

Matrix Spike Report

UNSPIKED SAMPLE

Data File : /chem/C.i/052804.b/c1135.d
Samp Info : GGMR01AP,0.20,D4E200184-004
Inj Date : 28-MAY-2004 07:58
Sample Amt : 0mL

SPIKE SAMPLE

Data File : /chem/C.i/052804.b/c1138.d
Samp Info : MS,0.20,D4E200184-004MS
Inj Date : 28-MAY-2004 08:58
Sample Amt : 0mL

SPIKE DUPLICATE SAMPLE

Data File : /chem/C.i/052804.b/c1139.d
Samp Info : MSD,0.20,D4E200184-004MSD
Inj Date : 28-MAY-2004 09:18
Sample Amt : 0mL

| Sample | Concentration | | | | %Recovery | | | | | | | |
|--------------------|---------------|-----------|-----------|-----------|-----------------|-----|-----|-----|-----|-----|-----|--|
| | MS | | MSD | | Measured Limits | | | | RPD | | | |
| | Measured | Spiked | Measured | Spiked | Measured | MS | MSD | Min | Max | Mes | Max | |
| ===== | | | | | | | | | | | | |
| 1,1-Dichloroethene | | | | | | | | | | | | |
| 0.0000 | 1000.0000 | 1182.9900 | 1000.0000 | 1130.5000 | 118 | 113 | 67 | 125 | 5 | 20 | | |
| Trichloroethene | | | | | | | | | | | | |
| 0.0000 | 1000.0000 | 1019.5800 | 1000.0000 | 992.8910 | 102 | 99 | 80 | 123 | 3 | 20 | | |
| Benzene | | | | | | | | | | | | |
| 22.8474 | 1000.0000 | 1046.7600 | 1000.0000 | 1026.5500 | 102 | 100 | 75 | 116 | 2 | 20 | | |
| Toluene | | | | | | | | | | | | |
| 273.8380 | 1000.0000 | 1339.8300 | 1000.0000 | 1346.1600 | 107 | 107 | 74 | 115 | 0 | 20 | | |
| Chlorobenzene | | | | | | | | | | | | |
| 0.0000 | 1000.0000 | 1008.3100 | 1000.0000 | 997.3430 | 101 | 100 | 77 | 117 | 1 | 20 | | |

100.0 Percent of recoveries are within control limits.

100.0 Percent of RPD values are within control limits.


STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/052804.b/c1140.d
Lab Smp Id: GGTFK1AA Client Smp ID: TB-2
Inj Date : 28-MAY-2004 09:41
Operator : yanezj Inst ID: C.i
Smp Info : GGTFK1AA,,D4E210325-007
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/052804.b/C-20ml-AQ.m
Meth Date : 28-May-2004 07:12 yanezj Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: QK-01.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|-------------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Final Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

05/29/04


| Compounds | QUANT | SIG | CONCENTRATIONS | | | | | | |
|------------------------------|--------|-------|------------------------|-------|---------|---------|----------|-----------|---------|
| | | | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN | FINAL |
| | | | | | | | | (ug/L) | (ug/L) |
| ===== | ===== | ===== | ===== | ===== | ===== | ===== | ===== | ===== | |
| * 56 Fluorobenzene | 96 | | 4.113 | 4.106 | (1.000) | 1670238 | 10.0000 | | |
| * 81 Chlorobenzene-d5 | 119 | | 7.563 | 7.563 | (1.000) | 255593 | 10.0000 | | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | | 9.720 | 9.720 | (1.000) | 286024 | 10.0000 | | |
| \$ 48 Dibromofluoromethane | 111 | | 3.242 | 3.236 | (0.788) | 291833 | 8.23948 | 8.23948 | |
| \$ 52 1,2-Dichloroethane-d4 | 65 | | 3.683 | 3.677 | (0.896) | 297576 | 7.85441 | 7.85441 | |
| \$ 69 Toluene-d8 | 98 | | 6.083 | 6.082 | (0.804) | 1349800 | 9.25150 | 9.25150 | |
| \$ 93 Bromofluorobenzene | 95 | | 8.693 | 8.693 | (1.149) | 367638 | 8.35805 | 8.35804 | |
| 1 dichlorodifluoromethane | 85.00 | | Compound Not Detected. | | | | | | |
| 2 dichlorotetrafluoroethane | 85.00 | | Compound Not Detected. | | | | | | |
| 3 Chloromethane | 50.00 | | Compound Not Detected. | | | | | | |
| 4 Vinyl Chloride | 62.00 | | Compound Not Detected. | | | | | | |
| 5 Ethylene Oxide | 43.00 | | Compound Not Detected. | | | | | | |
| 6 Bromomethane | 94.00 | | Compound Not Detected. | | | | | | |
| 7 Chloroethane | 64.00 | | Compound Not Detected. | | | | | | |
| 8 Dichlorofluoromethane | 67.00 | | Compound Not Detected. | | | | | | |
| 9 Trichlorofluoromethane | 101.00 | | Compound Not Detected. | | | | | | |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|-----------------------------------|-------------------|-------|----------|---------------|----------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 10 Ethanol | 45.00 | | Compound | Not Detected. | | | |
| 11 Ethyl Ether | 59.00 | | Compound | Not Detected. | | | |
| M 12 1,2-Dichloroethene (total) | 96.00 | | Compound | Not Detected. | | | |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117.00 | | Compound | Not Detected. | | | |
| 14 2,2-dichloro-1,1,1-trifluoroet | 83.00 | | Compound | Not Detected. | | | |
| 15 Acrolein | 56.00 | | Compound | Not Detected. | | | |
| 16 Trichlorotrifluoroethane | 151.00 | | Compound | Not Detected. | | | |
| 17 1,1-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| M 18 Xylene (total) | 106.00 | | Compound | Not Detected. | | | |
| 19 Acetone | 43.00 | | Compound | Not Detected. | | | |
| 20 Iodomethane | 142.00 | | Compound | Not Detected. | | | |
| 21 Carbon Disulfide | 76.00 | | Compound | Not Detected. | | | |
| 22 2-Propanol | 45.00 | | Compound | Not Detected. | | | |
| 23 Allyl Chloride | 41.00 | | Compound | Not Detected. | | | |
| 24 Methyl acetate | 43.00 | | Compound | Not Detected. | | | |
| 25 Acetonitrile | 41.00 | | Compound | Not Detected. | | | |
| 26 Methylene Chloride | 84 | 1.754 | 1.755 | (0.426) | 19926 | 0.52704 | 0.527036(a) |
| 27 tert-Butyl alcohol | 59.00 | | Compound | Not Detected. | | | |
| 28 Methyl t-butyl ether | 73.00 | | Compound | Not Detected. | | | |
| 29 trans-1,2-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 30 Acrylonitrile | 53.00 | | Compound | Not Detected. | | | |
| 31 Hexane | 57.00 | | Compound | Not Detected. | | | |
| 32 1,1-Dichloroethane | 63.00 | | Compound | Not Detected. | | | |
| 33 Isopropyl ether | 87.00 | | Compound | Not Detected. | | | |
| 34 Chloroprene | 53.00 | | Compound | Not Detected. | | | |
| 35 Vinyl acetate | 43.00 | | Compound | Not Detected. | | | |
| 36 ETBE | 59.00 | | Compound | Not Detected. | | | |
| 37 2,2-Dichloropropane | 77.00 | | Compound | Not Detected. | | | |
| 38 cis-1,2-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 39 2-Butanone | 43.00 | | Compound | Not Detected. | | | |
| 40 Ethyl Acetate | 43.00 | | Compound | Not Detected. | | | |
| 41 Propionitrile | 54.00 | | Compound | Not Detected. | | | |
| 42 Bromochloromethane | 128.00 | | Compound | Not Detected. | | | |
| 43 Tetrahydrofuran | 42.00 | | Compound | Not Detected. | | | |
| 44 Methacrylonitrile | 41.00 | | Compound | Not Detected. | | | |
| 45 Chloroform | 83.00 | | Compound | Not Detected. | | | |
| 46 Cyclohexane | 56.00 | | Compound | Not Detected. | | | |
| 47 1,1,1-Trichloroethane | 97.00 | | Compound | Not Detected. | | | |
| 49 Carbon Tetrachloride | 117.00 | | Compound | Not Detected. | | | |
| 50 1,1-Dichloropropene | 75.00 | | Compound | Not Detected. | | | |
| 51 Benzene | 78.00 | | Compound | Not Detected. | | | |
| 53 Isobutanol | 41.00 | | Compound | Not Detected. | | | |
| 54 1,2-Dichloroethane | 62.00 | | Compound | Not Detected. | | | |
| 55 TAME | 73.00 | | Compound | Not Detected. | | | |
| 57 Trichloroethene | 130.00 | | Compound | Not Detected. | | | |
| 58 Methyl cyclohexane | 55.00 | | Compound | Not Detected. | | | |
| 59 n-Butanol | 56.00 | | Compound | Not Detected. | | | |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|------------------------------|-------------------|-------|--------------|-----------|----------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 60 1,2-Dichloropropane | 63.00 | | Compound Not | Detected. | | | |
| 61 2-Pentanone | 43.00 | | Compound Not | Detected. | | | |
| 62 Dibromomethane | 93.00 | | Compound Not | Detected. | | | |
| 63 1,4-Dioxane | 88.00 | | Compound Not | Detected. | | | |
| 64 Methyl Methacrylate | 100.00 | | Compound Not | Detected. | | | |
| 65 Bromodichloromethane | 83.00 | | Compound Not | Detected. | | | |
| 66 2-nitropropane | 41.00 | | Compound Not | Detected. | | | |
| 67 2-Chloroethyl vinyl ether | 63.00 | | Compound Not | Detected. | | | |
| 68 cis-1,3-Dichloropropene | 75.00 | | Compound Not | Detected. | | | |
| 70 4-Methyl-2-pentanone | 43.00 | | Compound Not | Detected. | | | |
| 71 Toluene | 91 | 6.149 | 6.148 | (0.813) | 19697 | 0.10211 | 0.102109(a) |
| 72 trans-1,3-Dichloropropene | 75.00 | | Compound Not | Detected. | | | |
| 73 Ethyl methacrylate | 69.00 | | Compound Not | Detected. | | | |
| 74 1,1,2-Trichloroethane | 97.00 | | Compound Not | Detected. | | | |
| 75 Tetrachloroethene | 164.00 | | Compound Not | Detected. | | | |
| 76 1,3-Dichloropropane | 76.00 | | Compound Not | Detected. | | | |
| 77 Tetrahydrothiophene | 60.00 | | Compound Not | Detected. | | | |
| 78 2-Hexanone | 43.00 | | Compound Not | Detected. | | | |
| 79 Dibromochloromethane | 129.00 | | Compound Not | Detected. | | | |
| 80 1,2-Dibromoethane | 107.00 | | Compound Not | Detected. | | | |
| 82 Chlorobenzene | 112.00 | | Compound Not | Detected. | | | |
| 83 1-Chlorohexane | 91.00 | | Compound Not | Detected. | | | |
| 84 1,1,1,2-Tetrachloroethane | 131.00 | | Compound Not | Detected. | | | |
| 85 Ethylbenzene | 106.00 | | Compound Not | Detected. | | | |
| 86 m and p-Xylene | 106.00 | | Compound Not | Detected. | | | |
| 87 o-Xylene | 106.00 | | Compound Not | Detected. | | | |
| 88 Styrene | 104.00 | | Compound Not | Detected. | | | |
| 89 Bromoform | 173.00 | | Compound Not | Detected. | | | |
| 90 isopropyl benzene | 105.00 | | Compound Not | Detected. | | | |
| 91 Cyclohexanone | 55.00 | | Compound Not | Detected. | | | |
| 92 cis-1,4-dichloro-2-butene | 53.00 | | Compound Not | Detected. | | | |
| 94 Bromobenzene | 156.00 | | Compound Not | Detected. | | | |
| 95 1,1,2,2-Tetrachloroethane | 83.00 | | Compound Not | Detected. | | | |
| 96 1,2,3-Trichloropropane | 110.00 | | Compound Not | Detected. | | | |
| 97 n-Propylbenzene | 120.00 | | Compound Not | Detected. | | | |
| 98 t-1,4-Dichloro-2-butene | 53.00 | | Compound Not | Detected. | | | |
| 99 2-Chlorotoluene | 126.00 | | Compound Not | Detected. | | | |
| 100 4-Chlorotoluene | 126.00 | | Compound Not | Detected. | | | |
| 101 1,3,5-Trimethylbenzene | 105.00 | | Compound Not | Detected. | | | |
| 102 tert-Butylbenzene | 119.00 | | Compound Not | Detected. | | | |
| 103 1,2,4-Trimethylbenzene | 105.00 | | Compound Not | Detected. | | | |
| 104 sec-Butylbenzene | 134.00 | | Compound Not | Detected. | | | |
| 105 m-Dichlorobenzene | 146.00 | | Compound Not | Detected. | | | |
| 106 4-Isopropyltoluene | 119.00 | | Compound Not | Detected. | | | |
| 108 p-dichlorobenzene | 146.00 | | Compound Not | Detected. | | | |
| 109 1,2,3-Trimethylbenzene | 105.00 | | Compound Not | Detected. | | | |
| 110 o-Dichlorobenzene | 146.00 | | Compound Not | Detected. | | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|---------------------------------|-----------|----|--------|--------|------------------------|----------------|---------|
| | | | | | | ON-COLUMN | FINAL |
| | MASS | | | | | (ug/L) | (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 111 n-Butylbenzene | 91.00 | | | | Compound Not Detected. | | |
| 112 1,2-Dibromo-3-chloropropane | 157.00 | | | | Compound Not Detected. | | |
| 113 1,2,4-Trichlorobenzene | 180.00 | | | | Compound Not Detected. | | |
| 114 Hexachlorobutadiene | 225.00 | | | | Compound Not Detected. | | |
| 115 Naphthalene | 128.00 | | | | Compound Not Detected. | | |
| 116 1,2,3-Trichlorobenzene | 180.00 | | | | Compound Not Detected. | | |

QC Flag Legend

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

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/052804.b/c1140.d
 Lab Smp Id: GGTFK1AA Client Smp ID: TB-2
 Inj Date : 28-MAY-2004 09:41
 Operator : yanezj Inst ID: C.i
 Smp Info : GGTFK1AA,,D4E210325-007
 Misc Info :
 Comment : Purge and Trap Analysis
 Method : /chem/C.i/052804.b/C-20ml-AQ.m
 Meth Date : 28-May-2004 07:12 yanezj Quant Type: ISTD
 Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: QK-01.sub
 Target Version: 3.40
 Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|-------------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Final Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| ISTD | RT | AREA | AMOUNT |
|------------------------------|-------|---------|--------|
| ===== | ===== | ===== | ===== |
| * 107 1,4-Dichlorobenzene-d4 | 9.720 | 2193337 | 10.000 |

| RT | AREA | CONCENTRATIONS | | QUAL | QUANT | | CPND # |
|---------------------------------|--------|----------------|--------------|------|----------|-----------|--------|
| | | ON-COL(ug/L) | FINAL(ug/L) | | LIBRARY | LIB ENTRY | |
| ---- | ---- | ----- | ----- | ---- | ----- | ----- | ----- |
| Acetic acid, 2-ethylhexyl ester | | | | | | | |
| 11.014 | 538411 | 2.45475729 | 2.45476 | 91 | NBS75K.1 | 15793 | 107 |
| Unknown | | | | | | | |
| 11.696 | 251841 | 1.14820933 | 1.14821 | 0 | | 0 | 107 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c1140.d
Lab Smp Id: GGTFK1AA
Analysis Type: VOA
Quant Type: ISTD
Operator: yanezj
Method File: /chem/C.i/052804.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/28/4
Calibration Time: 0644
Client Smp ID: TB-2
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 1480865 | 740432 | 2961730 | 1670238 | 12.79 |
| 81 Chlorobenzene-d5 | 202798 | 101399 | 405596 | 255593 | 26.03 |
| 107 1,4-Dichlorobenze | 221202 | 110601 | 442404 | 286024 | 29.30 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 4.11 | 3.61 | 4.61 | 4.11 | 0.16 |
| 81 Chlorobenzene-d5 | 7.56 | 7.06 | 8.06 | 7.56 | 0.01 |
| 107 1,4-Dichlorobenze | 9.72 | 9.22 | 10.22 | 9.72 | 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.

STL Denver

RECOVERY REPORT

Client Name: Cabrera Services
Sample Matrix: LIQUID
Lab Smp Id: GGTFK1AA
Level: LOW
Data Type: MS DATA
SpikeList File: dcs-h20.spk
Sublist File: QK-01.sub
Method File: /chem/C.i/052804.b/C-20ml-AQ.m
Misc Info:

Client SDG: D4E210325
Fraction: VOA
Client Smp ID: TB-2
Operator: yanezj
SampleType: SAMPLE
Quant Type: ISTD

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 48 Dibromofluorometha | 8.75000 | 8.23948 | 94.17 | 76-116 |
| \$ 52 1,2-Dichloroethane | 8.75000 | 7.85441 | 89.76 | 59-129 |
| \$ 69 Toluene-d8 | 8.75000 | 9.25150 | 105.73 | 76-116 |
| \$ 93 Bromofluorobenzene | 8.75000 | 8.35804 | 95.52 | 74-114 |

Data File: /chem/C.i/052804.b/c1140.d

Date : 28-MAY-2004 09:41

Client ID: TB-2

Sample Info: GGTFK1AA,,D4E210325-007

Purge Volume: 20.0

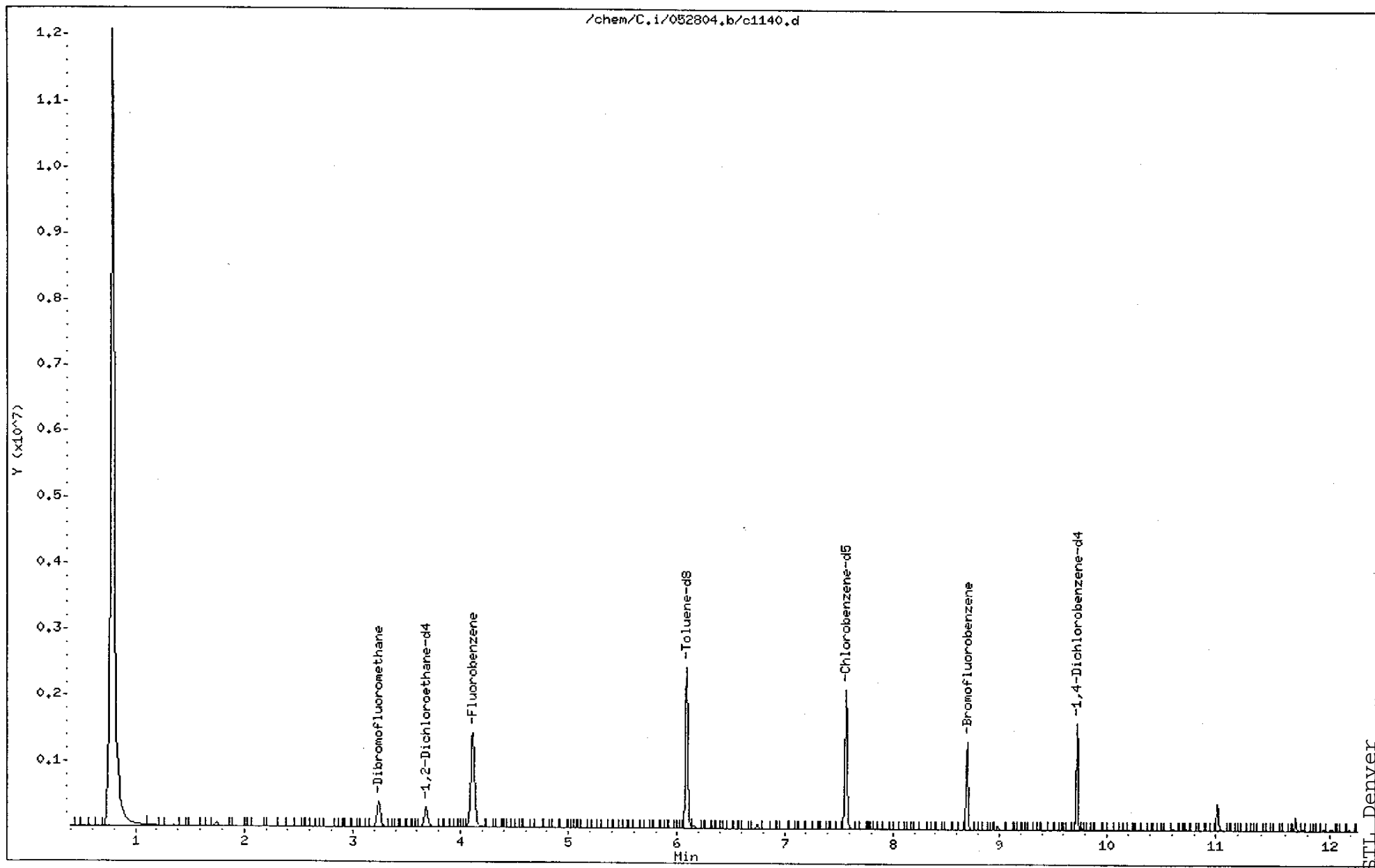
Column phase: DB624

Instrument: C.i

Operator: yanezj

Column diameter: 0.53

Page 8



Date : 28-MAY-2004 09:41

Client ID: TB-2

Instrument: C.i

Sample Info: GGTFK1AA,,D4E210325-007

Purge Volume: 20.0

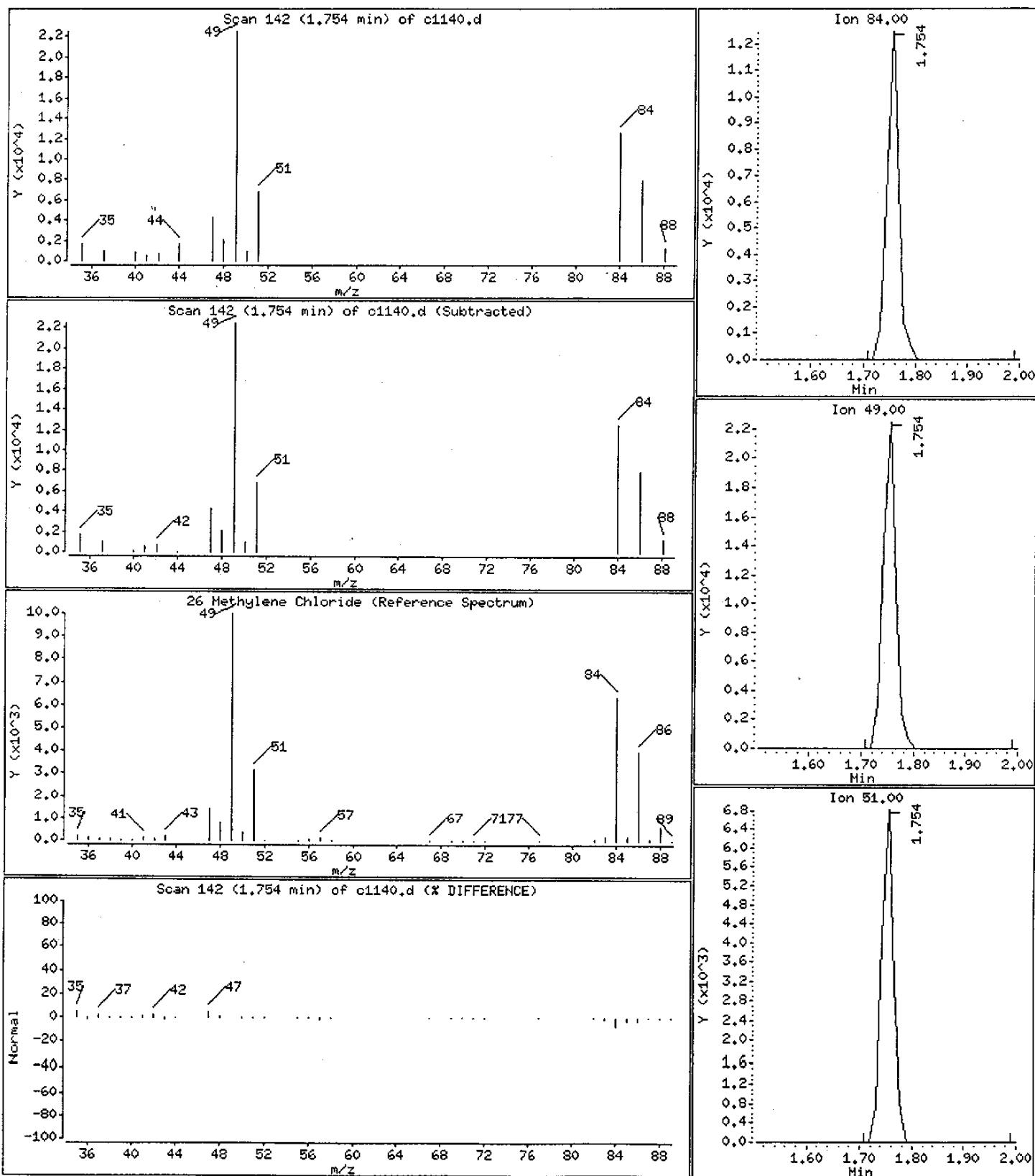
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

26 Methylene Chloride

Concentration: 0.527036 ug/L



Date : 28-MAY-2004 09:41

Client ID: TB-2

Instrument: C.i

Sample Info: GGTFK1AA,,D4E210325-007

Purge Volume: 20.0

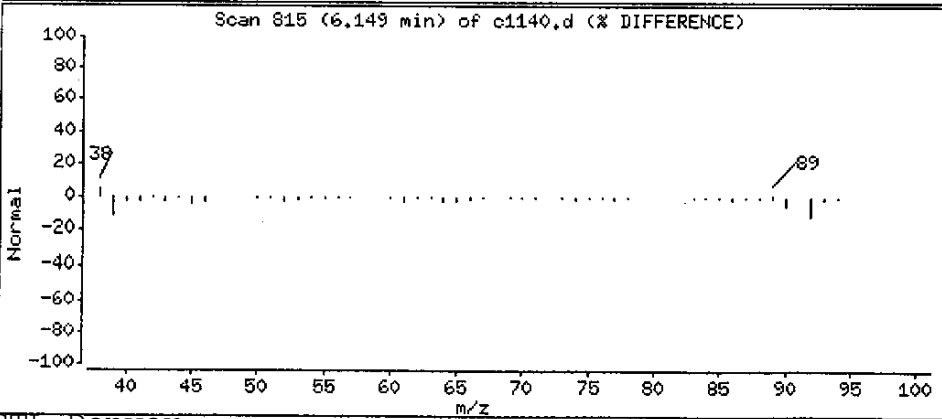
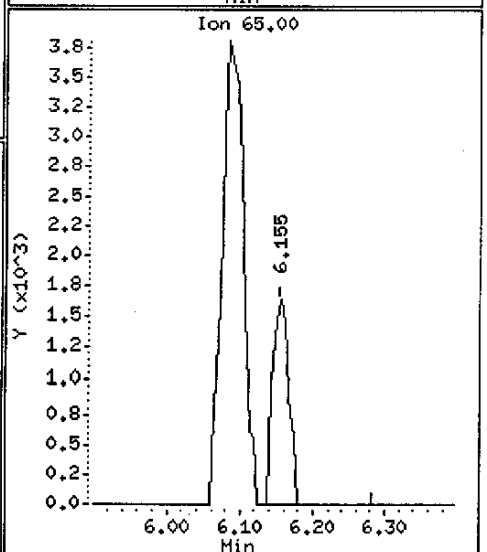
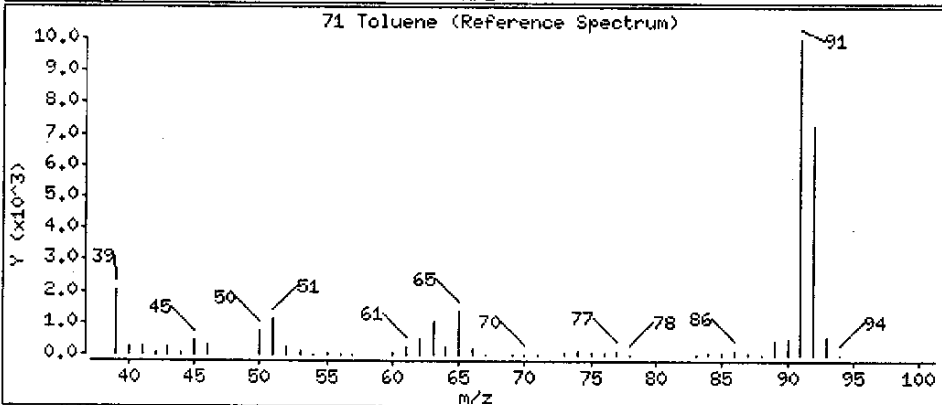
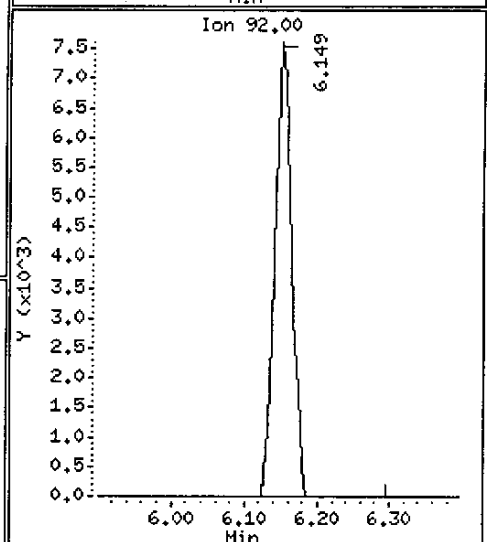
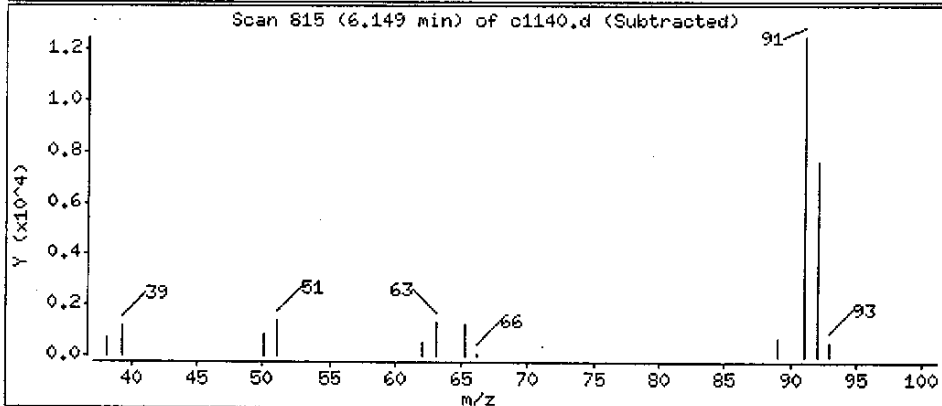
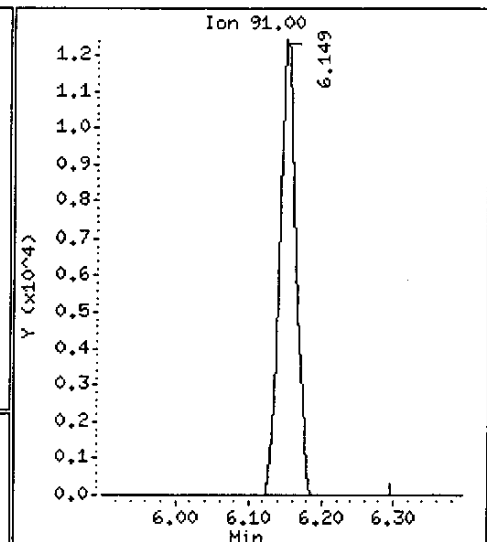
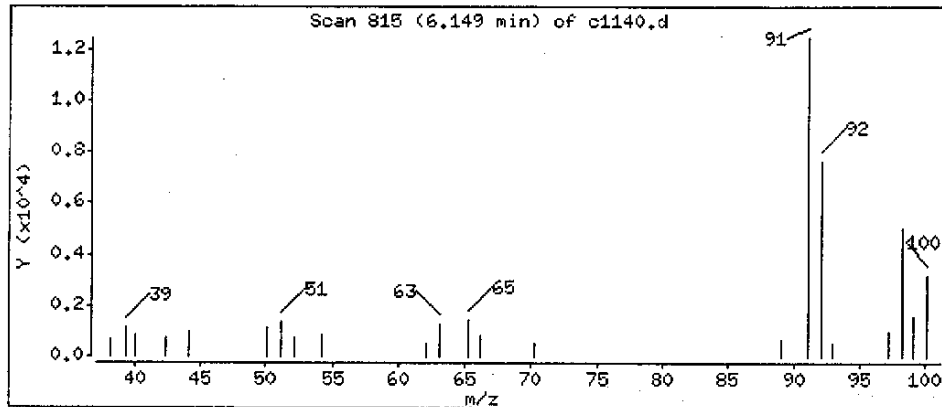
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

71 Toluene

Concentration: 0.102109 ug/L



Date : 28-MAY-2004 09:41

Client ID: TB-2

Instrument: C.i

Sample Info: GGTFK1AA,,D4E210325-007

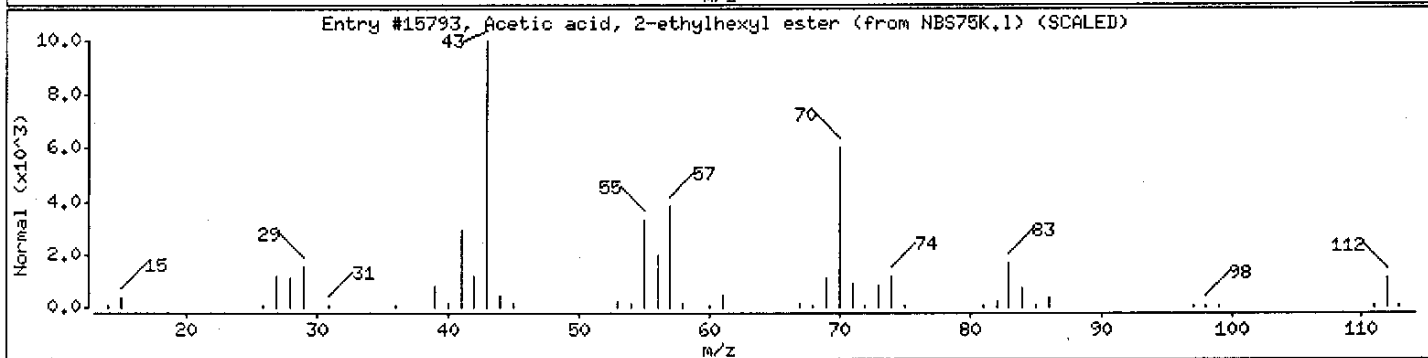
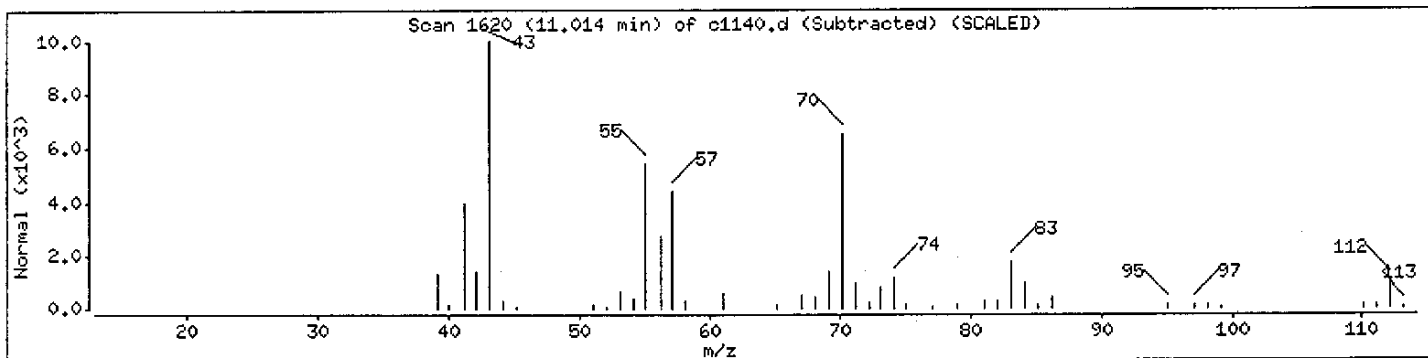
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---------------------------------|------------|----------|-------|---------|----------|--------|
| Acetic acid, 2-ethylhexyl ester | 103-09-3 | NBS75K.1 | 15793 | 91 | C10H20O2 | 172 |



Date : 28-MAY-2004 09:41

Client ID: TB-2

Instrument: C.i

Sample Info: GGTFK1AA,,D4E210325-007

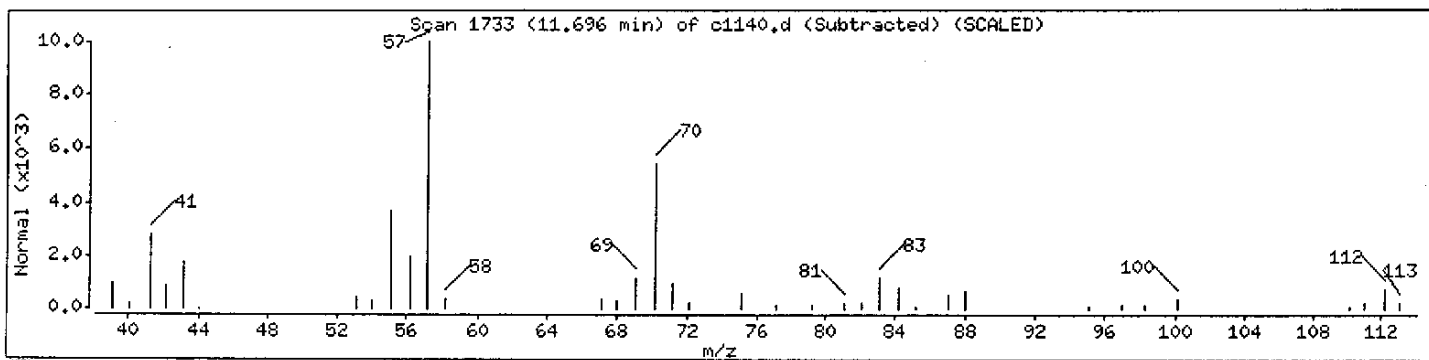
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|-------------------------------|------------|---------|-------|---------|---------|--------|
| Unknown | | | 0 | 0 | | 0 |



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/052804.b/c1143.d
Lab Smp Id: GGTF61AA Client Smp ID: TRIP BLANK
Inj Date : 28-MAY-2004 10:41
Operator : yanezj Inst ID: C.i
Smp Info : GGTF61AA,,D4E210325-011
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/052804.b/C-20ml-AQ.m
Meth Date : 28-May-2004 07:12 yanezj Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: QK-01.sub
Target Version: 3.40
Processing Host: chemsv02

05/29/04
JMY

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|-------------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Final Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|------------------------------|-------------------|------------------------|--------|---------|----------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| * 56 Fluorobenzene | 96 | 4.107 | 4.106 | (1.000) | 1213396 | 10.0000 | |
| * 81 Chlorobenzene-d5 | 119 | 7.564 | 7.563 | (1.000) | 190667 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 9.721 | 9.720 | (1.000) | 235368 | 10.0000 | |
| \$ 48 Dibromofluoromethane | 111 | 3.237 | 3.236 | (0.788) | 220619 | 8.57401 | 8.57401 |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 3.678 | 3.677 | (0.896) | 226652 | 8.23476 | 8.23476 |
| \$ 69 Toluene-d8 | 98 | 6.083 | 6.082 | (0.804) | 968712 | 8.90042 | 8.90042 |
| \$ 93 Bromofluorobenzene | 95 | 8.694 | 8.693 | (1.149) | 272014 | 8.28989 | 8.28989 |
| 1 dichlorodifluoromethane | 85.00 | Compound Not Detected. | | | | | |
| 2 dichlorotetrafluoroethane | 85.00 | Compound Not Detected. | | | | | |
| 3 Chloromethane | 50 | 0.930 | 0.921 | (0.226) | 4062 | 0.11718 | 0.117184(a) |
| 4 Vinyl Chloride | 62.00 | Compound Not Detected. | | | | | |
| 5 Ethylene Oxide | 43.00 | Compound Not Detected. | | | | | |
| 6 Bromomethane | 94.00 | Compound Not Detected. | | | | | |
| 7 Chloroethane | 64.00 | Compound Not Detected. | | | | | |
| 8 Dichlorofluoromethane | 67.00 | Compound Not Detected. | | | | | |
| 9 Trichlorofluoromethane | 101.00 | Compound Not Detected. | | | | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|-----------------------------------|-----------|-------|----------|---------------|----------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ----- | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| 10 Ethanol | 45.00 | | Compound | Not Detected. | | | |
| 11 Ethyl Ether | 59.00 | | Compound | Not Detected. | | | |
| M 12 1,2-Dichloroethene (total) | 96.00 | | Compound | Not Detected. | | | |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117.00 | | Compound | Not Detected. | | | |
| 14 2,2-dichloro-1,1,1-trifluoroet | 83.00 | | Compound | Not Detected. | | | |
| 15 Acrolein | 56.00 | | Compound | Not Detected. | | | |
| 16 Trichlorotrifluoroethane | 151.00 | | Compound | Not Detected. | | | |
| 17 1,1-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| M 18 Xylene (total) | 106.00 | | Compound | Not Detected. | | | |
| 19 Acetone | 43.00 | | Compound | Not Detected. | | | |
| 20 Iodomethane | 142.00 | | Compound | Not Detected. | | | |
| 21 Carbon Disulfide | 76.00 | | Compound | Not Detected. | | | |
| 22 2-Propanol | 45.00 | | Compound | Not Detected. | | | |
| 23 Allyl Chloride | 41.00 | | Compound | Not Detected. | | | |
| 24 Methyl acetate | 43.00 | | Compound | Not Detected. | | | |
| 25 Acetonitrile | 41.00 | | Compound | Not Detected. | | | |
| 26 Methylene Chloride | 84 | 1.752 | 1.755 | (0.427) | 18260 | 0.66481 | 0.664808(a) |
| 27 tert-Butyl alcohol | 59.00 | | Compound | Not Detected. | | | |
| 28 Methyl t-butyl ether | 73.00 | | Compound | Not Detected. | | | |
| 29 trans-1,2-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 30 Acrylonitrile | 53.00 | | Compound | Not Detected. | | | |
| 31 Hexane | 57.00 | | Compound | Not Detected. | | | |
| 32 1,1-Dichloroethane | 63.00 | | Compound | Not Detected. | | | |
| 33 Isopropyl ether | 87.00 | | Compound | Not Detected. | | | |
| 34 Chloroprene | 53.00 | | Compound | Not Detected. | | | |
| 35 Vinyl acetate | 43.00 | | Compound | Not Detected. | | | |
| 36 ETBE | 59.00 | | Compound | Not Detected. | | | |
| 37 2,2-Dichloropropane | 77.00 | | Compound | Not Detected. | | | |
| 38 cis-1,2-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 39 2-Butanone | 43.00 | | Compound | Not Detected. | | | |
| 40 Ethyl Acetate | 43.00 | | Compound | Not Detected. | | | |
| 41 Propionitrile | 54.00 | | Compound | Not Detected. | | | |
| 42 Bromochloromethane | 128.00 | | Compound | Not Detected. | | | |
| 43 Tetrahydrofuran | 42.00 | | Compound | Not Detected. | | | |
| 44 Methacrylonitrile | 41.00 | | Compound | Not Detected. | | | |
| 45 Chloroform | 83.00 | | Compound | Not Detected. | | | |
| 46 Cyclohexane | 56.00 | | Compound | Not Detected. | | | |
| 47 1,1,1-Trichloroethane | 97.00 | | Compound | Not Detected. | | | |
| 49 Carbon Tetrachloride | 117.00 | | Compound | Not Detected. | | | |
| 50 1,1-Dichloropropene | 75.00 | | Compound | Not Detected. | | | |
| 51 Benzene | 78.00 | | Compound | Not Detected. | | | |
| 53 Isobutanol | 41.00 | | Compound | Not Detected. | | | |
| 54 1,2-Dichloroethane | 62.00 | | Compound | Not Detected. | | | |
| 55 TAME | 73.00 | | Compound | Not Detected. | | | |
| 57 Trichloroethene | 130.00 | | Compound | Not Detected. | | | |
| 58 Methyl cyclohexane | 55.00 | | Compound | Not Detected. | | | |
| 59 n-Butanol | 56.00 | | Compound | Not Detected. | | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|------------------------------|-----------|----|----------|---------------|----------|----------------|---------|
| | | | | | | ON-COLUMN | FINAL |
| | MASS | | | | | (ug/L) | (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 60 1,2-Dichloropropane | 63.00 | | Compound | Not Detected. | | | |
| 61 2-Pentanone | 43.00 | | Compound | Not Detected. | | | |
| 62 Dibromomethane | 93.00 | | Compound | Not Detected. | | | |
| 63 1,4-Dioxane | 88.00 | | Compound | Not Detected. | | | |
| 64 Methyl Methacrylate | 100.00 | | Compound | Not Detected. | | | |
| 65 Bromodichloromethane | 83.00 | | Compound | Not Detected. | | | |
| 66 2-nitropropane | 41.00 | | Compound | Not Detected. | | | |
| 67 2-Chloroethyl vinyl ether | 63.00 | | Compound | Not Detected. | | | |
| 68 cis-1,3-Dichloropropene | 75.00 | | Compound | Not Detected. | | | |
| 70 4-Methyl-2-pentanone | 43.00 | | Compound | Not Detected. | | | |
| 71 Toluene | 91.00 | | Compound | Not Detected. | | | |
| 72 trans-1,3-Dichloropropene | 75.00 | | Compound | Not Detected. | | | |
| 73 Ethyl methacrylate | 69.00 | | Compound | Not Detected. | | | |
| 74 1,1,2-Trichloroethane | 97.00 | | Compound | Not Detected. | | | |
| 75 Tetrachloroethene | 164.00 | | Compound | Not Detected. | | | |
| 76 1,3-Dichloropropane | 76.00 | | Compound | Not Detected. | | | |
| 77 Tetrahydrothiophene | 60.00 | | Compound | Not Detected. | | | |
| 78 2-Hexanone | 43.00 | | Compound | Not Detected. | | | |
| 79 Dibromochloromethane | 129.00 | | Compound | Not Detected. | | | |
| 80 1,2-Dibromoethane | 107.00 | | Compound | Not Detected. | | | |
| 82 Chlorobenzene | 112.00 | | Compound | Not Detected. | | | |
| 83 1-Chlorohexane | 91.00 | | Compound | Not Detected. | | | |
| 84 1,1,1,2-Tetrachloroethane | 131.00 | | Compound | Not Detected. | | | |
| 85 Ethylbenzene | 106.00 | | Compound | Not Detected. | | | |
| 86 m and p-Xylene | 106.00 | | Compound | Not Detected. | | | |
| 87 o-Xylene | 106.00 | | Compound | Not Detected. | | | |
| 88 Styrene | 104.00 | | Compound | Not Detected. | | | |
| 89 Bromoform | 173.00 | | Compound | Not Detected. | | | |
| 90 isopropyl benzene | 105.00 | | Compound | Not Detected. | | | |
| 91 Cyclohexanone | 55.00 | | Compound | Not Detected. | | | |
| 92 cis-1,4-dichloro-2-butene | 53.00 | | Compound | Not Detected. | | | |
| 94 Bromobenzene | 156.00 | | Compound | Not Detected. | | | |
| 95 1,1,2,2-Tetrachloroethane | 83.00 | | Compound | Not Detected. | | | |
| 96 1,2,3-Trichloropropane | 110.00 | | Compound | Not Detected. | | | |
| 97 n-Propylbenzene | 120.00 | | Compound | Not Detected. | | | |
| 98 t-1,4-Dichloro-2-butene | 53.00 | | Compound | Not Detected. | | | |
| 99 2-Chlorotoluene | 126.00 | | Compound | Not Detected. | | | |
| 100 4-Chlorotoluene | 126.00 | | Compound | Not Detected. | | | |
| 101 1,3,5-Trimethylbenzene | 105.00 | | Compound | Not Detected. | | | |
| 102 tert-Butylbenzene | 119.00 | | Compound | Not Detected. | | | |
| 103 1,2,4-Trimethylbenzene | 105.00 | | Compound | Not Detected. | | | |
| 104 sec-Butylbenzene | 134.00 | | Compound | Not Detected. | | | |
| 105 m-Dichlorobenzene | 146.00 | | Compound | Not Detected. | | | |
| 106 4-Isopropyltoluene | 119.00 | | Compound | Not Detected. | | | |
| 108 p-dichlorobenzene | 146.00 | | Compound | Not Detected. | | | |
| 109 1,2,3-Trimethylbenzene | 105.00 | | Compound | Not Detected. | | | |
| 110 o-Dichlorobenzene | 146.00 | | Compound | Not Detected. | | | |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|---------------------------------|-------------------|----|------------------------|--------|----------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ---- | == | ===== | ===== | ===== | ===== | ===== |
| 111 n-Butylbenzene | 91.00 | | Compound Not Detected. | | | | |
| 112 1,2-Dibromo-3-chloropropane | 157.00 | | Compound Not Detected. | | | | |
| 113 1,2,4-Trichlorobenzene | 180.00 | | Compound Not Detected. | | | | |
| 114 Hexachlorobutadiene | 225.00 | | Compound Not Detected. | | | | |
| 115 Naphthalene | 128.00 | | Compound Not Detected. | | | | |
| 116 1,2,3-Trichlorobenzene | 180.00 | | Compound Not Detected. | | | | |

QC Flag Legend

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

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/052804.b/c1143.d
Lab Smp Id: GGTF61AA Client Smp ID: TRIP BLANK
Inj Date : 28-MAY-2004 10:41
Operator : yanezj Inst ID: C.i
Smp Info : GGTF61AA,,D4E210325-011
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/052804.b/C-20ml-AQ.m
Meth Date : 28-May-2004 07:12 yanezj Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: QK-01.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|-------------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Final Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| ISTD | RT | AREA | AMOUNT |
|------------------------------|-------|---------|--------|
| ===== | ===== | ===== | ===== |
| * 107 1,4-Dichlorobenzene-d4 | 9.721 | 1831749 | 10.000 |

| CONCENTRATIONS | | | | | QUANT | | |
|--|--------|---------------|--------------|------|------------------|-----------|--------|
| RT | AREA | ON-COL(ug/L) | FINAL(ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ---- | ---- | ----- | ----- | ---- | ----- | ----- | ----- |
| Cyclotetrasiloxane, octamethyl- | | | | | CAS #: 556-67-2 | | |
| 8.984 | 226007 | 1.23383171 | 1.23383 | 90 | NBS75K.1 | 41966 | 107 |
| Cyclopentane, 1,2,3-trimethyl-, (1.alpha | | | | | CAS #: 2613-69-6 | | |
| 11.014 | 730139 | 3.98602101 | 3.98602 | 81 | NBS75K.1 | 64045 | 107 |
| Unknown | | | | | CAS #: | | |
| 11.697 | 383719 | 2.09482304 | 2.09482 | 0 | | 0 | 107 |

Data File: /chem/C.i/052804.b/c1143.d
Report Date: 29-May-2004 12:17

Page 6

| RT | CONCENTRATIONS | | | QUAL | QUANT | | CPND # |
|-------------|----------------|---------------|--------------|------|-----------------|-----------|--------|
| | AREA | ON-COL(ug/L) | FINAL(ug/L) | | LIBRARY | LIB ENTRY | |
| ---- | ---- | ----- | ----- | ---- | ----- | ----- | ----- |
| Heneicosane | | | | | CAS #: 629-94-7 | | |
| 11.794 | 219606 | 1.19888697 | 1.19889 | 91 | NBS75K.1 | 42201 | 107 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c1143.d
Lab Smp Id: GGTF61AA
Analysis Type: VOA
Quant Type: ISTD
Operator: yanezj
Method File: /chem/C.i/052804.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/28/4
Calibration Time: 0644
Client Smp ID: TRIP BLANK
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|--------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1480865 | 740432 | 2961730 | 1213396 | -18.06 |
| 81 Chlorobenzene-d5 | 202798 | 101399 | 405596 | 190667 | -5.98 |
| 107 1,4-Dichlorobenze | 221202 | 110601 | 442404 | 235368 | 6.40 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 4.11 | 3.61 | 4.61 | 4.11 | 0.03 |
| 81 Chlorobenzene-d5 | 7.56 | 7.06 | 8.06 | 7.56 | 0.02 |
| 107 1,4-Dichlorobenze | 9.72 | 9.22 | 10.22 | 9.72 | 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.

STL Denver

RECOVERY REPORT

Client Name: Cabrera Services
Sample Matrix: LIQUID
Lab Smp Id: GGTF61AA
Level: LOW
Data Type: MS DATA
SpikeList File: dcs-h20.spk
Sublist File: QK-01.sub
Method File: /chem/C.i/052804.b/C-20ml-AQ.m
Misc Info:

Client SDG: D4E210325
Fraction: VOA
Client Smp ID: TRIP BLANK
Operator: yanezj
SampleType: SAMPLE
Quant Type: ISTD

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 48 Dibromofluorometha | 8.75000 | 8.57401 | 97.99 | 76-116 |
| \$ 52 1,2-Dichloroethane | 8.75000 | 8.23476 | 94.11 | 59-129 |
| \$ 69 Toluene-d8 | 8.75000 | 8.90042 | 101.72 | 76-116 |
| \$ 93 Bromofluorobenzene | 8.75000 | 8.28989 | 94.74 | 74-114 |

Data File: /chem/C.i/052804.b/c1143.d

Date : 28-MAY-2004 10:41

Client ID: TRIP BLANK

Sample Info: GGT61AA,,D4E210325-011

Purge Volume: 20.0

Column phase: DB624

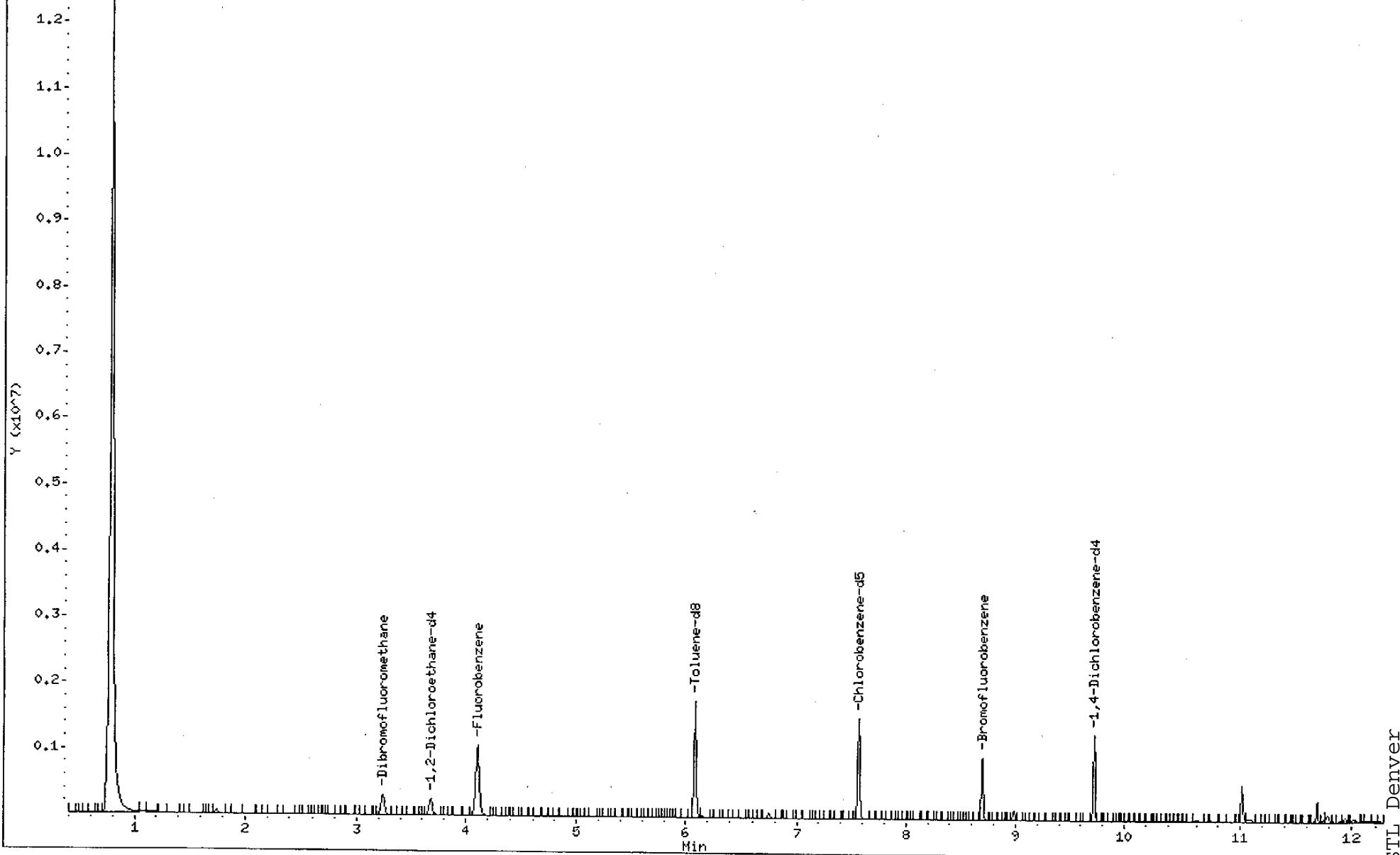
Instrument: C.i

Operator: yanezj

Column diameter: 0.53

Page 9

/chem/C.i/052804.b/c1143.d



Date : 28-MAY-2004 10:41

Client ID: TRIP BLANK

Instrument: C.i

Sample Info: GGT61AA,,D4E210325-011

Purge Volume: 20.0

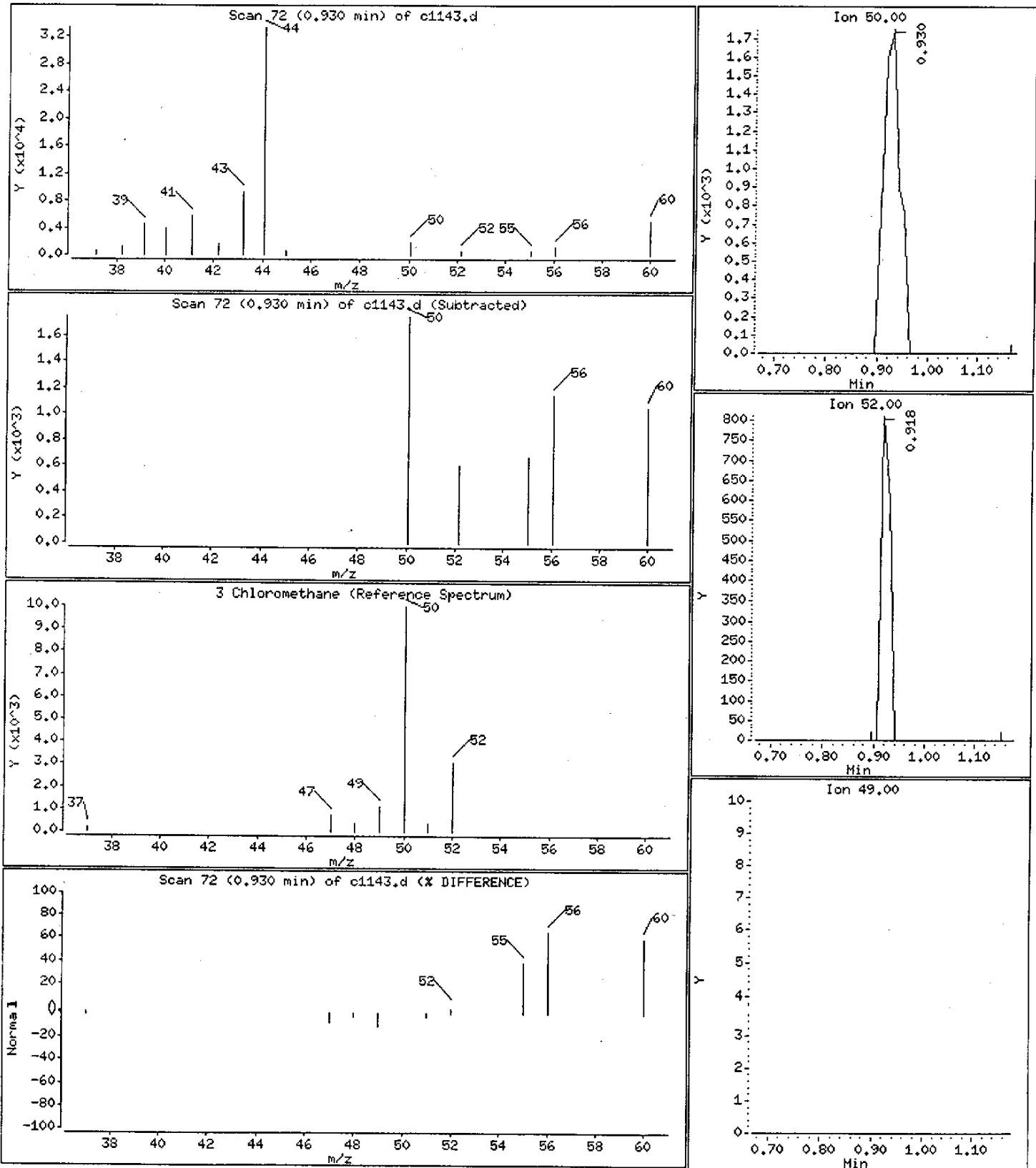
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

3 Chloromethane

Concentration: 0.117184 ug/L



Date : 28-MAY-2004 10:41

Client ID: TRIP BLANK

Instrument: C.i

Sample Info: GGTF61AA,,D4E210325-011

Purge Volume: 20.0

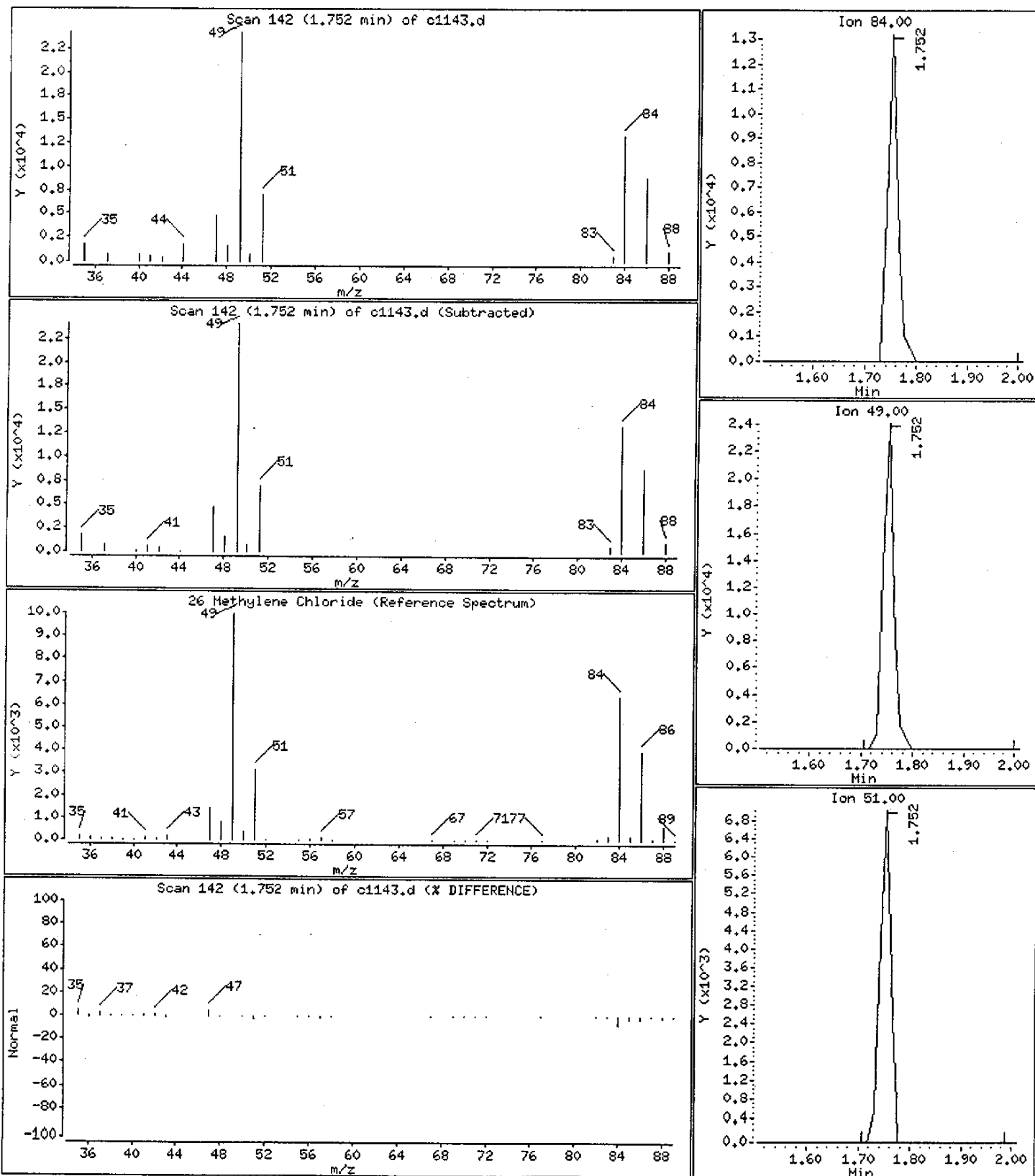
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

26 Methylene Chloride

Concentration: 0.664808 ug/L



Date : 28-MAY-2004 10:41

Client ID: TRIP BLANK

Instrument: C.i

Sample Info: GGTF61AA,,D4E210325-011

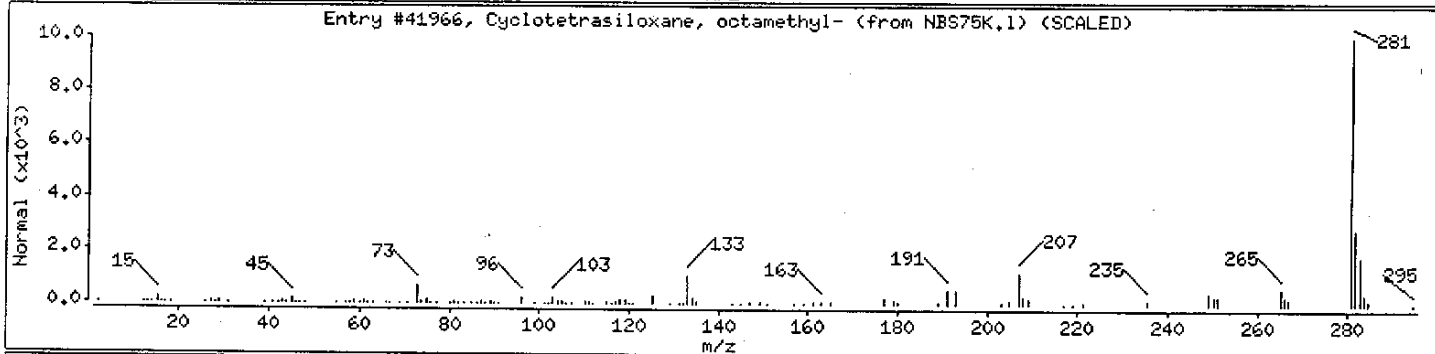
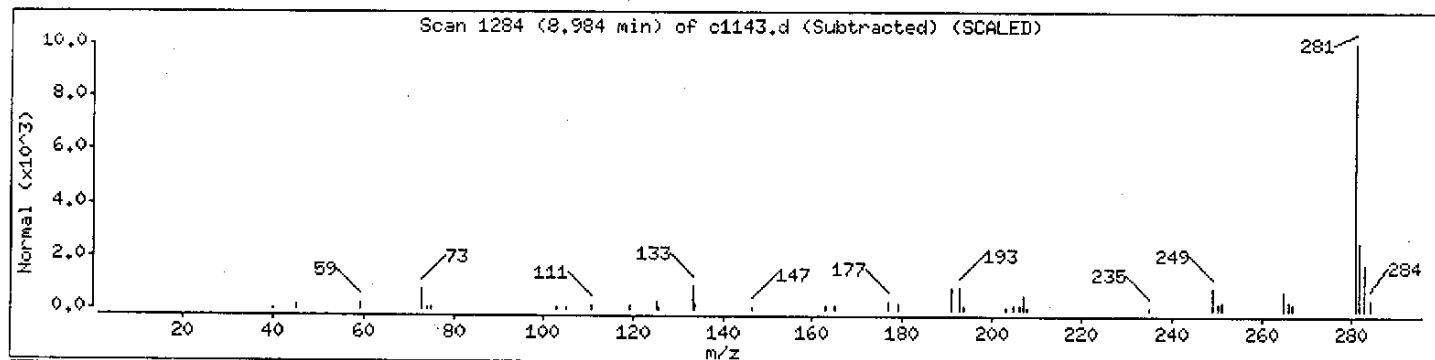
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---------------------------------|------------|----------|-------|---------|------------|--------|
| Cyclotetrasiloxane, octamethyl- | 556-67-2 | NBS75K.1 | 41966 | 90 | C8H24O4Si4 | 296 |



Date : 28-MAY-2004 10:41

Client ID: TRIP BLANK

Instrument: C.i

Sample Info: GCTF61AA,,D4E210325-011

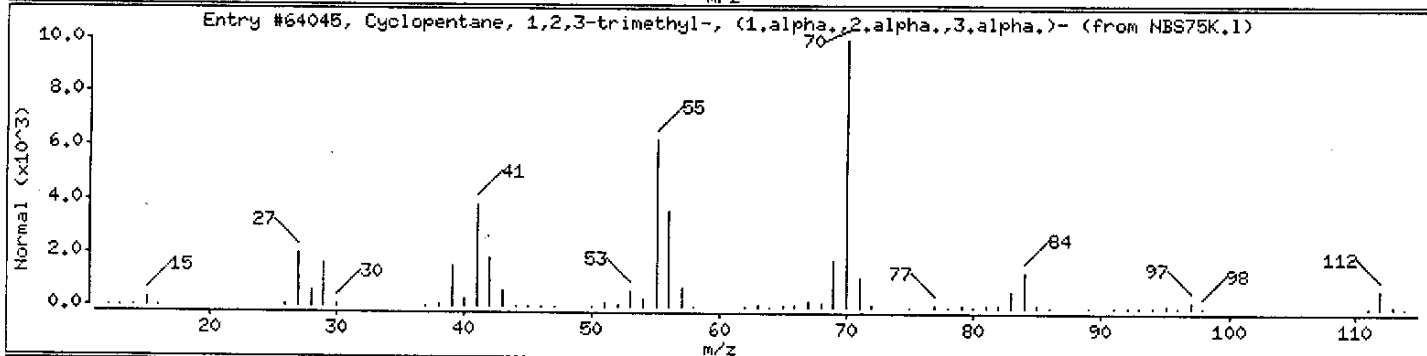
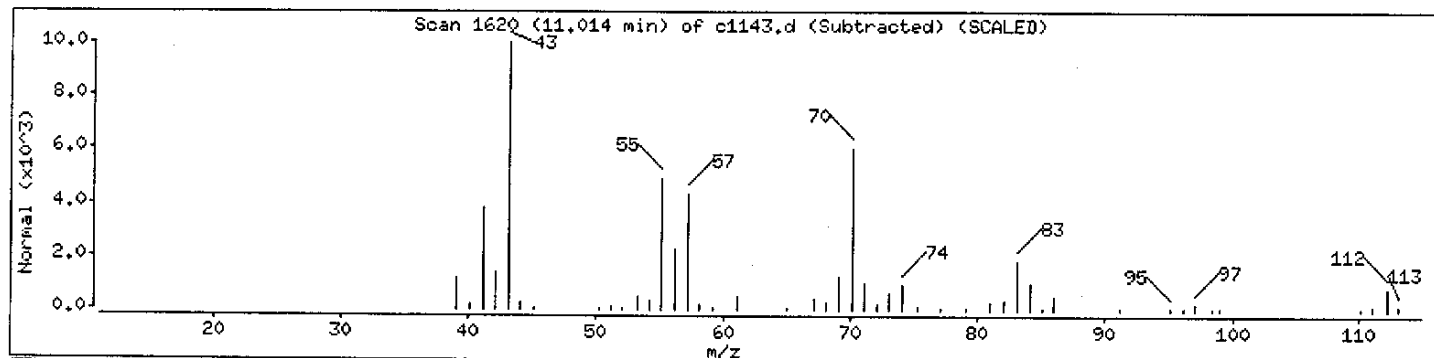
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|------------|----------|-------|---------|---------|--------|
| Cyclopentane, 1,2,3-trimethyl-, (1.alpha. | 2613-69-6 | NBS75K.1 | 64045 | 81 | C8H16 | 112 |



Date : 26-MAY-2004 10:41

Client ID: TRIP BLANK

Instrument: C.i

Sample Info: GGTf61AA,,D4E210325-011

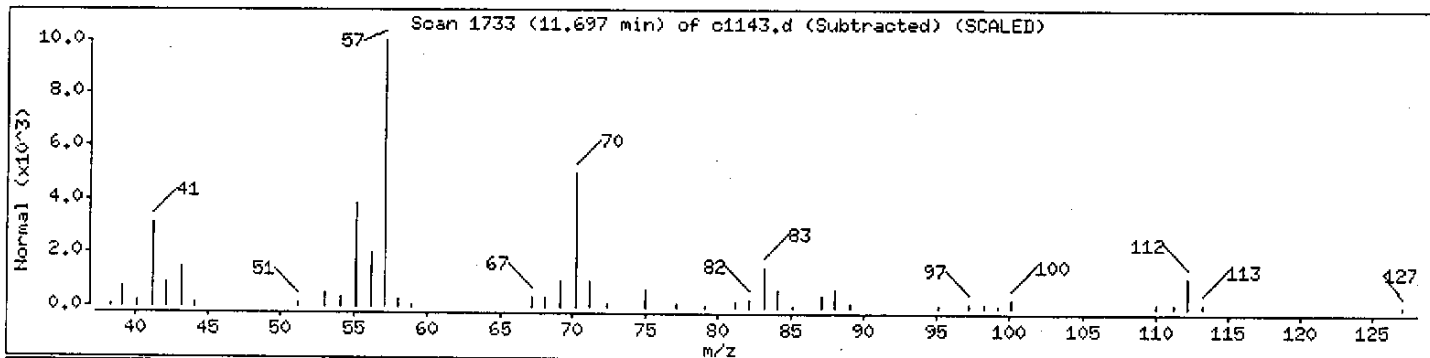
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|-------------------------------|------------|---------|-------|---------|---------|--------|
| Unknown | | | 0 | 0 | | 0 |



Date : 28-MAY-2004 10:41

Client ID: TRIP BLANK

Instrument: C.i

Sample Info: GGTF61AA,,D4E210325-011

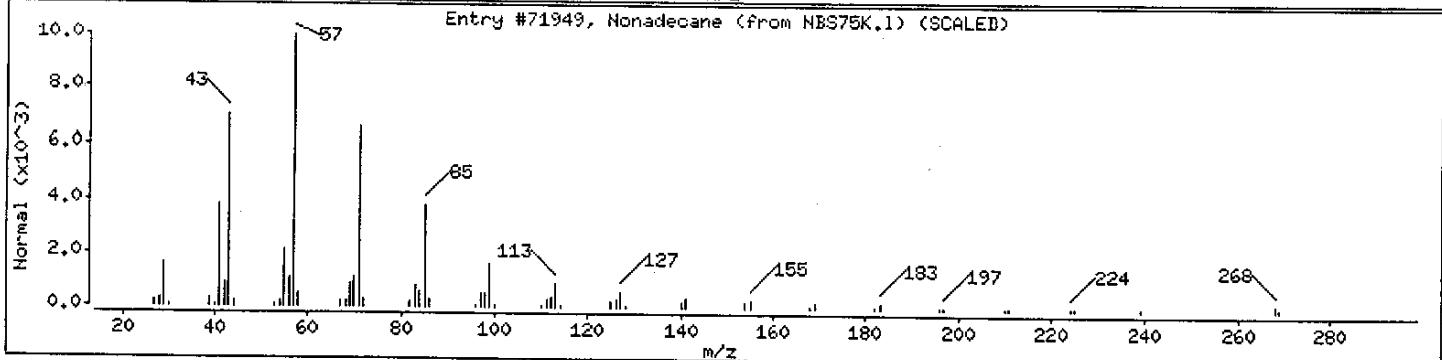
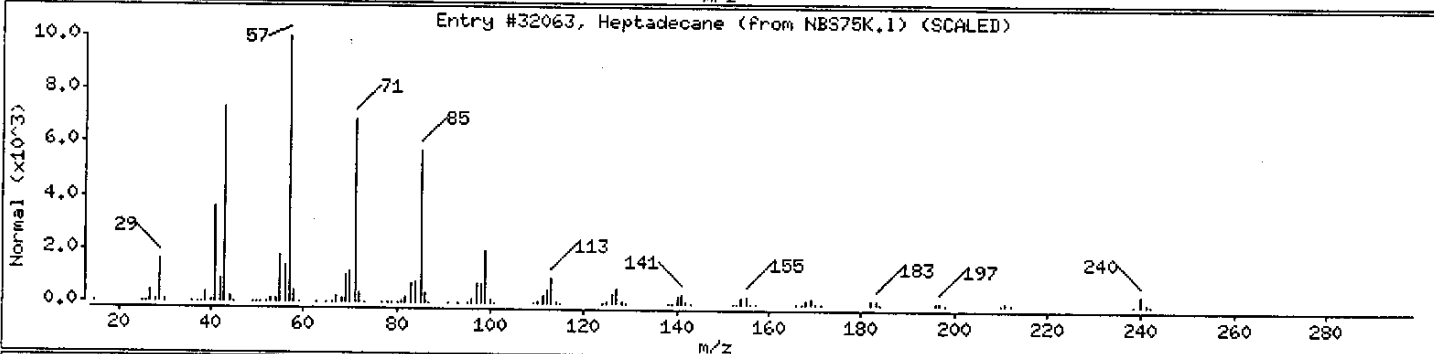
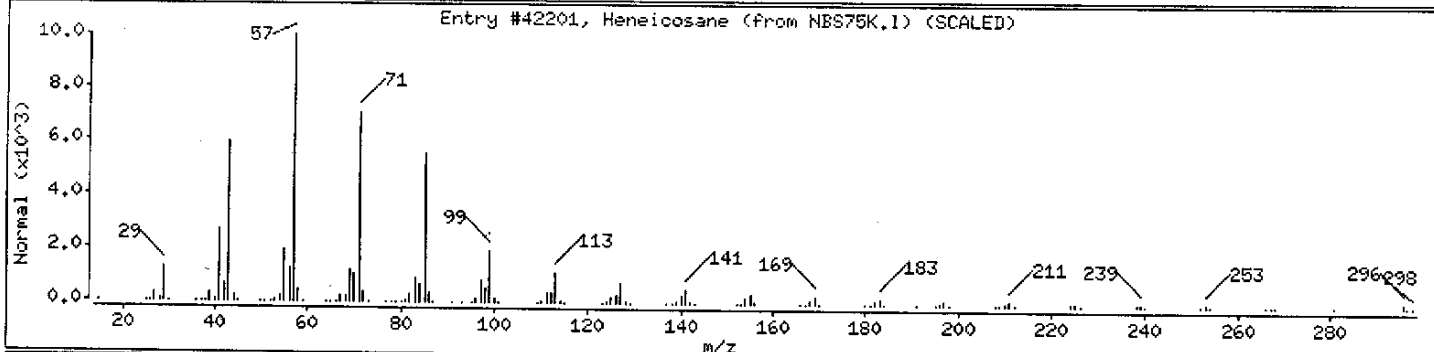
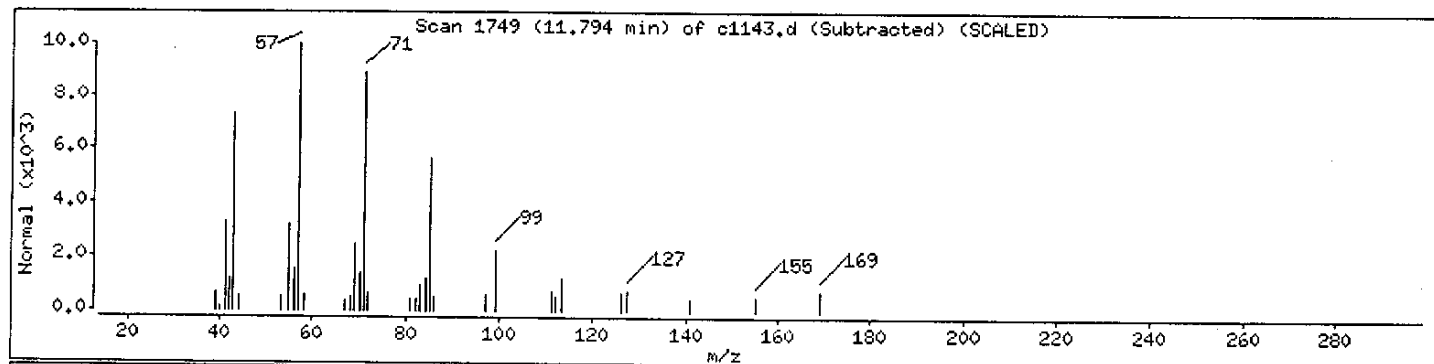
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Heneicosane | 629-94-7 | NBS75K.1 | 42201 | 91 | C21H44 | 296 |
| Heptadecane | 629-78-7 | NBS75K.1 | 32063 | 91 | C17H36 | 240 |
| Nonadecane | 629-92-5 | NBS75K.1 | 71949 | 90 | C19H40 | 268 |



Volatile GC/MS

Supporting Documentation

Sample Sequence, Chromatograms/Mass Spectra



STL

Lot ID: D4E210325

Client: Cabrera

Method: 8260

Associated Samples: 8, 9

Batch #(s): 4154317

I certify that, to the best of my knowledge, the attached package represents a complete and accurate copy of the original data.

Signature/Date: David J. Zappella

**GC /MS VOLATILE
ORGANIC EXTRACTION
LOG SHEETS**



STL

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEETRun Date: 6/02/04
Time: 13:48:17

| LEV 1 | LEV 2 | LEV 1 | LEV 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 AnalyticalGr
- Bench Sheet Copied per COC

Extractionist: _____

Concentrationist: _____

Reviewer/Date: _____ / 0/00/00

* QC BATCH: 4154317 *

PREP DATE: 5/29/04 14:54
COMP DATE: 5/29/04 14:54

Volatile Organics, GC/MS (8260B)
PURGE AND TRAP - 25 mL purge (Waters)

| EXTR EXPR | ANL DUE | LOT#,MSRUN#/ WORK ORDER | TEST FLGS | EXT | MTH | MATRIX | INIT/FIN WT/VOL | INIT | PH"S ADJ1 | ADJ2 | SOLVENTS EXTRACTION VOL | EXCHANGE | VOL | SPIKE STANDARD/ SURROGATE ID |
|----------------------|------------|-----------------------------|--------------|-----|-----|--------|--------------------|------|--------------|------|----------------------------|----------|-----|---------------------------------|
| 0/00/00 COMMENTS: | 6/03/04 | D4E210219-007 GGRC2-1-AA | R | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/10/04 | D4E210325-008 GGTFX-1-AA | D | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/10/04 | D4E210325-009 GGTF3-1-AA | D | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 5/31/04 | D4E210431-019 GGVD5-1-AA | R | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/03/04 | D4E220144-001 GGVXV-1-CC | R | 25 | QK | WATER | 0.50mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/03/04 | D4E220144-002 GGVX7-1-AA | R | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/03/04 | D4E220181-001 GGV81-1-AC | R | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | | .0 | |

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 6/02/04
Time: 13:48:17

*
* QC BATCH: 4154317 *
*

PREP DATE: 5/29/04 14:54
COMP DATE: 5/29/04 14:54

| EXTR EXPR | ANL DUE | LOT#,MSRUN#/ WORK ORDER | TEST FLGS | EXT | MTH | MATRIX | INIT/FIN WT/VOL | INIT | PH"S ADJ1 | ADJ2 | SOLVENTS EXTRACTION VOL | EXCHANGE VOL | SPIKE STANDARD/ SURROGATE ID |
|----------------------|------------|------------------------------|--------------|-----|-----|--------|--------------------|------|--------------|------|----------------------------|-----------------|---------------------------------|
| 0/00/00 COMMENTS: | 6/03/04 | D4E220181-002 GGV9G-1-AC | R | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/03/04 | D4E220181-003 GGV9K-1-AC | R | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/03/04 | D4E220181-004 GGV9L-1-AC | R | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/03/04 | D4E220181-005 GGV9N-1-AC | R | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/03/04 | D4E220181-006 GGV9R-1-AC | R | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/03/04 | D4E220181-007 GGV9V-1-AA | R | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/07/04 | D4E270388-011 GG8K3-1-AA | R | 25 | RI | WATER | 0.20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/07/04 | D4E270388-012 GG8K4-1-AA | R | 25 | RI | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/07/04 | D4E270388-012 GG8K4-1-ACS | R | 25 | RI | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/07/04 | D4E270388-012 GG8K4-1-ADD | R | 25 | RI | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEETRun Date: 6/02/04
Time: 13:48:17*****
*
* QC BATCH: 4154317 *
*
*****PREP DATE: 5/29/04 14:54
COMP DATE: 5/29/04 14:54

| EXTR EXPR | ANL DUE | LOT#,MSRUN#/ WORK ORDER | TEST FLGS | EXT | MTH | MATRIX | INIT/FIN WT/VOL | INIT | PH"S ADJ1 | ADJ2 | EXTRACTION | SOLVENTS VOL | EXCHANGE | VOL | SPIKE STANDARD/ SURROGATE ID |
|----------------------|------------|------------------------------|--------------|-----|-----|--------|--------------------|------|--------------|------|------------|-----------------|----------|-----|---------------------------------|
| 0/00/00 COMMENTS: | 6/07/04 | D4E270388-013 GG8K5-1-AA | R | 25 | RI | WATER | 0.08mL 20.00mL | NA | NA | NA | | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/07/04 | D4E270388-014 GG8K6-1-AC | R | 25 | RI | WATER | 10mL 20.00mL | NA | NA | NA | | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/07/04 | D4E270388-015 GG8K8-1-AC | R | 25 | RI | WATER | 2 20.00mL | NA | NA | NA | | .0 | | .0 | |
| 0/00/00 COMMENTS: | 0/00/00 | D4F020000-317 GHF4A-1-AAB | | 25 | RI | WATER | 20mL 20.00mL | NA | NA | NA | | .0 | | .0 | |
| 0/00/00 COMMENTS: | 0/00/00 | D4F020000-317 GHF4A-1-ACC | | 25 | RI | WATER | 20mL 20.00mL | NA | NA | NA | | .0 | | .0 | |

R = RUSH C = CLP
E = EPA 600 D = EXP.DEL)
M = CLIENT REQ MS/MSD

NUMBER OF WORK ORDERS IN BATCH: 22

**GC/MS VOLATILE
INSTRUMENT
LOG SHEETS**



STL

STL, Denver

GC/MS Volatile Analysis

Instrument 4
5972 M

| Column | Phase | Inj. Temp | Init. Time | Ramp Rate | Final Temp | Flow cc/min | Press. Psi | Type | Vac. Range | Source Temp | Mass Range |
|--------|--------|-----------|------------|-----------|------------|-------------|------------|------|------------------|-------------|-------------------------|
| 75M | DB-624 | 200C | 2 min. | 5C/min | 65C | 18 | 20 | MS | 10 ⁻⁶ | -175C | 35-300/2 ⁺ 2 |
| | | | 0 min. | 12C/min | 155C | | | | | | |
| | | | 0 min. | 25C/min | 210C | | | | | | |

Comments

DEN-MS-0010 (8260B) 624/524.
(Circle as appropriate)

Target Batch (Directory): H 052904.6

QuantIMS Batch: 4154317

| Lot # | Sample | W.O.# | Purge vol (ml) | Sample amt (ml/g) | Date | Initials | File Number | IS OK | SS OK | DIL OK | 24 hr 12 hr pH | Comments | AI |
|-----------|--------|------------|----------------|-------------------|----------|----------|-------------|-------|-------|--------|-------------------|--------------------------|----|
| BFB | — | — | 1 mL Dr Inj. | — | 03/29/04 | TPM | H 4663 | — | — | — | — | 073-04 (14.54) | |
| MAINO10 | — | — | 20 mL | Spl | 1 | | 64 | — | — | — | N/A | 067/082-04 epts ↑ (SPCC) | 1 |
| SUPPO10 | — | — | | | | | 65 | — | — | — | | 011/052-04 | 2 |
| MAINO10 | — | — | | | | | 66 | — | — | — | | 067/082-04 | 3 |
| CONF | — | — | | | | | 67 | — | — | — | | 067/082-04 | 4 |
| Cleanup | — | — | | 20 mL | | | 68 | — | — | — | | | 5 |
| LCS | — | — | | 10 µL | | | 69 | — | ↑ | — | — | 109-04 spike ↑ surr ↑ | 6 |
| VBK | — | — | | 20 mL | | | 70 | — | ↑ | — | — | 104-04 surr ↑ | 7 |
| LCS | — | GHF4A IAC | | 10 µL | | | 71 | — | — | — | — | 109-04 | 8 |
| VBK | — | ↓ IAA | | 20 mL | | | 72 | — | — | — | — | 104-04 | 9 |
| D4E270388 | 011 | GG8 K3 IAA | | 200 µL | | | 73 | — | — | — | — | | 10 |
| | 012 | K4 ↓ | | 20 mL | | | 74 | — | — | — | — | | 11 |
| | 12MS | ↓ IAC | | | | | 75 | — | — | — | — | | 12 |
| | 12MSD | ↓ IAD | | | | | 76 | — | — | — | — | | 13 |
| | 013 | K5 IAA | | 80 µL | | | 77 | — | — | — | — | | 14 |
| | 014 | K6 IAC | | 10 mL | | | 78 | — | — | — | — | | 15 |
| | 015 | ↓ K8 ↓ | | 2 mL | | | 79 | — | — | — | — | | 16 |
| D4E210325 | 008 | GGT FX IAA | | 20 mL | | | 80 | — | — | — | — | | 17 |
| | 009 | ↓ F3 ↓ | | | | | 81 | — | — | — | — | | 18 |
| D4E210219 | 007 | GGR C2 IAC | | | | | 82 | — | — | — | — | | 19 |

STL, Denver

GC/MS Volatile Analysis

Instrument

5972 M:

| Column | Phase | Inj. Temp | Init. Time | Ramp Rate | Final Temp | Flow cc/min | Press. Psi | Type | Vac. Range | Source Temp | Mass Range |
|--------|--------|-----------|------------|-----------|------------|-------------|------------|------|------------|-------------|------------|
| 75M | DB-624 | 200C | 2 min. | 5C/min | 65C | 18 | 20 | MS | 10^-6 | ~175C | 35-300/2^2 |
| | | | 0 min. | 12C/min | 155C | | | | | | |
| | | | 0 min. | 25C/min | 210C | | | | | | |

DEN-MS-001076260B/624/524

Comments

DEN-MS-0010 (8260B/624/524.
(Circle as appropriate)

Target Batch (Directory): H 052904-b

QuantIMS Batch: 4154317

[illegible]

**GC/MS VOLATILE
STANDARD DATA**

**SEVERN
TRENT**

STL

GC/MS Initial Calibration Review Checklist

STL Denver

Instrument ID and Date: Inst. H "Main" I-CAL 5/13/04Check Method Used: Analysis ☐ 625 ☐ 8270 ☐ Other SV _____☐ 524.2 ☐ 624 ☒ 8260B ☐ Other VOA _____VOA Preparation ☐ 5mL ☒ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

| Review Items | Level 1 | | | Level 2 | Comments |
|--|---------|----|-----|---------|---------------------------------------|
| | Yes | No | N/A | | |
| Initial Calibration | | | | | |
| 1. BFB/DFTPP meets criteria? | / | | | / | |
| 2. ICAL date and instrument ID verified? | / | | | / | |
| 3. Sufficient number of calibration points used? | / | | | / | |
| 4. Reasons for removal of points documented? | / | | | / | Some points below R.L. removed. |
| 5. %RSD or correlation coefficient within method limits? | / | | | / | |
| 6. If RRF used for ICAL, were all compounds within 15% RSD? | / | | | / | List all exceptions below (cpd & RSD) |
| 7. Response factors meet criteria? | / | | | / | |
| 8. Isomeric pairs checked for correct peak assignment? | / | | | / | |
| 9. Data checked for detector saturation? | / | | | / | |
| 10. Standards traceability properly documented? | / | | | / | |
| 11. Manual integrations documented and checked? | / | | | / | |
| 12. 2 nd source ICV recovery 75-125% for DoD projects, 65-135% ($\pm 55\%$ of expected for poor performers) for non-DoD? | / | | | / | |

1st Level Reviewer: MHDate: 5/14/042nd Level Reviewer: DADate: 5-14-04

STL, Denver

GC/MS Volatile Analysis

Instrument H
5972 MSD

| Column | Phase | Inj. Temp | Init. Time | Ramp Rate | Final Temp | Flow cc/min | Press. Psi | Type | Vac. Range | Source Temp | Mass Range |
|--------|--------|-----------|------------|-----------|------------|-------------|------------|------|------------------|-------------|------------|
| 75M | DB-624 | 200C | 2 min. | 5C/min | 65C | 18 | 20 | MS | 10 ⁻⁶ | -175C | 35-300/2*2 |
| | | | 0 min. | 12C/min | 155C | | | | | | |
| | | | 0 min. | 25C/min | 210C | | | | | | |

Comments

DEN-MS-0010 (8260B/624/524.2)
(Circle as appropriate)

Target Batch (Directory): 051304.6

MS-VDA
ISSS # 104.04
Main # 67/82.04
Supp # 011/052.04

QuantIMS Batch:

| Lot # | Sample | W.O.# | Purge vol (ml) | Sample amt (ml/g) | Date | Initials | File Number | IS OK | SS OK | DIL OK | 24 hr 12 hr | pH | Comments | ALS |
|----------------|--------|-----------|----------------|-------------------|---------|----------|-------------|-------|-------|--------|----------------|----|--------------|-----|
| BFB | | | 1 µl in | Inj. | 5/13/04 | MA | h 4139.2 | | | | | NA | OK 07:49 | |
| Main 001 | | | 20ml | 20ml | | | 40 | | NA | | | | OK | |
| 002 | | | | | | | 41 | | | | | | | |
| 005 | | | | | | | 42 | | | | | | | |
| 010 | | | | | | | 43 | | | | | | | |
| 030 | | | | | | | 44 | | | | | | | |
| 060 | | | | | | | 45 | | | | | | | |
| Supp 001 | | | | | | | 46 | | | | | | | |
| 002 | | | | | | | 47 | | | | | | | |
| 005 | | | | | | | 48 | | | | | | | |
| 010 | | | | | | | 49 | | | | | | | |
| 030 | | | | | | | 50 | | | | | | | |
| 060 | | | | | | | 51 | | | | | | | |
| VSTD 010 - ICV | | | | | | | 52 | | | | | | | |
| cle 5/13/04 | | | | | | | 53 | | | | | | #68/61/91.04 | |
| VSTD 010 - ICV | | | | | | | 54 | | | | | | | |
| LCS | | | | | | | 55 | | | | | | | |
| VBLK | | | | | | | 56 | | | | | | | |
| D4E 060268 | -027 | GFNGM 1AA | | 50ml | | | 57 | | | | | | | |
| | -27MS | | | | | | 58 | | | | | | | |
| | -27SD | | | | | | | | | | | | | |

Report Date: 14-May-2004 15:40

Calibration History

Method : /chem/H.i/051304.b/H-20ml-h2o.m
Start Cal Date: 13-MAY-2004 07:58
End Cal Date : 13-MAY-2004 11:34

Initial Calibration

| Injection Date | Sublist | Calibration File |
|------------------------------------|---------|----------------------------|
| Cal Level: 1 , Cal Amount: 1.00000 | | |
| 13-MAY-2004 09:56 | 2-supp | /chem/H.i/051304.b/h4146.d |
| 13-MAY-2004 07:58 | 1-main | /chem/H.i/051304.b/h4140.d |
| Cal Level: 2 , Cal Amount: 2.00000 | | |
| 13-MAY-2004 10:15 | 2-supp | /chem/H.i/051304.b/h4147.d |
| 13-MAY-2004 08:17 | 1-main | /chem/H.i/051304.b/h4141.d |
| Cal Level: 3 , Cal Amount: 5.00000 | | |
| 13-MAY-2004 10:35 | 2-supp | /chem/H.i/051304.b/h4148.d |
| 13-MAY-2004 08:37 | 1-main | /chem/H.i/051304.b/h4142.d |
| Cal Level: 4 , Cal Amount: 10.0000 | | |
| 13-MAY-2004 10:55 | 2-supp | /chem/H.i/051304.b/h4149.d |
| 13-MAY-2004 08:57 | 1-main | /chem/H.i/051304.b/h4143.d |
| Cal Level: 5 , Cal Amount: 30.0000 | | |
| 13-MAY-2004 11:14 | 2-supp | /chem/H.i/051304.b/h4150.d |
| 13-MAY-2004 09:16 | 1-main | /chem/H.i/051304.b/h4144.d |
| Cal Level: 6 , Cal Amount: 60.0000 | | |
| 13-MAY-2004 11:34 | 2-supp | /chem/H.i/051304.b/h4151.d |
| 13-MAY-2004 09:36 | 1-main | /chem/H.i/051304.b/h4145.d |

Continuing Calibration

| | | |
|-------------------|--------|----------------------------|
| 13-MAY-2004 10:55 | 2-supp | /chem/H.i/051304.b/h4149.d |
| 13-MAY-2004 08:57 | 1-main | /chem/H.i/051304.b/h4143.d |

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 13-MAY-2004 07:58
 End Cal Date : 13-MAY-2004 09:36
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/H.i/051304.b/H-20ml-h2o.m
 Cal Date : 13-May-2004 10:54 hoffmanm
 Curve Type : Average

Calibration File Names:

Level 1: /chem/H.i/051304.b/h4140.d
 Level 2: /chem/H.i/051304.b/h4141.d
 Level 3: /chem/H.i/051304.b/h4142.d
 Level 4: /chem/H.i/051304.b/h4143.d
 Level 5: /chem/H.i/051304.b/h4144.d
 Level 6: /chem/H.i/051304.b/h4145.d

| Compound | | 1.000 | 2.000 | 5.000 | 10.000 | 30.000 | 60.000 | | |
|----------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|--------|
| | | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | RRF | % RSD |
| M 1 | 1,2-Dichloroethene (total) | 0.30097 | 0.28024 | 0.29111 | 0.29125 | 0.29936 | 0.31066 | 0.29560 | 3.530 |
| M 2 | Xylene (total) | 6.87105 | 6.49348 | 6.58131 | 6.42101 | 6.56937 | 6.28372 | 6.53666 | 3.014 |
| | 3 dichlorodifluoromethane | 0.46719 | 0.48525 | 0.47604 | 0.47360 | 0.46972 | 0.45551 | 0.47122 | 2.103 |
| | 4 Chloromethane | 0.24579 | 0.25880 | 0.25286 | 0.25246 | 0.25611 | 0.24628 | 0.25205 | 2.064 |
| | 5 Vinyl Chloride | 0.22562 | 0.23382 | 0.24120 | 0.24146 | 0.24618 | 0.24034 | 0.23811 | 3.059 |
| | 7 Bromomethane | 0.20817 | 0.21462 | 0.22396 | 0.21920 | 0.22825 | 0.22994 | 0.22069 | 3.786 |
| | 8 Chloroethane | 0.17523 | 0.17501 | 0.17218 | 0.16986 | 0.16977 | 0.16844 | 0.17175 | 1.676 |
| | 10 Trichlorofluoromethane | 0.69584 | 0.69773 | 0.68828 | 0.70037 | 0.70748 | 0.70603 | 0.69929 | 1.010 |
| | 11 Ethanol | +++++ | 0.00057 | 0.00052 | 0.00048 | 0.00049 | 0.00051 | 0.00051 | 7.179 |
| | 13 Acrolein | +++++ | 0.00927 | 0.00882 | 0.00914 | 0.00932 | 0.00987 | 0.00929 | 4.114 |
| | 14 1,1-Dichloroethene | 0.30379 | 0.28465 | 0.29068 | 0.28121 | 0.28776 | 0.29685 | 0.29083 | 2.853 |
| | 15 Acetone | +++++ | 0.01641 | 0.01642 | 0.01570 | 0.01559 | 0.01614 | 0.01605 | 2.419 |
| | 17 Iodomethane | 0.37249 | 0.38859 | 0.44891 | 0.45286 | 0.48738 | 0.51020 | 0.44340 | 12.165 |
| | 19 Acetonitrile | +++++ | 0.00436 | 0.00416 | 0.00396 | 0.00416 | 0.00417 | 0.00416 | 3.461 |
| | 21 Methylene Chloride | +++++ | 0.23797 | 0.23086 | 0.21755 | 0.22086 | 0.22704 | 0.22686 | 3.568 |
| | 22 tert-Butyl alcohol | 0.00686 | 0.00577 | 0.00606 | 0.00588 | 0.00616 | 0.00639 | 0.00619 | 6.392 |
| | 23 Acrylonitrile | 0.01556 | 0.01405 | 0.01500 | 0.01478 | 0.01553 | 0.01648 | 0.01523 | 5.403 |
| | 24 trans-1,2-Dichloroethene | 0.30994 | 0.28650 | 0.28846 | 0.29325 | 0.30142 | 0.31156 | 0.29852 | 3.615 |
| | 27 1,1-Dichloroethane | 0.57377 | 0.53781 | 0.56042 | 0.55328 | 0.57913 | 0.61362 | 0.56967 | 4.582 |
| | 28 Chloroprene | 0.48082 | 0.46545 | 0.46903 | 0.46937 | 0.49843 | 0.52666 | 0.48496 | 4.893 |
| | 30 Isopropyl ether | 0.18726 | 0.17909 | 0.19222 | 0.19082 | 0.20247 | 0.20898 | 0.19347 | 5.545 |
| | 32 cis-1,2-Dichloroethene | 0.29200 | 0.27398 | 0.29377 | 0.28926 | 0.29729 | 0.30976 | 0.29268 | 3.972 |
| | 31 2,2-Dichloropropane | 0.46681 | 0.43882 | 0.45274 | 0.42748 | 0.42537 | 0.42136 | 0.43876 | 4.066 |
| | 33 2-Butanone | 0.02578 | 0.02636 | 0.02878 | 0.02902 | 0.03019 | 0.03207 | 0.02870 | 8.208 |
| | 34 Propionitrile | 0.00538 | 0.00508 | 0.00577 | 0.00559 | 0.00598 | 0.00619 | 0.00566 | 7.149 |

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 13-MAY-2004 07:58
 End Cal Date : 13-MAY-2004 09:36
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/H.i/051304.b/H-20ml-h2o.m
 Cal Date : 13-May-2004 10:54 hoffmanm
 Curve Type : Average

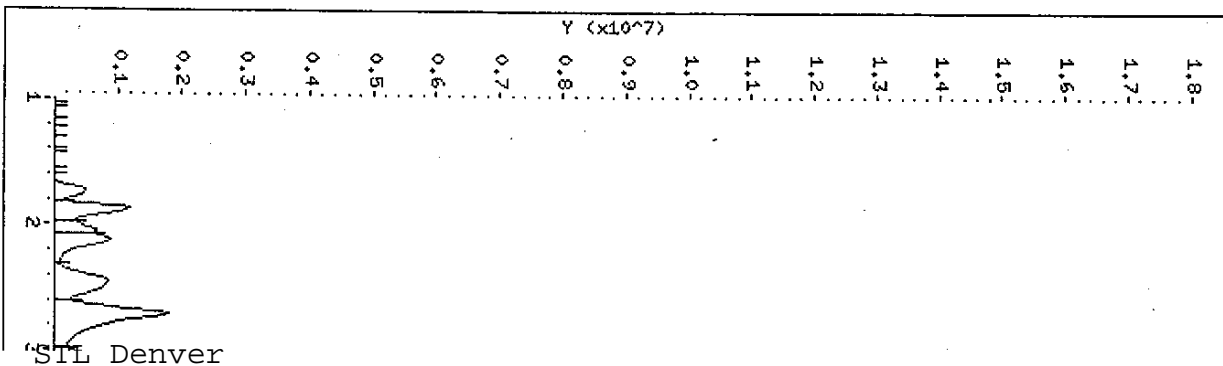
| Compound | 1.000 Level 1 | 2.000 Level 2 | 5.000 Level 3 | 10.000 Level 4 | 30.000 Level 5 | 60.000 Level 6 | RRF | % RSD |
|------------------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|---------|--------|
| 36 Methacrylonitrile | 0.04115 | 0.04065 | 0.04235 | 0.04314 | 0.04514 | 0.04750 | 0.04332 | 5.987 |
| 37 Bromochloromethane | 0.10789 | 0.10273 | 0.11368 | 0.11153 | 0.11514 | 0.12052 | 0.11192 | 5.483 |
| 38 Chloroform | 0.55335 | 0.51651 | 0.54734 | 0.53175 | 0.54600 | 0.56627 | 0.54354 | 3.190 |
| 41 1,1,1-Trichloroethane | 0.61038 | 0.57677 | 0.60352 | 0.58787 | 0.59338 | 0.60383 | 0.59596 | 2.079 |
| 42 1,1-Dichloropropene | 0.48147 | 0.44948 | 0.47304 | 0.46327 | 0.47161 | 0.48976 | 0.47144 | 2.982 |
| 43 Carbon Tetrachloride | 0.55568 | 0.53987 | 0.56266 | 0.55022 | 0.56269 | 0.58195 | 0.55885 | 2.540 |
| 45 Isobutanol | +++++ | 0.00149 | 0.00181 | 0.00192 | 0.00207 | 0.00215 | 0.00189 | 13.802 |
| 46 Benzene | 0.80293 | 0.77679 | 0.81776 | 0.79479 | 0.80943 | 0.83321 | 0.80582 | 2.405 |
| 47 1,2-Dichloroethane | 0.21184 | 0.20434 | 0.21206 | 0.20482 | 0.20832 | 0.21570 | 0.20951 | 2.139 |
| 49 n-Butanol | +++++ | 0.00119 | 0.00130 | 0.00131 | 0.00152 | 0.00162 | 0.00139 | 12.723 |
| 50 Trichloroethene | 0.33563 | 0.32942 | 0.34822 | 0.33878 | 0.34989 | 0.35349 | 0.34257 | 2.739 |
| 52 1,2-Dichloropropane | 0.27211 | 0.25782 | 0.27757 | 0.26496 | 0.26997 | 0.27608 | 0.26975 | 2.734 |
| 53 Dibromomethane | 0.14319 | 0.13414 | 0.14523 | 0.13905 | 0.14135 | 0.14446 | 0.14124 | 2.924 |
| 55 1,4-Dioxane | +++++ | 0.00059 | 0.00070 | 0.00068 | 0.00071 | 0.00072 | 0.00068 | 7.740 |
| 56 Bromodichloromethane | 0.40347 | 0.39379 | 0.41732 | 0.40570 | 0.41144 | 0.42289 | 0.40910 | 2.542 |
| 59 cis-1,3-Dichloropropene | 1.61695 | 1.57503 | 1.66326 | 1.61040 | 1.69367 | 1.69690 | 1.64270 | 3.012 |
| 60 4-Methyl-2-pentanone | 0.39918 | 0.38096 | 0.43342 | 0.41253 | 0.43268 | 0.42537 | 0.41402 | 5.030 |
| 62 Toluene | 4.86583 | 4.64246 | 4.74681 | 4.60576 | 4.76855 | 4.71963 | 4.72484 | 1.969 |
| 63 trans-1,3-Dichloropropene | 1.08211 | 1.06021 | 1.11926 | 1.05352 | 1.14670 | 1.13485 | 1.09944 | 3.599 |
| 65 1,1,2-Trichloroethane | 0.72746 | 0.69293 | 0.70365 | 0.67146 | 0.69750 | 0.67687 | 0.69498 | 2.893 |
| 67 1,3-Dichloropropane | 1.10021 | 1.04796 | 1.10711 | 1.08039 | 1.12443 | 1.10784 | 1.09466 | 2.461 |
| 66 Tetrachloroethene | 1.44642 | 1.42671 | 1.50380 | 1.48771 | 1.54881 | 1.53672 | 1.49170 | 3.246 |
| 68 2-Hexanone | 0.24649 | 0.24145 | 0.25973 | 0.26102 | 0.27600 | 0.27570 | 0.26006 | 5.520 |
| 69 Dibromochloromethane | 1.19082 | 1.14258 | 1.24376 | 1.18908 | 1.25997 | 1.26789 | 1.21568 | 4.054 |
| 70 1,2-Dibromoethane | 0.88037 | 0.87512 | 0.91522 | 0.89304 | 0.93217 | 0.91695 | 0.90215 | 2.517 |
| 71 1-Chlorohexane | 2.43178 | 2.34173 | 2.39389 | 2.31779 | 2.40524 | 2.25783 | 2.35804 | 2.740 |
| 73 Chlorobenzene | 3.22996 | 3.10275 | 3.21076 | 3.10764 | 3.21629 | 3.16544 | 3.17214 | 1.772 |
| 74 1,1,1,2-Tetrachloroethane | 1.26409 | 1.25035 | 1.32323 | 1.29883 | 1.37445 | 1.37970 | 1.31511 | 4.140 |
| 75 Ethylbenzene | 1.65271 | 1.63011 | 1.67258 | 1.63659 | 1.66822 | 1.61124 | 1.64524 | 1.436 |
| 76 m and p-Xylene | 2.38766 | 2.23598 | 2.28788 | 2.23387 | 2.29582 | 2.19415 | 2.27256 | 2.985 |
| 77 o-Xylene | 2.09573 | 2.02151 | 2.00555 | 1.95328 | 1.97774 | 1.89541 | 1.99154 | 3.394 |
| 78 Styrene | 2.85963 | 2.91344 | 3.06282 | 3.03318 | 3.09980 | 2.95646 | 2.98756 | 3.110 |
| 79 Bromoform | 0.56747 | 0.56782 | 0.62391 | 0.61364 | 0.64490 | 0.63866 | 0.60940 | 5.604 |

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 13-MAY-2004 07:58
 End Cal Date : 13-MAY-2004 09:36
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/H.i/051304.b/H-20ml-h2o.m
 Cal Date : 13-May-2004 10:54 hoffmanm
 Curve Type : Average

| Compound | 1.000 Level 1 | 2.000 Level 2 | 5.000 Level 3 | 10.000 Level 4 | 30.000 Level 5 | 60.000 Level 6 | RRF | % RSD |
|---------------------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|---------|-------|
| 80 isopropyl benzene | 6.97782 | 6.71597 | 6.70380 | 6.61971 | 6.63183 | 6.27181 | 6.65349 | 3.420 |
| 81 Cyclohexanone | 0.01688 | 0.01611 | 0.01611 | 0.01554 | 0.01570 | 0.01616 | 0.01608 | 2.907 |
| 83 1,1,2,2-Tetrachloroethane | 0.82776 | 0.79477 | 0.81021 | 0.77972 | 0.77986 | 0.77098 | 0.79389 | 2.723 |
| 84 Bromobenzene | 0.85464 | 0.81419 | 0.88537 | 0.84501 | 0.85736 | 0.88565 | 0.85704 | 3.134 |
| 85 1,2,3-Trichloropropane | 0.16009 | 0.14661 | 0.15686 | 0.14604 | 0.14977 | 0.15307 | 0.15207 | 3.717 |
| 87 n-Propylbenzene | 1.11579 | 1.06032 | 1.12767 | 1.07357 | 1.08048 | 1.07131 | 1.08819 | 2.485 |
| 88 2-Chlorotoluene | 0.84437 | 0.80600 | 0.86033 | 0.83101 | 0.83343 | 0.85259 | 0.83795 | 2.293 |
| 89 1,3,5-Trimethylbenzene | 3.53913 | 3.40153 | 3.63378 | 3.49950 | 3.55473 | 3.57346 | 3.53369 | 2.218 |
| 90 4-Chlorotoluene | 0.98351 | 0.85521 | 0.93829 | 0.91623 | 0.92193 | 0.90980 | 0.92083 | 4.526 |
| 91 tert-Butylbenzene | 3.78383 | 3.60677 | 3.76844 | 3.67957 | 3.70858 | 3.79152 | 3.72312 | 1.939 |
| 92 1,2,4-Trimethylbenzene | 3.28208 | 3.11601 | 3.29087 | 3.22914 | 3.20692 | 3.20129 | 3.22105 | 1.978 |
| 93 sec-Butylbenzene | 0.91933 | 0.84093 | 0.88746 | 0.86723 | 0.86096 | 0.85886 | 0.87246 | 3.143 |
| 94 m-Dichlorobenzene | 1.40727 | 1.30137 | 1.37506 | 1.34161 | 1.50120 | 1.41860 | 1.39085 | 4.971 |
| 95 4-Isopropyltoluene | 4.26945 | 4.01815 | 4.25639 | 4.18691 | 4.12867 | 4.13333 | 4.16548 | 2.242 |
| 97 p-dichlorobenzene | 1.82121 | 1.80673 | 1.87509 | 1.80226 | 1.64803 | 1.82165 | 1.79583 | 4.284 |
| 98 n-Butylbenzene | 4.14257 | 4.01629 | 4.13352 | 4.04334 | 3.88308 | 3.89432 | 4.01885 | 2.793 |
| 99 o-Dichlorobenzene | 1.15766 | 1.22617 | 1.23957 | 1.19870 | 1.20380 | 1.24396 | 1.21164 | 2.656 |
| 100 1,2-Dibromo-3-chloropropane | 0.07372 | 0.08161 | 0.08928 | 0.08727 | 0.08988 | 0.09712 | 0.08648 | 9.246 |
| 101 1,2,4-Trichlorobenzene | 0.87330 | 0.89453 | 0.90489 | 0.89986 | 0.83667 | 0.85992 | 0.87819 | 3.026 |
| 102 Hexachlorobutadiene | 0.83765 | 0.85448 | 0.85516 | 0.87357 | 0.79713 | 0.75897 | 0.82949 | 5.203 |
| 127 Naphthalene | 0.78183 | 0.78817 | 0.83299 | 0.78580 | 0.75861 | 0.84412 | 0.79859 | 4.118 |
| 104 1,2,3-Trichlorobenzene | 0.66666 | 0.69223 | 0.67008 | 0.65695 | 0.60961 | 0.63028 | 0.65430 | 4.545 |



Data File: /chem/H.i/0
 Date: 13-MAY-2004 09:
 Client ID: MAIN060
 Sample Info: MAIN060,,
 Purge Volume: 20.0
 Column Phase: DB624

Date : 13-MAY-2004 07:49

Client ID: BFB

Instrument: H.i

Sample Info: BFB #073-04

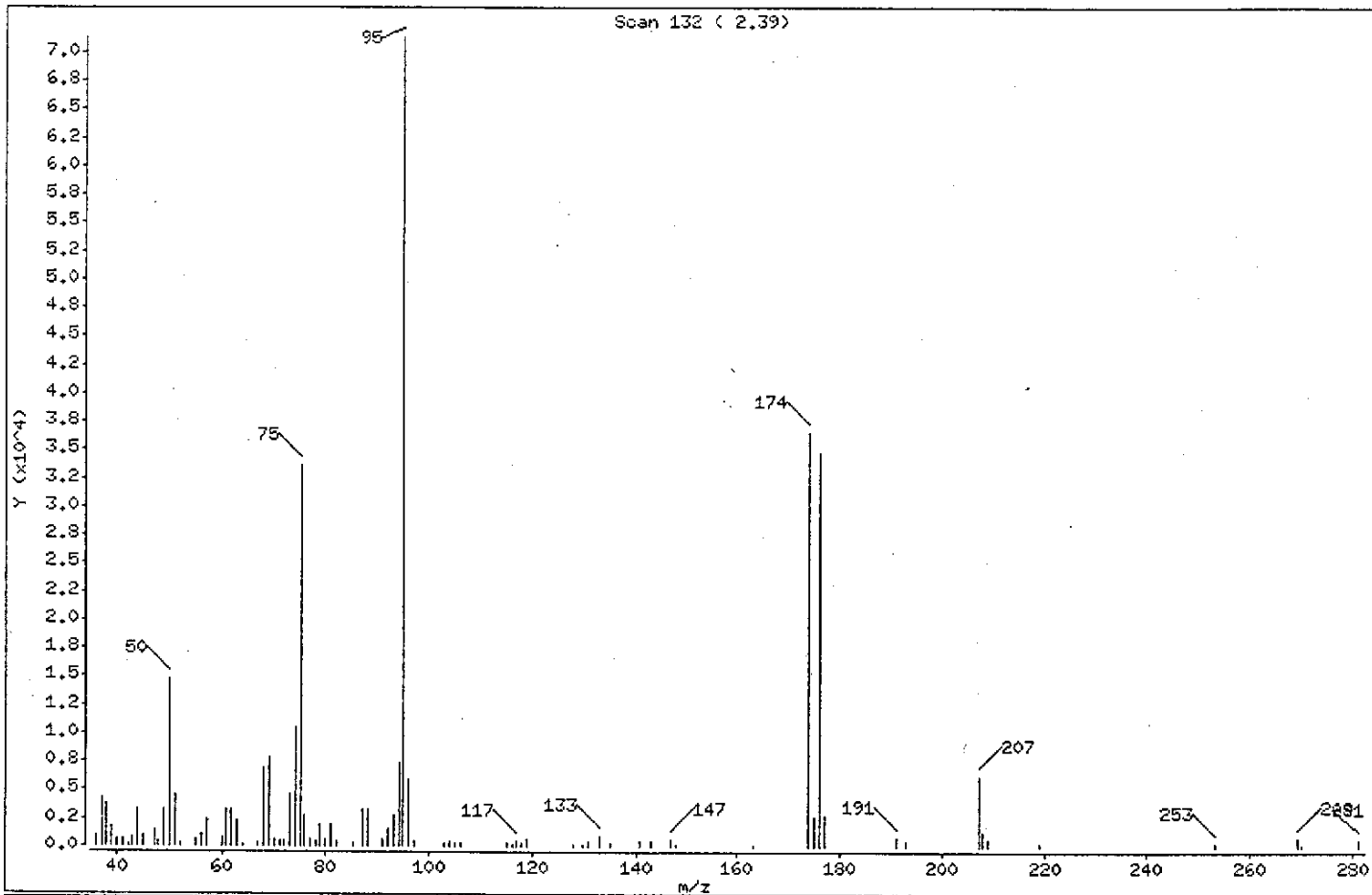
Volume Injected (uL): 1.0

Operator: mhoffman

Column phase: DB624

Column diameter: 0.53

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 | 20.58 |
| 75 | 30.00 - 60.00% of mass 95 | 47.04 |
| 96 | 5.00 - 9.00% of mass 95 | 8.19 |
| 173 | Less than 2.00% of mass 174 | 0.00 (0.00) |
| 174 | 50.00 - 100.00% of mass 95 | 51.30 |
| 175 | 5.00 - 9.00% of mass 174 | 3.63 (7.07) |
| 176 | 95.00 - 101.00% of mass 174 | 48.74 (95.01) |
| 177 | 5.00 - 9.00% of mass 176 | 3.90 (8.00) |

Data File: /chem/H.i/051304.b/h4139.d

Page 1

Date : 13-MAY-2004 07:49

Client ID: BFB

Instrument: H.i

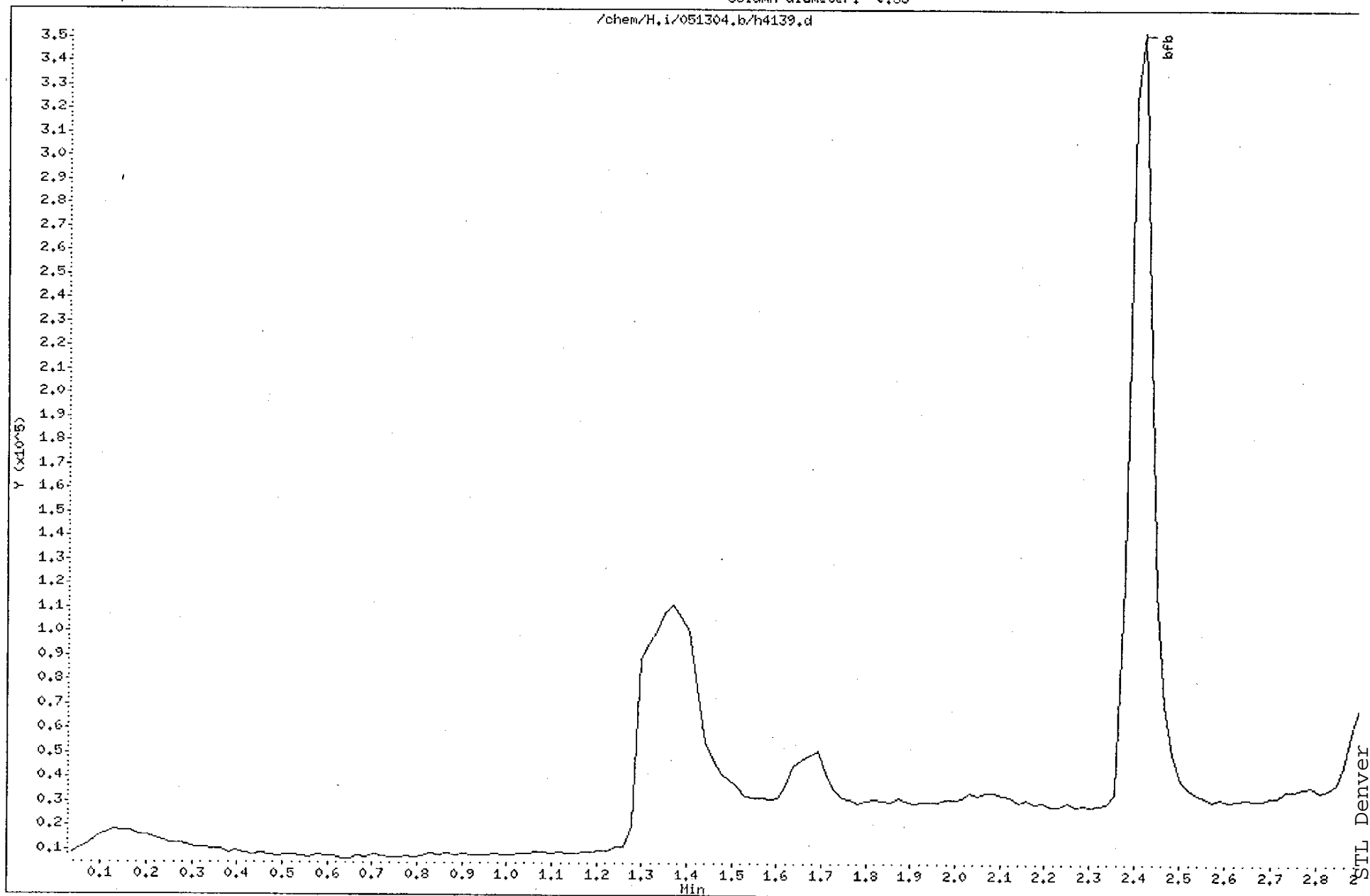
Sample Info: BFB #073-04

Operator: rhoffman

Volume Injected (uL): 1.0

Column diameter: 0.53

Column phase: DB624



Date : 13-MAY-2004 07:49

Client ID: BFB

Instrument: H.i

Sample Info: BFB #073-04

Volume Injected (uL): 1.0

Operator: mhoffman

Column phase: DB624

Column diameter: 0.53

Data File: h4139.d

Spectrum: Scan 132 (2.39)

Location of Maximum: 95.05

Number of points: 83

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|-------|-------|-------|-------|--------|-------|--------|-------|
| 36.00 | 997 | 62.00 | 3215 | 88.00 | 3244 | 135.00 | 285 |
| 37.00 | 4205 | 63.00 | 2338 | 91.00 | 607 | 140.90 | 450 |
| 38.00 | 3850 | 64.00 | 244 | 92.00 | 1644 | 142.90 | 416 |
| 39.10 | 1739 | 67.05 | 344 | 92.95 | 2739 | 147.05 | 699 |
| 40.00 | 663 | 68.05 | 6937 | 94.05 | 7410 | 147.85 | 242 |
| 41.05 | 656 | 69.05 | 7897 | 95.05 | 71304 | 163.00 | 210 |
| 42.05 | 219 | 70.05 | 652 | 96.05 | 5838 | 173.95 | 36576 |
| 43.05 | 851 | 71.15 | 474 | 97.05 | 462 | 174.95 | 2586 |
| 44.05 | 3209 | 71.95 | 501 | 102.95 | 369 | 175.95 | 34752 |
| 45.05 | 1054 | 73.05 | 4551 | 103.85 | 416 | 176.95 | 2779 |
| 47.05 | 1426 | 74.05 | 10513 | 104.95 | 344 | 191.00 | 810 |
| 47.95 | 551 | 75.05 | 33544 | 105.85 | 324 | 193.00 | 412 |
| 49.05 | 3245 | 76.05 | 2712 | 115.10 | 268 | 207.05 | 6227 |
| 50.05 | 14673 | 76.95 | 636 | 115.90 | 228 | 208.05 | 1355 |
| 51.05 | 4549 | 77.95 | 517 | 116.90 | 485 | 209.05 | 715 |
| 52.05 | 294 | 78.85 | 1902 | 117.90 | 272 | 219.00 | 312 |
| 55.10 | 685 | 80.00 | 586 | 119.00 | 685 | 253.05 | 396 |
| 56.10 | 1102 | 80.90 | 2006 | 127.95 | 227 | 269.10 | 801 |
| 57.10 | 2498 | 81.90 | 525 | 129.85 | 204 | 270.10 | 241 |
| 60.00 | 862 | 85.10 | 270 | 130.95 | 427 | 281.15 | 718 |
| 61.00 | 3342 | 87.00 | 3245 | 133.00 | 909 | | |

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/051304.b/h4140.d
 Lab Smp Id: MAIN001 Client Smp ID: MAIN001
 Inj Date : 13-MAY-2004 07:58
 Operator : hoffmanm Inst ID: H.i
 Smp Info : MAIN001,,
 Misc Info :
 Comment : Purge and Trap Analysis
 Method : /chem/H.i/051304.b/H-20ml-h2o.m
 Meth Date : 13-May-2004 10:54 hoffmanm Quant Type: ISTD
 Cal Date : 13-MAY-2004 07:58 Cal File: h4140.d
 Als bottle: 2 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 1-main.sub
 Target Version: 3.40
 Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|--------------------------------|-----------|------------------------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 48 Fluorobenzene | 96 | 6.383 | 6.379 | (1.000) | 1567187 | 10.0000 | |
| * 72 Chlorobenzene-d5 | 119 | 10.047 | 10.043 | (1.000) | 309267 | 10.0000 | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.903 | 12.917 | (1.000) | 427266 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | 94336 | 2.00000 | 2.03239 |
| M 2 Xylene (total) | 106 | | | | 212499 | 1.00000 | 3.10174 |
| 3 dichlorodifluoromethane | 85 | 1.874 | 1.870 | (0.294) | 73217 | 1.00000 | 0.993181 |
| 4 Chloromethane | 50 | 2.036 | 2.032 | (0.319) | 38520 | 1.00000 | 0.986620 |
| 5 Vinyl Chloride | 62 | 2.125 | 2.140 | (0.333) | 35359 | 1.00000 | 0.966082 |
| 7 Bromomethane | 94 | 2.431 | 2.427 | (0.381) | 32624 | 1.00000 | 0.974192 |
| 8 Chloroethane | 64 | 2.521 | 2.517 | (0.395) | 27462 | 1.00000 | 1.01557 |
| 10 Trichlorofluoromethane | 101 | 2.700 | 2.697 | (0.423) | 109051 | 1.00000 | 0.996754 |
| 11 Ethanol | 45.00 | Compound Not Detected. | | | | | |
| 13 Acrolein | 56.00 | Compound Not Detected. | | | | | |
| 14 1,1-Dichloroethene | 96 | 3.149 | 3.164 | (0.493) | 47609 | 1.00000 | 1.03858 |
| 15 Acetone | 43.00 | Compound Not Detected. | | | | | |
| 17 Iodomethane | 142 | 3.311 | 3.325 | (0.519) | 58376 | 1.00000 | 0.902624 |
| 19 Acetonitrile | 41.00 | Compound Not Detected. | | | | | |

| Compounds | QUANT SIG | | | | | | AMOUNTS | |
|------------------------------|-----------|------------------------|--------|---------|--------|----------|--------------------|-------------------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 21 Methylene Chloride | 84.00 | Compound Not Detected. | | | | | | |
| 22 tert-Butyl alcohol | 59 | 3.706 | 3.720 | (0.581) | 21513 | 20.0000 | 21.5498 | |
| 23 Acrylonitrile | 53 | 3.850 | 3.864 | (0.603) | 24379 | 10.0000 | 10.2566 | |
| 24 trans-1,2-Dichloroethene | 96 | 3.904 | 3.900 | (0.612) | 48574 | 1.00000 | 1.02768 | |
| 27 1,1-Dichloroethane | 63 | 4.353 | 4.367 | (0.682) | 89920 | 1.00000 | 1.01818 | |
| 28 Chloroprene | 53 | 4.461 | 4.457 | (0.699) | 75354 | 1.00000 | 1.01206 | |
| 30 Isopropyl ether | 87 | 4.425 | 4.421 | (0.693) | 146734 | 5.00000 | 4.95290 | |
| 32 cis-1,2-Dichloroethene | 96 | 5.017 | 5.014 | (0.786) | 45762 | 1.00000 | 1.00472 | |
| 31 2,2-Dichloropropane | 77 | 5.017 | 5.032 | (0.786) | 73158 | 1.00000 | 1.04398 | |
| 33 2-Butanone | 43 | 5.035 | 5.032 | (0.789) | 16159 | 4.00000 | 3.76312 | |
| 34 Propionitrile | 54 | 5.089 | 5.104 | (0.797) | 8425 | 10.0000 | 9.80847 | |
| 36 Methacrylonitrile | 41 | 5.269 | 5.283 | (0.826) | 64482 | 10.0000 | 9.76368 | |
| 37 Bromochloromethane | 128 | 5.305 | 5.301 | (0.831) | 16909 | 1.00000 | 0.983441 | |
| 38 Chloroform | 83 | 5.377 | 5.391 | (0.842) | 86721 | 1.00000 | 1.01991 | |
| 41 1,1,1-Trichloroethane | 97 | 5.610 | 5.625 | (0.879) | 95658 | 1.00000 | 1.01878 | |
| 42 1,1-Dichloropropene | 75 | 5.808 | 5.822 | (0.910) | 75455 | 1.00000 | 1.01926 | |
| 43 Carbon Tetrachloride | 117 | 5.826 | 5.822 | (0.913) | 87086 | 1.00000 | 1.00494 | |
| 45 Isobutanol | 41.00 | Compound Not Detected. | | | | | | |
| 46 Benzene | 78 | 6.059 | 6.056 | (0.949) | 125834 | 1.00000 | 1.00510 | |
| 47 1,2-Dichloroethane | 62 | 6.059 | 6.074 | (0.949) | 33199 | 1.00000 | 1.01685 | |
| 49 n-Butanol | 56.00 | Compound Not Detected. | | | | | | |
| 50 Trichloroethene | 130 | 6.814 | 6.828 | (1.068) | 52600 | 1.00000 | 0.995328 | |
| 52 1,2-Dichloropropane | 63 | 7.083 | 7.080 | (1.110) | 42644 | 1.00000 | 1.01330 | |
| 53 Dibromomethane | 93 | 7.227 | 7.223 | (1.132) | 22440 | 1.00000 | 1.01464 | |
| 55 1,4-Dioxane | 88.00 | Compound Not Detected. | | | | | | |
| 56 Bromodichloromethane | 83 | 7.406 | 7.421 | (1.160) | 63232 | 1.00000 | 0.997245 | |
| 59 cis-1,3-Dichloropropene | 75 | 7.945 | 7.960 | (0.791) | 50007 | 1.00000 | 1.00203 | |
| 60 4-Methyl-2-pentanone | 43 | 8.143 | 8.139 | (0.810) | 49381 | 4.00000 | 3.93422 | |
| 62 Toluene | 91 | 8.358 | 8.373 | (0.832) | 150484 | 1.00000 | 1.02746 | |
| 63 trans-1,3-Dichloropropene | 75 | 8.628 | 8.624 | (0.859) | 33466 | 1.00000 | 1.01338 | |
| 65 1,1,2-Trichloroethane | 97 | 8.843 | 8.858 | (0.880) | 22498 | 1.00000 | 1.04003 | |
| 67 1,3-Dichloropropane | 76 | 9.059 | 9.055 | (0.902) | 34026 | 1.00000 | 1.00909 | |
| 66 Tetrachloroethene | 164 | 9.041 | 9.037 | (0.900) | 44733 | 1.00000 | 0.985927 | |
| 68 2-Hexanone | 43 | 9.167 | 9.163 | (0.912) | 30492 | 4.00000 | 3.88542 | |
| 69 Dibromochloromethane | 129 | 9.328 | 9.343 | (0.928) | 36828 | 1.00000 | 1.00073 | |
| 70 1,2-Dibromoethane | 107 | 9.472 | 9.486 | (0.943) | 27227 | 1.00000 | 0.992858 | |
| 71 1-Chlorohexane | 91 | 10.047 | 10.061 | (1.000) | 75207 | 1.00000 | 1.02400 | |
| 73 Chlorobenzene | 112 | 10.083 | 10.079 | (1.004) | 99892 | 1.00000 | 1.01930 | |
| 74 1,1,1,2-Tetrachloroethane | 131 | 10.173 | 10.187 | (1.012) | 39094 | 1.00000 | 0.986445 | |
| 75 Ethylbenzene | 106 | 10.209 | 10.223 | (1.016) | 51113 | 1.00000 | 1.00490 | |
| 76 m and p-Xylene | 106 | 10.352 | 10.367 | (1.030) | 147685 | 2.00000 | 2.06656 | |
| 77 o-Xylene | 106 | 10.873 | 10.870 | (1.082) | 64814 | 1.00000 | 1.03518 | |
| 78 Styrene | 104 | 10.891 | 10.888 | (1.084) | 88439 | 1.00000 | 0.970549 | |
| 79 Bromoform | 173 | 11.125 | 11.139 | (1.107) | 17550 | 1.00000 | 0.960907 | |
| 80 isopropyl benzene | 105 | 11.358 | 11.355 | (1.131) | 215801 | 1.00000 | 1.02634 | |
| 81 Cyclohexanone | 55 | 11.466 | 11.462 | (1.141) | 20885 | 40.0000 | 41.6610 | |
| 83 1,1,2,2-Tetrachloroethane | 83 | 11.717 | 11.714 | (1.166) | 25600 | 1.00000 | 1.02989 | |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 84 Bromobenzene | 156 | 11.735 | 11.732 | (0.909) | 36516 | 1.00000 | 1.00566 |
| 85 1,2,3-Trichloropropane | 110 | 11.771 | 11.786 | (0.912) | 6840 | 1.00000 | 1.04588 |
| 87 n-Propylbenzene | 120 | 11.861 | 11.876 | (0.919) | 47674 | 1.00000 | 1.01928 |
| 88 2-Chlorotoluene | 126 | 11.969 | 11.983 | (0.928) | 36077 | 1.00000 | 1.00798 |
| 89 1,3,5-Trimethylbenzene | 105 | 12.077 | 12.091 | (0.936) | 151215 | 1.00000 | 1.00563 |
| 90 4-Chlorotoluene | 126 | 12.095 | 12.109 | (0.937) | 42022 | 1.00000 | 1.03542 |
| 91 tert-Butylbenzene | 119 | 12.454 | 12.468 | (0.965) | 161670 | 1.00000 | 1.01397 |
| 92 1,2,4-Trimethylbenzene | 105 | 12.508 | 12.522 | (0.969) | 140232 | 1.00000 | 1.00813 |
| 93 sec-Butylbenzene | 134 | 12.705 | 12.720 | (0.985) | 39280 | 1.00000 | 1.02916 |
| 94 m-Dichlorobenzene | 146 | 12.831 | 12.845 | (0.994) | 60128 | 1.00000 | 1.02389 |
| 95 4-Isopropyltoluene | 119 | 12.867 | 12.881 | (0.997) | 182419 | 1.00000 | 1.00976 |
| 97 p-dichlorobenzene | 146 | 12.921 | 12.935 | (1.001) | 77814 | 1.00000 | 1.00523 |
| 98 n-Butylbenzene | 91 | 13.298 | 13.295 | (1.031) | 176998 | 1.00000 | 1.01212 |
| 99 o-Dichlorobenzene | 146 | 13.316 | 13.330 | (1.032) | 49463 | 1.00000 | 0.982584 |
| 100 1,2-Dibromo-3-chloropropane | 157 | 14.107 | 14.103 | (1.093) | 3150 | 1.00000 | 0.915838 |
| 101 1,2,4-Trichlorobenzene | 180 | 14.879 | 14.875 | (1.153) | 37313 | 1.00000 | 0.985020 |
| 102 Hexachlorobutadiene | 225 | 15.023 | 15.037 | (1.164) | 35790 | 1.00000 | 0.979010 |
| 127 Naphthalene | 128 | 15.112 | 15.109 | (1.171) | 33405 | 1.00000 | 0.997467(a) |
| 104 1,2,3-Trichlorobenzene | 180 | 15.346 | 15.360 | (1.189) | 28484 | 1.00000 | 1.00733 |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4140.d
Lab Smp Id: MAIN001
Analysis Type: VOA
Quant Type: ISTD
Operator: hoffmanm
Method File: /chem/H.i/051304.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/13/4
Calibration Time: 0857
Client Smp ID: MAIN001
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 1613156 | 806578 | 3226312 | 1567187 | -2.85 |
| 72 Chlorobenzene-d5 | 325674 | 162837 | 651348 | 309267 | -5.04 |
| 96 1,4-Dichlorobenze | 462254 | 231127 | 924508 | 427266 | -7.57 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 6.38 | 5.88 | 6.88 | 6.38 | 0.05 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.05 | -0.15 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.90 | -0.11 |

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/H.i/051304.b/h4140.d

Page 5

Date : 13-MAY-2004 07:58

Client ID: MAIN001

Instrument: H.i

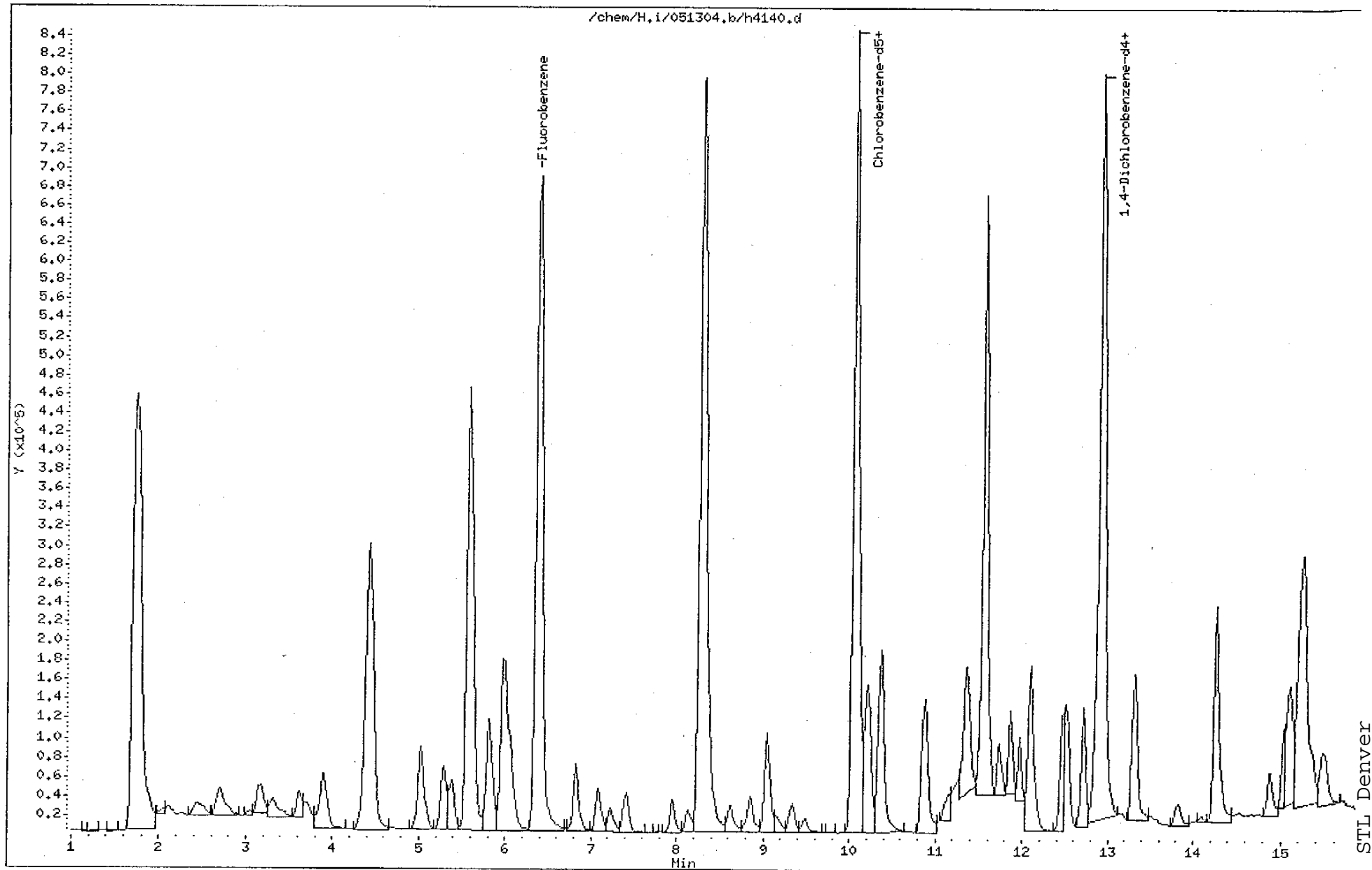
Sample Info: MAIN001,,

Purge Volume: 20.0

Operator: hoffmann

Column phase: DB624

Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/051304.b/h4141.d
Lab Smp Id: MAIN002 Client Smp ID: MAIN002
Inj Date : 13-MAY-2004 08:17
Operator : hoffmanm Inst ID: H.i
Smp Info : MAIN002,,
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/051304.b/H-20ml-h2o.m
Meth Date : 13-May-2004 10:54 hoffmanm Quant Type: ISTD
Cal Date : 13-MAY-2004 07:58 Cal File: h4140.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|--------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 48 Fluorobenzene | 96 | 6.379 | 6.379 | (1.000) | 1576594 | 10.0000 | |
| * 72 Chlorobenzene-d5 | 119 | 10.043 | 10.043 | (1.000) | 312368 | 10.0000 | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.917 | 12.917 | (1.000) | 452439 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | 176731 | 4.00000 | 3.79172 |
| M 2 Xylene (total) | 106 | | | | 405671 | 2.00000 | 5.96572 |
| 3 dichlorodifluoromethane | 85 | 1.870 | 1.870 | (0.293) | 153009 | 2.00000 | 2.05956 |
| 4 Chloromethane | 50 | 2.032 | 2.032 | (0.319) | 81604 | 2.00000 | 2.05356 |
| 5 Vinyl Chloride | 62 | 2.140 | 2.140 | (0.335) | 73729 | 2.00000 | 1.96404 |
| 7 Bromomethane | 94 | 2.427 | 2.427 | (0.380) | 67675 | 2.00000 | 1.94503 |
| 8 Chloroethane | 64 | 2.517 | 2.517 | (0.395) | 55185 | 2.00000 | 2.03803 |
| 10 Trichlorofluoromethane | 101 | 2.697 | 2.697 | (0.423) | 220008 | 2.00000 | 1.99555 |
| 11 Ethanol | 45 | 2.822 | 2.822 | (0.442) | 9049 | 100.000 | 111.631 |
| 13 Acrolein | 56 | 3.056 | 3.056 | (0.479) | 29239 | 20.0000 | 19.9725 |
| 14 1,1-Dichloroethene | 96 | 3.164 | 3.164 | (0.496) | 89756 | 2.00000 | 1.95754 |
| 15 Acetone | 43 | 3.182 | 3.182 | (0.499) | 20694 | 8.00000 | 8.17574 |
| 17 Iodomethane | 142 | 3.325 | 3.325 | (0.521) | 122530 | 2.00000 | 1.75276 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 19 Acetonitrile | 41 | 3.451 | 3.451 | (0.541) | 13762 | 20.0000 | 20.9747 |
| 21 Methylene Chloride | 84 | 3.613 | 3.613 | (0.566) | 75035 | 2.00000 | 2.09794 |
| 22 tert-Butyl alcohol | 59 | 3.720 | 3.720 | (0.583) | 36400 | 40.0000 | 37.3206 |
| 23 Acrylonitrile | 53 | 3.864 | 3.864 | (0.606) | 44318 | 20.0000 | 18.4534 |
| 24 trans-1,2-Dichloroethene | 96 | 3.900 | 3.900 | (0.611) | 90340 | 2.00000 | 1.91947 |
| 27 1,1-Dichloroethane | 63 | 4.367 | 4.367 | (0.685) | 169583 | 2.00000 | 1.88816 |
| 28 Chloroprene | 53 | 4.457 | 4.457 | (0.699) | 146766 | 2.00000 | 1.91955 |
| 30 Isopropyl ether | 87 | 4.421 | 4.421 | (0.693) | 282350 | 10.0000 | 9.25660 |
| 32 cis-1,2-Dichloroethene | 96 | 5.014 | 5.014 | (0.786) | 86391 | 2.00000 | 1.87224 |
| 31 2,2-Dichloropropane | 77 | 5.032 | 5.032 | (0.789) | 138368 | 2.00000 | 2.00026 |
| 33 2-Butanone | 43 | 5.032 | 5.032 | (0.789) | 33246 | 8.00000 | 7.34706 |
| 34 Propionitrile | 54 | 5.104 | 5.104 | (0.800) | 16004 | 20.0000 | 17.9269 |
| 36 Methacrylonitrile | 41 | 5.283 | 5.283 | (0.828) | 128179 | 20.0000 | 18.7672 |
| 37 Bromochloromethane | 128 | 5.301 | 5.301 | (0.831) | 32394 | 2.00000 | 1.83589 |
| 38 Chloroform | 83 | 5.391 | 5.391 | (0.845) | 162865 | 2.00000 | 1.90055 |
| 41 1,1,1-Trichloroethane | 97 | 5.625 | 5.625 | (0.882) | 181867 | 2.00000 | 1.93561 |
| 42 1,1-Dichloropropene | 75 | 5.822 | 5.822 | (0.913) | 141728 | 2.00000 | 1.90683 |
| 43 Carbon Tetrachloride | 117 | 5.822 | 5.822 | (0.913) | 170230 | 2.00000 | 1.93208 |
| 45 Isobutanol | 41 | 5.948 | 5.948 | (0.932) | 9369 | 40.0000 | 31.4983 |
| 46 Benzene | 78 | 6.056 | 6.056 | (0.949) | 244937 | 2.00000 | 1.92796 |
| 47 1,2-Dichloroethane | 62 | 6.074 | 6.074 | (0.952) | 64433 | 2.00000 | 1.95064 |
| 49 n-Butanol | 56 | 6.738 | 6.738 | (1.056) | 7480 | 40.0000 | 34.2336 (M) |
| 50 Trichloroethene | 130 | 6.828 | 6.828 | (1.070) | 103871 | 2.00000 | 1.92319 |
| 52 1,2-Dichloropropane | 63 | 7.080 | 7.080 | (1.110) | 81297 | 2.00000 | 1.91157 |
| 53 Dibromomethane | 93 | 7.223 | 7.223 | (1.132) | 42298 | 2.00000 | 1.89956 |
| 55 1,4-Dioxane | 88 | 7.277 | 7.277 | (1.141) | 9272 | 100.000 | 86.6392 |
| 56 Bromodichloromethane | 83 | 7.421 | 7.421 | (1.163) | 124168 | 2.00000 | 1.92512 |
| 59 cis-1,3-Dichloropropene | 75 | 7.960 | 7.960 | (0.793) | 98398 | 2.00000 | 1.91761 |
| 60 4-Methyl-2-pentanone | 43 | 8.139 | 8.139 | (0.810) | 95201 | 8.00000 | 7.36125 |
| 62 Toluene | 91 | 8.373 | 8.373 | (0.834) | 290031 | 2.00000 | 1.96513 |
| 63 trans-1,3-Dichloropropene | 75 | 8.624 | 8.624 | (0.859) | 66235 | 2.00000 | 1.92863 |
| 65 1,1,2-Trichloroethane | 97 | 8.858 | 8.858 | (0.882) | 43290 | 2.00000 | 1.99411 |
| 67 1,3-Dichloropropane | 76 | 9.055 | 9.055 | (0.902) | 65470 | 2.00000 | 1.91468 |
| 66 Tetrachloroethene | 164 | 9.037 | 9.037 | (0.900) | 89132 | 2.00000 | 1.91287 |
| 68 2-Hexanone | 43 | 9.163 | 9.163 | (0.912) | 60336 | 8.00000 | 7.42727 |
| 69 Dibromochloromethane | 129 | 9.343 | 9.343 | (0.930) | 71381 | 2.00000 | 1.87973 |
| 70 1,2-Dibromoethane | 107 | 9.486 | 9.486 | (0.945) | 54672 | 2.00000 | 1.94009 |
| 71 1-Chlorohexane | 91 | 10.061 | 10.061 | (1.002) | 146296 | 2.00000 | 1.98616 |
| 73 Chlorobenzene | 112 | 10.079 | 10.079 | (1.004) | 193840 | 2.00000 | 1.95625 |
| 74 1,1,1,2-Tetrachloroethane | 131 | 10.187 | 10.187 | (1.014) | 78114 | 2.00000 | 1.90152 |
| 75 Ethylbenzene | 106 | 10.223 | 10.223 | (1.018) | 101839 | 2.00000 | 1.98161 |
| 76 m and p-Xylene | 106 | 10.367 | 10.367 | (1.032) | 279380 | 4.00000 | 3.93562 |
| 77 o-Xylene | 106 | 10.870 | 10.870 | (1.082) | 126291 | 2.00000 | 2.03010 |
| 78 Styrene | 104 | 10.888 | 10.888 | (1.084) | 182013 | 2.00000 | 1.95038 |
| 79 Bromoform | 173 | 11.139 | 11.139 | (1.109) | 35474 | 2.00000 | 1.86354 |
| 80 isopropyl benzene | 105 | 11.355 | 11.355 | (1.131) | 419571 | 2.00000 | 2.01878 |
| 81 Cyclohexanone | 55 | 11.462 | 11.462 | (1.141) | 40260 | 80.0000 | 80.1378 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 83 1,1,2,2-Tetrachloroethane | 83 | 11.714 | 11.714 | (1.166) | 49652 | 2.00000 | 2.00222 |
| 84 Bromobenzene | 156 | 11.732 | 11.732 | (0.908) | 73674 | 2.00000 | 1.90000 |
| 85 1,2,3-Trichloropropane | 110 | 11.786 | 11.786 | (0.912) | 13266 | 2.00000 | 1.92809 |
| 87 n-Propylbenzene | 120 | 11.876 | 11.876 | (0.919) | 95946 | 2.00000 | 1.94878 |
| 88 2-Chlorotoluene | 126 | 11.983 | 11.983 | (0.928) | 72933 | 2.00000 | 1.92373 |
| 89 1,3,5-Trimethylbenzene | 105 | 12.091 | 12.091 | (0.936) | 307797 | 2.00000 | 1.92520 |
| 90 4-Chlorotoluene | 126 | 12.109 | 12.109 | (0.937) | 77386 | 2.00000 | 1.85748 |
| 91 tert-Butylbenzene | 119 | 12.468 | 12.468 | (0.965) | 326369 | 2.00000 | 1.93750 |
| 92 1,2,4-Trimethylbenzene | 105 | 12.522 | 12.522 | (0.969) | 281961 | 2.00000 | 1.93478 |
| 93 sec-Butylbenzene | 134 | 12.720 | 12.720 | (0.985) | 76094 | 2.00000 | 1.92772 |
| 94 m-Dichlorobenzene | 146 | 12.845 | 12.845 | (0.994) | 117758 | 2.00000 | 1.87132 |
| 95 4-Isopropyltoluene | 119 | 12.881 | 12.881 | (0.997) | 363594 | 2.00000 | 1.92926 |
| 97 p-dichlorobenzene | 146 | 12.935 | 12.935 | (1.001) | 163487 | 2.00000 | 2.01214 |
| 98 n-Butylbenzene | 91 | 13.295 | 13.295 | (1.029) | 363425 | 2.00000 | 1.99872 |
| 99 o-Dichlorobenzene | 146 | 13.330 | 13.330 | (1.032) | 110953 | 2.00000 | 2.02397 |
| 100 1,2-Dibromo-3-chloropropane | 157 | 14.103 | 14.103 | (1.092) | 7385 | 2.00000 | 1.88738 |
| 101 1,2,4-Trichlorobenzene | 180 | 14.875 | 14.875 | (1.152) | 80944 | 2.00000 | 2.03720 |
| 102 Hexachlorobutadiene | 225 | 15.037 | 15.037 | (1.164) | 77320 | 2.00000 | 2.06025 |
| 127 Naphthalene | 128 | 15.109 | 15.109 | (1.170) | 71320 | 2.00000 | 1.97392(a) |
| 104 1,2,3-Trichlorobenzene | 180 | 15.360 | 15.360 | (1.189) | 62638 | 2.00000 | 2.11593 |

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4141.d
Lab Smp Id: MAIN002
Analysis Type: VOA
Quant Type: ISTD
Operator: hoffmann
Method File: /chem/H.i/051304.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/13/4
Calibration Time: 0857
Client Smp ID: MAIN002
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 1613156 | 806578 | 3226312 | 1576594 | -2.27 |
| 72 Chlorobenzene-d5 | 325674 | 162837 | 651348 | 312368 | -4.09 |
| 96 1,4-Dichlorobenze | 462254 | 231127 | 924508 | 452439 | -2.12 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 6.38 | 5.88 | 6.88 | 6.38 | -0.01 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.04 | -0.18 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.92 | 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/H.i/051304.b/h4141.d

Page 5

Date : 13-MAY-2004 08:17

Client ID: MAIN002

Instrument: H.i

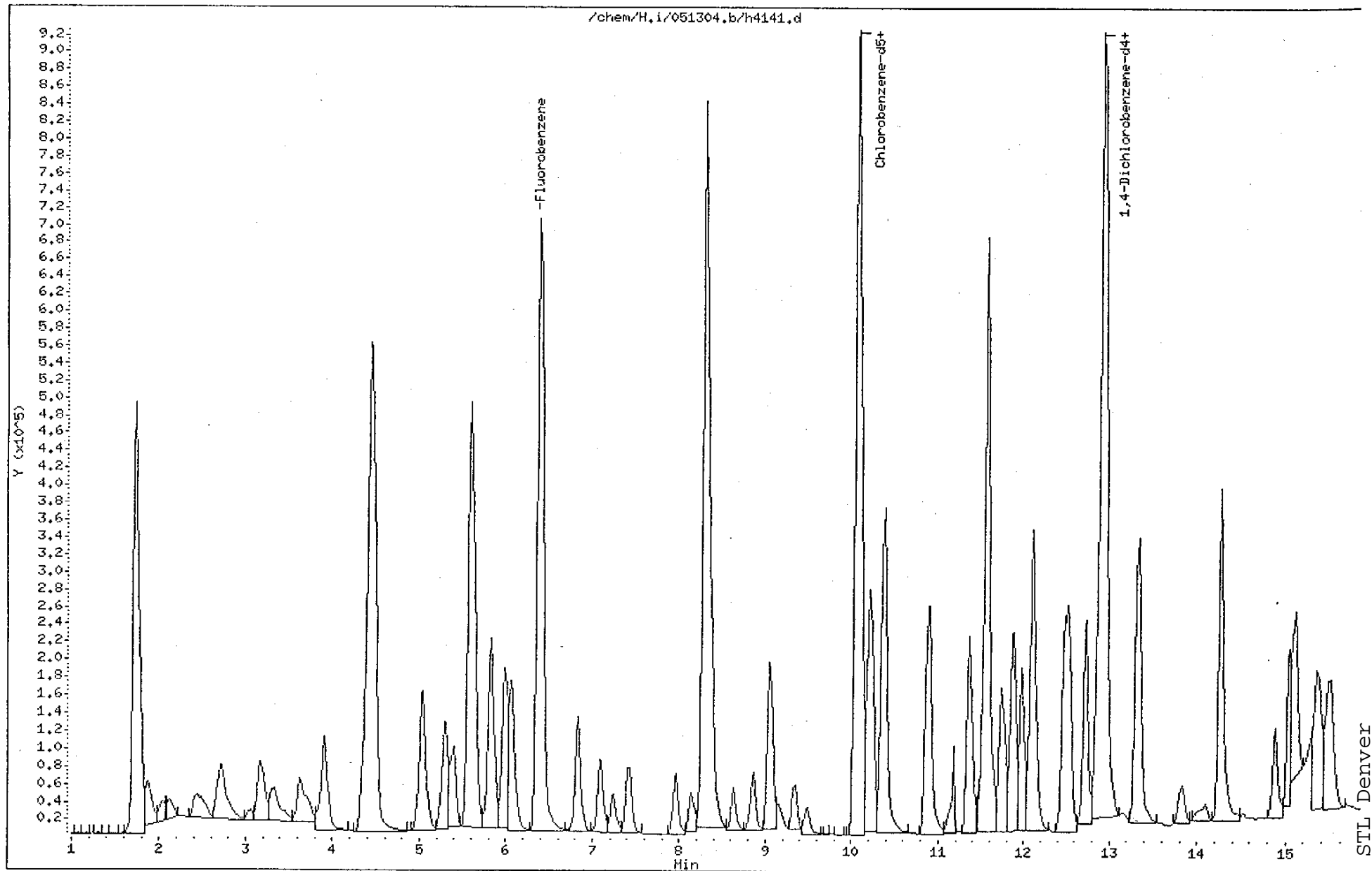
Sample Info: MAIN002,,

Purge Volume: 20.0

Operator: hoffmann

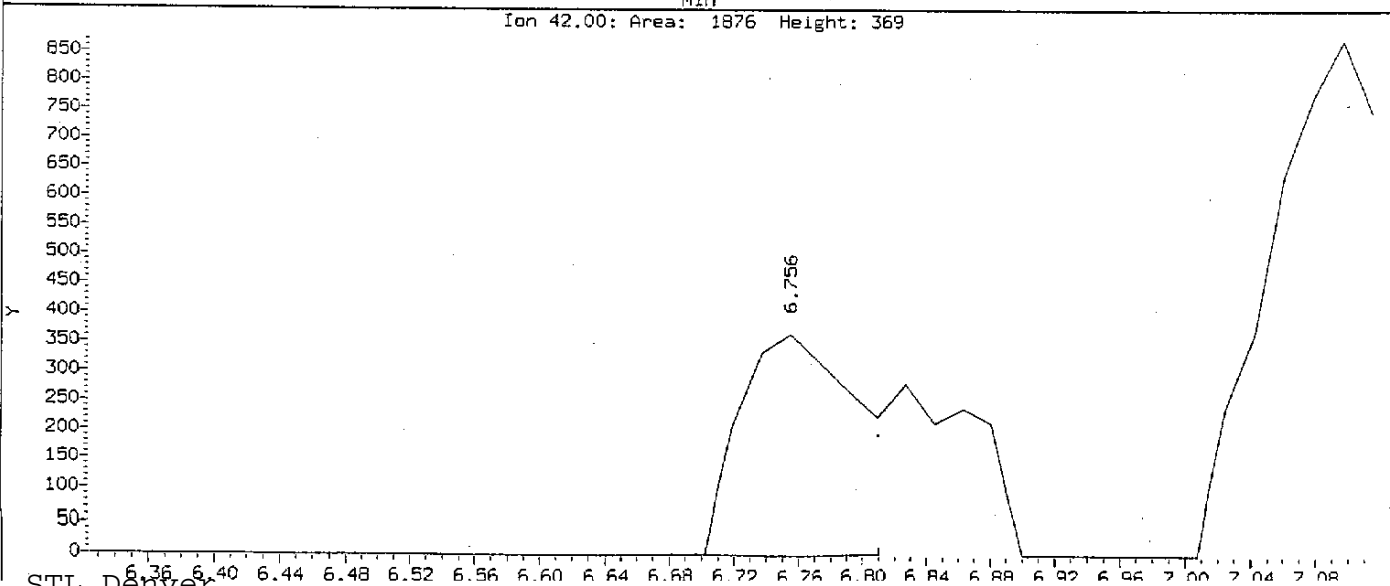
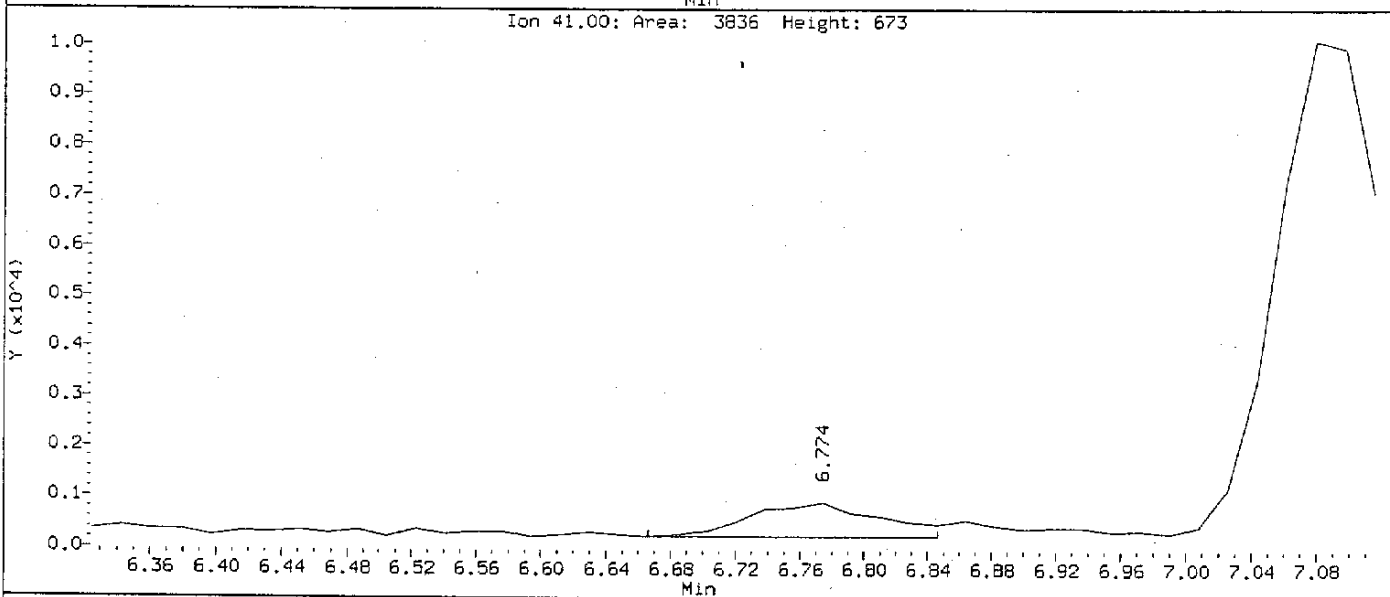
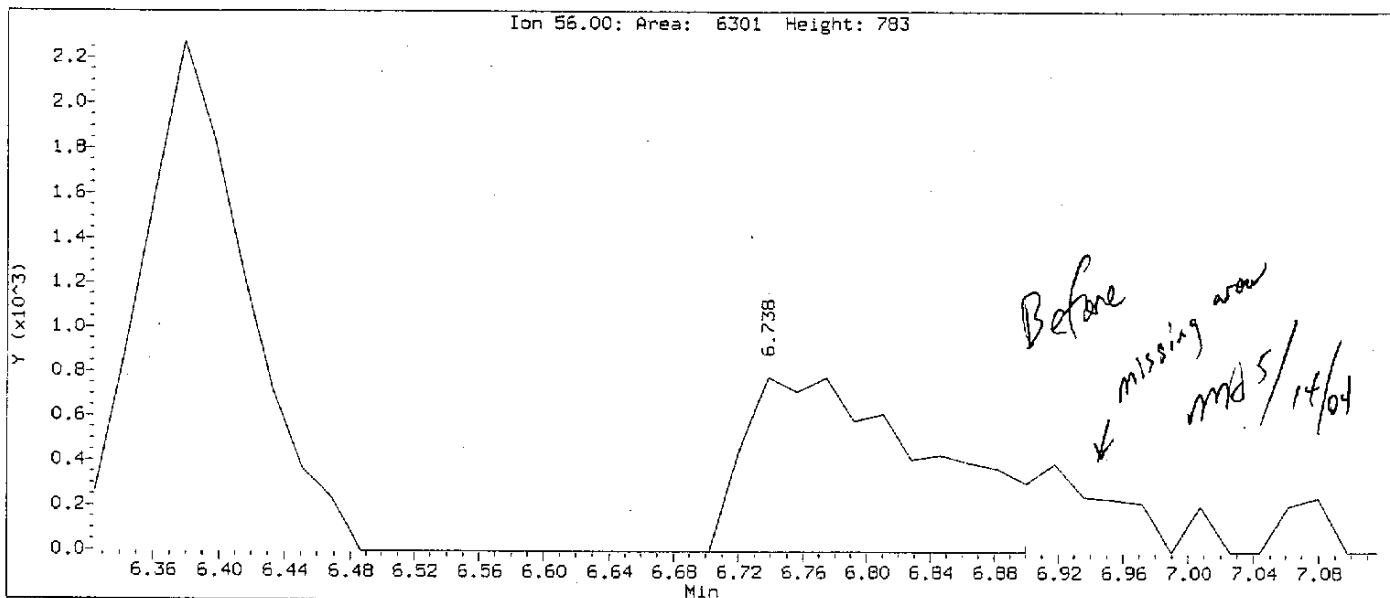
Column phase: DB624

Column diameter: 0.53



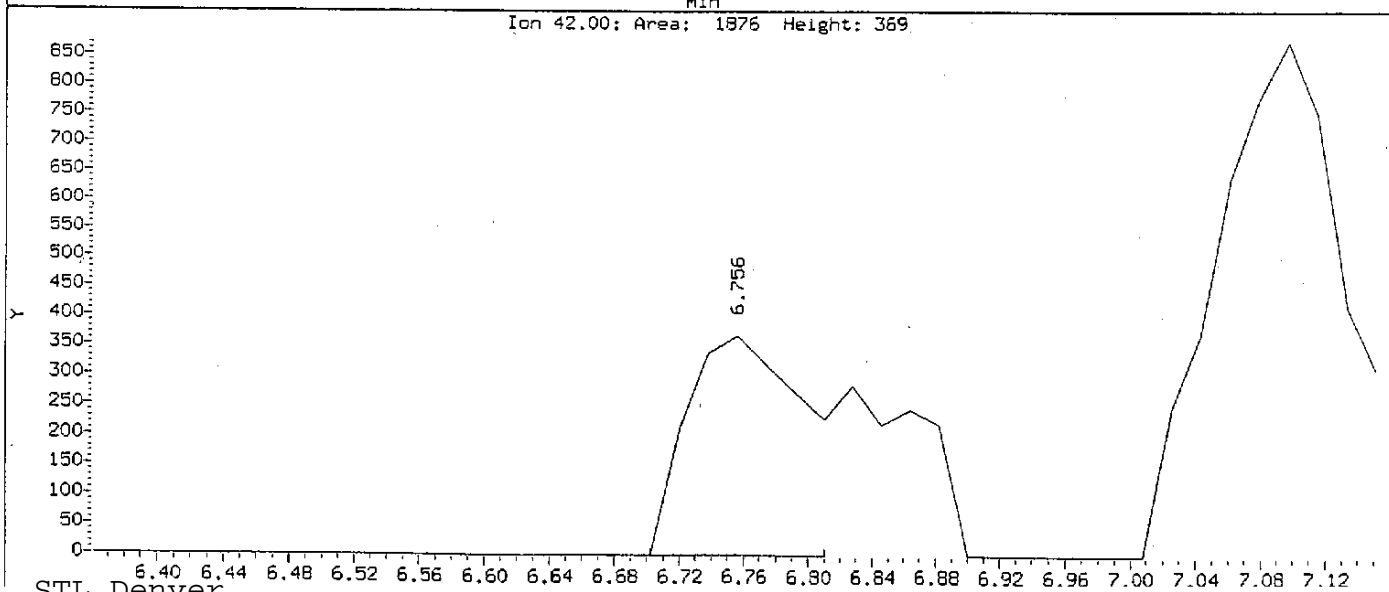
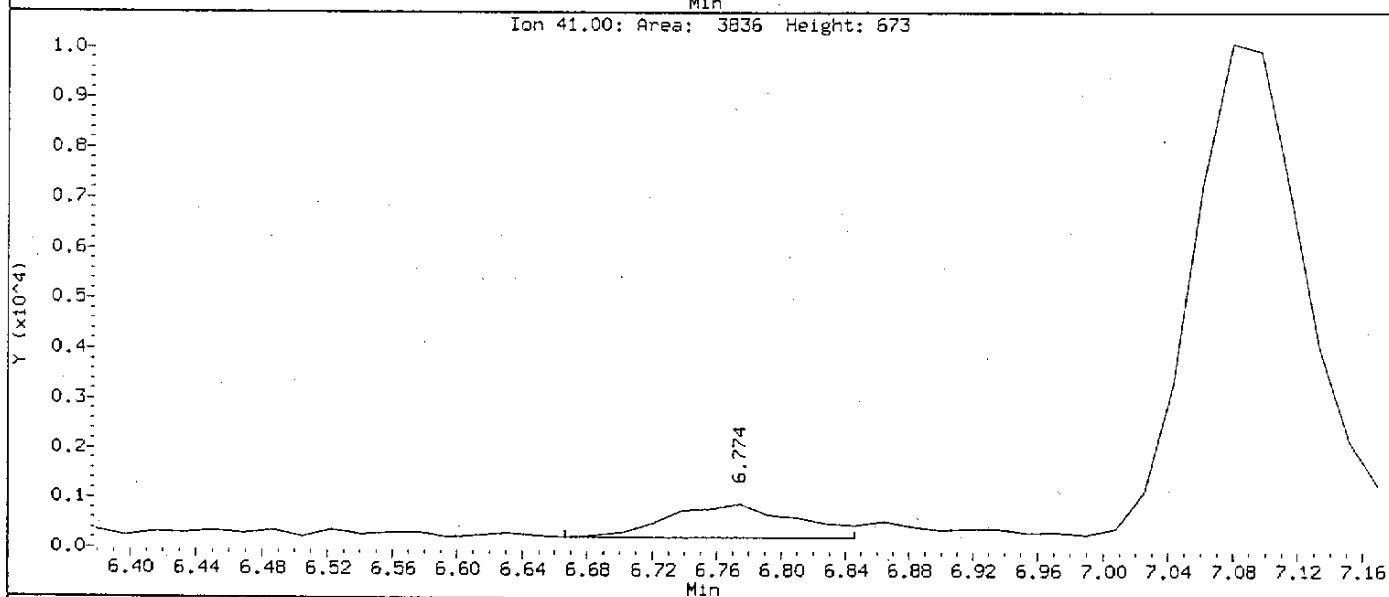
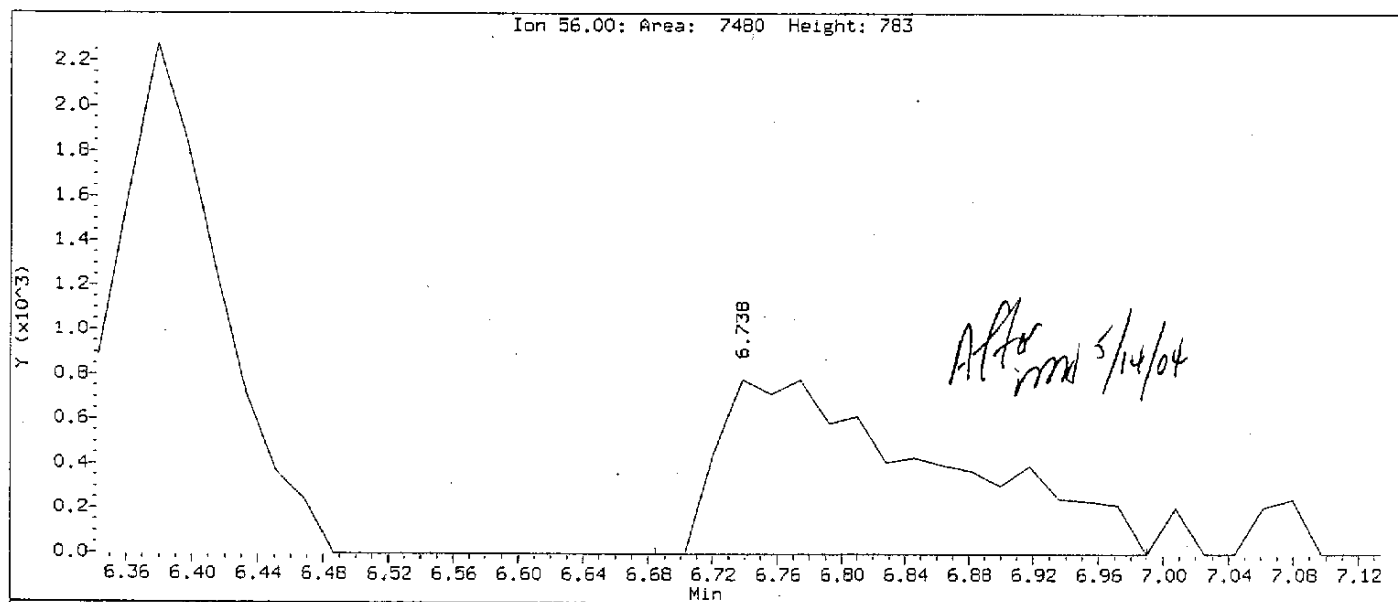
Data File: /chem/H.1/051304.b/h4141.d
Injection Date: 13-MAY-2004 08:17
Instrument: H.1
Client Sample ID: MAIN002

Compound: n-Butanol
CAS Number: 71-36-3



Data File: /chem/H.1/051304.b/h4141.d
Injection Date: 13-MAY-2004 08:17
Instrument: H.1
Client Sample ID: MAIN002

Compound: n-Butanol
CAS Number: 71-36-3



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/051304.b/h4142.d
Lab Smp Id: MAIN005 Client Smp ID: MAIN005
Inj Date : 13-MAY-2004 08:37
Operator : hoffmanm Inst ID: H.i
Smp Info : MAIN005,,
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/051304.b/H-20ml-h2o.m
Meth Date : 13-May-2004 10:54 hoffmanm Quant Type: ISTD
Cal Date : 13-MAY-2004 07:58 Cal File: h4140.d
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | AMOUNTS | | | |
|--------------------------------|-----------|--------|----------------|----------|--------------------|-------------------|--|
| | MASS | RT | EXP RT REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) | |
| * 48 Fluorobenzene | 96 | 6.379 | 6.379 (1.000) | 1581178 | 10.0000 | | |
| * 72 Chlorobenzene-d5 | 119 | 10.061 | 10.043 (1.000) | 320656 | 10.0000 | | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.918 | 12.917 (1.000) | 440128 | 10.0000 | | |
| M 1 1,2-Dichloroethene (total) | 96 | | | 460304 | 10.0000 | 10.0102 | |
| M 2 Xylene (total) | 106 | | | 1055168 | 5.00000 | 14.9733 | |
| 3 dichlorodifluoromethane | 85 | 1.871 | 1.870 (0.293) | 376351 | 5.00000 | 5.00545 | |
| 4 Chloromethane | 50 | 2.050 | 2.032 (0.321) | 199908 | 5.00000 | 5.00759 | |
| 5 Vinyl Chloride | 62 | 2.140 | 2.140 (0.335) | 190688 | 5.00000 | 5.12039 | |
| 7 Bromomethane | 94 | 2.427 | 2.427 (0.381) | 177060 | 5.00000 | 5.17256 | |
| 8 Chloroethane | 64 | 2.517 | 2.517 (0.395) | 136124 | 5.00000 | 4.97428 | |
| 10 Trichlorofluoromethane | 101 | 2.697 | 2.697 (0.423) | 544143 | 5.00000 | 4.94767 | |
| 11 Ethanol | 45 | 2.823 | 2.822 (0.442) | 20588 | 250.000 | 247.757 | |
| 13 Acrolein | 56 | 3.056 | 3.056 (0.479) | 69743 | 50.0000 | 48.5906 | |
| 14 1,1-Dichloroethene | 96 | 3.164 | 3.164 (0.496) | 229812 | 5.00000 | 5.01035 | |
| 15 Acetone | 43 | 3.182 | 3.182 (0.499) | 51940 | 20.0000 | 20.3040 | |
| 17 Iodomethane | 142 | 3.326 | 3.325 (0.521) | 354906 | 5.00000 | 5.39932 | |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ---- | == | ----- | ----- | ----- | ----- | ----- |
| 19 Acetonitrile | 41 | 3.451 | 3.451 | (0.541) | 32926 | 50.0000 | 50.0310 |
| 21 Methylene Chloride | 84 | 3.631 | 3.613 | (0.569) | 182515 | 5.00000 | 5.04520 |
| 22 tert-Butyl alcohol | 59 | 3.721 | 3.720 | (0.583) | 95880 | 100.000 | 98.6964 |
| 23 Acrylonitrile | 53 | 3.864 | 3.864 | (0.606) | 118612 | 50.0000 | 50.5226 |
| 24 trans-1,2-Dichloroethene | 96 | 3.918 | 3.900 | (0.614) | 228054 | 5.00000 | 4.89681 |
| 27 1,1-Dichloroethane | 63 | 4.367 | 4.367 | (0.685) | 443061 | 5.00000 | 5.03684 |
| 28 Chloroprene | 53 | 4.475 | 4.457 | (0.702) | 370807 | 5.00000 | 4.97728 |
| 30 Isopropyl ether | 87 | 4.421 | 4.421 | (0.693) | 759829 | 25.0000 | 25.6502 |
| 32 cis-1,2-Dichloroethene | 96 | 5.032 | 5.014 | (0.789) | 232250 | 5.00000 | 5.11343 |
| 31 2,2-Dichloropropane | 77 | 5.032 | 5.032 | (0.789) | 357930 | 5.00000 | 5.07029 |
| 33 2-Butanone | 43 | 5.032 | 5.032 | (0.789) | 91026 | 20.0000 | 20.9449 |
| 34 Propionitrile | 54 | 5.104 | 5.104 | (0.800) | 45626 | 50.0000 | 52.9260 |
| 36 Methacrylonitrile | 41 | 5.283 | 5.283 | (0.828) | 334798 | 50.0000 | 50.6311 |
| 37 Bromochloromethane | 128 | 5.301 | 5.301 | (0.831) | 89874 | 5.00000 | 5.21664 |
| 38 Chloroform | 83 | 5.391 | 5.391 | (0.845) | 432720 | 5.00000 | 5.09401 |
| 41 1,1,1-Trichloroethane | 97 | 5.625 | 5.625 | (0.882) | 477138 | 5.00000 | 5.07471 |
| 42 1,1-Dichloropropene | 75 | 5.822 | 5.822 | (0.913) | 373978 | 5.00000 | 5.06666 |
| 43 Carbon Tetrachloride | 117 | 5.822 | 5.822 | (0.913) | 444836 | 5.00000 | 5.09559 |
| 45 Isobutanol | 41 | 5.948 | 5.948 | (0.932) | 28566 | 100.000 | 103.964 |
| 46 Benzene | 78 | 6.056 | 6.056 | (0.949) | 646511 | 5.00000 | 5.12337 |
| 47 1,2-Dichloroethane | 62 | 6.074 | 6.074 | (0.952) | 167651 | 5.00000 | 5.09109 |
| 49 n-Butanol | 56 | 6.738 | 6.738 | (1.056) | 20568 | 100.000 | 108.159 |
| 50 Trichloroethene | 130 | 6.828 | 6.828 | (1.070) | 275301 | 5.00000 | 5.15101 |
| 52 1,2-Dichloropropane | 63 | 7.098 | 7.080 | (1.113) | 219446 | 5.00000 | 5.17636 |
| 53 Dibromomethane | 93 | 7.241 | 7.223 | (1.135) | 114820 | 5.00000 | 5.17198 |
| 55 1,4-Dioxane | 88 | 7.259 | 7.277 | (1.138) | 27640 | 250.000 | 266.543 |
| 56 Bromodichloromethane | 83 | 7.421 | 7.421 | (1.163) | 329929 | 5.00000 | 5.15120 |
| 59 cis-1,3-Dichloropropene | 75 | 7.960 | 7.960 | (0.791) | 266667 | 5.00000 | 5.14492 |
| 60 4-Methyl-2-pentanone | 43 | 8.139 | 8.139 | (0.809) | 277955 | 20.0000 | 21.3232 |
| 62 Toluene | 91 | 8.373 | 8.373 | (0.832) | 761046 | 5.00000 | 5.03350 |
| 63 trans-1,3-Dichloropropene | 75 | 8.624 | 8.624 | (0.857) | 179449 | 5.00000 | 5.18766 |
| 65 1,1,2-Trichloroethane | 97 | 8.858 | 8.858 | (0.880) | 112815 | 5.00000 | 5.03416 |
| 67 1,3-Dichloropropane | 76 | 9.056 | 9.055 | (0.900) | 177500 | 5.00000 | 5.10696 |
| 66 Tetrachloroethene | 164 | 9.038 | 9.037 | (0.898) | 241102 | 5.00000 | 5.12837 |
| 68 2-Hexanone | 43 | 9.163 | 9.163 | (0.911) | 166570 | 20.0000 | 20.5997 |
| 69 Dibromochloromethane | 129 | 9.343 | 9.343 | (0.929) | 199410 | 5.00000 | 5.21906 |
| 70 1,2-Dibromoethane | 107 | 9.487 | 9.486 | (0.943) | 146736 | 5.00000 | 5.13629 |
| 71 1-Chlorohexane | 91 | 10.061 | 10.061 | (1.000) | 383807 | 5.00000 | 5.04763 |
| 73 Chlorobenzene | 112 | 10.097 | 10.079 | (1.004) | 514775 | 5.00000 | 5.07586 |
| 74 1,1,1,2-Tetrachloroethane | 131 | 10.187 | 10.187 | (1.012) | 212151 | 5.00000 | 5.15227 |
| 75 Ethylbenzene | 106 | 10.223 | 10.223 | (1.016) | 268162 | 5.00000 | 5.07458 |
| 76 m and p-Xylene | 106 | 10.367 | 10.367 | (1.030) | 733622 | 10.0000 | 10.0067 |
| 77 o-Xylene | 106 | 10.870 | 10.870 | (1.080) | 321546 | 5.00000 | 4.96665 |
| 78 Styrene | 104 | 10.888 | 10.888 | (1.082) | 491056 | 5.00000 | 5.16101 |
| 79 Bromoform | 173 | 11.139 | 11.139 | (1.107) | 100030 | 5.00000 | 5.25873 |
| 80 isopropyl benzene | 105 | 11.355 | 11.355 | (1.129) | 1074807 | 5.00000 | 4.96260 |
| 81 Cyclohexanone | 55 | 11.481 | 11.462 | (1.141) | 103328 | 200.000 | 199.400 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 83 1,1,2,2-Tetrachloroethane | 83 | 11.732 | 11.714 | (1.166) | 129900 | 5.00000 | 5.04419 |
| 84 Bromobenzene | 156 | 11.732 | 11.732 | (0.908) | 194839 | 5.00000 | 5.20928 |
| 85 1,2,3-Trichloropropane | 110 | 11.786 | 11.786 | (0.912) | 34520 | 5.00000 | 5.14646 |
| 87 n-Propylbenzene | 120 | 11.876 | 11.876 | (0.919) | 248159 | 5.00000 | 5.15228 |
| 88 2-Chlorotoluene | 126 | 11.983 | 11.983 | (0.928) | 189327 | 5.00000 | 5.14904 |
| 89 1,3,5-Trimethylbenzene | 105 | 12.091 | 12.091 | (0.936) | 799664 | 5.00000 | 5.16384 |
| 90 4-Chlorotoluene | 126 | 12.109 | 12.109 | (0.937) | 206484 | 5.00000 | 5.08113 |
| 91 tert-Butylbenzene | 119 | 12.468 | 12.468 | (0.965) | 829298 | 5.00000 | 5.07924 |
| 92 1,2,4-Trimethylbenzene | 105 | 12.522 | 12.522 | (0.969) | 724201 | 5.00000 | 5.09497 |
| 93 sec-Butylbenzene | 134 | 12.720 | 12.720 | (0.985) | 195297 | 5.00000 | 5.04961 |
| 94 m-Dichlorobenzene | 146 | 12.846 | 12.845 | (0.994) | 302602 | 5.00000 | 5.06906 |
| 95 4-Isopropyltoluene | 119 | 12.882 | 12.881 | (0.997) | 936679 | 5.00000 | 5.08806 |
| 97 p-dichlorobenzene | 146 | 12.935 | 12.935 | (1.001) | 412640 | 5.00000 | 5.13352 |
| 98 n-Butylbenzene | 91 | 13.295 | 13.295 | (1.029) | 909638 | 5.00000 | 5.06071 |
| 99 o-Dichlorobenzene | 146 | 13.331 | 13.330 | (1.032) | 272785 | 5.00000 | 5.14121 |
| 100 1,2-Dibromo-3-chloropropane | 157 | 14.103 | 14.103 | (1.092) | 19647 | 5.00000 | 5.38000 |
| 101 1,2,4-Trichlorobenzene | 180 | 14.875 | 14.875 | (1.152) | 199134 | 5.00000 | 5.06576 |
| 102 Hexachlorobutadiene | 225 | 15.037 | 15.037 | (1.164) | 188189 | 5.00000 | 4.99966 |
| 127 Naphthalene | 128 | 15.109 | 15.109 | (1.170) | 183311 | 5.00000 | 5.22448 |
| 104 1,2,3-Trichlorobenzene | 180 | 15.360 | 15.360 | (1.189) | 147460 | 5.00000 | 4.98957 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4142.d
Lab Smp Id: MAIN005
Analysis Type: VOA
Quant Type: ISTD
Operator: hoffmanm
Method File: /chem/H.i/051304.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/13/4
Calibration Time: 0857
Client Smp ID: MAIN005
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 1613156 | 806578 | 3226312 | 1581178 | -1.98 |
| 72 Chlorobenzene-d5 | 325674 | 162837 | 651348 | 320656 | -1.54 |
| 96 1,4-Dichlorobenze | 462254 | 231127 | 924508 | 440128 | -4.79 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 6.38 | 5.88 | 6.88 | 6.38 | 0.00 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.06 | 0.00 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.92 | 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/H.i/051304.b/h4142.d

Page 5

Date : 13-MAY-2004 08:37

Client ID: MAIN005

Instrument: H.i

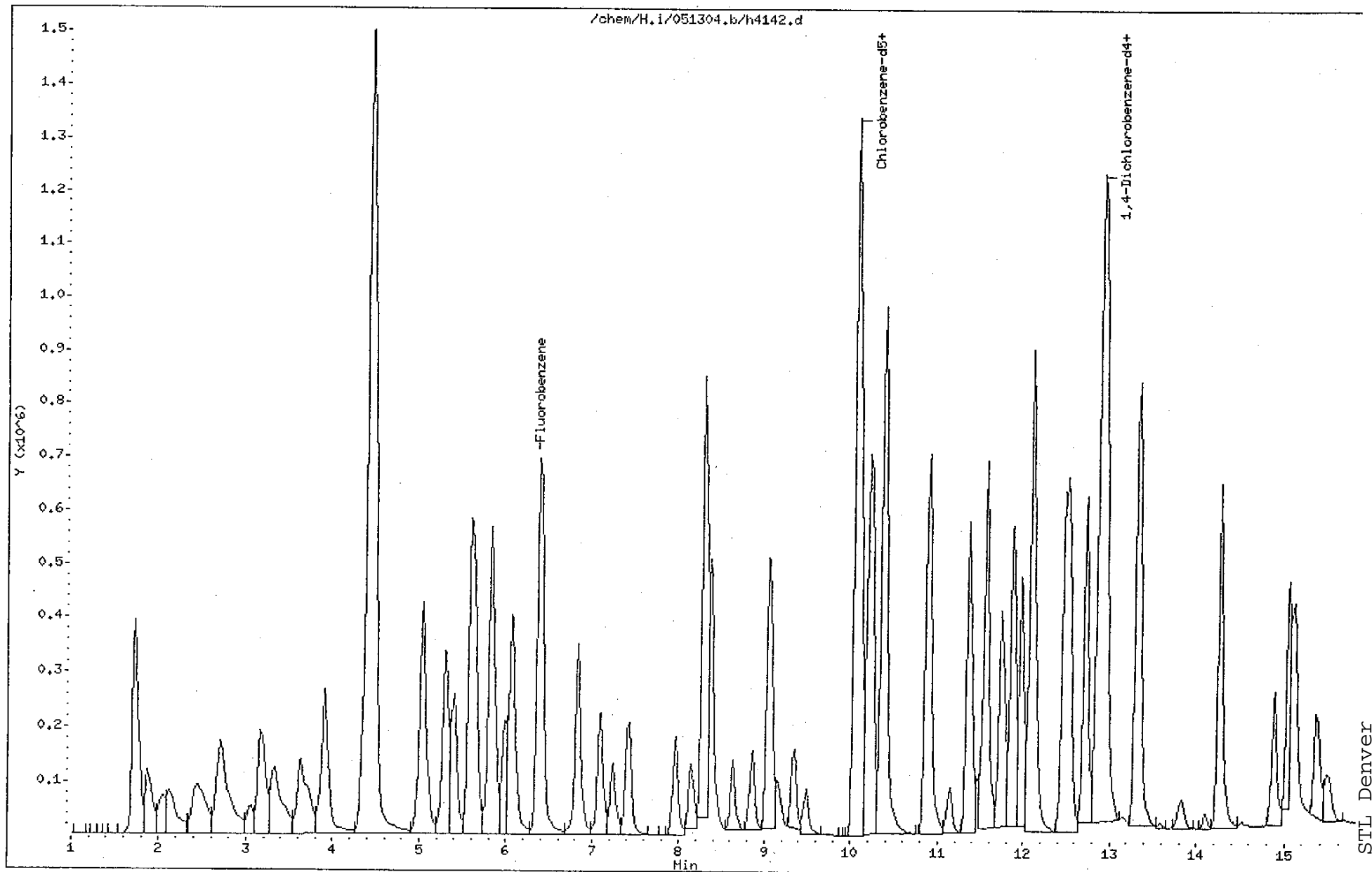
Sample Info: MAIN005,,

Purge Volume: 20.0

Operator: hoffmann

Column phase: DB624

Column diameter: 0,53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/051304.b/h4143.d
Lab Smp Id: MAIN010 Client Smp ID: MAIN010
Inj Date : 13-MAY-2004 08:57
Operator : hoffmanm Inst ID: H.i
Smp Info : MAIN010,,
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/051304.b/H-20ml-h2o.m
Meth Date : 13-May-2004 10:54 hoffmanm Quant Type: ISTD
Cal Date : 13-MAY-2004 08:57 Cal File: h4143.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| | | | | | | AMOUNTS | |
|--------------------------------|-------|--------|--------|---------|----------|---------|---------|
| QUANT SIG | | | | | | CAL-AMT | ON-COL |
| Compounds | MASS | RT | EXP RT | REL RT | RESPONSE | (ug/L) | (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| * 48 Fluorobenzene | 96 | 6.379 | 6.379 | (1.000) | 1613156 | 10.0000 | |
| * 72 Chlorobenzene-d5 | 119 | 10.062 | 10.043 | (1.000) | 325674 | 10.0000 | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.918 | 12.917 | (1.000) | 462254 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | 939677 | 20.0000 | 20.0000 |
| M 2 Xylene (total) | 106 | | | | 2091156 | 10.0000 | 30.0000 |
| 3 dichlorodifluoromethane | 85 | 1.871 | 1.870 | (0.293) | 763995 | 10.0000 | 10.0000 |
| 4 Chloromethane | 50 | 2.050 | 2.032 | (0.321) | 407253 | 10.0000 | 10.0000 |
| 5 Vinyl Chloride | 62 | 2.122 | 2.140 | (0.333) | 389518 | 10.0000 | 10.0000 |
| 7 Bromomethane | 94 | 2.428 | 2.427 | (0.381) | 353602 | 10.0000 | 10.0000 |
| 8 Chloroethane | 64 | 2.517 | 2.517 | (0.395) | 274007 | 10.0000 | 10.0000 |
| 10 Trichlorofluoromethane | 101 | 2.697 | 2.697 | (0.423) | 1129809 | 10.0000 | 10.0000 |
| 11 Ethanol | 45 | 2.823 | 2.822 | (0.442) | 38864 | 500.000 | 500.000 |
| 13 Acrolein | 56 | 3.056 | 3.056 | (0.479) | 147412 | 100.000 | 100.000 |
| 14 1,1-Dichloroethene | 96 | 3.164 | 3.164 | (0.496) | 453642 | 10.0000 | 10.0000 |
| 15 Acetone | 43 | 3.182 | 3.182 | (0.499) | 101332 | 40.0000 | 40.0000 |
| 17 Iodomethane | 142 | 3.326 | 3.325 | (0.521) | 730530 | 10.0000 | 10.0000 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 19 Acetonitrile | 41 | 3.451 | 3.451 | (0.541) | 63837 | 100.000 | 100.000 |
| 21 Methylene Chloride | 84 | 3.613 | 3.613 | (0.566) | 350941 | 10.0000 | 10.0000 |
| 22 tert-Butyl alcohol | 59 | 3.721 | 3.720 | (0.583) | 189590 | 200.000 | 200.000 |
| 23 Acrylonitrile | 53 | 3.865 | 3.864 | (0.606) | 238382 | 100.000 | 100.000 |
| 24 trans-1,2-Dichloroethene | 96 | 3.900 | 3.900 | (0.611) | 473058 | 10.0000 | 10.0000 |
| 27 1,1-Dichloroethane | 63 | 4.367 | 4.367 | (0.685) | 892526 | 10.0000 | 10.0000 |
| 28 Chloroprene | 53 | 4.457 | 4.457 | (0.699) | 757161 | 10.0000 | 10.0000 |
| 30 Isopropyl ether | 87 | 4.421 | 4.421 | (0.693) | 1539106 | 50.0000 | 50.0000 |
| 32 cis-1,2-Dichloroethene | 96 | 5.032 | 5.014 | (0.789) | 466619 | 10.0000 | 10.0000 |
| 31 2,2-Dichloropropane | 77 | 5.032 | 5.032 | (0.789) | 689592 | 10.0000 | 10.0000 |
| 33 2-Butanone | 43 | 5.032 | 5.032 | (0.789) | 187270 | 40.0000 | 40.0000 |
| 34 Propionitrile | 54 | 5.104 | 5.104 | (0.800) | 90108 | 100.000 | 100.000 |
| 36 Methacrylonitrile | 41 | 5.284 | 5.283 | (0.828) | 695864 | 100.000 | 100.000 |
| 37 Bromochloromethane | 128 | 5.302 | 5.301 | (0.831) | 179911 | 10.0000 | 10.0000 |
| 38 Chloroform | 83 | 5.391 | 5.391 | (0.845) | 857792 | 10.0000 | 10.0000 |
| 41 1,1,1-Trichloroethane | 97 | 5.625 | 5.625 | (0.882) | 948332 | 10.0000 | 10.0000 |
| 42 1,1-Dichloropropene | 75 | 5.822 | 5.822 | (0.913) | 747331 | 10.0000 | 10.0000 |
| 43 Carbon Tetrachloride | 117 | 5.822 | 5.822 | (0.913) | 887590 | 10.0000 | 10.0000 |
| 45 Isobutanol | 41 | 5.930 | 5.948 | (0.930) | 61976 | 200.000 | 200.000 |
| 46 Benzene | 78 | 6.056 | 6.056 | (0.949) | 1282115 | 10.0000 | 10.0000 |
| 47 1,2-Dichloroethane | 62 | 6.074 | 6.074 | (0.952) | 330403 | 10.0000 | 10.0000 |
| 49 n-Butanol | 56 | 6.739 | 6.738 | (1.056) | 42203 | 200.000 | 200.000 |
| 50 Trichloroethene | 130 | 6.828 | 6.828 | (1.070) | 546511 | 10.0000 | 10.0000 |
| 52 1,2-Dichloropropane | 63 | 7.098 | 7.080 | (1.113) | 427421 | 10.0000 | 10.0000 |
| 53 Dibromomethane | 93 | 7.224 | 7.223 | (1.132) | 224314 | 10.0000 | 10.0000 |
| 55 1,4-Dioxane | 88 | 7.259 | 7.277 | (1.138) | 54860 | 500.000 | 500.000 |
| 56 Bromodichloromethane | 83 | 7.421 | 7.421 | (1.163) | 654463 | 10.0000 | 10.0000 |
| 59 cis-1,3-Dichloropropene | 75 | 7.960 | 7.960 | (0.791) | 524464 | 10.0000 | 10.0000 |
| 60 4-Methyl-2-pentanone | 43 | 8.140 | 8.139 | (0.809) | 537395 | 40.0000 | 40.0000 |
| 62 Toluene | 91 | 8.373 | 8.373 | (0.832) | 1499976 | 10.0000 | 10.0000 |
| 63 trans-1,3-Dichloropropene | 75 | 8.625 | 8.624 | (0.857) | 343104 | 10.0000 | 10.0000 |
| 65 1,1,2-Trichloroethane | 97 | 8.858 | 8.858 | (0.880) | 218677 | 10.0000 | 10.0000 |
| 67 1,3-Dichloropropane | 76 | 9.056 | 9.055 | (0.900) | 351856 | 10.0000 | 10.0000 |
| 66 Tetrachloroethene | 164 | 9.038 | 9.037 | (0.898) | 484509 | 10.0000 | 10.0000 |
| 68 2-Hexanone | 43 | 9.164 | 9.163 | (0.911) | 340034 | 40.0000 | 40.0000 |
| 69 Dibromochloromethane | 129 | 9.343 | 9.343 | (0.929) | 387251 | 10.0000 | 10.0000 |
| 70 1,2-Dibromoethane | 107 | 9.487 | 9.486 | (0.943) | 290839 | 10.0000 | 10.0000 |
| 71 1-Chlorohexane | 91 | 10.062 | 10.061 | (1.000) | 754844 | 10.0000 | 10.0000 |
| 73 Chlorobenzene | 112 | 10.098 | 10.079 | (1.004) | 1012078 | 10.0000 | 10.0000 |
| 74 1,1,1,2-Tetrachloroethane | 131 | 10.187 | 10.187 | (1.012) | 422994 | 10.0000 | 10.0000 |
| 75 Ethylbenzene | 106 | 10.223 | 10.223 | (1.016) | 532995 | 10.0000 | 10.0000 |
| 76 m and p-Xylene | 106 | 10.367 | 10.367 | (1.030) | 1455024 | 20.0000 | 20.0000 |
| 77 o-Xylene | 106 | 10.870 | 10.870 | (1.080) | 636132 | 10.0000 | 10.0000 |
| 78 Styrene | 104 | 10.888 | 10.888 | (1.082) | 987828 | 10.0000 | 10.0000 |
| 79 Bromoform | 173 | 11.139 | 11.139 | (1.107) | 199848 | 10.0000 | 10.0000 |
| 80 isopropyl benzene | 105 | 11.355 | 11.355 | (1.129) | 2155866 | 10.0000 | 10.0000 |
| 81 Cyclohexanone | 55 | 11.463 | 11.462 | (1.139) | 202393 | 400.000 | 400.000 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 83 1,1,2,2-Tetrachloroethane | 83 | 11.732 | 11.714 | (1.166) | 253935 | 10.0000 | 10.0000 |
| 84 Bromobenzene | 156 | 11.732 | 11.732 | (0.908) | 390611 | 10.0000 | 10.0000 |
| 85 1,2,3-Trichloropropane | 110 | 11.786 | 11.786 | (0.912) | 67508 | 10.0000 | 10.0000 |
| 87 n-Propylbenzene | 120 | 11.876 | 11.876 | (0.919) | 496263 | 10.0000 | 10.0000 |
| 88 2-Chlorotoluene | 126 | 11.984 | 11.983 | (0.928) | 384136 | 10.0000 | 10.0000 |
| 89 1,3,5-Trimethylbenzene | 105 | 12.091 | 12.091 | (0.936) | 1617660 | 10.0000 | 10.0000 |
| 90 4-Chlorotoluene | 126 | 12.109 | 12.109 | (0.937) | 423530 | 10.0000 | 10.0000 |
| 91 tert-Butylbenzene | 119 | 12.469 | 12.468 | (0.965) | 1700897 | 10.0000 | 10.0000 |
| 92 1,2,4-Trimethylbenzene | 105 | 12.523 | 12.522 | (0.969) | 1492693 | 10.0000 | 10.0000 |
| 93 sec-Butylbenzene | 134 | 12.720 | 12.720 | (0.985) | 400880 | 10.0000 | 10.0000 |
| 94 m-Dichlorobenzene | 146 | 12.846 | 12.845 | (0.994) | 620165 | 10.0000 | 10.0000 |
| 95 4-Isopropyltoluene | 119 | 12.882 | 12.881 | (0.997) | 1935417 | 10.0000 | 10.0000 |
| 97 p-dichlorobenzene | 146 | 12.936 | 12.935 | (1.001) | 833102 | 10.0000 | 10.0000 |
| 98 n-Butylbenzene | 91 | 13.295 | 13.295 | (1.029) | 1869051 | 10.0000 | 10.0000 |
| 99 o-Dichlorobenzene | 146 | 13.331 | 13.330 | (1.032) | 554105 | 10.0000 | 10.0000 |
| 100 1,2-Dibromo-3-chloropropane | 157 | 14.103 | 14.103 | (1.092) | 40343 | 10.0000 | 10.0000 |
| 101 1,2,4-Trichlorobenzene | 180 | 14.876 | 14.875 | (1.152) | 415963 | 10.0000 | 10.0000 |
| 102 Hexachlorobutadiene | 225 | 15.037 | 15.037 | (1.164) | 403811 | 10.0000 | 10.0000 |
| 127 Naphthalene | 128 | 15.109 | 15.109 | (1.170) | 363240 | 10.0000 | 10.0000 |
| 104 1,2,3-Trichlorobenzene | 180 | 15.343 | 15.360 | (1.188) | 303679 | 10.0000 | 10.0000 |

STL Denver

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: H.i
 Lab File ID: h4143.d
 Lab Smp Id: MAIN010
 Analysis Type: VOA
 Quant Type: ISTD
 Operator: hoffmann
 Method File: /chem/H.i/051304.b/H-20ml-h2o.m
 Misc Info:

Calibration Date: 05/13/4
 Calibration Time: 0857
 Client Smp ID: MAIN010
 Level: LOW
 Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 1613156 | 806578 | 3226312 | 1613156 | 0.00 |
| 72 Chlorobenzene-d5 | 325674 | 162837 | 651348 | 325674 | 0.00 |
| 96 1,4-Dichlorobenze | 462254 | 231127 | 924508 | 462254 | 0.00 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 6.38 | 5.88 | 6.88 | 6.38 | 0.00 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.06 | 0.00 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.92 | 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/H.i/051304.b/h4143.d

