50-150 |

Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d  
Date: 07-APR-2006 19:24  
Client ID: AUDIT V05T #3  
Sample Info: H2KHV1AA-1.0,,,

Column phase: J+W 624

Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18



Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

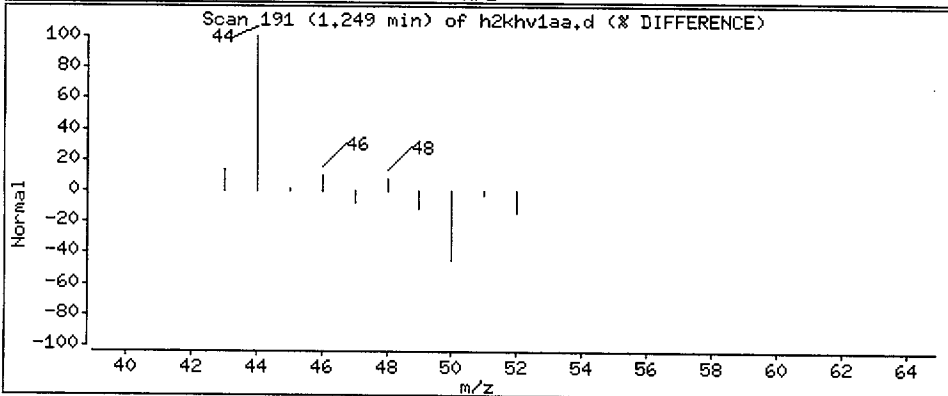
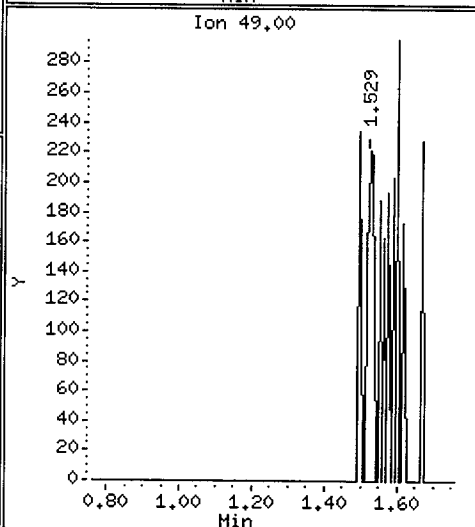
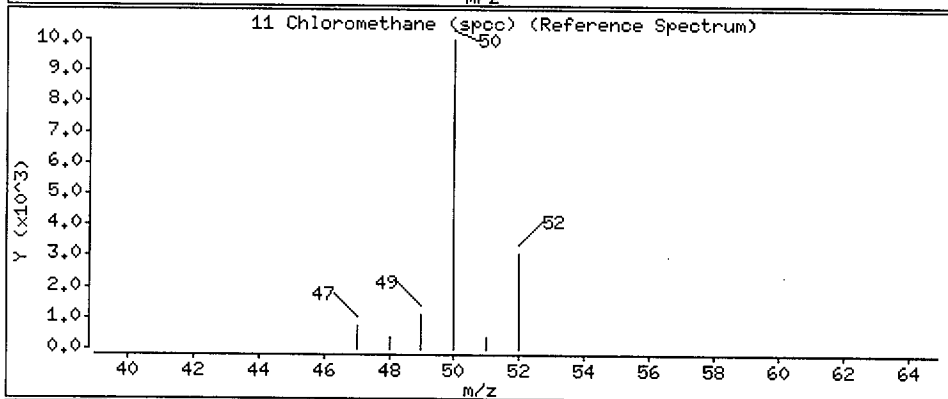
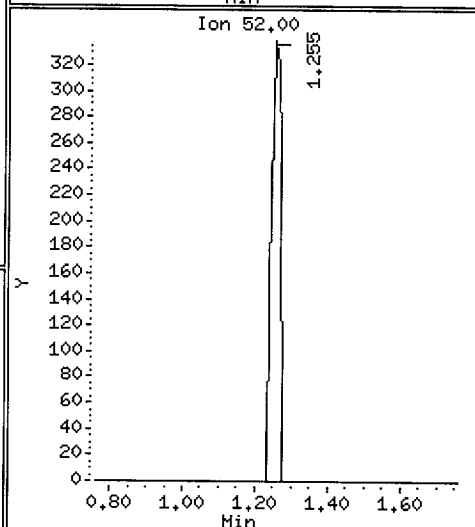
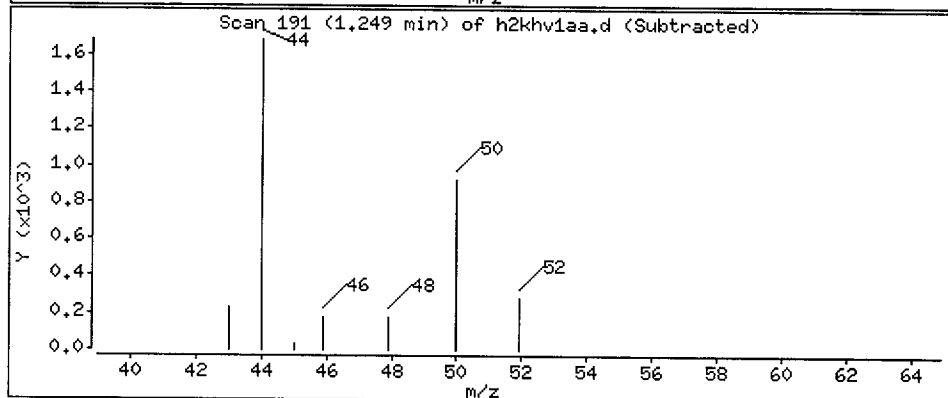
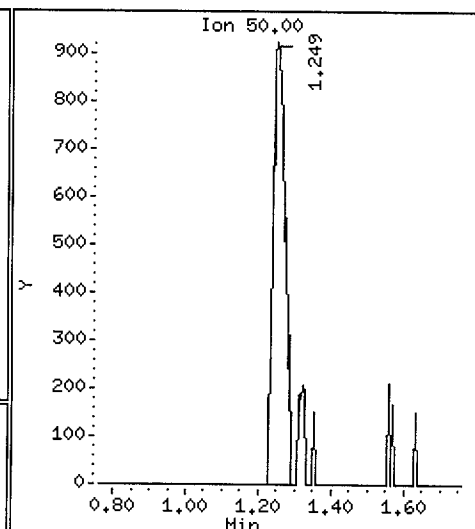
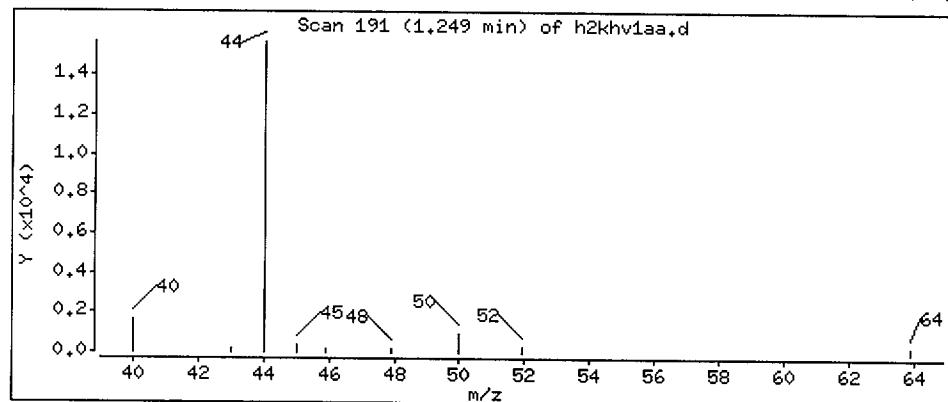
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

11 Chloromethane (spcc)

Concentration: 0.0011276 ug



Data File: /chem/gcms/mx,i/X040706,b/h2khv1aa,d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx,i

Sample Info: H2KHV1AA,1,0,,,

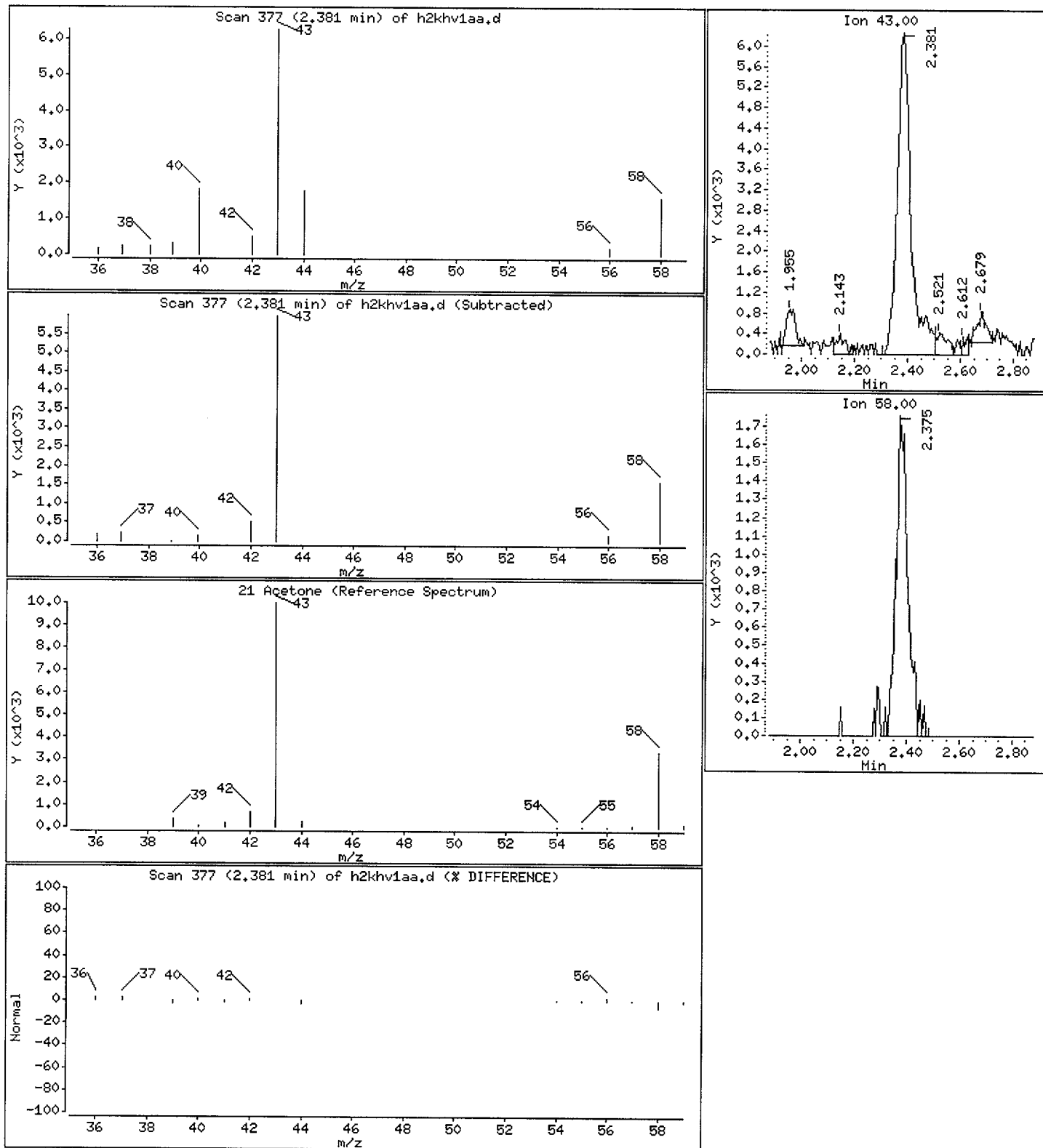
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

21 Acetone

Concentration: 0.38849 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

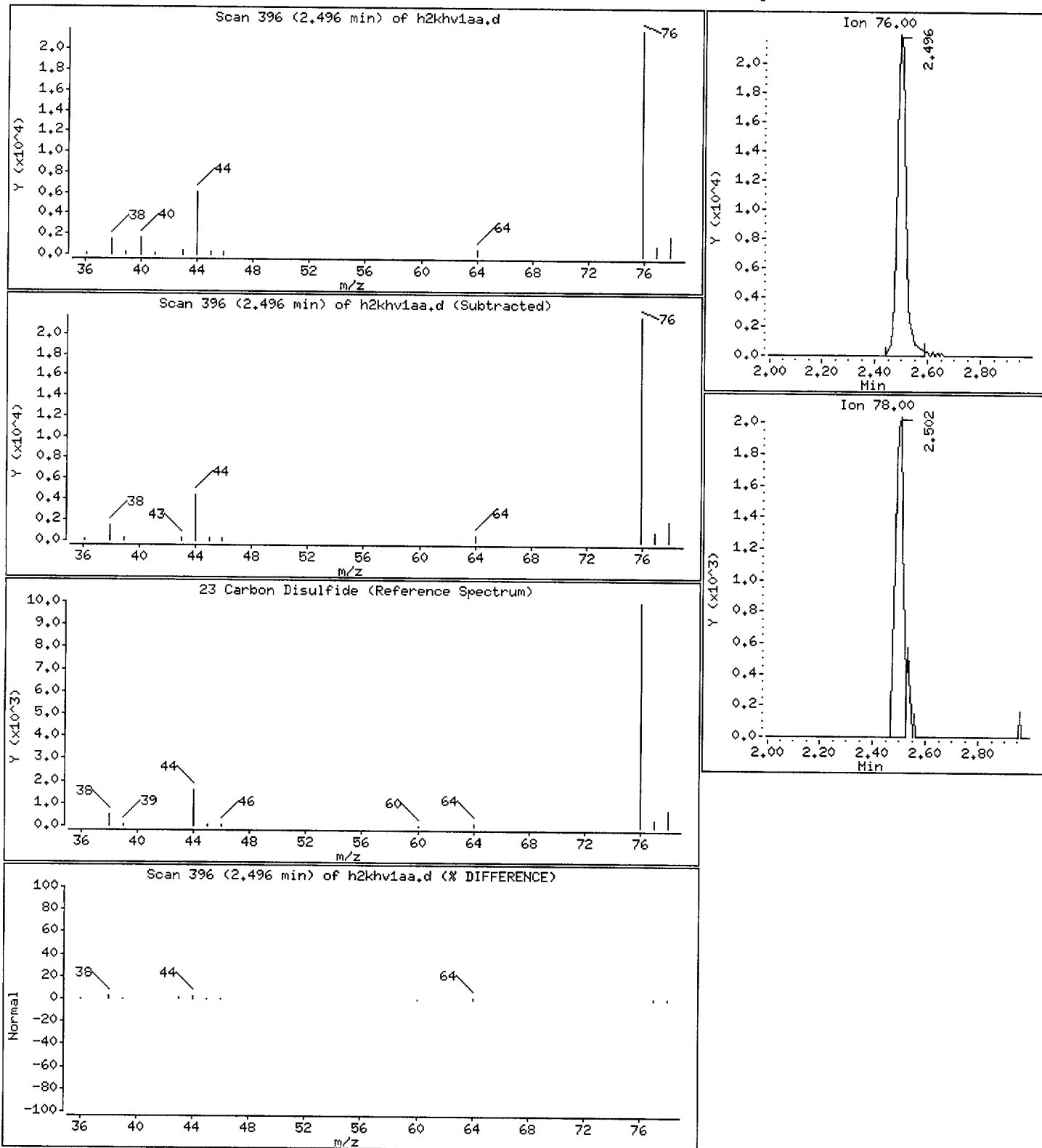
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

23 Carbon Disulfide

Concentration: 0.015818 ug



Data File: /chem/gcms/mx,i/X040706,b/h2khv1aa,d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

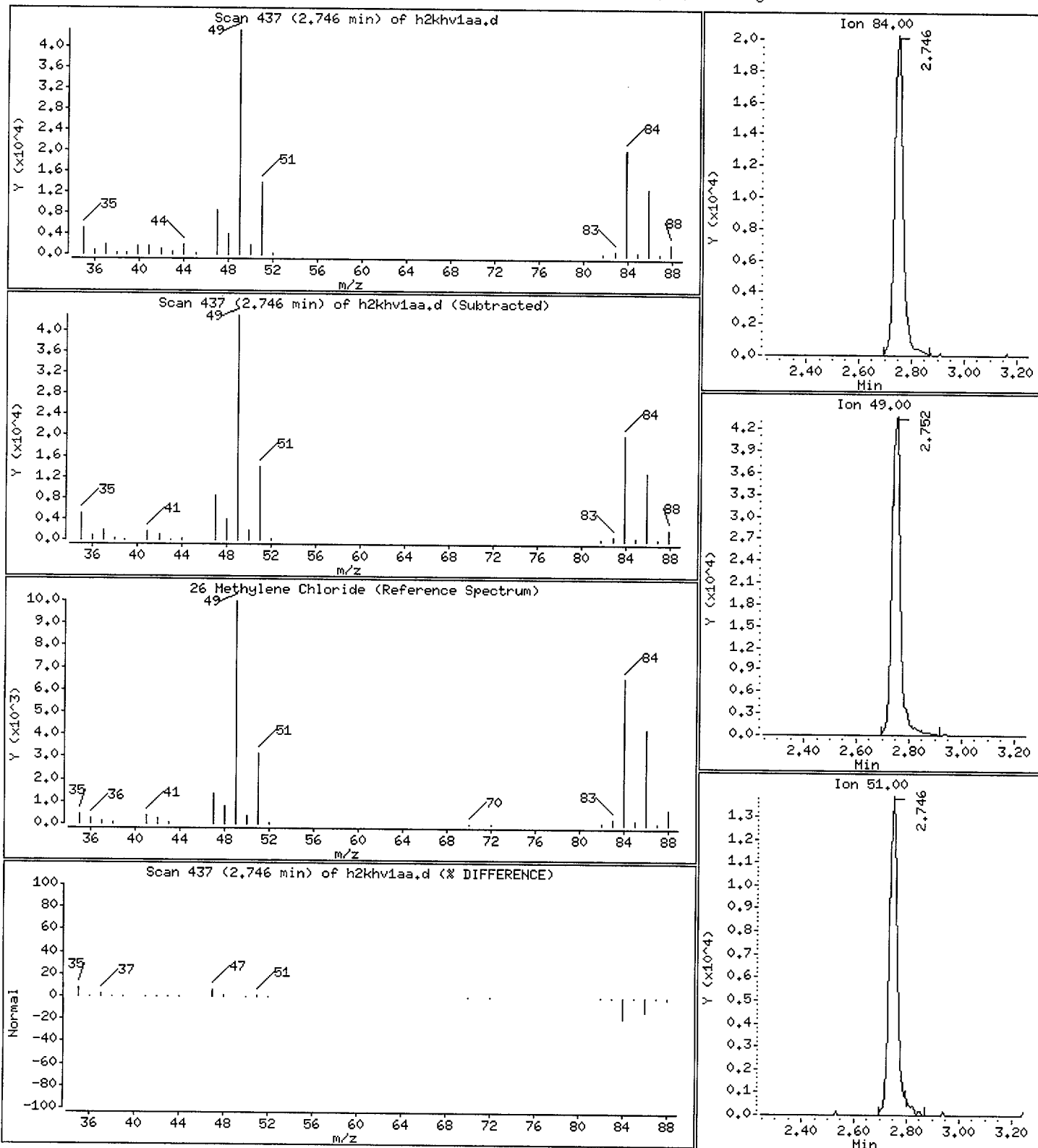
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

26 Methylene Chloride

Concentration: 0.072429 ug





Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

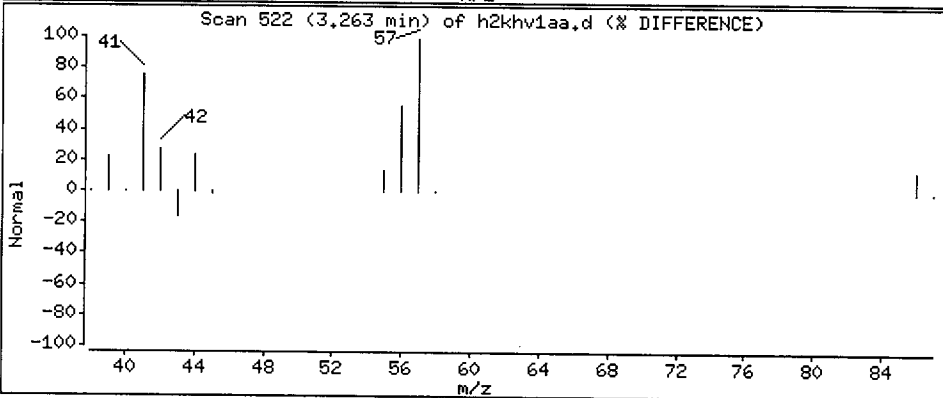
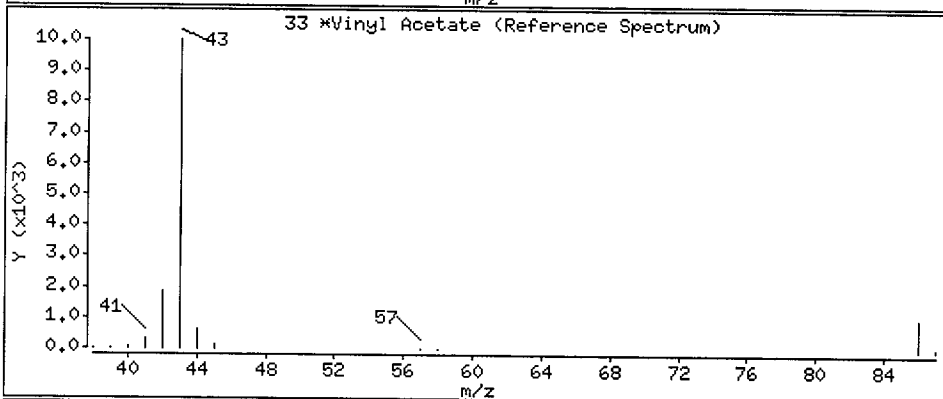
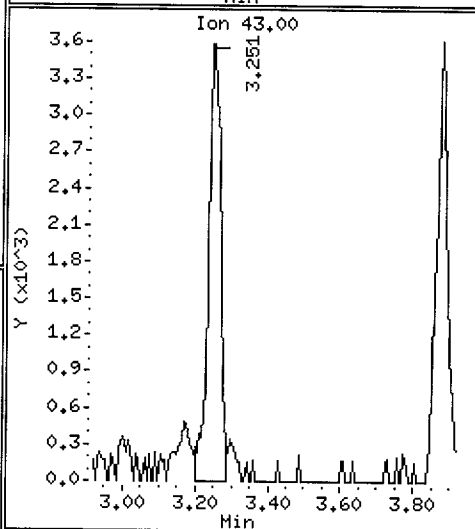
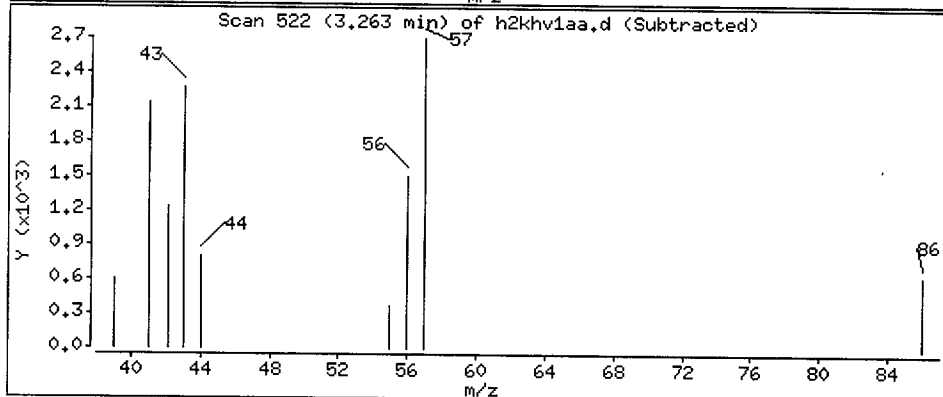
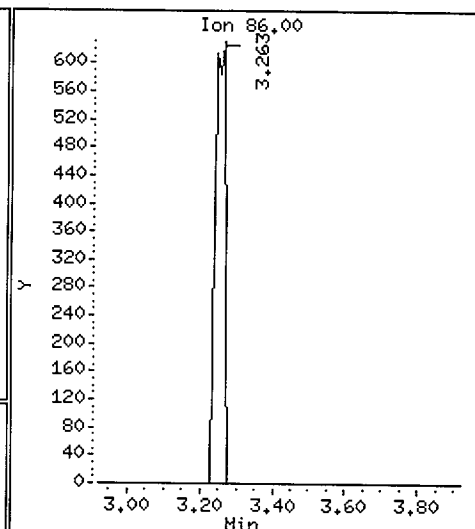
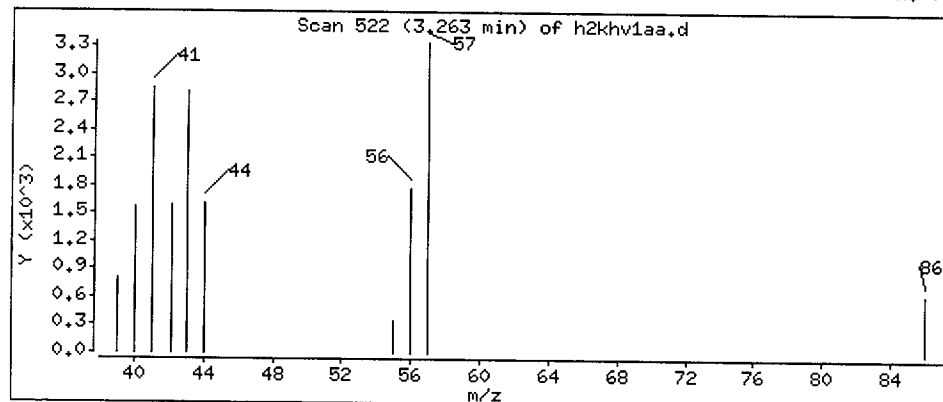
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

33 \*Vinyl Acetate

Concentration: 0.025102 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

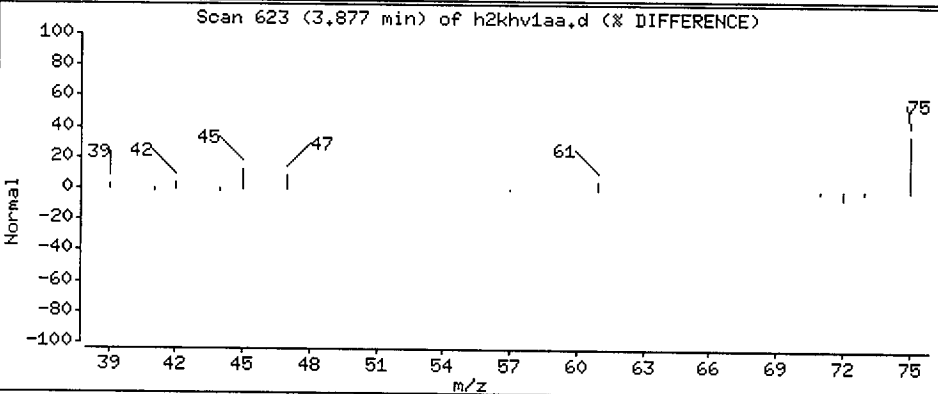
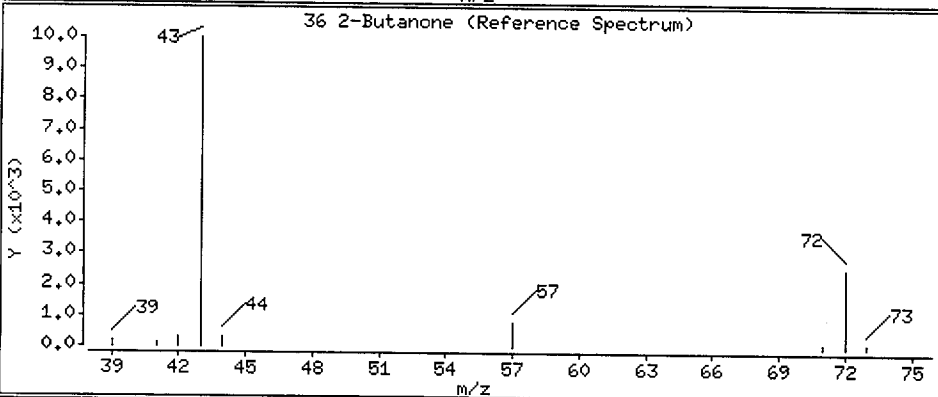
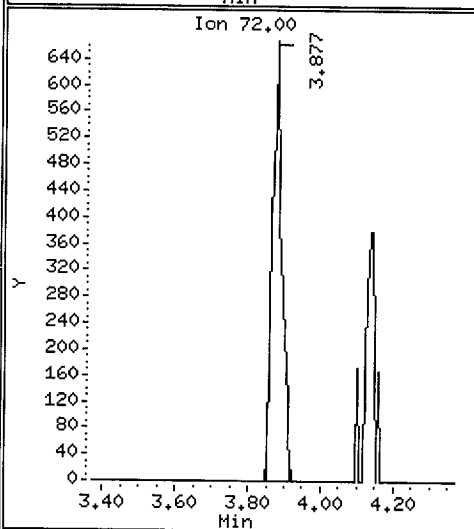
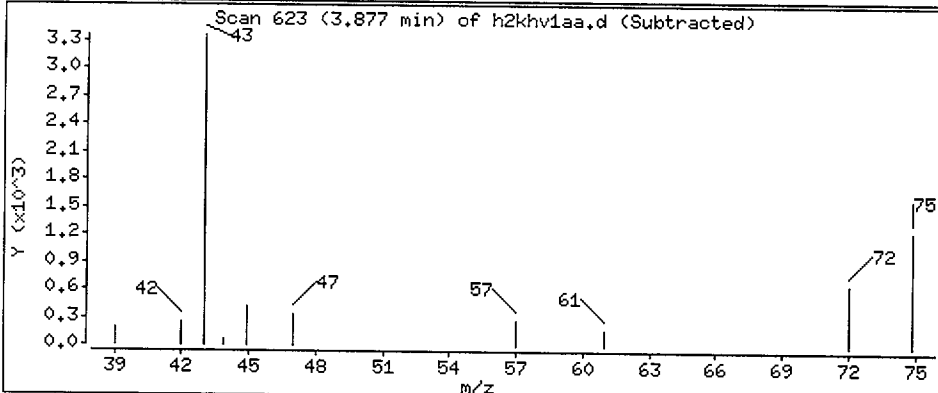
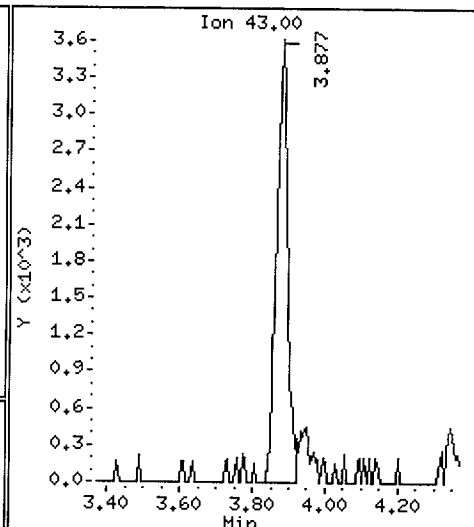
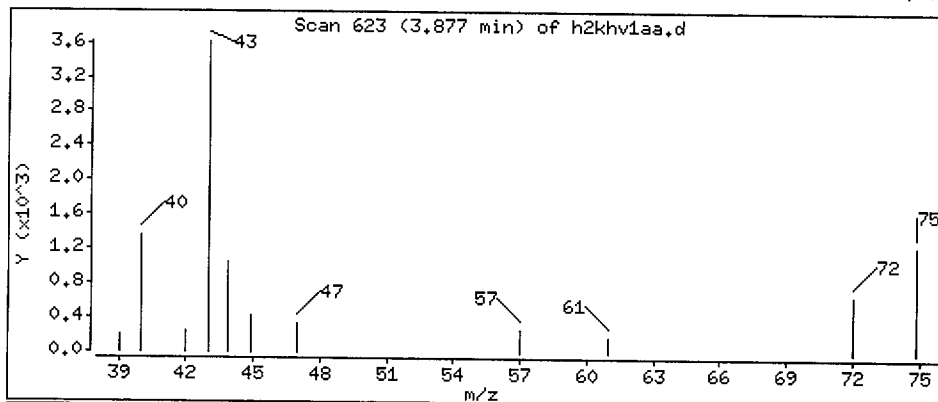
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

36 2-Butanone

Concentration: 0.084044 ug



Data File: /chem/goms/mx,i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

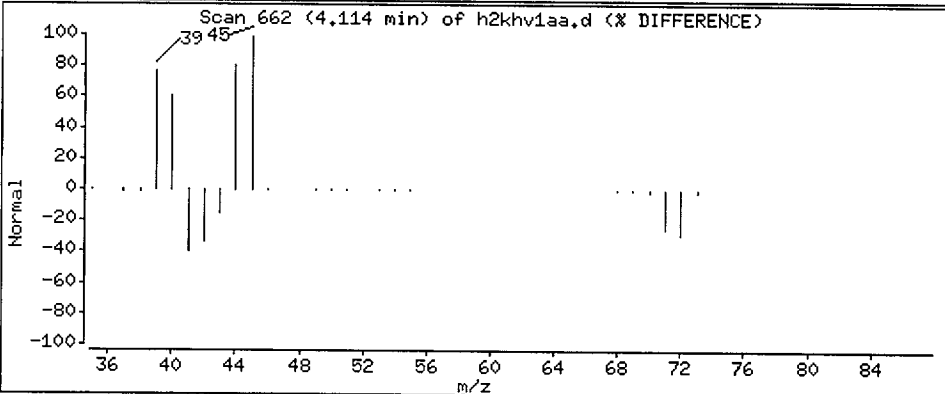
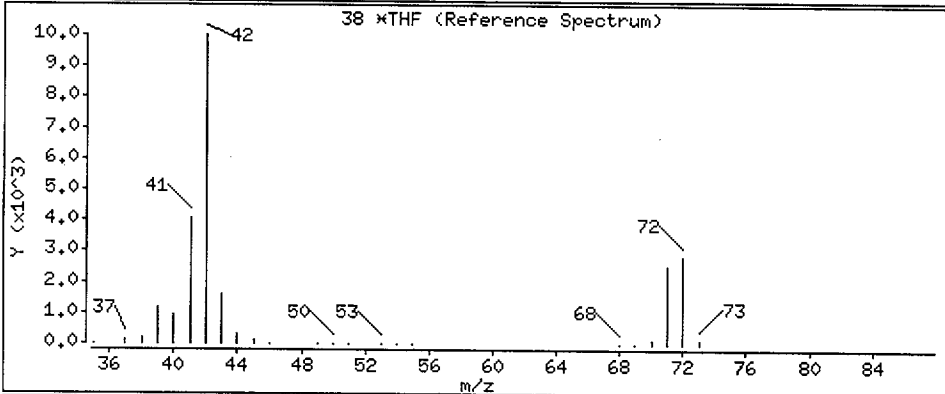
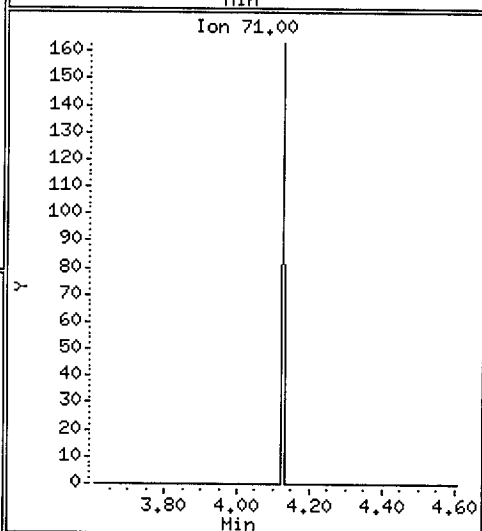
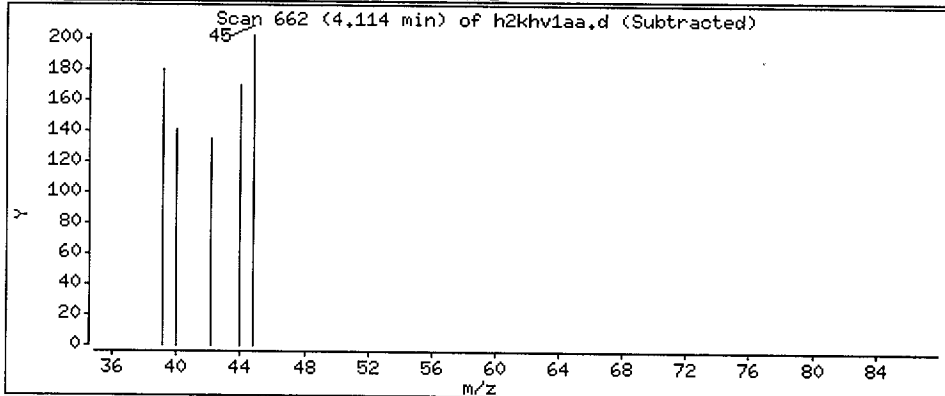
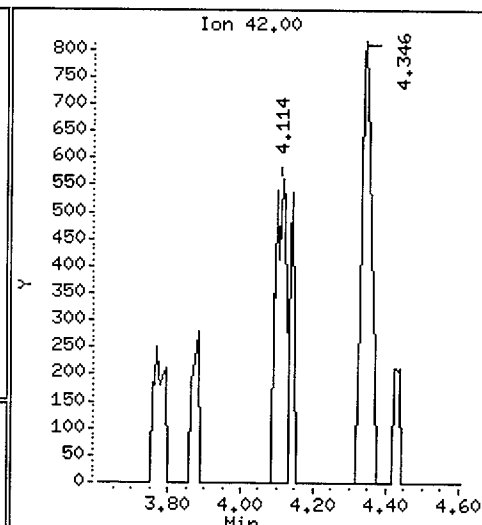
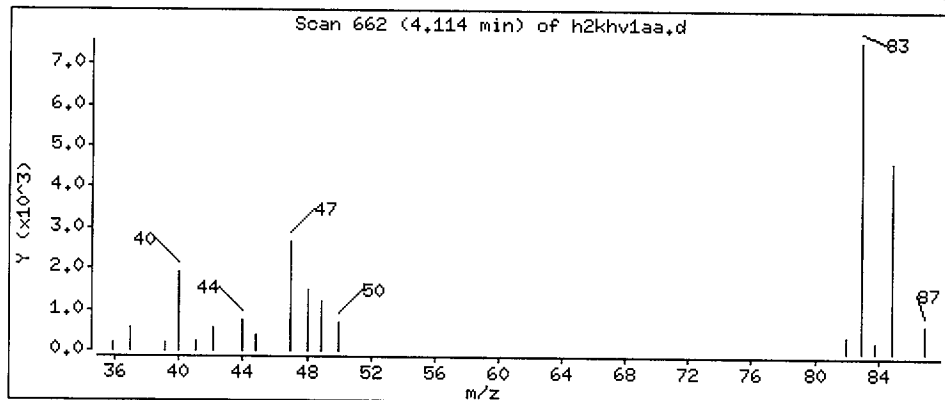
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

38 xTHF

Concentration: 0.021480 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

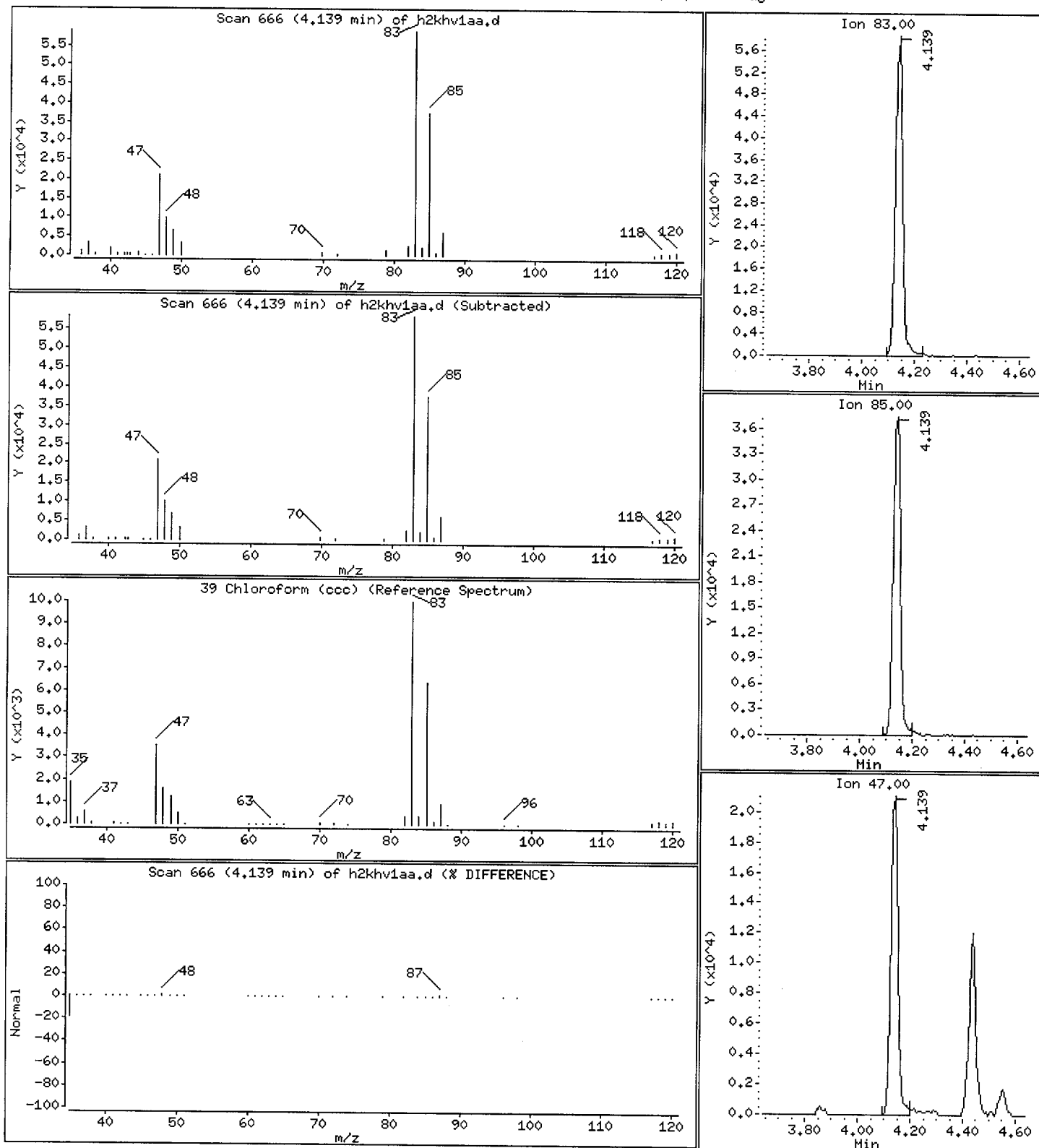
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

39 Chloroform (ccc)

Concentration: 0.069114 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

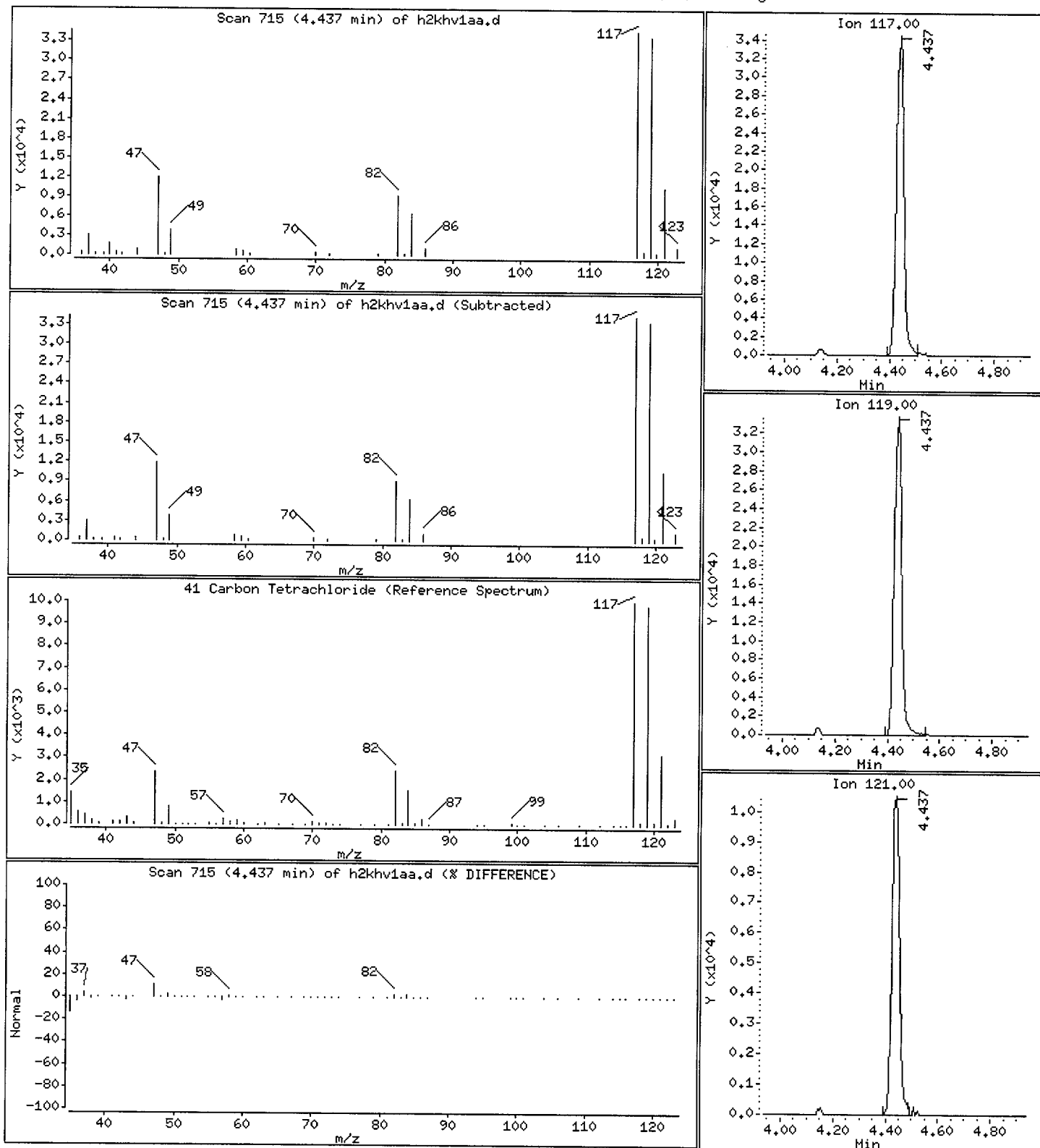
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

41 Carbon Tetrachloride

Concentration: 0.045182 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

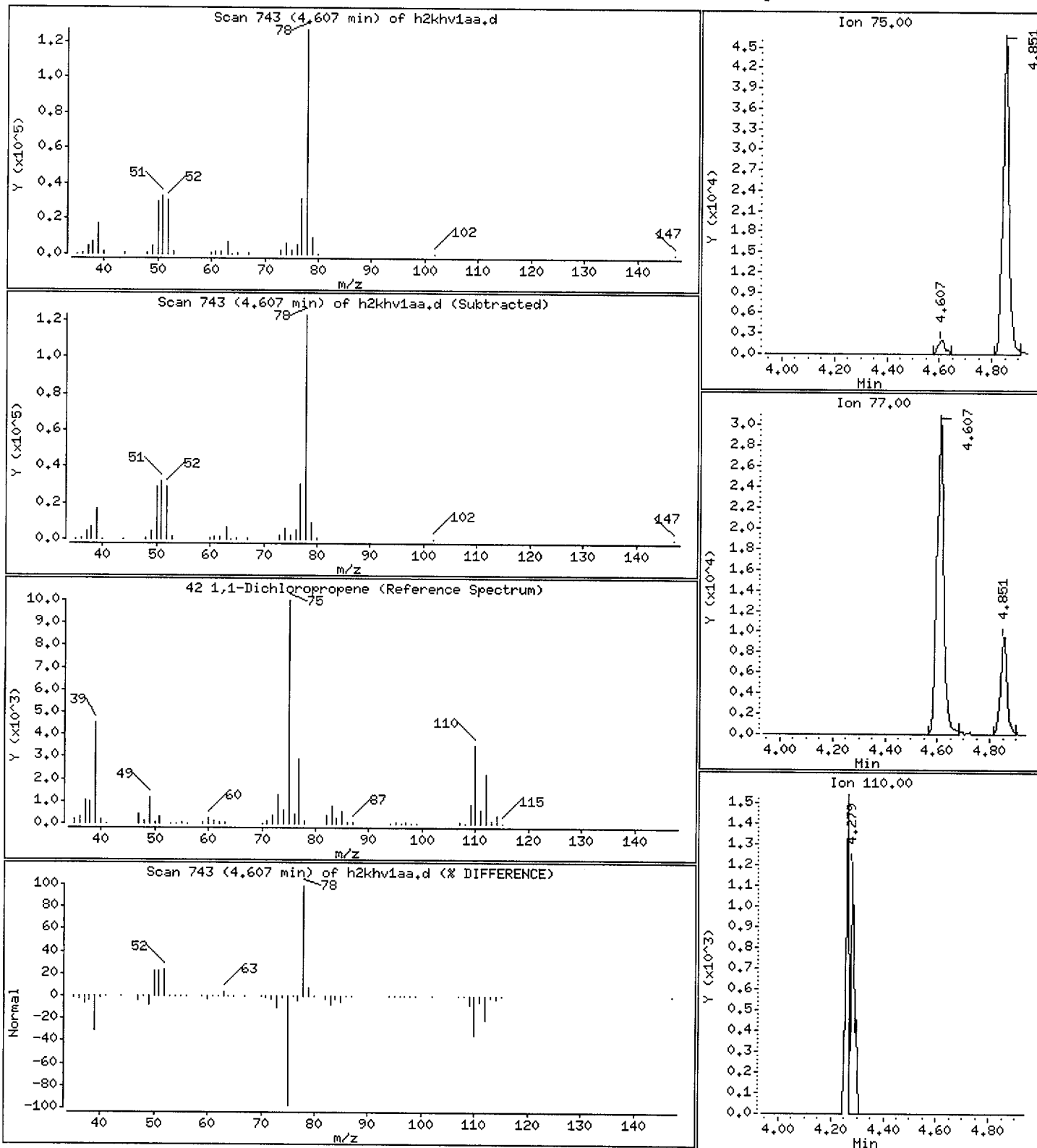
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

42 1,1-Dichloropropene

Concentration: 0.0023941 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Sample Info: H2KHV1AA,1,0,,,

Instrument: mx.i

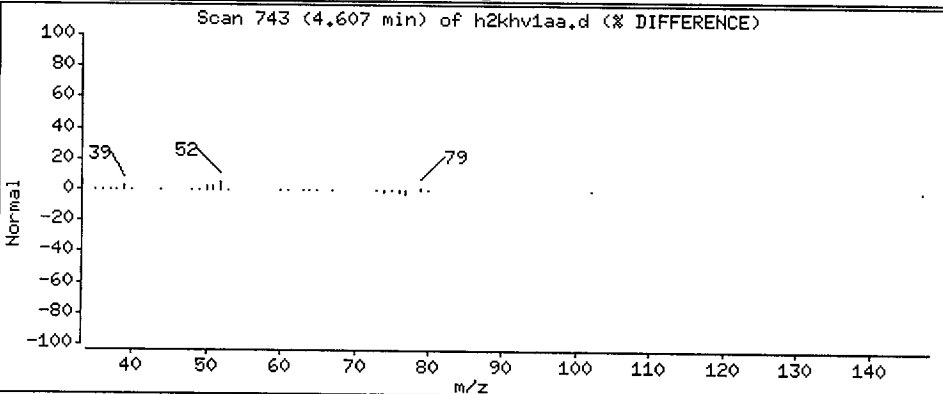
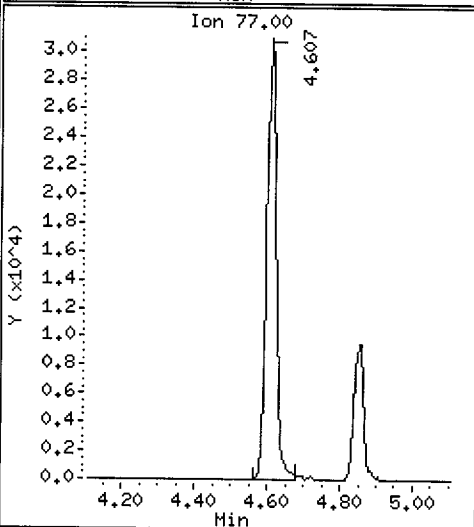
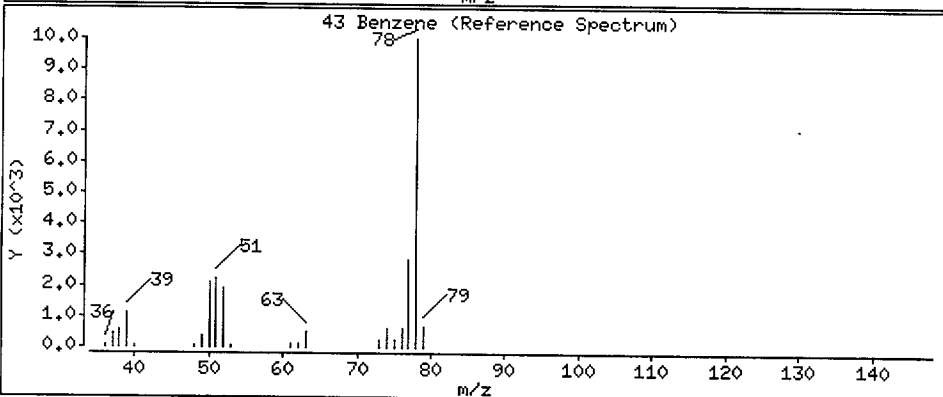
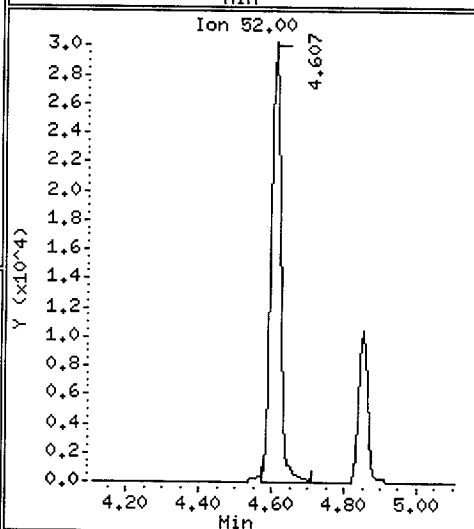
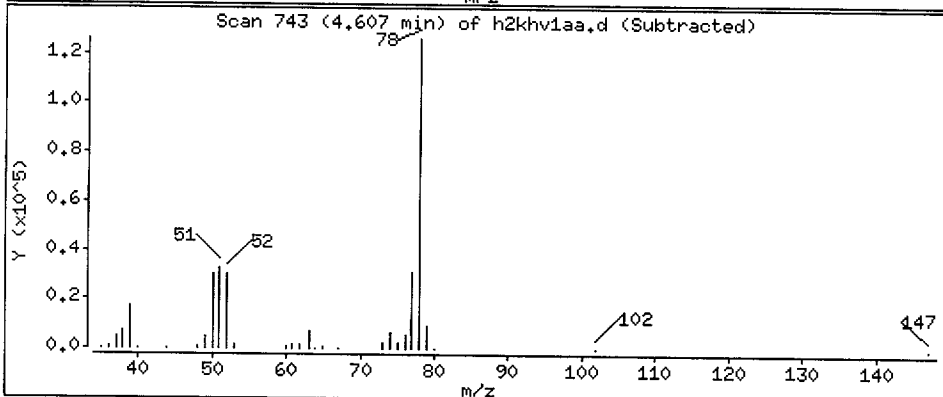
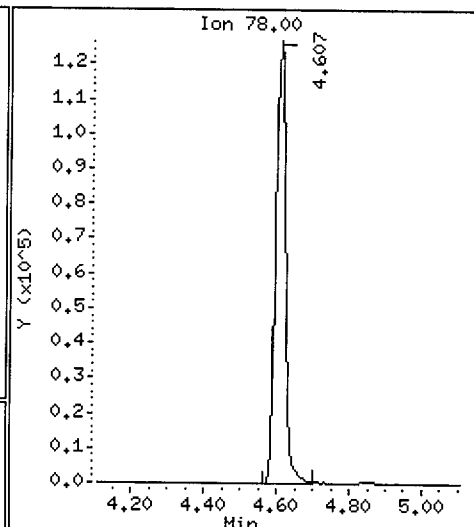
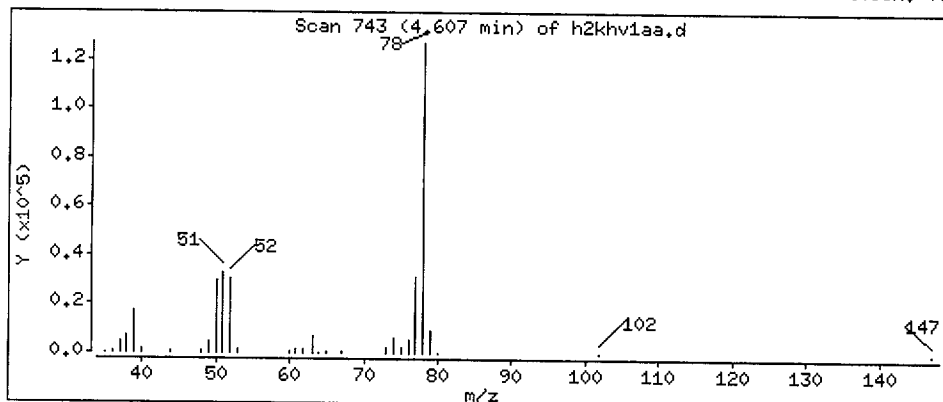
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

43 Benzene

Concentration: 0.056559 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Sample Info: H2KHV1AA,1,0,,,

Instrument: mx.i

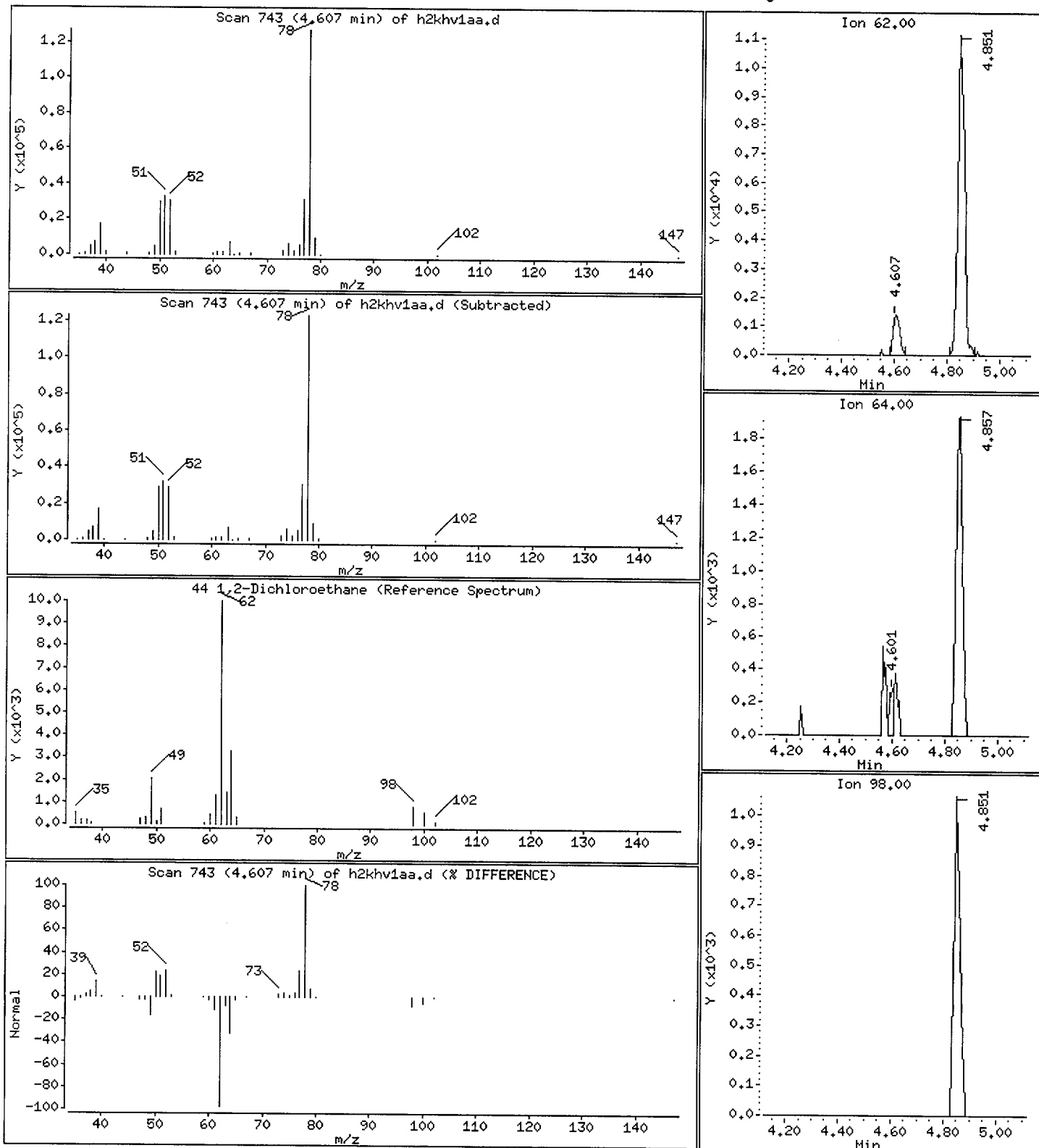
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

44 1,2-Dichloroethane

Concentration: 0.0035151 ug





Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

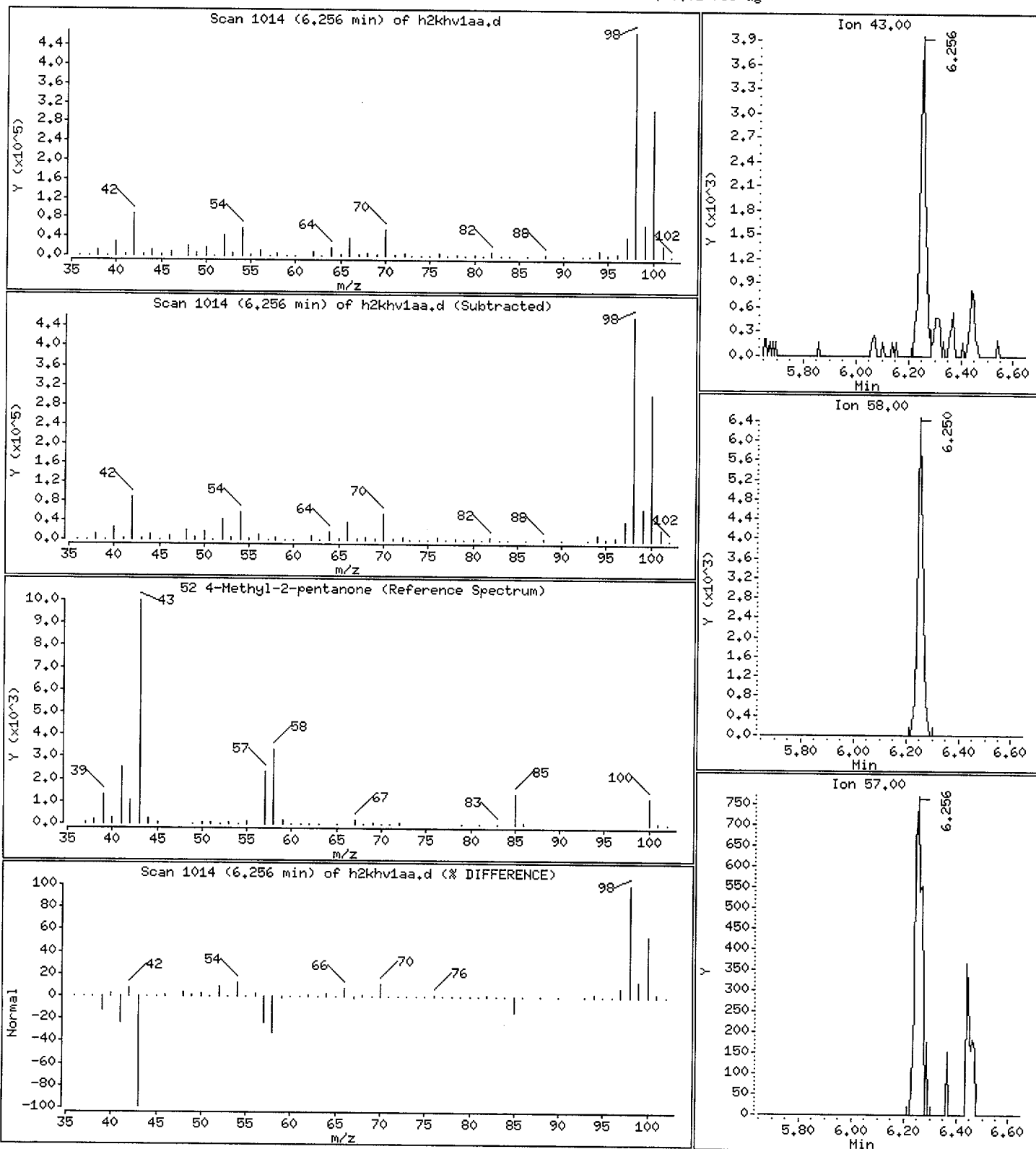
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

52 4-Methyl-2-pentanone

Concentration: 0.027753 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

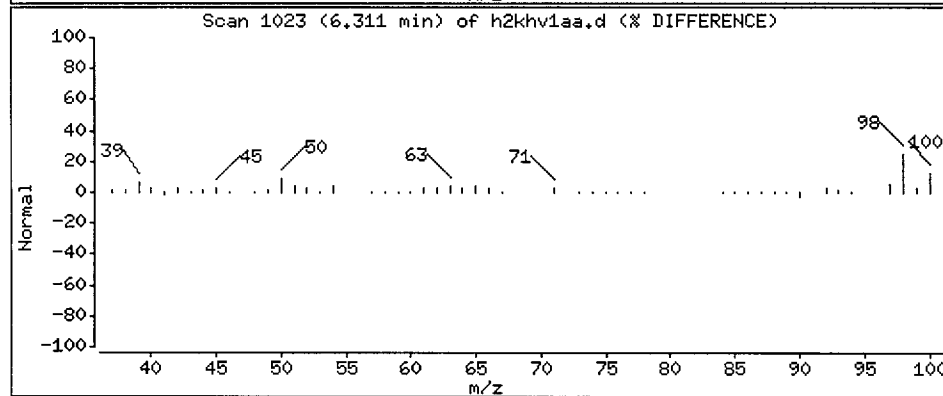
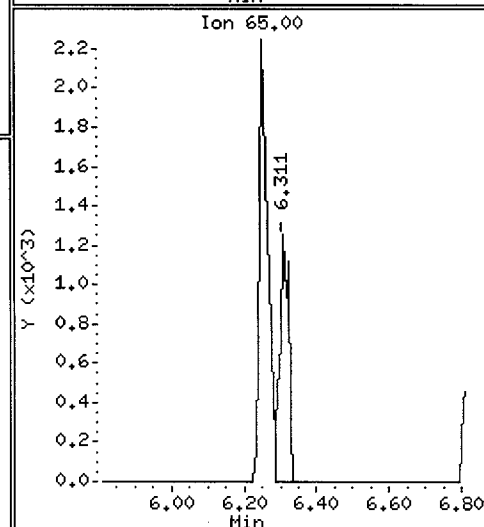
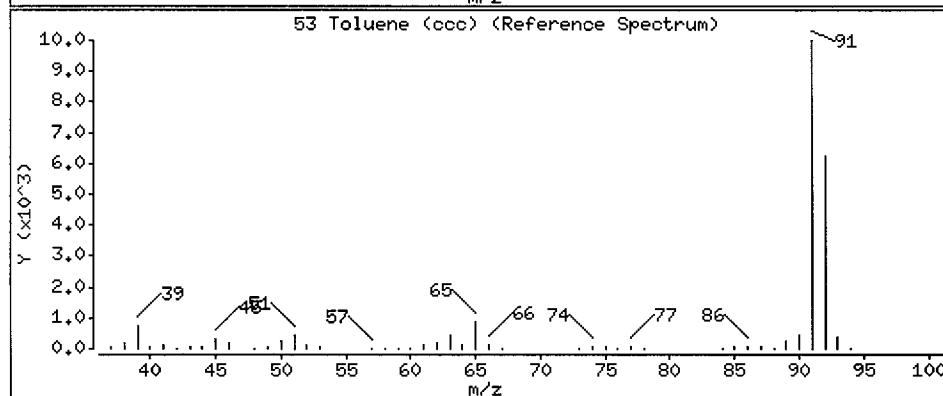
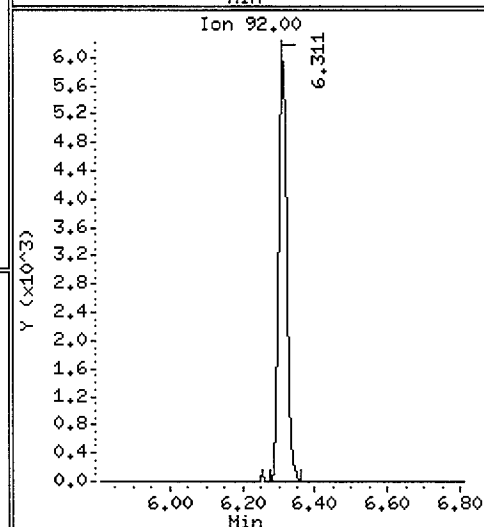
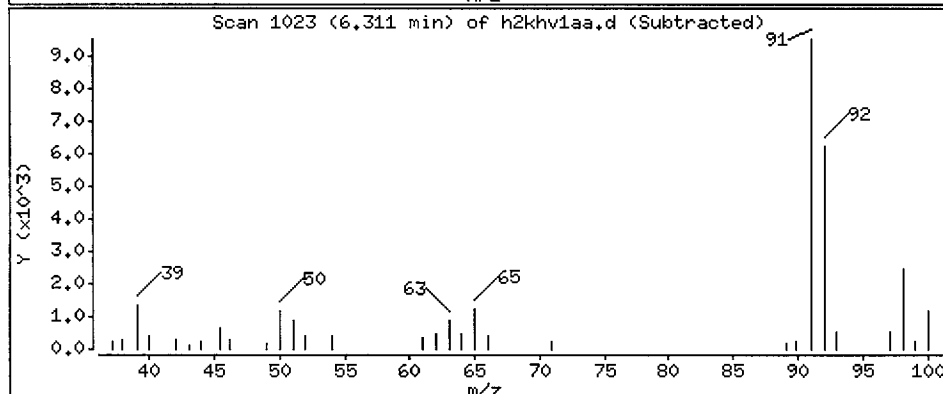
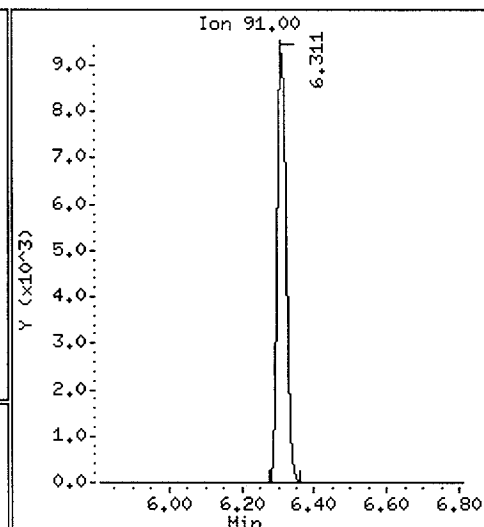
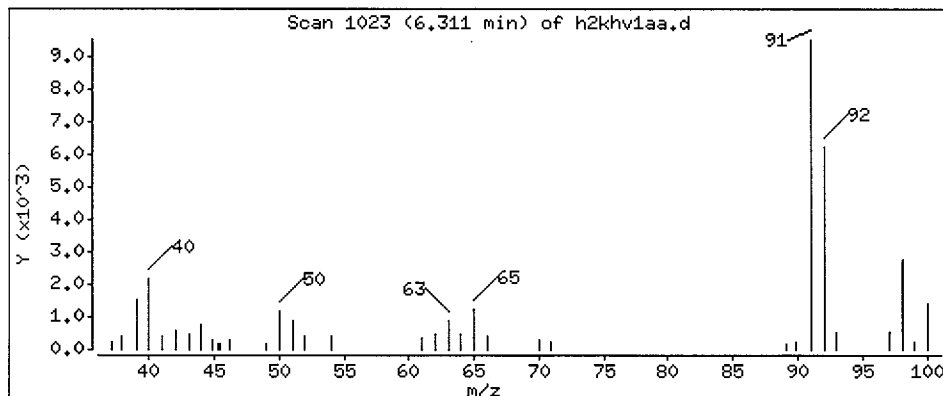
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

53 Toluene (ccc)

Concentration: 0.0032785 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

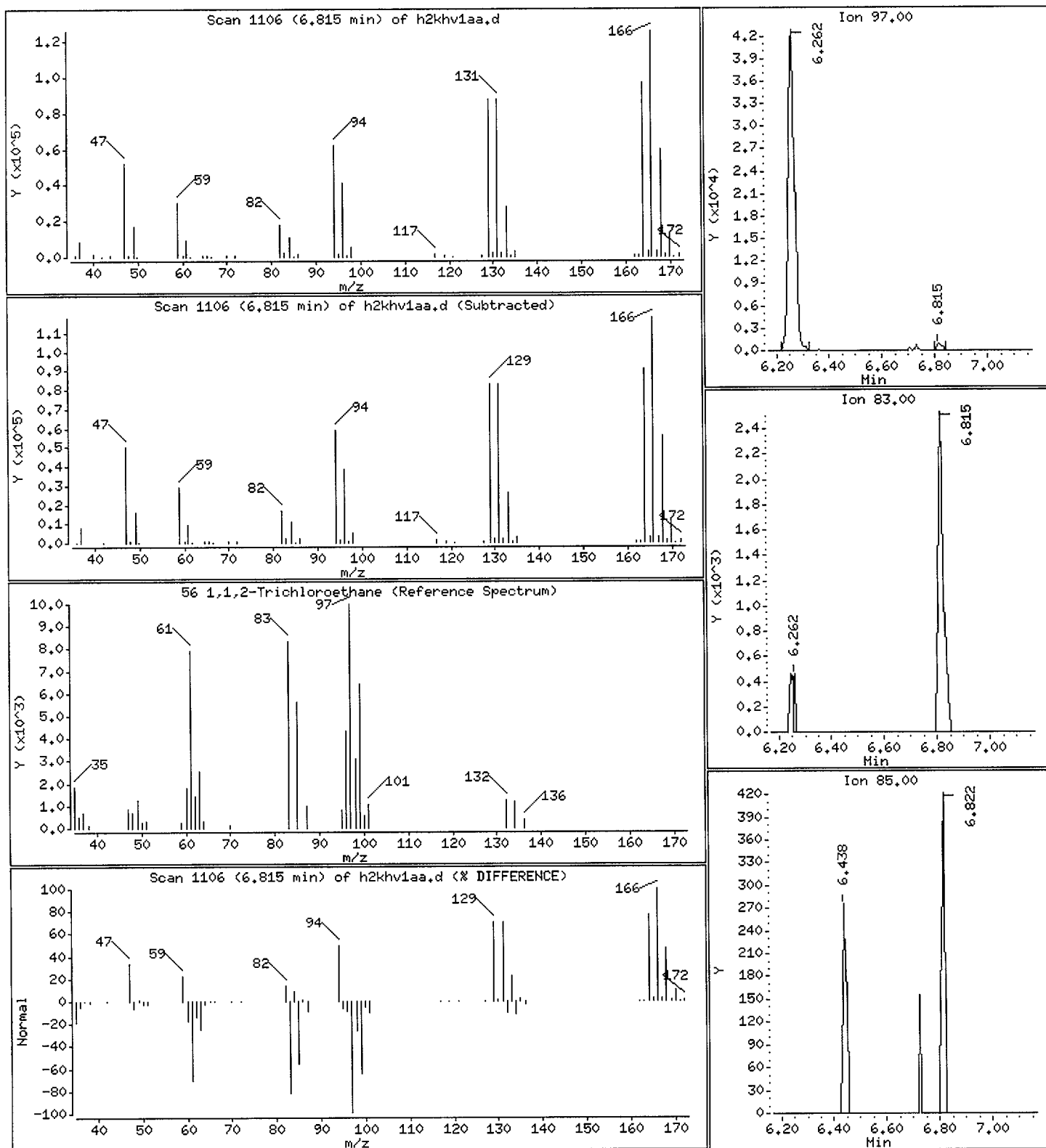
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

56 1,1,2-Trichloroethane

Concentration: 0.0033472 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

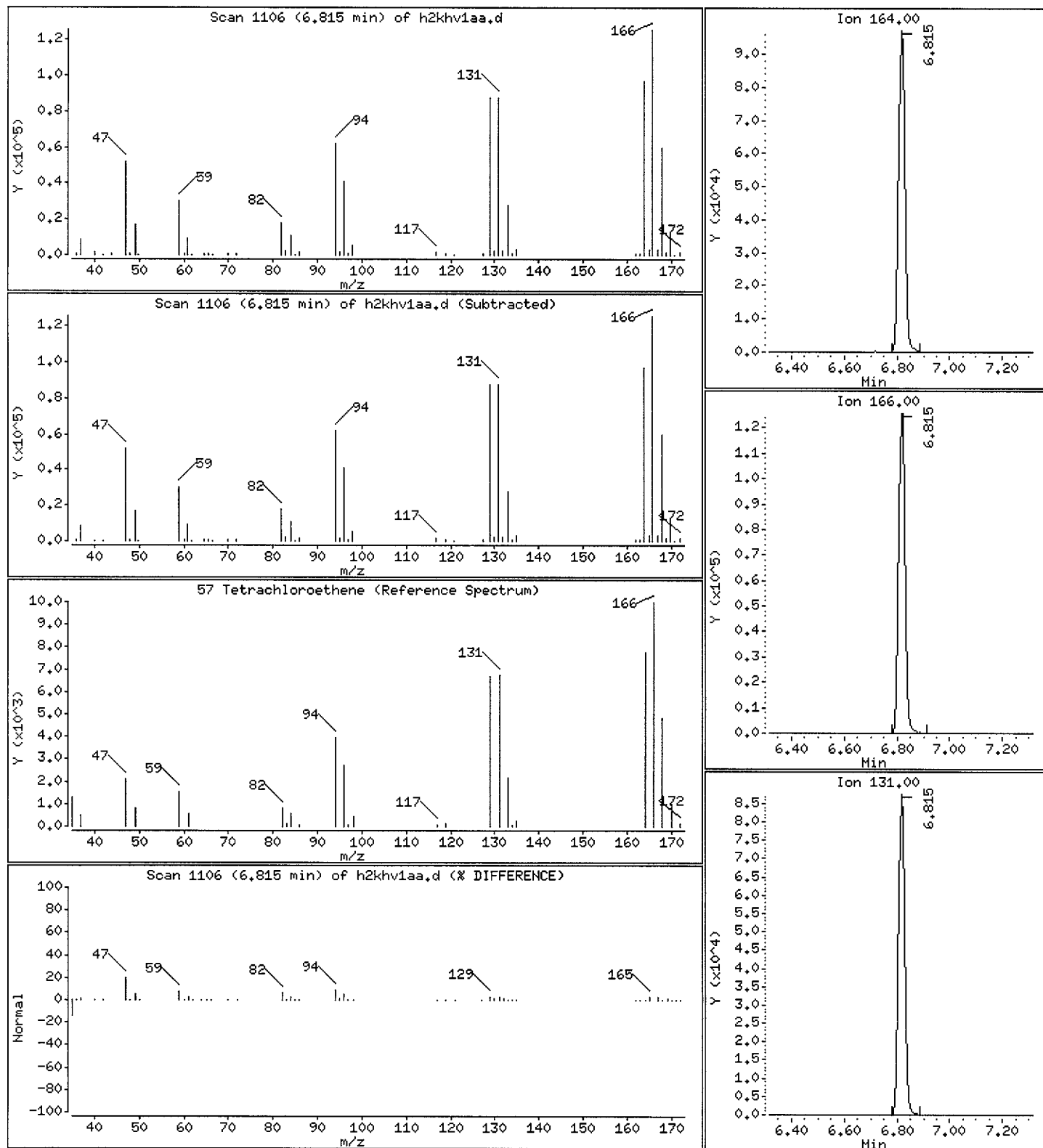
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

57 Tetrachloroethene

Concentration: 0.15829 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date: 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

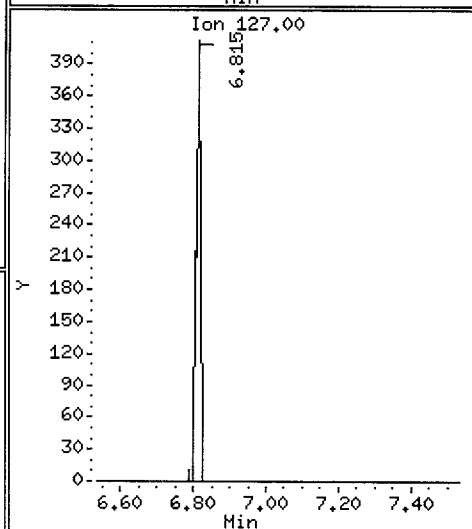
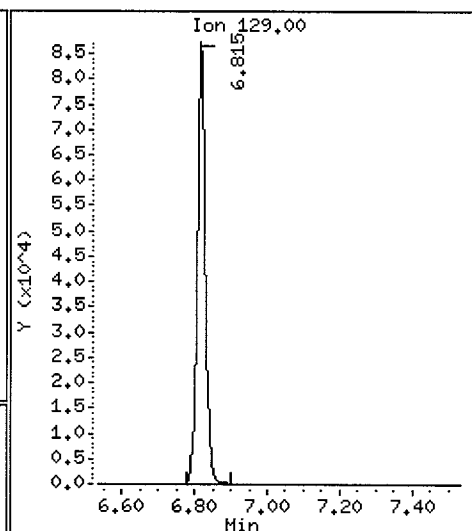
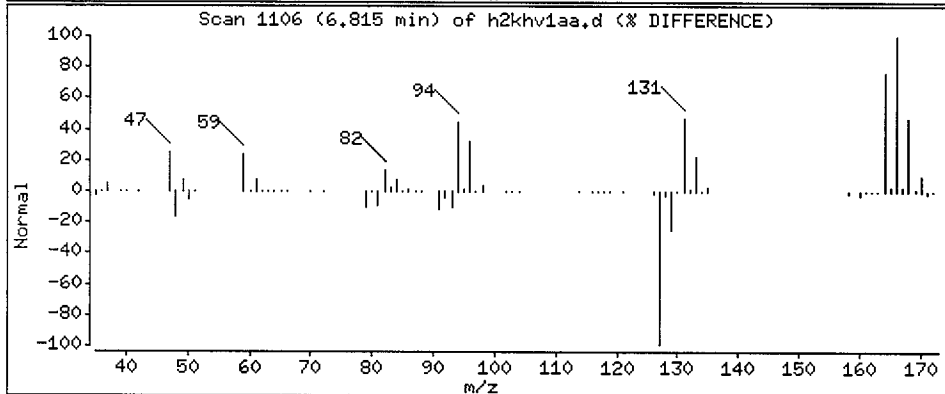
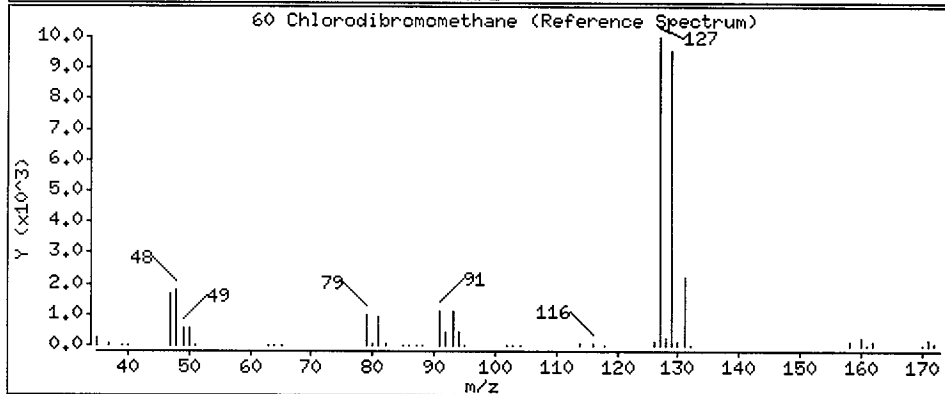
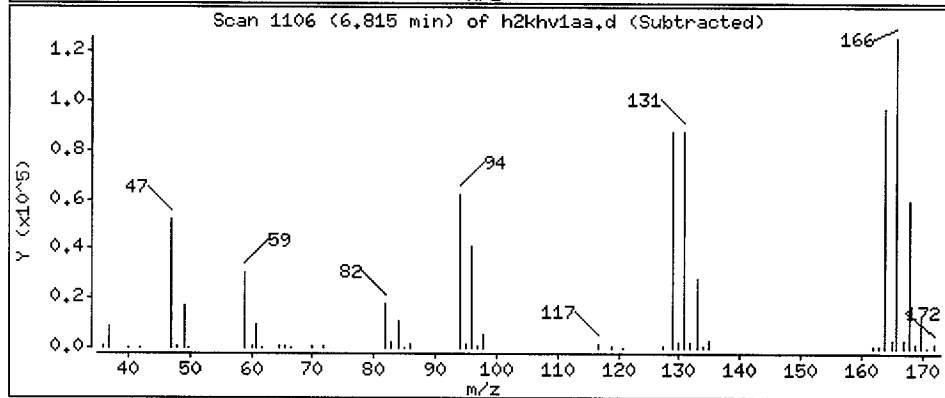
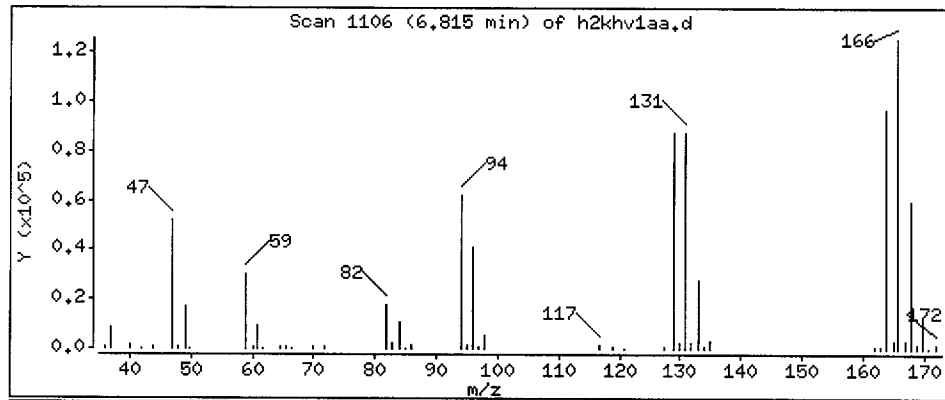
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

60 Chlorodibromomethane

Concentration: 0.31091 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khv1aa.d

Date : 07-APR-2006 19:24

Client ID: AUDIT VOST #3

Instrument: mx.i

Sample Info: H2KHV1AA,1,0,,,

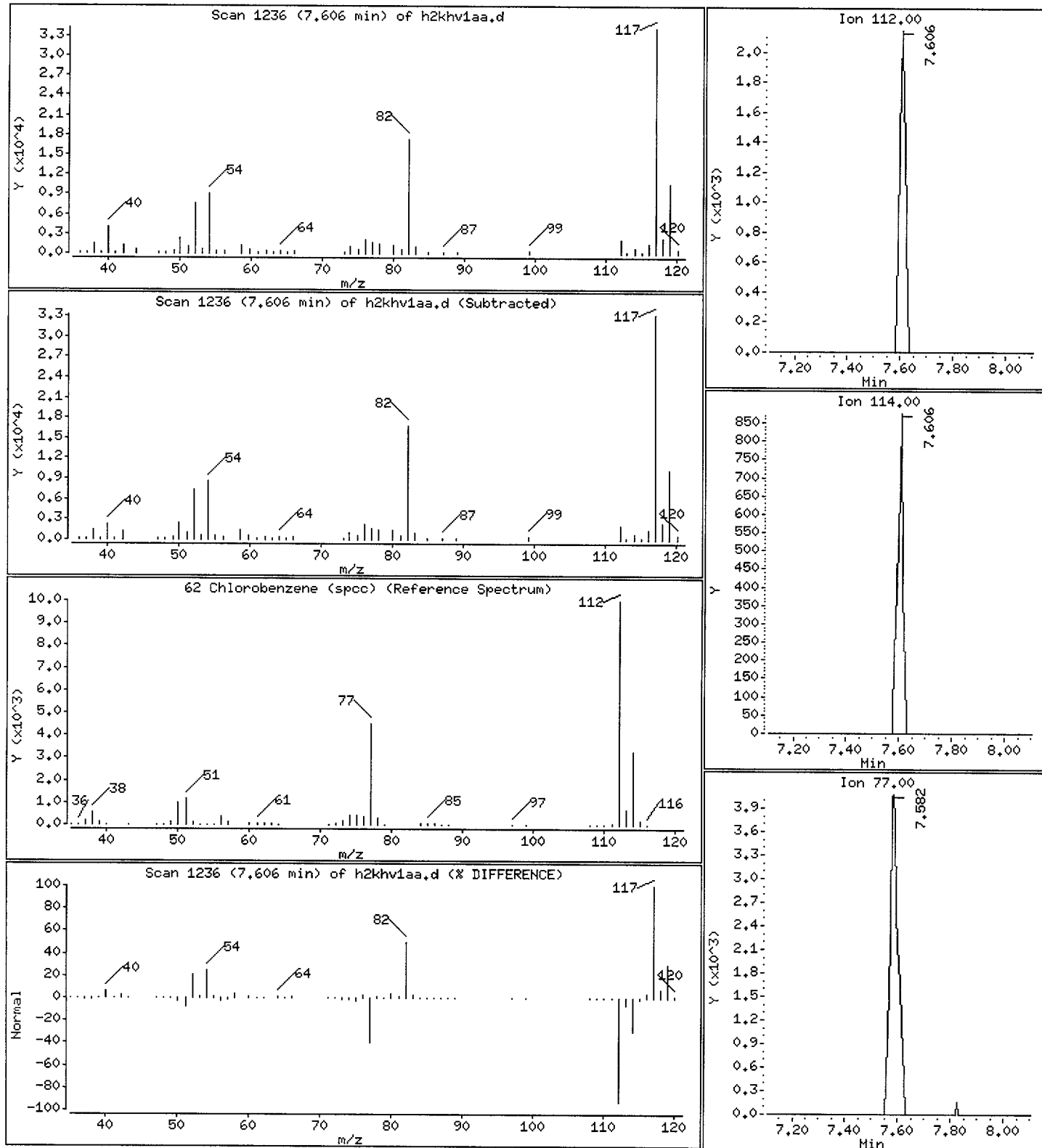
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

62 Chlorobenzene (spoc)

Concentration: 0.0013377 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khv1aa.d  
Report Date: 18-Apr-2006 14:59

## STL Knoxville

SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X040706.b/h2khv1aa.d  
Lab Smp Id: H2KHV1AA Client Smp ID: AUDIT VOST #3  
Inj Date : 07-APR-2006 19:24  
Operator : 22980 Inst ID: mx.i  
Smp Info : H2KHV1AA,1,0,,,  
Misc Info : X040706,8260B\_LM,focus.sub  
Comment :  
Method : /var/chem/gcms/mx.i/X040706.b/8260B LM.m  
Meth Date : 18-Apr-2006 14:54 tajh Quant Type: ISTD  
Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

## STL Knoxville - ACS

Client Sample ID: AUDIT VOST #4

## GC/MS Volatiles

Lot-Sample #....: H6D030169-042    Work Order #....: H2KHW1AA    Matrix.....: AIR  
 Date Sampled....: 03/28/06    Date Received...: 04/02/06  
 Prep Date.....: 04/07/06    Analysis Date...: 04/07/06  
 Prep Batch #....: 6097054  
 Dilution Factor: 1    Method.....: SW846 VOST

| PARAMETER                        | RESULT          | REPORTING    |           |               |
|----------------------------------|-----------------|--------------|-----------|---------------|
|                                  |                 | LIMIT        | UNITS     | MDL           |
| <b>Acetone</b>                   | <b>0.26</b>     | <b>0.10</b>  | <b>ug</b> | <b>0.085</b>  |
| Acrylonitrile                    | ND              | 0.50         | ug        | 0.076         |
| <b>Benzene</b>                   | <b>0.058</b>    | <b>0.010</b> | <b>ug</b> | <b>0.0032</b> |
| Bromobenzene                     | ND              | 0.010        | ug        | 0.0036        |
| Bromochloromethane               | ND              | 0.025        | ug        | 0.012         |
| Bromodichloromethane             | ND              | 0.010        | ug        | 0.0016        |
| Bromoform                        | ND              | 0.025        | ug        | 0.0066        |
| Bromomethane                     | ND              | 0.050        | ug        | 0.022         |
| <b>2-Butanone</b>                | <b>0.068 J</b>  | <b>0.10</b>  | <b>ug</b> | <b>0.035</b>  |
| n-Butylbenzene                   | ND              | 0.010        | ug        | 0.0047        |
| sec-Butylbenzene                 | ND              | 0.010        | ug        | 0.0036        |
| tert-Butylbenzene                | ND              | 0.010        | ug        | 0.0030        |
| <b>Carbon disulfide</b>          | <b>0.016</b>    | <b>0.010</b> | <b>ug</b> | <b>0.0011</b> |
| <b>Carbon tetrachloride</b>      | <b>0.046</b>    | <b>0.010</b> | <b>ug</b> | <b>0.0011</b> |
| <b>Chlorobenzene</b>             | <b>0.0016 J</b> | <b>0.010</b> | <b>ug</b> | <b>0.0013</b> |
| Chlorodibromomethane             | ND              | 0.025        | ug        | 0.010         |
| Chloroethane                     | ND              | 0.050        | ug        | 0.010         |
| <b>Chloroform</b>                | <b>0.072</b>    | <b>0.010</b> | <b>ug</b> | <b>0.0019</b> |
| Chloromethane                    | ND              | 0.025        | ug        | 0.0032        |
| 2-Chlorotoluene                  | ND              | 0.010        | ug        | 0.0023        |
| 4-Chlorotoluene                  | ND              | 0.010        | ug        | 0.0020        |
| 1,2-Dibromo-3-chloro-<br>propane | ND              | 0.050        | ug        | 0.020         |
| 1,2-Dibromoethane                | ND              | 0.025        | ug        | 0.010         |
| Dibromomethane                   | ND              | 0.025        | ug        | 0.010         |
| 1,2-Dichlorobenzene              | ND              | 0.010        | ug        | 0.0030        |
| 1,3-Dichlorobenzene              | ND              | 0.010        | ug        | 0.0031        |
| 1,4-Dichlorobenzene              | ND              | 0.010        | ug        | 0.0043        |
| Dichlorodifluoromethane          | ND              | 0.025        | ug        | 0.0050        |
| 1,1-Dichloroethane               | ND              | 0.010        | ug        | 0.0019        |
| 1,2-Dichloroethane               | ND              | 0.010        | ug        | 0.0022        |
| cis-1,2-Dichloroethene           | ND              | 0.010        | ug        | 0.0025        |
| trans-1,2-Dichloroethene         | ND              | 0.010        | ug        | 0.0017        |
| 1,1-Dichloroethene               | ND              | 0.010        | ug        | 0.0023        |
| 1,2-Dichloropropane              | ND              | 0.010        | ug        | 0.0027        |
| 1,3-Dichloropropane              | ND              | 0.010        | ug        | 0.0018        |
| 2,2-Dichloropropane              | ND              | 0.010        | ug        | 0.0015        |
| cis-1,3-Dichloropropene          | ND              | 0.010        | ug        | 0.0030        |
| trans-1,3-Dichloropropene        | ND              | 0.010        | ug        | 0.0020        |

(Continued on next page)



## STL Knoxville - ACS

Client Sample ID: AUDIT VOST #4

## GC/MS Volatiles

Lot-Sample #...: H6D030169-042 Work Order #...: H2KHW1AA Matrix.....: AIR

| PARAMETER                                 | RESULT          | REPORTING    |            |               |
|-------------------------------------------|-----------------|--------------|------------|---------------|
|                                           |                 | LIMIT        | UNITS      | MDL           |
| 1,1-Dichloropropene                       | ND              | 0.010        | ug         | 0.0010        |
| Ethylbenzene                              | ND              | 0.010        | ug         | 0.0013        |
| Hexachlorobutadiene                       | ND              | 0.025        | ug         | 0.0048        |
| 2-Hexanone                                | ND              | 0.10         | ug         | 0.0099        |
| Iodomethane                               | ND              | 0.050        | ug         | 0.0016        |
| Isopropylbenzene                          | ND              | 0.010        | ug         | 0.0023        |
| p-Isopropyltoluene                        | ND              | 0.010        | ug         | 0.0038        |
| <b>Methylene chloride</b>                 | <b>0.075</b>    | <b>0.025</b> | <b>ug</b>  | <b>0.013</b>  |
| 4-Methyl-2-pentanone                      | ND              | 0.10         | ug         | 0.014         |
| Naphthalene                               | ND              | 0.025        | ug         | 0.010         |
| n-Propylbenzene                           | ND              | 0.010        | ug         | 0.0029        |
| Styrene                                   | ND              | 0.010        | ug         | 0.0017        |
| 1,1,1,2-Tetrachloroethane                 | ND              | 0.010        | ug         | 0.0010        |
| 1,1,2,2-Tetrachloroethane                 | ND              | 0.025        | ug         | 0.011         |
| <b>Tetrachloroethene</b>                  | <b>0.16</b>     | <b>0.010</b> | <b>ug</b>  | <b>0.0021</b> |
| Tetrahydrofuran                           | ND              | 0.10         | ug         | 0.031         |
| <b>Toluene</b>                            | <b>0.0033 J</b> | <b>0.010</b> | <b>ug</b>  | <b>0.0022</b> |
| 1,2,3-Trichlorobenzene                    | ND              | 0.025        | ug         | 0.014         |
| 1,2,4-Trichloro-<br>benzene               | ND              | 0.025        | ug         | 0.0030        |
| 1,1,1-Trichloroethane                     | ND              | 0.025        | ug         | 0.0016        |
| 1,1,2-Trichloroethane                     | ND              | 0.025        | ug         | 0.0050        |
| Trichloroethene                           | ND              | 0.010        | ug         | 0.0050        |
| Trichlorofluoromethane                    | ND              | 0.050        | ug         | 0.0049        |
| 1,2,3-Trichloropropane                    | ND              | 0.025        | ug         | 0.0081        |
| 1,1,2-Trichloro-<br>1,2,2-trifluoroethane | ND              | 0.050        | ug         | 0.0018        |
| 1,2,4-Trimethylbenzene                    | ND              | 0.010        | ug         | 0.0048        |
| 1,3,5-Trimethylbenzene                    | ND              | 0.010        | ug         | 0.0028        |
| Vinyl acetate                             | ND              | 0.050        | ug         | 0.012         |
| Vinyl chloride                            | ND              | 0.010        | ug         | 0.0032        |
| m-Xylene & p-Xylene                       | ND              | 0.020        | ug         | 0.0034        |
| o-Xylene                                  | ND              | 0.010        | ug         | 0.0017        |
| Xylenes (total)                           | ND              | 0.030        | ug         | 0.0048        |
| SURROGATE                                 | PERCENT         |              | RECOVERY   |               |
|                                           | RECOVERY        |              | LIMITS     |               |
| Dibromofluoromethane                      | 80              |              | (50 - 134) |               |
| 1,2-Dichloroethane-d4                     | 82              |              | (50 - 134) |               |
| Toluene-d8                                | 87              |              | (57 - 127) |               |
| Bromofluorobenzene                        | 76              |              | (50 - 125) |               |

**NOTE(S) :**

J Estimated result. Result is less than RL.

STL Knoxville - ACS

AUDIT VOST #4

GC/MS Volatiles

Lot-Sample #: H6D030169-042

Work Order #: H2KHW1AA

Matrix: AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug           |

Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d  
Report Date: 07-Apr-2006 19:15

## STL Knoxville

SW-846 Method 8260A - Volatile Organics

Data file : /chem/gcms/mx.i/X040706.b/h2khw1aa.d  
Lab Smp Id: H2KHW1AA Client Smp ID: AUDIT VOST #4  
Inj Date : 07-APR-2006 18:59  
Operator : 22980 Inst ID: mx.i  
Smp Info : H2KHW1AA,1,0,,, /  
Misc Info : X040706,8260B\_LM,focus.sub  
Comment :  
Method : /var/chem/gcms/mx.i/X040706.b/8260B\_LM.m  
Meth Date : 07-Apr-2006 11:23 gosss Quant Type: ISTD  
Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

| Compounds                  | QUANT SIG |        |        |         |          |           | CONCENTRATIONS       |  |
|----------------------------|-----------|--------|--------|---------|----------|-----------|----------------------|--|
|                            | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL                |  |
|                            | =====     | ==     | =====  | =====   | =====    | ( ug/L)   | ( ug)                |  |
| * 1 Fluorobenzene          | 96        | 4.851  | 4.851  | (1.000) | 1032703  | 10.0000   |                      |  |
| * 2 Chlorobenzene-d5       | 119       | 7.582  | 7.582  | (1.000) | 199092   | 10.0000   |                      |  |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.746 | 10.746 | (1.000) | 210278   | 10.0000   |                      |  |
| \$ 4 Dibromofluoromethane  | 113       | 4.273  | 4.273  | (0.881) | 140996   | 8.03030   | 0.20076              |  |
| \$ 5 1,2-Dichloroethane-d4 | 65        | 4.553  | 4.553  | (0.939) | 112809   | 8.24252   | 0.20606              |  |
| \$ 6 Toluene-d8            | 98        | 6.250  | 6.250  | (0.824) | 847527   | 8.69471   | 0.21737              |  |
| \$ 7 4-Bromofluorobenzene  | 95        | 8.872  | 8.872  | (0.826) | 188789   | 7.57219   | 0.18930              |  |
| 11 Chloromethane (spcc)    | 50        | 1.250  | 1.262  | (0.258) | 2401     | 0.04992   | 0.0012480            |  |
| 21 Acetone                 | 43        | 2.375  | 2.381  | (0.490) | 15424    | 10.5454   | 0.26363              |  |
| 23 Carbon Disulfide        | 76        | 2.503  | 2.497  | (0.516) | 48913    | 0.62148   | 0.015537             |  |
| 26 Methylene Chloride      | 84        | 2.746  | 2.746  | (0.566) | 47646    | 2.98418   | 0.074604             |  |
| 33 *Vinyl Acetate          | 86        | 3.257  | 3.421  | (0.671) | 1517     | 1.29197   | <del>0.032239</del>  |  |
| 36 2-Butanone              | 43        | 3.872  | 3.871  | (0.798) | 6190     | 2.71316   | 0.067829             |  |
| 38 *THF                    | 42        | 4.109  | 4.109  | (0.847) | 1626     | 1.16307   | 0.029077             |  |
| 39 Chloroform (ccc)        | 83        | 4.139  | 4.139  | (0.853) | 113078   | 2.88094   | 0.072023             |  |
| 41 Carbon Tetrachloride    | 117       | 4.437  | 4.437  | (0.915) | 68603    | 1.85058   | 0.046264             |  |
| 42 1,1-Dichloropropene     | 75        | 4.614  | 4.437  | (0.951) | 4029     | 0.09856   | <del>0.0024641</del> |  |
| 43 Benzene                 | 78        | 4.608  | 4.607  | (0.950) | 243383   | 2.32706   | 0.058177             |  |
| 44 1,2-Dichloroethane      | 62        | 4.614  | 4.620  | (0.951) | 2212     | 0.12573   | <del>0.0031433</del> |  |
| 52 4-Methyl-2-pentanone    | 43        | 6.250  | 6.147  | (1.288) | 6551     | 1.19896   | <del>0.029974</del>  |  |

✓  
07/06

4/19/06

Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d  
Report Date: 07-Apr-2006 19:15

| Compounds                    | QUANT SIG |       |        |         |          |  | CONCENTRATIONS       |                      |
|------------------------------|-----------|-------|--------|---------|----------|--|----------------------|----------------------|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE |  | ON-COLUMN<br>( ug/L) | FINAL<br>( ug)       |
| =====                        | ====      | ==    | =====  | =====   | =====    |  | =====                | =====                |
| 53 Toluene (ccc)             | 91        | 6.311 | 6.311  | (0.832) | 15174    |  | 0.13012              | 0.0032530            |
| 54 trans-1,3-Dichloropropene | 75        | 6.719 | 6.506  | (0.886) | 1884     |  | 0.09218              | <del>0.0023045</del> |
| 56 1,1,2-Trichloroethane     | 97        | 6.810 | 6.670  | (0.898) | 1327     |  | 0.14412              | <del>0.0036030</del> |
| 57 Tetrachloroethene         | 164       | 6.816 | 6.816  | (0.899) | 160911   |  | 6.42166              | 0.16054              |
| 60 Chlorodibromomethane      | 129       | 6.816 | 7.035  | (0.899) | 145450   |  | 12.7435              | <del>0.31859</del>   |
| 62 Chlorobenzene (spcc)      | 112       | 7.607 | 7.607  | (1.003) | 3762     |  | 0.06284              | 0.0015710            |

4/19/06

Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d  
 Report Date: 07-Apr-2006 19:15

## STL Knoxville

 INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                       |                               |
|-------------------------------------------------------|-------------------------------|
| Instrument ID: mx.i                                   | Calibration Date: 07-APR-2006 |
| Lab File ID: h2khw1aa.d                               | Calibration Time: 09:16       |
| Lab Smp Id: H2KHW1AA                                  | Client Smp ID: AUDIT VOST #4  |
| Analysis Type: VOA                                    | Level: LOW                    |
| Quant Type: ISTD                                      | Sample Type: AIR              |
| Operator: 22980                                       |                               |
| Method File: /var/chem/gcms/mx.i/X040706.b/8260B_LM.m |                               |
| Misc Info: X040706,8260B_LM,focus.sub                 |                               |

| COMPOUND<br>=====   | STANDARD<br>===== | AREA LIMIT     |                | SAMPLE<br>===== | %DIFF<br>===== |
|---------------------|-------------------|----------------|----------------|-----------------|----------------|
|                     |                   | LOWER<br>===== | UPPER<br>===== |                 |                |
| 1 Fluorobenzene     | 1149191           | 574596         | 2298382        | 1032703         | -10.14         |
| 2 Chlorobenzene-d5  | 214194            | 107097         | 428388         | 199092          | -7.05          |
| 3 1,4 Dichlorobenze | 242601            | 121300         | 485202         | 210278          | -13.32         |

| COMPOUND<br>=====   | STANDARD<br>===== | RT LIMIT       |                | SAMPLE<br>===== | %DIFF<br>===== |
|---------------------|-------------------|----------------|----------------|-----------------|----------------|
|                     |                   | LOWER<br>===== | UPPER<br>===== |                 |                |
| 1 Fluorobenzene     | 4.85              | 4.35           | 5.35           | 4.85            | 0.00           |
| 2 Chlorobenzene-d5  | 7.58              | 7.08           | 8.08           | 7.58            | 0.00           |
| 3 1,4 Dichlorobenze | 10.75             | 10.25          | 11.25          | 10.75           | 0.00           |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d  
Report Date: 07-Apr-2006 19:15

## STL Knoxville

## RECOVERY REPORT

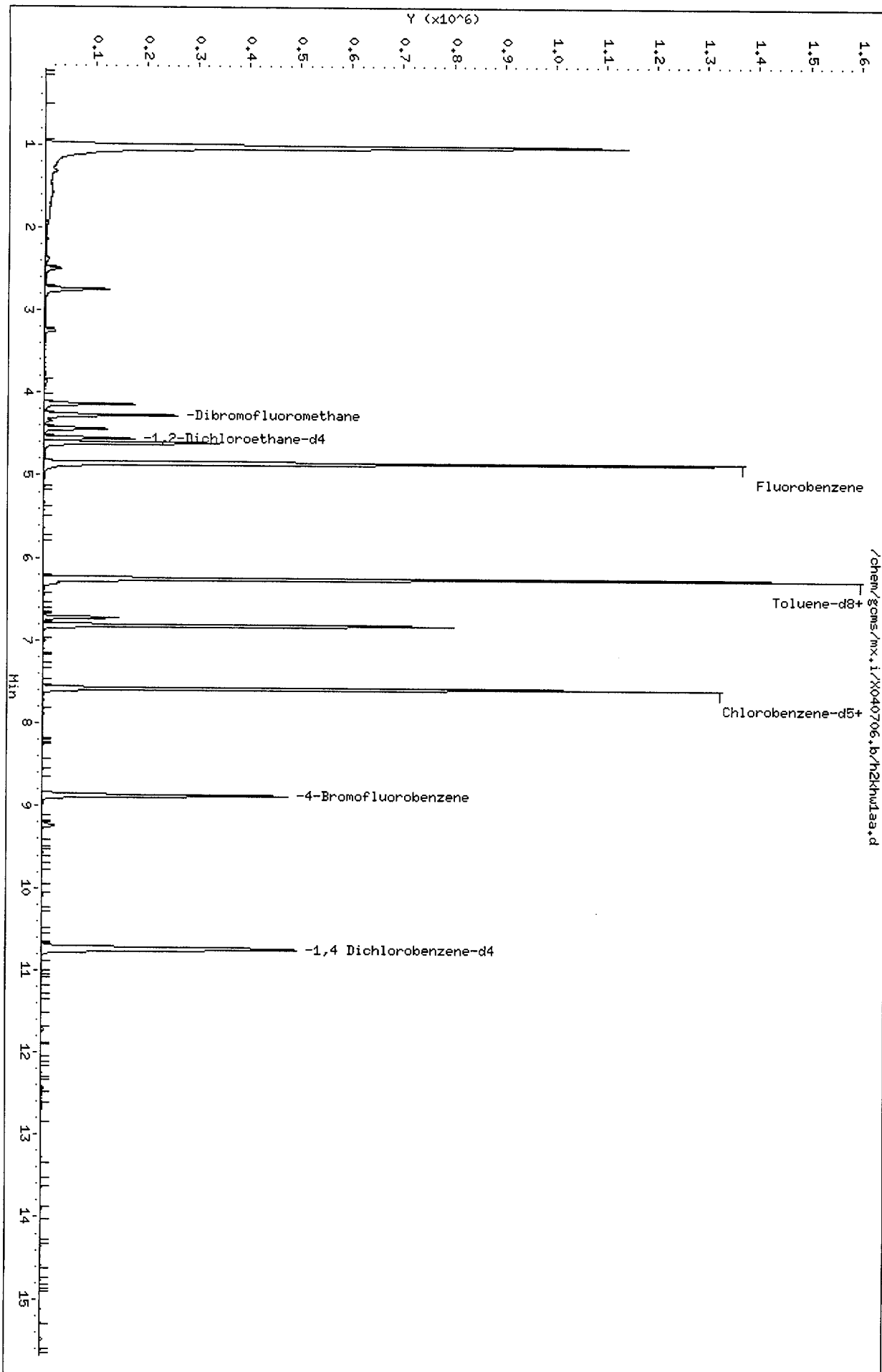
Client Name: STL Knoxville - ACS      Client SDG: H6D030169  
Sample Matrix: GAS      Fraction: VOA  
Lab Smp Id: H2KHW1AA      Client Smp ID: AUDIT VOST #4  
Level: LOW      Operator: 22980  
Data Type: MS DATA      SampleType: SAMPLE  
SpikeList File: allcmpds.spk      Quant Type: ISTD  
Sublist File: focus.sub  
Method File: /var/chem/gcms/mx.i/X040706.b/8260B\_LM.m  
Misc Info: X040706,8260B\_LM,focus.sub

| SURROGATE COMPOUND      | CONC<br>ADDED<br>ug | CONC<br>RECOVERED<br>ug | %<br>RECOVERED | LIMITS |
|-------------------------|---------------------|-------------------------|----------------|--------|
| \$ 4 Dibromofluorometha | 0.25000             | 0.20076                 | 80.30          | 50-150 |
| \$ 5 1,2-Dichloroethane | 0.25000             | 0.20606                 | 82.43          | 50-150 |
| \$ 6 Toluene-d8         | 0.25000             | 0.21737                 | 86.95          | 50-150 |
| \$ 7 4-Bromofluorobenze | 0.25000             | 0.18930                 | 75.72          | 50-150 |

Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d  
Date : 07-APR-2006 18:59  
Client ID: AUDIT VOST #4  
Sample Info: H2KHW1AA,1,0,,,

Column phase: J+W 624

Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18



Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

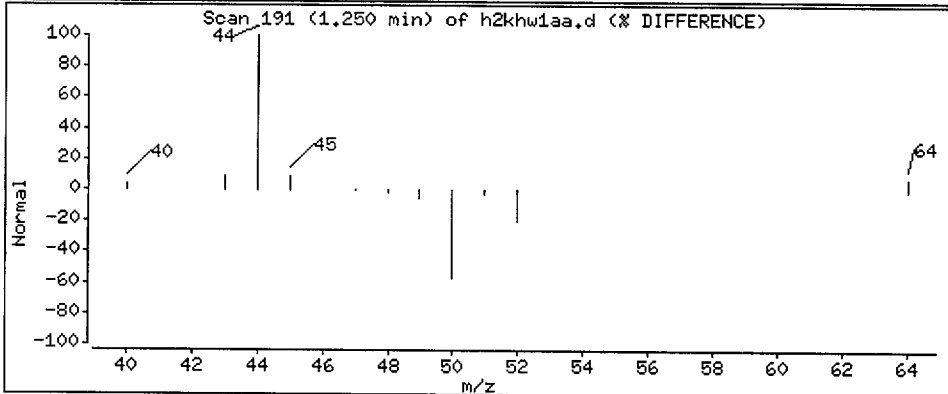
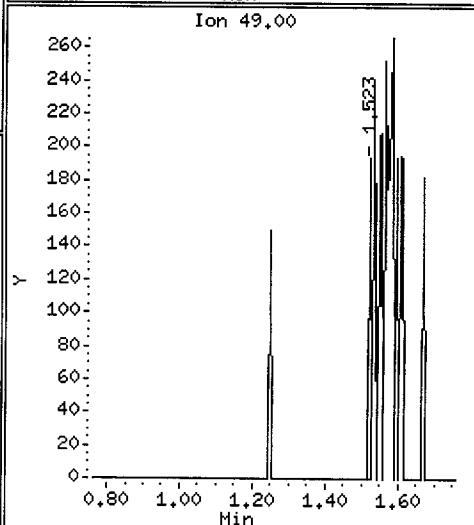
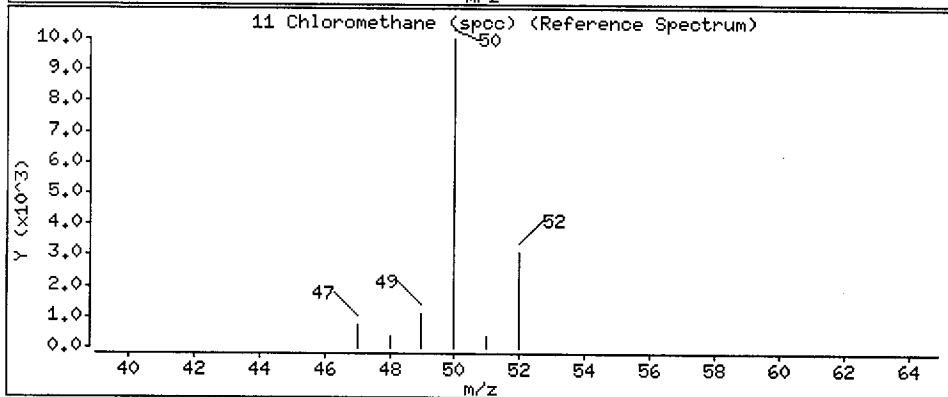
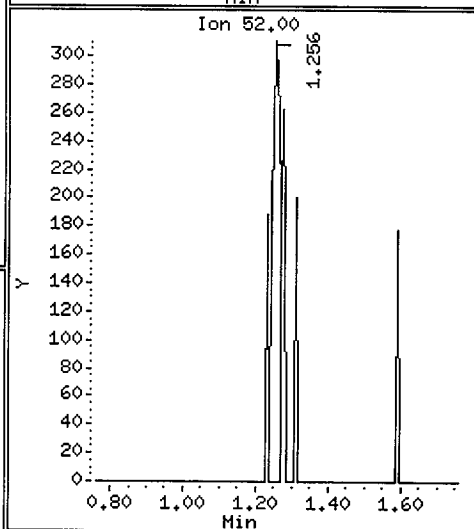
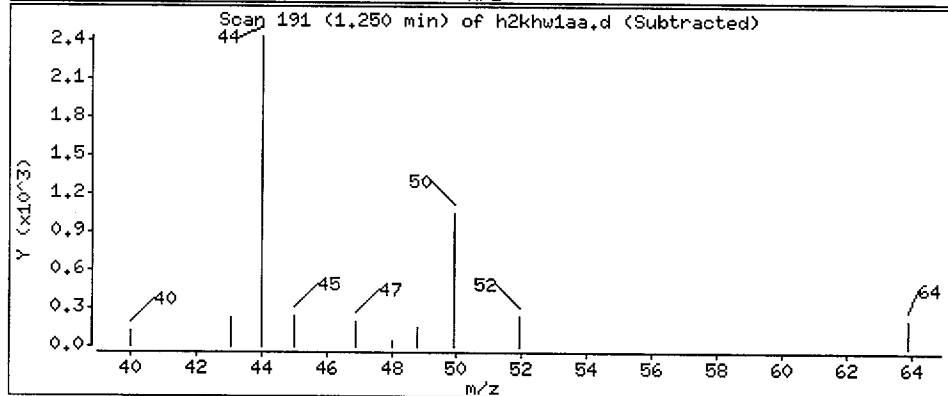
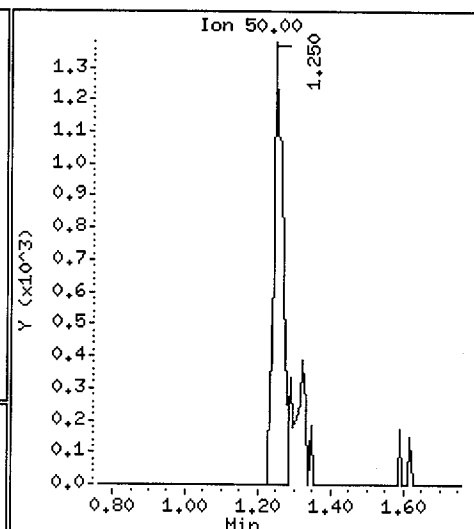
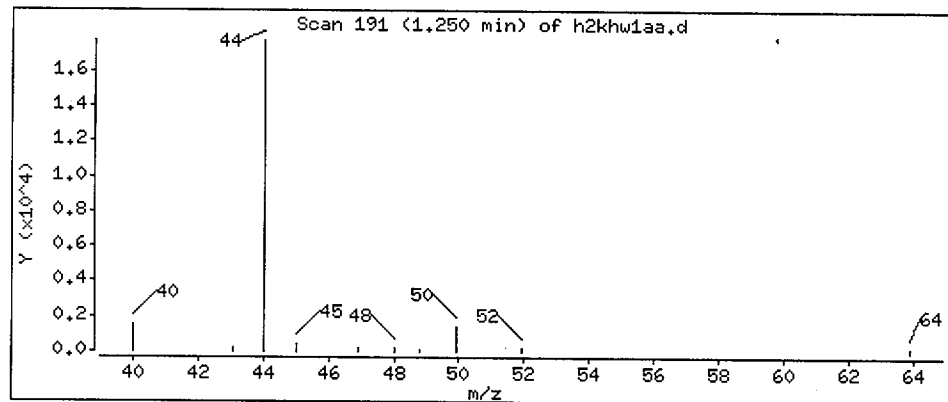
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

11 Chloromethane (spoc)

Concentration: 0.0012480 ug





Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

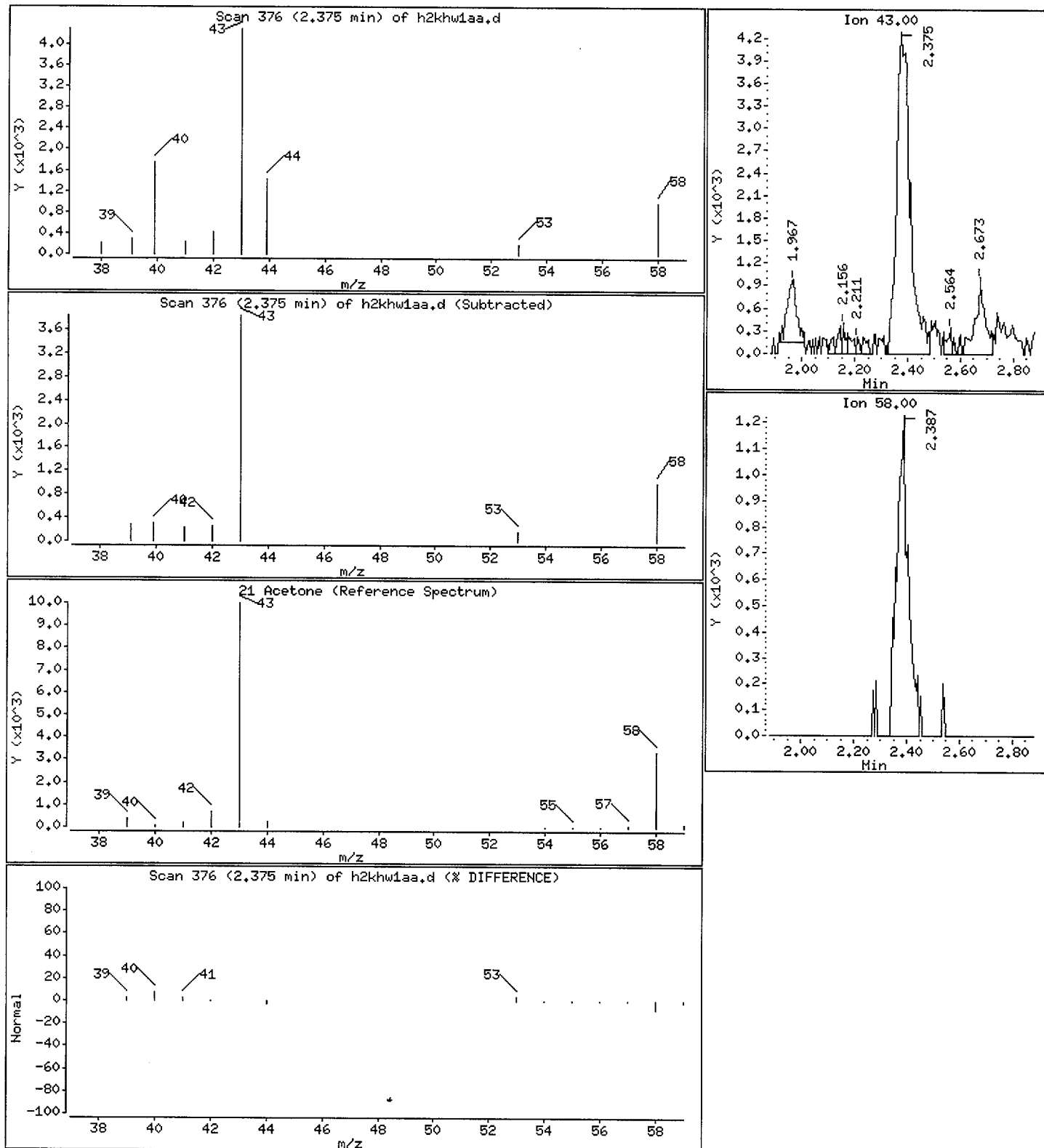
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

21 Acetone

Concentration: 0.26363 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

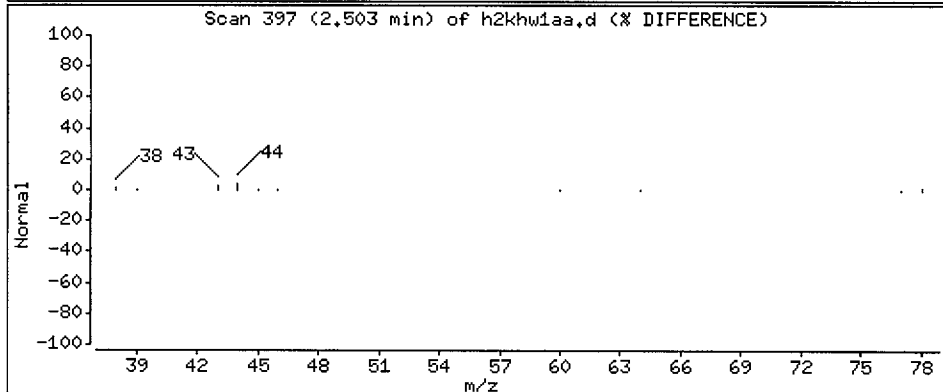
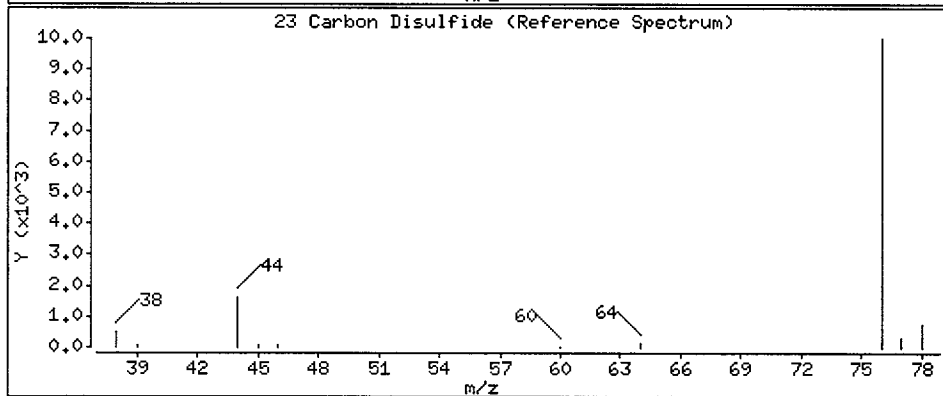
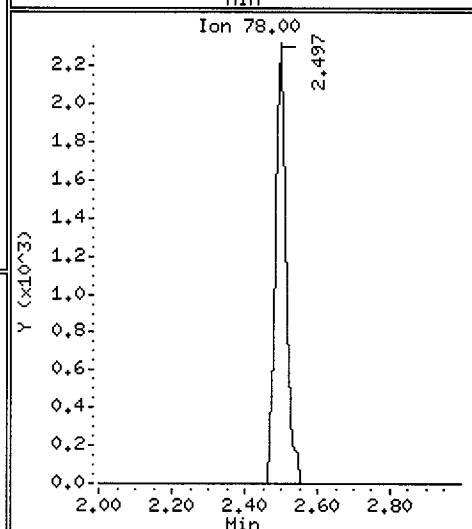
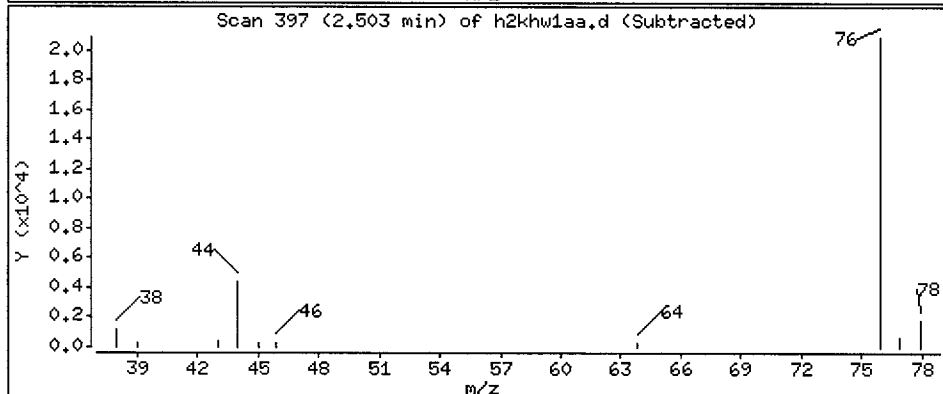
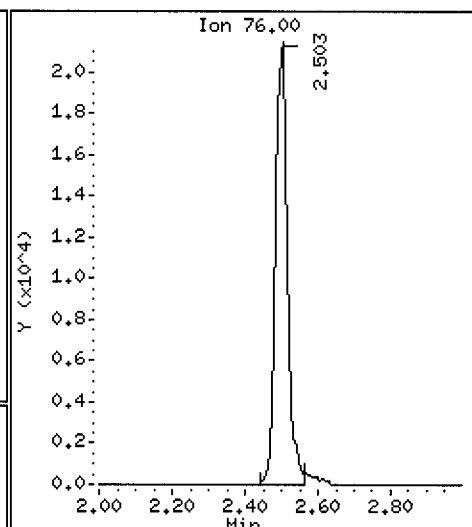
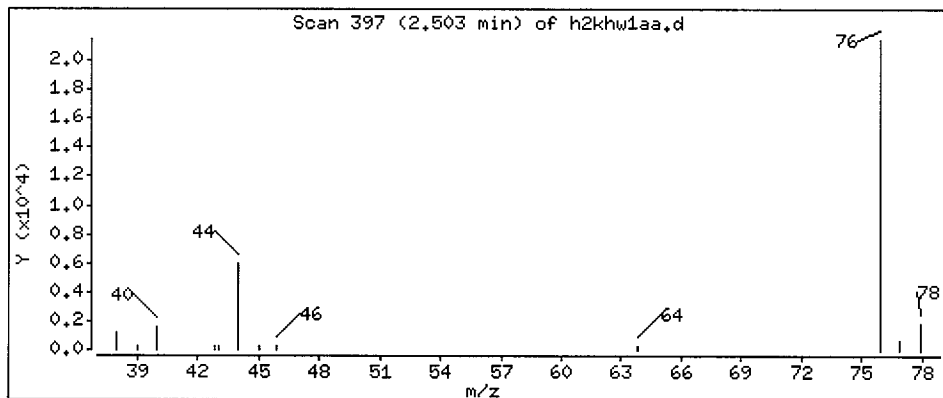
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

23 Carbon Disulfide

Concentration: 0.015537 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

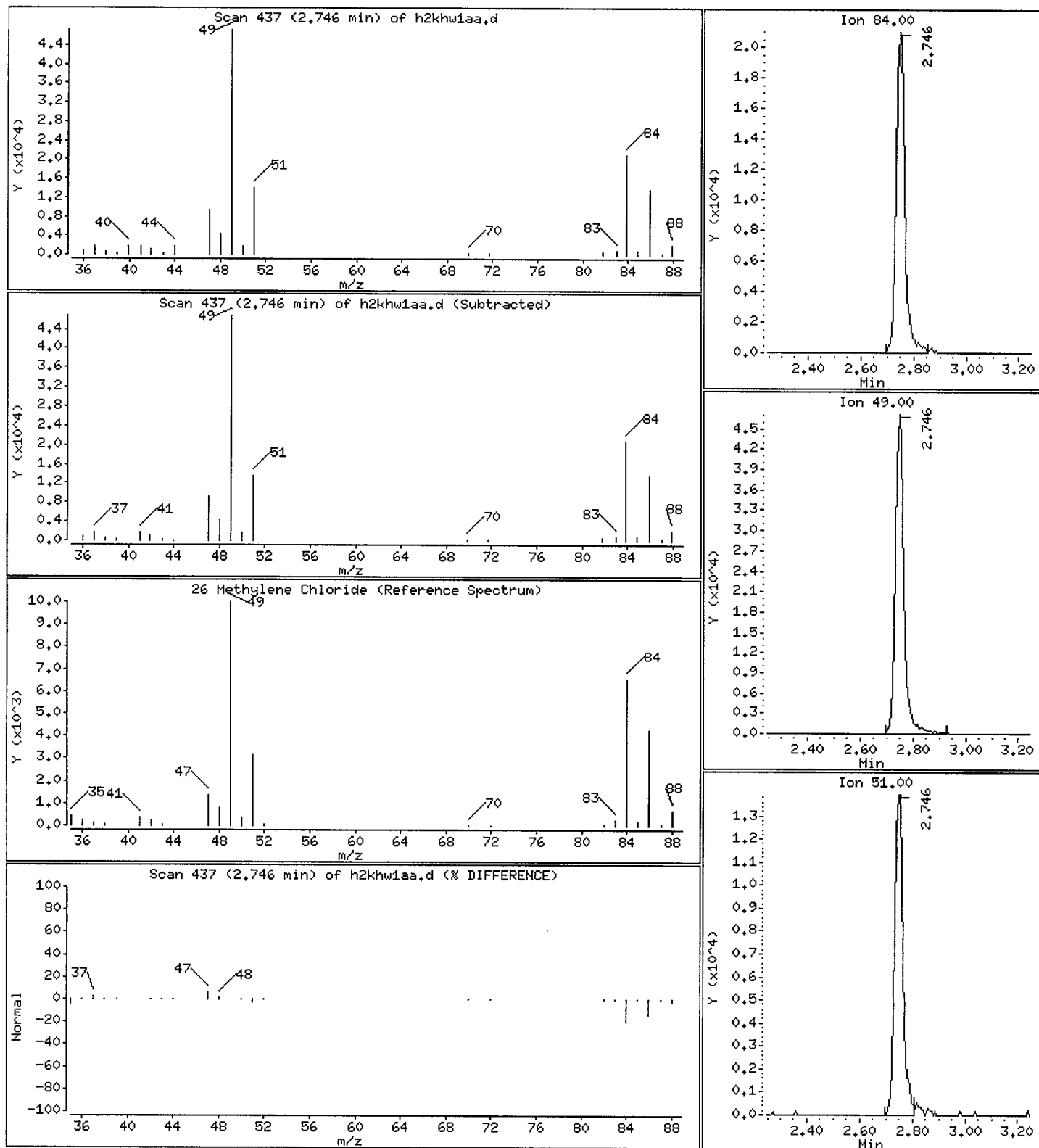
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

26 Methylene Chloride

Concentration: 0.074604 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

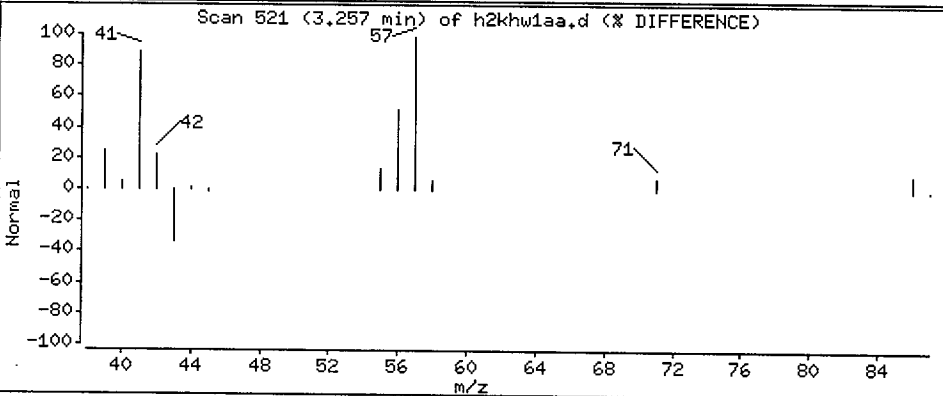
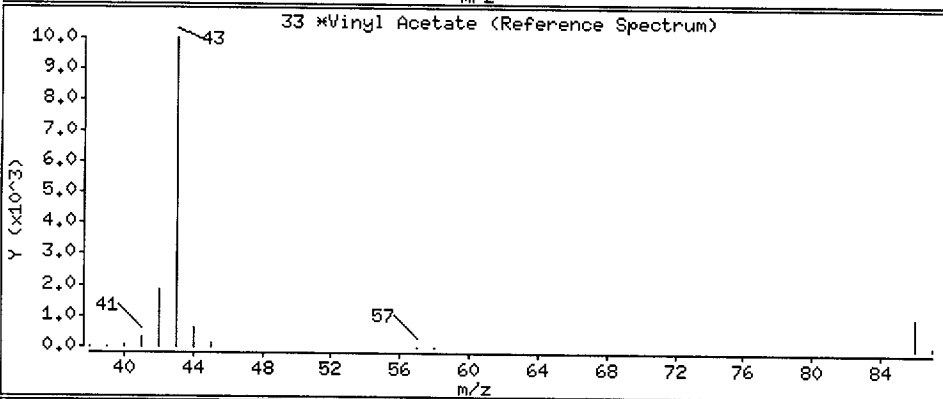
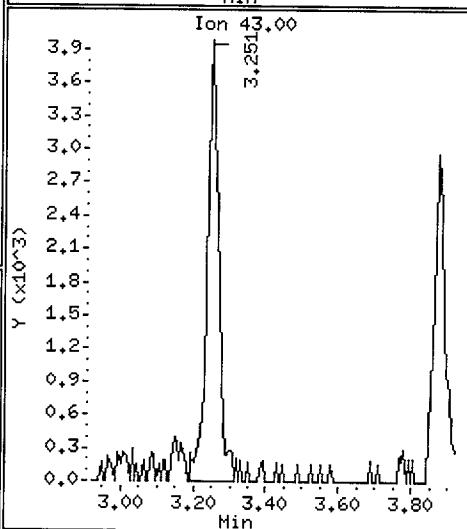
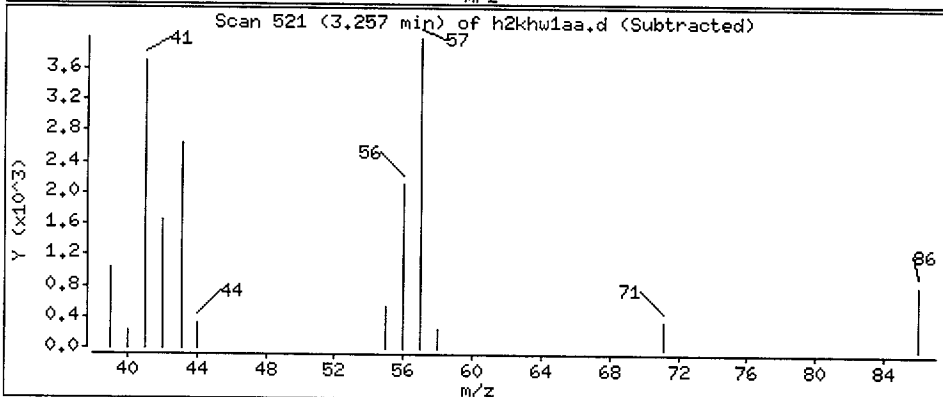
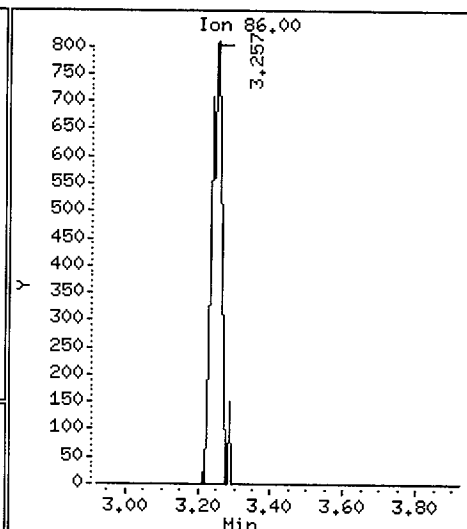
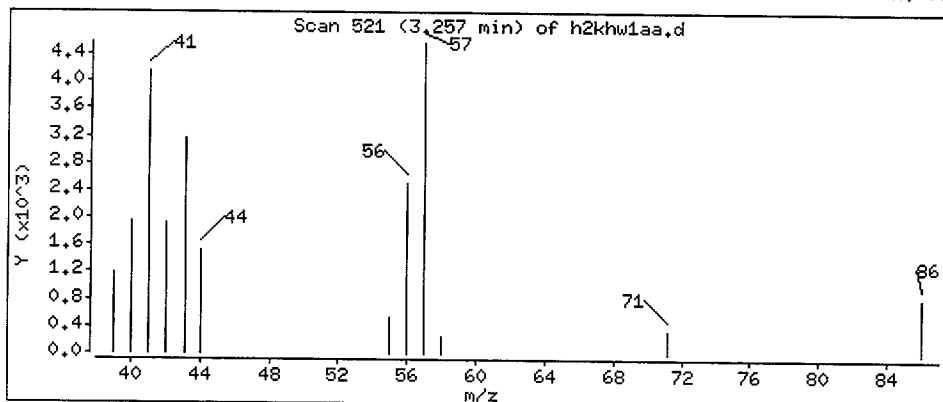
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

33 \*Vinyl Acetate

Concentration: 0.032299 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

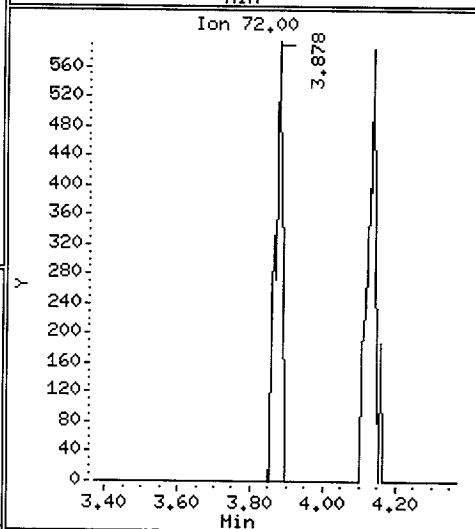
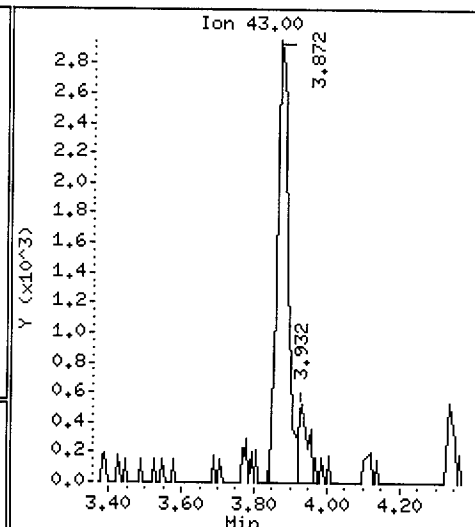
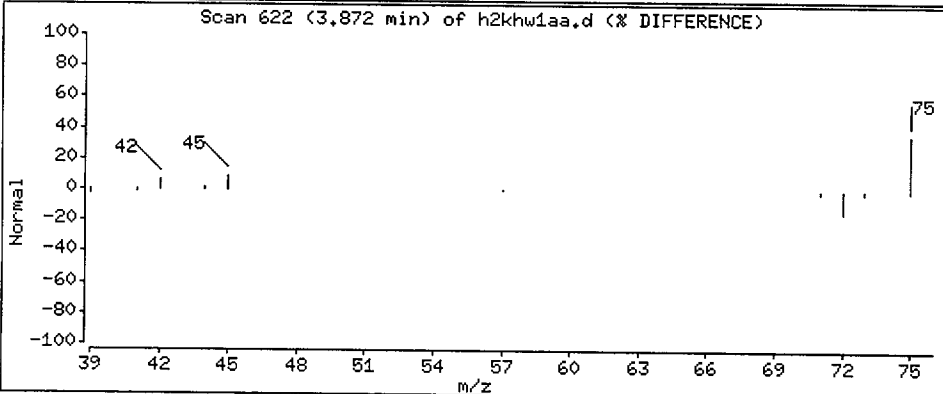
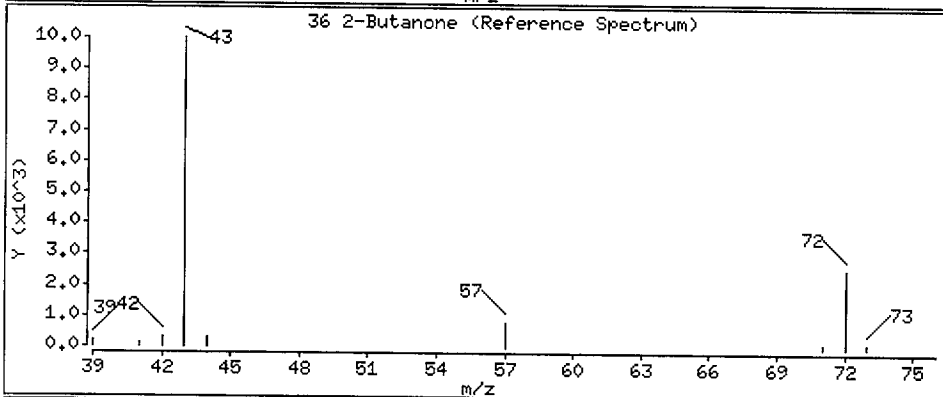
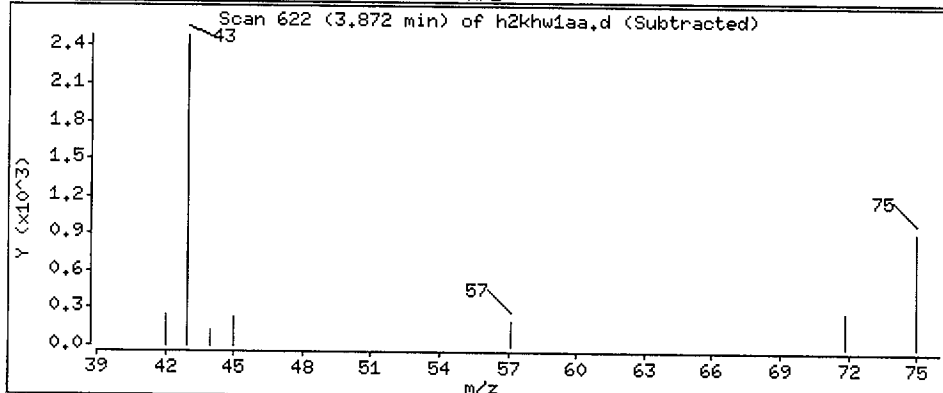
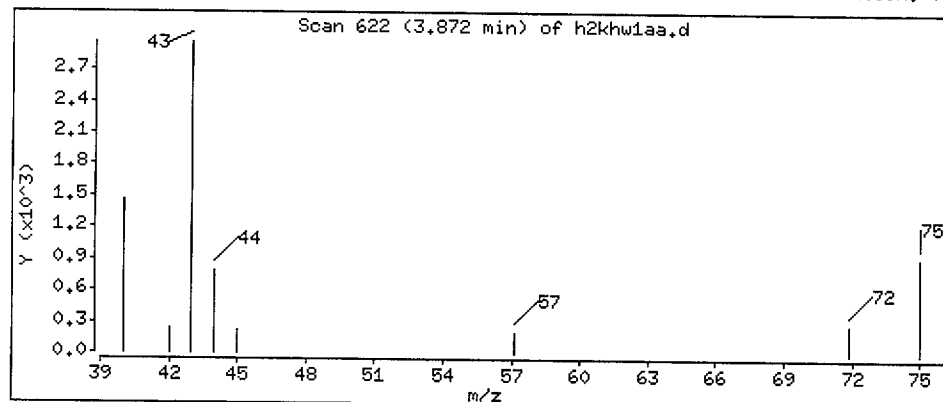
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

36 2-Butanone

Concentration: 0.067829 ug



Data File: /chem/gcms/mx.i/X040706,b/h2khw1aa,d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

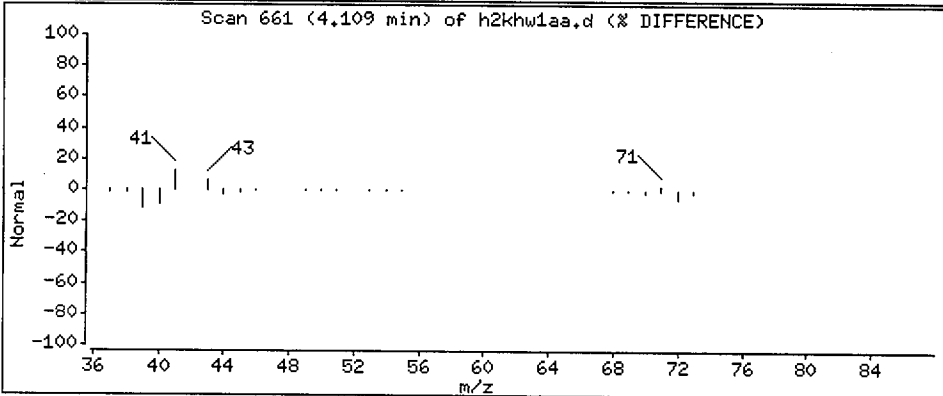
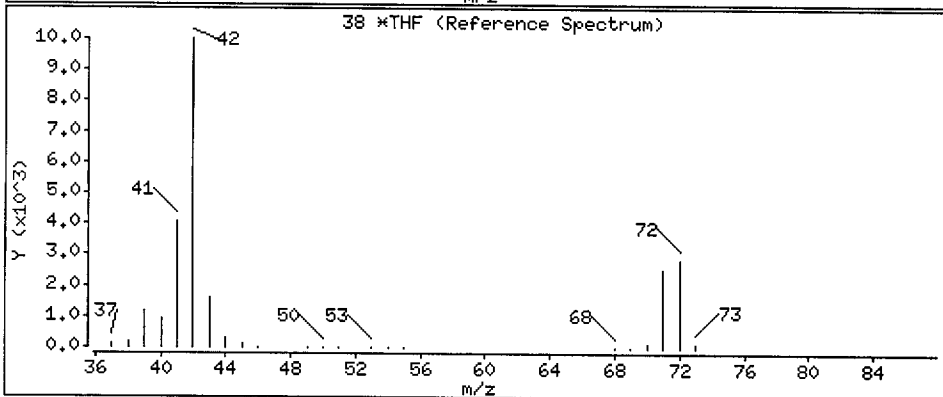
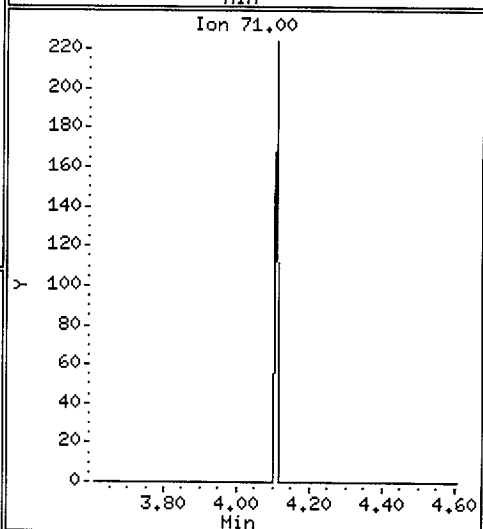
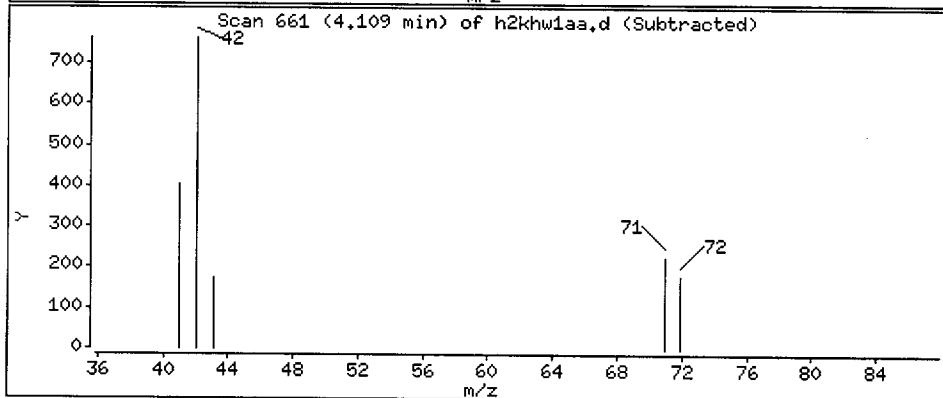
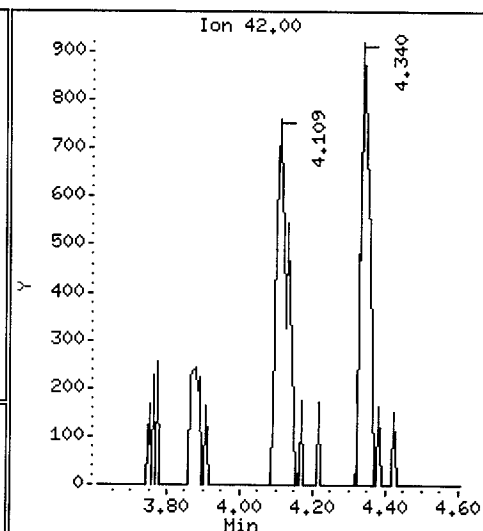
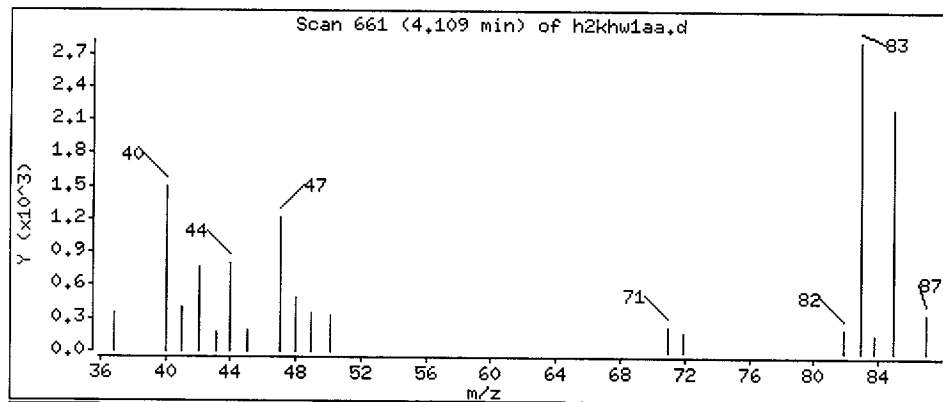
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

38 \*THF

Concentration: 0.029077 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

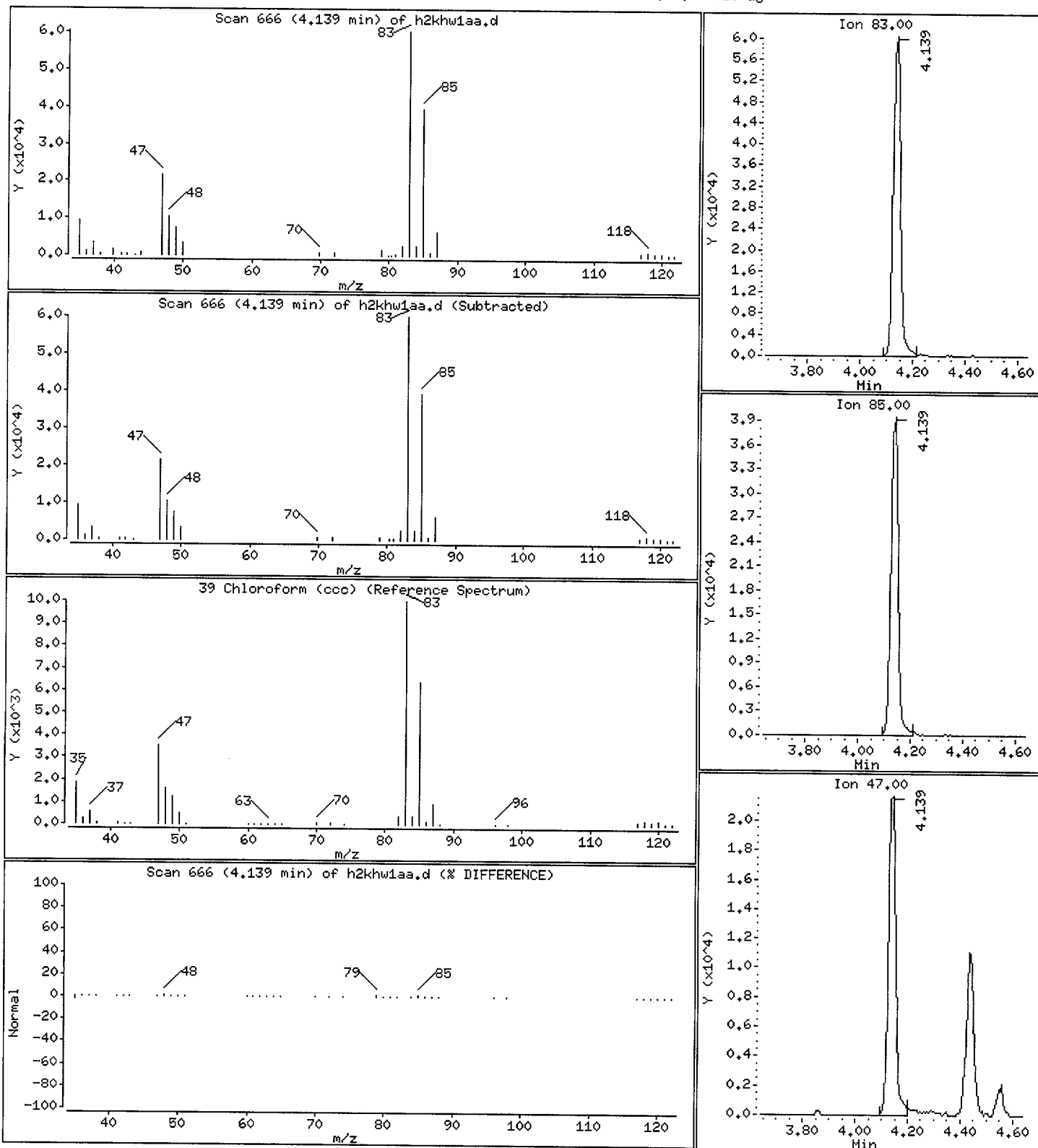
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

39 Chloroform (ccc)

Concentration: 0.072023 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

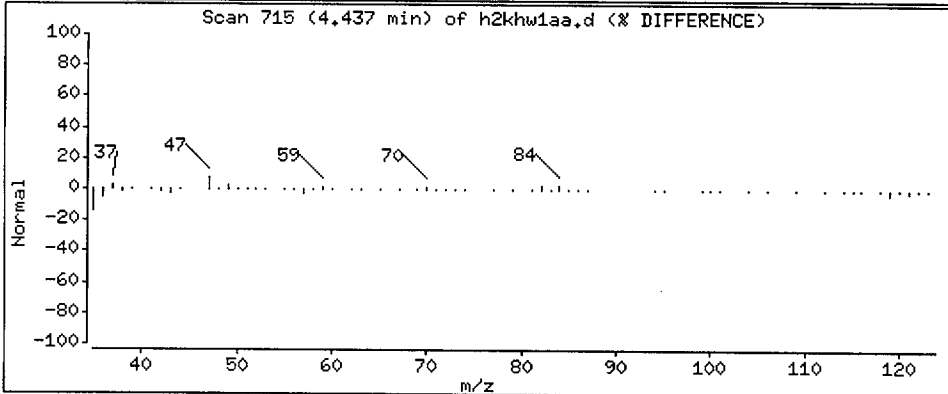
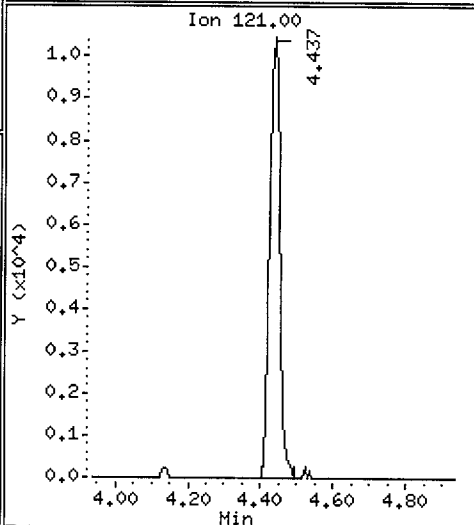
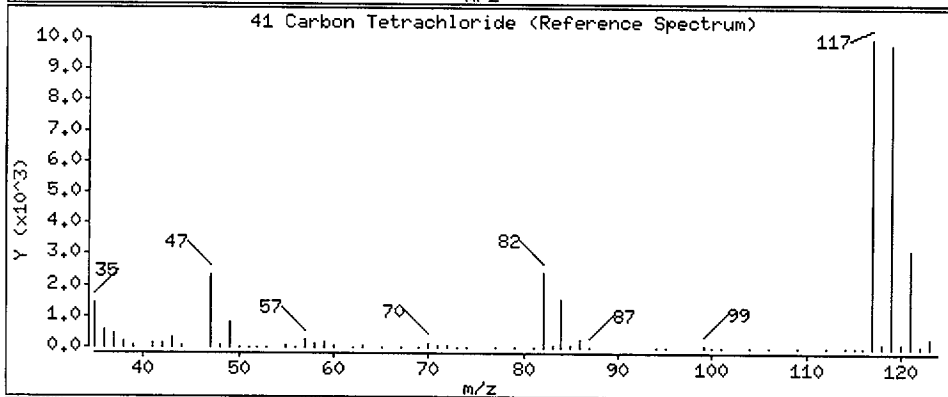
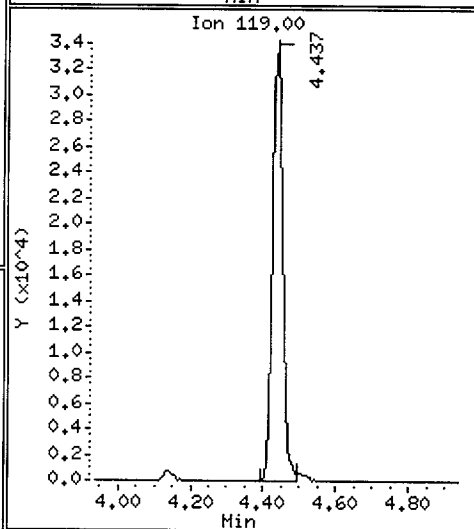
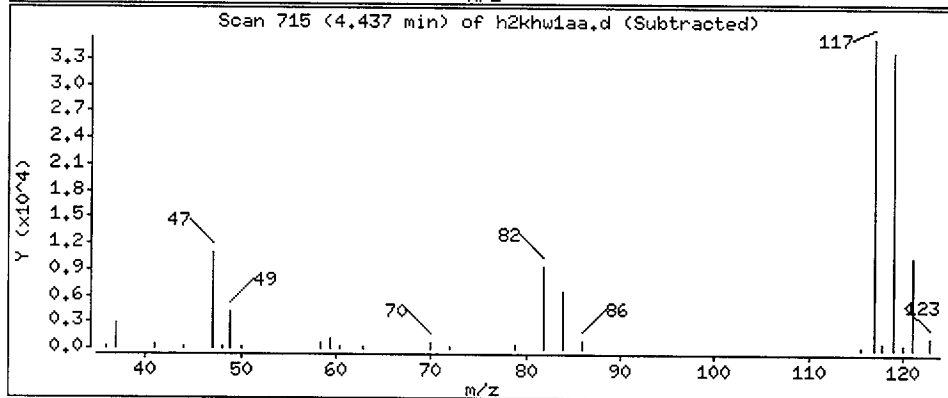
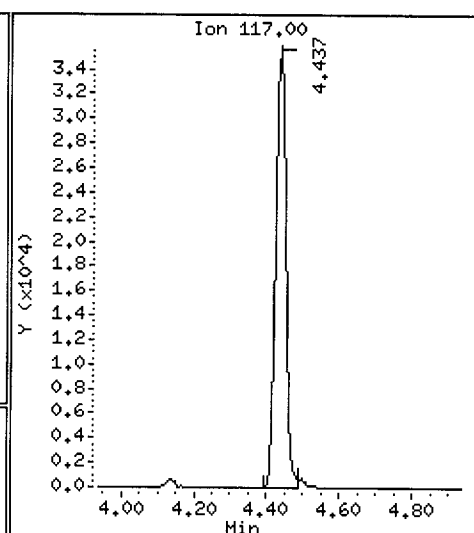
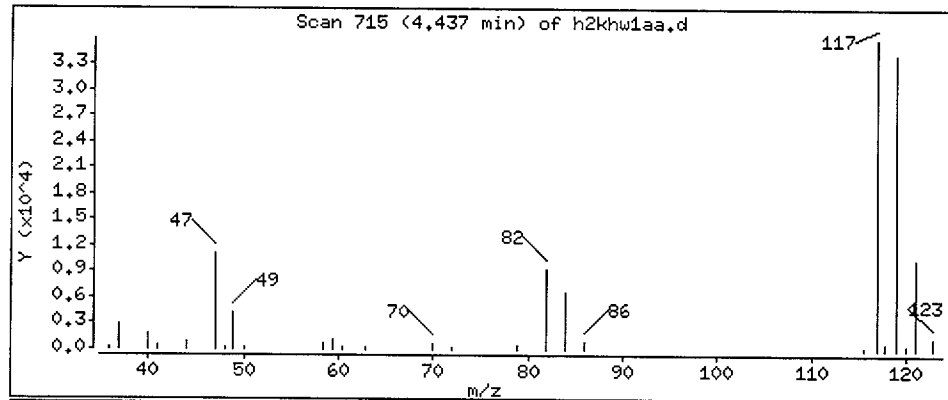
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

41 Carbon Tetrachloride

Concentration: 0.046264 ug





Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

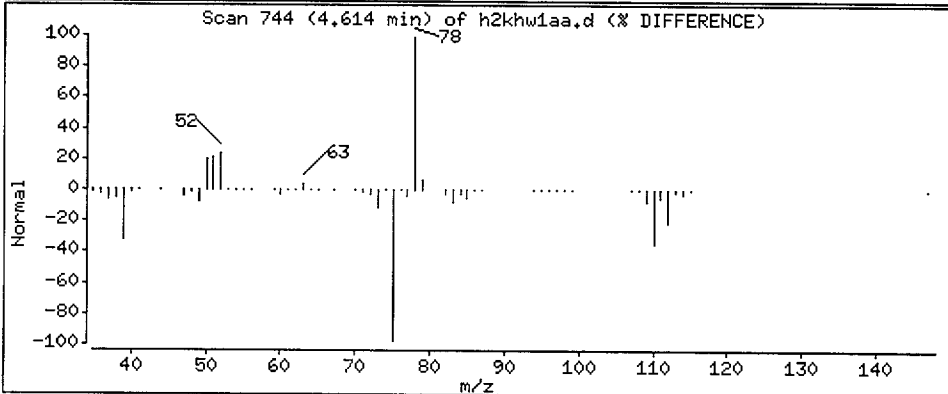
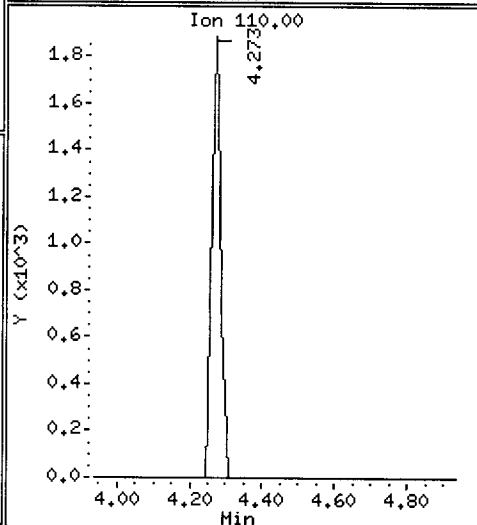
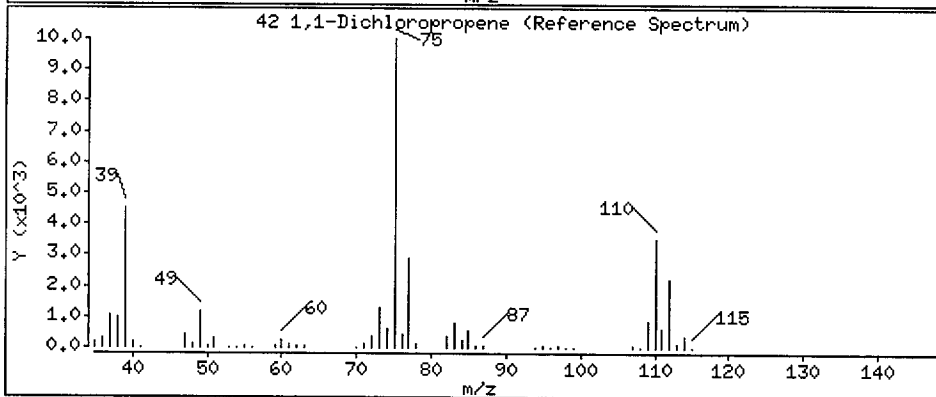
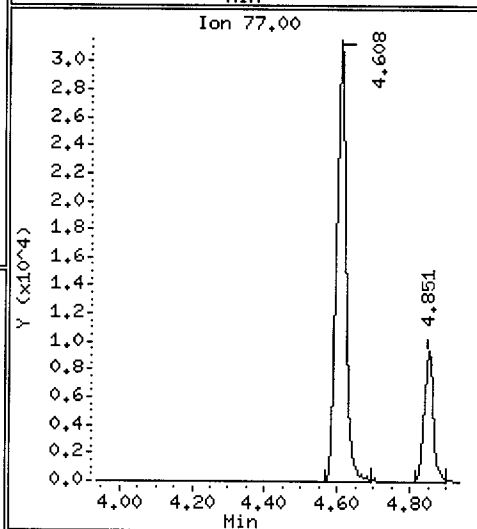
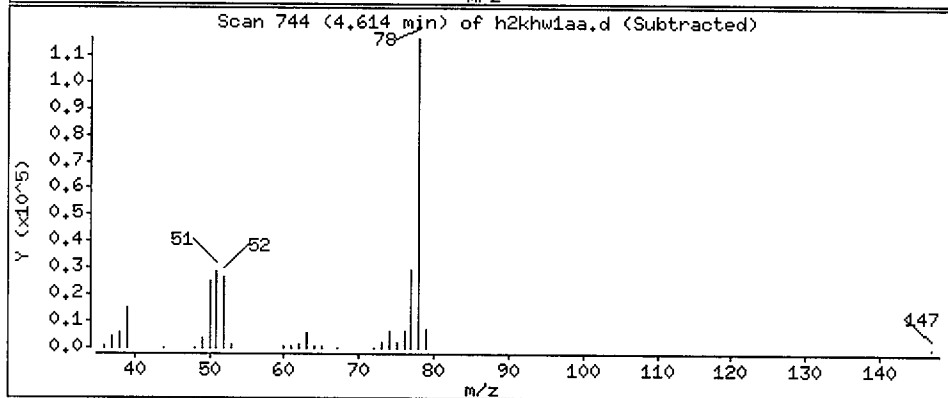
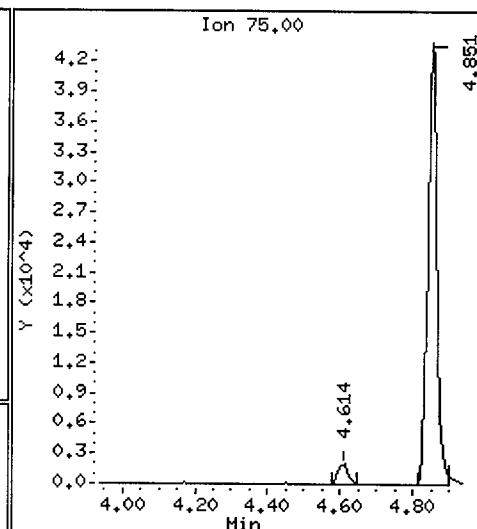
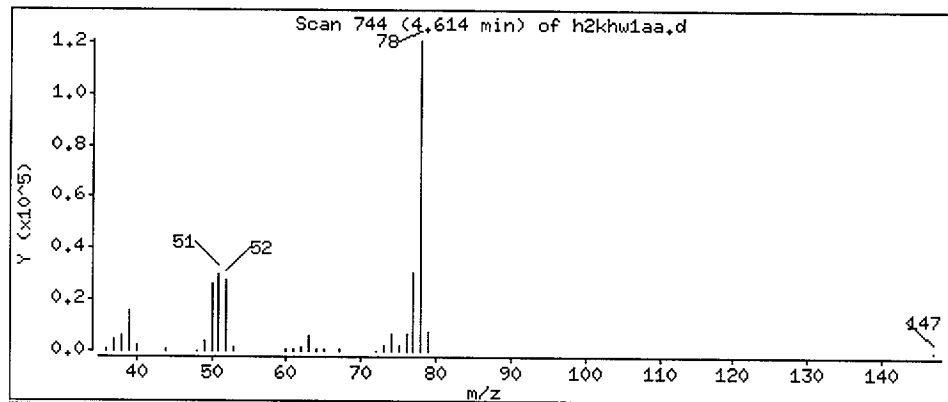
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

42 1,1-Dichloropropene

Concentration: 0.0024641 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

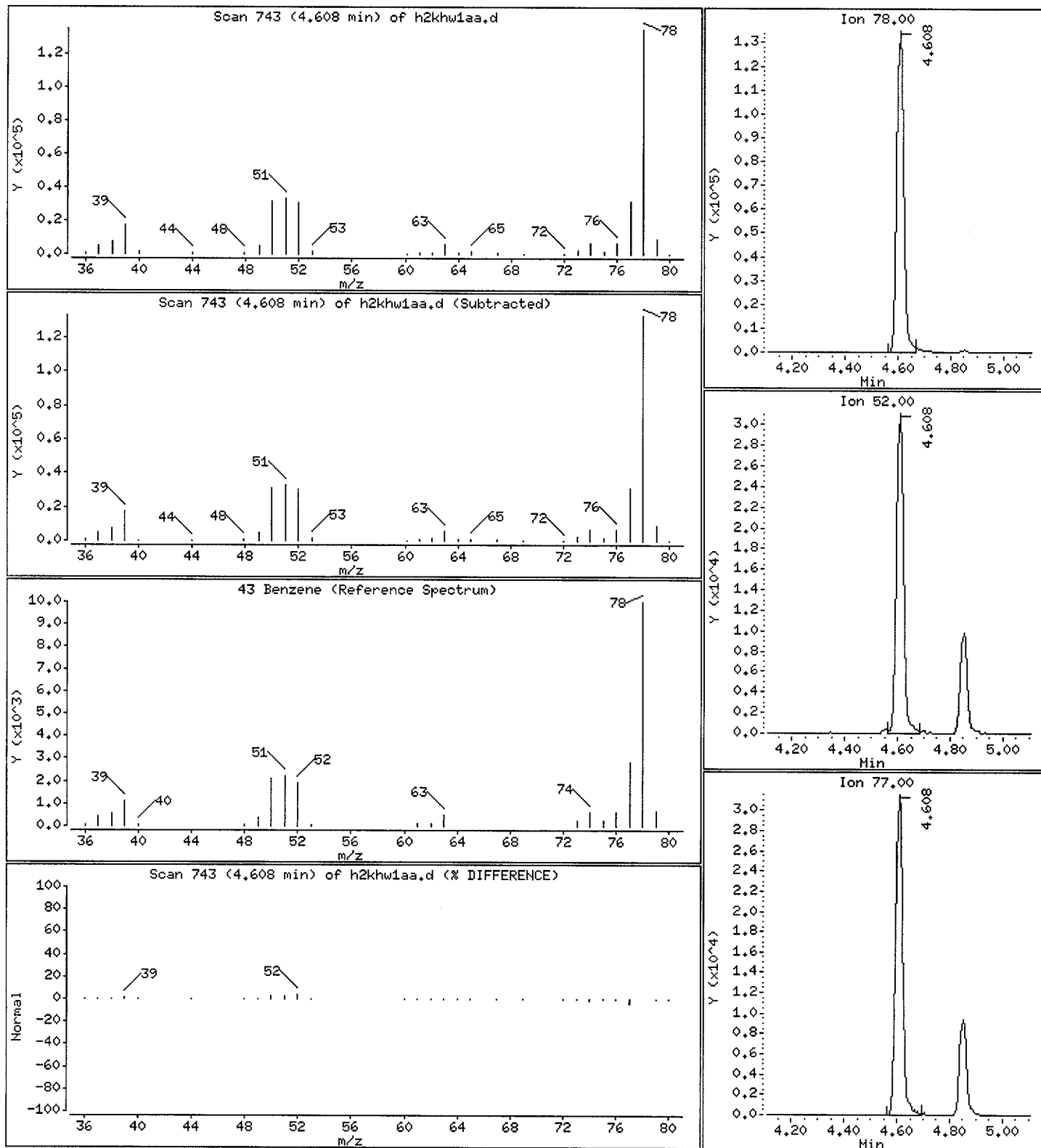
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

43 Benzene

Concentration: 0.058177 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

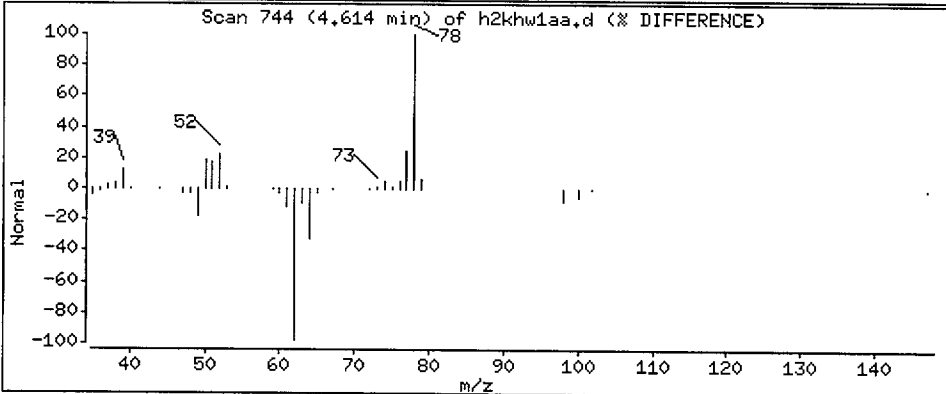
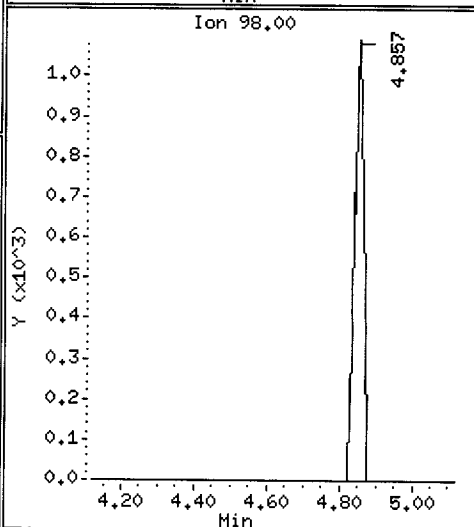
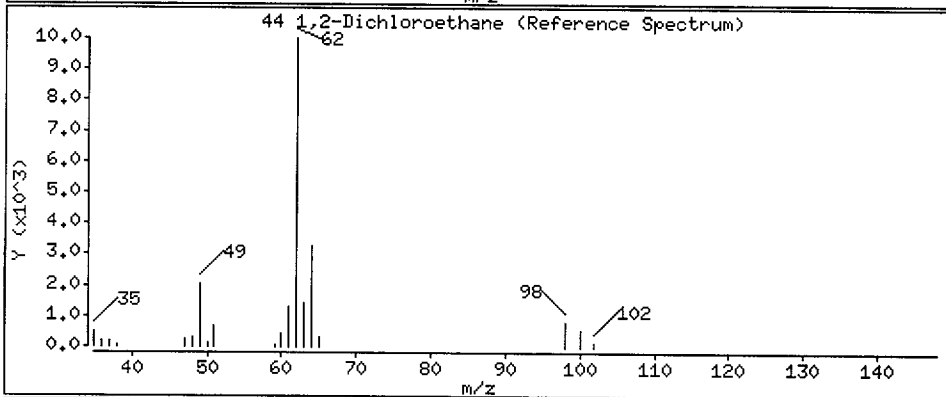
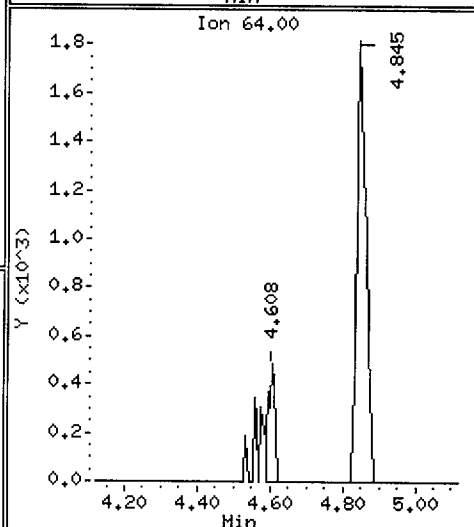
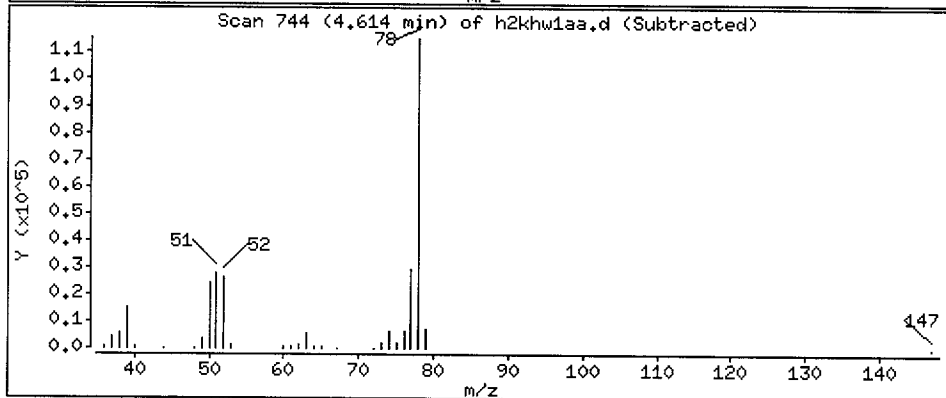
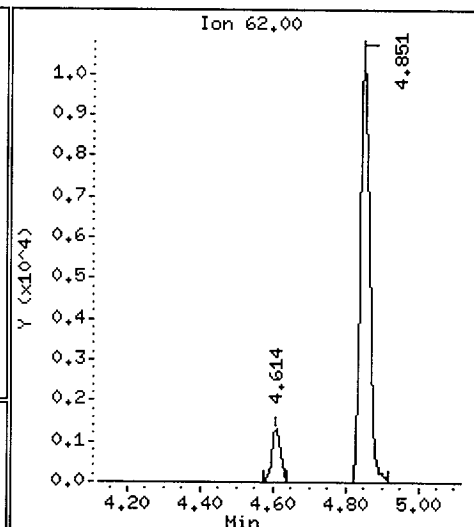
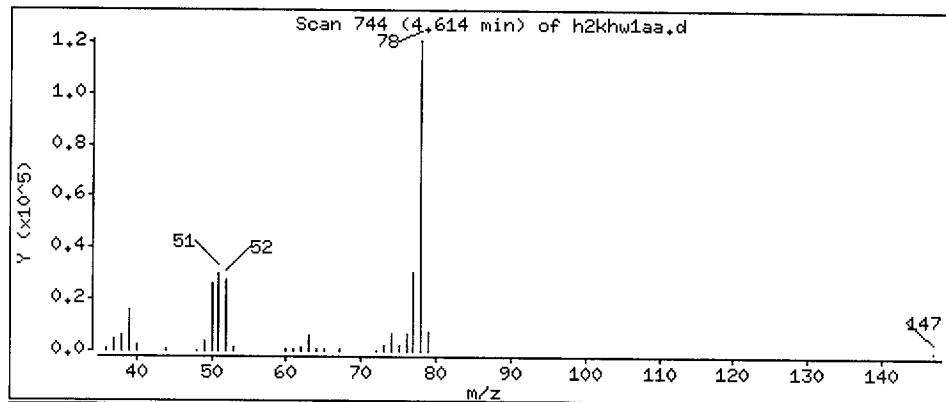
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

44 1,2-Dichloroethane

Concentration: 0.0031433 ug



Data File: /chem/gcms/mx,i/X040706,b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

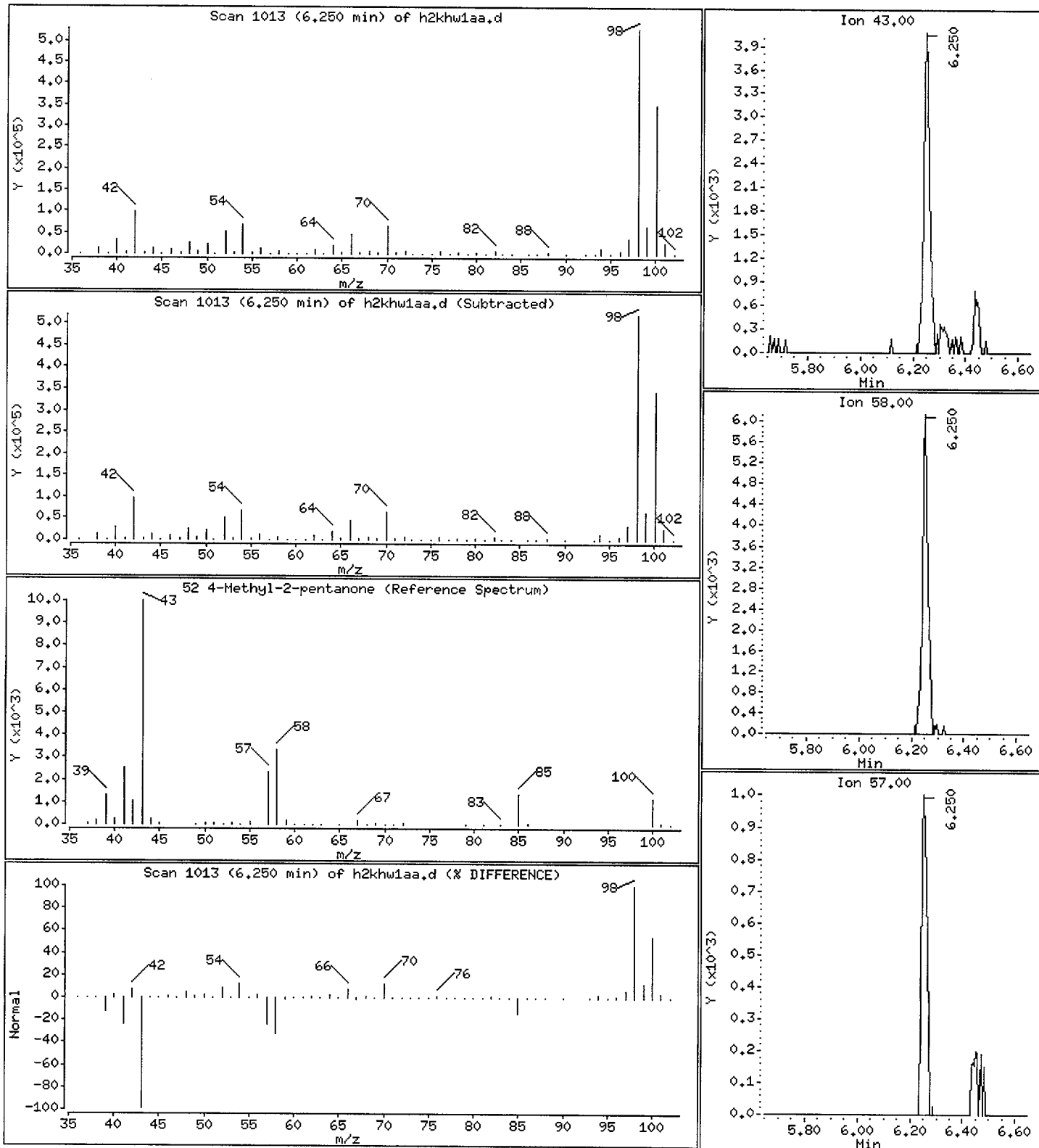
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

52 4-Methyl-2-pentanone

Concentration: 0.029974 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

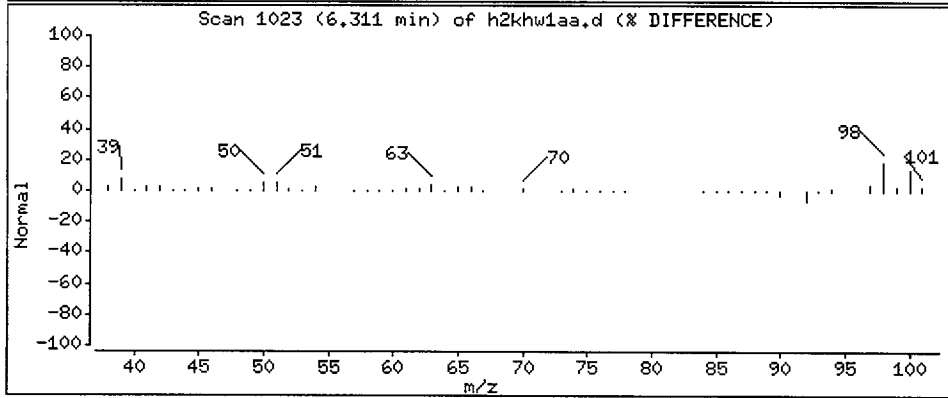
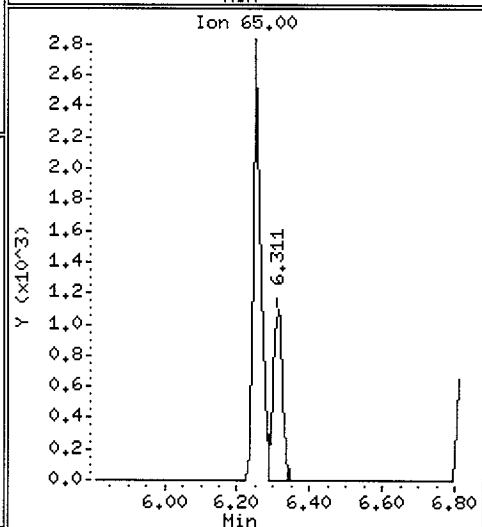
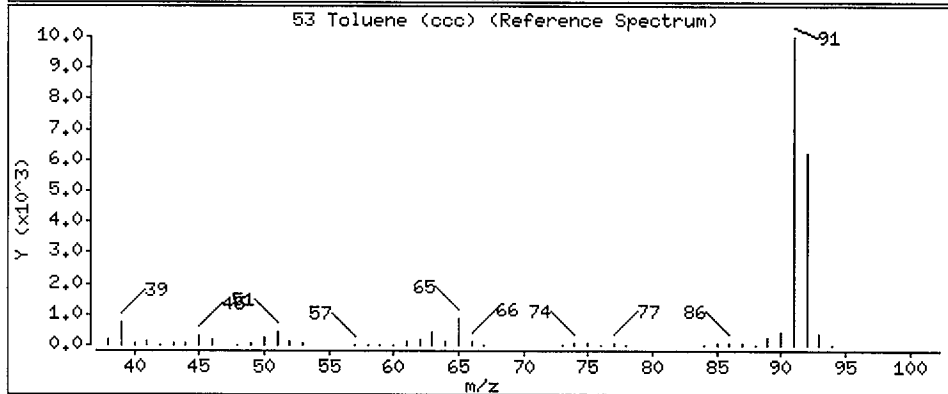
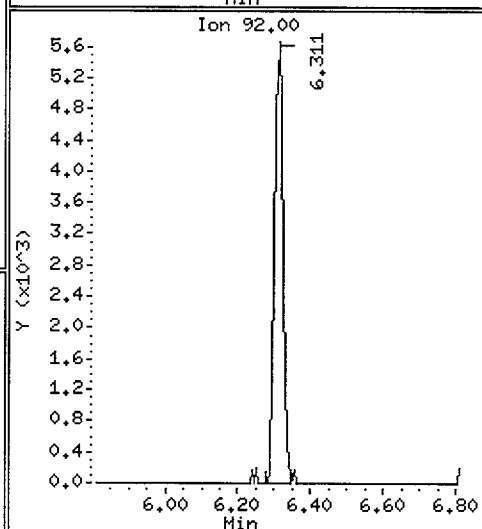
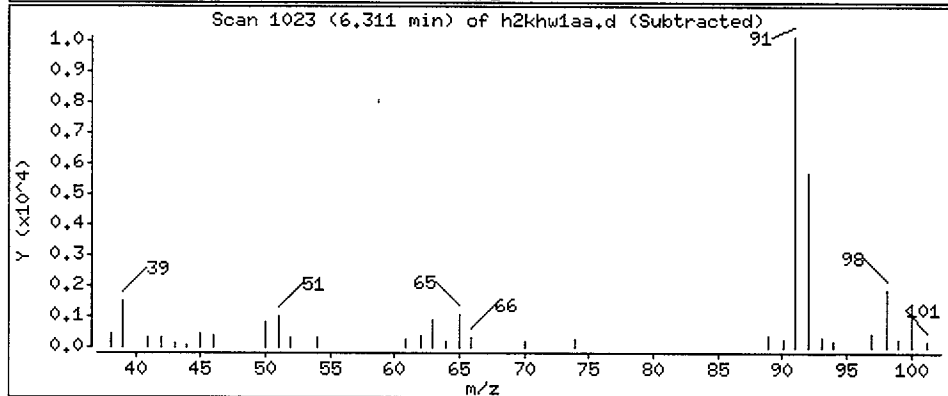
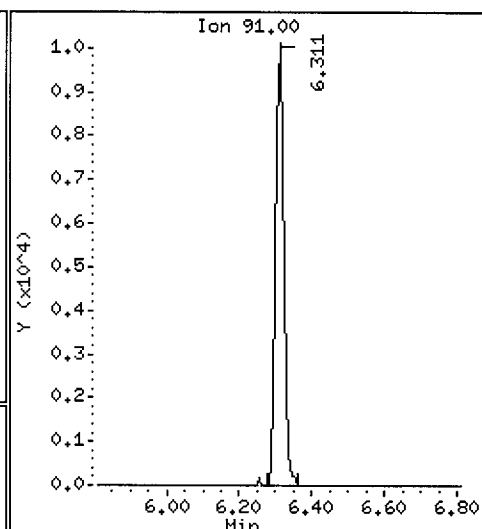
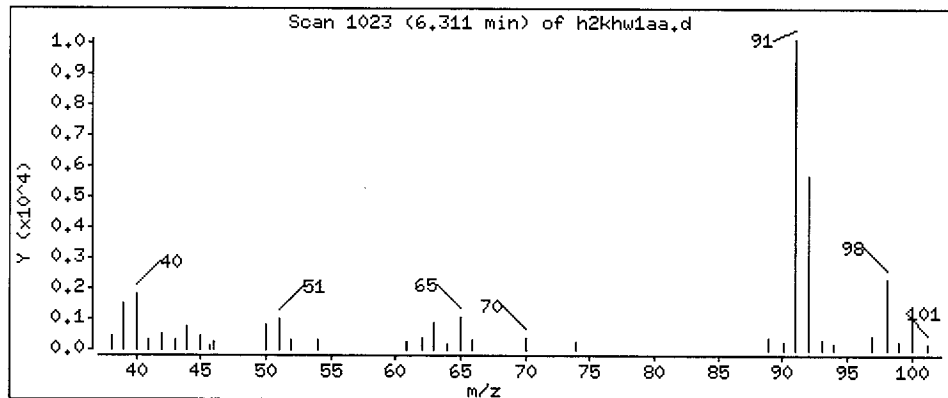
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

53 Toluene (ccc)

Concentration: 0.0032530 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

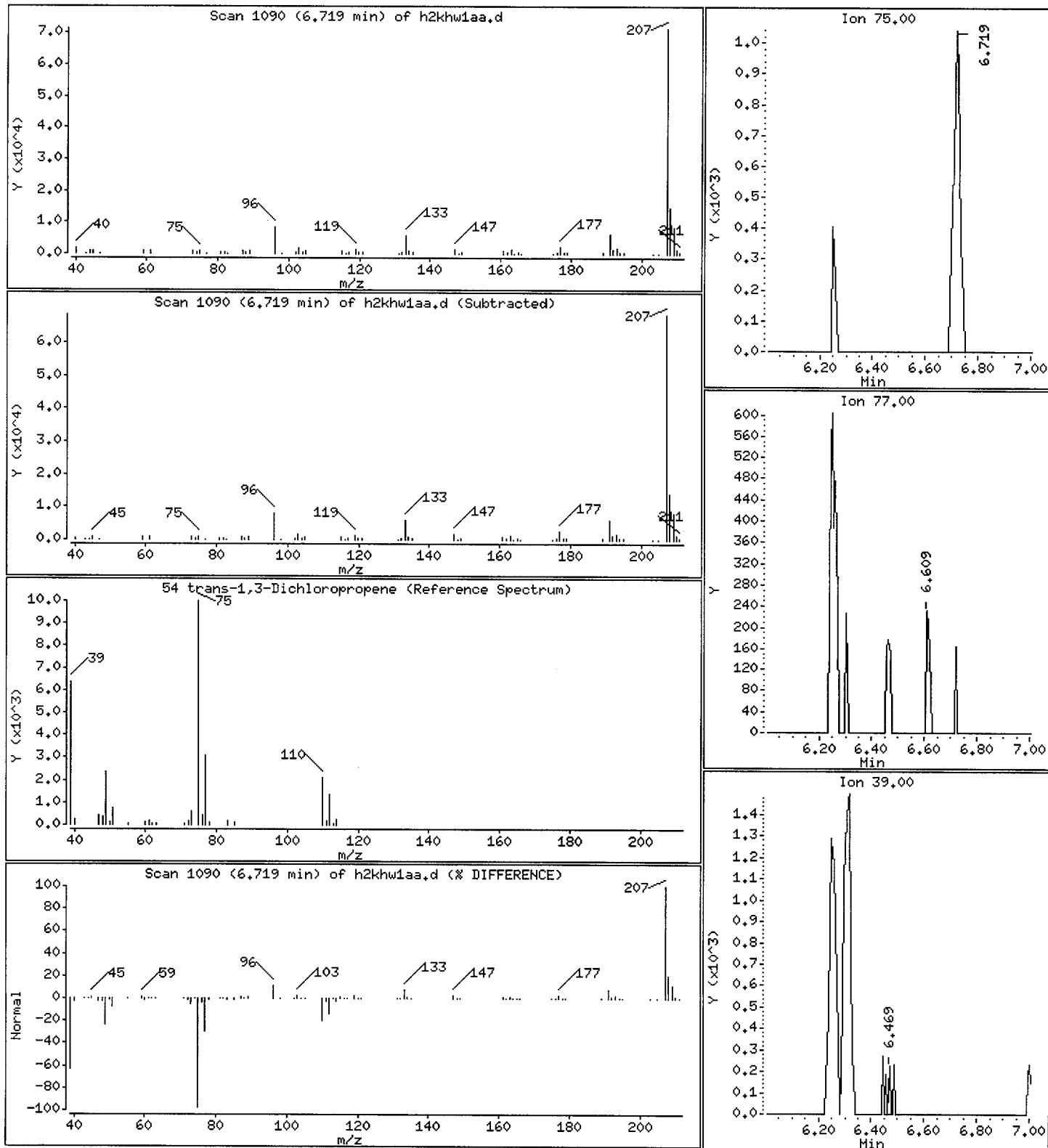
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

54 trans-1,3-Dichloropropene

Concentration: 0.0023045 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

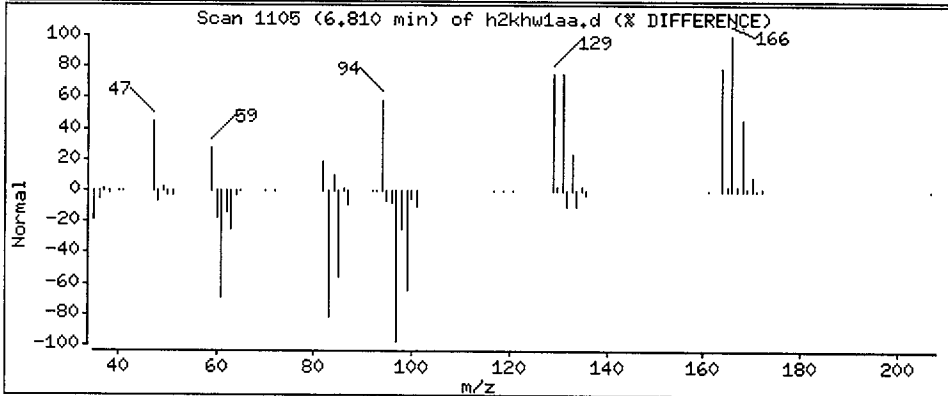
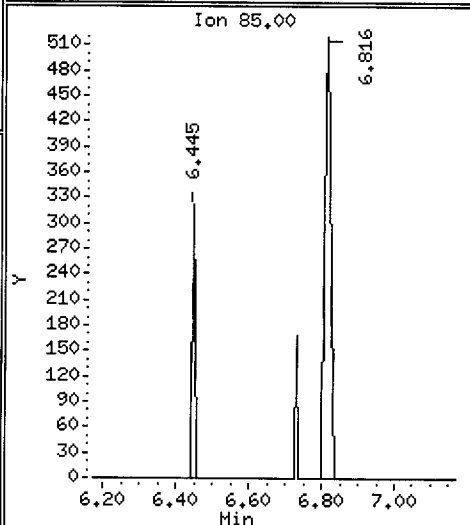
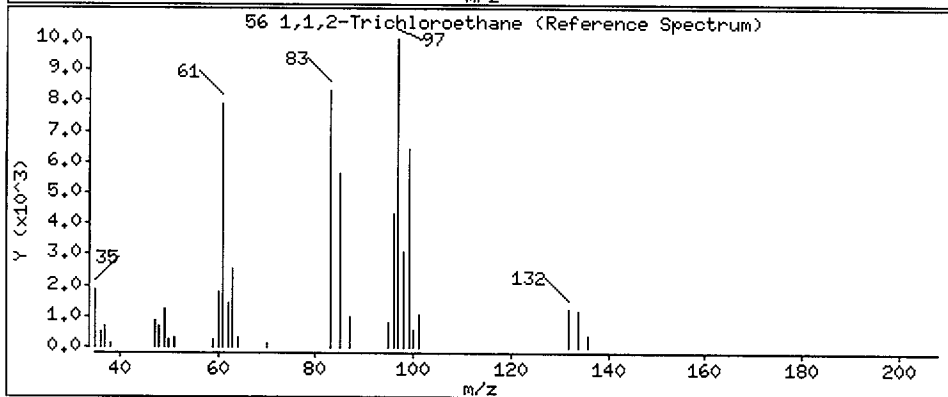
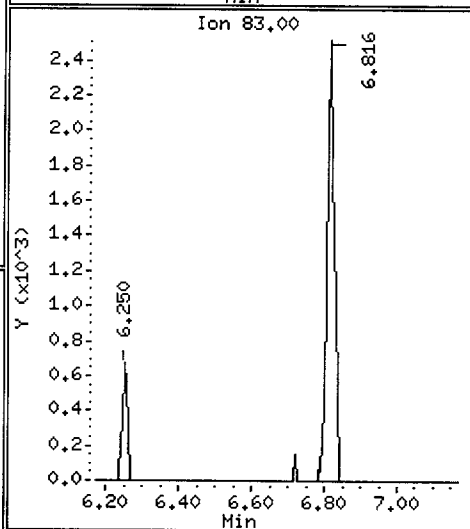
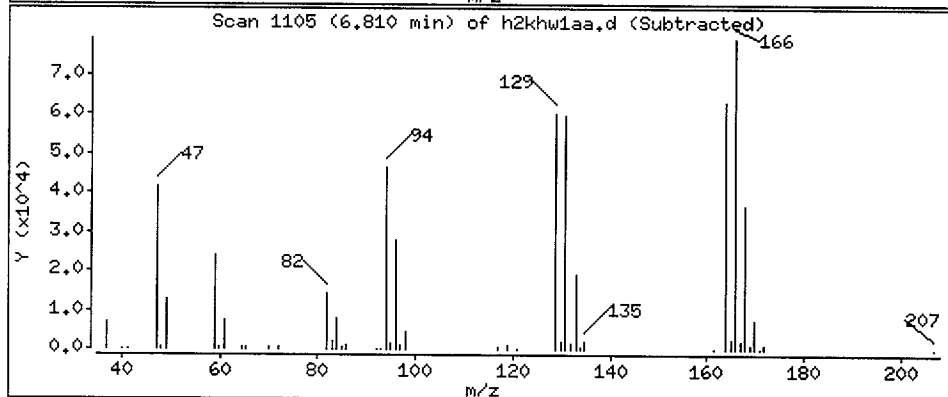
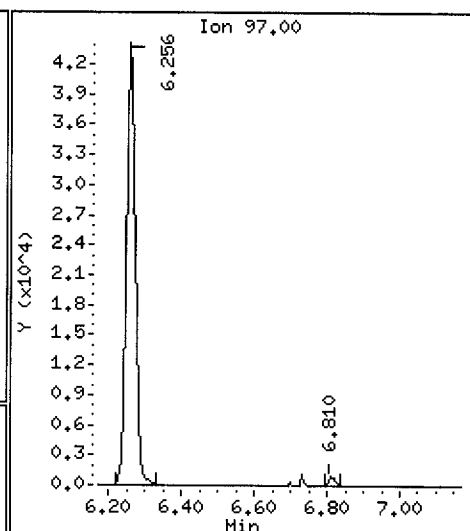
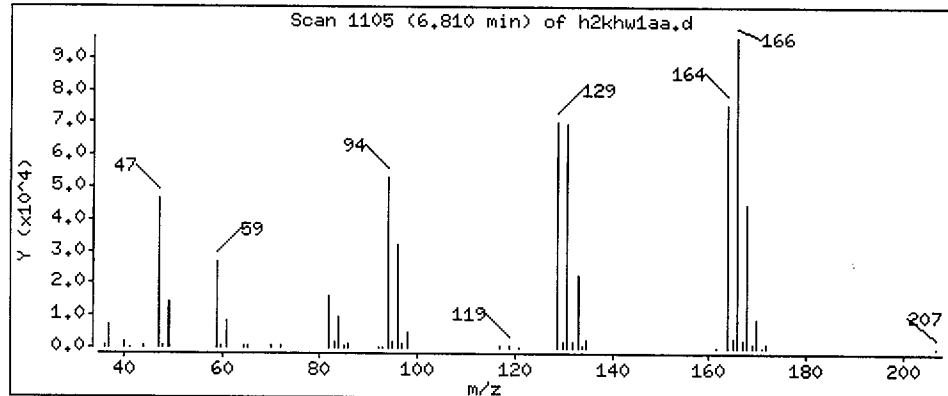
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

56 1,1,2-Trichloroethane

Concentration: 0.0036030 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date: 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

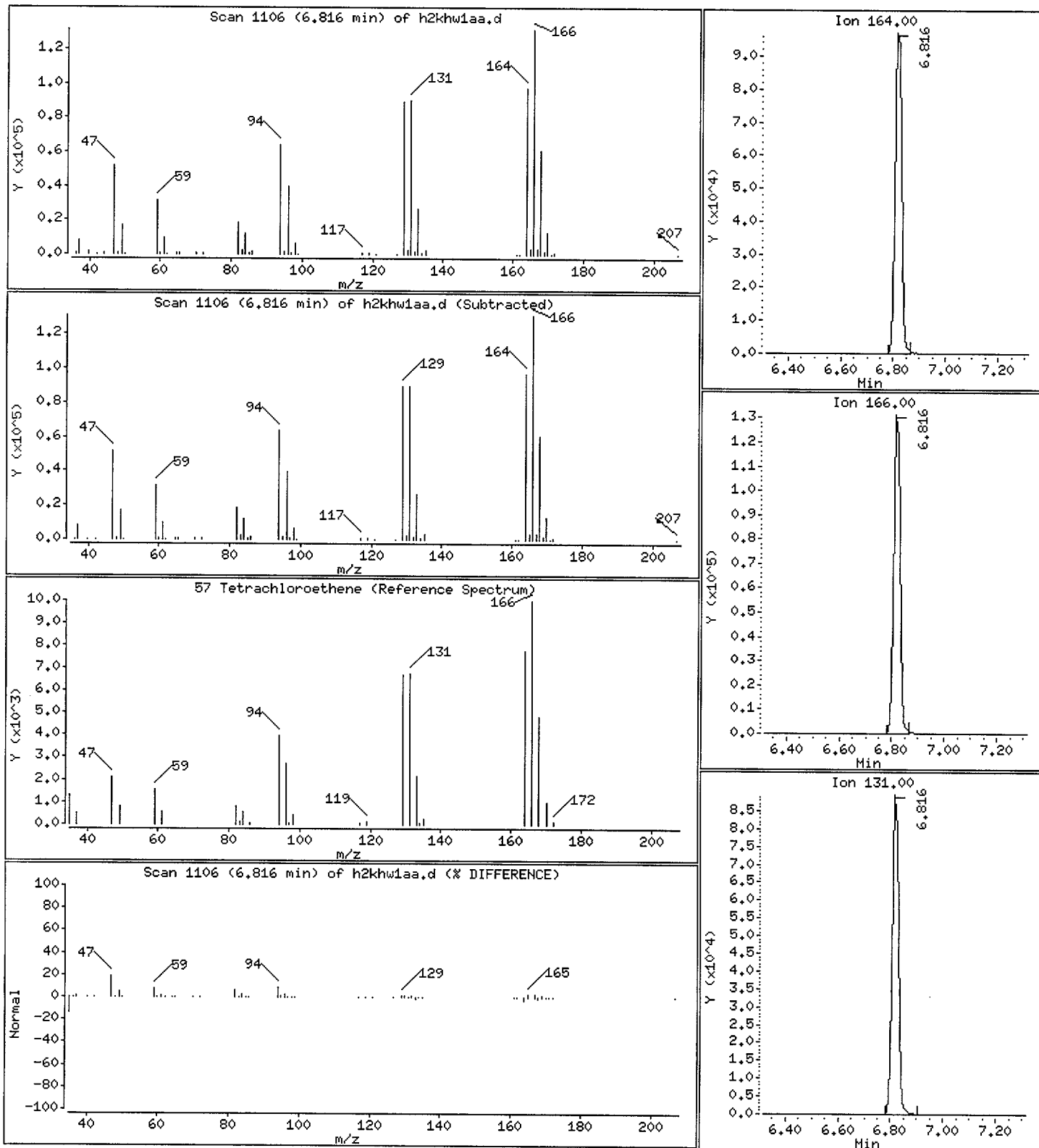
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

57 Tetrachloroethene

Concentration: 0.16054 ug





Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date: 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

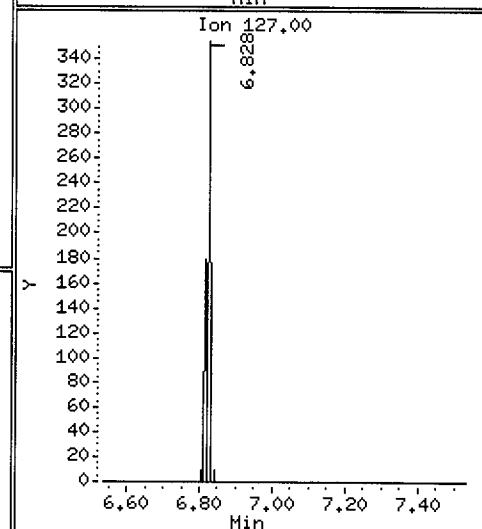
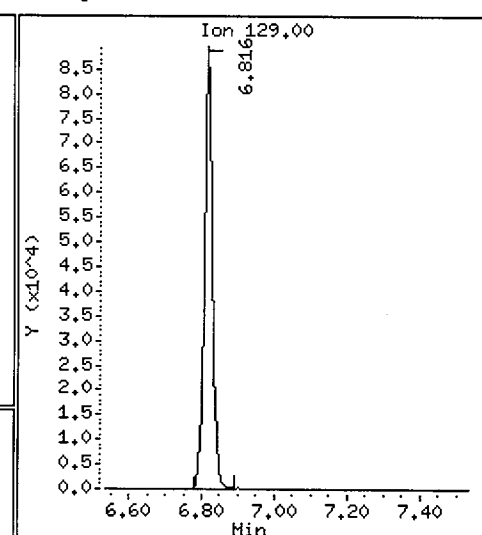
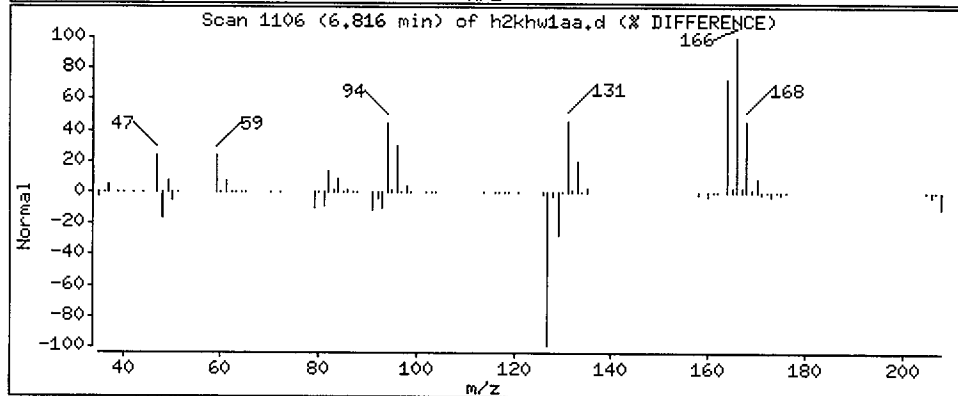
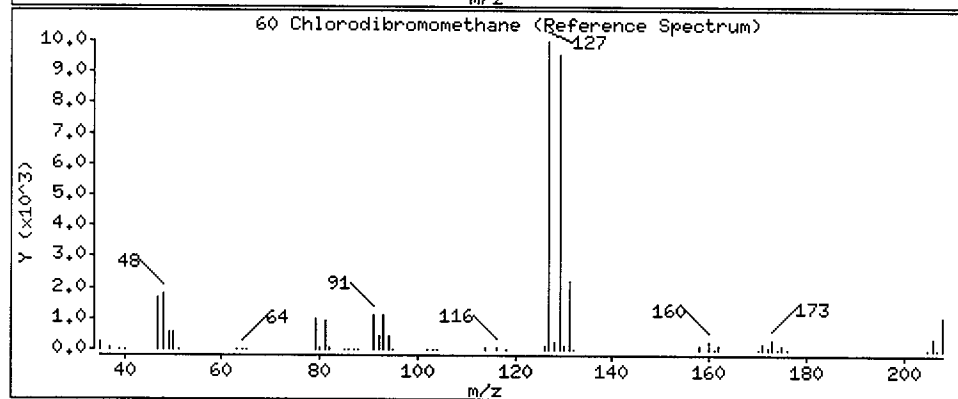
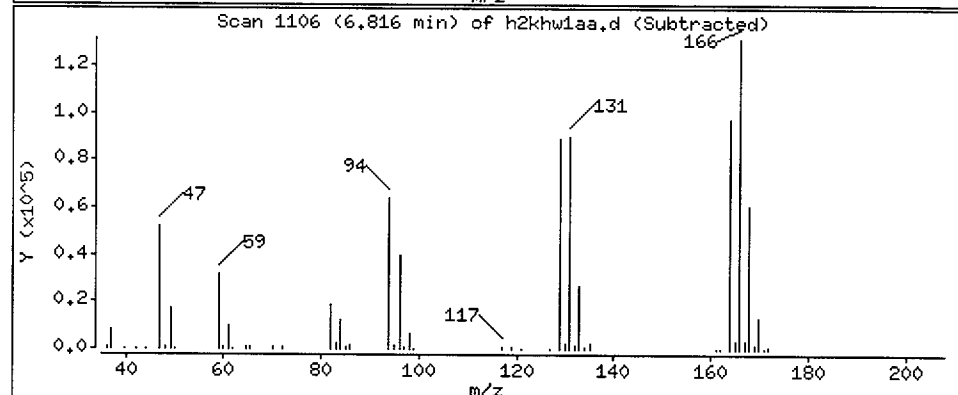
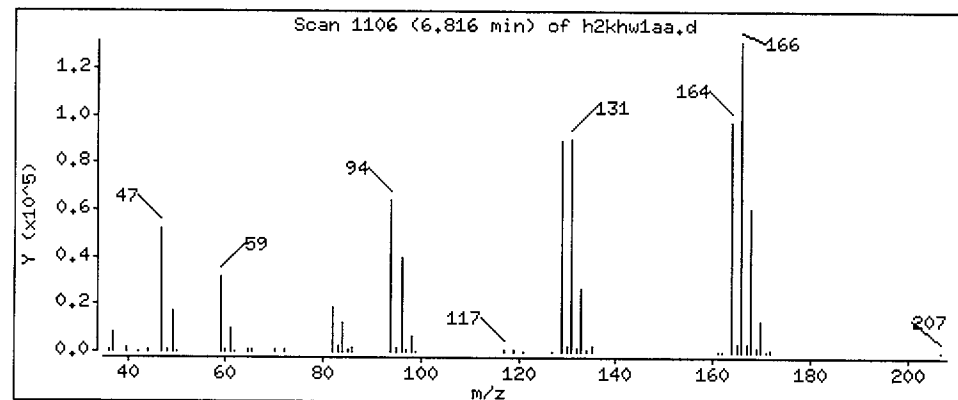
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

60 Chlorodibromomethane

Concentration: 0.31859 ug



Data File: /chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

Sample Info: H2KHW1AA,1,0,,,

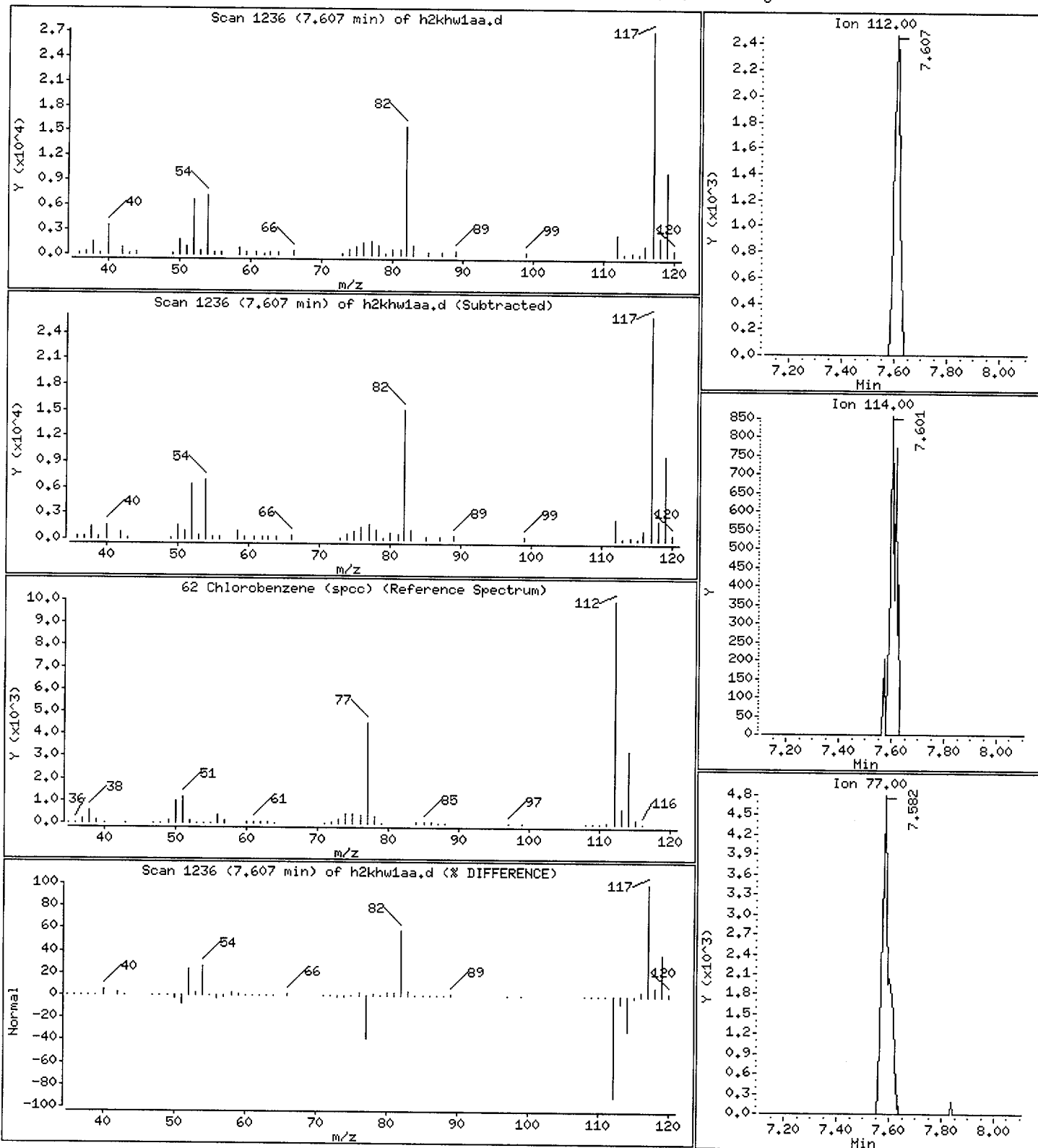
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

62 Chlorobenzene (spoc)

Concentration: 0.0015710 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2khw1aa.d  
 Report Date: 18-Apr-2006 14:59

## STL Knoxville

SW-846 Method 8260A - Volatile Organics  
 Data file : /var/chem/gcms/mx.i/X040706.b/h2khw1aa.d  
 Lab Smp Id: H2KHW1AA Client Smp ID: AUDIT VOST #4  
 Inj Date : 07-APR-2006 18:59  
 Operator : 22980 Inst ID: mx.i  
 Smp Info : H2KHW1AA,1,0,,,  
 Misc Info : X040706,8260B\_LM,focus.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X040706.b/8260B LM.m  
 Meth Date : 18-Apr-2006 14:54 tajh Quant Type: ISTD  
 Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: focus.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
 Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

| ISTD                 | RT    | HEIGHT  | AMOUNT |
|----------------------|-------|---------|--------|
| =====                | ===== | =====   | =====  |
| * 2 Chlorobenzene-d5 | 7.582 | 1330132 | 10.000 |

| CONCENTRATIONS                |        |               |            |          | QUANT   |           |        |
|-------------------------------|--------|---------------|------------|----------|---------|-----------|--------|
| RT                            | HEIGHT | ON-COL( ug/L) | FINAL( ug) | QUAL     | LIBRARY | LIB ENTRY | CPND # |
| =====                         | =====  | =====         | =====      | =====    | =====   | =====     | =====  |
| Cyclotrisiloxane, hexamethyl- | 6.719  | 147969        | 1.11243846 | 0.027811 | 91      | NIST02.1  | 71177  |
|                               |        |               |            |          |         |           | 2      |

5:

4/19/06

Data File: /var/chem/gcms/mx.i/X040706.b/h2khw1aa.d

Date : 07-APR-2006 18:59

Client ID: AUDIT VOST #4

Instrument: mx.i

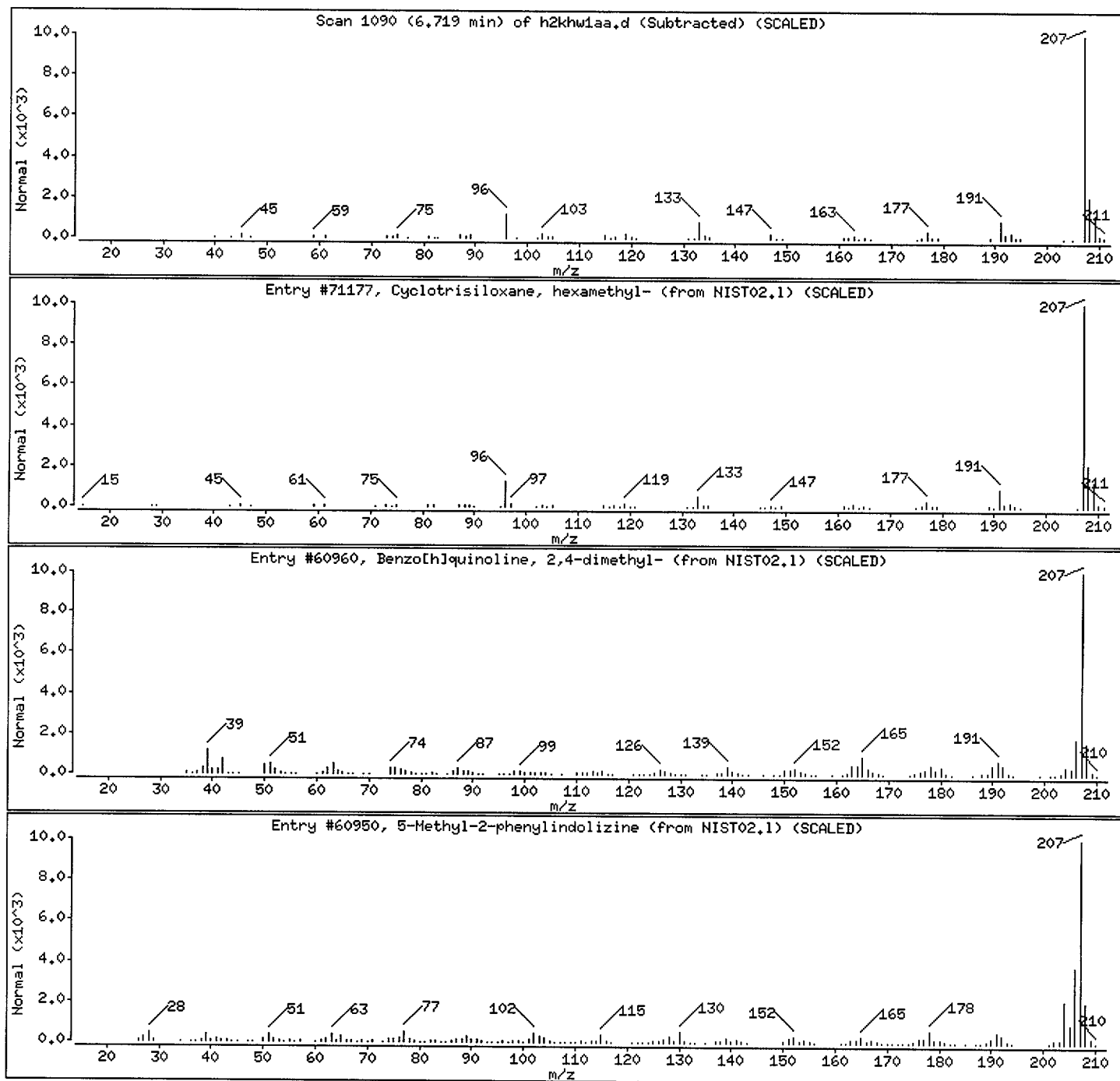
Sample Info: H2KHW1AA,1,0,,,

Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

| Library Search Compound Match    | CAS Number | Library  | Entry | Quality | Formula                                                       | Weight |
|----------------------------------|------------|----------|-------|---------|---------------------------------------------------------------|--------|
| Cyclotrisiloxane, hexamethyl-    | 541-05-9   | NIST02.1 | 71177 | 91      | C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub> | 222    |
| Benzo[h]quinoline, 2,4-dimethyl- | 605-67-4   | NIST02.1 | 60960 | 38      | C <sub>15</sub> H <sub>13</sub> N                             | 207    |
| 5-Methyl-2-phenylindolizine      | 36944-99-7 | NIST02.1 | 60950 | 38      | C <sub>15</sub> H <sub>13</sub> N                             | 207    |



## STL Knoxville - ACS

Client Sample ID: AUDIT VOST #5

## GC/MS Volatiles

Lot-Sample #....: H6D030169-043    Work Order #....: H2KHX1AA    Matrix.....: AIR  
 Date Sampled....: 03/28/06    Date Received...: 04/02/06  
 Prep Date.....: 04/07/06    Analysis Date...: 04/07/06  
 Prep Batch #....: 6097054  
 Dilution Factor: 1    Method.....: SW846 VOST

| PARAMETER                        | RESULT   | REPORTING<br>LIMIT | UNITS | MDL    |
|----------------------------------|----------|--------------------|-------|--------|
| Acetone                          | 0.18     | 0.10               | ug    | 0.085  |
| Acrylonitrile                    | ND       | 0.50               | ug    | 0.076  |
| Benzene                          | 0.063    | 0.010              | ug    | 0.0032 |
| Bromobenzene                     | ND       | 0.010              | ug    | 0.0036 |
| Bromochloromethane               | ND       | 0.025              | ug    | 0.012  |
| Bromodichloromethane             | ND       | 0.010              | ug    | 0.0016 |
| Bromoform                        | ND       | 0.025              | ug    | 0.0066 |
| Bromomethane                     | ND       | 0.050              | ug    | 0.022  |
| 2-Butanone                       | 0.046 J  | 0.10               | ug    | 0.035  |
| n-Butylbenzene                   | ND       | 0.010              | ug    | 0.0047 |
| sec-Butylbenzene                 | ND       | 0.010              | ug    | 0.0036 |
| tert-Butylbenzene                | ND       | 0.010              | ug    | 0.0030 |
| Carbon disulfide                 | 0.015    | 0.010              | ug    | 0.0011 |
| Carbon tetrachloride             | 0.047    | 0.010              | ug    | 0.0011 |
| Chlorobenzene                    | 0.0029 J | 0.010              | ug    | 0.0013 |
| Chlorodibromomethane             | ND       | 0.025              | ug    | 0.010  |
| Chloroethane                     | ND       | 0.050              | ug    | 0.010  |
| Chloroform                       | 0.076    | 0.010              | ug    | 0.0019 |
| Chloromethane                    | ND       | 0.025              | ug    | 0.0032 |
| 2-Chlorotoluene                  | ND       | 0.010              | ug    | 0.0023 |
| 4-Chlorotoluene                  | ND       | 0.010              | ug    | 0.0020 |
| 1,2-Dibromo-3-chloro-<br>propane | ND       | 0.050              | ug    | 0.020  |
| 1,2-Dibromoethane                | ND       | 0.025              | ug    | 0.010  |
| Dibromomethane                   | ND       | 0.025              | ug    | 0.010  |
| 1,2-Dichlorobenzene              | ND       | 0.010              | ug    | 0.0030 |
| 1,3-Dichlorobenzene              | ND       | 0.010              | ug    | 0.0031 |
| 1,4-Dichlorobenzene              | ND       | 0.010              | ug    | 0.0043 |
| Dichlorodifluoromethane          | ND       | 0.025              | ug    | 0.0050 |
| 1,1-Dichloroethane               | ND       | 0.010              | ug    | 0.0019 |
| 1,2-Dichloroethane               | ND       | 0.010              | ug    | 0.0022 |
| cis-1,2-Dichloroethene           | ND       | 0.010              | ug    | 0.0025 |
| trans-1,2-Dichloroethene         | ND       | 0.010              | ug    | 0.0017 |
| 1,1-Dichloroethene               | ND       | 0.010              | ug    | 0.0023 |
| 1,2-Dichloropropane              | ND       | 0.010              | ug    | 0.0027 |
| 1,3-Dichloropropane              | ND       | 0.010              | ug    | 0.0018 |
| 2,2-Dichloropropane              | ND       | 0.010              | ug    | 0.0015 |
| cis-1,3-Dichloropropene          | ND       | 0.010              | ug    | 0.0030 |
| trans-1,3-Dichloropropene        | ND       | 0.010              | ug    | 0.0020 |

(Continued on next page)

## STL Knoxville - ACS

Client Sample ID: AUDIT VOST #5

## GC/MS Volatiles

Lot-Sample #....: H6D030169-043 Work Order #....: H2KHX1AA Matrix.....: AIR

| PARAMETER                                 | RESULT          | REPORTING    |            |               |
|-------------------------------------------|-----------------|--------------|------------|---------------|
|                                           |                 | LIMIT        | UNITS      | MDL           |
| 1,1-Dichloropropene                       | ND              | 0.010        | ug         | 0.0010        |
| Ethylbenzene                              | ND              | 0.010        | ug         | 0.0013        |
| Hexachlorobutadiene                       | ND              | 0.025        | ug         | 0.0048        |
| 2-Hexanone                                | ND              | 0.10         | ug         | 0.0099        |
| Iodomethane                               | ND              | 0.050        | ug         | 0.0016        |
| Isopropylbenzene                          | ND              | 0.010        | ug         | 0.0023        |
| p-Isopropyltoluene                        | ND              | 0.010        | ug         | 0.0038        |
| <b>Methylene chloride</b>                 | <b>0.076</b>    | <b>0.025</b> | <b>ug</b>  | <b>0.013</b>  |
| 4-Methyl-2-pentanone                      | ND              | 0.10         | ug         | 0.014         |
| Naphthalene                               | ND              | 0.025        | ug         | 0.010         |
| n-Propylbenzene                           | ND              | 0.010        | ug         | 0.0029        |
| Styrene                                   | ND              | 0.010        | ug         | 0.0017        |
| 1,1,1,2-Tetrachloroethane                 | ND              | 0.010        | ug         | 0.0010        |
| 1,1,2,2-Tetrachloroethane                 | ND              | 0.025        | ug         | 0.011         |
| <b>Tetrachloroethene</b>                  | <b>0.14</b>     | <b>0.010</b> | <b>ug</b>  | <b>0.0021</b> |
| <b>Tetrahydrofuran</b>                    | <b>0.034 J</b>  | <b>0.10</b>  | <b>ug</b>  | <b>0.031</b>  |
| <b>Toluene</b>                            | <b>0.0030 J</b> | <b>0.010</b> | <b>ug</b>  | <b>0.0022</b> |
| 1,2,3-Trichlorobenzene                    | ND              | 0.025        | ug         | 0.014         |
| 1,2,4-Trichloro-<br>benzene               | ND              | 0.025        | ug         | 0.0030        |
| 1,1,1-Trichloroethane                     | ND              | 0.025        | ug         | 0.0016        |
| 1,1,2-Trichloroethane                     | ND              | 0.025        | ug         | 0.0050        |
| Trichloroethene                           | ND              | 0.010        | ug         | 0.0050        |
| Trichlorofluoromethane                    | ND              | 0.050        | ug         | 0.0049        |
| 1,2,3-Trichloropropane                    | ND              | 0.025        | ug         | 0.0081        |
| 1,1,2-Trichloro-<br>1,2,2-trifluoroethane | ND              | 0.050        | ug         | 0.0018        |
| 1,2,4-Trimethylbenzene                    | ND              | 0.010        | ug         | 0.0048        |
| 1,3,5-Trimethylbenzene                    | ND              | 0.010        | ug         | 0.0028        |
| Vinyl acetate                             | ND              | 0.050        | ug         | 0.012         |
| Vinyl chloride                            | ND              | 0.010        | ug         | 0.0032        |
| m-Xylene & p-Xylene                       | ND              | 0.020        | ug         | 0.0034        |
| o-Xylene                                  | ND              | 0.010        | ug         | 0.0017        |
| Xylenes (total)                           | ND              | 0.030        | ug         | 0.0048        |
| SURROGATE                                 | PERCENT         |              | RECOVERY   |               |
|                                           | RECOVERY        |              | LIMITS     |               |
| Dibromofluoromethane                      | 87              |              | (50 - 134) |               |
| 1,2-Dichloroethane-d4                     | 87              |              | (50 - 134) |               |
| Toluene-d8                                | 76              |              | (57 - 127) |               |
| Bromofluorobenzene                        | 58              |              | (50 - 125) |               |

**NOTE(S) :**

J Estimated result. Result is less than RL.