Date : 13-MAY-2004 09:57

Client ID: HAIN010

Sample Info: HAIN010,,

Purge Volume: 20.0

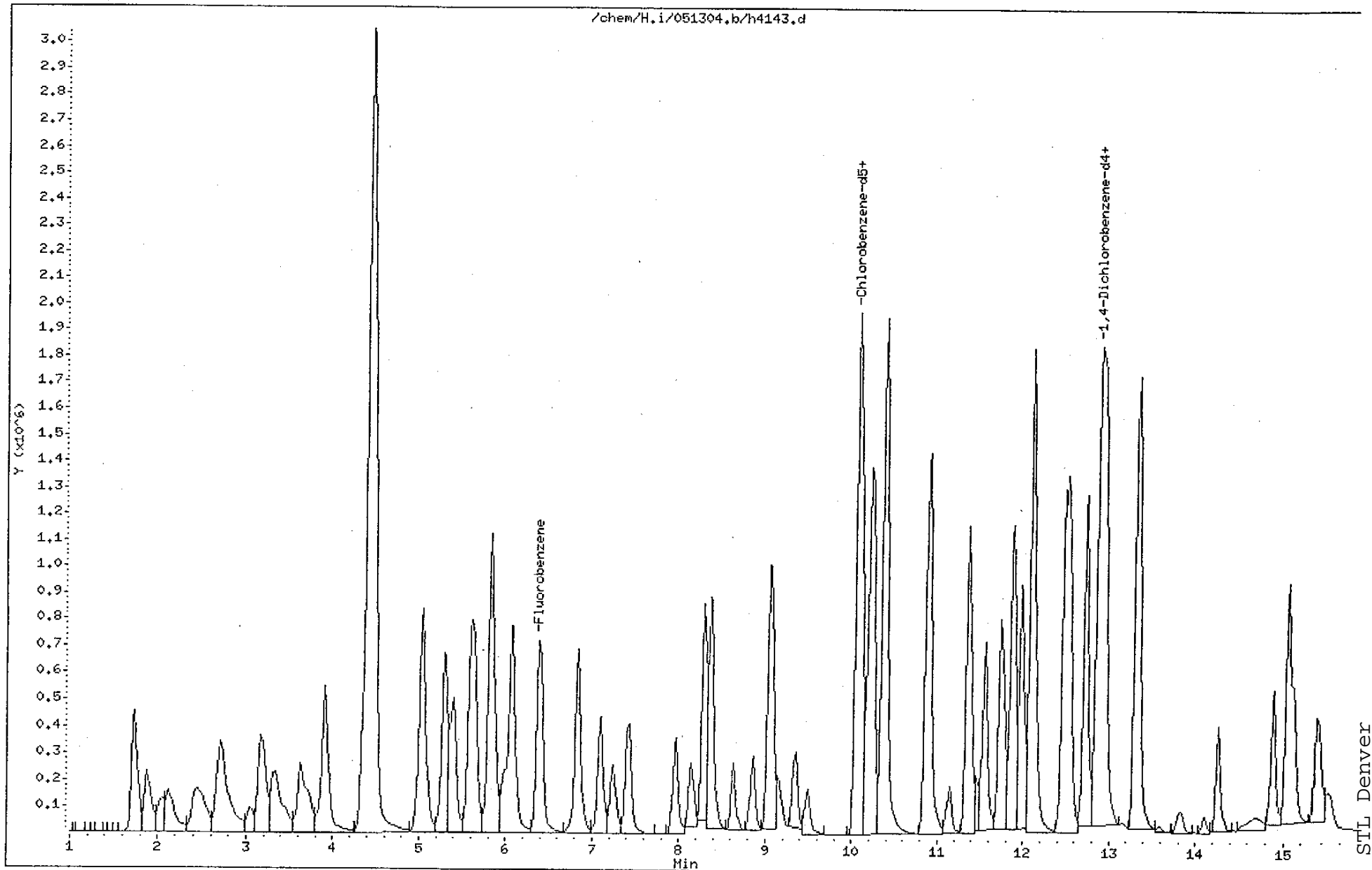
Column phase: DB624

Instrument: H.i

Operator: hoffmann

Column diameter: 0.53

Page 5



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/051304.b/h4144.d
Lab Smp Id: MAIN030 Client Smp ID: MAIN030
Inj Date : 13-MAY-2004 09:16
Operator : hoffmanm Inst ID: H.i
Smp Info : MAIN030,,
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/051304.b/H-20ml-h2o.m
Meth Date : 13-May-2004 10:54 hoffmanm Quant Type: ISTD
Cal Date : 13-MAY-2004 09:16 Cal File: h4144.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|--------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 48 Fluorobenzene | 96 | 6.396 | 6.379 | (1.000) | 1568340 | 10.0000 | |
| * 72 Chlorobenzene-d5 | 119 | 10.061 | 10.043 | (1.000) | 307040 | 10.0000 | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.917 | 12.917 | (1.000) | 429944 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | 2816960 | 60.0000 | 61.3912 |
| M 2 Xylene (total) | 106 | | | | 6051182 | 30.0000 | 89.7060 |
| 3 dichlorodifluoromethane | 85 | 1.888 | 1.870 | (0.295) | 2210064 | 30.0000 | 29.7068 |
| 4 Chloromethane | 50 | 2.049 | 2.032 | (0.320) | 1205000 | 30.0000 | 30.3444 |
| 5 Vinyl Chloride | 62 | 2.139 | 2.140 | (0.334) | 1158287 | 30.0000 | 31.0760 |
| 7 Bromomethane | 94 | 2.427 | 2.427 | (0.379) | 1073912 | 30.0000 | 31.2897 |
| 8 Chloroethane | 64 | 2.516 | 2.517 | (0.393) | 798757 | 30.0000 | 29.5401 |
| 10 Trichlorofluoromethane | 101 | 2.714 | 2.697 | (0.424) | 3328719 | 30.0000 | 30.4102 |
| 11 Ethanol | 45 | 2.822 | 2.822 | (0.441) | 114577 | 1500.00 | 1416.05 |
| 13 Acrolein | 56 | 3.055 | 3.056 | (0.478) | 438611 | 300.000 | 306.024 |
| 14 1,1-Dichloroethene | 96 | 3.181 | 3.164 | (0.497) | 1353923 | 30.0000 | 29.8075 |
| 15 Acetone | 43 | 3.199 | 3.182 | (0.500) | 293493 | 120.000 | 116.722 |
| 17 Iodomethane | 142 | 3.325 | 3.325 | (0.520) | 2293114 | 30.0000 | 33.9994 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 19 Acetonitrile | 41 | 3.468 | 3.451 | (0.542) | 195550 | 300.000 | 299.677 |
| 21 Methylene Chloride | 84 | 3.630 | 3.613 | (0.568) | 1039169 | 30.0000 | 29.2136 |
| 22 tert-Butyl alcohol | 59 | 3.720 | 3.720 | (0.582) | 579367 | 600.000 | 601.013 |
| 23 Acrylonitrile | 53 | 3.864 | 3.864 | (0.604) | 730708 | 300.000 | 310.933 |
| 24 trans-1,2-Dichloroethene | 96 | 3.917 | 3.900 | (0.612) | 1418210 | 30.0000 | 30.5584 |
| 27 1,1-Dichloroethane | 63 | 4.367 | 4.367 | (0.683) | 2724836 | 30.0000 | 30.9762 |
| 28 Chloroprene | 53 | 4.474 | 4.457 | (0.700) | 2345130 | 30.0000 | 31.3729 |
| 30 Isopropyl ether | 87 | 4.438 | 4.421 | (0.694) | 4763055 | 150.000 | 159.531 |
| 32 cis-1,2-Dichloroethene | 96 | 5.031 | 5.014 | (0.787) | 1398750 | 30.0000 | 30.8328 |
| 31 2,2-Dichloropropane | 77 | 5.031 | 5.032 | (0.787) | 2001374 | 30.0000 | 28.8554 |
| 33 2-Butanone | 43 | 5.031 | 5.032 | (0.787) | 568221 | 120.000 | 129.271 |
| 34 Propionitrile | 54 | 5.103 | 5.104 | (0.798) | 281390 | 300.000 | 322.824 |
| 36 Methacrylonitrile | 41 | 5.283 | 5.283 | (0.826) | 2124072 | 300.000 | 318.781 |
| 37 Bromochloromethane | 128 | 5.319 | 5.301 | (0.832) | 541754 | 30.0000 | 31.3471 |
| 38 Chloroform | 83 | 5.390 | 5.391 | (0.843) | 2568937 | 30.0000 | 30.3901 |
| 41 1,1,1-Trichloroethane | 97 | 5.624 | 5.625 | (0.879) | 2791842 | 30.0000 | 29.9490 |
| 42 1,1-Dichloropropene | 75 | 5.821 | 5.822 | (0.910) | 2218951 | 30.0000 | 30.2463 |
| 43 Carbon Tetrachloride | 117 | 5.839 | 5.822 | (0.913) | 2647460 | 30.0000 | 30.4582 |
| 45 Isobutanol | 41 | 5.929 | 5.948 | (0.927) | 194840 | 600.000 | 682.246 |
| 46 Benzene | 78 | 6.073 | 6.056 | (0.949) | 3808380 | 30.0000 | 30.3407 |
| 47 1,2-Dichloroethane | 62 | 6.073 | 6.074 | (0.949) | 980144 | 30.0000 | 30.0063 |
| 49 n-Butanol | 56 | 6.738 | 6.738 | (1.053) | 142687 | 600.000 | 710.173 |
| 50 Trichloroethene | 130 | 6.827 | 6.828 | (1.067) | 1646230 | 30.0000 | 30.8372 |
| 52 1,2-Dichloropropane | 63 | 7.097 | 7.080 | (1.110) | 1270231 | 30.0000 | 30.1661 |
| 53 Dibromomethane | 93 | 7.241 | 7.223 | (1.132) | 665033 | 30.0000 | 30.1607 |
| 55 1,4-Dioxane | 88 | 7.258 | 7.277 | (1.135) | 167009 | 1500.00 | 1590.91 |
| 56 Bromodichloromethane | 83 | 7.420 | 7.421 | (1.160) | 1935841 | 30.0000 | 30.3763 |
| 59 cis-1,3-Dichloropropene | 75 | 7.959 | 7.960 | (0.791) | 1560074 | 30.0000 | 31.1363 |
| 60 4-Methyl-2-pentanone | 43 | 8.139 | 8.139 | (0.809) | 1594205 | 120.000 | 126.099 |
| 62 Toluene | 91 | 8.372 | 8.373 | (0.832) | 4392408 | 30.0000 | 30.2709 |
| 63 trans-1,3-Dichloropropene | 75 | 8.624 | 8.624 | (0.857) | 1056252 | 30.0000 | 31.4925 |
| 65 1,1,2-Trichloroethane | 97 | 8.857 | 8.858 | (0.880) | 642482 | 30.0000 | 29.9527 |
| 67 1,3-Dichloropropane | 76 | 9.055 | 9.055 | (0.900) | 1035738 | 30.0000 | 30.8904 |
| 66 Tetrachloroethene | 164 | 9.055 | 9.037 | (0.900) | 1426642 | 30.0000 | 31.3378 |
| 68 2-Hexanone | 43 | 9.163 | 9.163 | (0.911) | 1016913 | 120.000 | 128.902 |
| 69 Dibromochloromethane | 129 | 9.342 | 9.343 | (0.929) | 1160585 | 30.0000 | 31.3623 |
| 70 1,2-Dibromoethane | 107 | 9.486 | 9.486 | (0.943) | 858640 | 30.0000 | 31.1005 |
| 71 1-Chlorohexane | 91 | 10.061 | 10.061 | (1.000) | 2215515 | 30.0000 | 30.3426 |
| 73 Chlorobenzene | 112 | 10.097 | 10.079 | (1.004) | 2962591 | 30.0000 | 30.4047 |
| 74 1,1,1,2-Tetrachloroethane | 131 | 10.186 | 10.187 | (1.012) | 1266029 | 30.0000 | 31.6647 |
| 75 Ethylbenzene | 106 | 10.222 | 10.223 | (1.016) | 1536629 | 30.0000 | 30.2937 |
| 76 m and p-Xylene | 106 | 10.366 | 10.367 | (1.030) | 4229445 | 60.0000 | 60.1986 |
| 77 o-Xylene | 106 | 10.869 | 10.870 | (1.080) | 1821737 | 30.0000 | 29.5073 |
| 78 Styrene | 104 | 10.887 | 10.888 | (1.082) | 2855289 | 30.0000 | 31.0625 |
| 79 Bromoform | 173 | 11.138 | 11.139 | (1.107) | 594031 | 30.0000 | 32.0554 |
| 80 isopropyl benzene | 105 | 11.354 | 11.355 | (1.129) | 6108711 | 30.0000 | 29.5632 |
| 81 Cyclohexanone | 55 | 11.462 | 11.462 | (1.139) | 578427 | 1200.00 | 1172.43 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 83 1,1,2,2-Tetrachloroethane | 83 | 11.731 | 11.714 | (1.166) | 718347 | 30.0000 | 29.3010 |
| 84 Bromobenzene | 156 | 11.749 | 11.732 | (0.910) | 1105845 | 30.0000 | 30.2129 |
| 85 1,2,3-Trichloropropane | 110 | 11.785 | 11.786 | (0.912) | 193181 | 30.0000 | 29.5848 |
| 87 n-Propylbenzene | 120 | 11.875 | 11.876 | (0.919) | 1393636 | 30.0000 | 29.6953 |
| 88 2-Chlorotoluene | 126 | 11.983 | 11.983 | (0.928) | 1074988 | 30.0000 | 29.9427 |
| 89 1,3,5-Trimethylbenzene | 105 | 12.090 | 12.091 | (0.936) | 4584999 | 30.0000 | 30.2467 |
| 90 4-Chlorotoluene | 126 | 12.108 | 12.109 | (0.937) | 1189129 | 30.0000 | 29.9640 |
| 91 tert-Butylbenzene | 119 | 12.468 | 12.468 | (0.965) | 4783446 | 30.0000 | 29.9931 |
| 92 1,2,4-Trimethylbenzene | 105 | 12.522 | 12.522 | (0.969) | 4136391 | 30.0000 | 29.8318 |
| 93 sec-Butylbenzene | 134 | 12.719 | 12.720 | (0.985) | 1110495 | 30.0000 | 29.5125 |
| 94 m-Dichlorobenzene | 146 | 12.845 | 12.845 | (0.994) | 1936300 | 30.0000 | 32.5099 |
| 95 4-Isopropyltoluene | 119 | 12.881 | 12.881 | (0.997) | 5325291 | 30.0000 | 29.6890 |
| 97 p-dichlorobenzene | 146 | 12.935 | 12.935 | (1.001) | 2125678 | 30.0000 | 27.6103 |
| 98 n-Butylbenzene | 91 | 13.294 | 13.295 | (1.029) | 5008516 | 30.0000 | 28.8079 |
| 99 o-Dichlorobenzene | 146 | 13.330 | 13.330 | (1.032) | 1552699 | 30.0000 | 29.9656 |
| 100 1,2-Dibromo-3-chloropropane | 157 | 14.102 | 14.103 | (1.092) | 115936 | 30.0000 | 31.9665 |
| 101 1,2,4-Trichlorobenzene | 180 | 14.875 | 14.875 | (1.152) | 1079158 | 30.0000 | 28.4629 |
| 102 Hexachlorobutadiene | 225 | 15.036 | 15.037 | (1.164) | 1028161 | 30.0000 | 28.3475 |
| 127 Naphthalene | 128 | 15.108 | 15.109 | (1.170) | 978485 | 30.0000 | 28.8270 |
| 104 1,2,3-Trichlorobenzene | 180 | 15.342 | 15.360 | (1.188) | 786290 | 30.0000 | 27.7470 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4144.d
Lab Smp Id: MAIN030
Analysis Type: VOA
Quant Type: ISTD
Operator: hoffmanm
Method File: /chem/H.i/051304.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/13/4
Calibration Time: 0857
Client Smp ID: MAIN030
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 1613156 | 806578 | 3226312 | 1568340 | -2.78 |
| 72 Chlorobenzene-d5 | 325674 | 162837 | 651348 | 307040 | -5.72 |
| 96 1,4-Dichlorobenze | 462254 | 231127 | 924508 | 429944 | -6.99 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 6.38 | 5.88 | 6.88 | 6.40 | 0.27 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.06 | -0.01 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.92 | -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/H,i/051304.b/h4144.d

Date : 13-MAY-2004 09:16

Client ID: MAIN030

Sample Info: MAIN030,,

Purge Volume: 20.0

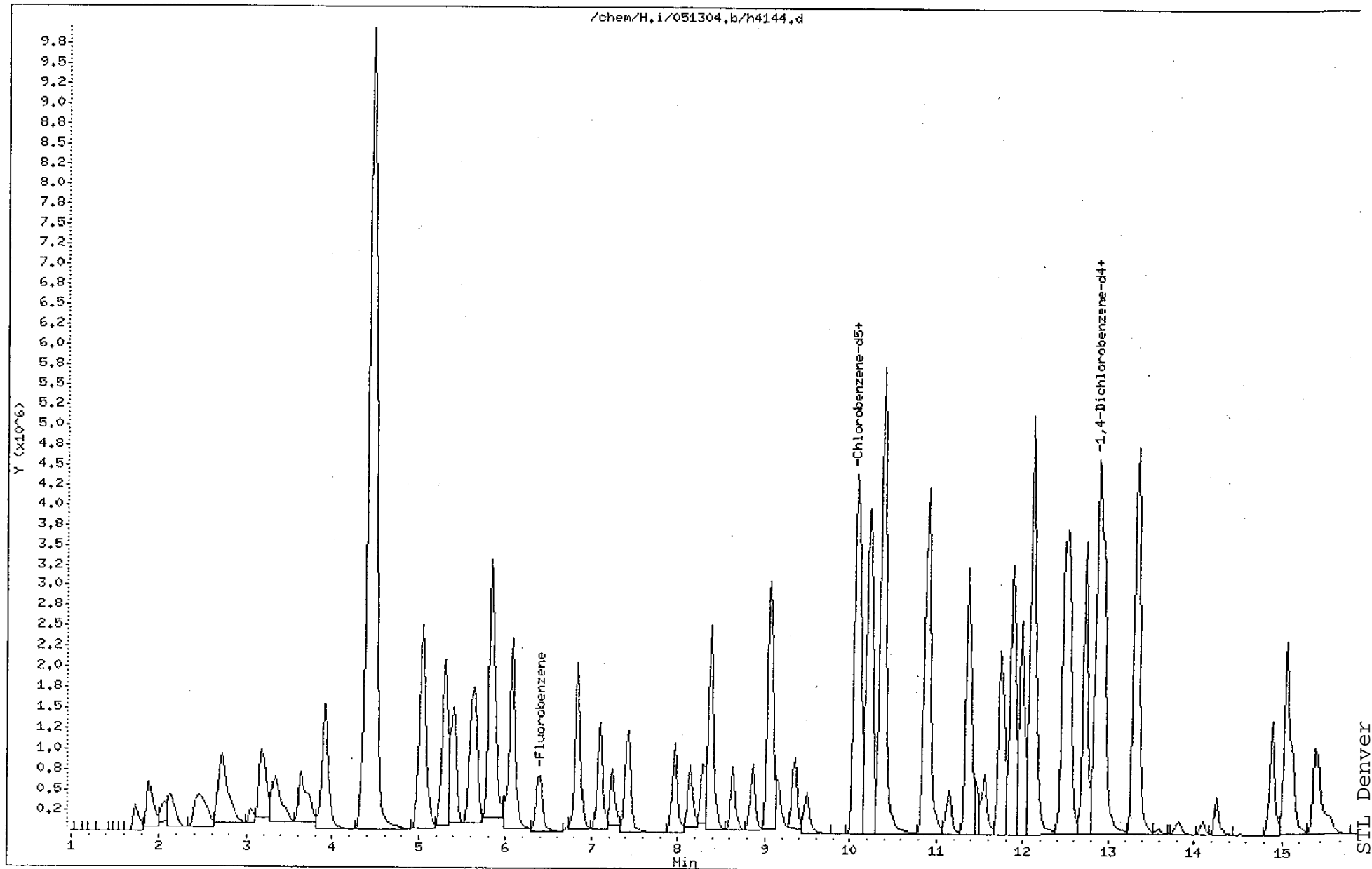
Column phase: DB624

Instrument: H.i

Operator: hoffmann

Column diameter: 0,53

Page 5



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/051304.b/h4145.d
Lab Smp Id: MAIN060 Client Smp ID: MAIN060
Inj Date : 13-MAY-2004 09:36
Operator : hoffmanm Inst ID: H.i
Smp Info : MAIN060,,
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/051304.b/H-20ml-h2o.m
Meth Date : 13-May-2004 10:54 hoffmanm Quant Type: ISTD
Cal Date : 13-MAY-2004 09:36 Cal File: h4145.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|--------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 48 Fluorobenzene | 96 | 6.382 | 6.379 | (1.000) | 1547959 | 10.0000 | |
| * 72 Chlorobenzene-d5 | 119 | 10.065 | 10.043 | (1.000) | 308257 | 10.0000 | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.921 | 12.917 | (1.000) | 405667 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | 5770586 | 120.000 | 126.121 |
| M 2 Xylene (total) | 106 | | | | 11622005 | 60.0000 | 172.964 |
| 3 dichlorodifluoromethane | 85 | 1.874 | 1.870 | (0.294) | 4230659 | 60.0000 | 57.9997 |
| 4 Chloromethane | 50 | 2.054 | 2.032 | (0.322) | 2287356 | 60.0000 | 58.6260 |
| 5 Vinyl Chloride | 62 | 2.125 | 2.140 | (0.333) | 2232260 | 60.0000 | 60.5643 (A) |
| 7 Bromomethane | 94 | 2.431 | 2.427 | (0.381) | 2135615 | 60.0000 | 62.5146 (A) |
| 8 Chloroethane | 64 | 2.521 | 2.517 | (0.395) | 1564401 | 60.0000 | 58.8434 |
| 10 Trichlorofluoromethane | 101 | 2.700 | 2.697 | (0.423) | 6557388 | 60.0000 | 60.5781 (A) |
| 11 Ethanol | 45 | 2.826 | 2.822 | (0.443) | 235499 | 3000.00 | 2958.93 |
| 13 Acrolein | 56 | 3.041 | 3.056 | (0.477) | 916992 | 600.000 | 637.965 (A) |
| 14 1,1-Dichloroethene | 96 | 3.167 | 3.164 | (0.496) | 2757095 | 60.0000 | 61.2436 (A) |
| 15 Acetone | 43 | 3.185 | 3.182 | (0.499) | 599701 | 240.000 | 241.312 (A) |
| 17 Iodomethane | 142 | 3.329 | 3.325 | (0.522) | 4738601 | 60.0000 | 69.0384 (A) |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| 19 Acetonitrile | 41 | 3.455 | 3.451 | (0.541) | 386892 | 600.000 | 600.570 (A) |
| 21 Methylene Chloride | 84 | 3.616 | 3.613 | (0.567) | 2108711 | 60.0000 | 60.0492 (A) |
| 22 tert-Butyl alcohol | 59 | 3.724 | 3.720 | (0.583) | 1186117 | 1200.00 | 1238.61 (A) |
| 23 Acrylonitrile | 53 | 3.868 | 3.864 | (0.606) | 1530277 | 600.000 | 648.971 (A) |
| 24 trans-1,2-Dichloroethene | 96 | 3.904 | 3.900 | (0.612) | 2893648 | 60.0000 | 62.6193 (A) |
| 27 1,1-Dichloroethane | 63 | 4.371 | 4.367 | (0.685) | 5699128 | 60.0000 | 64.6285 (A) |
| 28 Chloroprene | 53 | 4.460 | 4.457 | (0.699) | 4891486 | 60.0000 | 65.1592 (A) |
| 30 Isopropyl ether | 87 | 4.425 | 4.421 | (0.693) | 9704581 | 300.000 | 324.042 (A) |
| 32 cis-1,2-Dichloroethene | 96 | 5.035 | 5.014 | (0.789) | 2876938 | 60.0000 | 63.5016 (A) |
| 31 2,2-Dichloropropane | 77 | 5.035 | 5.032 | (0.789) | 3913488 | 60.0000 | 57.6202 |
| 33 2-Butanone | 43 | 5.035 | 5.032 | (0.789) | 1191607 | 240.000 | 268.205 (A) |
| 34 Propionitrile | 54 | 5.107 | 5.104 | (0.800) | 574509 | 600.000 | 655.441 (A) |
| 36 Methacrylonitrile | 41 | 5.287 | 5.283 | (0.828) | 4411709 | 600.000 | 657.885 (A) |
| 37 Bromochloromethane | 128 | 5.305 | 5.301 | (0.831) | 1119400 | 60.0000 | 64.6143 (A) |
| 38 Chloroform | 83 | 5.395 | 5.391 | (0.845) | 5259395 | 60.0000 | 62.5097 (A) |
| 41 1,1,1-Trichloroethane | 97 | 5.628 | 5.625 | (0.882) | 5608270 | 60.0000 | 60.7929 (A) |
| 42 1,1-Dichloropropene | 75 | 5.826 | 5.822 | (0.913) | 4548754 | 60.0000 | 62.3317 (A) |
| 43 Carbon Tetrachloride | 117 | 5.826 | 5.822 | (0.913) | 5404997 | 60.0000 | 62.4805 (A) |
| 45 Isobutanol | 41 | 5.933 | 5.948 | (0.930) | 399254 | 1200.00 | 1367.11 (A) |
| 46 Benzene | 78 | 6.059 | 6.056 | (0.949) | 7738646 | 60.0000 | 62.0396 (A) |
| 47 1,2-Dichloroethane | 62 | 6.077 | 6.074 | (0.952) | 2003389 | 60.0000 | 61.7725 (A) |
| 49 n-Butanol | 56 | 6.724 | 6.738 | (1.053) | 300687 | 1200.00 | 1440.34 (A) |
| 50 Trichloroethene | 130 | 6.832 | 6.828 | (1.070) | 3283124 | 60.0000 | 61.9121 (A) |
| 52 1,2-Dichloropropane | 63 | 7.083 | 7.080 | (1.110) | 2564142 | 60.0000 | 61.4069 (A) |
| 53 Dibromomethane | 93 | 7.227 | 7.223 | (1.132) | 1341700 | 60.0000 | 61.3688 (A) |
| 55 1,4-Dioxane | 88 | 7.263 | 7.277 | (1.138) | 332769 | 3000.00 | 3166.97 (A) |
| 56 Bromodichloromethane | 83 | 7.406 | 7.421 | (1.160) | 3927679 | 60.0000 | 62.0218 (A) |
| 59 cis-1,3-Dichloropropene | 75 | 7.963 | 7.960 | (0.791) | 3138481 | 60.0000 | 61.9795 (A) |
| 60 4-Methyl-2-pentanone | 43 | 8.143 | 8.139 | (0.809) | 3146937 | 240.000 | 246.576 (A) |
| 62 Toluene | 91 | 8.376 | 8.373 | (0.832) | 8729153 | 60.0000 | 59.9338 |
| 63 trans-1,3-Dichloropropene | 75 | 8.628 | 8.624 | (0.857) | 2098945 | 60.0000 | 61.9322 (A) |
| 65 1,1,2-Trichloroethane | 97 | 8.843 | 8.858 | (0.879) | 1251905 | 60.0000 | 58.4368 |
| 67 1,3-Dichloropropane | 76 | 9.059 | 9.055 | (0.900) | 2048996 | 60.0000 | 60.7225 (A) |
| 66 Tetrachloroethene | 164 | 9.041 | 9.037 | (0.898) | 2842235 | 60.0000 | 61.8110 (A) |
| 68 2-Hexanone | 43 | 9.149 | 9.163 | (0.909) | 2039665 | 240.000 | 254.428 (A) |
| 69 Dibromochloromethane | 129 | 9.346 | 9.343 | (0.929) | 2345014 | 60.0000 | 62.5767 (A) |
| 70 1,2-Dibromoethane | 107 | 9.490 | 9.486 | (0.943) | 1695937 | 60.0000 | 60.9846 (A) |
| 71 1-Chlorohexane | 91 | 10.065 | 10.061 | (1.000) | 4175960 | 60.0000 | 57.4502 |
| 73 Chlorobenzene | 112 | 10.083 | 10.079 | (1.002) | 5854617 | 60.0000 | 59.8733 |
| 74 1,1,1,2-Tetrachloroethane | 131 | 10.191 | 10.187 | (1.012) | 2551818 | 60.0000 | 62.9471 (A) |
| 75 Ethylbenzene | 106 | 10.226 | 10.223 | (1.016) | 2980056 | 60.0000 | 58.7599 |
| 76 m and p-Xylene | 106 | 10.370 | 10.367 | (1.030) | 8116361 | 120.000 | 115.860 |
| 77 o-Xylene | 106 | 10.873 | 10.870 | (1.080) | 3505644 | 60.0000 | 57.1040 |
| 78 Styrene | 104 | 10.891 | 10.888 | (1.082) | 5468094 | 60.0000 | 59.3755 |
| 79 Bromoform | 173 | 11.143 | 11.139 | (1.107) | 1181234 | 60.0000 | 62.8810 (A) |
| 80 isopropyl benzene | 105 | 11.358 | 11.355 | (1.128) | 11599974 | 60.0000 | 56.5581 |
| 81 Cyclohexanone | 55 | 11.466 | 11.462 | (1.139) | 1195374 | 2400.00 | 2411.13 (A) |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ---- | == | ===== | ===== | ===== | ===== | ===== |
| 83 1,1,2,2-Tetrachloroethane | 83 | 11.717 | 11.714 | (1.164) | 1425964 | 60.0000 | 58.2690 |
| 84 Bromobenzene | 156 | 11.735 | 11.732 | (0.908) | 2155662 | 60.0000 | 62.0028 (A) |
| 85 1,2,3-Trichloropropane | 110 | 11.771 | 11.786 | (0.911) | 372566 | 60.0000 | 60.3924 (A) |
| 87 n-Propylbenzene | 120 | 11.879 | 11.876 | (0.919) | 2607568 | 60.0000 | 59.0692 |
| 88 2-Chlorotoluene | 126 | 11.987 | 11.983 | (0.928) | 2075208 | 60.0000 | 61.0480 (A) |
| 89 1,3,5-Trimethylbenzene | 105 | 12.095 | 12.091 | (0.936) | 8697811 | 60.0000 | 60.6753 (A) |
| 90 4-Chlorotoluene | 126 | 12.113 | 12.109 | (0.937) | 2214463 | 60.0000 | 59.2817 |
| 91 tert-Butylbenzene | 119 | 12.472 | 12.468 | (0.965) | 9228574 | 60.0000 | 61.1024 (A) |
| 92 1,2,4-Trimethylbenzene | 105 | 12.526 | 12.522 | (0.969) | 7791939 | 60.0000 | 59.6318 |
| 93 sec-Butylbenzene | 134 | 12.723 | 12.720 | (0.985) | 2090468 | 60.0000 | 59.0646 |
| 94 m-Dichlorobenzene | 146 | 12.849 | 12.845 | (0.994) | 3452872 | 60.0000 | 61.1969 (A) |
| 95 4-Isopropyltoluene | 119 | 12.885 | 12.881 | (0.997) | 10060523 | 60.0000 | 59.5368 |
| 97 p-dichlorobenzene | 146 | 12.939 | 12.935 | (1.001) | 4433906 | 60.0000 | 60.8628 (A) |
| 98 n-Butylbenzene | 91 | 13.298 | 13.295 | (1.029) | 9478783 | 60.0000 | 58.1408 |
| 99 o-Dichlorobenzene | 146 | 13.316 | 13.330 | (1.031) | 3027800 | 60.0000 | 61.6003 (A) |
| 100 1,2-Dibromo-3-chloropropane | 157 | 14.088 | 14.103 | (1.090) | 236394 | 60.0000 | 67.3809 (A) |
| 101 1,2,4-Trichlorobenzene | 180 | 14.879 | 14.875 | (1.152) | 2093052 | 60.0000 | 58.7516 |
| 102 Hexachlorobutadiene | 225 | 15.040 | 15.037 | (1.164) | 1847336 | 60.0000 | 54.8989 |
| 127 Naphthalene | 128 | 15.112 | 15.109 | (1.170) | 2054578 | 60.0000 | 63.4206 (A) |
| 104 1,2,3-Trichlorobenzene | 180 | 15.346 | 15.360 | (1.188) | 1534099 | 60.0000 | 57.7972 |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4145.d
Lab Smp Id: MAIN060
Analysis Type: VOA
Quant Type: ISTD
Operator: hoffmanm
Method File: /chem/H.i/051304.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/13/4
Calibration Time: 0857
Client Smp ID: MAIN060
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|--------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 1613156 | 806578 | 3226312 | 1547959 | -4.04 |
| 72 Chlorobenzene-d5 | 325674 | 162837 | 651348 | 308257 | -5.35 |
| 96 1,4-Dichlorobenze | 462254 | 231127 | 924508 | 405667 | -12.24 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 6.38 | 5.88 | 6.88 | 6.38 | 0.05 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.06 | 0.03 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.92 | 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/H.i/051304.b/h4145.d

Page 1

Date : 13-MAY-2004 09:36

Client ID: MAIN060

Instrument: H.i

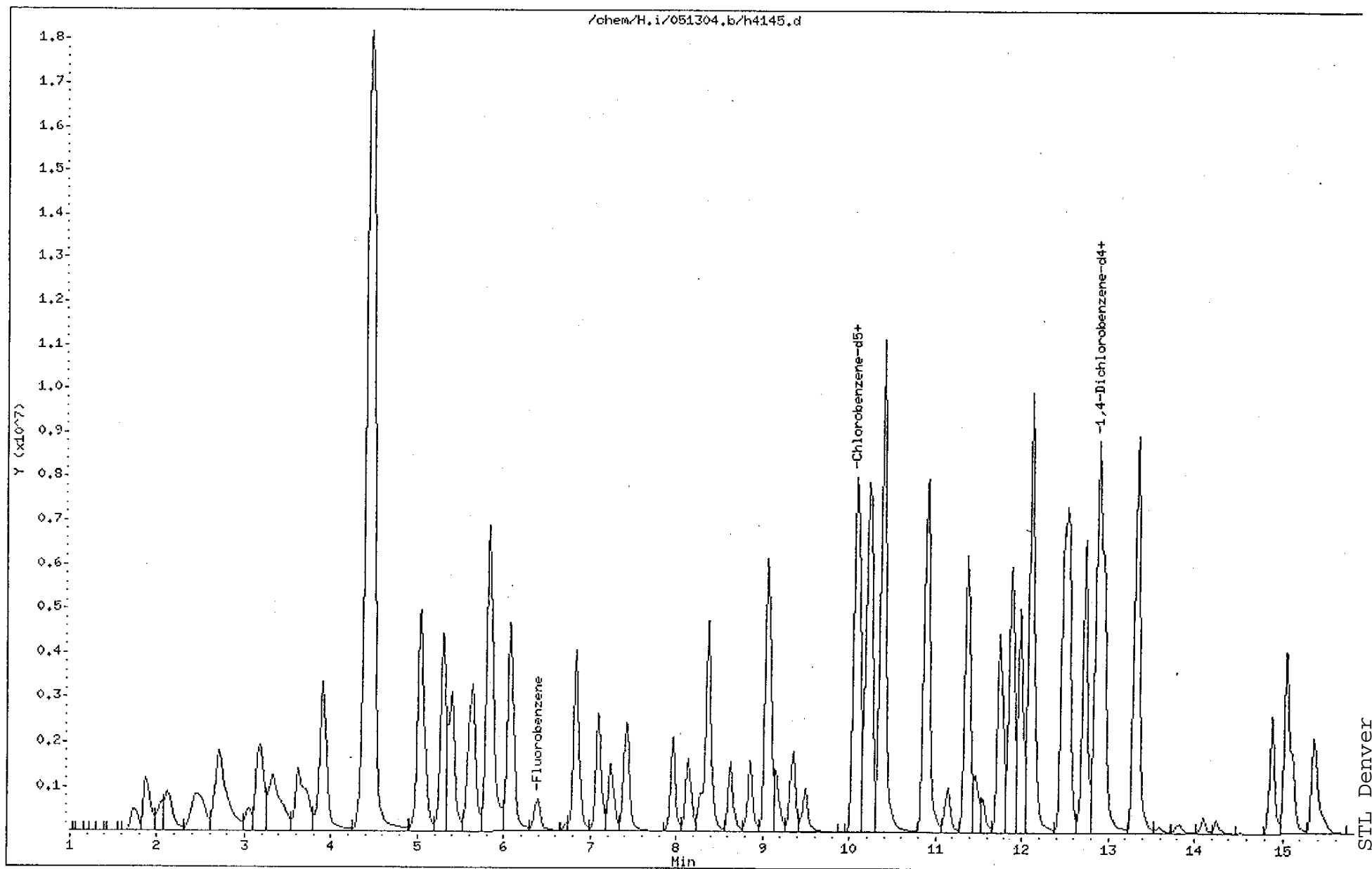
Sample Info: MAIN060,,

Purge Volume: 20.0

Operator: hoffmann

Column phase: DB624

Column diameter: 0.53



CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: H.i
Lab File ID: h4153.d
Analysis Type: WATER

Injection Date: 13-MAY-2004 12:14
Lab Sample ID: VSTD010
Method File: /chem/H.i/051304.b/H-20ml-h2o.m

| COMPOUND | EXPECTED CONC. | MEASURED CONC. | %D | MAX %D |
|-------------------------------|-------------------|-------------------|-----|-----------|
| 85 1,2-Dichloroethene (total) | 20.0000 | 19.9330 | 0.3 | 50.0 |
| 83 Xylene (total) | 30.0000 | 29.4885 | 1.7 | 50.0 |
| 64 dichlorodifluoromethane | 10.0000 | 9.2100 | 7.9 | 50.0 |
| 1 Chloromethane | 10.0000 | 10.3465 | 3.5 | 50.0 |
| 4 Vinyl Chloride | 10.0000 | 10.5268 | 5.3 | 20.0 |
| 2 Bromomethane | 10.0000 | 10.5534 | 5.5 | 50.0 |
| 5 Chloroethane | 10.0000 | 10.0707 | 0.7 | 50.0 |
| 11 Trichlorofluoromethane | 10.0000 | 9.5332 | 4.7 | 50.0 |
| 12 1,1-Dichloroethene | 10.0000 | 9.1084 | 8.9 | 20.0 |
| 7 Acetone | 20.0000 | 21.1355 | 5.7 | 50.0 |
| 6 Methylene Chloride | 10.0000 | 9.5889 | 4.1 | 50.0 |
| 0 trans-1,2-Dichloroethene | 10.0000 | 10.1545 | 1.5 | 50.0 |
| 15 1,1-Dichloroethane | 10.0000 | 9.1680 | 8.3 | 50.0 |
| 93 2,2-Dichloropropane | 10.0000 | 9.0712 | 9.3 | 50.0 |
| 0 cis-1,2-Dichloroethene | 10.0000 | 9.7785 | 2.2 | 50.0 |
| 20 2-Butanone | 20.0000 | 20.2548 | 1.3 | 50.0 |
| 13 Bromochloromethane | 10.0000 | 10.3701 | 3.7 | 50.0 |
| 17 Chloroform | 10.0000 | 9.7604 | 2.4 | 20.0 |
| 22 1,1,1-Trichloroethane | 10.0000 | 9.5101 | 4.9 | 50.0 |
| 94 1,1-Dichloropropene | 10.0000 | 9.3802 | 6.2 | 50.0 |
| 23 Carbon Tetrachloride | 10.0000 | 9.3758 | 6.2 | 50.0 |
| 30 Benzene | 10.0000 | 9.8009 | 2.0 | 50.0 |
| 16 1,2-Dichloroethane | 10.0000 | 9.9572 | 0.4 | 50.0 |
| 29 Trichloroethene | 10.0000 | 10.2921 | 2.9 | 50.0 |
| 26 1,2-Dichloropropane | 10.0000 | 9.9595 | 0.4 | 20.0 |
| 34 Dibromomethane | 10.0000 | 10.1066 | 1.1 | 50.0 |
| 25 Bromodichloromethane | 10.0000 | 10.0297 | 0.3 | 50.0 |
| 28 cis-1,3-Dichloropropene | 10.0000 | 10.2685 | 2.7 | 50.0 |
| 38 4-Methyl-2-pentanone | 20.0000 | 21.4637 | 7.3 | 50.0 |
| 45 Toluene | 10.0000 | 9.8434 | 1.6 | 20.0 |
| 31 trans-1,3-Dichloropropene | 10.0000 | 10.5495 | 5.5 | 50.0 |
| 32 1,1,2-Trichloroethane | 10.0000 | 10.1712 | 1.7 | 50.0 |
| 42 Tetrachloroethene | 10.0000 | 9.7576 | 2.4 | 50.0 |
| 109 1,3-Dichloropropane | 10.0000 | 10.5813 | 5.8 | 50.0 |
| 43 2-Hexanone | 20.0000 | 20.7488 | 3.7 | 50.0 |
| 36 Dibromochloromethane | 10.0000 | 10.3746 | 3.7 | 50.0 |
| 58 1,2-Dibromoethane | 10.0000 | 10.6976 | 7.0 | 50.0 |
| 92 1-Chlorohexane | 10.0000 | 9.0703 | 9.3 | 50.0 |
| 46 Chlorobenzene | 10.0000 | 10.0078 | 0.1 | 50.0 |

ICV
OK
mms/14/04

CONTINUING CALIBRATION COMPOUNDS
 PERCENT DRIFT REPORT

Instrument ID: H.i
 Lab File ID: h4153.d
 Analysis Type: WATER

Injection Date: 13-MAY-2004 12:14
 Lab Sample ID: VSTD010
 Method File: /chem/H.i/051304.b/H-20ml-h2o.m

| COMPOUND | EXPECTED CONC. | MEASURED CONC. | %D | MAX %D |
|--------------------------------|-------------------|-------------------|-----|-----------|
| 74 1,1,1,2-Tetrachloroethane | 10.0000 | 10.5623 | 5.6 | 50.0 |
| 47 Ethylbenzene | 10.0000 | 10.0239 | 0.2 | 20.0 |
| 0 m and p-Xylene | 20.0000 | 19.5790 | 2.1 | 50.0 |
| 0 o-Xylene | 10.0000 | 9.9095 | 0.9 | 50.0 |
| 49 Styrene | 10.0000 | 10.2270 | 2.3 | 50.0 |
| 37 Bromoform | 10.0000 | 10.9354 | 9.4 | 50.0 |
| 79 isopropyl benzene | 10.0000 | 9.2881 | 7.1 | 50.0 |
| 40 1,1,2,2-Tetrachloroethane | 10.0000 | 9.9947 | 0.1 | 50.0 |
| 95 Bromobenzene | 10.0000 | 9.9131 | 0.9 | 50.0 |
| 50 1,2,3-Trichloropropane | 10.0000 | 10.0029 | 0.0 | 50.0 |
| 96 n-Propylbenzene | 10.0000 | 9.4969 | 5.0 | 50.0 |
| 97 2-Chlorotoluene | 10.0000 | 9.9657 | 0.3 | 50.0 |
| 98 1,3,5-Trimethylbenzene | 10.0000 | 9.6109 | 3.9 | 50.0 |
| 99 4-Chlorotoluene | 10.0000 | 9.6778 | 3.2 | 50.0 |
| 100 tert-Butylbenzene | 10.0000 | 9.5312 | 4.7 | 50.0 |
| 101 1,2,4-Trimethylbenzene | 10.0000 | 9.6985 | 3.0 | 50.0 |
| 102 sec-Butylbenzene | 10.0000 | 9.7349 | 2.7 | 50.0 |
| 61 m-Dichlorobenzene | 10.0000 | 9.5496 | 4.5 | 50.0 |
| 103 4-Isopropyltoluene | 10.0000 | 9.1047 | 9.0 | 50.0 |
| 62 p-dichlorobenzene | 10.0000 | 9.6149 | 3.9 | 50.0 |
| 104 n-Butylbenzene | 10.0000 | 9.2306 | 7.7 | 50.0 |
| 63 o-Dichlorobenzene | 10.0000 | 9.8165 | 1.8 | 50.0 |
| 75 1,2-Dibromo-3-chloropropane | 10.0000 | 10.3191 | 3.2 | 50.0 |
| 105 1,2,4-Trichlorobenzene | 10.0000 | 9.9137 | 0.9 | 50.0 |
| 106 Hexachlorobutadiene | 10.0000 | 9.6963 | 3.0 | 50.0 |
| 107 Naphthalene | 10.0000 | 10.2079 | 2.1 | 50.0 |
| 108 1,2,3-Trichlorobenzene | 10.0000 | 9.7417 | 2.6 | 50.0 |

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/051304.b/h4153.d
Lab Smp Id: VSTD010 Client Smp ID: ICV
Inj Date : 13-MAY-2004 12:14
Operator : hoffmanm Inst ID: H.i
Smp Info : VSTD010,,ICV
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/051304.b/H-20ml-h2o.m
Meth Date : 13-May-2004 13:48 hoffmanm Quant Type: ISTD
Cal Date : 13-MAY-2004 09:36 Cal File: h4145.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: secsource.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | | CONCENTRATIONS | | |
|--------------------------------|-----------|--------|--------|---------|----------------|----------------------|------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN (ug/L) | FINAL (ug/L) |
| * 48 Fluorobenzene | 96 | 6.382 | 6.382 | (1.000) | 1628137 | 10.0000 | |
| * 72 Chlorobenzene-d5 | 119 | 10.047 | 10.046 | (1.000) | 319028 | 10.0000 | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.903 | 12.902 | (1.000) | 461440 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | 959506 | 19.9330 | 19.9330 |
| M 2 Xylene (total) | 106 | | | | 2049103 | 29.4885 | 29.4885 |
| 3 dichlorodifluoromethane | 85 | 1.874 | 1.870 | (0.294) | 706597 | 9.20996 | 9.20996 |
| 4 Chloromethane | 50 | 2.053 | 2.032 | (0.322) | 424590 | 10.3465 | 10.3465 |
| 5 Vinyl Chloride | 62 | 2.143 | 2.140 | (0.336) | 408092 | 10.5268 | 10.5268 |
| 7 Bromomethane | 94 | 2.431 | 2.427 | (0.381) | 379197 | 10.5534 | 10.5534 |
| 8 Chloroethane | 64 | 2.520 | 2.517 | (0.395) | 281607 | 10.0707 | 10.0707 |
| 10 Trichlorofluoromethane | 101 | 2.700 | 2.697 | (0.423) | 1085387 | 9.53318 | 9.53318 |
| 14 1,1-Dichloroethene | 96 | 3.167 | 3.164 | (0.496) | 431285 | 9.10839 | 9.10839 |
| 15 Acetone | 43 | 3.203 | 3.182 | (0.502) | 55246 | 21.1355 | 21.1355 |
| 21 Methylene Chloride | 84 | 3.634 | 3.613 | (0.569) | 354168 | 9.58888 | 9.58888 |
| 24 trans-1,2-Dichloroethene | 96 | 3.922 | 3.900 | (0.614) | 493545 | 10.1545 | 10.1545 |
| 27 1,1-Dichloroethane | 63 | 4.371 | 4.367 | (0.685) | 850340 | 9.16805 | 9.16805 |

| Compounds | QUANT SIG | MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|------------------------------|-----------|-------|--------|--------|---------|----------|----------------|---------|
| | | | | | | | ON-COLUMN | FINAL |
| | | | | | | | (ug/L) | (ug/L) |
| ===== | ===== | ===== | ===== | ===== | ===== | ===== | ===== | ===== |
| 33 2-Butanone | | 43 | 5.035 | 5.032 | (0.789) | 94651 | 20.2548 | 20.2548 |
| 32 cis-1,2-Dichloroethene | | 96 | 5.035 | 5.014 | (0.789) | 465961 | 9.77850 | 9.77850 |
| 31 2,2-Dichloropropane | | 77 | 5.035 | 5.032 | (0.789) | 648014 | 9.07117 | 9.07117 |
| 37 Bromochloromethane | | 128 | 5.305 | 5.301 | (0.831) | 188961 | 10.3701 | 10.3701 |
| 38 Chloroform | | 83 | 5.394 | 5.391 | (0.845) | 863749 | 9.76040 | 9.76040 |
| 41 1,1,1-Trichloroethane | | 97 | 5.628 | 5.625 | (0.882) | 922768 | 9.51009 | 9.51009 |
| 42 1,1-Dichloropropene | | 75 | 5.826 | 5.822 | (0.913) | 719994 | 9.38024 | 9.38024 |
| 43 Carbon Tetrachloride | | 117 | 5.826 | 5.822 | (0.913) | 853083 | 9.37581 | 9.37581 |
| 47 1,2-Dichloroethane | | 62 | 6.077 | 6.074 | (0.952) | 339655 | 9.95718 | 9.95718 |
| 46 Benzene | | 78 | 6.059 | 6.056 | (0.949) | 1285857 | 9.80088 | 9.80088 |
| 50 Trichloroethene | | 130 | 6.831 | 6.828 | (1.070) | 574045 | 10.2921 | 10.2921 |
| 52 1,2-Dichloropropane | | 63 | 7.083 | 7.080 | (1.110) | 437413 | 9.95946 | 9.95946 |
| 53 Dibromomethane | | 93 | 7.227 | 7.223 | (1.132) | 232404 | 10.1066 | 10.1066 |
| 56 Bromodichloromethane | | 83 | 7.424 | 7.421 | (1.163) | 668052 | 10.0297 | 10.0297 |
| 59 cis-1,3-Dichloropropene | | 75 | 7.963 | 7.960 | (0.793) | 538139 | 10.2685 | 10.2685 |
| 60 4-Methyl-2-pentanone | | 43 | 8.143 | 8.139 | (0.810) | 283503 | 21.4637 | 21.4637 |
| 62 Toluene | | 91 | 8.376 | 8.373 | (0.834) | 1483758 | 9.84345 | 9.84345 |
| 63 trans-1,3-Dichloropropene | | 75 | 8.628 | 8.624 | (0.859) | 370027 | 10.5495 | 10.5495 |
| 65 1,1,2-Trichloroethane | | 97 | 8.843 | 8.858 | (0.880) | 225513 | 10.1712 | 10.1712 |
| 67 1,3-Dichloropropane | | 76 | 9.059 | 9.055 | (0.902) | 369526 | 10.5813 | 10.5813 |
| 66 Tetrachloroethene | | 164 | 9.041 | 9.037 | (0.900) | 464357 | 9.75758 | 9.75758 |
| 68 2-Hexanone | | 43 | 9.167 | 9.163 | (0.912) | 172148 | 20.7488 | 20.7488 |
| 69 Dibromochloromethane | | 129 | 9.346 | 9.343 | (0.930) | 402364 | 10.3746 | 10.3746 |
| 70 1,2-Dibromoethane | | 107 | 9.490 | 9.486 | (0.945) | 307886 | 10.6976 | 10.6976 |
| 73 Chlorobenzene | | 112 | 10.083 | 10.079 | (1.004) | 1012787 | 10.0078 | 10.0078 |
| 74 1,1,1,2-Tetrachloroethane | | 131 | 10.190 | 10.187 | (1.014) | 443148 | 10.5623 | 10.5623 |
| 75 Ethylbenzene | | 106 | 10.226 | 10.223 | (1.018) | 526133 | 10.0239 | 10.0239 |
| 76 m and p-Xylene | | 106 | 10.370 | 10.367 | (1.032) | 1419497 | 19.5790 | 19.5790 |
| 77 o-Xylene | | 106 | 10.873 | 10.870 | (1.082) | 629606 | 9.90950 | 9.90950 |
| 78 Styrene | | 104 | 10.891 | 10.888 | (1.084) | 974746 | 10.2270 | 10.2270 |
| 71 1-Chlorohexane | | 91 | 10.047 | 10.061 | (1.000) | 682341 | 9.07028 | 9.07028 |
| 79 Bromoform | | 173 | 11.143 | 11.139 | (1.109) | 212602 | 10.9354 | 10.9354 |
| 80 isopropyl benzene | | 105 | 11.358 | 11.355 | (1.131) | 1971546 | 9.28814 | 9.28814 |
| 83 1,1,2,2-Tetrachloroethane | | 83 | 11.717 | 11.714 | (1.166) | 253137 | 9.99468 | 9.99468 |
| 84 Bromobenzene | | 156 | 11.735 | 11.732 | (0.909) | 392034 | 9.91309 | 9.91309 |
| 85 1,2,3-Trichloropropane | | 110 | 11.771 | 11.786 | (0.912) | 70193 | 10.0029 | 10.0029 |
| 87 n-Propylbenzene | | 120 | 11.879 | 11.876 | (0.921) | 476870 | 9.49686 | 9.49686 |
| 88 2-Chlorotoluene | | 126 | 11.969 | 11.983 | (0.928) | 385341 | 9.96575 | 9.96575 |
| 89 1,3,5-Trimethylbenzene | | 105 | 12.077 | 12.091 | (0.936) | 1567143 | 9.61092 | 9.61092 |
| 90 4-Chlorotoluene | | 126 | 12.112 | 12.109 | (0.939) | 411217 | 9.67782 | 9.67782 |
| 91 tert-Butylbenzene | | 119 | 12.472 | 12.468 | (0.967) | 1637453 | 9.53118 | 9.53118 |
| 92 1,2,4-Trimethylbenzene | | 105 | 12.526 | 12.522 | (0.971) | 1441510 | 9.69851 | 9.69851 |
| 93 sec-Butylbenzene | | 134 | 12.723 | 12.720 | (0.986) | 391917 | 9.73492 | 9.73492 |
| 94 m-Dichlorobenzene | | 146 | 12.831 | 12.845 | (0.994) | 612887 | 9.54957 | 9.54957 |
| 95 4-Isopropyltoluene | | 119 | 12.867 | 12.881 | (0.997) | 1750031 | 9.10469 | 9.10469 |
| 97 p-dichlorobenzene | | 146 | 12.939 | 12.935 | (1.003) | 796752 | 9.61486 | 9.61486 |
| 98 n-Butylbenzene | | 91 | 13.298 | 13.295 | (1.031) | 1711778 | 9.23061 | 9.23060 |

| Compounds | QUANT SIG | | | | | | CONCENTRATIONS | |
|---------------------------------|-----------|--------|--------|---------|----------|-----------|----------------|--|
| | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN | FINAL | |
| ===== | ---- | -- | ===== | ===== | ===== | ===== | ===== | |
| 99 o-Dichlorobenzene | 146 | 13.316 | 13.330 | (1.032) | 548841 | 9.81650 | 9.81650 | |
| 100 1,2-Dibromo-3-chloropropane | 157 | 14.106 | 14.103 | (1.093) | 41180 | 10.3191 | 10.3191 | |
| 101 1,2,4-Trichlorobenzene | 180 | 14.879 | 14.875 | (1.153) | 401736 | 9.91369 | 9.91368 | |
| 102 Hexachlorobutadiene | 225 | 15.040 | 15.037 | (1.166) | 371135 | 9.69626 | 9.69626 | |
| 127 Naphthalene | 128 | 15.112 | 15.109 | (1.171) | 376160 | 10.2079 | 10.2079 | |
| 104 1,2,3-Trichlorobenzene | 180 | 15.346 | 15.360 | (1.189) | 294123 | 9.74175 | 9.74175 | |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4153.d
Lab Smp Id: VSTD010
Analysis Type: VOA
Quant Type: ISTD
Operator: hoffmann
Method File: /chem/H.i/051304.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/13/4
Calibration Time: 1055
Client Smp ID: ICV
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 1540572 | 770286 | 3081144 | 1628137 | 5.68 |
| 72 Chlorobenzene-d5 | 325282 | 162641 | 650564 | 319028 | -1.92 |
| 96 1,4-Dichlorobenze | 424257 | 212128 | 848514 | 461440 | 8.76 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 6.40 | 5.90 | 6.90 | 6.38 | -0.24 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.05 | -0.15 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.90 | -0.12 |

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/H.i/051304.b/h4153.d

Page 5

Date : 13-MAY-2004 12:14

Client ID: ICV

Instrument: H.i

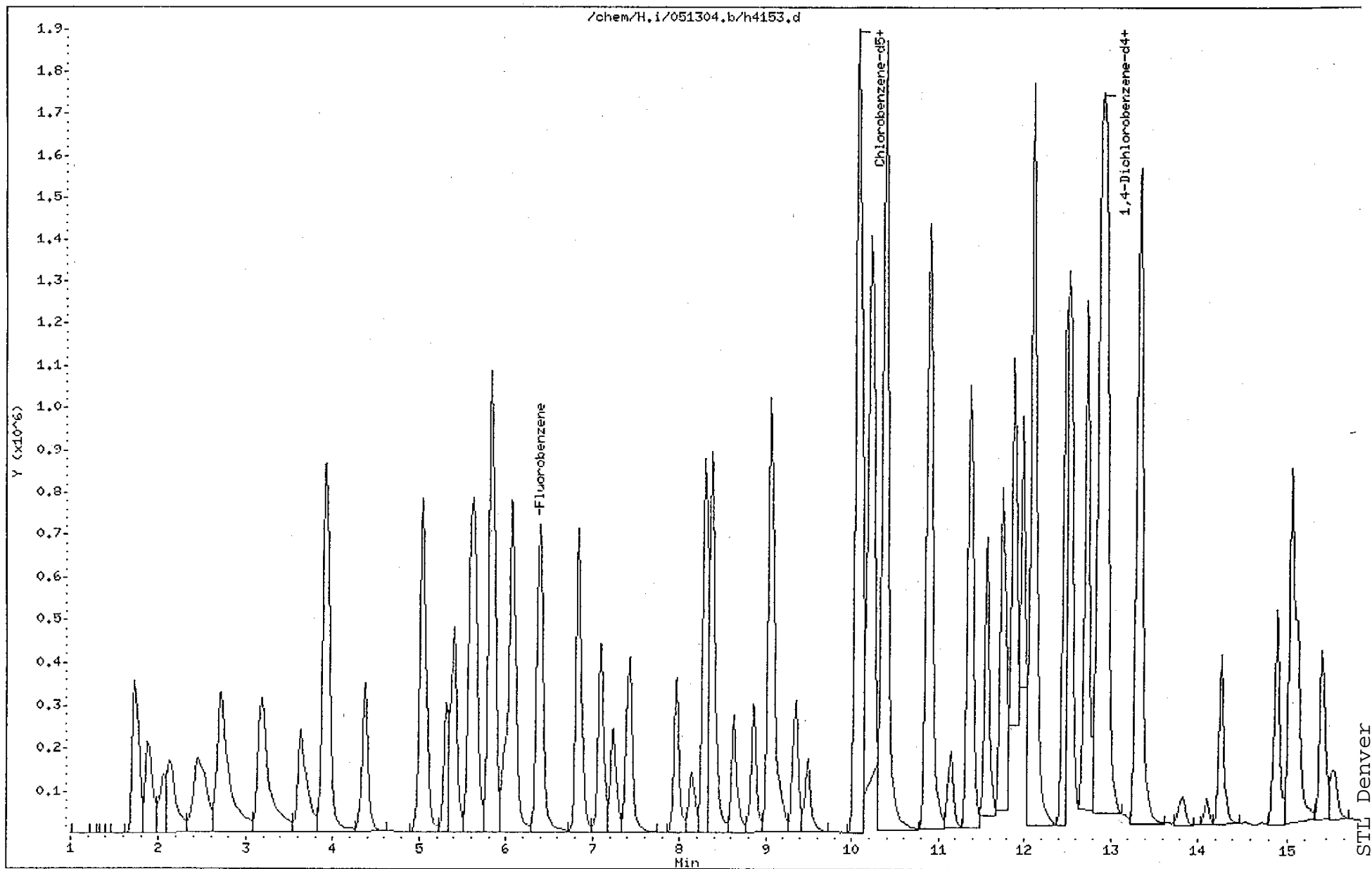
Sample Info: VSTD010,,ICV

Purge Volume: 20.0

Operator: hoffmann

Column phase: DB624

Column diameter: 0.53



GC/MS Initial Calibration Review Checklist

STL Denver

Instrument ID and Date: Inst. H "Supp" I-CAL 5/13/04Check Method Used: Analysis ☐ 625 ☐ 8270 ☐ Other SV _____☐ 524.2 ☐ 624 ☒ 8260B ☐ Other VOA _____VOA Preparation ☐ 5mL ☒ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

| Review Items | Level 1 | | | Level 2 | Comments |
|--|---------|----|-----|---------|---------------------------------------|
| | Yes | No | N/A | | |
| Initial Calibration | | | | | |
| 1. BFB/DFTPP meets criteria? | / | | | / | |
| 2. ICAL date and instrument ID verified? | / | | | / | |
| 3. Sufficient number of calibration points used? | / | | | / | |
| 4. Reasons for removal of points documented? | / | | | / | |
| 5. %RSD or correlation coefficient within method limits? | / | | | / | Some points below R.L. removed. |
| 6. If RRF used for ICAL, were all compounds within 15% RSD? | | | / | NA | List all exceptions below (cpd & RSD) |
| 7. Response factors meet criteria? | / | | | / | |
| 8. Isomeric pairs checked for correct peak assignment? | / | | | / | |
| 9. Data checked for detector saturation? | / | | | / | |
| 10. Standards traceability properly documented? | / | | | / | |
| 11. Manual integrations documented and checked? | | | / | NA | |
| 12. 2 nd source ICV recovery 75-125% for DoD projects, 65-135% ($\pm 55\%$ of expected for poor performers) for non-DoD? | | | / | NA | |

1st Level Reviewer: MADate: 5/14/042nd Level Reviewer: TADate: 5-14-04

GC/MS Volatile Analysis

STL, Denver

Instrument **H**

5972 MSD

| Column | Phase | Ini. Temp | Init. Time | Ramp Rate | Final Temp | Flow cc/min | Press. Psi | Type | Vac. Range | Source Temp | Mass Range |
|--------|--------|-----------|------------|-----------|------------|-------------|------------|------|------------------|-------------|-------------------------|
| 75M | DB-624 | 200C | 2 min. | 5C/min | 65C | 18 | 20 | MS | 10 ⁻⁶ | -175C | 35-300/2 ⁺ 2 |
| | | | 0 min. | 12C/min | 155C | | | | | | |
| | | | 0 min. | 25C/min | 210C | | | | | | |

Comments

DEN-MS-0010 (8260B/624/524.2)
(Circle as appropriate)

Target Batch (Directory): 051304.6

MS-VOA
ISS # 104.04
Main # 67/82.04
Supp # 011/052.04

QuantIMS Batch:

| Lot # | Sample | W.O.# | Purge vol (ml) | Sample amt (ml/g) | Date | Initials | File Number | IS OK | SS OK | DIL OK | 24 hr 12 hr | pH | Comments | ALS |
|----------------|--------|-----------|----------------|-------------------|---------|----------|-------------|-------|-------|--------|-------------|----|---------------|-----|
| BFB | | | 1 µl in | Inj. | 5/13/04 | MA | h 4139.2 | | | | | | NA (OK) 07:49 | |
| Main 001 | | | 20ml | 20ml | | | 40 | | NA | | | | (OK) | |
| 002 | | | | | | | 41 | | | | | | | |
| 005 | | | | | | | 42 | | | | | | | |
| 010 | | | | | | | 43 | | | | | | | |
| 030 | | | | | | | 44 | | | | | | | |
| 060 | | | | | | | 45 | | | | | | | |
| Supp 001 | | | | | | | 46 | | | | | | | |
| 002 | | | | | | | 47 | | | | | | | |
| 005 | | | | | | | 48 | | | | | | | |
| 010 | | | | | | | 49 | | | | | | | |
| 030 | | | | | | | 50 | | | | | | | |
| 060 | | | | | | | 51 | | | | | | | |
| VSTD 010 - ICV | | | | | | | 52 | | | | | | | |
| cle 5/13/04 | | | | | | | 53 | | | | | | #68/61/91.04 | |
| VSTD 010 - ICV | | | | | | | 54 | | | | | | | |
| LCS | | | | | | | 55 | | | | | | | |
| VBLK | | | | | | | 56 | | | | | | | |
| D4E060268 | -027 | GFNGM IAA | | 50ml | | | 57 | | | | | | | |
| | -27ms | | | | | | 58 | | | | | | | |
| | -2750 | | | | | | | | | | | | | |

Report Date: 14-May-2004 15:40

Calibration History

Method : /chem/H.i/051304.b/H-20ml-h2o.m
Start Cal Date: 13-MAY-2004 07:58
End Cal Date : 13-MAY-2004 11:34

Initial Calibration

| Injection Date | Sublist | Calibration File |
|------------------------------------|---------|----------------------------|
| Cal Level: 1 , Cal Amount: 1.00000 | | |
| 13-MAY-2004 09:56 | 2-supp | /chem/H.i/051304.b/h4146.d |
| 13-MAY-2004 07:58 | 1-main | /chem/H.i/051304.b/h4140.d |
| Cal Level: 2 , Cal Amount: 2.00000 | | |
| 13-MAY-2004 10:15 | 2-supp | /chem/H.i/051304.b/h4147.d |
| 13-MAY-2004 08:17 | 1-main | /chem/H.i/051304.b/h4141.d |
| Cal Level: 3 , Cal Amount: 5.00000 | | |
| 13-MAY-2004 10:35 | 2-supp | /chem/H.i/051304.b/h4148.d |
| 13-MAY-2004 08:37 | 1-main | /chem/H.i/051304.b/h4142.d |
| Cal Level: 4 , Cal Amount: 10.0000 | | |
| 13-MAY-2004 10:55 | 2-supp | /chem/H.i/051304.b/h4149.d |
| 13-MAY-2004 08:57 | 1-main | /chem/H.i/051304.b/h4143.d |
| Cal Level: 5 , Cal Amount: 30.0000 | | |
| 13-MAY-2004 11:14 | 2-supp | /chem/H.i/051304.b/h4150.d |
| 13-MAY-2004 09:16 | 1-main | /chem/H.i/051304.b/h4144.d |
| Cal Level: 6 , Cal Amount: 60.0000 | | |
| 13-MAY-2004 11:34 | 2-supp | /chem/H.i/051304.b/h4151.d |
| 13-MAY-2004 09:36 | 1-main | /chem/H.i/051304.b/h4145.d |

Continuing Calibration

| | | |
|-------------------|--------|----------------------------|
| 13-MAY-2004 10:55 | 2-supp | /chem/H.i/051304.b/h4149.d |
| 13-MAY-2004 08:57 | 1-main | /chem/H.i/051304.b/h4143.d |

Report Date : 13-May-2004 13:49

Page 4

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 13-MAY-2004 07:58
 End Cal Date : 13-MAY-2004 11:34
 Quant Method : ISTD
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/H.i/051304.b/H-20ml-h2o.m
 Cal Date : 13-May-2004 13:48 hoffmannm

Calibration File Names:

Level 1: /chem/H.i/051304.b/h4146.d
 Level 2: /chem/H.i/051304.b/h4147.d
 Level 3: /chem/H.i/051304.b/h4148.d
 Level 4: /chem/H.i/051304.b/h4149.d
 Level 5: /chem/H.i/051304.b/h4150.d
 Level 6: /chem/H.i/051304.b/h4151.d

| Compound | 1 | 2 | 5 | 10 | 30 | 60 | Curve | Coefficients | | %RSD or R ² |
|-------------------------------|---------|---------|---------|---------|---------|---------|-------|--------------|---------|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 |
| 117 Dichlorotetrafluoroethane | 0.46128 | 0.50417 | 0.52762 | 0.54880 | 0.53604 | 0.53911 | AVRG | | 0.51950 | 6.21191 |
| 6 Ethylene Oxide | ++++ | 0.00256 | 0.00287 | 0.00304 | 0.00304 | 0.00276 | AVRG | | 0.00285 | 7.04420 |
| 9 Dichlorofluoromethane | 0.55165 | 0.58175 | 0.61601 | 0.63278 | 0.63631 | 0.66302 | AVRG | | 0.61359 | 6.59350 |
| 12 Ethyl Ether | 0.10176 | 0.10676 | 0.10940 | 0.11300 | 0.11262 | 0.11586 | AVRG | | 0.10990 | 4.61860 |
| 16 Trichlorotrifluoroethane | 0.29766 | 0.32636 | 0.33364 | 0.35018 | 0.33353 | 0.33786 | AVRG | | 0.32987 | 5.34458 |
| 18 Carbon Disulfide | 0.86559 | 0.88400 | 0.90507 | 0.92990 | 0.91442 | 0.94033 | AVRG | | 0.90655 | 3.09532 |
| 20 Allyl Chloride | 0.43036 | 0.42331 | 0.43381 | 0.45344 | 0.45152 | 0.46899 | AVRG | | 0.44357 | 3.88760 |
| 119 Methyl Acetate | 0.05850 | 0.06026 | 0.06118 | 0.06245 | 0.06353 | 0.06653 | AVRG | | 0.06207 | 4.50219 |
| 25 Methyl t-butyl ether | 0.30764 | 0.32117 | 0.32916 | 0.33518 | 0.34360 | 0.35836 | AVRG | | 0.33252 | 5.30669 |

Report Date : 13-May-2004 13:49

Page 5

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 13-MAY-2004 07:58
 End Cal Date : 13-MAY-2004 11:34
 Quant Method : ISTD
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/H.i/051304.b/H-20ml-h2o.m
 Cal Date : 13-May-2004 13:48 hoffmanm

| Compound | 1 | 2 | 5 | 10 | 30 | 60 | Curve | Coefficients | | | %RSD or R ² |
|-----------------------------------|---------|---------|---------|---------|---------|---------|-------|--------------|---------|----|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| 26 Hexane | 2.06684 | 2.03611 | 2.13993 | 2.21710 | 2.19572 | 2.34821 | AVRG | | 2.16732 | | 5.22303 |
| 29 Vinyl acetate | 0.19380 | 0.13759 | 0.15376 | 0.15980 | 0.16220 | 0.16971 | AVRG | | 0.16281 | | 11.44265 |
| 35 Ethyl Acetate | ++++ | 0.07145 | 0.07059 | 0.07335 | 0.07531 | 0.07705 | AVRG | | 0.07355 | | 3.63367 |
| 39 Tetrahydrofuran | 0.02166 | 0.01833 | 0.01595 | 0.01672 | 0.01646 | 0.01708 | AVRG | | 0.01770 | | 11.84851 |
| 120 ETBE | 0.56600 | 0.58942 | 0.61309 | 0.64281 | 0.67064 | 0.71921 | AVRG | | 0.63353 | | 8.85292 |
| 114 Cyclohexane | 0.47629 | 0.46558 | 0.48455 | 0.49691 | 0.47687 | 0.48335 | AVRG | | 0.48059 | | 2.17717 |
| 115 2-Pentanone | 0.05339 | 0.06116 | 0.06546 | 0.06740 | 0.06897 | 0.07066 | AVRG | | 0.06451 | | 9.85141 |
| 121 TAME | 0.39174 | 0.40755 | 0.42615 | 0.45468 | 0.46815 | 0.49168 | AVRG | | 0.43999 | | 8.65619 |
| 54 Methyl Methacrylate | 0.03041 | 0.02984 | 0.02878 | 0.02914 | 0.02973 | 0.02960 | AVRG | | 0.02959 | | 1.92143 |
| 122 Methyl Cyclohexane | 0.47495 | 0.44381 | 0.44025 | 0.47041 | 0.45631 | 0.45823 | AVRG | | 0.45733 | | 3.02630 |
| 57 2-nitropropane | ++++ | 4034 | 15483 | 28355 | 87001 | 182341 | WLINR | 0.07368 | 0.09930 | | 0.99502 |
| 113 2-Chloroethyl vinyl ether | 3957 | 8307 | 21846 | 51484 | 179576 | 392291 | LINR | 0.18235 | 0.21913 | | 0.99629 |
| 64 Ethyl methacrylate | 0.59158 | 0.69518 | 0.71766 | 0.76167 | 0.77842 | 0.82444 | AVRG | | 0.72816 | | 11.11827 |
| 116 cis-1,4-Dichloro-2-butene | 0.08035 | 0.06752 | 0.06459 | 0.07481 | 0.08355 | 0.08846 | AVRG | | 0.07655 | | 12.15505 |
| 86 t-1,4-Dichloro-2-butene | 0.07231 | 0.07146 | 0.07267 | 0.08202 | 0.08438 | 0.09226 | AVRG | | 0.07918 | | 10.64911 |
| 118 1,2,3-Trimethylbenzene | 0.79789 | 0.76201 | 0.80307 | 0.80859 | 0.78432 | 0.79869 | AVRG | | 0.79243 | | 2.13729 |
| 123 1,2-dichloro-1,1,2-trifluorom | 0.38662 | 0.39875 | 0.40325 | 0.41565 | 0.40394 | 0.40920 | AVRG | | 0.40290 | | 2.44588 |

Report Date : 13-May-2004 13:49

Page 6

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 13-MAY-2004 07:58
 End Cal Date : 13-MAY-2004 11:34
 Quant Method : ISTD
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/H.i/051304.b/H-20ml-h2o.m
 Cal Date : 13-May-2004 13:48 hoffmanm

| Compound | 1 | 2 | 5 | 10 | 30 | 60 | Curve | Coefficients | | | %RSD or R^2 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|-------|--------------|---------|----|----------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| 124 2,2-dichloro-1,1,1-trifluorom | 0.63066 | 0.62288 | 0.64145 | 0.66238 | 0.64561 | 0.65602 | AVRG | | 0.64317 | | 2.31809 |
| 125 2-Propanol | 0.00390 | 0.00336 | 0.00358 | 0.00367 | 0.00359 | 0.00376 | AVRG | | 0.00364 | | 5.02318 |
| 126 Tetrahydrothiophene | +++++ | 0.15501 | 0.17205 | 0.18716 | 0.19467 | 0.20722 | AVRG | | 0.18322 | | 11.06061 |
| \$ 40 Dibromofluoromethane | +++++ | 0.44367 | 0.45283 | 0.45406 | 0.45797 | 0.46227 | AVRG | | 0.45416 | | 1.52571 |
| \$ 44 1,2-Dichloroethane-d4 | +++++ | 0.17661 | 0.18287 | 0.18340 | 0.17684 | 0.17337 | AVRG | | 0.17862 | | 2.43376 |
| \$ 61 Toluene-d8 | +++++ | 4.16445 | 4.14096 | 4.12652 | 4.16285 | 4.23399 | AVRG | | 4.16575 | | 0.99124 |
| \$ 82 Bromofluorobenzene | +++++ | 2.26467 | 2.18568 | 2.16934 | 2.17573 | 2.16614 | AVRG | | 2.19231 | | 1.87625 |

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

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 13-MAY-2004 07:58
 End Cal Date : 13-MAY-2004 11:34
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/H.i/051304.b/H-20ml-h2o.m
 Cal Date : 13-May-2004 13:41 hoffmanm
 Curve Type : Average

Calibration File Names:

Level 1: /chem/H.i/051304.b/h4146.d
 Level 2: /chem/H.i/051304.b/h4147.d
 Level 3: /chem/H.i/051304.b/h4148.d
 Level 4: /chem/H.i/051304.b/h4149.d
 Level 5: /chem/H.i/051304.b/h4150.d
 Level 6: /chem/H.i/051304.b/h4151.d

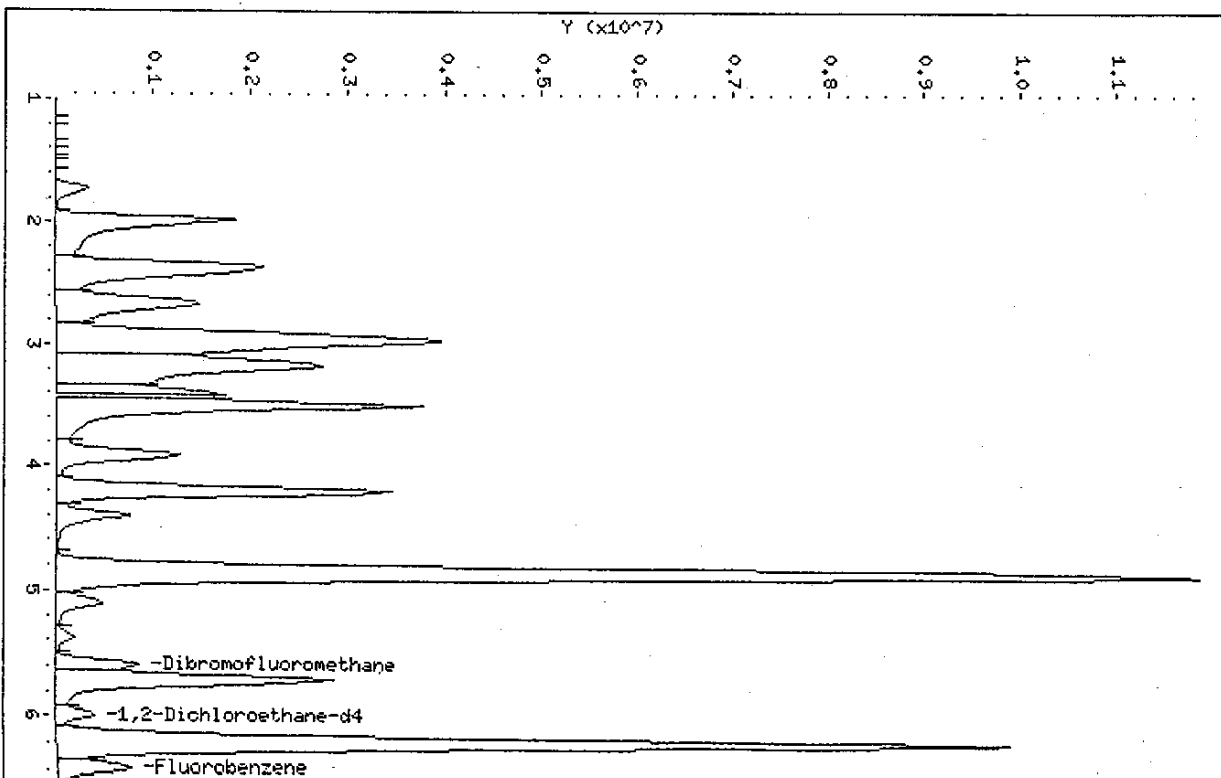
| Compound | 1.000 Level 1 | 2.000 Level 2 | 5.000 Level 3 | 10.000 Level 4 | 30.000 Level 5 | 60.000 Level 6 | RRF | % RSD |
|-------------------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|---------|--------|
| 117 Dichlorotetrafluoroethane | 0.46128 | 0.50417 | 0.52762 | 0.54880 | 0.53604 | 0.53911 | 0.51950 | 6.212 |
| 6 Ethylene Oxide | ++++ | 0.00256 | 0.00287 | 0.00304 | 0.00304 | 0.00276 | 0.00285 | 7.044 |
| 9 Dichlorofluoromethane | 0.55165 | 0.58175 | 0.61601 | 0.63278 | 0.63631 | 0.66302 | 0.61359 | 6.594 |
| 12 Ethyl Ether | 0.10176 | 0.10676 | 0.10940 | 0.11300 | 0.11262 | 0.11586 | 0.10990 | 4.619 |
| 16 Trichlorotrifluoroethane | 0.29766 | 0.32636 | 0.33364 | 0.35018 | 0.33353 | 0.33786 | 0.32987 | 5.345 |
| 18 Carbon Disulfide | 0.86559 | 0.88400 | 0.90507 | 0.92990 | 0.91442 | 0.94033 | 0.90655 | 3.095 |
| 20 Allyl Chloride | 0.43036 | 0.42331 | 0.43381 | 0.45344 | 0.45152 | 0.46899 | 0.44357 | 3.888 |
| 119 Methyl Acetate | 0.05850 | 0.06026 | 0.06118 | 0.06245 | 0.06353 | 0.06653 | 0.06207 | 4.502 |
| 25 Methyl t-butyl ether | 0.30764 | 0.32117 | 0.32916 | 0.33518 | 0.34360 | 0.35836 | 0.33252 | 5.307 |
| 26 Hexane | 2.06684 | 2.03611 | 2.13993 | 2.21710 | 2.19572 | 2.34821 | 2.16732 | 5.223 |
| 29 Vinyl acetate | 0.19380 | 0.13759 | 0.15376 | 0.15980 | 0.16220 | 0.16971 | 0.16281 | 11.443 |
| 35 Ethyl Acetate | ++++ | 0.07145 | 0.07059 | 0.07335 | 0.07531 | 0.07705 | 0.07355 | 3.634 |
| 39 Tetrahydrofuran | 0.02166 | 0.01833 | 0.01595 | 0.01672 | 0.01646 | 0.01708 | 0.01770 | 11.849 |
| 120 ETBE | 0.56600 | 0.58942 | 0.61309 | 0.64281 | 0.67064 | 0.71921 | 0.63353 | 8.853 |
| 114 Cyclohexane | 0.47629 | 0.46558 | 0.48455 | 0.49691 | 0.47687 | 0.48335 | 0.48059 | 2.177 |
| 115 2-Pentanone | 0.05339 | 0.06116 | 0.06546 | 0.06740 | 0.06897 | 0.07066 | 0.06451 | 9.851 |
| 121 TAME | 0.39174 | 0.40755 | 0.42615 | 0.45468 | 0.46815 | 0.49168 | 0.43999 | 8.656 |
| 54 Methyl Methacrylate | 0.03041 | 0.02984 | 0.02878 | 0.02914 | 0.02973 | 0.02960 | 0.02959 | 1.921 |
| 122 Methyl Cyclohexane | 0.47495 | 0.44381 | 0.44025 | 0.47041 | 0.45631 | 0.45823 | 0.45733 | 3.026 |
| 57 2-nitropropane | ++++ | 0.06065 | 0.09289 | 0.08717 | 0.09172 | 0.10060 | 0.08661 | 17.657 |
| 113 2-Chloroethyl vinyl ether | 0.11585 | 0.12490 | 0.13107 | 0.15827 | 0.18931 | 0.21643 | 0.15597 | 25.593 |
| 64 Ethyl methacrylate | 0.59158 | 0.69518 | 0.71766 | 0.76167 | 0.77842 | 0.82444 | 0.72816 | 11.118 |
| 116 cis-1,4-Dichloro-2-butene | 0.08035 | 0.06752 | 0.06459 | 0.07481 | 0.08355 | 0.08846 | 0.07655 | 12.155 |
| 86 t-1,4-Dichloro-2-butene | 0.07231 | 0.07146 | 0.07267 | 0.08202 | 0.08438 | 0.09226 | 0.07918 | 10.649 |
| 118 1,2,3-Trimethylbenzene | 0.79789 | 0.76201 | 0.80307 | 0.80859 | 0.78432 | 0.79869 | 0.79243 | 2.137 |

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 13-MAY-2004 07:58
 End Cal Date : 13-MAY-2004 11:34
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/H.i/051304.b/H-20ml-h2o.m
 Cal Date : 13-May-2004 13:41 hoffmanm
 Curve Type : Average

| Compound | 1.000 Level 1 | 2.000 Level 2 | 5.000 Level 3 | 10.000 Level 4 | 30.000 Level 5 | 60.000 Level 6 | RRF | % RSD |
|-----------------------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|---------|--------|
| 123 1,2-dichloro-1,1,2-trifluorom | 0.38662 | 0.39875 | 0.40325 | 0.41565 | 0.40394 | 0.40920 | 0.40290 | 2.446 |
| 124 2,2-dichloro-1,1,1-trifluorom | 0.63066 | 0.62288 | 0.64145 | 0.66238 | 0.64561 | 0.65602 | 0.64317 | 2.318 |
| 125 2-Propanol | 0.00390 | 0.00336 | 0.00358 | 0.00367 | 0.00359 | 0.00376 | 0.00364 | 5.023 |
| 126 Tetrahydrothiophene | +++++ | 0.15501 | 0.17205 | 0.18716 | 0.19467 | 0.20722 | 0.18322 | 11.061 |
| \$ 40 Dibromofluoromethane | +++++ | 0.44367 | 0.45283 | 0.45406 | 0.45797 | 0.46227 | 0.45416 | 1.526 |
| \$ 44 1,2-Dichloroethane-d4 | +++++ | 0.17661 | 0.18287 | 0.18340 | 0.17684 | 0.17337 | 0.17862 | 2.434 |
| \$ 61 Toluene-d8 | +++++ | 4.16445 | 4.14096 | 4.12652 | 4.16285 | 4.23399 | 4.16575 | 0.991 |
| \$ 82 Bromofluorobenzene | +++++ | 2.26467 | 2.18568 | 2.16934 | 2.17573 | 2.16614 | 2.19231 | 1.876 |



Data File: /chem/H.i/051304.b/h4151.d
 Date : 13-MAY-2004 11:34
 Client ID: SUPP060
 Sample Info: SUPP060,,
 Purge Volume: 20.0
 Column Phase: DB624

Date : 13-MAY-2004 07:49

Client ID: BFB

Instrument: H.i

Sample Info: BFB #073-04

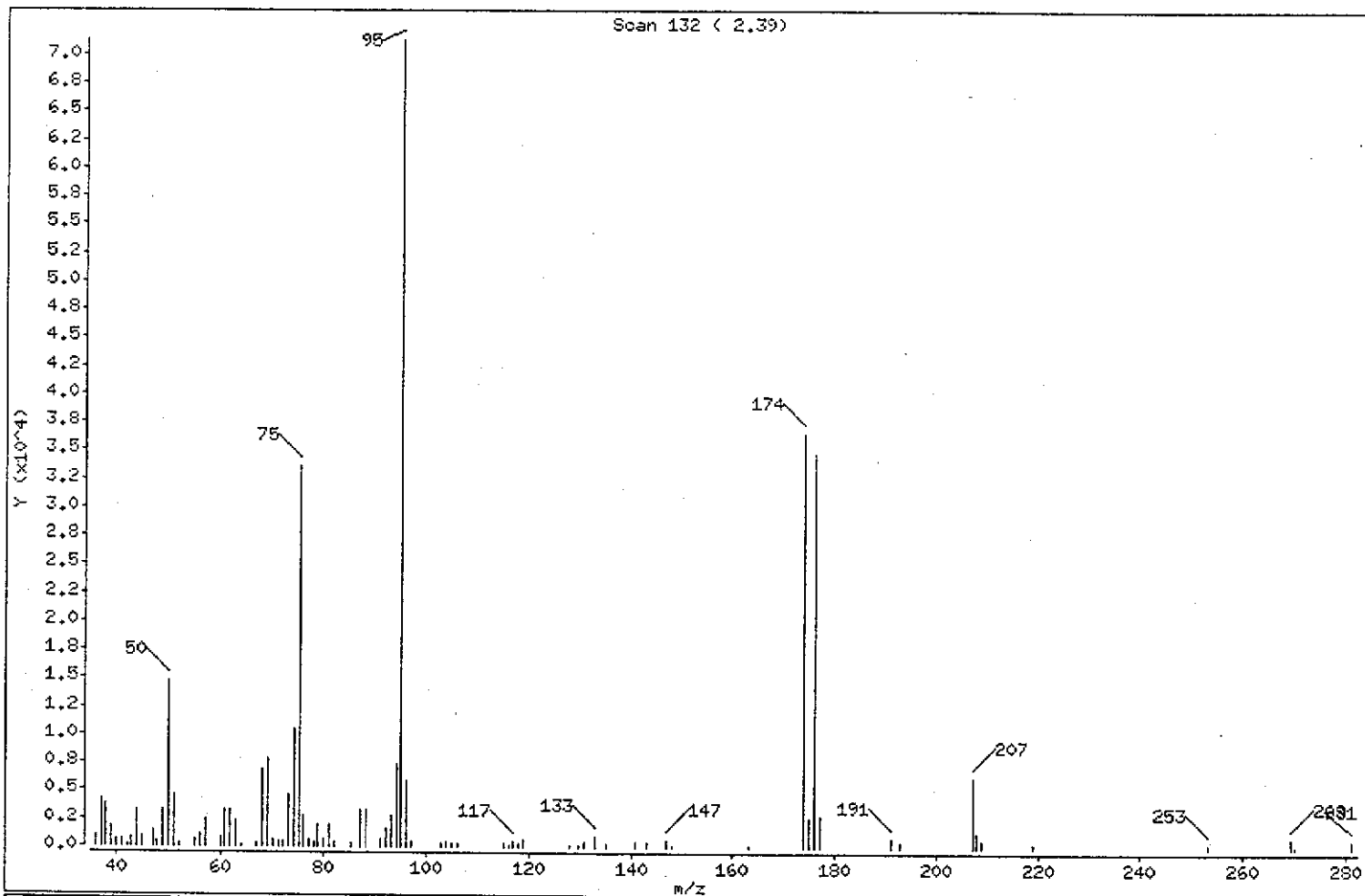
Volume Injected (uL): 1.0

Operator: mhoffman

Column phase: DB624

Column diameter: 0.53

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 | 20.58 |
| 75 | 30.00 - 60.00% of mass 95 | 47.04 |
| 96 | 5.00 - 9.00% of mass 95 | 8.19 |
| 173 | Less than 2.00% of mass 174 | 0.00 (0.00) |
| 174 | 50.00 - 100.00% of mass 95 | 51.30 |
| 175 | 5.00 - 9.00% of mass 174 | 3.63 (7.07) |
| 176 | 95.00 - 101.00% of mass 174 | 48.74 (95.01) |
| 177 | 5.00 - 9.00% of mass 176 | 3.90 (8.00) |

Date : 13-MAY-2004 07:49

Client ID: BFB

Instrument: H.i

Sample Info: BFB #073-04

Volume Injected (uL): 1.0

Operator: mhoffman

Column phase: DB624

Column diameter: 0.53

Data File: h4139.d

Spectrum: Scan 132 (2.39)

Location of Maximum: 95.05

Number of points: 83

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|-------|-------|-------|-------|--------|-------|--------|-------|
| 36.00 | 997 | 62.00 | 3215 | 88.00 | 3244 | 135.00 | 285 |
| 37.00 | 4205 | 63.00 | 2338 | 91.00 | 607 | 140.90 | 450 |
| 38.00 | 3850 | 64.00 | 244 | 92.00 | 1644 | 142.90 | 416 |
| 39.10 | 1739 | 67.05 | 344 | 92.95 | 2739 | 147.05 | 699 |
| 40.00 | 663 | 68.05 | 6937 | 94.05 | 7410 | 147.85 | 242 |
| 41.05 | 656 | 69.05 | 7897 | 95.05 | 71304 | 163.00 | 210 |
| 42.05 | 219 | 70.05 | 652 | 96.05 | 5838 | 173.95 | 36576 |
| 43.05 | 851 | 71.15 | 474 | 97.05 | 462 | 174.95 | 2586 |
| 44.05 | 3209 | 71.95 | 501 | 102.95 | 369 | 175.95 | 34752 |
| 45.05 | 1054 | 73.05 | 4551 | 103.85 | 416 | 176.95 | 2779 |
| 47.05 | 1426 | 74.05 | 10513 | 104.95 | 344 | 191.00 | 810 |
| 47.95 | 551 | 75.05 | 33544 | 105.85 | 324 | 193.00 | 412 |
| 49.05 | 3245 | 76.05 | 2712 | 115.10 | 268 | 207.05 | 6227 |
| 50.05 | 14673 | 76.95 | 636 | 115.90 | 228 | 208.05 | 1355 |
| 51.05 | 4549 | 77.95 | 517 | 116.90 | 485 | 209.05 | 715 |
| 52.05 | 294 | 78.85 | 1902 | 117.90 | 272 | 219.00 | 312 |
| 55.10 | 685 | 80.00 | 586 | 119.00 | 685 | 253.05 | 396 |
| 56.10 | 1102 | 80.90 | 2006 | 127.95 | 227 | 269.10 | 801 |
| 57.10 | 2498 | 81.90 | 525 | 129.85 | 204 | 270.10 | 241 |
| 60.00 | 862 | 85.10 | 270 | 130.95 | 427 | 281.15 | 718 |
| 61.00 | 3342 | 87.00 | 3245 | 133.00 | 909 | | |

Data File: /chem/H.i/051304.b/h4139.d

Page 1

Date : 13-MAY-2004 07:49

Client ID: BFB

Instrument: H.i

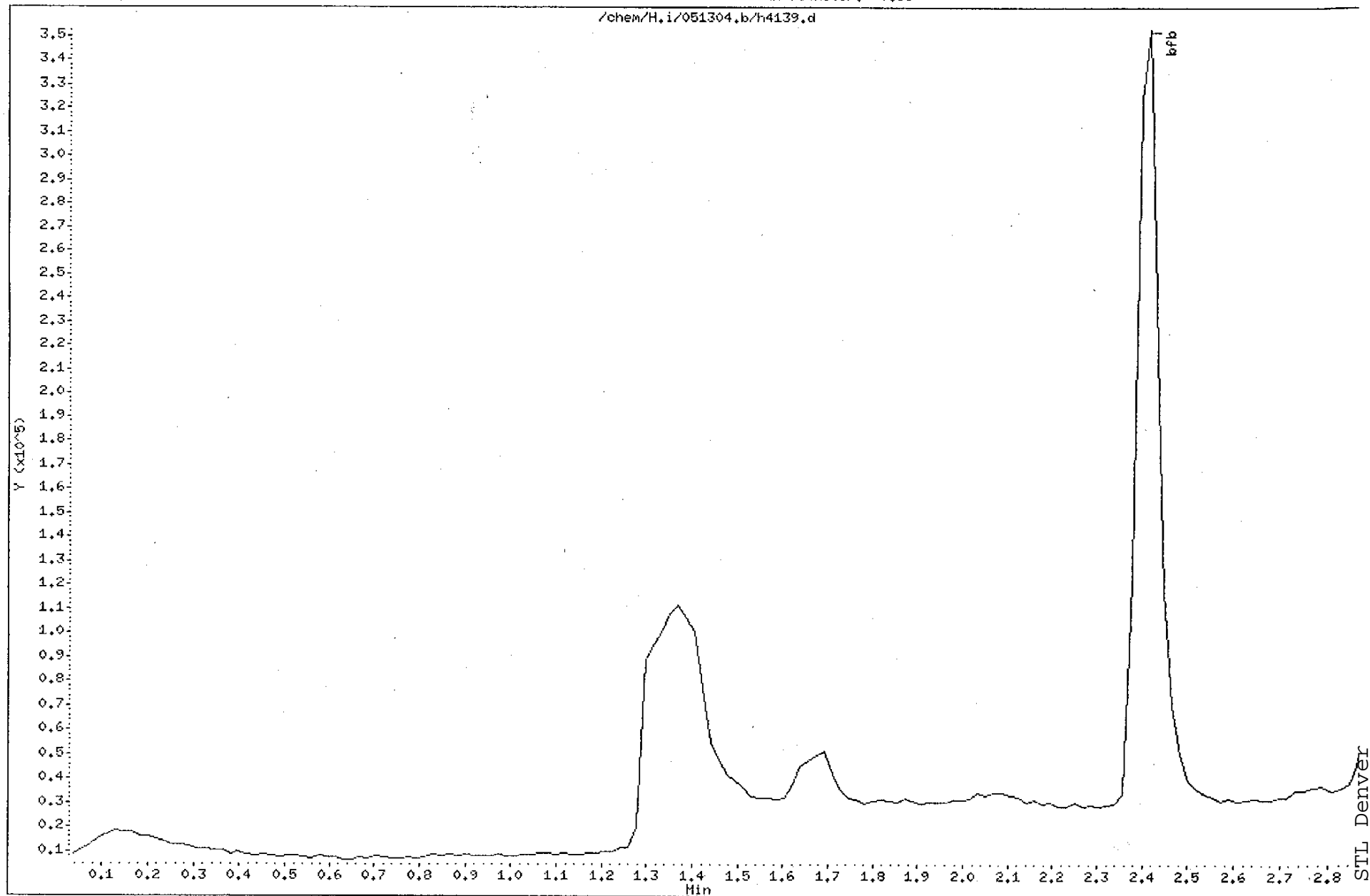
Sample Info: BFB #073-04

Volume Injected (uL): 1.0

Operator: mhoffman

Column phase: DB624

Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/051304.b/h4146.d
Lab Smp Id: SUPP001 Client Smp ID: SUPP001
Inj Date : 13-MAY-2004 09:56
Operator : hoffmanm Inst ID: H.i
Smp Info : SUPP001,,
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/051304.b/H-20ml-h2o.m
Meth Date : 13-May-2004 13:48 hoffmanm Quant Type: ISTD
Cal Date : 13-MAY-2004 10:55 Cal File: h4149.d
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|-------------------------------|-----------|------------------------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 48 Fluorobenzene | 96 | 6.399 | 6.382 | (1.000) | 1581793 | 10.0000 | |
| * 72 Chlorobenzene-d5 | 119 | 10.063 | 10.046 | (1.000) | 341551 | 10.0000 | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.919 | 12.902 | (1.000) | 447802 | 10.0000 | |
| \$ 40 Dibromofluoromethane | 111.00 | Compound Not Detected. | | | | | |
| \$ 44 1,2-Dichloroethane-d4 | 65.00 | Compound Not Detected. | | | | | |
| \$ 61 Toluene-d8 | 98.00 | Compound Not Detected. | | | | | |
| \$ 82 Bromofluorobenzene | 95 | 11.554 | 11.555 | (1.148) | 9476 | 1.00000 | 0.127891 |
| 117 Dichlorotetrafluoroethane | 85 | 1.980 | 1.963 | (0.309) | 72965 | 1.00000 | 0.913353(a) |
| 6 Ethylene Oxide | 43.00 | Compound Not Detected. | | | | | |
| 9 Dichlorofluoromethane | 67 | 2.663 | 2.664 | (0.416) | 87260 | 1.00000 | 0.931509(a) |
| 12 Ethyl Ether | 59 | 2.932 | 2.933 | (0.458) | 16096 | 1.00000 | 0.947668(a) |
| 16 Trichlorotrifluoroethane | 151 | 3.166 | 3.167 | (0.495) | 47083 | 1.00000 | 0.918919(a) |
| 18 Carbon Disulfide | 76 | 3.417 | 3.418 | (0.534) | 136918 | 1.00000 | 0.964179(a) |
| 20 Allyl Chloride | 41 | 3.507 | 3.490 | (0.548) | 68074 | 1.00000 | 0.973888(a) |
| 119 Methyl Acetate | 43 | 3.525 | 3.508 | (0.551) | 46264 | 5.00000 | 4.83643 |
| 25 Methyl t-butyl ether | 73 | 3.920 | 3.903 | (0.613) | 48662 | 1.00000 | 0.957160(a) |

| Compounds | QUANT SIG | | | | | | AMOUNTS | |
|-----------------------------------|-----------|------------------------|--------|---------|----------|---------|-------------|---------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | | CAL-AMT | ON-COL |
| | | | | | | | (ug/L) | (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | | ===== | ===== |
| 26 Hexane | 57 | 4.208 | 4.190 | (0.418) | 70593 | 1.00000 | 0.964924(a) | |
| 29 Vinyl acetate | 43 | 4.405 | 4.406 | (0.688) | 61311 | 2.00000 | 2.19229 | |
| 35 Ethyl Acetate | 43.00 | Compound Not Detected. | | | | | | |
| 39 Tetrahydrofuran | 42 | 5.393 | 5.376 | (0.843) | 6851 | 2.00000 | 2.25719(a) | |
| 120 ETBE | 59 | 4.854 | 4.855 | (0.759) | 447651 | 5.00000 | 4.68231 | |
| 114 Cyclohexane | 56 | 5.699 | 5.699 | (0.891) | 75339 | 1.00000 | 0.978808(a) | |
| 115 2-Pentanone | 43 | 7.046 | 7.029 | (1.101) | 33779 | 4.00000 | 3.53583 | |
| 121 TAME | 73 | 6.201 | 6.184 | (0.969) | 309824 | 5.00000 | 4.62820 | |
| 54 Methyl Methacrylate | 100 | 7.225 | 7.226 | (1.129) | 9622 | 2.00000 | 2.04285 | |
| 122 Methyl Cyclohexane | 55 | 7.064 | 7.064 | (1.104) | 75127 | 1.00000 | 1.00480 | |
| 57 2-nitropropane | 41.00 | Compound Not Detected. | | | | | | |
| 113 2-Chloroethyl vinyl ether | 63 | 7.782 | 7.765 | (0.773) | 3957 | 1.00000 | 0.845251(a) | |
| 64 Ethyl methacrylate | 69 | 8.752 | 8.735 | (0.870) | 40411 | 2.00000 | 1.74862 | |
| 116 cis-1,4-Dichloro-2-butene | 53 | 11.447 | 11.429 | (0.886) | 3598 | 1.00000 | 1.03569 | |
| 86 t-1,4-Dichloro-2-butene | 53 | 11.806 | 11.789 | (0.914) | 3238 | 1.00000 | 0.937096(a) | |
| 118 1,2,3-Trimethylbenzene | 105 | 12.991 | 12.992 | (2.030) | 126209 | 1.00000 | 0.993338(a) | |
| 123 1,2-dichloro-1,1,2-trifluorom | 117 | 2.932 | 2.933 | (0.458) | 61156 | 1.00000 | 0.963824(a) | |
| 124 2,2-dichloro-1,1,1-trifluorom | 83 | 2.986 | 2.987 | (0.467) | 99758 | 1.00000 | 0.975469(a) | |
| 125 2-Propanol | 45 | 3.310 | 3.310 | (0.517) | 12334 | 20.0000 | 20.5943 | |
| 126 Tetrahydrothiophene | 60 | 9.345 | 9.328 | (0.929) | 4957 | 1.00000 | 0.775454(a) | |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4146.d
Lab Smp Id: SUPP001
Analysis Type: VOA
Quant Type: ISTD
Operator: hoffmanm
Method File: /chem/H.i/051304.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/13/4
Calibration Time: 1055
Client Smp ID: SUPP001
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 1540572 | 770286 | 3081144 | 1581793 | 2.68 |
| 72 Chlorobenzene-d5 | 325282 | 162641 | 650564 | 341551 | 5.00 |
| 96 1,4-Dichlorobenze | 424257 | 212128 | 848514 | 447802 | 5.55 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 6.40 | 5.90 | 6.90 | 6.40 | 0.02 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.06 | 0.01 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.92 | 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/H.i/051304.b/h4146.d

Page 4

Date : 13-MAY-2004 09:56

Client ID: SUPP001

Instrument: H.i

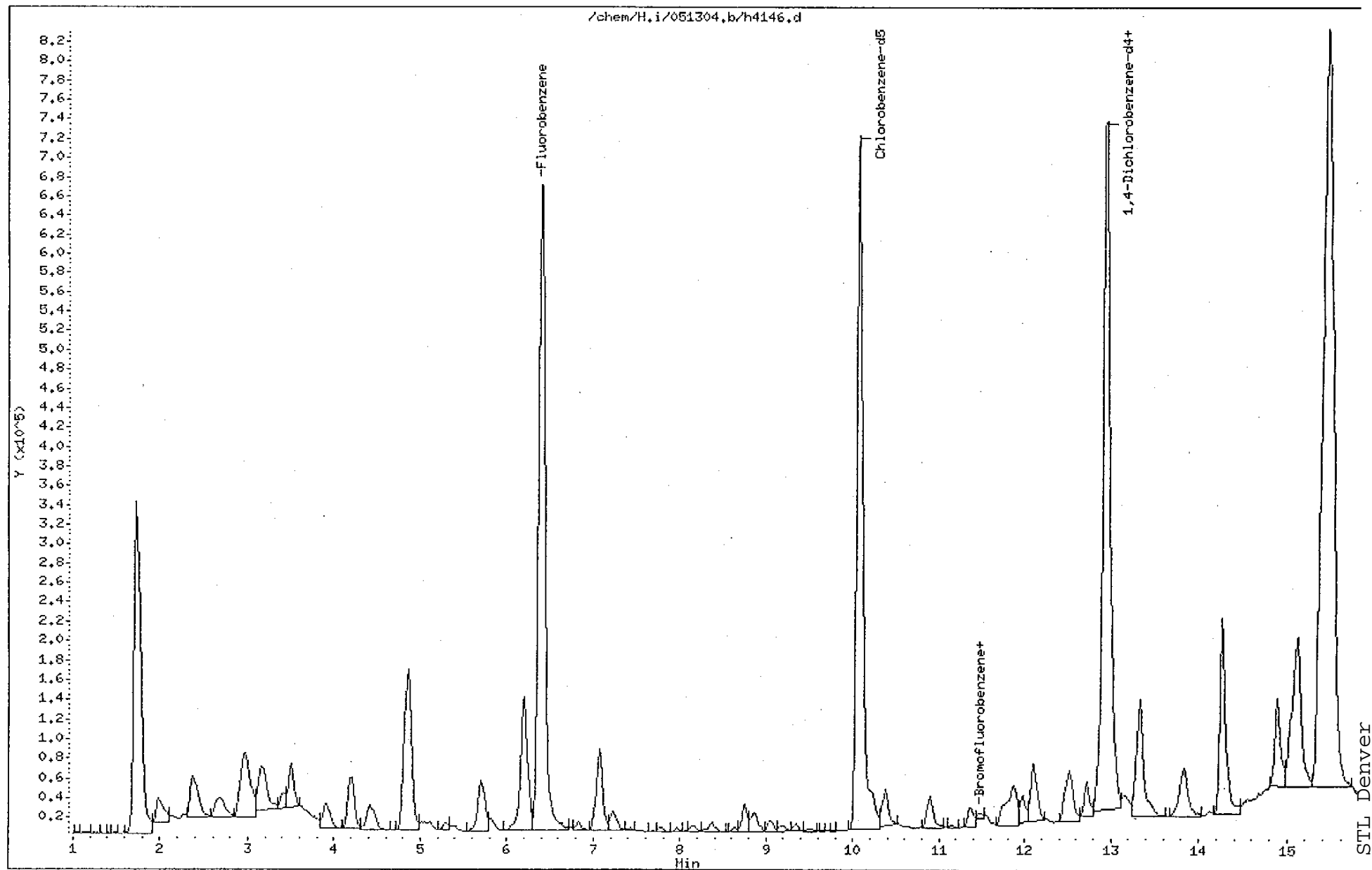
Sample Info: SUPP001,,

Purge Volume: 20.0

Operator: hoffmann

Column phase: DB624

Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/051304.b/h4147.d
Lab Smp Id: SUPP002 Client Smp ID: SUPP002
Inj Date : 13-MAY-2004 10:15
Operator : hoffmanm Inst ID: H.i
Smp Info : SUPP002,,
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/051304.b/H-20ml-h2o.m
Meth Date : 13-May-2004 13:48 hoffmanm Quant Type: ISTD
Cal Date : 13-MAY-2004 10:55 Cal File: h4149.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | AMOUNTS | | | |
|-------------------------------|-----------|--------|----------------|----------|--------------------|-------------------|--|
| | MASS | RT | EXP RT REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) | |
| * 48 Fluorobenzene | 96 | 6.383 | 6.382 (1.000) | 1565543 | 10.0000 | | |
| * 72 Chlorobenzene-d5 | 119 | 10.065 | 10.046 (1.000) | 332549 | 10.0000 | | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.921 | 12.902 (1.000) | 429640 | 10.0000 | | |
| \$ 40 Dibromofluoromethane | 111 | 5.592 | 5.592 (0.876) | 138917 | 2.00000 | 1.97684 | |
| \$ 44 1,2-Dichloroethane-d4 | 65 | 5.987 | 5.987 (0.938) | 55299 | 2.00000 | 1.96232 | |
| \$ 61 Toluene-d8 | 98 | 8.287 | 8.286 (0.823) | 276977 | 2.00000 | 2.00915 | |
| \$ 82 Bromofluorobenzene | 95 | 11.556 | 11.555 (1.148) | 150623 | 2.00000 | 2.04300 | |
| 117 Dichlorotetrafluoroethane | 85 | 1.982 | 1.963 (0.310) | 157859 | 2.00000 | 1.99769(a) | |
| 6 Ethylene Oxide | 43 | 2.377 | 2.358 (0.372) | 100322 | 250.000 | 228.762 | |
| 9 Dichlorofluoromethane | 67 | 2.664 | 2.664 (0.417) | 182152 | 2.00000 | 1.97631 | |
| 12 Ethyl Ether | 59 | 2.934 | 2.933 (0.460) | 33429 | 2.00000 | 1.99238(a) | |
| 16 Trichlorotrifluoroethane | 151 | 3.185 | 3.167 (0.499) | 102187 | 2.00000 | 2.01003 | |
| 18 Carbon Disulfide | 76 | 3.419 | 3.418 (0.536) | 276788 | 2.00000 | 1.97948 | |
| 20 Allyl Chloride | 41 | 3.508 | 3.490 (0.550) | 132542 | 2.00000 | 1.94312(a) | |
| 119 Methyl Acetate | 43 | 3.508 | 3.508 (0.550) | 94337 | 10.0000 | 9.97620 | |
| 25 Methyl t-butyl ether | 73 | 3.922 | 3.903 (0.614) | 100560 | 2.00000 | 1.99900(a) | |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 26 Hexane | 57 | 4.209 | 4.190 | (0.418) | 135421 | 2.00000 | 1.93300 |
| 29 Vinyl acetate | 43 | 4.407 | 4.406 | (0.690) | 86161 | 4.00000 | 3.36133 |
| 35 Ethyl Acetate | 43 | 5.107 | 5.089 | (0.800) | 44742 | 4.00000 | 3.94732 (a) |
| 39 Tetrahydrofuran | 42 | 5.395 | 5.376 | (0.845) | 11477 | 4.00000 | 3.87856 (a) |
| 120 ETBE | 59 | 4.856 | 4.855 | (0.761) | 922770 | 10.0000 | 9.83336 |
| 114 Cyclohexane | 56 | 5.700 | 5.699 | (0.893) | 145776 | 2.00000 | 1.94155 (a) |
| 115 2-Pentanone | 43 | 7.047 | 7.029 | (1.104) | 76597 | 8.00000 | 8.06708 |
| 121 TAME | 73 | 6.203 | 6.184 | (0.972) | 638039 | 10.0000 | 9.75030 |
| 54 Methyl Methacrylate | 100 | 7.227 | 7.226 | (1.132) | 18688 | 4.00000 | 4.00589 |
| 122 Methyl Cyclohexane | 55 | 7.065 | 7.064 | (1.107) | 138961 | 2.00000 | 1.91687 |
| 57 2-nitropropane | 41 | 7.694 | 7.675 | (0.764) | 4034 | 2.00000 | 1.64122 (a) |
| 113 2-Chloroethyl vinyl ether | 63 | 7.784 | 7.765 | (0.773) | 8307 | 2.00000 | 1.87805 (a) |
| 64 Ethyl methacrylate | 69 | 8.754 | 8.735 | (0.870) | 92472 | 4.00000 | 4.07245 |
| 116 cis-1,4-Dichloro-2-butene | 53 | 11.448 | 11.429 | (0.886) | 5802 | 2.00000 | 1.81933 |
| 86 t-1,4-Dichloro-2-butene | 53 | 11.807 | 11.789 | (0.914) | 6140 | 2.00000 | 1.89889 |
| 118 1,2,3-Trimethylbenzene | 105 | 12.993 | 12.992 | (2.036) | 238592 | 2.00000 | 1.93038 (a) |
| 123 1,2-dichloro-1,1,2-trifluorom | 117 | 2.934 | 2.933 | (0.460) | 124852 | 2.00000 | 1.99205 (a) |
| 124 2,2-dichloro-1,1,1-trifluorom | 83 | 2.988 | 2.987 | (0.468) | 195028 | 2.00000 | 1.95063 (a) |
| 125 2-Propanol | 45 | 3.311 | 3.310 | (0.519) | 21037 | 40.0000 | 36.8762 |
| 126 Tetrahydrothiophene | 60 | 9.346 | 9.328 | (0.929) | 10310 | 2.00000 | 1.81212 (a) |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4147.d
Lab Smp Id: SUPP002
Analysis Type: VOA
Quant Type: ISTD
Operator: hoffmann
Method File: /chem/H.i/051304.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/13/4
Calibration Time: 1055
Client Smp ID: SUPP002
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 1540572 | 770286 | 3081144 | 1565543 | 1.62 |
| 72 Chlorobenzene-d5 | 325282 | 162641 | 650564 | 332549 | 2.23 |
| 96 1,4-Dichlorobenze | 424257 | 212128 | 848514 | 429640 | 1.27 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 6.40 | 5.90 | 6.90 | 6.38 | -0.24 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.06 | 0.03 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.92 | 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/H,i/051304.b/h4147.d

Page 4

Date : 13-MAY-2004 10:15

Client ID: SUPP002

Instrument: H.i

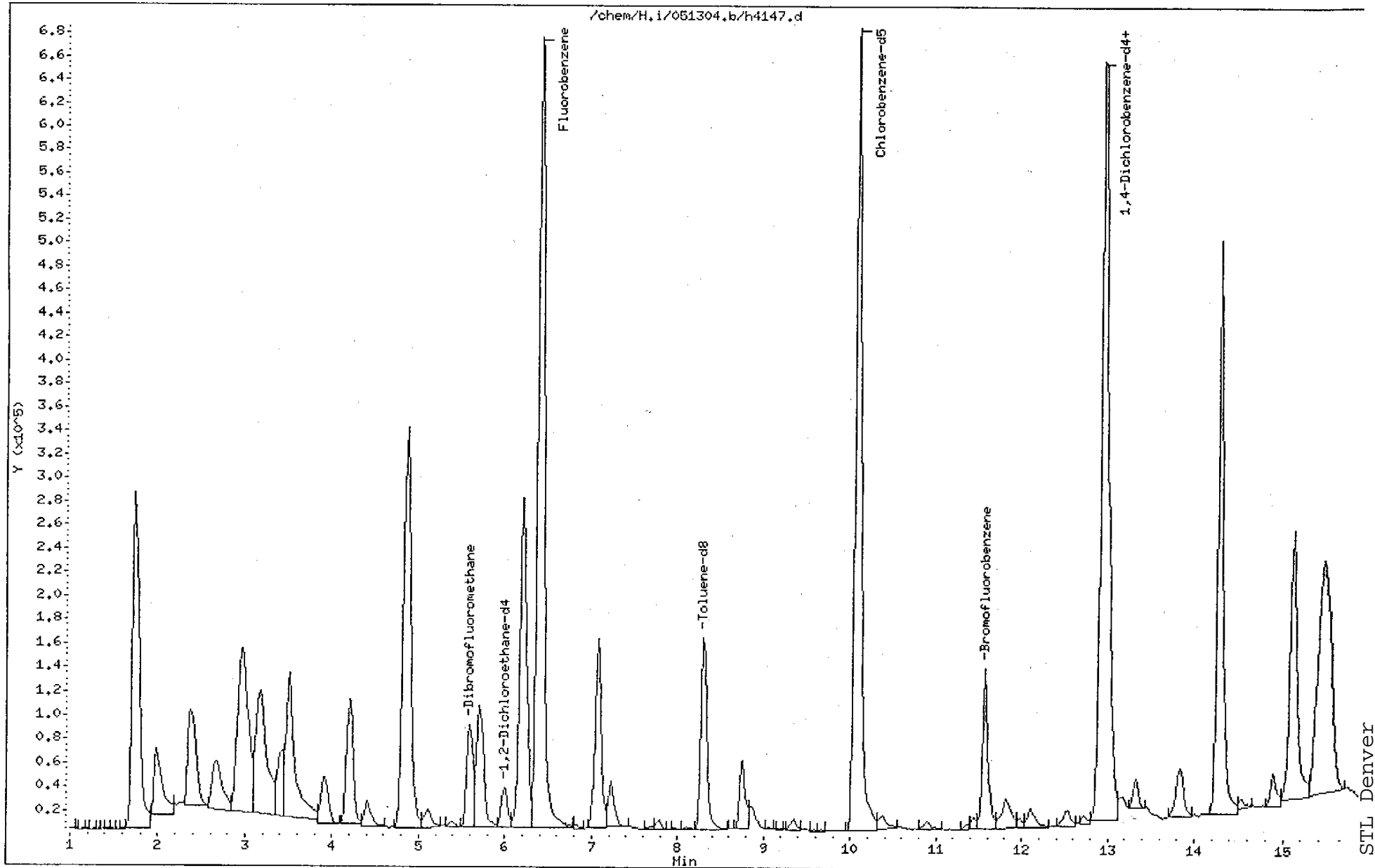
Sample Info: SUPP002,,

Purge Volume: 20.0

Operator: hoffmann

Column phase: DB624

Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/051304.b/h4148.d
Lab Smp Id: SUPP005 Client Smp ID: SUPP005
Inj Date : 13-MAY-2004 10:35
Operator : hoffmanm Inst ID: H.i
Smp Info : SUPP005,,
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/051304.b/H-20ml-h2o.m
Meth Date : 13-May-2004 13:48 hoffmanm Quant Type: ISTD
Cal Date : 13-MAY-2004 10:55 Cal File: h4149.d
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|-------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 48 Fluorobenzene | 96 | 6.397 | 6.382 | (1.000) | 1568502 | 10.0000 | |
| * 72 Chlorobenzene-d5 | 119 | 10.061 | 10.046 | (1.000) | 333351 | 10.0000 | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.917 | 12.902 | (1.000) | 441362 | 10.0000 | |
| \$ 40 Dibromofluoromethane | 111 | 5.588 | 5.592 | (0.874) | 355135 | 5.00000 | 5.02937 |
| \$ 44 1,2-Dichloroethane-d4 | 65 | 6.001 | 5.987 | (0.938) | 143415 | 5.00000 | 5.05276 |
| \$ 61 Toluene-d8 | 98 | 8.301 | 8.286 | (0.825) | 690197 | 5.00000 | 4.99636 |
| \$ 82 Bromofluorobenzene | 95 | 11.552 | 11.555 | (1.148) | 364299 | 5.00000 | 4.95267 |
| 117 Dichlorotetrafluoroethane | 85 | 1.978 | 1.963 | (0.309) | 413783 | 5.00000 | 5.16798 |
| 6 Ethylene Oxide | 43 | 2.373 | 2.358 | (0.371) | 280894 | 625.000 | 634.466 |
| 9 Dichlorofluoromethane | 67 | 2.678 | 2.664 | (0.419) | 483109 | 5.00000 | 5.17181 |
| 12 Ethyl Ether | 59 | 2.930 | 2.933 | (0.458) | 85799 | 5.00000 | 5.07760 |
| 16 Trichlorotrifluoroethane | 151 | 3.181 | 3.167 | (0.497) | 261661 | 5.00000 | 5.10220 |
| 18 Carbon Disulfide | 76 | 3.415 | 3.418 | (0.534) | 709804 | 5.00000 | 5.04983 |
| 20 Allyl Chloride | 41 | 3.505 | 3.490 | (0.548) | 340217 | 5.00000 | 4.98371 |
| 119 Methyl Acetate | 43 | 3.523 | 3.508 | (0.551) | 239887 | 25.0000 | 25.2395 |
| 25 Methyl t-butyl ether | 73 | 3.918 | 3.903 | (0.612) | 258141 | 5.00000 | 5.09082 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 26 Hexane | 57 | 4.205 | 4.190 | (0.418) | 356674 | 5.00000 | 5.05895 |
| 29 Vinyl acetate | 43 | 4.403 | 4.406 | (0.688) | 241180 | 10.0000 | 9.53636 |
| 35 Ethyl Acetate | 43 | 5.103 | 5.089 | (0.798) | 110717 | 10.0000 | 9.83158 |
| 39 Tetrahydrofuran | 42 | 5.391 | 5.376 | (0.843) | 25021 | 10.0000 | 8.78227 |
| 120 ETBE | 59 | 4.852 | 4.855 | (0.759) | 2404067 | 25.0000 | 25.4253 |
| 114 Cyclohexane | 56 | 5.714 | 5.699 | (0.893) | 380006 | 5.00000 | 5.03863 |
| 115 2-Pentanone | 43 | 7.043 | 7.029 | (1.101) | 205353 | 20.0000 | 21.1668 |
| 121 TAME | 73 | 6.199 | 6.184 | (0.969) | 1671059 | 25.0000 | 25.3645 |
| 54 Methyl Methacrylate | 100 | 7.223 | 7.226 | (1.129) | 45149 | 10.0000 | 9.74260 |
| 122 Methyl Cyclohexane | 55 | 7.061 | 7.064 | (1.104) | 345270 | 5.00000 | 4.81304 |
| 57 2-nitropropane | 41 | 7.690 | 7.675 | (0.764) | 15483 | 5.00000 | 5.78854 |
| 113 2-Chloroethyl vinyl ether | 63 | 7.780 | 7.765 | (0.773) | 21846 | 5.00000 | 4.94510 (a) |
| 64 Ethyl methacrylate | 69 | 8.750 | 8.735 | (0.870) | 239234 | 10.0000 | 10.3780 |
| 116 cis-1,4-Dichloro-2-butene | 53 | 11.444 | 11.429 | (0.886) | 14254 | 5.00000 | 4.49686 |
| 86 t-1,4-Dichloro-2-butene | 53 | 11.803 | 11.789 | (0.914) | 16037 | 5.00000 | 4.86985 |
| 118 1,2,3-Trimethylbenzene | 105 | 12.989 | 12.992 | (2.031) | 629808 | 5.00000 | 5.06420 |
| 123 1,2-dichloro-1,1,2-trifluorom | 117 | 2.948 | 2.933 | (0.461) | 316253 | 5.00000 | 5.02725 |
| 124 2,2-dichloro-1,1,1-trifluorom | 83 | 2.984 | 2.987 | (0.466) | 503059 | 5.00000 | 5.01648 |
| 125 2-Propanol | 45 | 3.325 | 3.310 | (0.520) | 56131 | 100.000 | 98.6497 |
| 126 Tetrahydrothiophene | 60 | 9.342 | 9.328 | (0.929) | 28677 | 5.00000 | 5.01880 |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4148.d
Lab Smp Id: SUPP005
Analysis Type: VOA
Quant Type: ISTD
Operator: hoffmanm
Method File: /chem/H.i/051304.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/13/4
Calibration Time: 1055
Client Smp ID: SUPP005
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 1540572 | 770286 | 3081144 | 1568502 | 1.81 |
| 72 Chlorobenzene-d5 | 325282 | 162641 | 650564 | 333351 | 2.48 |
| 96 1,4-Dichlorobenze | 424257 | 212128 | 848514 | 441362 | 4.03 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 6.40 | 5.90 | 6.90 | 6.40 | -0.02 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.06 | -0.01 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.92 | -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/H.i/051304.b/h4148.d

Date : 13-MAY-2004 10:35

Client ID: SUPP005

Sample Info: SUPP005,,

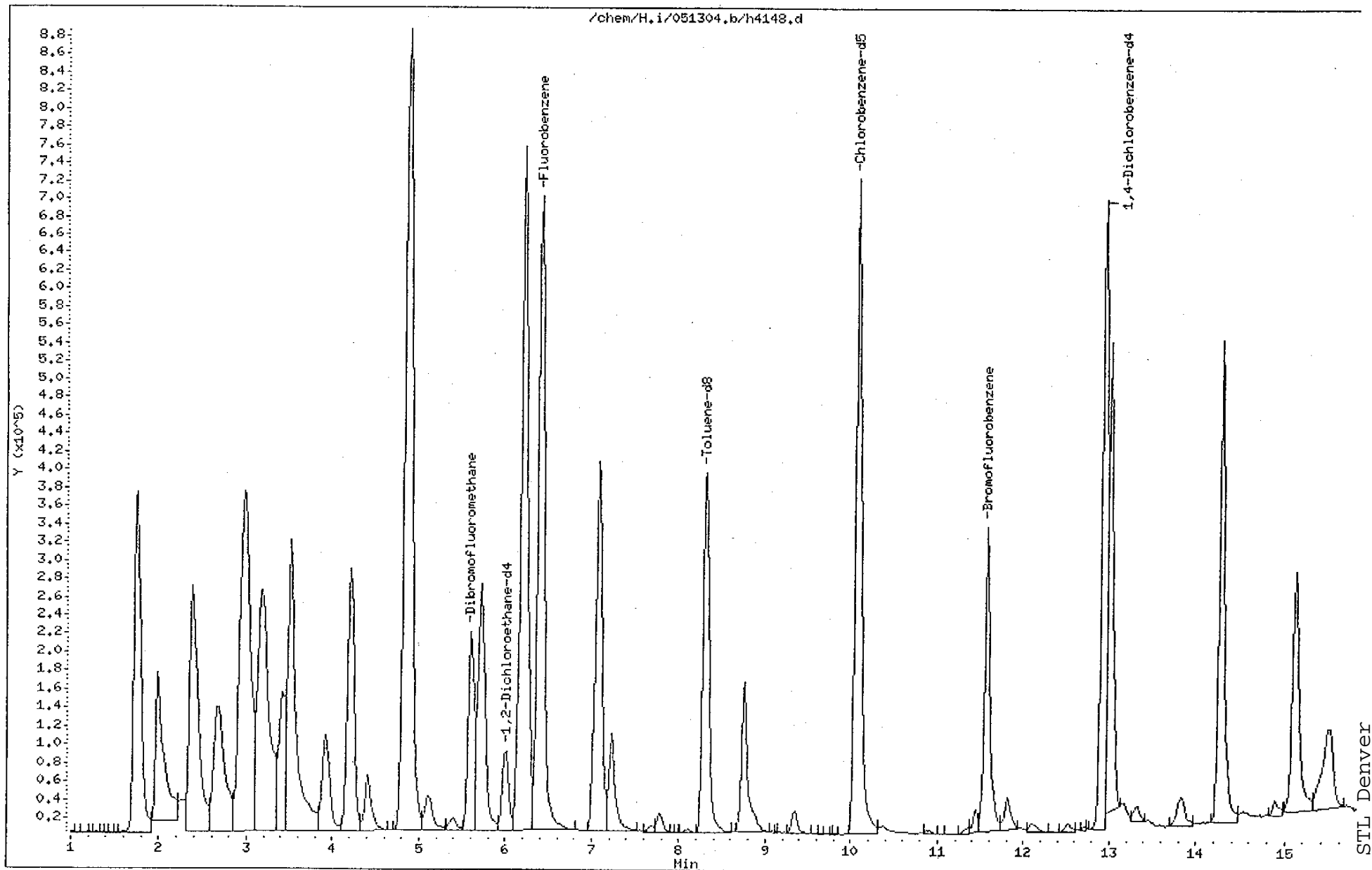
Purge Volume: 20.0

Column phase: DB624

Instrument: H.i

Operator: hoffmann

Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/051304.b/h4149.d
Lab Smp Id: SUPP010 Client Smp ID: SUPP010
Inj Date : 13-MAY-2004 10:55
Operator : hoffmanm Inst ID: H.i
Smp Info : SUPP010,,
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/051304.b/H-20ml-h2o.m
Meth Date : 13-May-2004 13:48 hoffmanm Quant Type: ISTD
Cal Date : 13-MAY-2004 10:55 Cal File: h4149.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supplsub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|-------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 48 Fluorobenzene | 96 | 6.398 | 6.382 | (1.000) | 1540572 | 10.0000 | |
| * 72 Chlorobenzene-d5 | 119 | 10.062 | 10.046 | (1.000) | 325282 | 10.0000 | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.918 | 12.902 | (1.000) | 424257 | 10.0000 | |
| \$ 40 Dibromofluoromethane | 111 | 5.589 | 5.592 | (0.874) | 699518 | 10.0000 | 10.0861 |
| \$ 44 1,2-Dichloroethane-d4 | 65 | 5.984 | 5.987 | (0.935) | 282535 | 10.0000 | 10.1347 |
| \$ 61 Toluene-d8 | 98 | 8.284 | 8.286 | (0.823) | 1342282 | 10.0000 | 9.95787 |
| \$ 82 Bromofluorobenzene | 95 | 11.553 | 11.555 | (1.148) | 705648 | 10.0000 | 9.83131 |
| 117 Dichlorotetrafluoroethane | 85 | 1.979 | 1.963 | (0.309) | 845467 | 10.0000 | 10.7510 |
| 6 Ethylene Oxide | 43 | 2.374 | 2.358 | (0.371) | 585261 | 1250.00 | 1345.92 |
| 9 Dichlorofluoromethane | 67 | 2.661 | 2.664 | (0.416) | 974836 | 10.0000 | 10.6251 |
| 12 Ethyl Ether | 59 | 2.931 | 2.933 | (0.458) | 174079 | 10.0000 | 10.4888 |
| 16 Trichlorotrifluoroethane | 151 | 3.182 | 3.167 | (0.497) | 539483 | 10.0000 | 10.7102 |
| 18 Carbon Disulfide | 76 | 3.416 | 3.418 | (0.534) | 1432584 | 10.0000 | 10.3768 |
| 20 Allyl Chloride | 41 | 3.506 | 3.490 | (0.548) | 698553 | 10.0000 | 10.4183 |
| 119 Methyl Acetate | 43 | 3.506 | 3.508 | (0.548) | 481061 | 50.0000 | 51.5320 |
| 25 Methyl t-butyl ether | 73 | 3.919 | 3.903 | (0.613) | 516363 | 10.0000 | 10.3678 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ---- | == | ===== | ===== | ===== | ===== | ===== |
| 26 Hexane | 57 | 4.206 | 4.190 | (0.418) | 721183 | 10.0000 | 10.4828 |
| 29 Vinyl acetate | 43 | 4.404 | 4.406 | (0.688) | 492382 | 20.0000 | 19.8220 |
| 35 Ethyl Acetate | 43 | 5.104 | 5.089 | (0.798) | 226017 | 20.0000 | 20.4340 |
| 39 Tetrahydrofuran | 42 | 5.392 | 5.376 | (0.843) | 51519 | 20.0000 | 18.4108 |
| 120 ETBE | 59 | 4.853 | 4.855 | (0.759) | 4951479 | 50.0000 | 53.3159 |
| 114 Cyclohexane | 56 | 5.715 | 5.699 | (0.893) | 765530 | 10.0000 | 10.3344 |
| 115 2-Pentanone | 43 | 7.044 | 7.029 | (1.101) | 415364 | 40.0000 | 43.5900 |
| 121 TAME | 73 | 6.200 | 6.184 | (0.969) | 3502312 | 50.0000 | 54.1243 |
| 54 Methyl Methacrylate | 100 | 7.224 | 7.226 | (1.129) | 89781 | 20.0000 | 19.7249 |
| 122 Methyl Cyclohexane | 55 | 7.062 | 7.064 | (1.104) | 724703 | 10.0000 | 10.2854 |
| 57 2-nitropropane | 41 | 7.691 | 7.675 | (0.764) | 28355 | 10.0000 | 10.8639 |
| 113 2-Chloroethyl vinyl ether | 63 | 7.781 | 7.765 | (0.773) | 51484 | 10.0000 | 11.9431 |
| 64 Ethyl methacrylate | 69 | 8.751 | 8.735 | (0.870) | 495513 | 20.0000 | 22.0287 |
| 116 cis-1,4-Dichloro-2-butene | 53 | 11.427 | 11.429 | (0.885) | 31739 | 10.0000 | 10.4167 |
| 86 t-1,4-Dichloro-2-butene | 53 | 11.804 | 11.789 | (0.914) | 34795 | 10.0000 | 10.9923 |
| 118 1,2,3-Trimethylbenzene | 105 | 12.990 | 12.992 | (2.030) | 1245687 | 10.0000 | 10.1980 |
| 123 1,2-dichloro-1,1,2-trifluorom | 117 | 2.931 | 2.933 | (0.458) | 640335 | 10.0000 | 10.3635 |
| 124 2,2-dichloro-1,1,1-trifluorom | 83 | 2.985 | 2.987 | (0.467) | 1020449 | 10.0000 | 10.3604 |
| 125 2-Propanol | 45 | 3.308 | 3.310 | (0.517) | 113193 | 200.000 | 202.542 |
| 126 Tetrahydrothiophene | 60 | 9.343 | 9.328 | (0.929) | 60879 | 10.0000 | 10.9188 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4149.d
Lab Smp Id: SUPP010
Analysis Type: VOA
Quant Type: ISTD
Operator: hoffmanm
Method File: /chem/H.i/051304.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/13/4
Calibration Time: 1055
Client Smp ID: SUPP010
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 1540572 | 770286 | 3081144 | 1540572 | 0.00 |
| 72 Chlorobenzene-d5 | 325282 | 162641 | 650564 | 325282 | 0.00 |
| 96 1,4-Dichlorobenze | 424257 | 212128 | 848514 | 424257 | 0.00 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 6.40 | 5.90 | 6.90 | 6.40 | 0.00 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.06 | 0.00 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.92 | 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/H.i/051304.b/h4149.d

Page 4

Date : 13-MAY-2004 10:55

Client ID: SUPP010

Instrument: H.i

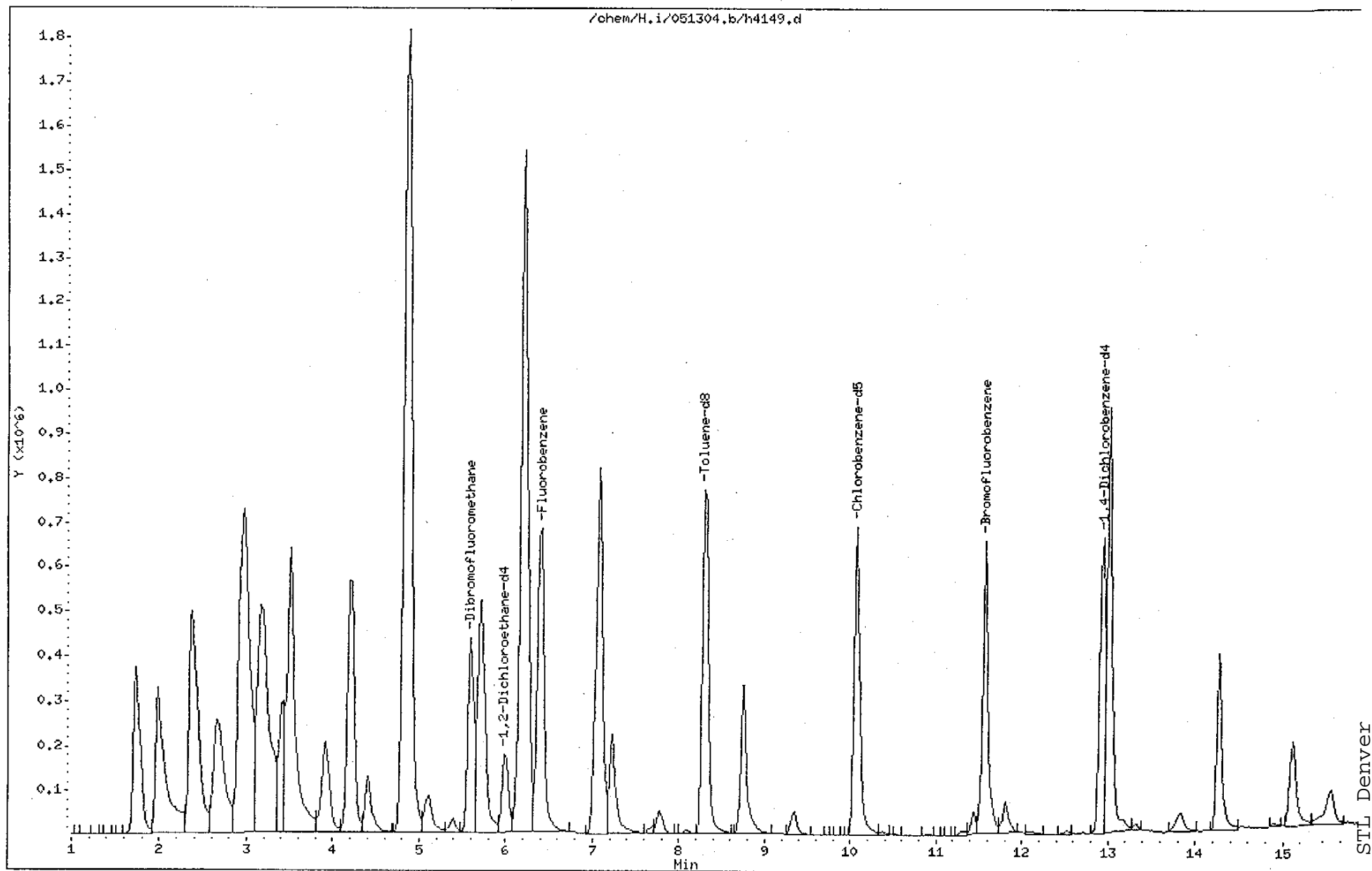
Sample Info: SUPP010,,

Purge Volume: 20.0

Operator: hoffmann

Column phase: DB624

Column diameter: 0,53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/051304.b/h4150.d
Lab Smp Id: SUPP030 Client Smp ID: SUPP030
Inj Date : 13-MAY-2004 11:14
Operator : hoffmanm Inst ID: H.i
Smp Info : SUPP030,,
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/051304.b/H-20ml-h2o.m
Meth Date : 13-May-2004 13:48 hoffmanm Quant Type: ISTD
Cal Date : 13-MAY-2004 11:14 Cal File: h4150.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-suppl.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|-------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 48 Fluorobenzene | 96 | 6.397 | 6.382 | (1.000) | 1503779 | 10.0000 | |
| * 72 Chlorobenzene-d5 | 119 | 10.061 | 10.046 | (1.000) | 316190 | 10.0000 | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.918 | 12.902 | (1.000) | 408757 | 10.0000 | |
| \$ 40 Dibromofluoromethane | 111 | 5.589 | 5.592 | (0.874) | 1013021 | 15.0000 | 15.1935 |
| \$ 44 1,2-Dichloroethane-d4 | 65 | 5.984 | 5.987 | (0.935) | 398890 | 15.0000 | 14.7424 |
| \$ 61 Toluene-d8 | 98 | 8.283 | 8.286 | (0.823) | 1974375 | 15.0000 | 15.0512 |
| \$ 82 Bromofluorobenzene | 95 | 11.552 | 11.555 | (1.148) | 1031917 | 15.0000 | 14.8422 |
| 117 Dichlorotetrafluoroethane | 85 | 1.978 | 1.963 | (0.309) | 2418251 | 30.0000 | 31.1904 |
| 6 Ethylene Oxide | 43 | 2.373 | 2.358 | (0.371) | 1714632 | 3750.00 | 3963.08 |
| 9 Dichlorofluoromethane | 67 | 2.661 | 2.664 | (0.416) | 2870616 | 30.0000 | 31.6205 |
| 12 Ethyl Ether | 59 | 2.930 | 2.933 | (0.458) | 508053 | 30.0000 | 31.0788 |
| 16 Trichlorotrifluoroethane | 151 | 3.182 | 3.167 | (0.497) | 1504677 | 30.0000 | 30.4804 |
| 18 Carbon Disulfide | 76 | 3.415 | 3.418 | (0.534) | 4125244 | 30.0000 | 30.4875 |
| 20 Allyl Chloride | 41 | 3.505 | 3.490 | (0.548) | 2036978 | 30.0000 | 30.8919 |
| 119 Methyl Acetate | 43 | 3.505 | 3.508 | (0.548) | 1433024 | 150.000 | 155.755 |
| 25 Methyl t-butyl ether | 73 | 3.918 | 3.903 | (0.613) | 1550110 | 30.0000 | 31.4897 |

| Compounds | QUANT SIG | | | | | | AMOUNTS | |
|-----------------------------------|-----------|--------|--------|---------|----------|---------|---------|--|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT | ON-COL | |
| | | | | | | (ug/L) | (ug/L) | |
| ===== | ---- | == | ===== | ===== | ===== | ===== | ===== | |
| 26 Hexane | 57 | 4.188 | 4.190 | (0.416) | 2082795 | 30.0000 | 30.9091 | |
| 29 Vinyl acetate | 43 | 4.403 | 4.406 | (0.688) | 1463445 | 60.0000 | 60.2843 | |
| 35 Ethyl Acetate | 43 | 5.104 | 5.089 | (0.798) | 679533 | 60.0000 | 62.1777 | |
| 39 Tetrahydrofuran | 42 | 5.373 | 5.376 | (0.840) | 148478 | 60.0000 | 55.4001 | |
| 120 ETBE | 59 | 4.852 | 4.855 | (0.759) | 15127528 | 150.000 | 163.202 | |
| 114 Cyclohexane | 56 | 5.697 | 5.699 | (0.890) | 2151337 | 30.0000 | 29.8021 | |
| 115 2-Pentanone | 43 | 7.026 | 7.029 | (1.098) | 1244573 | 120.000 | 130.797 | |
| 121 TAME | 73 | 6.200 | 6.184 | (0.969) | 10559924 | 150.000 | 163.440 | |
| 54 Methyl Methacrylate | 100 | 7.223 | 7.226 | (1.129) | 268244 | 60.0000 | 60.2997 | |
| 122 Methyl Cyclohexane | 55 | 7.062 | 7.064 | (1.104) | 2058549 | 30.0000 | 29.9448 | |
| 57 2-nitropropane | 41 | 7.672 | 7.675 | (0.763) | 87001 | 30.0000 | 33.1078 | |
| 113 2-Chloroethyl vinyl ether | 63 | 7.780 | 7.765 | (0.773) | 179576 | 30.0000 | 39.4725 | |
| 64 Ethyl methacrylate | 69 | 8.732 | 8.735 | (0.868) | 1476781 | 60.0000 | 65.8842 | |
| 116 cis-1,4-Dichloro-2-butene | 53 | 11.427 | 11.429 | (0.885) | 102457 | 30.0000 | 33.7971 | |
| 86 t-1,4-Dichloro-2-butene | 53 | 11.804 | 11.789 | (0.914) | 103475 | 30.0000 | 33.0622 | |
| 118 1,2,3-Trimethylbenzene | 105 | 12.989 | 12.992 | (2.030) | 3538351 | 30.0000 | 29.7402 | |
| 123 1,2-dichloro-1,1,2-trifluorom | 117 | 2.930 | 2.933 | (0.458) | 1822298 | 30.0000 | 30.1714 | |
| 124 2,2-dichloro-1,1,1-trifluorom | 83 | 2.984 | 2.987 | (0.466) | 2912576 | 30.0000 | 30.2348 | |
| 125 2-Propanol | 45 | 3.308 | 3.310 | (0.517) | 324173 | 600.000 | 595.393 | |
| 126 Tetrahydrothiophene | 60 | 9.325 | 9.328 | (0.927) | 184661 | 30.0000 | 32.9536 | |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4150.d
Lab Smp Id: SUPP030
Analysis Type: VOA
Quant Type: ISTD
Operator: hoffmanm
Method File: /chem/H.i/051304.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/13/4
Calibration Time: 1055
Client Smp ID: SUPP030
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 1540572 | 770286 | 3081144 | 1503779 | -2.39 |
| 72 Chlorobenzene-d5 | 325282 | 162641 | 650564 | 316190 | -2.80 |
| 96 1,4-Dichlorobenze | 424257 | 212128 | 848514 | 408757 | -3.65 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 6.40 | 5.90 | 6.90 | 6.40 | -0.01 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.06 | 0.00 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.92 | 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/H.i/051304.b/h4150.d

Page 4

Date : 13-MAY-2004 11:14

Client ID: SUPP030

Sample Info: SUPP030,,

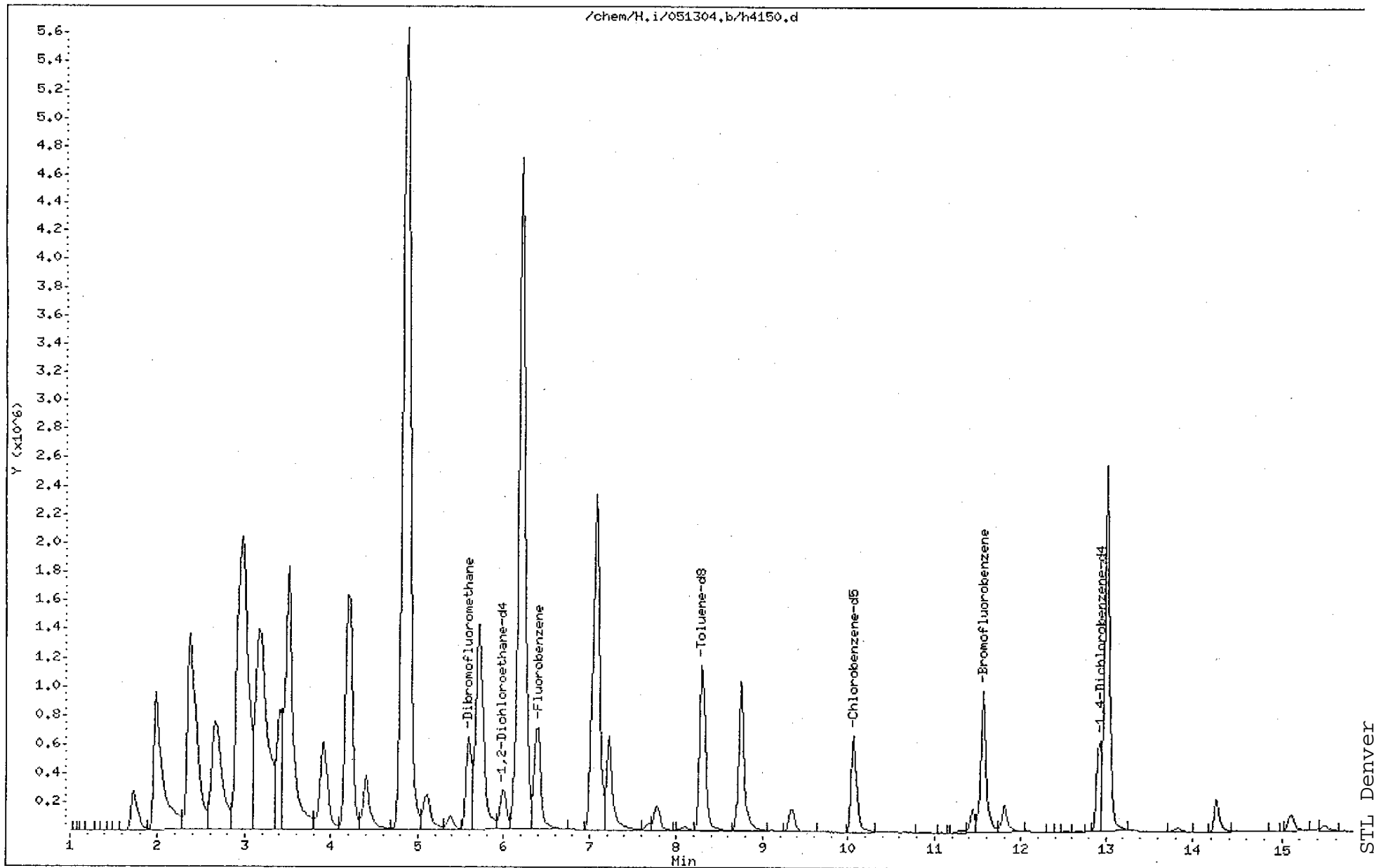
Purge Volume: 20.0

Column phase: DB624

Instrument: H.i

Operator: hoffmann

Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/051304.b/h4151.d
Lab Smp Id: SUPP060 Client Smp ID: SUPP060
Inj Date : 13-MAY-2004 11:34
Operator : hoffmanm Inst ID: H.i
Smp Info : SUPP060,,
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/051304.b/H-20ml-h2o.m
Meth Date : 13-May-2004 13:48 hoffmanm Quant Type: ISTD
Cal Date : 13-MAY-2004 11:34 Cal File: h4151.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | | RESPONSE | AMOUNTS | |
|-------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 48 Fluorobenzene | 96 | 6.382 | 6.382 | (1.000) | 1489279 | 10.0000 | |
| * 72 Chlorobenzene-d5 | 119 | 10.046 | 10.046 | (1.000) | 302093 | 10.0000 | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.902 | 12.902 | (1.000) | 397972 | 10.0000 | |
| \$ 40 Dibromofluoromethane | 111 | 5.592 | 5.592 | (0.876) | 1376896 | 20.0000 | 20.3571 |
| \$ 44 1,2-Dichloroethane-d4 | 65 | 5.987 | 5.987 | (0.938) | 516403 | 20.0000 | 19.4128 |
| \$ 61 Toluene-d8 | 98 | 8.286 | 8.286 | (0.825) | 2558117 | 20.0000 | 20.3276 |
| \$ 82 Bromofluorobenzene | 95 | 11.555 | 11.555 | (1.150) | 1308751 | 20.0000 | 19.7612 |
| 117 Dichlorotetrafluoroethane | 85 | 1.963 | 1.963 | (0.308) | 4817308 | 60.0000 | 62.2646(A) |
| 6 Ethylene Oxide | 43 | 2.358 | 2.358 | (0.370) | 3088061 | 7500.00 | 7263.78 |
| 9 Dichlorofluoromethane | 67 | 2.664 | 2.664 | (0.417) | 5924572 | 60.0000 | 64.8341(A) |
| 12 Ethyl Ether | 59 | 2.933 | 2.933 | (0.460) | 1035256 | 60.0000 | 63.2524(A) |
| 16 Trichlorotrifluoroethane | 151 | 3.167 | 3.167 | (0.496) | 3018978 | 60.0000 | 61.4522(A) |
| 18 Carbon Disulfide | 76 | 3.418 | 3.418 | (0.536) | 8402483 | 60.0000 | 62.2356(A) |
| 20 Allyl Chloride | 41 | 3.490 | 3.490 | (0.547) | 4190708 | 60.0000 | 63.4377(A) |
| 119 Methyl Acetate | 43 | 3.508 | 3.508 | (0.550) | 2972579 | 300.000 | 321.548(A) |
| 25 Methyl t-butyl ether | 73 | 3.903 | 3.903 | (0.612) | 3202174 | 60.0000 | 64.6630(A) |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 26 Hexane | 57 | 4.190 | 4.190 | (0.417) | 4256270 | 60.0000 | 65.0079 (A) |
| 29 Vinyl acetate | 43 | 4.406 | 4.406 | (0.690) | 3032859 | 120.000 | 125.082 (A) |
| 35 Ethyl Acetate | 43 | 5.089 | 5.089 | (0.797) | 1376931 | 120.000 | 125.705 (A) |
| 39 Tetrahydrofuran | 42 | 5.376 | 5.376 | (0.842) | 305242 | 120.000 | 115.805 |
| 120 ETBE | 59 | 4.855 | 4.855 | (0.761) | 32133275 | 300.000 | 340.574 (A) |
| 114 Cyclohexane | 56 | 5.699 | 5.699 | (0.893) | 4319017 | 60.0000 | 60.3439 (A) |
| 115 2-Pentanone | 43 | 7.029 | 7.029 | (1.101) | 2525520 | 240.000 | 262.888 (A) |
| 121 TAME | 73 | 6.184 | 6.184 | (0.969) | 21967621 | 300.000 | 335.245 (A) |
| 54 Methyl Methacrylate | 100 | 7.226 | 7.226 | (1.132) | 529051 | 120.000 | 120.071 (A) |
| 122 Methyl Cyclohexane | 55 | 7.064 | 7.064 | (1.107) | 4094629 | 60.0000 | 60.1189 (A) |
| 57 2-nitropropane | 41 | 7.675 | 7.675 | (0.764) | 182341 | 60.0000 | 69.6936 (A) |
| 113 2-Chloroethyl vinyl ether | 63 | 7.765 | 7.765 | (0.773) | 392291 | 60.0000 | 83.2565 (A) |
| 64 Ethyl methacrylate | 69 | 8.735 | 8.735 | (0.869) | 2988699 | 120.000 | 135.867 (A) |
| 116 cis-1,4-Dichloro-2-butene | 53 | 11.429 | 11.429 | (0.886) | 211228 | 60.0000 | 69.3377 (A) |
| 86 t-1,4-Dichloro-2-butene | 53 | 11.789 | 11.789 | (0.914) | 220307 | 60.0000 | 69.9112 (A) |
| 118 1,2,3-Trimethylbenzene | 105 | 12.992 | 12.992 | (2.036) | 7136797 | 60.0000 | 60.4739 (A) |
| 123 1,2-dichloro-1,1,2-trifluorom | 117 | 2.933 | 2.933 | (0.460) | 3656513 | 60.0000 | 60.9383 (A) |
| 124 2,2-dichloro-1,1,1-trifluorom | 83 | 2.987 | 2.987 | (0.468) | 5861986 | 60.0000 | 61.1990 (A) |
| 125 2-Propanol | 45 | 3.310 | 3.310 | (0.519) | 672280 | 1200.00 | 1238.72 (A) |
| 126 Tetrahydrothiophene | 60 | 9.328 | 9.328 | (0.928) | 375593 | 60.0000 | 67.8573 (A) |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: H.i
 Lab File ID: h4151.d
 Lab Smp Id: SUPP060
 Analysis Type: VOA
 Quant Type: ISTD
 Operator: hoffmann
 Method File: /chem/H.i/051304.b/H-20ml-h2o.m
 Misc Info:

Calibration Date: 05/13/4
 Calibration Time: 1055
 Client Smp ID: SUPP060
 Level: LOW
 Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 1540572 | 770286 | 3081144 | 1489279 | -3.33 |
| 72 Chlorobenzene-d5 | 325282 | 162641 | 650564 | 302093 | -7.13 |
| 96 1,4-Dichlorobenze | 424257 | 212128 | 848514 | 397972 | -6.20 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 6.40 | 5.90 | 6.90 | 6.38 | -0.25 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.05 | -0.16 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.90 | -0.12 |

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/H.i/051304.b/h4151.d

Date : 13-MAY-2004 11:34

Client ID: SUPP060

Sample Info: SUPP060,,

Purge Volume: 20.0

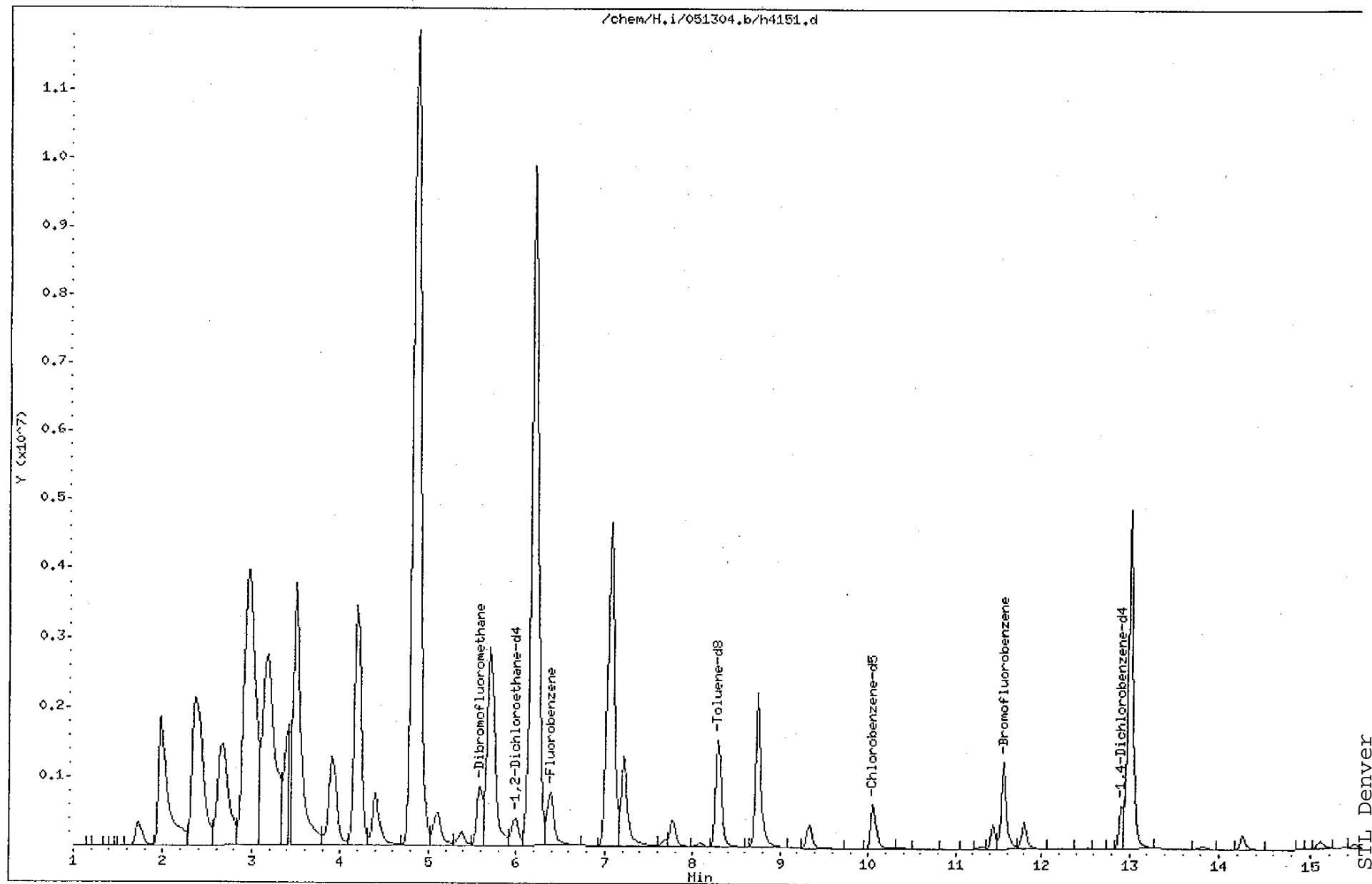
Column phase: DB624

Instrument: H.i

Operator: hoffmann

Column diameter: 0.53

Page 7



GC/MS Continuing Calibration Review Checklist

STL Denver

Instrument ID and Date: H 05/29/04Check Method Used: Analysis ☐ 625 ☐ 8270 ☐ Other SV _____☐ 524.2 ☐ 624 ☒ 8260B ☐ Other VOA _____VOA Preparation ☐ 5mL ☒ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

| Review Items | Level 1 | | | Level 2 | Comments |
|---|---------|----|-----|---------|----------|
| | Yes | No | N/A | | |
| Continuing Calibration | | | | | |
| 1. BFB/DFTPP meets criteria? | / | | | / | |
| 2. ICAL date and instrument ID verified? | / | | | / | |
| 3. Do SPCC RRFs and CCC %Ds meet method criteria? | / | | | / | |
| 4. Does %D meet criteria for non-CCC compounds? | / | | | / | |
| 5. Isomeric pairs checked for correct peak assignment? | / | | | / | |
| 6. Standards traceability properly documented? | / | | | / | |
| 7. Manual integrations documented and checked? | | | / | N/A | |
| 8. Do the Internal Standards meet criteria for %D against ICAL? | / | | | / | |

1st Level Reviewer: JPYDate: 05/29/042nd Level Reviewer: DADate: 6-1-04

Calibration History

Method : /chem/H.i/052904.b/H-20ml-h2o.m
Start Cal Date: 13-MAY-2004 07:58
End Cal Date : 13-MAY-2004 11:34

Initial Calibration

| Injection Date | Sublist | Calibration File |
|------------------------------------|---------|----------------------------|
| Cal Level: 1 , Cal Amount: 1.00000 | | |
| 13-MAY-2004 09:56 | 2-supp | /chem/H.i/051304.b/h4146.d |
| 13-MAY-2004 07:58 | 1-main | /chem/H.i/051304.b/h4140.d |
| Cal Level: 2 , Cal Amount: 2.00000 | | |
| 13-MAY-2004 10:15 | 2-supp | /chem/H.i/051304.b/h4147.d |
| 13-MAY-2004 08:17 | 1-main | /chem/H.i/051304.b/h4141.d |
| Cal Level: 3 , Cal Amount: 5.00000 | | |
| 13-MAY-2004 10:35 | 2-supp | /chem/H.i/051304.b/h4148.d |
| 13-MAY-2004 08:37 | 1-main | /chem/H.i/051304.b/h4142.d |
| Cal Level: 4 , Cal Amount: 10.0000 | | |
| 13-MAY-2004 10:55 | 2-supp | /chem/H.i/051304.b/h4149.d |
| 13-MAY-2004 08:57 | 1-main | /chem/H.i/051304.b/h4143.d |
| Cal Level: 5 , Cal Amount: 30.0000 | | |
| 13-MAY-2004 11:14 | 2-supp | /chem/H.i/051304.b/h4150.d |
| 13-MAY-2004 09:16 | 1-main | /chem/H.i/051304.b/h4144.d |
| Cal Level: 6 , Cal Amount: 60.0000 | | |
| 13-MAY-2004 11:34 | 2-supp | /chem/H.i/051304.b/h4151.d |
| 13-MAY-2004 09:36 | 1-main | /chem/H.i/051304.b/h4145.d |

Continuing Calibration

| | | |
|-------------------|--------|----------------------------|
| 29-MAY-2004 15:28 | 2-supp | /chem/H.i/052904.b/h4665.d |
| 29-MAY-2004 15:47 | 1-main | /chem/H.i/052904.b/h4666.d |

Date : 29-MAY-2004 14:54

Client ID: BFB

Instrument: H.i

Sample Info: BFB #073-04

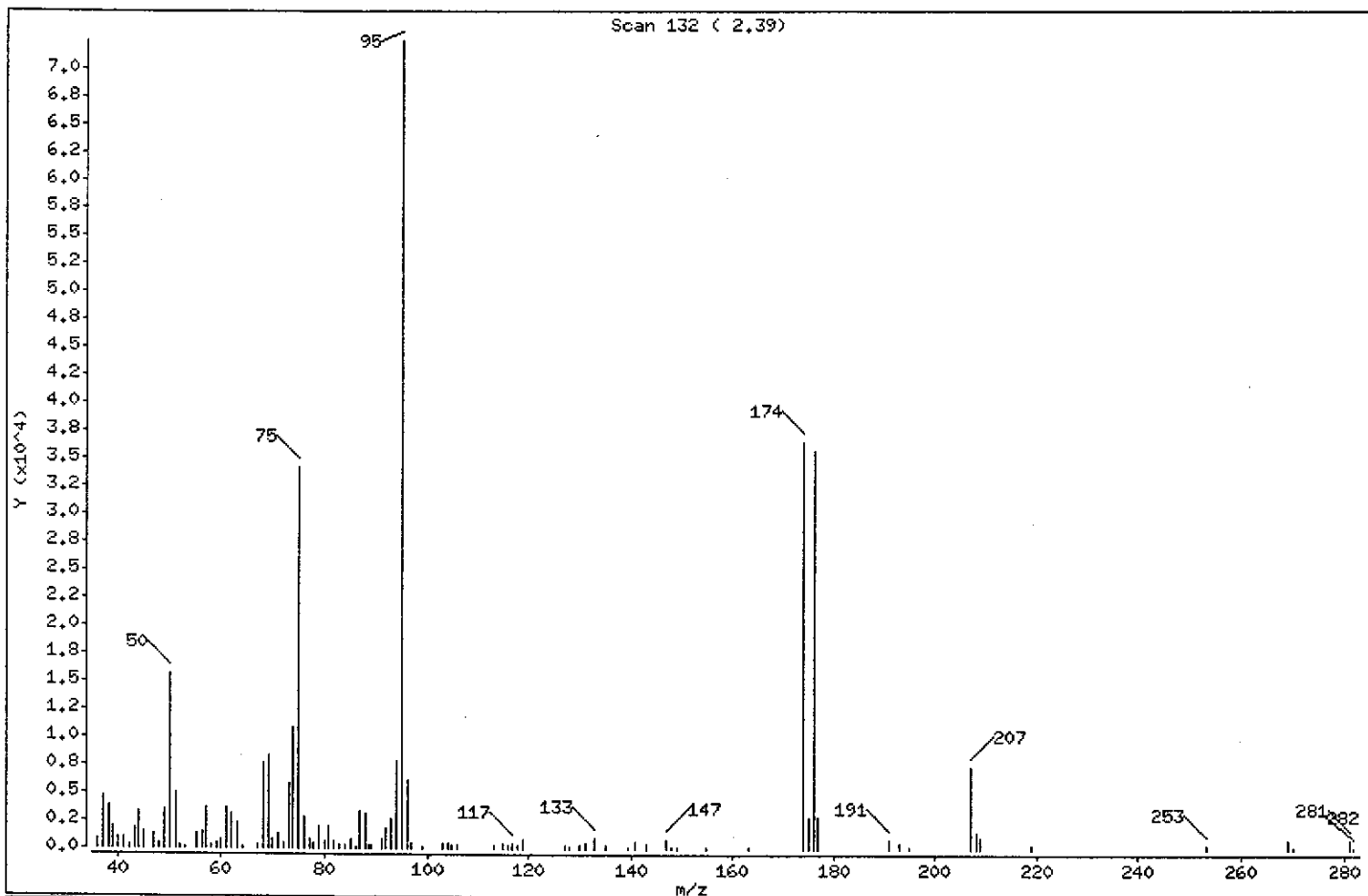
Volume Injected (uL): 1.0

Operator: mhoffman

Column phase: DB624

Column diameter: 0.53

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 | 21.61 |
| 75 | 30.00 - 60.00% of mass 95 | 47.01 |
| 96 | 5.00 - 9.00% of mass 95 | 8.42 |
| 173 | Less than 2.00% of mass 174 | 0.00 (0.00) |
| 174 | 50.00 - 100.00% of mass 95 | 50.24 |
| 175 | 5.00 - 9.00% of mass 174 | 3.80 (7.56) |
| 176 | 95.00 - 101.00% of mass 174 | 49.19 (97.91) |
| 177 | 5.00 - 9.00% of mass 176 | 3.98 (8.10) |

Date : 29-MAY-2004 14:54

Client ID: BFB

Instrument: H.i

Sample Info: BFB #073-04

Volume Injected (uL): 1.0

Operator: mhoffman

Column phase: DB624

Column diameter: 0.53

Data File: h4663.d

Spectrum: Scan 132 (2.39)

Location of Maximum: 95.05

Number of points: 99

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|-------|-------|-------|-------|--------|-------|--------|-------|
| 36.00 | 916 | 63.00 | 2312 | 89.00 | 335 | 139.40 | 211 |
| 37.10 | 4691 | 64.00 | 242 | 91.00 | 877 | 140.90 | 670 |
| 38.10 | 3882 | 67.15 | 357 | 91.90 | 1901 | 142.90 | 429 |
| 39.00 | 1942 | 68.05 | 7651 | 93.05 | 2591 | 147.05 | 827 |
| 40.00 | 1051 | 69.05 | 8308 | 94.05 | 7910 | 147.95 | 232 |
| 41.05 | 1066 | 70.05 | 910 | 95.05 | 72456 | 148.95 | 230 |
| 42.05 | 416 | 71.15 | 1310 | 96.05 | 6100 | 154.95 | 211 |
| 43.15 | 1776 | 72.05 | 559 | 97.05 | 523 | 163.00 | 236 |
| 44.05 | 3359 | 73.05 | 5866 | 99.15 | 242 | 173.95 | 36400 |
| 45.05 | 1488 | 74.05 | 10870 | 103.05 | 531 | 174.95 | 2751 |
| 47.05 | 1338 | 75.05 | 34064 | 103.95 | 435 | 175.95 | 35640 |
| 47.95 | 531 | 76.05 | 2905 | 104.95 | 284 | 176.95 | 2886 |
| 49.05 | 3434 | 76.95 | 780 | 105.95 | 282 | 191.00 | 876 |
| 50.05 | 15660 | 77.95 | 434 | 113.00 | 275 | 193.00 | 450 |
| 51.05 | 4964 | 78.85 | 2048 | 115.00 | 421 | 195.00 | 209 |
| 52.05 | 383 | 79.90 | 619 | 115.90 | 270 | 207.05 | 7264 |
| 53.05 | 203 | 80.90 | 1918 | 116.90 | 551 | 208.05 | 1420 |
| 55.10 | 1257 | 81.90 | 671 | 117.90 | 378 | 209.05 | 966 |
| 56.10 | 1498 | 83.00 | 385 | 118.90 | 830 | 219.00 | 316 |
| 57.10 | 3723 | 84.10 | 301 | 127.05 | 301 | 253.05 | 323 |
| 58.00 | 281 | 85.10 | 800 | 127.85 | 247 | 269.10 | 779 |
| 59.10 | 475 | 86.10 | 207 | 129.95 | 307 | 270.10 | 209 |
| 60.00 | 888 | 87.00 | 3252 | 130.95 | 559 | 281.15 | 850 |
| 61.00 | 3721 | 88.00 | 3082 | 133.00 | 1043 | 282.05 | 229 |
| 62.00 | 3141 | 88.80 | 335 | 135.10 | 313 | | |

Data File: /chem/H.i/052904.b/h4663.d

Page 1

Date : 29-MAY-2004 14:54

Client ID: BFB

Instrument: H.i

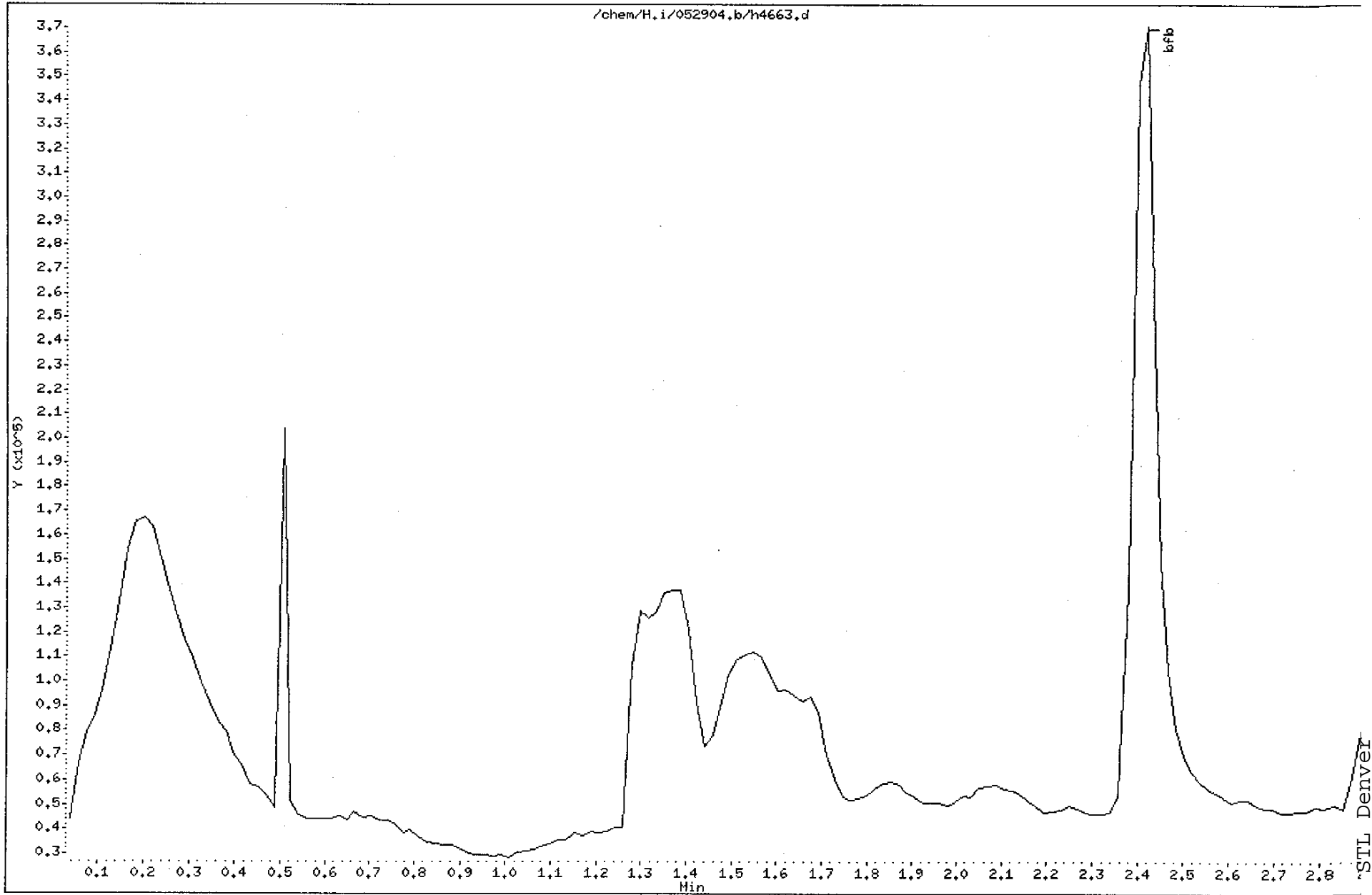
Sample Info: BFB #073-04

Volume Injected (uL): 1.0

Operator: mhoffman

Column phase: DB624

Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/052904.b/h4666.d
Lab Smp Id: MAIN010 Client Smp ID: MAIN010
Inj Date : 29-MAY-2004 15:47
Operator : yanezj Inst ID: H.i
Smp Info : MAIN010,,
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/052904.b/H-20ml-h2o.m
Meth Date : 29-May-2004 16:48 H Quant Type: ISTD
Cal Date : 13-MAY-2004 11:34 Cal File: h4151.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|--------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 48 Fluorobenzene | 96 | 6.400 | 6.400 | (1.000) | 1815283 | 10.0000 | |
| * 72 Chlorobenzene-d5 | 119 | 10.064 | 10.064 | (1.000) | 378195 | 10.0000 | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.921 | 12.921 | (1.000) | 548441 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | 1069081 | 20.0000 | 19.9246 |
| M 2 Xylene (total) | 106 | | | | 2431323 | 10.0000 | 29.4894 |
| 3 dichlorodifluoromethane | 85 | 1.891 | 1.891 | (0.296) | 849691 | 10.0000 | 9.93330 |
| 4 Chloromethane | 50 | 2.071 | 2.071 | (0.324) | 461570 | 10.0000 | 10.0881 |
| 5 Vinyl Chloride | 62 | 2.143 | 2.143 | (0.335) | 436223 | 10.0000 | 10.0924 |
| 7 Bromomethane | 94 | 2.448 | 2.448 | (0.383) | 398052 | 10.0000 | 9.93604 |
| 8 Chloroethane | 64 | 2.520 | 2.520 | (0.394) | 313526 | 10.0000 | 10.0563 |
| 10 Trichlorofluoromethane | 101 | 2.718 | 2.718 | (0.425) | 1271229 | 10.0000 | 10.0144 |
| 11 Ethanol | 45 | 2.826 | 2.826 | (0.441) | 37783 | 500.000 | 404.815 |
| 13 Acrolein | 56 | 3.059 | 3.059 | (0.478) | 160483 | 100.000 | 95.2084 |
| 14 1,1-Dichloroethene | 96 | 3.185 | 3.185 | (0.498) | 511963 | 10.0000 | 9.69756 |
| 15 Acetone | 43 | 3.203 | 3.203 | (0.500) | 117115 | 40.0000 | 40.1856 |
| 17 Iodomethane | 142 | 3.346 | 3.346 | (0.523) | 794696 | 10.0000 | 9.87317 |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 19 Acetonitrile | 41 | 3.472 | 3.472 | (0.543) | 68114 | 100.000 | 90.1624 |
| 21 Methylene Chloride | 84 | 3.634 | 3.634 | (0.568) | 408158 | 10.0000 | 9.91137 |
| 22 tert-Butyl alcohol | 59 | 3.742 | 3.742 | (0.585) | 216855 | 200.000 | 193.104 |
| 23 Acrylonitrile | 53 | 3.867 | 3.867 | (0.604) | 277378 | 100.000 | 100.310 |
| 24 trans-1,2-Dichloroethene | 96 | 3.921 | 3.921 | (0.613) | 536373 | 10.0000 | 9.89794 |
| 27 1,1-Dichloroethane | 63 | 4.370 | 4.370 | (0.683) | 1014702 | 10.0000 | 9.81227 |
| 28 Chloroprene | 53 | 4.478 | 4.478 | (0.700) | 843366 | 10.0000 | 9.58001 |
| 30 Isopropyl ether | 87 | 4.442 | 4.442 | (0.694) | 1744843 | 50.0000 | 49.6816 |
| 32 cis-1,2-Dichloroethene | 96 | 5.035 | 5.035 | (0.787) | 532708 | 10.0000 | 10.0267 |
| 31 2,2-Dichloropropane | 77 | 5.053 | 5.053 | (0.789) | 795037 | 10.0000 | 9.98189 |
| 33 2-Butanone | 43 | 5.053 | 5.053 | (0.789) | 218901 | 40.0000 | 42.0143 |
| 34 Propionitrile | 54 | 5.107 | 5.107 | (0.798) | 103485 | 100.000 | 100.677 |
| 36 Methacrylonitrile | 41 | 5.286 | 5.286 | (0.826) | 784180 | 100.000 | 99.7181 |
| 37 Bromochloromethane | 128 | 5.322 | 5.322 | (0.832) | 205825 | 10.0000 | 10.1311 |
| 38 Chloroform | 83 | 5.412 | 5.412 | (0.846) | 976176 | 10.0000 | 9.89361 |
| 41 1,1,1-Trichloroethane | 97 | 5.646 | 5.646 | (0.882) | 1077158 | 10.0000 | 9.95676 |
| 42 1,1-Dichloropropene | 75 | 5.825 | 5.825 | (0.910) | 836317 | 10.0000 | 9.77243 |
| 43 Carbon Tetrachloride | 117 | 5.843 | 5.843 | (0.913) | 990766 | 10.0000 | 9.76642 |
| 45 Isobutanol | 41 | 5.951 | 5.951 | (0.930) | 61714 | 200.000 | 180.199 |
| 46 Benzene | 78 | 6.077 | 6.077 | (0.949) | 1437897 | 10.0000 | 9.82985 |
| 47 1,2-Dichloroethane | 62 | 6.095 | 6.095 | (0.952) | 382754 | 10.0000 | 10.0638 |
| 49 n-Butanol | 56 | 6.759 | 6.759 | (1.056) | 50291 | 200.000 | 199.885 |
| 50 Trichloroethene | 130 | 6.849 | 6.849 | (1.070) | 616253 | 10.0000 | 9.90975 |
| 52 1,2-Dichloropropane | 63 | 7.101 | 7.101 | (1.109) | 498883 | 10.0000 | 10.1880 |
| 53 Dibromomethane | 93 | 7.244 | 7.244 | (1.132) | 256786 | 10.0000 | 10.0156 |
| 55 1,4-Dioxane | 88 | 7.262 | 7.262 | (1.135) | 62204 | 500.000 | 504.818 |
| 56 Bromodichloromethane | 83 | 7.424 | 7.424 | (1.160) | 755382 | 10.0000 | 10.1716 |
| 59 cis-1,3-Dichloropropene | 75 | 7.963 | 7.963 | (0.791) | 609797 | 10.0000 | 9.81546 |
| 60 4-Methyl-2-pentanone | 43 | 8.160 | 8.160 | (0.811) | 624824 | 40.0000 | 39.9042 |
| 62 Toluene | 91 | 8.376 | 8.376 | (0.832) | 1721403 | 10.0000 | 9.63340 |
| 63 trans-1,3-Dichloropropene | 75 | 8.645 | 8.645 | (0.859) | 396040 | 10.0000 | 9.52470 |
| 65 1,1,2-Trichloroethane | 97 | 8.861 | 8.861 | (0.880) | 253054 | 10.0000 | 9.62776 |
| 67 1,3-Dichloropropane | 76 | 9.077 | 9.077 | (0.902) | 408200 | 10.0000 | 9.86004 |
| 66 Tetrachloroethene | 164 | 9.059 | 9.059 | (0.900) | 542521 | 10.0000 | 9.61656 |
| 68 2-Hexanone | 43 | 9.166 | 9.166 | (0.911) | 393952 | 40.0000 | 40.0541 |
| 69 Dibromochloromethane | 129 | 9.346 | 9.346 | (0.929) | 451858 | 10.0000 | 9.82802 |
| 70 1,2-Dibromoethane | 107 | 9.490 | 9.490 | (0.943) | 339025 | 10.0000 | 9.93663 |
| 71 1-Chlorohexane | 91 | 10.064 | 10.064 | (1.000) | 870588 | 10.0000 | 9.76214 |
| 73 Chlorobenzene | 112 | 10.100 | 10.100 | (1.004) | 1172509 | 10.0000 | 9.77345 |
| 74 1,1,1,2-Tetrachloroethane | 131 | 10.190 | 10.190 | (1.012) | 486495 | 10.0000 | 9.78141 |
| 75 Ethylbenzene | 106 | 10.226 | 10.226 | (1.016) | 605769 | 10.0000 | 9.73556 |
| 76 m and p-Xylene | 106 | 10.370 | 10.370 | (1.030) | 1699938 | 20.0000 | 19.7789 |
| 77 o-Xylene | 106 | 10.891 | 10.891 | (1.082) | 731385 | 10.0000 | 9.71051 |
| 78 Styrene | 104 | 10.909 | 10.909 | (1.084) | 1150334 | 10.0000 | 10.1810 |
| 79 Bromoform | 173 | 11.142 | 11.142 | (1.107) | 232464 | 10.0000 | 10.0864 |
| 80 isopropyl benzene | 105 | 11.358 | 11.358 | (1.129) | 2473717 | 10.0000 | 9.83071 |
| 81 Cyclohexanone | 55 | 11.484 | 11.484 | (1.141) | 269831 | 400.000 | 443.615 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 83 1,1,2,2-Tetrachloroethane | 83 | 11.735 | 11.735 | (1.166) | 299664 | 10.0000 | 9.98070 |
| 84 Bromobenzene | 156 | 11.753 | 11.753 | (0.910) | 454622 | 10.0000 | 9.67211 |
| 85 1,2,3-Trichloropropane | 110 | 11.789 | 11.789 | (0.912) | 79110 | 10.0000 | 9.48527 |
| 87 n-Propylbenzene | 120 | 11.879 | 11.879 | (0.919) | 575169 | 10.0000 | 9.63742 |
| 88 2-Chlorotoluene | 126 | 11.986 | 11.986 | (0.928) | 436483 | 10.0000 | 9.49767 |
| 89 1,3,5-Trimethylbenzene | 105 | 12.094 | 12.094 | (0.936) | 1851353 | 10.0000 | 9.55281 |
| 90 4-Chlorotoluene | 126 | 12.112 | 12.112 | (0.937) | 491407 | 10.0000 | 9.73045 |
| 91 tert-Butylbenzene | 119 | 12.471 | 12.471 | (0.965) | 1932184 | 10.0000 | 9.46262 |
| 92 1,2,4-Trimethylbenzene | 105 | 12.525 | 12.525 | (0.969) | 1729537 | 10.0000 | 9.79044 |
| 93 sec-Butylbenzene | 134 | 12.723 | 12.723 | (0.985) | 457720 | 10.0000 | 9.55585 |
| 94 m-Dichlorobenzene | 146 | 12.849 | 12.849 | (0.994) | 783459 | 10.0000 | 10.2708 |
| 95 4-Isopropyltoluene | 119 | 12.885 | 12.885 | (0.997) | 2224977 | 10.0000 | 9.73935 |
| 97 p-dichlorobenzene | 146 | 12.938 | 12.938 | (1.001) | 906424 | 10.0000 | 9.20316 |
| 98 n-Butylbenzene | 91 | 13.316 | 13.316 | (1.031) | 2173290 | 10.0000 | 9.86020 |
| 99 o-Dichlorobenzene | 146 | 13.334 | 13.334 | (1.032) | 649964 | 10.0000 | 9.78103 |
| 100 1,2-Dibromo-3-chloropropane | 157 | 14.106 | 14.106 | (1.092) | 46983 | 10.0000 | 9.90560 |
| 101 1,2,4-Trichlorobenzene | 180 | 14.878 | 14.878 | (1.152) | 512149 | 10.0000 | 10.6335 |
| 102 Hexachlorobutadiene | 225 | 15.040 | 15.040 | (1.164) | 473819 | 10.0000 | 10.4152 |
| 127 Naphthalene | 128 | 15.112 | 15.112 | (1.170) | 456862 | 10.0000 | 10.4312 |
| 104 1,2,3-Trichlorobenzene | 180 | 15.363 | 15.363 | (1.189) | 375449 | 10.0000 | 10.4627 |

Internal Standard
Check Report

Instrument ID: H.i Injection Date: 29-MAY-2004 15:47
Lab File ID: h4666.d Lab Sample ID: MAIN010
Analysis Type: WATER Method File: /chem/H.i/052904.b/H-20ml-h2o.m

| | ICAL | SAMP | ICAL | SAMP | |
|------------------------|---------|---------|--------|--------|-------|
| INTERNAL STANDARD | AREA | AREA | RT | RT | %R |
| ===== | ===== | ===== | ===== | ===== | ===== |
| Fluorobenzene | 1613156 | 1815283 | 6.379 | 6.400 | 112.5 |
| Chlorobenzene-d5 | 325674 | 378195 | 10.062 | 10.064 | 116.1 |
| 1,4-Dichlorobenzene-d4 | 462254 | 548441 | 12.918 | 12.921 | 118.6 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4666.d
Lab Smp Id: MAIN010
Analysis Type: VOA
Quant Type: ISTD
Operator: yanezj
Method File: /chem/H.i/052904.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/29/4
Calibration Time: 1547
Client Smp ID: MAIN010
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 1815283 | 907642 | 3630566 | 1815283 | 0.00 |
| 72 Chlorobenzene-d5 | 378195 | 189098 | 756390 | 378195 | 0.00 |
| 96 1,4-Dichlorobenze | 548441 | 274220 | 1096882 | 548441 | 0.00 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 6.40 | 5.90 | 6.90 | 6.40 | 0.00 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.06 | 0.00 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.92 | 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.

CONTINUING CALIBRATION COMPOUNDS
 PERCENT DRIFT REPORT

Instrument ID: H.i
 Lab File ID: h4666.d
 Analysis Type: WATER

Injection Date: 29-MAY-2004 15:47
 Lab Sample ID: MAIN010
 Method File: /chem/H.i/052904.b/H-20ml-h2o.m

| COMPOUND | EXPECTED CONC. | MEASURED CONC. | %D | MAX %D |
|-------------------------------|-------------------|-------------------|------|-----------|
| 83 Xylene (total) | 30.0000 | 29.4894 | 1.7 | 50.0 |
| 95 1,2-Dichloroethene (total) | 20.0000 | 19.9247 | 0.4 | 50.0 |
| 64 dichlorodifluoromethane | 10.0000 | 9.9333 | 0.7 | 50.0 |
| 1 Chloromethane | 10.0000 | 10.0881 | 0.9 | 50.0 |
| 4 Vinyl Chloride | 10.0000 | 10.0924 | 0.9 | 20.0 |
| 2 Bromomethane | 10.0000 | 9.9360 | 0.6 | 50.0 |
| 5 Chloroethane | 10.0000 | 10.0563 | 0.6 | 50.0 |
| 11 Trichlorofluoromethane | 10.0000 | 10.0144 | 0.1 | 50.0 |
| 3 Ethanol | 500.0000 | 404.8152 | 19.0 | 50.0 |
| 8 Acrolein | 100.0000 | 95.2084 | 4.8 | 50.0 |
| 12 1,1-Dichloroethene | 10.0000 | 9.6976 | 3.0 | 20.0 |
| 7 Acetone | 40.0000 | 40.1856 | 0.5 | 50.0 |
| 21 Iodomethane | 10.0000 | 9.8732 | 1.3 | 50.0 |
| 68 Acetonitrile | 100.0000 | 90.1624 | 9.8 | 50.0 |
| 6 Methylene Chloride | 10.0000 | 9.9114 | 0.9 | 50.0 |
| 86 tert-Butyl alcohol | 200.0000 | 193.1043 | 3.4 | 50.0 |
| 9 Acrylonitrile | 100.0000 | 100.3096 | 0.3 | 50.0 |
| 0 trans-1,2-Dichloroethene | 10.0000 | 9.8979 | 1.0 | 50.0 |
| 15 1,1-Dichloroethane | 10.0000 | 9.8123 | 1.9 | 50.0 |
| 84 Isopropyl ether | 50.0000 | 49.6816 | 0.6 | 50.0 |
| 69 Chloroprene | 10.0000 | 9.5800 | 4.2 | 50.0 |
| 0 cis-1,2-Dichloroethene | 10.0000 | 10.0267 | 0.3 | 50.0 |
| 20 2-Butanone | 40.0000 | 42.0143 | 5.0 | 50.0 |
| 93 2,2-Dichloropropane | 10.0000 | 9.9819 | 0.2 | 50.0 |
| 70 Propionitrile | 100.0000 | 100.6768 | 0.7 | 50.0 |
| 72 Methacrylonitrile | 100.0000 | 99.7181 | 0.3 | 50.0 |
| 13 Bromochloromethane | 10.0000 | 10.1311 | 1.3 | 50.0 |
| 17 Chloroform | 10.0000 | 9.8936 | 1.1 | 20.0 |
| 22 1,1,1-Trichloroethane | 10.0000 | 9.9568 | 0.4 | 50.0 |
| 94 1,1-Dichloropropene | 10.0000 | 9.7724 | 2.3 | 50.0 |
| 23 Carbon Tetrachloride | 10.0000 | 9.7664 | 2.3 | 50.0 |
| 71 Isobutanol | 200.0000 | 180.1994 | 9.9 | 50.0 |
| 30 Benzene | 10.0000 | 9.8298 | 1.7 | 50.0 |
| 16 1,2-Dichloroethane | 10.0000 | 10.0639 | 0.6 | 50.0 |
| 88 n-Butanol | 200.0000 | 199.8848 | 0.1 | 50.0 |
| 29 Trichloroethene | 10.0000 | 9.9097 | 0.9 | 50.0 |
| 26 1,2-Dichloropropane | 10.0000 | 10.1880 | 1.9 | 20.0 |
| 34 Dibromomethane | 10.0000 | 10.0156 | 0.2 | 50.0 |
| 57 1,4-Dioxane | 500.0000 | 504.8178 | 1.0 | 50.0 |

CONTINUING CALIBRATION COMPOUNDS
 PERCENT DRIFT REPORT

Instrument ID: H.i
 Lab File ID: h4666.d
 Analysis Type: WATER

Injection Date: 29-MAY-2004 15:47
 Lab Sample ID: MAIN010
 Method File: /chem/H.i/052904.b/H-20ml-h2o.m

| COMPOUND | EXPECTED CONC. | MEASURED CONC. | %D | MAX %D |
|--------------------------------|-------------------|-------------------|-------|-----------|
| ===== | ===== | ===== | ===== | ===== |
| 25 Bromodichloromethane | 10.0000 | 10.1716 | 1.7 | 50.0 |
| 28 cis-1,3-Dichloropropene | 10.0000 | 9.8155 | 1.8 | 50.0 |
| 38 4-Methyl-2-pentanone | 40.0000 | 39.9042 | 0.2 | 50.0 |
| 45 Toluene | 10.0000 | 9.6334 | 3.7 | 20.0 |
| 31 trans-1,3-Dichloropropene | 10.0000 | 9.5247 | 4.8 | 50.0 |
| 32 1,1,2-Trichloroethane | 10.0000 | 9.6278 | 3.7 | 50.0 |
| 42 Tetrachloroethene | 10.0000 | 9.6166 | 3.8 | 50.0 |
| 109 1,3-Dichloropropane | 10.0000 | 9.8600 | 1.4 | 50.0 |
| 43 2-Hexanone | 40.0000 | 40.0541 | 0.1 | 50.0 |
| 36 Dibromochloromethane | 10.0000 | 9.8280 | 1.7 | 50.0 |
| 58 1,2-Dibromoethane | 10.0000 | 9.9366 | 0.6 | 50.0 |
| 92 1-Chlorohexane | 10.0000 | 9.7621 | 2.4 | 50.0 |
| 46 Chlorobenzene | 10.0000 | 9.7734 | 2.3 | 50.0 |
| 74 1,1,1,2-Tetrachloroethane | 10.0000 | 9.7814 | 2.2 | 50.0 |
| 47 Ethylbenzene | 10.0000 | 9.7356 | 2.6 | 20.0 |
| o m and p-Xylene | 20.0000 | 19.7789 | 1.1 | 50.0 |
| o-Xylene | 10.0000 | 9.7105 | 2.9 | 50.0 |
| 49 Styrene | 10.0000 | 10.1810 | 1.8 | 50.0 |
| 37 Bromoform | 10.0000 | 10.0864 | 0.9 | 50.0 |
| 79 isopropyl benzene | 10.0000 | 9.8307 | 1.7 | 50.0 |
| 76 Cyclohexanone | 400.0000 | 443.6150 | 10.9 | 50.0 |
| 40 1,1,2,2-Tetrachloroethane | 10.0000 | 9.9807 | 0.2 | 50.0 |
| 95 Bromobenzene | 10.0000 | 9.6721 | 3.3 | 50.0 |
| 50 1,2,3-Trichloropropane | 10.0000 | 9.4853 | 5.1 | 50.0 |
| 96 n-Propylbenzene | 10.0000 | 9.6374 | 3.6 | 50.0 |
| 97 2-Chlorotoluene | 10.0000 | 9.4977 | 5.0 | 50.0 |
| 98 1,3,5-Trimethylbenzene | 10.0000 | 9.5528 | 4.5 | 50.0 |
| 99 4-Chlorotoluene | 10.0000 | 9.7305 | 2.7 | 50.0 |
| 100 tert-Butylbenzene | 10.0000 | 9.4626 | 5.4 | 50.0 |
| 101 1,2,4-Trimethylbenzene | 10.0000 | 9.7904 | 2.1 | 50.0 |
| 102 sec-Butylbenzene | 10.0000 | 9.5659 | 4.3 | 50.0 |
| 61 m-Dichlorobenzene | 10.0000 | 10.2708 | 2.7 | 50.0 |
| 103 4-Isopropyltoluene | 10.0000 | 9.7394 | 2.6 | 50.0 |
| 62 p-dichlorobenzene | 10.0000 | 9.2032 | 8.0 | 50.0 |
| 104 n-Butylbenzene | 10.0000 | 9.8602 | 1.4 | 50.0 |
| 63 o-Dichlorobenzene | 10.0000 | 9.7810 | 2.2 | 50.0 |
| 75 1,2-Dibromo-3-chloropropane | 10.0000 | 9.9056 | 0.9 | 50.0 |
| 105 1,2,4-Trichlorobenzene | 10.0000 | 10.6335 | 6.3 | 50.0 |
| 106 Hexachlorobutadiene | 10.0000 | 10.4153 | 4.2 | 50.0 |

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: H.i
Lab File ID: h4666.d
Analysis Type: WATER

Injection Date: 29-MAY-2004 15:47
Lab Sample ID: MAIN010
Method File: /chem/H.i/052904.b/H-20ml-h2o.m

| COMPOUND | EXPECTED CONC. | MEASURED CONC. | %D | MAX %D |
|----------------------------|-------------------|-------------------|-------|-----------|
| ===== | ===== | ===== | ===== | ===== |
| 107 Naphthalene | 10.0000 | 10.4312 | 4.3 | 50.0 |
| 108 1,2,3-Trichlorobenzene | 10.0000 | 10.4627 | 4.6 | 50.0 |

STL Denver

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: H.i Injection Date: 29-MAY-2004 15:47
 Lab File ID: h4666.d Init. Calibration Date(s): 05/13/4 05/13/4
 Analysis Type: WATER Init. Calibration Times: 07:58 11:34
 Lab Sample ID: MAIN010 Method File: /chem/H.i/052904.b/H-20ml-h2o.m
 Quant Type: ISTD

| COMPOUND | RRF | RF10 | MIN | MAX |
|--------------------------------|-------|-------|-------|-----------|
| ----- | ----- | ----- | ----- | ----- |
| M 1 1,2-Dichloroethene (total) | 0.296 | 0.294 | 0.010 | 0.4 50.0 |
| M 2 Xylene (total) | 6.537 | 6.429 | 0.010 | 1.7 50.0 |
| 3 dichlorodifluoromethane | 0.471 | 0.468 | 0.010 | 0.7 50.0 |
| 4 Chloromethane | 0.252 | 0.254 | 0.100 | -0.9 50.0 |
| 5 Vinyl Chloride | 0.238 | 0.240 | 0.020 | -0.9 20.0 |
| 7 Bromomethane | 0.221 | 0.219 | 0.010 | 0.6 50.0 |
| 8 Chloroethane | 0.172 | 0.173 | 0.010 | -0.6 50.0 |
| 10 Trichlorofluoromethane | 0.699 | 0.700 | 0.010 | -0.1 50.0 |
| 11 Ethanol | 0.001 | 0.000 | 0.000 | 19.0 50.0 |
| 13 Acrolein | 0.009 | 0.009 | 0.001 | 4.8 50.0 |
| 14 1,1-Dichloroethene | 0.291 | 0.282 | 0.020 | 3.0 20.0 |
| 15 Acetone | 0.016 | 0.016 | 0.001 | -0.5 50.0 |
| 17 Iodomethane | 0.443 | 0.438 | 0.010 | 1.3 50.0 |
| 19 Acetonitrile | 0.004 | 0.004 | 0.000 | 9.8 50.0 |
| 21 Methylene Chloride | 0.227 | 0.225 | 0.010 | 0.9 50.0 |
| 22 tert-Butyl alcohol | 0.006 | 0.006 | 0.001 | 3.4 50.0 |
| 23 Acrylonitrile | 0.015 | 0.015 | 0.001 | -0.3 50.0 |
| 24 trans-1,2-Dichloroethene | 0.299 | 0.295 | 0.010 | 1.0 50.0 |
| 27 1,1-Dichloroethane | 0.570 | 0.559 | 0.100 | 1.9 50.0 |
| 28 Chloroprene | 0.485 | 0.465 | 0.010 | 4.2 50.0 |
| 30 Isopropyl ether | 0.193 | 0.192 | 0.010 | 0.6 50.0 |
| 32 cis-1,2-Dichloroethene | 0.293 | 0.293 | 0.010 | -0.3 50.0 |
| 31 2,2-Dichloropropane | 0.439 | 0.438 | 0.010 | 0.2 50.0 |
| 33 2-Butanone | 0.029 | 0.030 | 0.010 | -5.0 50.0 |
| 34 Propionitrile | 0.006 | 0.006 | 0.001 | -0.7 50.0 |
| 36 Methacrylonitrile | 0.043 | 0.043 | 0.010 | 0.3 50.0 |
| 37 Bromochloromethane | 0.112 | 0.113 | 0.010 | -1.3 50.0 |
| 38 Chloroform | 0.544 | 0.538 | 0.020 | 1.1 20.0 |
| 41 1,1,1-Trichloroethane | 0.596 | 0.593 | 0.010 | 0.4 50.0 |
| 42 1,1-Dichloropropene | 0.471 | 0.461 | 0.010 | 2.3 50.0 |
| 43 Carbon Tetrachloride | 0.559 | 0.546 | 0.010 | 2.3 50.0 |
| 45 Isobutanol | 0.002 | 0.002 | 0.000 | 9.9 50.0 |
| 46 Benzene | 0.806 | 0.792 | 0.010 | 1.7 50.0 |
| 47 1,2-Dichloroethane | 0.210 | 0.211 | 0.010 | -0.6 50.0 |
| 49 n-Butanol | 0.001 | 0.001 | 0.000 | 0.1 50.0 |

STL Denver

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: H.i Injection Date: 29-MAY-2004 15:47
Lab File ID: h4666.d Init. Calibration Date(s): 05/13/4 05/13/4
Analysis Type: WATER Init. Calibration Times: 07:58 11:34
Lab Sample ID: MAIN010 Method File: /chem/H.i/052904.b/H-20ml-h2o.m
Quant Type: ISTD

| COMPOUND | RRF | RF10 | MIN RRF | %D | MAX %D |
|------------------------------|-------|-------|------------|-------|-----------|
| 50 Trichloroethene | 0.343 | 0.339 | 0.010 | 0.9 | 50.0 |
| 52 1,2-Dichloropropane | 0.270 | 0.275 | 0.020 | -1.9 | 20.0 |
| 53 Dibromomethane | 0.141 | 0.141 | 0.010 | -0.2 | 50.0 |
| 55 1,4-Dioxane | 0.001 | 0.001 | 0.000 | -1.0 | 50.0 |
| 56 Bromodichloromethane | 0.409 | 0.416 | 0.010 | -1.7 | 50.0 |
| 59 cis-1,3-Dichloropropene | 1.643 | 1.612 | 0.010 | 1.8 | 50.0 |
| 60 4-Methyl-2-pentanone | 0.414 | 0.413 | 0.010 | 0.2 | 50.0 |
| 62 Toluene | 4.725 | 4.552 | 0.020 | 3.7 | 20.0 |
| 63 trans-1,3-Dichloropropene | 1.099 | 1.047 | 0.010 | 4.8 | 50.0 |
| 65 1,1,2-Trichloroethane | 0.695 | 0.669 | 0.010 | 3.7 | 50.0 |
| 67 1,3-Dichloropropane | 1.095 | 1.079 | 0.010 | 1.4 | 50.0 |
| 66 Tetrachloroethene | 1.492 | 1.435 | 0.010 | 3.8 | 50.0 |
| 68 2-Hexanone | 0.260 | 0.260 | 0.010 | -0.1 | 50.0 |
| 69 Dibromochloromethane | 1.216 | 1.195 | 0.010 | 1.7 | 50.0 |
| 70 1,2-Dibromoethane | 0.902 | 0.896 | 0.010 | 0.6 | 50.0 |
| 71 1-Chlorohexane | 2.358 | 2.302 | 0.010 | 2.4 | 50.0 |
| 73 Chlorobenzene | 3.172 | 3.100 | 0.300 | 2.3 | 50.0 |
| 74 1,1,1,2-Tetrachloroethane | 1.315 | 1.286 | 0.010 | 2.2 | 50.0 |
| 75 Ethylbenzene | 1.645 | 1.602 | 0.010 | 2.6 | 20.0 |
| 76 m and p-Xylene | 2.273 | 2.247 | 0.010 | 1.1 | 50.0 |
| 77 o-Xylene | 1.992 | 1.934 | 0.010 | 2.9 | 50.0 |
| 78 Styrene | 2.988 | 3.042 | 0.010 | -1.8 | 50.0 |
| 79 Bromoform | 0.609 | 0.615 | 0.101 | -0.9 | 50.0 |
| 80 isopropyl benzene | 6.653 | 6.541 | 0.010 | 1.7 | 50.0 |
| 81 Cyclohexanone | 0.016 | 0.018 | 0.001 | -10.9 | 50.0 |
| 83 1,1,2,2-Tetrachloroethane | 0.794 | 0.792 | 0.300 | 0.2 | 50.0 |
| 84 Bromobenzene | 0.857 | 0.829 | 0.010 | 3.3 | 50.0 |
| 85 1,2,3-Trichloropropane | 0.152 | 0.144 | 0.010 | 5.1 | 50.0 |
| 87 n-Propylbenzene | 1.088 | 1.049 | 0.010 | 3.6 | 50.0 |
| 88 2-Chlorotoluene | 0.838 | 0.796 | 0.010 | 5.0 | 50.0 |
| 89 1,3,5-Trimethylbenzene | 3.534 | 3.376 | 0.010 | 4.5 | 50.0 |
| 90 4-Chlorotoluene | 0.921 | 0.896 | 0.010 | 2.7 | 50.0 |
| 91 tert-Butylbenzene | 3.723 | 3.523 | 0.010 | 5.4 | 50.0 |
| 92 1,2,4-Trimethylbenzene | 3.221 | 3.154 | 0.010 | 2.1 | 50.0 |
| 93 sec-Butylbenzene | 0.872 | 0.835 | 0.010 | 4.3 | 50.0 |

STL Denver

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: H.i Injection Date: 29-MAY-2004 15:47
Lab File ID: h4666.d Init. Calibration Date(s): 05/13/4 05/13/4
Analysis Type: WATER Init. Calibration Times: 07:58 11:34
Lab Sample ID: MAIN010 Method File: /chem/H.i/052904.b/H-20ml-h2o.m
Quant Type: ISTD

| COMPOUND | RRF | RF10 | MIN | MAX |
|---------------------------------|-------|-------|-------|------|
| | | | RRF | %D |
| 94 m-Dichlorobenzene | 1.391 | 1.429 | 0.010 | -2.7 |
| 95 4-Isopropyltoluene | 4.165 | 4.057 | 0.010 | 2.6 |
| 97 p-dichlorobenzene | 1.796 | 1.653 | 0.010 | 8.0 |
| 98 n-Butylbenzene | 4.019 | 3.963 | 0.010 | 1.4 |
| 99 o-Dichlorobenzene | 1.212 | 1.185 | 0.010 | 2.2 |
| 100 1,2-Dibromo-3-chloropropane | 0.086 | 0.086 | 0.010 | 0.9 |
| 101 1,2,4-Trichlorobenzene | 0.878 | 0.934 | 0.010 | -6.3 |
| 102 Hexachlorobutadiene | 0.829 | 0.864 | 0.010 | -4.2 |
| 127 Naphthalene | 0.799 | 0.833 | 0.010 | -4.3 |
| 104 1,2,3-Trichlorobenzene | 0.654 | 0.685 | 0.010 | -4.6 |

Data File: /chem/H.i/052904.b/h4666.d

Date : 29-MAY-2004 15:47

Client ID: MAIN010

Sample Info: MAIN010,,

Purge Volume: 20.0

Column phase: DB624

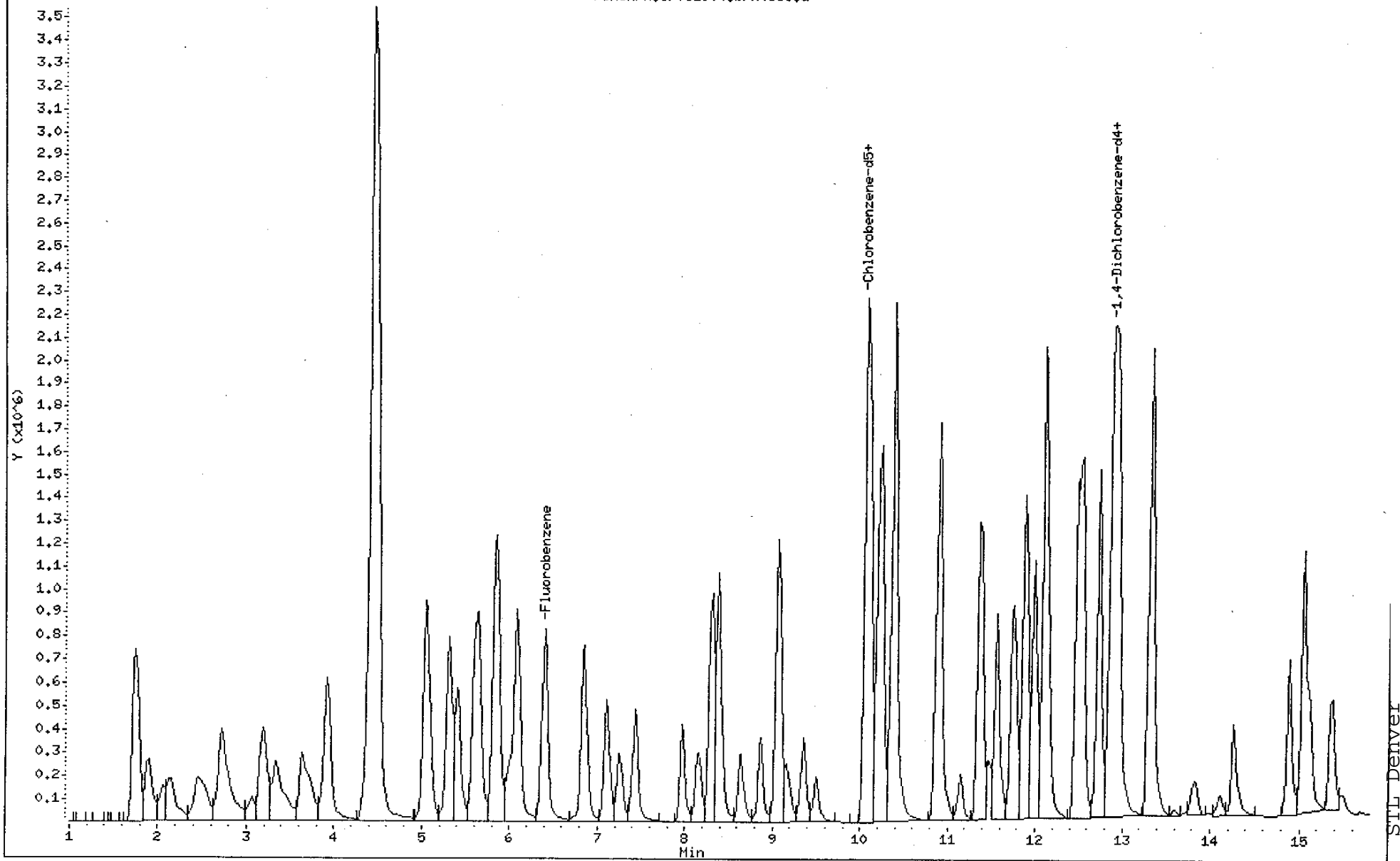
Instrument: H.i

Operator: yanezj

Column diameter: 0.53

Page 8

/chem/H.i/052904.b/h4666.d



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/052904.b/h4665.d
Lab Smp Id: SUPP010 Client Smp ID: SUPP010
Inj Date : 29-MAY-2004 15:28
Operator : yanezj Inst ID: H.i
Smp Info : SUPP010,,
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/052904.b/H-20ml-h2o.m
Meth Date : 29-May-2004 16:49 H Quant Type: ISTD
Cal Date : 13-MAY-2004 11:34 Cal File: h4151.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supplsub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | AMOUNTS | | | |
|-------------------------------|-----------|--------|----------------|----------|--------------------|-------------------|--|
| | MASS | RT | EXP RT REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) | |
| * 48 Fluorobenzene | 96 | 6.400 | 6.400 (1.000) | 1511042 | 10.0000 | | |
| * 72 Chlorobenzene-d5 | 119 | 10.065 | 10.065 (1.000) | 370905 | 10.0000 | | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.921 | 12.921 (1.000) | 532545 | 10.0000 | | |
| \$ 40 Dibromofluoromethane | 111 | 5.592 | 5.592 (0.874) | 792280 | 10.0000 | 11.5450 | |
| \$ 44 1,2-Dichloroethane-d4 | 65 | 5.987 | 5.987 (0.935) | 286970 | 10.0000 | 10.6325 | |
| \$ 61 Toluene-d8 | 98 | 8.286 | 8.286 (0.823) | 1346685 | 10.0000 | 8.71585 | |
| \$ 82 Bromofluorobenzene | 95 | 11.555 | 11.555 (1.148) | 860553 | 10.0000 | 10.5831 | |
| 117 Dichlorotetrafluoroethane | 85 | 1.981 | 1.981 (0.310) | 764663 | 10.0000 | 9.74106 | |
| 6 Ethylene Oxide | 43 | 2.377 | 2.377 (0.371) | 620463 | 1250.00 | 1438.44 | |
| 9 Dichlorofluoromethane | 67 | 2.664 | 2.664 (0.416) | 1153049 | 10.0000 | 12.4364 | |
| 12 Ethyl Ether | 59 | 2.933 | 2.933 (0.458) | 205199 | 10.0000 | 12.3567 | |
| 16 Trichlorotrifluoroethane | 151 | 3.167 | 3.167 (0.495) | 619110 | 10.0000 | 12.4207 | |
| 18 Carbon Disulfide | 76 | 3.418 | 3.418 (0.534) | 1647303 | 10.0000 | 12.0255 | |
| 20 Allyl Chloride | 41 | 3.508 | 3.508 (0.548) | 817329 | 10.0000 | 12.1943 | |
| 119 Methyl Acetate | 43 | 3.508 | 3.508 (0.548) | 591731 | 50.0000 | 63.0866 | |
| 25 Methyl t-butyl ether | 73 | 3.921 | 3.921 (0.613) | 648307 | 10.0000 | 12.9030 | |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 26 Hexane | 57 | 4.209 | 4.209 | (0.418) | 853301 | 10.0000 | 10.6149 |
| 29 Vinyl acetate | 43 | 4.406 | 4.406 | (0.688) | 729607 | 20.0000 | 29.6572 |
| 35 Ethyl Acetate | 43 | 5.107 | 5.107 | (0.798) | 291337 | 20.0000 | 26.2141 |
| 39 Tetrahydrofuran | 42 | 5.394 | 5.394 | (0.843) | 61579 | 20.0000 | 23.0258 |
| 120 ETBE | 59 | 4.855 | 4.855 | (0.759) | 5923429 | 50.0000 | 61.8770 |
| 114 Cyclohexane | 56 | 5.718 | 5.718 | (0.893) | 923886 | 10.0000 | 12.7223 |
| 115 2-Pentanone | 43 | 7.047 | 7.047 | (1.101) | 523582 | 40.0000 | 53.7161 |
| 121 TAME | 73 | 6.203 | 6.203 | (0.969) | 4213658 | 50.0000 | 63.3779 |
| 54 Methyl Methacrylate | 100 | 7.226 | 7.226 | (1.129) | 107422 | 20.0000 | 24.0289 |
| 122 Methyl Cyclohexane | 55 | 7.065 | 7.065 | (1.104) | 892860 | 10.0000 | 12.9205 |
| 57 2-nitropropane | 41 | 7.694 | 7.694 | (0.764) | 38355 | 10.0000 | 11.1504 |
| 113 2-Chloroethyl vinyl ether | 63 | 7.783 | 7.783 | (0.773) | 42494 | 10.0000 | 7.05176(a) |
| 64 Ethyl methacrylate | 69 | 8.735 | 8.735 | (0.868) | 604795 | 20.0000 | 22.3934 |
| 116 cis-1,4-Dichloro-2-butene | 53 | 11.448 | 11.448 | (0.886) | 37433 | 10.0000 | 9.18267 |
| 86 t-1,4-Dichloro-2-butene | 53 | 11.807 | 11.807 | (0.914) | 36577 | 10.0000 | 8.67406 |
| 118 1,2,3-Trimethylbenzene | 105 | 12.992 | 12.992 | (2.030) | 1598758 | 10.0000 | 13.3520 |
| 123 1,2-dichloro-1,1,2-trifluorom | 117 | 2.933 | 2.933 | (0.458) | 757348 | 10.0000 | 12.4399 |
| 124 2,2-dichloro-1,1,1-trifluorom | 83 | 2.987 | 2.987 | (0.467) | 1209087 | 10.0000 | 12.4410 |
| 125 2-Propanol | 45 | 3.311 | 3.311 | (0.517) | 137709 | 200.000 | 250.083 |
| 126 Tetrahydrothiophene | 60 | 9.346 | 9.346 | (0.929) | 52750 | 10.0000 | 7.76211 |

QC Flag Legend

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

Internal Standard
Check Report

Instrument ID: H.i
Lab File ID: h4665.d
Analysis Type: WATER

Injection Date: 29-MAY-2004 15:28
Lab Sample ID: SUPP010
Method File: /chem/H.i/052904.b/H-20ml-h2o.m

| INTERNAL STANDARD | ICAL AREA | SAMP AREA | ICAL RT | SAMP RT | %R |
|------------------------|--------------|--------------|------------|------------|-------|
| Fluorobenzene | 1540572 | 1511042 | 6.398 | 6.400 | 98.1 |
| Chlorobenzene-d5 | 325282 | 370905 | 10.062 | 10.065 | 114.0 |
| 1,4-Dichlorobenzene-d4 | 424257 | 532545 | 12.918 | 12.921 | 125.5 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4665.d
Lab Smp Id: SUPP010
Analysis Type: VOA
Quant Type: ISTD
Operator: yanezj
Method File: /chem/H.i/052904.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/29/4
Calibration Time: 1547
Client Smp ID: SUPP010
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|--------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 1815283 | 907642 | 3630566 | 1511042 | -16.76 |
| 72 Chlorobenzene-d5 | 378195 | 189098 | 756390 | 370905 | -1.93 |
| 96 1,4-Dichlorobenze | 548441 | 274220 | 1096882 | 532545 | -2.90 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 6.40 | 5.90 | 6.90 | 6.40 | 0.00 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.06 | 0.00 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.92 | 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.

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: H.i
Lab File ID: h4665.d
Analysis Type: WATER

Injection Date: 29-MAY-2004 15:28
Lab Sample ID: SUPP010
Method File: /chem/H.i/052904.b/H-20ml-h2o.m

| COMPOUND | EXPECTED CONC. | MEASURED CONC. | %D | MAX %D |
|-----------------------------------|-------------------|-------------------|------|-----------|
| 117 Dichlorotetrafluoroethane | 10.0000 | 9.7411 | 2.6 | 80.0 |
| 110 Ethylene Oxide | 1250.0000 | 1438.4412 | 15.1 | 50.0 |
| 87 Dichlorofluoromethane | 10.0000 | 12.4364 | 24.4 | 50.0 |
| 123 1,2-dichloro-1,1,2-trifluorom | 10.0000 | 12.4399 | 24.4 | 50.0 |
| 77 Ethyl Ether | 10.0000 | 12.3567 | 23.6 | 50.0 |
| 124 2,2-dichloro-1,1,1-trifluorom | 10.0000 | 12.4410 | 24.4 | 50.0 |
| 65 Trichlorotrifluoroethane | 10.0000 | 12.4207 | 24.2 | 50.0 |
| 125 2-Propanol | 200.0000 | 250.0834 | 25.0 | 50.0 |
| 10 Carbon Disulfide | 10.0000 | 12.0255 | 20.3 | 50.0 |
| 119 Methyl Acetate | 50.0000 | 63.0866 | 26.2 | 50.0 |
| 67 Allyl Chloride | 10.0000 | 12.1943 | 21.9 | 50.0 |
| 53 Methyl t-butyl ether | 10.0000 | 12.9030 | 29.0 | 50.0 |
| 54 Hexane | 10.0000 | 10.6149 | 6.1 | 50.0 |
| 24 Vinyl acetate | 20.0000 | 29.6572 | 48.3 | 50.0 |
| 120 ETBE | 50.0000 | 61.8770 | 23.8 | 50.0 |
| 78 Ethyl Acetate | 20.0000 | 26.2141 | 31.1 | 50.0 |
| 56 Tetrahydrofuran | 20.0000 | 23.0258 | 15.1 | 50.0 |
| 89 Dibromofluoromethane | 10.0000 | 11.5450 | 15.4 | 50.0 |
| 114 Cyclohexane | 10.0000 | 12.7223 | 27.2 | 50.0 |
| 303 1,2-Dichloroethane-d4 | 10.0000 | 10.6325 | 6.3 | 50.0 |
| 121 TAME | 50.0000 | 63.3779 | 26.8 | 50.0 |
| 115 2-Pentanone | 40.0000 | 53.7161 | 34.3 | 50.0 |
| 122 Methyl Cyclohexane | 10.0000 | 12.9205 | 29.2 | 50.0 |
| 73 Methyl Methacrylate | 20.0000 | 24.0289 | 20.1 | 50.0 |
| 82 2-nitropropane | 10.0000 | 11.1504 | 11.5 | 50.0 |
| 35 2-Chloroethyl vinyl ether | 10.0000 | 7.0518 | 29.5 | 50.0 |
| 301 Toluene-d8 | 10.0000 | 8.7158 | 12.8 | 50.0 |
| 41 Ethyl methacrylate | 20.0000 | 22.3934 | 12.0 | 50.0 |
| 126 Tetrahydrothiophene | 10.0000 | 7.7621 | 22.4 | 50.0 |
| 116 cis-1,4-Dichloro-2-butene | 10.0000 | 9.1827 | 8.2 | 50.0 |
| 302 Bromofluorobenzene | 10.0000 | 10.5831 | 5.8 | 50.0 |
| 60 t-1,4-Dichloro-2-butene | 10.0000 | 8.6741 | 13.3 | 50.0 |
| 118 1,2,3-Trimethylbenzene | 10.0000 | 13.3520 | 33.5 | 50.0 |

STL Denver

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: H.i Injection Date: 29-MAY-2004 15:28
 Lab File ID: h4665.d Init. Calibration Date(s): 05/13/4 05/13/4
 Analysis Type: WATER Init. Calibration Times: 07:58 11:34
 Lab Sample ID: SUPP010 Method File: /chem/H.i/052904.b/H-20ml-h2o.m
 Quant Type: ISTD

| COMPOUND | RRF | RF10 | MIN | MAX |
|---------------------------------|-------|-------|-------|------------|
| RRF | RF10 | RRF | %D | %D |
| \$ 40 Dibromofluoromethane | 0.454 | 0.524 | 0.010 | -15.4 50.0 |
| \$ 44 1,2-Dichloroethane-d4 | 0.179 | 0.190 | 0.010 | -6.3 50.0 |
| \$ 61 Toluene-d8 | 4.166 | 3.631 | 0.010 | 12.8 50.0 |
| \$ 82 Bromofluorobenzene | 2.192 | 2.320 | 0.010 | -5.8 50.0 |
| 117 Dichlorotetrafluoroethane | 0.520 | 0.506 | 0.010 | 2.6 80.0 |
| 6 Ethylene Oxide | 0.003 | 0.003 | 0.001 | -15.1 50.0 |
| 9 Dichlorofluoromethane | 0.614 | 0.763 | 0.010 | -24.4 50.0 |
| 12 Ethyl Ether | 0.110 | 0.136 | 0.010 | -23.6 50.0 |
| 16 Trichlorotrifluoroethane | 0.330 | 0.410 | 0.010 | -24.2 50.0 |
| 18 Carbon Disulfide | 0.907 | 1.090 | 0.010 | -20.3 50.0 |
| 20 Allyl Chloride | 0.444 | 0.541 | 0.010 | -21.9 50.0 |
| 119 Methyl Acetate | 0.062 | 0.078 | 0.010 | -26.2 50.0 |
| 25 Methyl t-butyl ether | 0.333 | 0.429 | 0.010 | -29.0 50.0 |
| 26 Hexane | 2.167 | 2.301 | 0.010 | -6.1 50.0 |
| 29 Vinyl acetate | 0.163 | 0.241 | 0.010 | -48.3 50.0 |
| 35 Ethyl Acetate | 0.074 | 0.096 | 0.010 | -31.1 50.0 |
| 39 Tetrahydrofuran | 0.018 | 0.020 | 0.003 | -15.1 50.0 |
| 120 ETBE | 0.634 | 0.784 | 0.010 | -23.8 50.0 |
| 114 Cyclohexane | 0.481 | 0.611 | 0.010 | -27.2 50.0 |
| 115 2-Pentanone | 0.065 | 0.087 | 0.005 | -34.3 50.0 |
| 121 TAME | 0.440 | 0.558 | 0.010 | -26.8 50.0 |
| 54 Methyl Methacrylate | 0.030 | 0.036 | 0.010 | -20.1 50.0 |
| 122 Methyl Cyclohexane | 0.457 | 0.591 | 0.010 | -29.2 50.0 |
| 57 2-nitropropane | 0.099 | 0.103 | 0.010 | N/A N/A |
| 113 2-Chloroethyl vinyl ether | 0.219 | 0.115 | 0.010 | N/A N/A |
| 64 Ethyl methacrylate | 0.728 | 0.815 | 0.010 | -12.0 50.0 |
| 116 cis-1,4-Dichloro-2-butene | 0.077 | 0.070 | 0.010 | 8.2 50.0 |
| 86 t-1,4-Dichloro-2-butene | 0.079 | 0.069 | 0.010 | 13.3 50.0 |
| 118 1,2,3-Trimethylbenzene | 0.792 | 1.058 | 0.010 | -33.5 50.0 |
| 123 1,2-dichloro-1,1,2-trifluor | 0.403 | 0.501 | 0.010 | -24.4 50.0 |
| 124 2,2-dichloro-1,1,1-trifluor | 0.643 | 0.800 | 0.010 | -24.4 50.0 |
| 125 2-Propanol | 0.004 | 0.005 | 0.001 | -25.0 50.0 |
| 126 Tetrahydrothiophene | 0.183 | 0.142 | 0.010 | 22.4 50.0 |

Data File: /chem/H.i/052904.b/h4665.d

Date : 29-MAY-2004 15:28

Client ID: SUPP010

Sample Info: SUPP010,,

Purge Volume: 20.0

Column phase: DB624

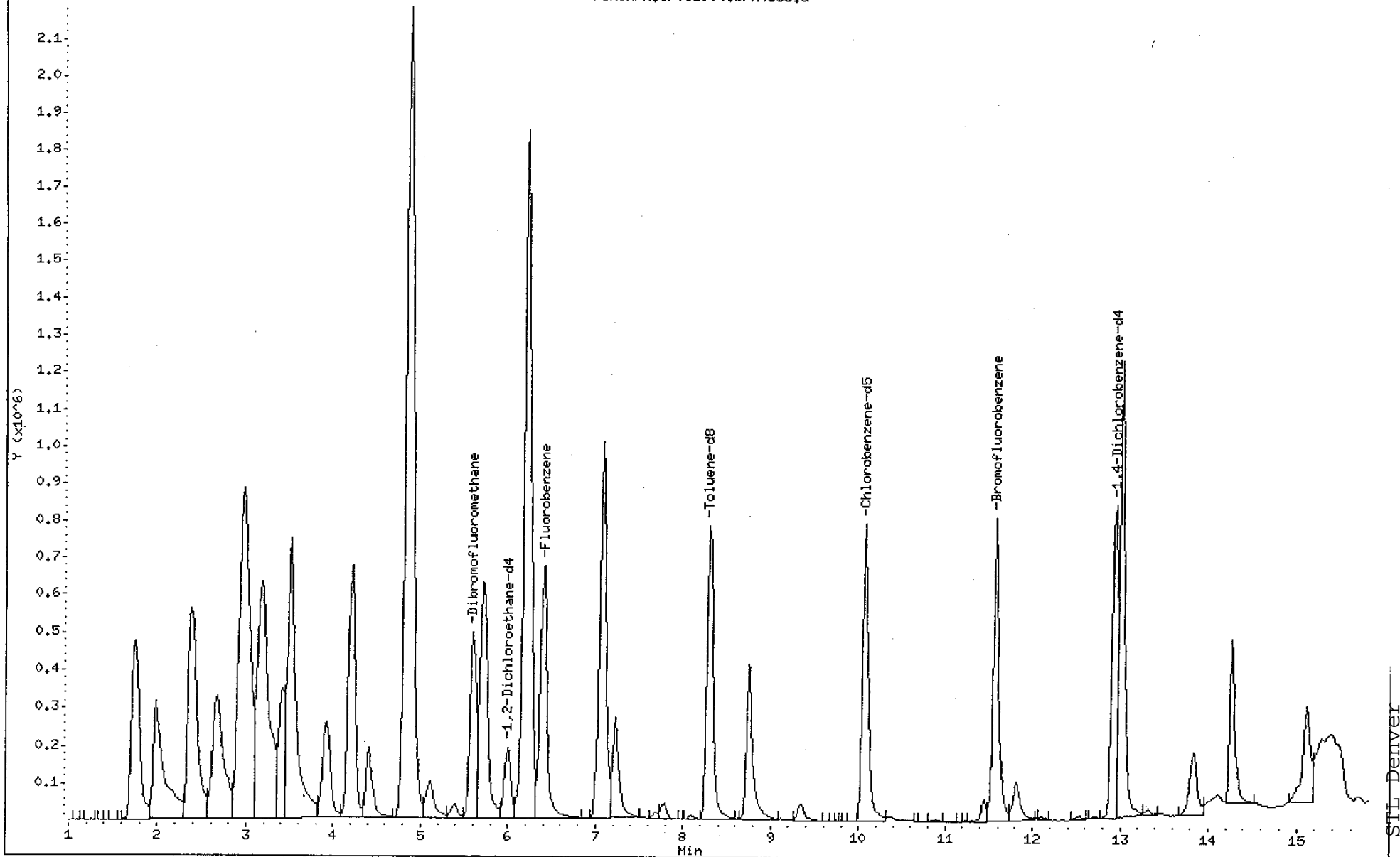
Instrument: H.i

Operator: yanezj

Column diameter: 0.53

Page 5

/chem/H.i/052904.b/h4665.d



**GC/MS VOLATILE
SAMPLE DATA**



STL

Matrix Spike Report

UNSPIKED SAMPLE

Data File : /chem/H.i/052904.b/h4674.d
Samp Info : GG8K41AA,,D4E270388-012
Inj Date : 29-MAY-2004 19:21
Sample Amt : 20mL

SPIKE SAMPLE

Data File : /chem/H.i/052904.b/h4675.d
Samp Info : GG8K41AC,,D4E270388-012MS
Inj Date : 29-MAY-2004 19:40
Sample Amt : 20mL

SPIKE DUPLICATE SAMPLE

Data File : /chem/H.i/052904.b/h4676.d
Samp Info : GG8K41AD,,D4E270388-012MSD
Inj Date : 29-MAY-2004 20:00
Sample Amt : 20mL

| Sample | Concentration | | | | %Recovery | | | | | | |
|--------------------|---------------|---------|----------|---------|-----------------|-----|-----|-----|-----|-----|-----|
| | MS | | MSD | | Measured Limits | | | | RPD | | |
| | Measured | Spiked | Measured | Spiked | Measured | MS | MSD | Min | Max | Mes | Max |
| ===== | | | | | | | | | | | |
| 1,1-Dichloroethene | 0.0000 | 10.0000 | 9.8258 | 10.0000 | 9.6590 | 98 | 97 | 67 | 125 | 2 | 20 |
| Trichloroethene | 0.0000 | 10.0000 | 10.0772 | 10.0000 | 9.9831 | 101 | 100 | 80 | 123 | 1 | 20 |
| Benzene | 0.0000 | 10.0000 | 10.3768 | 10.0000 | 10.2585 | 104 | 103 | 75 | 116 | 1 | 20 |
| Toluene | 0.0000 | 10.0000 | 9.5182 | 10.0000 | 9.3374 | 95 | 93 | 74 | 115 | 2 | 20 |
| Chlorobenzene | 0.0000 | 10.0000 | 9.6519 | 10.0000 | 9.5686 | 97 | 96 | 77 | 117 | 1 | 20 |

100.0 Percent of recoveries are within control limits.

100.0 Percent of RPD values are within control limits.

LCS Report

LCS SAMPLE

Data File : /chem/H.i/052904.b/h4671.d

Samp Info : LCS,,109-04

Inj Date : 29-MAY-2004 17:59

Sample Amt : 20mL

| Sample # | Sample # | Sample # | Sample # | Sample # |
|----------|----------|----------|----------|----------|
| ===== | ===== | ===== | ===== | ===== |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

| Compound | Concentration | | %Recovery | | |
|--------------------|---------------|----------|-----------|-----|-----|
| | Spiked | Measured | Meas. | Min | Max |
| 1,1-Dichloroethene | 10.0000 | 9.2801 | 93 | 67 | 125 |
| Benzene | 10.0000 | 9.7726 | 98 | 75 | 116 |
| Trichloroethene | 10.0000 | 9.6091 | 96 | 80 | 123 |
| Toluene | 10.0000 | 8.8776 | 89 | 74 | 115 |
| Chlorobenzene | 10.0000 | 9.1665 | 92 | 77 | 117 |

100.0 Percent of recoveries are within control limits.

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/052904.b/h4671.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 29-MAY-2004 17:59
Operator : yanezj Inst ID: H.i
Smp Info : LCS,,109-04
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/052904.b/H-20ml-h2o.m
Meth Date : 29-May-2004 16:50 yanezj Quant Type: ISTD
Cal Date : 13-MAY-2004 11:34 Cal File: h4151.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: dcs.sub
Target Version: 3.40
Processing Host: chemsv02

05/31/04
JMY

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | | | | | CONCENTRATIONS | |
|-----------------------------|-----------|--------|--------|---------|----------|-----------|---------|----------------|---------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN | FINAL | (ug/L) | (ug/L) |
| ***** | ---- | -- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| * 48 Fluorobenzene | 96 | 6.397 | 6.400 | (1.000) | 1912208 | 10.0000 | | | |
| * 72 Chlorobenzene-d5 | 119 | 10.062 | 10.065 | (1.000) | 424217 | 10.0000 | | | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.918 | 12.921 | (1.000) | 579165 | 10.0000 | | | |
| \$ 40 Dibromofluoromethane | 111 | 5.589 | 5.592 | (0.874) | 890710 | 10.2563 | 10.2563 | | |
| \$ 44 1,2-Dichloroethane-d4 | 65 | 6.002 | 5.987 | (0.938) | 364908 | 10.6837 | 10.6837 | | |
| \$ 61 Toluene-d8 | 98 | 8.301 | 8.286 | (0.825) | 1718673 | 9.72549 | 9.72549 | | |
| \$ 82 Bromofluorobenzene | 95 | 11.552 | 11.555 | (1.148) | 932524 | 10.0270 | 10.0270 | | |
| 14 1,1-Dichloroethene | 96 | 3.182 | 3.185 | (0.497) | 516082 | 9.28008 | 9.28008 | | |
| 46 Benzene | 78 | 6.074 | 6.077 | (0.949) | 1505852 | 9.77261 | 9.77261 | | |
| 50 Trichloroethene | 130 | 6.846 | 6.849 | (1.070) | 629466 | 9.60915 | 9.60915 | | |
| 62 Toluene | 91 | 8.373 | 8.376 | (0.832) | 1779382 | 8.87757 | 8.87757 | | |
| 73 Chlorobenzene | 112 | 10.097 | 10.100 | (1.004) | 1233511 | 9.16648 | 9.16648 | | |

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/052904.b/h4671.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 29-MAY-2004 17:59
Operator : yanezj Inst ID: H.i
Smp Info : LCS,,109-04
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/052904.b/H-20ml-h2o.m
Meth Date : 29-May-2004 16:50 yanezj Quant Type: ISTD
Cal Date : 13-MAY-2004 11:34 Cal File: h4151.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: dcs.sub
Target Version: 3.40
Processing Host: chemsv02

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4671.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: yanezj
Method File: /chem/H.i/052904.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/29/4
Calibration Time: 1528
Client Smp ID: LCS
Level: LOW
Sample Type: WATER

| COMPOUND ===== | STANDARD ===== | AREA LIMIT | | SAMPLE ===== | %DIFF ===== |
|----------------------|-------------------|----------------|----------------|-----------------|----------------|
| | | LOWER ===== | UPPER ===== | | |
| 48 Fluorobenzene | 1511042 | 755521 | 3022084 | 1912208 | 26.55 |
| 72 Chlorobenzene-d5 | 370905 | 185452 | 741810 | 424217 | 14.37 |
| 96 1,4-Dichlorobenze | 532545 | 266272 | 1065090 | 579165 | 8.75 |

| COMPOUND ===== | STANDARD ===== | RT LIMIT | | SAMPLE ===== | %DIFF ===== |
|----------------------|-------------------|----------------|----------------|-----------------|----------------|
| | | LOWER ===== | UPPER ===== | | |
| 48 Fluorobenzene | 6.40 | 5.90 | 6.90 | 6.40 | -0.05 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.06 | -0.03 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.92 | -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.

STL Denver

RECOVERY REPORT

Client Name: Client SDG: 052904
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: LCS Client Smp ID: LCS
Level: LOW Operator: yanezj
Data Type: MS DATA SampleType: LCS
SpikeList File: dcs-h20.spk Quant Type: ISTD
Sublist File: dcs.sub
Method File: /chem/H.i/052904.b/H-20ml-h2o.m
Misc Info:

| SPIKE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|-----------------------|-----------------------|---------------------------|----------------|--------|
| 14 1,1-Dichloroethene | 10.0000 | 9.28008 | 92.80 | 67-125 |
| 50 Trichloroethene | 10.0000 | 9.60915 | 96.09 | 80-123 |
| 46 Benzene | 10.0000 | 9.77261 | 97.73 | 75-116 |
| 62 Toluene | 10.0000 | 8.87757 | 88.78 | 74-115 |
| 73 Chlorobenzene | 10.0000 | 9.16648 | 91.66 | 77-117 |

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 40 Dibromofluorometha | 10.0000 | 10.2563 | 102.56 | 76-116 |
| \$ 44 1,2-Dichloroethane | 10.0000 | 10.6837 | 106.84 | 59-129 |
| \$ 61 Toluene-d8 | 10.0000 | 9.72549 | 97.25 | 76-116 |
| \$ 82 Bromofluorobenzene | 10.0000 | 10.0270 | 100.27 | 74-114 |

Data File: /chem/H.i/052904.b/h4671.d

Date : 29-MAY-2004 17:59

Client ID: LCS

Sample Info: LCS,,109-04

Purge Volume: 20.0

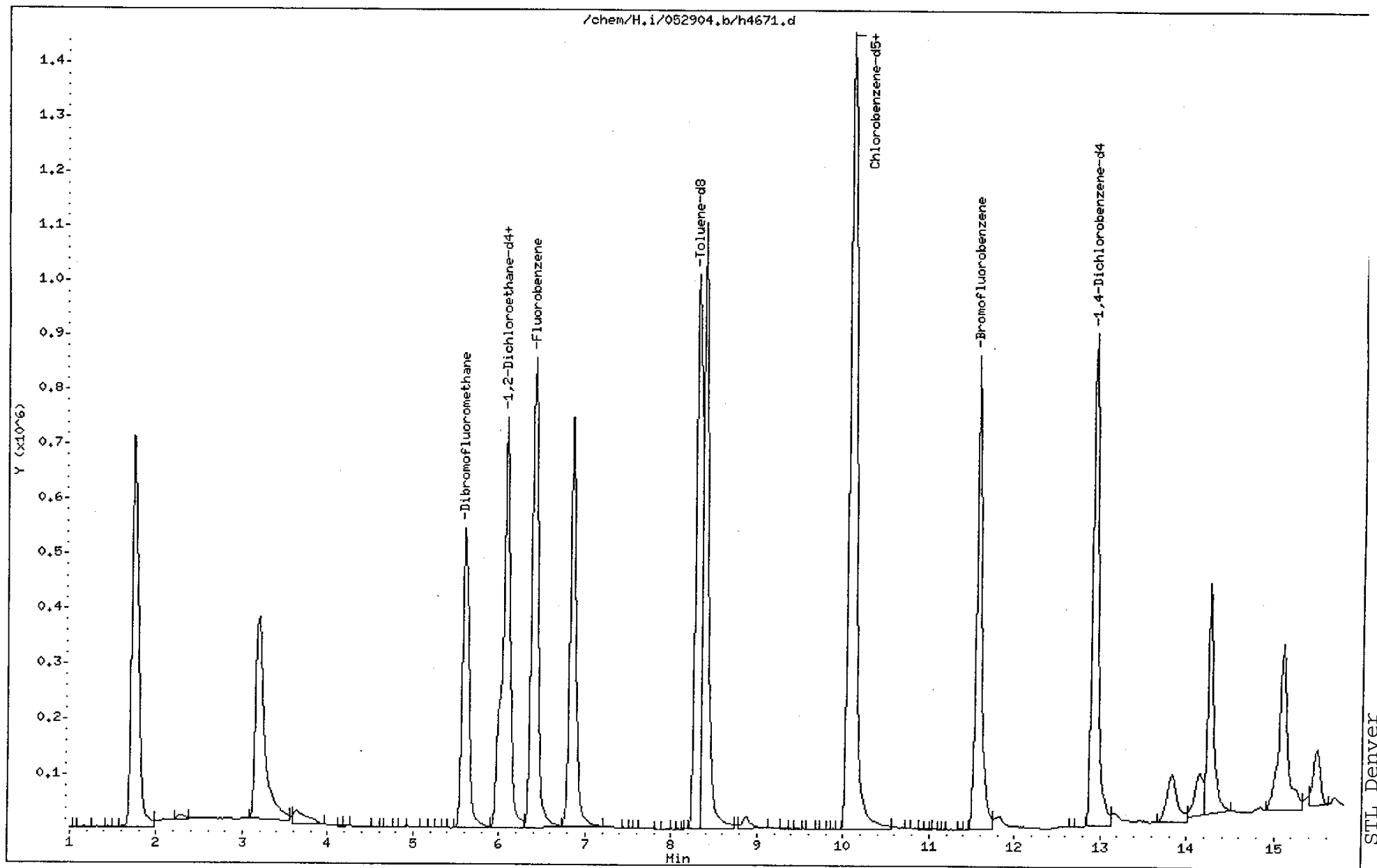
Column phase: DB624

Instrument: H.i

Operator: yanez.j

Column diameter: 0.53

Page 5



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/052904.b/h4672.d

Lab Smp Id: VBLK

Client Smp ID: VBLK

Inj Date : 29-MAY-2004 18:21

Operator : yanezj

Inst ID: H.i

Smp Info : VBLK,,104-04

Misc Info :

Comment : Purge and Trap Analysis

Method : /chem/H.i/052904.b/H-20ml-h2o.m

Meth Date : 29-May-2004 16:50 yanezj

Quant Type: ISTD

Cal Date : 13-MAY-2004 11:34

Cal File: h4151.d

Als bottle: 2

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: H-all.sub

Target Version: 3.40

Processing Host: chemsv02

05/31/04
Jm

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | |
|-----------------------------------|-----------|------------------------|--------|---------|----------|---------|---------|
| | | ON-COLUMN | FINAL | | | | |
| | MASS | RT | EXP RT | REL RT | RESPONSE | (ug/L) | (ug/L) |
| * 48 Fluorobenzene | 96 | 6.400 | 6.400 | (1.000) | 1953537 | 10.0000 | |
| * 72 Chlorobenzene-d5 | 119 | 10.064 | 10.065 | (1.000) | 428068 | 10.0000 | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.902 | 12.921 | (1.000) | 581593 | 10.0000 | |
| \$ 40 Dibromofluoromethane | 111 | 5.609 | 5.592 | (0.876) | 892245 | 10.0566 | 10.0566 |
| \$ 44 1,2-Dichloroethane-d4 | 65 | 6.005 | 5.987 | (0.938) | 367141 | 10.5217 | 10.5217 |
| \$ 61 Toluene-d8 | 98 | 8.304 | 8.286 | (0.825) | 1766445 | 9.90590 | 9.90590 |
| \$ 82 Bromofluorobenzene | 95 | 11.555 | 11.555 | (1.148) | 930540 | 9.91562 | 9.91562 |
| M 1 1,2-Dichloroethene (total) | 96.00 | Compound Not Detected. | | | | | |
| M 2 Xylene (total) | 106.00 | Compound Not Detected. | | | | | |
| 3 dichlorodifluoromethane | 85.00 | Compound Not Detected. | | | | | |
| 4 Chloromethane | 50.00 | Compound Not Detected. | | | | | |
| 5 Vinyl Chloride | 62.00 | Compound Not Detected. | | | | | |
| 6 Ethylene Oxide | 43.00 | Compound Not Detected. | | | | | |
| 117 Dichlorotetrafluoroethane | 85.00 | Compound Not Detected. | | | | | |
| 123 1,2-dichloro-1,1,2-trifluorom | 117.00 | Compound Not Detected. | | | | | |
| 124 2,2-dichloro-1,1,1-trifluorom | 83.00 | Compound Not Detected. | | | | | |

| Compounds | QUANT | SIG | CONCENTRATIONS | | | | | |
|-----------------------------|--------|-------|----------------|----------|---------|-----------|-----------|----------|
| | | | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN | FINAL |
| ===== | ===== | ===== | == | ===== | ===== | ===== | (ug/L) | (ug/L) |
| 7 Bromomethane | 94.00 | | | Compound | Not | Detected. | | |
| 8 Chloroethane | 64.00 | | | Compound | Not | Detected. | | |
| 9 Dichlorofluoromethane | 67.00 | | | Compound | Not | Detected. | | |
| 10 Trichlorofluoromethane | 101.00 | | | Compound | Not | Detected. | | |
| 11 Ethanol | 45.00 | | | Compound | Not | Detected. | | |
| 12 Ethyl Ether | 59.00 | | | Compound | Not | Detected. | | |
| 13 Acrolein | 56.00 | | | Compound | Not | Detected. | | |
| 15 Acetone | 43.00 | | | Compound | Not | Detected. | | |
| 14 1,1-Dichloroethene | 96.00 | | | Compound | Not | Detected. | | |
| 16 Trichlorotrifluoroethane | 151.00 | | | Compound | Not | Detected. | | |
| 17 Iodomethane | 142.00 | | | Compound | Not | Detected. | | |
| 19 Acetonitrile | 41.00 | | | Compound | Not | Detected. | | |
| 18 Carbon Disulfide | 76.00 | | | Compound | Not | Detected. | | |
| 20 Allyl Chloride | 41.00 | | | Compound | Not | Detected. | | |
| 119 Methyl Acetate | 43.00 | | | Compound | Not | Detected. | | |
| 21 Methylene Chloride | 84 | | 3.669 | 3.634 | (0.573) | 14873 | 0.33560 | 0.335604 |
| 125 2-Propanol | 45.00 | | | Compound | Not | Detected. | | |
| 22 tert-Butyl alcohol | 59.00 | | | Compound | Not | Detected. | | |
| 23 Acrylonitrile | 53.00 | | | Compound | Not | Detected. | | |
| 24 trans-1,2-Dichloroethene | 96.00 | | | Compound | Not | Detected. | | |
| 25 Methyl t-butyl ether | 73.00 | | | Compound | Not | Detected. | | |
| 26 Hexane | 57.00 | | | Compound | Not | Detected. | | |
| 27 1,1-Dichloroethane | 63.00 | | | Compound | Not | Detected. | | |
| 29 Vinyl acetate | 43.00 | | | Compound | Not | Detected. | | |
| 30 Isopropyl ether | 87.00 | | | Compound | Not | Detected. | | |
| 28 Chloroprene | 53.00 | | | Compound | Not | Detected. | | |
| 120 ETBE | 59.00 | | | Compound | Not | Detected. | | |
| 33 2-Butanone | 43.00 | | | Compound | Not | Detected. | | |
| 32 cis-1,2-Dichloroethene | 96.00 | | | Compound | Not | Detected. | | |
| 31 2,2-Dichloropropane | 77.00 | | | Compound | Not | Detected. | | |
| 35 Ethyl Acetate | 43.00 | | | Compound | Not | Detected. | | |
| 34 Propionitrile | 54.00 | | | Compound | Not | Detected. | | |
| 36 Methacrylonitrile | 41.00 | | | Compound | Not | Detected. | | |
| 37 Bromochloromethane | 128.00 | | | Compound | Not | Detected. | | |
| 39 Tetrahydrofuran | 42.00 | | | Compound | Not | Detected. | | |
| 38 Chloroform | 83.00 | | | Compound | Not | Detected. | | |
| 41 1,1,1-Trichloroethane | 97.00 | | | Compound | Not | Detected. | | |
| 114 Cyclohexane | 56.00 | | | Compound | Not | Detected. | | |
| 42 1,1-Dichloropropene | 75.00 | | | Compound | Not | Detected. | | |
| 43 Carbon Tetrachloride | 117.00 | | | Compound | Not | Detected. | | |
| 45 Isobutanol | 41.00 | | | Compound | Not | Detected. | | |
| 46 Benzene | 78.00 | | | Compound | Not | Detected. | | |
| 47 1,2-Dichloroethane | 62.00 | | | Compound | Not | Detected. | | |
| 121 TAME | 73.00 | | | Compound | Not | Detected. | | |
| 49 n-Butanol | 56.00 | | | Compound | Not | Detected. | | |
| 50 Trichloroethene | 130.00 | | | Compound | Not | Detected. | | |
| 115 2-Pentanone | 43.00 | | | Compound | Not | Detected. | | |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|-------------------------------|-------------------|----|--------|--------|------------------------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ---- | == | ===== | ===== | ===== | ===== | ===== |
| 52 1,2-Dichloropropane | 63.00 | | | | Compound Not Detected. | | |
| 122 Methyl Cyclohexane | 55.00 | | | | Compound Not Detected. | | |
| 53 Dibromomethane | 93.00 | | | | Compound Not Detected. | | |
| 54 Methyl Methacrylate | 100.00 | | | | Compound Not Detected. | | |
| 55 1,4-Dioxane | 88.00 | | | | Compound Not Detected. | | |
| 56 Bromodichloromethane | 83.00 | | | | Compound Not Detected. | | |
| 57 2-nitropropane | 41.00 | | | | Compound Not Detected. | | |
| 113 2-Chloroethyl vinyl ether | 63.00 | | | | Compound Not Detected. | | |
| 59 cis-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 60 4-Methyl-2-pentanone | 43.00 | | | | Compound Not Detected. | | |
| 62 Toluene | 91.00 | | | | Compound Not Detected. | | |
| 63 trans-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 64 Ethyl methacrylate | 69.00 | | | | Compound Not Detected. | | |
| 65 1,1,2-Trichloroethane | 97.00 | | | | Compound Not Detected. | | |
| 67 1,3-Dichloropropane | 76.00 | | | | Compound Not Detected. | | |
| 66 Tetrachloroethene | 164.00 | | | | Compound Not Detected. | | |
| 68 2-Hexanone | 43.00 | | | | Compound Not Detected. | | |
| 126 Tetrahydrothiophene | 60.00 | | | | Compound Not Detected. | | |
| 69 Dibromochloromethane | 129.00 | | | | Compound Not Detected. | | |
| 70 1,2-Dibromoethane | 107.00 | | | | Compound Not Detected. | | |
| 71 1-Chlorohexane | 91.00 | | | | Compound Not Detected. | | |
| 73 Chlorobenzene | 112.00 | | | | Compound Not Detected. | | |
| 74 1,1,1,2-Tetrachloroethane | 131.00 | | | | Compound Not Detected. | | |
| 75 Ethylbenzene | 106.00 | | | | Compound Not Detected. | | |
| 76 m and p-Xylene | 106.00 | | | | Compound Not Detected. | | |
| 77 o-Xylene | 106.00 | | | | Compound Not Detected. | | |
| 78 Styrene | 104.00 | | | | Compound Not Detected. | | |
| 79 Bromoform | 173.00 | | | | Compound Not Detected. | | |
| 80 isopropyl benzene | 105.00 | | | | Compound Not Detected. | | |
| 116 cis-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 81 Cyclohexanone | 55.00 | | | | Compound Not Detected. | | |
| 83 1,1,2,2-Tetrachloroethane | 83.00 | | | | Compound Not Detected. | | |
| 84 Bromobenzene | 156.00 | | | | Compound Not Detected. | | |
| 85 1,2,3-Trichloropropane | 110.00 | | | | Compound Not Detected. | | |
| 86 t-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 87 n-Propylbenzene | 120.00 | | | | Compound Not Detected. | | |
| 88 2-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 89 1,3,5-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 90 4-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 91 tert-Butylbenzene | 119.00 | | | | Compound Not Detected. | | |
| 92 1,2,4-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 93 sec-Butylbenzene | 134.00 | | | | Compound Not Detected. | | |
| 94 m-Dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 95 4-Isopropyltoluene | 119.00 | | | | Compound Not Detected. | | |
| 97 p-dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 118 1,2,3-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 98 n-Butylbenzene | 91.00 | | | | Compound Not Detected. | | |

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | |
|---------------------------------|-----------|----------------|------------------------|--------|----------|----------------------|------------------|
| | | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 99 o-Dichlorobenzene | 146.00 | | Compound Not Detected. | | | | |
| 100 1,2-Dibromo-3-chloropropane | 157.00 | | Compound Not Detected. | | | | |
| 101 1,2,4-Trichlorobenzene | 180.00 | | Compound Not Detected. | | | | |
| 102 Hexachlorobutadiene | 225.00 | | Compound Not Detected. | | | | |
| 127 Naphthalene | 128.00 | | Compound Not Detected. | | | | |
| 104 1,2,3-Trichlorobenzene | 180.00 | | Compound Not Detected. | | | | |

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/052904.b/h4672.d

Lab Smp Id: VBLKClient Smp ID: VBLK

Inj Date : 29-MAY-2004 18:21

Operator : yanezjInst ID: H.i

Smp Info : VBLK,,104-04

Misc Info :

Comment : Purge and Trap Analysis

Method : /chem/H.i/052904.b/H-20ml-h2o.m

Meth Date : 29-May-2004 16:50 yanezjQuant Type: ISTD

Cal Date : 13-MAY-2004 11:34Cal File: h4151.d

Als bottle: 2

Dil Factor: 1.00000

Integrator: HP RTECompound Sublist: H-all.sub

Target Version: 3.40

Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| ISTD | RT | AREA | AMOUNT |
|-----------------------------|--------|---------|--------|
| ===== | ===== | ===== | ===== |
| * 96 1,4-Dichlorobenzene-d4 | 12.902 | 3947289 | 10.000 |

| CONCENTRATIONS | | | | QUANT | | | |
|---------------------------------|---------|---------------|--------------|-----------------|----------|-----------|--------|
| RT | AREA | ON-COL(ug/L) | FINAL(ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ===== | ===== | ===== | ===== | ===== | ===== | ===== | ===== |
| Acetic acid, 2-ethylhexyl ester | | | | CAS #: 103-09-3 | | | |
| 14.249 | 1242587 | 3.14795040 | 3.14795 | 91 | NBS75K.1 | 15793 | 96 |
| Unknown | | | | CAS #: | | | |
| 15.094 | 1365582 | 3.45954401 | 3.45954 | 0 | | 0 | 96 |
| Unknown | | | | CAS #: | | | |
| 15.471 | 2533177 | 6.41751085 | 6.41751 | 0 | | 0 | 96 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4672.d
Lab Smp Id: VBLK
Analysis Type: VOA
Quant Type: ISTD
Operator: yanezj
Method File: /chem/H.i/052904.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/29/4
Calibration Time: 1528
Client Smp ID: VBLK
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 1511042 | 755521 | 3022084 | 1953537 | 29.28 |
| 72 Chlorobenzene-d5 | 370905 | 185452 | 741810 | 428068 | 15.41 |
| 96 1,4-Dichlorobenze | 532545 | 266272 | 1065090 | 581593 | 9.21 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 48 Fluorobenzene | 6.40 | 5.90 | 6.90 | 6.40 | -0.01 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.06 | 0.00 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.90 | -0.14 |

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.

STL Denver

RECOVERY REPORT

Client Name: Client SDG: 052904
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: VBLK Client Smp ID: VBLK
Level: LOW Operator: yanezj
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: dcs-h20.spk Quant Type: ISTD
Sublist File: H-all.sub
Method File: /chem/H.i/052904.b/H-20ml-h2o.m
Misc Info:

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 40 Dibromofluorometha | 10.0000 | 10.0566 | 100.57 | 76-116 |
| \$ 44 1,2-Dichloroethane | 10.0000 | 10.5217 | 105.22 | 59-129 |
| \$ 61 Toluene-d8 | 10.0000 | 9.90590 | 99.06 | 76-116 |
| \$ 82 Bromofluorobenzene | 10.0000 | 9.91562 | 99.16 | 74-114 |

Data File: /chem/H.i/052904.b/h4672.d

Date : 29-MAY-2004 18:21

Client ID: VBLK

Sample Info: VBLK,,104-04

Purge Volume: 20.0

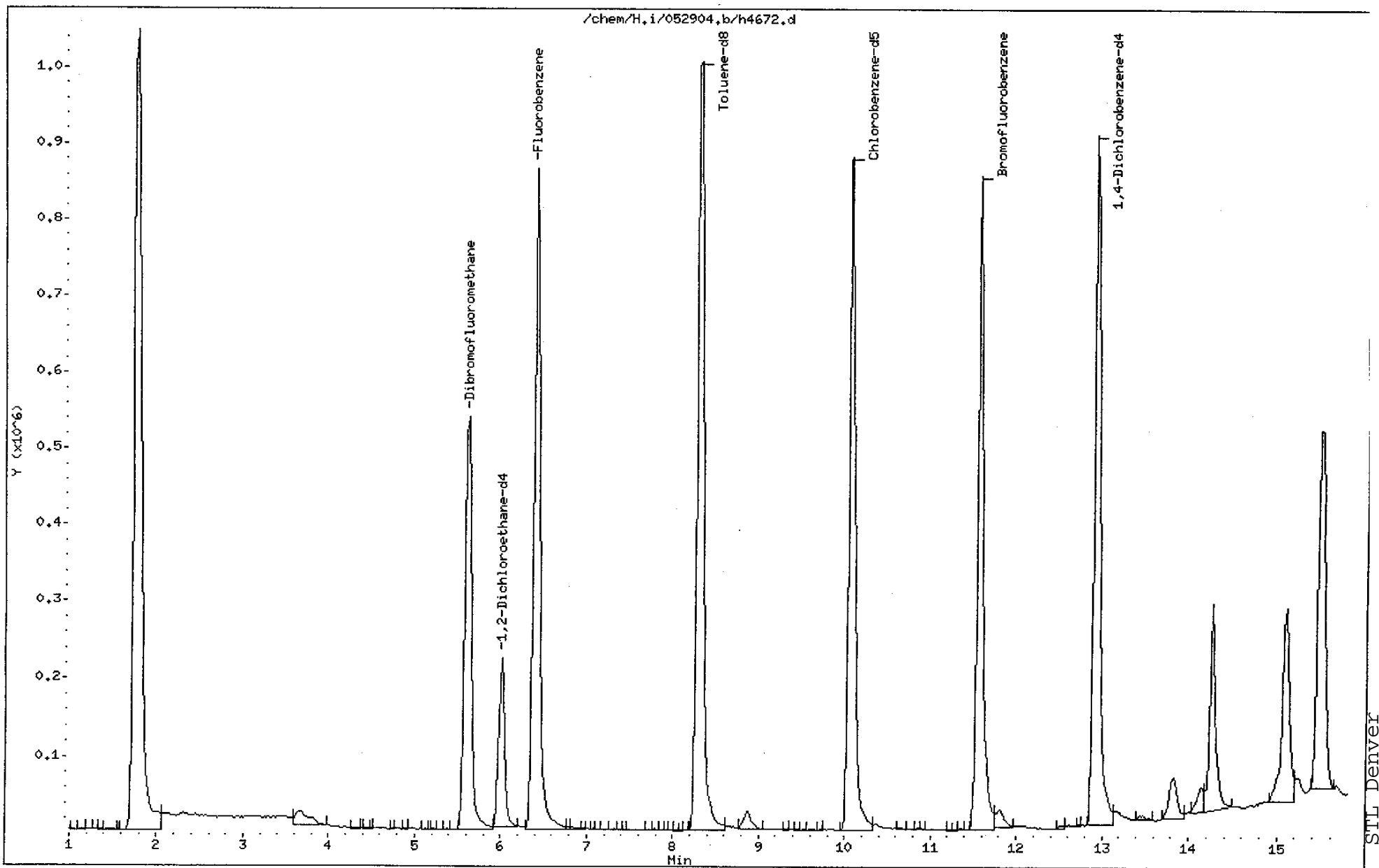
Column phase: DB624

Instrument: H.i

Operator: yanezj

Column diameter: 0.53

/chem/H.i/052904.b/h4672.d



Date : 29-MAY-2004 18:21

Client ID: VBLK

Instrument: H.i

Sample Info: VBLK,,104-04

Purge Volume: 20.0

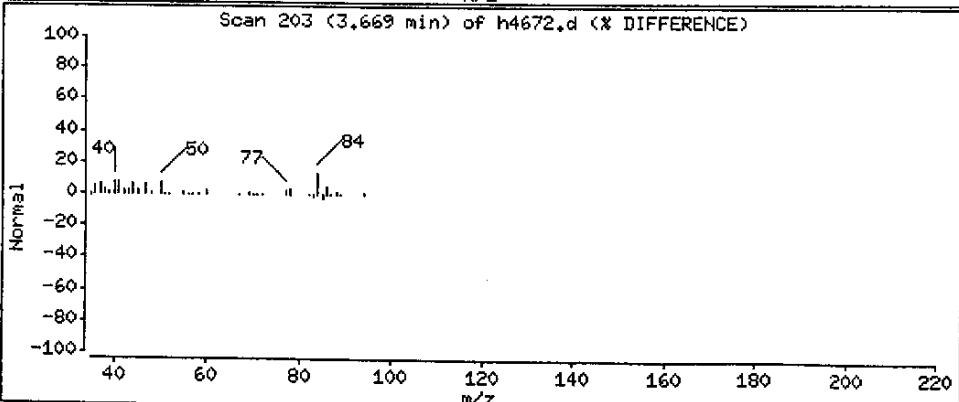
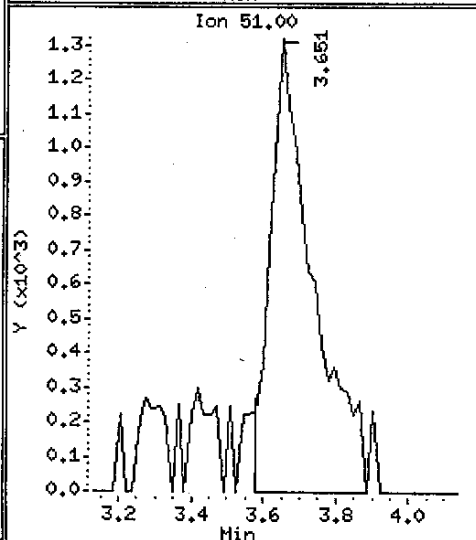
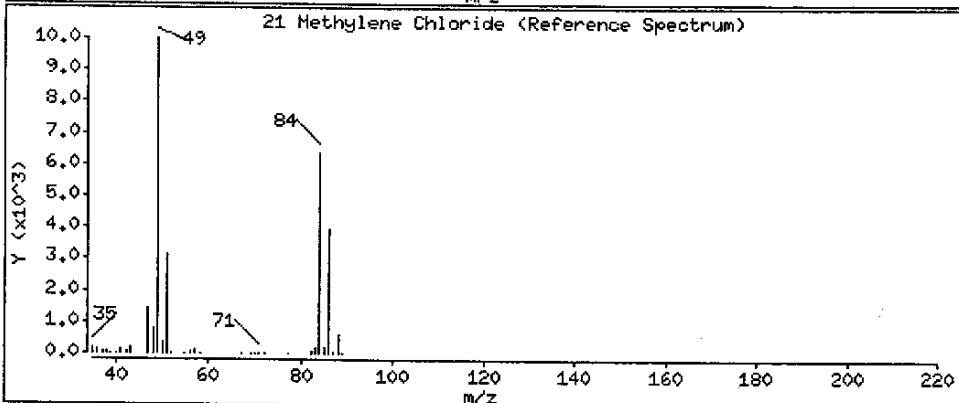
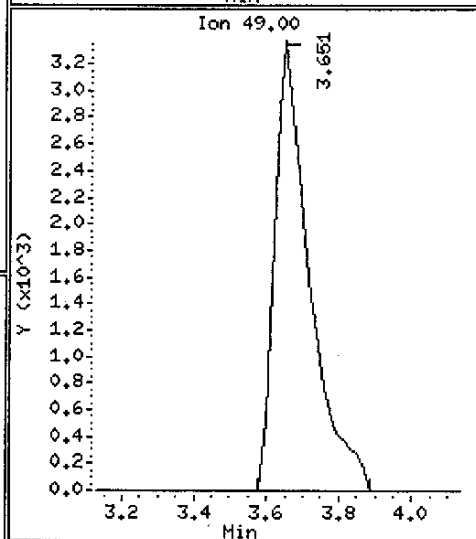
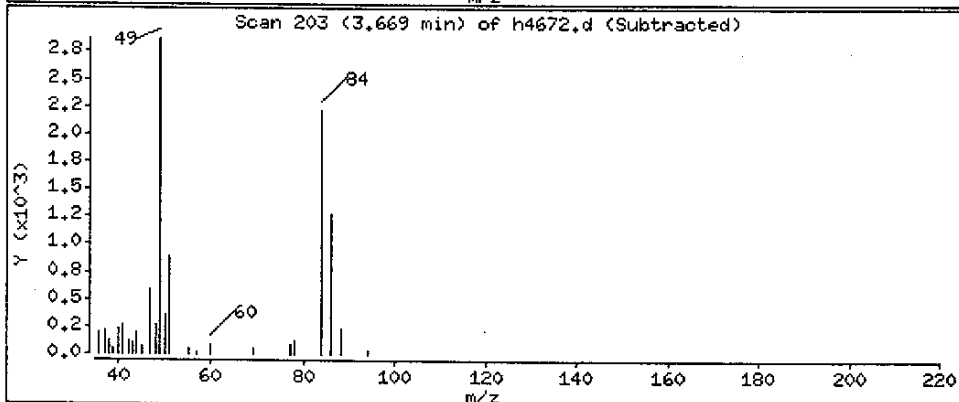
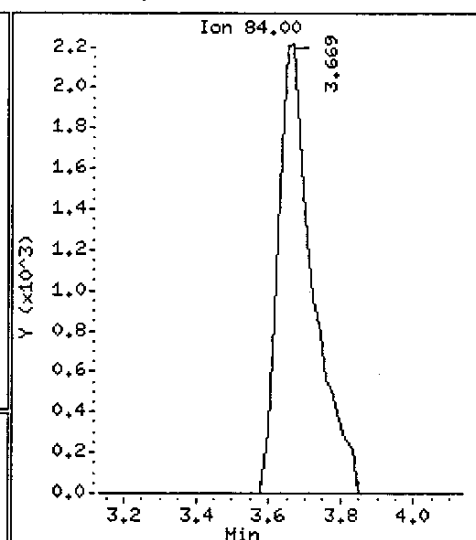
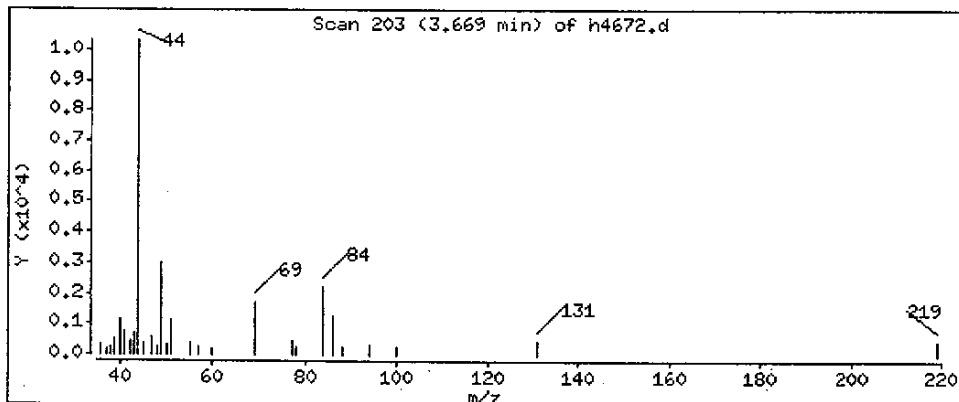
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

21 Methylene Chloride

Concentration: 0.335604 ug/L



Date : 29-MAY-2004 18:21

Client ID: VBLK

Instrument: H.i

Sample Info: VBLK,,104-04

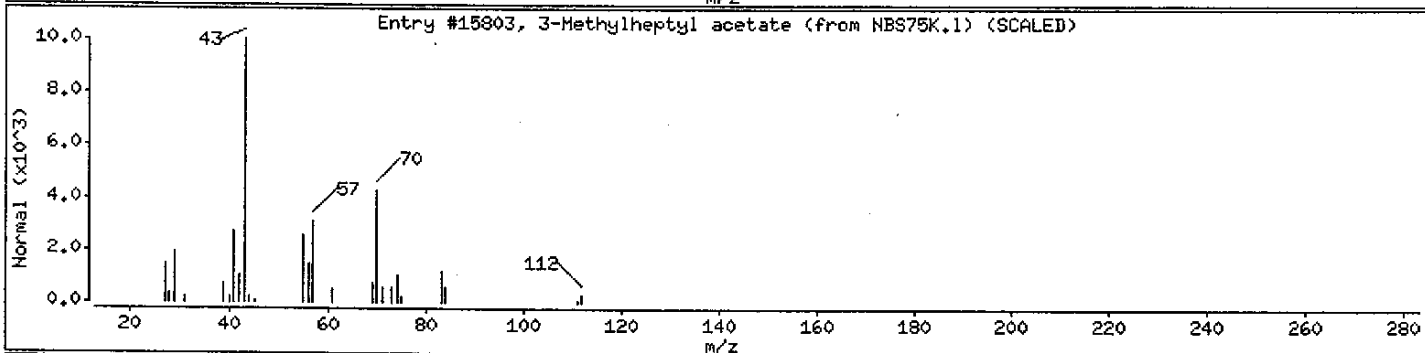
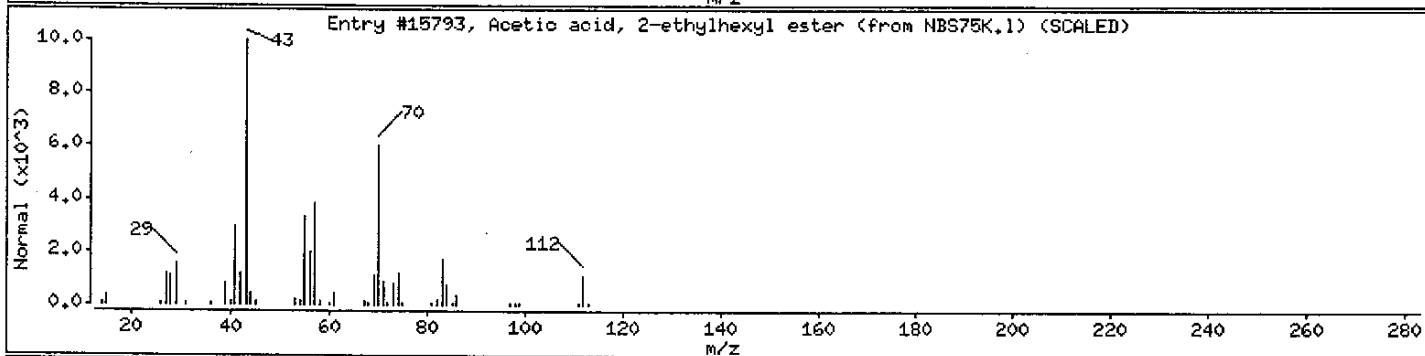
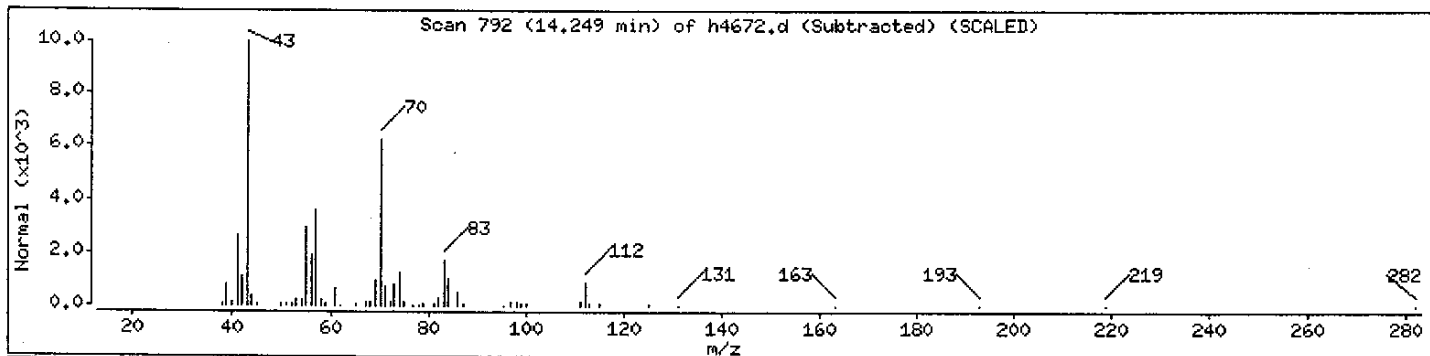
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---------------------------------|------------|----------|-------|---------|----------|--------|
| Acetic acid, 2-ethylhexyl ester | 103-09-3 | NBS75K.1 | 15793 | 91 | C10H20O2 | 172 |
| 3-Methylheptyl acetate | 72218-58-7 | NBS75K.1 | 15803 | 86 | C10H20O2 | 172 |



Date : 29-MAY-2004 18:21

Client ID: VBLK

Instrument: H.i

Sample Info: VBLK,,104-04

Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match

CAS Number

Library

Entry

Quality

Formula

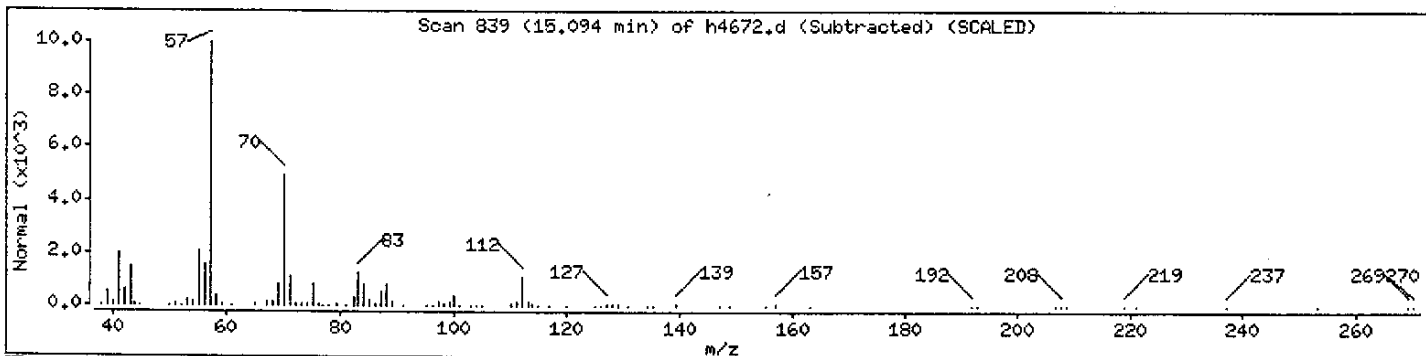
Weight

Unknown

0

0

0



Date : 29-MAY-2004 18:21

Client ID: VBLK

Instrument: H.i

Sample Info: VBLK,,104-04

Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match

CAS Number

Library

Entry

Quality

Formula

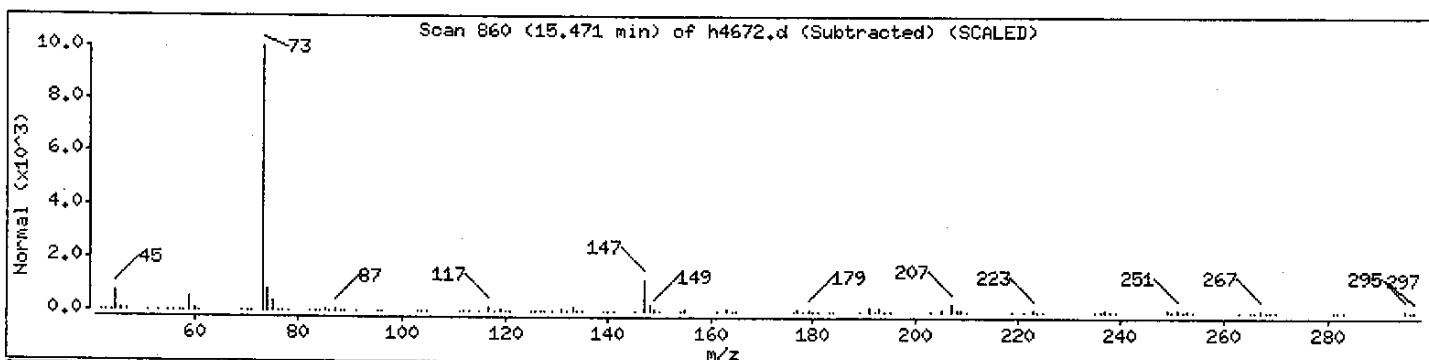
Weight

Unknown

0

0

0



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/052904.b/h4680.d
Lab Smp Id: GGTFX1AA Client Smp ID: 01-MW-11
Inj Date : 29-MAY-2004 21:20
Operator : yanezj Inst ID: H.i
Smp Info : GGTFX1AA,,D4E210325-008
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/052904.b/H-20ml-h2o.m
Meth Date : 29-May-2004 16:50 yanezj Quant Type: ISTD
Cal Date : 13-MAY-2004 11:34 Cal File: h4151.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: H-all.sub
Target Version: 3.40
Processing Host: chemsv02

05/31/04
JMY

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| Compounds | QUANT SIG | | | | | | | CONCENTRATIONS | |
|-----------------------------------|-----------|------------------------|--------|---------|----------|-----------|---------|----------------|---------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN | FINAL | (ug/L) | (ug/L) |
| ***** | **** | == | ===== | ===== | ===== | ===== | ===== | ===== | ===== |
| * 48 Fluorobenzene | 96 | 6.381 | 6.400 | (1.000) | 1949965 | 10.0000 | | | |
| * 72 Chlorobenzene-d5 | 119 | 10.046 | 10.065 | (1.000) | 419583 | 10.0000 | | | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.902 | 12.921 | (1.000) | 571232 | 10.0000 | | | |
| \$ 40 Dibromofluoromethane | 111 | 5.573 | 5.592 | (0.873) | 904626 | 10.2149 | 10.2149 | | |
| \$ 44 1,2-Dichloroethane-d4 | 65 | 5.986 | 5.987 | (0.938) | 371089 | 10.6543 | 10.6543 | | |
| \$ 61 Toluene-d8 | 98 | 8.285 | 8.286 | (0.825) | 1743571 | 9.97535 | 9.97535 | | |
| \$ 82 Bromofluorobenzene | 95 | 11.536 | 11.555 | (1.148) | 938747 | 10.2054 | 10.2054 | | |
| M 1 1,2-Dichloroethene (total) | 96.00 | Compound Not Detected. | | | | | | | |
| M 2 Xylene (total) | 106.00 | Compound Not Detected. | | | | | | | |
| 3 dichlorodifluoromethane | 85.00 | Compound Not Detected. | | | | | | | |
| 4 Chloromethane | 50.00 | Compound Not Detected. | | | | | | | |
| 5 Vinyl Chloride | 62.00 | Compound Not Detected. | | | | | | | |
| 6 Ethylene Oxide | 43.00 | Compound Not Detected. | | | | | | | |
| 117 Dichlorotetrafluoroethane | 85.00 | Compound Not Detected. | | | | | | | |
| 123 1,2-dichloro-1,1,2-trifluorom | 117.00 | Compound Not Detected. | | | | | | | |
| 124 2,2-dichloro-1,1,1-trifluorom | 83.00 | Compound Not Detected. | | | | | | | |

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | |
|-----------------------------|-----------|------------------------|--------|---------|----------|----------------------|------------------------|
| | | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| 7 Bromomethane | 94.00 | Compound Not Detected. | | | | | |
| 8 Chloroethane | 64.00 | Compound Not Detected. | | | | | |
| 9 Dichlorofluoromethane | 67.00 | Compound Not Detected. | | | | | |
| 10 Trichlorofluoromethane | 101.00 | Compound Not Detected. | | | | | |
| 11 Ethanol | 45.00 | Compound Not Detected. | | | | | |
| 12 Ethyl Ether | 59 | 2.932 | 2.933 | (0.460) | 4353358 | 203.144 | 203.144 (A) <i>NTC</i> |
| 13 Acrolein | 56.00 | Compound Not Detected. | | | | | |
| 15 Acetone | 43 | 3.184 | 3.203 | (0.499) | 55680 | 17.7859 | 17.7859 |
| 14 1,1-Dichloroethene | 96.00 | Compound Not Detected. | | | | | |
| 16 Trichlorotrifluoroethane | 151.00 | Compound Not Detected. | | | | | |
| 17 Iodomethane | 142.00 | Compound Not Detected. | | | | | |
| 19 Acetonitrile | 41.00 | Compound Not Detected. | | | | | |
| 18 Carbon Disulfide | 76 | 3.399 | 3.418 | (0.533) | 48882 | 0.27652 | 0.276522 |
| 20 Allyl Chloride | 41.00 | Compound Not Detected. | | | | | |
| 119 Methyl Acetate | 43.00 | Compound Not Detected. | | | | | |
| 21 Methylene Chloride | 84 | 3.615 | 3.634 | (0.567) | 20902 | 0.47251 | 0.472510 |
| 125 2-Propanol | 45.00 | Compound Not Detected. | | | | | |
| 22 tert-Butyl alcohol | 59.00 | Compound Not Detected. | | | | | |
| 23 Acrylonitrile | 53.00 | Compound Not Detected. | | | | | |
| 24 trans-1,2-Dichloroethene | 96.00 | Compound Not Detected. | | | | | |
| 25 Methyl t-butyl ether | 73.00 | Compound Not Detected. | | | | | |
| 26 Hexane | 57.00 | Compound Not Detected. | | | | | |
| 27 1,1-Dichloroethane | 63.00 | Compound Not Detected. | | | | | |
| 29 Vinyl acetate | 43.00 | Compound Not Detected. | | | | | |
| 30 Isopropyl ether | 87.00 | Compound Not Detected. | | | | | |
| 28 Chloroprene | 53.00 | Compound Not Detected. | | | | | |
| 120 ETBE | 59.00 | Compound Not Detected. | | | | | |
| 33 2-Butanone | 43.00 | Compound Not Detected. | | | | | |
| 32 cis-1,2-Dichloroethene | 96.00 | Compound Not Detected. | | | | | |
| 31 2,2-Dichloropropane | 77.00 | Compound Not Detected. | | | | | |
| 35 Ethyl Acetate | 43.00 | Compound Not Detected. | | | | | |
| 34 Propionitrile | 54.00 | Compound Not Detected. | | | | | |
| 36 Methacrylonitrile | 41.00 | Compound Not Detected. | | | | | |
| 37 Bromochloromethane | 128.00 | Compound Not Detected. | | | | | |
| 39 Tetrahydrofuran | 42 | 5.375 | 5.394 | (0.842) | 1874691 | 543.202 | 543.202 (A) <i>NTC</i> |
| 38 Chloroform | 83.00 | Compound Not Detected. | | | | | |
| 41 1,1,1-Trichloroethane | 97.00 | Compound Not Detected. | | | | | |
| 114 Cyclohexane | 56.00 | Compound Not Detected. | | | | | |
| 42 1,1-Dichloropropene | 75.00 | Compound Not Detected. | | | | | |
| 43 Carbon Tetrachloride | 117.00 | Compound Not Detected. | | | | | |
| 45 Isobutanol | 41.00 | Compound Not Detected. | | | | | |
| 46 Benzene | 78.00 | Compound Not Detected. | | | | | |
| 47 1,2-Dichloroethane | 62.00 | Compound Not Detected. | | | | | |
| 121 TAME | 73.00 | Compound Not Detected. | | | | | |
| 49 n-Butanol | 56.00 | Compound Not Detected. | | | | | |
| 50 Trichloroethene | 130.00 | Compound Not Detected. | | | | | |
| 115 2-Pentanone | 43.00 | Compound Not Detected. | | | | | |

| Compounds | QUANT SIG | | | | | | CONCENTRATIONS | |
|-------------------------------|-----------|-------|-------|----------|---------------|----------|----------------------|------------------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 52 1,2-Dichloropropane | 63.00 | | | Compound | Not Detected. | | | |
| 122 Methyl Cyclohexane | 55.00 | | | Compound | Not Detected. | | | |
| 53 Dibromomethane | 93.00 | | | Compound | Not Detected. | | | |
| 54 Methyl Methacrylate | 100.00 | | | Compound | Not Detected. | | | |
| 55 1,4-Dioxane | 88 | | 7.243 | 7.262 | (1.135) | 190869 | 1442.01 | 1442.01 |
| 56 Bromodichloromethane | 83.00 | | | Compound | Not Detected. | | | |
| 57 2-nitropropane | 41.00 | | | Compound | Not Detected. | | | |
| 113 2-Chloroethyl vinyl ether | 63.00 | | | Compound | Not Detected. | | | |
| 59 cis-1,3-Dichloropropene | 75.00 | | | Compound | Not Detected. | | | |
| 60 4-Methyl-2-pentanone | 43.00 | | | Compound | Not Detected. | | | |
| 62 Toluene | 91.00 | | | Compound | Not Detected. | | | |
| 63 trans-1,3-Dichloropropene | 75.00 | | | Compound | Not Detected. | | | |
| 64 Ethyl methacrylate | 69.00 | | | Compound | Not Detected. | | | |
| 65 1,1,2-Trichloroethane | 97.00 | | | Compound | Not Detected. | | | |
| 67 1,3-Dichloropropane | 76.00 | | | Compound | Not Detected. | | | |
| 66 Tetrachloroethene | 164.00 | | | Compound | Not Detected. | | | |
| 68 2-Hexanone | 43.00 | | | Compound | Not Detected. | | | |
| 126 Tetrahydrothiophene | 60.00 | | | Compound | Not Detected. | | | |
| 69 Dibromochloromethane | 129.00 | | | Compound | Not Detected. | | | |
| 70 1,2-Dibromoethane | 107.00 | | | Compound | Not Detected. | | | |
| 71 1-Chlorohexane | 91.00 | | | Compound | Not Detected. | | | |
| 73 Chlorobenzene | 112.00 | | | Compound | Not Detected. | | | |
| 74 1,1,1,2-Tetrachloroethane | 131.00 | | | Compound | Not Detected. | | | |
| 75 Ethylbenzene | 106.00 | | | Compound | Not Detected. | | | |
| 76 m and p-Xylene | 106.00 | | | Compound | Not Detected. | | | |
| 77 o-Xylene | 106.00 | | | Compound | Not Detected. | | | |
| 78 Styrene | 104.00 | | | Compound | Not Detected. | | | |
| 79 Bromoform | 173.00 | | | Compound | Not Detected. | | | |
| 80 isopropyl benzene | 105.00 | | | Compound | Not Detected. | | | |
| 116 cis-1,4-Dichloro-2-butene | 53.00 | | | Compound | Not Detected. | | | |
| 81 Cyclohexanone | 55.00 | | | Compound | Not Detected. | | | |
| 83 1,1,2,2-Tetrachloroethane | 83.00 | | | Compound | Not Detected. | | | |
| 84 Bromobenzene | 156.00 | | | Compound | Not Detected. | | | |
| 85 1,2,3-Trichloropropane | 110.00 | | | Compound | Not Detected. | | | |
| 86 t-1,4-Dichloro-2-butene | 53.00 | | | Compound | Not Detected. | | | |
| 87 n-Propylbenzene | 120.00 | | | Compound | Not Detected. | | | |
| 88 2-Chlorotoluene | 126.00 | | | Compound | Not Detected. | | | |
| 89 1,3,5-Trimethylbenzene | 105.00 | | | Compound | Not Detected. | | | |
| 90 4-Chlorotoluene | 126.00 | | | Compound | Not Detected. | | | |
| 91 tert-Butylbenzene | 119.00 | | | Compound | Not Detected. | | | |
| 92 1,2,4-Trimethylbenzene | 105.00 | | | Compound | Not Detected. | | | |
| 93 sec-Butylbenzene | 134.00 | | | Compound | Not Detected. | | | |
| 94 m-Dichlorobenzene | 146.00 | | | Compound | Not Detected. | | | |
| 95 4-Isopropyltoluene | 119.00 | | | Compound | Not Detected. | | | |
| 97 p-dichlorobenzene | 146.00 | | | Compound | Not Detected. | | | |
| 118 1,2,3-Trimethylbenzene | 105.00 | | | Compound | Not Detected. | | | |
| 98 n-Butylbenzene | 91.00 | | | Compound | Not Detected. | | | |

| Compounds | QUANT SIG | | | | | | | CONCENTRATIONS | |
|---------------------------------|-----------|----|--------|--------|----|------------------------|--|----------------|---------|
| | | RT | EXP RT | REL RT | RT | RESPONSE | | ON-COLUMN | FINAL |
| ===== | ==== | == | ===== | ===== | | ===== | | (ug/L) | (ug/L) |
| 99 o-Dichlorobenzene | 146.00 | | | | | Compound Not Detected. | | | |
| 100 1,2-Dibromo-3-chloropropane | 157.00 | | | | | Compound Not Detected. | | | |
| 101 1,2,4-Trichlorobenzene | 180.00 | | | | | Compound Not Detected. | | | |
| 102 Hexachlorobutadiene | 225.00 | | | | | Compound Not Detected. | | | |
| 127 Naphthalene | 128.00 | | | | | Compound Not Detected. | | | |
| 104 1,2,3-Trichlorobenzene | 180.00 | | | | | Compound Not Detected. | | | |

QC Flag Legend

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

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/052904.b/h4680.d
Lab Smp Id: GGTFX1AA Client Smp ID: 01-MW-11
Inj Date : 29-MAY-2004 21:20
Operator : yanezj Inst ID: H.i
Smp Info : GGTFX1AA,,D4E210325-008
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/052904.b/H-20ml-h2o.m
Meth Date : 29-May-2004 16:50 yanezj Quant Type: ISTD
Cal Date : 13-MAY-2004 11:34 Cal File: h4151.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: H-all.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| ISTD | RT | AREA | AMOUNT |
|-----------------------------|--------|---------|--------|
| ===== | ===== | ===== | ===== |
| * 72 Chlorobenzene-d5 | 10.046 | 4138155 | 10.000 |
| * 96 1,4-Dichlorobenzene-d4 | 12.902 | 3887925 | 10.000 |

| RT | AREA | CONCENTRATIONS | | QUAL | QUANT | | |
|-------------------------------|--------|----------------|--------------|------|----------|-----------|--------|
| | | ON-COL(ug/L) | FINAL(ug/L) | | LIBRARY | LIB ENTRY | CPND # |
| ---- | ---- | ----- | ----- | ---- | ----- | ----- | ----- |
| Cyclotrisiloxane, hexamethyl- | | | | | | | |
| 8.860 | 466636 | 1.12764263 | 1.12764 | 80 | NBS75K.1 | 27918 | 72 |
| CAS #: 541-05-9 | | | | | | | |
| Unknown | | | | | | | |
| 11.806 | 807711 | 2.07748606 | 2.07749 | 0 | | 0 | 96 |
| CAS #: | | | | | | | |

| RT | CONCENTRATIONS | | | QUANT | | CPND # |
|---------------------------------|----------------|---------------|--------------|-----------------|----------|--------|
| | AREA | ON-COL(ug/L) | FINAL(ug/L) | QUAL | LIBRARY | |
| ==== | ==== | ===== | ===== | ==== | ===== | ===== |
| Unknown | | | | CAS #: | | |
| 13.818 | 659093 | 1.69523075 | 1.69523 | 0 | | 96 |
| Docosane | | | | CAS #: 629-97-0 | | |
| 14.105 | 427049 | 1.09839825 | 1.09840 | 86 | NBS75K.1 | 96 |
| Acetic acid, 2-ethylhexyl ester | | | | CAS #: 103-09-3 | | |
| 14.249 | 3823119 | 9.83331469 | 9.83331 | 91 | NBS75K.1 | 96 |
| Unknown | | | | CAS #: | | |
| 15.093 | 2869528 | 7.38061562 | 7.38062 | 0 | | 96 |
| Unknown | | | | CAS #: | | |
| 15.470 | 1865383 | 4.79788833 | 4.79789 | 0 | | 96 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4680.d
Lab Smp Id: GGTFX1AA
Analysis Type: VOA
Quant Type: ISTD
Operator: yanezj
Method File: /chem/H.i/052904.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/29/4
Calibration Time: 1528
Client Smp ID: 01-MW-11
Level: LOW
Sample Type: WATER

| COMPOUND ===== | STANDARD ===== | AREA LIMIT | | SAMPLE ===== | %DIFF ===== |
|----------------------|-------------------|----------------|----------------|-----------------|----------------|
| | | LOWER ===== | UPPER ===== | | |
| 48 Fluorobenzene | 1511042 | 755521 | 3022084 | 1949965 | 29.05 |
| 72 Chlorobenzene-d5 | 370905 | 185452 | 741810 | 419583 | 13.12 |
| 96 1,4-Dichlorobenze | 532545 | 266272 | 1065090 | 571232 | 7.26 |

| COMPOUND ===== | STANDARD ===== | RT LIMIT | | SAMPLE ===== | %DIFF ===== |
|----------------------|-------------------|----------------|----------------|-----------------|----------------|
| | | LOWER ===== | UPPER ===== | | |
| 48 Fluorobenzene | 6.40 | 5.90 | 6.90 | 6.38 | -0.30 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.05 | -0.19 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.90 | -0.15 |

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.

STL Denver

RECOVERY REPORT

Client Name: Cabrera Services
Sample Matrix: LIQUID
Lab Smp Id: GGTFX1AA
Level: LOW
Data Type: MS DATA
SpikeList File: dcs-h20.spk
Sublist File: H-all.sub
Method File: /chem/H.i/052904.b/H-20ml-h2o.m
Misc Info:

Client SDG: D4E210325
Fraction: VOA
Client Smp ID: 01-MW-11
Operator: yanezj
SampleType: SAMPLE
Quant Type: ISTD

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 40 Dibromofluorometha | 10.0000 | 10.2149 | 102.15 | 76-116 |
| \$ 44 1,2-Dichloroethane | 10.0000 | 10.6543 | 106.54 | 59-129 |
| \$ 61 Toluene-d8 | 10.0000 | 9.97535 | 99.75 | 76-116 |
| \$ 82 Bromofluorobenzene | 10.0000 | 10.2054 | 102.05 | 74-114 |

Data File: /chem/H.i/052904.b/h4680.d

Date : 29-MAY-2004 21:20

Client ID: 01-MW-11

Sample Info: GGTFX1AA,,D4E210325-008

Purge Volume: 20.0

Column phase: DB624

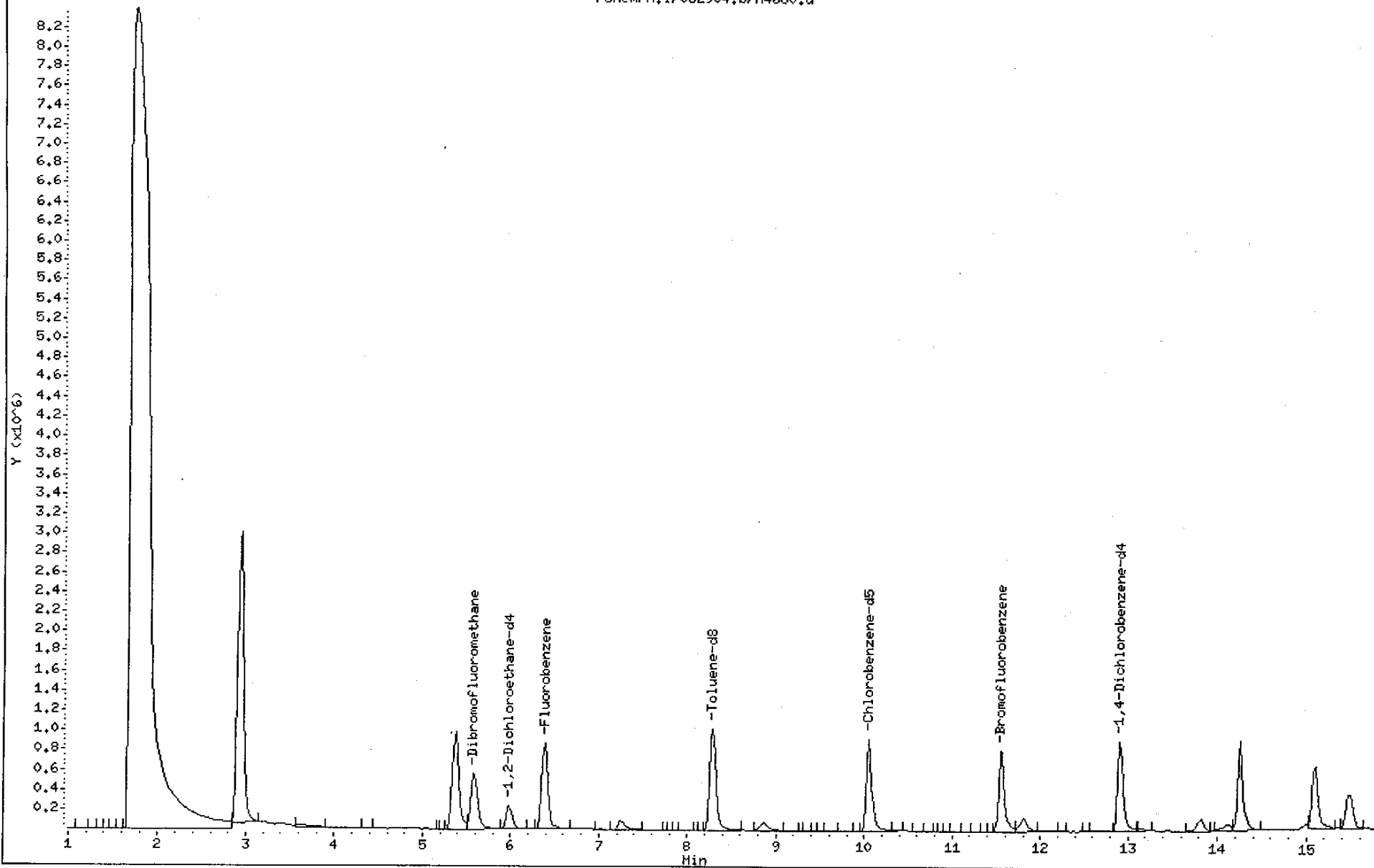
Instrument: H.i

Operator: yanezj

Column diameter: 0.53

Page 9

/chem/H.i/052904.b/h4680.d



Date : 29-MAY-2004 21:20

Client ID: 01-MW-11

Instrument: H.i

Sample Info: GGTFX1AA,,D4E210325-008

Purge Volume: 20.0

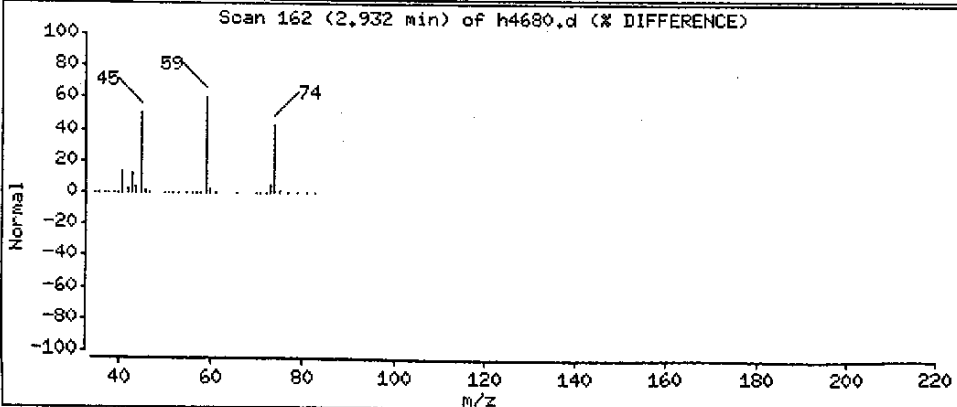
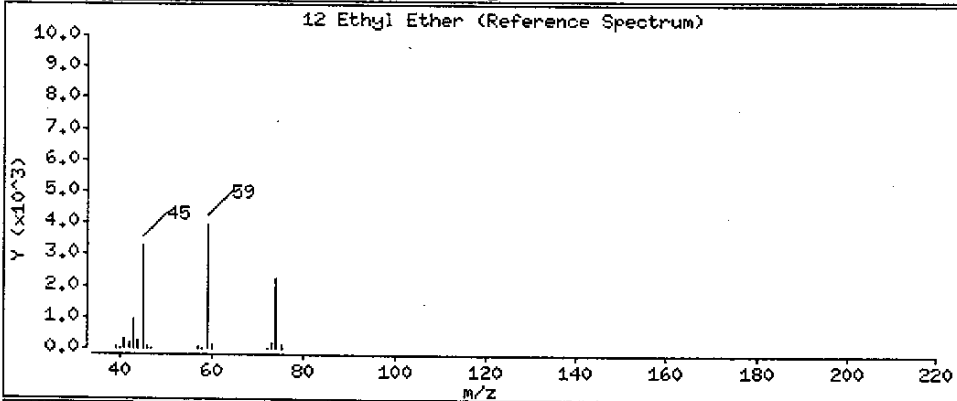
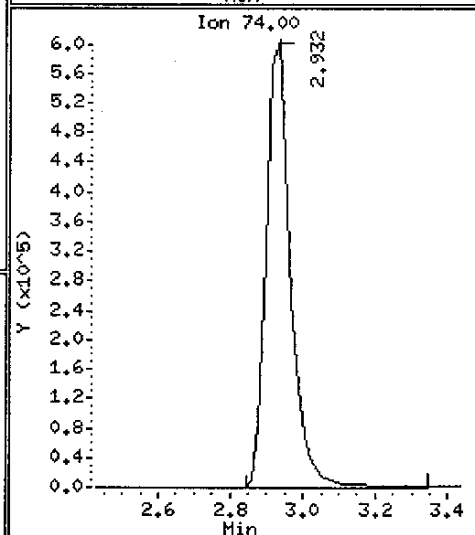
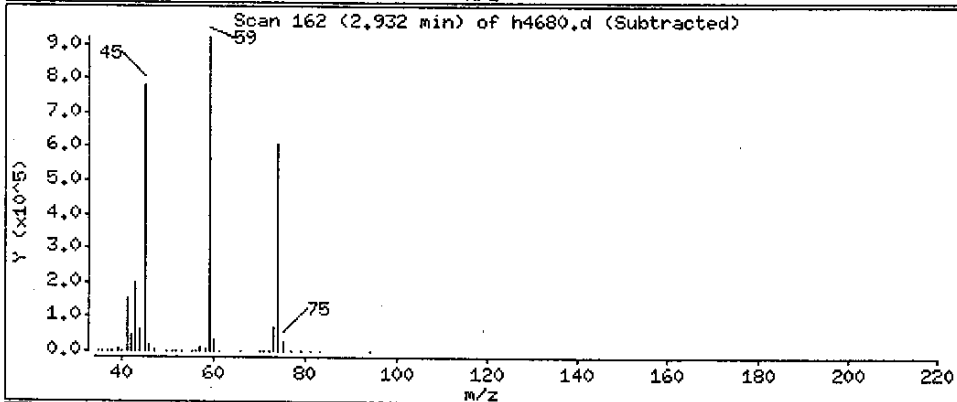
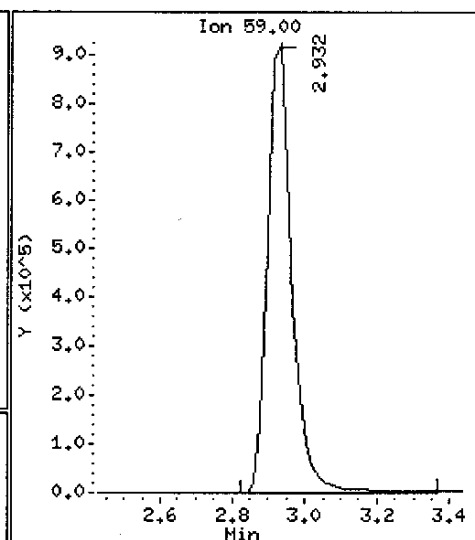
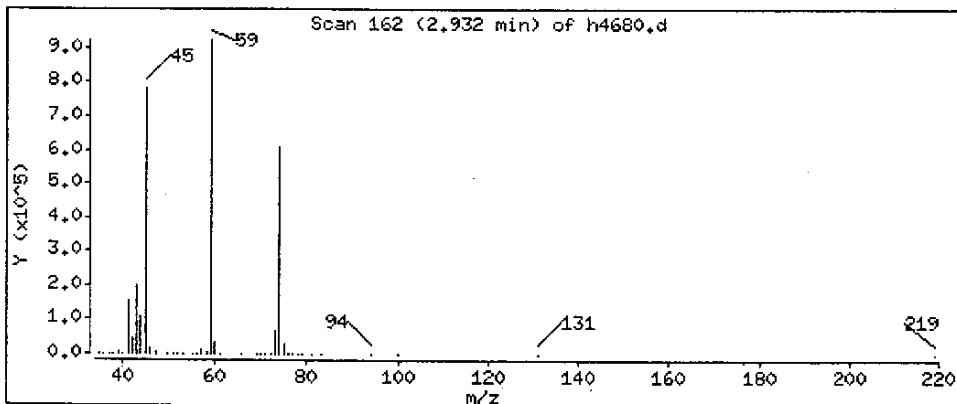
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

12 Ethyl Ether

Concentration: 203.144 ug/L



Date : 29-MAY-2004 21:20

Client ID: 01-MM-11

Instrument: H.i

Sample Info: GGTFX1AA,,D4E210325-008

Purge Volume: 20.0

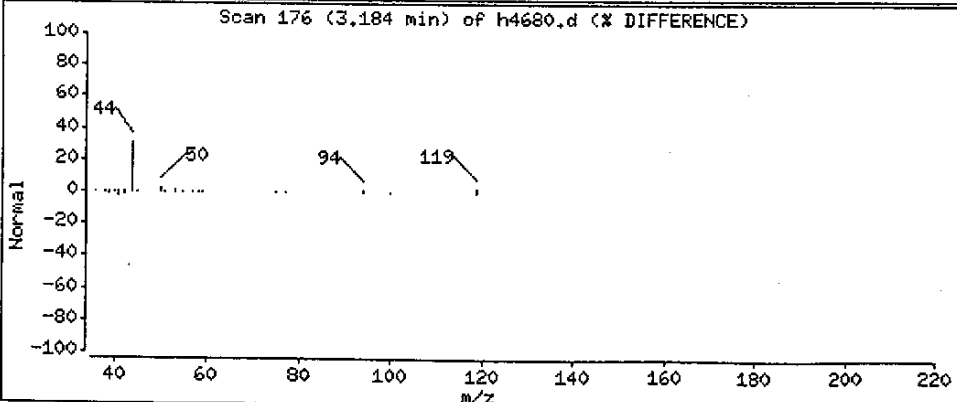
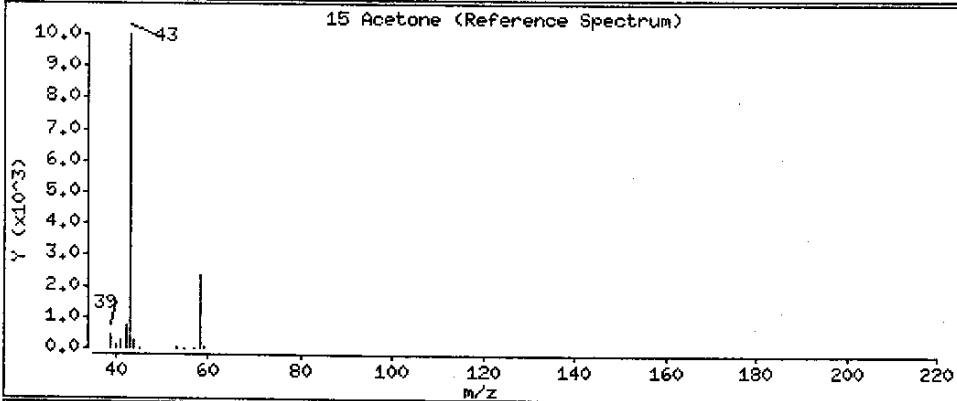
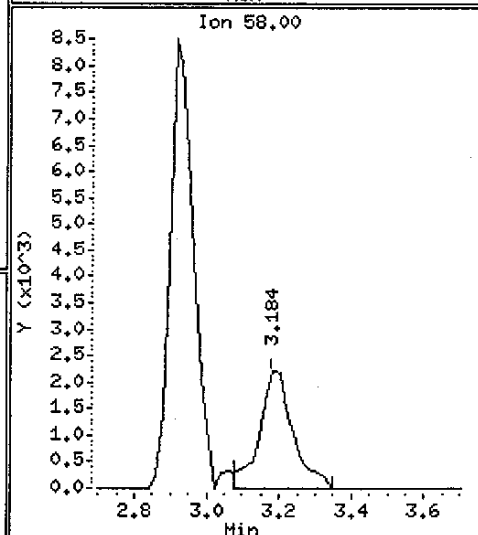
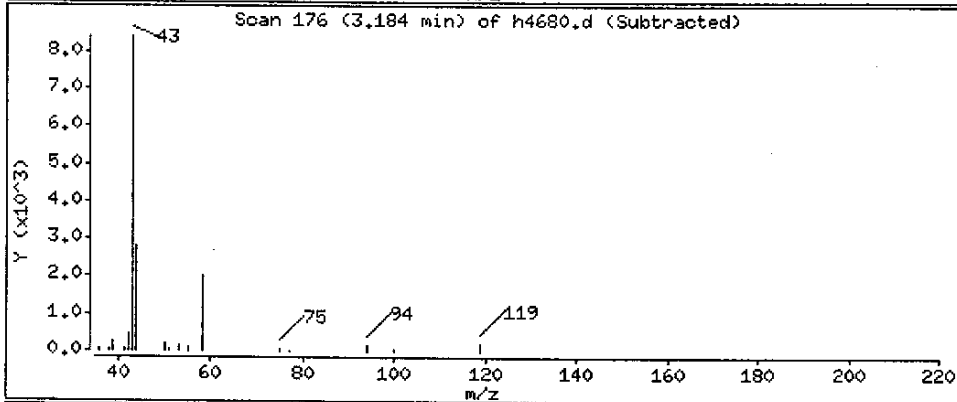
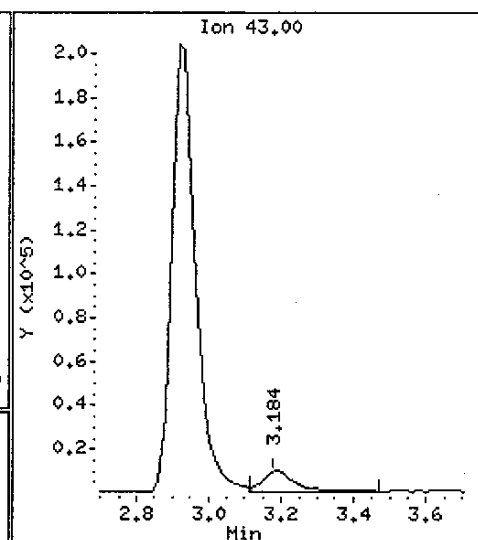
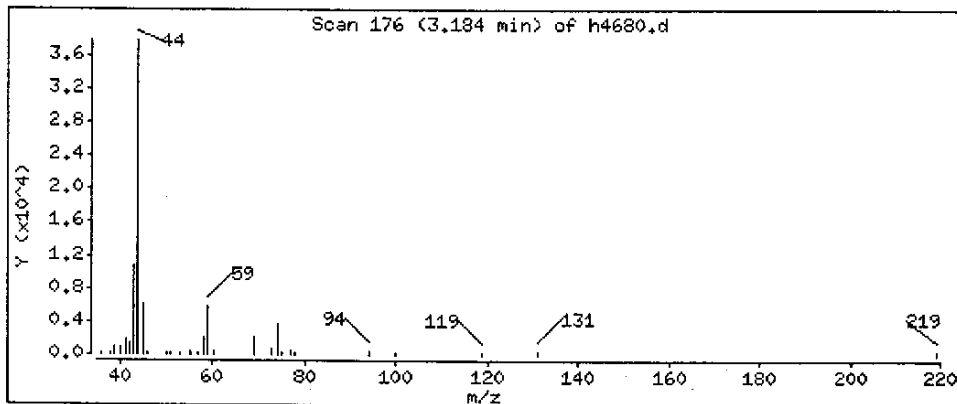
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

15 Acetone

Concentration: 17.7859 ug/L



Date : 29-MAY-2004 21:20

Client ID: 01-MW-11

Instrument: H.i

Sample Info: GGTFX1AA,,D4E210325-008

Purge Volume: 20.0

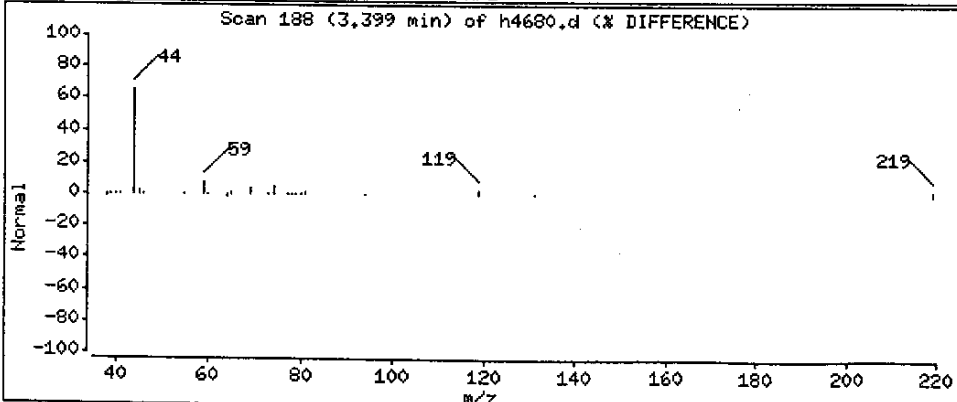
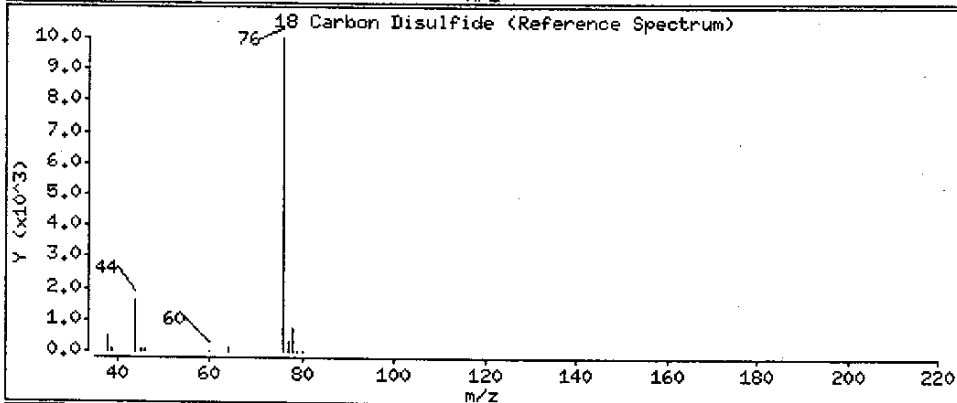
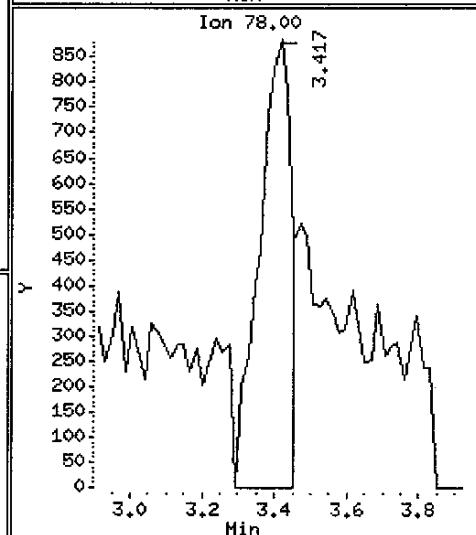
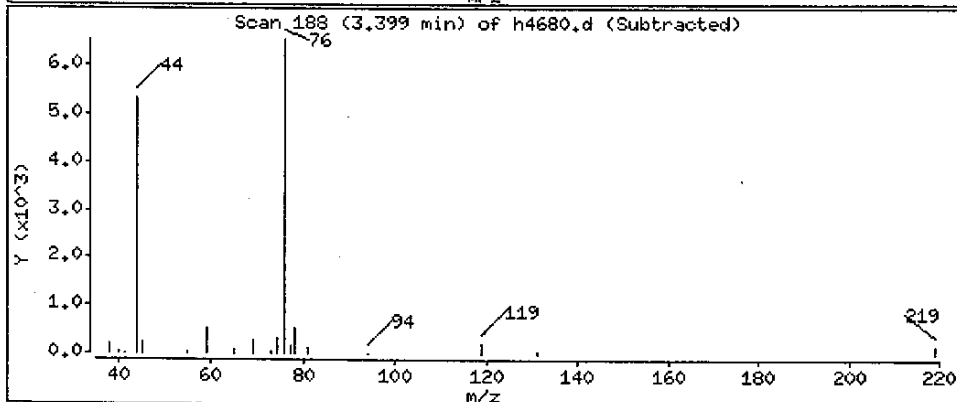
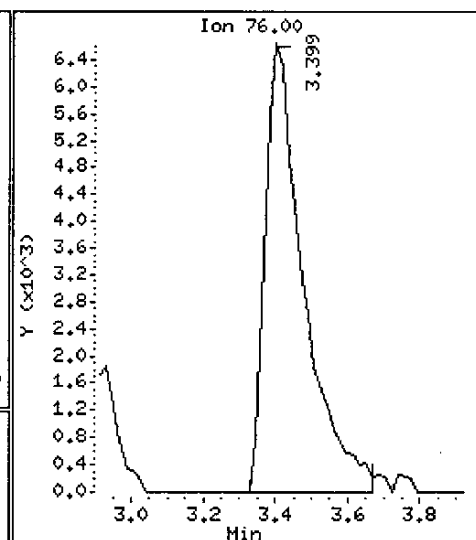
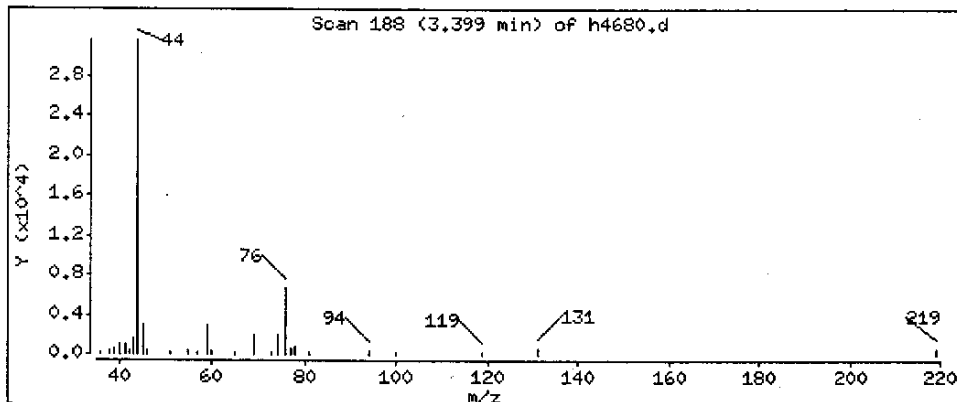
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

18 Carbon Disulfide

Concentration: 0.276522 ug/L



Date : 29-MAY-2004 21:20

Client ID: 01-MM-11

Instrument: H.i

Sample Info: GGTFX1AA,,D4E210325-008

Purge Volume: 20.0

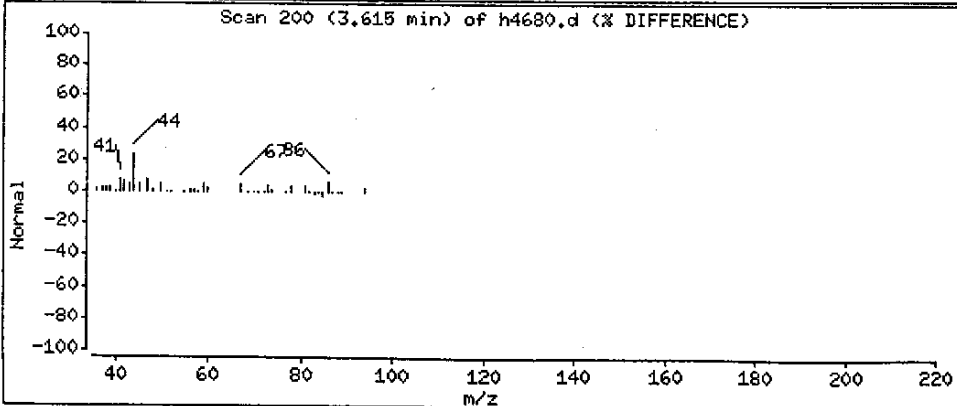
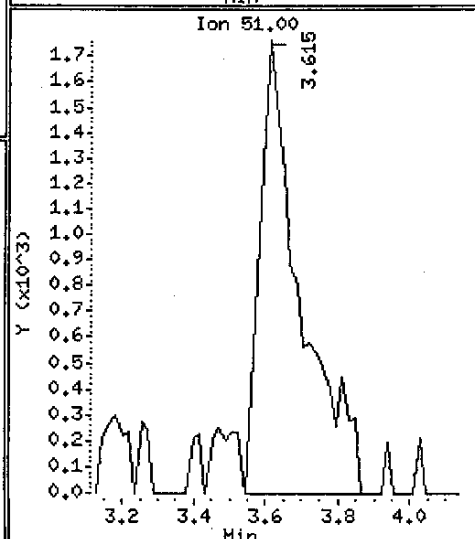
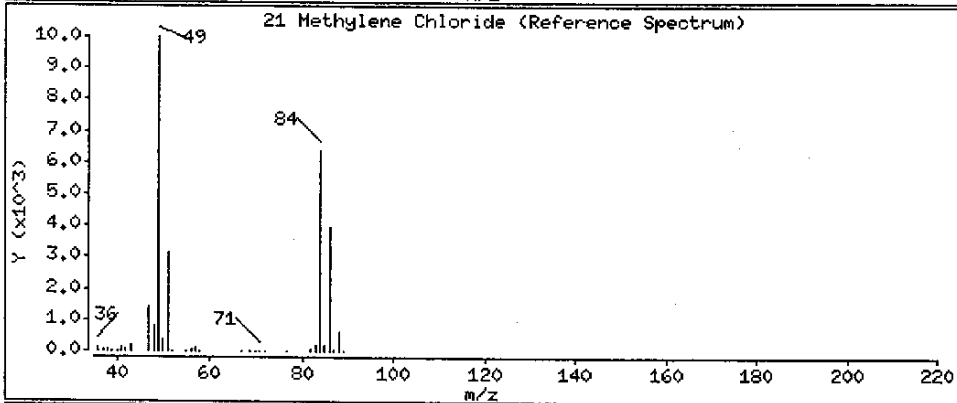
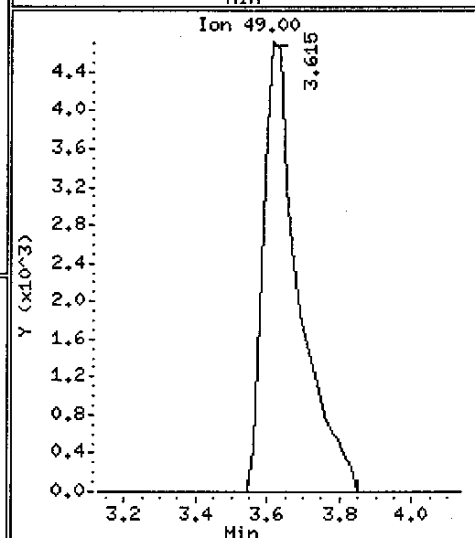
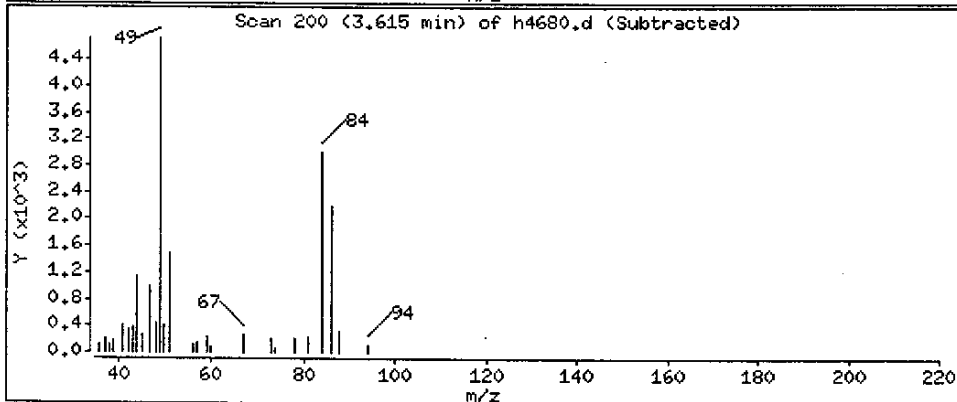
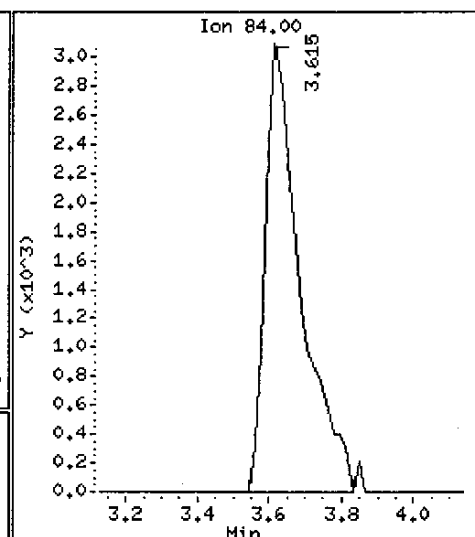
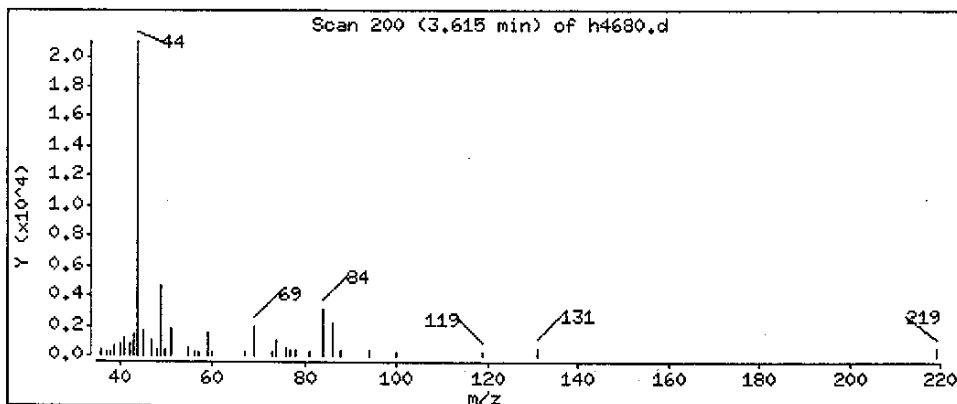
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

21 Methylene Chloride

Concentration: 0.472510 ug/L



Date : 29-MAY-2004 21:20

Client ID: 01-MW-11

Instrument: H.i

Sample Info: GGTFX1AA,,D4E210325-008

Purge Volume: 20.0

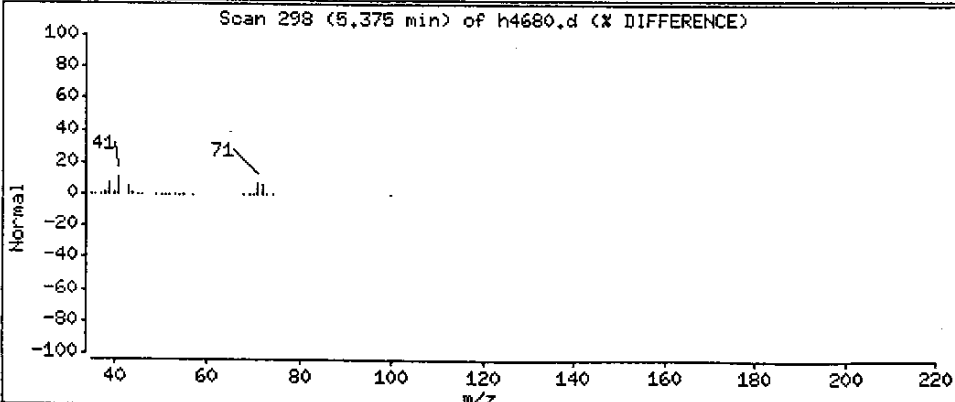
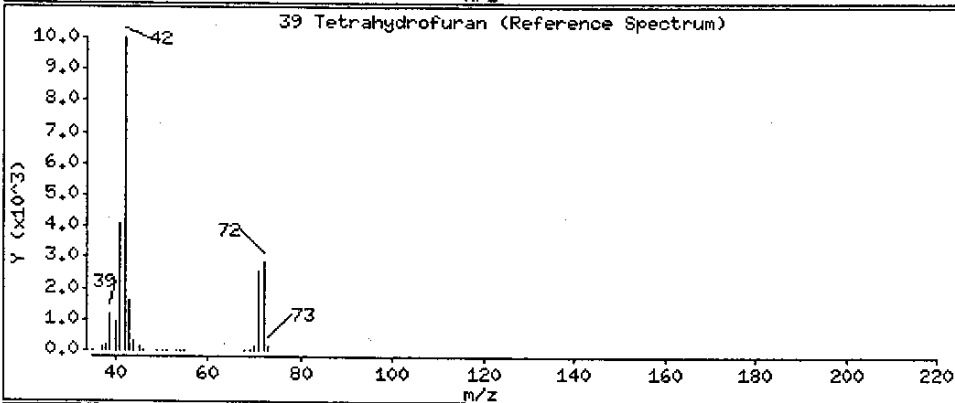
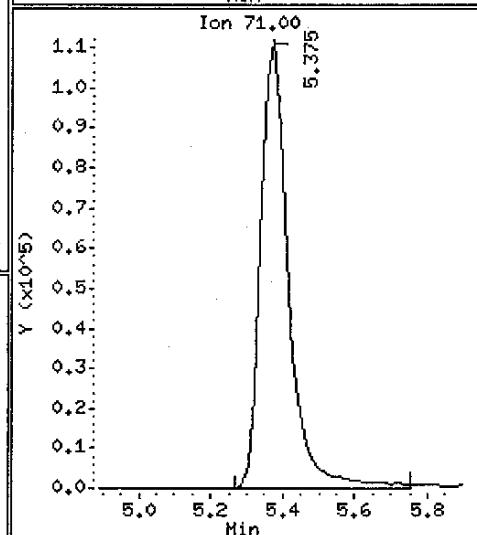
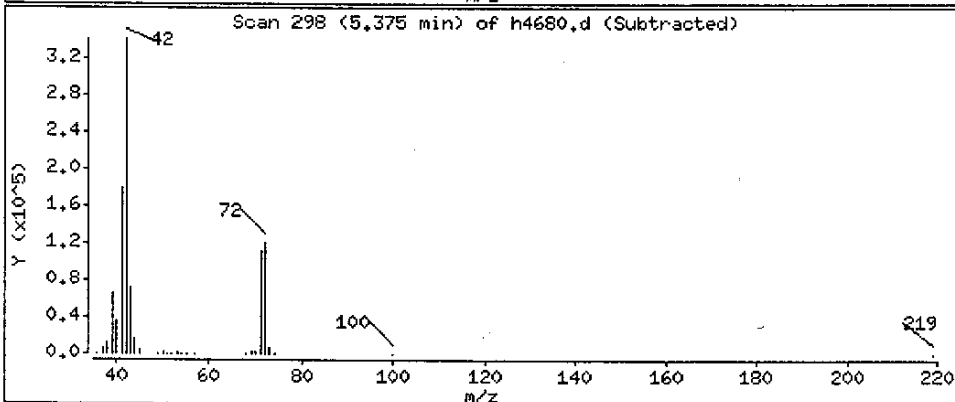
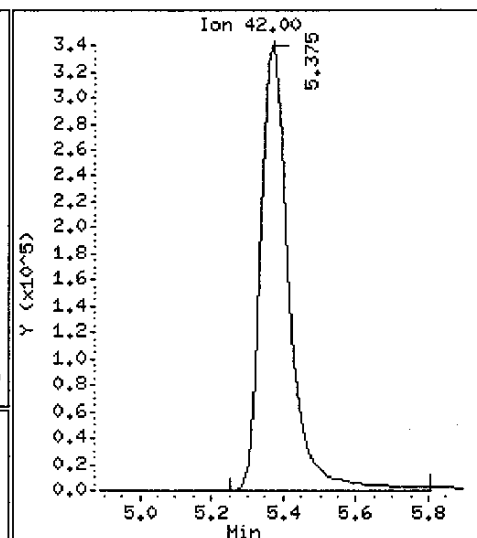
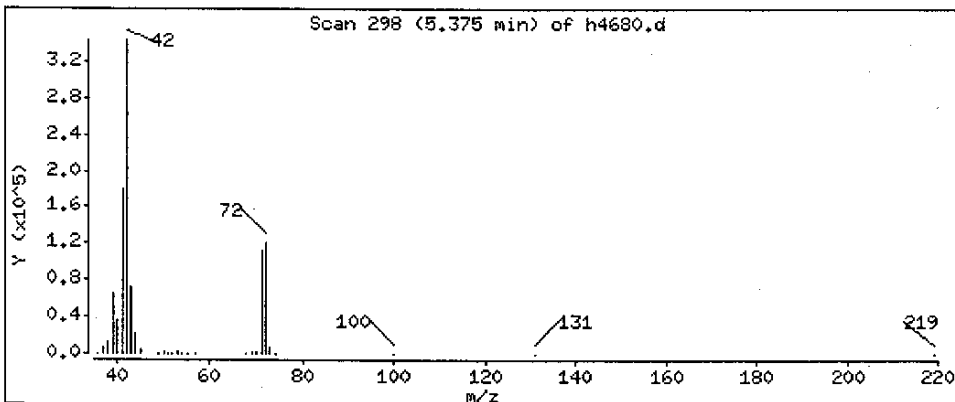
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

39 Tetrahydrofuran

Concentration: 543,202 ug/L



Date : 29-MAY-2004 21:20

Client ID: 01-MW-11

Instrument: H.i

Sample Info: GGTFX1AA,,D4E210325-008

Purge Volume: 20.0

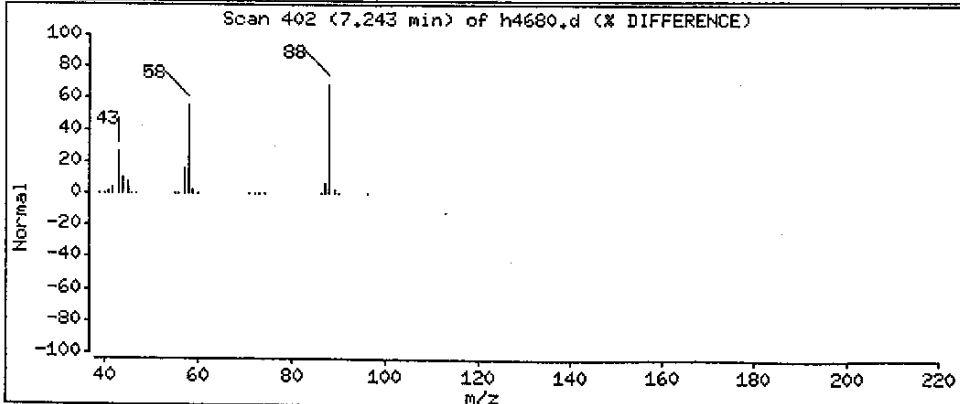
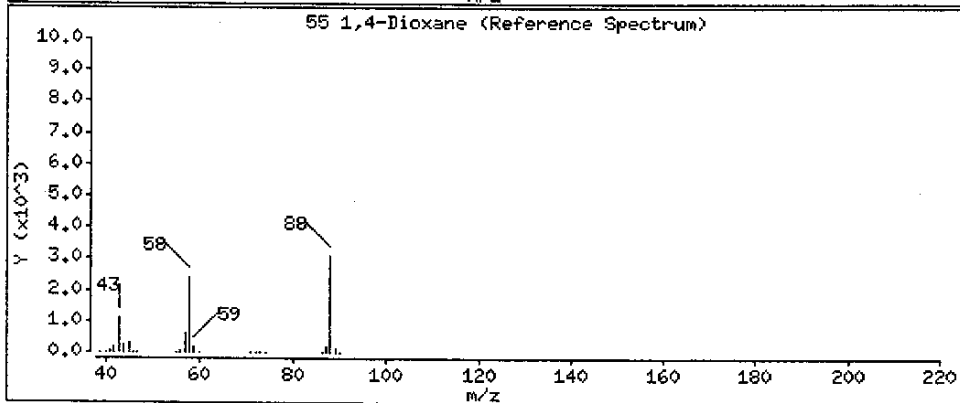
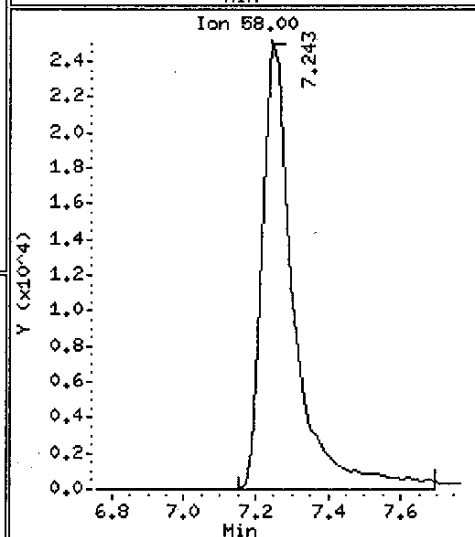
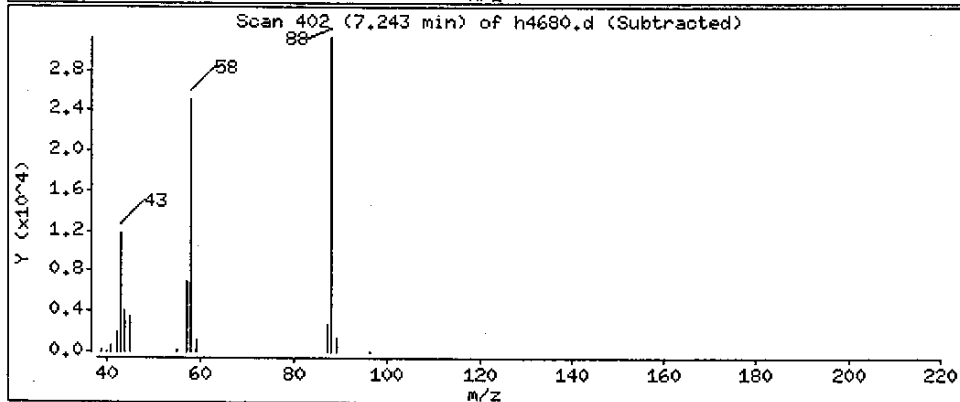
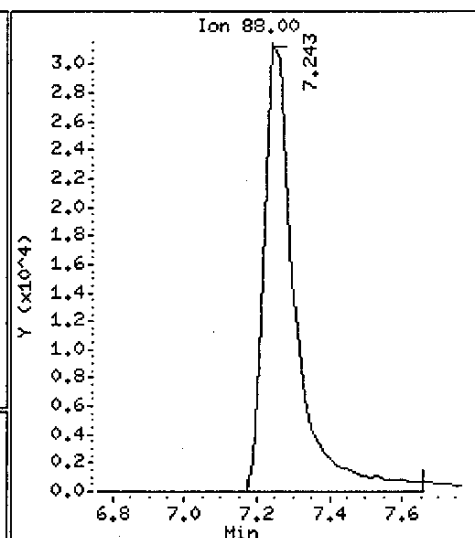
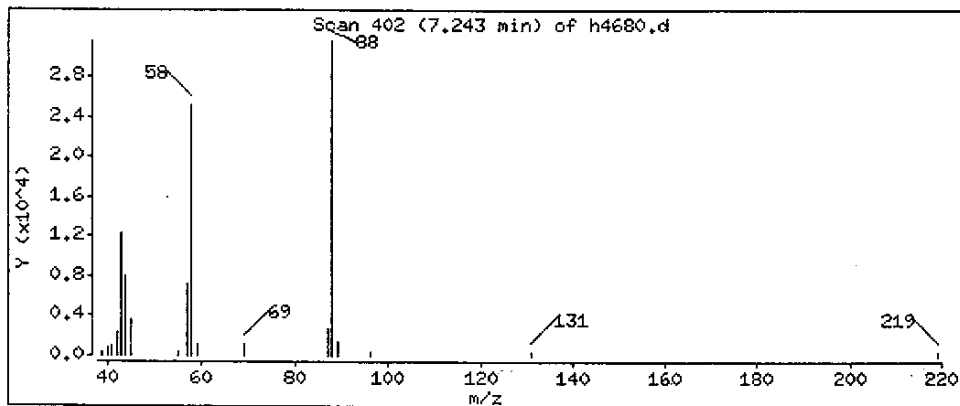
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

55 1,4-Dioxane

Concentration: 1442.01 ug/L



Date : 29-MAY-2004 21:20

Client ID: 01-MW-11

Instrument: H.i

Sample Info: GGTFX1AA,,D4E210325-008

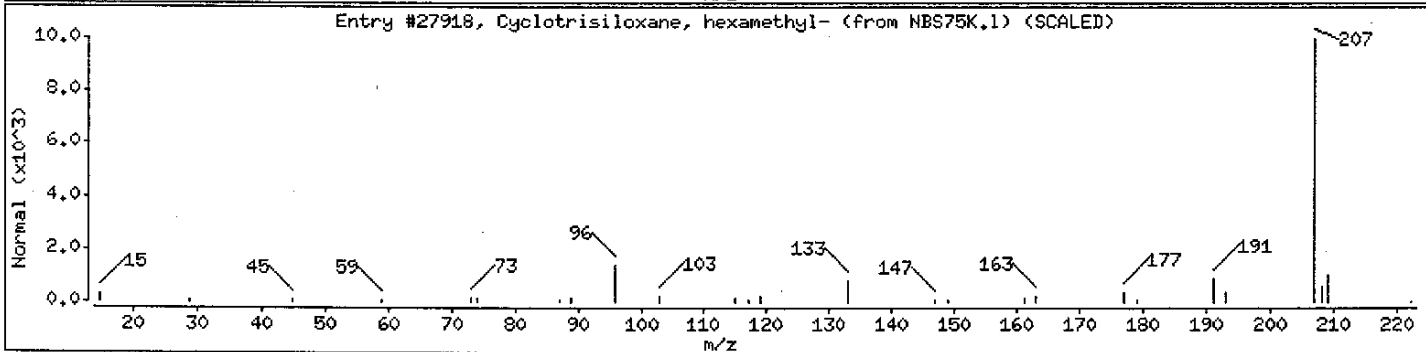
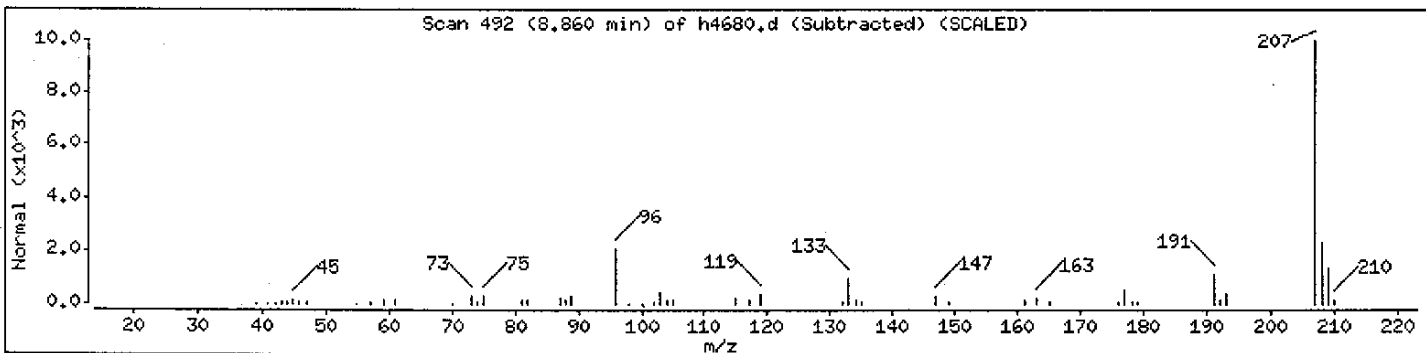
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---|--------|
| Cyclotrisiloxane, hexamethyl- | 541-05-9 | NBS75K.1 | 27918 | 80 | C ₆ H ₁₈ O ₃ Si ₃ | 222 |



Date : 29-MAY-2004 21:20

Client ID: 01-MW-11

Instrument: H.i

Sample Info: GGTFX1AA,,D4E210325-008

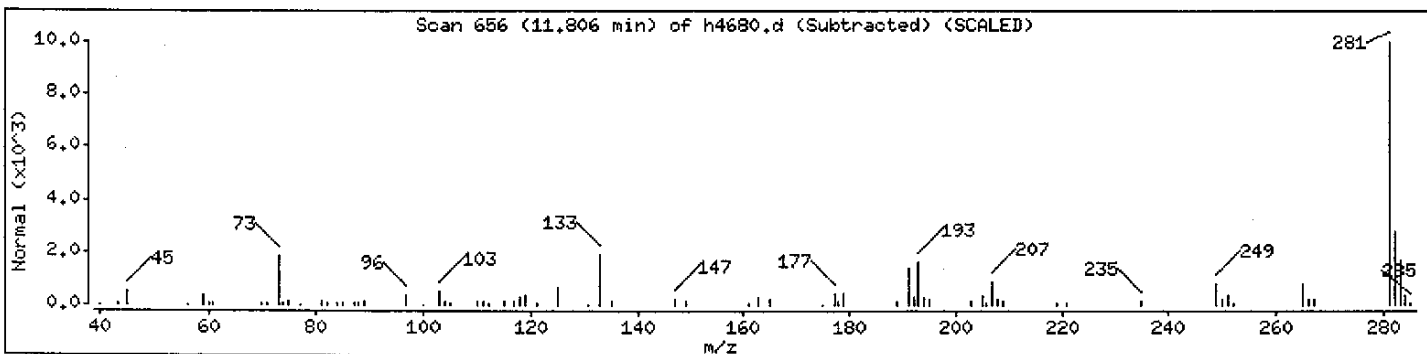
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|-------------------------------|------------|---------|-------|---------|---------|--------|
| Unknown | | | 0 | 0 | | 0 |



Date : 29-MAY-2004 21:20

Client ID: 01-MW-11

Instrument: H.i

Sample Info: GGTFX1AA,,D4E210325-008

Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match

CAS Number

Library

Entry

Quality

Formula

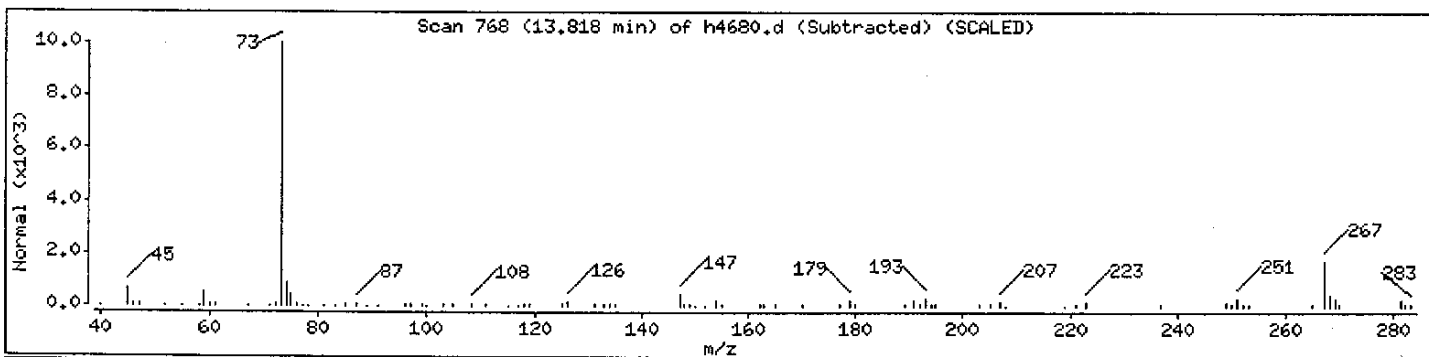
Weight

Unknown

0

0

0



Date : 29-MAY-2004 21:20

Client ID: 01-MW-11

Instrument: H.i

Sample Info: GGTFX1AA,,D4E210325-008

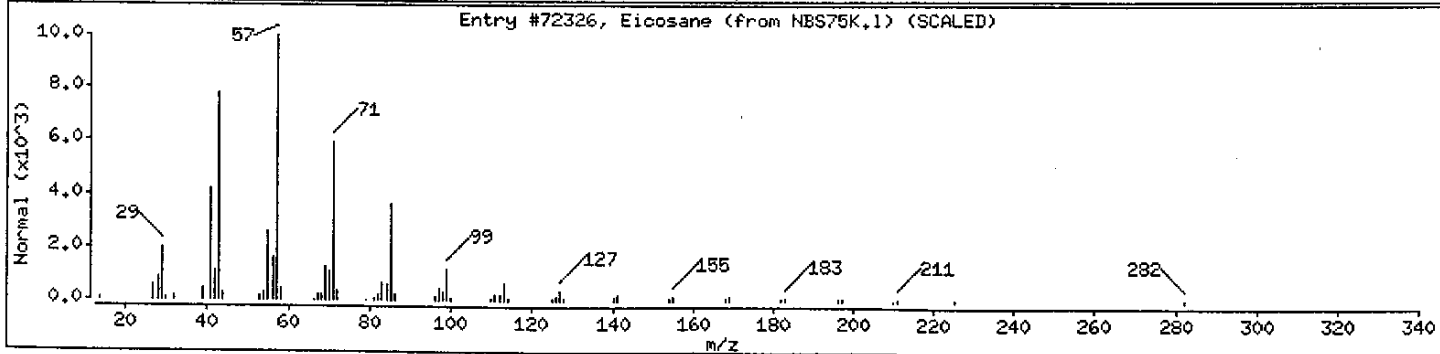
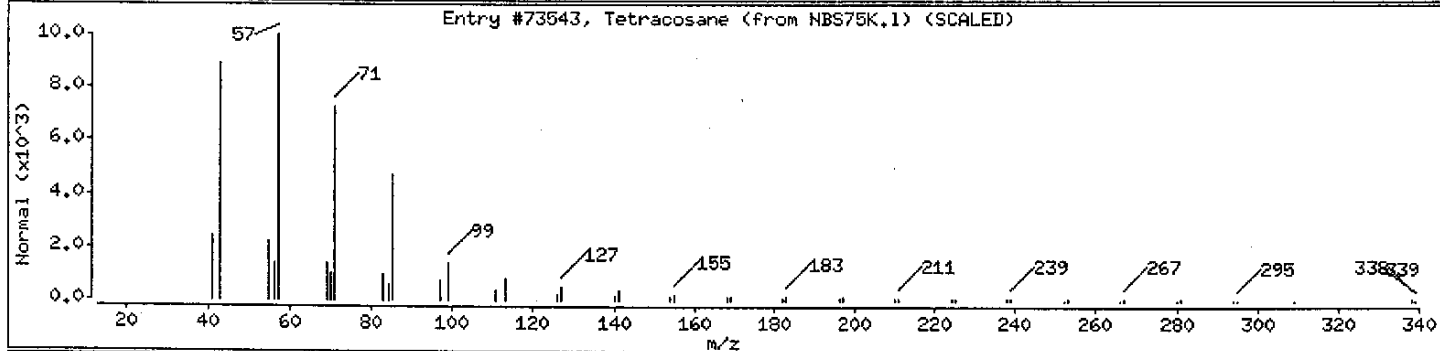
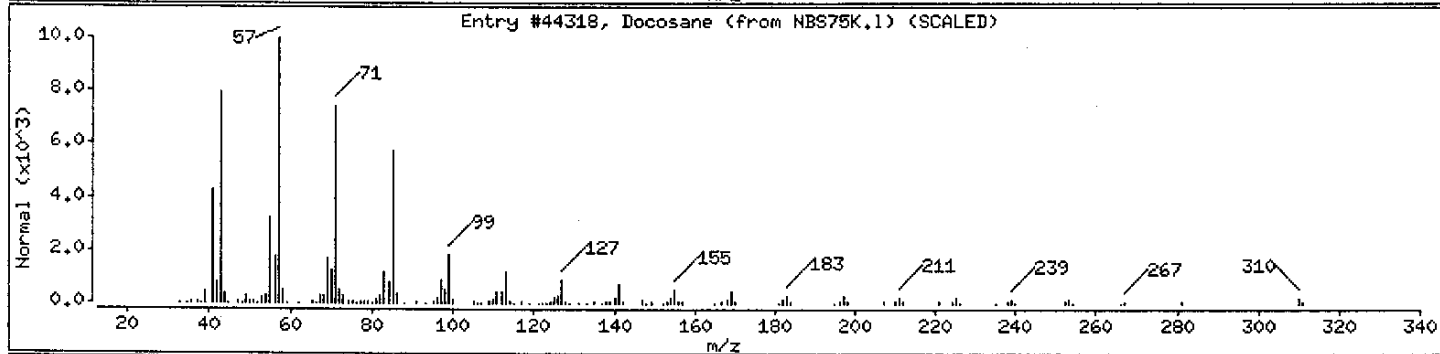
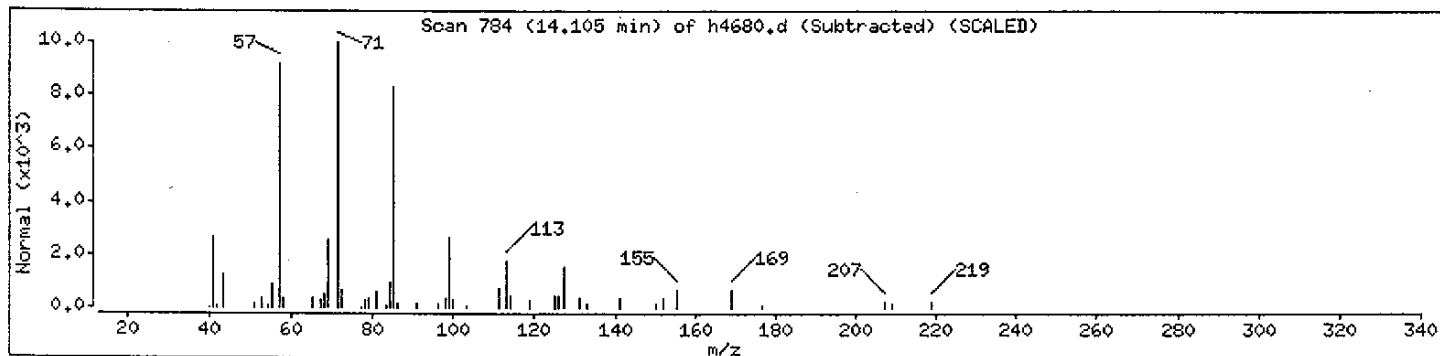
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|-------------------------------|------------|----------|-------|---------|---------|--------|
| Docosane | 629-97-0 | NBS75K.1 | 44318 | 86 | C22H46 | 310 |
| Tetracosane | 646-31-1 | NBS75K.1 | 73543 | 83 | C24H50 | 338 |
| Eicosane | 112-95-8 | NBS75K.1 | 72326 | 83 | C20H42 | 282 |



Date : 29-MAY-2004 21:20

Client ID: 01-MM-11

Instrument: H.i

Sample Info: GGTFX1AA,,D4E210325-008

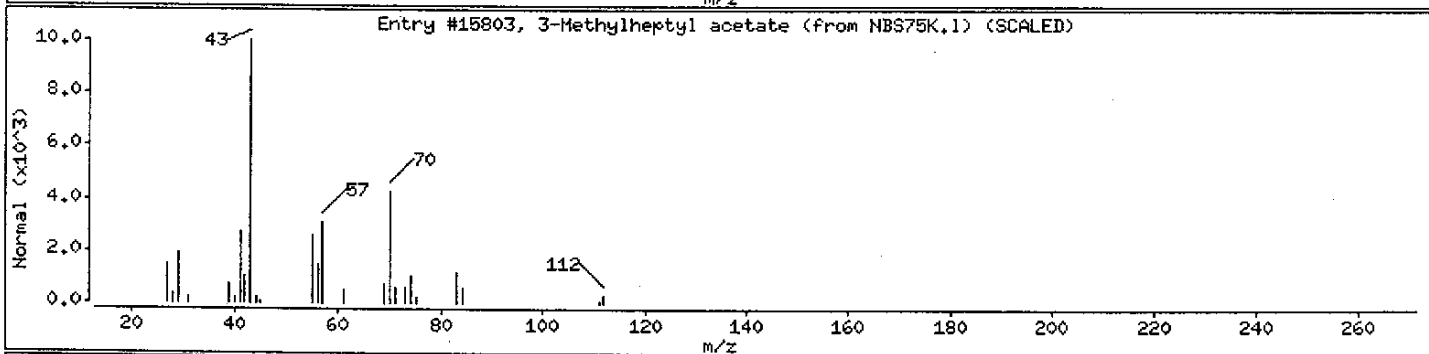
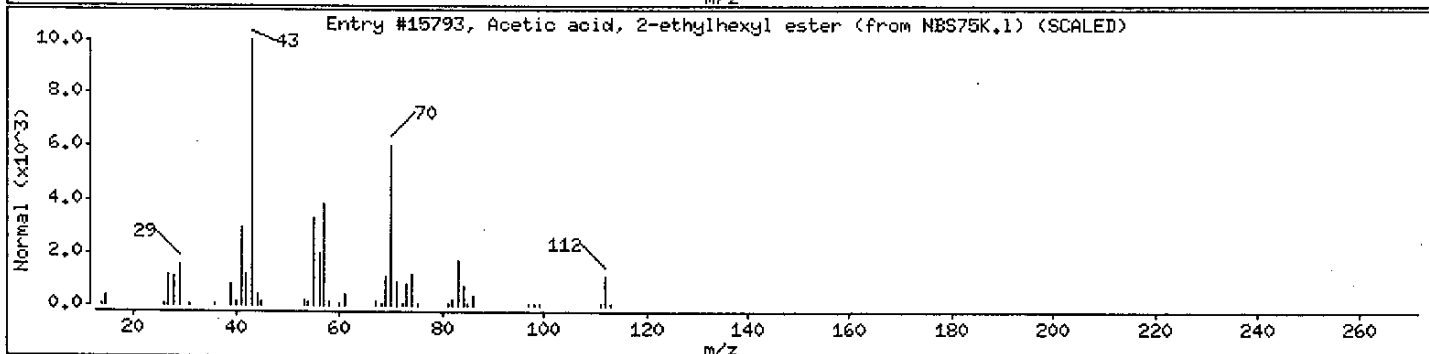
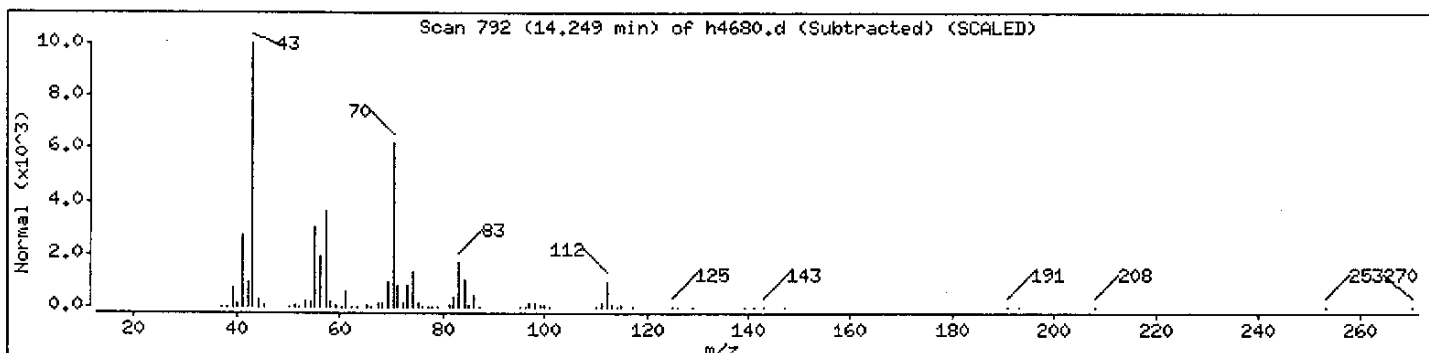
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---------------------------------|------------|----------|-------|---------|----------|--------|
| Acetic acid, 2-ethylhexyl ester | 103-09-3 | NBS75K.1 | 15793 | 91 | C10H20O2 | 172 |
| 3-Methylheptyl acetate | 72218-58-7 | NBS75K.1 | 15803 | 86 | C10H20O2 | 172 |



Date : 29-MAY-2004 21:20

Client ID: 01-MW-11

Instrument: H.i

Sample Info: GGTFX1AA,,D4E210325-008

Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match

CAS Number

Library

Entry

Quality

Formula

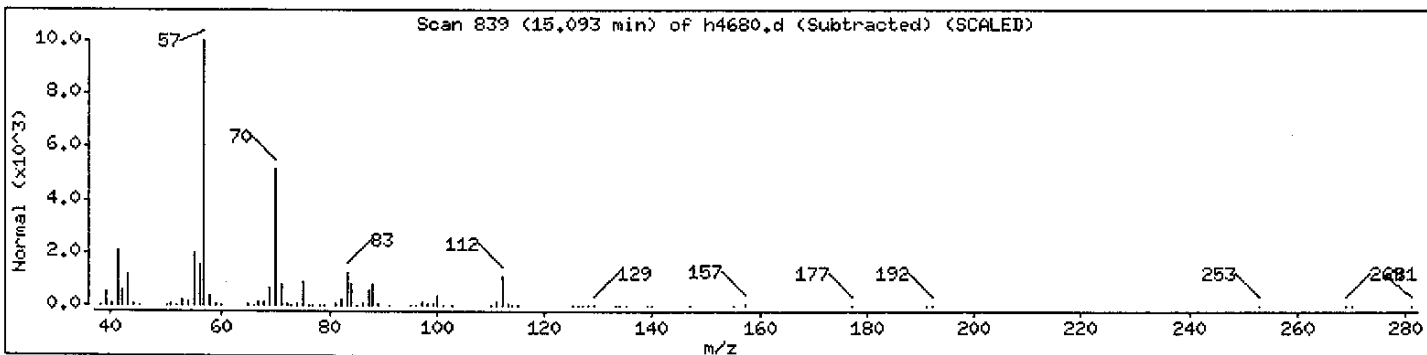
Weight

Unknown

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0

0



Date : 29-MAY-2004 21:20

Client ID: 01-MW-11

Instrument: H.i

Sample Info: GGTFX1AA,,D4E210325-008

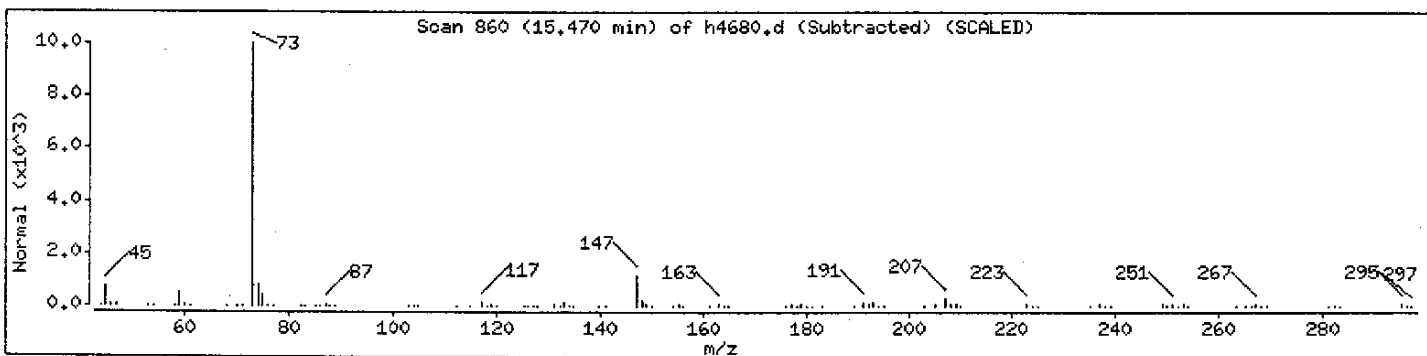
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|-------------------------------|------------|---------|-------|---------|---------|--------|
| Unknown | | | 0 | 0 | | 0 |



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/052904.b/h4681.d
Lab Smp Id: GGTF31AA Client Smp ID: 01-MW-10
Inj Date : 29-MAY-2004 21:39
Operator : yanezj Inst ID: H.i
Smp Info : GGTF31AA,,D4E210325-009
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/H.i/052904.b/H-20ml-h2o.m
Meth Date : 29-May-2004 16:50 yanezj Quant Type: ISTD
Cal Date : 13-MAY-2004 11:34 Cal File: h4151.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: H-all.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

05/31/04
Jum

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| | | | | | | CONCENTRATIONS | |
|-----------------------------------|--------|------------------------|--------|---------|----------|----------------|---------|
| | | QUANT SIG | | | | ON-COLUMN | FINAL |
| Compounds | MASS | RT | EXP RT | REL RT | RESPONSE | (ug/L) | (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| * 48 Fluorobenzene | 96 | 6.379 | 6.400 | (1.000) | 1952014 | 10.0000 | |
| * 72 Chlorobenzene-d5 | 119 | 10.044 | 10.065 | (1.000) | 422736 | 10.0000 | |
| * 96 1,4-Dichlorobenzene-d4 | 152 | 12.918 | 12.921 | (1.000) | 577529 | 10.0000 | |
| \$ 40 Dibromofluoromethane | 111 | 5.571 | 5.592 | (0.873) | 903706 | 10.1938 | 10.1938 |
| \$ 44 1,2-Dichloroethane-d4 | 65 | 5.984 | 5.987 | (0.938) | 363383 | 10.4221 | 10.4221 |
| \$ 61 Toluene-d8 | 98 | 8.283 | 8.286 | (0.825) | 1721811 | 9.77738 | 9.77738 |
| \$ 82 Bromofluorobenzene | 95 | 11.553 | 11.555 | (1.150) | 927801 | 10.0111 | 10.0111 |
| M 1 1,2-Dichloroethene (total) | 96.00 | Compound Not Detected. | | | | | |
| M 2 Xylene (total) | 106.00 | Compound Not Detected. | | | | | |
| 3 dichlorodifluoromethane | 85.00 | Compound Not Detected. | | | | | |
| 4 Chloromethane | 50.00 | Compound Not Detected. | | | | | |
| 5 Vinyl Chloride | 62.00 | Compound Not Detected. | | | | | |
| 6 Ethylene Oxide | 43.00 | Compound Not Detected. | | | | | |
| 117 Dichlorotetrafluoroethane | 85.00 | Compound Not Detected. | | | | | |
| 123 1,2-dichloro-1,1,2-triflourom | 117.00 | Compound Not Detected. | | | | | |
| 124 2,2-dichloro-1,1,1-trifluorom | 83.00 | Compound Not Detected. | | | | | |

| Compounds | QUANT | SIG | CONCENTRATIONS | | | | | |
|-----------------------------|--------|-------|----------------|--------|---------|------------------------|----------------------|------------------|
| | | | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 7 Bromomethane | 94.00 | | | | | Compound Not Detected. | | |
| 8 Chloroethane | 64.00 | | | | | Compound Not Detected. | | |
| 9 Dichlorofluoromethane | 67.00 | | | | | Compound Not Detected. | | |
| 10 Trichlorofluoromethane | 101.00 | | | | | Compound Not Detected. | | |
| 11 Ethanol | 45.00 | | | | | Compound Not Detected. | | |
| 12 Ethyl Ether | 59 | | 2.913 | 2.933 | (0.457) | 4277 | 0.19937 | 0.199371 |
| 13 Acrolein | 56.00 | | | | | Compound Not Detected. | | |
| 15 Acetone | 43 | | 3.182 | 3.203 | (0.499) | 15212 | 4.85407 | 4.85407 |
| 14 1,1-Dichloroethene | 96.00 | | | | | Compound Not Detected. | | |
| 16 Trichlorotrifluoroethane | 151.00 | | | | | Compound Not Detected. | | |
| 17 Iodomethane | 142.00 | | | | | Compound Not Detected. | | |
| 19 Acetonitrile | 41.00 | | | | | Compound Not Detected. | | |
| 18 Carbon Disulfide | 76.00 | | | | | Compound Not Detected. | | |
| 20 Allyl Chloride | 41.00 | | | | | Compound Not Detected. | | |
| 119 Methyl Acetate | 43.00 | | | | | Compound Not Detected. | | |
| 21 Methylene Chloride | 84 | | 3.613 | 3.634 | (0.566) | 22044 | 0.49780 | 0.497802 |
| 125 2-Propanol | 45.00 | | | | | Compound Not Detected. | | |
| 22 tert-Butyl alcohol | 59.00 | | | | | Compound Not Detected. | | |
| 23 Acrylonitrile | 53.00 | | | | | Compound Not Detected. | | |
| 24 trans-1,2-Dichloroethene | 96.00 | | | | | Compound Not Detected. | | |
| 25 Methyl t-butyl ether | 73.00 | | | | | Compound Not Detected. | | |
| 26 Hexane | 57.00 | | | | | Compound Not Detected. | | |
| 27 1,1-Dichloroethane | 63.00 | | | | | Compound Not Detected. | | |
| 29 Vinyl acetate | 43.00 | | | | | Compound Not Detected. | | |
| 30 Isopropyl ether | 87.00 | | | | | Compound Not Detected. | | |
| 28 Chloroprene | 53.00 | | | | | Compound Not Detected. | | |
| 120 ETBE | 59.00 | | | | | Compound Not Detected. | | |
| 33 2-Butanone | 43.00 | | | | | Compound Not Detected. | | |
| 32 cis-1,2-Dichloroethene | 96.00 | | | | | Compound Not Detected. | | |
| 31 2,2-Dichloropropane | 77.00 | | | | | Compound Not Detected. | | |
| 35 Ethyl Acetate | 43.00 | | | | | Compound Not Detected. | | |
| 34 Propionitrile | 54.00 | | | | | Compound Not Detected. | | |
| 36 Methacrylonitrile | 41.00 | | | | | Compound Not Detected. | | |
| 37 Bromochloromethane | 128.00 | | | | | Compound Not Detected. | | |
| 39 Tetrahydrofuran | 42.00 | | | | | Compound Not Detected. | | |
| 38 Chloroform | 83.00 | | | | | Compound Not Detected. | | |
| 41 1,1,1-Trichloroethane | 97.00 | | | | | Compound Not Detected. | | |
| 114 Cyclohexane | 56.00 | | | | | Compound Not Detected. | | |
| 42 1,1-Dichloropropene | 75.00 | | | | | Compound Not Detected. | | |
| 43 Carbon Tetrachloride | 117.00 | | | | | Compound Not Detected. | | |
| 45 Isobutanol | 41.00 | | | | | Compound Not Detected. | | |
| 46 Benzene | 78.00 | | | | | Compound Not Detected. | | |
| 47 1,2-Dichloroethane | 62.00 | | | | | Compound Not Detected. | | |
| 121 TAME | 73.00 | | | | | Compound Not Detected. | | |
| 49 n-Butanol | 56.00 | | | | | Compound Not Detected. | | |
| 50 Trichloroethene | 130.00 | | | | | Compound Not Detected. | | |
| 115 2-Pentanone | 43.00 | | | | | Compound Not Detected. | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|-------------------------------|-----------|-------|--------|---------|------------------------|----------------|---------|
| | | | | | | ON-COLUMN | FINAL |
| | MASS | | | | | (ug/L) | (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 52 1,2-Dichloropropane | 63.00 | | | | Compound Not Detected. | | |
| 122 Methyl Cyclohexane | 55.00 | | | | Compound Not Detected. | | |
| 53 Dibromomethane | 93.00 | | | | Compound Not Detected. | | |
| 54 Methyl Methacrylate | 100.00 | | | | Compound Not Detected. | | |
| 55 1,4-Dioxane | 88 | 7.260 | 7.262 | (1.138) | 159745 | 1205.60 | 1205.60 |
| 56 Bromodichloromethane | 83.00 | | | | Compound Not Detected. | | |
| 57 2-nitropropane | 41.00 | | | | Compound Not Detected. | | |
| 113 2-Chloroethyl vinyl ether | 63.00 | | | | Compound Not Detected. | | |
| 59 cis-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 60 4-Methyl-2-pentanone | 43.00 | | | | Compound Not Detected. | | |
| 62 Toluene | 91.00 | | | | Compound Not Detected. | | |
| 63 trans-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 64 Ethyl methacrylate | 69.00 | | | | Compound Not Detected. | | |
| 65 1,1,2-Trichloroethane | 97.00 | | | | Compound Not Detected. | | |
| 67 1,3-Dichloropropane | 76.00 | | | | Compound Not Detected. | | |
| 66 Tetrachloroethene | 164.00 | | | | Compound Not Detected. | | |
| 68 2-Hexanone | 43.00 | | | | Compound Not Detected. | | |
| 126 Tetrahydrothiophene | 60.00 | | | | Compound Not Detected. | | |
| 69 Dibromochloromethane | 129.00 | | | | Compound Not Detected. | | |
| 70 1,2-Dibromoethane | 107.00 | | | | Compound Not Detected. | | |
| 71 1-Chlorohexane | 91.00 | | | | Compound Not Detected. | | |
| 73 Chlorobenzene | 112.00 | | | | Compound Not Detected. | | |
| 74 1,1,1,2-Tetrachloroethane | 131.00 | | | | Compound Not Detected. | | |
| 75 Ethylbenzene | 106.00 | | | | Compound Not Detected. | | |
| 76 m and p-Xylene | 106.00 | | | | Compound Not Detected. | | |
| 77 o-Xylene | 106.00 | | | | Compound Not Detected. | | |
| 78 Styrene | 104.00 | | | | Compound Not Detected. | | |
| 79 Bromoform | 173.00 | | | | Compound Not Detected. | | |
| 80 isopropyl benzene | 105.00 | | | | Compound Not Detected. | | |
| 116 cis-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 81 Cyclohexanone | 55.00 | | | | Compound Not Detected. | | |
| 83 1,1,2,2-Tetrachloroethane | 83.00 | | | | Compound Not Detected. | | |
| 84 Bromobenzene | 156.00 | | | | Compound Not Detected. | | |
| 85 1,2,3-Trichloropropane | 110.00 | | | | Compound Not Detected. | | |
| 86 t-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 87 n-Propylbenzene | 120.00 | | | | Compound Not Detected. | | |
| 88 2-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 89 1,3,5-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 90 4-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 91 tert-Butylbenzene | 119.00 | | | | Compound Not Detected. | | |
| 92 1,2,4-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 93 sec-Butylbenzene | 134.00 | | | | Compound Not Detected. | | |
| 94 m-Dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 95 4-Isopropyltoluene | 119.00 | | | | Compound Not Detected. | | |
| 97 p-dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 118 1,2,3-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 98 n-Butylbenzene | 91.00 | | | | Compound Not Detected. | | |

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | |
|---------------------------------|-----------|----------------|----------|--------|-----------|----------------------|------------------|
| | | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 99 o-Dichlorobenzene | 146.00 | | Compound | Not | Detected. | | |
| 100 1,2-Dibromo-3-chloropropane | 157.00 | | Compound | Not | Detected. | | |
| 101 1,2,4-Trichlorobenzene | 180.00 | | Compound | Not | Detected. | | |
| 102 Hexachlorobutadiene | 225.00 | | Compound | Not | Detected. | | |
| 127 Naphthalene | 128.00 | | Compound | Not | Detected. | | |
| 104 1,2,3-Trichlorobenzene | 180.00 | | Compound | Not | Detected. | | |

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/H.i/052904.b/h4681.d

Lab Smp Id: GGTF31AA

Inj Date : 29-MAY-2004 21:39

Operator : yanezj

Smp Info : GGTF31AA,,D4E210325-009

Misc Info :

Comment : Purge and Trap Analysis

Method : /chem/H.i/052904.b/H-20ml-h2o.m

Meth Date : 29-May-2004 16:50 yanezj

Cal Date : 13-MAY-2004 11:34

Als bottle: 2

Dil Factor: 1.00000

Integrator: HP RTE

Target Version: 3.40

Processing Host: chemsv02

Client Smp ID: 01-MW-10

Inst ID: H.i

Quant Type: ISTD

Cal File: h4151.d

Compound Sublist: H-all.sub

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--------------------|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | Purge Volume (ml) |
| Vs | 20.000 | Sample Volume (ml) |

| ISTD | RT | AREA | AMOUNT |
|-----------------------------|--------|---------|--------|
| ===== | ===== | ===== | ===== |
| * 96 1,4-Dichlorobenzene-d4 | 12,918 | 3933360 | 10.000 |

| CONCENTRATIONS | | | | | QUANT | | |
|---------------------------------|---------|---------------|--------------|--------|----------|-----------|--------|
| RT | AREA | ON-COL(ug/L) | FINAL(ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ===== | ===== | ===== | ===== | ===== | ===== | ===== | ===== |
| Unknown | | | | CAS #: | | | |
| 11.804 | 430365 | 1.09414089 | 1.09414 | 0 | | 0 | 96 |
| Unknown | | | | CAS #: | | | |
| 13.816 | 733100 | 1.86380092 | 1.86380 | 0 | | 0 | 96 |
| Acetic acid, 2-ethylhexyl ester | | | | CAS #: | 103-09-3 | | |
| 14.247 | 8285416 | 21.0644741 | 21.0645 | 91 | NBS75K.1 | 15793 | 96 |

| RT | CONCENTRATIONS | | | QUAL | QUANT | | CPND # |
|---------|----------------|---------------|--------------|------|---------|-----------|--------|
| | AREA | ON-COL(ug/L) | FINAL(ug/L) | | LIBRARY | LIB ENTRY | |
| ==== | ==== | ===== | ===== | ==== | ===== | ===== | ===== |
| Unknown | | | | | CAS #: | | |
| 15.091 | 3037386 | 7.72211544 | 7.72212 | 0 | | 0 | 96 |
| Unknown | | | | | CAS #: | | |
| 15.486 | 408194 | 1.03777432 | 1.03777 | 0 | | 0 | 96 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: H.i
Lab File ID: h4681.d
Lab Smp Id: GGTF31AA
Analysis Type: VOA
Quant Type: ISTD
Operator: yanezj
Method File: /chem/H.i/052904.b/H-20ml-h2o.m
Misc Info:

Calibration Date: 05/29/4
Calibration Time: 1528
Client Smp ID: 01-MW-10
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 1511042 | 755521 | 3022084 | 1952014 | 29.18 |
| 72 Chlorobenzene-d5 | 370905 | 185452 | 741810 | 422736 | 13.97 |
| 96 1,4-Dichlorobenze | 532545 | 266272 | 1065090 | 577529 | 8.45 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 48 Fluorobenzene | 6.40 | 5.90 | 6.90 | 6.38 | -0.32 |
| 72 Chlorobenzene-d5 | 10.06 | 9.56 | 10.56 | 10.04 | -0.21 |
| 96 1,4-Dichlorobenze | 12.92 | 12.42 | 13.42 | 12.92 | -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.

STL Denver

RECOVERY REPORT

Client Name: Cabrera Services

Client SDG: D4E210325

Sample Matrix: LIQUID

Fraction: VOA

Lab Smp Id: GGTF31AA

Client Smp ID: 01-MW-10

Level: LOW

Operator: yanezj

Data Type: MS DATA

SampleType: SAMPLE

SpikeList File: dcs-h20.spk

Quant Type: ISTD

Sublist File: H-all.sub

Method File: /chem/H.i/052904.b/H-20ml-h2o.m

Misc Info:

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 40 Dibromofluorometha | 10.0000 | 10.1938 | 101.94 | 76-116 |
| \$ 44 1,2-Dichloroethane | 10.0000 | 10.4221 | 104.22 | 59-129 |
| \$ 61 Toluene-d8 | 10.0000 | 9.77738 | 97.77 | 76-116 |
| \$ 82 Bromofluorobenzene | 10.0000 | 10.0111 | 100.11 | 74-114 |

Data File: /chem/H.i/052904.b/h4681.d

Date : 29-MAY-2004 21:39

Client ID: 01-MW-10

Sample Info: GGTF31AA,,D4E210325-009

Purge Volume: 20.0

Column phase: DB624

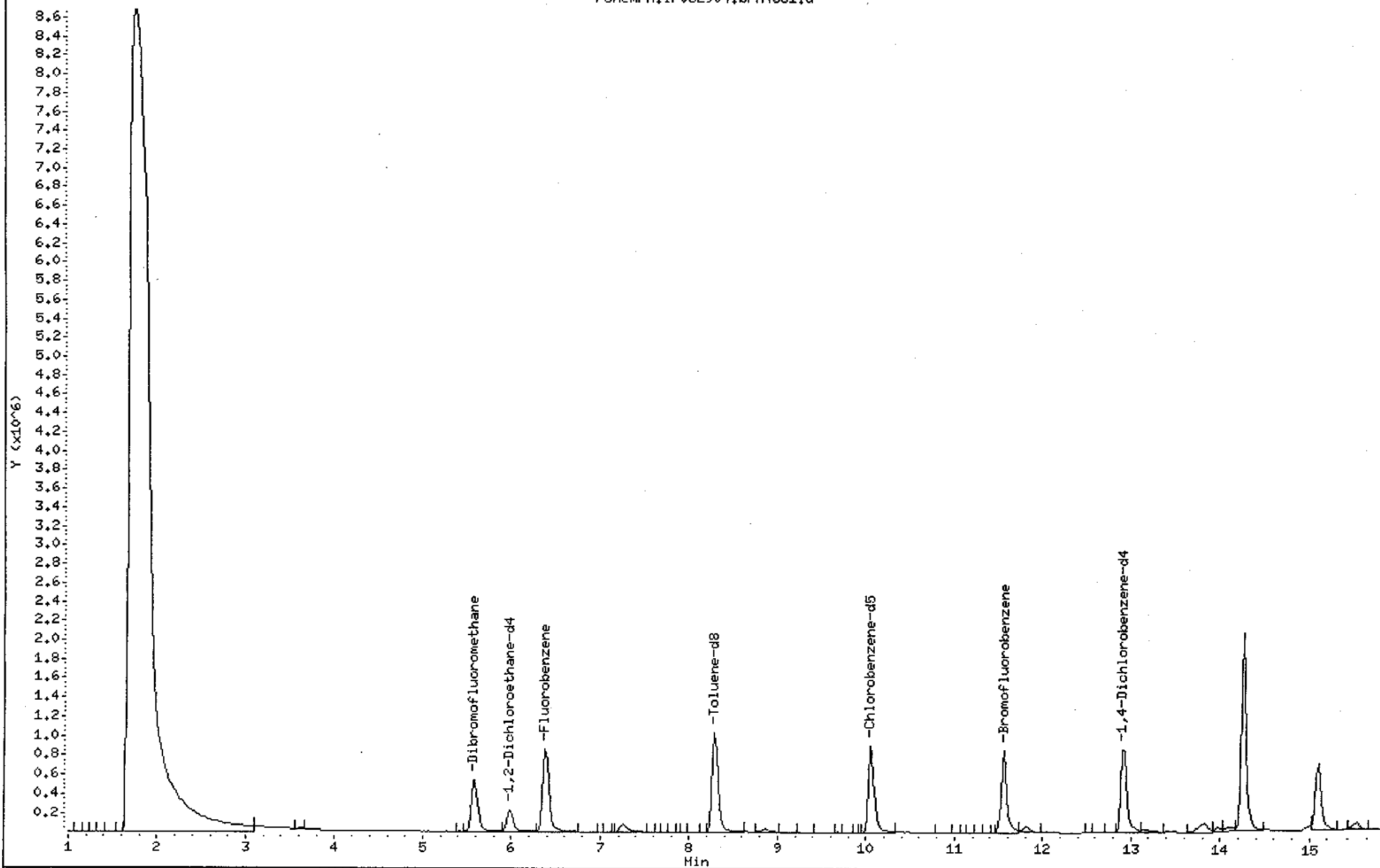
Instrument: H.i

Operator: yanezj

Column diameter: 0.53

Page 9

/chem/H.i/052904.b/h4681.d



Date : 29-MAY-2004 21:39

Client ID: 01-MW-10

Instrument: H.i

Sample Info: GGT31AA,,D4E210325-009

Purge Volume: 20.0

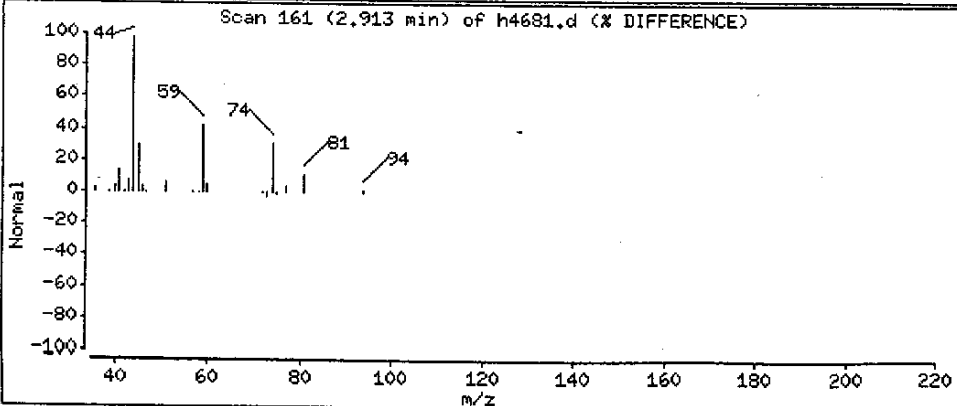
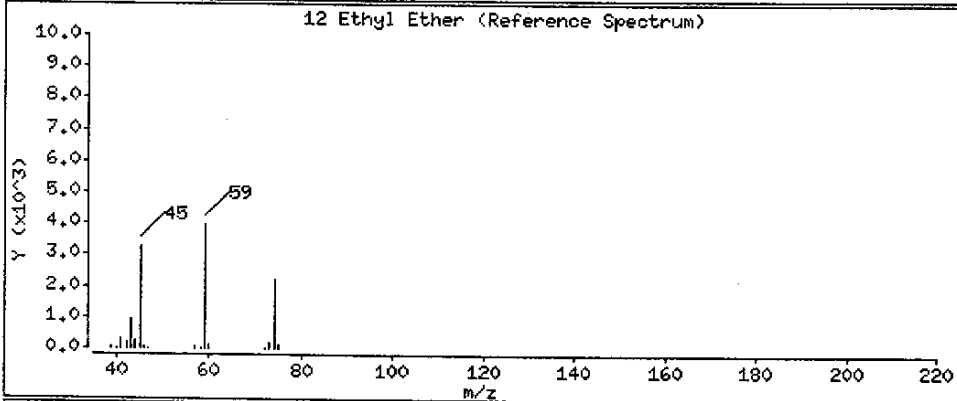
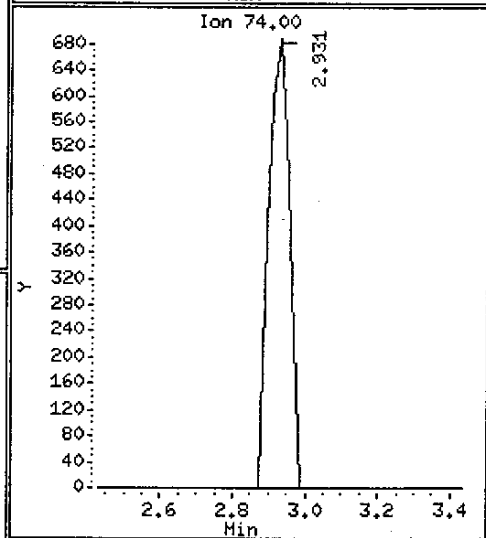
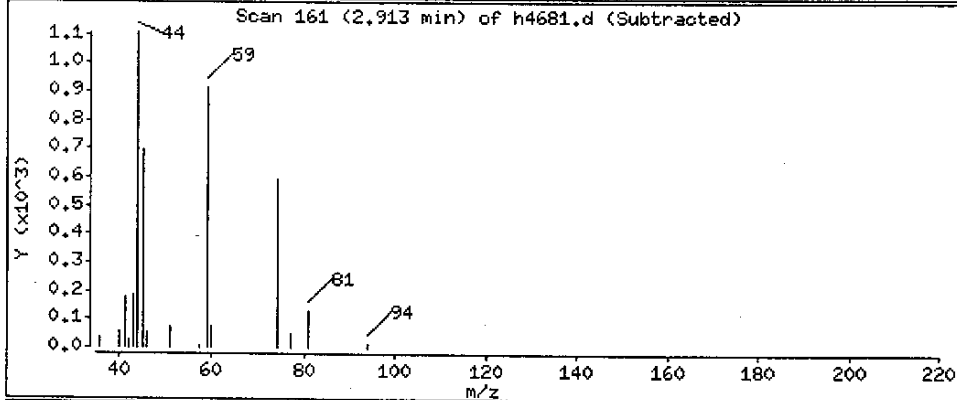
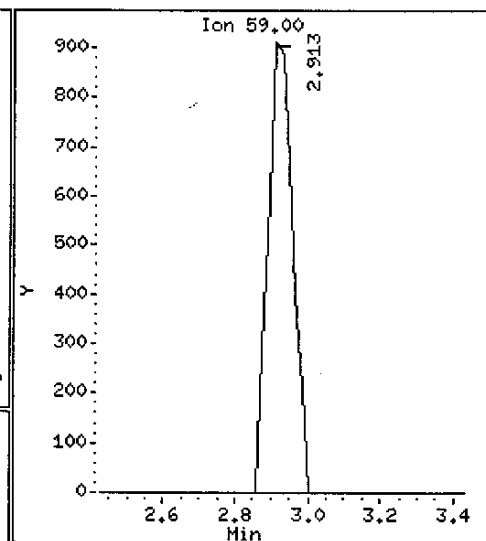
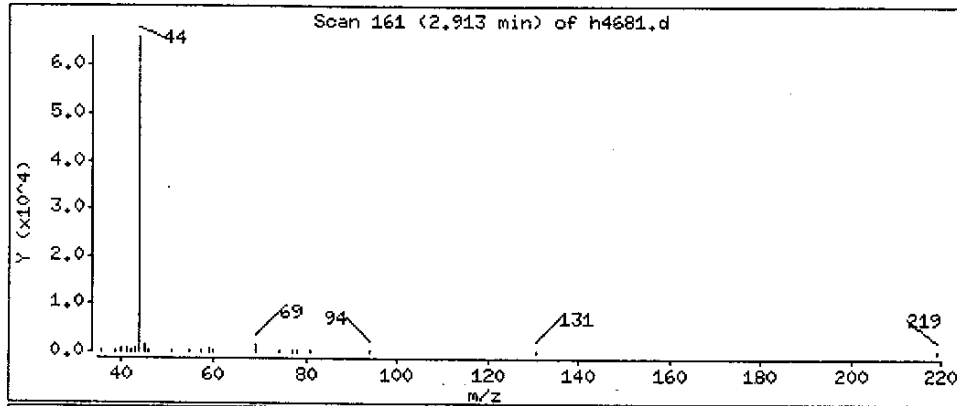
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

12 Ethyl Ether

Concentration: 0.199371 ug/L



Date : 29-MAY-2004 21:39

Client ID: 01-MM-10

Instrument: H.i

Sample Info: GGTF31AA,,D4E210325-009

Purge Volume: 20.0

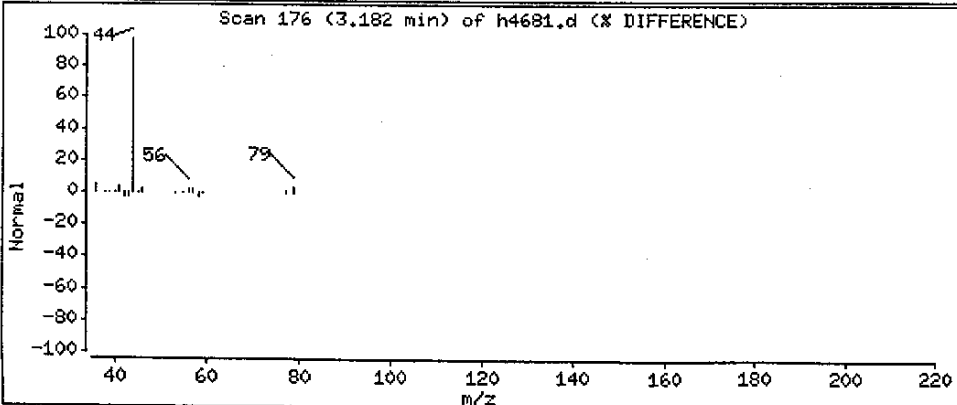
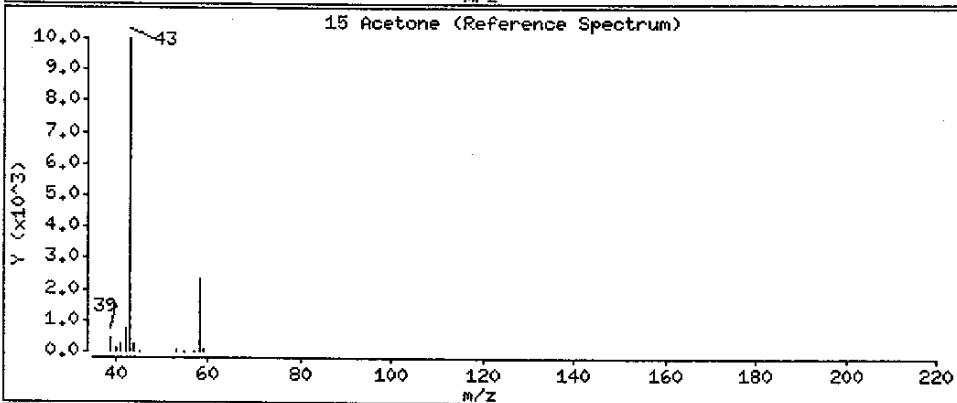
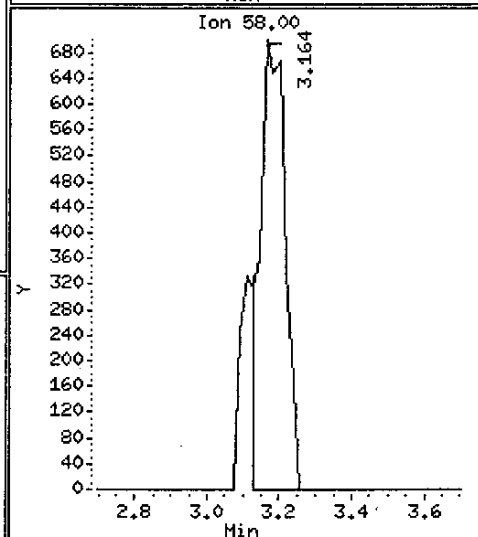
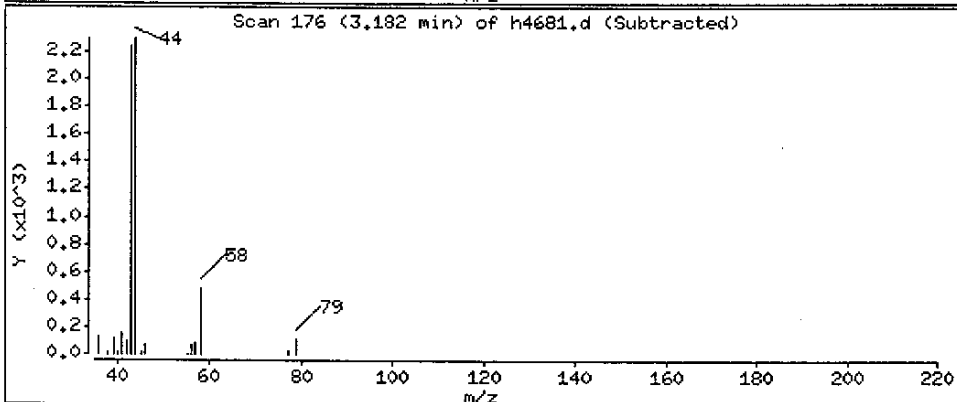
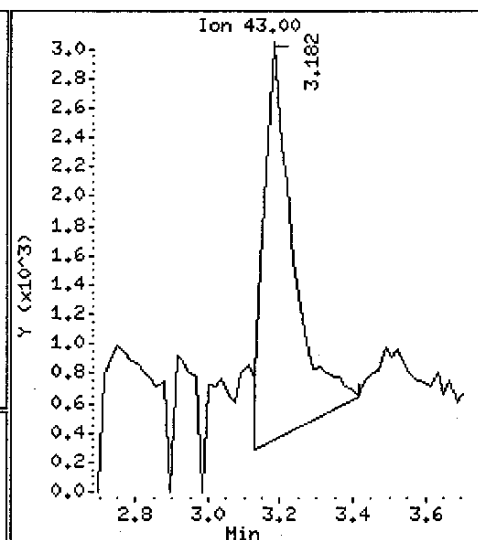
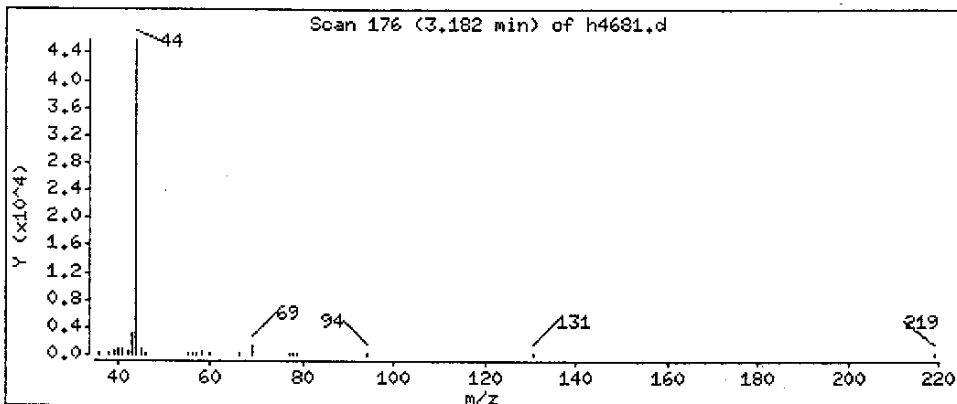
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

15 Acetone

Concentration: 4.85407 ug/L



Date : 29-MAY-2004 21:39

Client ID: 01-MW-10

Instrument: H.i

Sample Info: GCTF31AA,,D4E210325-009

Purge Volume: 20.0

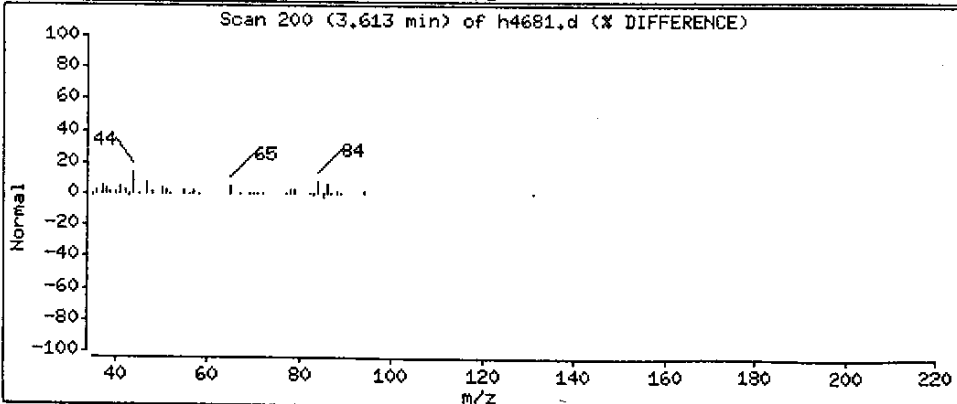
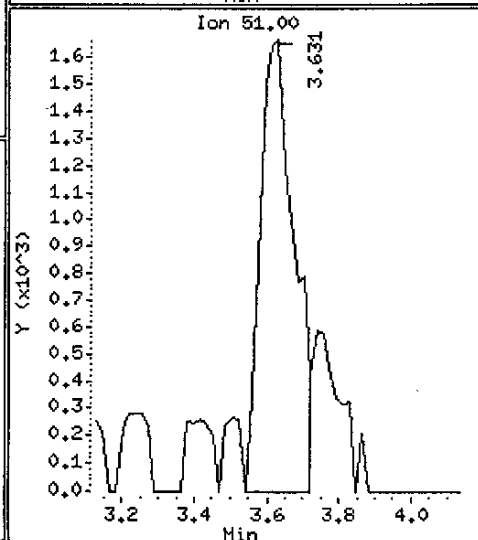
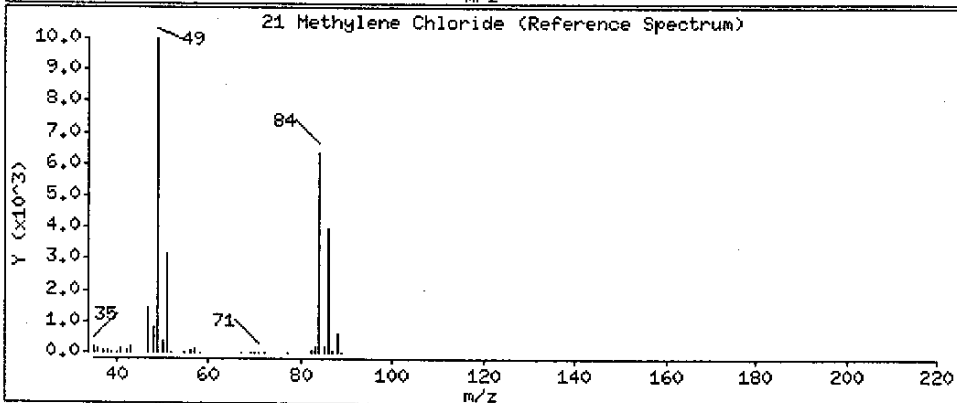
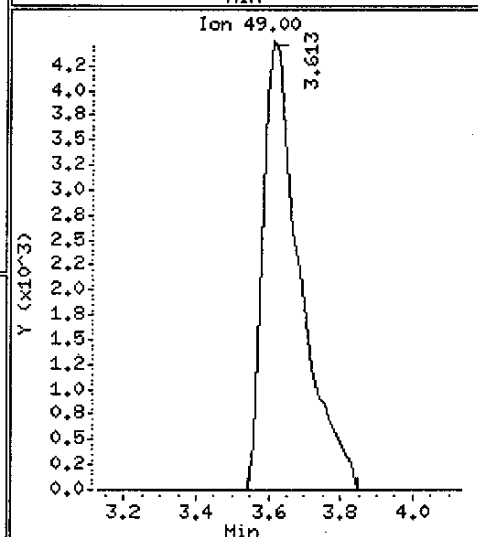
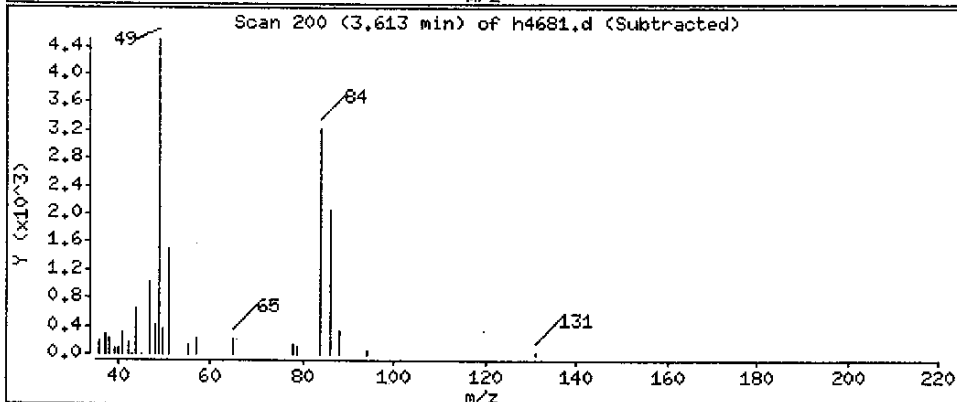
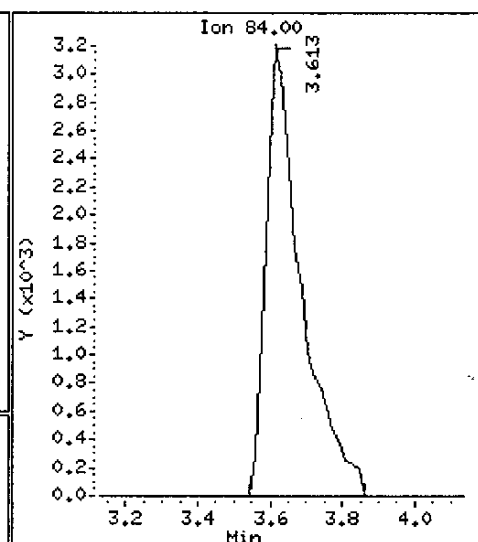
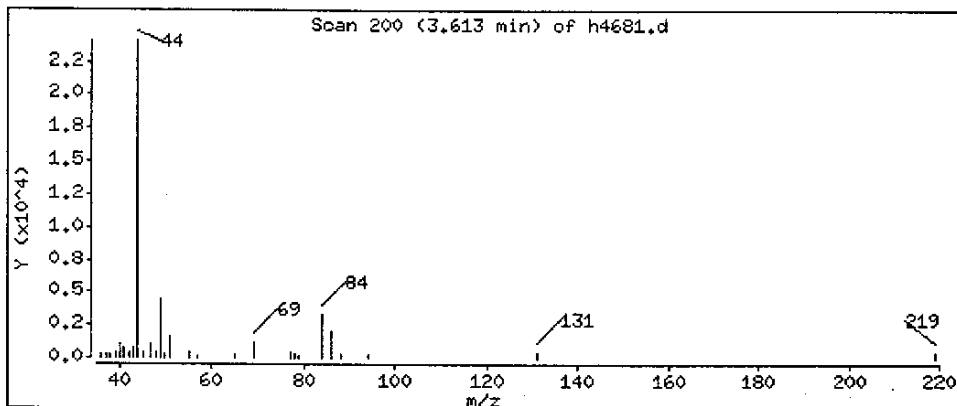
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

21 Methylene Chloride

Concentration: 0.497802 ug/L



Date : 29-MAY-2004 21:39

Client ID: 01-MW-10

Instrument: H.i

Sample Info: GGTF31AA,,D4E210325-009

Purge Volume: 20.0

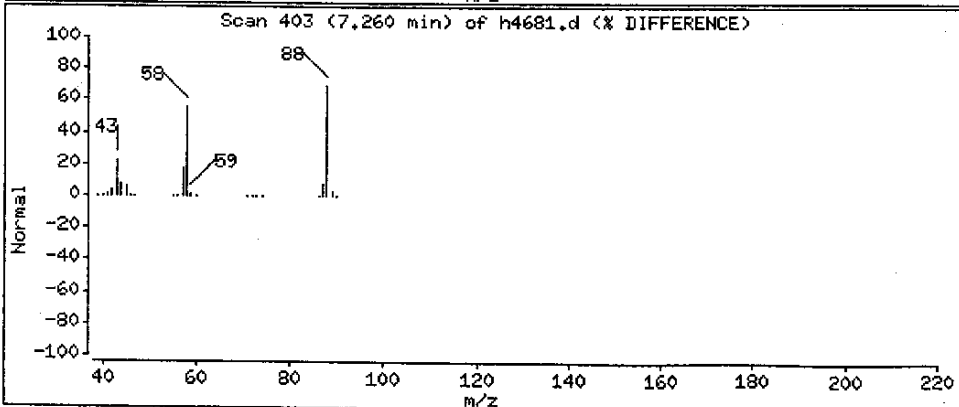
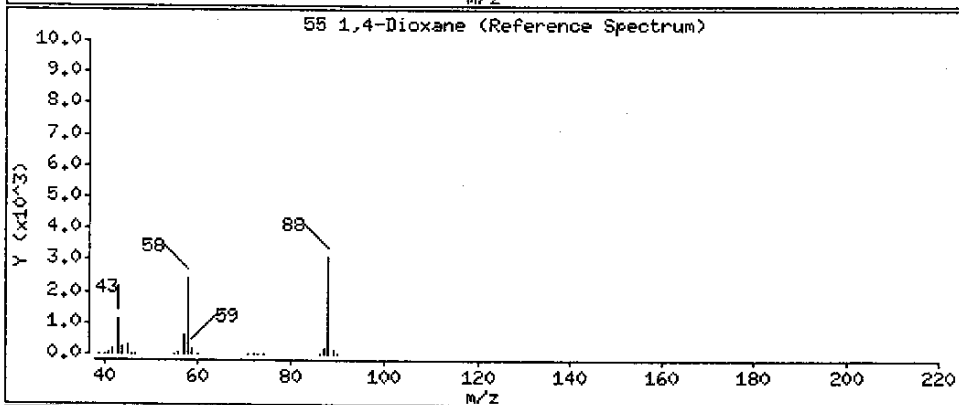
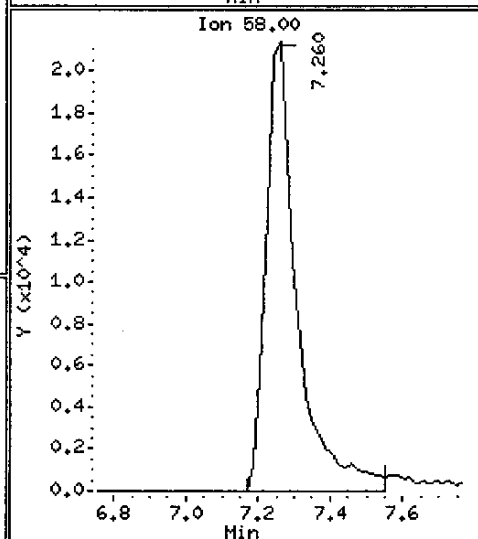
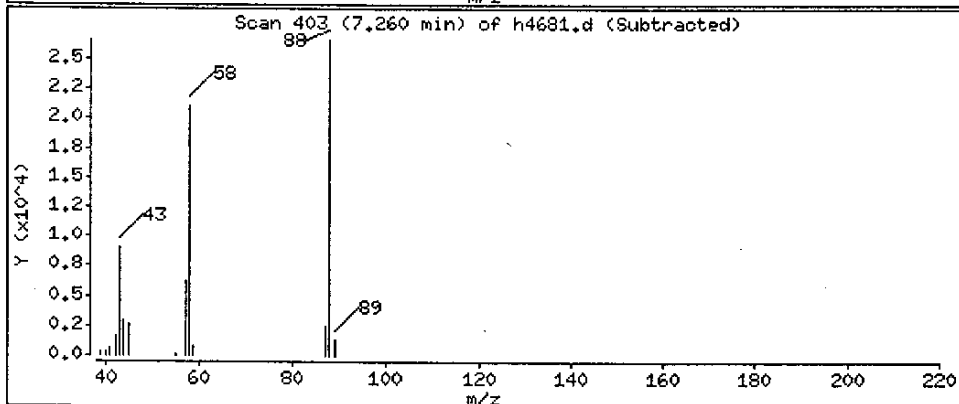
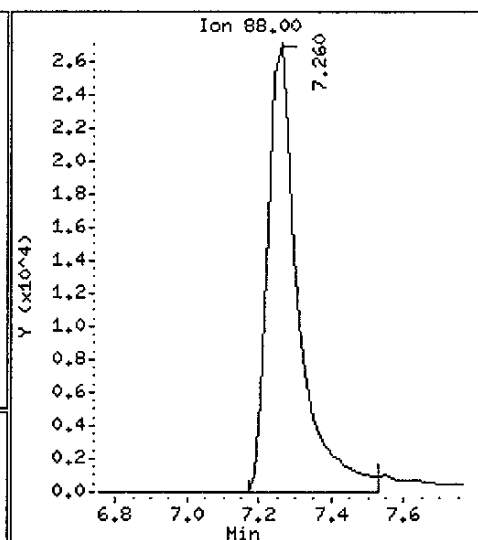
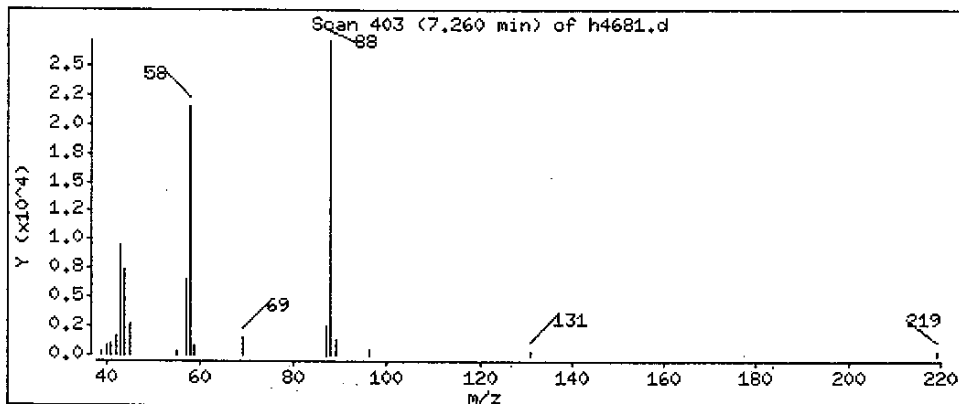
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

55 1,4-Dioxane

Concentration: 1205.60 ug/L



Date : 29-MAY-2004 21:39

Client ID: 01-MW-10

Instrument: H.i

Sample Info: GGTF31AA,,D4E210325-009

Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match

CAS Number

Library

Entry

Quality

Formula

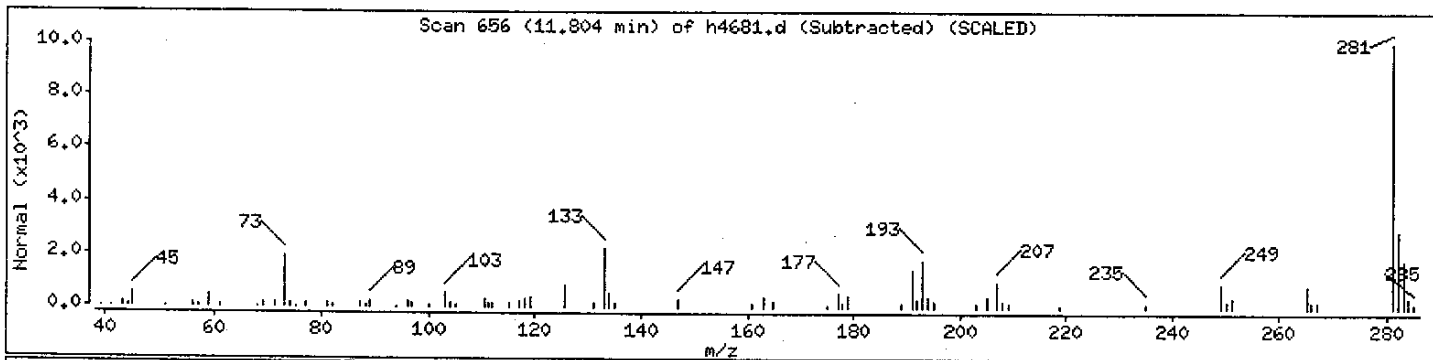
Weight

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Date : 29-MAY-2004 21:39

Client ID: 01-MW-10

Instrument: H.i

Sample Info: GGTF31AA,,D4E210325-009

Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match

CAS Number

Library

Entry

Quality Formula

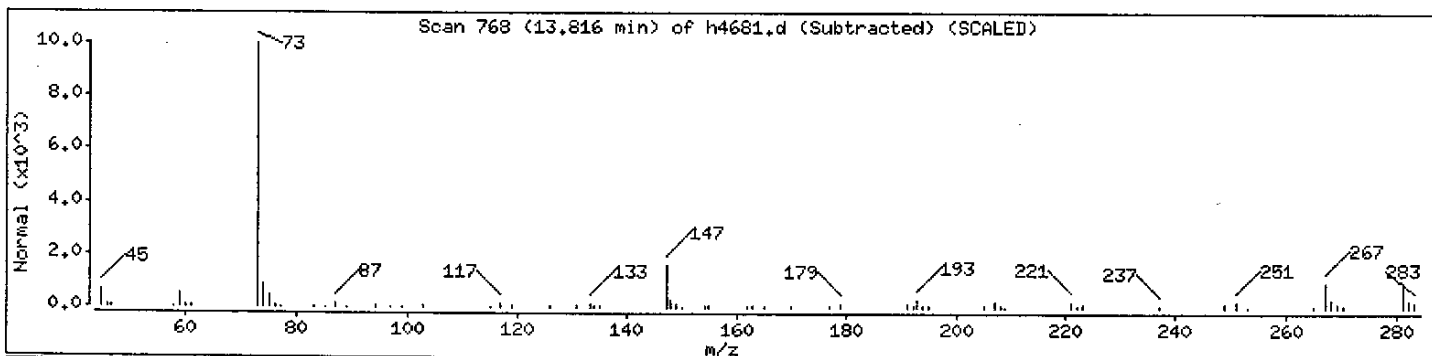
Weight

Unknown

0

0

0



Date : 29-MAY-2004 21:39

Client ID: 01-MW-10

Instrument: H.i

Sample Info: GGTF31AA,,D4E210325-009

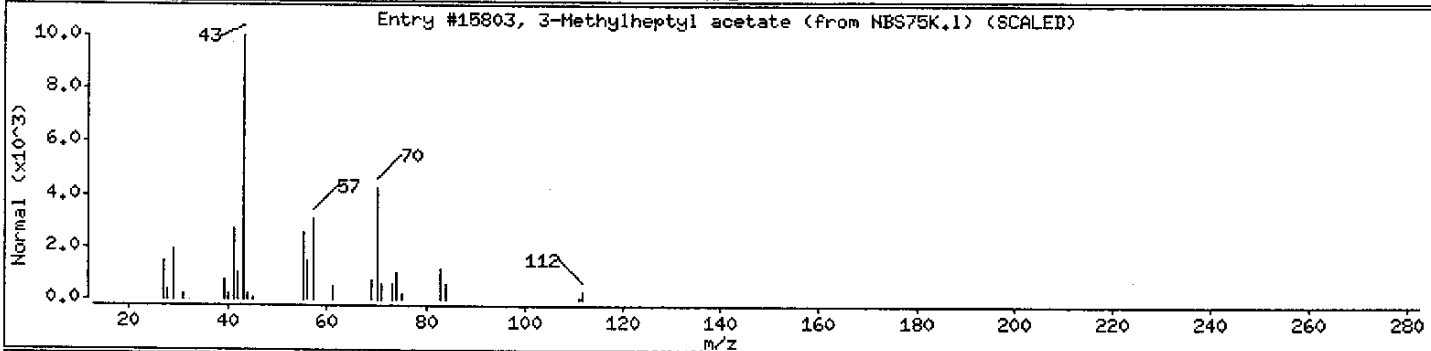
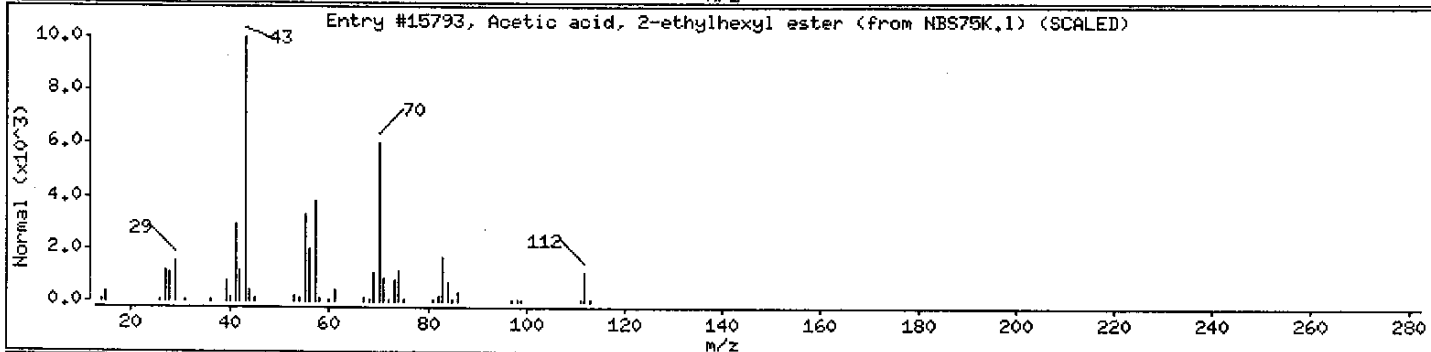
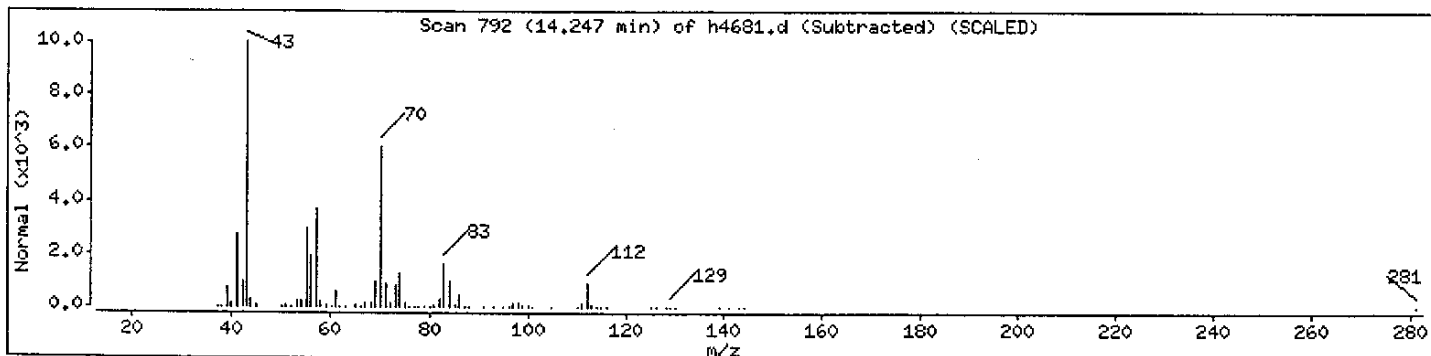
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---------------------------------|------------|----------|-------|---------|----------|--------|
| Acetic acid, 2-ethylhexyl ester | 103-09-3 | NBS75K.1 | 15793 | 91 | C10H20O2 | 172 |
| 3-Methylheptyl acetate | 72218-58-7 | NBS75K.1 | 15803 | 86 | C10H20O2 | 172 |



Date : 29-MAY-2004 21:39

Client ID: 01-MW-10

Instrument: H.i

Sample Info: GGTFF31AA,,D4E210325-009

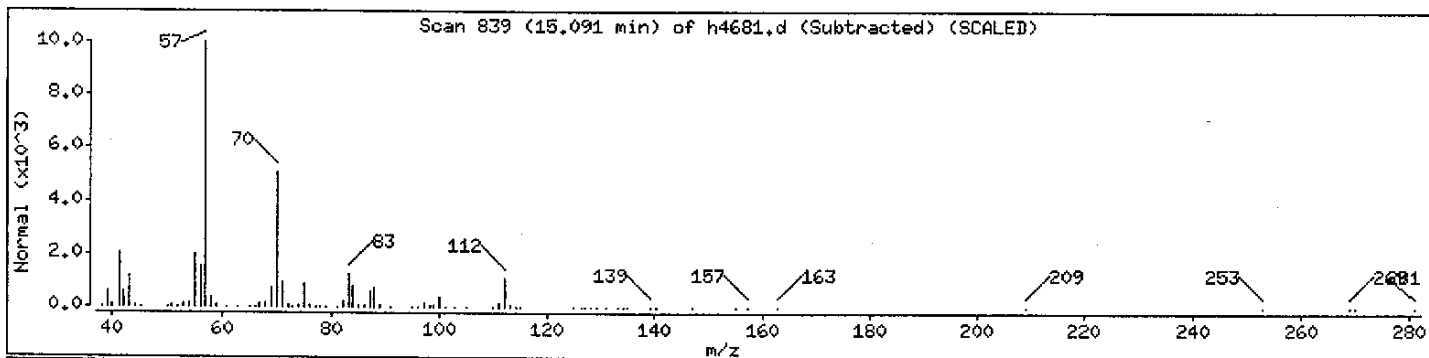
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|-------------------------------|------------|---------|-------|---------|---------|--------|
| Unknown | | | 0 | 0 | | 0 |



Date : 29-MAY-2004 21:39

Client ID: 01-MW-10

Instrument: H.i

Sample Info: GGTf31AA,,D4E210325-009

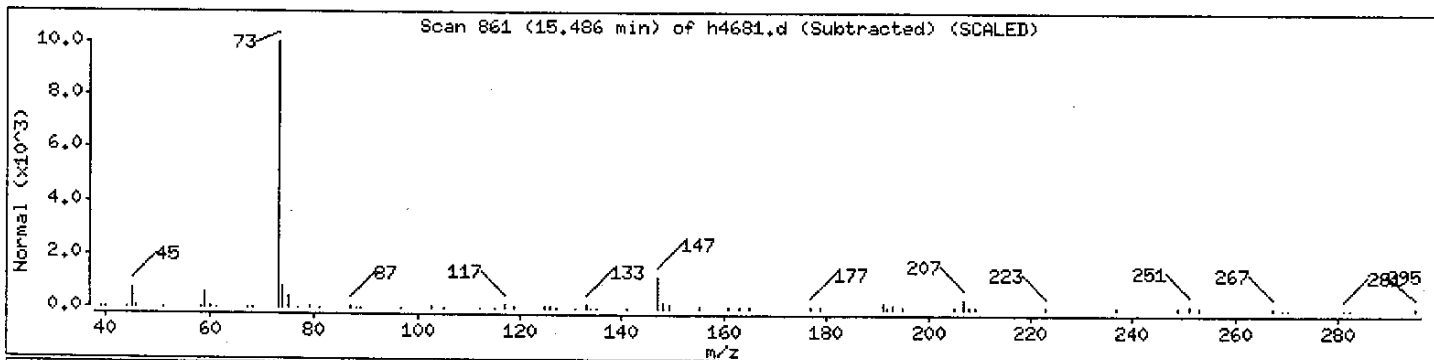
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|-------------------------------|------------|---------|-------|---------|---------|--------|
| Unknown | | | 0 | 0 | | 0 |



Volatile GC/MS

Supporting Documentation

Sample Sequence, Chromatograms/Mass Spectra



STL

Lot ID: D4E210325

Client: Cabrera Serv.