STL Knoxville - ACS

AUDIT VOST #5

GC/MS Volatiles

Lot-Sample #: H6D030169-043

Work Order #: H2KHX1AA

Matrix: AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug           |

Data File: /chem/gcms/mx.i/X040706.b/h2khx1aa.d  
Report Date: 07-Apr-2006 18:50

## STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /chem/gcms/mx.i/X040706.b/h2khx1aa.d  
Lab Smp Id: H2KHX1AA Client Smp ID: AUDIT VOST #5  
Inj Date : 07-APR-2006 18:34  
Operator : 22980 Inst ID: mx.i  
Smp Info : H2KHX1AA,1,0,,  
Misc Info : X040706,8260B\_LM,focus.sub  
Comment :  
Method : /var/chem/gcms/mx.i/X040706.b/8260B\_LM.m  
Meth Date : 07-Apr-2006 11:23 gosss Quant Type: ISTD  
Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

| Compounds                  | QUANT SIG |        |        |         |          |           | CONCENTRATIONS |  |
|----------------------------|-----------|--------|--------|---------|----------|-----------|----------------|--|
|                            | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL          |  |
|                            |           |        |        |         |          | ( ug/L)   | ( ug)          |  |
| *****                      | ****      | ==     | =====  | =====   | =====    | =====     | =====          |  |
| * 1 Fluorobenzene          | 96        | 4.852  | 4.851  | (1.000) | 1084499  | 10.0000   |                |  |
| * 2 Chlorobenzene-d5       | 119       | 7.584  | 7.582  | (1.000) | 238762   | 10.0000   |                |  |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.741 | 10.746 | (1.000) | 279393   | 10.0000   |                |  |
| \$ 4 Dibromofluoromethane  | 113       | 4.268  | 4.273  | (0.880) | 161002   | 8.73177   | 0.21829        |  |
| \$ 5 1,2 Dichloroethane-d4 | 65        | 4.554  | 4.553  | (0.939) | 124742   | 8.67909   | 0.21698        |  |
| \$ 6 Toluene-d8            | 98        | 6.251  | 6.250  | (0.824) | 891181   | 7.62355   | 0.19059        |  |
| \$ 7 4-Bromofluorobenzene  | 95        | 8.873  | 8.872  | (0.826) | 192468   | 5.81007   | 0.14525        |  |
| 11 Chloromethane (spcc)    | 50        | 1.251  | 1.262  | (0.258) | 2733     | 0.05409   | 0.0013524      |  |
| 15 Chloroethane            | 64        | 1.336  | 1.669  | (0.275) | 3160     | 0.14595   | 0.0036486      |  |
| 21 Acetone                 | 43        | 2.382  | 2.381  | (0.491) | 11110    | 7.23360   | 0.18084        |  |
| 23 Carbon Disulfide        | 76        | 2.492  | 2.497  | (0.514) | 49108    | 0.59417   | 0.014854       |  |
| 26 Methylene Chloride      | 84        | 2.747  | 2.746  | (0.566) | 50769    | 3.02790   | 0.075698       |  |
| 33 *Vinyl Acetate          | 86        | 3.252  | 3.421  | (0.670) | 1326     | 1.07548   | 0.026887       |  |
| 36 2-Butanone              | 43        | 3.873  | 3.871  | (0.798) | 4445     | 1.85553   | 0.046388       |  |
| 38 *THF                    | 42        | 4.122  | 4.109  | (0.850) | 2006     | 1.36681   | 0.024170       |  |
| 39 Chloroform (ccc)        | 83        | 4.134  | 4.139  | (0.852) | 125590   | 3.04691   | 0.076173       |  |
| 41 Carbon Tetrachloride    | 117       | 4.432  | 4.437  | (0.913) | 72967    | 1.87429   | 0.046857       |  |
| 42 1,1-Dichloropropene     | 75        | 4.609  | 4.437  | (0.950) | 4819     | 0.11224   | 0.0028060      |  |
| 43 Benzene                 | 78        | 4.609  | 4.607  | (0.950) | 275604   | 2.50929   | 0.062732       |  |
| 44 1,2-Dichloroethane      | 62        | 4.609  | 4.620  | (0.950) | 2967     | 0.16055   | 0.0040138      |  |

*4/19/06*

*4/19/06*

*OK 0.034170 "5"*



Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d  
Report Date: 07-Apr-2006 18:50

| Compounds                | QUANT SIG |       |        |         |          |           | CONCENTRATIONS       |  |
|--------------------------|-----------|-------|--------|---------|----------|-----------|----------------------|--|
|                          | MASS      | RT    | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL                |  |
| =====                    | ====      | ==    | =====  | =====   | =====    | ( ug/L)   | ( ug)                |  |
| 52 4-Methyl 2 pentanone  | 43        | 6.251 | 6.147  | (1.288) | 7120     | 1.24092   | <del>0.031023</del>  |  |
| 53 Toluene (ccc)         | 91        | 6.312 | 6.311  | (0.832) | 17062    | 0.12200   | 0.0030501            |  |
| 56 1,1,2-Trichloroethane | 97        | 6.817 | 6.670  | (0.899) | 1443     | 0.13063   | <del>0.0022659</del> |  |
| 57 Tetrachloroethene     | 164       | 6.817 | 6.816  | (0.899) | 163162   | 5.42963   | 0.13574              |  |
| 62 Chlorobenzene (spcc)  | 112       | 7.608 | 7.607  | (1.003) | 8345     | 0.11624   | 0.0029060            |  |

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Data File: /chem/gcms/mx.i/X040706.b/h2khx1aa.d  
 Report Date: 07-Apr-2006 18:50

STL Knoxville

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                       |                               |
|-------------------------------------------------------|-------------------------------|
| Instrument ID: mx.i                                   | Calibration Date: 07-APR-2006 |
| Lab File ID: h2khx1aa.d                               | Calibration Time: 09:16       |
| Lab Smp Id: H2KHX1AA                                  | Client Smp ID: AUDIT VOST #5  |
| Analysis Type: VOA                                    | Level: LOW                    |
| Quant Type: ISTD                                      | Sample Type: AIR              |
| Operator: 22980                                       |                               |
| Method File: /var/chem/gcms/mx.i/X040706.b/8260B_LM.m |                               |
| Misc Info: X040706,8260B_LM,focus.sub                 |                               |

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE  | %DIFF |
|---------------------|----------|------------|---------|---------|-------|
|                     |          | LOWER      | UPPER   |         |       |
| 1 Fluorobenzene     | 1149191  | 574596     | 2298382 | 1084499 | -5.63 |
| 2 Chlorobenzene-d5  | 214194   | 107097     | 428388  | 238762  | 11.47 |
| 3 1,4 Dichlorobenze | 242601   | 121300     | 485202  | 279393  | 15.17 |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 4.85     | 4.35     | 5.35  | 4.85   | 0.03  |
| 2 Chlorobenzene-d5  | 7.58     | 7.08     | 8.08  | 7.58   | 0.02  |
| 3 1,4 Dichlorobenze | 10.75    | 10.25    | 11.25 | 10.74  | -0.05 |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d

Report Date: 07-Apr-2006 18:50

STL Knoxville

## RECOVERY REPORT

Client Name: STL Knoxville - ACS

Sample Matrix: GAS

Lab Smp Id: H2KHX1AA

Level: LOW

Data Type: MS DATA

SpikeList File: allcmpds.spk

Sublist File: focus.sub

Method File: /var/chem/gcms/mx.i/X040706.b/8260B\_LM.m

Misc Info: X040706,8260B\_LM,focus.sub

Client SDG: H6D030169

Fraction: VOA

Client Smp ID: AUDIT VOST #5

Operator: 22980

SampleType: SAMPLE

Quant Type: ISTD

| SURROGATE COMPOUND      | CONC<br>ADDED<br>ug | CONC<br>RECOVERED<br>ug | %<br>RECOVERED | LIMITS |
|-------------------------|---------------------|-------------------------|----------------|--------|
| \$ 4 Dibromofluorometha | 0.25000             | 0.21829                 | 87.32          | 50-150 |
| \$ 5 1,2-Dichloroethane | 0.25000             | 0.21698                 | 86.79          | 50-150 |
| \$ 6 Toluene-d8         | 0.25000             | 0.19059                 | 76.24          | 50-150 |
| \$ 7 4-Bromofluorobenze | 0.25000             | 0.14525                 | 58.10          | 50-150 |

Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

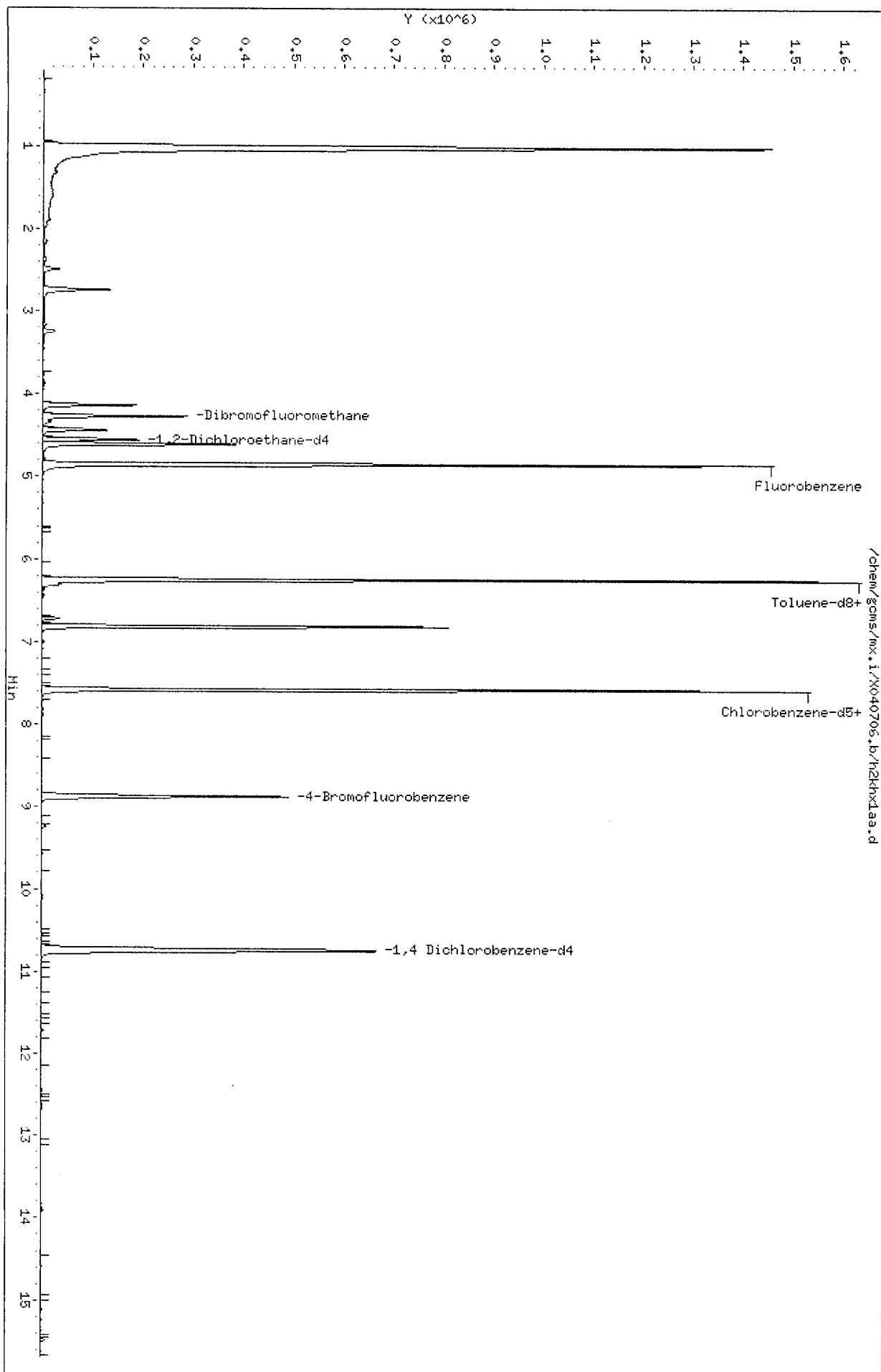
Sample Info: H2KHX1AA,1,0,,,

Column phase: J+N 624

Instrument: mx.i

Operator: 22980

Column diameter: 0.18



Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1,0,,,

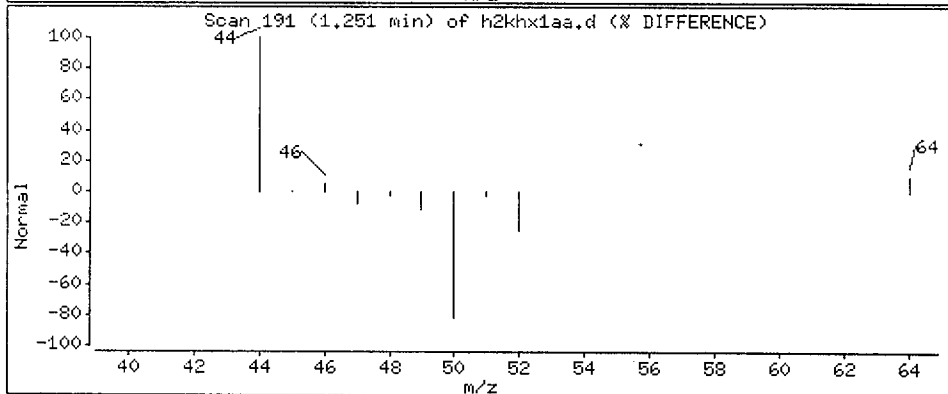
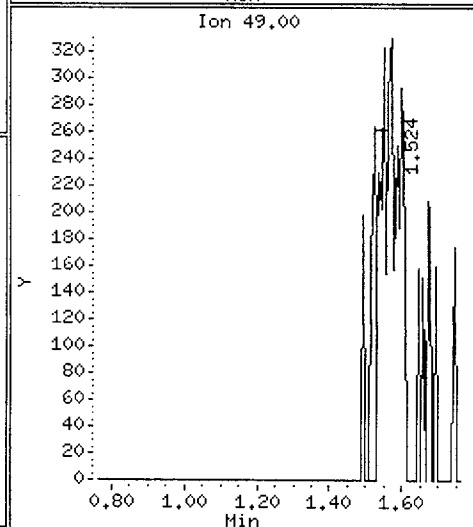
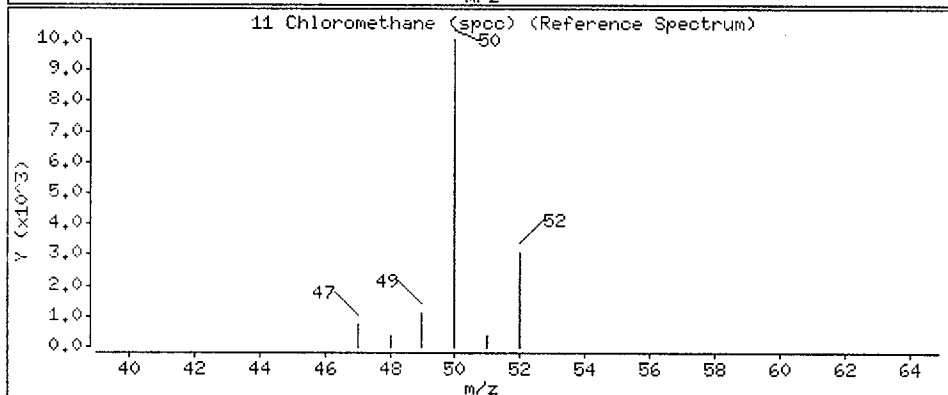
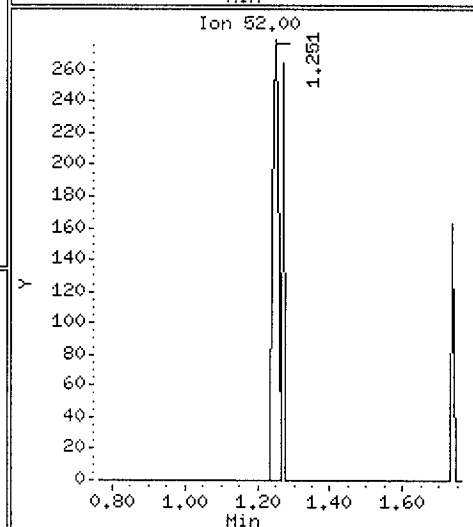
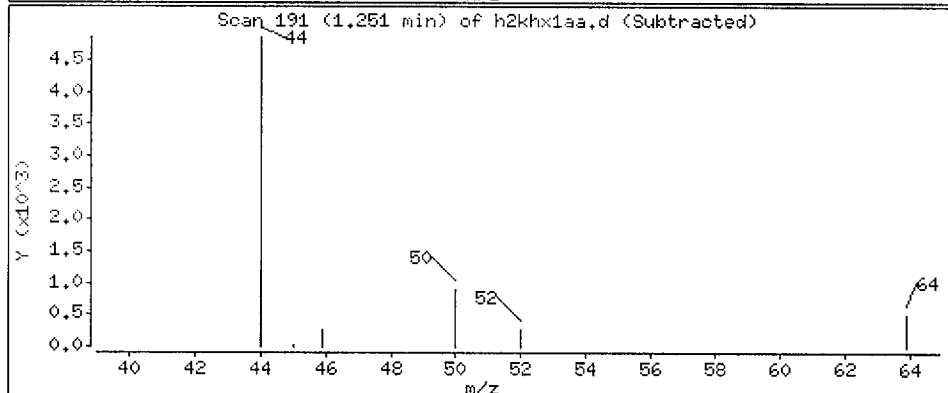
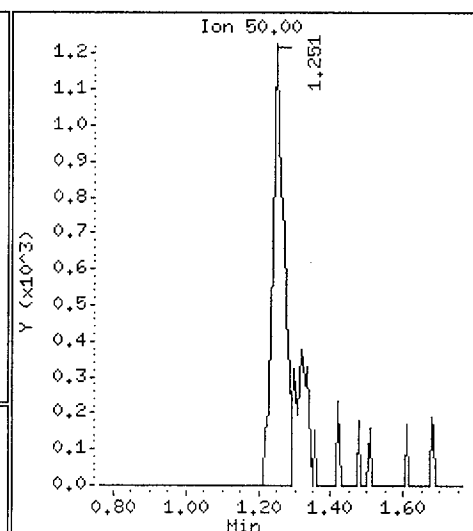
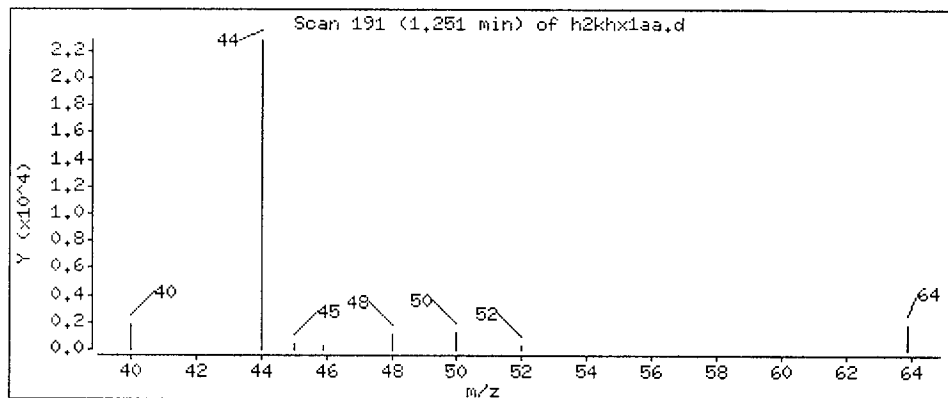
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

11 Chloromethane (spoc)

Concentration: 0.0013524 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1,0,,,

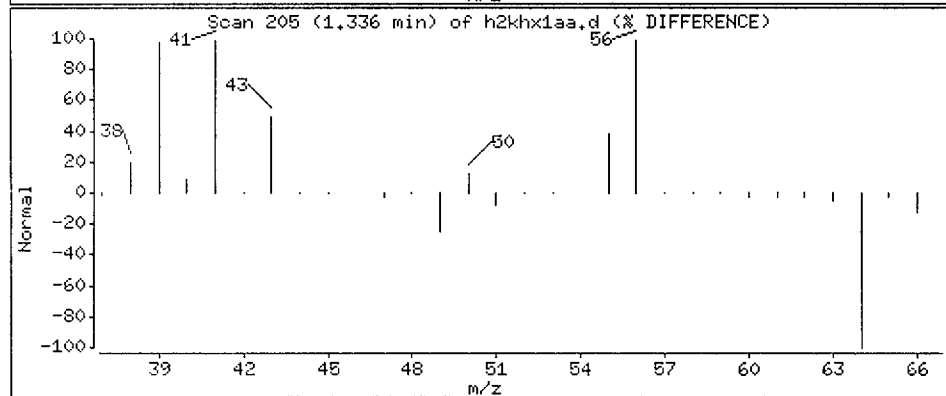
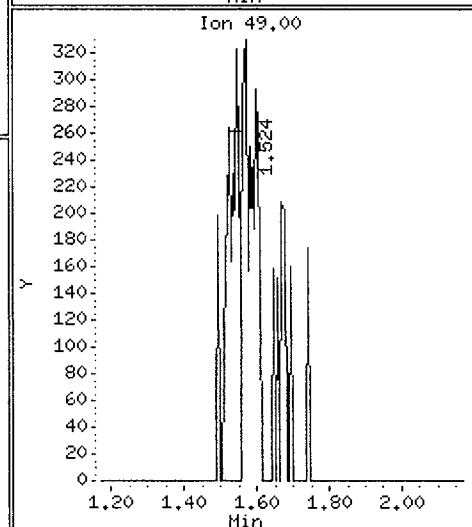
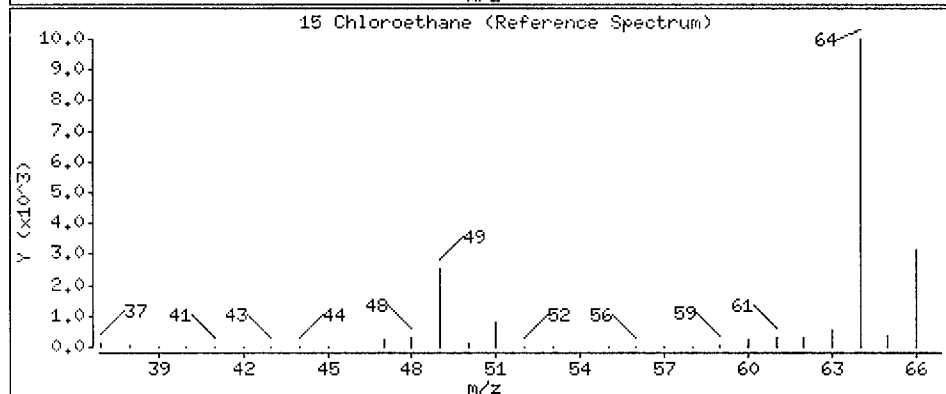
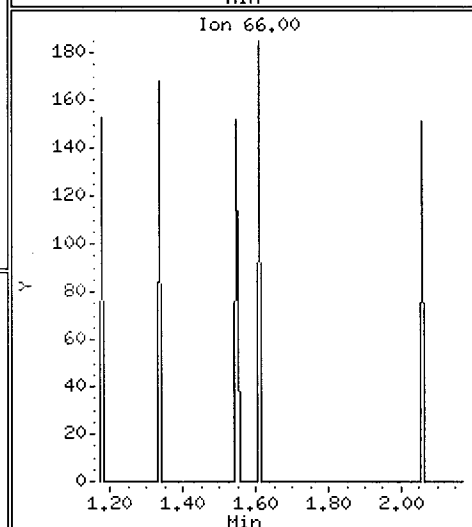
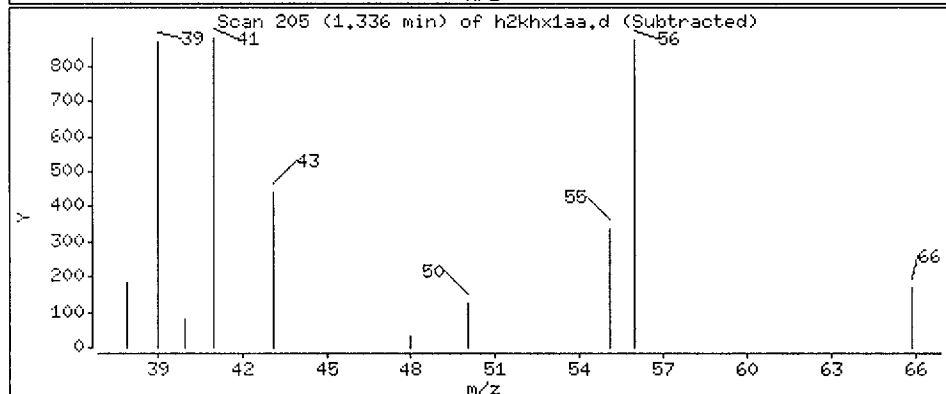
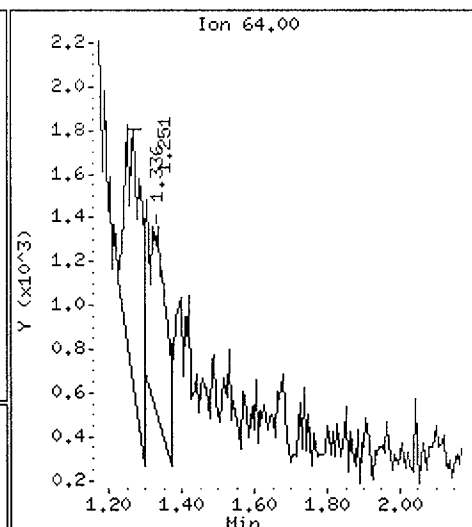
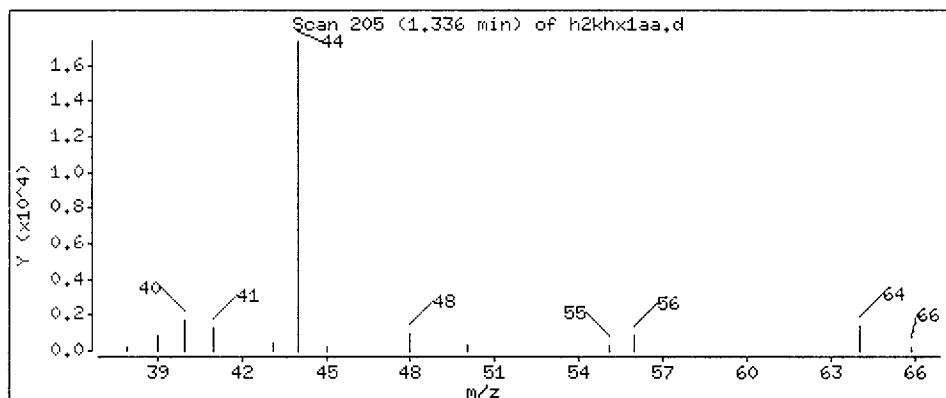
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

15 Chloroethane

Concentration: 0.0036486 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1,0,,,

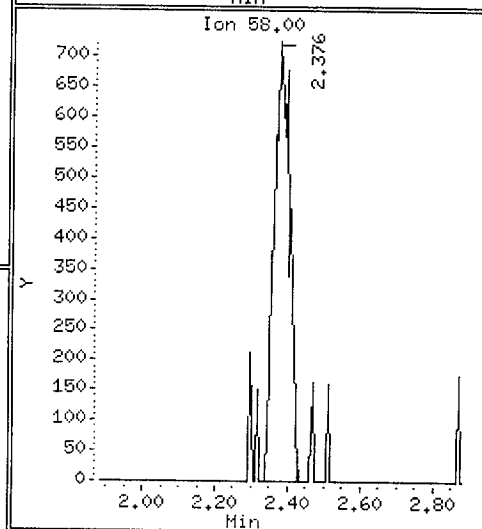
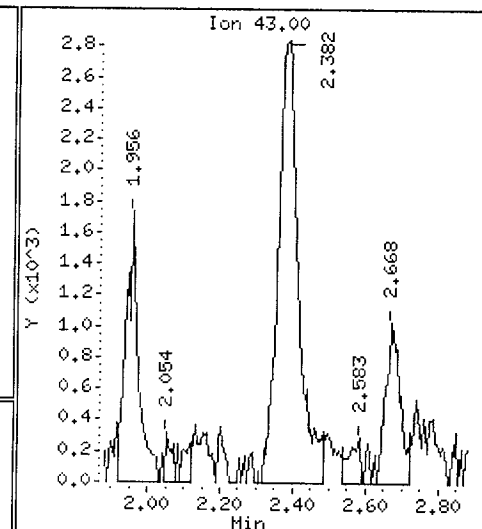
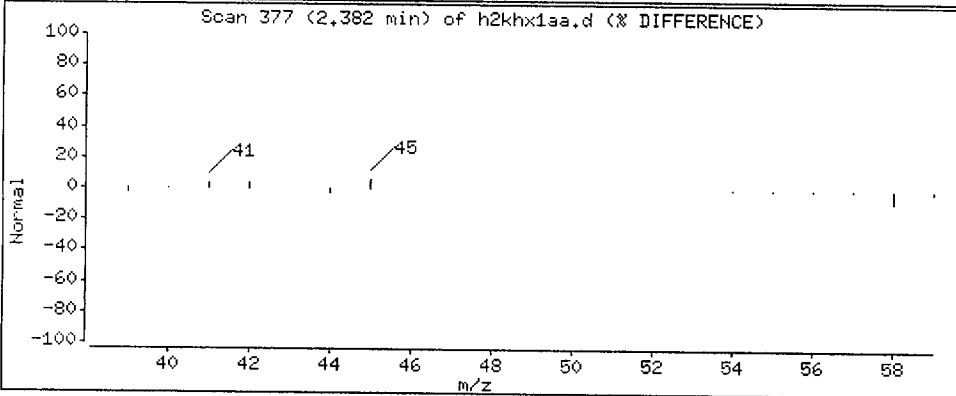
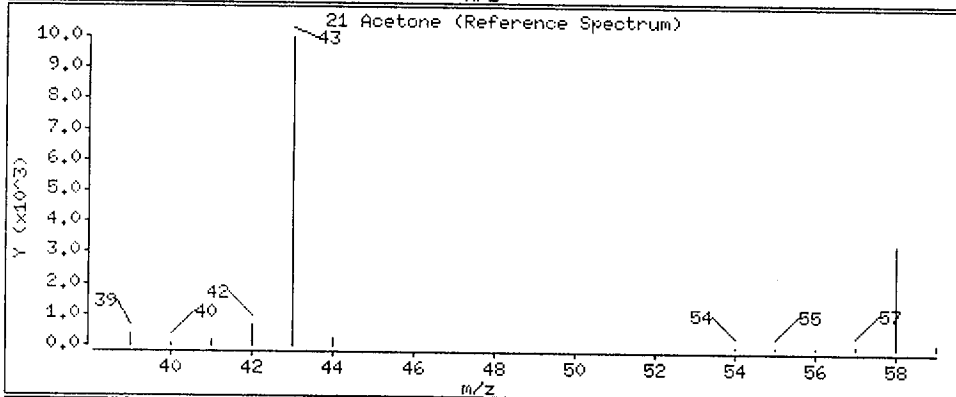
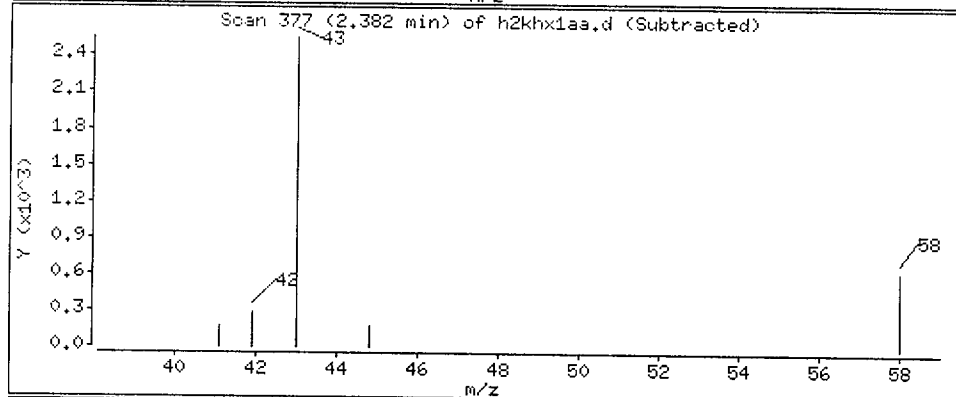
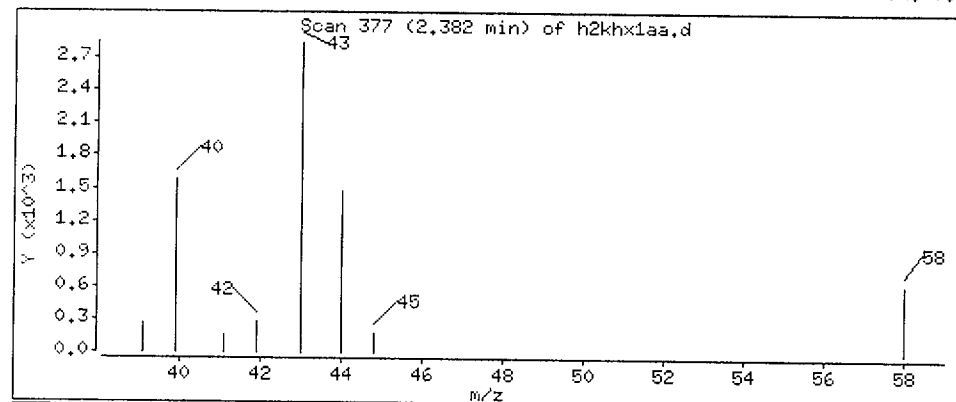
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

21 Acetone

Concentration: 0.18084 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1.0,,,

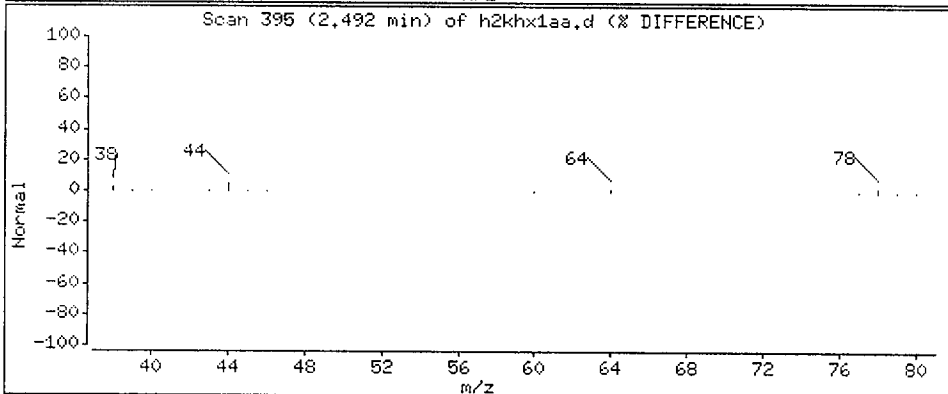
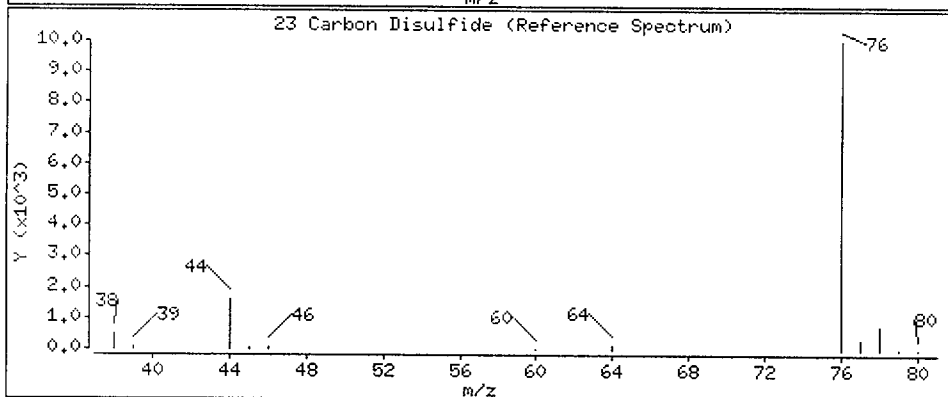
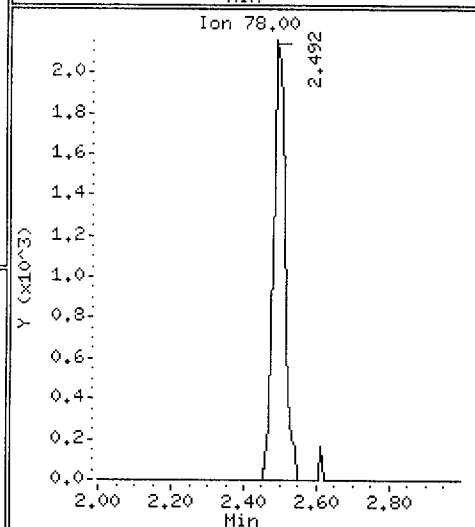
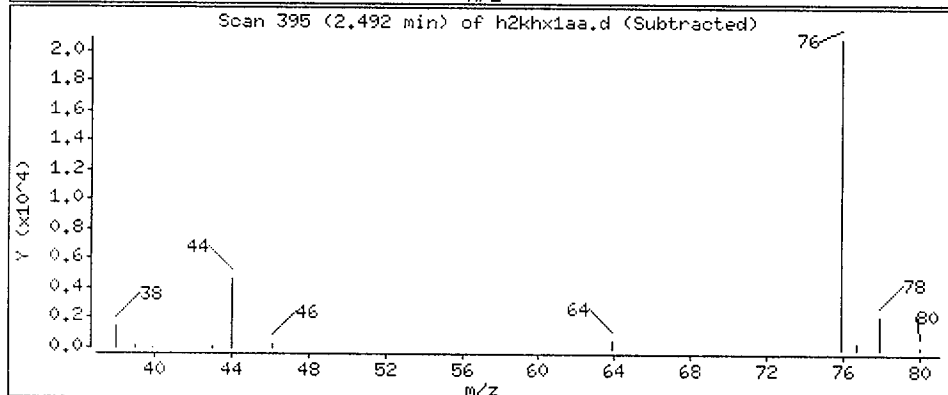
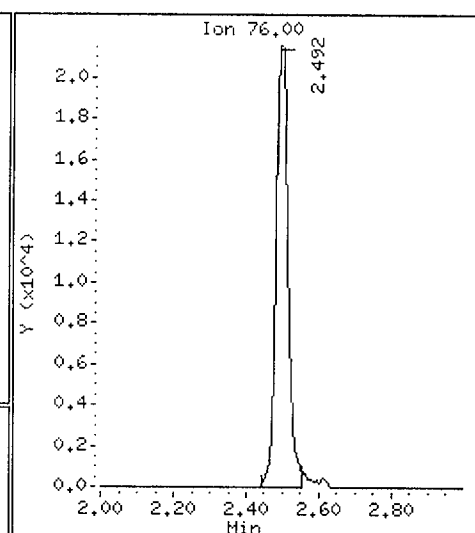
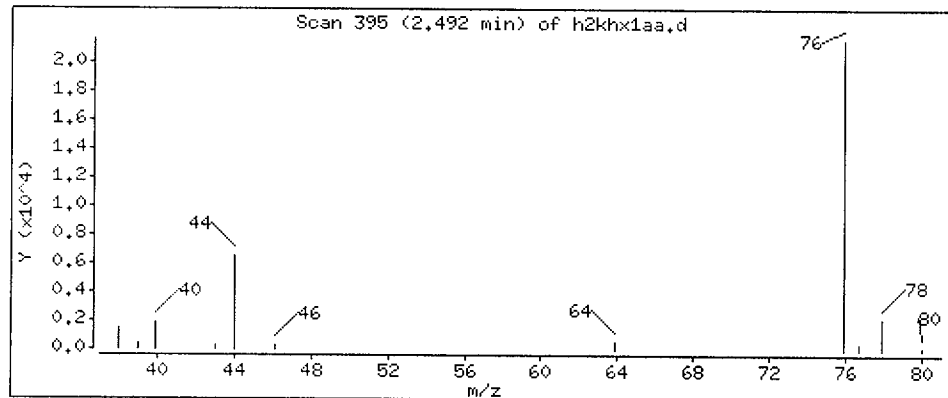
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

23 Carbon Disulfide

Concentration: 0.014854 ug





Data File: /chem/gcms/mx.i/X040706,b/h2kx1aa,d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1,0,,,

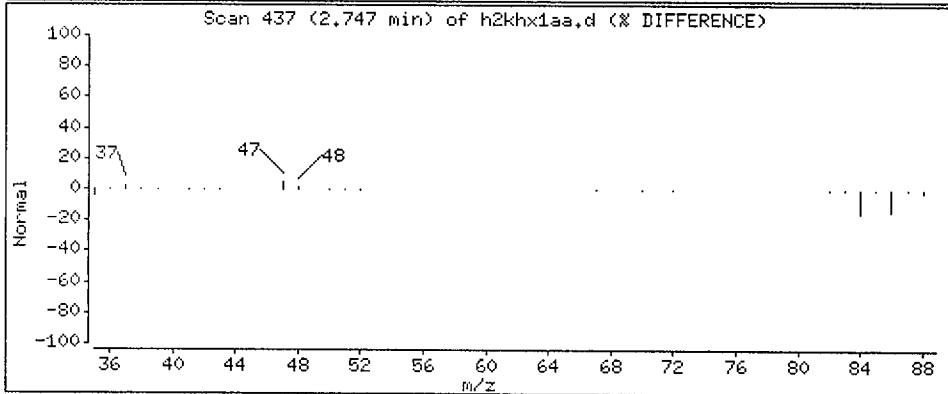
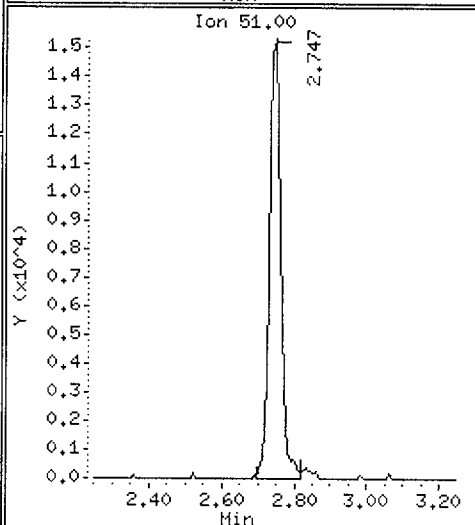
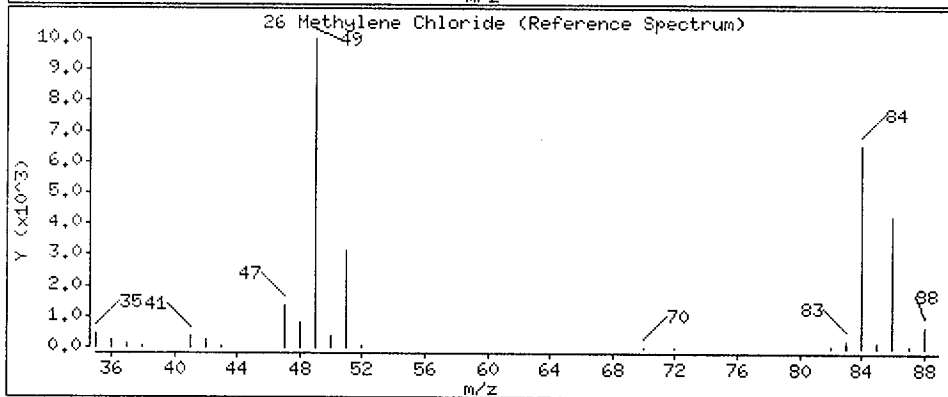
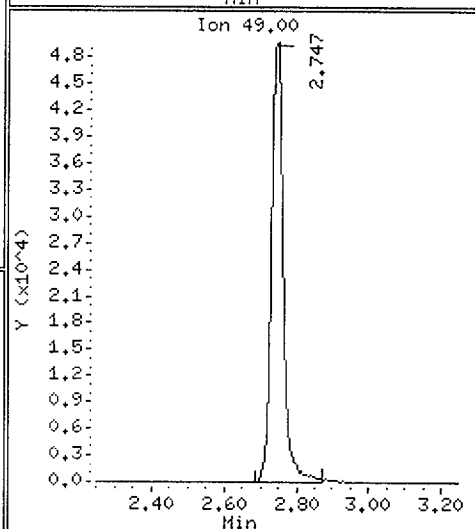
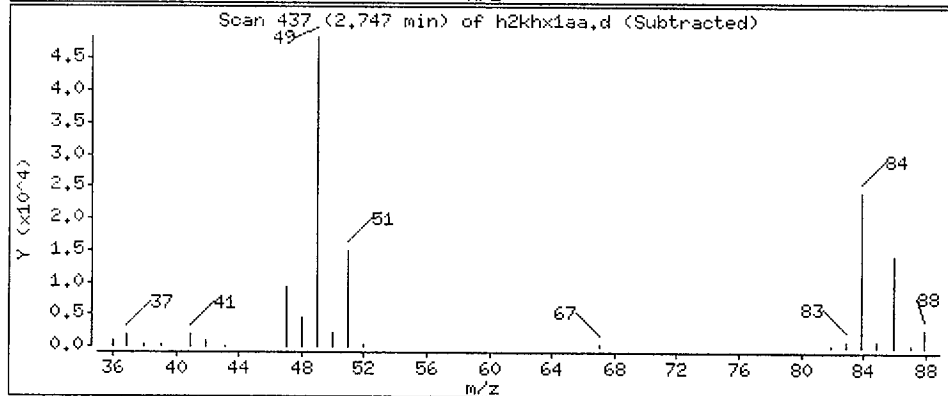
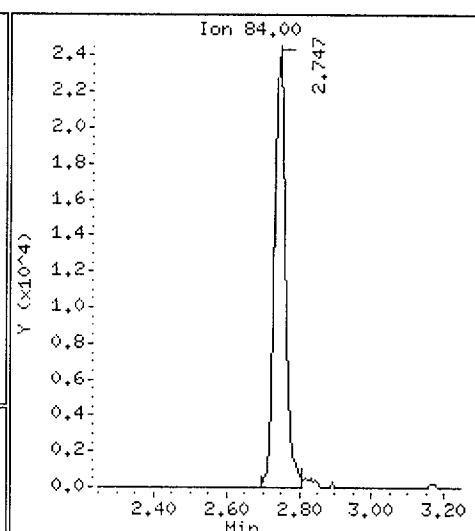
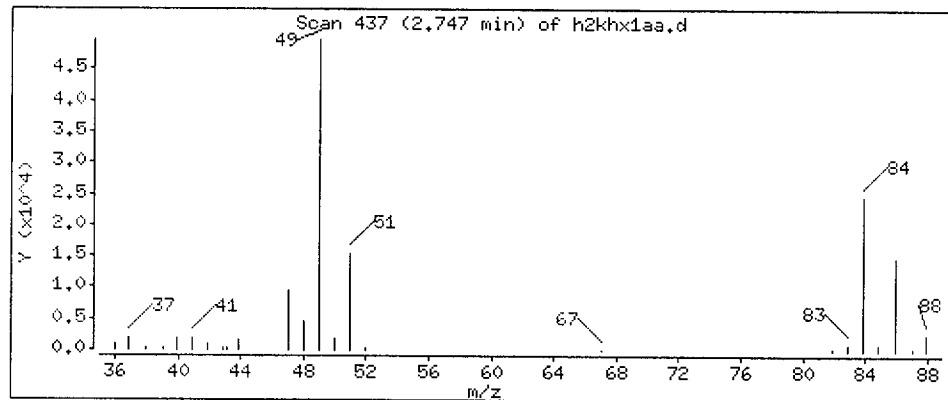
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

26 Methylene Chloride

Concentration: 0.075698 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1,0,,,

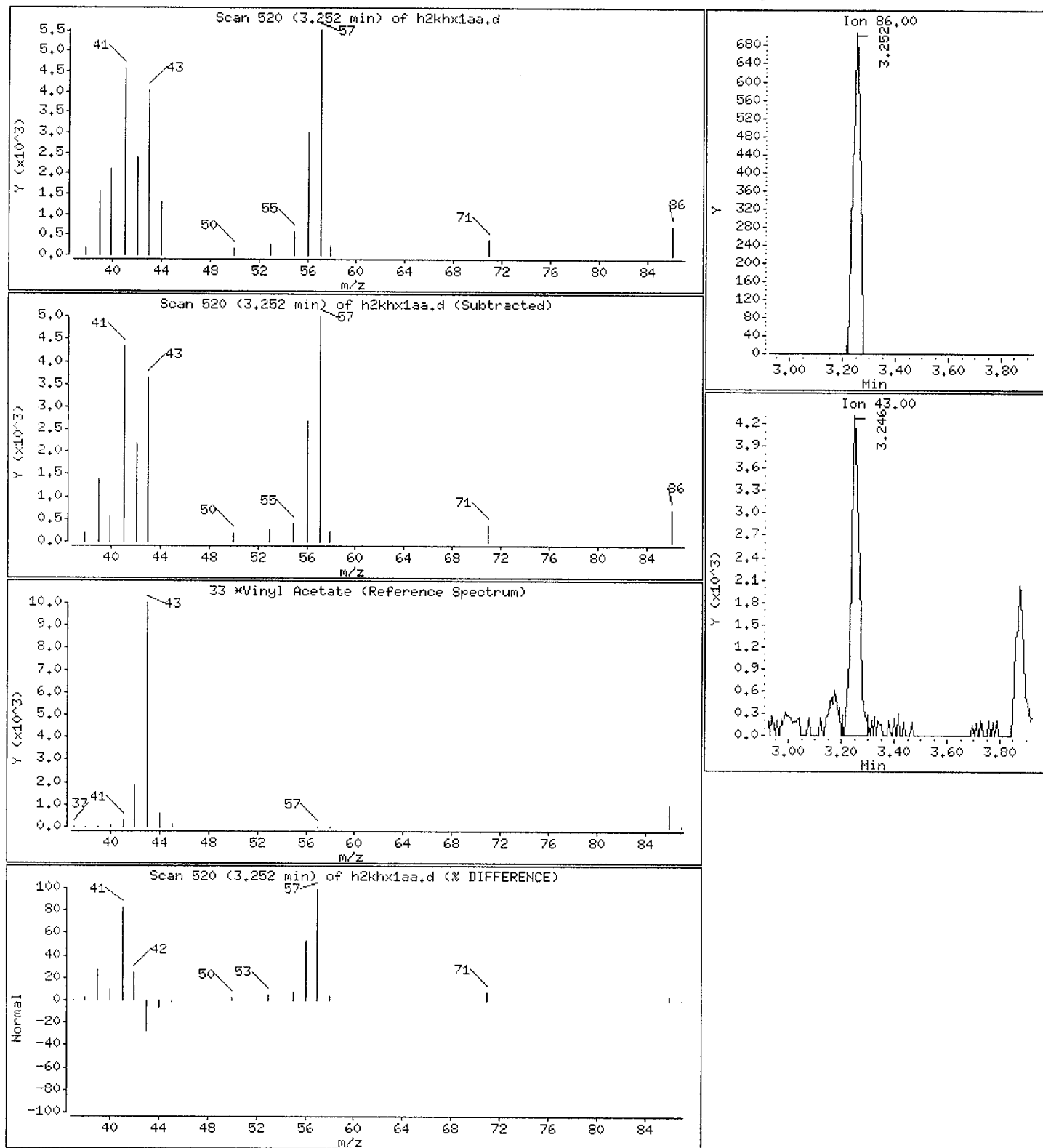
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

33 \*Vinyl Acetate

Concentration: 0.026887 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1,0,,,

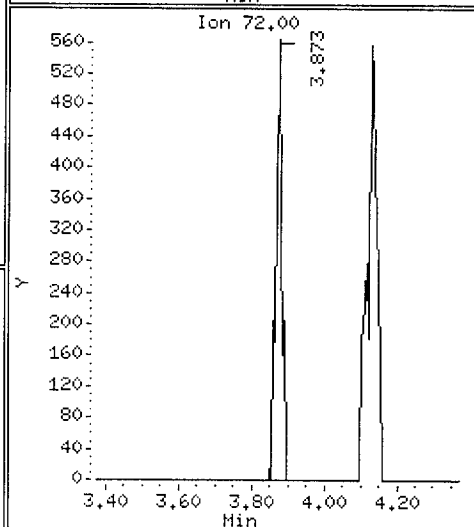
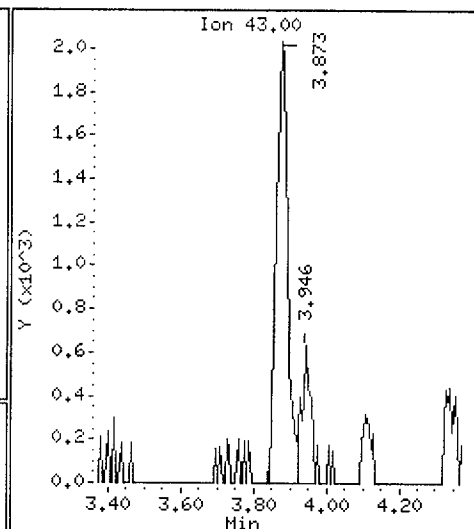
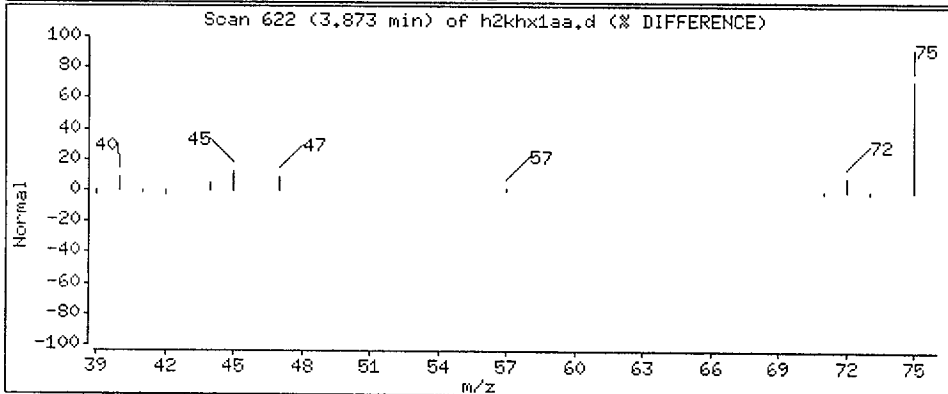
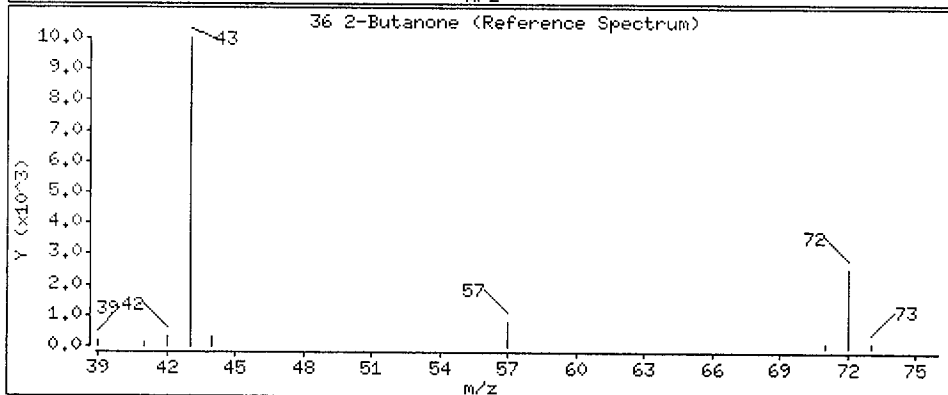
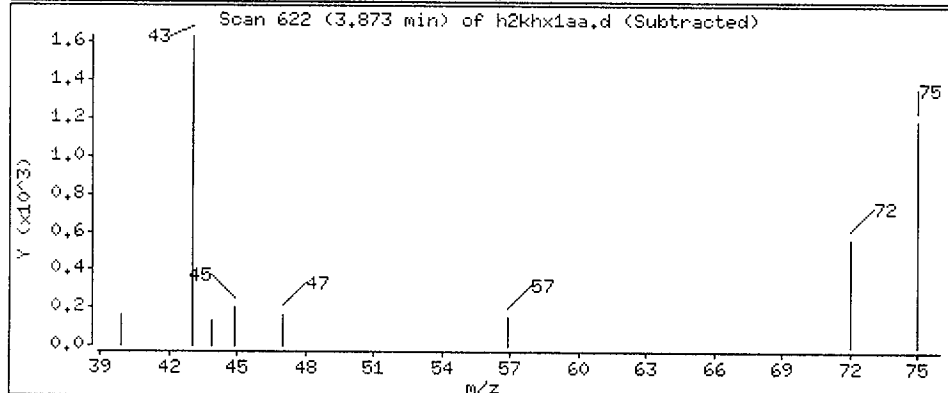
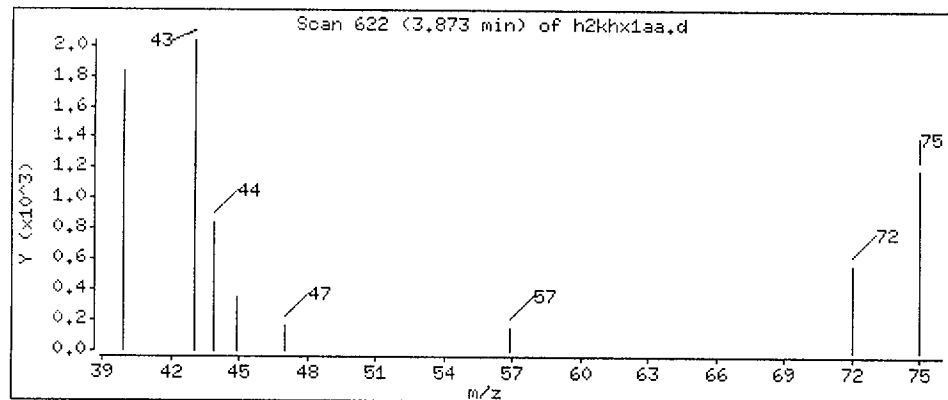
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

36 2-Butanone

Concentration: 0.046388 ug



Data File: /chem/gcms/mx,i/%040706,b/h2kx1aa,d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx,i

Sample Info: H2KHX1AA,1,0,,,

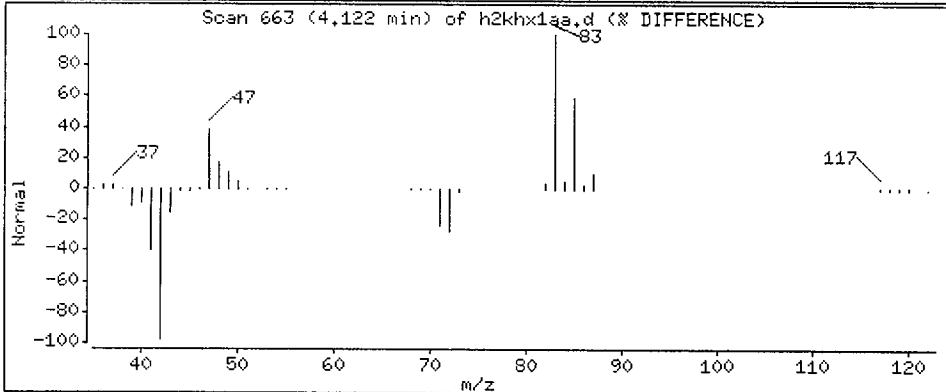
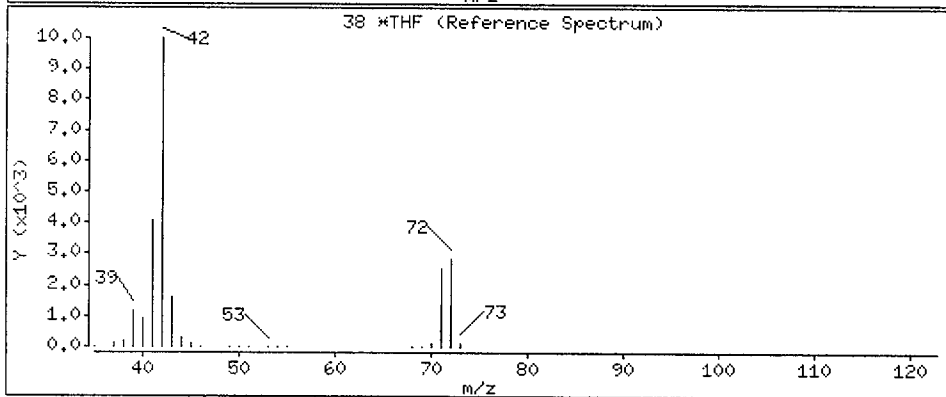
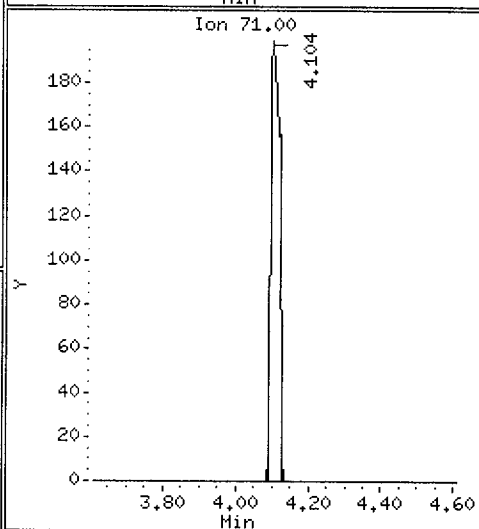
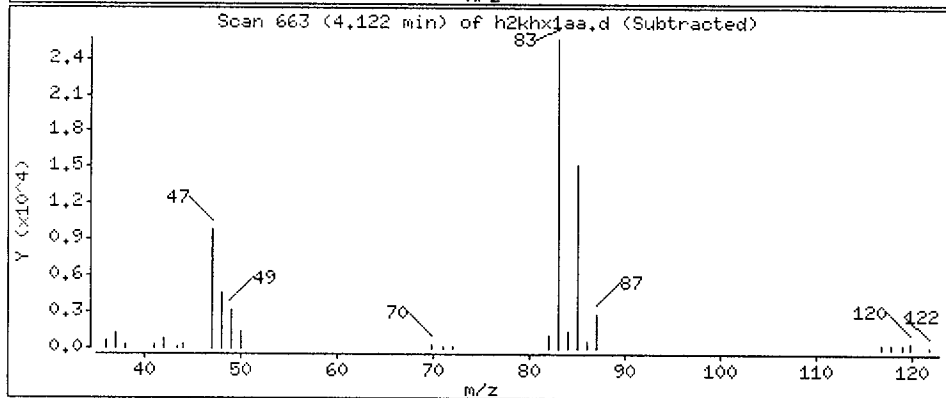
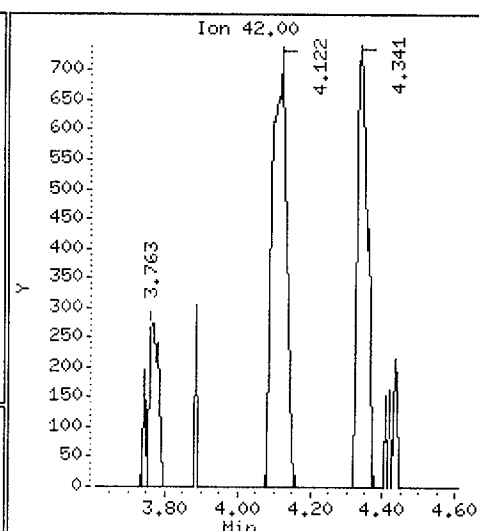
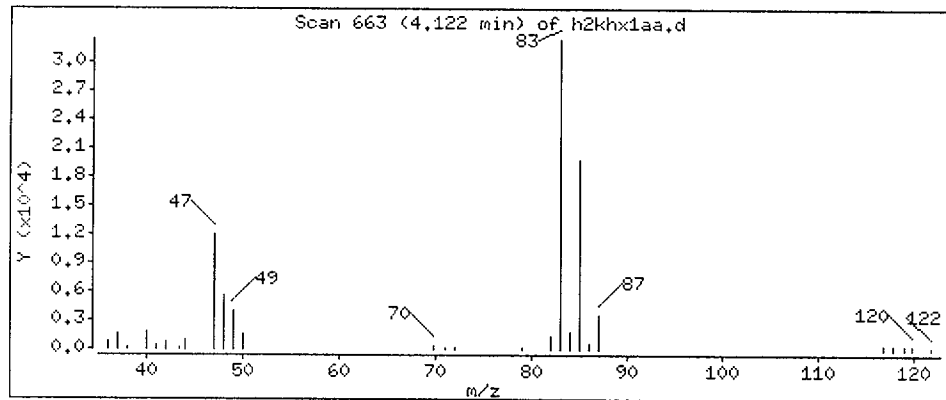
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

38 \*THF

Concentration: 0.034170 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1,0,,,

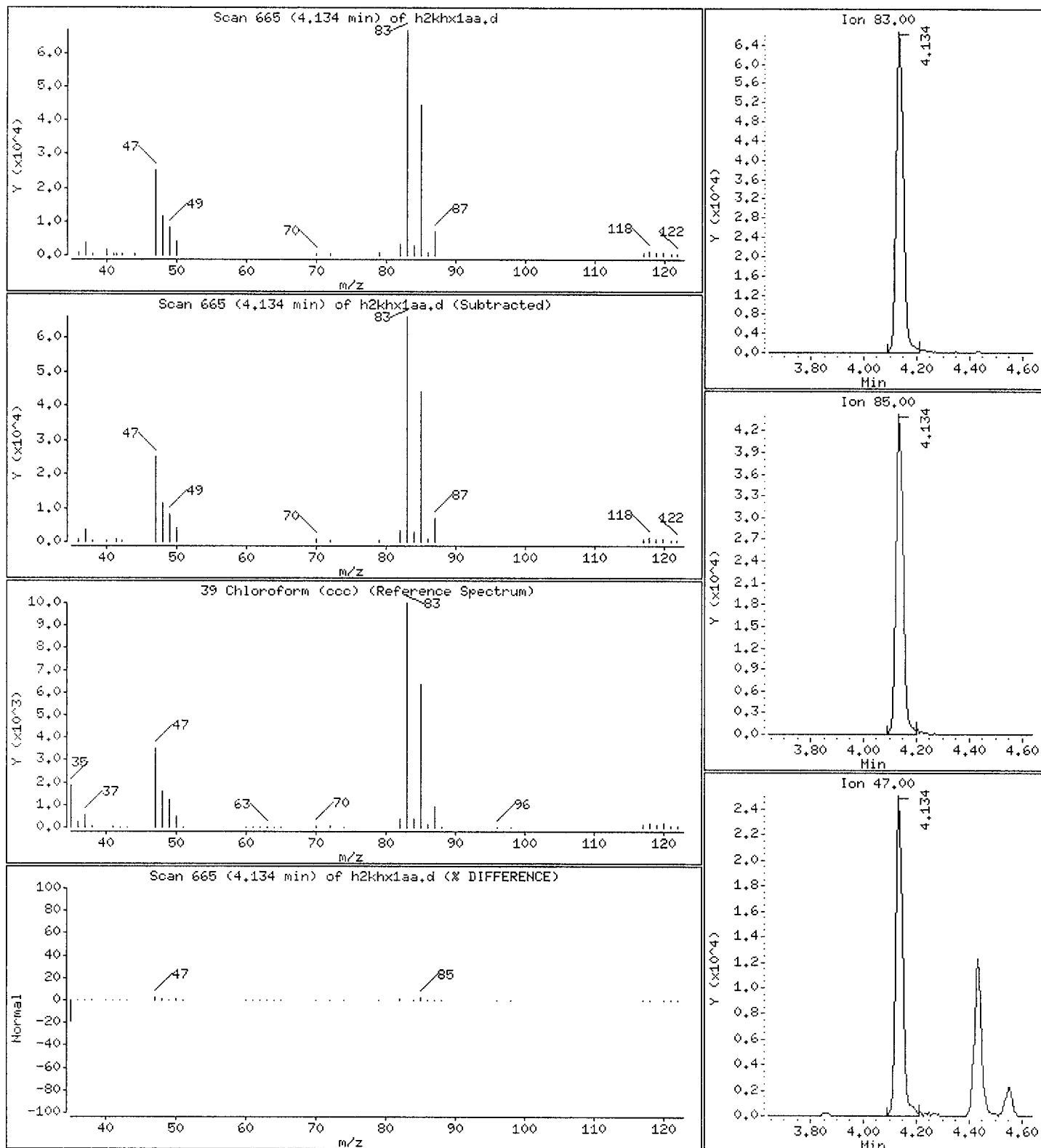
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

39 Chloroform (ccc)

Concentration: 0.076173 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kxh1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT V0ST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1,0,,,

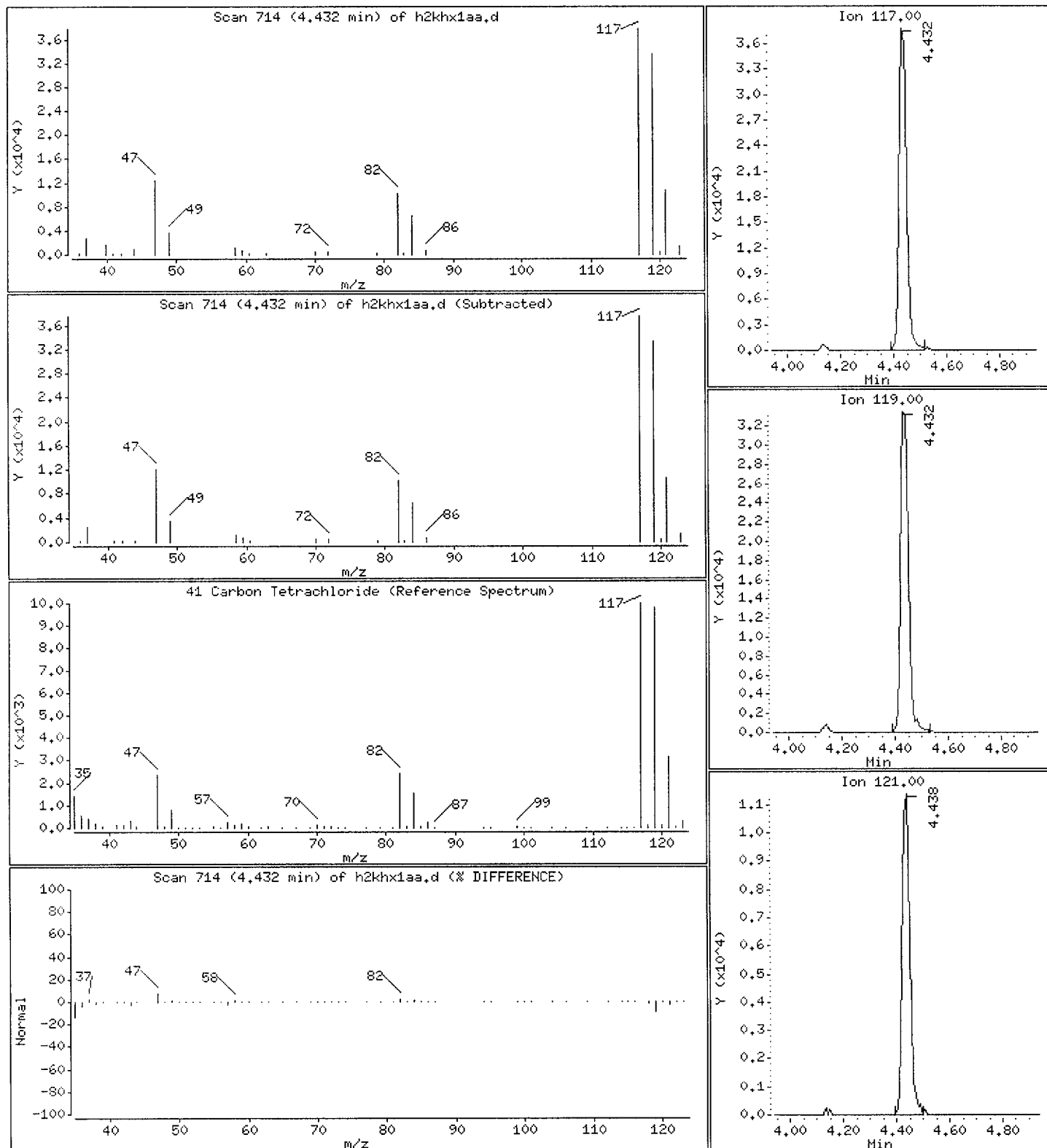
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

41 Carbon Tetrachloride

Concentration: 0.046857 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1,0,,,

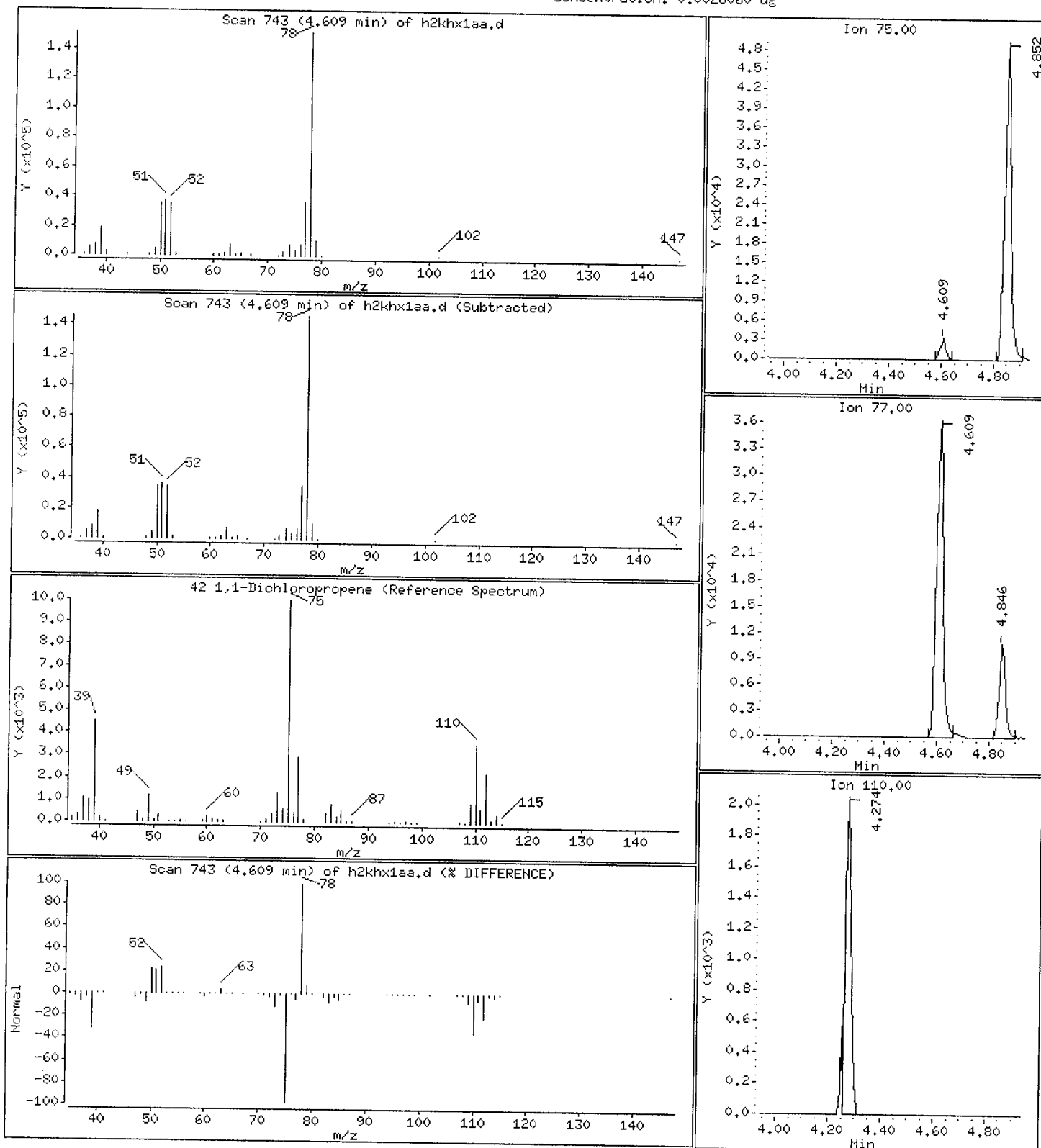
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

42 1,1-Dichloropropene

Concentration: 0.0028060 ug



Data File: /chem/gcms/mx,i/X040706,b/h2kx1aa,d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Sample Info: H2KHX1AA,1,0,,,

Instrument: mx.i

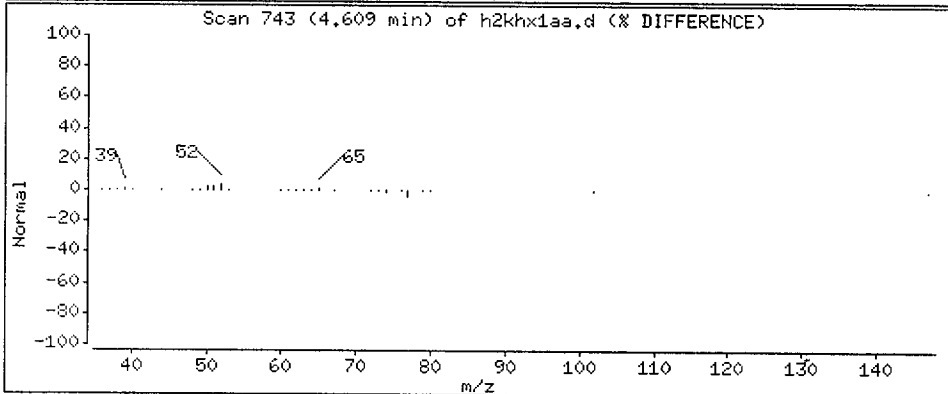
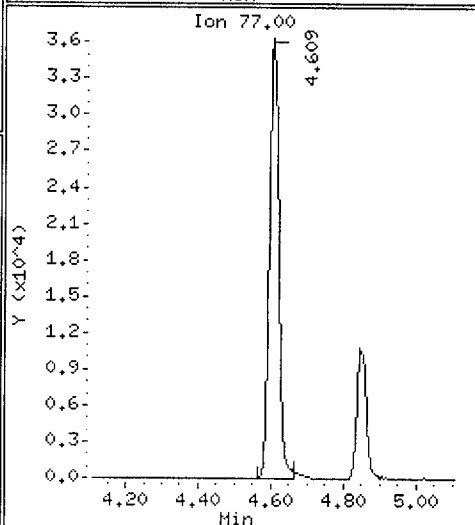
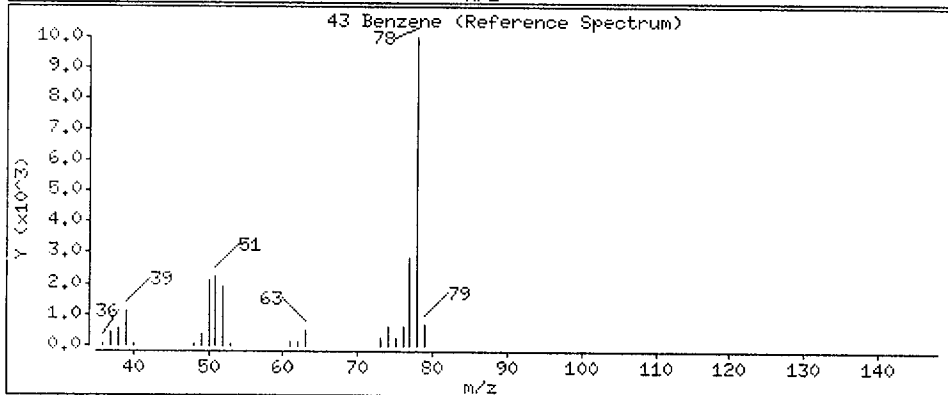
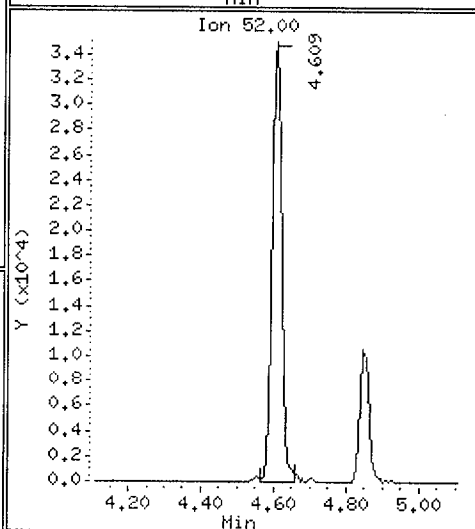
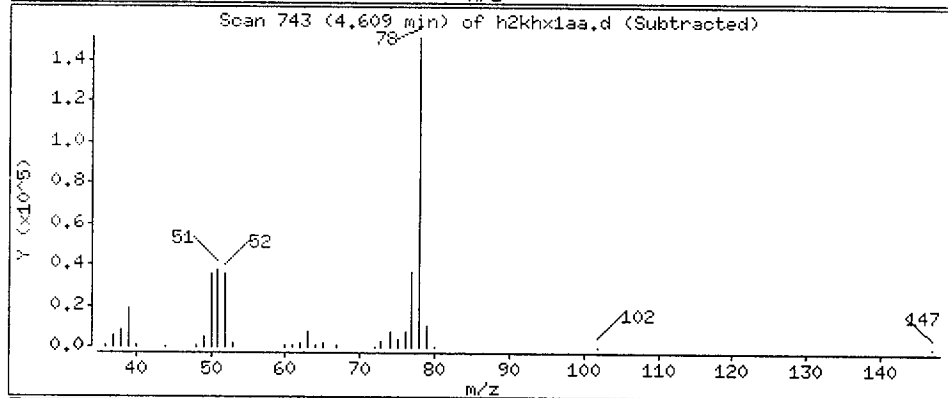
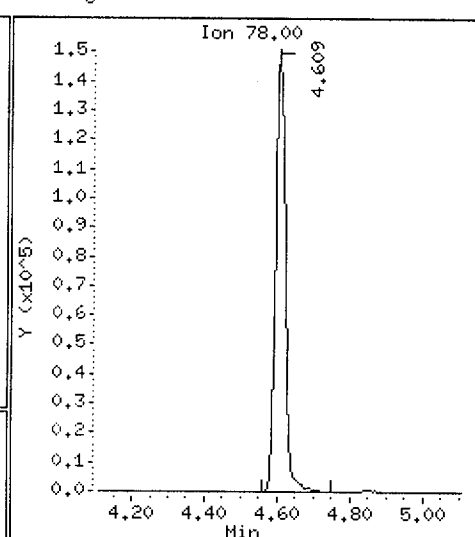
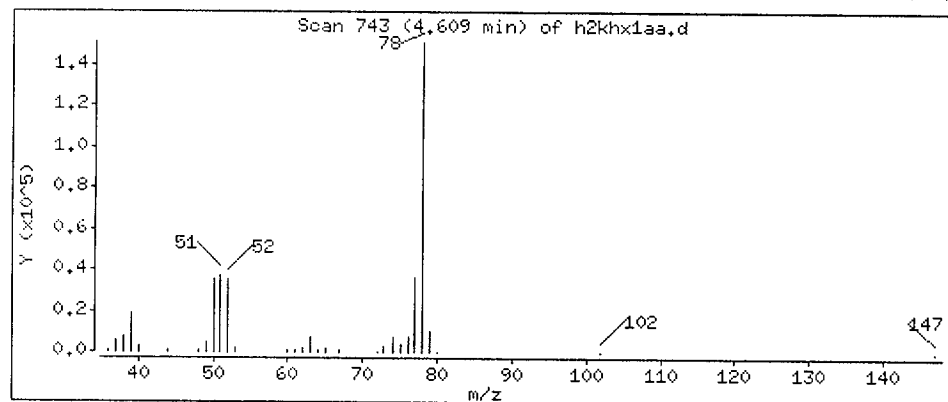
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

43 Benzene

Concentration: 0.062732 ug





Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1,0,,,

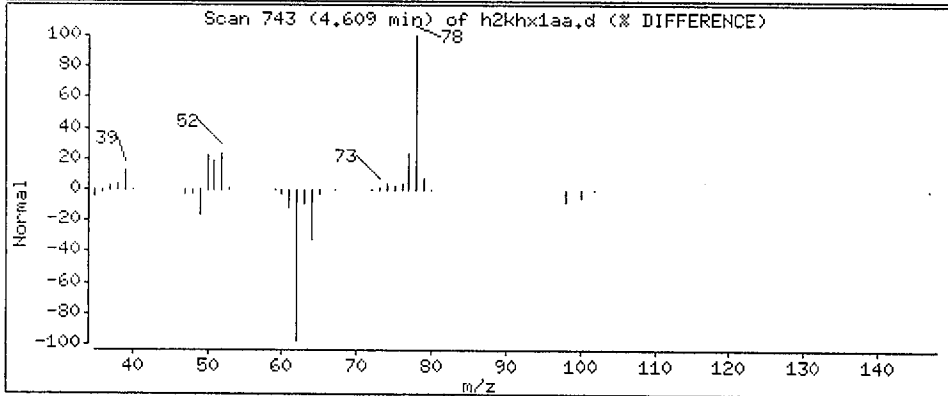
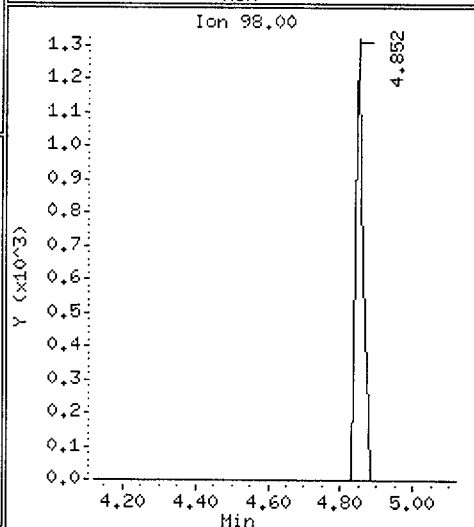
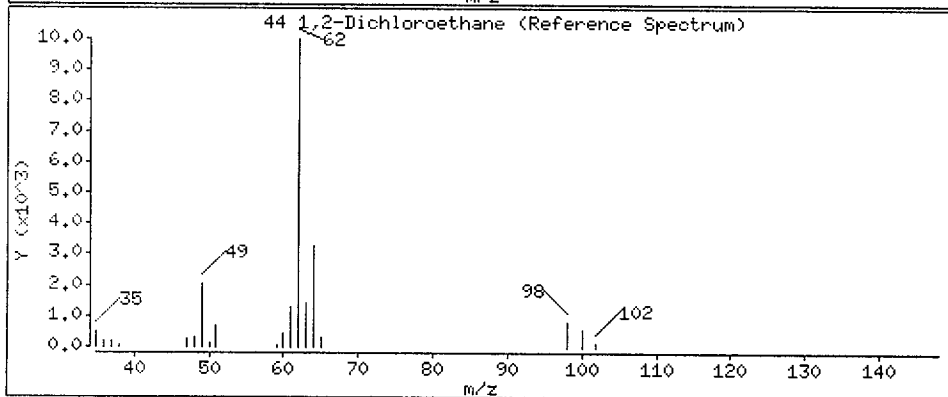
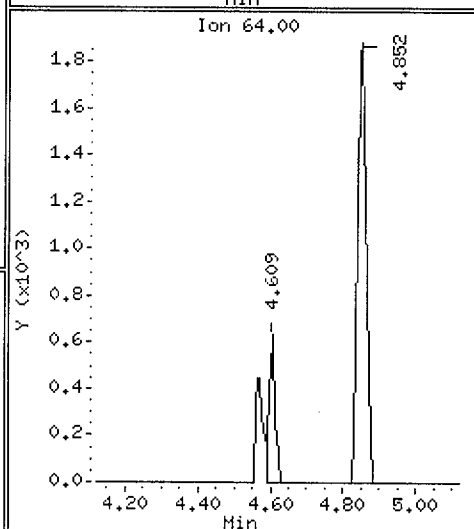
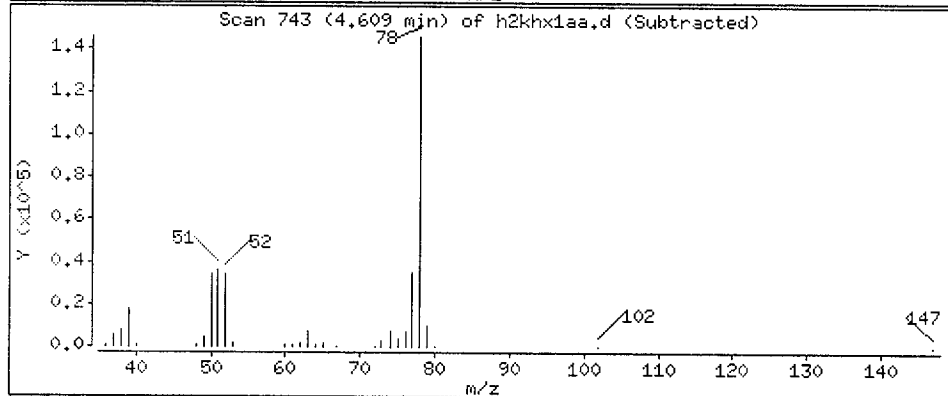
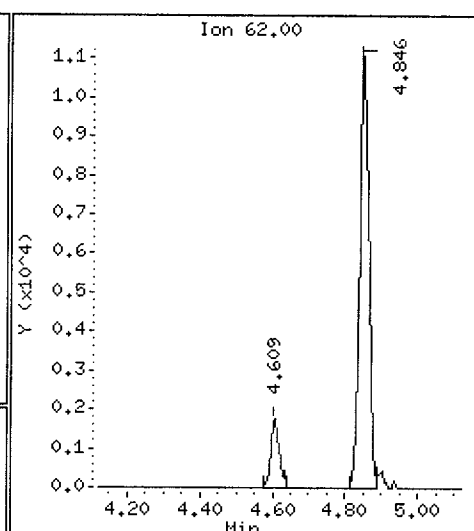
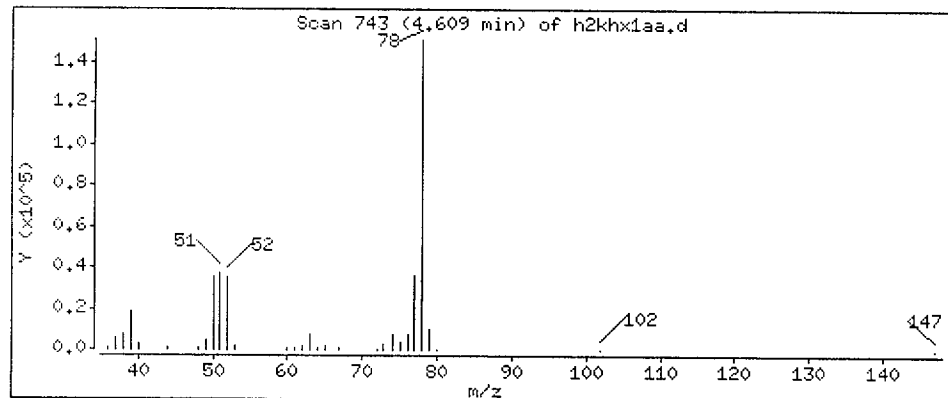
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

44 1,2-Dichloroethane

Concentration: 0.0040138 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1,0,,,

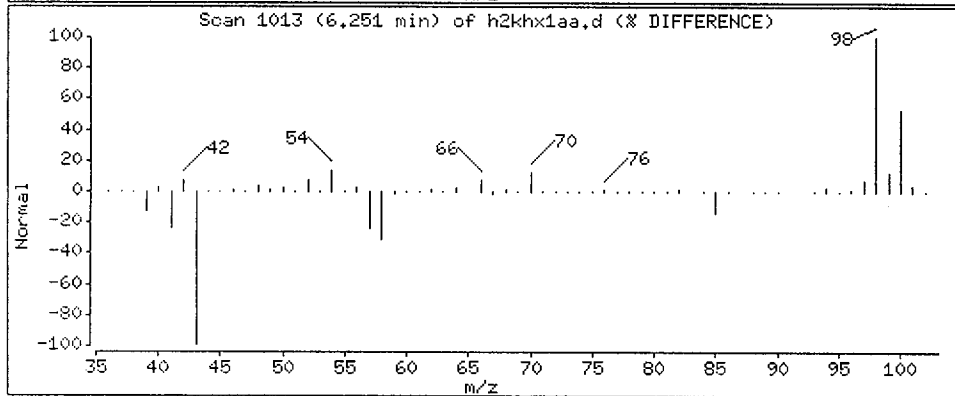
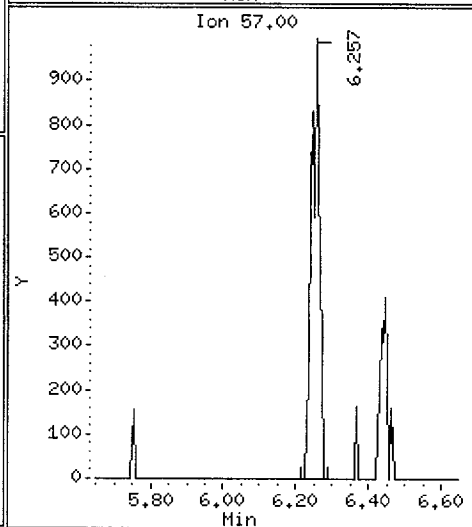
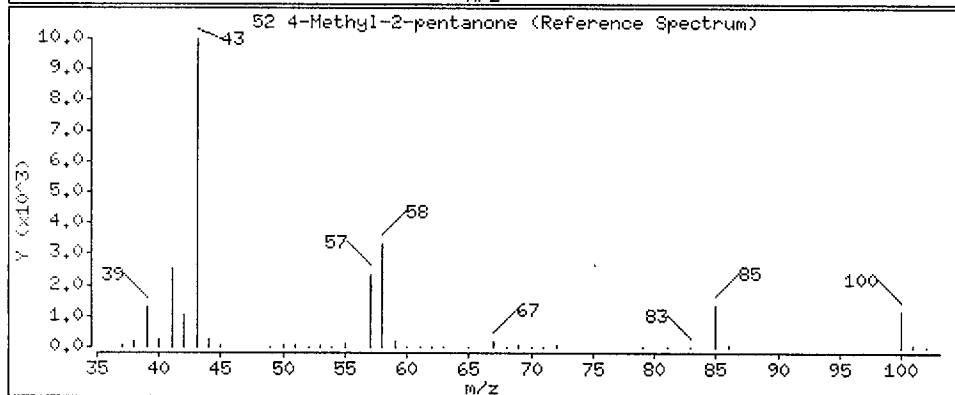
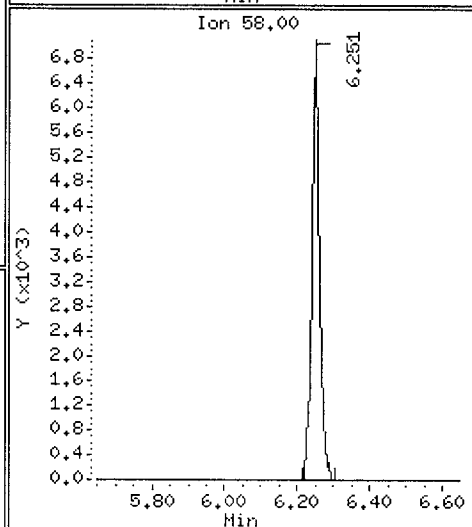
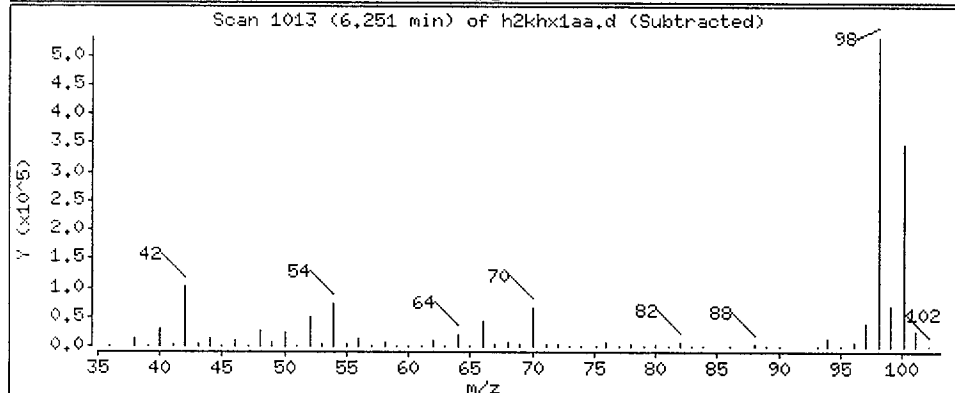
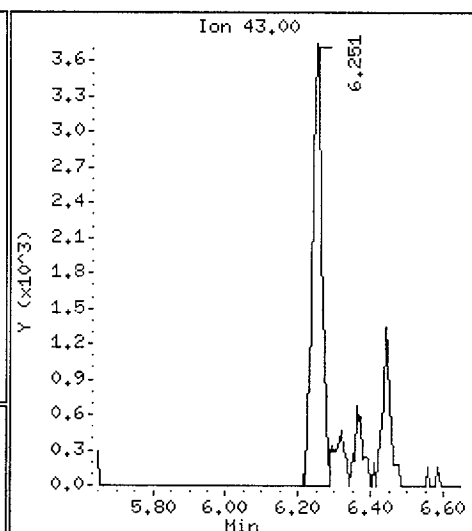
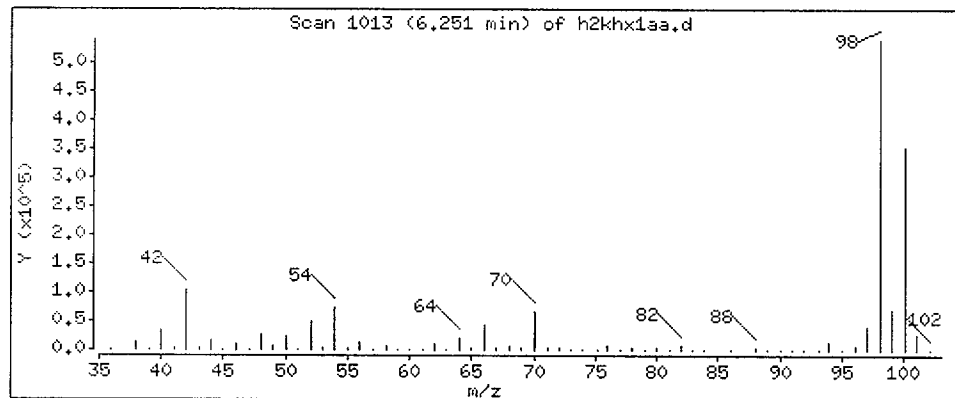
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

52 4-Methyl-2-pentanone

Concentration: 0.031023 ug



Data File: /chem/gcms/mx,i/X040706.b/h2kx1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1,0,,,

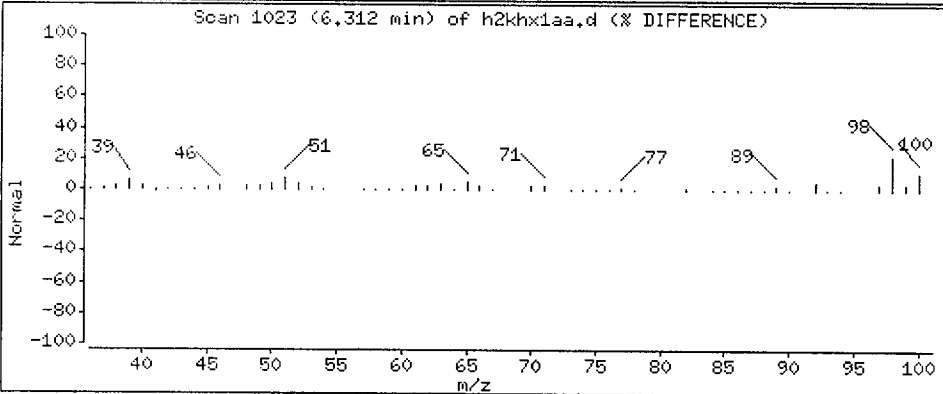
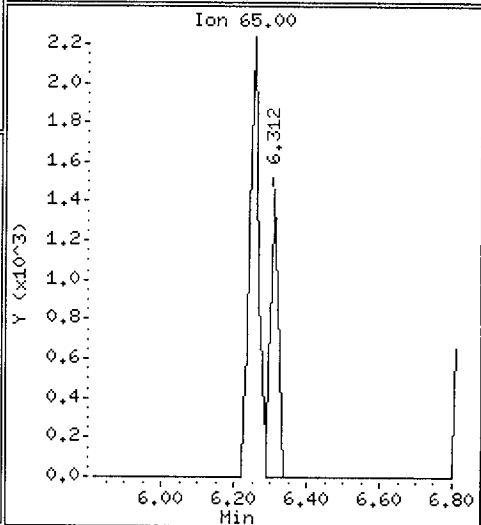
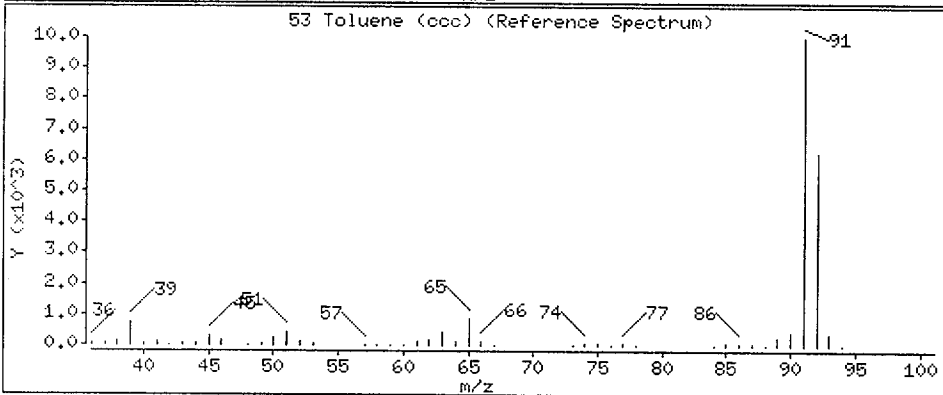
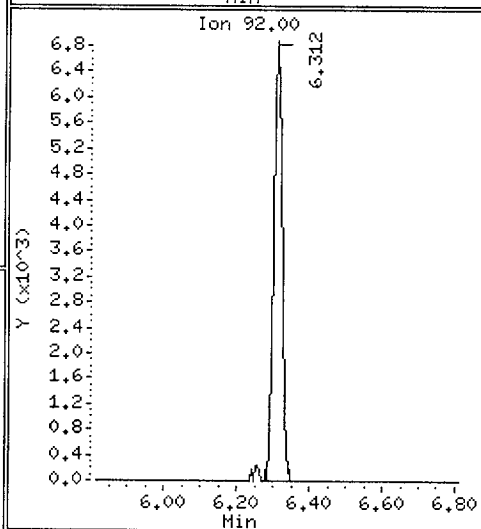
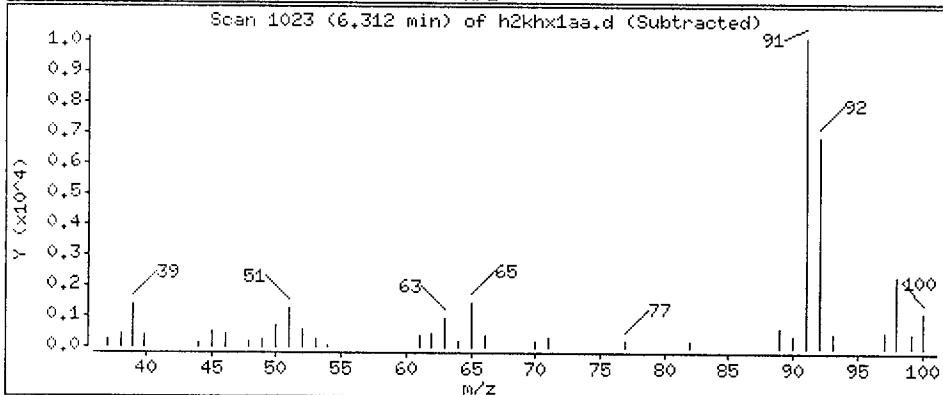
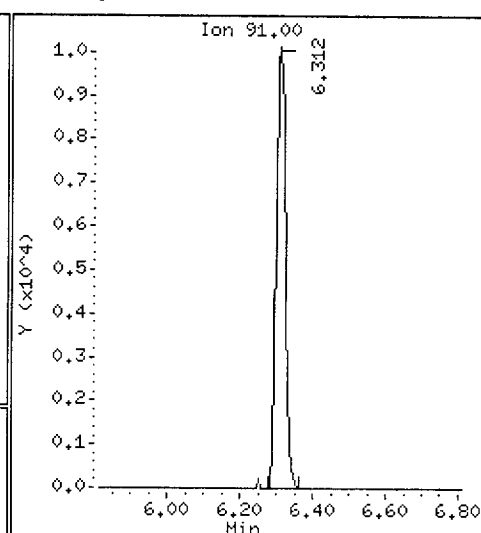
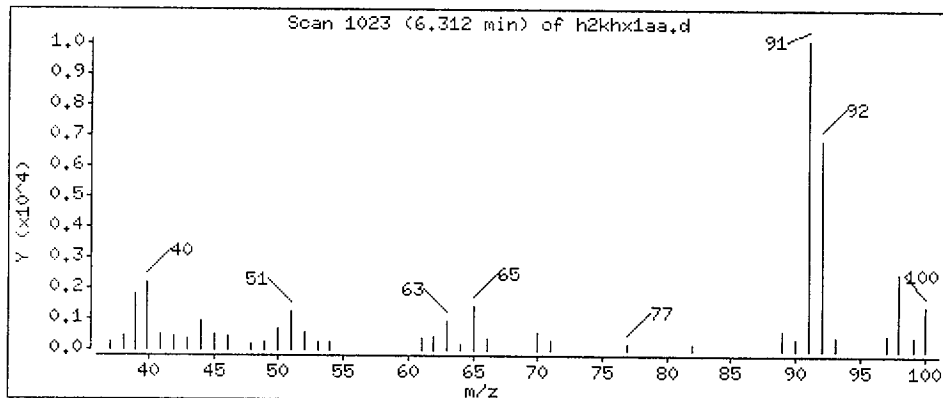
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

53 Toluene (ccc)

Concentration: 0.0030501 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1,0,,,

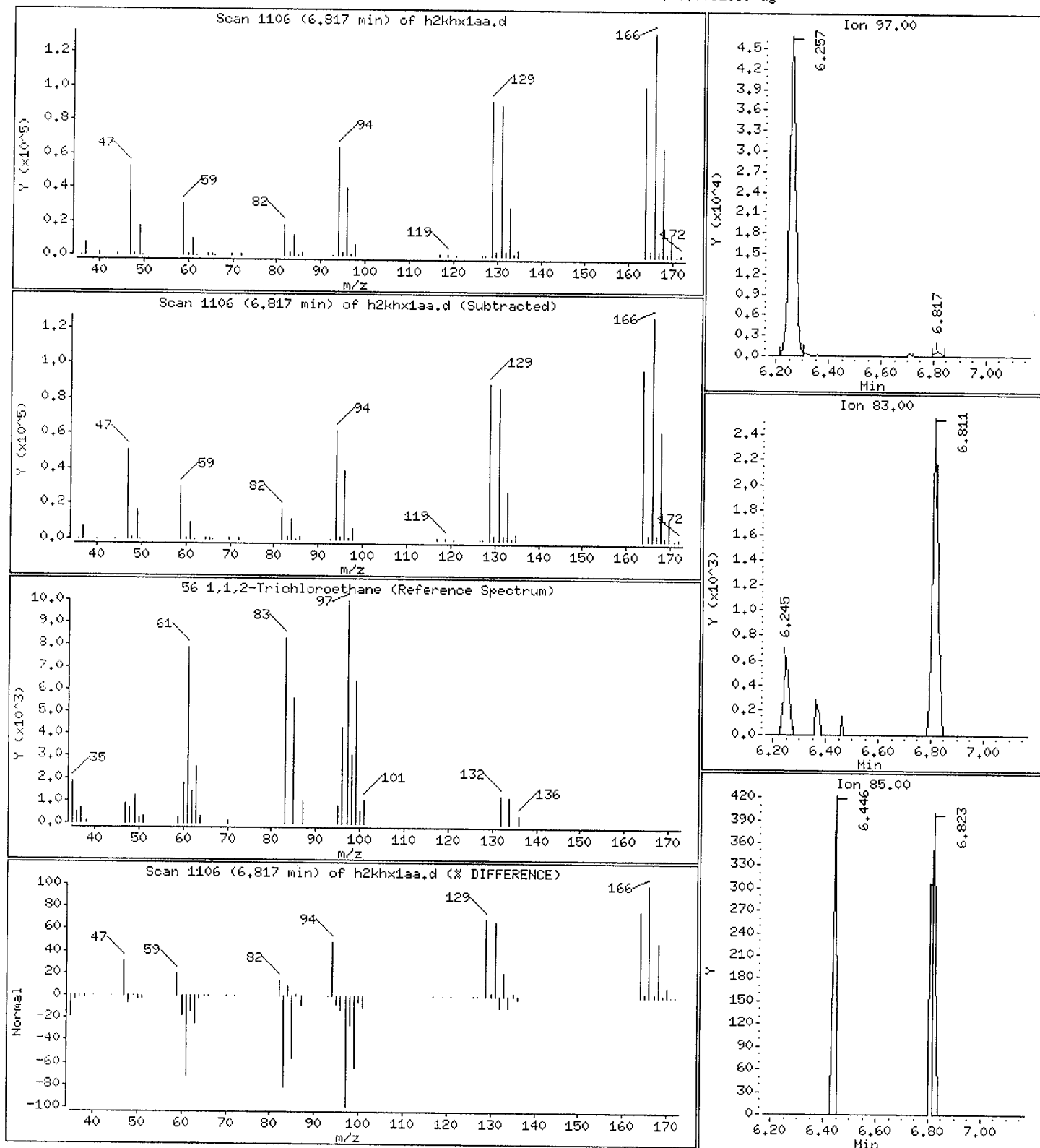
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

56 1,1,2-Trichloroethane

Concentration: 0.0032659 ug



Data File: /chem/gcms/mx,i/X040706,b/h2kx1aa,d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx,i

Sample Info: H2KHX1AA,1,0,,,

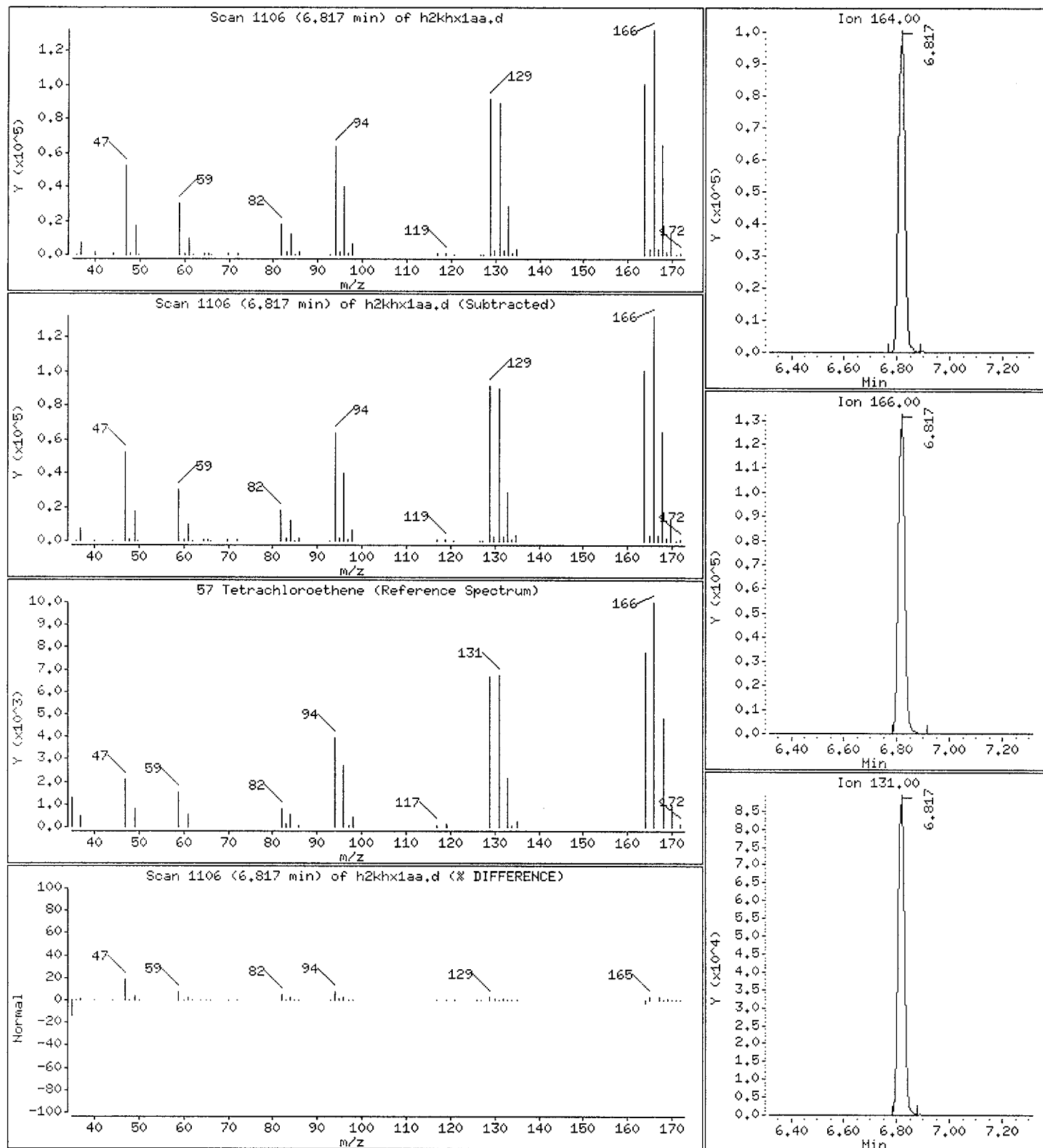
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

57 Tetrachloroethene

Concentration: 0.13574 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kx1aa.d

Date : 07-APR-2006 18:34

Client ID: AUDIT VOST #5

Instrument: mx.i

Sample Info: H2KHX1AA,1,0,,,

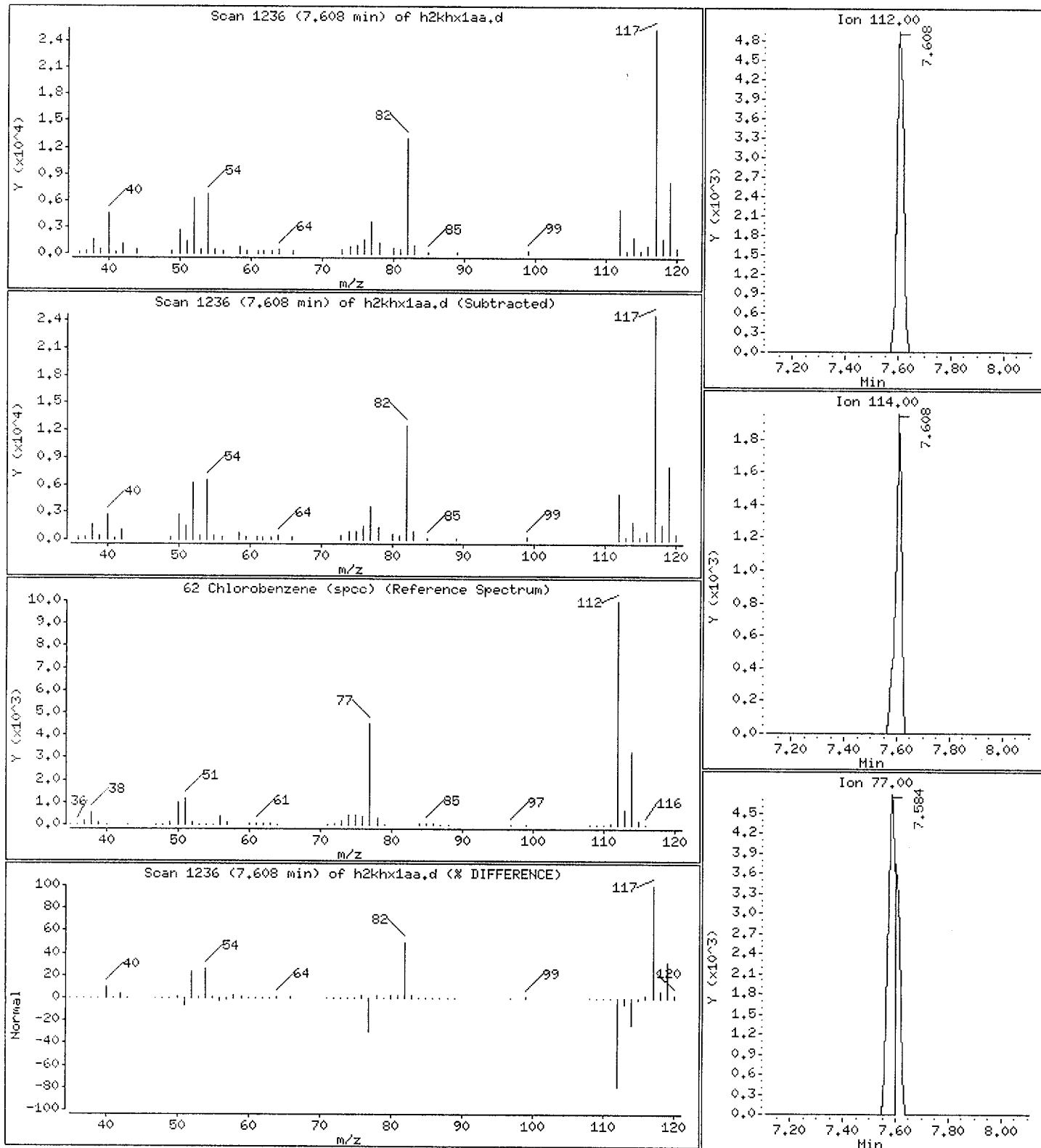
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

62 Chlorobenzene (spoc)

Concentration: 0.0029060 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2kx1aa.d  
Report Date: 18-Apr-2006 14:59

## STL Knoxville

SW-846 Method 8260A - Volatile Organics  
Data file : /var/chem/gcms/mx.i/X040706.b/h2kx1aa.d  
Lab Smp Id: H2KHX1AA Client Smp ID: AUDIT VOST #5  
Inj Date : 07-APR-2006 18:34  
Operator : 22980 Inst ID: mx.i  
Smp Info : H2KHX1AA,1,0,,,  
Misc Info : X040706,8260B\_LM,focus.sub  
Comment :  
Method : /var/chem/gcms/mx.i/X040706.b/8260B LM.m  
Meth Date : 18-Apr-2006 14:54 tajh Quant Type: ISTD  
Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

## STL Knoxville - ACS

Client Sample ID: AUDIT VOST #6

## GC/MS Volatiles

Lot-Sample #...: H6D030169-044    Work Order #...: H2KH11AA    Matrix.....: AIR  
 Date Sampled...: 03/28/06    Date Received...: 04/02/06  
 Prep Date.....: 04/07/06    Analysis Date...: 04/07/06  
 Prep Batch #...: 6097054  
 Dilution Factor: 1    Method.....: SW846 VOST

| PARAMETER                        | RESULT          | REPORTING    |           |               |
|----------------------------------|-----------------|--------------|-----------|---------------|
|                                  |                 | LIMIT        | UNITS     | MDL           |
| Acetone                          | ND              | 0.10         | ug        | 0.085         |
| Acrylonitrile                    | ND              | 0.50         | ug        | 0.076         |
| <b>Benzene</b>                   | <b>0.059</b>    | <b>0.010</b> | <b>ug</b> | <b>0.0032</b> |
| Bromobenzene                     | ND              | 0.010        | ug        | 0.0036        |
| Bromochloromethane               | ND              | 0.025        | ug        | 0.012         |
| Bromodichloromethane             | ND              | 0.010        | ug        | 0.0016        |
| Bromoform                        | ND              | 0.025        | ug        | 0.0066        |
| Bromomethane                     | ND              | 0.050        | ug        | 0.022         |
| 2-Butanone                       | ND              | 0.10         | ug        | 0.035         |
| n-Butylbenzene                   | ND              | 0.010        | ug        | 0.0047        |
| sec-Butylbenzene                 | ND              | 0.010        | ug        | 0.0036        |
| tert-Butylbenzene                | ND              | 0.010        | ug        | 0.0030        |
| <b>Carbon disulfide</b>          | <b>0.016</b>    | <b>0.010</b> | <b>ug</b> | <b>0.0011</b> |
| <b>Carbon tetrachloride</b>      | <b>0.049</b>    | <b>0.010</b> | <b>ug</b> | <b>0.0011</b> |
| <b>Chlorobenzene</b>             | <b>0.0044 J</b> | <b>0.010</b> | <b>ug</b> | <b>0.0013</b> |
| Chlorodibromomethane             | ND              | 0.025        | ug        | 0.010         |
| Chloroethane                     | ND              | 0.050        | ug        | 0.010         |
| <b>Chloroform</b>                | <b>0.074</b>    | <b>0.010</b> | <b>ug</b> | <b>0.0019</b> |
| Chloromethane                    | ND              | 0.025        | ug        | 0.0032        |
| 2-Chlorotoluene                  | ND              | 0.010        | ug        | 0.0023        |
| 4-Chlorotoluene                  | ND              | 0.010        | ug        | 0.0020        |
| 1,2-Dibromo-3-chloro-<br>propane | ND              | 0.050        | ug        | 0.020         |
| 1,2-Dibromoethane                | ND              | 0.025        | ug        | 0.010         |
| Dibromomethane                   | ND              | 0.025        | ug        | 0.010         |
| 1,2-Dichlorobenzene              | ND              | 0.010        | ug        | 0.0030        |
| 1,3-Dichlorobenzene              | ND              | 0.010        | ug        | 0.0031        |
| 1,4-Dichlorobenzene              | ND              | 0.010        | ug        | 0.0043        |
| Dichlorodifluoromethane          | ND              | 0.025        | ug        | 0.0050        |
| 1,1-Dichloroethane               | ND              | 0.010        | ug        | 0.0019        |
| 1,2-Dichloroethane               | ND              | 0.010        | ug        | 0.0022        |
| cis-1,2-Dichloroethene           | ND              | 0.010        | ug        | 0.0025        |
| trans-1,2-Dichloroethene         | ND              | 0.010        | ug        | 0.0017        |
| 1,1-Dichloroethene               | ND              | 0.010        | ug        | 0.0023        |
| 1,2-Dichloropropane              | ND              | 0.010        | ug        | 0.0027        |
| 1,3-Dichloropropane              | ND              | 0.010        | ug        | 0.0018        |
| 2,2-Dichloropropane              | ND              | 0.010        | ug        | 0.0015        |
| cis-1,3-Dichloropropene          | ND              | 0.010        | ug        | 0.0030        |
| trans-1,3-Dichloropropene        | ND              | 0.010        | ug        | 0.0020        |

(Continued on next page)



## STL Knoxville - ACS

Client Sample ID: AUDIT VOST #6

## GC/MS Volatiles

Lot-Sample #...: H6D030169-044 Work Order #...: H2KH11AA Matrix.....: AIR

| PARAMETER                                 | RESULT          | REPORTING    |            |               |
|-------------------------------------------|-----------------|--------------|------------|---------------|
|                                           |                 | LIMIT        | UNITS      | MDL           |
| 1,1-Dichloropropene                       | ND              | 0.010        | ug         | 0.0010        |
| Ethylbenzene                              | ND              | 0.010        | ug         | 0.0013        |
| Hexachlorobutadiene                       | ND              | 0.025        | ug         | 0.0048        |
| 2-Hexanone                                | ND              | 0.10         | ug         | 0.0099        |
| Iodomethane                               | ND              | 0.050        | ug         | 0.0016        |
| Isopropylbenzene                          | ND              | 0.010        | ug         | 0.0023        |
| p-Isopropyltoluene                        | ND              | 0.010        | ug         | 0.0038        |
| <b>Methylene chloride</b>                 | <b>0.075</b>    | <b>0.025</b> | <b>ug</b>  | <b>0.013</b>  |
| 4-Methyl-2-pentanone                      | ND              | 0.10         | ug         | 0.014         |
| Naphthalene                               | ND              | 0.025        | ug         | 0.010         |
| n-Propylbenzene                           | ND              | 0.010        | ug         | 0.0029        |
| Styrene                                   | ND              | 0.010        | ug         | 0.0017        |
| 1,1,1,2-Tetrachloroethane                 | ND              | 0.010        | ug         | 0.0010        |
| 1,1,2,2-Tetrachloroethane                 | ND              | 0.025        | ug         | 0.011         |
| <b>Tetrachloroethene</b>                  | <b>0.16</b>     | <b>0.010</b> | <b>ug</b>  | <b>0.0021</b> |
| Tetrahydrofuran                           | ND              | 0.10         | ug         | 0.031         |
| <b>Toluene</b>                            | <b>0.0034 J</b> | <b>0.010</b> | <b>ug</b>  | <b>0.0022</b> |
| 1,2,3-Trichlorobenzene                    | ND              | 0.025        | ug         | 0.014         |
| 1,2,4-Trichloro-<br>benzene               | ND              | 0.025        | ug         | 0.0030        |
| 1,1,1-Trichloroethane                     | ND              | 0.025        | ug         | 0.0016        |
| 1,1,2-Trichloroethane                     | ND              | 0.025        | ug         | 0.0050        |
| Trichloroethene                           | ND              | 0.010        | ug         | 0.0050        |
| Trichlorofluoromethane                    | ND              | 0.050        | ug         | 0.0049        |
| 1,2,3-Trichloropropane                    | ND              | 0.025        | ug         | 0.0081        |
| 1,1,2-Trichloro-<br>1,2,2-trifluoroethane | ND              | 0.050        | ug         | 0.0018        |
| 1,2,4-Trimethylbenzene                    | ND              | 0.010        | ug         | 0.0048        |
| 1,3,5-Trimethylbenzene                    | ND              | 0.010        | ug         | 0.0028        |
| Vinyl acetate                             | ND              | 0.050        | ug         | 0.012         |
| Vinyl chloride                            | ND              | 0.010        | ug         | 0.0032        |
| m-Xylene & p-Xylene                       | ND              | 0.020        | ug         | 0.0034        |
| o-Xylene                                  | ND              | 0.010        | ug         | 0.0017        |
| Xylenes (total)                           | ND              | 0.030        | ug         | 0.0048        |
| SURROGATE                                 | PERCENT         |              | RECOVERY   |               |
|                                           | RECOVERY        |              | LIMITS     |               |
| Dibromofluoromethane                      | 85              |              | (50 - 134) |               |
| 1,2-Dichloroethane-d4                     | 85              |              | (50 - 134) |               |
| Toluene-d8                                | 87              |              | (57 - 127) |               |
| Bromofluorobenzene                        | 64              |              | (50 - 125) |               |

**NOTE(S) :**

J Estimated result. Result is less than RL.

STL Knoxville - ACS

AUDIT VOST #6

GC/MS Volatiles

Lot-Sample #: H6D030169-044

Work Order #: H2KH11AA

Matrix: AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug           |

Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d  
Report Date: 07-Apr-2006 18:18

## STL Knoxville

SW-846 Method 8260A - Volatile Organics

Data file : /chem/gcms/mx.i/X040706.b/h2kh11aa.d  
Lab Smp Id: H2KH11AA Client Smp ID: AUDIT VOST #6  
Inj Date : 07-APR-2006 18:01  
Operator : 22980 Inst ID: mx.i  
Smp Info : H2KH11AA,1,0,,,  
Misc Info : X040706,8260B\_LM,focus.sub  
Comment :  
Method : /var/chem/gcms/mx.i/X040706.b/8260B\_LM.m  
Meth Date : 07-Apr-2006 11:23 gosss Quant Type: ISTD  
Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

| Compounds                  | QUANT SIG |        |        |         |          |            | CONCENTRATIONS       |  |
|----------------------------|-----------|--------|--------|---------|----------|------------|----------------------|--|
|                            | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON- COLUMN | FINAL                |  |
|                            |           |        |        |         |          | ( ug/L)    | ( ug)                |  |
| *****                      | ----      | ==     | =====  | =====   | =====    | =====      | =====                |  |
| * 1 Fluorobenzene          | 96        | 4.851  | 4.851  | (1.000) | 1014913  | 10.0000    |                      |  |
| * 2 Chlorobenzene-d5       | 119       | 7.583  | 7.582  | (1.000) | 200901   | 10.0000    |                      |  |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.746 | 10.746 | (1.000) | 220045   | 10.0000    |                      |  |
| \$ 4 Dibromofluoromethane  | 113       | 4.273  | 4.273  | (0.881) | 147528   | 8.54956    | 0.21374              |  |
| \$ 5 1,2-Dichloroethane d4 | 65        | 4.553  | 4.553  | (0.939) | 113969   | 8.47325    | 0.21183              |  |
| \$ 6 Toluene-d8            | 98        | 6.251  | 6.250  | (0.824) | 853396   | 8.67610    | 0.21690              |  |
| \$ 7 4 Bromofluorobenzene  | 95        | 8.873  | 8.872  | (0.826) | 167857   | 6.43381    | 0.16084              |  |
| 11 Chloromethane (spcc)    | 50        | 1.250  | 1.262  | (0.258) | 2012     | 0.04257    | 0.0010641            |  |
| 21 Acetone                 | 43        | 2.375  | 2.381  | (0.490) | 4637     | 3.22604    | 0.080651             |  |
| 23 Carbon Disulfide        | 76        | 2.497  | 2.497  | (0.515) | 50838    | 0.65727    | 0.016432             |  |
| 26 Methylene Chloride      | 84        | 2.746  | 2.746  | (0.566) | 46943    | 2.99167    | 0.074792             |  |
| 33 *Vinyl Acetate          | 86        | 3.245  | 3.421  | (0.669) | 1285     | 1.11318    | <del>0.027830</del>  |  |
| 36 2 Butanone              | 43        | 3.878  | 3.871  | (0.799) | 1530     | 0.68241    | 0.017060             |  |
| 38 *THF                    | 42        | 4.134  | 4.109  | (0.852) | 1600     | 1.16486    | 0.029122             |  |
| 39 Chloroform (ccc)        | 83        | 4.134  | 4.139  | (0.852) | 113537   | 2.94334    | 0.073583             |  |
| 41 Carbon Tetrachloride    | 117       | 4.438  | 4.437  | (0.915) | 71439    | 1.96086    | 0.049022             |  |
| 42 1,1-Dichloropropene     | 75        | 4.608  | 4.437  | (0.950) | 4406     | 0.10966    | <del>0.0027416</del> |  |
| 43 Benzene                 | 78        | 4.608  | 4.607  | (0.950) | 243872   | 2.37262    | 0.059315             |  |
| 44 1,2-Dichloroethane      | 62        | 4.608  | 4.620  | (0.950) | 2483     | 0.14358    | <del>0.0035899</del> |  |
| 52 4 Methyl 2-pentanone    | 43        | 6.257  | 6.147  | (1.290) | 7014     | 1.30636    | <del>0.022659</del>  |  |

✓  
4/19/06

4/19/06

Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d  
Report Date: 07-Apr-2006 18:18

| Compounds                | QUANT SIG | MASS | RT    | EXP RT | REL RT  | RESPONSE | CONCENTRATIONS |                  |
|--------------------------|-----------|------|-------|--------|---------|----------|----------------|------------------|
|                          |           |      |       |        |         |          | ON COLUMN      | FINAL            |
|                          |           |      |       |        |         |          | ( ug/L)        | ( ug)            |
| =====                    | =====     | ==   | ===== | =====  | =====   | =====    | =====          | =====            |
| 53 Toluene (ccc)         |           | 91   | 6.311 | 6.311  | (0.832) | 15938    | 0.13544        | 0.0033860        |
| 56 1,1,2-Trichloroethane |           | 97   | 6.810 | 6.670  | (0.898) | 1402     | 0.15086        | <u>0.0037714</u> |
| 57 Tetrachloroethene     |           | 164  | 6.816 | 6.816  | (0.899) | 164128   | 6.49106        | 0.16228          |
| 62 Chlorobenzene (spcc)  |           | 112  | 7.607 | 7.607  | (1.003) | 10579    | 0.17513        | 0.0043782        |

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Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d  
 Report Date: 07-Apr-2006 18:18

STL Knoxville

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                       |                               |
|-------------------------------------------------------|-------------------------------|
| Instrument ID: mx.i                                   | Calibration Date: 07-APR-2006 |
| Lab File ID: h2kh11aa.d                               | Calibration Time: 09:16       |
| Lab Smp Id: H2KH11AA                                  | Client Smp ID: AUDIT VOST #6  |
| Analysis Type: VOA                                    | Level: LOW                    |
| Quant Type: ISTD                                      | Sample Type: AIR              |
| Operator: 22980                                       |                               |
| Method File: /var/chem/gcms/mx.i/X040706.b/8260B_LM.m |                               |
| Misc Info: X040706,8260B_LM,focus.sub                 |                               |

| COMPOUND<br>=====   | STANDARD<br>===== | AREA LIMIT     |                | SAMPLE<br>===== | %DIFF<br>===== |
|---------------------|-------------------|----------------|----------------|-----------------|----------------|
|                     |                   | LOWER<br>===== | UPPER<br>===== |                 |                |
| 1 Fluorobenzene     | 1149191           | 574596         | 2298382        | 1014913         | -11.68         |
| 2 Chlorobenzene-d5  | 214194            | 107097         | 428388         | 200901          | -6.21          |
| 3 1,4 Dichlorobenze | 242601            | 121300         | 485202         | 220045          | -9.30          |

| COMPOUND<br>=====   | STANDARD<br>===== | RT LIMIT       |                | SAMPLE<br>===== | %DIFF<br>===== |
|---------------------|-------------------|----------------|----------------|-----------------|----------------|
|                     |                   | LOWER<br>===== | UPPER<br>===== |                 |                |
| 1 Fluorobenzene     | 4.85              | 4.35           | 5.35           | 4.85            | 0.01           |
| 2 Chlorobenzene-d5  | 7.58              | 7.08           | 8.08           | 7.58            | 0.01           |
| 3 1,4 Dichlorobenze | 10.75             | 10.25          | 11.25          | 10.75           | 0.01           |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d  
Report Date: 07-Apr-2006 18:18

## STL Knoxville

## RECOVERY REPORT

Client Name: STL Knoxville - ACS      Client SDG: H6D030169  
Sample Matrix: GAS      Fraction: VOA  
Lab Smp Id: H2KH11AA      Client Smp ID: AUDIT VOST #6  
Level: LOW      Operator: 22980  
Data Type: MS DATA      SampleType: SAMPLE  
SpikeList File: allcmpds.spk      Quant Type: ISTD  
Sublist File: focus.sub  
Method File: /var/chem/gcms/mx.i/X040706.b/8260B\_LM.m  
Misc Info: X040706,8260B\_LM,focus.sub

| SURROGATE COMPOUND      | CONC<br>ADDED<br>ug | CONC<br>RECOVERED<br>ug | %<br>RECOVERED | LIMITS |
|-------------------------|---------------------|-------------------------|----------------|--------|
| \$ 4 Dibromofluorometha | 0.25000             | 0.21374                 | 85.50          | 50-150 |
| \$ 5 1,2-Dichloroethane | 0.25000             | 0.21183                 | 84.73          | 50-150 |
| \$ 6 Toluene-d8         | 0.25000             | 0.21690                 | 86.76          | 50-150 |
| \$ 7 4-Bromofluorobenze | 0.25000             | 0.16084                 | 64.34          | 50-150 |

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

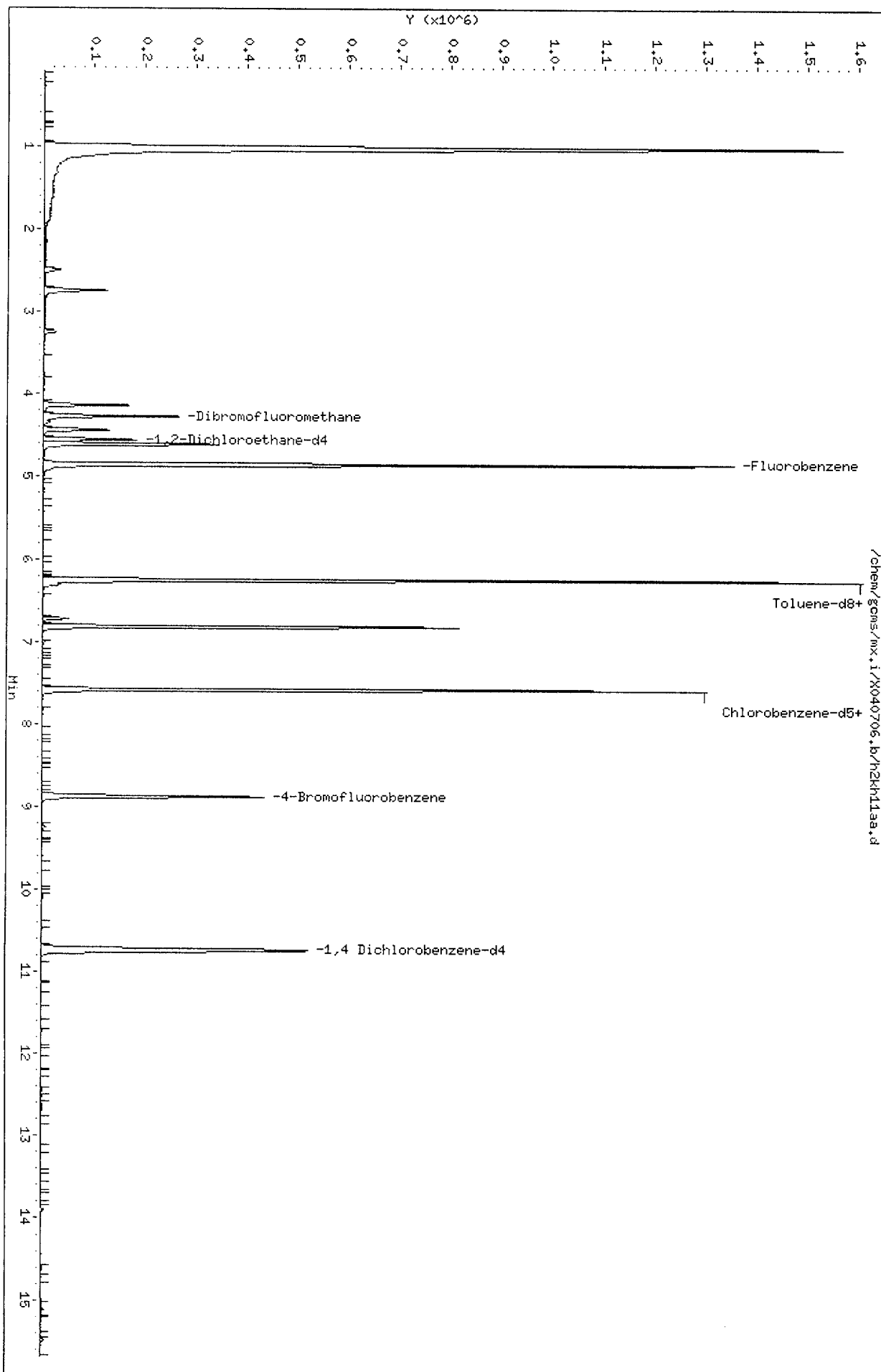
Sample Info: H2KH11AA,1,0,,

Column phase: J+W 624

Instrument: mx.i

Operator: 22980

Column diameter: 0.18



Data File: /chem/gcms/mx,i/X040706,b/h2kh11aa,d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx,i

Sample Info: H2KH11AA,1,0,,,

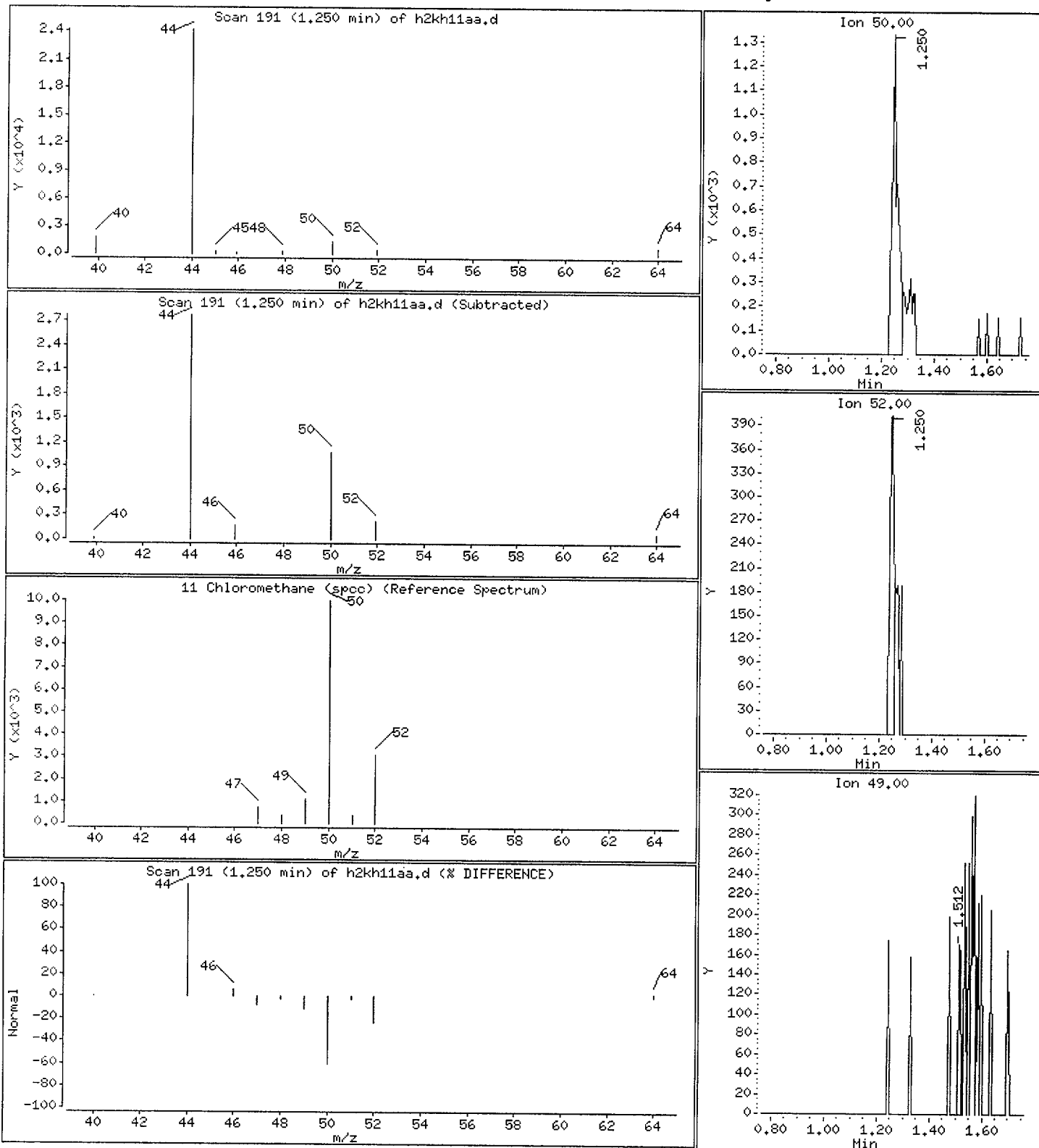
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

11 Chloromethane (spcc)

Concentration: 0.0010641 ug





Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx.i

Sample Info: H2KH11AA,1,0,,,

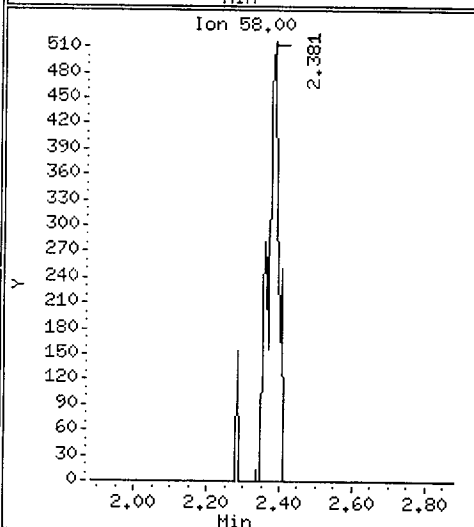
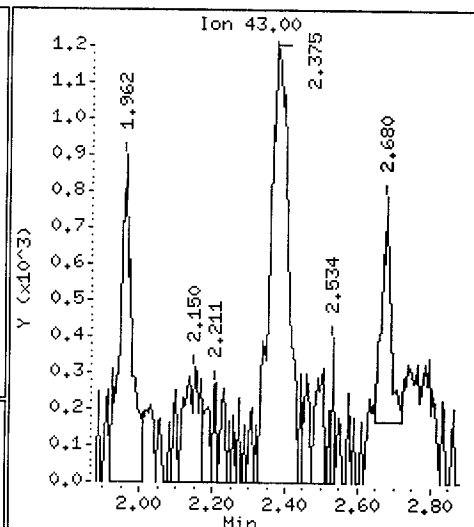
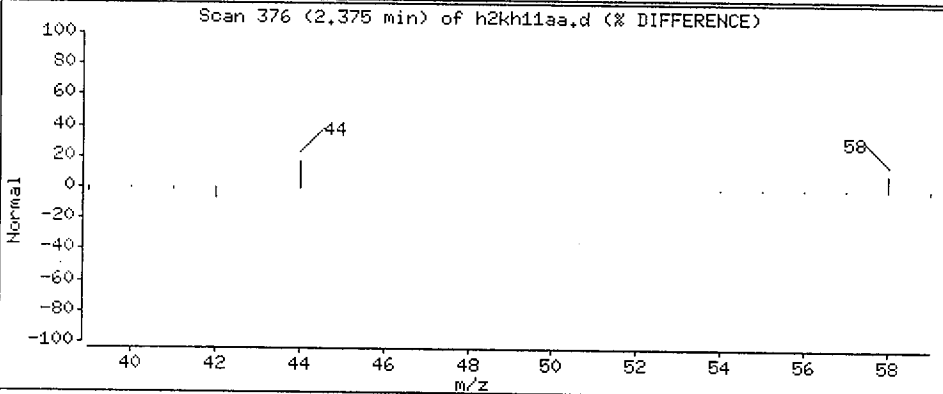
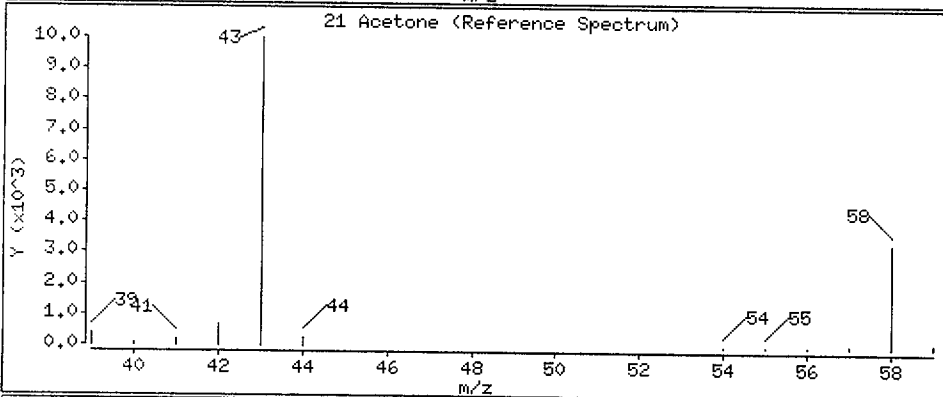
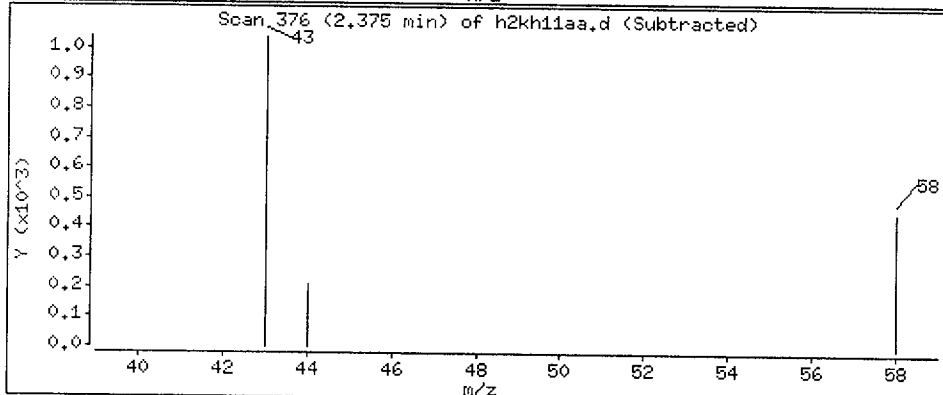
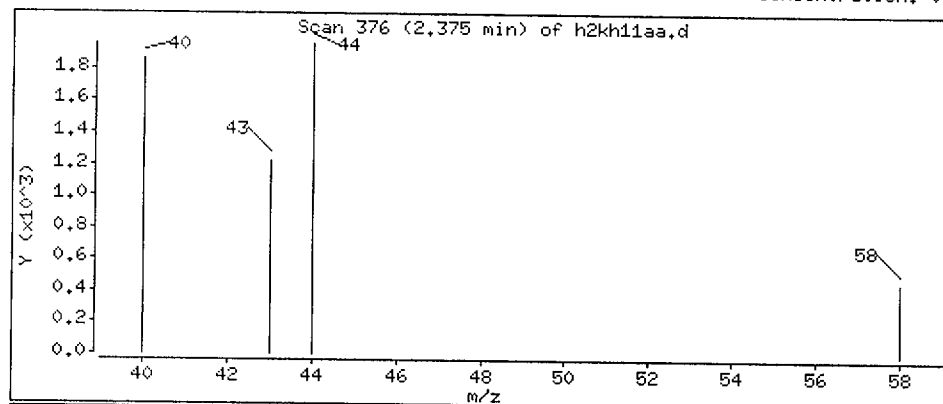
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

Concentration: 0.080651 ug

21 Acetone



Data File: /chem/gcms/mx,i/X040706,b/h2kh11aa,d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx,i

Sample Info: H2KH11AA,1,0,,,

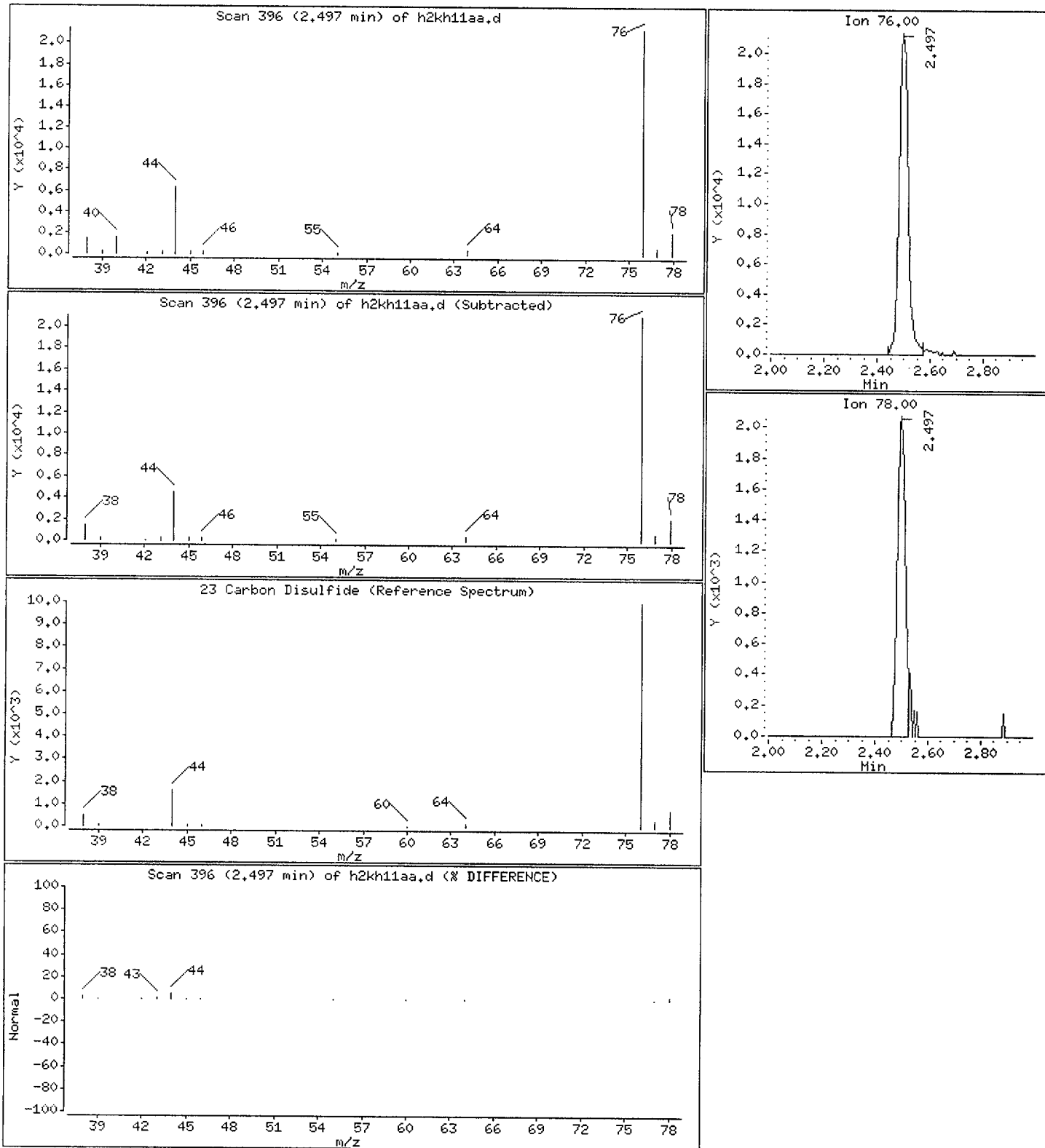
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

23 Carbon Disulfide

Concentration: 0.016432 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx.i

Sample Info: H2KH11AA,1,0,,,

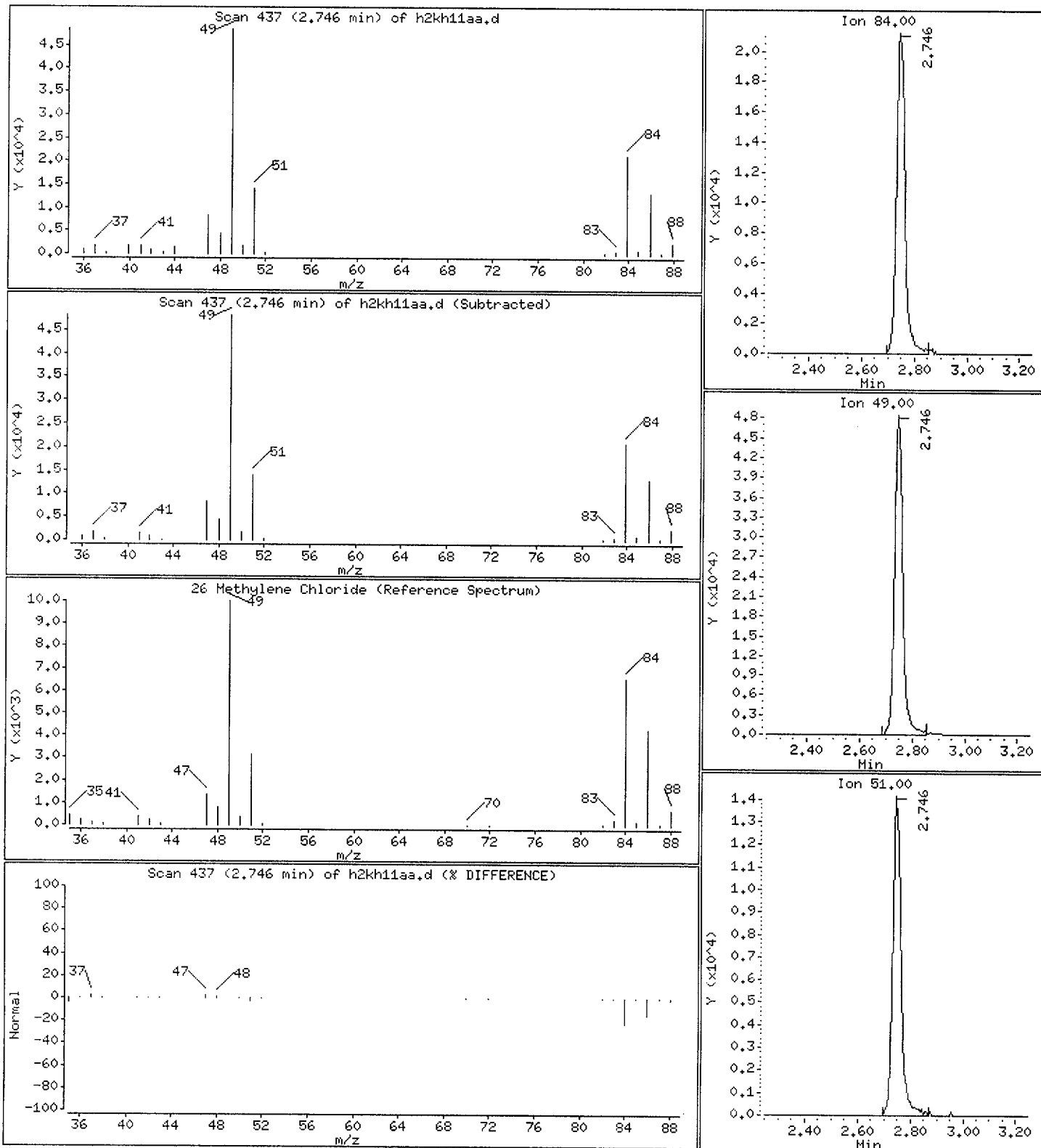
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

26 Methylene Chloride

Concentration: 0.074792 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx.i

Sample Info: H2KH11AA,1,0,,,

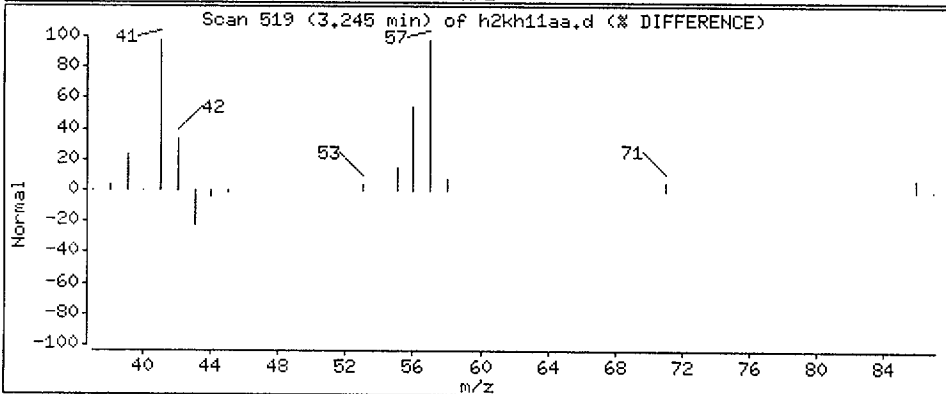
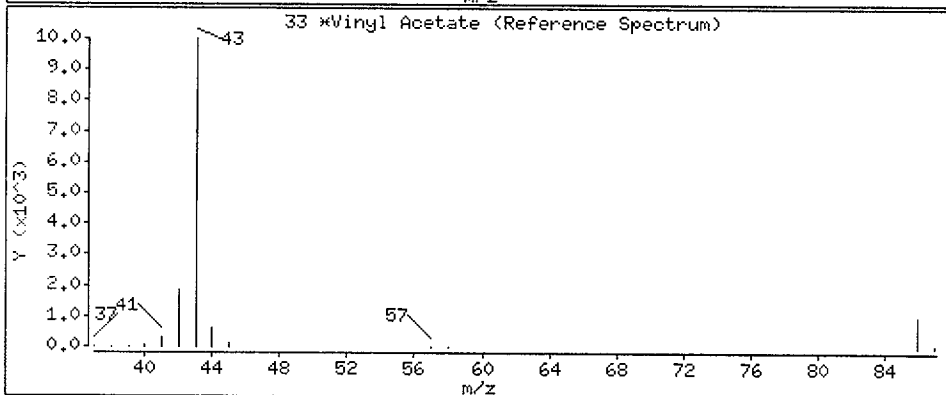
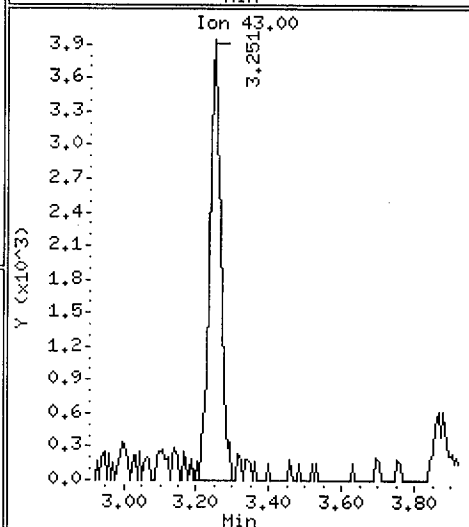
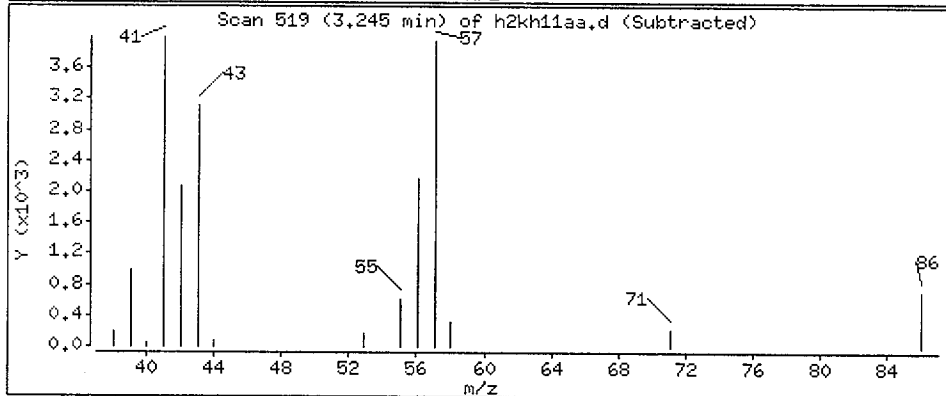
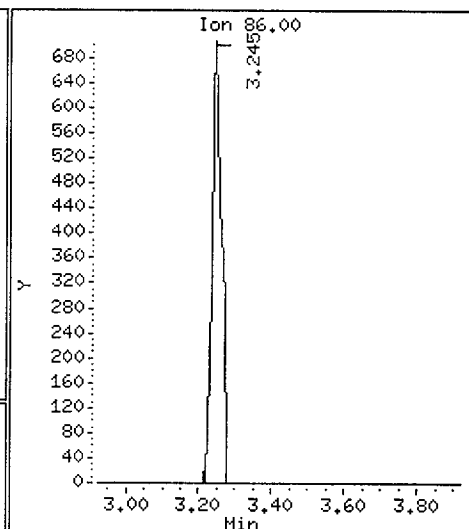
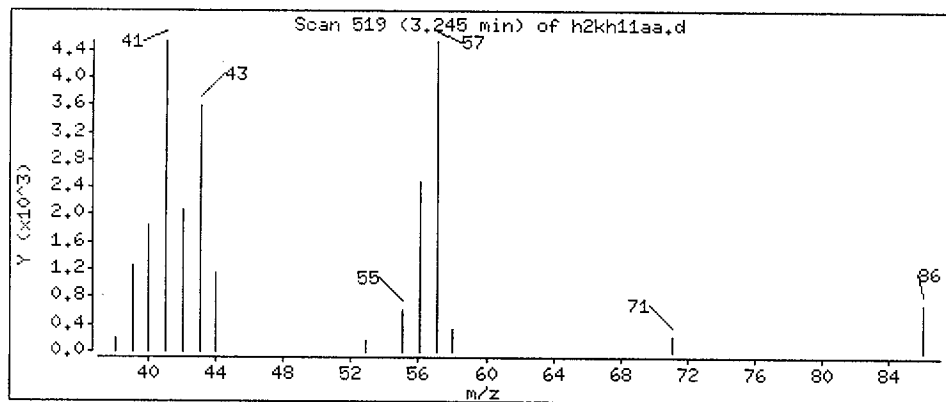
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

33 \*Vinyl Acetate

Concentration: 0.027830 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx.i

Sample Info: H2KH11AA,1,0,,,

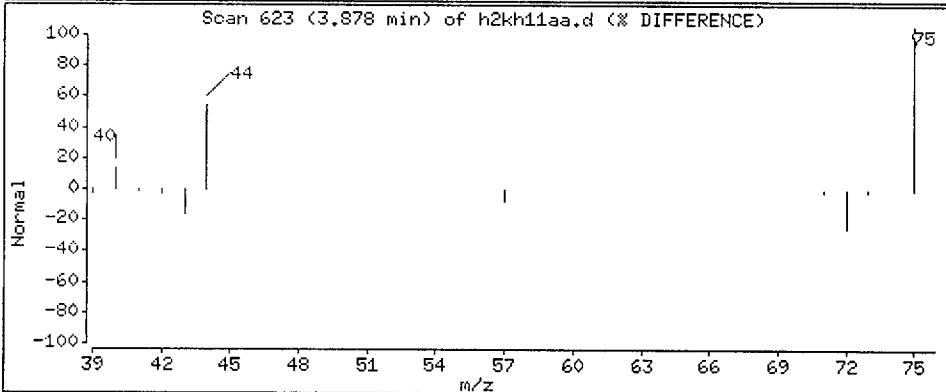
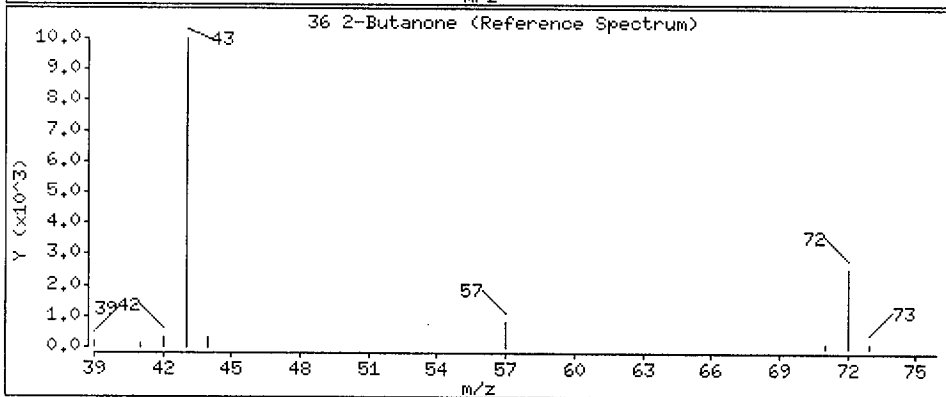
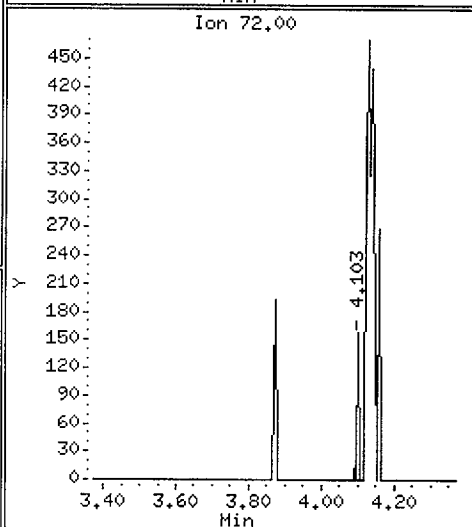
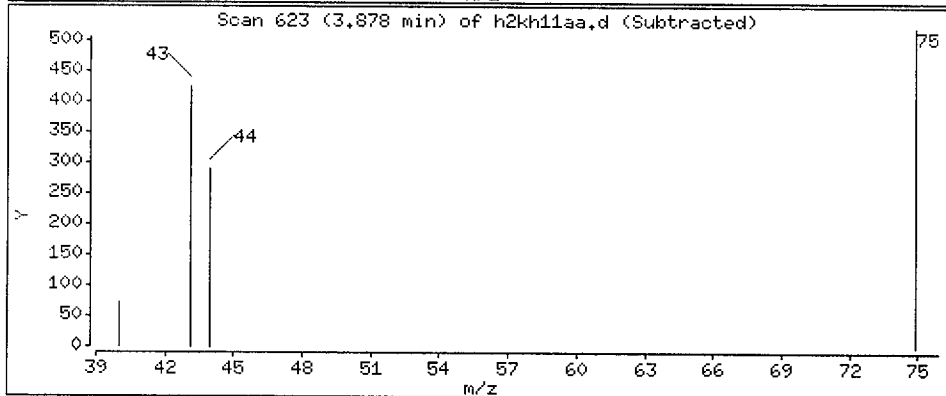
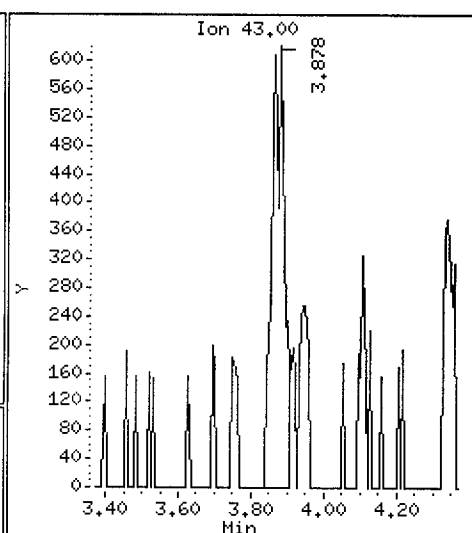
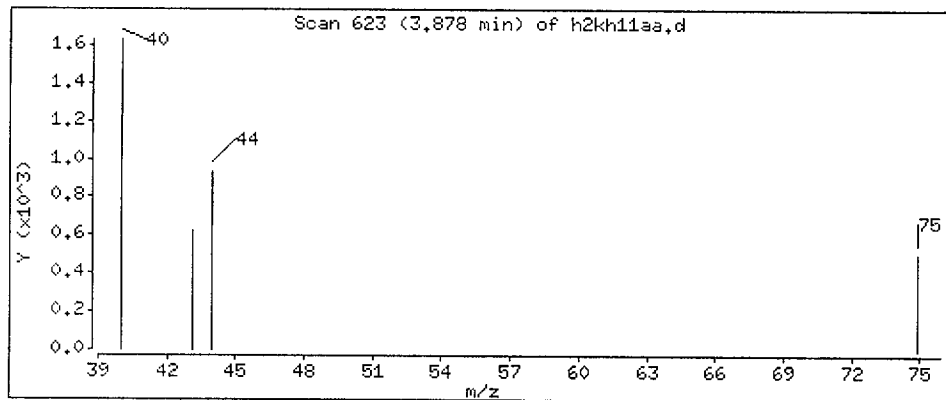
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

36 2-Butanone

Concentration: 0.017060 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx.i

Sample Info: H2KH11AA,1,0,,,

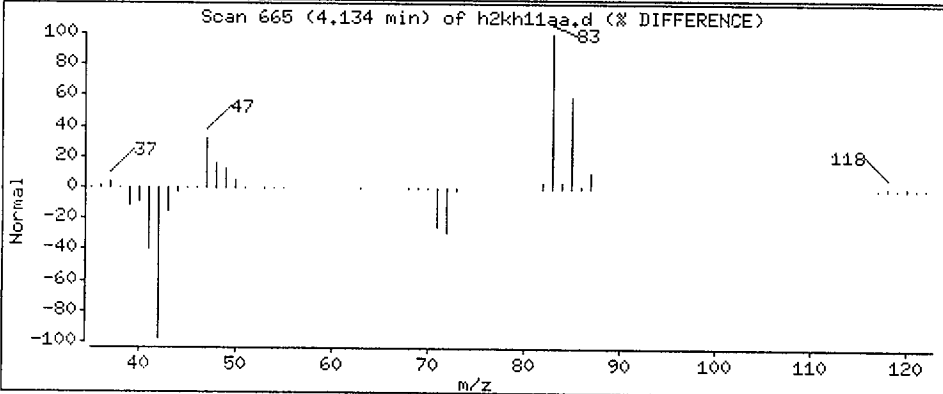
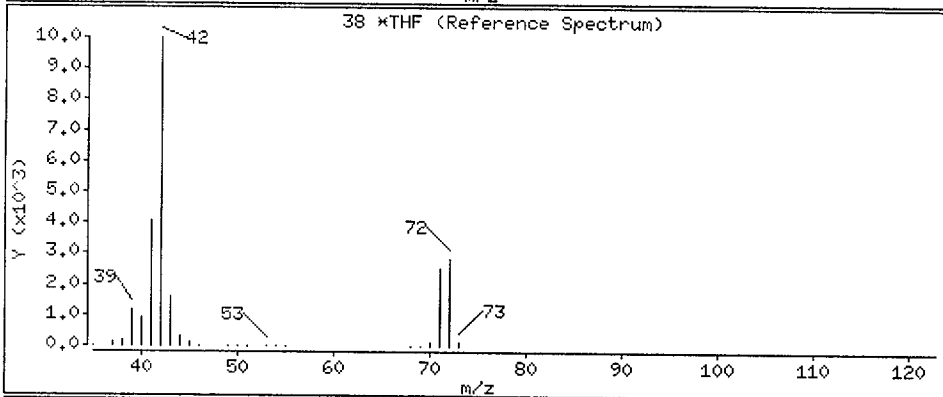
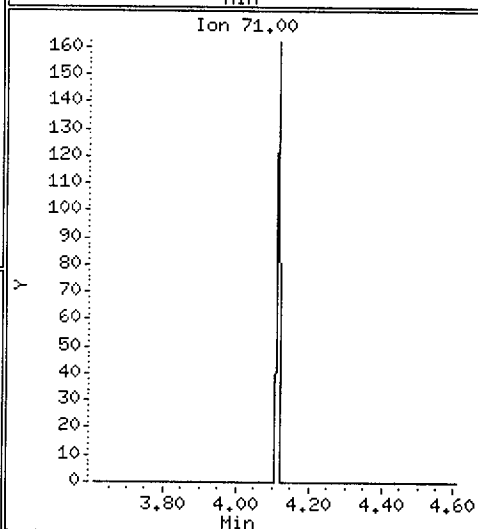
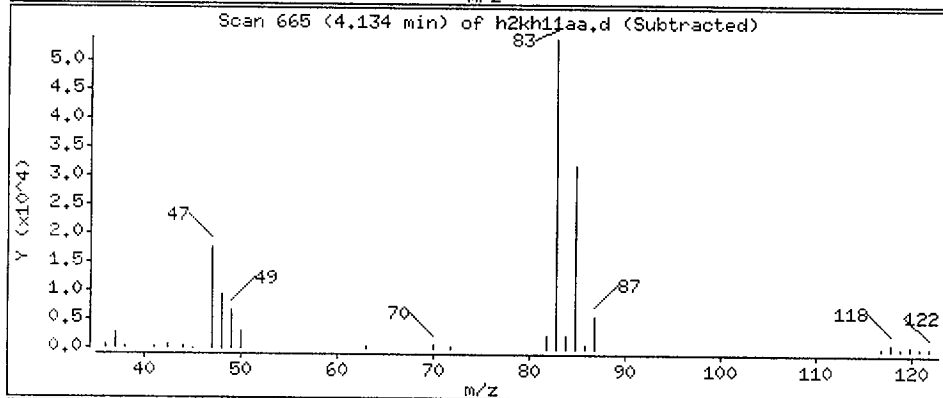
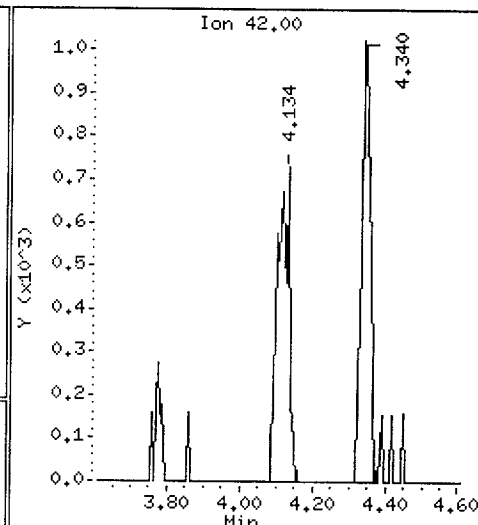
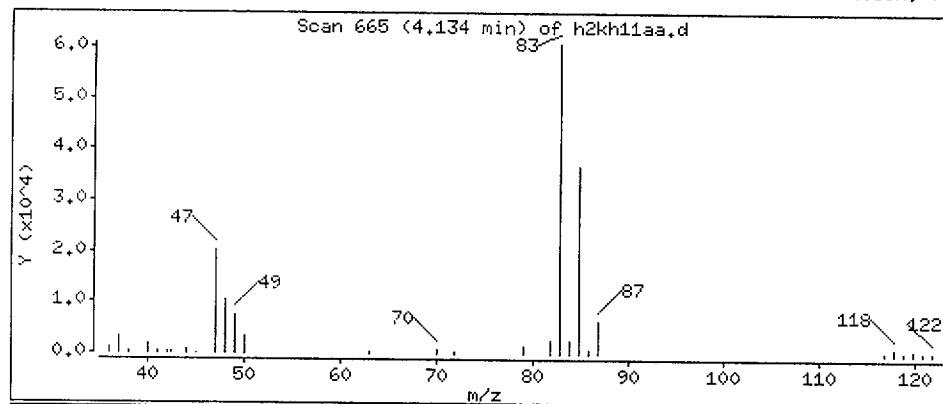
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

38 \*THF

Concentration: 0.029122 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx.i

Sample Info: H2KH11AA,1,0,,,

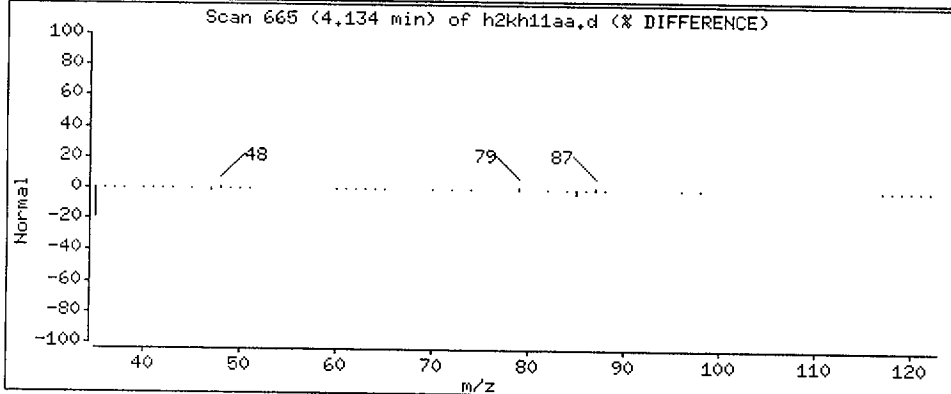
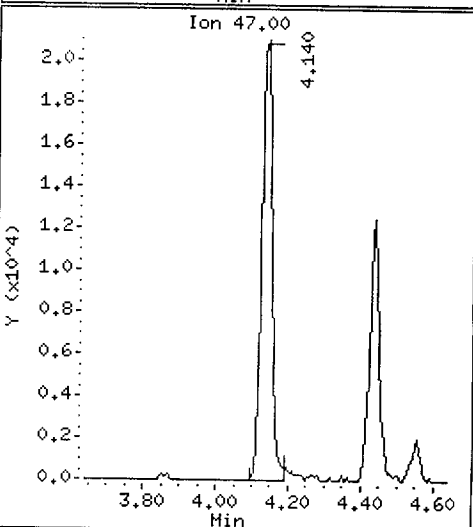
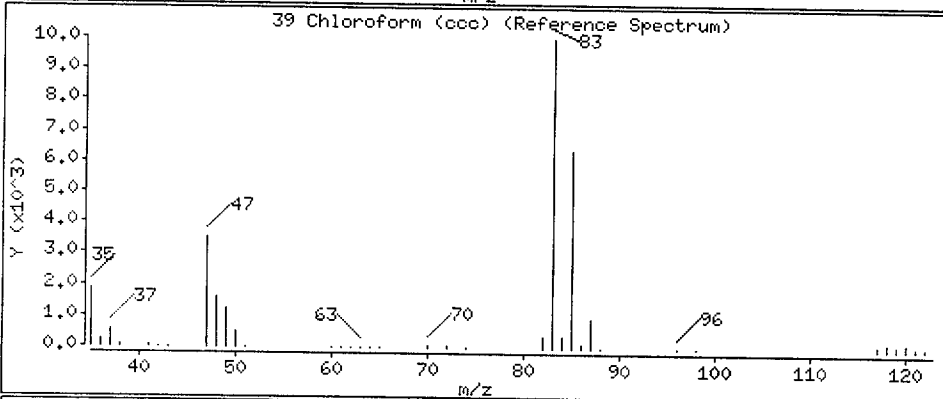
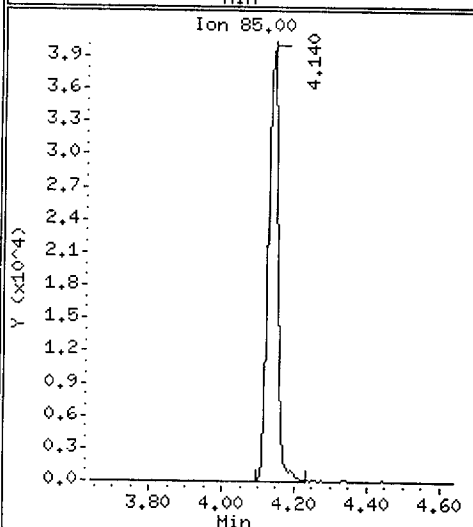
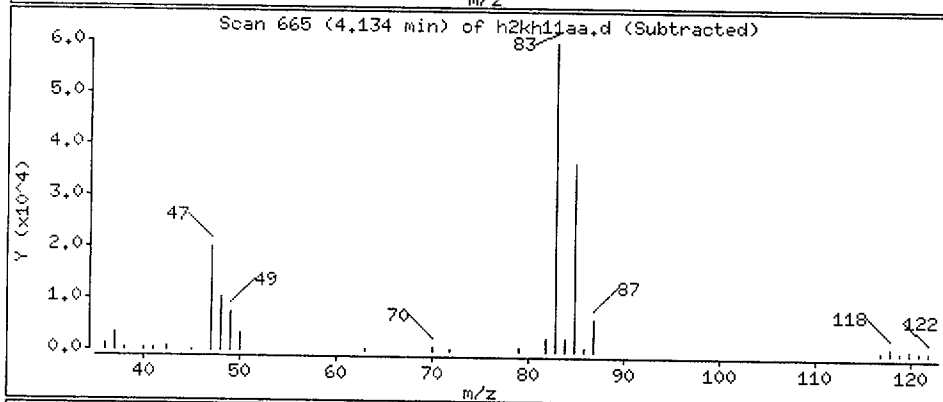
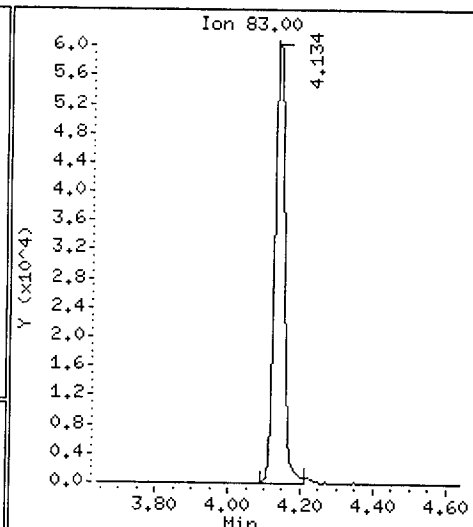
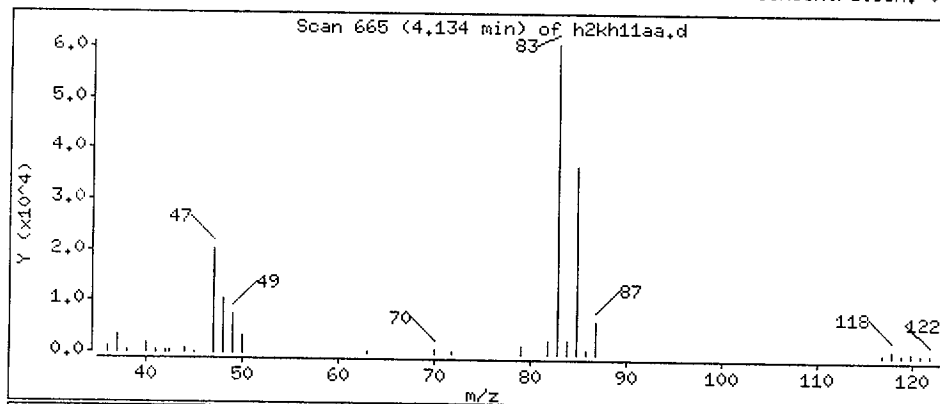
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

39 Chloroform (ccc)

Concentration: 0.073583 ug



Data File: /chem/gcms/mx,i/X040706,b/h2kh11aa,d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx,i

Sample Info: H2KH11AA,1,0,,,

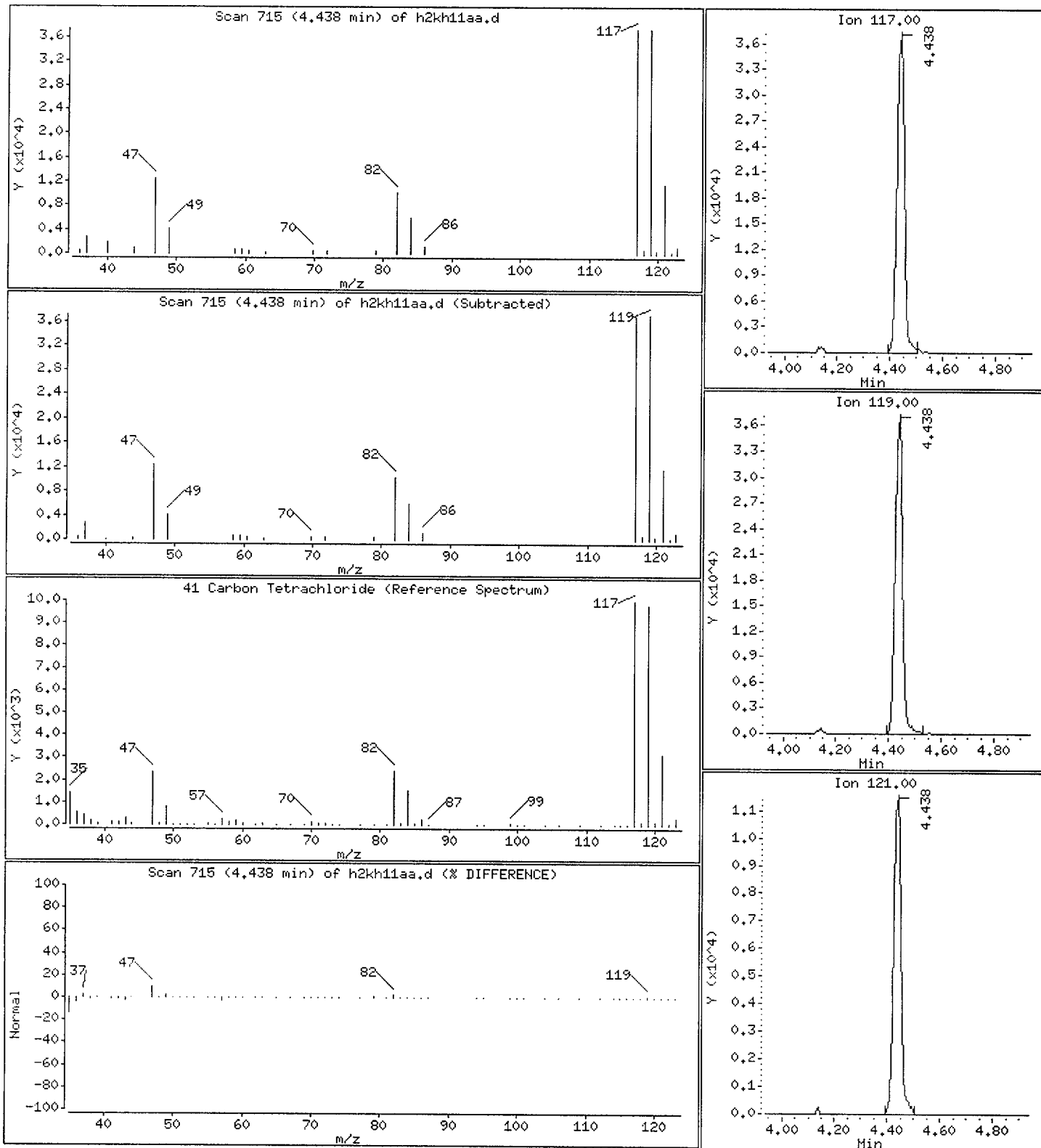
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

41 Carbon Tetrachloride

Concentration: 0.049022 ug





Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx.i

Sample Info: H2KH11AA,1,0,,,

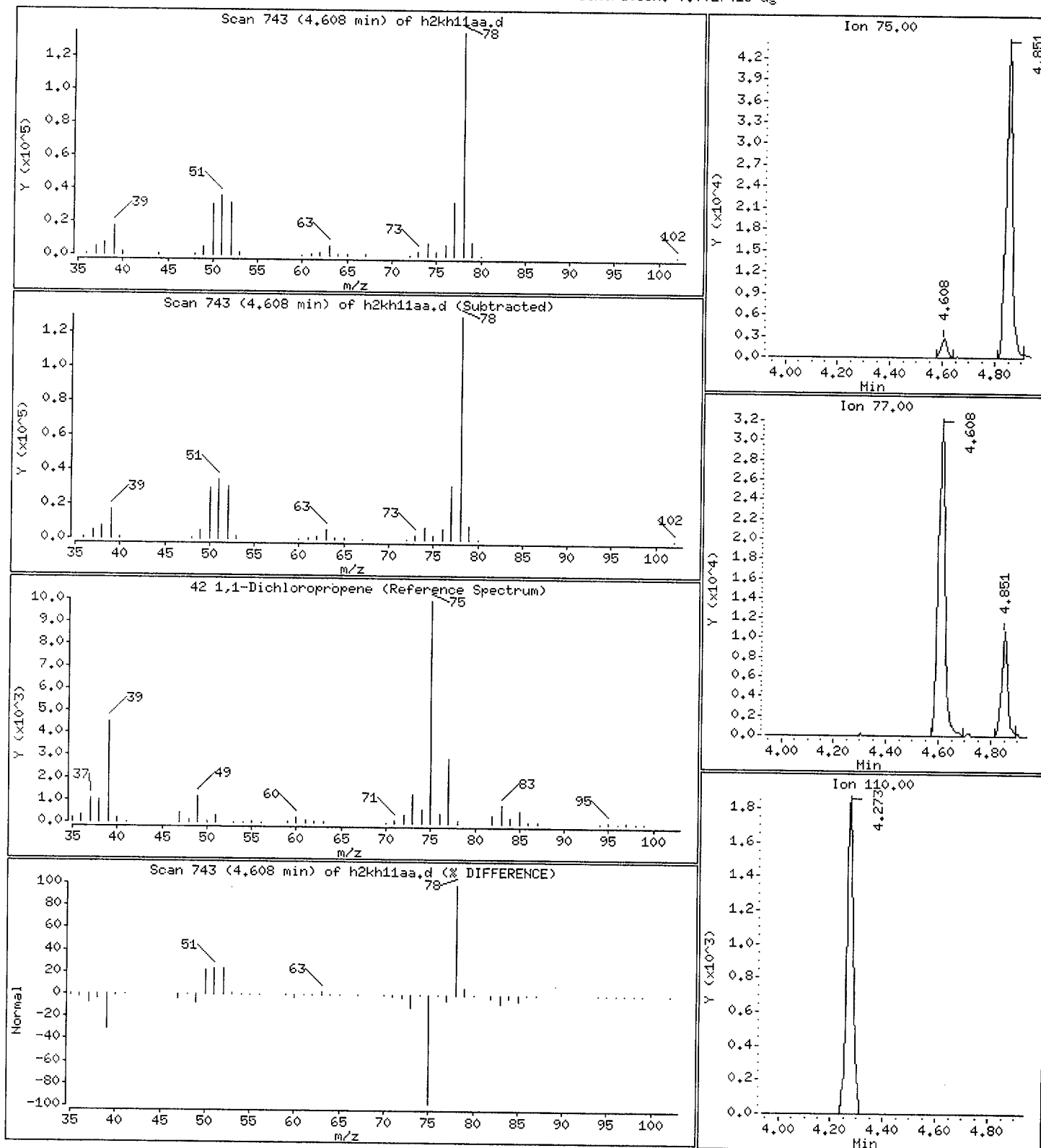
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

42 1,1-Dichloropropene

Concentration: 0.0027416 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx.i

Sample Info: H2KH11AA,1,0,,,

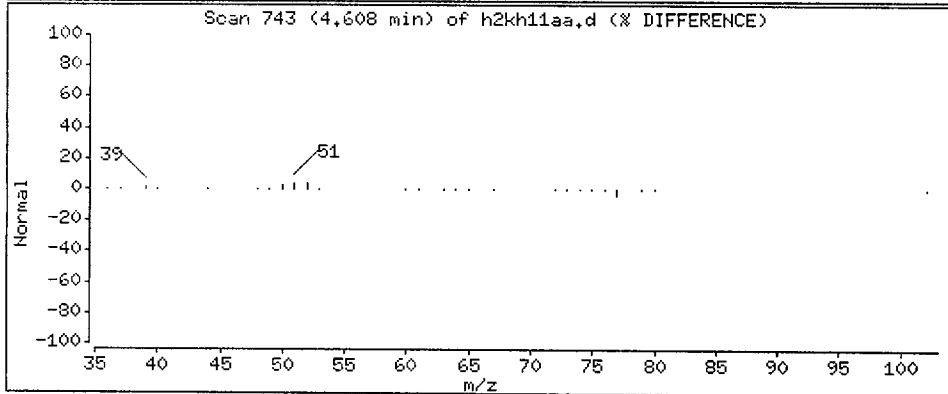
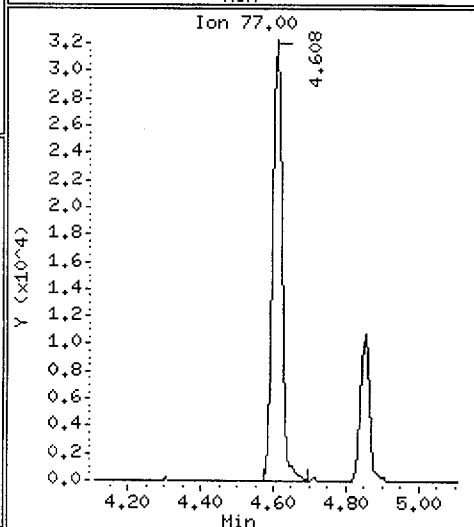
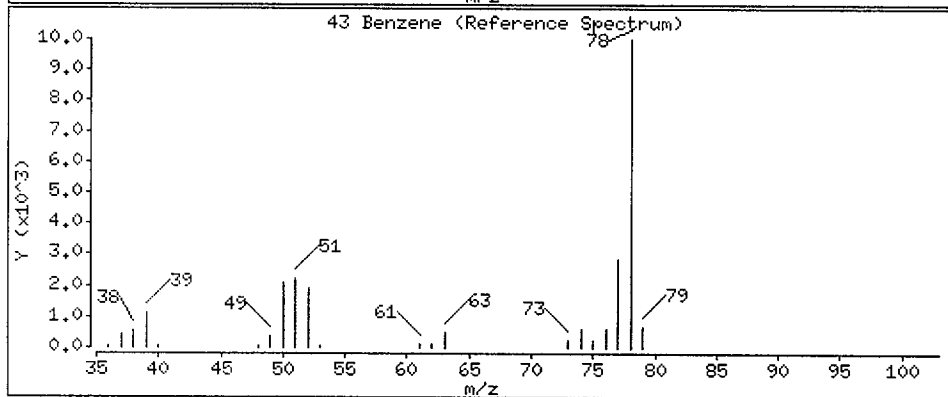
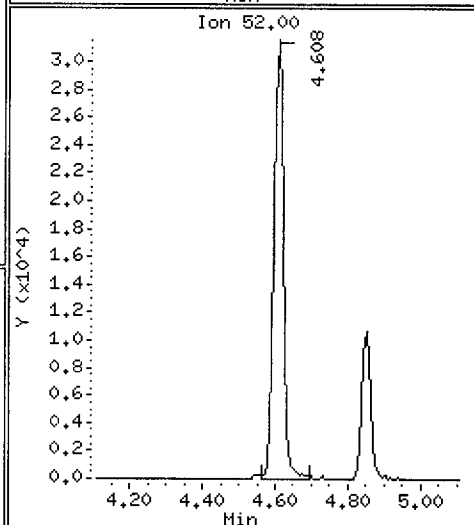
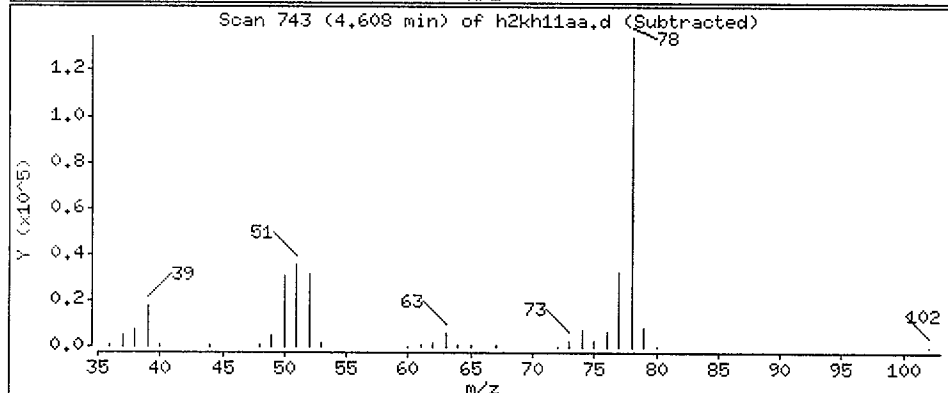
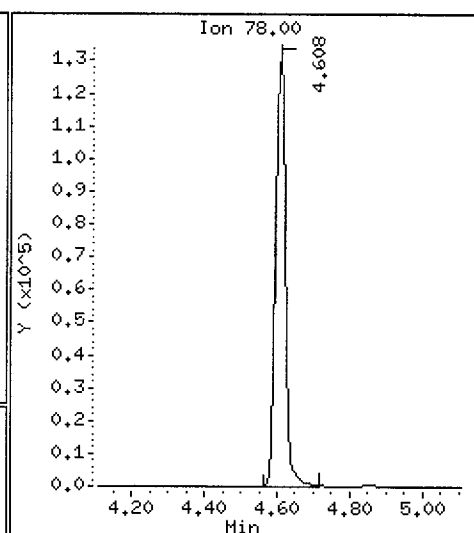
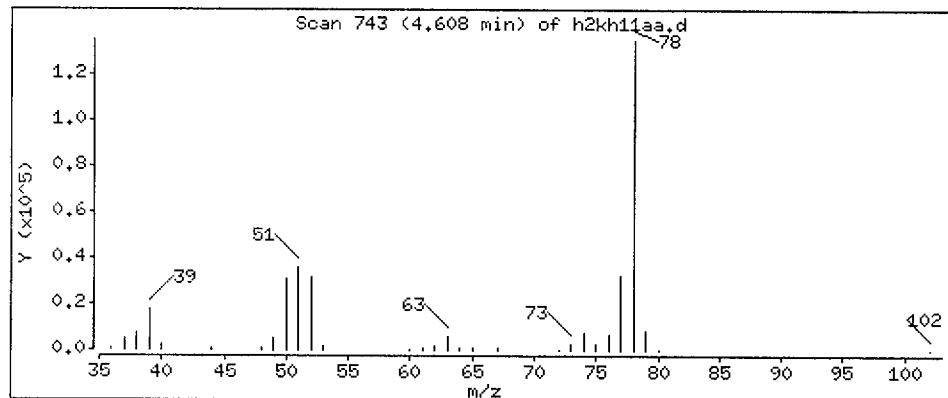
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

43 Benzene

Concentration: 0.059315 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx.i

Sample Info: H2KH11AA,1,0,,,

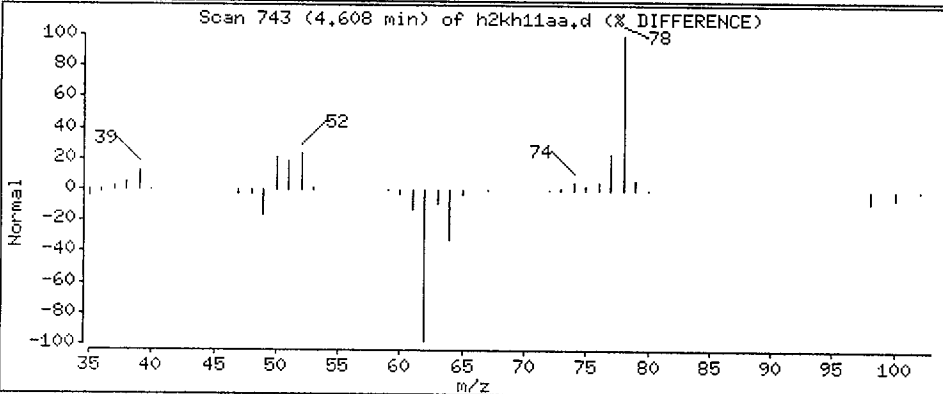
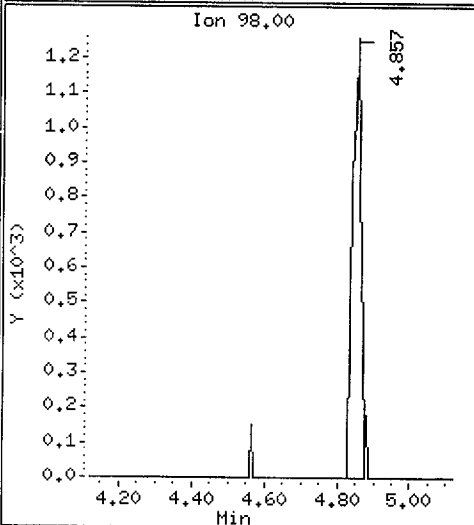
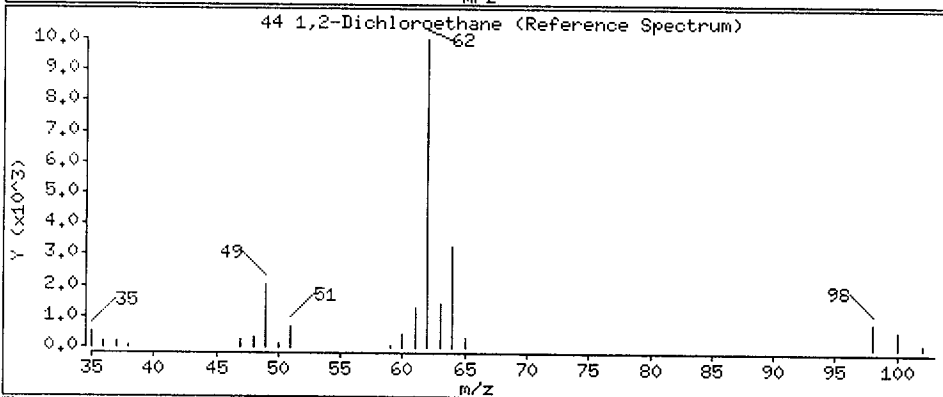
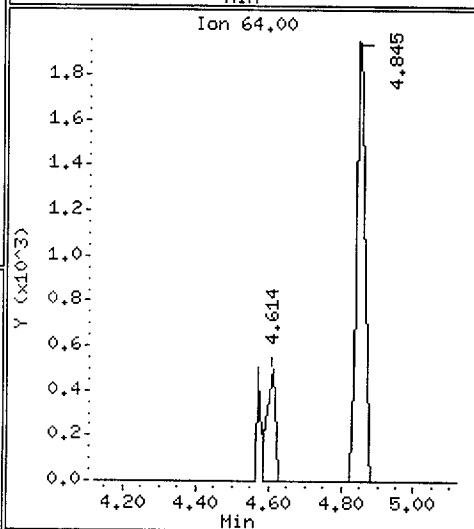
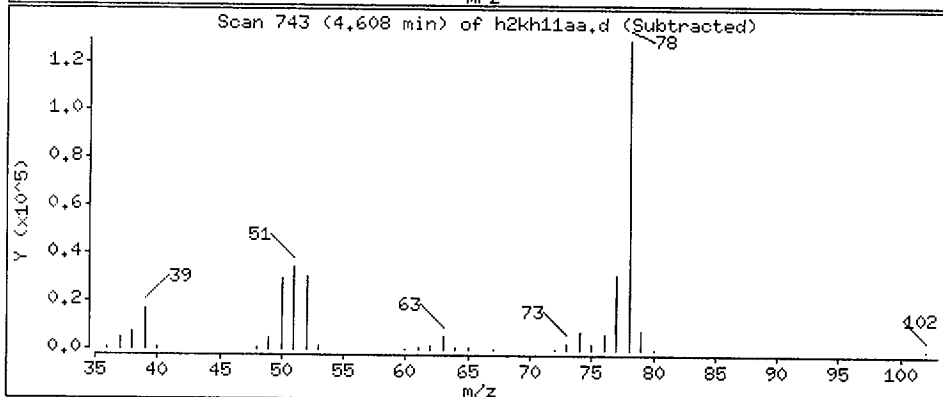
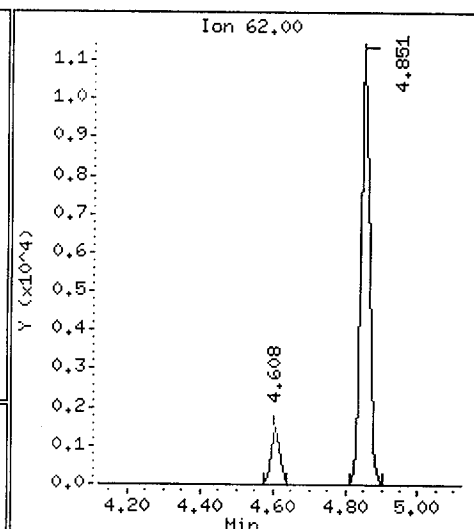
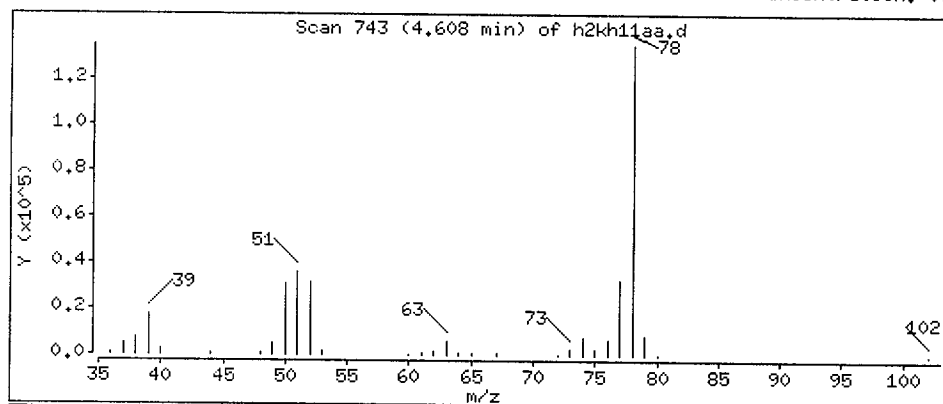
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

44 1,2-Dichloroethane

Concentration: 0.0035895 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx.i

Sample Info: H2KH11AA,1,0,,,

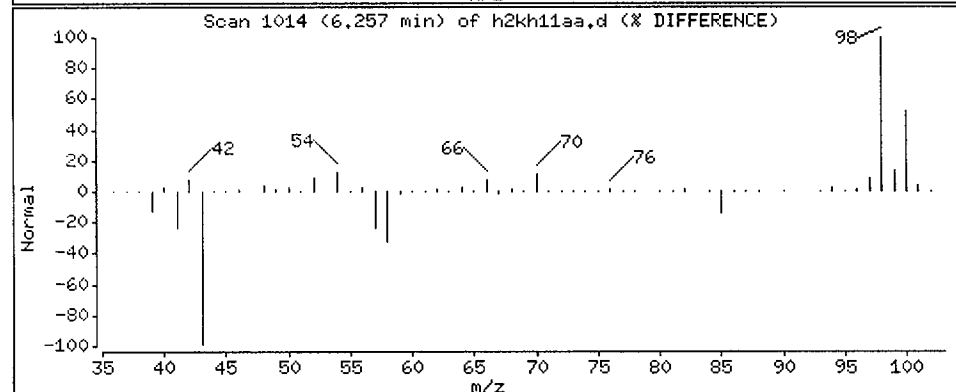
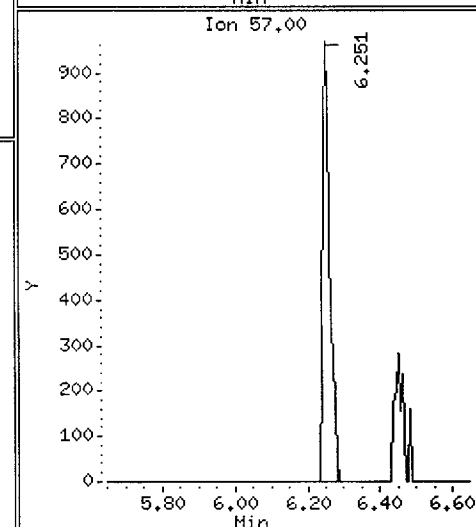
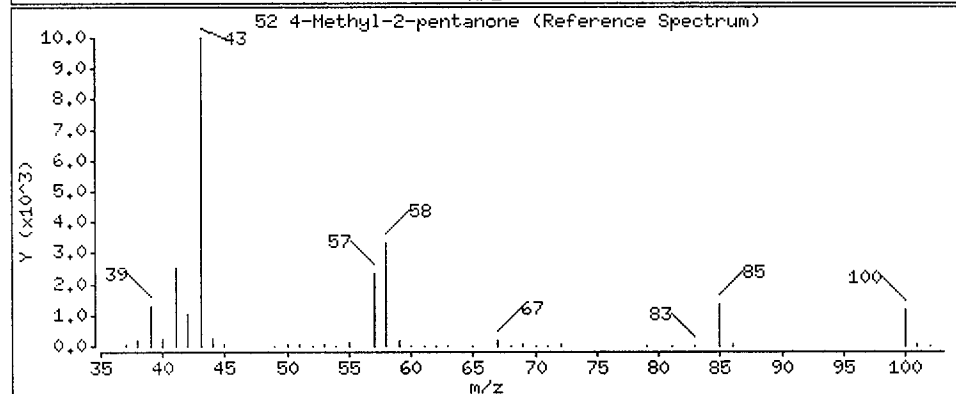
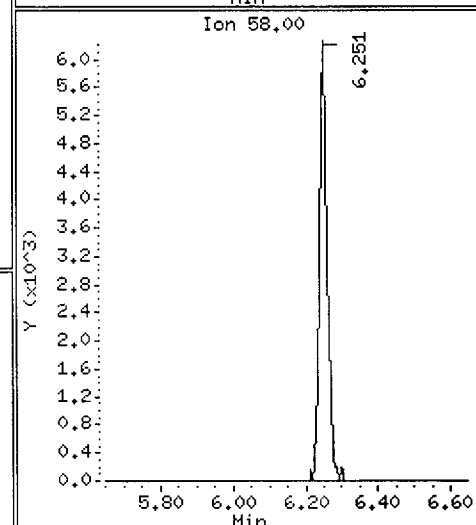
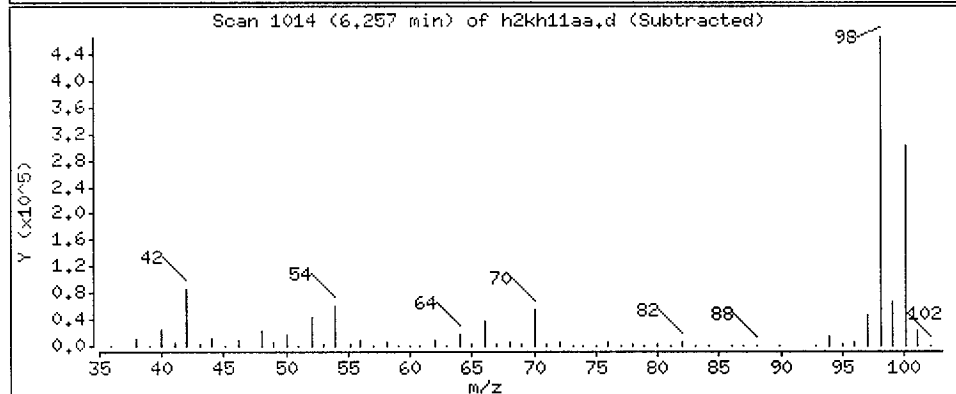
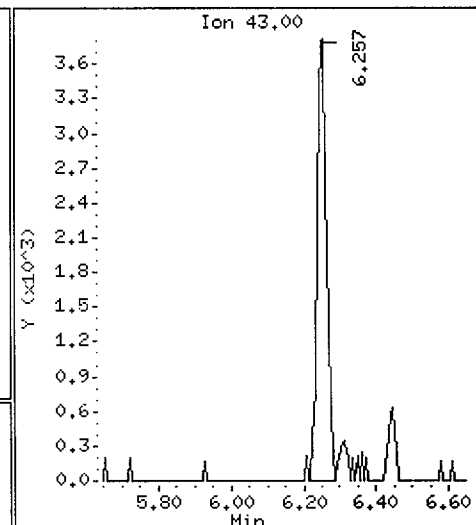
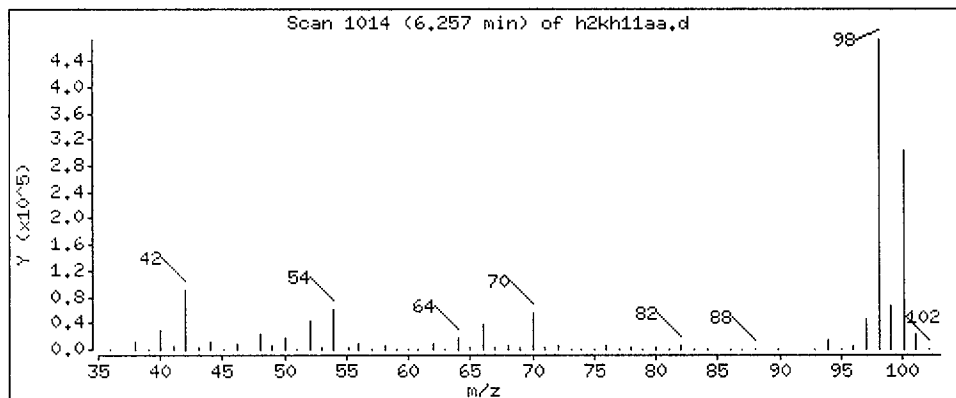
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

52 4-Methyl-2-pentanone

Concentration: 0.032659 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx.i

Sample Info: H2KH11AA,1,0,,,

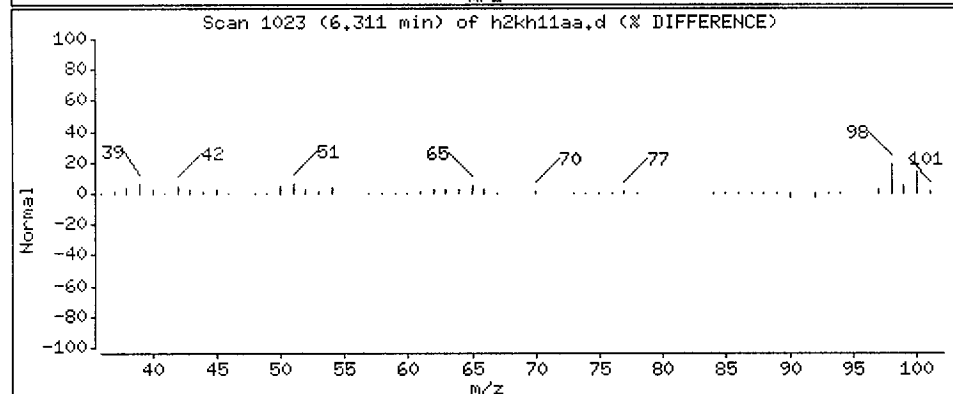
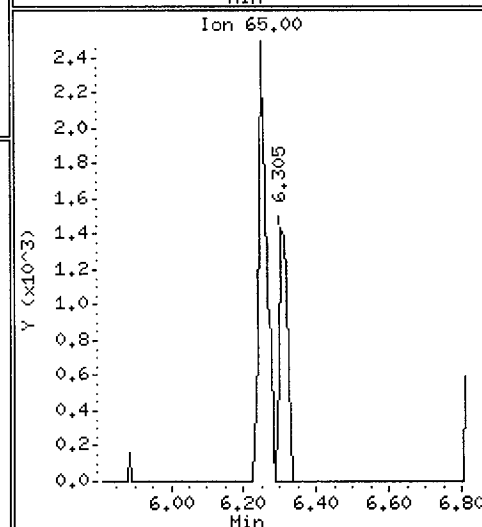
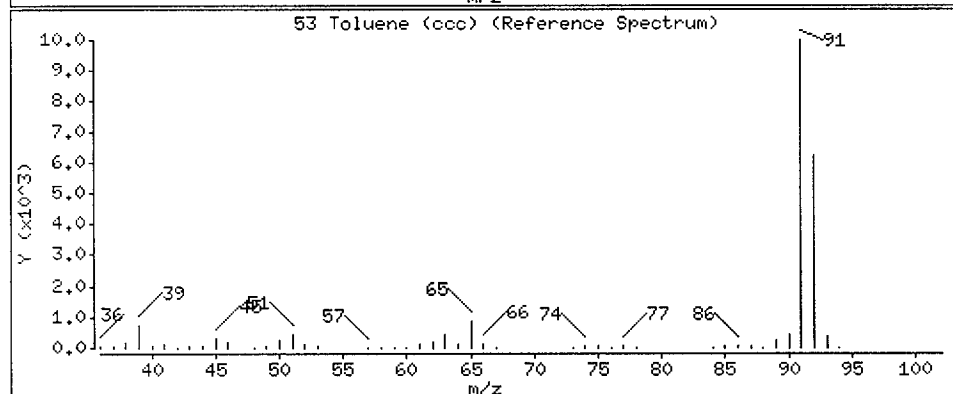
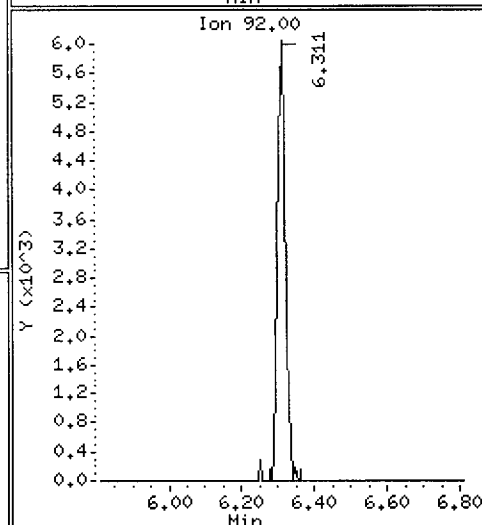
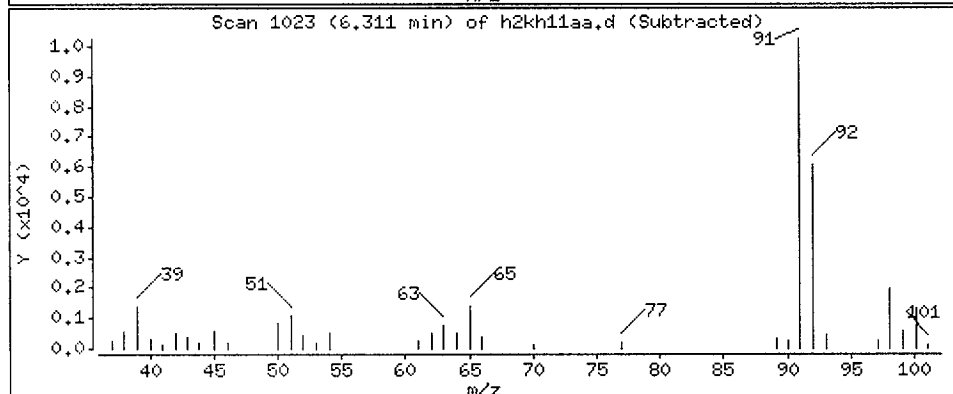
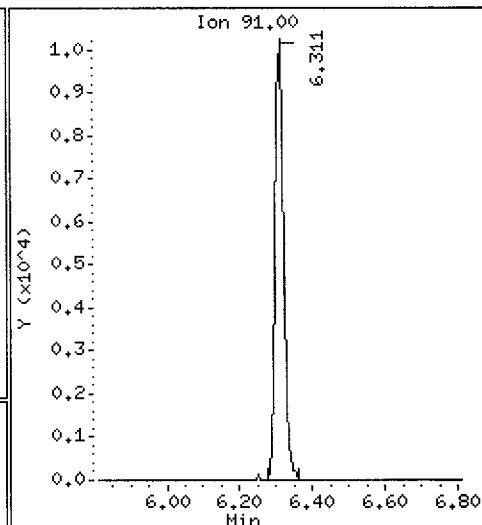
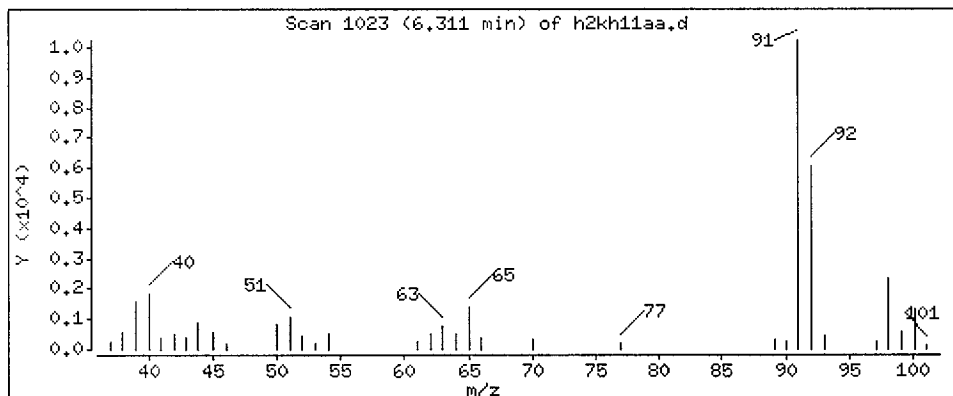
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

53 Toluene (ccc)

Concentration: 0.0033860 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx.i

Sample Info: H2KH11AA,1,0,,,

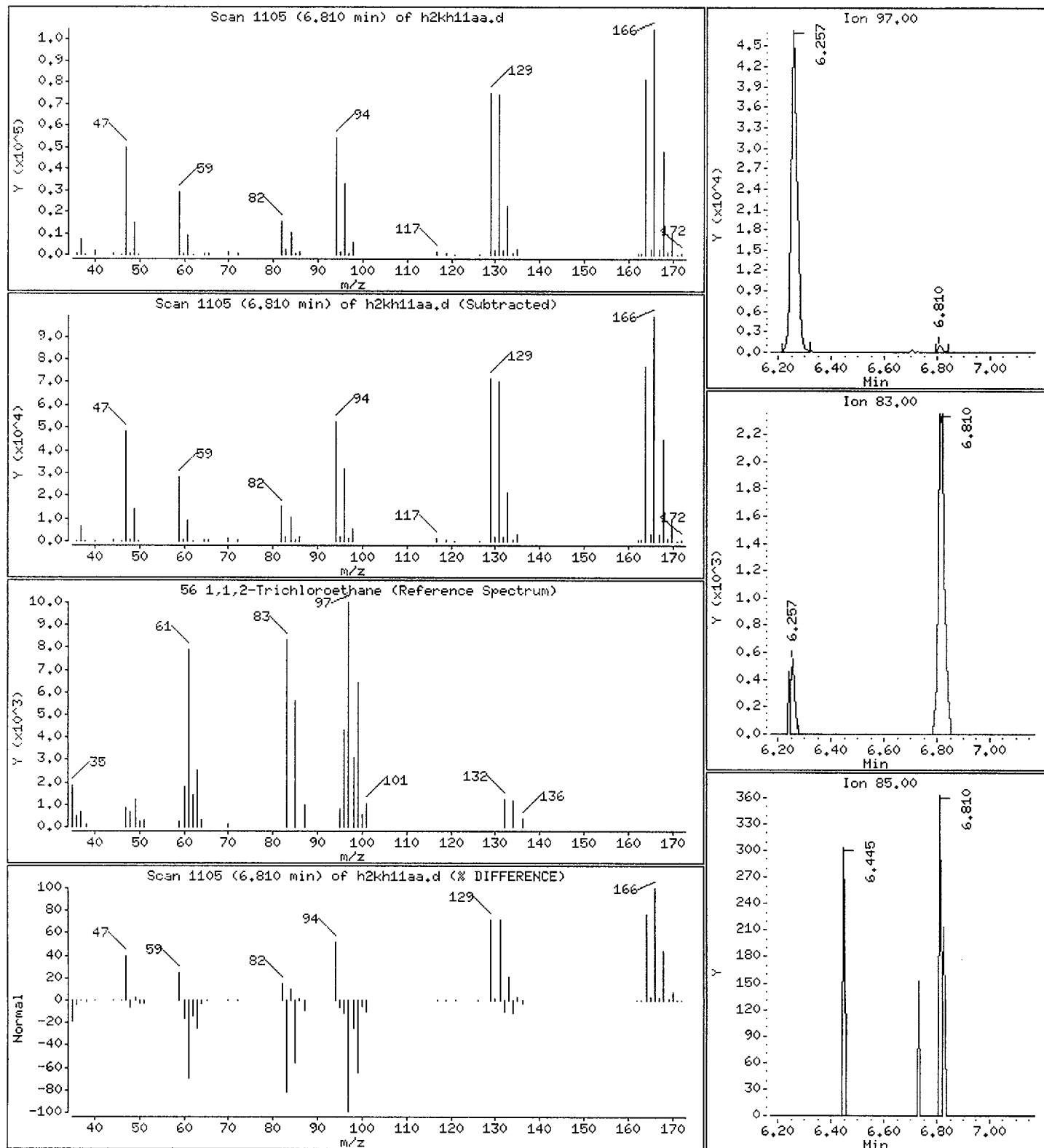
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

56 1,1,2-Trichloroethane

Concentration: 0.0037714 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx.i

Sample Info: H2KH11AA,1,0,,,

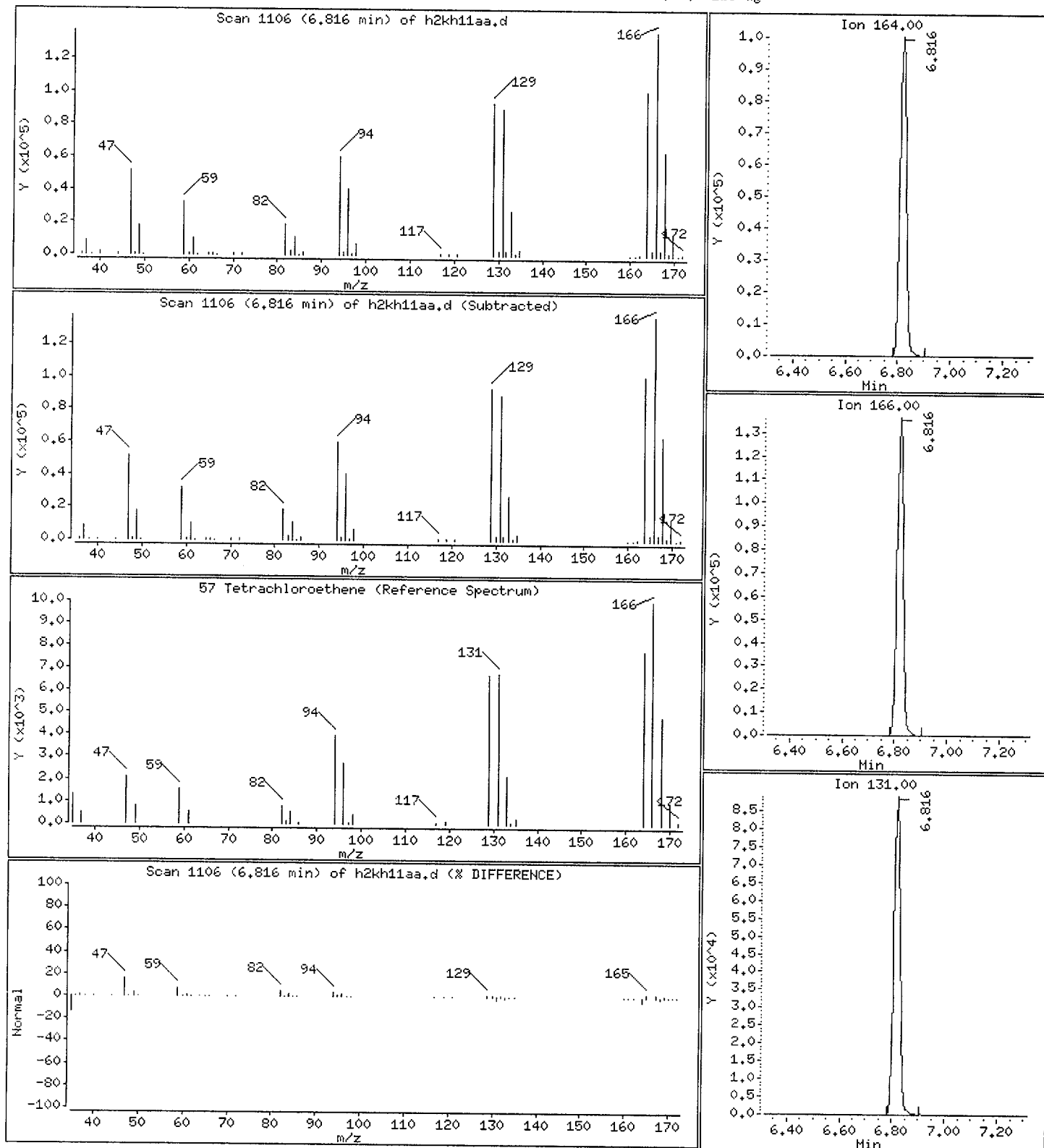
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

57 Tetrachloroethene

Concentration: 0.16228 ug



Data File: /chem/gcms/mx.i/X040706.b/h2kh11aa.d

Date : 07-APR-2006 18:01

Client ID: AUDIT VOST #6

Instrument: mx.i

Sample Info: H2KH11AA,1,0,,,

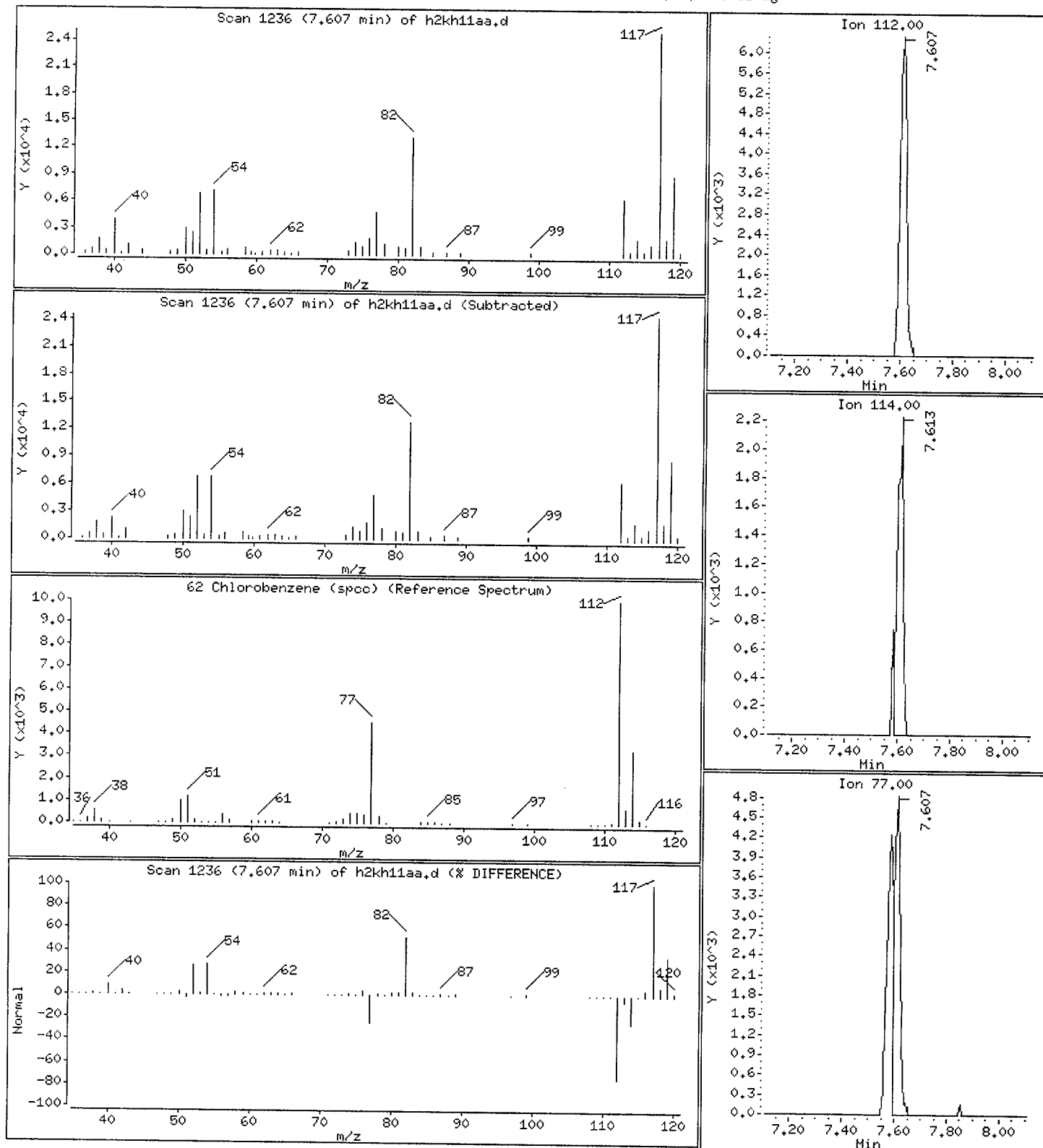
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

62 Chlorobenzene (spco)

Concentration: 0.0043782 ug





Data File: /var/chem/gcms/mx.i/X040706.b/h2kh11aa.d  
Report Date: 18-Apr-2006 14:58

## STL Knoxville

SW-846 Method 8260A - Volatile Organics  
Data file : /var/chem/gcms/mx.i/X040706.b/h2kh11aa.d  
Lab Smp Id: H2KH11AA Client Smp ID: AUDIT VOST #6  
Inj Date : 07-APR-2006 18:01  
Operator : 22980 Inst ID: mx.i  
Smp Info : H2KH11AA,1,0,,,  
Misc Info : X040706,8260B\_LM,focus.sub  
Comment :  
Method : /var/chem/gcms/mx.i/X040706.b/8260B LM.m  
Meth Date : 18-Apr-2006 14:54 tajh Quant Type: ISTD  
Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

## STL Knoxville - ACS

Client Sample ID: A-5388 MEDIA CHECK

## GC/MS Volatiles

Lot-Sample #....: H6D030169-045    Work Order #....: H2KH41AA    Matrix.....: AIR  
 Date Sampled....: 03/28/06    Date Received...: 04/02/06  
 Prep Date.....: 04/06/06    Analysis Date...: 04/07/06  
 Prep Batch #....: 6096033  
 Dilution Factor: 1    Method.....: SW846 VOST

| PARAMETER                        | RESULT    | REPORTING<br>LIMIT | UNITS | MDL    |
|----------------------------------|-----------|--------------------|-------|--------|
| Acetone                          | 0.098 J,B | 0.10               | ug    | 0.085  |
| Acrylonitrile                    | ND        | 0.50               | ug    | 0.076  |
| Benzene                          | 0.0078 J  | 0.010              | ug    | 0.0032 |
| Bromobenzene                     | ND        | 0.010              | ug    | 0.0036 |
| Bromochloromethane               | ND        | 0.025              | ug    | 0.012  |
| Bromodichloromethane             | ND        | 0.010              | ug    | 0.0016 |
| Bromoform                        | ND        | 0.025              | ug    | 0.0066 |
| Bromomethane                     | 0.026 J,B | 0.050              | ug    | 0.022  |
| 2-Butanone                       | ND        | 0.10               | ug    | 0.035  |
| n-Butylbenzene                   | ND        | 0.010              | ug    | 0.0047 |
| sec-Butylbenzene                 | ND        | 0.010              | ug    | 0.0036 |
| tert-Butylbenzene                | ND        | 0.010              | ug    | 0.0030 |
| Carbon disulfide                 | ND        | 0.010              | ug    | 0.0011 |
| Carbon tetrachloride             | ND        | 0.010              | ug    | 0.0011 |
| Chlorobenzene                    | ND        | 0.010              | ug    | 0.0013 |
| Chlorodibromomethane             | ND        | 0.025              | ug    | 0.010  |
| Chloroethane                     | ND        | 0.050              | ug    | 0.010  |
| Chloroform                       | ND        | 0.010              | ug    | 0.0019 |
| Chloromethane                    | ND        | 0.010              | ug    | 0.0032 |
| 2-Chlorotoluene                  | ND        | 0.010              | ug    | 0.0023 |
| 4-Chlorotoluene                  | ND        | 0.010              | ug    | 0.0020 |
| 1,2-Dibromo-3-chloro-<br>propane | ND        | 0.050              | ug    | 0.020  |
| 1,2-Dibromoethane                | ND        | 0.025              | ug    | 0.010  |
| Dibromomethane                   | ND        | 0.025              | ug    | 0.010  |
| 1,2-Dichlorobenzene              | ND        | 0.010              | ug    | 0.0030 |
| 1,3-Dichlorobenzene              | ND        | 0.010              | ug    | 0.0031 |
| 1,4-Dichlorobenzene              | ND        | 0.010              | ug    | 0.0043 |
| Dichlorodifluoromethane          | ND        | 0.025              | ug    | 0.0050 |
| 1,1-Dichloroethane               | ND        | 0.010              | ug    | 0.0019 |
| 1,2-Dichloroethane               | ND        | 0.010              | ug    | 0.0022 |
| cis-1,2-Dichloroethene           | ND        | 0.010              | ug    | 0.0025 |
| trans-1,2-Dichloroethene         | ND        | 0.010              | ug    | 0.0017 |
| 1,1-Dichloroethene               | ND        | 0.010              | ug    | 0.0023 |
| 1,2-Dichloropropane              | ND        | 0.010              | ug    | 0.0027 |
| 1,3-Dichloropropane              | ND        | 0.010              | ug    | 0.0018 |
| 2,2-Dichloropropane              | ND        | 0.010              | ug    | 0.0015 |
| cis-1,3-Dichloropropene          | ND        | 0.010              | ug    | 0.0030 |
| trans-1,3-Dichloropropene        | ND        | 0.010              | ug    | 0.0020 |

(Continued on next page)

## STL Knoxville - ACS

Client Sample ID: A-5388 MEDIA CHECK

## GC/MS Volatiles

Lot-Sample #...: H6D030169-045 Work Order #...: H2KH41AA Matrix.....: AIR

| PARAMETER                                 | RESULT              | REPORTING<br>LIMIT | UNITS     | MDL           |
|-------------------------------------------|---------------------|--------------------|-----------|---------------|
| 1,1-Dichloropropene                       | ND                  | 0.010              | ug        | 0.0010        |
| Ethylbenzene                              | ND                  | 0.010              | ug        | 0.0013        |
| Hexachlorobutadiene                       | ND                  | 0.025              | ug        | 0.0048        |
| 2-Hexanone                                | ND                  | 0.10               | ug        | 0.0099        |
| <b>Iodomethane</b>                        | <b>0.014 J,B</b>    | <b>0.050</b>       | <b>ug</b> | <b>0.0016</b> |
| Isopropylbenzene                          | ND                  | 0.010              | ug        | 0.0023        |
| p-Isopropyltoluene                        | ND                  | 0.010              | ug        | 0.0038        |
| Methylene chloride                        | ND                  | 0.025              | ug        | 0.013         |
| 4-Methyl-2-pentanone                      | ND                  | 0.10               | ug        | 0.014         |
| Naphthalene                               | ND                  | 0.025              | ug        | 0.010         |
| n-Propylbenzene                           | ND                  | 0.010              | ug        | 0.0029        |
| Styrene                                   | ND                  | 0.010              | ug        | 0.0017        |
| 1,1,1,2-Tetrachloroethane                 | ND                  | 0.010              | ug        | 0.0010        |
| 1,1,2,2-Tetrachloroethane                 | ND                  | 0.025              | ug        | 0.011         |
| Tetrachloroethene                         | ND                  | 0.010              | ug        | 0.0021        |
| Tetrahydrofuran                           | ND                  | 0.10               | ug        | 0.031         |
| Toluene                                   | ND                  | 0.010              | ug        | 0.0022        |
| 1,2,3-Trichlorobenzene                    | ND                  | 0.025              | ug        | 0.014         |
| 1,2,4-Trichloro-<br>benzene               | ND                  | 0.025              | ug        | 0.0030        |
| 1,1,1-Trichloroethane                     | ND                  | 0.025              | ug        | 0.0016        |
| 1,1,2-Trichloroethane                     | ND                  | 0.025              | ug        | 0.0050        |
| Trichloroethene                           | ND                  | 0.010              | ug        | 0.0050        |
| Trichlorofluoromethane                    | ND                  | 0.050              | ug        | 0.0049        |
| 1,2,3-Trichloropropane                    | ND                  | 0.025              | ug        | 0.0081        |
| 1,1,2-Trichloro-<br>1,2,2-trifluoroethane | ND                  | 0.050              | ug        | 0.0018        |
| 1,2,4-Trimethylbenzene                    | ND                  | 0.010              | ug        | 0.0048        |
| 1,3,5-Trimethylbenzene                    | ND                  | 0.010              | ug        | 0.0028        |
| Vinyl acetate                             | ND                  | 0.050              | ug        | 0.012         |
| Vinyl chloride                            | ND                  | 0.010              | ug        | 0.0032        |
| m-Xylene & p-Xylene                       | ND                  | 0.020              | ug        | 0.0034        |
| o-Xylene                                  | ND                  | 0.010              | ug        | 0.0017        |
| Xylenes (total)                           | ND                  | 0.030              | ug        | 0.0048        |
| SURROGATE                                 | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |           |               |
| Dibromofluoromethane                      | 114                 | (50 - 134)         |           |               |
| 1,2-Dichloroethane-d4                     | 102                 | (50 - 134)         |           |               |
| Toluene-d8                                | 102                 | (57 - 127)         |           |               |
| Bromofluorobenzene                        | 90                  | (50 - 125)         |           |               |

**NOTE(S) :**

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

STL Knoxville - ACS

A-5388 MEDIA CHECK

GC/MS Volatiles

Lot-Sample #: H6D030169-045

Work Order #: H2KH41AA

Matrix: AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug           |

Data File: /chem/gcms/mz.i/Z040706.b/h2kh41aa.d  
Report Date: 07-Apr-2006 10:42

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /chem/gcms/mz.i/Z040706.b/h2kh41aa.d  
Lab Smp Id: H2KH41AA Client Smp ID: A-5388 MEDIA CHECK  
Inj Date : 07-APR-2006 10:24  
Operator : 22980 Inst ID: mz.i  
Smp Info : H2KH41AA,1,0,,  
Misc Info : Z040706,8260B\_LM,focus.sub  
Comment : Volatile Organics by GC/MS  
Method : /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
Meth Date : 07-Apr-2006 09:40 gosss Quant Type: ISTD  
Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable Local Compound Variable

*W*  
*07 Nov 06*

| Compounds                  | QUANT SIG |        |        |         |          |           | CONCENTRATIONS |                     |
|----------------------------|-----------|--------|--------|---------|----------|-----------|----------------|---------------------|
|                            | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL          |                     |
|                            |           |        |        |         |          | ( ug/L)   | ( ug)          |                     |
| =====                      | =====     | ==     | =====  | =====   | =====    | =====     | =====          |                     |
| * 1 Fluorobenzene          | 96        | 5.669  | 5.676  | (1.000) | 782893   | 10.0000   |                |                     |
| * 2 Chlorobenzene-d5       | 119       | 8.936  | 8.937  | (1.000) | 169789   | 10.0000   |                |                     |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 11.491 | 11.492 | (1.000) | 229767   | 10.0000   |                |                     |
| \$ 4 Dibromofluoromethane  | 113       | 4.830  | 4.831  | (0.852) | 142835   | 11.3860   | 0.28465        |                     |
| \$ 5 1,2-Dichloroethane-d4 | 65        | 5.237  | 5.238  | (0.924) | 110445   | 10.1812   | 0.25453        |                     |
| \$ 6 Toluene-d8            | 98        | 7.464  | 7.465  | (0.835) | 760459   | 10.1935   | 0.25484        |                     |
| \$ 7 4-Bromofluorobenzene  | 95        | 10.128 | 10.129 | (0.881) | 207555   | 8.95714   | 0.22393        |                     |
| 15 Bromomethane            | 94        | 1.405  | 1.418  | (0.248) | 1365     | 0.99781   | 0.024945       | See reprint for (m) |
| 22 Acetone                 | 43        | 2.129  | 2.123  | (0.375) | 3185     | 3.92873   | 0.098218       |                     |
| 23 *Iodomethane            | 142       | 2.196  | 2.184  | (0.387) | 438      | 0.54369   | 0.013592       |                     |
| 27 Methylene Chloride      | 84        | 2.506  | 2.513  | (0.442) | 1514     | 0.11563   | 0.0028908      |                     |
| 34 *Vinyl Acetate          | 86        | 3.145  | 3.407  | (0.555) | 435      | 0.41683   | 0.010421       |                     |
| 39 *THF                    | 42        | 4.550  | 4.532  | (0.803) | 2041     | 1.09900   | 0.027475       |                     |
| 44 Benzene                 | 78        | 5.298  | 5.305  | (0.935) | 24194    | 0.31338   | 0.0078344      |                     |
| 45 1,2-Dichloroethane      | 62        | 5.669  | 5.335  | (1.000) | 8355     | 0.51108   | 0.012777       |                     |
| 53 4-Methyl-2-pentanone    | 43        | 7.458  | 7.386  | (1.315) | 6153     | 0.90011   | 0.022503       |                     |

*2004.14.06*

Data File: /chem/gcms/mz.i/Z040706.b/h2kh41aa.d  
Report Date: 07-Apr-2006 10:42

| Compounds                    | QUANT SIG |        |        |         |          |  | CONCENTRATIONS       |                     |
|------------------------------|-----------|--------|--------|---------|----------|--|----------------------|---------------------|
|                              | MASS      | RT     | EXP RT | REL RT  | RESPONSE |  | ON-COLUMN<br>( ug/L) | FINAL<br>( ug)      |
| =====                        | =====     | ==     | =====  | =====   | =====    |  | =====                | =====               |
| 54 Toluene (ccc)             | 91        | 7.531  | 7.532  | (0.843) | 7659     |  | 0.07927              | 0.0019818           |
| 55 trans-1,3-Dichloropropene | 75        | 7.470  | 7.793  | (0.836) | 181      |  | 0.63703              | <del>0.015926</del> |
| 69 Bromoform (spcc)          | 173       | 10.134 | 9.782  | (1.134) | 472      |  | 0.97554              | <del>0.024388</del> |
| 85 1,4-Dichlorobenzene       | 146       | 11.509 | 11.528 | (1.002) | 1502     |  | 0.04016              | 0.0010039           |
| 92 1,2,3-Trichlorobenzene    | 180       | 14.825 | 14.820 | (1.290) | 1423     |  | 0.12013              | 0.0030032           |

W4-14.04

Data File: /var/chem/gcms/mz.i/Z040706.b/h2kh41aa.d

Report Date: 14-Apr-2006 16:56

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z040706.b/h2kh41aa.d  
 Lab Smp Id: H2KH41AA Client Smp ID: A-5388 MEDIA CHECK  
 Inj Date : 07-APR-2006 10:24  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : H2KH41AA,1,0,,  
 Misc Info : Z040706,8260B\_LM,focus.sub  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
 Meth Date : 14-Apr-2006 15:48 wilestd Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: focus.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable Local Compound Variable

| Compounds                  | QUANT SIG | MASS   | RT     | EXP RT  | REL RT | RESPONSE | CONCENTRATIONS       |                |
|----------------------------|-----------|--------|--------|---------|--------|----------|----------------------|----------------|
|                            |           |        |        |         |        |          | ON-COLUMN<br>( ug/L) | FINAL<br>( ug) |
| * 1 Fluorobenzene          | 96        | 5.669  | 5.676  | (1.000) | 782893 | 10.0000  |                      |                |
| * 2 Chlorobenzene-d5       | 119       | 8.936  | 8.937  | (1.000) | 169789 | 10.0000  |                      |                |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 11.491 | 11.492 | (1.000) | 229767 | 10.0000  |                      |                |
| \$ 4 Dibromofluoromethane  | 113       | 4.830  | 4.831  | (0.852) | 142835 | 11.3860  | 0.28465              |                |
| \$ 5 1,2-Dichloroethane-d4 | 65        | 5.237  | 5.238  | (0.924) | 110445 | 10.1811  | 0.25453              |                |
| \$ 6 Toluene-d8            | 98        | 7.464  | 7.465  | (0.835) | 760459 | 10.1935  | 0.25484              |                |
| \$ 7 4-Bromofluorobenzene  | 95        | 10.128 | 10.129 | (0.881) | 207555 | 8.95712  | 0.22393              |                |
| 15 Bromomethane            | 94        | 1.405  | 1.418  | (0.248) | 1710   | 1.03902  | 0.025976(M)          |                |
| 22 Acetone                 | 43        | 2.129  | 2.123  | (0.375) | 3185   | 3.92857  | 0.098214             |                |
| 23 *Iodomethane            | 142       | 2.196  | 2.184  | (0.387) | 438    | 0.54368  | 0.013592             |                |
| 27 Methylene Chloride      | 84        | 2.506  | 2.513  | (0.442) | 1514   | 0.11563  | 0.0028908            |                |
| 39 *THF                    | 42        | 4.550  | 4.532  | (0.803) | 2041   | 1.09877  | 0.027469             |                |
| 44 Benzene                 | 78        | 5.298  | 5.305  | (0.935) | 24194  | 0.31337  | 0.0078343            |                |
| 54 Toluene (ccc)           | 91        | 7.531  | 7.532  | (0.843) | 7659   | 0.07926  | 0.0019816            |                |
| 69 Bromoform (spcc)        | 173       | 10.134 | 9.782  | (1.134) | 472    | 0.97541  | 0.024385             |                |
| 85 1,4-Dichlorobenzene     | 146       | 11.509 | 11.528 | (1.002) | 1502   | 0.04015  | 0.0010037            |                |

Data File: /var/chem/gcms/mz.i/Z040706.b/h2kh41aa.d

Report Date: 14-Apr-2006 16:56

| Compounds                 | QUANT SIG |        |        |         |    |          | CONCENTRATIONS       |                |
|---------------------------|-----------|--------|--------|---------|----|----------|----------------------|----------------|
|                           | MASS      | RT     | EXP RT | REL RT  | RT | RESPONSE | ON-COLUMN<br>( ug/L) | FINAL<br>( ug) |
| =====                     | =====     | ==     | =====  | =====   |    | =====    | =====                | =====          |
| 92 1,2,3-Trichlorobenzene | 180       | 14.825 | 14.820 | (1.290) |    | 1423     | 0.12011              | 0.0030029      |

#### QC Flag Legend

M - Compound response manually integrated.



Data File: /chem/gcms/mz.i/Z040706.b/h2kh41aa.d  
 Report Date: 07-Apr-2006 10:42

## STL Knoxville

 INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                       |                                   |
|-------------------------------------------------------|-----------------------------------|
| Instrument ID: mz.i                                   | Calibration Date: 07-APR-2006     |
| Lab File ID: h2kh41aa.d                               | Calibration Time: 07:35           |
| Lab Smp Id: H2KH41AA                                  | Client Smp ID: A-5388 MEDIA CHECK |
| Analysis Type: VOA                                    | Level: LOW                        |
| Quant Type: ISTD                                      | Sample Type: AIR                  |
| Operator: 22980                                       |                                   |
| Method File: /var/chem/gcms/mz.i/Z040706.b/8260B_LM.m |                                   |
| Misc Info: Z040706,8260B_LM,focus.sub                 |                                   |

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE | %DIFF  |
|---------------------|----------|------------|---------|--------|--------|
|                     |          | LOWER      | UPPER   |        |        |
| 1 Fluorobenzene     | 952581   | 476290     | 1905162 | 782893 | -17.81 |
| 2 Chlorobenzene-d5  | 164101   | 82050      | 328202  | 169789 | 3.47   |
| 3 1,4 Dichlorobenze | 204390   | 102195     | 408780  | 229767 | 12.42  |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 5.68     | 5.18     | 6.18  | 5.67   | -0.12 |
| 2 Chlorobenzene-d5  | 8.94     | 8.44     | 9.44  | 8.94   | -0.01 |
| 3 1,4 Dichlorobenze | 11.49    | 10.99    | 11.99 | 11.49  | -0.01 |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mz.i/Z040706.b/h2kh41aa.d  
Report Date: 07-Apr-2006 10:42

STL Knoxville

RECOVERY REPORT

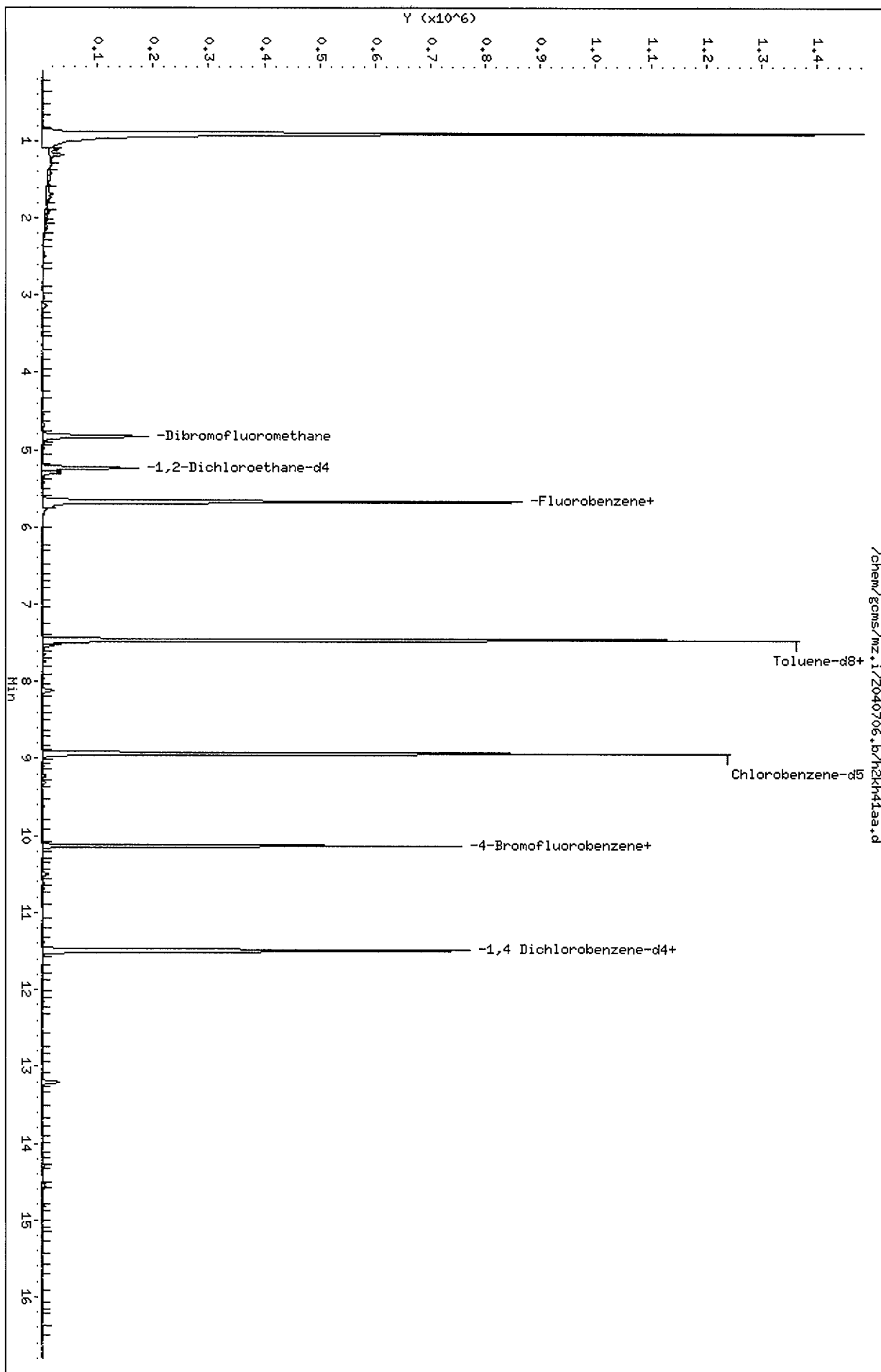
Client Name: STL Knoxville - ACS      Client SDG: H6D030169  
Sample Matrix: GAS      Fraction: VOA  
Lab Smp Id: H2KH41AA      Client Smp ID: A-5388 MEDIA CHECK  
Level: LOW      Operator: 22980  
Data Type: MS DATA      SampleType: SAMPLE  
SpikeList File: allcmpds.spk      Quant Type: ISTD  
Sublist File: focus.sub  
Method File: /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
Misc Info: Z040706,8260B\_LM,focus.sub

| SURROGATE COMPOUND      | CONC<br>ADDED<br>ug | CONC<br>RECOVERED<br>ug | %<br>RECOVERED | LIMITS |
|-------------------------|---------------------|-------------------------|----------------|--------|
| \$ 4 Dibromofluorometha | 0.25000             | 0.28465                 | 113.86         | 50-150 |
| \$ 5 1,2-Dichloroethane | 0.25000             | 0.25453                 | 101.81         | 50-150 |
| \$ 6 Toluene-d8         | 0.25000             | 0.25484                 | 101.93         | 50-150 |
| \$ 7 4-Bromofluorobenze | 0.25000             | 0.22393                 | 89.57          | 50-150 |

Data File: /chem/gcms/mz.i/Z040706.b/h2kh41aa.d  
Date : 07-APR-2006 10:24  
Client ID: A-5388 MEDIA CHECK  
Sample Info: H2KH41AA,1,0,,

Column phase: J+M 624

Instrument: mz.i  
Operator: 22980  
Column diameter: 0.18



Data File: /var/chem/gcms/mz.i/Z040706.b/h2kh41aa.d

Date: 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Instrument: mz.i

Sample Info: H2KH41AA,1,0,,

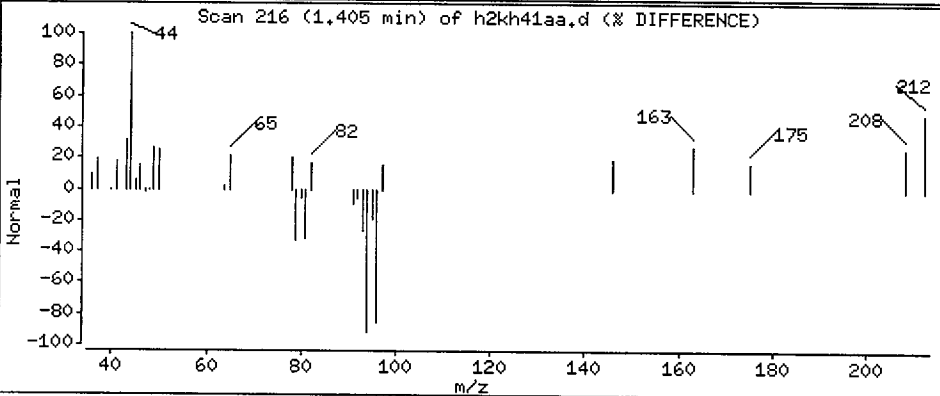
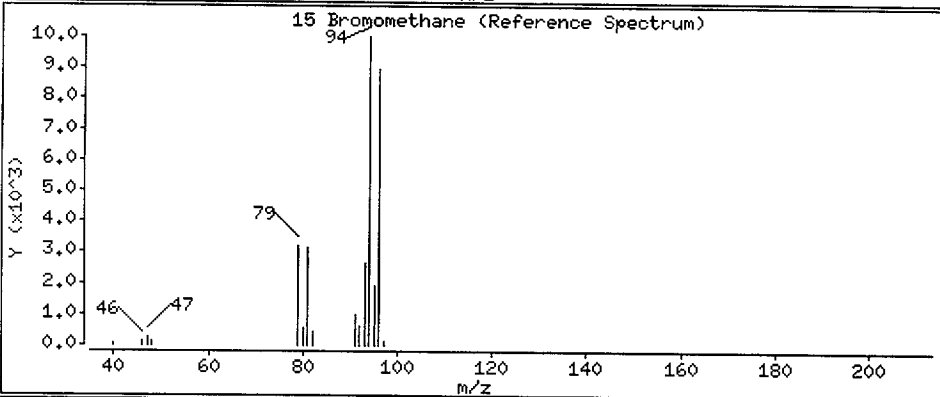
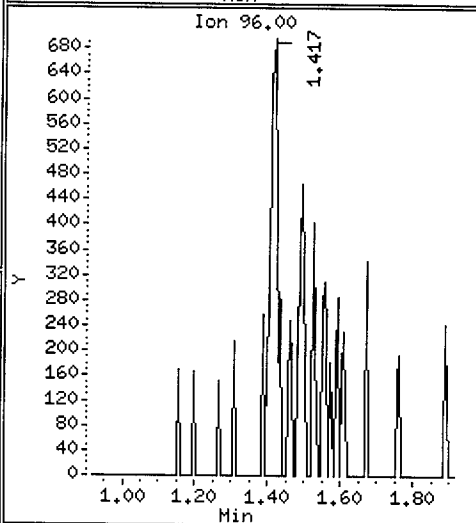
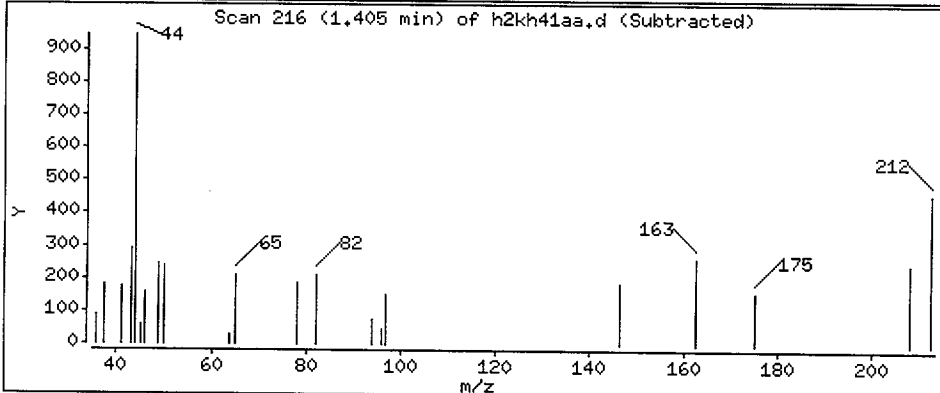
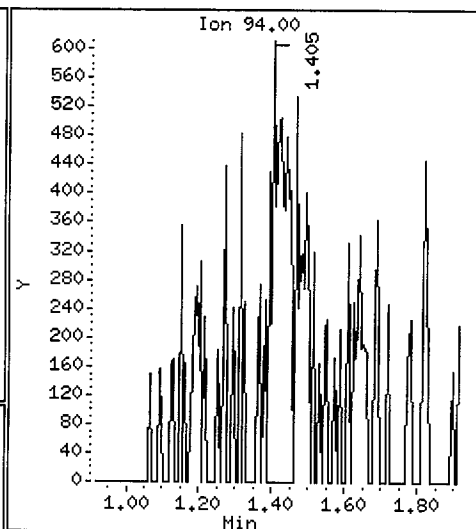
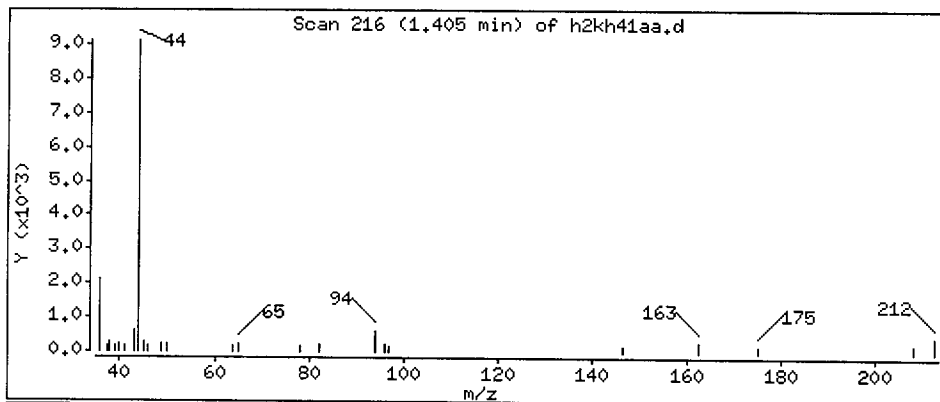
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

15 Bromomethane

Concentration: 0.025976 ug

RW4-14-06  
(1)

Data File: /chem/gcms/mz.i/Z040706.b/h2kh41aa.d

Date : 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Instrument: mz.i

Sample Info: H2KH41AA,1,0,,

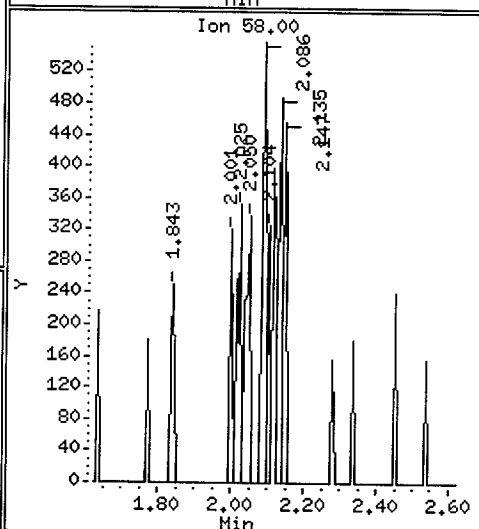
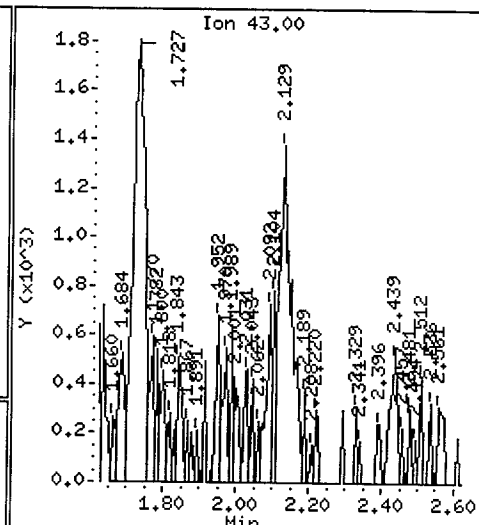
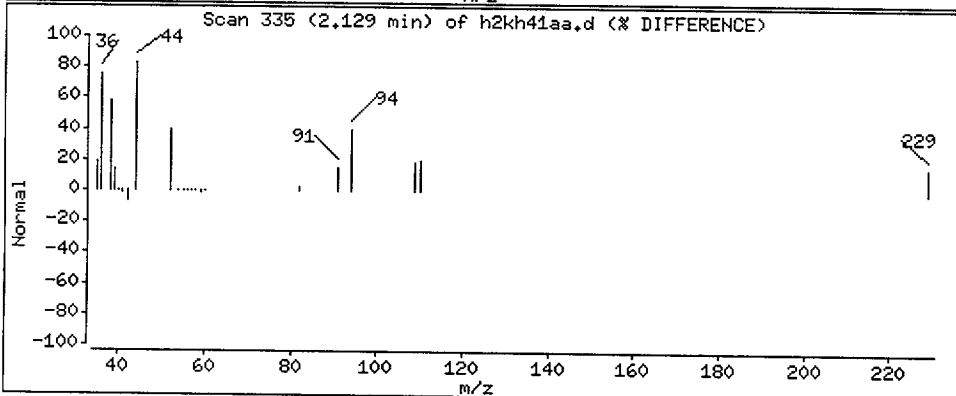
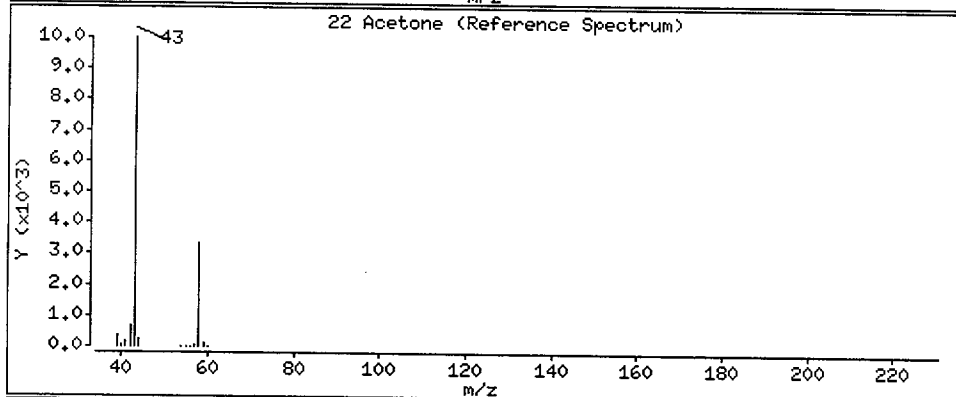
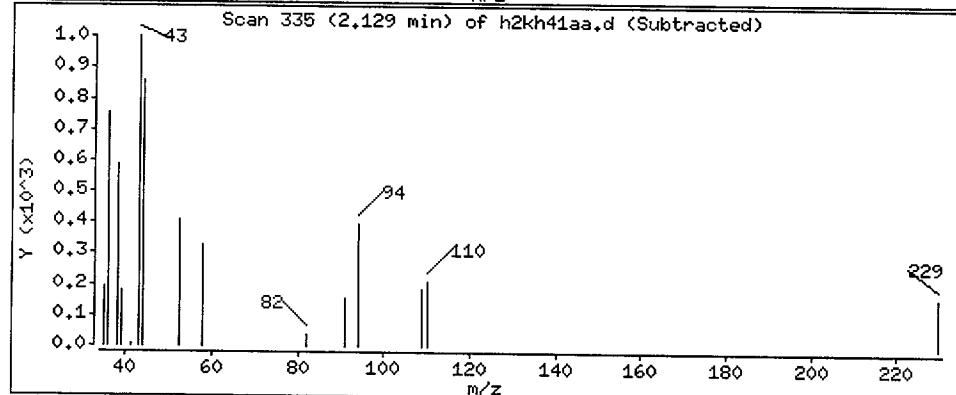
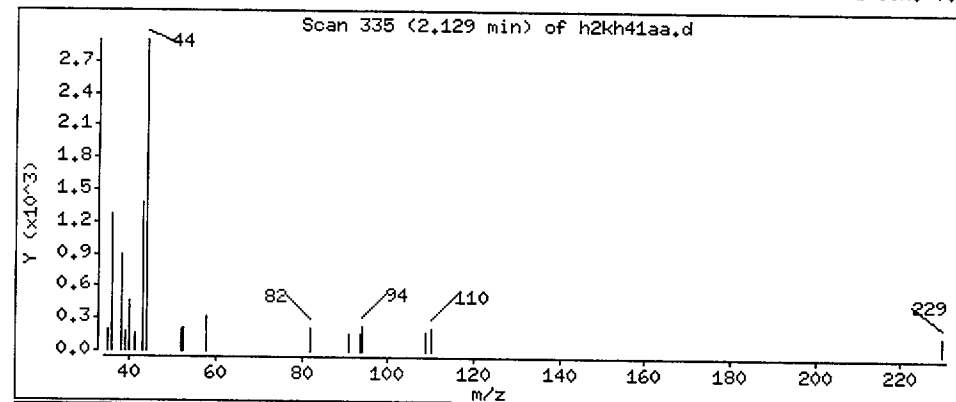
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

22 Acetone

Concentration: 0.098218 ug



Data File: /chem/gcms/mz.i/Z040706,b/h2kh41aa,d

Date : 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Instrument: mz.i

Sample Info: H2KH41AA,1,0,,

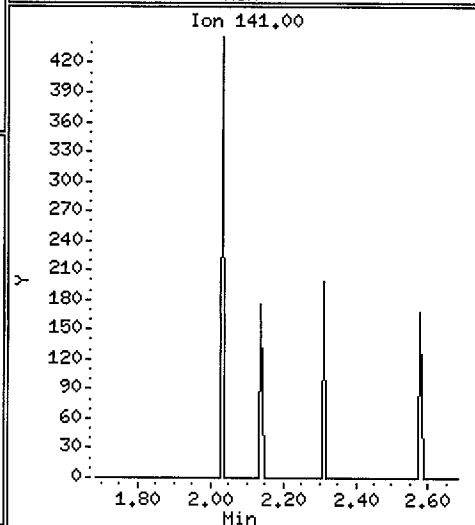
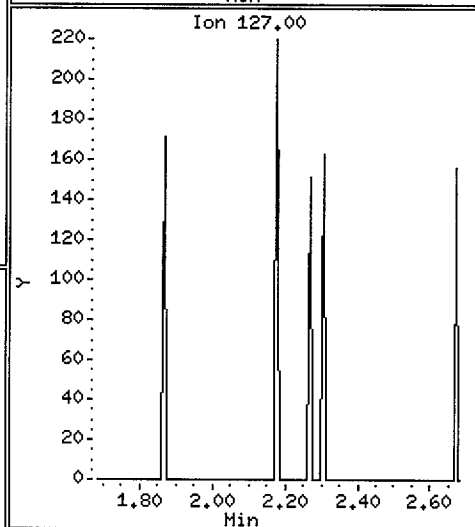
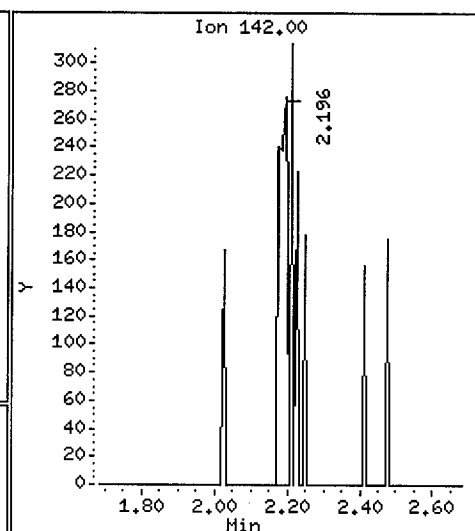
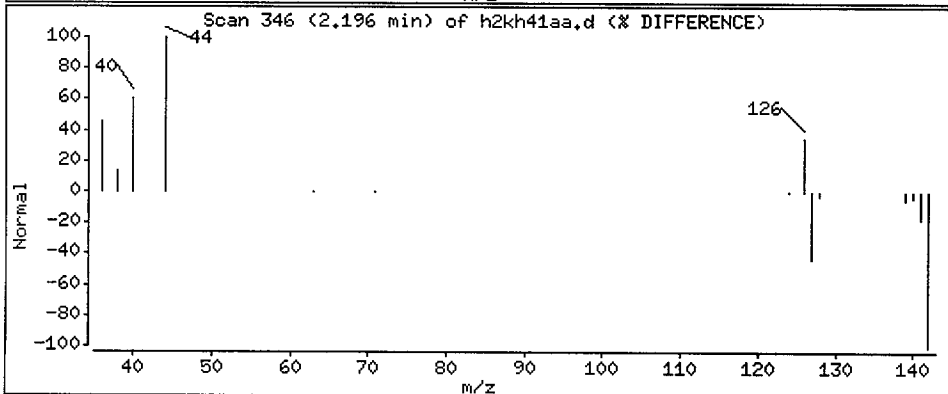
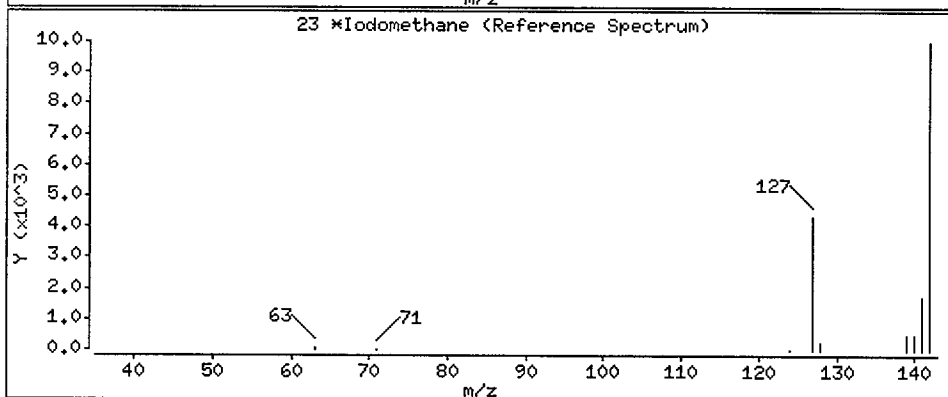
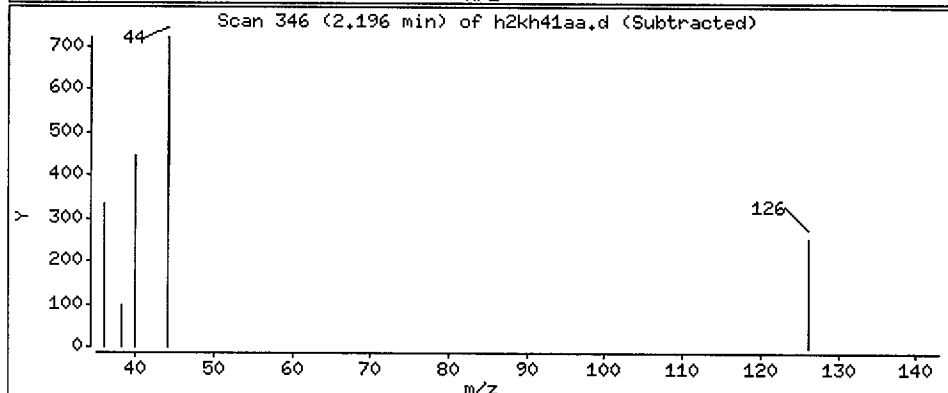
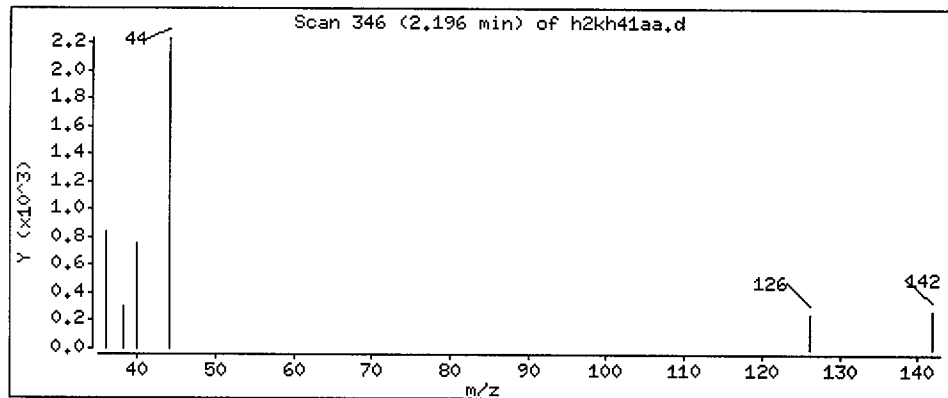
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

23 \*Iodomethane

Concentration: 0.013592 ug



Data File: /chem/gcms/mz.i/2040706.b/h2kh41aa.d

Date : 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Instrument: mz.i

Sample Info: H2KH41AA,1,0,,

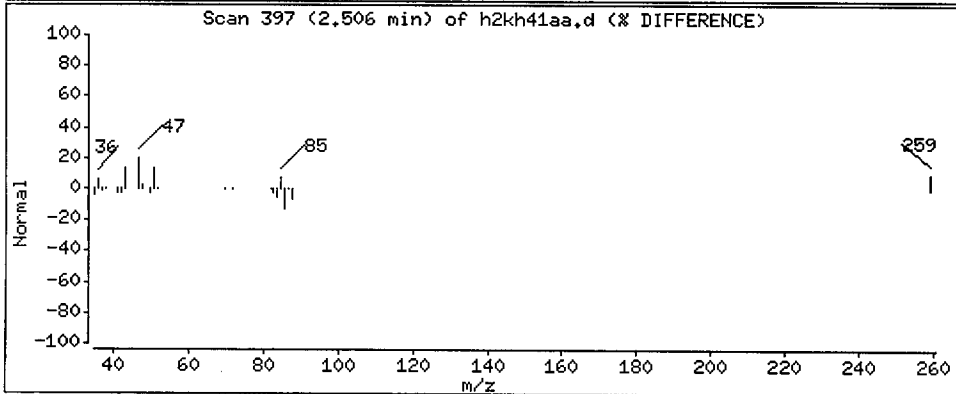
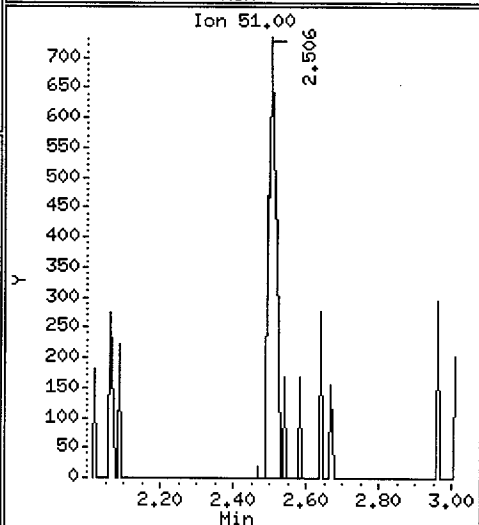
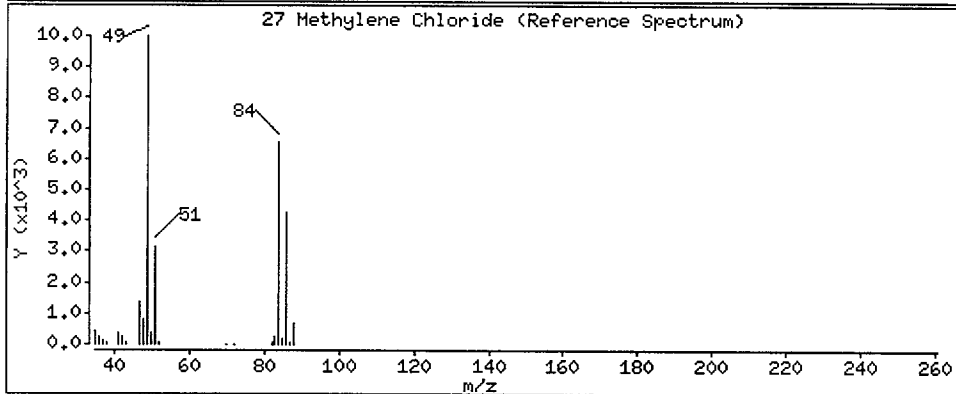
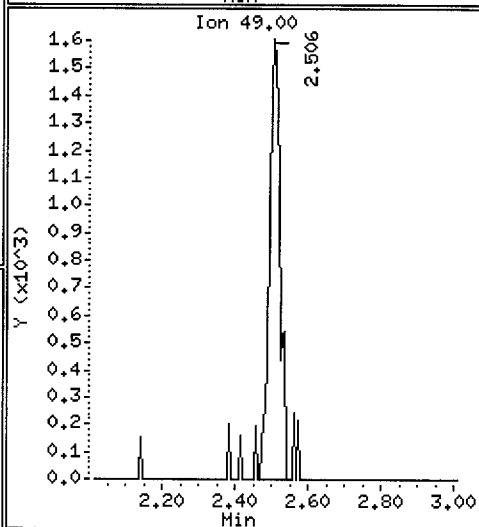
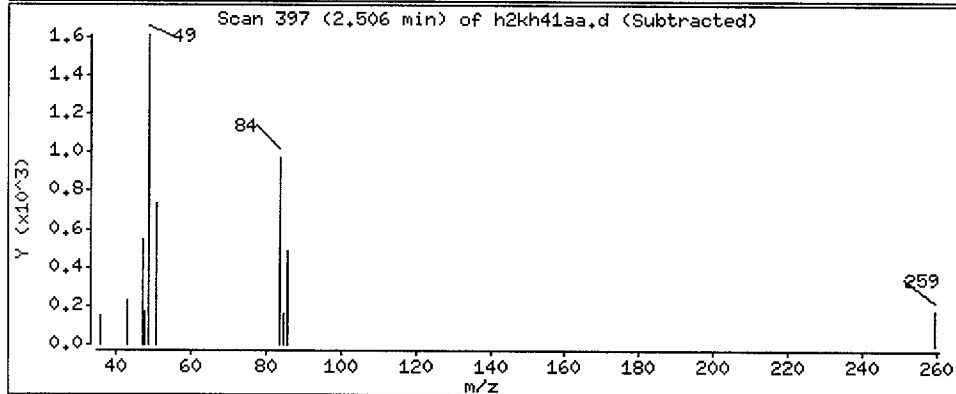
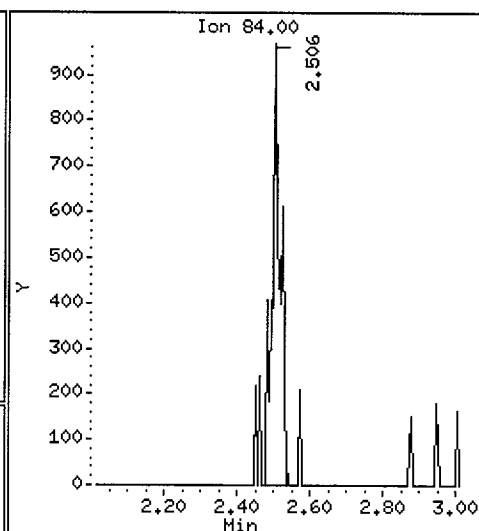
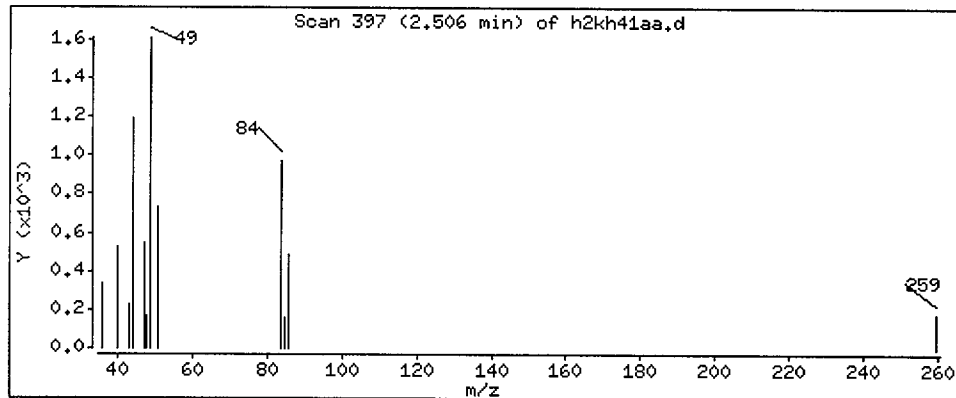
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

27 Methylene Chloride

Concentration: 0.0028908 ug



Data File: /chem/gcms/mz.i/2040706.b/h2kh41aa.d

Date : 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Instrument: mz.i

Sample Info: H2KH41AA,1,0,,

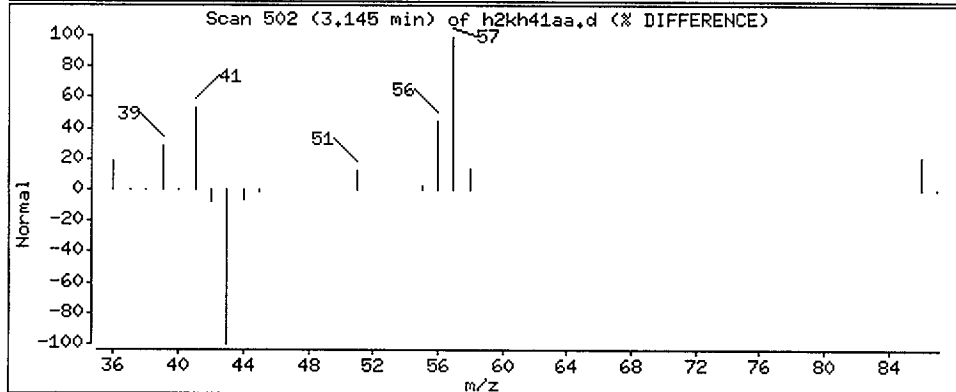
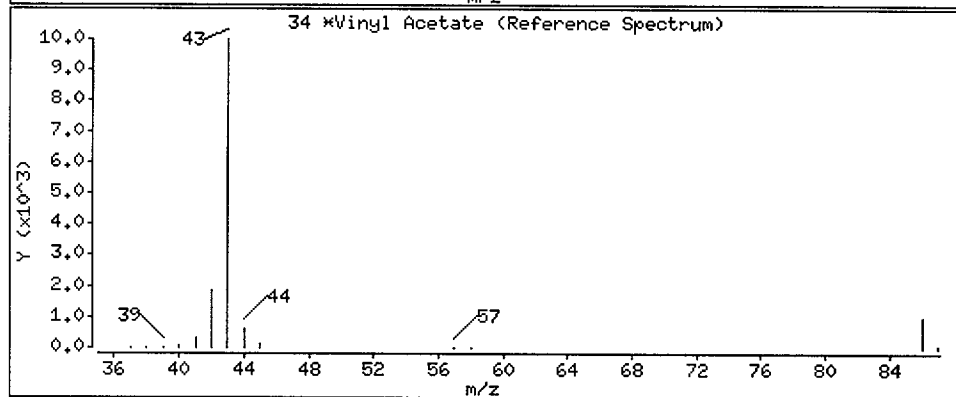
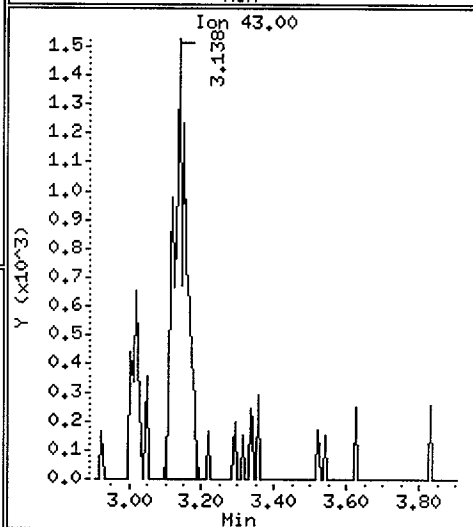
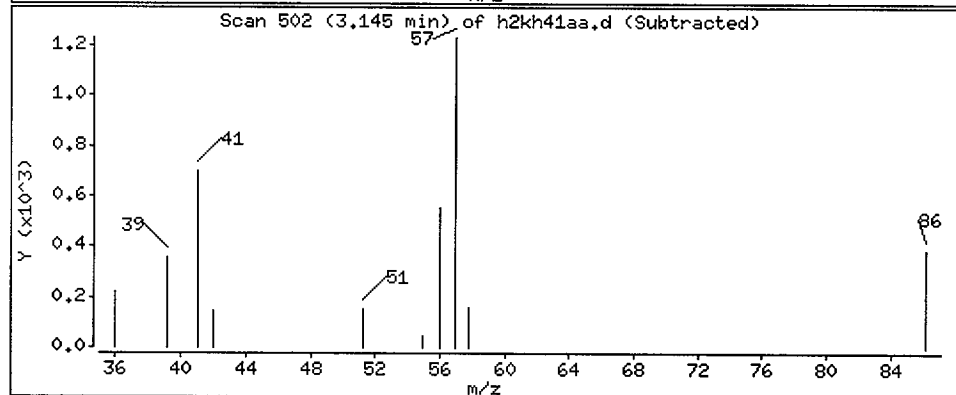
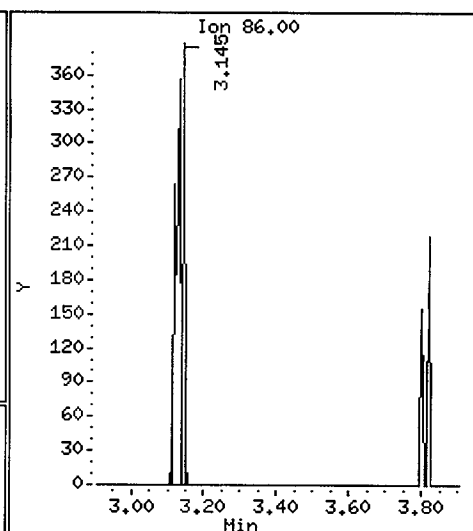
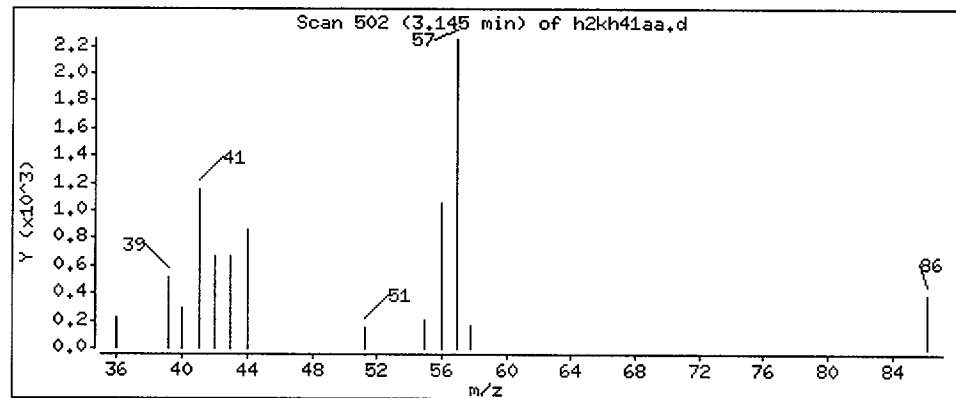
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

34 \*Vinyl Acetate

Concentration: 0.010421 ug





Data File: /chem/gcms/mz.i/2040706.b/h2kh41aa.d

Date : 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Instrument: mz.i

Sample Info: H2KH41AA,1,0,,

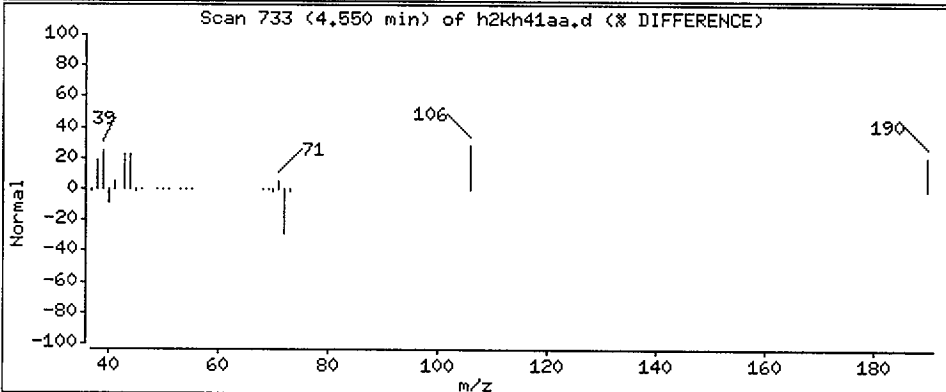
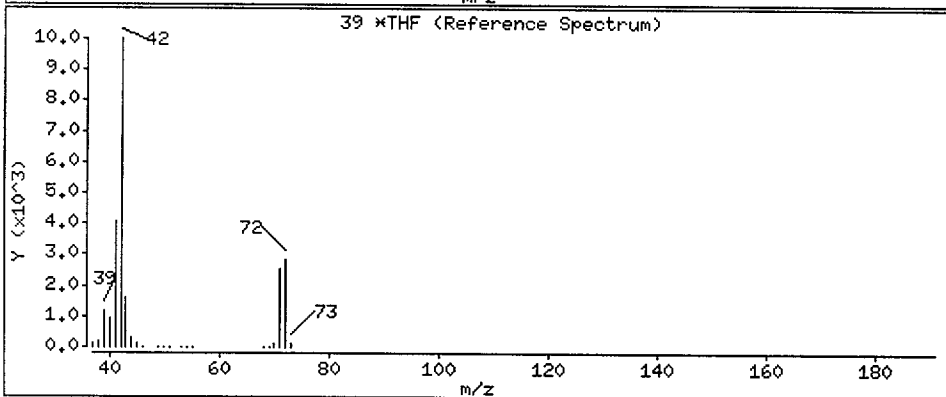
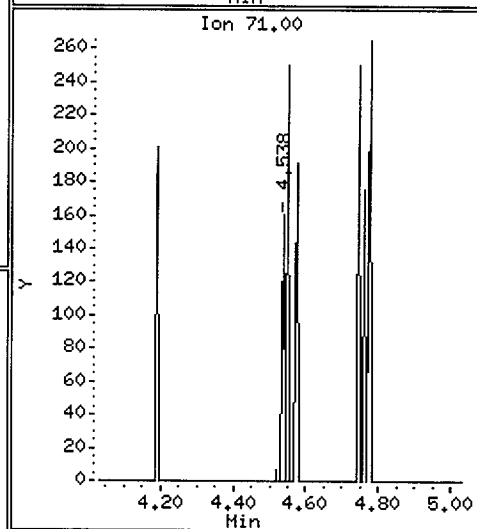
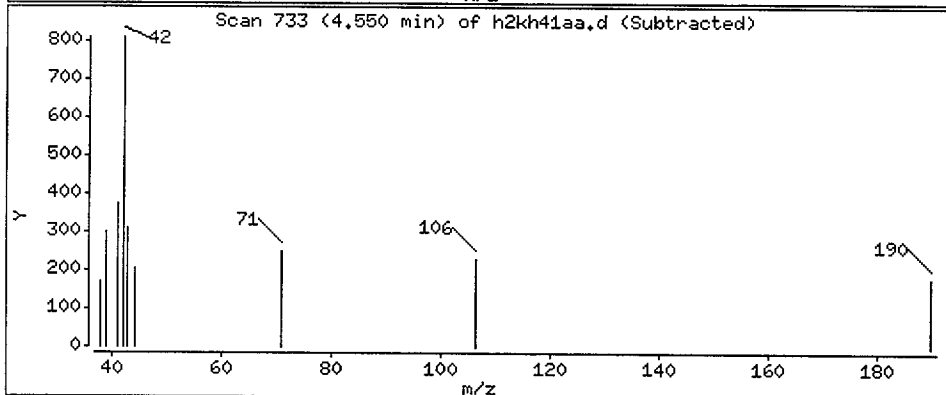
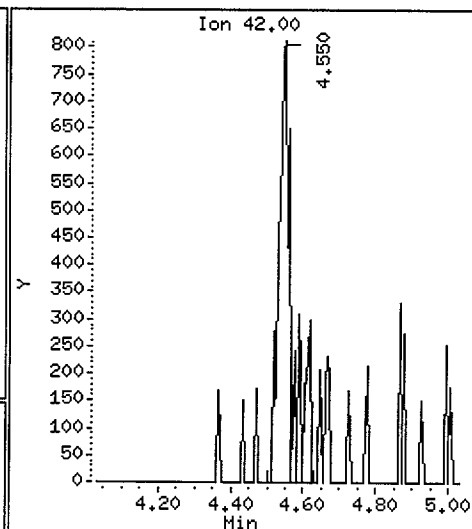
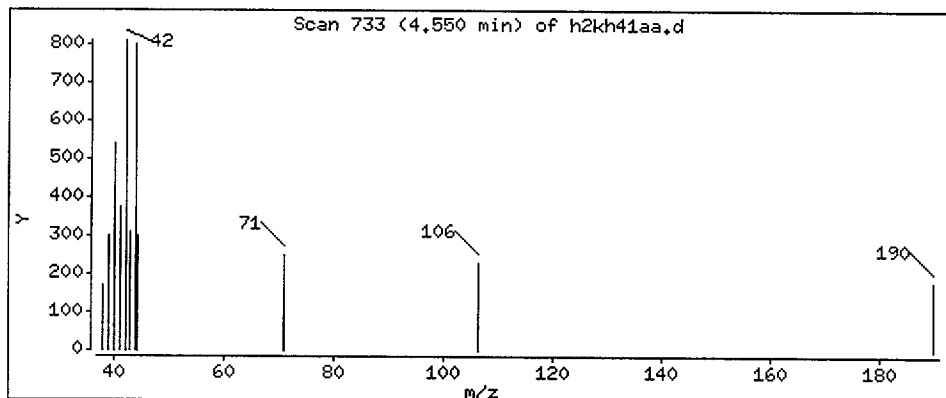
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

39 \*THF

Concentration: 0.027475 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2kh41aa.d

Date : 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Instrument: mz.i

Sample Info: H2KH41AA,1,0,,

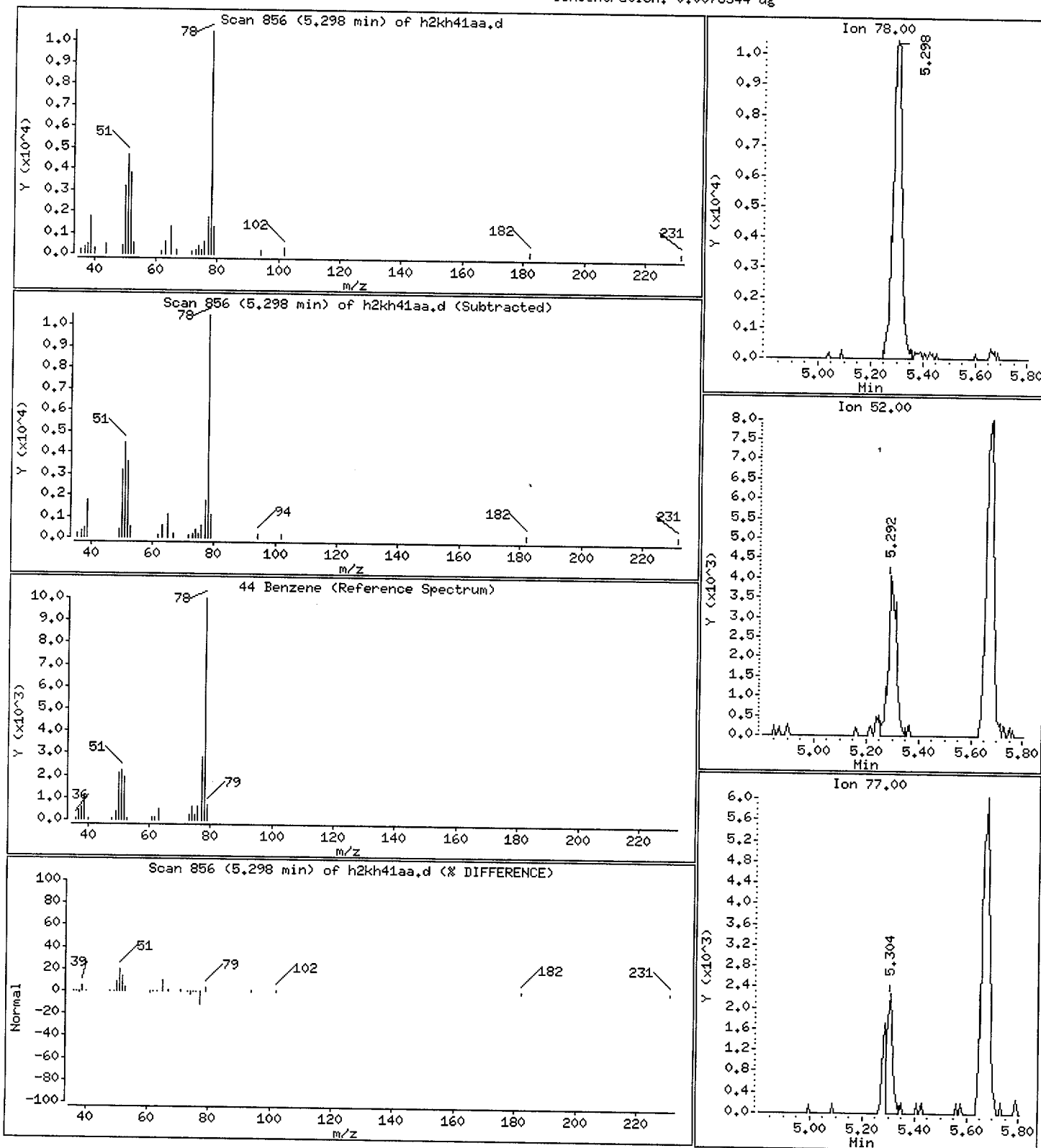
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

44 Benzene

Concentration: 0.0078344 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2kh41aa.d

Date : 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Sample Info: H2KH41AA,1,0,,

Instrument: mz.i

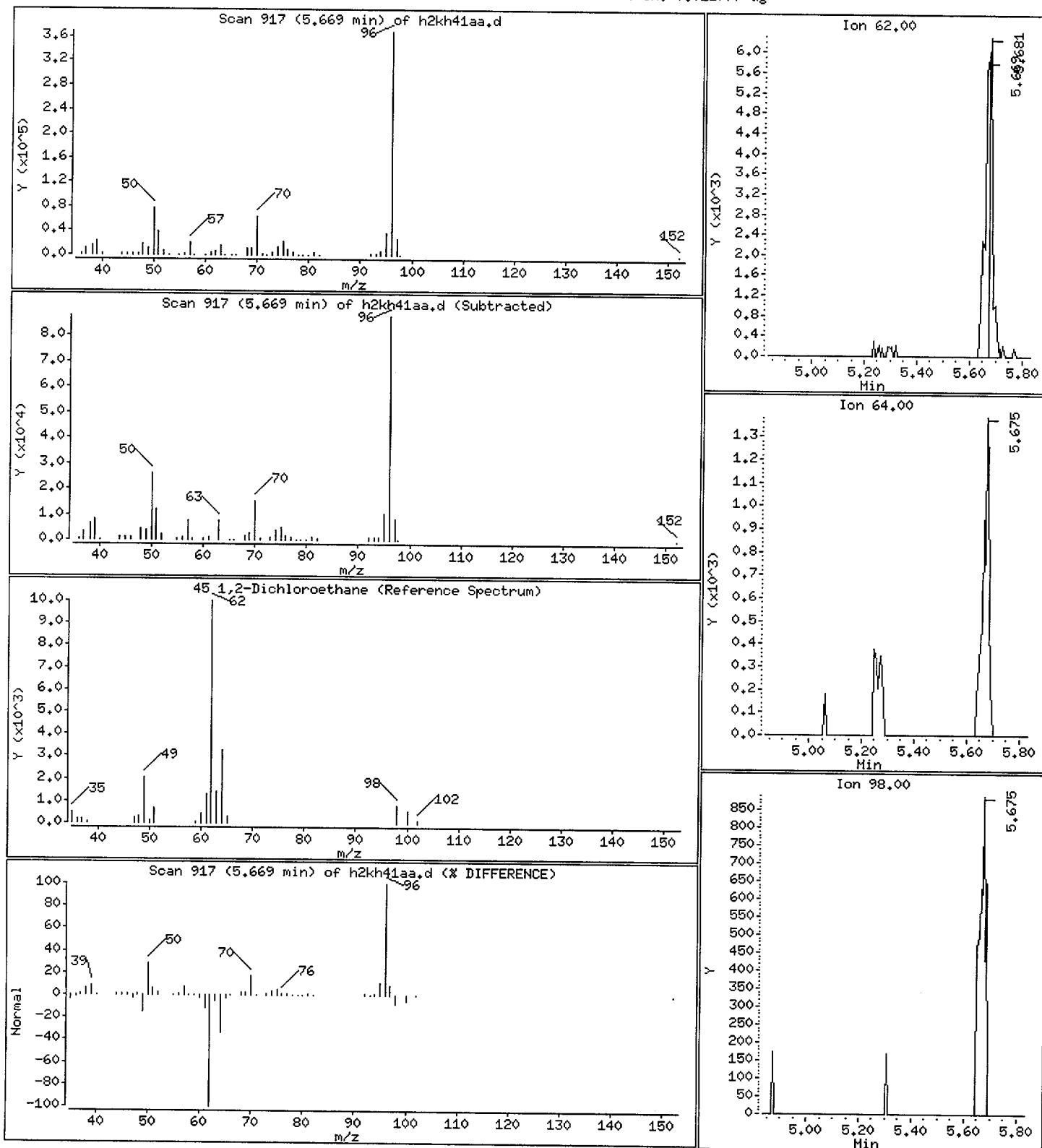
Operator: 22980

Column diameter: 0.18

Column phase: J+W 624

Concentration: 0.012777 ug

45 1,2-Dichloroethane



Data File: /chem/gcms/mz.i/Z040706.b/h2kh41aa.d

Date : 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Instrument: mz.i

Sample Info: H2KH41AA,1,0,,

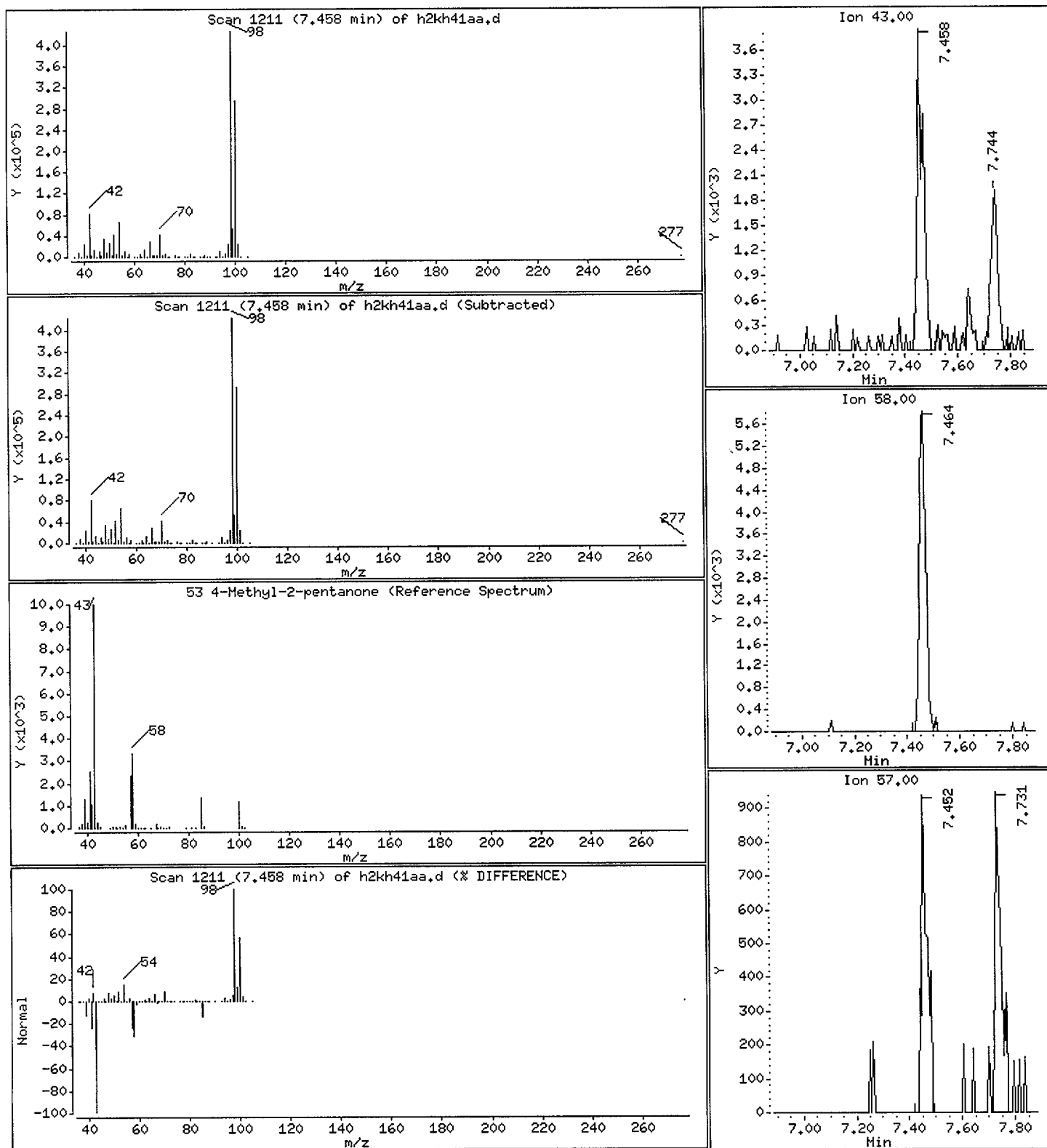
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

Concentration: 0.022503 ug

53 4-Methyl-2-pentanone



Data File: /chem/gcms/mz.i/Z040706.b/h2kh41aa.d

Date : 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Instrument: mz.i

Sample Info: H2KH41AA,1,0,,

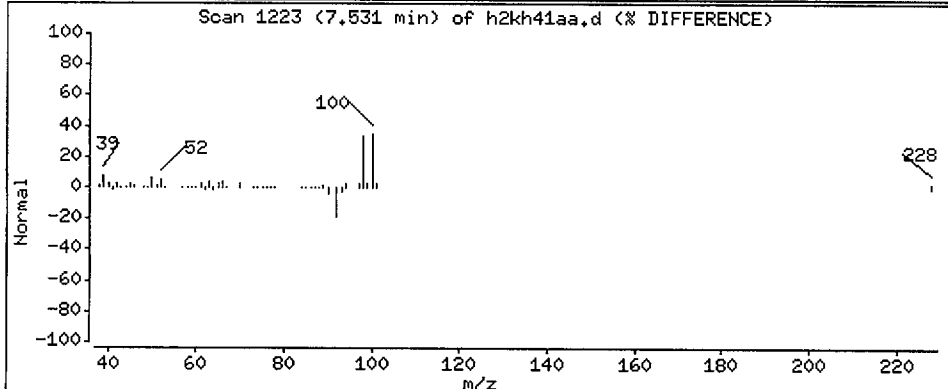
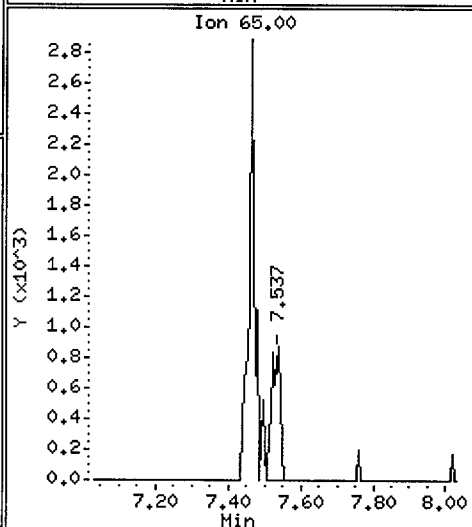
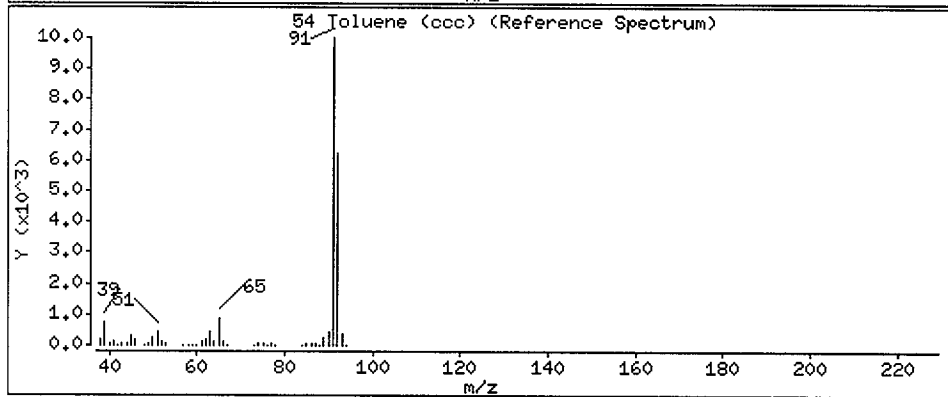
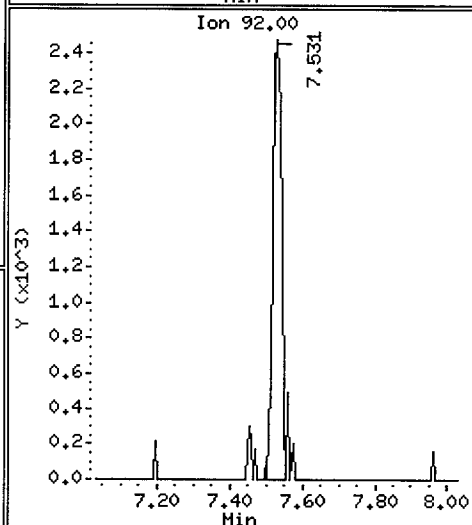
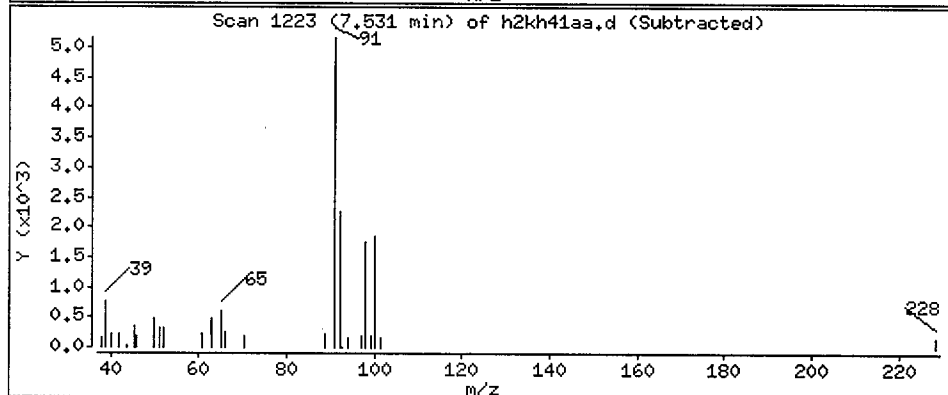
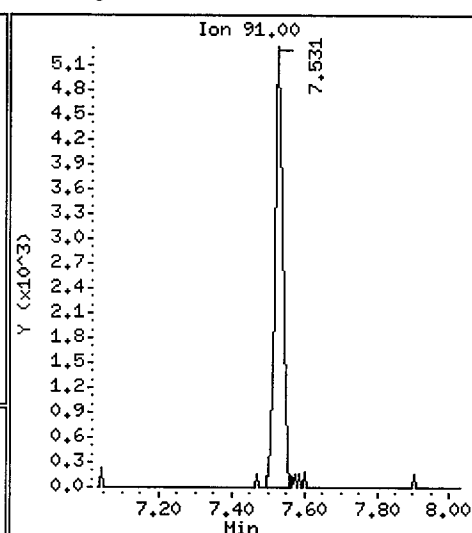
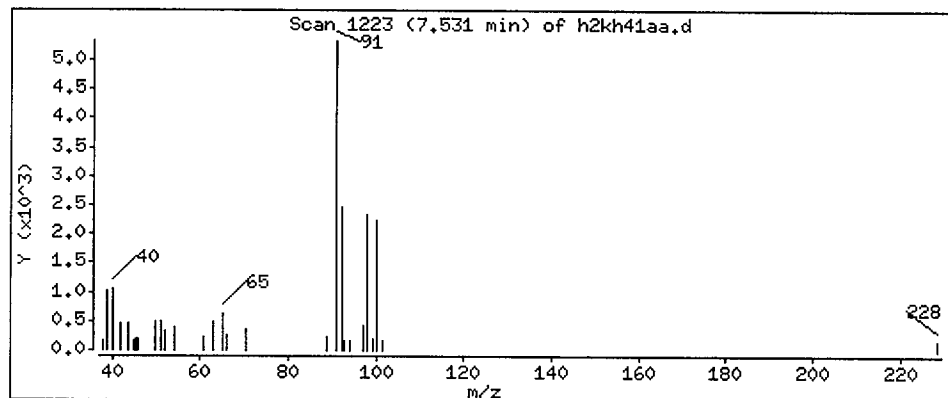
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

54 Toluene (ccc)

Concentration: 0.0019818 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2kh41aa.d

Date : 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Instrument: mz.i

Sample Info: H2KH41AA,1,0,,

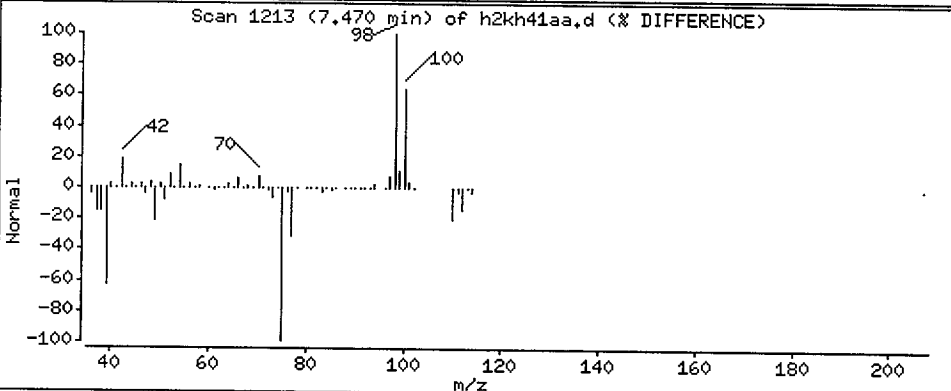
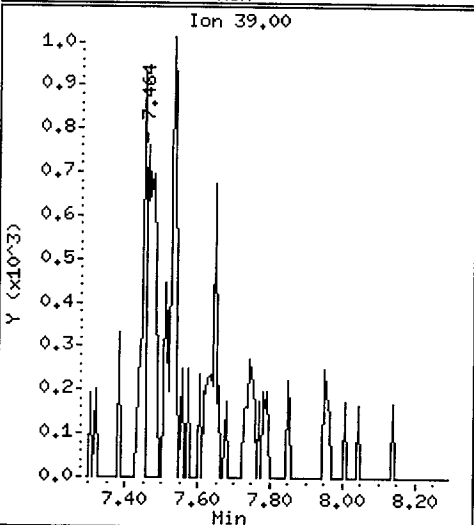
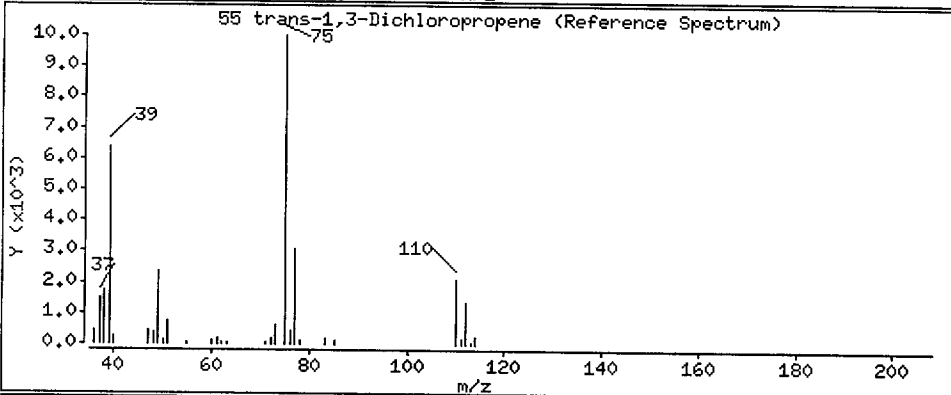
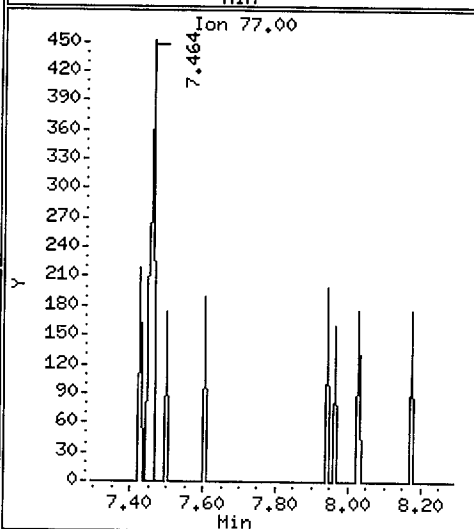
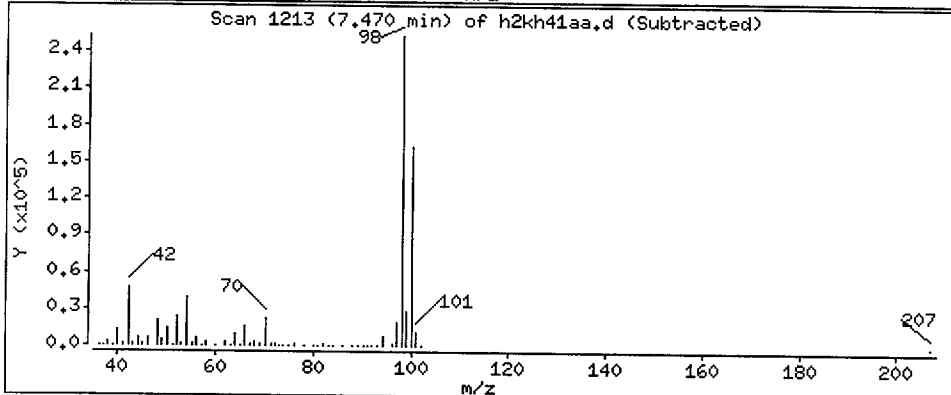
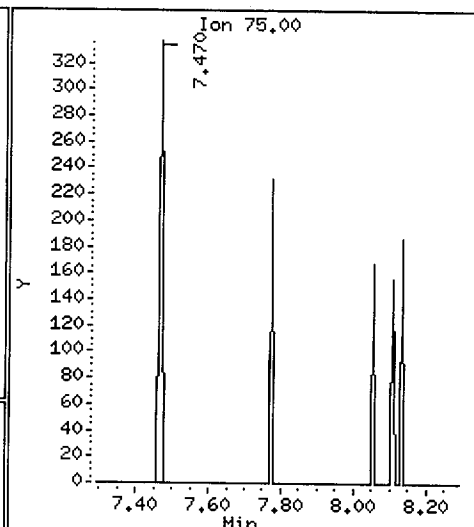
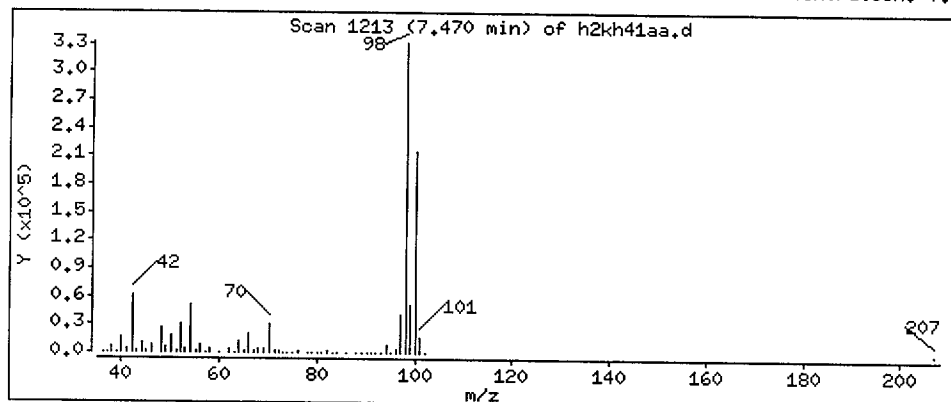
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

55 trans-1,3-Dichloropropene

Concentration: 0.015926 ug



Data File: /chem/gcms/mz.i/2040706.b/h2kh41aa.d

Date : 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Instrument: mz.i

Sample Info: H2KH41AA,1,0,,

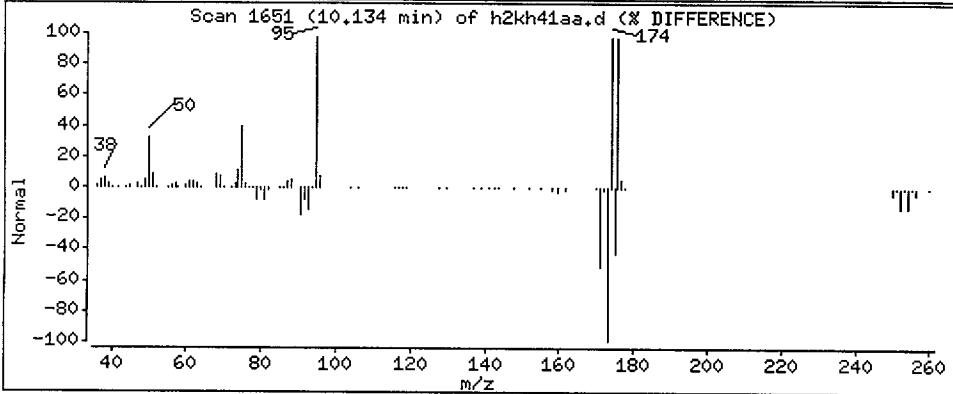
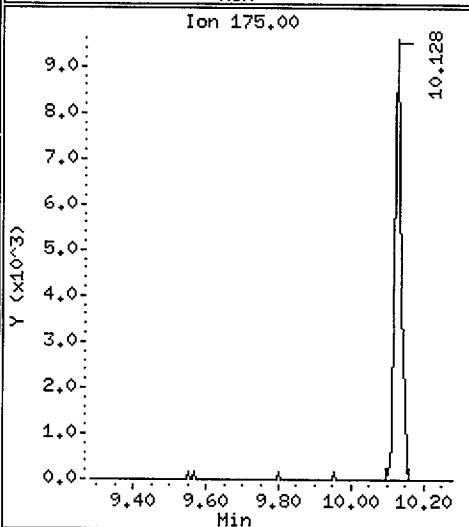
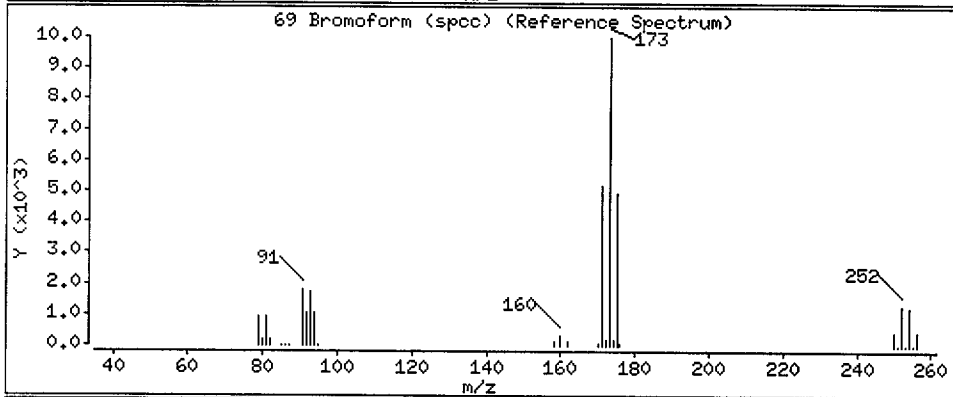
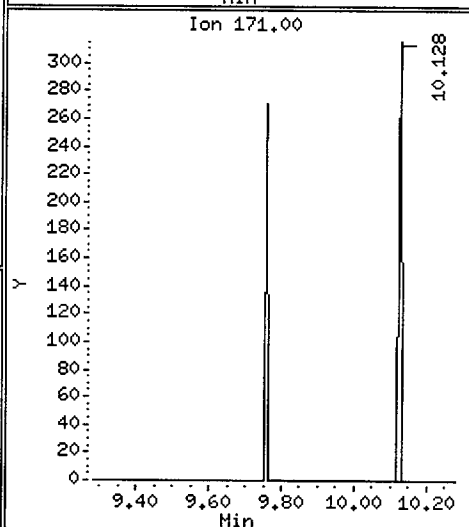
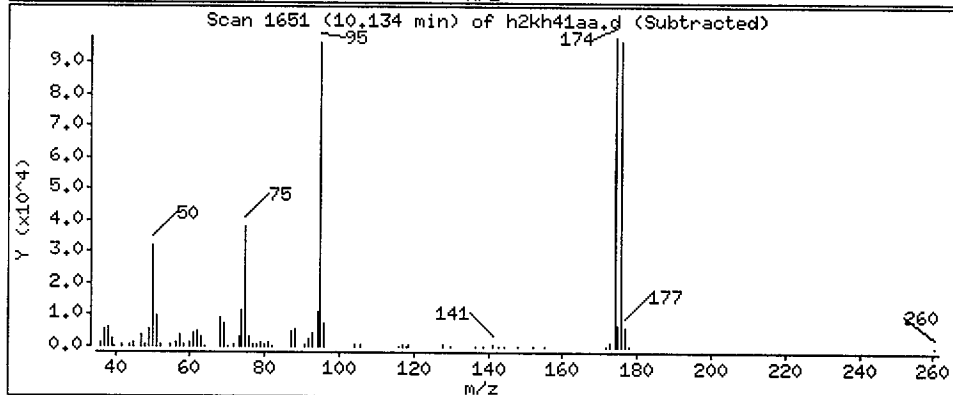
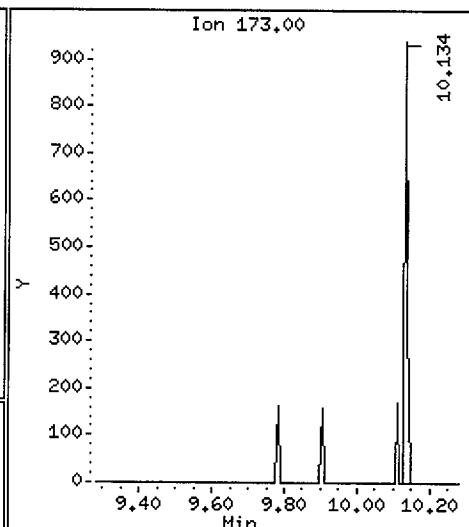
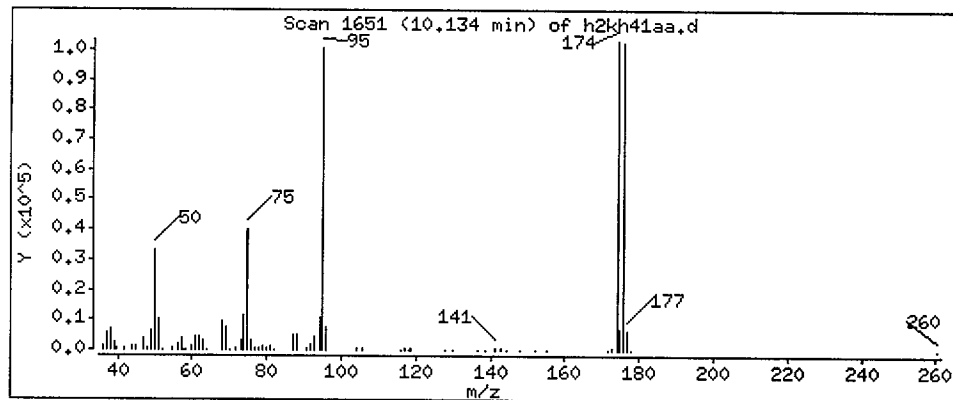
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

69 Bromoform (spcc)

Concentration: 0.024388 ug



Data File: /chem/gcms/mz.i/2040706.b/h2kh41aa.d

Date : 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Instrument: mz.i

Sample Info: H2KH41AA,1,0,,

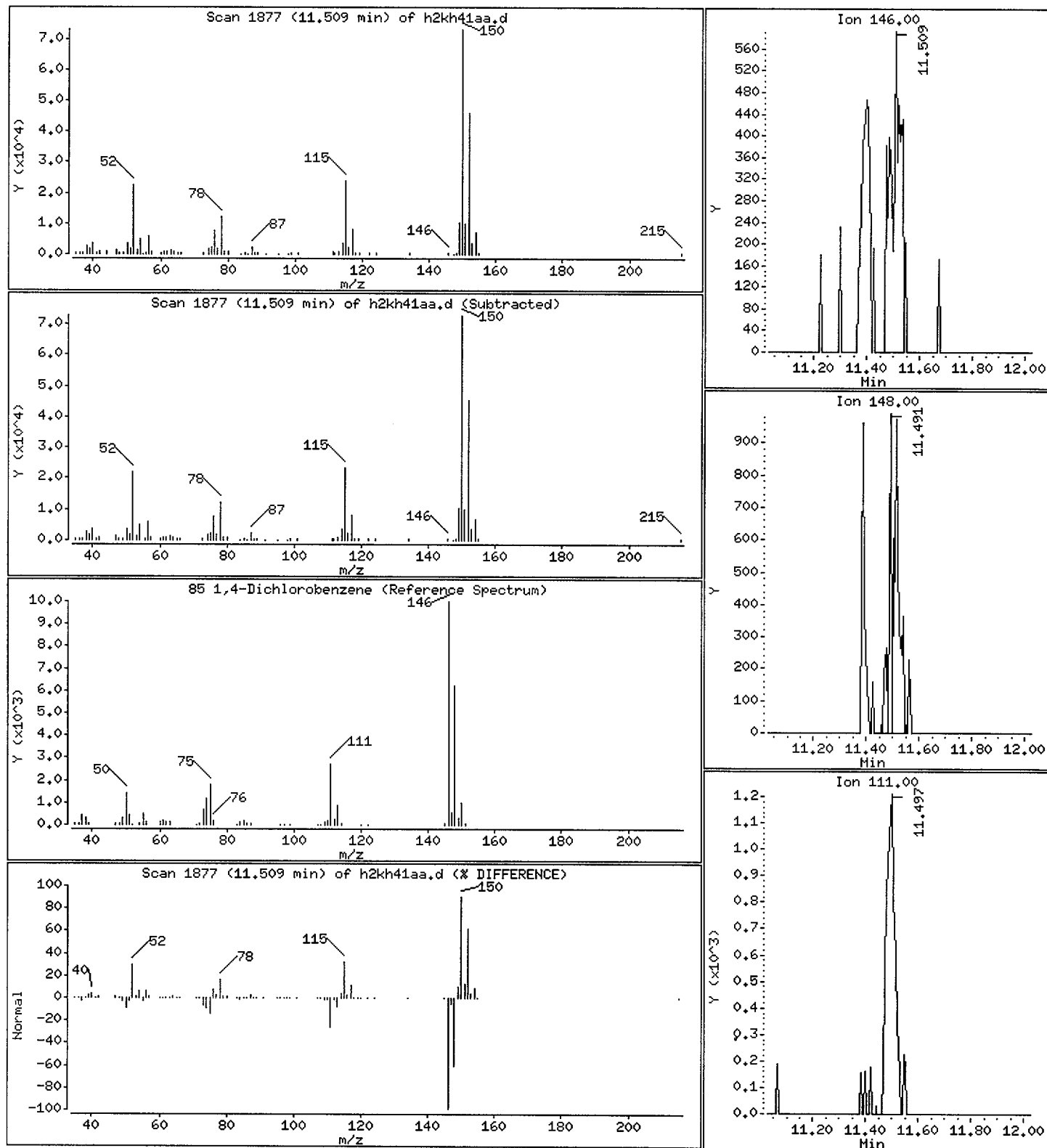
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

85 1,4-Dichlorobenzene

Concentration: 0.0010039 ug





Data File: /chem/gcms/mz.i/Z040706.b/h2kh41aa.d

Date : 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Instrument: mz.i

Sample Info: H2KH41AA,1,0,,

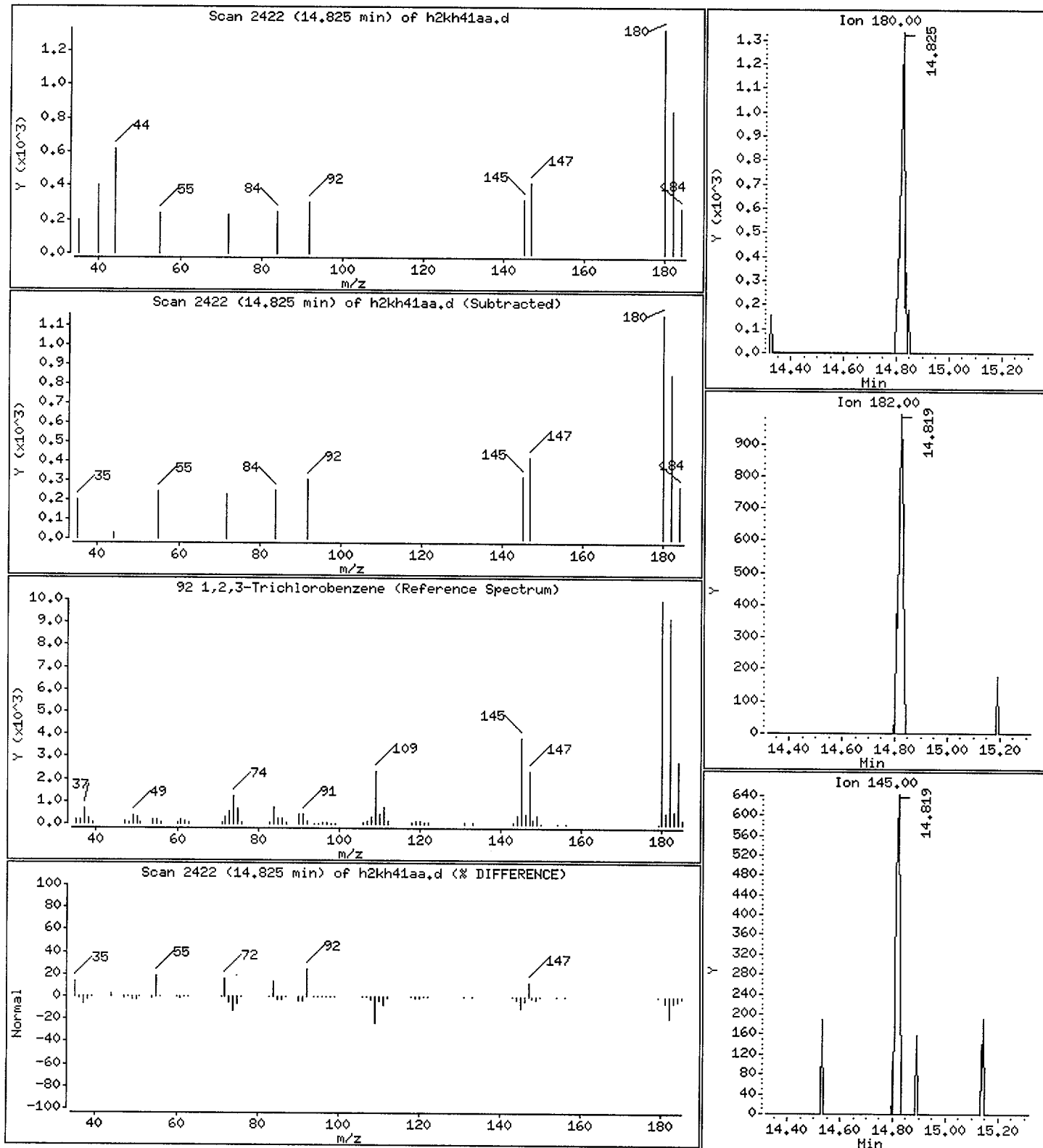
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

92 1,2,3-Trichlorobenzene

Concentration: 0.0030032 ug



Data File: /var/chem/gcms/mz.i/Z040706.b/h2kh41aa.d  
 Report Date: 14-Apr-2006 17:03

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z040706.b/h2kh41aa.d  
 Lab Smp Id: H2KH41AA Client Smp ID: A-5388 MEDIA CHECK  
 Inj Date : 07-APR-2006 10:24  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : H2KH41AA,1,0,,  
 Misc Info : Z040706,8260B\_LM,focus.sub  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
 Meth Date : 14-Apr-2006 15:48 wilesd Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: focus.sub  
 Target Version: 3.50

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable Local Compound Variable

| ISTD              | RT    | HEIGHT | AMOUNT |
|-------------------|-------|--------|--------|
| =====             | ===== | =====  | =====  |
| * 1 Fluorobenzene | 5.669 | 863382 | 10.000 |

| RT             | HEIGHT  | CONCENTRATIONS |            | QUAL  | QUANT           |           |        |
|----------------|---------|----------------|------------|-------|-----------------|-----------|--------|
|                |         | ON-COL( ug/L)  | FINAL( ug) |       | LIBRARY         | LIB ENTRY | CPND # |
| =====          | =====   | =====          | =====      | ===== | =====           | =====     | =====  |
| Carbon dioxide |         |                |            |       | CAS #: 124-38-9 |           |        |
| 0.906          | 1483355 | 17.1807497     | 0.42952    | 5     | NIST05.1        | 80        | 1      |

*7/14/06*

Data File: /var/chem/gcms/mz.i/Z040706.b/h2kh41aa.d

Date: 07-APR-2006 10:24

Client ID: A-5388 MEDIA CHECK

Instrument: mz.i

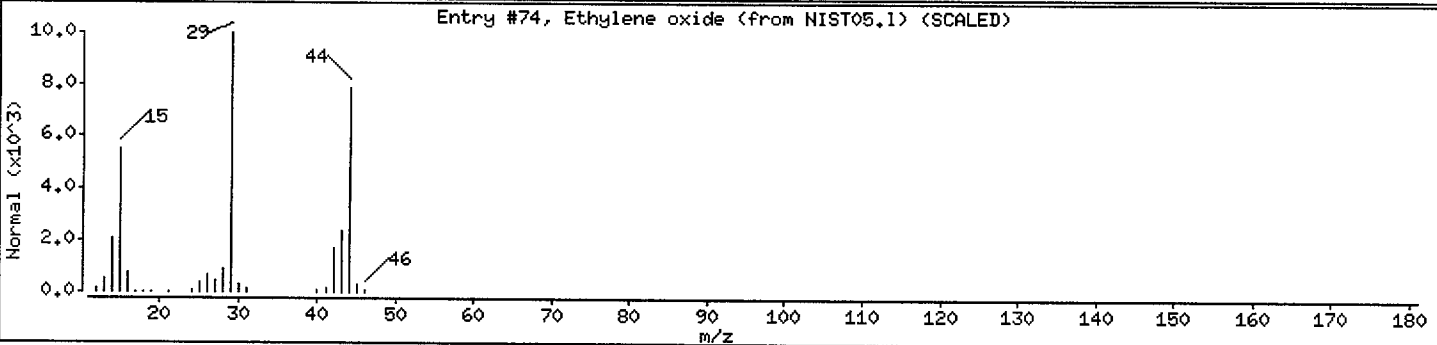
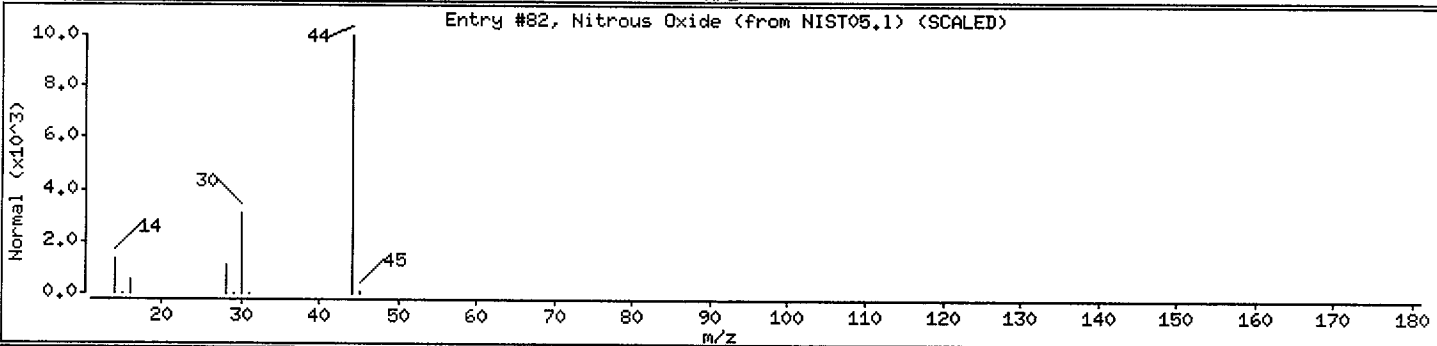
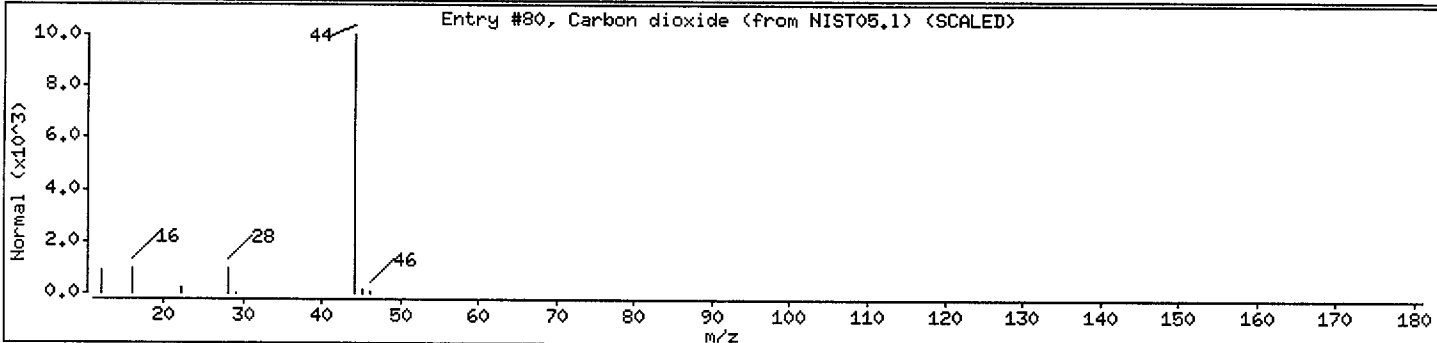
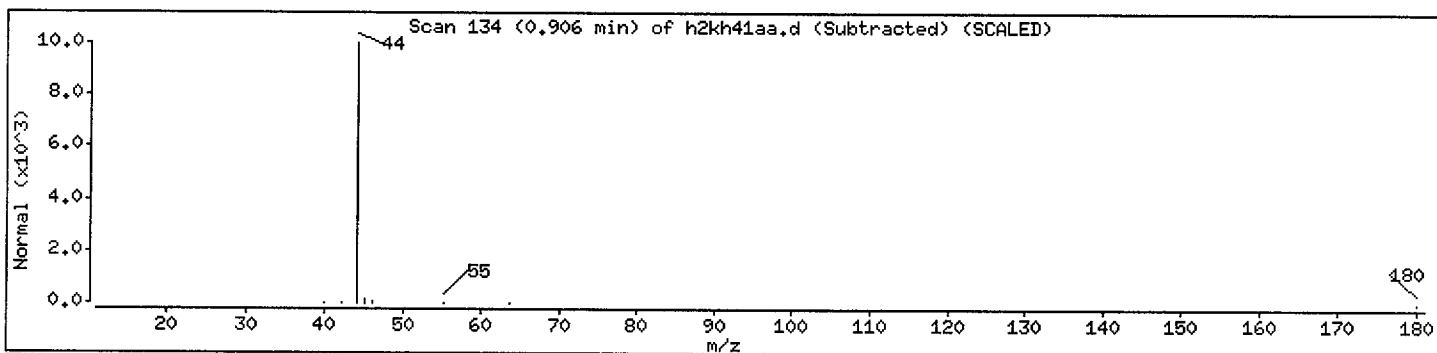
Sample Info: H2KH41AA,1,0,,

Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Carbon dioxide                | 124-38-9   | NIST05.1 | 80    | 5       | CO2     | 44     |
| Nitrous Oxide                 | 10024-97-2 | NIST05.1 | 82    | 3       | N2O     | 44     |
| Ethylene oxide                | 75-21-8    | NIST05.1 | 74    | 2       | C2H4O   | 44     |



# Standards Data

**Method: 8260B – KNOX-MS-0015, Rev. 8**

[illegible]

## STL Knoxville GC/MS Volatiles Run Log - Instrument MZ

|                   |            |            |            |             |   |         |
|-------------------|------------|------------|------------|-------------|---|---------|
| Target Batch      | Z032406I   | XXXXXXXXXX | XXXXXXXXXX | Loop #      | - | 3       |
| QuantIMS Batch    | 6083471    | -          | -          | Standard ID | - | VOA6488 |
| Method            | 82603      | XXXXXXXXXX | XXXXXXXXXX | Matrix      | - | lower   |
| SOP#              | KnoxMS0015 | XXXXXXXXXX | XXXXXXXXXX | IS Amt/ID   | - | 4.71ml  |
| Intitil Cal Batch | Z032406I   | XXXXXXXXXX | XXXXXXXXXX | SS Amt/ID   | - | ↓       |
| CCAL IS Areas     | 1140841    | 197405     | 234469     | Heated?     | Y | (N)     |

☒ Date/Time Verified    Preventive Maintenance Performed ☐ NA or ☒ cleaned source - see maint. log

[illegible]

Analyst/Date: JS/2/01

## STL Knoxville GC/MS Volatiles Run Log - Instrument MZ

|                   |              |            |            |             |         |     |
|-------------------|--------------|------------|------------|-------------|---------|-----|
| Target Batch      | 2032806      | XXXXXXXXXX | XXXXXXXXXX | Loop #      | 3       |     |
| QuantIMS Batch    |              |            |            | Standard ID | V0A6481 |     |
| Method            | 82603        | XXXXXXXXXX | XXXXXXXXXX | Matrix      | 25mL    |     |
| SOP#              | KNOX-MS-0015 | XXXXXXXXXX | XXXXXXXXXX | IS Amt/ID   | 471m    |     |
| Initial Cal Batch | 2452406      | XXXXXXXXXX | XXXXXXXXXX | SS Amt/ID   | ↓       |     |
| CCAL IS Areas     | 1026731      | 151231     | 222795     | Heated?     | Y       | (N) |

☒ Date/Time Verified    Preventive Maintenance Performed ☒ NA or ☐

[illegible]

Analyst/Date:                                           / 3/28/06

Data File: /chem/gcms/mz.i/Z032406I,b/bfbzo24.d

Date : 24-MAR-2006 13:31

Client ID:

Instrument: mz.i

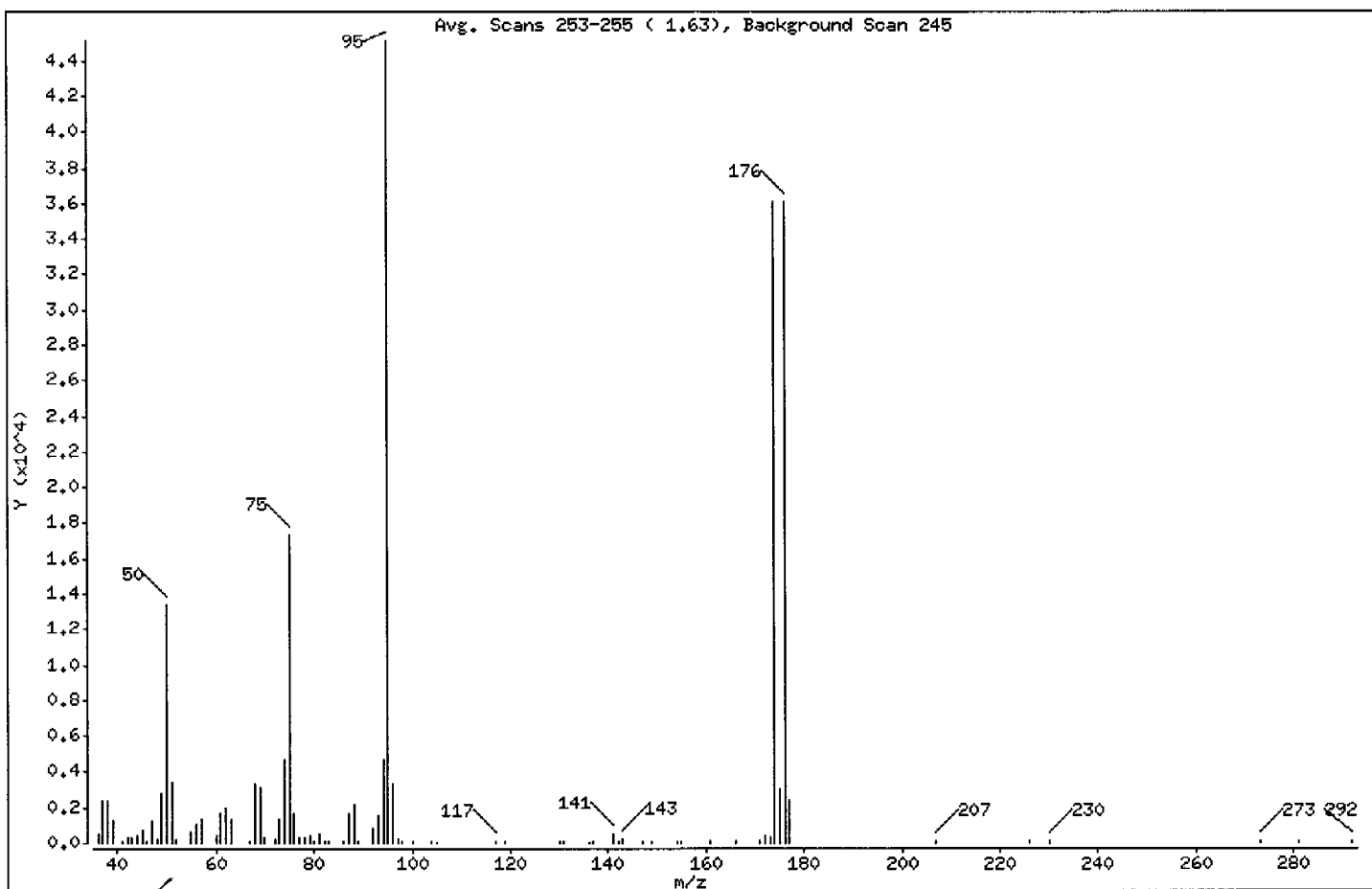
Sample Info: BFBZC24,1,3,,BFB

Operator: 22980

Column phase: J &amp; W 624

Column diameter: 0,18

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          | 29.57                |
| 75  | 30.00 - 60.00% of mass 95          | 38.36                |
| 96  | 5.00 - 9.00% of mass 95            | 7.28                 |
| 173 | Less than 2.00% of mass 174        | 0.63 ( 0.78)         |
| 174 | 50.00 - 120.00% of mass 95         | 80.00                |
| 175 | 5.00 - 9.00% of mass 174           | 6.62 ( 8.27)         |
| 176 | 95.00 - 101.00% of mass 174        | 80.04 (100.04)       |
| 177 | 5.00 - 9.00% of mass 176           | 5.18 ( 6.47)         |





Data File: /chem/gcms/mz.i/Z0324061.b/bfbz24.d

Date : 24-MAR-2006 13:31

Client ID:

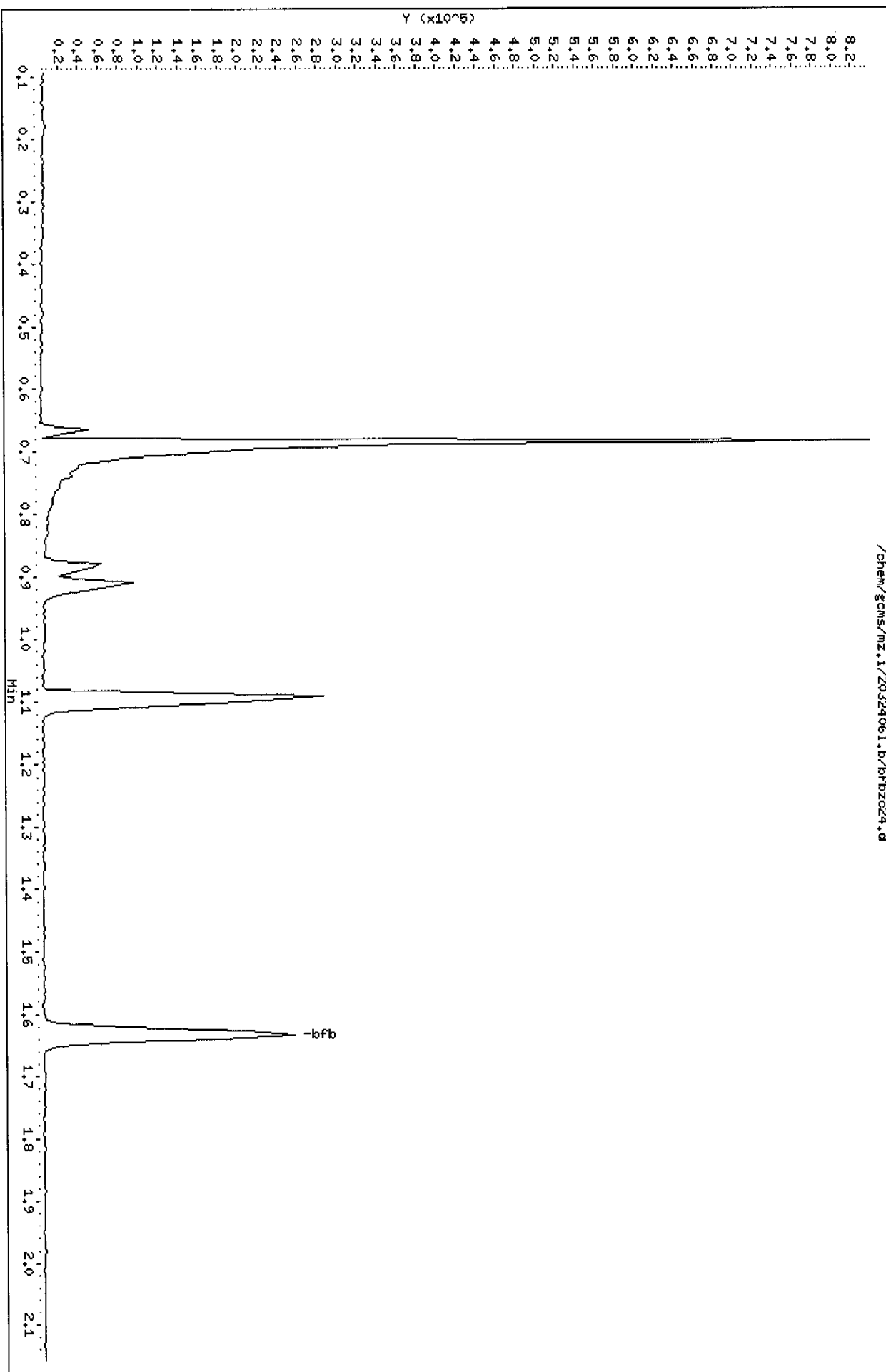
Sample Info: BFBZ24,1,3,,BFB

Instrument: mz.i

Operator: 22980

Column phase: J & W 624

Column diameter: 0.18





Report Date : 28-Mar-2006 11:42

STL Knoxville

# INITIAL CALIBRATION DATA

Start Cal Date : 24-MAR-2006 13:51  
 End Cal Date : 24-MAR-2006 16:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/gcms/mz.i/Z0324061.b/8260B\_LM.m  
 Cal Date : 28-Mar-2006 11:39 goss

| Compound                  | 1<br>Level 1       | 2<br>Level 2    | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b        | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|---------------------------|--------------------|-----------------|---------------|---------------|---------------|---------------|-------|----------|--------------------|----|---------------------------|
| 11 Chloromethane (spcc)   | 106980<br>39346    | 175396<br>++++  | 767002        | 1410409       | 2424327       | 4768731       | WLNR  | -0.05764 | 0.55962            |    | 0.99380                   |
| 12 Vinyl Chloride (ccc)   | 0.40412<br>0.34635 | 0.40077<br>++++ | 0.39782       | 0.41616       | 0.40406       | 0.38776       | AVRG  |          | 0.39386            |    | 5.73845                   |
| 13 *1,3-Butadiene         | 0.37494<br>++++    | 0.38329<br>++++ | 0.35114       | 0.38314       | 0.31783       | 0.32071       | AVRG  |          | 0.35518            |    | 8.50491                   |
| 15 Bromomethane           | 5472<br>++++       | 10576<br>++++   | 91856         | 213182        | 458442        | 963744        | WLNR  | 0.08343  | 0.10668            |    | 0.99641                   |
| 16 Chloroethane           | 0.19087<br>++++    | 0.19609<br>++++ | 0.18055       | 0.19083       | 0.18517       | 0.17548       | AVRG  |          | 0.18650            |    | 4.07346                   |
| 17 *Vinyl Bromide         | 0.16662<br>++++    | 0.15653<br>++++ | 0.16556       | 0.17758       | 0.17126       | 0.16214       | AVRG  |          | 0.16661            |    | 4.36583                   |
| 18 Trichlorofluoromethane | 0.29982<br>++++    | 0.30312<br>++++ | 0.29760       | 0.33017       | 0.31746       | 0.28573       | AVRG  |          | 0.30565            |    | 5.15771                   |

Report Date : 28-Mar-2006 11:42

STL Knoxville

## INITIAL CALIBRATION DATA

Start Cal Date : 24-MAR-2006 13:51  
 End Cal Date : 24-MAR-2006 16:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/gcms/mz.i/Z032406I.b/8260B\_LM.m  
 Cal Date : 28-Mar-2006 11:39 goss

| Compound                    | 1<br>Level 1       | 2<br>Level 2    | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>m1 | m2  | %RSD<br>or R <sup>2</sup> |
|-----------------------------|--------------------|-----------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|-----|---------------------------|
| 19 *2-Chloropropane         | 0.63079<br>++++    | 0.68632<br>++++ | 0.65954       | 0.69284       | 0.67170       | 0.62804       | AVRG  |         | 0.66154            |     | 4.15012                   |
| 20 1,1-Dichloroethene (ccc) | 0.22045<br>0.20428 | 0.21629<br>++++ | 0.21814       | 0.23068       | 0.22418       | 0.20736       | AVRG  |         | 0.21734            |     | 4.22541                   |
| 21 *Freon 113               | 0.16848<br>++++    | 0.17489<br>++++ | 0.17230       | 0.17790       | 0.16631       | 0.15533       | AVRG  |         | 0.16920            |     | 4.72125                   |
| 22 Acetone                  | 10079<br>3369      | 16702<br>++++   | 96858         | 175036        | 241819        | ++++          | QUAD  | 0.32608 | 15.44204           | 239 | 0.99409                   |
| 23 *Iodomethane             | 18279<br>++++      | 36560<br>++++   | 248702        | 547814        | 1119237       | 2352430       | WLINR | 0.05222 | 0.26044            |     | 0.99836                   |
| 24 Carbon Disulfide         | 0.75701<br>0.77317 | 0.80451<br>++++ | 0.75601       | 0.78871       | 0.74677       | 0.74411       | AVRG  |         | 0.76719            |     | 2.94853                   |
| 25 *2-propanol              | ++++<br>++++       | ++++<br>++++    | ++++          | ++++          | ++++          | ++++          | AVRG  |         | 0.000e+00          |     | 0.000e+00                 |

Report Date : 28-Mar-2006 11:42

## STL Knoxville

## INITIAL CALIBRATION DATA

Start Cal Date : 24-MAR-2006 13:51  
 End Cal Date : 24-MAR-2006 16:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/gcms/mz.i/Z032406I.b/8260B\_LM.m  
 Cal Date : 28-Mar-2006 11:39 goss

| Compound                    | 1<br>Level 1       | 2<br>Level 2    | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|-----------------------------|--------------------|-----------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|---------------------------|
| 26 *Acetonitrile            | 0.00383<br>++++    | 0.00422<br>++++ | 0.00475       | 0.00462       | 0.00476       | 0.00456       | AVRG  |   | 0.00445            |    | 8.14195                   |
| 27 Methylene Chloride       | 0.16394<br>++++    | 0.17002<br>++++ | 0.17677       | 0.15917       | 0.16942       | 0.16415       | AVRG  |   | 0.16724            |    | 3.67368                   |
| 28 *t-butanol               | ++++<br>++++       | ++++<br>++++    | ++++          | ++++          | ++++          | ++++          | AVRG  |   | 0.000e+00          |    | 0.000e+00                 |
| 29 *Acrylonitrile           | 0.03750<br>++++    | 0.03812<br>++++ | 0.03676       | 0.03790       | 0.03739       | 0.03639       | AVRG  |   | 0.03734            |    | 1.76900                   |
| 30 trans-1,2-Dichloroethene | 0.27947<br>0.26097 | 0.29373<br>++++ | 0.26414       | 0.28080       | 0.26814       | 0.27329       | AVRG  |   | 0.27436            |    | 4.11876                   |
| 31 *MTBE                    | 0.23209<br>0.20950 | 0.23996<br>++++ | 0.24521       | 0.25092       | 0.25472       | 0.25218       | AVRG  |   | 0.24065            |    | 6.57365                   |
| 32 *Hexane                  | 0.67107<br>++++    | 0.72649<br>++++ | 0.70026       | 0.73176       | 0.71148       | 0.67662       | AVRG  |   | 0.70295            |    | 3.58433                   |

Report Date : 28-Mar-2006 11:42

STL Knoxville

## INITIAL CALIBRATION DATA

Start Cal Date : 24-MAR-2006 13:51  
 End Cal Date : 24-MAR-2006 16:34  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/gcms/mz.i/Z032406I.b/8260B\_LM.m  
 Cal Date : 28-Mar-2006 11:39 goss

| Compound                     | 1<br>Level 1       | 2<br>Level 2    | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>ml | m2 | %RSD<br>or R <sup>2</sup> |
|------------------------------|--------------------|-----------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|---------------------------|
| 33 1,1-Dichloroethane (spcc) | 0.64580<br>0.56216 | 0.65450<br>++++ | 0.63331       | 0.65214       | 0.64389       | 0.64745       | AVRG  |   | 0.63418            |    | 5.12138                   |
| 34 *Vinyl Acetate            | ++++<br>++++       | 0.01047<br>++++ | 0.01319       | 0.01361       | 0.01456       | 0.01484       | AVRG  |   | 0.01333            |    | 13.02562                  |
| 35 2,2-Dichloropropane       | 0.29772<br>0.24637 | 0.30674<br>++++ | 0.32676       | 0.36218       | 0.36096       | 0.35474       | AVRG  |   | 0.32221            |    | 13.14806                  |
| 36 cis 1,2-Dichloroethene    | 0.25492<br>0.23604 | 0.25393<br>++++ | 0.25711       | 0.26279       | 0.25431       | 0.25365       | AVRG  |   | 0.25325            |    | 3.25015                   |
| 37 2-Butanone                | 0.03893<br>++++    | 0.03569<br>++++ | 0.03616       | 0.03963       | 0.03873       | 0.03820       | AVRG  |   | 0.03789            |    | 4.20824                   |
| 38 Bromochloromethane        | 0.07896<br>0.05015 | 0.06956<br>++++ | 0.07458       | 0.07280       | 0.07190       | 0.06951       | AVRG  |   | 0.06964            |    | 13.19229                  |
| 39 *THF                      | 0.02459<br>++++    | 0.02282<br>++++ | 0.02311       | 0.02410       | 0.02397       | 0.02376       | AVRG  |   | 0.02373            |    | 2.76137                   |

Report Date : 28-Mar-2006 11:42

STL Knoxville

## INITIAL CALIBRATION DATA

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| Compound                 | 1<br>Level 1       | 2<br>Level 2      | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|--------------------------|--------------------|-------------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----|---------------------------|
| 40 Chloroform (ccc)      | 0.3200<br>Level 7  | 0.2000<br>Level 8 |               |               |               |               |       |         |                    |    |                           |
| 41 1,1,1-Trichloroethane | 0.34499<br>0.32695 | 0.37034<br>++++   | 0.35947       | 0.37513       | 0.37388       | 0.37845       | AVRG  |         | 0.36132            |    | 5.26861                   |
| 42 Carbon Tetrachloride  | 14271<br>3974      | 29577<br>++++     | 222376        | 551865        | 1165263       | 2475319       | WLNLR | 0.03395 | 0.26703            |    | 0.98928                   |
| 43 1,1-Dichloropropene   | 0.34260<br>0.31860 | 0.34843<br>++++   | 0.34307       | 0.35671       | 0.34649       | 0.34286       | AVRG  |         | 0.34268            |    | 3.42082                   |
| 44 Benzene               | 1.00101<br>1.01631 | 1.01649<br>++++   | 0.95672       | 0.97798       | 0.97028       | 0.96430       | AVRG  |         | 0.98616            |    | 2.52252                   |
| 45 1,2-Dichloroethane    | 0.20895<br>0.17502 | 0.22017<br>++++   | 0.21136       | 0.21631       | 0.21642       | 0.21355       | AVRG  |         | 0.20883            |    | 7.35172                   |
| 46 Trichloroethene       | 0.26634<br>0.25803 | 0.29071<br>++++   | 0.27954       | 0.29447       | 0.27971       | 0.27302       | AVRG  |         | 0.27740            |    | 4.64315                   |



Report Date : 28-Mar-2006 11:42

STL Knoxville  
INITIAL CALIBRATION DATA

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 End Cal Date : 24-MAR-2006 16:34  
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 Cal Date : 28-Mar-2006 11:39 goss

| Compound                     | 1<br>Level 1       | 2<br>Level 2      | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|------------------------------|--------------------|-------------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----|---------------------------|
| 47 1,2-Dichloropropane (ccc) | 0.3200<br>Level 7  | 0.2000<br>Level 8 |               |               |               |               |       |         |                    |    |                           |
| 48 *Methyl Methacrylate      | 0.26775<br>0.24255 | 0.28155<br>++++   | 0.27157       | 0.28031       | 0.27549       | 0.26686       | AVRG  |         | 0.26944            |    | 4.88266                   |
| 49 Dibromomethane            | 0.07174<br>++++    | 0.07835<br>++++   | 0.08986       | 0.09573       | 0.09810       | 0.09657       | AVRG  |         | 0.08839            |    | 12.34440                  |
| 50 Bromodichloromethane      | 13084<br>3188      | 28405<br>++++     | 180001        | 389855        | 793046        | 1662952       | LINR  | 0.07341 | 0.18710            |    | 0.99972                   |
| 51 *2-Chloroethylvinylether  | 0.05925<br>++++    | 0.06288<br>++++   | 0.06006       | 0.06238       | 0.06226       | 0.06008       | AVRG  |         | 0.06115            |    | 2.49960                   |
| 52 cis-1,3-Dichloropropene   | 0.20364<br>0.19674 | 0.20643<br>++++   | 0.21727       | 0.23648       | 0.23777       | 0.23313       | AVRG  |         | 0.21878            |    | 7.80488                   |
| 53 4-Methyl-2-pentanone      | 0.08512<br>++++    | 0.08785<br>++++   | 0.08561       | 0.09099       | 0.08897       | 0.08543       | AVRG  |         | 0.08733            |    | 2.69996                   |

Report Date : 28-Mar-2006 11:42

STL Knoxville

## INITIAL CALIBRATION DATA

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 Cal Date : 28-Mar-2006 11:39 goss

| Compound                     | 1<br>Level 1       | 2<br>Level 2    | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>ml | m2 | %RSD<br>or R <sup>2</sup> |
|------------------------------|--------------------|-----------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----|---------------------------|
| 54 Toluene (ccc)             | 5.66178<br>5.35131 | 5.84420<br>++++ | 5.76650       | 5.83844       | 5.68813       | 5.68699       | AVRG  |         | 5.69105            |    | 2.93303                   |
| 55 trans-1,3-Dichloropropene | 13777<br>3165      | 25501<br>++++   | 160005        | 345095        | 671229        | 1388723       | LINR  | 0.06253 | 0.90961            |    | 0.99945                   |
| 56 *Ethyl Methacrylate       | 0.37164<br>++++    | 0.42381<br>++++ | 0.51299       | 0.54476       | 0.52652       | 0.53732       | AVRG  |         | 0.48617            |    | 14.66109                  |
| 57 1,1,2-Trichloroethane     | 0.47248<br>0.40264 | 0.44836<br>++++ | 0.48103       | 0.49239       | 0.46614       | 0.47033       | AVRG  |         | 0.46191            |    | 6.36837                   |
| 58 Tetrachloroethene         | 1.19633<br>1.22706 | 1.20170<br>++++ | 1.19342       | 1.19831       | 1.12973       | 1.11641       | AVRG  |         | 1.18042            |    | 3.46481                   |
| 59 1,3-Dichloropropane       | 0.78738<br>0.81547 | 0.81217<br>++++ | 0.82168       | 0.82476       | 0.79535       | 0.81074       | AVRG  |         | 0.80964            |    | 1.68234                   |
| 60 2-Hexanone                | 0.28315<br>++++    | 0.29721<br>++++ | 0.32006       | 0.33176       | 0.31017       | 0.31437       | AVRG  |         | 0.30945            |    | 5.55311                   |

Report Date : 28-Mar-2006 11:42

STL Knoxville

## INITIAL CALIBRATION DATA

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| Compound                     | 1<br>Level 1       | 2<br>Level 2    | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|------------------------------|--------------------|-----------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----|---------------------------|
| 61 Chlorodibromomethane      | 4945<br>++++       | 10189<br>++++   | 77270         | 186739        | 396499        | 826913        | WLNR  | 0.07711 | 0.52660            |    | 0.99460                   |
| 62 1,2-Dibromoethane         | 0.40448<br>0.35862 | 0.43067<br>++++ | 0.42100       | 0.43143       | 0.42338       | 0.42591       | AVRG  |         | 0.41364            |    | 6.25609                   |
| 63 Chlorobenzene (spcc)      | 3.20201<br>2.85479 | 3.29503<br>++++ | 3.24735       | 3.31002       | 3.18083       | 3.14486       | AVRG  |         | 3.17641            |    | 4.84434                   |
| 64 1,1,1,2-Tetrachloroethane | 7918<br>2102       | 17364<br>++++   | 132522        | 309111        | 635577        | 1296966       | WLNR  | 0.03228 | 0.82671            |    | 0.99363                   |
| 65 Ethylbenzene (ccc)        | 2.08636<br>1.83495 | 2.11892<br>++++ | 2.09532       | 2.13326       | 2.05057       | 2.00752       | AVRG  |         | 2.04670            |    | 5.00790                   |
| 66 m&p-Xylene                | 2.52686<br>2.31105 | 2.63318<br>++++ | 2.54972       | 2.59568       | 2.49295       | 2.21057       | AVRG  |         | 2.47429            |    | 6.28243                   |
| 67 o-Xylene                  | 2.20819<br>1.93445 | 2.26912<br>++++ | 2.25571       | 2.28112       | 2.20686       | 2.14238       | AVRG  |         | 2.18540            |    | 5.50752                   |

Report Date : 28-Mar-2006 11:42

STL Knoxville

## INITIAL CALIBRATION DATA

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| Compound                          | 1<br>Level 1       | 2<br>Level 2      | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>m1 | m2       | %RSD<br>or R <sup>2</sup> |
|-----------------------------------|--------------------|-------------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----------|---------------------------|
| 68 Styrene                        | 0.3200<br>Level 7  | 0.2000<br>Level 8 |               |               |               |               |       |         |                    |          |                           |
|                                   | 3.12714<br>2.88091 | 3.19372<br>++++   | 3.09953       | 3.11832       | 3.06862       | 2.99009       | AVRG  |         | 3.06833            |          | 3.36337                   |
| 69 Bromoform (spcc)               | 902<br>342         | 3151<br>212       | 23227         | 69535         | 155740        | ++++          | QUAD  | 0.08012 | 6.26987            | -1.75323 | 0.99532                   |
| 70 Isopropylbenzene               | 6.30752<br>5.84396 | 6.33819<br>++++   | 6.36998       | 6.55612       | 6.43651       | 6.13585       | AVRG  |         | 6.28402            |          | 3.69664                   |
| 71 *cis-1,4-dichloro-2-butene     | 738<br>++++        | 1185<br>++++      | 12831         | 31704         | 72559         | 157150        | QUAD  | 0.15516 | 11.26527           | -2.12891 | 0.99928                   |
| 72 Bromobenzene                   | 0.92356<br>0.83641 | 0.97997<br>++++   | 0.95738       | 0.96057       | 0.94353       | 0.93592       | AVRG  |         | 0.93391            |          | 5.00190                   |
| 73 1,1,2,2-Tetrachloroethane (sp) | 0.34273<br>0.30010 | 0.30777<br>++++   | 0.35534       | 0.38213       | 0.35643       | 0.36745       | AVRG  |         | 0.34456            |          | 8.80806                   |
| 74 1,2,3-Trichloropropane         | 0.09267<br>0.08253 | 0.08765<br>++++   | 0.08499       | 0.08759       | 0.08062       | 0.08662       | AVRG  |         | 0.08610            |          | 4.54883                   |

Report Date : 28-Mar-2006 11:42

STL Knoxville

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| Compound                        | 1<br>Level 1       | 2<br>Level 2    | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|---------------------------------|--------------------|-----------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----|---------------------------|
| 75 *trans-1,4-dichloro-2-butene | 2278<br>++++       | 3994<br>++++    | 27019         | 59782         | 118001        | 245666        | WLINE | 0.04782 | 0.13103            |    | 0.99828                   |
| 76 n-Propylbenzene              | 5.96494<br>5.39283 | 6.11612<br>++++ | 6.19261       | 6.44322       | 6.26175       | 5.99846       | AVRG  |         | 6.05285            |    | 5.50377                   |
| 77 2-Chlorotoluene              | 3.14181<br>3.00673 | 3.28575<br>++++ | 3.21817       | 3.35392       | 3.22163       | 3.24224       | AVRG  |         | 3.21004            |    | 3.45167                   |
| 78 1,3,5-Trimethylbenzene       | 4.03992<br>3.73263 | 4.12422<br>++++ | 4.15686       | 4.36781       | 4.14541       | 3.94215       | AVRG  |         | 4.07272            |    | 4.86840                   |
| 79 4-Chlorotoluene              | 3.27371<br>3.08613 | 3.48013<br>++++ | 3.55695       | 3.65907       | 3.48239       | 3.33248       | AVRG  |         | 3.41012            |    | 5.65671                   |
| 80 tert-Butylbenzene            | 3.64684<br>3.12829 | 3.67540<br>++++ | 3.72929       | 3.90358       | 3.74329       | 3.69878       | AVRG  |         | 3.64650            |    | 6.66515                   |
| 81 1,2,4-Trimethylbenzene       | 3.71384<br>3.45797 | 3.90063<br>++++ | 3.88108       | 4.03642       | 3.91567       | 3.87960       | AVRG  |         | 3.82646            |    | 4.91031                   |

Report Date : 28-Mar-2006 11:42

STL Knoxville

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| Compound                       | 1<br>Level 1       | 2<br>Level 2    | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|--------------------------------|--------------------|-----------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----|---------------------------|
| 82 sec-Butylbenzene            | 5.30372<br>4.57918 | 5.46178<br>++++ | 5.46334       | 5.71048       | 5.56407       | 5.54357       | AVRG  |         | 5.37516            |    | 6.92138                   |
| 83 1,3-Dichlorobenzene         | 1.71409<br>1.66185 | 1.74310<br>++++ | 1.75390       | 1.84572       | 1.76435       | 1.77031       | AVRG  |         | 1.75048            |    | 3.20630                   |
| 84 p-Isopropyltoluene          | 4.79696<br>4.29136 | 4.70342<br>++++ | 4.76514       | 5.03207       | 4.82664       | 4.59939       | AVRG  |         | 4.71643            |    | 4.85951                   |
| 85 1,4-Dichlorobenzene         | 1.73244<br>1.55151 | 1.67542<br>++++ | 1.61201       | 1.69818       | 1.59773       | 1.53045       | AVRG  |         | 1.62825            |    | 4.66508                   |
| 86 1,2-Dichlorobenzene         | 1.23043<br>1.18565 | 1.25519<br>++++ | 1.33636       | 1.39769       | 1.31502       | 1.31968       | AVRG  |         | 1.29143            |    | 5.55576                   |
| 87 n-Butylbenzene              | 4.06519<br>3.93656 | 4.15174<br>++++ | 4.20853       | 4.43258       | 4.34031       | 4.39406       | AVRG  |         | 4.21842            |    | 4.31757                   |
| 88 1,2-Dibromo-3-chloropropane | 575<br>++++        | 1118<br>++++    | 9124          | 22173         | 45425         | 94455         | WLNR  | 0.07684 | 0.05018            |    | 0.99601                   |

Report Date : 28-Mar-2006 11:42

STL Knoxville

## INITIAL CALIBRATION DATA

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| Compound                            | 1<br>Level 1    | 2<br>Level 2    | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|-------------------------------------|-----------------|-----------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|---------------------------|
| 89 1,2,4-Trichlorobenzene           | 0.74356<br>++++ | 0.78186<br>++++ | 0.78131       | 0.82745       | 0.78629       | 0.77582       | AVRG  |   | 0.78272            |    | 3.42713                   |
| 90 Hexachlorobutadiene              | 0.67700<br>++++ | 0.74831<br>++++ | 0.74432       | 0.78646       | 0.74560       | 0.70254       | AVRG  |   | 0.73404            |    | 5.25404                   |
| 91 Naphthalene                      | 0.77442<br>++++ | 0.77886<br>++++ | 0.79251       | 0.88395       | 0.83651       | 0.85866       | AVRG  |   | 0.82082            |    | 5.55067                   |
| 92 1,2,3-Trichlorobenzene           | 0.44745<br>++++ | 0.52129<br>++++ | 0.50470       | 0.55826       | 0.53363       | 0.52833       | AVRG  |   | 0.51561            |    | 7.31033                   |
| M 93 *1,4-dichloro-2-butene (total) | 0.07417<br>++++ | 0.06756<br>++++ | 0.10094       | 0.11806       | 0.12278       | 0.13193       | AVRG  |   | 0.10257            |    | 25.96262                  |
| \$ 4 Dibromofluoromethane           | 0.15507<br>++++ | 0.14487<br>++++ | 0.16212       | 0.17185       | 0.16727       | ++++          | AVRG  |   | 0.16024            |    | 6.62582                   |
| \$ 5 1,2-Dichloroethane-d4          | 0.14002<br>++++ | 0.12960<br>++++ | 0.13910       | 0.14225       | 0.14185       | ++++          | AVRG  |   | 0.13856            |    | 3.73480                   |

## STL Knoxville

## INITIAL CALIBRATION DATA

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| Compound               | 1       |         | 2       |         | 10      |         | 20      |         | 40      |         | 80      |         | Curve |       | b |   | Coefficients |    | m2 |    | RSD<br>or R <sup>2</sup> |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|-------|---|---|--------------|----|----|----|--------------------------|
|                        | Level 1 | Level 2 | Level 2 | Level 2 | Level 3 | Level 3 | Level 4 | Level 4 | Level 5 | Level 5 | Level 6 | Level 6 | Curve | Curve | b | b | m1           | m1 | m2 | m2 |                          |
| 6 Toluene-d8           | 0.3200  | 0.2000  |         |         |         |         |         |         |         |         |         |         |       |       |   |   |              |    |    |    |                          |
|                        | Level 7 | Level 8 |         |         |         |         |         |         |         |         |         |         |       |       |   |   |              |    |    |    |                          |
| 7 4-Bromofluorobenzene | 4.35051 | 4.13967 | 4.48662 | 4.57792 | 4.41441 | 4.41441 | 4.57792 | 4.57792 | 4.41441 | 4.41441 | 4.41441 | 4.41441 | AVRG  | AVRG  |   |   | 4.39383      |    |    |    | 3.76377                  |
|                        | +++++   | +++++   |         |         |         |         |         |         |         |         |         |         |       |       |   |   |              |    |    |    |                          |
| 7 4-Bromofluorobenzene | 1.06393 | 0.95714 | 0.98690 | 1.04723 | 0.98690 | 0.98690 | 1.04723 | 1.04723 | 0.98690 | 0.98690 | 0.98690 | 0.98690 | AVRG  | AVRG  |   |   | 1.00850      |    |    |    | 4.46933                  |
|                        | +++++   | +++++   |         |         |         |         |         |         |         |         |         |         |       |       |   |   |              |    |    |    |                          |



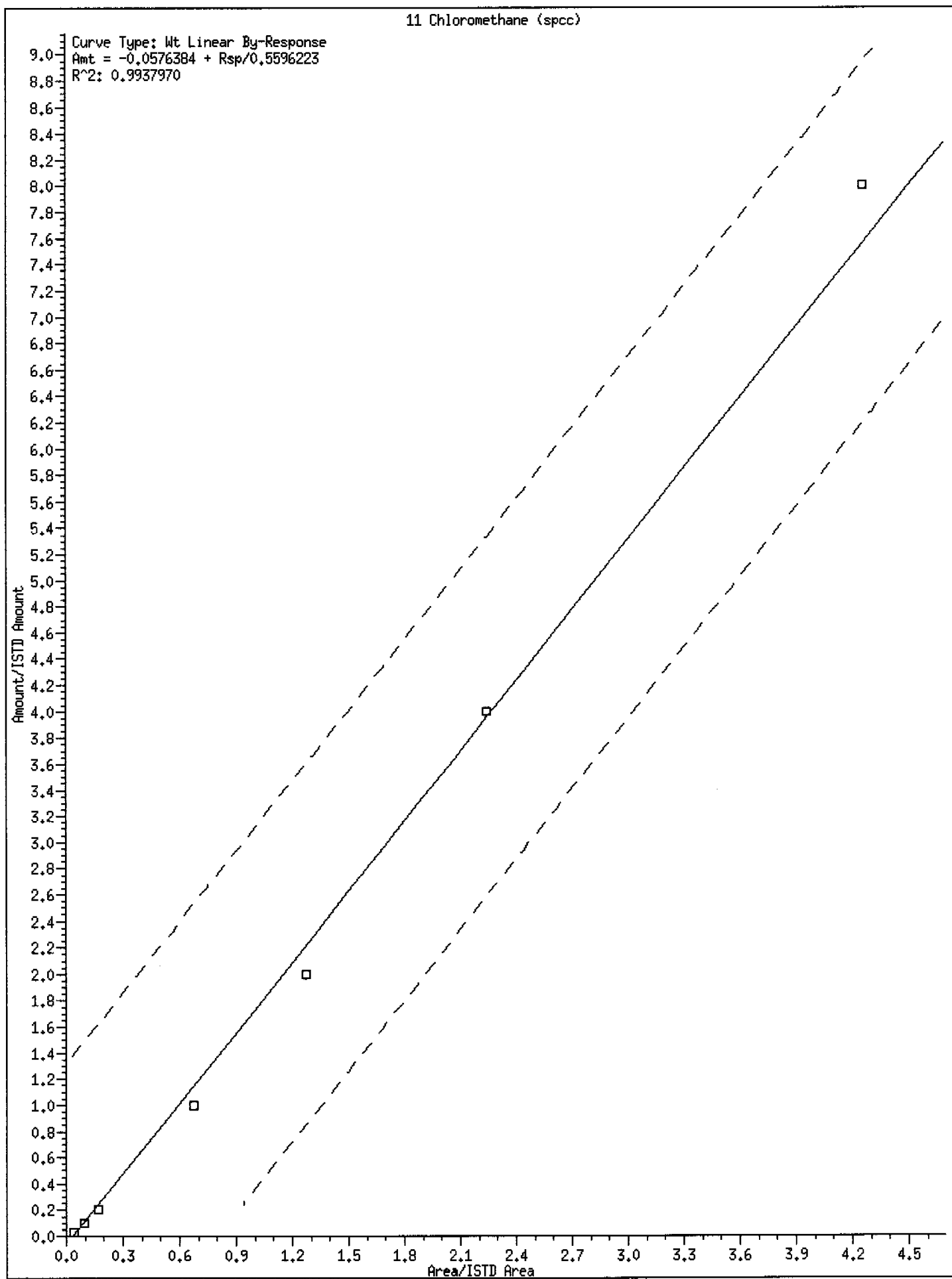
Report Date : 28-Mar-2006 11:42

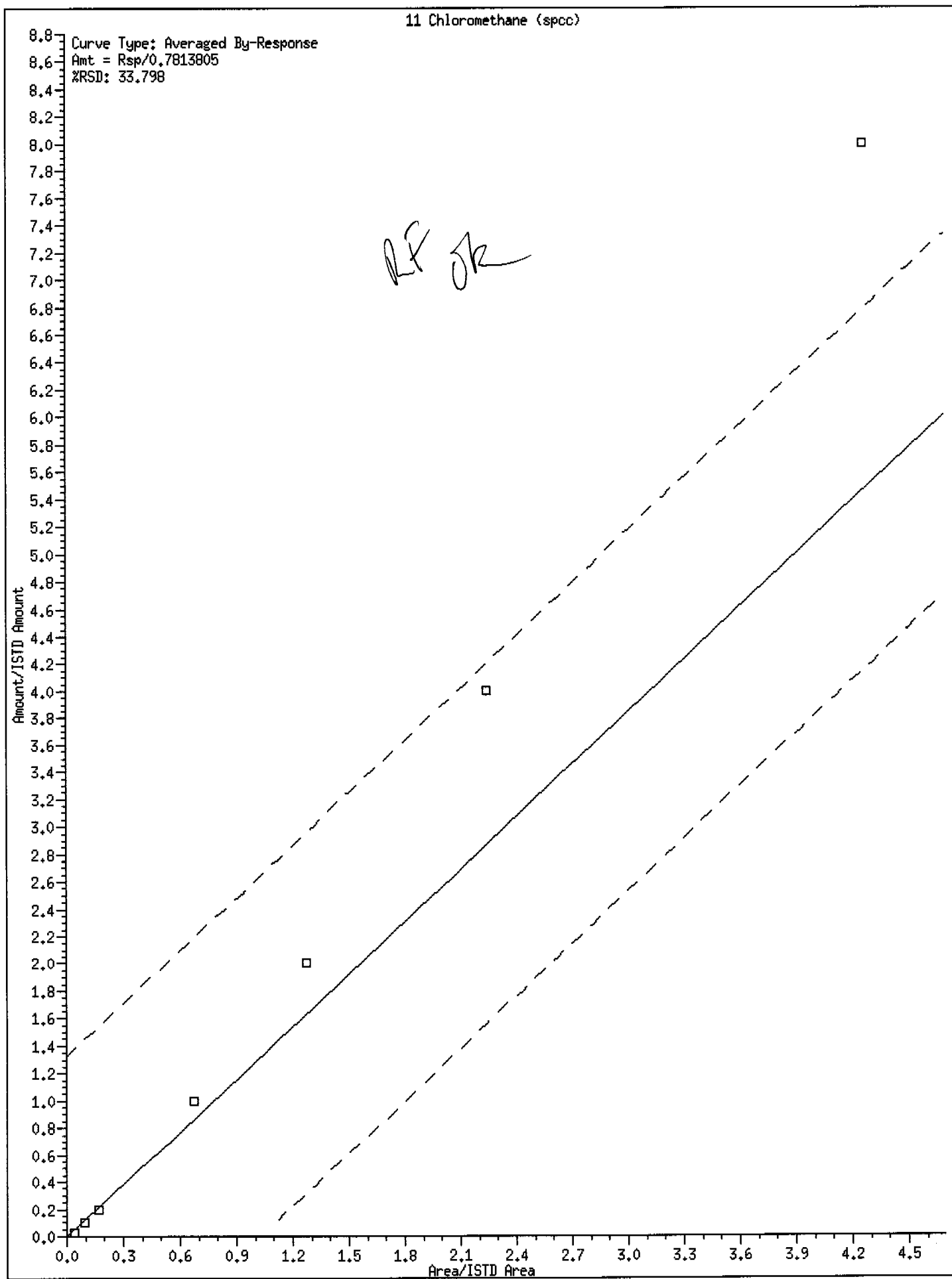
STL Knoxville

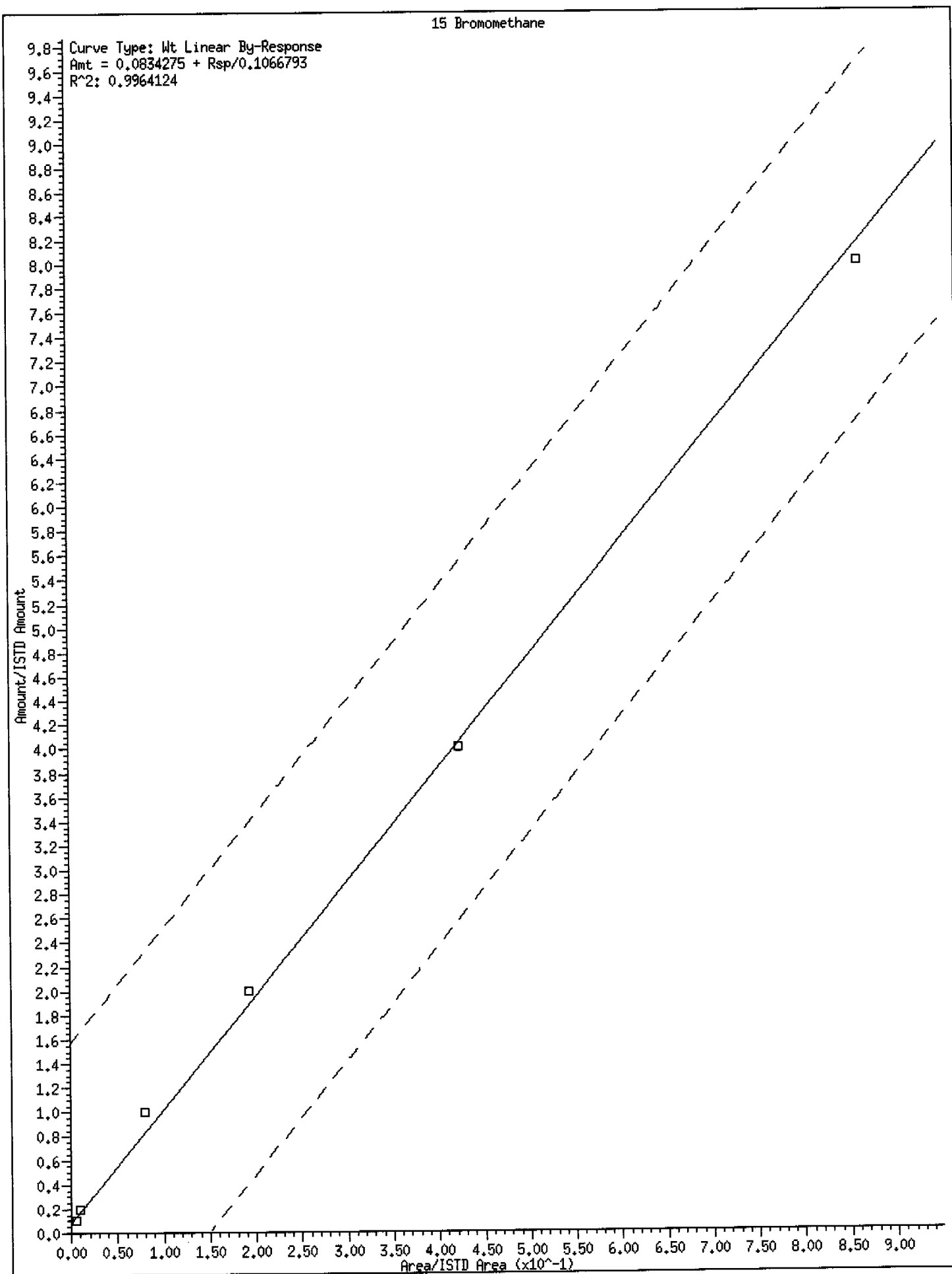
INITIAL CALIBRATION DATA

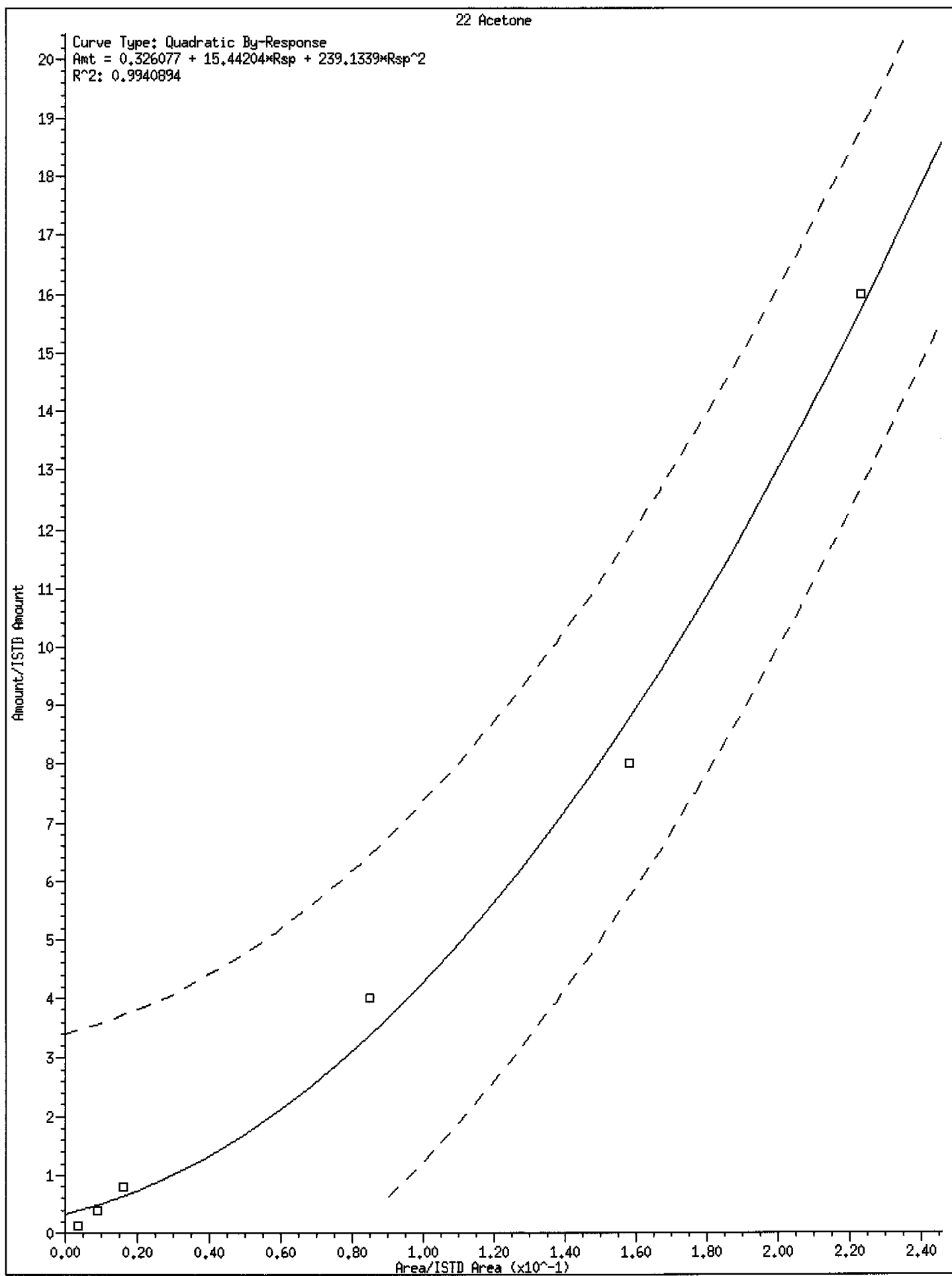
Start Cal Date : 24-MAR-2006 13:51  
End Cal Date : 24-MAR-2006 16:34  
Quant Method : ISTD  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /var/chem/gcms/mz.i/Z032406I.b/8260B\_LM.m  
Cal Date : 28-Mar-2006 11:39 goss

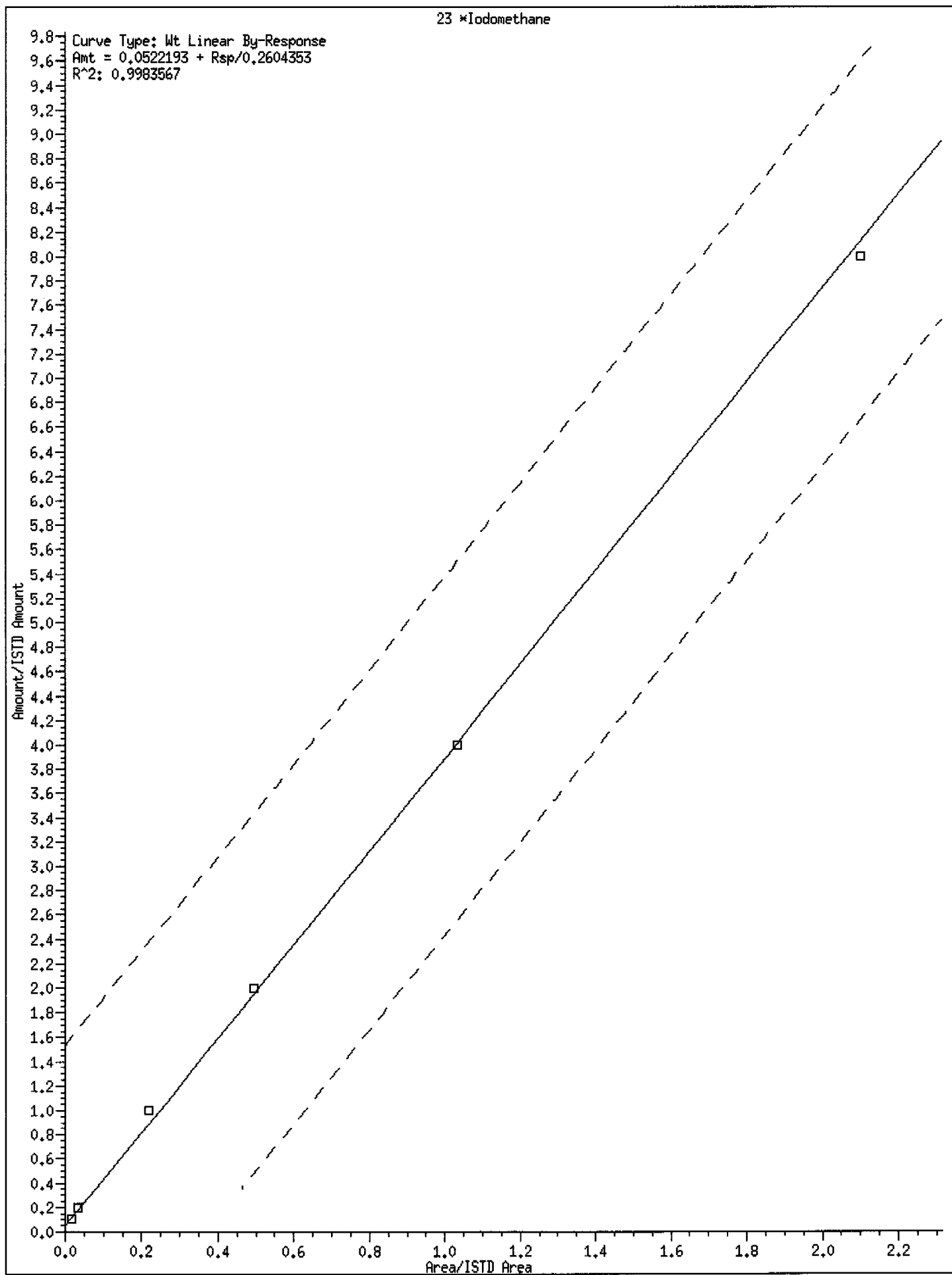
| Curve     | Formula                                                                | Units    |
|-----------|------------------------------------------------------------------------|----------|
| Averaged  | $\text{Amt} = \text{Rsp}/\text{ml}$                                    | Response |
| Linear    | $\text{Amt} = b + \text{Rsp}/\text{ml}$                                | Response |
| Wt Linear | $\text{Amt} = b + \text{Rsp}/\text{ml}$                                | Response |
| Quad      | $\text{Amt} = b + \text{ml} * \text{Rsp} + \text{ml}^2 * \text{Rsp}^2$ | Response |

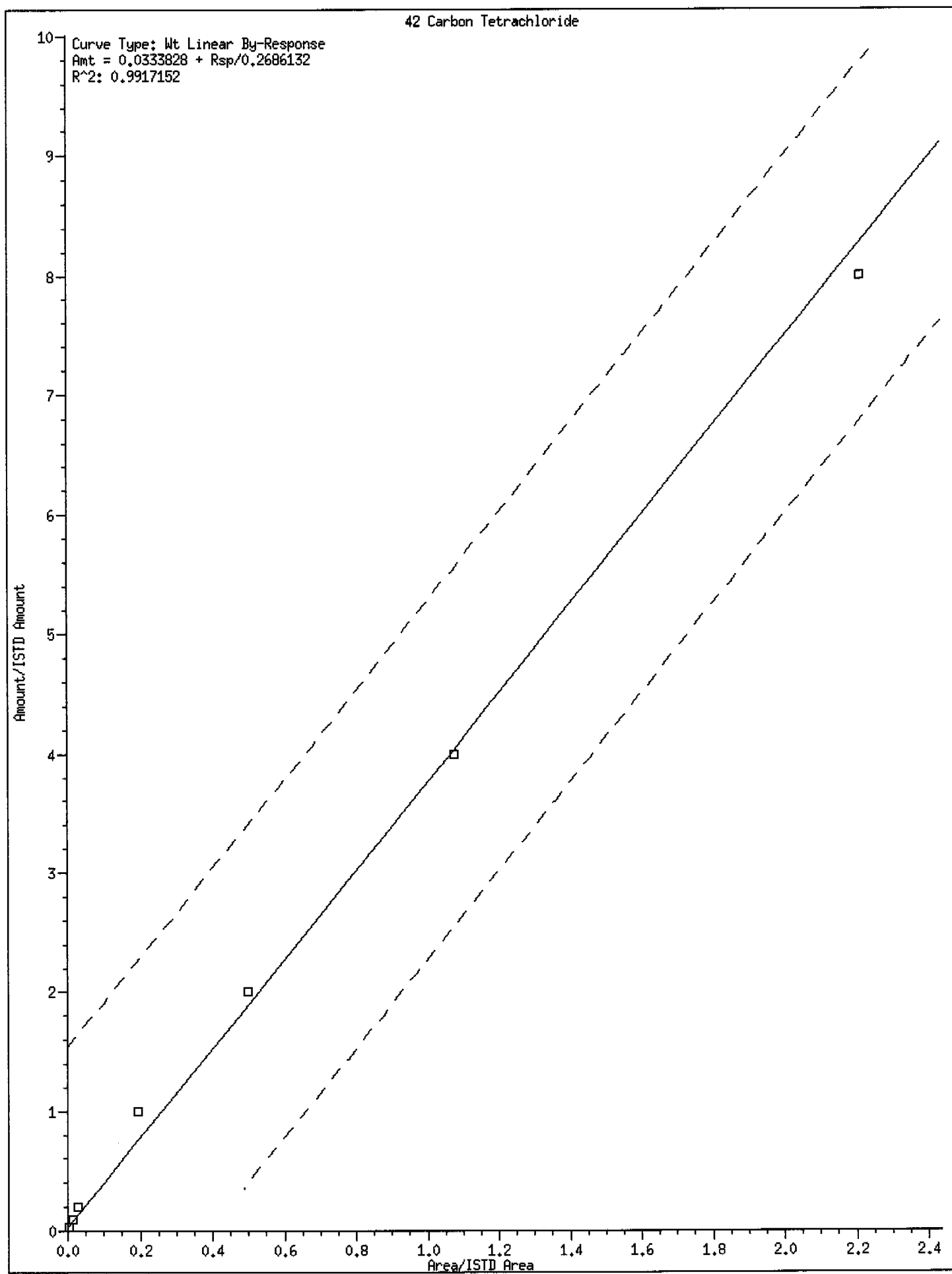


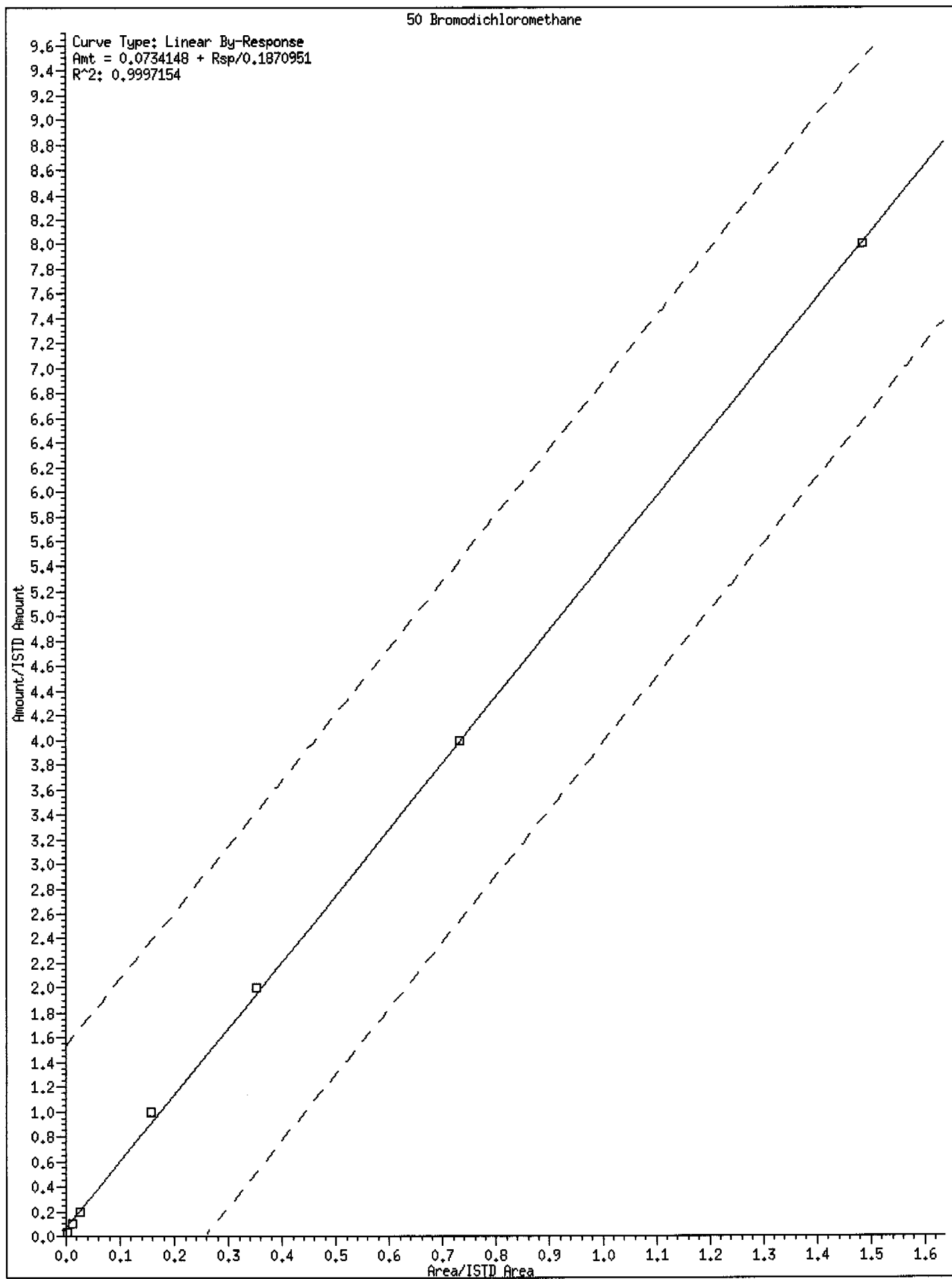




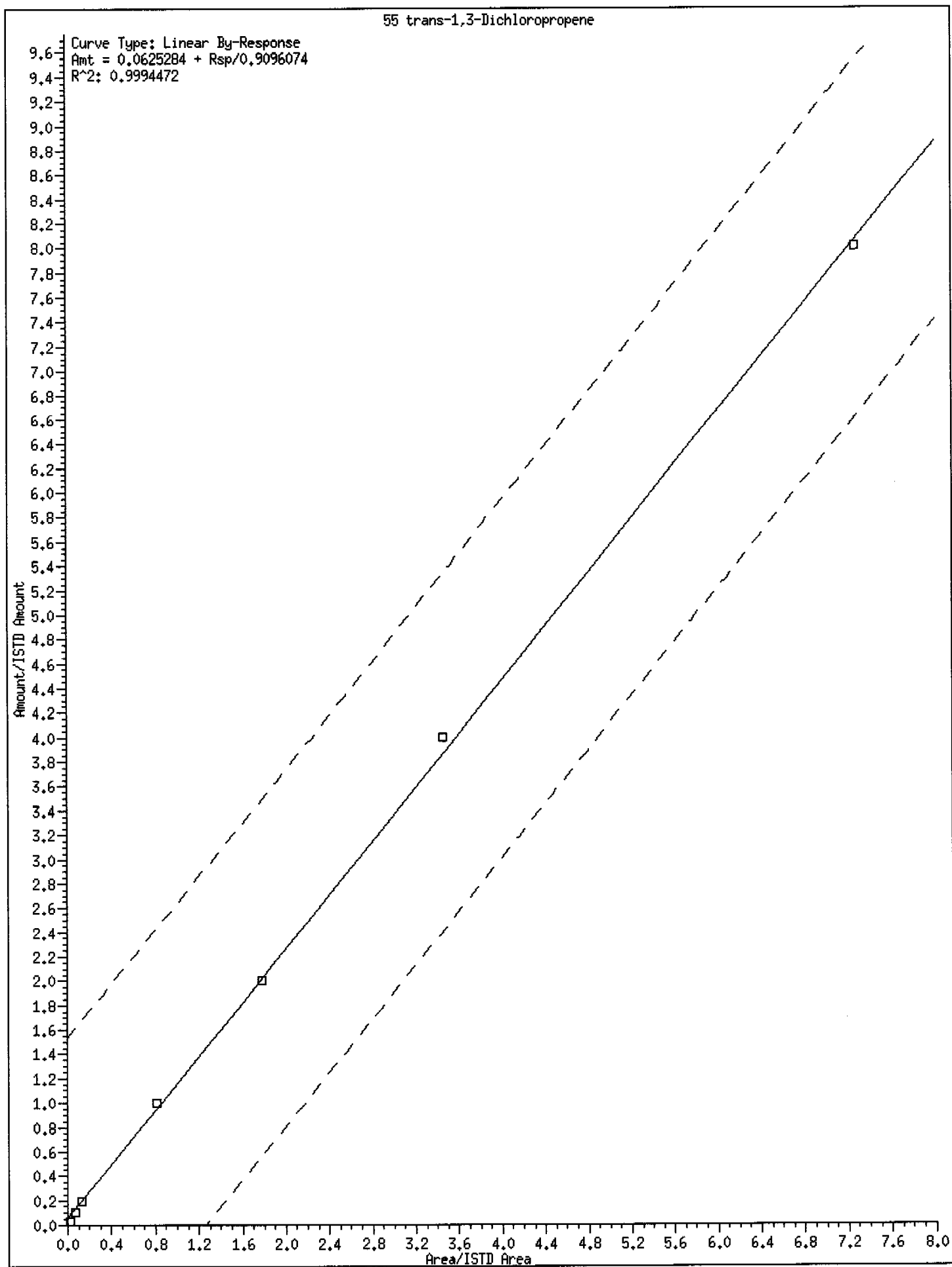


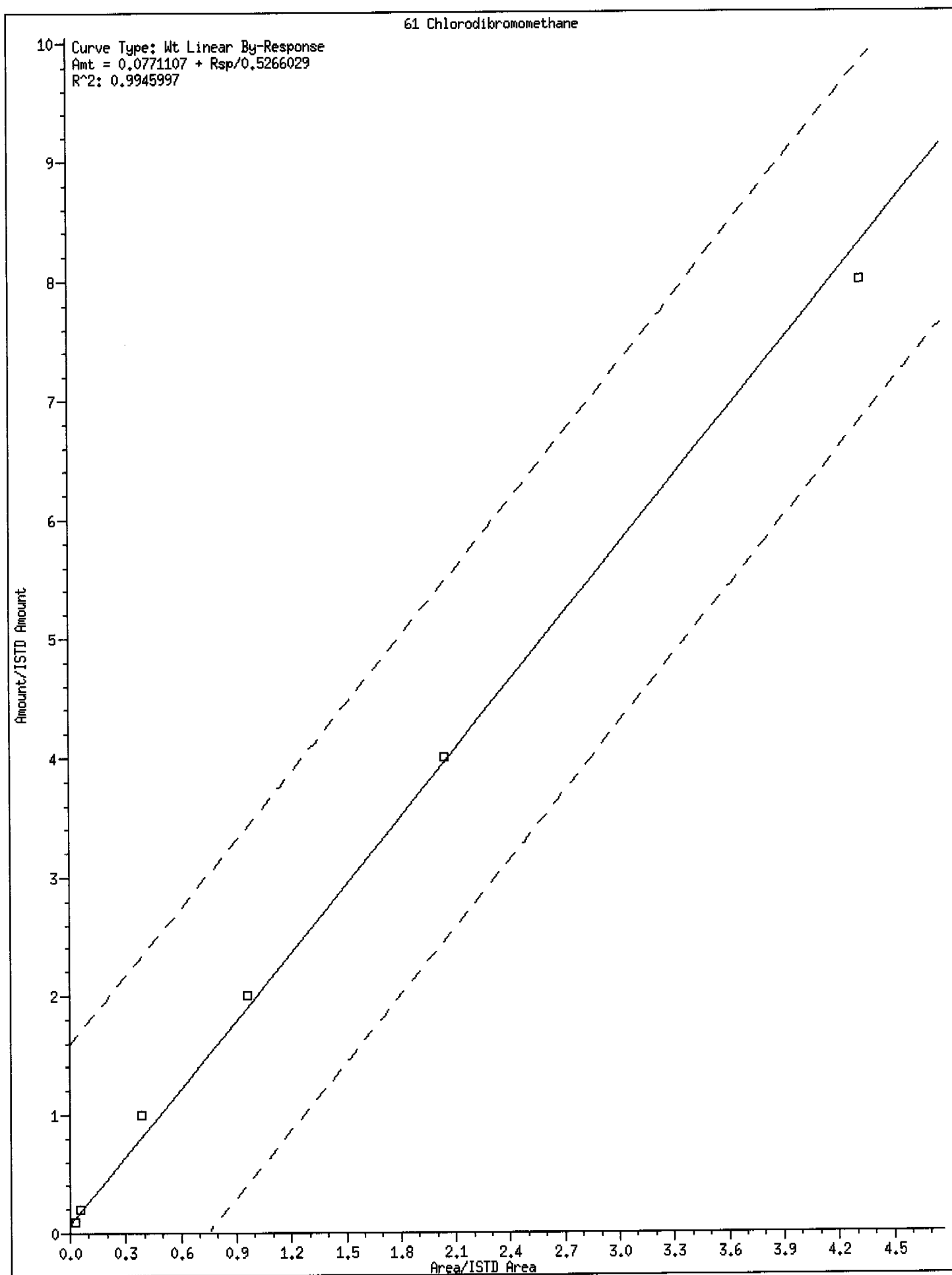




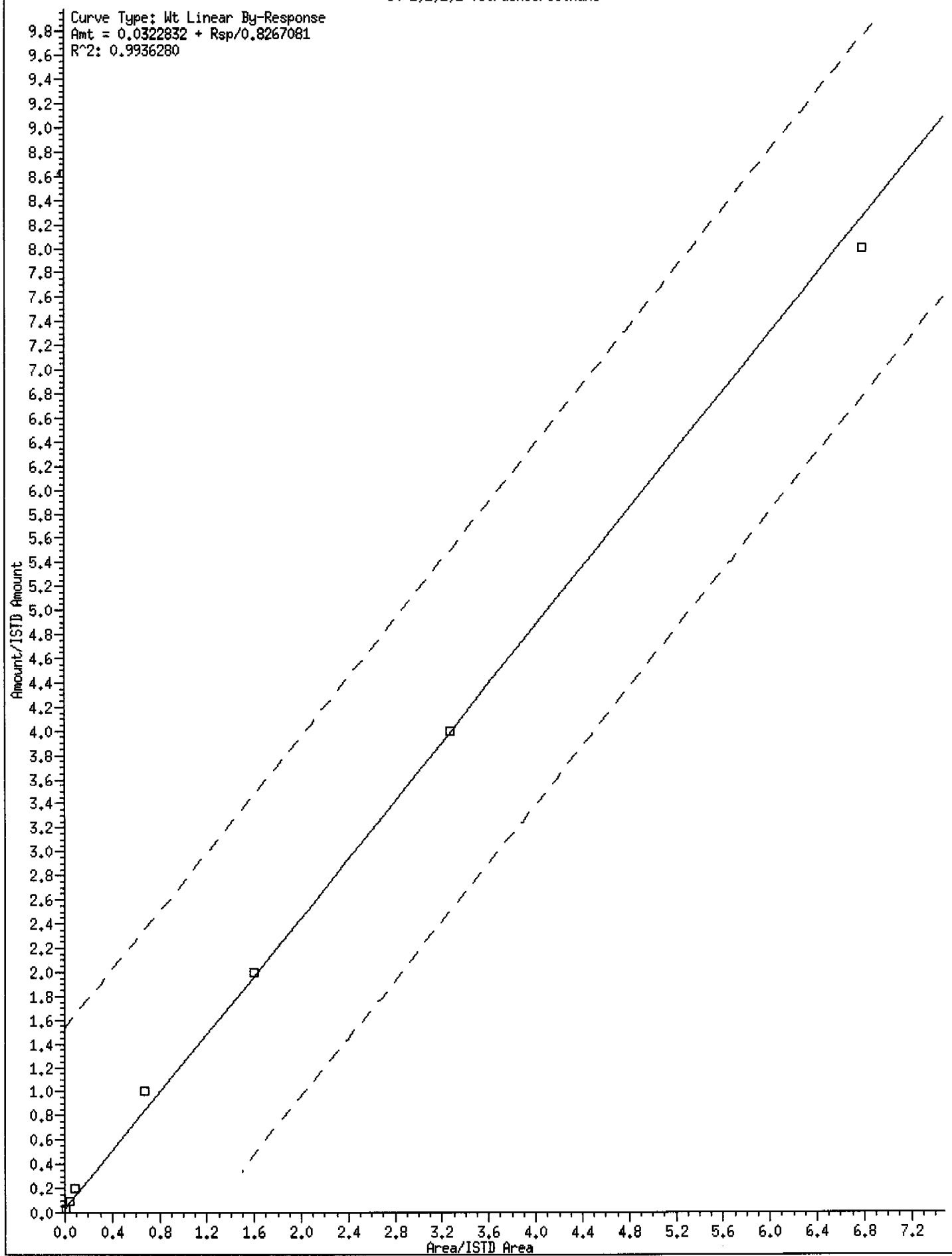


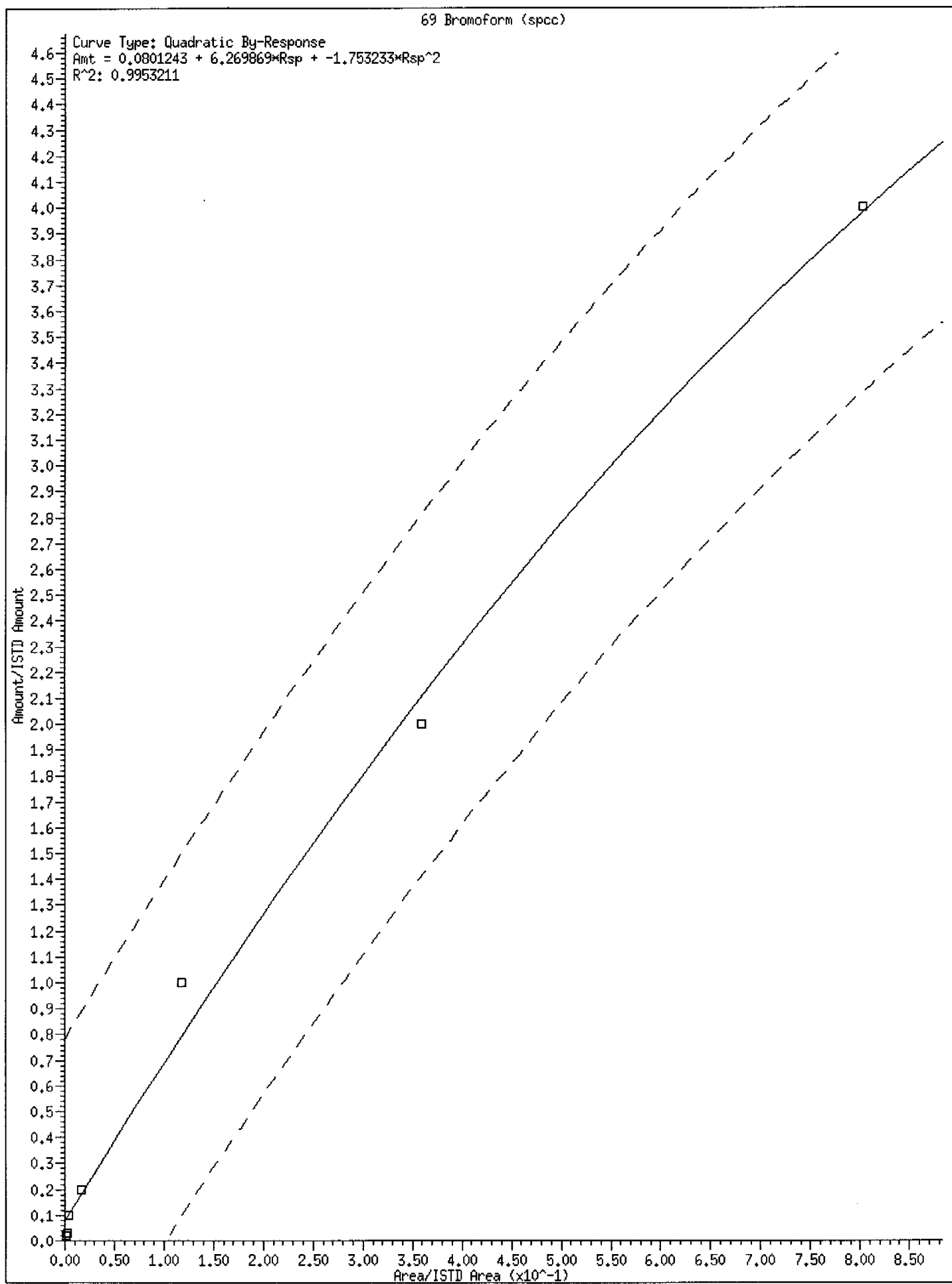


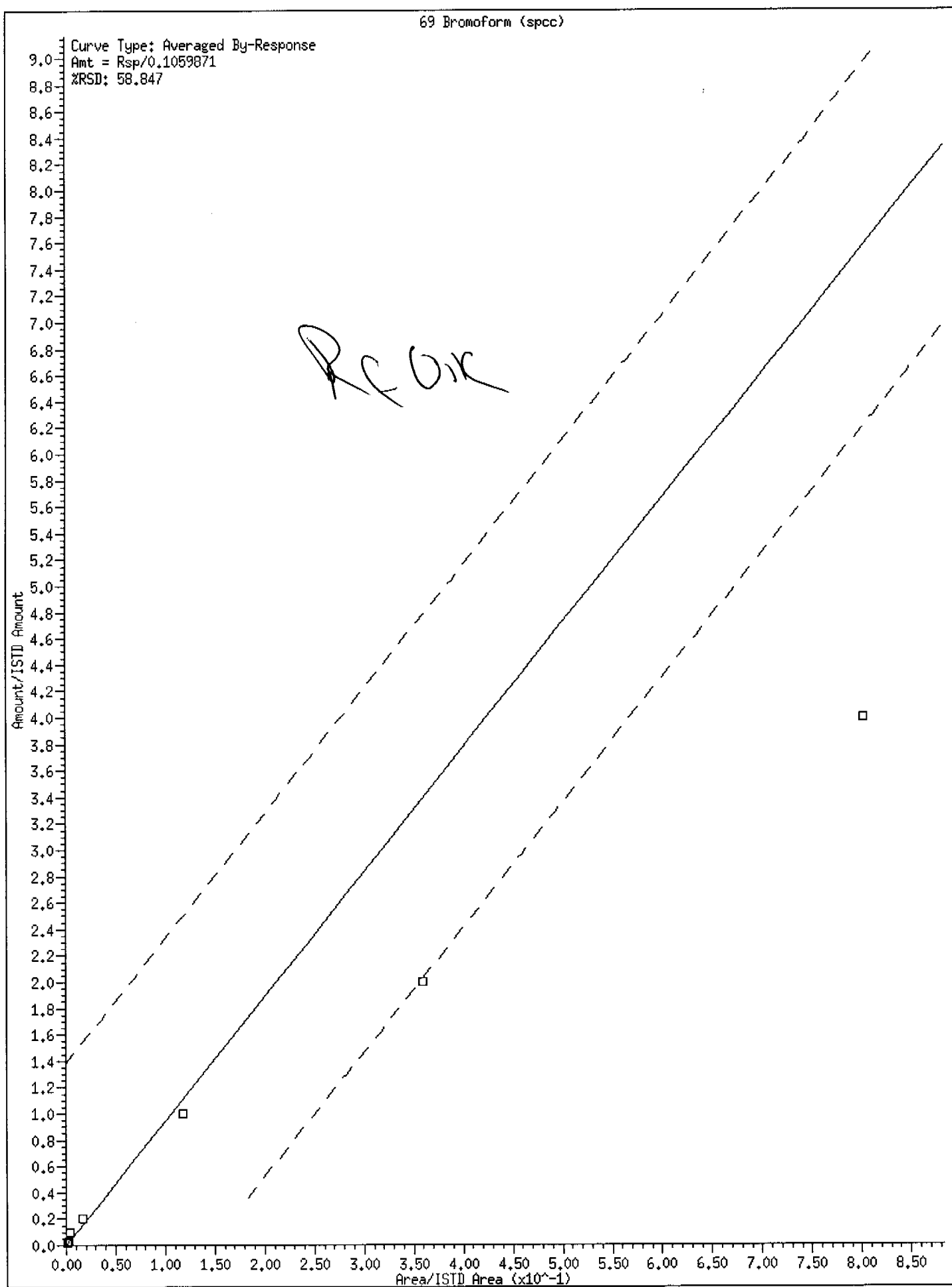


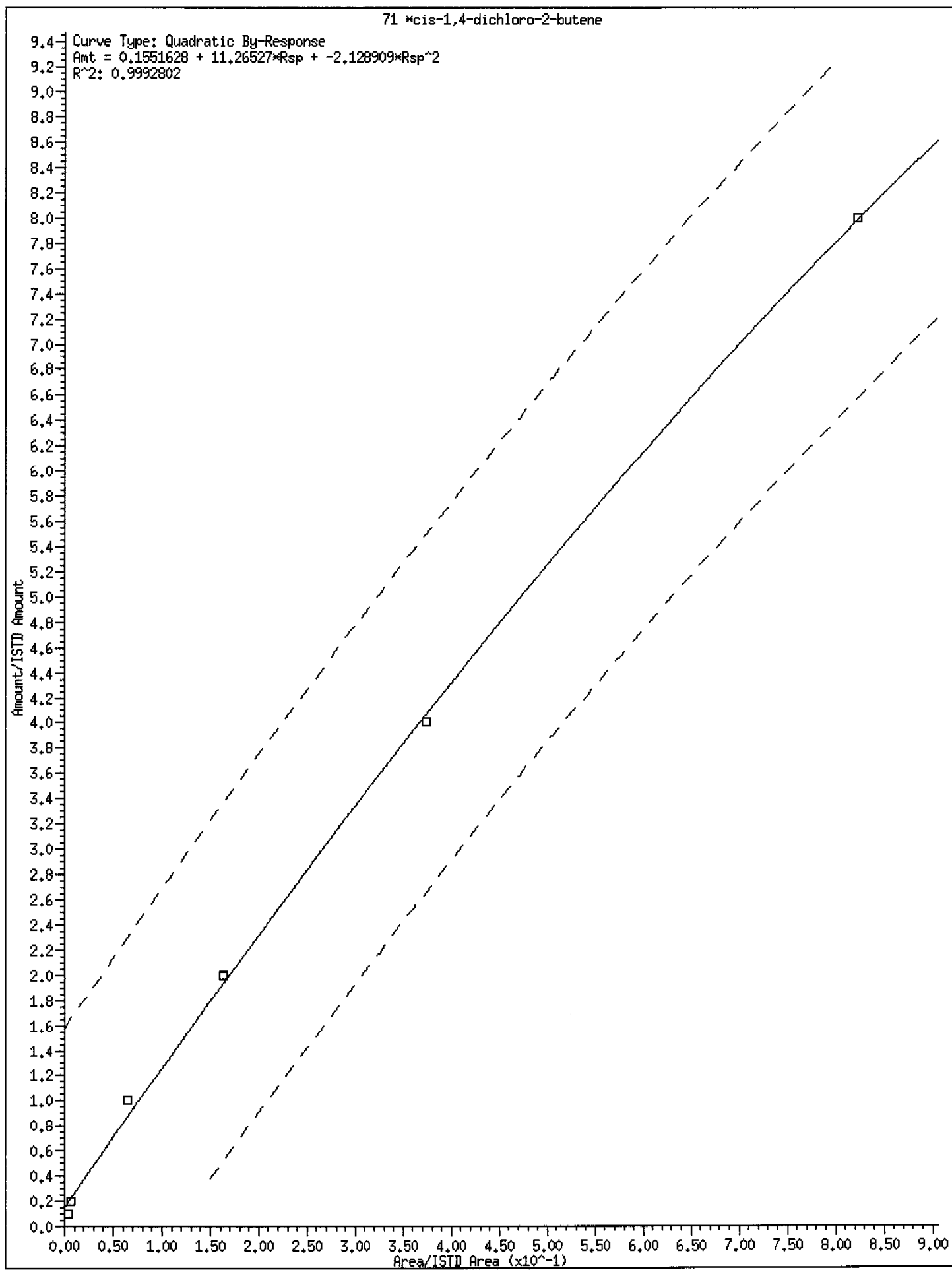


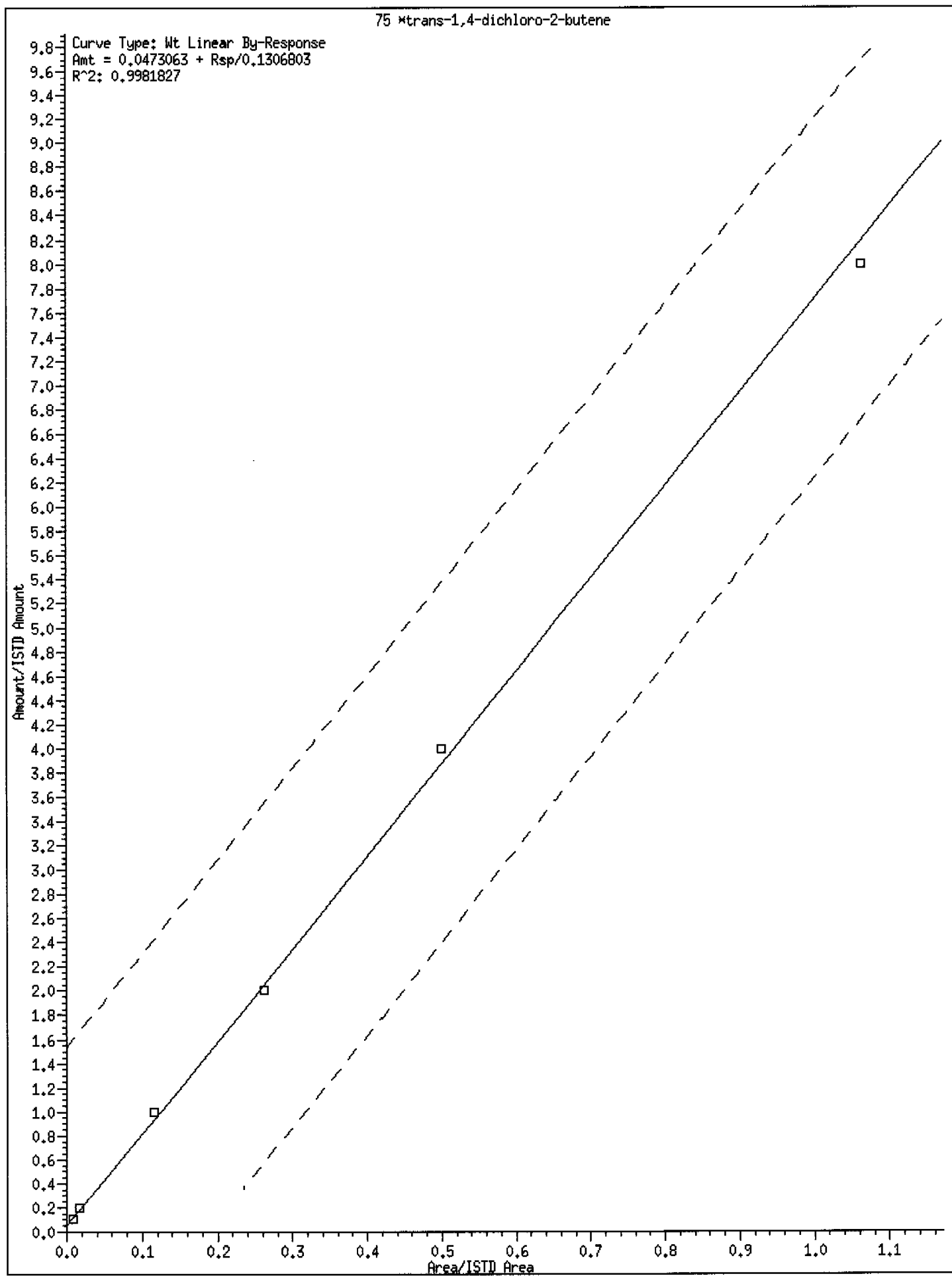
## 64 1,1,1,2-Tetrachloroethane

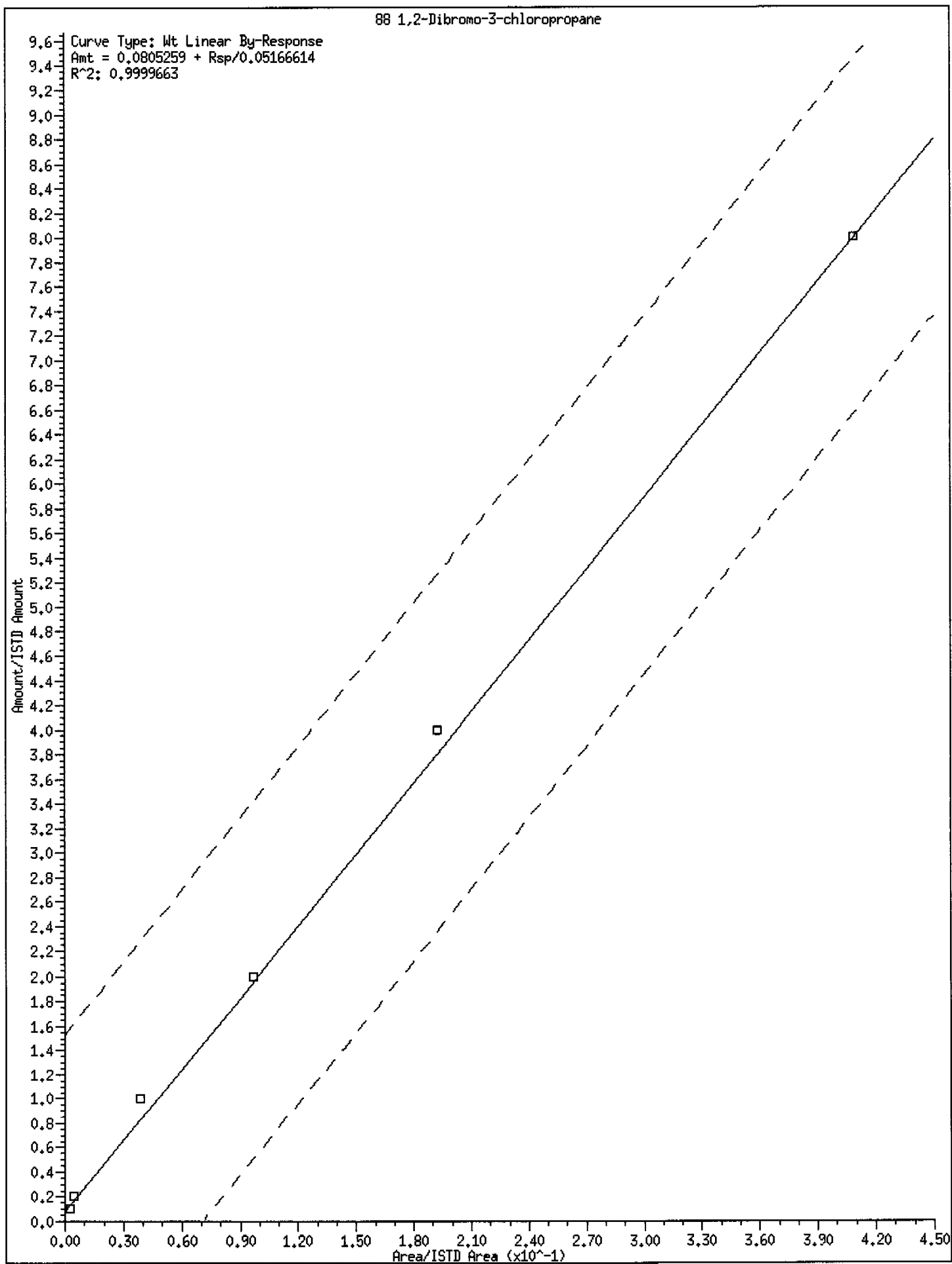














Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc248.d  
 Report Date: 28-Mar-2006 11:57

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z032406I.b/icvzc248.d  
 Lab Smp Id: ICVZC248 Client Smp ID: STD0.20  
 Inj Date : 24-MAR-2006 13:51  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : ICVZC248,1,1,8,,STD0.20  
 Misc Info : Z032406I,8260B\_LM,  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z032406I.b/8260B\_LM.m  
 Meth Date : 28-Mar-2006 11:57 gosss Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1 Calibration Sample, Level: 8  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT SIG | MASS   | RT     | EXP RT  | REL RT  | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-----------|--------|--------|---------|---------|----------|--------------------|-------------------|
|                                |           |        |        |         |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene              | 96        | 5.662  | 5.666  | (1.000) | 1039615 | 10.0000  |                    |                   |
| * 2 Chlorobenzene-d5           | 119       | 8.929  | 8.927  | (1.000) | 188148  | 10.0000  |                    |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152       | 11.484 | 11.488 | (1.000) | 249950  | 10.0000  |                    |                   |
| \$ 4 Dibromofluoromethane      | 113       | 4.835  | 4.826  | (0.854) | 3794    | 0.20000  | 0.22775            |                   |
| \$ 5 1,2-Dichloroethane-d4     | 65        | 5.230  | 5.228  | (0.924) | 4138    | 0.20000  | 0.28726            |                   |
| \$ 6 Toluene-d8                | 98        | 7.451  | 7.455  | (0.834) | 24821   | 0.20000  | 0.30024            |                   |
| \$ 7 4-Bromofluorobenzene      | 95        | 10.121 | 10.119 | (0.881) | 7329    | 0.20000  | 0.29075            |                   |
| M 8 1,2-Dichloroethene (total) | 96        |        |        |         | 9452    | 0.20000  | 0.34343            |                   |
| M 9 Xylene (total)             | 106       |        |        |         | 27923   | 0.20000  | 0.62429            |                   |
| 10 Dichlorodifluoromethane     | 85        | 1.014  | 1.012  | (0.179) | 3684    | 0.20000  | 0.14517            |                   |
| 12 Vinyl Chloride (ccc)        | 62        | 1.197  | 1.195  | (0.211) | 5728    | 0.20000  | 0.13989            |                   |
| 13 *1,3-Butadiene              | 39        | 1.221  | 1.219  | (0.216) | 6288    | 0.20000  | 0.17029            |                   |
| 15 Bromomethane                | 94        | 1.404  | 1.414  | (0.248) | 1909    | 0.20000  | 1.0064             |                   |
| 16 Chloroethane                | 64        | 1.483  | 1.481  | (0.262) | 3816    | 0.20000  | 0.19681            |                   |
| 17 *Vinyl Bromide              | 106       | 1.617  | 1.614  | (0.286) | 3137    | 0.20000  | 0.18110            |                   |
| 18 Trichlorofluoromethane      | 101       | 1.665  | 1.669  | (0.294) | 4821    | 0.20000  | 0.15172            |                   |

Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc248.d  
Report Date: 28-Mar-2006 11:57

| Compounds                    | QUANT SIG |       |        |         | RESPONSE | AMOUNTS            |                   |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                              | MASS      | RT    | EXP RT | REL RT  |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                        | =====     | ==    | =====  | =====   | =====    | =====              | =====             |
| 19 *2-Chloropropane          | 43        | 1.951 | 1.949  | (0.345) | 11552    | 0.20000            | 0.16797           |
| 20 1,1-Dichloroethene (ccc)  | 96        | 2.067 | 2.065  | (0.365) | 3882     | 0.20000            | 0.17181           |
| 21 *Freon 113                | 151       | 2.085 | 2.083  | (0.368) | 3028     | 0.20000            | 0.17214           |
| 22 Acetone                   | 43        | 2.116 | 2.125  | (0.374) | 5091     | 0.80000            | 4.0743 (M)        |
| 23 *Iodomethane              | 142       | 2.176 | 2.180  | (0.384) | 2845     | 0.20000            | 0.62727           |
| 24 Carbon Disulfide          | 76        | 2.231 | 2.229  | (0.394) | 14293    | 0.20000            | 0.17920           |
| 26 *Acetonitrile             | 40        | 2.377 | 2.369  | (0.420) | 5831     | 0.20000            | 12.590            |
| 27 Methylene Chloride        | 84        | 2.505 | 2.503  | (0.442) | 3368     | 0.20000            | 0.19371           |
| 29 *Acrylonitrile            | 53        | 2.754 | 2.758  | (0.486) | 11997    | 0.20000            | 3.0903            |
| 30 trans-1,2-Dichloroethene  | 96        | 2.791 | 2.795  | (0.493) | 5329     | 0.20000            | 0.18683           |
| 31 *MTBE                     | 73        | 2.821 | 2.819  | (0.498) | 4220     | 0.20000            | 0.16867           |
| 32 *Hexane                   | 57        | 3.138 | 3.135  | (0.554) | 24054    | 0.20000            | 0.32915           |
| 33 1,1-Dichloroethane (spcc) | 63        | 3.271 | 3.275  | (0.578) | 10609    | 0.20000            | 0.16091           |
| 34 *Vinyl Acetate            | 86        | 3.125 | 3.409  | (0.552) | 2185     | 0.20000            | 1.5764            |
| 35 2,2-Dichloropropane       | 77        | 4.087 | 4.096  | (0.722) | 4391     | 0.20000            | 0.13108           |
| 36 cis 1,2-Dichloroethene    | 96        | 4.105 | 4.115  | (0.725) | 4123     | 0.20000            | 0.15660           |
| 37 2-Butanone                | 43        | 4.184 | 4.169  | (0.739) | 4504     | 0.20000            | 1.1434            |
| 38 Bromochloromethane        | 128       | 4.433 | 4.449  | (0.783) | 1305     | 0.20000            | 0.18026           |
| 39 *THF                      | 42        | 4.525 | 4.528  | (0.799) | 8242     | 0.20000            | 3.3414            |
| 40 Chloroform (ccc)          | 83        | 4.604 | 4.607  | (0.813) | 5857     | 0.20000            | 0.15592           |
| 41 1,1,1-Trichloroethane     | 97        | 4.804 | 4.814  | (0.848) | 4210     | 0.20000            | 0.12663           |
| 42 Carbon Tetrachloride      | 117       | 5.048 | 5.039  | (0.891) | 1716     | 0.20000            | 0.40131           |
| 43 1,1-Dichloropropene       | 75        | 5.036 | 5.039  | (0.889) | 6040     | 0.20000            | 0.16954           |
| 44 Benzene                   | 78        | 5.291 | 5.295  | (0.934) | 21327    | 0.20000            | 0.20802           |
| 45 1,2-Dichloroethane        | 62        | 5.328 | 5.325  | (0.941) | 3506     | 0.20000            | 0.16149           |
| 46 Trichloroethene           | 130       | 6.106 | 6.110  | (1.078) | 5762     | 0.20000            | 0.19980           |
| 47 1,2-Dichloropropane (ccc) | 63        | 6.344 | 6.341  | (1.120) | 4586     | 0.20000            | 0.16372           |
| 48 *Methyl Methacrylate      | 41        | 6.581 | 6.572  | (1.162) | 1273     | 0.20000            | 0.13853           |
| 49 Dibromomethane            | 93        | 6.471 | 6.469  | (1.143) | 1010     | 0.20000            | 0.17315           |
| 51 *2-Chloroethylvinylether  | 63        | 7.067 | 7.065  | (1.248) | 1933     | 0.20000            | 0.30405           |
| 52 cis-1,3-Dichloropropene   | 75        | 7.183 | 7.181  | (1.269) | 3380     | 0.20000            | 0.14860           |
| 53 4-Methyl-2-pentanone      | 43        | 7.384 | 7.375  | (1.304) | 6975     | 0.20000            | 0.76828           |
| 54 Toluene (ccc)             | 91        | 7.524 | 7.528  | (0.843) | 18847    | 0.20000            | 0.17602           |
| 55 trans-1,3-Dichloropropene | 75        | 7.779 | 7.783  | (0.871) | 1661     | 0.20000            | 0.72234           |
| 56 *Ethyl Methacrylate       | 69        | 7.937 | 7.929  | (0.889) | 922      | 0.20000            | 0.10080           |
| 57 1,1,2-Trichloroethane     | 97        | 7.950 | 7.959  | (0.890) | 1306     | 0.20000            | 0.15028           |
| 58 Tetrachloroethene         | 164       | 8.089 | 8.093  | (0.906) | 4234     | 0.20000            | 0.19064           |
| 59 1,3-Dichloropropane       | 76        | 8.120 | 8.118  | (0.909) | 2381     | 0.20000            | 0.15630           |
| 60 2-Hexanone                | 43        | 8.254 | 8.251  | (0.924) | 4568     | 0.20000            | 0.78457           |
| 61 Chlorodibromomethane      | 129       | 8.083 | 8.349  | (0.905) | 3664     | 0.20000            | 1.1409            |
| 62 1,2-Dibromoethane         | 107       | 8.430 | 8.434  | (0.944) | 1108     | 0.20000            | 0.14237           |
| 63 Chlorobenzene (spcc)      | 112       | 8.953 | 8.957  | (1.003) | 11506    | 0.20000            | 0.19252           |
| 64 1,1,1,2-Tetrachloroethane | 131       | 9.057 | 9.054  | (1.014) | 955      | 0.20000            | 0.38423           |
| 65 Ethylbenzene (ccc)        | 106       | 9.093 | 9.091  | (1.018) | 7631     | 0.20000            | 0.19816           |
| 66 m&p-Xylene                | 106       | 9.215 | 9.219  | (1.032) | 19302    | 0.20000            | 0.41462           |
| 67 o-Xylene                  | 106       | 9.610 | 9.608  | (1.076) | 8621     | 0.20000            | 0.20966           |
| 68 Styrene                   | 104       | 9.623 | 9.620  | (1.078) | 11877    | 0.20000            | 0.20573           |

Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc248.d  
 Report Date: 28-Mar-2006 11:57

| Compounds                          | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|------------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                    | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                              | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 69 Bromoform (spcc)                | 173       | 9.781  | 9.778  | (1.095) | 212      | 0.20000            | 0.87187 (M)       |
| 70 Isopropylbenzene                | 105       | 9.988  | 9.991  | (1.119) | 22397    | 0.20000            | 0.18943           |
| 71 *cis-1,4-dichloro-2-butene      | 88        | 10.121 | 10.052 | (1.134) | 346      | 0.20000            | 1.7587            |
| 72 Bromobenzene                    | 156       | 10.255 | 10.253 | (1.149) | 3330     | 0.20000            | 0.18951           |
| 73 1,1,2,2-Tetrachloroethane(sp)   | 83        | 10.286 | 10.289 | (1.152) | 1161     | 0.20000            | 0.17909           |
| 75 *trans-1,4-dichloro-2-butene    | 53        | 10.401 | 10.350 | (0.906) | 161      | 0.20000            | 0.52735           |
| 76 n-Propylbenzene                 | 91        | 10.407 | 10.405 | (0.906) | 30665    | 0.20000            | 0.20269           |
| 77 2-Chlorotoluene                 | 91        | 10.474 | 10.472 | (0.912) | 16353    | 0.20000            | 0.20381           |
| 78 1,3,5-Trimethylbenzene          | 105       | 10.614 | 10.612 | (0.924) | 23676    | 0.20000            | 0.23258           |
| 79 4-Chlorotoluene                 | 91        | 10.596 | 10.594 | (0.923) | 17627    | 0.20000            | 0.20680           |
| 80 tert-Butylbenzene               | 119       | 10.985 | 10.989 | (0.957) | 17500    | 0.20000            | 0.19200           |
| 81 1,2,4-Trimethylbenzene          | 105       | 11.052 | 11.050 | (0.962) | 22941    | 0.20000            | 0.23986           |
| 82 sec-Butylbenzene                | 105       | 11.283 | 11.281 | (0.983) | 27151    | 0.20000            | 0.20209           |
| 83 1,3-Dichlorobenzene             | 146       | 11.381 | 11.384 | (0.991) | 11135    | 0.20000            | 0.25450           |
| 84 p-Isopropyltoluene              | 119       | 11.496 | 11.500 | (1.001) | 25189    | 0.20000            | 0.21367           |
| 85 1,4-Dichlorobenzene             | 146       | 11.521 | 11.518 | (1.003) | 10209    | 0.20000            | 0.25085           |
| 86 1,2-Dichlorobenzene             | 146       | 12.068 | 12.078 | (1.051) | 7193     | 0.20000            | 0.22284           |
| 87 n-Butylbenzene                  | 91        | 12.141 | 12.139 | (1.057) | 24432    | 0.20000            | 0.23172           |
| 89 1,2,4-Trichlorobenzene          | 180       | 14.295 | 14.292 | (1.245) | 5661     | 0.20000            | 0.28936           |
| 90 Hexachlorobutadiene             | 225       | 14.526 | 14.524 | (1.265) | 4335     | 0.20000            | 0.23627           |
| 91 Napthalene                      | 128       | 14.550 | 14.542 | (1.267) | 4606     | 0.20000            | 0.22450           |
| 92 1,2,3-Trichlorobenzene          | 180       | 14.818 | 14.816 | (1.290) | 3736     | 0.20000            | 0.28989           |
| M 93 *1,4-dichloro-2-butene(total) | 53        |        |        |         | 507      | 0.20000            | 2.2861            |

# QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/gcms/mz,i/20324061,b/1cvzc248.d

Date : 24-MAR-2006 13:51

Client ID: STD0.20

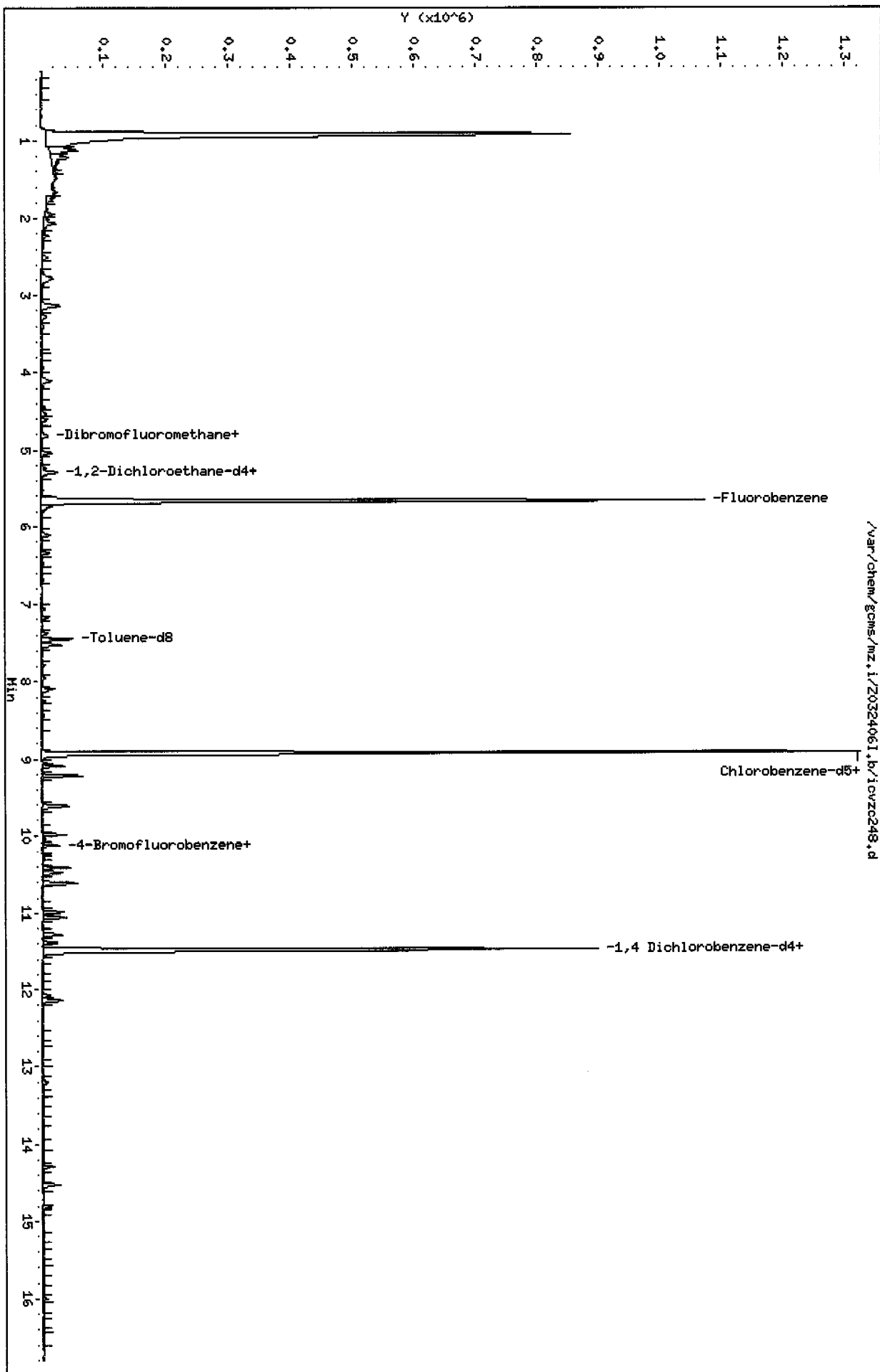
Sample Info: 1CVZC248,1,4,8,,STD0.20

Column phase: J+M 624

Instrument: mz,i

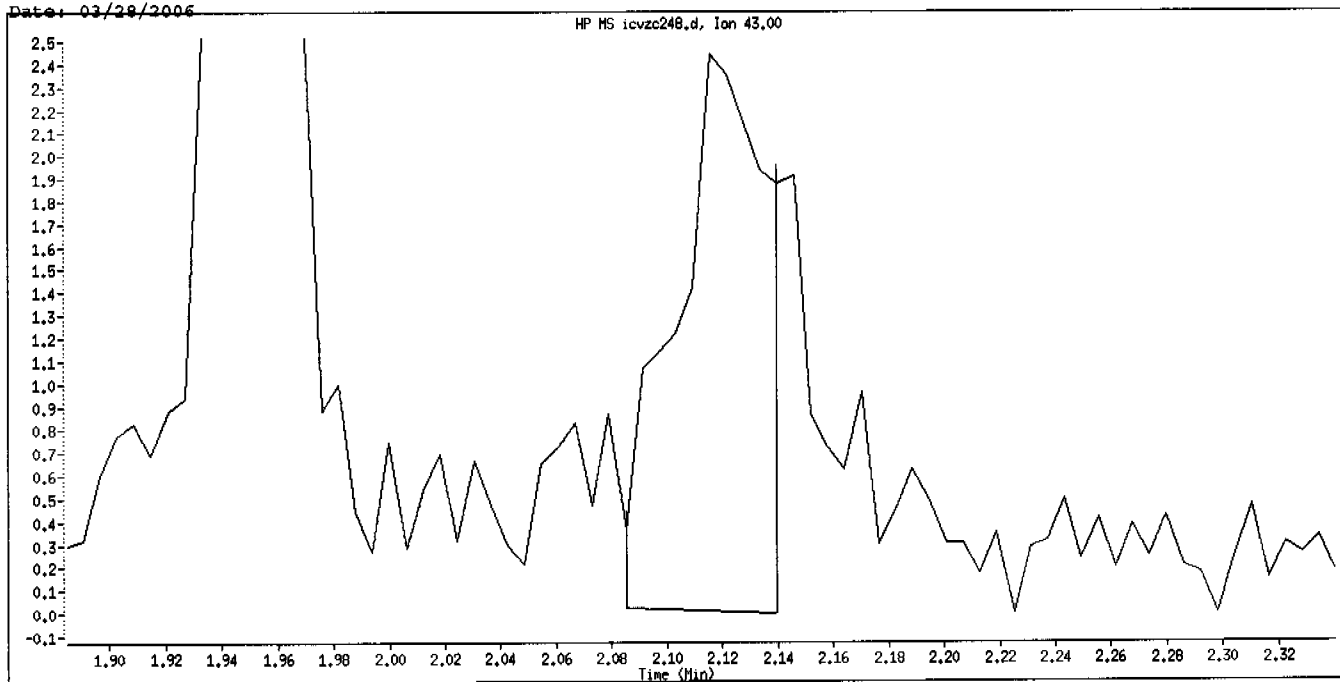
Operator: 22980

Column diameter: 0.18

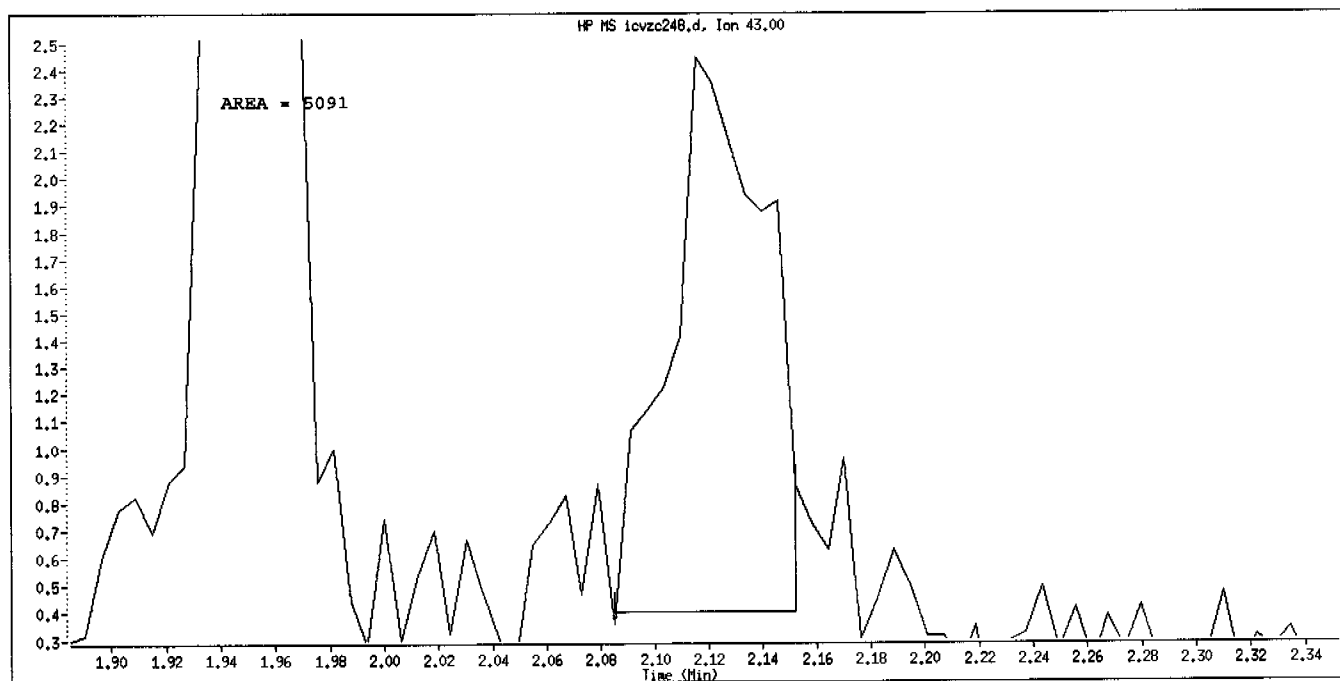


Data File Name: icvzc248.d  
Inj. Date and Time: 24-MAR-2006 13:51  
Instrument ID: mz.i  
Client ID: STD0.20  
Compound Name: Acetone  
CAS #: 67-64-1

Report Date: 03/28/2006



Original Integration



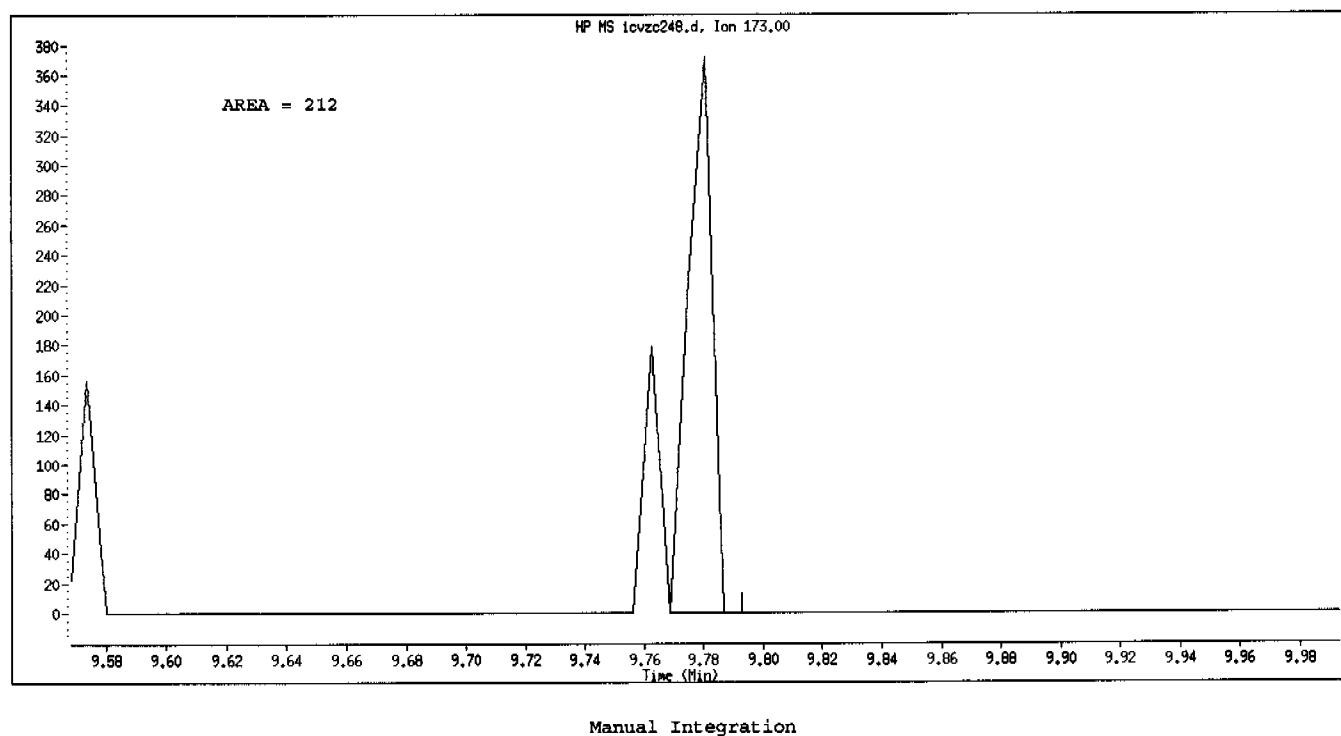
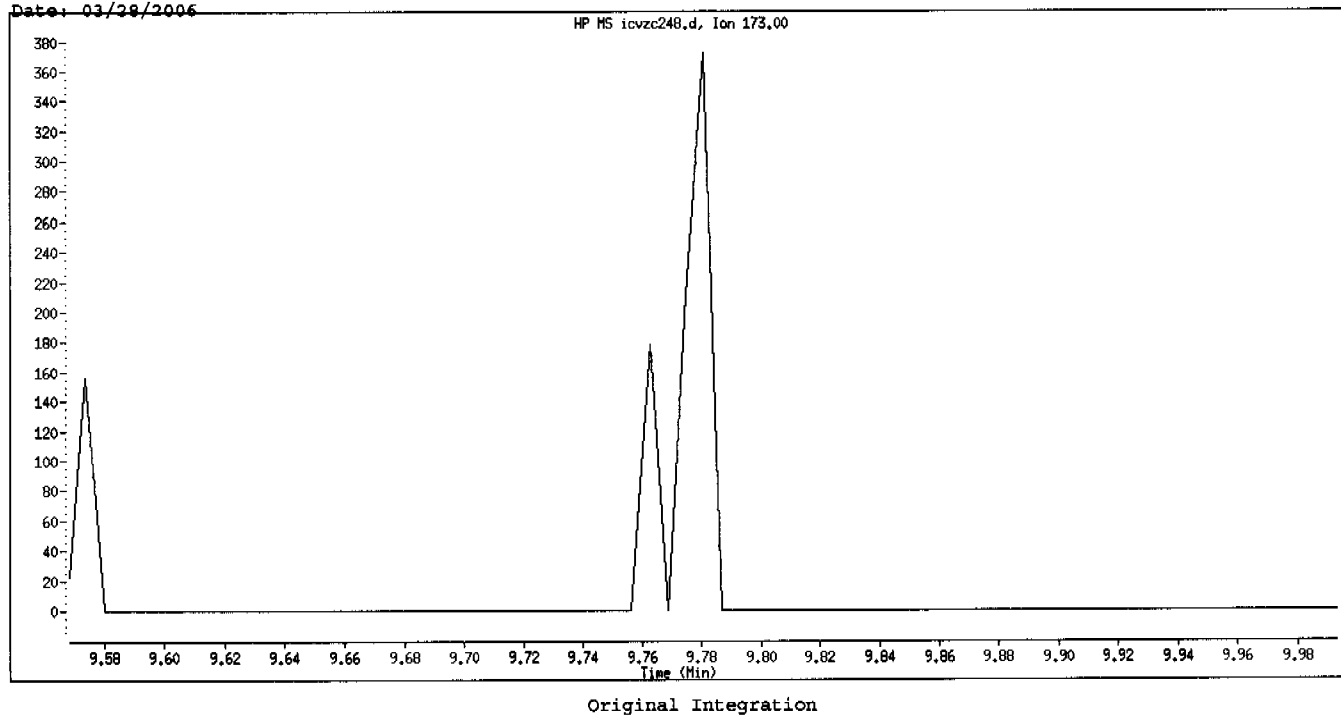
Manual Integration

Manually Integrated By: gosss

Manual Integration Reason: Splitting a peak

13/28/06

Data File Name: icvzc248.d  
Inj. Date and Time: 24-MAR-2006 13:51  
Instrument ID: mz.i  
Client ID: STD0.20  
Compound Name: Bromoform (spcc)  
CAS #: 75-25-2  
Report Date: 03/28/2006



Manually Integrated By: goss  
Manual Integration Reason: Analyte not Identified by the Data System

3/28/06

Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc247.d  
Report Date: 28-Mar-2006 11:30

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z032406I.b/icvzc247.d  
Lab Smp Id: ICVZC247 Client Smp ID: STD0.32  
Inj Date : 24-MAR-2006 14:14  
Operator : 22980 Inst ID: mz.i  
Smp Info : ICVZC247,1,1,7,,STD0.32  
Misc Info : Z032406I,8260B LM,  
Comment : Volatile Organics by GC/MS  
Method : /var/chem/gcms/mz.i/Z032406I.b/8260B LM.m  
Meth Date : 28-Mar-2006 11:30 gosss Quant Type: ISTD  
Cal Date : 24-MAR-2006 14:14 Cal File: icvzc247.d  
Als bottle: 5 Calibration Sample, Level: 7  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: all.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT SIG | MASS   | RT     | EXP RT  | REL RT | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-----------|--------|--------|---------|--------|----------|--------------------|-------------------|
|                                |           |        |        |         |        |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene              | 96        | 5.666  | 5.666  | (1.000) | 965258 | 10.0000  |                    |                   |
| * 2 Chlorobenzene-d5           | 119       | 8.933  | 8.927  | (1.000) | 174630 | 10.0000  |                    |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152       | 11.482 | 11.488 | (1.000) | 209010 | 10.0000  |                    |                   |
| \$ 4 Dibromofluoromethane      | 113       | 4.821  | 4.826  | (0.851) | 7280   | 0.32000  | 0.47068            |                   |
| \$ 5 1,2-Dichloroethane-d4     | 65        | 5.228  | 5.228  | (0.923) | 6511   | 0.32000  | 0.48680            |                   |
| \$ 6 Toluene-d8                | 98        | 7.455  | 7.455  | (0.835) | 36345  | 0.32000  | 0.47368            |                   |
| \$ 7 4-Bromofluorobenzene      | 95        | 10.119 | 10.119 | (0.881) | 10705  | 0.32000  | 0.50786            |                   |
| M 8 1,2-Dichloroethene (total) | 96        |        |        |         | 15352  | 0.32000  | 0.60264            |                   |
| M 9 Xylene (total)             | 106       |        |        |         | 36639  | 0.32000  | 0.88103            |                   |
| 10 Dichlorodifluoromethane     | 85        | 1.012  | 1.012  | (0.179) | 7312   | 0.32000  | 0.31033            |                   |
| 11 Chloromethane (spcc)        | 50        | 1.128  | 1.128  | (0.199) | 39346  | 0.32000  | 0.15200            |                   |
| 12 Vinyl Chloride (ccc)        | 62        | 1.195  | 1.195  | (0.211) | 10698  | 0.32000  | 0.28139            |                   |
| 13 *1,3-Butadiene              | 39        | 1.219  | 1.219  | (0.215) | 11280  | 0.32000  | 0.32902            |                   |
| 15 Bromomethane                | 94        | 1.408  | 1.414  | (0.248) | 3430   | 0.32000  | 1.1674             |                   |

Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc247.d

Report Date: 28-Mar-2006 11:30

| Compounds                    | QUANT SIG |       |        |         | RESPONSE | AMOUNTS            |                   |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                              | MASS      | RT    | EXP RT | REL RT  |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                        | =====     | ==    | =====  | =====   | =====    | =====              | =====             |
| 16 Chloroethane              | 64        | 1.487 | 1.481  | (0.262) | 5969     | 0.32000            | 0.33157           |
| 17 *Vinyl Bromide            | 106       | 1.615 | 1.614  | (0.285) | 4327     | 0.32000            | 0.26905           |
| 18 Trichlorofluoromethane    | 101       | 1.669 | 1.669  | (0.295) | 8492     | 0.32000            | 0.28783           |
| 19 *2-Chloropropane          | 43        | 1.949 | 1.949  | (0.344) | 19719    | 0.32000            | 0.30881           |
| 20 1,1-Dichloroethene (ccc)  | 96        | 2.071 | 2.065  | (0.365) | 6310     | 0.32000            | 0.30078           |
| 21 *Freon 113                | 151       | 2.083 | 2.083  | (0.368) | 4387     | 0.32000            | 0.26861           |
| 22 Acetone                   | 43        | 2.126 | 2.125  | (0.375) | 3369     | 1.28000            | 3.8289            |
| 23 *Iodomethane              | 142       | 2.174 | 2.180  | (0.384) | 4891     | 0.32000            | 0.71675           |
| 24 Carbon Disulfide          | 76        | 2.235 | 2.229  | (0.394) | 23882    | 0.32000            | 0.32250           |
| 26 *Acetonitrile             | 40        | 2.363 | 2.369  | (0.417) | 2058     | 0.32000            | 4.7858            |
| 27 Methylene Chloride        | 84        | 2.509 | 2.503  | (0.443) | 5508     | 0.32000            | 0.34119           |
| 29 *Acrylonitrile            | 53        | 2.758 | 2.758  | (0.487) | 18122    | 66.4000            | 5.0277            |
| 30 trans-1,2-Dichloroethene  | 96        | 2.795 | 2.795  | (0.493) | 8061     | 0.32000            | 0.30438           |
| 31 *MTBE                     | 73        | 2.825 | 2.819  | (0.499) | 6471     | 0.32000            | 0.27857           |
| 32 *Hexane                   | 57        | 3.142 | 3.135  | (0.554) | 40562    | 0.64000            | 0.59780           |
| 33 1,1-Dichloroethane (spcc) | 63        | 3.276 | 3.275  | (0.578) | 17364    | 0.32000            | 0.28366           |
| 34 *Vinyl Acetate            | 86        | 3.136 | 3.409  | (0.553) | 3843     | 0.64000            | 2.9862            |
| 35 2,2-Dichloropropane       | 77        | 4.091 | 4.096  | (0.722) | 7610     | 0.32000            | 0.24468           |
| 36 cis 1,2-Dichloroethene    | 96        | 4.115 | 4.115  | (0.726) | 7291     | 0.32000            | 0.29826           |
| 37 2-Butanone                | 43        | 4.182 | 4.169  | (0.738) | 5464     | 1.28000            | 1.4939            |
| 38 Bromochloromethane        | 128       | 4.456 | 4.449  | (0.786) | 1549     | 0.32000            | 0.23045           |
| 39 *THF                      | 42        | 4.529 | 4.528  | (0.799) | 3005     | 1.28000            | 1.3121            |
| 40 Chloroform (ccc)          | 83        | 4.608 | 4.607  | (0.813) | 10099    | 0.32000            | 0.28957           |
| 41 1,1,1-Trichloroethane     | 97        | 4.815 | 4.814  | (0.850) | 8417     | 0.32000            | 0.27267           |
| 42 Carbon Tetrachloride      | 117       | 5.034 | 5.039  | (0.888) | 3974     | 0.32000            | 0.49367           |
| 43 1,1-Dichloropropene       | 75        | 5.034 | 5.039  | (0.888) | 9841     | 0.32000            | 0.29751           |
| 44 Benzene                   | 78        | 5.289 | 5.295  | (0.933) | 31392    | 0.32000            | 0.32978           |
| 45 1,2-Dichloroethane        | 62        | 5.326 | 5.325  | (0.940) | 5406     | 0.32000            | 0.26819           |
| 46 Trichloroethene           | 130       | 6.104 | 6.110  | (1.077) | 7970     | 0.32000            | 0.29765           |
| 47 1,2-Dichloropropane (ccc) | 63        | 6.348 | 6.341  | (1.120) | 7492     | 0.32000            | 0.28807           |
| 49 Dibromomethane            | 93        | 6.469 | 6.469  | (1.142) | 1446     | 0.32000            | 0.26699           |
| 50 Bromodichloromethane      | 83        | 6.682 | 6.688  | (1.179) | 3188     | 0.32000            | 0.91068           |
| 51 *2-Chloroethylvinylether  | 63        | 7.066 | 7.065  | (1.247) | 3529     | 0.64000            | 0.59786           |
| 52 cis-1,3-Dichloropropene   | 75        | 7.181 | 7.181  | (1.267) | 6077     | 0.32000            | 0.28776           |
| 53 4-Methyl-2-pentanone      | 43        | 7.376 | 7.375  | (1.302) | 9399     | 1.28000            | 1.1150            |
| 54 Toluene (ccc)             | 91        | 7.522 | 7.528  | (0.842) | 29904    | 0.32000            | 0.30090           |
| 55 trans-1,3-Dichloropropene | 75        | 7.783 | 7.783  | (0.871) | 3165     | 0.32000            | 0.82454           |
| 56 *Ethyl Methacrylate       | 69        | 7.935 | 7.929  | (0.888) | 1499     | 0.32000            | 0.17656           |
| 57 1,1,2-Trichloroethane     | 97        | 7.966 | 7.959  | (0.892) | 2250     | 0.32000            | 0.27894           |
| 58 Tetrachloroethene         | 164       | 8.088 | 8.093  | (0.905) | 6857     | 0.32000            | 0.33264           |
| 59 1,3-Dichloropropane       | 76        | 8.118 | 8.118  | (0.909) | 4557     | 0.32000            | 0.32230           |
| 60 2-Hexanone                | 43        | 8.252 | 8.251  | (0.924) | 5778     | 1.28000            | 1.0692            |
| 61 Chlorodibromomethane      | 129       | 8.349 | 8.349  | (0.935) | 1051     | 0.32000            | 0.88540           |
| 62 1,2-Dibromoethane         | 107       | 8.434 | 8.434  | (0.944) | 2004     | 0.32000            | 0.27743           |
| 63 Chlorobenzene (spcc)      | 112       | 8.957 | 8.957  | (1.003) | 15953    | 0.32000            | 0.28760           |
| 64 1,1,1,2-Tetrachloroethane | 131       | 9.055 | 9.054  | (1.014) | 2102     | 0.32000            | 0.46843           |
| 65 Ethylbenzene (ccc)        | 106       | 9.091 | 9.091  | (1.018) | 10254    | 0.32000            | 0.28689           |



Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc247.d  
 Report Date: 28-Mar-2006 11:30

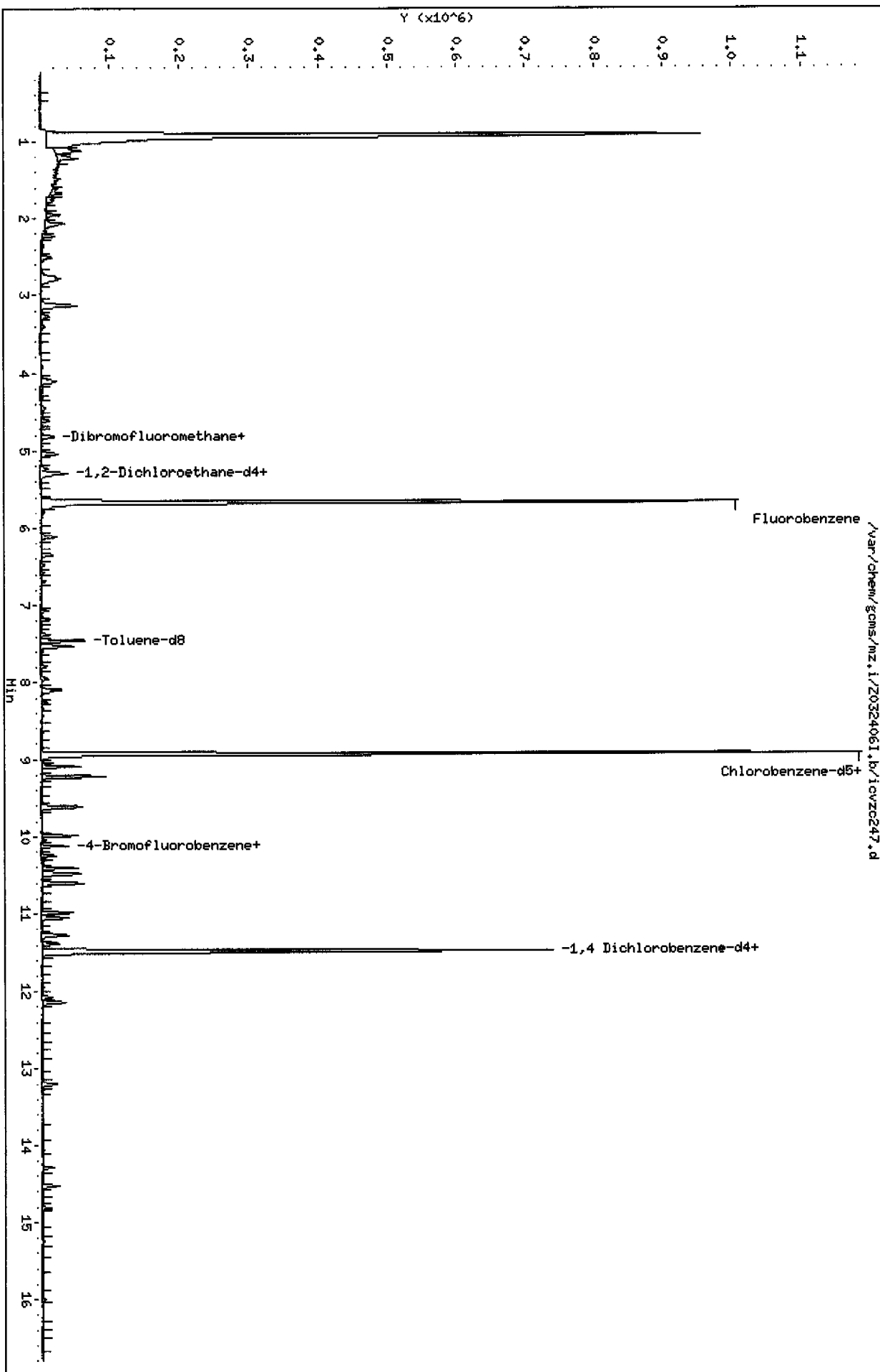
| Compounds                           | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|-------------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                     | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                               | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 66 m&p-Xylene                       | 106       | 9.219  | 9.219  | (1.032) | 25829    | 0.64000            | 0.59778           |
| 67 o-Xylene                         | 106       | 9.602  | 9.608  | (1.075) | 10810    | 0.32000            | 0.28325           |
| 68 Styrene                          | 104       | 9.621  | 9.620  | (1.077) | 16099    | 0.32000            | 0.30045           |
| 69 Bromoform (spcc)                 | 173       | 9.773  | 9.778  | (1.094) | 342      | 0.32000            | 1.4783 (M)        |
| 70 Isopropylbenzene                 | 105       | 9.992  | 9.991  | (1.118) | 32657    | 0.32000            | 0.29759           |
| 71 *cis-1,4-dichloro-2-butene       | 88        | 10.119 | 10.052 | (1.133) | 407      | 0.32000            | 1.8141            |
| 72 Bromobenzene                     | 156       | 10.253 | 10.253 | (1.148) | 4674     | 0.32000            | 0.28659           |
| 73 1,1,2,2-Tetrachloroethane (sp)   | 83        | 10.290 | 10.289 | (1.152) | 1677     | 0.32000            | 0.27870           |
| 74 1,2,3-Trichloropropane           | 110       | 10.308 | 10.314 | (0.898) | 552      | 0.32000            | 0.30675           |
| 75 *trans-1,4-dichloro-2-butene     | 53        | 10.338 | 10.350 | (0.900) | 644      | 0.32000            | 0.71335           |
| 76 n-Propylbenzene                  | 91        | 10.405 | 10.405 | (0.906) | 36069    | 0.32000            | 0.28511           |
| 77 2-Chlorotoluene                  | 91        | 10.472 | 10.472 | (0.912) | 20110    | 0.32000            | 0.29973           |
| 78 1,3,5-Trimethylbenzene           | 105       | 10.612 | 10.612 | (0.924) | 24965    | 0.32000            | 0.29328           |
| 79 4-Chlorotoluene                  | 91        | 10.594 | 10.594 | (0.923) | 20641    | 0.32000            | 0.28960           |
| 80 tert-Butylbenzene                | 119       | 10.989 | 10.989 | (0.957) | 20923    | 0.32000            | 0.27452           |
| 81 1,2,4-Trimethylbenzene           | 105       | 11.056 | 11.050 | (0.963) | 23128    | 0.32000            | 0.28918           |
| 82 sec-Butylbenzene                 | 105       | 11.275 | 11.281 | (0.982) | 30627    | 0.32000            | 0.27261           |
| 83 1,3-Dichlorobenzene              | 146       | 11.391 | 11.384 | (0.992) | 11115    | 0.32000            | 0.30380           |
| 84 p-Isopropyltoluene               | 119       | 11.500 | 11.500 | (1.002) | 28702    | 0.32000            | 0.29116           |
| 85 1,4-Dichlorobenzene              | 146       | 11.519 | 11.518 | (1.003) | 10377    | 0.32000            | 0.30492           |
| 86 1,2-Dichlorobenzene              | 146       | 12.072 | 12.078 | (1.051) | 7930     | 0.32000            | 0.29379           |
| 87 n-Butylbenzene                   | 91        | 12.139 | 12.139 | (1.057) | 26329    | 0.32000            | 0.29862           |
| 89 1,2,4-Trichlorobenzene           | 180       | 14.293 | 14.292 | (1.245) | 5022     | 0.32000            | 0.30698           |
| 90 Hexachlorobutadiene              | 225       | 14.524 | 14.524 | (1.265) | 4332     | 0.32000            | 0.28236           |
| 91 Napthalene                       | 128       | 14.548 | 14.542 | (1.267) | 5013     | 0.32000            | 0.29220           |
| 92 1,2,3-Trichlorobenzene           | 180       | 14.816 | 14.816 | (1.290) | 3260     | 0.32000            | 0.30250           |
| M 93 *1,4-dichloro-2-butene (total) | 53        |        |        |         | 1051     | 0.32000            | 2.5274            |

#### QC Flag Legend

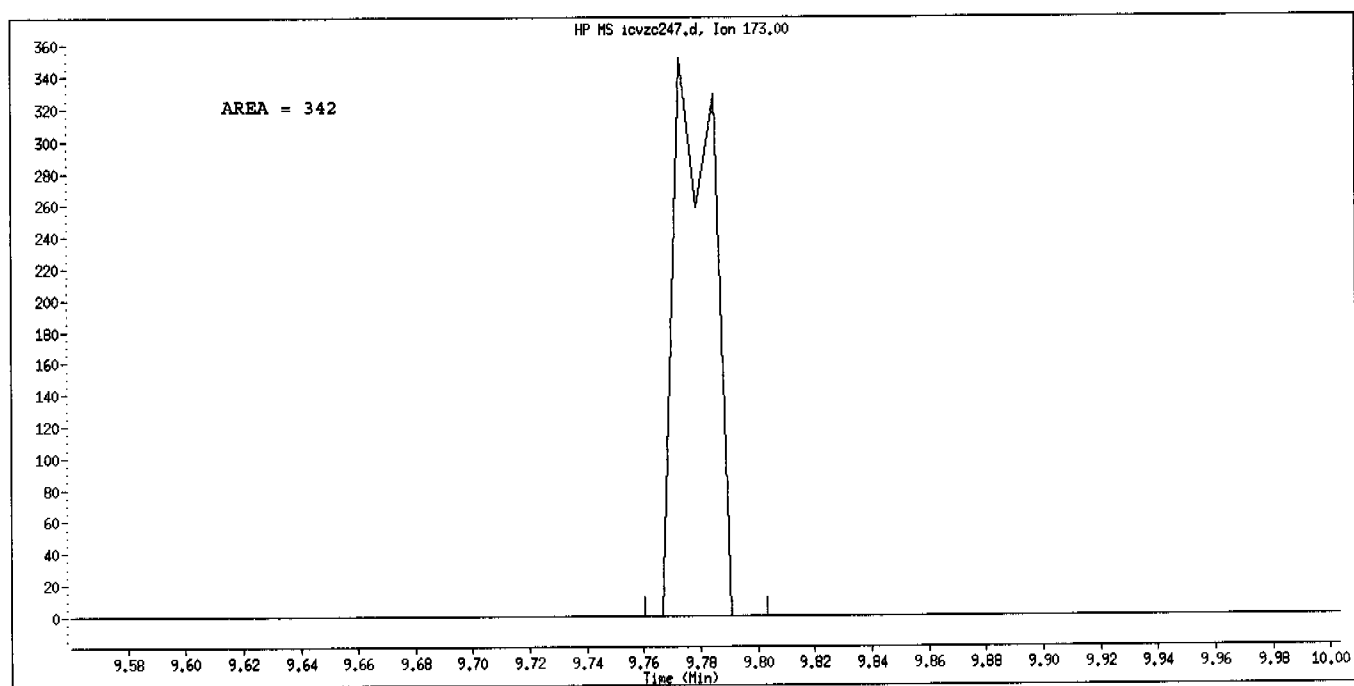
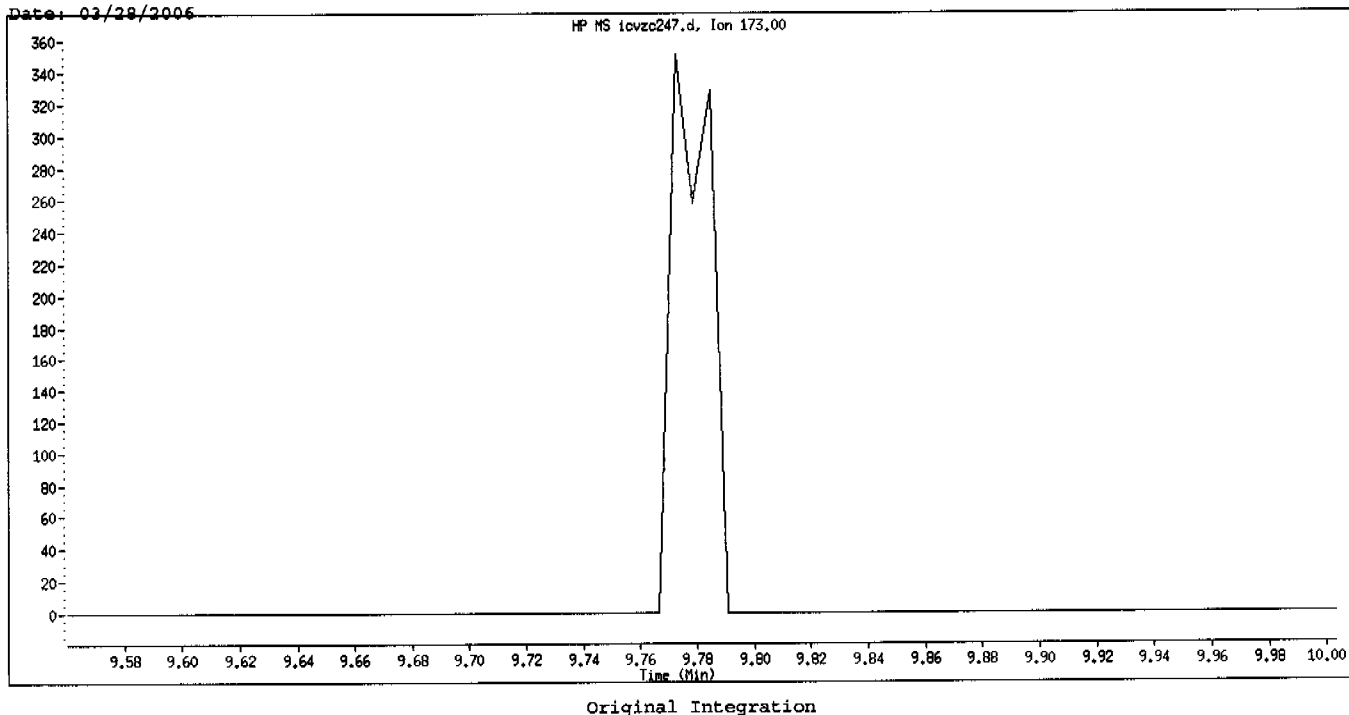
M - Compound response manually integrated.