Method: 8260

Associated Samples: 1-6

Batch #(s): 4149504

I certify that, to the best of my knowledge, the attached package represents a complete and accurate copy of the original data.

Signature/Date:  6/10/04

**GC /MS VOLATILE
ORGANIC EXTRACTION
LOG SHEETS**



STL

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEETRun Date: 5/28/04
Time: 19:02:04

| 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 AnalyticalGr
Bench Sheet Copied per COC

Extractionist: _____

Concentrationist: _____

Reviewer/Date: _____ / 0/00/00

* QC BATCH: 4149504 *

PREP DATE: 5/27/04 15:26
COMP DATE: 5/27/04 15:26

Volatile Organics, GC/MS (8260B)
PURGE AND TRAP - 25 mL purge (Waters)

| EXTR EXPR | ANL DUE | LOT#,MSRUN#/ WORK ORDER | TEST FLGS | EXT | MTH | MATRIX | INIT/FIN WT/VOL | INIT | PH"S ADJ1 | ADJ2 | SOLVENTS EXTRACTION VOL EXCHANGE | VOL | SPIKE STANDARD/ SURROGATE ID |
|----------------------|------------|------------------------------|--------------|-----|-----|--------|--------------------|------|--------------|------|-------------------------------------|-----|---------------------------------|
| 0/00/00 COMMENTS: | 6/10/04 | D4E210325-001 GGTEB-1-AA | D | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/10/04 | D4E210325-001 GGTEB-1-AGS | D | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/10/04 | D4E210325-001 GGTEB-1-AHD | D | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/10/04 | D4E210325-002 GGTEB-1-AA | D | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/10/04 | D4E210325-003 GGTEB-1-AA | D | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/10/04 | D4E210325-004 GGTEB-1-AA | D | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/10/04 | D4E210325-005 GGTEB-1-AA | D | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEETRun Date: 5/28/04
Time: 19:02:04

 * QC BATCH: 4149504 *
 *

PREP DATE: 5/27/04 15:26
 COMP DATE: 5/27/04 15:26

| EXTR EXPR | ANL DUE | LOT#,MSRUN#/ WORK ORDER | TEST FLGS | EXT | MTH | MATRIX | INIT/FIN WT/VOL | INIT | PH"S ADJI | ADJ2 | SOLVENTS EXTRACTION VOL | EXCHANGE | VOL | SPIKE STANDARD/ SURROGATE ID |
|----------------------|------------|-----------------------------|--------------|-----|-----|--------|--------------------|------|--------------|------|----------------------------|----------|-----|---------------------------------|
| 0/00/00 COMMENTS: | 6/10/04 | D4E210325-006 GGTFH-1-AA | D | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/04/04 | D4E250363-001 GG24F-1-AC | R | 25 | RI | WATER | 20mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/04/04 | D4E250363-002 GG24H-1-AC | R | 25 | RI | WATER | 0.15mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/04/04 | D4E250363-003 GG24J-1-AC | R | 25 | RI | WATER | 0.4mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/04/04 | D4E250363-004 GG24K-1-AC | R | 25 | RI | WATER | 0.015mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/04/04 | D4E250363-005 GG24L-1-AC | R | 25 | RI | WATER | 0.01mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/04/04 | D4E250363-006 GG24M-1-AC | R | 25 | RI | WATER | 0.004mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/04/04 | D4E250363-007 GG24P-1-AC | R | 25 | RI | WATER | 0.3mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/04/04 | D4E250363-008 GG24Q-1-AC | R | 25 | RI | WATER | 0.3mL 20.00mL | NA | NA | NA | .0 | | .0 | |
| 0/00/00 COMMENTS: | 6/04/04 | D4E250363-009 GG24R-1-AC | R | 25 | RI | WATER | 0.1mL 20.00mL | NA | NA | NA | .0 | | .0 | |

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEETRun Date: 5/28/04
Time: 19:02:04

 *
 * QC BATCH: 4149504 *
 *

PREP DATE: 5/27/04 15:26
 COMP DATE: 5/27/04 15:26

| EXTR EXPR | ANL DUE | LOT#,MSRUN#/ WORK ORDER | TEST FLGS | EXT | MTH | MATRIX | INIT/FIN WT/VOL | INIT | PH"S ADJ1 | ADJ2 | SOLVENTS EXTRACTION VOL | EXCHANGE VOL | SPIKE STANDARD/ SURROGATE ID |
|----------------------|------------|------------------------------|--------------|-----|-----|--------|--------------------|------|--------------|------|----------------------------|-----------------|---------------------------------|
| 0/00/00 COMMENTS: | 6/11/04 | D4E250365-001 GG25P-1-AA | | 25 | RI | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/11/04 | D4E250365-002 GG25Q-1-AA | | 25 | RI | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/11/04 | D4E250365-003 GG25R-1-AA | | 25 | RI | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/11/04 | D4E250365-006 GG252-1-AA | | 25 | RI | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 6/11/04 | D4E250365-008 GG255-1-AA | | 25 | RI | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 0/00/00 | D4E280000-504 GHCHG-1-AAB | | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |
| 0/00/00 COMMENTS: | 0/00/00 | D4E280000-504 GHCHG-1-ACC | | 25 | QK | WATER | 20mL 20.00mL | NA | NA | NA | .0 | .0 | |

R = RUSH C = CLP
 E = EPA 600 D = EXP.DEL)
 M = CLIENT REQ MS/MSD
 ‡

NUMBER OF WORK ORDERS IN BATCH: 24

**GC/MS VOLATILE
INSTRUMENT
LOG SHEETS**



STL

GC/MS Volatile Analysis

Instrument **B2**
5972 MSD

STL, Denver

| Column | Phase | Inj. Temp | Init. Time | Ramp Rate | Final Temp | Flow cc/min | Press. Psi | Type | Vac. Range | Source Temp | Mass Range |
|--------|--------|-----------|------------|-----------|------------|-------------|------------|------|------------------|-------------|-----------------------|
| 75M | DB-624 | 200C | 2 min. | 5C/min | 65C | 18 | 20 | MS | 10 ⁻⁶ | -175C | 35-300/2 ⁺ |
| | | | 0 min. | 12C/min | 155C | | | | | | |
| | | | 0 min. | 25C/min | 210C | | | | | | |

DEN-MS-0018 (82608/624/524.2)
(Circle as appropriate)

Comments

Main #067/083-04 LCS/ms/SD #107-04
Supp #011/052-04

QuantIMS Batch: 4149504

Target Batch (Directory): 052204.b

| Lot # | Sample | W.O.# | Purge vol (ml) | Sample amt (ml/g) | Date 2004 | Initials | File Number | IS OK | SS OK | DIL OK | 24 hr 12 hr | pH | Comments | AL |
|----------|--------|---------------|----------------|-------------------|-----------|----------|-------------|-------|-------|--------|-------------|----|----------------|----|
| BFB | | | 10/DIR INT | 5-27 | Gm | rr6279.d | | | | | | | #023-04 (1526) | 1 |
| MAIN 010 | | | 20 | 501 | | | 80 | — | — | | | | | 2 |
| SUPP 010 | | Gus 100 | | ↓ | | | 81 | — | — | | | | | 3 |
| LCS | | GGG GHCHG-IAA | | 1001 | | | 82 | — | — | | | | | 4 |
| VOLK | | IAA | | 20 | | | 83 | — | — | | | | | 5 |
| ME210325 | 1 | GG TEE IAA | | ↓ | | | 84 | — | — | | | 12 | | 6 |
| | ms | IAG | | ↓ | | | 85 | — | — | | | 12 | | 7 |
| | MSD | IAH | | ↓ | | | 86 | — | — | | | 12 | | 8 |
| | 2 | E3 IAA | | ↓ | | | 87 | — | — | | | 12 | | 9 |
| | 3 | E6 | | ↓ | | | 88 | — | — | | | 12 | | 10 |
| | 4 | E7 | | 3.0 | | | 89 | — | — | X | | 12 | R20 20 | 11 |
| | 5 | FE | | 20 | | | 90 | — | — | | | 12 | | 12 |
| | 6 | FH | | ↓ | | | 91 | — | — | | | 12 | | 13 |
| ME250363 | 1 | 24FIAC | | ↓ | | | 92 | — | — | | | 7 | | 14 |
| | 2 | 4H | | .15 | | | 93 | — | — | | | 7 | | 15 |
| | 3 | 4J | | 0.4 | | | 94 | — | — | | | 7 | | 16 |
| | 4 | 4K | | .015 | | | 95 | — | — | | | 7 | | 17 |
| | 5 | 4L | | .01 | | | 96 | — | — | | | 7 | | 18 |
| | 6 | 4M | | ↓ | | | 97 | — | — | X | | 7 | R20 401 | 19 |
| | 7 | 4P | | 0.3 | | | 98 | — | — | | | 7 | | 20 |

GC/MS Volatile Analysis

5972 MS

DEN-MS-0010 (8260B/624/524.2
(Circle as appropriate)

Comments

Target Batch (Directory):

QuantIMS Batch:

Om 5/20/04

**GC/MS VOLATILE
STANDARD DATA**



STL

GC/MS Initial Calibration Review Checklist

STL Denver

Instrument ID and Date:

R2 MAIN 5/25/04

Check Method Used: Analysis

☐ 625 ☐ 8270 ☐ Other SV _____☐ 524.2 ☐ 624 ☒ 8260B ☐ Other VOA _____VOA Preparation ☐ 5mL ☒ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

| Review Items | Level 1 | | | Level 2 | Comments |
|---|---------|----|-----|---------|---------------------------------------|
| | Yes | No | N/A | | |
| Initial Calibration | | | | | |
| 1. BFB/DFTTP meets criteria? | / | | | / | |
| 2. ICAL date and instrument ID verified? | / | | | / | |
| 3. Sufficient number of calibration points used? | / | | | / | |
| 4. Reasons for removal of points documented? | / | | | / | SOME Pts LPL REMOVED |
| 5. %RSD or correlation coefficient within method limits? | / | | | / | |
| 6. If RRF used for ICAL, were all compounds within 15% RSD? | / | | | / | List all exceptions below (cpd & RSD) |
| 7. Response factors meet criteria? | / | | | / | |
| 8. Isomeric pairs checked for correct peak assignment? | / | | | / | |
| 9. Data checked for detector saturation? | / | | | / | |
| 10. Standards traceability properly documented? | / | | | / | |
| 11. Manual integrations documented and checked? | | | / | N/A | |
| 12. 2 nd source ICV recovery 75-125% for DoD projects, 65-135% (±55% of expected for poor performers) for non-DoD? | / | | | / | |

1st Level Reviewer:

OK

Date:

5/25/04

2nd Level Reviewer:

JH/1

Date:

05/26/04

GC/MS Volatile Analysis

Instrument R2
5972 MSD

STL, Denver

| Column | Phase | Inj. Temp | Init. Time | Ramp Rate | Final Temp | Flow cc/min | Press. Psi | Type | Vac. Range | Source Temp | Mass Range |
|--------|--------|-----------|------------|-----------|------------|-------------|------------|------|------------------|-------------|-------------------------|
| 75M | DB-624 | 200C | 2 min. | 5C/min | 65C | 18 | 20 | MS | 10 ⁻⁶ | -175C | 35-300/2 ⁺ 2 |
| | | | 0 min. | 12C/min | 155C | | | | | | |
| | | | 0 min. | 25C/min | 210C | | | | | | |

DEN-MS-0010 (8260B/624/524.2)
(Circle as appropriate)

Comments

Target Batch (Directory): R2 052504i.bIS/SS # 104-04

QuantIMS Batch:

| Lot # | Sample | W.O.# | Purge vol (ml) | Sample amt (ml/g) | Date | Initials | File Number | IS OK | SS OK | DIL OK | 12 hr | pH | Comments | ALS |
|----------------|--------|-------------|----------------|-------------------|---------|-----------|-------------|-------|-------|--------|--------------|----|--------------|-----|
| BFB | | 1st dlr inj | | | 5/25/04 | <u>01</u> | R2 6217.d | | | | <u>24 hr</u> | | #73-04 1B36 | |
| MAIN 001 | | | 20 | 0.5 μ l | | | 18 | | | | | | #67/B3-04 | |
| 2 | | | | 1.0 | | | 19 | | | | | | | |
| 5 | | | | 2.5 | | | 20 | | | | | | | |
| 10 | | | | 5.0 | | | 21 | | | | | | | |
| 30 | | | | 15.0 | | | 22 | | | | | | | |
| 60 | | | | 30.0 | | | 23 | | | | | | | |
| SSV030 | | | | 15.0 | | | 24 | | | | | | #61/60/91-04 | |
| SUPP001 | | | | 0.5 | | | 25 | | | | | | #52/11-04 | |
| 2 | | | | 1.0 | | | 26 | | | | | | | |
| 5 | | | | 2.5 | | | 27 | | | | | | | |
| 10 | | | | 5.0 | | | 28 | | | | | | | |
| 30 | | | | 15.0 | | | 29 | | | | | | | |
| 60 | | | | 30.0 | | | 30 | | | | | | | |
| LCS | | | | 20 | | | 31 | | | | | | | |
| VBK | | | | | | | 32 | | | | | | | |
| | | | | | | | 33 | | | | | | | |
| DAE190320 | 2 | | | | | | 34 | | | | | 7 | | |
| DAE190322 | 11 | | | | | | 35 | | | | | 7 | | |
| DAE190320 | 1 | | | | | | 36 | | | | | 7 | | |

Calibration History

Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m
Start Cal Date: 25-MAY-2004 19:05
End Cal Date : 25-MAY-2004 21:11

Initial Calibration

| Injection Date | Sublist | Calibration File |
|------------------------------------|---------|-------------------------------|
| Cal Level: 1 , Cal Amount: 1.00000 | | |
| 25-MAY-2004 19:05 | 1-main | /chem/R2.i/052504i.b/rr6218.d |
| Cal Level: 2 , Cal Amount: 2.00000 | | |
| 25-MAY-2004 19:31 | 1-main | /chem/R2.i/052504i.b/rr6219.d |
| Cal Level: 3 , Cal Amount: 5.00000 | | |
| 25-MAY-2004 19:56 | 1-main | /chem/R2.i/052504i.b/rr6220.d |
| Cal Level: 4 , Cal Amount: 10.0000 | | |
| 25-MAY-2004 20:21 | 1-main | /chem/R2.i/052504i.b/rr6221.d |
| Cal Level: 5 , Cal Amount: 30.0000 | | |
| 25-MAY-2004 20:46 | 1-main | /chem/R2.i/052504i.b/rr6222.d |
| Cal Level: 6 , Cal Amount: 60.0000 | | |
| 25-MAY-2004 21:11 | 1-main | /chem/R2.i/052504i.b/rr6223.d |

Continuing Calibration

| | | |
|-------------------|--------|-------------------------------|
| 25-MAY-2004 20:21 | 1-main | /chem/R2.i/052504i.b/rr6221.d |
|-------------------|--------|-------------------------------|

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 25-MAY-2004 19:05
 End Cal Date : 25-MAY-2004 21:11
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/R2.i/052504i.b/R2-20ml-h2o.m
 Cal Date : 25-May-2004 21:50 reinharj
 Curve Type : Average

Calibration File Names:

Level 1: /chem/R2.i/052504i.b/rr6218.d
 Level 2: /chem/R2.i/052504i.b/rr6219.d
 Level 3: /chem/R2.i/052504i.b/rr6220.d
 Level 4: /chem/R2.i/052504i.b/rr6221.d
 Level 5: /chem/R2.i/052504i.b/rr6222.d
 Level 6: /chem/R2.i/052504i.b/rr6223.d

| Compound | 1.000 | 2.000 | 5.000 | 10.000 | 30.000 | 60.000 | RRF | % RSD |
|--------------------------------|---------|---------|---------|---------|---------|---------|---------|--------|
| Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | | |
| M 1 1,2-Dichloroethene (total) | 0.29608 | 0.26763 | 0.25863 | 0.25690 | 0.25579 | 0.24665 | 0.26361 | 6.546 |
| M 2 Xylene (total) | 6.63293 | 5.54641 | 5.94720 | 5.76201 | 5.84405 | 5.33884 | 5.84524 | 7.588 |
| 3 dichlorodifluoromethane | +++++ | 0.95932 | 0.92295 | 0.90642 | 0.91501 | 0.91444 | 0.92363 | 2.251 |
| 5 Chloromethane | +++++ | 0.49028 | 0.44474 | 0.43034 | 0.42981 | 0.41947 | 0.44293 | 6.311 |
| 6 Vinyl Chloride | 0.46782 | 0.44298 | 0.40293 | 0.40260 | 0.40626 | 0.39542 | 0.41967 | 6.907 |
| 8 Bromomethane | 0.61455 | 0.54723 | 0.50650 | 0.53840 | 0.58705 | 0.60425 | 0.56633 | 7.457 |
| 9 Chloroethane | 0.66350 | 0.60627 | 0.57691 | 0.57713 | 0.57245 | 0.57421 | 0.59508 | 6.015 |
| 11 Trichlorofluoromethane | 1.11952 | 1.06923 | 1.00274 | 0.99769 | 1.01984 | 1.01071 | 1.03662 | 4.637 |
| 12 Ethanol | 0.00259 | 0.00181 | 0.00268 | 0.00248 | 0.00265 | 0.00259 | 0.00247 | 13.377 |
| 16 Acrolein | 0.03749 | 0.03080 | 0.03271 | 0.03101 | 0.02929 | 0.03019 | 0.03192 | 9.259 |
| 19 1,1-Dichloroethene | 0.40625 | 0.37893 | 0.35996 | 0.34812 | 0.33941 | 0.33577 | 0.36141 | 7.463 |
| 18 Acetone | +++++ | 0.04275 | 0.04428 | 0.04443 | 0.04445 | 0.04432 | 0.04405 | 1.651 |
| 21 Iodomethane | 0.47893 | 0.55591 | 0.61058 | 0.61760 | 0.63420 | 0.61363 | 0.58514 | 9.981 |
| 22 Acetonitrile | 0.01615 | 0.01602 | 0.01634 | 0.01524 | 0.01609 | 0.01551 | 0.01589 | 2.666 |
| 27 Methylene Chloride | +++++ | 0.37414 | 0.32149 | 0.28137 | 0.27851 | 0.26751 | 0.30461 | 14.420 |
| 26 tert-Butyl alcohol | 0.01019 | 0.00874 | 0.00957 | 0.00885 | 0.00928 | 0.00912 | 0.00929 | 5.713 |
| 28 Acrylonitrile | 0.03651 | 0.03252 | 0.03335 | 0.03078 | 0.03311 | 0.03224 | 0.03308 | 5.756 |
| 30 trans-1,2-Dichloroethene | 0.29925 | 0.27289 | 0.25749 | 0.25652 | 0.25862 | 0.25223 | 0.26617 | 6.635 |
| 34 1,1-Dichloroethane | 0.51925 | 0.46775 | 0.46189 | 0.44496 | 0.43604 | 0.40638 | 0.45604 | 8.295 |
| 33 Isopropyl ether | 0.14982 | 0.13408 | 0.12845 | 0.12866 | 0.12606 | 0.12008 | 0.13119 | 7.767 |
| 35 Chloroprene | 0.43446 | 0.40157 | 0.37948 | 0.37734 | 0.37923 | 0.36543 | 0.38958 | 6.392 |
| 40 cis-1,2-Dichloroethene | 0.29291 | 0.26238 | 0.25976 | 0.25727 | 0.25296 | 0.24107 | 0.26106 | 6.628 |
| 37 2-Butanone | 0.04058 | 0.03640 | 0.03735 | 0.03783 | 0.03786 | 0.03900 | 0.03817 | 3.795 |
| 41 2,2-Dichloropropane | 0.49360 | 0.44196 | 0.42303 | 0.40138 | 0.41298 | 0.39179 | 0.42745 | 8.606 |
| 39 Propionitrile | 0.01023 | 0.01049 | 0.01035 | 0.01015 | 0.00973 | 0.00964 | 0.01010 | 3.378 |

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 25-MAY-2004 19:05
 End Cal Date : 25-MAY-2004 21:11
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/R2.i/052504i.b/R2-20ml-h2o.m
 Cal Date : 25-May-2004 21:50 reinharj
 Curve Type : Average

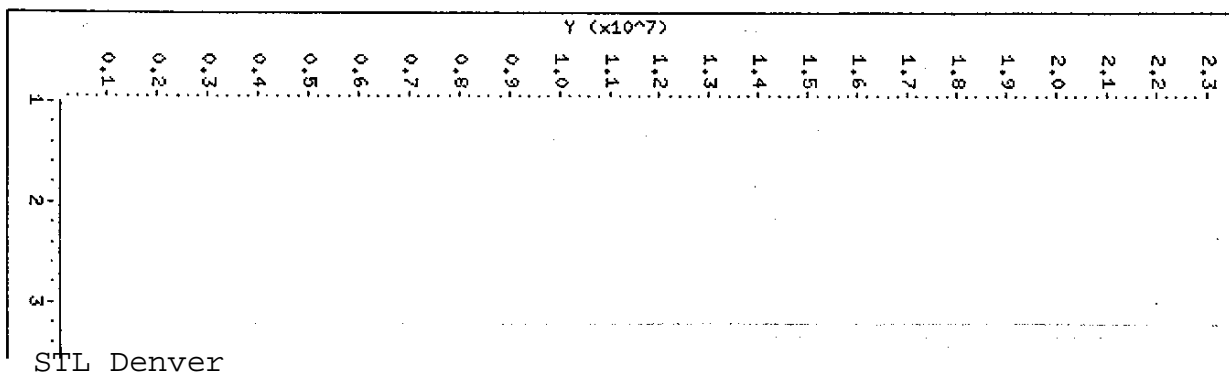
| Compound | 1.000 Level 1 | 2.000 Level 2 | 5.000 Level 3 | 10.000 Level 4 | 30.000 Level 5 | 60.000 Level 6 | RRF | % RSD |
|------------------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|---------|-------|
| 42 Methacrylonitrile | 0.06923 | 0.06201 | 0.06546 | 0.06399 | 0.06544 | 0.06315 | 0.06488 | 3.876 |
| 43 Bromochloromethane | 0.11476 | 0.10567 | 0.10416 | 0.09983 | 0.10366 | 0.10383 | 0.10532 | 4.759 |
| 44 Chloroform | 0.58029 | 0.51460 | 0.51089 | 0.48611 | 0.49260 | 0.49512 | 0.51327 | 6.746 |
| 47 1,1,1-Trichloroethane | 0.53427 | 0.47852 | 0.49774 | 0.46943 | 0.48675 | 0.46604 | 0.48879 | 5.135 |
| 50 1,1-Dichloropropene | 0.41830 | 0.38013 | 0.37201 | 0.37624 | 0.37250 | 0.35881 | 0.37966 | 5.333 |
| 51 Carbon Tetrachloride | 0.46711 | 0.42566 | 0.43049 | 0.43296 | 0.43807 | 0.43509 | 0.43840 | 3.330 |
| 48 Isobutanol | +++++ | 0.00247 | 0.00256 | 0.00241 | 0.00247 | 0.00239 | 0.00246 | 2.661 |
| 54 Benzene | 0.99895 | 0.90615 | 0.86865 | 0.86087 | 0.90338 | 0.87424 | 0.90204 | 5.651 |
| 53 1,2-Dichloroethane | 0.31060 | 0.28481 | 0.29754 | 0.28698 | 0.30040 | 0.29349 | 0.29564 | 3.198 |
| 57 n-Butanol | +++++ | 0.00165 | 0.00164 | 0.00157 | 0.00175 | 0.00171 | 0.00166 | 4.309 |
| 58 Trichloroethene | 0.28980 | 0.27931 | 0.27157 | 0.27382 | 0.27495 | 0.26122 | 0.27511 | 3.411 |
| 61 1,2-Dichloropropane | 0.25440 | 0.23553 | 0.24090 | 0.23872 | 0.23982 | 0.22932 | 0.23978 | 3.457 |
| 64 Dibromomethane | 0.16426 | 0.15143 | 0.15241 | 0.15123 | 0.14907 | 0.15033 | 0.15312 | 3.639 |
| 63 1,4-Dioxane | +++++ | 0.00089 | 0.00094 | 0.00090 | 0.00093 | 0.00095 | 0.00092 | 2.688 |
| 65 Bromodichloromethane | 0.42351 | 0.38895 | 0.38886 | 0.37529 | 0.38284 | 0.38235 | 0.39030 | 4.365 |
| 68 cis-1,3-Dichloropropene | 1.58347 | 1.41108 | 1.49791 | 1.49603 | 1.53775 | 1.44813 | 1.49573 | 4.111 |
| 69 4-Methyl-2-pentanone | 0.43522 | 0.37335 | 0.39800 | 0.40352 | 0.41914 | 0.40933 | 0.40643 | 5.129 |
| 71 Toluene | 4.46170 | 4.04606 | 4.06881 | 4.15730 | 4.19568 | 3.85866 | 4.13137 | 4.835 |
| 72 trans-1,3-Dichloropropene | 1.27125 | 1.16298 | 1.26996 | 1.22777 | 1.27739 | 1.17410 | 1.23057 | 4.170 |
| 74 1,1,2-Trichloroethane | 0.61772 | 0.57656 | 0.61620 | 0.60657 | 0.61156 | 0.59439 | 0.60383 | 2.614 |
| 76 1,3-Dichloropropane | 1.02855 | 0.98293 | 1.01211 | 0.99999 | 1.00419 | 0.98443 | 1.00203 | 1.722 |
| 77 Tetrachloroethene | 1.08534 | 1.02380 | 1.06073 | 1.04594 | 1.04928 | 0.99398 | 1.04318 | 3.009 |
| 75 2-Hexanone | 0.30213 | 0.27174 | 0.29248 | 0.28878 | 0.29673 | 0.29167 | 0.29059 | 3.557 |
| 78 Dibromochloromethane | 1.07583 | 0.95285 | 1.00811 | 1.02871 | 1.05525 | 1.00569 | 1.02107 | 4.220 |
| 80 1,2-Dibromoethane | 0.75477 | 0.68464 | 0.72346 | 0.71319 | 0.75856 | 0.73082 | 0.72757 | 3.777 |
| 81 1-Chlorohexane | 2.21259 | 1.82001 | 1.83852 | 1.87999 | 1.87026 | 1.74661 | 1.89466 | 8.593 |
| 83 Chlorobenzene | 3.16225 | 2.92208 | 2.97963 | 2.97591 | 2.98794 | 2.87566 | 2.98391 | 3.265 |
| 84 1,1,1,2-Tetrachloroethane | 1.21376 | 1.09479 | 1.08872 | 1.06644 | 1.08675 | 1.04625 | 1.09945 | 5.348 |
| 85 Ethylbenzene | 1.75816 | 1.56980 | 1.60106 | 1.58248 | 1.58273 | 1.45769 | 1.59199 | 6.051 |
| 86 m and p-Xylene | 2.23046 | 1.84173 | 1.99159 | 1.89979 | 1.94416 | 1.77368 | 1.94690 | 8.144 |
| 87 o-Xylene | 2.17201 | 1.86295 | 1.96402 | 1.96243 | 1.95573 | 1.79148 | 1.95144 | 6.577 |
| 88 Styrene | 3.44571 | 3.00389 | 3.22047 | 3.22920 | 3.26626 | 3.03835 | 3.20065 | 5.050 |
| 89 Bromoform | 0.66093 | 0.60369 | 0.63988 | 0.64910 | 0.67104 | 0.65964 | 0.64738 | 3.696 |

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 25-MAY-2004 19:05
 End Cal Date : 25-MAY-2004 21:11
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/R2.i/052504i.b/R2-20ml-h2o.m
 Cal Date : 25-May-2004 21:50 reinharj
 Curve Type : Average

| Compound | 1.000 Level 1 | 2.000 Level 2 | 5.000 Level 3 | 10.000 Level 4 | 30.000 Level 5 | 60.000 Level 6 | RRF | % RSD |
|---------------------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|---------|--------|
| 90 isopropyl benzene | 6.16851 | 5.35509 | 5.65716 | 5.65536 | 5.92115 | 5.38769 | 5.69093 | 5.491 |
| 92 Cyclohexanone | 0.02444 | 0.02277 | 0.02267 | 0.02340 | 0.02061 | 0.02085 | 0.02246 | 5.595 |
| 94 1,1,2,2-Tetrachloroethane | 0.87575 | 0.80929 | 0.85097 | 0.84865 | 0.83384 | 0.80830 | 0.83780 | 3.126 |
| 97 Bromobenzene | 0.92770 | 0.89382 | 0.88583 | 0.90641 | 0.84153 | 0.80003 | 0.87589 | 5.348 |
| 96 1,2,3-Trichloropropane | 0.11155 | 0.11826 | 0.11331 | 0.11268 | 0.10693 | 0.10305 | 0.11096 | 4.786 |
| 98 n-Propylbenzene | 0.94366 | 0.88187 | 0.85502 | 0.89502 | 0.80504 | 0.80468 | 0.86421 | 6.275 |
| 99 2-Chlorotoluene | 0.89095 | 0.82738 | 0.83318 | 0.82725 | 0.76102 | 0.70557 | 0.80756 | 8.017 |
| 100 1,3,5-Trimethylbenzene | 3.15338 | 2.95559 | 2.87076 | 2.95155 | 2.79338 | 2.65771 | 2.89706 | 5.793 |
| 101 4-Chlorotoluene | 0.91137 | 0.82277 | 0.81684 | 0.83145 | 0.77127 | 0.72638 | 0.81335 | 7.653 |
| 102 tert-Butylbenzene | 2.54920 | 2.36555 | 2.32413 | 2.33639 | 2.23015 | 2.26058 | 2.34433 | 4.786 |
| 103 1,2,4-Trimethylbenzene | 3.08227 | 2.86286 | 2.76179 | 2.85779 | 2.70572 | 2.62040 | 2.81514 | 5.688 |
| 104 sec-Butylbenzene | 0.62573 | 0.60303 | 0.59951 | 0.59204 | 0.56944 | 0.57511 | 0.59414 | 3.435 |
| 106 m-Dichlorobenzene | 1.68271 | 1.58706 | 1.54862 | 1.57736 | 1.48486 | 1.47779 | 1.55973 | 4.851 |
| 105 4-Isopropyltoluene | 3.11008 | 2.84795 | 2.81956 | 2.88290 | 2.89578 | 2.79157 | 2.89131 | 3.941 |
| 108 p-dichlorobenzene | 1.59369 | 1.51898 | 1.48451 | 1.49775 | 1.46127 | 1.41348 | 1.49495 | 4.038 |
| 110 n-Butylbenzene | 3.11506 | 2.93245 | 2.85487 | 2.97099 | 2.99905 | 2.93260 | 2.96750 | 2.934 |
| 111 o-Dichlorobenzene | 1.25639 | 1.25904 | 1.30666 | 1.31652 | 1.28946 | 1.22808 | 1.27603 | 2.653 |
| 112 1,2-Dibromo-3-chloropropane | +++++ | 0.07686 | 0.07629 | 0.07794 | 0.07840 | 0.07732 | 0.07736 | 1.085 |
| 113 1,2,4-Trichlorobenzene | 0.69173 | 0.64350 | 0.67404 | 0.72043 | 0.73583 | 0.74955 | 0.70251 | 5.713 |
| 114 Hexachlorobutadiene | 0.56704 | 0.52084 | 0.51436 | 0.51763 | 0.51345 | 0.51517 | 0.52475 | 3.981 |
| 115 Napthalene | 0.62654 | 0.62453 | 0.68072 | 0.70664 | 0.77779 | 0.82775 | 0.70733 | 11.582 |
| 116 1,2,3-Trichlorobenzene | 0.50640 | 0.50942 | 0.55114 | 0.56867 | 0.56687 | 0.58887 | 0.54856 | 6.144 |



Data File: /chem/R2.i/05
 Date : 25-MAY-2004 21:11
 Client ID: MAIN060
 Sample Info: MAIN060,,
 Column phase: HP624

Date : 25-MAY-2004 18:36

Client ID: BFB

Instrument: R2.i

Sample Info: BFB,,

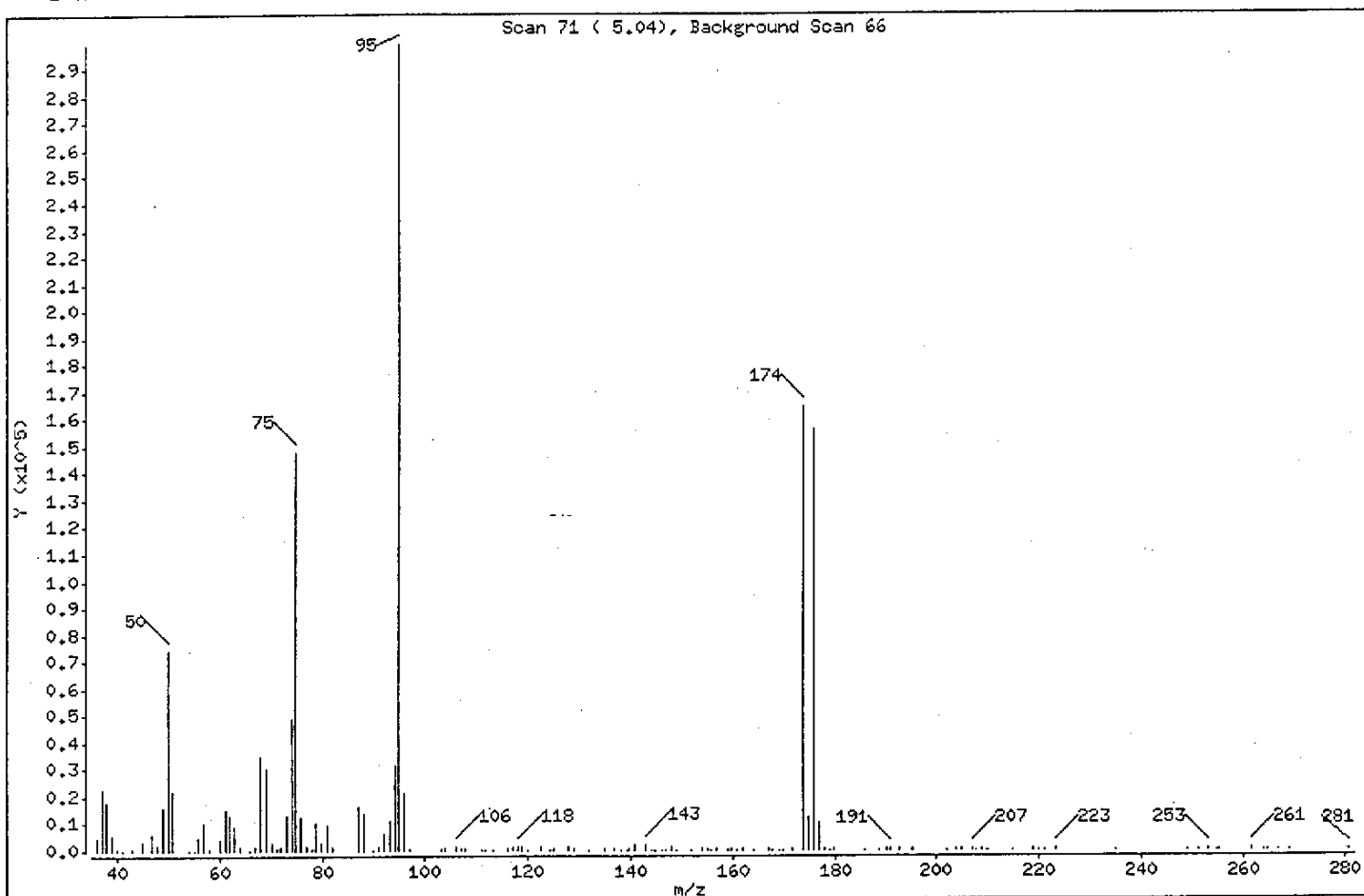
Volume Injected (uL): 2.0

Operator: meierg

Column phase: HP624

Column diameter: 0.32

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 | 24.90 |
| 75 | 30.00 - 60.00% of mass 95 | 49.51 |
| 96 | 5.00 - 9.00% of mass 95 | 7.14 |
| 173 | Less than 2.00% of mass 174 | 0.00 (0.00) |
| 174 | 50.00 - 100.00% of mass 95 | 54.90 |
| 175 | 5.00 - 9.00% of mass 174 | 4.03 (7.34) |
| 176 | 95.00 - 101.00% of mass 174 | 52.20 (95.09) |
| 177 | 5.00 - 9.00% of mass 176 | 3.37 (6.46) |

015/25

Date : 25-MAY-2004 18:36

Client ID: BFB

Instrument: R2.i

Sample Info: BFB,,

Volume Injected (uL): 2.0

Operator: meierg

Column phase: HP624

Column diameter: 0.32

Data File: rn6217.d

Spectrum: Scan 71 (5.04), Background Scan 66

Location of Maximum: 94.95

Number of points: 134

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|-------|--------|--------|--------|--------|--------|--------|-----|
| 35.95 | 4592 | 76.90 | 1182 | 131.90 | 158 | 178.90 | 170 |
| 36.95 | 22912 | 77.90 | 662 | 134.90 | 870 | 179.80 | 461 |
| 37.95 | 17872 | 78.80 | 10360 | 136.90 | 349 | 186.00 | 57 |
| 38.95 | 5724 | 79.70 | 3081 | 138.35 | 306 | 188.90 | 26 |
| 39.85 | 705 | 80.80 | 9967 | 139.15 | 65 | 190.00 | 485 |
| 40.95 | 286 | 81.90 | 1576 | 139.75 | 517 | 190.85 | 661 |
| 42.95 | 514 | 86.85 | 16338 | 140.85 | 2023 | 192.85 | 524 |
| 45.00 | 3182 | 87.85 | 14050 | 142.85 | 2242 | 195.05 | 428 |
| 46.90 | 5986 | 89.85 | 129 | 143.85 | 275 | 201.85 | 286 |
| 47.80 | 1956 | 90.85 | 1235 | 144.75 | 157 | 203.80 | 367 |
| 48.90 | 15702 | 91.85 | 6417 | 145.95 | 247 | 204.90 | 424 |
| 49.90 | 74472 | 92.85 | 10992 | 146.85 | 107 | 206.90 | 904 |
| 50.90 | 22224 | 93.95 | 31464 | 147.75 | 1035 | 207.90 | 152 |
| 53.90 | 301 | 94.95 | 299136 | 148.85 | 257 | 208.90 | 374 |
| 54.90 | 330 | 95.95 | 21368 | 151.90 | 206 | 210.00 | 108 |
| 55.90 | 4962 | 96.85 | 827 | 154.00 | 444 | 215.00 | 267 |
| 56.90 | 10298 | 102.90 | 737 | 154.90 | 467 | 218.85 | 657 |
| 58.05 | 638 | 103.90 | 1030 | 155.70 | 157 | 219.95 | 311 |
| 59.95 | 4392 | 105.80 | 1391 | 156.90 | 469 | 220.85 | 155 |
| 60.95 | 15441 | 106.90 | 582 | 158.90 | 506 | 223.05 | 374 |
| 61.95 | 12782 | 107.80 | 696 | 159.80 | 348 | 234.90 | 251 |
| 62.85 | 9107 | 110.95 | 11 | 160.70 | 23 | 248.85 | 137 |
| 63.85 | 1473 | 111.75 | 267 | 161.90 | 378 | 250.95 | 182 |
| 65.85 | 296 | 113.15 | 142 | 163.95 | 188 | 252.85 | 426 |
| 66.95 | 1287 | 115.85 | 874 | 167.05 | 421 | 254.65 | 312 |
| 67.85 | 35088 | 116.95 | 1262 | 167.75 | 147 | 255.15 | 253 |
| 68.85 | 30064 | 117.95 | 1161 | 168.95 | 216 | 261.50 | 406 |
| 69.95 | 2581 | 118.85 | 1090 | 169.75 | 6 | 263.90 | 145 |
| 71.00 | 556 | 119.85 | 220 | 171.65 | 819 | 264.90 | 12 |
| 72.00 | 1351 | 122.55 | 1088 | 173.85 | 164224 | 266.90 | 142 |
| 72.90 | 12961 | 124.10 | 213 | 174.85 | 12053 | 268.90 | 208 |
| 73.90 | 48552 | 124.80 | 506 | 175.85 | 156160 | 280.95 | 6 |
| 74.90 | 148096 | 127.90 | 1130 | 176.75 | 10090 | | |
| 75.90 | 12630 | 128.90 | 746 | 177.90 | 388 | | |

Data File: /chem/R2.i/052504i.b/rr6217.d

Page 1

Date : 25-MAY-2004 18:36

Client ID: BFB

Instrument: R2.i

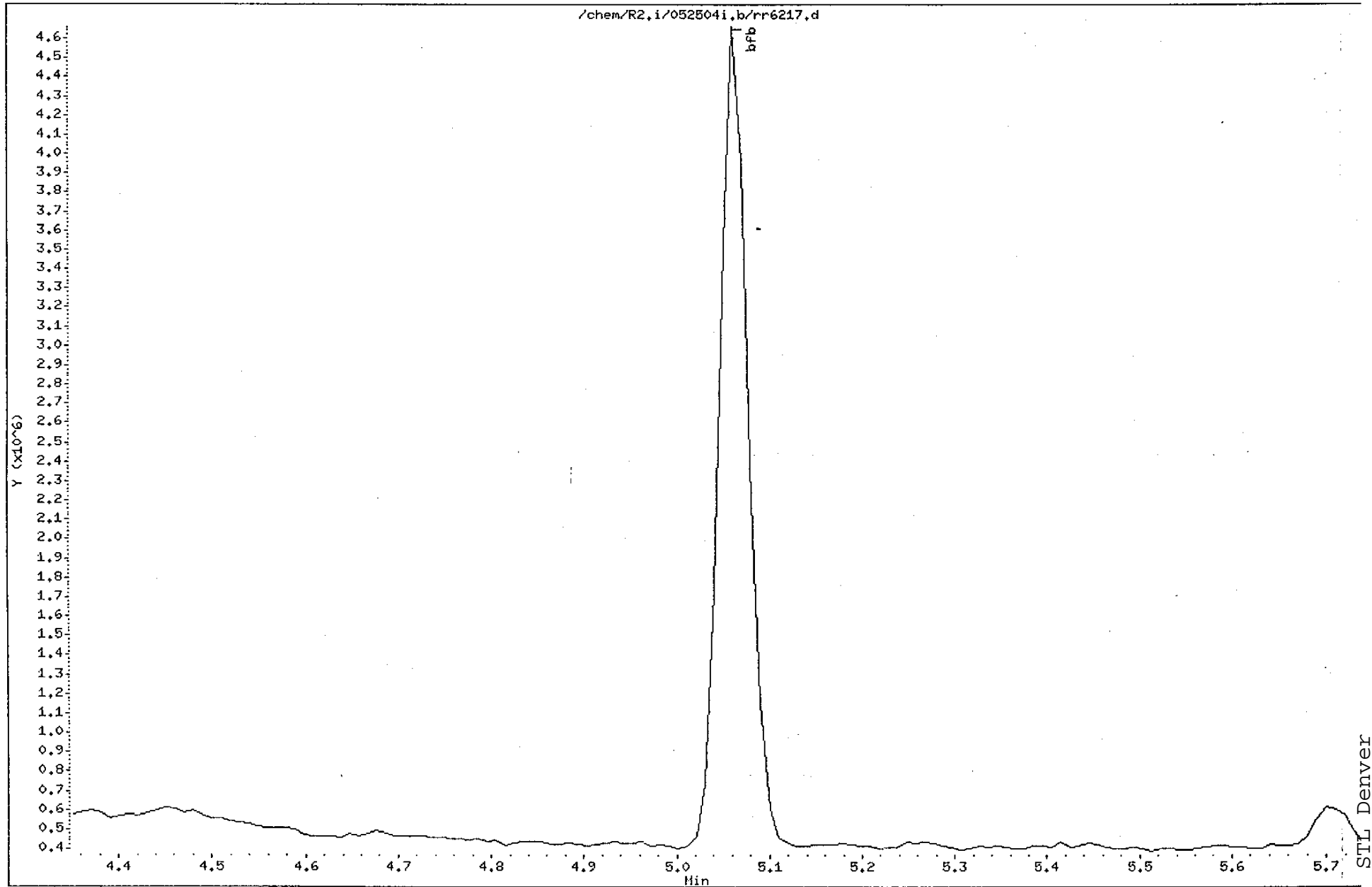
Sample Info: BFB,,

Volume Injected (uL): 2.0

Operator: meierg

Column phase: HP624

Column diameter: 0.32



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052504i.b/rr6218.d

Lab Smp Id: MAIN001Client Smp ID: MAIN001

Inj Date : 25-MAY-2004 19:05

Operator : reinharjInst ID: R2.i

Smp Info : MAIN001,,

Misc Info :

Comment : SOP # CORP-MS-0002 20ml Analysis

Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m

Meth Date : 25-May-2004 21:50 reinharjQuant Type: ISTD

Cal Date : 25-MAY-2004 19:05Cal File: rr6218.d

Als bottle: 2Calibration Sample, Level: 1

Dil Factor: 1.00000

Integrator: HP RTECompound Sublist: 1-main.sub

Target Version: 3.40

Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| | | | | | | AMOUNTS | |
|--------------------------------|-------|--------|--------|---------|----------|--------------------|-------------------|
| | | QUANT | SIG | | | | |
| Compounds | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| * 56 Fluorobenzene | 96 | 8.643 | 8.634 | (1.000) | 1019472 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.574 | 11.575 | (1.000) | 285082 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.181 | 14.182 | (1.000) | 457994 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | 60369 | 2.00000 | 2.00000 |
| M 2 Xylene (total) | 106 | | | | 189093 | 1.00000 | 3.00000 |
| 3 dichlorodifluoromethane | 85 | 4.354 | 4.355 | (0.504) | 104279 | 1.00000 | (a) |
| 5 Chloromethane | 50 | 4.659 | 4.660 | (0.539) | 55251 | 1.00000 | (a) |
| 6 Vinyl Chloride | 62 | 4.846 | 4.847 | (0.561) | 47693 | 1.00000 | 1.00000(a) |
| 8 Bromomethane | 94 | 5.436 | 5.427 | (0.629) | 62652 | 1.00000 | 1.00000(a) |
| 9 Chloroethane | 64 | 5.574 | 5.565 | (0.645) | 67642 | 1.00000 | 1.00000(a) |
| 11 Trichlorofluoromethane | 101 | 5.938 | 5.929 | (0.687) | 114132 | 1.00000 | 1.00000(a) |
| 12 Ethanol | 45 | 6.026 | 5.998 | (0.697) | 13202 | 50.0000 | (a) |
| 16 Acrolein | 56 | 6.341 | 6.332 | (0.734) | 38222 | 10.0000 | 10.0000(a) |
| 19 1,1-Dichloroethene | 96 | 6.479 | 6.480 | (0.750) | 41416 | 1.00000 | 1.00000 |
| 18 Acetone | 43 | 6.459 | 6.450 | (0.747) | 22989 | 4.00000 | (a) |
| 21 Iodomethane | 142 | 6.646 | 6.647 | (0.769) | 48826 | 1.00000 | 1.00000 |

| Compounds | QUANT SIG | | | RESPONSE | AMOUNTS | |
|------------------------------|-----------|--------|----------------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT REL RT | | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== |
| 22 Acetonitrile | 41 | 6.685 | 6.676 (0.773) | 16462 | 10.0000 | 10.0000(a) |
| 27 Methylene Chloride | 84 | 6.843 | 6.834 (0.792) | 51021 | 1.00000 | (a) |
| 26 tert-Butyl alcohol | 59 | 6.823 | 6.814 (0.789) | 20776 | 20.0000 | 20.0000(a) |
| 28 Acrylonitrile | 53 | 6.980 | 6.981 (0.808) | 37216 | 10.0000 | 10.0000(a) |
| 30 trans-1,2-Dichloroethene | 96 | 7.049 | 7.050 (0.816) | 30508 | 1.00000 | 1.00000 |
| 34 1,1-Dichloroethane | 63 | 7.335 | 7.335 (0.849) | 52936 | 1.00000 | 1.00000 |
| 33 Isopropyl ether | 87 | 7.325 | 7.326 (0.847) | 76370 | 5.00000 | 5.00000(a) |
| 35 Chloroprene | 53 | 7.403 | 7.404 (0.857) | 44292 | 1.00000 | 1.00000 |
| 40 cis-1,2-Dichloroethene | 96 | 7.738 | 7.739 (0.895) | 29861 | 1.00000 | 1.00000 |
| 37 2-Butanone | 43 | 7.699 | 7.689 (0.891) | 16547 | 4.00000 | 4.00000(a) |
| 41 2,2-Dichloropropane | 77 | 7.758 | 7.758 (0.898) | 50321 | 1.00000 | 1.00000(a) |
| 39 Propionitrile | 54 | 7.738 | 7.729 (0.895) | 10425 | 10.0000 | 10.0000 |
| 42 Methacrylonitrile | 41 | 7.866 | 7.857 (0.910) | 70583 | 10.0000 | 10.0000 |
| 43 Bromochloromethane | 128 | 7.925 | 7.926 (0.917) | 11699 | 1.00000 | 1.00000 |
| 44 Chloroform | 83 | 7.944 | 7.945 (0.919) | 59159 | 1.00000 | 1.00000 |
| 47 1,1,1-Trichloroethane | 97 | 8.151 | 8.152 (0.943) | 54467 | 1.00000 | 1.00000 |
| 50 1,1-Dichloropropene | 75 | 8.269 | 8.270 (0.957) | 42645 | 1.00000 | 1.00000 |
| 51 Carbon Tetrachloride | 117 | 8.299 | 8.299 (0.960) | 47621 | 1.00000 | 1.00000 |
| 48 Isobutanol | 41 | 8.181 | 8.171 (0.947) | 4624 | 20.0000 | (a) |
| 54 Benzene | 78 | 8.446 | 8.447 (0.977) | 101840 | 1.00000 | 1.00000 |
| 53 1,2-Dichloroethane | 62 | 8.426 | 8.417 (0.975) | 31665 | 1.00000 | 1.00000 |
| 57 n-Butanol | 56 | 8.722 | 8.703 (1.009) | 3664 | 20.0000 | (a) |
| 58 Trichloroethene | 130 | 8.958 | 8.958 (1.036) | 29544 | 1.00000 | 1.00000 |
| 61 1,2-Dichloropropane | 63 | 9.154 | 9.155 (1.059) | 25935 | 1.00000 | 1.00000 |
| 64 Dibromomethane | 93 | 9.272 | 9.263 (1.073) | 16746 | 1.00000 | 1.00000 |
| 63 1,4-Dioxane | 88 | 9.233 | 9.224 (1.068) | 4109 | 50.0000 | (a) |
| 65 Bromodichloromethane | 83 | 9.371 | 9.362 (1.084) | 43176 | 1.00000 | 1.00000 |
| 68 cis-1,3-Dichloropropene | 75 | 9.774 | 9.775 (0.844) | 45142 | 1.00000 | 1.00000 |
| 69 4-Methyl-2-pentanone | 43 | 9.863 | 9.863 (0.852) | 49629 | 4.00000 | 4.00000(a) |
| 71 Toluene | 91 | 10.148 | 10.149 (0.877) | 127195 | 1.00000 | 1.00000 |
| 72 trans-1,3-Dichloropropene | 75 | 10.295 | 10.286 (0.889) | 36241 | 1.00000 | 1.00000 |
| 74 1,1,2-Trichloroethane | 97 | 10.502 | 10.503 (0.907) | 17610 | 1.00000 | 1.00000 |
| 76 1,3-Dichloropropane | 76 | 10.689 | 10.690 (0.923) | 29322 | 1.00000 | 1.00000 |
| 77 Tetrachloroethene | 164 | 10.728 | 10.729 (0.927) | 30941 | 1.00000 | 1.00000 |
| 75 2-Hexanone | 43 | 10.689 | 10.680 (0.923) | 34453 | 4.00000 | 4.00000(a) |
| 78 Dibromochloromethane | 129 | 10.945 | 10.945 (0.946) | 30670 | 1.00000 | 1.00000 |
| 80 1,2-Dibromoethane | 107 | 11.112 | 11.113 (0.960) | 21517 | 1.00000 | 1.00000 |
| 81 1-Chlorohexane | 91 | 11.495 | 11.496 (0.993) | 63077 | 1.00000 | 1.00000 |
| 83 Chlorobenzene | 112 | 11.613 | 11.604 (1.003) | 90150 | 1.00000 | 1.00000 |
| 84 1,1,1,2-Tetrachloroethane | 131 | 11.663 | 11.663 (1.008) | 34602 | 1.00000 | 1.00000 |
| 85 Ethylbenzene | 106 | 11.682 | 11.683 (1.009) | 50122 | 1.00000 | 1.00000 |
| 86 m and p-Xylene | 106 | 11.800 | 11.801 (1.020) | 127173 | 2.00000 | 2.00000 |
| 87 o-Xylene | 106 | 12.243 | 12.234 (1.058) | 61920 | 1.00000 | 1.00000 |
| 88 Styrene | 104 | 12.243 | 12.234 (1.058) | 98231 | 1.00000 | 1.00000 |
| 89 Bromoform | 173 | 12.479 | 12.480 (1.078) | 18842 | 1.00000 | 1.00000 |
| 90 isopropyl benzene | 105 | 12.617 | 12.608 (1.090) | 175853 | 1.00000 | 1.00000 |
| 92 Cyclohexanone | 55 | 12.745 | 12.736 (1.101) | 27873 | 40.0000 | 40.0000 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 94 1,1,2,2-Tetrachloroethane | 83 | 12.892 | 12.893 | (1.114) | 24966 | 1.00000 | 1.00000 |
| 97 Bromobenzene | 156 | 13.020 | 13.021 | (0.918) | 42488 | 1.00000 | 1.00000 |
| 96 1,2,3-Trichloropropane | 110 | 12.971 | 12.972 | (0.915) | 5109 | 1.00000 | 1.00000 |
| 98 n-Propylbenzene | 120 | 13.069 | 13.060 | (0.922) | 43219 | 1.00000 | 1.00000 |
| 99 2-Chlorotoluene | 126 | 13.217 | 13.208 | (0.932) | 40805 | 1.00000 | 1.00000 |
| 100 1,3,5-Trimethylbenzene | 105 | 13.246 | 13.237 | (0.934) | 144423 | 1.00000 | 1.00000 |
| 101 4-Chlorotoluene | 126 | 13.325 | 13.326 | (0.940) | 41740 | 1.00000 | 1.00000 |
| 102 tert-Butylbenzene | 119 | 13.650 | 13.650 | (0.963) | 116752 | 1.00000 | 1.00000 |
| 103 1,2,4-Trimethylbenzene | 105 | 13.699 | 13.700 | (0.966) | 141166 | 1.00000 | 1.00000 |
| 104 sec-Butylbenzene | 134 | 13.915 | 13.916 | (0.981) | 28658 | 1.00000 | 1.00000 |
| 106 m-Dichlorobenzene | 146 | 14.112 | 14.113 | (0.995) | 77067 | 1.00000 | 1.00000 |
| 105 4-Isopropyltoluene | 119 | 14.063 | 14.064 | (0.992) | 142440 | 1.00000 | 1.00000 |
| 108 p-dichlorobenzene | 146 | 14.210 | 14.211 | (1.002) | 72990 | 1.00000 | 1.00000 |
| 110 n-Butylbenzene | 91 | 14.594 | 14.585 | (1.029) | 142668 | 1.00000 | 1.00000 |
| 111 o-Dichlorobenzene | 146 | 14.722 | 14.713 | (1.038) | 57542 | 1.00000 | 1.00000 |
| 112 1,2-Dibromo-3-chloropropane | 157 | 15.794 | 15.795 | (1.114) | 3348 | 1.00000 | (a) |
| 113 1,2,4-Trichlorobenzene | 180 | 17.250 | 17.231 | (1.216) | 31681 | 1.00000 | 1.00000 |
| 114 Hexachlorobutadiene | 225 | 17.525 | 17.526 | (1.236) | 25970 | 1.00000 | 1.00000 |
| 115 Napthalene | 128 | 17.761 | 17.752 | (1.252) | 28695 | 1.00000 | 1.00000 |
| 116 1,2,3-Trichlorobenzene | 180 | 18.263 | 18.254 | (1.288) | 23193 | 1.00000 | 1.00000 |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: R2.i
Lab File ID: rr6218.d
Lab Smp Id: MAIN001
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m
Misc Info:

Calibration Date: 05/25/4
Calibration Time: 2021
Client Smp ID: MAIN001
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|--------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1181127 | 590564 | 2362254 | 1019472 | -13.69 |
| 82 Chlorobenzene-d5 | 309128 | 154564 | 618256 | 285082 | -7.78 |
| 107 1,4-Dichlorobenze | 483986 | 241993 | 967972 | 457994 | -5.37 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.64 | 0.06 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.57 | -0.04 |
| 107 1,4-Dichlorobenze | 14.18 | 13.68 | 14.68 | 14.18 | 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/R2.i/052504i.b/rr6218.d

Page 5

Date : 25-MAY-2004 19:05

Client ID: MAIN001

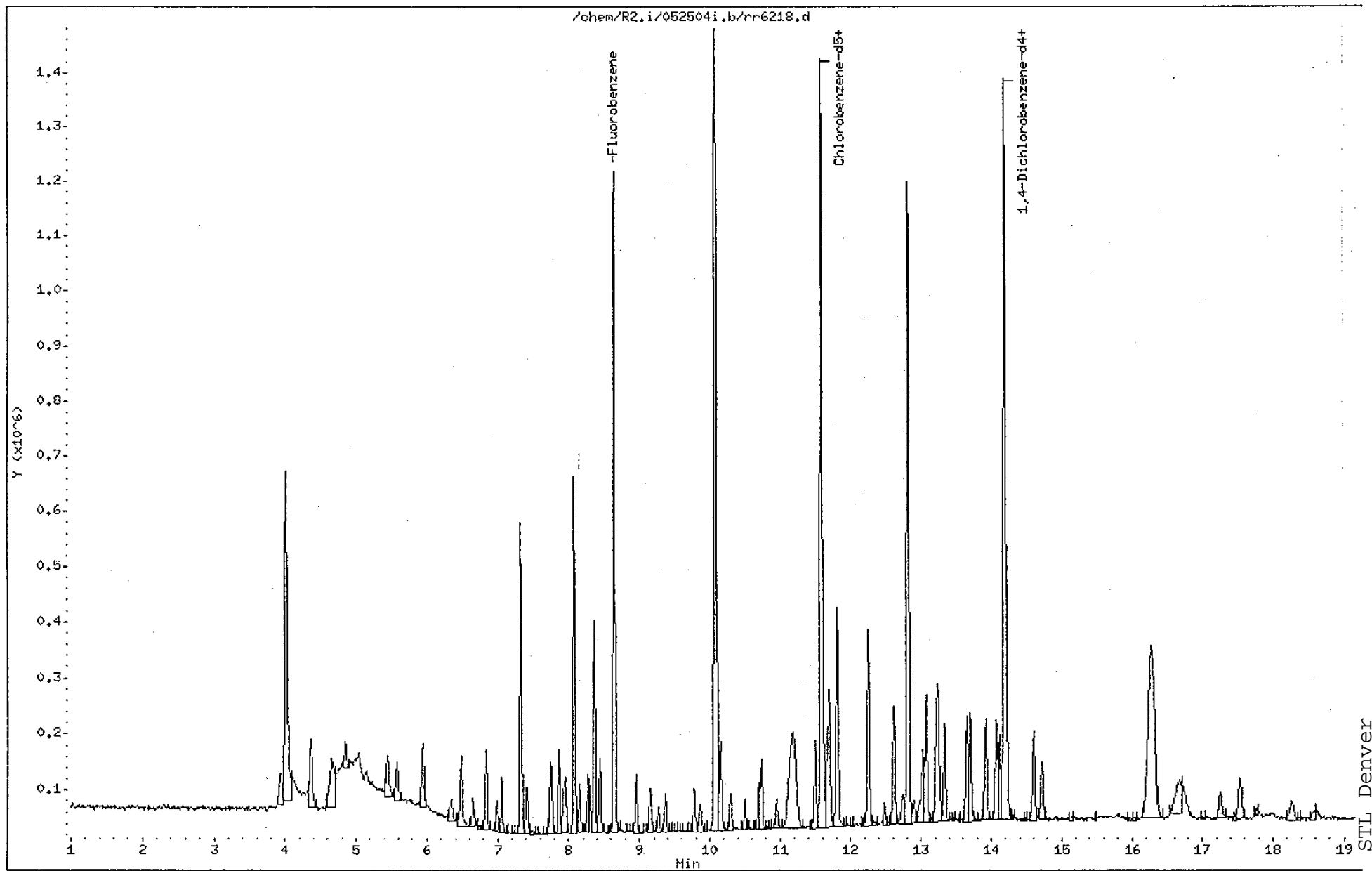
Sample Info: MAIN001,,

Instrument: R2.i

Operator: reinharj

Column phase: HP624

Column diameter: 0.32



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052504i.b/rr6219.d
Lab Smp Id: MAIN002 Client Smp ID: MAIN002
Inj Date : 25-MAY-2004 19:31
Operator : reinharj Inst ID: R2.i
Smp Info : MAIN002,,
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m
Meth Date : 25-May-2004 21:50 reinharj Quant Type: ISTD
Cal Date : 25-MAY-2004 19:31 Cal File: rr6219.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| Compounds | QUANT SIG | | | | RESPONSE | AMOUNTS | |
|--------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 56 Fluorobenzene | 96 | 8.639 | 8.634 | (1.000) | 1153933 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.581 | 11.575 | (1.000) | 320298 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.187 | 14.182 | (1.000) | 470227 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | 123532 | 4.00000 | 3.79788 |
| M 2 Xylene (total) | 106 | | | | 355301 | 2.00000 | 5.46497 |
| 3 dichlorodifluoromethane | 85 | 4.361 | 4.355 | (0.505) | 221399 | 2.00000 | 2.00000 |
| 5 Chloromethane | 50 | 4.666 | 4.660 | (0.540) | 113149 | 2.00000 | 2.00000 |
| 6 Vinyl Chloride | 62 | 4.852 | 4.847 | (0.562) | 102234 | 2.00000 | 1.94545(a) |
| 8 Bromomethane | 94 | 5.443 | 5.427 | (0.630) | 126294 | 2.00000 | 1.88411(a) |
| 9 Chloroethane | 64 | 5.580 | 5.565 | (0.646) | 139919 | 2.00000 | 1.90986(a) |
| 11 Trichlorofluoromethane | 101 | 5.934 | 5.929 | (0.687) | 246764 | 2.00000 | 1.95405(a) |
| 12 Ethanol | 45 | 6.013 | 5.998 | (0.696) | 20839 | 100.000 | 100.000(a) |
| 16 Acrolein | 56 | 6.338 | 6.332 | (0.734) | 71089 | 20.0000 | 18.0411(a) |
| 19 1,1-Dichloroethene | 96 | 6.485 | 6.480 | (0.751) | 87453 | 2.00000 | 1.93042 |
| 18 Acetone | 43 | 6.466 | 6.450 | (0.748) | 39466 | 8.00000 | 8.00000(a) |
| 21 Iodomethane | 142 | 6.653 | 6.647 | (0.770) | 128296 | 2.00000 | 2.14876 |

| Compounds | QUANT SIG | | | | RESPONSE | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 22 Acetonitrile | 41 | 6.682 | 6.676 | (0.773) | 36981 | 20.0000 | 19.9231(a) |
| 27 Methylene Chloride | 84 | 6.839 | 6.834 | (0.792) | 86347 | 2.00000 | 2.00000 |
| 26 tert-Butyl alcohol | 59 | 6.820 | 6.814 | (0.789) | 40354 | 40.0000 | 36.9430(a) |
| 28 Acrylonitrile | 53 | 6.977 | 6.981 | (0.808) | 75061 | 20.0000 | 18.8465(a) |
| 30 trans-1,2-Dichloroethene | 96 | 7.056 | 7.050 | (0.817) | 62979 | 2.00000 | 1.90784 |
| 34 1,1-Dichloroethane | 63 | 7.341 | 7.335 | (0.850) | 107950 | 2.00000 | 1.89564 |
| 33 Isopropyl ether | 87 | 7.331 | 7.326 | (0.849) | 154714 | 10.0000 | 9.44532(a) |
| 35 Chloroprene | 53 | 7.410 | 7.404 | (0.858) | 92677 | 2.00000 | 1.92132 |
| 40 cis-1,2-Dichloroethene | 96 | 7.744 | 7.739 | (0.896) | 60553 | 2.00000 | 1.89004 |
| 37 2-Butanone | 43 | 7.695 | 7.689 | (0.891) | 33606 | 8.00000 | 7.56627 |
| 41 2,2-Dichloropropane | 77 | 7.764 | 7.758 | (0.899) | 101998 | 2.00000 | 1.88960(a) |
| 39 Propionitrile | 54 | 7.735 | 7.729 | (0.895) | 24198 | 20.0000 | 20.2502 |
| 42 Methacrylonitrile | 41 | 7.862 | 7.857 | (0.910) | 143112 | 20.0000 | 18.8991 |
| 43 Bromochloromethane | 128 | 7.921 | 7.926 | (0.917) | 24387 | 2.00000 | 1.91756 |
| 44 Chloroform | 83 | 7.951 | 7.945 | (0.920) | 118762 | 2.00000 | 1.88000 |
| 47 1,1,1-Trichloroethane | 97 | 8.148 | 8.152 | (0.943) | 110437 | 2.00000 | 1.88992 |
| 50 1,1-Dichloropropene | 75 | 8.266 | 8.270 | (0.957) | 87728 | 2.00000 | 1.90436 |
| 51 Carbon Tetrachloride | 117 | 8.295 | 8.299 | (0.960) | 98467 | 2.00000 | 1.90947 |
| 48 Isobutanol | 41 | 8.177 | 8.171 | (0.946) | 11410 | 40.0000 | 40.0000(a) |
| 54 Benzene | 78 | 8.443 | 8.447 | (0.977) | 209127 | 2.00000 | 1.90258 |
| 53 1,2-Dichloroethane | 62 | 8.423 | 8.417 | (0.975) | 65731 | 2.00000 | 1.91337 |
| 57 n-Butanol | 56 | 8.718 | 8.703 | (1.009) | 7617 | 40.0000 | 40.0000(a) |
| 58 Trichloroethene | 130 | 8.954 | 8.958 | (1.036) | 64461 | 2.00000 | 1.96314 |
| 61 1,2-Dichloropropane | 63 | 9.151 | 9.155 | (1.059) | 54357 | 2.00000 | 1.92298 |
| 64 Dibromomethane | 93 | 9.269 | 9.263 | (1.073) | 34947 | 2.00000 | 1.91868 |
| 63 1,4-Dioxane | 88 | 9.230 | 9.224 | (1.068) | 10242 | 100.000 | 100.000(a) |
| 65 Bromodichloromethane | 83 | 9.367 | 9.362 | (1.084) | 89764 | 2.00000 | 1.91491 |
| 68 cis-1,3-Dichloropropene | 75 | 9.781 | 9.775 | (0.845) | 90393 | 2.00000 | 1.88486 |
| 69 4-Methyl-2-pentanone | 43 | 9.869 | 9.863 | (0.852) | 95667 | 8.00000 | 7.38790 |
| 71 Toluene | 91 | 10.154 | 10.149 | (0.877) | 259189 | 2.00000 | 1.90229 |
| 72 trans-1,3-Dichloropropene | 75 | 10.292 | 10.286 | (0.889) | 74500 | 2.00000 | 1.91104 |
| 74 1,1,2-Trichloroethane | 97 | 10.499 | 10.503 | (0.907) | 36934 | 2.00000 | 1.93107 |
| 76 1,3-Dichloropropane | 76 | 10.685 | 10.690 | (0.923) | 62966 | 2.00000 | 1.95464 |
| 77 Tetrachloroethene | 164 | 10.735 | 10.729 | (0.927) | 65584 | 2.00000 | 1.94164 |
| 75 2-Hexanone | 43 | 10.685 | 10.680 | (0.923) | 69630 | 8.00000 | 7.57631 |
| 78 Dibromochloromethane | 129 | 10.951 | 10.945 | (0.946) | 61039 | 2.00000 | 1.87875 |
| 80 1,2-Dibromoethane | 107 | 11.108 | 11.113 | (0.959) | 43858 | 2.00000 | 1.90257 |
| 81 1-Chlorohexane | 91 | 11.502 | 11.496 | (0.993) | 116589 | 2.00000 | 1.80530 |
| 83 Chlorobenzene | 112 | 11.610 | 11.604 | (1.003) | 187187 | 2.00000 | 1.92105 |
| 84 1,1,1,2-Tetrachloroethane | 131 | 11.669 | 11.663 | (1.008) | 70132 | 2.00000 | 1.89694 |
| 85 Ethylbenzene | 106 | 11.689 | 11.683 | (1.009) | 100561 | 2.00000 | 1.88680 |
| 86 m and p-Xylene | 106 | 11.807 | 11.801 | (1.020) | 235961 | 4.00000 | 3.61816 |
| 87 o-Xylene | 106 | 12.240 | 12.234 | (1.057) | 119340 | 2.00000 | 1.84681 |
| 88 Styrene | 104 | 12.240 | 12.234 | (1.057) | 192428 | 2.00000 | 1.86299 |
| 89 Bromoform | 173 | 12.486 | 12.480 | (1.078) | 38672 | 2.00000 | 1.90947 |
| 90 isopropyl benzene | 105 | 12.613 | 12.608 | (1.089) | 343045 | 2.00000 | 1.85883 |
| 92 Cyclohexanone | 55 | 12.741 | 12.736 | (1.100) | 58344 | 80.0000 | 77.1642 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 94 1,1,2,2-Tetrachloroethane | 83 | 12.889 | 12.893 | (1.113) | 51843 | 2.00000 | 1.92112 |
| 97 Bromobenzene | 156 | 13.017 | 13.021 | (0.917) | 84060 | 2.00000 | 1.96281 |
| 96 1,2,3-Trichloropropane | 110 | 12.977 | 12.972 | (0.915) | 11122 | 2.00000 | 2.05840 |
| 98 n-Propylbenzene | 120 | 13.066 | 13.060 | (0.921) | 82936 | 2.00000 | 1.93231 |
| 99 2-Chlorotoluene | 126 | 13.213 | 13.208 | (0.931) | 77811 | 2.00000 | 1.92600 |
| 100 1,3,5-Trimethylbenzene | 105 | 13.243 | 13.237 | (0.933) | 277960 | 2.00000 | 1.93525 |
| 101 4-Chlorotoluene | 126 | 13.331 | 13.326 | (0.940) | 77378 | 2.00000 | 1.89782 |
| 102 tert-Butylbenzene | 119 | 13.656 | 13.650 | (0.963) | 222469 | 2.00000 | 1.92526 |
| 103 1,2,4-Trimethylbenzene | 105 | 13.705 | 13.700 | (0.966) | 269239 | 2.00000 | 1.92619 |
| 104 sec-Butylbenzene | 134 | 13.922 | 13.916 | (0.981) | 56712 | 2.00000 | 1.96305 |
| 106 m-Dichlorobenzene | 146 | 14.109 | 14.113 | (0.994) | 149256 | 2.00000 | 1.94150 |
| 105 4-Isopropyltoluene | 119 | 14.069 | 14.064 | (0.992) | 267837 | 2.00000 | 1.91201 |
| 108 p-dichlorobenzene | 146 | 14.217 | 14.211 | (1.002) | 142853 | 2.00000 | 1.95200 |
| 110 n-Butylbenzene | 91 | 14.591 | 14.585 | (1.028) | 275783 | 2.00000 | 1.93960 |
| 111 o-Dichlorobenzene | 146 | 14.718 | 14.713 | (1.037) | 118407 | 2.00000 | 2.00211 |
| 112 1,2-Dibromo-3-chloropropane | 157 | 15.791 | 15.795 | (1.113) | 7228 | 2.00000 | 2.00000 |
| 113 1,2,4-Trichlorobenzene | 180 | 17.246 | 17.231 | (1.216) | 60518 | 2.00000 | 1.92775 |
| 114 Hexachlorobutadiene | 225 | 17.532 | 17.526 | (1.236) | 48983 | 2.00000 | 1.91508 |
| 115 Napthalene | 128 | 17.758 | 17.752 | (1.252) | 58734 | 2.00000 | 1.99679 |
| 116 1,2,3-Trichlorobenzene | 180 | 18.260 | 18.254 | (1.287) | 47909 | 2.00000 | 2.00595 |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: R2.i
Lab File ID: rr6219.d
Lab Smp Id: MAIN002
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m
Misc Info:

Calibration Date: 05/25/4
Calibration Time: 2021
Client Smp ID: MAIN002
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 1181127 | 590564 | 2362254 | 1153933 | -2.30 |
| 82 Chlorobenzene-d5 | 309128 | 154564 | 618256 | 320298 | 3.61 |
| 107 1,4-Dichlorobenze | 483986 | 241993 | 967972 | 470227 | -2.84 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.64 | 0.02 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.58 | 0.01 |
| 107 1,4-Dichlorobenze | 14.18 | 13.68 | 14.68 | 14.19 | 0.08 |

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/R2.1/052504i.b/rr6219.d

Page 5

Date : 25-MAY-2004 19:31

Client ID: MAIN002

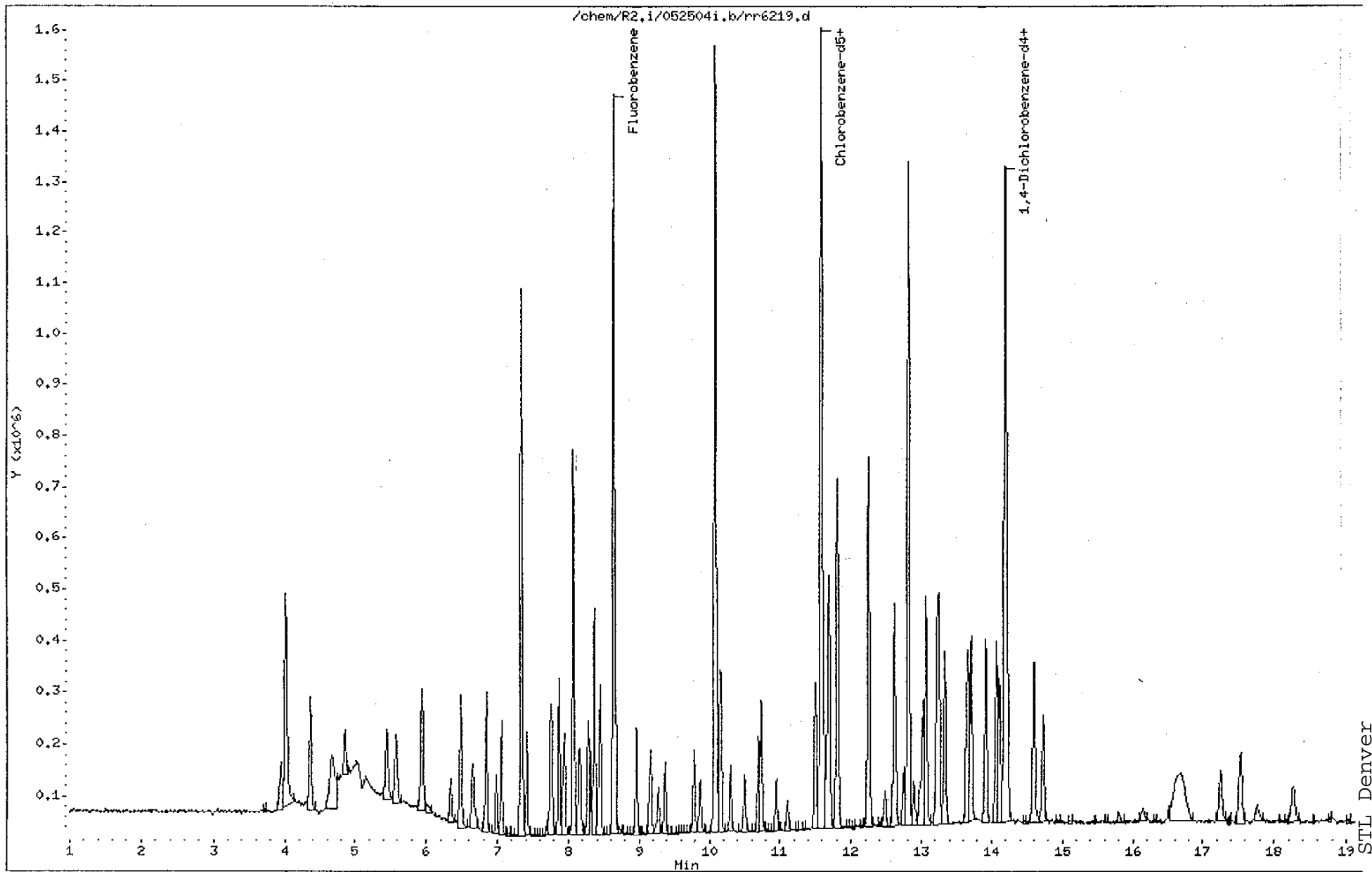
Sample Info: MAIN002,,

Instrument: R2.1

Operator: reinharj

Column phase: HP624

Column diameter: 0.32



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052504i.b/rr6220.d
Lab Smp Id: MAIN005 Client Smp ID: MAIN005
Inj Date : 25-MAY-2004 19:56
Operator : reinharj Inst ID: R2.i
Smp Info : MAIN005,,
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m
Meth Date : 25-May-2004 21:50 reinharj Quant Type: ISTD
Cal Date : 25-MAY-2004 19:56 Cal File: rr6220.d
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| | | | | | | AMOUNTS | |
|--------------------------------|-------|--------|--------|---------|----------|---------|---------|
| | | QUANT | SIG | | | CAL-AMT | ON-COL |
| Compounds | MASS | RT | EXP RT | REL RT | RESPONSE | (ug/L) | (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| * 56 Fluorobenzene | 96 | 8.644 | 8.634 | (1.000) | 1144667 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.576 | 11.575 | (1.000) | 304228 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.182 | 14.182 | (1.000) | 477071 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | 296041 | 10.0000 | 9.43614 |
| M 2 Xylene (total) | 106 | | | | 904652 | 5.00000 | 14.7641 |
| 3 dichlorodifluoromethane | 85 | 4.356 | 4.355 | (0.504) | 528233 | 5.00000 | 4.90337 |
| 5 Chloromethane | 50 | 4.660 | 4.660 | (0.539) | 254541 | 5.00000 | 4.75651 |
| 6 Vinyl Chloride | 62 | 4.847 | 4.847 | (0.561) | 230610 | 5.00000 | 4.60059 |
| 8 Bromomethane | 94 | 5.447 | 5.427 | (0.630) | 289885 | 5.00000 | 4.55405 |
| 9 Chloroethane | 64 | 5.585 | 5.565 | (0.646) | 330183 | 5.00000 | 4.68604 |
| 11 Trichlorofluoromethane | 101 | 5.939 | 5.929 | (0.687) | 573901 | 5.00000 | 4.71287 |
| 12 Ethanol | 45 | 6.018 | 5.998 | (0.696) | 76624 | 250.000 | 298.605 |
| 16 Acrolein | 56 | 6.343 | 6.332 | (0.734) | 187208 | 50.0000 | 48.5765 |
| 19 1,1-Dichloroethene | 96 | 6.490 | 6.480 | (0.751) | 206015 | 5.00000 | 4.71501 |
| 18 Acetone | 43 | 6.461 | 6.450 | (0.747) | 101368 | 20.0000 | 20.3508 |
| 21 Iodomethane | 142 | 6.647 | 6.647 | (0.769) | 349453 | 5.00000 | 5.56615 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 22 Acetonitrile | 41 | 6.687 | 6.676 | (0.774) | 93503 | 50.0000 | 50.5183 |
| 27 Methylene Chloride | 84 | 6.844 | 6.834 | (0.792) | 184001 | 5.00000 | 4.62157 |
| 26 tert-Butyl alcohol | 59 | 6.824 | 6.814 | (0.789) | 109499 | 100.000 | 100.701 |
| 28 Acrylonitrile | 53 | 6.982 | 6.981 | (0.808) | 190854 | 50.0000 | 48.8592 |
| 30 trans-1,2-Dichloroethene | 96 | 7.051 | 7.050 | (0.816) | 147370 | 5.00000 | 4.65550 |
| 34 1,1-Dichloroethane | 63 | 7.336 | 7.335 | (0.849) | 264355 | 5.00000 | 4.78184 |
| 33 Isopropyl ether | 87 | 7.326 | 7.326 | (0.848) | 367587 | 25.0000 | 23.3634 |
| 35 Chloroprene | 53 | 7.415 | 7.404 | (0.858) | 217189 | 5.00000 | 4.68297 |
| 40 cis-1,2-Dichloroethene | 96 | 7.739 | 7.739 | (0.895) | 148671 | 5.00000 | 4.78064 |
| 37 2-Butanone | 43 | 7.700 | 7.689 | (0.891) | 85497 | 20.0000 | 19.5995 |
| 41 2,2-Dichloropropane | 77 | 7.759 | 7.758 | (0.898) | 242112 | 5.00000 | 4.67060(a) |
| 39 Propionitrile | 54 | 7.739 | 7.729 | (0.895) | 59237 | 50.0000 | 49.9827 |
| 42 Methacrylonitrile | 41 | 7.867 | 7.857 | (0.910) | 374630 | 50.0000 | 49.9156 |
| 43 Bromochloromethane | 128 | 7.926 | 7.926 | (0.917) | 59616 | 5.00000 | 4.81363 |
| 44 Chloroform | 83 | 7.946 | 7.945 | (0.919) | 292397 | 5.00000 | 4.77233 |
| 47 1,1,1-Trichloroethane | 97 | 8.152 | 8.152 | (0.943) | 284873 | 5.00000 | 4.94270 |
| 50 1,1-Dichloropropene | 75 | 8.270 | 8.270 | (0.957) | 212911 | 5.00000 | 4.76752 |
| 51 Carbon Tetrachloride | 117 | 8.300 | 8.299 | (0.960) | 246383 | 5.00000 | 4.87617 |
| 48 Isobutanol | 41 | 8.172 | 8.171 | (0.945) | 29273 | 100.000 | 101.697 |
| 54 Benzene | 78 | 8.448 | 8.447 | (0.977) | 497155 | 5.00000 | 4.69751 |
| 53 1,2-Dichloroethane | 62 | 8.418 | 8.417 | (0.974) | 170293 | 5.00000 | 4.99814 |
| 57 n-Butanol | 56 | 8.713 | 8.703 | (1.008) | 18750 | 100.000 | 99.6291 |
| 58 Trichloroethene | 130 | 8.959 | 8.958 | (1.036) | 155429 | 5.00000 | 4.84557 |
| 61 1,2-Dichloropropane | 63 | 9.156 | 9.155 | (1.059) | 137874 | 5.00000 | 4.94438 |
| 64 Dibromomethane | 93 | 9.264 | 9.263 | (1.072) | 87231 | 5.00000 | 4.88398 |
| 63 1,4-Dioxane | 88 | 9.234 | 9.224 | (1.068) | 26825 | 250.000 | 256.824 |
| 65 Bromodichloromethane | 83 | 9.372 | 9.362 | (1.084) | 222555 | 5.00000 | 4.85536 |
| 68 cis-1,3-Dichloropropene | 75 | 9.775 | 9.775 | (0.844) | 227853 | 5.00000 | 5.00141 |
| 69 4-Methyl-2-pentanone | 43 | 9.864 | 9.863 | (0.852) | 242164 | 20.0000 | 19.7916 |
| 71 Toluene | 91 | 10.149 | 10.149 | (0.877) | 618923 | 5.00000 | 4.85284 |
| 72 trans-1,3-Dichloropropene | 75 | 10.287 | 10.286 | (0.889) | 193178 | 5.00000 | 5.14265 |
| 74 1,1,2-Trichloroethane | 97 | 10.503 | 10.503 | (0.907) | 93733 | 5.00000 | 5.10531 |
| 76 1,3-Dichloropropane | 76 | 10.690 | 10.690 | (0.924) | 153956 | 5.00000 | 5.02107 |
| 77 Tetrachloroethene | 164 | 10.730 | 10.729 | (0.927) | 161352 | 5.00000 | 5.01944 |
| 75 2-Hexanone | 43 | 10.690 | 10.680 | (0.924) | 177960 | 20.0000 | 20.2559 |
| 78 Dibromochloromethane | 129 | 10.946 | 10.945 | (0.946) | 153348 | 5.00000 | 4.97950 |
| 80 1,2-Dibromoethane | 107 | 11.113 | 11.113 | (0.960) | 110049 | 5.00000 | 5.01738 |
| 81 1-Chlorohexane | 91 | 11.497 | 11.496 | (0.993) | 279664 | 5.00000 | 4.69719 |
| 83 Chlorobenzene | 112 | 11.615 | 11.604 | (1.003) | 453244 | 5.00000 | 4.93101 |
| 84 1,1,1,2-Tetrachloroethane | 131 | 11.664 | 11.663 | (1.008) | 165610 | 5.00000 | 4.80705 |
| 85 Ethylbenzene | 106 | 11.684 | 11.683 | (1.009) | 243544 | 5.00000 | 4.87235 |
| 86 m and p-Xylene | 106 | 11.802 | 11.801 | (1.020) | 605897 | 10.0000 | 9.85320 |
| 87 o-Xylene | 106 | 12.235 | 12.234 | (1.057) | 298755 | 5.00000 | 4.91089 |
| 88 Styrene | 104 | 12.244 | 12.234 | (1.058) | 489878 | 5.00000 | 4.99552 |
| 89 Bromoform | 173 | 12.480 | 12.480 | (1.078) | 97335 | 5.00000 | 5.03976 |
| 90 isopropyl benzene | 105 | 12.618 | 12.608 | (1.090) | 860533 | 5.00000 | 4.93909 |
| 92 Cyclohexanone | 55 | 12.736 | 12.736 | (1.100) | 137911 | 200.000 | 194.616 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 94 1,1,2,2-Tetrachloroethane | 83 | 12.894 | 12.893 | (1.114) | 129445 | 5.00000 | 5.03333 |
| 97 Bromobenzene | 156 | 13.021 | 13.021 | (0.918) | 211302 | 5.00000 | 4.90792 |
| 96 1,2,3-Trichloropropane | 110 | 12.982 | 12.972 | (0.915) | 27029 | 5.00000 | 4.95353 |
| 98 n-Propylbenzene | 120 | 13.071 | 13.060 | (0.922) | 203953 | 5.00000 | 4.78458 |
| 99 2-Chlorotoluene | 126 | 13.218 | 13.208 | (0.932) | 198743 | 5.00000 | 4.89816 |
| 100 1,3,5-Trimethylbenzene | 105 | 13.248 | 13.237 | (0.934) | 684779 | 5.00000 | 4.79540 |
| 101 4-Chlorotoluene | 126 | 13.326 | 13.326 | (0.940) | 194845 | 5.00000 | 4.80309 |
| 102 tert-Butylbenzene | 119 | 13.651 | 13.650 | (0.963) | 554387 | 5.00000 | 4.81593 |
| 103 1,2,4-Trimethylbenzene | 105 | 13.700 | 13.700 | (0.966) | 658784 | 5.00000 | 4.75792 |
| 104 sec-Butylbenzene | 134 | 13.917 | 13.916 | (0.981) | 143004 | 5.00000 | 4.91866 |
| 106 m-Dichlorobenzene | 146 | 14.113 | 14.113 | (0.995) | 369401 | 5.00000 | 4.82097 |
| 105 4-Isopropyltoluene | 119 | 14.064 | 14.064 | (0.992) | 672565 | 5.00000 | 4.81833 |
| 108 p-dichlorobenzene | 146 | 14.212 | 14.211 | (1.002) | 354108 | 5.00000 | 4.84376 |
| 110 n-Butylbenzene | 91 | 14.595 | 14.585 | (1.029) | 680987 | 5.00000 | 4.81029 |
| 111 o-Dichlorobenzene | 146 | 14.723 | 14.713 | (1.038) | 311685 | 5.00000 | 5.12806 |
| 112 1,2-Dibromo-3-chloropropane | 157 | 15.805 | 15.795 | (1.114) | 18197 | 5.00000 | 4.98138 |
| 113 1,2,4-Trichlorobenzene | 180 | 17.241 | 17.231 | (1.216) | 160783 | 5.00000 | 5.03198 |
| 114 Hexachlorobutadiene | 225 | 17.527 | 17.526 | (1.236) | 122692 | 5.00000 | 4.81535 |
| 115 Napthalene | 128 | 17.763 | 17.752 | (1.252) | 162375 | 5.00000 | 5.28566 |
| 116 1,2,3-Trichlorobenzene | 180 | 18.254 | 18.254 | (1.287) | 131467 | 5.00000 | 5.27587 |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: R2.i
Lab File ID: rr6220.d
Lab Smp Id: MAIN005
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m
Misc Info:

Calibration Date: 05/25/4
Calibration Time: 2021
Client Smp ID: MAIN005
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 1181127 | 590564 | 2362254 | 1144667 | -3.09 |
| 82 Chlorobenzene-d5 | 309128 | 154564 | 618256 | 304228 | -1.59 |
| 107 1,4-Dichlorobenze | 483986 | 241993 | 967972 | 477071 | -1.43 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.64 | 0.07 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.58 | -0.03 |
| 107 1,4-Dichlorobenze | 14.18 | 13.68 | 14.68 | 14.18 | 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/R2.1/052504i.b/rr6220.d

Page 5

Date : 25-MAY-2004 19:56

Client ID: MAIN005

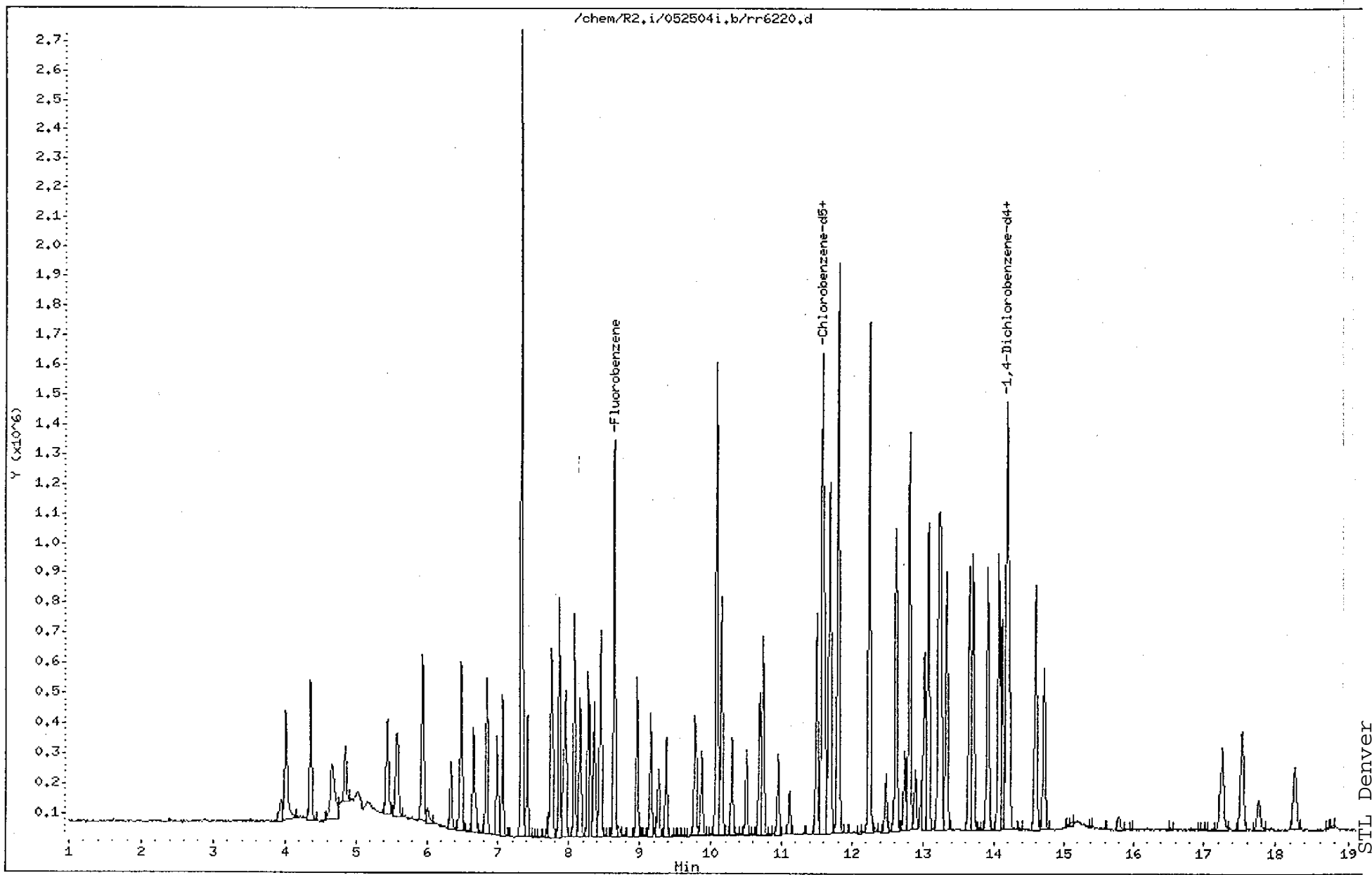
Instrument: R2.1

Sample Info: MAIN005,,

Operator: reinharj

Column phase: HP624

Column diameter: 0.32



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052504i.b/rr6221.d
 Lab Smp Id: MAIN010 Client Smp ID: MAIN010
 Inj Date : 25-MAY-2004 20:21
 Operator : reinharj Inst ID: R2.i
 Smp Info : MAIN010,,
 Misc Info :
 Comment : SOP # CORP-MS-0002 20ml Analysis
 Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m
 Meth Date : 25-May-2004 21:50 reinharj Quant Type: ISTD
 Cal Date : 25-MAY-2004 20:21 Cal File: rr6221.d
 Als bottle: 2 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 1-main.sub
 Target Version: 3.40
 Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|--------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 56 Fluorobenzene | 96 | 8.638 | 8.634 | (1.000) | 1181127 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.579 | 11.575 | (1.000) | 309128 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.176 | 14.182 | (1.000) | 483986 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | 606854 | 20.0000 | 19.0438 |
| M 2 Xylene (total) | 106 | | | | 1781199 | 10.0000 | 28.9445 |
| 3 dichlorodifluoromethane | 85 | 4.359 | 4.355 | (0.505) | 1070593 | 10.0000 | 9.75100 |
| 5 Chloromethane | 50 | 4.664 | 4.660 | (0.540) | 508290 | 10.0000 | 9.45559 |
| 6 Vinyl Chloride | 62 | 4.851 | 4.847 | (0.562) | 475526 | 10.0000 | 9.38287 |
| 8 Bromomethane | 94 | 5.441 | 5.427 | (0.630) | 635924 | 10.0000 | 9.75950 |
| 9 Chloroethane | 64 | 5.579 | 5.565 | (0.646) | 681663 | 10.0000 | 9.52435 |
| 11 Trichlorofluoromethane | 101 | 5.943 | 5.929 | (0.688) | 1178399 | 10.0000 | 9.52635 |
| 12 Ethanol | 45 | 6.012 | 5.998 | (0.696) | 146577 | 500.000 | 534.489 |
| 16 Acrolein | 56 | 6.336 | 6.332 | (0.734) | 366299 | 100.000 | 93.9656 |
| 19 1,1-Dichloroethene | 96 | 6.484 | 6.480 | (0.751) | 411179 | 10.0000 | 9.32519 |
| 18 Acetone | 43 | 6.454 | 6.450 | (0.747) | 209903 | 40.0000 | 40.5559 |
| 21 Iodomethane | 142 | 6.651 | 6.647 | (0.770) | 729464 | 10.0000 | 10.9164 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 22 Acetonitrile | 41 | 6.681 | 6.676 | (0.773) | 179955 | 100.000 | 95.6059 |
| 27 Methylene Chloride | 84 | 6.838 | 6.834 | (0.792) | 332339 | 10.0000 | 8.63987 |
| 26 tert-Butyl alcohol | 59 | 6.818 | 6.814 | (0.789) | 209055 | 200.000 | 189.564 |
| 28 Acrylonitrile | 53 | 6.976 | 6.981 | (0.808) | 363497 | 100.000 | 92.4526 |
| 30 trans-1,2-Dichloroethene | 96 | 7.054 | 7.050 | (0.817) | 302981 | 10.0000 | 9.44690 |
| 34 1,1-Dichloroethane | 63 | 7.340 | 7.335 | (0.850) | 525556 | 10.0000 | 9.39804 |
| 33 Isopropyl ether | 87 | 7.330 | 7.326 | (0.849) | 759794 | 50.0000 | 47.5617 |
| 35 Chloroprene | 53 | 7.409 | 7.404 | (0.858) | 445681 | 10.0000 | 9.47576 |
| 40 cis-1,2-Dichloroethene | 96 | 7.743 | 7.739 | (0.896) | 303873 | 10.0000 | 9.59690 |
| 37 2-Butanone | 43 | 7.694 | 7.689 | (0.891) | 178721 | 40.0000 | 39.7788 |
| 41 2,2-Dichloropropane | 77 | 7.763 | 7.758 | (0.899) | 474075 | 10.0000 | 9.12238 |
| 39 Propionitrile | 54 | 7.733 | 7.729 | (0.895) | 119875 | 100.000 | 98.5116 |
| 42 Methacrylonitrile | 41 | 7.861 | 7.857 | (0.910) | 755853 | 100.000 | 98.1897 |
| 43 Bromochloromethane | 128 | 7.930 | 7.926 | (0.918) | 117912 | 10.0000 | 9.40866 |
| 44 Chloroform | 83 | 7.950 | 7.945 | (0.920) | 574152 | 10.0000 | 9.29510 |
| 47 1,1,1-Trichloroethane | 97 | 8.156 | 8.152 | (0.944) | 554453 | 10.0000 | 9.48358 |
| 50 1,1-Dichloropropene | 75 | 8.264 | 8.270 | (0.957) | 444386 | 10.0000 | 9.73027 |
| 51 Carbon Tetrachloride | 117 | 8.294 | 8.299 | (0.960) | 511376 | 10.0000 | 9.85549 |
| 48 Isobutanol | 41 | 8.166 | 8.171 | (0.945) | 56814 | 200.000 | 194.104 |
| 54 Benzene | 78 | 8.441 | 8.447 | (0.977) | 1016791 | 10.0000 | 9.47409 |
| 53 1,2-Dichloroethane | 62 | 8.422 | 8.417 | (0.975) | 338962 | 10.0000 | 9.72871 |
| 57 n-Butanol | 56 | 8.707 | 8.703 | (1.008) | 37013 | 200.000 | 193.633 |
| 58 Trichloroethene | 130 | 8.963 | 8.958 | (1.038) | 323413 | 10.0000 | 9.82749 |
| 61 1,2-Dichloropropane | 63 | 9.150 | 9.155 | (1.059) | 281953 | 10.0000 | 9.84861 |
| 64 Dibromomethane | 93 | 9.268 | 9.263 | (1.073) | 178627 | 10.0000 | 9.76754 |
| 63 1,4-Dioxane | 88 | 9.228 | 9.224 | (1.068) | 53273 | 500.000 | 496.182 |
| 65 Bromodichloromethane | 83 | 9.366 | 9.362 | (1.084) | 443269 | 10.0000 | 9.52152 |
| 68 cis-1,3-Dichloropropene | 75 | 9.779 | 9.775 | (0.845) | 462466 | 10.0000 | 9.99272 |
| 69 4-Methyl-2-pentanone | 43 | 9.868 | 9.863 | (0.852) | 498959 | 40.0000 | 40.0993 |
| 71 Toluene | 91 | 10.143 | 10.149 | (0.876) | 1285138 | 10.0000 | 9.93745 |
| 72 trans-1,3-Dichloropropene | 75 | 10.291 | 10.286 | (0.889) | 379537 | 10.0000 | 9.95766 |
| 74 1,1,2-Trichloroethane | 97 | 10.497 | 10.503 | (0.907) | 187508 | 10.0000 | 10.0382 |
| 76 1,3-Dichloropropane | 76 | 10.684 | 10.690 | (0.923) | 309126 | 10.0000 | 9.94134 |
| 77 Tetrachloroethene | 164 | 10.733 | 10.729 | (0.927) | 323328 | 10.0000 | 9.92396 |
| 75 2-Hexanone | 43 | 10.684 | 10.680 | (0.923) | 357081 | 40.0000 | 39.9998 |
| 78 Dibromochloromethane | 129 | 10.950 | 10.945 | (0.946) | 318002 | 10.0000 | 10.1213 |
| 80 1,2-Dibromoethane | 107 | 11.107 | 11.113 | (0.959) | 220468 | 10.0000 | 9.91901 |
| 81 1-Chlorohexane | 91 | 11.491 | 11.496 | (0.992) | 581157 | 10.0000 | 9.70178 |
| 83 Chlorobenzene | 112 | 11.609 | 11.604 | (1.003) | 919938 | 10.0000 | 9.88686 |
| 84 1,1,1,2-Tetrachloroethane | 131 | 11.668 | 11.663 | (1.008) | 329668 | 10.0000 | 9.55656 |
| 85 Ethylbenzene | 106 | 11.687 | 11.683 | (1.009) | 489188 | 10.0000 | 9.72112 |
| 86 m and p-Xylene | 106 | 11.796 | 11.801 | (1.019) | 1174556 | 20.0000 | 19.0848 |
| 87 o-Xylene | 106 | 12.238 | 12.234 | (1.057) | 606643 | 10.0000 | 9.85972 |
| 88 Styrene | 104 | 12.238 | 12.234 | (1.057) | 998237 | 10.0000 | 10.0136 |
| 89 Bromoform | 173 | 12.484 | 12.480 | (1.078) | 200656 | 10.0000 | 10.1676 |
| 90 isopropyl benzene | 105 | 12.612 | 12.608 | (1.089) | 1748229 | 10.0000 | 9.90599 |
| 92 Cyclohexanone | 55 | 12.740 | 12.736 | (1.100) | 289318 | 400.000 | 401.353 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 94 1,1,2,2-Tetrachloroethane | 83 | 12.887 | 12.893 | (1.113) | 262341 | 10.0000 | 10.0293 |
| 97 Bromobenzene | 156 | 13.015 | 13.021 | (0.918) | 438691 | 10.0000 | 10.0329 |
| 96 1,2,3-Trichloropropane | 110 | 12.976 | 12.972 | (0.915) | 54535 | 10.0000 | 9.88834 |
| 98 n-Propylbenzene | 120 | 13.065 | 13.060 | (0.922) | 433179 | 10.0000 | 10.0126 |
| 99 2-Chlorotoluene | 126 | 13.212 | 13.208 | (0.932) | 400378 | 10.0000 | 9.79355 |
| 100 1,3,5-Trimethylbenzene | 105 | 13.242 | 13.237 | (0.934) | 1428508 | 10.0000 | 9.89515 |
| 101 4-Chlorotoluene | 126 | 13.330 | 13.326 | (0.940) | 402409 | 10.0000 | 9.83256 |
| 102 tert-Butylbenzene | 119 | 13.655 | 13.650 | (0.963) | 1130782 | 10.0000 | 9.76011 |
| 103 1,2,4-Trimethylbenzene | 105 | 13.704 | 13.700 | (0.967) | 1383132 | 10.0000 | 9.88453 |
| 104 sec-Butylbenzene | 134 | 13.910 | 13.916 | (0.981) | 286540 | 10.0000 | 9.78458 |
| 106 m-Dichlorobenzene | 146 | 14.107 | 14.113 | (0.995) | 763418 | 10.0000 | 9.86503 |
| 105 4-Isopropyltoluene | 119 | 14.068 | 14.064 | (0.992) | 1395284 | 10.0000 | 9.88946 |
| 108 p-dichlorobenzene | 146 | 14.215 | 14.211 | (1.003) | 724892 | 10.0000 | 9.82951 |
| 110 n-Butylbenzene | 91 | 14.589 | 14.585 | (1.029) | 1437916 | 10.0000 | 10.0089 |
| 111 o-Dichlorobenzene | 146 | 14.717 | 14.713 | (1.038) | 637178 | 10.0000 | 10.2481 |
| 112 1,2-Dibromo-3-chloropropane | 157 | 15.799 | 15.795 | (1.114) | 37722 | 10.0000 | 10.1185 |
| 113 1,2,4-Trichlorobenzene | 180 | 17.235 | 17.231 | (1.216) | 348677 | 10.0000 | 10.5569 |
| 114 Hexachlorobutadiene | 225 | 17.530 | 17.526 | (1.237) | 250524 | 10.0000 | 9.76716 |
| 115 Napthalene | 128 | 17.757 | 17.752 | (1.253) | 342005 | 10.0000 | 10.7131 |
| 116 1,2,3-Trichlorobenzene | 180 | 18.258 | 18.254 | (1.288) | 275226 | 10.0000 | 10.6510 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|---|---------------------------|
| Instrument ID: R2.i | Calibration Date: 05/25/4 |
| Lab File ID: rr6221.d | Calibration Time: 2021 |
| Lab Smp Id: MAIN010 | Client Smp ID: MAIN010 |
| Analysis Type: VOA | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: reinharj | |
| Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m | |
| Misc Info: | |

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 1181127 | 590564 | 2362254 | 1181127 | 0.00 |
| 82 Chlorobenzene-d5 | 309128 | 154564 | 618256 | 309128 | 0.00 |
| 107 1,4-Dichlorobenze | 483986 | 241993 | 967972 | 483986 | 0.00 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.64 | 0.00 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.58 | 0.00 |
| 107 1,4-Dichlorobenze | 14.18 | 13.68 | 14.68 | 14.18 | 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/R2.i/052504i.b/rr6221.d

Date : 25-MAY-2004 20:21

Client ID: MAIN010

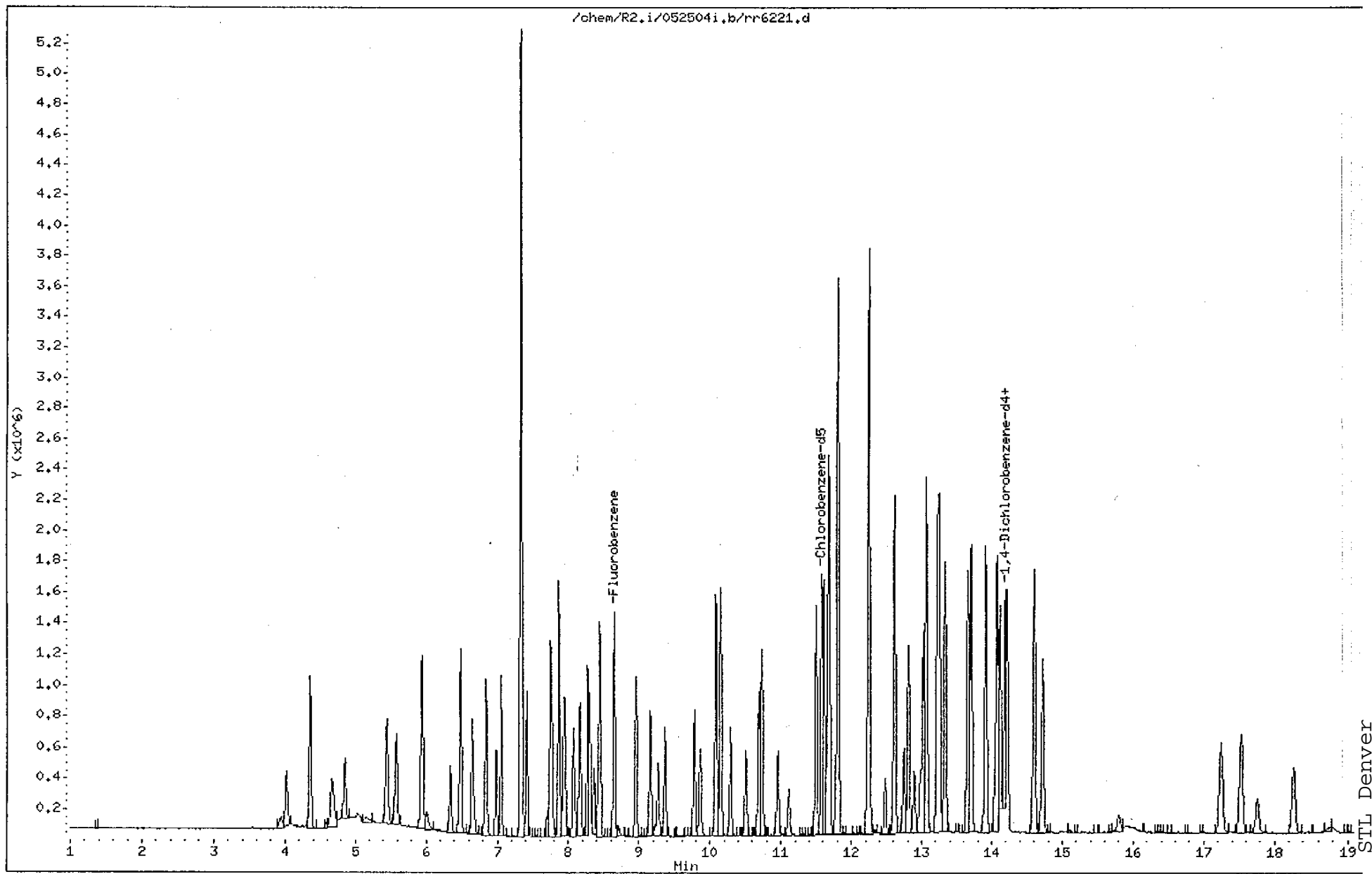
Sample Info: MAIN010,,

Column phase: HP624

Instrument: R2.i

Operator: reinharj

Column diameter: 0.32



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052504i.b/rr6222.d
Lab Smp Id: MAIN030 Client Smp ID: MAIN030
Inj Date : 25-MAY-2004 20:46
Operator : reinharj Inst ID: R2.i
Smp Info : MAIN030,,
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m
Meth Date : 25-May-2004 21:50 reinharj Quant Type: ISTD
Cal Date : 25-MAY-2004 20:46 Cal File: rr6222.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|--------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 56 Fluorobenzene | 96 | 8.643 | 8.634 | (1.000) | 1145086 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.575 | 11.575 | (1.000) | 300774 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.181 | 14.182 | (1.000) | 515738 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | 1757404 | 60.0000 | 57.4781 |
| M 2 Xylene (total) | 106 | | | | 5273214 | 30.0000 | 88.4490 |
| 3 dichlorodifluoromethane | 85 | 4.355 | 4.355 | (0.504) | 3143301 | 30.0000 | 29.6464 |
| 5 Chloromethane | 50 | 4.660 | 4.660 | (0.539) | 1476516 | 30.0000 | 28.7312 |
| 6 Vinyl Chloride | 62 | 4.846 | 4.847 | (0.561) | 1395611 | 30.0000 | 28.7097 |
| 8 Bromomethane | 94 | 5.437 | 5.427 | (0.629) | 2016672 | 30.0000 | 31.5196 |
| 9 Chloroethane | 64 | 5.574 | 5.565 | (0.645) | 1966511 | 30.0000 | 28.6582 |
| 11 Trichlorofluoromethane | 101 | 5.938 | 5.929 | (0.687) | 3503416 | 30.0000 | 29.3675 |
| 12 Ethanol | 45 | 6.007 | 5.998 | (0.695) | 454508 | 1500.00 | 1651.83 |
| 16 Acrolein | 56 | 6.332 | 6.332 | (0.733) | 1006038 | 300.000 | 272.336 |
| 19 1,1-Dichloroethene | 96 | 6.479 | 6.480 | (0.750) | 1165972 | 30.0000 | 27.7801 |
| 18 Acetone | 43 | 6.460 | 6.450 | (0.747) | 610838 | 120.000 | 121.298 |
| 21 Iodomethane | 142 | 6.646 | 6.647 | (0.769) | 2178626 | 30.0000 | 32.8348 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 22 Acetonitrile | 41 | 6.676 | 6.676 | (0.772) | 552567 | 300.000 | 302.240 |
| 27 Methylene Chloride | 84 | 6.843 | 6.934 | (0.792) | 956750 | 30.0000 | 26.6193 |
| 26 tert-Butyl alcohol | 59 | 6.824 | 6.814 | (0.789) | 637652 | 600.000 | 597.116 |
| 28 Acrylonitrile | 53 | 6.981 | 6.981 | (0.808) | 1137388 | 300.000 | 298.711 |
| 30 trans-1,2-Dichloroethene | 96 | 7.050 | 7.050 | (0.816) | 888426 | 30.0000 | 28.8473 |
| 34 1,1-Dichloroethane | 63 | 7.335 | 7.335 | (0.849) | 1497918 | 30.0000 | 28.0727 |
| 33 Isopropyl ether | 87 | 7.325 | 7.326 | (0.848) | 2165199 | 150.000 | 141.730 |
| 35 Chloroprene | 53 | 7.404 | 7.404 | (0.857) | 1302761 | 30.0000 | 28.8451 |
| 40 cis-1,2-Dichloroethene | 96 | 7.738 | 7.739 | (0.895) | 868978 | 30.0000 | 28.6308 |
| 37 2-Butanone | 43 | 7.699 | 7.689 | (0.891) | 520233 | 120.000 | 119.548 |
| 41 2,2-Dichloropropane | 77 | 7.758 | 7.758 | (0.898) | 1418703 | 30.0000 | 28.5086 |
| 39 Propionitrile | 54 | 7.738 | 7.729 | (0.895) | 334257 | 300.000 | 286.517 |
| 42 Methacrylonitrile | 41 | 7.866 | 7.857 | (0.910) | 2248112 | 300.000 | 300.987 |
| 43 Bromochloromethane | 128 | 7.925 | 7.926 | (0.917) | 356104 | 30.0000 | 29.4449 |
| 44 Chloroform | 83 | 7.945 | 7.945 | (0.919) | 1692210 | 30.0000 | 28.5899 |
| 47 1,1,1-Trichloroethane | 97 | 8.151 | 8.152 | (0.943) | 1672108 | 30.0000 | 29.5991 |
| 50 1,1-Dichloropropene | 75 | 8.269 | 8.270 | (0.957) | 1279642 | 30.0000 | 29.1142 |
| 51 Carbon Tetrachloride | 117 | 8.299 | 8.299 | (0.960) | 1504871 | 30.0000 | 29.9323 |
| 48 Isobutanol | 41 | 8.171 | 8.171 | (0.945) | 169564 | 600.000 | 598.157 |
| 54 Benzene | 78 | 8.447 | 8.447 | (0.977) | 3103327 | 30.0000 | 29.8605 |
| 53 1,2-Dichloroethane | 62 | 8.417 | 8.417 | (0.974) | 1031937 | 30.0000 | 30.4386 |
| 57 n-Butanol | 56 | 8.702 | 8.703 | (1.007) | 120430 | 600.000 | 636.633 |
| 58 Trichloroethene | 130 | 8.958 | 8.958 | (1.036) | 944534 | 30.0000 | 29.6830 |
| 61 1,2-Dichloropropane | 63 | 9.155 | 9.155 | (1.059) | 823849 | 30.0000 | 29.7457 |
| 64 Dibromomethane | 93 | 9.273 | 9.263 | (1.073) | 512106 | 30.0000 | 29.1005 |
| 63 1,4-Dioxane | 88 | 9.233 | 9.224 | (1.068) | 159833 | 1500.00 | 1526.49 |
| 65 Bromodichloromethane | 83 | 9.371 | 9.362 | (1.084) | 1315148 | 30.0000 | 29.3071 |
| 68 cis-1,3-Dichloropropene | 75 | 9.774 | 9.775 | (0.844) | 1387546 | 30.0000 | 30.6478 |
| 69 4-Methyl-2-pentanone | 43 | 9.863 | 9.863 | (0.852) | 1512798 | 120.000 | 123.931 |
| 71 Toluene | 91 | 10.148 | 10.149 | (0.877) | 3785851 | 30.0000 | 30.0700 |
| 72 trans-1,3-Dichloropropene | 75 | 10.296 | 10.286 | (0.890) | 1152616 | 30.0000 | 30.8581 |
| 74 1,1,2-Trichloroethane | 97 | 10.502 | 10.503 | (0.907) | 551821 | 30.0000 | 30.2890 |
| 76 1,3-Dichloropropane | 76 | 10.689 | 10.690 | (0.923) | 906103 | 30.0000 | 29.9593 |
| 77 Tetrachloroethene | 164 | 10.729 | 10.729 | (0.927) | 946786 | 30.0000 | 29.8935 |
| 75 2-Hexanone | 43 | 10.689 | 10.680 | (0.923) | 1070970 | 120.000 | 122.626 |
| 78 Dibromochloromethane | 129 | 10.945 | 10.945 | (0.946) | 952173 | 30.0000 | 30.9110 |
| 80 1,2-Dibromoethane | 107 | 11.112 | 11.113 | (0.960) | 684462 | 30.0000 | 31.3054 |
| 81 1-Chlorohexane | 91 | 11.496 | 11.496 | (0.993) | 1687576 | 30.0000 | 29.1579 |
| 83 Chlorobenzene | 112 | 11.614 | 11.604 | (1.003) | 2696083 | 30.0000 | 29.8241 |
| 84 1,1,1,2-Tetrachloroethane | 131 | 11.663 | 11.663 | (1.008) | 980594 | 30.0000 | 29.3690 |
| 85 Ethylbenzene | 106 | 11.683 | 11.683 | (1.009) | 1428134 | 30.0000 | 29.3307 |
| 86 m and p-Xylene | 106 | 11.801 | 11.801 | (1.020) | 3508515 | 60.0000 | 58.8679 |
| 87 o-Xylene | 106 | 12.234 | 12.234 | (1.057) | 1764699 | 30.0000 | 29.5811 |
| 88 Styrene | 104 | 12.243 | 12.234 | (1.058) | 2947214 | 30.0000 | 30.3076 |
| 89 Bromoform | 173 | 12.479 | 12.480 | (1.078) | 605498 | 30.0000 | 31.2147 |
| 90 isopropyl benzene | 105 | 12.607 | 12.608 | (1.089) | 5342787 | 30.0000 | 30.8852 |
| 92 Cyclohexanone | 55 | 12.735 | 12.736 | (1.100) | 743914 | 1200.00 | 1085.87 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 94 1,1,2,2-Tetrachloroethane | 83 | 12.893 | 12.893 | (1.114) | 752389 | 30.0000 | 29.6493 |
| 97 Bromobenzene | 156 | 13.021 | 13.021 | (0.918) | 1302029 | 30.0000 | 28.3325 |
| 96 1,2,3-Trichloropropane | 110 | 12.981 | 12.972 | (0.915) | 165437 | 30.0000 | 28.5018 |
| 98 n-Propylbenzene | 120 | 13.070 | 13.060 | (0.922) | 1245563 | 30.0000 | 27.5659 |
| 99 2-Chlorotoluene | 126 | 13.217 | 13.208 | (0.932) | 1177465 | 30.0000 | 27.5747 |
| 100 1,3,5-Trimethylbenzene | 105 | 13.237 | 13.237 | (0.933) | 4321955 | 30.0000 | 28.4561 |
| 101 4-Chlorotoluene | 126 | 13.325 | 13.326 | (0.940) | 1193322 | 30.0000 | 27.8525 |
| 102 tert-Butylbenzene | 119 | 13.650 | 13.650 | (0.963) | 3450516 | 30.0000 | 28.3363 |
| 103 1,2,4-Trimethylbenzene | 105 | 13.699 | 13.700 | (0.966) | 4186332 | 30.0000 | 28.4405 |
| 104 sec-Butylbenzene | 134 | 13.916 | 13.916 | (0.981) | 881042 | 30.0000 | 28.5696 |
| 106 m-Dichlorobenzene | 146 | 14.112 | 14.113 | (0.995) | 2297401 | 30.0000 | 28.2630 |
| 105 4-Isopropyltoluene | 119 | 14.063 | 14.064 | (0.992) | 4480398 | 30.0000 | 29.8406 |
| 108 p-dichlorobenzene | 146 | 14.211 | 14.211 | (1.002) | 2260902 | 30.0000 | 29.0081 |
| 110 n-Butylbenzene | 91 | 14.594 | 14.585 | (1.029) | 4640170 | 30.0000 | 30.2478 |
| 111 o-Dichlorobenzene | 146 | 14.712 | 14.713 | (1.037) | 1995068 | 30.0000 | 30.0897 |
| 112 1,2-Dibromo-3-chloropropane | 157 | 15.794 | 15.795 | (1.114) | 121296 | 30.0000 | 30.3980 |
| 113 1,2,4-Trichlorobenzene | 180 | 17.240 | 17.231 | (1.216) | 1138494 | 30.0000 | 31.8494 |
| 114 Hexachlorobutadiene | 225 | 17.526 | 17.526 | (1.236) | 794422 | 30.0000 | 29.2475 |
| 115 Napthalene | 128 | 17.752 | 17.752 | (1.252) | 1203400 | 30.0000 | 34.1512 |
| 116 1,2,3-Trichlorobenzene | 180 | 18.254 | 18.254 | (1.287) | 877070 | 30.0000 | 31.4636 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|---|---------------------------|
| Instrument ID: R2.i | Calibration Date: 05/25/4 |
| Lab File ID: rr6222.d | Calibration Time: 2021 |
| Lab Smp Id: MAIN030 | Client Smp ID: MAIN030 |
| Analysis Type: VOA | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: reinharj | |
| Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m | |
| Misc Info: | |

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1181127 | 590564 | 2362254 | 1145086 | -3.05 |
| 82 Chlorobenzene-d5 | 309128 | 154564 | 618256 | 300774 | -2.70 |
| 107 1,4-Dichlorobenze | 483986 | 241993 | 967972 | 515738 | 6.56 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.64 | 0.06 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.57 | -0.04 |
| 107 1,4-Dichlorobenze | 14.18 | 13.68 | 14.68 | 14.18 | 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/R2.i/052504i.b/rr6222.d

Page 5

Date : 25-MAY-2004 20:46

Client ID: MAIN030

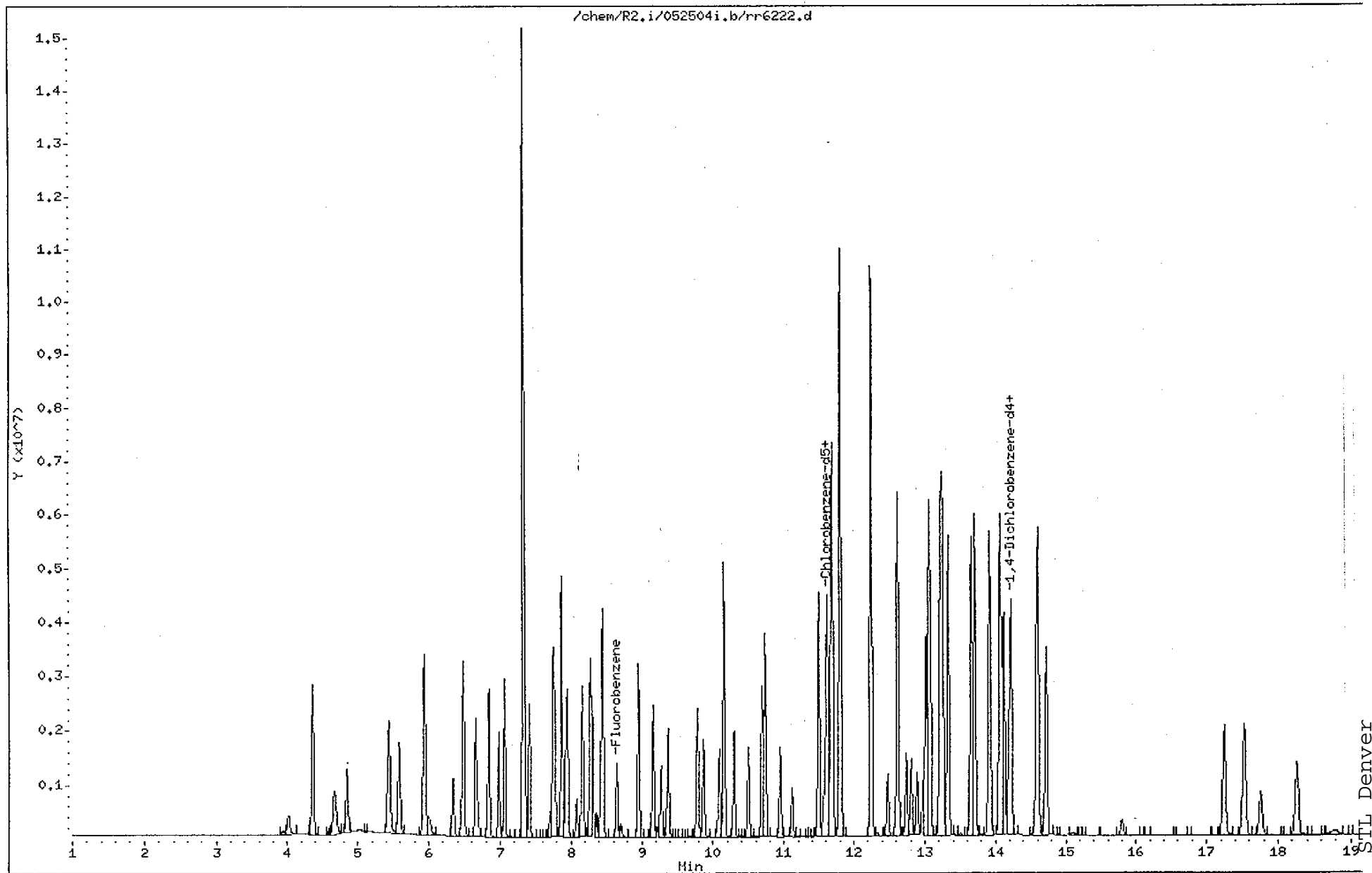
Sample Info: MAIN030,,

Column phase: HP624

Instrument: R2.i

Operator: reinharj

Column diameter: 0.32



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052504i.b/rr6223.d

Lab Smp Id: MAIN060

Inj Date : 25-MAY-2004 21:11

Operator : reinharj

Smp Info : MAIN060,,

Misc Info :

Comment : SOP # CORP-MS-0002 20ml Analysis

Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m

Meth Date : 25-May-2004 21:50 reinharj

Cal Date : 25-MAY-2004 21:11

Als bottle: 2

Dil Factor: 1.00000

Integrator: HP RTE

Target Version: 3.40

Processing Host: chemsv02

Client Smp ID: MAIN060

Inst ID: R2.i

Quant Type: ISTD

Cal File: rr6223.d

Calibration Sample, Level: 6

Compound Sublist: 1-main.sub

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| | | | | | | AMOUNTS | |
|--------------------------------|------|--------|--------|---------|----------|--------------------|-------------------|
| | | QUANT | SIG | | | | |
| Compounds | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | | | | | | | |
| * 56 Fluorobenzene | 96 | 8.634 | 8.634 | (1.000) | 1174015 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.575 | 11.575 | (1.000) | 315564 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.182 | 14.182 | (1.000) | 537955 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | 3474889 | 120.000 | 112.266 |
| M 2 Xylene (total) | 106 | | | | 10108478 | 60.0000 | 164.405 |
| 3 dichlorodifluoromethane | 85 | 4.355 | 4.355 | (0.504) | 6441426 | 60.0000 | 59.4034 |
| 5 Chloromethane | 50 | 4.660 | 4.660 | (0.540) | 2954804 | 60.0000 | 56.8225 |
| 6 Vinyl Chloride | 62 | 4.847 | 4.847 | (0.561) | 2785408 | 60.0000 | 56.5337 |
| 8 Bromomethane | 94 | 5.427 | 5.427 | (0.629) | 4256384 | 60.0000 | 64.0172 (A) |
| 9 Chloroethane | 64 | 5.565 | 5.565 | (0.645) | 4044801 | 60.0000 | 57.8961 |
| 11 Trichlorofluoromethane | 101 | 5.929 | 5.929 | (0.637) | 7119500 | 60.0000 | 58.5000 |
| 12 Ethanol | 45 | 5.998 | 5.998 | (0.695) | 911920 | 3000.00 | 3150.96 (A) |
| 16 Acrolein | 56 | 6.332 | 6.332 | (0.733) | 2126840 | 600.000 | 567.613 |
| 19 1,1-Dichloroethene | 96 | 6.480 | 6.480 | (0.750) | 2365170 | 60.0000 | 55.7432 |
| 18 Acetone | 43 | 6.450 | 6.450 | (0.747) | 1248740 | 240.000 | 241.485 (A) |
| 21 Iodomethane | 142 | 6.647 | 6.647 | (0.770) | 4322495 | 60.0000 | 62.9216 (A) |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 22 Acetonitrile | 41 | 6.676 | 6.676 | (0.773) | 1092280 | 600.000 | 585.537 |
| 27 Methylene Chloride | 84 | 6.834 | 6.834 | (0.791) | 1884368 | 60.0000 | 52.6931 |
| 26 tert-Butyl alcohol | 59 | 6.814 | 6.814 | (0.789) | 1284512 | 1200.00 | 1177.60 |
| 28 Acrylonitrile | 53 | 6.981 | 6.981 | (0.809) | 2270960 | 600.000 | 584.692 |
| 30 trans-1,2-Dichloroethene | 96 | 7.050 | 7.050 | (0.817) | 1776737 | 60.0000 | 56.8585 |
| 34 1,1-Dichloroethane | 63 | 7.335 | 7.335 | (0.850) | 2862555 | 60.0000 | 53.4654 |
| 33 Isopropyl ether | 87 | 7.326 | 7.326 | (0.848) | 4229443 | 300.000 | 274.602 |
| 35 Chloroprene | 53 | 7.404 | 7.404 | (0.858) | 2574115 | 60.0000 | 56.2798 |
| 40 cis-1,2-Dichloroethene | 96 | 7.739 | 7.739 | (0.896) | 1698152 | 60.0000 | 55.4070 |
| 37 2-Butanone | 43 | 7.689 | 7.689 | (0.891) | 1098831 | 240.000 | 245.215 (A) |
| 41 2,2-Dichloropropane | 77 | 7.758 | 7.758 | (0.899) | 2759770 | 60.0000 | 54.9933 |
| 39 Propionitrile | 54 | 7.729 | 7.729 | (0.895) | 678735 | 600.000 | 572.635 |
| 42 Methacrylonitrile | 41 | 7.857 | 7.857 | (0.910) | 4448354 | 600.000 | 583.990 |
| 43 Bromochloromethane | 128 | 7.926 | 7.926 | (0.918) | 731423 | 60.0000 | 59.1545 |
| 44 Chloroform | 83 | 7.945 | 7.945 | (0.920) | 3487700 | 60.0000 | 57.8791 |
| 47 1,1,1-Trichloroethane | 97 | 8.152 | 8.152 | (0.944) | 3282803 | 60.0000 | 57.2069 |
| 50 1,1-Dichloropropene | 75 | 8.270 | 8.270 | (0.958) | 2527478 | 60.0000 | 56.7040 |
| 51 Carbon Tetrachloride | 117 | 8.299 | 8.299 | (0.961) | 3064806 | 60.0000 | 59.5475 |
| 48 Isobutanol | 41 | 8.171 | 8.171 | (0.946) | 337189 | 1200.00 | 1167.92 |
| 54 Benzene | 78 | 8.447 | 8.447 | (0.978) | 6158209 | 60.0000 | 58.1509 |
| 53 1,2-Dichloroethane | 62 | 8.417 | 8.417 | (0.975) | 2067362 | 60.0000 | 59.5640 |
| 57 n-Butanol | 56 | 8.703 | 8.703 | (1.008) | 241293 | 1200.00 | 1235.04 (A) |
| 58 Trichloroethene | 130 | 8.958 | 8.958 | (1.038) | 1840086 | 60.0000 | 56.9711 |
| 61 1,2-Dichloropropane | 63 | 9.155 | 9.155 | (1.060) | 1615355 | 60.0000 | 57.3827 |
| 64 Dibromomethane | 93 | 9.263 | 9.263 | (1.073) | 1058947 | 60.0000 | 58.9060 |
| 63 1,4-Dioxane | 88 | 9.224 | 9.224 | (1.068) | 333118 | 3000.00 | 3081.89 (A) |
| 65 Bromodichloromethane | 83 | 9.362 | 9.362 | (1.084) | 2693310 | 60.0000 | 58.7779 |
| 68 cis-1,3-Dichloropropene | 75 | 9.775 | 9.775 | (0.844) | 2741860 | 60.0000 | 58.0905 |
| 69 4-Methyl-2-pentanone | 43 | 9.863 | 9.863 | (0.852) | 3100112 | 240.000 | 241.717 (A) |
| 71 Toluene | 91 | 10.149 | 10.149 | (0.877) | 7305917 | 60.0000 | 56.0394 |
| 72 trans-1,3-Dichloropropene | 75 | 10.286 | 10.286 | (0.889) | 2223015 | 60.0000 | 57.2463 |
| 74 1,1,2-Trichloroethane | 97 | 10.503 | 10.503 | (0.907) | 1125408 | 60.0000 | 59.0617 |
| 76 1,3-Dichloropropane | 76 | 10.690 | 10.690 | (0.924) | 1863906 | 60.0000 | 58.9460 |
| 77 Tetrachloroethene | 164 | 10.729 | 10.729 | (0.927) | 1881995 | 60.0000 | 57.1706 |
| 75 2-Hexanone | 43 | 10.680 | 10.680 | (0.923) | 2209005 | 240.000 | 240.897 (A) |
| 78 Dibromochloromethane | 129 | 10.945 | 10.945 | (0.946) | 1904159 | 60.0000 | 59.0961 |
| 80 1,2-Dibromoethane | 107 | 11.113 | 11.113 | (0.960) | 1383730 | 60.0000 | 60.2680 (A) |
| 81 1-Chlorohexane | 91 | 11.496 | 11.496 | (0.993) | 3307009 | 60.0000 | 55.3116 |
| 83 Chlorobenzene | 112 | 11.604 | 11.604 | (1.003) | 5444729 | 60.0000 | 57.8233 |
| 84 1,1,1,2-Tetrachloroethane | 131 | 11.663 | 11.663 | (1.008) | 1980951 | 60.0000 | 57.0966 |
| 85 Ethylbenzene | 106 | 11.683 | 11.683 | (1.009) | 2759973 | 60.0000 | 54.9386 |
| 86 m and p-Xylene | 106 | 11.801 | 11.801 | (1.020) | 6716516 | 120.000 | 109.323 |
| 87 o-Xylene | 106 | 12.234 | 12.234 | (1.057) | 3391962 | 60.0000 | 55.0819 |
| 88 Styrene | 104 | 12.234 | 12.234 | (1.057) | 5752770 | 60.0000 | 56.9576 |
| 89 Bromoform | 173 | 12.480 | 12.480 | (1.078) | 1248946 | 60.0000 | 61.1359 (A) |
| 90 isopropyl benzene | 105 | 12.608 | 12.608 | (1.089) | 10200972 | 60.0000 | 56.8040 |
| 92 Cyclohexanone | 55 | 12.736 | 12.736 | (1.100) | 1578929 | 2400.00 | 2228.16 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 94 1,1,2,2-Tetrachloroethane | 83 | 12.893 | 12.893 | (1.114) | 1530416 | 60.0000 | 57.8871 |
| 97 Bromobenzene | 156 | 13.021 | 13.021 | (0.918) | 2582275 | 60.0000 | 54.8035 |
| 96 1,2,3-Trichloropropane | 110 | 12.972 | 12.972 | (0.915) | 332612 | 60.0000 | 55.7203 |
| 98 n-Propylbenzene | 120 | 13.060 | 13.060 | (0.921) | 2597276 | 60.0000 | 55.8664 |
| 99 2-Chlorotoluene | 126 | 13.208 | 13.208 | (0.931) | 2277385 | 60.0000 | 52.4224 |
| 100 1,3,5-Trimethylbenzene | 105 | 13.237 | 13.237 | (0.933) | 8578363 | 60.0000 | 55.0428 |
| 101 4-Chlorotoluene | 126 | 13.326 | 13.326 | (0.940) | 2344548 | 60.0000 | 53.5844 |
| 102 tert-Butylbenzene | 119 | 13.650 | 13.650 | (0.963) | 7296535 | 60.0000 | 57.8564 |
| 103 1,2,4-Trimethylbenzene | 105 | 13.700 | 13.700 | (0.966) | 8457940 | 60.0000 | 55.8494 |
| 104 sec-Butylbenzene | 134 | 13.916 | 13.916 | (0.981) | 1856285 | 60.0000 | 58.0776 |
| 106 m-Dichlorobenzene | 146 | 14.113 | 14.113 | (0.995) | 4769902 | 60.0000 | 56.8477 |
| 105 4-Isopropyltoluene | 119 | 14.064 | 14.064 | (0.992) | 9010443 | 60.0000 | 57.9303 |
| 108 p-dichlorobenzene | 146 | 14.211 | 14.211 | (1.002) | 4562316 | 60.0000 | 56.7301 |
| 110 n-Butylbenzene | 91 | 14.585 | 14.585 | (1.028) | 9465634 | 60.0000 | 59.2943 |
| 111 o-Dichlorobenzene | 146 | 14.713 | 14.713 | (1.037) | 3963908 | 60.0000 | 57.7455 |
| 112 1,2-Dibromo-3-chloropropane | 157 | 15.795 | 15.795 | (1.114) | 249561 | 60.0000 | 59.9677 |
| 113 1,2,4-Trichlorobenzene | 180 | 17.231 | 17.231 | (1.215) | 2419341 | 60.0000 | 64.0171 (A) |
| 114 Hexachlorobutadiene | 225 | 17.526 | 17.526 | (1.236) | 1662827 | 60.0000 | 58.9048 |
| 115 Napthalene | 128 | 17.752 | 17.752 | (1.252) | 2671746 | 60.0000 | 70.2149 (A) |
| 116 1,2,3-Trichlorobenzene | 180 | 18.254 | 18.254 | (1.287) | 1900709 | 60.0000 | 64.4086 (A) |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

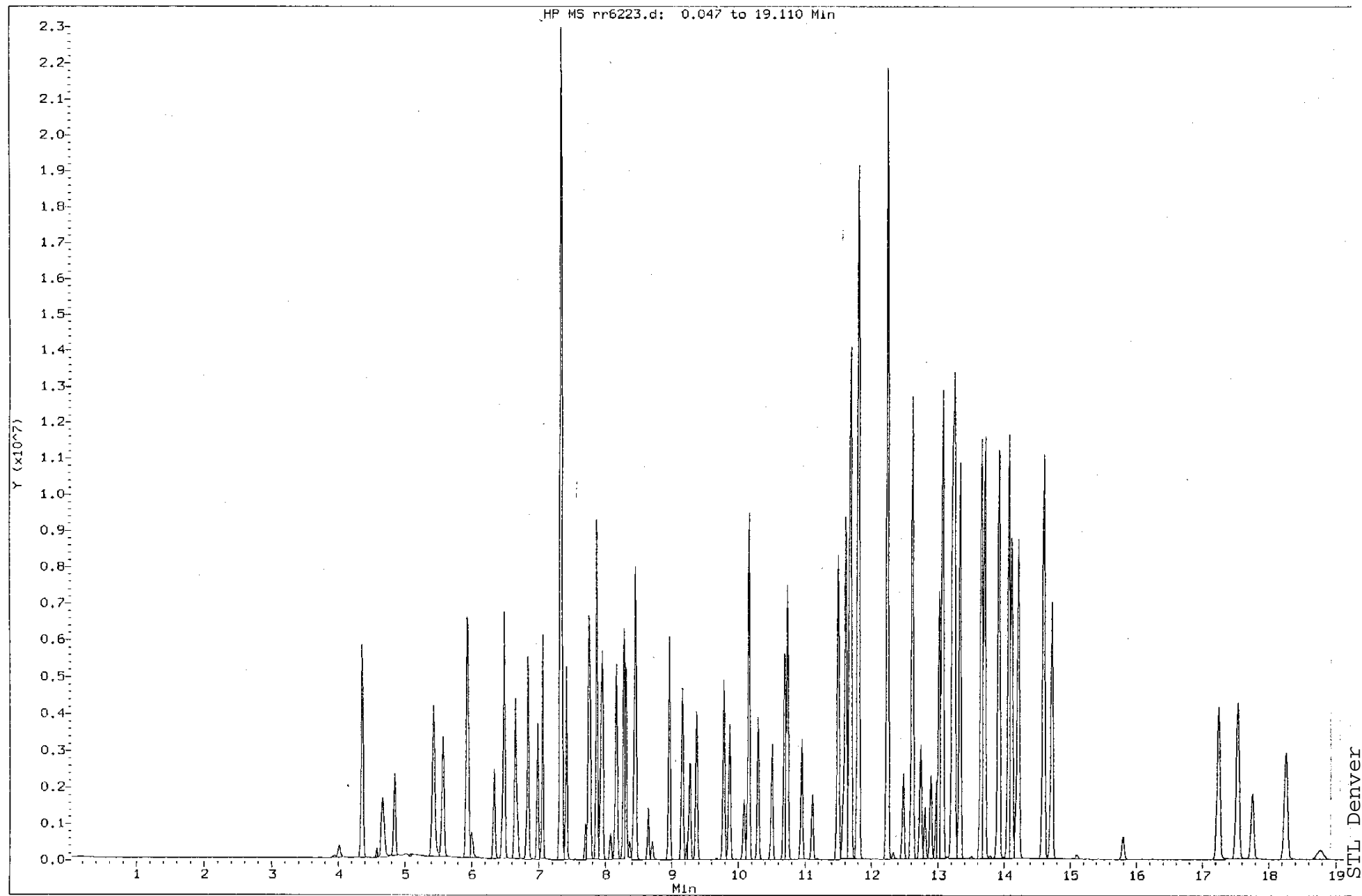
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|---|---------------------------|
| Instrument ID: R2.i | Calibration Date: 05/25/4 |
| Lab File ID: rr6223.d | Calibration Time: 2021 |
| Lab Smp Id: MAIN060 | Client Smp ID: MAIN060 |
| Analysis Type: VOA | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: reinharj | |
| Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m | |
| Misc Info: | |

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 1181127 | 590564 | 2362254 | 1174015 | -0.60 |
| 82 Chlorobenzene-d5 | 309128 | 154564 | 618256 | 315564 | 2.08 |
| 107 1,4-Dichlorobenze | 483986 | 241993 | 967972 | 537955 | 11.15 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.63 | -0.05 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.57 | -0.04 |
| 107 1,4-Dichlorobenze | 14.18 | 13.68 | 14.68 | 14.18 | 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/R2.1/0525041.b/rr6223.d
Injection Date: 25-MAY-2004 21:11
Instrument: R2.1
Client Sample ID: MAIN060



INITIAL CALIBRATION VERIFICATION

Instrument ID: R2.i
Lab File ID: rr6224.d
Analysis Type: WATER

Injection Date: 25-MAY-2004 21:36
Lab Sample ID: SSV030
Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m

| COMPOUND | EXPECTED CONC. | MEASURED CONC. | %D | MAX %D |
|-------------------------------|-------------------------|-------------------|------|-----------|
| 85 1,2-Dichloroethene (total) | 60.0000 | 56.8751 | 5.2 | 25.0 |
| 83 Xylene (total) | 90.0000 | 85.8598 | 4.6 | 25.0 |
| 64 dichlorodifluoromethane | 30.0000 | 26.7227 | 10.9 | 25.0 |
| 1 Chloromethane | 30.0000 | 27.2351 | 9.2 | 25.0 |
| 4 Vinyl Chloride | 30.0000 | 28.5516 | 4.8 | 25.0 |
| 2 Bromomethane | 30.0000 | 32.4127 | 8.0 | 25.0 |
| 5 Chloroethane | 30.0000 | 27.7253 | 7.6 | 25.0 |
| 11 Trichlorofluoromethane | 30.0000 | 28.0727 | 6.4 | 25.0 |
| 7 Acetone | 60 10 0.0000 | 61.9393 | 48.4 | 25.0 |
| 12 1,1-Dichloroethene | 30.0000 | 28.3033 | 5.7 | 25.0 |
| 6 Methylene Chloride | 30.0000 | 26.3275 | 12.2 | 25.0 |
| 0 trans-1,2-Dichloroethene | 30.0000 | 29.4461 | 1.8 | 25.0 |
| 15 1,1-Dichloroethane | 30.0000 | 28.5973 | 4.7 | 25.0 |
| 20 2-Butanone | 60 10 0.0000 | 61.1130 | 49.1 | 25.0 |
| 0 cis-1,2-Dichloroethene | 30.0000 | 27.4290 | 8.6 | 25.0 |
| 93 2,2-Dichloropropane | 30.0000 | 28.5890 | 4.7 | 25.0 |
| 13 Bromochloromethane | 30.0000 | 28.6431 | 4.5 | 25.0 |
| 17 Chloroform | 30.0000 | 29.3626 | 2.1 | 25.0 |
| 22 1,1,1-Trichloroethane | 30.0000 | 28.4136 | 5.3 | 25.0 |
| 94 1,1-Dichloropropene | 30.0000 | 29.6104 | 1.3 | 25.0 |
| 23 Carbon Tetrachloride | 30.0000 | 29.3152 | 2.3 | 25.0 |
| 16 1,2-Dichloroethane | 30.0000 | 28.6451 | 4.5 | 25.0 |
| 30 Benzene | 30.0000 | 29.0007 | 3.3 | 25.0 |
| 90 Fluorobenzene | 10.0000 | 10.0000 | 0.0 | 25.0 |
| 29 Trichloroethene | 30.0000 | 28.8111 | 4.0 | 25.0 |
| 26 1,2-Dichloropropane | 30.0000 | 29.3110 | 2.3 | 25.0 |
| 34 Dibromomethane | 30.0000 | 28.6685 | 4.4 | 25.0 |
| 25 Bromodichloromethane | 30.0000 | 28.3032 | 5.7 | 25.0 |
| 28 cis-1,3-Dichloropropene | 30.0000 | 29.2735 | 2.4 | 25.0 |
| 38 4-Methyl-2-pentanone | 60 10 0.0000 | 56.8528 | 52.6 | 25.0 |
| 45 Toluene | 30.0000 | 27.5550 | 8.1 | 25.0 |
| 31 trans-1,3-Dichloropropene | 30.0000 | 28.4103 | 5.3 | 25.0 |
| 32 1,1,2-Trichloroethane | 30.0000 | 28.0295 | 6.6 | 25.0 |
| 43 2-Hexanone | 60 10 0.0000 | 58.0190 | 51.7 | 25.0 |
| 109 1,3-Dichloropropane | 30.0000 | 28.4999 | 5.0 | 25.0 |
| 42 Tetrachloroethene | 30.0000 | 28.7489 | 4.2 | 25.0 |
| 36 Dibromochloromethane | 30.0000 | 28.2009 | 6.0 | 25.0 |
| 58 1,2-Dibromoethane | 30.0000 | 28.2306 | 5.9 | 25.0 |
| 92 1-Chlorohexane | 30.0000 | 27.2552 | 9.1 | 25.0 |

ALL < 25%

3.2% OK 5/25/04

1.9% OK 5/25/04

5.2% OK 5/25/04

3.3% OK 5/25/04

INITIAL CALIBRATION VERIFICATION

Instrument ID: R2.i
Lab File ID: rr6224.d
Analysis Type: WATER

Injection Date: 25-MAY-2004 21:36
Lab Sample ID: SSV030
Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m

| COMPOUND | EXPECTED CONC. | MEASURED CONC. | %D | MAX %D |
|--------------------------------|-------------------|-------------------|------|-----------|
| 39 Chlorobenzene-d5 | 10.0000 | 10.0000 | 0.0 | 25.0 |
| 46 Chlorobenzene | 30.0000 | 29.1215 | 2.9 | 25.0 |
| 74 1,1,1,2-Tetrachloroethane | 30.0000 | 28.5535 | 4.8 | 25.0 |
| 47 Ethylbenzene | 30.0000 | 28.2615 | 5.8 | 25.0 |
| 0 m and p-Xylene | 60.0000 | 57.8606 | 3.6 | 25.0 |
| 49 Styrene | 30.0000 | 28.6425 | 4.5 | 25.0 |
| 0 o-Xylene | 30.0000 | 27.9992 | 6.7 | 25.0 |
| 37 Bromoform | 30.0000 | 28.7626 | 4.1 | 25.0 |
| 79 isopropyl benzene | 30.0000 | 27.3220 | 8.9 | 25.0 |
| 40 1,1,2,2-Tetrachloroethane | 30.0000 | 27.3070 | 9.0 | 25.0 |
| 50 1,2,3-Trichloropropane | 30.0000 | 26.9149 | 10.3 | 25.0 |
| 95 Bromobenzene | 30.0000 | 27.4576 | 8.5 | 25.0 |
| 96 n-Propylbenzene | 30.0000 | 29.0518 | 3.2 | 25.0 |
| 97 2-Chlorotoluene | 30.0000 | 27.9066 | 7.0 | 25.0 |
| 98 1,3,5-Trimethylbenzene | 30.0000 | 28.5634 | 4.8 | 25.0 |
| 99 4-Chlorotoluene | 30.0000 | 28.3593 | 5.5 | 25.0 |
| 100 tert-Butylbenzene | 30.0000 | 29.1214 | 2.9 | 25.0 |
| 101 1,2,4-Trimethylbenzene | 30.0000 | 29.1481 | 2.8 | 25.0 |
| 102 sec-Butylbenzene | 30.0000 | 29.5027 | 1.7 | 25.0 |
| 103 4-Isopropyltoluene | 30.0000 | 28.1704 | 6.1 | 25.0 |
| 61 m-Dichlorobenzene | 30.0000 | 28.1674 | 6.1 | 25.0 |
| 91 1,4-Dichlorobenzene-d4 | 10.0000 | 10.0000 | 0.0 | 25.0 |
| 62 p-dichlorobenzene | 30.0000 | 28.1138 | 6.3 | 25.0 |
| 104 n-Butylbenzene | 30.0000 | 30.1821 | 0.6 | 25.0 |
| 63 o-Dichlorobenzene | 30.0000 | 28.9207 | 3.6 | 25.0 |
| 75 1,2-Dibromo-3-chloropropane | 30.0000 | 27.5682 | 8.1 | 25.0 |
| 105 1,2,4-Trichlorobenzene | 30.0000 | 30.3634 | 1.2 | 25.0 |
| 106 Hexachlorobutadiene | 30.0000 | 29.4477 | 1.8 | 25.0 |
| 107 Napthalene | 30.0000 | 30.0318 | 0.1 | 25.0 |
| 108 1,2,3-Trichlorobenzene | 30.0000 | 28.9912 | 3.4 | 25.0 |

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052504i.b/rr6224.d
Lab Smp Id: SSV030 Client Smp ID: SSV030
Inj Date : 25-MAY-2004 21:36
Operator : reinharj Inst ID: R2.i
Smp Info : SSV030,,
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m
Meth Date : 25-May-2004 21:57 reinharj Quant Type: ISTD
Cal Date : 25-MAY-2004 21:11 Cal File: rr6223.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: main-ICV.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| Compounds | QUANT | SIG | | | | | | CONCENTRATIONS | |
|--------------------------------|-------|-----|--------|--------|---------|--------|----------|----------------|---------|
| | | | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN | FINAL |
| | | | | | | | | (ug/L) | (ug/L) |
| * 56 Fluorobenzene | 96 | | 8.636 | 8.634 | (1.000) | | 1209337 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | | 11.577 | 11.575 | (1.000) | | 325482 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | | 14.174 | 14.182 | (1.000) | | 541329 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | | | 1813784 | 56.8751 | 56.8751 |
| M 2 Xylene (total) | 106 | | | | | | 5444909 | 85.8598 | 85.8598 |
| 3 dichlorodifluoromethane | 85 | | 4.357 | 4.355 | (0.505) | | 2984871 | 26.7227 | 26.7227 |
| 5 Chloromethane | 50 | | 4.662 | 4.660 | (0.540) | | 1458852 | 27.2351 | 27.2351 |
| 6 Vinyl Chloride | 62 | | 4.849 | 4.847 | (0.561) | | 1449056 | 28.5516 | 28.5516 |
| 8 Bromomethane | 94 | | 5.429 | 5.427 | (0.629) | | 2219901 | 32.4127 | 32.4127 |
| 9 Chloroethane | 64 | | 5.567 | 5.565 | (0.645) | | 1995248 | 27.7253 | 27.7253 |
| 11 Trichlorofluoromethane | 101 | | 5.931 | 5.929 | (0.687) | | 3519266 | 28.0727 | 28.0727 |
| 19 1,1-Dichloroethene | 96 | | 6.482 | 6.480 | (0.751) | | 1237033 | 28.3033 | 28.3033 |
| 18 Acetone | 43 | | 6.452 | 6.450 | (0.747) | | 329930 | 61.9393 | 61.9393 |
| 27 Methylene Chloride | 84 | | 6.836 | 6.834 | (0.792) | | 969829 | 26.3275 | 26.3275 |
| 30 trans-1,2-Dichloroethene | 96 | | 7.052 | 7.050 | (0.817) | | 947828 | 29.4461 | 29.4461 |
| 34 1,1-Dichloroethane | 63 | | 7.338 | 7.335 | (0.850) | | 1577172 | 28.5973 | 28.5972 |

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | | |
|------------------------------|-----------|----------------|--------|---------|---------|----------|-------------|---------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN | FINAL |
| | | | | | | | (ug/L) | (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== | |
| 40 cis-1,2-Dichloroethene | 96 | 7.741 | 7.739 | (0.896) | 865956 | 27.4290 | 27.4290 | |
| 37 2-Butanone | 43 | 7.692 | 7.689 | (0.891) | 282092 | 61.1130 | 61.1130 | |
| 41 2,2-Dichloropropane | 77 | 7.761 | 7.758 | (0.899) | 1477867 | 28.5890 | 28.5890 | |
| 43 Bromochloromethane | 128 | 7.928 | 7.926 | (0.918) | 364816 | 28.6431 | 28.6431 | |
| 44 Chloroform | 83 | 7.948 | 7.945 | (0.920) | 1822572 | 29.3626 | 29.3626 | |
| 47 1,1,1-Trichloroethane | 97 | 8.154 | 8.152 | (0.944) | 1679566 | 28.4136 | 28.4136 | |
| 50 1,1-Dichloropropene | 75 | 8.262 | 8.270 | (0.957) | 1359538 | 29.6104 | 29.6104 | |
| 51 Carbon Tetrachloride | 117 | 8.292 | 8.299 | (0.960) | 1554199 | 29.3152 | 29.3152 | |
| 54 Benzene | 78 | 8.439 | 8.447 | (0.977) | 3163591 | 29.0007 | 29.0007 | |
| 53 1,2-Dichloroethane | 62 | 8.420 | 8.417 | (0.975) | 1024134 | 28.6451 | 28.6451 | |
| 58 Trichloroethene | 130 | 8.961 | 8.958 | (1.038) | 958553 | 28.8111 | 28.8111 | |
| 61 1,2-Dichloropropane | 63 | 9.148 | 9.155 | (1.059) | 849947 | 29.3110 | 29.3110 | |
| 64 Dibromomethane | 93 | 9.266 | 9.263 | (1.073) | 530877 | 28.6685 | 28.6685 | |
| 65 Bromodichloromethane | 83 | 9.364 | 9.362 | (1.084) | 1335921 | 28.3032 | 28.3032 | |
| 68 cis-1,3-Dichloropropene | 75 | 9.777 | 9.775 | (0.845) | 1425129 | 29.2735 | 29.2735 | |
| 69 4-Methyl-2-pentanone | 43 | 9.866 | 9.863 | (0.852) | 752075 | 56.8528 | 56.8528 | |
| 71 Toluene | 91 | 10.151 | 10.149 | (0.877) | 3705285 | 27.5550 | 27.5550 | |
| 72 trans-1,3-Dichloropropene | 75 | 10.289 | 10.286 | (0.889) | 1137914 | 28.4103 | 28.4103 | |
| 74 1,1,2-Trichloroethane | 97 | 10.495 | 10.503 | (0.907) | 550883 | 28.0295 | 28.0295 | |
| 76 1,3-Dichloropropane | 76 | 10.682 | 10.690 | (0.923) | 929507 | 28.4999 | 28.4999 | |
| 77 Tetrachloroethene | 164 | 10.731 | 10.729 | (0.927) | 976126 | 28.7489 | 28.7489 | |
| 75 2-Hexanone | 43 | 10.682 | 10.680 | (0.923) | 548751 | 58.0190 | 58.0190 | |
| 78 Dibromochloromethane | 129 | 10.948 | 10.945 | (0.946) | 937230 | 28.2009 | 28.2009 | |
| 80 1,2-Dibromoethane | 107 | 11.105 | 11.113 | (0.959) | 668535 | 28.2306 | 28.2306 | |
| 81 1-Chlorohexane | 91 | 11.489 | 11.496 | (0.992) | 1680772 | 27.2552 | 27.2552 | |
| 83 Chlorobenzene | 112 | 11.607 | 11.604 | (1.003) | 2828311 | 29.1215 | 29.1215 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 11.666 | 11.663 | (1.008) | 1021791 | 28.5535 | 28.5535 | |
| 85 Ethylbenzene | 106 | 11.685 | 11.683 | (1.009) | 1464407 | 28.2615 | 28.2615 | |
| 86 m and p-Xylene | 106 | 11.794 | 11.801 | (1.019) | 3666518 | 57.8606 | 57.8606 | |
| 87 o-Xylene | 106 | 12.236 | 12.234 | (1.057) | 1778391 | 27.9992 | 27.9992 | |
| 88 Styrene | 104 | 12.236 | 12.234 | (1.057) | 2983845 | 28.6425 | 28.6425 | |
| 89 Bromoform | 173 | 12.482 | 12.480 | (1.078) | 606059 | 28.7626 | 28.7626 | |
| 90 isopropyl benzene | 105 | 12.610 | 12.608 | (1.089) | 5060758 | 27.3220 | 27.3220 | |
| 94 1,1,2,2-Tetrachloroethane | 83 | 12.885 | 12.893 | (1.113) | 744632 | 27.3070 | 27.3070 | |
| 97 Bromobenzene | 156 | 13.013 | 13.021 | (0.918) | 1301882 | 27.4576 | 27.4576 | |
| 96 1,2,3-Trichloropropane | 110 | 12.974 | 12.972 | (0.915) | 161671 | 26.9149 | 26.9148 (Q) | |
| 98 n-Propylbenzene | 120 | 13.062 | 13.060 | (0.922) | 1359114 | 29.0518 | 29.0518 | |
| 99 2-Chlorotoluene | 126 | 13.210 | 13.208 | (0.932) | 1219952 | 27.9066 | 27.9066 | |
| 100 1,3,5-Trimethylbenzene | 105 | 13.240 | 13.237 | (0.934) | 4479487 | 28.5634 | 28.5634 | |
| 101 4-Chlorotoluene | 126 | 13.328 | 13.326 | (0.940) | 1248626 | 28.3593 | 28.3593 | |
| 102 tert-Butylbenzene | 119 | 13.653 | 13.650 | (0.963) | 3695669 | 29.1214 | 29.1214 | |
| 103 1,2,4-Trimethylbenzene | 105 | 13.702 | 13.700 | (0.967) | 4441921 | 29.1481 | 29.1481 | |
| 104 sec-Butylbenzene | 134 | 13.908 | 13.916 | (0.981) | 948883 | 29.5027 | 29.5027 | |
| 106 m-Dichlorobenzene | 146 | 14.105 | 14.113 | (0.995) | 2378258 | 28.1674 | 28.1674 | |
| 105 4-Isopropyltoluene | 119 | 14.066 | 14.064 | (0.992) | 4409084 | 28.1704 | 28.1704 | |
| 108 p-dichlorobenzene | 146 | 14.213 | 14.211 | (1.003) | 2275128 | 28.1138 | 28.1138 | |
| 110 n-Butylbenzene | 91 | 14.587 | 14.585 | (1.029) | 4848436 | 30.1821 | 30.1821 | |

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | | |
|---------------------------------|-----------|----------------|--------|---------|---------|----------|----------------------|------------------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 111 o-Dichlorobenzene | 146 | 14.715 | 14.713 | {1.038} | 1997696 | 28.9207 | 28.9207 | |
| 112 1,2-Dibromo-3-chloropropane | 157 | 15.797 | 15.795 | {1.115} | 115447 | 27.5682 | 27.5682 | |
| 113 1,2,4-Trichlorobenzene | 180 | 17.233 | 17.231 | {1.216} | 1154695 | 30.3634 | 30.3634 | |
| 114 Hexachlorobutadiene | 225 | 17.518 | 17.526 | {1.236} | 836494 | 29.4477 | 29.4477 | |
| 115 Napthalene | 128 | 17.754 | 17.752 | {1.253} | 1149906 | 30.0318 | 30.0318 | |
| 116 1,2,3-Trichlorobenzene | 180 | 18.256 | 18.254 | {1.288} | 860902 | 28.9912 | 28.9912 | |

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/R2.i/052504i.b/rr6224.d
Report Date: 25-May-2004 21:57

Page 4

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052504i.b/rr6224.d
Lab Smp Id: SSV030 Client Smp ID: SSV030
Inj Date : 25-MAY-2004 21:36
Operator : reinharj Inst ID: R2.i
Smp Info : SSV030,,
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m
Meth Date : 25-May-2004 21:57 reinharj Quant Type: ISTD
Cal Date : 25-MAY-2004 21:11 Cal File: rr6223.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: main-ICV.sub
Target Version: 3.40
Processing Host: chemsv02

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|---|---------------------------|
| Instrument ID: R2.i | Calibration Date: 05/25/4 |
| Lab File ID: rr6224.d | Calibration Time: 2021 |
| Lab Smp Id: SSV030 | Client Smp ID: SSV030 |
| Analysis Type: VOA | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: reinharj | |
| Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m | |
| Misc Info: | |

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 1181127 | 590564 | 2362254 | 1209337 | 2.39 |
| 82 Chlorobenzene-d5 | 309128 | 154564 | 618256 | 325482 | 5.29 |
| 107 1,4-Dichlorobenze | 483986 | 241993 | 967972 | 541329 | 11.85 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.64 | -0.02 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.58 | -0.02 |
| 107 1,4-Dichlorobenze | 14.18 | 13.68 | 14.68 | 14.17 | -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/R2.i/052504i.b/rr6224.d

Date : 25-MAY-2004 21:36

Client ID: SSV030

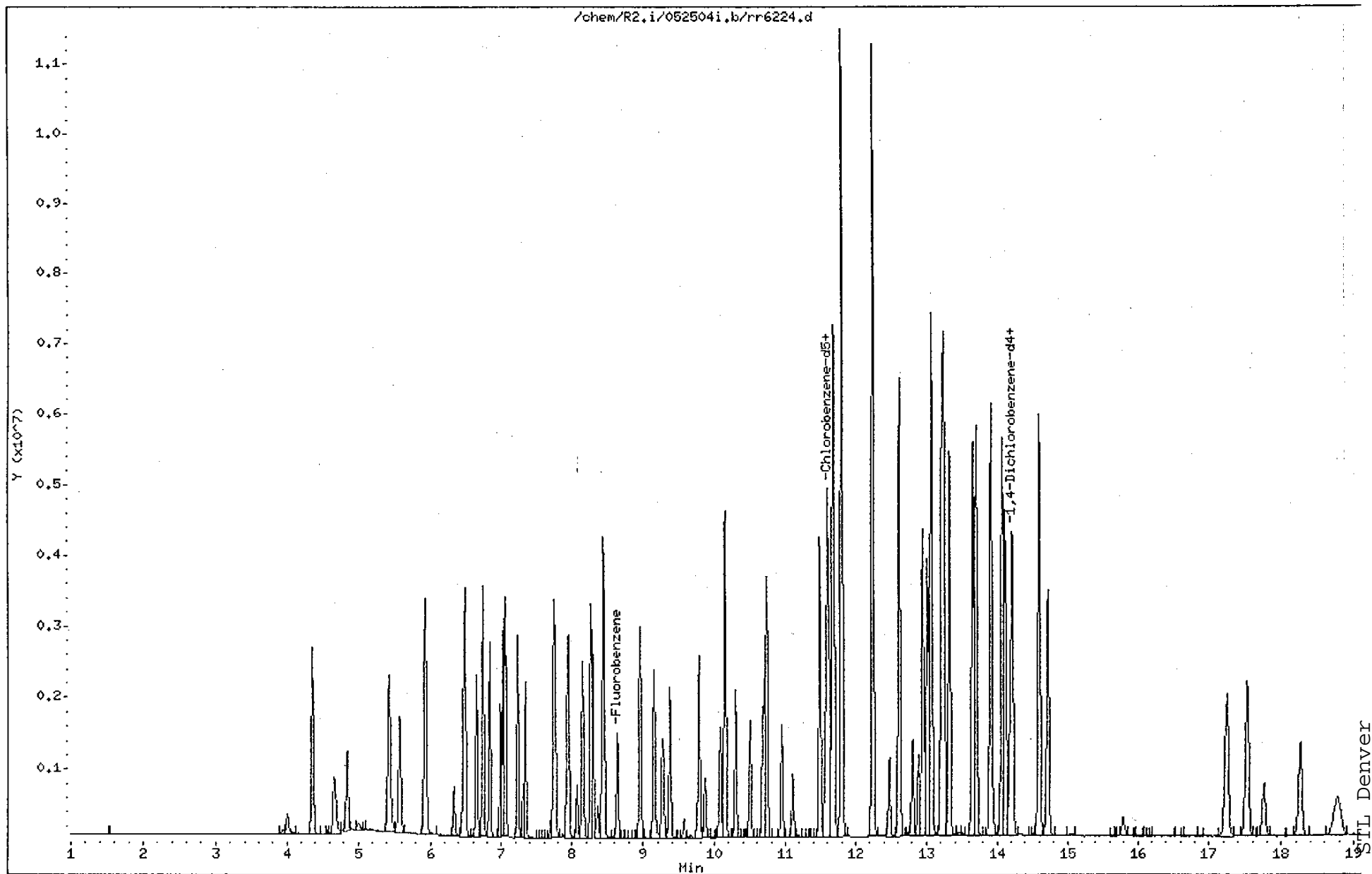
Sample Info: SSV030,,

Column phase: HP624

Instrument: R2.i

Operator: reinharj

Column diameter: 0.32



GC/MS Initial Calibration Review Checklist

STL Denver

Instrument ID and Date:

R2 Supp 5/25/04Check Method Used: Analysis ☐ 625 ☐ 8270 ☐ Other SV _____☐ 524.2 ☐ 624 ☒ 8260B ☐ Other VOA _____VOA Preparation ☐ 5mL ☒ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

| Review Items | ----- Level 1 ----- | | | Level 2 | Comments |
|--|---------------------|----|-----|---------|---------------------------------------|
| | Yes | No | N/A | | |
| Initial Calibration | | | | | |
| 1. BFB/DFTPP meets criteria? | / | | | / | |
| 2. ICAL date and instrument ID verified? | / | | | / | |
| 3. Sufficient number of calibration points used? | / | | | / | |
| 4. Reasons for removal of points documented? | / | | | / | SOME pts < RL REMOVED |
| 5. %RSD or correlation coefficient within method limits? | / | | | / | |
| 6. If RRF used for ICAL, were all compounds within 15% RSD? | / | | | / | List all exceptions below (cpd & RSD) |
| 7. Response factors meet criteria? | / | | | / | |
| 8. Isomeric pairs checked for correct peak assignment? | / | | | / | |
| 9. Data checked for detector saturation? | / | | | / | |
| 10. Standards traceability properly documented? | / | | | / | |
| 11. Manual integrations documented and checked? | | | / | N/A | |
| 12. 2 nd source ICV recovery 75-125% for DoD projects, 65-135% ($\pm 55\%$ of expected for poor performers) for non-DoD? | | | / | N/A | SEE MAIN ICA |

High pt 2CIEVE = 30 ppb
 High pt ETBE = 150 ppb

1st Level Reviewer:

OR

Date:

5/25/04

2nd Level Reviewer:

JMY

Date:

05/28/04

GC/MS Volatile Analysis

Instrument R2
5972 MSD

STL, Denver

| Column | Phase | Inj. Temp | Init. Time | Ramp Rate | Final Temp | Flow cc/min | Press. Psi | Type | Vac. Range | Source Temp | Mass Range |
|--------|--------|-----------|------------|-----------|------------|-------------|------------|------|------------------|-------------|-----------------------|
| 75M | DB-624 | 200C | 2 min. | 5C/min | 65C | 18 | 20 | MS | 10 ⁻⁶ | -175C | 35-300/2 ² |
| | | | 0 min. | 12C/min | 155C | | | | | | |
| | | | 0 min. | 25C/min | 210C | | | | | | |

DEN-MS-0010 (82608/624/524.2)
(Circle as appropriate)

Comments

Target Batch (Directory): R2 052504i.bIS/SS # 104-04

QuantIMS Batch:

| Lot # | Sample | W.O.# | Purge vol (ml) | Sample amt (ml/g) | Date | Initials | File Number | IS OK | SS OK | DIL OK | 24 hr | pH | Comments | ALS |
|----------------|--------|-------------|----------------|-------------------|---------|----------|-------------|-------|-------|--------|-------|----|--------------|-----|
| BFB | | 1ul div inj | | | 5/25/04 | EL | R2 6217.d | | | | | | #73-04 1836 | |
| MAIN 001 | | | 20 | 0.5 µl | | | 18 | | | | | | #61/83-04 | |
| 2 | | | | 1.0 | | | 19 | | | | | | | |
| 5 | | | | 2.5 | | | 20 | | | | | | | |
| 10 | | | | 5.0 | | | 21 | | | | | | | |
| 30 | | | | 15.0 | | | 22 | | | | | | | |
| 60 | | | | 30.0 | | | 23 | | | | | | | |
| SSV030 | | | | 15.0 | | | 24 | | | | | | #61/60/91-04 | |
| SUPP001 | | | | 0.5 | | | 25 | | | | | | #52/11-04 | |
| 2 | | | | 1.0 | | | 26 | | | | | | | |
| 5 | | | | 2.5 | | | 27 | | | | | | | |
| 10 | | | | 5.0 | | | 28 | | | | | | | |
| 30 | | | | 15.0 | | | 29 | | | | | | | |
| 60 | | | | 30.0 | | | 30 | | | | | | | |
| LCS | | | | 20 | | | 31 | | | | | | | |
| VBK | | | | | | | 32 | | | | | | | |
| | | | | | | | 33 | | | | | | | |
| DAE190320 | 2 | | | | | | 34 | | | | | 7 | | |
| DAE190322 | 11 | | | | | | 35 | | | | | 7 | | |
| DAE190320 | 1 | | | | | | 36 | | | | | 7 | | |

Report Date: 26-May-2004 01:02

Calibration History

Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m

Start Cal Date: 25-MAY-2004 19:05

End Cal Date : 26-MAY-2004 00:31

Initial Calibration

| Injection Date | Sublist | Calibration File |
|------------------------------------|---------|-------------------------------|
| Cal Level: 1 , Cal Amount: 1.00000 | | |
| 25-MAY-2004 22:27 | 2-supp | /chem/R2.i/052504i.b/rr6225.d |
| 25-MAY-2004 19:05 | 1-main | /chem/R2.i/052504i.b/rr6218.d |
| Cal Level: 2 , Cal Amount: 2.00000 | | |
| 25-MAY-2004 22:52 | 2-supp | /chem/R2.i/052504i.b/rr6226.d |
| 25-MAY-2004 19:31 | 1-main | /chem/R2.i/052504i.b/rr6219.d |
| Cal Level: 3 , Cal Amount: 5.00000 | | |
| 25-MAY-2004 23:17 | 2-supp | /chem/R2.i/052504i.b/rr6227.d |
| 25-MAY-2004 19:56 | 1-main | /chem/R2.i/052504i.b/rr6220.d |
| Cal Level: 4 , Cal Amount: 10.0000 | | |
| 25-MAY-2004 23:42 | 2-supp | /chem/R2.i/052504i.b/rr6228.d |
| 25-MAY-2004 20:21 | 1-main | /chem/R2.i/052504i.b/rr6221.d |
| Cal Level: 5 , Cal Amount: 30.0000 | | |
| 26-MAY-2004 00:06 | 2-supp | /chem/R2.i/052504i.b/rr6229.d |
| 25-MAY-2004 20:46 | 1-main | /chem/R2.i/052504i.b/rr6222.d |
| Cal Level: 6 , Cal Amount: 60.0000 | | |
| 26-MAY-2004 00:31 | 2-supp | /chem/R2.i/052504i.b/rr6230.d |
| 25-MAY-2004 21:11 | 1-main | /chem/R2.i/052504i.b/rr6223.d |

Continuing Calibration

| | | |
|-------------------|--------|-------------------------------|
| 25-MAY-2004 23:42 | 2-supp | /chem/R2.i/052504i.b/rr6228.d |
| 25-MAY-2004 20:21 | 1-main | /chem/R2.i/052504i.b/rr6221.d |

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 25-MAY-2004 19:05
 End Cal Date : 26-MAY-2004 00:31
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/R2.i/052504i.b/R2-20ml-h2o.m
 Cal Date : 26-May-2004 01:03 meierg
 Curve Type : Average

Calibration File Names:

Level 1: /chem/R2.i/052504i.b/rr6225.d
 Level 2: /chem/R2.i/052504i.b/rr6226.d
 Level 3: /chem/R2.i/052504i.b/rr6227.d
 Level 4: /chem/R2.i/052504i.b/rr6228.d
 Level 5: /chem/R2.i/052504i.b/rr6229.d
 Level 6: /chem/R2.i/052504i.b/rr6230.d

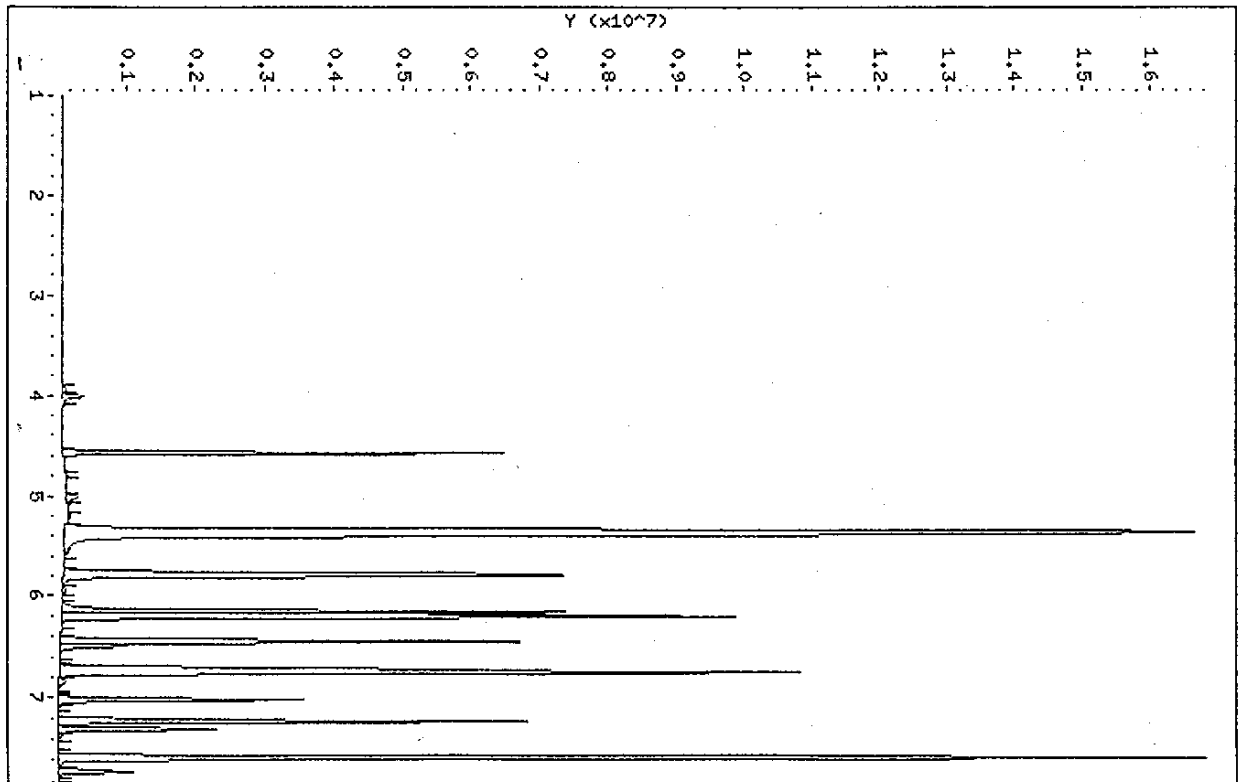
| Compound | 1.000 Level 1 | 2.000 Level 2 | 5.000 Level 3 | 10.000 Level 4 | 30.000 Level 5 | 60.000 Level 6 | RRF | % RSD |
|---------------------------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|---------|--------|
| 4 dichlorotetrafluoroethane | 0.61074 | 0.50128 | 0.48628 | 0.50349 | 0.50185 | 0.50843 | 0.51868 | 8.812 |
| 7 Ethylene Oxide | 0.02477 | 0.02155 | 0.02303 | 0.02239 | 0.02035 | 0.01886 | 0.02182 | 9.506 |
| 10 Dichlorofluoromethane | 1.62375 | 1.33409 | 1.31774 | 1.41989 | 1.37436 | 1.41497 | 1.41414 | 7.827 |
| 13 1,2-dichloro-1,1,2-trifluoroethane | 0.53625 | 0.39272 | 0.44039 | 0.47021 | 0.44635 | 0.44111 | 0.45451 | 10.409 |
| 14 Ethyl Ether | 0.28866 | 0.24730 | 0.24597 | 0.25553 | 0.24268 | 0.23473 | 0.25248 | 7.512 |
| 15 2,2-dichloro-1,1,1-trifluoroethane | 0.95727 | 0.76923 | 0.75135 | 0.81313 | 0.78823 | 0.77258 | 0.80863 | 9.363 |
| 17 Trichlorotrifluoroethane | 0.39709 | 0.31911 | 0.32153 | 0.32649 | 0.33418 | 0.33403 | 0.33874 | 8.637 |
| 20 2-Propanol | 0.00940 | 0.00759 | 0.00881 | 0.00847 | 0.00985 | 0.01024 | 0.00906 | 10.667 |
| 23 Methyl acetate | 0.10713 | 0.10340 | 0.10883 | 0.10616 | 0.09897 | 0.10244 | 0.10449 | 3.435 |
| 24 Carbon Disulfide | 1.59264 | 1.30819 | 1.28211 | 1.37068 | 1.30158 | 1.34405 | 1.36654 | 8.433 |
| 25 Allyl Chloride | 0.62604 | 0.49741 | 0.50195 | 0.53384 | 0.50141 | 0.52290 | 0.53059 | 9.215 |
| 29 Methyl t-butyl ether | +++++ | 0.40969 | 0.40533 | 0.41998 | 0.40046 | 0.41508 | 0.41011 | 1.881 |
| 31 Hexane | 0.40267 | 0.30994 | 0.31270 | 0.32806 | 0.31913 | 0.33105 | 0.33393 | 10.385 |
| 32 Vinyl acetate | 0.24483 | 0.22461 | 0.22811 | 0.23336 | 0.23003 | 0.21553 | 0.22941 | 4.233 |
| 36 ETBE | 0.59632 | 0.49008 | 0.51037 | 0.53428 | 0.49516 | +++++ | 0.52524 | 8.241 |
| 38 Ethyl Acetate | 0.08651 | 0.07679 | 0.08423 | 0.08088 | 0.08369 | 0.08245 | 0.08242 | 4.050 |
| 45 Tetrahydrofuran | +++++ | 0.02142 | 0.02011 | 0.02199 | 0.01865 | 0.02020 | 0.02048 | 6.342 |
| 49 Cyclohexane | 0.47162 | 0.37799 | 0.37248 | 0.39570 | 0.38408 | 0.38005 | 0.39699 | 9.416 |
| 55 TAME | 0.48600 | 0.41391 | 0.41135 | 0.42951 | 0.40904 | 0.39733 | 0.42452 | 7.501 |
| 59 2-Pentanone | 0.07873 | 0.07416 | 0.07563 | 0.07469 | 0.07188 | 0.07113 | 0.07437 | 3.681 |
| 60 Methyl Methacrylate | 0.02982 | 0.02574 | 0.02677 | 0.02537 | 0.02440 | 0.02506 | 0.02619 | 7.416 |
| 62 Methyl cyclohexane | 0.50326 | 0.40095 | 0.40770 | 0.39837 | 0.40389 | 0.39839 | 0.41876 | 9.921 |
| 66 2-nitropropane | +++++ | 0.12433 | 0.12610 | 0.13547 | 0.12499 | 0.13493 | 0.12916 | 4.298 |
| 67 2-Chloroethyl vinyl ether | 0.13275 | 0.13620 | 0.15451 | 0.16611 | 0.16948 | +++++ | 0.15181 | 11.077 |
| 73 Ethyl methacrylate | 0.66430 | 0.60763 | 0.59374 | 0.65372 | 0.59322 | 0.62508 | 0.62295 | 4.886 |

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 25-MAY-2004 19:05
 End Cal Date : 26-MAY-2004 00:31
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/R2.i/052504i.b/R2-20ml-h2o.m
 Cal Date : 26-May-2004 01:03 meierg
 Curve Type : Average

| Compound | 1.000 Level 1 | 2.000 Level 2 | 5.000 Level 3 | 10.000 Level 4 | 30.000 Level 5 | 60.000 Level 6 | RRF | % RSD |
|-----------------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|---------|--------|
| 79 Tetrahydrothiophene | 0.08341 | 0.07273 | 0.07571 | 0.08030 | 0.07471 | 0.07678 | 0.07727 | 5.070 |
| 91 c-1,4-Dichloro-2-butene | 0.22040 | 0.18499 | 0.16972 | 0.17947 | 0.16365 | 0.18369 | 0.18365 | 10.791 |
| 95 t-1,4-Dichloro-2-butene | 0.16080 | 0.12708 | 0.12197 | 0.11697 | 0.11460 | 0.12188 | 0.12722 | 13.377 |
| 109 1,2,3-Trimethylbenzene | 3.03014 | 2.59238 | 2.51110 | 2.66517 | 2.59961 | 2.76917 | 2.69460 | 6.886 |
| \$ 46 Dibromofluoromethane | 0.34887 | 0.33067 | 0.31747 | 0.33098 | 0.33068 | +++++ | 0.33173 | 3.370 |
| \$ 52 1,2-Dichloroethane-d4 | 0.30082 | 0.27151 | 0.24756 | 0.23943 | 0.25728 | +++++ | 0.26332 | 9.164 |
| \$ 70 Toluene-d8 | 4.11061 | 3.67256 | 3.25120 | 3.64538 | 3.47071 | +++++ | 3.63009 | 8.732 |
| \$ 93 Bromofluorobenzene | 1.93524 | 1.73403 | 1.62355 | 1.72722 | 1.69412 | +++++ | 1.74283 | 6.663 |



Data File: /chem/R2.i/052504i.b/rm6230.d
 Date : 26-MAY-2004 00:31
 Client ID: SUPP060
 Sample Info: SUPP060,,
 Column phase: HP624

Date : 25-MAY-2004 18:36

Client ID: BFB

Instrument: R2.i

Sample Info: BFB,,

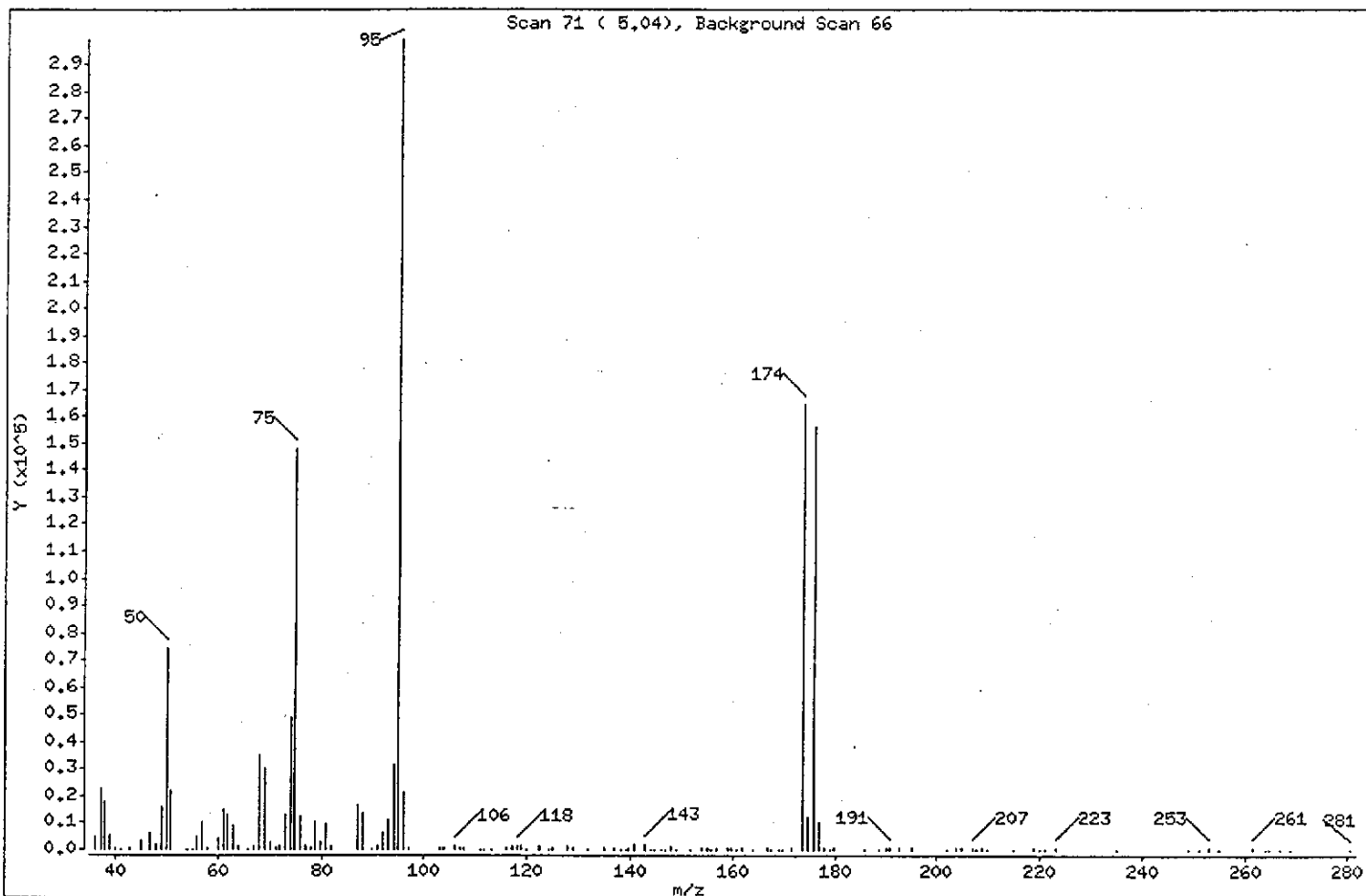
Volume Injected (uL): 2.0

Operator: meierg

Column phase: HP624

Column diameter: 0.32

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 | 24.90 |
| 75 | 30.00 - 60.00% of mass 95 | 49.51 |
| 96 | 5.00 - 9.00% of mass 95 | 7.14 |
| 173 | Less than 2.00% of mass 174 | 0.00 (0.00) |
| 174 | 50.00 - 100.00% of mass 95 | 54.90 |
| 175 | 5.00 - 9.00% of mass 174 | 4.03 (7.34) |
| 176 | 95.00 - 101.00% of mass 174 | 52.20 (95.09) |
| 177 | 5.00 - 9.00% of mass 176 | 3.37 (6.46) |

Date : 25-MAY-2004 18:36

Client ID: BFB

Instrument: R2.1

Sample Info: BFB,,

Volume Injected (uL): 2.0

Operator: meierg

Column phase: HP624

Column diameter: 0.32

Data File: rr6217.d

Spectrum: Scan 71 (5.04), Background Scan 66

Location of Maximum: 94.95

Number of points: 134

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|-------|--------|--------|--------|--------|--------|--------|-----|
| 35.95 | 4592 | 76.90 | 1182 | 131.90 | 158 | 178.90 | 170 |
| 36.95 | 22912 | 77.90 | 662 | 134.90 | 870 | 179.80 | 461 |
| 37.95 | 17872 | 78.80 | 10360 | 136.90 | 349 | 186.00 | 57 |
| 38.95 | 5724 | 79.70 | 3081 | 138.35 | 306 | 188.90 | 26 |
| 39.85 | 705 | 80.80 | 9967 | 139.15 | 65 | 190.00 | 485 |
| 40.95 | 286 | 81.90 | 1576 | 139.75 | 517 | 190.85 | 661 |
| 42.95 | 514 | 86.85 | 16338 | 140.85 | 2023 | 192.85 | 524 |
| 45.00 | 3182 | 87.85 | 14050 | 142.85 | 2242 | 195.05 | 428 |
| 46.90 | 5986 | 89.85 | 129 | 143.85 | 275 | 201.85 | 286 |
| 47.80 | 1956 | 90.85 | 1235 | 144.75 | 157 | 203.80 | 367 |
| 48.90 | 15702 | 91.85 | 6417 | 145.95 | 247 | 204.90 | 424 |
| 49.90 | 74472 | 92.85 | 10992 | 146.85 | 107 | 206.90 | 904 |
| 50.90 | 22224 | 93.95 | 31464 | 147.75 | 1035 | 207.90 | 152 |
| 53.90 | 301 | 94.95 | 299136 | 148.85 | 257 | 208.90 | 374 |
| 54.90 | 330 | 95.95 | 21368 | 151.90 | 206 | 210.00 | 108 |
| 55.90 | 4962 | 96.85 | 827 | 154.00 | 444 | 215.00 | 267 |
| 56.90 | 10298 | 102.90 | 737 | 154.90 | 467 | 218.85 | 657 |
| 58.05 | 638 | 103.90 | 1030 | 155.70 | 157 | 219.95 | 311 |
| 59.95 | 4392 | 105.80 | 1391 | 156.90 | 469 | 220.85 | 155 |
| 60.95 | 15441 | 106.90 | 582 | 158.90 | 506 | 223.05 | 374 |
| 61.95 | 12782 | 107.80 | 696 | 159.80 | 348 | 234.90 | 251 |
| 62.85 | 9107 | 110.95 | 11 | 160.70 | 23 | 248.85 | 137 |
| 63.85 | 1473 | 111.75 | 267 | 161.90 | 378 | 250.95 | 182 |
| 65.85 | 296 | 113.15 | 142 | 163.95 | 188 | 252.85 | 426 |
| 66.95 | 1287 | 115.85 | 874 | 167.05 | 421 | 254.65 | 312 |
| 67.85 | 35088 | 116.95 | 1262 | 167.75 | 147 | 255.15 | 253 |
| 68.85 | 30064 | 117.95 | 1161 | 168.95 | 216 | 261.50 | 406 |
| 69.95 | 2581 | 118.85 | 1090 | 169.75 | 6 | 263.90 | 145 |
| 71.00 | 556 | 119.85 | 220 | 171.65 | 819 | 264.90 | 12 |
| 72.00 | 1351 | 122.55 | 1088 | 173.85 | 164224 | 266.90 | 142 |
| 72.90 | 12961 | 124.10 | 213 | 174.85 | 12053 | 268.90 | 208 |
| 73.90 | 48552 | 124.80 | 506 | 175.85 | 156160 | 280.95 | 6 |
| 74.90 | 148096 | 127.90 | 1130 | 176.75 | 10090 | | |
| 75.90 | 12630 | 128.90 | 746 | 177.90 | 388 | | |