Data File: /var/chem/gcms/mz.i/Z0324061.b/1ovzc247.d  
Date : 24-MAR-2006 14:14  
Client ID: STD0.32  
Sample Info: 1OVZC247,1,1,7,STD0.32  
Purge Volume: 25.0  
Column phase: J+W 624

Instrument: mz.i  
Operator: 22980  
Column diameter: 0.18



Data File Name: icvzc247.d  
Inj. Date and Time: 24-MAR-2006 14:14  
Instrument ID: mz.i  
Client ID: STD0.32  
Compound Name: Bromoform (spcc)  
CAS #: 75-25-2  
Report Date: 03/28/2006



Manually Integrated By: goss  
Manual Integration Reason: Unknown

h-3/28/06

Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc241.d  
Report Date: 24-Mar-2006 17:29

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z032406I.b/icvzc241.d  
Lab Smp Id: ICVZC241 Client Smp ID: STD01  
Inj Date : 24-MAR-2006 14:38  
Operator : 22980 Inst ID: mz.i  
Smp Info : ICVZC241,1,1,1,,STD01  
Misc Info : Z032406I,8260B LM,  
Comment : Volatile Organics by GC/MS  
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Meth Date : 24-Mar-2006 17:26 tillerm Quant Type: ISTD  
Cal Date : 24-MAR-2006 14:38 Cal File: icvzc241.d  
Als bottle: 6 Calibration Sample, Level: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: all.sub  
Target Version: 3.50

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT SIG | MASS   | RT     | EXP RT  | REL RT  | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-----------|--------|--------|---------|---------|----------|--------------------|-------------------|
|                                |           |        |        |         |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene              | 96        | 5.669  | 5.666  | (1.000) | 1123931 | 10.0000  |                    |                   |
| * 2 Chlorobenzene-d5           | 119       | 8.929  | 8.927  | (1.000) | 203397  | 10.0000  |                    |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152       | 11.485 | 11.488 | (1.000) | 248522  | 10.0000  |                    |                   |
| \$ 4 Dibromofluoromethane      | 113       | 4.823  | 4.826  | (0.851) | 17429   | 1.00000  | 0.96779            |                   |
| \$ 5 1,2-Dichloroethane-d4     | 65        | 5.231  | 5.228  | (0.923) | 15737   | 1.00000  | 1.0105             |                   |
| \$ 6 Toluene-d8                | 98        | 7.457  | 7.455  | (0.835) | 88488   | 1.00000  | 0.99014            |                   |
| \$ 7 4-Bromofluorobenzene      | 95        | 10.122 | 10.119 | (0.881) | 26441   | 1.00000  | 1.0550             |                   |
| M 8 1,2-Dichloroethene (total) | 96        |        |        |         | 60061   | 2.00000  | 2.0248             |                   |
| M 9 Xylene (total)             | 106       |        |        |         | 147706  | 3.00000  | 3.0140             |                   |
| 10 Dichlorodifluoromethane     | 85        | 1.015  | 1.012  | (0.179) | 25499   | 1.00000  | 0.93790            |                   |
| 11 Chloromethane (spcc)        | 50        | 1.124  | 1.128  | (0.198) | 106980  | 1.00000  | 1.2994             |                   |
| 12 Vinyl Chloride (ccc)        | 62        | 1.191  | 1.195  | (0.210) | 45420   | 1.00000  | 1.0234             |                   |
| 13 *1,3-Butadiene              | 39        | 1.222  | 1.219  | (0.216) | 42141   | 1.00000  | 1.0355             |                   |
| 15 Bromomethane                | 94        | 1.410  | 1.414  | (0.249) | 5472    | 1.00000  | 0.65680            |                   |
| 16 Chloroethane                | 64        | 1.483  | 1.481  | (0.262) | 21453   | 1.00000  | 1.0115             |                   |

Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc241.d  
Report Date: 24-Mar-2006 17:29

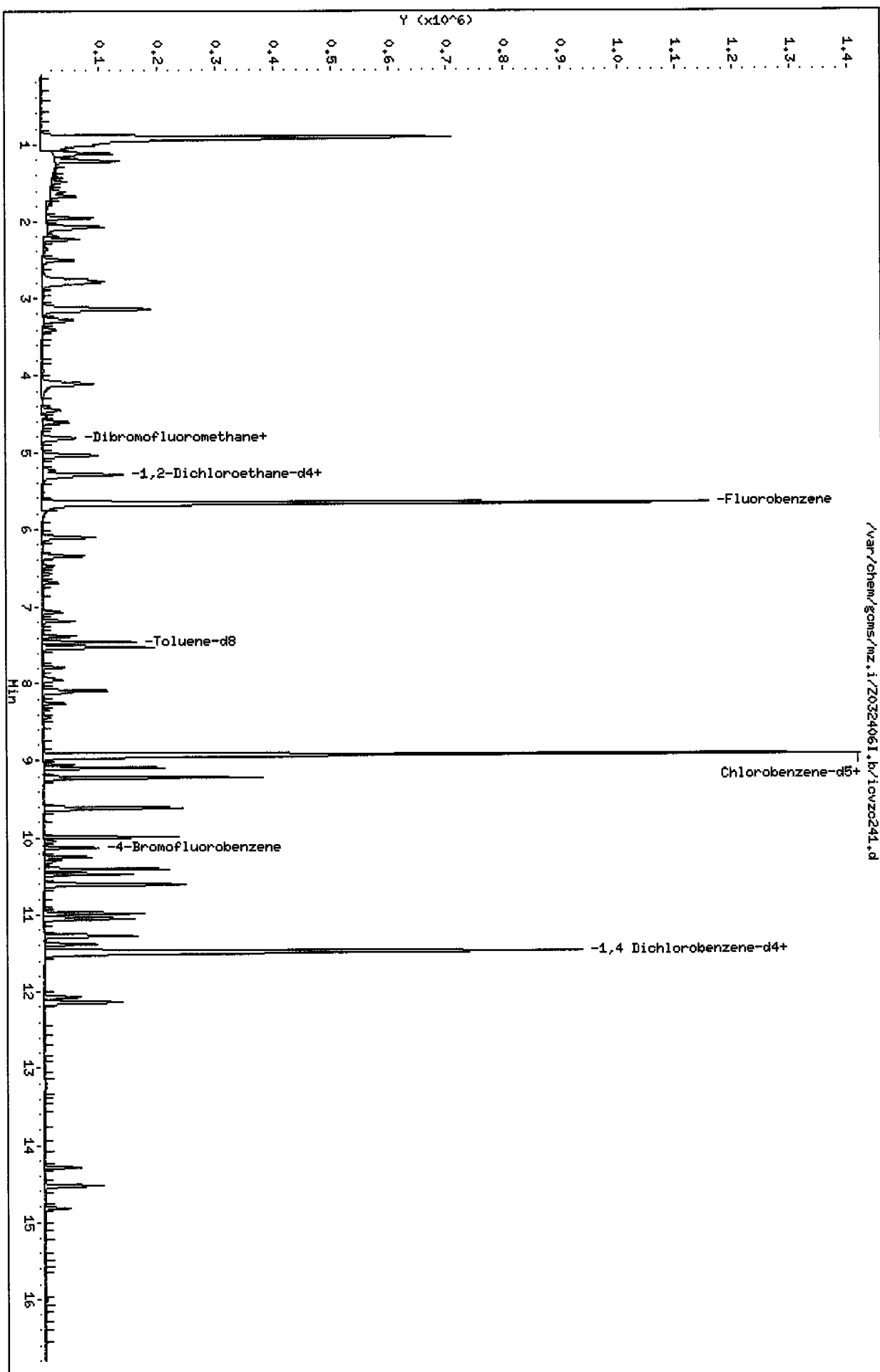
| Compounds                    | QUANT SIG |       |        |         | AMOUNTS  |         |         |
|------------------------------|-----------|-------|--------|---------|----------|---------|---------|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | CAL-AMT | ON-COL  |
|                              | =====     | ==    | =====  | =====   | =====    | ( ug/L) | ( ug/L) |
| 17 *Vinyl Bromide            | 106       | 1.617 | 1.614  | (0.285) | 18727    | 1.00000 | 1.0226  |
| 18 Trichlorofluoromethane    | 101       | 1.666 | 1.669  | (0.294) | 33698    | 1.00000 | 0.98677 |
| 19 *2-Chloropropane          | 43        | 1.952 | 1.949  | (0.344) | 70896    | 1.00000 | 0.94396 |
| 20 1,1-Dichloroethene (ccc)  | 96        | 2.067 | 2.065  | (0.365) | 24777    | 1.00000 | 1.0066  |
| 21 *Freon 113                | 151       | 2.086 | 2.083  | (0.368) | 18936    | 1.00000 | 0.97971 |
| 22 Acetone                   | 43        | 2.128 | 2.125  | (0.375) | 10079    | 4.00000 | 4.6035  |
| 23 *Iodomethane              | 142       | 2.183 | 2.180  | (0.385) | 18279    | 1.00000 | 0.79929 |
| 24 Carbon Disulfide          | 76        | 2.232 | 2.229  | (0.394) | 85083    | 1.00000 | 0.98182 |
| 26 *Acetonitrile             | 40        | 2.365 | 2.369  | (0.417) | 8616     | 20.0000 | 17.287  |
| 27 Methylene Chloride        | 84        | 2.505 | 2.503  | (0.442) | 18426    | 1.00000 | 0.97664 |
| 28 *t-butanol                | 59        | 2.700 | 2.697  | (0.476) | 12778    | 50.0000 | 37.709  |
| 29 *Acrylonitrile            | 53        | 2.755 | 2.758  | (0.486) | 84286    | 20.0000 | 19.981  |
| 30 trans-1,2-Dichloroethene  | 96        | 2.791 | 2.795  | (0.492) | 31410    | 1.00000 | 1.0180  |
| 31 *MTBE                     | 73        | 2.822 | 2.819  | (0.498) | 26085    | 1.00000 | 0.97217 |
| 32 *Hexane                   | 57        | 3.132 | 3.135  | (0.552) | 150847   | 2.00000 | 1.8951  |
| 33 1,1-Dichloroethane (spcc) | 63        | 3.278 | 3.275  | (0.578) | 72584    | 1.00000 | 1.0219  |
| 34 *Vinyl Acetate            | 86        | 3.412 | 3.409  | (0.602) | 1846     | 2.00000 | 1.3682  |
| 35 2,2-Dichloropropane       | 77        | 4.105 | 4.096  | (0.724) | 33462    | 1.00000 | 0.93981 |
| 36 cis 1,2-Dichloroethene    | 96        | 4.117 | 4.115  | (0.726) | 28651    | 1.00000 | 1.0068  |
| 37 2-Butanone                | 43        | 4.178 | 4.169  | (0.737) | 17502    | 4.00000 | 4.1166  |
| 38 Bromochloromethane        | 128       | 4.452 | 4.449  | (0.785) | 8875     | 1.00000 | 1.1337  |
| 39 *THF                      | 42        | 4.519 | 4.528  | (0.797) | 11056    | 4.00000 | 4.1474  |
| 40 Chloroform (ccc)          | 83        | 4.616 | 4.607  | (0.814) | 38775    | 1.00000 | 0.96245 |
| 41 1,1,1-Trichloroethane     | 97        | 4.811 | 4.814  | (0.849) | 31447    | 1.00000 | 0.89511 |
| 42 Carbon Tetrachloride      | 117       | 5.030 | 5.039  | (0.887) | 14271    | 1.00000 | 0.68582 |
| 43 1,1-Dichloropropene       | 75        | 5.042 | 5.039  | (0.889) | 38506    | 1.00000 | 0.99985 |
| 44 Benzene                   | 78        | 5.292 | 5.295  | (0.933) | 112507   | 1.00000 | 1.0113  |
| 45 1,2-Dichloroethane        | 62        | 5.328 | 5.325  | (0.940) | 23484    | 1.00000 | 1.0044  |
| 46 Trichloroethene           | 130       | 6.113 | 6.110  | (1.078) | 29935    | 1.00000 | 0.95762 |
| 47 1,2-Dichloropropane (ccc) | 63        | 6.344 | 6.341  | (1.119) | 30093    | 1.00000 | 0.99215 |
| 48 *Methyl Methacrylate      | 41        | 6.569 | 6.572  | (1.159) | 8063     | 1.00000 | 0.82691 |
| 49 Dibromomethane            | 93        | 6.466 | 6.469  | (1.141) | 6225     | 1.00000 | 0.99082 |
| 50 Bromodichloromethane      | 83        | 6.691 | 6.688  | (1.180) | 13084    | 1.00000 | 0.80016 |
| 51 *2-Chloroethylvinylether  | 63        | 7.062 | 7.065  | (1.246) | 13319    | 2.00000 | 1.9312  |
| 52 cis-1,3-Dichloropropene   | 75        | 7.184 | 7.181  | (1.267) | 22888    | 1.00000 | 0.94110 |
| 53 4-Methyl-2-pentanone      | 43        | 7.378 | 7.375  | (1.302) | 38268    | 4.00000 | 3.8820  |
| 54 Toluene (ccc)             | 91        | 7.524 | 7.528  | (0.843) | 115159   | 1.00000 | 0.99474 |
| 55 trans-1,3-Dichloropropene | 75        | 7.780 | 7.783  | (0.871) | 13777    | 1.00000 | 0.90818 |
| 56 *Ethyl Methacrylate       | 69        | 7.926 | 7.929  | (0.888) | 7559     | 1.00000 | 0.78092 |
| 57 1,1,2-Trichloroethane     | 97        | 7.962 | 7.959  | (0.892) | 9610     | 1.00000 | 1.0261  |
| 58 Tetrachloroethene         | 164       | 8.096 | 8.093  | (0.907) | 24333    | 1.00000 | 1.0044  |
| 59 1,3-Dichloropropane       | 76        | 8.120 | 8.118  | (0.909) | 16015    | 1.00000 | 0.97274 |
| 60 2-Hexanone                | 43        | 8.254 | 8.251  | (0.924) | 23037    | 4.00000 | 3.6717  |
| 61 Chlorodibromomethane      | 129       | 8.345 | 8.349  | (0.935) | 4945     | 1.00000 | 0.64215 |
| 62 1,2-Dibromoethane         | 107       | 8.437 | 8.434  | (0.945) | 8227     | 1.00000 | 0.98276 |
| 63 Chlorobenzene (spcc)      | 112       | 8.960 | 8.957  | (1.003) | 65128    | 1.00000 | 1.0064  |
| 64 1,1,1,2-Tetrachloroethane | 131       | 9.051 | 9.054  | (1.014) | 7918     | 1.00000 | 0.66612 |

Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc241.d  
 Report Date: 24-Mar-2006 17:29

| Compounds                          | QUANT SIG |        |        |         | RESPONSE | AMOUNTS            |                   |
|------------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                    | MASS      | RT     | EXP RT | REL RT  |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                              | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 65 Ethylbenzene (ccc)              | 106       | 9.094  | 9.091  | (1.018) | 42436    | 1.00000            | 1.0162            |
| 66 m&p-Xylene                      | 106       | 9.221  | 9.219  | (1.033) | 102791   | 2.00000            | 2.0068            |
| 67 o-Xylene                        | 106       | 9.611  | 9.608  | (1.076) | 44914    | 1.00000            | 1.0071            |
| 68 Styrene                         | 104       | 9.623  | 9.620  | (1.078) | 63605    | 1.00000            | 1.0149            |
| 69 Bromoform (spcc)                | 173       | 9.775  | 9.778  | (1.095) | 902      | 1.00000            | 0.35523           |
| 70 Isopropylbenzene                | 105       | 9.988  | 9.991  | (1.119) | 128293   | 1.00000            | 0.99981           |
| 71 *cis-1,4-dichloro-2-butene      | 88        | 10.055 | 10.052 | (1.126) | 738      | 1.00000            | 0.59045           |
| 72 Bromobenzene                    | 156       | 10.256 | 10.253 | (1.149) | 18785    | 1.00000            | 0.98930           |
| 73 1,1,2,2-Tetrachloroethane(sp)   | 83        | 10.292 | 10.289 | (1.153) | 6971     | 1.00000            | 1.0059            |
| 74 1,2,3-Trichloropropane          | 110       | 10.310 | 10.314 | (0.898) | 2303     | 1.00000            | 1.0776            |
| 75 *trans-1,4-dichloro-2-butene    | 53        | 10.341 | 10.350 | (0.900) | 2278     | 1.00000            | 0.83610           |
| 76 n-Propylbenzene                 | 91        | 10.408 | 10.405 | (0.906) | 148242   | 1.00000            | 0.98400           |
| 77 2-Chlorotoluene                 | 91        | 10.475 | 10.472 | (0.912) | 78081    | 1.00000            | 0.98039           |
| 78 1,3,5-Trimethylbenzene          | 105       | 10.615 | 10.612 | (0.924) | 100401   | 1.00000            | 0.98668           |
| 79 4-Chlorotoluene                 | 91        | 10.596 | 10.594 | (0.923) | 81359    | 1.00000            | 0.95637           |
| 80 tert-Butylbenzene               | 119       | 10.992 | 10.989 | (0.957) | 90632    | 1.00000            | 1.0025            |
| 81 1,2,4-Trimethylbenzene          | 105       | 11.053 | 11.050 | (0.962) | 92297    | 1.00000            | 0.97282           |
| 82 sec-Butylbenzene                | 105       | 11.278 | 11.281 | (0.982) | 131809   | 1.00000            | 0.99189           |
| 83 1,3-Dichlorobenzene             | 146       | 11.387 | 11.384 | (0.992) | 42599    | 1.00000            | 0.98107           |
| 84 p-Isopropyltoluene              | 119       | 11.503 | 11.500 | (1.002) | 119215   | 1.00000            | 1.0129            |
| 85 1,4-Dichlorobenzene             | 146       | 11.515 | 11.518 | (1.003) | 43055    | 1.00000            | 1.0534            |
| 86 1,2-Dichlorobenzene             | 146       | 12.075 | 12.078 | (1.051) | 30579    | 1.00000            | 0.95627           |
| 87 n-Butylbenzene                  | 91        | 12.142 | 12.139 | (1.057) | 101029   | 1.00000            | 0.97041           |
| 88 1,2-Dibromo-3-chloropropane     | 157       | 13.255 | 13.258 | (1.154) | 575      | 1.00000            | 0.63377           |
| 89 1,2,4-Trichlorobenzene          | 180       | 14.295 | 14.292 | (1.245) | 18479    | 1.00000            | 0.94834           |
| 90 Hexachlorobutadiene             | 225       | 14.526 | 14.524 | (1.265) | 16825    | 1.00000            | 0.91446           |
| 91 Napthalene                      | 128       | 14.544 | 14.542 | (1.266) | 19246    | 1.00000            | 0.95225           |
| 92 1,2,3-Trichlorobenzene          | 180       | 14.818 | 14.816 | (1.290) | 11120    | 1.00000            | 0.87211           |
| M 93 *1,4-dichloro-2-butene(total) | 53        |        |        |         | 3017     | 2.00000            | 1.4266            |

Data File: /var/chem/gcms/mz.i/Z0324061.b/iovzo241.d  
Date: 24-MAR-2006 14:38  
Client ID: STD01  
Sample Info: ICVZC241,1,1,1,STD01  
Purge Volume: 25.0  
Column phase: J+W 624

Instrument: mz.i  
Operator: 22980  
Column diameter: 0.18



Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc242.d  
 Report Date: 24-Mar-2006 17:29

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z032406I.b/icvzc242.d  
 Lab Smp Id: ICVZC242 Client Smp ID: STD02  
 Inj Date : 24-MAR-2006 15:01  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : ICVZC242,1,1,2,,STD02  
 Misc Info : Z032406I,8260B LM,  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z032406I.b/8260B LM.m  
 Meth Date : 24-Mar-2006 17:26 tillerm Quant Type: ISTD  
 Cal Date : 24-MAR-2006 15:01 Cal File: icvzc242.d  
 Als bottle: 7 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT SIG | MASS   | RT     | EXP RT  | REL RT  | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-----------|--------|--------|---------|---------|----------|--------------------|-------------------|
|                                |           |        |        |         |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene              | 96        | 5.667  | 5.666  | (1.000) | 1042279 | 10.0000  |                    |                   |
| * 2 Chlorobenzene-d5           | 119       | 8.928  | 8.927  | (1.000) | 191654  | 10.0000  |                    |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152       | 11.483 | 11.488 | (1.000) | 232924  | 10.0000  |                    |                   |
| \$ 4 Dibromofluoromethane      | 113       | 4.822  | 4.826  | (0.851) | 30198   | 2.00000  | 1.8082             |                   |
| \$ 5 1,2-Dichloroethane-d4     | 65        | 5.235  | 5.228  | (0.924) | 27016   | 2.00000  | 1.8706             |                   |
| \$ 6 Toluene-d8                | 98        | 7.456  | 7.455  | (0.835) | 158677  | 2.00000  | 1.8843             |                   |
| \$ 7 4-Bromofluorobenzene      | 95        | 10.120 | 10.119 | (0.881) | 44588   | 2.00000  | 1.8982             |                   |
| M 8 1,2-Dichloroethene (total) | 96        |        |        |         | 114162  | 4.00000  | 4.1456             |                   |
| M 9 Xylene (total)             | 106       |        |        |         | 288842  | 6.00000  | 6.2524             |                   |
| 10 Dichlorodifluoromethane     | 85        | 1.013  | 1.012  | (0.179) | 45631   | 2.00000  | 1.8099             |                   |
| 11 Chloromethane (spcc)        | 50        | 1.123  | 1.128  | (0.198) | 175396  | 2.00000  | 2.2972             |                   |
| 12 Vinyl Chloride (ccc)        | 62        | 1.196  | 1.195  | (0.211) | 83542   | 2.00000  | 2.0298             |                   |
| 13 *1,3-Butadiene              | 39        | 1.220  | 1.219  | (0.215) | 79900   | 2.00000  | 2.1172             |                   |
| 15 Bromomethane                | 94        | 1.397  | 1.414  | (0.246) | 10576   | 2.00000  | 1.3688             |                   |
| 16 Chloroethane                | 64        | 1.482  | 1.481  | (0.261) | 40877   | 2.00000  | 2.0783             |                   |



Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc242.d  
Report Date: 24-Mar-2006 17:29

| Compounds                    | QUANT SIG |       |        |         |          | AMOUNTS            |                   |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                        | =====     | ==    | =====  | =====   | =====    | =====              | =====             |
| 17 *Vinyl Bromide            | 106       | 1.610 | 1.614  | (0.284) | 32629    | 2.00000            | 1.9214            |
| 18 Trichlorofluoromethane    | 101       | 1.670 | 1.669  | (0.295) | 63188    | 2.00000            | 1.9952            |
| 19 *2-Chloropropane          | 43        | 1.950 | 1.949  | (0.344) | 143068   | 2.00000            | 2.0541            |
| 20 1,1-Dichloroethene (ccc)  | 96        | 2.066 | 2.065  | (0.365) | 45086    | 2.00000            | 1.9752            |
| 21 *Freon 113                | 151       | 2.078 | 2.083  | (0.367) | 36456    | 2.00000            | 2.0338            |
| 22 Acetone                   | 43        | 2.121 | 2.125  | (0.374) | 16702    | 8.00000            | 8.2259            |
| 23 *Iodomethane              | 142       | 2.181 | 2.180  | (0.385) | 36660    | 2.00000            | 1.7286            |
| 24 Carbon Disulfide          | 76        | 2.230 | 2.229  | (0.394) | 167705   | 2.00000            | 2.0868            |
| 26 *Acetonitrile             | 40        | 2.364 | 2.369  | (0.417) | 17578    | 40.0000            | 38.032            |
| 27 Methylene Chloride        | 84        | 2.510 | 2.503  | (0.443) | 35442    | 2.00000            | 2.0257            |
| 28 *t-butanol                | 59        | 2.699 | 2.697  | (0.476) | 25226    | 100.000            | 80.276            |
| 29 *Acrylonitrile            | 53        | 2.759 | 2.758  | (0.487) | 158917   | 40.0000            | 40.625            |
| 30 trans-1,2-Dichloroethene  | 96        | 2.790 | 2.795  | (0.492) | 61229    | 2.00000            | 2.1398            |
| 31 *MTBE                     | 73        | 2.826 | 2.819  | (0.499) | 50021    | 2.00000            | 2.0103            |
| 32 *Hexane                   | 57        | 3.137 | 3.135  | (0.553) | 302884   | 4.00000            | 4.1032            |
| 33 1,1-Dichloroethane (spcc) | 63        | 3.276 | 3.275  | (0.578) | 136434   | 2.00000            | 2.0713            |
| 34 *Vinyl Acetate            | 86        | 3.398 | 3.409  | (0.600) | 4364     | 4.00000            | 3.4874            |
| 35 2,2-Dichloropropane       | 77        | 4.092 | 4.096  | (0.722) | 63942    | 2.00000            | 1.9366            |
| 36 cis 1,2-Dichloroethene    | 96        | 4.110 | 4.115  | (0.725) | 52933    | 2.00000            | 2.0059            |
| 37 2-Butanone                | 43        | 4.171 | 4.169  | (0.736) | 29763    | 8.00000            | 7.5488            |
| 38 Bromochloromethane        | 128       | 4.445 | 4.449  | (0.784) | 14500    | 2.00000            | 1.9972            |
| 39 *THF                      | 42        | 4.536 | 4.528  | (0.800) | 19029    | 8.00000            | 7.6972            |
| 40 Chloroform (ccc)          | 83        | 4.615 | 4.607  | (0.814) | 77199    | 2.00000            | 2.0663            |
| 41 1,1,1-Trichloroethane     | 97        | 4.816 | 4.814  | (0.850) | 61867    | 2.00000            | 1.8989            |
| 42 Carbon Tetrachloride      | 117       | 5.035 | 5.039  | (0.888) | 29577    | 2.00000            | 1.5327            |
| 43 1,1-Dichloropropene       | 75        | 5.041 | 5.039  | (0.889) | 72633    | 2.00000            | 2.0338            |
| 44 Benzene                   | 78        | 5.290 | 5.295  | (0.933) | 211893   | 2.00000            | 2.0539            |
| 45 1,2-Dichloroethane        | 62        | 5.327 | 5.325  | (0.940) | 45896    | 2.00000            | 2.1167            |
| 46 Trichloroethene           | 130       | 6.105 | 6.110  | (1.077) | 60600    | 2.00000            | 2.0904            |
| 47 1,2-Dichloropropane (ccc) | 63        | 6.343 | 6.341  | (1.119) | 58691    | 2.00000            | 2.0866            |
| 48 *Methyl Methacrylate      | 41        | 6.574 | 6.572  | (1.160) | 16333    | 2.00000            | 1.8063            |
| 49 Dibromomethane            | 93        | 6.470 | 6.469  | (1.142) | 11936    | 2.00000            | 2.0487            |
| 50 Bromodichloromethane      | 83        | 6.689 | 6.688  | (1.180) | 28405    | 2.00000            | 1.8731            |
| 51 *2-Chloroethylvinylether  | 63        | 7.066 | 7.065  | (1.247) | 26217    | 4.00000            | 4.0990            |
| 52 cis-1,3-Dichloropropene   | 75        | 7.182 | 7.181  | (1.267) | 43032    | 2.00000            | 1.9080            |
| 53 4-Methyl-2-pentanone      | 43        | 7.377 | 7.375  | (1.302) | 73254    | 8.00000            | 8.0133            |
| 54 Toluene (ccc)             | 91        | 7.523 | 7.528  | (0.843) | 224013   | 2.00000            | 2.0536            |
| 55 trans-1,3-Dichloropropene | 75        | 7.784 | 7.783  | (0.872) | 25501    | 2.00000            | 1.7840            |
| 56 *Ethyl Methacrylate       | 69        | 7.930 | 7.929  | (0.888) | 16245    | 2.00000            | 1.7809            |
| 57 1,1,2-Trichloroethane     | 97        | 7.955 | 7.959  | (0.891) | 17186    | 2.00000            | 1.9473            |
| 58 Tetrachloroethene         | 164       | 8.095 | 8.093  | (0.907) | 46062    | 2.00000            | 2.0178            |
| 59 1,3-Dichloropropane       | 76        | 8.119 | 8.118  | (0.909) | 31131    | 2.00000            | 2.0067            |
| 60 2-Hexanone                | 43        | 8.253 | 8.251  | (0.924) | 45569    | 8.00000            | 7.7079            |
| 61 Chlorodibromomethane      | 129       | 8.344 | 8.349  | (0.935) | 10189    | 2.00000            | 1.4040            |
| 62 1,2-Dibromoethane         | 107       | 8.435 | 8.434  | (0.945) | 16508    | 2.00000            | 2.0928            |
| 63 Chlorobenzene (spcc)      | 112       | 8.958 | 8.957  | (1.003) | 126301   | 2.00000            | 2.0712            |
| 64 1,1,1,2-Tetrachloroethane | 131       | 9.050 | 9.054  | (1.014) | 17364    | 2.00000            | 1.5502            |

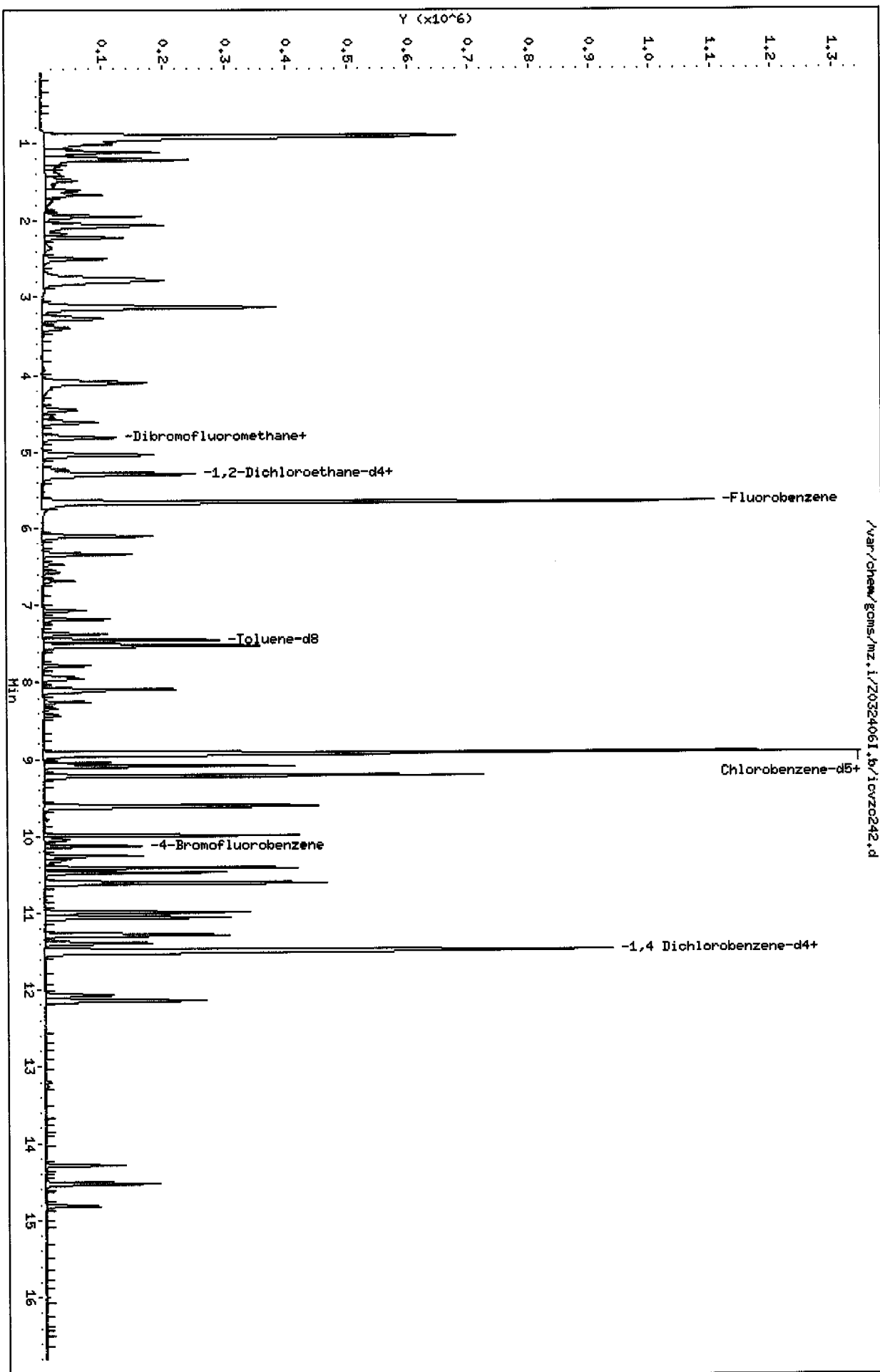
Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc242.d

Report Date: 24-Mar-2006 17:29

| Compounds                           | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|-------------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                     | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                               | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 65 Ethylbenzene (ccc)               | 106       | 9.092  | 9.091  | (1.018) | 81220    | 2.00000            | 2.0640            |
| 66 m&p-Xylene                       | 106       | 9.220  | 9.219  | (1.033) | 201864   | 4.00000            | 4.1826            |
| 67 o-Xylene                         | 106       | 9.609  | 9.608  | (1.076) | 86977    | 2.00000            | 2.0698            |
| 68 Styrene                          | 104       | 9.622  | 9.620  | (1.078) | 122418   | 2.00000            | 2.0729            |
| 69 Bromoform (spcc)                 | 173       | 9.780  | 9.778  | (1.095) | 3151     | 2.00000            | 1.3166            |
| 70 Isopropylbenzene                 | 105       | 9.987  | 9.991  | (1.119) | 242948   | 2.00000            | 2.0093            |
| 71 *cis-1,4-dichloro-2-butene       | 88        | 10.053 | 10.052 | (1.126) | 1185     | 2.00000            | 1.0057            |
| 72 Bromobenzene                     | 156       | 10.254 | 10.253 | (1.149) | 37563    | 2.00000            | 2.0994            |
| 73 1,1,2,2-Tetrachloroethane (sp)   | 83        | 10.291 | 10.289 | (1.153) | 11797    | 2.00000            | 1.8064            |
| 74 1,2,3-Trichloropropane           | 110       | 10.315 | 10.314 | (0.898) | 4083     | 2.00000            | 2.0385            |
| 75 *trans-1,4-dichloro-2-butene     | 53        | 10.345 | 10.350 | (0.901) | 3994     | 2.00000            | 1.5640            |
| 76 n-Propylbenzene                  | 91        | 10.406 | 10.405 | (0.906) | 284918   | 2.00000            | 2.0179            |
| 77 2-Chlorotoluene                  | 91        | 10.473 | 10.472 | (0.912) | 153066   | 2.00000            | 2.0506            |
| 78 1,3,5-Trimethylbenzene           | 105       | 10.613 | 10.612 | (0.924) | 192126   | 2.00000            | 2.0145            |
| 79 4-Chlorotoluene                  | 91        | 10.595 | 10.594 | (0.923) | 162121   | 2.00000            | 2.0333            |
| 80 tert-Butylbenzene                | 119       | 10.990 | 10.989 | (0.957) | 171218   | 2.00000            | 2.0207            |
| 81 1,2,4-Trimethylbenzene           | 105       | 11.051 | 11.050 | (0.962) | 181710   | 2.00000            | 2.0435            |
| 82 sec-Butylbenzene                 | 105       | 11.276 | 11.281 | (0.982) | 254436   | 2.00000            | 2.0429            |
| 83 1,3-Dichlorobenzene              | 146       | 11.386 | 11.384 | (0.992) | 81202    | 2.00000            | 1.9954            |
| 84 p-Isopropyltoluene               | 119       | 11.501 | 11.500 | (1.002) | 219108   | 2.00000            | 1.9863            |
| 85 1,4-Dichlorobenzene              | 146       | 11.514 | 11.518 | (1.003) | 78049    | 2.00000            | 2.0375            |
| 86 1,2-Dichlorobenzene              | 146       | 12.079 | 12.078 | (1.052) | 58473    | 2.00000            | 1.9510            |
| 87 n-Butylbenzene                   | 91        | 12.140 | 12.139 | (1.057) | 193408   | 2.00000            | 1.9821            |
| 88 1,2-Dibromo-3-chloropropane      | 157       | 13.253 | 13.258 | (1.154) | 1118     | 2.00000            | 1.3150            |
| 89 1,2,4-Trichlorobenzene           | 180       | 14.294 | 14.292 | (1.245) | 36423    | 2.00000            | 1.9943            |
| 90 Hexachlorobutadiene              | 225       | 14.525 | 14.524 | (1.265) | 34860    | 2.00000            | 2.0216            |
| 91 Napthalene                       | 128       | 14.543 | 14.542 | (1.266) | 36283    | 2.00000            | 1.9154            |
| 92 1,2,3-Trichlorobenzene           | 180       | 14.817 | 14.816 | (1.290) | 24284    | 2.00000            | 2.0321            |
| M 93 *1,4-dichloro-2-butene (total) | 53        |        |        |         | 5179     | 4.00000            | 2.5697            |

Data File: /var/chem/gcms/mz.i/20324061.b/1ovzo242.d  
Date : 24-MAR-2006 15:01  
Client ID: STD02  
Sample Info: ICVZC242.1.1.2., STD02  
Purge Volume: 25.0  
Column phase: J+W 624

Instrument: mz.i  
Operator: 22980  
Column diameter: 0.18



Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc243.d  
 Report Date: 24-Mar-2006 17:29

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z032406I.b/icvzc243.d  
 Lab Smp Id: ICVZC243 Client Smp ID: STD10  
 Inj Date : 24-MAR-2006 15:24  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : ICVZC243,1,1,3,,STD10  
 Misc Info : Z032406I,8260B LM,  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z032406I.b/8260B LM.m  
 Meth Date : 24-Mar-2006 17:26 tillerm Quant Type: ISTD  
 Cal Date : 24-MAR-2006 15:24 Cal File: icvzc243.d  
 Als bottle: 1 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT | SIG | RT     | EXP RT | REL RT  | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-------|-----|--------|--------|---------|----------|--------------------|-------------------|
|                                |       |     |        |        |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene              | 96    |     | 5.666  | 5.666  | (1.000) | 1140841  | 10.0000            |                   |
| * 2 Chlorobenzene-d5           | 119   |     | 8.927  | 8.927  | (1.000) | 197405   | 10.0000            |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152   |     | 11.488 | 11.488 | (1.000) | 234469   | 10.0000            |                   |
| \$ 4 Dibromofluoromethane      | 113   |     | 4.826  | 4.826  | (0.852) | 184955   | 10.0000            | 10.118            |
| \$ 5 1,2-Dichloroethane-d4     | 65    |     | 5.228  | 5.228  | (0.923) | 158691   | 10.0000            | 10.039            |
| \$ 6 Toluene-d8                | 98    |     | 7.455  | 7.455  | (0.835) | 885681   | 10.0000            | 10.211            |
| \$ 7 4-Bromofluorobenzene      | 95    |     | 10.119 | 10.119 | (0.881) | 231398   | 10.0000            | 9.7858            |
| M 8 1,2-Dichloroethene (total) | 96    |     |        |        |         | 594665   | 20.0000            | 19.776            |
| M 9 Xylene (total)             | 106   |     |        |        |         | 1451944  | 30.0000            | 30.538            |
| 10 Dichlorodifluoromethane     | 85    |     | 1.012  | 1.012  | (0.179) | 285113   | 10.0000            | 10.331            |
| 11 Chloromethane (spcc)        | 50    |     | 1.128  | 1.128  | (0.199) | 767002   | 10.0000            | 9.1778            |
| 12 Vinyl Chloride (ccc)        | 62    |     | 1.195  | 1.195  | (0.211) | 453855   | 10.0000            | 10.074            |
| 13 *1,3-Butadiene              | 39    |     | 1.219  | 1.219  | (0.215) | 400598   | 10.0000            | 9.6982            |
| 15 Bromomethane                | 94    |     | 1.414  | 1.414  | (0.249) | 91856    | 10.0000            | 10.535            |
| 16 Chloroethane                | 64    |     | 1.481  | 1.481  | (0.261) | 205980   | 10.0000            | 9.5679            |

Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc243.d  
Report Date: 24-Mar-2006 17:29

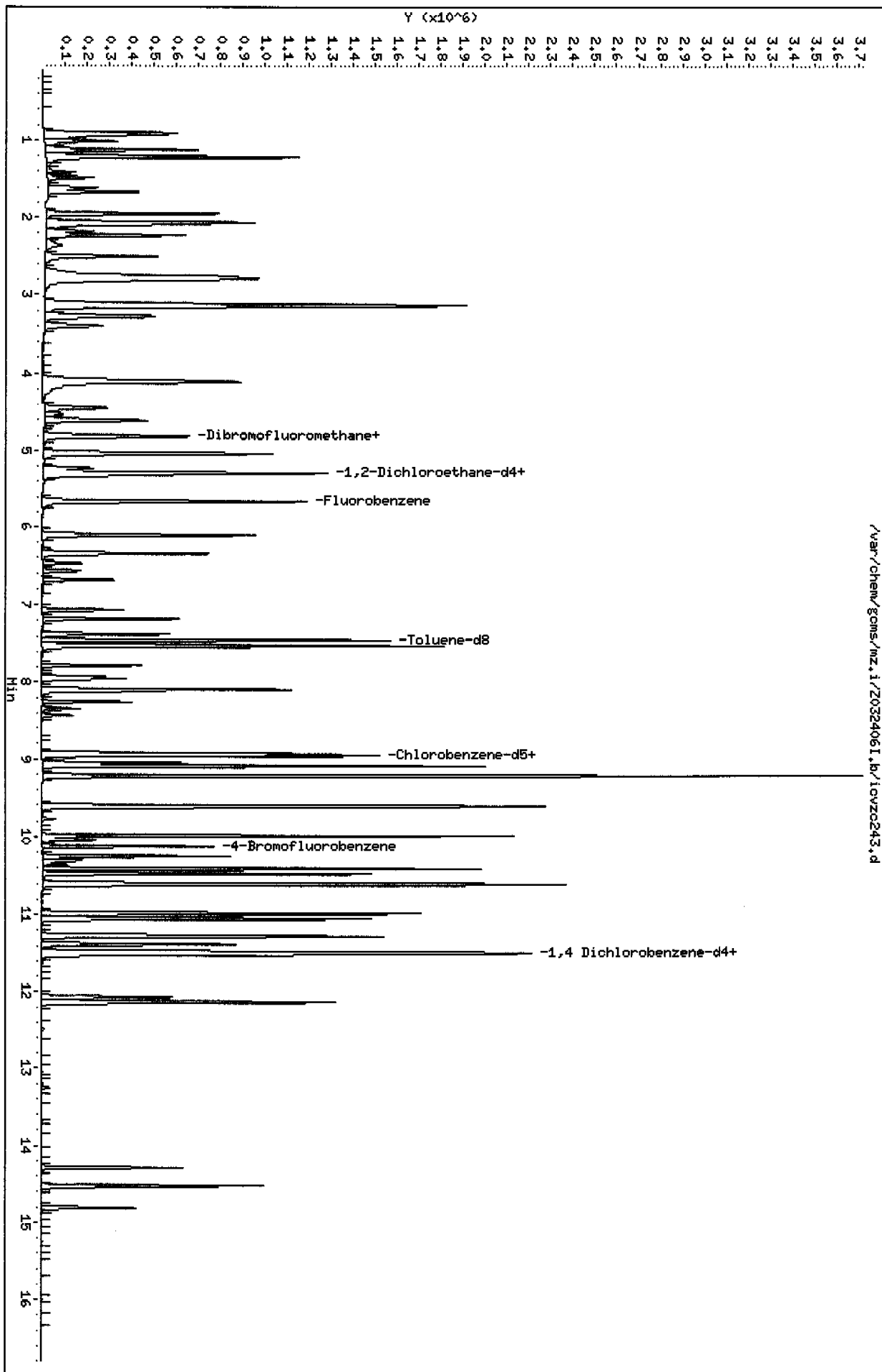
| Compounds                    | QUANT SIG |       |        |         | RESPONSE | AMOUNTS            |                   |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                              | MASS      | RT    | EXP RT | REL RT  |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                        | =====     | ==    | =====  | =====   | =====    | =====              | =====             |
| 17 *Vinyl Bromide            | 106       | 1.614 | 1.614  | (0.285) | 188883   | 10.0000            | 10.161            |
| 18 Trichlorofluoromethane    | 101       | 1.669 | 1.669  | (0.295) | 339509   | 10.0000            | 9.7942            |
| 19 *2-Chloropropane          | 43        | 1.949 | 1.949  | (0.344) | 752430   | 10.0000            | 9.8699            |
| 20 1,1-Dichloroethene (ccc)  | 96        | 2.065 | 2.065  | (0.364) | 248862   | 10.0000            | 9.9606            |
| 21 *Freon 113                | 151       | 2.083 | 2.083  | (0.368) | 196569   | 10.0000            | 10.019            |
| 22 Acetone                   | 43        | 2.125 | 2.125  | (0.375) | 96858    | 40.0000            | 43.581            |
| 23 *Iodomethane              | 142       | 2.180 | 2.180  | (0.385) | 248702   | 10.0000            | 10.714            |
| 24 Carbon Disulfide          | 76        | 2.229 | 2.229  | (0.393) | 862486   | 10.0000            | 9.8052            |
| 26 *Acetonitrile             | 40        | 2.369 | 2.369  | (0.418) | 108319   | 200.000            | 214.10            |
| 27 Methylene Chloride        | 84        | 2.503 | 2.503  | (0.442) | 201661   | 10.0000            | 10.530            |
| 28 *t-butanol                | 59        | 2.697 | 2.697  | (0.476) | 159989   | 500.000            | 465.13            |
| 29 *Acrylonitrile            | 53        | 2.758 | 2.758  | (0.487) | 838642   | 200.000            | 195.86            |
| 30 trans-1,2-Dichloroethene  | 96        | 2.795 | 2.795  | (0.493) | 301342   | 10.0000            | 9.6212            |
| 31 *MTBE                     | 73        | 2.819 | 2.819  | (0.498) | 279751   | 10.0000            | 10.271            |
| 32 *Hexane                   | 57        | 3.135 | 3.135  | (0.553) | 1597780  | 20.0000            | 19.776            |
| 33 1,1-Dichloroethane (spcc) | 63        | 3.275 | 3.275  | (0.578) | 722506   | 10.0000            | 10.021            |
| 34 *Vinyl Acetate            | 86        | 3.409 | 3.409  | (0.602) | 30105    | 20.0000            | 21.977            |
| 35 2,2-Dichloropropane       | 77        | 4.096 | 4.096  | (0.723) | 372783   | 10.0000            | 10.315            |
| 36 cis 1,2-Dichloroethene    | 96        | 4.115 | 4.115  | (0.726) | 293323   | 10.0000            | 10.155            |
| 37 2-Butanone                | 43        | 4.169 | 4.169  | (0.736) | 165016   | 40.0000            | 38.237            |
| 38 Bromochloromethane        | 128       | 4.449 | 4.449  | (0.785) | 85086    | 10.0000            | 10.707            |
| 39 *THF                      | 42        | 4.528 | 4.528  | (0.799) | 105470   | 40.0000            | 38.976            |
| 40 Chloroform (ccc)          | 83        | 4.607 | 4.607  | (0.813) | 410095   | 10.0000            | 10.028            |
| 41 1,1,1-Trichloroethane     | 97        | 4.814 | 4.814  | (0.850) | 365986   | 10.0000            | 10.263            |
| 42 Carbon Tetrachloride      | 117       | 5.039 | 5.039  | (0.889) | 222376   | 10.0000            | 10.528            |
| 43 1,1-Dichloropropene       | 75        | 5.039 | 5.039  | (0.889) | 391392   | 10.0000            | 10.012            |
| 44 Benzene                   | 78        | 5.295 | 5.295  | (0.934) | 1091471  | 10.0000            | 9.6658            |
| 45 1,2-Dichloroethane        | 62        | 5.325 | 5.325  | (0.940) | 241132   | 10.0000            | 10.160            |
| 46 Trichloroethene           | 130       | 6.110 | 6.110  | (1.078) | 318914   | 10.0000            | 10.051            |
| 47 1,2-Dichloropropane (ccc) | 63        | 6.341 | 6.341  | (1.119) | 309816   | 10.0000            | 10.063            |
| 48 *Methyl Methacrylate      | 41        | 6.572 | 6.572  | (1.160) | 102519   | 10.0000            | 10.358            |
| 49 Dibromomethane            | 93        | 6.469 | 6.469  | (1.142) | 67205    | 10.0000            | 10.538            |
| 50 Bromodichloromethane      | 83        | 6.688 | 6.688  | (1.180) | 180001   | 10.0000            | 10.844            |
| 51 *2-Chloroethylvinylether  | 63        | 7.065 | 7.065  | (1.247) | 137033   | 20.0000            | 19.574            |
| 52 cis-1,3-Dichloropropene   | 75        | 7.181 | 7.181  | (1.267) | 247874   | 10.0000            | 10.041            |
| 53 4-Methyl-2-pentanone      | 43        | 7.375 | 7.375  | (1.302) | 390670   | 40.0000            | 39.043            |
| 54 Toluene (ccc)             | 91        | 7.528 | 7.528  | (0.843) | 1138336  | 10.0000            | 10.131            |
| 55 trans-1,3-Dichloropropene | 75        | 7.783 | 7.783  | (0.872) | 160005   | 10.0000            | 10.867            |
| 56 *Ethyl Methacrylate       | 69        | 7.929 | 7.929  | (0.888) | 101267   | 10.0000            | 10.778            |
| 57 1,1,2-Trichloroethane     | 97        | 7.959 | 7.959  | (0.892) | 94957    | 10.0000            | 10.446            |
| 58 Tetrachloroethene         | 164       | 8.093 | 8.093  | (0.907) | 235588   | 10.0000            | 10.020            |
| 59 1,3-Dichloropropane       | 76        | 8.118 | 8.118  | (0.909) | 162203   | 10.0000            | 10.151            |
| 60 2-Hexanone                | 43        | 8.251 | 8.251  | (0.924) | 252723   | 40.0000            | 41.502            |
| 61 Chlorodibromomethane      | 129       | 8.349 | 8.349  | (0.935) | 77270    | 10.0000            | 10.337            |
| 62 1,2-Dibromoethane         | 107       | 8.434 | 8.434  | (0.945) | 83107    | 10.0000            | 10.228            |
| 63 Chlorobenzene (spcc)      | 112       | 8.957 | 8.957  | (1.003) | 641043   | 10.0000            | 10.206            |
| 64 1,1,1,2-Tetrachloroethane | 131       | 9.054 | 9.054  | (1.014) | 132522   | 10.0000            | 11.487            |

Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc243.d  
 Report Date: 24-Mar-2006 17:29

| Compounds                          | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|------------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                    | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                              | ----      | ==     | =====  | =====   | =====    | =====              | =====             |
| 65 Ethylbenzene (ccc)              | 106       | 9.091  | 9.091  | (1.018) | 413627   | 10.0000            | 10.205            |
| 66 m&p-Xylene                      | 106       | 9.219  | 9.219  | (1.033) | 1006655  | 20.0000            | 20.250            |
| 67 o-Xylene                        | 106       | 9.608  | 9.608  | (1.076) | 445288   | 10.0000            | 10.288            |
| 68 Styrene                         | 104       | 9.620  | 9.620  | (1.078) | 611863   | 10.0000            | 10.059            |
| 69 Bromoform (spcc)                | 173       | 9.778  | 9.778  | (1.095) | 23227    | 10.0000            | 9.4227            |
| 70 Isopropylbenzene                | 105       | 9.991  | 9.991  | (1.119) | 1257466  | 10.0000            | 10.097            |
| 71 *cis-1,4-dichloro-2-butene      | 88        | 10.052 | 10.052 | (1.126) | 12831    | 10.0000            | 10.568            |
| 72 Bromobenzene                    | 156       | 10.253 | 10.253 | (1.149) | 188992   | 10.0000            | 10.255            |
| 73 1,1,2,2-Tetrachloroethane(sp)   | 83        | 10.289 | 10.289 | (1.153) | 70145    | 10.0000            | 10.428            |
| 74 1,2,3-Trichloropropane          | 110       | 10.314 | 10.314 | (0.898) | 19928    | 10.0000            | 9.8818            |
| 75 *trans-1,4-dichloro-2-butene    | 53        | 10.350 | 10.350 | (0.901) | 27019    | 10.0000            | 10.510            |
| 76 n-Propylbenzene                 | 91        | 10.405 | 10.405 | (0.906) | 1451976  | 10.0000            | 10.216            |
| 77 2-Chlorotoluene                 | 91        | 10.472 | 10.472 | (0.912) | 754561   | 10.0000            | 10.042            |
| 78 1,3,5-Trimethylbenzene          | 105       | 10.612 | 10.612 | (0.924) | 974655   | 10.0000            | 10.152            |
| 79 4-Chlorotoluene                 | 91        | 10.594 | 10.594 | (0.922) | 833995   | 10.0000            | 10.391            |
| 80 tert-Butylbenzene               | 119       | 10.989 | 10.989 | (0.957) | 874403   | 10.0000            | 10.252            |
| 81 1,2,4-Trimethylbenzene          | 105       | 11.050 | 11.050 | (0.962) | 909993   | 10.0000            | 10.166            |
| 82 sec-Butylbenzene                | 105       | 11.281 | 11.281 | (0.982) | 1280984  | 10.0000            | 10.217            |
| 83 1,3-Dichlorobenzene             | 146       | 11.384 | 11.384 | (0.991) | 411236   | 10.0000            | 10.038            |
| 84 p-Isopropyltoluene              | 119       | 11.500 | 11.500 | (1.001) | 1117278  | 10.0000            | 10.062            |
| 85 1,4-Dichlorobenzene             | 146       | 11.518 | 11.518 | (1.003) | 377966   | 10.0000            | 9.8021            |
| 86 1,2-Dichlorobenzene             | 146       | 12.078 | 12.078 | (1.051) | 313334   | 10.0000            | 10.386            |
| 87 n-Butylbenzene                  | 91        | 12.139 | 12.139 | (1.057) | 986769   | 10.0000            | 10.046            |
| 88 1,2-Dibromo-3-chloropropane     | 157       | 13.258 | 13.258 | (1.154) | 9124     | 10.0000            | 10.656            |
| 89 1,2,4-Trichlorobenzene          | 180       | 14.292 | 14.292 | (1.244) | 183193   | 10.0000            | 9.9645            |
| 90 Hexachlorobutadiene             | 225       | 14.524 | 14.524 | (1.264) | 174520   | 10.0000            | 10.054            |
| 91 Napthalene                      | 128       | 14.542 | 14.542 | (1.266) | 185820   | 10.0000            | 9.7450            |
| 92 1,2,3-Trichlorobenzene          | 180       | 14.816 | 14.816 | (1.290) | 118336   | 10.0000            | 9.8369            |
| M 93 *1,4-dichloro-2-butene(total) | 53        |        |        |         | 39851    | 20.0000            | 21.079            |

Data File: /var/chem/gcms/mz.i/20324061.b/ievzc243.d  
Date : 24-MAR-2006 15:24  
Client ID: STD10  
Sample Info: ICVZC243.1.1.3,,STD10  
Purge Volume: 25.0  
Column phase: J+W 624

Instrument: mz.i  
Operator: 22980  
Column diameter: 0.18



Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc244.d  
 Report Date: 24-Mar-2006 17:29

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z032406I.b/icvzc244.d  
 Lab Smp Id: ICVZC244 Client Smp ID: STD20  
 Inj Date : 24-MAR-2006 15:48  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : ICVZC244,1,1,4,,STD20  
 Misc Info : Z032406I,8260B\_LM,  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z032406I.b/8260B\_LM.m  
 Meth Date : 24-Mar-2006 17:26 tillerm Quant Type: ISTD  
 Cal Date : 24-MAR-2006 15:48 Cal File: icvzc244.d  
 Als bottle: 2 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT SIG |        |        |         | AMOUNTS  |                    |                   |
|--------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| *****                          | ----      | ==     | =====  | =====   | =====    | =====              | =====             |
| * 1 Fluorobenzene              | 96        | 5.667  | 5.666  | (1.000) | 1107007  | 10.0000            |                   |
| * 2 Chlorobenzene-d5           | 119       | 8.934  | 8.927  | (1.000) | 193728   | 10.0000            |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152       | 11.483 | 11.488 | (1.000) | 228655   | 10.0000            |                   |
| \$ 4 Dibromofluoromethane      | 113       | 4.821  | 4.826  | (0.851) | 380475   | 20.0000            | 21.449            |
| \$ 5 1,2-Dichloroethane-d4     | 65        | 5.229  | 5.228  | (0.923) | 314936   | 20.0000            | 20.532            |
| \$ 6 Toluene-d8                | 98        | 7.455  | 7.455  | (0.835) | 1773741  | 20.0000            | 20.838            |
| \$ 7 4-Bromofluorobenzene      | 95        | 10.120 | 10.119 | (0.881) | 478911   | 20.0000            | 20.768            |
| M 8 1,2-Dichloroethene (total) | 96        |        |        |         | 1203524  | 40.0000            | 41.215            |
| M 9 Xylene (total)             | 106       |        |        |         | 2895253  | 60.0000            | 62.038            |
| 10 Dichlorodifluoromethane     | 85        | 1.013  | 1.012  | (0.179) | 581459   | 20.0000            | 21.714            |
| 11 Chloromethane (spcc)        | 50        | 1.123  | 1.128  | (0.198) | 1410409  | 20.0000            | 17.392            |
| 12 Vinyl Chloride (ccc)        | 62        | 1.196  | 1.195  | (0.211) | 921392   | 20.0000            | 21.078            |
| 13 *1,3-Butadiene              | 39        | 1.220  | 1.219  | (0.215) | 848286   | 20.0000            | 22.478            |
| 15 Bromomethane                | 94        | 1.415  | 1.414  | (0.250) | 213182   | 20.0000            | 29.129            |
| 16 Chloroethane                | 64        | 1.481  | 1.481  | (0.261) | 422504   | 20.0000            | 20.226            |



Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc244.d  
Report Date: 24-Mar-2006 17:29

| Compounds                    | QUANT SIG |       |        |         | RESPONSE | AMOUNTS            |                   |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                              | MASS      | RT    | EXP RT | REL RT  |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| -----                        | ----      | --    | -----  | -----   | -----    | -----              | -----             |
| 17 *Vinyl Bromide            | 106       | 1.615 | 1.614  | (0.285) | 393154   | 20.0000            | 21.797            |
| 18 Trichlorofluoromethane    | 101       | 1.664 | 1.669  | (0.294) | 731000   | 20.0000            | 21.732            |
| 19 *2-Chloropropane          | 43        | 1.950 | 1.949  | (0.344) | 1533951  | 20.0000            | 20.736            |
| 20 1,1-Dichloroethene (ccc)  | 96        | 2.065 | 2.065  | (0.364) | 510722   | 20.0000            | 20.297            |
| 21 *Freon 113                | 151       | 2.084 | 2.083  | (0.368) | 393884   | 20.0000            | 20.690            |
| 22 Acetone                   | 43        | 2.126 | 2.125  | (0.375) | 175036   | 80.0000            | 99.119            |
| 23 *Iodomethane              | 142       | 2.181 | 2.180  | (0.385) | 547814   | 20.0000            | 24.320            |
| 24 Carbon Disulfide          | 76        | 2.230 | 2.229  | (0.393) | 1746219  | 20.0000            | 20.459            |
| 26 *Acetonitrile             | 40        | 2.370 | 2.369  | (0.418) | 204586   | 400.000            | 416.74            |
| 27 Methylene Chloride        | 84        | 2.510 | 2.503  | (0.443) | 352407   | 20.0000            | 19.113            |
| 28 *t-butanol                | 59        | 2.704 | 2.697  | (0.477) | 407598   | 1000.00            | 1221.2            |
| 29 *Acrylonitrile            | 53        | 2.759 | 2.758  | (0.487) | 1678311  | 400.000            | 403.95            |
| 30 trans-1,2-Dichloroethene  | 96        | 2.795 | 2.795  | (0.493) | 621701   | 20.0000            | 20.456            |
| 31 *MTBE                     | 73        | 2.820 | 2.819  | (0.498) | 555537   | 20.0000            | 21.021            |
| 32 *Hexane                   | 57        | 3.136 | 3.135  | (0.553) | 3240261  | 40.0000            | 41.330 (A)        |
| 33 1,1-Dichloroethane (spcc) | 63        | 3.276 | 3.275  | (0.578) | 1443852  | 20.0000            | 20.638            |
| 34 *Vinyl Acetate            | 86        | 3.404 | 3.409  | (0.601) | 60254    | 40.0000            | 45.329            |
| 35 2,2-Dichloropropane       | 77        | 4.097 | 4.096  | (0.723) | 801872   | 20.0000            | 22.934            |
| 36 cis 1,2-Dichloroethene    | 96        | 4.116 | 4.115  | (0.726) | 581823   | 20.0000            | 20.759            |
| 37 2-Butanone                | 43        | 4.176 | 4.169  | (0.737) | 350937   | 80.0000            | 83.802            |
| 38 Bromochloromethane        | 128       | 4.450 | 4.449  | (0.785) | 161172   | 20.0000            | 20.901            |
| 39 *THF                      | 42        | 4.529 | 4.528  | (0.799) | 213431   | 80.0000            | 81.284            |
| 40 Chloroform (ccc)          | 83        | 4.614 | 4.607  | (0.814) | 830553   | 20.0000            | 20.930            |
| 41 1,1,1-Trichloroethane     | 97        | 4.815 | 4.814  | (0.850) | 777727   | 20.0000            | 22.475            |
| 42 Carbon Tetrachloride      | 117       | 5.034 | 5.039  | (0.888) | 551865   | 20.0000            | 26.925            |
| 43 1,1-Dichloropropene       | 75        | 5.046 | 5.039  | (0.890) | 789759   | 20.0000            | 20.820            |
| 44 Benzene                   | 78        | 5.296 | 5.295  | (0.934) | 2165258  | 20.0000            | 19.761            |
| 45 1,2-Dichloroethane        | 62        | 5.326 | 5.325  | (0.940) | 478903   | 20.0000            | 20.795            |
| 46 Trichloroethene           | 130       | 6.111 | 6.110  | (1.078) | 651969   | 20.0000            | 21.175            |
| 47 1,2-Dichloropropane (ccc) | 63        | 6.348 | 6.341  | (1.120) | 620611   | 20.0000            | 20.774            |
| 48 *Methyl Methacrylate      | 41        | 6.573 | 6.572  | (1.160) | 211954   | 20.0000            | 22.069            |
| 49 Dibromomethane            | 93        | 6.470 | 6.469  | (1.142) | 133319   | 20.0000            | 21.544            |
| 50 Bromodichloromethane      | 83        | 6.689 | 6.688  | (1.180) | 389855   | 20.0000            | 24.205            |
| 51 *2-Chloroethylvinylether  | 63        | 7.066 | 7.065  | (1.247) | 276224   | 40.0000            | 40.662            |
| 52 cis-1,3-Dichloropropene   | 75        | 7.182 | 7.181  | (1.267) | 523569   | 20.0000            | 21.857            |
| 53 4-Methyl-2-pentanone      | 43        | 7.376 | 7.375  | (1.302) | 805809   | 80.0000            | 82.993            |
| 54 Toluene (ccc)             | 91        | 7.528 | 7.528  | (0.843) | 2262138  | 20.0000            | 20.515            |
| 55 trans-1,3-Dichloropropene | 75        | 7.784 | 7.783  | (0.871) | 345095   | 20.0000            | 23.883            |
| 56 *Ethyl Methacrylate       | 69        | 7.936 | 7.929  | (0.888) | 211070   | 20.0000            | 22.892            |
| 57 1,1,2-Trichloroethane     | 97        | 7.960 | 7.959  | (0.891) | 190780   | 20.0000            | 21.385            |
| 58 Tetrachloroethene         | 164       | 8.094 | 8.093  | (0.906) | 464292   | 20.0000            | 20.121            |
| 59 1,3-Dichloropropane       | 76        | 8.119 | 8.118  | (0.909) | 319536   | 20.0000            | 20.377            |
| 60 2-Hexanone                | 43        | 8.252 | 8.251  | (0.924) | 514176   | 80.0000            | 86.041            |
| 61 Chlorodibromomethane      | 129       | 8.350 | 8.349  | (0.935) | 186739   | 20.0000            | 25.456            |
| 62 1,2-Dibromoethane         | 107       | 8.435 | 8.434  | (0.944) | 167161   | 20.0000            | 20.964            |
| 63 Chlorobenzene (spcc)      | 112       | 8.958 | 8.957  | (1.003) | 1282488  | 20.0000            | 20.807            |
| 64 1,1,1,2-Tetrachloroethane | 131       | 9.055 | 9.054  | (1.014) | 309111   | 20.0000            | 27.302            |

Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc244.d

Report Date: 24-Mar-2006 17:29

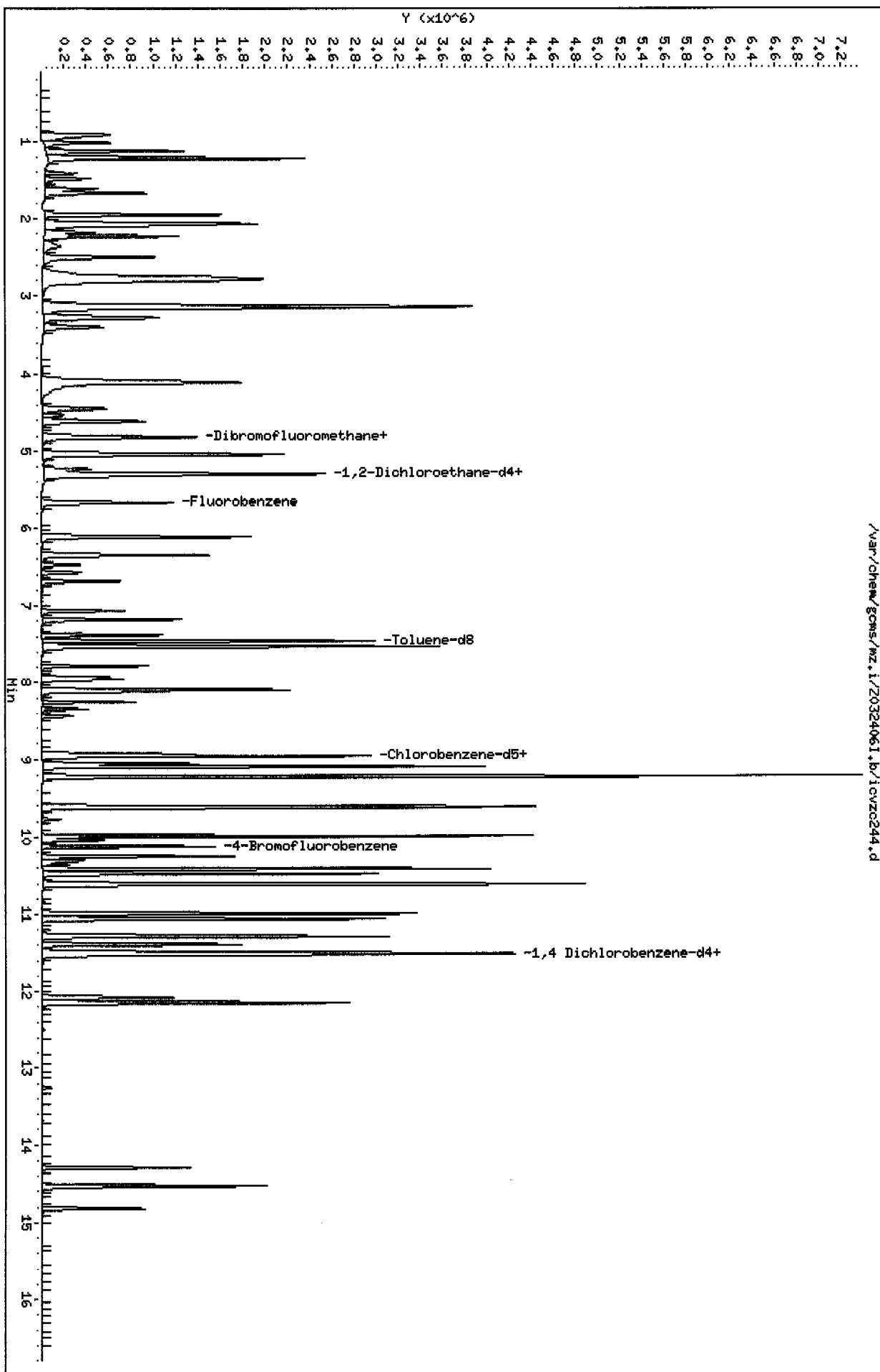
| Compounds                          | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|------------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                    | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                              | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 65 Ethylbenzene (ccc)              | 106       | 9.098  | 9.091  | (1.018) | 826543   | 20.0000            | 20.779            |
| 66 m&p-Xylene                      | 106       | 9.220  | 9.219  | (1.032) | 2011420  | 40.0000            | 41.230            |
| 67 o-Xylene                        | 106       | 9.609  | 9.608  | (1.076) | 883832   | 20.0000            | 20.808            |
| 68 Styrene                         | 104       | 9.627  | 9.620  | (1.078) | 1208211  | 20.0000            | 20.240            |
| 69 Bromoform (spcc)                | 173       | 9.779  | 9.778  | (1.095) | 69535    | 20.0000            | 19.447            |
| 70 Isopropylbenzene                | 105       | 9.992  | 9.991  | (1.118) | 2540209  | 20.0000            | 20.784            |
| 71 *cis-1,4-dichloro-2-butene      | 88        | 10.053 | 10.052 | (1.125) | 31704    | 20.0000            | 18.992            |
| 72 Bromobenzene                    | 156       | 10.254 | 10.253 | (1.148) | 372177   | 20.0000            | 20.578            |
| 73 1,1,2,2-Tetrachloroethane(sp)   | 83        | 10.290 | 10.289 | (1.152) | 148060   | 20.0000            | 22.429            |
| 74 1,2,3-Trichloropropane          | 110       | 10.315 | 10.314 | (0.898) | 40057    | 20.0000            | 20.368            |
| 75 *trans-1,4-dichloro-2-butene    | 53        | 10.351 | 10.350 | (0.901) | 59782    | 20.0000            | 23.846            |
| 76 n-Propylbenzene                 | 91        | 10.412 | 10.405 | (0.907) | 2946550  | 20.0000            | 21.258            |
| 77 2-Chlorotoluene                 | 91        | 10.473 | 10.472 | (0.912) | 1533783  | 20.0000            | 20.931            |
| 78 1,3,5-Trimethylbenzene          | 105       | 10.613 | 10.612 | (0.924) | 1997443  | 20.0000            | 21.335            |
| 79 4-Chlorotoluene                 | 91        | 10.601 | 10.594 | (0.923) | 1673329  | 20.0000            | 21.379            |
| 80 tert-Butylbenzene               | 119       | 10.990 | 10.989 | (0.957) | 1785146  | 20.0000            | 21.461            |
| 81 1,2,4-Trimethylbenzene          | 105       | 11.057 | 11.050 | (0.963) | 1845894  | 20.0000            | 21.146            |
| 82 sec-Butylbenzene                | 105       | 11.282 | 11.281 | (0.982) | 2611459  | 20.0000            | 21.359            |
| 83 1,3-Dichlorobenzene             | 146       | 11.391 | 11.384 | (0.992) | 844064   | 20.0000            | 21.128            |
| 84 p-Isopropyltoluene              | 119       | 11.501 | 11.500 | (1.002) | 2301216  | 20.0000            | 21.250            |
| 85 1,4-Dichlorobenzene             | 146       | 11.519 | 11.518 | (1.003) | 776593   | 20.0000            | 20.652            |
| 86 1,2-Dichlorobenzene             | 146       | 12.073 | 12.078 | (1.051) | 639178   | 20.0000            | 21.725            |
| 87 n-Butylbenzene                  | 91        | 12.146 | 12.139 | (1.058) | 2027064  | 20.0000            | 21.162            |
| 88 1,2-Dibromo-3-chloropropane     | 157       | 13.253 | 13.258 | (1.154) | 22173    | 20.0000            | 20.794            |
| 89 1,2,4-Trichlorobenzene          | 180       | 14.293 | 14.292 | (1.245) | 378402   | 20.0000            | 21.106            |
| 90 Hexachlorobutadiene             | 225       | 14.524 | 14.524 | (1.265) | 359657   | 20.0000            | 21.246            |
| 91 Napthalene                      | 128       | 14.543 | 14.542 | (1.266) | 404241   | 20.0000            | 21.739            |
| 92 1,2,3-Trichlorobenzene          | 180       | 14.816 | 14.816 | (1.290) | 255300   | 20.0000            | 21.762            |
| M 93 *1,4-dichloro-2-butene(total) | 53        |        |        |         | 91487    | 40.0000            | 42.837            |

## QC Flag Legend

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

Data File: /var/chem/gcms/mz.i/20324061.b/1ovzc244.d  
Date : 24-MAR-2006 15:48  
Client ID: STD20  
Sample Info: 1OVZC244,1,1,4,,STD20  
Purge Volume: 25.0  
Column phase: J+W 624

Instrument: mz.i  
Operator: 22980  
Column diameter: 0.18



Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc245.d  
 Report Date: 24-Mar-2006 17:30

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z032406I.b/icvzc245.d  
 Lab Smp Id: ICVZC245 Client Smp ID: STD40  
 Inj Date : 24-MAR-2006 16:11  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : ICVZC245,1,1,5,,STD40  
 Misc Info : Z032406I,8260B\_LM,  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z032406I.b/8260B\_LM.m  
 Meth Date : 24-Mar-2006 17:26 tillerm Quant Type: ISTD  
 Cal Date : 24-MAR-2006 16:11 Cal File: icvzc245.d  
 Als bottle: 3 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT | SIG | MASS   | RT     | EXP RT  | REL RT  | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-------|-----|--------|--------|---------|---------|----------|--------------------|-------------------|
|                                |       |     |        |        |         |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| *****                          | ****  | ==  | *****  | *****  | *****   | *****   | *****    | *****              | *****             |
| * 1 Fluorobenzene              | 96    |     | 5.666  | 5.666  | (1.000) | 1082096 | 10.0000  |                    |                   |
| * 2 Chlorobenzene-d5           | 119   |     | 8.933  | 8.927  | (1.000) | 194005  | 10.0000  |                    |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152   |     | 11.488 | 11.488 | (1.000) | 236275  | 10.0000  |                    |                   |
| \$ 4 Dibromofluoromethane      | 113   |     | 4.826  | 4.826  | (0.852) | 724030  | 40.0000  | 41.757             |                   |
| \$ 5 1,2-Dichloroethane-d4     | 65    |     | 5.234  | 5.228  | (0.924) | 613997  | 40.0000  | 40.950             |                   |
| \$ 6 Toluene-d8                | 98    |     | 7.461  | 7.455  | (0.835) | 3425672 | 40.0000  | 40.187             |                   |
| \$ 7 4-Bromofluorobenzene      | 95    |     | 10.125 | 10.119 | (0.881) | 933110  | 40.0000  | 39.160             |                   |
| M 8 1,2-Dichloroethene (total) | 96    |     |        |        |         | 2261348 | 80.0000  | 79.245             |                   |
| M 9 Xylene (total)             | 106   |     |        |        |         | 5581725 | 120.000  | 119.46             |                   |
| 10 Dichlorodifluoromethane     | 85    |     | 1.012  | 1.012  | (0.179) | 1109609 | 40.0000  | 42.391             |                   |
| 11 Chloromethane (spcc)        | 50    |     | 1.128  | 1.128  | (0.199) | 2424327 | 40.0000  | 30.584             |                   |
| 12 Vinyl Chloride (ccc)        | 62    |     | 1.195  | 1.195  | (0.211) | 1748930 | 40.0000  | 40.930             |                   |
| 13 *1,3-Butadiene              | 39    |     | 1.219  | 1.219  | (0.215) | 1375708 | 40.0000  | 37.428             |                   |
| 15 Bromomethane                | 94    |     | 1.414  | 1.414  | (0.249) | 458442  | 40.0000  | 64.084             |                   |
| 16 Chloroethane                | 64    |     | 1.487  | 1.481  | (0.262) | 801482  | 40.0000  | 39.251             |                   |

Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc245.d

Report Date: 24-Mar-2006 17:30

| Compounds                    | QUANT SIG |       |        |         |          | AMOUNTS            |                   |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                        | =====     | ==    | =====  | =====   | =====    | =====              | =====             |
| 17 *Vinyl Bromide            | 106       | 1.614 | 1.614  | (0.285) | 741266   | 40.0000            | 42.042            |
| 18 Trichlorofluoromethane    | 101       | 1.669 | 1.669  | (0.295) | 1374093  | 40.0000            | 41.792            |
| 19 *2-Chloropropane          | 43        | 1.955 | 1.949  | (0.345) | 2907354  | 40.0000            | 40.207            |
| 20 1,1-Dichloroethene (ccc)  | 96        | 2.065 | 2.065  | (0.364) | 970329   | 40.0000            | 39.946            |
| 21 *Freon 113                | 151       | 2.089 | 2.083  | (0.369) | 719834   | 40.0000            | 38.681            |
| 22 Acetone                   | 43        | 2.125 | 2.125  | (0.375) | 241819   | 160.000            | 143.60            |
| 23 *Iodomethane              | 142       | 2.180 | 2.180  | (0.385) | 1119237  | 40.0000            | 50.833            |
| 24 Carbon Disulfide          | 76        | 2.235 | 2.229  | (0.394) | 3232287  | 40.0000            | 38.741            |
| 26 *Acetonitrile             | 40        | 2.363 | 2.369  | (0.417) | 411749   | 800.000            | 858.04 (A)        |
| 27 Methylene Chloride        | 84        | 2.509 | 2.503  | (0.443) | 733303   | 40.0000            | 40.370            |
| 28 *t-butanol                | 59        | 2.703 | 2.697  | (0.477) | 842811   | 2000.00            | 2583.3            |
| 29 *Acrylonitrile            | 53        | 2.764 | 2.758  | (0.488) | 3236373  | 800.000            | 796.89            |
| 30 trans-1,2-Dichloroethene  | 96        | 2.795 | 2.795  | (0.493) | 1160594  | 40.0000            | 39.067            |
| 31 *MTBE                     | 73        | 2.825 | 2.819  | (0.499) | 1102546  | 40.0000            | 42.679            |
| 32 *Hexane                   | 57        | 3.141 | 3.135  | (0.554) | 6159086  | 80.0000            | 80.369 (A)        |
| 33 1,1-Dichloroethane (spcc) | 63        | 3.281 | 3.275  | (0.579) | 2786982  | 40.0000            | 40.754            |
| 34 *Vinyl Acetate            | 86        | 3.403 | 3.409  | (0.601) | 126016   | 80.0000            | 96.984 (A)        |
| 35 2,2-Dichloropropane       | 77        | 4.096 | 4.096  | (0.723) | 1562391  | 40.0000            | 45.578            |
| 36 cis 1,2-Dichloroethene    | 96        | 4.121 | 4.115  | (0.727) | 1100754  | 40.0000            | 40.178            |
| 37 2-Butanone                | 43        | 4.176 | 4.169  | (0.737) | 670572   | 160.000            | 163.82            |
| 38 Bromochloromethane        | 128       | 4.455 | 4.449  | (0.786) | 311208   | 40.0000            | 41.287            |
| 39 *THF                      | 42        | 4.528 | 4.528  | (0.799) | 415012   | 160.000            | 161.69            |
| 40 Chloroform (ccc)          | 83        | 4.614 | 4.607  | (0.814) | 1618287  | 40.0000            | 41.720            |
| 41 1,1,1-Trichloroethane     | 97        | 4.814 | 4.814  | (0.850) | 1533775  | 40.0000            | 45.345            |
| 42 Carbon Tetrachloride      | 117       | 5.039 | 5.039  | (0.889) | 1165263  | 40.0000            | 58.160            |
| 43 1,1-Dichloropropene       | 75        | 5.052 | 5.039  | (0.892) | 1499758  | 40.0000            | 40.448            |
| 44 Benzene                   | 78        | 5.301 | 5.295  | (0.936) | 4199733  | 40.0000            | 39.211            |
| 45 1,2-Dichloroethane        | 62        | 5.331 | 5.325  | (0.941) | 936763   | 40.0000            | 41.612            |
| 46 Trichloroethene           | 130       | 6.110 | 6.110  | (1.078) | 1210698  | 40.0000            | 40.227            |
| 47 1,2-Dichloropropane (ccc) | 63        | 6.347 | 6.341  | (1.120) | 1192416  | 40.0000            | 40.833            |
| 48 *Methyl Methacrylate      | 41        | 6.572 | 6.572  | (1.160) | 424629   | 40.0000            | 45.231            |
| 49 Dibromomethane            | 93        | 6.475 | 6.469  | (1.143) | 245914   | 40.0000            | 40.654            |
| 50 Bromodichloromethane      | 83        | 6.688 | 6.688  | (1.180) | 793046   | 40.0000            | 50.371            |
| 51 *2-Chloroethylvinylether  | 63        | 7.065 | 7.065  | (1.247) | 538930   | 80.0000            | 81.159 (A)        |
| 52 cis-1,3-Dichloropropene   | 75        | 7.187 | 7.181  | (1.268) | 1029163  | 40.0000            | 43.952            |
| 53 4-Methyl-2-pentanone      | 43        | 7.381 | 7.375  | (1.303) | 1540299  | 160.000            | 162.29            |
| 54 Toluene (ccc)             | 91        | 7.527 | 7.528  | (0.843) | 4414100  | 40.0000            | 39.975            |
| 55 trans-1,3-Dichloropropene | 75        | 7.783 | 7.783  | (0.871) | 671229   | 40.0000            | 46.387            |
| 56 *Ethyl Methacrylate       | 69        | 7.935 | 7.929  | (0.888) | 408592   | 40.0000            | 44.251            |
| 57 1,1,2-Trichloroethane     | 97        | 7.959 | 7.959  | (0.891) | 361732   | 40.0000            | 40.489            |
| 58 Tetrachloroethene         | 164       | 8.093 | 8.093  | (0.906) | 876692   | 40.0000            | 37.939            |
| 59 1,3-Dichloropropane       | 76        | 8.124 | 8.118  | (0.909) | 617210   | 40.0000            | 39.303            |
| 60 2-Hexanone                | 43        | 8.251 | 8.251  | (0.924) | 962806   | 160.000            | 160.88            |
| 61 Chlorodibromomethane      | 129       | 8.349 | 8.349  | (0.935) | 396499   | 40.0000            | 53.974            |
| 62 1,2-Dibromoethane         | 107       | 8.440 | 8.434  | (0.945) | 328555   | 40.0000            | 41.146            |
| 63 Chlorobenzene (spcc)      | 112       | 8.963 | 8.957  | (1.003) | 2468389  | 40.0000            | 39.989            |
| 64 1,1,1,2-Tetrachloroethane | 131       | 9.054 | 9.054  | (1.014) | 635577   | 40.0000            | 56.056            |

Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc245.d  
 Report Date: 24-Mar-2006 17:30

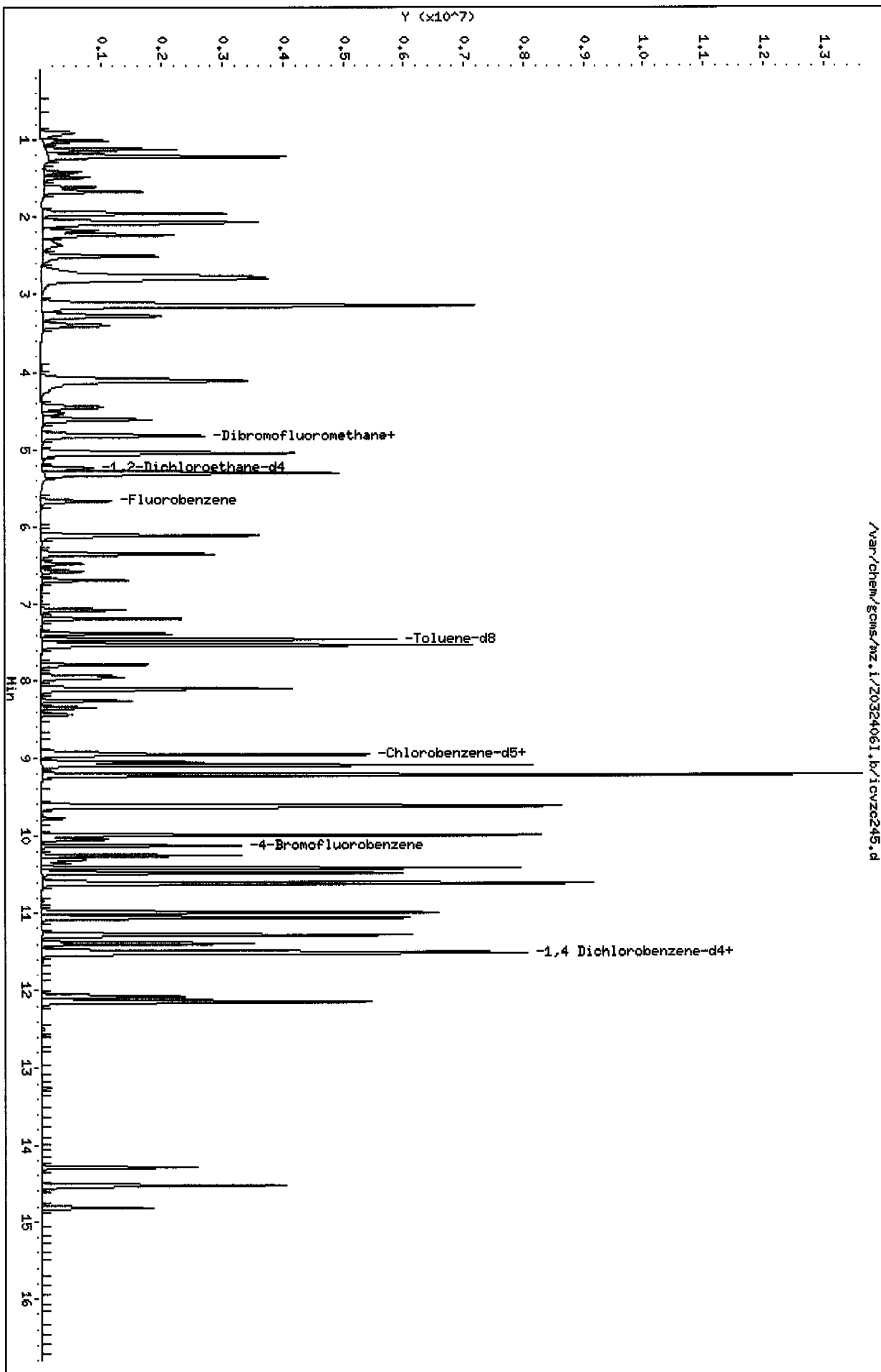
| Compounds                           | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|-------------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                     | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                               | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 65 Ethylbenzene (ccc)               | 106       | 9.097  | 9.091  | (1.018) | 1591284  | 40.0000            | 39.948            |
| 66 m&p-Xylene                       | 106       | 9.225  | 9.219  | (1.033) | 3869161  | 80.0000            | 79.197            |
| 67 o-Xylene                         | 106       | 9.614  | 9.608  | (1.076) | 1712564  | 40.0000            | 40.260 (A)        |
| 68 Styrene                          | 104       | 9.626  | 9.620  | (1.078) | 2381311  | 40.0000            | 39.834            |
| 69 Bromoform (spcc)                 | 173       | 9.778  | 9.778  | (1.095) | 155740   | 40.0000            | 42.161            |
| 70 Isopropylbenzene                 | 105       | 9.991  | 9.991  | (1.118) | 4994860  | 40.0000            | 40.810            |
| 71 *cis-1,4-dichloro-2-butene       | 88        | 10.052 | 10.052 | (1.125) | 72559    | 40.0000            | 42.165            |
| 72 Bromobenzene                     | 156       | 10.253 | 10.253 | (1.148) | 732202   | 40.0000            | 40.427            |
| 73 1,1,2,2-Tetrachloroethane (sp)   | 83        | 10.295 | 10.289 | (1.153) | 276593   | 40.0000            | 41.840            |
| 74 1,2,3-Trichloropropane           | 110       | 10.314 | 10.314 | (0.898) | 76193    | 40.0000            | 37.494            |
| 75 *trans-1,4-dichloro-2-butene     | 53        | 10.350 | 10.350 | (0.901) | 118001   | 40.0000            | 45.550            |
| 76 n-Propylbenzene                  | 91        | 10.411 | 10.405 | (0.906) | 5917981  | 40.0000            | 41.318            |
| 77 2-Chlorotoluene                  | 91        | 10.478 | 10.472 | (0.912) | 3044760  | 40.0000            | 40.212            |
| 78 1,3,5-Trimethylbenzene           | 105       | 10.618 | 10.612 | (0.924) | 3917827  | 40.0000            | 40.498            |
| 79 4-Chlorotoluene                  | 91        | 10.600 | 10.594 | (0.923) | 3291203  | 40.0000            | 40.693            |
| 80 tert-Butylbenzene                | 119       | 10.995 | 10.989 | (0.957) | 3537781  | 40.0000            | 41.160            |
| 81 1,2,4-Trimethylbenzene           | 105       | 11.056 | 11.050 | (0.962) | 3700698  | 40.0000            | 41.027            |
| 82 sec-Butylbenzene                 | 105       | 11.287 | 11.281 | (0.983) | 5258605  | 40.0000            | 41.623            |
| 83 1,3-Dichlorobenzene              | 146       | 11.390 | 11.384 | (0.992) | 1667487  | 40.0000            | 40.393            |
| 84 p-Isopropyltoluene               | 119       | 11.506 | 11.500 | (1.002) | 4561658  | 40.0000            | 40.766            |
| 85 1,4-Dichlorobenzene              | 146       | 11.524 | 11.518 | (1.003) | 1510014  | 40.0000            | 38.861            |
| 86 1,2-Dichlorobenzene              | 146       | 12.078 | 12.078 | (1.051) | 1242829  | 40.0000            | 40.880            |
| 87 n-Butylbenzene                   | 91        | 12.145 | 12.139 | (1.057) | 4102024  | 40.0000            | 41.443            |
| 88 1,2-Dibromo-3-chloropropane      | 157       | 13.258 | 13.258 | (1.154) | 45425    | 40.0000            | 40.518            |
| 89 1,2,4-Trichlorobenzene           | 180       | 14.292 | 14.292 | (1.244) | 743125   | 40.0000            | 40.112            |
| 90 Hexachlorobutadiene              | 225       | 14.530 | 14.524 | (1.265) | 704667   | 40.0000            | 40.284            |
| 91 Napthalene                       | 128       | 14.548 | 14.542 | (1.266) | 790581   | 40.0000            | 41.144            |
| 92 1,2,3-Trichlorobenzene           | 180       | 14.815 | 14.816 | (1.290) | 504335   | 40.0000            | 41.603            |
| M 93 *1,4-dichloro-2-butene (total) | 53        |        |        |         | 190560   | 80.0000            | 87.715            |

#### QC Flag Legend

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

Data File: /var/chem/gcms/mz.i/20324061.b/iovz245.d  
Date : 24-MAR-2006 16:11  
Client ID: STD40  
Sample Info: IOVZC245,1,1,5,,STD40  
Purge Volume: 25.0  
Column phase: J+W 624

Instrument: mz.i  
Operator: 22980  
Column diameter: 0.18



Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc246.d  
 Report Date: 24-Mar-2006 17:30

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z032406I.b/icvzc246.d  
 Lab Smp Id: ICVZC246 Client Smp ID: STD80  
 Inj Date : 24-MAR-2006 16:34  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : ICVZC246,1,1,6,,STD80  
 Misc Info : Z032406I,8260B\_LM,  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z032406I.b/8260B\_LM.m  
 Meth Date : 24-Mar-2006 17:26 tillerm Quant Type: ISTD  
 Cal Date : 24-MAR-2006 16:34 Cal File: icvzc246.d  
 Als bottle: 1 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50

Concentration Formula: Amt \* DF \* Uf\*Vt/(Vo\*1000) \* CpndVariable

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT | SIG | RT     | EXP RT | REL RT  | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-------|-----|--------|--------|---------|----------|--------------------|-------------------|
|                                |       |     |        |        |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene              | 96    |     | 5.666  | 5.666  | (1.000) | 1118051  | 10.0000            |                   |
| * 2 Chlorobenzene-d5           | 119   |     | 8.933  | 8.927  | (1.000) | 190829   | 10.0000            |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152   |     | 11.488 | 11.488 | (1.000) | 230846   | 10.0000            |                   |
| \$ 4 Dibromofluoromethane      | 113   |     | 4.826  | 4.826  | (0.852) | 185502   | 80.0000            | 10.354            |
| \$ 5 1,2-Dichloroethane-d4     | 65    |     | 5.234  | 5.228  | (0.924) | 159929   | 80.0000            | 10.323            |
| \$ 6 Toluene-d8                | 98    |     | 7.461  | 7.455  | (0.835) | 880227   | 80.0000            | 10.498            |
| \$ 7 4-Bromofluorobenzene      | 95    |     | 10.125 | 10.119 | (0.881) | 235988   | 80.0000            | 10.136            |
| M 8 1,2-Dichloroethene (total) | 96    |     |        |        |         | 4713126  | 160.000            | 159.81            |
| M 9 Xylene (total)             | 106   |     |        |        |         | 10020075 | 240.000            | 221.37            |
| 10 Dichlorodifluoromethane     | 85    |     | 1.012  | 1.012  | (0.179) | 2301332  | 80.0000            | 84.324 (A)        |
| 11 Chloromethane (spcc)        | 50    |     | 1.128  | 1.128  | (0.199) | 4768731  | 80.0000            | 60.992            |
| 12 Vinyl Chloride (ccc)        | 62    |     | 1.195  | 1.195  | (0.211) | 3468283  | 80.0000            | 78.760            |
| 13 *1,3-Butadiene              | 39    |     | 1.225  | 1.219  | (0.216) | 2868524  | 80.0000            | 72.236            |
| 15 Bromomethane                | 94    |     | 1.414  | 1.414  | (0.249) | 963744   | 80.0000            | 105.57 (A)        |
| 16 Chloroethane                | 64    |     | 1.480  | 1.481  | (0.261) | 1569558  | 80.0000            | 75.273            |



Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc246.d  
 Report Date: 24-Mar-2006 17:30

| Compounds                    | QUANT SIG |       |        |         | RESPONSE | AMOUNTS            |                   |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                              | MASS      | RT    | EXP RT | REL RT  |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                        | ----      | ==    | -----  | -----   | -----    | -----              | -----             |
| 17 *Vinyl Bromide            | 106       | 1.614 | 1.614  | (0.285) | 1450251  | 80.0000            | 79.664            |
| 18 Trichlorofluoromethane    | 101       | 1.669 | 1.669  | (0.295) | 2555712  | 80.0000            | 75.876            |
| 19 *2-Chloropropane          | 43        | 1.955 | 1.949  | (0.345) | 5617462  | 80.0000            | 75.949            |
| 20 1,1-Dichloroethene (ccc)  | 96        | 2.065 | 2.065  | (0.364) | 1854745  | 80.0000            | 76.328 (A)        |
| 21 *Freon 113                | 151       | 2.089 | 2.083  | (0.369) | 1389312  | 80.0000            | 73.440            |
| 22 Acetone                   | 43        | 2.131 | 2.125  | (0.376) | 590732   | 320.000            | 278.28 (A)        |
| 23 *Iodomethane              | 142       | 2.180 | 2.180  | (0.385) | 2352430  | 80.0000            | 99.257 (A)        |
| 24 Carbon Disulfide          | 76        | 2.235 | 2.229  | (0.394) | 6655650  | 80.0000            | 77.594            |
| 26 *Acetonitrile             | 40        | 2.369 | 2.369  | (0.418) | 815113   | 1600.00            | 1636.5 (A)        |
| 27 Methylene Chloride        | 84        | 2.509 | 2.503  | (0.443) | 1468213  | 80.0000            | 78.519            |
| 28 *t-butanol                | 59        | 2.709 | 2.697  | (0.478) | 1794644  | 4000.00            | 5045.5 (A)        |
| 29 *Acrylonitrile            | 53        | 2.770 | 2.758  | (0.489) | 6510629  | 1600.00            | 1559.4            |
| 30 trans-1,2-Dichloroethene  | 96        | 2.795 | 2.795  | (0.493) | 2444415  | 80.0000            | 79.687            |
| 31 *MTBE                     | 73        | 2.825 | 2.819  | (0.499) | 2255591  | 80.0000            | 83.831 (A)        |
| 32 *Hexane                   | 57        | 3.147 | 3.135  | (0.555) | 12103885 | 160.000            | 154.01 (A)        |
| 33 1,1-Dichloroethane (spcc) | 63        | 3.281 | 3.275  | (0.579) | 5791048  | 80.0000            | 81.674 (A)        |
| 34 *Vinyl Acetate            | 86        | 3.403 | 3.409  | (0.601) | 265402   | 160.000            | 190.22 (A)        |
| 35 2,2-Dichloropropane       | 77        | 4.102 | 4.096  | (0.724) | 3172913  | 80.0000            | 88.076 (A)        |
| 36 cis 1,2-Dichloroethene    | 96        | 4.121 | 4.115  | (0.727) | 2268711  | 80.0000            | 80.125 (A)        |
| 37 2-Butanone                | 43        | 4.175 | 4.169  | (0.737) | 1366804  | 320.000            | 322.63 (A)        |
| 38 Bromochloromethane        | 128       | 4.455 | 4.449  | (0.786) | 621691   | 80.0000            | 79.850            |
| 39 *THF                      | 42        | 4.534 | 4.528  | (0.800) | 850192   | 320.000            | 320.49 (A)        |
| 40 Chloroform (ccc)          | 83        | 4.613 | 4.607  | (0.814) | 3384994  | 80.0000            | 83.793 (A)        |
| 41 1,1,1-Trichloroethane     | 97        | 4.820 | 4.814  | (0.851) | 3247602  | 80.0000            | 90.829 (A)        |
| 42 Carbon Tetrachloride      | 117       | 5.039 | 5.039  | (0.889) | 2475319  | 80.0000            | 111.68 (A)        |
| 43 1,1-Dichloropropene       | 75        | 5.051 | 5.039  | (0.892) | 3066658  | 80.0000            | 80.041 (A)        |
| 44 Benzene                   | 78        | 5.301 | 5.295  | (0.936) | 8625092  | 80.0000            | 78.227            |
| 45 1,2-Dichloroethane        | 62        | 5.337 | 5.325  | (0.942) | 1910102  | 80.0000            | 81.811 (A)        |
| 46 Trichloroethene           | 130       | 6.116 | 6.110  | (1.079) | 2441960  | 80.0000            | 78.735            |
| 47 1,2-Dichloropropane (ccc) | 63        | 6.353 | 6.341  | (1.121) | 2386899  | 80.0000            | 79.234            |
| 48 *Methyl Methacrylate      | 41        | 6.572 | 6.572  | (1.160) | 863742   | 80.0000            | 87.398 (A)        |
| 49 Dibromomethane            | 93        | 6.475 | 6.469  | (1.143) | 513100   | 80.0000            | 81.792 (A)        |
| 50 Bromodichloromethane      | 83        | 6.688 | 6.688  | (1.180) | 1662952  | 80.0000            | 98.325 (A)        |
| 51 *2-Chloroethylvinylether  | 63        | 7.071 | 7.065  | (1.248) | 1074769  | 160.000            | 157.20 (A)        |
| 52 cis-1,3-Dichloropropene   | 75        | 7.187 | 7.181  | (1.268) | 2085222  | 80.0000            | 85.247 (A)        |
| 53 4-Methyl-2-pentanone      | 43        | 7.381 | 7.375  | (1.303) | 3056403  | 320.000            | 313.04            |
| 54 Toluene (ccc)             | 91        | 7.534 | 7.528  | (0.843) | 8681941  | 80.0000            | 79.943            |
| 55 trans-1,3-Dichloropropene | 75        | 7.789 | 7.783  | (0.872) | 1388723  | 80.0000            | 94.601 (A)        |
| 56 *Ethyl Methacrylate       | 69        | 7.935 | 7.929  | (0.888) | 820290   | 80.0000            | 88.416 (A)        |
| 57 1,1,2-Trichloroethane     | 97        | 7.965 | 7.959  | (0.892) | 718019   | 80.0000            | 81.458 (A)        |
| 58 Tetrachloroethene         | 164       | 8.099 | 8.093  | (0.907) | 1704353  | 80.0000            | 75.662 (A)        |
| 59 1,3-Dichloropropane       | 76        | 8.124 | 8.118  | (0.909) | 1237708  | 80.0000            | 80.109 (A)        |
| 60 2-Hexanone                | 43        | 8.257 | 8.251  | (0.924) | 1919701  | 320.000            | 325.08 (A)        |
| 61 Chlorodibromomethane      | 129       | 8.349 | 8.349  | (0.935) | 826913   | 80.0000            | 106.78 (A)        |
| 62 1,2-Dibromoethane         | 107       | 8.440 | 8.434  | (0.945) | 650211   | 80.0000            | 82.373 (A)        |
| 63 Chlorobenzene (spcc)      | 112       | 8.963 | 8.957  | (1.003) | 4801038  | 80.0000            | 79.205            |
| 64 1,1,1,2-Tetrachloroethane | 131       | 9.060 | 9.054  | (1.014) | 1296966  | 80.0000            | 109.21 (A)        |

Data File: /var/chem/gcms/mz.i/Z032406I.b/icvzc246.d  
Report Date: 24-Mar-2006 17:30

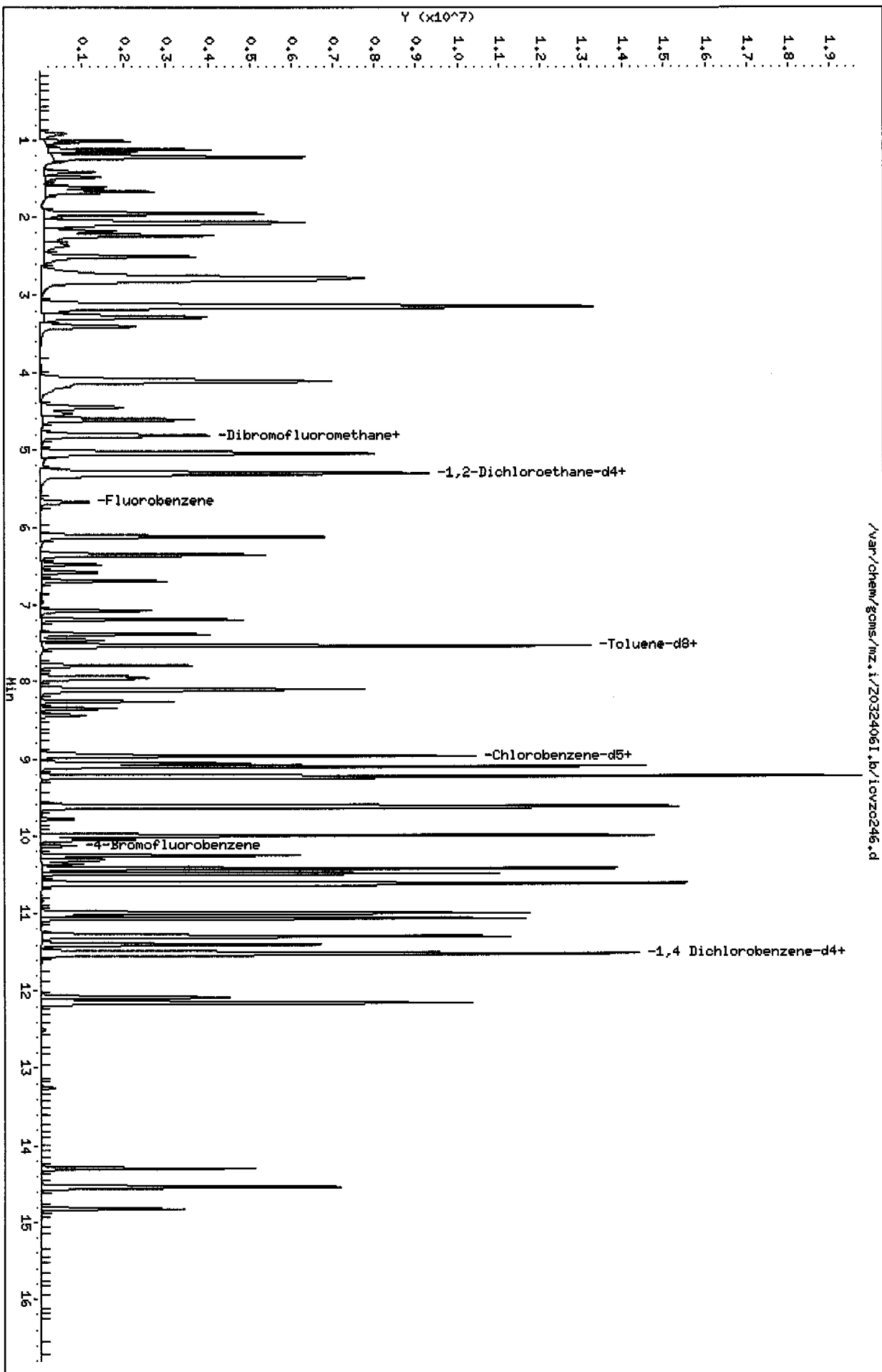
| Compounds                           | QUANT SIG |        |        | REL RT  | RESPONSE | AMOUNTS            |                   |
|-------------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                     | MASS      | RT     | EXP RT |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                               | ----      | --     | -----  | -----   | -----    | -----              | -----             |
| 65 Ethylbenzene (ccc)               | 106       | 9.103  | 9.091  | (1.019) | 3064738  | 80.0000            | 78.468            |
| 66 m&p-Xylene                       | 106       | 9.231  | 9.219  | (1.033) | 6749452  | 160.000            | 142.95 (A)        |
| 67 o-Xylene                         | 106       | 9.614  | 9.608  | (1.076) | 3270622  | 80.0000            | 78.425 (A)        |
| 68 Styrene                          | 104       | 9.632  | 9.620  | (1.078) | 4564771  | 80.0000            | 77.960            |
| 69 Bromoform (spcc)                 | 173       | 9.784  | 9.778  | (1.095) | 345341   | 80.0000            | 127.66 (A)        |
| 70 Isopropylbenzene                 | 105       | 9.997  | 9.991  | (1.119) | 9367183  | 80.0000            | 78.113            |
| 71 *cis-1,4-dichloro-2-butene       | 88        | 10.058 | 10.052 | (1.126) | 157150   | 80.0000            | 120.38 (A)        |
| 72 Bromobenzene                     | 156       | 10.259 | 10.253 | (1.148) | 1428813  | 80.0000            | 80.173 (A)        |
| 73 1,1,2,2-Tetrachloroethane (sp)   | 83        | 10.295 | 10.289 | (1.153) | 560963   | 80.0000            | 85.314 (A)        |
| 74 1,2,3-Trichloropropane           | 110       | 10.320 | 10.314 | (0.898) | 159966   | 80.0000            | 80.487 (A)        |
| 75 *trans-1,4-dichloro-2-butene     | 53        | 10.356 | 10.350 | (0.902) | 245666   | 80.0000            | 93.729 (A)        |
| 76 n-Propylbenzene                  | 91        | 10.417 | 10.405 | (0.907) | 11077770 | 80.0000            | 79.281            |
| 77 2-Chlorotoluene                  | 91        | 10.484 | 10.472 | (0.913) | 5987659  | 80.0000            | 80.802 (A)        |
| 78 1,3,5-Trimethylbenzene           | 105       | 10.624 | 10.612 | (0.925) | 7280244  | 80.0000            | 77.435            |
| 79 4-Chlorotoluene                  | 91        | 10.606 | 10.594 | (0.923) | 6154325  | 80.0000            | 78.179            |
| 80 tert-Butylbenzene                | 119       | 11.001 | 10.989 | (0.958) | 6830794  | 80.0000            | 81.147 (A)        |
| 81 1,2,4-Trimethylbenzene           | 105       | 11.062 | 11.050 | (0.963) | 7164714  | 80.0000            | 81.111 (A)        |
| 82 sec-Butylbenzene                 | 105       | 11.293 | 11.281 | (0.983) | 10237688 | 80.0000            | 82.506 (A)        |
| 83 1,3-Dichlorobenzene              | 146       | 11.403 | 11.384 | (0.993) | 3269358  | 80.0000            | 80.907 (A)        |
| 84 p-Isopropyltoluene               | 119       | 11.512 | 11.500 | (1.002) | 8494008  | 80.0000            | 78.015            |
| 85 1,4-Dichlorobenzene              | 146       | 11.530 | 11.518 | (1.004) | 2826394  | 80.0000            | 75.195            |
| 86 1,2-Dichlorobenzene              | 146       | 12.084 | 12.078 | (1.052) | 2437142  | 80.0000            | 81.750 (A)        |
| 87 n-Butylbenzene                   | 91        | 12.157 | 12.139 | (1.058) | 8114803  | 80.0000            | 83.331 (A)        |
| 88 1,2-Dibromo-3-chloropropane      | 157       | 13.258 | 13.258 | (1.154) | 94455    | 80.0000            | 105.03 (A)        |
| 89 1,2,4-Trichlorobenzene           | 180       | 14.298 | 14.292 | (1.245) | 1432764  | 80.0000            | 79.295            |
| 90 Hexachlorobutadiene              | 225       | 14.536 | 14.524 | (1.265) | 1297420  | 80.0000            | 76.566            |
| 91 Napthalene                       | 128       | 14.548 | 14.542 | (1.266) | 1585750  | 80.0000            | 83.688 (A)        |
| 92 1,2,3-Trichlorobenzene           | 180       | 14.822 | 14.816 | (1.290) | 975703   | 80.0000            | 81.974 (A)        |
| M 93 *1,4-dichloro-2-butene (total) | 53        |        |        |         | 402817   | 160.000            | 214.11            |

#### QC Flag Legend

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

Data File: /var/chem/gcms/mz.i/20324061.b/lovz0246.d  
Date : 24-MAR-2006 16:34  
Client ID: STD80  
Sample Info: ICVZC246,1,1,6,,STD80  
Purge Volume: 25.0  
Column phase: J+H 624

Instrument: mz.i  
Operator: 22380  
Column diameter: 0.18



Data File: /var/chem/gcms/mz.i/Z032406I.b/h10celac.d  
 Report Date: 28-Mar-2006 11:45

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z032406I.b/h10celac.d  
 Lab Smp Id: H10CE1AC Client Smp ID: INTRA-LAB CHECK  
 Inj Date : 24-MAR-2006 17:21  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : H10CE1AC,1,3,,LCS & 2ND SOURCE  
 Misc Info : Z032406I,8260B\_LM,ss.sub  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z032406I.b/8260B\_LM.m  
 Meth Date : 28-Mar-2006 11:44 gosss Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1 QC Sample: METHOD SPIKE  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: ss.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 5.00000     | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                   | QUANT SIG | MASS   | RT     | EXP RT  | REL RT  | RESPONSE | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|--------|---------|---------|----------|----------------------|------------------|
|                             |           |        |        |         |         |          | ON-COLUMN<br>( ug/L) | FINAL<br>( ug/L) |
| * 1 Fluorobenzene           | 96        | 5.667  | 5.666  | (1.000) | 1110859 | 10.0000  |                      |                  |
| * 2 Chlorobenzene-d5        | 119       | 8.928  | 8.927  | (1.000) | 193027  | 10.0000  |                      |                  |
| * 3 1,4 Dichlorobenzene-d4  | 152       | 11.483 | 11.488 | (1.000) | 236284  | 10.0000  |                      |                  |
| \$ 5 1,2-Dichloroethane-d4  | 65        | 5.229  | 5.228  | (0.923) | 149329  | 9.70148  | 48.507               |                  |
| \$ 4 Dibromofluoromethane   | 113       | 4.821  | 4.826  | (0.851) | 184495  | 10.3649  | 51.825               |                  |
| \$ 6 Toluene-d8             | 98        | 7.455  | 7.455  | (0.835) | 883426  | 10.4162  | 52.081               |                  |
| \$ 7 4-Bromofluorobenzene   | 95        | 10.120 | 10.119 | (0.881) | 234321  | 9.83329  | 49.166               |                  |
| 10 Dichlorodifluoromethane  | 85        | 1.013  | 1.012  | (0.179) | 279356  | 10.3023  | 51.512               |                  |
| 11 Chloromethane (spcc)     | 50        | 1.123  | 1.128  | (0.198) | 715520  | 10.9334  | 54.667               |                  |
| 12 Vinyl Chloride (ccc)     | 62        | 1.196  | 1.195  | (0.211) | 459931  | 10.5121  | 52.560               |                  |
| 15 Bromomethane             | 94        | 1.408  | 1.414  | (0.249) | 105550  | 9.74105  | 48.705               |                  |
| 16 Chloroethane             | 64        | 1.481  | 1.481  | (0.261) | 208234  | 10.0511  | 50.256               |                  |
| 18 Trichlorofluoromethane   | 101       | 1.664  | 1.669  | (0.294) | 330525  | 9.73464  | 48.673               |                  |
| 20 1,1-Dichloroethene (ccc) | 96        | 2.065  | 2.065  | (0.364) | 251498  | 10.4168  | 52.084               |                  |

Data File: /var/chem/gcms/mz.i/Z032406I.b/h10celac.d  
Report Date: 28-Mar-2006 11:45

|                                  |      |        |        |         |          | CONCENTRATIONS |            |
|----------------------------------|------|--------|--------|---------|----------|----------------|------------|
| QUANT SIG                        |      |        |        |         |          | ON-COLUMN      | FINAL      |
| Compounds                        | MASS | RT     | EXP RT | REL RT  | RESPONSE | ( ug/L)        | ( ug/L)    |
| =====                            | ---- | ==     | =====  | =====   | =====    | =====          | =====      |
| 23 *Iodomethane                  | 142  | 2.181  | 2.180  | (0.385) | 597926   | 21.1897        | 105.95     |
| 24 Carbon Disulfide              | 76   | 2.230  | 2.229  | (0.393) | 1715196  | 20.1259        | 100.63     |
| 22 Acetone                       | 43   | 2.126  | 2.125  | (0.375) | 38108    | 11.3726        | 56.863 (R) |
| 27 Methylene Chloride            | 84   | 2.510  | 2.503  | (0.443) | 173445   | 9.33581        | 46.679     |
| 30 trans-1,2-Dichloroethene      | 96   | 2.789  | 2.795  | (0.492) | 295003   | 9.67931        | 48.396     |
| 31 *MTBE                         | 73   | 2.826  | 2.819  | (0.499) | 250391   | 9.36627        | 46.831     |
| 33 1,1-Dichloroethane (spcc)     | 63   | 3.276  | 3.275  | (0.578) | 693586   | 9.84534        | 49.227     |
| 34 *Vinyl Acetate                | 86   | 3.392  | 3.409  | (0.598) | 24635    | 16.6335        | 83.168     |
| 35 2,2-Dichloropropane           | 77   | 4.097  | 4.096  | (0.723) | 377422   | 10.5445        | 52.723     |
| 36 cis 1,2-Dichloroethene        | 96   | 4.116  | 4.115  | (0.726) | 269097   | 9.56535        | 47.827     |
| M 8 1,2-Dichloroethene (total)   | 96   |        |        |         | 564101   | 19.2447        | 96.223     |
| 37 2-Butanone                    | 43   | 4.176  | 4.169  | (0.737) | 76287    | 18.1242        | 90.621     |
| 38 Bromochloromethane            | 128  | 4.444  | 4.449  | (0.784) | 77936    | 10.0751        | 50.375     |
| 40 Chloroform (ccc)              | 83   | 4.608  | 4.607  | (0.813) | 375212   | 9.34826        | 46.741     |
| 41 1,1,1-Trichloroethane         | 97   | 4.809  | 4.814  | (0.849) | 386220   | 10.8717        | 54.358     |
| 42 Carbon Tetrachloride          | 117  | 5.034  | 5.039  | (0.888) | 270953   | 9.47381        | 47.369     |
| 43 1,1-Dichloropropene           | 75   | 5.046  | 5.039  | (0.890) | 393707   | 10.3425        | 51.712     |
| 44 Benzene                       | 78   | 5.296  | 5.295  | (0.934) | 1048995  | 9.57566        | 47.878     |
| 45 1,2-Dichloroethane            | 62   | 5.326  | 5.325  | (0.940) | 227976   | 9.82759        | 49.138     |
| 46 Trichloroethene               | 130  | 6.111  | 6.110  | (1.078) | 322453   | 10.4640        | 52.320     |
| 47 1,2-Dichloropropane (ccc)     | 63   | 6.342  | 6.341  | (1.119) | 307289   | 10.2666        | 51.333     |
| 49 Dibromomethane                | 93   | 6.470  | 6.469  | (1.142) | 65689    | 10.5392        | 52.696     |
| 50 Bromodichloromethane          | 83   | 6.689  | 6.688  | (1.180) | 194803   | 10.1071        | 50.535     |
| 52 cis-1,3-Dichloropropene       | 75   | 7.182  | 7.181  | (1.267) | 253308   | 10.4227        | 52.114     |
| 53 4-Methyl-2-pentanone          | 43   | 7.376  | 7.375  | (1.302) | 190075   | 19.5937        | 97.968     |
| 54 Toluene (ccc)                 | 91   | 7.528  | 7.528  | (0.843) | 1115481  | 10.1543        | 50.772     |
| 55 trans-1,3-Dichloropropene     | 75   | 7.784  | 7.783  | (0.872) | 158316   | 9.64211        | 48.210     |
| 57 1,1,2-Trichloroethane         | 97   | 7.960  | 7.959  | (0.892) | 93771    | 10.5171        | 52.585     |
| 58 Tetrachloroethene             | 164  | 8.094  | 8.093  | (0.907) | 230773   | 10.1281        | 50.641     |
| 59 1,3-Dichloropropane           | 76   | 8.119  | 8.118  | (0.909) | 160180   | 10.2494        | 51.247     |
| 60 2-Hexanone                    | 43   | 8.252  | 8.251  | (0.924) | 121460   | 20.3338        | 101.67     |
| 61 Chlorodibromomethane          | 129  | 8.350  | 8.349  | (0.935) | 87235    | 9.35318        | 46.766     |
| 62 1,2-Dibromoethane             | 107  | 8.435  | 8.434  | (0.945) | 82847    | 10.3761        | 51.881     |
| 63 Chlorobenzene (spcc)          | 112  | 8.958  | 8.957  | (1.003) | 620686   | 10.1232        | 50.616     |
| 65 Ethylbenzene (ccc)            | 106  | 9.092  | 9.091  | (1.018) | 416923   | 10.5532        | 52.766     |
| 64 1,1,1,2-Tetrachloroethane     | 131  | 9.055  | 9.054  | (1.014) | 151683   | 9.82814        | 49.141     |
| 66 m&p-Xylene                    | 106  | 9.220  | 9.219  | (1.033) | 993957   | 20.8113        | 104.06     |
| 67 o-Xylene                      | 106  | 9.609  | 9.608  | (1.076) | 436681   | 10.3518        | 51.759     |
| M 9 Xylene (total)               | 106  |        |        |         | 1430638  | 31.1630        | 155.82     |
| 68 Styrene                       | 104  | 9.621  | 9.620  | (1.078) | 655213   | 11.0627        | 55.314     |
| 69 Bromoform (spcc)              | 173  | 9.779  | 9.778  | (1.095) | 32735    | 10.9300        | 54.650     |
| 70 Isopropylbenzene              | 105  | 9.992  | 9.991  | (1.119) | 1117859  | 9.21575        | 46.079     |
| 72 Bromobenzene                  | 156  | 10.254 | 10.253 | (1.149) | 185007   | 10.2628        | 51.314     |
| 73 1,1,2,2-Tetrachloroethane(sp) | 83   | 10.290 | 10.289 | (1.153) | 70910    | 10.6615        | 53.308     |
| 76 n-Propylbenzene               | 91   | 10.406 | 10.405 | (0.906) | 1445852  | 10.1095        | 50.547     |
| 74 1,2,3-Trichloropropane        | 110  | 10.309 | 10.314 | (0.898) | 20738    | 10.1942        | 50.971     |
| 77 2-Chlorotoluene               | 91   | 10.473 | 10.472 | (0.912) | 753997   | 9.94088        | 49.704     |

Data File: /var/chem/gcms/mz.i/Z032406I.b/h10celac.d  
 Report Date: 28-Mar-2006 11:45

| Compounds                      | QUANT SIG | CONCENTRATIONS |        |         |         |          |           |         |
|--------------------------------|-----------|----------------|--------|---------|---------|----------|-----------|---------|
|                                |           | MASS           | RT     | EXP RT  | REL RT  | RESPONSE | ON-COLUMN | FINAL   |
|                                |           |                |        |         |         |          | ( ug/L)   | ( ug/L) |
| =====                          | =====     | ==             | =====  | =====   | =====   | =====    | =====     |         |
| 78 1,3,5-Trimethylbenzene      | 105       | 10.613         | 10.612 | (0.924) | 1011039 | 10.5063  | 52.531    |         |
| 79 4-Chlorotoluene             | 91        | 10.594         | 10.594 | (0.923) | 805918  | 10.0020  | 50.010    |         |
| 80 tert-Butylbenzene           | 119       | 10.990         | 10.989 | (0.957) | 878401  | 10.1949  | 50.974    |         |
| 81 1,2,4-Trimethylbenzene      | 105       | 11.051         | 11.050 | (0.962) | 923566  | 10.2149  | 51.075    |         |
| 82 sec-Butylbenzene            | 105       | 11.282         | 11.281 | (0.983) | 1355045 | 10.6691  | 53.345    |         |
| 83 1,3-Dichlorobenzene         | 146       | 11.385         | 11.384 | (0.992) | 413200  | 9.99008  | 49.950    |         |
| 84 p-Isopropyltoluene          | 119       | 11.501         | 11.500 | (1.002) | 1094885 | 9.82472  | 49.124    |         |
| 85 1,4-Dichlorobenzene         | 146       | 11.519         | 11.518 | (1.003) | 388708  | 10.1034  | 50.517    |         |
| 87 n-Butylbenzene              | 91        | 12.140         | 12.139 | (1.057) | 1019789 | 10.2312  | 51.156    |         |
| 86 1,2-Dichlorobenzene         | 146       | 12.073         | 12.078 | (1.051) | 294000  | 9.63475  | 48.174    |         |
| 88 1,2-Dibromo-3-chloropropane | 157       | 13.259         | 13.258 | (1.155) | 10617   | 9.72403  | 48.620    |         |
| 89 1,2,4-Trichlorobenzene      | 180       | 14.293         | 14.292 | (1.245) | 189299  | 10.2355  | 51.178    |         |
| 90 Hexachlorobutadiene         | 225       | 14.524         | 14.524 | (1.265) | 194786  | 11.2306  | 56.153    |         |
| 91 Napthalene                  | 128       | 14.543         | 14.542 | (1.266) | 203415  | 10.4882  | 52.441    |         |
| 92 1,2,3-Trichlorobenzene      | 180       | 14.816         | 14.816 | (1.290) | 130611  | 10.7208  | 53.604    |         |

#### QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /var/chem/gcms/mz.i/Z032406I.b/h10celac.d  
 Report Date: 28-Mar-2006 11:45

## STL Knoxville

 INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                        |                                |
|--------------------------------------------------------|--------------------------------|
| Instrument ID: mz.i                                    | Calibration Date: 24-MAR-2006  |
| Lab File ID: h10celac.d                                | Calibration Time: 15:24        |
| Lab Smp Id: H10CE1AC                                   | Client Smp ID: INTRA-LAB CHECK |
| Analysis Type: VOA                                     | Level: LOW                     |
| Quant Type: ISTD                                       | Sample Type: WATER             |
| Operator: 22980                                        |                                |
| Method File: /var/chem/gcms/mz.i/Z032406I.b/8260B_LM.m |                                |
| Misc Info: Z032406I,8260B_LM,ss.sub                    |                                |

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE  | %DIFF |
|---------------------|----------|------------|---------|---------|-------|
|                     |          | LOWER      | UPPER   |         |       |
| 1 Fluorobenzene     | 1140841  | 570420     | 2281682 | 1110859 | -2.63 |
| 2 Chlorobenzene-d5  | 197405   | 98702      | 394810  | 193027  | -2.22 |
| 3 1,4 Dichlorobenze | 234469   | 117234     | 468938  | 236284  | 0.77  |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 5.67     | 5.17     | 6.17  | 5.67   | 0.02  |
| 2 Chlorobenzene-d5  | 8.93     | 8.43     | 9.43  | 8.93   | 0.01  |
| 3 1,4 Dichlorobenze | 11.49    | 10.99    | 11.99 | 11.48  | -0.05 |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /var/chem/gcms/mz.i/Z032406I.b/h10celac.d  
 Report Date: 28-Mar-2006 11:45

## STL Knoxville

## RECOVERY REPORT

Client Name: Client SDG: H6C240000  
 Sample Matrix: LIQUID Fraction: VOA  
 Lab Smp Id: H10CE1AC Client Smp ID: INTRA-LAB CHECK  
 Level: LOW Operator: 22980  
 Data Type: MS DATA SampleType: METHOD SPIKE  
 SpikeList File: ssallcmpds.spk Quant Type: ISTD  
 Sublist File: ss.sub  
 Method File: /var/chem/gcms/mz.i/Z032406I.b/8260B\_LM.m  
 Misc Info: Z032406I,8260B\_LM,ss.sub

| SPIKE COMPOUND         | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|------------------------|-----------------------|---------------------------|----------------|--------|
| 10 Dichlorodifluorome  | 50.000                | 51.512                    | 103.02         | 70-130 |
| 11 Chloromethane (spc  | 50.000                | 54.667                    | 109.33         | 70-130 |
| 12 Vinyl Chloride (cc  | 50.000                | 52.560                    | 105.12         | 70-130 |
| 15 Bromomethane        | 50.000                | 48.705                    | 97.41          | 70-130 |
| 16 Chloroethane        | 50.000                | 50.256                    | 100.51         | 70-130 |
| 18 Trichlorofluoromet  | 50.000                | 48.673                    | 97.35          | 70-130 |
| 20 1,1-Dichloroethene  | 50.000                | 52.084                    | 104.17         | 70-130 |
| 22 Acetone             | 100.00                | 56.863                    | 56.86*         | 70-130 |
| 23 *Iodomethane        | 100.00                | 105.95                    | 105.95         | 70-130 |
| 24 Carbon Disulfide    | 100.00                | 100.63                    | 100.63         | 70-130 |
| 27 Methylene Chloride  | 50.000                | 46.679                    | 93.36          | 70-130 |
| 30 trans-1,2-Dichloro  | 50.000                | 48.396                    | 96.79          | 70-130 |
| 31 *MTBE               | 50.000                | 46.831                    | 93.66          | 70-130 |
| 33 1,1-Dichloroethane  | 50.000                | 49.227                    | 98.45          | 70-130 |
| 34 *Vinyl Acetate      | 100.00                | 83.168                    | 83.17          | 70-130 |
| 35 2,2-Dichloropropan  | 50.000                | 52.723                    | 105.45         | 70-130 |
| 36 cis 1,2-Dichloroet  | 50.000                | 47.827                    | 95.65          | 70-130 |
| 37 2-Butanone          | 100.00                | 90.621                    | 90.62          | 70-130 |
| M 8 1,2-Dichloroethene | 100.00                | 96.223                    | 96.22          | 70-130 |
| 38 Bromochloromethane  | 50.000                | 50.375                    | 100.75         | 70-130 |
| 40 Chloroform (ccc)    | 50.000                | 46.741                    | 93.48          | 70-130 |
| 41 1,1,1-Trichloroeth  | 50.000                | 54.358                    | 108.72         | 70-130 |
| 42 Carbon Tetrachlori  | 50.000                | 47.369                    | 94.74          | 70-130 |
| 43 1,1-Dichloropropen  | 50.000                | 51.712                    | 103.42         | 70-130 |
| 44 Benzene             | 50.000                | 47.878                    | 95.76          | 70-130 |
| 45 1,2-Dichloroethane  | 50.000                | 49.138                    | 98.28          | 70-130 |
| 46 Trichloroethene     | 50.000                | 52.320                    | 104.64         | 70-130 |
| 47 1,2-Dichloropropan  | 50.000                | 51.333                    | 102.67         | 70-130 |
| 49 Dibromomethane      | 50.000                | 52.696                    | 105.39         | 70-130 |
| 50 Bromodichlorometha  | 50.000                | 50.535                    | 101.07         | 70-130 |
| 52 cis-1,3-Dichloropr  | 50.000                | 52.114                    | 104.23         | 70-130 |
| 53 4-Methyl-2-pentano  | 100.00                | 97.968                    | 97.97          | 70-130 |
| 54 Toluene (ccc)       | 50.000                | 50.772                    | 101.54         | 70-130 |

ok Remn next day for acetone.  
 12/29/06



Data File: /var/chem/gcms/mz.i/Z032406I.b/h10celac.d

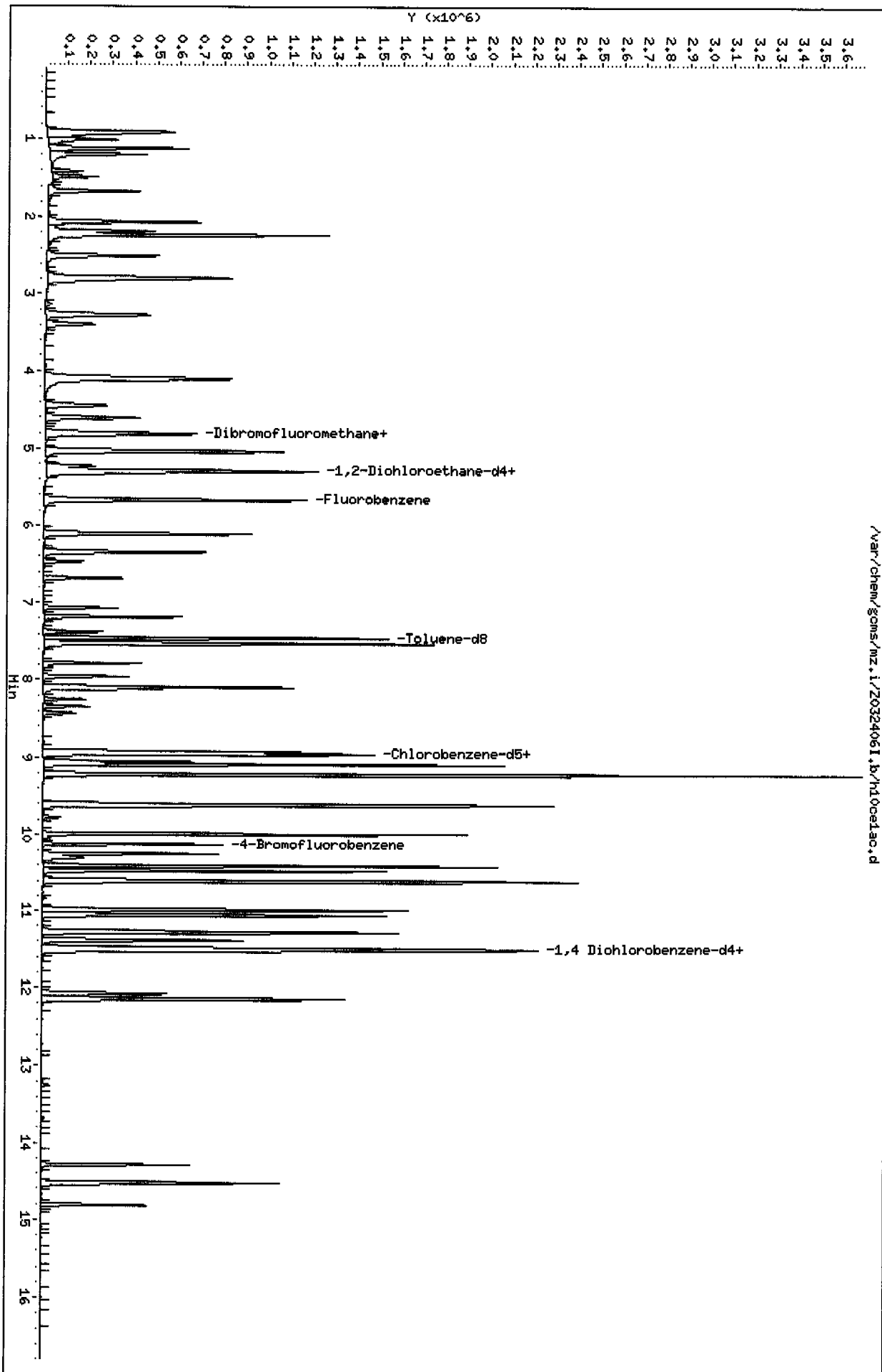
Report Date: 28-Mar-2006 11:45

| SPIKE COMPOUND |                       | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|----------------|-----------------------|-----------------------|---------------------------|----------------|--------|
|                | 55 trans-1,3-Dichloro | 50.000                | 48.210                    | 96.42          | 70-130 |
|                | 57 1,1,2-Trichloroeth | 50.000                | 52.585                    | 105.17         | 70-130 |
|                | 58 Tetrachloroethene  | 50.000                | 50.641                    | 101.28         | 70-130 |
|                | 59 1,3-Dichloropropan | 50.000                | 51.247                    | 102.49         | 70-130 |
|                | 60 2-Hexanone         | 100.00                | 101.67                    | 101.67         | 70-130 |
|                | 61 Chlorodibromometha | 50.000                | 46.766                    | 93.53          | 70-130 |
|                | 62 1,2-Dibromoethane  | 50.000                | 51.881                    | 103.76         | 70-130 |
|                | 63 Chlorobenzene (spc | 50.000                | 50.616                    | 101.23         | 70-130 |
|                | 65 Ethylbenzene (ccc) | 50.000                | 52.766                    | 105.53         | 70-130 |
|                | 64 1,1,1,2-Tetrachlor | 50.000                | 49.141                    | 98.28          | 70-130 |
|                | 66 m&p-Xylene         | 100.00                | 104.06                    | 104.06         | 70-130 |
|                | 67 o-Xylene           | 50.000                | 51.759                    | 103.52         | 70-130 |
| M              | 9 Xylene (total)      | 150.00                | 155.82                    | 103.88         | 70-130 |
|                | 68 Styrene            | 50.000                | 55.314                    | 110.63         | 70-130 |
|                | 69 Bromoform (spcc)   | 50.000                | 54.650                    | 109.30         | 70-130 |
|                | 70 Isopropylbenzene   | 50.000                | 46.079                    | 92.16          | 70-130 |
|                | 72 Bromobenzene       | 50.000                | 51.314                    | 102.63         | 70-130 |
|                | 73 1,1,2,2-Tetrachlor | 50.000                | 53.308                    | 106.62         | 70-130 |
|                | 76 n-Propylbenzene    | 50.000                | 50.547                    | 101.09         | 70-130 |
|                | 74 1,2,3-Trichloropro | 50.000                | 50.971                    | 101.94         | 70-130 |
|                | 77 2-Chlorotoluene    | 50.000                | 49.704                    | 99.41          | 70-130 |
|                | 78 1,3,5-Trimethylben | 50.000                | 52.531                    | 105.06         | 70-130 |
|                | 79 4-Chlorotoluene    | 50.000                | 50.010                    | 100.02         | 70-130 |
|                | 80 tert-Butylbenzene  | 50.000                | 50.974                    | 101.95         | 70-130 |
|                | 81 1,2,4-Trimethylben | 50.000                | 51.075                    | 102.15         | 70-130 |
|                | 82 sec-Butylbenzene   | 50.000                | 53.345                    | 106.69         | 70-130 |
|                | 83 1,3-Dichlorobenzen | 50.000                | 49.950                    | 99.90          | 70-130 |
|                | 84 p-Isopropyltoluene | 50.000                | 49.124                    | 98.25          | 70-130 |
|                | 85 1,4-Dichlorobenzen | 50.000                | 50.517                    | 101.03         | 70-130 |
|                | 87 n-Butylbenzene     | 50.000                | 51.156                    | 102.31         | 70-130 |
|                | 86 1,2-Dichlorobenzen | 50.000                | 48.174                    | 96.35          | 70-130 |
|                | 88 1,2-Dibromo-3-chlo | 50.000                | 48.620                    | 97.24          | 70-130 |
|                | 89 1,2,4-Trichloroben | 50.000                | 51.178                    | 102.36         | 70-130 |
|                | 90 Hexachlorobutadien | 50.000                | 56.153                    | 112.31         | 70-130 |
|                | 91 Napthalene         | 50.000                | 52.441                    | 104.88         | 70-130 |
|                | 92 1,2,3-Trichloroben | 50.000                | 53.604                    | 107.21         | 70-130 |

| SURROGATE COMPOUND |                      | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|--------------------|----------------------|-----------------------|---------------------------|----------------|--------|
| \$                 | 5 1,2-Dichloroethane | 50.000                | 48.507                    | 97.01          | 71-127 |
| \$                 | 4 Dibromofluorometha | 50.000                | 51.825                    | 103.65         | 79-120 |
| \$                 | 6 Toluene-d8         | 50.000                | 52.081                    | 104.16         | 80-120 |
| \$                 | 7 4-Bromofluorobenze | 50.000                | 49.166                    | 98.33          | 69-126 |

Data File: /var/chem/gcms/mz.i/20324061.b/hl0ce1a0.d  
Date : 24-MAR-2006 17:21  
Client ID: INTRA-LAB CHECK  
Sample Info: H10CE1A0.1,3,,LCS & 2ND SOURCE  
Purge Volume: 5.0  
Column phase: J+M 624

Instrument: mz.i  
Operator: 22980  
Column diameter: 0.18



Data File: /chem/gcms/mz.i/Z032806.b/lcsact.d  
Report Date: 28-Mar-2006 13:45

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /chem/gcms/mz.i/Z032806.b/lcsact.d  
Lab Smp Id: lcs Client Smp ID: .opc not found  
Inj Date : 28-MAR-2006 13:29  
Operator : 22980 Inst ID: mz.i  
Smp Info : lcs,1,3,,ACETONELCS  
Misc Info : Z032806,8260B\_LM,ss.sub  
Comment : Volatile Organics by GC/MS  
Method : /chem/gcms/mz.i/Z032806.b/8260B\_LM.m  
Meth Date : 28-Mar-2006 13:00 chemist Quant Type: ISTD  
Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
Als bottle: 1 QC Sample: ACETONELCS  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: ss.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

*Acetone  
Only*

Cpnd Variable

Local Compound Variable

|                             |      |        |        |         |          | CONCENTRATIONS |            |
|-----------------------------|------|--------|--------|---------|----------|----------------|------------|
| QUANT SIG                   |      |        |        |         |          | ON-COLUMN      | FINAL      |
| Compounds                   | MASS | RT     | EXP RT | REL RT  | RESPONSE | ( ug/L)        | ( ug/L)    |
| =====                       | ---- | --     | =====  | =====   | =====    | =====          | =====      |
| * 1 Fluorobenzene           | 96   | 5.663  | 5.666  | (1.000) | 995029   | 10.0000        |            |
| * 2 Chlorobenzene-d5        | 119  | 8.929  | 8.932  | (1.000) | 181149   | 10.0000        |            |
| * 3 1,4 Dichlorobenzene-d4  | 152  | 11.484 | 11.481 | (1.000) | 227793   | 10.0000        |            |
| \$ 5 1,2-Dichloroethane-d4  | 65   | 5.224  | 5.228  | (0.923) | 144042   | 10.4474        | 10.447     |
| \$ 4 Dibromofluoromethane   | 113  | 4.823  | 4.820  | (0.852) | 167606   | 10.5122        | 10.512     |
| \$ 6 Toluene-d8             | 98   | 7.457  | 7.454  | (0.835) | 803220   | 10.0915        | 10.091     |
| \$ 7 4-Bromofluorobenzene   | 95   | 10.122 | 10.119 | (0.881) | 219416   | 9.55106        | 9.5511     |
| 11 Chloromethane (spcc)     | 50   | 1.124  | 1.121  | (0.199) | 230481   | 3.56270        | 3.5627     |
| 12 Vinyl Chloride (ccc)     | 62   | 1.191  | 1.194  | (0.210) | 5545     | 0.14149        | 0.14149    |
| 15 Bromomethane             | 94   | 1.410  | 1.407  | (0.249) | 44816    | 5.05628        | 5.0563     |
| 20 1,1-Dichloroethene (ccc) | 96   | 2.067  | 2.058  | (0.365) | 3043     | 0.14071        | 0.14071    |
| 23 *Iodomethane             | 142  | 2.177  | 2.174  | (0.384) | 2645246  | 102.600        | 102.60 (A) |
| 24 Carbon Disulfide         | 76   | 2.231  | 2.228  | (0.394) | 7700001  | 100.868        | 100.87 (A) |
| 22 Acetone                  | 43   | 2.122  | 2.125  | (0.375) | 155799   | 86.0674        | 86.067     |

*Spike Level 80ppb*

*100% Recovery  
S. Dittmer  
for Ketone*

Data File: /chem/gcms/mz.i/Z032806.b/lcsact.d  
Report Date: 28-Mar-2006 13:45

| Compounds                         | QUANT SIG | CONCENTRATIONS |        |        |         |          |           |            |
|-----------------------------------|-----------|----------------|--------|--------|---------|----------|-----------|------------|
|                                   |           | MASS           | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL      |
|                                   |           |                |        |        |         |          | ( ug/L)   | ( ug/L)    |
| =====                             | =====     | ==             | =====  | =====  | =====   | =====    | =====     |            |
| 30 trans-1,2-Dichloroethene       | 96        |                | 2.791  | 2.788  | (0.493) | 6415     | 0.23499   | 0.23499    |
| 33 1,1-Dichloroethane (spcc)      | 63        |                | 3.278  | 3.275  | (0.579) | 13661    | 0.21650   | 0.21650    |
| 34 *Vinyl Acetate                 | 86        |                | 3.399  | 3.403  | (0.600) | 111189   | 83.8141   | 83.814 (A) |
| 35 2,2-Dichloropropane            | 77        |                | 4.087  | 4.090  | (0.722) | 4373     | 0.13640   | 0.13640    |
| 36 cis 1,2-Dichloroethene         | 96        |                | 4.117  | 4.108  | (0.727) | 5835     | 0.23159   | 0.23159    |
| M 8 1,2-Dichloroethene (total)    | 96        |                |        |        |         | 12251    | 0.46658   | 0.46658    |
| 37 2-Butanone                     | 43        |                | 4.172  | 4.175  | (0.737) | 333655   | 88.4963   | 88.496     |
| 40 Chloroform (ccc)               | 83        |                | 4.616  | 4.607  | (0.815) | 8361     | 0.23256   | 0.23256    |
| 41 1,1,1-Trichloroethane          | 97        |                | 4.811  | 4.814  | (0.850) | 4518     | 0.14199   | 0.14198    |
| 43 1,1-Dichloropropene            | 75        |                | 5.048  | 5.039  | (0.891) | 4635     | 0.13594   | 0.13594    |
| 44 Benzene                        | 78        |                | 5.285  | 5.288  | (0.933) | 25238    | 0.25721   | 0.25721    |
| 45 1,2-Dichloroethane             | 62        |                | 5.328  | 5.325  | (0.941) | 3027     | 0.14571   | 0.14571    |
| 46 Trichloroethene                | 130       |                | 6.107  | 6.104  | (1.078) | 5704     | 0.20668   | 0.20668    |
| 47 1,2-Dichloropropane (ccc)      | 63        |                | 6.350  | 6.341  | (1.121) | 4701     | 0.17535   | 0.17535    |
| 49 Dibromomethane                 | 93        |                | 6.478  | 6.469  | (1.144) | 669      | 0.11997   | 0.11997    |
| 50 Bromodichloromethane           | 83        |                | 6.685  | 6.682  | (1.180) | 3314     | 0.91219   | 0.91219    |
| 52 cis-1,3-Dichloropropene        | 75        |                | 7.177  | 7.180  | (1.268) | 3078     | 0.14141   | 0.14141    |
| 53 4-Methyl-2-pentanone           | 43        |                | 7.378  | 7.375  | (1.303) | 822490   | 94.6548   | 94.655     |
| 54 Toluene (ccc)                  | 91        |                | 7.524  | 7.521  | (0.843) | 21641    | 0.20993   | 0.20992    |
| 55 trans-1,3-Dichloropropene      | 75        |                | 7.780  | 7.783  | (0.871) | 1971     | 0.74492   | 0.74492    |
| 57 1,1,2-Trichloroethane          | 97        |                | 7.968  | 7.959  | (0.892) | 962      | 0.11503   | 0.11503    |
| 58 Tetrachloroethene              | 164       |                | 8.096  | 8.093  | (0.907) | 3399     | 0.15900   | 0.15900    |
| 59 1,3-Dichloropropane            | 76        |                | 8.120  | 8.117  | (0.909) | 1930     | 0.13162   | 0.13162    |
| 60 2-Hexanone                     | 43        |                | 8.254  | 8.251  | (0.924) | 540014   | 96.3321   | 96.332     |
| 61 Chlorodibromomethane           | 129       |                | 8.345  | 8.342  | (0.935) | 982      | 0.87407   | 0.87407    |
| 62 1,2-Dibromoethane              | 107       |                | 8.437  | 8.434  | (0.945) | 955      | 0.12753   | 0.12753    |
| 63 Chlorobenzene (spcc)           | 112       |                | 8.960  | 8.957  | (1.003) | 14706    | 0.25558   | 0.25558    |
| 65 Ethylbenzene (ccc)             | 106       |                | 9.094  | 9.091  | (1.018) | 8373     | 0.22586   | 0.22586    |
| 64 1,1,1,2-Tetrachloroethane      | 131       |                | 9.051  | 9.054  | (1.014) | 2292     | 0.47594   | 0.47594    |
| 66 m&p-Xylene                     | 106       |                | 9.215  | 9.218  | (1.032) | 20806    | 0.46420   | 0.46420    |
| 67 o-Xylene                       | 106       |                | 9.605  | 9.608  | (1.076) | 10070    | 0.25438   | 0.25438    |
| M 9 Xylene (total)                | 106       |                |        |        |         | 30877    | 0.71859   | 0.71859    |
| 68 Styrene                        | 104       |                | 9.623  | 9.620  | (1.078) | 16844    | 0.30304   | 0.30304    |
| 69 Bromoform (spcc)               | 173       |                | 9.769  | 9.778  | (1.094) | 202      | 0.87146   | 0.87146    |
| 70 Isopropylbenzene               | 105       |                | 9.988  | 9.991  | (1.119) | 19859    | 0.17446   | 0.17446    |
| 72 Bromobenzene                   | 156       |                | 10.249 | 10.253 | (1.148) | 4615     | 0.27284   | 0.27284    |
| 73 1,1,2,2-Tetrachloroethane (sp) | 83        |                | 10.286 | 10.289 | (1.152) | 1411     | 0.22619   | 0.22619    |
| 76 n-Propylbenzene                | 91        |                | 10.402 | 10.405 | (0.906) | 28271    | 0.20505   | 0.20505    |
| 74 1,2,3-Trichloropropane         | 110       |                | 10.310 | 10.313 | (0.898) | 306      | 0.15615   | 0.15615    |
| 77 2-Chlorotoluene                | 91        |                | 10.475 | 10.472 | (0.912) | 21370    | 0.29225   | 0.29225    |
| 78 1,3,5-Trimethylbenzene         | 105       |                | 10.608 | 10.611 | (0.924) | 23923    | 0.25787   | 0.25787    |
| 79 4-Chlorotoluene                | 91        |                | 10.596 | 10.599 | (0.923) | 21845    | 0.28123   | 0.28123    |
| 80 tert-Butylbenzene              | 119       |                | 10.986 | 10.989 | (0.957) | 17269    | 0.20791   | 0.20791    |
| 81 1,2,4-Trimethylbenzene         | 105       |                | 11.052 | 11.049 | (0.962) | 27037    | 0.31019   | 0.31019    |
| 82 sec-Butylbenzene               | 105       |                | 11.278 | 11.281 | (0.982) | 26515    | 0.21655   | 0.21655    |
| 83 1,3-Dichlorobenzene            | 146       |                | 11.381 | 11.384 | (0.991) | 15643    | 0.39232   | 0.39232    |
| 84 p-Isopropyltoluene             | 119       |                | 11.497 | 11.500 | (1.001) | 25581    | 0.23811   | 0.23811    |

Data File: /chem/gcms/mz.i/Z032806.b/lcsact.d  
 Report Date: 28-Mar-2006 13:45

| Compounds                      | QUANT SIG |        |        |         |          | CONCENTRATIONS |         |
|--------------------------------|-----------|--------|--------|---------|----------|----------------|---------|
|                                | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN      | FINAL   |
|                                |           |        |        |         |          | ( ug/L)        | ( ug/L) |
| =====                          | ====      | ==     | =====  | =====   | =====    | =====          | =====   |
| 85 1,4-Dichlorobenzene         | 146       | 11.515 | 11.518 | (1.003) | 14900    | 0.40173        | 0.40173 |
| 87 n-Butylbenzene              | 91        | 12.141 | 12.138 | (1.057) | 29455    | 0.30653        | 0.30653 |
| 86 1,2-Dichlorobenzene         | 146       | 12.074 | 12.071 | (1.051) | 12927    | 0.43946        | 0.43946 |
| 88 1,2-Dibromo-3-chloropropane | 157       | 13.255 | 13.252 | (1.154) | 604      | 1.29726        | 1.2972  |
| 89 1,2,4-Trichlorobenzene      | 180       | 14.289 | 14.292 | (1.244) | 27820    | 1.56033        | 1.5603  |
| 90 Hexachlorobutadiene         | 225       | 14.526 | 14.529 | (1.265) | 13890    | 0.83073        | 0.83073 |
| 91 Napthalene                  | 128       | 14.544 | 14.541 | (1.266) | 36719    | 1.96386        | 1.9639  |
| 92 1,2,3-Trichlorobenzene      | 180       | 14.818 | 14.815 | (1.290) | 29459    | 2.50824        | 2.5082  |

#### QC Flag Legend

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

Data File: /chem/gcms/mz.i/Z032806.b/lcsact.d  
 Report Date: 28-Mar-2006 13:45

## STL Knoxville

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| Instrument ID: mz.i                               | Calibration Date: 28-MAR-2006 |
| Lab File ID: lcsact.d                             | Calibration Time: 12:43       |
| Lab Smp Id: lcs                                   | Client Smp ID: .opc not found |
| Analysis Type: VOA                                | Level: LOW                    |
| Quant Type: ISTD                                  | Sample Type: WATER            |
| Operator: 22980                                   |                               |
| Method File: /chem/gcms/mz.i/Z032806.b/8260B_LM.m |                               |
| Misc Info: Z032806,8260B_LM,ss.sub                |                               |

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE | %DIFF |
|---------------------|----------|------------|---------|--------|-------|
|                     |          | LOWER      | UPPER   |        |       |
| 1 Fluorobenzene     | 1026761  | 513380     | 2053522 | 995029 | -3.09 |
| 2 Chlorobenzene-d5  | 189231   | 94616      | 378462  | 181149 | -4.27 |
| 3 1,4 Dichlorobenze | 222795   | 111398     | 445590  | 227793 | 2.24  |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 5.67     | 5.17     | 6.17  | 5.66   | -0.05 |
| 2 Chlorobenzene-d5  | 8.93     | 8.43     | 9.43  | 8.93   | -0.03 |
| 3 1,4 Dichlorobenze | 11.48    | 10.98    | 11.98 | 11.48  | 0.03  |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mz.i/Z032806.b/lcsact.d  
Report Date: 28-Mar-2006 13:45

## STL Knoxville

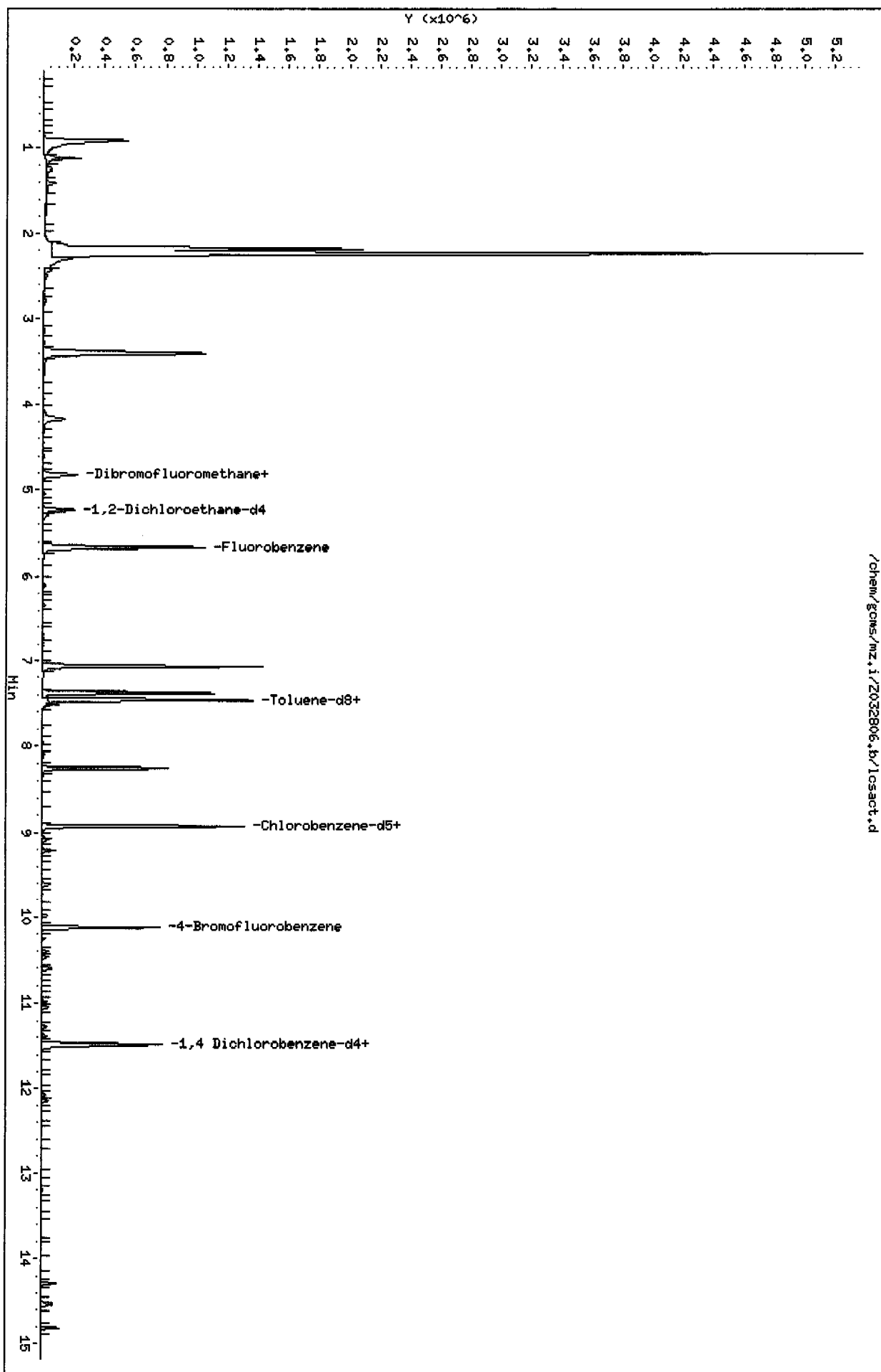
## RECOVERY REPORT

Client Name: Client SDG: Z032806  
Sample Matrix: LIQUID Fraction: VOA  
Lab Smp Id: lcs Client Smp ID: .opc not found  
Level: LOW Operator: 22980  
Data Type: MS DATA SampleType: ACETONELCS  
SpikeList File: ssallcmpds.spk Quant Type: ISTD  
Sublist File: ss.sub  
Method File: /chem/gcms/mz.i/Z032806.b/8260B\_LM.m  
Misc Info: Z032806,8260B\_LM,ss.sub

| SURROGATE COMPOUND      | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|-------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 5 1,2-Dichloroethane | 10.000                | 10.447                    | 104.47         | 71-127 |
| \$ 4 Dibromofluorometha | 10.000                | 10.512                    | 105.12         | 79-120 |
| \$ 6 Toluene-d8         | 10.000                | 10.091                    | 100.91         | 80-120 |
| \$ 7 4-Bromofluorobenze | 10.000                | 9.5511                    | 95.51          | 69-126 |

Data File: /chem/gcms/mz.i/Z032806.b/1osact.d  
Date : 28-MAR-2006 13:29  
Client ID: .opc not found  
Sample Info: 1cs.1.3,,ACETONELCS  
Purge Volume: 25.0  
Column phase: J+M 624

Instrument: mz.i  
Operator: 22980  
Column diameter: 0.18





## STL Volatile GC/MS Continuing Calibration Review / Narrative Checklist

1643

Method: 8260B - KNOX-MS-0015, Rev. 8

|                |          |                        |         |             |    |                        |          |                                  |
|----------------|----------|------------------------|---------|-------------|----|------------------------|----------|----------------------------------|
| Analysis Date: | 04/05/06 | CCAL Batch/ Scan Name: | Z010506 | Instrument: | MZ | ICAL Batch/ Scan Name: | Z032406I | Scanned <input type="checkbox"/> |
|----------------|----------|------------------------|---------|-------------|----|------------------------|----------|----------------------------------|

| Review Items                                                                                                                                                                                                                   | N/A                                 | Yes                                 | No | If No, why is data reportable?                                                                            | 2nd                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|----|-----------------------------------------------------------------------------------------------------------|-------------------------------------|
| 1. Did BFB meet tune criteria?                                                                                                                                                                                                 |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| 2. Were all standards injected within 12 hr of BFB?                                                                                                                                                                            |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| 3. Was date/time of analysis verified between analysis header and logbook as correct?                                                                                                                                          |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| 4. Was the primary ion used for all compounds?                                                                                                                                                                                 |                                     | <input checked="" type="checkbox"/> |    | <input type="checkbox"/> Secondary ion used due to interferences for: _____                               | <input checked="" type="checkbox"/> |
| 5. Do the RFs for SPCCs meet minimum RF?                                                                                                                                                                                       |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| 6. Is the %D or drift $\leq 20\%$ for all CCCs?                                                                                                                                                                                |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| 7. Is the %D or drift $\leq 50\%$ for all other compounds? [Up to 6 TCLs may have %D or drift $> 50\%$ ; any more and the calibration is INVALID].                                                                             |                                     | <input checked="" type="checkbox"/> |    | <input type="checkbox"/> %D or drift $> 50\%$ for the following TCLs: _____                               | <input checked="" type="checkbox"/> |
| 8. Are the internal standard responses within limits?<br>8260B: 50-200% of the mid-level ICAL standard                                                                                                                         |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| 9. Are the internal standard retention times within limits?<br>8260B: 30 seconds of the mid-level ICAL standard                                                                                                                |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| 10. If manual integrations were performed, are they clearly identified, initialed, dated and reason given?                                                                                                                     | <input checked="" type="checkbox"/> |                                     |    | Reasons: 1)Corrected split peak; 2)Unresolved peak; 3)tailing; 4)RT shift; 5)wrong peak selected; 6)other | NA                                  |
| 11. Have alternate hits/manual integrations been verified as correct and are correct RFs listed in CCAL summary?                                                                                                               | <input checked="" type="checkbox"/> |                                     |    |                                                                                                           | NA                                  |
| 12. Was the correct ICAL used for quantitation? (Verify date & time of ICAL is documented correctly on CCAL)                                                                                                                   |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| 13. Is the first IS documented correctly on the log?                                                                                                                                                                           |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| 14. Elution order checked on isomeric pairs/coeluters?                                                                                                                                                                         |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| • hexane and vinyl acetate                                                                                                                                                                                                     |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| • cis- and trans- isomers                                                                                                                                                                                                      |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| • trichlorofluoromethane and Freon 113                                                                                                                                                                                         |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| • ethyl benzene / m/p-xylene / o-xylene                                                                                                                                                                                        |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| • n-propylbenzene / 2-chlorotoluene / 4-chlorotoluene                                                                                                                                                                          |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| • 1,3,5-trimethylbenzene / 1,2,4-trimethylbenzene / sec-butylbenzene                                                                                                                                                           |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| • 1,3-, 1,4-, and 1,2-dichlorobenzene                                                                                                                                                                                          |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| • 1,2,4 and 1,2,3 -trichlorobenzene                                                                                                                                                                                            |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| • chlorobenzene-d5 and 1,1,1,2-tetrachloroethane                                                                                                                                                                               |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |
| 15. If criteria were not met, was a NCM generated, approved by supervisor, and copy included in folder?                                                                                                                        | <input checked="" type="checkbox"/> |                                     |    |                                                                                                           | NA                                  |
| 16. Does the CCAL folder contain <b>complete</b> data in the following order? Data review checklist, tune pass/fail page, m/z list, tune chromatogram, Target CCAL summary, Quan report, chromatogram and manual integrations. |                                     | <input checked="" type="checkbox"/> |    |                                                                                                           | <input checked="" type="checkbox"/> |

|           |    |       |        |                      |  |       |         |        |
|-----------|----|-------|--------|----------------------|--|-------|---------|--------|
| Analyst:  | WY | Date: | 4/5/06 | 2nd Level Reviewer : |  | Date: | 5/16/06 | 2-4/06 |
| Comments: |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |
|           |    |       |        |                      |  |       |         |        |

## STL Knoxville GC/MS Volatiles Run Log - Instrument MZ

|                   |           |            |            |             |   |          |
|-------------------|-----------|------------|------------|-------------|---|----------|
| Target Batch      | 2040506   | XXXXXXXXXX | XXXXXXXXXX | Loop #      | — | 3        |
| QuantIMS Batch    | 6095253   | —          | —          | Standard ID | — | LOA 6499 |
| Method            | 8260B     | XXXXXXXXXX | XXXXXXXXXX | Matrix      | — | Water    |
| SOP#              | KnoxMS005 | XXXXXXXXXX | XXXXXXXXXX | IS Amt/ID   | — | 4.71 mL  |
| Initial Cal Batch | 2032406I  | XXXXXXXXXX | XXXXXXXXXX | SS Amt/ID   | — | ↓        |
| CCAL IS Areas     | 1078707   | 188899     | 226143     | Heated?     | Y | (N)      |

☒ Date/Time Verified    Preventive Maintenance Performed ☒ NA or ☐

| Lot                  | Lab File ID | Time | ALS # | Loop # | Solutek Dilution Factor | MS Dilution Factor | Volume/Weight Purged | pH | Init | Standards ID/Spike ID/ and/or Comments |
|----------------------|-------------|------|-------|--------|-------------------------|--------------------|----------------------|----|------|----------------------------------------|
| Time                 | BF3BDDH     | 1425 | —     | —      | —                       | 1                  | —                    | NA | MT   | 1 mL DTA 6493                          |
| CUV                  | CCVZD043    | 1442 | 1     | 3      | 1                       |                    | 25 mL                |    |      | 5 mL DTA 6496 → 50 mL                  |
| LCS                  | H2MQQ1AC    | 1505 | 2     |        |                         |                    |                      |    |      | ↓                                      |
| BIK                  | BIK1        | 1529 | 3     |        |                         |                    |                      |    |      |                                        |
| ↓                    | H2MQQ1AA    | 1552 | 4     |        |                         |                    |                      | ↓  |      |                                        |
| C150102              | H08572AA    | 1615 | 5     |        |                         |                    |                      | L2 |      |                                        |
| ↓                    | H08582AA    | 1639 | 6     |        |                         |                    |                      | ↓  |      |                                        |
| D030104              | H2GMA1AA    | 1702 | 7     |        |                         |                    |                      | NA |      |                                        |
| ↓                    | H2GMD1AA    | 1725 | 8     |        |                         |                    |                      | ↓  |      |                                        |
| D030109              | H2HC11AA    | 1749 | 9     |        |                         |                    |                      | ↓  |      |                                        |
| D030205              | H2HPA1AA    | 1812 | 10    |        |                         |                    |                      | L2 |      |                                        |
| D030109              | H2G9H1AA    | 1836 | 11    |        |                         |                    |                      | NA |      |                                        |
| ↓                    | HAD         | 1859 | 12    |        |                         |                    |                      |    |      |                                        |
| ↓                    | HCR         | 1922 | 13    |        |                         |                    |                      |    |      |                                        |
| ↓                    | GSH1AC      | 1940 | 14    |        |                         |                    |                      |    |      |                                        |
| ↓                    | HAD         | 2019 | 15    |        |                         |                    |                      |    |      |                                        |
| ↓                    | HCR         | 2033 | 16    |        |                         |                    |                      | ↓  |      |                                        |
| MS                   | H2HPA1AC    | 2050 | 17    |        |                         |                    |                      | L2 |      | 5 mL DTA 6496 → 50 mL                  |
| MSD                  | H2HPA1AD    | 2120 | 18    |        |                         |                    |                      | ↓  |      | ↓                                      |
| D030114              | H2GKU1AA    | 2143 | 19    |        |                         | 20000              |                      | 7  |      | 5 mL 25 mL → 50 mL 4/6/06              |
| ↓                    | H2GKU2AA    | 2206 | 20    |        |                         | 10000              |                      | ↓  |      | 5 mL → 50 mL RR 12000                  |
| D030205              | H2HQT1AA    | 2280 | 21    |        |                         | 1                  |                      | L2 |      |                                        |
| ↓                    | QW          | 2253 | 22    |        |                         |                    |                      | 7  |      |                                        |
| ↓                    | QD          | 2316 | 23    |        |                         |                    |                      | ↓  |      |                                        |
| ↓                    | RA          | 2340 | 24    |        |                         |                    |                      | 4  |      |                                        |
| ↓                    | RF          | 0003 | 25    |        |                         |                    |                      | 7  |      |                                        |
| ↓                    | RH          | 0027 | 26    | ✓      | ✓                       | ✓                  | ✓                    | ↓  | ↓    |                                        |
| <div>MM 4/6/06</div> |             |      |       |        |                         |                    |                      |    |      |                                        |

Data File: /var/chem/gcms/mz.i/Z040506.b/bfbzd04.d

Date : 05-APR-2006 14:25

Client ID:

Instrument: mz.i

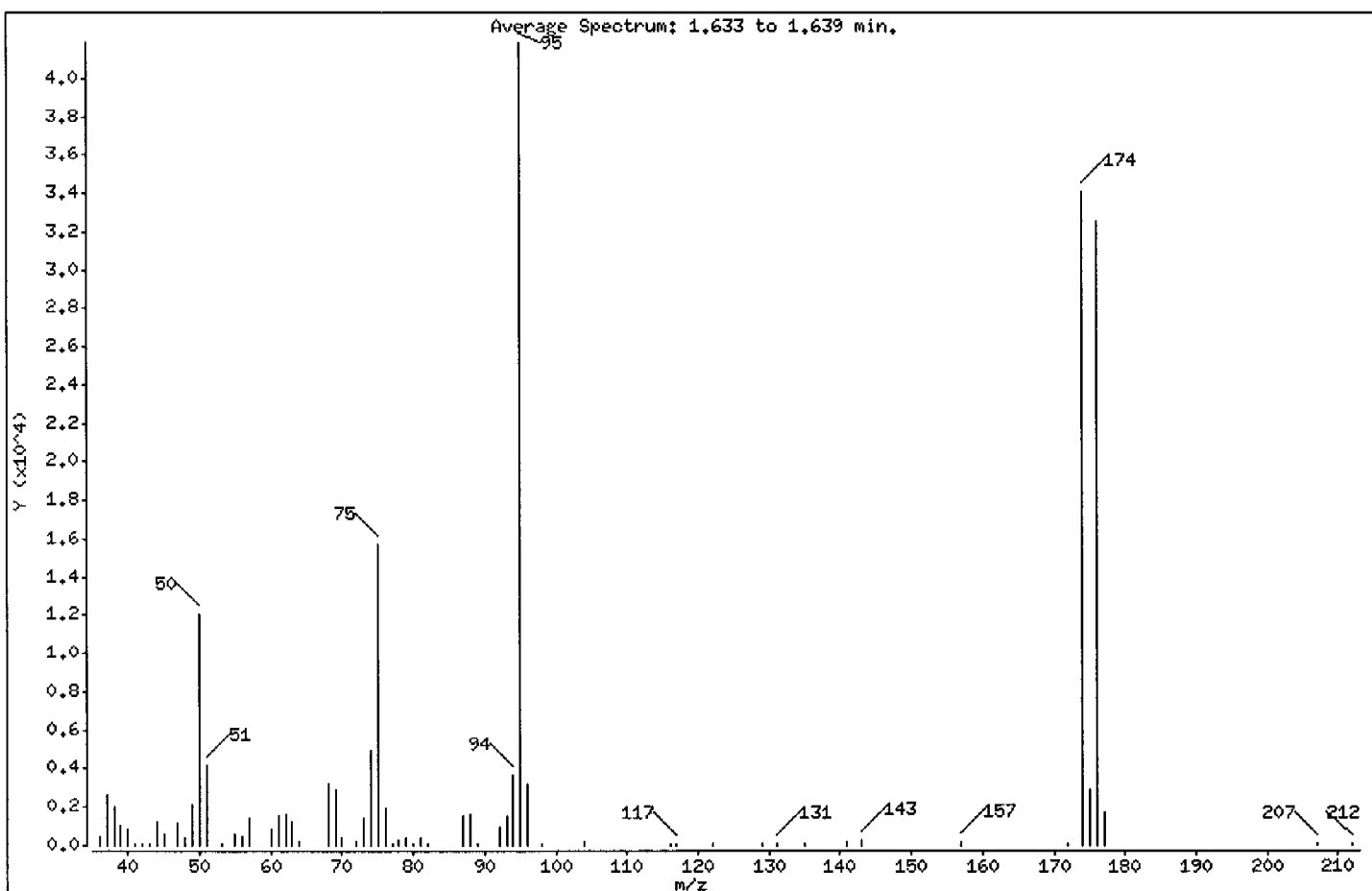
Sample Info: BFBZD04,1,3,,BFB

Operator: 063605

Column phase: J &amp; W 624

Column diameter: 0.18

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          | 28.77                |
| 75  | 30.00 - 60.00% of mass 95          | 37.41                |
| 96  | 5.00 - 9.00% of mass 95            | 7.53                 |
| 173 | Less than 2.00% of mass 174        | 0.00 ( 0.00)         |
| 174 | 50.00 - 120.00% of mass 95         | 81.35                |
| 175 | 5.00 - 9.00% of mass 174           | 6.99 ( 8.60)         |
| 176 | 95.00 - 101.00% of mass 174        | 77.81 ( 95.65)       |
| 177 | 5.00 - 9.00% of mass 176           | 4.08 ( 5.24)         |

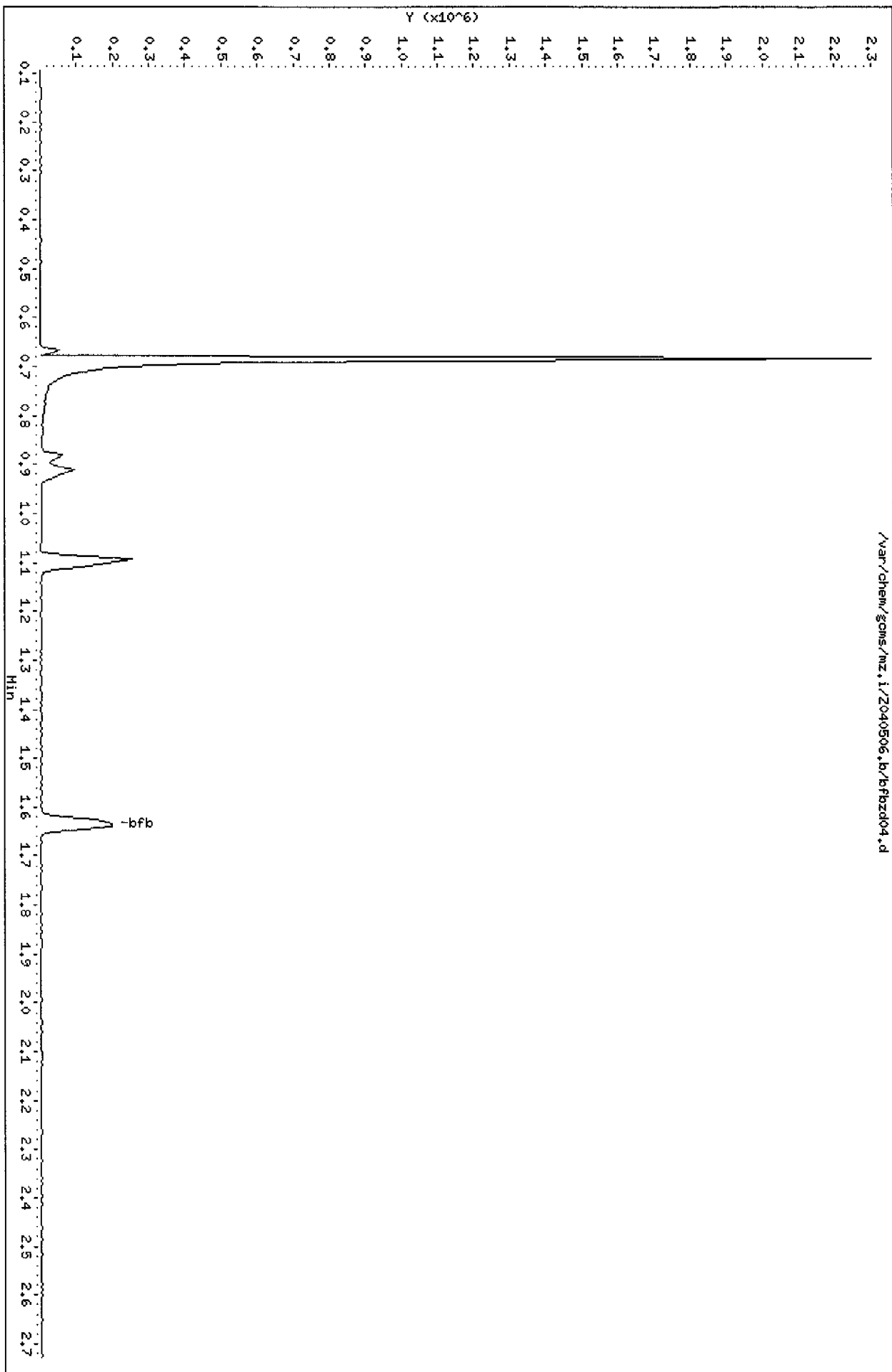


Data File: /var/chem/gcms/mz.i/2040506.b/bfbzd04.d  
Date : 05-APR-2006 14:25  
Client ID:  
Sample Info: BFBZD04,1,3,,BFB

Instrument: mz.i

Column phase: J & M 624

Operator: 063605  
Column diameter: 0.18



Data File: /chem/gcms/mz.i/Z040506.b/ccvzd043.d

Report Date: 05-Apr-2006 15:00

## STL Knoxville

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mz.i Injection Date: 05-APR-2006 14:42  
 Lab File ID: ccvzd043.d Init. Cal. Date(s): 24-MAR-2006 24-MAR-2006  
 Analysis Type: WATER Init. Cal. Times: 13:51 16:34  
 Lab Sample ID: CCVZD043 Quant Type: ISTD  
 Method: /var/chem/gcms/mz.i/Z040506.b/8260B\_LM.m

| COMPOUND                       | RRF / AMOUNT | RF10     | CCAL<br>RRF10 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|--------------------------------|--------------|----------|---------------|------------|-------------|--------------------|------------|
| \$ 4 Dibromofluoromethane      | 0.16024      | 0.16944  | 0.16944       | 0.000      | -5.74449    | 50.00000           | Averaged   |
| \$ 5 1,2-Dichloroethane-d4     | 0.13856      | 0.13960  | 0.13960       | 0.000      | -0.75058    | 50.00000           | Averaged   |
| \$ 6 Toluene-d8                | 4.39383      | 4.62663  | 4.62663       | 0.000      | -5.29848    | 50.00000           | Averaged   |
| \$ 7 4-Bromofluorobenzene      | 1.00850      | 0.96644  | 0.96644       | 0.000      | 4.17051     | 50.00000           | Averaged   |
| M 8 1,2-Dichloroethene (total) | 0.26636      | 0.22854  | 0.22854       | 0.000      | 14.19724    | 50.00000           | Averaged   |
| M 9 Xylene (total)             | 2.45452      | 2.22892  | 2.22892       | 0.000      | 9.19138     | 50.00000           | Averaged   |
| 10 Dichlorodifluoromethane     | 0.24410      | 0.21717  | 0.21717       | 0.000      | 11.03120    | 50.00000           | Averaged   |
| 11 Chloromethane (spcc)        | 10.05828     | 10.00000 | 0.59514       | 0.100      | -0.58281    | 50.00000           | Wt Linear  |
| 12 Vinyl Chloride (ccc)        | 0.39386      | 0.36524  | 0.36524       | 0.000      | 7.26717     | 19.00000           | Averaged   |
| 13 *1,3-Butadiene              | 0.35518      | 0.31767  | 0.31767       | 0.000      | 10.55902    | 50.00000           | Averaged   |
| 15 Bromomethane                | 7.37810      | 10.00000 | 0.06981       | 0.000      | 26.21900    | 50.00000           | Wt Linear  |
| 16 Chloroethane                | 0.18650      | 0.16334  | 0.16334       | 0.000      | 12.41631    | 50.00000           | Averaged   |
| 17 *Vinyl Bromide              | 0.16661      | 0.15620  | 0.15620       | 0.000      | 6.24775     | 50.00000           | Averaged   |
| 18 Trichlorofluoromethane      | 0.30565      | 0.26967  | 0.26967       | 0.000      | 11.77141    | 50.00000           | Averaged   |
| 19 *2-Chloropropane            | 0.66154      | 0.55698  | 0.55698       | 0.000      | 15.80490    | 50.00000           | Averaged   |
| 20 1,1-Dichloroethene (ccc)    | 0.21734      | 0.20910  | 0.20910       | 0.000      | 3.78978     | 19.00000           | Averaged   |
| 21 *Freon 113                  | 0.16920      | 0.17598  | 0.17598       | 0.000      | -4.00758    | 50.00000           | Averaged   |
| 22 Acetone                     | 35.92004     | 40.00000 | 0.02224       | 0.000      | 10.19991    | 50.00000           | Quadratic  |
| 23 *Iodomethane                | 9.59276      | 10.00000 | 0.23623       | 0.000      | 4.07237     | 50.00000           | Wt Linear  |
| 24 Carbon Disulfide            | 0.76719      | 0.67842  | 0.67842       | 0.000      | 11.57051    | 50.00000           | Averaged   |
| 25 *2-propanol                 | ++++         | 0.00106  | 0.00106       | 0.000      | ++++        | 50.00000           | Averaged   |
| 26 *Acetonitrile               | 0.00445      | 0.00476  | 0.00476       | 0.000      | -6.75181    | 50.00000           | Averaged   |
| 27 Methylene Chloride          | 0.16724      | 0.14752  | 0.14752       | 0.000      | 11.79282    | 50.00000           | Averaged   |
| 28 *t-butanol                  | ++++         | 0.00281  | 0.00281       | 0.000      | ++++        | 50.00000           | Averaged   |
| 29 *Acrylonitrile              | 0.03734      | 0.03411  | 0.03411       | 0.000      | 8.65411     | 50.00000           | Averaged   |
| 30 trans-1,2-Dichloroethene    | 0.27436      | 0.24246  | 0.24246       | 0.000      | 11.62620    | 50.00000           | Averaged   |
| 31 *MTBE                       | 0.24065      | 0.19448  | 0.19448       | 0.000      | 19.18769    | 50.00000           | Averaged   |
| 32 *Hexane                     | 0.70295      | 0.65170  | 0.65170       | 0.000      | 7.28969     | 50.00000           | Averaged   |
| 33 1,1-Dichloroethane (spcc)   | 0.63418      | 0.53615  | 0.53615       | 0.100      | 15.45717    | 50.00000           | Averaged   |
| 34 *Vinyl Acetate              | 0.01333      | 0.01073  | 0.01073       | 0.000      | 19.50828    | 50.00000           | Averaged   |
| 35 2,2-Dichloropropane         | 0.32221      | 0.26439  | 0.26439       | 0.000      | 17.94464    | 50.00000           | Averaged   |
| 36 cis 1,2-Dichloroethene      | 0.25325      | 0.21462  | 0.21462       | 0.000      | 15.25501    | 50.00000           | Averaged   |
| 37 2-Butanone                  | 0.03789      | 0.03371  | 0.03371       | 0.000      | 11.03508    | 50.00000           | Averaged   |
| 38 Bromochloromethane          | 0.06964      | 0.06468  | 0.06468       | 0.000      | 7.11605     | 50.00000           | Averaged   |
| 39 *THF                        | 0.02373      | 0.02122  | 0.02122       | 0.000      | 10.54946    | 50.00000           | Averaged   |

NA  
MT  
4/5/06

Data File: /chem/gcms/mz.i/Z040506.b/ccvzd043.d

Report Date: 05-Apr-2006 15:00

STL Knoxville

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mz.i Injection Date: 05-APR-2006 14:42  
 Lab File ID: ccvzd043.d Init. Cal. Date(s): 24-MAR-2006 24-MAR-2006  
 Analysis Type: WATER Init. Cal. Times: 13:51 16:34  
 Lab Sample ID: CCVZD043 Quant Type: ISTD  
 Method: /var/chem/gcms/mz.i/Z040506.b/8260B\_LM.m

| COMPOUND                       | RRF / AMOUNT | RF10     | CCAL<br>RRF10 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|--------------------------------|--------------|----------|---------------|------------|-------------|--------------------|------------|
| 40 Chloroform (ccc)            | 0.36132      | 0.30474  | 0.30474       | 0.000      | 15.65965    | 19.00000           | Averaged   |
| 41 1,1,1-Trichloroethane       | 0.31980      | 0.27866  | 0.27866       | 0.000      | 12.86479    | 50.00000           | Averaged   |
| 42 Carbon Tetrachloride        | 7.06978      | 10.00000 | 0.17972       | 0.000      | 29.30220    | 50.00000           | Wt Linear  |
| 43 1,1-Dichloropropene         | 0.34268      | 0.29870  | 0.29870       | 0.000      | 12.83351    | 50.00000           | Averaged   |
| 44 Benzene                     | 0.98616      | 0.80987  | 0.80987       | 0.000      | 17.87628    | 50.00000           | Averaged   |
| 45 1,2-Dichloroethane          | 0.20883      | 0.17992  | 0.17992       | 0.000      | 13.83994    | 50.00000           | Averaged   |
| 46 Trichloroethene             | 0.27740      | 0.25176  | 0.25176       | 0.000      | 9.24334     | 50.00000           | Averaged   |
| 47 1,2-Dichloropropane (ccc)   | 0.26944      | 0.23541  | 0.23541       | 0.000      | 12.63082    | 19.00000           | Averaged   |
| 48 *Methyl Methacrylate        | 0.08839      | 0.07247  | 0.07247       | 0.000      | 18.01817    | 50.00000           | Averaged   |
| 49 Dibromomethane              | 0.05611      | 0.04802  | 0.04802       | 0.000      | 14.41808    | 50.00000           | Averaged   |
| 50 Bromodichloromethane        | 8.36664      | 10.00000 | 0.14280       | 0.000      | 16.33363    | 50.00000           | Linear     |
| 51 *2-Chloroethylvinylether    | 0.06115      | 0.04048  | 0.04048       | 0.000      | 33.80926    | 50.00000           | Averaged   |
| 52 cis-1,3-Dichloropropene     | 0.21878      | 0.18434  | 0.18434       | 0.000      | 15.74142    | 50.00000           | Averaged   |
| 53 4-Methyl-2-pentanone        | 0.08733      | 0.07699  | 0.07699       | 0.000      | 11.83374    | 50.00000           | Averaged   |
| 54 Toluene (ccc)               | 5.69105      | 5.01491  | 5.01491       | 0.000      | 11.88086    | 19.00000           | Averaged   |
| 55 trans-1,3-Dichloropropene   | 7.52669      | 10.00000 | 0.62776       | 0.000      | 24.73310    | 50.00000           | Linear     |
| 56 *Ethyl Methacrylate         | 0.48617      | 0.39208  | 0.39208       | 0.000      | 19.35457    | 50.00000           | Averaged   |
| 57 1,1,2-Trichloroethane       | 0.46191      | 0.39898  | 0.39898       | 0.000      | 13.62296    | 50.00000           | Averaged   |
| 58 Tetrachloroethene           | 1.18042      | 1.07205  | 1.07205       | 0.000      | 9.18076     | 50.00000           | Averaged   |
| 59 1,3-Dichloropropane         | 0.80964      | 0.68899  | 0.68899       | 0.000      | 14.90207    | 50.00000           | Averaged   |
| 60 2-Hexanone                  | 0.30945      | 0.29133  | 0.29133       | 0.000      | 5.85664     | 50.00000           | Averaged   |
| 61 Chlorodibromomethane        | 7.69885      | 10.00000 | 0.36482       | 0.000      | 23.01152    | 50.00000           | Wt Linear  |
| 62 1,2-Dibromoethane           | 0.41364      | 0.35306  | 0.35306       | 0.000      | 14.64578    | 50.00000           | Averaged   |
| 63 Chlorobenzene (spcc)        | 3.17641      | 2.85555  | 2.85555       | 0.300      | 10.10133    | 50.00000           | Averaged   |
| 64 1,1,1,2-Tetrachloroethane   | 7.48771      | 10.00000 | 0.59233       | 0.000      | 25.12290    | 50.00000           | Wt Linear  |
| 65 Ethylbenzene (ccc)          | 2.04670      | 1.92519  | 1.92519       | 0.000      | 5.93673     | 19.00000           | Averaged   |
| 66 m&p-Xylene                  | 2.47429      | 2.32787  | 2.32787       | 0.000      | 5.91766     | 50.00000           | Averaged   |
| 67 o-Xylene                    | 2.18540      | 2.03102  | 2.03102       | 0.000      | 7.06413     | 50.00000           | Averaged   |
| 68 Styrene                     | 3.06833      | 2.71669  | 2.71669       | 0.000      | 11.46050    | 50.00000           | Averaged   |
| 69 Bromoform (spcc)            | 9.18658      | 10.00000 | 0.13915       | 0.100      | 8.13419     | 50.00000           | Quadratic  |
| 70 Isopropylbenzene            | 6.28402      | 5.77298  | 5.77298       | 0.000      | 8.13231     | 50.00000           | Averaged   |
| 71 *cis-1,4-dichloro-2-butene  | 7.17061      | 10.00000 | 0.05036       | 0.000      | 28.29389    | 50.00000           | Quadratic  |
| 72 Bromobenzene                | 0.93391      | 0.82165  | 0.82165       | 0.000      | 12.02056    | 50.00000           | Averaged   |
| 73 1,1,2,2-Tetrachloroethane(s | 0.34456      | 0.31352  | 0.31352       | 0.300      | 9.01066     | 50.00000           | Averaged   |
| 74 1,2,3-Trichloropropane      | 0.08610      | 0.07875  | 0.07875       | 0.000      | 8.52773     | 50.00000           | Averaged   |

Data File: /chem/gcms/mz.i/Z040506.b/ccvzd043.d

Report Date: 05-Apr-2006 15:00

STL Knoxville

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mz.i                      Injection Date: 05-APR-2006 14:42  
 Lab File ID: ccvzd043.d              Init. Cal. Date(s): 24-MAR-2006    24-MAR-2006  
 Analysis Type: WATER                  Init. Cal. Times:    13:51                  16:34  
 Lab Sample ID: CCVZD043              Quant Type:    ISTD  
 Method: /var/chem/gcms/mz.i/Z040506.b/8260B\_LM.m

| COMPOUND                         | RRF / AMOUNT | RF10     | CCAL<br>RRF10 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|----------------------------------|--------------|----------|---------------|------------|-------------|--------------------|------------|
| =====                            | =====        | =====    | =====         | =====      | =====       | =====              | =====      |
| 75 *trans-1,4-dichloro-2-buten   | 8.28269      | 10.00000 | 0.10226       | 0.000      | 17.17311    | 50.00000           | Wt Linear  |
| 76 n-Propylbenzene               | 6.05285      | 5.76048  | 5.76048       | 0.000      | 4.83028     | 50.00000           | Averaged   |
| 77 2-Chlorotoluene               | 3.21004      | 2.94356  | 2.94356       | 0.000      | 8.30131     | 50.00000           | Averaged   |
| 78 1,3,5-Trimethylbenzene        | 4.07272      | 3.95191  | 3.95191       | 0.000      | 2.96628     | 50.00000           | Averaged   |
| 79 4-Chlorotoluene               | 3.41012      | 3.24428  | 3.24428       | 0.000      | 4.86332     | 50.00000           | Averaged   |
| 80 tert-Butylbenzene             | 3.64650      | 3.53150  | 3.53150       | 0.000      | 3.15374     | 50.00000           | Averaged   |
| 81 1,2,4-Trimethylbenzene        | 3.82646      | 3.63388  | 3.63388       | 0.000      | 5.03287     | 50.00000           | Averaged   |
| 82 sec-Butylbenzene              | 5.37516      | 5.18534  | 5.18534       | 0.000      | 3.53144     | 50.00000           | Averaged   |
| 83 1,3-Dichlorobenzene           | 1.75048      | 1.59177  | 1.59177       | 0.000      | 9.06654     | 50.00000           | Averaged   |
| 84 p-Isopropyltoluene            | 4.71643      | 4.57444  | 4.57444       | 0.000      | 3.01038     | 50.00000           | Averaged   |
| 85 1,4-Dichlorobenzene           | 1.62825      | 1.48905  | 1.48905       | 0.000      | 8.54895     | 50.00000           | Averaged   |
| 86 1,2-Dichlorobenzene           | 1.29143      | 1.21673  | 1.21673       | 0.000      | 5.78412     | 50.00000           | Averaged   |
| 87 n-Butylbenzene                | 4.21842      | 4.07261  | 4.07261       | 0.000      | 3.45669     | 50.00000           | Averaged   |
| 88 1,2-Dibromo-3-chloropropane   | 6.54634      | 10.00000 | 0.02899       | 0.000      | 34.53663    | 50.00000           | Wt Linear  |
| 89 1,2,4-Trichlorobenzene        | 0.78272      | 0.69330  | 0.69330       | 0.000      | 11.42422    | 50.00000           | Averaged   |
| 90 Hexachlorobutadiene           | 0.73404      | 0.72011  | 0.72011       | 0.000      | 1.89689     | 50.00000           | Averaged   |
| 91 Napthalene                    | 0.82082      | 0.70122  | 0.70122       | 0.000      | 14.57112    | 50.00000           | Averaged   |
| 92 1,2,3-Trichlorobenzene        | 0.51561      | 0.46521  | 0.46521       | 0.000      | 9.77532     | 50.00000           | Averaged   |
| M 93 *1,4-dichloro-2-butene(tota | 0.10257      | 0.08477  | 0.08477       | 0.000      | 17.35986    | 50.00000           | Averaged   |



Data File: /chem/gcms/mz.i/Z040506.b/ccvzd043.d  
Report Date: 05-Apr-2006 15:00

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /chem/gcms/mz.i/Z040506.b/ccvzd043.d  
Lab Smp Id: CCVZD043 Client Smp ID: STD10  
Inj Date : 05-APR-2006 14:42  
Operator : 063605 Inst ID: mz.i  
Smp Info : CCVZD043,1,2,3,,STD10  
Misc Info : Z040506,8260B LM,all.sub  
Comment : Volatile Organics by GC/MS  
Method : /var/chem/gcms/mz.i/Z040506.b/8260B LM.m  
Meth Date : 05-Apr-2006 15:00 chemist Quant Type: ISTD  
Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
Als bottle: 1 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: all.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT | SIG | MASS   | RT     | EXP RT  | REL RT  | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-------|-----|--------|--------|---------|---------|----------|--------------------|-------------------|
|                                |       |     |        |        |         |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene              | 96    |     | 5.667  | 5.667  | (1.000) | 1078707 | 10.0000  |                    |                   |
| * 2 Chlorobenzene-d5           | 119   |     | 8.933  | 8.933  | (1.000) | 188899  | 10.0000  |                    |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152   |     | 11.488 | 11.488 | (1.000) | 220143  | 10.0000  |                    |                   |
| \$ 4 Dibromofluoromethane      | 113   |     | 4.821  | 4.821  | (0.851) | 182777  | 10.0000  | 10.574             |                   |
| \$ 5 1,2-Dichloroethane-d4     | 65    |     | 5.229  | 5.229  | (0.923) | 150591  | 10.0000  | 10.075             |                   |
| \$ 6 Toluene-d8                | 98    |     | 7.455  | 7.455  | (0.835) | 873970  | 10.0000  | 10.530             |                   |
| \$ 7 4-Bromofluorobenzene      | 95    |     | 10.126 | 10.126 | (0.881) | 212756  | 10.0000  | 9.5829             |                   |
| M 8 1,2-Dichloroethene (total) | 96    |     |        |        |         | 493056  | 20.0000  | 17.312             |                   |
| M 9 Xylene (total)             | 106   |     |        |        |         | 1263127 | 30.0000  | 28.110             |                   |
| 10 Dichlorodifluoromethane     | 85    |     | 1.013  | 1.013  | (0.179) | 234264  | 10.0000  | 8.8969             |                   |
| 11 Chloromethane (spcc)        | 50    |     | 1.122  | 1.122  | (0.198) | 641981  | 10.0000  | 10.058             |                   |
| 12 Vinyl Chloride (ccc)        | 62    |     | 1.195  | 1.195  | (0.211) | 393986  | 10.0000  | 9.2733             |                   |
| 13 *1,3-Butadiene              | 39    |     | 1.220  | 1.220  | (0.215) | 342677  | 10.0000  | 8.9441             |                   |
| 15 Bromomethane                | 94    |     | 1.414  | 1.414  | (0.250) | 75303   | 10.0000  | 7.3781             |                   |

Data File: /chem/gcms/mz.i/Z040506.b/ccvzd043.d  
 Report Date: 05-Apr-2006 15:00

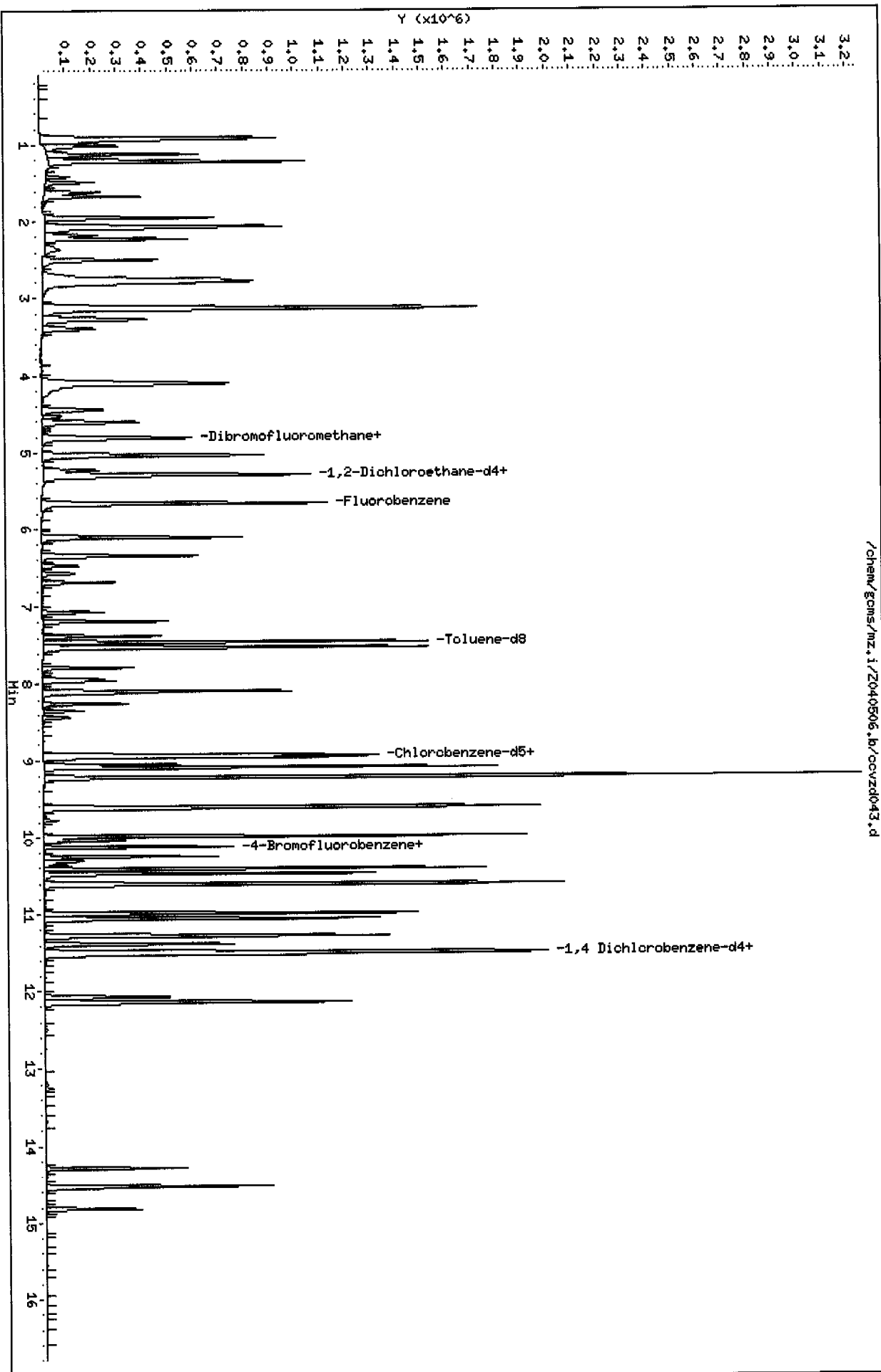
| Compounds                    | QUANT SIG |       |        |         |          | AMOUNTS            |                   |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                        | =====     | ==    | =====  | =====   | =====    | =====              | =====             |
| 16 Chloroethane              | 64        | 1.481 | 1.481  | (0.261) | 176199   | 10.0000            | 8.7584            |
| 17 *Vinyl Bromide            | 106       | 1.615 | 1.615  | (0.285) | 168498   | 10.0000            | 9.3752            |
| 18 Trichlorofluoromethane    | 101       | 1.670 | 1.670  | (0.295) | 290896   | 10.0000            | 8.8228            |
| 19 *2-Chloropropane          | 43        | 1.950 | 1.950  | (0.344) | 600820   | 10.0000            | 8.4195            |
| 20 1,1-Dichloroethene (ccc)  | 96        | 2.065 | 2.065  | (0.364) | 225560   | 10.0000            | 9.6210            |
| 21 *Freon 113                | 151       | 2.083 | 2.083  | (0.368) | 189832   | 10.0000            | 10.401            |
| 22 Acetone                   | 43        | 2.126 | 2.126  | (0.375) | 95956    | 40.0000            | 35.920            |
| 23 *Iodomethane              | 142       | 2.181 | 2.181  | (0.385) | 254822   | 10.0000            | 9.5928            |
| 24 Carbon Disulfide          | 76        | 2.229 | 2.229  | (0.393) | 731814   | 10.0000            | 8.8429            |
| 26 *Acetonitrile             | 40        | 2.369 | 2.369  | (0.418) | 102601   | 200.000            | 213.50            |
| 27 Methylene Chloride        | 84        | 2.503 | 2.503  | (0.442) | 159132   | 10.0000            | 8.8207            |
| 29 *Acrylonitrile            | 53        | 2.759 | 2.759  | (0.487) | 735900   | 200.000            | 182.69            |
| 30 trans-1,2-Dichloroethene  | 96        | 2.789 | 2.789  | (0.492) | 261547   | 10.0000            | 8.8374            |
| 31 *MTBE                     | 73        | 2.820 | 2.820  | (0.498) | 209785   | 10.0000            | 8.0812            |
| 32 *Hexane                   | 57        | 3.136 | 3.136  | (0.553) | 1405996  | 20.0000            | 18.542            |
| 33 1,1-Dichloroethane (spcc) | 63        | 3.276 | 3.276  | (0.578) | 578350   | 10.0000            | 8.4543            |
| 34 *Vinyl Acetate            | 86        | 3.397 | 3.397  | (0.600) | 23152    | 20.0000            | 16.098            |
| 35 2,2-Dichloropropane       | 77        | 4.091 | 4.091  | (0.722) | 285201   | 10.0000            | 8.2055            |
| 36 cis 1,2-Dichloroethene    | 96        | 4.109 | 4.109  | (0.725) | 231508   | 10.0000            | 8.4745            |
| 37 2-Butanone                | 43        | 4.170 | 4.170  | (0.736) | 145451   | 40.0000            | 35.586            |
| 38 Bromochloromethane        | 128       | 4.450 | 4.450  | (0.785) | 69771    | 10.0000            | 9.2884            |
| 39 *THF                      | 42        | 4.529 | 4.529  | (0.799) | 91576    | 40.0000            | 35.780            |
| 40 Chloroform (ccc)          | 83        | 4.608 | 4.608  | (0.813) | 328720   | 10.0000            | 8.4340            |
| 41 1,1,1-Trichloroethane     | 97        | 4.809 | 4.809  | (0.849) | 300590   | 10.0000            | 8.7135            |
| 42 Carbon Tetrachloride      | 117       | 5.028 | 5.028  | (0.887) | 193863   | 10.0000            | 7.0698            |
| 43 1,1-Dichloropropene       | 75        | 5.046 | 5.046  | (0.890) | 322213   | 10.0000            | 8.7166            |
| 44 Benzene                   | 78        | 5.295 | 5.295  | (0.934) | 873610   | 10.0000            | 8.2124            |
| 45 1,2-Dichloroethane        | 62        | 5.326 | 5.326  | (0.940) | 194085   | 10.0000            | 8.6160            |
| 46 Trichloroethene           | 130       | 6.105 | 6.105  | (1.077) | 271577   | 10.0000            | 9.0757            |
| 47 1,2-Dichloropropane (ccc) | 63        | 6.342 | 6.342  | (1.119) | 253935   | 10.0000            | 8.7369            |
| 48 *Methyl Methacrylate      | 41        | 6.573 | 6.573  | (1.160) | 78169    | 10.0000            | 8.1982            |
| 49 Dibromomethane            | 93        | 6.470 | 6.470  | (1.142) | 51798    | 10.0000            | 8.5582            |
| 50 Bromodichloromethane      | 83        | 6.683 | 6.683  | (1.179) | 154039   | 10.0000            | 8.3666            |
| 51 *2-Chloroethylvinylether  | 63        | 7.066 | 7.066  | (1.247) | 87325    | 20.0000            | 13.238            |
| 52 cis-1,3-Dichloropropene   | 75        | 7.181 | 7.181  | (1.267) | 198851   | 10.0000            | 8.4258            |
| 53 4-Methyl-2-pentanone      | 43        | 7.376 | 7.376  | (1.302) | 332214   | 40.0000            | 35.266            |
| 54 Toluene (ccc)             | 91        | 7.522 | 7.522  | (0.842) | 947315   | 10.0000            | 8.8119            |
| 55 trans-1,3-Dichloropropene | 75        | 7.784 | 7.784  | (0.871) | 118583   | 10.0000            | 7.5267            |
| 56 *Ethyl Methacrylate       | 69        | 7.930 | 7.930  | (0.888) | 74063    | 10.0000            | 8.0645            |
| 57 1,1,2-Trichloroethane     | 97        | 7.960 | 7.960  | (0.891) | 75367    | 10.0000            | 8.6377            |
| 58 Tetrachloroethene         | 164       | 8.094 | 8.094  | (0.906) | 202510   | 10.0000            | 9.0819            |
| 59 1,3-Dichloropropane       | 76        | 8.118 | 8.118  | (0.909) | 130149   | 10.0000            | 8.5098            |
| 60 2-Hexanone                | 43        | 8.252 | 8.252  | (0.924) | 220129   | 40.0000            | 37.657            |
| 61 Chlorodibromomethane      | 129       | 8.349 | 8.349  | (0.935) | 68913    | 10.0000            | 7.6988            |
| 62 1,2-Dibromoethane         | 107       | 8.435 | 8.435  | (0.944) | 66693    | 10.0000            | 8.5354            |
| 63 Chlorobenzene (spcc)      | 112       | 8.958 | 8.958  | (1.003) | 539413   | 10.0000            | 8.9899            |
| 64 1,1,1,2-Tetrachloroethane | 131       | 9.055 | 9.055  | (1.014) | 111890   | 10.0000            | 7.4877            |

Data File: /chem/gcms/mz.i/Z040506.b/ccvzd043.d  
 Report Date: 05-Apr-2006 15:00

| Compounds                          | QUANT SIG |        |                | RESPONSE | AMOUNTS            |                   |
|------------------------------------|-----------|--------|----------------|----------|--------------------|-------------------|
|                                    | MASS      | RT     | EXP RT REL RT  |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                              | =====     | ==     | =====          | =====    | =====              | =====             |
| 65 Ethylbenzene (ccc)              | 106       | 9.092  | 9.092 (1.018)  | 363668   | 10.0000            | 9.4063            |
| 66 m&p-Xylene                      | 106       | 9.219  | 9.219 (1.032)  | 879467   | 20.0000            | 18.816            |
| 67 o-Xylene                        | 106       | 9.609  | 9.609 (1.076)  | 383659   | 10.0000            | 9.2936            |
| 68 Styrene                         | 104       | 9.621  | 9.621 (1.077)  | 513181   | 10.0000            | 8.8540            |
| 69 Bromoform (spcc)                | 173       | 9.779  | 9.779 (1.095)  | 26286    | 10.0000            | 9.1866            |
| 70 Isopropylbenzene                | 105       | 9.992  | 9.992 (1.118)  | 1090515  | 10.0000            | 9.1868            |
| 71 *cis-1,4-dichloro-2-butene      | 88        | 10.059 | 10.059 (1.126) | 9512     | 10.0000            | 7.1706            |
| 72 Bromobenzene                    | 156       | 10.254 | 10.254 (1.148) | 155208   | 10.0000            | 8.7979            |
| 73 1,1,2,2-Tetrachloroethane(sp)   | 83        | 10.290 | 10.290 (1.152) | 59223    | 10.0000            | 9.0989            |
| 74 1,2,3-Trichloropropane          | 110       | 10.314 | 10.314 (0.898) | 17337    | 10.0000            | 9.1472            |
| 75 *trans-1,4-dichloro-2-butene    | 53        | 10.345 | 10.345 (0.900) | 22511    | 10.0000            | 8.2827            |
| 76 n-Propylbenzene                 | 91        | 10.406 | 10.406 (0.906) | 1268134  | 10.0000            | 9.5170            |
| 77 2-Chlorotoluene                 | 91        | 10.473 | 10.473 (0.912) | 648007   | 10.0000            | 9.1699            |
| 78 1,3,5-Trimethylbenzene          | 105       | 10.612 | 10.612 (0.924) | 869988   | 10.0000            | 9.7034            |
| 79 4-Chlorotoluene                 | 91        | 10.594 | 10.594 (0.922) | 714207   | 10.0000            | 9.5137            |
| 80 tert-Butylbenzene               | 119       | 10.990 | 10.990 (0.957) | 777437   | 10.0000            | 9.6846            |
| 81 1,2,4-Trimethylbenzene          | 105       | 11.050 | 11.050 (0.962) | 799975   | 10.0000            | 9.4967            |
| 82 sec-Butylbenzene                | 105       | 11.282 | 11.282 (0.982) | 1141521  | 10.0000            | 9.6468            |
| 83 1,3-Dichlorobenzene             | 146       | 11.385 | 11.385 (0.991) | 350418   | 10.0000            | 9.0933            |
| 84 p-Isopropyltoluene              | 119       | 11.501 | 11.501 (1.001) | 1007036  | 10.0000            | 9.6990            |
| 85 1,4-Dichlorobenzene             | 146       | 11.519 | 11.519 (1.003) | 327805   | 10.0000            | 9.1451            |
| 86 1,2-Dichlorobenzene             | 146       | 12.079 | 12.079 (1.051) | 267856   | 10.0000            | 9.4216            |
| 87 n-Butylbenzene                  | 91        | 12.145 | 12.145 (1.057) | 896559   | 10.0000            | 9.6543            |
| 88 1,2-Dibromo-3-chloropropane     | 157       | 13.253 | 13.253 (1.154) | 6382     | 10.0000            | 6.5463            |
| 89 1,2,4-Trichlorobenzene          | 180       | 14.293 | 14.293 (1.244) | 152625   | 10.0000            | 8.8576            |
| 90 Hexachlorobutadiene             | 225       | 14.524 | 14.524 (1.264) | 158528   | 10.0000            | 9.8103            |
| 91 Napthalene                      | 128       | 14.542 | 14.542 (1.266) | 154368   | 10.0000            | 8.5429            |
| 92 1,2,3-Trichlorobenzene          | 180       | 14.816 | 14.816 (1.290) | 102412   | 10.0000            | 9.0225            |
| M 93 *1,4-dichloro-2-butene(total) | 53        |        |                | 32024    | 20.0000            | 15.453            |

Data File: /chem/gcms/mz.i/2040506.b/ccvzd043.d  
Date : 05-APR-2006 14:42  
Client ID: STD10  
Sample Info: CCVZD043,1,2,3,,STD10  
Purge Volume: 25.0  
Column phase: J+M 624

Instrument: mz.i  
Operator: 063605  
Column diameter: 0.18



|                |         |                        |         |             |    |                        |          |
|----------------|---------|------------------------|---------|-------------|----|------------------------|----------|
| Analysis Date: | 4/17/06 | CCAL Batch/ Scan Name: | 2040706 | Instrument: | MZ | ICAL Batch/ Scan Name: | 2032406I |
|----------------|---------|------------------------|---------|-------------|----|------------------------|----------|

| Review Items                                                                                                                                                                                                                   | N/A | Yes | No | If No, why is data reportable?                                                                          | 2nd<br>✓ |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|----|---------------------------------------------------------------------------------------------------------|----------|
| 1. Did BFB meet tune criteria?                                                                                                                                                                                                 |     | /   |    |                                                                                                         | /        |
| 2. Were all standards injected within 12 hr of BFB?                                                                                                                                                                            |     | /   |    |                                                                                                         | /        |
| 3. Was date/time of analysis verified between analysis header and logbook as correct?                                                                                                                                          |     | /   |    |                                                                                                         | /        |
| 4. Was the primary ion used for all compounds?                                                                                                                                                                                 |     | /   |    | <input type="checkbox"/> Secondary ion used due to interferences for: _____                             | /        |
| 5. Do the RFs for SPCCs meet minimum RF?                                                                                                                                                                                       |     | /   |    |                                                                                                         | /        |
| 6. Is the %D or drift $\leq 20\%$ for all CCCs?                                                                                                                                                                                |     | /   |    |                                                                                                         | /        |
| 7. Is the %D or drift $\leq 50\%$ for all other compounds? [Up to 6 TCLs may have %D or drift $> 50\%$ ; any more and the calibration is INVALID].                                                                             |     | /   |    | <input type="checkbox"/> %D or drift $> 50\%$ for the following TCLs: _____                             | /        |
| 8. Are the internal standard responses within limits?<br>8260B: 50-200% of the mid-level ICAL standard                                                                                                                         |     | /   |    |                                                                                                         | /        |
| 9. Are the internal standard retention times within limits?<br>8260B: 30 seconds of the mid-level ICAL standard                                                                                                                |     | /   |    |                                                                                                         | /        |
| 10. If manual integrations were performed, are they clearly identified, initialed, dated and reason given?                                                                                                                     | /   |     |    | Reasons: 1)Corrected split peak; 2)Unresolved peak; 3)tailg; 4)RT shift; 5)wrong peak selected; 6)other | NA       |
| 11. Have alternate hits/manual integrations been verified as correct and are correct RFs listed in CCAL summary?                                                                                                               | /   |     |    |                                                                                                         | NA       |
| 12. Was the correct ICAL used for quantitation? (Verify date & time of ICAL is documented correctly on CCAL)                                                                                                                   |     | /   |    |                                                                                                         | /        |
| 13. Is the first IS documented correctly on the log?                                                                                                                                                                           |     | /   |    |                                                                                                         | /        |
| 14. Elution order checked on isomeric pairs/coeluters?                                                                                                                                                                         |     | /   |    |                                                                                                         | /        |
| • hexane and vinyl acetate                                                                                                                                                                                                     |     | /   |    |                                                                                                         | /        |
| • cis- and trans- isomers                                                                                                                                                                                                      |     | /   |    |                                                                                                         | /        |
| • trichlorofluoromethane and Freon 113                                                                                                                                                                                         |     | /   |    |                                                                                                         | /        |
| • ethyl benzene / m/p-xylene / o-xylene                                                                                                                                                                                        |     | /   |    |                                                                                                         | /        |
| • n-propylbenzene / 2-chlorotoluene / 4-chlorotoluene                                                                                                                                                                          |     | /   |    |                                                                                                         | /        |
| • 1,3,5-trimethylbenzene / 1,2,4-trimethylbenzene / sec-butylbenzene                                                                                                                                                           |     | /   |    |                                                                                                         | /        |
| • 1,3-, 1,4-, and 1,2-dichlorobenzene                                                                                                                                                                                          |     | /   |    |                                                                                                         | /        |
| • 1,2,4 and 1,2,3 -trichlorobenzene                                                                                                                                                                                            |     | /   |    |                                                                                                         | /        |
| • chlorobenzene-d5 and 1,1,1,2-tetrachloroethane                                                                                                                                                                               |     | /   |    |                                                                                                         | /        |
| 15. If criteria were not met, was a NCM generated, approved by supervisor, and copy included in folder?                                                                                                                        | /   |     |    |                                                                                                         | NA       |
| 16. Does the CCAL folder contain <b>complete</b> data in the following order? Data review checklist, tune pass/fail page, m/z list, tune chromatogram, Target CCAL summary, Quan report, chromatogram and manual integrations. |     | /   |    |                                                                                                         | ✓        |

[illegible]

## STL Knoxville GC/MS Volatiles Run Log - Instrument MZ

|                   |              |            |            |             |               |         |
|-------------------|--------------|------------|------------|-------------|---------------|---------|
| Target Batch      | 2040706      | XXXXXXXXXX | XXXXXXXXXX | Loop #      | 2             | (A)     |
| QuantIMS Batch    | 6046035      |            |            | Standard ID | V0A6500       | V0A6499 |
| Method            | V051         | XXXXXXXXXX | XXXXXXXXXX | Matrix      | 25ml V051     | 25ml    |
| SOP#              | K008.ms-0011 | XXXXXXXXXX | XXXXXXXXXX | IS Amt/ID   | 4.71ug        | 4.71ug  |
| Initial Cal Batch | 20324061     | XXXXXXXXXX | XXXXXXXXXX | SS Amt/ID   | 5.0um V0A6499 | ↓       |
| CCAL IS Areas     | 452561       | 161101     | 2041350    | Heated?     |               | Y N     |

☒ Date/Time Verified    Preventive Maintenance Performed ☒ NA or ☐

[illegible]

Analyst/Date: WTF 4/7/06 /         

MS033R6.doc, 2/24/05

Data File: /var/chem/gcms/mz.i/Z040706.b/bfbzd07.d

Date : 07-APR-2006 07:21

Client ID:

Instrument: mz.i

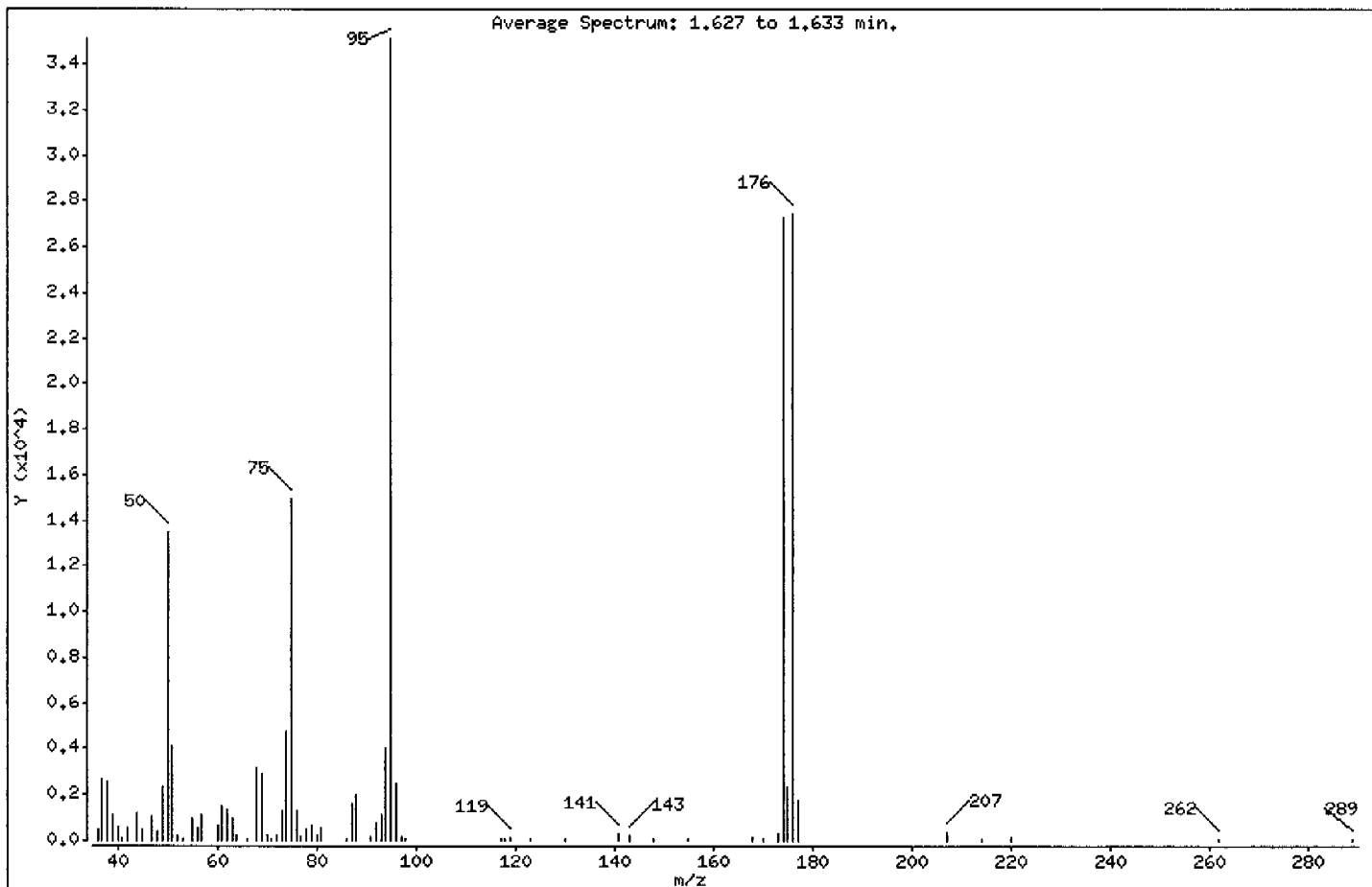
Sample Info: BFBZD07,1,3,,BFB

Operator: 22980

Column phase: J &amp; W 624

Column diameter: 0.18

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          | 38.40                |
| 75  | 30.00 - 60.00% of mass 95          | 42.45                |
| 96  | 5.00 - 9.00% of mass 95            | 7.22                 |
| 173 | Less than 2.00% of mass 174        | 0.99 ( 1.27)         |
| 174 | 50.00 - 120.00% of mass 95         | 77.63                |
| 175 | 5.00 - 9.00% of mass 174           | 6.63 ( 8.54)         |
| 176 | 95.00 - 101.00% of mass 174        | 78.24 (100.78)       |
| 177 | 5.00 - 9.00% of mass 176           | 4.96 ( 6.34)         |





Data File: /var/chem/gcms/mz.i/Z040706.b/bfbzd07.d

Date : 07-APR-2006 07:21

Client ID:

Sample Info: BFBZD07,1,3,BFB

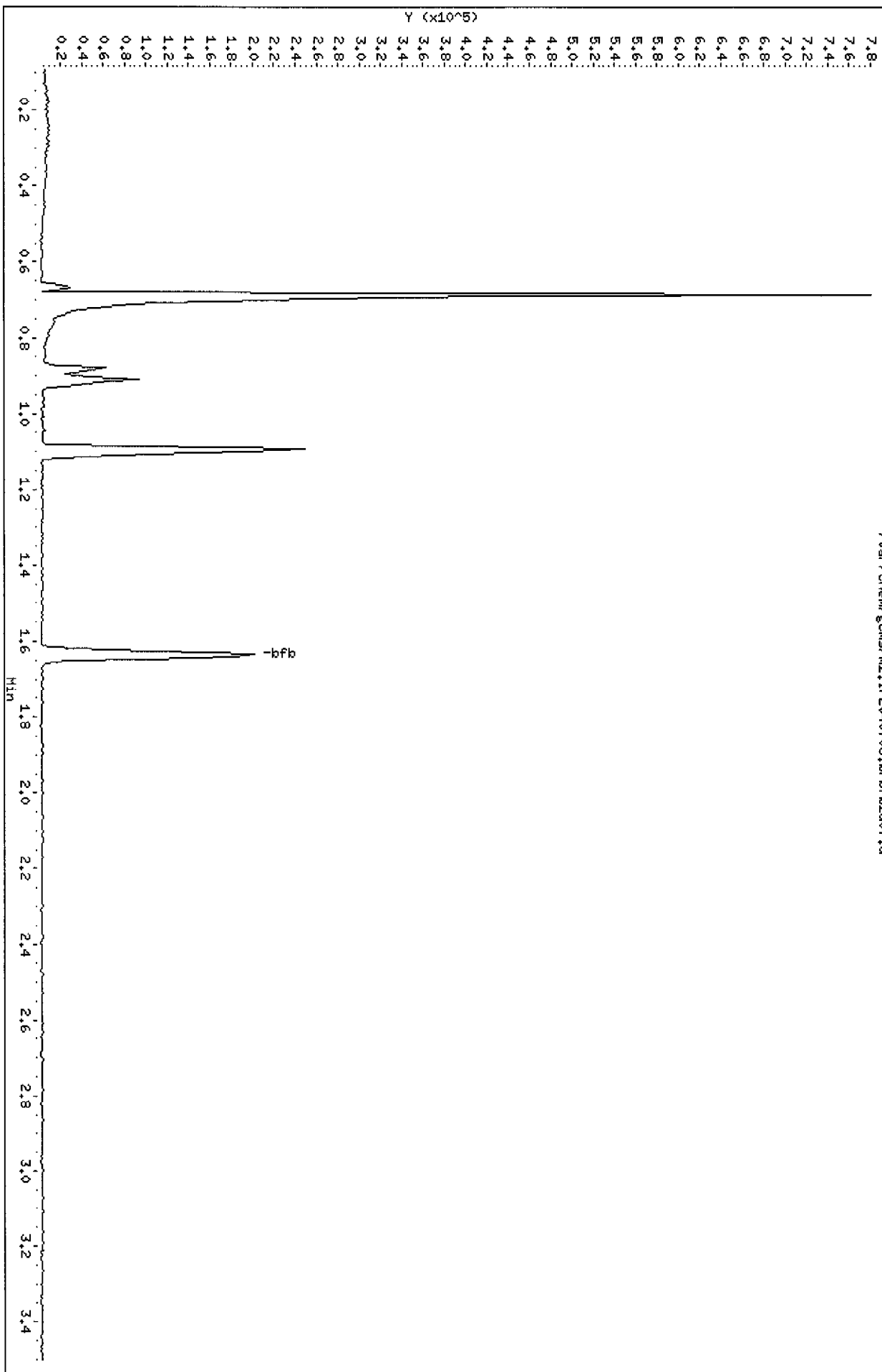
Instrument: mz.i

Operator: 22980

Column diameter: 0.18

Column phase: J & W 624

/var/chem/gcms/mz.i/Z040706.b/bfbzd07.d



Data File: /chem/gcms/mz.i/Z040706.b/ccvzd073.d  
Report Date: 07-Apr-2006 07:52

## STL Knoxville

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mz.i Injection Date: 07-APR-2006 07:35  
Lab File ID: ccvzd073.d Init. Cal. Date(s): 24-MAR-2006 24-MAR-2006  
Analysis Type: WATER Init. Cal. Times: 13:51 16:34  
Lab Sample ID: CCVZD073 Quant Type: ISTD  
Method: /chem/gcms/mz.i/Z040706.b/8260B\_LM.m

| COMPOUND                       | RRF / AMOUNT | RF10     | CCAL<br>RRF10 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE    |
|--------------------------------|--------------|----------|---------------|------------|-------------|--------------------|---------------|
| \$ 4 Dibromofluoromethane      | 0.16024      | 0.16851  | 0.16851       | 0.000      | -5.16464    | 50.00000           | Averaged      |
| \$ 5 1,2-Dichloroethane-d4     | 0.13856      | 0.14262  | 0.14262       | 0.000      | -2.92642    | 50.00000           | Averaged      |
| \$ 6 Toluene-d8                | 4.39383      | 4.60254  | 4.60254       | 0.000      | -4.75022    | 50.00000           | Averaged      |
| \$ 7 4-Bromofluorobenzene      | 1.00850      | 0.94003  | 0.94003       | 0.000      | 6.78913     | 50.00000           | Averaged      |
| M 8 1,2-Dichloroethene (total) | 0.26636      | 0.24870  | 0.24870       | 0.000      | 6.62988     | 50.00000           | Averaged      |
| M 9 Xylene (total)             | 2.45452      | 2.52877  | 2.52877       | 0.000      | -3.02473    | 50.00000           | Averaged      |
| 10 Dichlorodifluoromethane     | 0.24410      | 0.25069  | 0.25069       | 0.000      | -2.69993    | 50.00000           | Averaged      |
| 11 Chloromethane (spcc)        | 10.30886     | 10.00000 | 0.60916       | 0.100      | -3.08863    | 50.00000           | Wt Linear     |
| 12 Vinyl Chloride (ccc)        | 0.39386      | 0.45009  | 0.45009       | 0.000      | -14.27553   | 19.00000           | Averaged      |
| 13 *1,3-Butadiene              | 0.35518      | 0.37783  | 0.37783       | 0.000      | -6.37775    | 50.00000           | Averaged      |
| 15 Bromomethane                | 12.80031     | 10.00000 | 0.12765       | 0.000      | -28.00313   | 50.00000           | Wt Linear     |
| 16 Chloroethane                | 0.18650      | 0.20923  | 0.20923       | 0.000      | -12.18743   | 50.00000           | Averaged      |
| 17 *Vinyl Bromide              | 0.16661      | 0.18062  | 0.18062       | 0.000      | -8.40326    | 50.00000           | Averaged      |
| 18 Trichlorofluoromethane      | 0.30565      | 0.33505  | 0.33505       | 0.000      | -9.61826    | 50.00000           | Averaged      |
| 19 *2-Chloropropane            | 0.66154      | 0.62974  | 0.62974       | 0.000      | 4.80718     | 50.00000           | Averaged      |
| 20 1,1-Dichloroethene (ccc)    | 0.21734      | 0.23771  | 0.23771       | 0.000      | -9.37347    | 19.00000           | Averaged      |
| 21 *Freon 113                  | 0.16920      | 0.20373  | 0.20373       | 0.000      | -20.40683   | 50.00000           | Averaged      |
| 22 Acetone                     | 39.20699     | 40.00000 | 0.02362       | 0.000      | 1.98252     | 50.00000           | Quadratic     |
| 23 *Iodomethane                | 11.10925     | 10.00000 | 0.27572       | 0.000      | -11.09251   | 50.00000           | Wt Linear     |
| 24 Carbon Disulfide            | 0.76719      | 0.75312  | 0.75312       | 0.000      | 1.83374     | 50.00000           | Averaged      |
| 25 *2-propanol                 | ++++         | 0.00290  | 0.00290       | 0.000      | ++++        | 50.00000           | Averaged < NA |
| 26 *Acetonitrile               | 0.00445      | 0.00419  | 0.00419       | 0.000      | 5.99188     | 50.00000           | Averaged      |
| 27 Methylene Chloride          | 0.16724      | 0.14568  | 0.14568       | 0.000      | 12.89133    | 50.00000           | Averaged      |
| 28 *t-butanol                  | ++++         | 0.00295  | 0.00295       | 0.000      | ++++        | 50.00000           | Averaged < NA |
| 29 *Acrylonitrile              | 0.03734      | 0.03799  | 0.03799       | 0.000      | -1.73376    | 50.00000           | Averaged      |
| 30 trans-1,2-Dichloroethene    | 0.27436      | 0.26031  | 0.26031       | 0.000      | 5.12305     | 50.00000           | Averaged      |
| 31 *MTBE                       | 0.24065      | 0.22204  | 0.22204       | 0.000      | 7.73585     | 50.00000           | Averaged      |
| 32 *Hexane                     | 0.70295      | 0.77077  | 0.77077       | 0.000      | -9.64899    | 50.00000           | Averaged      |
| 33 1,1-Dichloroethane (spcc)   | 0.63418      | 0.62611  | 0.62611       | 0.100      | 1.27171     | 50.00000           | Averaged      |
| 34 *Vinyl Acetate              | 0.01333      | 0.01073  | 0.01073       | 0.000      | 19.50753    | 50.00000           | Averaged      |
| 35 2,2-Dichloropropane         | 0.32221      | 0.27382  | 0.27382       | 0.000      | 15.01872    | 50.00000           | Averaged      |
| 36 cis 1,2-Dichloroethene      | 0.25325      | 0.23709  | 0.23709       | 0.000      | 6.38235     | 50.00000           | Averaged      |
| 37 2-Butanone                  | 0.03789      | 0.03703  | 0.03703       | 0.000      | 2.26019     | 50.00000           | Averaged      |
| 38 Bromochloromethane          | 0.06964      | 0.06664  | 0.06664       | 0.000      | 4.30241     | 50.00000           | Averaged      |
| 39 *THF                        | 0.02373      | 0.02402  | 0.02402       | 0.000      | -1.24109    | 50.00000           | Averaged      |

24/7/06

Data File: /chem/gcms/mz.i/Z040706.b/ccvzd073.d  
Report Date: 07-Apr-2006 07:52

## STL Knoxville

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mz.i Injection Date: 07-APR-2006 07:35  
Lab File ID: ccvzd073.d Init. Cal. Date(s): 24-MAR-2006 24-MAR-2006  
Analysis Type: WATER Init. Cal. Times: 13:51 16:34  
Lab Sample ID: CCVZD073 Quant Type: ISTD  
Method: /chem/gcms/mz.i/Z040706.b/8260B\_LM.m

| COMPOUND                       | RRF / AMOUNT | RF10     | CCAL    | MIN   | %D / %DRIFT | MAX      | %D / %DRIFT | CURVE TYPE |
|--------------------------------|--------------|----------|---------|-------|-------------|----------|-------------|------------|
| =====                          | =====        | =====    | =====   | ===== | =====       | =====    | =====       | =====      |
| 40 Chloroform (ccc)            | 0.36132      | 0.34891  | 0.34891 | 0.000 | 3.43294     | 19.00000 |             | Averaged   |
| 41 1,1,1-Trichloroethane       | 0.31980      | 0.31948  | 0.31948 | 0.000 | 0.10051     | 50.00000 |             | Averaged   |
| 42 Carbon Tetrachloride        | 8.91487      | 10.00000 | 0.22899 | 0.000 | 10.85126    | 50.00000 |             | Wt Linear  |
| 43 1,1-Dichloropropene         | 0.34268      | 0.33842  | 0.33842 | 0.000 | 1.24372     | 50.00000 |             | Averaged   |
| 44 Benzene                     | 0.98616      | 0.89590  | 0.89590 | 0.000 | 9.15272     | 50.00000 |             | Averaged   |
| 45 1,2-Dichloroethane          | 0.20883      | 0.20749  | 0.20749 | 0.000 | 0.63722     | 50.00000 |             | Averaged   |
| 46 Trichloroethene             | 0.27740      | 0.27909  | 0.27909 | 0.000 | -0.60885    | 50.00000 |             | Averaged   |
| 47 1,2-Dichloropropane (ccc)   | 0.26944      | 0.26870  | 0.26870 | 0.000 | 0.27470     | 19.00000 |             | Averaged   |
| 48 *Methyl Methacrylate        | 0.08839      | 0.08717  | 0.08717 | 0.000 | 1.38690     | 50.00000 |             | Averaged   |
| 49 Dibromomethane              | 0.05611      | 0.05426  | 0.05426 | 0.000 | 3.29501     | 50.00000 |             | Averaged   |
| 50 Bromodichloromethane        | 9.63386      | 10.00000 | 0.16651 | 0.000 | 3.66138     | 50.00000 |             | Linear     |
| 51 *2-Chloroethylvinylether    | 0.06115      | 0.03119  | 0.03119 | 0.000 | 49.00076    | 50.00000 |             | Averaged   |
| 52 cis-1,3-Dichloropropene     | 0.21878      | 0.20122  | 0.20122 | 0.000 | 8.02474     | 50.00000 |             | Averaged   |
| 53 4-Methyl-2-pentanone        | 0.08733      | 0.08904  | 0.08904 | 0.000 | -1.95741    | 50.00000 |             | Averaged   |
| 54 Toluene (ccc)               | 5.69105      | 5.69438  | 5.69438 | 0.000 | -0.05848    | 19.00000 |             | Averaged   |
| 55 trans-1,3-Dichloropropene   | 8.60123      | 10.00000 | 0.72550 | 0.000 | 13.98772    | 50.00000 |             | Linear     |
| 56 *Ethyl Methacrylate         | 0.48617      | 0.45798  | 0.45798 | 0.000 | 5.79957     | 50.00000 |             | Averaged   |
| 57 1,1,2-Trichloroethane       | 0.46191      | 0.46124  | 0.46124 | 0.000 | 0.14357     | 50.00000 |             | Averaged   |
| 58 Tetrachloroethene           | 1.18042      | 1.22202  | 1.22202 | 0.000 | -3.52428    | 50.00000 |             | Averaged   |
| 59 1,3-Dichloropropane         | 0.80964      | 0.76908  | 0.76908 | 0.000 | 5.01014     | 50.00000 |             | Averaged   |
| 60 2-Hexanone                  | 0.30945      | 0.33433  | 0.33433 | 0.000 | -8.03762    | 50.00000 |             | Averaged   |
| 61 Chlorodibromomethane        | 9.56174      | 10.00000 | 0.46292 | 0.000 | 4.38255     | 50.00000 |             | Wt Linear  |
| 62 1,2-Dibromoethane           | 0.41364      | 0.40412  | 0.40412 | 0.000 | 2.30312     | 50.00000 |             | Averaged   |
| 63 Chlorobenzene (spcc)        | 3.17641      | 3.22047  | 3.22047 | 0.300 | -1.38705    | 50.00000 |             | Averaged   |
| 64 1,1,1,2-Tetrachloroethane   | 9.04288      | 10.00000 | 0.72089 | 0.000 | 9.57117     | 50.00000 |             | Wt Linear  |
| 65 Ethylbenzene (ccc)          | 2.04670      | 2.13400  | 2.13400 | 0.000 | -4.26557    | 19.00000 |             | Averaged   |
| 66 m&p-Xylene                  | 2.47429      | 2.64745  | 2.64745 | 0.000 | -6.99842    | 50.00000 |             | Averaged   |
| 67 o-Xylene                    | 2.18540      | 2.29140  | 2.29140 | 0.000 | -4.85041    | 50.00000 |             | Averaged   |
| 68 Styrene                     | 3.06833      | 3.14639  | 3.14639 | 0.000 | -2.54390    | 50.00000 |             | Averaged   |
| 69 Bromoform (spcc)            | 10.91211     | 10.00000 | 0.16927 | 0.100 | -9.12105    | 50.00000 |             | Quadratic  |
| 70 Isopropylbenzene            | 6.28402      | 6.60931  | 6.60931 | 0.000 | -5.17645    | 50.00000 |             | Averaged   |
| 71 *cis-1,4-dichloro-2-butene  | 7.95864      | 10.00000 | 0.05750 | 0.000 | 20.41360    | 50.00000 |             | Quadratic  |
| 72 Bromobenzene                | 0.93391      | 0.96944  | 0.96944 | 0.000 | -3.80438    | 50.00000 |             | Averaged   |
| 73 1,1,2,2-Tetrachloroethane(s | 0.34456      | 0.35327  | 0.35327 | 0.300 | -2.52753    | 50.00000 |             | Averaged   |
| 74 1,2,3-Trichloropropane      | 0.08610      | 0.08049  | 0.08049 | 0.000 | 6.50761     | 50.00000 |             | Averaged   |

Data File: /chem/gcms/mz.i/Z040706.b/ccvzd073.d  
 Report Date: 07-Apr-2006 07:52

STL Knoxville

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mz.i      Injection Date: 07-APR-2006 07:35  
 Lab File ID: ccvzd073.d      Init. Cal. Date(s): 24-MAR-2006    24-MAR-2006  
 Analysis Type: WATER      Init. Cal. Times:    13:51      16:34  
 Lab Sample ID: CCVZD073      Quant Type:    ISTD  
 Method: /chem/gcms/mz.i/Z040706.b/8260B\_LM.m

| COMPOUND                         | RRF / AMOUNT | RF10     | CCAL<br>RRF10 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|----------------------------------|--------------|----------|---------------|------------|-------------|--------------------|------------|
| 75 *trans-1,4-dichloro-2-buten   | 9.75901      | 10.00000 | 0.12160       | 0.000      | 2.40990     | 50.00000           | Wt Linear  |
| 76 n-Propylbenzene               | 6.05285      | 6.15087  | 6.15087       | 0.000      | -1.61948    | 50.00000           | Averaged   |
| 77 2-Chlorotoluene               | 3.21004      | 3.11477  | 3.11477       | 0.000      | 2.96774     | 50.00000           | Averaged   |
| 78 1,3,5-Trimethylbenzene        | 4.07272      | 4.23634  | 4.23634       | 0.000      | -4.01770    | 50.00000           | Averaged   |
| 79 4-Chlorotoluene               | 3.41012      | 3.41496  | 3.41496       | 0.000      | -0.14184    | 50.00000           | Averaged   |
| 80 tert-Butylbenzene             | 3.64650      | 3.78993  | 3.78993       | 0.000      | -3.93351    | 50.00000           | Averaged   |
| 81 1,2,4-Trimethylbenzene        | 3.82646      | 3.78950  | 3.78950       | 0.000      | 0.96585     | 50.00000           | Averaged   |
| 82 sec-Butylbenzene              | 5.37516      | 5.48927  | 5.48927       | 0.000      | -2.12290    | 50.00000           | Averaged   |
| 83 1,3-Dichlorobenzene           | 1.75048      | 1.75743  | 1.75743       | 0.000      | -0.39751    | 50.00000           | Averaged   |
| 84 p-Isopropyltoluene            | 4.71643      | 4.81595  | 4.81595       | 0.000      | -2.11012    | 50.00000           | Averaged   |
| 85 1,4-Dichlorobenzene           | 1.62825      | 1.63581  | 1.63581       | 0.000      | -0.46432    | 50.00000           | Averaged   |
| 86 1,2-Dichlorobenzene           | 1.29143      | 1.27068  | 1.27068       | 0.000      | 1.60702     | 50.00000           | Averaged   |
| 87 n-Butylbenzene                | 4.21842      | 4.28017  | 4.28017       | 0.000      | -1.46362    | 50.00000           | Averaged   |
| 88 1,2-Dibromo-3-chloropropane   | 8.94091      | 10.00000 | 0.04101       | 0.000      | 10.59094    | 50.00000           | Wt Linear  |
| 89 1,2,4-Trichlorobenzene        | 0.78272      | 0.79424  | 0.79424       | 0.000      | -1.47193    | 50.00000           | Averaged   |
| 90 Hexachlorobutadiene           | 0.73404      | 0.83269  | 0.83269       | 0.000      | -13.43886   | 50.00000           | Averaged   |
| 91 Napthalene                    | 0.82082      | 0.76838  | 0.76838       | 0.000      | 6.38895     | 50.00000           | Averaged   |
| 92 1,2,3-Trichlorobenzene        | 0.51561      | 0.52506  | 0.52506       | 0.000      | -1.83243    | 50.00000           | Averaged   |
| M 93 *1,4-dichloro-2-butene(tota | 0.10257      | 0.10448  | 0.10448       | 0.000      | -1.85909    | 50.00000           | Averaged   |

Data File: /chem/gcms/mz.i/Z040706.b/ccvzd073.d  
 Report Date: 07-Apr-2006 07:52

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /chem/gcms/mz.i/Z040706.b/ccvzd073.d  
 Lab Smp Id: CCVZD073 Client Smp ID: STD10  
 Inj Date : 07-APR-2006 07:35  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : CCVZD073,1,2,3,,STD10  
 Misc Info : Z040706,8260B\_LM,all.sub  
 Comment : Volatile Organics by GC/MS  
 Method : /chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
 Meth Date : 07-Apr-2006 07:52 chemist Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf\*Vt/(Vo\*1000) \* CpndVariable

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable Local Compound Variable

| Compounds                      | QUANT | SIG | MASS   | RT     | EXP RT  | REL RT  | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-------|-----|--------|--------|---------|---------|----------|--------------------|-------------------|
|                                |       |     |        |        |         |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene              | 96    |     | 5.676  | 5.676  | (1.000) | 952581  | 10.0000  |                    |                   |
| * 2 Chlorobenzene-d5           | 119   |     | 8.937  | 8.937  | (1.000) | 164101  | 10.0000  |                    |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152   |     | 11.492 | 11.492 | (1.000) | 204390  | 10.0000  |                    |                   |
| \$ 4 Dibromofluoromethane      | 113   |     | 4.831  | 4.831  | (0.851) | 160521  | 10.0000  | 10.516             |                   |
| \$ 5 1,2-Dichloroethane-d4     | 65    |     | 5.238  | 5.238  | (0.923) | 135855  | 10.0000  | 10.293             |                   |
| \$ 6 Toluene d8                | 98    |     | 7.465  | 7.465  | (0.835) | 755282  | 10.0000  | 10.475             |                   |
| \$ 7 4-Bromofluorobenzene      | 95    |     | 10.129 | 10.129 | (0.881) | 192134  | 10.0000  | 9.3211             |                   |
| M 8 1,2-Dichloroethene (total) | 96    |     |        |        |         | 473807  | 20.0000  | 18.849             |                   |
| M 9 Xylene (total)             | 106   |     |        |        |         | 1244919 | 30.0000  | 31.885             |                   |
| 10 Dichlorodifluoromethane     | 85    |     | 1.016  | 1.016  | (0.179) | 238801  | 10.0000  | 10.270             |                   |
| 11 Chloromethane (spcc)        | 50    |     | 1.126  | 1.126  | (0.198) | 580277  | 10.0000  | 10.309             |                   |
| 12 Vinyl Chloride (ccc)        | 62    |     | 1.199  | 1.199  | (0.211) | 428746  | 10.0000  | 11.428             |                   |
| 13 *1,3-Butadiene              | 39    |     | 1.223  | 1.223  | (0.215) | 359913  | 10.0000  | 10.638             |                   |
| 15 Bromomethane                | 94    |     | 1.418  | 1.418  | (0.250) | 121599  | 10.0000  | 12.800             |                   |

Data File: /chem/gcms/mz.i/Z040706.b/ccvzd073.d

Report Date: 07-Apr-2006 07:52

| Compounds                    | QUANT SIG |       |        |         |          | AMOUNTS            |                   |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                        | ====      | ==    | =====  | =====   | =====    | =====              | =====             |
| 16 Chloroethane              | 64        | 1.485 | 1.485  | (0.262) | 199308   | 10.0000            | 11.219            |
| 17 *Vinyl Bromide            | 106       | 1.618 | 1.618  | (0.285) | 172050   | 10.0000            | 10.840            |
| 18 Trichlorofluoromethane    | 101       | 1.673 | 1.673  | (0.295) | 319161   | 10.0000            | 10.962            |
| 19 *2-Chloropropane          | 43        | 1.953 | 1.953  | (0.344) | 599874   | 10.0000            | 9.5193            |
| 20 1,1-Dichloroethene (ccc)  | 96        | 2.069 | 2.069  | (0.364) | 226440   | 10.0000            | 10.937            |
| 21 *Freon 113                | 151       | 2.087 | 2.087  | (0.368) | 194069   | 10.0000            | 12.041            |
| 22 Acetone                   | 43        | 2.123 | 2.123  | (0.374) | 90016    | 40.0000            | 39.207            |
| 23 *Iodomethane              | 142       | 2.184 | 2.184  | (0.385) | 262649   | 10.0000            | 11.109            |
| 24 Carbon Disulfide          | 76        | 2.239 | 2.239  | (0.394) | 717405   | 10.0000            | 9.8166            |
| 26 *Acetonitrile             | 40        | 2.367 | 2.367  | (0.417) | 79788    | 200.000            | 188.02            |
| 27 Methylene Chloride        | 84        | 2.513 | 2.513  | (0.443) | 138776   | 10.0000            | 8.7109            |
| 29 *Acrylonitrile            | 53        | 2.768 | 2.768  | (0.488) | 723759   | 200.000            | 203.47            |
| 30 trans-1,2-Dichloroethene  | 96        | 2.799 | 2.799  | (0.493) | 247962   | 10.0000            | 9.4877            |
| 31 *MTBE                     | 73        | 2.829 | 2.829  | (0.498) | 211509   | 10.0000            | 9.2264            |
| 32 *Hexane                   | 57        | 3.145 | 3.145  | (0.554) | 1468451  | 20.0000            | 21.930            |
| 33 1,1-Dichloroethane (spcc) | 63        | 3.285 | 3.285  | (0.579) | 596423   | 10.0000            | 9.8728            |
| 34 *Vinyl Acetate            | 86        | 3.407 | 3.407  | (0.600) | 20445    | 20.0000            | 16.098            |
| 35 2,2-Dichloropropane       | 77        | 4.107 | 4.107  | (0.723) | 260835   | 10.0000            | 8.4981            |
| 36 cis 1,2-Dichloroethene    | 96        | 4.125 | 4.125  | (0.727) | 225844   | 10.0000            | 9.3618            |
| 37 2-Butanone                | 43        | 4.186 | 4.186  | (0.737) | 141114   | 40.0000            | 39.096            |
| 38 Bromochloromethane        | 128       | 4.466 | 4.466  | (0.787) | 63480    | 10.0000            | 9.5698            |
| 39 *THF                      | 42        | 4.532 | 4.532  | (0.798) | 91528    | 40.0000            | 40.496            |
| 40 Chloroform (ccc)          | 83        | 4.618 | 4.618  | (0.814) | 332367   | 10.0000            | 9.6567            |
| 41 1,1,1-Trichloroethane     | 97        | 4.818 | 4.818  | (0.849) | 304329   | 10.0000            | 9.9899            |
| 42 Carbon Tetrachloride      | 117       | 5.043 | 5.043  | (0.889) | 218129   | 10.0000            | 8.9149            |
| 43 1,1-Dichloropropene       | 75        | 5.056 | 5.056  | (0.891) | 322372   | 10.0000            | 9.8756            |
| 44 Benzene                   | 78        | 5.305 | 5.305  | (0.935) | 853414   | 10.0000            | 9.0847            |
| 45 1,2-Dichloroethane        | 62        | 5.335 | 5.335  | (0.940) | 197655   | 10.0000            | 9.9363            |
| 46 Trichloroethene           | 130       | 6.114 | 6.114  | (1.077) | 265857   | 10.0000            | 10.061            |
| 47 1,2-Dichloropropane (ccc) | 63        | 6.351 | 6.351  | (1.119) | 255958   | 10.0000            | 9.9725            |
| 48 *Methyl Methacrylate      | 41        | 6.577 | 6.577  | (1.159) | 83033    | 10.0000            | 9.8613            |
| 49 Dibromomethane            | 93        | 6.479 | 6.479  | (1.141) | 51687    | 10.0000            | 9.6705            |
| 50 Bromodichloromethane      | 83        | 6.692 | 6.692  | (1.179) | 158613   | 10.0000            | 9.6339            |
| 51 *2-Chloroethylvinylether  | 63        | 7.069 | 7.069  | (1.245) | 59416    | 20.0000            | 10.200            |
| 52 cis-1,3-Dichloropropene   | 75        | 7.191 | 7.191  | (1.267) | 191683   | 10.0000            | 9.1975            |
| 53 4-Methyl-2-pentanone      | 43        | 7.386 | 7.386  | (1.301) | 339260   | 40.0000            | 40.783            |
| 54 Toluene (ccc)             | 91        | 7.532 | 7.532  | (0.843) | 934453   | 10.0000            | 10.006            |
| 55 trans-1,3-Dichloropropene | 75        | 7.793 | 7.793  | (0.872) | 119054   | 10.0000            | 8.6012            |
| 56 *Ethyl Methacrylate       | 69        | 7.939 | 7.939  | (0.888) | 75154    | 10.0000            | 9.4200            |
| 57 1,1,2-Trichloroethane     | 97        | 7.964 | 7.964  | (0.891) | 75690    | 10.0000            | 9.9856            |
| 58 Tetrachloroethene         | 164       | 8.097 | 8.097  | (0.906) | 200535   | 10.0000            | 10.352            |
| 59 1,3-Dichloropropane       | 76        | 8.128 | 8.128  | (0.909) | 126206   | 10.0000            | 9.4990            |
| 60 2-Hexanone                | 43        | 8.256 | 8.256  | (0.924) | 219453   | 40.0000            | 43.215            |
| 61 Chlorodibromomethane      | 129       | 8.353 | 8.353  | (0.935) | 75965    | 10.0000            | 9.5617            |
| 62 1,2-Dibromoethane         | 107       | 8.444 | 8.444  | (0.945) | 66315    | 10.0000            | 9.7697            |
| 63 Chlorobenzene (spcc)      | 112       | 8.961 | 8.961  | (1.003) | 528482   | 10.0000            | 10.139            |
| 64 1,1,1,2-Tetrachloroethane | 131       | 9.065 | 9.065  | (1.014) | 118299   | 10.0000            | 9.0429            |

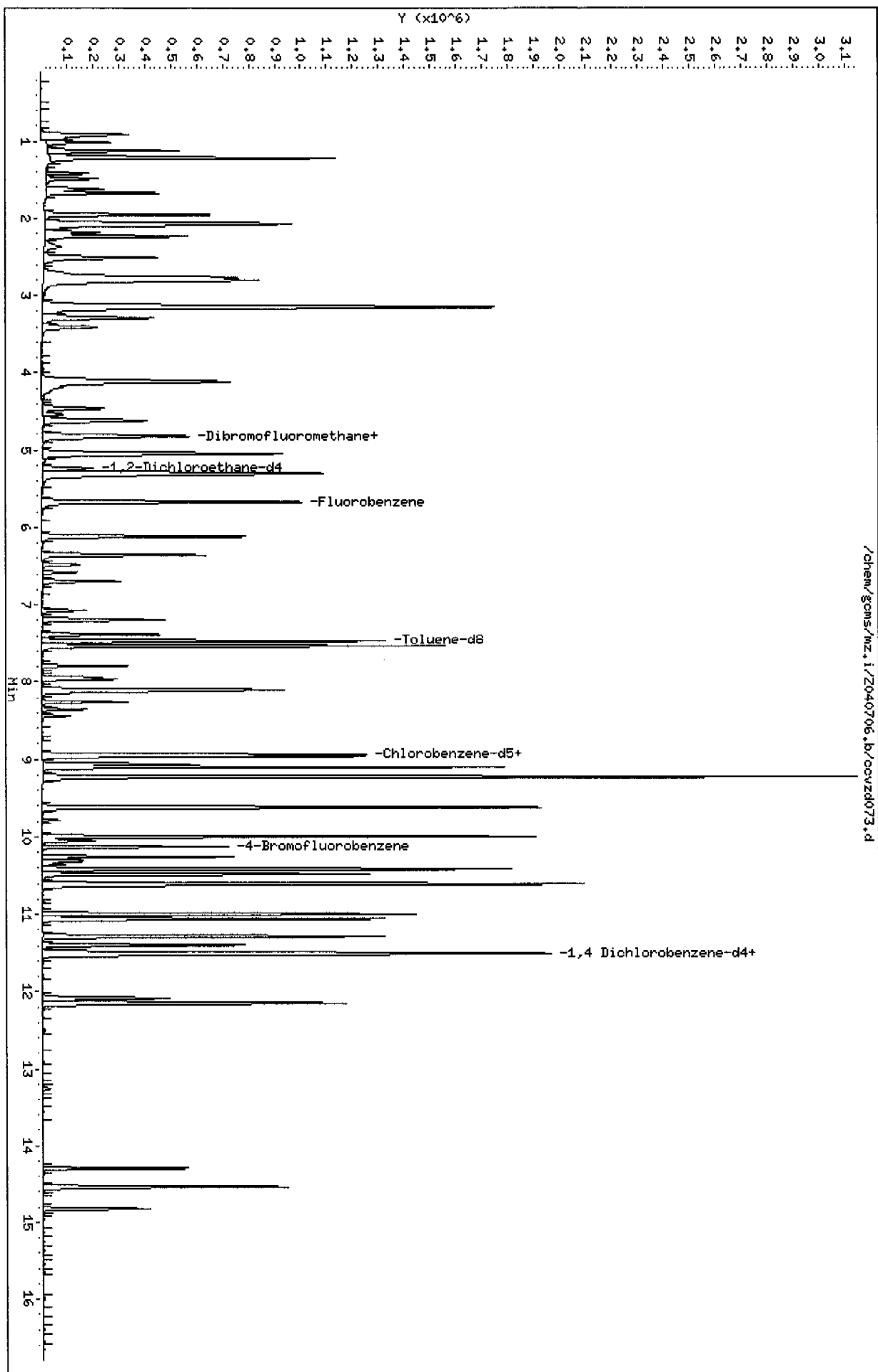
Data File: /chem/gcms/mz.i/Z040706.b/ccvzd073.d

Report Date: 07-Apr-2006 07:52

| Compounds                          | QUANT SIG |        |        |         |          | AMOUNTS            |                    |
|------------------------------------|-----------|--------|--------|---------|----------|--------------------|--------------------|
|                                    | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON- COL<br>( ug/L) |
| =====                              | =====     | ==     | =====  | =====   | =====    | =====              | =====              |
| 65 Ethylbenzene (ccc)              | 106       | 9.101  | 9.101  | (1.018) | 350192   | 10.0000            | 10.426             |
| 66 m&p-Xylene                      | 106       | 9.229  | 9.229  | (1.033) | 868897   | 20.0000            | 21.400             |
| 67 o-Xylene                        | 106       | 9.612  | 9.612  | (1.076) | 376021   | 10.0000            | 10.485             |
| 68 Styrene                         | 104       | 9.630  | 9.630  | (1.078) | 516325   | 10.0000            | 10.254             |
| 69 Bromoform (spcc)                | 173       | 9.782  | 9.782  | (1.095) | 27777    | 10.0000            | 10.912             |
| 70 Isopropylbenzene                | 105       | 9.995  | 9.995  | (1.118) | 1084594  | 10.0000            | 10.518             |
| 71 *cis-1,4-dichloro-2-butene      | 88        | 10.056 | 10.056 | (1.125) | 9435     | 10.0000            | 7.9586             |
| 72 Bromobenzene                    | 156       | 10.257 | 10.257 | (1.148) | 159085   | 10.0000            | 10.380             |
| 73 1,1,2,2-Tetrachloroethane(sp)   | 83        | 10.300 | 10.300 | (1.152) | 57972    | 10.0000            | 10.253             |
| 74 1,2,3-Trichloropropane          | 110       | 10.324 | 10.324 | (0.898) | 16452    | 10.0000            | 9.3492             |
| 75 *trans-1,4-dichloro-2-butene    | 53        | 10.354 | 10.354 | (0.901) | 24854    | 10.0000            | 9.7590             |
| 76 n-Propylbenzene                 | 91        | 10.415 | 10.415 | (0.906) | 1257182  | 10.0000            | 10.162             |
| 77 2-Chlorotoluene                 | 91        | 10.482 | 10.482 | (0.912) | 636630   | 10.0000            | 9.7032             |
| 78 1,3,5-Trimethylbenzene          | 105       | 10.622 | 10.622 | (0.924) | 865870   | 10.0000            | 10.402             |
| 79 4-Chlorotoluene                 | 91        | 10.604 | 10.604 | (0.923) | 697986   | 10.0000            | 10.014             |
| 80 tert-Butylbenzene               | 119       | 10.999 | 10.999 | (0.957) | 774627   | 10.0000            | 10.393             |
| 81 1,2,4-Trimethylbenzene          | 105       | 11.060 | 11.060 | (0.962) | 774538   | 10.0000            | 9.9034             |
| 82 sec-Butylbenzene                | 105       | 11.285 | 11.285 | (0.982) | 1121957  | 10.0000            | 10.212             |
| 83 1,3-Dichlorobenzene             | 146       | 11.395 | 11.395 | (0.992) | 359203   | 10.0000            | 10.040             |
| 84 p-Isopropyltoluene              | 119       | 11.510 | 11.510 | (1.002) | 984336   | 10.0000            | 10.211             |
| 85 1,4-Dichlorobenzene             | 146       | 11.528 | 11.528 | (1.003) | 334344   | 10.0000            | 10.046             |
| 86 1,2-Dichlorobenzene             | 146       | 12.088 | 12.088 | (1.052) | 259715   | 10.0000            | 9.8393             |
| 87 n-Butylbenzene                  | 91        | 12.155 | 12.155 | (1.058) | 874826   | 10.0000            | 10.146             |
| 88 1,2-Dibromo-3-chloropropane     | 157       | 13.262 | 13.262 | (1.154) | 8381     | 10.0000            | 8.9409             |
| 89 1,2,4-Trichlorobenzene          | 180       | 14.303 | 14.303 | (1.245) | 162334   | 10.0000            | 10.147             |
| 90 Hexachlorobutadiene             | 225       | 14.534 | 14.534 | (1.265) | 170193   | 10.0000            | 11.344             |
| 91 Napthalene                      | 128       | 14.552 | 14.552 | (1.266) | 157049   | 10.0000            | 9.3611             |
| 92 1,2,3-Trichlorobenzene          | 180       | 14.820 | 14.820 | (1.290) | 107316   | 10.0000            | 10.183             |
| M 93 *1,4-dichloro-2-butene(total) | 53        |        |        |         | 34290    | 20.0000            | 17.718             |

Data File: /chem/gcms/mz.i/Z040706.b/co vz073.d  
Date : 07-APR-2006 07:36  
Client ID: STD10  
Sample Info: CCVZ073,1,2,3,,STD10  
Purge Volume: 25.0  
Column phase: J+W 624

Instrument: mz.i  
Operator: 22980  
Column diameter: 0.18





**STL Volatile GC/MS Initial Calibration Data Review / Narrative Checklist**  
**Method: 8260B – KNOX-MS-0015, Rev. 8**

1667

|                |         |             |    |                       |          |                                  |
|----------------|---------|-------------|----|-----------------------|----------|----------------------------------|
| Analysis Date: | 2/15/06 | Instrument: | MX | ICAL Batch/Scan Name: | X021506I | Scanned <input type="checkbox"/> |
|----------------|---------|-------------|----|-----------------------|----------|----------------------------------|

| Review Items                                                                                                                                                                                                                                                                      | N/A | Yes | No | If No, why is data reportable?                                                                            | 2nd<br>✓ |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|----|-----------------------------------------------------------------------------------------------------------|----------|
| 1. Did BFB meet tune criteria?                                                                                                                                                                                                                                                    |     | ✓   |    |                                                                                                           | ✓        |
| 2. Were all standards injected within 12 hr of BFB?                                                                                                                                                                                                                               |     | ✓   |    |                                                                                                           | ✓        |
| 3. Was date/time of analysis verified between analysis header and logbook as correct?                                                                                                                                                                                             |     | ✓   |    |                                                                                                           | ✓        |
| 4. Were $\geq 5$ levels of each compound/surrogate analyzed?                                                                                                                                                                                                                      |     | ✓   |    |                                                                                                           | ✓        |
| 5. Was low level standard at or below RL?                                                                                                                                                                                                                                         |     | ✓   |    |                                                                                                           | ✓        |
| 6. Was the primary ion used for all compounds?                                                                                                                                                                                                                                    |     | ✓   |    | <input type="checkbox"/> Secondary ion used due to interferences for: _____                               | ✓        |
| 7. Do the average RFs for SPCCs meet minimum RF?                                                                                                                                                                                                                                  |     | ✓   |    |                                                                                                           | ✓        |
| 8. Are %RSD <30% for CCCs?                                                                                                                                                                                                                                                        |     | ✓   |    |                                                                                                           | ✓        |
| 9. Was a linear fit or quadratic fit used for analytes >15% RSD?                                                                                                                                                                                                                  |     | ✓   |    |                                                                                                           | ✓        |
| 10. If curves were used, is correlation coefficient $\geq 0.990$ ?                                                                                                                                                                                                                |     | ✓   |    |                                                                                                           | ✓        |
| 11. At least 6 consecutive points used for quadratic curves?                                                                                                                                                                                                                      | ✓   |     |    |                                                                                                           | NA       |
| 12. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous?                                                                                                                                                                                | ✓   |     |    |                                                                                                           | NA       |
| 13. Is the "Y" intercept less than the RL for each curve?                                                                                                                                                                                                                         |     | X   | ⊗  | $\approx 2 \times 10^{-6}$<br>2 propenol                                                                  | ⊗ NA     |
| 14. Were all peaks identified automatically?<br>If not, list analytes:                                                                                                                                                                                                            |     | ✓   |    |                                                                                                           | ✓        |
| 15. If manual integrations were performed, are they clearly identified, initialed, dated and reason given?                                                                                                                                                                        | X   | ✓   |    | Reasons: 1)Corrected split peak; 2)Unresolved peak; 3)tailing; 4)RT shift; 5)wrong peak selected; 6)other | ✓        |
| 16. Are the ICAL start and end dates/times correct on ICAL summary?                                                                                                                                                                                                               |     | ✓   |    |                                                                                                           | ✓        |
| 17. Elution order checked on isomeric pairs?                                                                                                                                                                                                                                      |     | ✓   |    |                                                                                                           | ✓        |
| • hexane and vinyl acetate                                                                                                                                                                                                                                                        |     | ✓   |    |                                                                                                           | ✓        |
| • cis- and trans- isomers                                                                                                                                                                                                                                                         |     | ✓   |    |                                                                                                           | ✓        |
| • trichlorofluoromethane and Freon 113                                                                                                                                                                                                                                            |     | ✓   |    |                                                                                                           | ✓        |
| • ethyl benzene / m/p-xylene / o-xylene                                                                                                                                                                                                                                           |     | ✓   |    |                                                                                                           | ✓        |
| • n-propylbenzene / 2-chlorotoluene / 4-chlorotoluene                                                                                                                                                                                                                             |     | ✓   |    |                                                                                                           | ✓        |
| • 1,3,5-trimethylbenzene / 1,2,4-trimethylbenzene / sec-butylbenzene                                                                                                                                                                                                              |     | ✓   |    |                                                                                                           | ✓        |
| • 1,3-, 1,4-, and 1,2-dichlorobenzene                                                                                                                                                                                                                                             |     | ✓   |    |                                                                                                           | ✓        |
| • 1,2,4 and 1,2,3 -trichlorobenzene                                                                                                                                                                                                                                               |     | ✓   |    |                                                                                                           | ✓        |
| • chlorobenzene-d5 and 1,1,1,2-tetrachloroethane                                                                                                                                                                                                                                  |     | ✓   |    |                                                                                                           | ✓        |
| 18. If criteria were not met, was a NCM generated, approved by supervisor, and copy included in folder?                                                                                                                                                                           | ✓   |     |    |                                                                                                           | NA       |
| 19. Does the ICAL folder contain <b>complete</b> data in the following order? Data review checklist, tune pass/fail page, m/z list, tune chromatogram, ICAL summary, & curves, followed by Quan reports, chromatograms & manual integrations, in order from low to high standard. |     | ✓   |    |                                                                                                           | ✓        |
| 20. Was the 2nd source calibration verification standard within 70-130% and are results in ICAL folder? (25% DOD)                                                                                                                                                                 |     | ✓   |    |                                                                                                           | ✓        |

|           |                                                                                                           |       |         |                     |     |       |         |
|-----------|-----------------------------------------------------------------------------------------------------------|-------|---------|---------------------|-----|-------|---------|
| Analyst:  | WT                                                                                                        | Date: | 2/15/06 | 2nd Level Reviewer: | D/W | Date: | 2/16/06 |
| Comments: | • 4-butanol upper range dropped from 4000 to 2000<br>⊗ • curve not valid for 2 propenol @ intercept > RL. |       |         |                     |     |       |         |
|           |                                                                                                           |       |         |                     |     |       |         |
|           |                                                                                                           |       |         |                     |     |       |         |
|           |                                                                                                           |       |         |                     |     |       |         |
|           |                                                                                                           |       |         |                     |     |       |         |
|           |                                                                                                           |       |         |                     |     |       |         |
|           |                                                                                                           |       |         |                     |     |       |         |
|           |                                                                                                           |       |         |                     |     |       |         |
|           |                                                                                                           |       |         |                     |     |       |         |



Data File: /chem/gcms/mx.i/X021506i.b/bfxb15.d

Date : 15-FEB-2006 13:39

Client ID: TUNE

Instrument: mx.i

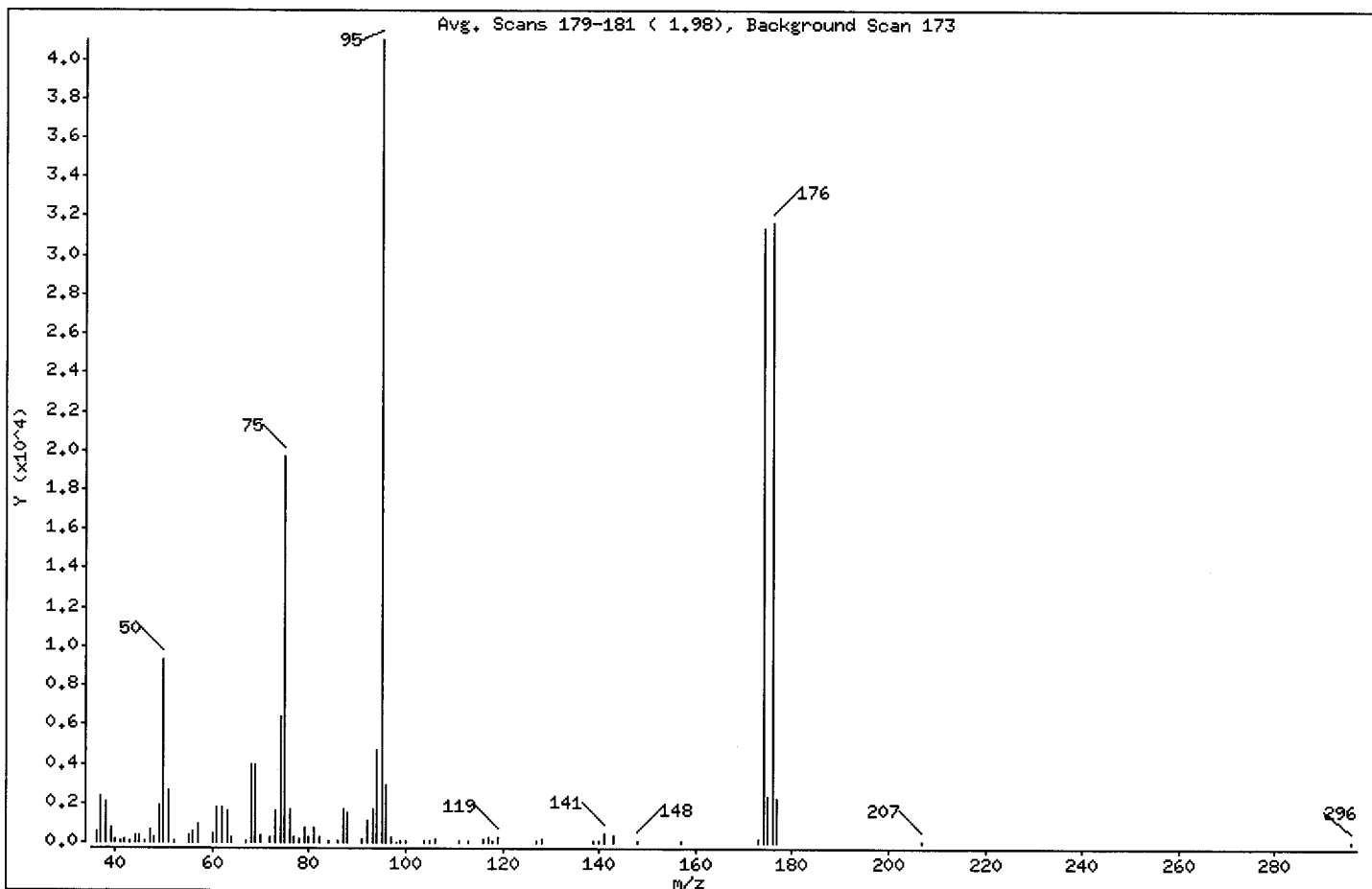
Sample Info: BFXB15,1,3,,BFB,TUNE

Operator: 22980

Column phase: J &amp; W 624

Column diameter: 0.18

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          | 22.65                |
| 75  | 30.00 - 60.00% of mass 95          | 48.13                |
| 96  | 5.00 - 9.00% of mass 95            | 7.04                 |
| 173 | Less than 2.00% of mass 174        | 0.53 ( 0.69)         |
| 174 | 50.00 - 120.00% of mass 95         | 76.61                |
| 175 | 5.00 - 9.00% of mass 174           | 5.79 ( 7.56)         |
| 176 | 95.00 - 101.00% of mass 174        | 77.35 (100.96)       |
| 177 | 5.00 - 9.00% of mass 176           | 5.60 ( 7.24)         |



Data File: /chem/gcms/mx.i/X0215061.b/bfxb15.d

Date : 15-FEB-2006 13:39

Client ID: TUNE

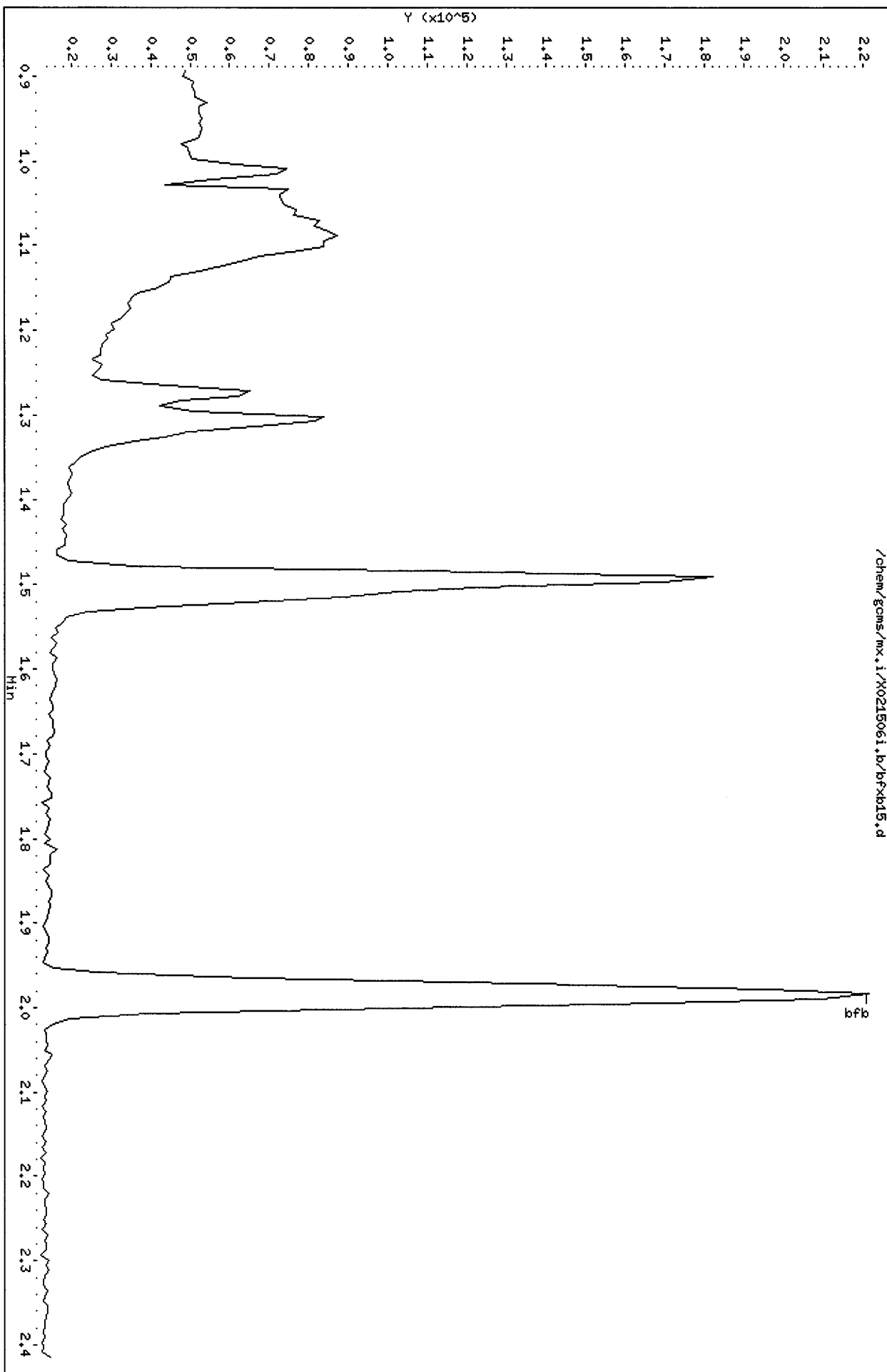
Sample Info: BFXB15,1,3,,BFB,TUNE

Instrument: mx.i

Operator: 22980

Column diameter: 0.18

Column phase: J & W 624





Report Date : 16-Feb-2006 09:51

## STL Knoxville

## INITIAL CALIBRATION DATA

Start Cal Date : 15-FEB-2006 14:31  
 End Cal Date : 15-FEB-2006 17:10  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/gcms/mx.i/x021506I.b/8260B\_LM.m  
 Cal Date : 15-Feb-2006 18:20 tillerm

| Compound                  | 1<br>Level 1       | 2<br>Level 2 | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|---------------------------|--------------------|--------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|---------------------------|
| 12 Vinyl Chloride (ccc)   | 0.36230<br>0.29497 | 0.34449      | 0.38684       | 0.38552       | 0.39112       | 0.37949       | AVRG  |   | 0.36353            |    | 9.46744                   |
| 13 *1,3-Butadiene         | 0.30765<br>0.23352 | 0.28309      | 0.32178       | 0.33041       | 0.33646       | 0.32408       | AVRG  |   | 0.30528            |    | 11.86794                  |
| 14 Bromomethane           | 0.12683<br>++++    | 0.12169      | 0.14113       | 0.14509       | 0.15554       | 0.15508       | AVRG  |   | 0.14089            |    | 10.03782                  |
| 15 Chloroethane           | 0.20590<br>++++    | 0.18274      | 0.20465       | 0.20039       | 0.20596       | 0.19839       | AVRG  |   | 0.19967            |    | 4.43473                   |
| 16 *Vinyl Bromide         | 0.16952<br>++++    | 0.15970      | 0.17746       | 0.17878       | 0.18153       | 0.17572       | AVRG  |   | 0.17378            |    | 4.59520                   |
| 17 Trichlorofluoromethane | 0.39468<br>++++    | 0.35357      | 0.41123       | 0.40969       | 0.41371       | 0.40337       | AVRG  |   | 0.39771            |    | 5.70275                   |
| 18 *2-Chloropropane       | 0.60692<br>++++    | 0.56060      | 0.63784       | 0.63182       | 0.64798       | 0.62883       | AVRG  |   | 0.61900            |    | 5.11471                   |

Report Date : 16-Feb-2006 09:51

STL Knoxville  
INITIAL CALIBRATION DATA

Start Cal Date : 15-FEB-2006 14:31  
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Quant Method : ISTD  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /var/chem/gcms/mx.i/x021506I.b/8260B\_IM.m  
Cal Date : 15-Feb-2006 18:20 tillerm

| Compound                    | 1<br>Level 1       | 2<br>Level 2 | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|-----------------------------|--------------------|--------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----|---------------------------|
| 19 1,1-Dichloroethene (ccc) | 0.20048<br>0.18103 | 0.18476      | 0.21051       | 0.20892       | 0.21599       | 0.20748       | AVRG  |         | 0.20131            |    | 6.67008                   |
| 20 *Freon 113               | 0.17719<br>++++    | 0.15951      | 0.18139       | 0.18585       | 0.18403       | 0.18376       | AVRG  |         | 0.17862            |    | 5.50234                   |
| 21 Acetone                  | 0.01432<br>++++    | 0.01429      | 0.01310       | 0.01459       | 0.01370       | 0.01498       | AVRG  |         | 0.01416            |    | 4.74169                   |
| 22 *Iodomethane             | 0.23811<br>++++    | 0.23116      | 0.26262       | 0.26070       | 0.26313       | 0.25748       | AVRG  |         | 0.25220            |    | 5.52177                   |
| 23 Carbon Disulfide         | 0.75668<br>0.63860 | 0.70969      | 0.81862       | 0.81077       | 0.82177       | 0.77867       | AVRG  |         | 0.76211            |    | 8.87133                   |
| 24 *2-propanol              | 4631<br>++++       | 8699         | 15388         | 41939         | 85359         | 191082        | LINR  | 1.23728 | 0.00179            |    | 0.99412                   |
| 25 *Acetonitrile            | 0.00272<br>++++    | 0.00286      | 0.00226       | 0.00271       | 0.00280       | 0.00288       | AVRG  |         | 0.00271            |    | 8.46063                   |



Report Date : 16-Feb-2006 09:51

## STL Knoxville

## INITIAL CALIBRATION DATA

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 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/gcms/mx.i/x021506I.b/8260B\_LM.m  
 Cal Date : 15-Feb-2006 18:20 tillerm

| Compound                     | 1<br>Level 1       | 2<br>Level 2 | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b       | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|------------------------------|--------------------|--------------|---------------|---------------|---------------|---------------|-------|---------|--------------------|----|---------------------------|
| 26 Methylene Chloride        | 0.15903<br>++++    | 0.14617      | 0.15656       | 0.15576       | 0.15576       | 0.15435       | AVRG  |         | 0.15461            |    | 2.85253                   |
| 27 *t-butanol                | 14811<br>10349     | 36667        | 87462         | 278246        | 534916        | ++++          | LINR  | 2.25565 | 0.00204            |    | 0.99017                   |
| 28 *Acrylonitrile            | 0.01935<br>++++    | 0.01892      | 0.01934       | 0.02035       | 0.02034       | 0.02092       | AVRG  |         | 0.01987            |    | 3.91192                   |
| 29 trans-1,2-Dichloroethene  | 0.24154<br>0.21123 | 0.22798      | 0.25924       | 0.26403       | 0.26124       | 0.24281       | AVRG  |         | 0.24401            |    | 7.96947                   |
| 30 *MTBE                     | 0.21359<br>0.18827 | 0.20966      | 0.22042       | 0.23092       | 0.22425       | 0.22320       | AVRG  |         | 0.21576            |    | 6.49028                   |
| 31 *Hexane                   | 0.50005<br>++++    | 0.45224      | 0.49311       | 0.51414       | 0.49312       | 0.50154       | AVRG  |         | 0.49237            |    | 4.28804                   |
| 32 1,1-Dichloroethane (spcc) | 0.46849<br>0.42011 | 0.46427      | 0.51129       | 0.50557       | 0.51369       | 0.50556       | AVRG  |         | 0.48414            |    | 7.18847                   |

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 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/gcms/mx.i/X021506I.b/8260B\_LM.m  
 Cal Date : 15-Feb-2006 18:20 tillerm

| Compound                  | 1<br>Level 1       | 2<br>Level 2 | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|---------------------------|--------------------|--------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|---------------------------|
| 33 *Vinyl Acetate         | 0.01111<br>++++    | 0.01156      | 0.01094       | 0.01194       | 0.01143       | 0.01127       | AVRG  |   | 0.01138            |    | 3.11151                   |
| 34 2,2-Dichloropropane    | 0.44452<br>0.39500 | 0.41775      | 0.46894       | 0.45760       | 0.45706       | 0.43179       | AVRG  |   | 0.43895            |    | 5.91018                   |
| 35 cis 1,2-Dichloroethene | 0.23030<br>0.20669 | 0.22360      | 0.24000       | 0.23795       | 0.23560       | 0.22850       | AVRG  |   | 0.22895            |    | 4.95980                   |
| 36 2-Butanone             | 0.02168<br>++++    | 0.02343      | 0.01970       | 0.02210       | 0.02214       | 0.02351       | AVRG  |   | 0.02209            |    | 6.30659                   |
| 37 Bromochloromethane     | 0.05774<br>++++    | 0.05545      | 0.06197       | 0.06247       | 0.06216       | 0.06143       | AVRG  |   | 0.06020            |    | 4.82987                   |
| 38 *THF                   | 0.01342<br>++++    | 0.01400      | 0.01215       | 0.01369       | 0.01365       | 0.01432       | AVRG  |   | 0.01354            |    | 5.53464                   |
| 39 Chloroform (ccc)       | 0.38503<br>0.34294 | 0.36653      | 0.39270       | 0.39438       | 0.39494       | 0.38400       | AVRG  |   | 0.38007            |    | 5.02349                   |

Report Date : 16-Feb-2006 09:51

STL Knoxville

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 Cal Date : 15-Feb-2006 18:20 tillerm

| Compound                     | 1<br>Level 1       | 2<br>Level 2 | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|------------------------------|--------------------|--------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|---------------------------|
| 40 1,1,1-Trichloroethane     | 0.43900<br>0.36514 | 0.40137      | 0.45173       | 0.44055       | 0.44813       | 0.42851       | AVRG  |   | 0.42492            |    | 7.34283                   |
| 41 Carbon Tetrachloride      | 0.35647<br>0.28996 | 0.33984      | 0.38986       | 0.38627       | 0.38575       | 0.36467       | AVRG  |   | 0.35897            |    | 9.90359                   |
| 42 1,1-Dichloropropene       | 0.40838<br>0.31819 | 0.38009      | 0.42795       | 0.41900       | 0.41991       | 0.39795       | AVRG  |   | 0.39592            |    | 9.55472                   |
| 43 Benzene                   | 1.04068<br>1.01071 | 0.98879      | 1.04526       | 1.02599       | 1.01821       | 0.95968       | AVRG  |   | 1.01276            |    | 2.97226                   |
| 44 1,2-Dichloroethane        | 0.16614<br>0.15373 | 0.16653      | 0.17534       | 0.17643       | 0.17849       | 0.17633       | AVRG  |   | 0.17043            |    | 5.20694                   |
| 45 Trichloroethene           | 0.27310<br>0.23097 | 0.25942      | 0.29067       | 0.28484       | 0.28649       | 0.27676       | AVRG  |   | 0.27175            |    | 7.64373                   |
| 46 1,2-Dichloropropane (ccc) | 0.21202<br>0.20134 | 0.20190      | 0.21903       | 0.22139       | 0.22149       | 0.21836       | AVRG  |   | 0.21365            |    | 4.11855                   |

Report Date : 16-Feb-2006 09:51

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| Compound                    | 1<br>Level 1       | 2<br>Level 2 | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|-----------------------------|--------------------|--------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|---------------------------|
| 47 *Methyl Methacrylate     | 0.06747<br>++++    | 0.06515      | 0.06475       | 0.06638       | 0.06644       | 0.06898       | AVRG  |   | 0.06653            |    | 2.33032                   |
| 48 Dibromomethane           | 0.05506<br>0.05041 | 0.05525      | 0.05733       | 0.05977       | 0.05935       | 0.05980       | AVRG  |   | 0.05671            |    | 6.05991                   |
| 49 Bromodichloromethane     | 0.20557<br>0.20503 | 0.20297      | 0.21469       | 0.22004       | 0.22002       | 0.21694       | AVRG  |   | 0.21218            |    | 3.50431                   |
| 50 *2-Chloroethylvinylether | 0.04128<br>++++    | 0.04202      | 0.04504       | 0.04867       | 0.04837       | 0.05002       | AVRG  |   | 0.04590            |    | 8.02715                   |
| 51 cis-1,3-Dichloropropene  | 0.24601<br>0.21782 | 0.24255      | 0.25667       | 0.26012       | 0.26068       | 0.25554       | AVRG  |   | 0.24849            |    | 6.10878                   |
| 52 4-Methyl-2-pentanone     | 0.05366<br>0.04879 | 0.05284      | 0.05145       | 0.05383       | 0.05344       | 0.05636       | AVRG  |   | 0.05291            |    | 4.41339                   |
| 53 Toluene (ccc)            | 6.10342<br>5.61839 | 5.71326      | 6.08871       | 6.03477       | 5.85875       | 5.58594       | AVRG  |   | 5.85760            |    | 3.79876                   |

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STL Knoxville

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 Method file : /var/chem/gcms/mx.i/X021506I.b/8260B\_LM.m  
 Cal Date : 15-Feb-2006 18:20 tillerm

| Compound                     | 1<br>Level 1       | 2<br>Level 2 | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|------------------------------|--------------------|--------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|---------------------------|
| 54 trans-1,3-Dichloropropene | 1.02636<br>0.94346 | 1.01404      | 1.04736       | 1.07037       | 1.04395       | 1.04093       | AVRG  |   | 1.02664            |    | 3.96126                   |
| 55 *Ethyl Methacrylate       | 0.57797<br>++++    | 0.53912      | 0.52425       | 0.53141       | 0.51415       | 0.53531       | AVRG  |   | 0.53704            |    | 4.08124                   |
| 56 1,1,2-Trichloroethane     | 0.45825<br>0.47322 | 0.46567      | 0.45902       | 0.46990       | 0.45729       | 0.45560       | AVRG  |   | 0.46271            |    | 1.48802                   |
| 57 Tetrachloroethene         | 1.30879<br>1.04879 | 1.23298      | 1.33399       | 1.32919       | 1.30217       | 1.25421       | AVRG  |   | 1.25859            |    | 7.93075                   |
| 58 1,3-Dichloropropane       | 0.88454<br>0.85461 | 0.87403      | 0.88847       | 0.92234       | 0.88292       | 0.87155       | AVRG  |   | 0.88264            |    | 2.35663                   |
| 59 2-Hexanone                | 0.20493<br>++++    | 0.20281      | 0.17972       | 0.19395       | 0.19083       | 0.20214       | AVRG  |   | 0.19574            |    | 4.90306                   |
| 60 Chlorodibromomethane      | 0.57001<br>0.45247 | 0.57132      | 0.59809       | 0.61804       | 0.59894       | 0.60412       | AVRG  |   | 0.57328            |    | 9.77423                   |

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 Integrator : HP RTE  
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 Cal Date : 15-Feb-2006 18:20 tillerm

| Compound                     | 1<br>Level 1       | 2<br>Level 2 | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|------------------------------|--------------------|--------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|---------------------------|
| 61 1,2-Dibromoethane         | 0.43479<br>0.39035 | 0.42264      | 0.44454       | 0.45040       | 0.43405       | 0.43966       | AVRG  |   | 0.43092            |    | 4.62254                   |
| 62 Chlorobenzene (spcc)      | 3.09162<br>2.79328 | 3.02095      | 3.09346       | 3.10397       | 3.01669       | 2.92850       | AVRG  |   | 3.00692            |    | 3.74705                   |
| 63 1,1,1,2-Tetrachloroethane | 0.98812<br>0.90152 | 0.98189      | 1.02262       | 1.04355       | 1.00383       | 0.98580       | AVRG  |   | 0.98962            |    | 4.52586                   |
| 64 Ethylbenzene (ccc)        | 2.13369<br>1.91066 | 2.04159      | 2.16360       | 2.12240       | 2.09660       | 2.00766       | AVRG  |   | 2.06803            |    | 4.24895                   |
| 65 m&p-Xylene                | 2.56408<br>2.21699 | 2.40917      | 2.56492       | 2.37005       | 2.47172       | 2.36840       | AVRG  |   | 2.42362            |    | 5.07663                   |
| 66 o-Xylene                  | 2.11756<br>1.90781 | 2.12983      | 2.19735       | 2.03304       | 2.10808       | 2.05054       | AVRG  |   | 2.07775            |    | 4.44335                   |
| 67 Styrene                   | 3.12741<br>2.85341 | 3.05907      | 3.08274       | 2.88467       | 2.96884       | 2.87255       | AVRG  |   | 2.97838            |    | 3.76133                   |

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| Compound                          | 1<br>Level 1       | 2<br>Level 2 | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|-----------------------------------|--------------------|--------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|---------------------------|
| 68 Bromoform (spcc)               | 0.26603<br>++++    | 0.27364      | 0.27471       | 0.28404       | 0.28168       | 0.28232       | AVRG  |   | 0.27707            |    | 2.48252                   |
| 69 Isopropylbenzene               | 7.06863<br>6.04598 | 6.66859      | 7.08613       | 6.73739       | 6.75717       | 6.28301       | AVRG  |   | 6.66384            |    | 5.75713                   |
| 70 *cis-1,4-dichloro-2-butene     | 0.13149<br>++++    | 0.12652      | 0.12469       | 0.12950       | 0.12697       | 0.12594       | AVRG  |   | 0.12752            |    | 1.96819                   |
| 71 Bromobenzene                   | 0.98490<br>0.86698 | 0.95362      | 0.95672       | 0.96178       | 0.94262       | 0.92278       | AVRG  |   | 0.94134            |    | 4.01677                   |
| 72 1,1,2,2-Tetrachloroethane (sp) | 0.43098<br>0.37030 | 0.38896      | 0.34839       | 0.35749       | 0.34180       | 0.33374       | AVRG  |   | 0.36738            |    | 9.13914                   |
| 73 1,2,3-Trichloropropane         | 0.10906<br>++++    | 0.09378      | 0.08729       | 0.10026       | 0.08543       | 0.08431       | AVRG  |   | 0.09335            |    | 10.45046                  |
| 74 *trans-1,4-dichloro-2-butene   | 0.10743<br>++++    | 0.09704      | 0.09709       | 0.10606       | 0.09516       | 0.09285       | AVRG  |   | 0.09927            |    | 6.05337                   |

Report Date : 16-Feb-2006 09:51

## STL Knoxville

## INITIAL CALIBRATION DATA

Start Cal Date : 15-FEB-2006 14:31  
 End Cal Date : 15-FEB-2006 17:10  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/gcms/mx.i/x021506I.b/8260B\_LM.m  
 Cal Date : 15-Feb-2006 18:20 tillerm

| Compound                  | 1<br>Level 1       | 2<br>Level 2 | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|---------------------------|--------------------|--------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|----------------|
| 75 n-Propylbenzene        | 7.41919<br>6.28401 | 6.78813      | 7.25621       | 7.00227       | 6.94825       | 6.45493       | AVRG  |   | 6.87900            |    | 5.92337        |
| 76 2-Chlorotoluene        | 3.71032<br>3.28419 | 3.53176      | 3.64993       | 3.64812       | 3.52222       | 3.36470       | AVRG  |   | 3.53018            |    | 4.45885        |
| 77 1,3,5-Trimethylbenzene | 4.04794<br>3.43024 | 3.82351      | 3.95106       | 3.32826       | 3.78179       | 3.65520       | AVRG  |   | 3.71686            |    | 7.09293        |
| 78 4-Chlorotoluene        | 3.95304<br>3.50942 | 3.78388      | 3.87261       | 3.69540       | 3.69792       | 3.54497       | AVRG  |   | 3.72246            |    | 4.35534        |
| 79 tert-Butylbenzene      | 4.15593<br>3.46796 | 3.90072      | 4.16955       | 3.99966       | 4.00119       | 3.77449       | AVRG  |   | 3.92421            |    | 6.21275        |
| 80 1,2,4-Trimethylbenzene | 3.52651<br>3.10080 | 3.31682      | 3.34935       | 2.80891       | 3.27402       | 3.20810       | AVRG  |   | 3.22636            |    | 7.00001        |
| 81 sec-Butylbenzene       | 6.12682<br>5.09512 | 5.64542      | 6.05720       | 5.70539       | 5.80019       | 5.46803       | AVRG  |   | 5.69974            |    | 6.17190        |



Report Date : 16-Feb-2006 09:51

## STL Knoxville

## INITIAL CALIBRATION DATA

Start Cal Date : 15-FEB-2006 14:31  
 End Cal Date : 15-FEB-2006 17:10  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/gcms/mx.i/x021506I.b/8260B\_LM.m  
 Cal Date : 15-Feb-2006 18:20 tillerm

| Compound                       | 1<br>Level 1       | 2<br>Level 2 | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R <sup>2</sup> |
|--------------------------------|--------------------|--------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|---------------------------|
| 82 1,3-Dichlorobenzene         | 1.79227<br>1.52531 | 1.69649      | 1.72250       | 1.69832       | 1.68639       | 1.67257       | AVRG  |   | 1.68484            |    | 4.77783                   |
| 83 p-Isopropyltoluene          | 4.91282<br>4.10978 | 4.54525      | 4.82311       | 4.25166       | 4.70989       | 4.47521       | AVRG  |   | 4.54682            |    | 6.47553                   |
| 84 1,4-Dichlorobenzene         | 1.60495<br>1.42695 | 1.56446      | 1.54466       | 1.51041       | 1.52490       | 1.50466       | AVRG  |   | 1.52586            |    | 3.64602                   |
| 85 1,2-Dichlorobenzene         | 1.30397<br>1.09639 | 1.22582      | 1.22848       | 1.20762       | 1.20427       | 1.19944       | AVRG  |   | 1.20943            |    | 5.06071                   |
| 86 n-Butylbenzene              | 4.40088<br>3.68759 | 4.04829      | 4.25310       | 3.51334       | 4.12360       | 3.96382       | AVRG  |   | 3.99866            |    | 7.76274                   |
| 87 1,2-Dibromo-3-chloropropane | 0.04862<br>++++    | 0.04808      | 0.04512       | 0.05479       | 0.04997       | 0.05229       | AVRG  |   | 0.04981            |    | 6.79522                   |
| 88 1,2,4-Trichlorobenzene      | 0.64635<br>0.58717 | 0.61922      | 0.59133       | 0.48394       | 0.60527       | 0.63076       | AVRG  |   | 0.59486            |    | 8.95269                   |

Report Date : 16-Feb-2006 09:51

STL Knoxville  
INITIAL CALIBRATION DATA

Start Cal Date : 15-FEB-2006 14:31  
End Cal Date : 15-FEB-2006 17:10  
Quant Method : ISTD  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /var/chem/gcms/mx.i/x021506I.b/8260B\_LM.m  
Cal Date : 15-Feb-2006 18:20 tillerm

| Compound                            | 1<br>Level 1       | 2<br>Level 2 | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | b | Coefficients<br>m1 | m2 | %RSD<br>or R^2 |
|-------------------------------------|--------------------|--------------|---------------|---------------|---------------|---------------|-------|---|--------------------|----|----------------|
| 89 Hexachlorobutadiene              | 1.00870<br>++++    | 0.92701      | 1.00903       | 0.98899       | 1.00456       | 0.96408       | AVRG  |   | 0.98373            |    | 3.31831        |
| 90 Naphthalene                      | 0.47793<br>++++    | 0.45356      | 0.42334       | 0.34221       | 0.43737       | 0.46893       | AVRG  |   | 0.43389            |    | 11.32988       |
| 91 1,2,3-Trichlorobenzene           | 0.42104<br>0.37389 | 0.38309      | 0.38499       | 0.31044       | 0.39478       | 0.42020       | AVRG  |   | 0.38406            |    | 9.69173        |
| M 92 *1,4-dichloro-2-butene (total) | 0.12713<br>++++    | 0.11924      | 0.11817       | 0.12033       | 0.11817       | 0.11656       | AVRG  |   | 0.11993            |    | 3.11997        |
| \$ 4 Dibromofluoromethane           | 0.16816<br>++++    | 0.17065      | 0.16860       | 0.17223       | 0.17045       | ++++          | AVRG  |   | 0.17002            |    | 0.97329        |
| \$ 5 1,2-Dichloroethane-d4          | 0.13308<br>++++    | 0.13146      | 0.12825       | 0.13497       | 0.13488       | ++++          | AVRG  |   | 0.13253            |    | 2.10738        |
| \$ 6 Toluene-d8                     | 5.06240<br>++++    | 4.87481      | 4.89939       | 4.92413       | 4.71936       | ++++          | AVRG  |   | 4.89602            |    | 2.50448        |

Report Date : 16-Feb-2006 09:51

STL Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 15-FEB-2006 14:31  
End Cal Date : 15-FEB-2006 17:10  
Quant Method : ISTD  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /var/chem/gcms/mx.i/X021506I.b/8260B\_LM.m  
Cal Date : 15-Feb-2006 18:20 tillerm

| Compound                  | 1<br>Level 1 | 2<br>Level 2 | 10<br>Level 3 | 20<br>Level 4 | 40<br>Level 5 | 80<br>Level 6 | Curve | Coefficients |         | %RSD<br>or R <sup>2</sup> |
|---------------------------|--------------|--------------|---------------|---------------|---------------|---------------|-------|--------------|---------|---------------------------|
|                           |              |              |               |               |               |               |       | b            | m1      | m2                        |
|                           | 0.3200       |              |               |               |               |               |       |              |         |                           |
|                           | Level 7      |              |               |               |               |               |       |              |         |                           |
| =====                     |              |              |               |               |               |               |       |              |         |                           |
| \$ 7 4-Bromofluorobenzene | 1.19617      | 1.15216      | 1.17594       | 1.28255       | 1.12149       | ++++          | AVRG  |              | 1.18566 |                           |
|                           | ++++         |              |               |               |               |               |       |              |         | 5.13604                   |
| -----                     |              |              |               |               |               |               |       |              |         |                           |

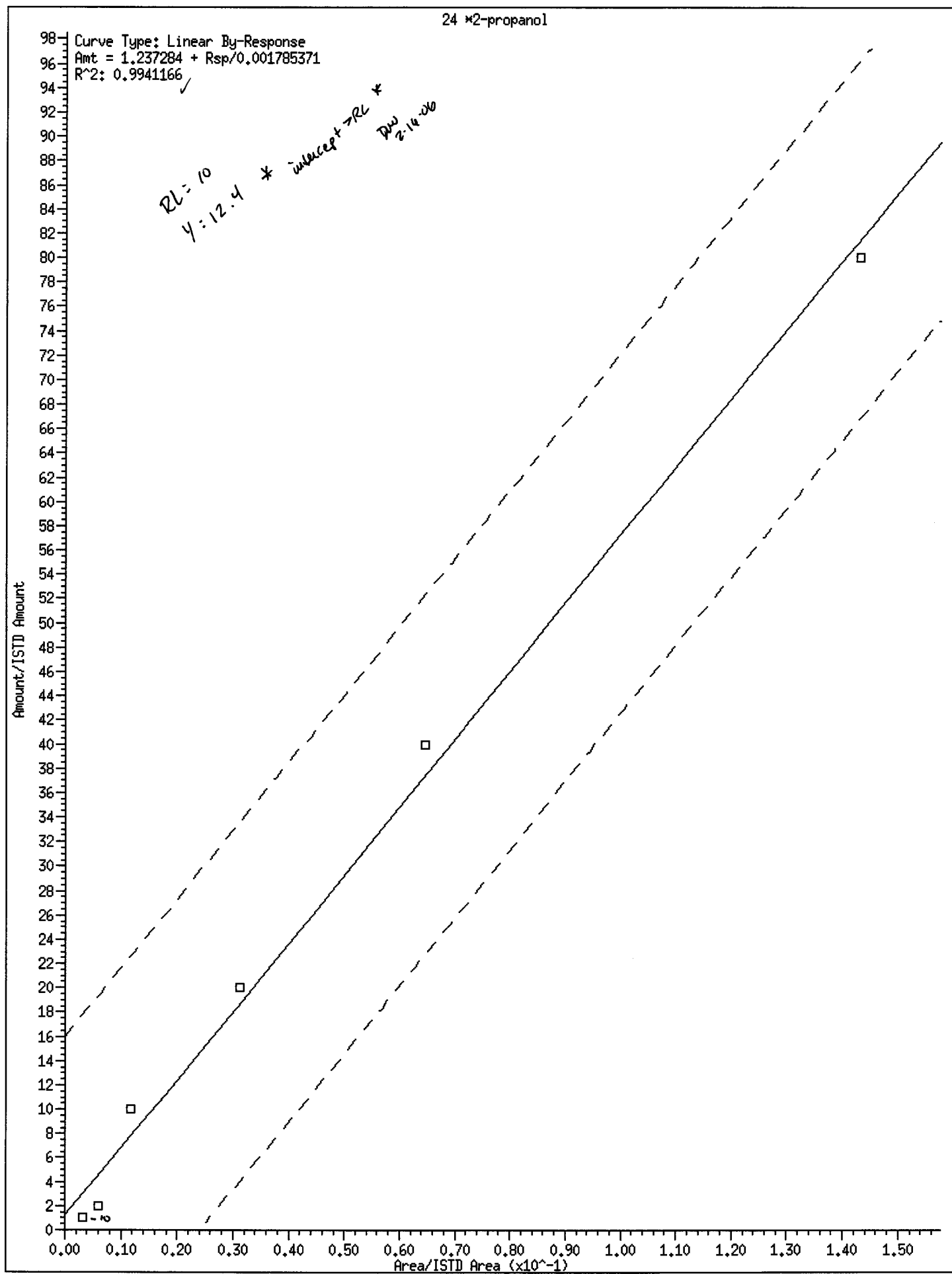
Report Date : 16-Feb-2006 09:51

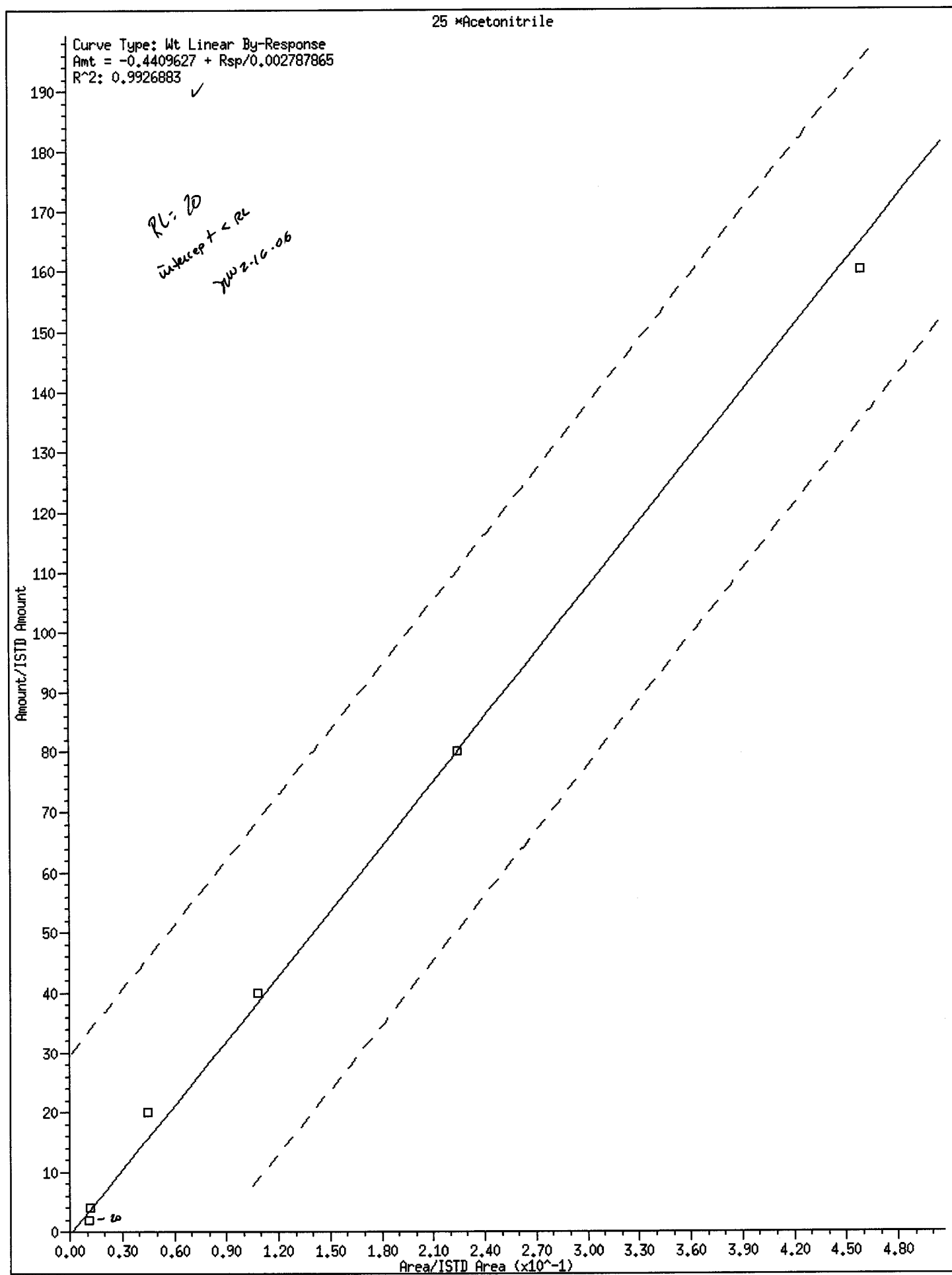
STL Knoxville

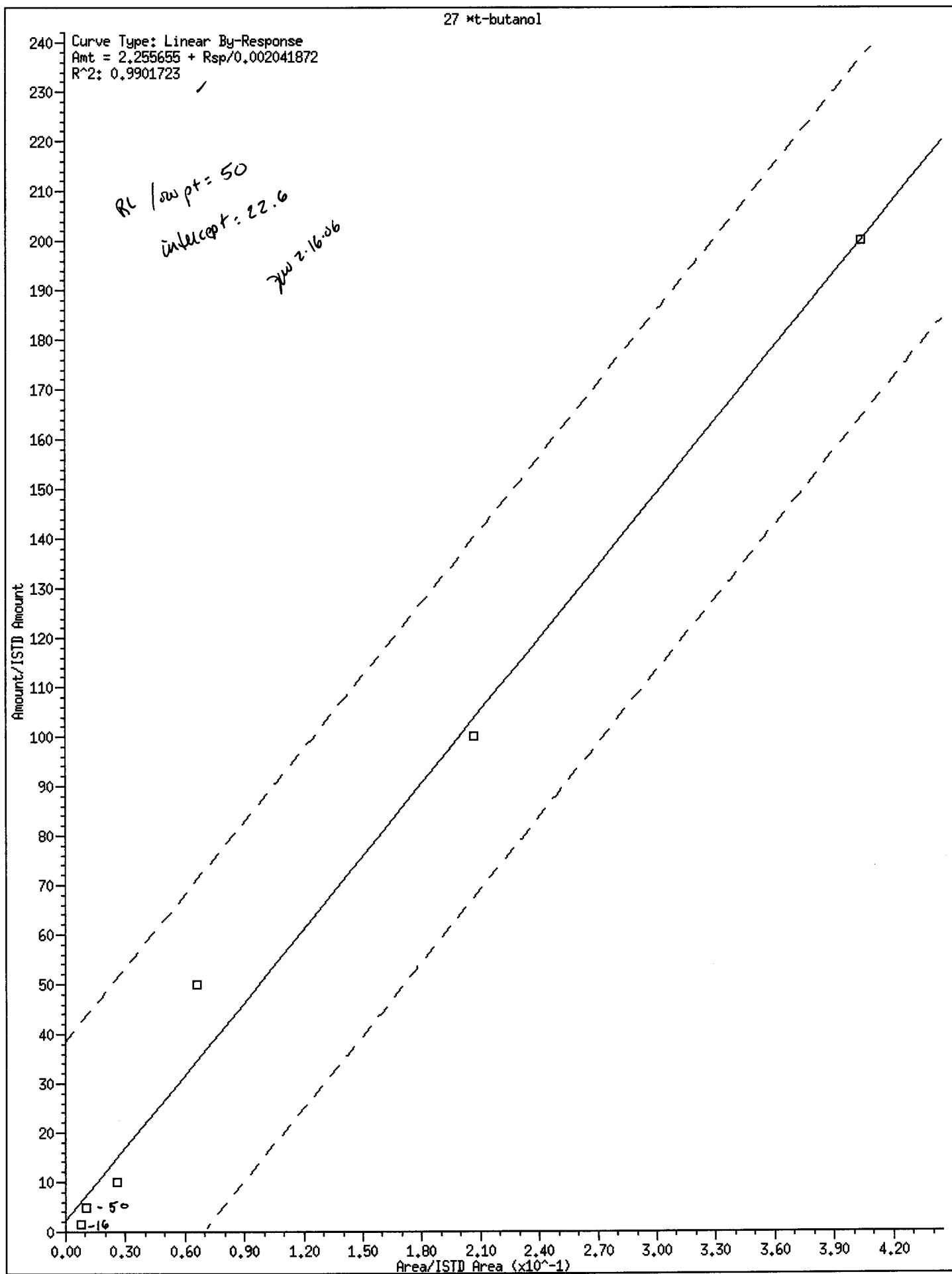
INITIAL CALIBRATION DATA

Start Cal Date : 15-FEB-2006 14:31  
End Cal Date : 15-FEB-2006 17:10  
Quant Method : ISTD  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /var/chem/gcms/mx.i/X021506I.b/8260B\_LM.m  
Cal Date : 15-Feb-2006 18:20 tillerm

| Curve    | Formula          | Units    |
|----------|------------------|----------|
| Averaged | Amt = Rsp/ml     | Response |
| Linear   | Amt = b + Rsp/ml | Response |







Data File: /var/chem/gcms/mx.i/X021506I.b/icxb157.d  
 Report Date: 15-Feb-2006 18:11

## STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X021506I.b/icxb157.d  
 Lab Smp Id: ICCXB157 Client Smp ID: VSTD0.32  
 Inj Date : 15-FEB-2006 14:31  
 Operator : 22980 Inst ID: mx.i  
 Smp Info : ICCXB157,1,1,7,,VSTD0.32  
 Misc Info : X021506I,8260B\_LM,all.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X021506I.b/8260B\_LM.m  
 Meth Date : 15-Feb-2006 18:11 tillerm Quant Type: ISTD  
 Cal Date : 15-FEB-2006 14:31 Cal File: icxb157.d  
 Als bottle: 7 Calibration Sample, Level: 7  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT SIG<br>MASS | RT     | EXP RT | REL RT  | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-------------------|--------|--------|---------|----------|--------------------|-------------------|
|                                |                   |        |        |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene              | 96                | 4.853  | 4.853  | (1.000) | 1321744  | 10.0000            |                   |
| * 2 Chlorobenzene-d5           | 119               | 7.585  | 7.585  | (1.000) | 219836   | 10.0000            |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152               | 10.742 | 10.748 | (1.000) | 250994   | 10.0000            |                   |
| \$ 4 Dibromofluoromethane      | 113               | 4.275  | 4.269  | (0.881) | 10280    | 0.32000            | 0.45986           |
| \$ 5 1,2-Dichloroethane-d4     | 65                | 4.555  | 4.555  | (0.939) | 8171     | 0.32000            | 0.47217           |
| \$ 6 Toluene-d8                | 98                | 6.252  | 6.252  | (0.824) | 50822    | 0.32000            | 0.46746           |
| \$ 7 4-Bromofluorobenzene      | 95                | 8.874  | 8.874  | (0.826) | 14793    | 0.32000            | 0.50170           |
| M 8 1,2-Dichloroethene (total) | 96                |        |        |         | 17677    | 0.32000            | 0.58143           |
| M 9 Xylene (total)             | 106               |        |        |         | 44613    | 0.32000            | 0.87417           |
| 10 Dichlorodifluoromethane     | 85                | 1.130  | 1.136  | (0.233) | 10849    | 0.32000            | 0.26584           |
| 11 Chloromethane (spcc)        | 50                | 1.264  | 1.264  | (0.260) | 19430    | 0.32000            | 0.32077           |
| 12 Vinyl Chloride (ccc)        | 62                | 1.343  | 1.343  | (0.277) | 12476    | 0.32000            | 0.27191           |
| 13 *1,3-Butadiene              | 39                | 1.373  | 1.373  | (0.283) | 9877     | 0.32000            | 0.26083           |
| 14 Bromomethane                | 94                | 1.586  | 1.592  | (0.327) | 4943     | 0.32000            | 0.28795           |
| 15 Chloroethane                | 64                | 1.678  | 1.678  | (0.346) | 8046     | 0.32000            | 0.30782           |



Data File: /var/chem/gcms/mx.i/X021506I.b/icxb157.d  
Report Date: 15-Feb-2006 18:11

| Compounds                    | QUANT SIG |       |        | REL RT  | RESPONSE | AMOUNTS                |                   |
|------------------------------|-----------|-------|--------|---------|----------|------------------------|-------------------|
|                              | MASS      | RT    | EXP RT |         |          | CAL-AMT<br>( ug/L)     | ON-COL<br>( ug/L) |
| =====                        | =====     | ==    | =====  | =====   | =====    | =====                  | =====             |
| 16 *Vinyl Bromide            | 106       | 1.824 | 1.830  | (0.376) | 5511     | 0.32000                | 0.24690           |
| 17 Trichlorofluoromethane    | 101       | 1.891 | 1.890  | (0.390) | 12668    | 0.32000                | 0.26278           |
| 18 *2-Chloropropane          | 43        | 2.213 | 2.213  | (0.456) | 20850    | 0.32000                | 0.26214           |
| 19 1,1-Dichloroethene (ccc)  | 96        | 2.335 | 2.335  | (0.481) | 7657     | 0.32000                | 0.29832           |
| 20 *Freon 113                | 151       | 2.353 | 2.353  | (0.485) | 5312     | 0.32000                | 0.24976           |
| 21 Acetone                   | 43        | 2.377 | 2.377  | (0.490) | 6586     | 0.32000                | 3.5842            |
| 22 *Iodomethane              | 142       | 2.450 | 2.450  | (0.505) | 8585     | 0.32000                | 0.26626           |
| 23 Carbon Disulfide          | 76        | 2.499 | 2.499  | (0.515) | 27010    | 0.32000                | 0.27959           |
| 24 *2-propanol               | 45        | 2.535 | 2.529  | (0.522) | 5825     | 0.32000 <sup>3.2</sup> | 17.731            |
| 25 *Acetonitrile             | 40        | 2.621 | 2.614  | (0.540) | 4082     | 0.32000 <sup>4</sup>   | 8.7971            |
| 26 Methylene Chloride        | 84        | 2.754 | 2.754  | (0.568) | 6160     | 0.32000                | 0.30280           |
| 27 *t-butanol                | 59        | 2.900 | 2.894  | (0.598) | 10349    | 16.0000                | 39.386            |
| 28 *Acrylonitrile            | 53        | 2.961 | 2.961  | (0.610) | 15891    | 66.4000                | 6.2616            |
| 29 trans-1,2-Dichloroethene  | 96        | 2.992 | 2.998  | (0.616) | 8934     | 0.32000                | 0.28764           |
| 30 *MTBE                     | 73        | 3.016 | 3.010  | (0.621) | 7963     | 0.32000                | 0.28968           |
| 31 *Hexane                   | 57        | 3.253 | 3.259  | (0.670) | 34442    | 0.64000                | 0.54086           |
| 32 1,1-Dichloroethane (spcc) | 63        | 3.351 | 3.357  | (0.690) | 17769    | 0.32000                | 0.28847           |
| 33 *Vinyl Acetate            | 86        | 3.424 | 3.417  | (0.705) | 890      | 0.64000                | 0.60141           |
| 34 2,2-Dichloropropane       | 77        | 3.862 | 3.855  | (0.796) | 16707    | 0.32000                | 0.29290           |
| 35 cis 1,2-Dichloroethene    | 96        | 3.855 | 3.855  | (0.794) | 8742     | 0.32000                | 0.29379           |
| 36 2-Butanone                | 43        | 3.874 | 3.874  | (0.798) | 5005     | 0.32000                | 1.7529            |
| 37 Bromochloromethane        | 128       | 4.062 | 4.056  | (0.837) | 2147     | 0.32000                | 0.27831           |
| 38 *THF                      | 42        | 4.111 | 4.105  | (0.847) | 4016     | 1.28000                | 2.3036            |
| 39 Chloroform (ccc)          | 83        | 4.141 | 4.135  | (0.853) | 14505    | 0.32000                | 0.29517           |
| 40 1,1,1-Trichloroethane     | 97        | 4.293 | 4.293  | (0.885) | 15444    | 0.32000                | 0.28204           |
| 41 Carbon Tetrachloride      | 117       | 4.439 | 4.439  | (0.915) | 12264    | 0.32000                | 0.26972           |
| 42 1,1-Dichloropropene       | 75        | 4.439 | 4.433  | (0.915) | 13458    | 0.32000                | 0.26540           |
| 43 Benzene                   | 78        | 4.610 | 4.610  | (0.950) | 42749    | 0.32000                | 0.31667           |
| 44 1,2-Dichloroethane        | 62        | 4.616 | 4.616  | (0.951) | 6502     | 0.32000                | 0.29736           |
| 45 Trichloroethene           | 130       | 5.176 | 5.176  | (1.066) | 9769     | 0.32000                | 0.28046           |
| 46 1,2-Dichloropropane (ccc) | 63        | 5.364 | 5.358  | (1.105) | 8516     | 0.32000                | 0.30892           |
| 47 *Methyl Methacrylate      | 41        | 5.480 | 5.480  | (1.129) | 3589     | 0.32000                | 0.41278           |
| 48 Dibromomethane            | 93        | 5.455 | 5.461  | (1.124) | 2132     | 0.32000                | 0.28866           |
| 49 Bromodichloromethane      | 83        | 5.601 | 5.607  | (1.154) | 8672     | 0.32000                | 0.31583           |
| 50 *2-Chloroethylvinylether  | 63        | 5.881 | 5.881  | (1.212) | 3140     | 0.64000                | 0.55539           |
| 51 cis-1,3-Dichloropropene   | 75        | 6.003 | 6.003  | (1.237) | 9213     | 0.32000                | 0.28953           |
| 52 4-Methyl-2-pentanone      | 43        | 6.143 | 6.143  | (1.266) | 8254     | 1.28000                | 1.2084            |
| 53 Toluene (ccc)             | 91        | 6.313 | 6.313  | (0.832) | 39524    | 0.32000                | 0.30572           |
| 54 trans-1,3-Dichloropropene | 75        | 6.508 | 6.502  | (0.858) | 6637     | 0.32000                | 0.29957           |
| 55 *Ethyl Methacrylate       | 69        | 6.605 | 6.605  | (0.871) | 3519     | 0.32000                | 0.29263           |
| 56 1,1,2-Trichloroethane     | 97        | 6.672 | 6.672  | (0.880) | 3329     | 0.32000                | 0.32859           |
| 57 Tetrachloroethene         | 164       | 6.818 | 6.818  | (0.899) | 7378     | 0.32000                | 0.27263           |
| 58 1,3-Dichloropropane       | 76        | 6.824 | 6.824  | (0.900) | 6012     | 0.32000                | 0.31242           |
| 59 2-Hexanone                | 43        | 6.909 | 6.903  | (0.911) | 5726     | 1.28000                | 1.3300            |
| 60 Chlorodibromomethane      | 129       | 7.031 | 7.031  | (0.927) | 3183     | 0.32000                | 0.24973           |
| 61 1,2-Dibromoethane         | 107       | 7.128 | 7.134  | (0.940) | 2746     | 0.32000                | 0.28788           |
| 62 Chlorobenzene (spcc)      | 112       | 7.609 | 7.609  | (1.003) | 19650    | 0.32000                | 0.29798           |

NA

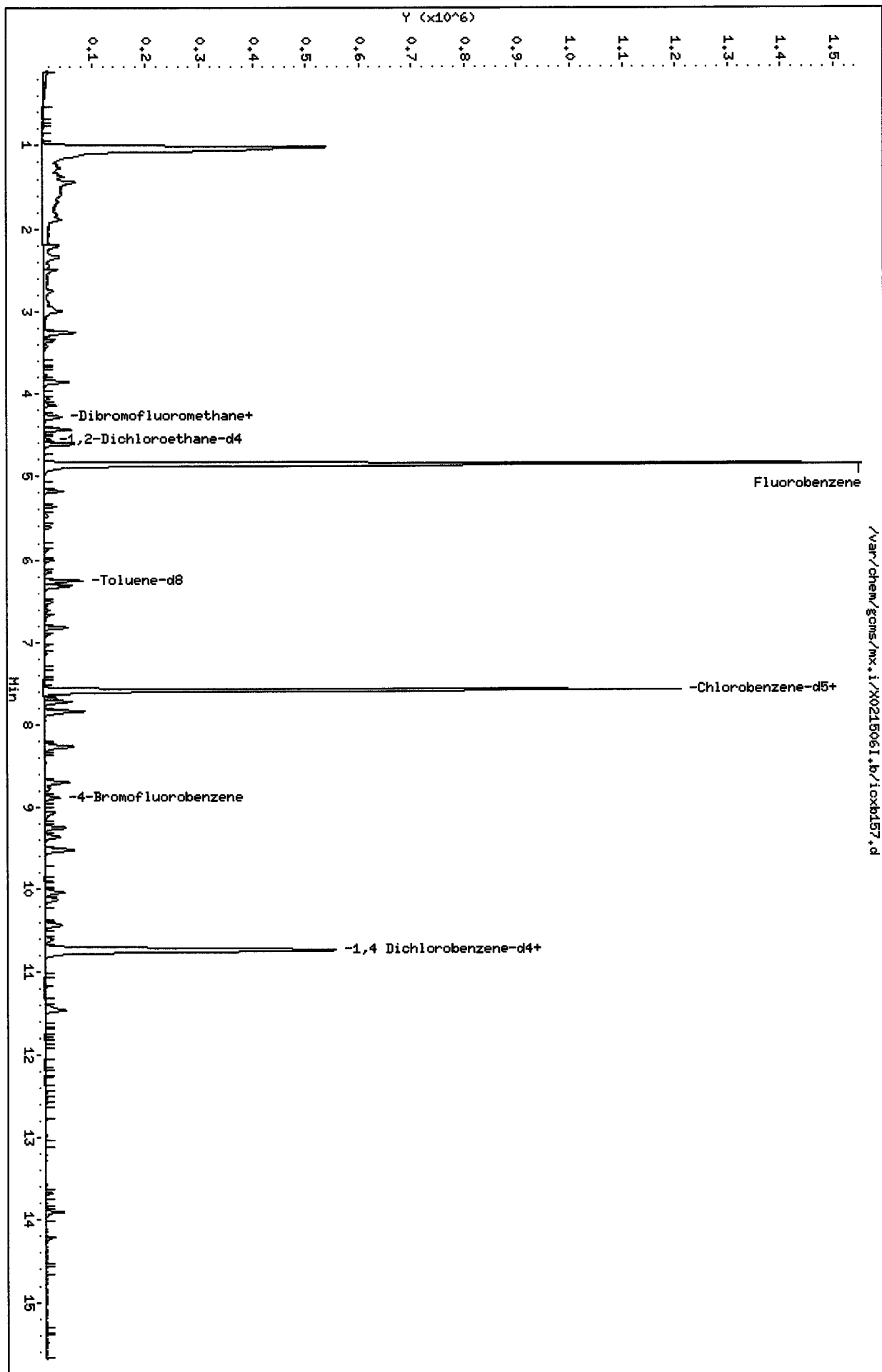
DW 2-16-06

Data File: /var/chem/gcms/mx.i/X021506I.b/icxb157.d  
 Report Date: 15-Feb-2006 18:11

| Compounds                           | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|-------------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                     | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                               | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 63 1,1,1,2-Tetrachloroethane        | 131       | 7.688  | 7.682  | (1.014) | 6342     | 0.32000            | 0.29635           |
| 64 Ethylbenzene (ccc)               | 106       | 7.725  | 7.724  | (1.018) | 13441    | 0.32000            | 0.29646           |
| 65 m&p-Xylene                       | 106       | 7.840  | 7.840  | (1.034) | 31192    | 0.64000            | 0.58180           |
| 66 o-Xylene                         | 106       | 8.254  | 8.254  | (1.088) | 13421    | 0.32000            | 0.29237           |
| 67 Styrene                          | 104       | 8.272  | 8.266  | (1.091) | 20073    | 0.32000            | 0.30129           |
| 68 Bromoform (spcc)                 | 173       | 8.461  | 8.461  | (1.115) | 1537     | 0.32000            | 0.25762           |
| 69 Isopropylbenzene                 | 105       | 8.692  | 8.692  | (1.146) | 42532    | 0.32000            | 0.28802           |
| 70 *cis-1,4-dichloro-2-butene       | 88        | 8.753  | 8.753  | (1.154) | 831      | 0.32000            | 0.29635           |
| 71 Bromobenzene                     | 156       | 9.069  | 9.069  | (1.196) | 6099     | 0.32000            | 0.29497           |
| 72 1,1,2,2-Tetrachloroethane (sp)   | 83        | 9.069  | 9.057  | (1.196) | 2605     | 0.32000            | 0.30436           |
| 73 1,2,3-Trichloropropane           | 110       | 9.118  | 9.112  | (0.849) | 866      | 0.32000            | 0.35713           |
| 74 *trans-1,4-dichloro-2-butene     | 53        | 9.148  | 9.142  | (0.852) | 833      | 0.32000            | 0.33043           |
| 75 n-Propylbenzene                  | 91        | 9.245  | 9.245  | (0.861) | 50472    | 0.32000            | 0.28988           |
| 76 2-Chlorotoluene                  | 91        | 9.355  | 9.355  | (0.871) | 26378    | 0.32000            | 0.29654           |
| 77 1,3,5-Trimethylbenzene           | 105       | 9.513  | 9.519  | (0.886) | 27551    | 0.32000            | 0.28787           |
| 78 4-Chlorotoluene                  | 91        | 9.519  | 9.519  | (0.886) | 28187    | 0.32000            | 0.29712           |
| 79 tert-Butylbenzene                | 119       | 10.036 | 10.036 | (0.934) | 27854    | 0.32000            | 0.28284           |
| 80 1,2,4-Trimethylbenzene           | 105       | 10.121 | 10.127 | (0.942) | 24905    | 0.32000            | 0.29857           |
| 81 sec-Butylbenzene                 | 105       | 10.438 | 10.438 | (0.972) | 40923    | 0.32000            | 0.28449           |
| 82 1,3-Dichlorobenzene              | 146       | 10.608 | 10.614 | (0.988) | 12251    | 0.32000            | 0.28982           |
| 83 p-Isopropyltoluene               | 119       | 10.736 | 10.736 | (0.999) | 33009    | 0.32000            | 0.28604           |
| 84 1,4-Dichlorobenzene              | 146       | 10.791 | 10.791 | (1.005) | 11461    | 0.32000            | 0.29744           |
| 85 1,2-Dichlorobenzene              | 146       | 11.429 | 11.429 | (1.064) | 8806     | 0.32000            | 0.28910           |
| 86 n-Butylbenzene                   | 91        | 11.466 | 11.466 | (1.067) | 29618    | 0.32000            | 0.28799           |
| 88 1,2,4-Trichlorobenzene           | 180       | 13.674 | 13.674 | (1.273) | 4716     | 0.32000            | 0.30362           |
| 89 Hexachlorobutadiene              | 225       | 13.905 | 13.905 | (1.294) | 7379     | 0.32000            | 0.29953           |
| 90 Napthalene                       | 128       | 13.948 | 13.942 | (1.298) | 3968     | 0.32000            | 0.35008           |
| 91 1,2,3-Trichlorobenzene           | 180       | 14.228 | 14.228 | (1.324) | 3003     | 0.32000            | 0.30187           |
| M 92 *1,4-dichloro-2-butene (total) | 53        |        |        |         | 1664     | 0.32000            | 0.62678           |

Data File: /var/chem/gcms/mx.i/X0215061.b/ioxbl57.d  
Date: 15-FEB-2006 14:31  
Client ID: VSTD0.32  
Sample Info: ICCXB157,1,1,7,,VSTD0.32  
Purge Volume: 25.0  
Column phase: J+W 624

Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18



Data File: /var/chem/gcms/mx.i/X021506I.b/icxb151.d  
 Report Date: 16-Feb-2006 09:49

## STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X021506I.b/icxb151.d  
 Lab Smp Id: ICCXB151 Client Smp ID: VSTD01  
 Inj Date : 15-FEB-2006 14:58  
 Operator : 22980 Inst ID: mx.i  
 Smp Info : ICCXB151,1,1,1,,VSTD01  
 Misc Info : X021506I,8260B\_LM,all.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X021506I.b/8260B\_LM.m  
 Meth Date : 15-Feb-2006 18:20 tillerm Quant Type: ISTD  
 Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
 Als bottle: 1 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT SIG | MASS   | RT     | EXP RT  | REL RT  | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-----------|--------|--------|---------|---------|----------|--------------------|-------------------|
|                                |           |        |        |         |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene              | 96        | 4.853  | 4.853  | (1.000) | 1419697 | 10.0000  |                    |                   |
| * 2 Chlorobenzene-d5           | 119       | 7.584  | 7.585  | (1.000) | 236135  | 10.0000  |                    |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152       | 10.742 | 10.748 | (1.000) | 269853  | 10.0000  |                    |                   |
| \$ 4 Dibromofluoromethane      | 113       | 4.275  | 4.269  | (0.881) | 23874   | 1.00000  | 0.98907            |                   |
| \$ 5 1,2-Dichloroethane-d4     | 65        | 4.555  | 4.555  | (0.939) | 18893   | 1.00000  | 1.0041             |                   |
| \$ 6 Toluene-d8                | 98        | 6.252  | 6.252  | (0.824) | 119541  | 1.00000  | 1.0340             |                   |
| \$ 7 4-Bromofluorobenzene      | 95        | 8.874  | 8.874  | (0.826) | 32279   | 1.00000  | 1.0089             |                   |
| M 8 1,2-Dichloroethene (total) | 96        |        |        |         | 66987   | 2.00000  | 1.9958             |                   |
| M 9 Xylene (total)             | 106       |        |        |         | 171097  | 3.00000  | 3.1351             |                   |
| 10 Dichlorodifluoromethane     | 85        | 1.130  | 1.136  | (0.233) | 45493   | 1.00000  | 1.0123             |                   |
| 11 Chloromethane (spcc)        | 50        | 1.264  | 1.264  | (0.260) | 65461   | 1.00000  | 0.98972            |                   |
| 12 Vinyl Chloride (ccc)        | 62        | 1.343  | 1.343  | (0.277) | 51435   | 1.00000  | 0.99660            |                   |
| 13 *1,3-Butadiene              | 39        | 1.373  | 1.373  | (0.283) | 43677   | 1.00000  | 1.0077             |                   |
| 14 Bromomethane                | 94        | 1.592  | 1.592  | (0.328) | 18006   | 1.00000  | 0.90019            |                   |
| 15 Chloroethane                | 64        | 1.677  | 1.678  | (0.346) | 29231   | 1.00000  | 1.0312             |                   |

Data File: /var/chem/gcms/mx.i/X021506I.b/icxb151.d  
 Report Date: 16-Feb-2006 09:49

| Compounds                    | QUANT SIG |       |        |         |          | AMOUNTS            |                   |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                        | =====     | ==    | =====  | =====   | =====    | =====              | =====             |
| 16 *Vinyl Bromide            | 106       | 1.829 | 1.830  | (0.377) | 24066    | 1.00000            | 0.97544           |
| 17 Trichlorofluoromethane    | 101       | 1.890 | 1.890  | (0.389) | 56032    | 1.00000            | 0.99238           |
| 18 *2-Chloropropane          | 43        | 2.213 | 2.213  | (0.456) | 86164    | 1.00000            | 0.98048           |
| 19 1,1-Dichloroethene (ccc)  | 96        | 2.334 | 2.335  | (0.481) | 28462    | 1.00000            | 0.99588           |
| 20 *Freon 113                | 151       | 2.346 | 2.353  | (0.484) | 25155    | 1.00000            | 0.99196           |
| 21 Acetone                   | 43        | 2.389 | 2.377  | (0.492) | 8132     | 4.00000            | 4.0442            |
| 22 *Iodomethane              | 142       | 2.450 | 2.450  | (0.505) | 33804    | 1.00000            | 0.94413           |
| 23 Carbon Disulfide          | 76        | 2.498 | 2.499  | (0.515) | 107426   | 1.00000            | 0.99287           |
| 24 *2-propanol               | 45        | 2.541 | 2.529  | (0.524) | 4631     | 10.0000            | 30.643            |
| 25 *Acetonitrile             | 40        | 2.614 | 2.614  | (0.539) | 7736     | 20.0000            | 22.776 (M)        |
| 26 Methylene Chloride        | 84        | 2.754 | 2.754  | (0.568) | 22578    | 1.00000            | 1.0286            |
| 27 *t-butanol                | 59        | 2.894 | 2.894  | (0.596) | 14811    | 50.0000            | 73.649            |
| 28 *Acrylonitrile            | 53        | 2.961 | 2.961  | (0.610) | 54929    | 20.0000            | 19.472            |
| 29 trans-1,2-Dichloroethene  | 96        | 2.991 | 2.998  | (0.616) | 34292    | 1.00000            | 0.98989           |
| 30 *MTBE                     | 73        | 3.009 | 3.010  | (0.620) | 30324    | 1.00000            | 0.98997           |
| 31 *Hexane                   | 57        | 3.259 | 3.259  | (0.672) | 141984   | 2.00000            | 2.0312            |
| 32 1,1-Dichloroethane (spcc) | 63        | 3.356 | 3.357  | (0.692) | 66511    | 1.00000            | 0.96767           |
| 33 *Vinyl Acetate            | 86        | 3.417 | 3.417  | (0.704) | 3155     | 2.00000            | 1.9536            |
| 34 2,2-Dichloropropane       | 77        | 3.855 | 3.855  | (0.794) | 63108    | 1.00000            | 1.0127            |
| 35 cis 1,2-Dichloroethene    | 96        | 3.861 | 3.855  | (0.796) | 32695    | 1.00000            | 1.0059            |
| 36 2-Butanone                | 43        | 3.879 | 3.874  | (0.799) | 12314    | 4.00000            | 3.9261            |
| 37 Bromochloromethane        | 128       | 4.056 | 4.056  | (0.836) | 8197     | 1.00000            | 0.95909           |
| 38 *THF                      | 42        | 4.104 | 4.105  | (0.846) | 7623     | 4.00000            | 3.9662            |
| 39 Chloroform (ccc)          | 83        | 4.135 | 4.135  | (0.852) | 54663    | 1.00000            | 1.0130            |
| 40 1,1,1-Trichloroethane     | 97        | 4.293 | 4.293  | (0.885) | 62324    | 1.00000            | 1.0331            |
| 41 Carbon Tetrachloride      | 117       | 4.439 | 4.439  | (0.915) | 50608    | 1.00000            | 0.99303           |
| 42 1,1-Dichloropropene       | 75        | 4.439 | 4.433  | (0.915) | 57978    | 1.00000            | 1.0315            |
| 43 Benzene                   | 78        | 4.609 | 4.610  | (0.950) | 147745   | 1.00000            | 1.0276            |
| 44 1,2-Dichloroethane        | 62        | 4.615 | 4.616  | (0.951) | 23587    | 1.00000            | 0.97486           |
| 45 Trichloroethene           | 130       | 5.175 | 5.176  | (1.066) | 38772    | 1.00000            | 1.0050            |
| 46 1,2-Dichloropropane (ccc) | 63        | 5.358 | 5.358  | (1.104) | 30100    | 1.00000            | 0.99237           |
| 47 *Methyl Methacrylate      | 41        | 5.479 | 5.480  | (1.129) | 9578     | 1.00000            | 1.0141            |
| 48 Dibromomethane            | 93        | 5.461 | 5.461  | (1.125) | 7817     | 1.00000            | 0.97090           |
| 49 Bromodichloromethane      | 83        | 5.607 | 5.607  | (1.155) | 29185    | 1.00000            | 0.96886           |
| 50 *2-Chloroethylvinylether  | 63        | 5.881 | 5.881  | (1.212) | 11721    | 2.00000            | 1.7987            |
| 51 cis-1,3-Dichloropropene   | 75        | 6.003 | 6.003  | (1.237) | 34926    | 1.00000            | 0.99004           |
| 52 4-Methyl-2-pentanone      | 43        | 6.142 | 6.143  | (1.266) | 30475    | 4.00000            | 4.0571            |
| 53 Toluene (ccc)             | 91        | 6.313 | 6.313  | (0.832) | 144123   | 1.00000            | 1.0420            |
| 54 trans-1,3-Dichloropropene | 75        | 6.507 | 6.502  | (0.858) | 24236    | 1.00000            | 0.99973           |
| 55 *Ethyl Methacrylate       | 69        | 6.605 | 6.605  | (0.871) | 13648    | 1.00000            | 1.0762            |
| 56 1,1,2-Trichloroethane     | 97        | 6.666 | 6.672  | (0.879) | 10821    | 1.00000            | 0.99038           |
| 57 Tetrachloroethene         | 164       | 6.818 | 6.818  | (0.899) | 30905    | 1.00000            | 1.0399            |
| 58 1,3-Dichloropropane       | 76        | 6.824 | 6.824  | (0.900) | 20887    | 1.00000            | 1.0022            |
| 59 2-Hexanone                | 43        | 6.903 | 6.903  | (0.910) | 19362    | 4.00000            | 4.1890            |
| 60 Chlorodibromomethane      | 129       | 7.031 | 7.031  | (0.927) | 13460    | 1.00000            | 0.99429           |
| 61 1,2-Dibromoethane         | 107       | 7.134 | 7.134  | (0.941) | 10267    | 1.00000            | 1.0090            |
| 62 Chlorobenzene (spcc)      | 112       | 7.609 | 7.609  | (1.003) | 73004    | 1.00000            | 1.0282            |

Data File: /var/chem/gcms/mx.i/X021506I.b/icxb151.d  
 Report Date: 16-Feb-2006 09:49

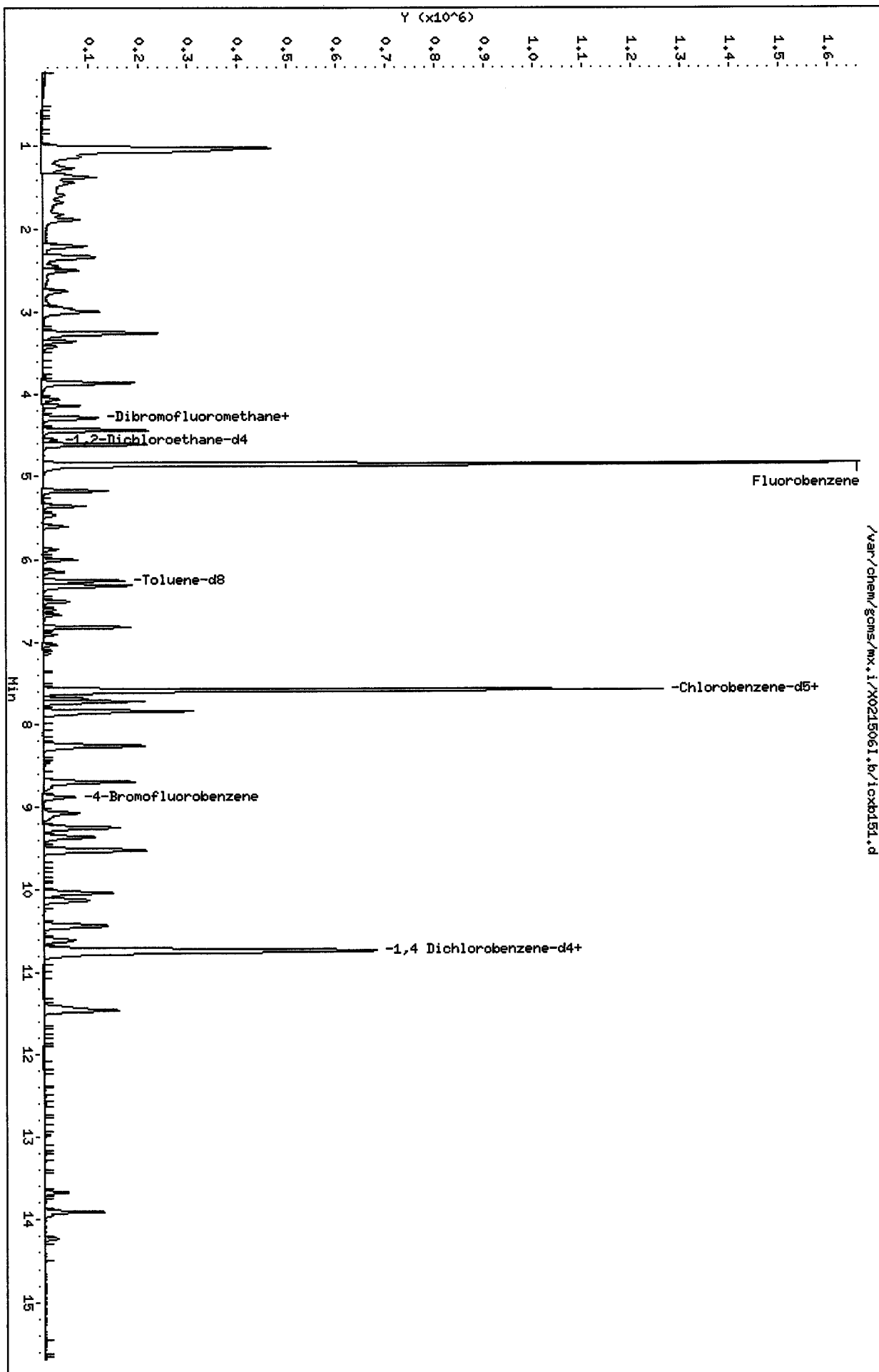
| Compounds                           | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|-------------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                     | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                               | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 63 1,1,1,2-Tetrachloroethane        | 131       | 7.688  | 7.682  | (1.014) | 23333    | 1.00000            | 0.99849           |
| 64 Ethylbenzene (ccc)               | 106       | 7.724  | 7.724  | (1.018) | 50384    | 1.00000            | 1.0318            |
| 65 m&p-Xylene                       | 106       | 7.840  | 7.840  | (1.034) | 121094   | 2.00000            | 2.1159            |
| 66 o-Xylene                         | 106       | 8.253  | 8.254  | (1.088) | 50003    | 1.00000            | 1.0192            |
| 67 Styrene                          | 104       | 8.272  | 8.266  | (1.091) | 73849    | 1.00000            | 1.0500            |
| 68 Bromoform (spcc)                 | 173       | 8.460  | 8.461  | (1.115) | 6282     | 1.00000            | 0.96016           |
| 69 Isopropylbenzene                 | 105       | 8.691  | 8.692  | (1.146) | 166915   | 1.00000            | 1.0607            |
| 70 *cis-1,4-dichloro-2-butene       | 88        | 8.752  | 8.753  | (1.154) | 3105     | 1.00000            | 1.0312            |
| 71 Bromobenzene                     | 156       | 9.069  | 9.069  | (1.196) | 23257    | 1.00000            | 1.0463            |
| 72 1,1,2,2-Tetrachloroethane (sp)   | 83        | 9.063  | 9.057  | (1.195) | 10177    | 1.00000            | 1.1731            |
| 73 1,2,3-Trichloropropane           | 110       | 9.117  | 9.112  | (0.849) | 2943     | 1.00000            | 1.1682            |
| 74 *trans-1,4-dichloro-2-butene     | 53        | 9.142  | 9.142  | (0.851) | 2899     | 1.00000            | 1.0822            |
| 75 n-Propylbenzene                  | 91        | 9.245  | 9.245  | (0.861) | 200209   | 1.00000            | 1.0785            |
| 76 2-Chlorotoluene                  | 91        | 9.355  | 9.355  | (0.871) | 100124   | 1.00000            | 1.0510            |
| 77 1,3,5-Trimethylbenzene           | 105       | 9.513  | 9.519  | (0.886) | 109235   | 1.00000            | 1.0891            |
| 78 4-Chlorotoluene                  | 91        | 9.519  | 9.519  | (0.886) | 106674   | 1.00000            | 1.0619            |
| 79 tert-Butylbenzene                | 119       | 10.036 | 10.036 | (0.934) | 112149   | 1.00000            | 1.0590            |
| 80 1,2,4-Trimethylbenzene           | 105       | 10.127 | 10.127 | (0.943) | 95164    | 1.00000            | 1.0930            |
| 81 sec-Butylbenzene                 | 105       | 10.437 | 10.438 | (0.972) | 165334   | 1.00000            | 1.0749            |
| 82 1,3-Dichlorobenzene              | 146       | 10.614 | 10.614 | (0.988) | 48365    | 1.00000            | 1.0638            |
| 83 p-Isopropyltoluene               | 119       | 10.735 | 10.736 | (0.999) | 132574   | 1.00000            | 1.0805            |
| 84 1,4-Dichlorobenzene              | 146       | 10.790 | 10.791 | (1.005) | 43310    | 1.00000            | 1.0518            |
| 85 1,2-Dichlorobenzene              | 146       | 11.435 | 11.429 | (1.065) | 35188    | 1.00000            | 1.0782            |
| 86 n-Butylbenzene                   | 91        | 11.465 | 11.466 | (1.067) | 118759   | 1.00000            | 1.1006            |
| 87 1,2-Dibromo-3-chloropropane      | 157       | 12.597 | 12.591 | (1.173) | 1312     | 1.00000            | 0.97604           |
| 88 1,2,4-Trichlorobenzene           | 180       | 13.674 | 13.674 | (1.273) | 17442    | 1.00000            | 1.0866            |
| 89 Hexachlorobutadiene              | 225       | 13.905 | 13.905 | (1.294) | 27220    | 1.00000            | 1.0254            |
| 90 Napthalene                       | 128       | 13.948 | 13.942 | (1.298) | 12897    | 1.00000            | 1.1015            |
| 91 1,2,3-Trichlorobenzene           | 180       | 14.227 | 14.228 | (1.325) | 11362    | 1.00000            | 1.0963            |
| M 92 *1,4-dichloro-2-butene (total) | 53        |        |        |         | 6004     | 2.00000            | 2.1134            |

### QC Flag Legend

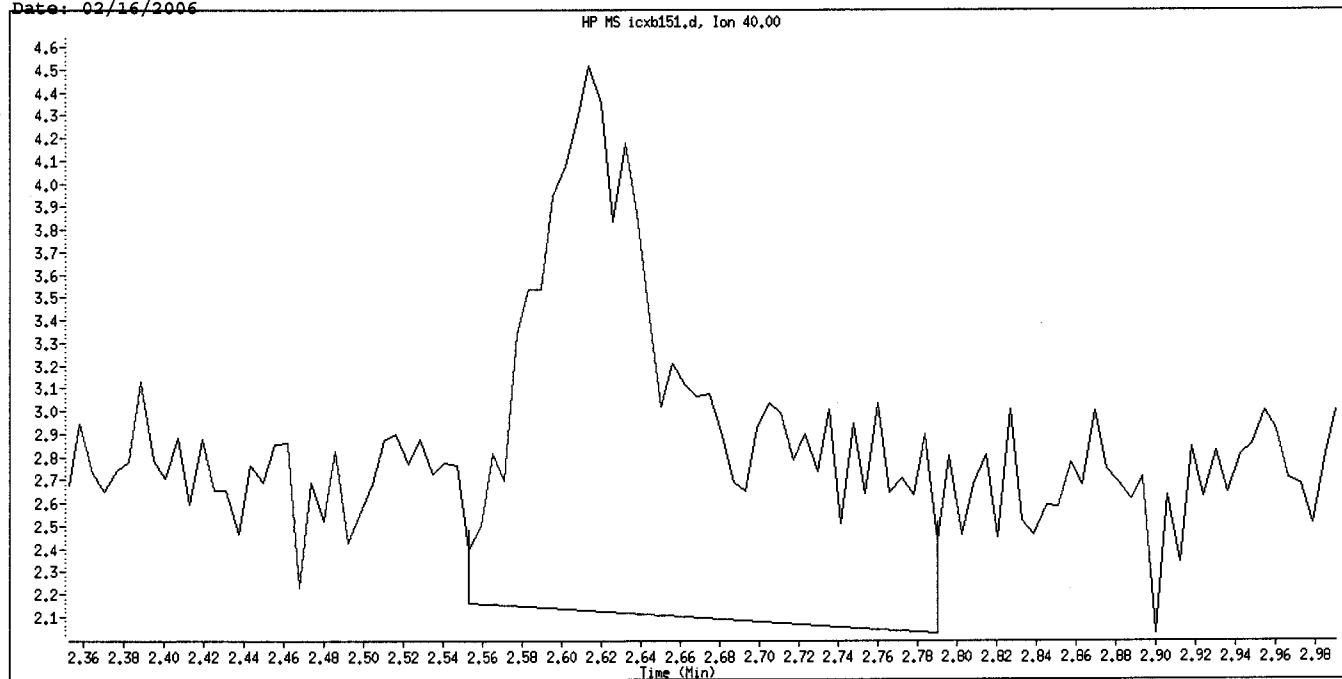
M - Compound response manually integrated.

Data File: /var/chem/gcms/mx.i/X0215061.b/1cxb151.d  
Date : 15-FEB-2006 14:58  
Client ID: VSTD01  
Sample Info: ICCXB151,1,1,1,,VSTD01  
Purge Volume: 25.0  
Column phase: J+W 624

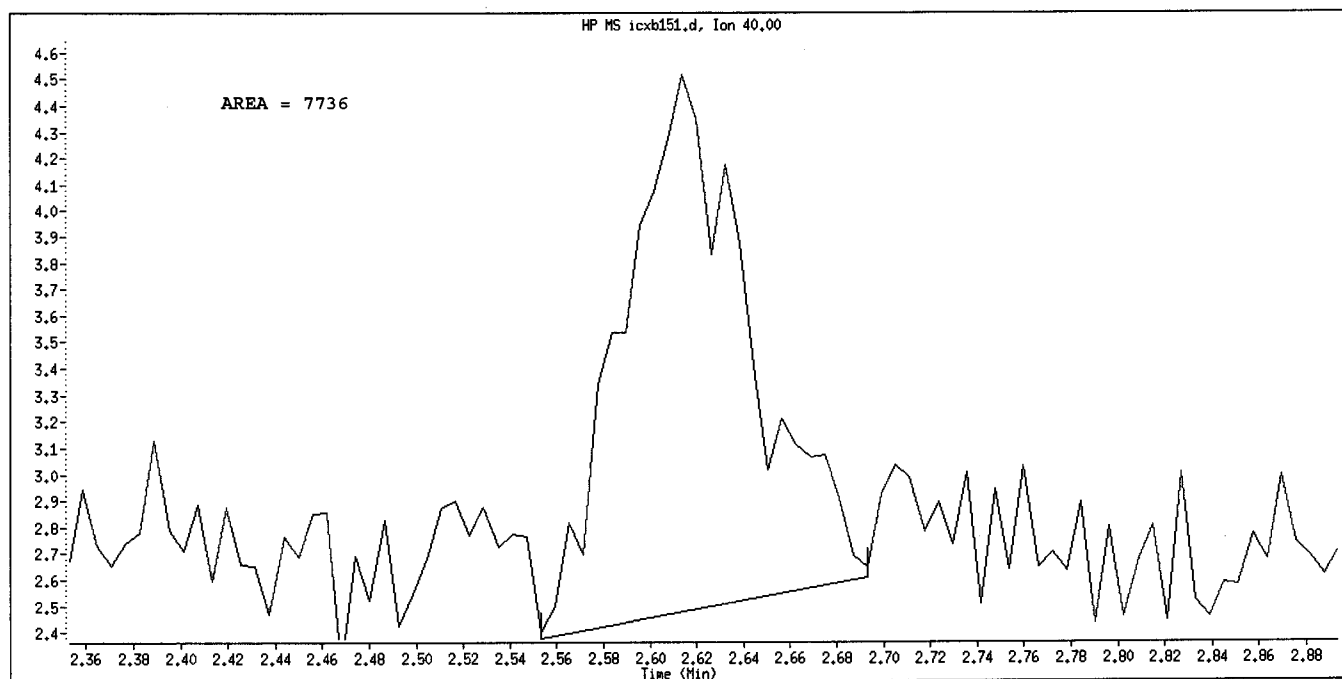
Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18



Data File Name: icxb151.d  
Inj. Date and Time: 15-FEB-2006 14:58  
Instrument ID: mx.i  
Client ID: VSTD01  
Compound Name: \*Acetonitrile  
CAS #: 75-05-8  
Report Date: 02/16/2006



Original Integration



Manual Integration

Manually Integrated By: wilesd  
Manual Integration Reason: Peak Tailing or Fronting

*WJ 2/16/06*



Data File: /var/chem/gcms/mx.i/X021506I.b/icxb152.d  
 Report Date: 15-Feb-2006 18:11

## STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X021506I.b/icxb152.d  
 Lab Smp Id: ICCXB152 Client Smp ID: VSTD002  
 Inj Date : 15-FEB-2006 15:24  
 Operator : 22980 Inst ID: mx.i  
 Smp Info : ICCXB152,1,1,2,,VSTD002  
 Misc Info : X021506I,8260B\_LM,all.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X021506I.b/8260B\_LM.m  
 Meth Date : 15-Feb-2006 18:11 tillerm Quant Type: ISTD  
 Cal Date : 15-FEB-2006 15:24 Cal File: icxb152.d  
 Als bottle: 2 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT SIG | MASS  | RT     | EXP RT | REL RT  | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-----------|-------|--------|--------|---------|----------|--------------------|-------------------|
|                                |           |       |        |        |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| *****                          | =====     | ===== | =====  | =====  | =====   | =====    | =====              | =====             |
| * 1 Fluorobenzene              |           | 96    | 4.852  | 4.853  | (1.000) | 1434554  | 10.0000            |                   |
| * 2 Chlorobenzene-d5           |           | 119   | 7.583  | 7.585  | (1.000) | 243200   | 10.0000            |                   |
| * 3 1,4 Dichlorobenzene-d4     |           | 152   | 10.747 | 10.748 | (1.000) | 280547   | 10.0000            |                   |
| \$ 4 Dibromofluoromethane      |           | 113   | 4.274  | 4.269  | (0.881) | 48962    | 2.00000            | 2.0179            |
| \$ 5 1,2-Dichloroethane-d4     |           | 65    | 4.554  | 4.555  | (0.939) | 37718    | 2.00000            | 2.0081            |
| \$ 6 Toluene-d8                |           | 98    | 6.257  | 6.252  | (0.825) | 237111   | 2.00000            | 1.9714            |
| \$ 7 4-Bromofluorobenzene      |           | 95    | 8.873  | 8.874  | (0.826) | 64647    | 2.00000            | 1.9615            |
| M 8 1,2-Dichloroethene (total) |           | 96    |        |        |         | 129564   | 4.00000            | 3.9344            |
| M 9 Xylene (total)             |           | 106   |        |        |         | 337959   | 6.00000            | 5.9913            |
| 10 Dichlorodifluoromethane     |           | 85    | 1.135  | 1.136  | (0.234) | 81883    | 2.00000            | 1.8486            |
| 11 Chloromethane (spcc)        |           | 50    | 1.263  | 1.264  | (0.260) | 124095   | 2.00000            | 1.9137            |
| 12 Vinyl Chloride (ccc)        |           | 62    | 1.342  | 1.343  | (0.277) | 98839    | 2.00000            | 1.9868            |
| 13 *1,3-Butadiene              |           | 39    | 1.372  | 1.373  | (0.283) | 81223    | 2.00000            | 1.9866            |
| 14 Bromomethane                |           | 94    | 1.591  | 1.592  | (0.328) | 34913    | 2.00000            | 1.8738            |
| 15 Chloroethane                |           | 64    | 1.676  | 1.678  | (0.345) | 52429    | 2.00000            | 1.8480            |

Data File: /var/chem/gcms/mx.i/X021506I.b/icxb152.d  
 Report Date: 15-Feb-2006 18:11

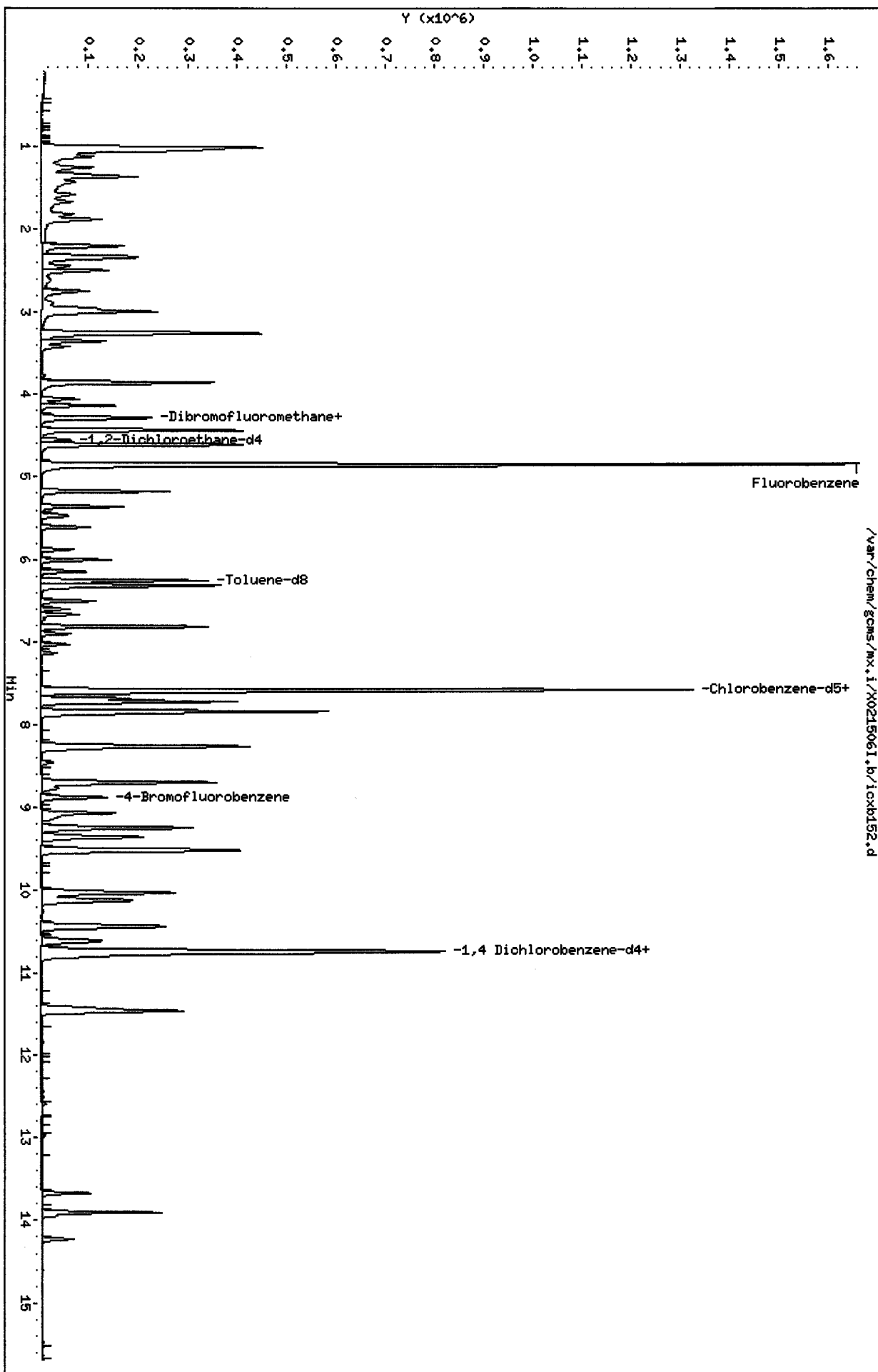
| Compounds                    | QUANT SIG |       |        |         |          | AMOUNTS            |                   |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                        | =====     | ==    | =====  | =====   | =====    | =====              | =====             |
| 16 *Vinyl Bromide            | 106       | 1.828 | 1.830  | (0.377) | 45819    | 2.00000            | 1.8911            |
| 17 Trichlorofluoromethane    | 101       | 1.889 | 1.890  | (0.389) | 101442   | 2.00000            | 1.9387            |
| 18 *2-Chloropropane          | 43        | 2.212 | 2.213  | (0.456) | 160843   | 2.00000            | 1.8631            |
| 19 1,1-Dichloroethene (ccc)  | 96        | 2.333 | 2.335  | (0.481) | 53009    | 2.00000            | 1.9028            |
| 20 *Freon 113                | 151       | 2.352 | 2.353  | (0.485) | 45765    | 2.00000            | 1.9825            |
| 21 Acetone                   | 43        | 2.382 | 2.377  | (0.491) | 16401    | 8.00000            | 8.2236            |
| 22 *Iodomethane              | 142       | 2.443 | 2.450  | (0.503) | 66321    | 2.00000            | 1.8950            |
| 23 Carbon Disulfide          | 76        | 2.504 | 2.499  | (0.516) | 203619   | 2.00000            | 1.9420            |
| 24 *2-propanol               | 45        | 2.565 | 2.529  | (0.529) | 8699     | 20.0000            | 24.398            |
| 25 *Acetonitrile             | 40        | 2.619 | 2.614  | (0.540) | 16416    | 40.0000            | 32.596            |
| 26 Methylene Chloride        | 84        | 2.753 | 2.754  | (0.567) | 41939    | 2.00000            | 1.8993            |
| 27 *t-butanol                | 59        | 2.887 | 2.894  | (0.595) | 36667    | 100.000            | 128.57            |
| 28 *Acrylonitrile            | 53        | 2.960 | 2.961  | (0.610) | 108571   | 40.0000            | 39.416            |
| 29 trans-1,2-Dichloroethene  | 96        | 2.996 | 2.998  | (0.618) | 65411    | 2.00000            | 1.9403            |
| 30 *MTBE                     | 73        | 3.009 | 3.010  | (0.620) | 60154    | 2.00000            | 2.0346            |
| 31 *Hexane                   | 57        | 3.258 | 3.259  | (0.671) | 259505   | 4.00000            | 3.7546            |
| 32 1,1-Dichloroethane (spcc) | 63        | 3.355 | 3.357  | (0.692) | 133205   | 2.00000            | 1.9924            |
| 33 *Vinyl Acetate            | 86        | 3.422 | 3.417  | (0.705) | 6633     | 4.00000            | 4.1272            |
| 34 2,2-Dichloropropane       | 77        | 3.854 | 3.855  | (0.794) | 119857   | 2.00000            | 1.9670            |
| 35 cis 1,2-Dichloroethene    | 96        | 3.860 | 3.855  | (0.796) | 64152    | 2.00000            | 1.9941            |
| 36 2-Butanone                | 43        | 3.879 | 3.874  | (0.799) | 26887    | 8.00000            | 8.6761            |
| 37 Bromochloromethane        | 128       | 4.061 | 4.056  | (0.837) | 15908    | 2.00000            | 1.8994            |
| 38 *THF                      | 42        | 4.110 | 4.105  | (0.847) | 16071    | 8.00000            | 8.4924            |
| 39 Chloroform (ccc)          | 83        | 4.140 | 4.135  | (0.853) | 105161   | 2.00000            | 1.9716            |
| 40 1,1,1-Trichloroethane     | 97        | 4.292 | 4.293  | (0.885) | 115157   | 2.00000            | 1.9375            |
| 41 Carbon Tetrachloride      | 117       | 4.438 | 4.439  | (0.915) | 97505    | 2.00000            | 1.9757            |
| 42 1,1-Dichloropropene       | 75        | 4.438 | 4.433  | (0.915) | 109052   | 2.00000            | 1.9814            |
| 43 Benzene                   | 78        | 4.609 | 4.610  | (0.950) | 283694   | 2.00000            | 1.9362            |
| 44 1,2-Dichloroethane        | 62        | 4.615 | 4.616  | (0.951) | 47778    | 2.00000            | 2.0132            |
| 45 Trichloroethene           | 130       | 5.174 | 5.176  | (1.066) | 74430    | 2.00000            | 1.9687            |
| 46 1,2-Dichloropropane (ccc) | 63        | 5.357 | 5.358  | (1.104) | 57928    | 2.00000            | 1.9360            |
| 47 *Methyl Methacrylate      | 41        | 5.479 | 5.480  | (1.129) | 18691    | 2.00000            | 1.9806            |
| 48 Dibromomethane            | 93        | 5.460 | 5.461  | (1.125) | 15853    | 2.00000            | 1.9775            |
| 49 Bromodichloromethane      | 83        | 5.606 | 5.607  | (1.155) | 58234    | 2.00000            | 1.9540            |
| 50 *2-Chloroethylvinylether  | 63        | 5.880 | 5.881  | (1.212) | 24111    | 4.00000            | 3.9288            |
| 51 cis-1,3-Dichloropropene   | 75        | 6.008 | 6.003  | (1.238) | 69590    | 2.00000            | 2.0149            |
| 52 4-Methyl-2-pentanone      | 43        | 6.148 | 6.143  | (1.267) | 60637    | 8.00000            | 7.8477            |
| 53 Toluene (ccc)             | 91        | 6.312 | 6.313  | (0.832) | 277893   | 2.00000            | 1.9430            |
| 54 trans-1,3-Dichloropropene | 75        | 6.507 | 6.502  | (0.858) | 49323    | 2.00000            | 2.0124            |
| 55 *Ethyl Methacrylate       | 69        | 6.604 | 6.605  | (0.871) | 26223    | 2.00000            | 1.9708            |
| 56 1,1,2-Trichloroethane     | 97        | 6.671 | 6.672  | (0.880) | 22650    | 2.00000            | 2.0204            |
| 57 Tetrachloroethene         | 164       | 6.817 | 6.818  | (0.899) | 59972    | 2.00000            | 2.0030            |
| 58 1,3-Dichloropropane       | 76        | 6.823 | 6.824  | (0.900) | 42513    | 2.00000            | 1.9968            |
| 59 2-Hexanone                | 43        | 6.908 | 6.903  | (0.911) | 39459    | 8.00000            | 8.2848            |
| 60 Chlorodibromomethane      | 129       | 7.030 | 7.031  | (0.927) | 27789    | 2.00000            | 1.9708            |
| 61 1,2-Dibromoethane         | 107       | 7.133 | 7.134  | (0.941) | 20557    | 2.00000            | 1.9477            |
| 62 Chlorobenzene (spcc)      | 112       | 7.608 | 7.609  | (1.003) | 146939   | 2.00000            | 2.0141            |

Data File: /var/chem/gcms/mx.i/X021506I.b/icxb152.d  
 Report Date: 15-Feb-2006 18:11

| Compounds                           | QUANT SIG |        |        | REL RT  | RESPONSE | AMOUNTS            |                   |
|-------------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                     | MASS      | RT     | EXP RT |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                               | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 63 1,1,1,2-Tetrachloroethane        | 131       | 7.687  | 7.682  | (1.014) | 47759    | 2.00000            | 2.0172            |
| 64 Ethylbenzene (ccc)               | 106       | 7.723  | 7.724  | (1.018) | 99303    | 2.00000            | 1.9798            |
| 65 m&p-Xylene                       | 106       | 7.839  | 7.840  | (1.034) | 234364   | 4.00000            | 3.9514            |
| 66 o-Xylene                         | 106       | 8.253  | 8.254  | (1.088) | 103595   | 2.00000            | 2.0399            |
| 67 Styrene                          | 104       | 8.271  | 8.266  | (1.091) | 148793   | 2.00000            | 2.0187            |
| 68 Bromoform (spcc)                 | 173       | 8.459  | 8.461  | (1.116) | 13310    | 2.00000            | 2.0161            |
| 69 Isopropylbenzene                 | 105       | 8.691  | 8.692  | (1.146) | 324360   | 2.00000            | 1.9855            |
| 70 *cis-1,4-dichloro-2-butene       | 88        | 8.758  | 8.753  | (1.155) | 6154     | 2.00000            | 1.9838            |
| 71 Bromobenzene                     | 156       | 9.068  | 9.069  | (1.196) | 46384    | 2.00000            | 2.0278            |
| 72 1,1,2,2-Tetrachloroethane (sp)   | 83        | 9.062  | 9.057  | (1.195) | 18919    | 2.00000            | 1.9975            |
| 73 1,2,3-Trichloropropane           | 110       | 9.116  | 9.112  | (0.848) | 5262     | 2.00000            | 1.9395            |
| 74 *trans-1,4-dichloro-2-butene     | 53        | 9.141  | 9.142  | (0.851) | 5445     | 2.00000            | 1.9309            |
| 75 n-Propylbenzene                  | 91        | 9.244  | 9.245  | (0.860) | 380878   | 2.00000            | 1.9571            |
| 76 2-Chlorotoluene                  | 91        | 9.354  | 9.355  | (0.870) | 198165   | 2.00000            | 1.9939            |
| 77 1,3,5-Trimethylbenzene           | 105       | 9.518  | 9.519  | (0.886) | 214535   | 2.00000            | 2.0054            |
| 78 4-Chlorotoluene                  | 91        | 9.518  | 9.519  | (0.886) | 212311   | 2.00000            | 2.0022            |
| 79 tert-Butylbenzene                | 119       | 10.041 | 10.036 | (0.934) | 218867   | 2.00000            | 1.9884            |
| 80 1,2,4-Trimethylbenzene           | 105       | 10.126 | 10.127 | (0.942) | 186105   | 2.00000            | 1.9960            |
| 81 sec-Butylbenzene                 | 105       | 10.437 | 10.438 | (0.971) | 316761   | 2.00000            | 1.9701            |
| 82 1,3-Dichlorobenzene              | 146       | 10.613 | 10.614 | (0.988) | 95189    | 2.00000            | 2.0147            |
| 83 p-Isopropyltoluene               | 119       | 10.741 | 10.736 | (0.999) | 255031   | 2.00000            | 1.9772            |
| 84 1,4-Dichlorobenzene              | 146       | 10.789 | 10.791 | (1.004) | 87781    | 2.00000            | 2.0381            |
| 85 1,2-Dichlorobenzene              | 146       | 11.434 | 11.429 | (1.064) | 68780    | 2.00000            | 2.0201            |
| 86 n-Butylbenzene                   | 91        | 11.471 | 11.466 | (1.067) | 227147   | 2.00000            | 1.9760            |
| 87 1,2-Dibromo-3-chloropropane      | 157       | 12.590 | 12.591 | (1.172) | 2698     | 2.00000            | 2.0346            |
| 88 1,2,4-Trichlorobenzene           | 180       | 13.673 | 13.674 | (1.272) | 34744    | 2.00000            | 2.0008            |
| 89 Hexachlorobutadiene              | 225       | 13.904 | 13.905 | (1.294) | 52014    | 2.00000            | 1.8888            |
| 90 Naphthalene                      | 128       | 13.941 | 13.942 | (1.297) | 25449    | 2.00000            | 2.0086            |
| 91 1,2,3-Trichlorobenzene           | 180       | 14.233 | 14.228 | (1.324) | 21495    | 2.00000            | 1.9330            |
| M 92 *1,4-dichloro-2-butene (total) | 53        |        |        |         | 11600    | 4.00000            | 3.9147            |

Data File: /var/chem/gcms/mx.i/X0215061.b/iox0152.d  
Date : 15-FEB-2006 15:24  
Client ID: VSTD002  
Sample Info: ICCXB152.1.1.2.,VSTD002  
Purge Volume: 25.0  
Column phase: J+M 624

Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18



Data File: /var/chem/gcms/mx.i/X021506I.b/icxb153.d  
 Report Date: 15-Feb-2006 18:11

## STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X021506I.b/icxb153.d  
 Lab Smp Id: ICCXB153 Client Smp ID: VSTD010  
 Inj Date : 15-FEB-2006 15:51  
 Operator : 22980 Inst ID: mx.i  
 Smp Info : ICCXB153,1,1,3,,VSTD010  
 Misc Info : X021506I,8260B\_LM,all.sub  
 Comment :  
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 Meth Date : 15-Feb-2006 18:11 tillerm Quant Type: ISTD  
 Cal Date : 15-FEB-2006 15:51 Cal File: icxb153.d  
 Als bottle: 1 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT SIG | MASS   | RT     | EXP RT  | REL RT  | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-----------|--------|--------|---------|---------|----------|--------------------|-------------------|
|                                |           |        |        |         |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene              | 96        | 4.853  | 4.853  | (1.000) | 1323492 | 10.0000  |                    |                   |
| * 2 Chlorobenzene-d5           | 119       | 7.585  | 7.585  | (1.000) | 226173  | 10.0000  |                    |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152       | 10.748 | 10.748 | (1.000) | 260091  | 10.0000  |                    |                   |
| \$ 4 Dibromofluoromethane      | 113       | 4.269  | 4.269  | (0.880) | 223143  | 10.0000  | 9.9682             |                   |
| \$ 5 1,2-Dichloroethane-d4     | 65        | 4.555  | 4.555  | (0.939) | 169743  | 10.0000  | 9.7955             |                   |
| \$ 6 Toluene-d8                | 98        | 6.252  | 6.252  | (0.824) | 1108110 | 10.0000  | 9.9067             |                   |
| \$ 7 4-Bromofluorobenzene      | 95        | 8.874  | 8.874  | (0.826) | 305851  | 10.0000  | 10.010             |                   |
| M 8 1,2-Dichloroethene (total) | 96        |        |        |         | 660747  | 20.0000  | 21.688             |                   |
| M 9 Xylene (total)             | 106       |        |        |         | 1657213 | 30.0000  | 31.557             |                   |
| 10 Dichlorodifluoromethane     | 85        | 1.136  | 1.136  | (0.234) | 424133  | 10.0000  | 10.379             |                   |
| 11 Chloromethane (spcc)        | 50        | 1.264  | 1.264  | (0.260) | 635423  | 10.0000  | 10.604             |                   |
| 12 Vinyl Chloride (ccc)        | 62        | 1.343  | 1.343  | (0.277) | 511985  | 10.0000  | 11.163             |                   |
| 13 *1,3-Butadiene              | 39        | 1.373  | 1.373  | (0.283) | 425870  | 10.0000  | 11.290             |                   |
| 14 Bromomethane                | 94        | 1.592  | 1.592  | (0.328) | 186783  | 10.0000  | 10.644             |                   |
| 15 Chloroethane                | 64        | 1.678  | 1.678  | (0.346) | 270857  | 10.0000  | 10.487             |                   |

Data File: /var/chem/gcms/mx.i/X021506I.b/icxb153.d  
Report Date: 15-Feb-2006 18:11

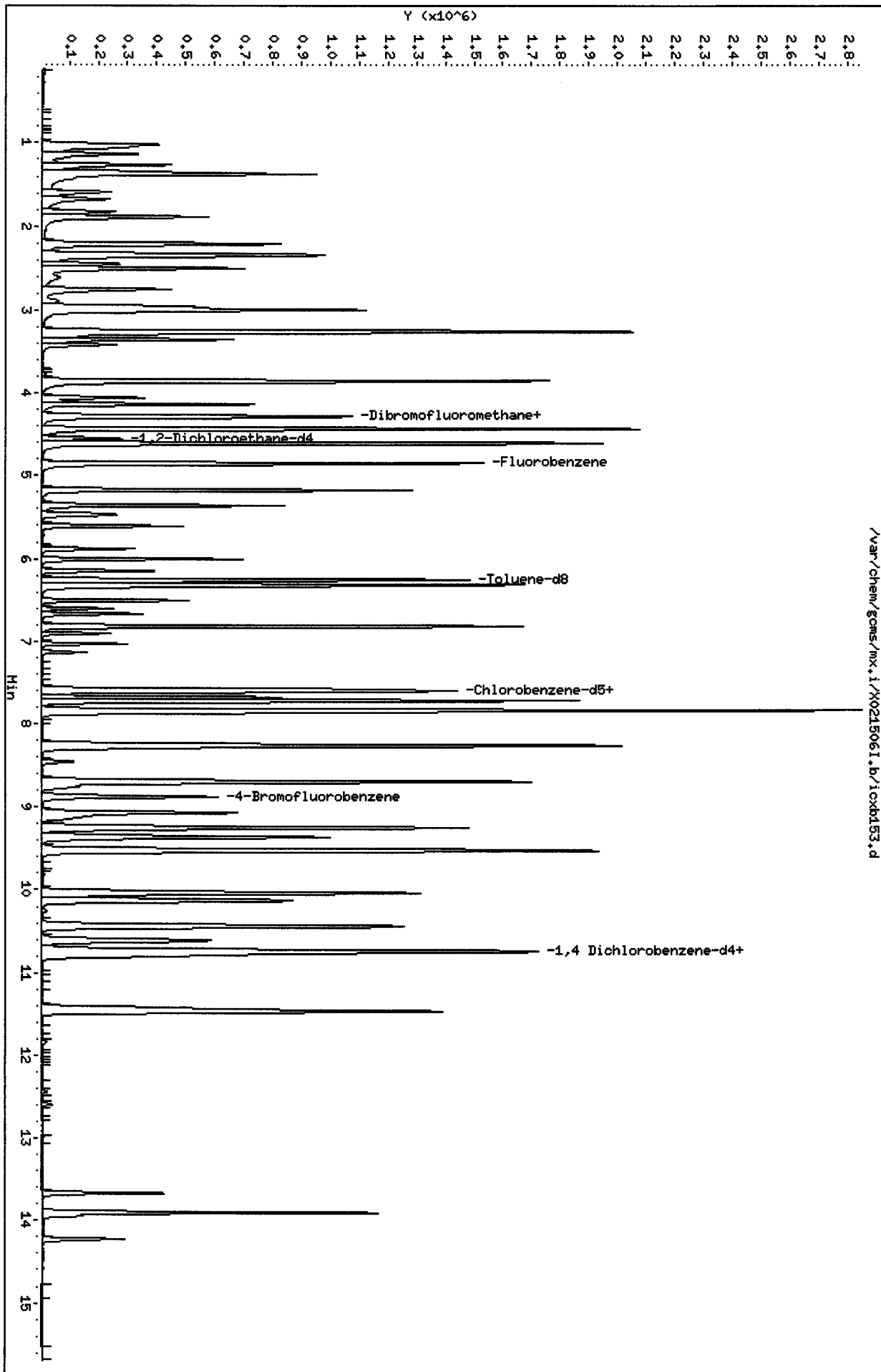
| Compounds                    | QUANT SIG |       |        |         |          | AMOUNTS            |                   |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                        | =====     | ==    | =====  | =====   | =====    | =====              | =====             |
| 16 *Vinyl Bromide            | 106       | 1.830 | 1.830  | (0.377) | 234864   | 10.0000            | 10.507            |
| 17 Trichlorofluoromethane    | 101       | 1.890 | 1.890  | (0.390) | 544253   | 10.0000            | 11.278            |
| 18 *2-Chloropropane          | 43        | 2.213 | 2.213  | (0.456) | 844174   | 10.0000            | 10.741            |
| 19 1,1-Dichloroethene (ccc)  | 96        | 2.335 | 2.335  | (0.481) | 278606   | 10.0000            | 10.840            |
| 20 *Freon 113                | 151       | 2.353 | 2.353  | (0.485) | 240072   | 10.0000            | 11.264            |
| 21 Acetone                   | 43        | 2.377 | 2.377  | (0.490) | 69334    | 40.0000            | 31.874            |
| 22 *Iodomethane              | 142       | 2.450 | 2.450  | (0.505) | 347581   | 10.0000            | 10.727            |
| 23 Carbon Disulfide          | 76        | 2.499 | 2.499  | (0.515) | 1083434  | 10.0000            | 11.200            |
| 24 *2-propanol               | 45        | 2.529 | 2.529  | (0.521) | 15388    | 100.000            | 46.782            |
| 25 *Acetonitrile             | 40        | 2.614 | 2.614  | (0.539) | 59824    | 200.000            | 187.49            |
| 26 Methylene Chloride        | 84        | 2.754 | 2.754  | (0.568) | 207210   | 10.0000            | 10.144            |
| 27 *t-butanol                | 59        | 2.894 | 2.894  | (0.596) | 87462    | 500.000            | 331.41            |
| 28 *Acrylonitrile            | 53        | 2.961 | 2.961  | (0.610) | 511856   | 200.000            | 199.22            |
| 29 trans-1,2-Dichloroethene  | 96        | 2.998 | 2.998  | (0.618) | 343104   | 10.0000            | 11.024            |
| 30 *MTBE                     | 73        | 3.010 | 3.010  | (0.620) | 291722   | 10.0000            | 10.705            |
| 31 *Hexane                   | 57        | 3.259 | 3.259  | (0.672) | 1305264  | 20.0000            | 20.464            |
| 32 1,1-Dichloroethane (spcc) | 63        | 3.357 | 3.357  | (0.692) | 676682   | 10.0000            | 10.971            |
| 33 *Vinyl Acetate            | 86        | 3.417 | 3.417  | (0.704) | 28959    | 20.0000            | 19.530            |
| 34 2,2-Dichloropropane       | 77        | 3.855 | 3.855  | (0.794) | 620638   | 10.0000            | 11.040            |
| 35 cis 1,2-Dichloroethene    | 96        | 3.855 | 3.855  | (0.794) | 317642   | 10.0000            | 10.663            |
| 36 2-Butanone                | 43        | 3.874 | 3.874  | (0.798) | 104271   | 40.0000            | 36.774            |
| 37 Bromochloromethane        | 128       | 4.056 | 4.056  | (0.836) | 82013    | 10.0000            | 10.613            |
| 38 *THF                      | 42        | 4.105 | 4.105  | (0.846) | 64315    | 40.0000            | 36.950            |
| 39 Chloroform (ccc)          | 83        | 4.135 | 4.135  | (0.852) | 519730   | 10.0000            | 10.562            |
| 40 1,1,1-Trichloroethane     | 97        | 4.293 | 4.293  | (0.885) | 597867   | 10.0000            | 10.903            |
| 41 Carbon Tetrachloride      | 117       | 4.439 | 4.439  | (0.915) | 515970   | 10.0000            | 11.332            |
| 42 1,1-Dichloropropene       | 75        | 4.433 | 4.433  | (0.914) | 566388   | 10.0000            | 11.155            |
| 43 Benzene                   | 78        | 4.610 | 4.610  | (0.950) | 1383392  | 10.0000            | 10.234            |
| 44 1,2-Dichloroethane        | 62        | 4.616 | 4.616  | (0.951) | 232058   | 10.0000            | 10.599            |
| 45 Trichloroethene           | 130       | 5.176 | 5.176  | (1.066) | 384696   | 10.0000            | 11.029            |
| 46 1,2-Dichloropropane (ccc) | 63        | 5.358 | 5.358  | (1.104) | 289885   | 10.0000            | 10.501            |
| 47 *Methyl Methacrylate      | 41        | 5.480 | 5.480  | (1.129) | 85694    | 10.0000            | 9.8861            |
| 48 Dibromomethane            | 93        | 5.461 | 5.461  | (1.125) | 75882    | 10.0000            | 10.260            |
| 49 Bromodichloromethane      | 83        | 5.607 | 5.607  | (1.155) | 284137   | 10.0000            | 10.334            |
| 50 *2-Chloroethylvinylether  | 63        | 5.881 | 5.881  | (1.212) | 119232   | 20.0000            | 21.058            |
| 51 cis-1,3-Dichloropropene   | 75        | 6.003 | 6.003  | (1.237) | 339698   | 10.0000            | 10.646            |
| 52 4-Methyl-2-pentanone      | 43        | 6.143 | 6.143  | (1.266) | 272360   | 40.0000            | 38.153            |
| 53 Toluene (ccc)             | 91        | 6.313 | 6.313  | (0.832) | 1377101  | 10.0000            | 10.343            |
| 54 trans-1,3-Dichloropropene | 75        | 6.502 | 6.502  | (0.857) | 236885   | 10.0000            | 10.392            |
| 55 *Ethyl Methacrylate       | 69        | 6.605 | 6.605  | (0.871) | 118572   | 10.0000            | 9.6295            |
| 56 1,1,2-Trichloroethane     | 97        | 6.672 | 6.672  | (0.880) | 103817   | 10.0000            | 9.9574            |
| 57 Tetrachloroethene         | 164       | 6.818 | 6.818  | (0.899) | 301713   | 10.0000            | 10.835            |
| 58 1,3-Dichloropropane       | 76        | 6.824 | 6.824  | (0.900) | 200948   | 10.0000            | 10.149            |
| 59 2-Hexanone                | 43        | 6.903 | 6.903  | (0.910) | 162590   | 40.0000            | 36.707            |
| 60 Chlorodibromomethane      | 129       | 7.031 | 7.031  | (0.927) | 135271   | 10.0000            | 10.315            |
| 61 1,2-Dibromoethane         | 107       | 7.134 | 7.134  | (0.941) | 100543   | 10.0000            | 10.243            |
| 62 Chlorobenzene (spcc)      | 112       | 7.609 | 7.609  | (1.003) | 699657   | 10.0000            | 10.312            |

Data File: /var/chem/gcms/mx.i/X021506I.b/icxb153.d  
 Report Date: 15-Feb-2006 18:11

|                                     |      |        |        |         |          | AMOUNTS            |                   |
|-------------------------------------|------|--------|--------|---------|----------|--------------------|-------------------|
|                                     |      | QUANT  |        | SIG     |          |                    |                   |
| Compounds                           | MASS | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                               | ==== | ==     | =====  | =====   | =====    | =====              | =====             |
| 63 1,1,1,2-Tetrachloroethane        | 131  | 7.682  | 7.682  | (1.013) | 231288   | 10.0000            | 10.504            |
| 64 Ethylbenzene (ccc)               | 106  | 7.724  | 7.724  | (1.018) | 489347   | 10.0000            | 10.490            |
| 65 m&p-Xylene                       | 106  | 7.840  | 7.840  | (1.034) | 1160230  | 20.0000            | 21.034            |
| 66 o-Xylene                         | 106  | 8.254  | 8.254  | (1.088) | 496982   | 10.0000            | 10.523            |
| 67 Styrene                          | 104  | 8.266  | 8.266  | (1.090) | 697232   | 10.0000            | 10.172            |
| 68 Bromoform (spcc)                 | 173  | 8.461  | 8.461  | (1.115) | 62132    | 10.0000            | 10.120            |
| 69 Isopropylbenzene                 | 105  | 8.692  | 8.692  | (1.146) | 1602692  | 10.0000            | 10.549            |
| 70 *cis-1,4-dichloro-2-butene       | 88   | 8.753  | 8.753  | (1.154) | 28202    | 10.0000            | 9.7747            |
| 71 Bromobenzene                     | 156  | 9.069  | 9.069  | (1.196) | 216384   | 10.0000            | 10.172            |
| 72 1,1,2,2-Tetrachloroethane (sp)   | 83   | 9.057  | 9.057  | (1.194) | 78797    | 10.0000            | 8.9724            |
| 73 1,2,3-Trichloropropane           | 110  | 9.112  | 9.112  | (0.848) | 22703    | 10.0000            | 9.0258            |
| 74 *trans-1,4-dichloro-2-butene     | 53   | 9.142  | 9.142  | (0.851) | 25251    | 10.0000            | 9.4964            |
| 75 n-Propylbenzene                  | 91   | 9.245  | 9.245  | (0.860) | 1887276  | 10.0000            | 10.460            |
| 76 2-Chlorotoluene                  | 91   | 9.355  | 9.355  | (0.870) | 949315   | 10.0000            | 10.246            |
| 77 1,3,5-Trimethylbenzene           | 105  | 9.519  | 9.519  | (0.886) | 1027634  | 10.0000            | 10.362            |
| 78 4-Chlorotoluene                  | 91   | 9.519  | 9.519  | (0.886) | 1007232  | 10.0000            | 10.295            |
| 79 tert-Butylbenzene                | 119  | 10.036 | 10.036 | (0.934) | 1084463  | 10.0000            | 10.627            |
| 80 1,2,4-Trimethylbenzene           | 105  | 10.127 | 10.127 | (0.942) | 871136   | 10.0000            | 10.078            |
| 81 sec-Butylbenzene                 | 105  | 10.438 | 10.438 | (0.971) | 1575423  | 10.0000            | 10.569            |
| 82 1,3-Dichlorobenzene              | 146  | 10.614 | 10.614 | (0.988) | 448007   | 10.0000            | 10.228            |
| 83 p-Isopropyltoluene               | 119  | 10.736 | 10.736 | (0.999) | 1254448  | 10.0000            | 10.490            |
| 84 1,4-Dichlorobenzene              | 146  | 10.791 | 10.791 | (1.004) | 401751   | 10.0000            | 10.061            |
| 85 1,2-Dichlorobenzene              | 146  | 11.429 | 11.429 | (1.063) | 319517   | 10.0000            | 10.122            |
| 86 n-Butylbenzene                   | 91   | 11.466 | 11.466 | (1.067) | 1106194  | 10.0000            | 10.380            |
| 87 1,2-Dibromo-3-chloropropane      | 157  | 12.591 | 12.591 | (1.172) | 11736    | 10.0000            | 9.5449            |
| 88 1,2,4-Trichlorobenzene           | 180  | 13.674 | 13.674 | (1.272) | 153800   | 10.0000            | 9.5535            |
| 89 Hexachlorobutadiene              | 225  | 13.905 | 13.905 | (1.294) | 262439   | 10.0000            | 10.280            |
| 90 Napthalene                       | 128  | 13.942 | 13.942 | (1.297) | 110108   | 10.0000            | 9.3741            |
| 91 1,2,3-Trichlorobenzene           | 180  | 14.228 | 14.228 | (1.324) | 100132   | 10.0000            | 9.7127            |
| M 92 *1,4-dichloro-2-butene (total) | 53   |        |        |         | 53454    | 20.0000            | 19.271            |

Data File: /var/chem/gcms/mx.i/X0215061.b/iox0153.d  
Date : 15-FEB-2006 15:51  
Client ID: VSTD010  
Sample Info: ICCX8153.1.1.3,,VSTD010  
Purge Volume: 25.0  
Column phase: J+W 624

Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18





Data File: /var/chem/gcms/mx.i/X021506I.b/icxb154.d  
 Report Date: 15-Feb-2006 18:11

# STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X021506I.b/icxb154.d  
 Lab Smp Id: ICCXB154 Client Smp ID: VSTD020  
 Inj Date : 15-FEB-2006 16:17  
 Operator : 22980 Inst ID: mx.i  
 Smp Info : ICCXB154,1,1,4,,VSTD020  
 Misc Info : X021506I,8260B\_LM,all.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X021506I.b/8260B\_LM.m  
 Meth Date : 15-Feb-2006 18:11 tillerm Quant Type: ISTD  
 Cal Date : 15-FEB-2006 16:17 Cal File: icxb154.d  
 Als bottle: 1 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT | SIG | MASS   | RT     | EXP RT  | REL RT  | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-------|-----|--------|--------|---------|---------|----------|--------------------|-------------------|
|                                |       |     |        |        |         |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene              | 96    |     | 4.854  | 4.853  | (1.000) | 1346611 | 10.0000  |                    |                   |
| * 2 Chlorobenzene-d5           | 119   |     | 7.585  | 7.585  | (1.000) | 229091  | 10.0000  |                    |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152   |     | 10.749 | 10.748 | (1.000) | 240120  | 10.0000  |                    |                   |
| \$ 4 Dibromofluoromethane      | 113   |     | 4.270  | 4.269  | (0.880) | 463866  | 20.0000  | 20.273             |                   |
| \$ 5 1,2-Dichloroethane-d4     | 65    |     | 4.550  | 4.555  | (0.937) | 363496  | 20.0000  | 20.459             |                   |
| \$ 6 Toluene-d8                | 98    |     | 6.253  | 6.252  | (0.824) | 2256149 | 20.0000  | 19.935             |                   |
| \$ 7 4-Bromofluorobenzene      | 95    |     | 8.881  | 8.874  | (0.826) | 615934  | 20.0000  | 21.346             |                   |
| M 8 1,2-Dichloroethene (total) | 96    |     |        |        |         | 1351954 | 40.0000  | 42.829             |                   |
| M 9 Xylene (total)             | 106   |     |        |        |         | 3103335 | 60.0000  | 58.668             |                   |
| 10 Dichlorodifluoromethane     | 85    |     | 1.131  | 1.136  | (0.233) | 887355  | 20.0000  | 20.989             |                   |
| 11 Chloromethane (spcc)        | 50    |     | 1.265  | 1.264  | (0.261) | 1280237 | 20.0000  | 20.592             |                   |
| 12 Vinyl Chloride (ccc)        | 62    |     | 1.344  | 1.343  | (0.277) | 1038280 | 20.0000  | 21.730             |                   |
| 13 *1,3-Butadiene              | 39    |     | 1.374  | 1.373  | (0.283) | 889863  | 20.0000  | 22.378             |                   |
| 14 Bromomethane                | 94    |     | 1.593  | 1.592  | (0.328) | 390772  | 20.0000  | 21.707             |                   |
| 15 Chloroethane                | 64    |     | 1.672  | 1.678  | (0.345) | 539685  | 20.0000  | 20.198             |                   |

Data File: /var/chem/gcms/mx.i/X021506I.b/icxb154.d  
 Report Date: 15-Feb-2006 18:11

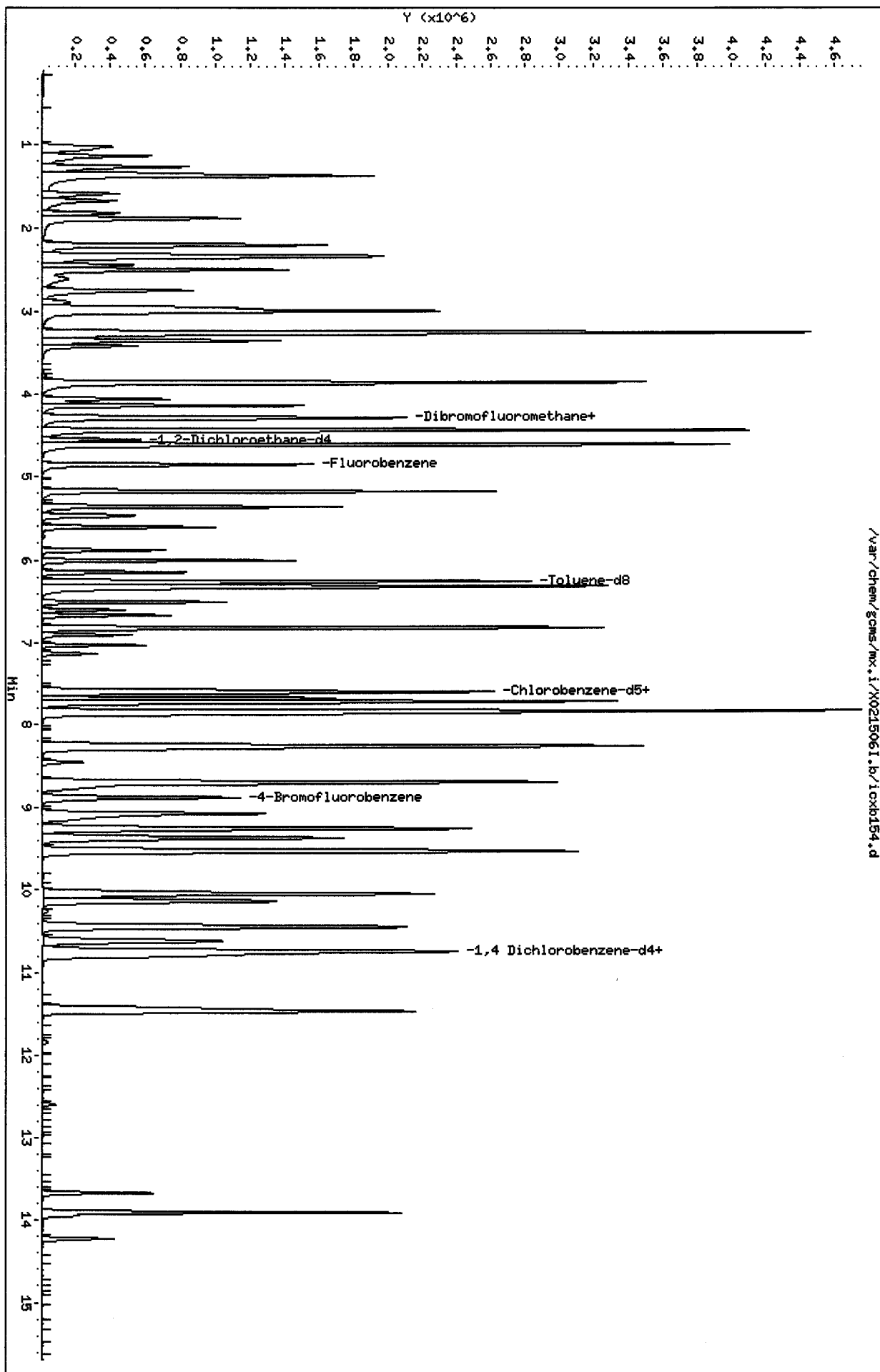
| Compounds                    | QUANT SIG |       |        |         |          | AMOUNTS            |                   |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                        | ----      | --    | -----  | -----   | -----    | -----              | -----             |
| 16 *Vinyl Bromide            | 106       | 1.830 | 1.830  | (0.377) | 481498   | 20.0000            | 20.866            |
| 17 Trichlorofluoromethane    | 101       | 1.891 | 1.890  | (0.390) | 1103380  | 20.0000            | 21.924            |
| 18 *2-Chloropropane          | 43        | 2.208 | 2.213  | (0.455) | 1701627  | 20.0000            | 20.739            |
| 19 1,1-Dichloroethene (ccc)  | 96        | 2.329 | 2.335  | (0.480) | 562660   | 20.0000            | 21.195            |
| 20 *Freon 113                | 151       | 2.354 | 2.353  | (0.485) | 500538   | 20.0000            | 22.404            |
| 21 Acetone                   | 43        | 2.378 | 2.377  | (0.490) | 157211   | 80.0000            | 82.944            |
| 22 *Iodomethane              | 142       | 2.445 | 2.450  | (0.504) | 702112   | 20.0000            | 21.012            |
| 23 Carbon Disulfide          | 76        | 2.500 | 2.499  | (0.515) | 2183581  | 20.0000            | 21.711            |
| 24 *2-propanol               | 45        | 2.530 | 2.529  | (0.521) | 41939    | 200.000            | 138.21            |
| 25 *Acetonitrile             | 40        | 2.615 | 2.614  | (0.539) | 146123   | 400.000            | 327.70            |
| 26 Methylene Chloride        | 84        | 2.749 | 2.754  | (0.566) | 419483   | 20.0000            | 20.178            |
| 27 *t-butanol                | 59        | 2.895 | 2.894  | (0.596) | 278246   | 1000.00            | 1029.2            |
| 28 *Acrylonitrile            | 53        | 2.962 | 2.961  | (0.610) | 1096344  | 400.000            | 417.74            |
| 29 trans-1,2-Dichloroethene  | 96        | 2.992 | 2.998  | (0.616) | 711103   | 20.0000            | 21.929            |
| 30 *MTBE                     | 73        | 3.011 | 3.010  | (0.620) | 621919   | 20.0000            | 21.726            |
| 31 *Hexane                   | 57        | 3.254 | 3.259  | (0.670) | 2769412  | 40.0000            | 41.981            |
| 32 1,1-Dichloroethane (spcc) | 63        | 3.351 | 3.357  | (0.690) | 1361605  | 20.0000            | 21.334            |
| 33 *Vinyl Acetate            | 86        | 3.418 | 3.417  | (0.704) | 64322    | 40.0000            | 41.944            |
| 34 2,2-Dichloropropane       | 77        | 3.856 | 3.855  | (0.794) | 1232410  | 20.0000            | 20.954            |
| 35 cis 1,2-Dichloroethene    | 96        | 3.856 | 3.855  | (0.794) | 640850   | 20.0000            | 20.900            |
| 36 2-Butanone                | 43        | 3.874 | 3.874  | (0.798) | 238061   | 80.0000            | 81.368            |
| 37 Bromochloromethane        | 128       | 4.057 | 4.056  | (0.836) | 168242   | 20.0000            | 21.032            |
| 38 *THF                      | 42        | 4.106 | 4.105  | (0.846) | 147437   | 80.0000            | 82.226            |
| 39 Chloroform (ccc)          | 83        | 4.136 | 4.135  | (0.852) | 1062145  | 20.0000            | 20.960            |
| 40 1,1,1-Trichloroethane     | 97        | 4.294 | 4.293  | (0.885) | 1186487  | 20.0000            | 21.000            |
| 41 Carbon Tetrachloride      | 117       | 4.440 | 4.439  | (0.915) | 1040304  | 20.0000            | 21.917            |
| 42 1,1-Dichloropropene       | 75        | 4.434 | 4.433  | (0.914) | 1128467  | 20.0000            | 21.448            |
| 43 Benzene                   | 78        | 4.611 | 4.610  | (0.950) | 2763214  | 20.0000            | 20.072            |
| 44 1,2-Dichloroethane        | 62        | 4.617 | 4.616  | (0.951) | 475172   | 20.0000            | 21.050            |
| 45 Trichloroethene           | 130       | 5.176 | 5.176  | (1.066) | 767146   | 20.0000            | 21.273            |
| 46 1,2-Dichloropropane (ccc) | 63        | 5.359 | 5.358  | (1.104) | 596245   | 20.0000            | 20.971            |
| 47 *Methyl Methacrylate      | 41        | 5.481 | 5.480  | (1.129) | 178765   | 20.0000            | 20.134            |
| 48 Dibromomethane            | 93        | 5.462 | 5.461  | (1.125) | 160984   | 20.0000            | 21.026            |
| 49 Bromodichloromethane      | 83        | 5.608 | 5.607  | (1.155) | 592611   | 20.0000            | 20.875            |
| 50 *2-Chloroethylvinylether  | 63        | 5.882 | 5.881  | (1.212) | 262134   | 40.0000            | 43.989            |
| 51 cis-1,3-Dichloropropene   | 75        | 6.004 | 6.003  | (1.237) | 700572   | 20.0000            | 21.266            |
| 52 4-Methyl-2-pentanone      | 43        | 6.144 | 6.143  | (1.266) | 579933   | 80.0000            | 82.639            |
| 53 Toluene (ccc)             | 91        | 6.314 | 6.313  | (0.832) | 2765023  | 20.0000            | 20.416            |
| 54 trans-1,3-Dichloropropene | 75        | 6.503 | 6.502  | (0.857) | 490423   | 20.0000            | 20.981            |
| 55 *Ethyl Methacrylate       | 69        | 6.606 | 6.605  | (0.871) | 243481   | 20.0000            | 19.566            |
| 56 1,1,2-Trichloroethane     | 97        | 6.667 | 6.672  | (0.879) | 215301   | 20.0000            | 20.289            |
| 57 Tetrachloroethene         | 164       | 6.819 | 6.818  | (0.899) | 609011   | 20.0000            | 21.254            |
| 58 1,3-Dichloropropane       | 76        | 6.825 | 6.824  | (0.900) | 422598   | 20.0000            | 20.848            |
| 59 2-Hexanone                | 43        | 6.904 | 6.903  | (0.910) | 355464   | 80.0000            | 79.420            |
| 60 Chlorodibromomethane      | 129       | 7.032 | 7.031  | (0.927) | 283177   | 20.0000            | 20.973            |
| 61 1,2-Dibromoethane         | 107       | 7.135 | 7.134  | (0.941) | 206363   | 20.0000            | 20.562            |
| 62 Chlorobenzene (spcc)      | 112       | 7.610 | 7.609  | (1.003) | 1422185  | 20.0000            | 20.552            |

Data File: /var/chem/gcms/mx.i/X021506I.b/icxb154.d  
 Report Date: 15-Feb-2006 18:11

| Compounds                           | QUANT SIG |        |        |         | AMOUNTS  |                    |                   |
|-------------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                     | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                               | ====      | ==     | =====  | =====   | =====    | =====              | =====             |
| 63 1,1,1,2-Tetrachloroethane        | 131       | 7.683  | 7.682  | (1.013) | 478134   | 20.0000            | 21.134            |
| 64 Ethylbenzene (ccc)               | 106       | 7.725  | 7.724  | (1.018) | 972444   | 20.0000            | 20.463            |
| 65 m&p-Xylene                       | 106       | 7.841  | 7.840  | (1.034) | 2171830  | 40.0000            | 39.093            |
| 66 o-Xylene                         | 106       | 8.261  | 8.254  | (1.089) | 931504   | 20.0000            | 19.576            |
| 67 Styrene                          | 104       | 8.267  | 8.266  | (1.090) | 1321706  | 20.0000            | 19.222            |
| 68 Bromoform (spcc)                 | 173       | 8.461  | 8.461  | (1.115) | 130144   | 20.0000            | 20.687            |
| 69 Isopropylbenzene                 | 105       | 8.693  | 8.692  | (1.146) | 3086949  | 20.0000            | 20.048            |
| 70 *cis-1,4-dichloro-2-butene       | 88        | 8.753  | 8.753  | (1.154) | 59333    | 20.0000            | 20.226            |
| 71 Bromobenzene                     | 156       | 9.076  | 9.069  | (1.196) | 440671   | 20.0000            | 20.359            |
| 72 1,1,2,2-Tetrachloroethane (sp)   | 83        | 9.064  | 9.057  | (1.195) | 163795   | 20.0000            | 18.743            |
| 73 1,2,3-Trichloropropane           | 110       | 9.118  | 9.112  | (0.848) | 48148    | 20.0000            | 20.546            |
| 74 *trans-1,4-dichloro-2-butene     | 53        | 9.143  | 9.142  | (0.851) | 50933    | 20.0000            | 20.815            |
| 75 n-Propylbenzene                  | 91        | 9.252  | 9.245  | (0.861) | 3362768  | 20.0000            | 20.150            |
| 76 2-Chlorotoluene                  | 91        | 9.362  | 9.355  | (0.871) | 1751971  | 20.0000            | 20.467            |
| 77 1,3,5-Trimethylbenzene           | 105       | 9.520  | 9.519  | (0.886) | 1598365  | 20.0000            | 17.912            |
| 78 4-Chlorotoluene                  | 91        | 9.526  | 9.519  | (0.886) | 1774681  | 20.0000            | 19.641            |
| 79 tert-Butylbenzene                | 119       | 10.043 | 10.036 | (0.934) | 1920796  | 20.0000            | 20.309            |
| 80 1,2,4-Trimethylbenzene           | 105       | 10.128 | 10.127 | (0.942) | 1348951  | 20.0000            | 17.444            |
| 81 sec-Butylbenzene                 | 105       | 10.445 | 10.438 | (0.972) | 2739957  | 20.0000            | 19.928            |
| 82 1,3-Dichlorobenzene              | 146       | 10.621 | 10.614 | (0.988) | 815600   | 20.0000            | 20.134            |
| 83 p-Isopropyltoluene               | 119       | 10.743 | 10.736 | (0.999) | 2041818  | 20.0000            | 18.777            |
| 84 1,4-Dichlorobenzene              | 146       | 10.791 | 10.791 | (1.004) | 725358   | 20.0000            | 19.740            |
| 85 1,2-Dichlorobenzene              | 146       | 11.436 | 11.429 | (1.064) | 579948   | 20.0000            | 19.920            |
| 86 n-Butylbenzene                   | 91        | 11.467 | 11.466 | (1.067) | 1687246  | 20.0000            | 17.652            |
| 87 1,2-Dibromo-3-chloropropane      | 157       | 12.592 | 12.591 | (1.171) | 26310    | 20.0000            | 22.292            |
| 88 1,2,4-Trichlorobenzene           | 180       | 13.675 | 13.674 | (1.272) | 232406   | 20.0000            | 16.539            |
| 89 Hexachlorobutadiene              | 225       | 13.906 | 13.905 | (1.294) | 474952   | 20.0000            | 20.113            |
| 90 Napthalene                       | 128       | 13.949 | 13.942 | (1.298) | 164341   | 20.0000            | 16.132            |
| 91 1,2,3-Trichlorobenzene           | 180       | 14.229 | 14.228 | (1.324) | 149088   | 20.0000            | 16.562            |
| M 92 *1,4-dichloro-2-butene (total) | 53        |        |        |         | 110266   | 40.0000            | 41.041            |

Data File: /var/chem/gcms/mx.i/X0215061.b/1cxb154.d  
Date : 15-FEB-2006 16:17  
Client ID: VSTD020  
Sample Info: ICCXB154,1,1,4,,VSTD020  
Purge Volume: 25.0  
Column phase: J+M 624

Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18



Data File: /var/chem/gcms/mx.i/X021506I.b/icxb155.d  
 Report Date: 15-Feb-2006 18:11

## STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X021506I.b/icxb155.d  
 Lab Smp Id: ICCXB155 Client Smp ID: VSTD040  
 Inj Date : 15-FEB-2006 16:43  
 Operator : 22980 Inst ID: mx.i  
 Smp Info : ICCXB155,1,1,5,,VSTD040  
 Misc Info : X021506I,8260B\_LM,all.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X021506I.b/8260B\_LM.m  
 Meth Date : 15-Feb-2006 18:11 tillerm Quant Type: ISTD  
 Cal Date : 15-FEB-2006 16:43 Cal File: icxb155.d  
 Als bottle: 1 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT SIG |        |        |         | AMOUNTS  |                    |                   |
|--------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| *****                          | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| * 1 Fluorobenzene              | 96        | 4.858  | 4.853  | (1.000) | 1322797  | 10.0000            |                   |
| * 2 Chlorobenzene-d5           | 119       | 7.583  | 7.585  | (1.000) | 229301   | 10.0000            |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152       | 10.753 | 10.748 | (1.000) | 263557   | 10.0000            |                   |
| \$ 4 Dibromofluoromethane      | 113       | 4.274  | 4.269  | (0.880) | 901900   | 40.0000            | 40.102            |
| \$ 5 1,2-Dichloroethane-d4     | 65        | 4.554  | 4.555  | (0.937) | 713692   | 40.0000            | 40.711            |
| \$ 6 Toluene-d8                | 98        | 6.257  | 6.252  | (0.825) | 4328616  | 40.0000            | 38.557            |
| \$ 7 4-Bromofluorobenzene      | 95        | 8.879  | 8.874  | (0.826) | 1182308  | 40.0000            | 37.835            |
| M 8 1,2-Dichloroethene (total) | 96        |        |        |         | 2628861  | 80.0000            | 83.938            |
| M 9 Xylene (total)             | 106       |        |        |         | 6467676  | 120.000            | 121.77            |
| 10 Dichlorodifluoromethane     | 85        | 1.135  | 1.136  | (0.234) | 1709929  | 40.0000            | 40.934            |
| 11 Chloromethane (spcc)        | 50        | 1.263  | 1.264  | (0.260) | 2551316  | 40.0000            | 41.468            |
| 12 Vinyl Chloride (ccc)        | 62        | 1.342  | 1.343  | (0.276) | 2069489  | 40.0000            | 43.353            |
| 13 *1,3-Butadiene              | 39        | 1.372  | 1.373  | (0.282) | 1780250  | 40.0000            | 44.541            |
| 14 Bromomethane                | 94        | 1.591  | 1.592  | (0.328) | 822983   | 40.0000            | 45.065            |
| 15 Chloroethane                | 64        | 1.676  | 1.678  | (0.345) | 1089769  | 40.0000            | 41.207            |

Data File: /var/chem/gcms/mx.i/X021506I.b/icxb155.d  
Report Date: 15-Feb-2006 18:11

| Compounds                    | QUANT SIG |       |        |         |          | AMOUNTS            |                   |
|------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                        | =====     | ==    | =====  | =====   | =====    | =====              | =====             |
| 16 *Vinyl Bromide            | 106       | 1.828 | 1.830  | (0.376) | 960502   | 40.0000            | 41.876            |
| 17 Trichlorofluoromethane    | 101       | 1.889 | 1.890  | (0.389) | 2189008  | 40.0000            | 43.503            |
| 18 *2-Chloropropane          | 43        | 2.212 | 2.213  | (0.455) | 3428569  | 40.0000            | 42.006            |
| 19 1,1-Dichloroethene (ccc)  | 96        | 2.333 | 2.335  | (0.480) | 1142846  | 40.0000            | 43.137            |
| 20 *Freon 113                | 151       | 2.352 | 2.353  | (0.484) | 973762   | 40.0000            | 43.577            |
| 21 Acetone                   | 43        | 2.382 | 2.377  | (0.490) | 289865   | 160.000            | 156.53            |
| 22 *Iodomethane              | 142       | 2.449 | 2.450  | (0.504) | 1392269  | 40.0000            | 41.909            |
| 23 Carbon Disulfide          | 76        | 2.504 | 2.499  | (0.515) | 4348134  | 40.0000            | 43.288            |
| 24 *2-propanol               | 45        | 2.546 | 2.529  | (0.524) | 85359    | 400.000            | 303.61            |
| 25 *Acetonitrile             | 40        | 2.619 | 2.614  | (0.539) | 296761   | 800.000            | 698.92            |
| 26 Methylene Chloride        | 84        | 2.753 | 2.754  | (0.567) | 824167   | 40.0000            | 40.286            |
| 27 *t-butanol                | 59        | 2.899 | 2.894  | (0.597) | 534916   | 2000.00            | 2011.4            |
| 28 *Acrylonitrile            | 53        | 2.966 | 2.961  | (0.611) | 2152645  | 800.000            | 827.75            |
| 29 trans-1,2-Dichloroethene  | 96        | 2.997 | 2.998  | (0.617) | 1382272  | 40.0000            | 42.789            |
| 30 *MTBE                     | 73        | 3.015 | 3.010  | (0.621) | 1186533  | 40.0000            | 41.814            |
| 31 *Hexane                   | 57        | 3.258 | 3.259  | (0.671) | 5218345  | 80.0000            | 80.421 (A)        |
| 32 1,1-Dichloroethane (spcc) | 63        | 3.355 | 3.357  | (0.691) | 2718016  | 40.0000            | 42.757            |
| 33 *Vinyl Acetate            | 86        | 3.422 | 3.417  | (0.704) | 120923   | 80.0000            | 80.217            |
| 34 2,2-Dichloropropane       | 77        | 3.860 | 3.855  | (0.795) | 2418408  | 40.0000            | 41.538            |
| 35 cis 1,2-Dichloroethene    | 96        | 3.860 | 3.855  | (0.795) | 1246589  | 40.0000            | 41.148            |
| 36 2-Butanone                | 43        | 3.879 | 3.874  | (0.798) | 468520   | 160.000            | 162.41            |
| 37 Bromochloromethane        | 128       | 4.061 | 4.056  | (0.836) | 328887   | 40.0000            | 41.469            |
| 38 *THF                      | 42        | 4.110 | 4.105  | (0.846) | 288805   | 160.000            | 163.16            |
| 39 Chloroform (ccc)          | 83        | 4.140 | 4.135  | (0.852) | 2089712  | 40.0000            | 41.636            |
| 40 1,1,1-Trichloroethane     | 97        | 4.292 | 4.293  | (0.884) | 2371155  | 40.0000            | 42.245            |
| 41 Carbon Tetrachloride      | 117       | 4.444 | 4.439  | (0.915) | 2041068  | 40.0000            | 43.098            |
| 42 1,1-Dichloropropene       | 75        | 4.438 | 4.433  | (0.914) | 2221803  | 40.0000            | 42.459            |
| 43 Benzene                   | 78        | 4.615 | 4.610  | (0.950) | 5387525  | 40.0000            | 39.867            |
| 44 1,2-Dichloroethane        | 62        | 4.621 | 4.616  | (0.951) | 944405   | 40.0000            | 42.135            |
| 45 Trichloroethene           | 130       | 5.180 | 5.176  | (1.066) | 1515897  | 40.0000            | 42.300            |
| 46 1,2-Dichloropropane (ccc) | 63        | 5.363 | 5.358  | (1.104) | 1171943  | 40.0000            | 41.621            |
| 47 *Methyl Methacrylate      | 41        | 5.485 | 5.480  | (1.129) | 351538   | 40.0000            | 40.245            |
| 48 Dibromomethane            | 93        | 5.460 | 5.461  | (1.124) | 314025   | 40.0000            | 41.391            |
| 49 Bromodichloromethane      | 83        | 5.606 | 5.607  | (1.154) | 1164166  | 40.0000            | 41.385            |
| 50 *2-Chloroethylvinylether  | 63        | 5.880 | 5.881  | (1.210) | 511887   | 80.0000            | 85.849            |
| 51 cis-1,3-Dichloropropene   | 75        | 6.008 | 6.003  | (1.237) | 1379314  | 40.0000            | 42.163            |
| 52 4-Methyl-2-pentanone      | 43        | 6.148 | 6.143  | (1.265) | 1131068  | 160.000            | 163.38            |
| 53 Toluene (ccc)             | 91        | 6.318 | 6.313  | (0.833) | 5373667  | 40.0000            | 39.701            |
| 54 trans-1,3-Dichloropropene | 75        | 6.507 | 6.502  | (0.858) | 957518   | 40.0000            | 40.769            |
| 55 *Ethyl Methacrylate       | 69        | 6.604 | 6.605  | (0.871) | 471585   | 40.0000            | 38.271            |
| 56 1,1,2-Trichloroethane     | 97        | 6.671 | 6.672  | (0.880) | 419429   | 40.0000            | 39.590            |
| 57 Tetrachloroethene         | 164       | 6.823 | 6.818  | (0.900) | 1194359  | 40.0000            | 41.361            |
| 58 1,3-Dichloropropane       | 76        | 6.823 | 6.824  | (0.900) | 809816   | 40.0000            | 39.929            |
| 59 2-Hexanone                | 43        | 6.908 | 6.903  | (0.911) | 700110   | 160.000            | 157.01            |
| 60 Chlorodibromomethane      | 129       | 7.036 | 7.031  | (0.928) | 549354   | 40.0000            | 40.518            |
| 61 1,2-Dibromoethane         | 107       | 7.139 | 7.134  | (0.941) | 398109   | 40.0000            | 39.704            |
| 62 Chlorobenzene (spcc)      | 112       | 7.614 | 7.609  | (1.004) | 2766917  | 40.0000            | 39.956            |

Data File: /var/chem/gcms/mx.i/X021506I.b/icxb155.d  
 Report Date: 15-Feb-2006 18:11

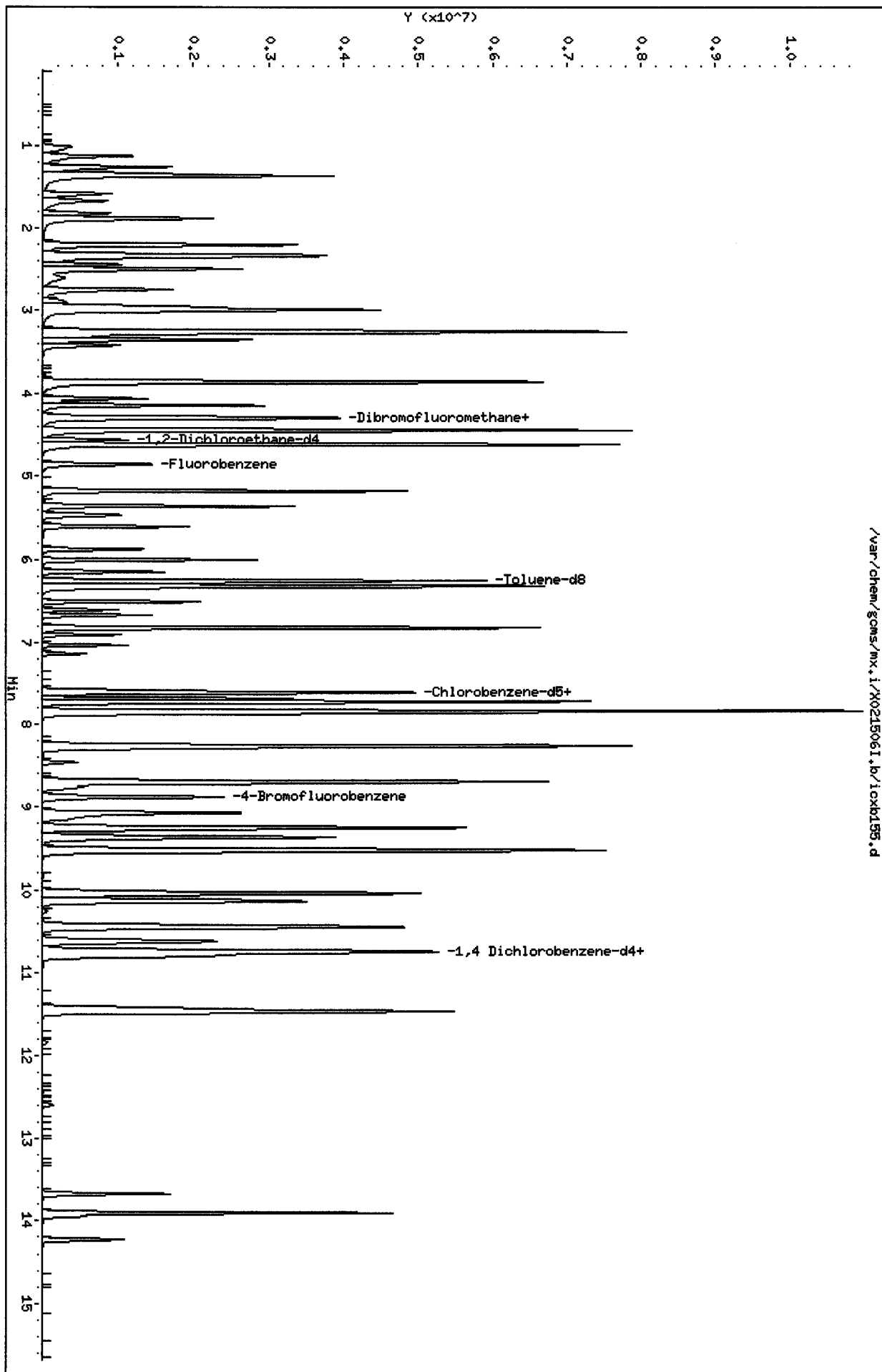
| Compounds                           | QUANT | SIG    | AMOUNTS |         |         |         |          |
|-------------------------------------|-------|--------|---------|---------|---------|---------|----------|
|                                     |       |        | MASS    | RT      | EXP RT  | REL RT  | RESPONSE |
| =====                               | ===== | ==     | =====   | =====   | =====   | =====   | =====    |
| 63 1,1,1,2-Tetrachloroethane        | 131   | 7.687  | 7.682   | (1.014) | 920720  | 40.0000 | 40.548   |
| 64 Ethylbenzene (ccc)               | 106   | 7.723  | 7.724   | (1.018) | 1923008 | 40.0000 | 40.356   |
| 65 m&p-Xylene                       | 106   | 7.845  | 7.840   | (1.034) | 4534139 | 80.0000 | 81.279   |
| 66 o-Xylene                         | 106   | 8.259  | 8.254   | (1.089) | 1933537 | 40.0000 | 40.496   |
| 67 Styrene                          | 104   | 8.271  | 8.266   | (1.091) | 2723035 | 40.0000 | 39.637   |
| 68 Bromoform (spcc)                 | 173   | 8.459  | 8.461   | (1.116) | 258362  | 40.0000 | 40.820   |
| 69 Isopropylbenzene                 | 105   | 8.697  | 8.692   | (1.147) | 6197706 | 40.0000 | 40.178   |
| 70 *cis-1,4-dichloro-2-butene       | 88    | 8.758  | 8.753   | (1.155) | 116457  | 40.0000 | 39.729   |
| 71 Bromobenzene                     | 156   | 9.074  | 9.069   | (1.197) | 864572  | 40.0000 | 39.923   |
| 72 1,1,2,2-Tetrachloroethane (sp)   | 83    | 9.068  | 9.057   | (1.196) | 313504  | 40.0000 | 36.603   |
| 73 1,2,3-Trichloropropane           | 110   | 9.116  | 9.112   | (0.848) | 90063   | 40.0000 | 35.909   |
| 74 *trans-1,4-dichloro-2-butene     | 53    | 9.147  | 9.142   | (0.851) | 100319  | 40.0000 | 37.854   |
| 75 n-Propylbenzene                  | 91    | 9.250  | 9.245   | (0.860) | 7325039 | 40.0000 | 39.992   |
| 76 2-Chlorotoluene                  | 91    | 9.360  | 9.355   | (0.870) | 3713220 | 40.0000 | 39.600   |
| 77 1,3,5-Trimethylbenzene           | 105   | 9.518  | 9.519   | (0.885) | 3986873 | 40.0000 | 40.586   |
| 78 4-Chlorotoluene                  | 91    | 9.524  | 9.519   | (0.886) | 3898448 | 40.0000 | 39.423   |
| 79 tert-Butylbenzene                | 119   | 10.041 | 10.036  | (0.934) | 4218164 | 40.0000 | 40.527   |
| 80 1,2,4-Trimethylbenzene           | 105   | 10.132 | 10.127  | (0.942) | 3451562 | 40.0000 | 40.552   |
| 81 sec-Butylbenzene                 | 105   | 10.449 | 10.438  | (0.972) | 6114718 | 40.0000 | 40.431   |
| 82 1,3-Dichlorobenzene              | 146   | 10.619 | 10.614  | (0.988) | 1777838 | 40.0000 | 39.988   |
| 83 p-Isopropyltoluene               | 119   | 10.747 | 10.736  | (0.999) | 4965299 | 40.0000 | 41.326   |
| 84 1,4-Dichlorobenzene              | 146   | 10.796 | 10.791  | (1.004) | 1607594 | 40.0000 | 39.882   |
| 85 1,2-Dichlorobenzene              | 146   | 11.434 | 11.429  | (1.063) | 1269579 | 40.0000 | 39.775   |
| 86 n-Butylbenzene                   | 91    | 11.471 | 11.466  | (1.067) | 4347217 | 40.0000 | 41.190   |
| 87 1,2-Dibromo-3-chloropropane      | 157   | 12.596 | 12.591  | (1.171) | 52685   | 40.0000 | 40.534   |
| 88 1,2,4-Trichlorobenzene           | 180   | 13.673 | 13.674  | (1.272) | 638090  | 40.0000 | 41.089   |
| 89 Hexachlorobutadiene              | 225   | 13.904 | 13.905  | (1.293) | 1059031 | 40.0000 | 40.684   |
| 90 Napthalene                       | 128   | 13.947 | 13.942  | (1.297) | 461083  | 40.0000 | 40.982   |
| 91 1,2,3-Trichlorobenzene           | 180   | 14.233 | 14.228  | (1.324) | 416183  | 40.0000 | 41.679   |
| M 92 *1,4-dichloro-2-butene (total) | 53    |        |         |         | 216777  | 80.0000 | 77.583   |

### QC Flag Legend

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

Data File: /var/chem/gcms/mx.i/X0215061.b/ioxb155.d  
Date : 15-FEB-2006 16:43  
Client ID: WSTD040  
Sample Info: ICCXB155,1,1,5,,WSTD040  
Purge Volume: 25.0  
Column phase: J+W 624

Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18





Data File: /var/chem/gcms/mx.i/X021506I.b/icxb156.d

Report Date: 15-Feb-2006 18:11

## STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X021506I.b/icxb156.d

Lab Smp Id: ICCXB156

Client Smp ID: VSTD080

Inj Date : 15-FEB-2006 17:10

Operator : 22980

Inst ID: mx.i

Smp Info : ICCXB156,1,1,6,,VSTD080

Misc Info : X021506I,8260B\_LM,all.sub

Comment :

Method : /var/chem/gcms/mx.i/X021506I.b/8260B\_LM.m

Meth Date : 15-Feb-2006 18:11 tillerm

Quant Type: ISTD

Cal Date : 15-FEB-2006 17:10

Cal File: icxb156.d

Als bottle: 1

Calibration Sample, Level: 6

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: all.sub

Target Version: 3.50

Concentration Formula: Amt \* DF \* Uf\*Vt/(Vo\*1000) \* CpndVariable

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT SIG | MASS   | RT     | EXP RT  | REL RT   | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-----------|--------|--------|---------|----------|----------|--------------------|-------------------|
|                                |           |        |        |         |          |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene              | 96        | 4.857  | 4.853  | (1.000) | 1333610  | 10.0000  |                    |                   |
| * 2 Chlorobenzene-d5           | 119       | 7.582  | 7.585  | (1.000) | 232080   | 10.0000  |                    |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152       | 10.752 | 10.748 | (1.000) | 267931   | 10.0000  |                    |                   |
| \$ 4 Dibromofluoromethane      | 113       | 4.273  | 4.269  | (0.880) | 229417   | 80.0000  | 10.118             |                   |
| \$ 5 1,2-Dichloroethane-d4     | 65        | 4.559  | 4.555  | (0.939) | 181935   | 80.0000  | 10.294             |                   |
| \$ 6 Toluene-d8                | 98        | 6.256  | 6.252  | (0.825) | 1130920  | 80.0000  | 9.9529             |                   |
| \$ 7 4-Bromofluorobenzene      | 95        | 8.878  | 8.874  | (0.826) | 313564   | 80.0000  | 9.8705             |                   |
| M 8 1,2-Dichloroethene (total) | 96        |        |        |         | 5028304  | 160.000  | 159.45             |                   |
| M 9 Xylene (total)             | 106       |        |        |         | 12601648 | 240.000  | 235.31             |                   |
| 10 Dichlorodifluoromethane     | 85        | 1.134  | 1.136  | (0.233) | 3418440  | 80.0000  | 80.974 (A)         |                   |
| 11 Chloromethane (spcc)        | 50        | 1.262  | 1.264  | (0.260) | 5020043  | 80.0000  | 80.798 (A)         |                   |
| 12 Vinyl Chloride (ccc)        | 62        | 1.347  | 1.343  | (0.277) | 4048762  | 80.0000  | 83.512 (A)         |                   |
| 13 *1,3-Butadiene              | 39        | 1.371  | 1.373  | (0.282) | 3457611  | 80.0000  | 84.926 (A)         |                   |
| 14 Bromomethane                | 94        | 1.590  | 1.592  | (0.327) | 1654493  | 80.0000  | 88.054 (A)         |                   |
| 15 Chloroethane                | 64        | 1.675  | 1.678  | (0.345) | 2116649  | 80.0000  | 79.489             |                   |

Data File: /var/chem/gcms/mx.i/X021506I.b/icxb156.d  
 Report Date: 15-Feb-2006 18:11

| Compounds                    | QUANT SIG | AMOUNTS |       |         |          |          |            |         |
|------------------------------|-----------|---------|-------|---------|----------|----------|------------|---------|
|                              |           | MASS    | RT    | EXP RT  | REL RT   | RESPONSE | CAL-AMT    | ON-COL  |
|                              |           |         |       |         |          |          | ( ug/L)    | ( ug/L) |
| =====                        | =====     | ==      | ===== | =====   | =====    | =====    | =====      |         |
| 16 *Vinyl Bromide            | 106       | 1.827   | 1.830 | (0.376) | 1874774  | 80.0000  | 80.893 (A) |         |
| 17 Trichlorofluoromethane    | 101       | 1.888   | 1.890 | (0.389) | 4303478  | 80.0000  | 84.106 (A) |         |
| 18 *2-Chloropropane          | 43        | 2.211   | 2.213 | (0.455) | 6708941  | 80.0000  | 81.271 (A) |         |
| 19 1,1-Dichloroethene (ccc)  | 96        | 2.332   | 2.335 | (0.480) | 2213545  | 80.0000  | 82.451 (A) |         |
| 20 *Freon 113                | 151       | 2.357   | 2.353 | (0.485) | 1960520  | 80.0000  | 85.946 (A) |         |
| 21 Acetone                   | 43        | 2.381   | 2.377 | (0.490) | 639444   | 320.000  | 338.54 (A) |         |
| 22 *Iodomethane              | 142       | 2.448   | 2.450 | (0.504) | 2747000  | 80.0000  | 81.675 (A) |         |
| 23 Carbon Disulfide          | 76        | 2.503   | 2.499 | (0.515) | 8307531  | 80.0000  | 81.738 (A) |         |
| 24 *2-propanol               | 45        | 2.539   | 2.529 | (0.523) | 191082   | 800.000  | 692.29     |         |
| 25 *Acetonitrile             | 40        | 2.618   | 2.614 | (0.539) | 613949   | 1600.00  | 1459.4     |         |
| 26 Methylene Chloride        | 84        | 2.752   | 2.754 | (0.567) | 1646788  | 80.0000  | 79.869     |         |
| 27 *t-butanol                | 59        | 2.898   | 2.894 | (0.597) | 1233798  | 4000.00  | 4489.1 (A) |         |
| 28 *Acrylonitrile            | 53        | 2.965   | 2.961 | (0.610) | 4464024  | 1600.00  | 1684.6 (A) |         |
| 29 trans-1,2-Dichloroethene  | 96        | 2.995   | 2.998 | (0.617) | 2590482  | 80.0000  | 79.605     |         |
| 30 *MTBE                     | 73        | 3.014   | 3.010 | (0.620) | 2381313  | 80.0000  | 82.760 (A) |         |
| 31 *Hexane                   | 57        | 3.263   | 3.259 | (0.672) | 10701772 | 160.000  | 162.98 (A) |         |
| 32 1,1-Dichloroethane (spcc) | 63        | 3.354   | 3.357 | (0.691) | 5393785  | 80.0000  | 83.540 (A) |         |
| 33 *Vinyl Acetate            | 86        | 3.421   | 3.417 | (0.704) | 240528   | 160.000  | 158.55     |         |
| 34 2,2-Dichloropropane       | 77        | 3.859   | 3.855 | (0.795) | 4606701  | 80.0000  | 78.694     |         |
| 35 cis 1,2-Dichloroethene    | 96        | 3.859   | 3.855 | (0.795) | 2437822  | 80.0000  | 79.843     |         |
| 36 2-Butanone                | 43        | 3.878   | 3.874 | (0.798) | 1003334  | 320.000  | 340.54 (A) |         |
| 37 Bromochloromethane        | 128       | 4.060   | 4.056 | (0.836) | 655351   | 80.0000  | 81.629 (A) |         |
| 38 *THF                      | 42        | 4.109   | 4.105 | (0.846) | 611178   | 320.000  | 338.52 (A) |         |
| 39 Chloroform (ccc)          | 83        | 4.139   | 4.135 | (0.852) | 4096887  | 80.0000  | 80.827 (A) |         |
| 40 1,1,1-Trichloroethane     | 97        | 4.297   | 4.293 | (0.885) | 4571767  | 80.0000  | 80.677 (A) |         |
| 41 Carbon Tetrachloride      | 117       | 4.443   | 4.439 | (0.915) | 3890628  | 80.0000  | 81.270 (A) |         |
| 42 1,1-Dichloropropene       | 75        | 4.443   | 4.433 | (0.915) | 4245724  | 80.0000  | 80.410 (A) |         |
| 43 Benzene                   | 78        | 4.614   | 4.610 | (0.950) | 10238707 | 80.0000  | 75.807     |         |
| 44 1,2-Dichloroethane        | 62        | 4.626   | 4.616 | (0.952) | 1881261  | 80.0000  | 82.772 (A) |         |
| 45 Trichloroethene           | 130       | 5.179   | 5.176 | (1.066) | 2952716  | 80.0000  | 81.475 (A) |         |
| 46 1,2-Dichloropropane (ccc) | 63        | 5.362   | 5.358 | (1.104) | 2329636  | 80.0000  | 81.764 (A) |         |
| 47 *Methyl Methacrylate      | 41        | 5.484   | 5.480 | (1.129) | 735977   | 80.0000  | 82.955 (A) |         |
| 48 Dibromomethane            | 93        | 5.459   | 5.461 | (1.124) | 638014   | 80.0000  | 82.824 (A) |         |
| 49 Bromodichloromethane      | 83        | 5.611   | 5.607 | (1.155) | 2314461  | 80.0000  | 81.337 (A) |         |
| 50 *2-Chloroethylvinylether  | 63        | 5.885   | 5.881 | (1.212) | 1067315  | 160.000  | 174.36 (A) |         |
| 51 cis-1,3-Dichloropropene   | 75        | 6.007   | 6.003 | (1.237) | 2726342  | 80.0000  | 82.272 (A) |         |
| 52 4-Methyl-2-pentanone      | 43        | 6.153   | 6.143 | (1.267) | 2405001  | 320.000  | 340.84 (A) |         |
| 53 Toluene (ccc)             | 91        | 6.317   | 6.313 | (0.833) | 10371072 | 80.0000  | 76.290     |         |
| 54 trans-1,3-Dichloropropene | 75        | 6.506   | 6.502 | (0.858) | 1932628  | 80.0000  | 81.113 (A) |         |
| 55 *Ethyl Methacrylate       | 69        | 6.609   | 6.605 | (0.872) | 993869   | 80.0000  | 79.742     |         |
| 56 1,1,2-Trichloroethane     | 97        | 6.670   | 6.672 | (0.880) | 845880   | 80.0000  | 79.070     |         |
| 57 Tetrachloroethene         | 164       | 6.822   | 6.818 | (0.900) | 2328624  | 80.0000  | 79.722     |         |
| 58 1,3-Dichloropropane       | 76        | 6.822   | 6.824 | (0.900) | 1618156  | 80.0000  | 78.995     |         |
| 59 2-Hexanone                | 43        | 6.907   | 6.903 | (0.911) | 1501218  | 320.000  | 330.46 (A) |         |
| 60 Chlorodibromomethane      | 129       | 7.035   | 7.031 | (0.928) | 1121631  | 80.0000  | 81.442 (A) |         |
| 61 1,2-Dibromoethane         | 107       | 7.138   | 7.134 | (0.941) | 816288   | 80.0000  | 80.362 (A) |         |
| 62 Chlorobenzene (spcc)      | 112       | 7.613   | 7.609 | (1.004) | 5437173  | 80.0000  | 77.914     |         |

Data File: /var/chem/gcms/mx.i/X021506I.b/icxb156.d  
 Report Date: 15-Feb-2006 18:11

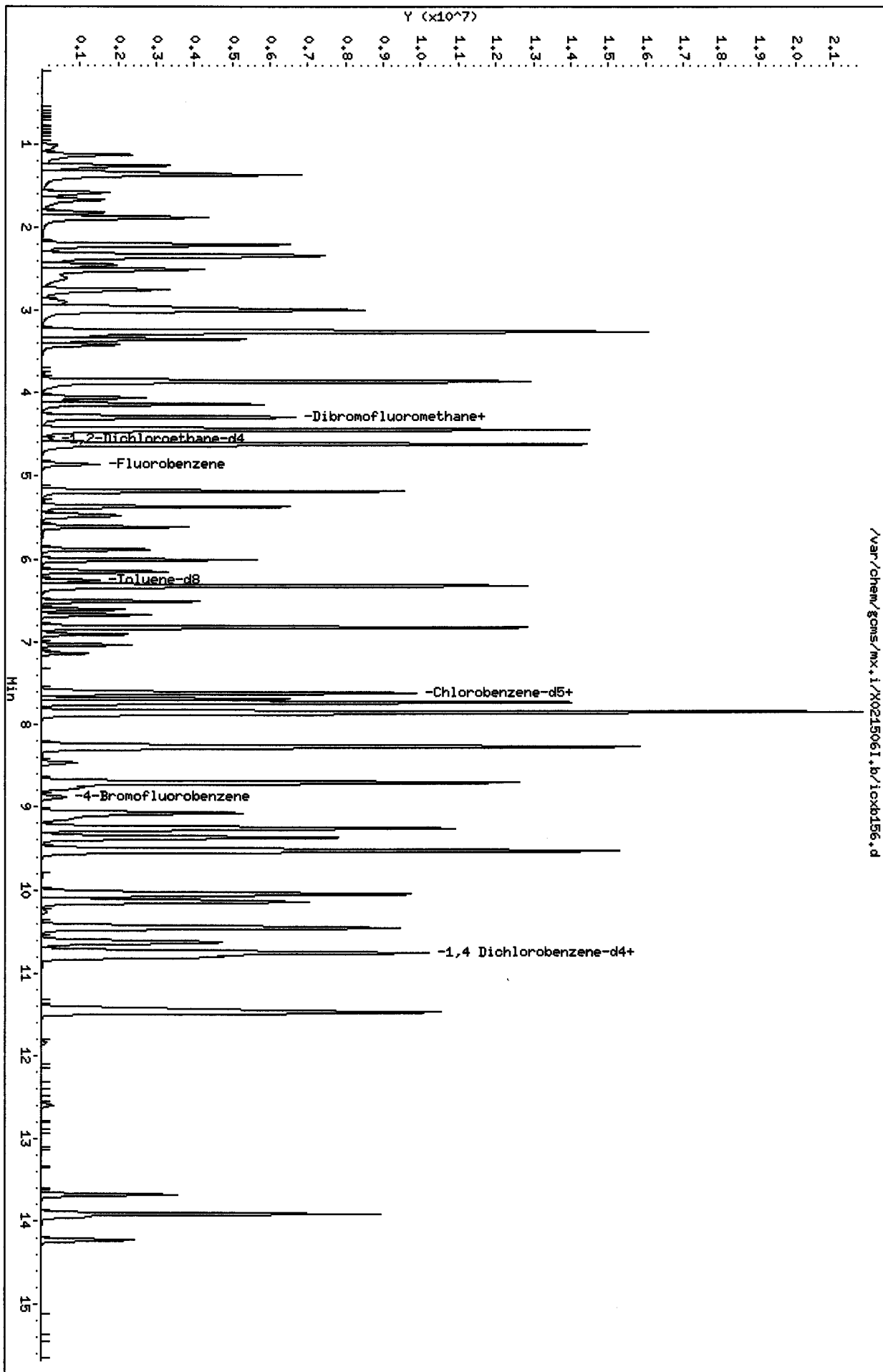
| Compounds                           | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|-------------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                     | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                               | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 63 1,1,1,2-Tetrachloroethane        | 131       | 7.686  | 7.682  | (1.014) | 1830283  | 80.0000            | 79.692            |
| 64 Ethylbenzene (ccc)               | 106       | 7.728  | 7.724  | (1.019) | 3727503  | 80.0000            | 77.665            |
| 65 m&p-Xylene                       | 106       | 7.850  | 7.840  | (1.035) | 8794541  | 160.000            | 156.35            |
| 66 o-Xylene                         | 106       | 8.264  | 8.254  | (1.090) | 3807106  | 80.0000            | 78.952            |
| 67 Styrene                          | 104       | 8.276  | 8.266  | (1.091) | 5333289  | 80.0000            | 77.157            |
| 68 Bromoform (spcc)                 | 173       | 8.464  | 8.461  | (1.116) | 524160   | 80.0000            | 81.514 (A)        |
| 69 Isopropylbenzene                 | 105       | 8.702  | 8.692  | (1.148) | 11665282 | 80.0000            | 75.428            |
| 70 *cis-1,4-dichloro-2-butene       | 88        | 8.756  | 8.753  | (1.155) | 233817   | 80.0000            | 79.007            |
| 71 Bromobenzene                     | 156       | 9.073  | 9.069  | (1.197) | 1713263  | 80.0000            | 78.422            |
| 72 1,1,2,2-Tetrachloroethane (sp)   | 83        | 9.067  | 9.057  | (1.196) | 619628   | 80.0000            | 72.770            |
| 73 1,2,3-Trichloropropane           | 110       | 9.121  | 9.112  | (0.848) | 180712   | 80.0000            | 72.249            |
| 74 *trans-1,4-dichloro-2-butene     | 53        | 9.152  | 9.142  | (0.851) | 199009   | 80.0000            | 74.822            |
| 75 n-Propylbenzene                  | 91        | 9.255  | 9.245  | (0.861) | 13835805 | 80.0000            | 75.068            |
| 76 2-Chlorotoluene                  | 91        | 9.365  | 9.355  | (0.871) | 7212059  | 80.0000            | 76.250            |
| 77 1,3,5-Trimethylbenzene           | 105       | 9.523  | 9.519  | (0.886) | 7834741  | 80.0000            | 78.673            |
| 78 4-Chlorotoluene                  | 91        | 9.529  | 9.519  | (0.886) | 7598454  | 80.0000            | 76.185            |
| 79 tert-Butylbenzene                | 119       | 10.046 | 10.036 | (0.934) | 8090421  | 80.0000            | 76.947            |
| 80 1,2,4-Trimethylbenzene           | 105       | 10.137 | 10.127 | (0.943) | 6876400  | 80.0000            | 79.547            |
| 81 sec-Butylbenzene                 | 105       | 10.454 | 10.438 | (0.972) | 11720433 | 80.0000            | 76.748            |
| 82 1,3-Dichlorobenzene              | 146       | 10.624 | 10.614 | (0.988) | 3585060  | 80.0000            | 79.417            |
| 83 p-Isopropyltoluene               | 119       | 10.752 | 10.736 | (1.000) | 9592389  | 80.0000            | 78.740            |
| 84 1,4-Dichlorobenzene              | 146       | 10.801 | 10.791 | (1.005) | 3225167  | 80.0000            | 78.889            |
| 85 1,2-Dichlorobenzene              | 146       | 11.439 | 11.429 | (1.064) | 2570935  | 80.0000            | 79.339            |
| 86 n-Butylbenzene                   | 91        | 11.476 | 11.466 | (1.067) | 8496252  | 80.0000            | 79.303            |
| 87 1,2-Dibromo-3-chloropropane      | 157       | 12.595 | 12.591 | (1.171) | 112077   | 80.0000            | 83.976 (A)        |
| 88 1,2,4-Trichlorobenzene           | 180       | 13.678 | 13.674 | (1.272) | 1351997  | 80.0000            | 84.645 (A)        |
| 89 Hexachlorobutadiene              | 225       | 13.909 | 13.905 | (1.294) | 2066459  | 80.0000            | 78.402            |
| 90 Napthalene                       | 128       | 13.946 | 13.942 | (1.297) | 1005122  | 80.0000            | 86.460 (A)        |
| 91 1,2,3-Trichlorobenzene           | 180       | 14.232 | 14.228 | (1.324) | 900669   | 80.0000            | 87.142 (A)        |
| M 92 *1,4-dichloro-2-butene (total) | 53        |        |        |         | 432826   | 160.000            | 153.83            |

### QC Flag Legend

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

Data File: /var/chem/gcms/mx.i/X0215061.b/1cxb156.d  
Date : 15-FEB-2006 17:10  
Client ID: VSTD080  
Sample Info: ICCXB156.1,1,6,,VSTD080  
Purge Volume: 25.0  
Column phase: J+W 624

Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18



Data File: /var/chem/gcms/mx.i/X021506I.b/vccxb15a.d  
 Report Date: 15-Feb-2006 18:21

## STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X021506I.b/vccxb15a.d  
 Lab Smp Id: VCCXB15A  
 Inj Date : 15-FEB-2006 18:03  
 Operator : 22980 Inst ID: mx.i  
 Smp Info : VCCXB15A,1,3,,2ndSource  
 Misc Info : X021506I,8260B\_LM,ss.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X021506I.b/8260B\_LM.m  
 Meth Date : 15-Feb-2006 18:20 tillerm Quant Type: ISTD  
 Cal Date : 15-FEB-2006 17:10 ✓ Cal File: icxb156.d  
 Als bottle: 5 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: ss.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                   | QUANT SIG | CONCENTRATIONS |        |         |        |          |                      |                  |
|-----------------------------|-----------|----------------|--------|---------|--------|----------|----------------------|------------------|
|                             |           | MASS           | RT     | EXP RT  | REL RT | RESPONSE | ON-COLUMN<br>( ug/L) | FINAL<br>( ug/L) |
| * 1 Fluorobenzene           | 96        | 4.855          | 4.853  | (1.000) |        | 1289539  | 10.0000              |                  |
| * 2 Chlorobenzene-d5        | 119       | 7.580          | 7.585  | (1.000) |        | 220789   | 10.0000              |                  |
| * 3 1,4 Dichlorobenzene-d4  | 152       | 10.744         | 10.748 | (1.000) |        | 259867   | 10.0000              |                  |
| \$ 5 1,2-Dichloroethane-d4  | 65        | 4.551          | 4.555  | (0.937) |        | 168796   | 9.87685              | 9.8768           |
| \$ 4 Dibromofluoromethane   | 113       | 4.271          | 4.269  | (0.880) |        | 217707   | 9.92971              | 9.9297           |
| \$ 6 Toluene-d8             | 98        | 6.254          | 6.252  | (0.825) |        | 1087101  | 10.0565              | 10.056           |
| \$ 7 4-Bromofluorobenzene   | 95        | 8.876          | 8.874  | (0.826) |        | 301450   | 9.78371              | 9.7837           |
| 10 Dichlorodifluoromethane  | 85        | 1.132          | 1.136  | (0.233) |        | 447120   | 10.9530              | 10.953           |
| 11 Chloromethane (spcc)     | 50        | 1.266          | 1.264  | (0.261) |        | 704099   | 11.7199              | 11.720           |
| 12 Vinyl Chloride (ccc)     | 62        | 1.345          | 1.343  | (0.277) |        | 547622   | 11.6816              | 11.682           |
| 14 Bromomethane             | 94        | 1.594          | 1.592  | (0.328) |        | 222001   | 12.2189              | 12.219           |
| 15 Chloroethane             | 64        | 1.679          | 1.678  | (0.346) |        | 283470   | 11.0093              | 11.009           |
| 17 Trichlorofluoromethane   | 101       | 1.892          | 1.890  | (0.390) |        | 539511   | 10.5197              | 10.520           |
| 19 1,1-Dichloroethene (ccc) | 96        | 2.330          | 2.335  | (0.480) |        | 304865   | 11.7439              | 11.744           |

Data File: /var/chem/gcms/mx.i/X021506I.b/vccxb15a.d

Report Date: 15-Feb-2006 18:21

| Compounds                         | QUANT SIG | MASS  | RT    | EXP RT | REL RT  | RESPONSE | CONCENTRATIONS |         |
|-----------------------------------|-----------|-------|-------|--------|---------|----------|----------------|---------|
|                                   |           |       |       |        |         |          | ON-COLUMN      | FINAL   |
|                                   |           |       |       |        |         |          | ( ug/L)        | ( ug/L) |
| =====                             | =====     | ===== | ===== | =====  | =====   | =====    | =====          | =====   |
| 21 Acetone                        |           | 43    | 2.385 | 2.377  | (0.491) | 32252    | 17.6588        | 17.659  |
| 22 *Iodomethane                   |           | 142   | 2.446 | 2.450  | (0.504) | 746767   | 22.9619        | 22.962  |
| 23 Carbon Disulfide               |           | 76    | 2.501 | 2.499  | (0.515) | 1997545  | 20.3255        | 20.326  |
| 26 Methylene Chloride             |           | 84    | 2.750 | 2.754  | (0.566) | 211805   | 10.6236        | 10.624  |
| 29 trans-1,2-Dichloroethene       |           | 96    | 2.993 | 2.998  | (0.617) | 335784   | 10.6713        | 10.671  |
| 30 *MTBE                          |           | 73    | 3.012 | 3.010  | (0.620) | 282452   | 10.1518        | 10.152  |
| 32 1,1-Dichloroethane (spcc)      |           | 63    | 3.352 | 3.357  | (0.690) | 691251   | 11.0721        | 11.072  |
| 33 *Vinyl Acetate                 |           | 86    | 3.419 | 3.417  | (0.704) | 30009    | 20.4577        | 20.458  |
| 34 2,2-Dichloropropane            |           | 77    | 3.857 | 3.855  | (0.794) | 607192   | 10.7269        | 10.727  |
| 35 cis 1,2-Dichloroethene         |           | 96    | 3.857 | 3.855  | (0.794) | 318970   | 10.8039        | 10.804  |
| M 8 1,2-Dichloroethene (total)    |           | 96    |       |        |         | 654755   | 21.4752        | 21.475  |
| 36 2-Butanone                     |           | 43    | 3.875 | 3.874  | (0.798) | 52702    | 18.4993        | 18.499  |
| 37 Bromochloromethane             |           | 128   | 4.058 | 4.056  | (0.836) | 83491    | 10.7549        | 10.755  |
| 39 Chloroform (ccc)               |           | 83    | 4.137 | 4.135  | (0.852) | 520649   | 10.6229        | 10.623  |
| 40 1,1,1-Trichloroethane          |           | 97    | 4.289 | 4.293  | (0.883) | 617075   | 11.2615        | 11.262  |
| 41 Carbon Tetrachloride           |           | 117   | 4.441 | 4.439  | (0.915) | 532460   | 11.5025        | 11.502  |
| 42 1,1-Dichloropropene            |           | 75    | 4.435 | 4.433  | (0.914) | 579041   | 11.3413        | 11.341  |
| 43 Benzene                        |           | 78    | 4.612 | 4.610  | (0.950) | 1407561  | 10.7777        | 10.778  |
| 44 1,2-Dichloroethane             |           | 62    | 4.618 | 4.616  | (0.951) | 239640   | 10.9041        | 10.904  |
| 45 Trichloroethene                |           | 130   | 5.177 | 5.176  | (1.066) | 395792   | 11.2944        | 11.294  |
| 46 1,2-Dichloropropane (ccc)      |           | 63    | 5.360 | 5.358  | (1.104) | 299959   | 10.8876        | 10.888  |
| 48 Dibromomethane                 |           | 93    | 5.457 | 5.461  | (1.124) | 77073    | 10.5390        | 10.539  |
| 49 Bromodichloromethane           |           | 83    | 5.603 | 5.607  | (1.154) | 296087   | 10.8214        | 10.821  |
| 51 cis-1,3-Dichloropropene        |           | 75    | 6.005 | 6.003  | (1.237) | 355614   | 11.0980        | 11.098  |
| 52 4-Methyl-2-pentanone           |           | 43    | 6.145 | 6.143  | (1.266) | 139331   | 20.4214        | 20.421  |
| 53 Toluene (ccc)                  |           | 91    | 6.315 | 6.313  | (0.833) | 1394342  | 10.7813        | 10.781  |
| 54 trans-1,3-Dichloropropene      |           | 75    | 6.504 | 6.502  | (0.858) | 227311   | 10.0282        | 10.028  |
| 56 1,1,2-Trichloroethane          |           | 97    | 6.668 | 6.672  | (0.880) | 106814   | 10.4555        | 10.456  |
| 57 Tetrachloroethene              |           | 164   | 6.820 | 6.818  | (0.900) | 308755   | 11.1109        | 11.111  |
| 58 1,3-Dichloropropane            |           | 76    | 6.820 | 6.824  | (0.900) | 208688   | 10.7087        | 10.709  |
| 59 2-Hexanone                     |           | 43    | 6.905 | 6.903  | (0.911) | 82267    | 19.0357        | 19.036  |
| 60 Chlorodibromomethane           |           | 129   | 7.033 | 7.031  | (0.928) | 134023   | 10.5884        | 10.588  |
| 61 1,2-Dibromoethane              |           | 107   | 7.136 | 7.134  | (0.941) | 98423    | 10.3448        | 10.345  |
| 62 Chlorobenzene (spcc)           |           | 112   | 7.611 | 7.609  | (1.004) | 702906   | 10.5876        | 10.588  |
| 64 Ethylbenzene (ccc)             |           | 106   | 7.720 | 7.724  | (1.018) | 503303   | 11.0229        | 11.023  |
| 63 1,1,1,2-Tetrachloroethane      |           | 131   | 7.684 | 7.682  | (1.014) | 230634   | 10.5555        | 10.555  |
| 65 m&p-Xylene                     |           | 106   | 7.842 | 7.840  | (1.034) | 1155263  | 21.5892        | 21.589  |
| 66 o-Xylene                       |           | 106   | 8.256 | 8.254  | (1.089) | 484752   | 10.5669        | 10.567  |
| M 9 Xylene (total)                |           | 106   |       |        |         | 1640015  | 32.1562        | 32.156  |
| 67 Styrene                        |           | 104   | 8.268 | 8.266  | (1.091) | 711966   | 10.8268        | 10.827  |
| 68 Bromoform (spcc)               |           | 173   | 8.456 | 8.461  | (1.116) | 65263    | 10.6684        | 10.668  |
| 69 Isopropylbenzene               |           | 105   | 8.694 | 8.692  | (1.147) | 1425690  | 9.68994        | 9.6899  |
| 71 Bromobenzene                   |           | 156   | 9.071 | 9.069  | (1.197) | 215785   | 10.3824        | 10.382  |
| 72 1,1,2,2-Tetrachloroethane (sp) |           | 83    | 9.059 | 9.057  | (1.195) | 81881    | 10.0946        | 10.094  |
| 75 n-Propylbenzene                |           | 91    | 9.247 | 9.245  | (0.861) | 1855671  | 10.3806        | 10.381  |
| 73 1,2,3-Trichloropropane         |           | 110   | 9.119 | 9.112  | (0.849) | 23399    | 9.64551        | 9.6455  |
| 76 2-Chlorotoluene                |           | 91    | 9.357 | 9.355  | (0.871) | 947503   | 10.3284        | 10.328  |

Data File: /var/chem/gcms/mx.i/X021506I.b/vccxb15a.d

Report Date: 15-Feb-2006 18:21

|                                |       |        |        |         |          | CONCENTRATIONS |         |
|--------------------------------|-------|--------|--------|---------|----------|----------------|---------|
| QUANT SIG                      |       |        |        |         |          | ON-COLUMN      | FINAL   |
| Compounds                      | MASS  | RT     | EXP RT | REL RT  | RESPONSE | ( ug/L)        | ( ug/L) |
| =====                          | ===== | ==     | =====  | =====   | =====    | =====          | =====   |
| 77 1,3,5-Trimethylbenzene      | 105   | 9.515  | 9.519  | (0.886) | 1016692  | 10.5260        | 10.526  |
| 78 4-Chlorotoluene             | 91    | 9.521  | 9.519  | (0.886) | 987838   | 10.2118        | 10.212  |
| 79 tert-Butylbenzene           | 119   | 10.038 | 10.036 | (0.934) | 1062547  | 10.4194        | 10.419  |
| 80 1,2,4-Trimethylbenzene      | 105   | 10.129 | 10.127 | (0.943) | 868090   | 10.3538        | 10.354  |
| 81 sec-Butylbenzene            | 105   | 10.440 | 10.438 | (0.972) | 1607895  | 10.8555        | 10.856  |
| 82 1,3-Dichlorobenzene         | 146   | 10.616 | 10.614 | (0.988) | 448990   | 10.2548        | 10.255  |
| 83 p-Isopropyltoluene          | 119   | 10.738 | 10.736 | (0.999) | 1199751  | 10.1539        | 10.154  |
| 84 1,4-Dichlorobenzene         | 146   | 10.792 | 10.791 | (1.005) | 408347   | 10.2983        | 10.298  |
| 86 n-Butylbenzene              | 91    | 11.468 | 11.466 | (1.067) | 1088940  | 10.4794        | 10.479  |
| 85 1,2-Dichlorobenzene         | 146   | 11.431 | 11.429 | (1.064) | 311316   | 9.90536        | 9.9054  |
| 87 1,2-Dibromo-3-chloropropane | 157   | 12.593 | 12.591 | (1.172) | 11655    | 9.00416        | 9.0042  |
| 88 1,2,4-Trichlorobenzene      | 180   | 13.670 | 13.674 | (1.272) | 149339   | 9.66068        | 9.6607  |
| 89 Hexachlorobutadiene         | 225   | 13.907 | 13.905 | (1.294) | 279047   | 10.9157        | 10.916  |
| 90 Napthalene                  | 128   | 13.944 | 13.942 | (1.298) | 106981   | 9.48809        | 9.4881  |
| 91 1,2,3-Trichlorobenzene      | 180   | 14.230 | 14.228 | (1.324) | 99445    | 9.96397        | 9.9640  |

Data File: /var/chem/gcms/mx.i/X021506I.b/vccxb15a.d  
 Report Date: 15-Feb-2006 18:21

## STL Knoxville

 INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: mx.i  
 Lab File ID: vccxb15a.d  
 Lab Smp Id: VCCXB15A  
 Analysis Type: VOA  
 Quant Type: ISTD  
 Operator: 22980  
 Method File: /var/chem/gcms/mx.i/X021506I.b/8260B\_LM.m  
 Misc Info: X021506I,8260B\_LM,ss.sub

Calibration Date: 15-FEB-2006  
 Calibration Time: 15:51  
 Level: LOW  
 Sample Type: WATER

| COMPOUND<br>=====   | STANDARD<br>===== | AREA LIMIT     |                | SAMPLE<br>===== | %DIFF<br>===== |
|---------------------|-------------------|----------------|----------------|-----------------|----------------|
|                     |                   | LOWER<br>===== | UPPER<br>===== |                 |                |
| 1 Fluorobenzene     | 1323492           | 661746         | 2646984        | 1289539         | -2.57          |
| 2 Chlorobenzene-d5  | 226173            | 113086         | 452346         | 220789          | -2.38          |
| 3 1,4 Dichlorobenze | 260091            | 130046         | 520182         | 259867          | -0.09          |

| COMPOUND<br>=====   | STANDARD<br>===== | RT LIMIT       |                | SAMPLE<br>===== | %DIFF<br>===== |
|---------------------|-------------------|----------------|----------------|-----------------|----------------|
|                     |                   | LOWER<br>===== | UPPER<br>===== |                 |                |
| 1 Fluorobenzene     | 4.85              | 4.35           | 5.35           | 4.85            | 0.04           |
| 2 Chlorobenzene-d5  | 7.58              | 7.08           | 8.08           | 7.58            | -0.06          |
| 3 1,4 Dichlorobenze | 10.75             | 10.25          | 11.25          | 10.74           | -0.04          |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: /var/chem/gcms/mx.i/X021506I.b/vccxb15a.d  
 Report Date: 15-Feb-2006 18:21