Data File: /chem/R2.i/052504i.b/rr6217.d

Page 1

Date : 25-MAY-2004 18:36

Client ID: BFB

Instrument: R2.i

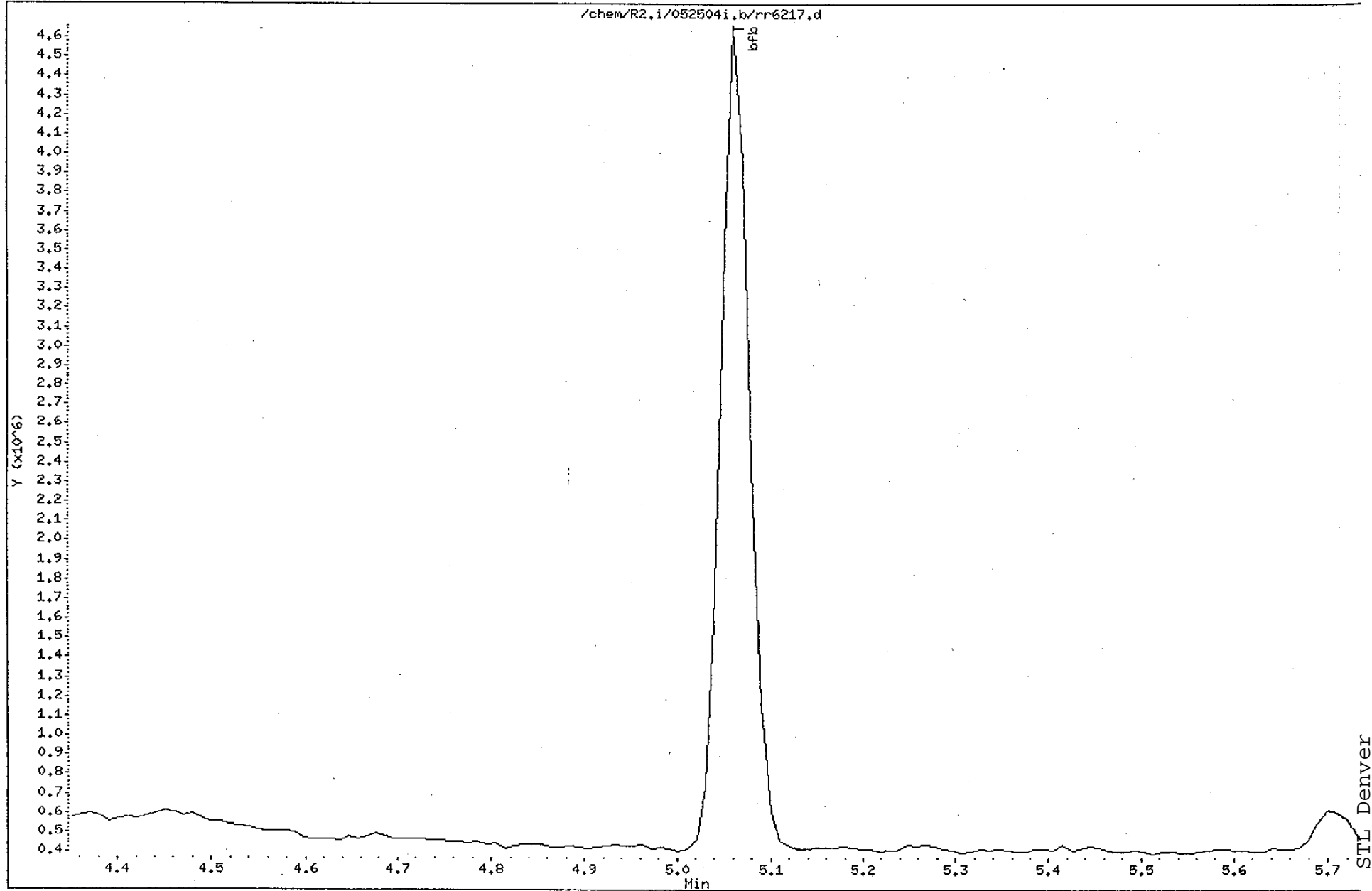
Sample Info: BFB,,

Volume Injected (uL): 2.0

Operator: meierg

Column phase: HP624

Column diameter: 0.32



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052504i.b/rr6225.d

Lab Smp Id: SUPP001

Client Smp ID: SUPP001

Inj Date : 25-MAY-2004 22:27

Operator : reinharj

Inst ID: R2.i

Smp Info : SUPP001,,

Misc Info :

Comment : SOP # CORP-MS-0002 20ml Analysis

Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m

Meth Date : 26-May-2004 01:03 meierg

Quant Type: ISTD

Cal Date : 25-MAY-2004 22:27

Cal File: rr6225.d

Als bottle: 2

Calibration Sample, Level: 1

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 2-supp.sub

Target Version: 3.40

Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 56 Fluorobenzene | 96 | 8.636 | 8.633 | (1.000) | 1160483 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.577 | 11.574 | (1.000) | 307806 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.184 | 14.180 | (1.000) | 466166 | 10.0000 | |
| \$ 46 Dibromofluoromethane | 111 | 8.066 | 8.062 | (0.934) | 40486 | 1.00000 | 1.00000(a) |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 8.361 | 8.357 | (0.968) | 34910 | 1.00000 | 1.00000(a) |
| \$ 70 Toluene-d8 | 98 | 10.072 | 10.079 | (0.870) | 126527 | 1.00000 | 1.00000(a) |
| \$ 93 Bromofluorobenzene | 95 | 12.807 | 12.803 | (1.106) | 59568 | 1.00000 | 1.00000(a) |
| 4 dichlorotetrafluoroethane | 85 | 4.574 | 4.570 | (0.530) | 70875 | 1.00000 | 1.00000 |
| 7 Ethylene Oxide | 43 | 5.370 | 5.347 | (0.622) | 359348 | 125.000 | 125.000(a) |
| 10 Dichlorofluoromethane | 67 | 5.793 | 5.780 | (0.671) | 188434 | 1.00000 | 1.00000(a) |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117 | 6.157 | 6.154 | (0.713) | 62231 | 1.00000 | 1.00000 |
| 14 Ethyl Ether | 59 | 6.197 | 6.193 | (0.718) | 33498 | 1.00000 | 1.00000(a) |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83 | 6.206 | 6.203 | (0.719) | 111090 | 1.00000 | 1.00000 |
| 17 Trichlorotrifluoroethane | 151 | 6.452 | 6.449 | (0.747) | 46082 | 1.00000 | 1.00000(a) |
| 20 2-Propanol | 45 | 6.511 | 6.498 | (0.754) | 21823 | 20.0000 | 20.0000 |
| 23 Methyl acetate | 43 | 6.718 | 6.714 | (0.778) | 62163 | 5.00000 | 5.00000 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ----- | ---- | == | ----- | ----- | ----- | ----- | ----- |
| 24 Carbon Disulfide | 76 | 6.738 | 6.734 | (0.780) | 184823 | 1.00000 | 1.00000(a) |
| 25 Allyl Chloride | 41 | 6.747 | 6.754 | (0.781) | 72651 | 1.00000 | 1.00000(a) |
| 29 Methyl t-butyl ether | 73 | 7.023 | 7.019 | (0.913) | 54204 | 1.00000 | (a) |
| 31 Hexane | 57 | 7.229 | 7.226 | (0.937) | 45729 | 1.00000 | 1.00000(a) |
| 32 Vinyl acetate | 43 | 7.308 | 7.305 | (0.946) | 56825 | 2.00000 | 2.00000 |
| 36 ETBE | 59 | 7.574 | 7.570 | (0.877) | 346007 | 5.00000 | 5.00000 |
| 38 Ethyl Acetate | 43 | 7.711 | 7.698 | (0.893) | 20079 | 2.00000 | 2.00000 |
| 45 Tetrahydrofuran | 42 | 7.967 | 7.954 | (0.923) | 6477 | 2.00000 | (a) |
| 49 Cyclohexane | 56 | 8.223 | 8.229 | (0.952) | 54731 | 1.00000 | 1.00000(a) |
| 55 TAME | 73 | 8.459 | 8.456 | (0.979) | 282000 | 5.00000 | 5.00000 |
| 59 2-Pentanone | 43 | 9.010 | 9.006 | (1.043) | 36547 | 4.00000 | 4.00000 |
| 60 Methyl Methacrylate | 100 | 9.138 | 9.134 | (1.058) | 6921 | 2.00000 | 2.00000 |
| 62 Methyl cyclohexane | 55 | 9.167 | 9.174 | (1.062) | 58402 | 1.00000 | 1.00000 |
| 66 2-nitropropane | 41 | 9.541 | 9.528 | (0.824) | 6487 | 1.00000 | 1.00000(a) |
| 67 2-Chloroethyl vinyl ether | 63 | 9.570 | 9.567 | (0.827) | 4086 | 1.00000 | 1.00000(a) |
| 73 Ethyl methacrylate | 69 | 10.308 | 10.305 | (0.890) | 40895 | 2.00000 | 2.00000 |
| 79 Tetrahydrothiophene | 60 | 10.997 | 10.993 | (1.273) | 9680 | 1.00000 | 1.00000 |
| 91 c-1,4-Dichloro-2-butene | 53 | 12.639 | 12.636 | (1.092) | 6784 | 1.00000 | 1.00000 |
| 95 t-1,4-Dichloro-2-butene | 53 | 12.944 | 12.941 | (0.913) | 7496 | 1.00000 | 1.00000(a) |
| 109 1,2,3-Trimethylbenzene | 105 | 14.243 | 14.239 | (1.004) | 141255 | 1.00000 | 1.00000 |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: R2.i
Lab File ID: rr6225.d
Lab Smp Id: SUPP001
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m
Misc Info:

Calibration Date: 05/25/4
Calibration Time: 2342
Client Smp ID: SUPP001
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1149959 | 574980 | 2299918 | 1160483 | 0.92 |
| 82 Chlorobenzene-d5 | 302802 | 151401 | 605604 | 307806 | 1.65 |
| 107 1,4-Dichlorobenze | 475530 | 237765 | 951060 | 466166 | -1.97 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.63 | 8.13 | 9.13 | 8.64 | 0.03 |
| 82 Chlorobenzene-d5 | 11.57 | 11.07 | 12.07 | 11.58 | 0.02 |
| 107 1,4-Dichlorobenze | 14.18 | 13.68 | 14.68 | 14.18 | 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/R2.i/052504i.b/rr6225.d

Date : 25-MAY-2004 22:27

Client ID: SUPP001

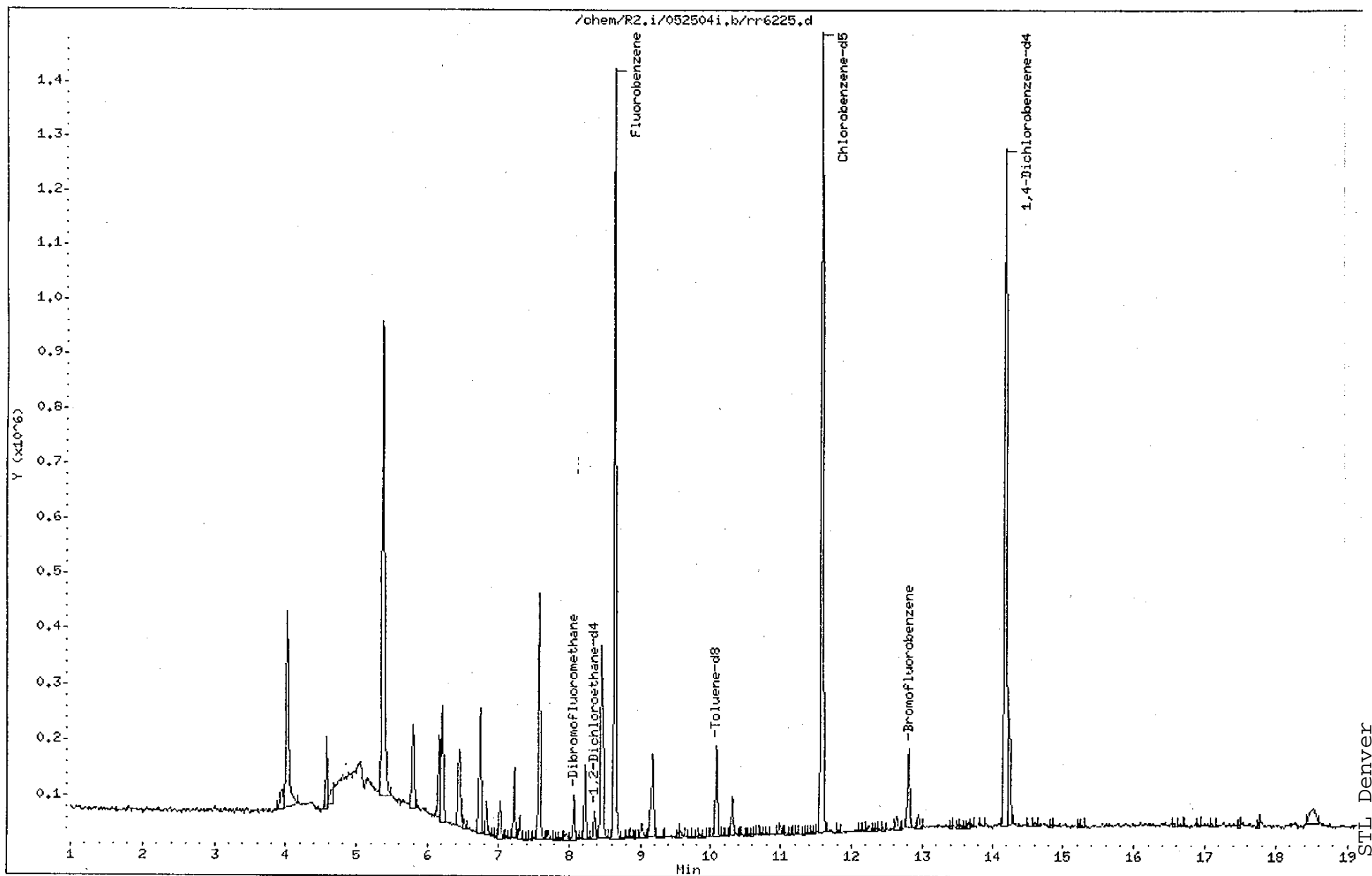
Sample Info: SUPP001,,

Column phase: HP624

Instrument: R2.i

Operator: reinharj

Column diameter: 0,32



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052504i.b/rr6226.d
Lab Smp Id: SUPP002 Client Smp ID: SUPP002
Inj Date : 25-MAY-2004 22:52
Operator : reinharj Inst ID: R2.i
Smp Info : SUPP002,,
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m
Meth Date : 26-May-2004 01:03 meierg Quant Type: ISTD
Cal Date : 25-MAY-2004 22:52 Cal File: rr6226.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-suppl.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| Compounds | QUANT SIG | | | | RESPONSE | AMOUNTS | |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 56 Fluorobenzene | 96 | 8.634 | 8.633 | (1.000) | 1208245 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.575 | 11.574 | (1.000) | 324181 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.181 | 14.180 | (1.000) | 471320 | 10.0000 | |
| \$ 46 Dibromofluoromethane | 111 | 8.063 | 8.062 | (0.934) | 79905 | 2.00000 | 1.94642(a) |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 8.358 | 8.357 | (0.968) | 65609 | 2.00000 | 1.89755(a) |
| \$ 70 Toluene-d8 | 98 | 10.079 | 10.079 | (0.871) | 238115 | 2.00000 | 1.88744(a) |
| \$ 93 Bromofluorobenzene | 95 | 12.804 | 12.803 | (1.106) | 112428 | 2.00000 | 1.89032(a) |
| 4 dichlorotetrafluoroethane | 85 | 4.571 | 4.570 | (0.529) | 121134 | 2.00000 | 1.80314 |
| 7 Ethylene Oxide | 43 | 5.378 | 5.347 | (0.623) | 650892 | 250.000 | 232.600(a) |
| 10 Dichlorofluoromethane | 67 | 5.791 | 5.780 | (0.671) | 322382 | 2.00000 | 1.80414(a) |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117 | 6.155 | 6.154 | (0.713) | 94901 | 2.00000 | 1.69100 |
| 14 Ethyl Ether | 59 | 6.204 | 6.193 | (0.719) | 59760 | 2.00000 | 1.84568(a) |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83 | 6.204 | 6.203 | (0.719) | 185883 | 2.00000 | 1.78216 |
| 17 Trichlorotrifluoroethane | 151 | 6.450 | 6.449 | (0.747) | 77113 | 2.00000 | 1.78224(a) |
| 20 2-Propanol | 45 | 6.499 | 6.498 | (0.753) | 36703 | 40.0000 | 35.7444 |
| 23 Methyl acetate | 43 | 6.715 | 6.714 | (0.778) | 124933 | 10.0000 | 9.82271 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ----- | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| 24 Carbon Disulfide | 76 | 6.735 | 6.734 | (0.780) | 316124 | 2.00000 | 1.80389(a) |
| 25 Allyl Chloride | 41 | 6.755 | 6.754 | (0.782) | 120198 | 2.00000 | 1.77100(a) |
| 29 Methyl t-butyl ether | 73 | 7.020 | 7.019 | (0.813) | 99000 | 2.00000 | 2.00000 |
| 31 Hexane | 57 | 7.227 | 7.226 | (0.837) | 74897 | 2.00000 | 1.73975(a) |
| 32 Vinyl acetate | 43 | 7.306 | 7.305 | (0.846) | 108552 | 4.00000 | 3.82765 |
| 36 ETBE | 59 | 7.571 | 7.570 | (0.877) | 592139 | 10.0000 | 9.02215 |
| 38 Ethyl Acetate | 43 | 7.709 | 7.698 | (0.893) | 37112 | 4.00000 | 3.76185 |
| 45 Tetrahydrofuran | 42 | 7.965 | 7.954 | (0.923) | 10353 | 4.00000 | 4.00000 |
| 49 Cyclohexane | 56 | 8.220 | 8.229 | (0.952) | 91341 | 2.00000 | 1.77959(a) |
| 55 TAME | 73 | 8.456 | 8.456 | (0.979) | 500102 | 10.0000 | 9.19885 |
| 59 2-Pentanone | 43 | 9.007 | 9.006 | (1.043) | 71685 | 8.00000 | 7.76088 |
| 60 Methyl Methacrylate | 100 | 9.135 | 9.134 | (1.058) | 12438 | 4.00000 | 3.70596 |
| 62 Methyl cyclohexane | 55 | 9.165 | 9.174 | (1.062) | 96890 | 2.00000 | 1.77372 |
| 66 2-nitropropane | 41 | 9.538 | 9.528 | (0.824) | 8061 | 2.00000 | 1.48417(a) |
| 67 2-Chloroethyl vinyl ether | 63 | 9.568 | 9.567 | (0.827) | 8831 | 2.00000 | 2.02572 |
| 73 Ethyl methacrylate | 69 | 10.306 | 10.305 | (0.890) | 78793 | 4.00000 | 3.82179 |
| 79 Tetrahydrothiophene | 60 | 10.994 | 10.993 | (1.273) | 17575 | 2.00000 | 1.86315 |
| 91 c-1,4-Dichloro-2-butene | 53 | 12.637 | 12.636 | (1.092) | 11994 | 2.00000 | 1.82531 |
| 95 t-1,4-Dichloro-2-butene | 53 | 12.942 | 12.941 | (0.913) | 11979 | 2.00000 | 1.76572(a) |
| 109 1,2,3-Trimethylbenzene | 105 | 14.240 | 14.239 | (1.004) | 244368 | 2.00000 | 1.84428 |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: R2.i
Lab File ID: rr6226.d
Lab Smp Id: SUPP002
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m
Misc Info:

Calibration Date: 05/25/4
Calibration Time: 2342
Client Smp ID: SUPP002
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1149959 | 574980 | 2299918 | 1208245 | 5.07 |
| 82 Chlorobenzene-d5 | 302802 | 151401 | 605604 | 324181 | 7.06 |
| 107 1,4-Dichlorobenze | 475530 | 237765 | 951060 | 471320 | -0.89 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.63 | 8.13 | 9.13 | 8.63 | 0.00 |
| 82 Chlorobenzene-d5 | 11.57 | 11.07 | 12.07 | 11.57 | 0.00 |
| 107 1,4-Dichlorobenze | 14.18 | 13.68 | 14.68 | 14.18 | 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/R2.i/052504i.b/rr6226.d

Date : 25-MAY-2004 22:52

Client ID: SUPP002

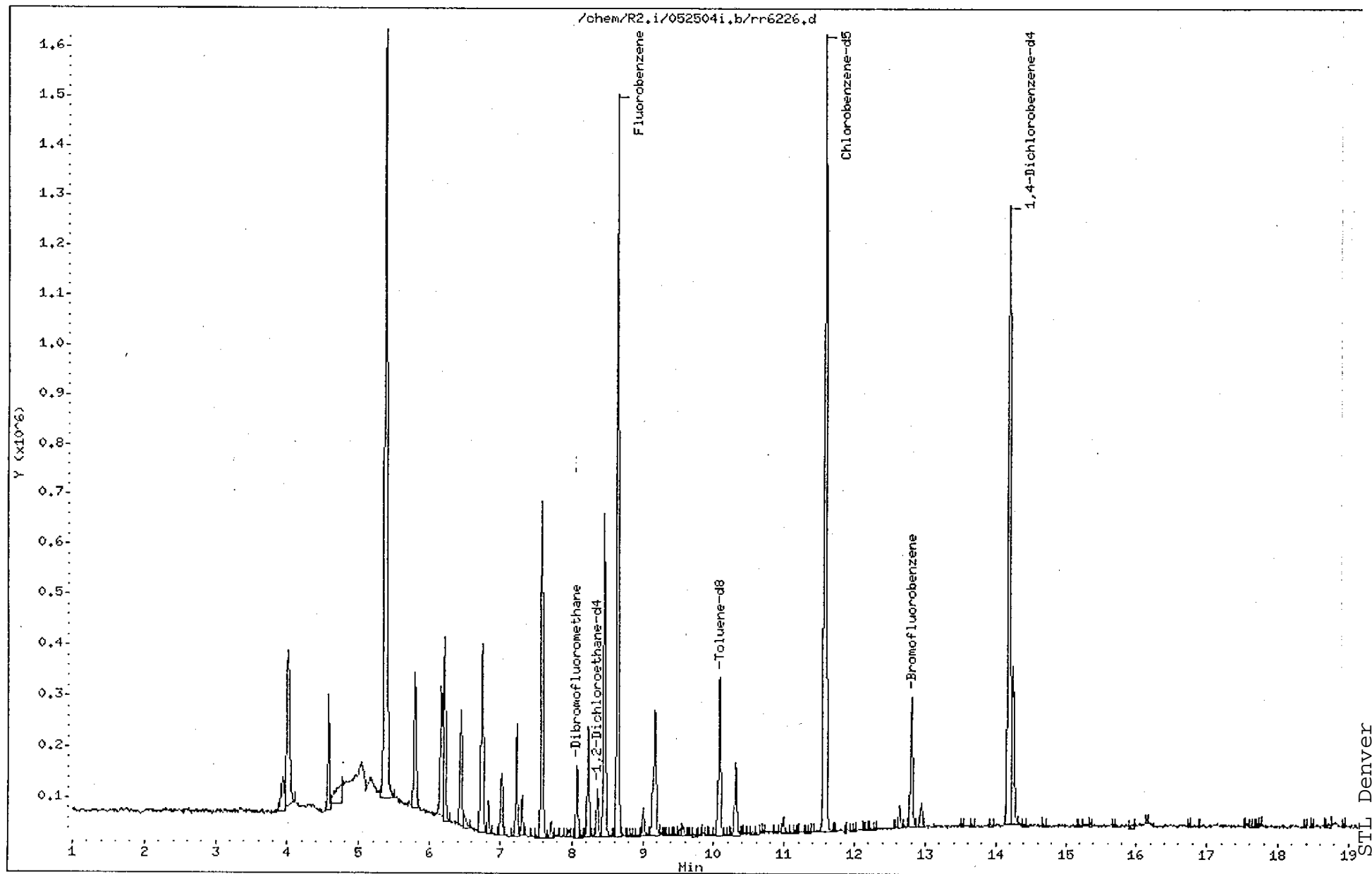
Sample Info: SUPP002,,

Column phase: HP624

Instrument: R2.i

Operator: reinharj

Column diameter: 0.32



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052504i.b/rr6227.d
Lab Smp Id: SUPP005 Client Smp ID: SUPP005
Inj Date : 25-MAY-2004 23:17
Operator : reinharj Inst ID: R2.i
Smp Info : SUPP005,,
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m
Meth Date : 26-May-2004 01:03 meierg Quant Type: ISTD
Cal Date : 25-MAY-2004 23:17 Cal File: rr6227.d
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-suppl.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 56 Fluorobenzene | 96 | 8.633 | 8.633 | (1.000) | 1063219 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.574 | 11.574 | (1.000) | 291622 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.181 | 14.180 | (1.000) | 441640 | 10.0000 | |
| \$ 46 Dibromofluoromethane | 111 | 8.072 | 8.062 | (0.935) | 168770 | 5.00000 | 4.77634 |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 8.358 | 8.357 | (0.968) | 131605 | 5.00000 | 4.52915 |
| \$ 70 Toluene-d8 | 98 | 10.079 | 10.079 | (0.871) | 474060 | 5.00000 | 4.41964 |
| \$ 93 Bromofluorobenzene | 95 | 12.804 | 12.803 | (1.106) | 236732 | 5.00000 | 4.60119 |
| 4 dichlorotetrafluoroethane | 85 | 4.571 | 4.570 | (0.529) | 258511 | 5.00000 | 4.56373 |
| 7 Ethylene Oxide | 43 | 5.377 | 5.347 | (0.623) | 1530586 | 625.000 | 622.709 |
| 10 Dichlorofluoromethane | 67 | 5.790 | 5.780 | (0.671) | 700524 | 5.00000 | 4.62302 |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117 | 6.164 | 6.154 | (0.714) | 234115 | 5.00000 | 4.82402 |
| 14 Ethyl Ether | 59 | 6.194 | 6.193 | (0.717) | 130762 | 5.00000 | 4.71859 |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83 | 6.203 | 6.203 | (0.719) | 399427 | 5.00000 | 4.54841 |
| 17 Trichlorotrifluoroethane | 151 | 6.449 | 6.449 | (0.747) | 170927 | 5.00000 | 4.64755 |
| 20 2-Propanol | 45 | 6.498 | 6.498 | (0.753) | 93694 | 100.000 | 102.432 |
| 23 Methyl acetate | 43 | 6.715 | 6.714 | (0.778) | 289268 | 25.0000 | 25.5574 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 24 Carbon Disulfide | 76 | 6.744 | 6.734 | (0.781) | 681583 | 5.00000 | 4.59764 |
| 25 Allyl Chloride | 41 | 6.754 | 6.754 | (0.782) | 266839 | 5.00000 | 4.63222 |
| 29 Methyl t-butyl ether | 73 | 7.020 | 7.019 | (0.813) | 215479 | 5.00000 | 4.97330 |
| 31 Hexane | 57 | 7.226 | 7.226 | (0.837) | 166234 | 5.00000 | 4.57471 |
| 32 Vinyl acetate | 43 | 7.305 | 7.305 | (0.846) | 242527 | 10.0000 | 9.81037 |
| 36 ETBE | 59 | 7.580 | 7.570 | (0.878) | 1356593 | 25.0000 | 23.9721 |
| 38 Ethyl Acetate | 43 | 7.708 | 7.698 | (0.893) | 89555 | 10.0000 | 10.2084 |
| 45 Tetrahydrofuran | 42 | 7.964 | 7.954 | (0.923) | 21385 | 10.0000 | 9.68506 |
| 49 Cyclohexane | 56 | 8.230 | 8.229 | (0.953) | 198016 | 5.00000 | 4.57186 |
| 55 TAME | 73 | 8.456 | 8.456 | (0.979) | 1093382 | 25.0000 | 23.5278 |
| 59 2-Pentanone | 43 | 9.007 | 9.006 | (1.043) | 160828 | 20.0000 | 19.8574 |
| 60 Methyl Methacrylate | 100 | 9.135 | 9.134 | (1.058) | 28464 | 10.0000 | 9.75560 |
| 62 Methyl cyclohexane | 55 | 9.174 | 9.174 | (1.063) | 216735 | 5.00000 | 4.66149 |
| 66 2-nitropropane | 41 | 9.528 | 9.528 | (0.823) | 18387 | 5.00000 | 4.10149 |
| 67 2-Chloroethyl vinyl ether | 63 | 9.567 | 9.567 | (0.827) | 22529 | 5.00000 | 5.47308 |
| 73 Ethyl methacrylate | 69 | 10.305 | 10.305 | (0.890) | 173148 | 10.0000 | 9.54736 |
| 79 Tetrahydrothiophene | 60 | 10.994 | 10.993 | (1.273) | 40250 | 5.00000 | 4.89830 |
| 91 c-1,4-Dichloro-2-butene | 53 | 12.636 | 12.636 | (1.092) | 24747 | 5.00000 | 4.42664 |
| 95 t-1,4-Dichloro-2-butene | 53 | 12.941 | 12.941 | (0.913) | 26933 | 5.00000 | 4.46390 |
| 109 1,2,3-Trimethylbenzene | 105 | 14.240 | 14.239 | (1.004) | 554502 | 5.00000 | 4.63097 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: R2.i
Lab File ID: rr6227.d
Lab Smp Id: SUPP005
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m
Misc Info:

Calibration Date: 05/25/4
Calibration Time: 2342
Client Smp ID: SUPP005
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1149959 | 574980 | 2299918 | 1063219 | -7.54 |
| 82 Chlorobenzene-d5 | 302802 | 151401 | 605604 | 291622 | -3.69 |
| 107 1,4-Dichlorobenze | 475530 | 237765 | 951060 | 441640 | -7.13 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.63 | 8.13 | 9.13 | 8.63 | 0.00 |
| 82 Chlorobenzene-d5 | 11.57 | 11.07 | 12.07 | 11.57 | 0.00 |
| 107 1,4-Dichlorobenze | 14.18 | 13.68 | 14.68 | 14.18 | 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/R2.i/052504i.b/rr6227.d

Page 4

Date : 25-MAY-2004 23:17

Client ID: SUPP005

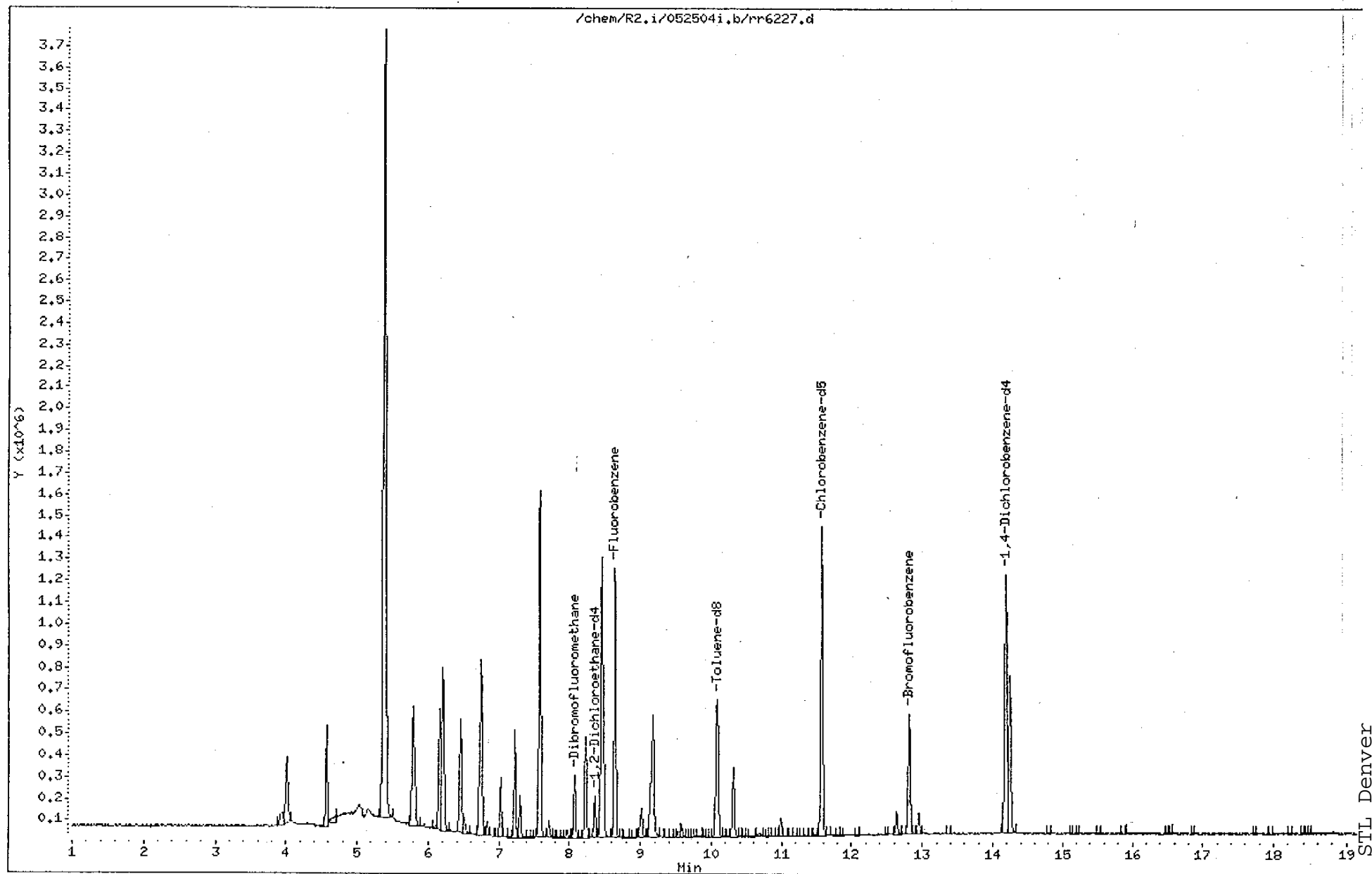
Instrument: R2.i

Sample Info: SUPP005,,

Operator: reinharj

Column phase: HP624

Column diameter: 0.32



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052504i.b/rr6228.d
Lab Smp Id: SUPP010 Client Smp ID: SUPP010
Inj Date : 25-MAY-2004 23:42
Operator : reinharj Inst ID: R2.i
Smp Info : SUPP010,,
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m
Meth Date : 26-May-2004 01:03 meierg Quant Type: ISTD
Cal Date : 25-MAY-2004 23:42 Cal File: rr6228.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-suppl.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ***** | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| * 56 Fluorobenzene | 96 | 8.633 | 8.633 | (1.000) | 1149959 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.574 | 11.574 | (1.000) | 302802 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.181 | 14.180 | (1.000) | 475530 | 10.0000 | |
| \$ 46 Dibromofluoromethane | 111 | 8.073 | 8.062 | (0.935) | 380615 | 10.0000 | 9.96940 |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 8.358 | 8.357 | (0.968) | 275337 | 10.0000 | 9.04097 |
| \$ 70 Toluene-d8 | 98 | 10.079 | 10.079 | (0.871) | 1103827 | 10.0000 | 9.93308 |
| \$ 93 Bromofluorobenzene | 95 | 12.804 | 12.803 | (1.106) | 523005 | 10.0000 | 9.84163 |
| 4 dichlorotetrafluoroethane | 85 | 4.571 | 4.570 | (0.529) | 578989 | 10.0000 | 9.58208 |
| 7 Ethylene Oxide | 43 | 5.377 | 5.347 | (0.623) | 3218178 | 1250.00 | 1220.17 |
| 10 Dichlorofluoromethane | 67 | 5.790 | 5.780 | (0.671) | 1632814 | 10.0000 | 9.97204 |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117 | 6.164 | 6.154 | (0.714) | 540717 | 10.0000 | 10.2242 |
| 14 Ethyl Ether | 59 | 6.204 | 6.193 | (0.719) | 293852 | 10.0000 | 9.85221 |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83 | 6.204 | 6.203 | (0.719) | 935071 | 10.0000 | 9.88316 |
| 17 Trichlorotrifluoroethane | 151 | 6.450 | 6.449 | (0.747) | 375449 | 10.0000 | 9.57290 |
| 20 2-Propanol | 45 | 6.499 | 6.498 | (0.753) | 194885 | 200.000 | 197.734 |
| 23 Methyl acetate | 43 | 6.715 | 6.714 | (0.778) | 610420 | 50.0000 | 49.8979 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ---- | == | ----- | ----- | ----- | ----- | ----- |
| 24 Carbon Disulfide | 76 | 6.735 | 6.734 | (0.780) | 1576221 | 10.0000 | 9.87230 |
| 25 Allyl Chloride | 41 | 6.754 | 6.754 | (0.782) | 613891 | 10.0000 | 9.88940 |
| 29 Methyl t-butyl ether | 73 | 7.020 | 7.019 | (0.813) | 482957 | 10.0000 | 10.2019 |
| 31 Hexane | 57 | 7.227 | 7.226 | (0.837) | 377256 | 10.0000 | 9.69610 |
| 32 Vinyl acetate | 43 | 7.305 | 7.305 | (0.846) | 536720 | 20.0000 | 20.0547 |
| 36 ETBE | 59 | 7.581 | 7.570 | (0.878) | 3071977 | 50.0000 | 50.1421 |
| 38 Ethyl Acetate | 43 | 7.709 | 7.698 | (0.893) | 186012 | 20.0000 | 19.7017 |
| 45 Tetrahydrofuran | 42 | 7.964 | 7.954 | (0.923) | 50583 | 20.0000 | 20.7719 |
| 49 Cyclohexane | 56 | 8.230 | 8.229 | (0.953) | 455037 | 10.0000 | 9.78365 |
| 55 TAME | 73 | 8.456 | 8.456 | (0.979) | 2469589 | 50.0000 | 49.3470 |
| 59 2-Pentanone | 43 | 9.007 | 9.006 | (1.043) | 343562 | 40.0000 | 39.4120 |
| 60 Methyl Methacrylate | 100 | 9.135 | 9.134 | (1.058) | 58359 | 20.0000 | 18.8480 |
| 62 Methyl cyclohexane | 55 | 9.174 | 9.174 | (1.063) | 458109 | 10.0000 | 9.31709 |
| 66 2-nitropropane | 41 | 9.528 | 9.528 | (0.823) | 41021 | 10.0000 | 9.08211 |
| 67 2-Chloroethyl vinyl ether | 63 | 9.568 | 9.567 | (0.827) | 50299 | 10.0000 | 11.2700 |
| 73 Ethyl methacrylate | 69 | 10.305 | 10.305 | (0.890) | 395896 | 20.0000 | 20.7580 |
| 79 Tetrahydrothiophene | 60 | 10.994 | 10.993 | (1.273) | 92338 | 10.0000 | 10.2894 |
| 91 c-1,4-Dichloro-2-butene | 53 | 12.637 | 12.636 | (1.092) | 54345 | 10.0000 | 9.51382 |
| 95 t-1,4-Dichloro-2-butene | 53 | 12.942 | 12.941 | (0.913) | 55624 | 10.0000 | 8.88139 |
| 109 1,2,3-Trimethylbenzene | 105 | 14.240 | 14.239 | (1.004) | 1267370 | 10.0000 | 9.87211 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|---|---------------------------|
| Instrument ID: R2.i | Calibration Date: 05/25/4 |
| Lab File ID: rr6228.d | Calibration Time: 2342 |
| Lab Smp Id: SUPP010 | Client Smp ID: SUPP010 |
| Analysis Type: VOA | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: reinharj | |
| Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m | |
| Misc Info: | |

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 1149959 | 574980 | 2299918 | 1149959 | 0.00 |
| 82 Chlorobenzene-d5 | 302802 | 151401 | 605604 | 302802 | 0.00 |
| 107 1,4-Dichlorobenze | 475530 | 237765 | 951060 | 475530 | 0.00 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 8.63 | 8.13 | 9.13 | 8.63 | 0.00 |
| 82 Chlorobenzene-d5 | 11.57 | 11.07 | 12.07 | 11.57 | 0.00 |
| 107 1,4-Dichlorobenze | 14.18 | 13.68 | 14.68 | 14.18 | 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/R2,i/052504i.b/rr6228.d

Date : 25-MAY-2004 23:42

Client ID: SUPP010

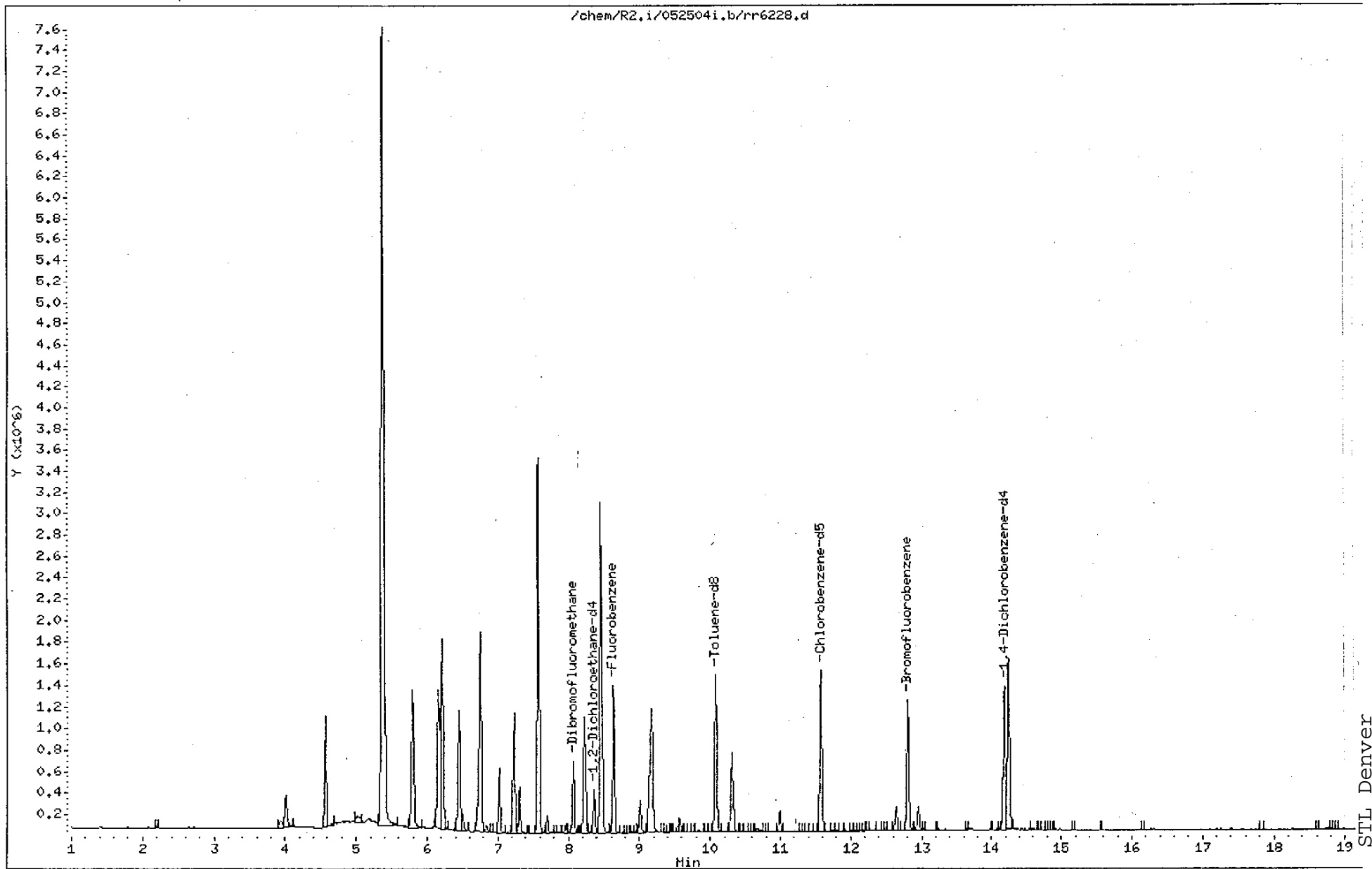
Sample Info: SUPP010,,

Column phase: HP624

Instrument: R2.i

Operator: reinharj

Column diameter: 0.32



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052504i.b/rr6229.d
Lab Smp Id: SUPP030 Client Smp ID: SUPP030
Inj Date : 26-MAY-2004 00:06
Operator : reinharj Inst ID: R2.i
Smp Info : SUPP030,,
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m
Meth Date : 26-May-2004 01:03 meierg Quant Type: ISTD
Cal Date : 26-MAY-2004 00:06 Cal File: rr6229.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| Compounds | QUANT SIG | | | | | | AMOUNTS | |
|-----------------------------------|-----------|------|--------|--------|---------|----------|--------------------|-------------------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 56 Fluorobenzene | 96 | | 8.636 | 8.633 | (1.000) | 1135546 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | | 11.577 | 11.574 | (1.000) | 316134 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | | 14.174 | 14.180 | (1.000) | 469660 | 10.0000 | |
| \$ 46 Dibromofluoromethane | 111 | | 8.065 | 8.062 | (0.934) | 751008 | 20.0000 | 21.3557 |
| \$ 52 1,2-Dichloroethane-d4 | 65 | | 8.360 | 8.357 | (0.968) | 584315 | 20.0000 | 20.9030 |
| \$ 70 Toluene-d8 | 98 | | 10.072 | 10.079 | (0.870) | 2194417 | 20.0000 | 20.4237 |
| \$ 93 Bromofluorobenzene | 95 | | 12.797 | 12.803 | (1.105) | 1071135 | 20.0000 | 20.7881 |
| 4 dichlorotetrafluoroethane | 85 | | 4.573 | 4.570 | (0.530) | 1709634 | 30.0000 | 28.9126 |
| 7 Ethylene Oxide | 43 | | 5.360 | 5.347 | (0.621) | 8663720 | 3750.00 | 3403.40 |
| 10 Dichlorofluoromethane | 67 | | 5.783 | 5.780 | (0.670) | 4681943 | 30.0000 | 29.1596 |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117 | | 6.157 | 6.154 | (0.713) | 1520556 | 30.0000 | 29.2892 |
| 14 Ethyl Ether | 59 | | 6.196 | 6.193 | (0.718) | 826710 | 30.0000 | 28.4355 |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83 | | 6.206 | 6.203 | (0.719) | 2685228 | 30.0000 | 28.9847 |
| 17 Trichlorotrifluoroethane | 151 | | 6.442 | 6.449 | (0.746) | 1138433 | 30.0000 | 29.5143 |
| 20 2-Propanol | 45 | | 6.492 | 6.498 | (0.752) | 559075 | 500.000 | 557.836 |
| 23 Methyl acetate | 43 | | 6.708 | 6.714 | (0.777) | 1685810 | 150.000 | 141.524 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 24 Carbon Disulfide | 76 | 6.737 | 6.734 | (0.780) | 4434014 | 30.0000 | 28.4801 |
| 25 Allyl Chloride | 41 | 6.747 | 6.754 | (0.781) | 1708130 | 30.0000 | 28.2683 |
| 29 Methyl t-butyl ether | 73 | 7.023 | 7.019 | (0.813) | 1364239 | 30.0000 | 29.3836 |
| 31 Hexane | 57 | 7.229 | 7.226 | (0.837) | 1087164 | 30.0000 | 28.6216 |
| 32 Vinyl acetate | 43 | 7.298 | 7.305 | (0.845) | 1567240 | 60.0000 | 59.4417 |
| 36 ETBE | 59 | 7.574 | 7.570 | (0.877) | 8434163 | 150.000 | 141.409 |
| 38 Ethyl Acetate | 43 | 7.701 | 7.698 | (0.892) | 570179 | 60.0000 | 60.9228 |
| 45 Tetrahydrofuran | 42 | 7.957 | 7.954 | (0.921) | 127058 | 60.0000 | 54.4637 |
| 49 Cyclohexane | 56 | 8.223 | 8.229 | (0.952) | 1308437 | 30.0000 | 28.7793 |
| 55 TAME | 73 | 8.459 | 8.456 | (0.979) | 6967219 | 150.000 | 142.700 |
| 59 2-Pentanone | 43 | 9.010 | 9.006 | (1.043) | 979475 | 120.000 | 114.978 |
| 60 Methyl Methacrylate | 100 | 9.138 | 9.134 | (1.058) | 166254 | 60.0000 | 55.4148 |
| 62 Methyl cyclohexane | 55 | 9.167 | 9.174 | (1.062) | 1375919 | 30.0000 | 28.6562 |
| 66 2-nitropropane | 41 | 9.531 | 9.528 | (0.823) | 118537 | 30.0000 | 25.9797 |
| 67 2-Chloroethyl vinyl ether | 63 | 9.570 | 9.567 | (0.827) | 160737 | 30.0000 | 33.4921 |
| 73 Ethyl methacrylate | 69 | 10.308 | 10.305 | (0.890) | 1125217 | 60.0000 | 57.1756 |
| 79 Tetrahydrothiophene | 60 | 10.987 | 10.993 | (1.272) | 254513 | 30.0000 | 28.9679 |
| 91 c-1,4-Dichloro-2-butene | 53 | 12.639 | 12.636 | (1.092) | 155208 | 30.0000 | 26.7337 |
| 95 t-1,4-Dichloro-2-butene | 53 | 12.944 | 12.941 | (0.913) | 161476 | 30.0000 | 26.8008 |
| 109 1,2,3-Trimethylbenzene | 105 | 14.243 | 14.239 | (1.005) | 3662801 | 30.0000 | 29.1036 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: R2.i
Lab File ID: rr6229.d
Lab Smp Id: SUPP030
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m
Misc Info:

Calibration Date: 05/25/4
Calibration Time: 2342
Client Smp ID: SUPP030
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 1149959 | 574980 | 2299918 | 1135546 | -1.25 |
| 82 Chlorobenzene-d5 | 302802 | 151401 | 605604 | 316134 | 4.40 |
| 107 1,4-Dichlorobenze | 475530 | 237765 | 951060 | 469660 | -1.23 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 8.63 | 8.13 | 9.13 | 8.64 | 0.03 |
| 82 Chlorobenzene-d5 | 11.57 | 11.07 | 12.07 | 11.58 | 0.02 |
| 107 1,4-Dichlorobenze | 14.18 | 13.68 | 14.68 | 14.17 | -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/R2.i/052504i.b/rr6229.d

Date : 26-MAY-2004 00:06

Client ID: SUPP030

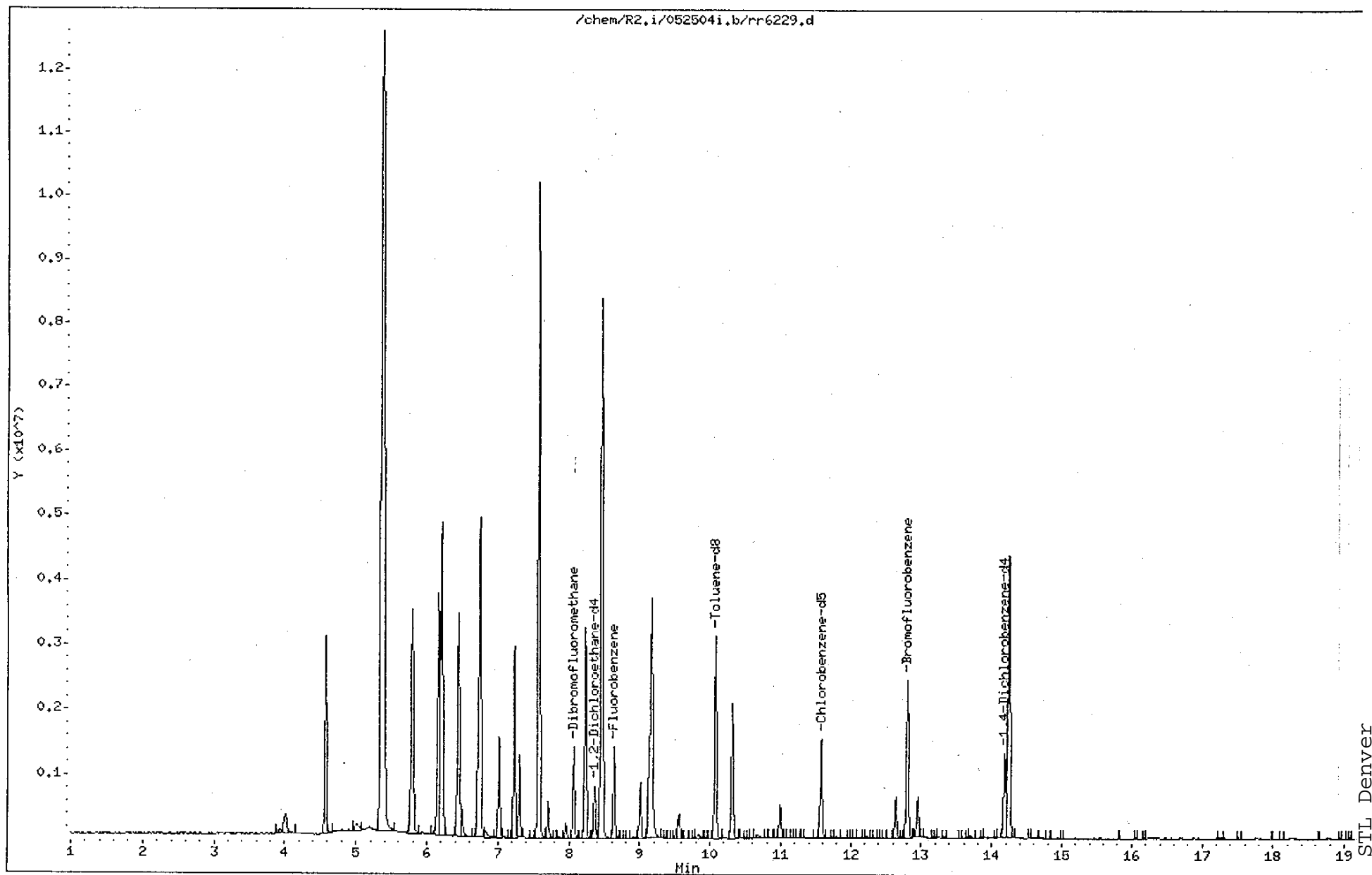
Sample Info: SUPP030,,

Instrument: R2.i

Operator: reinhanj

Column diameter: 0,32

Column phase: HP624



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052504i.b/rr6230.d
Lab Smp Id: SUPP060 Client Smp ID: SUPP060
Inj Date : 26-MAY-2004 00:31
Operator : reinharj Inst ID: R2.i
Smp Info : SUPP060,,
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052504i.b/R2-20ml-h2o.m
Meth Date : 26-May-2004 01:03 meierg Quant Type: ISTD
Cal Date : 26-MAY-2004 00:31 Cal File: rr6230.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|-----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| * 56 Fluorobenzene | 96 | 8.633 | 8.633 | (1.000) | 1166661 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.574 | 11.574 | (1.000) | 312758 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.180 | 14.180 | (1.000) | 468023 | 10.0000 | |
| \$ 46 Dibromofluoromethane | 111 | 8.062 | 8.062 | (0.934) | 1126360 | 30.0000 | 29.1033 |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 8.357 | 8.357 | (0.968) | 877712 | 30.0000 | 28.5708 |
| \$ 70 Toluene-d8 | 98 | 10.079 | 10.079 | (0.871) | 3396480 | 30.0000 | 29.9160 |
| \$ 93 Bromofluorobenzene | 95 | 12.803 | 12.803 | (1.106) | 1689436 | 30.0000 | 30.9940 |
| 4 dichlorotetrafluoroethane | 85 | 4.570 | 4.570 | (0.529) | 3558990 | 60.0000 | 58.8145 |
| 7 Ethylene Oxide | 43 | 5.347 | 5.347 | (0.619) | 16502547 | 7500.00 | 6481.26 |
| 10 Dichlorofluoromethane | 67 | 5.780 | 5.780 | (0.670) | 9904770 | 60.0000 | 60.0356(A) |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117 | 6.154 | 6.154 | (0.713) | 3087789 | 60.0000 | 58.2323 |
| 14 Ethyl Ether | 59 | 6.193 | 6.193 | (0.717) | 1643092 | 60.0000 | 55.7820 |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83 | 6.203 | 6.203 | (0.719) | 5408041 | 60.0000 | 57.3249 |
| 17 Trichlorotrifluoroethane | 151 | 6.449 | 6.449 | (0.747) | 2338177 | 60.0000 | 59.1655 |
| 20 2-Propanol | 45 | 6.498 | 6.498 | (0.753) | 1194078 | 1000.00 | 1129.60 |
| 23 Methyl acetate | 43 | 6.714 | 6.714 | (0.778) | 3585525 | 300.000 | 294.126 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ---- | == | ===== | ===== | ===== | ===== | ===== |
| 24 Carbon Disulfide | 76 | 6.734 | 6.734 | (0.780) | 9408286 | 60.0000 | 59.0124 |
| 25 Allyl Chloride | 41 | 6.754 | 6.754 | (0.782) | 3660281 | 60.0000 | 59.1303 |
| 29 Methyl t-butyl ether | 73 | 7.019 | 7.019 | (0.813) | 2905541 | 60.0000 | 60.7273 (A) |
| 31 Hexane | 57 | 7.226 | 7.226 | (0.837) | 2317337 | 60.0000 | 59.4834 |
| 32 Vinyl acetate | 43 | 7.305 | 7.305 | (0.846) | 3017336 | 120.000 | 112.737 |
| 36 ETBE | 59 | 7.570 | 7.570 | (0.877) | 14412997 | 300.000 | 235.207 |
| 38 Ethyl Acetate | 43 | 7.698 | 7.698 | (0.892) | 1154267 | 120.000 | 120.035 (A) |
| 45 Tetrahydrofuran | 42 | 7.954 | 7.954 | (0.921) | 282778 | 120.000 | 118.379 |
| 49 Cyclohexane | 56 | 8.229 | 8.229 | (0.953) | 2660330 | 60.0000 | 57.4398 |
| 55 TAME | 73 | 8.456 | 8.456 | (0.979) | 13906557 | 300.000 | 280.785 |
| 59 2-Pentanone | 43 | 9.006 | 9.006 | (1.043) | 1991621 | 240.000 | 229.540 |
| 60 Methyl Methacrylate | 100 | 9.134 | 9.134 | (1.058) | 350788 | 120.000 | 114.792 |
| 62 Methyl cyclohexane | 55 | 9.174 | 9.174 | (1.063) | 2788751 | 60.0000 | 57.0820 |
| 66 2-nitropropane | 41 | 9.528 | 9.528 | (0.823) | 253211 | 60.0000 | 56.7102 |
| 67 2-Chloroethyl vinyl ether | 63 | 9.567 | 9.567 | (0.827) | 388787 | 60.0000 | 77.1919 (A) |
| 73 Ethyl methacrylate | 69 | 10.305 | 10.305 | (0.890) | 2345993 | 120.000 | 120.411 (A) |
| 79 Tetrahydrothiophene | 60 | 10.993 | 10.993 | (1.273) | 537470 | 60.0000 | 59.6176 |
| 91 c-1,4-Dichloro-2-butene | 53 | 12.636 | 12.636 | (1.092) | 344704 | 60.0000 | 60.0119 (A) |
| 95 t-1,4-Dichloro-2-butene | 53 | 12.941 | 12.941 | (0.913) | 342243 | 60.0000 | 57.4808 |
| 109 1,2,3-Trimethylbenzene | 105 | 14.239 | 14.239 | (1.004) | 7776202 | 60.0000 | 61.6604 (A) |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: R2.i
Lab File ID: rr6230.d
Lab Smp Id: SUPP060
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/R2.i/052504i.b/R2-20ml-h2o.m
Misc Info:

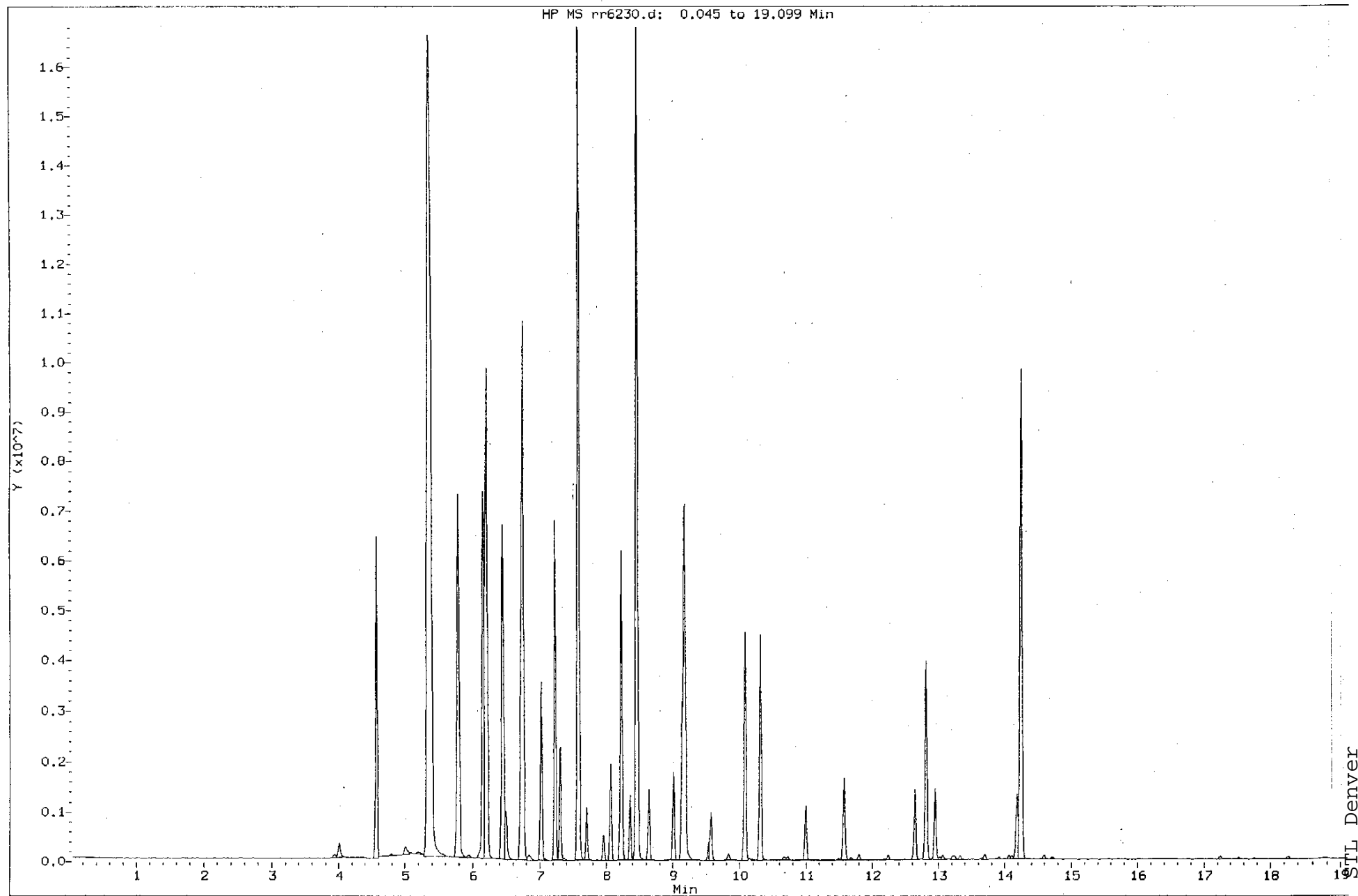
Calibration Date: 05/25/4
Calibration Time: 2342
Client Smp ID: SUPP060
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1149959 | 574980 | 2299918 | 1166661 | 1.45 |
| 82 Chlorobenzene-d5 | 302802 | 151401 | 605604 | 312758 | 3.29 |
| 107 1,4-Dichlorobenze | 475530 | 237765 | 951060 | 468023 | -1.58 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.63 | 8.13 | 9.13 | 8.63 | -0.01 |
| 82 Chlorobenzene-d5 | 11.57 | 11.07 | 12.07 | 11.57 | -0.01 |
| 107 1,4-Dichlorobenze | 14.18 | 13.68 | 14.68 | 14.18 | 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/R2.1/0525041.b/rr6230.d
Injection Date: 26-MAY-2004 00:31
Instrument: R2.1
Client Sample ID: SUPP060



GC/MS Continuing Calibration Review Checklist

STL Denver

Instrument ID and Date:

R2 5/27/04

Check Method Used: Analysis ☐ 625 ☐ 8270 ☐ Other SV _____☐ 524.2 ☐ 624 ☒ 8260B ☐ Other VOA _____VOA Preparation ☐ 5mL ☒ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

| Review Items | Level 1 | | | Level 2 | Comments |
|---|---------|----|-----|---------|----------|
| | Yes | No | N/A | | |
| Continuing Calibration | | | | | |
| 1. BFB/DFTPP meets criteria? | / | | | / | |
| 2. ICAL date and instrument ID verified? | / | | | / | |
| 3. Do SPCC RRFs and CCC %Ds meet method criteria? | / | | | / | |
| 4. Does %D meet criteria for non-CCC compounds? | / | | | / | |
| 5. Isomeric pairs checked for correct peak assignment? | / | | | / | |
| 6. Standards traceability properly documented? | / | | | / | |
| 7. Manual integrations documented and checked? | | | / | / | |
| 8. Do the Internal Standards meet criteria for %D against ICAL? | / | | | / | |

1st Level Reviewer:

Gm

Date:

5/27/04

2nd Level Reviewer:

con

Date:

5/27/04

Calibration History

Method : /chem/R2.i/052704.b/R2-20ml-h2o.m
Start Cal Date: 25-MAY-2004 19:05
End Cal Date : 26-MAY-2004 00:31

Initial Calibration

| Injection Date | Sublist | Calibration File |
|------------------------------------|---------|-------------------------------|
| Cal Level: 1 , Cal Amount: 1.00000 | | |
| 25-MAY-2004 22:27 | 2-supp | /chem/R2.i/052504i.b/rr6225.d |
| 25-MAY-2004 19:05 | 1-main | /chem/R2.i/052504i.b/rr6218.d |
| Cal Level: 2 , Cal Amount: 2.00000 | | |
| 25-MAY-2004 22:52 | 2-supp | /chem/R2.i/052504i.b/rr6226.d |
| 25-MAY-2004 19:31 | 1-main | /chem/R2.i/052504i.b/rr6219.d |
| Cal Level: 3 , Cal Amount: 5.00000 | | |
| 25-MAY-2004 23:17 | 2-supp | /chem/R2.i/052504i.b/rr6227.d |
| 25-MAY-2004 19:56 | 1-main | /chem/R2.i/052504i.b/rr6220.d |
| Cal Level: 4 , Cal Amount: 10.0000 | | |
| 25-MAY-2004 23:42 | 2-supp | /chem/R2.i/052504i.b/rr6228.d |
| 25-MAY-2004 20:21 | 1-main | /chem/R2.i/052504i.b/rr6221.d |
| Cal Level: 5 , Cal Amount: 30.0000 | | |
| 26-MAY-2004 00:06 | 2-supp | /chem/R2.i/052504i.b/rr6229.d |
| 25-MAY-2004 20:46 | 1-main | /chem/R2.i/052504i.b/rr6222.d |
| Cal Level: 6 , Cal Amount: 60.0000 | | |
| 26-MAY-2004 00:31 | 2-supp | /chem/R2.i/052504i.b/rr6230.d |
| 25-MAY-2004 21:11 | 1-main | /chem/R2.i/052504i.b/rr6223.d |

Continuing Calibration

| | | |
|-------------------|--------|------------------------------|
| 27-MAY-2004 16:04 | 2-supp | /chem/R2.i/052704.b/rr6281.d |
| 27-MAY-2004 15:39 | 1-main | /chem/R2.i/052704.b/rr6280.d |

Date : 27-MAY-2004 15:26

Client ID: BFB

Instrument: R2.i

Sample Info: BFB,,

Volume Injected (uL): 2.0

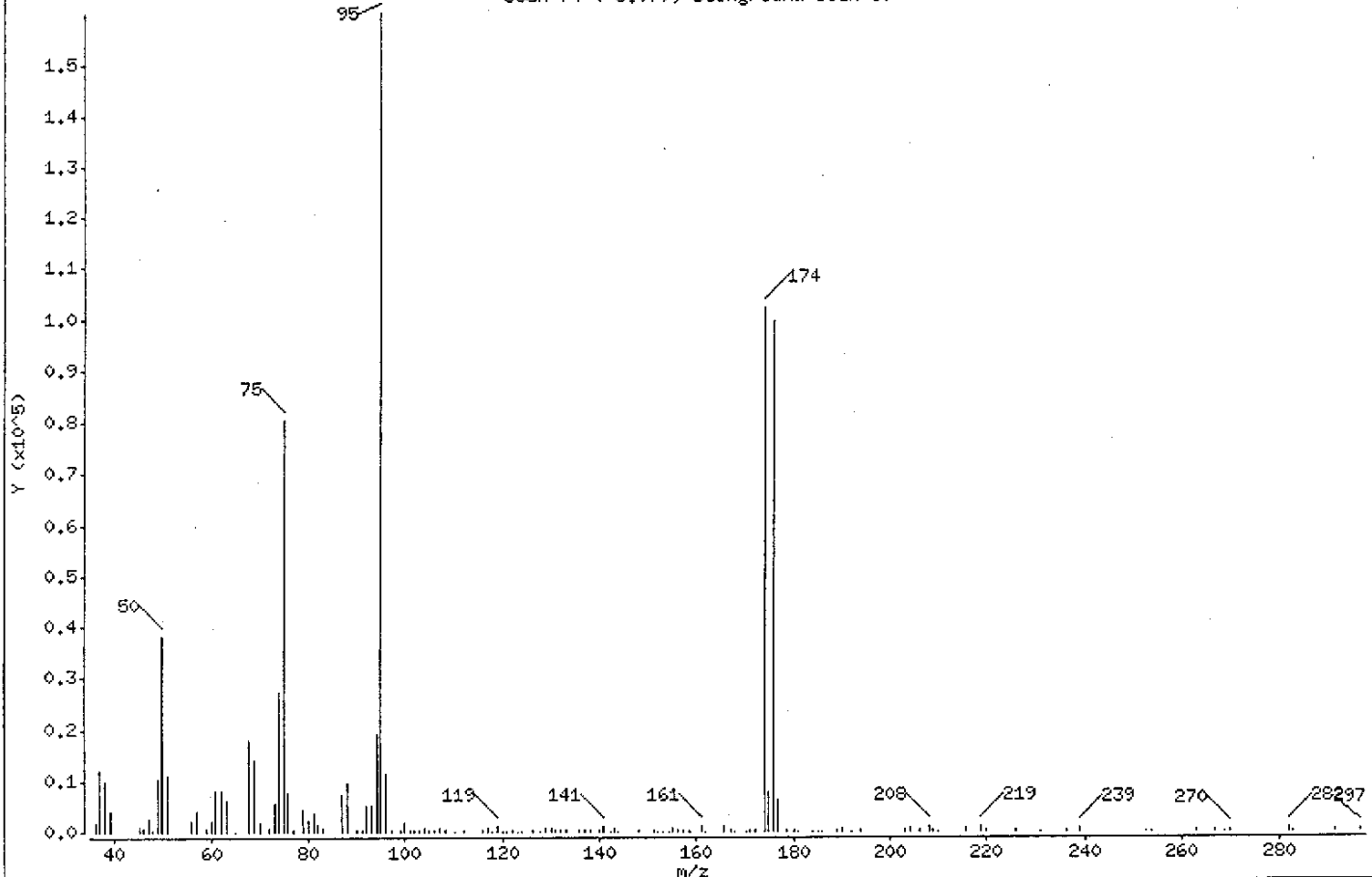
Operator: meierg

Column phase: HP624

Column diameter: 0.32

1 bfb

Scan 74 (5.07), Background Scan 69



| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 15.00 - 40.00% of mass 95 | 23.99 |
| 75 | 30.00 - 60.00% of mass 95 | 50.27 |
| 96 | 5.00 - 9.00% of mass 95 | 7.06 |
| 173 | Less than 2.00% of mass 174 | 0.00 (0.00) |
| 174 | 50.00 - 100.00% of mass 95 | 63.87 |
| 175 | 5.00 - 9.00% of mass 174 | 4.94 (7.73) |
| 176 | 95.00 - 101.00% of mass 174 | 62.27 (97.50) |
| 177 | 5.00 - 9.00% of mass 176 | 3.93 (6.31) |

Om 5/27

Date : 27-MAY-2004 15:26

Client ID: BFB

Instrument: R2.i

Sample Info: BFB,,

Volume Injected (uL): 2.0

Operator: meierg

Column phase: HP624

Column diameter: 0.32

Data File: rn6279.d

Spectrum: Scan 74 (5.07), Background Scan 69

Location of Maximum: 94.95

Number of points: 134

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|-------|-------|--------|--------|--------|--------|--------|------|
| ----- | | | | | | | |
| 35.85 | 1788 | 87.85 | 9425 | 130.90 | 264 | 180.10 | 266 |
| 36.95 | 12002 | 89.85 | 293 | 131.80 | 386 | 180.90 | 119 |
| 37.95 | 9776 | 90.95 | 420 | 132.90 | 457 | 183.80 | 106 |
| 38.95 | 4017 | 91.95 | 5222 | 135.90 | 523 | 184.90 | 130 |
| 45.00 | 1048 | 92.85 | 5302 | 136.80 | 343 | 185.90 | 54 |
| ----- | | | | | | | |
| 46.00 | 568 | 93.95 | 19120 | 137.95 | 319 | 188.90 | 210 |
| 46.90 | 2444 | 94.95 | 159744 | 139.95 | 293 | 189.90 | 716 |
| 48.00 | 311 | 95.95 | 11280 | 140.85 | 1107 | 191.95 | 73 |
| 48.90 | 10310 | 96.95 | 257 | 142.05 | 180 | 193.95 | 246 |
| 49.90 | 38320 | 98.90 | 463 | 142.85 | 779 | 202.95 | 279 |
| ----- | | | | | | | |
| 50.90 | 11066 | 99.90 | 1886 | 143.85 | 102 | 204.30 | 719 |
| 55.90 | 2061 | 100.80 | 390 | 147.85 | 468 | 205.90 | 350 |
| 56.90 | 4029 | 101.90 | 219 | 151.10 | 450 | 207.90 | 1086 |
| 59.05 | 612 | 102.80 | 396 | 151.90 | 136 | 208.90 | 260 |
| 59.95 | 2373 | 103.90 | 861 | 153.00 | 160 | 209.80 | 37 |
| ----- | | | | | | | |
| 60.95 | 8008 | 104.90 | 510 | 154.00 | 30 | 215.60 | 589 |
| 61.95 | 8246 | 105.80 | 461 | 154.90 | 657 | 218.85 | 992 |
| 62.95 | 6322 | 106.90 | 692 | 156.00 | 406 | 219.85 | 267 |
| 64.85 | 174 | 108.40 | 534 | 157.00 | 453 | 225.95 | 287 |
| 67.85 | 17880 | 110.00 | 84 | 158.10 | 426 | 230.90 | 33 |
| ----- | | | | | | | |
| 68.85 | 14024 | 111.95 | 189 | 158.80 | 149 | 236.40 | 258 |
| 69.95 | 1787 | 115.95 | 252 | 161.00 | 1130 | 239.00 | 595 |
| 71.90 | 673 | 116.95 | 874 | 161.90 | 141 | 252.85 | 119 |
| 73.00 | 5467 | 117.95 | 139 | 165.65 | 1029 | 253.75 | 56 |
| 73.90 | 27256 | 118.95 | 951 | 167.25 | 490 | 263.00 | 253 |
| ----- | | | | | | | |
| 74.90 | 80320 | 119.95 | 107 | 167.95 | 127 | 266.90 | 252 |
| 75.90 | 7547 | 120.75 | 27 | 170.05 | 133 | 268.90 | 155 |
| 76.90 | 348 | 121.85 | 394 | 170.85 | 285 | 270.00 | 261 |
| 78.80 | 4305 | 123.05 | 94 | 172.05 | 266 | 281.95 | 675 |
| 79.90 | 2325 | 123.80 | 177 | 173.85 | 102048 | 282.95 | 20 |
| ----- | | | | | | | |
| 80.90 | 3812 | 126.00 | 243 | 174.85 | 7890 | 291.60 | 265 |
| 81.90 | 1333 | 127.90 | 173 | 175.85 | 99496 | 297.15 | 368 |
| 83.00 | 739 | 129.00 | 685 | 176.75 | 6280 | | |
| 86.85 | 7525 | 129.90 | 784 | 178.60 | 224 | | |
| ----- | | | | | | | |

Data File: /chem/R2.i/052704.b/rr6279.d

Page 1

Date : 27-MAY-2004 15:26

Client ID: BFB

Instrument: R2.i

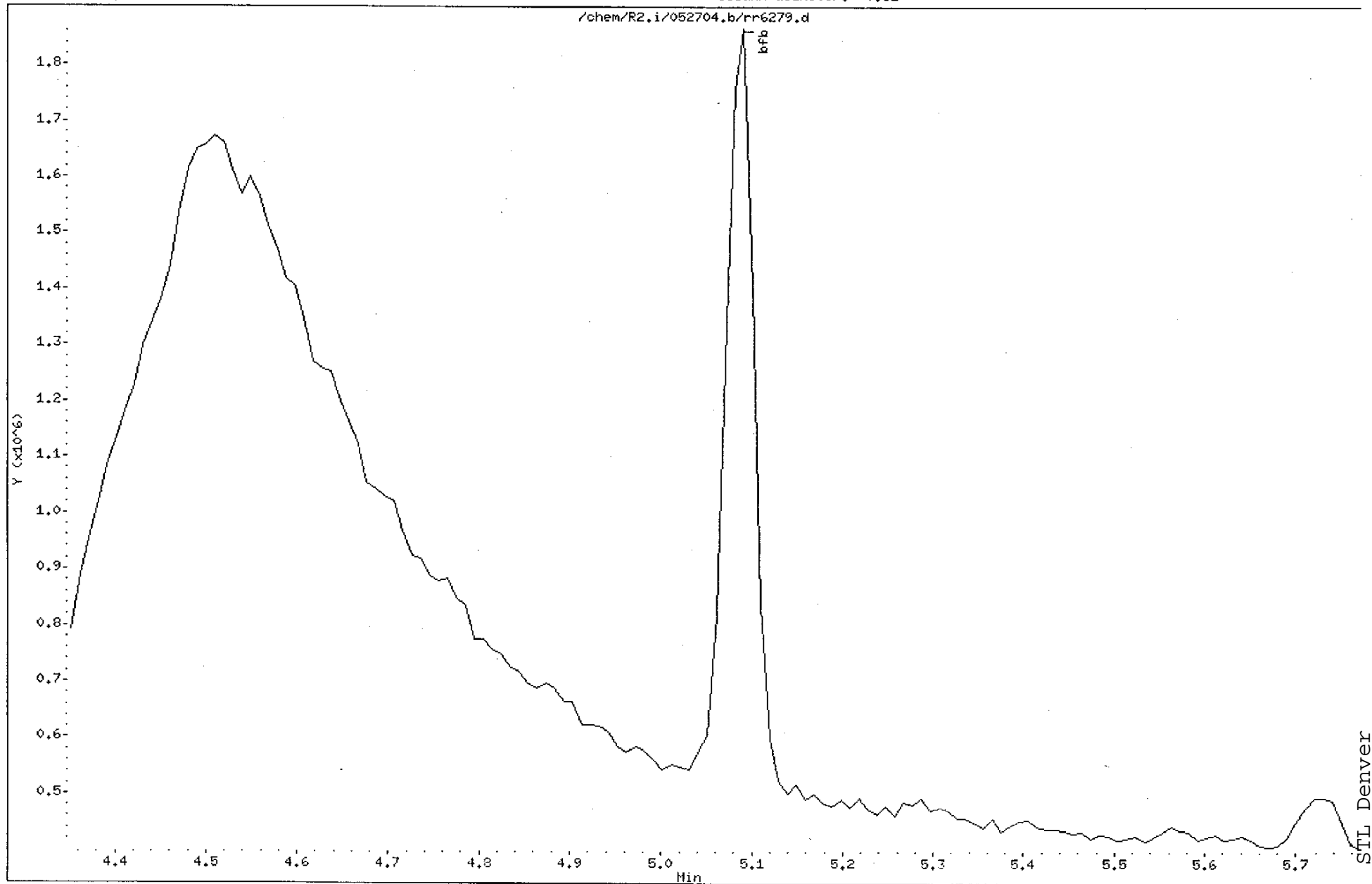
Sample Info: BFB,,

Volume Injected (uL): 2.0

Operator: meierg

Column phase: HP624

Column diameter: 0.32



CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: R2.i
Lab File ID: rr6280.d
Analysis Type: WATER

Injection Date: 27-MAY-2004 15:39
Lab Sample ID: MAIN010
Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m

| COMPOUND | EXPECTED CONC. | MEASURED CONC. | %D | MAX %D |
|-------------------------------|-------------------|-------------------|------|-----------|
| 83 Xylene (total) | 30.0000 | 31.7639 | 5.9 | 50.0 |
| 85 1,2-Dichloroethene (total) | 20.0000 | 20.2559 | 1.3 | 50.0 |
| 64 dichlorodifluoromethane | 10.0000 | 9.0767 | 9.2 | 50.0 |
| 1 Chloromethane | 10.0000 | 8.4174 | 15.8 | 50.0 |
| 4 Vinyl Chloride | 10.0000 | 8.5648 | 14.4 | 20.0 |
| 2 Bromomethane | 10.0000 | 5.0127 | 49.9 | 50.0 |
| 5 Chloroethane | 10.0000 | 8.9586 | 10.4 | 50.0 |
| 11 Trichlorofluoromethane | 10.0000 | 8.6378 | 13.6 | 50.0 |
| 3 Ethanol | 500.0000 | 529.5658 | 5.9 | 50.0 |
| 8 Acrolein | 100.0000 | 103.0934 | 3.1 | 50.0 |
| 7 Acetone | 40.0000 | 39.9425 | 0.1 | 50.0 |
| 12 1,1-Dichloroethene | 10.0000 | 10.1324 | 1.3 | 20.0 |
| 21 Iodomethane | 10.0000 | 9.0307 | 9.7 | 50.0 |
| 68 Acetonitrile | 100.0000 | 105.3960 | 5.4 | 50.0 |
| 86 tert-Butyl alcohol | 200.0000 | 203.5011 | 1.8 | 50.0 |
| 6 Methylene Chloride | 10.0000 | 9.9129 | 0.9 | 50.0 |
| 9 Acrylonitrile | 100.0000 | 100.8451 | 0.8 | 50.0 |
| 0 trans-1,2-Dichloroethene | 10.0000 | 10.0353 | 0.4 | 50.0 |
| 84 Isopropyl ether | 50.0000 | 48.3330 | 3.3 | 50.0 |
| 15 1,1-Dichloroethane | 10.0000 | 9.5196 | 4.8 | 50.0 |
| 69 Chloroprene | 10.0000 | 10.1303 | 1.3 | 50.0 |
| 20 2-Butanone | 40.0000 | 42.5388 | 6.3 | 50.0 |
| 70 Propionitrile | 100.0000 | 102.0227 | 2.0 | 50.0 |
| 0 cis-1,2-Dichloroethene | 10.0000 | 10.2206 | 2.2 | 50.0 |
| 93 2,2-Dichloropropane | 10.0000 | 10.8666 | 8.7 | 50.0 |
| 72 Methacrylonitrile | 100.0000 | 102.5232 | 2.5 | 50.0 |
| 13 Bromochloromethane | 10.0000 | 10.2860 | 2.9 | 50.0 |
| 17 Chloroform | 10.0000 | 10.3202 | 3.2 | 20.0 |
| 22 1,1,1-Trichloroethane | 10.0000 | 10.6133 | 6.1 | 50.0 |
| 71 Isobutanol | 200.0000 | 220.0799 | 10.0 | 50.0 |
| 94 1,1-Dichloropropene | 10.0000 | 10.2388 | 2.4 | 50.0 |
| 23 Carbon Tetrachloride | 10.0000 | 9.9130 | 0.9 | 50.0 |
| 16 1,2-Dichloroethane | 10.0000 | 10.5852 | 5.9 | 50.0 |
| 30 Benzene | 10.0000 | 10.2705 | 2.7 | 50.0 |
| 88 n-Butanol | 200.0000 | 207.7217 | 3.9 | 50.0 |
| 29 Trichloroethene | 10.0000 | 10.5588 | 5.6 | 50.0 |
| 26 1,2-Dichloropropane | 10.0000 | 9.8733 | 1.3 | 20.0 |
| 57 1,4-Dioxane | 500.0000 | 502.0476 | 0.4 | 50.0 |
| 34 Dibromomethane | 10.0000 | 10.0770 | 0.8 | 50.0 |

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: R2.i
Lab File ID: rr6280.d
Analysis Type: WATER

Injection Date: 27-MAY-2004 15:39
Lab Sample ID: MAIN010
Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m

| COMPOUND | EXPECTED CONC. | MEASURED CONC. | %D | MAX %D |
|--------------------------------|-------------------|-------------------|------|-----------|
| 25 Bromodichloromethane | 10.0000 | 10.2634 | 2.6 | 50.0 |
| 28 cis-1,3-Dichloropropene | 10.0000 | 10.3807 | 3.8 | 50.0 |
| 38 4-Methyl-2-pentanone | 40.0000 | 42.1034 | 5.3 | 50.0 |
| 45 Toluene | 10.0000 | 10.6179 | 6.2 | 20.0 |
| 31 trans-1,3-Dichloropropene | 10.0000 | 10.3121 | 3.1 | 50.0 |
| 32 1,1,2-Trichloroethane | 10.0000 | 10.4070 | 4.1 | 50.0 |
| 43 2-Hexanone | 40.0000 | 42.3026 | 5.8 | 50.0 |
| 109 1,3-Dichloropropane | 10.0000 | 10.4937 | 4.9 | 50.0 |
| 42 Tetrachloroethene | 10.0000 | 10.0105 | 0.1 | 50.0 |
| 36 Dibromochloromethane | 10.0000 | 10.4020 | 4.0 | 50.0 |
| 58 1,2-Dibromoethane | 10.0000 | 10.3260 | 3.3 | 50.0 |
| 92 1-Chlorohexane | 10.0000 | 10.0203 | 0.2 | 50.0 |
| 46 Chlorobenzene | 10.0000 | 10.2502 | 2.5 | 50.0 |
| 74 1,1,1,2-Tetrachloroethane | 10.0000 | 10.1733 | 1.7 | 50.0 |
| 47 Ethylbenzene | 10.0000 | 10.3705 | 3.7 | 20.0 |
| 0 m and p-Xylene | 20.0000 | 21.2438 | 6.2 | 50.0 |
| 0 o-Xylene | 10.0000 | 10.5201 | 5.2 | 50.0 |
| 49 Styrene | 10.0000 | 10.6527 | 6.5 | 50.0 |
| 37 Bromoform | 10.0000 | 10.2406 | 2.4 | 50.0 |
| 79 isopropyl benzene | 10.0000 | 10.2800 | 2.8 | 50.0 |
| 76 Cyclohexanone | 400.0000 | 341.8136 | 14.5 | 50.0 |
| 40 1,1,2,2-Tetrachloroethane | 10.0000 | 10.5858 | 5.9 | 50.0 |
| 50 1,2,3-Trichloropropane | 10.0000 | 9.7288 | 2.7 | 50.0 |
| 95 Bromobenzene | 10.0000 | 9.8560 | 1.4 | 50.0 |
| 96 n-Propylbenzene | 10.0000 | 10.0350 | 0.3 | 50.0 |
| 97 2-Chlorotoluene | 10.0000 | 9.6112 | 3.9 | 50.0 |
| 98 1,3,5-Trimethylbenzene | 10.0000 | 9.4807 | 5.2 | 50.0 |
| 99 4-Chlorotoluene | 10.0000 | 9.6418 | 3.6 | 50.0 |
| 100 tert-Butylbenzene | 10.0000 | 9.4258 | 5.7 | 50.0 |
| 101 1,2,4-Trimethylbenzene | 10.0000 | 9.5592 | 4.4 | 50.0 |
| 102 sec-Butylbenzene | 10.0000 | 9.3500 | 6.5 | 50.0 |
| 103 4-Isopropyltoluene | 10.0000 | 9.7349 | 2.7 | 50.0 |
| 61 m-Dichlorobenzene | 10.0000 | 9.8185 | 1.8 | 50.0 |
| 62 p-dichlorobenzene | 10.0000 | 10.1358 | 1.4 | 50.0 |
| 104 n-Butylbenzene | 10.0000 | 9.6814 | 3.2 | 50.0 |
| 63 o-Dichlorobenzene | 10.0000 | 9.9443 | 0.6 | 50.0 |
| 75 1,2-Dibromo-3-chloropropane | 10.0000 | 9.1362 | 8.6 | 50.0 |
| 105 1,2,4-Trichlorobenzene | 10.0000 | 10.0101 | 0.1 | 50.0 |
| 106 Hexachlorobutadiene | 10.0000 | 9.3415 | 6.6 | 50.0 |

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: R2.i Injection Date: 27-MAY-2004 15:39
Lab File ID: rr6280.d Lab Sample ID: MAIN010
Analysis Type: WATER Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m

| | EXPECTED | MEASURED | | MAX |
|----------------------------|----------|----------|-------|-------|
| COMPOUND | CONC. | CONC. | %D | %D |
| ===== | ===== | ===== | ===== | ===== |
| 107 Napthalene | 10.0000 | 9.3641 | 6.4 | 50.0 |
| 108 1,2,3-Trichlorobenzene | 10.0000 | 9.6780 | 3.2 | 50.0 |

STL Denver

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: R2.i Injection Date: 27-MAY-2004 15:39
 Lab File ID: rr6280.d Init. Calibration Date(s): 05/25/4 05/26/4
 Analysis Type: WATER Init. Calibration Times: 19:05 00:31
 Lab Sample ID: MAIN010 Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m
 Quant Type: ISTD

| COMPOUND | RRF | RF10 | MIN RRF | %D | MAX %D |
|--------------------------------|-------|-------|------------|-------|-----------|
| M 1 1,2-Dichloroethene (total) | 0.264 | 0.267 | 0.010 | -1.3 | 50.0 |
| M 2 Xylene (total) | 5.845 | 6.189 | 0.010 | -5.9 | 50.0 |
| 3 dichlorodifluoromethane | 0.924 | 0.838 | 0.010 | 9.2 | 50.0 |
| 5 Chloromethane | 0.443 | 0.373 | 0.100 | 15.8 | 50.0 |
| 6 Vinyl Chloride | 0.420 | 0.359 | 0.020 | 14.4 | 20.0 |
| 8 Bromomethane | 0.566 | 0.284 | 0.010 | 49.9 | 50.0 |
| 9 Chloroethane | 0.595 | 0.533 | 0.010 | 10.4 | 50.0 |
| 11 Trichlorofluoromethane | 1.037 | 0.895 | 0.010 | 13.6 | 50.0 |
| 12 Ethanol | 0.002 | 0.003 | 0.000 | -5.9 | 50.0 |
| 16 Acrolein | 0.032 | 0.033 | 0.001 | -3.1 | 50.0 |
| 19 1,1-Dichloroethene | 0.361 | 0.366 | 0.020 | -1.3 | 20.0 |
| 18 Acetone | 0.044 | 0.044 | 0.001 | 0.1 | 50.0 |
| 21 Iodomethane | 0.585 | 0.528 | 0.010 | 9.7 | 50.0 |
| 22 Acetonitrile | 0.016 | 0.017 | 0.000 | -5.4 | 50.0 |
| 27 Methylene Chloride | 0.305 | 0.302 | 0.010 | 0.9 | 50.0 |
| 26 tert-Butyl alcohol | 0.009 | 0.009 | 0.001 | -1.8 | 50.0 |
| 28 Acrylonitrile | 0.033 | 0.033 | 0.001 | -0.8 | 50.0 |
| 30 trans-1,2-Dichloroethene | 0.266 | 0.267 | 0.010 | -0.4 | 50.0 |
| 34 1,1-Dichloroethane | 0.456 | 0.434 | 0.100 | 4.8 | 50.0 |
| 33 Isopropyl ether | 0.131 | 0.127 | 0.010 | 3.3 | 50.0 |
| 35 Chloroprene | 0.390 | 0.395 | 0.010 | -1.3 | 50.0 |
| 40 cis-1,2-Dichloroethene | 0.261 | 0.267 | 0.010 | -2.2 | 50.0 |
| 37 2-Butanone | 0.038 | 0.041 | 0.010 | -6.3 | 50.0 |
| 41 2,2-Dichloropropane | 0.427 | 0.464 | 0.010 | -8.7 | 50.0 |
| 39 Propionitrile | 0.010 | 0.010 | 0.001 | -2.0 | 50.0 |
| 42 Methacrylonitrile | 0.065 | 0.067 | 0.010 | -2.5 | 50.0 |
| 43 Bromochloromethane | 0.105 | 0.108 | 0.010 | -2.9 | 50.0 |
| 44 Chloroform | 0.513 | 0.530 | 0.020 | -3.2 | 20.0 |
| 47 1,1,1-Trichloroethane | 0.489 | 0.519 | 0.010 | -6.1 | 50.0 |
| 50 1,1-Dichloropropene | 0.380 | 0.389 | 0.010 | -2.4 | 50.0 |
| 51 Carbon Tetrachloride | 0.438 | 0.435 | 0.010 | 0.9 | 50.0 |
| 48 Isobutanol | 0.002 | 0.003 | 0.000 | -10.0 | 50.0 |
| 54 Benzene | 0.902 | 0.926 | 0.010 | -2.7 | 50.0 |
| 53 1,2-Dichloroethane | 0.296 | 0.313 | 0.010 | -5.9 | 50.0 |
| 57 n-Butanol | 0.002 | 0.002 | 0.000 | -3.9 | 50.0 |

STL Denver

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: R2.i Injection Date: 27-MAY-2004 15:39
Lab File ID: rr6280.d Init. Calibration Date(s): 05/25/4 05/26/4
Analysis Type: WATER Init. Calibration Times: 19:05 00:31
Lab Sample ID: MAIN010 Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m
Quant Type: ISTD

| COMPOUND | RRF | RF10 | MIN RRF | %D | MAX %D |
|------------------------------|-------|-------|------------|------|-----------|
| 58 Trichloroethene | 0.275 | 0.290 | 0.010 | -5.6 | 50.0 |
| 61 1,2-Dichloropropane | 0.240 | 0.237 | 0.020 | 1.3 | 20.0 |
| 64 Dibromomethane | 0.153 | 0.154 | 0.010 | -0.8 | 50.0 |
| 63 1,4-Dioxane | 0.001 | 0.001 | 0.000 | -0.4 | 50.0 |
| 65 Bromodichloromethane | 0.390 | 0.401 | 0.010 | -2.6 | 50.0 |
| 68 cis-1,3-Dichloropropene | 1.496 | 1.553 | 0.010 | -3.8 | 50.0 |
| 69 4-Methyl-2-pentanone | 0.406 | 0.428 | 0.010 | -5.3 | 50.0 |
| 71 Toluene | 4.131 | 4.387 | 0.020 | -6.2 | 20.0 |
| 72 trans-1,3-Dichloropropene | 1.231 | 1.269 | 0.010 | -3.1 | 50.0 |
| 74 1,1,2-Trichloroethane | 0.604 | 0.628 | 0.010 | -4.1 | 50.0 |
| 76 1,3-Dichloropropane | 1.002 | 1.052 | 0.010 | -4.9 | 50.0 |
| 77 Tetrachloroethene | 1.043 | 1.044 | 0.010 | -0.1 | 50.0 |
| 75 2-Hexanone | 0.291 | 0.307 | 0.010 | -5.8 | 50.0 |
| 78 Dibromochloromethane | 1.021 | 1.062 | 0.010 | -4.0 | 50.0 |
| 80 1,2-Dibromoethane | 0.728 | 0.751 | 0.010 | -3.3 | 50.0 |
| 81 1-Chlorohexane | 1.895 | 1.899 | 0.010 | -0.2 | 50.0 |
| 83 Chlorobenzene | 2.984 | 3.059 | 0.300 | -2.5 | 50.0 |
| 84 1,1,1,2-Tetrachloroethane | 1.099 | 1.119 | 0.010 | -1.7 | 50.0 |
| 85 Ethylbenzene | 1.592 | 1.651 | 0.020 | -3.7 | 20.0 |
| 86 m and p-Xylene | 1.947 | 2.068 | 0.010 | -6.2 | 50.0 |
| 87 o-Xylene | 1.951 | 2.053 | 0.010 | -5.2 | 50.0 |
| 88 Styrene | 3.201 | 3.410 | 0.010 | -6.5 | 50.0 |
| 89 Bromoform | 0.647 | 0.663 | 0.101 | -2.4 | 50.0 |
| 90 isopropyl benzene | 5.691 | 5.850 | 0.010 | -2.8 | 50.0 |
| 92 Cyclohexanone | 0.022 | 0.019 | 0.001 | 14.5 | 50.0 |
| 94 1,1,2,2-Tetrachloroethane | 0.838 | 0.887 | 0.300 | -5.9 | 50.0 |
| 97 Bromobenzene | 0.876 | 0.863 | 0.010 | 1.4 | 50.0 |
| 96 1,2,3-Trichloropropane | 0.111 | 0.108 | 0.010 | 2.7 | 50.0 |
| 98 n-Propylbenzene | 0.864 | 0.867 | 0.010 | -0.3 | 50.0 |
| 99 2-Chlorotoluene | 0.808 | 0.776 | 0.010 | 3.9 | 50.0 |
| 100 1,3,5-Trimethylbenzene | 2.897 | 2.747 | 0.010 | 5.2 | 50.0 |
| 101 4-Chlorotoluene | 0.813 | 0.784 | 0.010 | 3.6 | 50.0 |
| 102 tert-Butylbenzene | 2.344 | 2.210 | 0.010 | 5.7 | 50.0 |
| 103 1,2,4-Trimethylbenzene | 2.815 | 2.691 | 0.010 | 4.4 | 50.0 |
| 104 sec-Butylbenzene | 0.594 | 0.556 | 0.010 | 6.5 | 50.0 |

STL Denver

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: R2.i Injection Date: 27-MAY-2004 15:39
Lab File ID: rr6280.d Init. Calibration Date(s): 05/25/4 05/26/4
Analysis Type: WATER Init. Calibration Times: 19:05 00:31
Lab Sample ID: MAIN010 Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m
Quant Type: ISTD

| COMPOUND | RRF | RF10 | MIN RRF | %D | MAX %D |
|---------------------------------|-------|-------|------------|------|-----------|
| 106 m-Dichlorobenzene | 1.560 | 1.531 | 0.010 | 1.8 | 50.0 |
| 105 4-Isopropyltoluene | 2.891 | 2.815 | 0.010 | 2.7 | 50.0 |
| 108 p-dichlorobenzene | 1.495 | 1.515 | 0.010 | -1.4 | 50.0 |
| 110 n-Butylbenzene | 2.968 | 2.873 | 0.010 | 3.2 | 50.0 |
| 111 o-Dichlorobenzene | 1.276 | 1.269 | 0.010 | 0.6 | 50.0 |
| 112 1,2-Dibromo-3-chloropropane | 0.077 | 0.071 | 0.010 | 8.6 | 50.0 |
| 113 1,2,4-Trichlorobenzene | 0.703 | 0.703 | 0.010 | -0.1 | 50.0 |
| 114 Hexachlorobutadiene | 0.525 | 0.490 | 0.010 | 6.6 | 50.0 |
| 115 Napthalene | 0.707 | 0.662 | 0.010 | 6.4 | 50.0 |
| 116 1,2,3-Trichlorobenzene | 0.549 | 0.531 | 0.010 | 3.2 | 50.0 |

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052704.b/rr6280.d
Lab Smp Id: MAIN010 Client Smp ID: MAIN010
Inj Date : 27-MAY-2004 15:39
Operator : meierg Inst ID: R2.i
Smp Info : MAIN010,,067/083-04
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052704.b/R2-20ml-h2o.m
Meth Date : 27-May-2004 17:49 meierg Quant Type: ISTD
Cal Date : 26-MAY-2004 00:31 Cal File: rr6230.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| | | | | | | AMOUNTS | |
|--------------------------------|------|--------|--------|---------|----------|---------|---------|
| | | QUANT | SIG | | | CAL-AMT | ON-COL |
| Compounds | MASS | RT | EXP RT | REL RT | RESPONSE | (ug/L) | (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| * 56 Fluorobenzene | 96 | 8.648 | 8.642 | (1.000) | 1234618 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.580 | 11.584 | (1.000) | 321484 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.186 | 14.190 | (1.000) | 547631 | 10.0000 | |
| M 1 1,2-Dichloroethene (total) | 96 | | | | 659192 | 20.0000 | 20.2559 |
| M 2 Xylene (total) | 106 | | | | 1989630 | 10.0000 | 31.7639 |
| 3 dichlorodifluoromethane | 85 | 4.360 | 4.360 | (0.504) | 1035037 | 10.0000 | 9.07666 |
| 5 Chloromethane | 50 | 4.665 | 4.665 | (0.539) | 460302 | 10.0000 | 8.41736 |
| 6 Vinyl Chloride | 62 | 4.851 | 4.851 | (0.561) | 443768 | 10.0000 | 8.56476 |
| 8 Bromomethane | 94 | 5.442 | 5.442 | (0.629) | 350490 | 10.0000 | 5.01271 |
| 9 Chloroethane | 64 | 5.589 | 5.589 | (0.646) | 658186 | 10.0000 | 8.95864 |
| 11 Trichlorofluoromethane | 101 | 5.943 | 5.943 | (0.687) | 1105498 | 10.0000 | 8.63784 |
| 12 Ethanol | 45 | 6.012 | 6.012 | (0.695) | 161173 | 500.000 | 529.566 |
| 16 Acrolein | 56 | 6.347 | 6.347 | (0.734) | 406230 | 100.000 | 103.093 |
| 19 1,1-Dichloroethene | 96 | 6.484 | 6.484 | (0.750) | 452109 | 10.0000 | 10.1324 |
| 18 Acetone | 43 | 6.465 | 6.465 | (0.748) | 217208 | 40.0000 | 39.9425 |
| 21 Iodomethane | 142 | 6.652 | 6.652 | (0.769) | 652401 | 10.0000 | 9.03070 |

| Compounds | QUANT SIG | | | | RESPONSE | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 22 Acetonitrile | 41 | 6.691 | 6.691 | (0.774) | 206758 | 100.000 | 105.396 |
| 27 Methylene Chloride | 84 | 6.848 | 6.848 | (0.792) | 372798 | 10.0000 | 9.91295 |
| 26 tert-Butyl alcohol | 59 | 6.829 | 6.829 | (0.790) | 233436 | 200.000 | 203.501 |
| 28 Acrylonitrile | 53 | 6.986 | 6.986 | (0.808) | 411904 | 100.000 | 100.845 |
| 30 trans-1,2-Dichloroethene | 96 | 7.055 | 7.055 | (0.816) | 329775 | 10.0000 | 10.0353 |
| 34 1,1-Dichloroethane | 63 | 7.340 | 7.340 | (0.849) | 535994 | 10.0000 | 9.51963 |
| 33 Isopropyl ether | 87 | 7.330 | 7.330 | (0.848) | 782856 | 50.0000 | 48.3330(Q) |
| 35 Chloroprene | 53 | 7.409 | 7.409 | (0.857) | 487256 | 10.0000 | 10.1303 |
| 40 cis-1,2-Dichloroethene | 96 | 7.743 | 7.743 | (0.895) | 329417 | 10.0000 | 10.2206 |
| 37 2-Butanone | 43 | 7.704 | 7.704 | (0.891) | 200460 | 40.0000 | 42.5388 |
| 41 2,2-Dichloropropane | 77 | 7.763 | 7.763 | (0.898) | 573476 | 10.0000 | 10.8666 |
| 39 Propionitrile | 54 | 7.743 | 7.743 | (0.895) | 127168 | 100.000 | 102.023 |
| 42 Methacrylonitrile | 41 | 7.871 | 7.871 | (0.910) | 821250 | 100.000 | 102.523 |
| 43 Bromochloromethane | 128 | 7.930 | 7.930 | (0.917) | 133748 | 10.0000 | 10.2860 |
| 44 Chloroform | 83 | 7.950 | 7.950 | (0.919) | 653977 | 10.0000 | 10.3202 |
| 47 1,1,1-Trichloroethane | 97 | 8.156 | 8.156 | (0.943) | 640480 | 10.0000 | 10.6133 |
| 50 1,1-Dichloropropene | 75 | 8.275 | 8.275 | (0.957) | 479936 | 10.0000 | 10.2388 |
| 51 Carbon Tetrachloride | 117 | 8.304 | 8.304 | (0.960) | 536541 | 10.0000 | 9.91298 |
| 48 Isobutanol | 41 | 8.176 | 8.176 | (0.945) | 66819 | 200.000 | 220.080 |
| 54 Benzene | 78 | 8.452 | 8.452 | (0.977) | 1143792 | 10.0000 | 10.2705 |
| 53 1,2-Dichloroethane | 62 | 8.422 | 8.422 | (0.974) | 386358 | 10.0000 | 10.5852 |
| 57 n-Butanol | 56 | 8.707 | 8.707 | (1.007) | 42678 | 200.000 | 207.722 |
| 58 Trichloroethene | 130 | 8.963 | 8.963 | (1.036) | 358640 | 10.0000 | 10.5588 |
| 61 1,2-Dichloropropane | 63 | 9.160 | 9.160 | (1.059) | 292287 | 10.0000 | 9.87333 |
| 64 Dibromomethane | 93 | 9.268 | 9.268 | (1.072) | 190504 | 10.0000 | 10.0770 |
| 63 1,4-Dioxane | 88 | 9.239 | 9.239 | (1.068) | 57067 | 500.000 | 502.048 |
| 65 Bromodichloromethane | 83 | 9.376 | 9.376 | (1.084) | 494563 | 10.0000 | 10.2634 |
| 68 cis-1,3-Dichloropropene | 75 | 9.780 | 9.780 | (0.845) | 499161 | 10.0000 | 10.3807 |
| 69 4-Methyl-2-pentanone | 43 | 9.868 | 9.868 | (0.852) | 550122 | 40.0000 | 42.1034 |
| 71 Toluene | 91 | 10.153 | 10.153 | (0.877) | 1410232 | 10.0000 | 10.6179 |
| 72 trans-1,3-Dichloropropene | 75 | 10.291 | 10.291 | (0.889) | 407955 | 10.0000 | 10.3121 |
| 74 1,1,2-Trichloroethane | 97 | 10.507 | 10.507 | (0.907) | 202023 | 10.0000 | 10.4070 |
| 76 1,3-Dichloropropane | 76 | 10.694 | 10.694 | (0.924) | 338042 | 10.0000 | 10.4937 |
| 77 Tetrachloroethene | 164 | 10.734 | 10.734 | (0.927) | 335718 | 10.0000 | 10.0105 |
| 75 2-Hexanone | 43 | 10.694 | 10.694 | (0.924) | 395189 | 40.0000 | 42.3026 |
| 78 Dibromochloromethane | 129 | 10.950 | 10.950 | (0.946) | 341455 | 10.0000 | 10.4020 |
| 80 1,2-Dibromoethane | 107 | 11.117 | 11.117 | (0.960) | 241528 | 10.0000 | 10.3260 |
| 81 1-Chlorohexane | 91 | 11.501 | 11.501 | (0.993) | 610339 | 10.0000 | 10.0203 |
| 83 Chlorobenzene | 112 | 11.609 | 11.609 | (1.003) | 983278 | 10.0000 | 10.2502 |
| 84 1,1,1,2-Tetrachloroethane | 131 | 11.668 | 11.668 | (1.008) | 359582 | 10.0000 | 10.1733 |
| 85 Ethylbenzene | 106 | 11.688 | 11.688 | (1.009) | 530762 | 10.0000 | 10.3705 |
| 86 m and p-Xylene | 106 | 11.806 | 11.806 | (1.020) | 1329647 | 20.0000 | 21.2438 |
| 87 o-Xylene | 106 | 12.239 | 12.239 | (1.057) | 659983 | 10.0000 | 10.5201 |
| 88 Styrene | 104 | 12.248 | 12.248 | (1.058) | 1096114 | 10.0000 | 10.6527 |
| 89 Bromoform | 173 | 12.485 | 12.485 | (1.078) | 213131 | 10.0000 | 10.2406 |
| 90 isopropyl benzene | 105 | 12.612 | 12.612 | (1.089) | 1880730 | 10.0000 | 10.2800 |
| 92 Cyclohexanone | 55 | 12.740 | 12.740 | (1.100) | 246762 | 400.000 | 341.814 |

| Compounds | QUANT SIG | | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--|---------|---------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | | CAL-AMT | ON-COL |
| | | | | | | | (ug/L) | (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | | ===== | ===== |
| 94 1,1,2,2-Tetrachloroethane | 83 | 12.898 | 12.898 | (1.114) | 285116 | | 10.0000 | 10.5858 |
| 97 Bromobenzene | 156 | 13.026 | 13.026 | (0.918) | 472756 | | 10.0000 | 9.85600 |
| 96 1,2,3-Trichloropropane | 110 | 12.986 | 12.986 | (0.915) | 59119 | | 10.0000 | 9.72882 |
| 98 n-Propylbenzene | 120 | 13.075 | 13.075 | (0.922) | 474927 | | 10.0000 | 10.0350 |
| 99 2-Chlorotoluene | 126 | 13.222 | 13.222 | (0.932) | 425049 | | 10.0000 | 9.61119 |
| 100 1,3,5-Trimethylbenzene | 105 | 13.242 | 13.242 | (0.933) | 1504140 | | 10.0000 | 9.48074 |
| 101 4-Chlorotoluene | 126 | 13.331 | 13.331 | (0.940) | 429457 | | 10.0000 | 9.64177 |
| 102 tert-Butylbenzene | 119 | 13.655 | 13.655 | (0.963) | 1210111 | | 10.0000 | 9.42579 |
| 103 1,2,4-Trimethylbenzene | 105 | 13.704 | 13.704 | (0.966) | 1473697 | | 10.0000 | 9.55918 |
| 104 sec-Butylbenzene | 134 | 13.921 | 13.921 | (0.981) | 304220 | | 10.0000 | 9.34996 |
| 106 m-Dichlorobenzene | 146 | 14.117 | 14.117 | (0.995) | 838653 | | 10.0000 | 9.81847 |
| 105 4-Isopropyltoluene | 119 | 14.068 | 14.068 | (0.992) | 1541403 | | 10.0000 | 9.73495 |
| 108 p-dichlorobenzene | 146 | 14.216 | 14.216 | (1.002) | 829798 | | 10.0000 | 10.1358 |
| 110 n-Butylbenzene | 91 | 14.599 | 14.599 | (1.029) | 1573328 | | 10.0000 | 9.68145 |
| 111 o-Dichlorobenzene | 146 | 14.727 | 14.727 | (1.038) | 694896 | | 10.0000 | 9.94426 |
| 112 1,2-Dibromo-3-chloropropane | 157 | 15.799 | 15.799 | (1.114) | 38705 | | 10.0000 | 9.13620 |
| 113 1,2,4-Trichlorobenzene | 180 | 17.245 | 17.245 | (1.216) | 385106 | | 10.0000 | 10.0101 |
| 114 Hexachlorobutadiene | 225 | 17.541 | 17.541 | (1.236) | 268446 | | 10.0000 | 9.34154 |
| 115 Napthalene | 128 | 17.767 | 17.767 | (1.252) | 362721 | | 10.0000 | 9.36408 |
| 116 1,2,3-Trichlorobenzene | 180 | 18.268 | 18.268 | (1.288) | 290736 | | 10.0000 | 9.67798 |

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Internal Standard
Check Report

Instrument ID: R2.i
Lab File ID: rr6280.d
Analysis Type: WATER

Injection Date: 27-MAY-2004 15:39
Lab Sample ID: MAIN010
Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m

| | ICAL | SAMP | ICAL | SAMP | |
|------------------------|---------|---------|--------|--------|-------|
| INTERNAL STANDARD | AREA | AREA | RT | RT | %R |
| ===== | ===== | ===== | ===== | ===== | ===== |
| Fluorobenzene | 1181127 | 1234618 | 8.638 | 8.648 | 104.5 |
| Chlorobenzene-d5 | 309128 | 321484 | 11.579 | 11.580 | 104.0 |
| 1,4-Dichlorobenzene-d4 | 483986 | 547631 | 14.176 | 14.186 | 113.2 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: R2.i
Lab File ID: rr6280.d
Lab Smp Id: MAIN010
Analysis Type: VOA
Quant Type: ISTD
Operator: meierg
Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m
Misc Info:

Calibration Date: 05/27/4
Calibration Time: 1539
Client Smp ID: MAIN010
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1234618 | 617309 | 2469236 | 1234618 | 0.00 |
| 82 Chlorobenzene-d5 | 321484 | 160742 | 642968 | 321484 | 0.00 |
| 107 1,4-Dichlorobenze | 547631 | 273816 | 1095262 | 547631 | 0.00 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.65 | 8.15 | 9.15 | 8.65 | 0.00 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.58 | 0.00 |
| 107 1,4-Dichlorobenze | 14.19 | 13.69 | 14.69 | 14.19 | 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/R2.i/052704,b/rr6280.d

Page 8

Date : 27-MAY-2004 15:39

Client ID: MAIN010

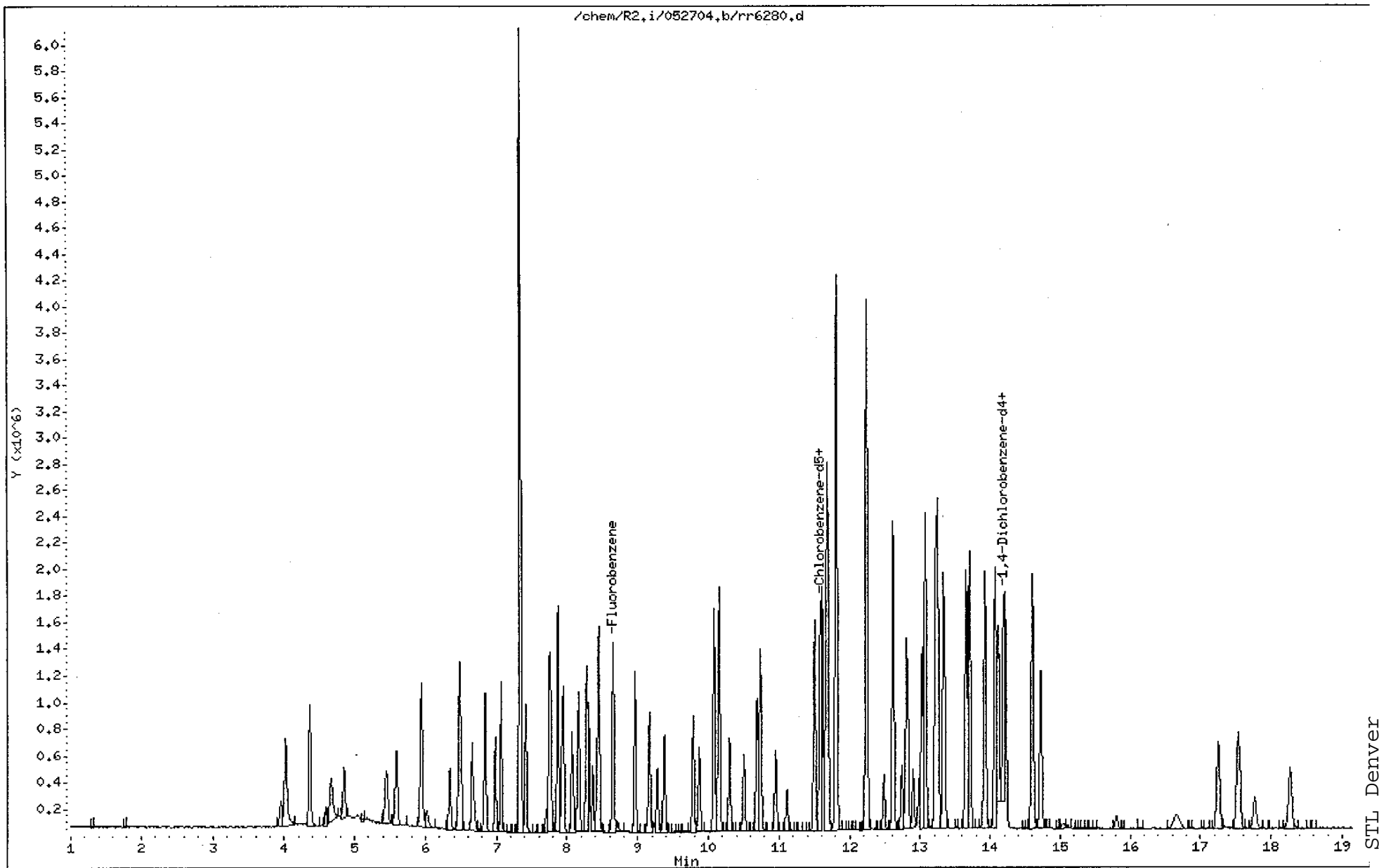
Instrument: R2.i

Sample Info: MAIN010,,067/083-04

Operator: meierg

Column phase: HP624

Column diameter: 0.32



CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: R2.i
Lab File ID: rr6281.d
Analysis Type: WATER

Injection Date: 27-MAY-2004 16:04
Lab Sample ID: SUPP010
Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m

| COMPOUND | EXPECTED CONC. | MEASURED CONC. | %D | MAX %D |
|-------------------------------------|-------------------|-------------------|------|-----------|
| 122 dichlorotetrafluoroethane | 10.0000 | 9.7369 | 2.6 | 50.0 |
| 110 Ethylene Oxide | 1250.0000 | 1407.1361 | 12.6 | 50.0 |
| 87 Dichlorofluoromethane | 10.0000 | 10.2037 | 2.0 | 50.0 |
| 129 1,2-dichloro-1,1,2-trifluoroeth | 10.0000 | 9.9833 | 0.2 | 50.0 |
| 77 Ethyl Ether | 10.0000 | 10.8967 | 9.0 | 50.0 |
| 130 2,2-dichloro-1,1,1-trifluoroeth | 10.0000 | 9.9619 | 0.4 | 50.0 |
| 65 Trichlorotrifluoroethane | 10.0000 | 9.9832 | 0.2 | 50.0 |
| 131 2-Propanol | 200.0000 | 205.5524 | 2.8 | 50.0 |
| 124 Methyl acetate | 50.0000 | 55.1529 | 10.3 | 50.0 |
| 10 Carbon Disulfide | 10.0000 | 9.8750 | 1.3 | 50.0 |
| 67 Allyl Chloride | 10.0000 | 9.7127 | 2.9 | 50.0 |
| 53 Methyl t-butyl ether | 10.0000 | 11.2237 | 12.2 | 50.0 |
| 54 Hexane | 10.0000 | 10.2314 | 2.3 | 50.0 |
| 24 Vinyl acetate | 20.0000 | 23.5117 | 17.6 | 50.0 |
| 125 ETBE | 50.0000 | 53.1677 | 6.3 | 50.0 |
| 78 Ethyl Acetate | 20.0000 | 22.1517 | 10.8 | 50.0 |
| 56 Tetrahydrofuran | 20.0000 | 22.5511 | 12.8 | 50.0 |
| 89 Dibromofluoromethane | 10.0000 | 11.0380 | 10.4 | 50.0 |
| 115 Cyclohexane | 10.0000 | 9.3575 | 6.4 | 50.0 |
| 303 1,2-Dichloroethane-d4 | 10.0000 | 11.0077 | 10.1 | 50.0 |
| 126 TAME | 50.0000 | 55.3242 | 10.6 | 50.0 |
| 116 2-Pentanone | 40.0000 | 44.4325 | 11.1 | 50.0 |
| 73 Methyl Methacrylate | 20.0000 | 22.9361 | 14.7 | 50.0 |
| 127 Methyl cyclohexane | 10.0000 | 9.5335 | 4.7 | 50.0 |
| 82 2-nitropropane | 10.0000 | 11.3671 | 13.7 | 50.0 |
| 35 2-Chloroethyl vinyl ether | 10.0000 | 9.6902 | 3.1 | 50.0 |
| 301 Toluene-d8 | 10.0000 | 10.0982 | 1.0 | 50.0 |
| 41 Ethyl methacrylate | 20.0000 | 21.5420 | 7.7 | 50.0 |
| 128 Tetrahydrothiophene | 10.0000 | 10.9693 | 9.7 | 50.0 |
| 117 c-1,4-Dichloro-2-butene | 10.0000 | 9.8860 | 1.1 | 50.0 |
| 302 Bromofluorobenzene | 10.0000 | 10.2570 | 2.6 | 50.0 |
| 60 t-1,4-Dichloro-2-butene | 10.0000 | 9.4216 | 5.8 | 50.0 |
| 123 1,2,3-Trimethylbenzene | 10.0000 | 9.3840 | 6.2 | 50.0 |

STL Denver

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: R2.i Injection Date: 27-MAY-2004 16:04
Lab File ID: rr6281.d Init. Calibration Date(s): 05/25/4 05/26/4
Analysis Type: WATER Init. Calibration Times: 19:05 00:31
Lab Sample ID: SUPP010 Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m
Quant Type: ISTD

| COMPOUND | RRF | RF10 | MIN RRF | %D | MAX %D |
|--------------------------------|-------|-------|------------|-------|-----------|
| \$ 46 Dibromofluoromethane | 0.332 | 0.366 | 0.010 | -10.4 | 50.0 |
| \$ 52 1,2-Dichloroethane-d4 | 0.263 | 0.290 | 0.010 | -10.1 | 50.0 |
| \$ 70 Toluene-d8 | 3.630 | 3.666 | 0.010 | -1.0 | 50.0 |
| \$ 93 Bromofluorobenzene | 1.743 | 1.788 | 0.010 | -2.6 | 50.0 |
| 4 dichlorotetrafluoroethane | 0.519 | 0.505 | 0.010 | 2.6 | 50.0 |
| 7 Ethylene Oxide | 0.022 | 0.025 | 0.001 | -12.6 | 50.0 |
| 10 Dichlorofluoromethane | 1.414 | 1.443 | 0.010 | -2.0 | 50.0 |
| 13 1,2-dichloro-1,1,2-trifluor | 0.455 | 0.454 | 0.010 | 0.2 | 50.0 |
| 14 Ethyl Ether | 0.252 | 0.275 | 0.010 | -9.0 | 50.0 |
| 15 2,2-dichloro-1,1,1-trifluor | 0.809 | 0.806 | 0.010 | 0.4 | 50.0 |
| 17 Trichlorotrifluoroethane | 0.339 | 0.338 | 0.010 | 0.2 | 50.0 |
| 20 2-Propanol | 0.009 | 0.009 | 0.001 | -2.8 | 50.0 |
| 23 Methyl acetate | 0.104 | 0.115 | 0.010 | -10.3 | 50.0 |
| 24 Carbon Disulfide | 1.367 | 1.349 | 0.010 | 1.3 | 50.0 |
| 25 Allyl Chloride | 0.531 | 0.515 | 0.010 | 2.9 | 50.0 |
| 29 Methyl t-butyl ether | 0.410 | 0.460 | 0.010 | -12.2 | 50.0 |
| 31 Hexane | 0.334 | 0.342 | 0.010 | -2.3 | 50.0 |
| 32 Vinyl acetate | 0.229 | 0.270 | 0.010 | -17.6 | 50.0 |
| 36 ETBE | 0.525 | 0.559 | 0.010 | -6.3 | 50.0 |
| 38 Ethyl Acetate | 0.082 | 0.091 | 0.010 | -10.8 | 50.0 |
| 45 Tetrahydrofuran | 0.020 | 0.023 | 0.003 | -12.8 | 50.0 |
| 49 Cyclohexane | 0.397 | 0.371 | 0.010 | 6.4 | 50.0 |
| 55 TAME | 0.425 | 0.470 | 0.010 | -10.6 | 50.0 |
| 59 2-Pentanone | 0.074 | 0.083 | 0.010 | -11.1 | 50.0 |
| 60 Methyl Methacrylate | 0.026 | 0.030 | 0.010 | -14.7 | 50.0 |
| 62 Methyl cyclohexane | 0.419 | 0.399 | 0.010 | 4.7 | 50.0 |
| 66 2-nitropropane | 0.129 | 0.147 | 0.010 | -13.7 | 50.0 |
| 67 2-Chloroethyl vinyl ether | 0.152 | 0.147 | 0.001 | 3.1 | 50.0 |
| 73 Ethyl methacrylate | 0.623 | 0.671 | 0.010 | -7.7 | 50.0 |
| 79 Tetrahydrothiophene | 0.077 | 0.085 | 0.010 | -9.7 | 50.0 |
| 91 c-1,4-Dichloro-2-butene | 0.184 | 0.182 | 0.010 | 1.1 | 50.0 |
| 95 t-1,4-Dichloro-2-butene | 0.127 | 0.120 | 0.010 | 5.8 | 50.0 |
| 109 1,2,3-Trimethylbenzene | 2.695 | 2.529 | 0.010 | 6.2 | 50.0 |

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052704.b/rr6281.d
Lab Smp Id: SUPP010 Client Smp ID: SUPP010
Inj Date : 27-MAY-2004 16:04
Operator : meierg Inst ID: R2.i
Smp Info : SUPP010,,011/052-04
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052704.b/R2-20ml-h2o.m
Meth Date : 27-May-2004 17:49 meierg Quant Type: ISTD
Cal Date : 26-MAY-2004 00:31 Cal File: rr6230.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-suppl.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| | | | | | | AMOUNTS | |
|-----------------------------------|------|-----------|--------|---------|----------|---------|-------------|
| | | QUANT SIG | | | | CAL-AMT | ON-COL |
| Compounds | MASS | RT | EXP RT | REL RT | RESPONSE | (ug/L) | (ug/L) |
| ===== | ---- | == | ===== | ===== | ===== | ===== | ===== |
| * 56 Fluorobenzene | 96 | 8.642 | 8.642 | (1.000) | 1117002 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.584 | 11.584 | (1.000) | 318643 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.190 | 14.190 | (1.000) | 494708 | 10.0000 | |
| \$ 46 Dibromofluoromethane | 111 | 8.072 | 8.072 | (0.934) | 409012 | 10.0000 | 11.0380 |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 8.367 | 8.367 | (0.968) | 323769 | 10.0000 | 11.0077 |
| \$ 70 Toluene-d8 | 98 | 10.088 | 10.088 | (0.871) | 1168057 | 10.0000 | 10.0982 |
| \$ 93 Bromofluorobenzene | 95 | 12.813 | 12.813 | (1.106) | 569611 | 10.0000 | 10.2570 |
| 4 dichlorotetrafluoroethane | 85 | 4.590 | 4.590 | (0.531) | 564123 | 10.0000 | 9.73693 |
| 7 Ethylene Oxide | 43 | 5.387 | 5.387 | (0.623) | 3430335 | 1250.00 | 1407.14 (Q) |
| 10 Dichlorofluoromethane | 67 | 5.810 | 5.810 | (0.672) | 1611764 | 10.0000 | 10.2037 |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117 | 6.174 | 6.174 | (0.714) | 506835 | 10.0000 | 9.98328 |
| 14 Ethyl Ether | 59 | 6.213 | 6.213 | (0.719) | 307306 | 10.0000 | 10.8967 |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83 | 6.223 | 6.223 | (0.720) | 899807 | 10.0000 | 9.96193 |
| 17 Trichlorotrifluoroethane | 151 | 6.459 | 6.459 | (0.747) | 377735 | 10.0000 | 9.98318 |
| 20 2-Propanol | 45 | 6.508 | 6.508 | (0.753) | 208037 | 200.000 | 205.552 |
| 23 Methyl acetate | 43 | 6.724 | 6.724 | (0.778) | 643721 | 50.0000 | 55.1529 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/L) | ON-COL (ug/L) |
| ===== | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| 24 Carbon Disulfide | 76 | 6.754 | 6.754 | (0.781) | 1507342 | 10.0000 | 9.87495 |
| 25 Allyl Chloride | 41 | 6.764 | 6.764 | (0.783) | 575642 | 10.0000 | 9.71268 |
| 29 Methyl t-butyl ether | 73 | 7.029 | 7.029 | (0.813) | 514147 | 10.0000 | 11.2237 |
| 31 Hexane | 57 | 7.236 | 7.236 | (0.837) | 381625 | 10.0000 | 10.2314 |
| 32 Vinyl acetate | 43 | 7.315 | 7.315 | (0.846) | 602492 | 20.0000 | 23.5117 |
| 36 ETBE | 59 | 7.580 | 7.580 | (0.877) | 3119325 | 50.0000 | 53.1677 |
| 38 Ethyl Acetate | 43 | 7.718 | 7.718 | (0.893) | 203945 | 20.0000 | 22.1517 |
| 45 Tetrahydrofuran | 42 | 7.974 | 7.974 | (0.923) | 51576 | 20.0000 | 22.5511 |
| 49 Cyclohexane | 56 | 8.239 | 8.239 | (0.953) | 414945 | 10.0000 | 9.35748 |
| 55 TAME | 73 | 8.465 | 8.465 | (0.980) | 2623434 | 50.0000 | 55.3242 |
| 59 2-Pentanone | 43 | 9.016 | 9.016 | (1.043) | 369113 | 40.0000 | 44.4325 |
| 60 Methyl Methacrylate | 100 | 9.144 | 9.144 | (1.058) | 67106 | 20.0000 | 22.9361 |
| 62 Methyl cyclohexane | 55 | 9.184 | 9.184 | (1.063) | 445934 | 10.0000 | 9.53346 |
| 66 2-nitropropane | 41 | 9.538 | 9.538 | (0.823) | 46784 | 10.0000 | 11.3671 |
| 67 2-Chloroethyl vinyl ether | 63 | 9.577 | 9.577 | (0.827) | 46875 | 10.0000 | 9.69025 |
| 73 Ethyl methacrylate | 69 | 10.315 | 10.315 | (0.890) | 427605 | 20.0000 | 21.5420 |
| 79 Tetrahydrothiophene | 60 | 11.003 | 11.003 | (1.273) | 94682 | 10.0000 | 10.9693 |
| 91 c-1,4-Dichloro-2-butene | 53 | 12.646 | 12.646 | (1.092) | 57853 | 10.0000 | 9.88601 |
| 95 t-1,4-Dichloro-2-butene | 53 | 12.951 | 12.951 | (0.913) | 59295 | 10.0000 | 9.42159 |
| 109 1,2,3-Trimethylbenzene | 105 | 14.249 | 14.249 | (1.004) | 1250925 | 10.0000 | 9.38401 |

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Internal Standard
Check Report

Instrument ID: R2.i Injection Date: 27-MAY-2004 16:04
Lab File ID: rr6281.d Lab Sample ID: SUPP010
Analysis Type: WATER Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m

| | ICAL | SAMP | ICAL | SAMP | |
|------------------------|---------|---------|--------|--------|-------|
| INTERNAL STANDARD | AREA | AREA | RT | RT | %R |
| ===== | ===== | ===== | ===== | ===== | ===== |
| Fluorobenzene | 1149959 | 1117002 | 8.633 | 8.642 | 97.1 |
| Chlorobenzene-d5 | 302802 | 318643 | 11.574 | 11.584 | 105.2 |
| 1,4-Dichlorobenzene-d4 | 475530 | 494708 | 14.181 | 14.190 | 104.0 |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|--|---------------------------|
| Instrument ID: R2.i | Calibration Date: 05/27/4 |
| Lab File ID: rr6281.d | Calibration Time: 1539 |
| Lab Smp Id: SUPP010 | Client Smp ID: SUPP010 |
| Analysis Type: VOA | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: meierg | |
| Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m | |
| Misc Info: | |

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 1234618 | 617309 | 2469236 | 1117002 | -9.53 |
| 82 Chlorobenzene-d5 | 321484 | 160742 | 642968 | 318643 | -0.88 |
| 107 1,4-Dichlorobenze | 547631 | 273816 | 1095262 | 494708 | -9.66 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 56 Fluorobenzene | 8.65 | 8.15 | 9.15 | 8.64 | -0.07 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.58 | 0.03 |
| 107 1,4-Dichlorobenze | 14.19 | 13.69 | 14.69 | 14.19 | 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/R2.i/052704.b/rr6281.d

Page 5

Date : 27-MAY-2004 16:04

Client ID: SUPP010

Sample Info: SUPP010,,011/052-04

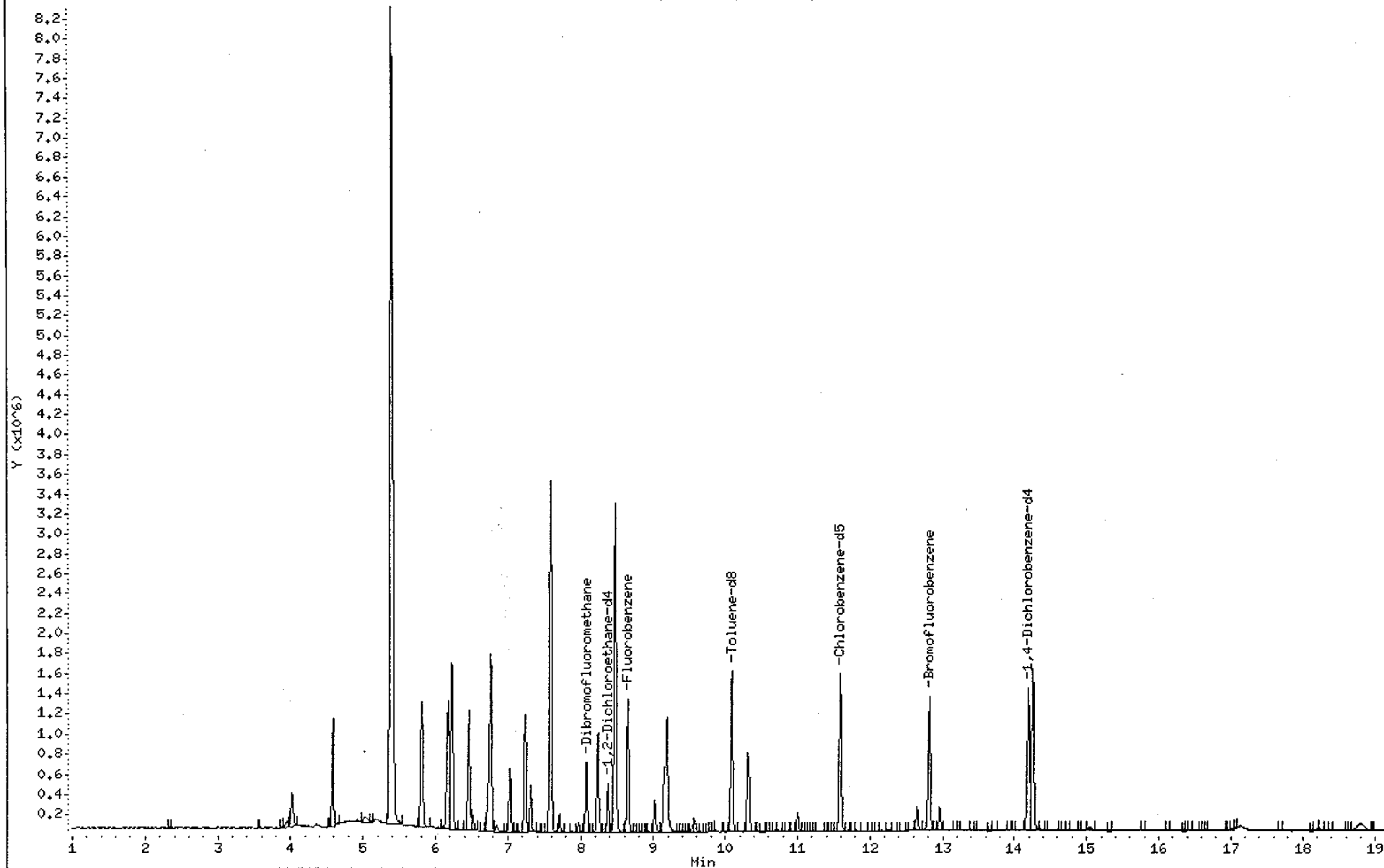
Instrument: R2.i

Operator: meierg

Column phase: HP624

Column diameter: 0.32

/chem/R2.i/052704.b/rr6281.d



**GC/MS VOLATILE
SAMPLE DATA**



STL

LCS Report

LCS SAMPLE

Data File : /chem/R2.i/052704.b/rr6282.d

Samp Info : LCS,,109-04

Inj Date : 27-MAY-2004 16:29

Sample Amt : 20mL

| Sample # | Sample # | Sample # | Sample # | Sample # |
|----------|----------|----------|----------|----------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| Compound | Concentration | | %Recovery | | |
|--------------------|---------------|----------|-----------|-----|-----|
| | Spiked | Measured | Meas. | Min | Max |
| 1,1-Dichloroethene | 10.0000 | 11.1003 | 111 | 67 | 125 |
| Benzene | 10.0000 | 11.0042 | 110 | 75 | 116 |
| Trichloroethene | 10.0000 | 11.0414 | 110 | 80 | 123 |
| Toluene | 10.0000 | 10.4528 | 105 | 74 | 115 |
| Chlorobenzene | 10.0000 | 10.2695 | 103 | 77 | 117 |

100.0 Percent of recoveries are within control limits.

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052704.b/rr6282.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 27-MAY-2004 16:29
Operator : meierg Inst ID: R2.i
Smp Info : LCS,,109-04
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052704.b/R2-20ml-h2o.m
Meth Date : 27-May-2004 17:49 meierg Quant Type: ISTD
Cal Date : 26-MAY-2004 00:31 Cal File: rr6230.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: dcs.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Gu 5/27

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | | |
|------------------------------|-----------|----------------|--------|---------|---------|----------|-----------|---------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN | FINAL |
| | | | | | | | (ug/L) | (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== | |
| * 56 Fluorobenzene | 96 | 8.643 | 8.642 | (1.000) | 1195453 | 10.0000 | | |
| * 82 Chlorobenzene-d5 | 119 | 11.584 | 11.584 | (1.000) | 327439 | 10.0000 | | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.191 | 14.190 | (1.000) | 520277 | 10.0000 | | |
| \$ 46 Dibromofluoromethane | 111 | 8.072 | 8.072 | (0.934) | 414169 | 10.4437 | 10.4437 | |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 8.368 | 8.367 | (0.968) | 313776 | 9.96787 | 9.96786 | |
| \$ 70 Toluene-d8 | 98 | 10.089 | 10.088 | (0.871) | 1161791 | 9.77418 | 9.77418 | |
| \$ 93 Bromofluorobenzene | 95 | 12.814 | 12.813 | (1.106) | 590784 | 10.3524 | 10.3524 | |
| 19 1,1-Dichloroethene | 96 | 6.489 | 6.484 | (0.751) | 479585 | 11.1003 | 11.1003 | |
| 54 Benzene | 78 | 8.456 | 8.452 | (0.978) | 1186627 | 11.0042 | 11.0042 | |
| 58 Trichloroethene | 130 | 8.968 | 8.963 | (1.038) | 363134 | 11.0414 | 11.0414 | |
| 71 Toluene | 91 | 10.158 | 10.153 | (0.877) | 1414026 | 10.4528 | 10.4528 | |
| 83 Chlorobenzene | 112 | 11.614 | 11.609 | (1.003) | 1003381 | 10.2695 | 10.2695 | |

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|--|---------------------------|
| Instrument ID: R2.i | Calibration Date: 05/27/4 |
| Lab File ID: rr6282.d | Calibration Time: 1604 |
| Lab Smp Id: LCS | Client Smp ID: LCS |
| Analysis Type: VOA | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: meierg | |
| Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m | |
| Misc Info: | |

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1117002 | 558501 | 2234004 | 1195453 | 7.02 |
| 82 Chlorobenzene-d5 | 318643 | 159322 | 637286 | 327439 | 2.76 |
| 107 1,4-Dichlorobenze | 494708 | 247354 | 989416 | 520277 | 5.17 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.64 | 0.01 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.58 | 0.00 |
| 107 1,4-Dichlorobenze | 14.19 | 13.69 | 14.69 | 14.19 | 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.

STL Denver

RECOVERY REPORT

| | |
|--|--------------------|
| Client Name: | Client SDG: 052704 |
| Sample Matrix: LIQUID | Fraction: VOA |
| Lab Smp Id: LCS | Client Smp ID: LCS |
| Level: LOW | Operator: meierg |
| Data Type: MS DATA | SampleType: LCS |
| SpikeList File: dcs.spk | Quant Type: ISTD |
| Sublist File: dcs.sub | |
| Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m | |
| Misc Info: | |

| SPIKE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|-----------------------|-----------------------|---------------------------|----------------|--------|
| 19 1,1-Dichloroethene | 10.0000 | 11.1003 | 111.00 | 67-125 |
| 54 Benzene | 10.0000 | 11.0042 | 110.04 | 75-116 |
| 58 Trichloroethene | 10.0000 | 11.0414 | 110.41 | 80-123 |
| 71 Toluene | 10.0000 | 10.4528 | 104.53 | 74-115 |
| 83 Chlorobenzene | 10.0000 | 10.2695 | 102.70 | 77-117 |

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 46 Dibromofluorometha | 10.0000 | 10.4437 | 104.44 | 76-116 |
| \$ 52 1,2-Dichloroethane | 10.0000 | 9.96786 | 99.68 | 59-129 |
| \$ 70 Toluene-d8 | 10.0000 | 9.77418 | 97.74 | 76-116 |
| \$ 93 Bromofluorobenzene | 10.0000 | 10.3524 | 103.52 | 79-119 |

Data File: /chem/R2.i/052704.b/rr6282.d

Date : 27-MAY-2004 16:29

Client ID: LCS

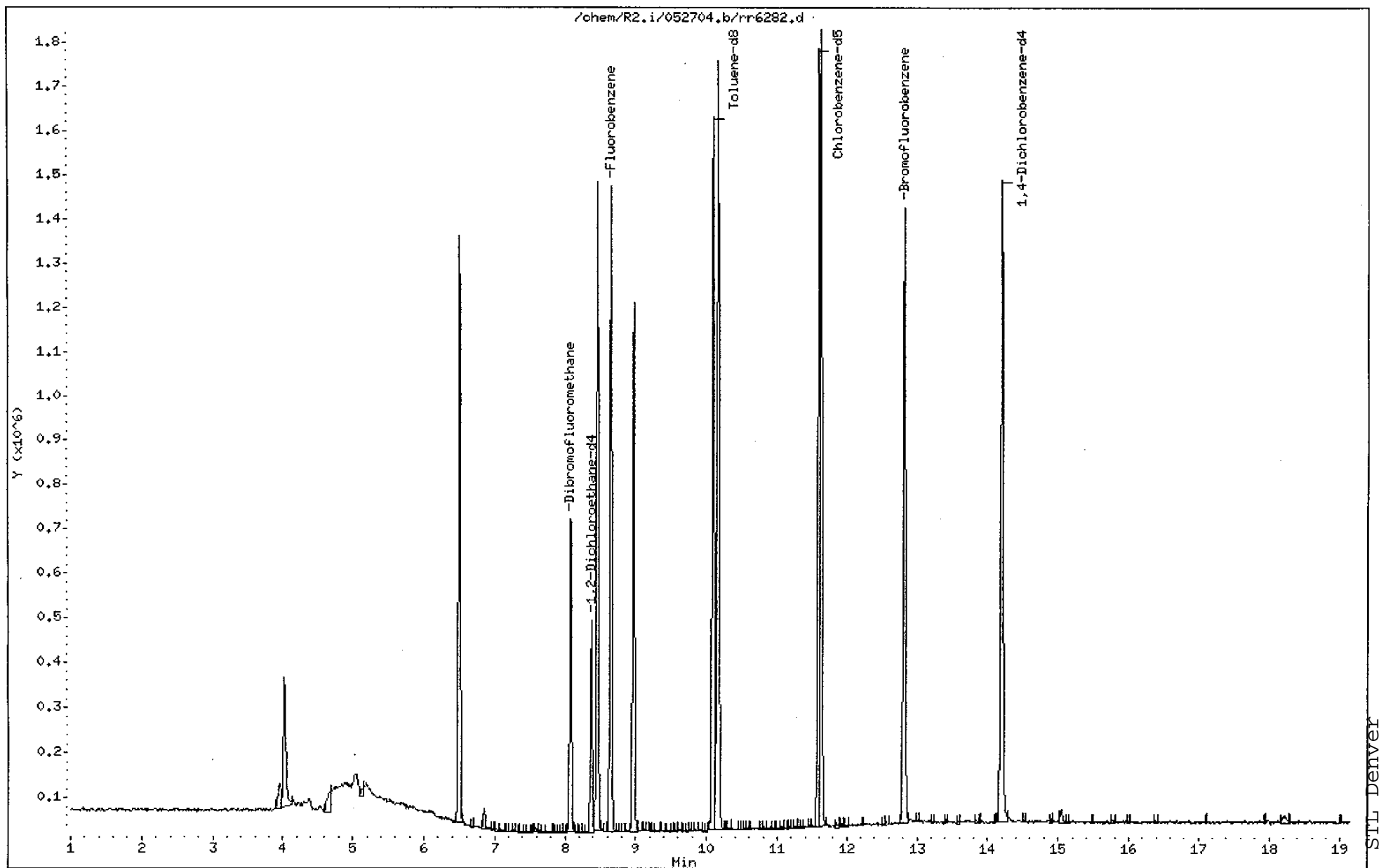
Sample Info: LCS,,109-04

Column phase: HP624

Instrument: R2.i

Operator: meierg

Column diameter: 0.32



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052704.b/rr6283.d
Lab Smp Id: VBLK Client Smp ID: VBLK
Inj Date : 27-MAY-2004 16:54
Operator : meierg Inst ID: R2.i
Smp Info : VBLK
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052704.b/R2-20ml-h2o.m
Meth Date : 27-May-2004 17:49 meierg Quant Type: ISTD
Cal Date : 26-MAY-2004 00:31 Cal File: rr6230.d
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: QK-01.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

Gr 5/27

| | | | | | | CONCENTRATIONS | |
|--------------------------------|--------|------------------------|--------|---------|----------|----------------|---------|
| QUANT SIG | | | | | | ON-COLUMN | FINAL |
| Compounds | MASS | RT | EXP RT | REL RT | RESPONSE | (ug/L) | (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| * 56 Fluorobenzene | 96 | 8.649 | 8.642 | (1.000) | 1191135 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.580 | 11.584 | (1.000) | 324805 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.186 | 14.190 | (1.000) | 495852 | 10.0000 | |
| \$ 46 Dibromofluoromethane | 111 | 8.078 | 8.072 | (0.934) | 405424 | 10.2603 | 10.2603 |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 8.363 | 8.367 | (0.967) | 322741 | 10.2898 | 10.2898 |
| \$ 70 Toluene-d8 | 98 | 10.085 | 10.088 | (0.871) | 1173538 | 9.95307 | 9.95307 |
| \$ 93 Bromofluorobenzene | 95 | 12.809 | 12.813 | (1.106) | 551898 | 9.74946 | 9.74946 |
| M 1 1,2-Dichloroethene (total) | 96.00 | Compound Not Detected. | | | | | |
| M 2 Xylene (total) | 106.00 | Compound Not Detected. | | | | | |
| 3 dichlorodifluoromethane | 85.00 | Compound Not Detected. | | | | | |
| 4 dichlorotetrafluoroethane | 85.00 | Compound Not Detected. | | | | | |
| 5 Chloromethane | 50.00 | Compound Not Detected. | | | | | |
| 6 Vinyl Chloride | 62.00 | Compound Not Detected. | | | | | |
| 7 Ethylene Oxide | 43.00 | Compound Not Detected. | | | | | |
| 8 Bromomethane | 94.00 | Compound Not Detected. | | | | | |
| 9 Chloroethane | 64.00 | Compound Not Detected. | | | | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|-----------------------------------|-----------|-------|----------|---------------|----------|----------------|-------------|
| | | | | | | ON-COLUMN | FINAL |
| | MASS | | | | | (ug/L) | (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 10 Dichlorofluoromethane | 67.00 | | Compound | Not Detected. | | | |
| 11 Trichlorofluoromethane | 101.00 | | Compound | Not Detected. | | | |
| 12 Ethanol | 45.00 | | Compound | Not Detected. | | | |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117.00 | | Compound | Not Detected. | | | |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83.00 | | Compound | Not Detected. | | | |
| 14 Ethyl Ether | 59.00 | | Compound | Not Detected. | | | |
| 16 Acrolein | 56.00 | | Compound | Not Detected. | | | |
| 20 2-Propanol | 45.00 | | Compound | Not Detected. | | | |
| 19 1,1-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 17 Trichlorotrifluoroethane | 151.00 | | Compound | Not Detected. | | | |
| 18 Acetone | 43.00 | | Compound | Not Detected. | | | |
| 21 Iodomethane | 142.00 | | Compound | Not Detected. | | | |
| 24 Carbon Disulfide | 76.00 | | Compound | Not Detected. | | | |
| 22 Acetonitrile | 41.00 | | Compound | Not Detected. | | | |
| 25 Allyl Chloride | 41.00 | | Compound | Not Detected. | | | |
| 23 Methyl acetate | 43.00 | | Compound | Not Detected. | | | |
| 27 Methylene Chloride | 84 | 6.848 | 6.848 | (0.792) | 18440 | 0.50823 | 0.508232(a) |
| 26 tert-Butyl alcohol | 59.00 | | Compound | Not Detected. | | | |
| 28 Acrylonitrile | 53.00 | | Compound | Not Detected. | | | |
| 29 Methyl t-butyl ether | 73.00 | | Compound | Not Detected. | | | |
| 30 trans-1,2-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 31 Hexane | 57.00 | | Compound | Not Detected. | | | |
| 34 1,1-Dichloroethane | 63.00 | | Compound | Not Detected. | | | |
| 32 Vinyl acetate | 43.00 | | Compound | Not Detected. | | | |
| 33 Isopropyl ether | 87.00 | | Compound | Not Detected. | | | |
| 35 Chloroprene | 53.00 | | Compound | Not Detected. | | | |
| 36 ETBE | 59.00 | | Compound | Not Detected. | | | |
| 40 cis-1,2-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 37 2-Butanone | 43.00 | | Compound | Not Detected. | | | |
| 41 2,2-Dichloropropane | 77.00 | | Compound | Not Detected. | | | |
| 39 Propionitrile | 54.00 | | Compound | Not Detected. | | | |
| 38 Ethyl Acetate | 43.00 | | Compound | Not Detected. | | | |
| 42 Methacrylonitrile | 41.00 | | Compound | Not Detected. | | | |
| 43 Bromochloromethane | 128.00 | | Compound | Not Detected. | | | |
| 45 Tetrahydrofuran | 42.00 | | Compound | Not Detected. | | | |
| 44 Chloroform | 83.00 | | Compound | Not Detected. | | | |
| 47 1,1,1-Trichloroethane | 97.00 | | Compound | Not Detected. | | | |
| 50 1,1-Dichloropropene | 75.00 | | Compound | Not Detected. | | | |
| 51 Carbon Tetrachloride | 117.00 | | Compound | Not Detected. | | | |
| 49 Cyclohexane | 56.00 | | Compound | Not Detected. | | | |
| 48 Isobutanol | 41.00 | | Compound | Not Detected. | | | |
| 55 TAME | 73.00 | | Compound | Not Detected. | | | |
| 54 Benzene | 78.00 | | Compound | Not Detected. | | | |
| 53 1,2-Dichloroethane | 62.00 | | Compound | Not Detected. | | | |
| 57 n-Butanol | 56.00 | | Compound | Not Detected. | | | |
| 59 2-Pentanone | 43.00 | | Compound | Not Detected. | | | |
| 58 Trichloroethene | 130.00 | | Compound | Not Detected. | | | |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|------------------------------|-------------------|----|----------|--------|-----------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 61 1,2-Dichloropropane | 63.00 | | Compound | Not | Detected. | | |
| 60 Methyl Methacrylate | 100.00 | | Compound | Not | Detected. | | |
| 62 Methyl cyclohexane | 55.00 | | Compound | Not | Detected. | | |
| 64 Dibromomethane | 93.00 | | Compound | Not | Detected. | | |
| 63 1,4-Dioxane | 88.00 | | Compound | Not | Detected. | | |
| 65 Bromodichloromethane | 83.00 | | Compound | Not | Detected. | | |
| 66 2-nitropropane | 41.00 | | Compound | Not | Detected. | | |
| 67 2-Chloroethyl vinyl ether | 63.00 | | Compound | Not | Detected. | | |
| 68 cis-1,3-Dichloropropene | 75.00 | | Compound | Not | Detected. | | |
| 69 4-Methyl-2-pentanone | 43.00 | | Compound | Not | Detected. | | |
| 71 Toluene | 91.00 | | Compound | Not | Detected. | | |
| 72 trans-1,3-Dichloropropene | 75.00 | | Compound | Not | Detected. | | |
| 73 Ethyl methacrylate | 69.00 | | Compound | Not | Detected. | | |
| 74 1,1,2-Trichloroethane | 97.00 | | Compound | Not | Detected. | | |
| 76 1,3-Dichloropropane | 76.00 | | Compound | Not | Detected. | | |
| 77 Tetrachloroethane | 164.00 | | Compound | Not | Detected. | | |
| 75 2-Hexanone | 43.00 | | Compound | Not | Detected. | | |
| 78 Dibromochloromethane | 129.00 | | Compound | Not | Detected. | | |
| 79 Tetrahydrothiophene | 60.00 | | Compound | Not | Detected. | | |
| 80 1,2-Dibromoethane | 107.00 | | Compound | Not | Detected. | | |
| 81 1-Chlorohexane | 91.00 | | Compound | Not | Detected. | | |
| 83 Chlorobenzene | 112.00 | | Compound | Not | Detected. | | |
| 84 1,1,1,2-Tetrachloroethane | 131.00 | | Compound | Not | Detected. | | |
| 85 Ethylbenzene | 106.00 | | Compound | Not | Detected. | | |
| 86 m and p-Xylene | 106.00 | | Compound | Not | Detected. | | |
| 87 o-Xylene | 106.00 | | Compound | Not | Detected. | | |
| 88 Styrene | 104.00 | | Compound | Not | Detected. | | |
| 89 Bromoform | 173.00 | | Compound | Not | Detected. | | |
| 90 isopropyl benzene | 105.00 | | Compound | Not | Detected. | | |
| 91 c-1,4-Dichloro-2-butene | 53.00 | | Compound | Not | Detected. | | |
| 92 Cyclohexanone | 55.00 | | Compound | Not | Detected. | | |
| 94 1,1,2,2-Tetrachloroethane | 83.00 | | Compound | Not | Detected. | | |
| 95 t-1,4-Dichloro-2-butene | 53.00 | | Compound | Not | Detected. | | |
| 97 Bromobenzene | 156.00 | | Compound | Not | Detected. | | |
| 96 1,2,3-Trichloropropane | 110.00 | | Compound | Not | Detected. | | |
| 98 n-Propylbenzene | 120.00 | | Compound | Not | Detected. | | |
| 99 2-Chlorotoluene | 126.00 | | Compound | Not | Detected. | | |
| 100 1,3,5-Trimethylbenzene | 105.00 | | Compound | Not | Detected. | | |
| 101 4-Chlorotoluene | 126.00 | | Compound | Not | Detected. | | |
| 102 tert-Butylbenzene | 119.00 | | Compound | Not | Detected. | | |
| 103 1,2,4-Trimethylbenzene | 105.00 | | Compound | Not | Detected. | | |
| 104 sec-Butylbenzene | 134.00 | | Compound | Not | Detected. | | |
| 106 m-Dichlorobenzene | 146.00 | | Compound | Not | Detected. | | |
| 105 4-Isopropyltoluene | 119.00 | | Compound | Not | Detected. | | |
| 108 p-dichlorobenzene | 146.00 | | Compound | Not | Detected. | | |
| 109 1,2,3-Trimethylbenzene | 105.00 | | Compound | Not | Detected. | | |
| 110 n-Butylbenzene | 91.00 | | Compound | Not | Detected. | | |

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | |
|---------------------------------|-----------|----------------|----------|--------|-----------|---------|---------|
| | | ON-COLUMN | FINAL | | | | |
| | MASS | RT | EXP RT | REL RT | RESPONSE | (ug/L) | (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 111 o-Dichlorobenzene | 146.00 | | Compound | Not | Detected. | | |
| 112 1,2-Dibromo-3-chloropropane | 157.00 | | Compound | Not | Detected. | | |
| 113 1,2,4-Trichlorobenzene | 180.00 | | Compound | Not | Detected. | | |
| 114 Hexachlorobutadiene | 225.00 | | Compound | Not | Detected. | | |
| 115 Napthalene | 128.00 | | Compound | Not | Detected. | | |
| 116 1,2,3-Trichlorobenzene | 180.00 | | Compound | Not | Detected. | | |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|--|---------------------------|
| Instrument ID: R2.i | Calibration Date: 05/27/4 |
| Lab File ID: rr6283.d | Calibration Time: 1604 |
| Lab Smp Id: VBLK | Client Smp ID: VBLK |
| Analysis Type: VOA | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: meierg | |
| Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m | |
| Misc Info: | |

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1117002 | 558501 | 2234004 | 1191135 | 6.64 |
| 82 Chlorobenzene-d5 | 318643 | 159322 | 637286 | 324805 | 1.93 |
| 107 1,4-Dichlorobenze | 494708 | 247354 | 989416 | 495852 | 0.23 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.65 | 0.07 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.58 | -0.03 |
| 107 1,4-Dichlorobenze | 14.19 | 13.69 | 14.69 | 14.19 | -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.

STL Denver

RECOVERY REPORT

| | |
|--|---------------------|
| Client Name: | Client SDG: 052704 |
| Sample Matrix: LIQUID | Fraction: VOA |
| Lab Smp Id: VBLK | Client Smp ID: VBLK |
| Level: LOW | Operator: meierg |
| Data Type: MS DATA | SampleType: BLANK |
| SpikeList File: dcs.spk | Quant Type: ISTD |
| Sublist File: QK-01.sub | |
| Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m | |
| Misc Info: | |

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 46 Dibromofluorometha | 10.0000 | 10.2603 | 102.60 | 76-116 |
| \$ 52 1,2-Dichloroethane | 10.0000 | 10.2898 | 102.90 | 59-129 |
| \$ 70 Toluene-d8 | 10.0000 | 9.95307 | 99.53 | 76-116 |
| \$ 93 Bromofluorobenzene | 10.0000 | 9.74946 | 97.49 | 74-114 |

Data File: /chem/R2.i/052704.b/rr6283.d

Date : 27-MAY-2004 16:54

Client ID: VBLK

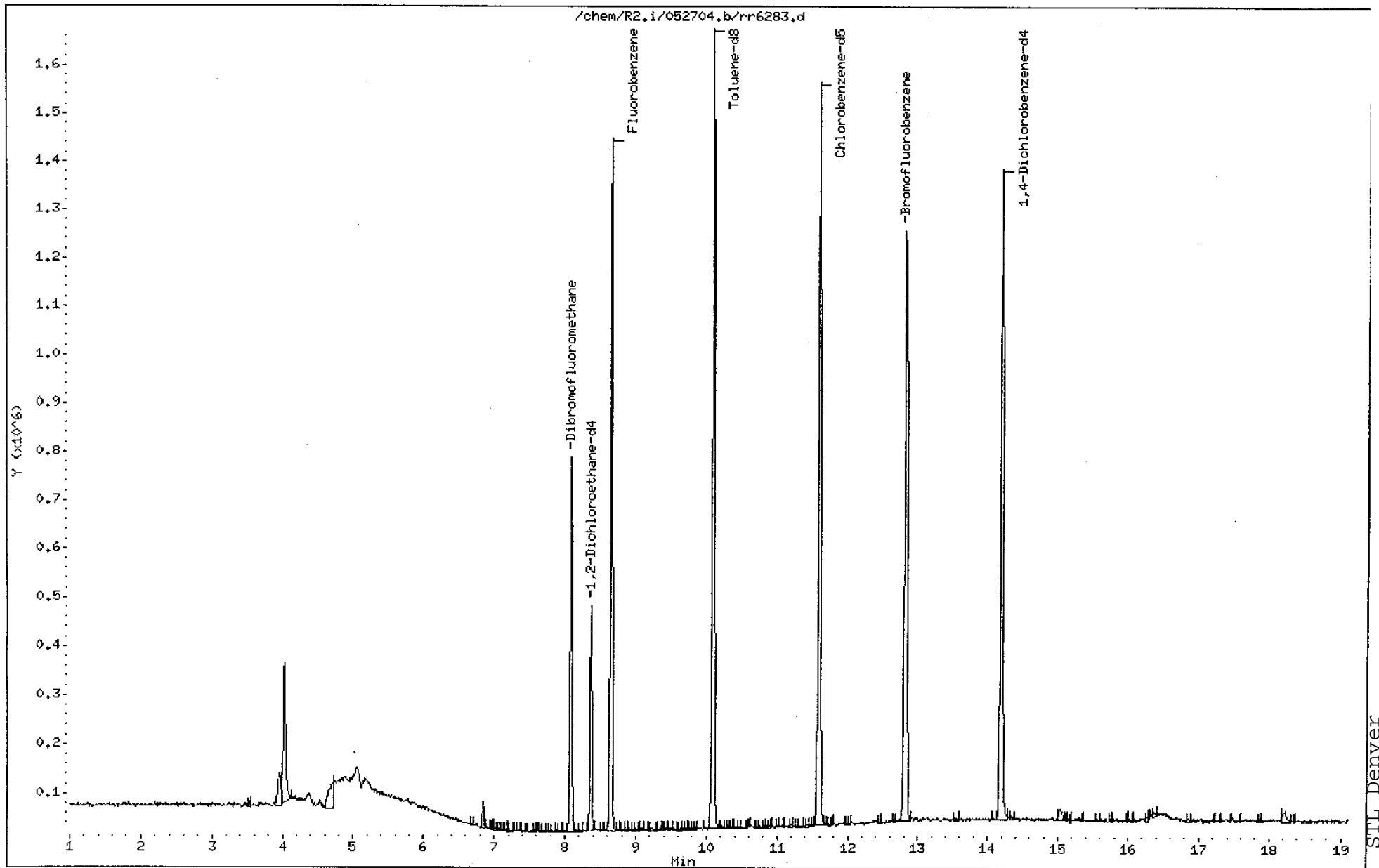
Sample Info: VBLK

Column phase: HP624

Instrument: R2.i

Operator: meierg

Column diameter: 0.32



Date : 27-MAY-2004 16:54

Client ID: VBLK

Instrument: R2.i

Sample Info: VBLK

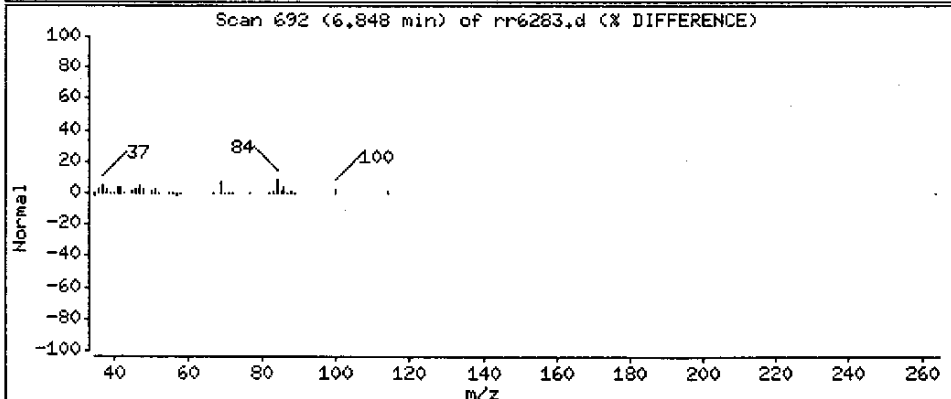
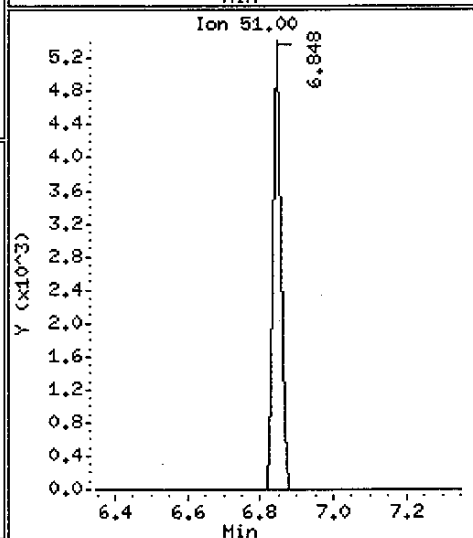
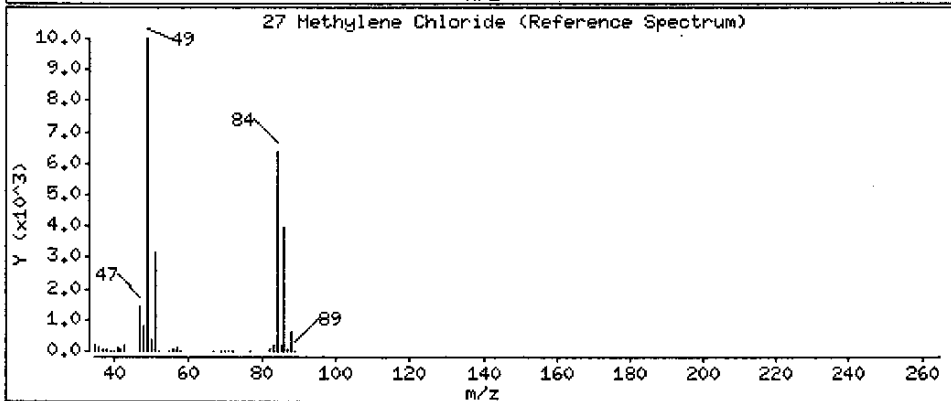
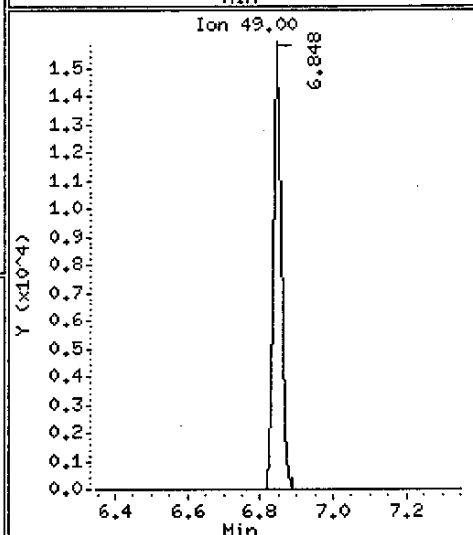
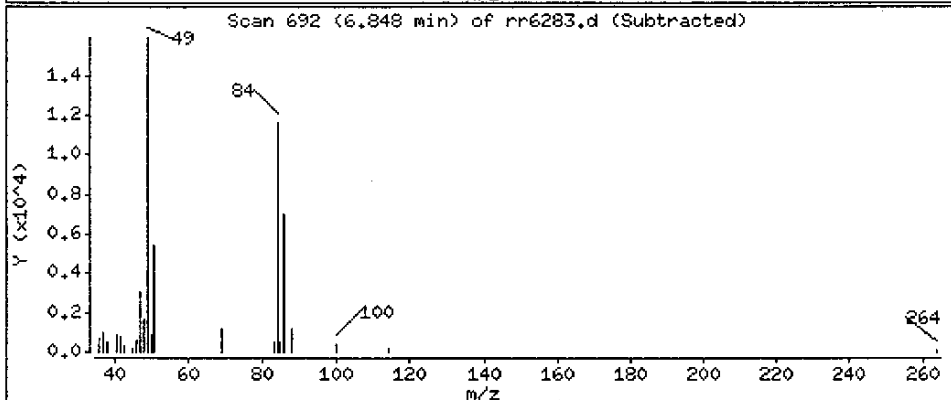
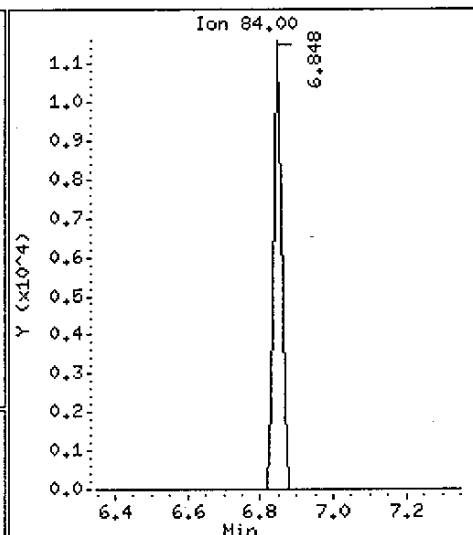
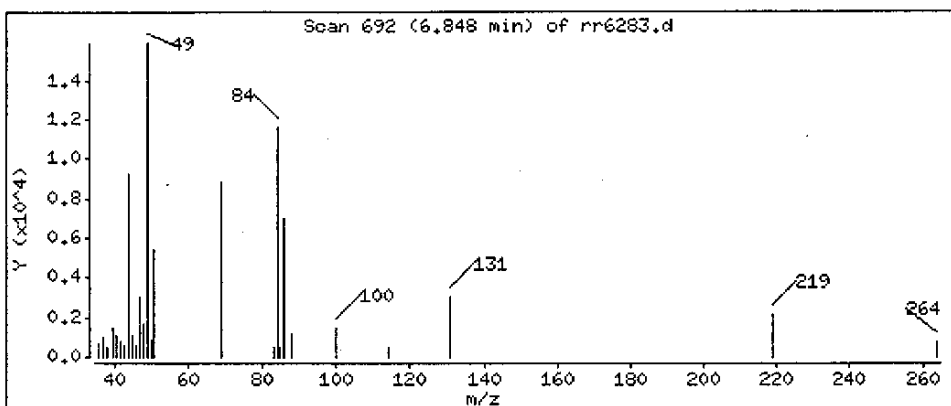
Column phase: HP624

Operator: meierg

Column diameter: 0.32

27 Methylene Chloride

Concentration: 0.508232 ug/L



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052704.b/rr6284.d

Lab Smp Id: GGTEE1AA

Inj Date : 27-MAY-2004 17:19

Operator : meierg

Smp Info : GGTEE1AA,,D4E210325-01

Misc Info :

Comment : SOP # CORP-MS-0002 20ml Analysis

Method : /chem/R2.i/052704.b/R2-20ml-h2o.m

Meth Date : 27-May-2004 17:49 meierg

Cal Date : 26-MAY-2004 00:31

Als bottle: 2

Dil Factor: 1.00000

Integrator: HP RTE

Target Version: 3.40

Processing Host: chemsv02

Client Smp ID: 01-MW-06

Inst ID: R2.i

Quant Type: ISTD

Cal File: rr6230.d

Compound Sublist: QK-01.sub

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

Con 5/27

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | | |
|--------------------------------|-----------|------------------------|--------|---------|---------|----------|----------------------|------------------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ==== | | == | ===== | ===== | ===== | ===== | ===== |
| * 56 Fluorobenzene | 96 | 8.646 | 8.642 | (1.000) | 1158064 | 10.0000 | | |
| * 82 Chlorobenzene-d5 | 119 | 11.588 | 11.584 | (1.000) | 303946 | 10.0000 | | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.194 | 14.190 | (1.000) | 428572 | 10.0000 | | |
| \$ 46 Dibromofluoromethane | 111 | 8.076 | 8.072 | (0.934) | 381405 | 9.92805 | 9.92804 | |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 8.371 | 8.367 | (0.968) | 291233 | 9.55043 | 9.55043 | |
| \$ 70 Toluene-d8 | 98 | 10.083 | 10.088 | (0.870) | 1105823 | 10.0224 | 10.0224 | |
| \$ 93 Bromofluorobenzene | 95 | 12.817 | 12.813 | (1.106) | 522633 | 9.86608 | 9.86608 | |
| M 1 1,2-Dichloroethene (total) | 96.00 | Compound Not Detected. | | | | | | |
| M 2 Xylene (total) | 106.00 | Compound Not Detected. | | | | | | |
| 3 dichlorodifluoromethane | 85.00 | Compound Not Detected. | | | | | | |
| 4 dichlorotetrafluoroethane | 85.00 | Compound Not Detected. | | | | | | |
| 5 Chloromethane | 50.00 | Compound Not Detected. | | | | | | |
| 6 Vinyl Chloride | 62.00 | Compound Not Detected. | | | | | | |
| 7 Ethylene Oxide | 43.00 | Compound Not Detected. | | | | | | |
| 8 Bromomethane | 94.00 | Compound Not Detected. | | | | | | |
| 9 Chloroethane | 64.00 | Compound Not Detected. | | | | | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|-----------------------------------|-----------|-------|----------|---------------|----------|----------------|-------------|
| | | | | | | ON-COLUMN | FINAL |
| | MASS | | | | | (ug/L) | (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 10 Dichlorofluoromethane | 67.00 | | Compound | Not Detected. | | | |
| 11 Trichlorofluoromethane | 101.00 | | Compound | Not Detected. | | | |
| 12 Ethanol | 45.00 | | Compound | Not Detected. | | | |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117.00 | | Compound | Not Detected. | | | |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83.00 | | Compound | Not Detected. | | | |
| 14 Ethyl Ether | 59 | 6.217 | 6.213 | (0.719) | 5024 | 0.17183 | 0.171828(a) |
| 16 Acrolein | 56.00 | | Compound | Not Detected. | | | |
| 20 2-Propanol | 45.00 | | Compound | Not Detected. | | | |
| 19 1,1-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 17 Trichlorotrifluoroethane | 151.00 | | Compound | Not Detected. | | | |
| 18 Acetone | 43.00 | | Compound | Not Detected. | | | |
| 21 Iodomethane | 142.00 | | Compound | Not Detected. | | | |
| 24 Carbon Disulfide | 76.00 | | Compound | Not Detected. | | | |
| 22 Acetonitrile | 41.00 | | Compound | Not Detected. | | | |
| 25 Allyl Chloride | 41.00 | | Compound | Not Detected. | | | |
| 23 Methyl acetate | 43.00 | | Compound | Not Detected. | | | |
| 27 Methylene Chloride | 84 | 6.846 | 6.848 | (0.792) | 13140 | 0.37250 | 0.372499(a) |
| 26 tert-Butyl alcohol | 59.00 | | Compound | Not Detected. | | | |
| 28 Acrylonitrile | 53.00 | | Compound | Not Detected. | | | |
| 29 Methyl t-butyl ether | 73.00 | | Compound | Not Detected. | | | |
| 30 trans-1,2-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 31 Hexane | 57.00 | | Compound | Not Detected. | | | |
| 34 1,1-Dichloroethane | 63.00 | | Compound | Not Detected. | | | |
| 32 Vinyl acetate | 43.00 | | Compound | Not Detected. | | | |
| 33 Isopropyl ether | 87.00 | | Compound | Not Detected. | | | |
| 35 Chloroprene | 53.00 | | Compound | Not Detected. | | | |
| 36 ETBE | 59.00 | | Compound | Not Detected. | | | |
| 40 cis-1,2-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 37 2-Butanone | 43.00 | | Compound | Not Detected. | | | |
| 41 2,2-Dichloropropane | 77.00 | | Compound | Not Detected. | | | |
| 39 Propionitrile | 54.00 | | Compound | Not Detected. | | | |
| 38 Ethyl Acetate | 43.00 | | Compound | Not Detected. | | | |
| 42 Methacrylonitrile | 41.00 | | Compound | Not Detected. | | | |
| 43 Bromochloromethane | 128.00 | | Compound | Not Detected. | | | |
| 45 Tetrahydrofuran | 42.00 | | Compound | Not Detected. | | | |
| 44 Chloroform | 83.00 | | Compound | Not Detected. | | | |
| 47 1,1,1-Trichloroethane | 97.00 | | Compound | Not Detected. | | | |
| 50 1,1-Dichloropropene | 75.00 | | Compound | Not Detected. | | | |
| 51 Carbon Tetrachloride | 117.00 | | Compound | Not Detected. | | | |
| 49 Cyclohexane | 56.00 | | Compound | Not Detected. | | | |
| 48 Isobutanol | 41.00 | | Compound | Not Detected. | | | |
| 55 TAME | 73.00 | | Compound | Not Detected. | | | |
| 54 Benzene | 78.00 | | Compound | Not Detected. | | | |
| 53 1,2-Dichloroethane | 62.00 | | Compound | Not Detected. | | | |
| 57 n-Butanol | 56.00 | | Compound | Not Detected. | | | |
| 59 2-Pentanone | 43.00 | | Compound | Not Detected. | | | |
| 58 Trichloroethene | 130.00 | | Compound | Not Detected. | | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|------------------------------|-----------|-------|--------|---------|------------------------|----------------|------------|
| | | | | | | ON-COLUMN | FINAL |
| | MASS | | | | | (ug/L) | (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 61 1,2-Dichloropropane | 63.00 | | | | Compound Not Detected. | | |
| 60 Methyl Methacrylate | 100.00 | | | | Compound Not Detected. | | |
| 62 Methyl cyclohexane | 55.00 | | | | Compound Not Detected. | | |
| 64 Dibromomethane | 93.00 | | | | Compound Not Detected. | | |
| 63 1,4-Dioxane | 88 | 9.237 | 9.239 | (1.068) | 4088 | 38.3417 | 38.3416(a) |
| 65 Bromodichloromethane | 83.00 | | | | Compound Not Detected. | | |
| 66 2-nitropropane | 41.00 | | | | Compound Not Detected. | | |
| 67 2-Chloroethyl vinyl ether | 63.00 | | | | Compound Not Detected. | | |
| 68 cis-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 69 4-Methyl-2-pentanone | 43.00 | | | | Compound Not Detected. | | |
| 71 Toluene | 91.00 | | | | Compound Not Detected. | | |
| 72 trans-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 73 Ethyl methacrylate | 69.00 | | | | Compound Not Detected. | | |
| 74 1,1,2-Trichloroethane | 97.00 | | | | Compound Not Detected. | | |
| 76 1,3-Dichloropropane | 76.00 | | | | Compound Not Detected. | | |
| 77 Tetrachloroethene | 164.00 | | | | Compound Not Detected. | | |
| 75 2-Hexanone | 43.00 | | | | Compound Not Detected. | | |
| 78 Dibromochloromethane | 129.00 | | | | Compound Not Detected. | | |
| 79 Tetrahydrothiophene | 60.00 | | | | Compound Not Detected. | | |
| 80 1,2-Dibromoethane | 107.00 | | | | Compound Not Detected. | | |
| 81 1-Chlorohexane | 91.00 | | | | Compound Not Detected. | | |
| 83 Chlorobenzene | 112.00 | | | | Compound Not Detected. | | |
| 84 1,1,1,2-Tetrachloroethane | 131.00 | | | | Compound Not Detected. | | |
| 85 Ethylbenzene | 106.00 | | | | Compound Not Detected. | | |
| 86 m and p-Xylene | 106.00 | | | | Compound Not Detected. | | |
| 87 o-Xylene | 106.00 | | | | Compound Not Detected. | | |
| 88 Styrene | 104.00 | | | | Compound Not Detected. | | |
| 89 Bromoform | 173.00 | | | | Compound Not Detected. | | |
| 90 isopropyl benzene | 105.00 | | | | Compound Not Detected. | | |
| 91 c-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 92 Cyclohexanone | 55.00 | | | | Compound Not Detected. | | |
| 94 1,1,2,2-Tetrachloroethane | 83.00 | | | | Compound Not Detected. | | |
| 95 t-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 97 Bromobenzene | 156.00 | | | | Compound Not Detected. | | |
| 96 1,2,3-Trichloropropane | 110.00 | | | | Compound Not Detected. | | |
| 98 n-Propylbenzene | 120.00 | | | | Compound Not Detected. | | |
| 99 2-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 100 1,3,5-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 101 4-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 102 tert-Butylbenzene | 119.00 | | | | Compound Not Detected. | | |
| 103 1,2,4-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 104 sec-Butylbenzene | 134.00 | | | | Compound Not Detected. | | |
| 106 m-Dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 105 4-Isopropyltoluene | 119.00 | | | | Compound Not Detected. | | |
| 108 p-dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 109 1,2,3-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 110 n-Butylbenzene | 91.00 | | | | Compound Not Detected. | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|---------------------------------|-----------|----|------------------------|--------|----------|----------------|---------|
| | | | | | | ON-COLUMN | FINAL |
| | MASS | | | | | (ug/L) | (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 111 o-Dichlorobenzene | 146.00 | | Compound Not Detected. | | | | |
| 112 1,2-Dibromo-3-chloropropane | 157.00 | | Compound Not Detected. | | | | |
| 113 1,2,4-Trichlorobenzene | 180.00 | | Compound Not Detected. | | | | |
| 114 Hexachlorobutadiene | 225.00 | | Compound Not Detected. | | | | |
| 115 Napthalene | 128.00 | | Compound Not Detected. | | | | |
| 116 1,2,3-Trichlorobenzene | 180.00 | | Compound Not Detected. | | | | |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|--|---------------------------|
| Instrument ID: R2.i | Calibration Date: 05/27/4 |
| Lab File ID: rr6284.d | Calibration Time: 1604 |
| Lab Smp Id: GGTEE1AA | Client Smp ID: 01-MW-06 |
| Analysis Type: VOA | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: meierg | |
| Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m | |
| Misc Info: | |

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|--------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1117002 | 558501 | 2234004 | 1158064 | 3.68 |
| 82 Chlorobenzene-d5 | 318643 | 159322 | 637286 | 303946 | -4.61 |
| 107 1,4-Dichlorobenze | 494708 | 247354 | 989416 | 428572 | -13.37 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.65 | 0.05 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.59 | 0.03 |
| 107 1,4-Dichlorobenze | 14.19 | 13.69 | 14.69 | 14.19 | 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.

STL Denver

RECOVERY REPORT

| | |
|--|-------------------------|
| Client Name: Cabrera Services | Client SDG: D4E210325 |
| Sample Matrix: LIQUID | Fraction: VOA |
| Lab Smp Id: GGTEE1AA | Client Smp ID: 01-MW-06 |
| Level: LOW | Operator: meierg |
| Data Type: MS DATA | SampleType: SAMPLE |
| SpikeList File: dcs.spk | Quant Type: ISTD |
| Sublist File: QK-01.sub | |
| Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m | |
| Misc Info: | |

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 46 Dibromofluorometha | 10.0000 | 9.92804 | 99.28 | 76-116 |
| \$ 52 1,2-Dichloroethane | 10.0000 | 9.55043 | 95.50 | 59-129 |
| \$ 70 Toluene-d8 | 10.0000 | 10.0224 | 100.22 | 76-116 |
| \$ 93 Bromofluorobenzene | 10.0000 | 9.86608 | 98.66 | 74-114 |

Data File: /chem/R2.i/052704.b/rr6284.d

Page 7

Date : 27-MAY-2004 17:19

Client ID: 01-MW-06

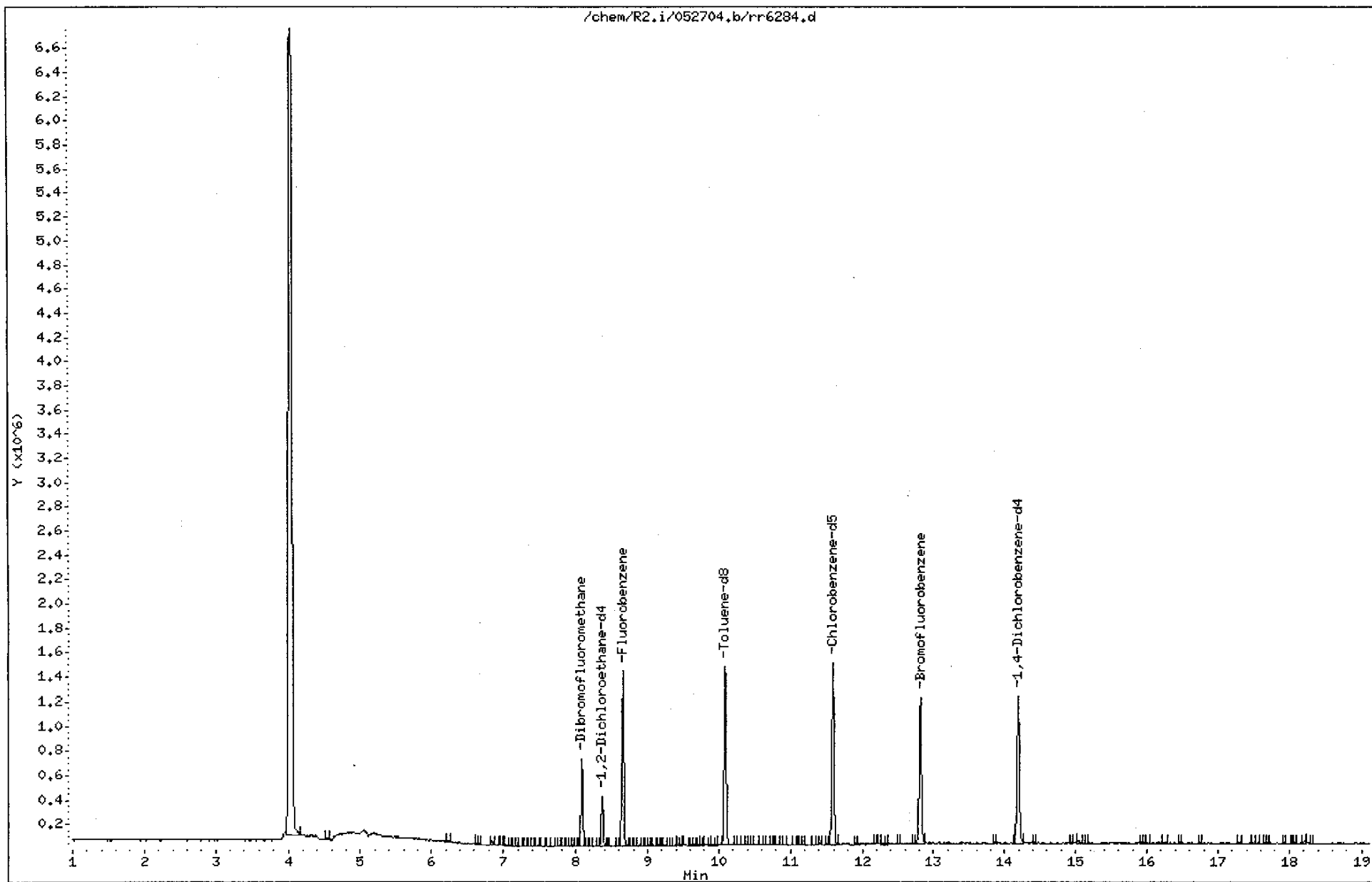
Instrument: R2.i

Sample Info: GGTEE1AA,,D4E210325-01

Operator: meierg

Column phase: HP624

Column diameter: 0.32



Date : 27-MAY-2004 17:19

Client ID: 01-MW-06

Instrument: R2.i

Sample Info: GGTEE1AA,,D4E210325-01

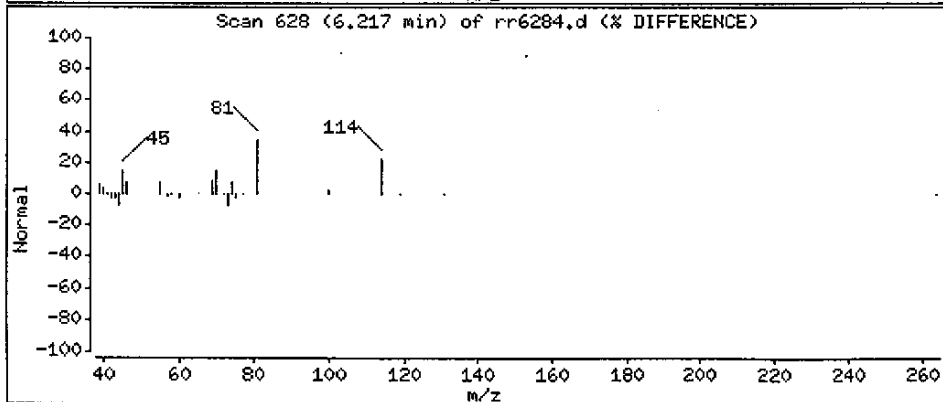
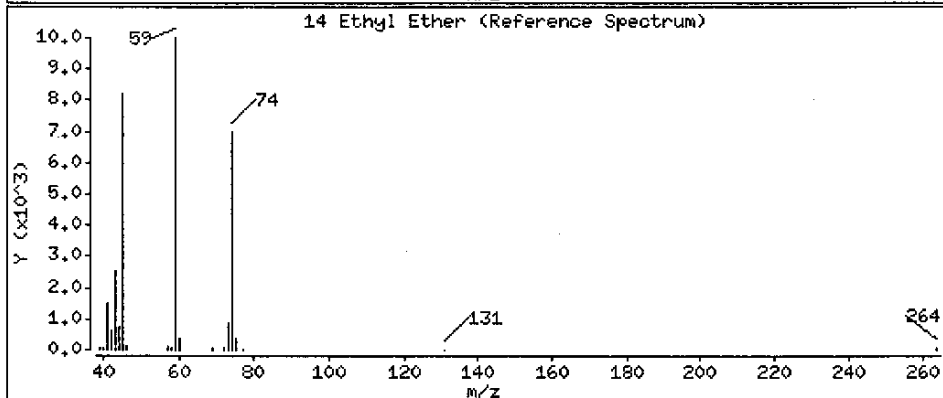
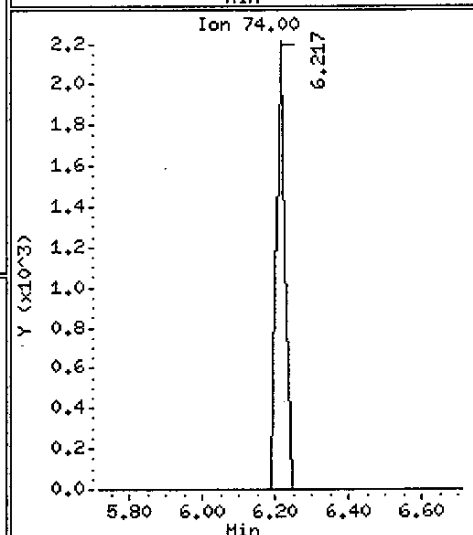
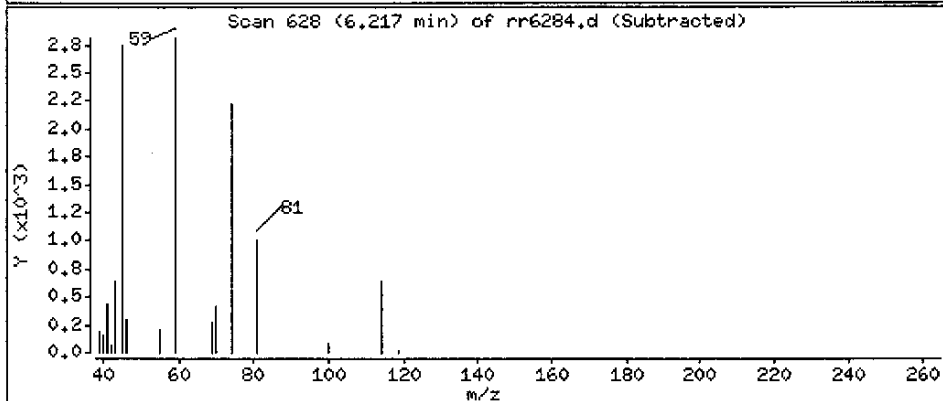
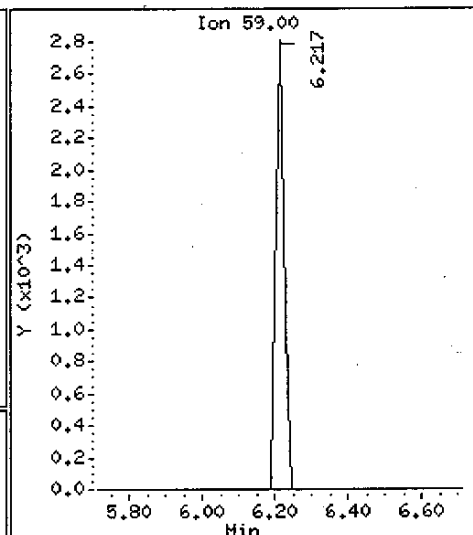
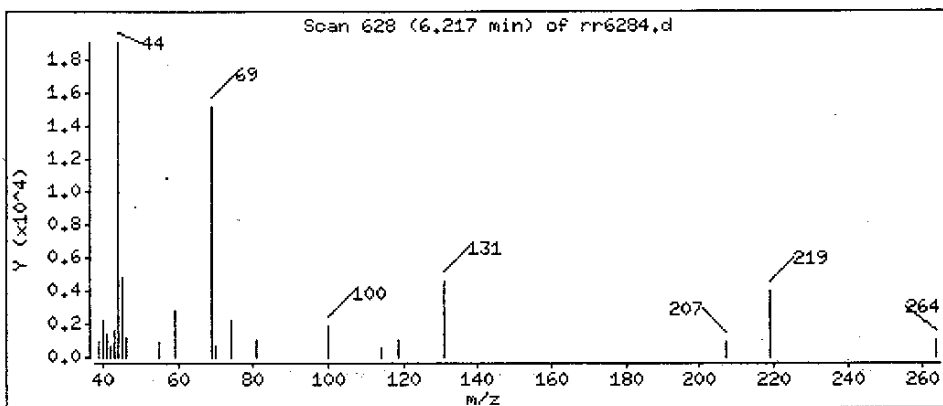
Operator: meierg

Column phase: HP624

Column diameter: 0.32

14 Ethyl Ether

Concentration: 0.171828 ug/L



Data File: /chem/R2.i/052704.b/rr6284.d

Page 9

Date: 27-MAY-2004 17:19

Client ID: 01-MN-06

Instrument: R2.i

Sample Info: GSTEE1AA,,D4E210325-01

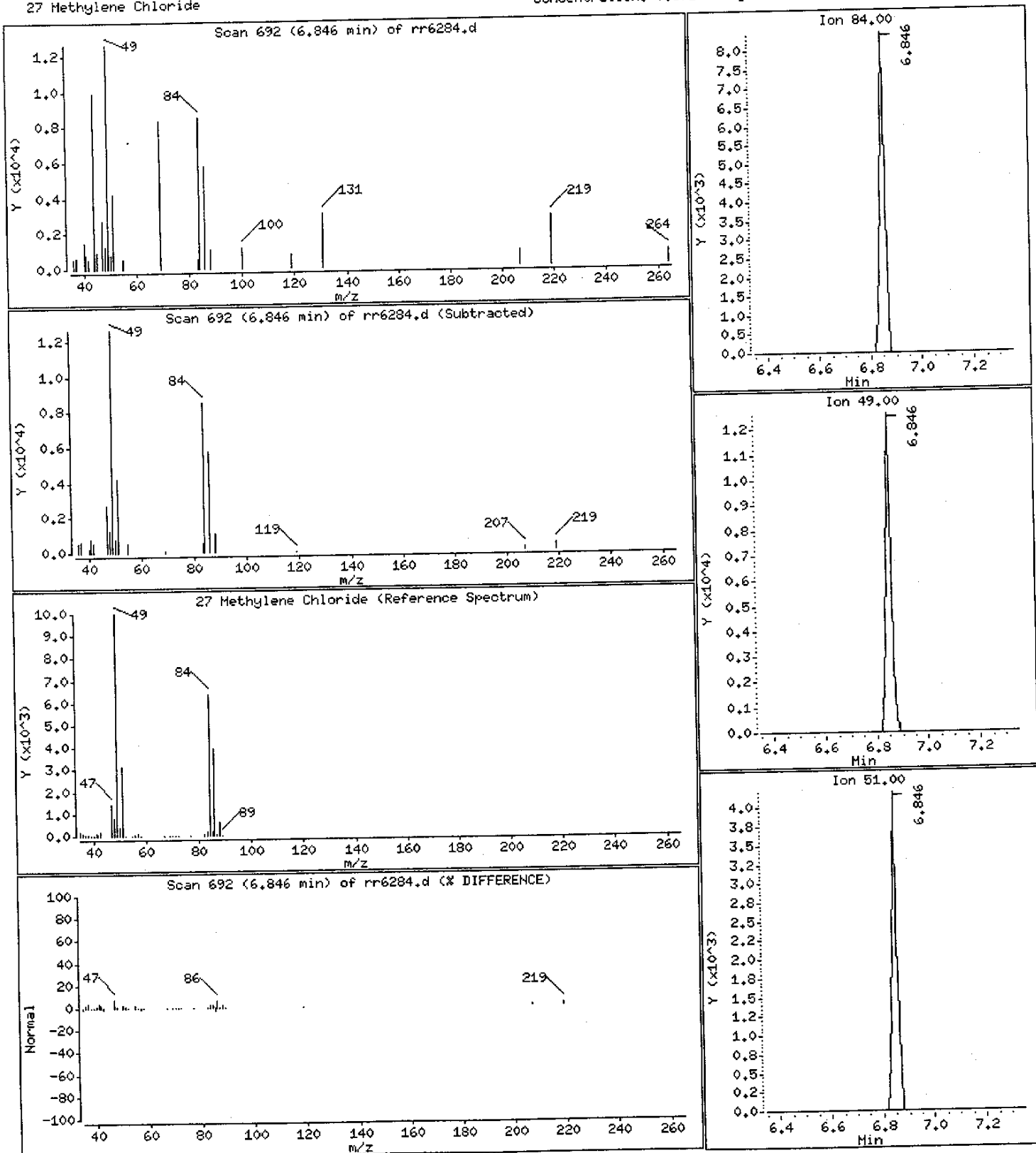
Operator: meieng

Column phase: HP624

Column diameter: 0.32

27 Methylene Chloride

Concentration: 0.372499 ug/L



Date : 27-MAY-2004 17:19

Client ID: 01-MW-06

Instrument: R2.i

Sample Info: GCTEE1AA,,D4E210325-01

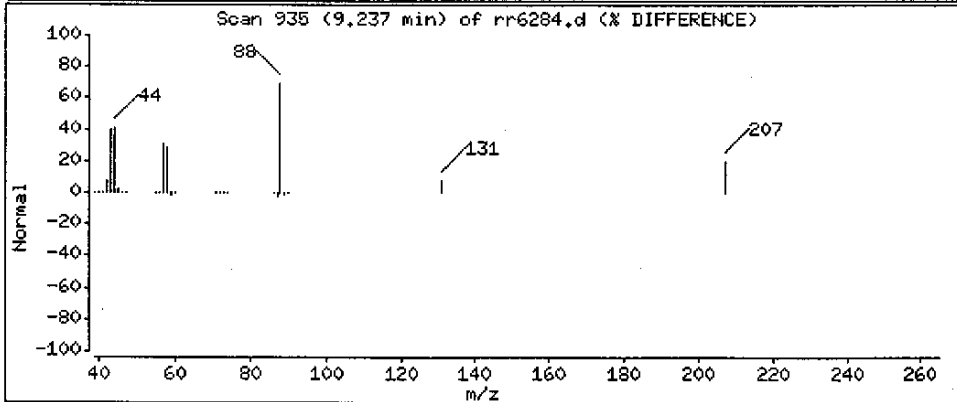
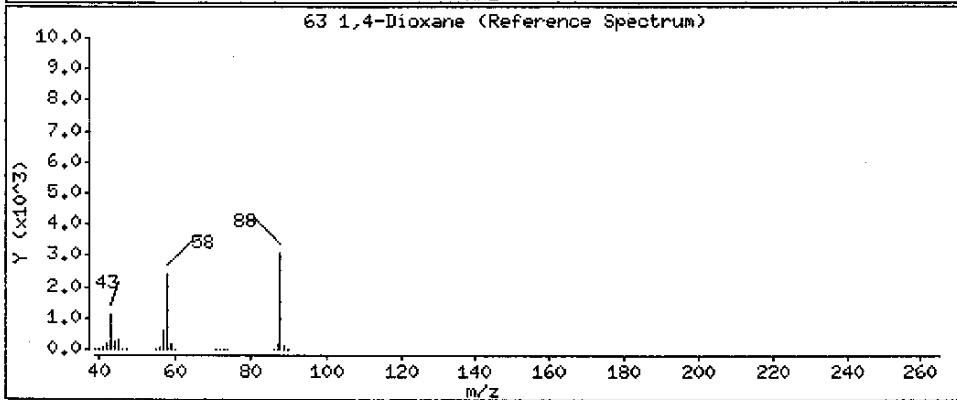
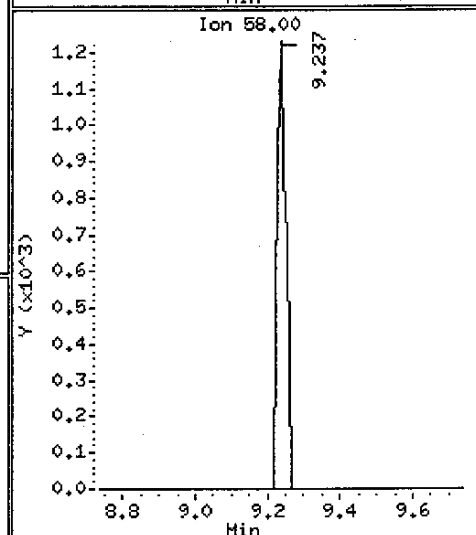
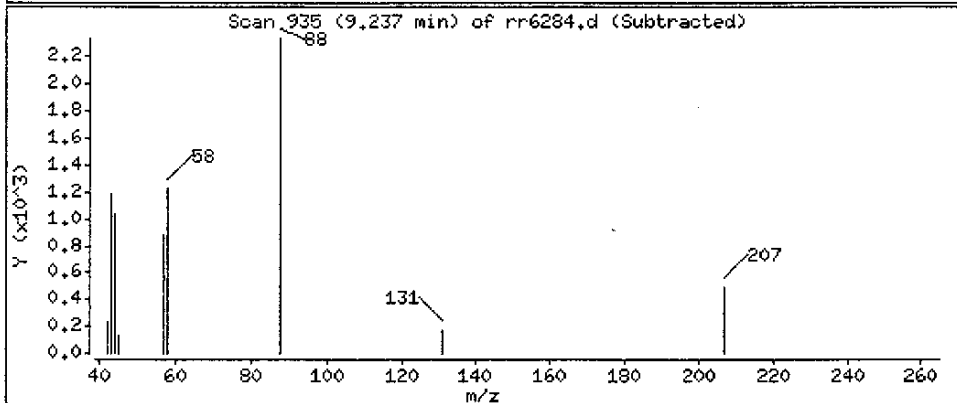
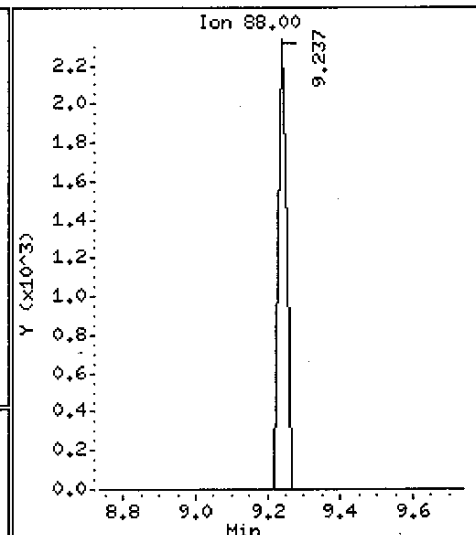
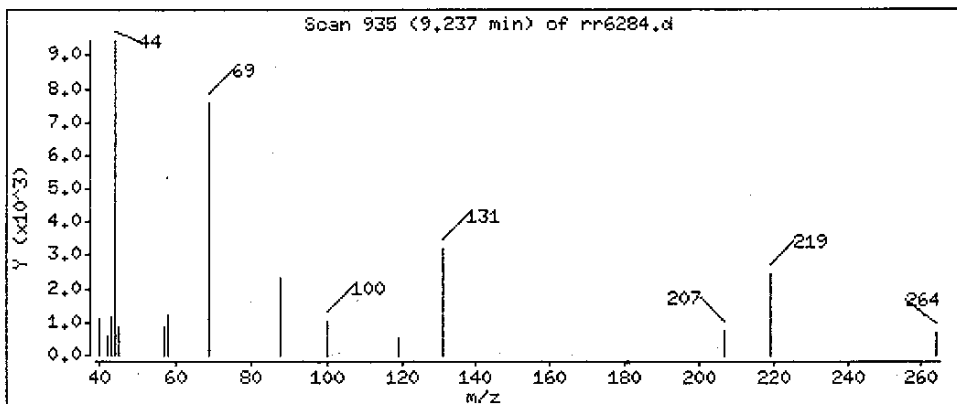
Column phase: HP624

Operator: meierg

Column diameter: 0.32

63 1,4-Dioxane

Concentration: 38.3416 ug/L



Matrix Spike Report

UNSPIKED SAMPLE

Data File : /chem/R2.i/052704.b/rr6284.d
Samp Info : GGTEE1AA,,D4E210325-01
Inj Date : 27-MAY-2004 17:19
Sample Amt : 20mL

SPIKE SAMPLE

Data File : /chem/R2.i/052704.b/rr6285.d
Samp Info : GGTEE1AG,,D4E210325-01MS
Inj Date : 27-MAY-2004 17:44
Sample Amt : 20mL

SPIKE DUPLICATE SAMPLE

Data File : /chem/R2.i/052704.b/rr6286.d
Samp Info : GGTEE1AH,,D4E210325-01MSD
Inj Date : 27-MAY-2004 18:10
Sample Amt : 20mL

| Sample | Concentration | | %Recovery | | Limits | | RPD | | | | |
|--------------------|---------------|---------|-----------|---------|----------|-----|-----|-----|-----|-----|-----|
| | Measured | Spiked | Measured | Spiked | Measured | MS | MSD | Min | Max | Mes | Max |
| 1,1-Dichloroethene | 0.0000 | 10.0000 | 11.2362 | 10.0000 | 11.3452 | 112 | 113 | 67 | 125 | 1 | 20 |
| Trichloroethene | 0.0000 | 10.0000 | 10.9187 | 10.0000 | 11.2373 | 109 | 112 | 80 | 123 | 3 | 20 |
| Benzene | 0.0000 | 10.0000 | 10.9553 | 10.0000 | 11.2703 | 110 | 113 | 75 | 116 | 3 | 20 |
| Toluene | 0.0000 | 10.0000 | 10.7674 | 10.0000 | 11.0255 | 108 | 110 | 74 | 115 | 2 | 20 |
| Chlorobenzene | 0.0000 | 10.0000 | 10.8334 | 10.0000 | 11.2023 | 108 | 112 | 77 | 117 | 3 | 20 |

100.0 Percent of recoveries are within control limits.

100.0 Percent of RPD values are within control limits.

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052704.b/rr6285.d

Lab Smp Id: GGTEE1AG

Inj Date : 27-MAY-2004 17:44

Operator : meierg

Smp Info : GGTEE1AG,,D4E210325-01MS

Misc Info : rr6284.d

Comment : SOP # CORP-MS-0002 20ml Analysis

Method : /chem/R2.i/052704.b/R2-20ml-h2o.m

Meth Date : 27-May-2004 17:49 meierg

Cal Date : 26-MAY-2004 00:31

Als bottle: 2

Dil Factor: 1.00000

Integrator: HP RTE

Target Version: 3.40

Processing Host: chemsv02

Client Smp ID: 01-MW-06

Inst ID: R2.i

Quant Type: ISTD

Cal File: rr6230.d

QC Sample: MS

Compound Sublist: QK-01.sub

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

Gr 5/22

| Compounds | QUANT SIG | | | | | | CONCENTRATIONS | |
|--------------------------------|-----------|------------------------|--------|---------|---------|----------|----------------|---------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN | FINAL |
| | | | | | | | (ug/L) | (ug/L) |
| * 56 Fluorobenzene | 96 | 8.649 | 8.642 | (1.000) | 1204832 | 10.0000 | | |
| * 82 Chlorobenzene-d5 | 119 | 11.580 | 11.584 | (1.000) | 320651 | 10.0000 | | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.197 | 14.190 | (1.000) | 485413 | 10.0000 | | |
| \$ 46 Dibromofluoromethane | 111 | 8.078 | 8.072 | (0.934) | 422268 | 10.5651 | 10.5650 | |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 8.364 | 8.367 | (0.967) | 315583 | 9.94723 | 9.94723 | |
| \$ 70 Toluene-d8 | 98 | 10.085 | 10.088 | (0.871) | 1164318 | 10.0028 | 10.0028 | |
| \$ 93 Bromofluorobenzene | 95 | 12.810 | 12.813 | (1.106) | 559059 | 10.0039 | 10.0039 | |
| M 1 1,2-Dichloroethene (total) | 96.00 | Compound Not Detected. | | | | | | |
| M 2 Xylene (total) | 106.00 | Compound Not Detected. | | | | | | |
| 3 dichlorodifluoromethane | 85.00 | Compound Not Detected. | | | | | | |
| 4 dichlorotetrafluoroethane | 85.00 | Compound Not Detected. | | | | | | |
| 5 Chloromethane | 50.00 | Compound Not Detected. | | | | | | |
| 6 Vinyl Chloride | 62.00 | Compound Not Detected. | | | | | | |
| 7 Ethylene Oxide | 43.00 | Compound Not Detected. | | | | | | |
| 8 Bromomethane | 94.00 | Compound Not Detected. | | | | | | |
| 9 Chloroethane | 64.00 | Compound Not Detected. | | | | | | |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|-----------------------------------|-------------------|-------|--------|---------|------------------------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 10 Dichlorofluoromethane | 67.00 | | | | Compound Not Detected. | | |
| 11 Trichlorofluoromethane | 101.00 | | | | Compound Not Detected. | | |
| 12 Ethanol | 45.00 | | | | Compound Not Detected. | | |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117.00 | | | | Compound Not Detected. | | |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83.00 | | | | Compound Not Detected. | | |
| 14 Ethyl Ether | 59 | 6.209 | 6.213 | (0.718) | 3287 | 0.10806 | 0.108056(a) |
| 16 Acrolein | 56.00 | | | | Compound Not Detected. | | |
| 20 2-Propanol | 45.00 | | | | Compound Not Detected. | | |
| 19 1,1-Dichloroethene | 96 | 6.495 | 6.484 | (0.751) | 489265 | 11.2362 | 11.2362 |
| 17 Trichlorotrifluoroethane | 151.00 | | | | Compound Not Detected. | | |
| 18 Acetone | 43.00 | | | | Compound Not Detected. | | |
| 21 Iodomethane | 142.00 | | | | Compound Not Detected. | | |
| 24 Carbon Disulfide | 76.00 | | | | Compound Not Detected. | | |
| 22 Acetonitrile | 41.00 | | | | Compound Not Detected. | | |
| 25 Allyl Chloride | 41.00 | | | | Compound Not Detected. | | |
| 23 Methyl acetate | 43.00 | | | | Compound Not Detected. | | |
| 27 Methylene Chloride | 84 | 6.849 | 6.848 | (0.792) | 14601 | 0.39785 | 0.397849(a) |
| 26 tert-Butyl alcohol | 59.00 | | | | Compound Not Detected. | | |
| 28 Acrylonitrile | 53.00 | | | | Compound Not Detected. | | |
| 29 Methyl t-butyl ether | 73.00 | | | | Compound Not Detected. | | |
| 30 trans-1,2-Dichloroethene | 96.00 | | | | Compound Not Detected. | | |
| 31 Hexane | 57.00 | | | | Compound Not Detected. | | |
| 34 1,1-Dichloroethane | 63.00 | | | | Compound Not Detected. | | |
| 32 Vinyl acetate | 43.00 | | | | Compound Not Detected. | | |
| 33 Isopropyl ether | 87.00 | | | | Compound Not Detected. | | |
| 35 Chloroprene | 53.00 | | | | Compound Not Detected. | | |
| 36 ETBE | 59.00 | | | | Compound Not Detected. | | |
| 40 cis-1,2-Dichloroethene | 96.00 | | | | Compound Not Detected. | | |
| 37 2-Butanone | 43.00 | | | | Compound Not Detected. | | |
| 41 2,2-Dichloropropane | 77.00 | | | | Compound Not Detected. | | |
| 39 Propionitrile | 54.00 | | | | Compound Not Detected. | | |
| 38 Ethyl Acetate | 43.00 | | | | Compound Not Detected. | | |
| 42 Methacrylonitrile | 41.00 | | | | Compound Not Detected. | | |
| 43 Bromochloromethane | 128.00 | | | | Compound Not Detected. | | |
| 45 Tetrahydrofuran | 42.00 | | | | Compound Not Detected. | | |
| 44 Chloroform | 83.00 | | | | Compound Not Detected. | | |
| 47 1,1,1-Trichloroethane | 97.00 | | | | Compound Not Detected. | | |
| 50 1,1-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 51 Carbon Tetrachloride | 117.00 | | | | Compound Not Detected. | | |
| 49 Cyclohexane | 56.00 | | | | Compound Not Detected. | | |
| 48 Isobutanol | 41.00 | | | | Compound Not Detected. | | |
| 55 TAME | 73.00 | | | | Compound Not Detected. | | |
| 54 Benzene | 78 | 8.452 | 8.452 | (0.977) | 1190624 | 10.9553 | 10.9553 |
| 53 1,2-Dichloroethane | 62.00 | | | | Compound Not Detected. | | |
| 57 n-Butanol | 56.00 | | | | Compound Not Detected. | | |
| 59 2-Pentanone | 43.00 | | | | Compound Not Detected. | | |
| 58 Trichloroethene | 130 | 8.964 | 8.963 | (1.036) | 361916 | 10.9187 | 10.9187 |
| 61 1,2-Dichloropropane | 63.00 | | | | Compound Not Detected. | | |

| Compounds | QUANT | SIG | | | | | | CONCENTRATIONS | |
|------------------------------|--------|-----|--------|--------|---------|------------------------|---------|----------------|---------|
| | | | RT | EXP RT | REL RT | RESPONSE | | ON-COLUMN | FINAL |
| | MASS | | | | | | | (ug/L) | (ug/L) |
| ===== | ===== | | == | ===== | ===== | ===== | | ===== | ===== |
| 60 Methyl Methacrylate | 100.00 | | | | | Compound Not Detected. | | | |
| 62 Methyl cyclohexane | 55.00 | | | | | Compound Not Detected. | | | |
| 64 Dibromomethane | 93.00 | | | | | Compound Not Detected. | | | |
| 63 1,4-Dioxane | 88 | | 9.249 | 9.239 | (1.069) | 3472 | 31.3001 | 31.3001(a) | |
| 65 Bromodichloromethane | 83.00 | | | | | Compound Not Detected. | | | |
| 66 2-nitropropane | 41.00 | | | | | Compound Not Detected. | | | |
| 67 2-Chloroethyl vinyl ether | 63.00 | | | | | Compound Not Detected. | | | |
| 68 cis-1,3-Dichloropropene | 75.00 | | | | | Compound Not Detected. | | | |
| 69 4-Methyl-2-pentanone | 43.00 | | | | | Compound Not Detected. | | | |
| 71 Toluene | 91 | | 10.154 | 10.153 | (0.877) | 1426393 | 10.7674 | 10.7674 | |
| 72 trans-1,3-Dichloropropene | 75.00 | | | | | Compound Not Detected. | | | |
| 73 Ethyl methacrylate | 69.00 | | | | | Compound Not Detected. | | | |
| 74 1,1,2-Trichloroethane | 97.00 | | | | | Compound Not Detected. | | | |
| 76 1,3-Dichloropropane | 76.00 | | | | | Compound Not Detected. | | | |
| 77 Tetrachloroethene | 164.00 | | | | | Compound Not Detected. | | | |
| 75 2-Hexanone | 43.00 | | | | | Compound Not Detected. | | | |
| 78 Dibromochloromethane | 129.00 | | | | | Compound Not Detected. | | | |
| 79 Tetrahydrothiophene | 60.00 | | | | | Compound Not Detected. | | | |
| 80 1,2-Dibromoethane | 107.00 | | | | | Compound Not Detected. | | | |
| 81 1-Chlorohexane | 91.00 | | | | | Compound Not Detected. | | | |
| 83 Chlorobenzene | 112 | | 11.620 | 11.609 | (1.003) | 1036531 | 10.8334 | 10.8334 | |
| 84 1,1,1,2-Tetrachloroethane | 131.00 | | | | | Compound Not Detected. | | | |
| 85 Ethylbenzene | 106.00 | | | | | Compound Not Detected. | | | |
| 86 m and p-Xylene | 106.00 | | | | | Compound Not Detected. | | | |
| 87 o-Xylene | 106.00 | | | | | Compound Not Detected. | | | |
| 88 Styrene | 104.00 | | | | | Compound Not Detected. | | | |
| 89 Bromoform | 173.00 | | | | | Compound Not Detected. | | | |
| 90 isopropyl benzene | 105.00 | | | | | Compound Not Detected. | | | |
| 91 c-1,4-Dichloro-2-butene | 53.00 | | | | | Compound Not Detected. | | | |
| 92 Cyclohexanone | 55.00 | | | | | Compound Not Detected. | | | |
| 94 1,1,2,2-Tetrachloroethane | 83.00 | | | | | Compound Not Detected. | | | |
| 95 t-1,4-Dichloro-2-butene | 53.00 | | | | | Compound Not Detected. | | | |
| 97 Bromobenzene | 156.00 | | | | | Compound Not Detected. | | | |
| 96 1,2,3-Trichloropropane | 110.00 | | | | | Compound Not Detected. | | | |
| 98 n-Propylbenzene | 120.00 | | | | | Compound Not Detected. | | | |
| 99 2-Chlorotoluene | 126.00 | | | | | Compound Not Detected. | | | |
| 100 1,3,5-Trimethylbenzene | 105.00 | | | | | Compound Not Detected. | | | |
| 101 4-Chlorotoluene | 126.00 | | | | | Compound Not Detected. | | | |
| 102 tert-Butylbenzene | 119.00 | | | | | Compound Not Detected. | | | |
| 103 1,2,4-Trimethylbenzene | 105.00 | | | | | Compound Not Detected. | | | |
| 104 sec-Butylbenzene | 134.00 | | | | | Compound Not Detected. | | | |
| 106 m-Dichlorobenzene | 146.00 | | | | | Compound Not Detected. | | | |
| 105 4-Isopropyltoluene | 119.00 | | | | | Compound Not Detected. | | | |
| 108 p-dichlorobenzene | 146.00 | | | | | Compound Not Detected. | | | |
| 109 1,2,3-Trimethylbenzene | 105.00 | | | | | Compound Not Detected. | | | |
| 110 n-Butylbenzene | 91.00 | | | | | Compound Not Detected. | | | |
| 111 o-Dichlorobenzene | 146.00 | | | | | Compound Not Detected. | | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|---------------------------------|-----------|----|--------|--------|------------------------|----------------|---------|
| | | | | | | ON-COLUMN | FINAL |
| | MASS | | | | | (ug/L) | (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 112 1,2-Dibromo-3-chloropropane | 157.00 | | | | Compound Not Detected. | | |
| 113 1,2,4-Trichlorobenzene | 180.00 | | | | Compound Not Detected. | | |
| 114 Hexachlorobutadiene | 225.00 | | | | Compound Not Detected. | | |
| 115 Napthalene | 128.00 | | | | Compound Not Detected. | | |
| 116 1,2,3-Trichlorobenzene | 180.00 | | | | Compound Not Detected. | | |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: R2.i
Lab File ID: rr6285.d
Lab Smp Id: GGTEE1AG
Analysis Type: VOA
Quant Type: ISTD
Operator: meierg
Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m
Misc Info: rr6284.d

Calibration Date: 05/27/4
Calibration Time: 1604
Client Smp ID: 01-MW-06
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1117002 | 558501 | 2234004 | 1204832 | 7.86 |
| 82 Chlorobenzene-d5 | 318643 | 159322 | 637286 | 320651 | 0.63 |
| 107 1,4-Dichlorobenze | 494708 | 247354 | 989416 | 485413 | -1.88 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.65 | 0.07 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.58 | -0.03 |
| 107 1,4-Dichlorobenze | 14.19 | 13.69 | 14.69 | 14.20 | 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.