## STL Knoxville

## RECOVERY REPORT

Client Name: Client SDG: X021506I  
 Sample Matrix: LIQUID Fraction: VOA  
 Lab Smp Id: VCCXB15A  
 Level: LOW Operator: 22980  
 Data Type: MS DATA SampleType: LCS  
 SpikeList File: ssallcmpds.spk Quant Type: ISTD  
 Sublist File: ss.sub  
 Method File: /var/chem/gcms/mx.i/X021506I.b/8260B\_LM.m  
 Misc Info: X021506I,8260B\_LM,ss.sub

| SPIKE COMPOUND |                       | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|----------------|-----------------------|-----------------------|---------------------------|----------------|--------|
|                | 10 Dichlorodifluorome | 10.000                | 10.953                    | 109.53         | 70-130 |
|                | 11 Chloromethane (spc | 10.000                | 11.720                    | 117.20         | 70-130 |
|                | 12 Vinyl Chloride (cc | 10.000                | 11.682                    | 116.82         | 70-130 |
|                | 14 Bromomethane       | 10.000                | 12.219                    | 122.19         | 70-130 |
|                | 15 Chloroethane       | 10.000                | 11.009                    | 110.09         | 70-130 |
|                | 17 Trichlorofluoromet | 10.000                | 10.520                    | 105.20         | 70-130 |
|                | 19 1,1-Dichloroethene | 10.000                | 11.744                    | 117.44         | 70-130 |
|                | 23 Carbon Disulfide   | 20.000                | 20.326                    | 101.63         | 70-130 |
|                | 21 Acetone            | 20.000                | 17.659                    | 88.29          | 70-130 |
|                | 22 *Iodomethane       | 20.000                | 22.962                    | 114.81         | 70-130 |
|                | 26 Methylene Chloride | 10.000                | 10.624                    | 106.24         | 70-130 |
|                | 29 trans-1,2-Dichloro | 10.000                | 10.671                    | 106.71         | 70-130 |
|                | 30 *MTBE              | 10.000                | 10.152                    | 101.52         | 70-130 |
|                | 32 1,1-Dichloroethane | 10.000                | 11.072                    | 110.72         | 70-130 |
|                | 33 *Vinyl Acetate     | 20.000                | 20.458                    | 102.29         | 70-130 |
|                | 34 2,2-Dichloropropan | 10.000                | 10.727                    | 107.27         | 70-130 |
|                | 35 cis 1,2-Dichloroet | 10.000                | 10.804                    | 108.04         | 70-130 |
|                | 36 2-Butanone         | 20.000                | 18.499                    | 92.50          | 70-130 |
| M              | 8 1,2-Dichloroethene  | 20.000                | 21.475                    | 107.38         | 70-130 |
|                | 37 Bromochloromethane | 10.000                | 10.755                    | 107.55         | 70-130 |
|                | 39 Chloroform (ccc)   | 10.000                | 10.623                    | 106.23         | 70-130 |
|                | 40 1,1,1-Trichloroeth | 10.000                | 11.262                    | 112.62         | 70-130 |
|                | 41 Carbon Tetrachlori | 10.000                | 11.502                    | 115.02         | 70-130 |
|                | 42 1,1-Dichloropropen | 10.000                | 11.341                    | 113.41         | 70-130 |
|                | 43 Benzene            | 10.000                | 10.778                    | 107.78         | 70-130 |
|                | 44 1,2-Dichloroethane | 10.000                | 10.904                    | 109.04         | 70-130 |
|                | 45 Trichloroethene    | 10.000                | 11.294                    | 112.94         | 70-130 |
|                | 46 1,2-Dichloropropan | 10.000                | 10.888                    | 108.88         | 70-130 |
|                | 48 Dibromomethane     | 10.000                | 10.539                    | 105.39         | 70-130 |
|                | 49 Bromodichlorometha | 10.000                | 10.821                    | 108.21         | 70-130 |
|                | 51 cis-1,3-Dichloropr | 10.000                | 11.098                    | 110.98         | 70-130 |
|                | 52 4-Methyl-2-pentano | 20.000                | 20.421                    | 102.11         | 70-130 |
|                | 53 Toluene (ccc)      | 10.000                | 10.781                    | 107.81         | 70-130 |

Data File: /var/chem/gcms/mx.i/X021506I.b/vccxb15a.d

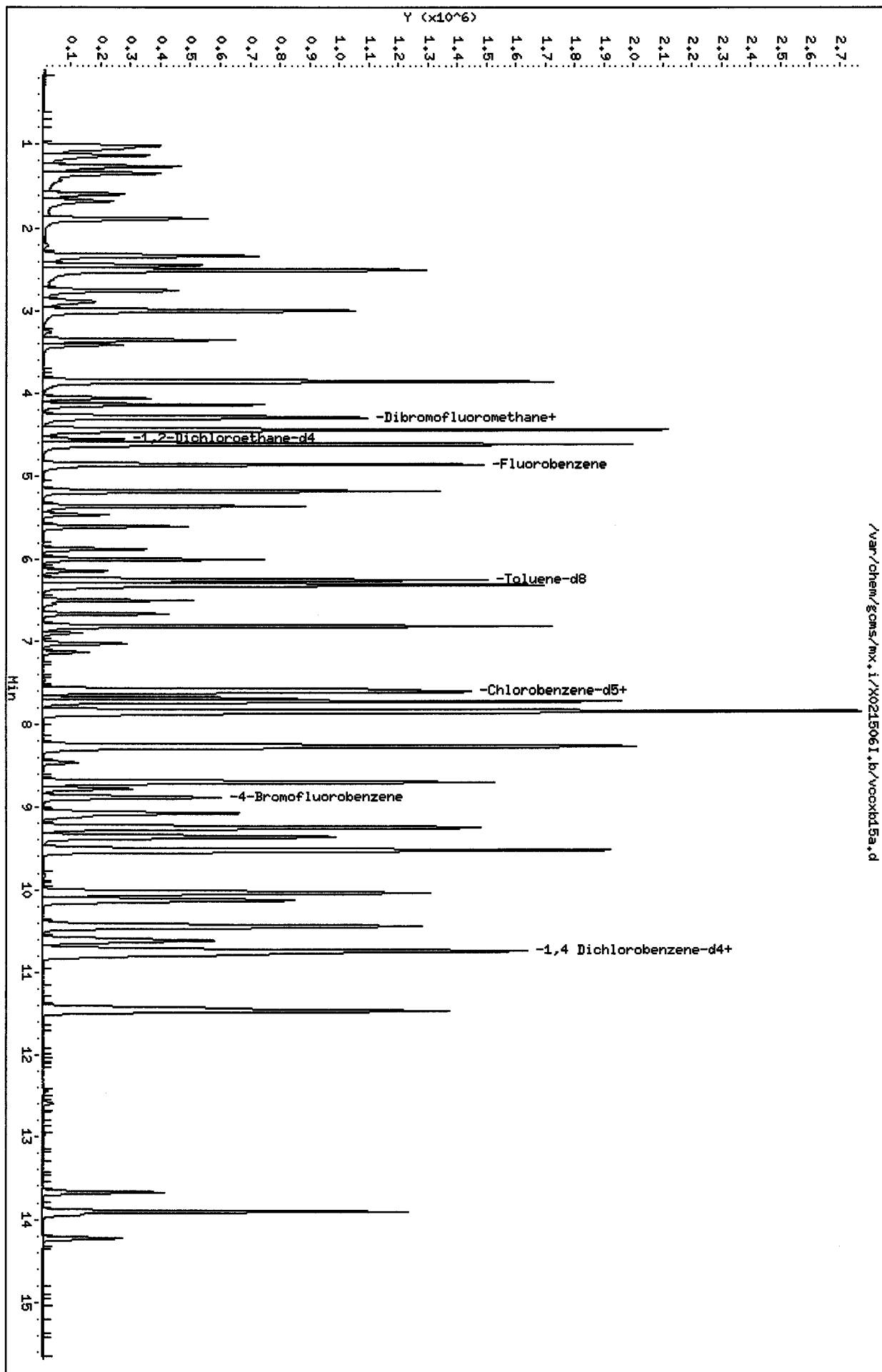
Report Date: 15-Feb-2006 18:21

| SPIKE COMPOUND |                       | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|----------------|-----------------------|-----------------------|---------------------------|----------------|--------|
| M              | 54 trans-1,3-Dichloro | 10.000                | 10.028                    | 100.28         | 70-130 |
|                | 56 1,1,2-Trichloroeth | 10.000                | 10.456                    | 104.56         | 70-130 |
|                | 57 Tetrachloroethene  | 10.000                | 11.111                    | 111.11         | 70-130 |
|                | 58 1,3-Dichloropropan | 10.000                | 10.709                    | 107.09         | 70-130 |
|                | 59 2-Hexanone         | 20.000                | 19.036                    | 95.18          | 70-130 |
|                | 60 Chlorodibromometha | 10.000                | 10.588                    | 105.88         | 70-130 |
|                | 61 1,2-Dibromoethane  | 10.000                | 10.345                    | 103.45         | 70-130 |
|                | 62 Chlorobenzene (spc | 10.000                | 10.588                    | 105.88         | 70-130 |
|                | 64 Ethylbenzene (ccc) | 10.000                | 11.023                    | 110.23         | 70-130 |
|                | 63 1,1,1,2-Tetrachlor | 10.000                | 10.555                    | 105.55         | 70-130 |
|                | 65 m&p-Xylene         | 20.000                | 21.589                    | 107.95         | 70-130 |
|                | 66 o-Xylene           | 10.000                | 10.567                    | 105.67         | 70-130 |
|                | 9 Xylene (total)      | 30.000                | 32.156                    | 107.19         | 70-130 |
|                | 67 Styrene            | 10.000                | 10.827                    | 108.27         | 70-130 |
|                | 68 Bromoform (spcc)   | 10.000                | 10.668                    | 106.68         | 70-130 |
|                | 69 Isopropylbenzene   | 10.000                | 9.6899                    | 96.90          | 70-130 |
|                | 71 Bromobenzene       | 10.000                | 10.382                    | 103.82         | 70-130 |
|                | 72 1,1,2,2-Tetrachlor | 10.000                | 10.094                    | 100.95         | 70-130 |
|                | 75 n-Propylbenzene    | 10.000                | 10.381                    | 103.81         | 70-130 |
|                | 73 1,2,3-Trichloropro | 10.000                | 9.6455                    | 96.46          | 70-130 |
|                | 76 2-Chlorotoluene    | 10.000                | 10.328                    | 103.28         | 70-130 |
|                | 77 1,3,5-Trimethylben | 10.000                | 10.526                    | 105.26         | 70-130 |
|                | 78 4-Chlorotoluene    | 10.000                | 10.212                    | 102.12         | 70-130 |
|                | 79 tert-Butylbenzene  | 10.000                | 10.419                    | 104.19         | 70-130 |
|                | 80 1,2,4-Trimethylben | 10.000                | 10.354                    | 103.54         | 70-130 |
|                | 81 sec-Butylbenzene   | 10.000                | 10.856                    | 108.56         | 70-130 |
|                | 82 1,3-Dichlorobenzen | 10.000                | 10.255                    | 102.55         | 70-130 |
|                | 83 p-Isopropyltoluene | 10.000                | 10.154                    | 101.54         | 70-130 |
|                | 84 1,4-Dichlorobenzen | 10.000                | 10.298                    | 102.98         | 70-130 |
|                | 86 n-Butylbenzene     | 10.000                | 10.479                    | 104.79         | 70-130 |
|                | 85 1,2-Dichlorobenzen | 10.000                | 9.9054                    | 99.05          | 70-130 |
|                | 87 1,2-Dibromo-3-chlo | 10.000                | 9.0042                    | 90.04          | 70-130 |
|                | 88 1,2,4-Trichloroben | 10.000                | 9.6607                    | 96.61          | 70-130 |
|                | 89 Hexachlorobutadien | 10.000                | 10.916                    | 109.16         | 70-130 |
|                | 90 Napthalene         | 10.000                | 9.4881                    | 94.88          | 70-130 |
|                | 91 1,2,3-Trichloroben | 10.000                | 9.9640                    | 99.64          | 70-130 |

| SURROGATE COMPOUND |                      | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|--------------------|----------------------|-----------------------|---------------------------|----------------|--------|
| \$                 | 5 1,2-Dichloroethane | 10.000                | 9.8768                    | 98.77          | 71-127 |
| \$                 | 4 Dibromofluorometha | 10.000                | 9.9297                    | 99.30          | 79-120 |
| \$                 | 6 Toluene-d8         | 10.000                | 10.056                    | 100.57         | 80-120 |
| \$                 | 7 4-Bromofluorobenze | 10.000                | 9.7837                    | 97.84          | 69-126 |

Data File: /var/chem/gcms/mx.i/X0215061.b/vccxb15a.d  
Date : 15-FEB-2006 18:03  
Client ID:  
Sample Info: VCCXB15a,1,3,2ndSource  
Purge Volume: 25.0  
Column phase: J+M 624

Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18



**STL Knoxville GC/MS VOST Continuing Calibration Review / Narrative Checklist**  
**Method: VOST Analysis - KNOX-MS-0011, Rev. 5 and KNOX-MS-0015, Rev. 8**

|                |        |                        |         |             |    |                        |               |
|----------------|--------|------------------------|---------|-------------|----|------------------------|---------------|
| Analysis Date: | 4/7/06 | CCAL Batch/ Scan Name: | X040706 | Instrument: | MY | ICAL Batch/ Scan Name: | X020 X0215062 |
|----------------|--------|------------------------|---------|-------------|----|------------------------|---------------|

| Review Items                                                                                                                                                                                                                   | N/A | Yes | No | If No, why is data reportable?                                                                            | 2nd<br>✓ |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|----|-----------------------------------------------------------------------------------------------------------|----------|
| 1. Did BFB meet tune criteria?                                                                                                                                                                                                 |     | ✓   |    |                                                                                                           | ✓        |
| 2. Were all standards injected within 12 hr of BFB?                                                                                                                                                                            |     | ✓   |    |                                                                                                           | ✓        |
| 3. Was date/time of analysis verified between analysis header and logbook as correct?                                                                                                                                          |     | ✓   |    |                                                                                                           | ✓        |
| 4. Was the primary ion used for all compounds?                                                                                                                                                                                 |     | ✓   |    | <input type="checkbox"/> Secondary ion used due to interferences for: _____                               | ✓        |
| 5. Do the RFs for SPCCs meet minimum RF?                                                                                                                                                                                       |     | ✓   |    |                                                                                                           | ✓        |
| 6. Is the %D or drift ≤20% for all CCCs?                                                                                                                                                                                       |     | ✓   |    |                                                                                                           | ✓        |
| 7. Is the %D or drift ≤ 50% for all other compounds? [Up to 6 TCLs may have %D or drift > 50%; any more and the calibration is INVALID].                                                                                       |     | ✓   |    | <input type="checkbox"/> %D or drift > 50% for the following TCLs: <u>Autumn 984</u>                      | ✓        |
| 8. Are the internal standard responses within limits?<br>8260B: 50-200% of the mid-level ICAL standard                                                                                                                         |     | ✓   |    |                                                                                                           | ✓        |
| 9. Are the internal standard retention times within limits?<br>8260B: 30 seconds of the mid-level ICAL standard                                                                                                                |     | ✓   |    |                                                                                                           | ✓        |
| 10. If manual integrations were performed, are they clearly identified, initialed, dated and reason given?                                                                                                                     | ✓   |     |    | Reasons: 1)Corrected split peak; 2)Unresolved peak; 3)tailing; 4)RT shift; 5)wrong peak selected; 6)other | NA       |
| 11. Have alternate hits/manual integrations been verified as correct and are correct RFs listed in CCAL summary?                                                                                                               | ✓   |     |    |                                                                                                           | NA       |
| 12. Was the correct ICAL used for quantitation? (Verify date & time of ICAL is documented correctly on CCAL)                                                                                                                   |     | ✓   |    |                                                                                                           | ✓        |
| 13. Is the first IS documented correctly on the log?                                                                                                                                                                           |     | ✓   |    |                                                                                                           | ✓        |
| 14. Elution order checked on isomeric pairs/coeluters?                                                                                                                                                                         |     | ✓   |    |                                                                                                           | ✓        |
| • hexane and vinyl acetate                                                                                                                                                                                                     |     | ✓   |    |                                                                                                           | ✓        |
| • cis- and trans- isomers                                                                                                                                                                                                      |     | ✓   |    |                                                                                                           | ✓        |
| • trichlorofluoromethane and Freon 113                                                                                                                                                                                         |     | ✓   |    |                                                                                                           | ✓        |
| • ethyl benzene / m/p-xylene / o-xylene                                                                                                                                                                                        |     | ✓   |    |                                                                                                           | ✓        |
| • n-propylbenzene / 2-chlorotoluene / 4-chlorotoluene                                                                                                                                                                          |     | ✓   |    |                                                                                                           | ✓        |
| • 1,3,5-trimethylbenzene / 1,2,4-trimethylbenzene / sec-butylbenzene                                                                                                                                                           |     | ✓   |    |                                                                                                           | ✓        |
| • 1,3-, 1,4-, and 1,2-dichlorobenzene                                                                                                                                                                                          |     | ✓   |    |                                                                                                           | ✓        |
| • 1,2,4 and 1,2,3 -trichlorobenzene                                                                                                                                                                                            |     | ✓   |    |                                                                                                           | ✓        |
| • chlorobenzene-d5 and 1,1,1,2-tetrachloroethane                                                                                                                                                                               |     | ✓   |    |                                                                                                           | ✓        |
| 15. If criteria were not met, was a NCM generated, approved by supervisor, and copy included in folder?                                                                                                                        | ✓   |     |    |                                                                                                           | NA       |
| 16. Does the CCAL folder contain <b>complete</b> data in the following order? Data review checklist, tune pass/fail page, m/z list, tune chromatogram, Target CCAL summary, Quan report, chromatogram and manual integrations. |     | ✓   |    |                                                                                                           | ✓        |

[illegible]

## STL Knoxville GC/MS Volatiles Run Log - Instrument MX

|                   |              |            |            |             |         |               |
|-------------------|--------------|------------|------------|-------------|---------|---------------|
| Target Batch      | 70407086     | XXXXXXXXXX | XXXXXXXXXX | Loop #      | 1       | 2             |
| QuantIMS Batch    | 6097054      | -          | -          | Standard ID | V0A6495 | V0A6494       |
| Method            | V057         | XXXXXXXXXX | XXXXXXXXXX | Matrix      | 2.5mL   | 2.5mL V057    |
| SOP#              | KNOX-11-0011 | XXXXXXXXXX | XXXXXXXXXX | IS Amt      | 0.96mL  | 0.939mL       |
| Initial Cal Batch | X021506J     | XXXXXXXXXX | XXXXXXXXXX | SS Amt      | 1       | 5.0mL V0A6493 |
| CCAL IS Areas     | 1149191      | 214194     | 242601     | Heated?     | Y       | N             |

☒ Date/Time Verified Preventive Maintenance Performed ☐ NA or ☒ (changed Transfer line + Temp heater + Lig line + vent)

| Lot      | Lab File ID          | Time | ALS # | Loop # | Solute Dilution Factor | MS Dilution Factor | Volume/Weight Purged | pH | Init | Standards ID/Spike ID/and/or Comments |
|----------|----------------------|------|-------|--------|------------------------|--------------------|----------------------|----|------|---------------------------------------|
| Trim     | 15815X1007           | 0859 | -     | -      | 1                      | 1                  | 1.0mL                | NA | 1    | 1.0mL V0A6493                         |
| CCV      | 121VX10073           | 0916 | 18    | 1      | 1                      | 1                  | 2.5mL                |    |      | 5.0mL V0A6496 → 5.0mL                 |
| LCS      | H2KMH11AA            | 1002 | 1     | 2      | 1                      | 1                  |                      |    |      | 2.5mL V0A6496                         |
| LCS      | 1AD                  | 1033 | 2     | 1      |                        |                    |                      |    |      | ↓                                     |
| BIK      | 131K1                | 1109 | 3     |        |                        |                    |                      |    |      |                                       |
| 2        | H2KMH11AA            | 1131 | 4     |        |                        |                    |                      |    |      |                                       |
| H600300A | H2G871AA             | 1206 | 5     |        |                        |                    |                      |    |      |                                       |
|          | 9A                   | 1232 | 6     |        |                        |                    |                      |    |      |                                       |
|          | 9F                   | 1259 | 7     |        |                        |                    |                      |    |      |                                       |
|          | 9W                   | 1325 | 8     |        |                        |                    |                      |    |      |                                       |
|          | 9Z                   | 1351 | 9     |        |                        |                    |                      |    |      |                                       |
|          | 99                   | 1417 | 10    |        |                        |                    |                      |    |      |                                       |
|          | H2HCG11AA            | 1443 | 11    |        |                        |                    |                      |    |      |                                       |
|          | CM                   | 1510 | 12    |        |                        |                    |                      |    |      |                                       |
|          | CP                   | 1538 | 13    |        |                        |                    |                      |    |      | 1.5mL                                 |
|          | <del>H2KMH11AA</del> |      |       |        |                        |                    |                      |    |      | H2KMH11AA                             |
|          | <del>HX</del>        |      |       |        |                        |                    |                      |    |      |                                       |
|          | <del>HV</del>        |      |       |        |                        |                    |                      |    |      |                                       |
|          | 131K2                | 1609 | 14    |        |                        |                    |                      |    |      |                                       |
|          | H2KMH11AA            | 1620 | 15    | 18     |                        |                    |                      |    |      |                                       |
|          | HX                   | 1634 | 16    | 19     |                        |                    |                      |    |      |                                       |
|          | HW                   | 1659 | 17    | 20     |                        |                    |                      |    |      |                                       |
|          | HV                   | 1684 | 18    | 21     |                        |                    |                      |    |      |                                       |
|          | HR                   | 1649 | 19    | 22     |                        |                    |                      |    |      |                                       |
|          | HL                   | 2014 | 20    | 23     |                        |                    |                      |    |      |                                       |
|          | <del>H2HCG11AA</del> |      |       |        |                        |                    |                      |    |      |                                       |
|          | H2HCG11AA            | 1637 | 15    |        |                        |                    |                      |    |      | 1.4/7/06                              |
|          | H2HCO1AA             | 1703 | 16    |        |                        |                    |                      |    |      | Archive                               |
| BIK      | 131K3                | 1734 | 17    |        |                        |                    |                      |    |      | ↓ 'E'                                 |

Analyst/Date:                      4/10/06

MS033R7.doc, 11/3/05

Data File: /var/chem/gcms/mx.i/X040706,b/bfbxd07.d

Date : 07-APR-2006 08:59

Client ID: TUNE

Instrument: mx.i

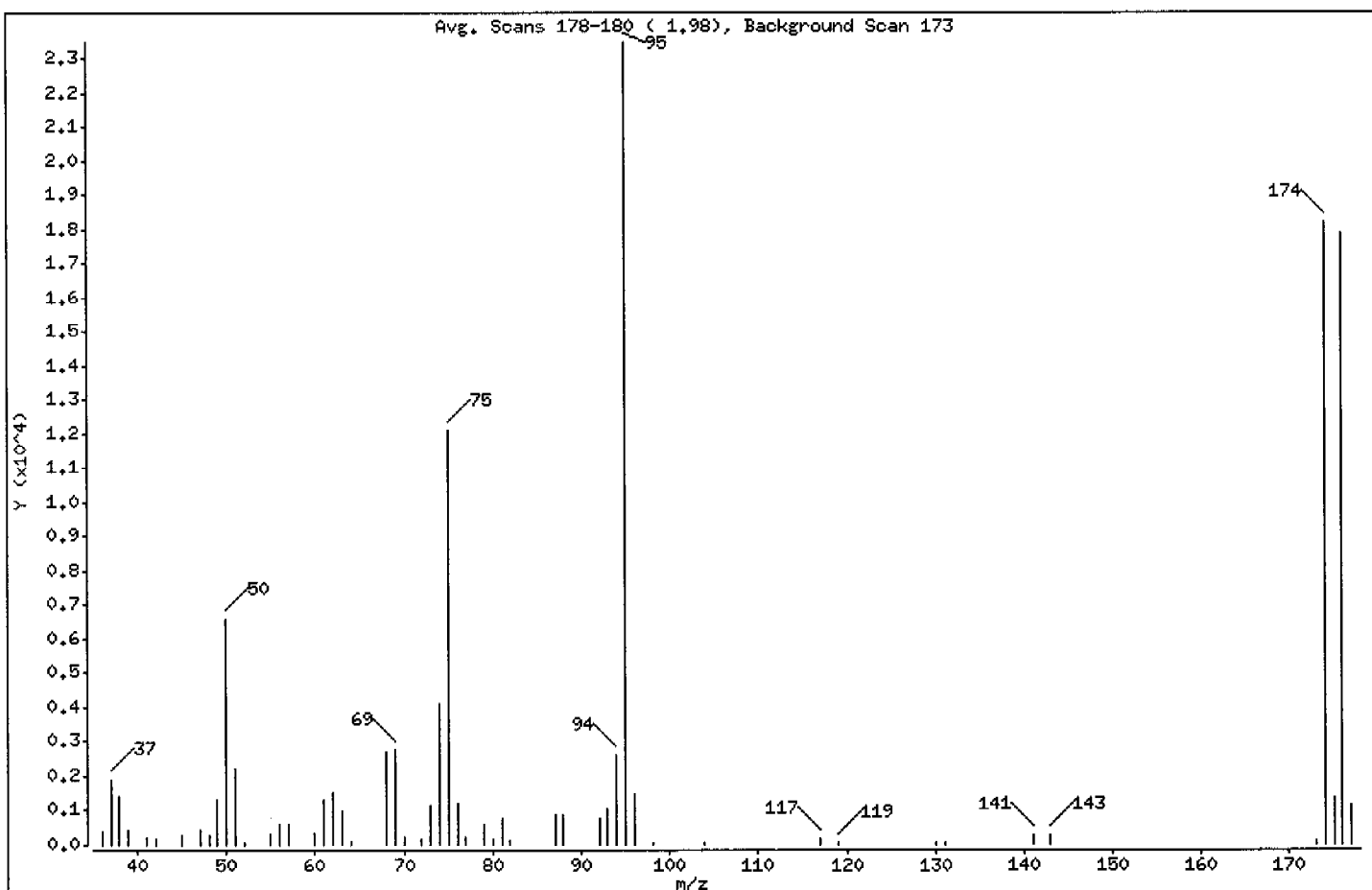
Sample Info: BFBXD07,1,3,,BFB,TUNE

Operator: 22980

Column phase: J &amp; W 624

Column diameter: 0.18

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          | 27.95                |
| 75  | 30.00 - 60.00% of mass 95          | 51.57                |
| 96  | 5.00 - 9.00% of mass 95            | 6.19                 |
| 173 | Less than 2.00% of mass 174        | 0.49 ( 0.63)         |
| 174 | 50.00 - 120.00% of mass 95         | 77.47                |
| 175 | 5.00 - 9.00% of mass 174           | 5.63 ( 7.27)         |
| 176 | 95.00 - 101.00% of mass 174        | 76.16 ( 98.31)       |
| 177 | 5.00 - 9.00% of mass 176           | 4.77 ( 6.27)         |



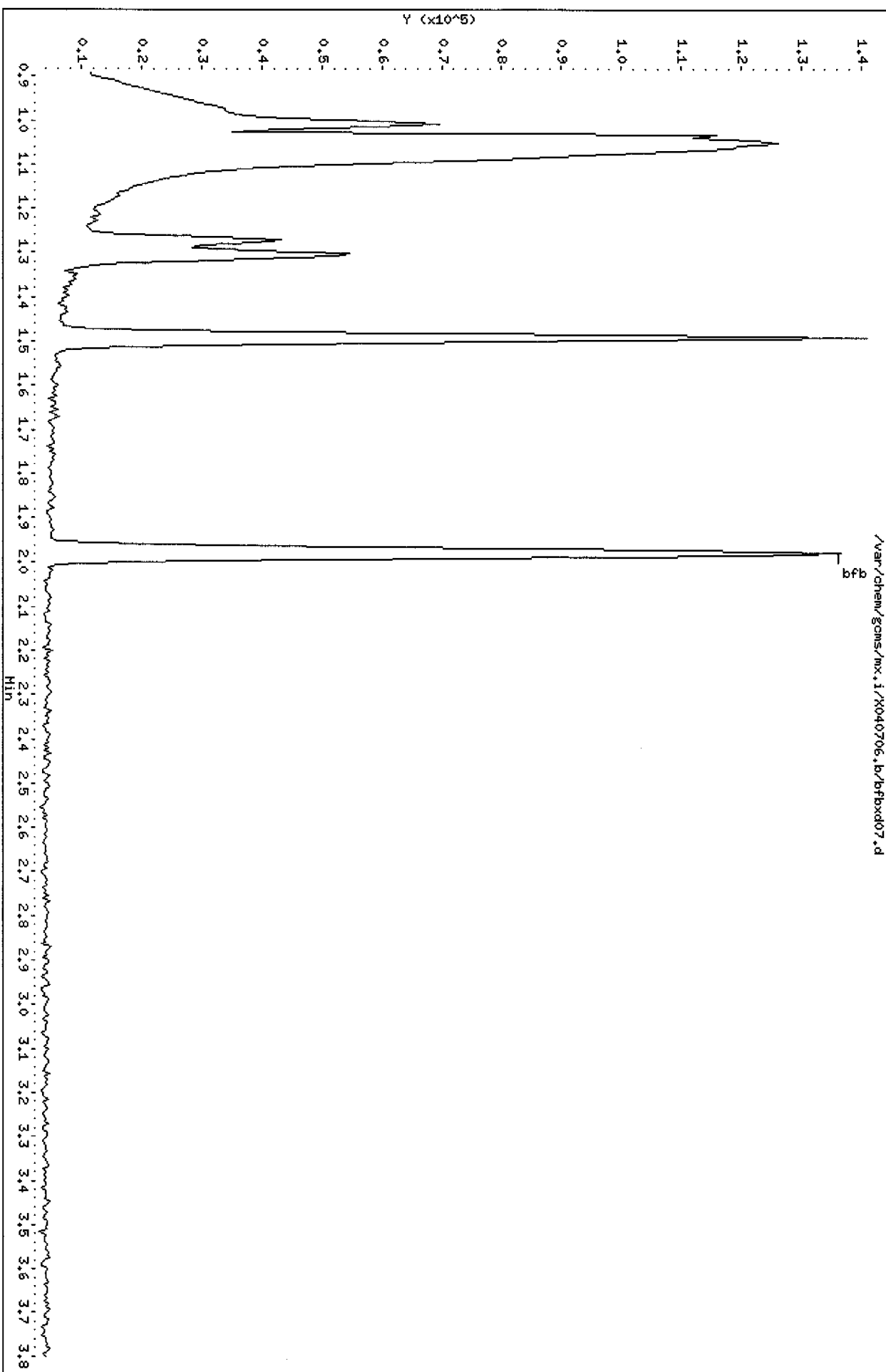
Data File: /var/chem/gcms/mx.i/X040706.b/bfbxd07.d  
Date : 07-APR-2006 08:59  
Client ID: TUNE  
Sample Info: BFBXD07,1,3,BFB,TUNE

Instrument: mx.i

Operator: 22980

Column phase: J & W 624

Column diameter: 0.18





Data File: /chem/gcms/mx.i/X040706.b/ccvxd073.d

Report Date: 07-Apr-2006 09:34

## STL Knoxville

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mx.i Injection Date: 07-APR-2006 09:16  
 Lab File ID: ccvxd073.d Init. Cal. Date(s): 15-FEB-2006 15-FEB-2006  
 Analysis Type: WATER Init. Cal. Times: 14:31 17:10  
 Lab Sample ID: CCVXD073 Quant Type: ISTD  
 Method: /chem/gcms/mx.i/X040706.b/8260B\_LM.m

| COMPOUND                       | RRF / AMOUNT | RF10    | CCAL<br>RRF10 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE  |
|--------------------------------|--------------|---------|---------------|------------|-------------|--------------------|-------------|
| \$ 4 Dibromofluoromethane      | 0.17002      | 0.16172 | 0.16172       | 0.000      | 4.88180     | 50.00000           | Averaged    |
| \$ 5 1,2-Dichloroethane-d4     | 0.13253      | 0.13234 | 0.13234       | 0.000      | 0.14437     | 50.00000           | Averaged    |
| \$ 6 Toluene-d8                | 4.89602      | 4.76421 | 4.76421       | 0.000      | 2.69217     | 50.00000           | Averaged    |
| \$ 7 4-Bromofluorobenzene      | 1.18566      | 1.14726 | 1.14726       | 0.000      | 3.23855     | 50.00000           | Averaged    |
| M 8 1,2-Dichloroethene (total) | 0.24107      | 0.23692 | 0.23692       | 0.000      | 1.72199     | 50.00000           | Averaged    |
| M 9 Xylene (total)             | 2.34073      | 2.58599 | 2.58599       | 0.000      | -10.47792   | 50.00000           | Averaged    |
| 10 Dichlorodifluoromethane     | 0.31656      | 0.34676 | 0.34676       | 0.000      | -9.54071    | 50.00000           | Averaged    |
| 11 Chloromethane (spcc)        | 0.46588      | 0.47701 | 0.47701       | 0.100      | -2.38954    | 50.00000           | Averaged    |
| 12 Vinyl Chloride (ccc)        | 0.36353      | 0.38354 | 0.38354       | 0.000      | -5.50275    | 19.00000           | Averaged    |
| 14 Bromomethane                | 0.14089      | 0.14339 | 0.14339       | 0.000      | -1.77498    | 50.00000           | Averaged    |
| 15 Chloroethane                | 0.19967      | 0.19625 | 0.19625       | 0.000      | 1.71522     | 50.00000           | Averaged    |
| 17 Trichlorofluoromethane      | 0.39771      | 0.39879 | 0.39879       | 0.000      | -0.27176    | 50.00000           | Averaged    |
| 19 1,1-Dichloroethene (ccc)    | 0.20131      | 0.21199 | 0.21199       | 0.000      | -5.30601    | 19.00000           | Averaged    |
| 20 *Freon 113                  | 0.17862      | 0.17325 | 0.17325       | 0.000      | 3.00737     | 50.00000           | Averaged    |
| 21 Acetone                     | 0.01416      | 0.02798 | 0.02798       | 0.000      | -97.52675   | 50.00000           | Averaged <- |
| 22 *Iodomethane                | 0.25220      | 0.23778 | 0.23778       | 0.000      | 5.71607     | 50.00000           | Averaged    |
| 23 Carbon Disulfide            | 0.76211      | 0.83827 | 0.83827       | 0.000      | -9.99323    | 50.00000           | Averaged    |
| 26 Methylene Chloride          | 0.15461      | 0.15293 | 0.15293       | 0.000      | 1.08179     | 50.00000           | Averaged    |
| 28 *Acrylonitrile              | 0.01987      | 0.02111 | 0.02111       | 0.000      | -6.25168    | 50.00000           | Averaged    |
| 29 trans-1,2-Dichloroethene    | 0.24401      | 0.23960 | 0.23960       | 0.000      | 1.80585     | 50.00000           | Averaged    |
| 32 1,1-Dichloroethane (spcc)   | 0.48414      | 0.52327 | 0.52327       | 0.100      | -8.08230    | 50.00000           | Averaged    |
| 33 *Vinyl Acetate              | 0.01138      | 0.01219 | 0.01219       | 0.000      | -7.12455    | 50.00000           | Averaged    |
| 34 2,2-Dichloropropane         | 0.43895      | 0.28664 | 0.28664       | 0.000      | 34.69938    | 50.00000           | Averaged    |
| 35 cis 1,2-Dichloroethene      | 0.22895      | 0.23423 | 0.23423       | 0.000      | -2.30578    | 50.00000           | Averaged    |
| 36 2-Butanone                  | 0.02209      | 0.02561 | 0.02561       | 0.000      | -15.93209   | 50.00000           | Averaged    |
| 37 Bromochloromethane          | 0.06020      | 0.05946 | 0.05946       | 0.000      | 1.23167     | 50.00000           | Averaged    |
| 38 *THF                        | 0.01354      | 0.01755 | 0.01755       | 0.000      | -29.59940   | 50.00000           | Averaged    |
| 39 Chloroform (ccc)            | 0.38007      | 0.41207 | 0.41207       | 0.000      | -8.41866    | 19.00000           | Averaged    |
| 40 1,1,1-Trichloroethane       | 0.42492      | 0.46593 | 0.46593       | 0.000      | -9.65064    | 50.00000           | Averaged    |
| 41 Carbon Tetrachloride        | 0.35897      | 0.36593 | 0.36593       | 0.000      | -1.93801    | 50.00000           | Averaged    |
| 42 1,1-Dichloropropene         | 0.39592      | 0.43501 | 0.43501       | 0.000      | -9.87067    | 50.00000           | Averaged    |
| 43 Benzene                     | 1.01276      | 1.09784 | 1.09784       | 0.000      | -8.40126    | 50.00000           | Averaged    |
| 44 1,2-Dichloroethane          | 0.17043      | 0.19340 | 0.19340       | 0.000      | -13.48075   | 50.00000           | Averaged    |
| 45 Trichloroethene             | 0.27175      | 0.28040 | 0.28040       | 0.000      | -3.18342    | 50.00000           | Averaged    |
| 46 1,2-Dichloropropane (ccc)   | 0.21365      | 0.23160 | 0.23160       | 0.000      | -8.40174    | 19.00000           | Averaged    |

Data File: /chem/gcms/mx.i/X040706.b/ccvxd073.d

Report Date: 07-Apr-2006 09:34

## STL Knoxville

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mx.i Injection Date: 07-APR-2006 09:16  
 Lab File ID: ccvxd073.d Init. Cal. Date(s): 15-FEB-2006 15-FEB-2006  
 Analysis Type: WATER Init. Cal. Times: 14:31 17:10  
 Lab Sample ID: CCVXD073 Quant Type: ISTD  
 Method: /chem/gcms/mx.i/X040706.b/8260B\_LM.m

| COMPOUND                       | RRF / AMOUNT | RF10    | CCAL<br>RRF10 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|--------------------------------|--------------|---------|---------------|------------|-------------|--------------------|------------|
| 48 Dibromomethane              | 0.05671      | 0.05927 | 0.05927       | 0.000      | -4.51155    | 50.00000           | Averaged   |
| 49 Bromodichloromethane        | 0.21218      | 0.22515 | 0.22515       | 0.000      | -6.11275    | 50.00000           | Averaged   |
| 51 cis-1,3-Dichloropropene     | 0.24849      | 0.25431 | 0.25431       | 0.000      | -2.34391    | 50.00000           | Averaged   |
| 52 4-Methyl-2-pentanone        | 0.05291      | 0.06617 | 0.06617       | 0.000      | -25.07184   | 50.00000           | Averaged   |
| 53 Toluene (ccc)               | 5.85760      | 6.41561 | 6.41561       | 0.000      | -9.52619    | 19.00000           | Averaged   |
| 54 trans-1,3-Dichloropropene   | 1.02664      | 0.92678 | 0.92678       | 0.000      | 9.72696     | 50.00000           | Averaged   |
| 56 1,1,2-Trichloroethane       | 0.46271      | 0.42312 | 0.42312       | 0.000      | 8.55621     | 50.00000           | Averaged   |
| 57 Tetrachloroethene           | 1.25859      | 1.31735 | 1.31735       | 0.000      | -4.66884    | 50.00000           | Averaged   |
| 58 1,3-Dichloropropane         | 0.88264      | 0.84079 | 0.84079       | 0.000      | 4.74131     | 50.00000           | Averaged   |
| 59 2-Hexanone                  | 0.19574      | 0.23340 | 0.23340       | 0.000      | -19.23876   | 50.00000           | Averaged   |
| 60 Chlorodibromomethane        | 0.57328      | 0.54665 | 0.54665       | 0.000      | 4.64597     | 50.00000           | Averaged   |
| 61 1,2-Dibromoethane           | 0.43092      | 0.39034 | 0.39034       | 0.000      | 9.41551     | 50.00000           | Averaged   |
| 62 Chlorobenzene (spcc)        | 3.00692      | 3.19686 | 3.19686       | 0.300      | -6.31673    | 50.00000           | Averaged   |
| 63 1,1,1,2-Tetrachloroethane   | 0.98962      | 0.91579 | 0.91579       | 0.000      | 7.46028     | 50.00000           | Averaged   |
| 64 Ethylbenzene (ccc)          | 2.06803      | 2.32875 | 2.32875       | 0.000      | -12.60740   | 19.00000           | Averaged   |
| 65 m&p-Xylene                  | 2.42362      | 2.71970 | 2.71970       | 0.000      | -12.21633   | 50.00000           | Averaged   |
| 66 o-Xylene                    | 2.07775      | 2.31857 | 2.31857       | 0.000      | -11.59055   | 50.00000           | Averaged   |
| 67 Styrene                     | 2.97838      | 3.08597 | 3.08597       | 0.000      | -3.61223    | 50.00000           | Averaged   |
| 68 Bromoform (spcc)            | 0.27707      | 0.26128 | 0.26128       | 0.100      | 5.69901     | 50.00000           | Averaged   |
| 69 Isopropylbenzene            | 6.66384      | 7.49716 | 7.49716       | 0.000      | -12.50501   | 50.00000           | Averaged   |
| 71 Bromobenzene                | 0.94134      | 1.00280 | 1.00280       | 0.000      | -6.52834    | 50.00000           | Averaged   |
| 72 1,1,2,2-Tetrachloroethane(s | 0.36738      | 0.37501 | 0.37501       | 0.300      | -2.07634    | 50.00000           | Averaged   |
| 73 1,2,3-Trichloropropane      | 0.09335      | 0.09076 | 0.09076       | 0.000      | 2.78337     | 50.00000           | Averaged   |
| 75 n-Propylbenzene             | 6.87900      | 8.03852 | 8.03852       | 0.000      | -16.85601   | 50.00000           | Averaged   |
| 76 2-Chlorotoluene             | 3.53018      | 3.87661 | 3.87661       | 0.000      | -9.81351    | 50.00000           | Averaged   |
| 77 1,3,5-Trimethylbenzene      | 3.71686      | 4.69744 | 4.69744       | 0.000      | -26.38191   | 50.00000           | Averaged   |
| 78 4-Chlorotoluene             | 3.72246      | 4.20961 | 4.20961       | 0.000      | -13.08658   | 50.00000           | Averaged   |
| 79 tert-Butylbenzene           | 3.92421      | 4.37731 | 4.37731       | 0.000      | -11.54619   | 50.00000           | Averaged   |
| 80 1,2,4-Trimethylbenzene      | 3.22636      | 4.20407 | 4.20407       | 0.000      | -30.30397   | 50.00000           | Averaged   |
| 81 sec-Butylbenzene            | 5.69974      | 6.62118 | 6.62118       | 0.000      | -16.16651   | 50.00000           | Averaged   |
| 82 1,3-Dichlorobenzene         | 1.68484      | 1.82160 | 1.82160       | 0.000      | -8.11740    | 50.00000           | Averaged   |
| 83 p-Isopropyltoluene          | 4.54682      | 5.37699 | 5.37699       | 0.000      | -18.25823   | 50.00000           | Averaged   |
| 84 1,4-Dichlorobenzene         | 1.52586      | 1.66781 | 1.66781       | 0.000      | -9.30315    | 50.00000           | Averaged   |
| 85 1,2-Dichlorobenzene         | 1.20943      | 1.25587 | 1.25587       | 0.000      | -3.84003    | 50.00000           | Averaged   |
| 86 n-Butylbenzene              | 3.99866      | 5.44218 | 5.44218       | 0.000      | -36.10005   | 50.00000           | Averaged   |

Data File: /chem/gcms/mx.i/X040706.b/ccvxd073.d  
 Report Date: 07-Apr-2006 09:34

STL Knoxville

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mx.i                      Injection Date: 07-APR-2006 09:16  
 Lab File ID: ccvxd073.d              Init. Cal. Date(s): 15-FEB-2006    15-FEB-2006  
 Analysis Type: WATER                  Init. Cal. Times:    14:31                  17:10  
 Lab Sample ID: CCVXD073              Quant Type:    ISTD  
 Method: /chem/gcms/mx.i/X040706.b/8260B\_LM.m

| COMPOUND                       | RRF / AMOUNT | RF10    | CCAL<br>RRF10 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|--------------------------------|--------------|---------|---------------|------------|-------------|--------------------|------------|
| 87 1,2-Dibromo-3-chloropropane | 0.04981      | 0.04271 | 0.04271       | 0.000      | 14.26643    | 50.00000           | Averaged   |
| 88 1,2,4-Trichlorobenzene      | 0.59486      | 0.70041 | 0.70041       | 0.000      | -17.74282   | 50.00000           | Averaged   |
| 89 Hexachlorobutadiene         | 0.98373      | 0.87275 | 0.87275       | 0.000      | 11.28172    | 50.00000           | Averaged   |
| 90 Napthalene                  | 0.43389      | 0.64578 | 0.64578       | 0.000      | -48.83592   | 50.00000           | Averaged   |
| 91 1,2,3-Trichlorobenzene      | 0.38406      | 0.43867 | 0.43867       | 0.000      | -14.21883   | 50.00000           | Averaged   |

Data File: /chem/gcms/mx.i/X040706.b/ccvxd073.d  
 Report Date: 07-Apr-2006 09:34

## STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /chem/gcms/mx.i/X040706.b/ccvxd073.d  
 Lab Smp Id: CCVXD073 Client Smp ID: VSTD010  
 Inj Date : 07-APR-2006 09:16  
 Operator : 22980 Inst ID: mx.i  
 Smp Info : CCVXD073,1,2,3,,VSTD010  
 Misc Info : X040706,8260B\_LM,focus.sub  
 Comment :  
 Method : /chem/gcms/mx.i/X040706.b/8260B\_LM.m  
 Meth Date : 07-Apr-2006 09:33 chemist Quant Type: ISTD  
 Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
 Als bottle: 1 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: focus.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                      | QUANT SIG | MASS   | RT     | EXP RT  | REL RT  | RESPONSE | AMOUNTS            |                   |
|--------------------------------|-----------|--------|--------|---------|---------|----------|--------------------|-------------------|
|                                |           |        |        |         |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene              | 96        | 4.851  | 4.851  | (1.000) | 1149191 | 10.0000  |                    |                   |
| * 2 Chlorobenzene-d5           | 119       | 7.582  | 7.582  | (1.000) | 214194  | 10.0000  |                    |                   |
| * 3 1,4 Dichlorobenzene-d4     | 152       | 10.746 | 10.746 | (1.000) | 242601  | 10.0000  |                    |                   |
| \$ 4 Dibromofluoromethane      | 113       | 4.273  | 4.273  | (0.881) | 185848  | 10.0000  | 9.5118             |                   |
| \$ 5 1,2-Dichloroethane-d4     | 65        | 4.553  | 4.553  | (0.939) | 152081  | 10.0000  | 9.9856             |                   |
| \$ 6 Toluene-d8                | 98        | 6.250  | 6.250  | (0.824) | 1020467 | 10.0000  | 9.7308             |                   |
| \$ 7 4-Bromofluorobenzene      | 95        | 8.872  | 8.872  | (0.826) | 278327  | 10.0000  | 9.6761             |                   |
| M 8 1,2-Dichloroethene (total) | 96        |        |        |         | 544521  | 20.0000  | 20.050             |                   |
| M 9 Xylene (total)             | 106       |        |        |         | 1661711 | 30.0000  | 33.602             |                   |
| 10 Dichlorodifluoromethane     | 85        | 1.128  | 1.128  | (0.232) | 398495  | 10.0000  | 10.954             |                   |
| 11 Chloromethane (spcc)        | 50        | 1.262  | 1.262  | (0.260) | 548181  | 10.0000  | 10.239             |                   |
| 12 Vinyl Chloride (ccc)        | 62        | 1.335  | 1.335  | (0.275) | 440757  | 10.0000  | 10.550             |                   |
| 14 Bromomethane                | 94        | 1.590  | 1.590  | (0.328) | 164786  | 10.0000  | 10.177             |                   |
| 15 Chloroethane                | 64        | 1.669  | 1.669  | (0.344) | 225524  | 10.0000  | 9.8285             |                   |

Data File: /chem/gcms/mx.i/X040706.b/ccvxd073.d

Report Date: 07-Apr-2006 09:34

| Compounds                        | QUANT SIG |       |        |         |          | AMOUNTS            |                   |
|----------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
|                                  | MASS      | RT    | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                            | =====     | ==    | =====  | =====   | =====    | =====              | =====             |
| 17 Trichlorofluoromethane        | 101       | 1.888 | 1.888  | (0.389) | 458281   | 10.0000            | 10.027            |
| 19 1,1-Dichloroethene (ccc)      | 96        | 2.326 | 2.326  | (0.480) | 243617   | 10.0000            | 10.531            |
| 20 *Freon 113                    | 151       | 2.351 | 2.351  | (0.485) | 199098   | 10.0000            | 9.6993            |
| 21 Acetone                       | 43        | 2.381 | 2.381  | (0.491) | 128601   | 40.0000            | 79.011            |
| 22 *Iodomethane                  | 142       | 2.442 | 2.442  | (0.503) | 273257   | 10.0000            | 9.4284            |
| 23 Carbon Disulfide              | 76        | 2.497 | 2.497  | (0.515) | 963337   | 10.0000            | 10.999            |
| 26 Methylene Chloride            | 84        | 2.746 | 2.746  | (0.566) | 175751   | 10.0000            | 9.8918            |
| 28 *Acrylonitrile                | 53        | 2.959 | 2.959  | (0.610) | 485237   | 200.000            | 212.50            |
| 29 trans-1,2-Dichloroethene      | 96        | 2.989 | 2.989  | (0.616) | 275351   | 10.0000            | 9.8194            |
| 32 1,1-Dichloroethane (spcc)     | 63        | 3.354 | 3.354  | (0.691) | 601336   | 10.0000            | 10.808            |
| 33 *Vinyl Acetate                | 86        | 3.421 | 3.421  | (0.705) | 28007    | 20.0000            | 21.425            |
| 34 2,2-Dichloropropane           | 77        | 3.853 | 3.853  | (0.794) | 329401   | 10.0000            | 6.5301            |
| 35 cis 1,2-Dichloroethene        | 96        | 3.859 | 3.859  | (0.796) | 269169   | 10.0000            | 10.230            |
| 36 2-Butanone                    | 43        | 3.871 | 3.871  | (0.798) | 117732   | 40.0000            | 46.373            |
| 37 Bromochloromethane            | 128       | 4.054 | 4.054  | (0.836) | 68329    | 10.0000            | 9.8768            |
| 38 *THF                          | 42        | 4.109 | 4.109  | (0.847) | 80651    | 40.0000            | 51.840            |
| 39 Chloroform (ccc)              | 83        | 4.139 | 4.139  | (0.853) | 473549   | 10.0000            | 10.842            |
| 40 1,1,1-Trichloroethane         | 97        | 4.291 | 4.291  | (0.885) | 535438   | 10.0000            | 10.965            |
| 41 Carbon Tetrachloride          | 117       | 4.437 | 4.437  | (0.915) | 420523   | 10.0000            | 10.194            |
| 42 1,1-Dichloropropene           | 75        | 4.437 | 4.437  | (0.915) | 499904   | 10.0000            | 10.987            |
| 43 Benzene                       | 78        | 4.607 | 4.607  | (0.950) | 1261632  | 10.0000            | 10.840            |
| 44 1,2-Dichloroethane            | 62        | 4.620 | 4.620  | (0.952) | 222254   | 10.0000            | 11.348            |
| 45 Trichloroethene               | 130       | 5.173 | 5.173  | (1.066) | 322234   | 10.0000            | 10.318            |
| 46 1,2-Dichloropropane (ccc)     | 63        | 5.362 | 5.362  | (1.105) | 266149   | 10.0000            | 10.840            |
| 48 Dibromomethane                | 93        | 5.459 | 5.459  | (1.125) | 68112    | 10.0000            | 10.451            |
| 49 Bromodichloromethane          | 83        | 5.605 | 5.605  | (1.155) | 258739   | 10.0000            | 10.611            |
| 51 cis-1,3-Dichloropropene       | 75        | 6.007 | 6.007  | (1.238) | 292250   | 10.0000            | 10.234            |
| 52 4-Methyl-2-pentanone          | 43        | 6.147 | 6.147  | (1.267) | 304188   | 40.0000            | 50.029            |
| 53 Toluene (ccc)                 | 91        | 6.311 | 6.311  | (0.832) | 1374187  | 10.0000            | 10.953            |
| 54 trans-1,3-Dichloropropene     | 75        | 6.506 | 6.506  | (0.858) | 198510   | 10.0000            | 9.0273            |
| 56 1,1,2-Trichloroethane         | 97        | 6.670 | 6.670  | (0.880) | 90629    | 10.0000            | 9.1444            |
| 57 Tetrachloroethene             | 164       | 6.816 | 6.816  | (0.899) | 282169   | 10.0000            | 10.467            |
| 58 1,3-Dichloropropane           | 76        | 6.822 | 6.822  | (0.900) | 180092   | 10.0000            | 9.5259            |
| 59 2-Hexanone                    | 43        | 6.907 | 6.907  | (0.911) | 199970   | 40.0000            | 47.696            |
| 60 Chlorodibromomethane          | 129       | 7.035 | 7.035  | (0.928) | 117089   | 10.0000            | 9.5354            |
| 61 1,2-Dibromoethane             | 107       | 7.138 | 7.138  | (0.941) | 83609    | 10.0000            | 9.0584            |
| 62 Chlorobenzene (spcc)          | 112       | 7.607 | 7.607  | (1.003) | 684750   | 10.0000            | 10.632            |
| 63 1,1,1,2-Tetrachloroethane     | 131       | 7.686 | 7.686  | (1.014) | 196157   | 10.0000            | 9.2540            |
| 64 Ethylbenzene (ccc)            | 106       | 7.716 | 7.716  | (1.018) | 498805   | 10.0000            | 11.261            |
| 65 m&p-Xylene                    | 106       | 7.838 | 7.838  | (1.034) | 1165087  | 20.0000            | 22.443            |
| 66 o-Xylene                      | 106       | 8.251 | 8.251  | (1.088) | 496624   | 10.0000            | 11.159            |
| 67 Styrene                       | 104       | 8.264 | 8.264  | (1.090) | 660997   | 10.0000            | 10.361            |
| 68 Bromoform (spcc)              | 173       | 8.464 | 8.464  | (1.116) | 55965    | 10.0000            | 9.4301            |
| 69 Isopropylbenzene              | 105       | 8.689 | 8.689  | (1.146) | 1605848  | 10.0000            | 11.250            |
| 71 Bromobenzene                  | 156       | 9.067 | 9.067  | (1.196) | 214793   | 10.0000            | 10.653            |
| 72 1,1,2,2-Tetrachloroethane(sp) | 83        | 9.061 | 9.061  | (1.195) | 80324    | 10.0000            | 10.208            |
| 73 1,2,3-Trichloropropane        | 110       | 9.115 | 9.115  | (0.848) | 22017    | 10.0000            | 9.7217            |

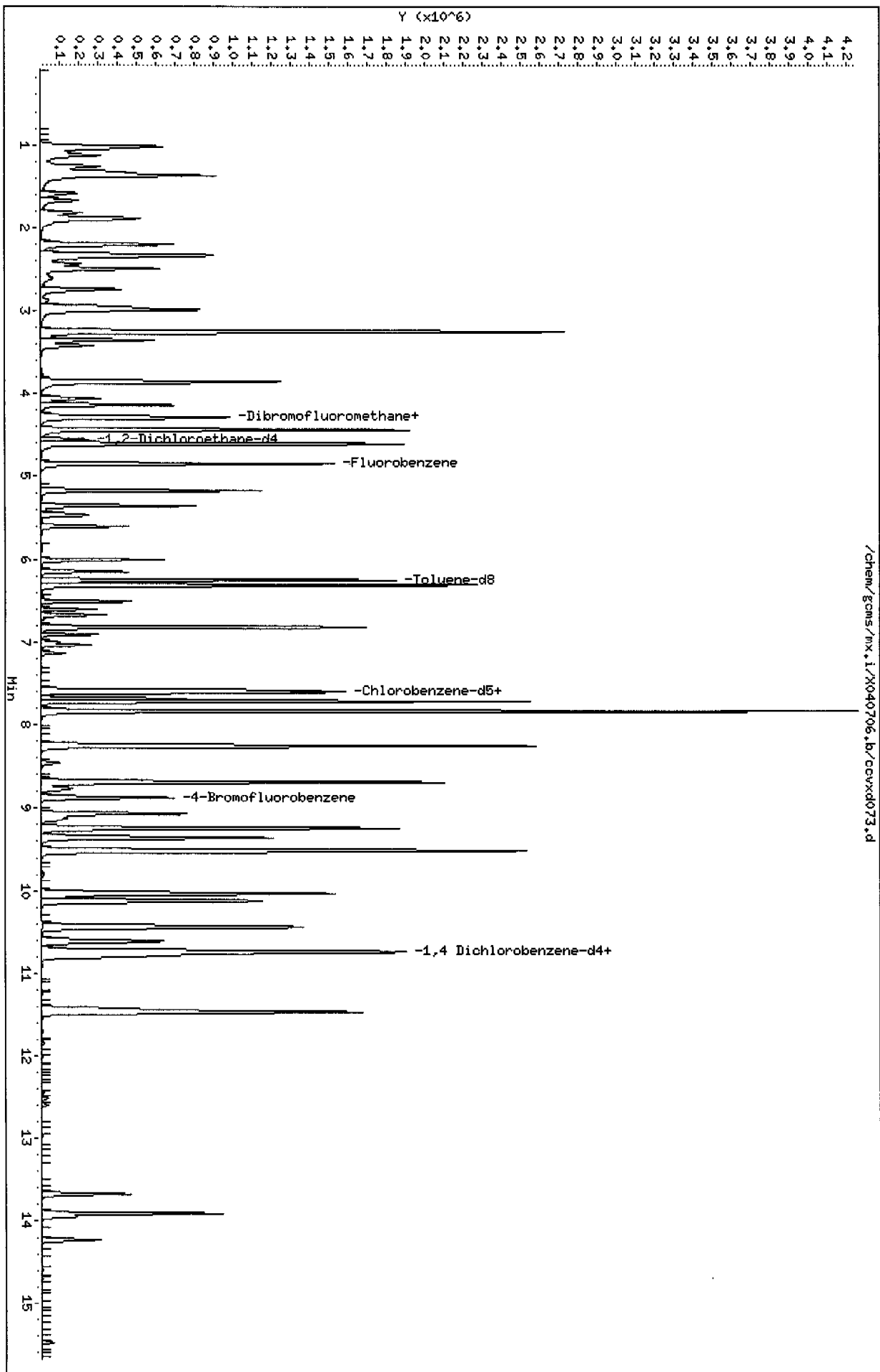
Data File: /chem/gcms/mx.i/X040706.b/ccvxd073.d

Report Date: 07-Apr-2006 09:34

| Compounds                      | QUANT SIG |        |        |         |          | AMOUNTS            |                   |
|--------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
|                                | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                          | =====     | ==     | =====  | =====   | =====    | =====              | =====             |
| 75 n-Propylbenzene             | 91        | 9.243  | 9.243  | (0.860) | 1950155  | 10.0000            | 11.686            |
| 76 2-Chlorotoluene             | 91        | 9.353  | 9.353  | (0.870) | 940470   | 10.0000            | 10.981            |
| 77 1,3,5-Trimethylbenzene      | 105       | 9.511  | 9.511  | (0.885) | 1139604  | 10.0000            | 12.638            |
| 78 4-Chlorotoluene             | 91        | 9.511  | 9.511  | (0.885) | 1021255  | 10.0000            | 11.309            |
| 79 tert-Butylbenzene           | 119       | 10.034 | 10.034 | (0.934) | 1061941  | 10.0000            | 11.155            |
| 80 1,2,4-Trimethylbenzene      | 105       | 10.125 | 10.125 | (0.942) | 1019913  | 10.0000            | 13.030            |
| 81 sec-Butylbenzene            | 105       | 10.435 | 10.435 | (0.971) | 1606307  | 10.0000            | 11.617            |
| 82 1,3-Dichlorobenzene         | 146       | 10.612 | 10.612 | (0.988) | 441922   | 10.0000            | 10.812            |
| 83 p-Isopropyltoluene          | 119       | 10.734 | 10.734 | (0.999) | 1304464  | 10.0000            | 11.826            |
| 84 1,4-Dichlorobenzene         | 146       | 10.788 | 10.788 | (1.004) | 404612   | 10.0000            | 10.930            |
| 85 1,2-Dichlorobenzene         | 146       | 11.433 | 11.433 | (1.064) | 304675   | 10.0000            | 10.384            |
| 86 n-Butylbenzene              | 91        | 11.470 | 11.470 | (1.067) | 1320279  | 10.0000            | 13.610            |
| 87 1,2-Dibromo-3-chloropropane | 157       | 12.595 | 12.595 | (1.172) | 10360    | 10.0000            | 8.5734            |
| 88 1,2,4-Trichlorobenzene      | 180       | 13.678 | 13.678 | (1.273) | 169919   | 10.0000            | 11.774            |
| 89 Hexachlorobutadiene         | 225       | 13.909 | 13.909 | (1.294) | 211729   | 10.0000            | 8.8718            |
| 90 Napthalene                  | 128       | 13.946 | 13.946 | (1.298) | 156667   | 10.0000            | 14.884            |
| 91 1,2,3-Trichlorobenzene      | 180       | 14.232 | 14.232 | (1.324) | 106421   | 10.0000            | 11.422            |

Data File: /chem/gcms/mx.i/X040706.b/ccvxd073.d  
Date : 07-APR-2006 09:16  
Client ID: VSTD010  
Sample Info: CCVXD073,1,2,3,VSTD010  
Purge Volume: 25.0  
Column phase: J+H 624

Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18



## STL Volatile GC/MS Initial Calibration Data Review / Narrative Checklist

1738

Method: 8260B – KNOX-MS-0015, Rev. 8

|                |        |             |    |                       |         |         |                          |
|----------------|--------|-------------|----|-----------------------|---------|---------|--------------------------|
| Analysis Date: | 5/3/06 | Instrument: | MX | ICAL Batch/Scan Name: | X050306 | Scanned | <input type="checkbox"/> |
|----------------|--------|-------------|----|-----------------------|---------|---------|--------------------------|

| Review Items                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | N/A          | Yes | No | If No, why is data reportable?                                                                            | 2nd<br>✓ |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----|----|-----------------------------------------------------------------------------------------------------------|----------|
| 1. Did BFB meet tune criteria?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              | ✓   |    |                                                                                                           | ✓        |
| 2. Were all standards injected within 12 hr of BFB?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              | ✓   |    |                                                                                                           | ✓        |
| 3. Was date/time of analysis verified between analysis header and logbook as correct?                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              | ✓   |    |                                                                                                           | ✓        |
| 4. Were ≥ 5 levels of each compound/surrogate analyzed?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              | ✓   |    |                                                                                                           | ✓        |
| 5. Was low level standard at or below RL?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ✓            |     |    | See comments                                                                                              | NS       |
| 6. Was the primary ion used for all compounds?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              | ✓   |    | <input type="checkbox"/> Secondary ion used due to interferences for: _____                               | ✓        |
| 7. Do the average RFs for SPCCs meet minimum RF?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              | ✓   |    |                                                                                                           | ✓        |
| 8. Are %RSD <30% for CCCs?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ✓            |     |    |                                                                                                           | NS       |
| 9. Was a linear fit or quadratic fit used for analytes >15% RSD?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ✓            |     |    |                                                                                                           | NS       |
| 10. If curves were used, is correlation coefficient ≥0.990?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ✓            |     |    |                                                                                                           | NS       |
| 11. At least 6 consecutive points used for quadratic curves?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ✓            |     |    |                                                                                                           | NS       |
| 12. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous?                                                                                                                                                                                                                                                                                                                                                                                                                                                | ✓            |     |    |                                                                                                           | NS       |
| 13. Is the "Y" intercept less than the RL for each curve?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ✓            |     |    |                                                                                                           | NS       |
| 14. Were all peaks identified automatically?<br>If not, list analytes:                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              | ✓   |    |                                                                                                           | ✓        |
| 15. If manual integrations were performed, are they clearly identified, initialed, dated and reason given?                                                                                                                                                                                                                                                                                                                                                                                                                                        | ✓            |     |    | Reasons: 1)Corrected split peak; 2)Unresolved peak; 3)tailing; 4)RT shift; 5)wrong peak selected; 6)other | NS       |
| 16. Are the ICAL start and end dates/times correct on ICAL summary?                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              | ✓   |    |                                                                                                           | ✓        |
| 17. Elution order checked on isomeric pairs?<br><ul style="list-style-type: none"> <li>hexane and vinyl acetate</li> <li>cis- and trans- isomers</li> <li>trichlorofluoromethane and Freon 113</li> <li>ethyl benzene / m/p-xylene / o-xylene</li> <li>n-propylbenzene / 2-chlorotoluene / 4-chlorotoluene</li> <li>1,3,5-trimethylbenzene / 1,2,4-trimethylbenzene / sec-butylbenzene</li> <li>1,3-, 1,4-, and 1,2-dichlorobenzene</li> <li>1,2,4 and 1,2,3 -trichlorobenzene</li> <li>chlorobenzene-d5 and 1,1,1,2-tetrachloroethane</li> </ul> | NS<br>5-7-06 | ✓   |    |                                                                                                           | NS       |
| 18. If criteria were not met, was a NCM generated, approved by supervisor, and copy included in folder?                                                                                                                                                                                                                                                                                                                                                                                                                                           |              | ✓   |    | NCM 05-06213 - see comment                                                                                | ✓        |
| 19. Does the ICAL folder contain complete data in the following order? Data review checklist, tune pass/fail page, m/z list, tune chromatogram, ICAL summary, & curves, followed by Quan reports, chromatograms & manual integrations, in order from low to high standard.                                                                                                                                                                                                                                                                        |              | ✓   |    |                                                                                                           | ✓        |
| 20. Was the 2nd source calibration verification standard within 70-130% and are results in ICAL folder? (25% DOD)                                                                                                                                                                                                                                                                                                                                                                                                                                 |              | ✓   |    |                                                                                                           | ✓        |

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |       |         |                     |    |       |          |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------|---------------------|----|-------|----------|
| Analyst:  | ML                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Date: | 5/10/06 | 2nd Level Reviewer: | ML | Date: | 05/10/06 |
| Comments: | <p>This calibration curve ranges from 10 → 320 µg/L. (0.25 → 8 µg)</p> <p>this is to allow a calculation from samples analyzed in lot H6D030169 that were analyzed on 4/7/06 that were over the original initial calibration's range. This is discussed in NCM 05-06213. In addition, chlorobenzene in the 320 µg/L std was slightly saturated. This point was still included in the calibration (Surrogates not included in this quantitation due to the surrogates are included in the original quantitation).</p> |       |         |                     |    |       |          |



## STL Knoxville GC/MS Volatiles Run Log - Instrument MX

|                     |              |            |            |             |          |    |
|---------------------|--------------|------------|------------|-------------|----------|----|
| Target Batch        | X050306      | XXXXXXXXXX | XXXXXXXXXX | Loop #      | 1        | —  |
| QuantIMS Batch      | —            | —          | —          | Standard ID | V0A6527  | —  |
| Method              | B2607        | XXXXXXXXXX | XXXXXXXXXX | Matrix      | N20      | —  |
| SOP#                | Knox-MS-0015 | XXXXXXXXXX | XXXXXXXXXX | IS Amt      | 0.969 µl | —  |
| Initial Cal Batch   | X021506 F    | XXXXXXXXXX | XXXXXXXXXX | SS Amt      | —        | —  |
| CCAL IS Areas 8260: | 1027267      | 184227     | 189905     | Heated?     | Y        | ND |

☒ Date/Time Verified    Preventive Maintenance Performed ☐ NA or ☐

| Lot                                                                                                                                                                           | Lab File ID  | Time | ALS # | Loop # | Solvent Dilution Factor | MS Dilution Factor | Volume/Weight Purged | pH | Init | Standards ID/Spike ID/ and/or Comments |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------|-------|--------|-------------------------|--------------------|----------------------|----|------|----------------------------------------|
| TUNE                                                                                                                                                                          | BFBXE03      | 1425 | —     | —      | —                       | —                  | 1 µl                 | NA | T/W  | 1 µl V0A6526                           |
| B260 C-Cal                                                                                                                                                                    | CCVXE03      | 1445 | 18    | 1      | 1                       | 1                  | 25 ml                |    |      | 5 µl V0A6529 / 50 ml                   |
| TCLP C-Cal (10)                                                                                                                                                               | TCLP10       | 1512 | 19    | 1      | 1                       | 1                  |                      |    |      | 2.5 µl V0A6531 / 50 ml                 |
| TCLP 80                                                                                                                                                                       | 80           | 1537 | 20    | 1      | 1                       | 1                  |                      |    |      | 20 µl                                  |
| 0160                                                                                                                                                                          | 160          | 1605 | 21    | 1      | 1                       | 1                  |                      |    |      | 40 µl                                  |
| 0240                                                                                                                                                                          | 240          | 1632 | 22    | 1      | 1                       | 1                  |                      |    |      | 60 µl                                  |
| 0320                                                                                                                                                                          | 320          | 1659 | 23    | 1      | 1                       | 1                  |                      |    |      | 80 µl                                  |
| BLANK                                                                                                                                                                         | BLANK1       | 1726 | 24    | 1      | 1                       | 1                  |                      |    |      |                                        |
|                                                                                                                                                                               | B1K2         | 1753 | 25    | 1      | 1                       | 1                  |                      |    |      |                                        |
|                                                                                                                                                                               | B1K2 V0A6531 | 1953 | 26    | 1      | 1                       | 1                  |                      |    |      | 60 µl V0A6531 + 5 µl V0A6526           |
| <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%) rotate(-45deg); font-size: 2em; opacity: 0.5;">             Not 5/3/06           </div> |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |
|                                                                                                                                                                               |              |      |       |        |                         |                    |                      |    |      |                                        |

Analyst/Date: WTS 5/3/06 /

MS033R7.doc, 11/3/05

Data File: /var/chem/gcms/mx.i/X050306.b/bfbxe03.d

Date : 03-MAY-2006 14:25

Client ID: TUNE

Instrument: mx.i

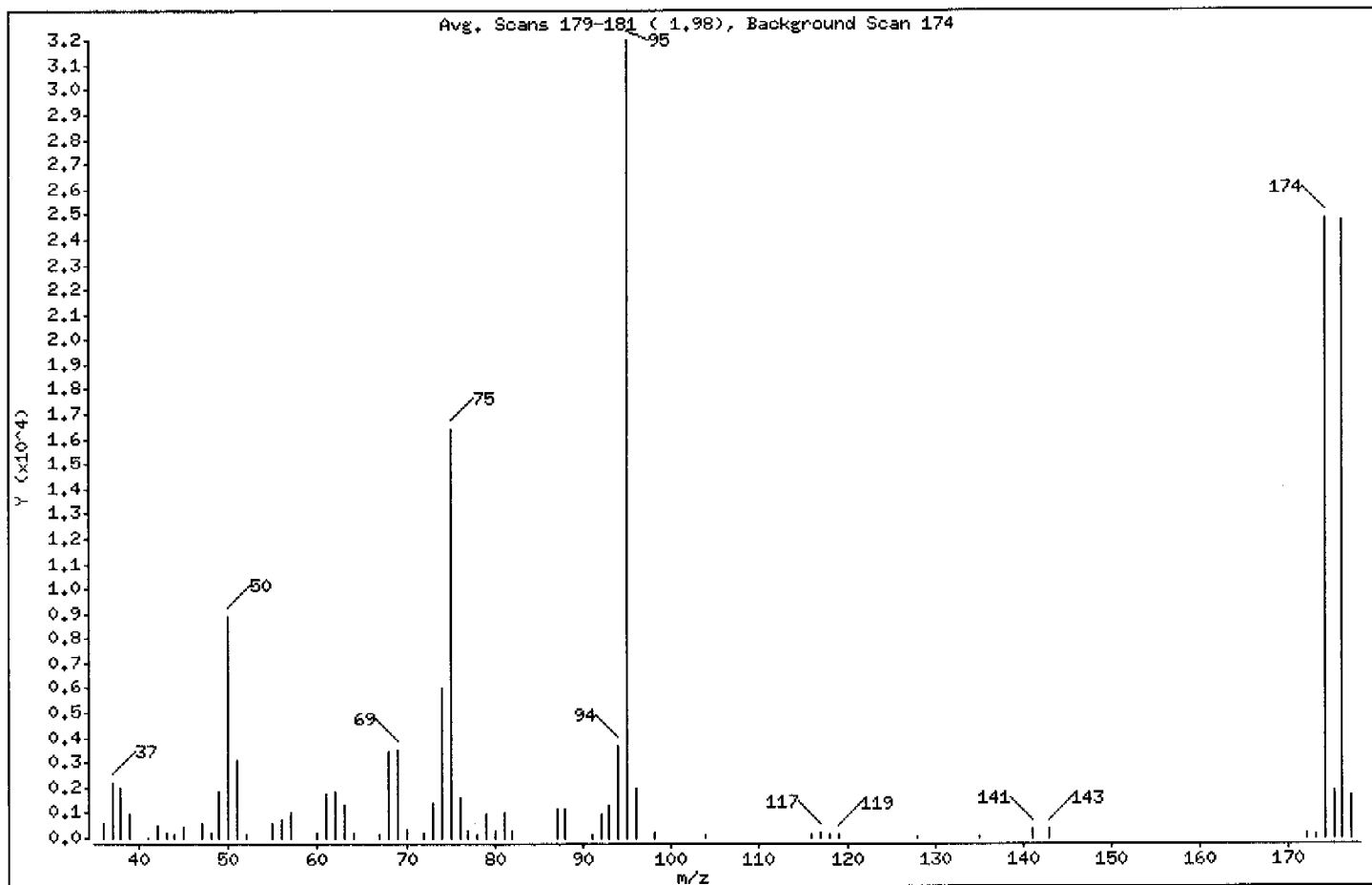
Sample Info: BFBXE03,1,3,,BFB,TUNE

Operator: 60487

Column phase: J &amp; W 624

Column diameter: 0.18

1 bfb



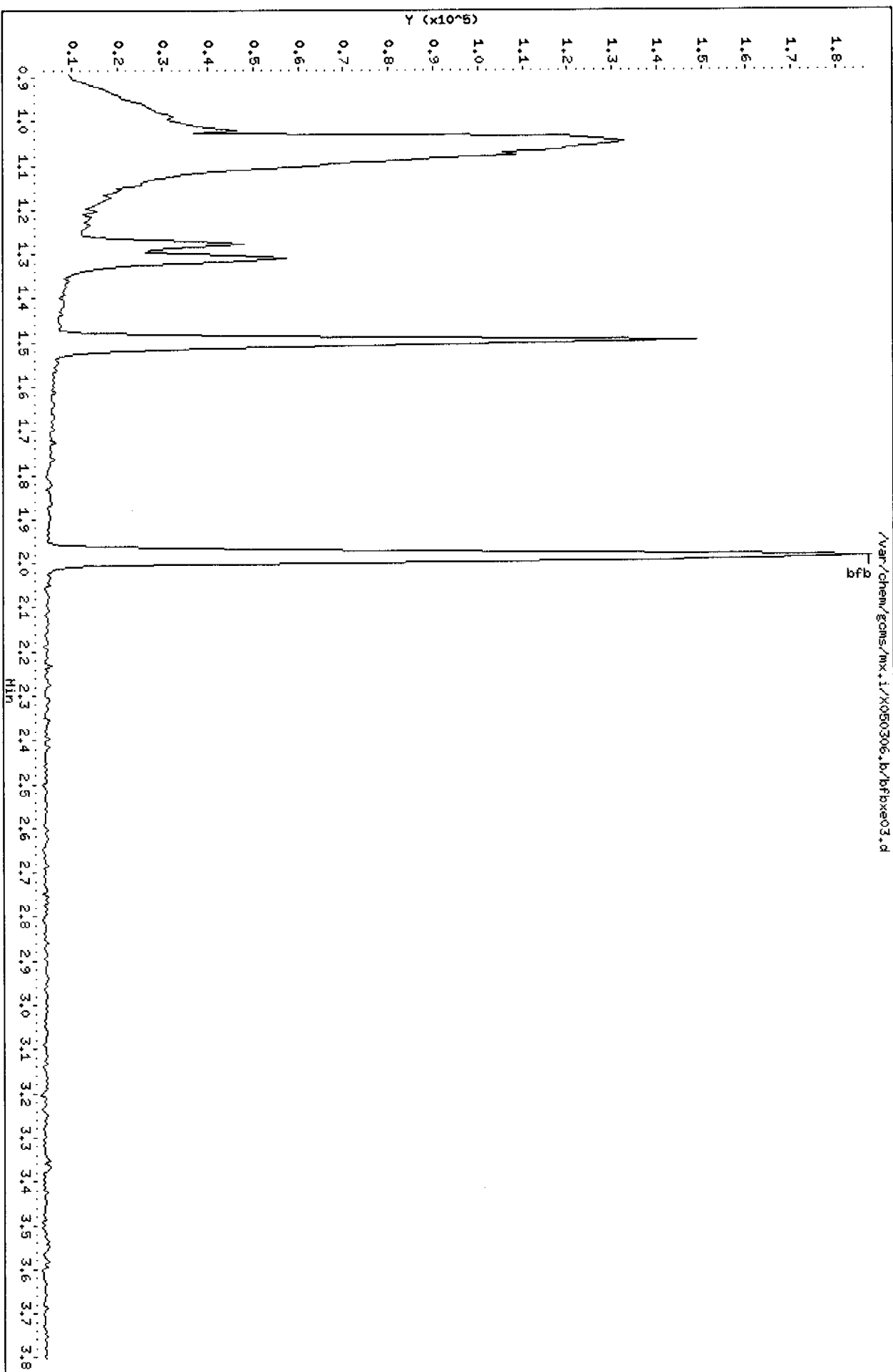
| $m/e$ | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-------|------------------------------------|----------------------|
| 95    | Base Peak, 100% relative abundance | 100.00               |
| 50    | 15.00 - 40.00% of mass 95          | 27.70                |
| 75    | 30.00 - 60.00% of mass 95          | 51.39                |
| 96    | 5.00 - 9.00% of mass 95            | 6.21                 |
| 173   | Less than 2.00% of mass 174        | 0.38 ( 0.50)         |
| 174   | 50.00 - 120.00% of mass 95         | 77.49                |
| 175   | 5.00 - 9.00% of mass 174           | 6.02 ( 7.77)         |
| 176   | 95.00 - 101.00% of mass 174        | 77.14 ( 99.55)       |
| 177   | 5.00 - 9.00% of mass 176           | 5.25 ( 6.80)         |



Data File: /var/chem/gcms/mx.i/X050306.b/bfbxe03.d  
Date: 03-MAY-2006 14:25  
Client ID: TUNE  
Sample Info: BFBXE03,1,3,,BFB,TUNE

Column phase: J & W 624

Instrument: mx.i  
Operator: 60487  
Column diameter: 0.18



Report Date : 09-May-2006 12:16

STL Knoxville

## INITIAL CALIBRATION DATA

Start Cal Date : 03-MAY-2006 15:12  
 End Cal Date : 03-MAY-2006 16:59  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/gcms/mx.i/x050306.b/clbz.m  
 Cal Date : 09-May-2006 12:16 wilesd

## Calibration File Names:

Level 3: /var/chem/gcms/mx.i/x050306.b/tclp10.d  
 Level 6: /var/chem/gcms/mx.i/x050306.b/tclp80.d  
 Level 8: /var/chem/gcms/mx.i/x050306.b/tclp160.d  
 Level 9: /var/chem/gcms/mx.i/x050306.b/tclp240.d  
 Level 10: /var/chem/gcms/mx.i/x050306.b/tclp320.d

320  
 240  
 160  
 80  
 10

| Compound                       | 10<br>Level 3 | 80<br>Level 6 | 160<br>Level 8 | 240<br>Level 9 | 320<br>Level 10 | Curve | b | Coefficients<br>ml | m2 | RSD<br>or R <sup>2</sup> |
|--------------------------------|---------------|---------------|----------------|----------------|-----------------|-------|---|--------------------|----|--------------------------|
| M 8 1,2-Dichloroethene (total) | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |
| M 9 Xylene (total)             | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |
| 10 Dichlorodifluoromethane     | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |
| 11 Chloromethane (spcc)        | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |
| 12 Vinyl Chloride (ccc)        | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |
| 13 *1,3-Butadiene              | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |
| 14 Bromomethane                | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |
| 15 Chloroethane                | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |
| 16 *Vinyl Bromide              | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |
| 17 Trichlorofluoromethane      | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |
| 18 *2-Chloropropane            | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |
| 19 1,1-Dichloroethene (ccc)    | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |
| 20 *Freon 113                  | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |
| 21 Acetone                     | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |
| 22 *Iodomethane                | ++++          | ++++          | ++++           | ++++           | ++++            | AVRG  |   | 0.000e+00          |    | 0.000e+00                |

320  
 240  
 160  
 80  
 10

Report Date : 09-May-2006 12:16

## STL Knoxville

## INITIAL CALIBRATION DATA

Start Cal Date : 03-MAY-2006 15:12  
 End Cal Date : 03-MAY-2006 16:59  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/gcms/mx.i/x050306.b/clbz.m  
 Cal Date : 09-May-2006 12:16 wilesd

7/25/06

| Compound                     | 100     |         | 200     |         | 320      |          | Curve | Coefficients |           | RSD<br>or R^2 |
|------------------------------|---------|---------|---------|---------|----------|----------|-------|--------------|-----------|---------------|
|                              | Level 3 | Level 6 | Level 8 | Level 9 | Level 10 | Level 10 |       | b            | m1        | m2            |
| 45 Trichloroethene           | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 46 1,2-Dichloropropane (ccc) | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 47 *Methyl Methacrylate      | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 48 Dibromomethane            | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 49 Bromodichloromethane      | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 50 *2-Chloroethylvinylether  | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 51 cis-1,3-Dichloropropene   | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 52 4-Methyl-2-pentanone      | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 53 Toluene (ccc)             | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 54 trans-1,3-Dichloropropene | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 55 *Ethyl Methacrylate       | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 56 1,1,2-Trichloroethane     | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 57 Tetrachloroethene         | 1.40265 | 1.43614 | 1.42347 | 1.42934 | 1.36135  | 1.41059  | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 58 1,3-Dichloropropane       | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 59 2-Hexanone                | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 60 Chlorodibromomethane      | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 61 1,2-Dibromoethane         | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 62 Chlorobenzene (spcc)      | 3.55544 | 3.40844 | 3.34833 | 3.27918 | 2.94936  | 3.30815  | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 63 1,1,1,2-Tetrachloroethane | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 64 Ethylbenzene (ccc)        | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 65 msp-Xylene                | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |
| 66 o-Xylene                  | ++++    | ++++    | ++++    | ++++    | ++++     | ++++     | AVRG  | 0.000e+00    | 0.000e+00 | <             |

Data File: /var/chem/gcms/mx.i/X050306.b/tclp10.d  
 Report Date: 09-May-2006 12:21

# STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X050306.b/tclp10.d  
 Lab Smp Id: TCLP10 Client Smp ID: VSTD010  
 Inj Date : 03-MAY-2006 15:12  
 Operator : 60487 Inst ID: mx.i  
 Smp Info : TCLP10,1,1,3,,VSTD010,  
 Misc Info : X050306,8260B\_LM,clbz.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X050306.b/clbz.m  
 Meth Date : 09-May-2006 12:20 wilesd Quant Type: ISTD  
 Cal Date : 03-MAY-2006 15:12 Cal File: tclp10.d  
 Als bottle: 19 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: clbz.sub  
 Target Version: 3.50

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
 Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

|                            |      |        |        |         |          | AMOUNTS |         |
|----------------------------|------|--------|--------|---------|----------|---------|---------|
| QUANT SIG                  |      |        |        |         |          | CAL-AMT | ON-COL  |
| Compounds                  | MASS | RT     | EXP RT | REL RT  | RESPONSE | ( ug/L) | ( ug/L) |
| =====                      | ==== | ==     | =====  | =====   | =====    | =====   | =====   |
| * 1 Fluorobenzene          | 96   | 4.851  | 4.851  | (1.000) | 954873   | 10.0000 |         |
| * 2 Chlorobenzene-d5       | 119  | 7.582  | 7.582  | (1.000) | 176393   | 10.0000 |         |
| * 3 1,4 Dichlorobenzene-d4 | 152  | 10.740 | 10.740 | (1.000) | 181219   | 10.0000 |         |
| 57 Tetrachloroethene       | 164  | 6.816  | 6.816  | (0.899) | 247417   | 10.0000 | 10.0000 |
| 62 Chlorobenzene (spcc)    | 112  | 7.607  | 7.607  | (1.003) | 627155   | 10.0000 | 10.0000 |

Data File: /var/chem/gcms/mx.i/X050306.b/tc1p10.d

Date : 03-MAY-2006 15:12

Client ID: WSTD010

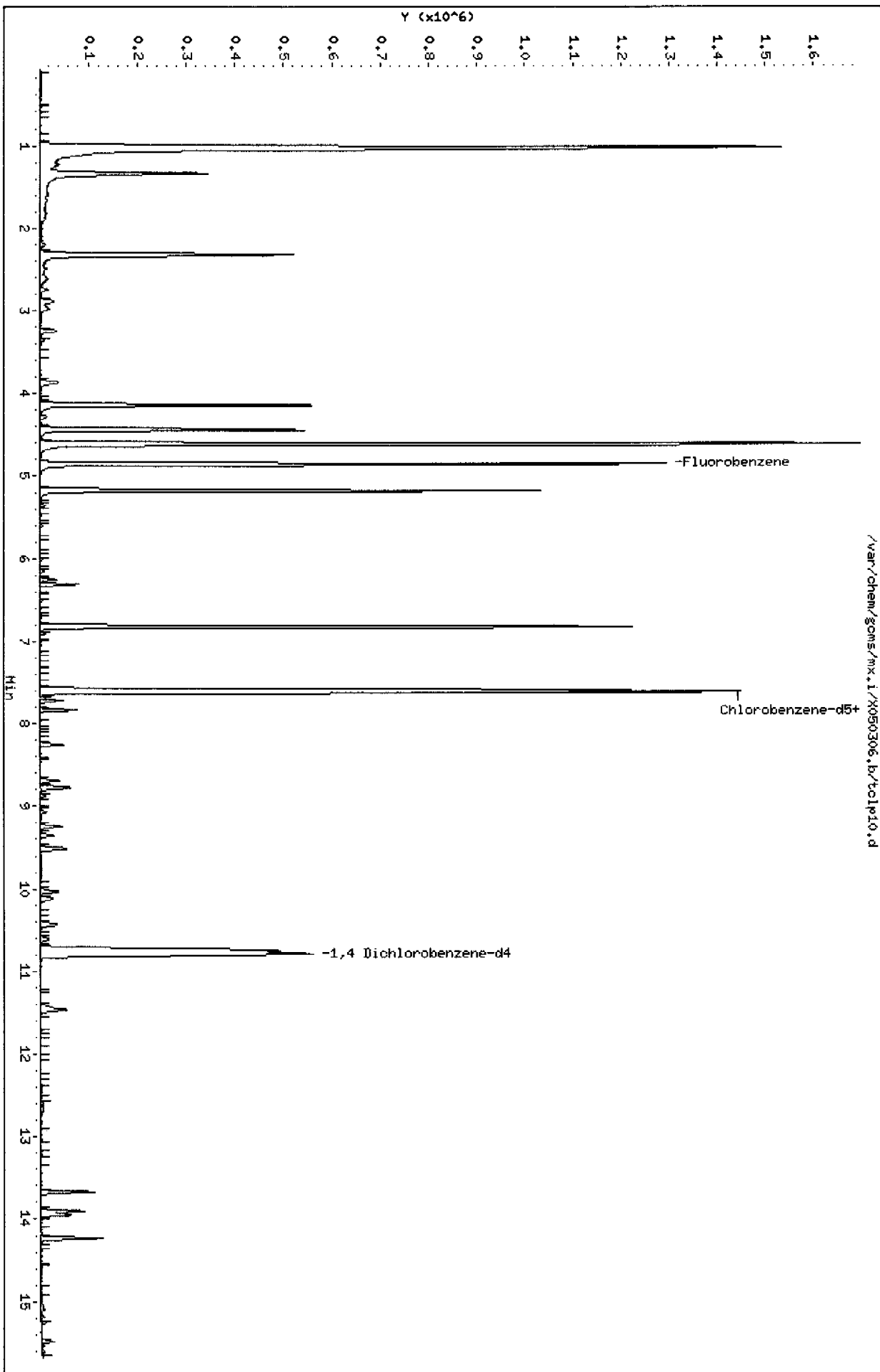
Sample Info: TCLP10,1,1,3,WSTD010,

Column phase: J+W 624

Instrument: mx.i

Operator: 60487

Column diameter: 0.18





Data File: /var/chem/gcms/mx.i/X050306.b/tclp80.d  
 Report Date: 09-May-2006 12:21

# STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X050306.b/tclp80.d  
 Lab Smp Id: TCLP80 Client Smp ID: VSTD080  
 Inj Date : 03-MAY-2006 15:39  
 Operator : 60487 Inst ID: mx.i  
 Smp Info : TCLP80,1,1,6,,VSTD080,  
 Misc Info : X050306,8260B\_LM,clbz.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X050306.b/clbz.m  
 Meth Date : 09-May-2006 12:20 wilesd Quant Type: ISTD  
 Cal Date : 03-MAY-2006 15:39 Cal File: tclp80.d  
 Als bottle: 20 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: clbz.sub  
 Target Version: 3.50

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
 Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

| Compounds                  | QUANT SIG |        |        |         |          |         | AMOUNTS    |  |
|----------------------------|-----------|--------|--------|---------|----------|---------|------------|--|
|                            | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT | ON-COL     |  |
|                            |           |        |        |         |          | ( ug/L) | ( ug/L)    |  |
| =====                      | =====     | ==     | =====  | =====   | =====    | =====   | =====      |  |
| * 1 Fluorobenzene          | 96        | 4.850  | 4.851  | (1.000) | 948436   | 10.0000 |            |  |
| * 2 Chlorobenzene-d5       | 119       | 7.582  | 7.582  | (1.000) | 173153   | 10.0000 |            |  |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.751 | 10.740 | (1.000) | 170595   | 10.0000 |            |  |
| 57 Tetrachloroethene       | 164       | 6.821  | 6.816  | (0.900) | 1989371  | 80.0000 | 80.944 (A) |  |
| 62 Chlorobenzene (spcc)    | 112       | 7.612  | 7.607  | (1.004) | 4721446  | 80.0000 | 78.311     |  |

## QC Flag Legend

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

Data File: /var/chem/gcms/mx.i/X050306.b/tc1p80.d

Date: 03-MAY-2006 15:39

Client ID: VSTD080

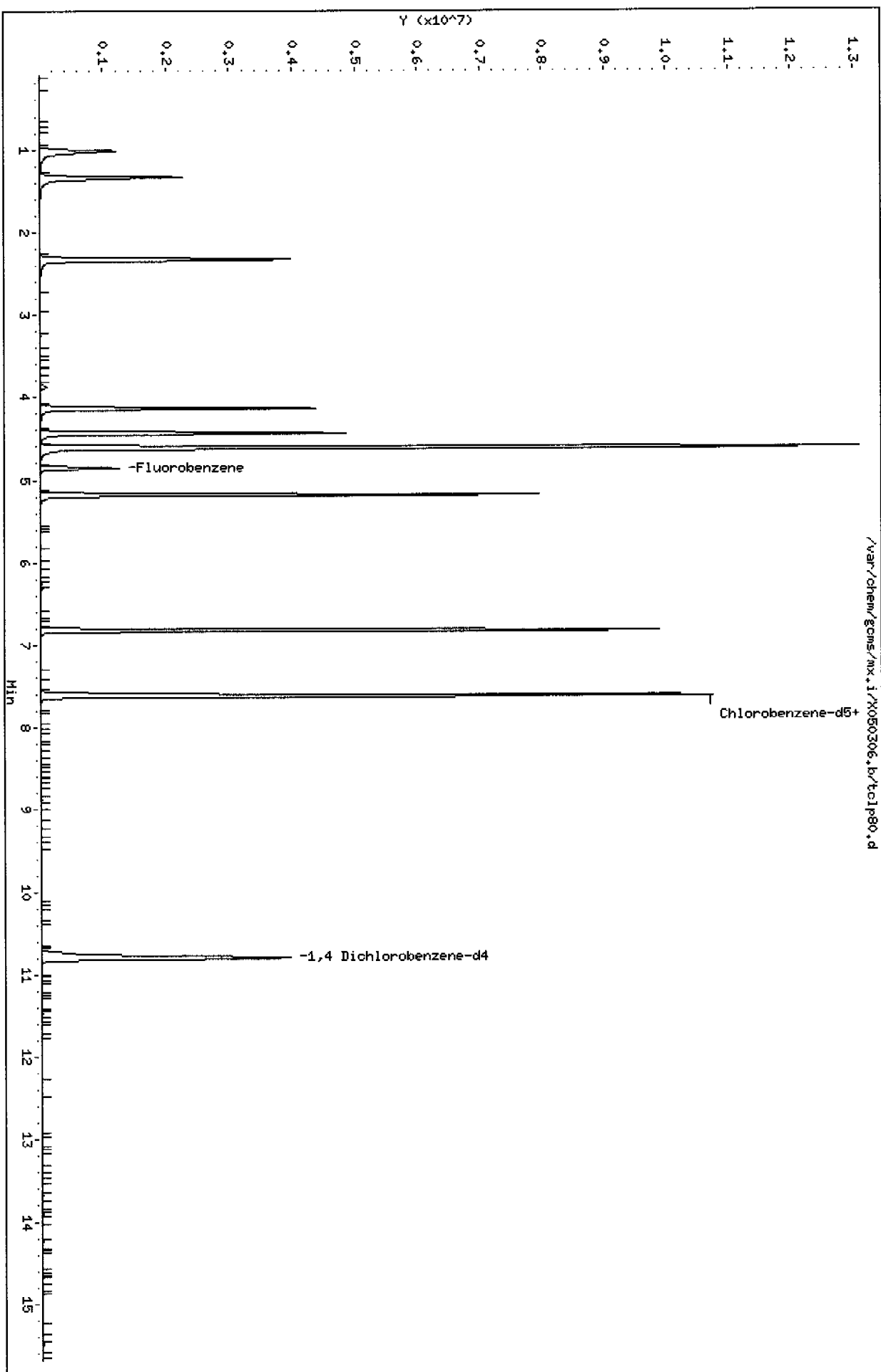
Sample Info: TCLP80,1,1,6,VSTD080,

Column phase: J+W 624

Instrument: mx.i

Operator: 60487

Column diameter: 0.18



Data File: /var/chem/gcms/mx.i/X050306.b/tclp160.d  
 Report Date: 09-May-2006 12:21

# STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X050306.b/tclp160.d  
 Lab Smp Id: TCLP160 Client Smp ID: VSTD160  
 Inj Date : 03-MAY-2006 16:05  
 Operator : 60487 Inst ID: mx.i  
 Smp Info : TCLP160,1,1,8,,VSTD160,  
 Misc Info : X050306,8260B\_LM,clbz.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X050306.b/clbz.m  
 Meth Date : 09-May-2006 12:20 wilesd Quant Type: ISTD  
 Cal Date : 03-MAY-2006 16:05 Cal File: tclp160.d  
 Als bottle: 21 Calibration Sample, Level: 8  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: clbz.sub  
 Target Version: 3.50

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
 Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

| Compounds                  | QUANT SIG |        |        |         |          |         | AMOUNTS    |  |
|----------------------------|-----------|--------|--------|---------|----------|---------|------------|--|
|                            | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT | ON-COL     |  |
|                            |           |        |        |         |          | ( ug/L) | ( ug/L)    |  |
| =====                      | =====     | ==     | =====  | =====   | =====    | =====   | =====      |  |
| * 1 Fluorobenzene          | 96        | 4.854  | 4.851  | (1.000) | 885269   | 10.0000 |            |  |
| * 2 Chlorobenzene-d5       | 119       | 7.585  | 7.582  | (1.000) | 168843   | 10.0000 |            |  |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.749 | 10.740 | (1.000) | 171850   | 10.0000 |            |  |
| 57 Tetrachloroethene       | 164       | 6.825  | 6.816  | (0.900) | 3845475  | 160.000 | 160.30 (A) |  |
| 62 Chlorobenzene (spcc)    | 112       | 7.616  | 7.607  | (1.004) | 9045465  | 160.000 | 155.85 (A) |  |

## QC Flag Legend

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

Data File: /var/chem/gcms/mx.i/X050306.b/tolp160.d

Date : 03-MAY-2006 16:05

Client ID: VSTD160

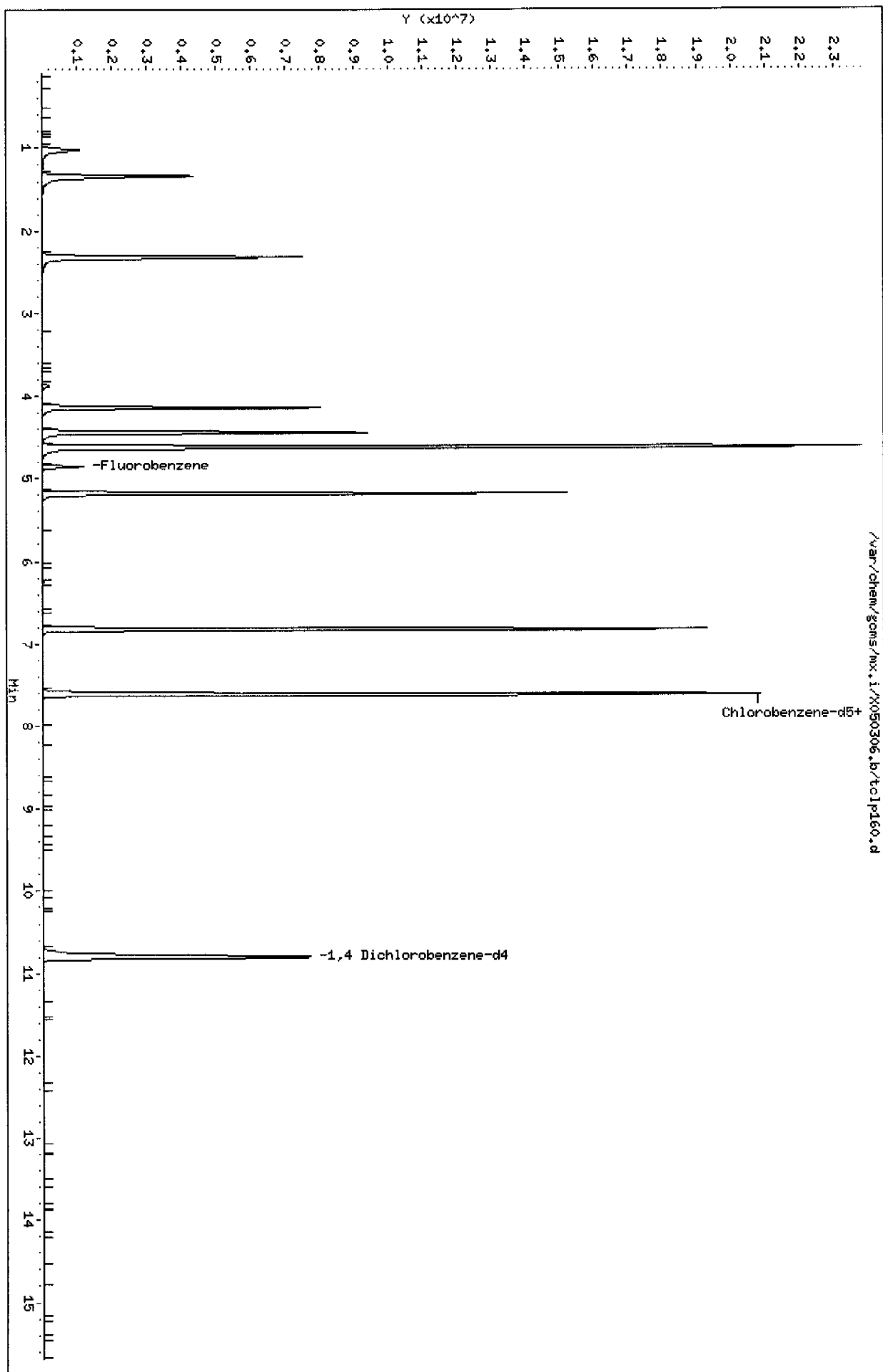
Sample Info: TOLP160,1,1,8,,VSTD160,

Column phase: J+M 624

Instrument: mx.i

Operator: 60487

Column diameter: 0.18



Data File: /var/chem/gcms/mx.i/X050306.b/tclp240.d  
 Report Date: 09-May-2006 12:21

# STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X050306.b/tclp240.d  
 Lab Smp Id: TCLP240 Client Smp ID: VSTD240  
 Inj Date : 03-MAY-2006 16:32  
 Operator : 60487 Inst ID: mx.i  
 Smp Info : TCLP240,1,1,9,,VSTD240,  
 Misc Info : X050306,8260B\_LM,clbz.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X050306.b/clbz.m  
 Meth Date : 09-May-2006 12:20 wilesd Quant Type: ISTD  
 Cal Date : 03-MAY-2006 16:32 Cal File: tclp240.d  
 Als bottle: 22 Calibration Sample, Level: 9  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: clbz.sub  
 Target Version: 3.50

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
 Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

| Compounds                  | QUANT SIG |        |        |         |          |         | AMOUNTS    |  |
|----------------------------|-----------|--------|--------|---------|----------|---------|------------|--|
|                            | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT | ON-COL     |  |
|                            |           |        |        |         |          | ( ug/L) | ( ug/L)    |  |
| =====                      | =====     | ==     | =====  | =====   | =====    | =====   | =====      |  |
| * 1 Fluorobenzene          | 96        | 4.853  | 4.851  | (1.000) | 873147   | 10.0000 |            |  |
| * 2 Chlorobenzene-d5       | 119       | 7.590  | 7.582  | (1.000) | 170046   | 10.0000 |            |  |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.754 | 10.740 | (1.000) | 181215   | 10.0000 |            |  |
| 57 Tetrachloroethene       | 164       | 6.830  | 6.816  | (0.900) | 5833274  | 240.000 | 241.08 (A) |  |
| 62 Chlorobenzene (spcc)    | 112       | 7.621  | 7.607  | (1.004) | 13382686 | 240.000 | 231.62 (A) |  |

## QC Flag Legend

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

Data File: /var/chem/gcms/mx.i/X050306.b/tolp240.d

Date : 03-MAY-2006 16:32

Client ID: VSTD240

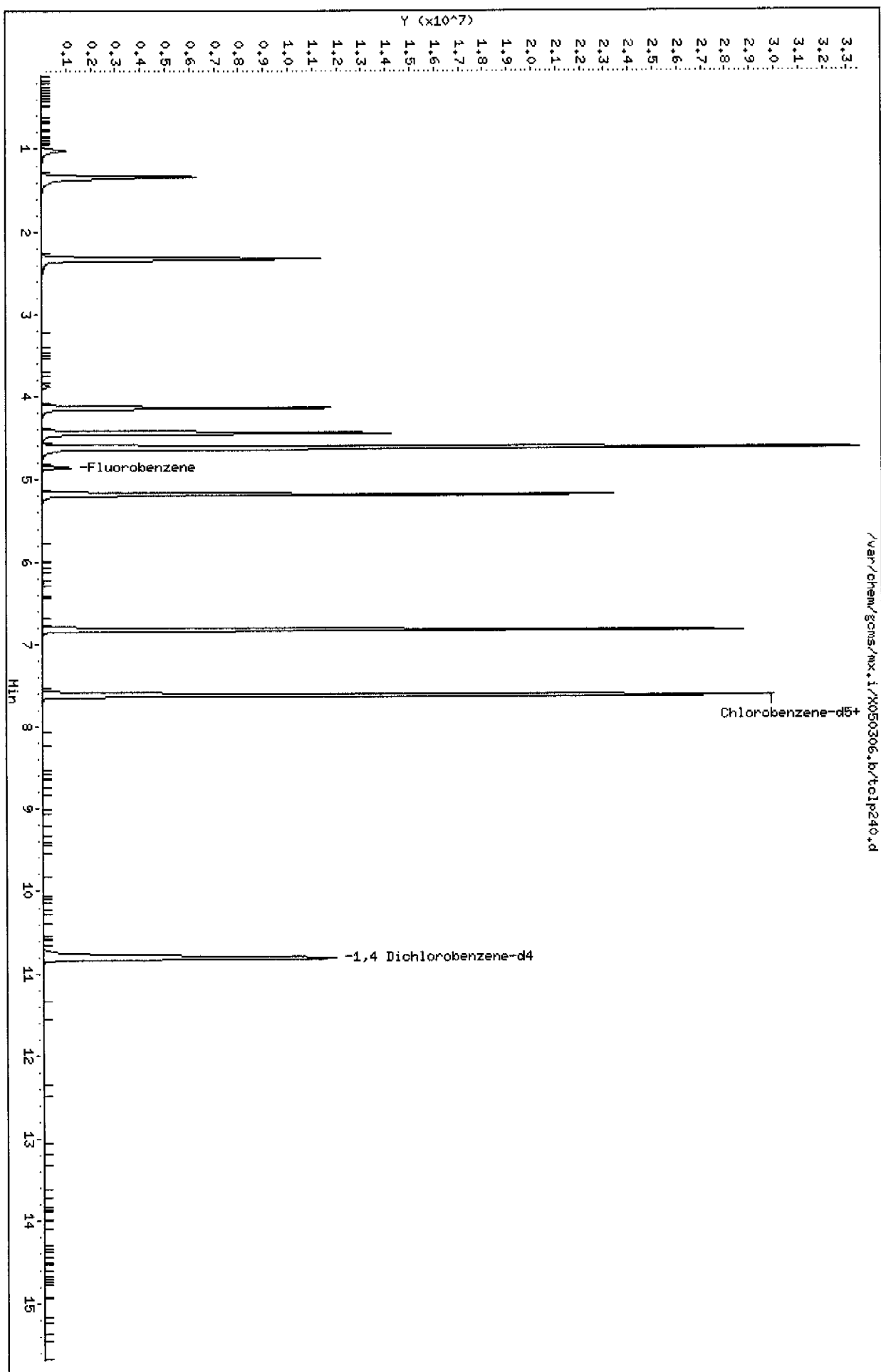
Sample Info: TOLP240,1,1,9,,VSTD240,

Column phase: J+W 624

Instrument: mx.i

Operator: 60487

Column diameter: 0.18



Data File: /var/chem/gcms/mx.i/X050306.b/tclp320.d  
 Report Date: 09-May-2006 12:21

# STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X050306.b/tclp320.d  
 Lab Smp Id: TCLP320 Client Smp ID: VSTD320  
 Inj Date : 03-MAY-2006 16:59  
 Operator : 60487 Inst ID: mx.i  
 Smp Info : TCLP320,1,1,10,,VSTD320,  
 Misc Info : X050306,8260B\_LM,clbz.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X050306.b/clbz.m  
 Meth Date : 09-May-2006 12:20 wilesd Quant Type: ISTD  
 Cal Date : 03-MAY-2006 16:59 Cal File: tclp320.d  
 Als bottle: 23 Calibration Sample, Level: 10  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: clbz.sub  
 Target Version: 3.50

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
 Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

| Compounds                  | QUANT SIG | MASS   | RT     | EXP RT  | REL RT   | RESPONSE | AMOUNTS    |         |
|----------------------------|-----------|--------|--------|---------|----------|----------|------------|---------|
|                            |           |        |        |         |          |          | CAL-AMT    | ON-COL  |
|                            |           |        |        |         |          |          | ( ug/L)    | ( ug/L) |
| =====                      | =====     | =====  | =====  | =====   | =====    | =====    | =====      | =====   |
| * 1 Fluorobenzene          | 96        | 4.851  | 4.851  | (1.000) | 937364   | 10.0000  |            |         |
| * 2 Chlorobenzene-d5       | 119       | 7.589  | 7.582  | (1.000) | 178088   | 10.0000  |            |         |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.758 | 10.740 | (1.000) | 174020   | 10.0000  |            |         |
| 57 Tetrachloroethene       | 164       | 6.834  | 6.816  | (0.901) | 7758092  | 320.000  | 308.83 (A) |         |
| 62 Chlorobenzene (spcc)    | 112       | 7.619  | 7.607  | (1.004) | 16807848 | 320.000  | 285.29 (A) |         |

← Slight Saturation

## QC Flag Legend

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

Data File: /var/chem/gcms/mx.i/X050306.b/tc1p320.d

Date : 03-MAY-2006 16:59

Client ID: VSTD320

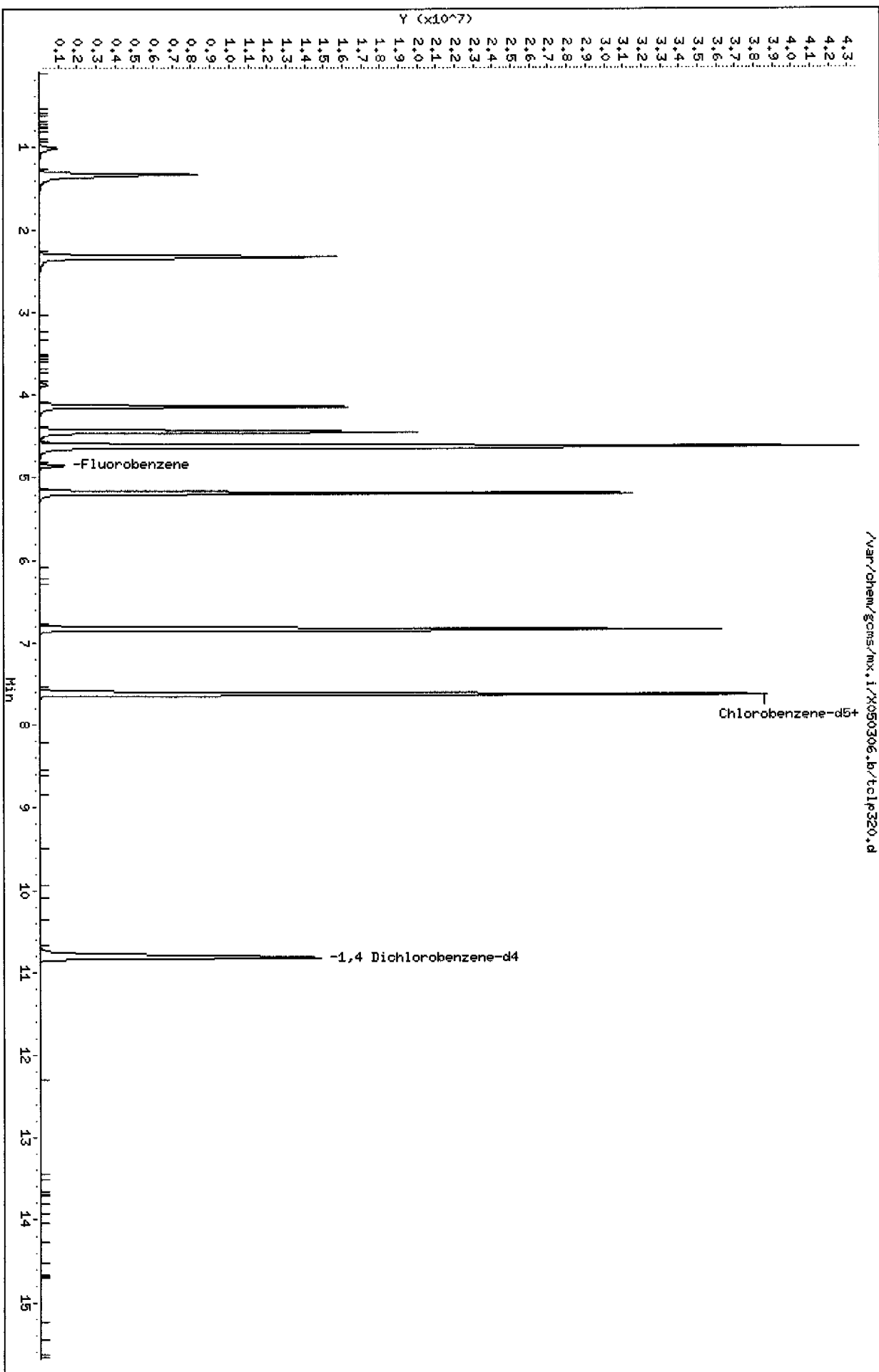
Sample Info: TCLP320,1,1,10,,VSTD320,

Column phase: J+M 624

Instrument: mx.i

Operator: 60467

Column diameter: 0.18





Data File: /var/chem/gcms/mx.i/X050306.b/ccvxe033.d  
 Report Date: 09-May-2006 12:24

8260 std processed  
 as 2nd source against  
 new curve  
 7/15/06

## STL Knoxville

SW-846 Method 8260A - Volatile Organics  
 Data file : /var/chem/gcms/mx.i/X050306.b/ccvxe033.d  
 Lab Smp Id: CCVXE033 Client Smp ID: VSTD010  
 Inj Date : 03-MAY-2006 14:45  
 Operator : 60487 Inst ID: mx.i  
 Smp Info : CCVXE033,1,2,3,,VSTD010  
 Misc Info : X050306,8260B\_LM,1-all.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X050306.b/clbz.m  
 Meth Date : 09-May-2006 12:24 wilestd Quant Type: ISTD  
 Cal Date : 03-MAY-2006 16:59 Cal File: tclp320.d  
 Als bottle: 1 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: clbz.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
 Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable

Local Compound Variable

| Compounds                  | QUANT SIG |        |        |         |          |                    | AMOUNTS           |       |
|----------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|-------|
|                            | MASS      | RT     | EXP RT | REL RT  | RESPONSE | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |       |
| *****                      | ====      | ==     | =====  | =====   | =====    | =====              | =====             |       |
| * 1 Fluorobenzene          | 96        | 4.852  | 4.852  | (1.000) | 1027267  | 10.0000            |                   |       |
| * 2 Chlorobenzene-d5       | 119       | 7.584  | 7.584  | (1.000) | 184227   | 10.0000            |                   |       |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.741 | 10.741 | (1.000) | 189905   | 10.0000            |                   |       |
| 57 Tetrachloroethene       | 164       | 6.817  | 6.817  | (0.899) | 245047   | 10.0000            | 9.4297            | : 94% |
| 62 Chlorobenzene (spcc)    | 112       | 7.608  | 7.608  | (1.003) | 600699   | 10.0000            | 9.8564            | : 99% |

Data File: /var/chem/gcms/mx.i/X050306.b/ccvxe033.d  
 Report Date: 09-May-2006 12:24

## STL Knoxville

 INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| Instrument ID: mx.i                               | Calibration Date: 03-MAY-2006 |
| Lab File ID: ccvxe033.d                           | Calibration Time: 15:12       |
| Lab Smp Id: CCVXE033                              | Client Smp ID: VSTD010        |
| Analysis Type: VOA                                | Level: LOW                    |
| Quant Type: ISTD                                  | Sample Type: AIR              |
| Operator: 60487                                   |                               |
| Method File: /var/chem/gcms/mx.i/X050306.b/clbz.m |                               |
| Misc Info: X050306,8260B_LM,1-all.sub             |                               |

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE  | %DIFF |
|---------------------|----------|------------|---------|---------|-------|
|                     |          | LOWER      | UPPER   |         |       |
| 1 Fluorobenzene     | 954873   | 477436     | 1909746 | 1027267 | 7.58  |
| 2 Chlorobenzene-d5  | 176393   | 88196      | 352786  | 184227  | 4.44  |
| 3 1,4 Dichlorobenze | 181219   | 90610      | 362438  | 189905  | 4.79  |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 4.85     | 4.35     | 5.35  | 4.85   | 0.02  |
| 2 Chlorobenzene-d5  | 7.58     | 7.08     | 8.08  | 7.58   | 0.01  |
| 3 1,4 Dichlorobenze | 10.74    | 10.24    | 11.24 | 10.74  | 0.01  |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /var/chem/gcms/mx.i/X050306.b/cvxe033.d

Date: 03-MAY-2006 14:45

Client ID: VSTD010

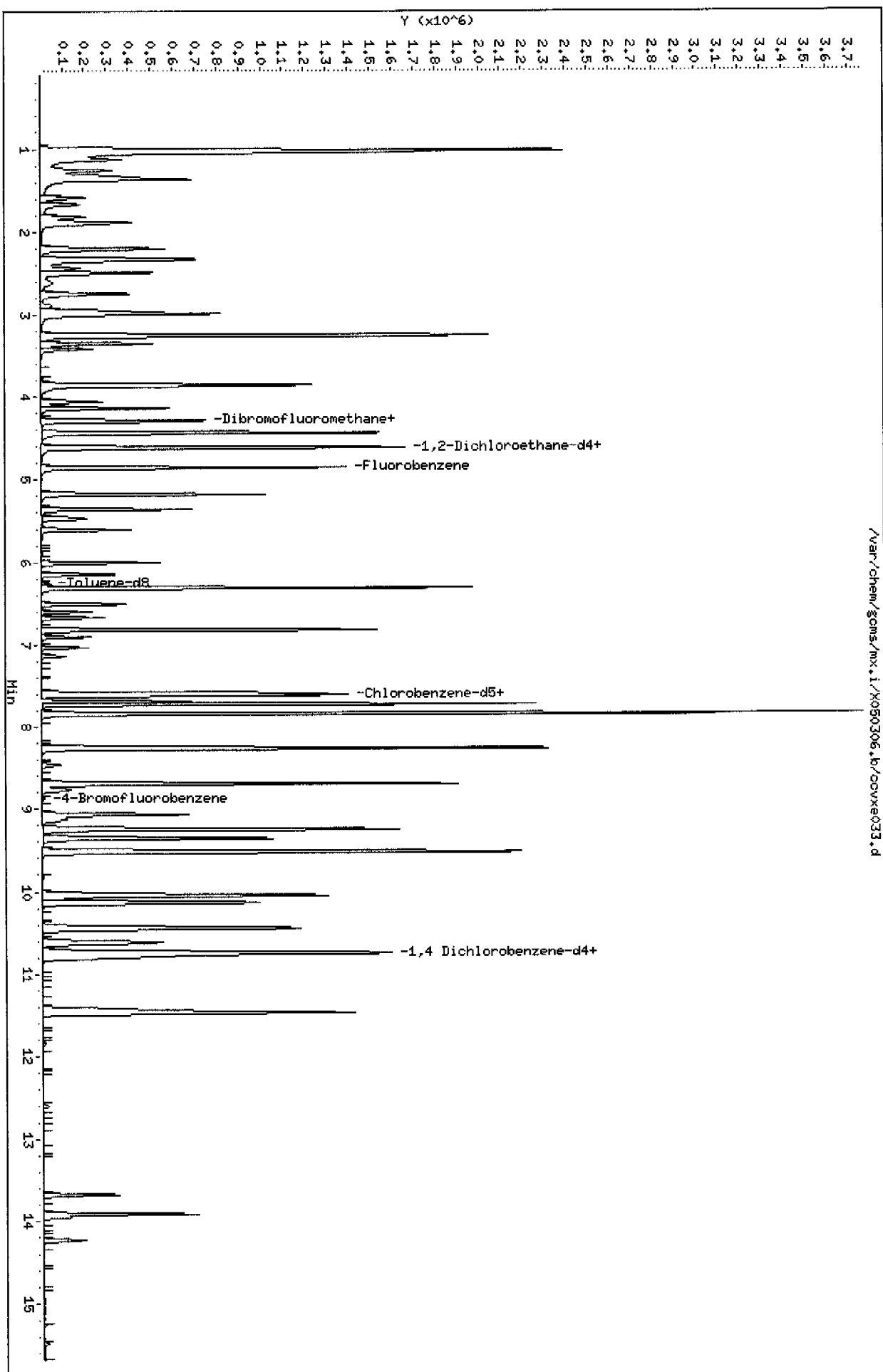
Sample Info: CVXE033,1,2,3,,VSTD010

Column phase: J+W 624

Instrument: mx.i

Operator: 60487

Column diameter: 0.18



## STL Volatile GC/MS Continuing Calibration Review / Narrative Checklist

1758

Method: 8260B - KNOX-MS-0015, Rev. 8

|                |        |                        |           |             |    |                        |         |                                  |
|----------------|--------|------------------------|-----------|-------------|----|------------------------|---------|----------------------------------|
| Analysis Date: | 4/7/06 | CCAL Batch/ Scan Name: | X040706 R | Instrument: | MX | ICAL Batch/ Scan Name: | X050306 | Scanned <input type="checkbox"/> |
|----------------|--------|------------------------|-----------|-------------|----|------------------------|---------|----------------------------------|

| Review Items                                                                                                                                                                                                                   | N/A | Yes | No | If No, why is data reportable?                                                                          | 2nd |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|----|---------------------------------------------------------------------------------------------------------|-----|
| 1. Did BFB meet tune criteria?                                                                                                                                                                                                 |     | ✓   |    |                                                                                                         | ✓   |
| 2. Were all standards injected within 12 hr of BFB?                                                                                                                                                                            |     | ✓   |    |                                                                                                         | ✓   |
| 3. Was date/time of analysis verified between analysis header and logbook as correct?                                                                                                                                          |     | ✓   |    |                                                                                                         | ✓   |
| 4. Was the primary ion used for all compounds?                                                                                                                                                                                 |     | ✓   |    | <input type="checkbox"/> Secondary ion used due to interferences for: _____                             | ✓   |
| 5. Do the RFs for SPCCs meet minimum RF?                                                                                                                                                                                       |     | ✓   |    |                                                                                                         | ✓   |
| 6. Is the %D or drift $\leq 20\%$ for all CCCs?                                                                                                                                                                                | ✓   |     |    |                                                                                                         | NA  |
| 7. Is the %D or drift $\leq 50\%$ for all other compounds? [Up to 6 TCLs may have %D or drift $> 50\%$ ; any more and the calibration is INVALID].                                                                             |     | ✓   |    | <input type="checkbox"/> %D or drift $> 50\%$ for the following TCLs: _____                             | ✓   |
| 8. Are the internal standard responses within limits?<br>8260B: 50-200% of the mid-level ICAL standard                                                                                                                         |     | ✓   |    |                                                                                                         | ✓   |
| 9. Are the internal standard retention times within limits?<br>8260B: 30 seconds of the mid-level ICAL standard                                                                                                                |     | ✓   |    |                                                                                                         | ✓   |
| 10. If manual integrations were performed, are they clearly identified, initialed, dated and reason given?                                                                                                                     | ✓   |     |    | Reasons: 1)Corrected split peak; 2)Unresolved peak; 3)tailg; 4)RT shift; 5)wrong peak selected; 6)other | NA  |
| 11. Have alternate hits/manual integrations been verified as correct and are correct RFs listed in CCAL summary?                                                                                                               | ✓   |     |    |                                                                                                         | NA  |
| 12. Was the correct ICAL used for quantitation? (Verify date & time of ICAL is documented correctly on CCAL)                                                                                                                   |     | ✓   |    |                                                                                                         | ✓   |
| 13. Is the first IS documented correctly on the log?                                                                                                                                                                           |     | ✓   |    |                                                                                                         | ✓   |
| 14. Elution order checked on isomeric pairs/coeluters?                                                                                                                                                                         |     | ✓   |    |                                                                                                         | ✓   |
| • hexane and vinyl acetate                                                                                                                                                                                                     | ✓   |     |    |                                                                                                         | NA  |
| • cis- and trans- isomers                                                                                                                                                                                                      |     |     |    |                                                                                                         | NA  |
| • trichlorofluoromethane and Freon 113                                                                                                                                                                                         |     |     |    |                                                                                                         | NA  |
| • ethyl benzene / m/p-xylene / o-xylene                                                                                                                                                                                        |     |     |    |                                                                                                         | NA  |
| • n-propylbenzene / 2-chlorotoluene / 4-chlorotoluene                                                                                                                                                                          |     |     |    |                                                                                                         | NA  |
| • 1,3,5-trimethylbenzene / 1,2,4-trimethylbenzene / sec-butylbenzene                                                                                                                                                           |     |     |    |                                                                                                         | NA  |
| • 1,3-, 1,4-, and 1,2-dichlorobenzene                                                                                                                                                                                          |     |     |    |                                                                                                         | NA  |
| • 1,2,4 and 1,2,3 -trichlorobenzene                                                                                                                                                                                            |     |     |    |                                                                                                         | NA  |
| • chlorobenzene-d5 and 1,1,1,2-tetrachloroethane                                                                                                                                                                               |     | ✓   |    |                                                                                                         | ✓   |
| 15. If criteria were not met, was a NCM generated, approved by supervisor, and copy included in folder?                                                                                                                        |     | ✓   |    | 08-06213 - see comment                                                                                  | ✓   |
| 16. Does the CCAL folder contain <b>complete</b> data in the following order? Data review checklist, tune pass/fail page, m/z list, tune chromatogram, Target CCAL summary, Quan report, chromatogram and manual integrations. |     | ✓   |    |                                                                                                         | ✓   |

|                                                                                                                                                                                                                                                                                                                                                                                          |               |                       |                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------|----------------|
| Analyst:                                                                                                                                                                                                                                                                                                                                                                                 | Date: 5/10/06 | 2nd Level Reviewer: ✓ | Date: 05/10/06 |
| Comments: CCV & five samples from lot H4D030169 were copied from batch X040706 to batch X050306. These files were processed against the new extended calibration ranges (method: clbz.m). See NCM 08-06213. This C-Cal data scanned as X040706 R to signify the original batch data had been reprocessed for chlorobenzene & tetrachloroethane only. New cal range in same batch X050306 | Comments:     |                       |                |
|                                                                                                                                                                                                                                                                                                                                                                                          |               |                       |                |
|                                                                                                                                                                                                                                                                                                                                                                                          |               |                       |                |
|                                                                                                                                                                                                                                                                                                                                                                                          |               |                       |                |
|                                                                                                                                                                                                                                                                                                                                                                                          |               |                       |                |
|                                                                                                                                                                                                                                                                                                                                                                                          |               |                       |                |
|                                                                                                                                                                                                                                                                                                                                                                                          |               |                       |                |
|                                                                                                                                                                                                                                                                                                                                                                                          |               |                       |                |
|                                                                                                                                                                                                                                                                                                                                                                                          |               |                       |                |

## STL Knoxville GC/MS Volatiles Run Log - Instrument MX

2004-11-06

|                   |              |            |            |             |         |               |
|-------------------|--------------|------------|------------|-------------|---------|---------------|
| Target Batch      | X0407086     | XXXXXXXXXX | XXXXXXXXXX | Loop #      | 1       | 2             |
| QuantIMS Batch    | G097054      | -          | -          | Standard ID | V0A6495 | V0A6494       |
| Method            | V05T         | XXXXXXXXXX | XXXXXXXXXX | Matrix      | 2.5mL   | 2.5mL V05T    |
| SOP#              | Knox.MS-0011 | XXXXXXXXXX | XXXXXXXXXX | IS Amt      | 0.969mL | 0.939mL       |
| Initial Cal Batch | X0219067     | XXXXXXXXXX | XXXXXXXXXX | SS Amt      | 1       | 5.0mL V0A6495 |
| CCAL IS Areas     | 1149191      | 214194     | 242601     | Heated?     | Y       | N             |

☑ Date/Time Verified Preventive Maintenance Performed ☐ NA or ☒ (Change Transfer Line + Trap heater + Inj. liner + GWT)

| Lot     | Lab File ID          | Time | ALS # | Loop # | Solute Dilution Factor | MS Dilution Factor | Volume/Weight Purged | pH | Init | Standards ID/Spike ID/and/or Comments |
|---------|----------------------|------|-------|--------|------------------------|--------------------|----------------------|----|------|---------------------------------------|
| Trim    | 15815X1007           | 0859 | -     | -      | 1                      | 1                  | 1.0mL                | NA | ✓    | 1.0mL V0A6493                         |
| CCV     | 111X10073            | 0916 | 18    | 1      | 1                      | 1                  | 2.5mL                | 1  | ✓    | 5.0mL V0A6496 → 5.0mL                 |
| LS      | H2KMH11A1            | 1002 | 1     | 2      | 1                      | 1                  |                      |    | ✓    | 2.5mL V0A6496                         |
| LSD     | 1A0                  | 1033 | 2     | 1      |                        |                    |                      |    | ✓    | ↓ ↓                                   |
| BIK     | 131K1                | 1104 | 3     |        |                        |                    |                      |    |      |                                       |
| 2       | H2KMH11A1            | 1131 | 4     |        |                        |                    |                      |    |      |                                       |
| H60030A | H2G-871AA            | 1206 | 5     |        |                        |                    |                      |    |      |                                       |
|         | 9A                   | 1232 | 6     |        |                        |                    |                      |    |      |                                       |
|         | 95                   | 1259 | 7     |        |                        |                    |                      |    |      |                                       |
|         | 9W                   | 1325 | 8     |        |                        |                    |                      |    |      |                                       |
|         | 9Z                   | 1351 | 9     |        |                        |                    |                      |    |      |                                       |
|         | 99                   | 1417 | 10    |        |                        |                    |                      |    |      |                                       |
|         | H2HCG11AA            | 1443 | 11    |        |                        |                    |                      |    |      |                                       |
|         | CM                   | 1510 | 12    |        |                        |                    |                      |    |      |                                       |
|         | CP                   | 1538 | 13    |        |                        |                    |                      |    |      | ↓ Sur                                 |
|         | <del>H2KMH11A1</del> |      |       |        |                        |                    |                      |    |      | <del>H2KMH11A1</del>                  |
|         | <del>H2KMH11A1</del> |      |       |        |                        |                    |                      |    |      |                                       |
|         | <del>H2KMH11A1</del> |      |       |        |                        |                    |                      |    |      |                                       |
|         | BIK2                 | 1609 | 14    |        |                        |                    |                      |    | ✓    |                                       |
|         | H2KH11AA             | 1601 | 15    | 18     |                        |                    |                      |    | ✓    |                                       |
|         | HX                   | 1634 | 16    | 19     |                        |                    |                      |    |      |                                       |
|         | HW                   | 1659 | 17    | 20     |                        |                    |                      |    |      |                                       |
|         | HV                   | 1684 | 18    | 21     |                        |                    |                      |    |      |                                       |
|         | HR                   | 1649 | 19    | 22     |                        |                    |                      |    |      |                                       |
|         | HL                   | 2014 | 20    | 23     |                        |                    |                      |    |      |                                       |
|         | <del>H2KH11AA</del>  |      |       |        |                        |                    |                      |    |      |                                       |
|         | H2HCF1AA             | 1637 | 15    |        |                        |                    |                      |    |      | 2/4/2/06                              |
|         | H2HCO1AA             | 1703 | 16    |        |                        |                    |                      |    |      | Archive                               |
| BIK     | BIK3                 | 1734 | 17    | ✓      | ✓                      | ✓                  | ✓                    | ✓  | ✓    | ↓ 'E'                                 |

Analyst/Date:                      4/10/06

MS033R7.doc, 11/3/05

Data File: /var/chem/gcms/mx.i/X040706.b/bfbxd07.d

Date : 07-APR-2006 08:59

Client ID: TUNE

Instrument: mx.i

Sample Info: BFBXD07,1,3,,BFB,TUNE

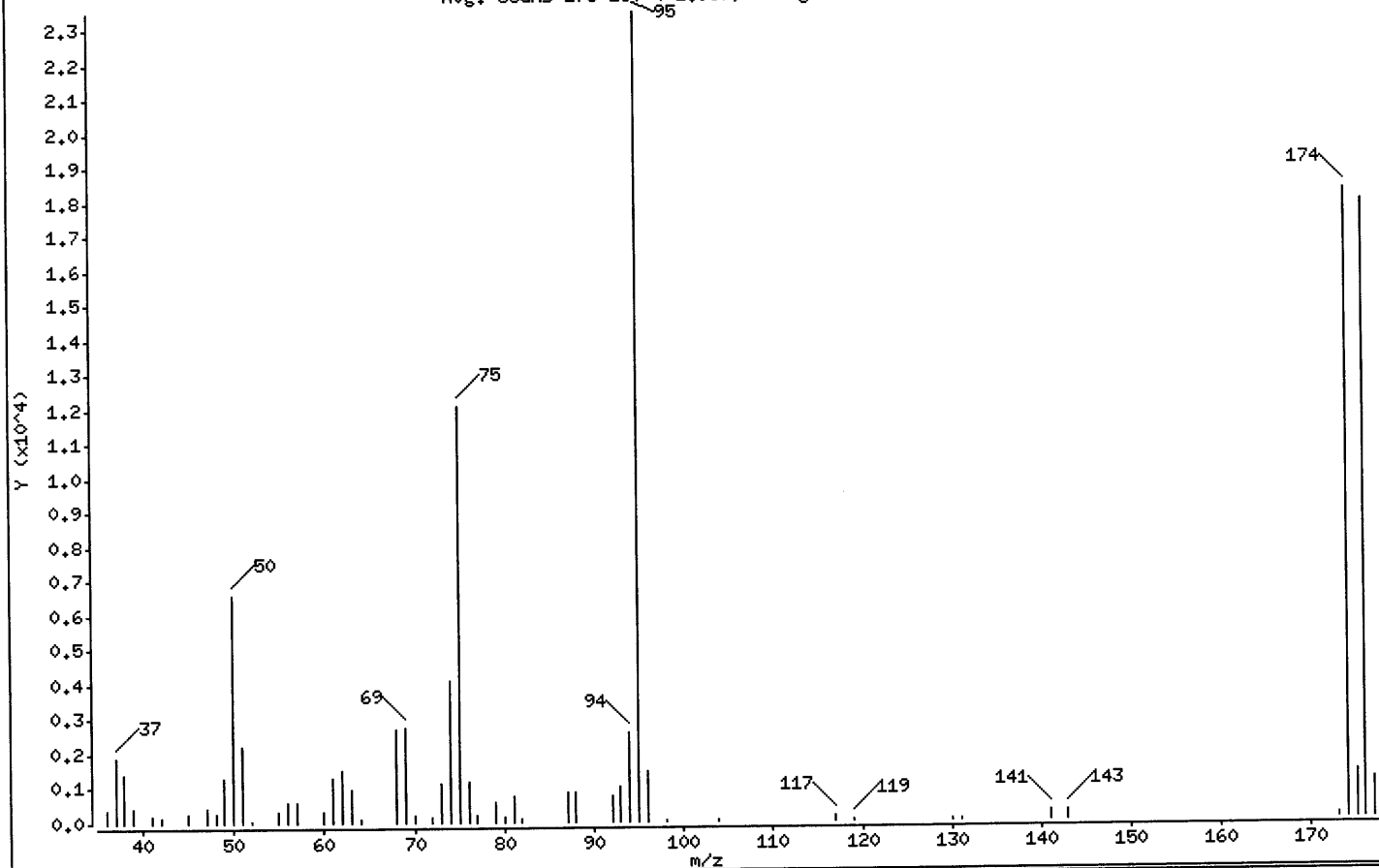
Operator: 22980

Column phase: J &amp; W 624

Column diameter: 0.18

1 bfb

Avg. Scans 178-180 ( 1.98), Background Scan 173



| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 95  | Base Peak, 100% relative abundance | 100.00               |
| 50  | 15.00 - 40.00% of mass 95          | 27.95                |
| 75  | 30.00 - 60.00% of mass 95          | 51.57                |
| 96  | 5.00 - 9.00% of mass 95            | 6.19                 |
| 173 | Less than 2.00% of mass 174        | 0.49 ( 0.63)         |
| 174 | 50.00 - 120.00% of mass 95         | 77.47                |
| 175 | 5.00 - 9.00% of mass 174           | 5.63 ( 7.27)         |
| 176 | 95.00 - 101.00% of mass 174        | 76.16 ( 98.31)       |
| 177 | 5.00 - 9.00% of mass 176           | 4.77 ( 6.27)         |

Data File: /var/chem/gcms/mx.i/X040706.b/bfbxd07.d

Date : 07-APR-2006 08:59

Client ID: TUNE

Instrument: mx.i

Sample Info: BFBXD07,1,3,,BFB,TUNE

Operator: 22980

Column phase: J &amp; W 624

Column diameter: 0.18

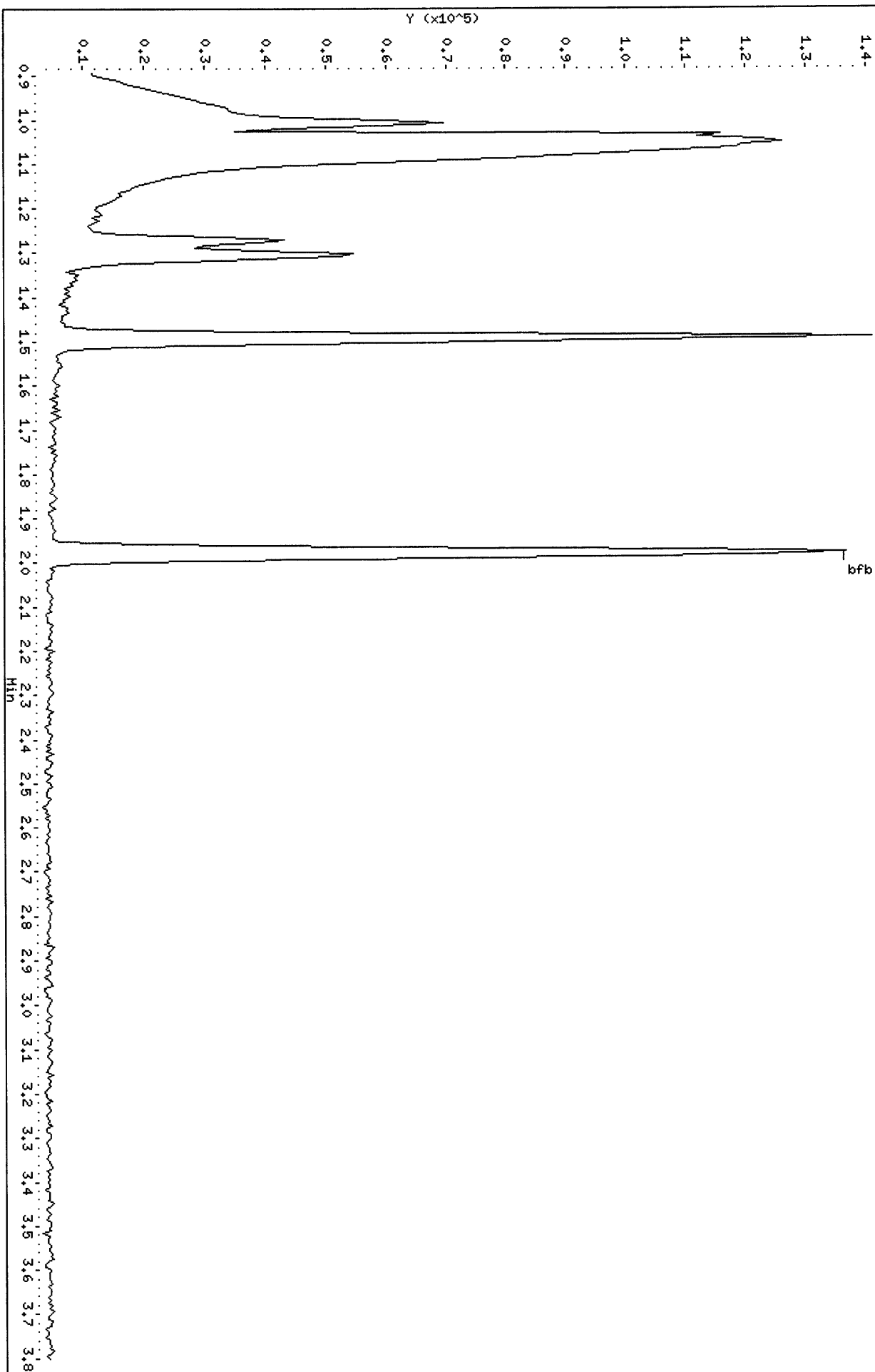
Data File: bfbxd07.d

Spectrum: Avg. Scans 178-180 ( 1.98), Background Scan 173

Location of Maximum: 95.00

Number of points: 54

| m/z   | Y    | m/z   | Y     | m/z   | Y     | m/z    | Y     |
|-------|------|-------|-------|-------|-------|--------|-------|
| 36.00 | 356  | 56.00 | 594   | 76.00 | 1181  | 104.00 | 64    |
| 37.00 | 1885 | 57.00 | 592   | 77.00 | 192   | 117.00 | 150   |
| 38.00 | 1408 | 60.00 | 302   | 79.00 | 614   | 119.00 | 62    |
| 39.00 | 412  | 61.00 | 1271  | 80.00 | 140   | 130.00 | 51    |
| 41.00 | 192  | 62.00 | 1489  | 81.00 | 738   | 131.00 | 56    |
| 42.00 | 163  | 63.00 | 963   | 82.00 | 125   | 141.00 | 277   |
| 45.00 | 283  | 64.00 | 103   | 87.00 | 850   | 143.00 | 294   |
| 47.00 | 433  | 68.00 | 2706  | 88.00 | 877   | 173.00 | 114   |
| 48.00 | 296  | 69.00 | 2736  | 92.00 | 764   | 174.00 | 18208 |
| 49.00 | 1319 | 70.00 | 224   | 93.00 | 1028  | 175.00 | 1324  |
| 50.00 | 6569 | 72.00 | 145   | 94.00 | 2617  | 176.00 | 17896 |
| 51.00 | 2238 | 73.00 | 1115  | 95.00 | 23504 | 177.00 | 1122  |
| 52.00 | 67   | 74.00 | 4101  | 96.00 | 1456  |        |       |
| 55.00 | 347  | 75.00 | 12121 | 98.00 | 56    |        |       |





Data File: /var/chem/gcms/mx.i/X050306.b/ccvxd073.d  
 Report Date: 09-May-2006 16:11

STL Knoxville

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mx.i      Injection Date: 07-APR-2006 09:16  
 Lab File ID: ccvxd073.d      Init. Cal. Date(s): 03-MAY-2006      03-MAY-2006  
 Analysis Type: WATER      Init. Cal. Times: 15:12      ✓      16:59  
 Lab Sample ID: CCVXD073      Quant Type: ISTD  
 Method: /var/chem/gcms/mx.i/X050306.b/clbz.m

| COMPOUND                | RRF / AMOUNT | RF10      | CCAL<br>RRF10 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|-------------------------|--------------|-----------|---------------|------------|-------------|--------------------|------------|
| 57 Tetrachloroethene    | ✓ 1.41059    | ✓ 1.31735 | 1.31735       | 0.000      | 6.60977     | 50.00000           | Averaged   |
| 62 Chlorobenzene (spcc) | 3.30815      | 3.19686   | 3.19686       | 0.300      | 3.36398     | 50.00000           | Averaged   |

this calibration analyzed on 4/7/06  
 copied to X050306 & requantitated  
 against new extended calibration  
 curve that was analyzed on 5/3/06.  
 This is to show good %D on the  
 new curve.

jms/10/06

Data File: /var/chem/gcms/mx.i/X050306.b/ccvxd073.d

Report Date: 09-May-2006 16:11

## STL Knoxville

SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X050306.b/ccvxd073.d

Lab Smp Id: CCVXD073

Client Smp ID: VSTD010

Inj Date : 07-APR-2006 09:16

Operator : 22980

Inst ID: mx.i

Smp Info : CCVXD073,1,2,3,,VSTD010

Misc Info : X040706,8260B\_LM,focus.sub

Comment :

Method : /var/chem/gcms/mx.i/X050306.b/clbz.m

Meth Date : 09-May-2006 16:11 wilesd

Quant Type: ISTD

Cal Date : 03-MAY-2006 15:12

Cal File: tclp10.d

Als bottle: 1

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: clbz.sub

Target Version: 3.50

Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf\*Vt/(Vo\*1000) \* CpndVariable

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

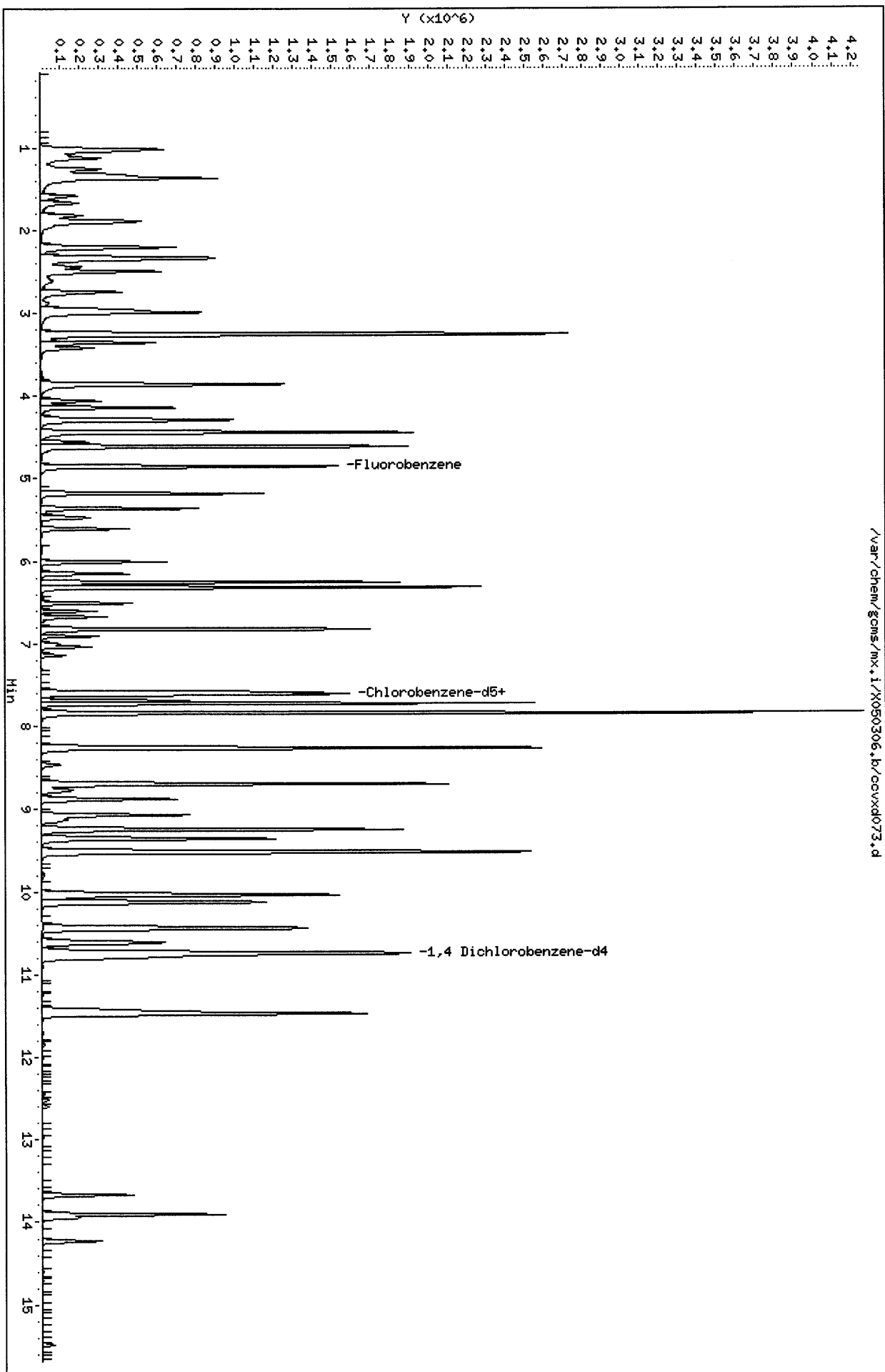
Cpnd Variable

Local Compound Variable

| Compounds                  | QUANT SIG<br>MASS | RT     | EXP RT | REL RT  | RESPONSE | AMOUNTS            |                   |
|----------------------------|-------------------|--------|--------|---------|----------|--------------------|-------------------|
|                            |                   |        |        |         |          | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| * 1 Fluorobenzene          | 96                | 4.851  | 4.851  | (1.000) | 1149191  | 10.0000            |                   |
| * 2 Chlorobenzene-d5       | 119               | 7.582  | 7.582  | (1.000) | 214194   | 10.0000            |                   |
| * 3 1,4 Dichlorobenzene-d4 | 152               | 10.746 | 10.746 | (1.000) | 242601   | 10.0000            |                   |
| 57 Tetrachloroethene       | 164               | 6.816  | 6.816  | (0.899) | 282169   | 10.0000            | 9.3390            |
| 62 Chlorobenzene (spcc)    | 112               | 7.607  | 7.607  | (1.003) | 684750   | 10.0000            | 9.6636            |

Data File: /var/chem/gcms/mx.i/X050306.b/ccvxd073.d  
Date : 07-APR-2006 09:16  
Client ID: VSTD010  
Sample Info: CCVXD073,1,2,3,,VSTD010  
Purge Volume: 25.0  
Column phase: J+M 624

Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18



## STL Volatile GC/MS Continuing Calibration Review / Narrative Checklist

1766

Method: 8260B - KNOX-MS-0015, Rev. 8

|                |        |                        |         |             |    |                        |         |                                  |
|----------------|--------|------------------------|---------|-------------|----|------------------------|---------|----------------------------------|
| Analysis Date: | 5/9/06 | CCAL Batch/ Scan Name: | X050906 | Instrument: | MX | ICAL Batch/ Scan Name: | X050306 | Scanned <input type="checkbox"/> |
|----------------|--------|------------------------|---------|-------------|----|------------------------|---------|----------------------------------|

| Review Items                                                                                                                                                                                                                   | N/A                                 | Yes                                 | No | If No, why is data reportable?                                                                         | 2nd <input checked="" type="checkbox"/> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|----|--------------------------------------------------------------------------------------------------------|-----------------------------------------|
| 1. Did BFB meet tune criteria?                                                                                                                                                                                                 |                                     | <input checked="" type="checkbox"/> |    |                                                                                                        | <input checked="" type="checkbox"/>     |
| 2. Were all standards injected within 12 hr of BFB?                                                                                                                                                                            |                                     | <input checked="" type="checkbox"/> |    |                                                                                                        | <input checked="" type="checkbox"/>     |
| 3. Was date/time of analysis verified between analysis header and logbook as correct?                                                                                                                                          |                                     | <input checked="" type="checkbox"/> |    |                                                                                                        | <input checked="" type="checkbox"/>     |
| 4. Was the primary ion used for all compounds?                                                                                                                                                                                 |                                     | <input checked="" type="checkbox"/> |    | <input type="checkbox"/> Secondary ion used due to interferences for: _____                            | <input checked="" type="checkbox"/>     |
| 5. Do the RFs for SPCCs meet minimum RF?                                                                                                                                                                                       |                                     | <input checked="" type="checkbox"/> |    |                                                                                                        | <input checked="" type="checkbox"/>     |
| 6. Is the %D or drift $\leq 20\%$ for all CCCs?                                                                                                                                                                                | <input checked="" type="checkbox"/> |                                     |    |                                                                                                        | NA                                      |
| 7. Is the %D or drift $\leq 50\%$ for all other compounds? [Up to 6 TCLs may have %D or drift $> 50\%$ ; any more and the calibration is INVALID].                                                                             |                                     | <input checked="" type="checkbox"/> |    | <input type="checkbox"/> %D or drift $> 50\%$ for the following TCLs: _____                            | <input checked="" type="checkbox"/>     |
| 8. Are the internal standard responses within limits?<br>8260B: 50-200% of the mid-level ICAL standard                                                                                                                         |                                     | <input checked="" type="checkbox"/> |    |                                                                                                        | <input checked="" type="checkbox"/>     |
| 9. Are the internal standard retention times within limits?<br>8260B: 30 seconds of the mid-level ICAL standard                                                                                                                |                                     | <input checked="" type="checkbox"/> |    |                                                                                                        | <input checked="" type="checkbox"/>     |
| 10. If manual integrations were performed, are they clearly identified, initialed, dated and reason given?                                                                                                                     | <input checked="" type="checkbox"/> |                                     |    | Reasons: 1)Corrected split peak; 2)Unresolved peak; 3)tail; 4)RT shift; 5)wrong peak selected; 6)other | NA                                      |
| 11. Have alternate hits/manual integrations been verified as correct and are correct RFs listed in CCAL summary?                                                                                                               | <input checked="" type="checkbox"/> |                                     |    |                                                                                                        | NA                                      |
| 12. Was the correct ICAL used for quantitation? (Verify date & time of ICAL is documented correctly on CCAL)                                                                                                                   |                                     | <input checked="" type="checkbox"/> |    |                                                                                                        | <input checked="" type="checkbox"/>     |
| 13. Is the first IS documented correctly on the log?                                                                                                                                                                           |                                     | <input checked="" type="checkbox"/> |    |                                                                                                        | <input checked="" type="checkbox"/>     |
| 14. Elution order checked on isomeric pairs/coeluters?                                                                                                                                                                         |                                     | <input checked="" type="checkbox"/> |    |                                                                                                        | <input checked="" type="checkbox"/>     |
| • hexane and vinyl acetate                                                                                                                                                                                                     | <input checked="" type="checkbox"/> |                                     |    |                                                                                                        | NA                                      |
| • cis- and trans- isomers                                                                                                                                                                                                      | <input checked="" type="checkbox"/> |                                     |    |                                                                                                        | NA                                      |
| • trichlorofluoromethane and Freon 113                                                                                                                                                                                         | <input checked="" type="checkbox"/> |                                     |    |                                                                                                        | NA                                      |
| • ethyl benzene / m/p-xylene / o-xylene                                                                                                                                                                                        | <input checked="" type="checkbox"/> |                                     |    |                                                                                                        | NA                                      |
| • n-propylbenzene / 2-chlorotoluene / 4-chlorotoluene                                                                                                                                                                          | <input checked="" type="checkbox"/> |                                     |    |                                                                                                        | NA                                      |
| • 1,3,5-trimethylbenzene / 1,2,4-trimethylbenzene / sec-butylbenzene                                                                                                                                                           | <input checked="" type="checkbox"/> |                                     |    |                                                                                                        | NA                                      |
| • 1,3-, 1,4-, and 1,2-dichlorobenzene                                                                                                                                                                                          | <input checked="" type="checkbox"/> |                                     |    |                                                                                                        | NA                                      |
| • 1,2,4 and 1,2,3 -trichlorobenzene                                                                                                                                                                                            | <input checked="" type="checkbox"/> |                                     |    |                                                                                                        | NA                                      |
| • chlorobenzene-d5 and 1,1,1,2-tetrachloroethane                                                                                                                                                                               | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |    |                                                                                                        | <input checked="" type="checkbox"/>     |
| 15. If criteria were not met, was a NCM generated, approved by supervisor, and copy included in folder?                                                                                                                        |                                     | <input checked="" type="checkbox"/> |    | NCM 08-06213 - see comment                                                                             | <input checked="" type="checkbox"/>     |
| 16. Does the CCAL folder contain <b>complete</b> data in the following order? Data review checklist, tune pass/fail page, m/z list, tune chromatogram, Target CCAL summary, Quan report, chromatogram and manual integrations. |                                     | <input checked="" type="checkbox"/> |    |                                                                                                        | <input checked="" type="checkbox"/>     |

|           |                                                                                                                                                                                                                                                                                                                            |       |         |                     |     |       |          |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------|---------------------|-----|-------|----------|
| Analyst:  | RLW                                                                                                                                                                                                                                                                                                                        | Date: | 5/10/06 | 2nd Level Reviewer: | RLW | Date: | 05/10/06 |
| Comments: | <p>This CCV @ 240 µg/L for chl<sub>2</sub> &amp; PCE only.<br/>         Compared/quantitated against new curve for (new curve = X050306; chl<sub>2</sub>.m)<br/>         these 2 analytes on extended range. See<br/>         NCM 08-06213 for discussion of requantitating<br/>         samples from lot H6 D 030169.</p> |       |         |                     |     |       |          |
|           |                                                                                                                                                                                                                                                                                                                            |       |         |                     |     |       |          |
|           |                                                                                                                                                                                                                                                                                                                            |       |         |                     |     |       |          |
|           |                                                                                                                                                                                                                                                                                                                            |       |         |                     |     |       |          |
|           |                                                                                                                                                                                                                                                                                                                            |       |         |                     |     |       |          |
|           |                                                                                                                                                                                                                                                                                                                            |       |         |                     |     |       |          |
|           |                                                                                                                                                                                                                                                                                                                            |       |         |                     |     |       |          |
|           |                                                                                                                                                                                                                                                                                                                            |       |         |                     |     |       |          |
|           |                                                                                                                                                                                                                                                                                                                            |       |         |                     |     |       |          |



Data File: /var/chem/gcms/mx.i/X050906.b/bfbxe09.d

Date : 09-MAY-2006 17:10

Client ID: TUNE

Instrument: mx.i

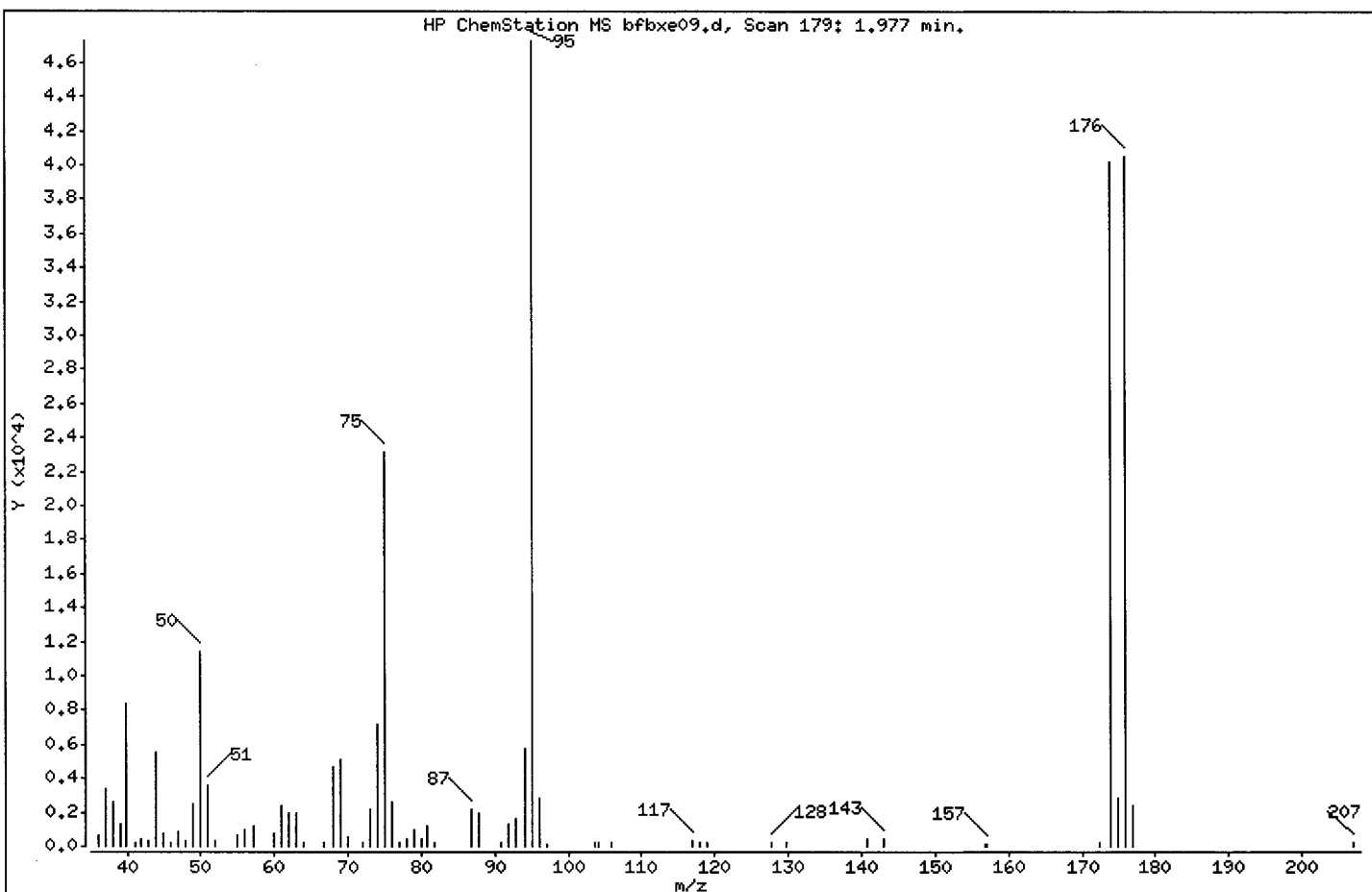
Sample Info: BFBXE09,1,3,,BFB,TUNE

Operator: 063605

Column phase: J &amp; W 624

Column diameter: 0.18

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          | 24.03                |
| 75  | 30.00 - 60.00% of mass 95          | 48.97                |
| 96  | 5.00 - 9.00% of mass 95            | 5.89                 |
| 173 | Less than 2.00% of mass 174        | 0.00 ( 0.00)         |
| 174 | 50.00 - 120.00% of mass 95         | 85.08                |
| 175 | 5.00 - 9.00% of mass 174           | 6.09 ( 7.15)         |
| 176 | 95.00 - 101.00% of mass 174        | 85.74 (100.78)       |
| 177 | 5.00 - 9.00% of mass 176           | 5.01 ( 5.84)         |



Data File: /var/chem/gcms/mx.i/X050906.b/bfbxe09.d

Date : 09-MAY-2006 17:10

Client ID: TUNE

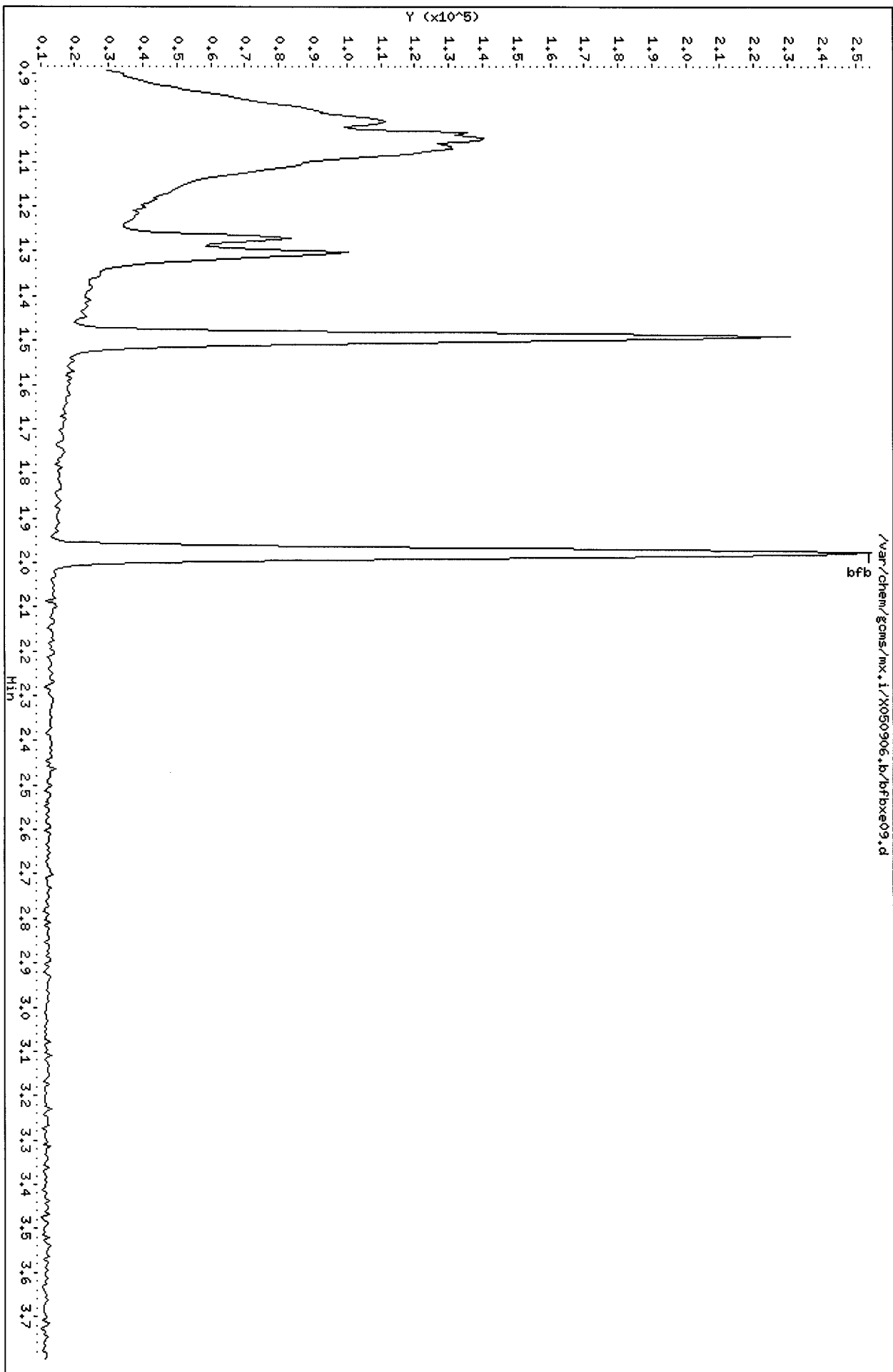
Sample Info: BFBXE09,1,3,BFB,TUNE

Instrument: mx.i

Operator: 063605

Column diameter: 0.18

Column phase: J & W 624





Data File: /chem/gcms/mx.i/X050906.b/ccvxe093.d  
 Report Date: 09-May-2006 17:50

STL Knoxville

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mx.i                      Injection Date: 09-MAY-2006 17:34  
 Lab File ID: ccvxe093.d              Init. Cal. Date(s): 03-MAY-2006    03-MAY-2006  
 Analysis Type: AIR                    Init. Cal. Times:    15:12        ✓        16:59        ✓  
 Lab Sample ID: CCVXE093              Quant Type:    ISTD  
 Method: /chem/gcms/mx.i/X050906.b/clbz.m

| COMPOUND                | RRF / AMOUNT | RF0.000   | CCAL<br>RRF0.000 | MIN<br>RRF | %D / %DRIFT | MAX<br>%D / %DRIFT | CURVE TYPE |
|-------------------------|--------------|-----------|------------------|------------|-------------|--------------------|------------|
| =====                   | =====        | =====     | =====            | =====      | =====       | =====              | =====      |
| 57 Tetrachloroethene    | ✓ 1.41059    | ✓ 1.23886 | 1.23886          | 0.000      | 12.17409    | 50.00000           | Averaged   |
| 62 Chlorobenzene (spcc) | ✓ 3.30815    | 2.52955   | 2.52955          | 0.300      | 23.53591    | 50.00000           | Averaged   |
|                         |              |           |                  |            |             |                    |            |

Data File: /chem/gcms/mx.i/X050906.b/ccvxe093.d  
 Report Date: 09-May-2006 17:50

## STL Knoxville

SW-846 Method 8260A - Volatile Organics

Data file : /chem/gcms/mx.i/X050906.b/ccvxe093.d  
 Lab Smp Id: CCVXE093 Client Smp ID: VSTD010  
 Inj Date : 09-MAY-2006 17:34  
 Operator : 063605 Inst ID: mx.i  
 Smp Info : CCVXE093,1,2,3,,VSTD010  
 Misc Info : X050906,clbz,clbz.sub  
 Comment :  
 Method : /chem/gcms/mx.i/X050906.b/clbz.m  
 Meth Date : 09-May-2006 17:50 chemist Quant Type: ISTD  
 Cal Date : 03-MAY-2006 15:12 Cal File: tclp10.d  
 Als bottle: 1 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: clbz.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
 Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

| Compounds                  | QUANT SIG | AMOUNTS  |        |         |           |                    |                   |
|----------------------------|-----------|----------|--------|---------|-----------|--------------------|-------------------|
|                            |           | RT       | EXP RT | REL RT  | RESPONSE  | CAL-AMT<br>( ug/L) | ON-COL<br>( ug/L) |
| =====                      | =====     | ==       | =====  | =====   | =====     | =====              | =====             |
| * 1 Fluorobenzene          | 96        | 4.852 ✓  | 4.852  | (1.000) | 1474532 ✓ | 10.0000            |                   |
| * 2 Chlorobenzene-d5       | 119       | 7.589 ✓  | 7.589  | (1.000) | 298122 ✓  | 10.0000            |                   |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.753 ✓ | 10.753 | (1.000) | 319423 ✓  | 10.0000            |                   |
| 57 Tetrachloroethene       | 164       | 6.829    | 6.829  | (0.900) | 8863988   | 240.000            | 210.78 (A)        |
| 62 Chlorobenzene (spcc)    | 112       | 7.614    | 7.614  | (1.003) | 18098771  | 240.000            | 183.51 (A)        |

barely saturated

## QC Flag Legend

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

Data File: /var/chem/gcms/mx.i/X050906.b/covxe093.d

Date : 09-MAY-2006 17:34

Client ID: VSTD010

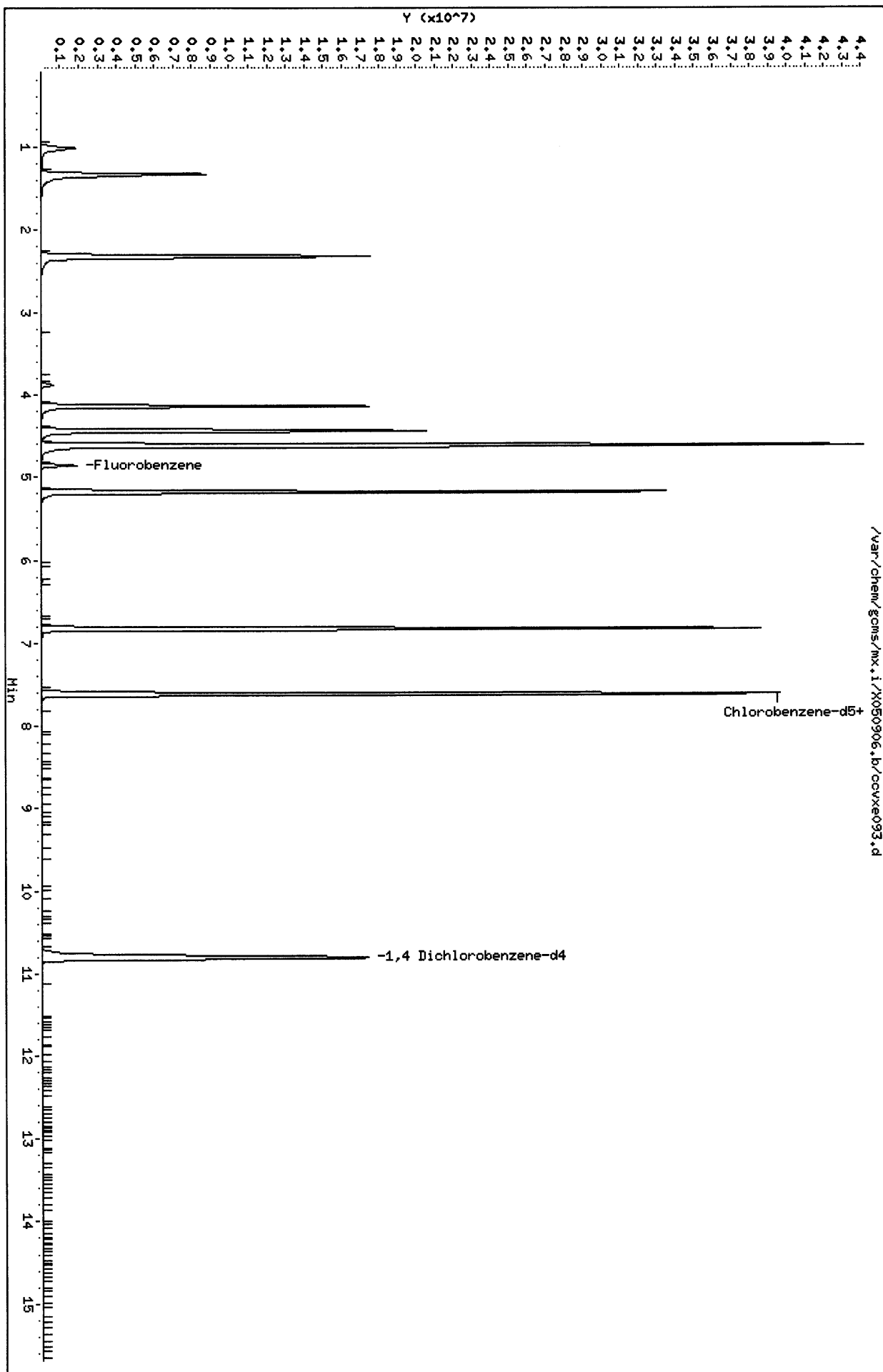
Sample Info: COVXE093.1,2,3,,VSTD010

Column phase: J+M 624

Instrument: mx.i

Operator: 063605

Column diameter: 0.18



# Raw QC Data

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169  
 MB Lot-Sample #: H6D050000-253

Work Order #...: H2MQQ1AA

Matrix.....: WATER

Analysis Date...: 04/05/06

Prep Date.....: 04/05/06

Dilution Factor: 1

Prep Batch #...: 6095253

| PARAMETER                        | RESULT | REPORTING |       |       | METHOD |
|----------------------------------|--------|-----------|-------|-------|--------|
|                                  |        | LIMIT     | UNITS |       |        |
| Acetone                          | ND     | 10        | ug/L  | SW846 | 8260B  |
| Acrylonitrile                    | ND     | 20        | ug/L  | SW846 | 8260B  |
| Benzene                          | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| Bromobenzene                     | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| Bromochloromethane               | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| Bromodichloromethane             | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| Bromoform                        | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| Bromomethane                     | ND     | 2.0       | ug/L  | SW846 | 8260B  |
| 2-Butanone                       | ND     | 5.0       | ug/L  | SW846 | 8260B  |
| n-Butylbenzene                   | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| sec-Butylbenzene                 | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| tert-Butylbenzene                | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| Carbon disulfide                 | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| Carbon tetrachloride             | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| Chlorobenzene                    | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| Chlorodibromomethane             | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| Chloroethane                     | ND     | 2.0       | ug/L  | SW846 | 8260B  |
| Chloroform                       | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| Chloromethane                    | ND     | 2.0       | ug/L  | SW846 | 8260B  |
| 2-Chlorotoluene                  | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| 4-Chlorotoluene                  | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| 1,2-Dibromo-3-chloro-<br>propane | ND     | 2.0       | ug/L  | SW846 | 8260B  |
| 1,2-Dibromoethane                | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| Dibromomethane                   | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| 1,2-Dichlorobenzene              | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| 1,3-Dichlorobenzene              | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| 1,4-Dichlorobenzene              | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| Dichlorodifluoromethane          | ND     | 2.0       | ug/L  | SW846 | 8260B  |
| 1,1-Dichloroethane               | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| 1,2-Dichloroethane               | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| cis-1,2-Dichloroethene           | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| trans-1,2-Dichloroethene         | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| 1,1-Dichloroethene               | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| 1,2-Dichloropropane              | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| 1,3-Dichloropropane              | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| 2,2-Dichloropropane              | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| cis-1,3-Dichloropropene          | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| trans-1,3-Dichloropropene        | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| 1,1-Dichloropropene              | ND     | 1.0       | ug/L  | SW846 | 8260B  |
| Ethylbenzene                     | ND     | 1.0       | ug/L  | SW846 | 8260B  |

(Continued on next page)

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169

Work Order #...: H2MQQ1AA

Matrix.....: WATER

| PARAMETER                                 | RESULT   | REPORTING  |       |             |
|-------------------------------------------|----------|------------|-------|-------------|
|                                           |          | LIMIT      | UNITS | METHOD      |
| Hexachlorobutadiene                       | ND       | 2.0        | ug/L  | SW846 8260B |
| 2-Hexanone                                | ND       | 5.0        | ug/L  | SW846 8260B |
| Iodomethane                               | 0.55 J   | 2.0        | ug/L  | SW846 8260B |
| Isopropylbenzene                          | ND       | 1.0        | ug/L  | SW846 8260B |
| p-Isopropyltoluene                        | ND       | 1.0        | ug/L  | SW846 8260B |
| Methylene chloride                        | ND       | 2.0        | ug/L  | SW846 8260B |
| 4-Methyl-2-pentanone                      | ND       | 5.0        | ug/L  | SW846 8260B |
| Naphthalene                               | ND       | 1.0        | ug/L  | SW846 8260B |
| n-Propylbenzene                           | ND       | 1.0        | ug/L  | SW846 8260B |
| Styrene                                   | ND       | 1.0        | ug/L  | SW846 8260B |
| 1,1,1,2-Tetrachloroethane                 | ND       | 1.0        | ug/L  | SW846 8260B |
| 1,1,2,2-Tetrachloroethane                 | ND       | 1.0        | ug/L  | SW846 8260B |
| Tetrachloroethene                         | ND       | 1.0        | ug/L  | SW846 8260B |
| Tetrahydrofuran                           | ND       | 4.0        | ug/L  | SW846 8260B |
| Toluene                                   | ND       | 1.0        | ug/L  | SW846 8260B |
| 1,2,3-Trichlorobenzene                    | 0.26 J   | 1.0        | ug/L  | SW846 8260B |
| 1,2,4-Trichloro-<br>benzene               | 0.15 J   | 1.0        | ug/L  | SW846 8260B |
| 1,1,1-Trichloroethane                     | ND       | 1.0        | ug/L  | SW846 8260B |
| 1,1,2-Trichloroethane                     | ND       | 1.0        | ug/L  | SW846 8260B |
| Trichloroethene                           | ND       | 1.0        | ug/L  | SW846 8260B |
| Trichlorofluoromethane                    | ND       | 2.0        | ug/L  | SW846 8260B |
| 1,2,3-Trichloropropane                    | ND       | 1.0        | ug/L  | SW846 8260B |
| 1,1,2-Trichloro-<br>1,2,2-trifluoroethane | ND       | 1.0        | ug/L  | SW846 8260B |
| 1,2,4-Trimethylbenzene                    | ND       | 1.0        | ug/L  | SW846 8260B |
| 1,3,5-Trimethylbenzene                    | ND       | 1.0        | ug/L  | SW846 8260B |
| Vinyl acetate                             | ND       | 2.0        | ug/L  | SW846 8260B |
| Vinyl chloride                            | ND       | 1.0        | ug/L  | SW846 8260B |
| m-Xylene & p-Xylene                       | ND       | 1.0        | ug/L  | SW846 8260B |
| o-Xylene                                  | ND       | 1.0        | ug/L  | SW846 8260B |
| Xylenes (total)                           | ND       | 1.0        | ug/L  | SW846 8260B |
|                                           | PERCENT  | RECOVERY   |       |             |
| SURROGATE                                 | RECOVERY | LIMITS     |       |             |
| Dibromofluoromethane                      | 107      | (79 - 120) |       |             |
| 1,2-Dichloroethane-d4                     | 105      | (71 - 127) |       |             |
| Toluene-d8                                | 104      | (80 - 120) |       |             |
| Bromofluorobenzene                        | 96       | (69 - 126) |       |             |

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

STL Knoxville - ACS

Method Blank Report

GC/MS Volatiles

Lot-Sample #: H6D050000-253 B Work Order #: H2MQQ1AA

Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug/L         |

Data File: /chem/gcms/mz.i/Z040506.b/h2mqqlaa.d  
Report Date: 05-Apr-2006 16:10

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /chem/gcms/mz.i/Z040506.b/h2mqqlaa.d  
Lab Smp Id: H2MQQ1AA Client Smp ID: INTRA-LAB BLANK  
Inj Date : 05-APR-2006 15:52  
Operator : 063605 Inst ID: mz.i  
Smp Info : H2MQQ1AA,1,3,,BLANK  
Misc Info : Z040506,8260B\_LM,all.sub  
Comment : Volatile Organics by GC/MS  
Method : /var/chem/gcms/mz.i/Z040506.b/8260B\_LM.m  
Meth Date : 05-Apr-2006 15:47 tillerm Quant Type: ISTD  
Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
Als bottle: 1 QC Sample: METHOD BLANK  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: all.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf\*Vt/(Vo\*1000) \* CpndVariable

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                  | QUANT SIG |        |        |         |          | CONCENTRATIONS       |                    |
|----------------------------|-----------|--------|--------|---------|----------|----------------------|--------------------|
|                            | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN<br>( ug/L) | FINAL<br>( ug/L)   |
| * 1 Fluorobenzene          | 96        | 5.669  | 5.667  | (1.000) | 1078768  | 10.0000              |                    |
| * 2 Chlorobenzene-d5       | 119       | 8.930  | 8.933  | (1.000) | 190004   | 10.0000              |                    |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 11.485 | 11.488 | (1.000) | 227067   | 10.0000              |                    |
| \$ 4 Dibromofluoromethane  | 113       | 4.830  | 4.821  | (0.852) | 184371   | 10.6661              | 10.666             |
| \$ 5 1,2-Dichloroethane-d4 | 65        | 5.237  | 5.229  | (0.924) | 156720   | 10.4845              | 10.484             |
| \$ 6 Toluene-d8            | 98        | 7.458  | 7.455  | (0.835) | 864522   | 10.3555              | 10.355             |
| \$ 7 4-Bromofluorobenzene  | 95        | 10.122 | 10.126 | (0.881) | 219161   | 9.57046              | 9.5705             |
| 15 Bromomethane            | 94        | 1.417  | 1.414  | (0.250) | 1219     | <del>0.94027</del>   | <del>0.94027</del> |
| 22 Acetone                 | 43        | 2.122  | 2.126  | (0.374) | 1374     | <del>3.46147</del>   | <del>3.4615</del>  |
| 23 *Iodomethane            | 142       | 2.189  | 2.181  | (0.386) | 701      | 0.54716              | 0.54716            |
| 26 *Acetonitrile           | 40        | 2.421  | 2.369  | (0.427) | 801      | <del>1.66860</del>   | <del>1.6686</del>  |
| 34 *Vinyl Acetate          | 86        | 3.132  | 3.397  | (0.553) | 371      | <del>0.25860</del>   | <del>0.25860</del> |
| 45 1,2-Dichloroethane      | 62        | 5.675  | 5.326  | (1.001) | 16265    | <del>0.72201</del>   | <del>0.72201</del> |
| 53 4-Methyl-2-pentanone    | 43        | 7.458  | 7.376  | (1.315) | 6211     | <del>0.65940</del>   | <del>0.65940</del> |

✓  
0.47156

mt  
4/6/06  
NA



Data File: /chem/gcms/mz.i/Z040506.b/h2mqqlaa.d  
Report Date: 05-Apr-2006 16:10

| Compounds                    | QUANT SIG |        |        |         |          |  | CONCENTRATIONS       |                  |
|------------------------------|-----------|--------|--------|---------|----------|--|----------------------|------------------|
|                              | MASS      | RT     | EXP RT | REL RT  | RESPONSE |  | ON-COLUMN<br>( ug/L) | FINAL<br>( ug/L) |
| =====                        | =====     | ==     | =====  | =====   | =====    |  | =====                | =====            |
| 55 trans-1,3-Dichloropropene | 75        | 7.476  | 7.784  | (0.837) | 124      |  | <del>0.63249</del>   | 0.63248          |
| 69 Bromoform (spcc)          | 173       | 10.104 | 9.779  | (1.131) | 93       |  | <del>0.83219</del>   | 0.83219          |
| 89 1,2,4-Trichlorobenzene    | 180       | 14.295 | 14.293 | (1.245) | 2743     |  | 0.15436              | 0.15436          |
| 90 Hexachlorobutadiene       | 225       | 14.521 | 14.524 | (1.264) | 1874     |  | 0.11247              | 0.11247          |
| 92 1,2,3-Trichlorobenzene    | 180       | 14.819 | 14.816 | (1.290) | 3052     |  | 0.26076              | 0.26076          |

NT  
4/6/06

Data File: /chem/gcms/mz.i/Z040506.b/h2mqqlaa.d  
 Report Date: 05-Apr-2006 16:10

STL Knoxville

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                       |                                |
|-------------------------------------------------------|--------------------------------|
| Instrument ID: mz.i                                   | Calibration Date: 05-APR-2006  |
| Lab File ID: h2mqqlaa.d                               | Calibration Time: 14:42        |
| Lab Smp Id: H2MQQ1AA                                  | Client Smp ID: INTRA-LAB BLANK |
| Analysis Type: VOA                                    | Level: LOW                     |
| Quant Type: ISTD                                      | Sample Type: WATER             |
| Operator: 063605                                      |                                |
| Method File: /var/chem/gcms/mz.i/Z040506.b/8260B_LM.m |                                |
| Misc Info: Z040506,8260B_LM,all.sub                   |                                |

| COMPOUND<br>=====   | STANDARD<br>===== | AREA LIMIT     |                | SAMPLE<br>===== | %DIFF<br>===== |
|---------------------|-------------------|----------------|----------------|-----------------|----------------|
|                     |                   | LOWER<br>===== | UPPER<br>===== |                 |                |
| 1 Fluorobenzene     | 1078707           | 539354         | 2157414        | 1078768         | 0.01           |
| 2 Chlorobenzene-d5  | 188899            | 94450          | 377798         | 190004          | 0.58           |
| 3 1,4 Dichlorobenze | 220143            | 110072         | 440286         | 227067          | 3.15           |

| COMPOUND<br>=====   | STANDARD<br>===== | RT LIMIT       |                | SAMPLE<br>===== | %DIFF<br>===== |
|---------------------|-------------------|----------------|----------------|-----------------|----------------|
|                     |                   | LOWER<br>===== | UPPER<br>===== |                 |                |
| 1 Fluorobenzene     | 5.67              | 5.17           | 6.17           | 5.67            | 0.05           |
| 2 Chlorobenzene-d5  | 8.93              | 8.43           | 9.43           | 8.93            | -0.04          |
| 3 1,4 Dichlorobenze | 11.49             | 10.99          | 11.99          | 11.48           | -0.03          |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mz.i/Z040506.b/h2mqqlaa.d  
Report Date: 05-Apr-2006 16:10

STL Knoxville

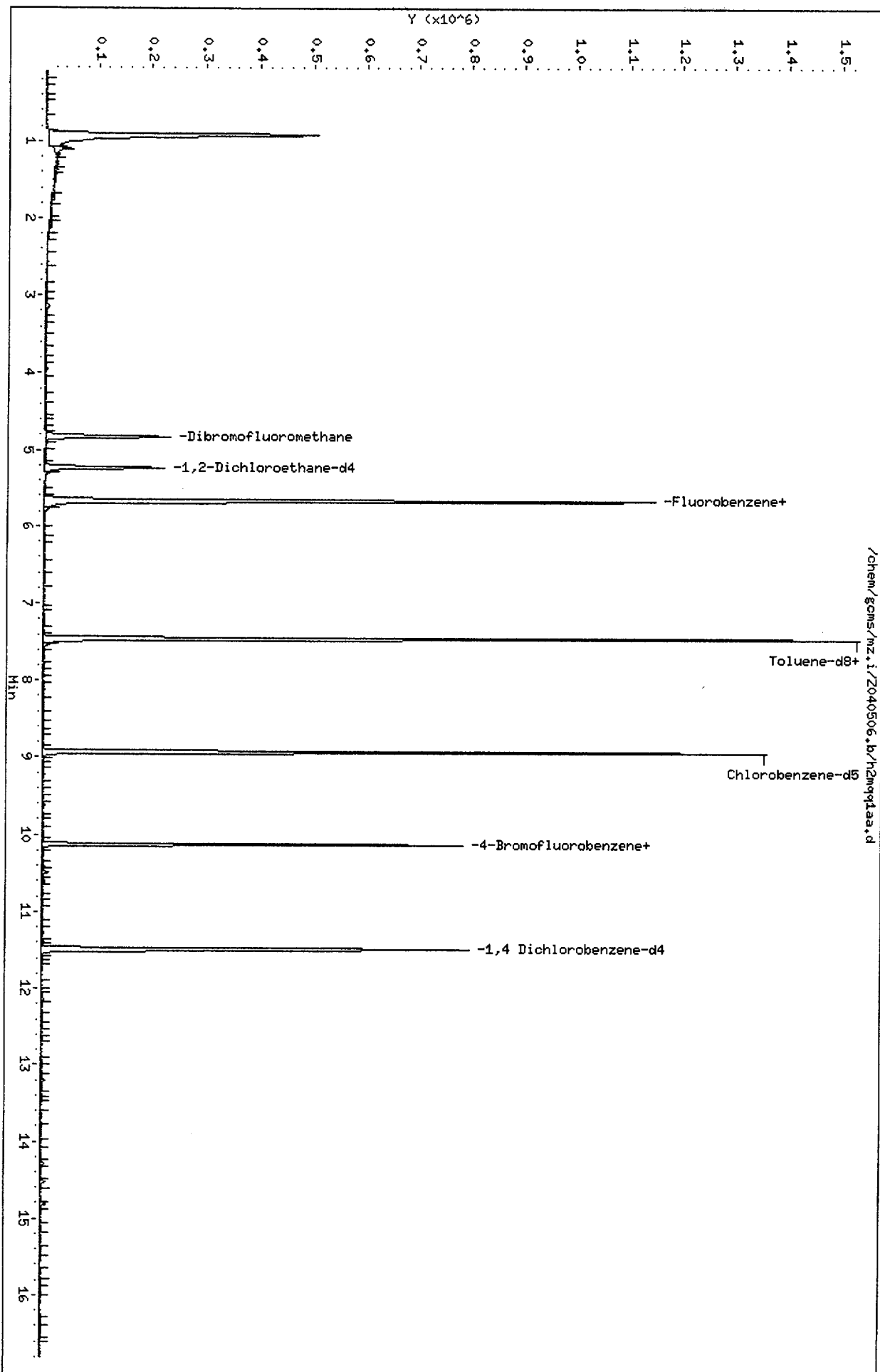
RECOVERY REPORT

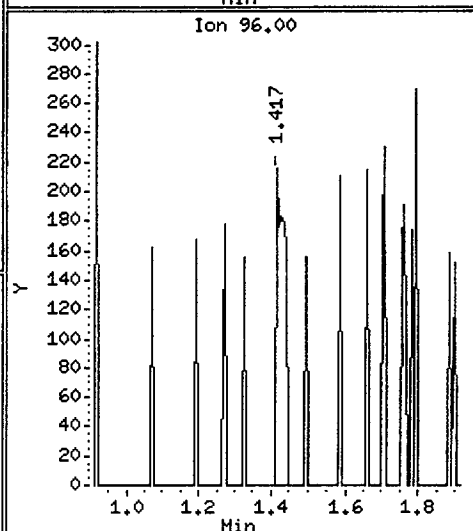
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Sample Matrix: LIQUID Fraction: VOA  
Lab Smp Id: H2MQQ1AA Client Smp ID: INTRA-LAB BLANK  
Level: LOW Operator: 063605  
Data Type: MS DATA SampleType: METHOD BLANK  
SpikeList File: allcmpds.spk Quant Type: ISTD  
Sublist File: all.sub  
Method File: /var/chem/gcms/mz.i/Z040506.b/8260B\_LM.m  
Misc Info: Z040506,8260B\_LM,all.sub

| SURROGATE COMPOUND      | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|-------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 4 Dibromofluorometha | 10.000                | 10.666                    | 106.66         | 79-120 |
| \$ 5 1,2-Dichloroethane | 10.000                | 10.484                    | 104.84         | 71-127 |
| \$ 6 Toluene-d8         | 10.000                | 10.355                    | 103.55         | 80-120 |
| \$ 7 4-Bromofluorobenze | 10.000                | 9.5705                    | 95.70          | 69-126 |

Data File: /chem/gcms/mz.i/Z040506.b/h2mq1aa.d  
Date : 05-APR-2006 15:52  
Client ID: INTRA-LAB BLANK  
Sample Info: H2MQ1AA,1,3,,BLANK  
Purge Volume: 25.0  
Column phase: J+W 624

Instrument: mz.i  
Operator: 063605  
Column diameter: 0.18





Data File: /chem/gcms/mz.i/Z040506.b/h2mq1aa.d

Date : 05-APR-2006 15:52

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2MQ1AA,1,3,,BLANK

Purge Volume: 25.0

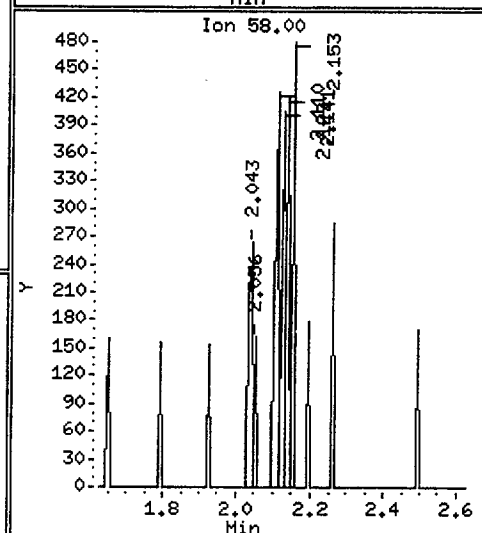
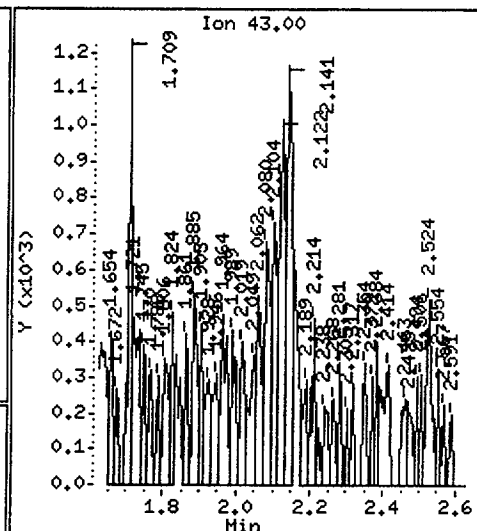
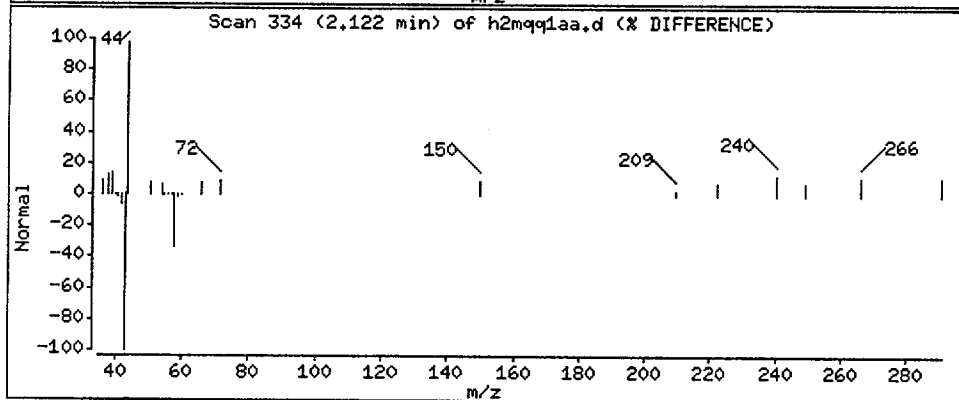
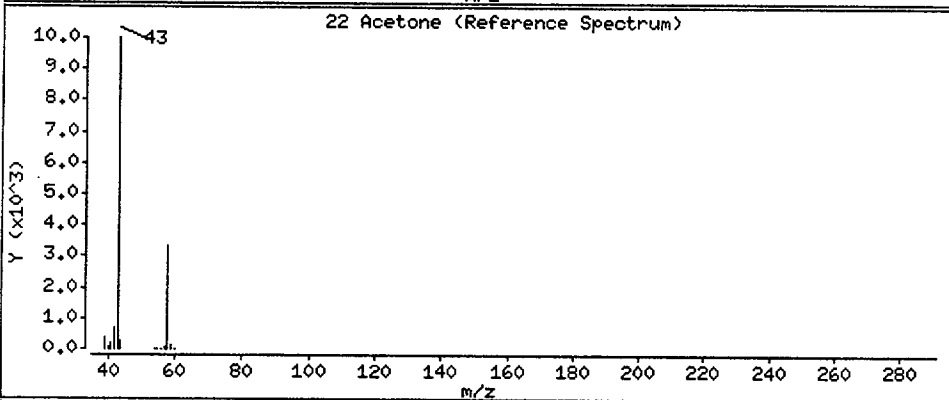
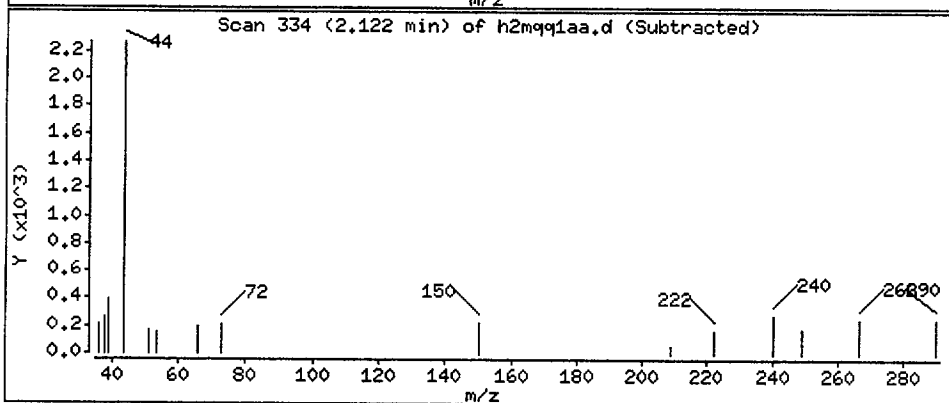
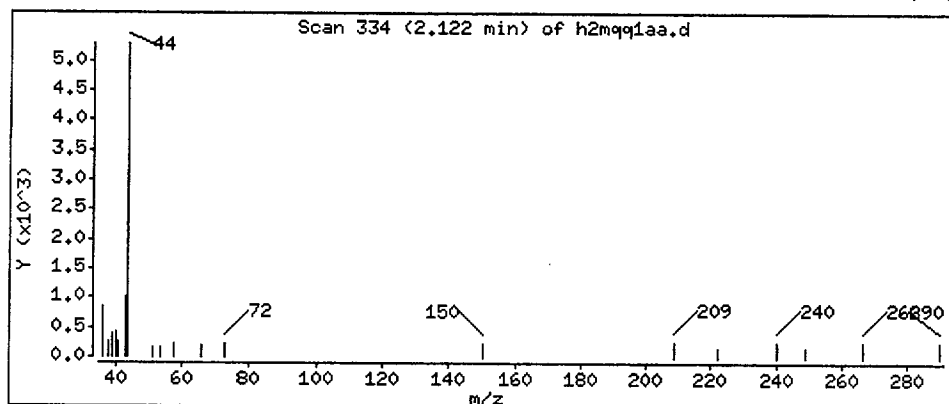
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

22 Acetone

Concentration: 3.4615 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2mq1aa.d

Date : 05-APR-2006 15:52

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2MQQ1AA,1,3,,BLANK

Purge Volume: 25.0

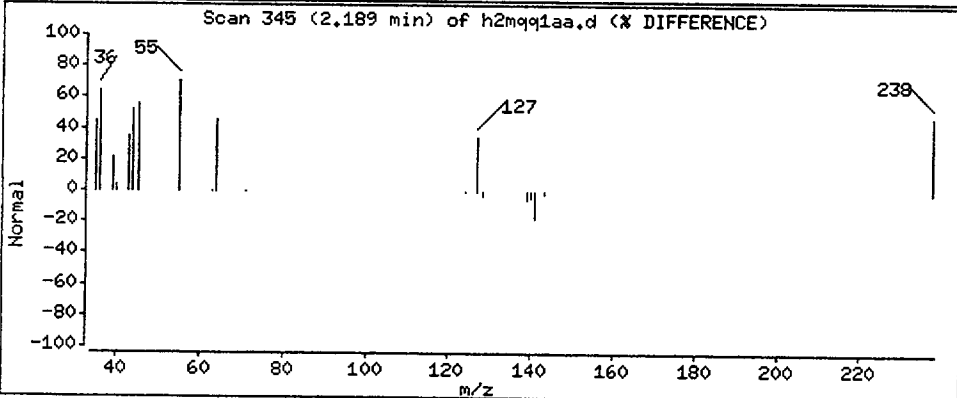
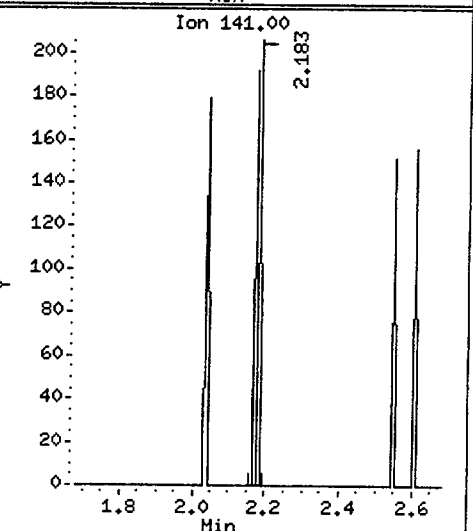
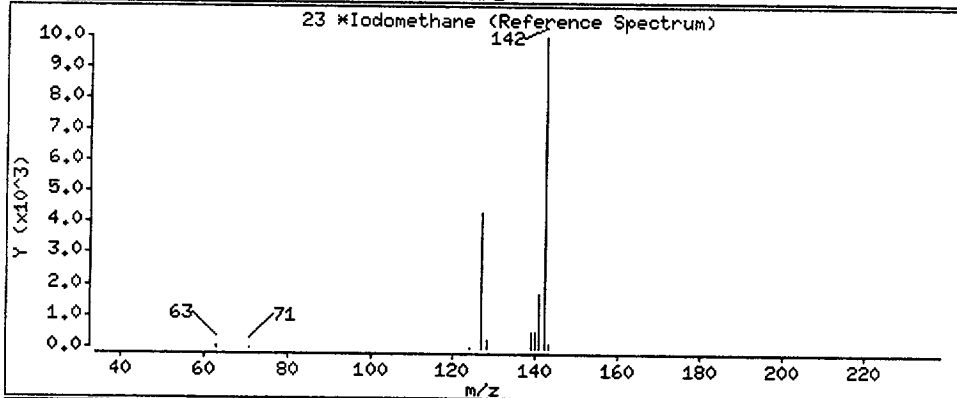
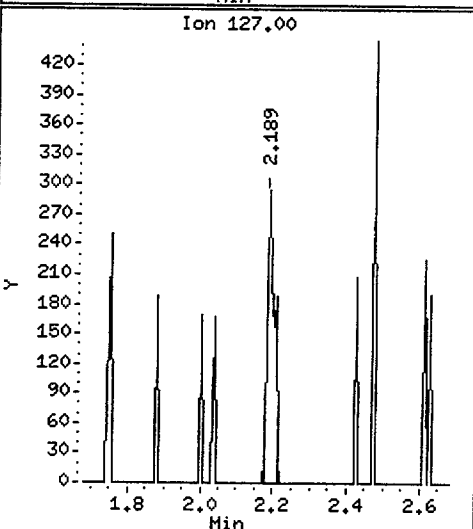
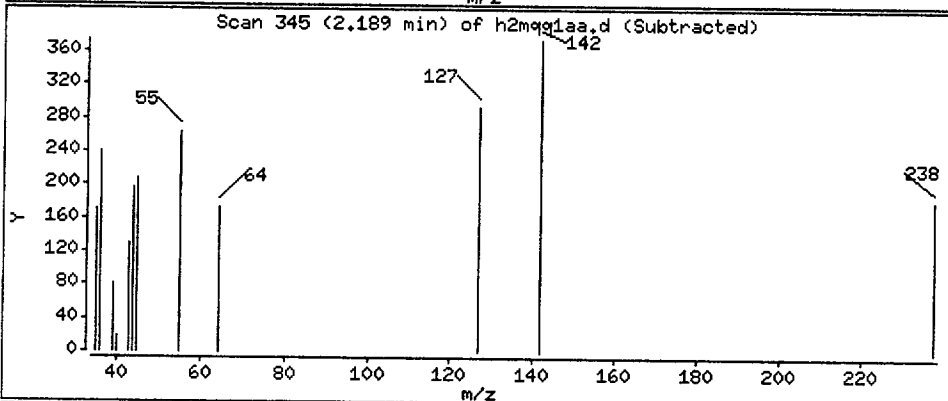
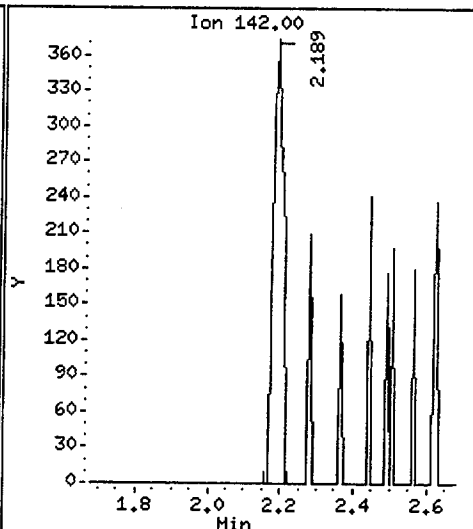
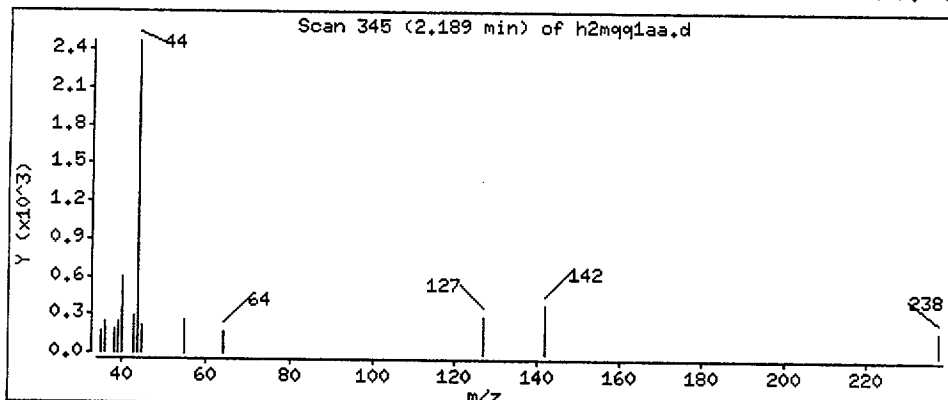
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

23 \*Iodomethane

Concentration: 0.54716 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2mqq1aa.d

Date : 05-APR-2006 15:52

Client ID: INTRA-LAB BLANK

Instrument: mz.i

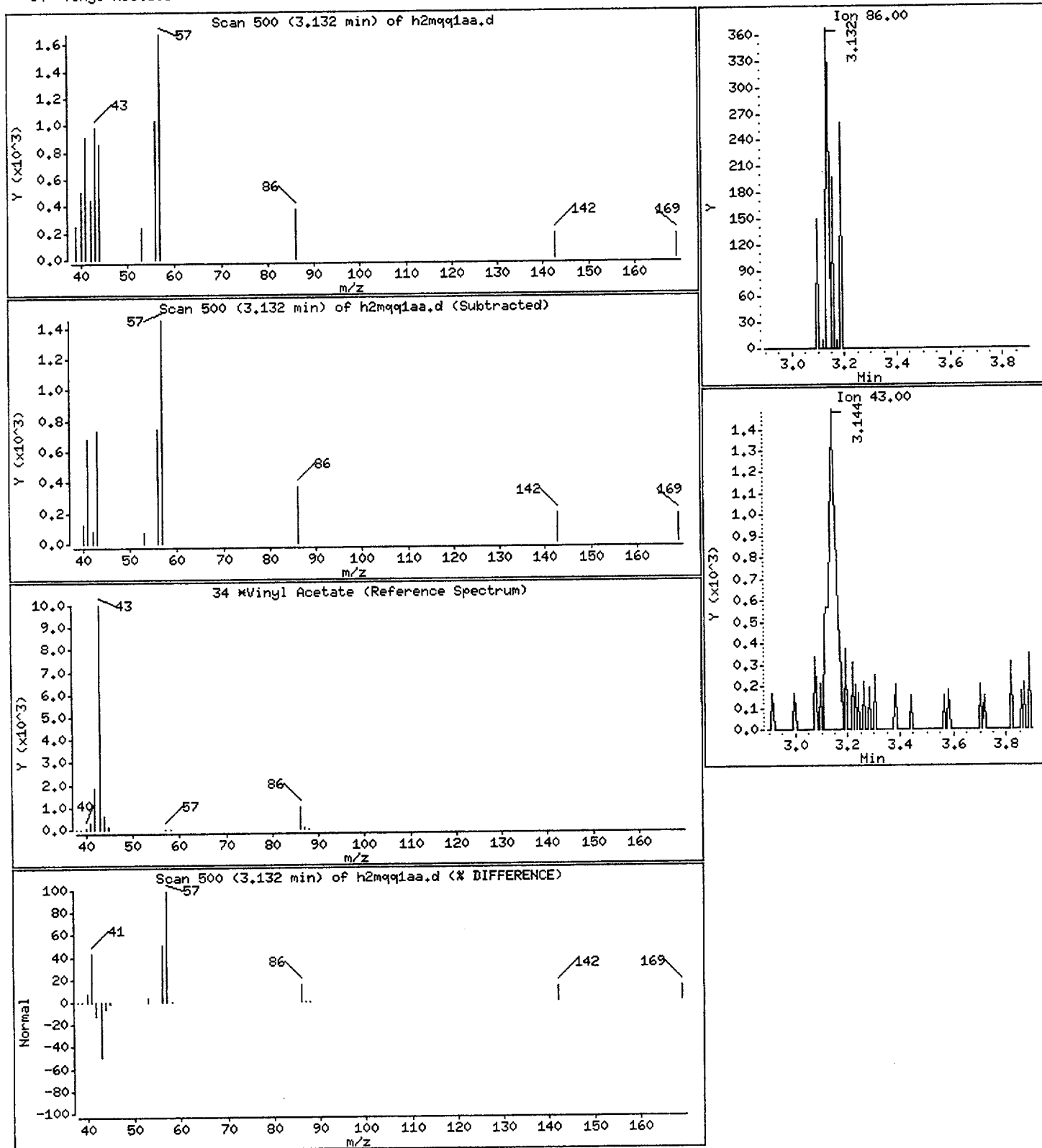
Sample Info: H2MQQ1AA,1,3,,BLANK

Purge Volume: 25.0

Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

34  $\mu$ Vinyl AcetateConcentration: 0.25860  $\mu$ g/L



Data File: /chem/gcms/mz.i/Z040506.b/h2mq1aa.d

Date : 05-APR-2006 15:52

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2HQQ1AA,1,3,,BLANK

Purge Volume: 25.0

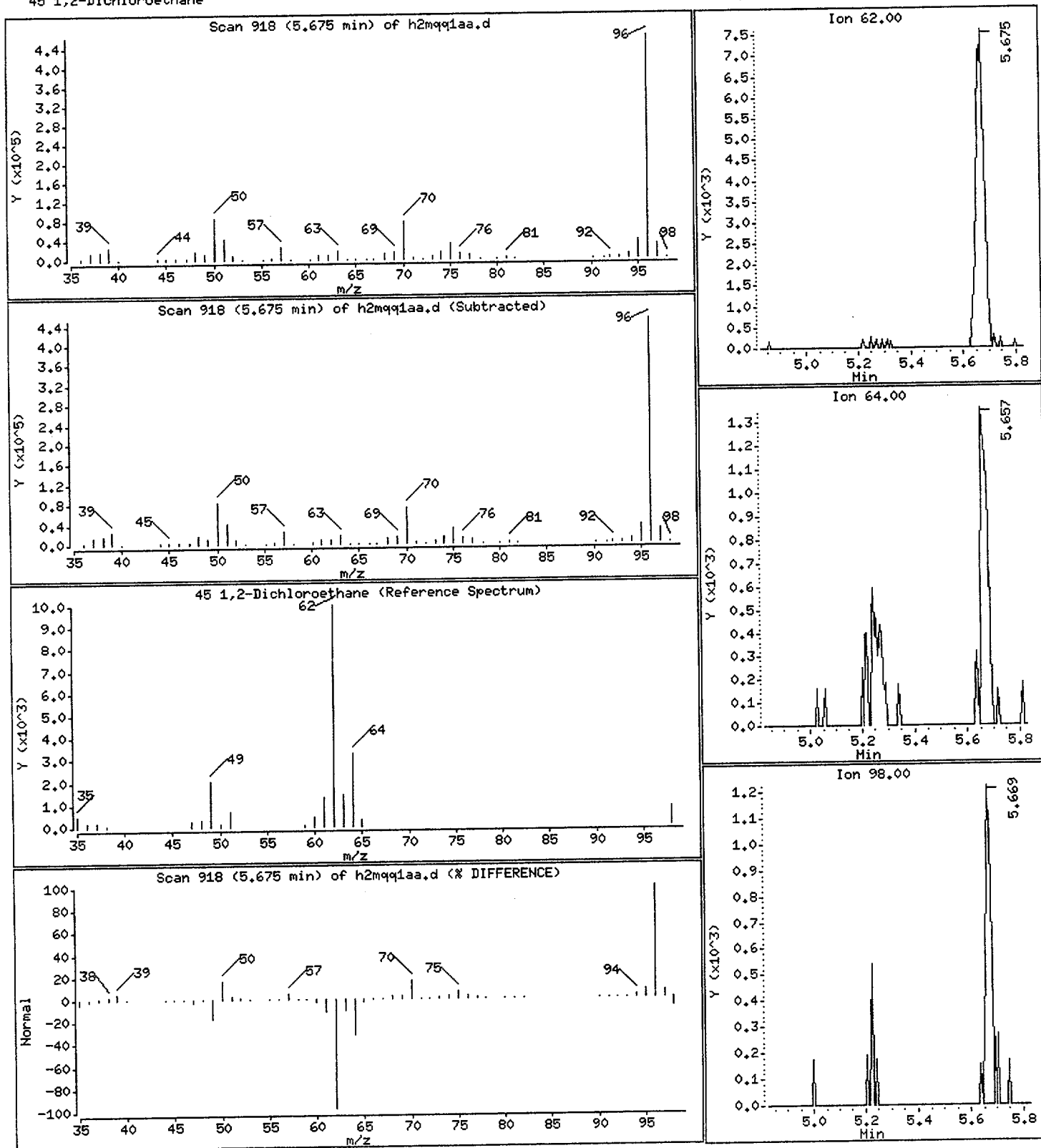
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

45 1,2-Dichloroethane

Concentration: 0.72201 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2mqqlaa.d

Date : 05-APR-2006 15:52

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2MQQ1AA,1,3,,BLANK

Purge Volume: 25.0

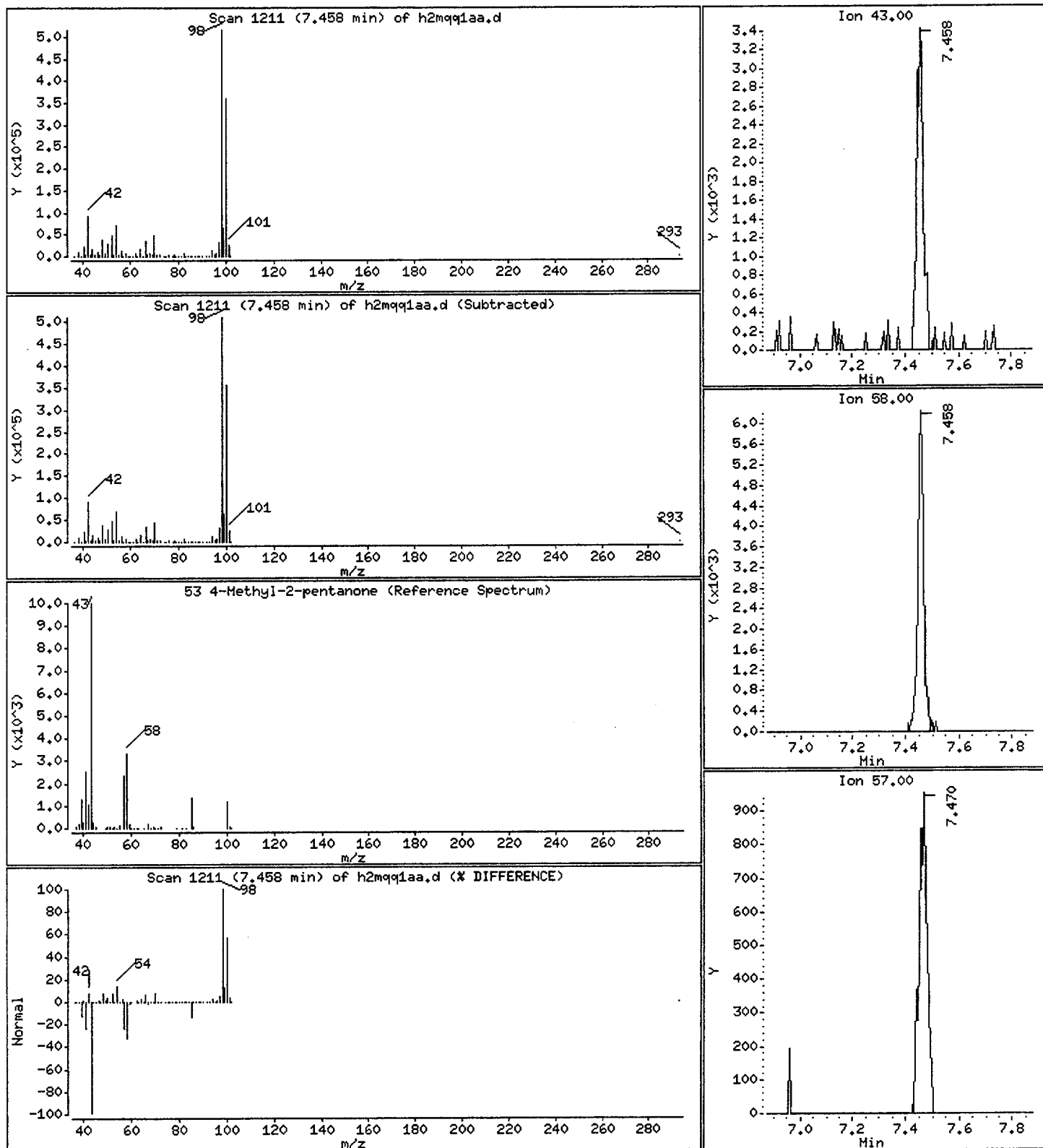
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

53 4-Methyl-2-pentanone

Concentration: 0.65940 ug/L



Data File: /chem/gcms/mz.i/Z040506,b/h2mqq1aa.d

Date : 05-APR-2006 15:52

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2MQQ1AA,1,3,,BLANK

Purge Volume: 25.0

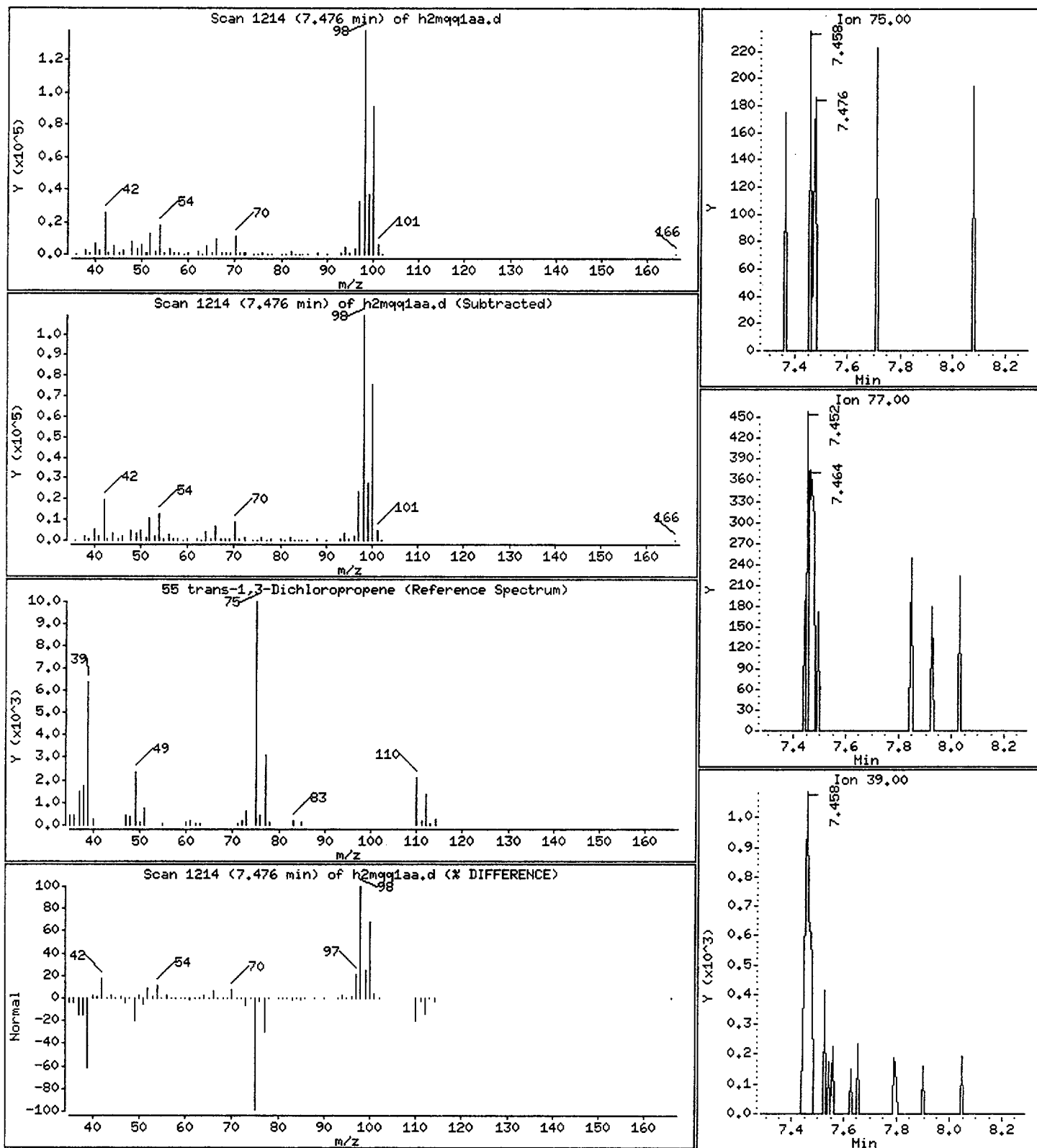
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

55 trans-1,3-Dichloropropene

Concentration: 0.63248 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2mq1aa.d

Date : 05-APR-2006 15:52

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2MQ1AA,1,3,,BLANK

Purge Volume: 25.0

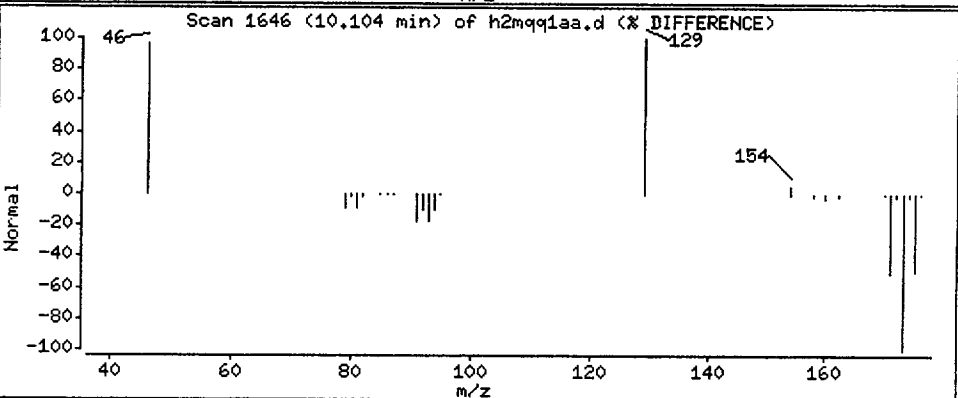
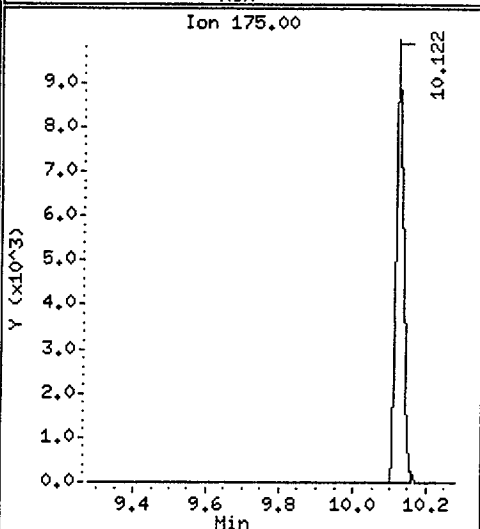
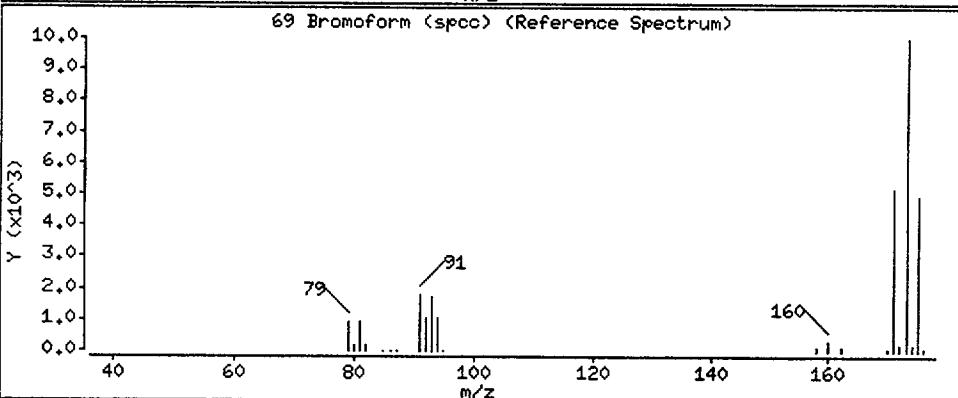
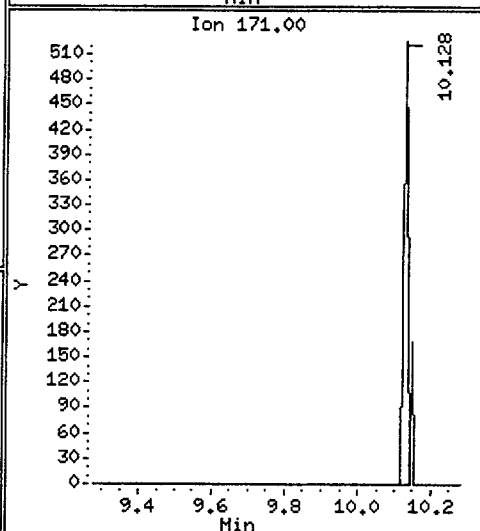
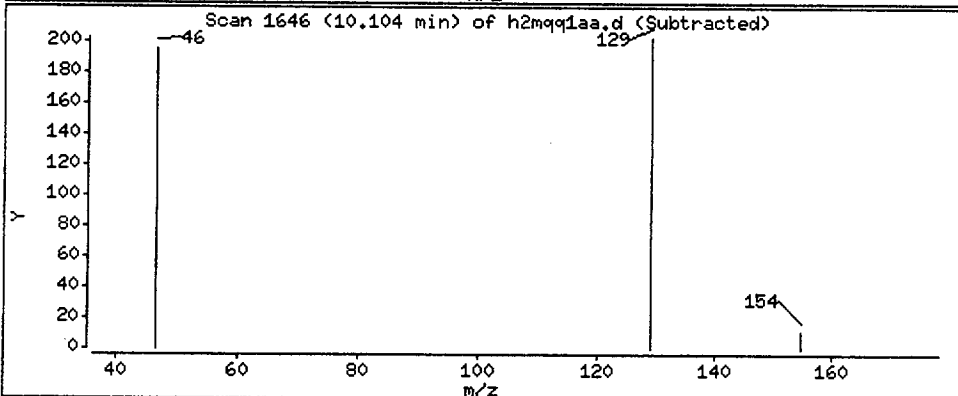
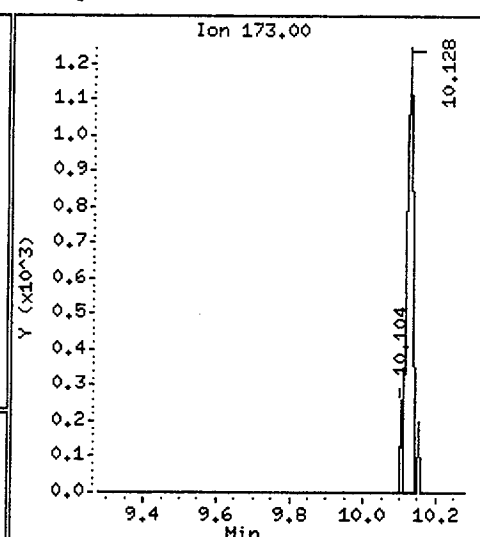
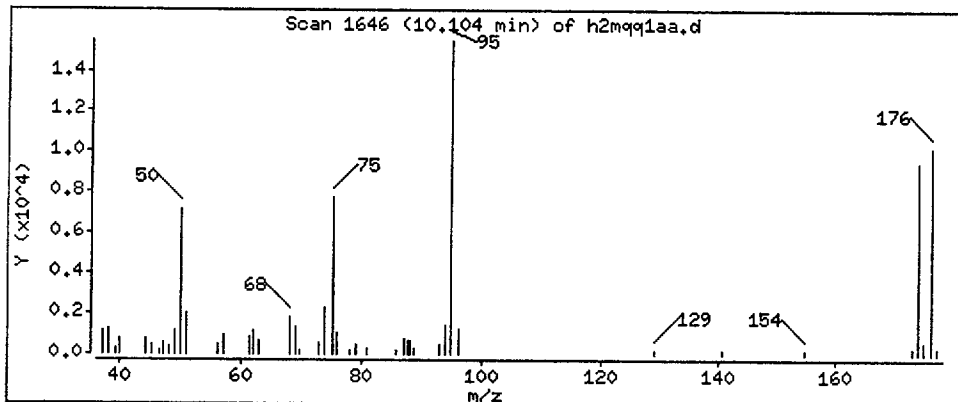
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

69 Bromoform (spcc)

Concentration: 0.83219 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2mq1aa.d

Date : 05-APR-2006 15:52

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2MQQ1AA,1,3,,BLANK

Purge Volume: 25.0

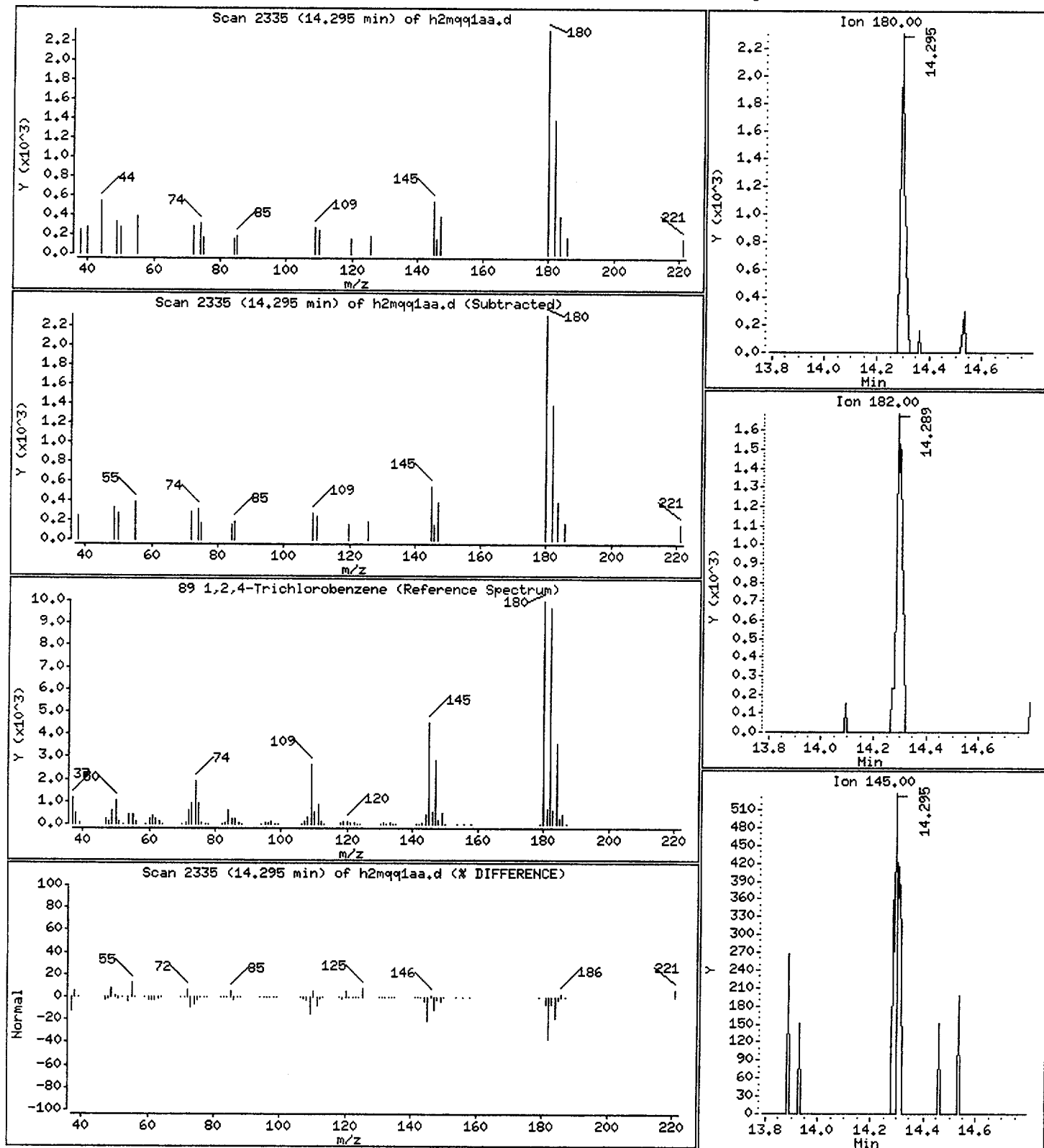
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

89 1,2,4-Trichlorobenzene

Concentration: 0.15436 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2mq1aa.d

Date : 05-APR-2006 15:52

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2MQ1AA,1,3,,BLANK

Purge Volume: 25.0

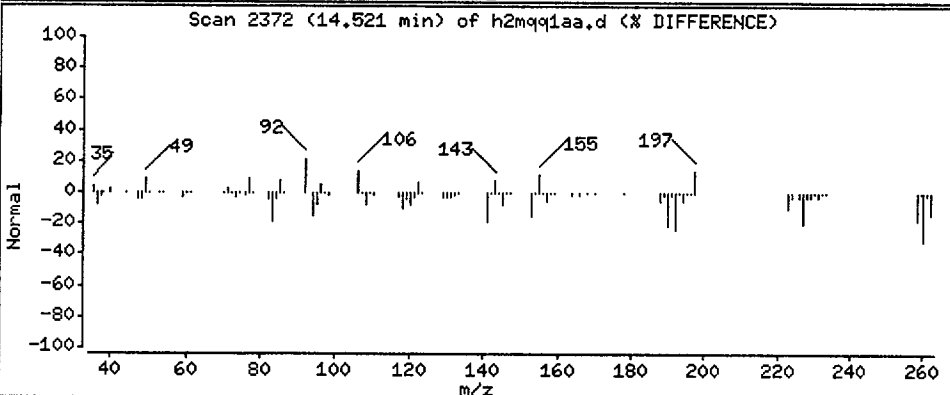
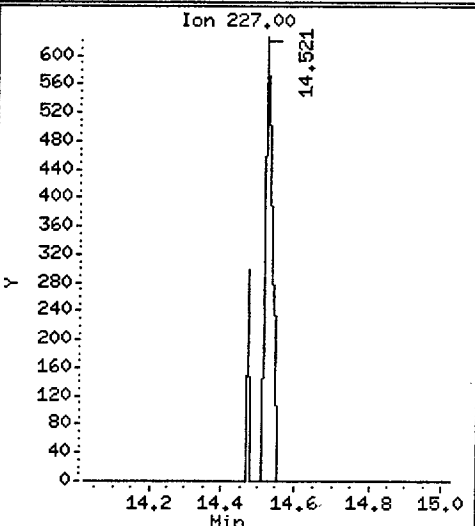
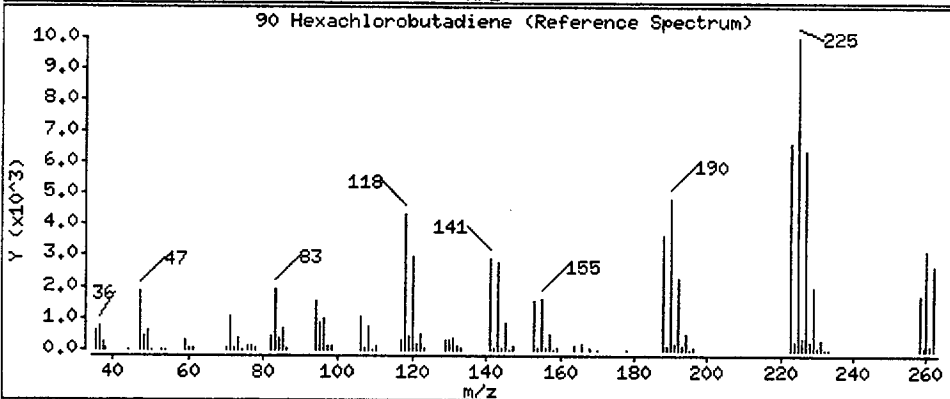
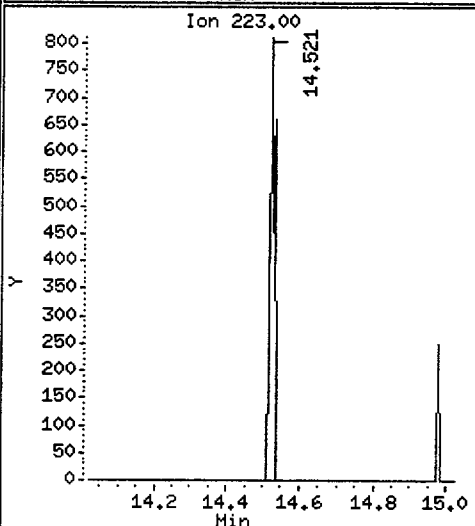
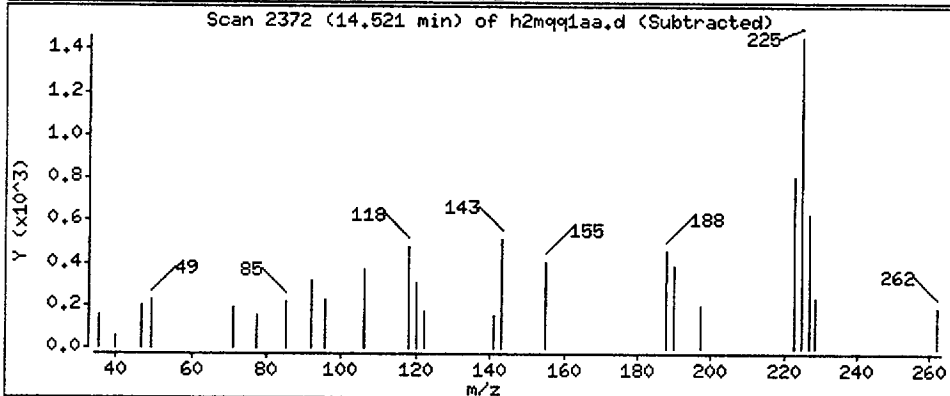
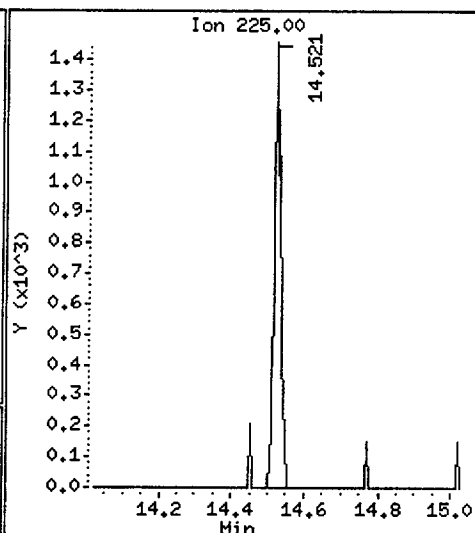
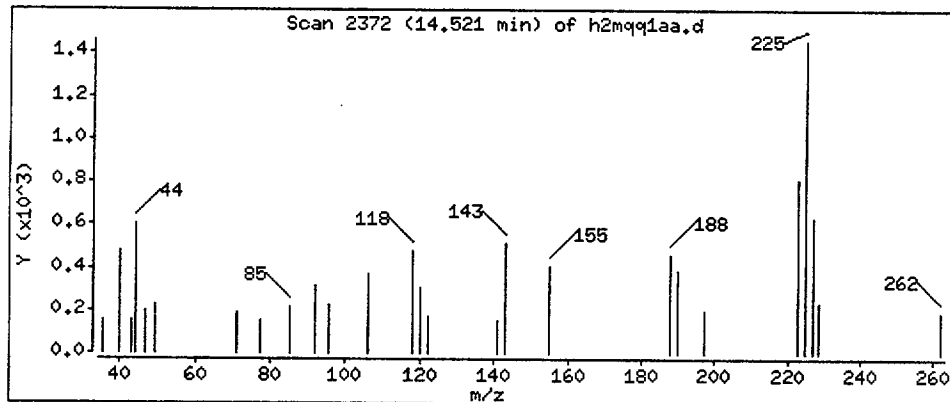
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

90 Hexachlorobutadiene

Concentration: 0.11247 ug/L



Data File: /chem/gcms/mz.i/Z040506.b/h2mqqlaa.d

Date : 05-APR-2006 15:52

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2MQQ1AA,1,3,,BLANK

Purge Volume: 25.0

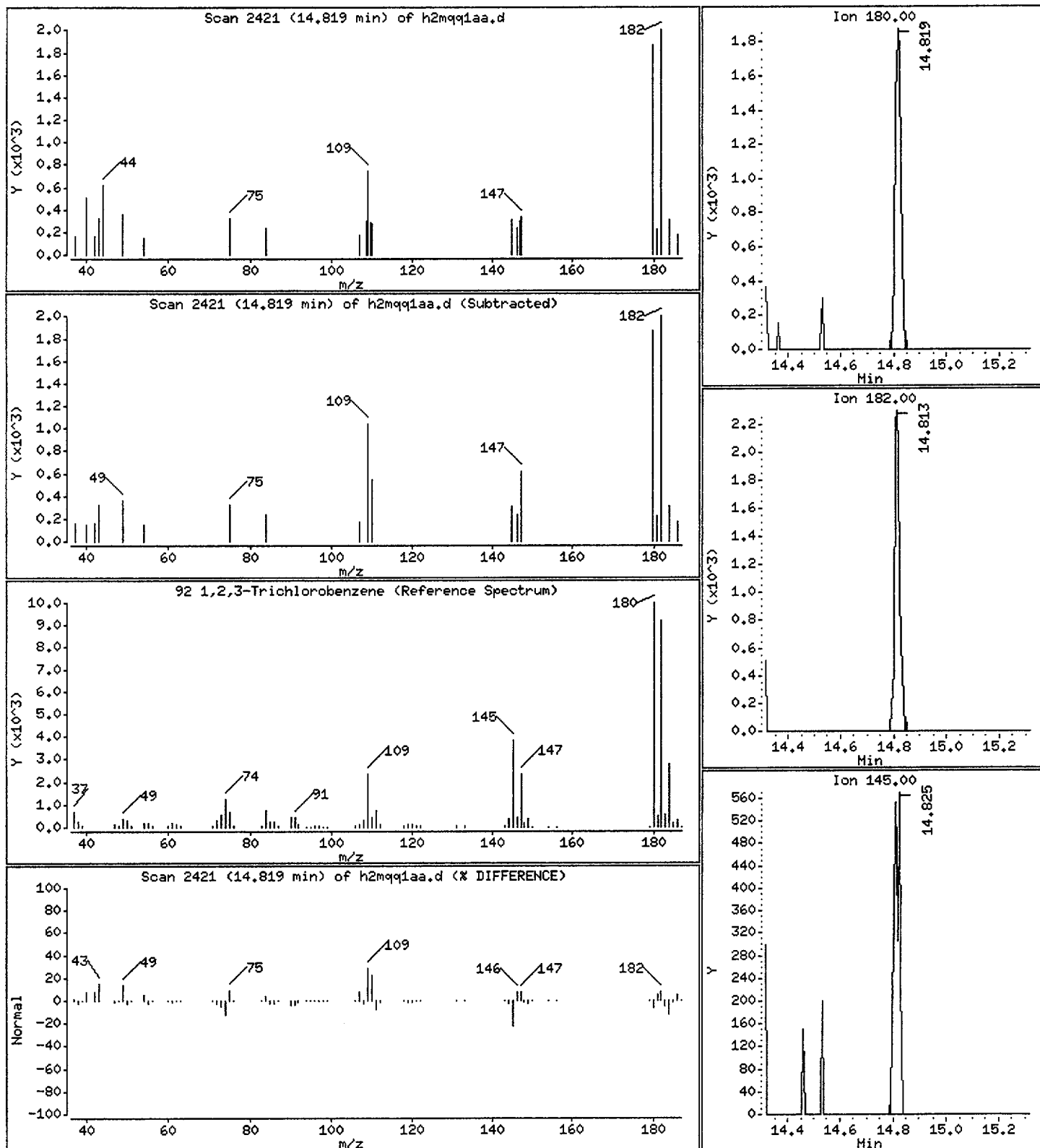
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

92 1,2,3-Trichlorobenzene

Concentration: 0.26076 ug/L



Data File: /var/chem/gcms/mz.i/Z040506.b/h2mqqlaa.d  
 Report Date: 06-Apr-2006 17:16

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z040506.b/h2mqqlaa.d  
 Lab Smp Id: H2MQQ1AA Client Smp ID: INTRA-LAB BLANK  
 Inj Date : 05-APR-2006 15:52  
 Operator : 063605 Inst ID: mz.i  
 Smp Info : H2MQQ1AA,1,3,,BLANK  
 Misc Info : Z040506,8260B LM,all.sub  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z040506.b/8260B LM.m  
 Meth Date : 06-Apr-2006 17:11 tillerm Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1 QC Sample: METHOD BLANK  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable Local Compound Variable

| ISTD              | RT    | HEIGHT  | AMOUNT |
|-------------------|-------|---------|--------|
| =====             | ===== | =====   | =====  |
| * 1 Fluorobenzene | 5.669 | 1147589 | 10.000 |

## CONCENTRATIONS

## QUANT

| RT    | HEIGHT | ON-COL( ug/L) | FINAL( ug/L) | QUAL | LIBRARY  | LIB ENTRY | CPND # |
|-------|--------|---------------|--------------|------|----------|-----------|--------|
| 0.918 | 503742 | 4.38956804    | 4.3896       | 5    | NIST05.1 | 80        | 1      |

Carbon dioxide

CAS #: 124-38-9

*fir*  
*not 4/6/06*



Data File: /var/chem/gcms/mz.i/Z040506.b/h2mqq1aa.d

Date: 05-APR-2006 15:52

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2MQQ1AA,1,3,,BLANK

Purge Volume: 25.0

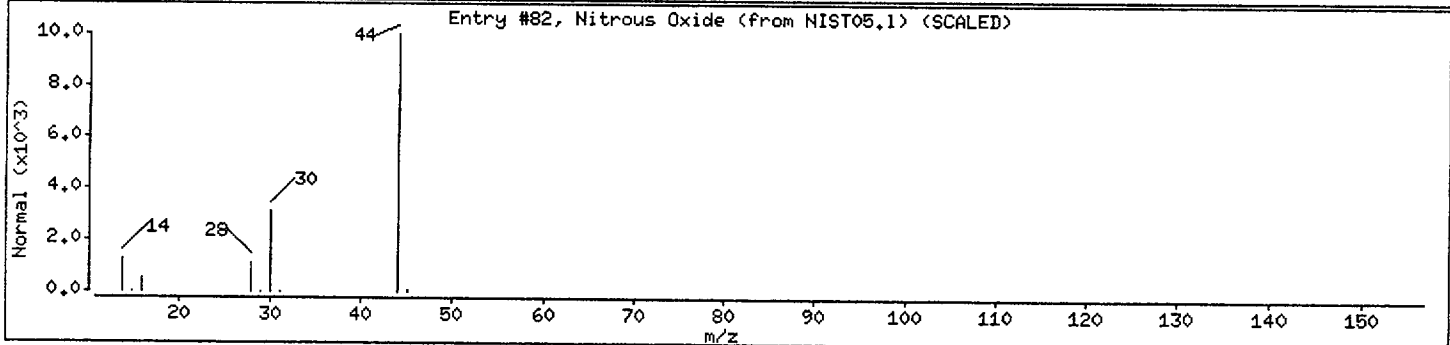
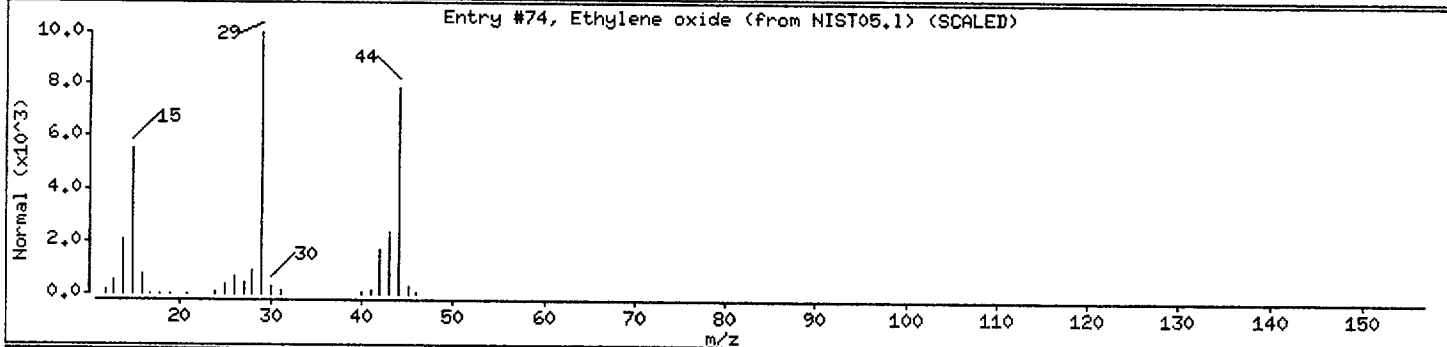
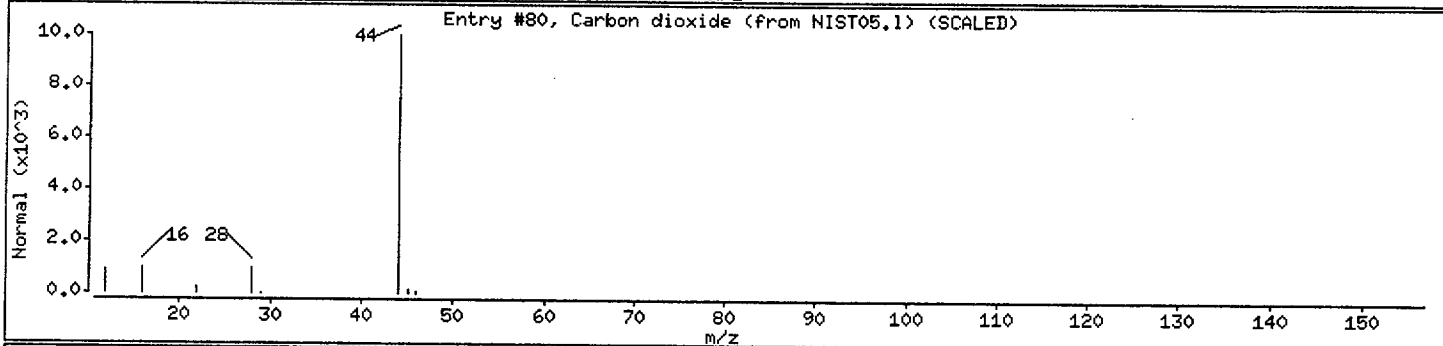
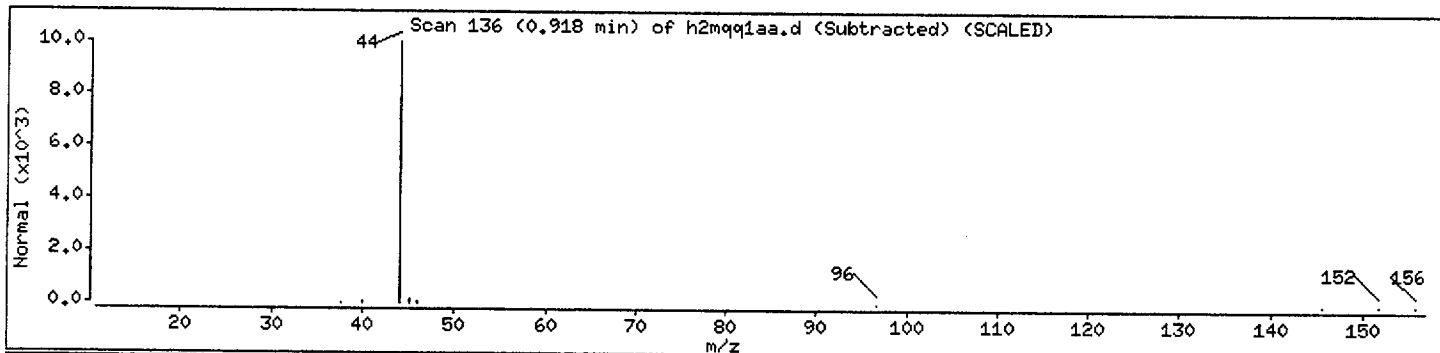
Operator: 063605

Column phase: J+W 624

Column diameter: 0.18

## Library Search Compound Match

|                | CAS Number | Library  | Entry | Quality | Formula | Weight |
|----------------|------------|----------|-------|---------|---------|--------|
| Carbon dioxide | 124-38-9   | NIST05.1 | 80    | 5       | CO2     | 44     |
| Ethylene oxide | 75-21-8    | NIST05.1 | 74    | 3       | C2H4O   | 44     |
| Nitrous Oxide  | 10024-97-2 | NIST05.1 | 82    | 3       | N2O     | 44     |



## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169      Work Order #...: H2MQQ1AC      Matrix.....: WATER  
 LCS Lot-Sample#: H6D050000-253  
 Prep Date.....: 04/05/06      Analysis Date...: 04/05/06  
 Prep Batch #...: 6095253  
 Dilution Factor: 1

| PARAMETER                        | PERCENT    | RECOVERY          | METHOD             |
|----------------------------------|------------|-------------------|--------------------|
|                                  | RECOVERY   | LIMITS            |                    |
| Acetone                          | 47 a       | (49 - 141)        | SW846 8260B        |
| <b>Benzene</b>                   | <b>87</b>  | <b>(80 - 121)</b> | <b>SW846 8260B</b> |
| Bromobenzene                     | 94         | (80 - 122)        | SW846 8260B        |
| Bromochloromethane               | 97         | (75 - 124)        | SW846 8260B        |
| Bromodichloromethane             | 91         | (73 - 127)        | SW846 8260B        |
| Bromoform                        | 96         | (63 - 141)        | SW846 8260B        |
| Bromomethane                     | 96         | (44 - 157)        | SW846 8260B        |
| 2-Butanone                       | 86         | (61 - 139)        | SW846 8260B        |
| n-Butylbenzene                   | 93         | (62 - 128)        | SW846 8260B        |
| sec-Butylbenzene                 | 94         | (67 - 127)        | SW846 8260B        |
| tert-Butylbenzene                | 96         | (68 - 123)        | SW846 8260B        |
| Carbon disulfide                 | 89         | (71 - 126)        | SW846 8260B        |
| Carbon tetrachloride             | 82         | (66 - 133)        | SW846 8260B        |
| <b>Chlorobenzene</b>             | <b>94</b>  | <b>(80 - 121)</b> | <b>SW846 8260B</b> |
| Chlorodibromomethane             | 88         | (71 - 132)        | SW846 8260B        |
| Chloroethane                     | 99         | (61 - 151)        | SW846 8260B        |
| Chloroform                       | 93         | (76 - 120)        | SW846 8260B        |
| Chloromethane                    | 101        | (56 - 140)        | SW846 8260B        |
| 2-Chlorotoluene                  | 90         | (68 - 123)        | SW846 8260B        |
| 4-Chlorotoluene                  | 93         | (68 - 125)        | SW846 8260B        |
| 1,2-Dibromo-3-chloro-<br>propane | 83         | (51 - 143)        | SW846 8260B        |
| 1,2-Dibromoethane                | 90         | (78 - 120)        | SW846 8260B        |
| Dibromomethane                   | 91         | (72 - 125)        | SW846 8260B        |
| 1,2-Dichlorobenzene              | 91         | (76 - 120)        | SW846 8260B        |
| 1,3-Dichlorobenzene              | 92         | (77 - 120)        | SW846 8260B        |
| 1,4-Dichlorobenzene              | 92         | (75 - 120)        | SW846 8260B        |
| Dichlorodifluoromethane          | 95         | (48 - 147)        | SW846 8260B        |
| 1,1-Dichloroethane               | 93         | (70 - 127)        | SW846 8260B        |
| 1,2-Dichloroethane               | 93         | (71 - 125)        | SW846 8260B        |
| cis-1,2-Dichloroethene           | 91         | (76 - 123)        | SW846 8260B        |
| trans-1,2-Dichloroethene         | 93         | (75 - 124)        | SW846 8260B        |
| <b>1,1-Dichloroethene</b>        | <b>100</b> | <b>(70 - 128)</b> | <b>SW846 8260B</b> |
| 1,2-Dichloropropane              | 93         | (77 - 122)        | SW846 8260B        |

(Continued on next page)

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169

Work Order #...: H2MQQ1AC

Matrix.....: WATER

LCS Lot-Sample#: H6D050000-253

| PARAMETER                   | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS | METHOD             |
|-----------------------------|---------------------|--------------------|--------------------|
| 1,3-Dichloropropane         | 90                  | (78 - 120)         | SW846 8260B        |
| 2,2-Dichloropropane         | 89                  | (48 - 149)         | SW846 8260B        |
| cis-1,3-Dichloropropene     | 90                  | (69 - 128)         | SW846 8260B        |
| trans-1,3-Dichloropropene   | 84                  | (61 - 132)         | SW846 8260B        |
| 1,1-Dichloropropene         | 91                  | (78 - 122)         | SW846 8260B        |
| Ethylbenzene                | 94                  | (79 - 124)         | SW846 8260B        |
| Hexachlorobutadiene         | 98                  | (67 - 123)         | SW846 8260B        |
| 2-Hexanone                  | 93                  | (63 - 132)         | SW846 8260B        |
| Isopropylbenzene            | 96                  | (77 - 126)         | SW846 8260B        |
| p-Isopropyltoluene          | 96                  | (67 - 125)         | SW846 8260B        |
| Methylene chloride          | 88                  | (59 - 131)         | SW846 8260B        |
| 4-Methyl-2-pentanone        | 91                  | (64 - 133)         | SW846 8260B        |
| Naphthalene                 | 86                  | (48 - 141)         | SW846 8260B        |
| n-Propylbenzene             | 95                  | (67 - 128)         | SW846 8260B        |
| Styrene                     | 93                  | (76 - 127)         | SW846 8260B        |
| 1,1,1,2-Tetrachloroethane   | 84                  | (75 - 127)         | SW846 8260B        |
| 1,1,2,2-Tetrachloroethane   | 94                  | (69 - 128)         | SW846 8260B        |
| Tetrachloroethene           | 94                  | (79 - 126)         | SW846 8260B        |
| <b>Toluene</b>              | <b>93</b>           | <b>(77 - 124)</b>  | <b>SW846 8260B</b> |
| 1,2,3-Trichlorobenzene      | 89                  | (63 - 127)         | SW846 8260B        |
| 1,2,4-Trichloro-<br>benzene | 88                  | (64 - 126)         | SW846 8260B        |
| 1,1,1-Trichloroethane       | 96                  | (71 - 125)         | SW846 8260B        |
| 1,1,2-Trichloroethane       | 88                  | (74 - 120)         | SW846 8260B        |
| <b>Trichloroethene</b>      | <b>96</b>           | <b>(80 - 121)</b>  | <b>SW846 8260B</b> |
| Trichlorofluoromethane      | 101                 | (67 - 143)         | SW846 8260B        |
| 1,2,3-Trichloropropane      | 88                  | (67 - 124)         | SW846 8260B        |
| 1,2,4-Trimethylbenzene      | 92                  | (69 - 121)         | SW846 8260B        |
| 1,3,5-Trimethylbenzene      | 95                  | (71 - 125)         | SW846 8260B        |
| Vinyl chloride              | 102                 | (72 - 137)         | SW846 8260B        |
| m-Xylene & p-Xylene         | 98                  | (71 - 134)         | SW846 8260B        |
| o-Xylene                    | 96                  | (76 - 126)         | SW846 8260B        |
| Xylenes (total)             | 97                  | (73 - 130)         | SW846 8260B        |

| SURROGATE            | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |
|----------------------|---------------------|--------------------|
| Dibromofluoromethane | 110                 | (79 - 120)         |

(Continued on next page)

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169

Work Order #...: H2MQQ1AC

Matrix.....: WATER

LCS Lot-Sample#: H6D050000-253

| <u>SURROGATE</u>      | PERCENT         | RECOVERY      |
|-----------------------|-----------------|---------------|
|                       | <u>RECOVERY</u> | <u>LIMITS</u> |
| 1,2-Dichloroethane-d4 | 102             | (71 - 127)    |
| Toluene-d8            | 104             | (80 - 120)    |
| Bromofluorobenzene    | 93              | (69 - 126)    |

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #....: H6D030169  
 LCS Lot-Sample#: H6D050000-253  
 Prep Date.....: 04/05/06  
 Prep Batch #....: 6095253  
 Dilution Factor: 1

Work Order #....: H2MQQ1AC  
 Analysis Date...: 04/05/06

Matrix.....: WATER

| PARAMETER                        | SPIKE<br>AMOUNT | MEASURED<br>AMOUNT | UNITS       | PERCENT<br>RECOVERY | METHOD             |
|----------------------------------|-----------------|--------------------|-------------|---------------------|--------------------|
| Acetone                          | 40.0            | 18.9 a             | ug/L        | 47                  | SW846 8260B        |
| <b>Benzene</b>                   | <b>10.0</b>     | <b>8.71</b>        | <b>ug/L</b> | <b>87</b>           | <b>SW846 8260B</b> |
| Bromobenzene                     | 10.0            | 9.44               | ug/L        | 94                  | SW846 8260B        |
| Bromochloromethane               | 10.0            | 9.75               | ug/L        | 97                  | SW846 8260B        |
| Bromodichloromethane             | 10.0            | 9.08               | ug/L        | 91                  | SW846 8260B        |
| Bromoform                        | 10.0            | 9.64               | ug/L        | 96                  | SW846 8260B        |
| Bromomethane                     | 10.0            | 9.58               | ug/L        | 96                  | SW846 8260B        |
| 2-Butanone                       | 40.0            | 34.5               | ug/L        | 86                  | SW846 8260B        |
| n-Butylbenzene                   | 10.0            | 9.32               | ug/L        | 93                  | SW846 8260B        |
| sec-Butylbenzene                 | 10.0            | 9.41               | ug/L        | 94                  | SW846 8260B        |
| tert-Butylbenzene                | 10.0            | 9.59               | ug/L        | 96                  | SW846 8260B        |
| Carbon disulfide                 | 10.0            | 8.90               | ug/L        | 89                  | SW846 8260B        |
| Carbon tetrachloride             | 10.0            | 8.18               | ug/L        | 82                  | SW846 8260B        |
| <b>Chlorobenzene</b>             | <b>10.0</b>     | <b>9.44</b>        | <b>ug/L</b> | <b>94</b>           | <b>SW846 8260B</b> |
| Chlorodibromomethane             | 10.0            | 8.82               | ug/L        | 88                  | SW846 8260B        |
| Chloroethane                     | 10.0            | 9.89               | ug/L        | 99                  | SW846 8260B        |
| Chloroform                       | 10.0            | 9.30               | ug/L        | 93                  | SW846 8260B        |
| Chloromethane                    | 10.0            | 10.1               | ug/L        | 101                 | SW846 8260B        |
| 2-Chlorotoluene                  | 10.0            | 8.98               | ug/L        | 90                  | SW846 8260B        |
| 4-Chlorotoluene                  | 10.0            | 9.35               | ug/L        | 93                  | SW846 8260B        |
| 1,2-Dibromo-3-chloro-<br>propane | 10.0            | 8.34               | ug/L        | 83                  | SW846 8260B        |
| 1,2-Dibromoethane                | 10.0            | 9.00               | ug/L        | 90                  | SW846 8260B        |
| Dibromomethane                   | 10.0            | 9.12               | ug/L        | 91                  | SW846 8260B        |
| 1,2-Dichlorobenzene              | 10.0            | 9.14               | ug/L        | 91                  | SW846 8260B        |
| 1,3-Dichlorobenzene              | 10.0            | 9.19               | ug/L        | 92                  | SW846 8260B        |
| 1,4-Dichlorobenzene              | 10.0            | 9.24               | ug/L        | 92                  | SW846 8260B        |
| Dichlorodifluoromethane          | 10.0            | 9.50               | ug/L        | 95                  | SW846 8260B        |
| 1,1-Dichloroethane               | 10.0            | 9.28               | ug/L        | 93                  | SW846 8260B        |
| 1,2-Dichloroethane               | 10.0            | 9.27               | ug/L        | 93                  | SW846 8260B        |
| cis-1,2-Dichloroethene           | 10.0            | 9.13               | ug/L        | 91                  | SW846 8260B        |
| trans-1,2-Dichloroethene         | 10.0            | 9.30               | ug/L        | 93                  | SW846 8260B        |
| <b>1,1-Dichloroethene</b>        | <b>10.0</b>     | <b>10.0</b>        | <b>ug/L</b> | <b>100</b>          | <b>SW846 8260B</b> |
| 1,2-Dichloropropane              | 10.0            | 9.25               | ug/L        | 93                  | SW846 8260B        |

(Continued on next page)

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169

Work Order #...: H2MQQ1AC

Matrix.....: WATER

LCS Lot-Sample#: H6D050000-253

| PARAMETER                   | SPIKE<br>AMOUNT | MEASURED<br>AMOUNT | UNITS       | PERCENT<br>RECOVERY | METHOD             |
|-----------------------------|-----------------|--------------------|-------------|---------------------|--------------------|
| 1,3-Dichloropropane         | 10.0            | 8.98               | ug/L        | 90                  | SW846 8260B        |
| 2,2-Dichloropropane         | 10.0            | 8.90               | ug/L        | 89                  | SW846 8260B        |
| cis-1,3-Dichloropropene     | 10.0            | 9.01               | ug/L        | 90                  | SW846 8260B        |
| trans-1,3-Dichloropropene   | 10.0            | 8.38               | ug/L        | 84                  | SW846 8260B        |
| 1,1-Dichloropropene         | 10.0            | 9.08               | ug/L        | 91                  | SW846 8260B        |
| Ethylbenzene                | 10.0            | 9.45               | ug/L        | 94                  | SW846 8260B        |
| Hexachlorobutadiene         | 10.0            | 9.81               | ug/L        | 98                  | SW846 8260B        |
| 2-Hexanone                  | 40.0            | 37.3               | ug/L        | 93                  | SW846 8260B        |
| Isopropylbenzene            | 10.0            | 9.58               | ug/L        | 96                  | SW846 8260B        |
| p-Isopropyltoluene          | 10.0            | 9.57               | ug/L        | 96                  | SW846 8260B        |
| Methylene chloride          | 10.0            | 8.77               | ug/L        | 88                  | SW846 8260B        |
| 4-Methyl-2-pentanone        | 40.0            | 36.4               | ug/L        | 91                  | SW846 8260B        |
| Naphthalene                 | 10.0            | 8.59               | ug/L        | 86                  | SW846 8260B        |
| n-Propylbenzene             | 10.0            | 9.46               | ug/L        | 95                  | SW846 8260B        |
| Styrene                     | 10.0            | 9.26               | ug/L        | 93                  | SW846 8260B        |
| 1,1,1,2-Tetrachloroethane   | 10.0            | 8.41               | ug/L        | 84                  | SW846 8260B        |
| 1,1,2,2-Tetrachloroethane   | 10.0            | 9.38               | ug/L        | 94                  | SW846 8260B        |
| Tetrachloroethene           | 10.0            | 9.37               | ug/L        | 94                  | SW846 8260B        |
| <b>Toluene</b>              | <b>10.0</b>     | <b>9.29</b>        | <b>ug/L</b> | <b>93</b>           | <b>SW846 8260B</b> |
| 1,2,3-Trichlorobenzene      | 10.0            | 8.87               | ug/L        | 89                  | SW846 8260B        |
| 1,2,4-Trichloro-<br>benzene | 10.0            | 8.83               | ug/L        | 88                  | SW846 8260B        |
| 1,1,1-Trichloroethane       | 10.0            | 9.64               | ug/L        | 96                  | SW846 8260B        |
| 1,1,2-Trichloroethane       | 10.0            | 8.83               | ug/L        | 88                  | SW846 8260B        |
| <b>Trichloroethene</b>      | <b>10.0</b>     | <b>9.56</b>        | <b>ug/L</b> | <b>96</b>           | <b>SW846 8260B</b> |
| Trichlorofluoromethane      | 10.0            | 10.1               | ug/L        | 101                 | SW846 8260B        |
| 1,2,3-Trichloropropane      | 10.0            | 8.77               | ug/L        | 88                  | SW846 8260B        |
| 1,2,4-Trimethylbenzene      | 10.0            | 9.17               | ug/L        | 92                  | SW846 8260B        |
| 1,3,5-Trimethylbenzene      | 10.0            | 9.55               | ug/L        | 95                  | SW846 8260B        |
| Vinyl chloride              | 10.0            | 10.2               | ug/L        | 102                 | SW846 8260B        |
| m-Xylene & p-Xylene         | 20.0            | 19.5               | ug/L        | 98                  | SW846 8260B        |
| o-Xylene                    | 10.0            | 9.58               | ug/L        | 96                  | SW846 8260B        |
| Xylenes (total)             | 30.0            | 29.1               | ug/L        | 97                  | SW846 8260B        |

| SURROGATE            | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |
|----------------------|---------------------|--------------------|
| Dibromofluoromethane | 110                 | (79 - 120)         |

(Continued on next page)

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169

Work Order #...: H2MQQ1AC

Matrix.....: WATER

LCS Lot-Sample#: H6D050000-253

| <u>SURROGATE</u>      | <u>PERCENT<br/>RECOVERY</u> | <u>RECOVERY<br/>LIMITS</u> |
|-----------------------|-----------------------------|----------------------------|
| 1,2-Dichloroethane-d4 | 102                         | (71 - 127)                 |
| Toluene-d8            | 104                         | (80 - 120)                 |
| Bromofluorobenzene    | 93                          | (69 - 126)                 |

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

Data File: /chem/gcms/mz.i/Z040506.b/h2mqqlac.d  
 Report Date: 05-Apr-2006 15:23

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /chem/gcms/mz.i/Z040506.b/h2mqqlac.d  
 Lab Smp Id: H2MQQ1AC Client Smp ID: INTRA-LAB CHECK  
 Inj Date : 05-APR-2006 15:05  
 Operator : 063605 Inst ID: mz.i  
 Smp Info : H2MQQ1AC,1,3,,LCS  
 Misc Info : Z040506,8260B LM,1-all.sub  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z040506.b/8260B LM.m  
 Meth Date : 05-Apr-2006 15:00 chemist Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1 QC Sample: METHOD SPIKE  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 1-all.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * 1000) * \text{CpndVariable}$

| Name | Value       | Description            |
|------|-------------|------------------------|
| DF   | 1.00000     | Dilution Factor        |
| Uf   | 1.00000     | Unit Correction factor |
| Vt   | 25000.00000 | Sample Volume Purged   |
| Vo   | 25.00000    | Sample Volume Used     |

Cpnd Variable

Local Compound Variable

| Compounds                   | QUANT SIG |        |        |         |          | CONCENTRATIONS       |                  |
|-----------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
|                             | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN<br>( ug/L) | FINAL<br>( ug/L) |
| =====                       | =====     | ==     | =====  | =====   | =====    | =====                | =====            |
| * 1 Fluorobenzene           | 96        | 5.668  | 5.667  | (1.000) | 1035143  | 10.0000              |                  |
| * 2 Chlorobenzene-d5        | 119       | 8.929  | 8.933  | (1.000) | 183392   | 10.0000              |                  |
| * 3 1,4 Dichlorobenzene-d4  | 152       | 11.484 | 11.488 | (1.000) | 224968   | 10.0000              |                  |
| \$ 5 1,2-Dichloroethane-d4  | 65        | 5.236  | 5.229  | (0.924) | 146622   | 10.2223              | 10.222           |
| \$ 4 Dibromofluoromethane   | 113       | 4.823  | 4.821  | (0.851) | 182064   | 10.9765              | 10.976           |
| \$ 6 Toluene-d8             | 98        | 7.457  | 7.455  | (0.835) | 838957   | 10.4116              | 10.412           |
| \$ 7 4-Bromofluorobenzene   | 95        | 10.121 | 10.126 | (0.881) | 211877   | 9.33871              | 9.3387           |
| 10 Dichlorodifluoromethane  | 85        | 1.014  | 1.013  | (0.179) | 240135   | 9.50365              | 9.5036           |
| 11 Chloromethane (spcc)     | 50        | 1.124  | 1.122  | (0.198) | 617175   | 10.0776              | 10.078           |
| 12 Vinyl Chloride (ccc)     | 62        | 1.197  | 1.195  | (0.211) | 416466   | 10.2149              | 10.215           |
| 15 Bromomethane             | 94        | 1.410  | 1.414  | (0.249) | 96598    | 9.58188              | 9.5819           |
| 16 Chloroethane             | 64        | 1.483  | 1.481  | (0.262) | 191004   | 9.89385              | 9.8938           |
| 18 Trichlorofluoromethane   | 101       | 1.671  | 1.670  | (0.295) | 321024   | 10.1464              | 10.146           |
| 20 1,1-Dichloroethene (ccc) | 96        | 2.067  | 2.065  | (0.365) | 225922   | 10.0420              | 10.042           |



Data File: /chem/gcms/mz.i/Z040506.b/h2mqqlac.d

Report Date: 05-Apr-2006 15:23

| Compounds                        | QUANT SIG |        |                | RESPONSE | CONCENTRATIONS       |                  |
|----------------------------------|-----------|--------|----------------|----------|----------------------|------------------|
|                                  | MASS      | RT     | EXP RT REL RT  |          | ON-COLUMN<br>( ug/L) | FINAL<br>( ug/L) |
| =====                            | ====      | ==     | =====          | =====    | =====                | =====            |
| 22 Acetone                       | 43        | 2.122  | 2.126 (0.374)  | 56689    | 18.8897              | 18.890 (R)       |
| 24 Carbon Disulfide              | 76        | 2.231  | 2.229 (0.394)  | 706562   | 8.89713              | 8.8971           |
| 27 Methylene Chloride            | 84        | 2.511  | 2.503 (0.443)  | 151747   | 8.76534              | 8.7653           |
| 30 trans-1,2-Dichloroethene      | 96        | 2.791  | 2.789 (0.492)  | 264151   | 9.30100              | 9.3010           |
| 33 1,1-Dichloroethane (spcc)     | 63        | 3.277  | 3.276 (0.578)  | 608884   | 9.27521              | 9.2752           |
| 35 2,2-Dichloropropane           | 77        | 4.093  | 4.091 (0.722)  | 296693   | 8.89542              | 8.8954           |
| 36 cis 1,2-Dichloroethene        | 96        | 4.117  | 4.109 (0.726)  | 239248   | 9.12641              | 9.1264           |
| M 8 1,2-Dichloroethene (total)   | 96        |        |                | 503400   | 18.4274              | 18.427           |
| 37 2-Butanone                    | 43        | 4.172  | 4.170 (0.736)  | 135317   | 34.4997              | 34.500           |
| 38 Bromochloromethane            | 128       | 4.458  | 4.450 (0.786)  | 70268    | 9.74821              | 9.7482           |
| 40 Chloroform (ccc)              | 83        | 4.610  | 4.608 (0.813)  | 347975   | 9.30381              | 9.3038           |
| 41 1,1,1-Trichloroethane         | 97        | 4.811  | 4.809 (0.849)  | 319179   | 9.64175              | 9.6417           |
| 42 Carbon Tetrachloride          | 117       | 5.036  | 5.028 (0.888)  | 216780   | 8.18209              | 8.1821           |
| 43 1,1-Dichloropropene           | 75        | 5.048  | 5.046 (0.891)  | 322265   | 9.08496              | 9.0850           |
| 44 Benzene                       | 78        | 5.297  | 5.295 (0.935)  | 889009   | 8.70884              | 8.7088           |
| 45 1,2-Dichloroethane            | 62        | 5.328  | 5.326 (0.940)  | 200362   | 9.26898              | 9.2690           |
| 46 Trichloroethene               | 130       | 6.112  | 6.105 (1.078)  | 274457   | 9.55792              | 9.5579           |
| 47 1,2-Dichloropropane (ccc)     | 63        | 6.344  | 6.342 (1.119)  | 257999   | 9.25034              | 9.2503           |
| 49 Dibromomethane                | 93        | 6.471  | 6.470 (1.142)  | 52994    | 9.12424              | 9.1242           |
| 50 Bromodichloromethane          | 83        | 6.684  | 6.683 (1.179)  | 161718   | 9.08436              | 9.0844           |
| 52 cis-1,3-Dichloropropene       | 75        | 7.183  | 7.181 (1.267)  | 204076   | 9.01121              | 9.0112           |
| 53 4-Methyl-2-pentanone          | 43        | 7.378  | 7.376 (1.302)  | 328918   | 36.3861              | 36.386           |
| 54 Toluene (ccc)                 | 91        | 7.524  | 7.522 (0.843)  | 969142   | 9.28568              | 9.2857           |
| 55 trans-1,3-Dichloropropene     | 75        | 7.785  | 7.784 (0.872)  | 129422   | 8.38372              | 8.3837           |
| 57 1,1,2-Trichloroethane         | 97        | 7.962  | 7.960 (0.892)  | 74762    | 8.82570              | 8.8257           |
| 58 Tetrachloroethene             | 164       | 8.096  | 8.094 (0.907)  | 202739   | 9.36527              | 9.3653           |
| 59 1,3-Dichloropropane           | 76        | 8.120  | 8.118 (0.909)  | 133322   | 8.97904              | 8.9790           |
| 60 2-Hexanone                    | 43        | 8.254  | 8.252 (0.924)  | 211646   | 37.2935              | 37.294           |
| 61 Chlorodibromomethane          | 129       | 8.345  | 8.349 (0.935)  | 77704    | 8.81710              | 8.8171           |
| 62 1,2-Dibromoethane             | 107       | 8.436  | 8.435 (0.945)  | 68281    | 9.00115              | 9.0012           |
| 63 Chlorobenzene (spcc)          | 112       | 8.959  | 8.958 (1.003)  | 549623   | 9.43511              | 9.4351           |
| 65 Ethylbenzene (ccc)            | 106       | 9.093  | 9.092 (1.018)  | 354701   | 9.44990              | 9.4499           |
| 64 1,1,1,2-Tetrachloroethane     | 131       | 9.057  | 9.055 (1.014)  | 122625   | 8.41091              | 8.4109           |
| 66 m&p-Xylene                    | 106       | 9.221  | 9.219 (1.033)  | 885262   | 19.5093              | 19.509           |
| 67 o-Xylene                      | 106       | 9.610  | 9.609 (1.076)  | 383906   | 9.57884              | 9.5788           |
| M 9 Xylene (total)               | 106       |        |                | 1269169  | 29.0881              | 29.088           |
| 68 Styrene                       | 104       | 9.623  | 9.621 (1.078)  | 520803   | 9.25528              | 9.2553           |
| 69 Bromoform (spcc)              | 173       | 9.781  | 9.779 (1.095)  | 26972    | 9.64340              | 9.6434           |
| 70 Isopropylbenzene              | 105       | 9.988  | 9.992 (1.119)  | 1103817  | 9.57808              | 9.5781           |
| 72 Bromobenzene                  | 156       | 10.249 | 10.254 (1.148) | 161624   | 9.43675              | 9.4367           |
| 73 1,1,2,2-Tetrachloroethane(sp) | 83        | 10.292 | 10.290 (1.153) | 59258    | 9.37779              | 9.3778           |
| 74 1,2,3-Trichloropropane        | 110       | 10.316 | 10.314 (0.898) | 16988    | 8.77130              | 8.7713           |
| 76 n-Propylbenzene               | 91        | 10.407 | 10.406 (0.906) | 1288753  | 9.46431              | 9.4643           |
| 77 2-Chlorotoluene               | 91        | 10.474 | 10.473 (0.912) | 648530   | 8.98047              | 8.9805           |
| 78 1,3,5-Trimethylbenzene        | 105       | 10.614 | 10.612 (0.924) | 874575   | 9.54535              | 9.5454           |
| 79 4-Chlorotoluene               | 91        | 10.596 | 10.594 (0.923) | 717068   | 9.34694              | 9.3469           |
| 80 tert-Butylbenzene             | 119       | 10.991 | 10.990 (0.957) | 786940   | 9.59280              | 9.5928           |

Data File: /chem/gcms/mz.i/Z040506.b/h2mqqlac.d

Report Date: 05-Apr-2006 15:23

| Compounds                      | QUANT SIG |        |        |         |          | CONCENTRATIONS |         |
|--------------------------------|-----------|--------|--------|---------|----------|----------------|---------|
|                                | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN      | FINAL   |
|                                |           |        |        |         |          | ( ug/L)        | ( ug/L) |
| =====                          | =====     | ==     | =====  | =====   | =====    | =====          | =====   |
| 81 1,2,4-Trimethylbenzene      | 105       | 11.052 | 11.050 | (0.962) | 789212   | 9.16804        | 9.1680  |
| 82 sec-Butylbenzene            | 105       | 11.277 | 11.282 | (0.982) | 1137418  | 9.40606        | 9.4061  |
| 83 1,3-Dichlorobenzene         | 146       | 11.387 | 11.385 | (0.992) | 361908   | 9.19015        | 9.1901  |
| 84 p-Isopropyltoluene          | 119       | 11.502 | 11.501 | (1.002) | 1015261  | 9.56850        | 9.5685  |
| 85 1,4-Dichlorobenzene         | 146       | 11.521 | 11.519 | (1.003) | 338463   | 9.23997        | 9.2400  |
| 86 1,2-Dichlorobenzene         | 146       | 12.074 | 12.079 | (1.051) | 265604   | 9.14204        | 9.1420  |
| 87 n-Butylbenzene              | 91        | 12.141 | 12.145 | (1.057) | 884715   | 9.32250        | 9.3225  |
| 88 1,2-Dibromo-3-chloropropane | 157       | 13.260 | 13.253 | (1.155) | 8547     | 8.34051        | 8.3405  |
| 89 1,2,4-Trichlorobenzene      | 180       | 14.295 | 14.293 | (1.245) | 155560   | 8.83434        | 8.8343  |
| 90 Hexachlorobutadiene         | 225       | 14.526 | 14.524 | (1.265) | 162016   | 9.81116        | 9.8112  |
| 91 Napthalene                  | 128       | 14.544 | 14.542 | (1.266) | 158654   | 8.59178        | 8.5918  |
| 92 1,2,3-Trichlorobenzene      | 180       | 14.818 | 14.816 | (1.290) | 102934   | 8.87398        | 8.8740  |

## QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/gcms/mz.i/Z040506.b/h2mqqlac.d  
 Report Date: 05-Apr-2006 15:23

## STL Knoxville

 INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                       |                                |
|-------------------------------------------------------|--------------------------------|
| Instrument ID: mz.i                                   | Calibration Date: 05-APR-2006  |
| Lab File ID: h2mqqlac.d                               | Calibration Time: 14:42        |
| Lab Smp Id: H2MQQ1AC                                  | Client Smp ID: INTRA-LAB CHECK |
| Analysis Type: VOA                                    | Level: LOW                     |
| Quant Type: ISTD                                      | Sample Type: WATER             |
| Operator: 063605                                      |                                |
| Method File: /var/chem/gcms/mz.i/Z040506.b/8260B_LM.m |                                |
| Misc Info: Z040506,8260B_LM,1-all.sub                 |                                |

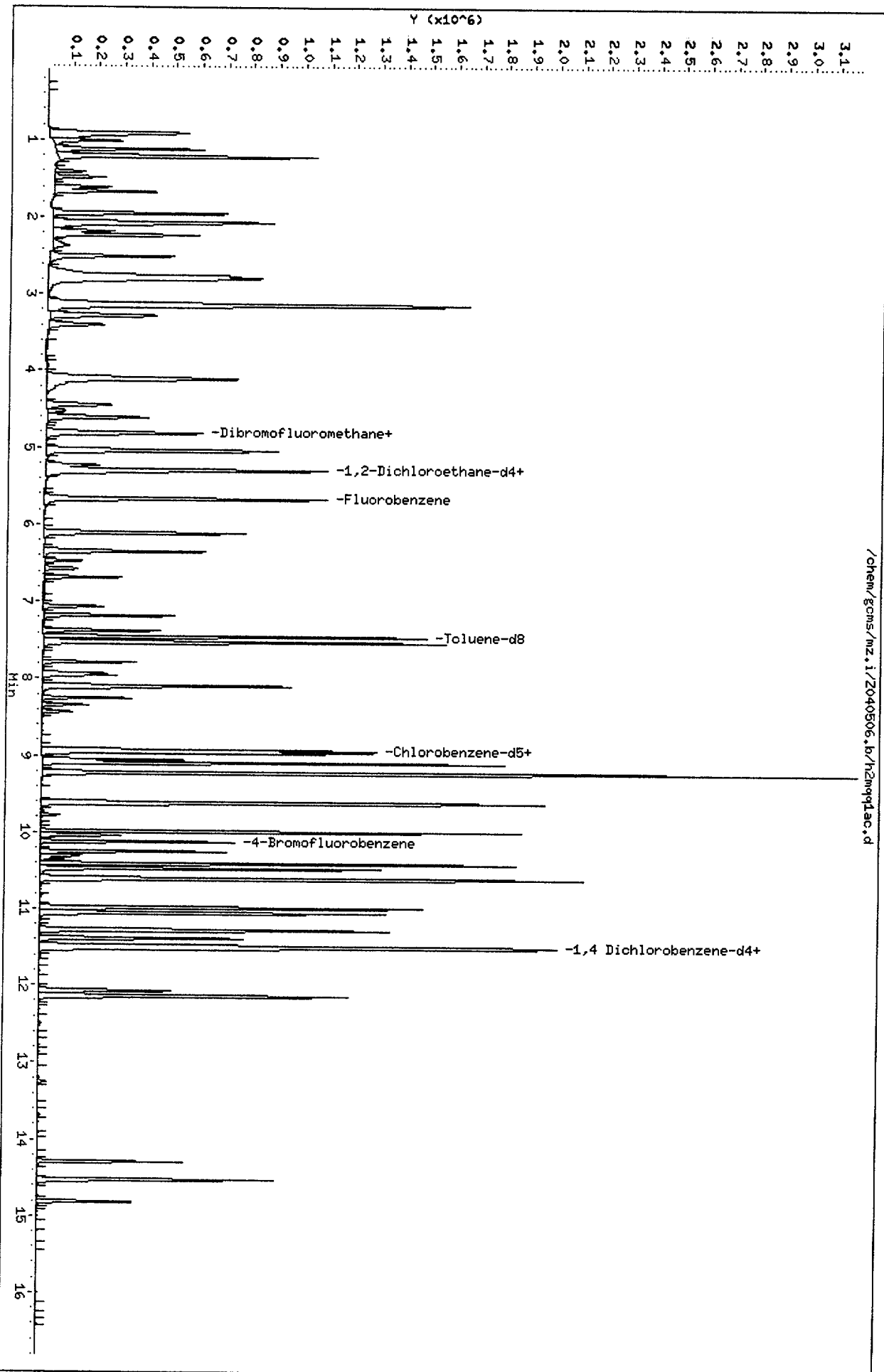
| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE  | %DIFF |
|---------------------|----------|------------|---------|---------|-------|
|                     |          | LOWER      | UPPER   |         |       |
| 1 Fluorobenzene     | 1078707  | 539354     | 2157414 | 1035143 | -4.04 |
| 2 Chlorobenzene-d5  | 188899   | 94450      | 377798  | 183392  | -2.92 |
| 3 1,4 Dichlorobenze | 220143   | 110072     | 440286  | 224968  | 2.19  |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 5.67     | 5.17     | 6.17  | 5.67   | 0.03  |
| 2 Chlorobenzene-d5  | 8.93     | 8.43     | 9.43  | 8.93   | -0.05 |
| 3 1,4 Dichlorobenze | 11.49    | 10.99    | 11.99 | 11.48  | -0.04 |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mz.i/Z040506.b/h2mqqlac.d  
Date : 05-APR-2006 15:05  
Client ID: INTRA-LAB CHECK  
Sample Info: H2MQQLAC,1,3,,LCS  
Purge Volume: 25.0  
Column phase: J+W 624

Instrument: mz.i  
Operator: 063605  
Column diameter: 0.18



## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169  
 MB Lot-Sample #: H6D060000-033

Work Order #...: H2N441AA

Matrix.....: AIR

Analysis Date...: 04/07/06

Prep Date.....: 04/06/06

Dilution Factor: 1

Prep Batch #...: 6096033

| PARAMETER                        | RESULT         | REPORTING    |           |  | METHOD            |
|----------------------------------|----------------|--------------|-----------|--|-------------------|
|                                  |                | LIMIT        | UNITS     |  |                   |
| <b>Acetone</b>                   | <b>0.095 J</b> | <b>0.10</b>  | <b>ug</b> |  | <b>SW846 VOST</b> |
| Acrylonitrile                    | ND             | 0.50         | ug        |  | SW846 VOST        |
| Benzene                          | ND             | 0.010        | ug        |  | SW846 VOST        |
| Bromobenzene                     | ND             | 0.010        | ug        |  | SW846 VOST        |
| Bromochloromethane               | ND             | 0.025        | ug        |  | SW846 VOST        |
| Bromodichloromethane             | ND             | 0.010        | ug        |  | SW846 VOST        |
| Bromoform                        | ND             | 0.025        | ug        |  | SW846 VOST        |
| <b>Bromomethane</b>              | <b>0.026 J</b> | <b>0.050</b> | <b>ug</b> |  | <b>SW846 VOST</b> |
| 2-Butanone                       | ND             | 0.10         | ug        |  | SW846 VOST        |
| n-Butylbenzene                   | ND             | 0.010        | ug        |  | SW846 VOST        |
| sec-Butylbenzene                 | ND             | 0.010        | ug        |  | SW846 VOST        |
| tert-Butylbenzene                | ND             | 0.010        | ug        |  | SW846 VOST        |
| Carbon disulfide                 | ND             | 0.010        | ug        |  | SW846 VOST        |
| Carbon tetrachloride             | ND             | 0.010        | ug        |  | SW846 VOST        |
| Chlorobenzene                    | ND             | 0.010        | ug        |  | SW846 VOST        |
| Chlorodibromomethane             | ND             | 0.025        | ug        |  | SW846 VOST        |
| Chloroethane                     | ND             | 0.050        | ug        |  | SW846 VOST        |
| Chloroform                       | ND             | 0.010        | ug        |  | SW846 VOST        |
| Chloromethane                    | ND             | 0.010        | ug        |  | SW846 VOST        |
| 2-Chlorotoluene                  | ND             | 0.010        | ug        |  | SW846 VOST        |
| 4-Chlorotoluene                  | ND             | 0.010        | ug        |  | SW846 VOST        |
| 1,2-Dibromo-3-chloro-<br>propane | ND             | 0.050        | ug        |  | SW846 VOST        |
| 1,2-Dibromoethane                | ND             | 0.025        | ug        |  | SW846 VOST        |
| Dibromomethane                   | ND             | 0.025        | ug        |  | SW846 VOST        |
| 1,2-Dichlorobenzene              | ND             | 0.010        | ug        |  | SW846 VOST        |
| 1,3-Dichlorobenzene              | ND             | 0.010        | ug        |  | SW846 VOST        |
| 1,4-Dichlorobenzene              | ND             | 0.010        | ug        |  | SW846 VOST        |
| Dichlorodifluoromethane          | ND             | 0.025        | ug        |  | SW846 VOST        |
| 1,1-Dichloroethane               | ND             | 0.010        | ug        |  | SW846 VOST        |
| 1,2-Dichloroethane               | ND             | 0.010        | ug        |  | SW846 VOST        |
| cis-1,2-Dichloroethene           | ND             | 0.010        | ug        |  | SW846 VOST        |
| trans-1,2-Dichloroethene         | ND             | 0.010        | ug        |  | SW846 VOST        |
| 1,1-Dichloroethene               | ND             | 0.010        | ug        |  | SW846 VOST        |
| 1,2-Dichloropropane              | ND             | 0.010        | ug        |  | SW846 VOST        |
| 1,3-Dichloropropane              | ND             | 0.010        | ug        |  | SW846 VOST        |
| 2,2-Dichloropropane              | ND             | 0.010        | ug        |  | SW846 VOST        |
| cis-1,3-Dichloropropene          | ND             | 0.010        | ug        |  | SW846 VOST        |
| trans-1,3-Dichloropropene        | ND             | 0.010        | ug        |  | SW846 VOST        |
| 1,1-Dichloropropene              | ND             | 0.010        | ug        |  | SW846 VOST        |
| Ethylbenzene                     | ND             | 0.010        | ug        |  | SW846 VOST        |

(Continued on next page)

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169

Work Order #...: H2N441AA

Matrix.....: AIR

| PARAMETER                                 | RESULT   | REPORTING  |       |            |
|-------------------------------------------|----------|------------|-------|------------|
|                                           |          | LIMIT      | UNITS | METHOD     |
| Hexachlorobutadiene                       | ND       | 0.025      | ug    | SW846 VOST |
| 2-Hexanone                                | ND       | 0.10       | ug    | SW846 VOST |
| Iodomethane                               | 0.014 J  | 0.050      | ug    | SW846 VOST |
| Isopropylbenzene                          | ND       | 0.010      | ug    | SW846 VOST |
| p-Isopropyltoluene                        | ND       | 0.010      | ug    | SW846 VOST |
| Methylene chloride                        | ND       | 0.025      | ug    | SW846 VOST |
| 4-Methyl-2-pentanone                      | ND       | 0.10       | ug    | SW846 VOST |
| Naphthalene                               | ND       | 0.025      | ug    | SW846 VOST |
| n-Propylbenzene                           | ND       | 0.010      | ug    | SW846 VOST |
| Styrene                                   | ND       | 0.010      | ug    | SW846 VOST |
| 1,1,1,2-Tetrachloroethane                 | ND       | 0.010      | ug    | SW846 VOST |
| 1,1,2,2-Tetrachloroethane                 | ND       | 0.025      | ug    | SW846 VOST |
| Tetrachloroethene                         | ND       | 0.010      | ug    | SW846 VOST |
| Tetrahydrofuran                           | ND       | 0.10       | ug    | SW846 VOST |
| Toluene                                   | ND       | 0.010      | ug    | SW846 VOST |
| 1,2,3-Trichlorobenzene                    | ND       | 0.025      | ug    | SW846 VOST |
| 1,2,4-Trichloro-<br>benzene               | ND       | 0.025      | ug    | SW846 VOST |
| 1,1,1-Trichloroethane                     | ND       | 0.025      | ug    | SW846 VOST |
| 1,1,2-Trichloroethane                     | ND       | 0.025      | ug    | SW846 VOST |
| Trichloroethene                           | ND       | 0.010      | ug    | SW846 VOST |
| Trichlorofluoromethane                    | ND       | 0.050      | ug    | SW846 VOST |
| 1,2,3-Trichloropropane                    | ND       | 0.025      | ug    | SW846 VOST |
| 1,1,2-Trichloro-<br>1,2,2-trifluoroethane | ND       | 0.050      | ug    | SW846 VOST |
| 1,2,4-Trimethylbenzene                    | ND       | 0.010      | ug    | SW846 VOST |
| 1,3,5-Trimethylbenzene                    | ND       | 0.010      | ug    | SW846 VOST |
| Vinyl acetate                             | ND       | 0.050      | ug    | SW846 VOST |
| Vinyl chloride                            | ND       | 0.010      | ug    | SW846 VOST |
| m-Xylene & p-Xylene                       | ND       | 0.020      | ug    | SW846 VOST |
| o-Xylene                                  | ND       | 0.010      | ug    | SW846 VOST |
| Xylenes (total)                           | ND       | 0.030      | ug    | SW846 VOST |
|                                           | PERCENT  | RECOVERY   |       |            |
| SURROGATE                                 | RECOVERY | LIMITS     |       |            |
| Dibromofluoromethane                      | 101      | (50 - 134) |       |            |
| 1,2-Dichloroethane-d4                     | 91       | (50 - 134) |       |            |
| Toluene-d8                                | 95       | (57 - 127) |       |            |
| Bromofluorobenzene                        | 79       | (50 - 125) |       |            |

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

STL Knoxville - ACS

Method Blank Report

GC/MS Volatiles

Lot-Sample #: H6D060000-033 B Work Order #: H2N441AA Matrix: AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug           |

Data File: /var/chem/gcms/mz.i/Z040706.b/h2n441aa.d

Report Date: 07-Apr-2006 10:25

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z040706.b/h2n441aa.d  
 Lab Smp Id: H2N441AA Client Smp ID: INTRA-LAB BLANK  
 Inj Date : 07-APR-2006 09:47  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : H2N441AA,1,3,,BLANK  
 Misc Info : Z040706,8260B\_LM,focus.sub  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
 Meth Date : 07-Apr-2006 09:40 goss Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1 QC Sample: METHOD BLANK  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: focus.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable Local Compound Variable

✓  
4/7/06

| Compounds                    | QUANT SIG | MASS   | RT     | EXP RT  | REL RT | RESPONSE | CONCENTRATIONS       |                |
|------------------------------|-----------|--------|--------|---------|--------|----------|----------------------|----------------|
|                              |           |        |        |         |        |          | ON-COLUMN<br>( ug/L) | FINAL<br>( ug) |
| * 1 Fluorobenzene            | 96        | 5.672  | 5.676  | (1.000) | 870215 | 10.0000  |                      |                |
| * 2 Chlorobenzene-d5         | 119       | 8.933  | 8.937  | (1.000) | 180272 | 10.0000  |                      |                |
| * 3 1,4 Dichlorobenzene-d4   | 152       | 11.488 | 11.492 | (1.000) | 245666 | 10.0000  |                      |                |
| \$ 4 Dibromofluoromethane    | 113       | 4.827  | 4.831  | (0.851) | 141293 | 10.1329  | 0.25332              |                |
| \$ 5 1,2-Dichloroethane-d4   | 65        | 5.234  | 5.238  | (0.923) | 109406 | 9.07330  | 0.22683              |                |
| \$ 6 Toluene-d8              | 98        | 7.461  | 7.465  | (0.835) | 752034 | 9.49438  | 0.23736              |                |
| \$ 7 4-Bromofluorobenzene    | 95        | 10.125 | 10.129 | (0.881) | 196022 | 7.91193  | 0.19780              |                |
| 15 Bromomethane              | 94        | 1.414  | 1.418  | (0.249) | 1986   | 1.04821  | 0.026205             |                |
| 22 Acetone                   | 43        | 2.132  | 2.123  | (0.376) | 2885   | 3.79908  | 0.094977 (M)         |                |
| 23 *Iodomethane              | 142       | 2.186  | 2.184  | (0.385) | 698    | 0.55299  | 0.013825             |                |
| 39 *THF                      | 42        | 4.535  | 4.532  | (0.799) | 1549   | 0.75022  | 0.018756             |                |
| 44 Benzene                   | 78        | 5.301  | 5.305  | (0.935) | 7063   | 0.08230  | 0.0020576            |                |
| 45 1,2-Dichloroethane        | 62        | 5.666  | 5.335  | (0.999) | 13293  | 0.73150  | 0.018287             |                |
| 53 4-Methyl-2-pentanone      | 43        | 7.461  | 7.386  | (1.315) | 6822   | 0.89770  | 0.022442             |                |
| 55 trans-1,3-Dichloropropene | 75        | 7.461  | 7.793  | (0.835) | 160    | 0.63504  | 0.015876             |                |
| 69 Bromoform (spcc)          | 173       | 10.137 | 9.782  | (1.135) | 313    | 0.91005  | 0.022751             |                |

4/7/06



Data File: /var/chem/gcms/mz.i/Z040706.b/h2n441aa.d

Report Date: 07-Apr-2006 10:25

| Compounds                 | QUANT SIG |        |        |         |          |  | CONCENTRATIONS |           |
|---------------------------|-----------|--------|--------|---------|----------|--|----------------|-----------|
|                           | MASS      | RT     | EXP RT | REL RT  | RESPONSE |  | ON-COLUMN      | FINAL     |
|                           |           |        |        |         |          |  | ( ug/L)        | ( ug)     |
| =====                     | =====     | ==     | =====  | =====   | =====    |  | =====          | =====     |
| 89 1,2,4-Trichlorobenzene | 180       | 14.298 | 14.303 | (1.245) | 2089     |  | 0.10864        | 0.0027160 |
| 91 Napthalene             | 128       | 14.548 | 14.552 | (1.266) | 2384     |  | 0.11823        | 0.0029556 |
| 92 1,2,3-Trichlorobenzene | 180       | 14.828 | 14.820 | (1.291) | 1972     |  | 0.15568        | 0.0038921 |

## QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/gcms/mz.i/Z040706.b/h2n441aa.d  
 Report Date: 07-Apr-2006 10:05

## STL Knoxville

 INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                       |                                |
|-------------------------------------------------------|--------------------------------|
| Instrument ID: mz.i                                   | Calibration Date: 07-APR-2006  |
| Lab File ID: h2n441aa.d                               | Calibration Time: 07:35        |
| Lab Smp Id: H2N441AA                                  | Client Smp ID: INTRA-LAB BLANK |
| Analysis Type: VOA                                    | Level: LOW                     |
| Quant Type: ISTD                                      | Sample Type: AIR               |
| Operator: 22980                                       |                                |
| Method File: /var/chem/gcms/mz.i/Z040706.b/8260B_LM.m |                                |
| Misc Info: Z040706,8260B_LM,focus.sub                 |                                |

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE | %DIFF |
|---------------------|----------|------------|---------|--------|-------|
|                     |          | LOWER      | UPPER   |        |       |
| 1 Fluorobenzene     | 952581   | 476290     | 1905162 | 870215 | -8.65 |
| 2 Chlorobenzene-d5  | 164101   | 82050      | 328202  | 180272 | 9.85  |
| 3 1,4 Dichlorobenze | 204390   | 102195     | 408780  | 245666 | 20.19 |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 5.68     | 5.18     | 6.18  | 5.67   | -0.07 |
| 2 Chlorobenzene-d5  | 8.94     | 8.44     | 9.44  | 8.93   | -0.04 |
| 3 1,4 Dichlorobenze | 11.49    | 10.99    | 11.99 | 11.49  | -0.03 |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mz.i/Z040706.b/h2n441aa.d  
Report Date: 07-Apr-2006 10:05

STL Knoxville

RECOVERY REPORT

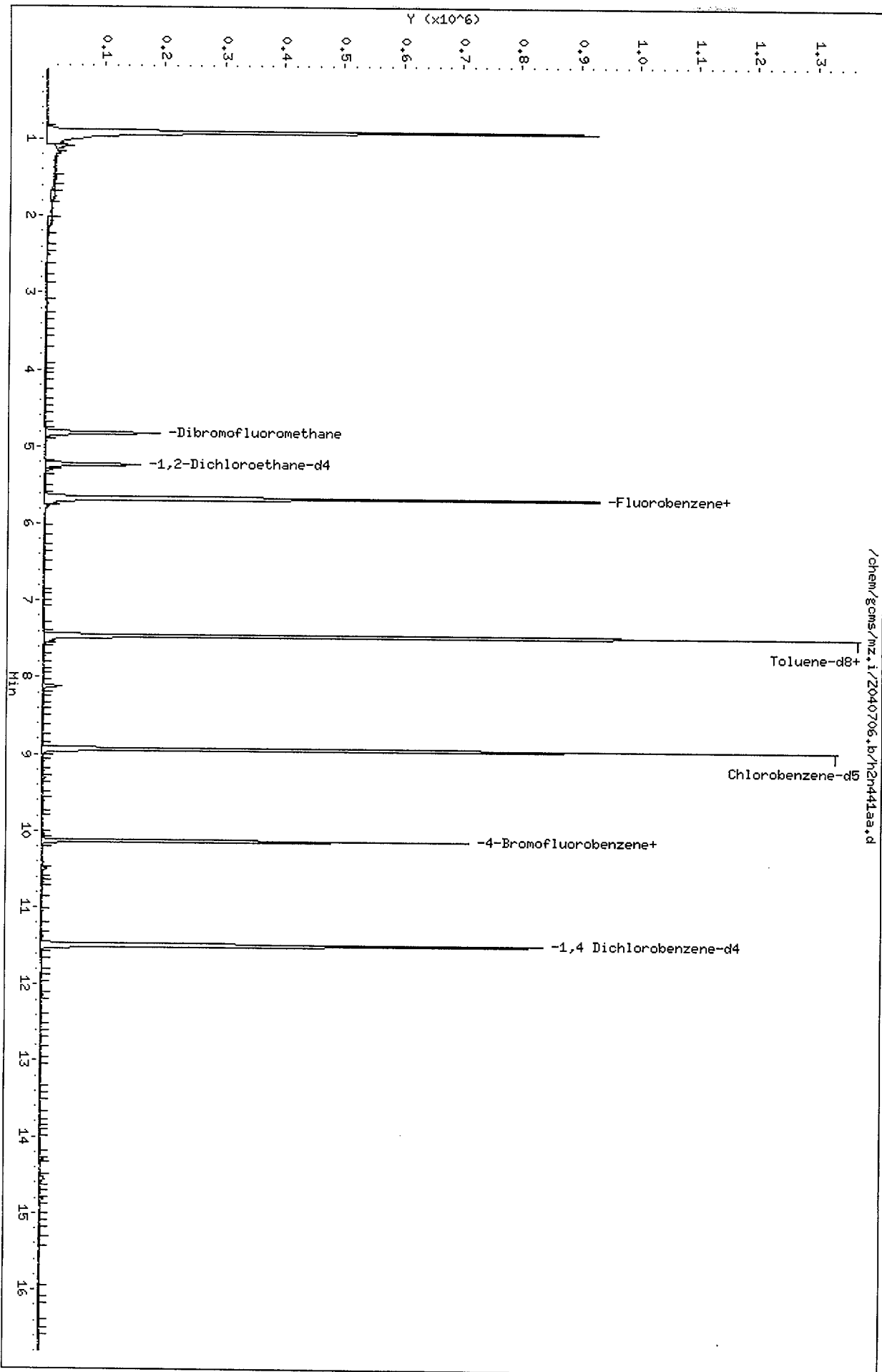
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Sample Matrix: GAS Fraction: VOA  
Lab Smp Id: H2N441AA Client Smp ID: INTRA-LAB BLANK  
Level: LOW Operator: 22980  
Data Type: MS DATA SampleType: METHOD BLANK  
SpikeList File: allcmpds.spk Quant Type: ISTD  
Sublist File: focus.sub  
Method File: /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
Misc Info: Z040706,8260B\_LM,focus.sub

| SURROGATE COMPOUND      | CONC<br>ADDED<br>ug | CONC<br>RECOVERED<br>ug | %<br>RECOVERED | LIMITS |
|-------------------------|---------------------|-------------------------|----------------|--------|
| \$ 4 Dibromofluorometha | 0.25000             | 0.25332                 | 101.33         | 50-150 |
| \$ 5 1,2-Dichloroethane | 0.25000             | 0.22683                 | 90.73          | 50-150 |
| \$ 6 Toluene-d8         | 0.25000             | 0.23736                 | 94.94          | 50-150 |
| \$ 7 4-Bromofluorobenze | 0.25000             | 0.19780                 | 79.12          | 50-150 |

Data File: /chem/gcms/mz.i/2040706.b/h2n441aa.d  
Date : 07-APR-2006 09:47  
Client ID: INTRA-LAB BLANK  
Sample Info: H2N441AA,1,3,,BLANK

Column phase: J+W 624

Instrument: mz.i  
Operator: 22980  
Column diameter: 0.18



Data File: /chem/gcms/mz,i/Z040706.b/h2n441aa.d

Date : 07-APR-2006 09:47

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2N441AA,1,3,,BLANK

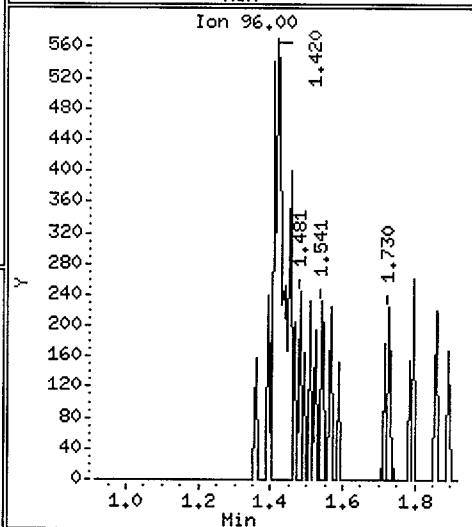
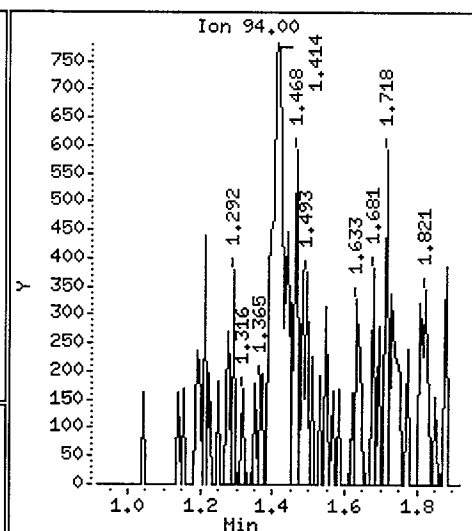
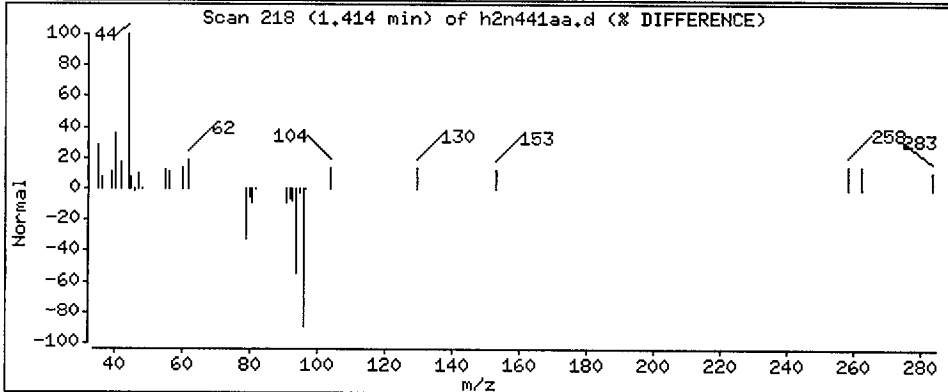
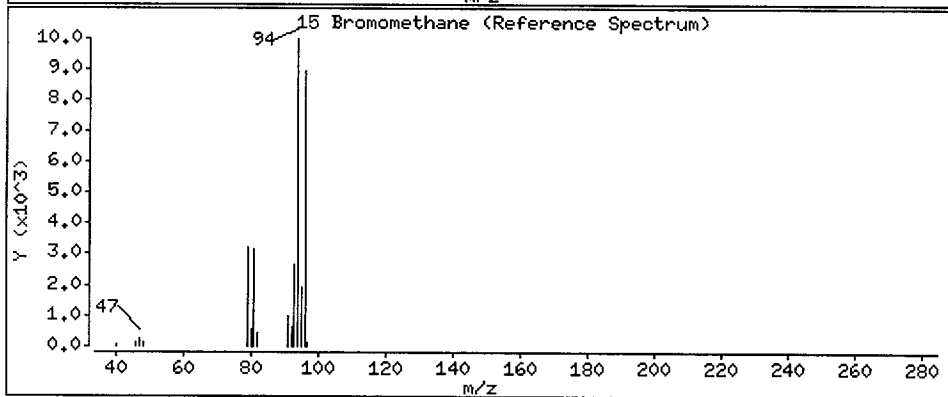
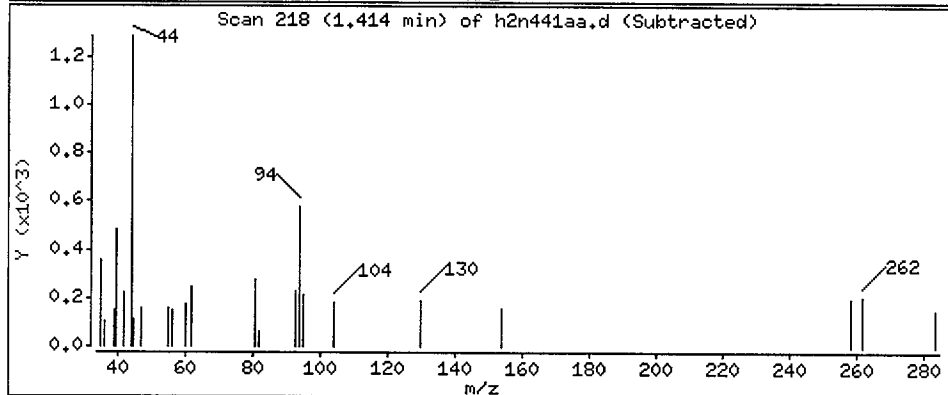
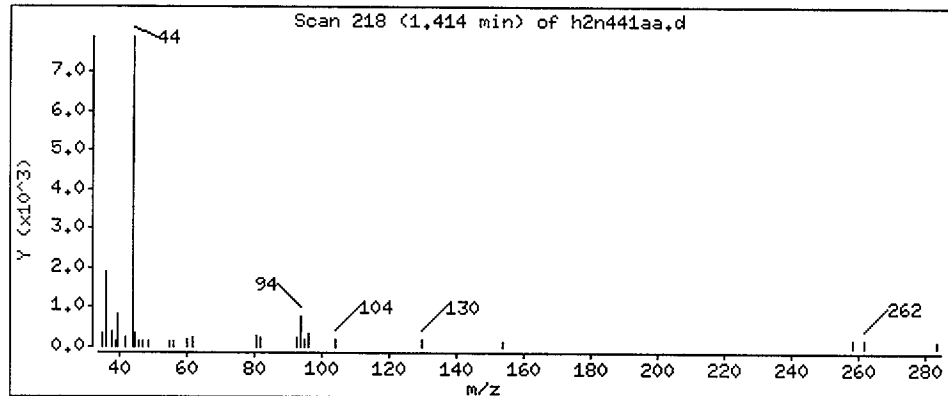
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

15 Bromomethane

Concentration: 0.026207 ug



Data File: /var/chem/gcms/mz.i/Z040706.b/h2n441aa.d

Date : 07-APR-2006 09:47

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2N441AA,1,3,,BLANK

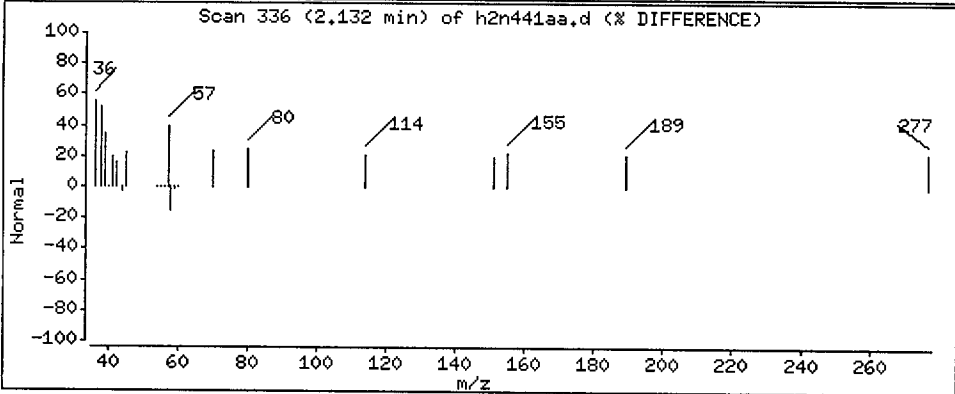
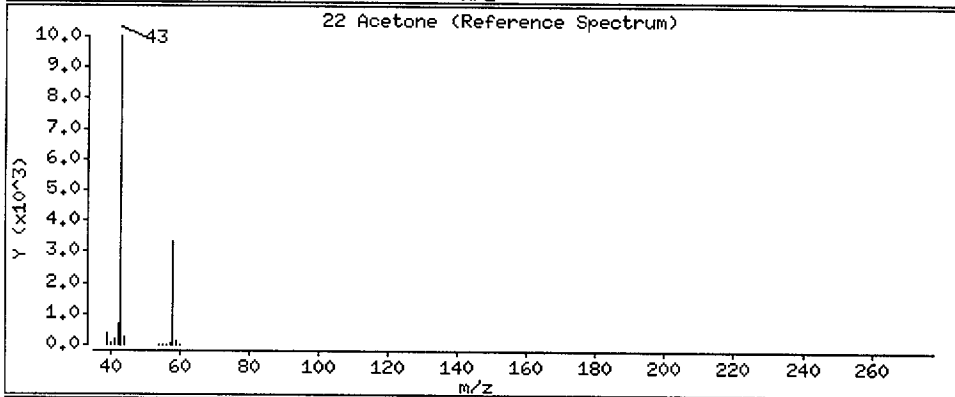
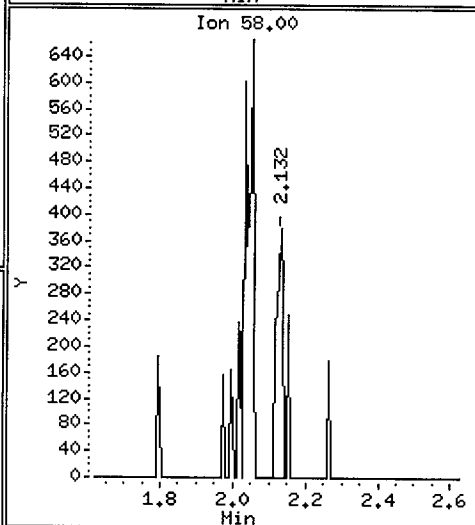
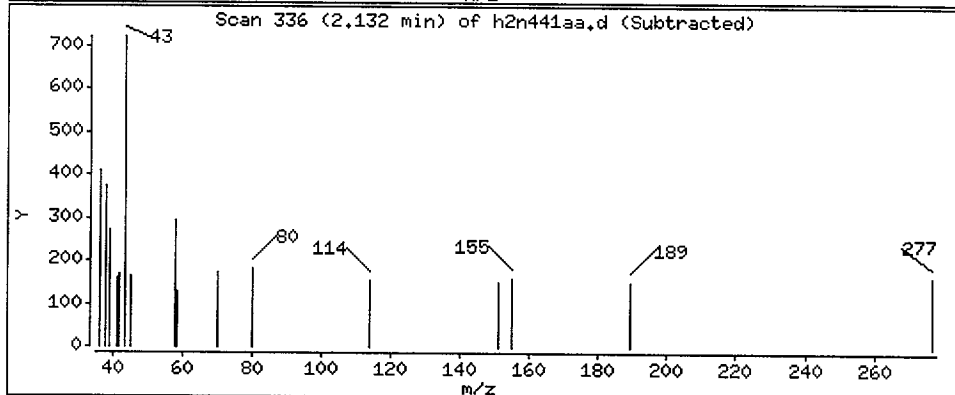
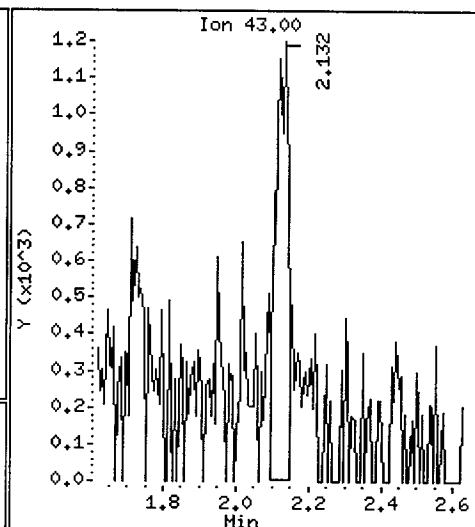
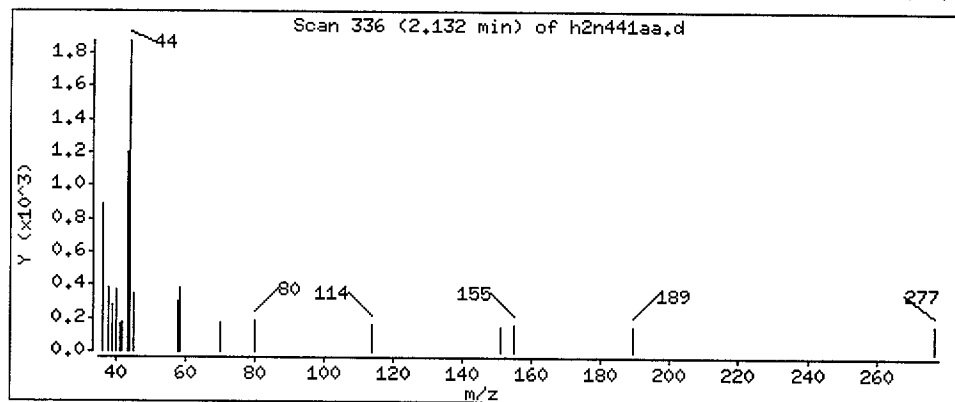
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

22 Acetone

Concentration: 0.094977 ug



4/7/06  
Split  
Peak

Data File: /chem/gcms/mz.i/Z040706.b/h2n441aa.d

Date : 07-APR-2006 09:47

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2N441AA,1,3,,BLANK

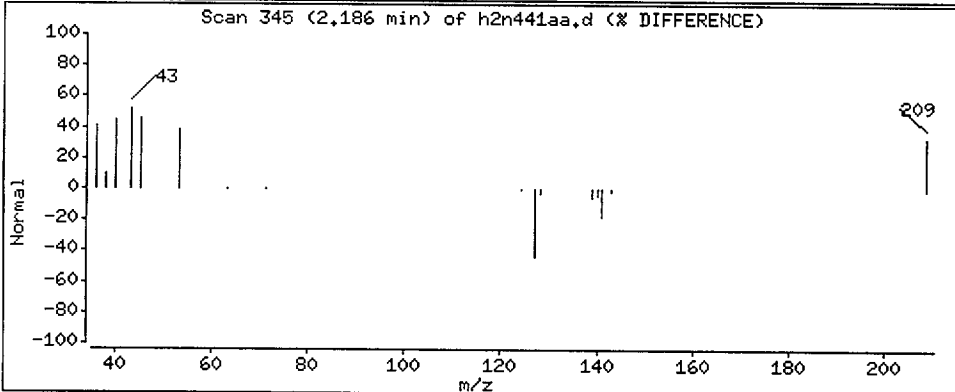
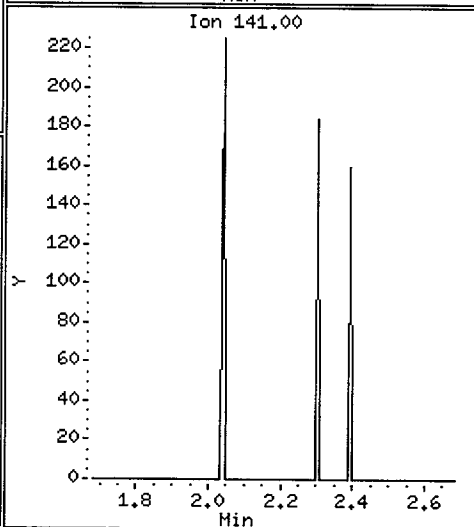
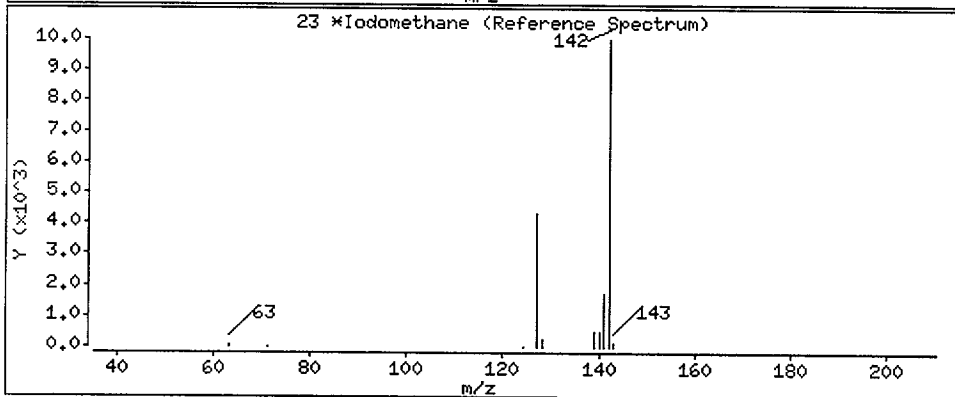
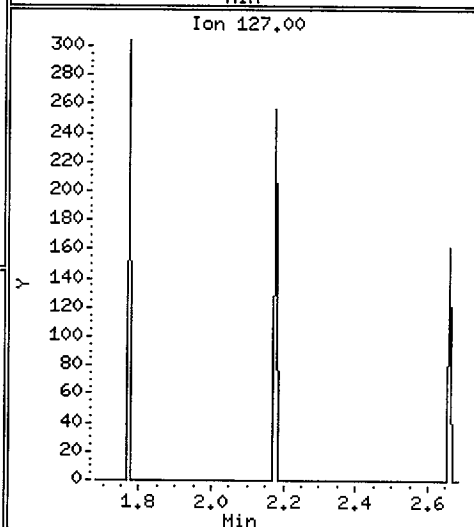
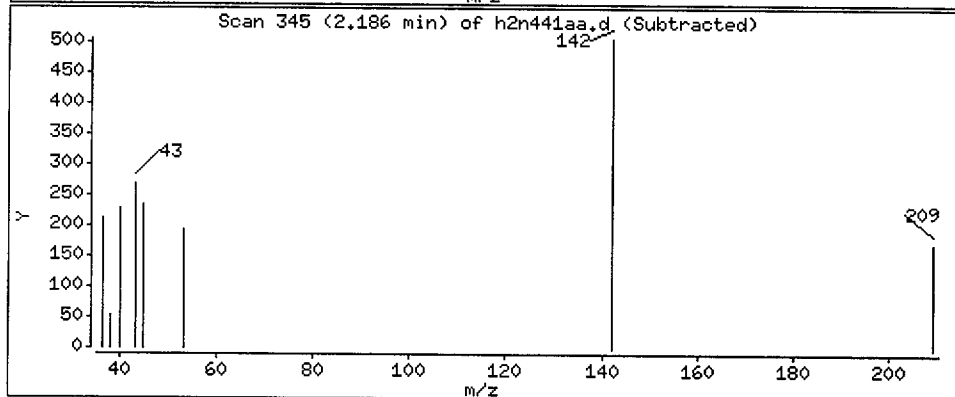
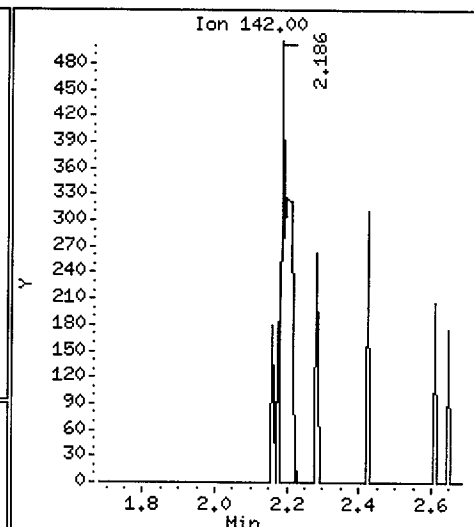
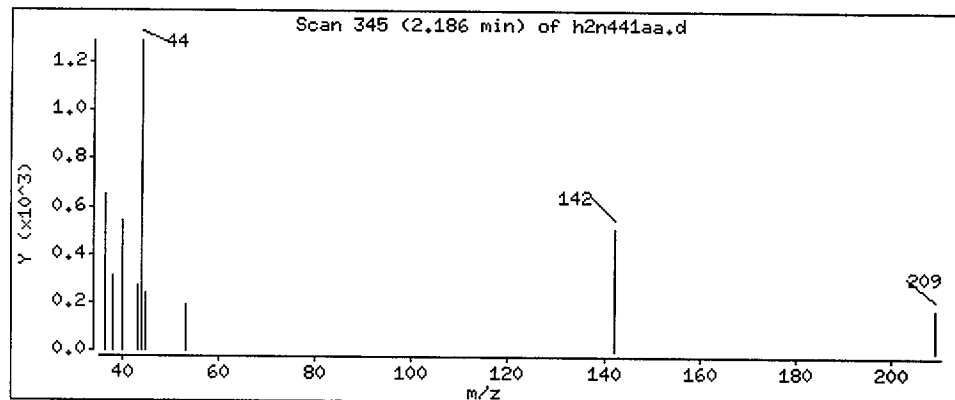
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

23 \*Iodomethane

Concentration: 0.013826 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2n441aa.d

Date : 07-APR-2006 09:47

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2N441AA,1,3,,BLANK

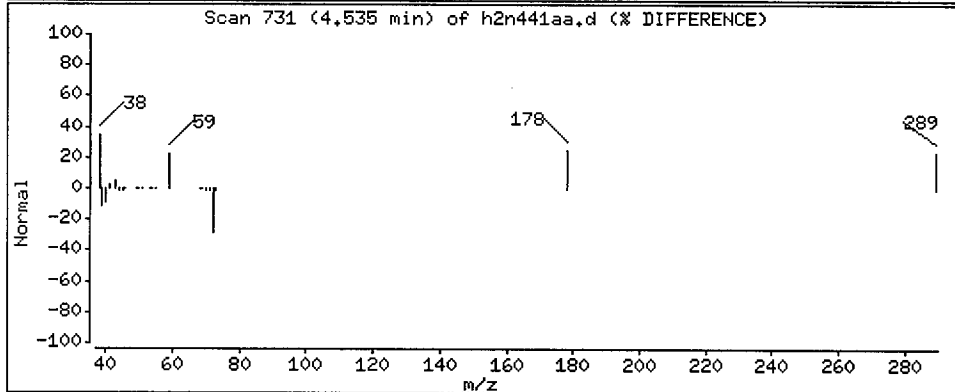
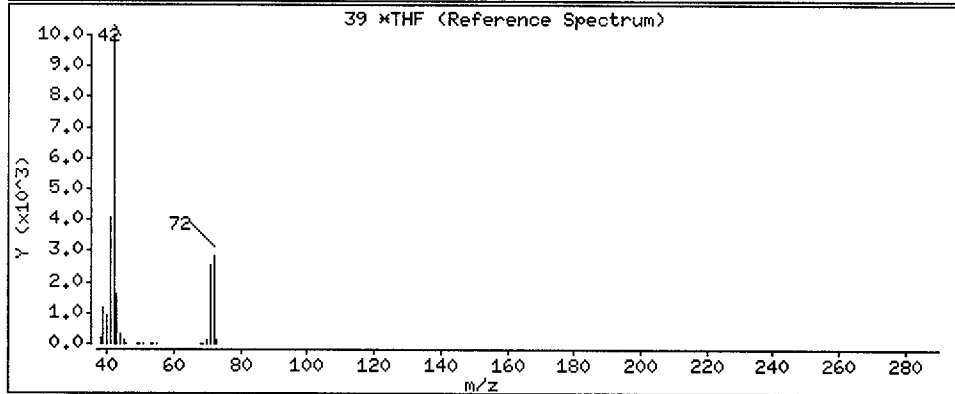
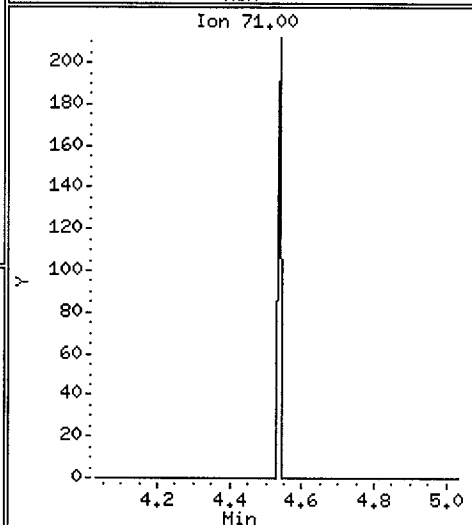
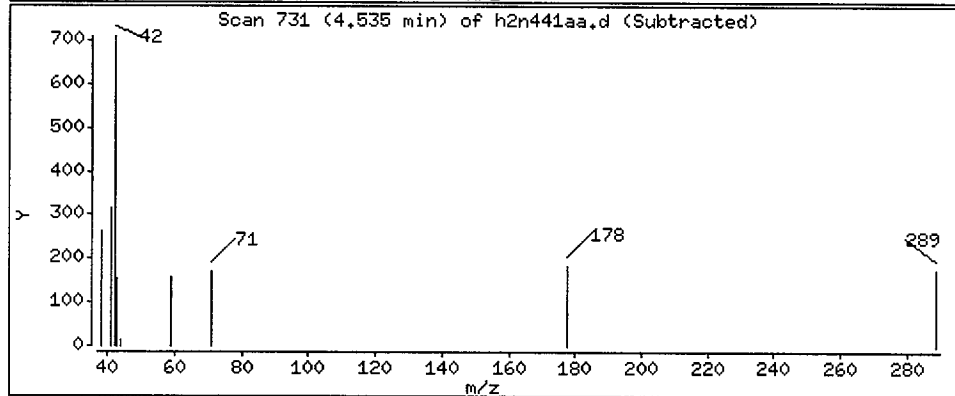
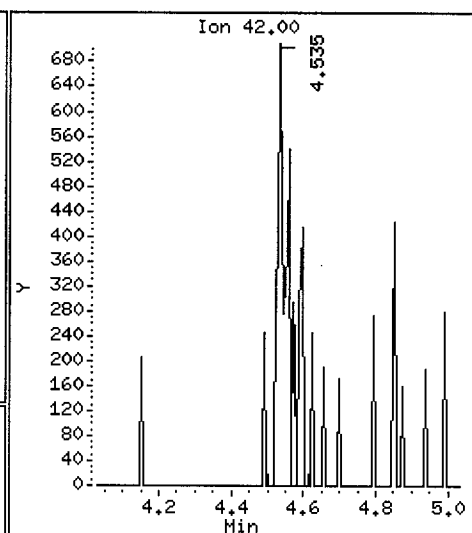
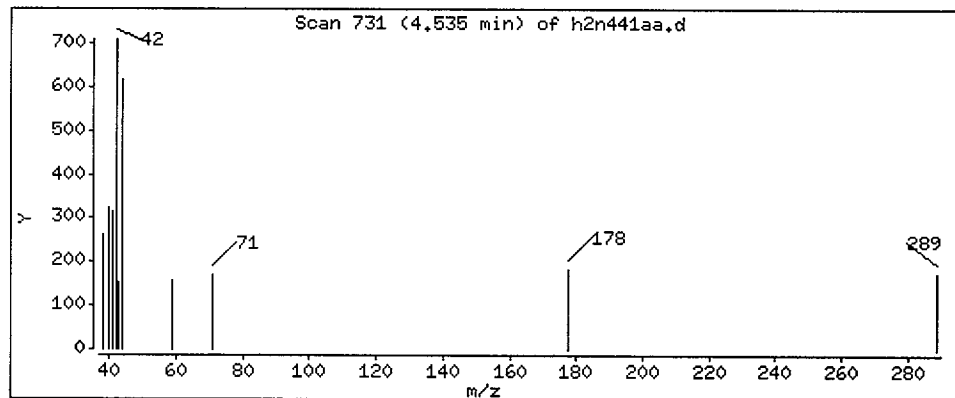
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

39 \*THF

Concentration: 0.018761 ug





Data File: /chem/gcms/mz,i/Z040706,b/h2n441aa,d

Date : 07-APR-2006 09:47

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2N441AA,1,3,,BLANK

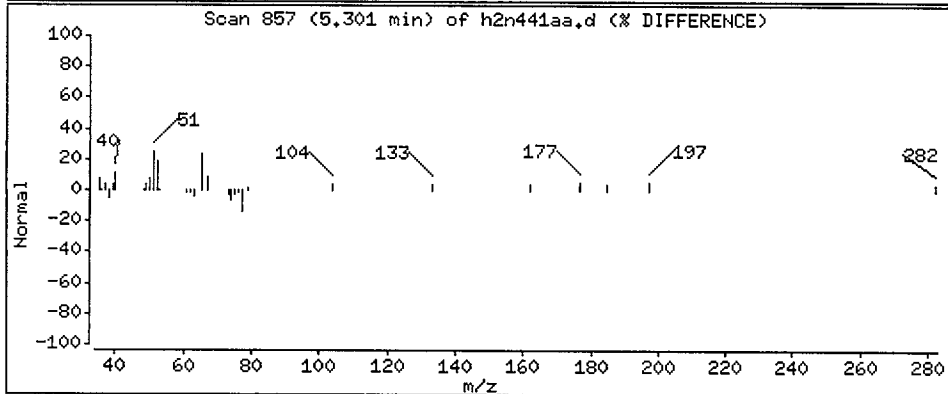
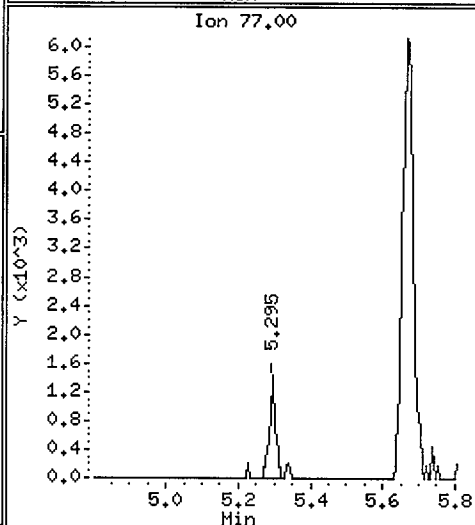
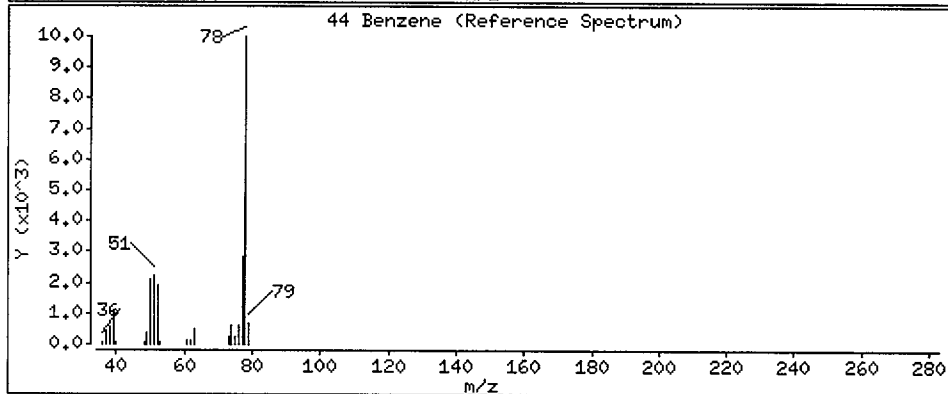
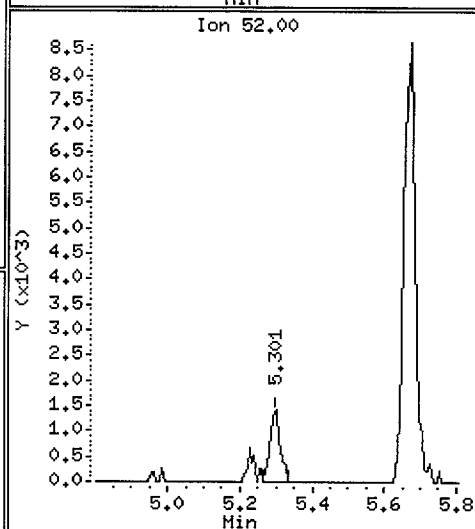
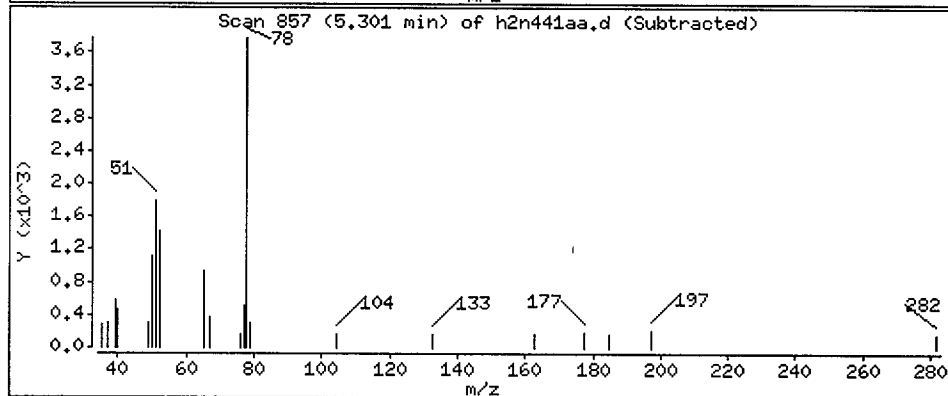
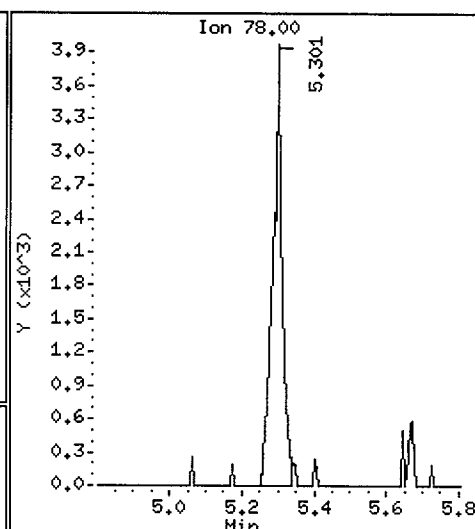
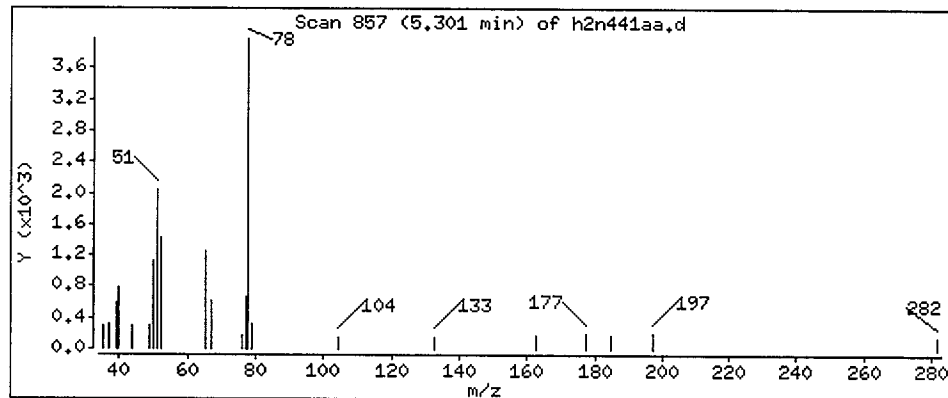
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

44 Benzene

Concentration: 0.0020576 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2n441aa.d

Date : 07-APR-2006 09:47

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2N441AA,1,3,,BLANK

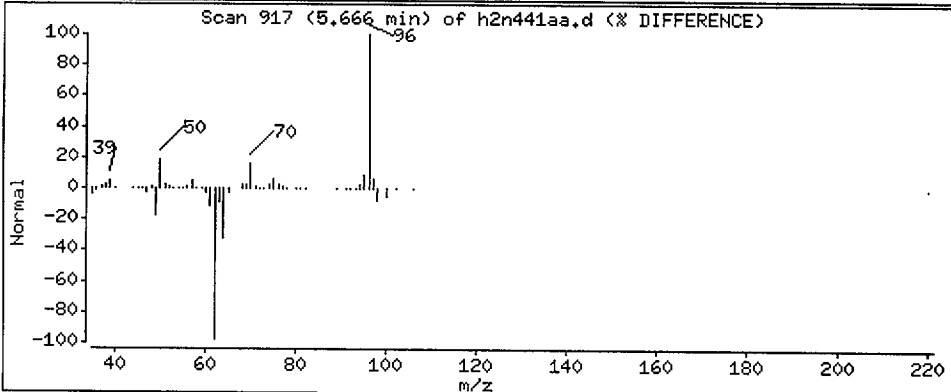
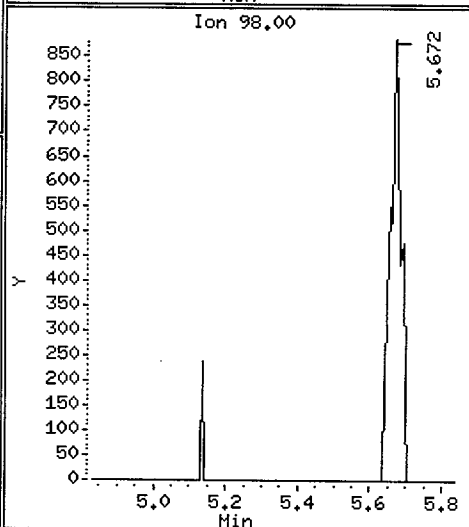
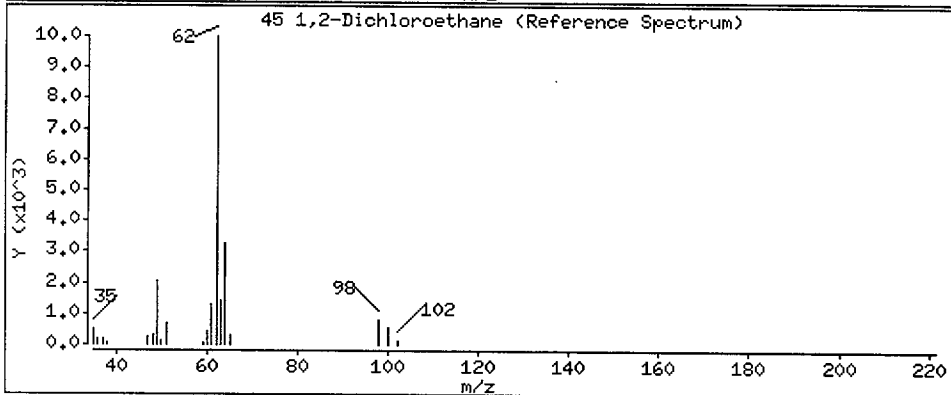
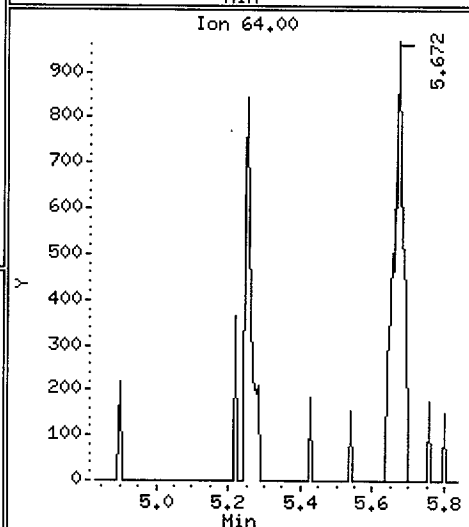
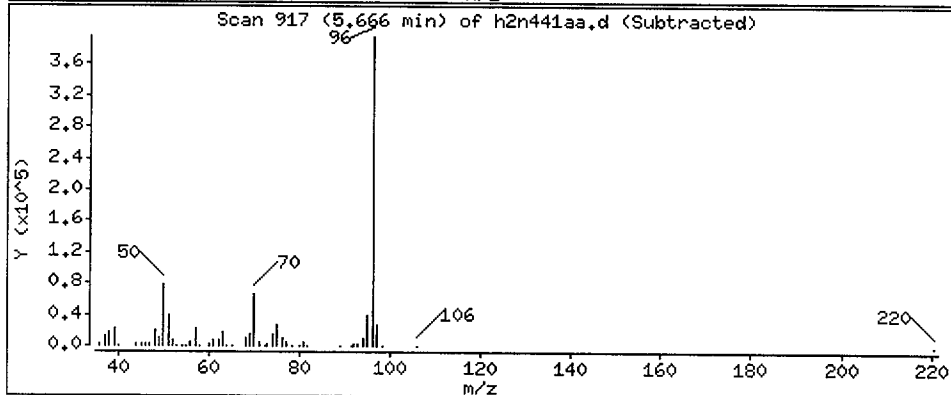
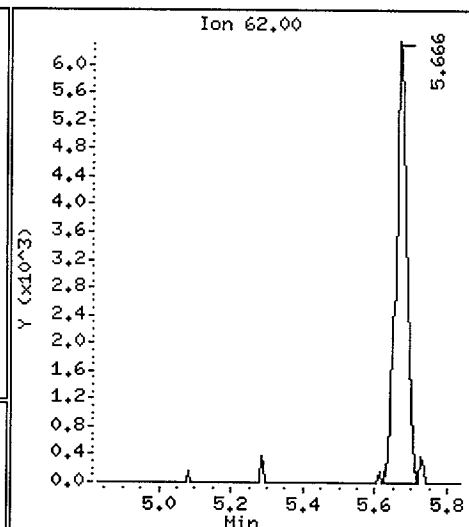
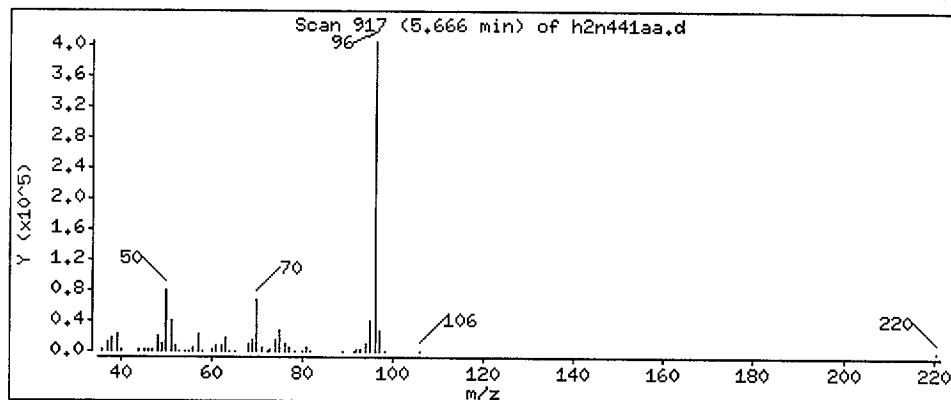
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

45 1,2-Dichloroethane

Concentration: 0.018288 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2n441aa.d

Date : 07-APR-2006 09:47

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2N441AA,1,3,,BLANK

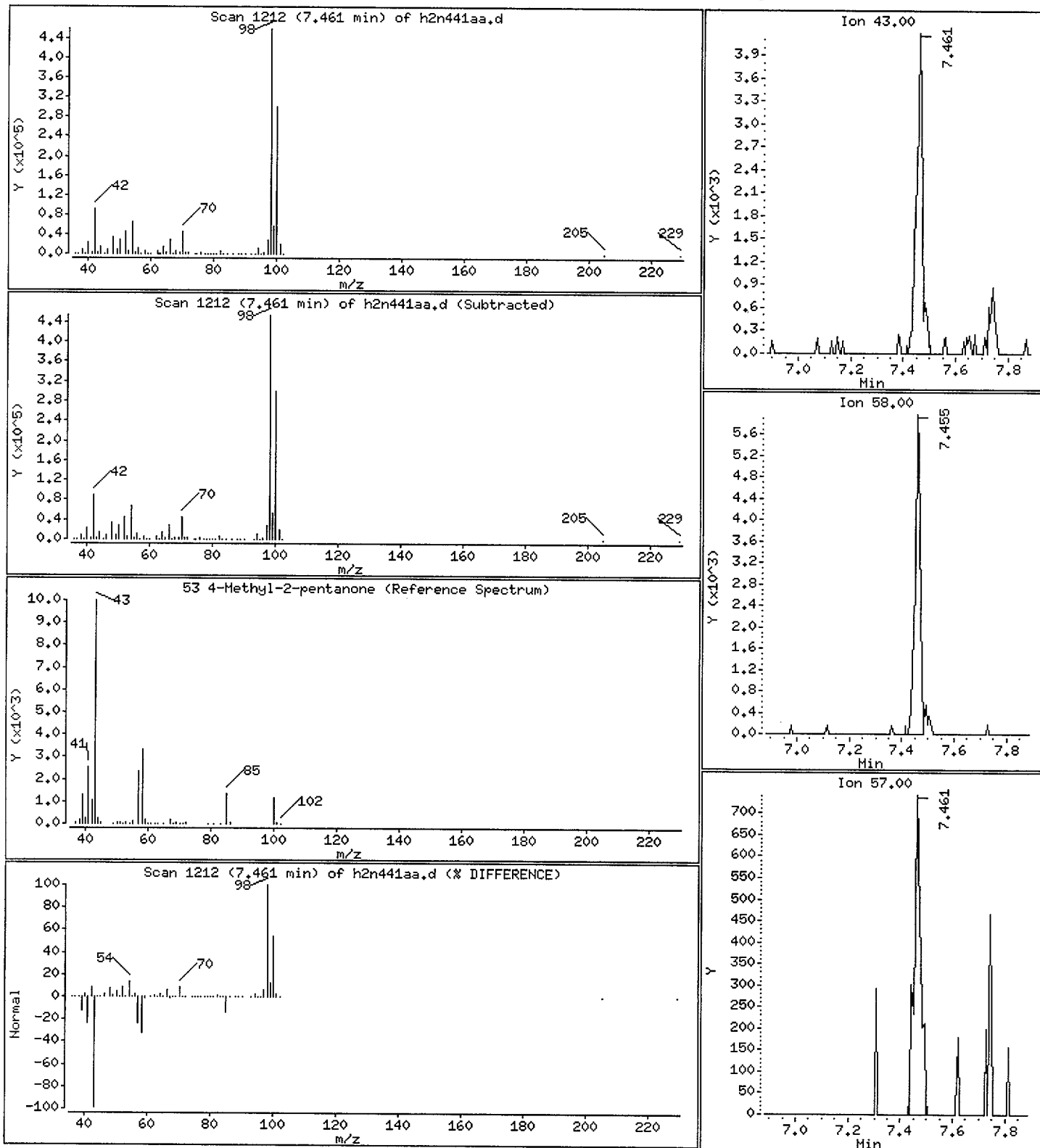
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

53 4-Methyl-2-pentanone

Concentration: 0.022443 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2n441aa.d

Date : 07-APR-2006 09:47

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2N441AA,1,3,,BLANK

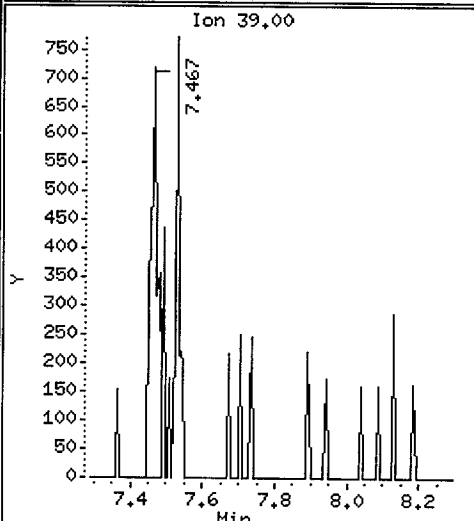
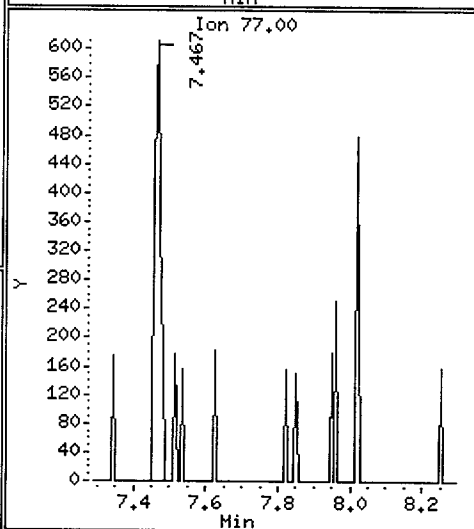
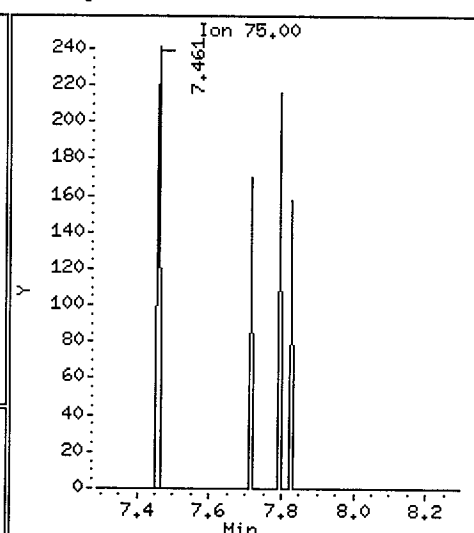
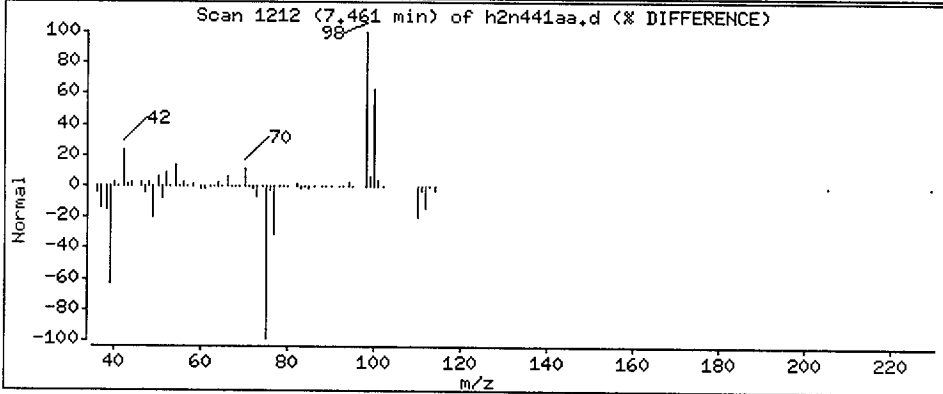
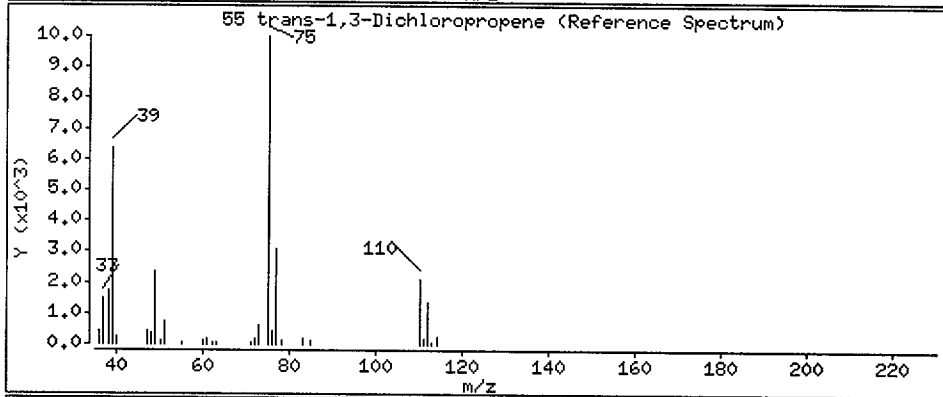
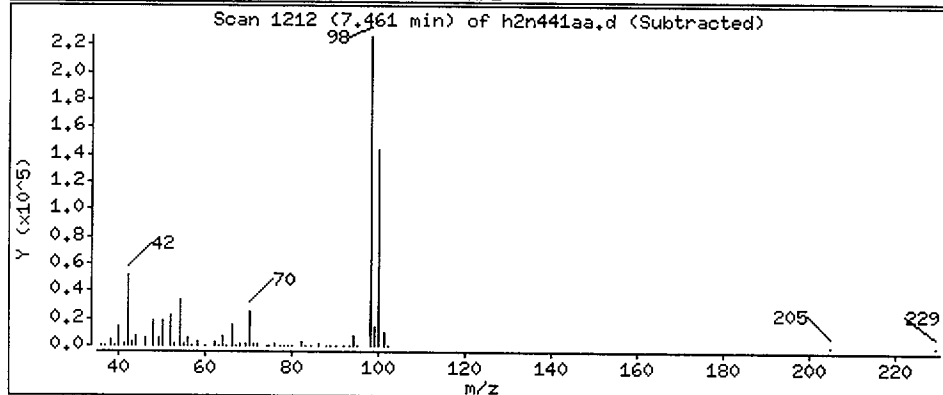
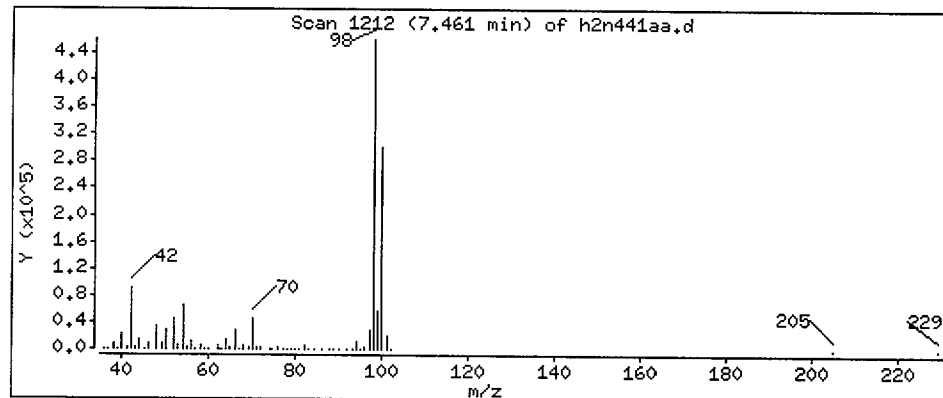
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

55 trans-1,3-Dichloropropene

Concentration: 0.015877 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2n441aa.d

Date : 07-APR-2006 09:47

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2N441AA,1,3,,BLANK

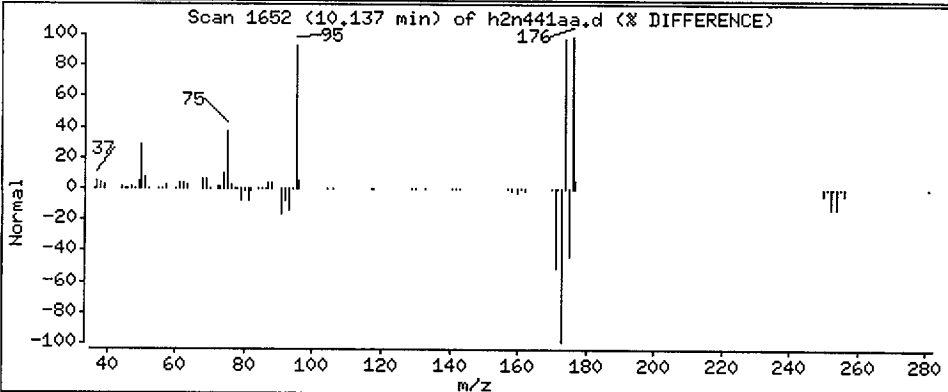
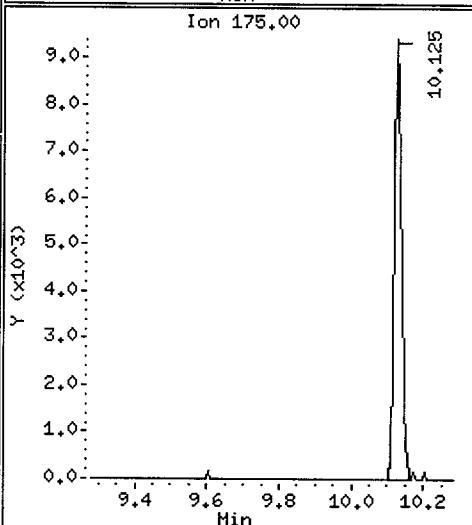
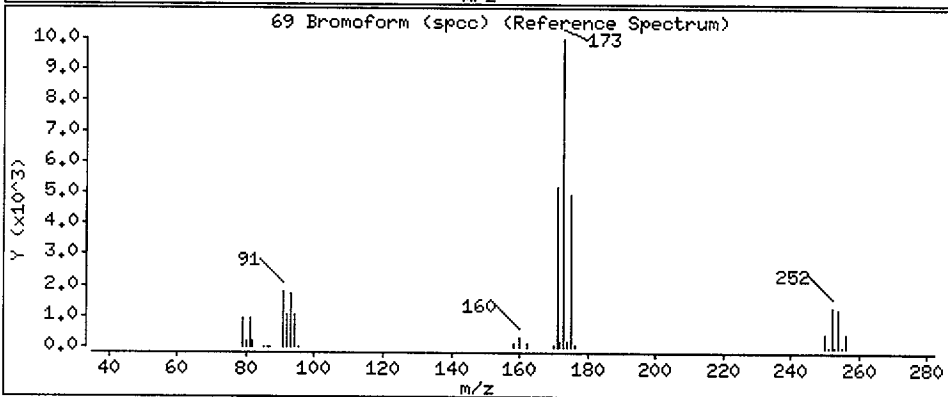
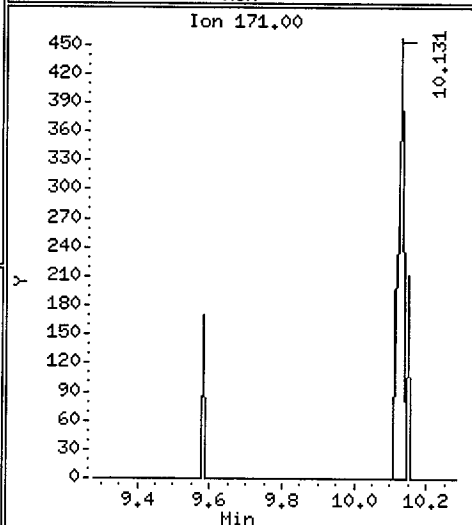
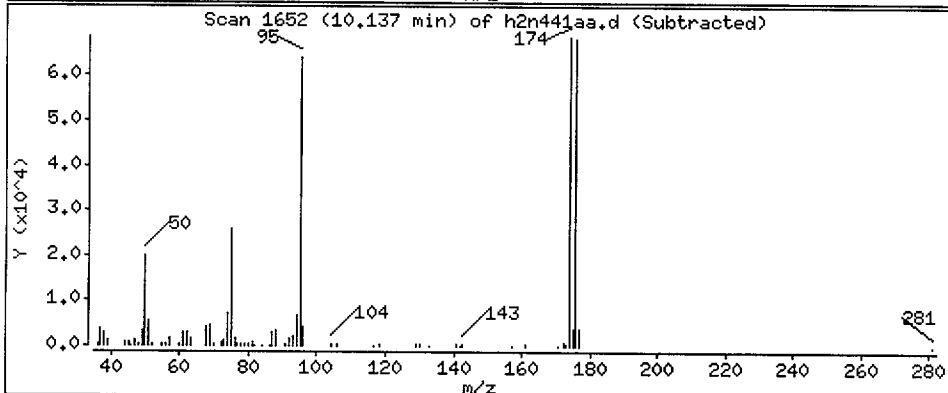
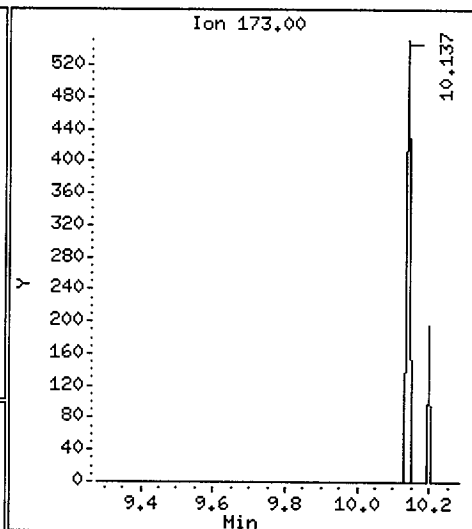
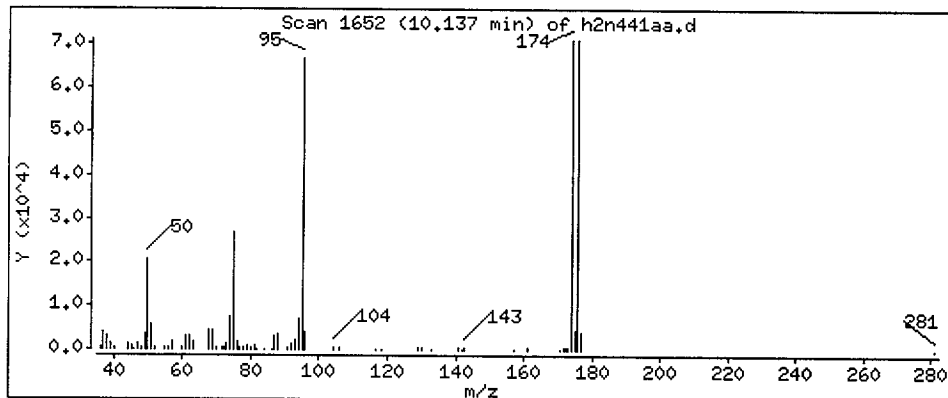
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

69 Bromoform (spcc)

Concentration: 0.022757 ug



Data File: /chem/gcms/mz,i/2040706,b/h2n441aa,d

Date : 07-APR-2006 09:47

Client ID: INTRA-LAB BLANK

Instrument: mz,i

Sample Info: H2N441AA,1,3,,BLANK

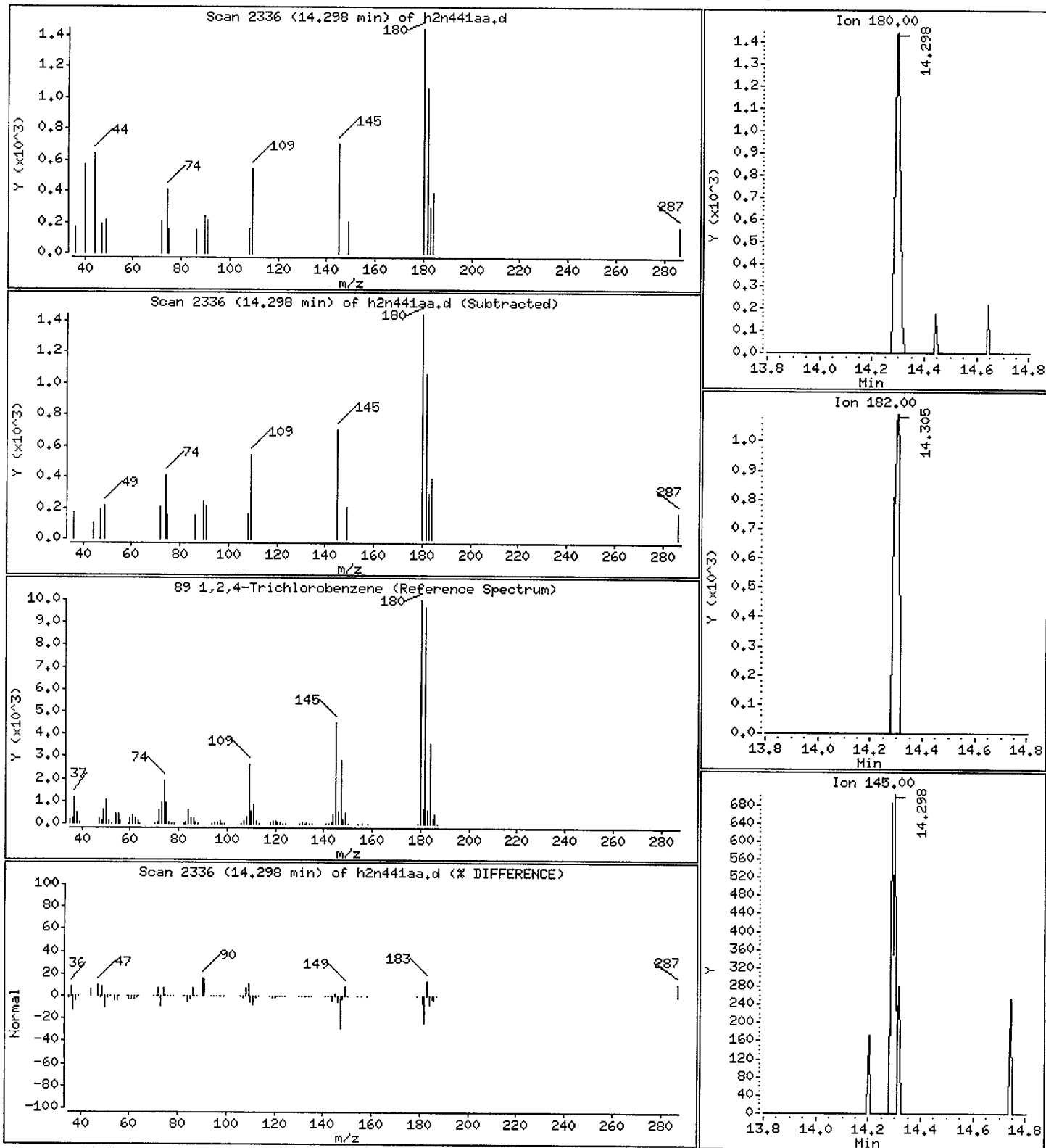
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

89 1,2,4-Trichlorobenzene

Concentration: 0.0027168 ug



Data File: /chem/gcms/mz,i/Z040706.b/h2n441aa.d

Date : 07-APR-2006 09:47

Client ID: INTRA-LAB BLANK

Instrument: mz,i

Sample Info: H2N441AA,1,3,,BLANK

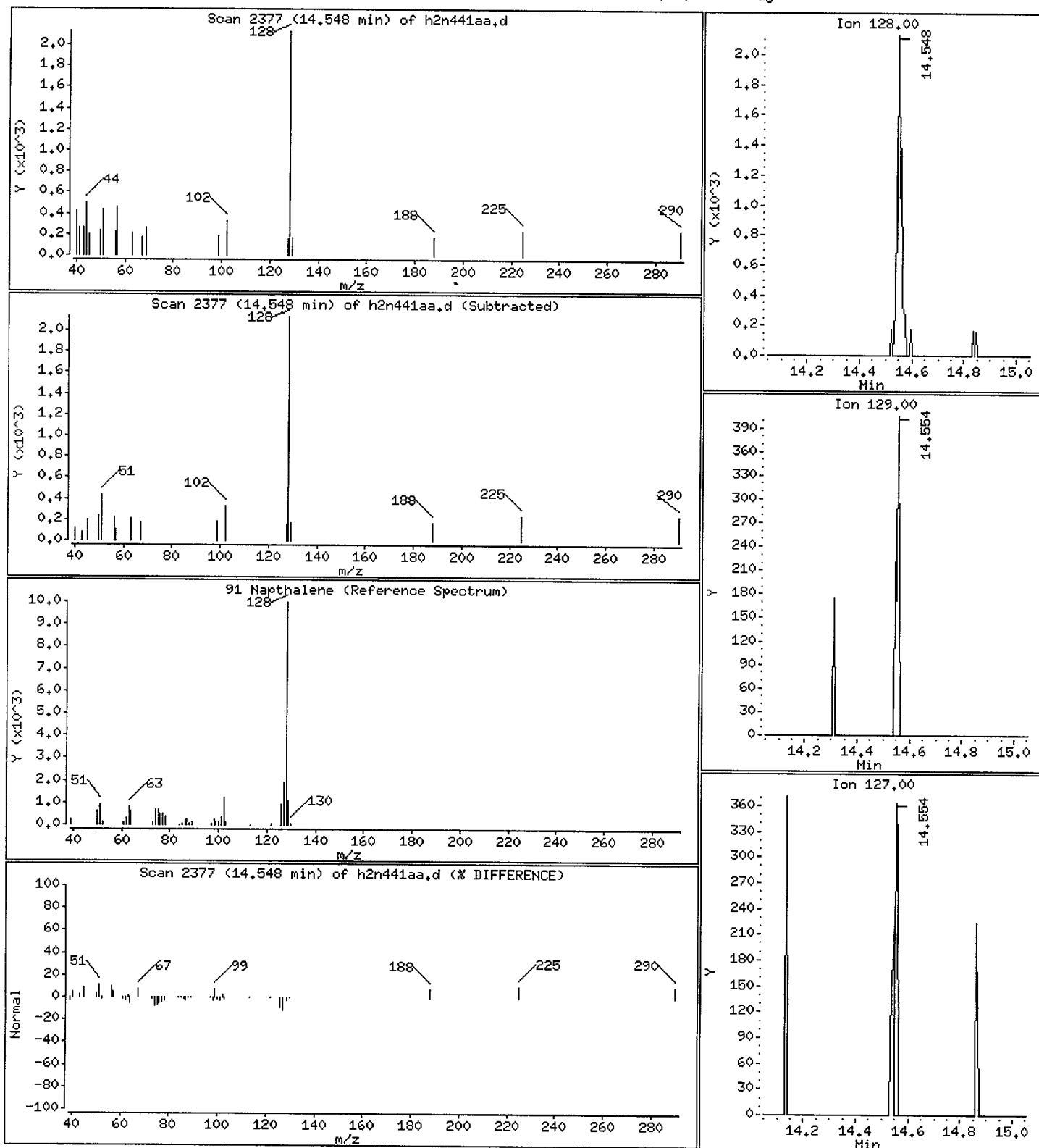
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

91 Napthalene

Concentration: 0.0029559 ug



Data File: /chem/gcms/mz.i/Z040706.b/h2n441aa.d

Date : 07-APR-2006 09:47

Client ID: INTRA-LAB BLANK

Instrument: mz.i

Sample Info: H2N441AA,1,3,,BLANK

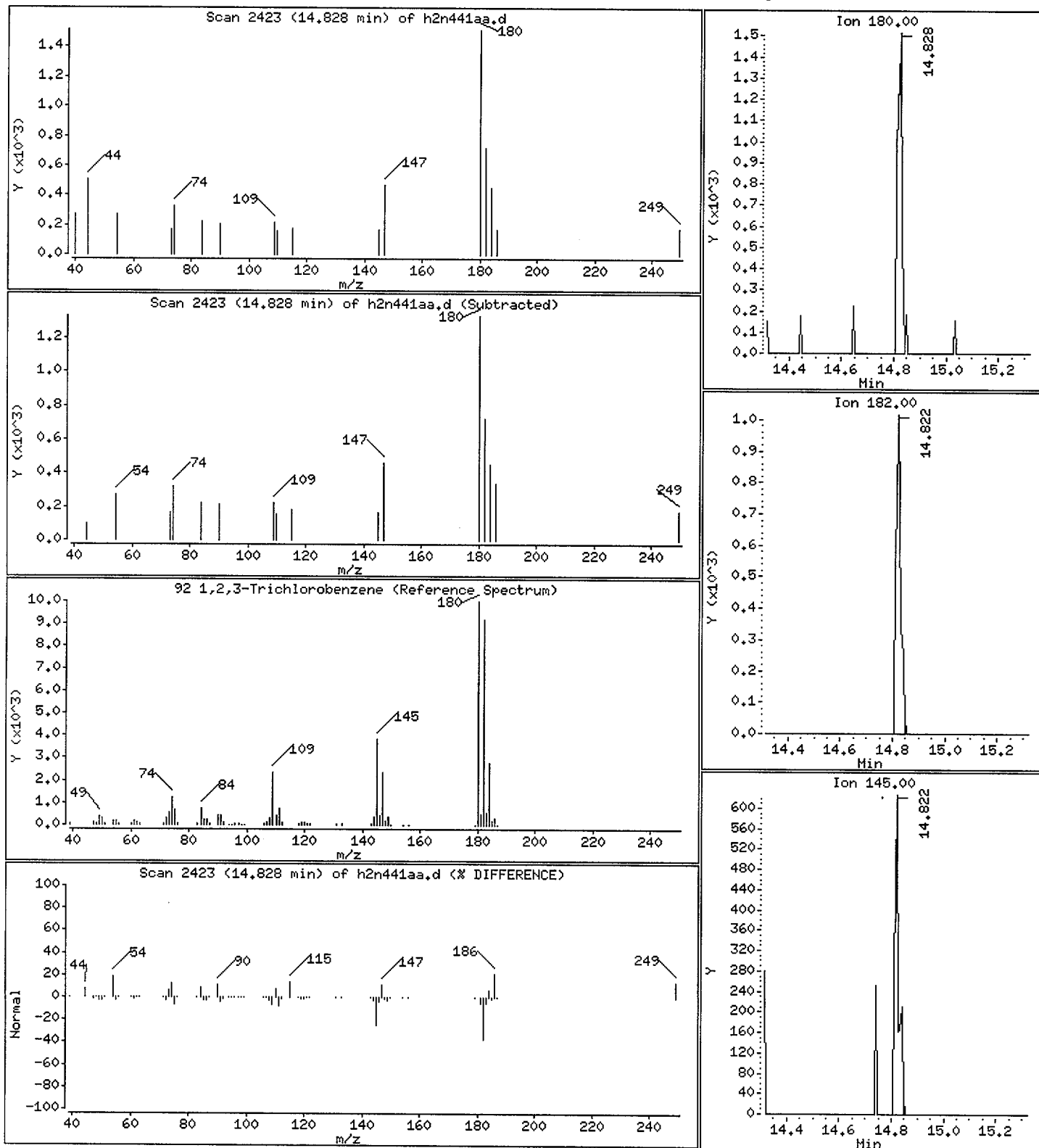
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

92 1,2,3-Trichlorobenzene

Concentration: 0.0038922 ug





Data File: /var/chem/gcms/mz.i/Z040706.b/h2n441aa.d

Report Date: 14-Apr-2006 15:04

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /var/chem/gcms/mz.i/Z040706.b/h2n441aa.d  
 Lab Smp Id: H2N441AA Client Smp ID: INTRA-LAB BLANK  
 Inj Date : 07-APR-2006 09:47  
 Operator : 22980 Inst ID: mz.i  
 Smp Info : H2N441AA,1,3,,BLANK  
 Misc Info : Z040706,8260B\_LM,focus.sub  
 Comment : Volatile Organics by GC/MS  
 Method : /var/chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
 Meth Date : 14-Apr-2006 15:02 wilesd Quant Type: ISTD  
 Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
 Als bottle: 1 QC Sample: METHOD BLANK  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: focus.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable Local Compound Variable

| ISTD              | RT    | HEIGHT | AMOUNT |
|-------------------|-------|--------|--------|
| =====             | ===== | =====  | =====  |
| * 1 Fluorobenzene | 5.672 | 935337 | 10.000 |

| CONCENTRATIONS |        |               |            | QUANT   |         |           |        |
|----------------|--------|---------------|------------|---------|---------|-----------|--------|
| RT             | HEIGHT | ON-COL( ug/L) | FINAL( ug) | QUAL    | LIBRARY | LIB ENTRY | CPND # |
| =====          | =====  | =====         | =====      | =====   | =====   | =====     | =====  |
| Carbon dioxide | 0.909  | 927411        | 9.91526049 | 0.24788 | 3       | NIST05.1  | 81     |
|                |        |               |            |         |         |           | 1      |

CAS #: 124-38-9

*Arr*  
*pu 4/14/06*

Data File: /var/chem/gcms/mz,i/Z040706,b/h2n441aa,d

Date : 07-APR-2006 09:47

Client ID: INTRA-LAB BLANK

Instrument: mz,i

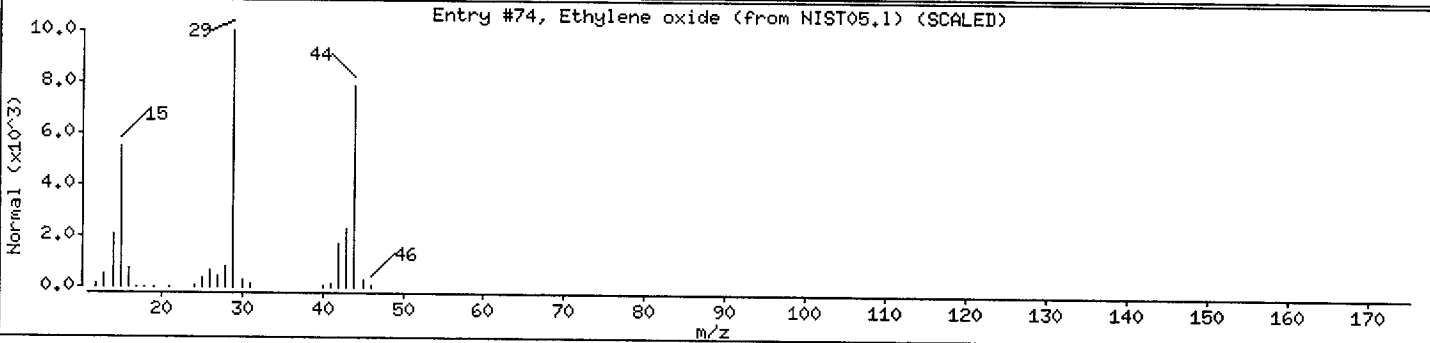
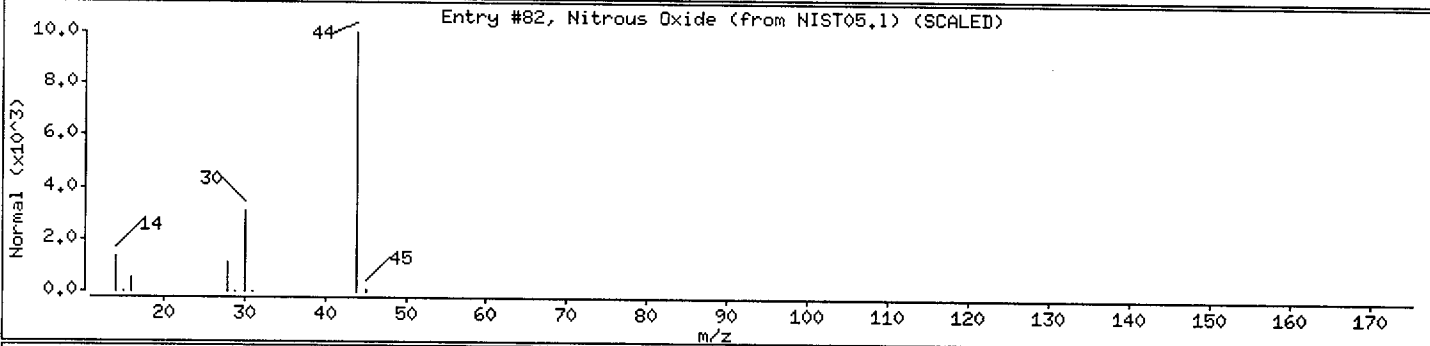
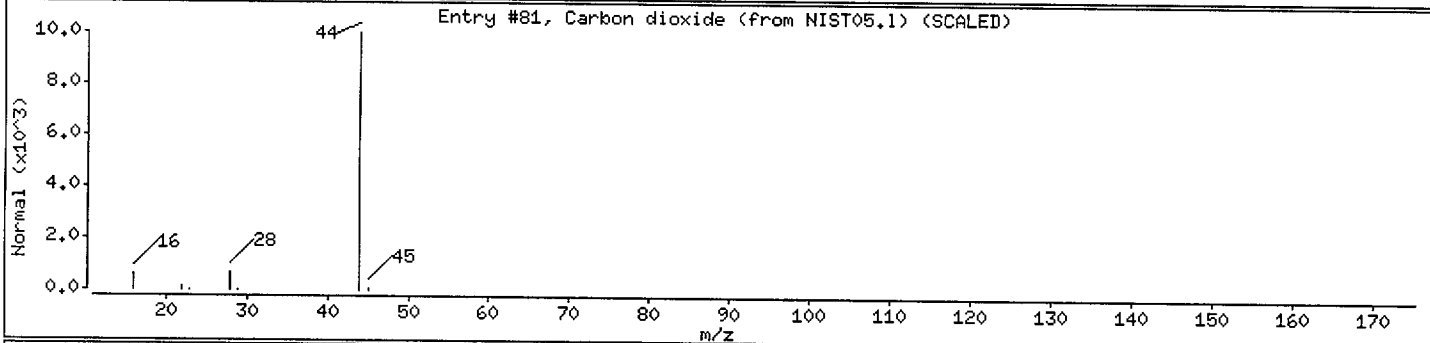
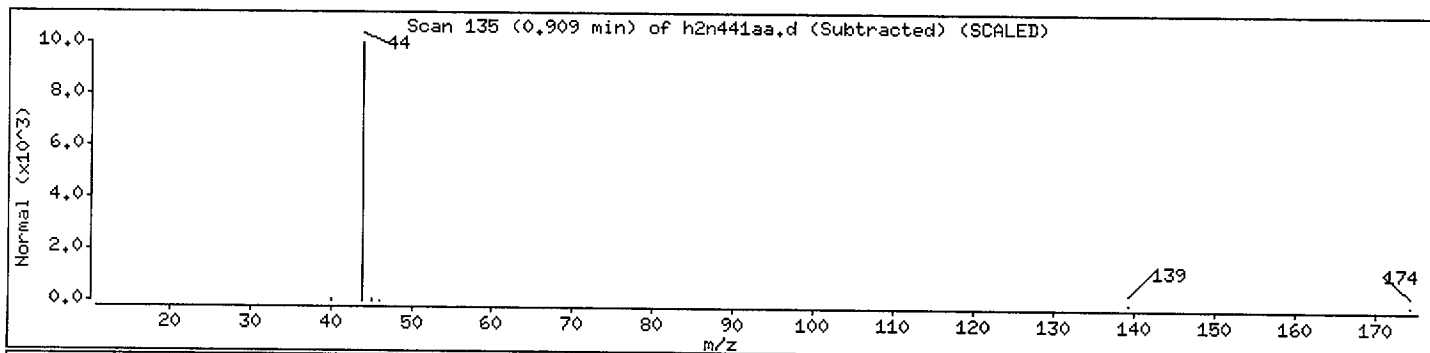
Sample Info: H2N441AA,1,3,,BLANK

Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Carbon dioxide                | 124-38-9   | NIST05.1 | 81    | 3       | CO2     | 44     |
| Nitrous Oxide                 | 10024-97-2 | NIST05.1 | 82    | 3       | N2O     | 44     |
| Ethylene oxide                | 75-21-8    | NIST05.1 | 74    | 2       | C2H4O   | 44     |



## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: H6D030169      Work Order #....: H2N441AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D060000-033      H2N441AD-LCSD  
 Prep Date.....: 04/06/06      Analysis Date...: 04/07/06  
 Prep Batch #....: 6096033  
 Dilution Factor: 1

| PARAMETER            | PERCENT   | RECOVERY          | RPD         | RPD           | METHOD            |
|----------------------|-----------|-------------------|-------------|---------------|-------------------|
|                      | RECOVERY  | LIMITS            |             | LIMITS        |                   |
| Acetone              | 50        | (30 - 180)        |             |               | SW846 VOST        |
|                      | 63        | (30 - 180)        | 23          | (0-25)        | SW846 VOST        |
| Acrylonitrile        | 71        | (30 - 130)        |             |               | SW846 VOST        |
|                      | 86        | (30 - 130)        | 18          | (0-30)        | SW846 VOST        |
| <b>Benzene</b>       | <b>99</b> | <b>(69 - 130)</b> |             |               | <b>SW846 VOST</b> |
|                      | <b>99</b> | <b>(69 - 130)</b> | <b>0.26</b> | <b>(0-25)</b> | <b>SW846 VOST</b> |
| Bromobenzene         | 90        | (50 - 117)        |             |               | SW846 VOST        |
|                      | 99        | (50 - 117)        | 9.8         | (0-25)        | SW846 VOST        |
| Bromochloromethane   | 102       | (52 - 125)        |             |               | SW846 VOST        |
|                      | 102       | (52 - 125)        | 0.010       | (0-25)        | SW846 VOST        |
| Bromodichloromethane | 101       | (51 - 129)        |             |               | SW846 VOST        |
|                      | 109       | (51 - 129)        | 7.7         | (0-25)        | SW846 VOST        |
| Bromoform            | 101       | (40 - 111)        |             |               | SW846 VOST        |
|                      | 109       | (40 - 111)        | 7.6         | (0-25)        | SW846 VOST        |
| Bromomethane         | 139       | (30 - 170)        |             |               | SW846 VOST        |
|                      | 129       | (30 - 170)        | 7.9         | (0-25)        | SW846 VOST        |
| 2-Butanone           | 60        | (30 - 150)        |             |               | SW846 VOST        |
|                      | 81 p      | (30 - 150)        | 30          | (0-25)        | SW846 VOST        |
| n-Butylbenzene       | 97        | (50 - 140)        |             |               | SW846 VOST        |
|                      | 95        | (50 - 140)        | 2.1         | (0-25)        | SW846 VOST        |
| sec-Butylbenzene     | 96        | (59 - 136)        |             |               | SW846 VOST        |
|                      | 93        | (59 - 136)        | 3.4         | (0-25)        | SW846 VOST        |
| tert-Butylbenzene    | 95        | (59 - 127)        |             |               | SW846 VOST        |
|                      | 92        | (59 - 127)        | 3.1         | (0-25)        | SW846 VOST        |
| Carbon disulfide     | 112       | (58 - 150)        |             |               | SW846 VOST        |
|                      | 110       | (58 - 150)        | 1.6         | (0-25)        | SW846 VOST        |
| Carbon tetrachloride | 104       | (61 - 150)        |             |               | SW846 VOST        |
|                      | 102       | (61 - 150)        | 2.3         | (0-25)        | SW846 VOST        |
| <b>Chlorobenzene</b> | <b>96</b> | <b>(70 - 116)</b> |             |               | <b>SW846 VOST</b> |
|                      | <b>98</b> | <b>(70 - 116)</b> | <b>2.3</b>  | <b>(0-25)</b> | <b>SW846 VOST</b> |
| Chlorodibromomethane | 83        | (50 - 116)        |             |               | SW846 VOST        |
|                      | 95        | (50 - 116)        | 12          | (0-25)        | SW846 VOST        |
| Chloroethane         | 128       | (30 - 150)        |             |               | SW846 VOST        |
|                      | 129       | (30 - 150)        | 0.41        | (0-25)        | SW846 VOST        |
| Chloroform           | 102       | (60 - 132)        |             |               | SW846 VOST        |
|                      | 106       | (60 - 132)        | 3.6         | (0-25)        | SW846 VOST        |
| Chloromethane        | 171 a     | (30 - 170)        |             |               | SW846 VOST        |
|                      | 162       | (30 - 170)        | 5.1         | (0-25)        | SW846 VOST        |
| 2-Chlorotoluene      | 88        | (50 - 122)        |             |               | SW846 VOST        |
|                      | 89        | (50 - 122)        | 0.53        | (0-25)        | SW846 VOST        |

(Continued on next page)

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169      Work Order #...: H2N441AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D060000-033      H2N441AD-LCSD

| PARAMETER                        | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS | RPD        | RPD<br>LIMITS | METHOD            |
|----------------------------------|---------------------|--------------------|------------|---------------|-------------------|
| 4-Chlorotoluene                  | 92                  | (50 - 119)         |            |               | SW846 VOST        |
|                                  | 92                  | (50 - 119)         | 0.36       | (0-25)        | SW846 VOST        |
| 1,2-Dibromo-3-chloro-<br>propane | 51                  | (30 - 110)         |            |               | SW846 VOST        |
|                                  | 67 p                | (30 - 110)         | 27         | (0-25)        | SW846 VOST        |
| 1,2-Dibromoethane                | 82                  | (50 - 111)         |            |               | SW846 VOST        |
|                                  | 90                  | (50 - 111)         | 9.3        | (0-25)        | SW846 VOST        |
| Dibromomethane                   | 95                  | (50 - 118)         |            |               | SW846 VOST        |
|                                  | 100                 | (50 - 118)         | 5.0        | (0-25)        | SW846 VOST        |
| 1,2-Dichlorobenzene              | 83                  | (50 - 108)         |            |               | SW846 VOST        |
|                                  | 92                  | (50 - 108)         | 11         | (0-25)        | SW846 VOST        |
| 1,3-Dichlorobenzene              | 88                  | (50 - 113)         |            |               | SW846 VOST        |
|                                  | 91                  | (50 - 113)         | 4.1        | (0-25)        | SW846 VOST        |
| 1,4-Dichlorobenzene              | 86                  | (50 - 111)         |            |               | SW846 VOST        |
|                                  | 92                  | (50 - 111)         | 6.8        | (0-25)        | SW846 VOST        |
| Dichlorodifluoromethane          | 103                 | (30 - 150)         |            |               | SW846 VOST        |
|                                  | 100                 | (30 - 150)         | 3.6        | (0-25)        | SW846 VOST        |
| 1,1-Dichloroethane               | 104                 | (64 - 134)         |            |               | SW846 VOST        |
|                                  | 106                 | (64 - 134)         | 1.4        | (0-25)        | SW846 VOST        |
| 1,2-Dichloroethane               | 101                 | (50 - 121)         |            |               | SW846 VOST        |
|                                  | 107                 | (50 - 121)         | 6.1        | (0-25)        | SW846 VOST        |
| cis-1,2-Dichloroethene           | 99                  | (60 - 131)         |            |               | SW846 VOST        |
|                                  | 103                 | (60 - 131)         | 3.0        | (0-25)        | SW846 VOST        |
| trans-1,2-Dichloroethene         | 105                 | (68 - 140)         |            |               | SW846 VOST        |
|                                  | 102                 | (68 - 140)         | 3.0        | (0-25)        | SW846 VOST        |
| <b>1,1-Dichloroethene</b>        | <b>122</b>          | <b>(63 - 150)</b>  |            |               | <b>SW846 VOST</b> |
|                                  | <b>120</b>          | <b>(63 - 150)</b>  | <b>1.3</b> | <b>(0-25)</b> | <b>SW846 VOST</b> |
| 1,2-Dichloropropane              | 103                 | (56 - 124)         |            |               | SW846 VOST        |
|                                  | 108                 | (56 - 124)         | 4.2        | (0-25)        | SW846 VOST        |
| 1,3-Dichloropropane              | 79                  | (50 - 113)         |            |               | SW846 VOST        |
|                                  | 89                  | (50 - 113)         | 11         | (0-25)        | SW846 VOST        |
| 2,2-Dichloropropane              | 96                  | (66 - 150)         |            |               | SW846 VOST        |
|                                  | 97                  | (66 - 150)         | 1.2        | (0-25)        | SW846 VOST        |
| cis-1,3-Dichloropropene          | 97                  | (50 - 128)         |            |               | SW846 VOST        |
|                                  | 105                 | (50 - 128)         | 8.1        | (0-25)        | SW846 VOST        |
| trans-1,3-Dichloropropene        | 76                  | (50 - 116)         |            |               | SW846 VOST        |
|                                  | 86                  | (50 - 116)         | 11         | (0-25)        | SW846 VOST        |
| 1,1-Dichloropropene              | 110                 | (75 - 149)         |            |               | SW846 VOST        |
|                                  | 105                 | (75 - 149)         | 4.8        | (0-25)        | SW846 VOST        |
| Ethylbenzene                     | 98                  | (66 - 129)         |            |               | SW846 VOST        |
|                                  | 101                 | (66 - 129)         | 2.2        | (0-25)        | SW846 VOST        |

(Continued on next page)

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169      Work Order #...: H2N441AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D060000-033      H2N441AD-LCSD

| PARAMETER                   | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS | RPD         | RPD<br>LIMITS | METHOD            |
|-----------------------------|---------------------|--------------------|-------------|---------------|-------------------|
| Hexachlorobutadiene         | 115                 | (50 - 150)         |             |               | SW846 VOST        |
|                             | 112                 | (50 - 150)         | 2.4         | (0-25)        | SW846 VOST        |
| 2-Hexanone                  | 78                  | (30 - 133)         |             |               | SW846 VOST        |
|                             | 100                 | (30 - 133)         | 24          | (0-25)        | SW846 VOST        |
| Iodomethane                 | 129                 | (50 - 150)         |             |               | SW846 VOST        |
|                             | 123                 | (50 - 150)         | 4.6         | (0-25)        | SW846 VOST        |
| Isopropylbenzene            | 99                  | (62 - 137)         |             |               | SW846 VOST        |
|                             | 99                  | (62 - 137)         | 0.63        | (0-25)        | SW846 VOST        |
| p-Isopropyltoluene          | 97                  | (57 - 131)         |             |               | SW846 VOST        |
|                             | 94                  | (57 - 131)         | 2.8         | (0-25)        | SW846 VOST        |
| Methylene chloride          | 98                  | (50 - 149)         |             |               | SW846 VOST        |
|                             | 101                 | (50 - 149)         | 3.3         | (0-25)        | SW846 VOST        |
| 4-Methyl-2-pentanone        | 93                  | (30 - 120)         |             |               | SW846 VOST        |
|                             | 114                 | (30 - 120)         | 21          | (0-25)        | SW846 VOST        |
| Naphthalene                 | 62                  | (30 - 120)         |             |               | SW846 VOST        |
|                             | 78                  | (30 - 120)         | 22          | (0-25)        | SW846 VOST        |
| n-Propylbenzene             | 94                  | (56 - 136)         |             |               | SW846 VOST        |
|                             | 91                  | (56 - 136)         | 3.5         | (0-25)        | SW846 VOST        |
| Styrene                     | 91                  | (50 - 122)         |             |               | SW846 VOST        |
|                             | 96                  | (50 - 122)         | 5.6         | (0-25)        | SW846 VOST        |
| 1,1,1,2-Tetrachloroethane   | 86                  | (50 - 115)         |             |               | SW846 VOST        |
|                             | 93                  | (50 - 115)         | 7.9         | (0-25)        | SW846 VOST        |
| 1,1,2,2-Tetrachloroethane   | 81                  | (30 - 110)         |             |               | SW846 VOST        |
|                             | 94                  | (30 - 110)         | 15          | (0-25)        | SW846 VOST        |
| Tetrachloroethene           | 102                 | (60 - 142)         |             |               | SW846 VOST        |
|                             | 98                  | (60 - 142)         | 3.6         | (0-25)        | SW846 VOST        |
| <b>Toluene</b>              | <b>94</b>           | <b>(64 - 128)</b>  |             |               | <b>SW846 VOST</b> |
|                             | <b>97</b>           | <b>(64 - 128)</b>  | <b>2.3</b>  | <b>(0-25)</b> | <b>SW846 VOST</b> |
| 1,2,3-Trichlorobenzene      | 82                  | (30 - 106)         |             |               | SW846 VOST        |
|                             | 98                  | (30 - 106)         | 17          | (0-25)        | SW846 VOST        |
| 1,2,4-Trichloro-<br>benzene | 85                  | (30 - 116)         |             |               | SW846 VOST        |
|                             | 101                 | (30 - 116)         | 17          | (0-25)        | SW846 VOST        |
| 1,1,1-Trichloroethane       | 110                 | (64 - 150)         |             |               | SW846 VOST        |
|                             | 111                 | (64 - 150)         | 1.3         | (0-25)        | SW846 VOST        |
| 1,1,2-Trichloroethane       | 89                  | (50 - 112)         |             |               | SW846 VOST        |
|                             | 90                  | (50 - 112)         | 1.2         | (0-25)        | SW846 VOST        |
| <b>Trichloroethene</b>      | <b>113</b>          | <b>(72 - 150)</b>  |             |               | <b>SW846 VOST</b> |
|                             | <b>112</b>          | <b>(72 - 150)</b>  | <b>0.48</b> | <b>(0-25)</b> | <b>SW846 VOST</b> |
| Trichlorofluoromethane      | 130                 | (30 - 150)         |             |               | SW846 VOST        |
|                             | 123                 | (30 - 150)         | 5.1         | (0-25)        | SW846 VOST        |

(Continued on next page)

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169      Work Order #...: H2N441AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D060000-033      H2N441AD-LCSD

| PARAMETER              | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS | RPD  | RPD<br>LIMITS | METHOD     |
|------------------------|---------------------|--------------------|------|---------------|------------|
| 1,2,3-Trichloropropane | 75                  | (30 - 110)         |      |               | SW846 VOST |
|                        | 78                  | (30 - 110)         | 4.4  | (0-25)        | SW846 VOST |
| 1,2,4-Trimethylbenzene | 91                  | (50 - 125)         |      |               | SW846 VOST |
|                        | 91                  | (50 - 125)         | 0.40 | (0-25)        | SW846 VOST |
| 1,3,5-Trimethylbenzene | 94                  | (53 - 130)         |      |               | SW846 VOST |
|                        | 93                  | (53 - 130)         | 0.84 | (0-25)        | SW846 VOST |
| Vinyl chloride         | 117                 | (61 - 150)         |      |               | SW846 VOST |
|                        | 124                 | (61 - 150)         | 5.4  | (0-25)        | SW846 VOST |
| m-Xylene & p-Xylene    | 99                  | (62 - 131)         |      |               | SW846 VOST |
|                        | 102                 | (62 - 131)         | 2.8  | (0-25)        | SW846 VOST |
| o-Xylene               | 96                  | (56 - 121)         |      |               | SW846 VOST |
|                        | 100                 | (56 - 121)         | 4.3  | (0-25)        | SW846 VOST |
| Xylenes (total)        | 98                  | (60 - 127)         |      |               | SW846 VOST |
|                        | 101                 | (60 - 127)         | 3.3  | (0-25)        | SW846 VOST |

| SURROGATE             | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |
|-----------------------|---------------------|--------------------|
| Dibromofluoromethane  | 107                 | (50 - 134)         |
|                       | 109                 | (50 - 134)         |
| 1,2-Dichloroethane-d4 | 96                  | (50 - 134)         |
|                       | 100                 | (50 - 134)         |
| Toluene-d8            | 97                  | (57 - 127)         |
|                       | 96                  | (57 - 127)         |
| Bromofluorobenzene    | 84                  | (50 - 125)         |
|                       | 84                  | (50 - 125)         |

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #....: H6D030169      Work Order #....: H2N441AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D060000-033      H2N441AD-LCSD  
 Prep Date.....: 04/06/06      Analysis Date...: 04/07/06  
 Prep Batch #....: 6096033  
 Dilution Factor: 1

| PARAMETER            | SPIKE<br>AMOUNT | MEASURED<br>AMOUNT | UNITS     | PERCENT<br>RECOVERY | RPD         | METHOD            |
|----------------------|-----------------|--------------------|-----------|---------------------|-------------|-------------------|
| Acetone              | 1.00            | 0.501              | ug        | 50                  |             | SW846 VOST        |
|                      | 1.00            | 0.630              | ug        | 63                  | 23          | SW846 VOST        |
| Acrylonitrile        | 5.00            | 3.56               | ug        | 71                  |             | SW846 VOST        |
|                      | 5.00            | 4.28               | ug        | 86                  | 18          | SW846 VOST        |
| <b>Benzene</b>       | <b>0.250</b>    | <b>0.248</b>       | <b>ug</b> | <b>99</b>           |             | <b>SW846 VOST</b> |
|                      | <b>0.250</b>    | <b>0.248</b>       | <b>ug</b> | <b>99</b>           | <b>0.26</b> | <b>SW846 VOST</b> |
| Bromobenzene         | 0.250           | 0.224              | ug        | 90                  |             | SW846 VOST        |
|                      | 0.250           | 0.247              | ug        | 99                  | 9.8         | SW846 VOST        |
| Bromochloromethane   | 0.250           | 0.254              | ug        | 102                 |             | SW846 VOST        |
|                      | 0.250           | 0.254              | ug        | 102                 | 0.010       | SW846 VOST        |
| Bromodichloromethane | 0.250           | 0.253              | ug        | 101                 |             | SW846 VOST        |
|                      | 0.250           | 0.274              | ug        | 109                 | 7.7         | SW846 VOST        |
| Bromoform            | 0.250           | 0.251              | ug        | 101                 |             | SW846 VOST        |
|                      | 0.250           | 0.271              | ug        | 109                 | 7.6         | SW846 VOST        |
| Bromomethane         | 0.250           | 0.348              | ug        | 139                 |             | SW846 VOST        |
|                      | 0.250           | 0.321              | ug        | 129                 | 7.9         | SW846 VOST        |
| 2-Butanone           | 1.00            | 0.597              | ug        | 60                  |             | SW846 VOST        |
|                      | 1.00            | 0.810 p            | ug        | 81                  | 30          | SW846 VOST        |
| n-Butylbenzene       | 0.250           | 0.243              | ug        | 97                  |             | SW846 VOST        |
|                      | 0.250           | 0.238              | ug        | 95                  | 2.1         | SW846 VOST        |
| sec-Butylbenzene     | 0.250           | 0.240              | ug        | 96                  |             | SW846 VOST        |
|                      | 0.250           | 0.232              | ug        | 93                  | 3.4         | SW846 VOST        |
| tert-Butylbenzene    | 0.250           | 0.238              | ug        | 95                  |             | SW846 VOST        |
|                      | 0.250           | 0.231              | ug        | 92                  | 3.1         | SW846 VOST        |
| Carbon disulfide     | 0.250           | 0.280              | ug        | 112                 |             | SW846 VOST        |
|                      | 0.250           | 0.276              | ug        | 110                 | 1.6         | SW846 VOST        |
| Carbon tetrachloride | 0.250           | 0.260              | ug        | 104                 |             | SW846 VOST        |
|                      | 0.250           | 0.254              | ug        | 102                 | 2.3         | SW846 VOST        |
| <b>Chlorobenzene</b> | <b>0.250</b>    | <b>0.240</b>       | <b>ug</b> | <b>96</b>           |             | <b>SW846 VOST</b> |
|                      | <b>0.250</b>    | <b>0.246</b>       | <b>ug</b> | <b>98</b>           | <b>2.3</b>  | <b>SW846 VOST</b> |
| Chlorodibromomethane | 0.250           | 0.209              | ug        | 83                  |             | SW846 VOST        |
|                      | 0.250           | 0.237              | ug        | 95                  | 12          | SW846 VOST        |
| Chloroethane         | 0.250           | 0.320              | ug        | 128                 |             | SW846 VOST        |
|                      | 0.250           | 0.322              | ug        | 129                 | 0.41        | SW846 VOST        |
| Chloroform           | 0.250           | 0.255              | ug        | 102                 |             | SW846 VOST        |
|                      | 0.250           | 0.265              | ug        | 106                 | 3.6         | SW846 VOST        |
| Chloromethane        | 0.250           | 0.426 a            | ug        | 171                 |             | SW846 VOST        |
|                      | 0.250           | 0.405              | ug        | 162                 | 5.1         | SW846 VOST        |
| 2-Chlorotoluene      | 0.250           | 0.221              | ug        | 88                  |             | SW846 VOST        |
|                      | 0.250           | 0.222              | ug        | 89                  | 0.53        | SW846 VOST        |

(Continued on next page)

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169      Work Order #...: H2N441AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D060000-033      H2N441AD-LCSD

| PARAMETER                        | SPIKE<br>AMOUNT | MEASURED<br>AMOUNT | UNITS     | PERCENT<br>RECOVERY | RPD        | METHOD            |
|----------------------------------|-----------------|--------------------|-----------|---------------------|------------|-------------------|
| 4-Chlorotoluene                  | 0.250           | 0.229              | ug        | 92                  |            | SW846 VOST        |
|                                  | 0.250           | 0.230              | ug        | 92                  | 0.36       | SW846 VOST        |
| 1,2-Dibromo-3-chloro-<br>propane | 0.250           | 0.127              | ug        | 51                  |            | SW846 VOST        |
|                                  | 0.250           | 0.167 p            | ug        | 67                  | 27         | SW846 VOST        |
| 1,2-Dibromoethane                | 0.250           | 0.205              | ug        | 82                  |            | SW846 VOST        |
|                                  | 0.250           | 0.225              | ug        | 90                  | 9.3        | SW846 VOST        |
| Dibromomethane                   | 0.250           | 0.237              | ug        | 95                  |            | SW846 VOST        |
|                                  | 0.250           | 0.249              | ug        | 100                 | 5.0        | SW846 VOST        |
| 1,2-Dichlorobenzene              | 0.250           | 0.207              | ug        | 83                  |            | SW846 VOST        |
|                                  | 0.250           | 0.231              | ug        | 92                  | 11         | SW846 VOST        |
| 1,3-Dichlorobenzene              | 0.250           | 0.219              | ug        | 88                  |            | SW846 VOST        |
|                                  | 0.250           | 0.228              | ug        | 91                  | 4.1        | SW846 VOST        |
| 1,4-Dichlorobenzene              | 0.250           | 0.215              | ug        | 86                  |            | SW846 VOST        |
|                                  | 0.250           | 0.231              | ug        | 92                  | 6.8        | SW846 VOST        |
| Dichlorodifluoromethane          | 0.250           | 0.259              | ug        | 103                 |            | SW846 VOST        |
|                                  | 0.250           | 0.249              | ug        | 100                 | 3.6        | SW846 VOST        |
| 1,1-Dichloroethane               | 0.250           | 0.261              | ug        | 104                 |            | SW846 VOST        |
|                                  | 0.250           | 0.264              | ug        | 106                 | 1.4        | SW846 VOST        |
| 1,2-Dichloroethane               | 0.250           | 0.252              | ug        | 101                 |            | SW846 VOST        |
|                                  | 0.250           | 0.268              | ug        | 107                 | 6.1        | SW846 VOST        |
| cis-1,2-Dichloroethene           | 0.250           | 0.249              | ug        | 99                  |            | SW846 VOST        |
|                                  | 0.250           | 0.256              | ug        | 103                 | 3.0        | SW846 VOST        |
| trans-1,2-Dichloroethene         | 0.250           | 0.262              | ug        | 105                 |            | SW846 VOST        |
|                                  | 0.250           | 0.254              | ug        | 102                 | 3.0        | SW846 VOST        |
| <b>1,1-Dichloroethene</b>        | <b>0.250</b>    | <b>0.304</b>       | <b>ug</b> | <b>122</b>          |            | <b>SW846 VOST</b> |
|                                  | <b>0.250</b>    | <b>0.300</b>       | <b>ug</b> | <b>120</b>          | <b>1.3</b> | <b>SW846 VOST</b> |
| 1,2-Dichloropropane              | 0.250           | 0.258              | ug        | 103                 |            | SW846 VOST        |
|                                  | 0.250           | 0.269              | ug        | 108                 | 4.2        | SW846 VOST        |
| 1,3-Dichloropropane              | 0.250           | 0.198              | ug        | 79                  |            | SW846 VOST        |
|                                  | 0.250           | 0.222              | ug        | 89                  | 11         | SW846 VOST        |
| 2,2-Dichloropropane              | 0.250           | 0.239              | ug        | 96                  |            | SW846 VOST        |
|                                  | 0.250           | 0.242              | ug        | 97                  | 1.2        | SW846 VOST        |
| cis-1,3-Dichloropropene          | 0.250           | 0.243              | ug        | 97                  |            | SW846 VOST        |
|                                  | 0.250           | 0.263              | ug        | 105                 | 8.1        | SW846 VOST        |
| trans-1,3-Dichloropropene        | 0.250           | 0.191              | ug        | 76                  |            | SW846 VOST        |
|                                  | 0.250           | 0.214              | ug        | 86                  | 11         | SW846 VOST        |
| 1,1-Dichloropropene              | 0.250           | 0.275              | ug        | 110                 |            | SW846 VOST        |
|                                  | 0.250           | 0.262              | ug        | 105                 | 4.8        | SW846 VOST        |
| Ethylbenzene                     | 0.250           | 0.246              | ug        | 98                  |            | SW846 VOST        |
|                                  | 0.250           | 0.252              | ug        | 101                 | 2.2        | SW846 VOST        |

(Continued on next page)



## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169      Work Order #...: H2N441AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D060000-033      H2N441AD-LCSD

| PARAMETER                   | SPIKE<br>AMOUNT | MEASURED<br>AMOUNT | UNITS     | PERCENT<br>RECOVERY | RPD         | METHOD            |
|-----------------------------|-----------------|--------------------|-----------|---------------------|-------------|-------------------|
| Hexachlorobutadiene         | 0.250           | 0.287              | ug        | 115                 |             | SW846 VOST        |
|                             | 0.250           | 0.281              | ug        | 112                 | 2.4         | SW846 VOST        |
| 2-Hexanone                  | 1.00            | 0.783              | ug        | 78                  |             | SW846 VOST        |
|                             | 1.00            | 0.998              | ug        | 100                 | 24          | SW846 VOST        |
| Iodomethane                 | 0.250           | 0.322              | ug        | 129                 |             | SW846 VOST        |
|                             | 0.250           | 0.307              | ug        | 123                 | 4.6         | SW846 VOST        |
| Isopropylbenzene            | 0.250           | 0.249              | ug        | 99                  |             | SW846 VOST        |
|                             | 0.250           | 0.247              | ug        | 99                  | 0.63        | SW846 VOST        |
| p-Isopropyltoluene          | 0.250           | 0.243              | ug        | 97                  |             | SW846 VOST        |
|                             | 0.250           | 0.236              | ug        | 94                  | 2.8         | SW846 VOST        |
| Methylene chloride          | 0.250           | 0.244              | ug        | 98                  |             | SW846 VOST        |
|                             | 0.250           | 0.253              | ug        | 101                 | 3.3         | SW846 VOST        |
| 4-Methyl-2-pentanone        | 1.00            | 0.928              | ug        | 93                  |             | SW846 VOST        |
|                             | 1.00            | 1.14               | ug        | 114                 | 21          | SW846 VOST        |
| Naphthalene                 | 0.250           | 0.156              | ug        | 62                  |             | SW846 VOST        |
|                             | 0.250           | 0.195              | ug        | 78                  | 22          | SW846 VOST        |
| n-Propylbenzene             | 0.250           | 0.236              | ug        | 94                  |             | SW846 VOST        |
|                             | 0.250           | 0.228              | ug        | 91                  | 3.5         | SW846 VOST        |
| Styrene                     | 0.250           | 0.228              | ug        | 91                  |             | SW846 VOST        |
|                             | 0.250           | 0.241              | ug        | 96                  | 5.6         | SW846 VOST        |
| 1,1,1,2-Tetrachloroethane   | 0.250           | 0.215              | ug        | 86                  |             | SW846 VOST        |
|                             | 0.250           | 0.232              | ug        | 93                  | 7.9         | SW846 VOST        |
| 1,1,2,2-Tetrachloroethane   | 0.250           | 0.203              | ug        | 81                  |             | SW846 VOST        |
|                             | 0.250           | 0.236              | ug        | 94                  | 15          | SW846 VOST        |
| Tetrachloroethene           | 0.250           | 0.254              | ug        | 102                 |             | SW846 VOST        |
|                             | 0.250           | 0.245              | ug        | 98                  | 3.6         | SW846 VOST        |
| <b>Toluene</b>              | <b>0.250</b>    | <b>0.236</b>       | <b>ug</b> | <b>94</b>           |             | <b>SW846 VOST</b> |
|                             | <b>0.250</b>    | <b>0.242</b>       | <b>ug</b> | <b>97</b>           | <b>2.3</b>  | <b>SW846 VOST</b> |
| 1,2,3-Trichlorobenzene      | 0.250           | 0.205              | ug        | 82                  |             | SW846 VOST        |
|                             | 0.250           | 0.244              | ug        | 98                  | 17          | SW846 VOST        |
| 1,2,4-Trichloro-<br>benzene | 0.250           | 0.213              | ug        | 85                  |             | SW846 VOST        |
|                             | 0.250           | 0.254              | ug        | 101                 | 17          | SW846 VOST        |
| 1,1,1-Trichloroethane       | 0.250           | 0.274              | ug        | 110                 |             | SW846 VOST        |
|                             | 0.250           | 0.278              | ug        | 111                 | 1.3         | SW846 VOST        |
| 1,1,2-Trichloroethane       | 0.250           | 0.223              | ug        | 89                  |             | SW846 VOST        |
|                             | 0.250           | 0.225              | ug        | 90                  | 1.2         | SW846 VOST        |
| <b>Trichloroethene</b>      | <b>0.250</b>    | <b>0.282</b>       | <b>ug</b> | <b>113</b>          |             | <b>SW846 VOST</b> |
|                             | <b>0.250</b>    | <b>0.281</b>       | <b>ug</b> | <b>112</b>          | <b>0.48</b> | <b>SW846 VOST</b> |
| Trichlorofluoromethane      | 0.250           | 0.325              | ug        | 130                 |             | SW846 VOST        |
|                             | 0.250           | 0.309              | ug        | 123                 | 5.1         | SW846 VOST        |

(Continued on next page)

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169      Work Order #...: H2N441AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D060000-033      H2N441AD-LCSD

| PARAMETER              | SPIKE<br>AMOUNT | MEASURED<br>AMOUNT | UNITS | PERCENT<br>RECOVERY | RPD  | METHOD     |
|------------------------|-----------------|--------------------|-------|---------------------|------|------------|
| 1,2,3-Trichloropropane | 0.250           | 0.187              | ug    | 75                  |      | SW846 VOST |
|                        | 0.250           | 0.195              | ug    | 78                  | 4.4  | SW846 VOST |
| 1,2,4-Trimethylbenzene | 0.250           | 0.227              | ug    | 91                  |      | SW846 VOST |
|                        | 0.250           | 0.228              | ug    | 91                  | 0.40 | SW846 VOST |
| 1,3,5-Trimethylbenzene | 0.250           | 0.235              | ug    | 94                  |      | SW846 VOST |
|                        | 0.250           | 0.233              | ug    | 93                  | 0.84 | SW846 VOST |
| Vinyl chloride         | 0.250           | 0.293              | ug    | 117                 |      | SW846 VOST |
|                        | 0.250           | 0.309              | ug    | 124                 | 5.4  | SW846 VOST |
| m-Xylene & p-Xylene    | 0.500           | 0.496              | ug    | 99                  |      | SW846 VOST |
|                        | 0.500           | 0.510              | ug    | 102                 | 2.8  | SW846 VOST |
| o-Xylene               | 0.250           | 0.239              | ug    | 96                  |      | SW846 VOST |
|                        | 0.250           | 0.249              | ug    | 100                 | 4.3  | SW846 VOST |
| Xylenes (total)        | 0.750           | 0.735              | ug    | 98                  |      | SW846 VOST |
|                        | 0.750           | 0.760              | ug    | 101                 | 3.3  | SW846 VOST |

| SURROGATE             | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |
|-----------------------|---------------------|--------------------|
| Dibromofluoromethane  | 107                 | (50 - 134)         |
|                       | 109                 | (50 - 134)         |
| 1,2-Dichloroethane-d4 | 96                  | (50 - 134)         |
|                       | 100                 | (50 - 134)         |
| Toluene-d8            | 97                  | (57 - 127)         |
|                       | 96                  | (57 - 127)         |
| Bromofluorobenzene    | 84                  | (50 - 125)         |
|                       | 84                  | (50 - 125)         |

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

Data File: /chem/gcms/mz.i/Z040706.b/h2n441ac.d  
Report Date: 07-Apr-2006 08:38

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /chem/gcms/mz.i/Z040706.b/h2n441ac.d  
Lab Smp Id: H2N441AC Client Smp ID: INTRA-LAB CHECK  
Inj Date : 07-APR-2006 08:21  
Operator : 22980 Inst ID: mz.i  
Smp Info : H2N441AC,1,3,,LCS  
Misc Info : Z040706,8260B\_LM,all.sub  
Comment : Volatile Organics by GC/MS  
Method : /chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
Meth Date : 07-Apr-2006 07:52 chemist Quant Type: ISTD  
Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
Als bottle: 1 QC Sample: METHOD SPIKE  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: all.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable Local Compound Variable

*✓*  
*04/27/06*

| Compounds                      | QUANT SIG |        |        |         |          |           |            | CONCENTRATIONS |       |
|--------------------------------|-----------|--------|--------|---------|----------|-----------|------------|----------------|-------|
|                                | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL      | ( ug/L)        | ( ug) |
| =====                          | =====     | ==     | =====  | =====   | =====    | =====     | =====      | =====          | ===== |
| * 1 Fluorobenzene              | 96        | 5.673  | 5.676  | (1.000) | 889708   | 10.0000   |            |                |       |
| * 2 Chlorobenzene-d5           | 119       | 8.934  | 8.937  | (1.000) | 180447   | 10.0000   |            |                |       |
| * 3 1,4 Dichlorobenzene-d4     | 152       | 11.495 | 11.492 | (1.000) | 228108   | 10.0000   |            |                |       |
| \$ 4 Dibromofluoromethane      | 113       | 4.828  | 4.831  | (0.851) | 153163   | 10.7435   | 0.26859    |                |       |
| \$ 5 1,2-Dichloroethane-d4     | 65        | 5.235  | 5.238  | (0.923) | 118753   | 9.63272   | 0.24082    |                |       |
| \$ 6 Toluene-d8                | 98        | 7.462  | 7.465  | (0.835) | 769740   | 9.70847   | 0.24271    |                |       |
| \$ 7 4-Bromofluorobenzene      | 95        | 10.127 | 10.129 | (0.881) | 193948   | 8.43076   | 0.21077    |                |       |
| M 8 1,2-Dichloroethene (total) | 96        |        |        |         | 479873   | 20.4240   | 0.51060    |                |       |
| M 9 Xylene (total)             | 106       |        |        |         | 1263145  | 29.4065   | 0.73516    |                |       |
| 10 Dichlorodifluoromethane     | 85        | 1.014  | 1.016  | (0.179) | 224631   | 10.3433   | 0.25858    |                |       |
| 11 Chloromethane (spcc)        | 50        | 1.123  | 1.126  | (0.198) | 878077   | 17.0592   | 0.42648(R) |                |       |
| 12 Vinyl Chloride (ccc)        | 62        | 1.196  | 1.199  | (0.211) | 410281   | 11.7082   | 0.29270    |                |       |
| 13 *1,3-Butadiene              | 39        | 1.220  | 1.223  | (0.215) | 393653   | 12.4572   | 0.31143    |                |       |
| 15 Bromomethane                | 94        | 1.415  | 1.418  | (0.249) | 124128   | 13.9123   | 0.34781(R) |                |       |
| 16 Chloroethane                | 64        | 1.482  | 1.485  | (0.261) | 212655   | 12.8159   | 0.32040    |                |       |
| 17 *Vinyl Bromide              | 106       | 1.616  | 1.618  | (0.285) | 163019   | 10.9971   | 0.27493    |                |       |

Data File: /chem/gcms/mz.i/Z040706.b/h2n441ac.d  
 Report Date: 07-Apr-2006 08:38

| Compounds                    | QUANT SIG |       |        |         |          | CONCENTRATIONS       |                |
|------------------------------|-----------|-------|--------|---------|----------|----------------------|----------------|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | ON-COLUMN<br>( ug/L) | FINAL<br>( ug) |
| =====                        | =====     | ==    | =====  | =====   | =====    | =====                | =====          |
| 18 Trichlorofluoromethane    | 101       | 1.671 | 1.673  | (0.294) | 353239   | 12.9896              | 0.32474        |
| 19 *2-Chloropropane          | 43        | 1.956 | 1.953  | (0.345) | 645017   | 10.9590              | 0.27397        |
| 20 1,1-Dichloroethene (ccc)  | 96        | 2.066 | 2.069  | (0.364) | 235514   | 12.1796              | 0.30449        |
| 21 *Freon 113                | 151       | 2.090 | 2.087  | (0.368) | 162262   | 10.7787              | 0.26947        |
| 22 Acetone                   | 43        | 2.127 | 2.123  | (0.375) | 51184    | 20.0592              | 0.50148(R)     |
| 23 *Iodomethane              | 142       | 2.182 | 2.184  | (0.385) | 286264   | 12.8766              | 0.32191        |
| 24 Carbon Disulfide          | 76        | 2.236 | 2.239  | (0.394) | 764324   | 11.1977              | 0.27994        |
| 26 *Acetonitrile             | 40        | 2.370 | 2.367  | (0.418) | 23933    | 60.3819              | 1.5095         |
| 27 Methylene Chloride        | 84        | 2.510 | 2.513  | (0.442) | 145446   | 9.77471              | 0.24437        |
| 29 *Acrylonitrile            | 53        | 2.760 | 2.768  | (0.486) | 472755   | 142.296              | 3.5574         |
| 30 trans-1,2-Dichloroethene  | 96        | 2.796 | 2.799  | (0.493) | 255787   | 10.4787              | 0.26197        |
| 31 *MTBE                     | 73        | 2.820 | 2.829  | (0.497) | 182173   | 8.50832              | 0.21271        |
| 32 *Hexane                   | 57        | 3.143 | 3.145  | (0.554) | 1586712  | 25.3704              | 0.63426        |
| 33 1,1-Dichloroethane (spcc) | 63        | 3.277 | 3.285  | (0.578) | 588025   | 10.4217              | 0.26054        |
| 34 *Vinyl Acetate            | 86        | 3.398 | 3.407  | (0.599) | 22113    | 18.6427              | 0.46607        |
| 35 2,2-Dichloropropane       | 77        | 4.104 | 4.107  | (0.723) | 274174   | 9.56396              | 0.23910        |
| 36 cis 1,2-Dichloroethene    | 96        | 4.116 | 4.125  | (0.725) | 224085   | 9.94528              | 0.24863        |
| 37 2-Butanone                | 43        | 4.183 | 4.186  | (0.737) | 80563    | 23.8975              | 0.59744        |
| 38 Bromochloromethane        | 128       | 4.457 | 4.466  | (0.786) | 62889    | 10.1506              | 0.25377        |
| 39 *THF                      | 42        | 4.536 | 4.532  | (0.799) | 54339    | 25.7414              | 0.64353        |
| 40 Chloroform (ccc)          | 83        | 4.615 | 4.618  | (0.813) | 328323   | 10.2133              | 0.25533        |
| 41 1,1,1-Trichloroethane     | 97        | 4.816 | 4.818  | (0.849) | 311773   | 10.9575              | 0.27394        |
| 42 Carbon Tetrachloride      | 117       | 5.041 | 5.043  | (0.888) | 239395   | 10.4160              | 0.26040        |
| 43 1,1-Dichloropropene       | 75        | 5.053 | 5.056  | (0.891) | 335161   | 10.9930              | 0.27482        |
| 44 Benzene                   | 78        | 5.296 | 5.305  | (0.934) | 872021   | 9.93879              | 0.24847        |
| 45 1,2-Dichloroethane        | 62        | 5.333 | 5.335  | (0.940) | 187164   | 10.0738              | 0.25184        |
| 46 Trichloroethene           | 130       | 6.111 | 6.114  | (1.077) | 278346   | 11.2778              | 0.28195        |
| 47 1,2-Dichloropropane (ccc) | 63        | 6.349 | 6.351  | (1.119) | 247633   | 10.3300              | 0.25825        |
| 48 *Methyl Methacrylate      | 41        | 6.580 | 6.577  | (1.160) | 81154    | 10.3192              | 0.25798        |
| 49 Dibromomethane            | 93        | 6.476 | 6.479  | (1.142) | 47341    | 9.48328              | 0.23708        |
| 50 Bromodichloromethane      | 83        | 6.689 | 6.692  | (1.179) | 156528   | 10.1375              | 0.25344        |
| 51 *2-Chloroethylvinylether  | 63        | 7.073 | 7.069  | (1.247) | 57982    | 10.6571              | 0.26643        |
| 52 cis-1,3-Dichloropropene   | 75        | 7.188 | 7.191  | (1.267) | 189126   | 9.71614              | 0.24290        |
| 53 4-Methyl-2-pentanone      | 43        | 7.383 | 7.386  | (1.301) | 288428   | 37.1226              | 0.92806        |
| 54 Toluene (ccc)             | 91        | 7.529 | 7.532  | (0.843) | 969994   | 9.44552              | 0.23614        |
| 55 trans-1,3-Dichloropropene | 75        | 7.791 | 7.793  | (0.872) | 114975   | 7.63013              | 0.19075        |
| 56 *Ethyl Methacrylate       | 69        | 7.937 | 7.939  | (0.888) | 75015    | 8.55084              | 0.21377        |
| 57 1,1,2-Trichloroethane     | 97        | 7.967 | 7.964  | (0.892) | 74202    | 8.90244              | 0.22256        |
| 58 Tetrachloroethene         | 164       | 8.101 | 8.097  | (0.907) | 216226   | 10.1513              | 0.25378        |
| 59 1,3-Dichloropropane       | 76        | 8.125 | 8.128  | (0.909) | 115940   | 7.93578              | 0.19839        |
| 60 2-Hexanone                | 43        | 8.259 | 8.256  | (0.924) | 174862   | 31.3148              | 0.78287        |
| 61 Chlorodibromomethane      | 129       | 8.350 | 8.353  | (0.935) | 72003    | 8.34846              | 0.20871        |
| 62 1,2-Dibromoethane         | 107       | 8.441 | 8.444  | (0.945) | 61124    | 8.18915              | 0.20473        |
| 63 Chlorobenzene (spcc)      | 112       | 8.965 | 8.961  | (1.003) | 550231   | 9.59970              | 0.23999        |
| 64 1,1,1,2-Tetrachloroethane | 131       | 9.056 | 9.065  | (1.014) | 123282   | 8.58700              | 0.21467        |
| 65 Ethylbenzene (ccc)        | 106       | 9.098 | 9.101  | (1.018) | 363518   | 9.84287              | 0.24607        |
| 66 m&p-Xylene                | 106       | 9.226 | 9.229  | (1.033) | 886449   | 19.8542              | 0.49636        |

Data File: /chem/gcms/mz.i/Z040706.b/h2n441ac.d  
 Report Date: 07-Apr-2006 08:38

| Compounds                          | QUANT SIG | RT     | EXP RT | REL RT  | RESPONSE | CONCENTRATIONS |            |
|------------------------------------|-----------|--------|--------|---------|----------|----------------|------------|
|                                    |           |        |        |         |          | ON-COLUMN      | FINAL      |
|                                    | MASS      |        |        |         |          | ( ug/L)        | ( ug)      |
| =====                              | =====     | ==     | =====  | =====   | =====    | =====          | =====      |
| 67 o-Xylene                        | 106       | 9.616  | 9.612  | (1.076) | 376695   | 9.55229        | 0.23881    |
| 68 Styrene                         | 104       | 9.628  | 9.630  | (1.078) | 504358   | 9.10932        | 0.22773    |
| 69 Bromoform (spcc)                | 173       | 9.786  | 9.782  | (1.095) | 27831    | 10.0546        | 0.25136    |
| 70 Isopropylbenzene                | 105       | 9.993  | 9.995  | (1.118) | 1127804  | 9.94592        | 0.24865    |
| 71 *cis-1,4-dichloro-2-butene      | 88        | 10.060 | 10.056 | (1.126) | 8524     | 6.82620        | 0.17065    |
| 72 Bromobenzene                    | 156       | 10.260 | 10.257 | (1.148) | 150910   | 8.95496        | 0.22387    |
| 73 1,1,2,2-Tetrachloroethane(sp)   | 83        | 10.297 | 10.300 | (1.153) | 50460    | 8.11584        | 0.20290    |
| 74 1,2,3-Trichloropropane          | 110       | 10.321 | 10.324 | (0.898) | 14666    | 7.46777        | 0.18669    |
| 75 *trans-1,4-dichloro-2-butene    | 53        | 10.352 | 10.354 | (0.900) | 19896    | 7.13530        | 0.17838    |
| 76 n-Propylbenzene                 | 91        | 10.412 | 10.415 | (0.906) | 1304673  | 9.44931        | 0.23623    |
| 77 2-Chlorotoluene                 | 91        | 10.479 | 10.482 | (0.912) | 645991   | 8.82217        | 0.22055    |
| 78 1,3,5-Trimethylbenzene          | 105       | 10.619 | 10.622 | (0.924) | 873493   | 9.40230        | 0.23506    |
| 79 4-Chlorotoluene                 | 91        | 10.601 | 10.604 | (0.922) | 712255   | 9.15639        | 0.22891    |
| 80 tert-Butylbenzene               | 119       | 10.996 | 10.999 | (0.957) | 791651   | 9.51737        | 0.23793    |
| 81 1,2,4-Trimethylbenzene          | 105       | 11.057 | 11.060 | (0.962) | 792245   | 9.07656        | 0.22691    |
| 82 sec-Butylbenzene                | 105       | 11.289 | 11.285 | (0.982) | 1174657  | 9.58027        | 0.23951    |
| 83 1,3-Dichlorobenzene             | 146       | 11.398 | 11.395 | (0.992) | 349438   | 8.75131        | 0.21878    |
| 84 p-Isopropyltoluene              | 119       | 11.508 | 11.510 | (1.001) | 1043993  | 9.70382        | 0.24260    |
| 85 1,4-Dichlorobenzene             | 146       | 11.526 | 11.528 | (1.003) | 320127   | 8.61907        | 0.21548    |
| 86 1,2-Dichlorobenzene             | 146       | 12.079 | 12.088 | (1.051) | 244205   | 8.28975        | 0.20724    |
| 87 n-Butylbenzene                  | 91        | 12.152 | 12.155 | (1.057) | 933918   | 9.70549        | 0.24264    |
| 88 1,2-Dibromo-3-chloropropane     | 157       | 13.266 | 13.262 | (1.154) | 4919     | 5.06670        | 0.12667(R) |
| 89 1,2,4-Trichlorobenzene          | 180       | 14.300 | 14.303 | (1.244) | 152289   | 8.52952        | 0.21324    |
| 90 Hexachlorobutadiene             | 225       | 14.531 | 14.534 | (1.264) | 192546   | 11.4994        | 0.28748    |
| 91 Napthalene                      | 128       | 14.555 | 14.552 | (1.266) | 117000   | 6.24884        | 0.15622(R) |
| 92 1,2,3-Trichlorobenzene          | 180       | 14.823 | 14.820 | (1.289) | 96447    | 8.20029        | 0.20501    |
| M 93 *1,4-dichloro-2-butene(total) | 53        |        |        |         | 28421    | 13.9615        | 0.34904    |

# QC Flag Legend

R - Spike/~~Surrogate~~ failed recovery limits.

24/8/06

Data File: /chem/gcms/mz.i/Z040706.b/h2n441ac.d  
 Report Date: 07-Apr-2006 08:38

STL Knoxville

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                   |                                |
|---------------------------------------------------|--------------------------------|
| Instrument ID: mz.i                               | Calibration Date: 07-APR-2006  |
| Lab File ID: h2n441ac.d                           | Calibration Time: 07:35        |
| Lab Smp Id: H2N441AC                              | Client Smp ID: INTRA-LAB CHECK |
| Analysis Type: VOA                                | Level: LOW                     |
| Quant Type: ISTD                                  | Sample Type: AIR               |
| Operator: 22980                                   |                                |
| Method File: /chem/gcms/mz.i/Z040706.b/8260B_LM.m |                                |
| Misc Info: Z040706,8260B_LM,all.sub               |                                |

| COMPOUND<br>=====   | STANDARD<br>===== | AREA LIMIT     |                | SAMPLE<br>===== | %DIFF<br>===== |
|---------------------|-------------------|----------------|----------------|-----------------|----------------|
|                     |                   | LOWER<br>===== | UPPER<br>===== |                 |                |
| 1 Fluorobenzene     | 952581            | 476290         | 1905162        | 889708          | -6.60          |
| 2 Chlorobenzene-d5  | 164101            | 82050          | 328202         | 180447          | 9.96           |
| 3 1,4 Dichlorobenze | 204390            | 102195         | 408780         | 228108          | 11.60          |

| COMPOUND<br>=====   | STANDARD<br>===== | RT LIMIT       |                | SAMPLE<br>===== | %DIFF<br>===== |
|---------------------|-------------------|----------------|----------------|-----------------|----------------|
|                     |                   | LOWER<br>===== | UPPER<br>===== |                 |                |
| 1 Fluorobenzene     | 5.68              | 5.18           | 6.18           | 5.67            | -0.05          |
| 2 Chlorobenzene-d5  | 8.94              | 8.44           | 9.44           | 8.93            | -0.03          |
| 3 1,4 Dichlorobenze | 11.49             | 10.99          | 11.99          | 11.50           | 0.03           |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mz.i/2040706.b/h2n441ac.d

Date : 07-APR-2006 08:21

Client ID: INTRA-LAB CHECK

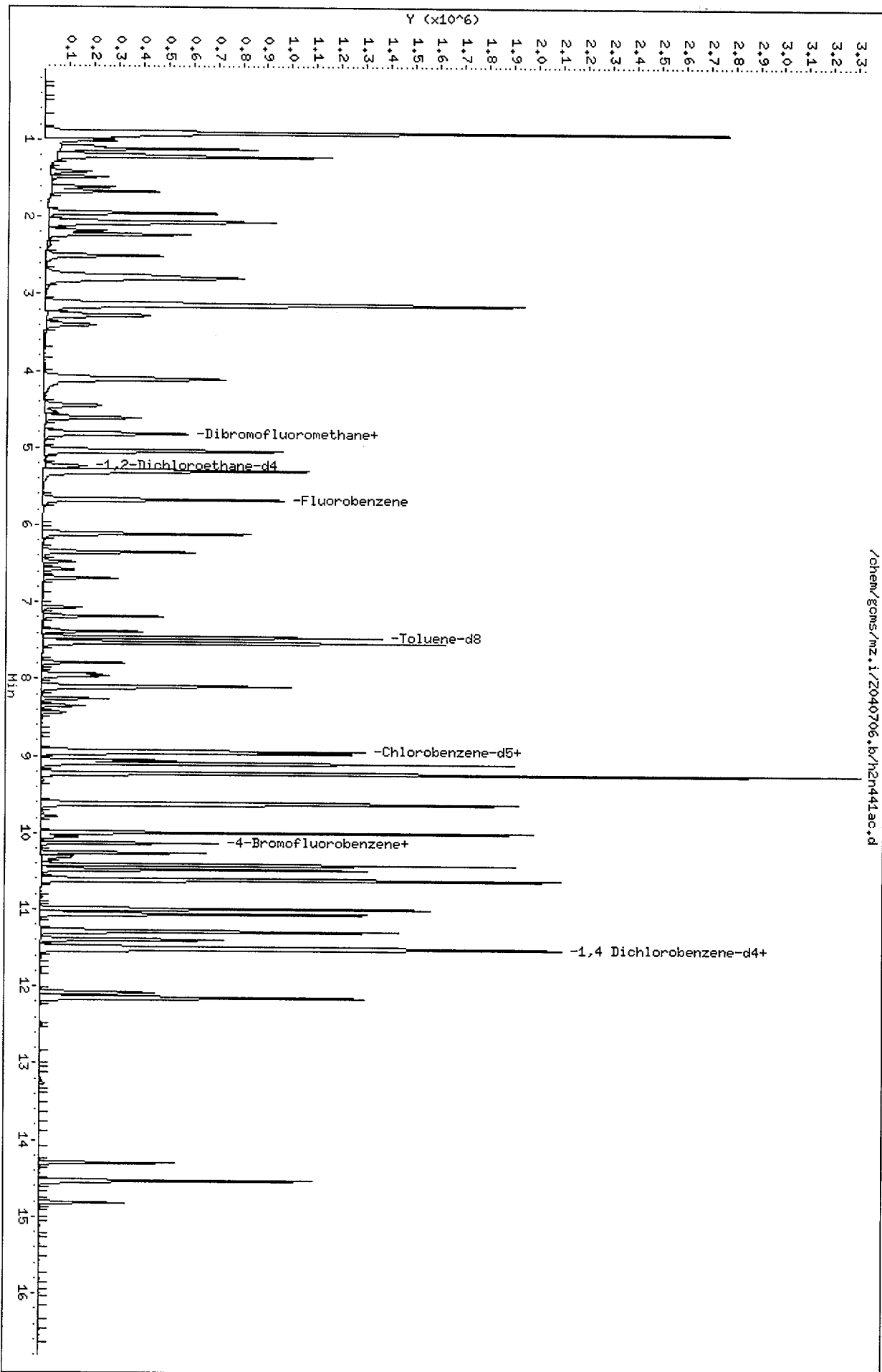
Sample Info: H2N441AC/1,3,LCs

Column phase: J+M 624

Instrument: mz.i

Operator: 22980

Column diameter: 0.18



Data File: /chem/gcms/mz.i/Z040706.b/h2n441ad.d  
Report Date: 07-Apr-2006 09:05

## STL Knoxville

## Volatile Organics by GC/MS

Data file : /chem/gcms/mz.i/Z040706.b/h2n441ad.d  
Lab Smp Id: H2N441AD Client Smp ID: INTRA-LAB CHECK  
Inj Date : 07-APR-2006 08:47  
Operator : 22980 Inst ID: mz.i  
Smp Info : H2N441AD,1,3,,LCSD  
Misc Info : Z040706,8260B\_LM,all.sub  
Comment : Volatile Organics by GC/MS  
Method : /chem/gcms/mz.i/Z040706.b/8260B\_LM.m  
Meth Date : 07-Apr-2006 07:52 chemist Quant Type: ISTD  
Cal Date : 24-MAR-2006 13:51 Cal File: icvzc248.d  
Als bottle: 1 QC Sample: METHOD SPIKE  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: all.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable

| Name | Value   | Description          |
|------|---------|----------------------|
| DF   | 1.00000 | Dilution Factor      |
| Uf   | 0.02500 | ug/L * 0.025L purged |

Cpnd Variable Local Compound Variable

*✓*  
*04/21/06*

| Compounds                      | QUANT SIG |        |        |         |          |           |             | CONCENTRATIONS |       |
|--------------------------------|-----------|--------|--------|---------|----------|-----------|-------------|----------------|-------|
|                                | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL       | ( ug/L)        | ( ug) |
| =====                          | =====     | ==     | =====  | =====   | =====    | =====     | =====       | =====          | ===== |
| * 1 Fluorobenzene              | 96        | 5.672  | 5.676  | (1.000) | 904744   | 10.0000   |             |                |       |
| * 2 Chlorobenzene-d5           | 119       | 8.938  | 8.937  | (1.000) | 182639   | 10.0000   |             |                |       |
| * 3 1,4 Dichlorobenzene-d4     | 152       | 11.494 | 11.492 | (1.000) | 241712   | 10.0000   |             |                |       |
| \$ 4 Dibromofluoromethane      | 113       | 4.826  | 4.831  | (0.851) | 158718   | 10.9481   | 0.27370     |                |       |
| \$ 5 1,2-Dichloroethane-d4     | 65        | 5.240  | 5.238  | (0.924) | 125610   | 10.0196   | 0.25049     |                |       |
| \$ 6 Toluene-d8                | 98        | 7.460  | 7.465  | (0.835) | 771832   | 9.61802   | 0.24045     |                |       |
| \$ 7 4-Bromofluorobenzene      | 95        | 10.125 | 10.129 | (0.881) | 205218   | 8.41859   | 0.21046     |                |       |
| M 8 1,2-Dichloroethene (total) | 96        |        |        |         | 487400   | 20.4242   | 0.51060     |                |       |
| M 9 Xylene (total)             | 106       |        |        |         | 1320661  | 30.3885   | 0.75971     |                |       |
| 10 Dichlorodifluoromethane     | 85        | 1.012  | 1.016  | (0.178) | 220254   | 9.97318   | 0.24933     |                |       |
| 11 Chloromethane (spcc)        | 50        | 1.121  | 1.126  | (0.198) | 849821   | 16.2080   | 0.40520 (R) |                |       |
| 12 Vinyl Chloride (ccc)        | 62        | 1.194  | 1.199  | (0.211) | 440162   | 12.3522   | 0.30880     |                |       |
| 13 *1,3-Butadiene              | 39        | 1.225  | 1.223  | (0.216) | 368570   | 11.4696   | 0.28674     |                |       |
| 15 Bromomethane                | 94        | 1.413  | 1.418  | (0.249) | 116030   | 12.8560   | 0.32140     |                |       |
| 16 Chloroethane                | 64        | 1.486  | 1.485  | (0.262) | 217143   | 12.8689   | 0.32172     |                |       |
| 17 *Vinyl Bromide              | 106       | 1.614  | 1.618  | (0.285) | 181096   | 12.0135   | 0.30034     |                |       |



Data File: /chem/gcms/mz.i/Z040706.b/h2n441ad.d

Report Date: 07-Apr-2006 09:05

| Compounds                    | QUANT SIG |       |        |         |          | CONCENTRATIONS       |                |
|------------------------------|-----------|-------|--------|---------|----------|----------------------|----------------|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | ON-COLUMN<br>( ug/L) | FINAL<br>( ug) |
| =====                        | =====     | ==    | =====  | =====   | =====    | =====                | =====          |
| 18 Trichlorofluoromethane    | 101       | 1.669 | 1.673  | (0.294) | 341376   | 12.3447              | 0.30862        |
| 19 *2-Chloropropane          | 43        | 1.955 | 1.953  | (0.345) | 617528   | 10.3176              | 0.25794        |
| 20 1,1-Dichloroethene (ccc)  | 96        | 2.070 | 2.069  | (0.365) | 236317   | 12.0180              | 0.30045        |
| 21 *Freon 113                | 151       | 2.088 | 2.087  | (0.368) | 171114   | 11.1779              | 0.27945        |
| 22 Acetone                   | 43        | 2.125 | 2.123  | (0.375) | 62213    | 25.1868              | 0.62967(R)     |
| 23 *Iodomethane              | 142       | 2.180 | 2.184  | (0.384) | 277452   | 12.2973              | 0.30743        |
| 24 Carbon Disulfide          | 76        | 2.234 | 2.239  | (0.394) | 765093   | 11.0227              | 0.27557        |
| 26 *Acetonitrile             | 40        | 2.374 | 2.367  | (0.419) | 35464    | 87.9891              | 2.1997         |
| 27 Methylene Chloride        | 84        | 2.508 | 2.513  | (0.442) | 152836   | 10.1006              | 0.25252        |
| 29 *Acrylonitrile            | 53        | 2.764 | 2.768  | (0.487) | 577768   | 171.014              | 4.2753         |
| 30 trans-1,2-Dichloroethene  | 96        | 2.800 | 2.799  | (0.494) | 252473   | 10.1710              | 0.25428        |
| 31 *MTBE                     | 73        | 2.825 | 2.829  | (0.498) | 228802   | 10.5085              | 0.26271        |
| 32 *Hexane                   | 57        | 3.141 | 3.145  | (0.554) | 1604144  | 25.2229              | 0.63057        |
| 33 1,1-Dichloroethane (spcc) | 63        | 3.281 | 3.285  | (0.578) | 606584   | 10.5719              | 0.26430        |
| 34 *Vinyl Acetate            | 86        | 3.403 | 3.407  | (0.600) | 24442    | 20.2631              | 0.50658        |
| 35 2,2-Dichloropropane       | 77        | 4.102 | 4.107  | (0.723) | 282289   | 9.68341              | 0.24208        |
| 36 cis 1,2-Dichloroethene    | 96        | 4.120 | 4.125  | (0.726) | 234927   | 10.2532              | 0.25633        |
| 37 2-Butanone                | 43        | 4.175 | 4.186  | (0.736) | 111031   | 32.3878              | 0.80970        |
| 38 Bromochloromethane        | 128       | 4.461 | 4.466  | (0.787) | 63961    | 10.1521              | 0.25380        |
| 39 *THF                      | 42        | 4.540 | 4.532  | (0.800) | 73640    | 34.3049              | 0.85762        |
| 40 Chloroform (ccc)          | 83        | 4.619 | 4.618  | (0.814) | 345937   | 10.5824              | 0.26456        |
| 41 1,1,1-Trichloroethane     | 97        | 4.814 | 4.818  | (0.849) | 321195   | 11.1011              | 0.27753        |
| 42 Carbon Tetrachloride      | 117       | 5.039 | 5.043  | (0.888) | 237637   | 10.1757              | 0.25439        |
| 43 1,1-Dichloropropene       | 75        | 5.051 | 5.056  | (0.891) | 324794   | 10.4759              | 0.26190        |
| 44 Benzene                   | 78        | 5.301 | 5.305  | (0.935) | 884443   | 9.91284              | 0.24782        |
| 45 1,2-Dichloroethane        | 62        | 5.331 | 5.335  | (0.940) | 202280   | 10.7064              | 0.26766        |
| 46 Trichloroethene           | 130       | 6.116 | 6.114  | (1.078) | 281690   | 11.2237              | 0.28059        |
| 47 1,2-Dichloropropane (ccc) | 63        | 6.353 | 6.351  | (1.120) | 262732   | 10.7777              | 0.26944        |
| 48 *Methyl Methacrylate      | 41        | 6.578 | 6.577  | (1.160) | 92684    | 11.5894              | 0.28974        |
| 49 Dibromomethane            | 93        | 6.475 | 6.479  | (1.142) | 50611    | 9.96985              | 0.24925        |
| 50 Bromodichloromethane      | 83        | 6.694 | 6.692  | (1.180) | 172850   | 10.9455              | 0.27364        |
| 51 *2-Chloroethylvinylether  | 63        | 7.071 | 7.069  | (1.247) | 52589    | 9.50521              | 0.23763        |
| 52 cis-1,3-Dichloropropene   | 75        | 7.186 | 7.191  | (1.267) | 208508   | 10.5338              | 0.26335        |
| 53 4-Methyl-2-pentanone      | 43        | 7.381 | 7.386  | (1.301) | 361118   | 45.7059              | 1.1426         |
| 54 Toluene (ccc)             | 91        | 7.533 | 7.532  | (0.843) | 1004400  | 9.66317              | 0.24158        |
| 55 trans-1,3-Dichloropropene | 75        | 7.789 | 7.793  | (0.871) | 131724   | 8.55425              | 0.21386        |
| 56 *Ethyl Methacrylate       | 69        | 7.935 | 7.939  | (0.888) | 90440    | 10.1854              | 0.25463        |
| 57 1,1,2-Trichloroethane     | 97        | 7.965 | 7.964  | (0.891) | 75993    | 9.00799              | 0.22520        |
| 58 Tetrachloroethene         | 164       | 8.099 | 8.097  | (0.906) | 211035   | 9.78865              | 0.24472        |
| 59 1,3-Dichloropropane       | 76        | 8.123 | 8.128  | (0.909) | 131412   | 8.88689              | 0.22217        |
| 60 2-Hexanone                | 43        | 8.257 | 8.256  | (0.924) | 225671   | 39.9288              | 0.99822        |
| 61 Chlorodibromomethane      | 129       | 8.348 | 8.353  | (0.934) | 83584    | 9.46164              | 0.23654        |
| 62 1,2-Dibromoethane         | 107       | 8.440 | 8.444  | (0.944) | 67906    | 8.98860              | 0.22472        |
| 63 Chlorobenzene (spcc)      | 112       | 8.963 | 8.961  | (1.003) | 569962   | 9.82460              | 0.24562        |
| 64 1,1,1,2-Tetrachloroethane | 131       | 9.060 | 9.065  | (1.014) | 135414   | 9.29130              | 0.23228        |
| 65 Ethylbenzene (ccc)        | 106       | 9.103 | 9.101  | (1.018) | 376203   | 10.0641              | 0.25160        |
| 66 m&p-Xylene                | 106       | 9.224 | 9.229  | (1.032) | 922745   | 20.4191              | 0.51048        |

Data File: /chem/gcms/mz.i/Z040706.b/h2n441ad.d

Report Date: 07-Apr-2006 09:05

| Compounds                          | QUANT SIG |        |        |         |          | CONCENTRATIONS       |                |
|------------------------------------|-----------|--------|--------|---------|----------|----------------------|----------------|
|                                    | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN<br>( ug/L) | FINAL<br>( ug) |
| =====                              | =====     | ==     | =====  | =====   | =====    | =====                | =====          |
| 67 o-Xylene                        | 106       | 9.614  | 9.612  | (1.076) | 397916   | 9.96932              | 0.24923        |
| 68 Styrene                         | 104       | 9.626  | 9.630  | (1.077) | 539712   | 9.63087              | 0.24077        |
| 69 Bromoform (spcc)                | 173       | 9.784  | 9.782  | (1.095) | 30728    | 10.8537              | 0.27134        |
| 70 Isopropylbenzene                | 105       | 9.997  | 9.995  | (1.118) | 1134301  | 9.88318              | 0.24708        |
| 71 *cis-1,4-dichloro-2-butene      | 88        | 10.058 | 10.056 | (1.125) | 10290    | 7.83133              | 0.19578        |
| 72 Bromobenzene                    | 156       | 10.259 | 10.257 | (1.148) | 168443   | 9.87541              | 0.24688        |
| 73 1,1,2,2-Tetrachloroethane(sp)   | 83        | 10.295 | 10.300 | (1.152) | 59447    | 9.44655              | 0.23616        |
| 74 1,2,3-Trichloropropane          | 110       | 10.319 | 10.324 | (0.898) | 16239    | 7.80341              | 0.19508        |
| 75 *trans-1,4-dichloro-2-butene    | 53        | 10.350 | 10.354 | (0.900) | 25139    | 8.41594              | 0.21040        |
| 76 n-Propylbenzene                 | 91        | 10.411 | 10.415 | (0.906) | 1334899  | 9.12408              | 0.22810        |
| 77 2-Chlorotoluene                 | 91        | 10.478 | 10.482 | (0.912) | 688183   | 8.86940              | 0.22174        |
| 78 1,3,5-Trimethylbenzene          | 105       | 10.617 | 10.622 | (0.924) | 917831   | 9.32350              | 0.23309        |
| 79 4-Chlorotoluene                 | 91        | 10.605 | 10.604 | (0.923) | 757507   | 9.19004              | 0.22975        |
| 80 tert-Butylbenzene               | 119       | 10.995 | 10.999 | (0.957) | 813052   | 9.22450              | 0.23061        |
| 81 1,2,4-Trimethylbenzene          | 105       | 11.062 | 11.060 | (0.962) | 842830   | 9.11264              | 0.22782        |
| 82 sec-Butylbenzene                | 105       | 11.287 | 11.285 | (0.982) | 1203669  | 9.26437              | 0.23161        |
| 83 1,3-Dichlorobenzene             | 146       | 11.396 | 11.395 | (0.992) | 385872   | 9.11986              | 0.22800        |
| 84 p-Isopropyltoluene              | 119       | 11.506 | 11.510 | (1.001) | 1075665  | 9.43549              | 0.23589        |
| 85 1,4-Dichlorobenzene             | 146       | 11.524 | 11.528 | (1.003) | 363295   | 9.23081              | 0.23077        |
| 86 1,2-Dichlorobenzene             | 146       | 12.084 | 12.088 | (1.051) | 288036   | 9.22734              | 0.23068        |
| 87 n-Butylbenzene                  | 91        | 12.151 | 12.155 | (1.057) | 969243   | 9.50568              | 0.23764        |
| 88 1,2-Dibromo-3-chloropropane     | 157       | 13.258 | 13.262 | (1.153) | 7169     | 6.67959              | 0.16699(R)     |
| 89 1,2,4-Trichlorobenzene          | 180       | 14.298 | 14.303 | (1.244) | 191937   | 10.1451              | 0.25363        |
| 90 Hexachlorobutadiene             | 225       | 14.535 | 14.534 | (1.265) | 199093   | 11.2212              | 0.28053        |
| 91 Napthalene                      | 128       | 14.554 | 14.552 | (1.266) | 154824   | 7.80355              | 0.19509        |
| 92 1,2,3-Trichlorobenzene          | 180       | 14.821 | 14.820 | (1.290) | 121658   | 9.76166              | 0.24404        |
| M 93 *1,4-dichloro-2-butene(total) | 53        |        |        |         | 35429    | 16.2473              | 0.40618        |

## QC Flag Legend

R - Spike/Surrogate failed recovery limits.