STL Denver

RECOVERY REPORT

| | |
|--|-------------------------|
| Client Name: Cabrera Services | Client SDG: D4E210325 |
| Sample Matrix: LIQUID | Fraction: VOA |
| Lab Smp Id: GGTEE1AG | Client Smp ID: 01-MW-06 |
| Level: LOW | Operator: meierg |
| Data Type: MS DATA | SampleType: MS |
| SpikeList File: dcs.spk | Quant Type: ISTD |
| Sublist File: QK-01.sub | |
| Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m | |
| Misc Info: rr6284.d | |

| SPIKE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|-----------------------|-----------------------|---------------------------|----------------|--------|
| 19 1,1-Dichloroethene | 10.0000 | 11.2362 | 112.36 | 67-125 |
| 54 Benzene | 10.0000 | 10.9553 | 109.55 | 75-116 |
| 58 Trichloroethene | 10.0000 | 10.9187 | 109.19 | 80-123 |
| 71 Toluene | 10.0000 | 10.7674 | 107.67 | 74-115 |
| 83 Chlorobenzene | 10.0000 | 10.8334 | 108.33 | 77-117 |

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 46 Dibromofluorometha | 10.0000 | 10.5650 | 105.65 | 76-116 |
| \$ 52 1,2-Dichloroethane | 10.0000 | 9.94723 | 99.47 | 59-129 |
| \$ 70 Toluene-d8 | 10.0000 | 10.0028 | 100.03 | 76-116 |
| \$ 93 Bromofluorobenzene | 10.0000 | 10.0039 | 100.04 | 74-114 |

Data File: /chem/R2.i/052704.b/rr6285.d

Page 7

Date : 27-MAY-2004 17:44

Client ID: 01-MW-06

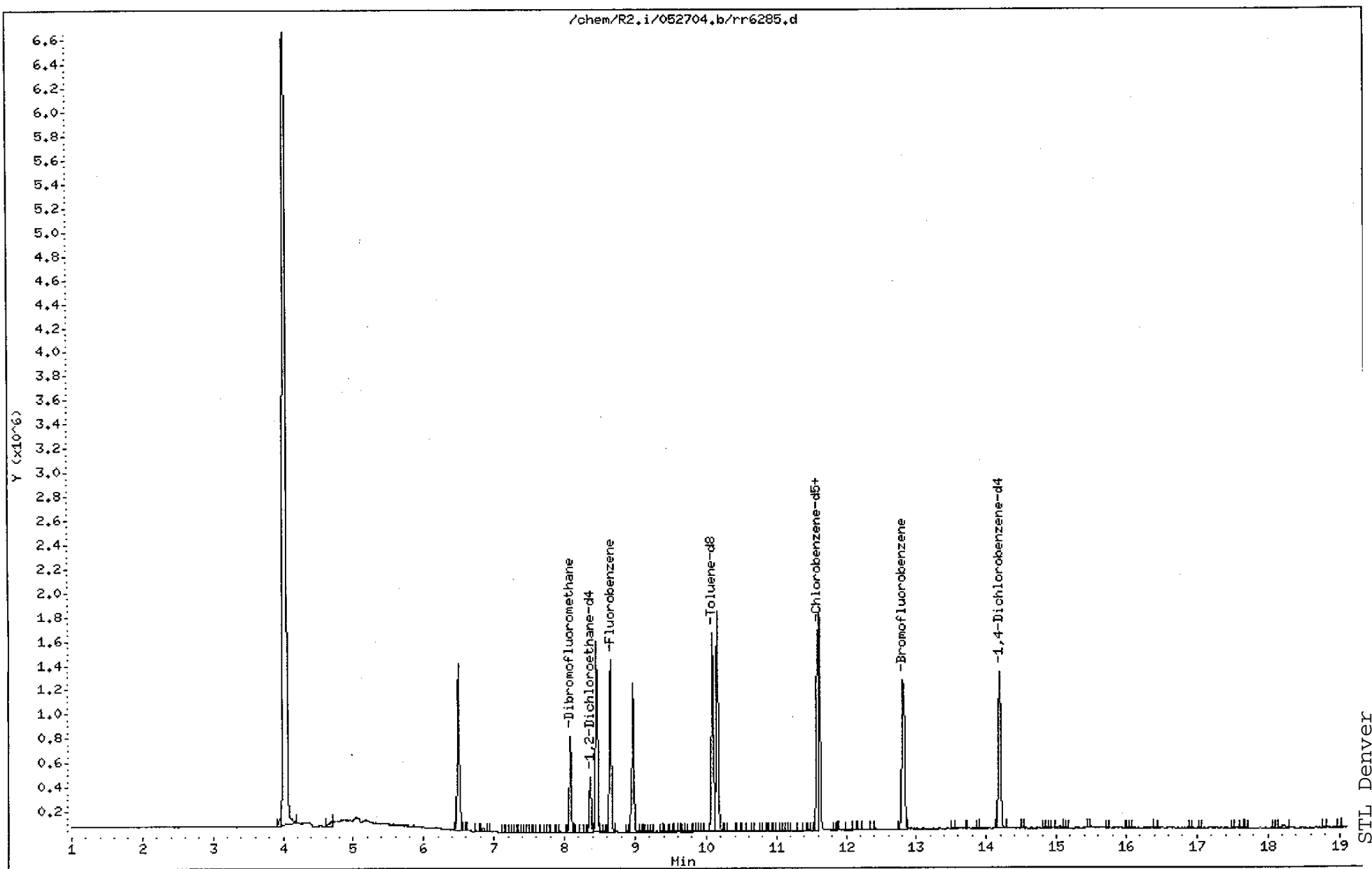
Instrument: R2.i

Sample Info: GGTEE1AG,,D4E210325-01MS

Operator: meieng

Column phase: HP624

Column diameter: 0.32



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052704.b/rr6286.d

Lab Smp Id: GGTEE1AHClient Smp ID: 01-MW-06

Inj Date : 27-MAY-2004 18:10

Operator : meiergInst ID: R2.i

Smp Info : GGTEE1AH,,D4E210325-01MSD

Misc Info : rr6285.d

Comment : SOP # CORP-MS-0002 20ml Analysis

Method : /chem/R2.i/052704.b/R2-20ml-h2o.m

Meth Date : 27-May-2004 17:49 meiergQuant Type: ISTD

Cal Date : 26-MAY-2004 00:31Cal File: rr6230.d

Als bottle: 2QC Sample: MSD

Dil Factor: 1.00000

Integrator: HP RTECompound Sublist: QK-01.sub

Target Version: 3.40

Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | |
|--------------------------------|-----------|------------------------|--------|---------|---------|----------|----------------------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| * 56 Fluorobenzene | 96 | 8.642 | 8.642 | (1.000) | 1178018 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.584 | 11.584 | (1.000) | 312775 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.190 | 14.190 | (1.000) | 494533 | 10.0000 | |
| \$ 46 Dibromofluoromethane | 111 | 8.082 | 8.072 | (0.935) | 411932 | 10.5410 | 10.5410 |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 8.367 | 8.367 | (0.968) | 311071 | 10.0282 | 10.0282 |
| \$ 70 Toluene-d8 | 98 | 10.088 | 10.088 | (0.871) | 1164066 | 10.2525 | 10.2525 |
| \$ 93 Bromofluorobenzene | 95 | 12.813 | 12.813 | (1.106) | 574038 | 10.5306 | 10.5306 |
| M 1 1,2-Dichloroethene (total) | 96.00 | Compound Not Detected. | | | | | |
| M 2 Xylene (total) | 106.00 | Compound Not Detected. | | | | | |
| 3 dichlorodifluoromethane | 85.00 | Compound Not Detected. | | | | | |
| 4 dichlorotetrafluoroethane | 85.00 | Compound Not Detected. | | | | | |
| 5 Chloromethane | 50.00 | Compound Not Detected. | | | | | |
| 6 Vinyl Chloride | 62.00 | Compound Not Detected. | | | | | |
| 7 Ethylene Oxide | 43.00 | Compound Not Detected. | | | | | |
| 8 Bromomethane | 94.00 | Compound Not Detected. | | | | | |
| 9 Chloroethane | 64.00 | Compound Not Detected. | | | | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|-----------------------------------|-----------|-------|----------|---------------|----------|----------------|-------------|
| | | | | | | ON-COLUMN | FINAL |
| | MASS | | | | | (ug/L) | (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 10 Dichlorofluoromethane | 67.00 | | Compound | Not Detected. | | | |
| 11 Trichlorofluoromethane | 101.00 | | Compound | Not Detected. | | | |
| 12 Ethanol | 45.00 | | Compound | Not Detected. | | | |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117.00 | | Compound | Not Detected. | | | |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83.00 | | Compound | Not Detected. | | | |
| 14 Ethyl Ether | 59.00 | | Compound | Not Detected. | | | |
| 16 Acrolein | 56.00 | | Compound | Not Detected. | | | |
| 20 2-Propanol | 45.00 | | Compound | Not Detected. | | | |
| 19 1,1-Dichloroethene | 96 | 6.498 | 6.484 | (0.752) | 483018 | 11.3453 | 11.3452 |
| 17 Trichlorotrifluoroethane | 151.00 | | Compound | Not Detected. | | | |
| 18 Acetone | 43.00 | | Compound | Not Detected. | | | |
| 21 Iodomethane | 142.00 | | Compound | Not Detected. | | | |
| 24 Carbon Disulfide | 76.00 | | Compound | Not Detected. | | | |
| 22 Acetonitrile | 41.00 | | Compound | Not Detected. | | | |
| 25 Allyl Chloride | 41.00 | | Compound | Not Detected. | | | |
| 23 Methyl acetate | 43.00 | | Compound | Not Detected. | | | |
| 27 Methylene Chloride | 84 | 6.852 | 6.848 | (0.793) | 15842 | 0.44149 | 0.441489(a) |
| 26 tert-Butyl alcohol | 59.00 | | Compound | Not Detected. | | | |
| 28 Acrylonitrile | 53.00 | | Compound | Not Detected. | | | |
| 29 Methyl t-butyl ether | 73.00 | | Compound | Not Detected. | | | |
| 30 trans-1,2-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 31 Hexane | 57.00 | | Compound | Not Detected. | | | |
| 34 1,1-Dichloroethane | 63.00 | | Compound | Not Detected. | | | |
| 32 Vinyl acetate | 43.00 | | Compound | Not Detected. | | | |
| 33 Isopropyl ether | 87.00 | | Compound | Not Detected. | | | |
| 35 Chloroprene | 53.00 | | Compound | Not Detected. | | | |
| 36 ETBE | 59.00 | | Compound | Not Detected. | | | |
| 40 cis-1,2-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 37 2-Butanone | 43.00 | | Compound | Not Detected. | | | |
| 41 2,2-Dichloropropane | 77.00 | | Compound | Not Detected. | | | |
| 39 Propionitrile | 54.00 | | Compound | Not Detected. | | | |
| 38 Ethyl Acetate | 43.00 | | Compound | Not Detected. | | | |
| 42 Methacrylonitrile | 41.00 | | Compound | Not Detected. | | | |
| 43 Bromochloromethane | 128.00 | | Compound | Not Detected. | | | |
| 45 Tetrahydrofuran | 42.00 | | Compound | Not Detected. | | | |
| 44 Chloroform | 83.00 | | Compound | Not Detected. | | | |
| 47 1,1,1-Trichloroethane | 97.00 | | Compound | Not Detected. | | | |
| 50 1,1-Dichloropropene | 75.00 | | Compound | Not Detected. | | | |
| 51 Carbon Tetrachloride | 117.00 | | Compound | Not Detected. | | | |
| 49 Cyclohexane | 56.00 | | Compound | Not Detected. | | | |
| 48 Isobutanol | 41.00 | | Compound | Not Detected. | | | |
| 55 TAME | 73.00 | | Compound | Not Detected. | | | |
| 54 Benzene | 78 | 8.456 | 8.452 | (0.978) | 1197597 | 11.2703 | 11.2703 |
| 53 1,2-Dichloroethane | 62.00 | | Compound | Not Detected. | | | |
| 57 n-Butanol | 56.00 | | Compound | Not Detected. | | | |
| 59 2-Pentanone | 43.00 | | Compound | Not Detected. | | | |
| 58 Trichloroethene | 130 | 8.967 | 8.963 | (1.038) | 364186 | 11.2373 | 11.2373 |
| 61 1,2-Dichloropropane | 63.00 | | Compound | Not Detected. | | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|------------------------------|-----------|--------|--------|---------|------------------------|----------------|------------|
| | | | | | | ON-COLUMN | FINAL |
| | MASS | | | | | (ug/L) | (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 60 Methyl Methacrylate | 100.00 | | | | Compound Not Detected. | | |
| 62 Methyl cyclohexane | 55.00 | | | | Compound Not Detected. | | |
| 64 Dibromomethane | 93.00 | | | | Compound Not Detected. | | |
| 63 1,4-Dioxane | 88 | 9.242 | 9.239 | (1.069) | 3611 | 33.2942 | 33.2942(a) |
| 65 Bromodichloromethane | 83.00 | | | | Compound Not Detected. | | |
| 66 2-nitropropane | 41.00 | | | | Compound Not Detected. | | |
| 67 2-Chloroethyl vinyl ether | 63.00 | | | | Compound Not Detected. | | |
| 68 cis-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 69 4-Methyl-2-pentanone | 43.00 | | | | Compound Not Detected. | | |
| 71 Toluene | 91 | 10.157 | 10.153 | (0.877) | 1424706 | 11.0255 | 11.0255 |
| 72 trans-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 73 Ethyl methacrylate | 69.00 | | | | Compound Not Detected. | | |
| 74 1,1,2-Trichloroethane | 97.00 | | | | Compound Not Detected. | | |
| 76 1,3-Dichloropropane | 76.00 | | | | Compound Not Detected. | | |
| 77 Tetrachloroethene | 164.00 | | | | Compound Not Detected. | | |
| 75 2-Hexanone | 43.00 | | | | Compound Not Detected. | | |
| 78 Dibromochloromethane | 129.00 | | | | Compound Not Detected. | | |
| 79 Tetrahydrothiophene | 60.00 | | | | Compound Not Detected. | | |
| 80 1,2-Dibromoethane | 107.00 | | | | Compound Not Detected. | | |
| 81 1-Chlorohexane | 91.00 | | | | Compound Not Detected. | | |
| 83 Chlorobenzene | 112 | 11.623 | 11.609 | (1.003) | 1045500 | 11.2023 | 11.2023 |
| 84 1,1,1,2-Tetrachloroethane | 131.00 | | | | Compound Not Detected. | | |
| 85 Ethylbenzene | 106.00 | | | | Compound Not Detected. | | |
| 86 m and p-Xylene | 106.00 | | | | Compound Not Detected. | | |
| 87 o-Xylene | 106.00 | | | | Compound Not Detected. | | |
| 88 Styrene | 104.00 | | | | Compound Not Detected. | | |
| 89 Bromoform | 173.00 | | | | Compound Not Detected. | | |
| 90 isopropyl benzene | 105.00 | | | | Compound Not Detected. | | |
| 91 c-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 92 Cyclohexanone | 55.00 | | | | Compound Not Detected. | | |
| 94 1,1,2,2-Tetrachloroethane | 83.00 | | | | Compound Not Detected. | | |
| 95 t-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 97 Bromobenzene | 156.00 | | | | Compound Not Detected. | | |
| 96 1,2,3-Trichloropropane | 110.00 | | | | Compound Not Detected. | | |
| 98 n-Propylbenzene | 120.00 | | | | Compound Not Detected. | | |
| 99 2-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 100 1,3,5-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 101 4-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 102 tert-Butylbenzene | 119.00 | | | | Compound Not Detected. | | |
| 103 1,2,4-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 104 sec-Butylbenzene | 134.00 | | | | Compound Not Detected. | | |
| 106 m-Dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 105 4-Isopropyltoluene | 119.00 | | | | Compound Not Detected. | | |
| 108 p-dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 109 1,2,3-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 110 n-Butylbenzene | 91.00 | | | | Compound Not Detected. | | |
| 111 o-Dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|---------------------------------|-----------|----|----------|--------|-----------|----------------|---------|
| | | | | | | ON-COLUMN | FINAL |
| | MASS | | | | | (ug/L) | (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 112 1,2-Dibromo-3-chloropropane | 157.00 | | Compound | Not | Detected. | | |
| 113 1,2,4-Trichlorobenzene | 180.00 | | Compound | Not | Detected. | | |
| 114 Hexachlorobutadiene | 225.00 | | Compound | Not | Detected. | | |
| 115 Napthalene | 128.00 | | Compound | Not | Detected. | | |
| 116 1,2,3-Trichlorobenzene | 180.00 | | Compound | Not | Detected. | | |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: R2.i
Lab File ID: rr6286.d
Lab Smp Id: GGTEE1AH
Analysis Type: VOA
Quant Type: ISTD
Operator: meierg
Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m
Misc Info: rr6285.d

Calibration Date: 05/27/4
Calibration Time: 1604
Client Smp ID: 01-MW-06
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1117002 | 558501 | 2234004 | 1178018 | 5.46 |
| 82 Chlorobenzene-d5 | 318643 | 159322 | 637286 | 312775 | -1.84 |
| 107 1,4-Dichlorobenze | 494708 | 247354 | 989416 | 494533 | -0.04 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.64 | 0.00 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.58 | 0.00 |
| 107 1,4-Dichlorobenze | 14.19 | 13.69 | 14.69 | 14.19 | 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.

STL Denver

RECOVERY REPORT

Client Name: Cabrera Services
Sample Matrix: LIQUID
Lab Smp Id: GGTEE1AH
Level: LOW
Data Type: MS DATA
SpikeList File: dcs.spk
Sublist File: QK-01.sub
Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m
Misc Info: rr6285.d

Client SDG: D4E210325
Fraction: VOA
Client Smp ID: 01-MW-06
Operator: meierg
SampleType: MSD
Quant Type: ISTD

| SPIKE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|-----------------------|-----------------------|---------------------------|----------------|--------|
| 19 1,1-Dichloroethene | 10.0000 | 11.3452 | 113.45 | 67-125 |
| 54 Benzene | 10.0000 | 11.2703 | 112.70 | 75-116 |
| 58 Trichloroethene | 10.0000 | 11.2373 | 112.37 | 80-123 |
| 71 Toluene | 10.0000 | 11.0255 | 110.26 | 74-115 |
| 83 Chlorobenzene | 10.0000 | 11.2023 | 112.02 | 77-117 |

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 46 Dibromofluorometha | 10.0000 | 10.5410 | 105.41 | 76-116 |
| \$ 52 1,2-Dichloroethane | 10.0000 | 10.0282 | 100.28 | 59-129 |
| \$ 70 Toluene-d8 | 10.0000 | 10.2525 | 102.52 | 76-116 |
| \$ 93 Bromofluorobenzene | 10.0000 | 10.5306 | 105.31 | 74-114 |

Data File: /chem/R2.i/052704.b/rr6286.d

Page 7

Date : 27-MAY-2004 18:10

Client ID: 01-MW-06

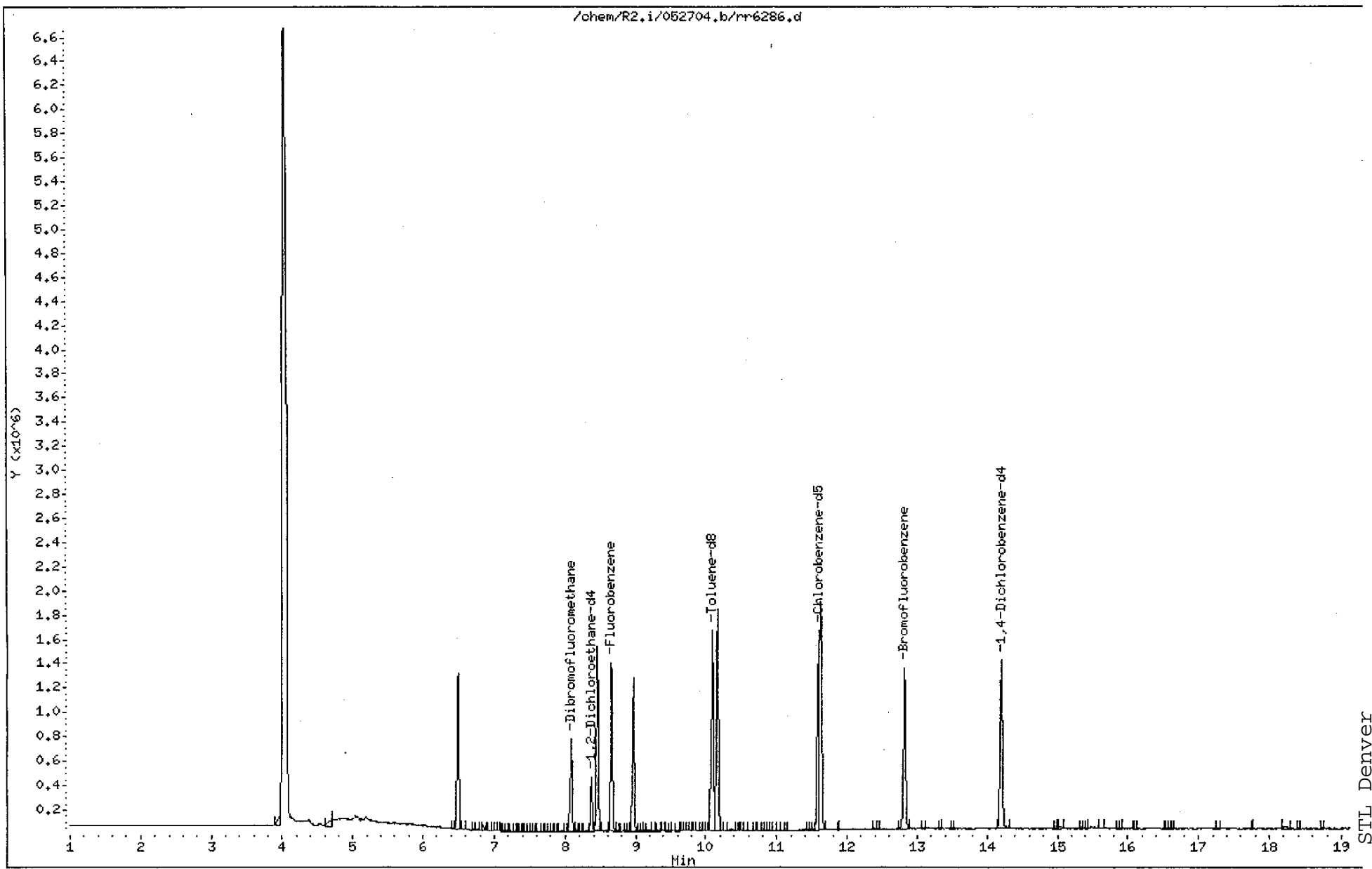
Instrument: R2.i

Sample Info: CGTEE1AH,,D4E210325-01MSD

Operator: meierg

Column phase: HP624

Column diameter: 0.32



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052704.b/rr6287.d
Lab Smp Id: GGTE31AA Client Smp ID: 01-MW-12
Inj Date : 27-MAY-2004 18:35
Operator : meierg Inst ID: R2.i
Smp Info : GGTE31AA,,D4E210325-02
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052704.b/R2-20ml-h2o.m
Meth Date : 27-May-2004 17:49 meierg Quant Type: ISTD
Cal Date : 26-MAY-2004 00:31 Cal File: rr6230.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: QK-01.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

6m 5/27

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| | | | | | | CONCENTRATIONS | | |
|--------------------------------|-------|------------------------|--------|---------|----------|----------------|-----------|---------|
| | | QUANT SIG | | | | | ON-COLUMN | FINAL |
| Compounds | MASS | RT | EXP RT | REL RT | RESPONSE | (ug/L) | (ug/L) | |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== | |
| * 56 Fluorobenzene | 96 | 8.644 | 8.642 | (1.000) | 974671 | 10.0000 | | |
| * 82 Chlorobenzene-d5 | 119 | 11.585 | 11.584 | (1.000) | 253634 | 10.0000 | | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.191 | 14.190 | (1.000) | 405875 | 10.0000 | | |
| \$ 46 Dibromofluoromethane | 111 | 8.083 | 8.072 | (0.935) | 345071 | 10.6724 | 10.6724 | |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 8.368 | 8.367 | (0.968) | 288557 | 11.2432 | 11.2432 | |
| \$ 70 Toluene-d8 | 98 | 10.090 | 10.088 | (0.871) | 962813 | 10.4572 | 10.4572 | |
| \$ 93 Bromofluorobenzene | 95 | 12.814 | 12.813 | (1.106) | 471262 | 10.6610 | 10.6610 | |
| M 1 1,2-Dichloroethene (total) | 96.00 | Compound Not Detected. | | | | | | |
| M 2 Xylene (total) | 106 | | | | | | 75812 | 1.53445 |
| 3 dichlorodifluoromethane | 85.00 | Compound Not Detected. | | | | | | |
| 4 dichlorotetrafluoroethane | 85.00 | Compound Not Detected. | | | | | | |
| 5 Chloromethane | 50.00 | Compound Not Detected. | | | | | | |
| 6 Vinyl Chloride | 62.00 | Compound Not Detected. | | | | | | |
| 7 Ethylene Oxide | 43.00 | Compound Not Detected. | | | | | | |
| 8 Bromomethane | 94.00 | Compound Not Detected. | | | | | | |
| 9 Chloroethane | 64.00 | Compound Not Detected. | | | | | | |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|-----------------------------------|-------------------|-------|------------------------|---------|----------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 10 Dichlorofluoromethane | 67.00 | | Compound Not Detected. | | | | |
| 11 Trichlorofluoromethane | 101.00 | | Compound Not Detected. | | | | |
| 12 Ethanol | 45.00 | | Compound Not Detected. | | | | |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117.00 | | Compound Not Detected. | | | | |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83.00 | | Compound Not Detected. | | | | |
| 14 Ethyl Ether | 59 | 6.214 | 6.213 | (0.719) | 234611 | 9.53382 | 9.53382 |
| 16 Acrolein | 56.00 | | Compound Not Detected. | | | | |
| 20 2-Propanol | 45.00 | | Compound Not Detected. | | | | |
| 19 1,1-Dichloroethene | 96.00 | | Compound Not Detected. | | | | |
| 17 Trichlorotrifluoroethane | 151.00 | | Compound Not Detected. | | | | |
| 18 Acetone | 43 | 6.470 | 6.465 | (0.749) | 63327 | 14.7510 | 14.7510 |
| 21 Iodomethane | 142.00 | | Compound Not Detected. | | | | |
| 24 Carbon Disulfide | 76.00 | | Compound Not Detected. | | | | |
| 22 Acetonitrile | 41.00 | | Compound Not Detected. | | | | |
| 25 Allyl Chloride | 41.00 | | Compound Not Detected. | | | | |
| 23 Methyl acetate | 43.00 | | Compound Not Detected. | | | | |
| 27 Methylene Chloride | 84 | 6.853 | 6.848 | (0.793) | 13135 | 0.44242 | 0.442419(a) |
| 26 tert-Butyl alcohol | 59.00 | | Compound Not Detected. | | | | |
| 28 Acrylonitrile | 53.00 | | Compound Not Detected. | | | | |
| 29 Methyl t-butyl ether | 73.00 | | Compound Not Detected. | | | | |
| 30 trans-1,2-Dichloroethene | 96.00 | | Compound Not Detected. | | | | |
| 31 Hexane | 57.00 | | Compound Not Detected. | | | | |
| 34 1,1-Dichloroethane | 63.00 | | Compound Not Detected. | | | | |
| 32 Vinyl acetate | 43.00 | | Compound Not Detected. | | | | |
| 33 Isopropyl ether | 87.00 | | Compound Not Detected. | | | | |
| 35 Chloroprene | 53.00 | | Compound Not Detected. | | | | |
| 36 ETBE | 59.00 | | Compound Not Detected. | | | | |
| 40 cis-1,2-Dichloroethene | 96.00 | | Compound Not Detected. | | | | |
| 37 2-Butanone | 43.00 | | Compound Not Detected. | | | | |
| 41 2,2-Dichloropropane | 77.00 | | Compound Not Detected. | | | | |
| 39 Propionitrile | 54.00 | | Compound Not Detected. | | | | |
| 38 Ethyl Acetate | 43.00 | | Compound Not Detected. | | | | |
| 42 Methacrylonitrile | 41.00 | | Compound Not Detected. | | | | |
| 43 Bromochloromethane | 128.00 | | Compound Not Detected. | | | | |
| 45 Tetrahydrofuran | 42 | 7.985 | 7.974 | (0.924) | 4116 | 2.06249 | 2.06249(a) |
| 44 Chloroform | 83.00 | | Compound Not Detected. | | | | |
| 47 1,1,1-Trichloroethane | 97.00 | | Compound Not Detected. | | | | |
| 50 1,1-Dichloropropene | 75.00 | | Compound Not Detected. | | | | |
| 51 Carbon Tetrachloride | 117.00 | | Compound Not Detected. | | | | |
| 49 Cyclohexane | 56.00 | | Compound Not Detected. | | | | |
| 48 Isobutanol | 41.00 | | Compound Not Detected. | | | | |
| 55 TAME | 73.00 | | Compound Not Detected. | | | | |
| 54 Benzene | 78 | 8.457 | 8.452 | (0.978) | 21042 | 0.23933 | 0.239334(a) |
| 53 1,2-Dichloroethane | 62.00 | | Compound Not Detected. | | | | |
| 57 n-Butanol | 56.00 | | Compound Not Detected. | | | | |
| 59 2-Pentanone | 43.00 | | Compound Not Detected. | | | | |
| 58 Trichloroethene | 130.00 | | Compound Not Detected. | | | | |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|------------------------------|-------------------|--------|--------|---------|------------------------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 61 1,2-Dichloropropane | 63.00 | | | | Compound Not Detected. | | |
| 60 Methyl Methacrylate | 100.00 | | | | Compound Not Detected. | | |
| 62 Methyl cyclohexane | 55.00 | | | | Compound Not Detected. | | |
| 64 Dibromomethane | 93.00 | | | | Compound Not Detected. | | |
| 63 1,4-Dioxane | 88 | 9.244 | 9.239 | (1.069) | 8547 | 95.2463 | 95.2463(a) |
| 65 Bromodichloromethane | 83.00 | | | | Compound Not Detected. | | |
| 66 2-nitropropane | 41.00 | | | | Compound Not Detected. | | |
| 67 2-Chloroethyl vinyl ether | 63.00 | | | | Compound Not Detected. | | |
| 68 cis-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 69 4-Methyl-2-pentanone | 43.00 | | | | Compound Not Detected. | | |
| 71 Toluene | 91 | 10.158 | 10.153 | (0.877) | 71615 | 0.68344 | 0.683444(a) |
| 72 trans-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 73 Ethyl methacrylate | 69.00 | | | | Compound Not Detected. | | |
| 74 1,1,2-Trichloroethane | 97.00 | | | | Compound Not Detected. | | |
| 76 1,3-Dichloropropane | 76.00 | | | | Compound Not Detected. | | |
| 77 Tetrachloroethene | 164.00 | | | | Compound Not Detected. | | |
| 75 2-Hexanone | 43.00 | | | | Compound Not Detected. | | |
| 78 Dibromochloromethane | 129.00 | | | | Compound Not Detected. | | |
| 79 Tetrahydrothiophene | 60.00 | | | | Compound Not Detected. | | |
| 80 1,2-Dibromoethane | 107.00 | | | | Compound Not Detected. | | |
| 81 1-Chlorohexane | 91.00 | | | | Compound Not Detected. | | |
| 83 Chlorobenzene | 112 | 11.614 | 11.609 | (1.003) | 174310 | 2.30319 | 2.30318 |
| 84 1,1,1,2-Tetrachloroethane | 131.00 | | | | Compound Not Detected. | | |
| 85 Ethylbenzene | 106 | 11.693 | 11.688 | (1.009) | 11645 | 0.28840 | 0.288398(a) |
| 86 m and p-Xylene | 106 | 11.811 | 11.806 | (1.020) | 58295 | 1.18054 | 1.18054 |
| 87 o-Xylene | 106 | 12.244 | 12.239 | (1.057) | 17517 | 0.35391 | 0.353914(a) |
| 88 Styrene | 104.00 | | | | Compound Not Detected. | | |
| 89 Bromoform | 173.00 | | | | Compound Not Detected. | | |
| 90 isopropyl benzene | 105 | 12.618 | 12.612 | (1.089) | 27604 | 0.19124 | 0.191245(a) |
| 91 c-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 92 Cyclohexanone | 55.00 | | | | Compound Not Detected. | | |
| 94 1,1,2,2-Tetrachloroethane | 83.00 | | | | Compound Not Detected. | | |
| 95 t-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 97 Bromobenzene | 156.00 | | | | Compound Not Detected. | | |
| 96 1,2,3-Trichloropropane | 110.00 | | | | Compound Not Detected. | | |
| 98 n-Propylbenzene | 120 | 13.080 | 13.075 | (0.922) | 7038 | 0.20065 | 0.200648(aQ) |
| 99 2-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 100 1,3,5-Trimethylbenzene | 105 | 13.257 | 13.242 | (0.934) | 31496 | 0.26786 | 0.267858(a) |
| 101 4-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 102 tert-Butylbenzene | 119.00 | | | | Compound Not Detected. | | |
| 103 1,2,4-Trimethylbenzene | 105 | 13.709 | 13.704 | (0.966) | 90749 | 0.79424 | 0.794236(aQ) |
| 104 sec-Butylbenzene | 134.00 | | | | Compound Not Detected. | | |
| 106 m-Dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 105 4-Isopropyltoluene | 119.00 | | | | Compound Not Detected. | | |
| 108 p-dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 109 1,2,3-Trimethylbenzene | 105 | 14.250 | 14.249 | (1.004) | 23304 | 0.21308 | 0.213081(a) |
| 110 n-Butylbenzene | 91.00 | | | | Compound Not Detected. | | |

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | |
|---------------------------------|-----------|----------------|------------------------|--------|----------|---------|---------|
| | | ON-COLUMN | FINAL | | | | |
| | MASS | RT | EXP RT | REL RT | RESPONSE | (ug/L) | (ug/L) |
| ===== | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| 111 o-Dichlorobenzene | 146.00 | | Compound Not Detected. | | | | |
| 112 1,2-Dibromo-3-chloropropane | 157.00 | | Compound Not Detected. | | | | |
| 113 1,2,4-Trichlorobenzene | 180.00 | | Compound Not Detected. | | | | |
| 114 Hexachlorobutadiene | 225.00 | | Compound Not Detected. | | | | |
| 115 Napthalene | 128.00 | | Compound Not Detected. | | | | |
| 116 1,2,3-Trichlorobenzene | 180.00 | | Compound Not Detected. | | | | |

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|--|---------------------------|
| Instrument ID: R2.i | Calibration Date: 05/27/4 |
| Lab File ID: rr6287.d | Calibration Time: 1604 |
| Lab Smp Id: GGTE31AA | Client Smp ID: 01-MW-12 |
| Analysis Type: VOA | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: meierg | |
| Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m | |
| Misc Info: | |

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|--------|--------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1117002 | 558501 | 2234004 | 974671 | -12.74 |
| 82 Chlorobenzene-d5 | 318643 | 159322 | 637286 | 253634 | -20.40 |
| 107 1,4-Dichlorobenze | 494708 | 247354 | 989416 | 405875 | -17.96 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.64 | 0.01 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.58 | 0.01 |
| 107 1,4-Dichlorobenze | 14.19 | 13.69 | 14.69 | 14.19 | 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.

STL Denver

RECOVERY REPORT

Client Name: Cabrera Services Client SDG: D4E210325
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: GGTE31AA Client Smp ID: 01-MW-12
Level: LOW Operator: meierg
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: dcs.spk Quant Type: ISTD
Sublist File: QK-01.sub
Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m
Misc Info:

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 46 Dibromofluorometha | 10.0000 | 10.6724 | 106.72 | 76-116 |
| \$ 52 1,2-Dichloroethane | 10.0000 | 11.2432 | 112.43 | 59-129 |
| \$ 70 Toluene-d8 | 10.0000 | 10.4572 | 104.57 | 76-116 |
| \$ 93 Bromofluorobenzene | 10.0000 | 10.6610 | 106.61 | 74-114 |

Data File: /chem/R2.i/052704.b/rr6287.d

Page 7

Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

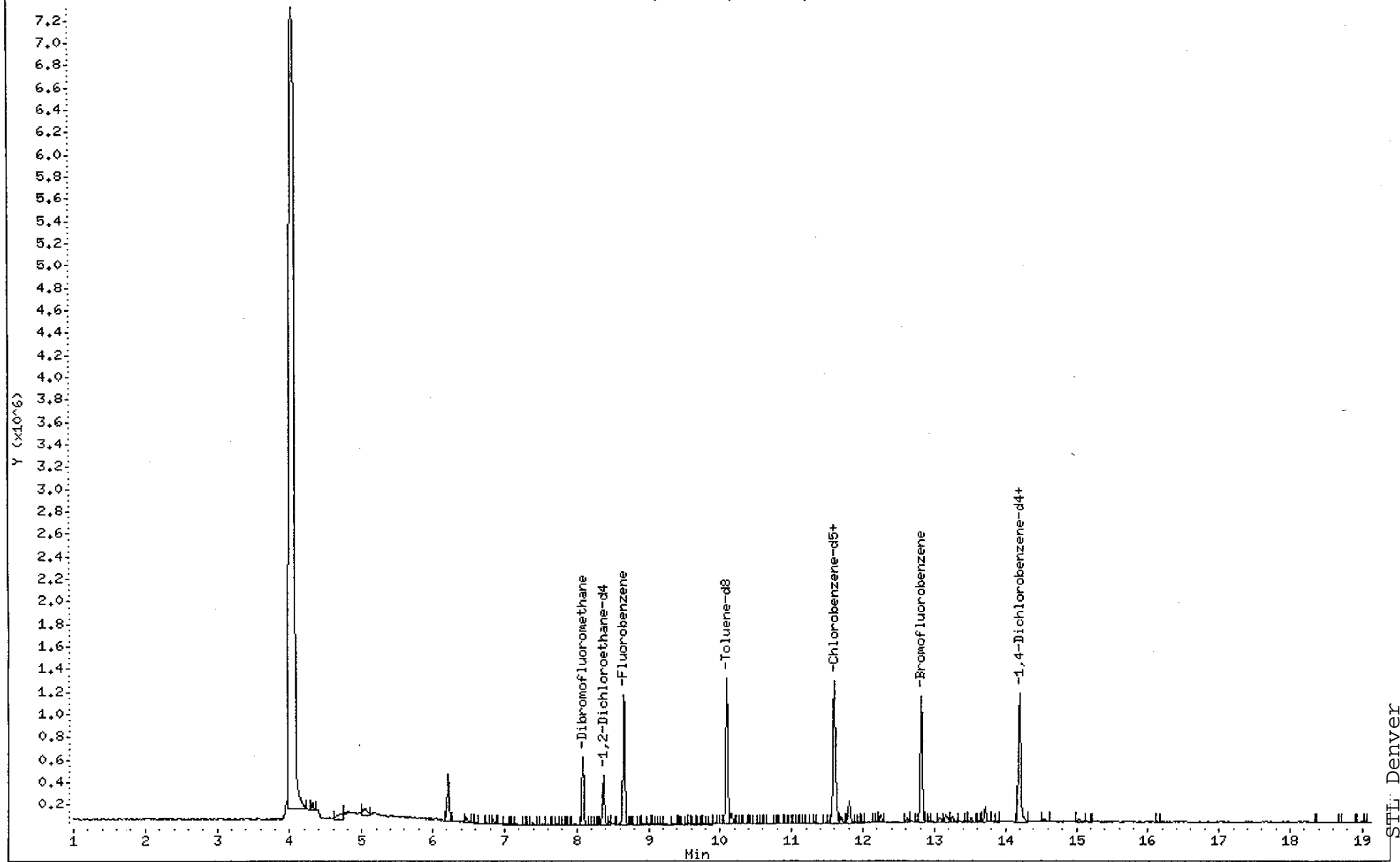
Sample Info: GGTE31AA,,D4E210325-02

Operator: meierg

Column phase: HP624

Column diameter: 0.32

/chem/R2.i/052704.b/rr6287.d



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: GGTE31AA,,D4E210325-02

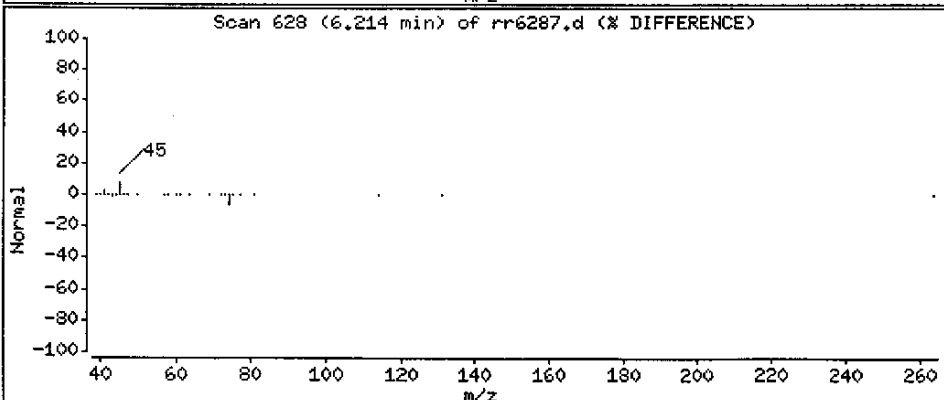
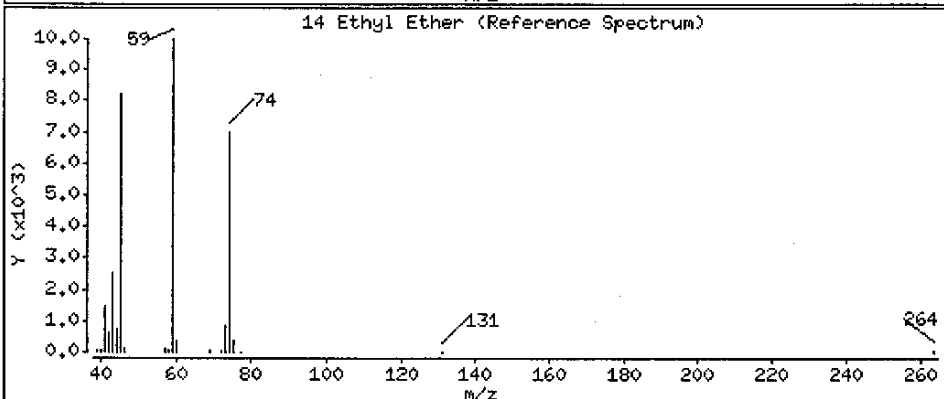
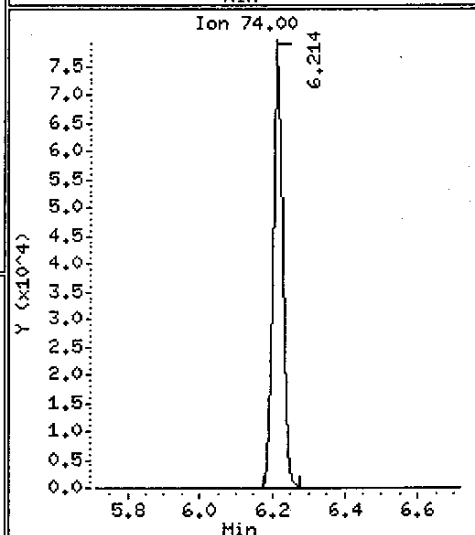
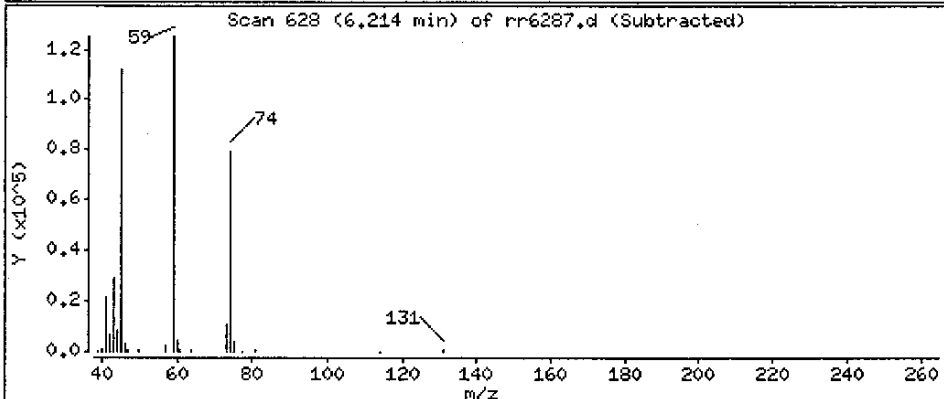
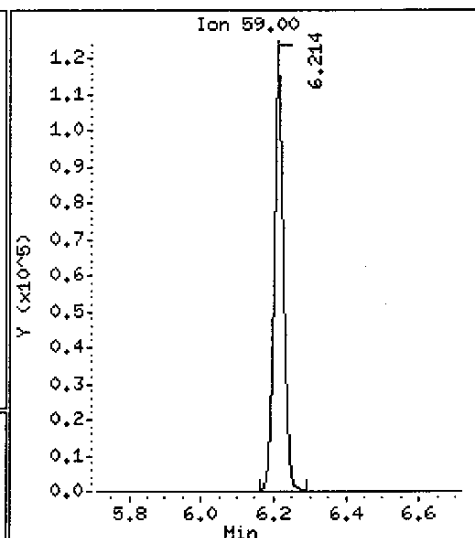
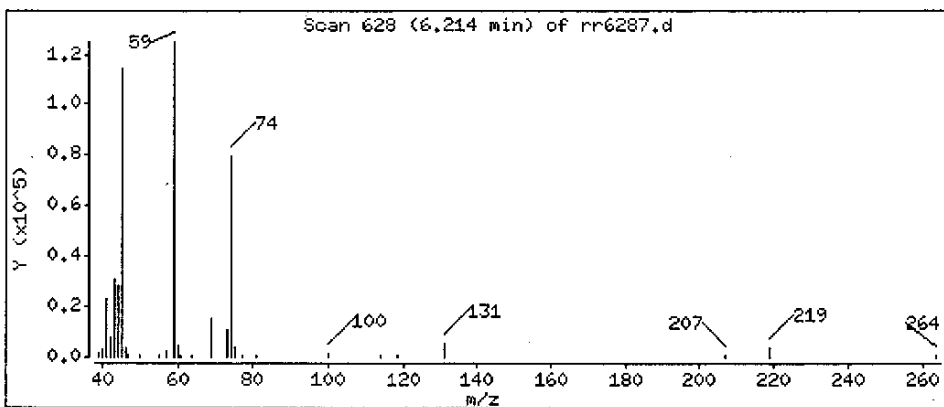
Column phase: HP624

Operator: meierg

Column diameter: 0.32

14 Ethyl Ether

Concentration: 9.53382 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: GGTE31AA,,D4E210325-02

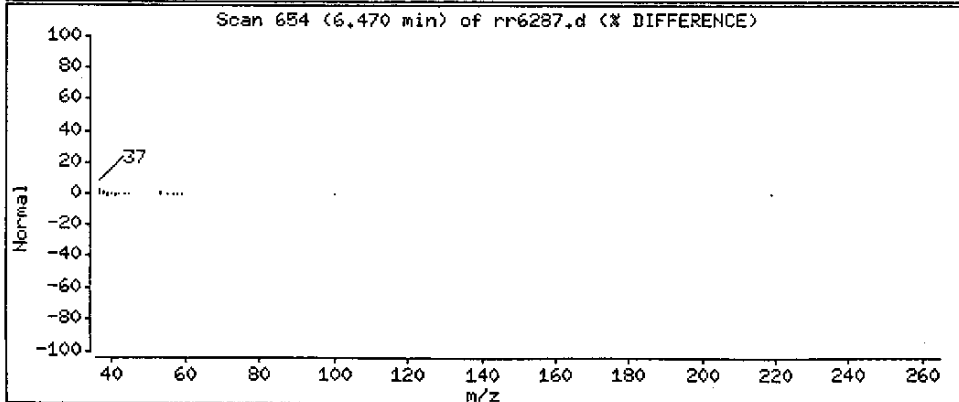
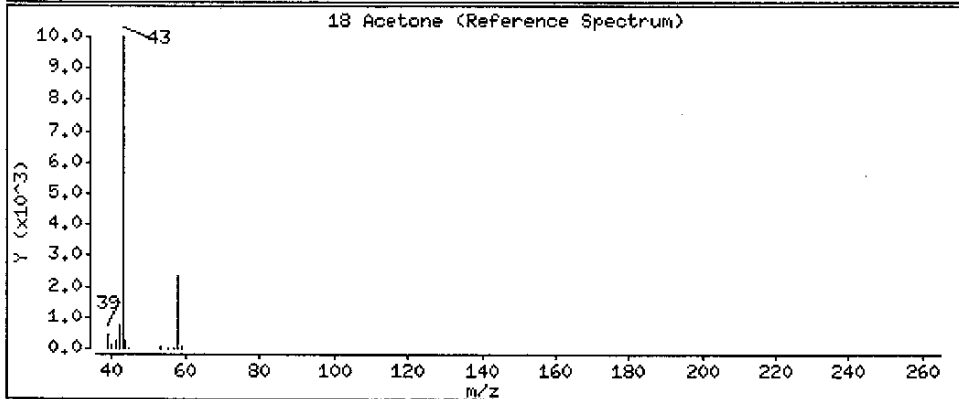
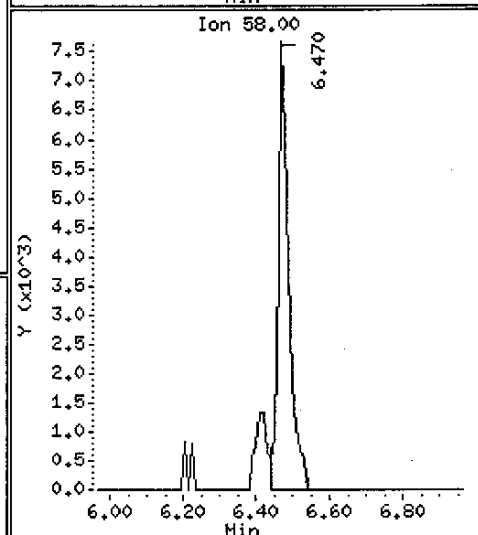
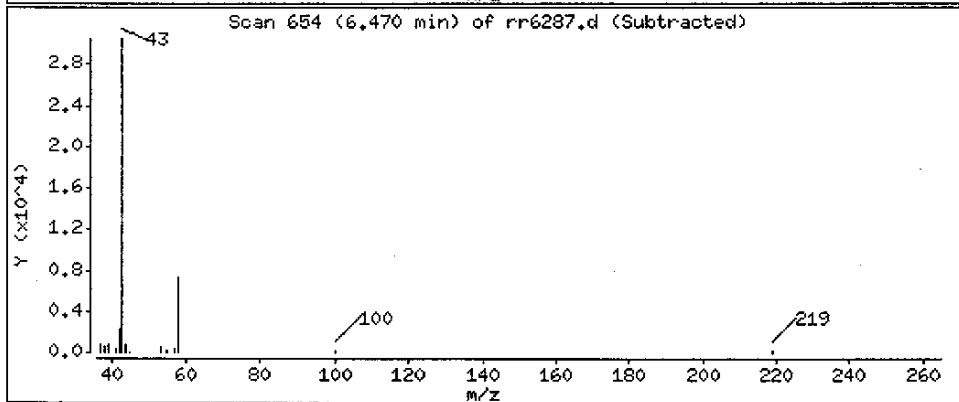
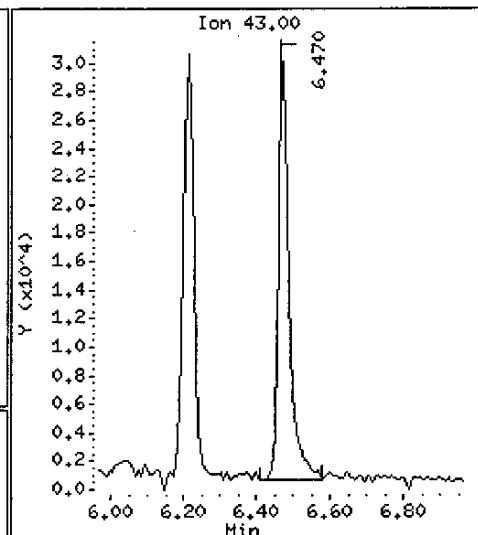
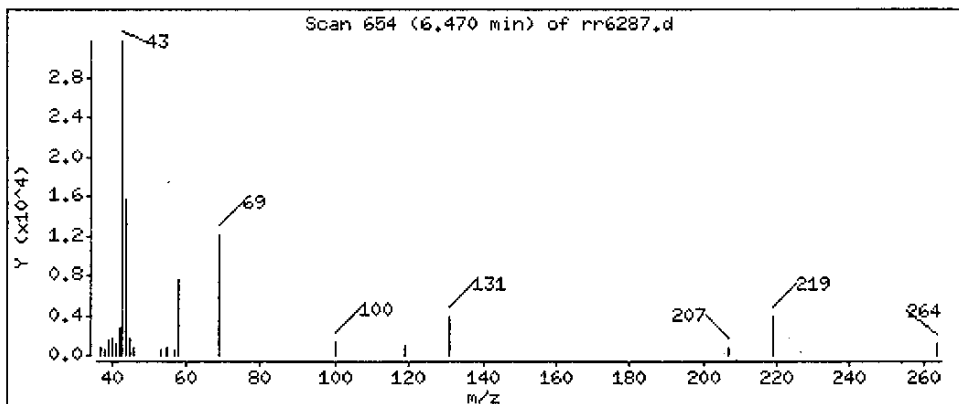
Operator: meierg

Column phase: HP624

Column diameter: 0.32

18 Acetone

Concentration: 14.7510 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: GGTE31AA,,D4E210325-02

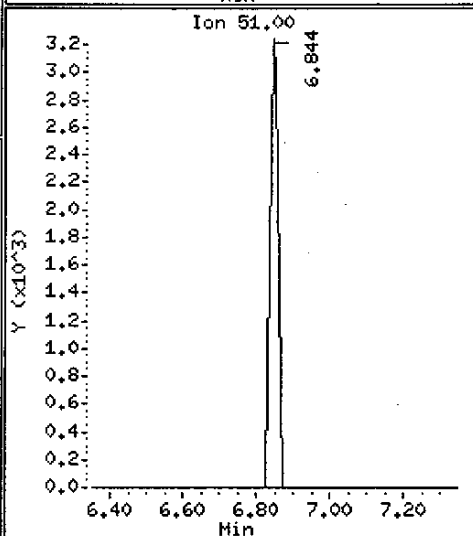
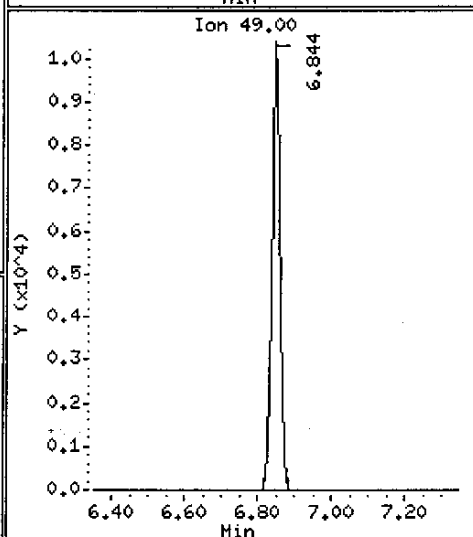
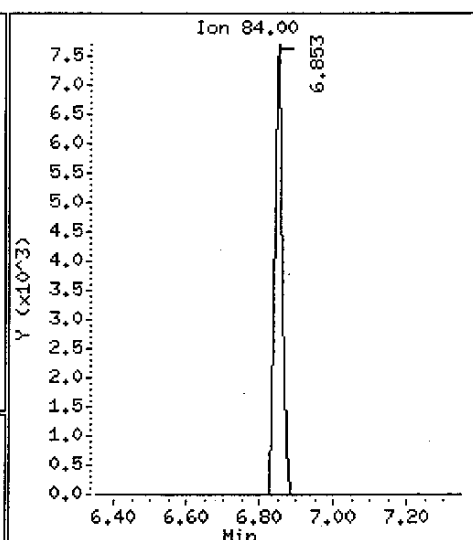
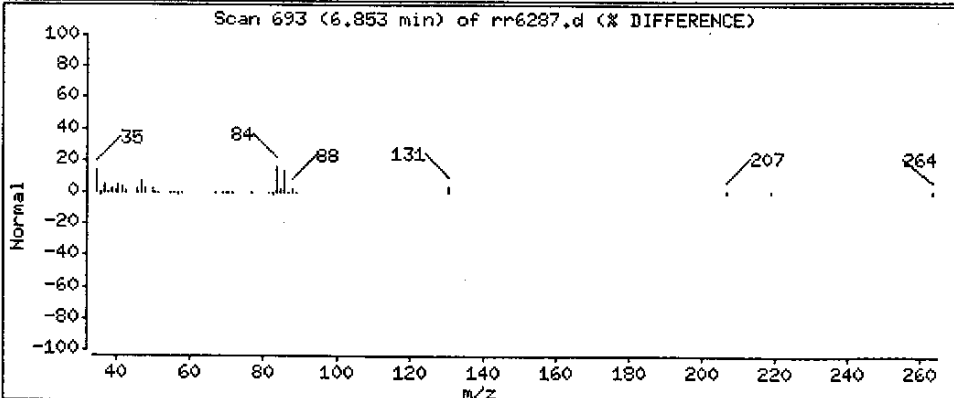
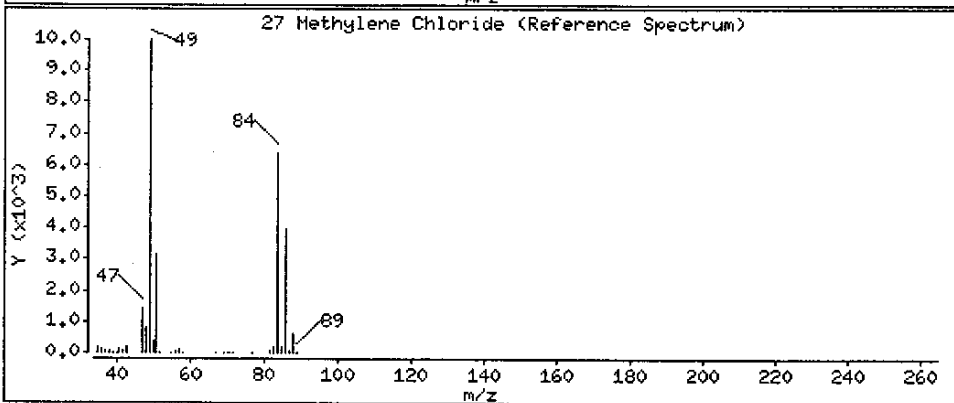
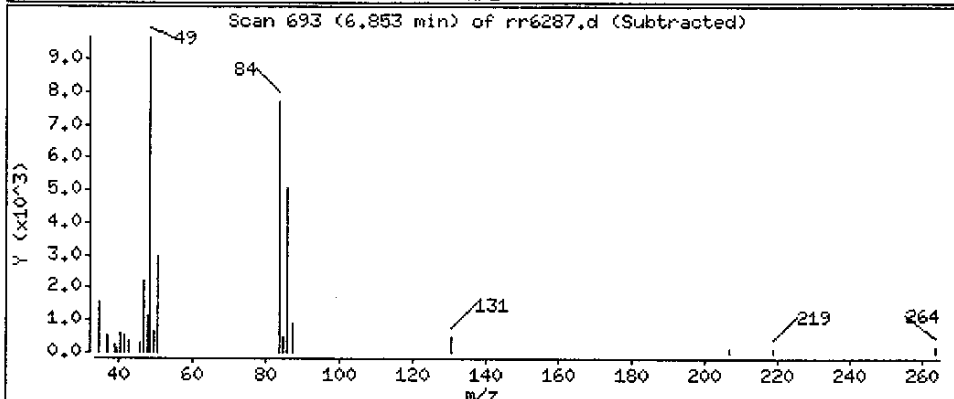
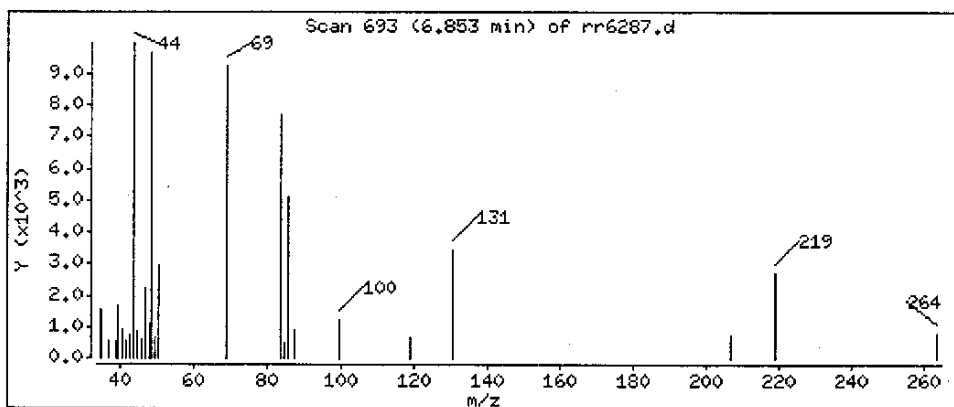
Column phase: HP624

Operator: meierg

Column diameter: 0.32

27 Methylene Chloride

Concentration: 0.442419 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: CGTE31AA,,D4E210325-02

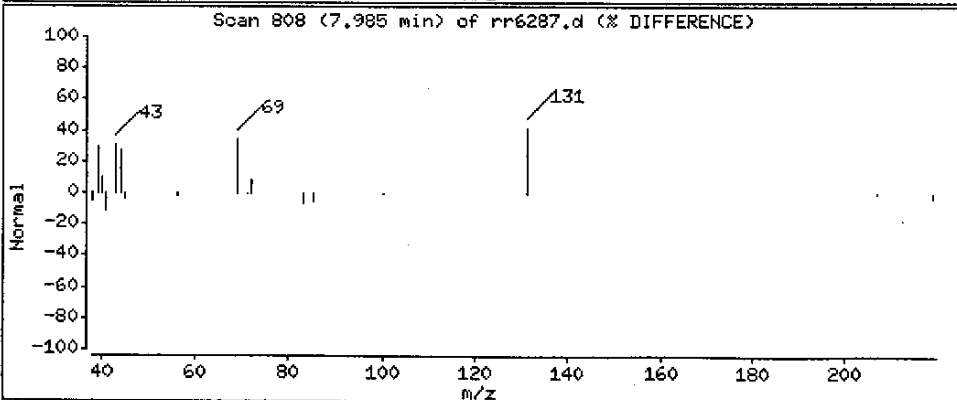
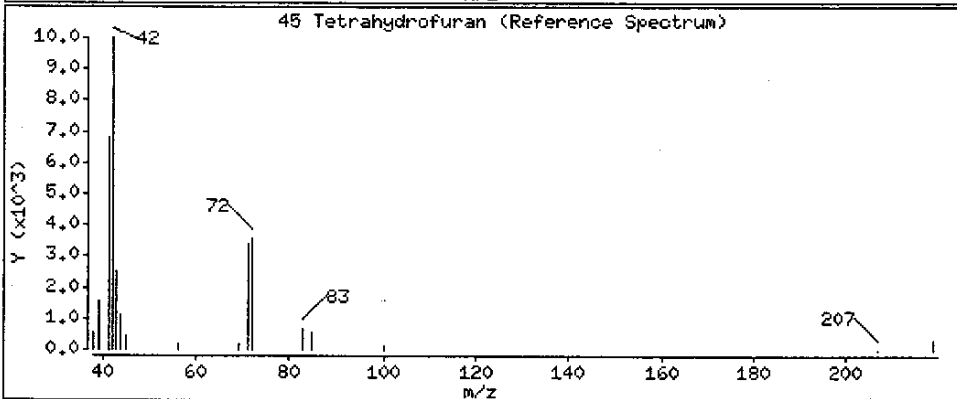
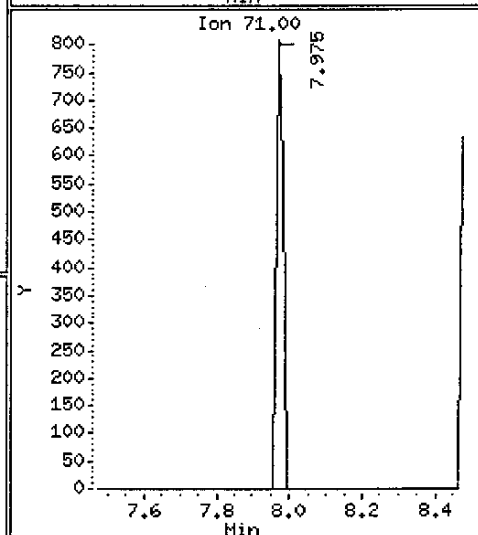
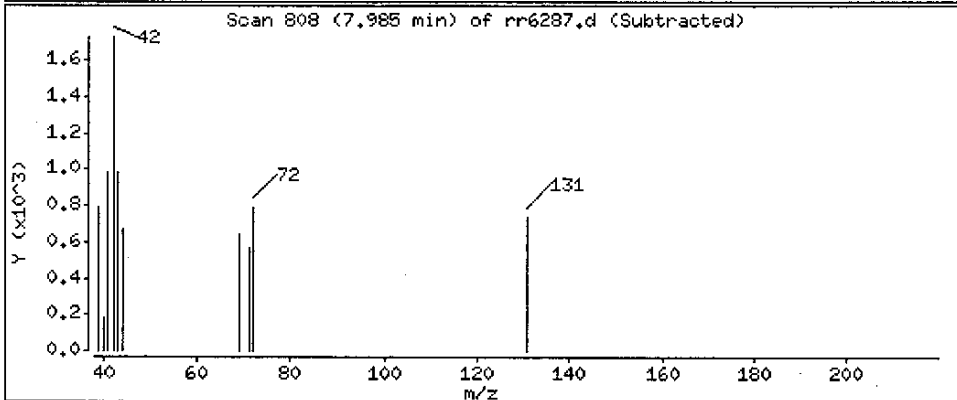
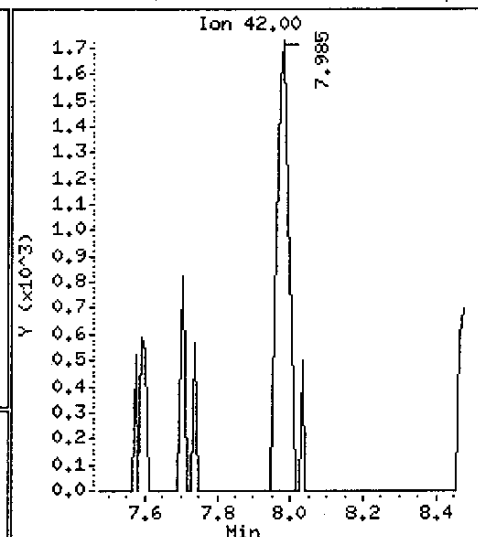
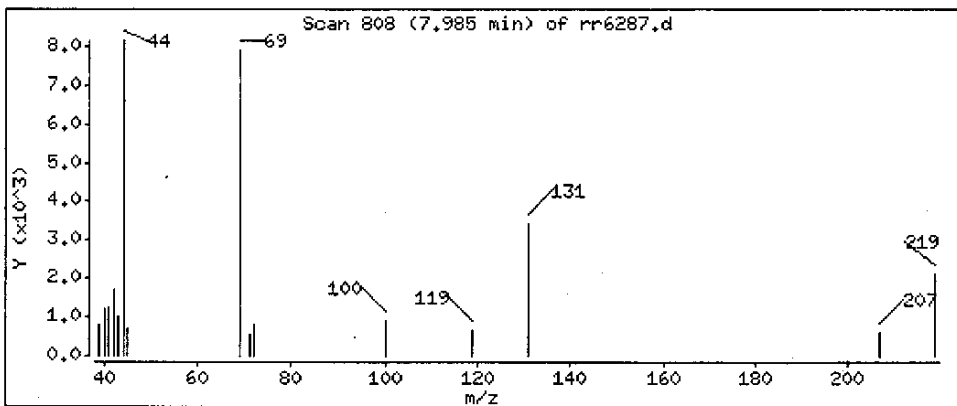
Column phase: HP624

Operator: meierg

Column diameter: 0.32

45 Tetrahydrofuran

Concentration: 2.06249 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: GGTE31AA,,D4E210325-02

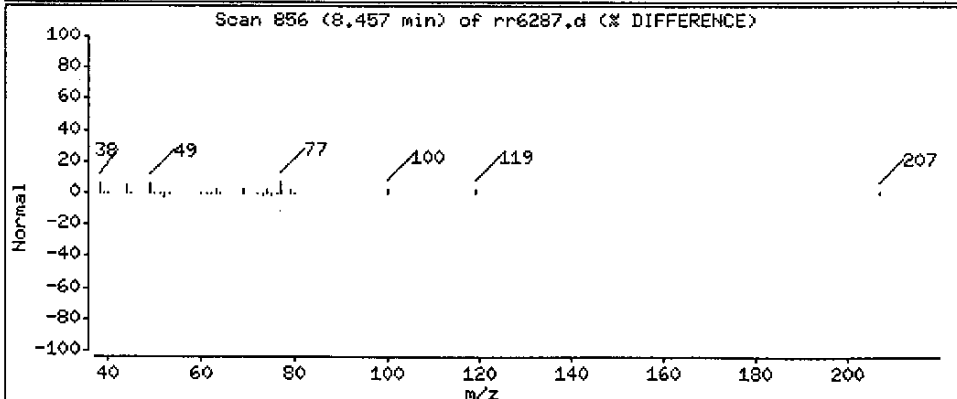
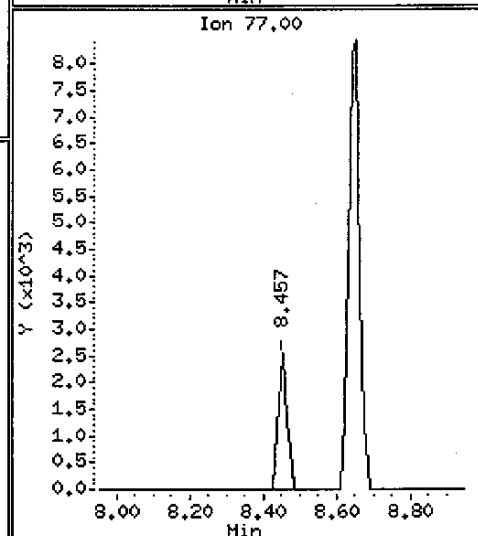
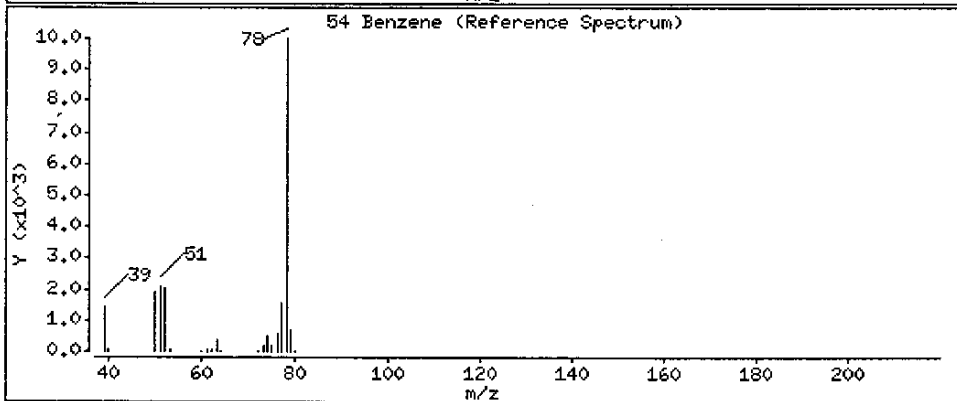
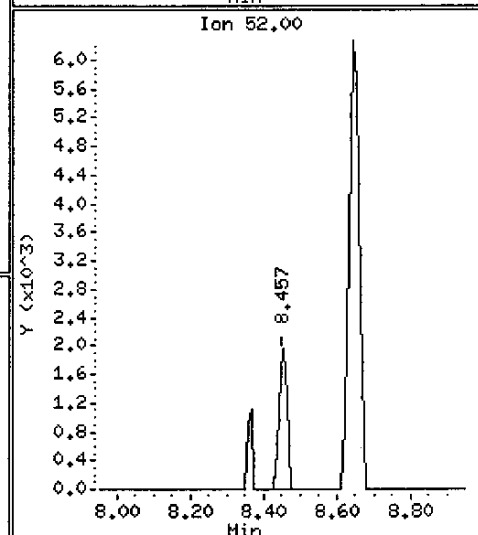
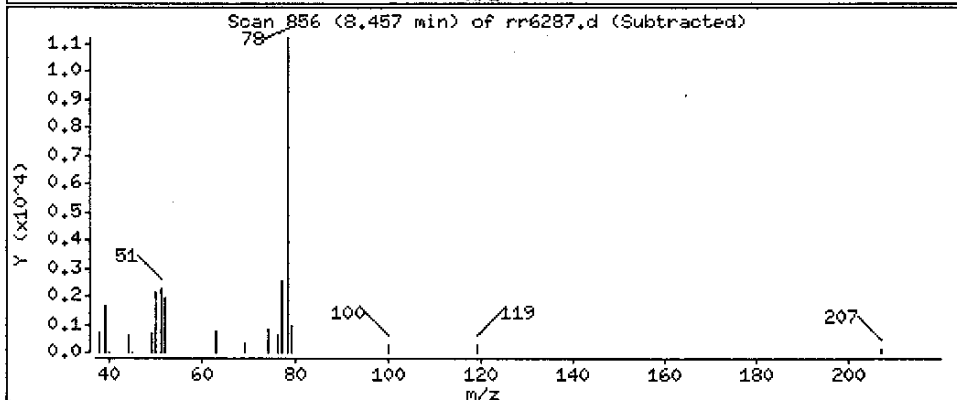
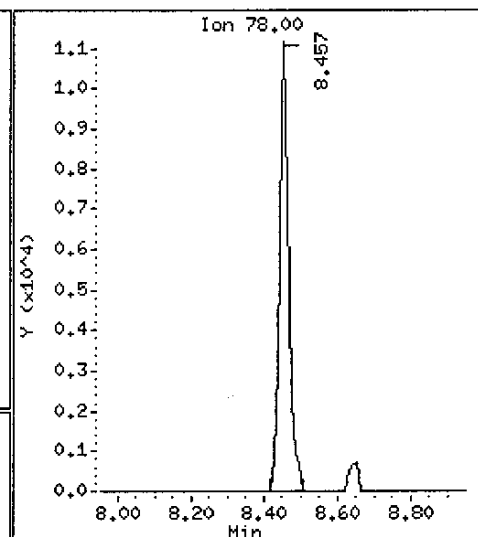
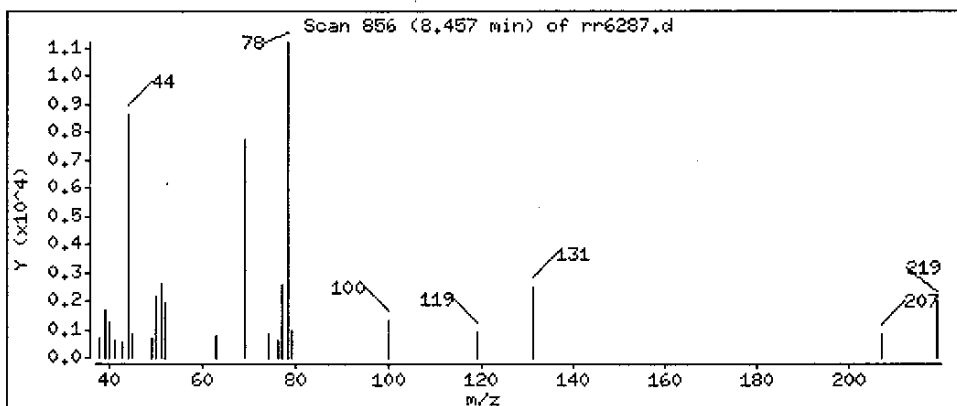
Column phase: HP624

Operator: meierg

Column diameter: 0.32

54 Benzene

Concentration: 0.239334 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: GGTE31AA,,D4E210325-02

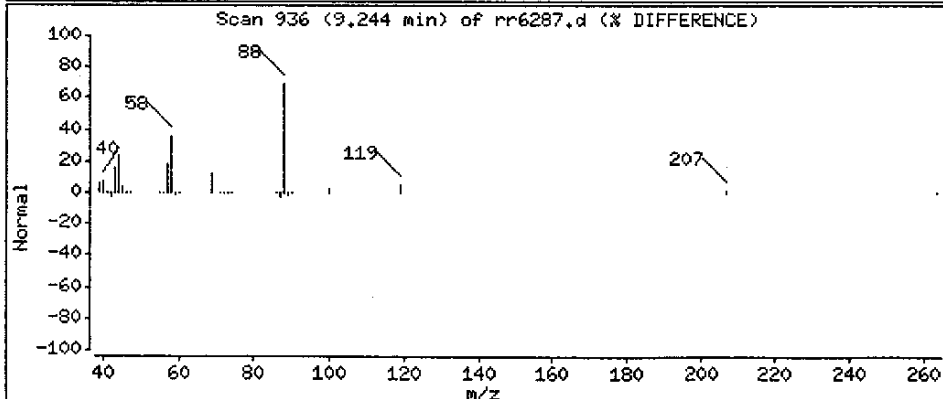
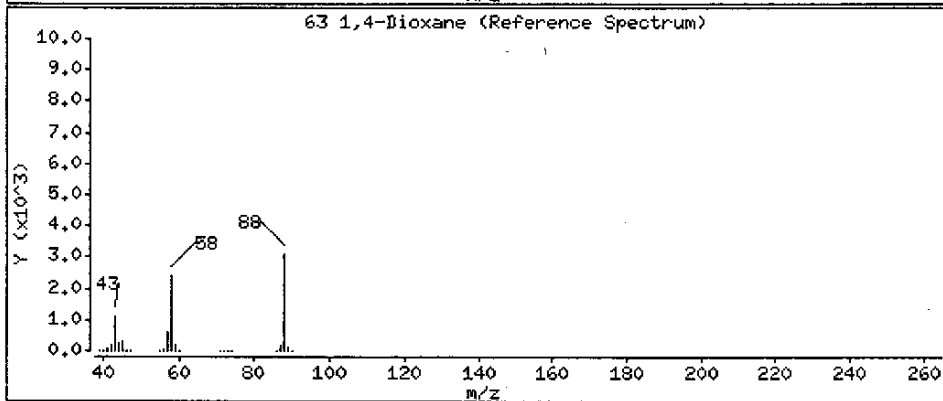
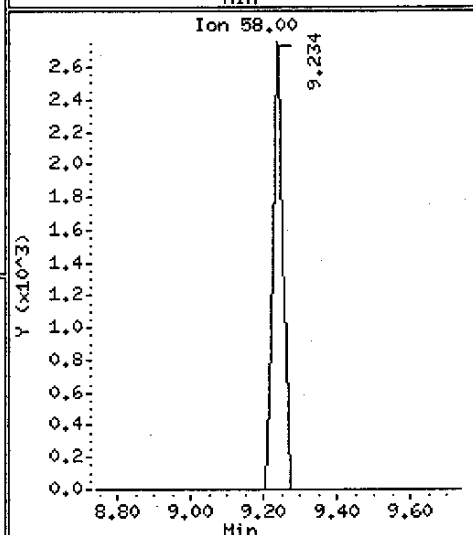
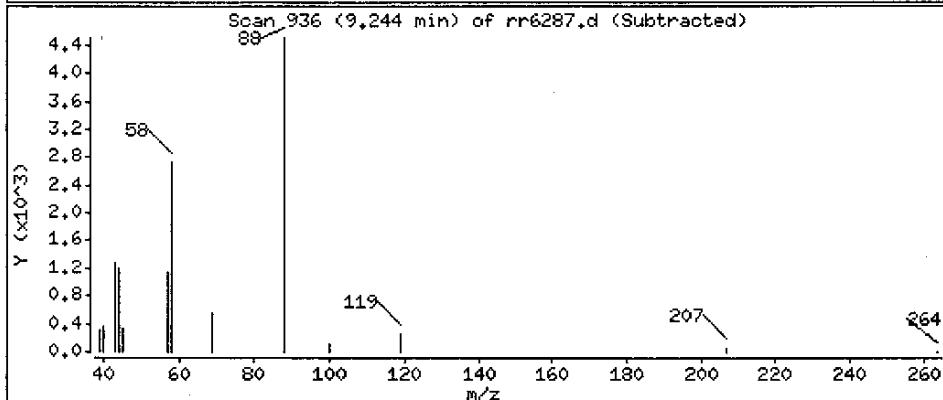
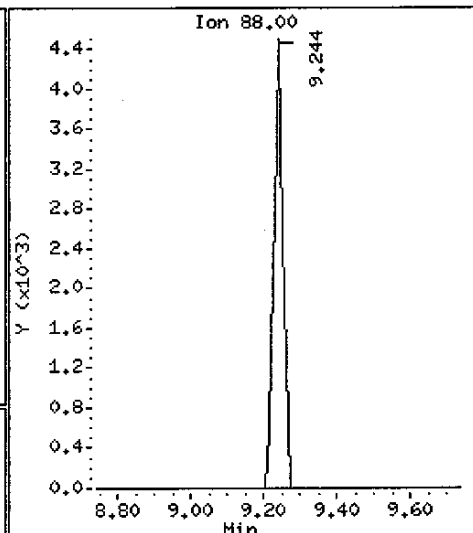
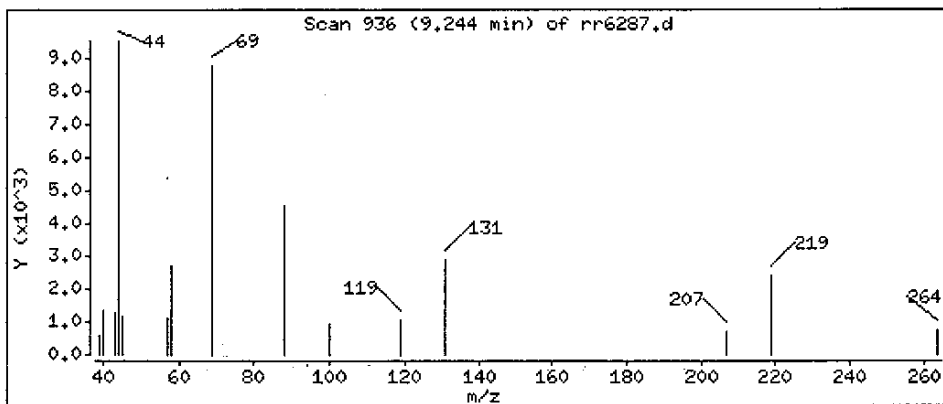
Column phase: HP624

Operator: meierg

Column diameter: 0.32

63 1,4-Dioxane

Concentration: 95.2463 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: GGTE31AA,,D4E210325-02

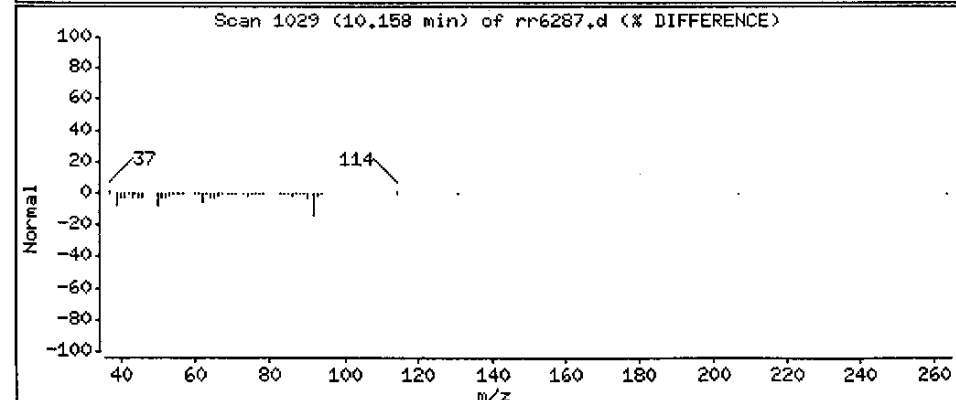
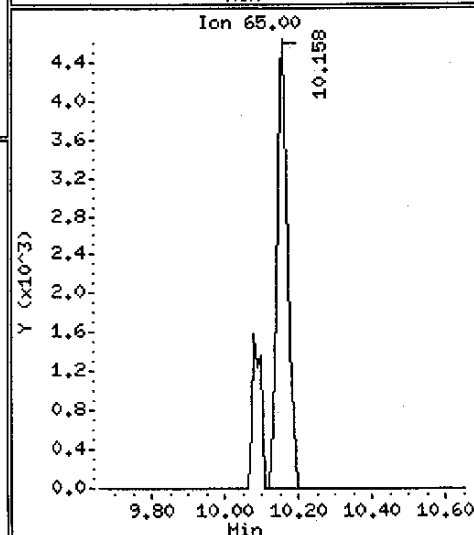
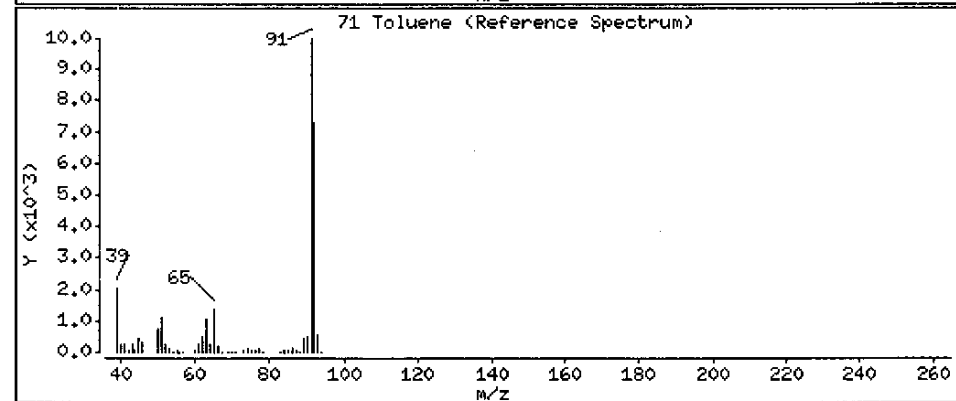
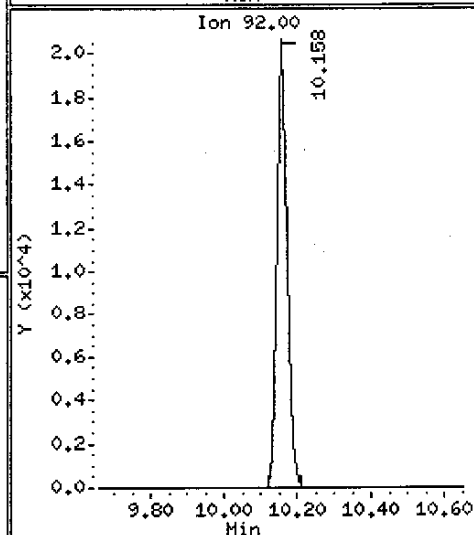
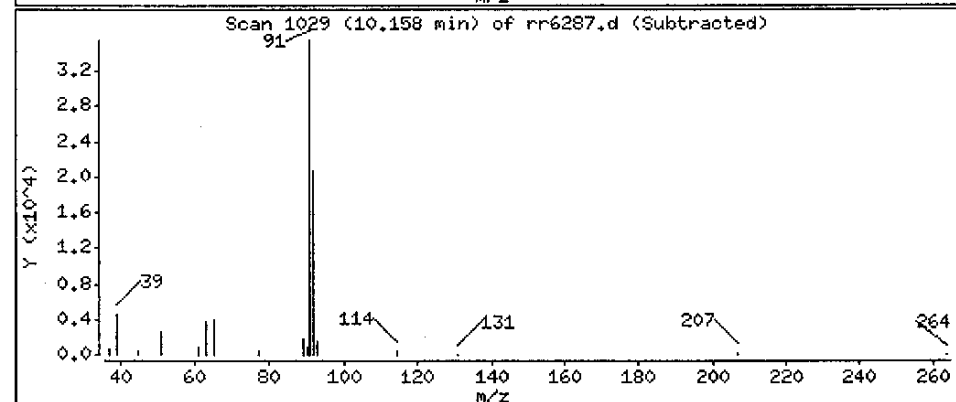
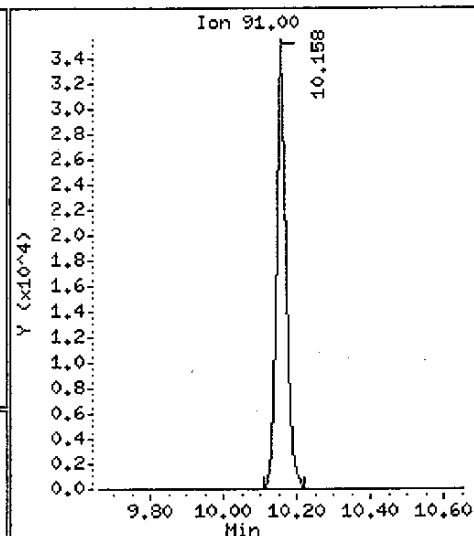
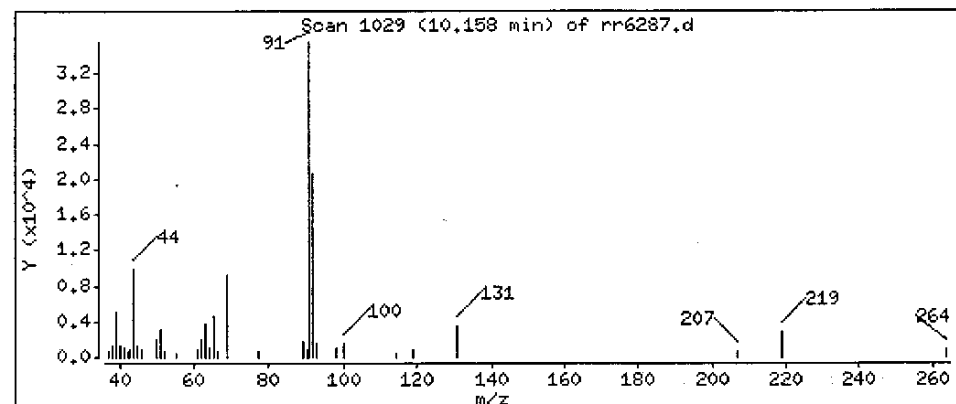
Operator: meieng

Column phase: HP624

Column diameter: 0.32

71 Toluene

Concentration: 0.683444 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: GGTE31AA,,D4E210325-02

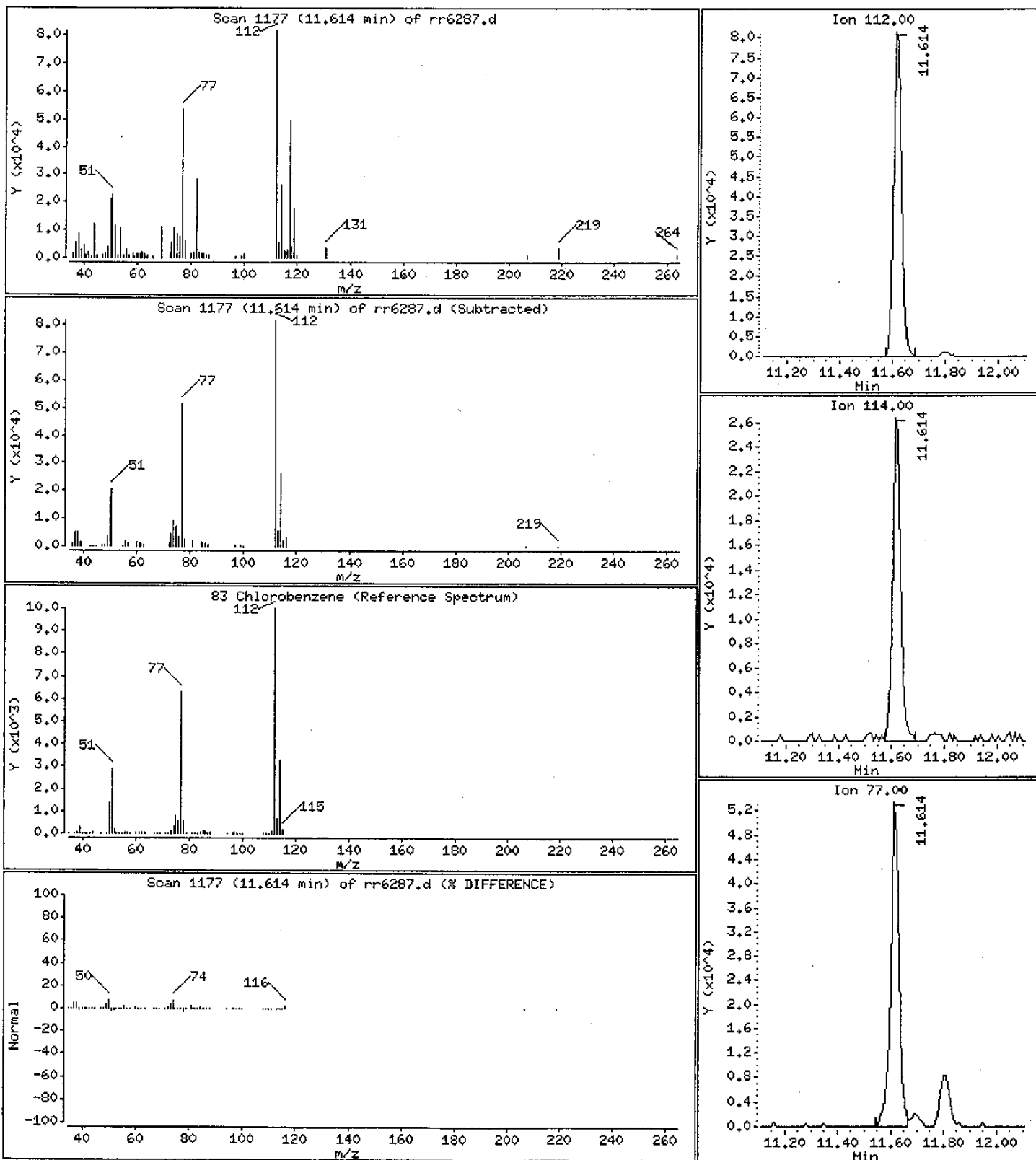
Operator: meierg

Column phase: HP624

Column diameter: 0.32

83 Chlorobenzene

Concentration: 2.30318 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: GGTE31AA,,D4E210325-02

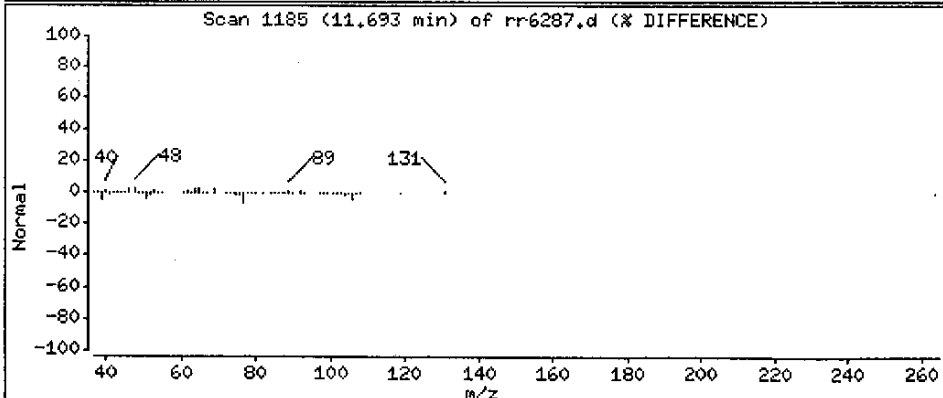
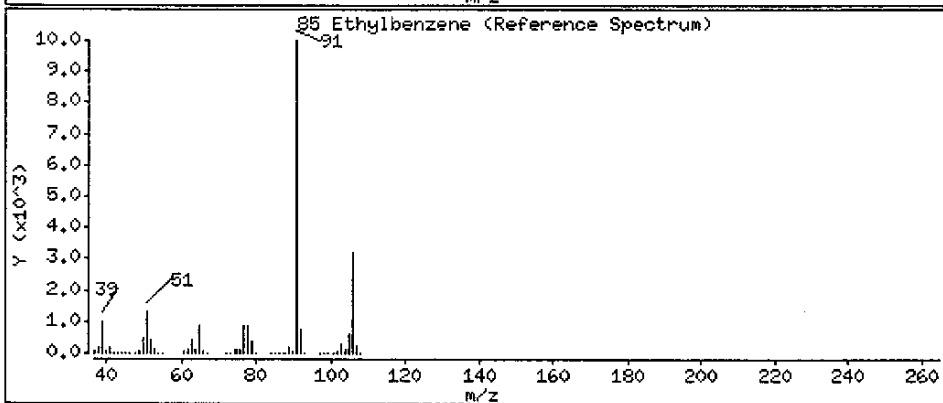
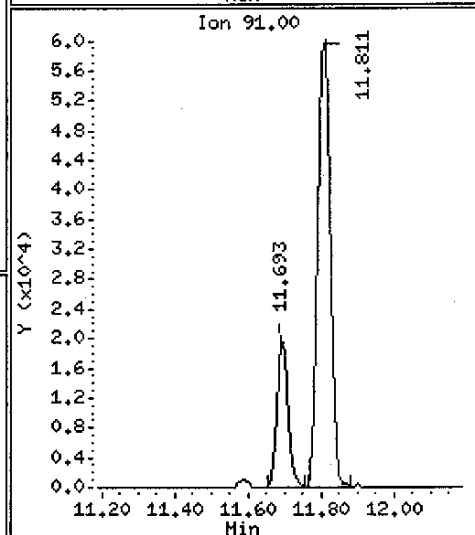
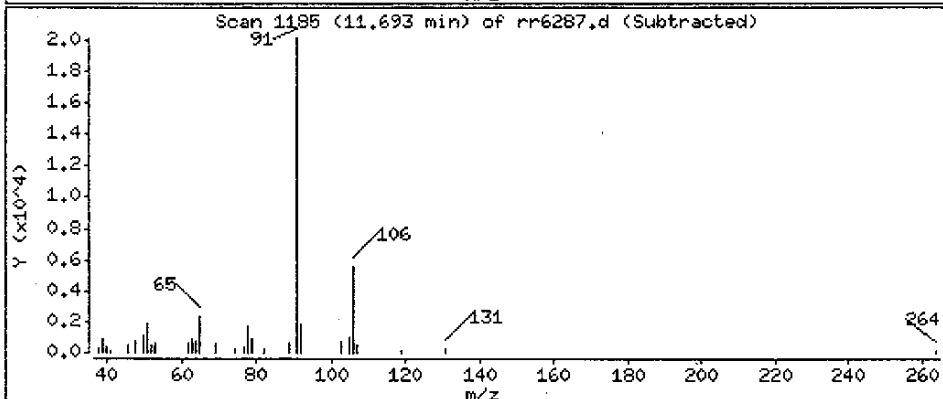
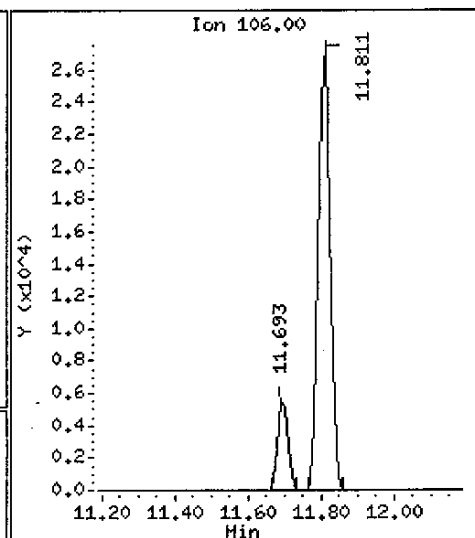
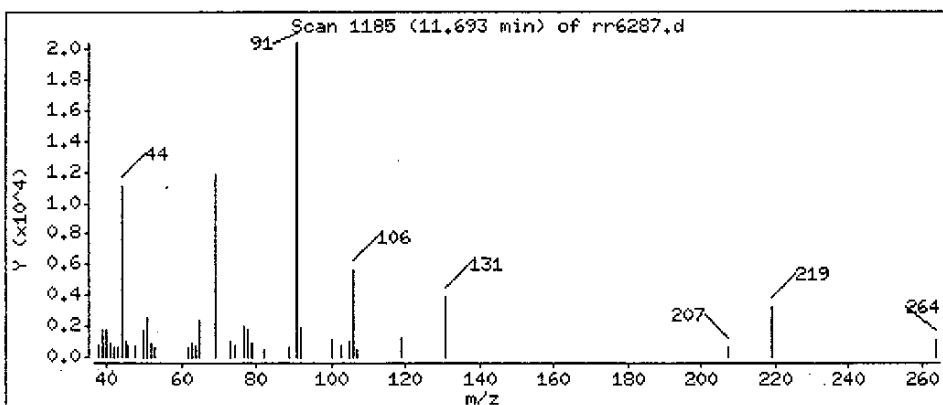
Column phase: HP624

Operator: meierg

Column diameter: 0.32

85 Ethylbenzene

Concentration: 0.288398 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: GGTE31AA,,D4E210325-02

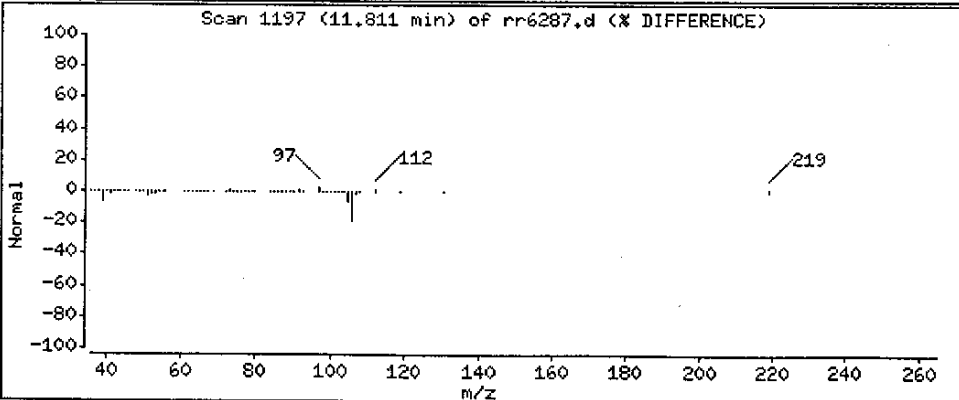
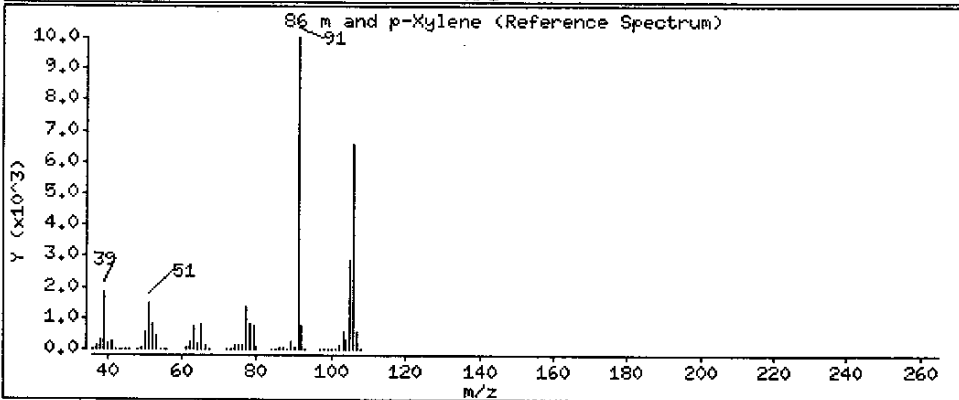
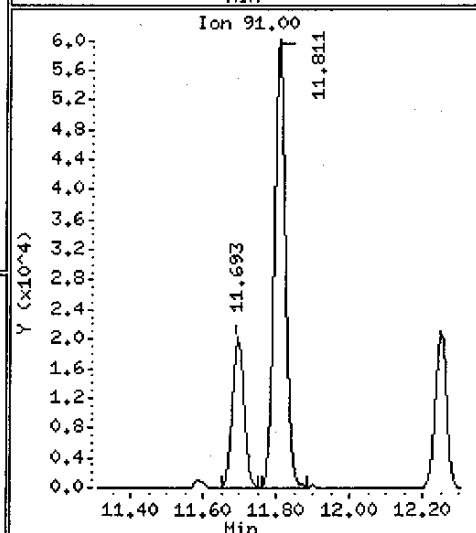
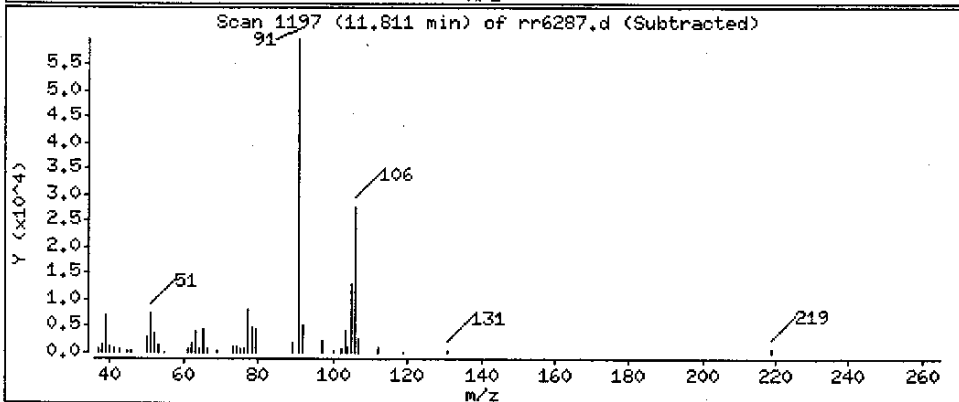
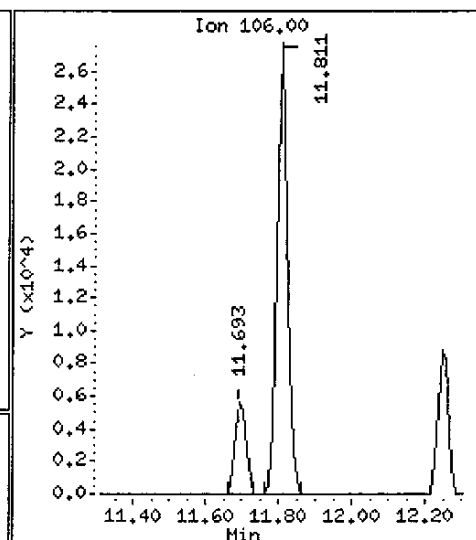
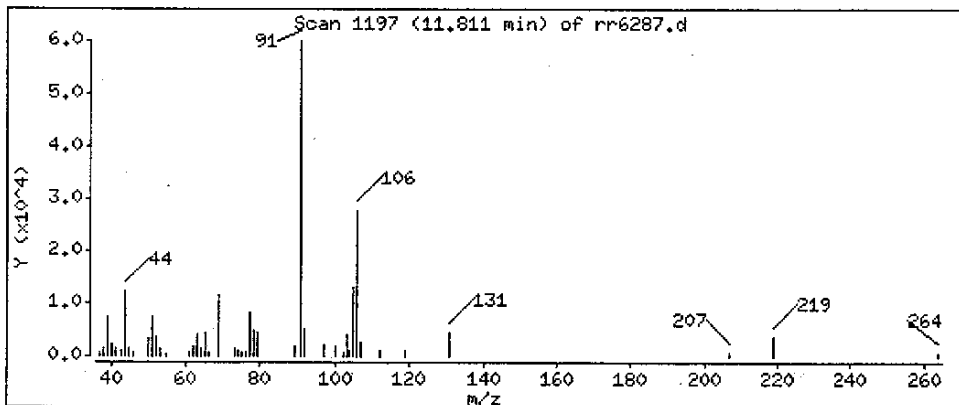
Operator: meierg

Column phase: HP624

Column diameter: 0.32

86 m and p-Xylene

Concentration: 1.18054 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: CGTE31AA,,D4E210325-02

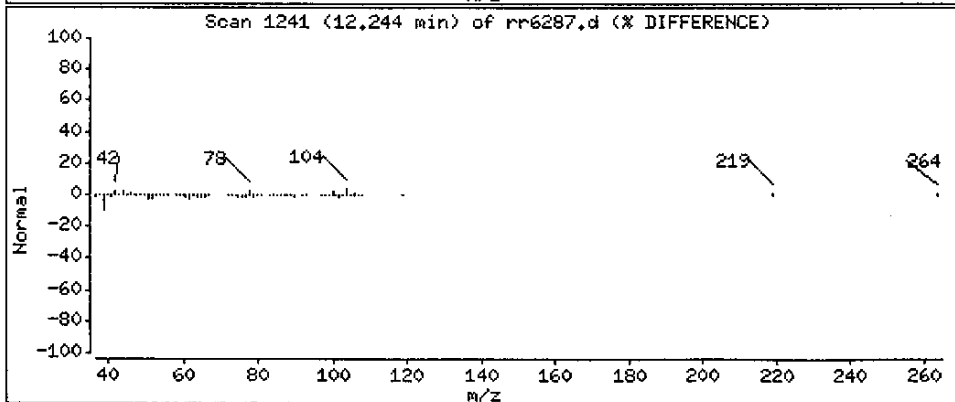
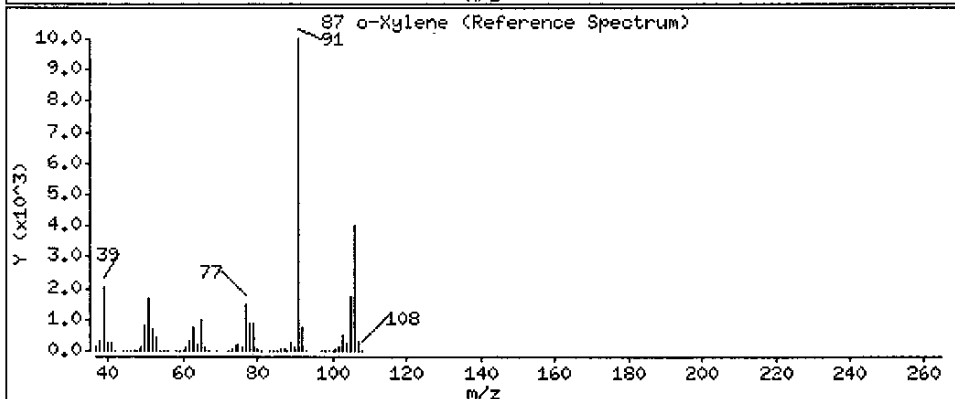
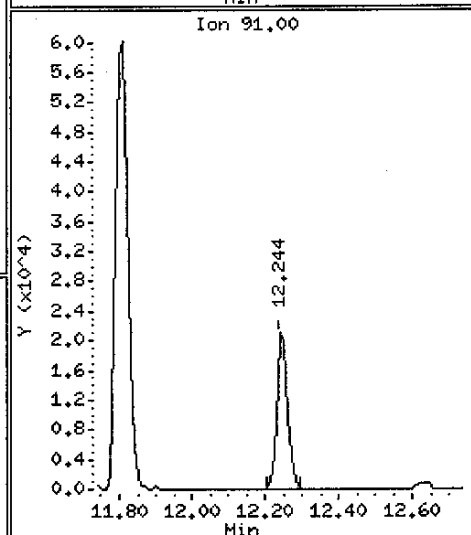
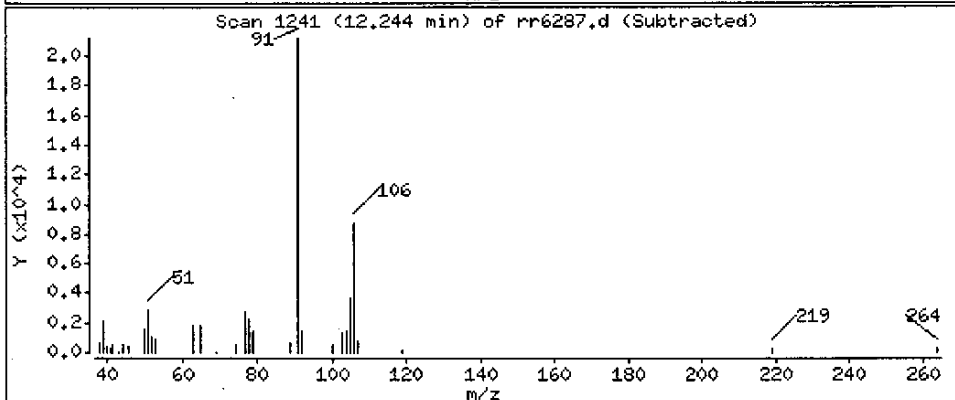
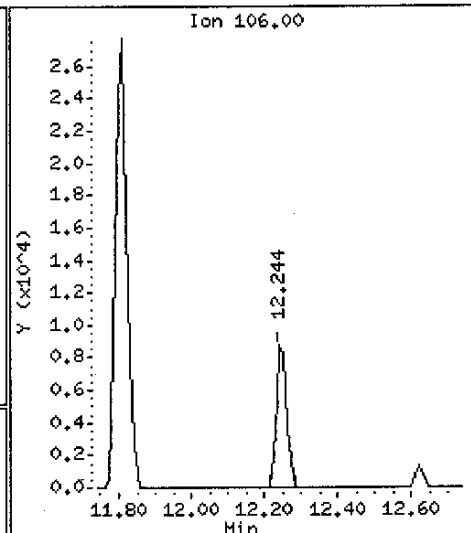
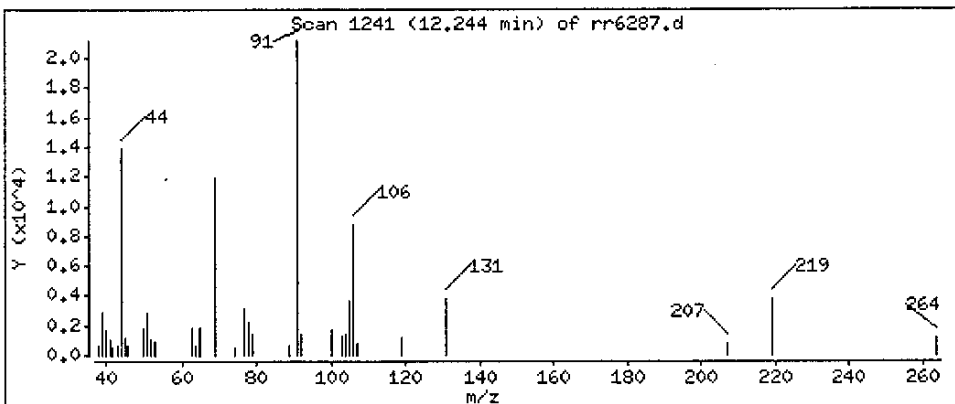
Column phase: HP624

Operator: meierg

Column diameter: 0.32

87 o-Xylene

Concentration: 0.353914 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: CGTE31AA,,D4E210325-02

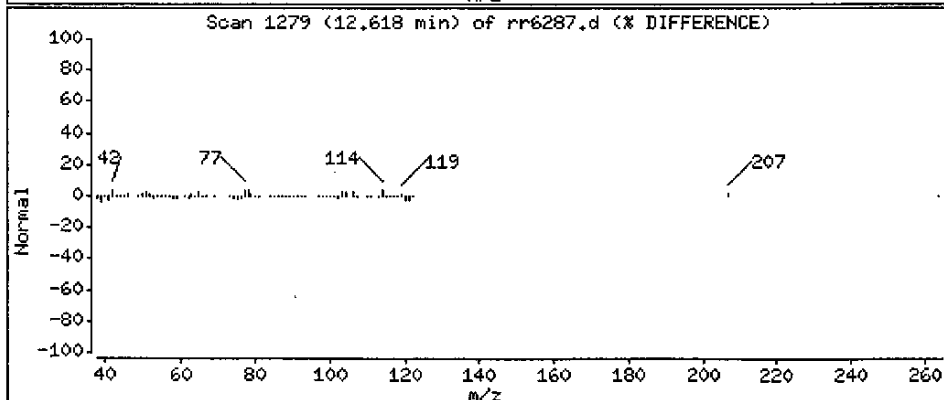
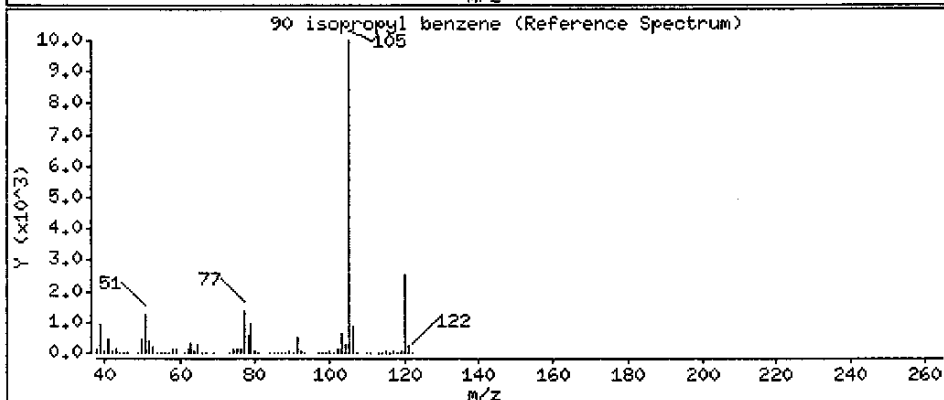
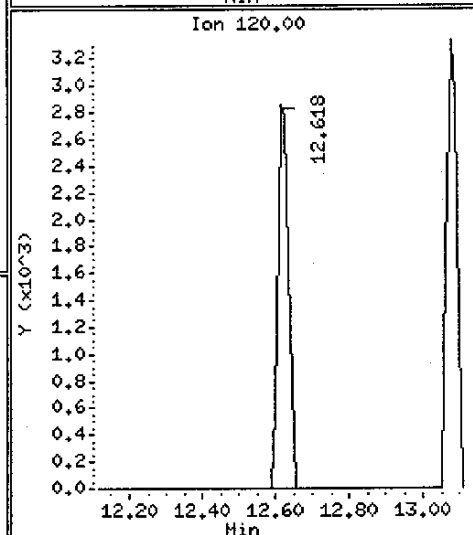
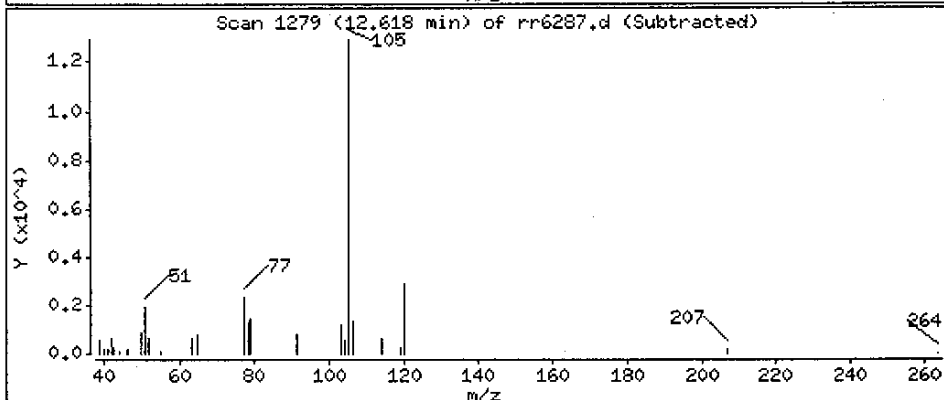
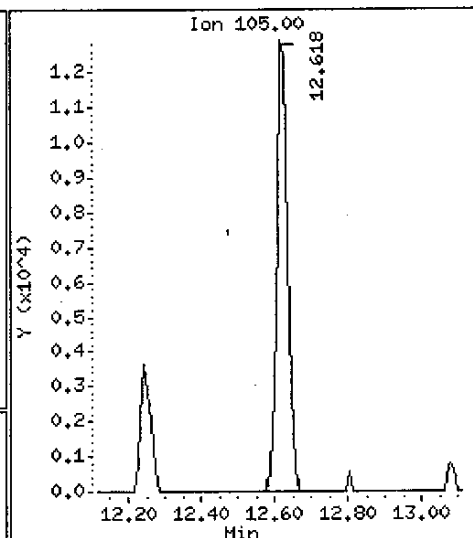
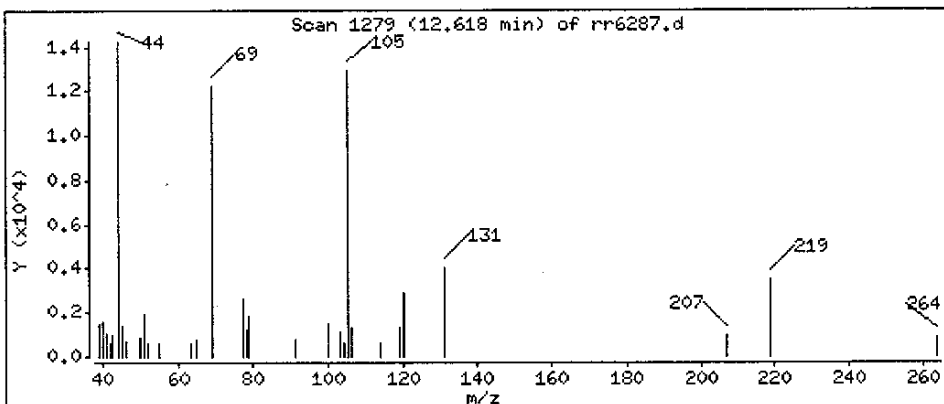
Operator: meieng

Column phase: HP624

Column diameter: 0.32

90 isopropyl benzene

Concentration: 0.191245 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: CGTE31AA,,D4E210325-02

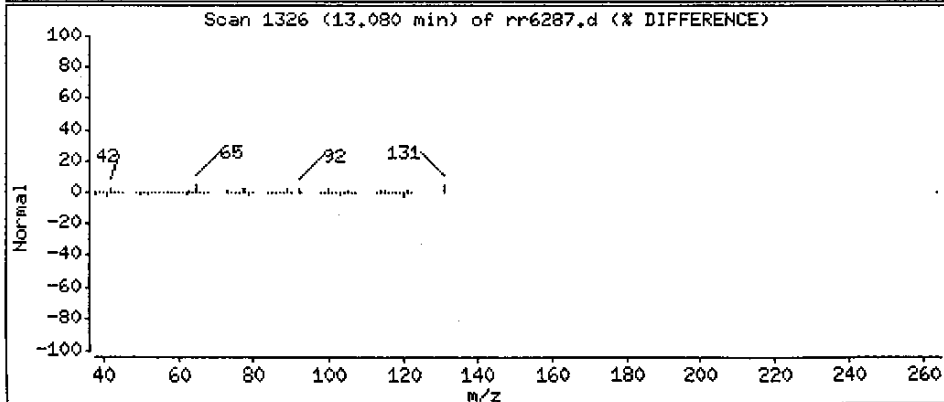
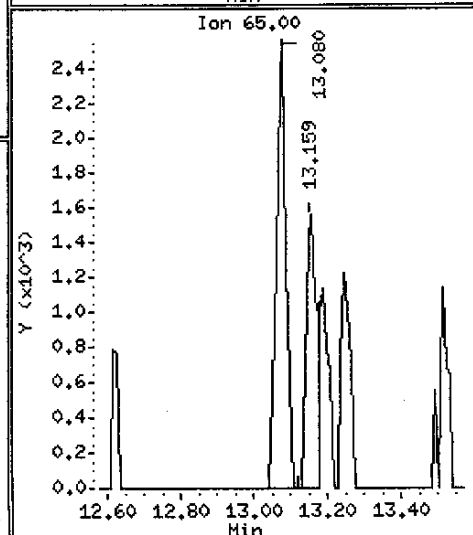
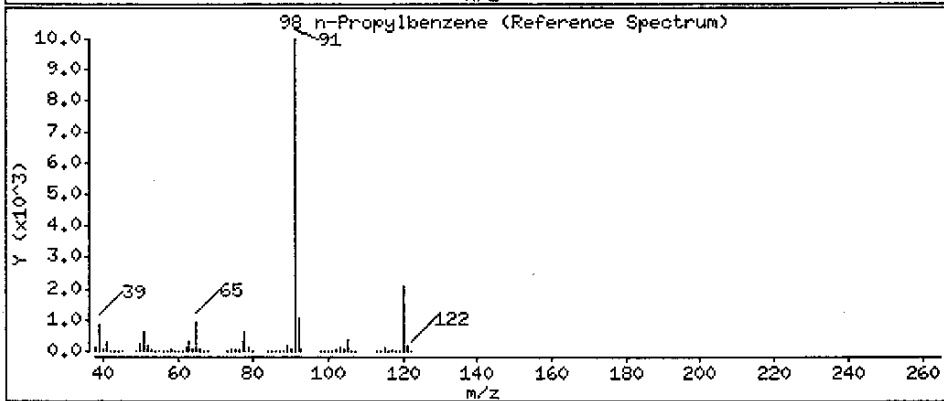
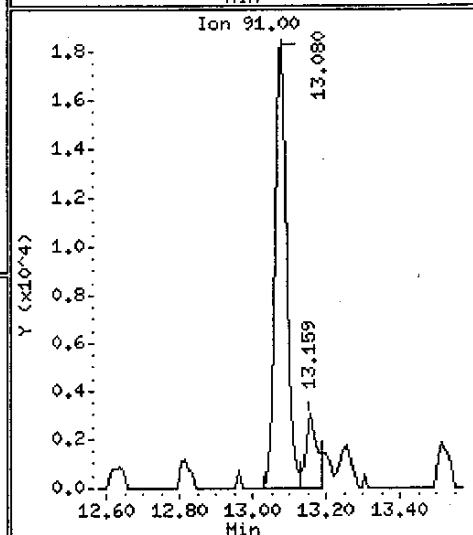
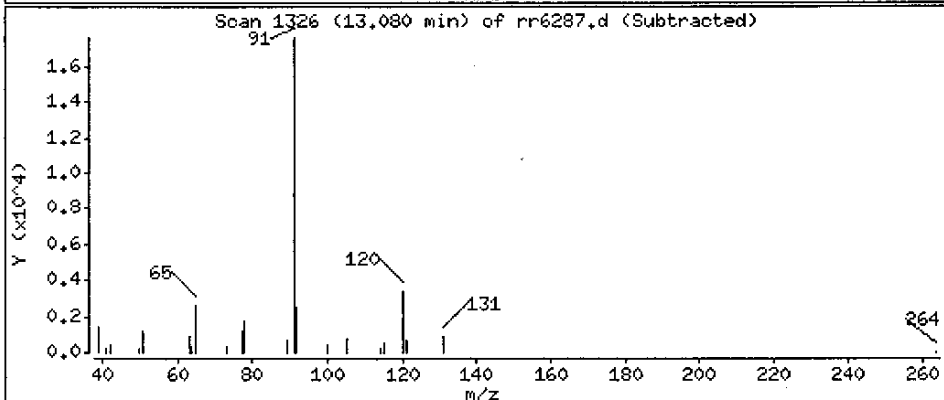
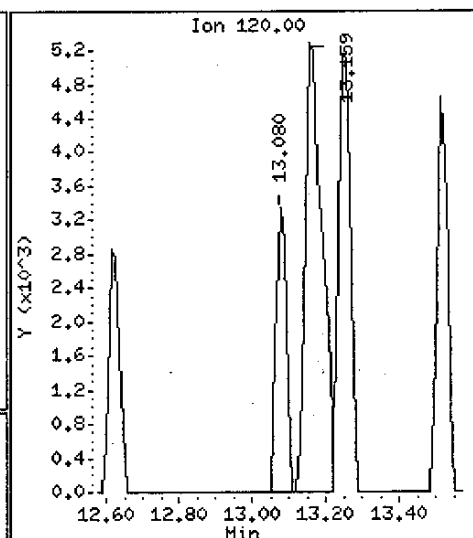
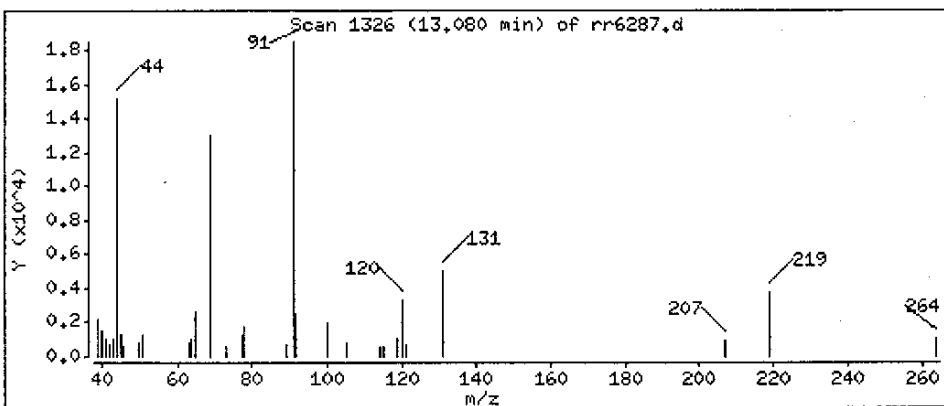
Operator: meieng

Column phase: HP624

Column diameter: 0.32

98 n-Propylbenzene

Concentration: 0.200648 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: CGTE31AA,,D4E210325-02

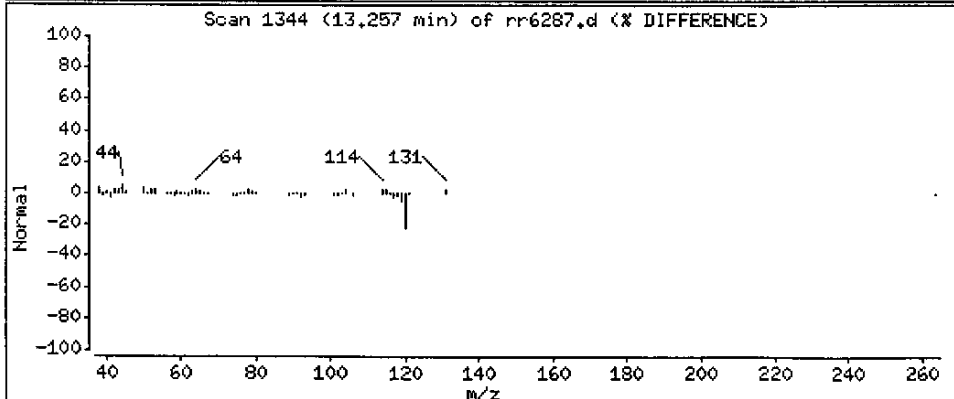
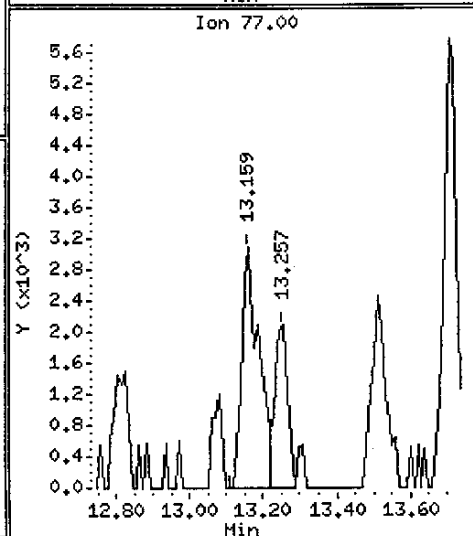
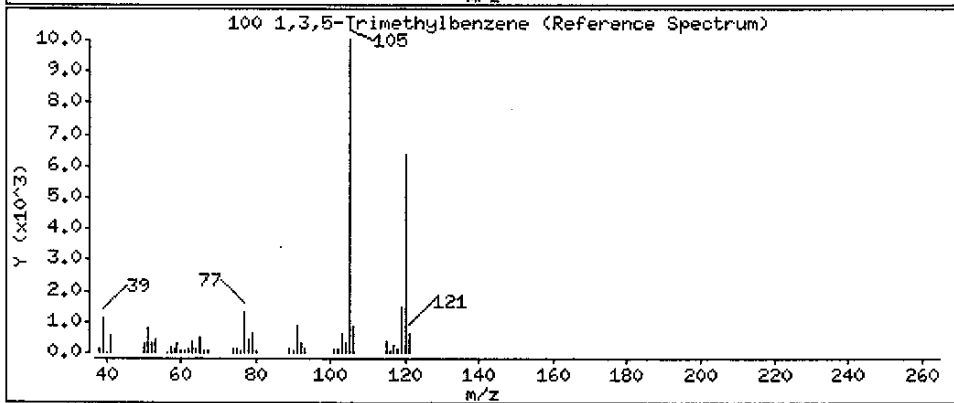
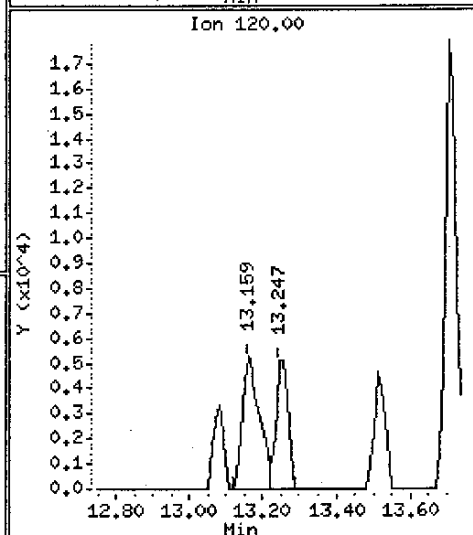
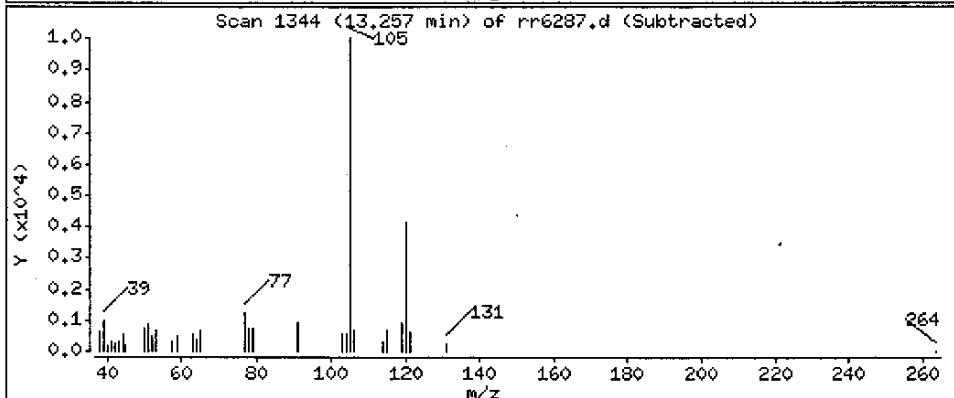
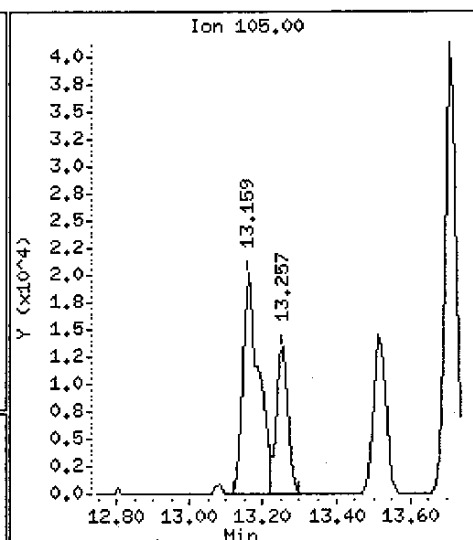
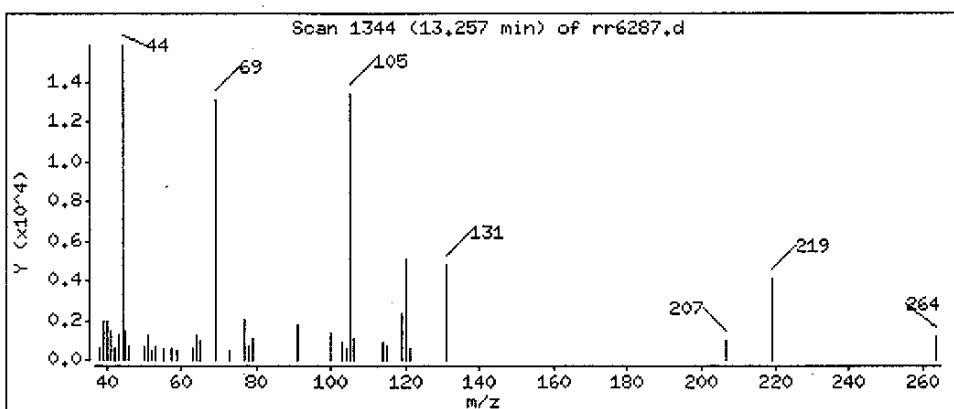
Operator: meierg

Column phase: HP624

Column diameter: 0.32

100 1,3,5-Trimethylbenzene

Concentration: 0.267858 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: CGTE31AA,,D4E210325-02

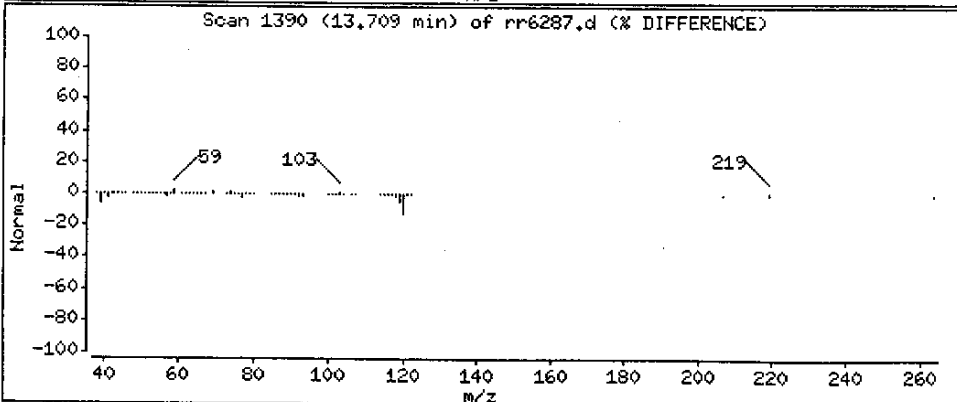
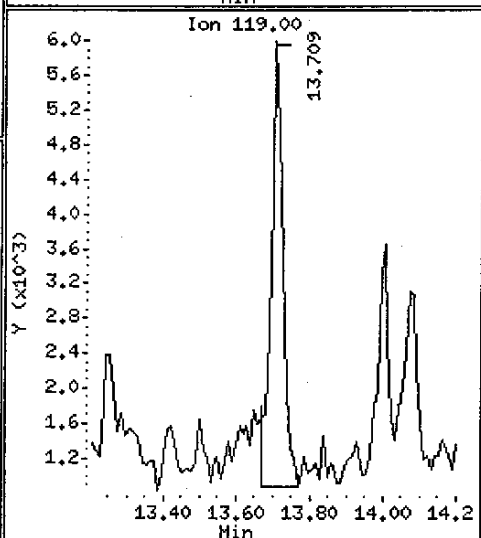
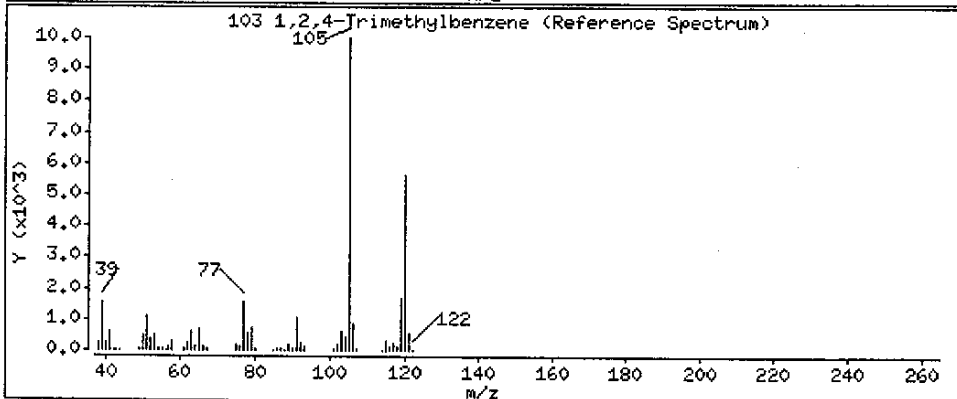
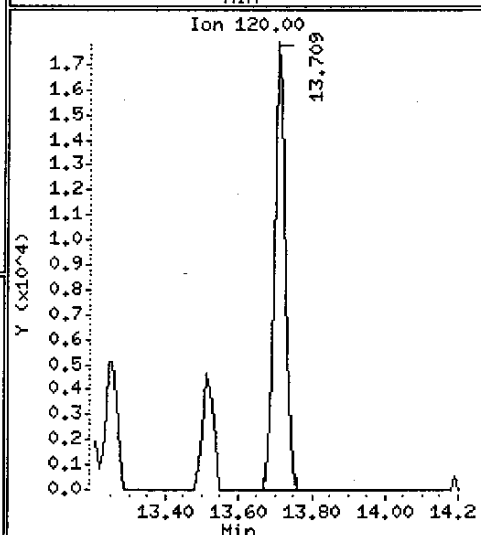
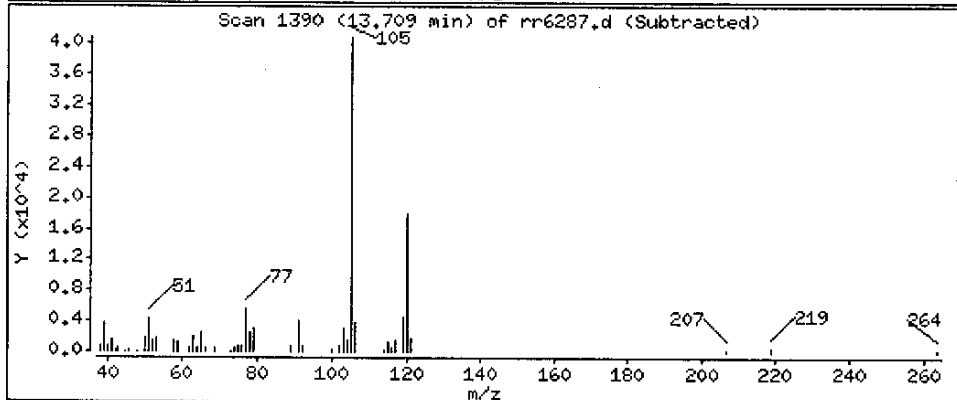
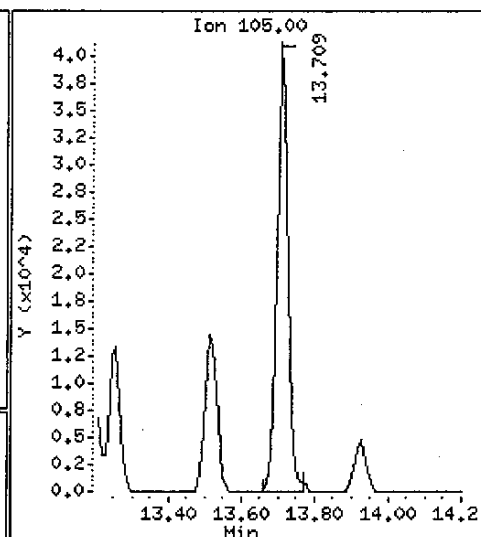
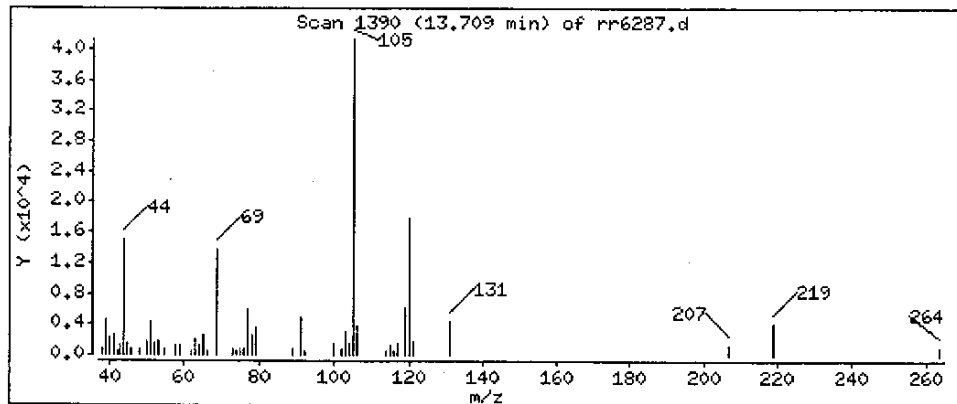
Operator: meierg

Column phase: HP624

Column diameter: 0.32

103 1,2,4-Trimethylbenzene

Concentration: 0.794236 ug/L



Date : 27-MAY-2004 18:35

Client ID: 01-MW-12

Instrument: R2.i

Sample Info: GGTE31AA,,D4E210325-02

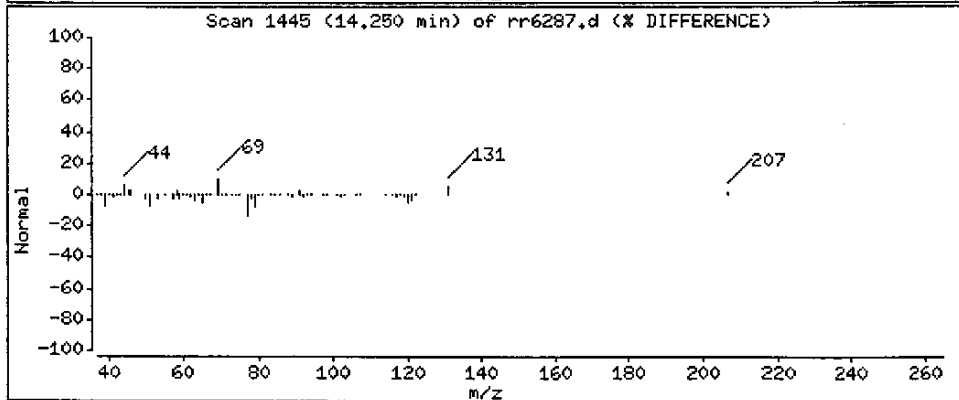
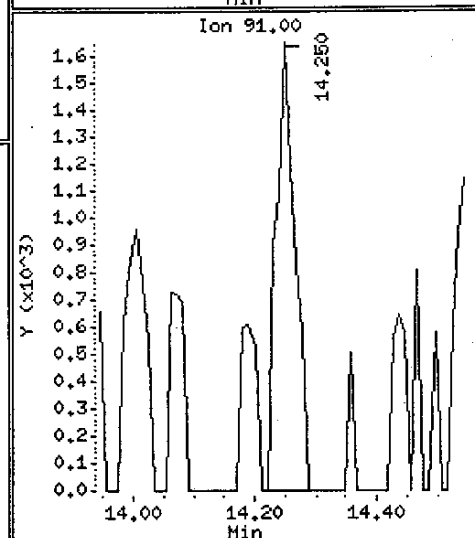
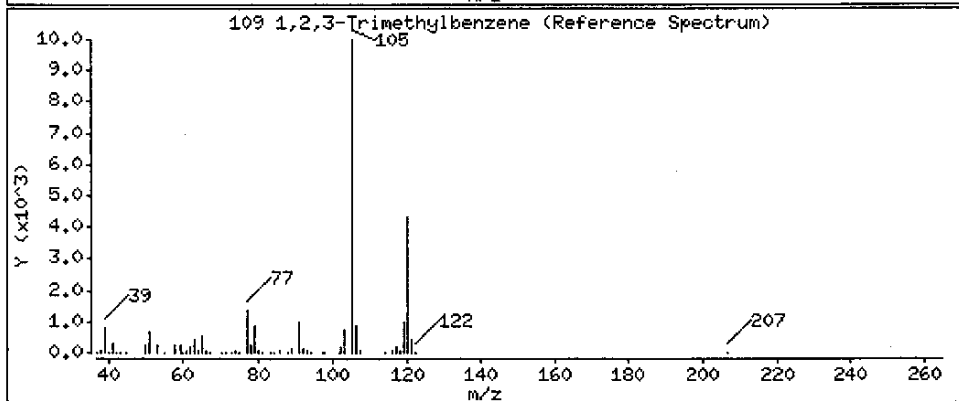
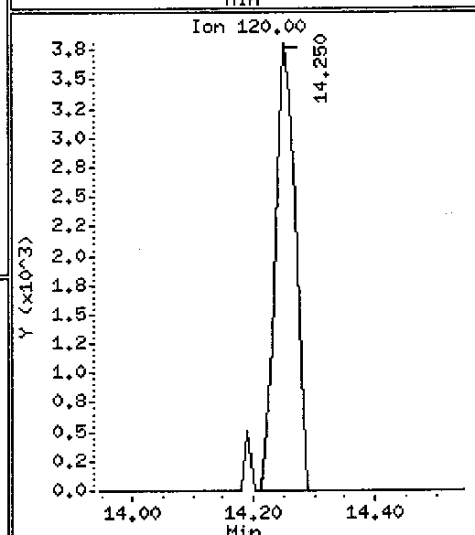
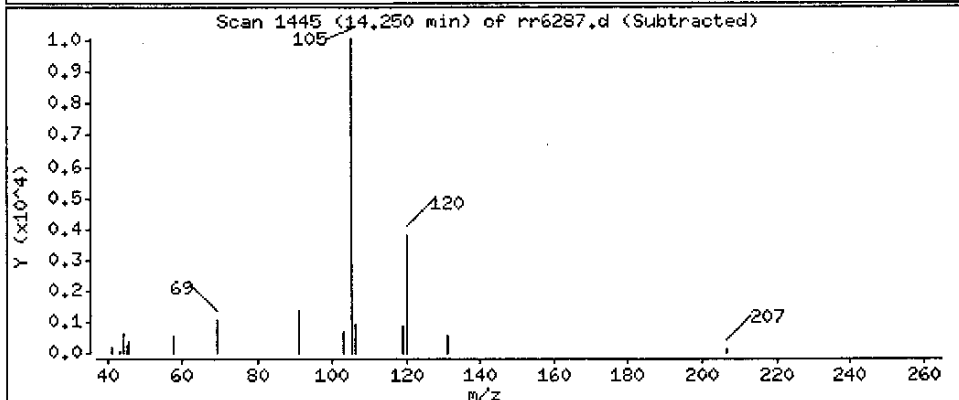
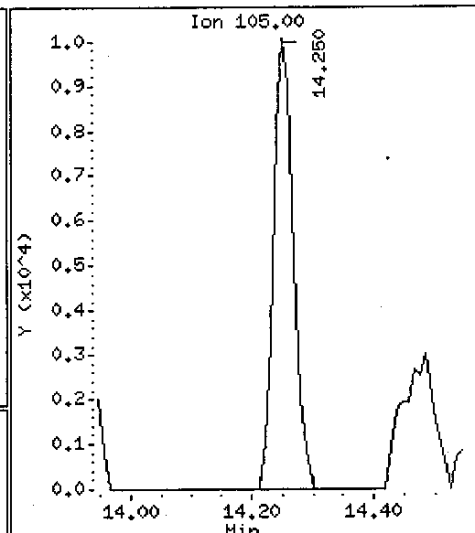
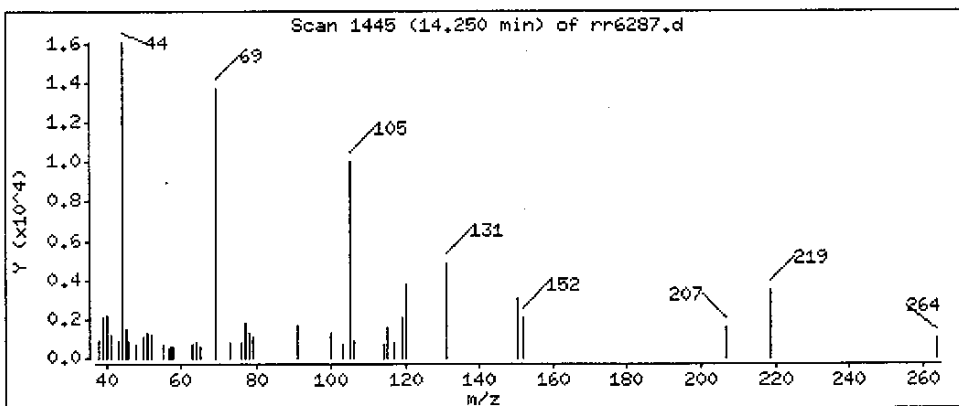
Column phase: HP624

Operator: meieng

Column diameter: 0.32

109 1,2,3-Trimethylbenzene

Concentration: 0.213081 ug/L



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052704.b/rr6288.d
Lab Smp Id: GGTE61AA Client Smp ID: 01-MW-04
Inj Date : 27-MAY-2004 19:00
Operator : meierg Inst ID: R2.i
Smp Info : GGTE61AA,,D4E210325-03
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052704.b/R2-20ml-h2o.m
Meth Date : 27-May-2004 17:49 meierg Quant Type: ISTD
Cal Date : 26-MAY-2004 00:31 Cal File: rr6230.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: QK-01.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Gm 5/22

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| Compounds | QUANT SIG | MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|--------------------------------|-----------|--------|------------------------|--------|---------|----------|----------------|---------|
| | | | | | | | ON-COLUMN | FINAL |
| | | | | | | | (ug/L) | (ug/L) |
| * 56 Fluorobenzene | | 96 | 8.653 | 8.642 | (1.000) | 1175858 | 10.0000 | |
| * 82 Chlorobenzene-d5 | | 119 | 11.584 | 11.584 | (1.000) | 316177 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | | 152 | 14.191 | 14.190 | (1.000) | 499754 | 10.0000 | |
| \$ 46 Dibromofluoromethane | | 111 | 8.082 | 8.072 | (0.934) | 412874 | 10.5846 | 10.5846 |
| \$ 52 1,2-Dichloroethane-d4 | | 65 | 8.367 | 8.367 | (0.967) | 318261 | 10.2788 | 10.2788 |
| \$ 70 Toluene-d8 | | 98 | 10.089 | 10.088 | (0.871) | 1157110 | 10.0815 | 10.0815 |
| \$ 93 Bromofluorobenzene | | 95 | 12.813 | 12.813 | (1.106) | 554434 | 10.0615 | 10.0615 |
| M 1 1,2-Dichloroethene (total) | | 96.00 | Compound Not Detected. | | | | | |
| M 2 Xylene (total) | | 106.00 | Compound Not Detected. | | | | | |
| 3 dichlorodifluoromethane | | 85.00 | Compound Not Detected. | | | | | |
| 4 dichlorotetrafluoroethane | | 85.00 | Compound Not Detected. | | | | | |
| 5 Chloromethane | | 50.00 | Compound Not Detected. | | | | | |
| 6 Vinyl Chloride | | 62.00 | Compound Not Detected. | | | | | |
| 7 Ethylene Oxide | | 43.00 | Compound Not Detected. | | | | | |
| 8 Bromomethane | | 94.00 | Compound Not Detected. | | | | | |
| 9 Chloroethane | | 64.00 | Compound Not Detected. | | | | | |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|-----------------------------------|-------------------|-------|--------|---------|------------------------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 10 Dichlorofluoromethane | 67.00 | | | | Compound Not Detected. | | |
| 11 Trichlorofluoromethane | 101.00 | | | | Compound Not Detected. | | |
| 12 Ethanol | 45.00 | | | | Compound Not Detected. | | |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117.00 | | | | Compound Not Detected. | | |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83.00 | | | | Compound Not Detected. | | |
| 14 Ethyl Ether | 59 | 6.223 | 6.213 | (0.719) | 11341 | 0.38201 | 0.382008(a) |
| 16 Acrolein | 56.00 | | | | Compound Not Detected. | | |
| 20 2-Propanol | 45.00 | | | | Compound Not Detected. | | |
| 19 1,1-Dichloroethene | 96.00 | | | | Compound Not Detected. | | |
| 17 Trichlorotrifluoroethane | 151.00 | | | | Compound Not Detected. | | |
| 18 Acetone | 43.00 | | | | Compound Not Detected. | | |
| 21 Iodomethane | 142.00 | | | | Compound Not Detected. | | |
| 24 Carbon Disulfide | 76.00 | | | | Compound Not Detected. | | |
| 22 Acetonitrile | 41.00 | | | | Compound Not Detected. | | |
| 25 Allyl Chloride | 41.00 | | | | Compound Not Detected. | | |
| 23 Methyl acetate | 43.00 | | | | Compound Not Detected. | | |
| 27 Methylene Chloride | 84 | 6.852 | 6.848 | (0.792) | 15017 | 0.41927 | 0.419266(a) |
| 26 tert-Butyl alcohol | 59.00 | | | | Compound Not Detected. | | |
| 28 Acrylonitrile | 53.00 | | | | Compound Not Detected. | | |
| 29 Methyl t-butyl ether | 73.00 | | | | Compound Not Detected. | | |
| 30 trans-1,2-Dichloroethene | 96.00 | | | | Compound Not Detected. | | |
| 31 Hexane | 57.00 | | | | Compound Not Detected. | | |
| 34 1,1-Dichloroethane | 63.00 | | | | Compound Not Detected. | | |
| 32 Vinyl acetate | 43.00 | | | | Compound Not Detected. | | |
| 33 Isopropyl ether | 87.00 | | | | Compound Not Detected. | | |
| 35 Chloroprene | 53.00 | | | | Compound Not Detected. | | |
| 36 ETBE | 59.00 | | | | Compound Not Detected. | | |
| 40 cis-1,2-Dichloroethene | 96.00 | | | | Compound Not Detected. | | |
| 37 2-Butanone | 43.00 | | | | Compound Not Detected. | | |
| 41 2,2-Dichloropropane | 77.00 | | | | Compound Not Detected. | | |
| 39 Propionitrile | 54.00 | | | | Compound Not Detected. | | |
| 38 Ethyl Acetate | 43.00 | | | | Compound Not Detected. | | |
| 42 Methacrylonitrile | 41.00 | | | | Compound Not Detected. | | |
| 43 Bromochloromethane | 128.00 | | | | Compound Not Detected. | | |
| 45 Tetrahydrofuran | 42.00 | | | | Compound Not Detected. | | |
| 44 Chloroform | 83.00 | | | | Compound Not Detected. | | |
| 47 1,1,1-Trichloroethane | 97.00 | | | | Compound Not Detected. | | |
| 50 1,1-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 51 Carbon Tetrachloride | 117.00 | | | | Compound Not Detected. | | |
| 49 Cyclohexane | 56.00 | | | | Compound Not Detected. | | |
| 48 Isobutanol | 41.00 | | | | Compound Not Detected. | | |
| 55 TAME | 73.00 | | | | Compound Not Detected. | | |
| 54 Benzene | 78.00 | | | | Compound Not Detected. | | |
| 53 1,2-Dichloroethane | 62.00 | | | | Compound Not Detected. | | |
| 57 n-Butanol | 56.00 | | | | Compound Not Detected. | | |
| 59 2-Pentanone | 43.00 | | | | Compound Not Detected. | | |
| 58 Trichloroethene | 130.00 | | | | Compound Not Detected. | | |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|------------------------------|-------------------|--------|--------|---------|------------------------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| 61 1,2-Dichloropropane | 63.00 | | | | Compound Not Detected. | | |
| 60 Methyl Methacrylate | 100.00 | | | | Compound Not Detected. | | |
| 62 Methyl cyclohexane | 55.00 | | | | Compound Not Detected. | | |
| 64 Dibromomethane | 93.00 | | | | Compound Not Detected. | | |
| 63 1,4-Dioxane | 88 | 9.243 | 9.239 | (1.068) | 96081 | 887.514 | 887.514 |
| 65 Bromodichloromethane | 83.00 | | | | Compound Not Detected. | | |
| 66 2-nitropropane | 41.00 | | | | Compound Not Detected. | | |
| 67 2-Chloroethyl vinyl ether | 63.00 | | | | Compound Not Detected. | | |
| 68 cis-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 69 4-Methyl-2-pentanone | 43.00 | | | | Compound Not Detected. | | |
| 71 Toluene | 91 | 10.158 | 10.153 | (0.877) | 13843 | 0.10598 | 0.105976(a) |
| 72 trans-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 73 Ethyl methacrylate | 69.00 | | | | Compound Not Detected. | | |
| 74 1,1,2-Trichloroethane | 97.00 | | | | Compound Not Detected. | | |
| 76 1,3-Dichloropropane | 76.00 | | | | Compound Not Detected. | | |
| 77 Tetrachloroethene | 164.00 | | | | Compound Not Detected. | | |
| 75 2-Hexanone | 43.00 | | | | Compound Not Detected. | | |
| 78 Dibromochloromethane | 129.00 | | | | Compound Not Detected. | | |
| 79 Tetrahydrothiophene | 60.00 | | | | Compound Not Detected. | | |
| 80 1,2-Dibromoethane | 107.00 | | | | Compound Not Detected. | | |
| 81 1-Chlorohexane | 91.00 | | | | Compound Not Detected. | | |
| 83 Chlorobenzene | 112.00 | | | | Compound Not Detected. | | |
| 84 1,1,1,2-Tetrachloroethane | 131.00 | | | | Compound Not Detected. | | |
| 85 Ethylbenzene | 106.00 | | | | Compound Not Detected. | | |
| 86 m and p-Xylene | 106.00 | | | | Compound Not Detected. | | |
| 87 o-Xylene | 106.00 | | | | Compound Not Detected. | | |
| 88 Styrene | 104.00 | | | | Compound Not Detected. | | |
| 89 Bromoform | 173.00 | | | | Compound Not Detected. | | |
| 90 isopropyl benzene | 105.00 | | | | Compound Not Detected. | | |
| 91 c-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 92 Cyclohexanone | 55.00 | | | | Compound Not Detected. | | |
| 94 1,1,2,2-Tetrachloroethane | 83.00 | | | | Compound Not Detected. | | |
| 95 t-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 97 Bromobenzene | 156.00 | | | | Compound Not Detected. | | |
| 96 1,2,3-Trichloropropane | 110.00 | | | | Compound Not Detected. | | |
| 98 n-Propylbenzene | 120.00 | | | | Compound Not Detected. | | |
| 99 2-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 100 1,3,5-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 101 4-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 102 tert-Butylbenzene | 119.00 | | | | Compound Not Detected. | | |
| 103 1,2,4-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 104 sec-Butylbenzene | 134.00 | | | | Compound Not Detected. | | |
| 106 m-Dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 105 4-Isopropyltoluene | 119.00 | | | | Compound Not Detected. | | |
| 108 p-dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 109 1,2,3-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 110 n-Butylbenzene | 91.00 | | | | Compound Not Detected. | | |

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | |
|---------------------------------|-----------|----------------|------------------------|--------|----------|----------------------|------------------|
| | | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 111 o-Dichlorobenzene | 146.00 | | Compound Not Detected. | | | | |
| 112 1,2-Dibromo-3-chloropropane | 157.00 | | Compound Not Detected. | | | | |
| 113 1,2,4-Trichlorobenzene | 180.00 | | Compound Not Detected. | | | | |
| 114 Hexachlorobutadiene | 225.00 | | Compound Not Detected. | | | | |
| 115 Napthalene | 128.00 | | Compound Not Detected. | | | | |
| 116 1,2,3-Trichlorobenzene | 180.00 | | Compound Not Detected. | | | | |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|--|---------------------------|
| Instrument ID: R2.i | Calibration Date: 05/27/4 |
| Lab File ID: rr6288.d | Calibration Time: 1604 |
| Lab Smp Id: GGTE61AA | Client Smp ID: 01-MW-04 |
| Analysis Type: VOA | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: meierg | |
| Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m | |
| Misc Info: | |

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1117002 | 558501 | 2234004 | 1175858 | 5.27 |
| 82 Chlorobenzene-d5 | 318643 | 159322 | 637286 | 316177 | -0.77 |
| 107 1,4-Dichlorobenze | 494708 | 247354 | 989416 | 499754 | 1.02 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.65 | 0.12 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.58 | 0.00 |
| 107 1,4-Dichlorobenze | 14.19 | 13.69 | 14.69 | 14.19 | 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.

STL Denver

RECOVERY REPORT

Client Name: Cabrera Services
Sample Matrix: LIQUID
Lab Smp Id: GGTE61AA
Level: LOW
Data Type: MS DATA
SpikeList File: dcs.spk
Sublist File: QK-01.sub
Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m
Misc Info:

Client SDG: D4E210325
Fraction: VOA
Client Smp ID: 01-MW-04
Operator: meierg
SampleType: SAMPLE
Quant Type: ISTD

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 46 Dibromofluorometha | 10.0000 | 10.5846 | 105.85 | 76-116 |
| \$ 52 1,2-Dichloroethane | 10.0000 | 10.2788 | 102.79 | 59-129 |
| \$ 70 Toluene-d8 | 10.0000 | 10.0815 | 100.82 | 76-116 |
| \$ 93 Bromofluorobenzene | 10.0000 | 10.0615 | 100.62 | 74-114 |

Data File: /chem/R2.i/052704.b/rr6288.d

Page 7

Date : 27-MAY-2004 19:00

Client ID: 01-MW-04

Instrument: R2.i

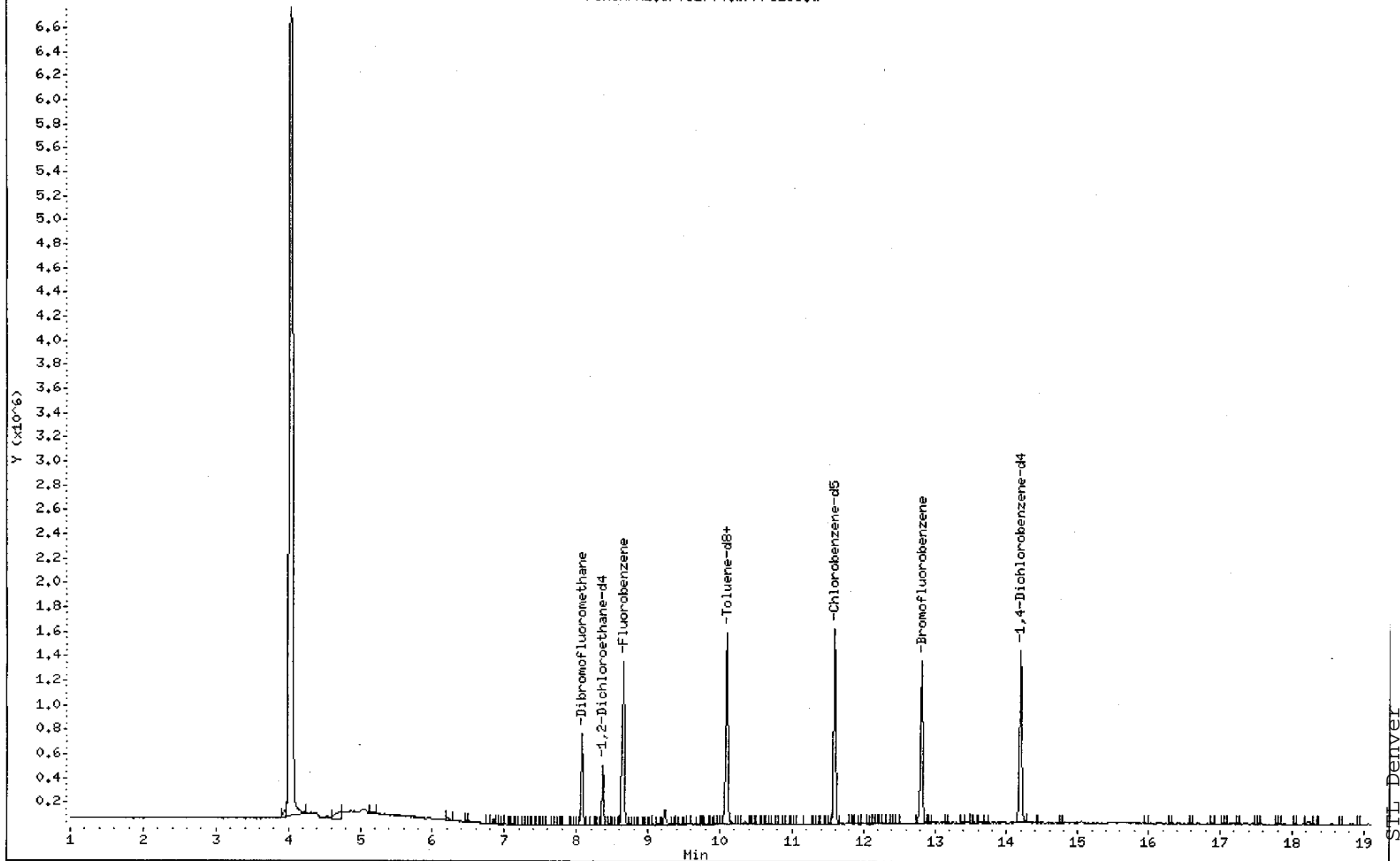
Sample Info: CGTE61AA,,D4E210325-03

Operator: meierg

Column phase: HP624

Column diameter: 0.32

/chem/R2.i/052704.b/rr6288.d



Date : 27-MAY-2004 19:00

Client ID: 01-MW-04

Instrument: R2.i

Sample Info: GGTE61AA,,D4E210325-03

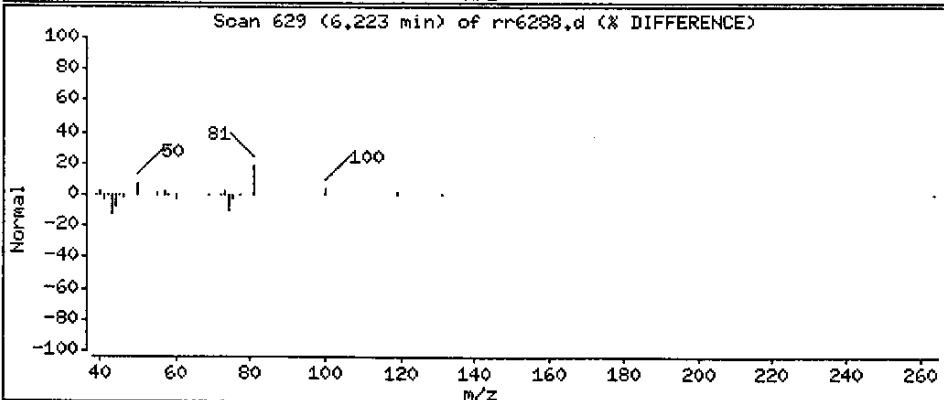
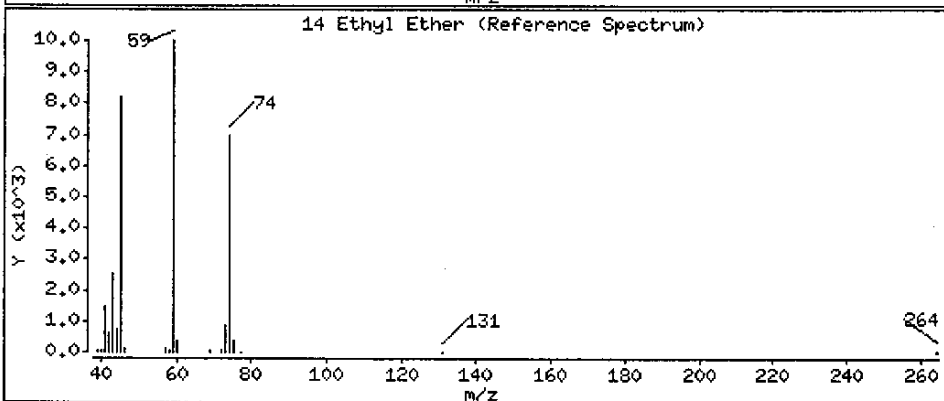
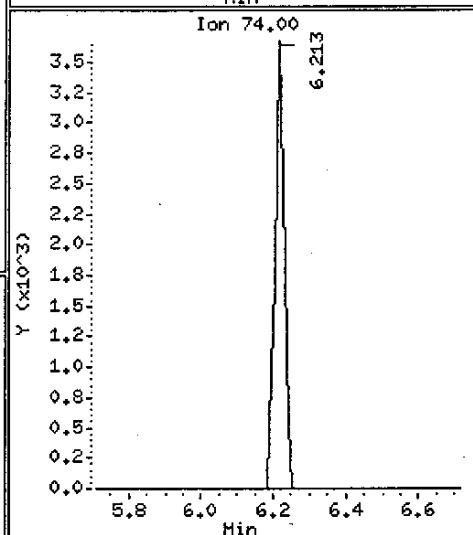
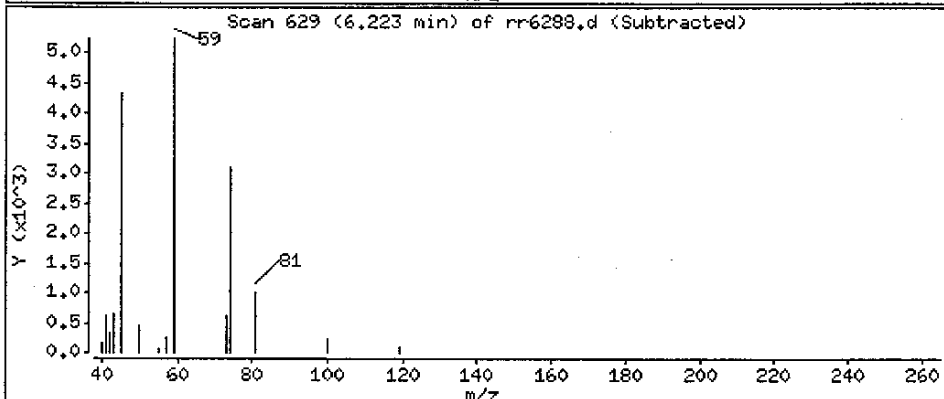
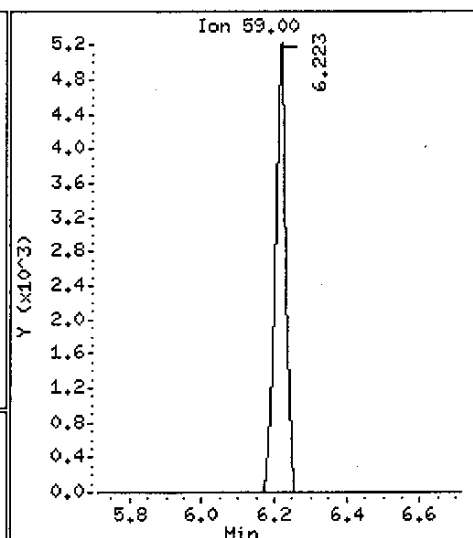
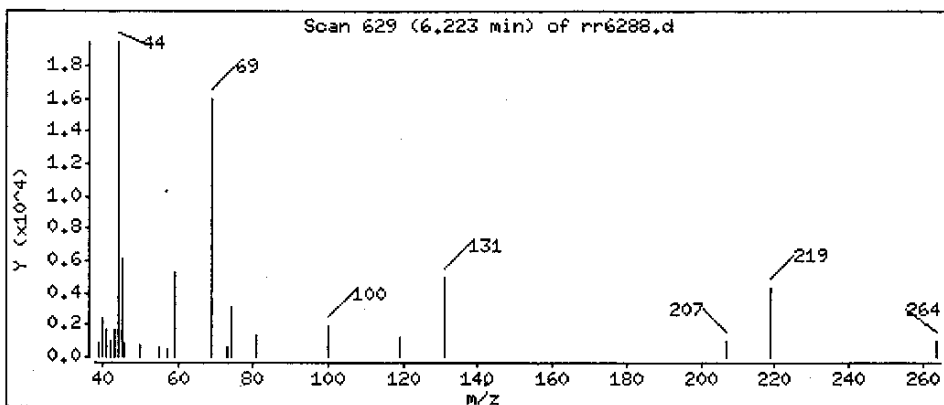
Operator: meierg

Column phase: HP624

Column diameter: 0.32

14 Ethyl Ether

Concentration: 0.382008 ug/L



Date : 27-MAY-2004 19:00

Client ID: 01-MW-04

Instrument: R2.i

Sample Info: GGTE61AA,,D4E210325-03

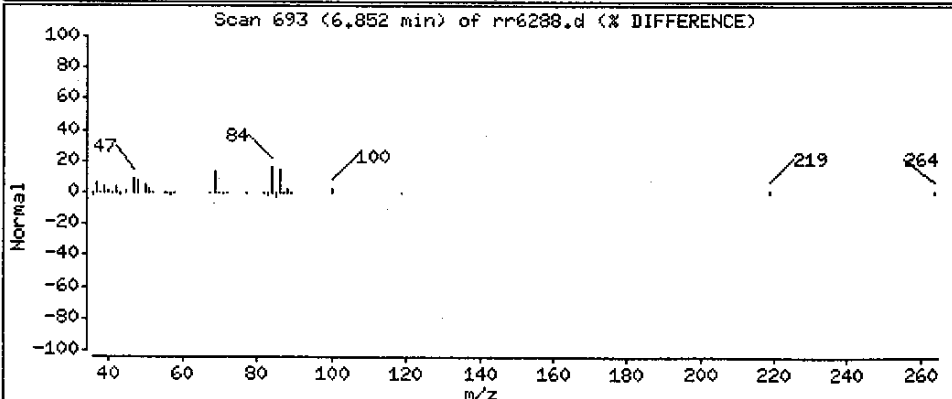
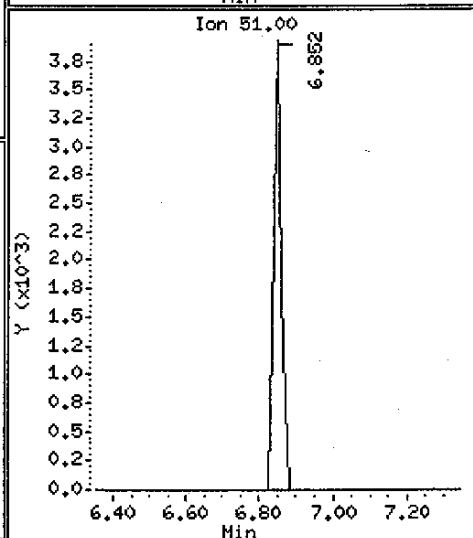
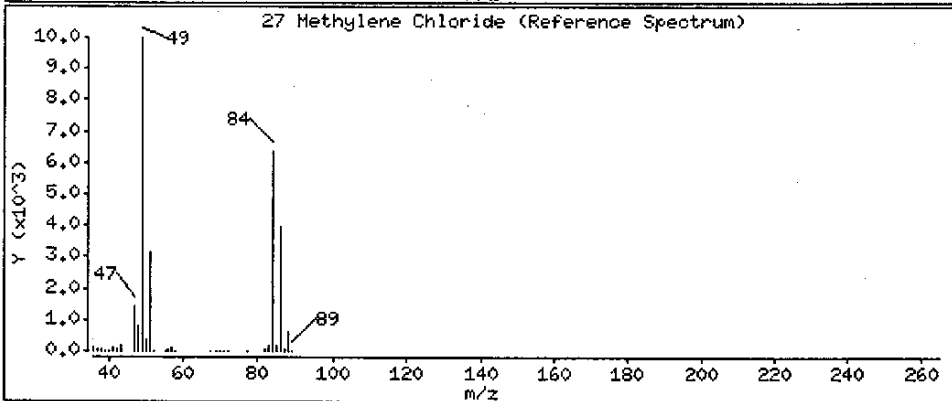
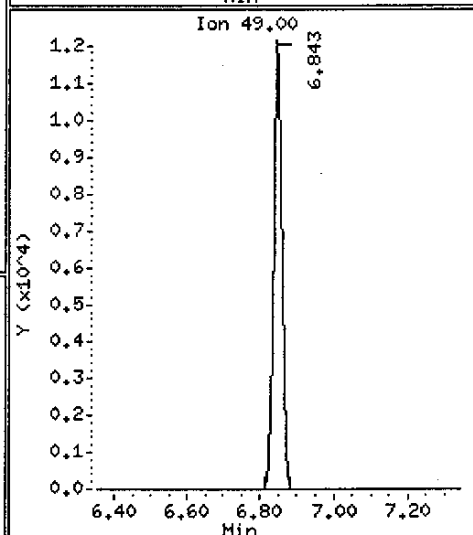
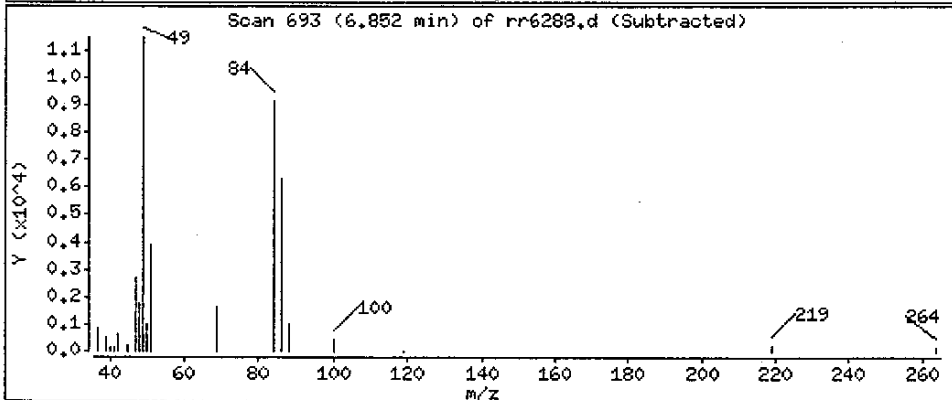
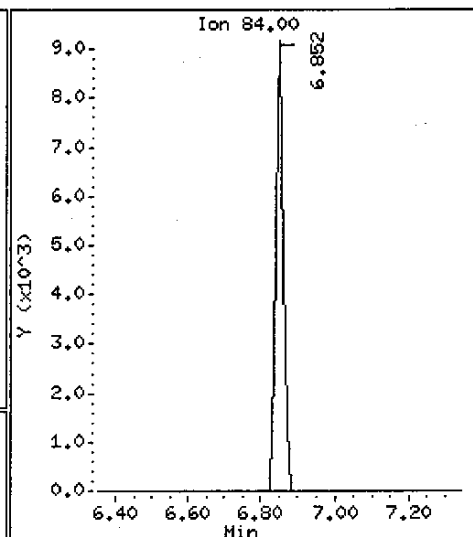
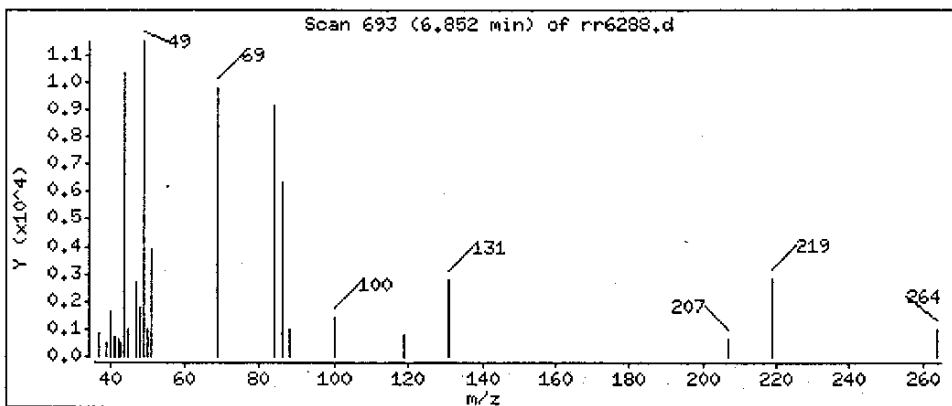
Column phase: HP624

Operator: meierg

Column diameter: 0.32

27 Methylene Chloride

Concentration: 0.419266 ug/L



Date : 27-MAY-2004 19:00

Client ID: 01-MM-04

Instrument: R2.i

Sample Info: GGTE61AA,,D4E210325-03

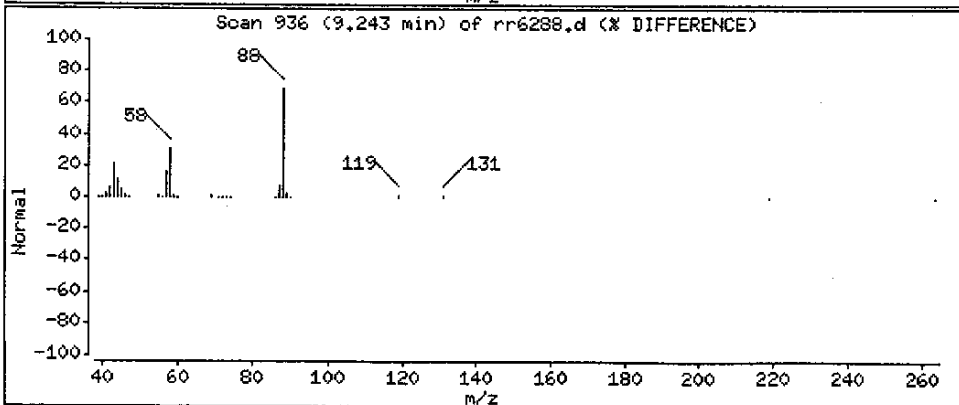
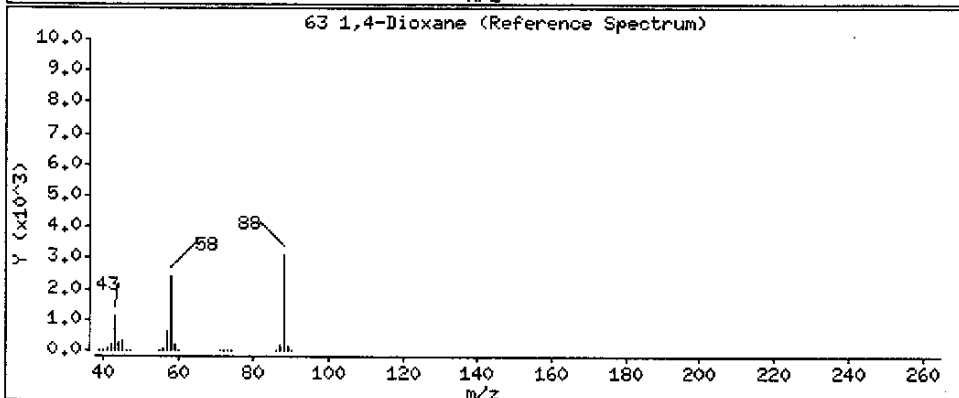
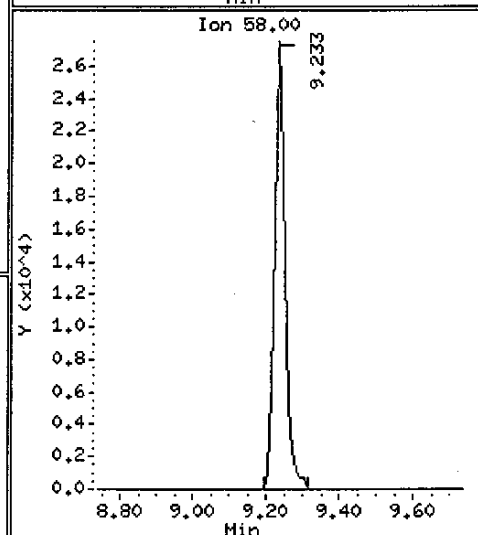
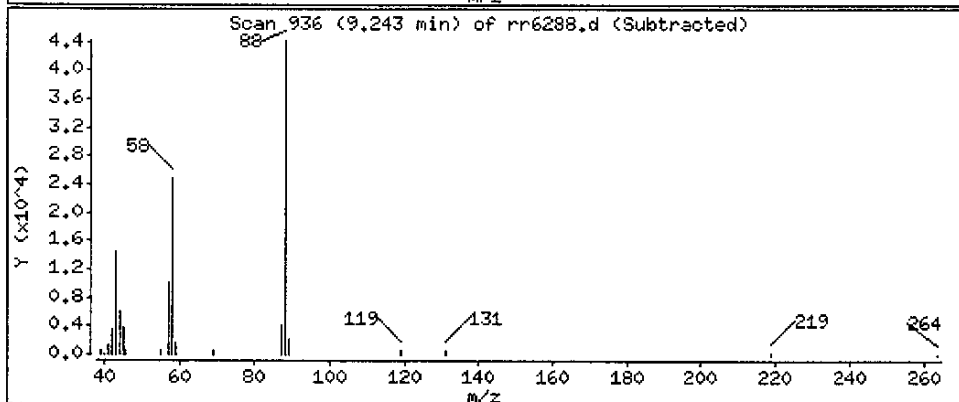
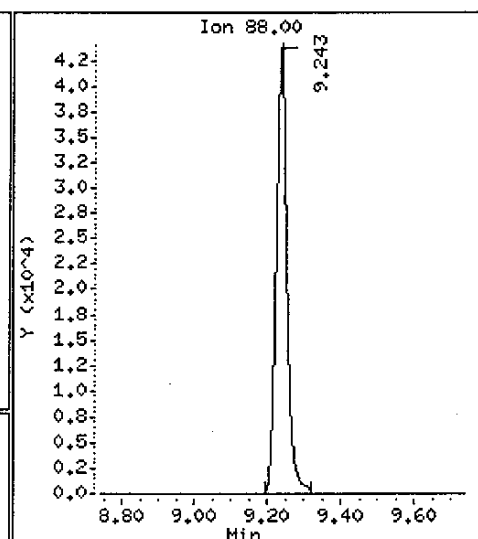
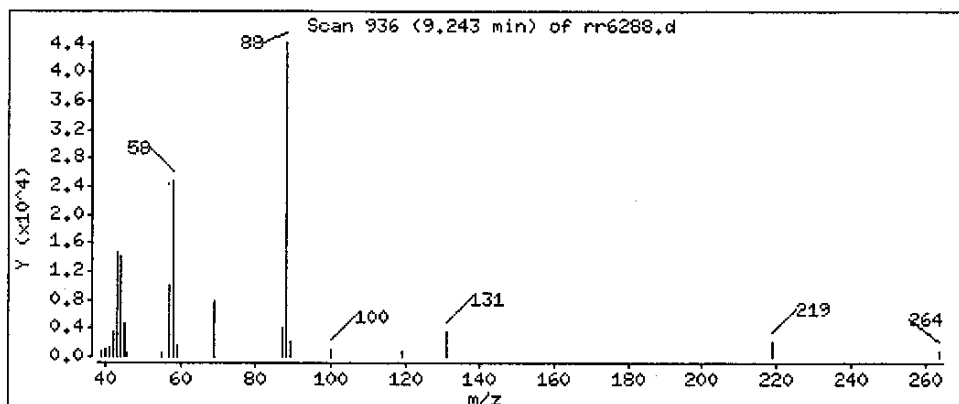
Operator: meierg

Column phase: HP624

Column diameter: 0.32

63 1,4-Dioxane

Concentration: 887.514 ug/L



Date : 27-MAY-2004 19:00

Client ID: 01-MW-04

Instrument: R2.i

Sample Info: GGTE61AA,,D4E210325-03

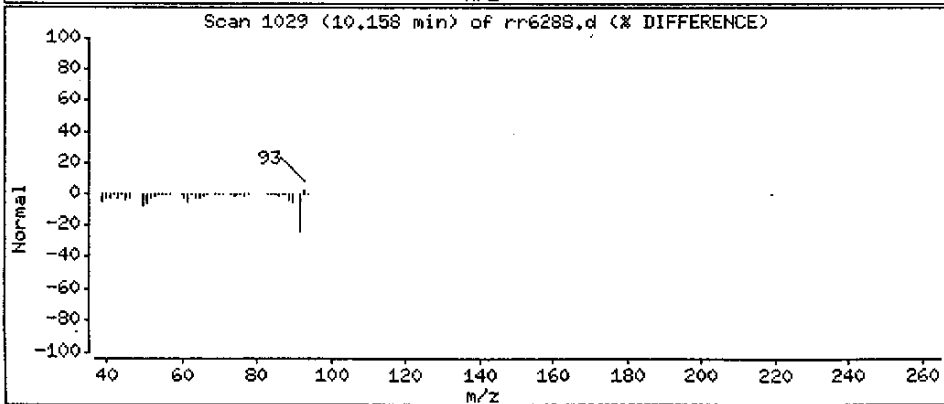
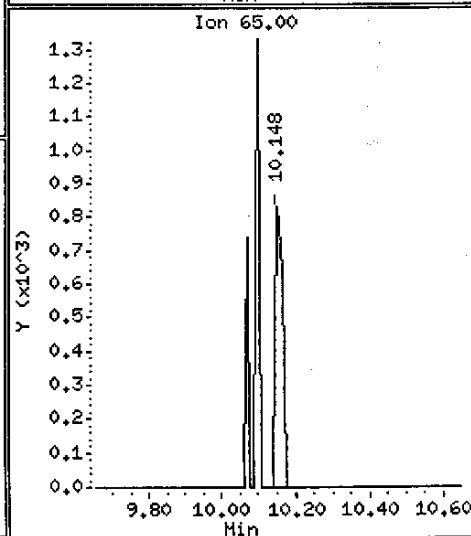
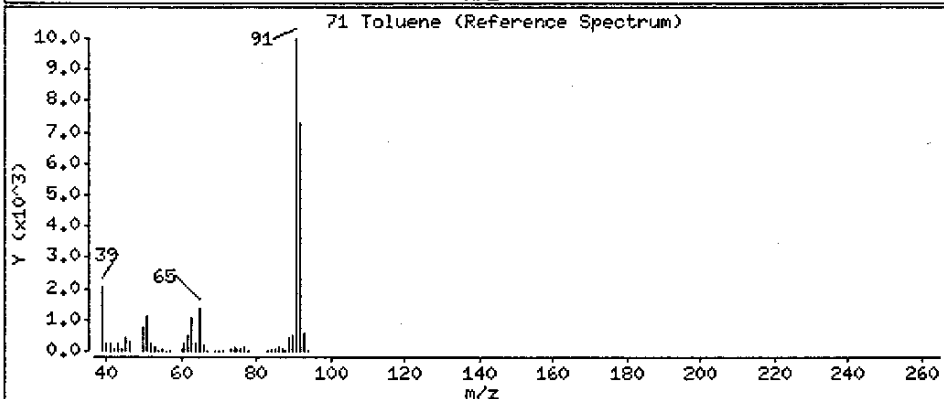
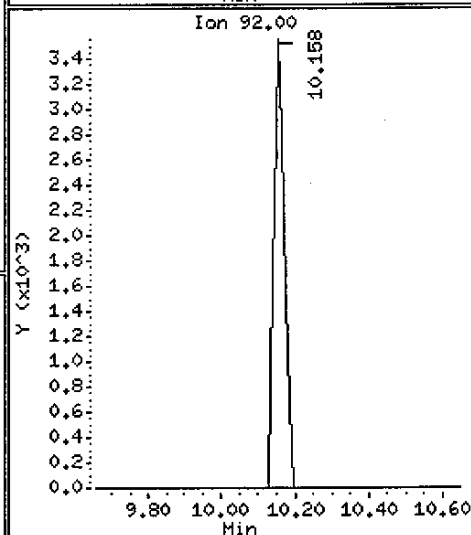
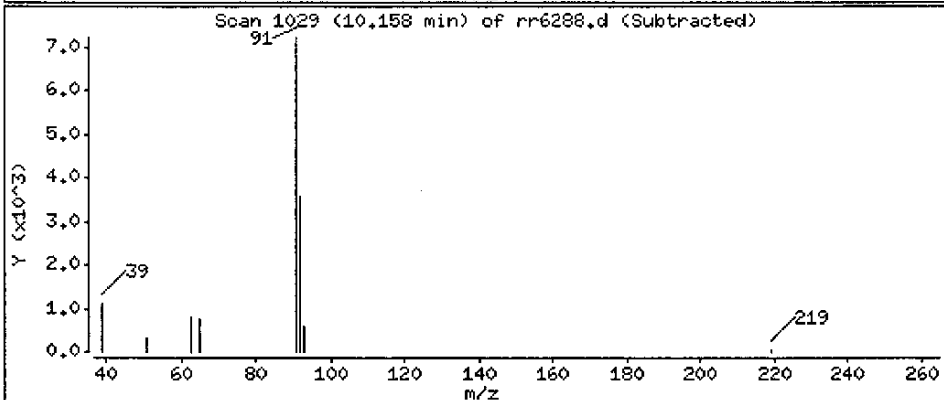
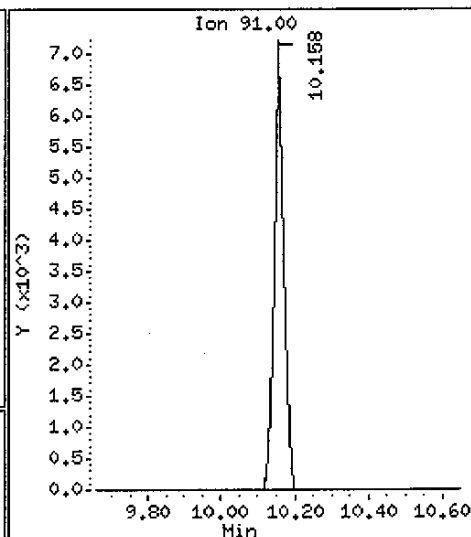
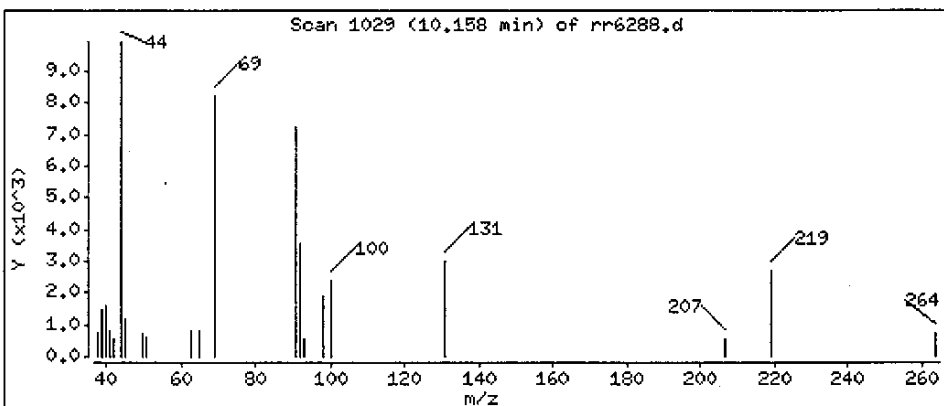
Operator: meieng

Column phase: HP624

Column diameter: 0.32

71 Toluene

Concentration: 0.105976 ug/L



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052704.b/rr6306.d

Lab Smp Id: GGTE71AA

Inj Date : 28-MAY-2004 02:31

Operator : meierg

Smp Info : GGTE71AA,,D4E210325-04

Misc Info :

Comment : SOP # CORP-MS-0002 20ml Analysis

Method : /chem/R2.i/052704.b/R2-20ml-h2o.m

Meth Date : 27-May-2004 17:49 meierg

Cal Date : 26-MAY-2004 00:31

Als bottle: 2

Dil Factor: 1.00000

Integrator: HP RTE

Target Version: 3.40

Processing Host: chemsv02

Client Smp ID: 01-MW-07

Inst ID: R2.i

Quant Type: ISTD

Cal File: rr6230.d

Compound Sublist: QK-01.sub

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

Gu 5/28

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | |
|--------------------------------|-----------|------------------------|--------|---------|---------|----------|----------------------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| * 56 Fluorobenzene | 96 | 8.644 | 8.642 | (1.000) | 1135461 | 10.0000 | |
| * 82 Chlorobenzene-d5 | 119 | 11.575 | 11.584 | (1.000) | 300098 | 10.0000 | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.182 | 14.190 | (1.000) | 447982 | 10.0000 | |
| \$ 46 Dibromofluoromethane | 111 | 8.073 | 8.072 | (0.934) | 377053 | 10.0101 | 10.0101 |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 8.358 | 8.367 | (0.967) | 293671 | 9.82209 | 9.82209 |
| \$ 70 Toluene-d8 | 98 | 10.080 | 10.088 | (0.871) | 1099444 | 10.0924 | 10.0924 |
| \$ 93 Bromofluorobenzene | 95 | 12.805 | 12.813 | (1.106) | 513610 | 9.82007 | 9.82007 |
| M 1 1,2-Dichloroethene (total) | 96.00 | Compound Not Detected. | | | | | |
| M 2 Xylene (total) | 106.00 | Compound Not Detected. | | | | | |
| 3 dichlorodifluoromethane | 85.00 | Compound Not Detected. | | | | | |
| 4 dichlorotetrafluoroethane | 85.00 | Compound Not Detected. | | | | | |
| 5 Chloromethane | 50.00 | Compound Not Detected. | | | | | |
| 6 Vinyl Chloride | 62.00 | Compound Not Detected. | | | | | |
| 7 Ethylene Oxide | 43.00 | Compound Not Detected. | | | | | |
| 8 Bromomethane | 94.00 | Compound Not Detected. | | | | | |
| 9 Chloroethane | 64.00 | Compound Not Detected. | | | | | |

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | |
|-----------------------------------|-----------|------------------------|---------|---------|----------|---------|-------------|
| | | ON-COLUMN | FINAL | | RESPONSE | | |
| | MASS | (ug/L) | (ug/L) | | | | |
| ===== | ===== | ===== | ===== | | ===== | | |
| 10 Dichlorofluoromethane | 67 | 5.791 | 5.810 | (0.670) | 30941 | 0.19270 | 0.192695(a) |
| 11 Trichlorofluoromethane | 101.00 | Compound Not Detected. | | | | | |
| 12 Ethanol | 45.00 | Compound Not Detected. | | | | | |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117.00 | Compound Not Detected. | | | | | |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83.00 | Compound Not Detected. | | | | | |
| 14 Ethyl Ether | 59.00 | Compound Not Detected. | | | | | |
| 16 Acrolein | 56.00 | Compound Not Detected. | | | | | |
| 20 2-Propanol | 45.00 | Compound Not Detected. | | | | | |
| 19 1,1-Dichloroethene | 96.00 | Compound Not Detected. | | | | | |
| 17 Trichlorotrifluoroethane | 151.00 | Compound Not Detected. | | | | | |
| 18 Acetone | 43.00 | Compound Not Detected. | | | | | |
| 21 Iodomethane | 142.00 | Compound Not Detected. | | | | | |
| 24 Carbon Disulfide | 76.00 | Compound Not Detected. | | | | | |
| 22 Acetonitrile | 41.00 | Compound Not Detected. | | | | | |
| 25 Allyl Chloride | 41.00 | Compound Not Detected. | | | | | |
| 23 Methyl acetate | 43.00 | Compound Not Detected. | | | | | |
| 27 Methylene Chloride | 84 | 6.844 | 6.848 | (0.792) | 18083 | 0.52283 | 0.522830(a) |
| 26 tert-Butyl alcohol | 59.00 | Compound Not Detected. | | | | | |
| 28 Acrylonitrile | 53.00 | Compound Not Detected. | | | | | |
| 29 Methyl t-butyl ether | 73.00 | Compound Not Detected. | | | | | |
| 30 trans-1,2-Dichloroethene | 96.00 | Compound Not Detected. | | | | | |
| 31 Hexane | 57.00 | Compound Not Detected. | | | | | |
| 34 1,1-Dichloroethane | 63.00 | Compound Not Detected. | | | | | |
| 32 Vinyl acetate | 43.00 | Compound Not Detected. | | | | | |
| 33 Isopropyl ether | 87.00 | Compound Not Detected. | | | | | |
| 35 Chloroprene | 53.00 | Compound Not Detected. | | | | | |
| 36 ETBE | 59.00 | Compound Not Detected. | | | | | |
| 40 cis-1,2-Dichloroethene | 96.00 | Compound Not Detected. | | | | | |
| 37 2-Butanone | 43.00 | Compound Not Detected. | | | | | |
| 41 2,2-Dichloropropane | 77.00 | Compound Not Detected. | | | | | |
| 39 Propionitrile | 54.00 | Compound Not Detected. | | | | | |
| 38 Ethyl Acetate | 43.00 | Compound Not Detected. | | | | | |
| 42 Methacrylonitrile | 41.00 | Compound Not Detected. | | | | | |
| 43 Bromochloromethane | 128.00 | Compound Not Detected. | | | | | |
| 45 Tetrahydrofuran | 42.00 | Compound Not Detected. | | | | | |
| 44 Chloroform | 83.00 | Compound Not Detected. | | | | | |
| 47 1,1,1-Trichloroethane | 97.00 | Compound Not Detected. | | | | | |
| 50 1,1-Dichloropropene | 75.00 | Compound Not Detected. | | | | | |
| 51 Carbon Tetrachloride | 117.00 | Compound Not Detected. | | | | | |
| 49 Cyclohexane | 56.00 | Compound Not Detected. | | | | | |
| 48 Isobutanol | 41.00 | Compound Not Detected. | | | | | |
| 55 TAME | 73.00 | Compound Not Detected. | | | | | |
| 54 Benzene | 78.00 | Compound Not Detected. | | | | | |
| 53 1,2-Dichloroethane | 62.00 | Compound Not Detected. | | | | | |
| 57 n-Butanol | 56.00 | Compound Not Detected. | | | | | |
| 59 2-Pentanone | 43.00 | Compound Not Detected. | | | | | |
| 58 Trichloroethene | 130.00 | Compound Not Detected. | | | | | |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|------------------------------|-------------------|-------|--------|---------|------------------------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ----- | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| 61 1,2-Dichloropropane | 63.00 | | | | Compound Not Detected. | | |
| 60 Methyl Methacrylate | 100.00 | | | | Compound Not Detected. | | |
| 62 Methyl cyclohexane | 55.00 | | | | Compound Not Detected. | | |
| 64 Dibromomethane | 93.00 | | | | Compound Not Detected. | | |
| 63 1,4-Dioxane | 88 | 9.224 | 9.239 | (1.067) | 280235 | 2680.67 | 2680.66 |
| 65 Bromodichloromethane | 83.00 | | | | Compound Not Detected. | | |
| 66 2-nitropropane | 41.00 | | | | Compound Not Detected. | | |
| 67 2-Chloroethyl vinyl ether | 63.00 | | | | Compound Not Detected. | | |
| 68 cis-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 69 4-Methyl-2-pentanone | 43.00 | | | | Compound Not Detected. | | |
| 71 Toluene | 91.00 | | | | Compound Not Detected. | | |
| 72 trans-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 73 Ethyl methacrylate | 69.00 | | | | Compound Not Detected. | | |
| 74 1,1,2-Trichloroethane | 97.00 | | | | Compound Not Detected. | | |
| 76 1,3-Dichloropropane | 76.00 | | | | Compound Not Detected. | | |
| 77 Tetrachloroethene | 164.00 | | | | Compound Not Detected. | | |
| 75 2-Hexanone | 43.00 | | | | Compound Not Detected. | | |
| 78 Dibromochloromethane | 129.00 | | | | Compound Not Detected. | | |
| 79 Tetrahydrothiophene | 60.00 | | | | Compound Not Detected. | | |
| 80 1,2-Dibromoethane | 107.00 | | | | Compound Not Detected. | | |
| 81 1-Chlorohexane | 91.00 | | | | Compound Not Detected. | | |
| 83 Chlorobenzene | 112.00 | | | | Compound Not Detected. | | |
| 84 1,1,1,2-Tetrachloroethane | 131.00 | | | | Compound Not Detected. | | |
| 85 Ethylbenzene | 106.00 | | | | Compound Not Detected. | | |
| 86 m and p-Xylene | 106.00 | | | | Compound Not Detected. | | |
| 87 o-Xylene | 106.00 | | | | Compound Not Detected. | | |
| 88 Styrene | 104.00 | | | | Compound Not Detected. | | |
| 89 Bromoform | 173.00 | | | | Compound Not Detected. | | |
| 90 isopropyl benzene | 105.00 | | | | Compound Not Detected. | | |
| 91 c-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 92 Cyclohexanone | 55.00 | | | | Compound Not Detected. | | |
| 94 1,1,2,2-Tetrachloroethane | 83.00 | | | | Compound Not Detected. | | |
| 95 t-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 97 Bromobenzene | 156.00 | | | | Compound Not Detected. | | |
| 96 1,2,3-Trichloropropane | 110.00 | | | | Compound Not Detected. | | |
| 98 n-Propylbenzene | 120.00 | | | | Compound Not Detected. | | |
| 99 2-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 100 1,3,5-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 101 4-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 102 tert-Butylbenzene | 119.00 | | | | Compound Not Detected. | | |
| 103 1,2,4-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 104 sec-Butylbenzene | 134.00 | | | | Compound Not Detected. | | |
| 106 m-Dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 105 4-Isopropyltoluene | 119.00 | | | | Compound Not Detected. | | |
| 108 p-dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 109 1,2,3-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 110 n-Butylbenzene | 91.00 | | | | Compound Not Detected. | | |

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | |
|---------------------------------|-----------|----------------|--------------|-----------|----------|----------------------|------------------|
| | | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 111 o-Dichlorobenzene | 146.00 | | Compound Not | Detected. | | | |
| 112 1,2-Dibromo-3-chloropropane | 157.00 | | Compound Not | Detected. | | | |
| 113 1,2,4-Trichlorobenzene | 180.00 | | Compound Not | Detected. | | | |
| 114 Hexachlorobutadiene | 225.00 | | Compound Not | Detected. | | | |
| 115 Napthalene | 128.00 | | Compound Not | Detected. | | | |
| 116 1,2,3-Trichlorobenzene | 180.00 | | Compound Not | Detected. | | | |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|--|---------------------------|
| Instrument ID: R2.i | Calibration Date: 05/27/4 |
| Lab File ID: rr6306.d | Calibration Time: 1604 |
| Lab Smp Id: GGTE71AA | Client Smp ID: 01-MW-07 |
| Analysis Type: VOA | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: meierg | |
| Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m | |
| Misc Info: | |

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1117002 | 558501 | 2234004 | 1135461 | 1.65 |
| 82 Chlorobenzene-d5 | 318643 | 159322 | 637286 | 300098 | -5.82 |
| 107 1,4-Dichlorobenze | 494708 | 247354 | 989416 | 447982 | -9.45 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.64 | 0.01 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.58 | -0.07 |
| 107 1,4-Dichlorobenze | 14.19 | 13.69 | 14.69 | 14.18 | -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.

STL Denver

RECOVERY REPORT

Client Name: Cabrera Services

Client SDG: D4E210325

Sample Matrix: LIQUID

Fraction: VOA

Lab Smp Id: GGTE71AA

Client Smp ID: 01-MW-07

Level: LOW

Operator: meierg

Data Type: MS DATA

SampleType: SAMPLE

SpikeList File: dcs.spk

Quant Type: ISTD

Sublist File: QK-01.sub

Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m

Misc Info:

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 46 Dibromofluorometha | 10.0000 | 10.0101 | 100.10 | 76-116 |
| \$ 52 1,2-Dichloroethane | 10.0000 | 9.82209 | 98.22 | 59-129 |
| \$ 70 Toluene-d8 | 10.0000 | 10.0924 | 100.92 | 76-116 |
| \$ 93 Bromofluorobenzene | 10.0000 | 9.82007 | 98.20 | 74-114 |

Data File: /chem/R2.i/052704.b/rr6306.d

Date : 28-MAY-2004 02:31

Client ID: 01-MW-07

Sample Info: GGTE71AA,,D4E210325-04

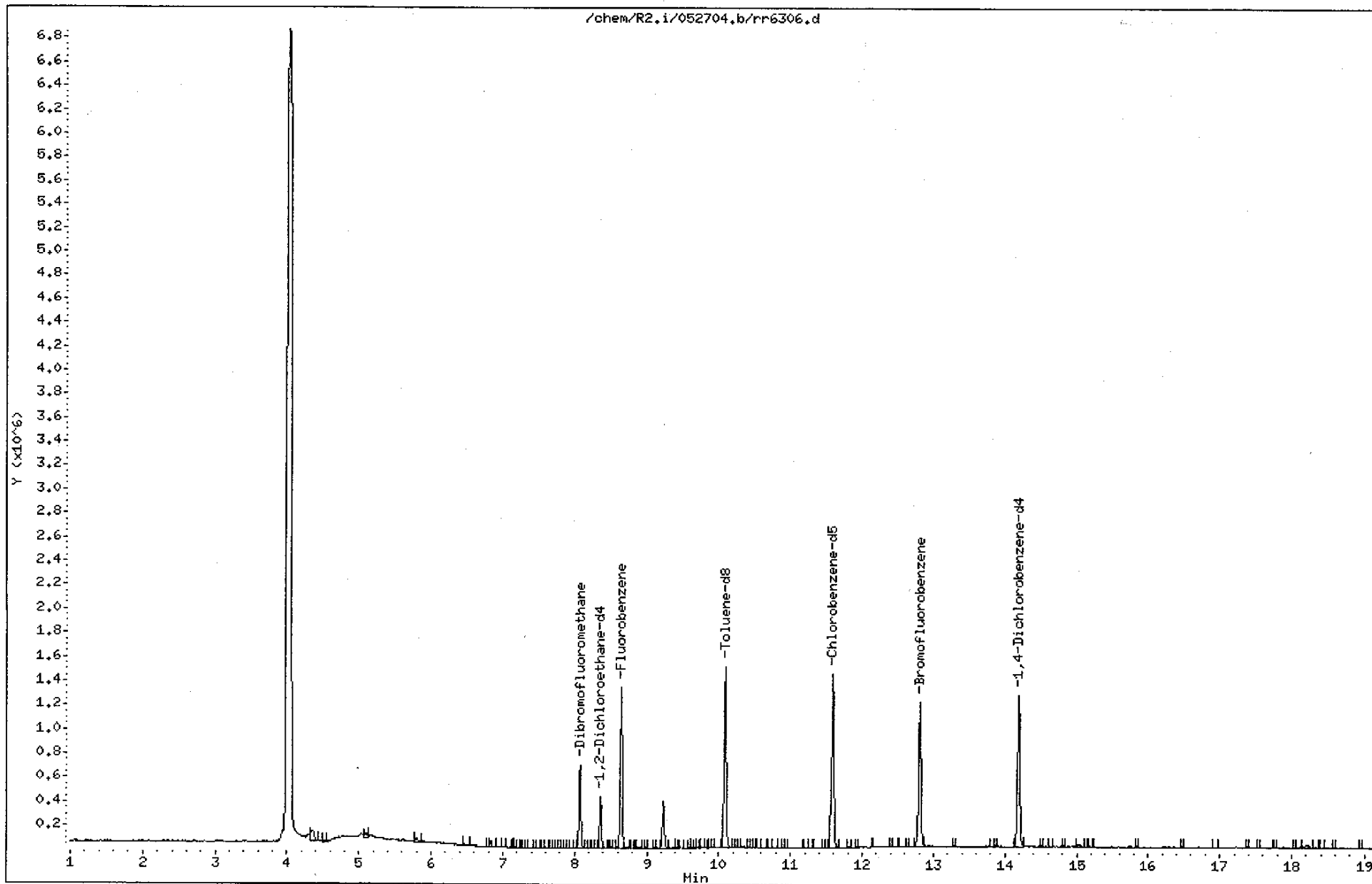
Column phase: HP624

Instrument: R2.i

Operator: meierg

Column diameter: 0.32

Page 7



Date : 28-MAY-2004 02:31

Client ID: 01-MW-07

Instrument: R2.i

Sample Info: GGT71AA,,D4E210325-04

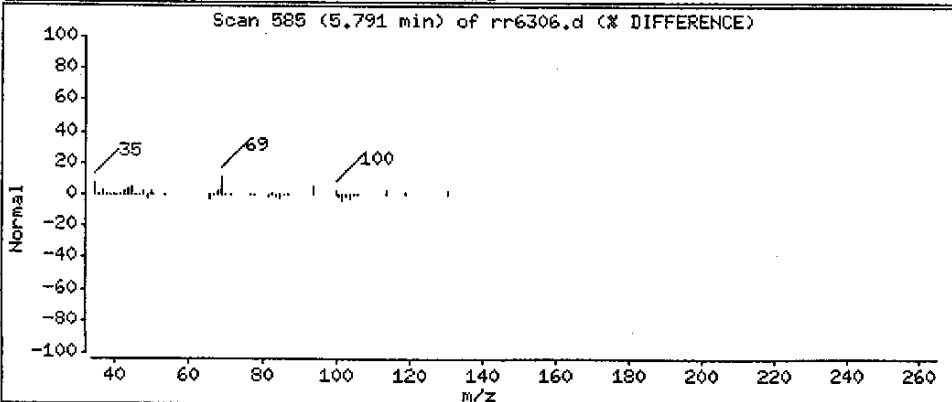
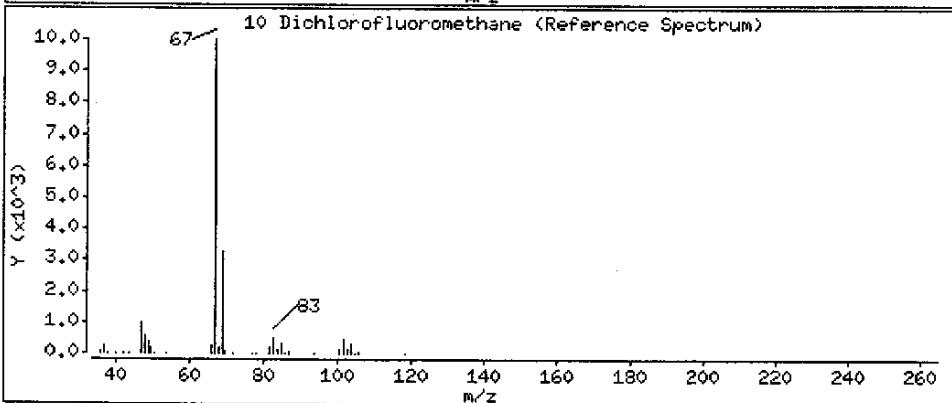
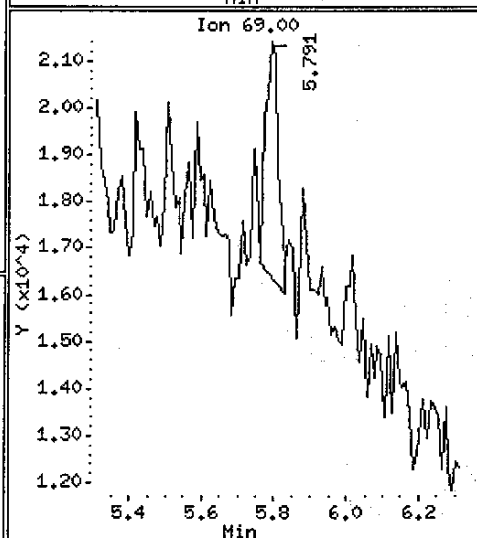
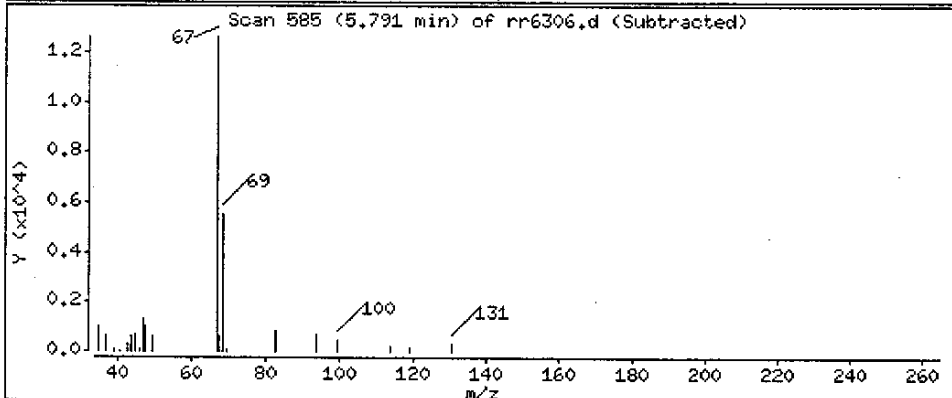
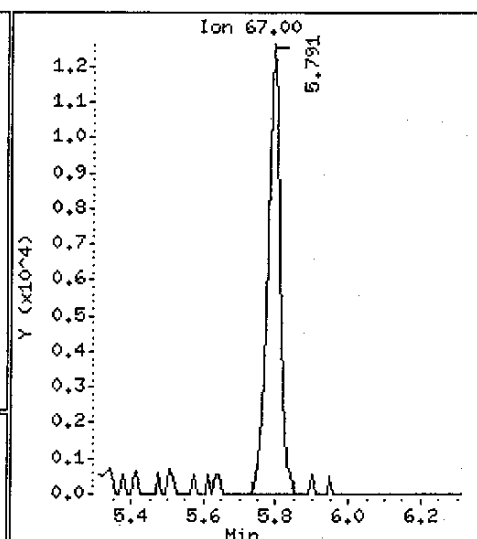
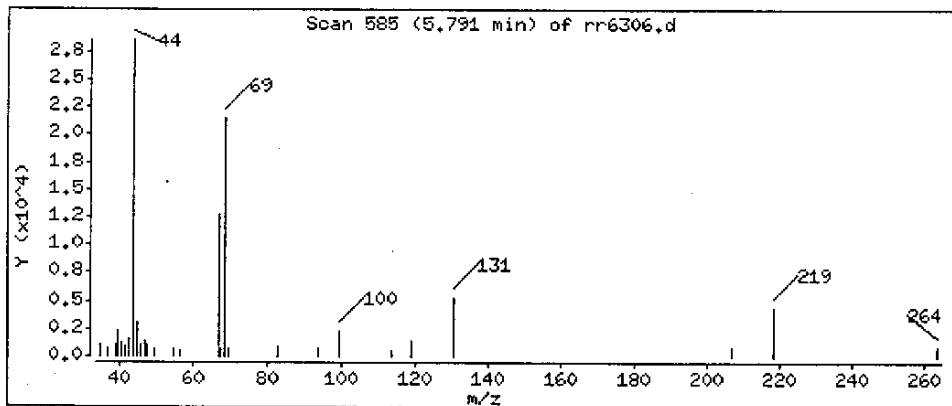
Operator: meierg

Column phase: HP624

Column diameter: 0.32

10 Dichlorofluoromethane

Concentration: 0.192695 ug/L



Date : 28-MAY-2004 02:31

Client ID: 01-MW-07

Instrument: R2.i

Sample Info: GGTE71AA,,D4E210325-04

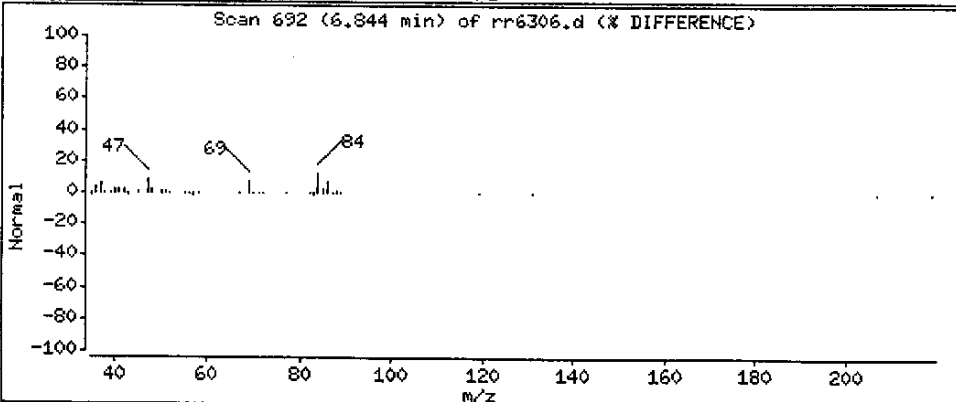
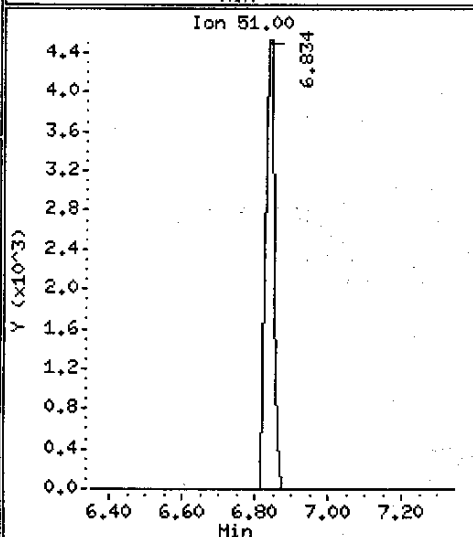
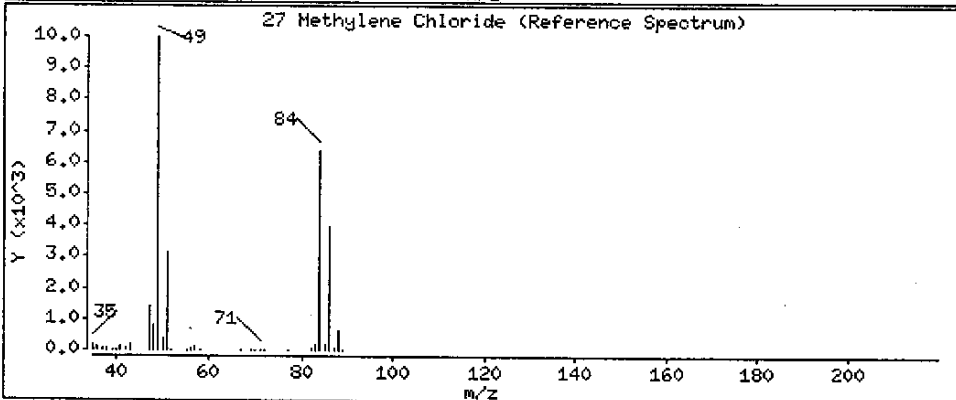
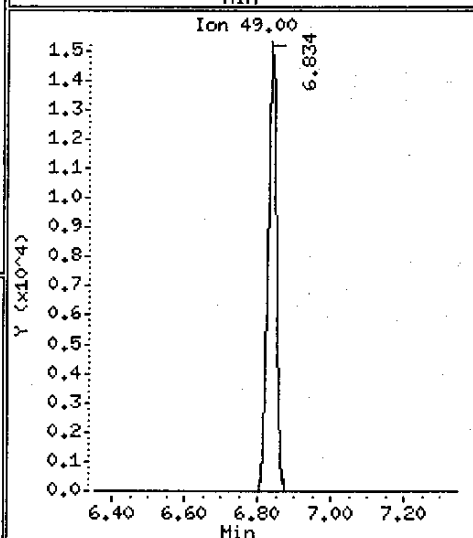
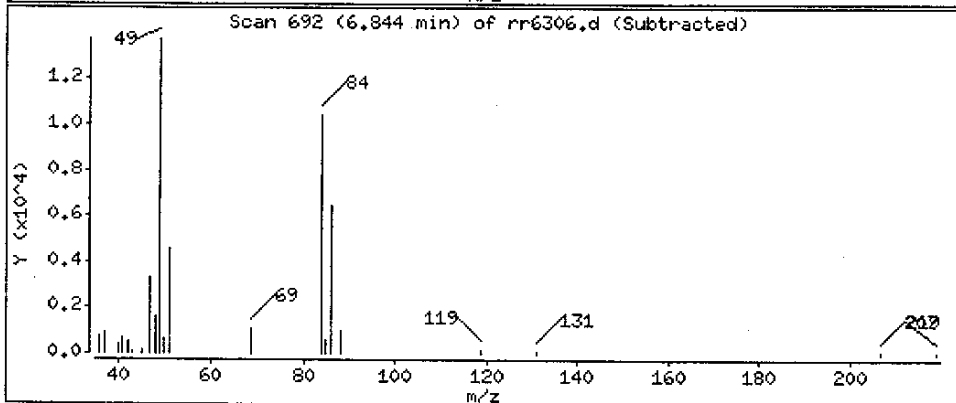
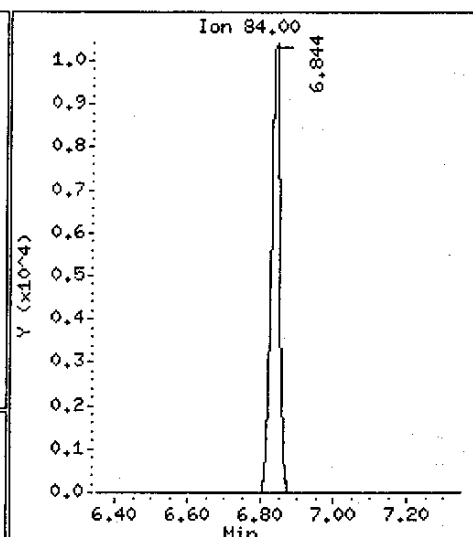
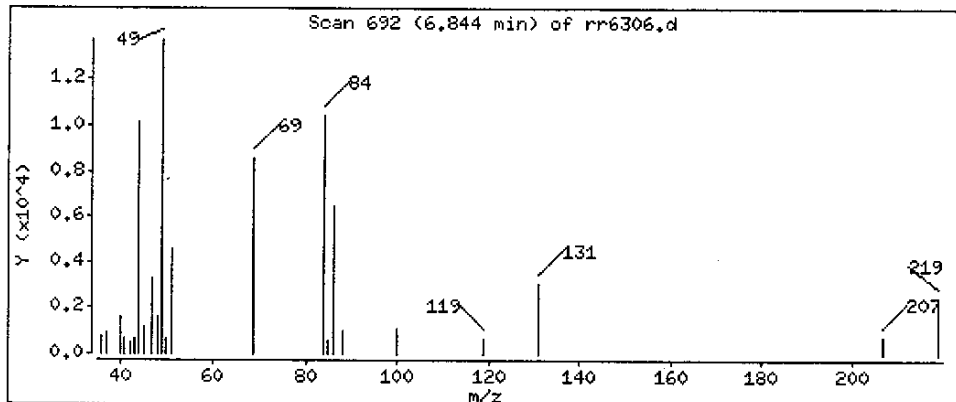
Operator: meierg

Column phase: HP624

Column diameter: 0.32

27 Methylene Chloride

Concentration: 0.522830 ug/L



Date : 28-MAY-2004 02:31

Client ID: 01-MW-07

Instrument: R2.i

Sample Info: GGTE71AA,,D4E210325-04

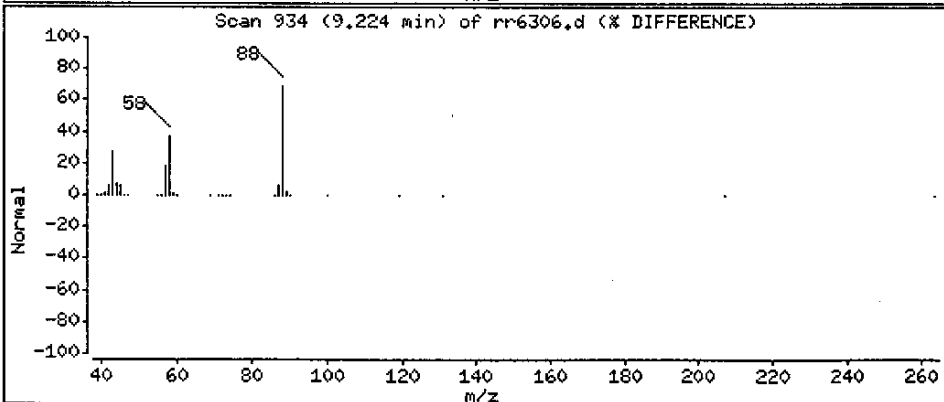
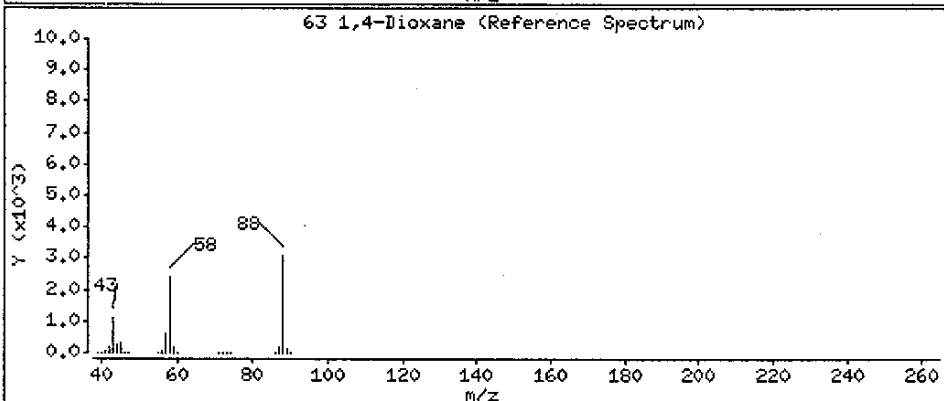
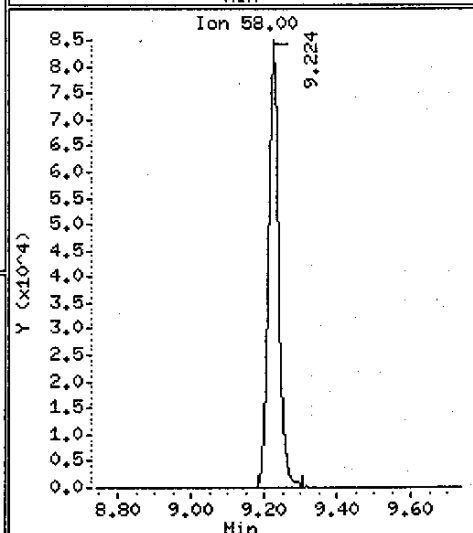
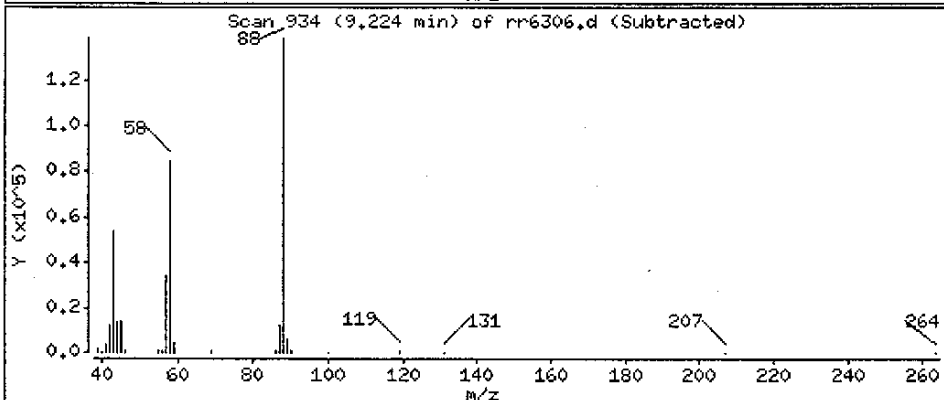
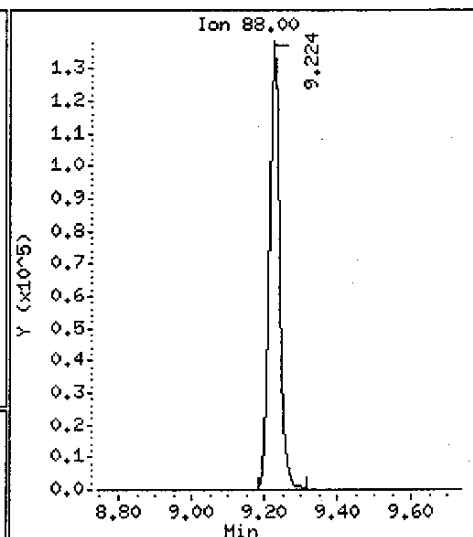
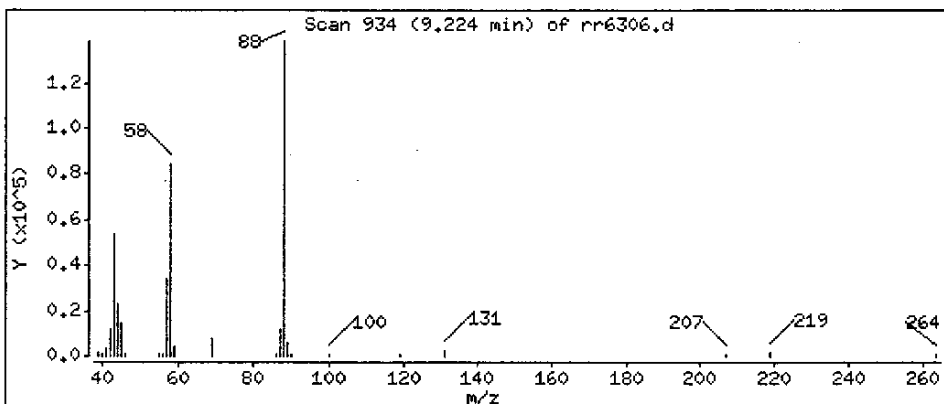
Column phase: HP624

Operator: meierg

Column diameter: 0.32

63 1,4-Dioxane

Concentration: 2680.66 ug/L



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052704.b/rr6290.d
Lab Smp Id: GGTFE1AA Client Smp ID: 01-MW-02
Inj Date : 27-MAY-2004 19:51
Operator : meierg Inst ID: R2.i
Smp Info : GGTFE1AA,,D4E210325-05
Misc Info :
Comment : SOP # CORP-MS-0002 20ml Analysis
Method : /chem/R2.i/052704.b/R2-20ml-h2o.m
Meth Date : 27-May-2004 17:49 meierg Quant Type: ISTD
Cal Date : 26-MAY-2004 00:31 Cal File: rr6230.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: QK-01.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Gm 5/27

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

| | | | | | | CONCENTRATIONS | | |
|--------------------------------|--------|------------------------|--------|---------|----------|----------------|-----------|-------|
| | | QUANT SIG | | | | | ON-COLUMN | FINAL |
| Compounds | MASS | RT | EXP RT | REL RT | RESPONSE | (ug/L) | (ug/L) | |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== | |
| * 56 Fluorobenzene | 96 | 8.643 | 8.642 | {1.000} | 1106004 | 10.0000 | | |
| * 82 Chlorobenzene-d5 | 119 | 11.584 | 11.584 | {1.000} | 300929 | 10.0000 | | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | 14.191 | 14.190 | {1.000} | 456252 | 10.0000 | | |
| \$ 46 Dibromofluoromethane | 111 | 8.082 | 8.072 | {0.935} | 389759 | 10.6231 | 10.6230 | |
| \$ 52 1,2-Dichloroethane-d4 | 65 | 8.368 | 8.367 | {0.968} | 307391 | 10.5548 | 10.5548 | |
| \$ 70 Toluene-d8 | 98 | 10.089 | 10.088 | {0.871} | 1106653 | 10.1305 | 10.1305 | |
| \$ 93 Bromofluorobenzene | 95 | 12.814 | 12.813 | {1.106} | 524518 | 10.0009 | 10.0009 | |
| M 1 1,2-Dichloroethene (total) | 96.00 | Compound Not Detected. | | | | | | |
| M 2 Xylene (total) | 106.00 | Compound Not Detected. | | | | | | |
| 3 dichlorodifluoromethane | 85.00 | Compound Not Detected. | | | | | | |
| 4 dichlorotetrafluoroethane | 85.00 | Compound Not Detected. | | | | | | |
| 5 Chloromethane | 50.00 | Compound Not Detected. | | | | | | |
| 6 Vinyl Chloride | 62.00 | Compound Not Detected. | | | | | | |
| 7 Ethylene Oxide | 43.00 | Compound Not Detected. | | | | | | |
| 8 Bromomethane | 94.00 | Compound Not Detected. | | | | | | |
| 9 Chloroethane | 64.00 | Compound Not Detected. | | | | | | |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|-----------------------------------|-------------------|-------|----------|---------------|----------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 10 Dichlorofluoromethane | 67.00 | | Compound | Not Detected. | | | |
| 11 Trichlorofluoromethane | 101.00 | | Compound | Not Detected. | | | |
| 12 Ethanol | 45.00 | | Compound | Not Detected. | | | |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117.00 | | Compound | Not Detected. | | | |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83.00 | | Compound | Not Detected. | | | |
| 14 Ethyl Ether | 59.00 | | Compound | Not Detected. | | | |
| 16 Acrolein | 56.00 | | Compound | Not Detected. | | | |
| 20 2-Propanol | 45.00 | | Compound | Not Detected. | | | |
| 19 1,1-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 17 Trichlorotrifluoroethane | 151.00 | | Compound | Not Detected. | | | |
| 18 Acetone | 43.00 | | Compound | Not Detected. | | | |
| 21 Iodomethane | 142.00 | | Compound | Not Detected. | | | |
| 24 Carbon Disulfide | 76.00 | | Compound | Not Detected. | | | |
| 22 Acetonitrile | 41.00 | | Compound | Not Detected. | | | |
| 25 Allyl Chloride | 41.00 | | Compound | Not Detected. | | | |
| 23 Methyl acetate | 43.00 | | Compound | Not Detected. | | | |
| 27 Methylene Chloride | 84 | 6.853 | 6.848 | (0.793) | 11862 | 0.35210 | 0.352098(a) |
| 26 tert-Butyl alcohol | 59.00 | | Compound | Not Detected. | | | |
| 28 Acrylonitrile | 53.00 | | Compound | Not Detected. | | | |
| 29 Methyl t-butyl ether | 73.00 | | Compound | Not Detected. | | | |
| 30 trans-1,2-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 31 Hexane | 57.00 | | Compound | Not Detected. | | | |
| 34 1,1-Dichloroethane | 63.00 | | Compound | Not Detected. | | | |
| 32 Vinyl acetate | 43.00 | | Compound | Not Detected. | | | |
| 33 Isopropyl ether | 87.00 | | Compound | Not Detected. | | | |
| 35 Chloroprene | 53.00 | | Compound | Not Detected. | | | |
| 36 ETBE | 59.00 | | Compound | Not Detected. | | | |
| 40 cis-1,2-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 37 2-Butanone | 43.00 | | Compound | Not Detected. | | | |
| 41 2,2-Dichloropropane | 77.00 | | Compound | Not Detected. | | | |
| 39 Propionitrile | 54.00 | | Compound | Not Detected. | | | |
| 38 Ethyl Acetate | 43.00 | | Compound | Not Detected. | | | |
| 42 Methacrylonitrile | 41.00 | | Compound | Not Detected. | | | |
| 43 Bromochloromethane | 128.00 | | Compound | Not Detected. | | | |
| 45 Tetrahydrofuran | 42.00 | | Compound | Not Detected. | | | |
| 44 Chloroform | 83.00 | | Compound | Not Detected. | | | |
| 47 1,1,1-Trichloroethane | 97.00 | | Compound | Not Detected. | | | |
| 50 1,1-Dichloropropene | 75.00 | | Compound | Not Detected. | | | |
| 51 Carbon Tetrachloride | 117.00 | | Compound | Not Detected. | | | |
| 49 Cyclohexane | 56.00 | | Compound | Not Detected. | | | |
| 48 Isobutanol | 41.00 | | Compound | Not Detected. | | | |
| 55 TAME | 73.00 | | Compound | Not Detected. | | | |
| 54 Benzene | 78.00 | | Compound | Not Detected. | | | |
| 53 1,2-Dichloroethane | 62.00 | | Compound | Not Detected. | | | |
| 57 n-Butanol | 56.00 | | Compound | Not Detected. | | | |
| 59 2-Pentanone | 43.00 | | Compound | Not Detected. | | | |
| 58 Trichloroethene | 130.00 | | Compound | Not Detected. | | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|------------------------------|-----------|--------|------------------------|---------|----------|----------------|--------------|
| | | | | | | ON-COLUMN | FINAL |
| | MASS | | | | | (ug/L) | (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 61 1,2-Dichloropropane | 63.00 | | Compound Not Detected. | | | | |
| 60 Methyl Methacrylate | 100.00 | | Compound Not Detected. | | | | |
| 62 Methyl cyclohexane | 55.00 | | Compound Not Detected. | | | | |
| 64 Dibromomethane | 93.00 | | Compound Not Detected. | | | | |
| 63 1,4-Dioxane | 88 | 9.243 | 9.239 | (1.069) | 5688 | 55.8593 | 55.8593 (a) |
| 65 Bromodichloromethane | 83.00 | | Compound Not Detected. | | | | |
| 66 2-nitropropane | 41.00 | | Compound Not Detected. | | | | |
| 67 2-Chloroethyl vinyl ether | 63.00 | | Compound Not Detected. | | | | |
| 68 cis-1,3-Dichloropropene | 75.00 | | Compound Not Detected. | | | | |
| 69 4-Methyl-2-pentanone | 43.00 | | Compound Not Detected. | | | | |
| 71 Toluene | 91 | 10.158 | 10.153 | (0.877) | 19383 | 0.15591 | 0.155906 (a) |
| 72 trans-1,3-Dichloropropene | 75.00 | | Compound Not Detected. | | | | |
| 73 Ethyl methacrylate | 69.00 | | Compound Not Detected. | | | | |
| 74 1,1,2-Trichloroethane | 97.00 | | Compound Not Detected. | | | | |
| 76 1,3-Dichloropropane | 76.00 | | Compound Not Detected. | | | | |
| 77 Tetrachloroethene | 164.00 | | Compound Not Detected. | | | | |
| 75 2-Hexanone | 43.00 | | Compound Not Detected. | | | | |
| 78 Dibromochloromethane | 129.00 | | Compound Not Detected. | | | | |
| 79 Tetrahydrothiophene | 60.00 | | Compound Not Detected. | | | | |
| 80 1,2-Dibromoethane | 107.00 | | Compound Not Detected. | | | | |
| 81 1-Chlorohexane | 91.00 | | Compound Not Detected. | | | | |
| 83 Chlorobenzene | 112.00 | | Compound Not Detected. | | | | |
| 84 1,1,1,2-Tetrachloroethane | 131.00 | | Compound Not Detected. | | | | |
| 85 Ethylbenzene | 106.00 | | Compound Not Detected. | | | | |
| 86 m and p-Xylene | 106.00 | | Compound Not Detected. | | | | |
| 87 o-Xylene | 106.00 | | Compound Not Detected. | | | | |
| 88 Styrene | 104.00 | | Compound Not Detected. | | | | |
| 89 Bromoform | 173.00 | | Compound Not Detected. | | | | |
| 90 isopropyl benzene | 105.00 | | Compound Not Detected. | | | | |
| 91 c-1,4-Dichloro-2-butene | 53.00 | | Compound Not Detected. | | | | |
| 92 Cyclohexanone | 55.00 | | Compound Not Detected. | | | | |
| 94 1,1,2,2-Tetrachloroethane | 83.00 | | Compound Not Detected. | | | | |
| 95 t-1,4-Dichloro-2-butene | 53.00 | | Compound Not Detected. | | | | |
| 97 Bromobenzene | 156.00 | | Compound Not Detected. | | | | |
| 96 1,2,3-Trichloropropane | 110.00 | | Compound Not Detected. | | | | |
| 98 n-Propylbenzene | 120.00 | | Compound Not Detected. | | | | |
| 99 2-Chlorotoluene | 126.00 | | Compound Not Detected. | | | | |
| 100 1,3,5-Trimethylbenzene | 105.00 | | Compound Not Detected. | | | | |
| 101 4-Chlorotoluene | 126.00 | | Compound Not Detected. | | | | |
| 102 tert-Butylbenzene | 119.00 | | Compound Not Detected. | | | | |
| 103 1,2,4-Trimethylbenzene | 105.00 | | Compound Not Detected. | | | | |
| 104 sec-Butylbenzene | 134.00 | | Compound Not Detected. | | | | |
| 106 m-Dichlorobenzene | 146.00 | | Compound Not Detected. | | | | |
| 105 4-Isopropyltoluene | 119.00 | | Compound Not Detected. | | | | |
| 108 p-dichlorobenzene | 146.00 | | Compound Not Detected. | | | | |
| 109 1,2,3-Trimethylbenzene | 105.00 | | Compound Not Detected. | | | | |
| 110 n-Butylbenzene | 91.00 | | Compound Not Detected. | | | | |

| Compounds | QUANT SIG | | | | | | | CONCENTRATIONS | |
|---------------------------------|-----------|------------------------|--------|--------|----------|-----------|-------|----------------|---------|
| | | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN | FINAL | (ug/L) | (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== | ===== | ===== |
| 111 o-Dichlorobenzene | 146.00 | Compound Not Detected. | | | | | | | |
| 112 1,2-Dibromo-3-chloropropane | 157.00 | Compound Not Detected. | | | | | | | |
| 113 1,2,4-Trichlorobenzene | 180.00 | Compound Not Detected. | | | | | | | |
| 114 Hexachlorobutadiene | 225.00 | Compound Not Detected. | | | | | | | |
| 115 Napthalene | 128.00 | Compound Not Detected. | | | | | | | |
| 116 1,2,3-Trichlorobenzene | 180.00 | Compound Not Detected. | | | | | | | |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|--|---------------------------|
| Instrument ID: R2.i | Calibration Date: 05/27/4 |
| Lab File ID: rr6290.d | Calibration Time: 1604 |
| Lab Smp Id: GGTFE1AA | Client Smp ID: 01-MW-02 |
| Analysis Type: VOA | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: meierg | |
| Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m | |
| Misc Info: | |

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1117002 | 558501 | 2234004 | 1106004 | -0.98 |
| 82 Chlorobenzene-d5 | 318643 | 159322 | 637286 | 300929 | -5.56 |
| 107 1,4-Dichlorobenze | 494708 | 247354 | 989416 | 456252 | -7.77 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.64 | 0.01 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.58 | 0.01 |
| 107 1,4-Dichlorobenze | 14.19 | 13.69 | 14.69 | 14.19 | 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.

STL Denver

RECOVERY REPORT

| | |
|--|-------------------------|
| Client Name: Cabrera Services | Client SDG: D4E210325 |
| Sample Matrix: LIQUID | Fraction: VOA |
| Lab Smp Id: GGTFE1AA | Client Smp ID: 01-MW-02 |
| Level: LOW | Operator: meierg |
| Data Type: MS DATA | SampleType: SAMPLE |
| SpikeList File: dcs.spk | Quant Type: ISTD |
| Sublist File: QK-01.sub | |
| Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m | |
| Misc Info: | |

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 46 Dibromofluorometha | 10.0000 | 10.6230 | 106.23 | 76-116 |
| \$ 52 1,2-Dichloroethane | 10.0000 | 10.5548 | 105.55 | 59-129 |
| \$ 70 Toluene-d8 | 10.0000 | 10.1305 | 101.30 | 76-116 |
| \$ 93 Bromofluorobenzene | 10.0000 | 10.0009 | 100.01 | 74-114 |

Data File: /chem/R2.i/052704.b/rr6290.d

Page 7

Date : 27-MAY-2004 19:51

Client ID: 01-MW-02

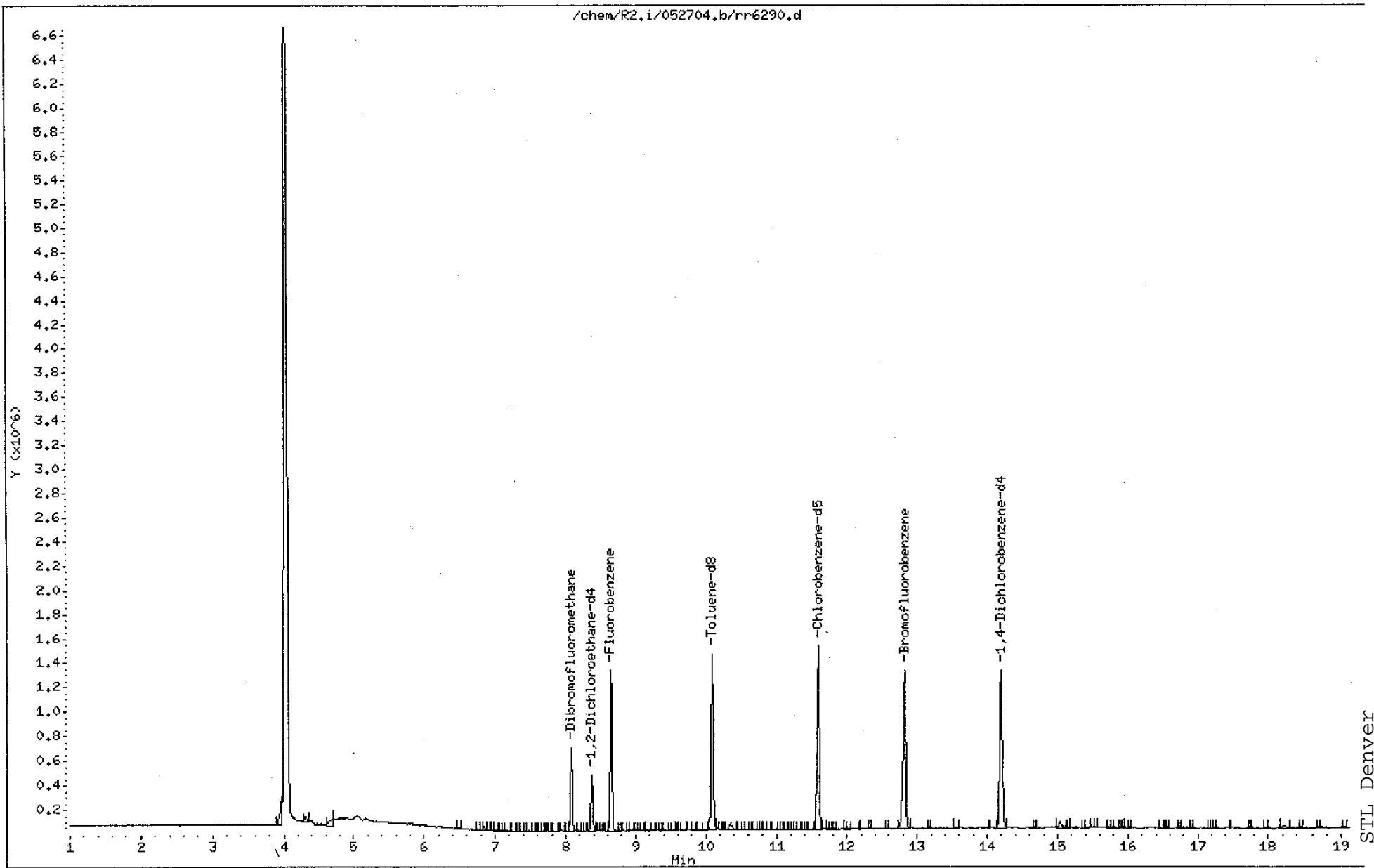
Instrument: R2.i

Sample Info: GGTFE1AA,,D4E210325-05

Operator: meierg

Column phase: HP624

Column diameter: 0.32



Date : 27-MAY-2004 19:51

Client ID: 01-HW-02

Instrument: R2.i

Sample Info: GGTFE1AA,,D4E210325-05

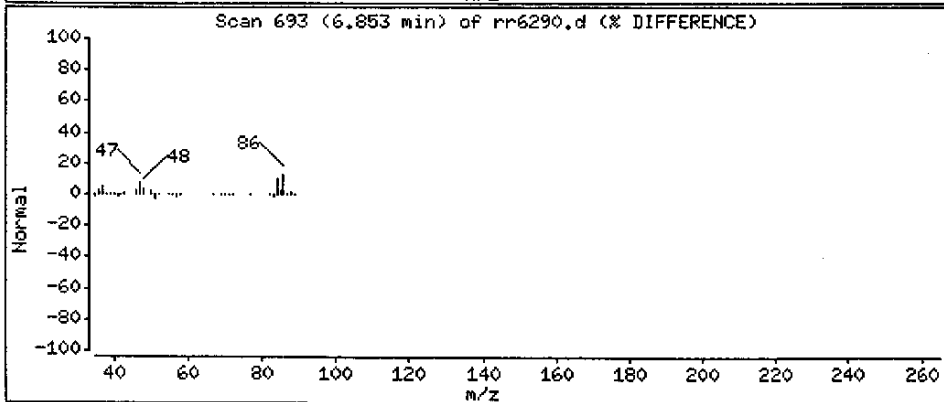
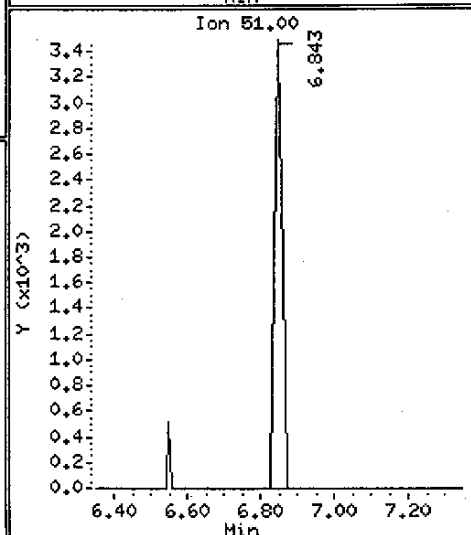
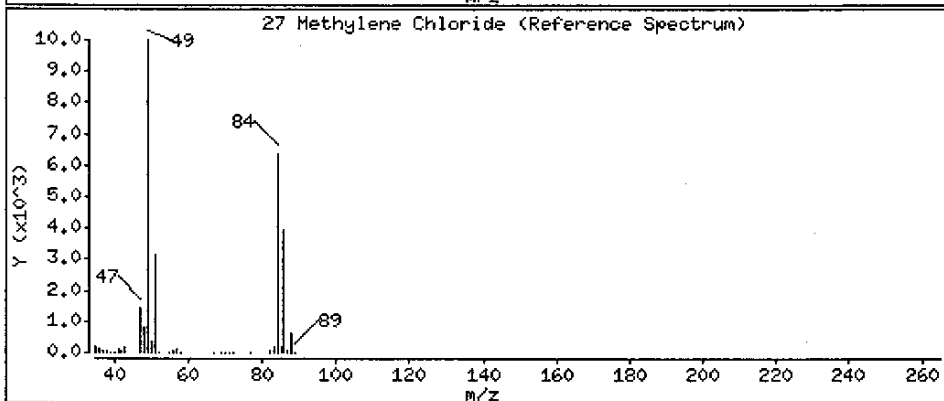
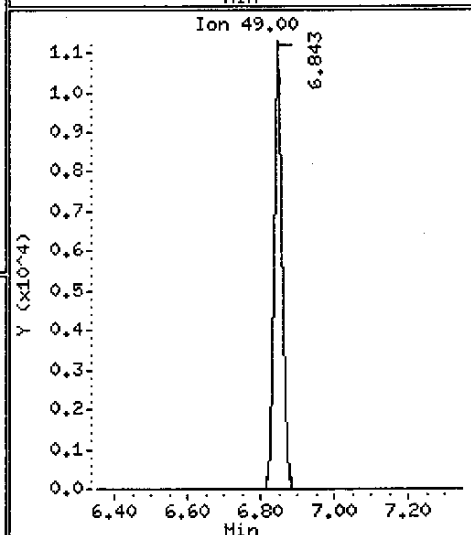
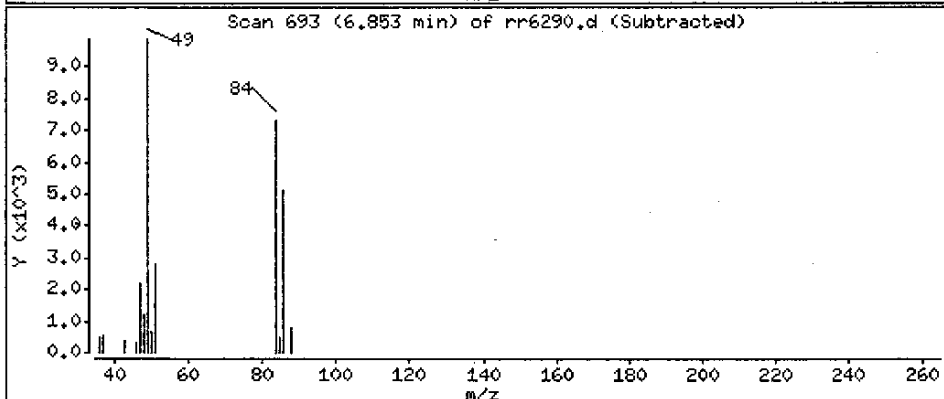
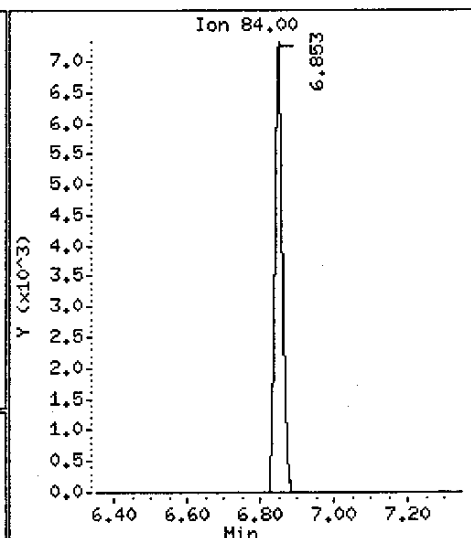
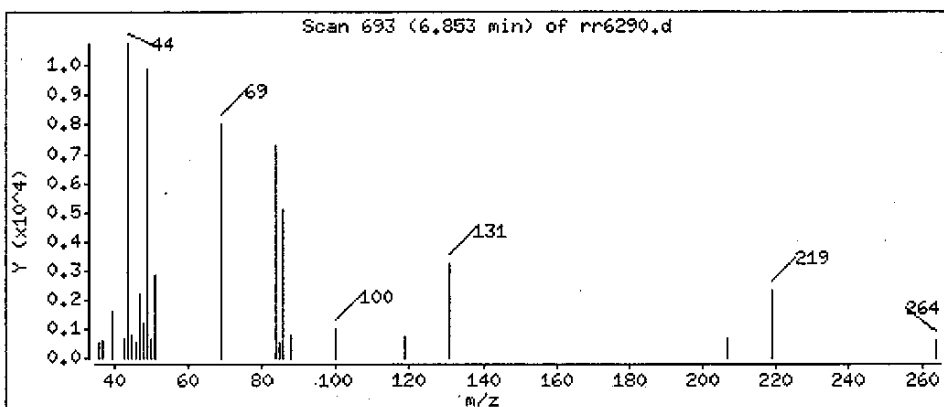
Operator: meieng

Column phase: HP624

Column diameter: 0.32

27 Methylene Chloride

Concentration: 0.352098 ug/L



Date : 27-MAY-2004 19:51

Client ID: 01-MW-02

Instrument: R2.i

Sample Info: GGTFE1AA,,D4E210325-05

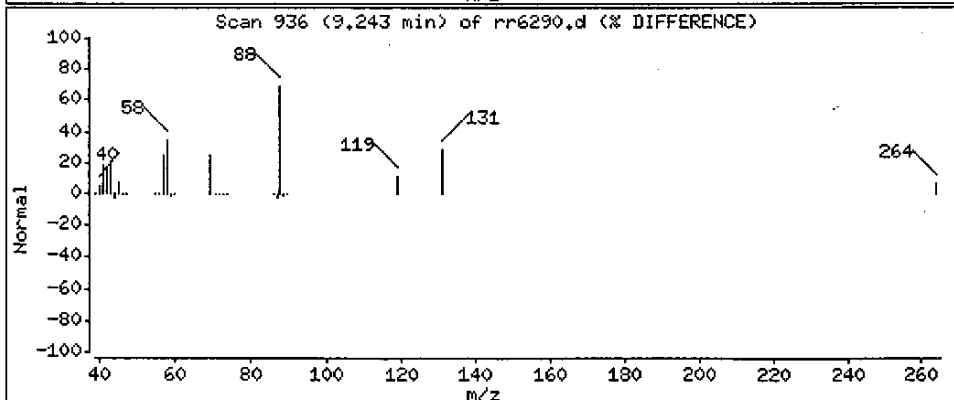
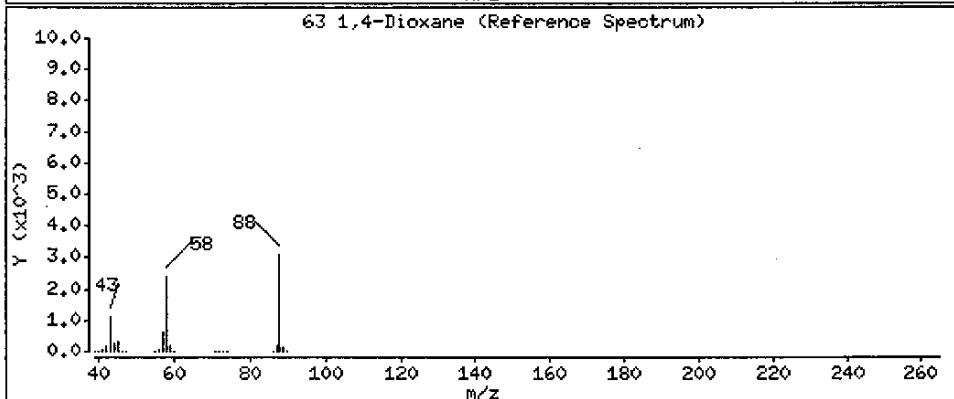
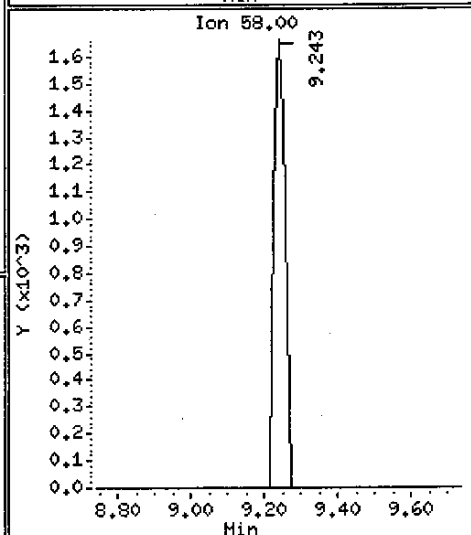
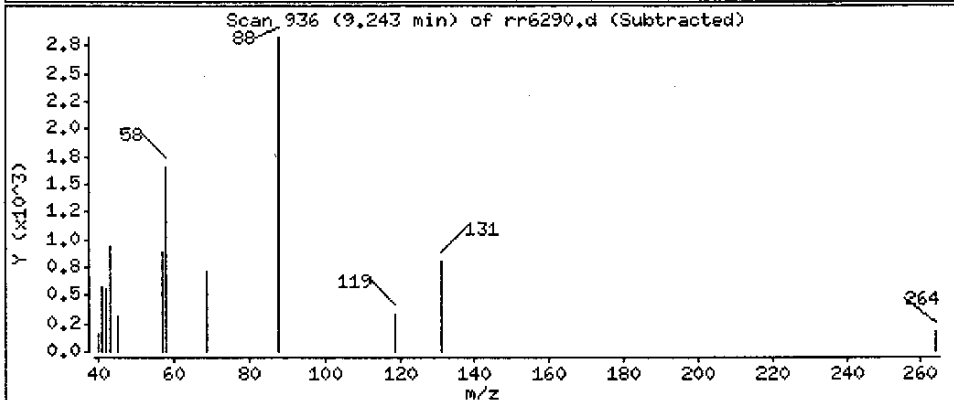
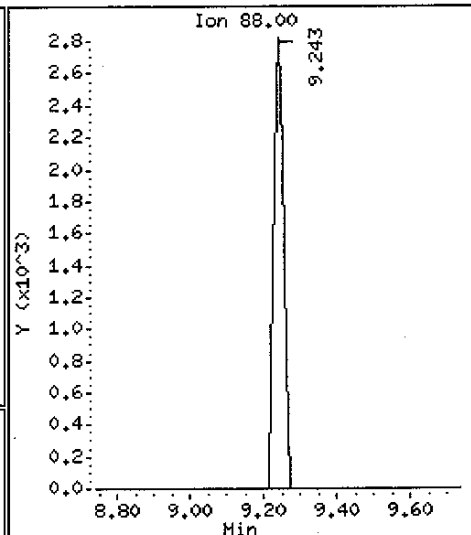
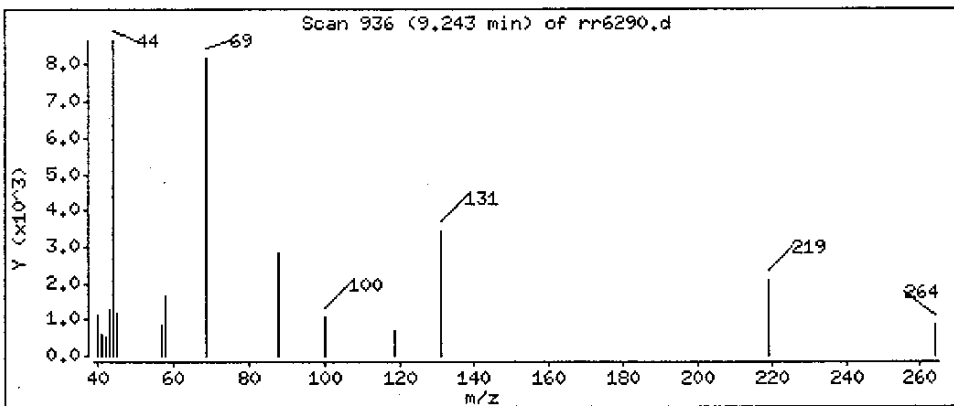
Operator: meierg

Column phase: HP624

Column diameter: 0.32

63 1,4-Dioxane

Concentration: 55.8593 ug/L



Date : 27-MAY-2004 19:51

Client ID: 01-MW-02

Instrument: R2.i

Sample Info: GGTFE1AA,,D4E210325-05

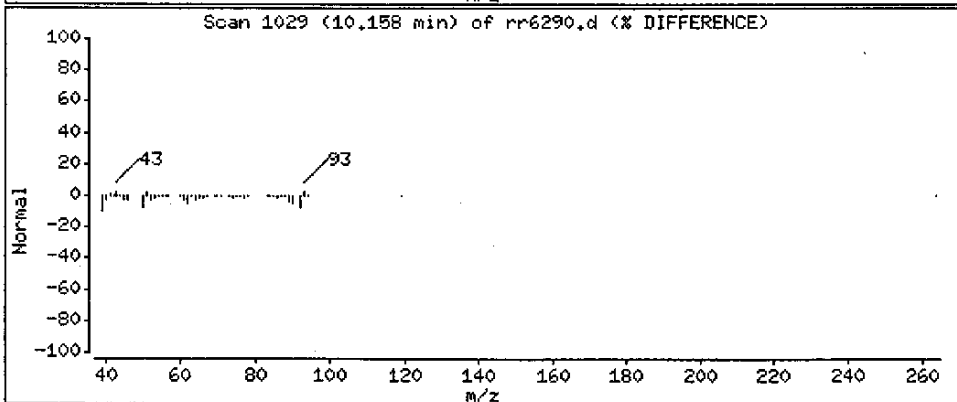
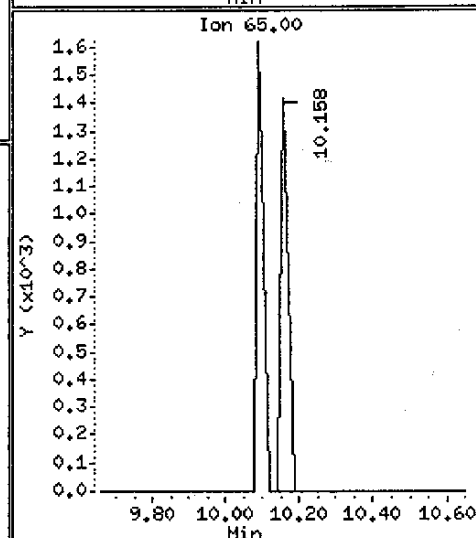
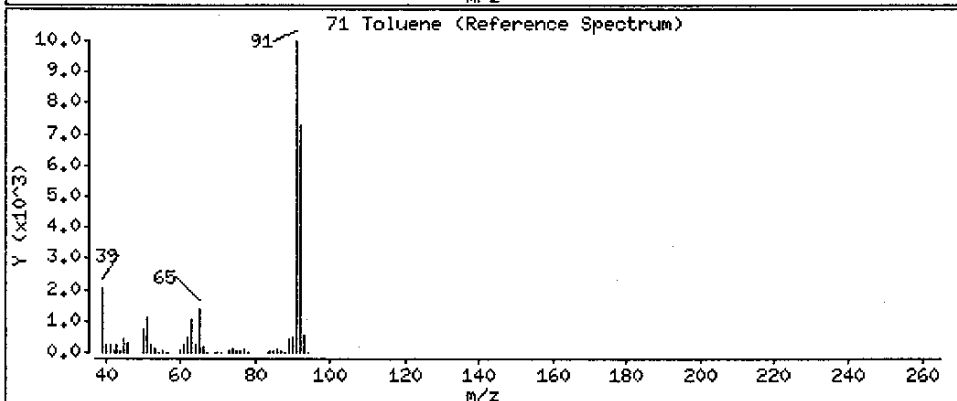
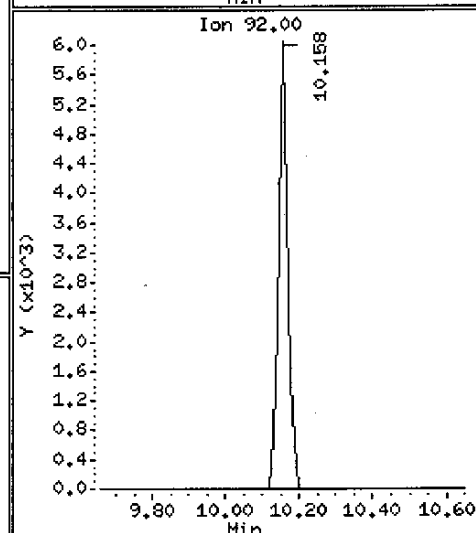
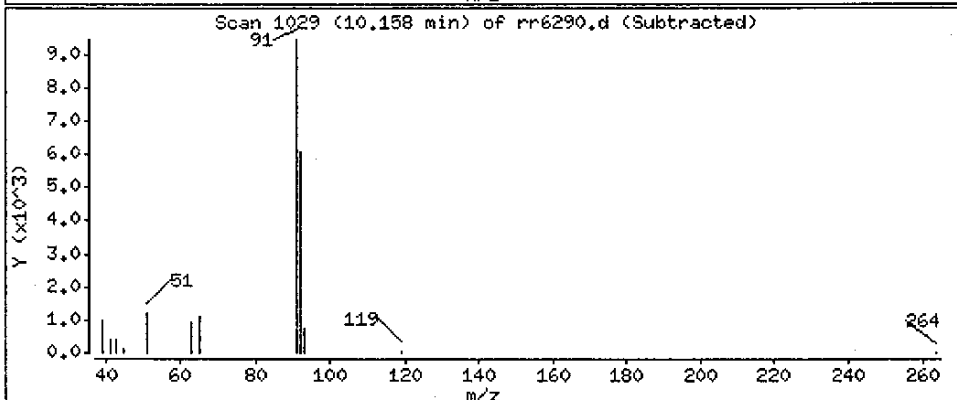
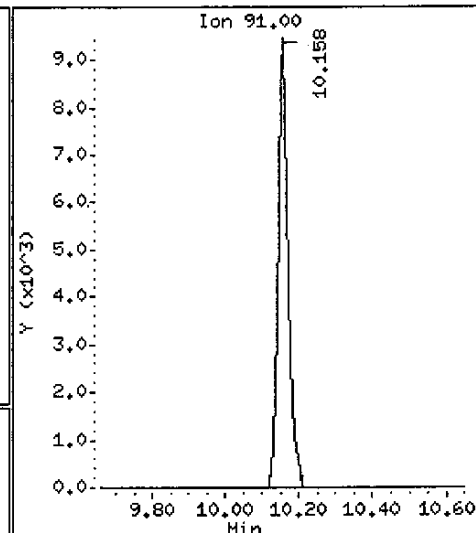
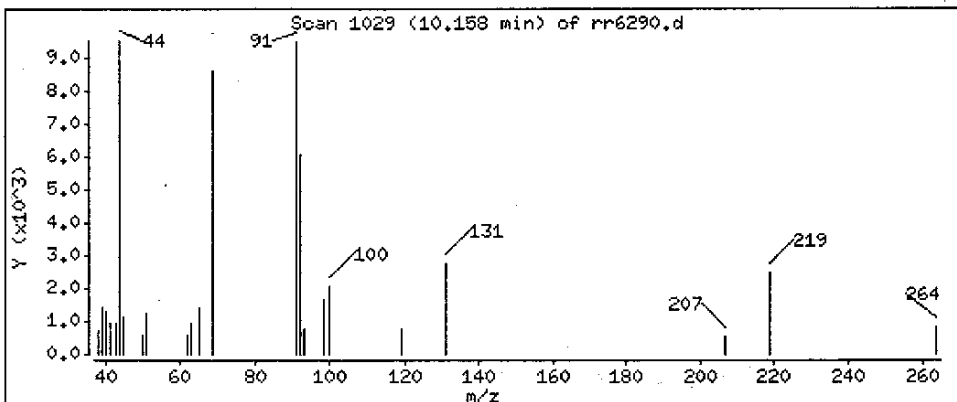
Operator: meierg

Column phase: HP624

Column diameter: 0.32

71 Toluene

Concentration: 0.155906 ug/L



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/R2.i/052704.b/rr6291.d

Lab Smp Id: GGTFH1AAClient Smp ID: 01-MW-03

Inj Date : 27-MAY-2004 20:16

Operator : meiergInst ID: R2.i

Smp Info : GGTFH1AA, D4E210325-06

Misc Info :

Comment : SOP # CORP-MS-0002 20ml Analysis

Method : /chem/R2.i/052704.b/R2-20ml-h2o.m

Meth Date : 27-May-2004 17:49 meiergQuant Type: ISTD

Cal Date : 26-MAY-2004 00:31Cal File: rr6230.d

Als bottle: 2

Dil Factor: 1.00000

Integrator: HP RTECompound Sublist: QK-01.sub

Target Version: 3.40

Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

| Name | Value | Description |
|------|--------|--|
| DF | 1.000 | Dilution Factor |
| Vp | 20.000 | final purge volume (mL) |
| Vs | 20.000 | vlm of sample added to purge vessel (mL) |

Am 5/27

| Compounds | QUANT | SIG | | | | | | CONCENTRATIONS | |
|--------------------------------|--------|-----|------------------------|--------|---------|---------|----------|----------------|---------|
| | | | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN | FINAL |
| | | | | | | | | (ug/L) | (ug/L) |
| * 56 Fluorobenzene | 96 | | 8.645 | 8.642 | (1.000) | 1082553 | 10.0000 | | |
| * 82 Chlorobenzene-d5 | 119 | | 11.586 | 11.584 | (1.000) | 305137 | 10.0000 | | |
| * 107 1,4-Dichlorobenzene-d4 | 152 | | 14.193 | 14.190 | (1.000) | 466441 | 10.0000 | | |
| \$ 46 Dibromofluoromethane | 111 | | 8.074 | 8.072 | (0.934) | 391186 | 10.8929 | 10.8929 | |
| \$ 52 1,2-Dichloroethane-d4 | 65 | | 8.369 | 8.367 | (0.968) | 308151 | 10.8101 | 10.8101 | |
| \$ 70 Toluene-d8 | 98 | | 10.091 | 10.088 | (0.871) | 1080060 | 9.75070 | 9.75070 | |
| \$ 93 Bromofluorobenzene | 95 | | 12.815 | 12.813 | (1.106) | 534648 | 10.0535 | 10.0535 | |
| M 1 1,2-Dichloroethene (total) | 96.00 | | Compound Not Detected. | | | | | | |
| M 2 Xylene (total) | 106.00 | | Compound Not Detected. | | | | | | |
| 3 dichlorodifluoromethane | 85.00 | | Compound Not Detected. | | | | | | |
| 4 dichlorotetrafluoroethane | 85.00 | | Compound Not Detected. | | | | | | |
| 5 Chloromethane | 50.00 | | Compound Not Detected. | | | | | | |
| 6 Vinyl Chloride | 62.00 | | Compound Not Detected. | | | | | | |
| 7 Ethylene Oxide | 43.00 | | Compound Not Detected. | | | | | | |
| 8 Bromomethane | 94.00 | | Compound Not Detected. | | | | | | |
| 9 Chloroethane | 64.00 | | Compound Not Detected. | | | | | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|-----------------------------------|-----------|-------|----------|---------------|----------|----------------|-------------|
| | | | | | | ON-COLUMN | FINAL |
| | MASS | | | | | (ug/L) | (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 10 Dichlorofluoromethane | 67.00 | | Compound | Not Detected. | | | |
| 11 Trichlorofluoromethane | 101.00 | | Compound | Not Detected. | | | |
| 12 Ethanol | 45.00 | | Compound | Not Detected. | | | |
| 13 1,2-dichloro-1,1,2-trifluoroet | 117.00 | | Compound | Not Detected. | | | |
| 15 2,2-dichloro-1,1,1-trifluoroet | 83.00 | | Compound | Not Detected. | | | |
| 14 Ethyl Ether | 59.00 | | Compound | Not Detected. | | | |
| 16 Acrolein | 56.00 | | Compound | Not Detected. | | | |
| 20 2-Propanol | 45.00 | | Compound | Not Detected. | | | |
| 19 1,1-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 17 Trichlorotrifluoroethane | 151.00 | | Compound | Not Detected. | | | |
| 18 Acetone | 43 | 6.481 | 6.465 | (0.750) | 18191 | 3.81504 | 3.81504(a) |
| 21 Iodomethane | 142.00 | | Compound | Not Detected. | | | |
| 24 Carbon Disulfide | 76 | 6.746 | 6.754 | (0.780) | 18394 | 0.12434 | 0.124338(a) |
| 22 Acetonitrile | 41.00 | | Compound | Not Detected. | | | |
| 25 Allyl Chloride | 41.00 | | Compound | Not Detected. | | | |
| 23 Methyl acetate | 43.00 | | Compound | Not Detected. | | | |
| 27 Methylene Chloride | 84 | 6.845 | 6.848 | (0.792) | 14220 | 0.43123 | 0.431233(a) |
| 26 tert-Butyl alcohol | 59.00 | | Compound | Not Detected. | | | |
| 28 Acrylonitrile | 53.00 | | Compound | Not Detected. | | | |
| 29 Methyl t-butyl ether | 73.00 | | Compound | Not Detected. | | | |
| 30 trans-1,2-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 31 Hexane | 57.00 | | Compound | Not Detected. | | | |
| 34 1,1-Dichloroethane | 63.00 | | Compound | Not Detected. | | | |
| 32 Vinyl acetate | 43.00 | | Compound | Not Detected. | | | |
| 33 Isopropyl ether | 87.00 | | Compound | Not Detected. | | | |
| 35 Chloroprene | 53.00 | | Compound | Not Detected. | | | |
| 36 ETBE | 59.00 | | Compound | Not Detected. | | | |
| 40 cis-1,2-Dichloroethene | 96.00 | | Compound | Not Detected. | | | |
| 37 2-Butanone | 43.00 | | Compound | Not Detected. | | | |
| 41 2,2-Dichloropropane | 77.00 | | Compound | Not Detected. | | | |
| 39 Propionitrile | 54.00 | | Compound | Not Detected. | | | |
| 38 Ethyl Acetate | 43.00 | | Compound | Not Detected. | | | |
| 42 Methacrylonitrile | 41.00 | | Compound | Not Detected. | | | |
| 43 Bromochloromethane | 128.00 | | Compound | Not Detected. | | | |
| 45 Tetrahydrofuran | 42.00 | | Compound | Not Detected. | | | |
| 44 Chloroform | 83.00 | | Compound | Not Detected. | | | |
| 47 1,1,1-Trichloroethane | 97.00 | | Compound | Not Detected. | | | |
| 50 1,1-Dichloropropene | 75.00 | | Compound | Not Detected. | | | |
| 51 Carbon Tetrachloride | 117.00 | | Compound | Not Detected. | | | |
| 49 Cyclohexane | 56.00 | | Compound | Not Detected. | | | |
| 48 Isobutanol | 41.00 | | Compound | Not Detected. | | | |
| 55 TAME | 73.00 | | Compound | Not Detected. | | | |
| 54 Benzene | 78.00 | | Compound | Not Detected. | | | |
| 53 1,2-Dichloroethane | 62.00 | | Compound | Not Detected. | | | |
| 57 n-Butanol | 56.00 | | Compound | Not Detected. | | | |
| 59 2-Pentanone | 43.00 | | Compound | Not Detected. | | | |
| 58 Trichloroethene | 130.00 | | Compound | Not Detected. | | | |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|------------------------------|-------------------|--------|--------|---------|------------------------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/L) | FINAL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 61 1,2-Dichloropropane | 63.00 | | | | Compound Not Detected. | | |
| 60 Methyl Methacrylate | 100.00 | | | | Compound Not Detected. | | |
| 62 Methyl cyclohexane | 55.00 | | | | Compound Not Detected. | | |
| 64 Dibromomethane | 93.00 | | | | Compound Not Detected. | | |
| 63 1,4-Dioxane | 88 | 9.235 | 9.239 | (1.068) | 5905 | 59.2466 | 59.2466(a) |
| 65 Bromodichloromethane | 83.00 | | | | Compound Not Detected. | | |
| 66 2-nitropropane | 41.00 | | | | Compound Not Detected. | | |
| 67 2-Chloroethyl vinyl ether | 63.00 | | | | Compound Not Detected. | | |
| 68 cis-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 69 4-Methyl-2-pentanone | 43.00 | | | | Compound Not Detected. | | |
| 71 Toluene | 91 | 10.150 | 10.153 | (0.876) | 47251 | 0.37482 | 0.374820(a) |
| 72 trans-1,3-Dichloropropene | 75.00 | | | | Compound Not Detected. | | |
| 73 Ethyl methacrylate | 69.00 | | | | Compound Not Detected. | | |
| 74 1,1,2-Trichloroethane | 97.00 | | | | Compound Not Detected. | | |
| 76 1,3-Dichloropropane | 76.00 | | | | Compound Not Detected. | | |
| 77 Tetrachloroethene | 164.00 | | | | Compound Not Detected. | | |
| 75 2-Hexanone | 43.00 | | | | Compound Not Detected. | | |
| 78 Dibromochloromethane | 129.00 | | | | Compound Not Detected. | | |
| 79 Tetrahydrothiophene | 60.00 | | | | Compound Not Detected. | | |
| 80 1,2-Dibromoethane | 107.00 | | | | Compound Not Detected. | | |
| 81 1-Chlorohexane | 91.00 | | | | Compound Not Detected. | | |
| 83 Chlorobenzene | 112.00 | | | | Compound Not Detected. | | |
| 84 1,1,1,2-Tetrachloroethane | 131.00 | | | | Compound Not Detected. | | |
| 85 Ethylbenzene | 106.00 | | | | Compound Not Detected. | | |
| 86 m and p-Xylene | 106.00 | | | | Compound Not Detected. | | |
| 87 o-Xylene | 106.00 | | | | Compound Not Detected. | | |
| 88 Styrene | 104.00 | | | | Compound Not Detected. | | |
| 89 Bromoform | 173.00 | | | | Compound Not Detected. | | |
| 90 isopropyl benzene | 105.00 | | | | Compound Not Detected. | | |
| 91 c-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 92 Cyclohexanone | 55.00 | | | | Compound Not Detected. | | |
| 94 1,1,2,2-Tetrachloroethane | 83.00 | | | | Compound Not Detected. | | |
| 95 t-1,4-Dichloro-2-butene | 53.00 | | | | Compound Not Detected. | | |
| 97 Bromobenzene | 156.00 | | | | Compound Not Detected. | | |
| 96 1,2,3-Trichloropropane | 110.00 | | | | Compound Not Detected. | | |
| 98 n-Propylbenzene | 120.00 | | | | Compound Not Detected. | | |
| 99 2-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 100 1,3,5-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 101 4-Chlorotoluene | 126.00 | | | | Compound Not Detected. | | |
| 102 tert-Butylbenzene | 119.00 | | | | Compound Not Detected. | | |
| 103 1,2,4-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 104 sec-Butylbenzene | 134.00 | | | | Compound Not Detected. | | |
| 106 m-Dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 105 4-Isopropyltoluene | 119.00 | | | | Compound Not Detected. | | |
| 108 p-dichlorobenzene | 146.00 | | | | Compound Not Detected. | | |
| 109 1,2,3-Trimethylbenzene | 105.00 | | | | Compound Not Detected. | | |
| 110 n-Butylbenzene | 91.00 | | | | Compound Not Detected. | | |

| Compounds | QUANT SIG | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|---------------------------------|-----------|----|------------------------|--------|----------|----------------|---------|
| | | | | | | ON-COLUMN | FINAL |
| | MASS | | | | | (ug/L) | (ug/L) |
| ===== | ---- | == | ===== | ===== | ===== | ===== | ===== |
| 111 o-Dichlorobenzene | 146.00 | | Compound Not Detected. | | | | |
| 112 1,2-Dibromo-3-chloropropane | 157.00 | | Compound Not Detected. | | | | |
| 113 1,2,4-Trichlorobenzene | 180.00 | | Compound Not Detected. | | | | |
| 114 Hexachlorobutadiene | 225.00 | | Compound Not Detected. | | | | |
| 115 Napthalene | 128.00 | | Compound Not Detected. | | | | |
| 116 1,2,3-Trichlorobenzene | 180.00 | | Compound Not Detected. | | | | |

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: R2.i
Lab File ID: rr6291.d
Lab Smp Id: GGTFH1AA
Analysis Type: VOA
Quant Type: ISTD
Operator: meierg
Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m
Misc Info:

Calibration Date: 05/27/4
Calibration Time: 1604
Client Smp ID: 01-MW-03
Level: LOW
Sample Type: WATER

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|------------|---------|---------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 1117002 | 558501 | 2234004 | 1082553 | -3.08 |
| 82 Chlorobenzene-d5 | 318643 | 159322 | 637286 | 305137 | -4.24 |
| 107 1,4-Dichlorobenze | 494708 | 247354 | 989416 | 466441 | -5.71 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|-----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| ===== | ===== | ===== | ===== | ===== | ===== |
| 56 Fluorobenzene | 8.64 | 8.14 | 9.14 | 8.64 | 0.03 |
| 82 Chlorobenzene-d5 | 11.58 | 11.08 | 12.08 | 11.59 | 0.02 |
| 107 1,4-Dichlorobenze | 14.19 | 13.69 | 14.69 | 14.19 | 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.

STL Denver

RECOVERY REPORT

Client Name: Cabrera Services Client SDG: D4E210325
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: GGTFH1AA Client Smp ID: 01-MW-03
Level: LOW Operator: meierg
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: dcs.spk Quant Type: ISTD
Sublist File: QK-01.sub
Method File: /chem/R2.i/052704.b/R2-20ml-h2o.m
Misc Info:

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 46 Dibromofluorometha | 10.0000 | 10.8929 | 108.93 | 76-116 |
| \$ 52 1,2-Dichloroethane | 10.0000 | 10.8101 | 108.10 | 59-129 |
| \$ 70 Toluene-d8 | 10.0000 | 9.75070 | 97.51 | 76-116 |
| \$ 93 Bromofluorobenzene | 10.0000 | 10.0535 | 100.54 | 74-114 |

Data File: /chem/R2,i/052704.b/rr6291.d
Date : 27-MAY-2004 20:16
Client ID: 01-MW-03
Sample Info: GCTFH1AA,,D4E210325-06

Page 7

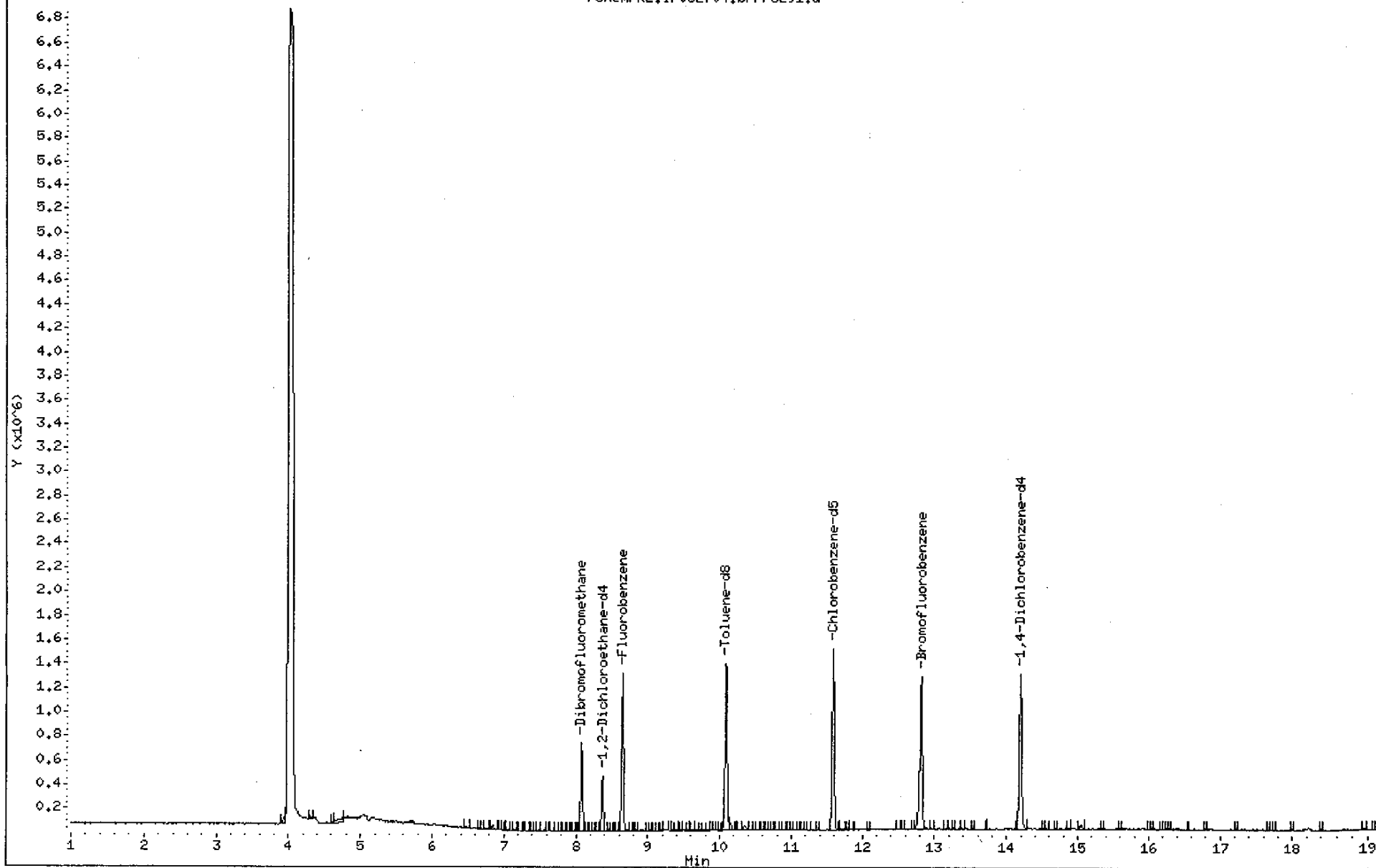
Instrument: R2.i

Operator: meierg

Column phase: HP624

Column diameter: 0.32

/chem/R2,i/052704.b/rr6291.d



Date : 27-MAY-2004 20:16

Client ID: 01-MW-03

Instrument: R2.i

Sample Info: GGTFFH1AA,,D4E210325-06

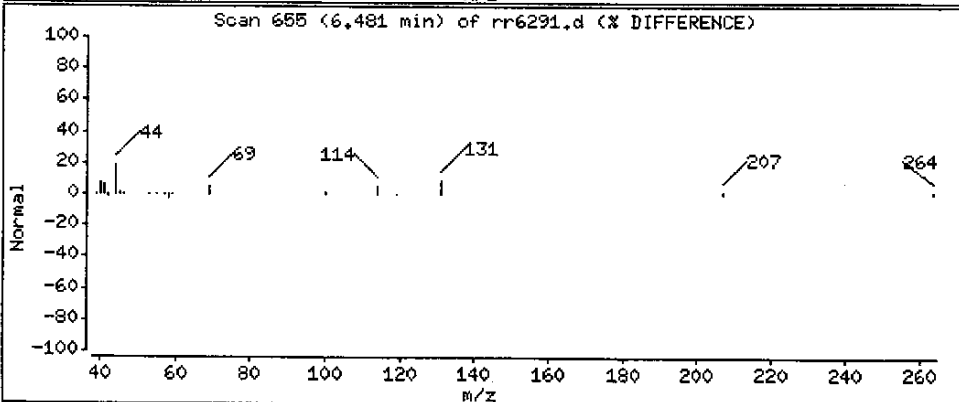
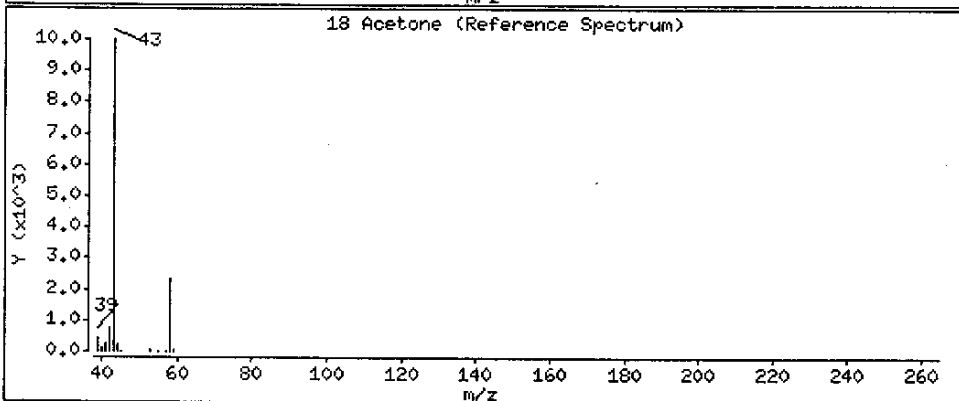
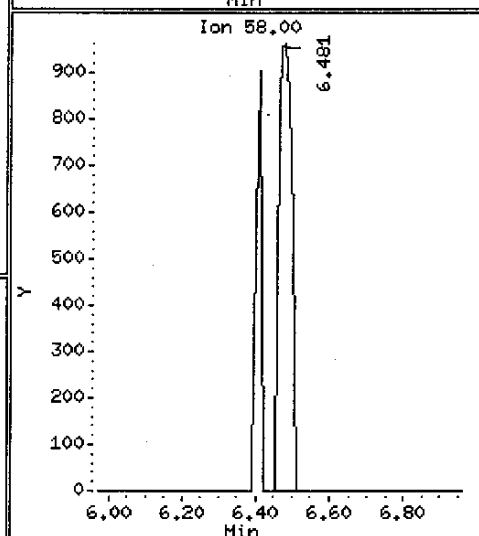
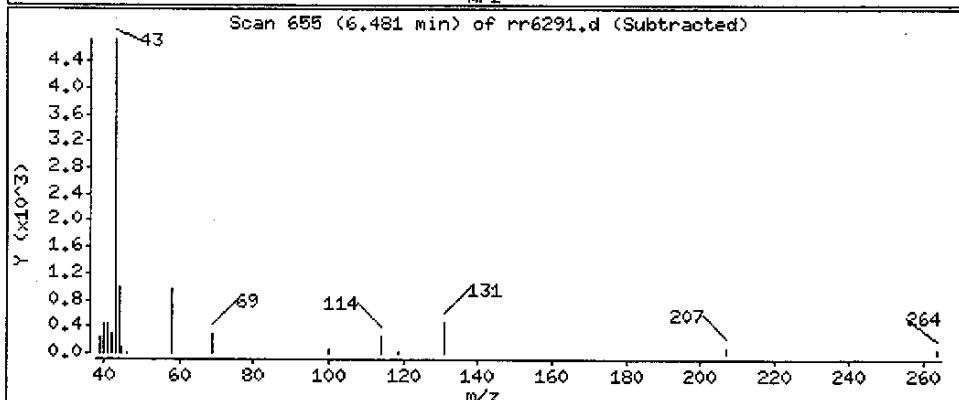
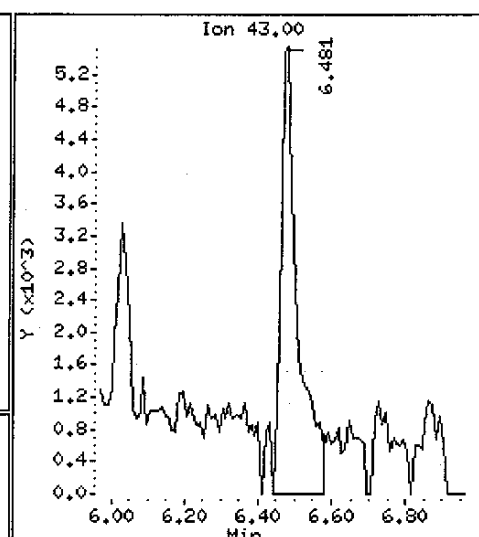
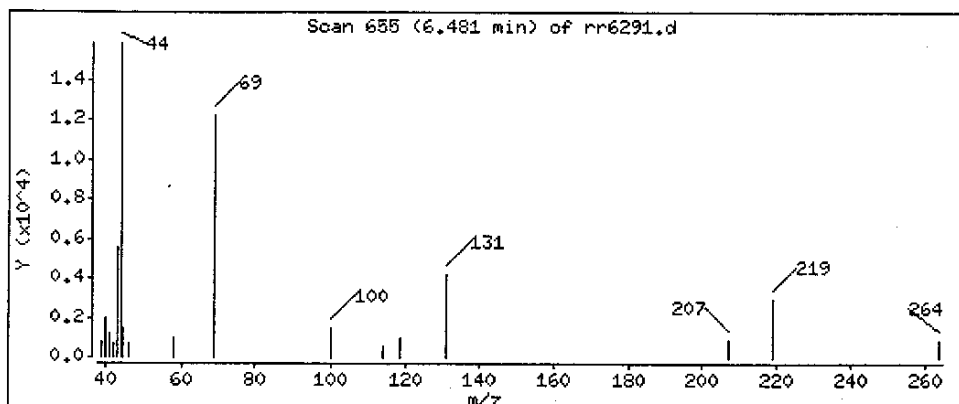
Operator: meierg

Column phase: HP624

Column diameter: 0.32

18 Acetone

Concentration: 3.81504 ug/L



Data File: /chem/R2.i/052704.b/rr6291.d

Page 9

Date : 27-MAY-2004 20:16

Client ID: 01-MW-03

Instrument: R2.i

Sample Info: GGTFFH1AA,,D4E210325-06

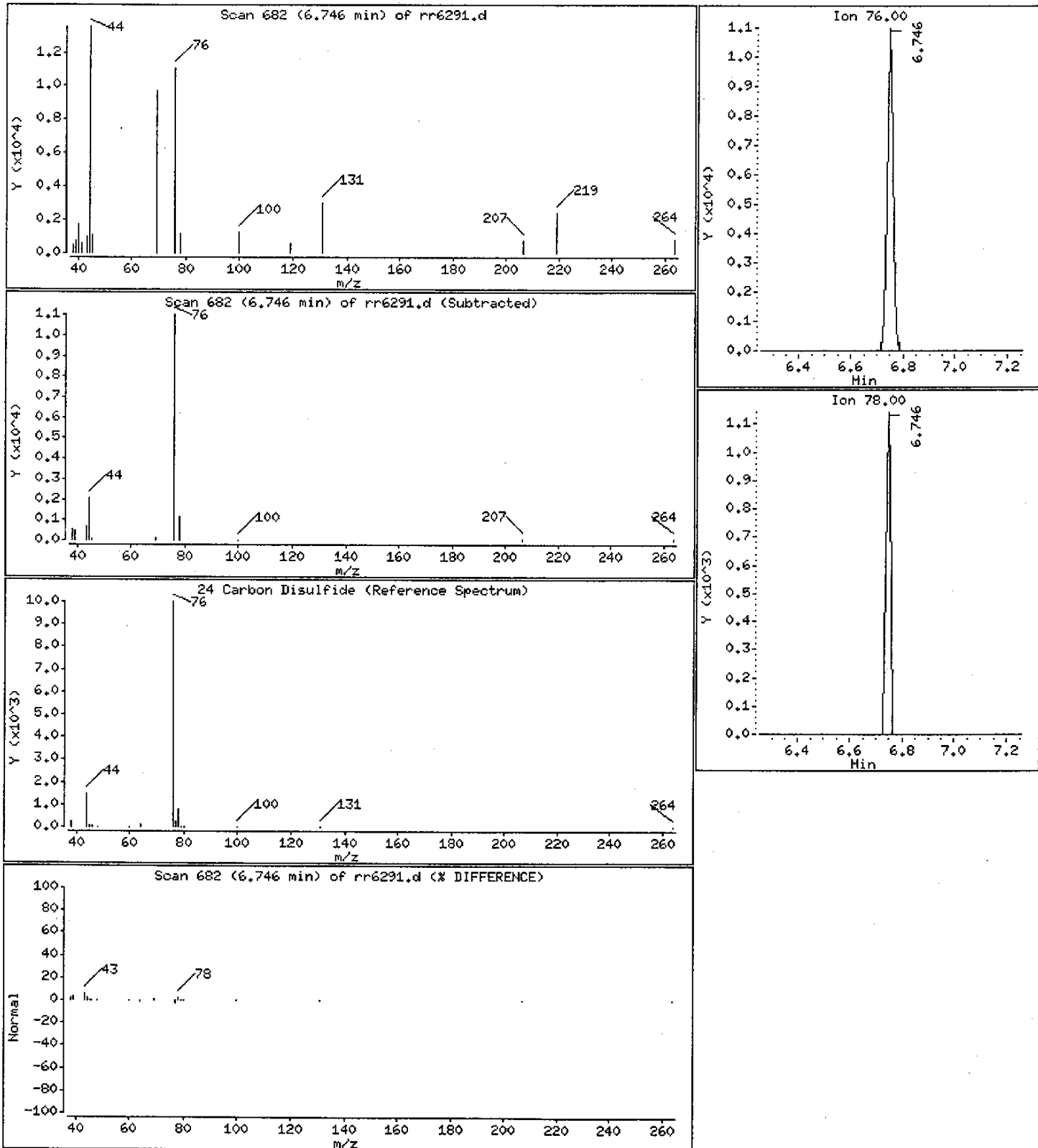
Operator: meierg

Column phase: HP624

Column diameter: 0.32

24 Carbon Disulfide

Concentration: 0.124338 ug/L



Date : 27-MAY-2004 20:16

Client ID: 01-MW-03

Instrument: R2.i

Sample Info: GGTFFH1AA,,D4E210325-06

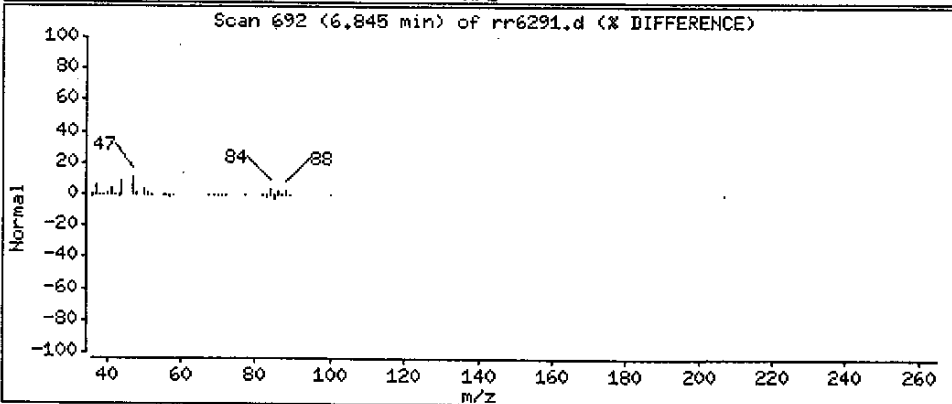
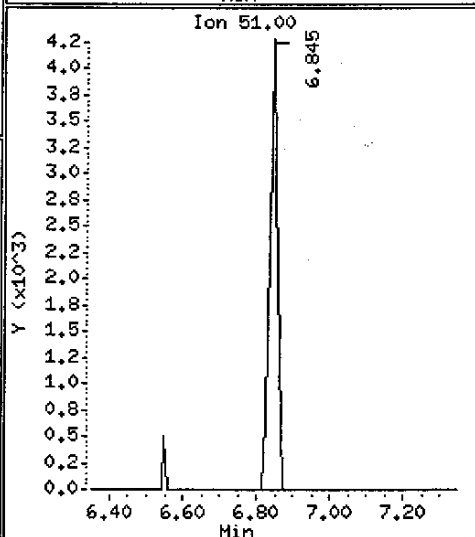
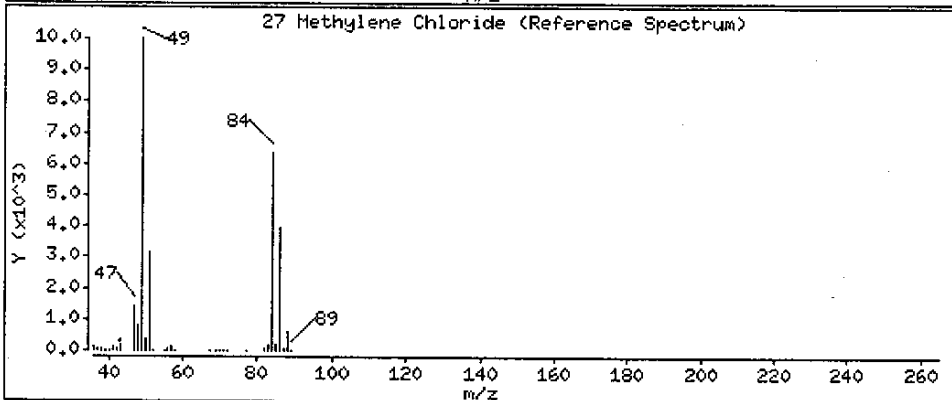
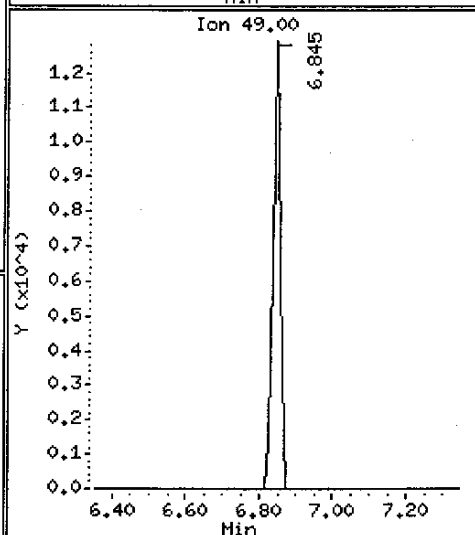
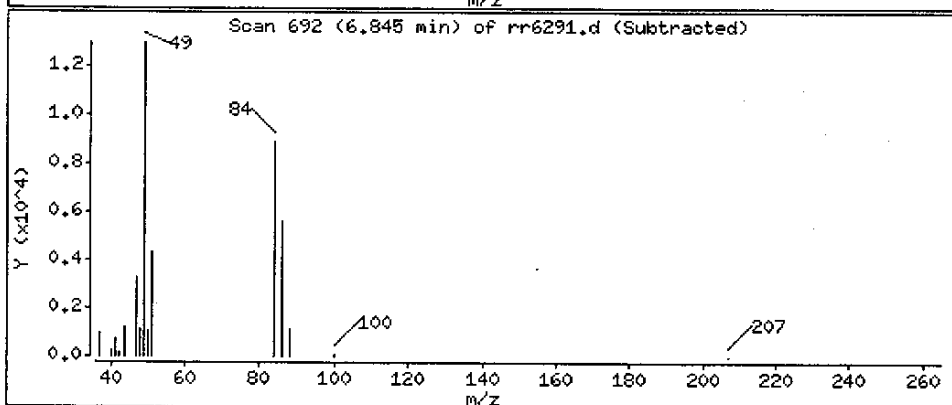
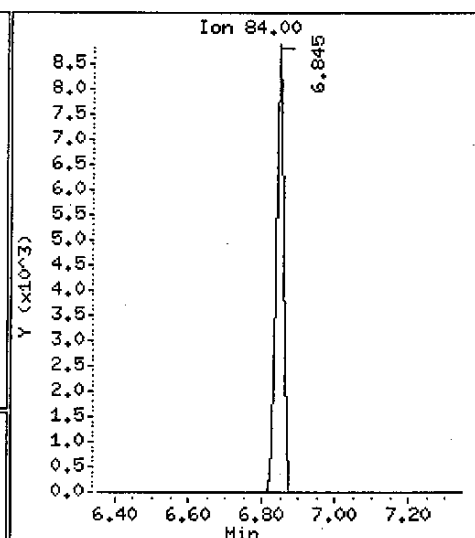
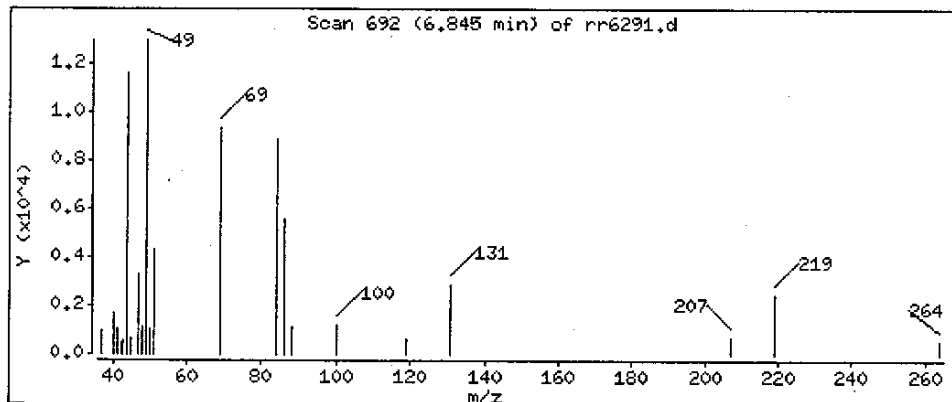
Operator: meierg

Column phase: HP624

Column diameter: 0.32

27 Methylene Chloride

Concentration: 0.431233 ug/L



Date : 27-MAY-2004 20:16

Client ID: 01-MW-03

Instrument: R2.i

Sample Info: CGTFH1AA,,D4E210325-06

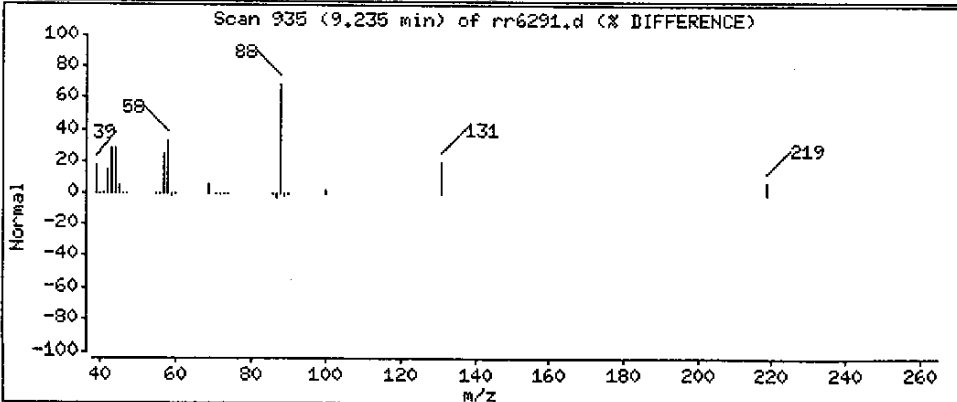
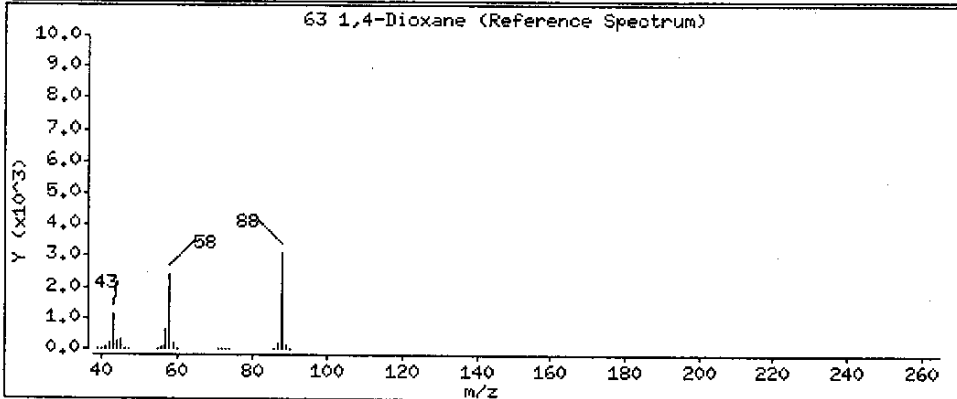
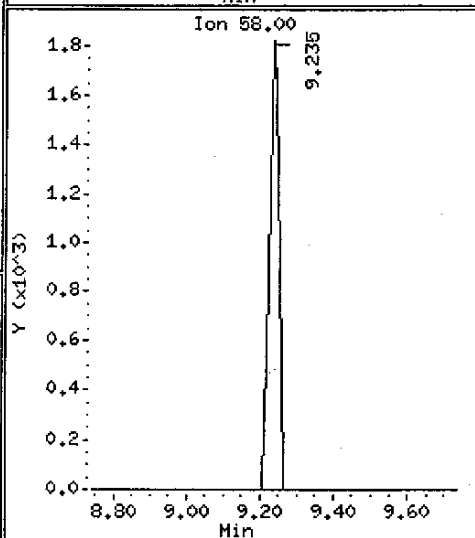
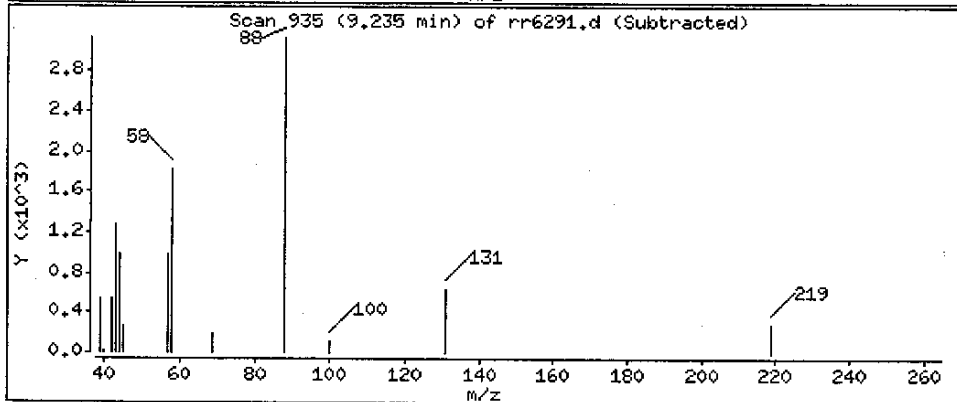
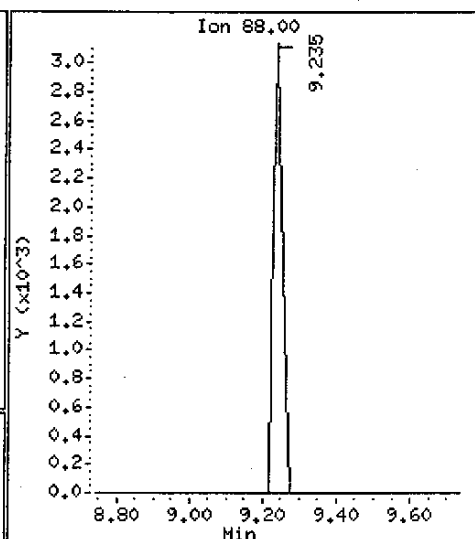
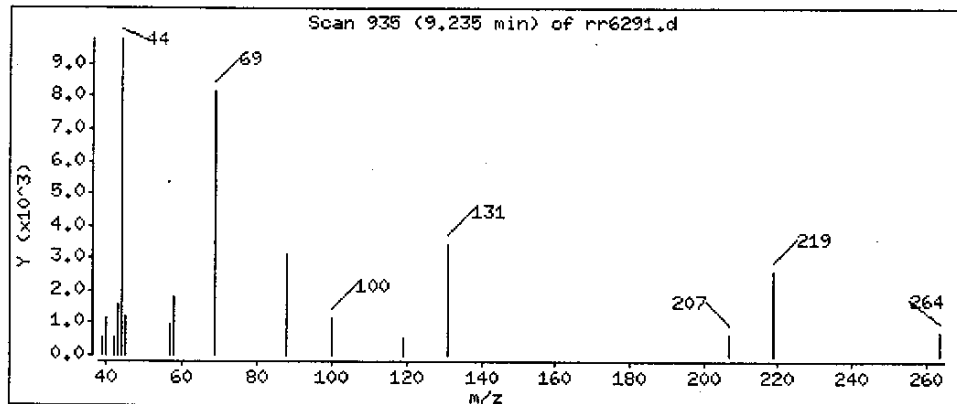
Operator: meierg

Column phase: HP624

Column diameter: 0.32

63 1,4-Dioxane

Concentration: 59.2466 ug/L



Date : 27-MAY-2004 20:16

Client ID: 01-MW-03

Instrument: R2.i

Sample Info: GGTFFH1AA,,D4E210325-06

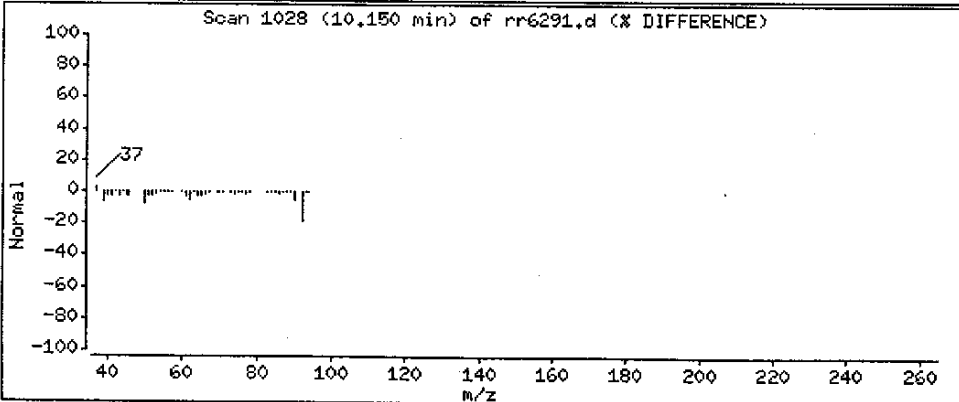
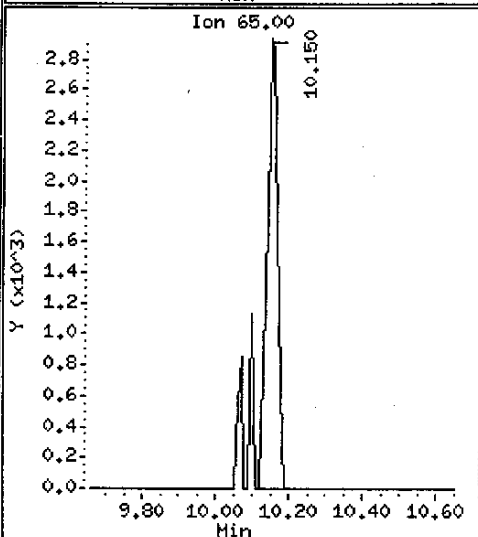
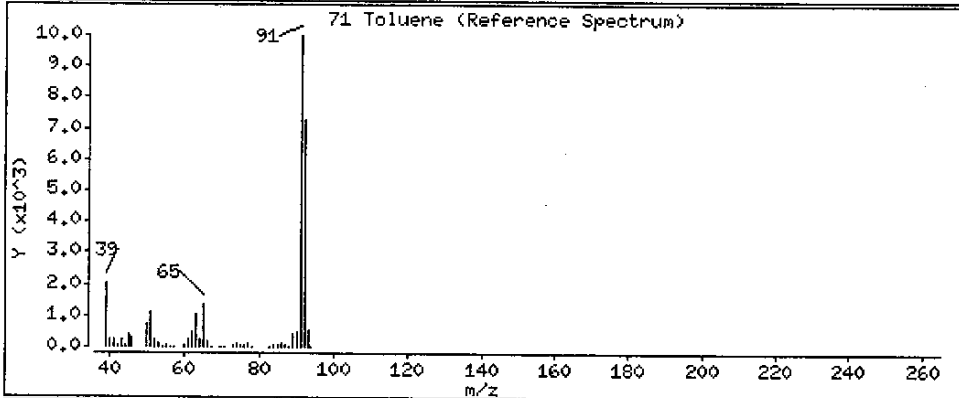
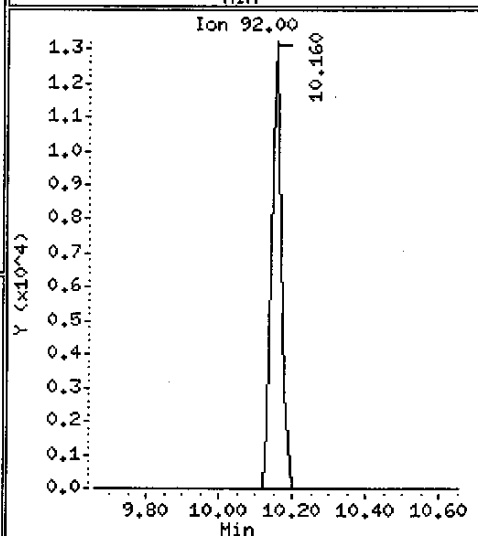
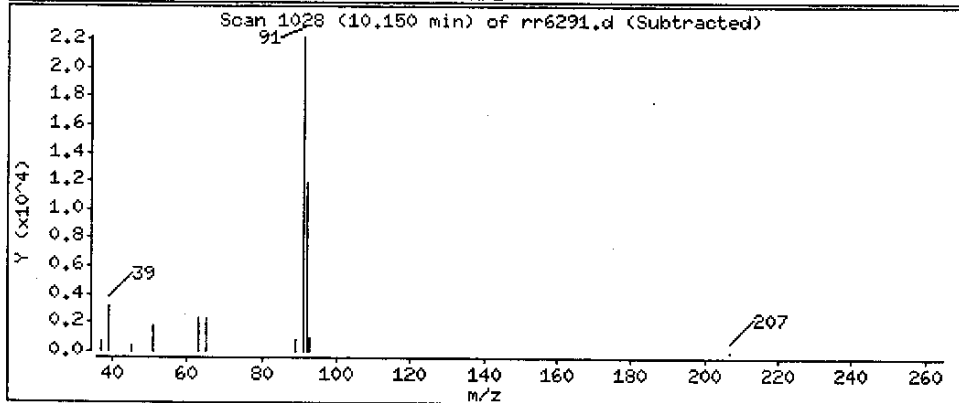
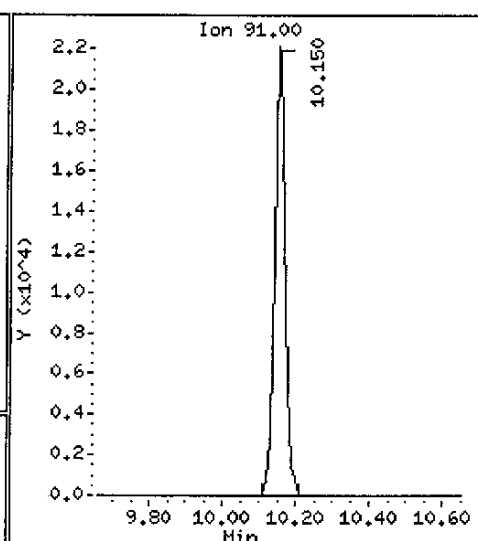
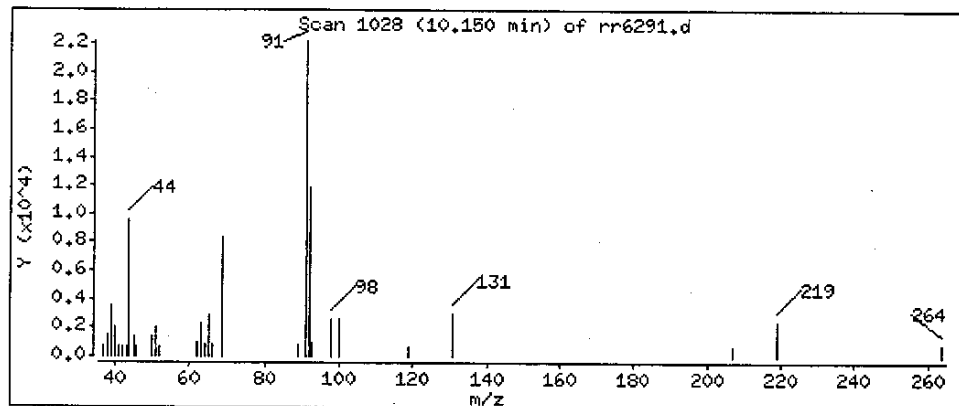
Operator: meierg

Column phase: HP624

Column diameter: 0.32

71 Toluene

Concentration: 0.374820 ug/L



Semivolatile GC/MS

Supporting Documentation

Sample Sequence, Chromatograms/Mass Spectra

SEVERN

TRENT

STL

Lot ID: DHE210325

Client: Cabrera Services

Method: 8270C

Associated Samples: 1-6, 8, 9

Batch #(s): 4145234

I certify that, to the best of my knowledge, the attached package represents a complete and accurate copy of the original data.

Signature/Date: _____

**GC/MS SEMIVOLATILE
ORGANIC EXTRACTION
LOG SHEETS**



STL

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEETRun Date: 5/27/04
Time: 23:26:35

| LEV | LEV | | LEV | LEV | |
|-----|-----|--------|-----|-----|-------------------------------------|
| 1 | 2 | | 1 | 2 | |
| Y | Y | Blank | Y | Y | Weights/Volumes |
| Y | Y | Check | Y | Y | Spike & Surrogate Worksheet |
| - | - | MS/MSD | Y | Y | Vial contains correct volume |
| | | | Y | Y | Labels, greenbars, worksheets |
| | | | | | computer batch: correct & all match |
| | | | Y | Y | Anomalies to Extraction Method |

- Expanded Deliverable
- COC Completed
- Bench Sheet Copied
- Package Submitted to Analytical Group
- Bench Sheet Copied per COC

Extractionist: 006091 Jon Laviolette

* QC BATCH: 4145234 *

PREP DATE: 5/24/04 11:00
COMP DATE: 5/27/04 18:45

Concentrationist: 002862 Janel Motichka
009005 Tamera Ashcraft

Reviewer/Date: ASHCRAFT / 5/27/04

Base/Neutrals and Acids (8270C)
LIQ/LIQ, CONT (A/B/N) - Acid->Base

| EXTR EXPR | ANL DUE | LOT#,MSRUN#/ WORK ORDER | TEST FLGS | EXT | MTH | MATRIX | INIT/FIN WT/VOL | PH'S INIT | ADJ1 | ADJ2 | EXTRACTION | SOLVENTS VOL | EXCHANGE | VOL | SPIKE STANDARD/ SURROGATE ID |
|----------------------|------------|-----------------------------|--------------|-----|-----|--------|--------------------|--------------|------|------|------------|-----------------|----------|-----|---------------------------------|
| 5/27/04 COMMENTS: | 6/03/04 | D4E210201-001 GGQ0H-1-AQ | R | 49 | QL | WATER | 985mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | | .0 | BNA1530 1.0ML 5-12-04 |
| 5/27/04 COMMENTS: | 6/03/04 | D4E210201-002 GGQ26-1-A3 | R | 49 | QL | WATER | 986mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | | .0 | BNA1530 1.0ML 5-12-04 |
| 5/27/04 COMMENTS: | 6/03/04 | D4E210201-003 GGQ3X-1-A3 | R | 49 | QL | WATER | 1022mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | | .0 | BNA1530 1.0ML 5-12-04 |
| 5/27/04 COMMENTS: | 6/03/04 | D4E210201-004 GGQ32-1-A3 | R | 49 | QL | WATER | 961mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | | .0 | BNA1530 1.0ML 5-12-04 |
| 5/27/04 COMMENTS: | 6/02/04 | D4E210241-001 GGRKW-1-AQ | R | 49 | QL | WATER | 998mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | | .0 | BNA1530 1.0ML 5-12-04 |
| 5/26/04 COMMENTS: | 6/10/04 | D4E210325-001 GGTER-1-AC | D | 49 | QL | WATER | 990mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | | .0 | BNA1530 1.0ML 5-12-04 |
| 5/26/04 COMMENTS: | 6/10/04 | D4E210325-002 GGTE3-1-AC | D | 49 | QL | WATER | 978mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | | .0 | BNA1530 1.0ML 5-12-04 |

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEETRun Date: 5/27/04
Time: 23:26:35

 * QC BATCH: 4145234 *
 *

PREP DATE: 5/24/04 11:00
 COMP DATE: 5/27/04 18:45

| EXTR EXPR | ANL DUE | LOT#,MSRUN#/ WORK ORDER | TEST FLGS | EXT | MTH | MATRIX | INIT/FIN WT/VOL | INIT | PH"S ADJ1 | ADJ2 | EXTRACTION | SOLVENTS VOL EXCHANGE | VOL | SPIKE STANDARD/ SURROGATE ID |
|----------------------|------------|-----------------------------|--------------|-----|-----|--------|--------------------|------|--------------|------|------------|--------------------------|-----|---------------------------------|
| 5/26/04 COMMENTS: | 6/10/04 | D4E210325-003 GGTE6-1-AC | D | 49 | QL | WATER | 1024mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | .0 | BNA1530 1.0ML 5-12-04 |
| 5/26/04 COMMENTS: | 6/10/04 | D4E210325-004 GGTE7-1-AC | D | 49 | QL | WATER | 969mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | .0 | BNA1530 1.0ML 5-12-04 |
| 5/26/04 COMMENTS: | 6/10/04 | D4E210325-005 GGTFE-1-AC | D | 49 | QL | WATER | 1025mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | .0 | BNA1530 1.0ML 5-12-04 |
| 5/26/04 COMMENTS: | 6/10/04 | D4E210325-006 GGTFH-1-AC | D | 49 | QL | WATER | 1051mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | .0 | BNA1530 1.0ML 5-12-04 |
| 5/27/04 COMMENTS: | 6/10/04 | D4E210325-008 GGTFX-1-AC | D | 49 | QL | WATER | 1011mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | .0 | BNA1530 1.0ML 5-12-04 |
| 5/27/04 COMMENTS: | 6/10/04 | D4E210325-009 GGTF3-1-AC | D | 49 | QL | WATER | 948mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | .0 | BNA1530 1.0ML 5-12-04 |
| 5/28/04 COMMENTS: | 5/31/04 | D4E210431-016 GGVD2-1-AT | R | 49 | QL | WATER | 1055mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | .0 | BNA1530 1.0ML 5-12-04 |
| 5/28/04 COMMENTS: | 5/31/04 | D4E210431-017 GGVD3-1-AT | R | 49 | QL | WATER | 1049mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | .0 | BNA1530 1.0ML 5-12-04 |
| 5/28/04 COMMENTS: | 5/31/04 | D4E210431-018 GGVD4-1-AT | R | 49 | QL | WATER | 1056mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | .0 | BNA1530 1.0ML 5-12-04 |
| 5/28/04 COMMENTS: | 6/02/04 | D4E210434-002 GGVEL-1-AC | R | 49 | QL | WATER | 961mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | .0 | BNA1530 1.0ML 5-12-04 |

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEETRun Date: 5/27/04
Time: 23:26:35*****
*
* QC BATCH: 4145234 *
*
*****PREP DATE: 5/24/04 11:00
COMP DATE: 5/27/04 18:45

| EXTR EXPR | ANL DUE | LOT#,MSRUN#/ WORK ORDER | TEST FLGS | EXT | MTH | MATRIX | INIT/FIN WT/VOL | PH"S INIT | ADJ1 | ADJ2 | EXTRACTION | SOLVENTS VOL | EXCHANGE | VOL | SPIKE STANDARD/ SURROGATE ID |
|----------------------|------------|------------------------------|--------------|-----|-----|--------|--------------------|--------------|------|------|------------|-----------------|----------|-----|--|
| 5/28/04 COMMENTS: | 6/02/04 | D4E210434-003 GGVEM-1-AC | R | 49 | QL | WATER | 974mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | | .0 | BNA1530 1.0ML 5-12-04 |
| 5/28/04 COMMENTS: | 6/02/04 | D4E210434-004 GGVEP-1-AC | R | 49 | QL | WATER | 919mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | | .0 | BNA1530 1.0ML 5-12-04 |
| 5/28/04 COMMENTS: | 0/00/00 | D4E240000-234 GGXHG-1-AAB | | 49 | QL | WATER | 1000mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | | .0 | BNA1530 1.0ML 5-12-04 |
| 5/28/04 COMMENTS: | 0/00/00 | D4E240000-234 GGXHG-1-ACC | | 49 | QL | WATER | 1000mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | | .0 | BNA1528 1.0ML 5-10-04 BNA1530 1.0ML 5-12-04 |
| 5/28/04 COMMENTS: | 0/00/00 | D4E240000-234 GGXHG-1-ADL | R | 49 | QL | WATER | 1000mL 1.00mL | 7.0 | 2.0 | 12.0 | MECL2 | 150.0 | | .0 | BNA1528 1.0ML 5-10-04 BNA1530 1.0ML 5-12-04 |

DEN-OP-0005 MECL2:Y52E39 ACID:236-37-N BASE:4041-21 H2O:ELGA
S/S:JL W:AIS NA2SO4:Y31626 BATH TEMP: 84C

R = RUSH C = CLP
E = EPA 600 D = EXP.DEL)
M = CLIENT REQ MS/MSD

NUMBER OF WORK ORDERS IN BATCH: 22

**GC/MS SEMIVOLATILE
INSTRUMENT
LOG SHEETS**



STL

CORP-MS-0001 DEN or DEN-MS-001 (8270C/625)

DEN-MS-0002 (8270C SIM)

Maint: Removed R/D column, replaced normal 145-5 New autotune
 Changed septa, liner, o-ring, Trimmed 6' column
 Instrument K
 5973 MSD
 MSBNA 1377

Target Batch 052904, b

| Lot # / Sample | W.O.# | Amount | Dilution | Date | Initials | File Number | IS OK | SS OK | DIL OK | Comments | Batch # |
|----------------|----------|--------|----------|---------|----------|-------------|-------|-------|--------|------------|---------|
| Rinse | NA | | 0.5 µL | 5/24/04 | MA | K 3362 | NA | NA | NA | | |
| DETPP | BNA-1512 | 25 µg | | | | 63 | | | | Hit | |
| HSL Test | ↓ 1509 | 5 µg | | | | 64 | | | | ad' emv | |
| DETPP | ↓ 1512 | 5 µg | | | | 65 | ✓ | ✓ | | lit 8:25 ← | |
| HSL-0005 | BNA-1509 | 5 µg | | | | 66 | ✓ | NA | | OK | |
| HSL-0010 | | 10 µg | | | | 67 | ✓ | | | OK | |
| HSL-0020 | | 20 | | | | 68 | ✓ | | | OK | |
| HSL-0030 | | 50 | | | | 69 | ✓ | | | OK | |
| HSL-0040 | | 80 | | | | 70 | ✓ | | | OK | |
| HSL-0050 | | 120 | | | | 71 | ✓ | | | OK | |
| HSL-0060 | | 160 | | | | 72 | ✓ | | | OK | |
| HSL-0070 | | 200 | | | | 73 | ✓ | | | OK | |
| HSL-0100-SB | BNA-1346 | 100 | | | ✓ | 74 | ✓ | | | OK | |
| APG-0010 | BNA-1402 | 10 | | | ✓ | 75 | ✓ | | | OK | |
| APG-0020 | | 20 | | | | 76 | ✓ | | | OK | |
| APG-0030 | | 50 | | | | 77 | ✓ | | | OK | |
| APG-0040 | | 80 | | | | 78 | ✓ | | | OK | |
| APG-0050 | | 120 | | | | 79 | ✓ | | | OK | |
| APG-0060 | | 160 | | | | 80 | ✓ | | | OK | |
| APG-0070 | | 200 | | | | 81 | ✓ | | | OK | |
| APG-0100-SB | BNA-1477 | 100 | ✓ | | | 82 | ✓ | | ✓ | OK | |
| APG-0100-SB | BNA-1477 | 100 | ✓ | | | 83 | | | ✓ | | 4446139 |

STL Denver

GC/MS Semi-Volatile Analysis

CORP-MS-0001 DEN or DEN-MS-001 (8270C/625)

DEN-MS-0002 (8270C SIM)

Maint: Removed RID column, replaced normal MS-S, New auto tune,
 Changed septa, liner, spring, Trimmed 6' column, 05-27-04
 Instrument K
 5973 MSD
 MS: MSBNA 137.7

Target Batch 0529041b

| Target Batch 03210115 | | | | | | | | | | | Batch # |
|-----------------------|----------|----------|----------|---------|----------|-------------|-------|-------|--------|--------------|----------|
| Lot # / Sample | W.O.# | Amount | Dilution | Date | Initials | File Number | IS OK | SS OK | DIL OK | Comments | Batch # |
| Rinse | NA | | 0.5 µL | 5/24/04 | MA | K 3362 | NA | NA | NA | | |
| DFTPP | BNA 1512 | 25 mg OC | | | | 63 | | | | Hit | |
| HSL Test | ↓ 1509 | 5 mg/a | | | | 64 | | | | adj emv | |
| DFTK | ↓ 1512 | 5 mg/a | | | | 65 | ✓ | ✓ | | lit 2 8:25 ← | |
| HSL 0005 | BNA 1509 | 5 mg/a | | | | 66 | ✓ | NA | | OK | |
| HSL 0010 | | 10 mg | | | | 67 | ✓ | | | OK | |
| HSL 0020 | | 20 | | | | 68 | ✓ | | | OK | |
| HSL 0030 | | 30 | | | | 69 | ✓ | | | OK | |
| HSL 0040 | | 40 | | | | 70 | ✓ | | | OK | |
| HSL 0050 | | 50 | | | | 71 | ✓ | | | OK | |
| HSL 0060 | | 60 | | | | 72 | ✓ | | | OK | |
| HSL 0070 | | 70 | | | | 73 | ✓ | | | OK | |
| HSL 0080 | | 80 | | | | 74 | ✓ | | | OK | |
| HSL 0090 | | 90 | | | | 75 | ✓ | | | OK | |
| HSL 0100 | | 100 | | | | 76 | ✓ | | | OK | |
| HSL 0100-SSV | BNA 1346 | 10 | | | | 77 | ✓ | | | OK | |
| HSL 0110 | BNA 1402 | 20 | | | | 78 | ✓ | | | OK | |
| HSL 0120 | | 30 | | | | 79 | ✓ | | | OK | |
| HSL 0130 | | 40 | | | | 80 | ✓ | | | OK | |
| HSL 0140 | | 50 | | | | 81 | ✓ | | | OK | |
| HSL 0150 | | 60 | | | | 82 | ✓ | | | OK | |
| HSL 0160 | | 70 | | | | 83 | ✓ | | | OK | |
| HSL 0170 | | 80 | | | | 84 | ✓ | | | OK | |
| HSL 0180 | | 90 | | | | 85 | ✓ | | | OK | |
| HSL 0190 | | 100 | | | | 86 | ✓ | | | OK | |
| HSL 0190-SSV | BNA 1417 | 100 | ✓ | | | 87 | ✓ | ✓ | ✓ | OK | |
| Q4E15000-139 | 6605N/mt | 100 µL | 100 µL | | | 88 | ✓ | | ✓ | | 414-6139 |

CORP-MS-0001 DEN or DEN-MS-0011 (8270C/625)

DEN-MS-0002 (8270C SIM)

Instrument KIS: MSBNA 1377

5973 MSD

Target Batch

060204.b

Maint. - replaced septa, liner, gold seal, clipped N13" column.
 Baked JMP 6/2/04

| Lot # / Sample | W.O.# | Amount | Dilution | Date | Initials | File Number | IS OK | SS OK | DIL OK | Comments | Batch # |
|----------------|---------------|--------|----------|--------|----------|-------------|-------|-------|--------|-------------|----------|
| RINSE | | | 0.5ml | 6/2/04 | JMP | K3464 | | | | | |
| DETPP | - BNA1512 | 25ms | | | | K3465 | N/A | N/A | N/A | Hit @ 17:03 | |
| HSL-0080 | - BNA1509 | 8ms/ml | | | | 66 | ✓ | ✓ | ✓ | OK | |
| AP9-0080 | - BNA1406 | ↓ | ↓ | | | 67 | ✓ | ✓ | ✓ | OK | |
| D4E240000-234 | B1K G6X4G1AA | 1000ml | 100% | | | 68 | ✓ | ✓ | ✓ | OK | 4145234 |
| ↓ | CCS ↓ IAC | ↓ | ↓ | | | 69 | ✓ | ✓ | ✓ | OK | ↓ |
| ↓ | CCS ↓ IAD | ↓ | ↓ | | | 70 | ✓ | ✓ | ✓ | OK | |
| D4E180414 | 006 G66DWIAC | 947ml | 20x | | | 71 | ✓ | ✓ | ✓ | OK | SV=10mls |
| ↓ | 007 G66DXIAC | 987ml | 5x | | | 72 | ✓ | ✓ | ✓ | OK | 4140117 |
| D4E210201 | 001 G660H1AQ | 985ml | 100% | | | 73 | ✓ | ✓ | ✓ | OK | ↓ |
| ↓ | 002 G66Q261A3 | 986ml | | | | 74 | ✓ | ✓ | ✓ | OK | 4145234 |
| ↓ | 003 G66Q3X1A3 | 1022ml | | | | 75 | ✓ | ✓ | ✓ | OK | |
| ↓ | 004 G66Q321A3 | 961ml | | | | 76 | ✓ | ✓ | ✓ | OK | |
| D4E210241 | 001 G66KWIAC | 998ml | | | | 77 | ✓ | ✓ | ✓ | OK | |
| D4E210325 | 001 G66TEIAC | 990ml | | | | 78 | ✓ | ✓ | ✓ | OK | |
| | 002 G66TE3IAC | 978ml | | | | 79 | ✓ | ✓ | ✓ | OK | |
| | 003 G66TE6IAC | 1024ml | | | | 80 | ✓ | ✓ | ✓ | OK | |
| | 004 G66TE7IAC | 969ml | | | | 81 | ✓ | ✓ | ✓ | OK | |
| | 005 G66TEIAC | 1025ml | | | | 82 | ✓ | ✓ | ✓ | OK | |
| | 006 G66TPIAC | 1051ml | | 6/3/04 | | 83 | ✓ | ✓ | ✓ | OK | |
| | 008 G66TFXIAC | 1011ml | | | | 84 | ✓ | ✓ | ✓ | OK | |
| ↓ | 009 G66TF3IAC | 948ml | ↓ | | | 85 | ✓ | ✓ | ✓ | OK | ↓ |

GC/MS Semi-Volatile Analysis

CORP-MS-0001 DEN or DEN-MS-0011 (82702/625)

DEN-MS-0002 (8270C SIM)

Instrument KTarget Batch 060204.6 Cont.IS: MSBNA 1377^{5973 MS0}

| Lot # / Sample | W.O.# | Amount | Dilution | Date | Initials | File Number | IS OK | SS OK | DIL OK | Comments | Batch # | |
|----------------|-------|----------|----------|------|----------|-------------|-------|-------|--------|----------|--------------|---------|
| D4E210431 | 016 | GGVD21AT | 1055mL | 100% | 6/3/04 | JMP | K3486 | ✓ | 3✓ | ✓ | | 4145234 |
| ↓ | 017 | GGVD31AT | 1049mL | | | | 87 | ✓ | ✓ | ✓ | (OK) | |
| ↓ | 018 | GGVD41AT | 1056mL | | | | 88 | ✓ | ✓ | ✓ | (OK) | |
| D4E210434 | 002 | GGVE11AC | 961mL | | | | 89 | ✓ | ✓ | ✓ | (OK) | |
| ↓ | 003 | GGVE11AC | 974mL | | | | 90 | ✓ | ✓ | ✓ | (OK) | |
| ↓ | 004 | GGVE11AC | 919mL | | | | 91 | ✓ | ✓ | ✓ | (OK) 03:07 ← | |
| RINSES | | | 0.5mL | | | | 92-95 | | | | | |
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JMP 6/3/04

**GC/MS SEMIVOLATILE
STANDARD DATA**



STL

GC/MS Initial Calibration Review Checklist

STL Denver

Instrument ID and Date:

K 052904.6

Check Method Used: Analysis

☒ 625☒ 8270☒ Other SV

HSL (non-AFCEE)

☐ 524.2☐ 624☐ 8260B☐ Other VOA

VOA Preparation

☐ 5mL☐ 20mL☐ 5035 Low☐ 5035 High☐ 5030 Low☐ 5030 High

| Review Items | Level 1 | | | Level 2 | Comments |
|---|---------|----|-----|---------|---------------------------------------|
| | Yes | No | N/A | | |
| Initial Calibration | | | B/p | | |
| 1. BFB/DFTPP meets criteria? | ✓ | | | ✓ | |
| 2. ICAL date and instrument ID verified? | ✓ | | | ✓ | |
| 3. Sufficient number of calibration points used? | ✓ | | | ✓ | |
| 4. Reasons for removal of points documented? | ✓ | | | ✓ | some points removed below RL. |
| 5. %RSD or correlation coefficient within method limits? | ✓ | | | ✓ | |
| 6. If RRF used for ICAL, were all compounds within 15% RSD? | ✓ | | | ✓ | List all exceptions below (cpd & RSD) |
| 7. Response factors meet criteria? | ✓ | | | ✓ | |
| 8. Isomeric pairs checked for correct peak assignment? | ✓ | | | ✓ | |
| 9. Data checked for detector saturation? | ✓ | | | ✓ | |
| 10. Standards traceability properly documented? | ✓ | | | ✓ | |
| 11. Manual integrations documented and checked? | ✓ | | | ✓ | |
| 12. 2 nd source ICV recovery 75-125% for DoD projects, 65-135% (+55% of expected for poor performers) for non-DoD? | ✓ | | | ✓ | see below |

1st Level Reviewer:

MRK

Date:

05-31-04

2nd Level Reviewer:

B/p

Date:

6.1.04

715% RSD

Atrazine 81.6%

2nd Source

Dibenz(a,h)anthracene 1

Aniline 60%

Atrazine 307%

Date : 29-MAY-2004 08:25

Client ID: DFTPP

Instrument: K.i

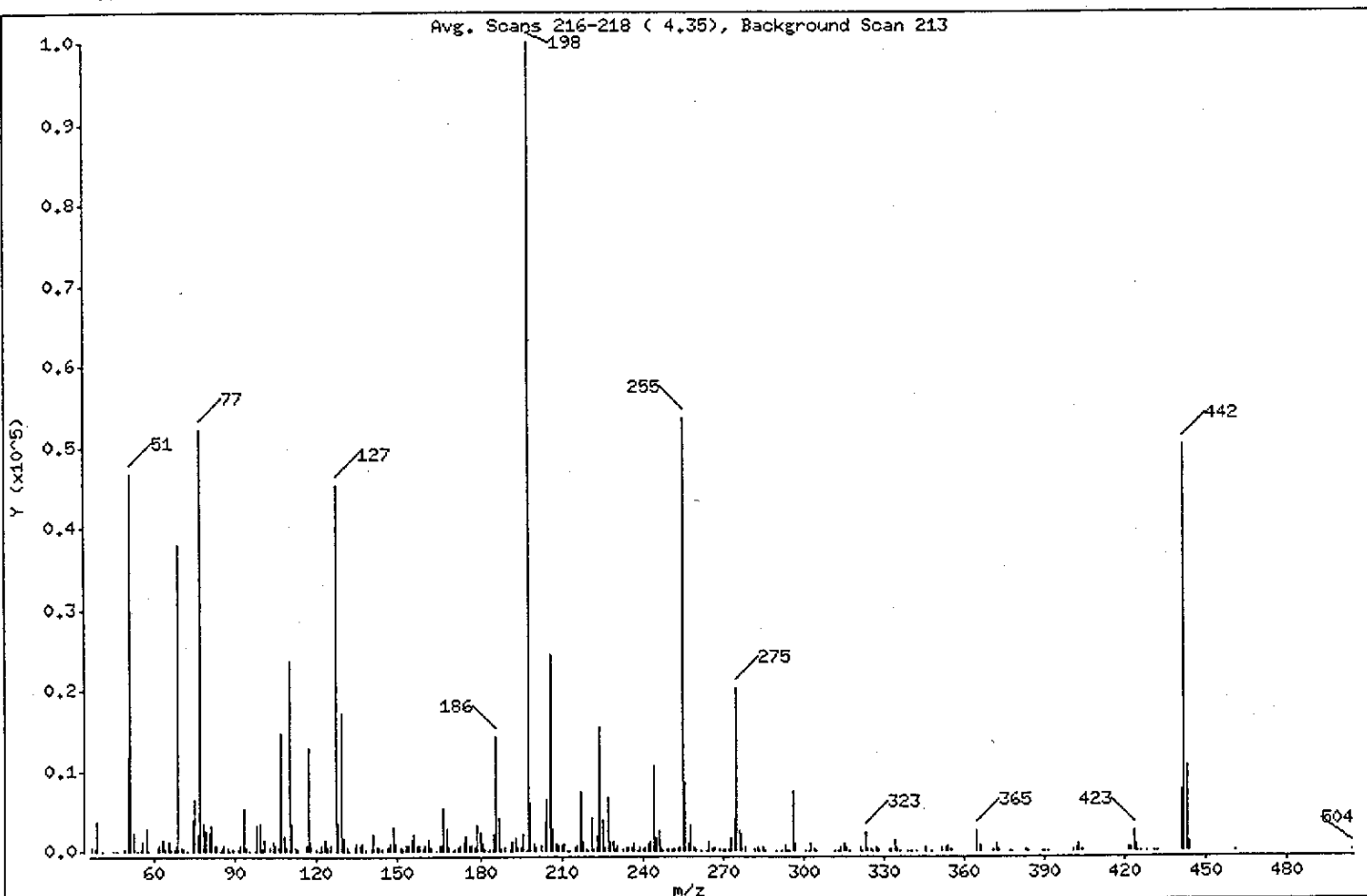
Sample Info: DFTPP,BNA1512,P:041904,E:041905

Operator: Kidd

Column phase: Rtx-5ms, 30m,0.5um

Column diameter: 0.25

1 dftpp

NW
05-31-04

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% relative abundance | 100.00 |
| 51 | 30.00 - 60.00% of mass 198 | 46.64 |
| 68 | Less than 2.00% of mass 69 | 0.71 (1.87) |
| 69 | Mass 69 relative abundance | 37.86 |
| 70 | Less than 2.00% of mass 69 | 0.39 (1.03) |
| 127 | 40.00 - 60.00% of mass 198 | 45.32 |
| 197 | Less than 1.00% of mass 198 | 0.04 |
| 199 | 5.00 - 9.00% of mass 198 | 6.06 |
| 275 | 10.00 - 30.00% of mass 198 | 20.14 |
| 365 | Greater than 1.00% of mass 198 | 2.63 |
| 441 | Present, but less than mass 443 | 7.57 |
| 442 | 40.00 - 100.00% of mass 198 | 50.07 |
| 443 | 17.00 - 23.00% of mass 442 | 10.61 (21.19) |

Date : 29-MAY-2004 08:25

Client ID: DFTPP

Instrument: K.i

Sample Info: DFTPP,BNA1512,P:041904,E:041905

Operator: kidd

Column phase: Rtx-5ms, 30m,0.5um

Column diameter: 0.25

Data File: k3365.d

Spectrum: Avg. Scans 216-218 (4.35), Background Scan 213

Location of Maximum: 198.00

Number of points: 289

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|-------|-------|--------|-------|--------|-------|--------|------|
| 37.00 | 357 | 127.00 | 45368 | 207.00 | 2876 | 292.00 | 67 |
| 38.00 | 344 | 128.00 | 3408 | 208.00 | 839 | 293.00 | 617 |
| 39.00 | 3651 | 129.00 | 17208 | 209.00 | 640 | 294.00 | 65 |
| 41.00 | 115 | 130.00 | 1713 | 210.00 | 651 | 295.00 | 66 |
| 45.00 | 65 | 131.00 | 407 | 211.00 | 1025 | 296.00 | 7465 |
| 46.00 | 51 | 132.00 | 16 | 212.00 | 101 | 297.00 | 939 |
| 49.00 | 128 | 134.00 | 530 | 213.00 | 103 | 301.00 | 54 |
| 50.00 | 11666 | 135.00 | 858 | 215.00 | 359 | 302.00 | 92 |
| 51.00 | 46680 | 136.00 | 799 | 216.00 | 775 | 303.00 | 983 |
| 52.00 | 2241 | 137.00 | 889 | 217.00 | 7434 | 304.00 | 323 |
| 54.00 | 56 | 138.00 | 214 | 218.00 | 1056 | 305.00 | 52 |
| 55.00 | 153 | 140.00 | 323 | 219.00 | 152 | 312.00 | 55 |
| 56.00 | 1118 | 141.00 | 2028 | 220.00 | 67 | 313.00 | 57 |
| 57.00 | 2767 | 142.00 | 568 | 221.00 | 4065 | 314.00 | 448 |
| 58.00 | 35 | 143.00 | 460 | 222.00 | 217 | 315.00 | 1009 |
| 61.00 | 521 | 144.00 | 140 | 223.00 | 1772 | 316.00 | 547 |
| 62.00 | 630 | 146.00 | 402 | 224.00 | 15422 | 317.00 | 68 |
| 63.00 | 1373 | 147.00 | 870 | 225.00 | 3861 | 321.00 | 372 |
| 64.00 | 212 | 148.00 | 2998 | 226.00 | 519 | 322.00 | 95 |
| 65.00 | 1165 | 149.00 | 807 | 227.00 | 6635 | 323.00 | 2219 |
| 66.00 | 195 | 151.00 | 398 | 228.00 | 1102 | 324.00 | 309 |
| 67.00 | 127 | 152.00 | 167 | 229.00 | 1218 | 325.00 | 135 |
| 68.00 | 707 | 153.00 | 633 | 230.00 | 253 | 326.00 | 50 |
| 69.00 | 37896 | 154.00 | 576 | 231.00 | 667 | 327.00 | 471 |
| 70.00 | 389 | 155.00 | 1375 | 233.00 | 142 | 328.00 | 322 |
| 71.00 | 185 | 156.00 | 2113 | 234.00 | 378 | 332.00 | 155 |
| 72.00 | 73 | 157.00 | 647 | 235.00 | 498 | 333.00 | 253 |
| 74.00 | 3866 | 158.00 | 684 | 236.00 | 388 | 334.00 | 1314 |
| 75.00 | 6449 | 159.00 | 128 | 237.00 | 936 | 335.00 | 486 |
| 76.00 | 2074 | 160.00 | 756 | 238.00 | 79 | 336.00 | 63 |
| 77.00 | 52216 | 161.00 | 1428 | 239.00 | 436 | 339.00 | 54 |
| 78.00 | 3454 | 162.00 | 390 | 240.00 | 186 | 340.00 | 87 |
| 79.00 | 2633 | 164.00 | 53 | 241.00 | 418 | 342.00 | 86 |
| 80.00 | 2274 | 165.00 | 582 | 242.00 | 825 | 346.00 | 539 |
| 81.00 | 3213 | 166.00 | 767 | 243.00 | 1038 | 348.00 | 63 |

Date : 29-MAY-2004 08:25

Client ID: DFTPP

Instrument: K.i

Sample Info: DFTPP,BNA1512,P:041904,E:041905

Operator: kidd

Column phase: Rtx-5ms, 30m,0.5um

Column diameter: 0.25

Data File: k3365.d

Spectrum: Avg. Scans 216-218 (4.35), Background Scan 213

Location of Maximum: 198.00

Number of points: 289

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|--------|-------|--------|--------|--------|-------|--------|-------|
| ----- | | | | | | | |
| 82.00 | 686 | 167.00 | 5393 | 244.00 | 10693 | 352.00 | 498 |
| 83.00 | 681 | 168.00 | 2748 | 245.00 | 1533 | 353.00 | 457 |
| 84.00 | 113 | 169.00 | 536 | 246.00 | 2467 | 354.00 | 624 |
| 85.00 | 473 | 170.00 | 89 | 247.00 | 374 | 355.00 | 291 |
| 86.00 | 760 | 171.00 | 235 | 248.00 | 60 | 365.00 | 2628 |
| ----- | | | | | | | |
| 87.00 | 458 | 172.00 | 558 | 249.00 | 204 | 366.00 | 577 |
| 88.00 | 107 | 173.00 | 741 | 250.00 | 122 | 371.00 | 173 |
| 89.00 | 179 | 174.00 | 1085 | 251.00 | 171 | 372.00 | 1024 |
| 91.00 | 336 | 175.00 | 1805 | 252.00 | 157 | 373.00 | 290 |
| 92.00 | 788 | 176.00 | 643 | 253.00 | 295 | 377.00 | 53 |
| ----- | | | | | | | |
| 93.00 | 5402 | 177.00 | 682 | 254.00 | 380 | 378.00 | 78 |
| 94.00 | 503 | 178.00 | 393 | 255.00 | 53520 | 383.00 | 279 |
| 95.00 | 25 | 179.00 | 3207 | 256.00 | 8448 | 384.00 | 76 |
| 97.00 | 99 | 180.00 | 2394 | 257.00 | 906 | 389.00 | 63 |
| 98.00 | 3317 | 181.00 | 926 | 258.00 | 3299 | 390.00 | 96 |
| ----- | | | | | | | |
| 99.00 | 3401 | 182.00 | 299 | 259.00 | 498 | 391.00 | 74 |
| 100.00 | 230 | 183.00 | 72 | 260.00 | 145 | 401.00 | 168 |
| 101.00 | 1364 | 184.00 | 193 | 262.00 | 60 | 402.00 | 432 |
| 103.00 | 575 | 185.00 | 2122 | 264.00 | 6 | 403.00 | 851 |
| 104.00 | 1039 | 186.00 | 14214 | 265.00 | 1247 | 404.00 | 188 |
| ----- | | | | | | | |
| 105.00 | 684 | 187.00 | 4128 | 266.00 | 313 | 421.00 | 455 |
| 106.00 | 346 | 188.00 | 320 | 267.00 | 450 | 422.00 | 513 |
| 107.00 | 14768 | 189.00 | 421 | 269.00 | 174 | 423.00 | 2586 |
| 108.00 | 1940 | 191.00 | 298 | 270.00 | 243 | 424.00 | 856 |
| 109.00 | 385 | 192.00 | 1215 | 271.00 | 174 | 425.00 | 81 |
| ----- | | | | | | | |
| 110.00 | 23712 | 193.00 | 1532 | 272.00 | 157 | 426.00 | 66 |
| 111.00 | 3547 | 194.00 | 442 | 273.00 | 1594 | 428.00 | 50 |
| 112.00 | 520 | 195.00 | 410 | 274.00 | 3842 | 431.00 | 65 |
| 113.00 | 167 | 196.00 | 2159 | 275.00 | 20152 | 432.00 | 57 |
| 116.00 | 794 | 197.00 | 41 | 276.00 | 2586 | 441.00 | 7582 |
| ----- | | | | | | | |
| 117.00 | 12817 | 198.00 | 100104 | 277.00 | 1990 | 442.00 | 50120 |
| 118.00 | 1046 | 199.00 | 6068 | 278.00 | 354 | 443.00 | 10620 |
| 120.00 | 129 | 200.00 | 869 | 282.00 | 198 | 444.00 | 1148 |
| 121.00 | 96 | 201.00 | 569 | 283.00 | 503 | 461.00 | 51 |
| 122.00 | 580 | 203.00 | 677 | 284.00 | 104 | 504.00 | 67 |

Data File: /chem/K.i/052904,b/k3365.d

Page 5

Date : 29-MAY-2004 08:25

Client ID: DFTPP

Instrument: K.i

Sample Info: DFTPP,BNA1512,P:041904,E:041905

Operator: kidd

Column phase: Rtx-5ms, 30m,0.5um

Column diameter: 0.25

Data File: k3365.d

Spectrum: Avg. Scans 216-218 (4.35), Background Scan 213

Location of Maximum: 198.00

Number of points: 289

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|--------|------|--------|-------|--------|-----|-----|---|
| 123.00 | 1353 | 204.00 | 3760 | 285.00 | 533 | | |
| 124.00 | 571 | 205.00 | 6526 | 286.00 | 69 | | |
| 125.00 | 620 | 206.00 | 24320 | 290.00 | 51 | | |

Data File: /chem/K.i/052904.b/k3365.d

Page 1

Date : 29-MAY-2004 08:25

Client ID: DFTPP

Instrument: K.i

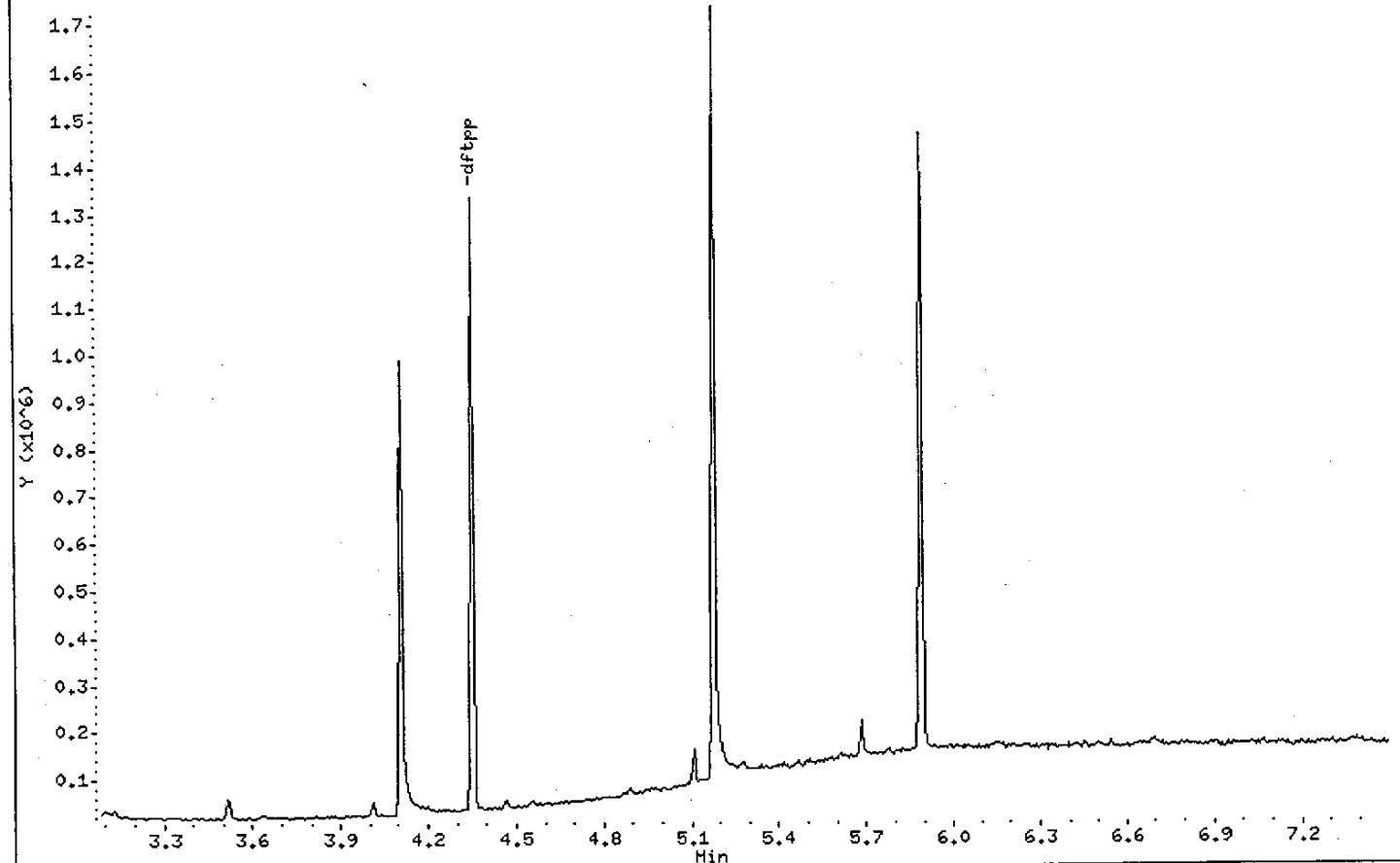
Sample Info: DFTPP,BNA1512,P:041904,E:041905

Operator: kidd

Column phase: Rtx-5ms, 30m,0.5um

Column diameter: 0.25

/chem/K.i/052904.b/k3365.d



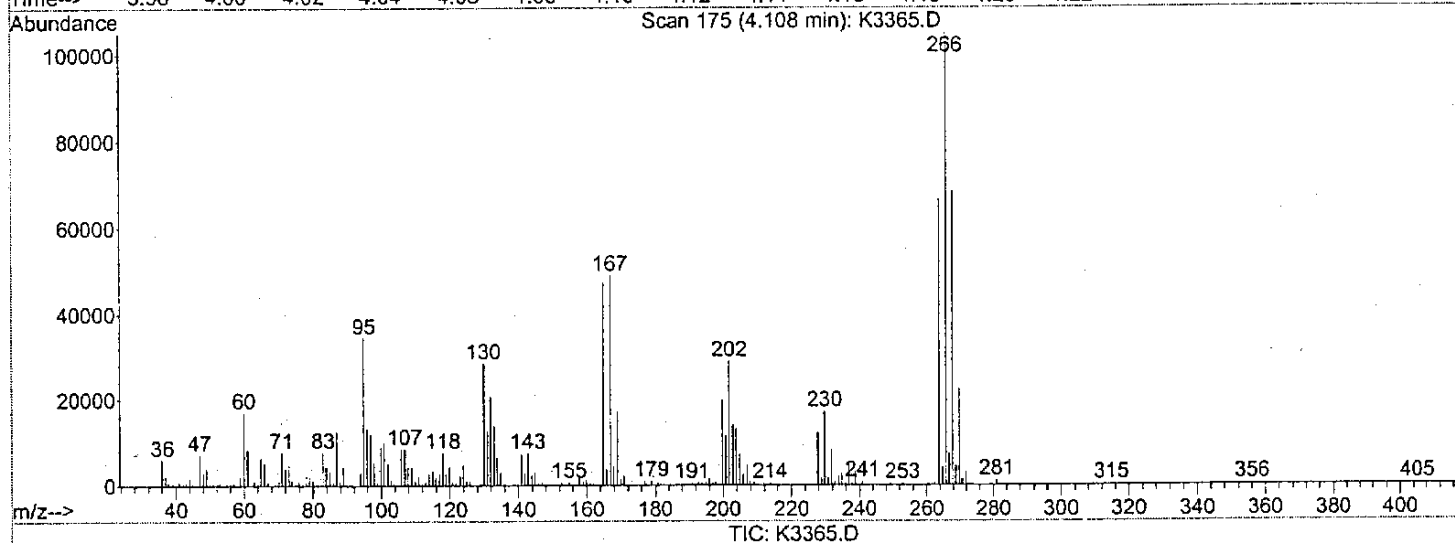
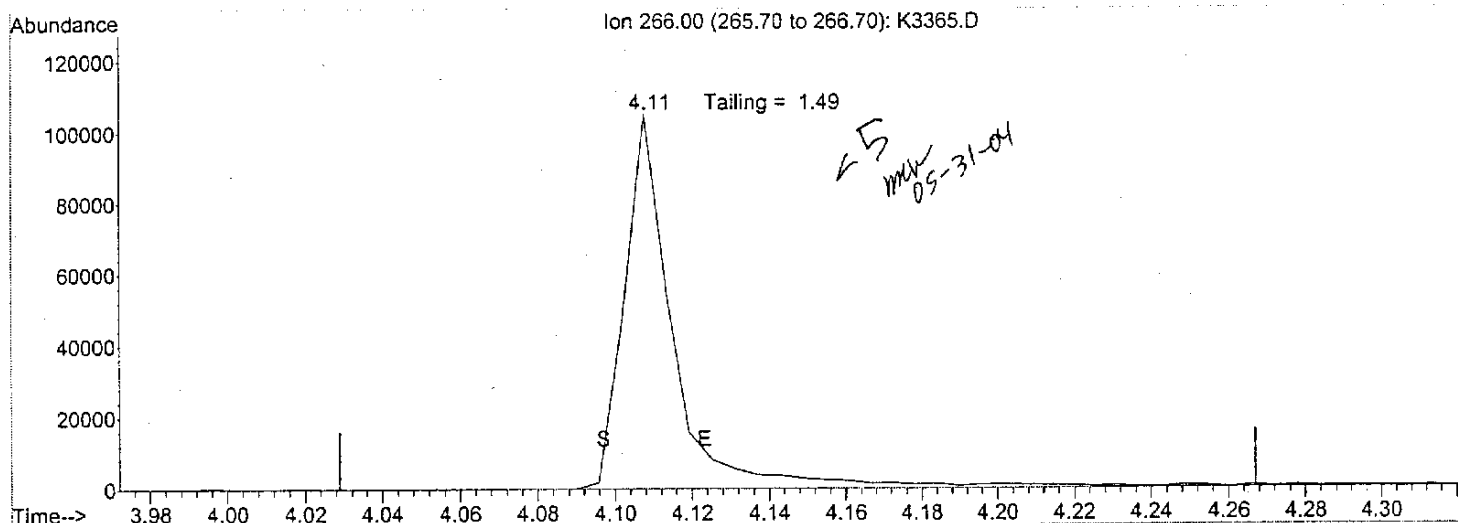
Quantitation Report (Qedit)

Data File : D:\DATA\052904.B\K3365.D
 Acq On : 29 May 2004 8:25 am
 Sample : DFTPP,BNA1512,P:041904,E:041905
 Misc :
 MS Integration Params: events.e
 Quant Time: May 31 15:03 2004

Vial: 2
 Operator: kidd
 Inst : Instrumen
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPB.M (Chemstation Integrator)
 Title : 8270C DFTPP CHECK
 Last Update : Tue May 18 13:56:37 2004
 Response via : Single Level Calibration



(1) Pentachlorophenol

4.11min 0.00

response 881321

| Ion | Exp% | Act% |
|--------|------|------|
| 266.00 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

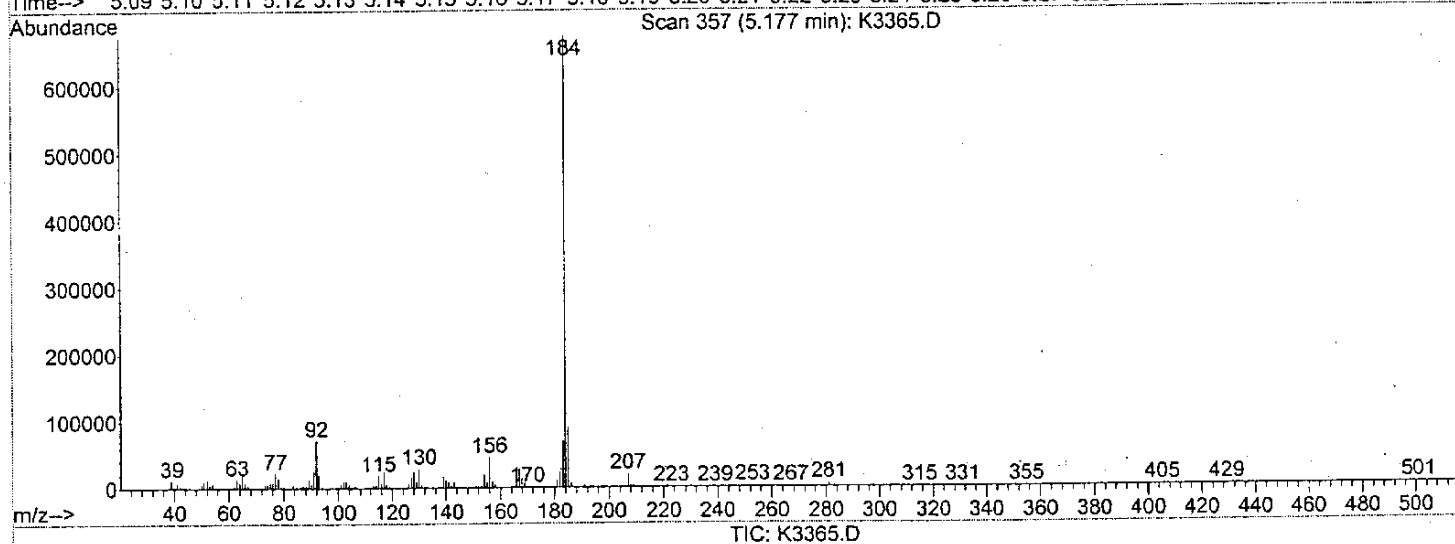
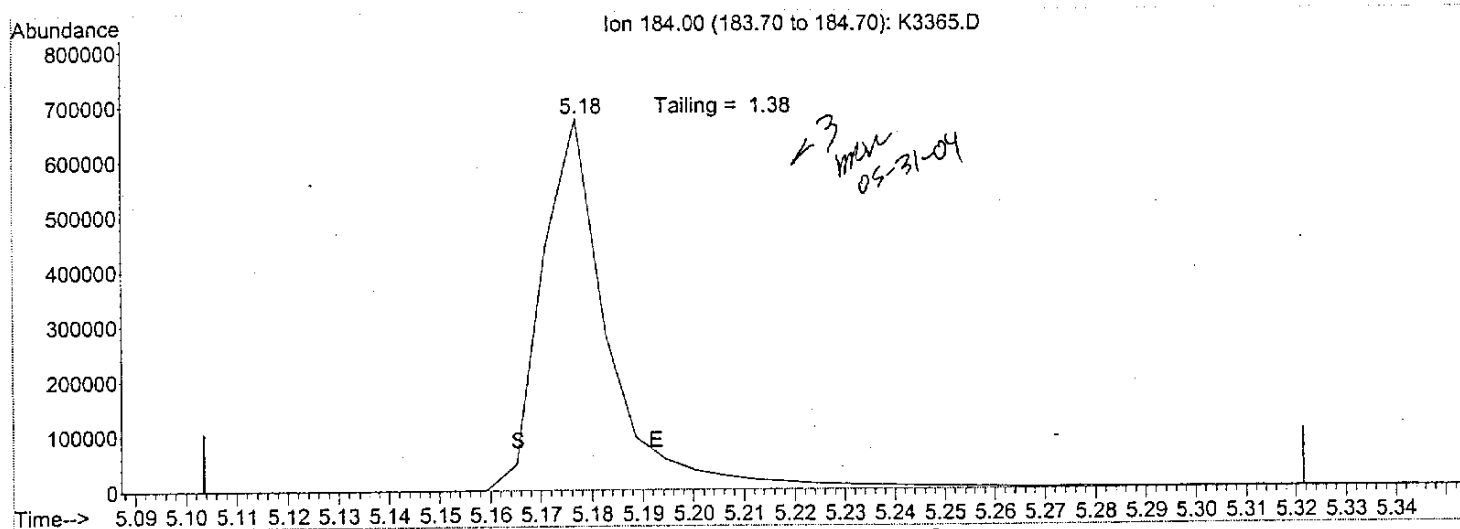
Quantitation Report (Qedit)

Data File : D:\DATA\052904.B\K3365.D
 Acq On : 29 May 2004 8:25 am
 Sample : DFTPP,BNA1512,P:041904,E:041905
 Misc :
 MS Integration Params: events.e
 Quant Time: May 31 15:03 2004

Vial: 2
 Operator: kiddd
 Inst : Instrumen
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPB.M (Chemstation Integrator)
 Title : 8270C DFTPP CHECK
 Last Update : Tue May 18 13:56:37 2004
 Response via : Single Level Calibration



(3) Benzidine

5.18min 0.00

response 6095163

| Ion | Exp% | Act% |
|--------|------|------|
| 184.00 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

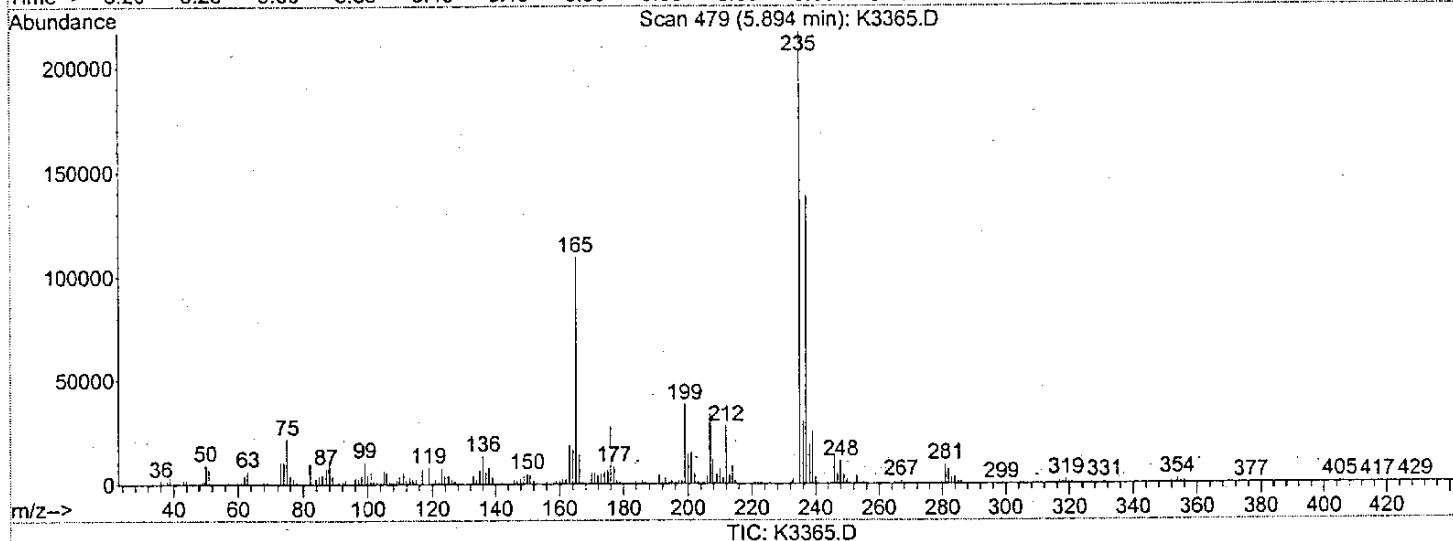
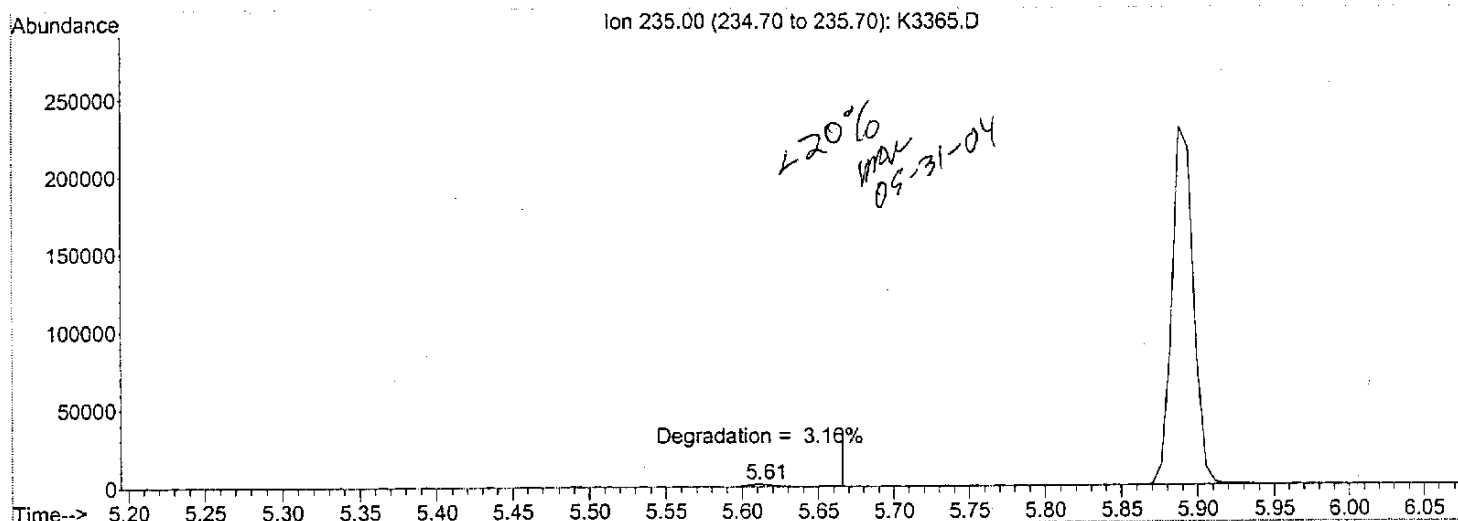
Quantitation Report (Qedit)

Data File : D:\DATA\052904.B\K3365.D
 Acq On : 29 May 2004 8:25 am
 Sample : DFTPP,BNA1512,P:041904,E:041905
 Misc :
 MS Integration Params: events.e
 Quant Time: May 31 15:03 2004

Vial: 2
 Operator: kiddd
 Inst : Instrumen
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPB.M (Chemstation Integrator)
 Title : 8270C DFTPP CHECK
 Last Update : Tue May 18 13:56:37 2004
 Response via : Single Level Calibration



(4) DDT

5.89min 0.00

response 2262503

| Ion | Exp% | Act% |
|--------|------|------|
| 235.00 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Report Date: 31-May-2004 17:01

Calibration History

Method : /chem/K.i/052904.b/8270C.m
Start Cal Date: 29-MAY-2004 08:39
End Cal Date : 29-MAY-2004 14:36

Initial Calibration

| Injection Date | Sublist | Calibration File |
|--------------------------------------|----------|------------------------------|
| Cal Level: 1 , Cal Amount: 5.00000 | | |
| 29-MAY-2004 08:39 | 1-HSL | /chem/K.i/052904.b/k3366.d ✓ |
| Cal Level: 2 , Cal Amount: 10.00000 | | |
| 29-MAY-2004 12:13 | 2-AP9std | /chem/K.i/052904.b/k3375.d |
| 29-MAY-2004 09:03 | 1-HSL | /chem/K.i/052904.b/k3367.d ✓ |
| Cal Level: 3 , Cal Amount: 20.00000 | | |
| 29-MAY-2004 12:37 | 2-AP9std | /chem/K.i/052904.b/k3376.d |
| 29-MAY-2004 09:26 | 1-HSL | /chem/K.i/052904.b/k3368.d ✓ |
| Cal Level: 4 , Cal Amount: 50.00000 | | |
| 29-MAY-2004 13:00 | 2-AP9std | /chem/K.i/052904.b/k3377.d |
| 29-MAY-2004 09:50 | 1-HSL | /chem/K.i/052904.b/k3369.d ✓ |
| Cal Level: 5 , Cal Amount: 80.00000 | | |
| 29-MAY-2004 13:24 | 2-AP9std | /chem/K.i/052904.b/k3378.d |
| 29-MAY-2004 10:14 | 1-HSL | /chem/K.i/052904.b/k3370.d ✓ |
| Cal Level: 6 , Cal Amount: 120.00000 | | |
| 29-MAY-2004 13:48 | 2-AP9std | /chem/K.i/052904.b/k3379.d |
| 29-MAY-2004 10:38 | 1-HSL | /chem/K.i/052904.b/k3371.d ✓ |
| Cal Level: 7 , Cal Amount: 160.00000 | | |
| 29-MAY-2004 14:12 | 2-AP9std | /chem/K.i/052904.b/k3380.d |
| 29-MAY-2004 11:01 | 1-HSL | /chem/K.i/052904.b/k3372.d ✓ |
| Cal Level: 8 , Cal Amount: 200.00000 | | |
| 29-MAY-2004 14:36 | 2-AP9std | /chem/K.i/052904.b/k3381.d |
| 29-MAY-2004 11:25 | 1-HSL | /chem/K.i/052904.b/k3373.d ✓ |

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

Ccal Level: 5 , Ccal Amount: 80.0000

~~29-MAY-2004 13:24 | 2-AP9STD | /chem/K.i/052904.b/k3378.d~~

Ccal Level: 5 , Ccal Amount: 80.0000

~~29-MAY-2004 10:14 | 1-HSL | /chem/K.i/052904.b/k3370.d~~

Report Date : 31-May-2004 14:26

Page 5

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 14:26 kiddd

Calibration File Names:

Level 1: /chem/K.i/052904.b/k3366.d
 Level 2: /chem/K.i/052904.b/k3367.d
 Level 3: /chem/K.i/052904.b/k3368.d
 Level 4: /chem/K.i/052904.b/k3369.d
 Level 5: /chem/K.i/052904.b/k3370.d
 Level 6: /chem/K.i/052904.b/k3371.d
 Level 7: /chem/K.i/052904.b/k3372.d
 Level 8: /chem/K.i/052904.b/k3373.d

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | | %RSD or R ² |
|-----------------------------|-----------------|--------------------|---------|---------|---------|---------|-------|--------------|----------|---------|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| | 160 Level 7 | 200 Level 8 | | | | | | | | | |
| 5 Pyridine | ++++ 1.49458 | 1.55679 1.47129 | 1.70683 | 1.65861 | 1.62894 | 1.49487 | AVRG | | 1.57313 | | 5.87386 |
| 4 N-Nitrosodimethylamine | ++++ 0.96016 | 0.99147 0.94950 | 1.04996 | 1.02666 | 0.96742 | 0.94997 | AVRG | | 0.98502 | | 4.02081 |
| 16 Aniline | ++++ 654887 | 87319 650513 | 185467 | 337309 | 474972 | 573451 | QUAD | 0.26612 | -0.01600 | 0.19546 | 0.99319 ✓ |
| 15 Phenol | ++++ 1.48051 | 1.91150 1.49594 | 1.90473 | 1.78666 | 1.63422 | 1.54422 | AVRG | | 1.67968 | | 11.12947 |
| 18 Bis(2-chloroethyl) ether | ++++ 810150 | 93703 979169 | 175004 | 336354 | 516592 | 597031 | LINR | -0.20882 | 1.36747 | | 0.99260 ✓ |

Report Date : 31-May-2004 14:26

Page 6

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 14:26 kiddd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | | %RSD or R ² |
|---------------------------------|---------|---------|---------|---------|---------|---------|-------|--------------|---------|---------|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| | 160 | 200 | | | | | | | | | |
| | Level 7 | Level 8 | | | | | | | | | |
| 20 2-Chlorophenol | +++++ | 1.51391 | 1.45517 | 1.33273 | 1.19601 | 1.13998 | | | | | |
| | 1.09301 | 1.07477 | | | | | AVRG | | 1.25794 | | 14.09100 |
| 21 1,3-Dichlorobenzene | +++++ | 1.74014 | 1.67356 | 1.52092 | 1.38049 | 1.35018 | | | | | |
| | 1.33759 | 1.33953 | | | | | AVRG | | 1.47749 | | 11.51069 |
| 23 1,4-Dichlorobenzene | +++++ | 1.78739 | 1.73391 | 1.53129 | 1.39871 | 1.34146 | | | | | |
| | 1.36149 | 1.36925 | | | | | AVRG | | 1.50336 | | 12.44078 |
| 24 Benzyl alcohol | +++++ | 0.82480 | 0.90581 | 0.91045 | 0.89172 | 0.84778 | | | | | |
| | 0.85331 | 0.83209 | | | | | AVRG | | 0.86657 | | 4.09670 |
| 25 1,2-Dichlorobenzene | +++++ | 1.70953 | 1.59420 | 1.39939 | 1.26528 | 1.20476 | | | | | |
| | 1.20450 | 1.20245 | | | | | AVRG | | 1.36859 | | 15.21399 |
| 26 2-Methylphenol | +++++ | 1.41644 | 1.45945 | 1.35656 | 1.22773 | 1.16567 | | | | | |
| | 1.14721 | 1.15850 | | | | | AVRG | | 1.27594 | | 10.35620 |
| 27 1H-Indene | +++++ | 2.72851 | 2.60886 | 2.31105 | 2.08583 | 1.98364 | | | | | |
| | 1.94544 | 1.96408 | | | | | AVRG | | 2.23249 | | 14.53469 |
| 28 2,2'-oxybis(1-chloropropane) | +++++ | 121150 | 247656 | 463323 | 695390 | 867321 | | | | | |
| | 1066676 | 1179996 | | | | | QUAD | -0.06445 | 0.38247 | 0.02245 | 0.99954 |
| 29 4-Methylphenol | +++++ | 1.38195 | 1.54011 | 1.31876 | 1.26328 | 1.23132 | | | | | |
| | 1.26085 | 1.24437 | | | | | AVRG | | 1.32009 | | 8.33218 |