24/7/06

Data File: /chem/gcms/mz.i/Z040706.b/h2n441ad.d

Report Date: 07-Apr-2006 09:05

## STL Knoxville

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: mz.i

Lab File ID: h2n441ad.d

Lab Smp Id: H2N441AD

Analysis Type: VOA

Quant Type: ISTD

Operator: 22980

Method File: /chem/gcms/mz.i/Z040706.b/8260B\_LM.m

Misc Info: Z040706,8260B\_LM,all.sub

Calibration Date: 07-APR-2006

Calibration Time: 07:35

Client Smp ID: INTRA-LAB CHECK

Level: LOW

Sample Type: AIR

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE | %DIFF |
|---------------------|----------|------------|---------|--------|-------|
|                     |          | LOWER      | UPPER   |        |       |
| 1 Fluorobenzene     | 952581   | 476290     | 1905162 | 904744 | -5.02 |
| 2 Chlorobenzene-d5  | 164101   | 82050      | 328202  | 182639 | 11.30 |
| 3 1,4 Dichlorobenze | 204390   | 102195     | 408780  | 241712 | 18.26 |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 5.68     | 5.18     | 6.18  | 5.67   | -0.08 |
| 2 Chlorobenzene-d5  | 8.94     | 8.44     | 9.44  | 8.94   | 0.02  |
| 3 1,4 Dichlorobenze | 11.49    | 10.99    | 11.99 | 11.49  | 0.01  |

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mz.i/2040706.b/h2n441ad.d

Date : 07-APR-2006 08:47

Client ID: INTRA-LAB CHECK

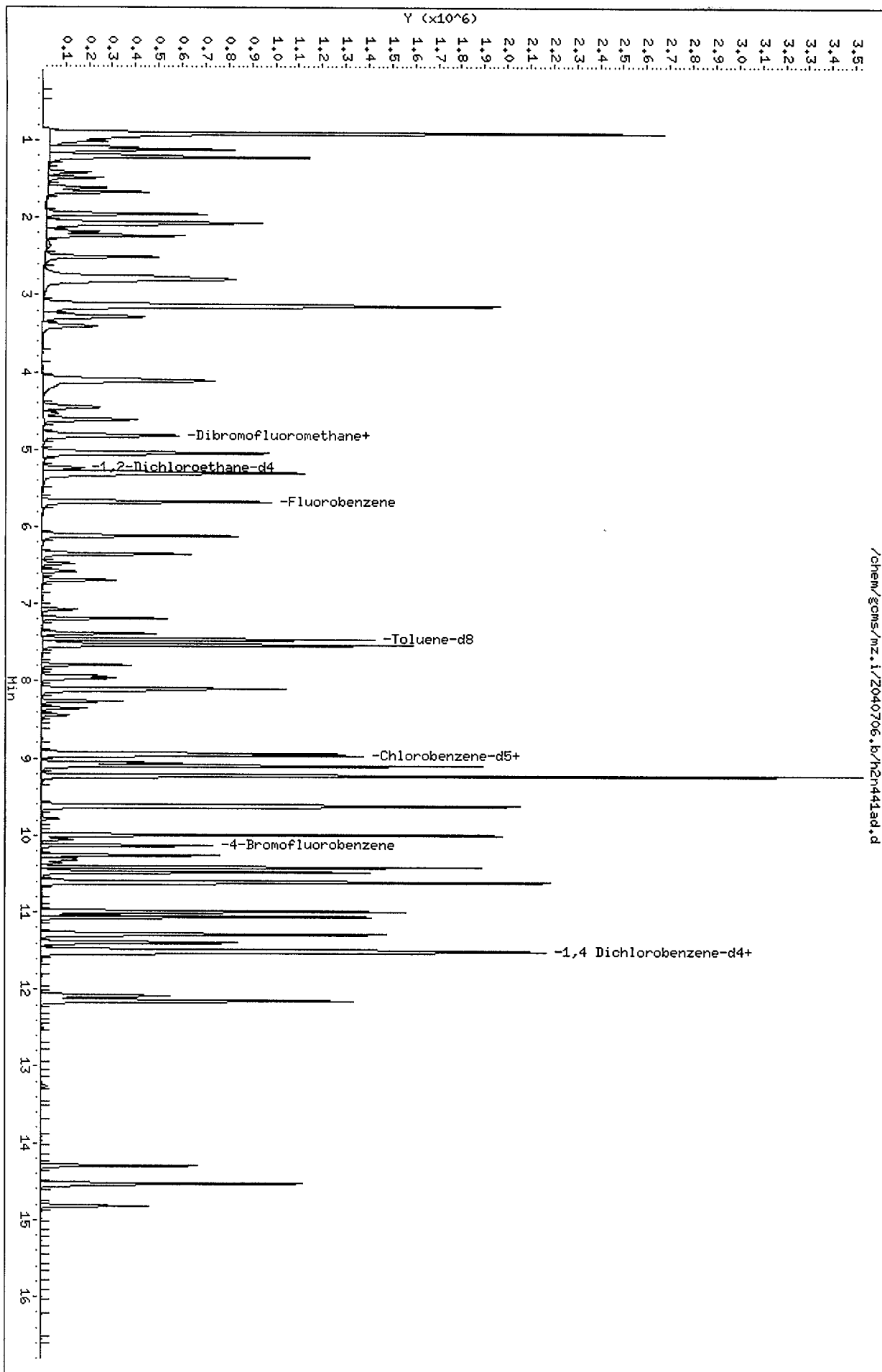
Sample Info: H2N441AD.1.3., LCSD

Column phase: J+W 624

Instrument: mz.i

Operator: 22980

Column diameter: 0.18



## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169  
 MB Lot-Sample #: H6D070000-054

Work Order #...: H2RM41AA

Matrix.....: AIR

Analysis Date...: 04/07/06

Prep Date.....: 04/07/06

Dilution Factor: 1

Prep Batch #...: 6097054

| PARAMETER                        | RESULT | REPORTING |       |  | METHOD     |
|----------------------------------|--------|-----------|-------|--|------------|
|                                  |        | LIMIT     | UNITS |  |            |
| Acetone                          | ND     | 0.10      | ug    |  | SW846 VOST |
| Acrylonitrile                    | ND     | 0.50      | ug    |  | SW846 VOST |
| Benzene                          | ND     | 0.010     | ug    |  | SW846 VOST |
| Bromobenzene                     | ND     | 0.010     | ug    |  | SW846 VOST |
| Bromochloromethane               | ND     | 0.025     | ug    |  | SW846 VOST |
| Bromodichloromethane             | ND     | 0.010     | ug    |  | SW846 VOST |
| Bromoform                        | ND     | 0.025     | ug    |  | SW846 VOST |
| Bromomethane                     | ND     | 0.050     | ug    |  | SW846 VOST |
| 2-Butanone                       | ND     | 0.10      | ug    |  | SW846 VOST |
| n-Butylbenzene                   | ND     | 0.010     | ug    |  | SW846 VOST |
| sec-Butylbenzene                 | ND     | 0.010     | ug    |  | SW846 VOST |
| tert-Butylbenzene                | ND     | 0.010     | ug    |  | SW846 VOST |
| Carbon disulfide                 | ND     | 0.010     | ug    |  | SW846 VOST |
| Carbon tetrachloride             | ND     | 0.010     | ug    |  | SW846 VOST |
| Chlorobenzene                    | ND     | 0.010     | ug    |  | SW846 VOST |
| Chlorodibromomethane             | ND     | 0.025     | ug    |  | SW846 VOST |
| Chloroethane                     | ND     | 0.050     | ug    |  | SW846 VOST |
| Chloroform                       | ND     | 0.010     | ug    |  | SW846 VOST |
| Chloromethane                    | ND     | 0.025     | ug    |  | SW846 VOST |
| 2-Chlorotoluene                  | ND     | 0.010     | ug    |  | SW846 VOST |
| 4-Chlorotoluene                  | ND     | 0.010     | ug    |  | SW846 VOST |
| 1,2-Dibromo-3-chloro-<br>propane | ND     | 0.050     | ug    |  | SW846 VOST |
| 1,2-Dibromoethane                | ND     | 0.025     | ug    |  | SW846 VOST |
| Dibromomethane                   | ND     | 0.025     | ug    |  | SW846 VOST |
| 1,2-Dichlorobenzene              | ND     | 0.010     | ug    |  | SW846 VOST |
| 1,3-Dichlorobenzene              | ND     | 0.010     | ug    |  | SW846 VOST |
| 1,4-Dichlorobenzene              | ND     | 0.010     | ug    |  | SW846 VOST |
| Dichlorodifluoromethane          | ND     | 0.025     | ug    |  | SW846 VOST |
| 1,1-Dichloroethane               | ND     | 0.010     | ug    |  | SW846 VOST |
| 1,2-Dichloroethane               | ND     | 0.010     | ug    |  | SW846 VOST |
| cis-1,2-Dichloroethene           | ND     | 0.010     | ug    |  | SW846 VOST |
| trans-1,2-Dichloroethene         | ND     | 0.010     | ug    |  | SW846 VOST |
| 1,1-Dichloroethene               | ND     | 0.010     | ug    |  | SW846 VOST |
| 1,2-Dichloropropane              | ND     | 0.010     | ug    |  | SW846 VOST |
| 1,3-Dichloropropane              | ND     | 0.010     | ug    |  | SW846 VOST |
| 2,2-Dichloropropane              | ND     | 0.010     | ug    |  | SW846 VOST |
| cis-1,3-Dichloropropene          | ND     | 0.010     | ug    |  | SW846 VOST |
| trans-1,3-Dichloropropene        | ND     | 0.010     | ug    |  | SW846 VOST |
| 1,1-Dichloropropene              | ND     | 0.010     | ug    |  | SW846 VOST |
| Ethylbenzene                     | ND     | 0.010     | ug    |  | SW846 VOST |

(Continued on next page)

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169

Work Order #...: H2RM41AA

Matrix.....: AIR

| PARAMETER                             | RESULT          | REPORTING    |            |  | METHOD            |
|---------------------------------------|-----------------|--------------|------------|--|-------------------|
|                                       |                 | LIMIT        | UNITS      |  |                   |
| Hexachlorobutadiene                   | ND              | 0.025        | ug         |  | SW846 VOST        |
| 2-Hexanone                            | ND              | 0.10         | ug         |  | SW846 VOST        |
| Iodomethane                           | ND              | 0.050        | ug         |  | SW846 VOST        |
| Isopropylbenzene                      | ND              | 0.010        | ug         |  | SW846 VOST        |
| p-Isopropyltoluene                    | ND              | 0.010        | ug         |  | SW846 VOST        |
| Methylene chloride                    | ND              | 0.025        | ug         |  | SW846 VOST        |
| 4-Methyl-2-pentanone                  | ND              | 0.10         | ug         |  | SW846 VOST        |
| Naphthalene                           | ND              | 0.025        | ug         |  | SW846 VOST        |
| n-Propylbenzene                       | ND              | 0.010        | ug         |  | SW846 VOST        |
| Styrene                               | ND              | 0.010        | ug         |  | SW846 VOST        |
| 1,1,1,2-Tetrachloroethane             | ND              | 0.010        | ug         |  | SW846 VOST        |
| 1,1,2,2-Tetrachloroethane             | ND              | 0.025        | ug         |  | SW846 VOST        |
| Tetrachloroethene                     | ND              | 0.010        | ug         |  | SW846 VOST        |
| Tetrahydrofuran                       | ND              | 0.10         | ug         |  | SW846 VOST        |
| Toluene                               | ND              | 0.010        | ug         |  | SW846 VOST        |
| 1,2,3-Trichlorobenzene                | ND              | 0.025        | ug         |  | SW846 VOST        |
| <b>1,2,4-Trichloro-benzene</b>        | <b>0.0030 J</b> | <b>0.025</b> | <b>ug</b>  |  | <b>SW846 VOST</b> |
| 1,1,1-Trichloroethane                 | ND              | 0.025        | ug         |  | SW846 VOST        |
| 1,1,2-Trichloroethane                 | ND              | 0.025        | ug         |  | SW846 VOST        |
| Trichloroethene                       | ND              | 0.010        | ug         |  | SW846 VOST        |
| Trichlorofluoromethane                | ND              | 0.050        | ug         |  | SW846 VOST        |
| 1,2,3-Trichloropropane                | ND              | 0.025        | ug         |  | SW846 VOST        |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND              | 0.050        | ug         |  | SW846 VOST        |
| 1,2,4-Trimethylbenzene                | ND              | 0.010        | ug         |  | SW846 VOST        |
| 1,3,5-Trimethylbenzene                | ND              | 0.010        | ug         |  | SW846 VOST        |
| Vinyl acetate                         | ND              | 0.050        | ug         |  | SW846 VOST        |
| Vinyl chloride                        | ND              | 0.010        | ug         |  | SW846 VOST        |
| m-Xylene & p-Xylene                   | ND              | 0.020        | ug         |  | SW846 VOST        |
| o-Xylene                              | ND              | 0.010        | ug         |  | SW846 VOST        |
| Xylenes (total)                       | ND              | 0.030        | ug         |  | SW846 VOST        |
| SURROGATE                             | PERCENT         |              | RECOVERY   |  |                   |
|                                       | RECOVERY        |              | LIMITS     |  |                   |
| Dibromofluoromethane                  | 73              |              | (50 - 134) |  |                   |
| 1,2-Dichloroethane-d4                 | 73              |              | (50 - 134) |  |                   |
| Toluene-d8                            | 71              |              | (57 - 127) |  |                   |
| Bromofluorobenzene                    | 57              |              | (50 - 125) |  |                   |

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

STL Knoxville - ACS

Method Blank Report

GC/MS Volatiles

Lot-Sample #: H6D070000-054 B Work Order #: H2RM41AA Matrix: AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug           |

Data File: /chem/gcms/mx.i/X040706.b/h2rm41aa.d  
Report Date: 07-Apr-2006 11:47

## STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /chem/gcms/mx.i/X040706.b/h2rm41aa.d  
Lab Smp Id: H2RM41AA Client Smp ID: INTRA-LAB BLANK  
Inj Date : 07-APR-2006 11:31 /  
Operator : 22980 Inst ID: mx.i  
Smp Info : H2RM41AA,1,3,,,BLK  
Misc Info : X040706,8260B\_LM,focus.sub  
Comment :  
Method : /var/chem/gcms/mx.i/X040706.b/8260B\_LM.m  
Meth Date : 07-Apr-2006 11:23 gosss Quant Type: ISTD  
Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
Als bottle: 1 QC Sample: METHOD BLANK  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: focus.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

| Compounds                  | QUANT SIG | MASS   | RT     | EXP RT  | REL RT  | RESPONSE | CONCENTRATIONS      |       |
|----------------------------|-----------|--------|--------|---------|---------|----------|---------------------|-------|
|                            |           |        |        |         |         |          | ON-COLUMN           | FINAL |
|                            |           |        |        |         |         |          | ( ug/L)             | ( ug) |
| =====                      | =====     | ==     | =====  | =====   | =====   | =====    | =====               | ===== |
| * 1 Fluorobenzene          | 96        | 4.854  | 4.851  | (1.000) | 1215358 | 10.0000  |                     |       |
| * 2 Chlorobenzene-d5       | 119       | 7.579  | 7.582  | (1.000) | 243163  | 10.0000  |                     |       |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.742 | 10.746 | (1.000) | 263714  | 10.0000  |                     |       |
| \$ 4 Dibromofluoromethane  | 113       | 4.270  | 4.273  | (0.880) | 151181  | 7.31632  | 0.18291             |       |
| \$ 5 1,2-Dichloroethane-d4 | 65        | 4.550  | 4.553  | (0.937) | 117434  | 7.29091  | 0.18227             |       |
| \$ 6 Toluene-d8            | 98        | 6.253  | 6.250  | (0.825) | 841645  | 7.06950  | 0.17674             |       |
| \$ 7 4-Bromofluorobenzene  | 95        | 8.875  | 8.872  | (0.826) | 178855  | 5.72013  | 0.14300             |       |
| 21 Acetone                 | 43        | 2.390  | 2.381  | (0.492) | 4085    | 2.37317  | 0.059329            |       |
| 36 2-Butanone              | 43        | 3.874  | 3.871  | (0.798) | 1193    | 0.44452  | <del>0.011113</del> |       |
| 38 *THF                    | 42        | 4.112  | 4.109  | (0.847) | 1417    | 0.86138  | 0.021534            |       |
| 42 1,1-Dichloropropene     | 75        | 4.848  | 4.437  | (0.999) | 93483   | 1.94275  | <del>0.048569</del> |       |
| 44 1,2-Dichloroethane      | 62        | 4.854  | 4.620  | (1.000) | 21287   | 1.02776  | <del>0.025894</del> |       |
| 52 4-Methyl-2-pentanone    | 43        | 6.247  | 6.147  | (1.287) | 6132    | 0.95360  | <del>0.023840</del> |       |
| 56 1,1,2-Trichloroethane   | 97        | 6.259  | 6.670  | (0.826) | 76476   | 6.79712  | <del>0.16993</del>  |       |
| 88 1,2,4-Trichlorobenzene  | 180       | 13.675 | 13.678 | (1.273) | 1864    | 0.11887  | 0.0029718           |       |
| 90 Napthalene              | 128       | 13.955 | 13.946 | (1.299) | 2756    | 0.24090  | 0.0060226           |       |
| 91 1,2,3-Trichlorobenzene  | 180       | 14.234 | 14.232 | (1.325) | 2369    | 0.23396  | 0.0058489           |       |

*W*  
*2006*



Data File: /chem/gcms/mx.i/X040706.b/h2rm41aa.d  
 Report Date: 07-Apr-2006 11:47

## STL Knoxville

 INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                       |                                |
|-------------------------------------------------------|--------------------------------|
| Instrument ID: mx.i                                   | Calibration Date: 07-APR-2006  |
| Lab File ID: h2rm41aa.d                               | Calibration Time: 09:16        |
| Lab Smp Id: H2RM41AA                                  | Client Smp ID: INTRA-LAB BLANK |
| Analysis Type: VOA                                    | Level: LOW                     |
| Quant Type: ISTD                                      | Sample Type: AIR               |
| Operator: 22980                                       |                                |
| Method File: /var/chem/gcms/mx.i/X040706.b/8260B_LM.m |                                |
| Misc Info: X040706,8260B_LM,focus.sub                 |                                |

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE  | %DIFF |
|---------------------|----------|------------|---------|---------|-------|
|                     |          | LOWER      | UPPER   |         |       |
| 1 Fluorobenzene     | 1149191  | 574596     | 2298382 | 1215358 | 5.76  |
| 2 Chlorobenzene-d5  | 214194   | 107097     | 428388  | 243163  | 13.52 |
| 3 1,4 Dichlorobenze | 242601   | 121300     | 485202  | 263714  | 8.70  |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 4.85     | 4.35     | 5.35  | 4.85   | 0.06  |
| 2 Chlorobenzene-d5  | 7.58     | 7.08     | 8.08  | 7.58   | -0.04 |
| 3 1,4 Dichlorobenze | 10.75    | 10.25    | 11.25 | 10.74  | -0.03 |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mx.i/X040706.b/h2rm41aa.d  
Report Date: 07-Apr-2006 11:47

STL Knoxville

RECOVERY REPORT

Client Name: Client SDG: H6D070000  
Sample Matrix: GAS Fraction: VOA  
Lab Smp Id: H2RM41AA Client Smp ID: INTRA-LAB BLANK  
Level: LOW Operator: 22980  
Data Type: MS DATA SampleType: METHOD BLANK  
SpikeList File: allcmpds.spk Quant Type: ISTD  
Sublist File: focus.sub  
Method File: /var/chem/gcms/mx.i/X040706.b/8260B\_LM.m  
Misc Info: X040706,8260B\_LM,focus.sub

| SURROGATE COMPOUND      | CONC<br>ADDED<br>ug | CONC<br>RECOVERED<br>ug | %<br>RECOVERED | LIMITS |
|-------------------------|---------------------|-------------------------|----------------|--------|
| \$ 4 Dibromofluorometha | 0.25000             | 0.18291                 | 73.16          | 50-150 |
| \$ 5 1,2-Dichloroethane | 0.25000             | 0.18227                 | 72.91          | 50-150 |
| \$ 6 Toluene-d8         | 0.25000             | 0.17674                 | 70.70          | 50-150 |
| \$ 7 4-Bromofluorobenze | 0.25000             | 0.14300                 | 57.20          | 50-150 |

Data File: /chem/gcms/mx.i/X040706.b/h2rm41aa.d

Date : 07-APR-2006 11:31

Client ID: INTRA-LAB BLANK

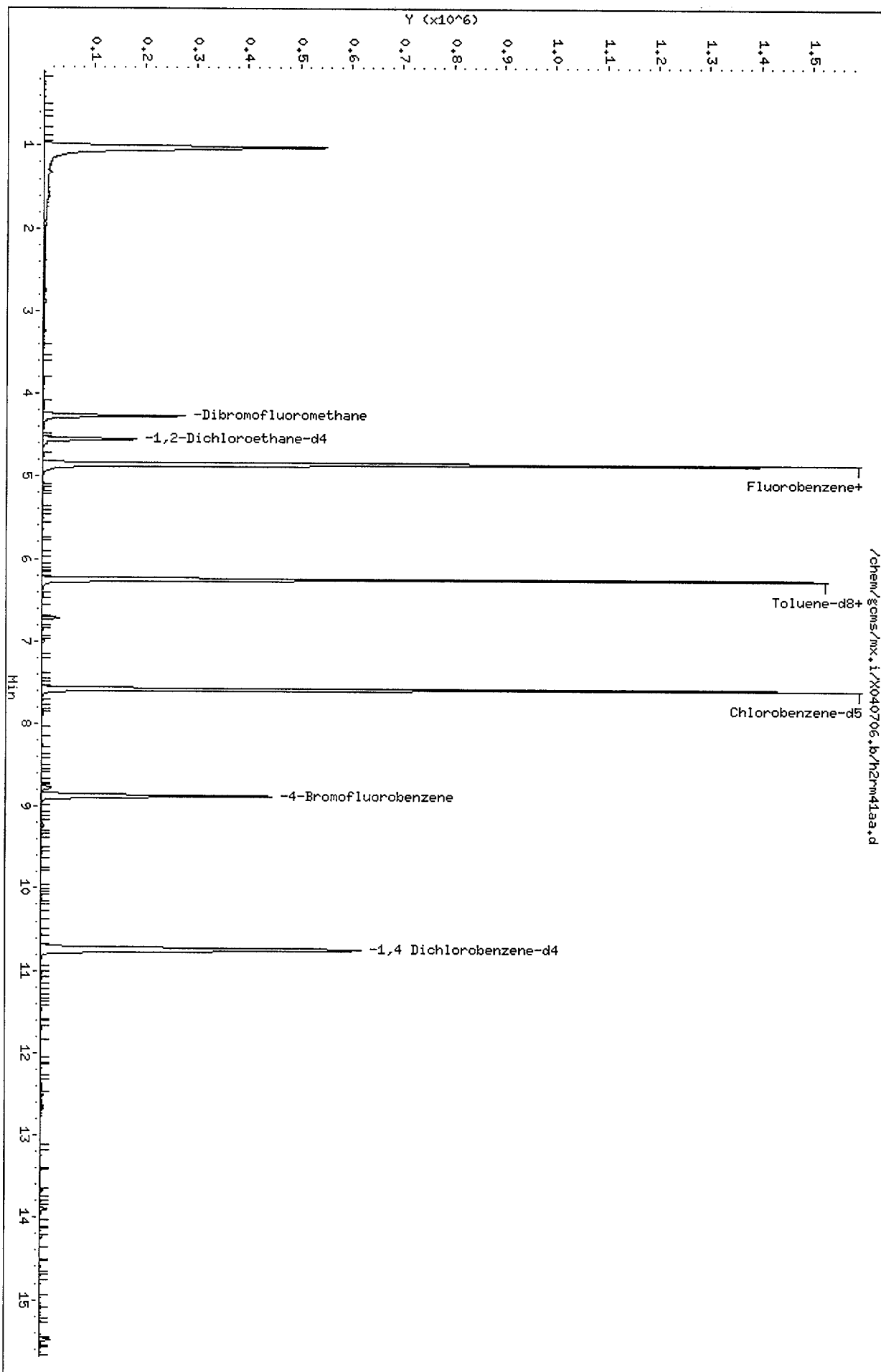
Sample Info: H2RM41AA,1,3,,,BLK

Column phase: J+W 624

Instrument: mx.i

Operator: 22980

Column diameter: 0.18



Data File: /chem/gcms/mx.i/X040706.b/h2rm41aa.d

Date : 07-APR-2006 11:31

Client ID: INTRA-LAB BLANK

Instrument: mx.i

Sample Info: H2RM41AA,1,3,,BLK

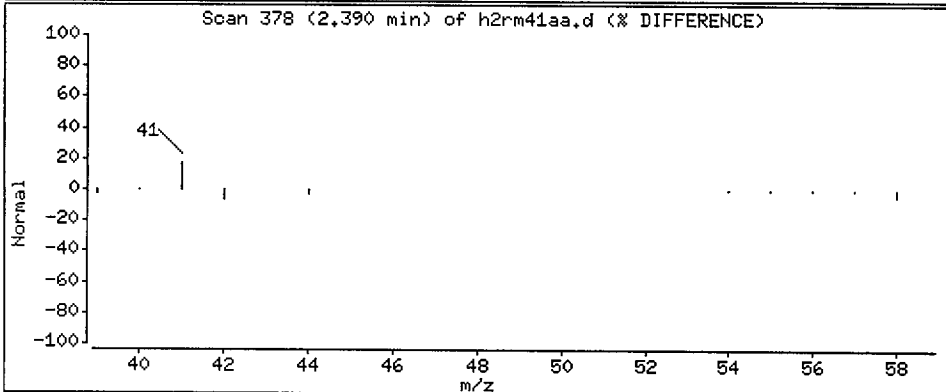
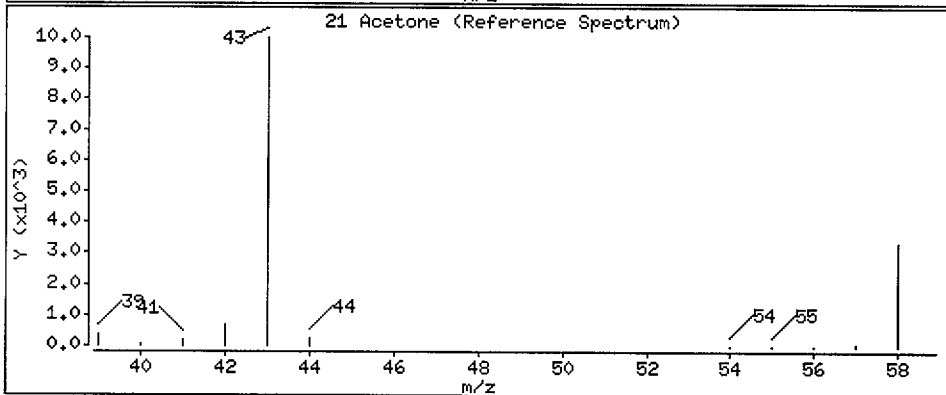
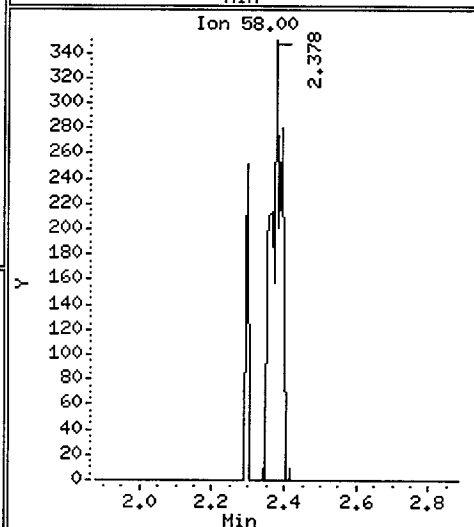
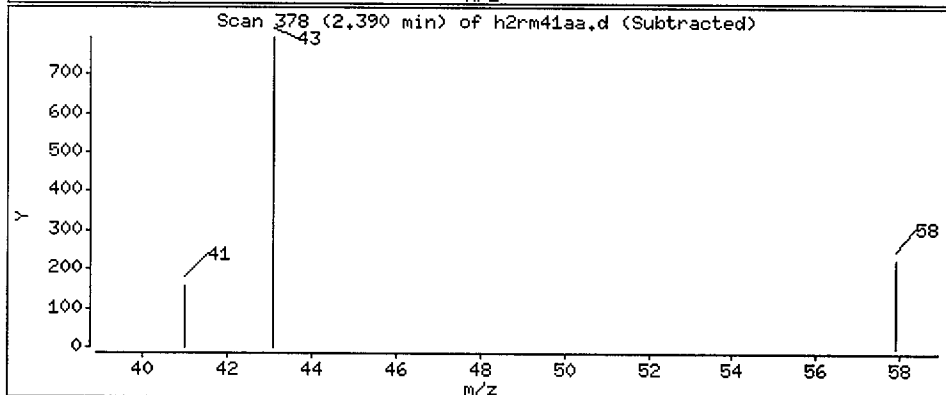
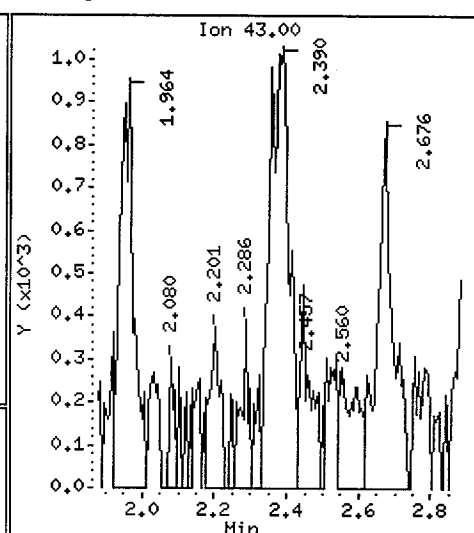
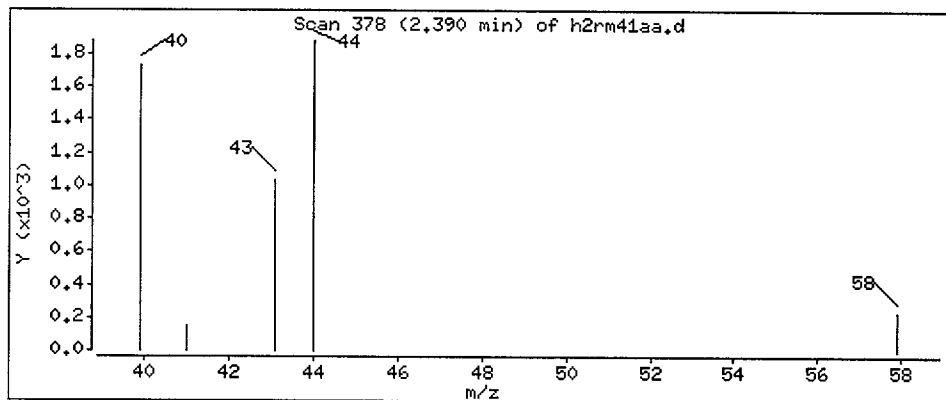
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

21 Acetone

Concentration: 0.059329 ug



Data File: /chem/gcms/mx.i/X040706.b/h2rm41aa.d

Date : 07-APR-2006 11:31

Client ID: INTRA-LAB BLANK

Instrument: mx.i

Sample Info: H2RM41AA,1,3,,,BLK

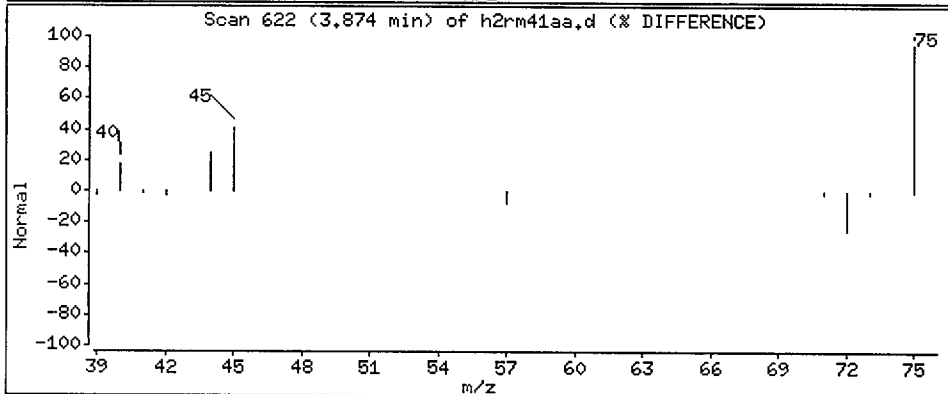
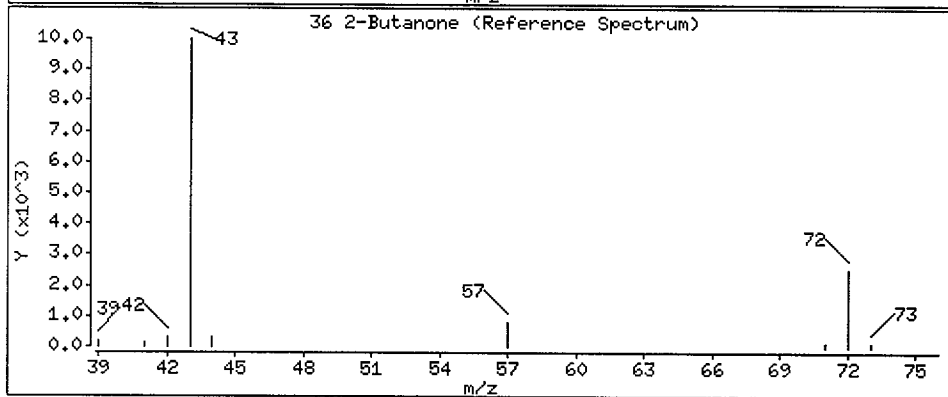
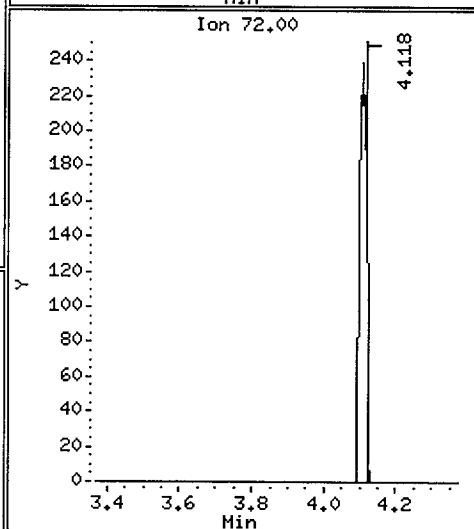
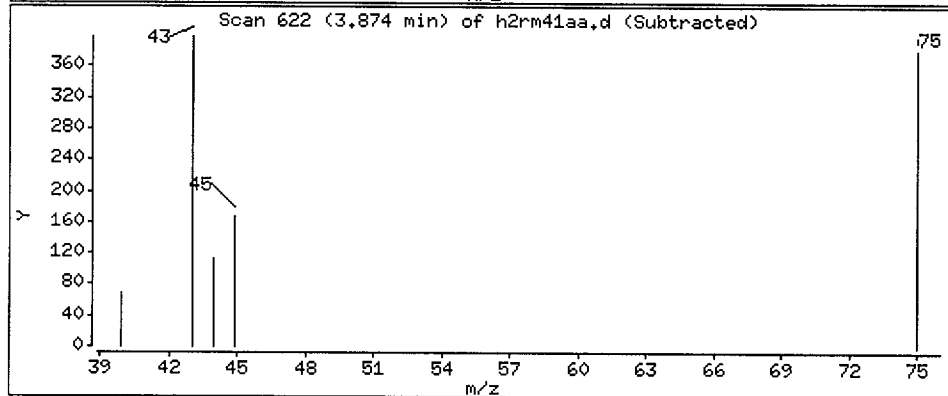
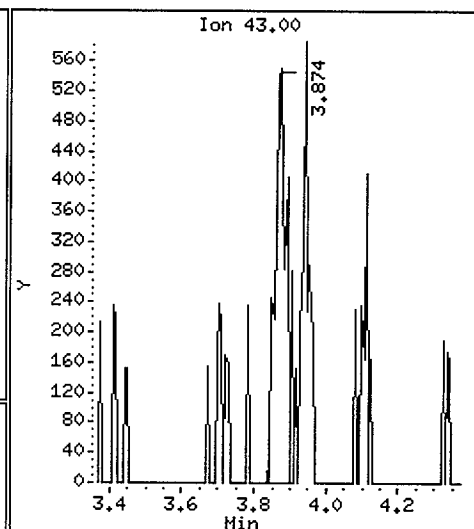
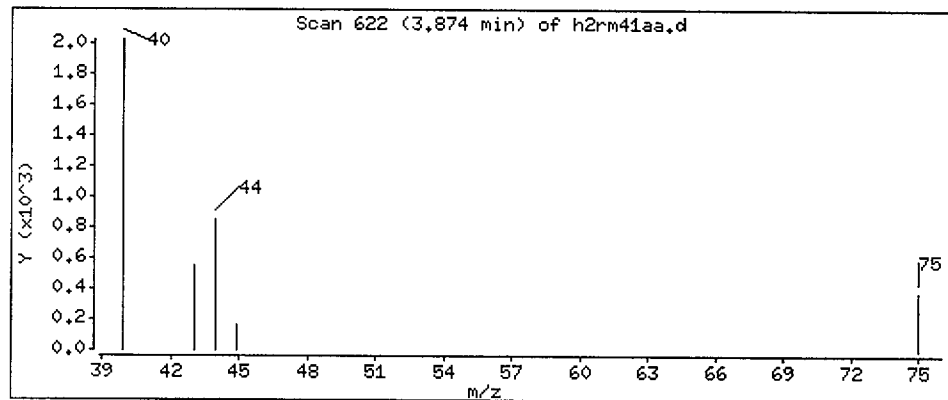
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

36 2-Butanone

Concentration: 0.011113 ug



Data File: /chem/gcms/mx.i/X040706.b/h2rm41aa.d

Date : 07-APR-2006 11:31

Client ID: INTRA-LAB BLANK

Instrument: mx.i

Sample Info: H2RM41AA,1,3,,,BLK

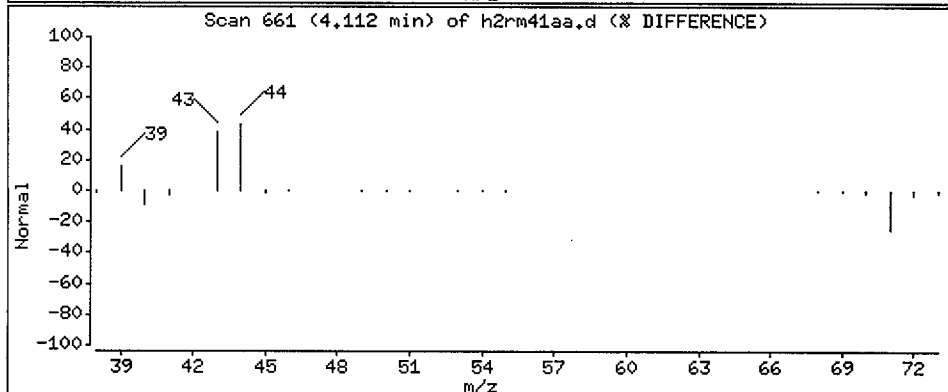
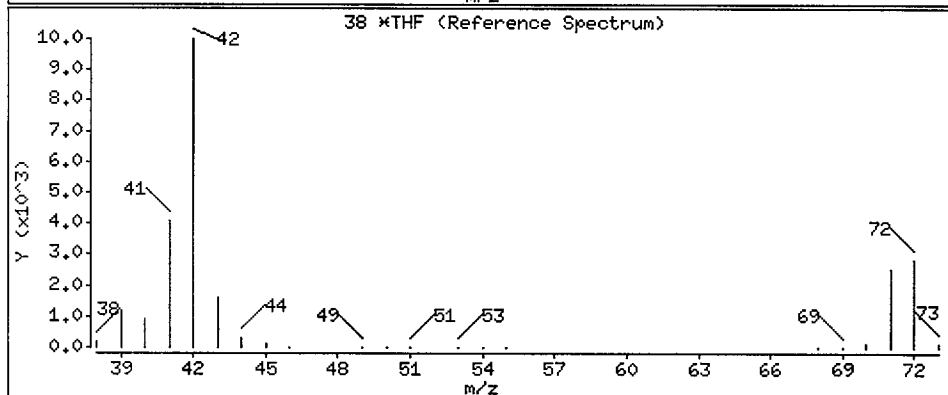
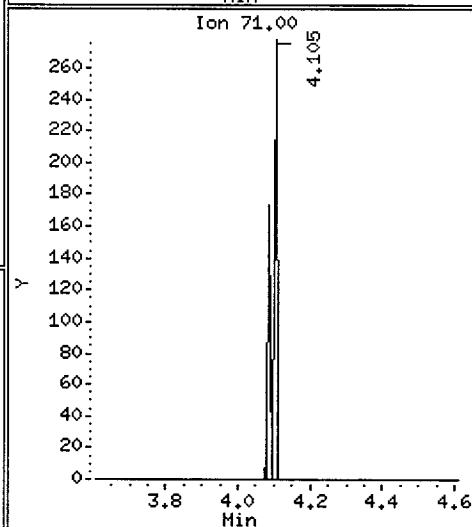
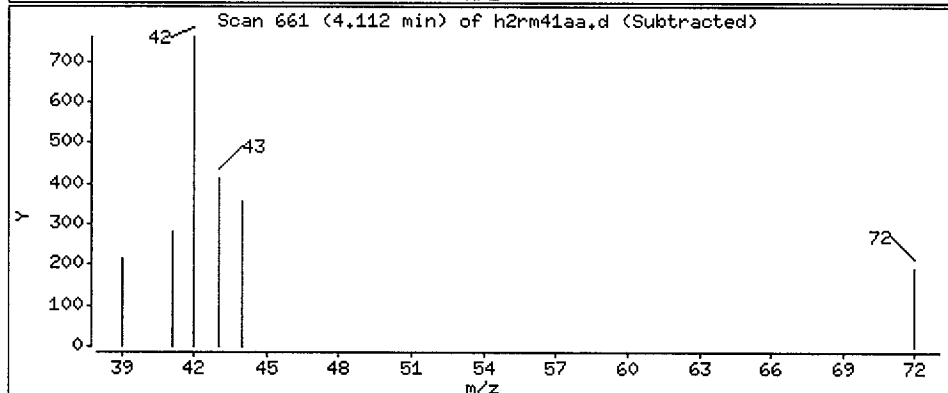
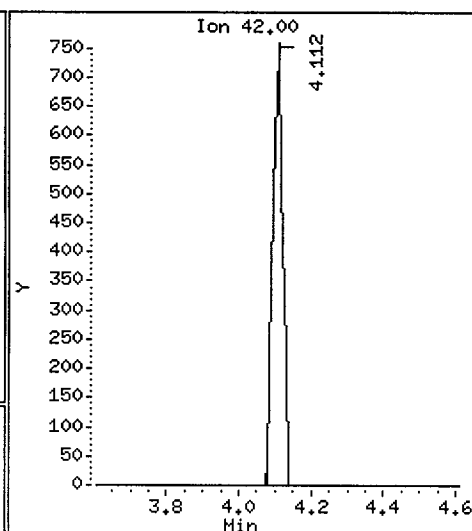
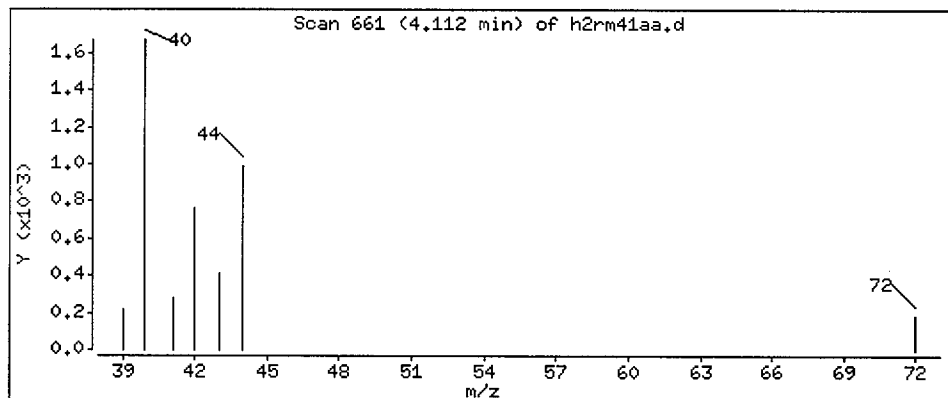
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

38 \*THF

Concentration: 0.021534 ug



Data File: /chem/gcms/mx.i/X040706.b/h2rm41aa.d

Date : 07-APR-2006 11:31

Client ID: INTRA-LAB BLANK

Instrument: mx.i

Sample Info: H2RM41AA,1,3,,,BLK

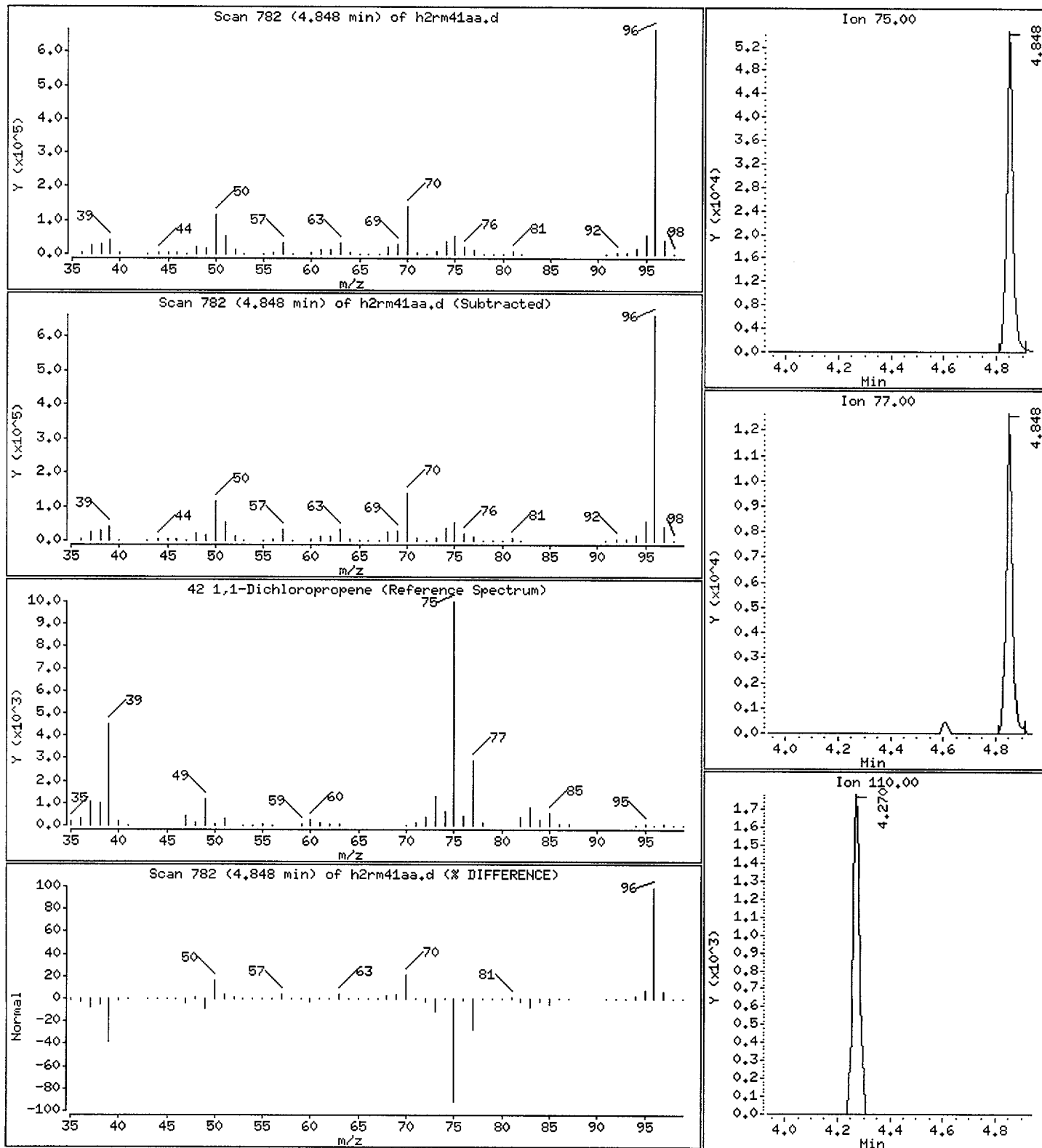
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

42 1,1-Dichloropropene

Concentration: 0.048569 ug



Data File: /chem/gcms/mx.i/X040706.b/h2rm41aa.d

Date : 07-APR-2006 11:31

Client ID: INTRA-LAB BLANK

Instrument: mx.i

Sample Info: H2RM41AA,1,3,,,BLK

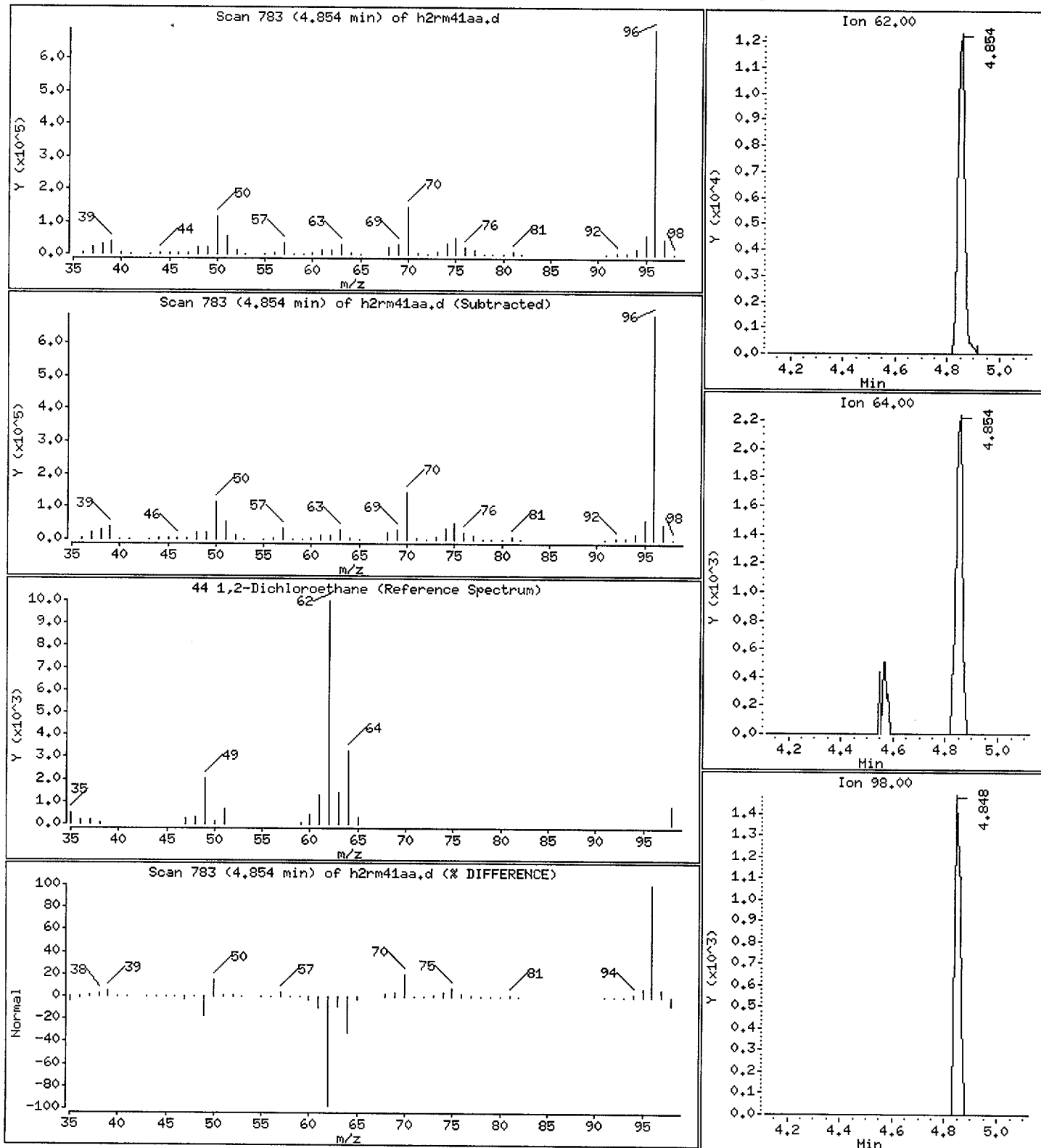
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

44 1,2-Dichloroethane

Concentration: 0.025694 ug





Data File: /chem/gcms/mx.i/X040706.b/h2rm41aa.d

Date : 07-APR-2006 11:31

Client ID: INTRA-LAB BLANK

Instrument: mx.i

Sample Info: H2RM41AA,1,3,,,BLK

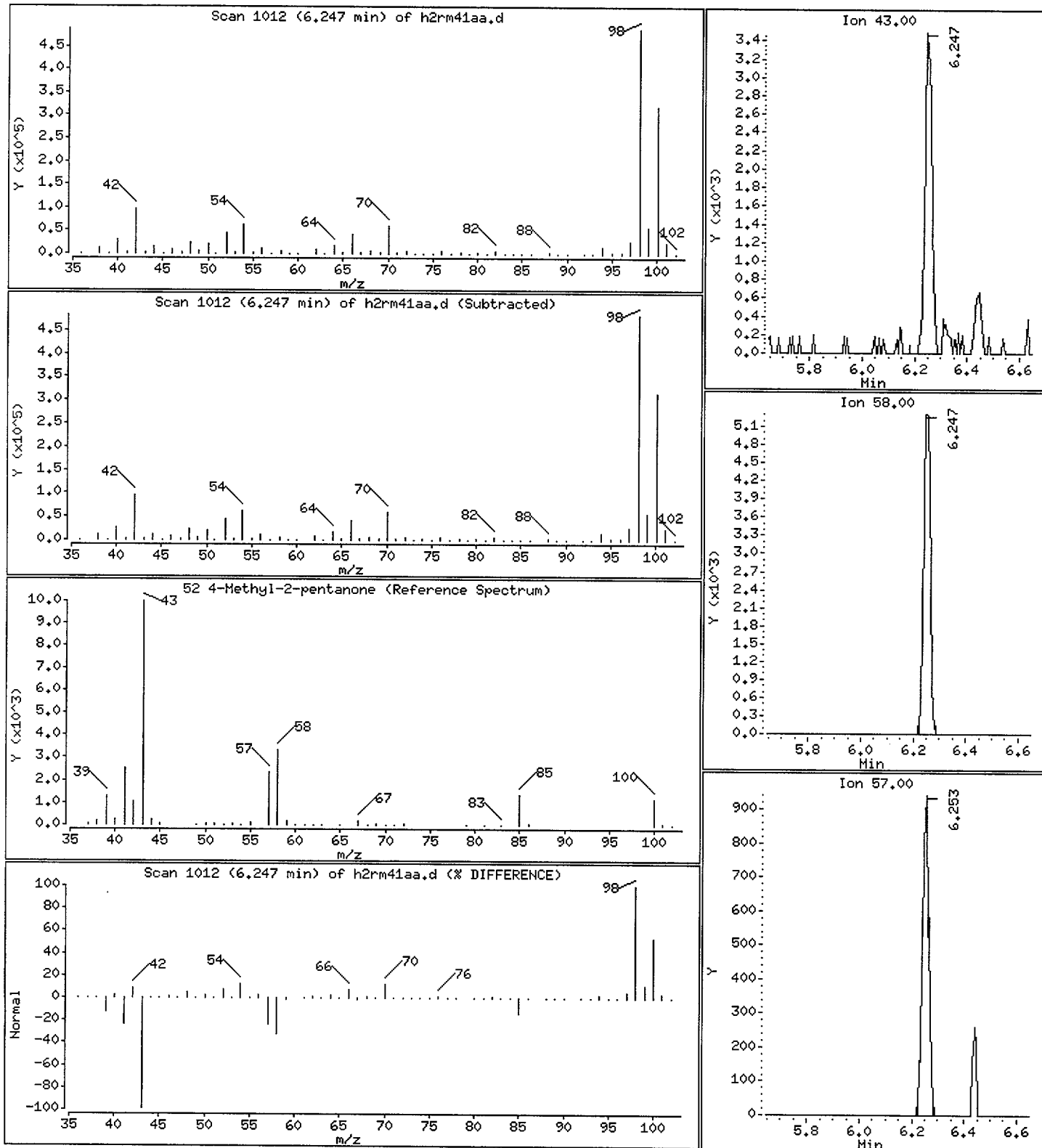
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

52 4-Methyl-2-pentanone

Concentration: 0.023840 ug



Data File: /chem/gcms/mx.i/X040706.b/h2rm41aa.d

Date : 07-APR-2006 11:31

Client ID: INTRA-LAB BLANK

Instrument: mx.i

Sample Info: H2RM41AA,1,3,,,BLK

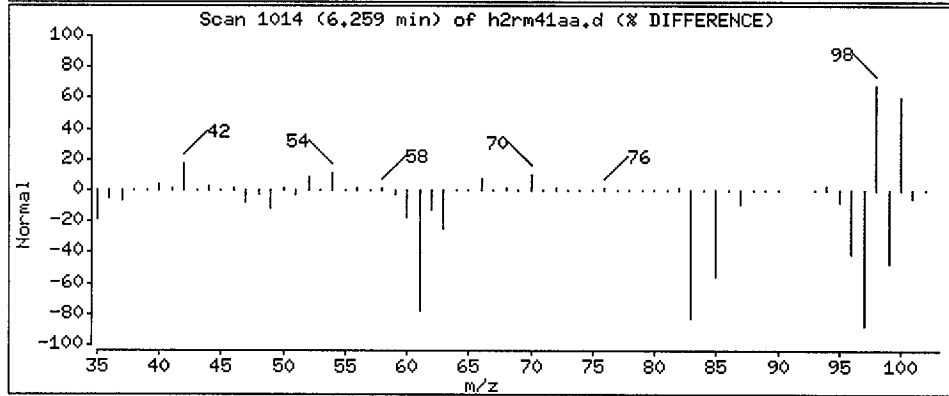
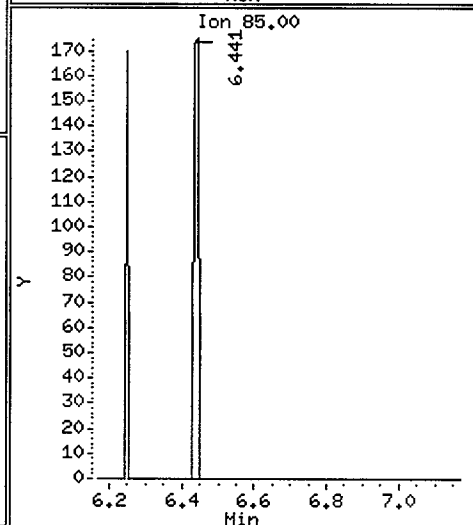
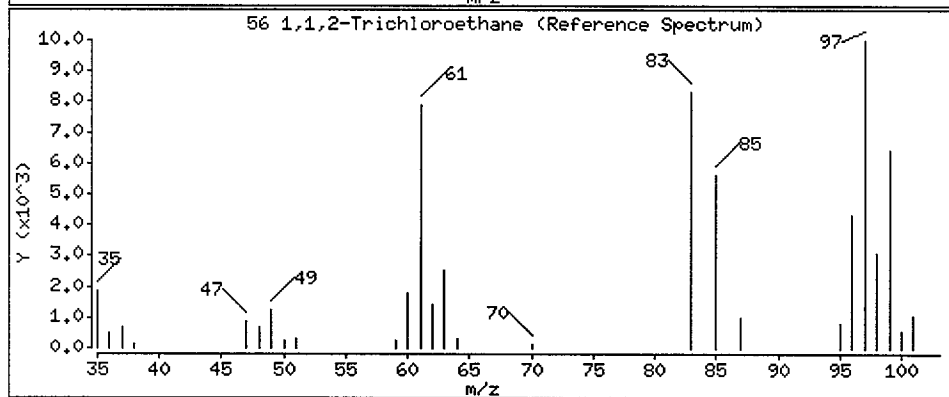
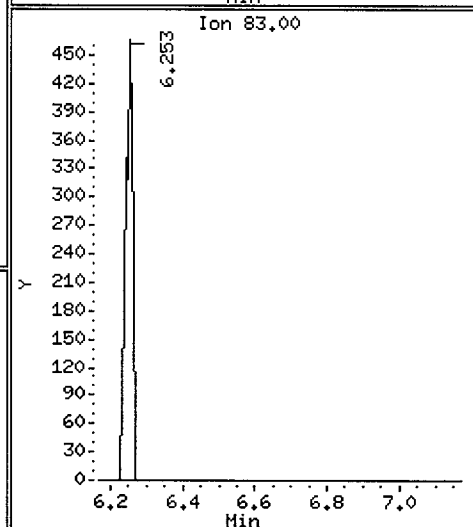
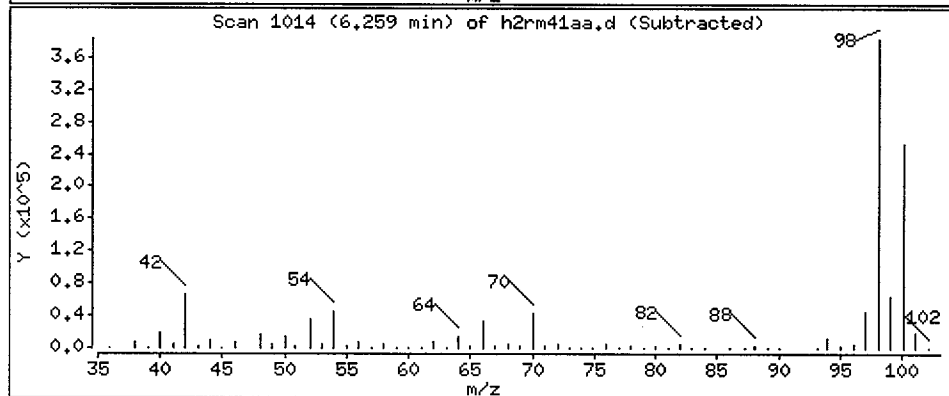
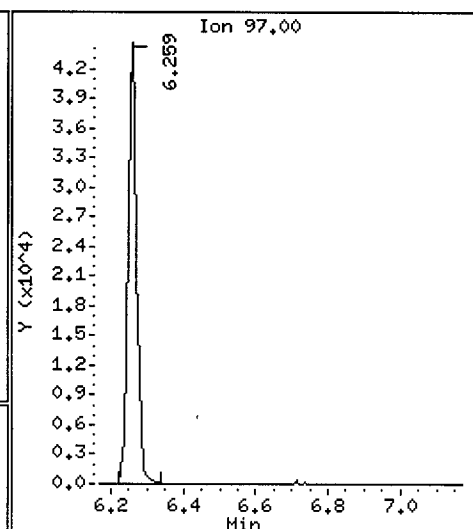
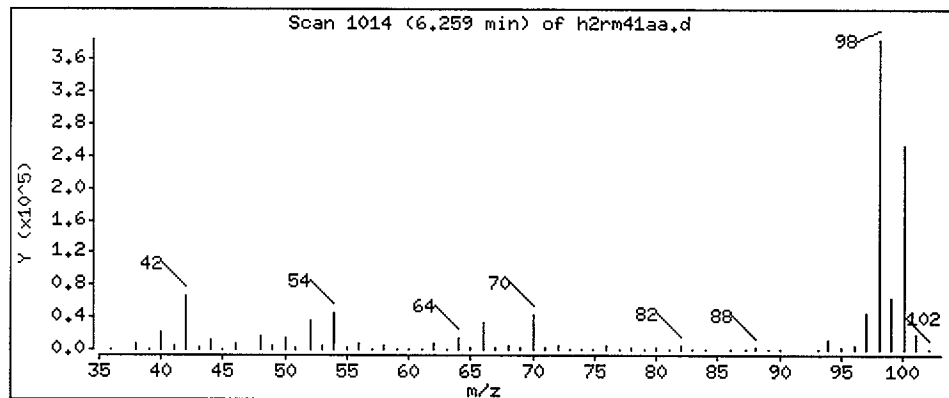
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

56 1,1,2-Trichloroethane

Concentration: 0.16993 ug



Data File: /chem/gcms/mx.i/X040706.b/h2rm41aa.d

Date : 07-APR-2006 11:31

Client ID: INTRA-LAB BLANK

Instrument: mx.i

Sample Info: H2RM41AA,1,3,,,BLK

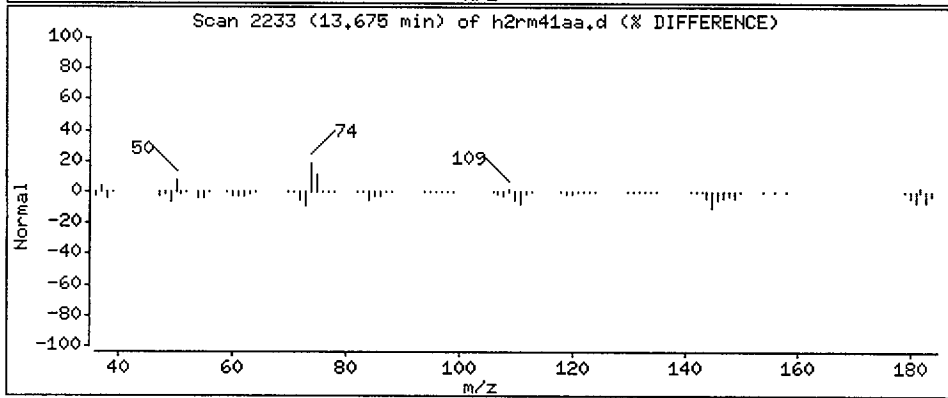
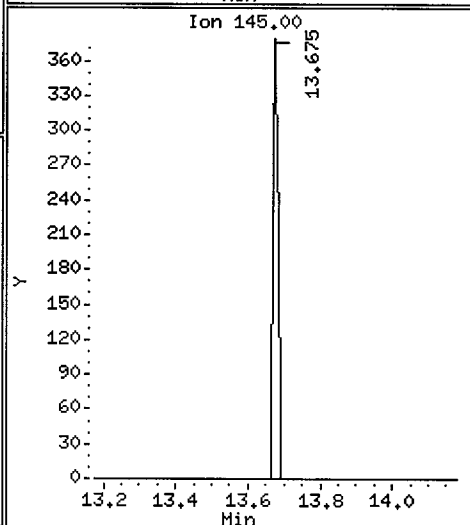
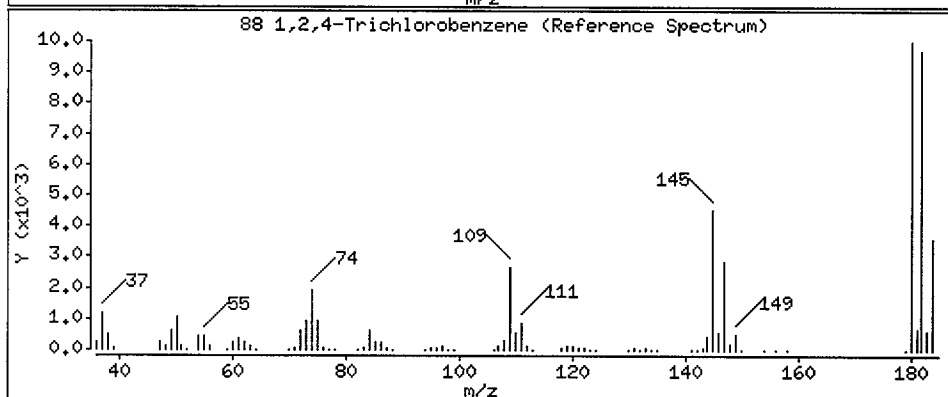
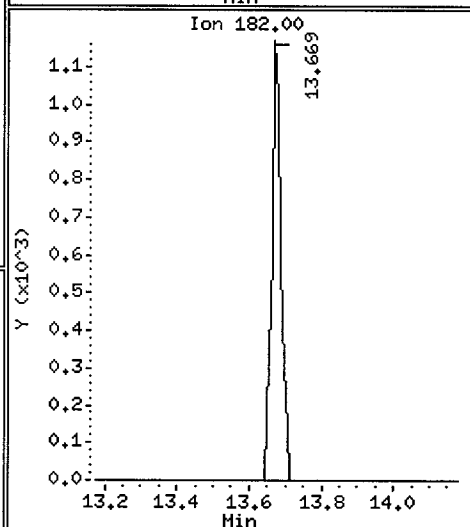
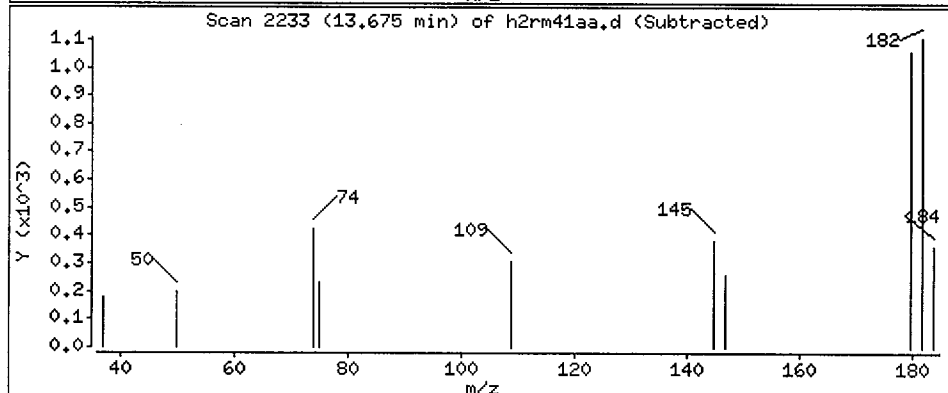
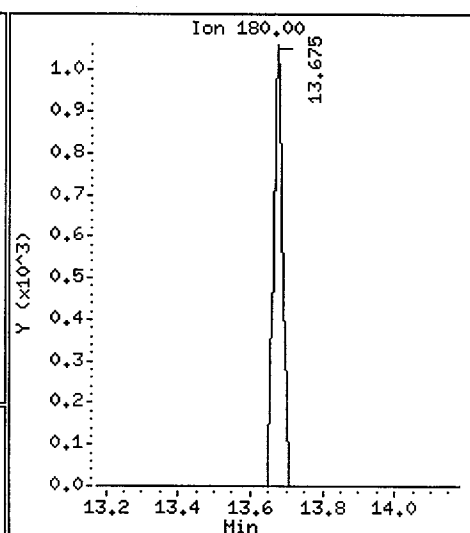
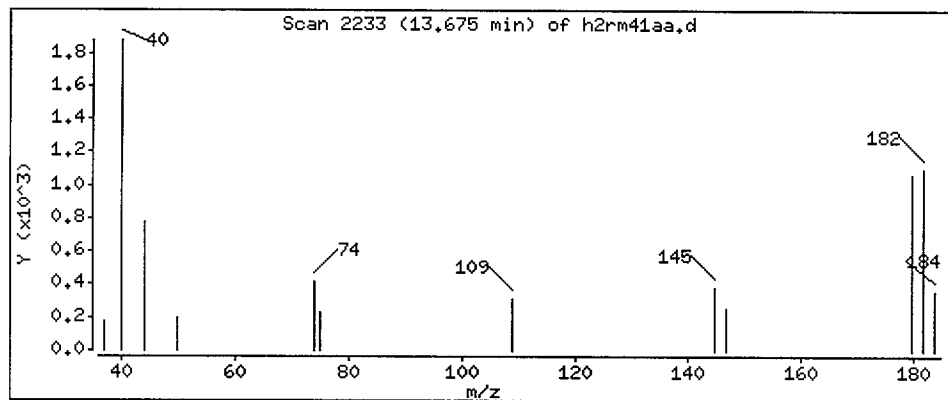
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

88 1,2,4-Trichlorobenzene

Concentration: 0.0029718 ug



Data File: /chem/gcms/mx.i/X040706,b/h2rm41aa,d

Date : 07-APR-2006 11:31

Client ID: INTRA-LAB BLANK

Instrument: mx.i

Sample Info: H2RM41AA,1,3,,,BLK

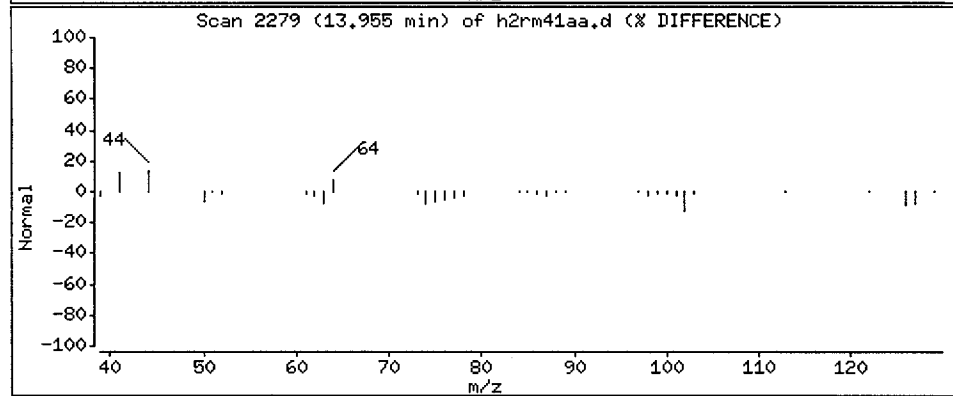
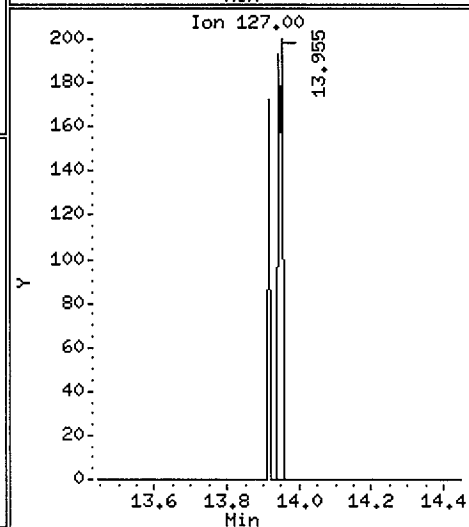
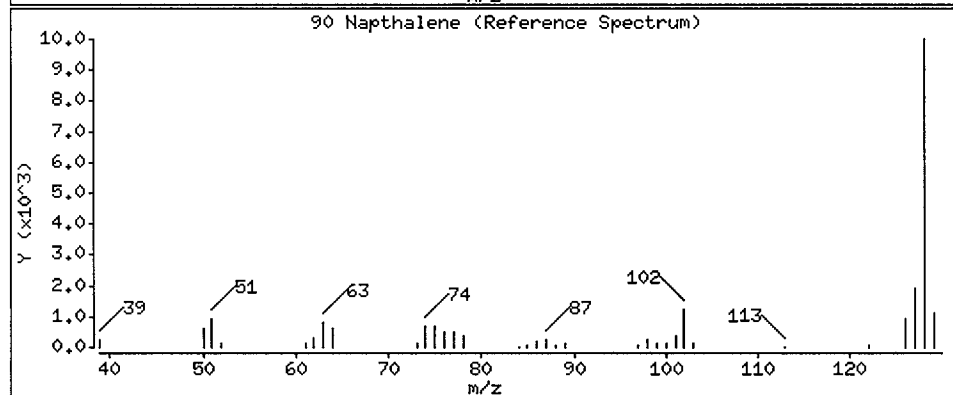
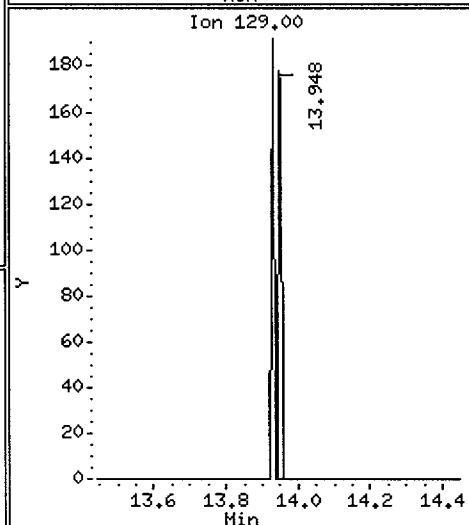
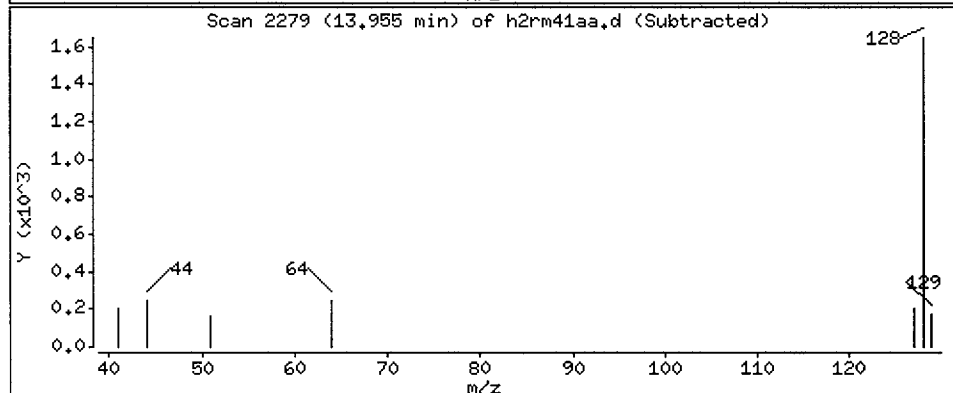
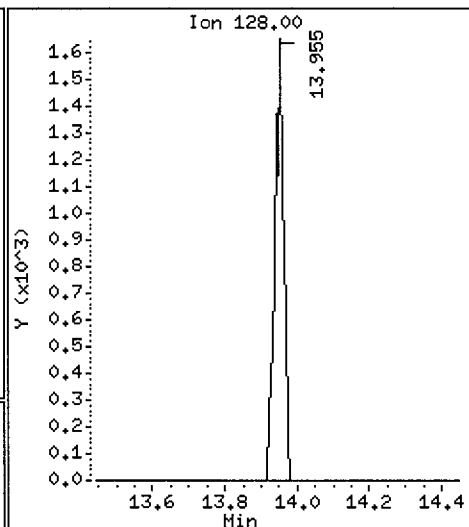
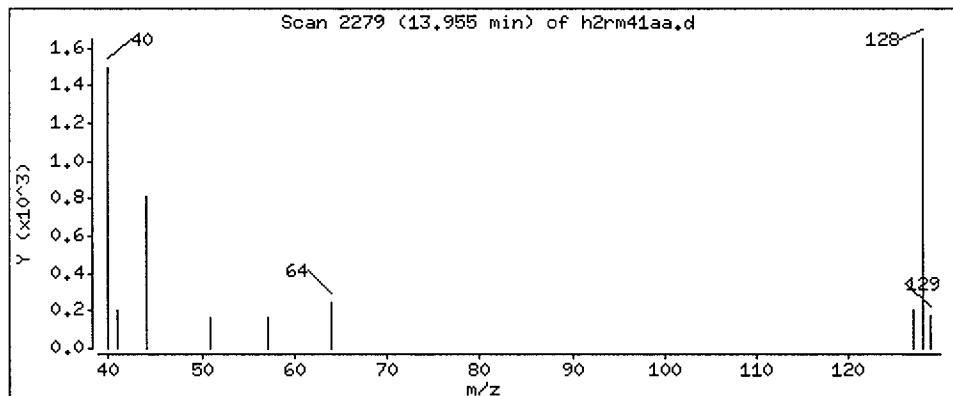
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

90 Napthalene

Concentration: 0.0060226 ug



Data File: /chem/gcms/mx.i/X040706.b/h2rm41aa.d

Date : 07-APR-2006 11:31

Client ID: INTRA-LAB BLANK

Instrument: mx.i

Sample Info: H2RM41AA,1,3,,,BLK

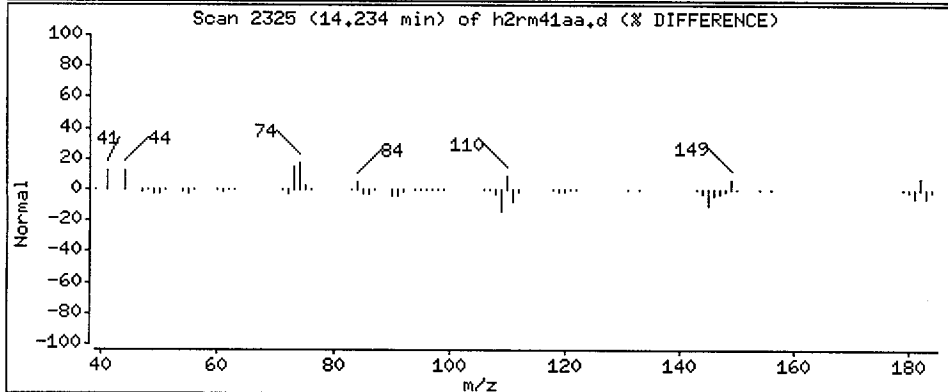
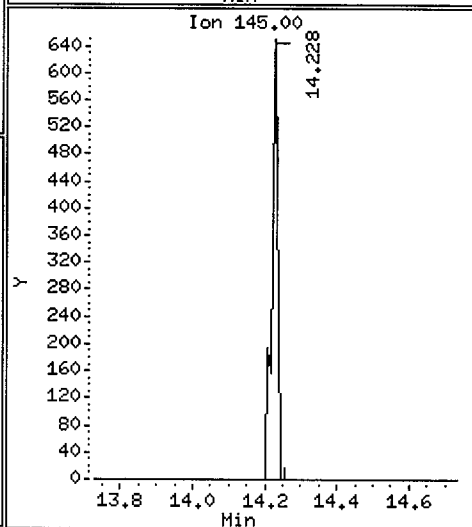
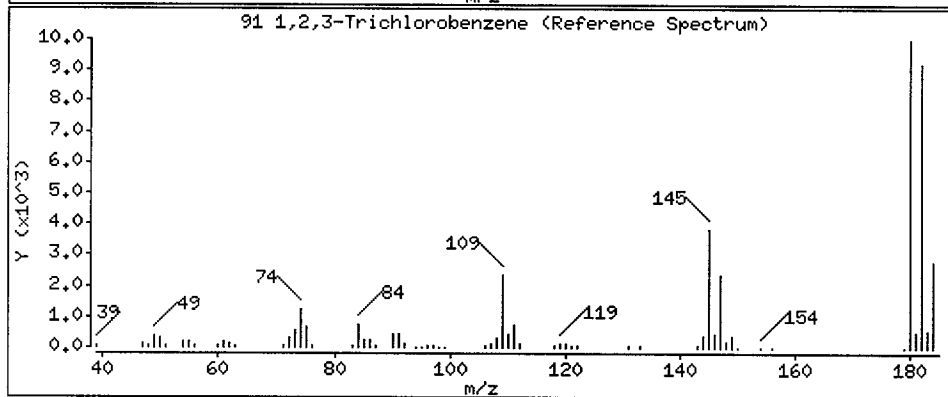
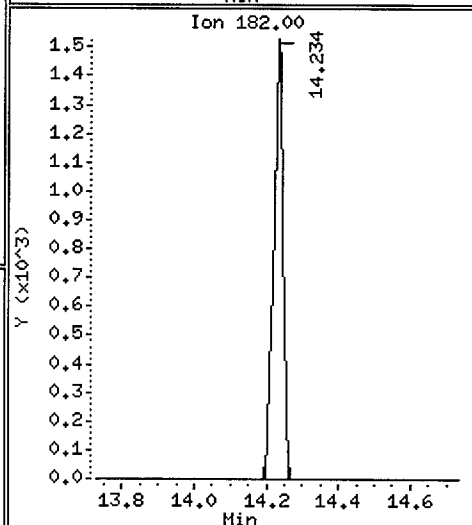
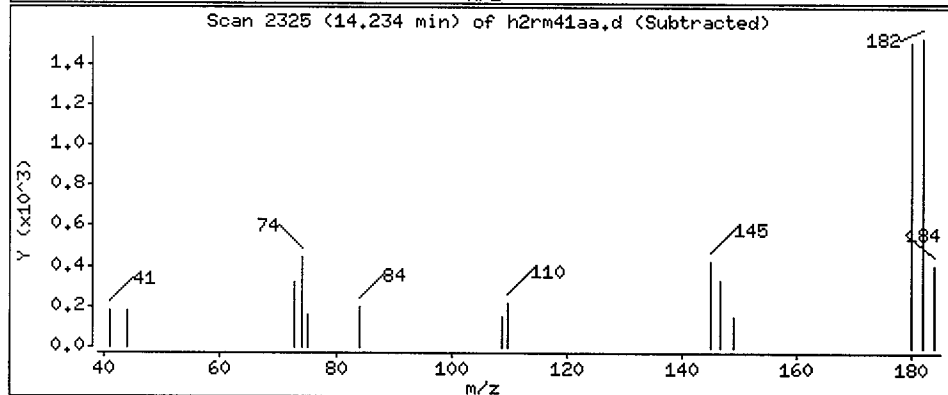
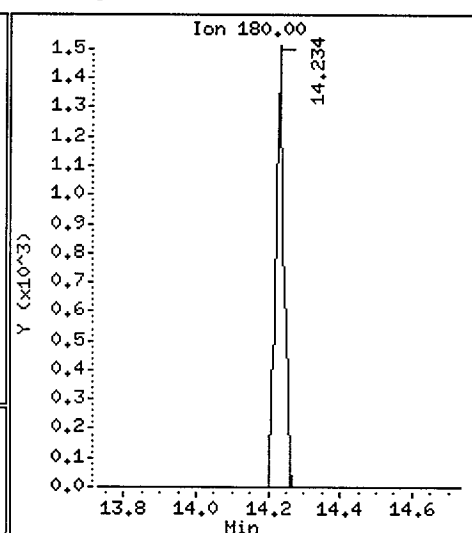
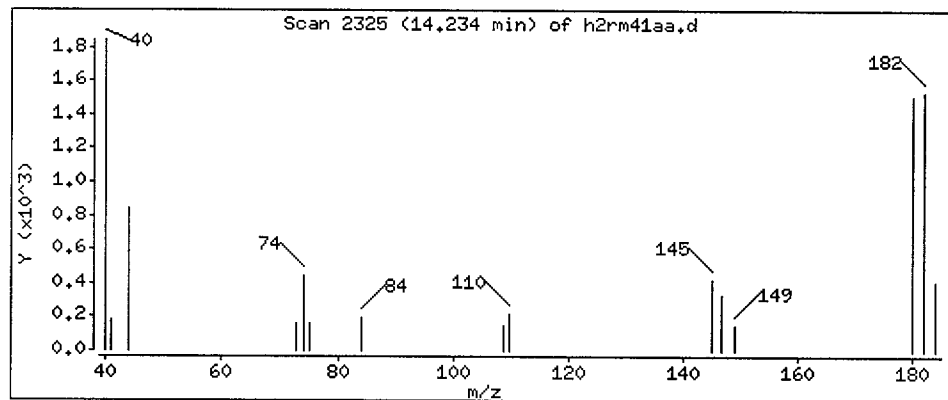
Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

91 1,2,3-Trichlorobenzene

Concentration: 0.0058489 ug



Data File: /var/chem/gcms/mx.i/X040706.b/h2rm41aa.d  
 Report Date: 18-Apr-2006 11:06

## STL Knoxville

SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X040706.b/h2rm41aa.d  
 Lab Smp Id: H2RM41AA Client Smp ID: INTRA-LAB BLANK  
 Inj Date : 07-APR-2006 11:31  
 Operator : 22980 Inst ID: mx.i  
 Smp Info : H2RM41AA,1,3,,,BLK  
 Misc Info : X040706,8260B\_LM,focus.sub  
 Comment :  
 Method : /var/chem/gcms/mx.i/X040706.b/8260B LM.m  
 Meth Date : 18-Apr-2006 11:05 tajh Quant Type: ISTD  
 Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
 Als bottle: 1 QC Sample: METHOD BLANK  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: focus.sub  
 Target Version: 3.50  
 Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
 Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

| ISTD              | RT    | HEIGHT  | AMOUNT |
|-------------------|-------|---------|--------|
| =====             | ===== | =====   | =====  |
| * 1 Fluorobenzene | 4.854 | 1595465 | 10.000 |

| RT             | HEIGHT | CONCENTRATIONS |            |       | QUAL            | QUANT   |           |        |
|----------------|--------|----------------|------------|-------|-----------------|---------|-----------|--------|
|                |        | ON-COL( ug/L)  | FINAL( ug) |       |                 | LIBRARY | LIB ENTRY | CPND # |
| =====          | =====  | =====          | =====      | ===== | =====           | =====   | =====     |        |
| Carbon dioxide |        |                |            |       | CAS #: 124-38-9 |         |           |        |
| 1.015          | 548488 | 3.43779400     | 0.085945   | 5     | NIST02.1        | 77      | 1         |        |

ai  
 4/18/06  
 CH

Data File: /var/chem/gcms/mx.i/X040706.b/h2rm41aa.d

Date : 07-APR-2006 11:31

Client ID: INTRA-LAB BLANK

Instrument: mx.i

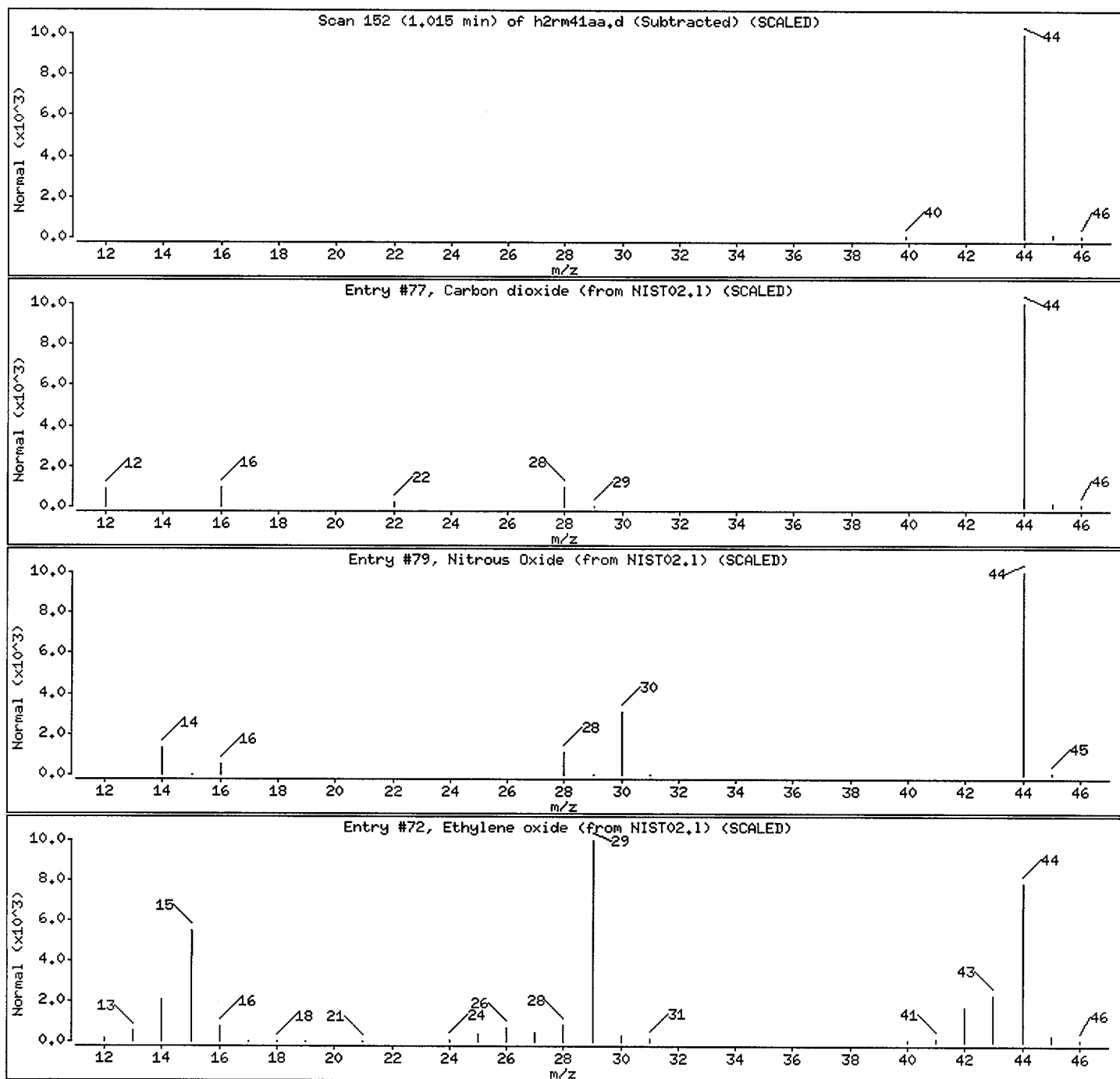
Sample Info: H2RM41AA,1,3,,,BLK

Operator: 22980

Column phase: J+W 624

Column diameter: 0.18

| Library Search Compound Match | CAS Number | Library  | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Carbon dioxide                | 124-38-9   | NIST02.1 | 77    | 5       | CO2     | 44     |
| Nitrous Oxide                 | 10024-97-2 | NIST02.1 | 79    | 3       | N2O     | 44     |
| Ethylene oxide                | 75-21-8    | NIST02.1 | 72    | 2       | C2H4O   | 44     |



## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: H6D030169      Work Order #....: H2RM41AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D070000-054      H2RM41AD-LCSD  
 Prep Date.....: 04/07/06      Analysis Date...: 04/07/06  
 Prep Batch #....: 6097054  
 Dilution Factor: 1

| PARAMETER            | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS | RPD          | RPD<br>LIMITS | METHOD            |
|----------------------|---------------------|--------------------|--------------|---------------|-------------------|
| Acetone              | 128                 | (30 - 180)         |              |               | SW846 VOST        |
|                      | 127                 | (30 - 180)         | 0.55         | (0-25)        | SW846 VOST        |
| Acrylonitrile        | 53                  | (30 - 130)         |              |               | SW846 VOST        |
|                      | 54                  | (30 - 130)         | 2.1          | (0-30)        | SW846 VOST        |
| <b>Benzene</b>       | <b>92</b>           | <b>(69 - 130)</b>  |              |               | <b>SW846 VOST</b> |
|                      | <b>92</b>           | <b>(69 - 130)</b>  | <b>0.020</b> | <b>(0-25)</b> | <b>SW846 VOST</b> |
| Bromobenzene         | 70                  | (50 - 117)         |              |               | SW846 VOST        |
|                      | 74                  | (50 - 117)         | 5.4          | (0-25)        | SW846 VOST        |
| Bromochloromethane   | 76                  | (52 - 125)         |              |               | SW846 VOST        |
|                      | 77                  | (52 - 125)         | 0.92         | (0-25)        | SW846 VOST        |
| Bromodichloromethane | 85                  | (51 - 129)         |              |               | SW846 VOST        |
|                      | 89                  | (51 - 129)         | 4.9          | (0-25)        | SW846 VOST        |
| Bromoform            | 56                  | (40 - 111)         |              |               | SW846 VOST        |
|                      | 59                  | (40 - 111)         | 5.1          | (0-25)        | SW846 VOST        |
| Bromomethane         | 94                  | (30 - 170)         |              |               | SW846 VOST        |
|                      | 92                  | (30 - 170)         | 1.5          | (0-25)        | SW846 VOST        |
| 2-Butanone           | 57                  | (30 - 150)         |              |               | SW846 VOST        |
|                      | 67                  | (30 - 150)         | 17           | (0-25)        | SW846 VOST        |
| n-Butylbenzene       | 111                 | (50 - 140)         |              |               | SW846 VOST        |
|                      | 107                 | (50 - 140)         | 3.3          | (0-25)        | SW846 VOST        |
| sec-Butylbenzene     | 95                  | (59 - 136)         |              |               | SW846 VOST        |
|                      | 93                  | (59 - 136)         | 3.0          | (0-25)        | SW846 VOST        |
| tert-Butylbenzene    | 87                  | (59 - 127)         |              |               | SW846 VOST        |
|                      | 85                  | (59 - 127)         | 2.4          | (0-25)        | SW846 VOST        |
| Carbon disulfide     | 104                 | (58 - 150)         |              |               | SW846 VOST        |
|                      | 103                 | (58 - 150)         | 1.4          | (0-25)        | SW846 VOST        |
| Carbon tetrachloride | 95                  | (61 - 150)         |              |               | SW846 VOST        |
|                      | 96                  | (61 - 150)         | 0.41         | (0-25)        | SW846 VOST        |
| <b>Chlorobenzene</b> | <b>78</b>           | <b>(70 - 116)</b>  |              |               | <b>SW846 VOST</b> |
|                      | <b>82</b>           | <b>(70 - 116)</b>  | <b>4.4</b>   | <b>(0-25)</b> | <b>SW846 VOST</b> |
| Chlorodibromomethane | 64                  | (50 - 116)         |              |               | SW846 VOST        |
|                      | 69                  | (50 - 116)         | 6.2          | (0-25)        | SW846 VOST        |
| Chloroethane         | 96                  | (30 - 150)         |              |               | SW846 VOST        |
|                      | 98                  | (30 - 150)         | 1.7          | (0-25)        | SW846 VOST        |
| Chloroform           | 91                  | (60 - 132)         |              |               | SW846 VOST        |
|                      | 94                  | (60 - 132)         | 3.2          | (0-25)        | SW846 VOST        |
| Chloromethane        | 111                 | (30 - 170)         |              |               | SW846 VOST        |
|                      | 104                 | (30 - 170)         | 6.3          | (0-25)        | SW846 VOST        |
| 2-Chlorotoluene      | 78                  | (50 - 122)         |              |               | SW846 VOST        |
|                      | 78                  | (50 - 122)         | 0.51         | (0-25)        | SW846 VOST        |

(Continued on next page)



## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169      Work Order #...: H2RM41AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D070000-054      H2RM41AD-LCSD

| PARAMETER                        | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS | RPD        | RPD<br>LIMITS | METHOD            |
|----------------------------------|---------------------|--------------------|------------|---------------|-------------------|
| 4-Chlorotoluene                  | 81                  | (50 - 119)         |            |               | SW846 VOST        |
|                                  | 81                  | (50 - 119)         | 0.060      | (0-25)        | SW846 VOST        |
| 1,2-Dibromo-3-chloro-<br>propane | 30                  | (30 - 110)         |            |               | SW846 VOST        |
|                                  | 34                  | (30 - 110)         | 11         | (0-25)        | SW846 VOST        |
| 1,2-Dibromoethane                | 59                  | (50 - 111)         |            |               | SW846 VOST        |
|                                  | 62                  | (50 - 111)         | 5.9        | (0-25)        | SW846 VOST        |
| Dibromomethane                   | 77                  | (50 - 118)         |            |               | SW846 VOST        |
|                                  | 79                  | (50 - 118)         | 2.7        | (0-25)        | SW846 VOST        |
| 1,2-Dichlorobenzene              | 62                  | (50 - 108)         |            |               | SW846 VOST        |
|                                  | 64                  | (50 - 108)         | 3.1        | (0-25)        | SW846 VOST        |
| 1,3-Dichlorobenzene              | 72                  | (50 - 113)         |            |               | SW846 VOST        |
|                                  | 72                  | (50 - 113)         | 0.47       | (0-25)        | SW846 VOST        |
| 1,4-Dichlorobenzene              | 70                  | (50 - 111)         |            |               | SW846 VOST        |
|                                  | 72                  | (50 - 111)         | 2.4        | (0-25)        | SW846 VOST        |
| Dichlorodifluoromethane          | 103                 | (30 - 150)         |            |               | SW846 VOST        |
|                                  | 98                  | (30 - 150)         | 4.5        | (0-25)        | SW846 VOST        |
| 1,1-Dichloroethane               | 94                  | (64 - 134)         |            |               | SW846 VOST        |
|                                  | 97                  | (64 - 134)         | 3.0        | (0-25)        | SW846 VOST        |
| 1,2-Dichloroethane               | 89                  | (50 - 121)         |            |               | SW846 VOST        |
|                                  | 92                  | (50 - 121)         | 3.1        | (0-25)        | SW846 VOST        |
| cis-1,2-Dichloroethene           | 86                  | (60 - 131)         |            |               | SW846 VOST        |
|                                  | 89                  | (60 - 131)         | 3.3        | (0-25)        | SW846 VOST        |
| trans-1,2-Dichloroethene         | 89                  | (68 - 140)         |            |               | SW846 VOST        |
|                                  | 89                  | (68 - 140)         | 0.54       | (0-25)        | SW846 VOST        |
| <b>1,1-Dichloroethene</b>        | <b>101</b>          | <b>(63 - 150)</b>  |            |               | <b>SW846 VOST</b> |
|                                  | <b>99</b>           | <b>(63 - 150)</b>  | <b>2.2</b> | <b>(0-25)</b> | <b>SW846 VOST</b> |
| 1,2-Dichloropropane              | 88                  | (56 - 124)         |            |               | SW846 VOST        |
|                                  | 91                  | (56 - 124)         | 3.4        | (0-25)        | SW846 VOST        |
| 1,3-Dichloropropane              | 66                  | (50 - 113)         |            |               | SW846 VOST        |
|                                  | 69                  | (50 - 113)         | 4.6        | (0-25)        | SW846 VOST        |
| 2,2-Dichloropropane              | 62 a                | (66 - 150)         |            |               | SW846 VOST        |
|                                  | 65 a                | (66 - 150)         | 4.0        | (0-25)        | SW846 VOST        |
| cis-1,3-Dichloropropene          | 80                  | (50 - 128)         |            |               | SW846 VOST        |
|                                  | 84                  | (50 - 128)         | 4.9        | (0-25)        | SW846 VOST        |
| trans-1,3-Dichloropropene        | 62                  | (50 - 116)         |            |               | SW846 VOST        |
|                                  | 68                  | (50 - 116)         | 7.9        | (0-25)        | SW846 VOST        |
| 1,1-Dichloropropene              | 103                 | (75 - 149)         |            |               | SW846 VOST        |
|                                  | 101                 | (75 - 149)         | 1.4        | (0-25)        | SW846 VOST        |
| Ethylbenzene                     | 87                  | (66 - 129)         |            |               | SW846 VOST        |
|                                  | 89                  | (66 - 129)         | 2.4        | (0-25)        | SW846 VOST        |

(Continued on next page)

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169      Work Order #...: H2RM41AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D070000-054      H2RM41AD-LCSD

| PARAMETER                   | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS | RPD         | RPD<br>LIMITS | METHOD            |
|-----------------------------|---------------------|--------------------|-------------|---------------|-------------------|
| Hexachlorobutadiene         | 74                  | (50 - 150)         |             |               | SW846 VOST        |
|                             | 76                  | (50 - 150)         | 3.6         | (0-25)        | SW846 VOST        |
| 2-Hexanone                  | 57                  | (30 - 133)         |             |               | SW846 VOST        |
|                             | 67                  | (30 - 133)         | 16          | (0-25)        | SW846 VOST        |
| Iodomethane                 | 92                  | (50 - 150)         |             |               | SW846 VOST        |
|                             | 92                  | (50 - 150)         | 0.65        | (0-25)        | SW846 VOST        |
| Isopropylbenzene            | 90                  | (62 - 137)         |             |               | SW846 VOST        |
|                             | 91                  | (62 - 137)         | 0.92        | (0-25)        | SW846 VOST        |
| p-Isopropyltoluene          | 93                  | (57 - 131)         |             |               | SW846 VOST        |
|                             | 90                  | (57 - 131)         | 3.3         | (0-25)        | SW846 VOST        |
| Methylene chloride          | 83                  | (50 - 149)         |             |               | SW846 VOST        |
|                             | 84                  | (50 - 149)         | 0.98        | (0-25)        | SW846 VOST        |
| 4-Methyl-2-pentanone        | 68                  | (30 - 120)         |             |               | SW846 VOST        |
|                             | 76                  | (30 - 120)         | 10          | (0-25)        | SW846 VOST        |
| Naphthalene                 | 76                  | (30 - 120)         |             |               | SW846 VOST        |
|                             | 80                  | (30 - 120)         | 5.3         | (0-25)        | SW846 VOST        |
| n-Propylbenzene             | 94                  | (56 - 136)         |             |               | SW846 VOST        |
|                             | 91                  | (56 - 136)         | 2.8         | (0-25)        | SW846 VOST        |
| Styrene                     | 73                  | (50 - 122)         |             |               | SW846 VOST        |
|                             | 75                  | (50 - 122)         | 3.8         | (0-25)        | SW846 VOST        |
| 1,1,1,2-Tetrachloroethane   | 63                  | (50 - 115)         |             |               | SW846 VOST        |
|                             | 66                  | (50 - 115)         | 5.4         | (0-25)        | SW846 VOST        |
| 1,1,2,2-Tetrachloroethane   | 57                  | (30 - 110)         |             |               | SW846 VOST        |
|                             | 60                  | (30 - 110)         | 5.2         | (0-25)        | SW846 VOST        |
| Tetrachloroethene           | 89                  | (60 - 142)         |             |               | SW846 VOST        |
|                             | 90                  | (60 - 142)         | 0.54        | (0-25)        | SW846 VOST        |
| <b>Toluene</b>              | <b>87</b>           | <b>(64 - 128)</b>  |             |               | <b>SW846 VOST</b> |
|                             | <b>87</b>           | <b>(64 - 128)</b>  | <b>0.40</b> | <b>(0-25)</b> | <b>SW846 VOST</b> |
| 1,2,3-Trichlorobenzene      | 73                  | (30 - 106)         |             |               | SW846 VOST        |
|                             | 78                  | (30 - 106)         | 6.7         | (0-25)        | SW846 VOST        |
| 1,2,4-Trichloro-<br>benzene | 69                  | (30 - 116)         |             |               | SW846 VOST        |
|                             | 76                  | (30 - 116)         | 9.7         | (0-25)        | SW846 VOST        |
| 1,1,1-Trichloroethane       | 99                  | (64 - 150)         |             |               | SW846 VOST        |
|                             | 98                  | (64 - 150)         | 0.56        | (0-25)        | SW846 VOST        |
| 1,1,2-Trichloroethane       | 64                  | (50 - 112)         |             |               | SW846 VOST        |
|                             | 67                  | (50 - 112)         | 4.7         | (0-25)        | SW846 VOST        |
| <b>Trichloroethene</b>      | <b>95</b>           | <b>(72 - 150)</b>  |             |               | <b>SW846 VOST</b> |
|                             | <b>96</b>           | <b>(72 - 150)</b>  | <b>1.5</b>  | <b>(0-25)</b> | <b>SW846 VOST</b> |
| Trichlorofluoromethane      | 98                  | (30 - 150)         |             |               | SW846 VOST        |
|                             | 97                  | (30 - 150)         | 0.70        | (0-25)        | SW846 VOST        |

(Continued on next page)

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169      Work Order #...: H2RM41AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D070000-054      H2RM41AD-LCSD

| PARAMETER              | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS | RPD  | RPD<br>LIMITS | METHOD     |
|------------------------|---------------------|--------------------|------|---------------|------------|
| 1,2,3-Trichloropropane | 51                  | (30 - 110)         |      |               | SW846 VOST |
|                        | 54                  | (30 - 110)         | 5.2  | (0-25)        | SW846 VOST |
| 1,2,4-Trimethylbenzene | 91                  | (50 - 125)         |      |               | SW846 VOST |
|                        | 91                  | (50 - 125)         | 0.65 | (0-25)        | SW846 VOST |
| 1,3,5-Trimethylbenzene | 94                  | (53 - 130)         |      |               | SW846 VOST |
|                        | 93                  | (53 - 130)         | 1.4  | (0-25)        | SW846 VOST |
| Vinyl chloride         | 105                 | (61 - 150)         |      |               | SW846 VOST |
|                        | 104                 | (61 - 150)         | 0.67 | (0-25)        | SW846 VOST |
| m-Xylene & p-Xylene    | 88                  | (62 - 131)         |      |               | SW846 VOST |
|                        | 89                  | (62 - 131)         | 1.0  | (0-25)        | SW846 VOST |
| o-Xylene               | 81                  | (56 - 121)         |      |               | SW846 VOST |
|                        | 83                  | (56 - 121)         | 2.7  | (0-25)        | SW846 VOST |
| Xylenes (total)        | 86                  | (60 - 127)         |      |               | SW846 VOST |
|                        | 87                  | (60 - 127)         | 1.6  | (0-25)        | SW846 VOST |

| SURROGATE             | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |
|-----------------------|---------------------|--------------------|
| Dibromofluoromethane  | 78                  | (50 - 134)         |
|                       | 80                  | (50 - 134)         |
| 1,2-Dichloroethane-d4 | 77                  | (50 - 134)         |
|                       | 79                  | (50 - 134)         |
| Toluene-d8            | 73                  | (57 - 127)         |
|                       | 75                  | (57 - 127)         |
| Bromofluorobenzene    | 64                  | (50 - 125)         |
|                       | 64                  | (50 - 125)         |

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169      Work Order #...: H2RM41AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D070000-054      H2RM41AD-LCSD  
 Prep Date.....: 04/07/06      Analysis Date...: 04/07/06  
 Prep Batch #...: 6097054  
 Dilution Factor: 1

| PARAMETER            | SPIKE<br>AMOUNT | MEASURED<br>AMOUNT | UNITS     | PERCENT<br>RECOVERY | RPD          | METHOD            |
|----------------------|-----------------|--------------------|-----------|---------------------|--------------|-------------------|
| Acetone              | 1.00            | 1.28               | ug        | 128                 |              | SW846 VOST        |
|                      | 1.00            | 1.27               | ug        | 127                 | 0.55         | SW846 VOST        |
| Acrylonitrile        | 5.00            | 2.63               | ug        | 53                  |              | SW846 VOST        |
|                      | 5.00            | 2.69               | ug        | 54                  | 2.1          | SW846 VOST        |
| <b>Benzene</b>       | <b>0.250</b>    | <b>0.231</b>       | <b>ug</b> | <b>92</b>           |              | <b>SW846 VOST</b> |
|                      | <b>0.250</b>    | <b>0.231</b>       | <b>ug</b> | <b>92</b>           | <b>0.020</b> | <b>SW846 VOST</b> |
| Bromobenzene         | 0.250           | 0.176              | ug        | 70                  |              | SW846 VOST        |
|                      | 0.250           | 0.185              | ug        | 74                  | 5.4          | SW846 VOST        |
| Bromochloromethane   | 0.250           | 0.190              | ug        | 76                  |              | SW846 VOST        |
|                      | 0.250           | 0.192              | ug        | 77                  | 0.92         | SW846 VOST        |
| Bromodichloromethane | 0.250           | 0.213              | ug        | 85                  |              | SW846 VOST        |
|                      | 0.250           | 0.224              | ug        | 89                  | 4.9          | SW846 VOST        |
| Bromoform            | 0.250           | 0.141              | ug        | 56                  |              | SW846 VOST        |
|                      | 0.250           | 0.149              | ug        | 59                  | 5.1          | SW846 VOST        |
| Bromomethane         | 0.250           | 0.234              | ug        | 94                  |              | SW846 VOST        |
|                      | 0.250           | 0.230              | ug        | 92                  | 1.5          | SW846 VOST        |
| 2-Butanone           | 1.00            | 0.570              | ug        | 57                  |              | SW846 VOST        |
|                      | 1.00            | 0.674              | ug        | 67                  | 17           | SW846 VOST        |
| n-Butylbenzene       | 0.250           | 0.277              | ug        | 111                 |              | SW846 VOST        |
|                      | 0.250           | 0.268              | ug        | 107                 | 3.3          | SW846 VOST        |
| sec-Butylbenzene     | 0.250           | 0.238              | ug        | 95                  |              | SW846 VOST        |
|                      | 0.250           | 0.231              | ug        | 93                  | 3.0          | SW846 VOST        |
| tert-Butylbenzene    | 0.250           | 0.217              | ug        | 87                  |              | SW846 VOST        |
|                      | 0.250           | 0.212              | ug        | 85                  | 2.4          | SW846 VOST        |
| Carbon disulfide     | 0.250           | 0.261              | ug        | 104                 |              | SW846 VOST        |
|                      | 0.250           | 0.257              | ug        | 103                 | 1.4          | SW846 VOST        |
| Carbon tetrachloride | 0.250           | 0.239              | ug        | 95                  |              | SW846 VOST        |
|                      | 0.250           | 0.240              | ug        | 96                  | 0.41         | SW846 VOST        |
| <b>Chlorobenzene</b> | <b>0.250</b>    | <b>0.195</b>       | <b>ug</b> | <b>78</b>           |              | <b>SW846 VOST</b> |
|                      | <b>0.250</b>    | <b>0.204</b>       | <b>ug</b> | <b>82</b>           | <b>4.4</b>   | <b>SW846 VOST</b> |
| Chlorodibromomethane | 0.250           | 0.161              | ug        | 64                  |              | SW846 VOST        |
|                      | 0.250           | 0.171              | ug        | 69                  | 6.2          | SW846 VOST        |
| Chloroethane         | 0.250           | 0.241              | ug        | 96                  |              | SW846 VOST        |
|                      | 0.250           | 0.245              | ug        | 98                  | 1.7          | SW846 VOST        |
| Chloroform           | 0.250           | 0.228              | ug        | 91                  |              | SW846 VOST        |
|                      | 0.250           | 0.235              | ug        | 94                  | 3.2          | SW846 VOST        |
| Chloromethane        | 0.250           | 0.276              | ug        | 111                 |              | SW846 VOST        |
|                      | 0.250           | 0.259              | ug        | 104                 | 6.3          | SW846 VOST        |
| 2-Chlorotoluene      | 0.250           | 0.196              | ug        | 78                  |              | SW846 VOST        |
|                      | 0.250           | 0.195              | ug        | 78                  | 0.51         | SW846 VOST        |

(Continued on next page)

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #....: H6D030169      Work Order #....: H2RM41AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D070000-054      H2RM41AD-LCSD

| PARAMETER                        | SPIKE<br>AMOUNT | MEASURED<br>AMOUNT | UNITS     | PERCENT<br>RECOVERY | RPD        | METHOD            |
|----------------------------------|-----------------|--------------------|-----------|---------------------|------------|-------------------|
| 4-Chlorotoluene                  | 0.250           | 0.202              | ug        | 81                  |            | SW846 VOST        |
|                                  | 0.250           | 0.202              | ug        | 81                  | 0.060      | SW846 VOST        |
| 1,2-Dibromo-3-chloro-<br>propane | 0.250           | 0.0758             | ug        | 30                  |            | SW846 VOST        |
|                                  | 0.250           | 0.0844             | ug        | 34                  | 11         | SW846 VOST        |
| 1,2-Dibromoethane                | 0.250           | 0.147              | ug        | 59                  |            | SW846 VOST        |
|                                  | 0.250           | 0.156              | ug        | 62                  | 5.9        | SW846 VOST        |
| Dibromomethane                   | 0.250           | 0.192              | ug        | 77                  |            | SW846 VOST        |
|                                  | 0.250           | 0.197              | ug        | 79                  | 2.7        | SW846 VOST        |
| 1,2-Dichlorobenzene              | 0.250           | 0.155              | ug        | 62                  |            | SW846 VOST        |
|                                  | 0.250           | 0.160              | ug        | 64                  | 3.1        | SW846 VOST        |
| 1,3-Dichlorobenzene              | 0.250           | 0.179              | ug        | 72                  |            | SW846 VOST        |
|                                  | 0.250           | 0.180              | ug        | 72                  | 0.47       | SW846 VOST        |
| 1,4-Dichlorobenzene              | 0.250           | 0.176              | ug        | 70                  |            | SW846 VOST        |
|                                  | 0.250           | 0.180              | ug        | 72                  | 2.4        | SW846 VOST        |
| Dichlorodifluoromethane          | 0.250           | 0.257              | ug        | 103                 |            | SW846 VOST        |
|                                  | 0.250           | 0.246              | ug        | 98                  | 4.5        | SW846 VOST        |
| 1,1-Dichloroethane               | 0.250           | 0.236              | ug        | 94                  |            | SW846 VOST        |
|                                  | 0.250           | 0.243              | ug        | 97                  | 3.0        | SW846 VOST        |
| 1,2-Dichloroethane               | 0.250           | 0.222              | ug        | 89                  |            | SW846 VOST        |
|                                  | 0.250           | 0.229              | ug        | 92                  | 3.1        | SW846 VOST        |
| cis-1,2-Dichloroethene           | 0.250           | 0.214              | ug        | 86                  |            | SW846 VOST        |
|                                  | 0.250           | 0.221              | ug        | 89                  | 3.3        | SW846 VOST        |
| trans-1,2-Dichloroethene         | 0.250           | 0.222              | ug        | 89                  |            | SW846 VOST        |
|                                  | 0.250           | 0.223              | ug        | 89                  | 0.54       | SW846 VOST        |
| <b>1,1-Dichloroethene</b>        | <b>0.250</b>    | <b>0.252</b>       | <b>ug</b> | <b>101</b>          |            | <b>SW846 VOST</b> |
|                                  | <b>0.250</b>    | <b>0.246</b>       | <b>ug</b> | <b>99</b>           | <b>2.2</b> | <b>SW846 VOST</b> |
| 1,2-Dichloropropane              | 0.250           | 0.220              | ug        | 88                  |            | SW846 VOST        |
|                                  | 0.250           | 0.228              | ug        | 91                  | 3.4        | SW846 VOST        |
| 1,3-Dichloropropane              | 0.250           | 0.164              | ug        | 66                  |            | SW846 VOST        |
|                                  | 0.250           | 0.172              | ug        | 69                  | 4.6        | SW846 VOST        |
| 2,2-Dichloropropane              | 0.250           | 0.155 a            | ug        | 62                  |            | SW846 VOST        |
|                                  | 0.250           | 0.162 a            | ug        | 65                  | 4.0        | SW846 VOST        |
| cis-1,3-Dichloropropene          | 0.250           | 0.201              | ug        | 80                  |            | SW846 VOST        |
|                                  | 0.250           | 0.211              | ug        | 84                  | 4.9        | SW846 VOST        |
| trans-1,3-Dichloropropene        | 0.250           | 0.156              | ug        | 62                  |            | SW846 VOST        |
|                                  | 0.250           | 0.169              | ug        | 68                  | 7.9        | SW846 VOST        |
| 1,1-Dichloropropene              | 0.250           | 0.257              | ug        | 103                 |            | SW846 VOST        |
|                                  | 0.250           | 0.254              | ug        | 101                 | 1.4        | SW846 VOST        |
| Ethylbenzene                     | 0.250           | 0.218              | ug        | 87                  |            | SW846 VOST        |
|                                  | 0.250           | 0.223              | ug        | 89                  | 2.4        | SW846 VOST        |

(Continued on next page)

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169      Work Order #...: H2RM41AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D070000-054      H2RM41AD-LCSD

| PARAMETER                   | SPIKE<br>AMOUNT | MEASURED<br>AMOUNT | UNITS     | PERCENT<br>RECOVERY | RPD         | METHOD            |
|-----------------------------|-----------------|--------------------|-----------|---------------------|-------------|-------------------|
| Hexachlorobutadiene         | 0.250           | 0.184              | ug        | 74                  |             | SW846 VOST        |
|                             | 0.250           | 0.191              | ug        | 76                  | 3.6         | SW846 VOST        |
| 2-Hexanone                  | 1.00            | 0.575              | ug        | 57                  |             | SW846 VOST        |
|                             | 1.00            | 0.674              | ug        | 67                  | 16          | SW846 VOST        |
| Iodomethane                 | 0.250           | 0.229              | ug        | 92                  |             | SW846 VOST        |
|                             | 0.250           | 0.231              | ug        | 92                  | 0.65        | SW846 VOST        |
| Isopropylbenzene            | 0.250           | 0.226              | ug        | 90                  |             | SW846 VOST        |
|                             | 0.250           | 0.228              | ug        | 91                  | 0.92        | SW846 VOST        |
| p-Isopropyltoluene          | 0.250           | 0.233              | ug        | 93                  |             | SW846 VOST        |
|                             | 0.250           | 0.225              | ug        | 90                  | 3.3         | SW846 VOST        |
| Methylene chloride          | 0.250           | 0.207              | ug        | 83                  |             | SW846 VOST        |
|                             | 0.250           | 0.209              | ug        | 84                  | 0.98        | SW846 VOST        |
| 4-Methyl-2-pentanone        | 1.00            | 0.683              | ug        | 68                  |             | SW846 VOST        |
|                             | 1.00            | 0.759              | ug        | 76                  | 10          | SW846 VOST        |
| Naphthalene                 | 0.250           | 0.190              | ug        | 76                  |             | SW846 VOST        |
|                             | 0.250           | 0.200              | ug        | 80                  | 5.3         | SW846 VOST        |
| n-Propylbenzene             | 0.250           | 0.234              | ug        | 94                  |             | SW846 VOST        |
|                             | 0.250           | 0.228              | ug        | 91                  | 2.8         | SW846 VOST        |
| Styrene                     | 0.250           | 0.182              | ug        | 73                  |             | SW846 VOST        |
|                             | 0.250           | 0.189              | ug        | 75                  | 3.8         | SW846 VOST        |
| 1,1,1,2-Tetrachloroethane   | 0.250           | 0.156              | ug        | 63                  |             | SW846 VOST        |
|                             | 0.250           | 0.165              | ug        | 66                  | 5.4         | SW846 VOST        |
| 1,1,2,2-Tetrachloroethane   | 0.250           | 0.141              | ug        | 57                  |             | SW846 VOST        |
|                             | 0.250           | 0.149              | ug        | 60                  | 5.2         | SW846 VOST        |
| Tetrachloroethene           | 0.250           | 0.223              | ug        | 89                  |             | SW846 VOST        |
|                             | 0.250           | 0.224              | ug        | 90                  | 0.54        | SW846 VOST        |
| <b>Toluene</b>              | <b>0.250</b>    | <b>0.217</b>       | <b>ug</b> | <b>87</b>           |             | <b>SW846 VOST</b> |
|                             | <b>0.250</b>    | <b>0.217</b>       | <b>ug</b> | <b>87</b>           | <b>0.40</b> | <b>SW846 VOST</b> |
| 1,2,3-Trichlorobenzene      | 0.250           | 0.182              | ug        | 73                  |             | SW846 VOST        |
|                             | 0.250           | 0.194              | ug        | 78                  | 6.7         | SW846 VOST        |
| 1,2,4-Trichloro-<br>benzene | 0.250           | 0.173              | ug        | 69                  |             | SW846 VOST        |
|                             | 0.250           | 0.191              | ug        | 76                  | 9.7         | SW846 VOST        |
| 1,1,1-Trichloroethane       | 0.250           | 0.247              | ug        | 99                  |             | SW846 VOST        |
|                             | 0.250           | 0.245              | ug        | 98                  | 0.56        | SW846 VOST        |
| 1,1,2-Trichloroethane       | 0.250           | 0.159              | ug        | 64                  |             | SW846 VOST        |
|                             | 0.250           | 0.167              | ug        | 67                  | 4.7         | SW846 VOST        |
| <b>Trichloroethene</b>      | <b>0.250</b>    | <b>0.237</b>       | <b>ug</b> | <b>95</b>           |             | <b>SW846 VOST</b> |
|                             | <b>0.250</b>    | <b>0.241</b>       | <b>ug</b> | <b>96</b>           | <b>1.5</b>  | <b>SW846 VOST</b> |
| Trichlorofluoromethane      | 0.250           | 0.244              | ug        | 98                  |             | SW846 VOST        |
|                             | 0.250           | 0.242              | ug        | 97                  | 0.70        | SW846 VOST        |

(Continued on next page)

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: H6D030169      Work Order #...: H2RM41AC-LCS      Matrix.....: AIR  
 LCS Lot-Sample#: H6D070000-054      H2RM41AD-LCSD

| PARAMETER              | SPIKE<br>AMOUNT | MEASURED<br>AMOUNT | UNITS | PERCENT<br>RECOVERY | RPD  | METHOD     |
|------------------------|-----------------|--------------------|-------|---------------------|------|------------|
| 1,2,3-Trichloropropane | 0.250           | 0.128              | ug    | 51                  |      | SW846 VOST |
|                        | 0.250           | 0.135              | ug    | 54                  | 5.2  | SW846 VOST |
| 1,2,4-Trimethylbenzene | 0.250           | 0.227              | ug    | 91                  |      | SW846 VOST |
|                        | 0.250           | 0.229              | ug    | 91                  | 0.65 | SW846 VOST |
| 1,3,5-Trimethylbenzene | 0.250           | 0.235              | ug    | 94                  |      | SW846 VOST |
|                        | 0.250           | 0.231              | ug    | 93                  | 1.4  | SW846 VOST |
| Vinyl chloride         | 0.250           | 0.262              | ug    | 105                 |      | SW846 VOST |
|                        | 0.250           | 0.260              | ug    | 104                 | 0.67 | SW846 VOST |
| m-Xylene & p-Xylene    | 0.500           | 0.439              | ug    | 88                  |      | SW846 VOST |
|                        | 0.500           | 0.444              | ug    | 89                  | 1.0  | SW846 VOST |
| o-Xylene               | 0.250           | 0.202              | ug    | 81                  |      | SW846 VOST |
|                        | 0.250           | 0.208              | ug    | 83                  | 2.7  | SW846 VOST |
| Xylenes (total)        | 0.750           | 0.641              | ug    | 86                  |      | SW846 VOST |
|                        | 0.750           | 0.651              | ug    | 87                  | 1.6  | SW846 VOST |

| SURROGATE             | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |
|-----------------------|---------------------|--------------------|
| Dibromofluoromethane  | 78                  | (50 - 134)         |
|                       | 80                  | (50 - 134)         |
| 1,2-Dichloroethane-d4 | 77                  | (50 - 134)         |
|                       | 79                  | (50 - 134)         |
| Toluene-d8            | 73                  | (57 - 127)         |
|                       | 75                  | (57 - 127)         |
| Bromofluorobenzene    | 64                  | (50 - 125)         |
|                       | 64                  | (50 - 125)         |

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

Data File: /chem/gcms/mx.i/X040706.b/h2rm41ac.d  
Report Date: 07-Apr-2006 10:18

## STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /chem/gcms/mx.i/X040706.b/h2rm41ac.d  
Lab Smp Id: H2RM41AC Client Smp ID: INTRA-LAB CHECK  
Inj Date : 07-APR-2006 10:02  
Operator : 22980 Inst ID: mx.i  
Smp Info : H2RM41AC,1,3,,,LCS  
Misc Info : X040706,8260B\_LM,all.sub  
Comment :  
Method : /chem/gcms/mx.i/X040706.b/8260B\_LM.m  
Meth Date : 07-Apr-2006 09:33 chemist Quant Type: ISTD  
Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
Als bottle: 1 QC Sample: METHOD SPIKE  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: all.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

*Handwritten signature*

|           |                              |           |        |        |         | CONCENTRATIONS |         |         |
|-----------|------------------------------|-----------|--------|--------|---------|----------------|---------|---------|
|           |                              | QUANT SIG |        |        |         | ON-COLUMN      | FINAL   |         |
| Compounds |                              | MASS      | RT     | EXP RT | REL RT  | RESPONSE       | ( ug/L) | ( ug)   |
| =====     |                              | =====     | ==     | =====  | =====   | =====          | =====   | =====   |
| *         | 1 Fluorobenzene              | 96        | 4.853  | 4.851  | (1.000) | 1307212        | 10.0000 |         |
| *         | 2 Chlorobenzene-d5           | 119       | 7.578  | 7.582  | (1.000) | 264393         | 10.0000 |         |
| *         | 3 1,4 Dichlorobenzene-d4     | 152       | 10.742 | 10.746 | (1.000) | 302267         | 10.0000 |         |
| \$        | 4 Dibromofluoromethane       | 113       | 4.269  | 4.273  | (0.880) | 172830         | 7.77629 | 0.19441 |
| \$        | 5 1,2-Dichloroethane-d4      | 65        | 4.555  | 4.553  | (0.939) | 133394         | 7.69984 | 0.19250 |
| \$        | 6 Toluene-d8                 | 98        | 6.252  | 6.250  | (0.825) | 950883         | 7.34571 | 0.18364 |
| \$        | 7 4-Bromofluorobenzene       | 95        | 8.874  | 8.872  | (0.826) | 228665         | 6.38040 | 0.15951 |
| M         | 8 1,2-Dichloroethene (total) | 96        |        |        |         | 540085         | 17.4610 | 0.43653 |
| M         | 9 Xylene (total)             | 106       |        |        |         | 1569742        | 25.6509 | 0.64127 |
|           | 10 Dichlorodifluoromethane   | 85        | 1.124  | 1.128  | (0.232) | 425206         | 10.2754 | 0.25688 |
|           | 11 Chloromethane (spcc)      | 50        | 1.252  | 1.262  | (0.258) | 673045         | 11.0515 | 0.27629 |
|           | 12 Vinyl Chloride (ccc)      | 62        | 1.337  | 1.335  | (0.275) | 497992         | 10.4793 | 0.26198 |
|           | 13 *1,3-Butadiene            | 39        | 1.367  | 1.369  | (0.282) | 512642         | 12.8459 | 0.32115 |
|           | 14 Bromomethane              | 94        | 1.580  | 1.590  | (0.326) | 172230         | 9.35138 | 0.23378 |
|           | 15 Chloroethane              | 64        | 1.665  | 1.669  | (0.343) | 251151         | 9.62221 | 0.24056 |
|           | 16 *Vinyl Bromide            | 106       | 1.817  | 1.825  | (0.374) | 224356         | 9.87603 | 0.24690 |
|           | 17 Trichlorofluoromethane    | 101       | 1.884  | 1.888  | (0.388) | 507369         | 9.75926 | 0.24398 |
|           | 18 *2-Chloropropane          | 43        | 2.207  | 2.208  | (0.455) | 816451         | 10.0901 | 0.25225 |
|           | 19 1,1-Dichloroethene (ccc)  | 96        | 2.328  | 2.326  | (0.480) | 265216         | 10.0784 | 0.25196 |
|           | 20 *Freon 113                | 151       | 2.347  | 2.351  | (0.484) | 205353         | 8.79466 | 0.21987 |



Data File: /chem/gcms/mx.i/X040706.b/h2rm41ac.d  
Report Date: 07-Apr-2006 10:18

| Compounds                    | QUANT SIG |       |        |         |          |           | CONCENTRATIONS |  |
|------------------------------|-----------|-------|--------|---------|----------|-----------|----------------|--|
|                              | MASS      | RT    | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL          |  |
| =====                        | =====     | ==    | =====  | =====   | =====    | ( ug/L)   | ( ug)          |  |
| 21 Acetone                   | 43        | 2.371 | 2.381  | (0.489) | 94567    | 51.0771   | 1.2769         |  |
| 22 *Iodomethane              | 142       | 2.438 | 2.442  | (0.502) | 302348   | 9.17105   | 0.22928        |  |
| 23 Carbon Disulfide          | 76        | 2.493 | 2.497  | (0.514) | 1038705  | 10.4262   | 0.26066        |  |
| 24 *2-propanol               | 45        | 2.554 | 2.537  | (0.526) | 37198    | 171.761   | 4.2940         |  |
| 25 *Acetonitrile             | 40        | 2.608 | 2.610  | (0.537) | 29471    | 83.2976   | 2.0824         |  |
| 26 Methylene Chloride        | 84        | 2.748 | 2.746  | (0.566) | 167526   | 8.28913   | 0.20723        |  |
| 27 *t-butanol                | 59        | 2.876 | 2.884  | (0.593) | 57853    | 239.305   | 5.9826         |  |
| 28 *Acrylonitrile            | 53        | 2.955 | 2.959  | (0.609) | 273377   | 105.250   | 2.6312 (R)     |  |
| 29 trans-1,2-Dichloroethene  | 96        | 2.992 | 2.989  | (0.616) | 283583   | 8.89047   | 0.22226        |  |
| 30 *MTBE                     | 73        | 2.992 | 3.005  | (0.616) | 17914    | 0.63519   | 0.015880       |  |
| 31 *Hexane                   | 57        | 3.247 | 3.255  | (0.669) | 1556241  | 24.1791   | 0.60448        |  |
| 32 1,1-Dichloroethane (spcc) | 63        | 3.350 | 3.354  | (0.690) | 597176   | 9.43596   | 0.23590        |  |
| 33 *Vinyl Acetate            | 86        | 3.411 | 3.421  | (0.703) | 21837    | 14.6859   | 0.36715        |  |
| 34 2,2-Dichloropropane       | 77        | 3.849 | 3.853  | (0.793) | 356584   | 6.21440   | 0.15536 (R)    |  |
| 35 cis 1,2-Dichloroethene    | 96        | 3.855 | 3.859  | (0.794) | 256501   | 8.57058   | 0.21426        |  |
| 36 2-Butanone                | 43        | 3.874 | 3.871  | (0.798) | 65858    | 22.8048   | 0.57012        |  |
| 37 Bromochloromethane        | 128       | 4.056 | 4.054  | (0.836) | 59860    | 7.60668   | 0.19017        |  |
| 38 *THF                      | 42        | 4.105 | 4.109  | (0.846) | 38574    | 21.7970   | 0.54492        |  |
| 39 Chloroform (ccc)          | 83        | 4.135 | 4.139  | (0.852) | 453038   | 9.11843   | 0.22796        |  |
| 40 1,1,1-Trichloroethane     | 97        | 4.287 | 4.291  | (0.883) | 548209   | 9.86947   | 0.24674        |  |
| 41 Carbon Tetrachloride      | 117       | 4.439 | 4.437  | (0.915) | 447832   | 9.54348   | 0.23859        |  |
| 42 1,1-Dichloropropene       | 75        | 4.433 | 4.437  | (0.914) | 532475   | 10.2882   | 0.25720        |  |
| 43 Benzene                   | 78        | 4.610 | 4.607  | (0.950) | 1223893  | 9.24466   | 0.23112 ✓      |  |
| 44 1,2-Dichloroethane        | 62        | 4.616 | 4.620  | (0.951) | 198113   | 8.89265   | 0.22232        |  |
| 45 Trichloroethene           | 130       | 5.176 | 5.173  | (1.066) | 336885   | 9.48344   | 0.23709 ✓      |  |
| 46 1,2-Dichloropropane (ccc) | 63        | 5.358 | 5.362  | (1.104) | 245734   | 8.79879   | 0.21997        |  |
| 47 *Methyl Methacrylate      | 41        | 5.480 | 5.481  | (1.129) | 70123    | 8.06355   | 0.20159        |  |
| 48 Dibromomethane            | 93        | 5.461 | 5.459  | (1.125) | 57006    | 7.68965   | 0.19224        |  |
| 49 Bromodichloromethane      | 83        | 5.607 | 5.605  | (1.155) | 236065   | 8.51105   | 0.21278        |  |
| 50 *2-Chloroethylvinylether  | 63        | 6.003 | 5.877  | (1.237) | 1523     | 0.25397   | 0.0063494      |  |
| 51 cis-1,3-Dichloropropene   | 75        | 6.003 | 6.007  | (1.237) | 260666   | 8.02486   | 0.20062        |  |
| 52 4-Methyl-2-pentanone      | 43        | 6.149 | 6.147  | (1.267) | 189091   | 27.3397   | 0.68349 (R)    |  |
| 53 Toluene (ccc)             | 91        | 6.313 | 6.311  | (0.833) | 1341374  | 8.66122   | 0.21653 ✓      |  |
| 54 trans-1,3-Dichloropropene | 75        | 6.508 | 6.506  | (0.859) | 169546   | 6.24626   | 0.15616 (R)    |  |
| 55 *Ethyl Methacrylate       | 69        | 6.605 | 6.607  | (0.872) | 91488    | 6.44334   | 0.16108        |  |
| 56 1,1,2-Trichloroethane     | 97        | 6.672 | 6.670  | (0.880) | 77788    | 6.35855   | 0.15896 (R)    |  |
| 57 Tetrachloroethene         | 164       | 6.818 | 6.816  | (0.900) | 296570   | 8.91238   | 0.22281        |  |
| 58 1,3-Dichloropropane       | 76        | 6.824 | 6.822  | (0.900) | 153428   | 6.57467   | 0.16437 (R)    |  |
| 59 2-Hexanone                | 43        | 6.903 | 6.907  | (0.911) | 119026   | 22.9991   | 0.57498        |  |
| 60 Chlorodibromomethane      | 129       | 7.037 | 7.035  | (0.929) | 97729    | 6.44772   | 0.16119 (R)    |  |
| 61 1,2-Dibromoethane         | 107       | 7.134 | 7.138  | (0.941) | 66873    | 5.86958   | 0.14674 (R)    |  |
| 62 Chlorobenzene (spcc)      | 112       | 7.609 | 7.607  | (1.004) | 621133   | 7.81289   | 0.19532 (R) ✓  |  |
| 63 1,1,1,2-Tetrachloroethane | 131       | 7.688 | 7.686  | (1.014) | 163790   | 6.25995   | 0.15650 (R)    |  |
| 64 Ethylbenzene (ccc)        | 106       | 7.718 | 7.716  | (1.018) | 476704   | 8.71851   | 0.21796        |  |
| 65 m&p-Xylene                | 106       | 7.834 | 7.838  | (1.034) | 1125560  | 17.5652   | 0.43913        |  |
| 66 o-Xylene                  | 106       | 8.248 | 8.251  | (1.088) | 444182   | 8.08571   | 0.20214        |  |
| 67 Styrene                   | 104       | 8.266 | 8.264  | (1.091) | 571844   | 7.26184   | 0.18154        |  |

Data File: /chem/gcms/mx.i/X040706.b/h2rm41ac.d  
 Report Date: 07-Apr-2006 10:18

| Compounds                           | QUANT SIG | MASS  | RT     | EXP RT | REL RT  | RESPONSE | CONCENTRATIONS |              |
|-------------------------------------|-----------|-------|--------|--------|---------|----------|----------------|--------------|
|                                     |           |       |        |        |         |          | ON-COLUMN      | FINAL        |
|                                     |           |       |        |        |         |          | ( ug/L)        | ( ug)        |
| =====                               | =====     | ===== | =====  | =====  | =====   | =====    | =====          | =====        |
| 68 Bromoform (spcc)                 |           | 173   | 8.461  | 8.464  | (1.116) | 41350    | 5.64470        | 0.14112 (R)  |
| 69 Isopropylbenzene                 |           | 105   | 8.692  | 8.689  | (1.147) | 1592463  | 9.03845        | 0.22596      |
| 70 *cis-1,4-dichloro-2-butene       |           | 88    | 8.759  | 8.754  | (1.156) | 17270    | 5.12246        | 0.12806      |
| 71 Bromobenzene                     |           | 156   | 9.069  | 9.067  | (1.197) | 174853   | 7.02546        | 0.17564      |
| 72 1,1,2,2-Tetrachloroethane (sp)   |           | 83    | 9.063  | 9.061  | (1.196) | 54923    | 5.65443        | 0.14136 (R)  |
| 73 1,2,3-Trichloropropane           |           | 110   | 9.118  | 9.115  | (0.849) | 14427    | 5.11282        | 0.12782 (R)  |
| 74 *trans-1,4-dichloro-2-butene     |           | 53    | 9.142  | 9.143  | (0.851) | 16309    | 5.43543        | 0.13588      |
| 75 n-Propylbenzene                  |           | 91    | 9.245  | 9.243  | (0.861) | 1949852  | 9.37746        | 0.23444      |
| 76 2-Chlorotoluene                  |           | 91    | 9.355  | 9.353  | (0.871) | 835903   | 7.83373        | 0.19584      |
| 77 1,3,5-Trimethylbenzene           |           | 105   | 9.507  | 9.511  | (0.885) | 1055504  | 9.39491        | 0.23487      |
| 78 4-Chlorotoluene                  |           | 91    | 9.513  | 9.511  | (0.886) | 909250   | 8.08094        | 0.20202      |
| 79 tert-Butylbenzene                |           | 119   | 10.036 | 10.034 | (0.934) | 1030982  | 8.69175        | 0.21729      |
| 80 1,2,4-Trimethylbenzene           |           | 105   | 10.121 | 10.125 | (0.942) | 886194   | 9.08710        | 0.22718      |
| 81 sec-Butylbenzene                 |           | 105   | 10.438 | 10.435 | (0.972) | 1642947  | 9.53625        | 0.23841      |
| 82 1,3-Dichlorobenzene              |           | 146   | 10.614 | 10.612 | (0.988) | 364691   | 7.16105        | 0.17903      |
| 83 p-Isopropyltoluene               |           | 119   | 10.736 | 10.734 | (0.999) | 1280420  | 9.31652        | 0.23291      |
| 84 1,4-Dichlorobenzene              |           | 146   | 10.784 | 10.788 | (1.004) | 324981   | 7.04618        | 0.17615      |
| 85 1,2-Dichlorobenzene              |           | 146   | 11.435 | 11.433 | (1.065) | 227304   | 6.21781        | 0.15544 (R)  |
| 86 n-Butylbenzene                   |           | 91    | 11.472 | 11.470 | (1.068) | 1339049  | 11.0787        | 0.27697      |
| 87 1,2-Dibromo-3-chloropropane      |           | 157   | 12.597 | 12.595 | (1.173) | 4566     | 3.03313        | 0.075828 (R) |
| 88 1,2,4-Trichlorobenzene           |           | 180   | 13.674 | 13.678 | (1.273) | 124754   | 6.93824        | 0.17346 (R)  |
| 89 Hexachlorobutadiene              |           | 225   | 13.905 | 13.909 | (1.294) | 218947   | 7.36331        | 0.18408      |
| 90 Napthalene                       |           | 128   | 13.948 | 13.946 | (1.298) | 99684    | 7.60077        | 0.19002      |
| 91 1,2,3-Trichlorobenzene           |           | 180   | 14.234 | 14.232 | (1.325) | 84468    | 7.27619        | 0.18190      |
| M 92 *1,4-dichloro-2-butene (total) |           | 53    |        |        |         | 33579    | 10.5579        | 0.26395      |

# QC Flag Legend

R - Spike/Surrogate failed recovery limits.

4/7/06

Data File: /chem/gcms/mx.i/X040706.b/h2rm41ac.d  
 Report Date: 07-Apr-2006 10:18

## STL Knoxville

 INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                   |                                |
|---------------------------------------------------|--------------------------------|
| Instrument ID: mx.i                               | Calibration Date: 07-APR-2006  |
| Lab File ID: h2rm41ac.d                           | Calibration Time: 09:16        |
| Lab Smp Id: H2RM41AC                              | Client Smp ID: INTRA-LAB CHECK |
| Analysis Type: VOA                                | Level: LOW                     |
| Quant Type: ISTD                                  | Sample Type: AIR               |
| Operator: 22980                                   |                                |
| Method File: /chem/gcms/mx.i/X040706.b/8260B_LM.m |                                |
| Misc Info: X040706,8260B_LM,all.sub               |                                |

| COMPOUND<br>=====   | STANDARD<br>===== | AREA LIMIT     |                | SAMPLE<br>===== | %DIFF<br>===== |
|---------------------|-------------------|----------------|----------------|-----------------|----------------|
|                     |                   | LOWER<br>===== | UPPER<br>===== |                 |                |
| 1 Fluorobenzene     | 1149191           | 574596         | 2298382        | 1307212         | 13.75          |
| 2 Chlorobenzene-d5  | 214194            | 107097         | 428388         | 264393          | 23.44          |
| 3 1,4 Dichlorobenze | 242601            | 121300         | 485202         | 302267          | 24.59          |

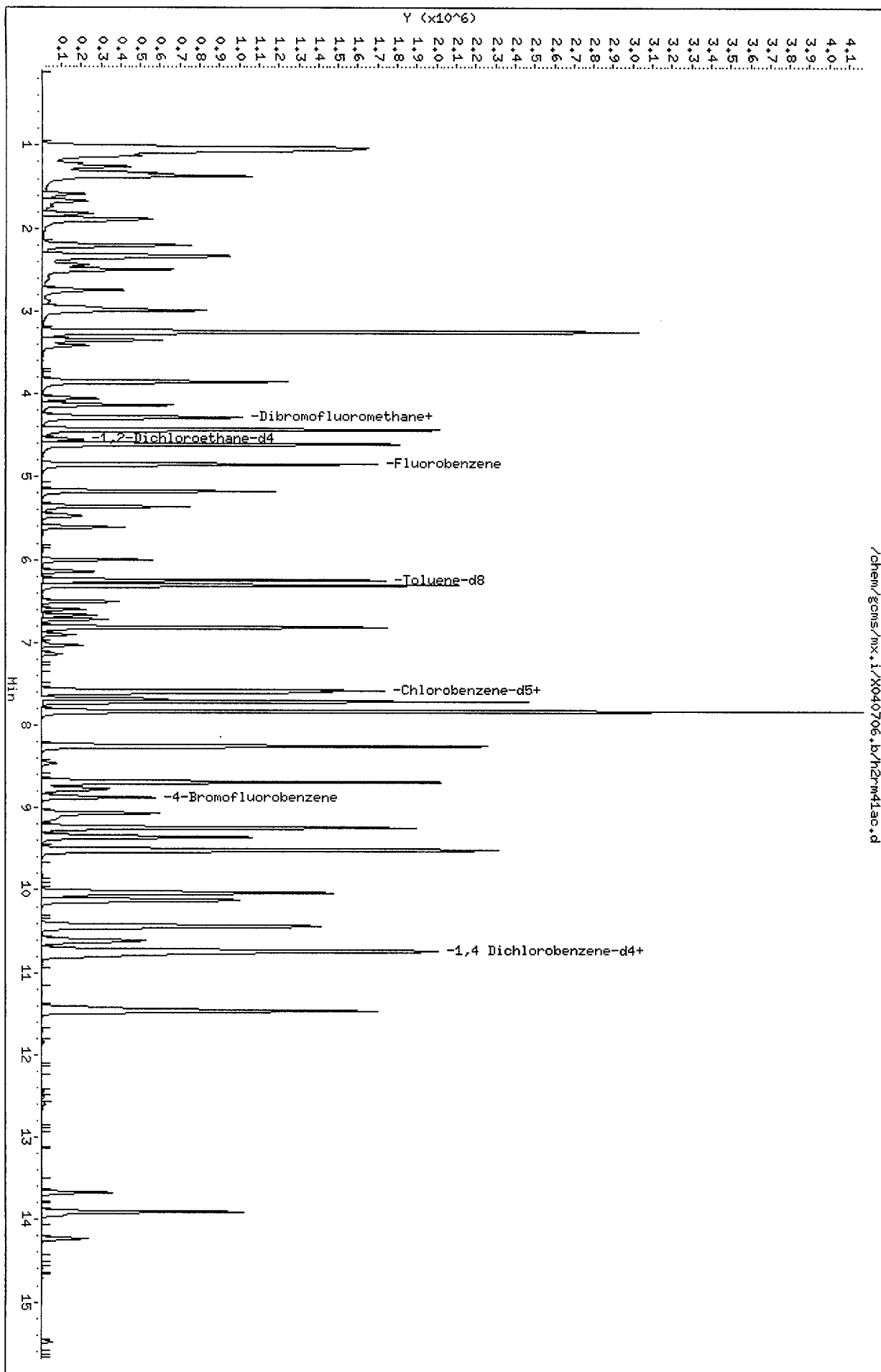
| COMPOUND<br>=====   | STANDARD<br>===== | RT LIMIT       |                | SAMPLE<br>===== | %DIFF<br>===== |
|---------------------|-------------------|----------------|----------------|-----------------|----------------|
|                     |                   | LOWER<br>===== | UPPER<br>===== |                 |                |
| 1 Fluorobenzene     | 4.85              | 4.35           | 5.35           | 4.85            | 0.05           |
| 2 Chlorobenzene-d5  | 7.58              | 7.08           | 8.08           | 7.58            | -0.05          |
| 3 1,4 Dichlorobenze | 10.75             | 10.25          | 11.25          | 10.74           | -0.04          |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/gcms/mx.i/X040706.b/h2m41ac.d  
Date : 07-APR-2006 10:02  
Client ID: INTRA-LAB CHECK  
Sample Info: H2RH41AC,1,3,,LCS

Column phase: J+W 624

Instrument: mx.i  
Operator: 22980  
Column diameter: 0.18



Data File: /chem/gcms/mx.i/X040706.b/h2rm41ad.d  
Report Date: 07-Apr-2006 10:49

## STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /chem/gcms/mx.i/X040706.b/h2rm41ad.d  
Lab Smp Id: H2RM41AD Client Smp ID: INTRA-LAB CHECK  
Inj Date : 07-APR-2006 10:33  
Operator : 22980 Inst ID: mx.i  
Smp Info : H2RM41AD,1,3,,,LCSD  
Misc Info : X040706,8260B\_LM,all.sub  
Comment :  
Method : /chem/gcms/mx.i/X040706.b/8260B\_LM.m  
Meth Date : 07-Apr-2006 09:33 chemist Quant Type: ISTD  
Cal Date : 15-FEB-2006 14:58 Cal File: icxb151.d  
Als bottle: 1 QC Sample: METHOD SPIKE  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: all.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

*04/06*

| Compounds                      | QUANT SIG |        |        |         |          |           | CONCENTRATIONS |  |
|--------------------------------|-----------|--------|--------|---------|----------|-----------|----------------|--|
|                                | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN | FINAL          |  |
|                                | =====     | ==     | =====  | =====   | =====    | ( ug/L)   | ( ug)          |  |
| * 1 Fluorobenzene              | 96        | 4.853  | 4.851  | (1.000) | 1284100  | 10.0000   |                |  |
| * 2 Chlorobenzene-d5           | 119       | 7.578  | 7.582  | (1.000) | 259320   | 10.0000   |                |  |
| * 3 1,4 Dichlorobenzene-d4     | 152       | 10.742 | 10.746 | (1.000) | 309253   | 10.0000   |                |  |
| \$ 4 Dibromofluoromethane      | 113       | 4.269  | 4.273  | (0.880) | 173760   | 7.95882   | 0.19897        |  |
| \$ 5 1,2-Dichloroethane-d4     | 65        | 4.549  | 4.553  | (0.937) | 135164   | 7.94243   | 0.19856        |  |
| \$ 6 Toluene-d8                | 98        | 6.252  | 6.250  | (0.825) | 958163   | 7.54676   | 0.18867        |  |
| \$ 7 4-Bromofluorobenzene      | 95        | 8.874  | 8.872  | (0.826) | 236333   | 6.44541   | 0.16114        |  |
| M 8 1,2-Dichloroethene (total) | 96        |        |        |         | 540427   | 17.7943   | 0.44486        |  |
| M 9 Xylene (total)             | 106       |        |        |         | 1563147  | 26.0570   | 0.65143        |  |
| 10 Dichlorodifluoromethane     | 85        | 1.124  | 1.128  | (0.232) | 399453   | 9.82680   | 0.24567        |  |
| 11 Chloromethane (spcc)        | 50        | 1.252  | 1.262  | (0.258) | 620764   | 10.3765   | 0.25941        |  |
| 12 Vinyl Chloride (ccc)        | 62        | 1.337  | 1.335  | (0.275) | 485915   | 10.4092   | 0.26023        |  |
| 13 *1,3-Butadiene              | 39        | 1.367  | 1.369  | (0.282) | 500545   | 12.7685   | 0.31921        |  |
| 14 Bromomethane                | 94        | 1.586  | 1.590  | (0.327) | 166622   | 9.20972   | 0.23024        |  |
| 15 Chloroethane                | 64        | 1.665  | 1.669  | (0.343) | 250936   | 9.78702   | 0.24468        |  |
| 16 *Vinyl Bromide              | 106       | 1.817  | 1.825  | (0.374) | 217276   | 9.73651   | 0.24341        |  |
| 17 Trichlorofluoromethane      | 101       | 1.884  | 1.888  | (0.388) | 494882   | 9.69040   | 0.24226        |  |
| 18 *2-Chloropropane            | 43        | 2.207  | 2.208  | (0.455) | 792536   | 9.97083   | 0.24927        |  |
| 19 1,1-Dichloroethene (ccc)    | 96        | 2.322  | 2.326  | (0.479) | 254788   | 9.85637   | 0.24641        |  |
| 20 *Freon 113                  | 151       | 2.347  | 2.351  | (0.484) | 204118   | 8.89915   | 0.22248        |  |

Data File: /chem/gcms/mx.i/X040706.b/h2rm41ad.d

Report Date: 07-Apr-2006 10:49

| Compounds                    | QUANT SIG | MASS  | RT    | EXP RT | REL RT  | RESPONSE | CONCENTRATIONS |            |
|------------------------------|-----------|-------|-------|--------|---------|----------|----------------|------------|
|                              |           |       |       |        |         |          | ON-COLUMN      | FINAL      |
|                              |           |       |       |        |         |          | ( ug/L)        | ( ug)      |
| =====                        | =====     | ===== | ===== | =====  | =====   | =====    | =====          | =====      |
| 21 Acetone                   |           | 43    | 2.377 | 2.381  | (0.490) | 92382    | 50.7950        | 1.2699     |
| 22 *Iodomethane              |           | 142   | 2.438 | 2.442  | (0.502) | 298962   | 9.23158        | 0.23079    |
| 23 Carbon Disulfide          |           | 76    | 2.493 | 2.497  | (0.514) | 1006509  | 10.2849        | 0.25712    |
| 24 *2-propanol               |           | 45    | 2.547 | 2.537  | (0.525) | 26615    | 128.467        | 3.2117     |
| 25 *Acetonitrile             |           | 40    | 2.614 | 2.610  | (0.539) | 19837    | 57.0774        | 1.4269     |
| 26 Methylene Chloride        |           | 84    | 2.742 | 2.746  | (0.565) | 166195   | 8.37127        | 0.20928    |
| 27 *t-butanol                |           | 59    | 2.876 | 2.884  | (0.593) | 38717    | 170.222        | 4.2555     |
| 28 *Acrylonitrile            |           | 53    | 2.955 | 2.959  | (0.609) | 274230   | 107.478        | 2.6870(R)  |
| 29 trans-1,2-Dichloroethene  |           | 96    | 2.992 | 2.989  | (0.616) | 280089   | 8.93897        | 0.22347    |
| 30 *MTBE                     |           | 73    | 2.992 | 3.005  | (0.616) | 20167    | 0.72793        | 0.018198   |
| 31 *Hexane                   |           | 57    | 3.247 | 3.255  | (0.669) | 1538055  | 24.3267        | 0.60817    |
| 32 1,1-Dichloroethane (spcc) |           | 63    | 3.350 | 3.354  | (0.690) | 604234   | 9.71933        | 0.24298    |
| 33 *Vinyl Acetate            |           | 86    | 3.411 | 3.421  | (0.703) | 21491    | 14.7134        | 0.36783    |
| 34 2,2-Dichloropropane       |           | 77    | 3.849 | 3.853  | (0.793) | 364722   | 6.47065        | 0.16177(R) |
| 35 cis 1,2-Dichloroethene    |           | 96    | 3.855 | 3.859  | (0.794) | 260338   | 8.85534        | 0.22138    |
| 36 2-Butanone                |           | 43    | 3.874 | 3.871  | (0.798) | 76477    | 26.9582        | 0.67395    |
| 37 Bromochloromethane        |           | 128   | 4.056 | 4.054  | (0.836) | 59351    | 7.67778        | 0.19194    |
| 38 *THF                      |           | 42    | 4.105 | 4.109  | (0.846) | 37436    | 21.5347        | 0.53837    |
| 39 Chloroform (ccc)          |           | 83    | 4.135 | 4.139  | (0.852) | 459644   | 9.41791        | 0.23545    |
| 40 1,1,1-Trichloroethane     |           | 97    | 4.287 | 4.291  | (0.883) | 535502   | 9.81424        | 0.24536    |
| 41 Carbon Tetrachloride      |           | 117   | 4.439 | 4.437  | (0.915) | 441754   | 9.58341        | 0.23958    |
| 42 1,1-Dichloropropene       |           | 75    | 4.433 | 4.437  | (0.914) | 515882   | 10.1470        | 0.25368    |
| 43 Benzene                   |           | 78    | 4.610 | 4.607  | (0.950) | 1202029  | 9.24294        | 0.23107    |
| 44 1,2-Dichloroethane        |           | 62    | 4.616 | 4.620  | (0.951) | 200683   | 9.17018        | 0.22925    |
| 45 Trichloroethene           |           | 130   | 5.176 | 5.173  | (1.066) | 335906   | 9.62607        | 0.24065    |
| 46 1,2-Dichloropropane (ccc) |           | 63    | 5.358 | 5.362  | (1.104) | 249719   | 9.10243        | 0.22756    |
| 47 *Methyl Methacrylate      |           | 41    | 5.480 | 5.481  | (1.129) | 73498    | 8.60369        | 0.21509    |
| 48 Dibromomethane            |           | 93    | 5.461 | 5.459  | (1.125) | 57510    | 7.89727        | 0.19743    |
| 49 Bromodichloromethane      |           | 83    | 5.607 | 5.605  | (1.155) | 243650   | 8.94263        | 0.22356    |
| 50 *2-Chloroethylvinylether  |           | 63    | 5.869 | 5.877  | (1.209) | 261      | 0.04440        | 0.0011100  |
| 51 cis-1,3-Dichloropropene   |           | 75    | 6.003 | 6.007  | (1.237) | 268879   | 8.42669        | 0.21067    |
| 52 4-Methyl-2-pentanone      |           | 43    | 6.143 | 6.147  | (1.266) | 206243   | 30.3563        | 0.75891    |
| 53 Toluene (ccc)             |           | 91    | 6.313 | 6.311  | (0.833) | 1320965  | 8.69631        | 0.21741    |
| 54 trans-1,3-Dichloropropene |           | 75    | 6.508 | 6.506  | (0.859) | 180020   | 6.76188        | 0.16905(R) |
| 55 *Ethyl Methacrylate       |           | 69    | 6.599 | 6.607  | (0.871) | 98426    | 7.06761        | 0.17669    |
| 56 1,1,2-Trichloroethane     |           | 97    | 6.672 | 6.670  | (0.880) | 79979    | 6.66556        | 0.16664(R) |
| 57 Tetrachloroethene         |           | 164   | 6.818 | 6.816  | (0.900) | 292474   | 8.96123        | 0.22403    |
| 58 1,3-Dichloropropane       |           | 76    | 6.824 | 6.822  | (0.900) | 157573   | 6.88439        | 0.17211(R) |
| 59 2-Hexanone                |           | 43    | 6.903 | 6.907  | (0.911) | 136947   | 26.9797        | 0.67449    |
| 60 Chlorodibromomethane      |           | 129   | 7.031 | 7.035  | (0.928) | 101962   | 6.85860        | 0.17146(R) |
| 61 1,2-Dibromoethane         |           | 107   | 7.134 | 7.138  | (0.941) | 69578    | 6.22652        | 0.15566(R) |
| 62 Chlorobenzene (spcc)      |           | 112   | 7.609 | 7.607  | (1.004) | 636409   | 8.16165        | 0.20404    |
| 63 1,1,1,2-Tetrachloroethane |           | 131   | 7.688 | 7.686  | (1.014) | 169544   | 6.60663        | 0.16516(R) |
| 64 Ethylbenzene (ccc)        |           | 106   | 7.718 | 7.716  | (1.018) | 478836   | 8.92884        | 0.22322    |
| 65 m&p-Xylene                |           | 106   | 7.834 | 7.838  | (1.034) | 1115487  | 17.7486        | 0.44371    |
| 66 o-Xylene                  |           | 106   | 8.248 | 8.251  | (1.088) | 447660   | 8.30845        | 0.20771    |
| 67 Styrene                   |           | 104   | 8.260 | 8.264  | (1.090) | 582893   | 7.54697        | 0.18867    |

Data File: /chem/gcms/mx.i/X040706.b/h2rm41ad.d

Report Date: 07-Apr-2006 10:49

| Compounds                          | QUANT SIG | MASS  | RT     | EXP RT | REL RT  | RESPONSE | CONCENTRATIONS |             |
|------------------------------------|-----------|-------|--------|--------|---------|----------|----------------|-------------|
|                                    |           |       |        |        |         |          | ON-COLUMN      | FINAL       |
|                                    |           |       |        |        |         |          | ( ug/L)        | ( ug)       |
| =====                              | =====     | ===== | =====  | =====  | =====   | =====    | =====          | =====       |
| 68 Bromoform (spcc)                |           | 173   | 8.467  | 8.464  | (1.117) | 42691    | 5.94172        | 0.14854     |
| 69 Isopropylbenzene                |           | 105   | 8.692  | 8.689  | (1.147) | 1576466  | 9.12271        | 0.22807     |
| 70 *cis-1,4-dichloro-2-butene      |           | 88    | 8.753  | 8.754  | (1.155) | 17701    | 5.35304        | 0.13382     |
| 71 Bromobenzene                    |           | 156   | 9.069  | 9.067  | (1.197) | 181093   | 7.41853        | 0.18546     |
| 72 1,1,2,2-Tetrachloroethane(sp)   |           | 83    | 9.063  | 9.061  | (1.196) | 56726    | 5.95433        | 0.14886(R)  |
| 73 1,2,3-Trichloropropane          |           | 110   | 9.118  | 9.115  | (0.849) | 15542    | 5.38344        | 0.13458(R)  |
| 74 *trans-1,4-dichloro-2-butene    |           | 53    | 9.148  | 9.143  | (0.852) | 18227    | 5.93736        | 0.14843     |
| 75 n-Propylbenzene                 |           | 91    | 9.239  | 9.243  | (0.860) | 1940004  | 9.11934        | 0.22798     |
| 76 2-Chlorotoluene                 |           | 91    | 9.355  | 9.353  | (0.871) | 850846   | 7.79364        | 0.19484     |
| 77 1,3,5-Trimethylbenzene          |           | 105   | 9.513  | 9.511  | (0.886) | 1064366  | 9.25978        | 0.23149     |
| 78 4-Chlorotoluene                 |           | 91    | 9.513  | 9.511  | (0.886) | 929595   | 8.07513        | 0.20188     |
| 79 tert-Butylbenzene               |           | 119   | 10.036 | 10.034 | (0.934) | 1029665  | 8.48456        | 0.21211     |
| 80 1,2,4-Trimethylbenzene          |           | 105   | 10.121 | 10.125 | (0.942) | 912633   | 9.14680        | 0.22867     |
| 81 sec-Butylbenzene                |           | 105   | 10.438 | 10.435 | (0.972) | 1631421  | 9.25544        | 0.23139     |
| 82 1,3-Dichlorobenzene             |           | 146   | 10.614 | 10.612 | (0.988) | 374897   | 7.19517        | 0.17988     |
| 83 p-Isopropyltoluene              |           | 119   | 10.736 | 10.734 | (0.999) | 1267546  | 9.01451        | 0.22536     |
| 84 1,4-Dichlorobenzene             |           | 146   | 10.791 | 10.788 | (1.005) | 340583   | 7.21765        | 0.18044     |
| 85 1,2-Dichlorobenzene             |           | 146   | 11.429 | 11.433 | (1.064) | 239901   | 6.41415        | 0.16035(R)  |
| 86 n-Butylbenzene                  |           | 91    | 11.466 | 11.470 | (1.067) | 1325683  | 10.7204        | 0.26801     |
| 87 1,2-Dibromo-3-chloropropane     |           | 157   | 12.597 | 12.595 | (1.173) | 5202     | 3.37736        | 0.084434(R) |
| 88 1,2,4-Trichlorobenzene          |           | 180   | 13.674 | 13.678 | (1.273) | 140637   | 7.64488        | 0.19112     |
| 89 Hexachlorobutadiene             |           | 225   | 13.905 | 13.909 | (1.294) | 232174   | 7.63178        | 0.19079     |
| 90 Napthalene                      |           | 128   | 13.948 | 13.946 | (1.298) | 107502   | 8.01175        | 0.20029     |
| 91 1,2,3-Trichlorobenzene          |           | 180   | 14.234 | 14.232 | (1.325) | 92390    | 7.77881        | 0.19447     |
| M 92 *1,4-dichloro-2-butene(total) |           | 53    |        |        |         | 35928    | 11.2904        | 0.28226     |

## QC Flag Legend

R - Spike/Surrogate failed recovery limits.

24/7/07

Data File: /chem/gcms/mx.i/X040706.b/h2rm41ad.d  
 Report Date: 07-Apr-2006 10:49

## STL Knoxville

 INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

|                                                   |                                |
|---------------------------------------------------|--------------------------------|
| Instrument ID: mx.i                               | Calibration Date: 07-APR-2006  |
| Lab File ID: h2rm41ad.d                           | Calibration Time: 09:16        |
| Lab Smp Id: H2RM41AD                              | Client Smp ID: INTRA-LAB CHECK |
| Analysis Type: VOA                                | Level: LOW                     |
| Quant Type: ISTD                                  | Sample Type: AIR               |
| Operator: 22980                                   |                                |
| Method File: /chem/gcms/mx.i/X040706.b/8260B_LM.m |                                |
| Misc Info: X040706,8260B_LM,all.sub               |                                |

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE  | %DIFF |
|---------------------|----------|------------|---------|---------|-------|
|                     |          | LOWER      | UPPER   |         |       |
| 1 Fluorobenzene     | 1149191  | 574596     | 2298382 | 1284100 | 11.74 |
| 2 Chlorobenzene-d5  | 214194   | 107097     | 428388  | 259320  | 21.07 |
| 3 1,4 Dichlorobenze | 242601   | 121300     | 485202  | 309253  | 27.47 |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 4.85     | 4.35     | 5.35  | 4.85   | 0.05  |
| 2 Chlorobenzene-d5  | 7.58     | 7.08     | 8.08  | 7.58   | -0.05 |
| 3 1,4 Dichlorobenze | 10.75    | 10.25    | 11.25 | 10.74  | -0.04 |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: /chem/gcms/mx.i/X040706.b/h2rm41ad.d

Date : 07-APR-2006 10:33

Client ID: INTRA-LAB CHECK

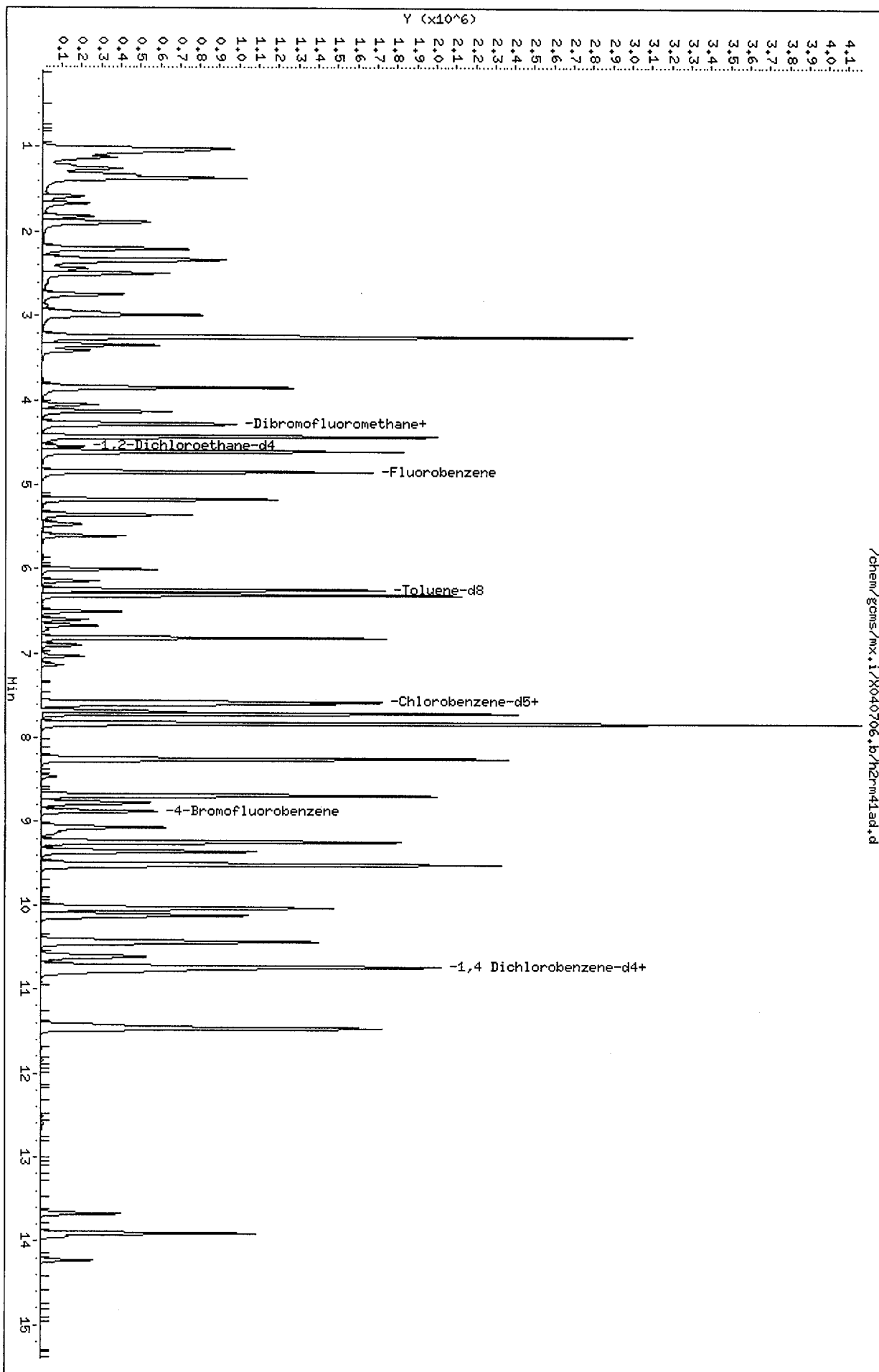
Sample Info: HERH41AD-1,3,,LCSD

Column phase: J+M 624

Instrument: mx.i

Operator: 22980

Column diameter: 0.18



# Miscellaneous Data

|                     |                 |                 |                 |  |  |  |
|---------------------|-----------------|-----------------|-----------------|--|--|--|
| Instrument:         | <u>W17</u>      | <u>MX</u>       | <u>MX</u>       |  |  |  |
| Scanned File Names: | <u>2032106I</u> | <u>X021506I</u> | <u>X050306</u>  |  |  |  |
|                     | <u>20410506</u> | <u>X040705</u>  | <u>X040706R</u> |  |  |  |
|                     | <u>2040706</u>  |                 | <u>X050906</u>  |  |  |  |
|                     |                 |                 |                 |  |  |  |
|                     |                 |                 |                 |  |  |  |
|                     |                 |                 |                 |  |  |  |
|                     |                 |                 |                 |  |  |  |

| Review Items                                                                                                                                                                                                                                                                                    |  |  |  | N/A | Yes | No | Why is data reportable?                                                                                                                                                                                                                                                                  | 2nd<br>✓ |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|-----|-----|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>A. Tune / Calibration</b>                                                                                                                                                                                                                                                                    |  |  |  |     |     |    |                                                                                                                                                                                                                                                                                          |          |
| 1. Were all samples injected within 12 hr of BFB?                                                                                                                                                                                                                                               |  |  |  |     | ✓   |    |                                                                                                                                                                                                                                                                                          | ✓        |
| 2. Has a Continuing Calibration Checklist been completed for each analytical batch?                                                                                                                                                                                                             |  |  |  |     | ✓   |    |                                                                                                                                                                                                                                                                                          | ✓        |
| 3. Was the correct ICAL used for quantitation?                                                                                                                                                                                                                                                  |  |  |  |     | ✓   |    |                                                                                                                                                                                                                                                                                          | ✓        |
| <b>B. CLIENT SAMPLE AND QC SAMPLE Results</b>                                                                                                                                                                                                                                                   |  |  |  |     |     |    |                                                                                                                                                                                                                                                                                          |          |
| 1. Were all special project requirements met?                                                                                                                                                                                                                                                   |  |  |  |     | ✓   |    |                                                                                                                                                                                                                                                                                          | ✓        |
| 2. Were prep/dilution factors & header information verified?                                                                                                                                                                                                                                    |  |  |  |     | ✓   |    |                                                                                                                                                                                                                                                                                          | ✓        |
| 3. Was date/time of analysis verified between analysis header and logbook as correct?                                                                                                                                                                                                           |  |  |  |     | ✓   |    |                                                                                                                                                                                                                                                                                          | ✓        |
| 4. Sample analyses done within preparation and analytical holding time (HT)?<br>If no, list samples: _____                                                                                                                                                                                      |  |  |  |     | ✓   |    | [ht1] HT expired upon receipt.<br>[ht2] Client requested analysis after HT expired.*                                                                                                                                                                                                     | ✓        |
| 5. Are surrogates and internal standards within QC limits?<br>If no, list samples and reason (e.g., sur1):<br><div style="display: flex; justify-content: space-between;"> <div> Sample <u>A3, 5, 23, 25, 27</u><br/>Reason <u>Sur</u> </div> <div> Sample _____<br/>Reason _____ </div> </div> |  |  |  |     |     | ✓  | [sur7] Obvious matrix interference.<br>[sur12] Surr.%R high and all targets ND.<br>[sur13] Reanalysis not possible.<br>[sur14] Entire sample consumed.<br>[isb1] Sample bracketed by acceptable runs.<br>[isb4] IS and associated surr. %R out, but sample bracketed by acceptable runs. | ✓        |
| 6. Are internal standards <0.5min of last CCAL?                                                                                                                                                                                                                                                 |  |  |  |     | ✓   |    |                                                                                                                                                                                                                                                                                          | ✓        |
| 7. Were positive hits evaluated using qualitative identification criteria and technical judgement?                                                                                                                                                                                              |  |  |  |     | ✓   |    |                                                                                                                                                                                                                                                                                          | ✓        |
| 8. Are positive results within calibration range?<br>If no, list samples: <u>A3, 5, 23, 25, 27</u>                                                                                                                                                                                              |  |  |  |     | ✓   |    | [vost] Conc. of several compounds > calibration range. Dilutions not possible due to the nature of the analysis.                                                                                                                                                                         | ✓        |
| 11. If manual integrations were performed, are they clearly identified, initialed, dated and reason given?                                                                                                                                                                                      |  |  |  |     | ✓   |    | Reasons: 1)Corrected split peak; 2)Unresolved peak; 3)tailg; 4)RT shift; 5)wrong peak selected; 6)other                                                                                                                                                                                  | ✓        |
| 12. Have alternate hits and manual integrations been verified as correct?                                                                                                                                                                                                                       |  |  |  | ✓   |     |    |                                                                                                                                                                                                                                                                                          | ✓        |
| <b>C. Preparation/Matrix QC</b>                                                                                                                                                                                                                                                                 |  |  |  |     |     |    |                                                                                                                                                                                                                                                                                          |          |
| 1. LCS done per prep batch and all analytes within laboratory established QC limits?<br>If no, list LCS ID: _____                                                                                                                                                                               |  |  |  |     | ✓   |    | [lcs3] LCS %R high and all analyte(s) were <RL in associated samples.<br>[lcs4] Reanalysis not possible.                                                                                                                                                                                 | ✓        |
| 2. Method blank done per prep batch and method blank or instrument blank analyzed with each sequence?                                                                                                                                                                                           |  |  |  |     | ✓   |    |                                                                                                                                                                                                                                                                                          | ✓        |
| 3. Method blank surrogate recoveries within QC limits?                                                                                                                                                                                                                                          |  |  |  |     | ✓   |    | [mb1] All sample surrogates OK and there is no analyte >RL in samples associated with blank.*<br>[mb7] Entire sample consumed.                                                                                                                                                           | ✓        |
| 4. Are all analytes present in the method blank ≤ RL?<br>If no, list blank ID: _____                                                                                                                                                                                                            |  |  |  |     | ✓   |    | [mb2] Common lab contaminant <5x RL.*<br>[mb3] No analyte > RL in associated samples.*<br>[mb4] Sample results > 20x higher than blank.<br>[mb7] Reanalysis not possible.                                                                                                                | ✓        |

| Review Items                                                                                                                                                                                           |     |    |                         |  | 2nd |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|-------------------------|--|-----|
| D. Other                                                                                                                                                                                               |     |    |                         |  | ✓   |
| N/A                                                                                                                                                                                                    | Yes | No | Why is data reportable? |  |     |
|                                                                                                                                                                                                        | ✓   |    | 08-06127                |  | ✓   |
| 1. Are all nonconformances documented appropriately and copy included with deliverable?                                                                                                                |     |    |                         |  | ✓   |
| 2. Are the correct scanned file names listed at the top of the data review checklist?                                                                                                                  | ✓   |    |                         |  | ✓   |
| 3. Were the standards scanned properly with runlogs?                                                                                                                                                   | ✓   |    |                         |  | ✓   |
| 4. Final report acceptable? (Results correct, RLs calculated correctly, units correct, surrogate %R correct, appropriate flags used, dilution factor correct, and extraction/ analysis dates correct.) | ✓   |    |                         |  | ✓   |
| 5. Was a narrative prepared and all deviations noted?                                                                                                                                                  | ✓   |    |                         |  | ✓   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                      |                                           |                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------------------------|---------------------|
| Analyst: <i>LM</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Date: <i>4/19/06</i> | 2 <sup>nd</sup> Level Reviewer: <i>LM</i> | Date: <i>042406</i> |
| Comments:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                      | Comments:                                 |                     |
| <p>Batch QC for Condensates (ms/msd)<br/>Outside Limits Batch 6095253<br/>15T, 115t</p> <p>5/11/06: See NCM # 08-06213 for discussion of the following:</p> <ul style="list-style-type: none"> <li>• 5 samples were over the cal range for PCB/CLBZ (analyzed 4/7/06)</li> <li>• An extended curve analyzed on 5/3/06 for these two analytes</li> <li>• the 5 samples were requantitated against the new curve (reported as -ZAA)</li> <li>• A VOST tube was spiked in the upper range of the new curve &amp; included in the "Miscellaneous" section of data pkg.</li> </ul> <p><i>LM</i> 5/11/06</p> |                      | <p>✓ 05/11/06 (Zinc-work 5 samples)</p>   |                     |

RQC058

Severn Trent Laboratories, Inc.  
EXTRACTION BENCH WORKSHEETRun Date: 4/05/06  
Time: 11:59:17

| LEV | LEV | LEV    | LEV |
|-----|-----|--------|-----|
| 1   | 2   | 1      | 2   |
| -   | -   | Blank  | -   |
| -   | -   | Check  | -   |
| -   | -   | MS/MSD | -   |

Weights/Volumes  
Spike & Surrogate Worksheet  
Vial contains correct volume  
Labels, greenbars, worksheets  
computer batch: correct & all match  
Anomalies to Extraction Method

Expanded Deliverable  
COC Completed  
Bench Sheet Copied  
Package Submitted to Analytical Group  
Bench Sheet Copied per COC

Extractionist: \_\_\_\_\_

Concentrationist: \_\_\_\_\_

\*\*\*\*\*  
\* QC BATCH: 6095253 \*  
\* PREP DATE: 4/05/06 12:00  
\* COMP DATE: 4/05/06 24:00  
\*\*\*\*\*

Reviewer/Date: \_\_\_\_\_ / 0/00/00

Volatile Organics, GC/MS (8260B)  
PURGE AND TRAP ~ 25 mL purge (Waters)

| EXTR      | ANL     | LOT#,MSRUN#/<br>DUE WORK ORDER | TEST<br>FLGS | EXT | MTH | MATRIX | INIT/FIN<br>WT/VOL | PH <sup>NS</sup><br>INIT | ADJ1 | ADJ2 | EXTRACTION<br>VOL | SOLVENTS<br>VOL EXCHANGE | SPIKE STANDARD/<br>SURROGATE ID |
|-----------|---------|--------------------------------|--------------|-----|-----|--------|--------------------|--------------------------|------|------|-------------------|--------------------------|---------------------------------|
| 0/00/00   | 4/18/06 | H6C150102-001<br>H0857-2-AA    |              | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA                       | NA   | NA   | .0                | .0                       | .0                              |
| COMMENTS: |         |                                |              |     |     |        |                    |                          |      |      |                   |                          |                                 |
| 0/00/00   | 4/18/06 | H6C150102-002<br>H0858-2-AA    |              | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA                       | NA   | NA   | .0                | .0                       | .0                              |
| COMMENTS: |         |                                |              |     |     |        |                    |                          |      |      |                   |                          |                                 |
| 0/00/00   | 4/13/06 | H6D030104-002<br>H2GKV-1-AA    | D 25         | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA                       | NA   | NA   | .0                | .0                       | .0                              |
| COMMENTS: |         |                                |              |     |     |        |                    |                          |      |      |                   |                          |                                 |
| 0/00/00   | 4/13/06 | H6D030104-005<br>H2GK2-1-AA    | D 25         | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA                       | NA   | NA   | .0                | .0                       | .0                              |
| COMMENTS: |         |                                |              |     |     |        |                    |                          |      |      |                   |                          |                                 |
| 0/00/00   | 4/13/06 | H6D030104-018<br>H2GMA-1-AA    | D 25         | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA                       | NA   | NA   | .0                | .0                       | .0                              |
| COMMENTS: |         |                                |              |     |     |        |                    |                          |      |      |                   |                          |                                 |
| 0/00/00   | 4/13/06 | H6D030104-019<br>H2GMD-1-AA    | D 25         | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA                       | NA   | NA   | .0                | .0                       | .0                              |
| COMMENTS: |         |                                |              |     |     |        |                    |                          |      |      |                   |                          |                                 |
| 0/00/00   | 4/24/06 | H6D030169-009<br>H2G9H-1-AA    | D 25         | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA                       | NA   | NA   | .0                | .0                       | .0                              |
| COMMENTS: |         |                                |              |     |     |        |                    |                          |      |      |                   |                          |                                 |

RQC058

Severn Trent Laboratories, Inc.  
EXTRACTION BENCH WORKSHEETRun Date: 4/05/06  
Time: 11:59:17

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\* QC BATCH: 6095253 \*  
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PREP DATE: 4/05/06 12:00  
COMP DATE: 4/05/06 24:00

| EXTR<br>EXPR         | ANL<br>DUE | LOT#,MSRUN#/<br>WORK ORDER   | TEST<br>FLGS | EXT | MTH | MATRIX | INIT/FIN<br>WT/VOL | PH"S |      | EXTRACTION |     | SOLVENTS |     | SPIKE STANDARD/<br>SURROGATE ID |
|----------------------|------------|------------------------------|--------------|-----|-----|--------|--------------------|------|------|------------|-----|----------|-----|---------------------------------|
|                      |            |                              |              |     |     |        |                    | INIT | ADJ1 | ADJ2       | VOL | VOL      | VOL |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-009<br>H2G9H-1-ACX | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA   | NA   | NA         | .0  | .0       | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-020<br>H2HAD-1-AA  | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA   | NA   | NA         | .0  | .0       | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-020<br>H2HAD-1-ACX | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA   | NA   | NA         | .0  | .0       | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-031<br>H2HCR-1-AA  | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA   | NA   | NA         | .0  | .0       | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-031<br>H2HCR-1-ACX | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA   | NA   | NA         | .0  | .0       | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-036<br>H2HCL-1-AA  | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA   | NA   | NA         | .0  | .0       | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030205-002<br>H2HPA-1-AA  | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA   | NA   | NA         | .0  | .0       | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030205-002<br>H2HPA-1-ACS | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA   | NA   | NA         | .0  | .0       | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030205-002<br>H2HPA-1-ADD | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA   | NA   | NA         | .0  | .0       | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030205-007<br>H2HQT-1-AA  | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA   | NA   | NA         | .0  | .0       | .0  |                                 |

RQC058

Severn Trent Laboratories, Inc.  
EXTRACTION BENCH WORKSHEETRun Date: 4/05/06  
Time: 11:59:17

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\* QC BATCH: 6095253 \*  
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PREP DATE: 4/05/06 12:00  
COMP DATE: 4/05/06 24:00

| EXTR<br>EXPR         | ANL<br>DUE | LOT#,MSRUN#/<br>WORK ORDER   | TEST<br>FLGS | EXT | MTH | MATRIX | INIT/FIN<br>WT/VOL | PH"S<br>INIT | ADJ1 | ADJ2 | EXTRACTION<br>VOL | SOLVENTS<br>EXCHANGE | VOL | SPIKE STANDARD/<br>SURROGATE ID |
|----------------------|------------|------------------------------|--------------|-----|-----|--------|--------------------|--------------|------|------|-------------------|----------------------|-----|---------------------------------|
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030205-008<br>H2HQA-1-AA  | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA           | NA   | NA   | .0                | .0                   | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030205-009<br>H2HQA-1-AA  | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA           | NA   | NA   | .0                | .0                   | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030205-011<br>H2HRA-1-AA  | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA           | NA   | NA   | .0                | .0                   | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030205-012<br>H2HRF-1-AA  | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA           | NA   | NA   | .0                | .0                   | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030205-013<br>H2HRH-1-AA  | D            | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA           | NA   | NA   | .0                | .0                   | .0  |                                 |
| 0/00/00<br>COMMENTS: | 0/00/00    | H6D050000-253<br>H2HQA-1-AAB |              | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA           | NA   | NA   | .0                | .0                   | .0  |                                 |
| 0/00/00<br>COMMENTS: | 0/00/00    | H6D050000-253<br>H2HQA-1-ACC |              | 25  | QK  | WATER  | 25.0mL<br>25.00mL  | NA           | NA   | NA   | .0                | .0                   | .0  |                                 |

R = RUSH  
E = EPA 600  
M = CLIENT REQ MS/MSD

C = CLP  
D = EXP.DEL)  
NUMBER OF WORK ORDERS IN BATCH: 24

†





RQC058

Sewern Trent Laboratories, Inc.  
EXTRACTION BENCH WORKSHEETRun Date: 4/06/06  
Time: 5:03:59

| LEV | LEV | LEV | LEV |
|-----|-----|-----|-----|
| 1   | 2   | 1   | 2   |
| -   | -   | -   | -   |
| -   | -   | -   | -   |
| -   | -   | -   | -   |
| -   | -   | -   | -   |
| -   | -   | -   | -   |

Blank  
Check  
MS/MSD  
Weights/Volumes  
Spike & Surrogate Worksheet  
Vial contains correct volume  
Labels, greenbars, worksheets  
computer batch: correct & all match  
Anomalies to Extraction Method

Expanded Deliverable  
COC Completed  
Bench Sheet Copied  
Package Submitted to Analytical Group  
Bench Sheet Copied per COC

Extractionist: \_\_\_\_\_

Concentrationist: \_\_\_\_\_

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\* QC BATCH: 6096033 \*  
\* \*\*\*\*\*

PREP DATE: 4/06/06 7:00  
COMP DATE: 4/06/06 19:00

Reviewer/Date: \_\_\_\_\_ / 0/00/00

Volatile Organic Sampling Train (VOST-0031/5041A)  
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

| EXTR      | ANL     | LOT#,MSRUN#/<br>DUE WORK ORDER | TEST<br>FLGS | EXT | MTH | MATRIX | INIT/FIN<br>WT/VOL | PH"S<br>INIT | ADJ1 | ADJ2 | EXTRACTION<br>VOL | SOLVENTS<br>VOL | EXCHANGE<br>VOL | SPIKE STANDARD/<br>SURROGATE ID |
|-----------|---------|--------------------------------|--------------|-----|-----|--------|--------------------|--------------|------|------|-------------------|-----------------|-----------------|---------------------------------|
| 0/00/00   | 4/24/06 | H6D030169-004<br>H2G89-1-AA    | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA           | NA   | NA   | .0                | .0              | .0              | .0                              |
| COMMENTS: |         |                                |              |     |     |        |                    |              |      |      |                   |                 |                 |                                 |
| 0/00/00   | 4/24/06 | H6D030169-006<br>H2G9D-1-AA    | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA           | NA   | NA   | .0                | .0              | .0              | .0                              |
| COMMENTS: |         |                                |              |     |     |        |                    |              |      |      |                   |                 |                 |                                 |
| 0/00/00   | 4/24/06 | H6D030169-008<br>H2G9G-1-AA    | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA           | NA   | NA   | .0                | .0              | .0              | .0                              |
| COMMENTS: |         |                                |              |     |     |        |                    |              |      |      |                   |                 |                 |                                 |
| 0/00/00   | 4/24/06 | H6D030169-010<br>H2G9J-1-AA    | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA           | NA   | NA   | .0                | .0              | .0              | .0                              |
| COMMENTS: |         |                                |              |     |     |        |                    |              |      |      |                   |                 |                 |                                 |
| 0/00/00   | 4/24/06 | H6D030169-011<br>H2G9L-1-AA    | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA           | NA   | NA   | .0                | .0              | .0              | .0                              |
| COMMENTS: |         |                                |              |     |     |        |                    |              |      |      |                   |                 |                 |                                 |
| 0/00/00   | 4/24/06 | H6D030169-015<br>H2G9I-1-AA    | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA           | NA   | NA   | .0                | .0              | .0              | .0                              |
| COMMENTS: |         |                                |              |     |     |        |                    |              |      |      |                   |                 |                 |                                 |
| 0/00/00   | 4/24/06 | H6D030169-017<br>H2G98-1-AA    | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA           | NA   | NA   | .0                | .0              | .0              | .0                              |
| COMMENTS: |         |                                |              |     |     |        |                    |              |      |      |                   |                 |                 |                                 |

RQC058

Severn Trent Laboratories, Inc.  
EXTRACTION BENCH WORKSHEET

Run Date: 4/06/06  
Time: 5:03:59

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\* QC BATCH: 6096033 \*  
\* PREP DATE: 4/06/06 7:00  
\* COMP DATE: 4/06/06 19:00  
\*\*\*\*\*

| EXTR<br>EXPR | ANL<br>DUE | LOT#,MSRUN#/<br>WORK ORDER  | TEST<br>FLGS | EXT | MTH | MATRIX | INIT/FIN<br>WT/VOL | PH'S |      |      | SOLVENTS   |     |          | VOL | SPIKE STANDARD/<br>SURROGATE ID |
|--------------|------------|-----------------------------|--------------|-----|-----|--------|--------------------|------|------|------|------------|-----|----------|-----|---------------------------------|
|              |            |                             |              |     |     |        |                    | INIT | ADJ1 | ADJ2 | EXTRACTION | VOL | EXCHANGE |     |                                 |
| 0/00/00      | 4/24/06    | H6D030169-019<br>H2HAA-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA   | NA   | NA   | .0         | .0  |          | .0  |                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |      |      |      |            |     |          |     |                                 |
| 0/00/00      | 4/24/06    | H6D030169-021<br>H2HA7-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA   | NA   | NA   | .0         | .0  |          | .0  |                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |      |      |      |            |     |          |     |                                 |
| 0/00/00      | 4/24/06    | H6D030169-022<br>H2HCA-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA   | NA   | NA   | .0         | .0  |          | .0  |                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |      |      |      |            |     |          |     |                                 |
| 0/00/00      | 4/24/06    | H6D030169-026<br>H2HCL-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA   | NA   | NA   | .0         | .0  |          | .0  |                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |      |      |      |            |     |          |     |                                 |
| 0/00/00      | 4/24/06    | H6D030169-028<br>H2HCN-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA   | NA   | NA   | .0         | .0  |          | .0  |                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |      |      |      |            |     |          |     |                                 |
| 0/00/00      | 4/24/06    | H6D030169-030<br>H2HCQ-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA   | NA   | NA   | .0         | .0  |          | .0  |                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |      |      |      |            |     |          |     |                                 |
| 0/00/00      | 4/24/06    | H6D030169-032<br>H2HCV-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA   | NA   | NA   | .0         | .0  |          | .0  |                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |      |      |      |            |     |          |     |                                 |
| 0/00/00      | 4/24/06    | H6D030169-033<br>H2HCW-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA   | NA   | NA   | .0         | .0  |          | .0  |                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |      |      |      |            |     |          |     |                                 |
| 0/00/00      | 4/24/06    | H6D030169-034<br>H2HCX-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA   | NA   | NA   | .0         | .0  |          | .0  |                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |      |      |      |            |     |          |     |                                 |
| 0/00/00      | 4/24/06    | H6D030169-035<br>H2HCO-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA   | NA   | NA   | .0         | .0  |          | .0  |                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |      |      |      |            |     |          |     |                                 |

RQC058

Seyvern Trent Laboratories, Inc.  
EXTRACTION BENCH WORKSHEET

Run Date: 4/06/06  
Time: 5:03:59

\*\*\*\*\*  
\* QC BATCH: 6096033 \*  
\* PREP DATE: 4/06/06 7:00  
\* COMP DATE: 4/06/06 19:00  
\*\*\*\*\*

| EXTR<br>EXPR | ANL<br>DUE | LOT#,MSRUN#/<br>WORK ORDER   | TEST<br>FLGS | EXT | MTH | MATRIX | INIT/FIN<br>WT/VOL | PH"S<br>INIT ADJI | ADJ2 | EXTRACTION<br>VOL | EXCHANGE<br>VOL | SOLVENTS<br>VOL | SPIKE STANDARD/<br>SURROGATE ID |
|--------------|------------|------------------------------|--------------|-----|-----|--------|--------------------|-------------------|------|-------------------|-----------------|-----------------|---------------------------------|
| 0/00/00      | 4/24/06    | H6D030169-037<br>H2HC2-1-AA  | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA                | .0              | .0              |                                 |
| COMMENTS:    |            |                              |              |     |     |        |                    |                   |      |                   |                 |                 |                                 |
| 0/00/00      | 4/24/06    | H6D030169-038<br>H2HC4-1-AA  | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA                | .0              | .0              |                                 |
| COMMENTS:    |            |                              |              |     |     |        |                    |                   |      |                   |                 |                 |                                 |
| 0/00/00      | 4/24/06    | H6D030169-045<br>H2KH4-1-AA  | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA                | .0              | .0              |                                 |
| COMMENTS:    |            |                              |              |     |     |        |                    |                   |      |                   |                 |                 |                                 |
| 0/00/00      | 0/00/00    | H6D060000-033<br>H2N44-1-AAB |              | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA                | .0              | .0              |                                 |
| COMMENTS:    |            |                              |              |     |     |        |                    |                   |      |                   |                 |                 |                                 |
| 0/00/00      | 0/00/00    | H6D060000-033<br>H2N44-1-ACC |              | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA                | .0              | .0              |                                 |
| COMMENTS:    |            |                              |              |     |     |        |                    |                   |      |                   |                 |                 |                                 |
| 0/00/00      | 0/00/00    | H6D060000-033<br>H2N44-1-ADL | R            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA                | .0              | .0              |                                 |
| COMMENTS:    |            |                              |              |     |     |        |                    |                   |      |                   |                 |                 |                                 |

R = RUSH C = CLP  
E = EPA 600 D = EXP.DEL)  
M = CLIENT REQ MS/MSD

NUMBER OF WORK ORDERS IN BATCH: 23

RQC058

Sewern Trent Laboratories, Inc.  
EXTRACTION BENCH WORKSHEETRun Date: 4/11/06  
Time: 10:19:12

| LEV | LEV | LEV | LEV |
|-----|-----|-----|-----|
| 1   | 2   | 1   | 2   |
| -   | -   | -   | -   |
| -   | -   | -   | -   |
| -   | -   | -   | -   |

Blank  
Check  
MS/MSD

Weights/Volumes  
Spike & Surrogate Worksheet  
Vial contains correct volume  
Labels, greenbars, worksheets  
computer batch: correct & all match  
Anomalies to Extraction Method

Expanded Deliverable  
COC Completed  
Bench Sheet Copied  
Package Submitted to Analytical Group  
Bench Sheet Copied per COC

Extractionist: \_\_\_\_\_

Concentrationist: \_\_\_\_\_

\*\*\*\*\*  
\* QC BATCH: 6097054 \*  
\* \*\*\*\*\* \*

PREP DATE: 4/07/06 9:00  
COMP DATE: 4/07/06 21:00

Reviewer/Date: \_\_\_\_\_ / 0/00/00

Volatile Organic Sampling Train (VOST-0031/5041A)  
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

| EXTR<br>EXPR | ANL<br>DUE | LOT#,MSRUN#/<br>WORK ORDER  | TEST<br>FLGS | EXT | MTH | MATRIX | INIT/FIN<br>WT/VOL | PH"S<br>ADJ1 | ADJ2 | EXTRACTION<br>VOL | SOLVENTS<br>VOL | SPRKE<br>STANDARD/<br>SURROGATE ID |
|--------------|------------|-----------------------------|--------------|-----|-----|--------|--------------------|--------------|------|-------------------|-----------------|------------------------------------|
| 0/00/00      | 4/24/06    | H6D030169-003<br>H2G87-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA           | NA   | .0                | .0              | .0                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |              |      |                   |                 |                                    |
| 0/00/00      | 4/24/06    | H6D030169-005<br>H2G9A-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA           | NA   | .0                | .0              | .0                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |              |      |                   |                 |                                    |
| 0/00/00      | 4/24/06    | H6D030169-007<br>H2G9F-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA           | NA   | .0                | .0              | .0                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |              |      |                   |                 |                                    |
| 0/00/00      | 4/24/06    | H6D030169-014<br>H2G9W-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA           | NA   | .0                | .0              | .0                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |              |      |                   |                 |                                    |
| 0/00/00      | 4/24/06    | H6D030169-016<br>H2G97-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA           | NA   | .0                | .0              | .0                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |              |      |                   |                 |                                    |
| 0/00/00      | 4/24/06    | H6D030169-018<br>H2G99-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA           | NA   | .0                | .0              | .0                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |              |      |                   |                 |                                    |
| 0/00/00      | 4/24/06    | H6D030169-023<br>H2HCD-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA           | NA   | .0                | .0              | .0                                 |
| COMMENTS:    |            |                             |              |     |     |        |                    |              |      |                   |                 |                                    |

RQC058

Seyvern Trent Laboratories, Inc.  
EXTRACTION BENCH WORKSHEETRun Date: 4/11/06  
Time: 10:19:12\*\*\*\*\*  
\* QC BATCH: 6097054 \*  
\* PREP DATE: 4/07/06 9:00  
\* COMP DATE: 4/07/06 21:00  
\*\*\*\*\*

| EXTR<br>EXPR         | ANL<br>DUE | LOT#,MSRUN#/<br>WORK ORDER  | TEST<br>FLGS | EXT | MTH | MATRIX | INIT/FIN<br>WT/VOL | PH"S<br>INIT ADJ1 | ADJ2 | EXTRACTION | SOLVENTS<br>VOL | EXCHANGE | VOL | SPIKE STANDARD/<br>SURROGATE ID |
|----------------------|------------|-----------------------------|--------------|-----|-----|--------|--------------------|-------------------|------|------------|-----------------|----------|-----|---------------------------------|
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-024<br>H2HCF-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA         | .0              |          | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-025<br>H2HCG-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA         | .0              |          | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-027<br>H2HCM-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA         | .0              |          | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-029<br>H2HCP-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA         | .0              |          | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-039<br>H2KHL-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA         | .0              |          | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-040<br>H2KHR-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA         | .0              |          | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-041<br>H2KHV-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA         | .0              |          | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-042<br>H2KHW-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA         | .0              |          | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-043<br>H2KHX-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA         | .0              |          | .0  |                                 |
| 0/00/00<br>COMMENTS: | 4/24/06    | H6D030169-044<br>H2KHL-1-AA | D            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA         | .0              |          | .0  |                                 |

RQC058

Severn Trent Laboratories, Inc.  
EXTRACTION BENCH WORKSHEETRun Date: 4/11/06  
Time: 10:19:12\*\*\*\*\*  
\* QC BATCH: 6097054 \*  
\* PREP DATE: 4/07/06 9:00  
\* COMP DATE: 4/07/06 21:00  
\*\*\*\*\*

| EXTR<br>EXPR | ANL<br>DUE | LOT#,MSRUN#/<br>WORK ORDER   | TEST<br>FLGS | EXT | MTH | MATRIX | INIT/FIN<br>WT/VOL | PH"S<br>INIT ADJ1 | ADJ2 | EXTRACTION | SOLVENTS<br>VOL EXCHANGE | VOL | SPIKE STANDARD/<br>SURROGATE ID |
|--------------|------------|------------------------------|--------------|-----|-----|--------|--------------------|-------------------|------|------------|--------------------------|-----|---------------------------------|
| 0/00/00      | 0/00/00    | H6D070000-054<br>H2RM4-1-AAB |              | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA         | .0                       | .0  |                                 |
| COMMENTS:    |            |                              |              |     |     |        |                    |                   |      |            |                          |     |                                 |
| 0/00/00      | 0/00/00    | H6D070000-054<br>H2RM4-1-ACC |              | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA         | .0                       | .0  |                                 |
| COMMENTS:    |            |                              |              |     |     |        |                    |                   |      |            |                          |     |                                 |
| 0/00/00      | 0/00/00    | H6D070000-054<br>H2RM4-1-ADL | R            | 88  | Q9  | AIR    | 1 25.00mL          | NA                | NA   | NA         | .0                       | .0  |                                 |
| COMMENTS:    |            |                              |              |     |     |        |                    |                   |      |            |                          |     |                                 |

R = RUSH C = CLP  
E = EPA 600 D = EXP.DEL)  
M = CLIENT REQ MS/MSD  
‡

NUMBER OF WORK ORDERS IN BATCH: 20

Data File: /var/chem/gcms/mx.i/X050906.b/vostspk.d  
Report Date: 10-May-2006 09:01

VOST Tube  
spiked @ 6ug

## STL Knoxville

## SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X050906.b/vostspk.d  
Lab Smp Id: VOSTSPK Client Smp ID: .opc not found  
Inj Date : 09-MAY-2006 19:36  
Operator : 063605 Inst ID: mx.i  
Smp Info : VOSTSPK,1,3,,6ug Spike  
Misc Info : X050906,clbz,clbz.sub  
Comment :  
Method : /var/chem/gcms/mx.i/X050906.b/clbz.m  
Meth Date : 10-May-2006 09:00 wilesd Quant Type: ISTD  
Cal Date : 03-MAY-2006 15:12 Cal File: tclp10.d  
Als bottle: 1 QC Sample: 6ug Spike  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: clbz.sub  
Target Version: 3.50

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

✓  
05/10/06

| Compounds                  | QUANT SIG | MASS   | RT     | EXP RT  | REL RT   | RESPONSE | CONCENTRATIONS |       |
|----------------------------|-----------|--------|--------|---------|----------|----------|----------------|-------|
|                            |           |        |        |         |          |          | ON-COLUMN      | FINAL |
|                            |           |        |        |         |          |          | ( ug/L)        | ( ug) |
| =====                      | =====     | =====  | =====  | =====   | =====    | =====    | =====          | ===== |
| * 1 Fluorobenzene          | 96        | 4.851  | 4.852  | (1.000) | 1420440  | 10.0000  |                |       |
| * 2 Chlorobenzene-d5       | 119       | 7.588  | 7.589  | (1.000) | 320672   | 10.0000  |                |       |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.746 | 10.753 | (1.000) | 381226   | 10.0000  |                |       |
| 57 Tetrachloroethene       | 164       | 6.828  | 6.829  | (0.900) | 8646666  | 191.156  | 4.7789 (A)     |       |
| 62 Chlorobenzene (spcc)    | 112       | 7.619  | 7.614  | (1.004) | 15624775 | 147.288  | 3.6822 (A)     |       |

twr/10/06

## QC Flag Legend

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

Data File: /chem/gcms/mx.i/X050906.b/vostspk.d

Report Date: 09-May-2006 19:52

## STL Knoxville

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: mx.i  
 Lab File ID: vostspk.d  
 Lab Smp Id: VOSTSPK  
 Analysis Type: VOA  
 Quant Type: ISTD  
 Operator: 063605

Method File: /chem/gcms/mx.i/X050906.b/clbz.m  
 Misc Info: X050906,clbz,clbz.sub

Calibration Date: 09-MAY-2006  
 Calibration Time: 17:34 ✓  
 Client Smp ID: .opc not found  
 Level: LOW  
 Sample Type: AIR

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE  | %DIFF |
|---------------------|----------|------------|---------|---------|-------|
|                     |          | LOWER      | UPPER   |         |       |
| 1 Fluorobenzene     | 1474532  | ✓ 737266   | 2949064 | 1420440 | -3.67 |
| 2 Chlorobenzene-d5  | 298122   | 149061     | 596244  | 320672  | 7.56  |
| 3 1,4 Dichlorobenze | 319423   | 159712     | 638846  | 381226  | 19.35 |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 4.85     | 4.35     | 5.35  | 4.85   | -0.02 |
| 2 Chlorobenzene-d5  | 7.59     | 7.09     | 8.09  | 7.59   | -0.01 |
| 3 1,4 Dichlorobenze | 10.75    | 10.25    | 11.25 | 10.75  | -0.06 |

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: /var/chem/gcms/mx.i/X050906.b/vostspk.d

Report Date: 10-May-2006 13:27

## STL Knoxville

## RECOVERY REPORT

Client Name:

Sample Matrix: GAS

Lab Smp Id: VOSTSPK

Level: LOW

Data Type: MS DATA

SpikeList File: tclp.spk

Sublist File: clbz.sub

Method File: /var/chem/gcms/mx.i/X050906.b/clbz.m

Misc Info: X050906,clbz,clbz.sub

Client SDG: X050906

Fraction: VOA

Client Smp ID: .opc not found

Operator: 063605

SampleType: LCS

Quant Type: ISTD

| SPIKE COMPOUND                  | CONC<br>ADDED<br>ug   | CONC<br>RECOVERED<br>ug | %<br>RECOVERED | LIMITS            |
|---------------------------------|-----------------------|-------------------------|----------------|-------------------|
| <del>12 Vinyl Chloride (c</del> | <del>6.0000</del>     | <del>0.0000</del>       | <del>*</del>   | <del>66-120</del> |
| <del>19 1,1-Dichloroethen</del> | <del>6.0000</del>     | <del>0.0000</del>       | <del>*</del>   | <del>74-120</del> |
| 36 2-Butanone                   | <i>DM</i> 24.000      | 0.0000                  | *              | 39-138            |
| 39 Chloroform (ccc)             | <i>5-10.06</i> 6.0000 | 0.0000                  | *              | 74-120            |
| 41 Carbon Tetrachlor            | 6.0000                | 0.0000                  | *              | 64-134            |
| 43 Benzene                      | 6.0000                | 0.0000                  | *              | 74-120            |
| 44 1,2-Dichloroethane           | 6.0000                | 0.0000                  | *              | 70-125            |
| <del>45 Trichloroethene</del>   | <del>6.0000</del>     | <del>0.0000</del>       | <del>*</del>   | <del>76-120</del> |
| 57 Tetrachloroethene            | 6.0000                | 4.7789                  | 79.65          | 74-120            |
| 62 Chlorobenzene (spc           | 6.0000                | 3.6822                  | 61.37*         | 76-120            |

Data File: /var/chem/gcms/mx.i/X050906.b/vostspk.d

Date : 09-MAY-2006 19:36

Client ID: .opc not found

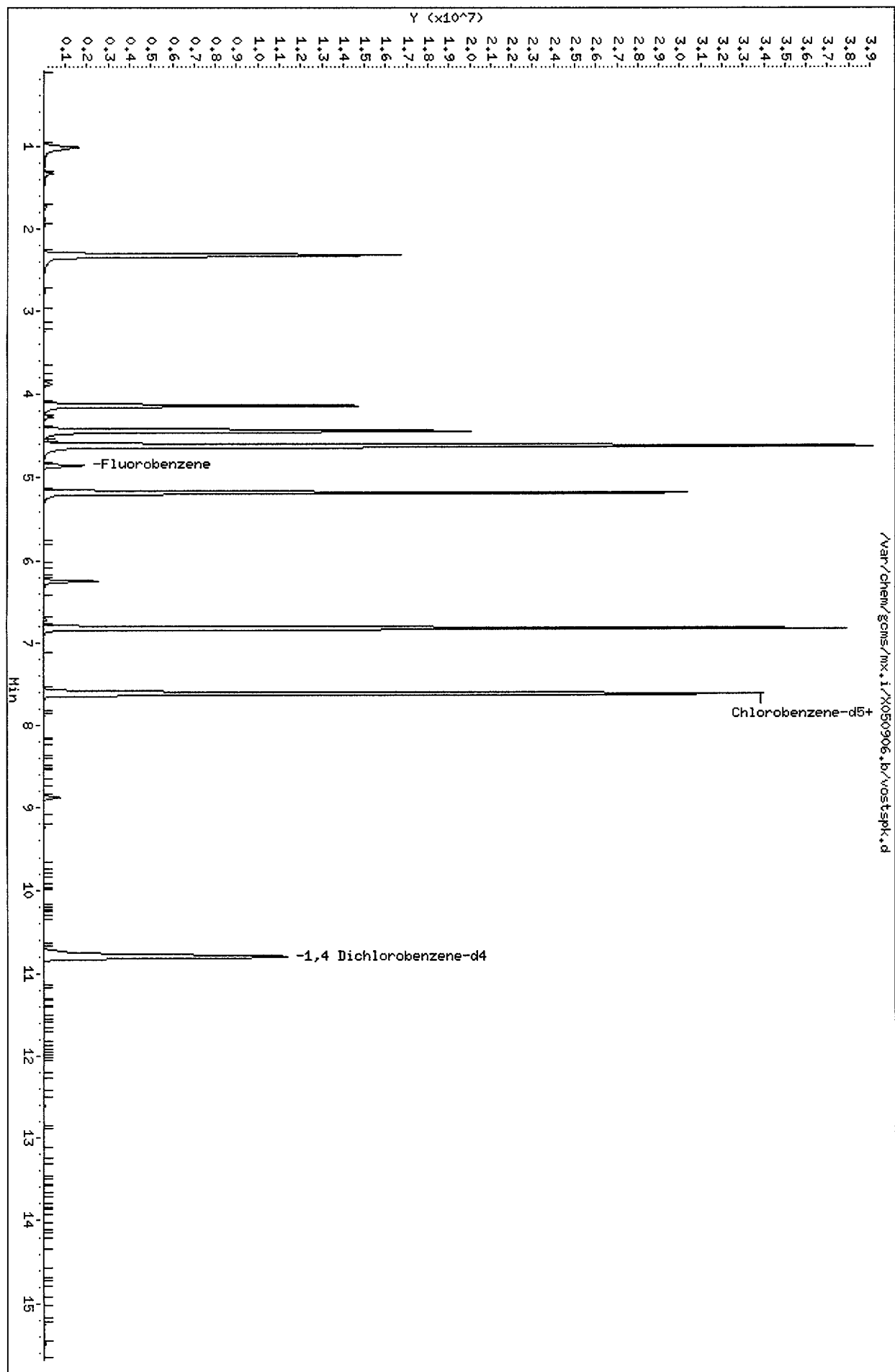
Sample Info: VOSTSPK.1,3,6ug Spike

Column phase: J+H 624

Instrument: mx.i

Operator: 063605

Column diameter: 0.18



Data File: /var/chem/gcms/mx.i/X050306.b/vostspk.d  
Report Date: 09-May-2006 12:20

VOST TUBE SPIKED  
@ 12 µg

## STL Knoxville

SW-846 Method 8260A - Volatile Organics

Data file : /var/chem/gcms/mx.i/X050306.b/vostspk.d  
Lab Smp Id: VOSTSPK Client Smp ID: spk240 12 µg  
Inj Date : 03-MAY-2006 19:53  
Operator : 60487 Inst ID: mx.i  
Smp Info : VOSTSPK,1,3,,,spk240 = 12 µg  
Misc Info : X050306,8260B\_LM,clbz.sub  
Comment :  
Method : /var/chem/gcms/mx.i/X050306.b/clbz.m  
Meth Date : 09-May-2006 12:16 wilesd Quant Type: ISTD  
Cal Date : 03-MAY-2006 16:59 Cal File: tclp320.d  
Als bottle: 26 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: clbz.sub  
Target Version: 3.50  
Processing Host: qmidhp01

Concentration Formula: Amt \* DF \* Uf \* CpndVariable  
Uf 0.02500 ug/L \* 0.025L purged

Cpnd Variable Local Compound Variable

| Compounds                  | QUANT SIG |        |        |         |          |                      | CONCENTRATIONS |       |
|----------------------------|-----------|--------|--------|---------|----------|----------------------|----------------|-------|
|                            | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ON-COLUMN<br>( ug/L) | FINAL<br>( ug) |       |
| =====                      | =====     | ==     | =====  | =====   | =====    | =====                | =====          |       |
| * 1 Fluorobenzene          | 96        | 4.856  | 4.851  | (1.000) | 919986   | 10.0000              |                |       |
| * 2 Chlorobenzene-d5       | 119       | 7.594  | 7.582  | (1.000) | 222022   | 10.0000              |                |       |
| * 3 1,4 Dichlorobenzene-d4 | 152       | 10.757 | 10.740 | (1.000) | 249691   | 10.0000              |                |       |
| 57 Tetrachloroethene       | 164       | 6.840  | 6.816  | (0.901) | 12102253 | 386.430              | 9.6607 (A)     | = 80% |
| 62 Chlorobenzene (spcc)    | 112       | 7.618  | 7.607  | (1.003) | 22324420 | 303.948              | 7.5987 (AM)    | : 63% |

## QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.  
M - Compound response manually integrated.

Data File: /var/chem/gcms/mx.i/X050306.b/vostspk.d  
 Report Date: 09-May-2006 12:20

STL Knoxville

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: mx.i  
 Lab File ID: vostspk.d  
 Lab Smp Id: VOSTSPK  
 Analysis Type: VOA  
 Quant Type: ISTD  
 Operator: 60487  
 Method File: /var/chem/gcms/mx.i/X050306.b/clbz.m  
 Misc Info: X050306,8260B\_LM,clbz.sub

Calibration Date: 03-MAY-2006  
 Calibration Time: 15:12  
 Client Smp ID: spk240  
 Level: LOW  
 Sample Type: AIR

| COMPOUND            | STANDARD | AREA LIMIT |         | SAMPLE | %DIFF |
|---------------------|----------|------------|---------|--------|-------|
|                     |          | LOWER      | UPPER   |        |       |
| 1 Fluorobenzene     | 954873   | 477436     | 1909746 | 919986 | -3.65 |
| 2 Chlorobenzene-d5  | 176393   | 88196      | 352786  | 222022 | 25.87 |
| 3 1,4 Dichlorobenze | 181219   | 90610      | 362438  | 249691 | 37.78 |

| COMPOUND            | STANDARD | RT LIMIT |       | SAMPLE | %DIFF |
|---------------------|----------|----------|-------|--------|-------|
|                     |          | LOWER    | UPPER |        |       |
| 1 Fluorobenzene     | 4.85     | 4.35     | 5.35  | 4.86   | 0.11  |
| 2 Chlorobenzene-d5  | 7.58     | 7.08     | 8.08  | 7.59   | 0.15  |
| 3 1,4 Dichlorobenze | 10.74    | 10.24    | 11.24 | 10.76  | 0.16  |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /var/chem/gcms/mx.1/X050306.b/vostspk.d

Date: 03-MAY-2006 19:53

Client ID: spk240

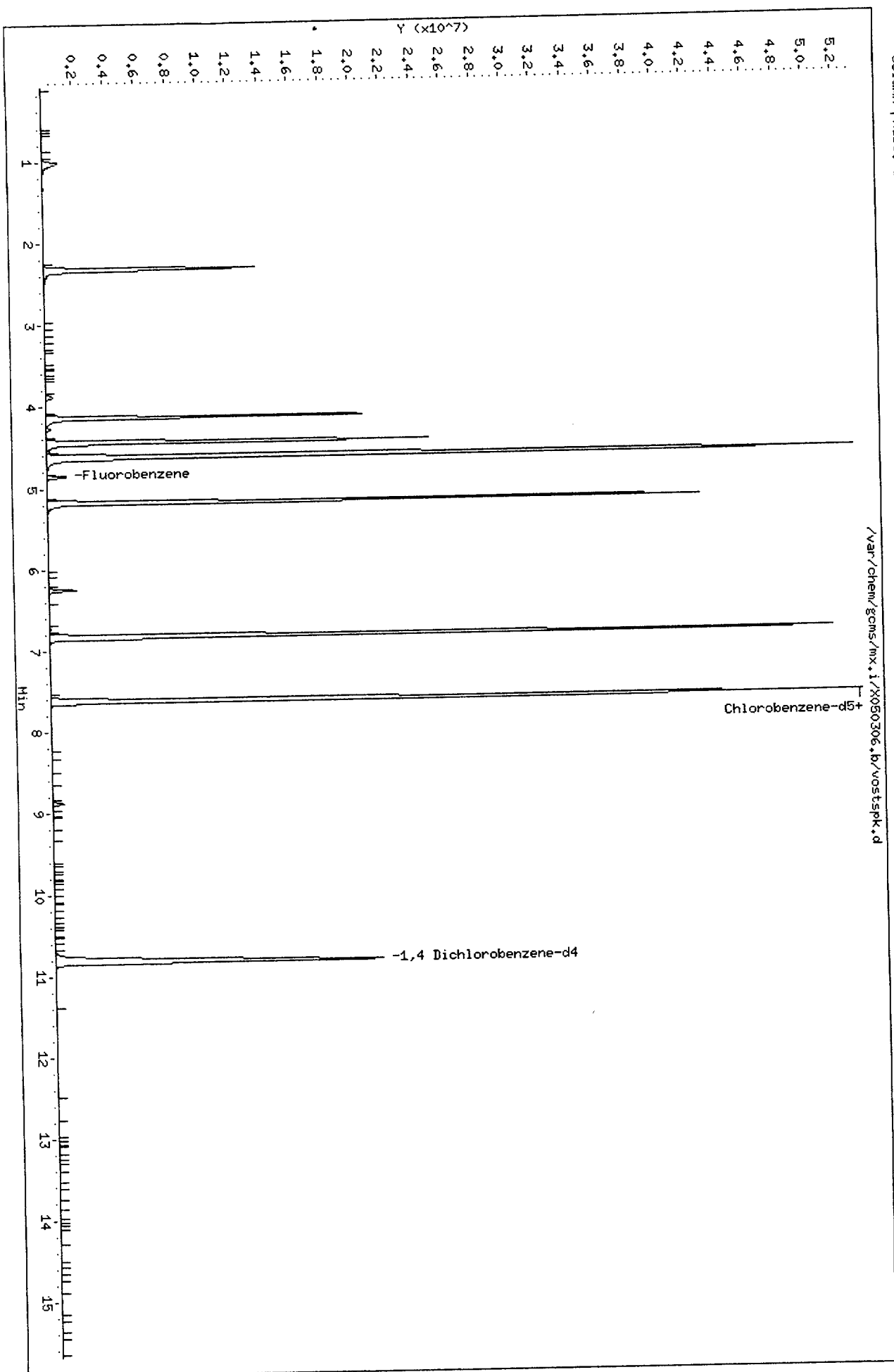
Sample Info: WOSTSPK,1,3,,,spk240

Column phase: J+M 624

Instrument: mx.i

Operator: 60487

Column diameter: 0.18



Data File: /var/chem/gcms/mx.i/X050306.b/vostspk.d

Date : 03-MAY-2006 19:53

Client ID: spk240

Instrument: mx.i

Sample Info: VOSTSPK,1,3,,,spk240

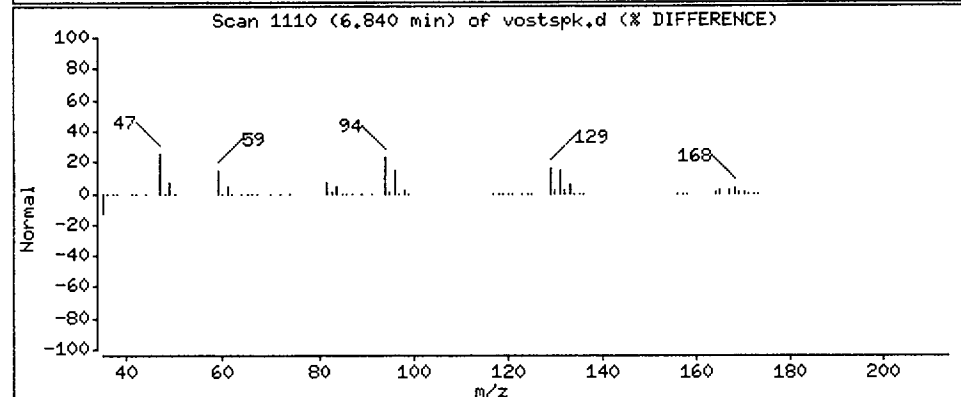
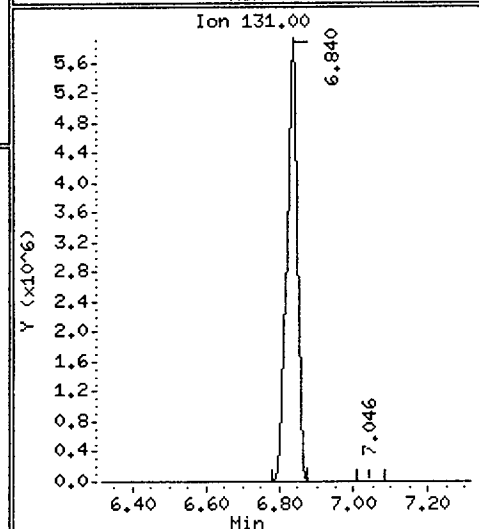
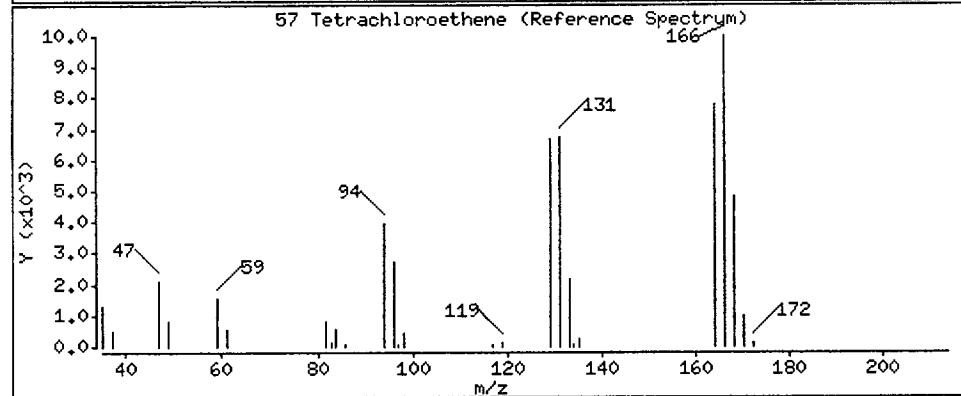
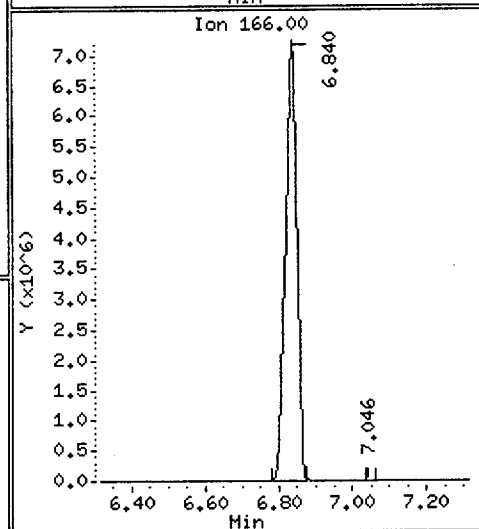
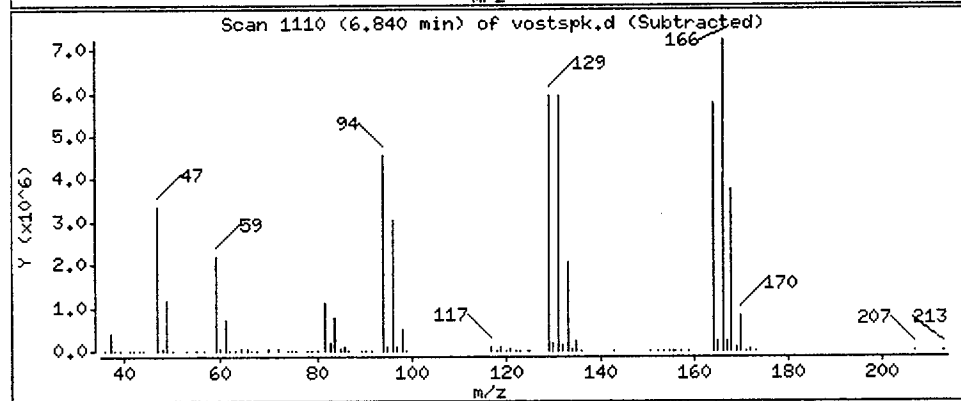
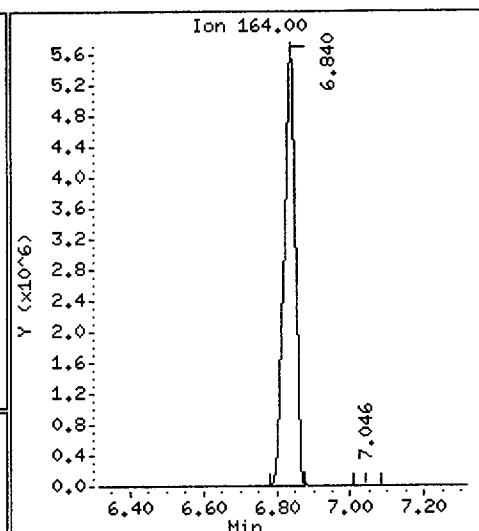
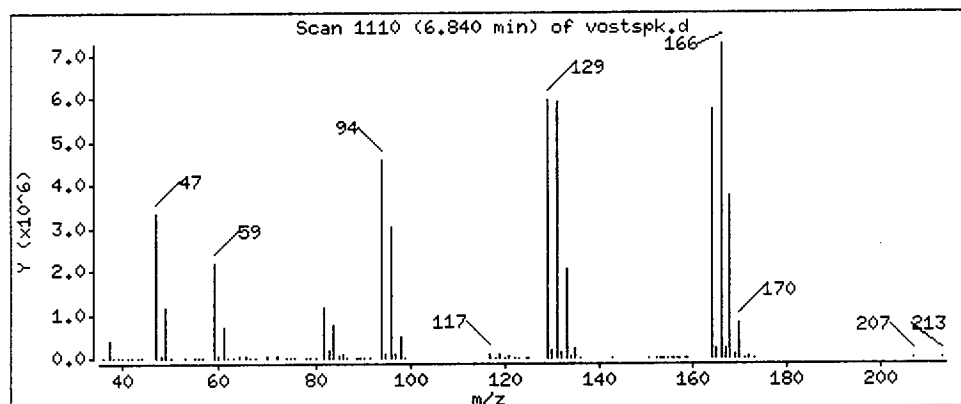
Operator: 60487

Column phase: J+W 624

Column diameter: 0.18

57 Tetrachloroethene

Concentration: 9.6607 ug



Data File: /var/chem/gcms/mx.i/X050306.b/vostspk.d

Date : 03-MAY-2006 19:53

Client ID: spk240

Instrument: mx.i

Sample Info: VOSTSPK,1,3,,,spk240

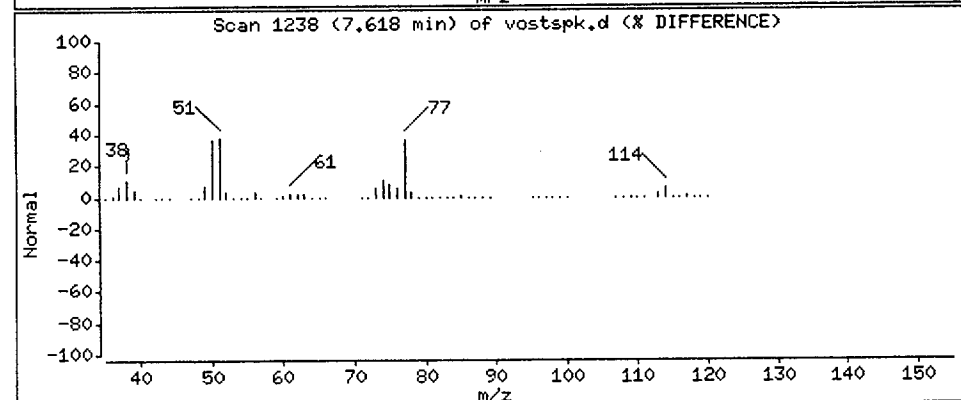
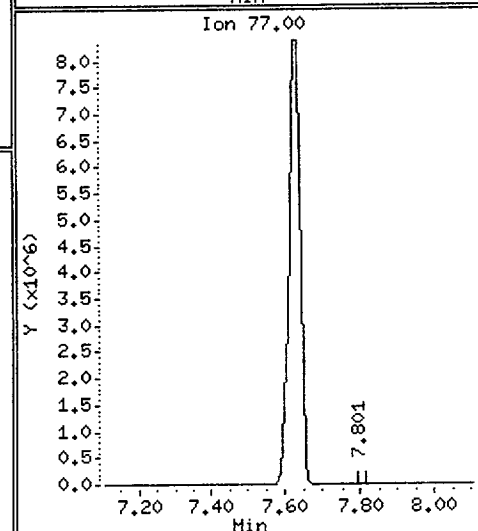
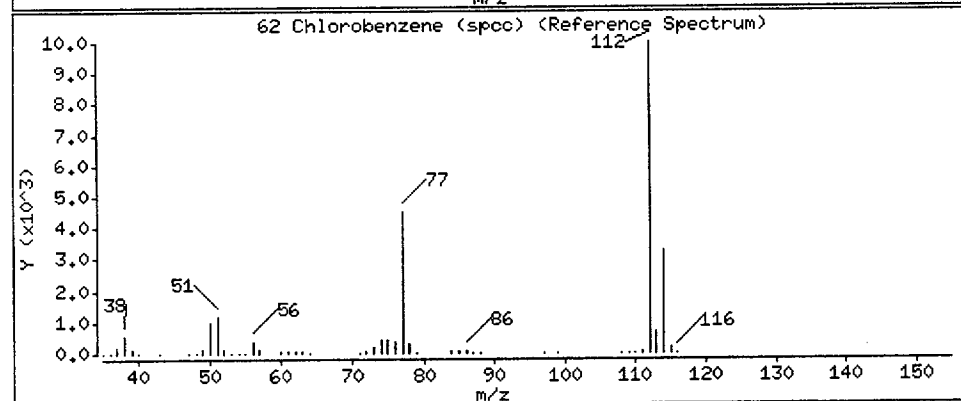
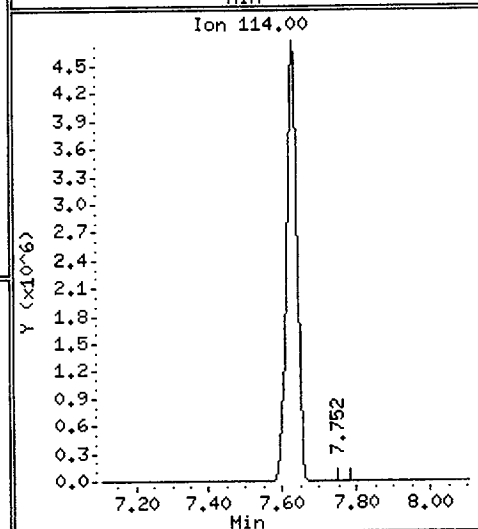
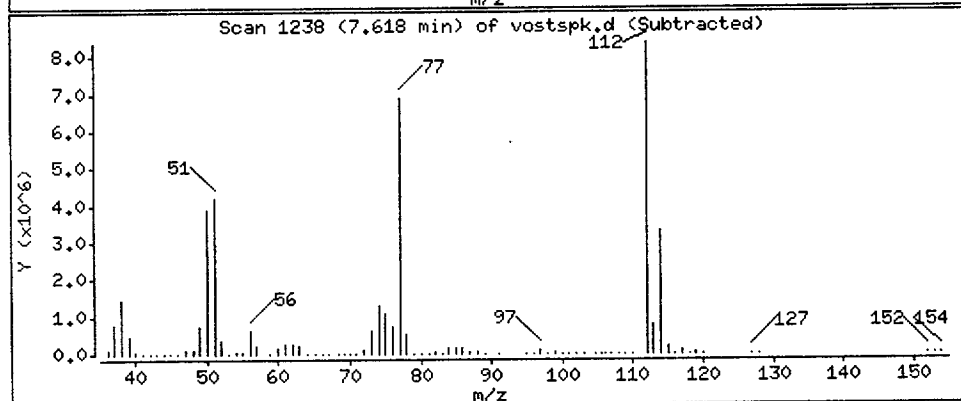
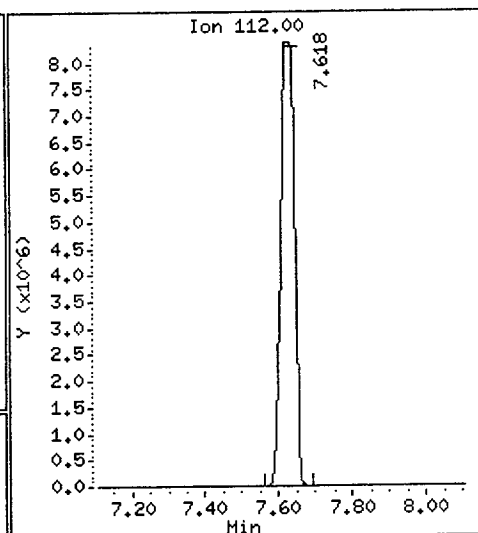
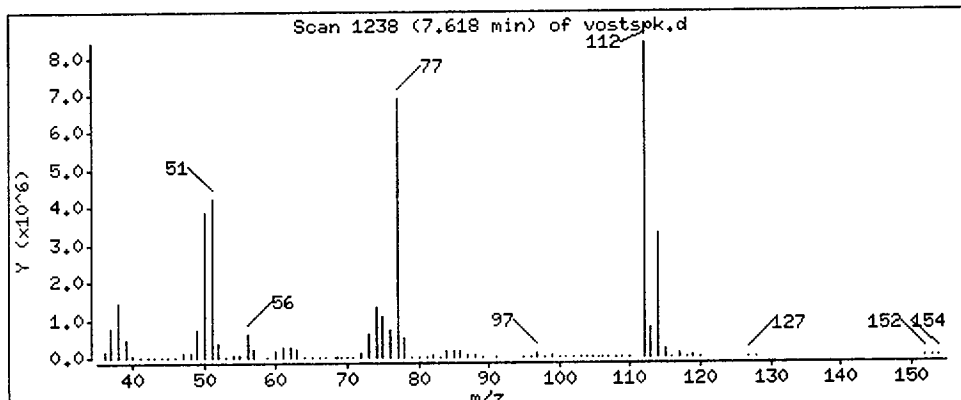
Operator: 60487

Column phase: J+W 624

Column diameter: 0.18

62 Chlorobenzene (spc)

Concentration: 7.5987 ug

*Saturated  
pws 4/06*

# Sample Receipt Documentation



**Request for Analysis/Chain-of-Custody – RFA/COC #014 [VOST]**  
**Focus/US Filter Westates Carbon**  
**Comprehensive Performance Test at Parker, Arizona**

STL Knoxville Lot Number: 445030169  
 STL Knoxville Project Number: 142541

**NOTE: After Log-In, please give the original completed RFA/COC to Patti Carswell.**

|                                                                                                                                                                                                                                                                   |                                           |                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>Project Identification:</b>                                                                                                                                                                                                                                    | <b>Westates Carbon CPT</b>                | <b>Laboratory Deliverable Turnaround Requirements:</b>                                                                |
| STL Knoxville Project Number:                                                                                                                                                                                                                                     | 142541                                    | Analytical Due Date: 21 Days from Lab Receipt<br>(Review-Released Data)                                               |
| STL Contact:                                                                                                                                                                                                                                                      | Ms. Patti Carswell<br>(865) 291-3010      | Data Package Due Date: 21 Days from Lab Receipt                                                                       |
| STL - ACS Project Manager:                                                                                                                                                                                                                                        | Dr. William C. Anderson<br>(865) 291-3080 | <b>Laboratory Destination:</b> STL Knoxville<br>5815 Middlebrook Pike<br>Knoxville, Tennessee 37921<br>(865) 291-3000 |
| <b>Analytical Testing QC Requirements:</b><br>The Legend for Project-Specific Quality Control Testing is designated in the "QC" column as follows:<br>"MS" = Matrix Spike, "MSD" = Matrix Spike Duplicate,<br>"DUP" = Duplicate, and "PDS" = Post Digestion Spike |                                           | <b>Courier:</b> Federal Express                                                                                       |
| <b>Project Deliverables:</b><br>Report analytical results on R-02 Reports and in data packages.<br>Include "Field Number", "Sample Type", and "Run Number" on all R-02 Reports.                                                                                   |                                           |                                                                                                                       |
| <b>Holding Time Requirements:</b>                                                                                                                                                                                                                                 |                                           |                                                                                                                       |
| Volatile Organic Compounds (VOCs)                                                                                                                                                                                                                                 |                                           | 14 Days to Analysis.                                                                                                  |

| Field Sample No./<br>Sample Coding ID               | Sample<br>Collection<br>Date | Project QC<br>Require-<br>ments | Sample Bottle/<br>Container | Sample Type/Analysis                                                                                                              | Analytical Specifications                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------|------------------------------|---------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| G-2908-R1-VOST<br>Pair #1 Tenax                     | 3-28-06                      |                                 | Tenax Tube                  | Tenax Tube - Pair #1,<br>Run #1<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis          | Archive this back-up sample.                                                                                                                                                                                                                                                                  |
| G-2909-R1-VOST<br>Pair #1<br>Tenax/Charcoal         | 3-28-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Pair #1, Run #1<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis | Archive this back-up sample.                                                                                                                                                                                                                                                                  |
| G-2910-R1-VOST<br>Pair #1, Run #1<br>Tenax          | 3-28-06                      |                                 | Tenax Tube                  | Tenax Tube - Pair #1,<br>Run #1<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis          | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard. |
| G-2911-R1-VOST<br>Pair #1, Run #1<br>Tenax/Charcoal | 3-28-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Pair #1, Run #1<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard. |
| G-2912-R1-VOST<br>Pair #1, Run #1<br>Tenax          | 3-28-06                      |                                 | Tenax Tube                  | Tenax Tube - Pair #1,<br>Run #1<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis          | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard. |

**Request for Analysis/Chain-of-Custody – RFA/COC #014 [VOST]**  
**Focus/US Filter Westates Carbon**  
**Comprehensive Performance Test at Parker, Arizona**

| Field Sample No./<br>Sample Coding ID               | Sample<br>Collection<br>Date | Project QC<br>Require-<br>ments | Sample Bottle/<br>Container | Sample Type/Analysis                                                                                                                  | Analytical Specifications                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------|------------------------------|---------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| G-2913-R1-VOST<br>Pair #1, Run #1<br>Tenax/Charcoal | 3-28-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Pair #1, Run #1<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis     | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-2914-R1-VOST<br>Pair #1, Run #1<br>Tenax          | 3-28-06                      |                                 | Tenax Tube                  | Tenax Tube - Pair #1,<br>Run #1<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis              | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-2915-R1-VOST<br>Pair #1, Run #1<br>Tenax/Charcoal | 3-28-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Pair #1, Run #1<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis     | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-2916-R1-VOST<br>Condensate                        | 3-28-06                      |                                 | 2 X 40 mL<br>VOA Vials      | VOST Condensate Sample<br>- Run #1<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis           | Prepare the sample as required using a 25<br>mL purge volume and analyze for the<br>target volatile compounds and TICs by<br>GC/MS (Method 8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard. |
| G-2917-R1-VOST<br>Tenax FB                          | 3-28-06                      |                                 | Tenax Tube                  | Tenax Tube - Field Blank<br>Run #1<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis           | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-2918-R1-VOST<br>Tenax/Charcoal FB                 | 3-28-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Field Blank, Run #1<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-3006-R2-VOST<br>Pair #1 Tenax                     | 3-29-06                      |                                 | Tenax Tube                  | Tenax Tube - Pair #1,<br>Run #2<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis              | Archive this back-up sample.                                                                                                                                                                                                                                                                                                        |

**Request for Analysis/Chain-of-Custody – RFA/COC #014 [VOST]**  
**Focus/US Filter Westates Carbon**  
**Comprehensive Performance Test at Parker, Arizona**

| Field Sample No./<br>Sample Coding ID               | Sample<br>Collection<br>Date | Project QC<br>Require-<br>ments | Sample Bottle/<br>Container | Sample Type/Analysis                                                                                                              | Analytical Specifications                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------|------------------------------|---------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| G-3007-R2-VOST<br>Pair #1<br>Tenax/Charcoal         | 3-29-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Pair #1, Run #2<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis | Archive this back-up sample.                                                                                                                                                                                                                                                                  |
| G-3008-R2-VOST<br>Pair #1, Run #1<br>Tenax          | 3-29-06                      |                                 | Tenax Tube                  | Tenax Tube - Pair #1,<br>Run #2<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis          | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard. |
| G-3009-R2-VOST<br>Pair #1, Run #1<br>Tenax/Charcoal | 3-29-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Pair #1, Run #2<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard. |
| G-3010-R2-VOST<br>Pair #1, Run #1<br>Tenax          | 3-29-06                      |                                 | Tenax Tube                  | Tenax Tube - Pair #1,<br>Run #2<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis          | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard. |
| G-3011-R2-VOST<br>Pair #1, Run #1<br>Tenax/Charcoal | 3-29-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Pair #1, Run #2<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard. |
| G-3012-R2-VOST<br>Pair #1, Run #1<br>Tenax          | 3-29-06                      |                                 | Tenax Tube                  | Tenax Tube - Pair #1,<br>Run #2<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis          | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard. |
| G-3013-R2-VOST<br>Pair #1, Run #1<br>Tenax/Charcoal | 3-29-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Pair #1, Run #2<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard. |

**Request for Analysis/Chain-of-Custody – RFA/COC #014 [VOST]**  
**Focus/US Filter Westates Carbon**  
**Comprehensive Performance Test at Parker, Arizona**

| Field Sample No./<br>Sample Coding ID               | Sample<br>Collection<br>Date | Project QC<br>Require-<br>ments | Sample Bottle/<br>Container | Sample Type/Analysis                                                                                                                  | Analytical Specifications                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------|------------------------------|---------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| G-3014-R2-VOST<br>Condensate                        | 3-29-06                      |                                 | 2 X 40 mL<br>VOA Vials      | VOST Condensate Sample<br>- Run #2<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis           | Prepare the sample as required using a 25<br>mL purge volume and analyze for the<br>target volatile compounds and TICs by<br>GC/MS (Method 8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard. |
| G-3015-R2-VOST<br>Tenax FB                          | 3-29-06                      |                                 | Tenax Tube                  | Tenax Tube - Field Blank<br>Run #2<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis           | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-3016-R2-VOST<br>Tenax/Charcoal FB                 | 3-29-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Field Blank, Run #2<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-3089-R3-VOST<br>Pair #1 Tenax                     | 3-30-06                      |                                 | Tenax Tube                  | Tenax Tube - Pair #1,<br>Run #3<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis              | Archive this back-up sample.                                                                                                                                                                                                                                                                                                        |
| G-3090-R3-VOST<br>Pair #1<br>Tenax/Charcoal         | 3-30-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Pair #1, Run #3<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis     | Archive this back-up sample.                                                                                                                                                                                                                                                                                                        |
| G-3091-R3-VOST<br>Pair #1, Run #1<br>Tenax          | 3-30-06                      |                                 | Tenax Tube                  | Tenax Tube - Pair #1,<br>Run #3<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis              | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-3092-R3-VOST<br>Pair #1, Run #1<br>Tenax/Charcoal | 3-30-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Pair #1, Run #3<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis     | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |

**Request for Analysis/Chain-of-Custody – RFA/COC #014 [VOST]**  
**Focus/US Filter Westates Carbon**  
**Comprehensive Performance Test at Parker, Arizona**

| Field Sample No./<br>Sample Coding ID               | Sample<br>Collection<br>Date | Project QC<br>Require-<br>ments | Sample Bottle/<br>Container | Sample Type/Analysis                                                                                                                  | Analytical Specifications                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------|------------------------------|---------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| G-3093-R3-VOST<br>Pair #1, Run #1<br>Tenax          | 3-30-06                      |                                 | Tenax Tube                  | Tenax Tube - Pair #1,<br>Run #3<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis              | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-3094-R3-VOST<br>Pair #1, Run #1<br>Tenax/Charcoal | 3-30-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Pair #1, Run #3<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis     | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-3095-R3-VOST<br>Pair #1, Run #1<br>Tenax          | 3-30-06                      |                                 | Tenax Tube                  | Tenax Tube - Pair #1,<br>Run #3<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis              | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-3096-R3-VOST<br>Pair #1, Run #1<br>Tenax/Charcoal | 3-30-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Pair #1, Run #3<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis     | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-3097-R3-VOST<br>Condensate                        | 3-30-06                      |                                 | 2 X 40 mL<br>VOA Vials      | VOST Condensate Sample<br>Run #3<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis             | Prepare the sample as required using a 25<br>mL purge volume and analyze for the<br>target volatile compounds and TICs by<br>GC/MS (Method 8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard. |
| G-3098-R3-VOST<br>Tenax FB                          | 3-30-06                      |                                 | Tenax Tube                  | Tenax Tube - Field Blank<br>Run #3<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis           | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-3099-R3-VOST<br>Tenax/Charcoal FB                 | 3-30-06                      |                                 | Tenax/<br>Charcoal Tube     | Tenax-Charcoal Tube –<br>Field Blank, Run #3<br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |

**Request for Analysis/Chain-of-Custody – RFA/COC #014 [VOST]**  
**Focus/US Filter Westates Carbon**  
**Comprehensive Performance Test at Parker, Arizona**

| Field Sample No./<br>Sample Coding ID | Sample<br>Collection<br>Date | Project QC<br>Require-<br>ments | Sample Bottle/<br>Container | Sample Type/Analysis                                                                                                                         | Analytical Specifications                                                                                                                                                                                                                                                                                                           |
|---------------------------------------|------------------------------|---------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| G-3100-R3-VOST<br>Tenax TB            | 3-30-06                      |                                 | Tenax Tube                  | <b>Tenax Tube - Trip Blank<br/>Run #3</b><br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis           | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-3101-R3-VOST<br>Tenax/Charcoal TB   | 3-30-06                      |                                 | Tenax/<br>Charcoal Tube     | <b>Tenax-Charcoal Tube –<br/>Trip Blank, Run #3</b><br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis | Analyze this tube separately for the target<br>volatile compounds and TICs by GC/MS<br>(Method 5041B/8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard.                                       |
| G-3102-R3-VOST<br>DI Water TB         | 3-30-06                      |                                 | 40 mL VOA<br>Vial           | <b>VOST Deionized Water<br/>Trip Blank, Run #3</b><br><br>Method 0030 VOST Train<br><br>Volatiles (VOCs) Including<br>POHC and TIC Analysis  | Prepare the sample as required using a 25<br>mL purge volume and analyze for the<br>target volatile compounds and TICs by<br>GC/MS (Method 8260B). Also conduct a<br>library search for the tentatively identified<br>compounds (TICs) using an 85% match<br>criteria and semi-quantitate against the<br>nearest internal standard. |

**Request for Analysis/Chain-of-Custody – RFA/COC #014 [VOST]  
Focus/US Filter Westates Carbon  
Comprehensive Performance Test at Parker, Arizona**

H6D030169

**Sample Receipt Log and Condition of the Samples Upon Receipt:**

Please fill in the following information:

**Comments**

(Please write "NONE" if no comment applicable)

- (1) Record the identities of any samples that were listed on the RFA but were not found in the sample shipment.

NONE

- (2) Record the sample shipping cooler temperature of all coolers transporting samples listed on this RFA:

6°C

- (3) Record any apparent sample loss/breakage.

NONE

- (4) Record any unidentified samples transported with this shipment of samples:

NONE

- (5) Indicate if all samples were received according to the project's required specifications (i.e. no nonconformances):

HAND DELIVERED, NO CUSTODY SEALS

**Custody Transfer:**

Relinquished By:

Name

Company

Date/Time

Accepted By:

Name

Company

Date/Time

Relinquished By:

Name

Company

Date/Time

Accepted By:

Name

Company

Date/Time

Relinquished By:

Name

Company

Date/Time

Accepted By:

Name

Company

Date/Time

Relinquished By:

Name

Company

Date/Time

Accepted By:

Name

Company

Date/Time

## STL KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

1 of 2

Client: STL KNOXVILLEProject: WESTATES CARMIN CPTLot Number: HA026R18

| Review Items                                                                                                                      | Yes                                 | No | NA | If No, what was the problem?                                                                                                                                                                                                                                                                                              | Comments/Actions Taken |
|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| 1. Do sample container labels match COC? (IDs, Dates, Times)                                                                      | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 1a Do not match COC<br><input type="checkbox"/> 1b Incomplete information<br><input type="checkbox"/> 1c Marking smeared<br><input type="checkbox"/> 1d Label torn<br><input type="checkbox"/> 1e No label<br><input type="checkbox"/> 1f COC not received<br><input type="checkbox"/> 1g Other: | 14A                    |
| 2. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C; NC, 1668, 1613B; 0-4 °C; VOST: 10 °C; MA: 2-6 °C) | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 2a Temp Blank = _____<br><input type="checkbox"/> 2b Cooler Temp = _____                                                                                                                                                                                                                         |                        |
| 3. Were samples received with correct chemical preservative (excluding Encore)?                                                   | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 3a Sample preservative =                                                                                                                                                                                                                                                                         |                        |
| 4. Were custody seals present/intact on cooler and/or containers?                                                                 | <input checked="" type="checkbox"/> |    |    | <input checked="" type="checkbox"/> 4a Not present<br><input type="checkbox"/> 4b Not intact<br><input type="checkbox"/> 4c Other:                                                                                                                                                                                        |                        |
| 5. Were all of the samples listed on the COC received?                                                                            | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 5a Samples received-not on COC<br><input type="checkbox"/> 5b Samples not received-on COC                                                                                                                                                                                                        |                        |
| 6. Were all of the sample containers received intact?                                                                             | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 6a Leaking<br><input type="checkbox"/> 6b Broken                                                                                                                                                                                                                                                 |                        |
| 7. Were VOA samples received without headspace?                                                                                   | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 7a Headspace (VOA only)                                                                                                                                                                                                                                                                          |                        |
| 8. Were samples received in appropriate containers?                                                                               | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 8a Improper container                                                                                                                                                                                                                                                                            |                        |
| 9. Did you check for residual chlorine, if necessary?                                                                             | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 9a Could not be determined due to matrix interference                                                                                                                                                                                                                                            |                        |
| 10. Were samples received within holding time?                                                                                    | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 10a Holding time expired                                                                                                                                                                                                                                                                         |                        |
| 11. For rad samples, was sample activity info. provided?                                                                          | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> Incomplete information                                                                                                                                                                                                                                                                           |                        |
| 12. For SOG water samples (1613B, 1668A, 8290, LR PAHs), do samples have visible solids present?                                  | <input checked="" type="checkbox"/> |    |    | If yes & appears to be >1%, was SOG notified?                                                                                                                                                                                                                                                                             |                        |
| 13. Are the shipping containers intact?                                                                                           | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 13a Leaking<br><input type="checkbox"/> 13b Other:                                                                                                                                                                                                                                               |                        |
| 14. Was COC relinquished? (Signed/Dated/Timed)                                                                                    | <input checked="" type="checkbox"/> |    |    | <input checked="" type="checkbox"/> 14a Not relinquished                                                                                                                                                                                                                                                                  |                        |
| 15. Are tests/parameters listed for each sample?                                                                                  | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 15a Incomplete information                                                                                                                                                                                                                                                                       |                        |
| 16. Is the matrix of the samples noted?                                                                                           | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 15a Incomplete information                                                                                                                                                                                                                                                                       |                        |
| 17. Is the date/time of sample collection noted?                                                                                  | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 15a Incomplete information                                                                                                                                                                                                                                                                       |                        |
| 18. Is the client and project name/# identified?                                                                                  | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 15a Incomplete information                                                                                                                                                                                                                                                                       |                        |
| 19. Was the sampler identified on the COC?                                                                                        | <input checked="" type="checkbox"/> |    |    | <input type="checkbox"/> 15a Incomplete information                                                                                                                                                                                                                                                                       |                        |

Quote #: 64351 PM Instructions: \_\_\_\_\_Sample Receiving Associate: Bryan DannerDate: 4-3-06

QA026R18.doc, 1/30/06



## STL KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

2 of 2

Client: ENVIRONMENTAL ANALYTICAL SERVICE Project:

Lot Number: H0030169

| Review Items                                                                                                                  | Yes | No | NA | If No, what was the problem?                                                                                                                                                                                                                                                                                                         | Comments/Actions Taken                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------|-----|----|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 1. Do sample container labels match COC?<br>(IDs, Dates, Times)                                                               |     |    |    | <input type="checkbox"/> 1a Do not match COC<br><input type="checkbox"/> 1b Incomplete information<br><input type="checkbox"/> 1c Marking smeared<br><input type="checkbox"/> 1d Label torn<br><input type="checkbox"/> 1e No label<br><input checked="" type="checkbox"/> 1f COC not received<br><input type="checkbox"/> 1g Other: | RECEIVED BY: <u>Dan Brown</u> 4-4-06 09:30<br>NO CUSTODY SEALS<br>RECEIVED AT 21°C<br>BKS 4-4-06<br>1 COOLER 1PS#<br>1291X2110147109061 |
| 2. Is the cooler temperature within limits? (> freezing temp. of water to 6°C; NC, 1668, 1613B: 0-4°C; VOST: 10°C; MA: 2-6°C) |     |    |    | <input type="checkbox"/> 2a Temp Blank = _____<br><input type="checkbox"/> 2b Cooler Temp = 21°C                                                                                                                                                                                                                                     | IF NO COC RECEIVED                                                                                                                      |
| 3. Were samples received with correct chemical preservative (excluding Encore)?                                               |     |    |    | <input type="checkbox"/> 3a Sample preservative = _____                                                                                                                                                                                                                                                                              |                                                                                                                                         |
| 4. Were custody seals present/intact on cooler and/or containers?                                                             |     |    |    | <input checked="" type="checkbox"/> 4a Not present<br><input type="checkbox"/> 4b Not intact<br><input type="checkbox"/> 4c Other:                                                                                                                                                                                                   |                                                                                                                                         |
| 5. Were all of the samples listed on the COC received?                                                                        |     |    |    | <input type="checkbox"/> 5a Samples received-not on COC<br><input type="checkbox"/> 5b Samples not received-on COC                                                                                                                                                                                                                   |                                                                                                                                         |
| 6. Were all of the sample containers received intact?                                                                         |     |    |    | <input type="checkbox"/> 6a Leaking<br><input type="checkbox"/> 6b Broken                                                                                                                                                                                                                                                            |                                                                                                                                         |
| 7. Were VOA samples received without headspace?                                                                               |     |    |    | <input type="checkbox"/> 7a Headspace (VOA only)                                                                                                                                                                                                                                                                                     |                                                                                                                                         |
| 8. Were samples received in appropriate containers?                                                                           |     |    |    | <input type="checkbox"/> 8a Improper container                                                                                                                                                                                                                                                                                       |                                                                                                                                         |
| 9. Did you check for residual chlorine, if necessary?                                                                         |     |    |    | <input type="checkbox"/> 9a Could not be determined due to matrix interference<br><input type="checkbox"/> 10a Holding time expired                                                                                                                                                                                                  |                                                                                                                                         |
| 10. Were samples received within holding time?                                                                                |     |    |    | <input type="checkbox"/> Incomplete information                                                                                                                                                                                                                                                                                      |                                                                                                                                         |
| 11. For rad samples, was sample activity info. provided?                                                                      |     |    |    | If yes & appears to be >1%, was SOG notified?                                                                                                                                                                                                                                                                                        |                                                                                                                                         |
| 12. For SOG water samples (1613B, 1668A, 8290, LR PAHs), do samples have visible solids present?                              |     |    |    | <input type="checkbox"/> 13a Leaking<br><input type="checkbox"/> 13b Other:                                                                                                                                                                                                                                                          |                                                                                                                                         |
| 13. Are the shipping containers intact?                                                                                       |     |    |    | <input checked="" type="checkbox"/> 14a Not relinquished                                                                                                                                                                                                                                                                             |                                                                                                                                         |
| 14. Was COC relinquished? (Signed/Dated/Timed)                                                                                |     |    |    | <input checked="" type="checkbox"/> 15a Incomplete information                                                                                                                                                                                                                                                                       |                                                                                                                                         |
| 15. Are tests/parameters listed for each sample?                                                                              |     |    |    | <input checked="" type="checkbox"/> 15a Incomplete information                                                                                                                                                                                                                                                                       |                                                                                                                                         |
| 16. Is the matrix of the samples noted?                                                                                       |     |    |    | <input checked="" type="checkbox"/> 15a Incomplete information                                                                                                                                                                                                                                                                       |                                                                                                                                         |
| 17. Is the date/time of sample collection noted?                                                                              |     |    |    | <input checked="" type="checkbox"/> 15a Incomplete information                                                                                                                                                                                                                                                                       |                                                                                                                                         |
| 18. Is the client and project name/# identified?                                                                              |     |    |    | <input checked="" type="checkbox"/> 15a Incomplete information                                                                                                                                                                                                                                                                       |                                                                                                                                         |
| 19. Was the sampler identified on the COC?                                                                                    |     |    |    |                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                         |

Quote #: \_\_\_\_\_ PM Instructions: \_\_\_\_\_

Sample Receiving Associate: \_\_\_\_\_

Date: \_\_\_\_\_

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