Report Date : 31-May-2004 14:26

Page 7

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 14:26 kidd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | b | Coefficients | | %RSD or R ² |
|-------------------------------|---------|---------|---------|---------|---------|---------|-------|---|--------------|----|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | | m1 | m2 | |
| | 160 | 200 | | | | | | | | | |
| | Level 7 | Level 8 | | | | | | | | | |
| 30 N-nitrosodi-n-propylamine | +++++ | 1.12987 | 1.09720 | 0.99733 | 0.91299 | 0.88346 | | | | | |
| | 0.85999 | 0.86451 | | | | | AVRG | | 0.96362 | | 11.69276 |
| 32 Acetophenone | +++++ | 2.16026 | 2.12931 | 1.89241 | 1.70952 | 1.63862 | | | | | |
| | 1.64117 | 1.60821 | | | | | AVRG | | 1.82564 | | 13.00861 |
| 33 Hexachloroethane | 0.74849 | 0.71499 | 0.72388 | 0.66066 | 0.60013 | 0.58667 | | | | | |
| | 0.59016 | 0.58482 | | | | | AVRG | | 0.65123 | | 10.67217 |
| 37 Nitrobenzene | +++++ | 1.83151 | 1.84229 | 1.69134 | 1.61398 | 1.53478 | | | | | |
| | 1.53885 | 1.49120 | | | | | AVRG | | 1.64914 | | 8.70917 |
| 40 Isophorone | +++++ | 0.77593 | 0.80784 | 0.75090 | 0.72659 | 0.70042 | | | | | |
| | 0.68999 | 0.67913 | | | | | AVRG | | 0.73297 | | 6.49992 |
| 41 2-Nitrophenol | +++++ | 0.18060 | 0.18770 | 0.17370 | 0.15680 | 0.15394 | | | | | |
| | 0.15022 | 0.15098 | | | | | AVRG | | 0.16485 | | 9.39329 |
| 42 2,4-Dimethylphenol | +++++ | 0.37896 | 0.37535 | 0.33506 | 0.31036 | 0.29854 | | | | | |
| | 0.30024 | 0.30954 | | | | | AVRG | | 0.32972 | | 10.47531 |
| 43 Bis(2-chloroethoxy)methane | +++++ | 0.48773 | 0.49206 | 0.43316 | 0.40699 | 0.39081 | | | | | |
| | 0.38676 | 0.37253 | | | | | AVRG | | 0.42429 | | 11.46715 |
| 45 Benzoic acid | +++++ | +++++ | +++++ | 0.18713 | 0.20894 | 0.21773 | | | | | |
| | 0.22159 | 0.22320 | | | | | AVRG | | 0.21172 | | 6.99597 |

Report Date : 31-May-2004 14:26

Page 8

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 14:26 kidd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | | %RSD or R ² |
|------------------------------|-----------------|--------------------|---------|---------|---------|---------|-------|--------------|---------|----|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| | 160 Level 7 | 200 Level 8 | | | | | | | | | |
| 46 2,4-Dichlorophenol | ++++ 0.27785 | 0.29188 0.26966 | 0.32348 | 0.29373 | 0.28757 | 0.27993 | AVRG | | 0.28916 | | 5.99378 |
| 47 1,2,4-Trichlorobenzene | ++++ 0.28923 | 0.36618 0.28791 | 0.35063 | 0.31887 | 0.30060 | 0.28954 | AVRG | | 0.31471 | | 10.17835 |
| 50 Naphthalene | ++++ 0.87913 | 1.13506 0.86715 | 1.11042 | 0.96579 | 0.92067 | 0.89328 | AVRG | | 0.96736 | | 11.48689 |
| 51 4-Chloroaniline | ++++ 0.34613 | 0.40520 0.33760 | 0.42390 | 0.40129 | 0.37327 | 0.35463 | AVRG | | 0.37743 | | 8.78939 |
| 52 Hexachlorobutadiene | ++++ 0.19198 | 0.22899 0.19514 | 0.21942 | 0.20267 | 0.19856 | 0.19530 | AVRG | | 0.20458 | | 6.88467 |
| 59 4-Chloro-3-methylphenol | ++++ 0.29669 | 0.30536 0.28609 | 0.33010 | 0.30871 | 0.30714 | 0.29693 | AVRG | | 0.30443 | | 4.52345 |
| 62 2-Methylnaphthalene | ++++ 0.53913 | 0.64394 0.53891 | 0.65941 | 0.59575 | 0.56251 | 0.54342 | AVRG | | 0.58330 | | 8.73298 |
| 64 1-Methylnaphthalene | ++++ 0.54749 | 0.70161 0.54096 | 0.67474 | 0.59246 | 0.56636 | 0.54477 | AVRG | | 0.59548 | | 11.10718 |
| 63 Hexachlorocyclopentadiene | ++++ 0.38879 | 0.28832 0.39087 | 0.34146 | 0.37157 | 0.36646 | 0.38021 | AVRG | | 0.36110 | | 10.00965 |

Report Date : 31-May-2004 14:26

Page 9

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 14:26 kiddd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | | %RSD or R ² |
|--------------------------|-----------------|--------------------|---------|---------|---------|---------|-------|--------------|---------|----|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| | 160 | 200 | | | | | | | | | |
| | Level 7 | Level 8 | | | | | | | | | |
| 67 2,4,6-Trichlorophenol | ++++ 0.34637 | 0.37498 0.34955 | 0.37908 | 0.36723 | 0.35892 | 0.34952 | AVRG | | 0.36081 | | 3.65235 |
| 68 2,4,5-Trichlorophenol | ++++ 0.38892 | 0.40464 0.37846 | 0.42949 | 0.39850 | 0.38863 | 0.37510 | AVRG | | 0.39482 | | 4.67164 |
| 71 2-Chloronaphthalene | ++++ 0.94698 | 1.19020 0.93426 | 1.15851 | 1.05722 | 0.97580 | 0.95679 | AVRG | | 1.03139 | | 10.26555 |
| 74 2-Nitroaniline | ++++ 0.39625 | 0.40513 0.38644 | 0.44539 | 0.43967 | 0.41849 | 0.41232 | AVRG | | 0.41481 | | 5.22225 |
| 76 Dimethyl phthalate | ++++ 1.05508 | 1.21115 1.03976 | 1.25297 | 1.14326 | 1.07834 | 1.07666 | AVRG | | 1.12246 | | 7.34270 |
| 79 2,6-Dinitrotoluene | ++++ 0.23958 | 0.24282 0.22871 | 0.26263 | 0.25731 | 0.24578 | 0.23848 | AVRG | | 0.24504 | | 4.72660 |
| 81 Acenaphthylene | ++++ 1.54347 | 1.84443 1.53424 | 1.81336 | 1.65901 | 1.54564 | 1.53172 | AVRG | | 1.63884 | | 8.38595 |
| 82 3-Nitroaniline | ++++ 0.26854 | ++++ 0.26748 | 0.30845 | 0.30169 | 0.29454 | 0.28516 | AVRG | | 0.28764 | | 5.93159 |
| 84 Acenaphthene | ++++ 0.89580 | 1.04656 0.92056 | 1.03125 | 0.94016 | 0.89436 | 0.88582 | AVRG | | 0.94493 | | 7.08074 |

Report Date : 31-May-2004 14:26

Page 10

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 14:26 kiddd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | | %RSD or R ² |
|--------------------------------|-----------------|--------------------|---------|---------|---------|---------|-------|--------------|---------|----|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| | 160 | 200 | | | | | | | | | |
| | Level 7 | Level 8 | | | | | | | | | |
| 85 2,4-Dinitrophenol | ++++ 246098 | ++++ 281085 | 16548 | 61946 | 124109 | 179119 | WLINR | 0.28217 | 0.19855 | | 0.99902 |
| 86 4-Nitrophenol | ++++ 0.26843 | ++++ 0.26409 | 0.20683 | 0.24180 | 0.26029 | 0.26291 | AVRG | | 0.25073 | | 9.33365 |
| 87 2,4-Dinitrotoluene | ++++ 0.31288 | 0.31150 0.30497 | 0.35379 | 0.34983 | 0.33201 | 0.31561 | AVRG | | 0.32580 | | 6.02109 |
| 88 Dibenzofuran | ++++ 1.27906 | 1.53399 1.27610 | 1.51972 | 1.39180 | 1.29092 | 1.26509 | AVRG | | 1.36524 | | 8.66522 |
| 93 Diethyl phthalate | ++++ 1.07357 | 1.17094 1.06176 | 1.23180 | 1.16198 | 1.07979 | 1.06613 | AVRG | | 1.12085 | | 5.97577 |
| 95 4-Chlorophenyl phenyl ether | ++++ 0.58205 | 0.64700 0.58705 | 0.66707 | 0.61117 | 0.57250 | 0.57207 | AVRG | | 0.60556 | | 6.26727 |
| 96 Fluorene | ++++ 1.10684 | 1.28180 1.14065 | 1.28607 | 1.18167 | 1.10119 | 1.09549 | AVRG | | 1.17053 | | 7.08301 |
| 97 4-Nitroaniline | ++++ 0.27296 | ++++ 0.25349 | 0.29272 | 0.30944 | 0.29057 | 0.28251 | AVRG | | 0.28361 | | 6.72771 |
| 99 4,6-Dinitro-2-methylphenol | ++++ 0.23695 | ++++ 0.24023 | 0.21046 | 0.23072 | 0.23418 | 0.23139 | AVRG | | 0.23065 | | 4.55591 |

Report Date : 31-May-2004 14:26

Page 11

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 14:26 kidd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | | %RSD or R ² |
|--------------------------------|-----------------|--------------------|---------|---------|---------|---------|-------|--------------|---------|----|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| | 160 | 200 | | | | | | | | | |
| | Level 7 | Level 8 | | | | | | | | | |
| 101 N-nitrosodiphenylamine | ++++ 0.77234 | 0.90752 0.76638 | 0.90174 | 0.82833 | 0.78467 | 0.74538 | AVRG | | 0.81519 | | 8.10795 |
| 102 Azobenzene | ++++ 1.24741 | 1.42630 1.20955 | 1.48519 | 1.41429 | 1.33076 | 1.28726 | AVRG | | 1.34296 | | 7.59629 |
| 108 4-Bromophenyl phenyl ether | ++++ 0.17481 | 0.19574 0.17812 | 0.19612 | 0.17653 | 0.17018 | 0.17281 | AVRG | | 0.18062 | | 5.96120 |
| 110 Hexachlorobenzene | ++++ 0.19474 | 0.20445 0.19922 | 0.20446 | 0.18116 | 0.17469 | 0.18789 | AVRG | | 0.19237 | | 6.01375 |
| 113 Pentachlorophenol | ++++ 0.12526 | ++++ 0.12432 | 0.10026 | 0.10890 | 0.11382 | 0.12170 | AVRG | | 0.11571 | | 8.55344 |
| 118 Phenanthrene | ++++ 0.87357 | 1.05077 0.90067 | 1.01563 | 0.89885 | 0.85037 | 0.86468 | AVRG | | 0.92208 | | 8.52819 |
| 122 Anthracene | ++++ 0.87878 | 1.08304 0.91958 | 1.06997 | 0.90055 | 0.85541 | 0.87495 | AVRG | | 0.94033 | | 10.13187 |
| 123 Carbazole | ++++ 0.74509 | 0.96404 0.75355 | 0.94333 | 0.81482 | 0.76605 | 0.75716 | AVRG | | 0.82058 | | 11.43968 |
| 125 Di-n-butyl phthalate | ++++ 0.91360 | 1.05361 0.91708 | 1.08063 | 0.97518 | 0.90986 | 0.93092 | AVRG | | 0.96870 | | 7.34436 |

Report Date : 31-May-2004 14:26

Page 12

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 14:26 kiddd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | | %RSD or R ² |
|---------------------------------|--------------------|--------------------|---------|---------|---------|---------|-------|--------------|---------|----|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| | 160 | 200 | | | | | | | | | |
| | Level 7 | Level 8 | | | | | | | | | |
| 130 Fluoranthene | ++++ 1.04587 | 1.18046 1.05993 | 1.16591 | 1.04505 | 0.99211 | 1.02339 | AVRG | | 1.07324 | | 6.68351 |
| 131 Benzidine | ++++ 308364 | ++++ 319500 | 63234 | 105904 | 171611 | 227861 | WLINR | -0.31963 | 0.10871 | | 0.99542 |
| 132 Pyrene | ++++ 1.08432 | 1.23109 1.08158 | 1.17904 | 1.09205 | 1.05344 | 1.05113 | AVRG | | 1.11038 | | 6.13934 |
| 137 Butyl benzyl phthalate | ++++ 0.41426 | 0.48174 0.40597 | 0.49211 | 0.45449 | 0.43066 | 0.42359 | AVRG | | 0.44326 | | 7.57848 |
| 140 3 3'-Dichlorobenzidine | ++++ 0.38754 | 0.38138 0.39867 | 0.37534 | 0.37501 | 0.37145 | 0.38159 | AVRG | | 0.38157 | | 2.42171 |
| 141 Benzo(a)anthracene | ++++ 1.06713 | 1.06523 1.06295 | 1.05459 | 0.98052 | 1.01085 | 1.01131 | AVRG | | 1.03608 | | 3.34727 |
| 144 Chrysene | ++++ 0.99276 | 1.05777 1.00786 | 1.00373 | 0.94910 | 0.95496 | 0.94690 | AVRG | | 0.98758 | | 4.09739 |
| 143 Bis(2-ethylhexyl) phthalate | 0.63013 0.58313 | 0.64416 0.56523 | 0.63904 | 0.61882 | 0.59196 | 0.58225 | AVRG | | 0.60684 | | 4.91856 |
| 146 Di-n-octyl phthalate | ++++ 1.03848 | 1.08841 1.02604 | 1.09371 | 1.06380 | 1.03697 | 1.04905 | AVRG | | 1.05664 | | 2.48764 |

Report Date : 31-May-2004 14:26

Page 13

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 14:26 kidd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | RSD or R ² |
|----------------------------|-----------------|--------------------|---------|---------|---------|---------|-------|--------------|---------|--------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 |
| | 160 | 200 | | | | | | | | |
| | Level 7 | Level 8 | | | | | | | | |
| 147 Benzo(b)fluoranthene | ++++ 1.22601 | 1.08935 1.28701 | 1.03884 | 1.03279 | 1.09461 | 1.18880 | AVRG | | 1.13677 | 8.62436 |
| 148 Benzo(k)fluoranthene | ++++ 1.31575 | 1.23641 1.35547 | 1.32581 | 1.26271 | 1.13199 | 1.23085 | AVRG | | 1.26557 | 5.96010 |
| 150 Benzo(a)pyrene | ++++ 1.08808 | 0.99861 1.11429 | 1.03184 | 1.01430 | 0.98600 | 1.06213 | AVRG | | 1.04218 | 4.57545 |
| 155 Indeno(1,2,3-cd)pyrene | ++++ 1.25925 | 1.05736 1.31084 | 1.10777 | 1.08730 | 1.09574 | 1.19300 | AVRG | | 1.15875 | 8.36414 |
| 156 Dibenz(a,h)anthracene | ++++ 1.06970 | 0.91029 1.11177 | 0.90749 | 0.89386 | 0.92387 | 1.01958 | AVRG | | 0.97665 | 9.11847 |
| 157 Benzo(g,h,i)perylene | ++++ 1.01618 | 0.96561 1.05830 | 0.99989 | 0.95624 | 0.90844 | 0.97735 | AVRG | | 0.98314 | 4.85424 |
| 168 Methyl Styrene | ++++ 1.26657 | 1.70788 1.28733 | 1.69320 | 1.47579 | 1.32990 | 1.26210 | AVRG | | 1.43182 | 13.78781 |
| 202 Alachlor | ++++ 0.11892 | 0.14181 0.11966 | 0.13975 | 0.12568 | 0.11583 | 0.11837 | AVRG | | 0.12572 | 8.53466 |
| 204 Atrazine | ++++ 0.00401 | 0.03763 0.00246 | 0.03320 | 0.02486 | 0.01431 | 0.00677 | AVRG | | 0.01761 | 81.63052 |

<- narrate

Report Date : 31-May-2004 14:26

Page 14

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 14:26 kidd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | | %RSD or R ² |
|------------------------------|-----------------|--------------------|---------|---------|---------|---------|-------|--------------|---------|---------|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| | 160 | 200 | | | | | | | | | |
| | Level 7 | Level 8 | | | | | | | | | |
| 205 Caprolactam | ++++ 0.19111 | 0.12467 0.17605 | 0.17108 | 0.17995 | 0.18535 | 0.18846 | AVRG | | 0.17381 | | 13.10340 |
| 207 2,3-Dichlorobenzeneamine | ++++ 0.49909 | 0.66317 0.48748 | 0.63624 | 0.57885 | 0.53998 | 0.51274 | AVRG | | 0.55965 | | 12.29638 |
| 206 Decane | ++++ 856199 | 90419 953119 | 180655 | 353239 | 532393 | 691723 | LINR | -0.28765 | 1.38030 | | 0.99526 ✓ |
| 213 n-Dodecane | ++++ 797428 | 80339 901546 | 171661 | 323278 | 497211 | 641947 | QUAD | -0.02037 | 1.09799 | 0.22705 | 0.99982 ✓ |
| 210 Tetradecane | ++++ 621714 | 74196 701696 | 152826 | 278670 | 417034 | 516003 | QUAD | -0.01034 | 1.08590 | 0.52476 | 0.99950 ✓ |
| 209 Hexadecane | ++++ 881323 | 87751 1011851 | 185859 | 347764 | 541073 | 701965 | QUAD | -0.05527 | 1.11959 | 0.14110 | 0.99971 ✓ |
| 208 n-Octadecane | ++++ 366232 | 35456 433682 | 75070 | 140116 | 220567 | 290737 | LINR | -0.27266 | 0.13851 | | 0.99707 ✓ |
| 211 n-Eicosane | ++++ 0.51186 | 0.63908 0.48895 | 0.68537 | 0.62059 | 0.58982 | 0.55590 | AVRG | | 0.58451 | | 12.03875 |
| 212 n-Docosane | ++++ 0.43343 | 0.51754 0.40638 | 0.54995 | 0.50597 | 0.48002 | 0.45871 | AVRG | | 0.47886 | | 10.44469 |

Report Date : 31-May-2004 14:26

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
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 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 14:26 kidd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | %RSD or R ² |
|-------------------------------|-----------------|--------------------|---------|---------|---------|---------|-------|--------------|---------|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 |
| | 160 | 200 | | | | | | | | |
| | Level 7 | Level 8 | | | | | | | | |
| \$ 36 Nitrobenzene-d5 | ++++ 1.52868 | 1.73317 1.51779 | 1.74655 | 1.62644 | 1.54021 | 1.52976 | AVRG | | 1.60323 | 6.24740 |
| \$ 70 2-Fluorobiphenyl | ++++ 1.18303 | 1.39744 1.24747 | 1.32608 | 1.16313 | 1.07513 | 1.10155 | AVRG | | 1.21340 | 9.68174 |
| \$ 133 Terphenyl-d14 | ++++ 0.67928 | 0.72374 0.70501 | 0.69257 | 0.62889 | 0.63454 | 0.66149 | AVRG | | 0.67507 | 5.25431 |
| \$ 10 2-Fluorophenol | ++++ 1.23700 | 1.31695 1.21701 | 1.42021 | 1.42510 | 1.31997 | 1.26775 | AVRG | | 1.31486 | 6.29751 |
| \$ 14 Phenol-d5 | ++++ 1.47652 | 1.92950 1.44888 | 1.90219 | 1.76701 | 1.62140 | 1.47003 | AVRG | | 1.65936 | 12.50992 |
| \$ 103 2,4,6-Tribromophenol | ++++ 0.09927 | 0.08128 0.10294 | 0.08703 | 0.07797 | 0.08308 | 0.08938 | AVRG | | 0.08871 | 10.49150 |
| \$ 163 1,2-Dichlorobenzene-d4 | ++++ 0.73204 | 0.96097 0.74248 | 0.95894 | 0.84431 | 0.76179 | 0.73389 | AVRG | | 0.81920 | 12.63810 |
| \$ 162 2-Chlorophenol-d4 | ++++ 1.06586 | 1.47422 1.07289 | 1.41829 | 1.26889 | 1.13953 | 1.08374 | AVRG | | 1.21763 | 14.09513 |

Report Date : 31-May-2004 14:26

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
End Cal Date : 29-MAY-2004 11:25
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/K.i/052904.b/8270C.m
Cal Date : 31-May-2004 14:26 kiddd

| Curve | Formula | Units |
|-----------|-----------------------------|----------|
| ----- | ----- | ----- |
| Averaged | Amt = Rsp/ml | Response |
| Linear | Amt = b + Rsp/ml | Response |
| Wt Linear | Amt = b + Rsp/ml | Response |
| Quad | Amt = b + m1*Rsp + m2*Rsp^2 | Response |

INITIAL CALIBRATION REPORT

Instrument ID: K.i
 Lab File ID: k3373.d
 Analysis Type: WATER

Injection Date: 29-MAY-2004 11:25
 Lab Sample ID: HSL 0200
 Method File: /chem/K.i/052904.b/8270C.m

| COMPOUND | %RSD |
|------------------------------|------|
| N-Nitrosodimethylamine | 4.0 |
| Pyridine | 5.9 |
| 2-Fluorophenol | 6.3 |
| Phenol-d5 | 12.5 |
| Phenol | 11.1 |
| Aniline | 28.5 |
| Methyl Styrene | 13.8 |
| Bis(2-chloroethyl) ether | 18.8 |
| Decane | 15.8 |
| 2-Chlorophenol-d4 | 14.1 |
| 2-Chlorophenol | 14.1 |
| 1,3-Dichlorobenzene | 11.5 |
| 1,4-Dichlorobenzene | 12.4 |
| Benzyl alcohol | 4.1 |
| 1,2-Dichlorobenzene-d4 | 12.6 |
| 1,2-Dichlorobenzene | 15.2 |
| 2-Methylphenol | 10.4 |
| 2,2'-oxybis(1-chloropropane) | 19.5 |
| 1H-Indene | 14.5 |
| 4-Methylphenol | 8.3 |
| Acetophenone | 13.0 |
| N-nitrosodi-n-propylamine | 11.7 |
| Hexachloroethane | 10.7 |
| Nitrobenzene-d5 | 6.2 |
| Nitrobenzene | 8.7 |
| Isophorone | 6.5 |
| 2,4-Dimethylphenol | 10.5 |
| 2-Nitrophenol | 9.4 |
| Bis(2-chloroethoxy)methane | 11.5 |
| Benzoic acid | 7.0 |
| 2,4-Dichlorophenol | 6.0 |
| n-Dodecane | 17.2 |
| 1,2,4-Trichlorobenzene | 10.2 |
| Naphthalene | 11.5 |
| 4-Chloroaniline | 8.8 |
| Hexachlorobutadiene | 6.9 |
| Caprolactam | 13.1 |
| 4-Chloro-3-methylphenol | 4.5 |
| 2-Methylnaphthalene | 8.7 |

Quad
 05-31-04
 Linear

Quad

Quad

INITIAL CALIBRATION REPORT

Instrument ID: K.i
Lab File ID: k3373.d
Analysis Type: WATER

Injection Date: 29-MAY-2004 11:25
Lab Sample ID: HSL 0200
Method File: /chem/K.i/052904.b/8270C.m

| COMPOUND | %RSD |
|-----------------------------|------|
| 1-Methylnaphthalene | 11.1 |
| Hexachlorocyclopentadiene | 10.0 |
| 2,4,6-Trichlorophenol | 3.7 |
| 2,3-Dichlorobenzeneamine | 12.3 |
| 2,4,5-Trichlorophenol | 4.7 |
| 2-Fluorobiphenyl | 9.7 |
| Tetradecane | 23.7 |
| 2-Chloronaphthalene | 10.3 |
| 2-Nitroaniline | 5.2 |
| Dimethyl phthalate | 7.3 |
| 2,6-Dinitrotoluene | 4.7 |
| Acenaphthylene | 8.4 |
| 3-Nitroaniline | 5.9 |
| Acenaphthene | 7.1 |
| 2,4-Dinitrophenol | 23.9 |
| 4-Nitrophenol | 9.3 |
| Dibenzofuran | 8.7 |
| 2,4-Dinitrotoluene | 6.0 |
| Hexadecane | 16.3 |
| Diethyl phthalate | 6.0 |
| 4-Chlorophenyl phenyl ether | 6.3 |
| Fluorene | 7.1 |
| 4-Nitroaniline | 6.7 |
| 4,6-Dinitro-2-methylphenol | 4.6 |
| N-nitrosodiphenylamine | 8.1 |
| Azobenzene | 7.6 |
| 2,4,6-Tribromophenol | 10.5 |
| 4-Bromophenyl phenyl ether | 6.0 |
| Atrazine | 81.6 |
| Hexachlorobenzene | 6.0 |
| n-Octadecane | 17.2 |
| Pentachlorophenol | 8.6 |
| Phenanthrene | 8.5 |
| Anthracene | 10.1 |
| Carbazole | 11.4 |
| Alachlor | 8.5 |
| Di-n-butyl phthalate | 7.3 |
| n-Eicosane | 12.0 |
| Fluoranthene | 6.7 |

- Quad

- WL $1/x^2$

- Quad

- narrate

- Linear

INITIAL CALIBRATION REPORT

Instrument ID: K.i
Lab File ID: k3373.d
Analysis Type: WATER

Injection Date: 29-MAY-2004 11:25
Lab Sample ID: HSL 0200
Method File: /chem/K.i/052904.b/8270C.m

| COMPOUND | %RSD |
|-----------------------------|------|
| n-docosane | 10.4 |
| Benzidine | 18.6 |
| Pyrene | 6.1 |
| Terphenyl-d14 | 5.3 |
| Butyl benzyl phthalate | 7.6 |
| Bis(2-ethylhexyl) phthalate | 4.9 |
| 3,3'-Dichlorobenzidine | 2.4 |
| Benzo(a)anthracene | 3.3 |
| Chrysene | 4.1 |
| Di-n-octyl phthalate | 2.5 |
| Benzo(b)fluoranthene | 8.6 |
| Benzo(k)fluoranthene | 6.0 |
| Benzo(a)pyrene | 4.6 |
| Dibenz(a,h)anthracene | 9.1 |
| Indeno(1,2,3-cd)pyrene | 8.4 |
| Benzo(g,h,i)perylene | 4.9 |

-WL 1/2

The average of all %RSD's in the initial calibration is 10.3

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
End Cal Date : 29-MAY-2004 11:25
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/K.i/052904.b/8270C.m
Cal Date : 31-May-2004 13:02 kidd
Curve Type : Average

Calibration File Names:
Level 1: /chem/K.i/052904.b/k3366.d
Level 2: /chem/K.i/052904.b/k3367.d
Level 3: /chem/K.i/052904.b/k3368.d
Level 4: /chem/K.i/052904.b/k3369.d
Level 5: /chem/K.i/052904.b/k3370.d
Level 6: /chem/K.i/052904.b/k3371.d
Level 7: /chem/K.i/052904.b/k3372.d
Level 8: /chem/K.i/052904.b/k3373.d

| Compound | 5.000 | 10.000 | 20.000 | 50.000 | 80.000 | 120.000 | RRF | % RSD |
|-----------------------------|---------|---------|---------|---------|---------|---------|---------|--------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | |
| | ----- | ----- | ----- | ----- | ----- | ----- | | |
| | 160.000 | 200.000 | | | | | | |
| | Level 7 | Level 8 | | | | | | |
| ===== | | | | | | | | |
| 5 Pyridine | +++++ | 1.55679 | 1.70683 | 1.65861 | 1.62894 | 1.49487 | | |
| | 1.49458 | 1.47129 | | | | | 1.57313 | 5.874 |
| ----- | | | | | | | | |
| 4 N-Nitrosodimethylamine | +++++ | 0.99147 | 1.04996 | 1.02666 | 0.96742 | 0.94997 | | |
| | 0.96016 | 0.94950 | | | | | 0.98502 | 4.021 |
| ----- | | | | | | | | |
| 16 Aniline | +++++ | 2.04836 | 2.07119 | 1.77616 | 1.47618 | 1.28966 | | |
| | 1.13416 | 0.96816 | | | | | 1.53770 | 28.530 |
| ----- | | | | | | | | |
| 15 Phenol | +++++ | 1.91150 | 1.90473 | 1.78666 | 1.63422 | 1.54422 | | |
| | 1.48051 | 1.49594 | | | | | 1.67968 | 11.129 |
| ----- | | | | | | | | |
| 18 Bis(2-chloroethyl) ether | +++++ | 2.19812 | 1.95435 | 1.77113 | 1.60553 | 1.34269 | | |
| | 1.40305 | 1.45730 | | | | | 1.67602 | 18.829 |
| ----- | | | | | | | | |
| 20 2-Chlorophenol | +++++ | 1.51391 | 1.45517 | 1.33273 | 1.19601 | 1.13998 | | |
| | 1.09301 | 1.07477 | | | | | 1.25794 | 14.091 |
| ----- | | | | | | | | |
| 21 1,3-Dichlorobenzene | +++++ | 1.74014 | 1.67356 | 1.52092 | 1.38049 | 1.35018 | | |
| | 1.33759 | 1.33953 | | | | | 1.47749 | 11.511 |
| ----- | | | | | | | | |

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 13:02 kidd
 Curve Type : Average

| Compound | 5.000 Level 1 | 10.000 Level 2 | 20.000 Level 3 | 50.000 Level 4 | 80.000 Level 5 | 120.000 Level 6 | RRF | % RSD |
|---------------------------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|---------|--------|
| | 160.000 Level 7 | 200.000 Level 8 | | | | | | |
| 23 1,4-Dichlorobenzene | +++++ 1.36149 | 1.78739 1.36925 | 1.73391 | 1.53129 | 1.39871 | 1.34146 | 1.50336 | 12.441 |
| 24 Benzyl alcohol | +++++ 0.85331 | 0.82480 0.83209 | 0.90581 | 0.91045 | 0.89172 | 0.84778 | 0.86657 | 4.097 |
| 25 1,2-Dichlorobenzene | +++++ 1.20450 | 1.70953 1.20245 | 1.59420 | 1.39939 | 1.26528 | 1.20476 | 1.36859 | 15.214 |
| 26 2-Methylphenol | +++++ 1.14721 | 1.41644 1.15850 | 1.45945 | 1.35656 | 1.22773 | 1.16567 | 1.27594 | 10.356 |
| 27 1H-Indene | +++++ 1.94544 | 2.72851 1.96408 | 2.60886 | 2.31105 | 2.08583 | 1.98364 | 2.23249 | 14.535 |
| 28 2,2'-oxybis(1-chloropropane) | +++++ 1.84731 | 2.84198 1.75619 | 2.76568 | 2.43971 | 2.16122 | 1.95055 | 2.25181 | 19.492 |
| 29 4-Methylphenol | +++++ 1.26085 | 1.38195 1.24437 | 1.54011 | 1.31876 | 1.26328 | 1.23132 | 1.32009 | 8.332 |
| 30 N-nitrosodi-n-propylamine | +++++ 0.85999 | 1.12987 0.86451 | 1.09720 | 0.99733 | 0.91299 | 0.88346 | 0.96362 | 11.693 |
| 32 Acetophenone | +++++ 1.64117 | 2.16026 1.60821 | 2.12931 | 1.89241 | 1.70952 | 1.63862 | 1.82564 | 13.009 |
| 33 Hexachloroethane | 0.74849 0.59016 | 0.71499 0.58482 | 0.72388 | 0.66066 | 0.60013 | 0.58667 | 0.65123 | 10.672 |

STL-Denver

INITIAL CALIBRATION DATA

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 Cal Date : 31-May-2004 13:02 kidd
 Curve Type : Average

| Compound | 5.000 Level 1 | 10.000 Level 2 | 20.000 Level 3 | 50.000 Level 4 | 80.000 Level 5 | 120.000 Level 6 | RRF | % RSD |
|-------------------------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|---------|--------|
| | 160.000 Level 7 | 200.000 Level 8 | | | | | | |
| 37 Nitrobenzene | ++++ 1.53885 | 1.83151 1.49120 | 1.84229 | 1.69134 | 1.61398 | 1.53478 | 1.64914 | 8.709 |
| 40 Isophorone | ++++ 0.68999 | 0.77593 0.67913 | 0.80784 | 0.75090 | 0.72659 | 0.70042 | 0.73297 | 6.500 |
| 41 2-Nitrophenol | ++++ 0.15022 | 0.18060 0.15098 | 0.18770 | 0.17370 | 0.15680 | 0.15394 | 0.16485 | 9.393 |
| 42 2,4-Dimethylphenol | ++++ 0.30024 | 0.37896 0.30954 | 0.37535 | 0.33506 | 0.31036 | 0.29854 | 0.32972 | 10.475 |
| 43 Bis(2-chloroethoxy)methane | ++++ 0.38676 | 0.48773 0.37253 | 0.49206 | 0.43316 | 0.40699 | 0.39081 | 0.42429 | 11.467 |
| 45 Benzoic acid | ++++ 0.22159 | ++++ 0.22320 | ++++ | 0.18713 | 0.20894 | 0.21773 | 0.21172 | 6.996 |
| 46 2,4-Dichlorophenol | ++++ 0.27785 | 0.29188 0.26966 | 0.32348 | 0.29373 | 0.28757 | 0.27993 | 0.28916 | 5.994 |
| 47 1,2,4-Trichlorobenzene | ++++ 0.28923 | 0.36618 0.28791 | 0.35063 | 0.31887 | 0.30060 | 0.28954 | 0.31471 | 10.178 |
| 50 Naphthalene | ++++ 0.87913 | 1.13506 0.86715 | 1.11042 | 0.96579 | 0.92067 | 0.89328 | 0.96736 | 11.487 |
| 51 4-Chloroaniline | ++++ 0.34613 | 0.40520 0.33760 | 0.42390 | 0.40129 | 0.37327 | 0.35463 | 0.37743 | 8.789 |

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
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 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 13:02 kidd
 Curve Type : Average

| Compound | 5.000 Level 1 | 10.000 Level 2 | 20.000 Level 3 | 50.000 Level 4 | 80.000 Level 5 | 120.000 Level 6 | RRF | % RSD |
|------------------------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|---------|--------|
| | 160.000 Level 7 | 200.000 Level 8 | | | | | | |
| 52 Hexachlorobutadiene | +++++ 0.19198 | 0.22899 0.19514 | 0.21942 | 0.20267 | 0.19856 | 0.19530 | 0.20458 | 6.885 |
| 59 4-Chloro-3-methylphenol | +++++ 0.29669 | 0.30536 0.28609 | 0.33010 | 0.30871 | 0.30714 | 0.29693 | 0.30443 | 4.523 |
| 62 2-Methylnaphthalene | +++++ 0.53913 | 0.64394 0.53891 | 0.65941 | 0.59575 | 0.56251 | 0.54342 | 0.58330 | 8.733 |
| 64 1-Methylnaphthalene | +++++ 0.54749 | 0.70161 0.54096 | 0.67474 | 0.59246 | 0.56636 | 0.54477 | 0.59548 | 11.107 |
| 63 Hexachlorocyclopentadiene | +++++ 0.38879 | 0.28832 0.39087 | 0.34146 | 0.37157 | 0.36646 | 0.38021 | 0.36110 | 10.010 |
| 67 2,4,6-Trichlorophenol | +++++ 0.34637 | 0.37498 0.34955 | 0.37908 | 0.36723 | 0.35892 | 0.34952 | 0.36081 | 3.652 |
| 68 2,4,5-Trichlorophenol | +++++ 0.38892 | 0.40464 0.37846 | 0.42949 | 0.39850 | 0.38863 | 0.37510 | 0.39482 | 4.672 |
| 71 2-Chloronaphthalene | +++++ 0.94698 | 1.19020 0.93426 | 1.15851 | 1.05722 | 0.97580 | 0.95679 | 1.03139 | 10.266 |
| 74 2-Nitroaniline | +++++ 0.39625 | 0.40513 0.38644 | 0.44539 | 0.43967 | 0.41849 | 0.41232 | 0.41481 | 5.222 |
| 76 Dimethyl phthalate | +++++ 1.05508 | 1.21115 1.03976 | 1.25297 | 1.14326 | 1.07834 | 1.07666 | 1.12246 | 7.343 |

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 13:02 kidd
 Curve Type : Average

| Compound | 5.000 | 10.000 | 20.000 | 50.000 | 80.000 | 120.000 | RRF | % RSD |
|--------------------------------|---------|---------|---------|---------|---------|---------|---------|--------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | |
| | 160.000 | 200.000 | | | | | | |
| | Level 7 | Level 8 | | | | | | |
| 79 2,6-Dinitrotoluene | +++++ | 0.24282 | 0.26263 | 0.25731 | 0.24578 | 0.23848 | 0.24504 | 4.727 |
| | 0.23958 | 0.22871 | | | | | | |
| 81 Acenaphthylene | +++++ | 1.84443 | 1.81336 | 1.65901 | 1.54564 | 1.53172 | 1.63884 | 8.386 |
| | 1.54347 | 1.53424 | | | | | | |
| 82 3-Nitroaniline | +++++ | +++++ | 0.30845 | 0.30169 | 0.29454 | 0.28516 | 0.28764 | 5.932 |
| | 0.26854 | 0.26748 | | | | | | |
| 84 Acenaphthene | +++++ | 1.04656 | 1.03125 | 0.94016 | 0.89436 | 0.88582 | 0.94493 | 7.081 |
| | 0.89580 | 0.92056 | | | | | | |
| 85 2,4-Dinitrophenol | +++++ | +++++ | 0.08618 | 0.15179 | 0.17521 | 0.18210 | 0.16033 | 23.932 |
| | 0.18750 | 0.17921 | | | | | | |
| 86 4-Nitrophenol | +++++ | +++++ | 0.20683 | 0.24180 | 0.26029 | 0.26291 | 0.25073 | 9.334 |
| | 0.26843 | 0.26409 | | | | | | |
| 87 2,4-Dinitrotoluene | +++++ | 0.31150 | 0.35379 | 0.34983 | 0.33201 | 0.31561 | 0.32580 | 6.021 |
| | 0.31288 | 0.30497 | | | | | | |
| 88 Dibenzofuran | +++++ | 1.53399 | 1.51972 | 1.39180 | 1.29092 | 1.26509 | 1.36524 | 8.665 |
| | 1.27906 | 1.27610 | | | | | | |
| 93 Diethyl phthalate | +++++ | 1.17094 | 1.23180 | 1.16198 | 1.07979 | 1.06613 | 1.12085 | 5.976 |
| | 1.07357 | 1.06176 | | | | | | |
| 95 4-Chlorophenyl phenyl ether | +++++ | 0.64700 | 0.66707 | 0.61117 | 0.57250 | 0.57207 | 0.60556 | 6.267 |
| | 0.58205 | 0.58705 | | | | | | |

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 13:02 kidd
 Curve Type : Average

| Compound | 5.000 Level 1 | 10.000 Level 2 | 20.000 Level 3 | 50.000 Level 4 | 80.000 Level 5 | 120.000 Level 6 | RRF | % RSD |
|--------------------------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|---------|--------|
| | 160.000 Level 7 | 200.000 Level 8 | | | | | | |
| 96 Fluorene | ++++ 1.10684 | 1.28180 1.14065 | 1.28607 | 1.18167 | 1.10119 | 1.09549 | 1.17053 | 7.083 |
| 97 4-Nitroaniline | ++++ 0.27296 | ++++ 0.25349 | 0.29272 | 0.30944 | 0.29057 | 0.28251 | 0.28361 | 6.728 |
| 99 4,6-Dinitro-2-methylphenol | ++++ 0.23695 | ++++ 0.24023 | 0.21046 | 0.23072 | 0.23418 | 0.23139 | 0.23065 | 4.556 |
| 101 N-nitrosodiphenylamine | ++++ 0.77234 | 0.90752 0.76638 | 0.90174 | 0.82833 | 0.78467 | 0.74538 | 0.81519 | 8.108 |
| 102 Azobenzene | ++++ 1.24741 | 1.42630 1.20955 | 1.48519 | 1.41429 | 1.33076 | 1.28726 | 1.34296 | 7.596 |
| 108 4-Bromophenyl phenyl ether | ++++ 0.17481 | 0.19574 0.17812 | 0.19612 | 0.17653 | 0.17018 | 0.17281 | 0.18062 | 5.961 |
| 110 Hexachlorobenzene | ++++ 0.19474 | 0.20445 0.19922 | 0.20446 | 0.18116 | 0.17469 | 0.18789 | 0.19237 | 6.014 |
| 113 Pentachlorophenol | ++++ 0.12526 | ++++ 0.12432 | 0.10026 | 0.10890 | 0.11382 | 0.12170 | 0.11571 | 8.553 |
| 118 Phenanthrene | ++++ 0.87357 | 1.05077 0.90067 | 1.01563 | 0.89885 | 0.85037 | 0.86468 | 0.92208 | 8.528 |
| 122 Anthracene | ++++ 0.87878 | 1.08304 0.91958 | 1.06997 | 0.90055 | 0.85541 | 0.87495 | 0.94033 | 10.132 |

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 13:02 kidd
 Curve Type : Average

| Compound | 5.000 Level 1 | 10.000 Level 2 | 20.000 Level 3 | 50.000 Level 4 | 80.000 Level 5 | 120.000 Level 6 | RRF | % RSD |
|---------------------------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|---------|--------|
| | 160.000 Level 7 | 200.000 Level 8 | | | | | | |
| 123 Carbazole | +++++ | 0.96404 | 0.94333 | 0.81482 | 0.76605 | 0.75716 | 0.82058 | 11.440 |
| | 0.74509 | 0.75355 | | | | | | |
| 125 Di-n-butyl phthalate | +++++ | 1.05361 | 1.08063 | 0.97518 | 0.90986 | 0.93092 | 0.96870 | 7.344 |
| | 0.91360 | 0.91708 | | | | | | |
| 130 Fluoranthene | +++++ | 1.18046 | 1.16591 | 1.04505 | 0.99211 | 1.02339 | 1.07324 | 6.684 |
| | 1.04587 | 1.05993 | | | | | | |
| 131 Benzidine | +++++ | +++++ | 0.17730 | 0.13780 | 0.12824 | 0.12203 | 0.13213 | 18.596 |
| | 0.12239 | 0.10503 | | | | | | |
| 132 Pyrene | +++++ | 1.23109 | 1.17904 | 1.09205 | 1.05344 | 1.05113 | 1.11038 | 6.139 |
| | 1.08432 | 1.08158 | | | | | | |
| 137 Butyl benzyl phthalate | +++++ | 0.48174 | 0.49211 | 0.45449 | 0.43066 | 0.42359 | 0.44326 | 7.578 |
| | 0.41426 | 0.40597 | | | | | | |
| 140 3,3'-Dichlorobenzidine | +++++ | 0.38138 | 0.37534 | 0.37501 | 0.37145 | 0.38159 | 0.38157 | 2.422 |
| | 0.38754 | 0.39867 | | | | | | |
| 141 Benzo(a)anthracene | +++++ | 1.06523 | 1.05459 | 0.98052 | 1.01085 | 1.01131 | 1.03608 | 3.347 |
| | 1.06713 | 1.06295 | | | | | | |
| 144 Chrysene | +++++ | 1.05777 | 1.00373 | 0.94910 | 0.95496 | 0.94690 | 0.98758 | 4.097 |
| | 0.99276 | 1.00786 | | | | | | |
| 143 Bis(2-ethylhexyl) phthalate | 0.63013 | 0.64416 | 0.63904 | 0.61882 | 0.59196 | 0.58225 | 0.60684 | 4.919 |
| | 0.58313 | 0.56523 | | | | | | |

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 13:02 kiddd
 Curve Type : Average

| Compound | 5.000 | 10.000 | 20.000 | 50.000 | 80.000 | 120.000 | RRF | % RSD |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|--------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | |
| | 150.000 | 200.000 | | | | | | |
| | Level 7 | Level 8 | | | | | | |
| 146 Di-n-octyl phthalate | +++++ | 1.08841 | 1.09371 | 1.06380 | 1.03697 | 1.04905 | | |
| | 1.03848 | 1.02604 | | | | | 1.05664 | 2.488 |
| 147 Benzo(b)fluoranthene | +++++ | 1.08935 | 1.03884 | 1.03279 | 1.09461 | 1.18880 | | |
| | 1.22601 | 1.28701 | | | | | 1.13677 | 8.624 |
| 148 Benzo(k)fluoranthene | +++++ | 1.23641 | 1.32581 | 1.26271 | 1.13199 | 1.23085 | | |
| | 1.31575 | 1.35547 | | | | | 1.26557 | 5.960 |
| 150 Benzo(a)pyrene | +++++ | 0.99861 | 1.03184 | 1.01430 | 0.98600 | 1.06213 | | |
| | 1.08808 | 1.11429 | | | | | 1.04218 | 4.575 |
| 155 Indeno(1,2,3-cd)pyrene | +++++ | 1.05736 | 1.10777 | 1.08730 | 1.09574 | 1.19300 | | |
| | 1.25925 | 1.31084 | | | | | 1.15875 | 8.364 |
| 156 Dibenz(a,h)anthracene | +++++ | 0.91029 | 0.90749 | 0.89386 | 0.92387 | 1.01958 | | |
| | 1.06970 | 1.11177 | | | | | 0.97665 | 9.118 |
| 157 Benzo(g,h,i)perylene | +++++ | 0.96561 | 0.99989 | 0.95624 | 0.90844 | 0.97735 | | |
| | 1.01618 | 1.05830 | | | | | 0.98314 | 4.854 |
| 168 Methyl Styrene | +++++ | 1.70788 | 1.69320 | 1.47579 | 1.32990 | 1.26210 | | |
| | 1.26657 | 1.28733 | | | | | 1.43182 | 13.788 |
| 202 Alachlor | +++++ | 0.14181 | 0.13975 | 0.12568 | 0.11583 | 0.11837 | | |
| | 0.11892 | 0.11966 | | | | | 0.12572 | 8.535 |
| 204 Atrazine | +++++ | 0.03763 | 0.03320 | 0.02486 | 0.01431 | 0.00677 | | |
| | 0.00401 | 0.00246 | | | | | 0.01761 | 81.631 |

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 13:02 kiddd
 Curve Type : Average

| Compound | 5.000 | 10.000 | 20.000 | 50.000 | 80.000 | 120.000 | RRF | % RSD |
|------------------------------|---------|---------|---------|---------|---------|---------|---------|--------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | |
| | 160.000 | 200.000 | | | | | | |
| | Level 7 | Level 8 | | | | | | |
| 205 Caprolactam | +++++ | 0.12467 | 0.17108 | 0.17995 | 0.18535 | 0.18846 | | |
| | 0.19111 | 0.17605 | | | | | 0.17381 | 13.103 |
| 207 2,3-Dichlorobenzeneamine | +++++ | 0.66317 | 0.63624 | 0.57885 | 0.53998 | 0.51274 | | |
| | 0.49909 | 0.48748 | | | | | 0.55965 | 12.296 |
| 206 Decane | +++++ | 2.12108 | 2.01745 | 1.86005 | 1.65464 | 1.55564 | | |
| | 1.48280 | 1.41853 | | | | | 1.73003 | 15.771 |
| 213 n-Dodecane | +++++ | 0.86273 | 0.89397 | 0.79213 | 0.70192 | 0.65263 | | |
| | 0.60755 | 0.57480 | | | | | 0.72653 | 17.241 |
| 210 Tetradecane | +++++ | 0.79677 | 0.79589 | 0.68283 | 0.58873 | 0.52459 | | |
| | 0.47367 | 0.44738 | | | | | 0.61569 | 23.657 |
| 209 Hexadecane | +++++ | 0.94233 | 0.96791 | 0.85213 | 0.76384 | 0.71364 | | |
| | 0.67147 | 0.64513 | | | | | 0.79378 | 16.278 |
| 208 n-Octadecane | +++++ | 0.21315 | 0.21428 | 0.18045 | 0.16133 | 0.15633 | | |
| | 0.14496 | 0.14460 | | | | | 0.17359 | 17.243 |
| 211 n-Eicosane | +++++ | 0.63908 | 0.68537 | 0.62059 | 0.58982 | 0.55590 | | |
| | 0.51186 | 0.48895 | | | | | 0.58451 | 12.039 |
| 212 n-Docosane | +++++ | 0.51754 | 0.54995 | 0.50597 | 0.48002 | 0.45871 | | |
| | 0.43343 | 0.40638 | | | | | 0.47886 | 10.445 |
| \$ 16 Nitrobenzene-d5 | +++++ | 1.73317 | 1.74655 | 1.62644 | 1.54021 | 1.52976 | | |
| | 1.52868 | 1.51779 | | | | | 1.60323 | 6.247 |

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 11:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 13:02 kidd
 Curve Type : Average

| Compound | 5.000 Level 1 | 10.000 Level 2 | 20.000 Level 3 | 50.000 Level 4 | 80.000 Level 5 | 120.000 Level 6 | RRF | % RSD |
|-------------------------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|---------|--------|
| | 160.000 Level 7 | 200.000 Level 8 | | | | | | |
| \$ 70 2-Fluorobiphenyl | ++++ 1.18303 | 1.39744 1.24747 | 1.32608 | 1.16313 | 1.07513 | 1.10155 | 1.21340 | 9.682 |
| \$ 133 Terphenyl-d14 | ++++ 0.67928 | 0.72374 0.70501 | 0.69257 | 0.62889 | 0.63454 | 0.66149 | 0.67507 | 5.254 |
| \$ 10 2-Fluorophenol | ++++ 1.23700 | 1.31695 1.21701 | 1.42021 | 1.42510 | 1.31997 | 1.26775 | 1.31486 | 6.298 |
| \$ 14 Phenol-d5 | ++++ 1.47652 | 1.92950 1.44888 | 1.90219 | 1.76701 | 1.62140 | 1.47003 | 1.65936 | 12.510 |
| \$ 103 2,4,6-Tribromophenol | ++++ 0.09927 | 0.08128 0.10294 | 0.08703 | 0.07797 | 0.08308 | 0.08938 | 0.08871 | 10.492 |
| \$ 163 1,2-Dichlorobenzene-d4 | ++++ 0.73204 | 0.96097 0.74248 | 0.95894 | 0.84431 | 0.76179 | 0.73389 | 0.81920 | 12.638 |
| \$ 162 2-Chlorophenol-d4 | ++++ 1.06586 | 1.47422 1.07289 | 1.41829 | 1.26889 | 1.13953 | 1.08374 | 1.21763 | 14.095 |

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3366.d
Lab Smp Id: HSL_0005 Client Smp ID: HSL_0005
Inj Date : 29-MAY-2004 08:39
Operator : kiddd Inst ID: K.i
Smp Info : HSL_0005,BNA1509,P:051104,E:053104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 14:24 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 08:39 Cal File: k3366.d
Als bottle: 6 Calibration Sample, Level: 1
Dil Factor: 1.00000 Compound Sublist: 1-HSL.sub
Integrator: HP RTE
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | | | RESPONSE | AMOUNTS | |
|-------------------------------|-----------|--------|----------------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT REL RT | | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 (1.000) | 191115 | 40.0000 | |
| * 49 Naphthalene-d8 | 136 | 6.322 | 6.322 (1.000) | 724962 | 40.0000 | |
| * 83 Acenaphthene-d10 | 164 | 8.008 | 8.008 (1.000) | 410645 | 40.0000 | |
| * 117 Phenanthrene-d10 | 188 | 9.248 | 9.248 (1.000) | 747022 | 40.0000 | |
| * 142 Chrysene-d12 | 240 | 11.387 | 11.387 (1.000) | 740825 | 40.0000 | |
| * 151 Perylene-d12 | 264 | 12.914 | 12.914 (1.000) | 627602 | 40.0000 | |
| \$ 36 Nitrobenzene-d5 | 82 | 5.652 | 5.652 (1.104) | 38269 | 5.00000 | 4.99593(a) |
| \$ 70 2-Fluorobiphenyl | 172 | 7.362 | 7.362 (0.919) | 71892 | 5.00000 | 5.77123(a) |
| \$ 133 Terphenyl-d14 | 244 | 10.476 | 10.476 (0.920) | 64665 | 5.00000 | 5.17204(a) |
| \$ 10 2-Fluorophenol | 112 | 4.054 | 4.054 (0.792) | 40825 | 7.50000 | 6.49850(a) |
| \$ 14 Phenol-d5 | 99 | 4.794 | 4.794 (0.937) | 65597 | 7.50000 | 8.27386(a) |
| \$ 103 2,4,6-Tribromophenol | 330 | 8.696 | 8.696 (0.940) | 11296 | 7.50000 | 6.81855(a) |
| \$ 163 1,2-Dichlorobenzene-d4 | 152 | 5.299 | 5.299 (1.036) | 24023 | 5.00000 | 6.13764(a) |
| \$ 162 2-Chlorophenol-d4 | 132 | 4.953 | 4.953 (0.968) | 50460 | 7.50000 | 8.67354(a) |
| 5 Pyridine | 79 | 3.090 | 3.090 (0.604) | 27920 | 5.00000 | 3.71463(aH) |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ==== | ** | ===== | ===== | ===== | ===== | ===== |
| 4 N-Nitrosodimethylamine | 74 | 3.043 | 3.043 | (0.595) | 21562 | 5.00000 | 4.58152(a) |
| 16 Aniline | 93 | 4.859 | 4.859 | (0.949) | 52703 | 5.00000 | 11.0628 |
| 15 Phenol | 94 | 4.806 | 4.806 | (0.939) | 41641 | 5.00000 | 5.18870(a) |
| 20 2-Chlorophenol | 128 | 4.965 | 4.965 | (0.970) | 35061 | 5.00000 | 5.83351(a) |
| 21 1,3-Dichlorobenzene | 146 | 5.088 | 5.088 | (0.994) | 40900 | 5.00000 | 5.79382(a) |
| 23 1,4-Dichlorobenzene | 146 | 5.135 | 5.135 | (1.003) | 43486 | 5.00000 | 6.05414(a) |
| 24 Benzyl alcohol | 108 | 5.252 | 5.252 | (1.026) | 16100 | 5.00000 | 3.88857(a) |
| 25 1,2-Dichlorobenzene | 146 | 5.311 | 5.311 | (1.038) | 38951 | 5.00000 | 5.95678(a) |
| 26 2-Methylphenol | 108 | 5.341 | 5.341 | (1.044) | 31953 | 5.00000 | 5.24141(a) |
| 27 1H-Indene | 116 | 5.376 | 5.376 | (1.051) | 65387 | 5.00000 | 6.13010(a) |
| 28 2,2'-oxybis(1-chloropropane) | 45 | 5.370 | 5.370 | (1.049) | 66923 | 5.00000 | 2.88925(a) |
| 29 4-Methylphenol | 108 | 5.476 | 5.476 | (1.070) | 30489 | 5.00000 | 4.83397(a) |
| 30 N-nitrosodi-n-propylamine | 70 | 5.499 | 5.499 | (1.075) | 26544 | 5.00000 | 5.76534(a) |
| 32 Acetophenone | 105 | 5.499 | 5.499 | (1.075) | 47990 | 5.00000 | 5.50175 |
| 33 Hexachloroethane | 117 | 5.593 | 5.593 | (1.093) | 17881 | 5.00000 | 5.74680(a) |
| 37 Nitrobenzene | 77 | 5.670 | 5.670 | (1.108) | 41727 | 5.00000 | 5.29573(a) |
| 40 Isophorone | 82 | 5.875 | 5.875 | (0.929) | 70962 | 5.00000 | 5.34174(a) |
| 41 2-Nitrophenol | 139 | 5.975 | 5.975 | (0.945) | 15452 | 5.00000 | 5.17191(a) |
| 42 2,4-Dimethylphenol | 107 | 5.969 | 5.969 | (0.944) | 33534 | 5.00000 | 5.61153(a) |
| 43 Bis(2-chloroethoxy)methane | 93 | 6.063 | 6.063 | (0.959) | 42525 | 5.00000 | 5.52999(a) |
| 45 Benzoic acid | 122 | 6.087 | 6.087 | (0.963) | 4207 | 5.00000 | 1.09637(aQ) |
| 46 2,4-Dichlorophenol | 162 | 6.198 | 6.198 | (0.980) | 23217 | 5.00000 | 4.43014(a) |
| 47 1,2,4-Trichlorobenzene | 180 | 6.275 | 6.275 | (0.993) | 33051 | 5.00000 | 5.79454(a) |
| 50 Naphthalene | 128 | 6.339 | 6.339 | (1.003) | 100310 | 5.00000 | 5.72139(a) |
| 51 4-Chloroaniline | 127 | 6.410 | 6.410 | (1.014) | 33294 | 5.00000 | 4.86711(a) |
| 52 Hexachlorobutadiene | 225 | 6.492 | 6.492 | (1.027) | 20895 | 5.00000 | 5.63535(a) |
| 59 4-Chloro-3-methylphenol | 107 | 6.851 | 6.851 | (1.084) | 25002 | 5.00000 | 4.53138(a) |
| 62 2-Methylnaphthalene | 142 | 7.009 | 7.009 | (1.109) | 57520 | 5.00000 | 5.44095(a) |
| 64 1-Methylnaphthalene | 142 | 7.121 | 7.121 | (1.126) | 64697 | 5.00000 | 5.99458(a) |
| 63 Hexachlorocyclopentadiene | 237 | 7.221 | 7.221 | (0.902) | 12822 | 5.00000 | 3.45879(a) |
| 67 2,4,6-Trichlorophenol | 196 | 7.303 | 7.303 | (0.912) | 18504 | 5.00000 | 4.99556(a) |
| 68 2,4,5-Trichlorophenol | 196 | 7.356 | 7.356 | (0.919) | 16967 | 5.00000 | 4.18599(a) |
| 71 2-Chloronaphthalene | 162 | 7.485 | 7.485 | (0.935) | 62983 | 5.00000 | 5.94829(a) |
| 74 2-Nitroaniline | 65 | 7.609 | 7.609 | (0.950) | 18550 | 5.00000 | 4.35599(a) |
| 76 Dimethyl phthalate | 163 | 7.761 | 7.761 | (0.969) | 61186 | 5.00000 | 5.30976(a) |
| 79 2,6-Dinitrotoluene | 165 | 7.844 | 7.844 | (0.979) | 11558 | 5.00000 | 4.59444(a) |
| 81 Acenaphthylene | 152 | 7.879 | 7.879 | (0.984) | 95878 | 5.00000 | 5.69870(a) |
| 82 3-Nitroaniline | 138 | 7.990 | 7.990 | (0.998) | 11818 | 5.00000 | 4.00204(a) |
| 84 Acenaphthene | 153 | 8.037 | 8.037 | (1.004) | 56861 | 5.00000 | 5.86149(a) |
| 85 2,4-Dinitrophenol | 184 | 8.084 | 8.084 | (1.010) | 382 | 5.00000 | 11.4742(Q) |
| 86 4-Nitrophenol | 109 | 8.131 | 8.131 | (1.015) | 4531 | 5.00000 | 1.76030(a) |
| 87 2,4-Dinitrotoluene | 165 | 8.196 | 8.196 | (1.023) | 13760 | 5.00000 | 4.11400(a) |
| 88 Dibenzofuran | 168 | 8.173 | 8.173 | (1.021) | 80939 | 5.00000 | 5.77488(a) |
| 93 Diethyl phthalate | 149 | 8.367 | 8.367 | (1.045) | 60057 | 5.00000 | 5.21925(a) |
| 95 4-Chlorophenyl phenyl ether | 204 | 8.449 | 8.449 | (1.055) | 35308 | 5.00000 | 5.67951(a) |
| 96 Fluorene | 166 | 8.472 | 8.472 | (1.058) | 67091 | 5.00000 | 5.58310(a) |
| 97 4-Nitroaniline | 138 | 8.525 | 8.525 | (1.065) | 11112 | 5.00000 | 3.81644(a) |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| 99 4,6-Dinitro-2-methylphenol | 198 | 8.543 | 8.543 | (1.067) | 5745 | 5.00000 | 2.42619(a) |
| 101 N-nitrosodiphenylamine | 169 | 8.549 | 8.549 | (1.067) | 46437 | 5.00000 | 5.54876(a) |
| 102 Azobenzene | 77 | 8.578 | 8.578 | (1.071) | 78720 | 5.00000 | 5.70972(a) |
| 108 4-Bromophenyl phenyl ether | 248 | 8.854 | 8.854 | (0.957) | 18352 | 5.00000 | 5.44068(a) |
| 110 Hexachlorobenzene | 284 | 8.995 | 8.995 | (0.973) | 17738 | 5.00000 | 4.93728(a) |
| 113 Pentachlorophenol | 266 | 9.142 | 9.142 | (0.989) | 8541 | 5.00000 | 3.95251(a) |
| 118 Phenanthrene | 178 | 9.265 | 9.265 | (1.002) | 95117 | 5.00000 | 5.52353(a) |
| 122 Anthracene | 178 | 9.301 | 9.301 | (1.006) | 101353 | 5.00000 | 5.77145(a) |
| 123 Carbazole | 167 | 9.424 | 9.424 | (1.019) | 89196 | 5.00000 | 5.82039(a) |
| 125 Di-n-butyl phthalate | 149 | 9.659 | 9.659 | (1.044) | 95638 | 5.00000 | 5.28652(a) |
| 130 Fluoranthene | 202 | 10.211 | 10.211 | (1.104) | 108564 | 5.00000 | 5.41644(a) |
| 131 Benzidine | 184 | 10.300 | 10.300 | (0.905) | 36963 | 5.00000 | 5.57328(a) |
| 132 Pyrene | 202 | 10.399 | 10.399 | (0.913) | 112369 | 5.00000 | 5.46411(a) |
| 137 Butyl benzyl phthalate | 149 | 10.846 | 10.846 | (0.953) | 44550 | 5.00000 | 5.42666(a) |
| 140 3 3'-Dichlorobenzidine | 252 | 11.328 | 11.328 | (0.995) | 36680 | 5.00000 | 5.19040(a) |
| 141 Benzo(a)anthracene | 228 | 11.369 | 11.369 | (0.998) | 100686 | 5.00000 | 5.24710(a) |
| 144 Chrysene | 228 | 11.410 | 11.410 | (1.002) | 100621 | 5.00000 | 5.50122(a) |
| 143 Bis(2-ethylhexyl) phthalate | 149 | 11.281 | 11.281 | (0.991) | 58352 | 5.00000 | 5.19190(a) |
| 146 Di-n-octyl phthalate | 149 | 11.810 | 11.810 | (1.037) | 90506 | 5.00000 | 4.62484(a) |
| 147 Benzo(b)fluoranthene | 252 | 12.438 | 12.438 | (0.963) | 87267 | 5.00000 | 4.89273(a) |
| 148 Benzo(k)fluoranthene | 252 | 12.462 | 12.462 | (0.965) | 102456 | 5.00000 | 5.15972(a) |
| 150 Benzo(a)pyrene | 252 | 12.838 | 12.838 | (0.994) | 77752 | 5.00000 | 4.75493(a) |
| 155 Indeno(1,2,3-cd)pyrene | 276 | 14.506 | 14.506 | (1.123) | 80383 | 5.00000 | 4.42129(a) |
| 156 Dibenz(a,h)anthracene | 278 | 14.501 | 14.501 | (1.123) | 64213 | 5.00000 | 4.19043(a) |
| 157 Benzo(g,h,i)perylene | 276 | 15.006 | 15.006 | (1.162) | 75365 | 5.00000 | 4.88572(a) |
| 168 Methyl Styrene | 118 | 4.882 | 4.882 | (0.954) | 40905 | 5.00000 | 5.97932(a) |
| 202 Alachlor | 188 | 9.565 | 9.565 | (1.034) | 11805 | 5.00000 | 5.02798(a) |
| 204 Atrazine | 200 | 8.983 | 8.983 | (0.971) | 2731 | 5.00000 | 8.30619(a) |
| 205 Caprolactam | 55 | 6.721 | 6.721 | (1.063) | 7423 | 5.00000 | 2.35643(a) |
| 207 2,3-Dichlorobenzeneamine | 161 | 7.321 | 7.321 | (0.914) | 33631 | 5.00000 | 5.85355(a) |
| 213 n-Dodecane | 43 | 6.234 | 6.234 | (0.778) | 45554 | 5.00000 | 4.16926(a) |
| 210 Tetradecane | 43 | 7.368 | 7.368 | (0.920) | 39980 | 5.00000 | 4.01431(a) |
| 209 Hexadecane | 57 | 8.284 | 8.284 | (1.034) | 48063 | 5.00000 | 3.10824(a) |
| 211 n-Eicosane | 43 | 9.677 | 9.677 | (1.208) | 33571 | 5.00000 | 5.59456(a) |
| 212 n-docosane | 43 | 10.258 | 10.258 | (1.281) | 24425 | 5.00000 | 4.96847(a) |

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: K.i
Lab File ID: k3366.d
Lab Smp Id: HSL 0005
Analysis Type: SV
Quant Type: ISTD
Operator: kiddd
Method File: /chem/K.i/052904.b/8270C.m
Misc Info:

Calibration Date: 29-MAY-2004
Calibration Time: 10:14
Client Smp ID: HSL_0005
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 160879 | 80440 | 321758 | 191115 | 18.79 |
| 49 Naphthalene-d8 | 591401 | 295700 | 1182802 | 724962 | 22.58 |
| 83 Acenaphthene-d10 | 354180 | 177090 | 708360 | 410645 | 15.94 |
| 117 Phenanthrene-d10 | 683575 | 341788 | 1367150 | 747022 | 9.28 |
| 142 Chrysene-d12 | 669104 | 334552 | 1338208 | 740825 | 10.72 |
| 151 Perylene-d12 | 582855 | 291428 | 1165710 | 627602 | 7.68 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.00 |
| 117 Phenanthrene-d10 | 9.25 | 8.75 | 9.75 | 9.25 | 0.00 |
| 142 Chrysene-d12 | 11.39 | 10.89 | 11.89 | 11.39 | -0.05 |
| 151 Perylene-d12 | 12.92 | 12.42 | 13.42 | 12.91 | -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/K,i/052904.b/k3366.d

Date : 29-MAY-2004 08:39

Client ID: HSL_0005

Sample Info: HSL_0005,BNA1509,P:051104,E:053104

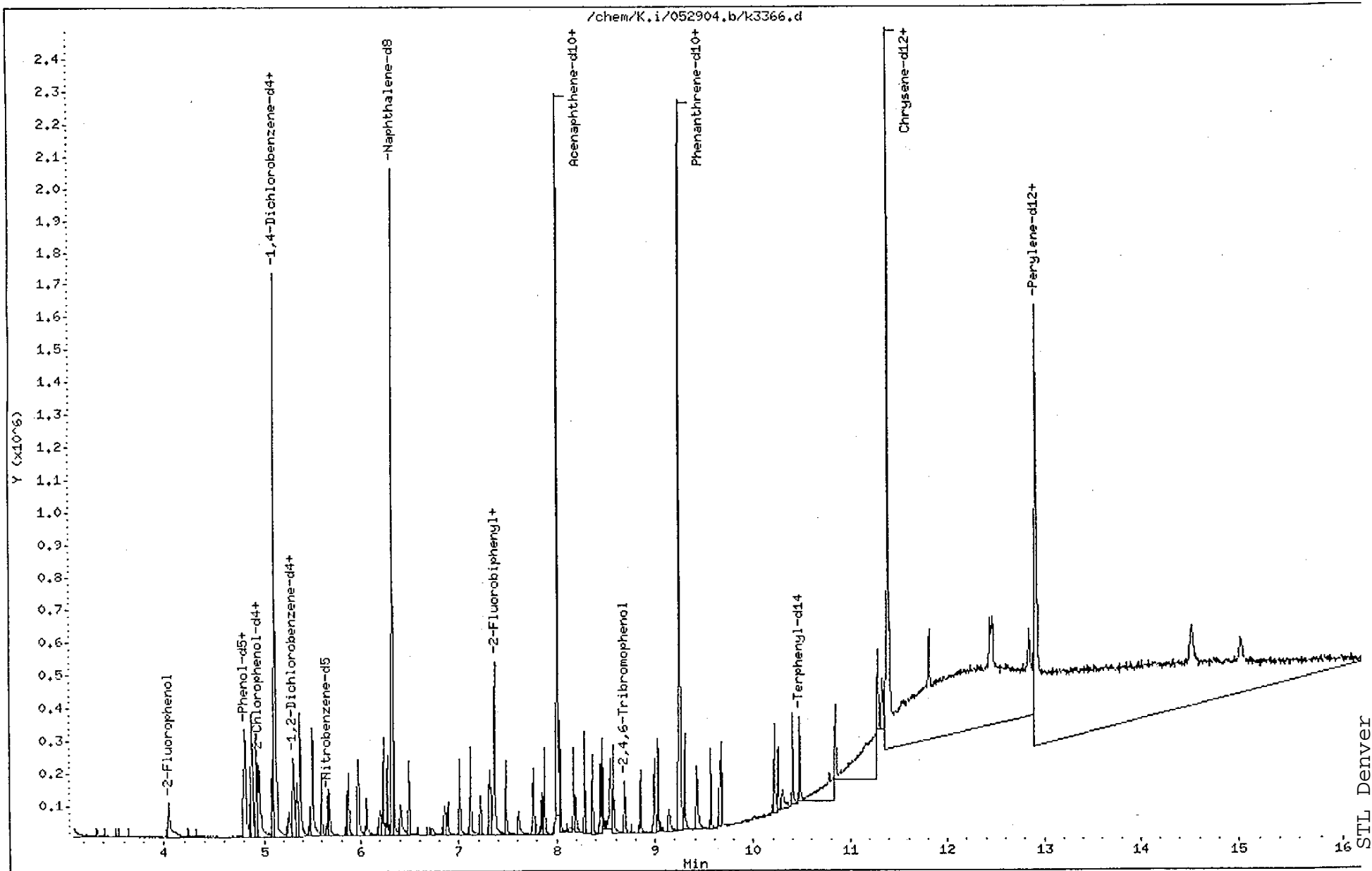
Volume Injected (ul): 0.5

Column phase: Rtx-5ms 30m 0.5um

Instrument: K,i

Operator: kidd

Column diameter: 0.25



Data File: /chem/K.i/052904.b/k3367.d
Report Date: 31-May-2004 14:24

Page 1

MLK
05-31-04

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3367.d
Lab Smp Id: HSL_0010 Client Smp ID: HSL_0010
Inj Date : 29-MAY-2004 09:03
Operator : kiddd Inst ID: K.i
Smp Info : HSL_0010,BNA1509,P:051104,E:053104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 14:24 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 09:03 Cal File: k3367.d
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000 Compound Sublist: 1-HSL.sub
Integrator: HP RTE
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS | |
|-------------------------------|-------------------|--------|--------|---------|----------|--------------------|-------------------|
| | | | | | | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 | (1.000) | 170515 | 40.0000 | |
| * 49 Naphthalene-d8 | 136 | 6.322 | 6.322 | (1.000) | 649064 | 40.0000 | |
| * 83 Acenaphthene-d10 | 164 | 8.008 | 8.008 | (1.000) | 372486 | 40.0000 | |
| * 117 Phenanthrene-d10 | 188 | 9.242 | 9.242 | (1.000) | 665380 | 40.0000 | |
| * 142 Chrysene-d12 | 240 | 11.357 | 11.357 | (1.000) | 660026 | 40.0000 | |
| * 151 Perylene-d12 | 264 | 12.873 | 12.873 | (1.000) | 553392 | 40.0000 | |
| \$ 36 Nitrobenzene-d5 | 82 | 5.652 | 5.652 | (1.104) | 73883 | 10.0000 | 10.8105 |
| \$ 70 2-Fluorobiphenyl | 172 | 7.367 | 7.367 | (0.920) | 130132 | 10.0000 | 11.5167 |
| \$ 133 Terphenyl-d14 | 244 | 10.464 | 10.464 | (0.921) | 119422 | 10.0000 | 10.7209 |
| \$ 10 2-Fluorophenol | 112 | 4.048 | 4.048 | (0.791) | 84210 | 15.0000 | 15.0239 |
| \$ 14 Phenol-d5 | 99 | 4.794 | 4.794 | (0.937) | 123378 | 15.0000 | 17.4419 |
| \$ 103 2,4,6-Tribromophenol | 330 | 8.695 | 8.695 | (0.941) | 20280 | 15.0000 | 13.7435 |
| \$ 163 1,2-Dichlorobenzene-d4 | 152 | 5.293 | 5.293 | (1.034) | 40965 | 10.0000 | 11.7306 |
| \$ 162 2-Chlorophenol-d4 | 132 | 4.947 | 4.947 | (0.967) | 94266 | 15.0000 | 18.1609 |
| 5 Pyridine | 79 | 3.078 | 3.078 | (0.602) | 66364 | 10.0000 | 9.89613 (aH) |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 4 N-Nitrosodimethylamine | 74 | 3.043 | 3.043 | (0.595) | 42265 | 10.0000 | 10.0655 |
| 16 Aniline | 93 | 4.859 | 4.859 | (0.949) | 87319 | 10.0000 | 12.3672 |
| 15 Phenol | 94 | 4.806 | 4.806 | (0.939) | 81485 | 10.0000 | 11.3801 |
| 18 Bis(2-chloroethyl) ether | 93 | 4.882 | 4.882 | (0.954) | 93703 | 10.0000 | 7.72158(a) |
| 20 2-Chlorophenol | 128 | 4.964 | 4.964 | (0.970) | 64536 | 10.0000 | 12.0348 |
| 21 1,3-Dichlorobenzene | 146 | 5.088 | 5.088 | (0.994) | 74180 | 10.0000 | 11.7777 |
| 23 1,4-Dichlorobenzene | 146 | 5.135 | 5.135 | (1.003) | 76194 | 10.0000 | 11.8893 |
| 24 Benzyl alcohol | 108 | 5.252 | 5.252 | (1.026) | 35160 | 10.0000 | 9.51798(a) |
| 25 1,2-Dichlorobenzene | 146 | 5.311 | 5.311 | (1.038) | 72875 | 10.0000 | 12.4912 |
| 26 2-Methylphenol | 108 | 5.340 | 5.340 | (1.044) | 60381 | 10.0000 | 11.1012 |
| 27 1H-Indene | 116 | 5.376 | 5.376 | (1.051) | 116313 | 10.0000 | 12.2218 |
| 28 2,2'-oxybis(1-chloropropane) | 45 | 5.370 | 5.370 | (1.049) | 121150 | 10.0000 | 8.74495(a) |
| 29 4-Methylphenol | 108 | 5.470 | 5.470 | (1.069) | 58911 | 10.0000 | 10.4686 |
| 30 N-nitrosodi-n-propylamine | 70 | 5.499 | 5.499 | (1.075) | 48165 | 10.0000 | 11.7253 |
| 32 Acetophenone | 105 | 5.499 | 5.499 | (1.075) | 92089 | 10.0000 | 11.8329 |
| 33 Hexachloroethane | 117 | 5.593 | 5.593 | (1.093) | 30479 | 10.0000 | 10.9791 |
| 37 Nitrobenzene | 77 | 5.669 | 5.669 | (1.108) | 78075 | 10.0000 | 11.1059 |
| 40 Isophorone | 82 | 5.875 | 5.875 | (0.929) | 125907 | 10.0000 | 10.5861 |
| 41 2-Nitrophenol | 139 | 5.975 | 5.975 | (0.945) | 29305 | 10.0000 | 10.9556 |
| 42 2,4-Dimethylphenol | 107 | 5.969 | 5.969 | (0.944) | 61492 | 10.0000 | 11.4932 |
| 43 Bis(2-chloroethoxy)methane | 93 | 6.057 | 6.057 | (0.958) | 79142 | 10.0000 | 11.4951 |
| 45 Benzoic acid | 122 | 6.051 | 6.051 | (0.957) | 19194 | 10.0000 | 5.58699(a) |
| 46 2,4-Dichlorophenol | 162 | 6.192 | 6.192 | (0.980) | 47362 | 10.0000 | 10.0941 |
| 47 1,2,4-Trichlorobenzene | 180 | 6.275 | 6.275 | (0.993) | 59419 | 10.0000 | 11.6356 |
| 50 Naphthalene | 128 | 6.339 | 6.339 | (1.003) | 184181 | 10.0000 | 11.7336 |
| 51 4-Chloroaniline | 127 | 6.404 | 6.404 | (1.013) | 65750 | 10.0000 | 10.7357 |
| 52 Hexachlorobutadiene | 225 | 6.492 | 6.492 | (1.027) | 37158 | 10.0000 | 11.1933 |
| 59 4-Chloro-3-methylphenol | 107 | 6.850 | 6.850 | (1.084) | 49550 | 10.0000 | 10.0306 |
| 62 2-Methylnaphthalene | 142 | 7.009 | 7.009 | (1.109) | 104490 | 10.0000 | 11.0397 |
| 64 1-Methylnaphthalene | 142 | 7.121 | 7.121 | (1.126) | 113847 | 10.0000 | 11.7821 |
| 63 Hexachlorocyclopentadiene | 237 | 7.221 | 7.221 | (0.902) | 26849 | 10.0000 | 7.98460(a) |
| 67 2,4,6-Trichlorophenol | 196 | 7.303 | 7.303 | (0.912) | 34919 | 10.0000 | 10.3929 |
| 68 2,4,5-Trichlorophenol | 196 | 7.350 | 7.350 | (0.918) | 37681 | 10.0000 | 10.2488 |
| 71 2-Chloronaphthalene | 162 | 7.479 | 7.479 | (0.934) | 110833 | 10.0000 | 11.5397 |
| 74 2-Nitroaniline | 65 | 7.608 | 7.608 | (0.950) | 37726 | 10.0000 | 9.76653(a) |
| 76 Dimethyl phthalate | 163 | 7.761 | 7.761 | (0.969) | 112784 | 10.0000 | 10.7901 |
| 79 2,6-Dinitrotoluene | 165 | 7.843 | 7.843 | (0.979) | 22612 | 10.0000 | 9.90936(a) |
| 81 Acenaphthylene | 152 | 7.879 | 7.879 | (0.984) | 171756 | 10.0000 | 11.2545 |
| 82 3-Nitroaniline | 138 | 7.984 | 7.984 | (0.997) | 26385 | 10.0000 | 9.85035(a) |
| 84 Acenaphthene | 153 | 8.037 | 8.037 | (1.004) | 97457 | 10.0000 | 11.0755 |
| 85 2,4-Dinitrophenol | 184 | 8.078 | 8.078 | (1.009) | 2373 | 10.0000 | 12.5702(Q) |
| 86 4-Nitrophenol | 109 | 8.125 | 8.125 | (1.015) | 14003 | 10.0000 | 5.99751(a) |
| 87 2,4-Dinitrotoluene | 165 | 8.196 | 8.196 | (1.023) | 29007 | 10.0000 | 9.56105(a) |
| 88 Dibenzofuran | 168 | 8.172 | 8.172 | (1.021) | 142847 | 10.0000 | 11.2360 |
| 93 Diethyl phthalate | 149 | 8.366 | 8.366 | (1.045) | 109040 | 10.0000 | 10.4469 |
| 95 4-Chlorophenyl phenyl ether | 204 | 8.449 | 8.449 | (1.055) | 60250 | 10.0000 | 10.6844 |
| 96 Fluorene | 166 | 8.472 | 8.472 | (1.058) | 119363 | 10.0000 | 10.9506 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ----- | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| 97 4-Nitroaniline | 138 | 8.525 | 8.525 | (1.065) | 25635 | 10.0000 | 9.70636(a) |
| 99 4,6-Dinitro-2-methylphenol | 198 | 8.543 | 8.543 | (1.067) | 12435 | 10.0000 | 5.78944(a) |
| 101 N-nitrosodiphenylamine | 169 | 8.548 | 8.548 | (1.067) | 84510 | 10.0000 | 11.1326 |
| 102 Azobenzene | 77 | 8.578 | 8.578 | (1.071) | 132819 | 10.0000 | 10.6205 |
| 108 4-Bromophenyl phenyl ether | 248 | 8.854 | 8.854 | (0.958) | 32560 | 10.0000 | 10.8372 |
| 110 Hexachlorobenzene | 284 | 8.995 | 8.995 | (0.973) | 34009 | 10.0000 | 10.6277 |
| 113 Pentachlorophenol | 266 | 9.136 | 9.136 | (0.989) | 14946 | 10.0000 | 7.76521(a) |
| 118 Phenanthrene | 178 | 9.259 | 9.259 | (1.002) | 174791 | 10.0000 | 11.3957 |
| 122 Anthracene | 178 | 9.301 | 9.301 | (1.006) | 180159 | 10.0000 | 11.5178 |
| 123 Carbazole | 167 | 9.418 | 9.418 | (1.019) | 160364 | 10.0000 | 11.7484 |
| 125 Di-n-butyl phthalate | 149 | 9.653 | 9.653 | (1.044) | 175262 | 10.0000 | 10.8765 |
| 130 Fluoranthene | 202 | 10.205 | 10.205 | (1.104) | 196363 | 10.0000 | 10.9990 |
| 131 Benzidine | 184 | 10.288 | 10.288 | (0.906) | 47124 | 10.0000 | 13.4852 |
| 132 Pyrene | 202 | 10.387 | 10.387 | (0.915) | 203138 | 10.0000 | 11.0871 |
| 137 Butyl benzyl phthalate | 149 | 10.822 | 10.822 | (0.953) | 79490 | 10.0000 | 10.8681 |
| 140 3,3'-Dichlorobenzidine | 252 | 11.298 | 11.298 | (0.995) | 62930 | 10.0000 | 9.99502(a) |
| 141 Benzo(a)anthracene | 228 | 11.339 | 11.339 | (0.998) | 175770 | 10.0000 | 10.2813(H) |
| 144 Chrysene | 228 | 11.380 | 11.380 | (1.002) | 174539 | 10.0000 | 10.7107 |
| 143 Bis(2-ethylhexyl) phthalate | 149 | 11.251 | 11.251 | (0.991) | 106291 | 10.0000 | 10.6150(H) |
| 146 Di-n-octyl phthalate | 149 | 11.774 | 11.774 | (1.037) | 179595 | 10.0000 | 10.3007(H) |
| 147 Benzo(b)fluoranthene | 252 | 12.403 | 12.403 | (0.963) | 150710 | 10.0000 | 9.58286(aH) |
| 148 Benzo(k)fluoranthene | 252 | 12.426 | 12.426 | (0.965) | 171055 | 10.0000 | 9.76959(aH) |
| 150 Benzo(a)pyrene | 252 | 12.802 | 12.802 | (0.995) | 138156 | 10.0000 | 9.58195(aH) |
| 155 Indeno(1,2,3-cd)pyrene | 276 | 14.471 | 14.471 | (1.124) | 146284 | 10.0000 | 9.12501(a) |
| 156 Dibenz(a,h)anthracene | 278 | 14.459 | 14.459 | (1.123) | 125937 | 10.0000 | 9.32052(a) |
| 157 Benzo(g,h,i)perylene | 276 | 14.965 | 14.965 | (1.162) | 133590 | 10.0000 | 9.82164(aH) |
| 168 Methyl Styrene | 118 | 4.882 | 4.882 | (0.954) | 72805 | 10.0000 | 11.9280 |
| 202 Alachlor | 188 | 9.559 | 9.559 | (1.034) | 23590 | 10.0000 | 11.2803 |
| 204 Atrazine | 200 | 8.983 | 8.983 | (0.972) | 6260 | 10.0000 | 21.3756 |
| 205 Caprolactam | 55 | 6.721 | 6.721 | (1.063) | 20229 | 10.0000 | 7.17262(a) |
| 207 2,3-Dichlorobenzeneamine | 161 | 7.320 | 7.320 | (0.914) | 61755 | 10.0000 | 11.8497 |
| 206 Decane | 43 | 4.923 | 4.923 | (0.962) | 90419 | 10.0000 | 3.86063(a) |
| 213 n-Dodecane | 43 | 6.233 | 6.233 | (0.778) | 80339 | 10.0000 | 9.08060(a) |
| 210 Tetradecane | 43 | 7.367 | 7.367 | (0.920) | 74196 | 10.0000 | 9.07136(a) |
| 209 Hexadecane | 57 | 8.284 | 8.284 | (1.034) | 87751 | 10.0000 | 8.65278(a) |
| 208 n-Octadecane | 85 | 9.030 | 9.030 | (0.977) | 35456 | 10.0000 | 4.48221(a) |
| 211 n-Eicosane | 43 | 9.671 | 9.671 | (1.208) | 59512 | 10.0000 | 10.9336 |
| 212 n-docosane | 43 | 10.246 | 10.246 | (1.280) | 48194 | 10.0000 | 10.8078 |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: K.i
Lab File ID: k3367.d
Lab Smp Id: HSL_0010
Analysis Type: SV
Quant Type: ISTD
Operator: kiddd
Method File: /chem/K.i/052904.b/8270C.m
Misc Info:

Calibration Date: 29-MAY-2004
Calibration Time: 10:14
Client Smp ID: HSL_0010
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 160879 | 80440 | 321758 | 170515 | 5.99 |
| 49 Naphthalene-d8 | 591401 | 295700 | 1182802 | 649064 | 9.75 |
| 83 Acenaphthene-d10 | 354180 | 177090 | 708360 | 372486 | 5.17 |
| 117 Phenanthrene-d10 | 683575 | 341788 | 1367150 | 665380 | -2.66 |
| 142 Chrysene-d12 | 669104 | 334552 | 1338208 | 660026 | -1.36 |
| 151 Perylene-d12 | 582855 | 291428 | 1165710 | 553392 | -5.05 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.00 |
| 117 Phenanthrene-d10 | 9.25 | 8.75 | 9.75 | 9.24 | -0.06 |
| 142 Chrysene-d12 | 11.39 | 10.89 | 11.89 | 11.36 | -0.31 |
| 151 Perylene-d12 | 12.92 | 12.42 | 13.42 | 12.87 | -0.36 |

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/K,i/052904.b/k3367.d

Date : 29-MAY-2004 09:03

Client ID: HSL_0010

Sample Info: HSL_0010,BNA1509,P:051104,E:053104

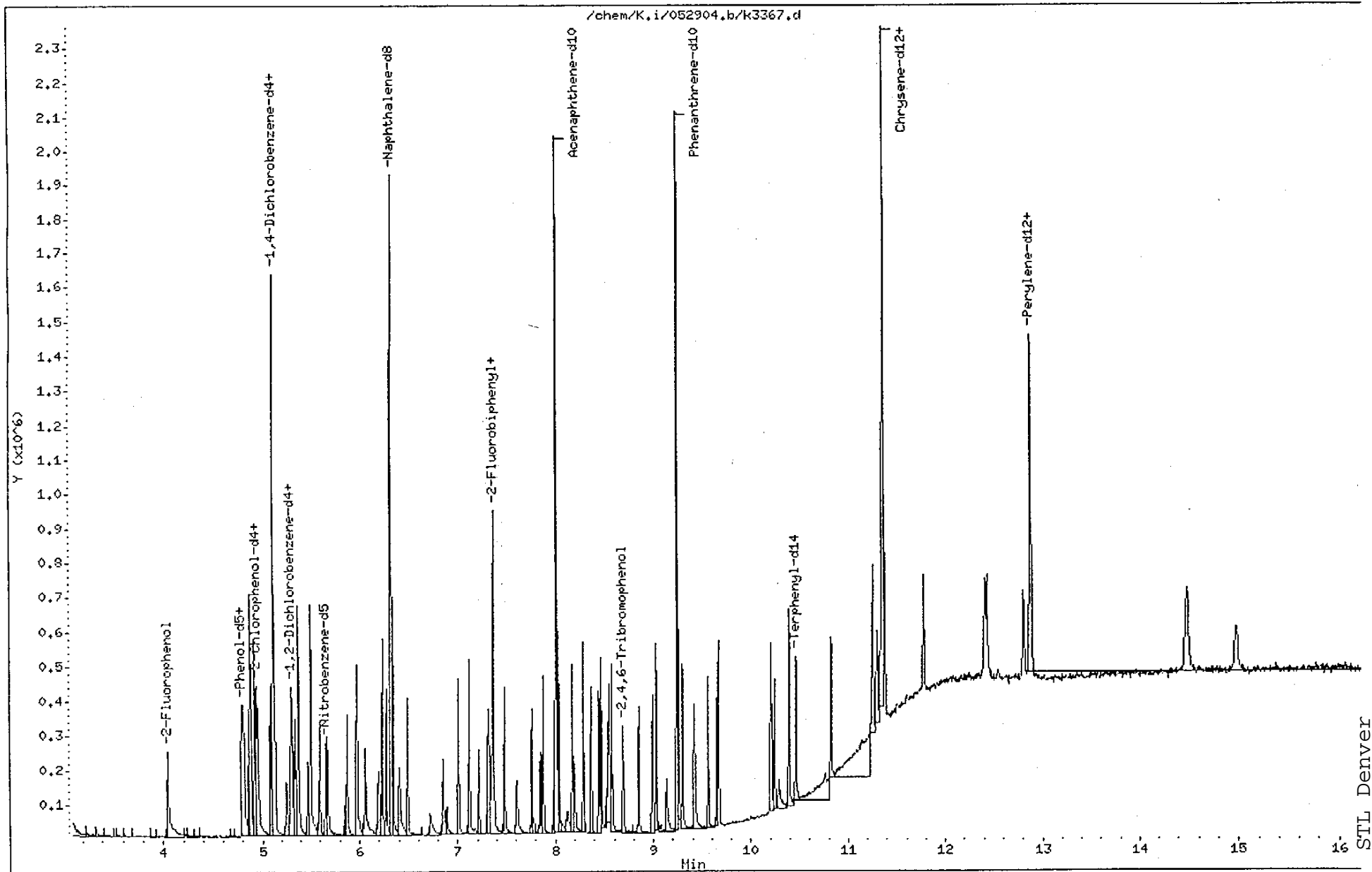
Volume Injected (uL): 0.5

Column phase: Rtx-5ms 30m 0.5um

Instrument: K.i

Operator: kidd

Column diameter: 0.25



Data File: /chem/K.i/052904.b/k3368.d
Report Date: 31-May-2004 14:24

Page 1

MSK
05-31-04

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3368.d
Lab Smp Id: HSL_0020 Client Smp ID: HSL_0020
Inj Date : 29-MAY-2004 09:26
Operator : kiddd Inst ID: K.i
Smp Info : HSL_0020,BNA1509,P:051104,E:053104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 14:24 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 09:26 Cal File: k3368.d
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-HSL.sub
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | | | | | | AMOUNTS | |
|-------------------------------|-----------|------|--------|--------|---------|----------|--------------------|-------------------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| * 22 1,4-Dichlorobenzene-d4 | 152 | | 5.117 | 5.117 | (1.000) | 179092 | 40.0000 | |
| * 49 Naphthalene-d8 | 136 | | 6.322 | 6.322 | (1.000) | 658451 | 40.0000 | |
| * 83 Acenaphthene-d10 | 164 | | 8.008 | 8.008 | (1.000) | 384040 | 40.0000 | |
| * 117 Phenanthrene-d10 | 188 | | 9.248 | 9.248 | (1.000) | 700664 | 40.0000 | |
| * 142 Chrysene-d12 | 240 | | 11.375 | 11.375 | (1.000) | 713298 | 40.0000 | |
| * 151 Perylene-d12 | 264 | | 12.896 | 12.896 | (1.000) | 584066 | 40.0000 | |
| \$ 36 Nitrobenzene-d5 | 82 | | 5.652 | 5.652 | (1.104) | 156397 | 20.0000 | 21.7879 |
| \$ 70 2-Fluorobiphenyl | 172 | | 7.368 | 7.368 | (0.920) | 254633 | 20.0000 | 21.8571 |
| \$ 133 Terphenyl-d14 | 244 | | 10.470 | 10.470 | (0.920) | 247004 | 20.0000 | 20.5183 |
| \$ 10 2-Fluorophenol | 112 | | 4.048 | 4.048 | (0.791) | 190761 | 30.0000 | 32.4038 |
| \$ 14 Phenol-d5 | 99 | | 4.794 | 4.794 | (0.937) | 255500 | 30.0000 | 34.3901 |
| \$ 103 2,4,6-Tribromophenol | 330 | | 8.695 | 8.695 | (0.940) | 45734 | 30.0000 | 29.4327 |
| \$ 153 1,2-Dichlorobenzene-d4 | 152 | | 5.293 | 5.293 | (1.034) | 85869 | 20.0000 | 23.4115 |
| \$ 162 2-Chlorophenol-d4 | 132 | | 4.947 | 4.947 | (0.967) | 190503 | 30.0000 | 34.9438 |
| 5 Pyridine | 79 | | 3.067 | 3.067 | (0.599) | 152840 | 20.0000 | 21.6998 (H) |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 4 N-Nitrosodimethylamine | 74 | 3.037 | 3.037 | (0.594) | 94020 | 20.0000 | 21.3186 |
| 16 Aniline | 93 | 4.859 | 4.859 | (0.949) | 185467 | 20.0000 | 18.3667 |
| 15 Phenol | 94 | 4.806 | 4.806 | (0.939) | 170561 | 20.0000 | 22.6796 |
| 18 Bis(2-chloroethyl) ether | 93 | 4.882 | 4.882 | (0.954) | 175004 | 20.0000 | 20.2306 |
| 20 2-Chlorophenol | 128 | 4.964 | 4.964 | (0.970) | 130305 | 20.0000 | 23.1358 |
| 21 1,3-Dichlorobenzene | 146 | 5.088 | 5.088 | (0.994) | 149861 | 20.0000 | 22.6542 |
| 23 1,4-Dichlorobenzene | 146 | 5.135 | 5.135 | (1.003) | 155265 | 20.0000 | 23.0672 |
| 24 Benzyl alcohol | 108 | 5.246 | 5.246 | (1.025) | 81112 | 20.0000 | 20.9058 |
| 25 1,2-Dichlorobenzene | 146 | 5.311 | 5.311 | (1.038) | 142754 | 20.0000 | 23.2970 |
| 26 2-Methylphenol | 108 | 5.340 | 5.340 | (1.044) | 130688 | 20.0000 | 22.8766 |
| 27 1H-Indene | 116 | 5.376 | 5.376 | (1.051) | 233613 | 20.0000 | 23.3718 |
| 28 2,2'-oxybis(1-chloropropane) | 45 | 5.370 | 5.370 | (1.049) | 247656 | 20.0000 | 20.2950 |
| 29 4-Methylphenol | 108 | 5.470 | 5.470 | (1.069) | 137911 | 20.0000 | 23.3334 |
| 30 N-nitrosodi-n-propylamine | 70 | 5.499 | 5.499 | (1.075) | 98250 | 20.0000 | 22.7725 |
| 32 Acetophenone | 105 | 5.499 | 5.499 | (1.075) | 190671 | 20.0000 | 23.3267 |
| 33 Hexachloroethane | 117 | 5.593 | 5.593 | (1.093) | 64821 | 20.0000 | 22.2315 |
| 37 Nitrobenzene | 77 | 5.669 | 5.669 | (1.108) | 164970 | 20.0000 | 22.3425 |
| 40 Isophorone | 82 | 5.875 | 5.875 | (0.929) | 265963 | 20.0000 | 22.0430 |
| 41 2-Nitrophenol | 139 | 5.969 | 5.969 | (0.944) | 61794 | 20.0000 | 22.7722 |
| 42 2,4-Dimethylphenol | 107 | 5.969 | 5.969 | (0.944) | 123575 | 20.0000 | 22.7677 |
| 43 Bis(2-chloroethoxy)methane | 93 | 6.057 | 6.057 | (0.958) | 161999 | 20.0000 | 23.1944 |
| 45 Benzoic acid | 122 | 6.046 | 6.046 | (0.956) | 53367 | 20.0000 | 15.3126 |
| 46 2,4-Dichlorophenol | 162 | 6.192 | 6.192 | (0.980) | 106499 | 20.0000 | 22.3743 |
| 47 1,2,4-Trichlorobenzene | 180 | 6.275 | 6.275 | (0.993) | 115435 | 20.0000 | 22.2825 |
| 50 Naphthalene | 128 | 6.339 | 6.339 | (1.003) | 365580 | 20.0000 | 22.9579 |
| 51 4-Chloroaniline | 127 | 6.404 | 6.404 | (1.013) | 139559 | 20.0000 | 22.4623 |
| 52 Hexachlorobutadiene | 225 | 6.492 | 6.492 | (1.027) | 72240 | 20.0000 | 21.4510 |
| 59 4-Chloro-3-methylphenol | 107 | 6.850 | 6.850 | (1.084) | 108676 | 20.0000 | 21.6861 |
| 62 2-Methylnaphthalene | 142 | 7.009 | 7.009 | (1.109) | 217093 | 20.0000 | 22.6096 |
| 64 1-Methylnaphthalene | 142 | 7.121 | 7.121 | (1.126) | 222140 | 20.0000 | 22.6617 |
| 63 Hexachlorocyclopentadiene | 237 | 7.221 | 7.221 | (0.902) | 65568 | 20.0000 | 18.9126 |
| 67 2,4,6-Trichlorophenol | 196 | 7.303 | 7.303 | (0.912) | 72790 | 20.0000 | 21.0126 |
| 68 2,4,5-Trichlorophenol | 196 | 7.350 | 7.350 | (0.918) | 82470 | 20.0000 | 21.7560 |
| 71 2-Chloronaphthalene | 162 | 7.485 | 7.485 | (0.935) | 222457 | 20.0000 | 22.4649 |
| 74 2-Nitroaniline | 65 | 7.603 | 7.603 | (0.949) | 85523 | 20.0000 | 21.4741 |
| 76 Dimethyl phthalate | 163 | 7.761 | 7.761 | (0.969) | 240596 | 20.0000 | 22.3255 |
| 79 2,6-Dinitrotoluene | 165 | 7.843 | 7.843 | (0.979) | 50430 | 20.0000 | 21.4353 |
| 81 Acenaphthylene | 152 | 7.879 | 7.879 | (0.984) | 348201 | 20.0000 | 22.1298 |
| 82 3-Nitroaniline | 138 | 7.979 | 7.979 | (0.996) | 59229 | 20.0000 | 21.4468 |
| 84 Acenaphthene | 153 | 8.037 | 8.037 | (1.004) | 198020 | 20.0000 | 21.8269 |
| 85 2,4-Dinitrophenol | 184 | 8.073 | 8.073 | (1.008) | 16548 | 20.0000 | 19.9677 |
| 86 4-Nitrophenol | 109 | 8.114 | 8.114 | (1.013) | 39716 | 20.0000 | 16.4987 |
| 87 2,4-Dinitrotoluene | 165 | 8.190 | 8.190 | (1.023) | 67935 | 20.0000 | 21.7185 |
| 88 Dibenzofuran | 168 | 8.172 | 8.172 | (1.021) | 291816 | 20.0000 | 22.2630 |
| 93 Diethyl phthalate | 149 | 8.366 | 8.366 | (1.045) | 236530 | 20.0000 | 21.9796 |
| 95 4-Chlorophenyl phenyl ether | 204 | 8.449 | 8.449 | (1.055) | 128090 | 20.0000 | 22.0315 |
| 96 Fluorene | 166 | 8.472 | 8.472 | (1.058) | 246952 | 20.0000 | 21.9742 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 97 4-Nitroaniline | 138 | 8.519 | 8.519 | (1.064) | 56208 | 20.0000 | 20.6421 |
| 99 4,6-Dinitro-2-methylphenol | 198 | 8.537 | 8.537 | (1.066) | 40412 | 20.0000 | 18.2488 |
| 101 N-nitrosodiphenylamine | 169 | 8.554 | 8.554 | (1.068) | 173152 | 20.0000 | 22.1233 |
| 102 Azobenzene | 77 | 8.578 | 8.578 | (1.071) | 285186 | 20.0000 | 22.1181 |
| 108 4-Bromophenyl phenyl ether | 248 | 8.854 | 8.854 | (0.957) | 68708 | 20.0000 | 21.7170 |
| 110 Hexachlorobenzene | 284 | 8.995 | 8.995 | (0.973) | 71629 | 20.0000 | 21.2567 |
| 113 Pentachlorophenol | 266 | 9.136 | 9.136 | (0.988) | 35124 | 20.0000 | 17.3297 |
| 118 Phenanthrene | 178 | 9.265 | 9.265 | (1.002) | 355809 | 20.0000 | 22.0292 |
| 122 Anthracene | 178 | 9.301 | 9.301 | (1.006) | 374844 | 20.0000 | 22.7574 |
| 123 Carbazole | 167 | 9.418 | 9.418 | (1.018) | 330480 | 20.0000 | 22.9919 |
| 125 Di-n-butyl phthalate | 149 | 9.653 | 9.653 | (1.044) | 378578 | 20.0000 | 22.3110 |
| 130 Fluoranthene | 202 | 10.211 | 10.211 | (1.104) | 408455 | 20.0000 | 21.7268 |
| 131 Benzidine | 184 | 10.288 | 10.288 | (0.904) | 63234 | 20.0000 | 19.8333 |
| 132 Pyrene | 202 | 10.393 | 10.393 | (0.914) | 420505 | 20.0000 | 21.2368 |
| 137 Butyl benzyl phthalate | 149 | 10.840 | 10.840 | (0.953) | 175512 | 20.0000 | 22.2043 |
| 140 3,3'-Dichlorobenzidine | 252 | 11.310 | 11.310 | (0.994) | 133866 | 20.0000 | 19.6737 |
| 141 Benzo(a)anthracene | 228 | 11.357 | 11.357 | (0.998) | 376120 | 20.0000 | 20.3573 (H) |
| 144 Chrysene | 228 | 11.398 | 11.398 | (1.002) | 357980 | 20.0000 | 20.3270 |
| 143 Bis(2-ethylhexyl) phthalate | 149 | 11.269 | 11.269 | (0.991) | 227914 | 20.0000 | 21.0614 |
| 146 Di-n-octyl phthalate | 149 | 11.798 | 11.798 | (1.037) | 390069 | 20.0000 | 20.7016 |
| 147 Benzo(b)fluoranthene | 252 | 12.421 | 12.421 | (0.963) | 303377 | 20.0000 | 18.2771 |
| 148 Benzo(k)fluoranthene | 252 | 12.450 | 12.450 | (0.965) | 387181 | 20.0000 | 20.9520 |
| 150 Benzo(a)pyrene | 252 | 12.826 | 12.826 | (0.995) | 301332 | 20.0000 | 19.8016 (H) |
| 155 Indeno(1,2,3-cd)pyrene | 276 | 14.495 | 14.495 | (1.124) | 323504 | 20.0000 | 19.1200 |
| 156 Dibenz(a,h)anthracene | 278 | 14.483 | 14.483 | (1.123) | 265016 | 20.0000 | 18.5836 |
| 157 Benzo(g,h,i)perylene | 276 | 14.988 | 14.988 | (1.162) | 292001 | 20.0000 | 20.3407 (H) |
| 168 Methyl Styrene | 118 | 4.876 | 4.876 | (0.953) | 151619 | 20.0000 | 23.6509 |
| 202 Alachlor | 188 | 9.565 | 9.565 | (1.034) | 48960 | 20.0000 | 22.2327 |
| 204 Atrazine | 200 | 8.983 | 8.983 | (0.971) | 11630 | 20.0000 | 37.7123 |
| 205 Caprolactam | 55 | 6.721 | 6.721 | (1.063) | 56323 | 20.0000 | 19.6858 |
| 207 2,3-Dichlorobenzeneamine | 161 | 7.321 | 7.321 | (0.914) | 122170 | 20.0000 | 22.7370 |
| 206 Decane | 43 | 4.923 | 4.923 | (0.962) | 180655 | 20.0000 | 17.7260 |
| 213 n-Dodecane | 43 | 6.234 | 6.234 | (0.778) | 171661 | 20.0000 | 20.6315 |
| 210 Tetradecane | 43 | 7.373 | 7.373 | (0.921) | 152826 | 20.0000 | 20.1955 |
| 209 Hexadecane | 57 | 8.284 | 8.284 | (1.034) | 185859 | 20.0000 | 20.7846 |
| 208 n-Octadecane | 85 | 9.030 | 9.030 | (0.976) | 75070 | 20.0000 | 20.0347 |
| 211 n-Eicosane | 43 | 9.671 | 9.671 | (1.208) | 131605 | 20.0000 | 23.4512 |
| 212 n-docosane | 43 | 10.252 | 10.252 | (1.280) | 105601 | 20.0000 | 22.9692 |

QC Flag Legend

H - Operator selected an alternate compound hit.

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: K.i
Lab File ID: k3368.d
Lab Smp Id: HSL_0020
Analysis Type: SV
Quant Type: ISTD
Operator: kiddd
Method File: /chem/K.i/052904.b/8270C.m
Misc Info:

Calibration Date: 29-MAY-2004
Calibration Time: 10:14
Client Smp ID: HSL_0020
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 160879 | 80440 | 321758 | 179092 | 11.32 |
| 49 Naphthalene-d8 | 591401 | 295700 | 1182802 | 658451 | 11.34 |
| 83 Acenaphthene-d10 | 354180 | 177090 | 708360 | 384040 | 8.43 |
| 117 Phenanthrene-d10 | 683575 | 341788 | 1367150 | 700664 | 2.50 |
| 142 Chrysene-d12 | 669104 | 334552 | 1338208 | 713298 | 6.60 |
| 151 Perylene-d12 | 582855 | 291428 | 1165710 | 584066 | 0.21 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.00 |
| 117 Phenanthrene-d10 | 9.25 | 8.75 | 9.75 | 9.25 | 0.00 |
| 142 Chrysene-d12 | 11.39 | 10.89 | 11.89 | 11.37 | -0.15 |
| 151 Perylene-d12 | 12.92 | 12.42 | 13.42 | 12.90 | -0.18 |

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/K,i/052904,b/k3368,d

Date : 29-HAY-2004 09:26

Client ID: HSL_0020

Sample Info: HSL_0020,BNA1509,P:051104,E:053104

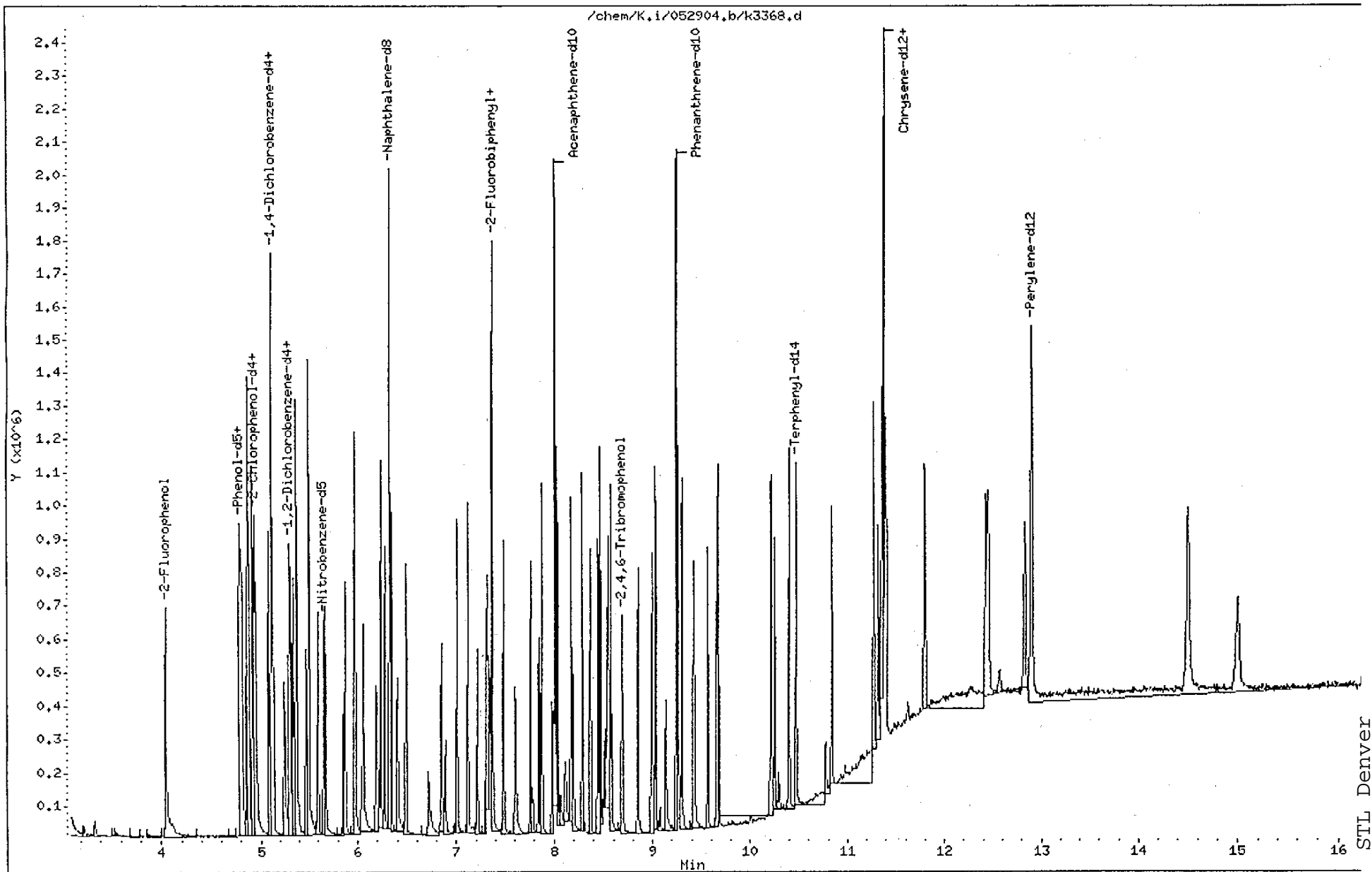
Volume Injected (ul): 0.5

Column phase: Rtx-5ms 30m 0.5um

Instrument: K,i

Operator: kidd

Column diameter: 0.25



STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3369.d
Lab Smp Id: HSL_0050 Client Smp ID: HSL_0050
Inj Date : 29-MAY-2004 09:50
Operator : kiddd Inst ID: K.i
Smp Info : HSL_0050,BNA1509,P:051104,E:053104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 14:25 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 09:50 Cal File: k3369.d
Als bottle: 9 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-HSL.sub
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | | | | | | AMOUNTS | |
|-------------------------------|-----------|--------|--------|---------|--------|----------|-------------|---------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT | ON-COL |
| | | | | | | | (ug/ml) | (ug/ml) |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 | (1.000) | 151927 | 40.0000 | | |
| * 49 Naphthalene-d8 | 136 | 6.321 | 6.321 | (1.000) | 565656 | 40.0000 | | |
| * 83 Acenaphthene-d10 | 164 | 8.008 | 8.008 | (1.000) | 326489 | 40.0000 | | |
| * 117 Phenanthrene-d10 | 188 | 9.247 | 9.247 | (1.000) | 621188 | 40.0000 | | |
| * 142 Chrysene-d12 | 240 | 11.380 | 11.380 | (1.000) | 614820 | 40.0000 | | |
| * 151 Perylene-d12 | 264 | 12.908 | 12.908 | (1.000) | 509237 | 40.0000 | | |
| \$ 36 Nitrobenzene-d5 | 82 | 5.652 | 5.652 | (1.104) | 308875 | 50.0000 | 50.7238 | |
| \$ 70 2-Fluorobiphenyl | 172 | 7.367 | 7.367 | (0.920) | 474688 | 50.0000 | 47.9286 | |
| \$ 133 Terphenyl-d14 | 244 | 10.475 | 10.475 | (0.920) | 483318 | 50.0000 | 46.5793 | |
| \$ 10 2-Fluorophenol | 112 | 4.048 | 4.048 | (0.791) | 405958 | 75.0000 | 81.2883 | |
| \$ 14 Phenol-d5 | 99 | 4.794 | 4.794 | (0.937) | 503357 | 75.0000 | 79.8657 | |
| \$ 103 2,4,6-Tribromophenol | 330 | 8.695 | 8.695 | (0.940) | 90815 | 75.0000 | 65.9227 | |
| \$ 163 1,2-Dichlorobenzene-d4 | 152 | 5.293 | 5.293 | (1.034) | 160341 | 50.0000 | 51.5322 | |
| \$ 162 2-Chlorophenol-d4 | 132 | 4.947 | 4.947 | (0.967) | 361460 | 75.0000 | 78.1572 | |
| 5 Pyridine | 79 | 3.061 | 3.061 | (0.598) | 314984 | 50.0000 | 52.7168 (H) | |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 4 N-Nitrosodimethylamine | 74 | 3.037 | 3.037 | (0.594) | 194972 | 50.0000 | 52.1138 |
| 16 Aniline | 93 | 4.858 | 4.858 | (0.949) | 337309 | 50.0000 | 47.7622 |
| 15 Phenol | 94 | 4.806 | 4.806 | (0.939) | 339303 | 50.0000 | 53.1845 |
| 18 Bis(2-chloroethyl) ether | 93 | 4.882 | 4.882 | (0.954) | 336354 | 50.0000 | 56.4066 |
| 20 2-Chlorophenol | 128 | 4.964 | 4.964 | (0.970) | 253097 | 50.0000 | 52.9727 |
| 21 1,3-Dichlorobenzene | 146 | 5.088 | 5.088 | (0.994) | 288836 | 50.0000 | 51.4698 |
| 23 1,4-Dichlorobenzene | 146 | 5.135 | 5.135 | (1.003) | 290805 | 50.0000 | 50.9289 |
| 24 Benzyl alcohol | 108 | 5.246 | 5.246 | (1.025) | 172903 | 50.0000 | 52.5323 |
| 25 1,2-Dichlorobenzene | 146 | 5.311 | 5.311 | (1.038) | 265756 | 50.0000 | 51.1253 |
| 26 2-Methylphenol | 108 | 5.340 | 5.340 | (1.044) | 257622 | 50.0000 | 53.1593 |
| 27 1H-Indene | 116 | 5.375 | 5.375 | (1.051) | 438889 | 50.0000 | 51.7596 |
| 28 2,2'-oxybis(1-chloropropane) | 45 | 5.370 | 5.370 | (1.049) | 463323 | 50.0000 | 52.4297 |
| 29 4-Methylphenol | 108 | 5.469 | 5.469 | (1.069) | 250444 | 50.0000 | 49.9495 |
| 30 N-nitrosodi-n-propylamine | 70 | 5.499 | 5.499 | (1.075) | 189402 | 50.0000 | 51.7492 |
| 32 Acetophenone | 105 | 5.499 | 5.499 | (1.075) | 359386 | 50.0000 | 51.8288 |
| 33 Hexachloroethane | 117 | 5.593 | 5.593 | (1.093) | 125465 | 50.0000 | 50.7243 |
| 37 Nitrobenzene | 77 | 5.669 | 5.669 | (1.108) | 321201 | 50.0000 | 51.2796 |
| 40 Isophorone | 82 | 5.875 | 5.875 | (0.929) | 530939 | 50.0000 | 51.2229 |
| 41 2-Nitrophenol | 139 | 5.969 | 5.969 | (0.944) | 122816 | 50.0000 | 52.6846 |
| 42 2,4-Dimethylphenol | 107 | 5.969 | 5.969 | (0.944) | 236911 | 50.0000 | 50.8094 |
| 43 Bis(2-chloroethoxy)methane | 93 | 6.057 | 6.057 | (0.958) | 306272 | 50.0000 | 51.0446 |
| 45 Benzoic acid | 122 | 6.057 | 6.057 | (0.958) | 132316 | 50.0000 | 44.1936 |
| 46 2,4-Dichlorophenol | 162 | 6.186 | 6.186 | (0.979) | 207686 | 50.0000 | 50.7904 |
| 47 1,2,4-Trichlorobenzene | 180 | 6.274 | 6.274 | (0.993) | 225464 | 50.0000 | 50.6611 |
| 50 Naphthalene | 128 | 6.345 | 6.345 | (1.004) | 682881 | 50.0000 | 49.9189 |
| 51 4-Chloroaniline | 127 | 6.404 | 6.404 | (1.013) | 283742 | 50.0000 | 53.1608 |
| 52 Hexachlorobutadiene | 225 | 6.492 | 6.492 | (1.027) | 143302 | 50.0000 | 49.5329 |
| 59 4-Chloro-3-methylphenol | 107 | 6.850 | 6.850 | (1.084) | 218281 | 50.0000 | 50.7031 |
| 62 2-Methylnaphthalene | 142 | 7.009 | 7.009 | (1.109) | 421240 | 50.0000 | 51.0679 |
| 64 1-Methylnaphthalene | 142 | 7.121 | 7.121 | (1.126) | 418913 | 50.0000 | 49.7464 |
| 63 Hexachlorocyclopentadiene | 237 | 7.220 | 7.220 | (0.902) | 151642 | 50.0000 | 51.4500 |
| 67 2,4,6-Trichlorophenol | 196 | 7.303 | 7.303 | (0.912) | 149869 | 50.0000 | 50.8895 |
| 68 2,4,5-Trichlorophenol | 196 | 7.350 | 7.350 | (0.918) | 162633 | 50.0000 | 50.4661 |
| 71 2-Chloronaphthalene | 162 | 7.485 | 7.485 | (0.935) | 431465 | 50.0000 | 51.2522 |
| 74 2-Nitroaniline | 65 | 7.602 | 7.602 | (0.949) | 179433 | 50.0000 | 52.9960 |
| 76 Dimethyl phthalate | 163 | 7.761 | 7.761 | (0.969) | 466576 | 50.0000 | 50.9265 |
| 79 2,6-Dinitrotoluene | 165 | 7.843 | 7.843 | (0.979) | 105010 | 50.0000 | 52.5023 |
| 81 Acenaphthylene | 152 | 7.878 | 7.878 | (0.984) | 677059 | 50.0000 | 50.6153 |
| 82 3-Nitroaniline | 138 | 7.978 | 7.978 | (0.996) | 123123 | 50.0000 | 52.4415 |
| 84 Acenaphthene | 153 | 8.037 | 8.037 | (1.004) | 383691 | 50.0000 | 49.7477 |
| 85 2,4-Dinitrophenol | 184 | 8.066 | 8.066 | (1.007) | 61946 | 50.0000 | 49.5115 |
| 86 4-Nitrophenol | 109 | 8.108 | 8.108 | (1.012) | 98683 | 50.0000 | 48.2207 |
| 87 2,4-Dinitrotoluene | 165 | 8.190 | 8.190 | (1.023) | 142768 | 50.0000 | 53.6878 |
| 88 Dibenzofuran | 168 | 8.172 | 8.172 | (1.021) | 568011 | 50.0000 | 50.9729 |
| 93 Diethyl phthalate | 149 | 8.372 | 8.372 | (1.045) | 474218 | 50.0000 | 51.8347 |
| 95 4-Chlorophenyl phenyl ether | 204 | 8.448 | 8.448 | (1.055) | 249424 | 50.0000 | 50.4631 |
| 96 Fluorene | 166 | 8.472 | 8.472 | (1.058) | 482251 | 50.0000 | 50.4756 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| 97 4-Nitroaniline | 138 | 8.519 | 8.519 | (1.064) | 126284 | 50.0000 | 54.5523 |
| 99 4,6-Dinitro-2-methylphenol | 198 | 8.542 | 8.542 | (1.067) | 94158 | 50.0000 | 50.0138 |
| 101 N-nitrosodiphenylamine | 169 | 8.554 | 8.554 | (1.068) | 338049 | 50.0000 | 50.8054 |
| 102 Azobenzene | 77 | 8.578 | 8.578 | (1.071) | 577186 | 50.0000 | 52.6554 |
| 108 4-Bromophenyl phenyl ether | 248 | 8.854 | 8.854 | (0.957) | 137075 | 50.0000 | 48.8696 |
| 110 Hexachlorobenzene | 284 | 8.995 | 8.995 | (0.973) | 140668 | 50.0000 | 47.0857 |
| 113 Pentachlorophenol | 266 | 9.136 | 9.136 | (0.988) | 84559 | 50.0000 | 47.0581 |
| 118 Phenanthrene | 178 | 9.265 | 9.265 | (1.002) | 697945 | 50.0000 | 48.7405 |
| 122 Anthracene | 178 | 9.300 | 9.300 | (1.006) | 699265 | 50.0000 | 47.8851 |
| 123 Carbazole | 167 | 9.424 | 9.424 | (1.019) | 632696 | 50.0000 | 49.6492 |
| 125 Di-n-butyl phthalate | 149 | 9.653 | 9.653 | (1.044) | 757212 | 50.0000 | 50.3347 |
| 130 Fluoranthene | 202 | 10.211 | 10.211 | (1.104) | 811467 | 50.0000 | 48.6866 |
| 131 Benzidine | 184 | 10.293 | 10.293 | (0.904) | 105904 | 50.0000 | 50.5943 |
| 132 Pyrene | 202 | 10.399 | 10.399 | (0.914) | 839271 | 50.0000 | 49.1748 |
| 137 Butyl benzyl phthalate | 149 | 10.846 | 10.846 | (0.953) | 349288 | 50.0000 | 51.2668 |
| 140 3,3'-Dichlorobenzidine | 252 | 11.322 | 11.322 | (0.995) | 288207 | 50.0000 | 49.1409 |
| 141 Benzo(a)anthracene | 228 | 11.363 | 11.363 | (0.998) | 753552 | 50.0000 | 47.3185(H) |
| 144 Chrysene | 228 | 11.404 | 11.404 | (1.002) | 729407 | 50.0000 | 48.0516 |
| 143 Bis(2-ethylhexyl) phthalate | 149 | 11.280 | 11.280 | (0.991) | 475577 | 50.0000 | 50.9870 |
| 146 Di-n-octyl phthalate | 149 | 11.803 | 11.803 | (1.037) | 817557 | 50.0000 | 50.3390 |
| 147 Benzo(b)fluoranthene | 252 | 12.432 | 12.432 | (0.963) | 657418 | 50.0000 | 45.4263 |
| 148 Benzo(k)fluoranthene | 252 | 12.461 | 12.461 | (0.965) | 803773 | 50.0000 | 49.8870 |
| 150 Benzo(a)pyrene | 252 | 12.837 | 12.837 | (0.995) | 645652 | 50.0000 | 48.6626(H) |
| 155 Indeno(1,2,3-cd)pyrene | 276 | 14.512 | 14.512 | (1.124) | 692118 | 50.0000 | 46.9169 |
| 156 Dibenz(a,h)anthracene | 278 | 14.500 | 14.500 | (1.123) | 568986 | 50.0000 | 45.7616 |
| 157 Benzo(g,h,i)perylene | 276 | 15.006 | 15.006 | (1.163) | 608692 | 50.0000 | 48.6318(H) |
| 168 Methyl Styrene | 118 | 4.876 | 4.876 | (0.953) | 280266 | 50.0000 | 51.5354 |
| 202 Alachlor | 188 | 9.565 | 9.565 | (1.034) | 97592 | 50.0000 | 49.9865 |
| 204 Atrazine | 200 | 8.983 | 8.983 | (0.971) | 19301 | 50.0000 | 70.5944 |
| 205 Caprolactam | 55 | 6.727 | 6.727 | (1.064) | 127235 | 50.0000 | 51.7661 |
| 207 2,3-Dichlorobenzeneamine | 161 | 7.320 | 7.320 | (0.914) | 236234 | 50.0000 | 51.7154 |
| 206 Decane | 43 | 4.923 | 4.923 | (0.962) | 353239 | 50.0000 | 55.8722 |
| 213 n-Dodecane | 43 | 6.233 | 6.233 | (0.778) | 323278 | 50.0000 | 51.5774 |
| 210 Tetradecane | 43 | 7.373 | 7.373 | (0.921) | 278670 | 50.0000 | 51.9526 |
| 209 Hexadecane | 57 | 8.290 | 8.290 | (1.035) | 347764 | 50.0000 | 51.8947 |
| 208 n-Octadecane | 85 | 9.036 | 9.036 | (0.977) | 140116 | 50.0000 | 54.2330 |
| 211 n-Eicosane | 43 | 9.671 | 9.671 | (1.208) | 253271 | 50.0000 | 53.0867 |
| 212 n-docosane | 43 | 10.252 | 10.252 | (1.280) | 206492 | 50.0000 | 52.8311 |

QC Flag Legend

H - Operator selected an alternate compound hit.

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: K.i
Lab File ID: k3369.d
Lab Smp Id: HSL_0050
Analysis Type: SV
Quant Type: ISTD
Operator: kiddd
Method File: /chem/K.i/052904.b/8270C.m
Misc Info:

Calibration Date: 29-MAY-2004
Calibration Time: 10:14
Client Smp ID: HSL_0050
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|--------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 160879 | 80440 | 321758 | 151927 | -5.56 |
| 49 Naphthalene-d8 | 591401 | 295700 | 1182802 | 565656 | -4.35 |
| 83 Acenaphthene-d10 | 354180 | 177090 | 708360 | 326489 | -7.82 |
| 117 Phenanthrene-d10 | 683575 | 341788 | 1367150 | 621188 | -9.13 |
| 142 Chrysene-d12 | 669104 | 334552 | 1338208 | 614820 | -8.11 |
| 151 Perylene-d12 | 582855 | 291428 | 1165710 | 509237 | -12.63 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.00 |
| 117 Phenanthrene-d10 | 9.25 | 8.75 | 9.75 | 9.25 | 0.00 |
| 142 Chrysene-d12 | 11.39 | 10.89 | 11.89 | 11.38 | -0.11 |
| 151 Perylene-d12 | 12.92 | 12.42 | 13.42 | 12.91 | -0.09 |

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/K.i/052904.b/k3369.d

Date : 29-MAY-2004 09:50

Client ID: HSL_0050

Sample Info: HSL_0050,BNA1509,P:051104,E:053104

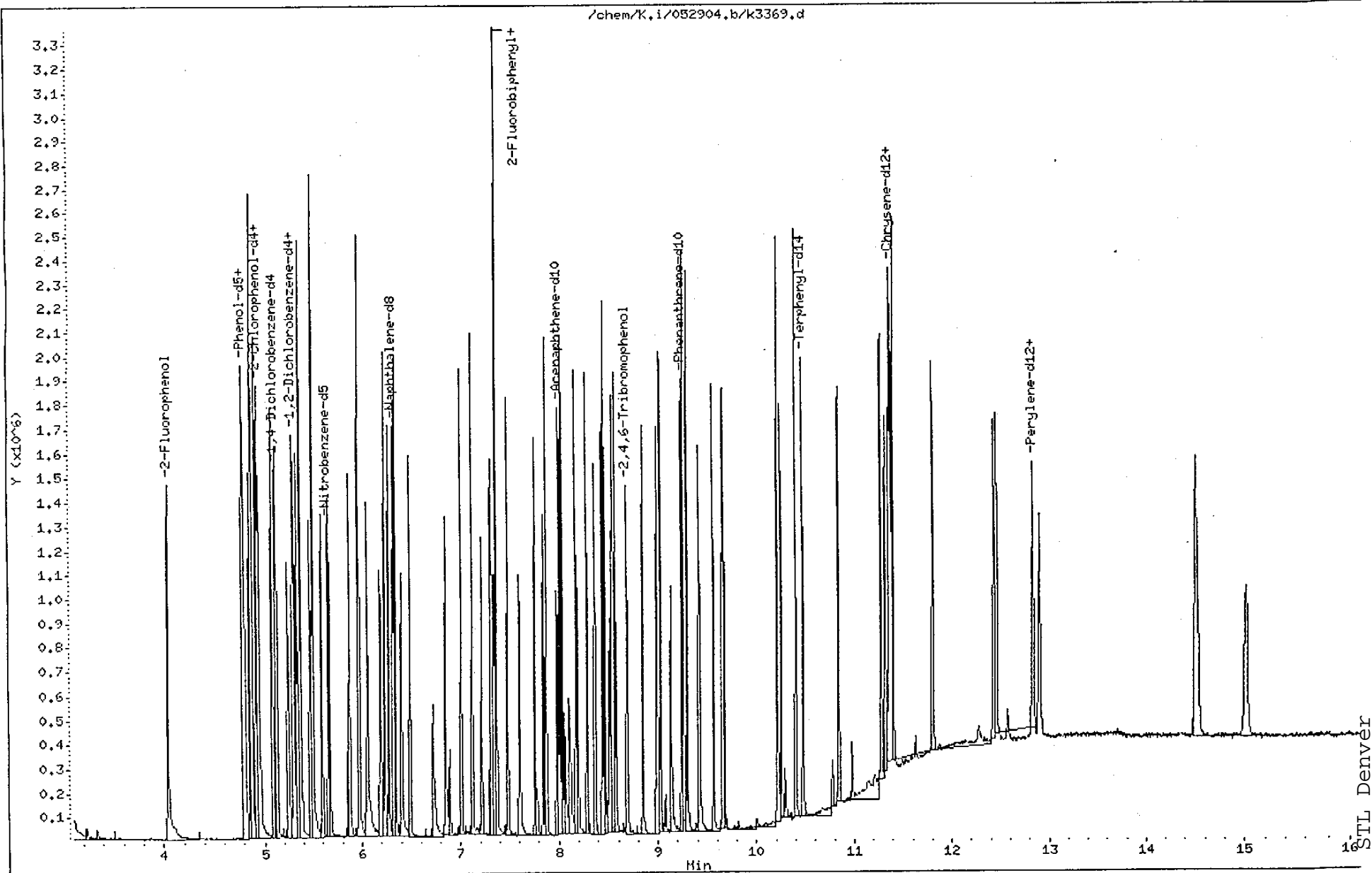
Volume Injected (uL): 0.5

Column phase: Rtx-5ms 30m 0.5um

Instrument: K.i

Operator: kidd

Column diameter: 0.25



mw
05-31-04

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3370.d
Lab Smp Id: HSL_0080 Client Smp ID: HSL_0080
Inj Date : 29-MAY-2004 10:14
Operator : kiddd Inst ID: K.i
Smp Info : HSL_0080,BNA1509,P:051104,E:053104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 14:25 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 10:14 Cal File: k3370.d
Als bottle: 10 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-HSL.sub
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | AMOUNTS | | | | | | |
|-------------------------------|-----------|---------|--------|---------|--------|----------|--------------------|-------------------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ***** | **** | *** | ** | ***** | ***** | ***** | ***** | ***** |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 | (1.000) | 160879 | 40.0000 | | |
| * 49 Naphthalene-d8 | 136 | 6.322 | 6.322 | (1.000) | 591401 | 40.0000 | | |
| * 83 Acenaphthene-d10 | 164 | 8.008 | 8.008 | (1.000) | 354180 | 40.0000 | | |
| * 117 Phenanthrene-d10 | 188 | 9.248 | 9.248 | (1.000) | 683575 | 40.0000 | | |
| * 142 Chrysene-d12 | 240 | 11.392 | 11.392 | (1.000) | 669104 | 40.0000 | | |
| * 151 Perylene-d12 | 264 | 12.920 | 12.920 | (1.000) | 582855 | 40.0000 | | |
| \$ 36 Nitrobenzene-d5 | 82 | 5.652 | 5.652 | (1.104) | 495576 | 80.0000 | 76.8555 | |
| \$ 70 2-Fluorobiphenyl | 172 | 7.368 | 7.368 | (0.920) | 761578 | 80.0000 | 70.8835 | |
| \$ 133 Terphenyl-d14 | 244 | 10.476 | 10.476 | (0.920) | 849151 | 80.0000 | 75.1968 | |
| \$ 10 2-Fluorophenol | 112 | 4.048 | 4.048 | (0.791) | 637068 | 120.000 | 120.467 | |
| \$ 14 Phenol-d5 | 99 | 4.794 | 4.794 | (0.937) | 782549 | 120.000 | 117.255 | |
| \$ 103 2,4,6-Tribromophenol | 330 | 8.695 | 8.695 | (0.940) | 170366 | 120.000 | 112.382 | |
| \$ 163 1,2-Dichlorobenzene-d4 | 152 | 5.293 | 5.293 | (1.034) | 245111 | 80.0000 | 74.3931 | |
| \$ 162 2-Chlorophenol-d4 | 132 | 4.947 | 4.947 | (0.967) | 549979 | 120.000 | 112.303 | |
| 5 Pyridine | 79 | 3.061 | 3.061 | (0.598) | 524124 | 80.0000 | 82.8381(H) | |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ---- | == | ----- | ----- | ----- | ----- | ----- |
| 4 N-Nitrosodimethylamine | 74 | 3.037 | 3.037 | (0.594) | 311274 | 80.0000 | 78.5704 |
| 16 Aniline | 93 | 4.859 | 4.859 | (0.949) | 474972 | 80.0000 | 76.9019 |
| 15 Phenol | 94 | 4.806 | 4.806 | (0.939) | 525824 | 80.0000 | 77.8347 |
| 18 Bis(2-chloroethyl) ether | 93 | 4.882 | 4.882 | (0.954) | 516592 | 80.0000 | 85.5740 |
| 20 2-Chlorophenol | 128 | 4.964 | 4.964 | (0.970) | 384826 | 80.0000 | 76.0616 |
| 21 1,3-Dichlorobenzene | 146 | 5.088 | 5.088 | (0.994) | 444184 | 80.0000 | 74.7481 |
| 23 1,4-Dichlorobenzene | 146 | 5.135 | 5.135 | (1.003) | 450046 | 80.0000 | 74.4312 |
| 24 Benzyl alcohol | 108 | 5.246 | 5.246 | (1.025) | 286919 | 80.0000 | 82.3225 |
| 25 1,2-Dichlorobenzene | 146 | 5.311 | 5.311 | (1.038) | 407115 | 80.0000 | 73.9614 |
| 26 2-Methylphenol | 108 | 5.340 | 5.340 | (1.044) | 395032 | 80.0000 | 76.9775 |
| 27 1H-Indene | 116 | 5.376 | 5.376 | (1.051) | 671133 | 80.0000 | 74.7447 |
| 28 2,2'-oxybis(1-chloropropane) | 45 | 5.370 | 5.370 | (1.049) | 695390 | 80.0000 | 80.3284 |
| 29 4-Methylphenol | 108 | 5.470 | 5.470 | (1.069) | 406472 | 80.0000 | 76.5574 |
| 30 N-nitrosodi-n-propylamine | 70 | 5.505 | 5.505 | (1.076) | 293762 | 80.0000 | 75.7966 |
| 32 Acetophenone | 105 | 5.499 | 5.499 | (1.075) | 550052 | 80.0000 | 74.9116 |
| 33 Hexachloroethane | 117 | 5.593 | 5.593 | (1.093) | 193096 | 80.0000 | 73.7229 |
| 37 Nitrobenzene | 77 | 5.670 | 5.670 | (1.108) | 519312 | 80.0000 | 78.2946 |
| 40 Isophorone | 82 | 5.875 | 5.875 | (0.929) | 859413 | 80.0000 | 79.3034 |
| 41 2-Nitrophenol | 139 | 5.975 | 5.975 | (0.945) | 185459 | 80.0000 | 76.0934 |
| 42 2,4-Dimethylphenol | 107 | 5.969 | 5.969 | (0.944) | 367096 | 80.0000 | 75.3024 |
| 43 Bis(2-chloroethoxy)methane | 93 | 6.063 | 6.063 | (0.959) | 481390 | 80.0000 | 76.7379 |
| 45 Benzoic acid | 122 | 6.069 | 6.069 | (0.960) | 247137 | 80.0000 | 78.9506 |
| 46 2,4-Dichlorophenol | 162 | 6.187 | 6.187 | (0.979) | 340138 | 80.0000 | 79.5609 |
| 47 1,2,4-Trichlorobenzene | 180 | 6.275 | 6.275 | (0.993) | 355550 | 80.0000 | 76.4132 |
| 50 Naphthalene | 128 | 6.345 | 6.345 | (1.004) | 1088970 | 80.0000 | 76.1389 |
| 51 4-Chloroaniline | 127 | 6.404 | 6.404 | (1.013) | 441503 | 80.0000 | 79.1175 |
| 52 Hexachlorobutadiene | 225 | 6.492 | 6.492 | (1.027) | 234861 | 80.0000 | 77.6466 |
| 59 4-Chloro-3-methylphenol | 107 | 6.851 | 6.851 | (1.084) | 363288 | 80.0000 | 80.7123 |
| 62 2-Methylnaphthalene | 142 | 7.009 | 7.009 | (1.109) | 665337 | 80.0000 | 77.1491 |
| 64 1-Methylnaphthalene | 142 | 7.121 | 7.121 | (1.126) | 669892 | 80.0000 | 76.0874 |
| 63 Hexachlorocyclopentadiene | 237 | 7.221 | 7.221 | (0.902) | 259586 | 80.0000 | 81.1880 |
| 67 2,4,6-Trichlorophenol | 196 | 7.309 | 7.309 | (0.913) | 254247 | 80.0000 | 79.5824 |
| 68 2,4,5-Trichlorophenol | 196 | 7.350 | 7.350 | (0.918) | 275287 | 80.0000 | 78.7447 |
| 71 2-Chloronaphthalene | 162 | 7.485 | 7.485 | (0.935) | 691218 | 80.0000 | 75.6878 |
| 74 2-Nitroaniline | 65 | 7.603 | 7.603 | (0.949) | 296439 | 80.0000 | 80.7088 |
| 76 Dimethyl phthalate | 163 | 7.761 | 7.761 | (0.969) | 763850 | 80.0000 | 76.8553 |
| 79 2,6-Dinitrotoluene | 165 | 7.843 | 7.843 | (0.979) | 174099 | 80.0000 | 80.2396 |
| 81 Acenaphthylene | 152 | 7.879 | 7.879 | (0.984) | 1094873 | 80.0000 | 75.4507 |
| 82 3-Nitroaniline | 138 | 7.984 | 7.984 | (0.997) | 208642 | 80.0000 | 81.9185 |
| 84 Acenaphthene | 153 | 8.037 | 8.037 | (1.004) | 633527 | 80.0000 | 75.7184 |
| 85 2,4-Dinitrophenol | 184 | 8.067 | 8.067 | (1.007) | 124109 | 80.0000 | 81.8826 |
| 86 4-Nitrophenol | 109 | 8.108 | 8.108 | (1.012) | 184377 | 80.0000 | 83.0506 |
| 87 2,4-Dinitrotoluene | 165 | 8.196 | 8.196 | (1.023) | 235185 | 80.0000 | 81.5264 |
| 88 Dibenzofuran | 168 | 8.172 | 8.172 | (1.021) | 914437 | 80.0000 | 75.6451 |
| 93 Diethyl phthalate | 149 | 8.372 | 8.372 | (1.045) | 764878 | 80.0000 | 77.0689 |
| 95 4-Chlorophenyl phenyl ether | 204 | 8.449 | 8.449 | (1.055) | 405539 | 80.0000 | 75.6333 |
| 96 Fluorene | 166 | 8.472 | 8.472 | (1.058) | 780040 | 80.0000 | 75.2610 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ----- | ---- | == | ===== | ===== | ===== | ===== | ===== |
| 97 4-Nitroaniline | 138 | 8.519 | 8.519 | (1.064) | 205828 | 80.0000 | 81.9622 |
| 99 4,6-Dinitro-2-methylphenol | 198 | 8.543 | 8.543 | (1.067) | 165883 | 80.0000 | 81.2230 |
| 101 N-nitrosodiphenylamine | 169 | 8.554 | 8.554 | (1.068) | 555829 | 80.0000 | 77.0044 |
| 102 Azobenzene | 77 | 8.584 | 8.584 | (1.072) | 942654 | 80.0000 | 79.2728 |
| 108 4-Bromophenyl phenyl ether | 248 | 8.854 | 8.854 | (0.957) | 232667 | 80.0000 | 75.3793 |
| 110 Hexachlorobenzene | 284 | 8.995 | 8.995 | (0.973) | 238825 | 80.0000 | 72.6458 |
| 113 Pentachlorophenol | 266 | 9.136 | 9.136 | (0.988) | 155605 | 80.0000 | 78.6928 |
| 118 Phenanthrene | 178 | 9.265 | 9.265 | (1.002) | 1162587 | 80.0000 | 73.7787 |
| 122 Anthracene | 178 | 9.301 | 9.301 | (1.006) | 1169467 | 80.0000 | 72.7752 |
| 123 Carbazole | 167 | 9.424 | 9.424 | (1.019) | 1047299 | 80.0000 | 74.6835 |
| 125 Di-n-butyl phthalate | 149 | 9.659 | 9.659 | (1.044) | 1243917 | 80.0000 | 75.1412 |
| 130 Fluoranthene | 202 | 10.217 | 10.217 | (1.105) | 1356357 | 80.0000 | 73.9519 |
| 131 Benzidine | 184 | 10.294 | 10.294 | (0.904) | 171611 | 80.0000 | 81.5853 |
| 132 Pyrene | 202 | 10.405 | 10.405 | (0.913) | 1409725 | 80.0000 | 75.8978 |
| 137 Butyl benzyl phthalate | 149 | 10.852 | 10.852 | (0.953) | 576308 | 80.0000 | 77.7252 |
| 140 3,3'-Dichlorobenzidine | 252 | 11.334 | 11.334 | (0.995) | 497074 | 80.0000 | 77.8779 |
| 141 Benzo(a)anthracene | 228 | 11.375 | 11.375 | (0.998) | 1352722 | 80.0000 | 78.0514 (H) |
| 144 Chrysene | 228 | 11.416 | 11.416 | (1.002) | 1277940 | 80.0000 | 77.3575 |
| 143 Bis(2-ethylhexyl) phthalate | 149 | 11.287 | 11.287 | (0.991) | 792167 | 80.0000 | 78.0386 |
| 146 Di-n-octyl phthalate | 149 | 11.815 | 11.815 | (1.037) | 1387676 | 80.0000 | 78.5108 |
| 147 Benzo(b)fluoranthene | 252 | 12.450 | 12.450 | (0.964) | 1275997 | 80.0000 | 77.0327 |
| 148 Benzo(k)fluoranthene | 252 | 12.473 | 12.473 | (0.965) | 1319570 | 80.0000 | 71.5559 (H) |
| 150 Benzo(a)pyrene | 252 | 12.849 | 12.849 | (0.995) | 1149393 | 80.0000 | 75.6877 |
| 155 Indeno(1,2,3-cd)pyrene | 276 | 14.536 | 14.536 | (1.125) | 1277313 | 80.0000 | 75.6495 |
| 156 Dibenz(a,h)anthracene | 278 | 14.524 | 14.524 | (1.124) | 1076968 | 80.0000 | 75.6766 |
| 157 Benzo(g,h,i)perylene | 276 | 15.029 | 15.029 | (1.163) | 1058978 | 80.0000 | 73.9213 |
| 168 Methyl Styrene | 118 | 4.876 | 4.876 | (0.953) | 427905 | 80.0000 | 74.3050 |
| 202 Alachlor | 188 | 9.565 | 9.565 | (1.034) | 158360 | 80.0000 | 73.7090 |
| 204 Atrazine | 200 | 8.983 | 8.983 | (0.971) | 19562 | 80.0000 | 65.0190 |
| 205 Caprolactam | 55 | 6.733 | 6.733 | (1.065) | 219228 | 80.0000 | 85.3110 |
| 207 2,3-Dichlorobenzeneamine | 161 | 7.321 | 7.321 | (0.914) | 382498 | 80.0000 | 77.1882 |
| 206 Decane | 43 | 4.923 | 4.923 | (0.962) | 532393 | 80.0000 | 84.3941 |
| 213 n-Dodecane | 43 | 6.234 | 6.234 | (0.778) | 497211 | 80.0000 | 78.7399 |
| 210 Tetradecane | 43 | 7.373 | 7.373 | (0.921) | 417034 | 80.0000 | 79.8323 |
| 209 Hexadecane | 57 | 8.290 | 8.290 | (1.035) | 541073 | 80.0000 | 79.3761 |
| 208 n-Octadecane | 85 | 9.036 | 9.036 | (0.977) | 220567 | 80.0000 | 82.2760 |
| 211 n-Eicosane | 43 | 9.677 | 9.677 | (1.208) | 417803 | 80.0000 | 80.7265 |
| 212 n-docosane | 43 | 10.258 | 10.258 | (1.281) | 340024 | 80.0000 | 80.1937 |

QC Flag Legend

H - Operator selected an alternate compound hit.

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|---|-------------------------------|
| Instrument ID: K.i | Calibration Date: 29-MAY-2004 |
| Lab File ID: k3370.d | Calibration Time: 10:14 |
| Lab Smp Id: HSL 0080 | Client Smp ID: HSL_0080 |
| Analysis Type: SV | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: kiddd | |
| Method File: /chem/K.i/052904.b/8270C.m | |
| Misc Info: | |

Test Mode:
Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 160879 | 80440 | 321758 | 160879 | 0.00 |
| 49 Naphthalene-d8 | 591401 | 295700 | 1182802 | 591401 | 0.00 |
| 83 Acenaphthene-d10 | 354180 | 177090 | 708360 | 354180 | 0.00 |
| 117 Phenanthrene-d10 | 683575 | 341788 | 1367150 | 683575 | 0.00 |
| 142 Chrysene-d12 | 669104 | 334552 | 1338208 | 669104 | 0.00 |
| 151 Perylene-d12 | 582855 | 291428 | 1165710 | 582855 | 0.00 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.00 |
| 117 Phenanthrene-d10 | 9.25 | 8.75 | 9.75 | 9.25 | 0.00 |
| 142 Chrysene-d12 | 11.39 | 10.89 | 11.89 | 11.39 | 0.00 |
| 151 Perylene-d12 | 12.92 | 12.42 | 13.42 | 12.92 | 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/K,i/052904,b/k3370.d

Date : 29-MAY-2004 10:14

Client ID: HSL_0080

Sample Info: HSL_0080,BNA1509,P:051104,E:053104

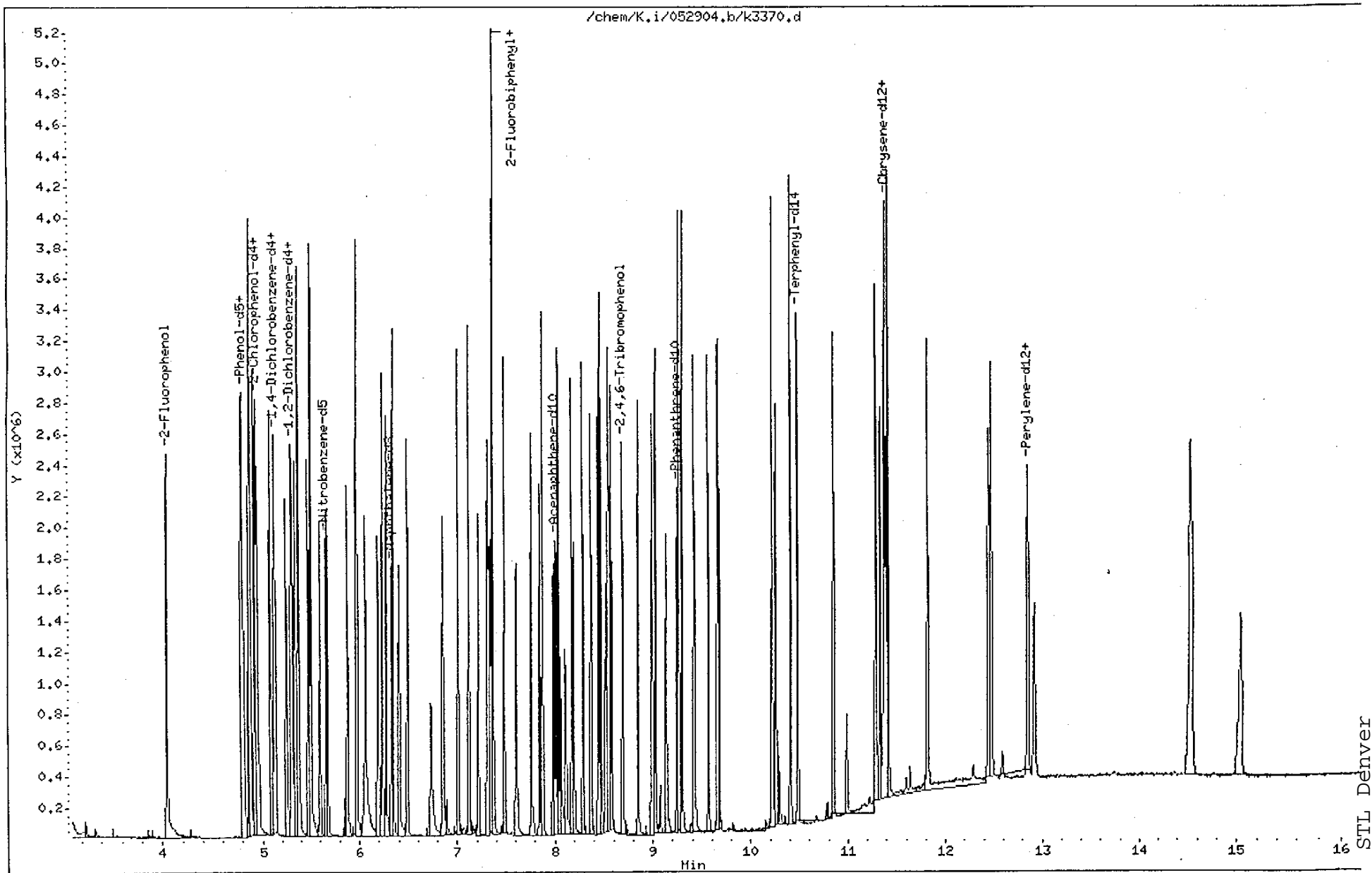
Volume Injected (uL): 0.5

Column phase: Rtx-5ms 30m 0.5um

Instrument: K,i

Operator: kidd

Column diameter: 0.25



mw
05-31-04

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3371.d
Lab Smp Id: HSL_0120 Client Smp ID: HSL_0120
Inj Date : 29-MAY-2004 10:38
Operator : kiddd Inst ID: K.i
Smp Info : HSL_0120,BNA1509,P:051104,E:053104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 14:25 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 10:38 Cal File: k3371.d
Als bottle: 11 Calibration Sample, Level: 6
Dil Factor: 1.00000 Compound Sublist: 1-HSL.sub
Integrator: HP RTE
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | AMOUNTS | | | | | | |
|-------------------------------|-----------|---------|--------|---------|---------|----------|--------------------|-------------------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ***** | ---- | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 | (1.000) | 148218 | 40.0000 | | |
| * 49 Naphthalene-d8 | 136 | 6.322 | 6.322 | (1.000) | 548536 | 40.0000 | | |
| * 83 Acenaphthene-d10 | 164 | 8.014 | 8.014 | (1.000) | 327879 | 40.0000 | | |
| * 117 Phenanthrene-d10 | 188 | 9.248 | 9.248 | (1.000) | 619927 | 40.0000 | | |
| * 142 Chrysene-d12 | 240 | 11.404 | 11.404 | (1.000) | 622399 | 40.0000 | | |
| * 151 Perylene-d12 | 264 | 12.932 | 12.932 | (1.000) | 524720 | 40.0000 | | |
| \$ 36 Nitrobenzene-d5 | 82 | 5.658 | 5.658 | (1.106) | 680215 | 120.000 | | 114.501 |
| \$ 70 2-Fluorobiphenyl | 172 | 7.368 | 7.368 | (0.919) | 1083521 | 120.000 | | 108.938 |
| \$ 133 Terphenyl-d14 | 244 | 10.482 | 10.482 | (0.919) | 1235124 | 120.000 | | 117.584 |
| \$ 10 2-Fluorophenol | 112 | 4.048 | 4.048 | (0.791) | 845568 | 180.000 | | 173.552 |
| \$ 14 Phenol-d5 | 99 | 4.800 | 4.800 | (0.938) | 980481 | 180.000 | | 159.462 |
| \$ 103 2,4,6-Tribromophenol | 330 | 8.701 | 8.701 | (0.941) | 249349 | 180.000 | | 181.371 |
| \$ 163 1,2-Dichlorobenzene-d4 | 152 | 5.299 | 5.299 | (1.036) | 326326 | 120.000 | | 107.503 |
| \$ 162 2-Chlorophenol-d4 | 132 | 4.953 | 4.953 | (0.968) | 722835 | 180.000 | | 160.207 |
| 5 Pyridine | 79 | 3.061 | 3.061 | (0.598) | 664698 | 120.000 | | 114.030 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ---- | == | ===== | ===== | ===== | ===== | ===== |
| 4 N-Nitrosodimethylamine | 74 | 3.037 | 3.037 | (0.594) | 422408 | 120.000 | 115.730 |
| 16 Aniline | 93 | 4.865 | 4.865 | (0.951) | 573451 | 120.000 | 125.199 |
| 15 Phenol | 94 | 4.812 | 4.812 | (0.940) | 686644 | 120.000 | 110.322 |
| 18 Bis(2-chloroethyl) ether | 93 | 4.888 | 4.888 | (0.955) | 597031 | 120.000 | 109.472 |
| 20 2-Chlorophenol | 128 | 4.965 | 4.965 | (0.970) | 506895 | 120.000 | 108.747 |
| 21 1,3-Dichlorobenzene | 146 | 5.088 | 5.088 | (0.994) | 600361 | 120.000 | 109.660 |
| 23 1,4-Dichlorobenzene | 146 | 5.135 | 5.135 | (1.003) | 596485 | 120.000 | 107.077 |
| 24 Benzyl alcohol | 108 | 5.247 | 5.247 | (1.025) | 376968 | 120.000 | 117.398 |
| 25 1,2-Dichlorobenzene | 146 | 5.311 | 5.311 | (1.038) | 535703 | 120.000 | 105.636 |
| 26 2-Methylphenol | 108 | 5.346 | 5.346 | (1.045) | 518320 | 120.000 | 109.630 |
| 27 1H-Indene | 116 | 5.376 | 5.376 | (1.051) | 882032 | 120.000 | 106.624 |
| 28 2,2'-oxybis(1-chloropropane) | 45 | 5.370 | 5.370 | (1.049) | 867321 | 120.000 | 117.696 |
| 29 4-Methylphenol | 108 | 5.470 | 5.470 | (1.069) | 547511 | 120.000 | 111.930 |
| 30 N-nitrosodi-n-propylamine | 70 | 5.505 | 5.505 | (1.076) | 392832 | 120.000 | 110.017 |
| 32 Acetophenone | 105 | 5.499 | 5.499 | (1.075) | 728617 | 120.000 | 107.707 |
| 33 Hexachloroethane | 117 | 5.593 | 5.593 | (1.093) | 260865 | 120.000 | 108.104 |
| 37 Nitrobenzene | 77 | 5.676 | 5.676 | (1.109) | 682448 | 120.000 | 111.679 |
| 40 Isophorone | 82 | 5.881 | 5.881 | (0.930) | 1152610 | 120.000 | 114.670 |
| 41 2-Nitrophenol | 139 | 5.975 | 5.975 | (0.945) | 253327 | 120.000 | 112.062 |
| 42 2,4-Dimethylphenol | 107 | 5.975 | 5.975 | (0.945) | 491288 | 120.000 | 108.653 |
| 43 Bis(2-chloroethoxy)methane | 93 | 6.063 | 6.063 | (0.959) | 643120 | 120.000 | 110.530 |
| 45 Benzoic acid | 122 | 6.081 | 6.081 | (0.962) | 358306 | 120.000 | 123.410 |
| 46 2,4-Dichlorophenol | 162 | 6.193 | 6.193 | (0.980) | 460649 | 120.000 | 116.169 |
| 47 1,2,4-Trichlorobenzene | 180 | 6.275 | 6.275 | (0.993) | 476473 | 120.000 | 110.404 |
| 50 Naphthalene | 128 | 6.345 | 6.345 | (1.004) | 1469994 | 120.000 | 110.811 |
| 51 4-Chloroaniline | 127 | 6.410 | 6.410 | (1.014) | 583590 | 120.000 | 112.752 |
| 52 Hexachlorobutadiene | 225 | 6.492 | 6.492 | (1.027) | 321392 | 120.000 | 114.558 |
| 59 4-Chloro-3-methylphenol | 107 | 6.856 | 6.856 | (1.085) | 488624 | 120.000 | 117.042 |
| 62 2-Methylnaphthalene | 142 | 7.009 | 7.009 | (1.109) | 894252 | 120.000 | 111.796 |
| 64 1-Methylnaphthalene | 142 | 7.121 | 7.121 | (1.126) | 896479 | 120.000 | 109.780 |
| 63 Hexachlorocyclopentadiene | 237 | 7.221 | 7.221 | (0.901) | 373989 | 120.000 | 126.351 |
| 67 2,4,6-Trichlorophenol | 196 | 7.309 | 7.309 | (0.912) | 343802 | 120.000 | 116.246 |
| 68 2,4,5-Trichlorophenol | 196 | 7.350 | 7.350 | (0.917) | 368967 | 120.000 | 114.007 |
| 71 2-Chloronaphthalene | 162 | 7.485 | 7.485 | (0.934) | 941131 | 120.000 | 111.320 |
| 74 2-Nitroaniline | 65 | 7.609 | 7.609 | (0.949) | 405577 | 120.000 | 119.280 |
| 76 Dimethyl phthalate | 163 | 7.767 | 7.767 | (0.969) | 1059041 | 120.000 | 115.104 |
| 79 2,6-Dinitrotoluene | 165 | 7.844 | 7.844 | (0.979) | 234575 | 120.000 | 116.784 |
| 81 Acenaphthylene | 152 | 7.879 | 7.879 | (0.983) | 1506661 | 120.000 | 112.157 |
| 82 3-Nitroaniline | 138 | 7.985 | 7.985 | (0.996) | 280494 | 120.000 | 118.964 |
| 84 Acenaphthene | 153 | 8.043 | 8.043 | (1.004) | 871326 | 120.000 | 112.493 |
| 85 2,4-Dinitrophenol | 184 | 8.067 | 8.067 | (1.007) | 179119 | 120.000 | 121.346 |
| 86 4-Nitrophenol | 109 | 8.114 | 8.114 | (1.012) | 258611 | 120.000 | 125.833 |
| 87 2,4-Dinitrotoluene | 165 | 8.196 | 8.196 | (1.023) | 310444 | 120.000 | 116.247 |
| 88 Dibenzofuran | 168 | 8.178 | 8.178 | (1.021) | 1244387 | 120.000 | 111.197 |
| 93 Diethyl phthalate | 149 | 8.372 | 8.372 | (1.045) | 1048689 | 120.000 | 114.142 |
| 95 4-Chlorophenyl phenyl ether | 204 | 8.449 | 8.449 | (1.054) | 562706 | 120.000 | 113.363 |
| 96 Fluorene | 166 | 8.472 | 8.472 | (1.057) | 1077561 | 120.000 | 112.307 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| 97 4-Nitroaniline | 138 | 8.525 | 8.525 | (1.064) | 277889 | 120.000 | 119.534 |
| 99 4,6-Dinitro-2-methylphenol | 198 | 8.549 | 8.549 | (1.067) | 227604 | 120.000 | 120.384 |
| 101 N-nitrosodiphenylamine | 169 | 8.555 | 8.555 | (1.067) | 733187 | 120.000 | 109.724 |
| 102 Azobenzene | 77 | 8.584 | 8.584 | (1.071) | 1266193 | 120.000 | 115.022 |
| 108 4-Bromophenyl phenyl ether | 248 | 8.854 | 8.854 | (0.957) | 321385 | 120.000 | 114.812 |
| 110 Hexachlorobenzene | 284 | 9.001 | 9.001 | (0.973) | 349432 | 120.000 | 117.203 |
| 113 Pentachlorophenol | 266 | 9.136 | 9.136 | (0.988) | 226328 | 120.000 | 126.210 |
| 118 Phenanthrene | 178 | 9.265 | 9.265 | (1.002) | 1608114 | 120.000 | 112.530 |
| 122 Anthracene | 178 | 9.301 | 9.301 | (1.006) | 1627224 | 120.000 | 111.658 |
| 123 Carbazole | 167 | 9.424 | 9.424 | (1.019) | 1408149 | 120.000 | 110.726 |
| 125 Di-n-butyl phthalate | 149 | 9.659 | 9.659 | (1.044) | 1731312 | 120.000 | 115.321 |
| 130 Fluoranthene | 202 | 10.223 | 10.223 | (1.105) | 1903277 | 120.000 | 114.426 |
| 131 Benzidine | 184 | 10.300 | 10.300 | (0.903) | 227861 | 120.000 | 121.920 |
| 132 Pyrene | 202 | 10.411 | 10.411 | (0.913) | 1962666 | 120.000 | 113.597 |
| 137 Butyl benzyl phthalate | 149 | 10.858 | 10.858 | (0.952) | 790935 | 120.000 | 114.676 |
| 140 3,3'-Dichlorobenzidine | 252 | 11.340 | 11.340 | (0.994) | 712505 | 120.000 | 120.007 |
| 141 Benzo(a)anthracene | 228 | 11.387 | 11.387 | (0.998) | 1888310 | 120.000 | 117.130(H) |
| 144 Chrysene | 228 | 11.428 | 11.428 | (1.002) | 1768058 | 120.000 | 115.057 |
| 143 Bis(2-ethylhexyl) phthalate | 149 | 11.298 | 11.298 | (0.991) | 1087167 | 120.000 | 115.137 |
| 146 Di-n-octyl phthalate | 149 | 11.827 | 11.827 | (1.037) | 1958783 | 120.000 | 119.138 |
| 147 Benzo(b)fluoranthene | 252 | 12.462 | 12.462 | (0.964) | 1871363 | 120.000 | 125.492 |
| 148 Benzo(k)fluoranthene | 252 | 12.485 | 12.485 | (0.965) | 1937556 | 120.000 | 116.708(H) |
| 150 Benzo(a)pyrene | 252 | 12.867 | 12.867 | (0.995) | 1671958 | 120.000 | 122.297 |
| 155 Indeno(1,2,3-cd)pyrene | 276 | 14.553 | 14.553 | (1.125) | 1877977 | 120.000 | 123.547 |
| 156 Dibenzo(a,h)anthracene | 278 | 14.542 | 14.542 | (1.124) | 1604987 | 120.000 | 125.275 |
| 157 Benzo(g,h,i)perylene | 276 | 15.047 | 15.047 | (1.164) | 1538499 | 120.000 | 119.292 |
| 168 Methyl Styrene | 118 | 4.882 | 4.882 | (0.954) | 561200 | 120.000 | 105.776 |
| 202 Alachlor | 188 | 9.565 | 9.565 | (1.034) | 220149 | 120.000 | 112.989 |
| 204 Atrazine | 200 | 8.989 | 8.989 | (0.972) | 12596 | 120.000 | 46.1642 |
| 205 Caprolactam | 55 | 6.745 | 6.745 | (1.067) | 310128 | 120.000 | 130.115 |
| 207 2,3-Dichlorobenzeneamine | 161 | 7.321 | 7.321 | (0.913) | 504347 | 120.000 | 109.942 |
| 206 Decane | 43 | 4.923 | 4.923 | (0.962) | 691723 | 120.000 | 123.738 |
| 213 n-Dodecane | 43 | 6.234 | 6.234 | (0.778) | 641947 | 120.000 | 119.989 |
| 210 Tetradecane | 43 | 7.374 | 7.374 | (0.920) | 516003 | 120.000 | 119.932 |
| 209 Hexadecane | 57 | 8.290 | 8.290 | (1.034) | 701965 | 120.000 | 119.537 |
| 208 n-Octadecane | 85 | 9.036 | 9.036 | (0.977) | 290737 | 120.000 | 124.531 |
| 211 n-Eicosane | 43 | 9.677 | 9.677 | (1.207) | 546799 | 120.000 | 114.125 |
| 212 n-docosane | 43 | 10.258 | 10.258 | (1.280) | 451205 | 120.000 | 114.952 |

QC Flag Legend

H - Operator selected an alternate compound hit.

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|---|-------------------------------|
| Instrument ID: K.i | Calibration Date: 29-MAY-2004 |
| Lab File ID: k3371.d | Calibration Time: 10:14 |
| Lab Smp Id: HSL_0120 | Client Smp ID: HSL_0120 |
| Analysis Type: SV | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: kiddd | |
| Method File: /chem/K.i/052904.b/8270C.m | |
| Misc Info: | |

Test Mode: Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 160879 | 80440 | 321758 | 148218 | -7.87 |
| 49 Naphthalene-d8 | 591401 | 295700 | 1182802 | 548536 | -7.25 |
| 83 Acenaphthene-d10 | 354180 | 177090 | 708360 | 327879 | -7.43 |
| 117 Phenanthrene-d10 | 683575 | 341788 | 1367150 | 619927 | -9.31 |
| 142 Chrysene-d12 | 669104 | 334552 | 1338208 | 622399 | -6.98 |
| 151 Perylene-d12 | 582855 | 291428 | 1165710 | 524720 | -9.97 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.07 |
| 117 Phenanthrene-d10 | 9.25 | 8.75 | 9.75 | 9.25 | 0.00 |
| 142 Chrysene-d12 | 11.39 | 10.89 | 11.89 | 11.40 | 0.10 |
| 151 Perylene-d12 | 12.92 | 12.42 | 13.42 | 12.93 | 0.09 |

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/K.i/052904.b/k3371.d

Date : 29-MAY-2004 10:38

Client ID: HSL_0120

Sample Info: HSL_0120,BNA1509,P:051104,E:053104

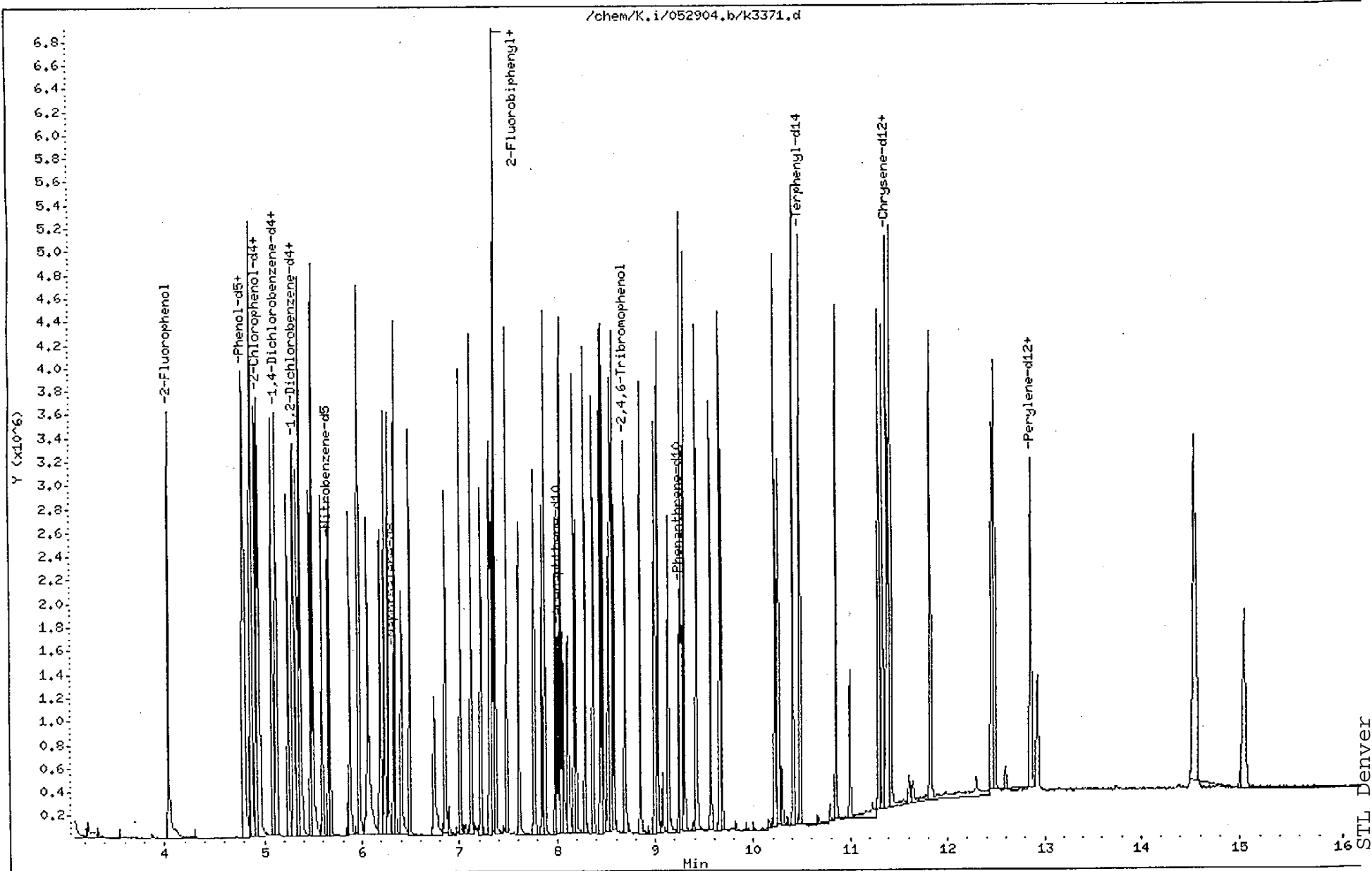
Volume Injected (uL): 0.5

Column phase: Rtx-5ms 30m 0.5um

Instrument: K.i

Operator: kiddd

Column diameter: 0.25



STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3372.d
Lab Smp Id: HSL_0160 Client Smp ID: HSL_0160
Inj Date : 29-MAY-2004 11:01
Operator : kiddd Inst ID: K.i
Smp Info : HSL_0160,BNA1509,P:051104,E:053104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 14:25 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 11:01 Cal File: k3372.d
Als bottle: 12 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-HSL.sub
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | AMOUNTS | | | | | |
|-------------------------------|-----------|---------|--------|---------|---------|----------|-----------------------------------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT ON-COL (ug/ml) (ug/ml) |
| ***** | **** | == | ===== | ===== | ===== | ===== | ***** |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 | (1.000) | 144355 | 40.0000 | |
| * 49 Naphthalene-d8 | 136 | 6.327 | 6.327 | (1.000) | 545046 | 40.0000 | |
| * 83 Acenaphthene-d10 | 164 | 8.014 | 8.014 | (1.000) | 328134 | 40.0000 | |
| * 117 Phenanthrene-d10 | 188 | 9.248 | 9.248 | (1.000) | 631590 | 40.0000 | |
| * 142 Chrysene-d12 | 240 | 11.380 | 11.380 | (1.000) | 629899 | 40.0000 | |
| * 151 Perylene-d12 | 264 | 12.902 | 12.902 | (1.000) | 541942 | 40.0000 | |
| \$ 36 Nitrobenzene-d5 | 82 | 5.658 | 5.658 | (1.106) | 882690 | 160.000 | 152.560 |
| \$ 70 2-Fluorobiphenyl | 172 | 7.367 | 7.367 | (0.919) | 1552775 | 160.000 | 155.995 |
| \$ 133 Terphenyl-d14 | 244 | 10.476 | 10.476 | (0.920) | 1711512 | 160.000 | 160.997 |
| \$ 10 2-Fluorophenol | 112 | 4.048 | 4.048 | (0.791) | 1071399 | 240.000 | 225.798 |
| \$ 14 Phenol-d5 | 99 | 4.800 | 4.800 | (0.938) | 1278859 | 240.000 | 213.555 |
| \$ 103 2,4,6-Tribromophenol | 330 | 8.701 | 8.701 | (0.941) | 376206 | 240.000 | 268.591 |
| \$ 163 1,2-Dichlorobenzene-d4 | 152 | 5.299 | 5.299 | (1.036) | 422697 | 160.000 | 142.977 |
| \$ 162 2-Chlorophenol-d4 | 132 | 4.952 | 4.952 | (0.968) | 923177 | 240.000 | 210.086 |
| 5 Pyridine | 79 | 3.061 | 3.061 | (0.598) | 863003 | 160.000 | 152.011 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 4 N-Nitrosodimethylamine | 74 | 3.037 | 3.037 | (0.594) | 554413 | 160.000 | 155.961 |
| 16 Aniline | 93 | 4.864 | 4.864 | (0.951) | 654887 | 160.000 | 168.649 |
| 15 Phenol | 94 | 4.811 | 4.811 | (0.940) | 854878 | 160.000 | 141.028 |
| 18 Bis(2-chloroethyl) ether | 93 | 4.888 | 4.888 | (0.955) | 810150 | 160.000 | 155.810 |
| 20 2-Chlorophenol | 128 | 4.964 | 4.964 | (0.970) | 631125 | 160.000 | 139.022 |
| 21 1,3-Dichlorobenzene | 146 | 5.088 | 5.088 | (0.994) | 772351 | 160.000 | 144.850 |
| 23 1,4-Dichlorobenzene | 146 | 5.135 | 5.135 | (1.003) | 786153 | 160.000 | 144.902 |
| 24 Benzyl alcohol | 108 | 5.252 | 5.252 | (1.026) | 492716 | 160.000 | 157.552 |
| 25 1,2-Dichlorobenzene | 146 | 5.311 | 5.311 | (1.038) | 695502 | 160.000 | 140.817 |
| 26 2-Methylphenol | 108 | 5.346 | 5.346 | (1.045) | 662421 | 160.000 | 143.858 |
| 27 1H-Indene | 116 | 5.381 | 5.381 | (1.052) | 1123337 | 160.000 | 139.428 |
| 28 2,2'-oxybis(1-chloropropane) | 45 | 5.370 | 5.370 | (1.049) | 1066676 | 160.000 | 159.502 |
| 29 4-Methylphenol | 108 | 5.475 | 5.475 | (1.070) | 728038 | 160.000 | 152.819 |
| 30 N-nitrosodi-n-propylamine | 70 | 5.511 | 5.511 | (1.077) | 496573 | 160.000 | 142.792 |
| 32 Acetophenone | 105 | 5.505 | 5.505 | (1.076) | 947642 | 160.000 | 143.832 |
| 33 Hexachloroethane | 117 | 5.593 | 5.593 | (1.093) | 340773 | 160.000 | 144.998 |
| 37 Nitrobenzene | 77 | 5.675 | 5.675 | (1.109) | 888560 | 160.000 | 149.299 |
| 40 Isophorone | 82 | 5.881 | 5.881 | (0.929) | 1504315 | 160.000 | 150.618 |
| 41 2-Nitrophenol | 139 | 5.975 | 5.975 | (0.944) | 327499 | 160.000 | 145.800 |
| 42 2,4-Dimethylphenol | 107 | 5.975 | 5.975 | (0.944) | 654586 | 160.000 | 145.695 |
| 43 Bis(2-chloroethoxy)methane | 93 | 6.063 | 6.063 | (0.958) | 843216 | 160.000 | 145.848 |
| 45 Benzoic acid | 122 | 6.092 | 6.092 | (0.963) | 483102 | 160.000 | 167.458 |
| 46 2,4-Dichlorophenol | 162 | 6.192 | 6.192 | (0.979) | 605761 | 160.000 | 153.743 |
| 47 1,2,4-Trichlorobenzene | 180 | 6.275 | 6.275 | (0.992) | 630584 | 160.000 | 147.048 |
| 50 Naphthalene | 128 | 6.345 | 6.345 | (1.003) | 1916667 | 160.000 | 145.407 |
| 51 4-Chloroaniline | 127 | 6.416 | 6.416 | (1.014) | 754633 | 160.000 | 146.732 |
| 52 Hexachlorobutadiene | 225 | 6.492 | 6.492 | (1.026) | 418548 | 160.000 | 150.143 |
| 59 4-Chloro-3-methylphenol | 107 | 6.856 | 6.856 | (1.084) | 646832 | 160.000 | 155.930 |
| 62 2-Methylnaphthalene | 142 | 7.009 | 7.009 | (1.108) | 1175403 | 160.000 | 147.885 |
| 64 1-Methylnaphthalene | 142 | 7.121 | 7.121 | (1.125) | 1193633 | 160.000 | 147.105 |
| 63 Hexachlorocyclopentadiene | 237 | 7.220 | 7.220 | (0.901) | 510303 | 160.000 | 172.271 |
| 67 2,4,6-Trichlorophenol | 196 | 7.309 | 7.309 | (0.912) | 454627 | 160.000 | 153.599 |
| 68 2,4,5-Trichlorophenol | 196 | 7.350 | 7.350 | (0.917) | 510478 | 160.000 | 157.610 |
| 71 2-Chloronaphthalene | 162 | 7.485 | 7.485 | (0.934) | 1242944 | 160.000 | 146.905 |
| 74 2-Nitroaniline | 65 | 7.608 | 7.608 | (0.949) | 520091 | 160.000 | 152.840 |
| 76 Dimethyl phthalate | 163 | 7.767 | 7.767 | (0.969) | 1384826 | 160.000 | 150.395 |
| 79 2,6-Dinitrotoluene | 165 | 7.849 | 7.849 | (0.979) | 314463 | 160.000 | 156.435 |
| 81 Acenaphthylene | 152 | 7.879 | 7.879 | (0.983) | 2025860 | 160.000 | 150.689 |
| 82 3-Nitroaniline | 138 | 7.984 | 7.984 | (0.996) | 352469 | 160.000 | 149.374 |
| 84 Acenaphthene | 153 | 8.043 | 8.043 | (1.004) | 1175774 | 160.000 | 151.682 |
| 85 2,4-Dinitrophenol | 184 | 8.072 | 8.072 | (1.007) | 246098 | 160.000 | 162.384 |
| 86 4-Nitrophenol | 109 | 8.114 | 8.114 | (1.012) | 352325 | 160.000 | 171.298 |
| 87 2,4-Dinitrotoluene | 165 | 8.196 | 8.196 | (1.023) | 410660 | 160.000 | 153.654 |
| 88 Dibenzofuran | 168 | 8.178 | 8.178 | (1.021) | 1678811 | 160.000 | 149.900 |
| 93 Diethyl phthalate | 149 | 8.378 | 8.378 | (1.045) | 1409101 | 160.000 | 153.250 |
| 95 4-Chlorophenyl phenyl ether | 204 | 8.448 | 8.448 | (1.054) | 763960 | 160.000 | 153.788 |
| 96 Fluorene | 166 | 8.478 | 8.478 | (1.058) | 1452773 | 160.000 | 151.295 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 97 4-Nitroaniline | 138 | 8.531 | 8.531 | (1.065) | 358264 | 160.000 | 153.987 |
| 99 4,6-Dinitro-2-methylphenol | 198 | 8.548 | 8.548 | (1.067) | 311002 | 160.000 | 164.366 |
| 101 N-nitrosodiphenylamine | 169 | 8.560 | 8.560 | (1.068) | 1013724 | 160.000 | 151.589 |
| 102 Azobenzene | 77 | 8.584 | 8.584 | (1.071) | 1637269 | 160.000 | 148.616 |
| 108 4-Bromophenyl phenyl ether | 248 | 8.854 | 8.854 | (0.957) | 441624 | 160.000 | 154.853 |
| 110 Hexachlorobenzene | 284 | 9.001 | 9.001 | (0.973) | 491983 | 160.000 | 161.969 |
| 113 Pentachlorophenol | 266 | 9.136 | 9.136 | (0.988) | 316447 | 160.000 | 173.206 |
| 118 Phenanthrene | 178 | 9.265 | 9.265 | (1.002) | 2206953 | 160.000 | 151.583 |
| 122 Anthracene | 178 | 9.300 | 9.300 | (1.006) | 2220105 | 160.000 | 149.527 |
| 123 Carbazole | 167 | 9.424 | 9.424 | (1.019) | 1882369 | 160.000 | 145.281 |
| 125 Di-n-butyl phthalate | 149 | 9.659 | 9.659 | (1.044) | 2308070 | 160.000 | 150.899 |
| 130 Fluoranthene | 202 | 10.217 | 10.217 | (1.105) | 2642256 | 160.000 | 155.920 |
| 131 Benzidine | 184 | 10.288 | 10.288 | (0.904) | 308364 | 160.000 | 167.341 |
| 132 Pyrene | 202 | 10.399 | 10.399 | (0.914) | 2732057 | 160.000 | 156.245 |
| 137 Butyl benzyl phthalate | 149 | 10.840 | 10.840 | (0.952) | 1043765 | 160.000 | 149.532 |
| 140 3 3'-Dichlorobenzidine | 252 | 11.322 | 11.322 | (0.995) | 976440 | 160.000 | 162.503 |
| 141 Benzo(a)anthracene | 228 | 11.363 | 11.363 | (0.998) | 2688742 | 160.000 | 164.795(H) |
| 144 Chrysene | 228 | 11.404 | 11.404 | (1.002) | 2501366 | 160.000 | 160.839 |
| 143 Bis(2-ethylhexyl) phthalate | 149 | 11.275 | 11.275 | (0.991) | 1469243 | 160.000 | 153.748(H) |
| 146 Di-n-octyl phthalate | 149 | 11.803 | 11.803 | (1.037) | 2616545 | 160.000 | 157.250 |
| 147 Benzo(b)fluoranthene | 252 | 12.438 | 12.438 | (0.964) | 2657697 | 160.000 | 172.559(H) |
| 148 Benzo(k)fluoranthene | 252 | 12.467 | 12.467 | (0.966) | 2852250 | 160.000 | 166.344 |
| 150 Benzo(a)pyrene | 252 | 12.843 | 12.843 | (0.995) | 2358714 | 160.000 | 167.047 |
| 155 Indeno(1,2,3-cd)pyrene | 276 | 14.536 | 14.536 | (1.127) | 2729763 | 160.000 | 173.877 |
| 156 Dibenz(a,h)anthracene | 278 | 14.524 | 14.524 | (1.126) | 2318863 | 160.000 | 175.244 |
| 157 Benzo(g,h,i)perylene | 276 | 15.035 | 15.035 | (1.165) | 2202836 | 160.000 | 165.376 |
| 168 Methyl Styrene | 118 | 4.882 | 4.882 | (0.954) | 731341 | 160.000 | 141.533 |
| 202 Alachlor | 188 | 9.565 | 9.565 | (1.034) | 300425 | 160.000 | 151.343 |
| 204 Atrazine | 200 | 8.989 | 8.989 | (0.972) | 10143 | 160.000 | 36.4875 |
| 205 Caprolactam | 55 | 6.756 | 6.756 | (1.068) | 416646 | 160.000 | 175.924 |
| 207 2,3-Dichlorobenzeneamine | 161 | 7.320 | 7.320 | (0.913) | 655068 | 160.000 | 142.686 |
| 206 Decane | 43 | 4.929 | 4.929 | (0.963) | 856199 | 160.000 | 160.376 |
| 213 n-Dodecane | 43 | 6.239 | 6.239 | (0.779) | 797428 | 160.000 | 159.555 |
| 210 Tetradecane | 43 | 7.373 | 7.373 | (0.920) | 621714 | 160.000 | 157.237 |
| 209 Hexadecane | 57 | 8.290 | 8.290 | (1.034) | 881323 | 160.000 | 158.786 |
| 208 n-Octadecane | 85 | 9.036 | 9.036 | (0.977) | 366232 | 160.000 | 156.550 |
| 211 n-Eicosane | 43 | 9.676 | 9.676 | (1.207) | 671838 | 160.000 | 140.114 |
| 212 n-docosane | 43 | 10.252 | 10.252 | (1.279) | 568895 | 160.000 | 144.822 |

QC Flag Legend

H - Operator selected an alternate compound hit.

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: K.i
Lab File ID: k3372.d
Lab Smp Id: HSL 0160
Analysis Type: SV
Quant Type: ISTD
Operator: kiddd
Method File: /chem/K.i/052904.b/8270C.m
Misc Info:

Calibration Date: 29-MAY-2004
Calibration Time: 10:14
Client Smp ID: HSL_0160
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|--------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 160879 | 80440 | 321758 | 144355 | -10.27 |
| 49 Naphthalene-d8 | 591401 | 295700 | 1182802 | 545046 | -7.84 |
| 83 Acenaphthene-d10 | 354180 | 177090 | 708360 | 328134 | -7.35 |
| 117 Phenanthrene-d10 | 683575 | 341788 | 1367150 | 631590 | -7.60 |
| 142 Chrysene-d12 | 669104 | 334552 | 1338208 | 629899 | -5.86 |
| 151 Perylene-d12 | 582855 | 291428 | 1165710 | 541942 | -7.02 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.33 | 0.09 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.07 |
| 117 Phenanthrene-d10 | 9.25 | 8.75 | 9.75 | 9.25 | 0.00 |
| 142 Chrysene-d12 | 11.39 | 10.89 | 11.89 | 11.38 | -0.10 |
| 151 Perylene-d12 | 12.92 | 12.42 | 13.42 | 12.90 | -0.14 |

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/K,i/052904,b/k3372.d

Date : 29-MAY-2004 11:01

Client ID: HSL_0160

Sample Info: HSL_0160,BNA1509,P:051104,E:053104

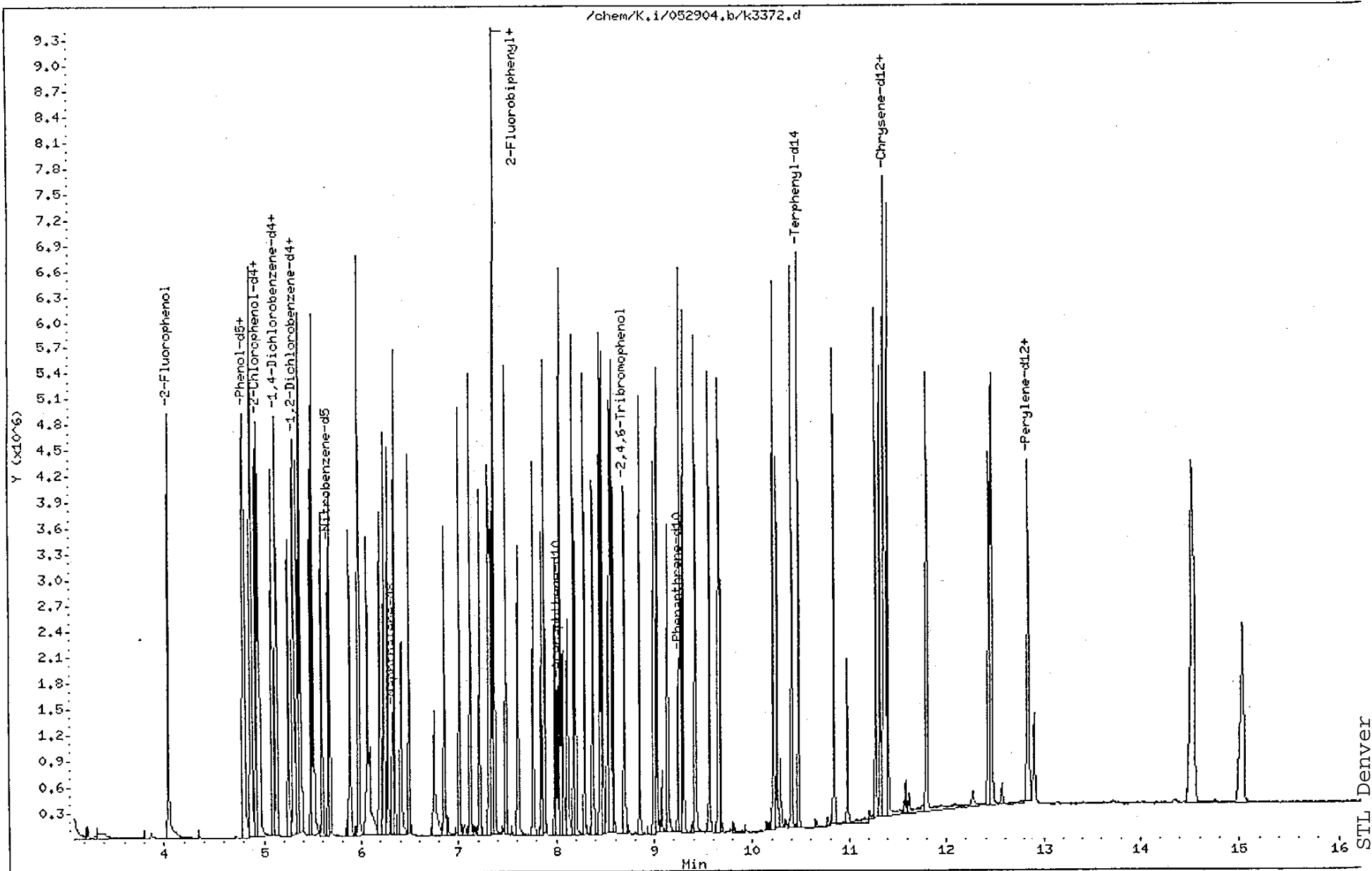
Volume Injected (uL): 0.5

Column phase: Rtx-5ms 30m 0.5um

Instrument: K.i

Operator: kidd

Column diameter: 0.25



mlr
05-31-04

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3373.d
Lab Smp Id: HSL 0200 Client Smp ID: HSL_0200
Inj Date : 29-MAY-2004 11:25
Operator : kiddd Inst ID: K.i
Smp Info : HSL_0200,BNA1509,P:051104,E:053104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 14:26 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 11:25 Cal File: k3373.d
Als bottle: 13 Calibration Sample, Level: 8
Dil Factor: 1.00000 Compound Sublist: 1-HSL.sub
Integrator: HP RTE
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | | | | | | AMOUNTS | |
|-------------------------------|-----------|--------|--------|---------|---------|----------|------------|---------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT | ON-COL |
| | | | | | | | (ug/ml) | (ug/ml) |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 | (1.000) | 134381 | 40.0000 | | |
| * 49 Naphthalene-d8 | 136 | 6.328 | 6.328 | (1.000) | 516776 | 40.0000 | | |
| * 83 Acenaphthene-d10 | 164 | 8.014 | 8.014 | (1.000) | 313691 | 40.0000 | | |
| * 117 Phenanthrene-d10 | 188 | 9.248 | 9.248 | (1.000) | 599820 | 40.0000 | | |
| * 142 Chrysene-d12 | 240 | 11.392 | 11.392 | (1.000) | 608392 | 40.0000 | | |
| * 151 Perylene-d12 | 264 | 12.914 | 12.914 | (1.000) | 511851 | 40.0000 | | |
| \$ 36 Nitrobenzene-d5 | 82 | 5.658 | 5.658 | (1.106) | 1019810 | 200.000 | 189.341 | |
| \$ 70 2-Fluorobiphenyl | 172 | 7.368 | 7.368 | (0.919) | 1956595 | 200.000 | 205.614(A) | |
| \$ 133 Terphenyl-d14 | 244 | 10.476 | 10.476 | (0.920) | 2144623 | 200.000 | 208.870(A) | |
| \$ 10 2-Fluorophenol | 112 | 4.048 | 4.048 | (0.791) | 1226571 | 300.000 | 277.675 | |
| \$ 14 Phenol-d5 | 99 | 4.806 | 4.806 | (0.939) | 1460262 | 300.000 | 261.946 | |
| \$ 103 2,4,6-Tribromophenol | 330 | 8.701 | 8.701 | (0.941) | 463089 | 300.000 | 348.132(A) | |
| \$ 163 1,2-Dichlorobenzene-d4 | 152 | 5.299 | 5.299 | (1.036) | 498875 | 200.000 | 181.269 | |
| \$ 162 2-Chlorophenol-d4 | 132 | 4.953 | 4.953 | (0.968) | 1081325 | 300.000 | 264.340 | |
| 5 Pyridine | 79 | 3.061 | 3.061 | (0.598) | 988567 | 200.000 | 187.052 | |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|-------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| 4 N-Nitrosodimethylamine | 74 | 3.037 | 3.037 | (0.594) | 637972 | 200.000 | 192.788 |
| 16 Aniline | 93 | 4.865 | 4.865 | (0.951) | 650513 | 200.000 | 190.754 |
| 15 Phenol | 94 | 4.818 | 4.818 | (0.941) | 1005128 | 200.000 | 178.121 |
| 18 Bis(2-chloroethyl) ether | 93 | 4.888 | 4.888 | (0.955) | 979169 | 200.000 | 204.785(A) |
| 20 2-Chlorophenol | 128 | 4.970 | 4.970 | (0.971) | 722143 | 200.000 | 170.878 |
| 21 1,3-Dichlorobenzene | 146 | 5.094 | 5.094 | (0.995) | 900034 | 200.000 | 181.325 |
| 23 1,4-Dichlorobenzene | 146 | 5.135 | 5.135 | (1.003) | 920008 | 200.000 | 182.159 |
| 24 Benzyl alcohol | 108 | 5.252 | 5.252 | (1.026) | 559083 | 200.000 | 192.042 |
| 25 1,2-Dichlorobenzene | 146 | 5.311 | 5.311 | (1.038) | 807932 | 200.000 | 175.721 |
| 26 2-Methylphenol | 108 | 5.346 | 5.346 | (1.045) | 778400 | 200.000 | 181.592 |
| 27 1H-Indene | 116 | 5.382 | 5.382 | (1.052) | 1319672 | 200.000 | 175.954 |
| 28 2,2'-oxybis(1-chloropropane) | 45 | 5.370 | 5.370 | (1.049) | 1179996 | 200.000 | 201.004(A) |
| 29 4-Methylphenol | 108 | 5.476 | 5.476 | (1.070) | 836097 | 200.000 | 188.527 |
| 30 N-nitrosodi-n-propylamine | 70 | 5.511 | 5.511 | (1.077) | 580869 | 200.000 | 179.430 |
| 32 Acetophenone | 105 | 5.505 | 5.505 | (1.076) | 1080562 | 200.000 | 176.180 |
| 33 Hexachloroethane | 117 | 5.593 | 5.593 | (1.093) | 392941 | 200.000 | 179.605 |
| 37 Nitrobenzene | 77 | 5.675 | 5.675 | (1.109) | 1001946 | 200.000 | 180.846 |
| 40 Isophorone | 82 | 5.881 | 5.881 | (0.929) | 1754800 | 200.000 | 185.309 |
| 41 2-Nitrophenol | 139 | 5.975 | 5.975 | (0.944) | 390110 | 200.000 | 183.175 |
| 42 2,4-Dimethylphenol | 107 | 5.975 | 5.975 | (0.944) | 799811 | 200.000 | 187.757 |
| 43 Bis(2-chloroethoxy)methane | 93 | 6.063 | 6.063 | (0.958) | 962579 | 200.000 | 175.602 |
| 45 Benzoic acid | 122 | 6.104 | 6.104 | (0.965) | 576719 | 200.000 | 210.844(A) |
| 46 2,4-Dichlorophenol | 162 | 6.193 | 6.193 | (0.979) | 696774 | 200.000 | 186.516 |
| 47 1,2,4-Trichlorobenzene | 180 | 6.275 | 6.275 | (0.992) | 743929 | 200.000 | 182.970 |
| 50 Naphthalene | 128 | 6.345 | 6.345 | (1.003) | 2240619 | 200.000 | 179.283 |
| 51 4-Chloroaniline | 127 | 6.416 | 6.416 | (1.014) | 872314 | 200.000 | 178.892 |
| 52 Hexachlorobutadiene | 225 | 6.492 | 6.492 | (1.026) | 504212 | 200.000 | 190.768 |
| 59 4-Chloro-3-methylphenol | 107 | 6.862 | 6.862 | (1.084) | 739230 | 200.000 | 187.952 |
| 62 2-Methylnaphthalene | 142 | 7.009 | 7.009 | (1.108) | 1392485 | 200.000 | 184.782 |
| 64 1-Methylnaphthalene | 142 | 7.121 | 7.121 | (1.125) | 1397775 | 200.000 | 181.687 |
| 63 Hexachlorocyclopentadiene | 237 | 7.221 | 7.221 | (0.901) | 613057 | 200.000 | 216.488(A) |
| 67 2,4,6-Trichlorophenol | 196 | 7.309 | 7.309 | (0.912) | 548248 | 200.000 | 193.758 |
| 68 2,4,5-Trichlorophenol | 196 | 7.350 | 7.350 | (0.917) | 593600 | 200.000 | 191.713 |
| 71 2-Chloronaphthalene | 162 | 7.485 | 7.485 | (0.934) | 1465350 | 200.000 | 181.165 |
| 74 2-Nitroaniline | 65 | 7.609 | 7.609 | (0.949) | 606114 | 200.000 | 186.321 |
| 76 Dimethyl phthalate | 163 | 7.767 | 7.767 | (0.969) | 1630812 | 200.000 | 185.264 |
| 79 2,6-Dinitrotoluene | 165 | 7.849 | 7.849 | (0.979) | 358718 | 200.000 | 186.667 |
| 81 Acenaphthylene | 152 | 7.879 | 7.879 | (0.983) | 2406387 | 200.000 | 187.235 |
| 82 3-Nitroaniline | 138 | 7.990 | 7.990 | (0.997) | 419531 | 200.000 | 185.980 |
| 84 Acenaphthene | 153 | 8.043 | 8.043 | (1.004) | 1443861 | 200.000 | 194.842 |
| 85 2,4-Dinitrophenol | 184 | 8.073 | 8.073 | (1.007) | 281085 | 200.000 | 191.811 |
| 86 4-Nitrophenol | 109 | 8.114 | 8.114 | (1.012) | 414215 | 200.000 | 210.661(A) |
| 87 2,4-Dinitrotoluene | 165 | 8.202 | 8.202 | (1.023) | 478329 | 200.000 | 187.214 |
| 88 Dibenzofuran | 168 | 8.178 | 8.178 | (1.021) | 2001504 | 200.000 | 186.941 |
| 93 Diethyl phthalate | 149 | 8.378 | 8.378 | (1.045) | 1665324 | 200.000 | 189.456 |
| 95 4-Chlorophenyl phenyl ether | 204 | 8.449 | 8.449 | (1.054) | 920755 | 200.000 | 193.886 |
| 96 Fluorene | 166 | 8.478 | 8.478 | (1.058) | 1789059 | 200.000 | 194.895 |

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| 97 4-Nitroaniline | 138 | 8.531 | 8.531 | (1.065) | 397586 | 200.000 | 178.757 |
| 99 4,6-Dinitro-2-methylphenol | 198 | 8.555 | 8.555 | (1.067) | 376785 | 200.000 | 208.302 (A) |
| 101 N-nitrosodiphenylamine | 169 | 8.560 | 8.560 | (1.068) | 1202034 | 200.000 | 188.024 |
| 102 Azobenzene | 77 | 8.584 | 8.584 | (1.071) | 1897119 | 200.000 | 180.131 |
| 108 4-Bromophenyl phenyl ether | 248 | 8.854 | 8.854 | (0.957) | 534206 | 200.000 | 197.238 |
| 110 Hexachlorobenzene | 284 | 9.001 | 9.001 | (0.973) | 597486 | 200.000 | 207.121 (A) |
| 113 Pentachlorophenol | 266 | 9.142 | 9.142 | (0.989) | 372836 | 200.000 | 214.879 (A) |
| 118 Phenanthrene | 178 | 9.271 | 9.271 | (1.003) | 2701202 | 200.000 | 195.356 |
| 122 Anthracene | 178 | 9.307 | 9.307 | (1.006) | 2757915 | 200.000 | 195.588 |
| 123 Carbazole | 167 | 9.424 | 9.424 | (1.019) | 2259982 | 200.000 | 183.664 |
| 125 Di-n-butyl phthalate | 149 | 9.659 | 9.659 | (1.044) | 2750400 | 200.000 | 189.342 |
| 130 Fluoranthene | 202 | 10.217 | 10.217 | (1.105) | 3178823 | 200.000 | 197.518 |
| 131 Benzidine | 184 | 10.294 | 10.294 | (0.904) | 319500 | 200.000 | 180.444 |
| 132 Pyrene | 202 | 10.405 | 10.405 | (0.913) | 3290109 | 200.000 | 194.812 |
| 137 Butyl benzyl phthalate | 149 | 10.846 | 10.846 | (0.952) | 1234942 | 200.000 | 183.174 |
| 140 3,3'-Dichlorobenzidine | 252 | 11.328 | 11.328 | (0.994) | 1212741 | 200.000 | 208.964 (A) |
| 141 Benzo(a)anthracene | 228 | 11.375 | 11.375 | (0.998) | 3233448 | 200.000 | 205.186 (AH) |
| 144 Chrysene | 228 | 11.416 | 11.416 | (1.002) | 3065859 | 200.000 | 204.105 (A) |
| 143 Bis(2-ethylhexyl) phthalate | 149 | 11.281 | 11.281 | (0.990) | 1719395 | 200.000 | 186.285 |
| 146 Di-n-octyl phthalate | 149 | 11.815 | 11.815 | (1.037) | 3121170 | 200.000 | 194.209 |
| 147 Benzo(b)fluoranthene | 252 | 12.450 | 12.450 | (0.964) | 3293795 | 200.000 | 226.432 (AH) |
| 148 Benzo(k)fluoranthene | 252 | 12.479 | 12.479 | (0.966) | 3468992 | 200.000 | 214.207 (A) |
| 150 Benzo(a)pyrene | 252 | 12.855 | 12.855 | (0.995) | 2851751 | 200.000 | 213.838 (A) |
| 155 Indeno(1,2,3-cd)pyrene | 276 | 14.553 | 14.553 | (1.127) | 3354786 | 200.000 | 226.251 (A) |
| 156 Dibenzo(a,h)anthracene | 278 | 14.542 | 14.542 | (1.126) | 2845309 | 200.000 | 227.670 (A) |
| 157 Benzo(g,h,i)perylene | 276 | 15.047 | 15.047 | (1.165) | 2708460 | 200.000 | 215.289 (A) |
| 168 Methyl Styrene | 118 | 4.882 | 4.882 | (0.954) | 864962 | 200.000 | 179.816 |
| 202 Alachlor | 188 | 9.571 | 9.571 | (1.035) | 358858 | 200.000 | 190.354 |
| 204 Atrazine | 200 | 8.989 | 8.989 | (0.972) | 7363 | 200.000 | 27.8899 |
| 205 Caprolactam | 55 | 6.762 | 6.762 | (1.069) | 454902 | 200.000 | 202.585 (AM) |
| 207 2,3-Dichlorobenzeneamine | 161 | 7.327 | 7.327 | (0.914) | 764588 | 200.000 | 174.209 |
| 206 Decane | 43 | 4.929 | 4.929 | (0.963) | 953119 | 200.000 | 194.034 |
| 213 n-Dodecane | 43 | 6.240 | 6.240 | (0.779) | 901546 | 200.000 | 200.426 (A) |
| 210 Tetradecane | 43 | 7.373 | 7.373 | (0.920) | 701696 | 200.000 | 201.779 (A) |
| 209 Hexadecane | 57 | 8.290 | 8.290 | (1.034) | 1011851 | 200.000 | 200.968 (A) |
| 208 n-Octadecane | 85 | 9.036 | 9.036 | (0.977) | 433682 | 200.000 | 197.893 |
| 211 n-Eicosane | 43 | 9.677 | 9.677 | (1.207) | 766892 | 200.000 | 167.302 |
| 212 n-docosane | 43 | 10.258 | 10.258 | (1.280) | 637387 | 200.000 | 169.729 |

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: K.i
Lab File ID: k3373.d
Lab Smp Id: HSL_0200
Analysis Type: SV
Quant Type: ISTD
Operator: kiddd
Method File: /chem/K.i/052904.b/8270C.m
Misc Info:

Calibration Date: 29-MAY-2004
Calibration Time: 10:14
Client Smp ID: HSL_0200
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|--------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 160879 | 80440 | 321758 | 134381 | -16.47 |
| 49 Naphthalene-d8 | 591401 | 295700 | 1182802 | 516776 | -12.62 |
| 83 Acenaphthene-d10 | 354180 | 177090 | 708360 | 313691 | -11.43 |
| 117 Phenanthrene-d10 | 683575 | 341788 | 1367150 | 599820 | -12.25 |
| 142 Chrysene-d12 | 669104 | 334552 | 1338208 | 608392 | -9.07 |
| 151 Perylene-d12 | 582855 | 291428 | 1165710 | 511851 | -12.18 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.33 | 0.09 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.07 |
| 117 Phenanthrene-d10 | 9.25 | 8.75 | 9.75 | 9.25 | 0.00 |
| 142 Chrysene-d12 | 11.39 | 10.89 | 11.89 | 11.39 | 0.00 |
| 151 Perylene-d12 | 12.92 | 12.42 | 13.42 | 12.91 | -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/K.i/052904.b/k3373.d

Date : 29-MAY-2004 11:25

Client ID: HSL_0200

Sample Info: HSL_0200,BNA1509,P:051104,E:053104

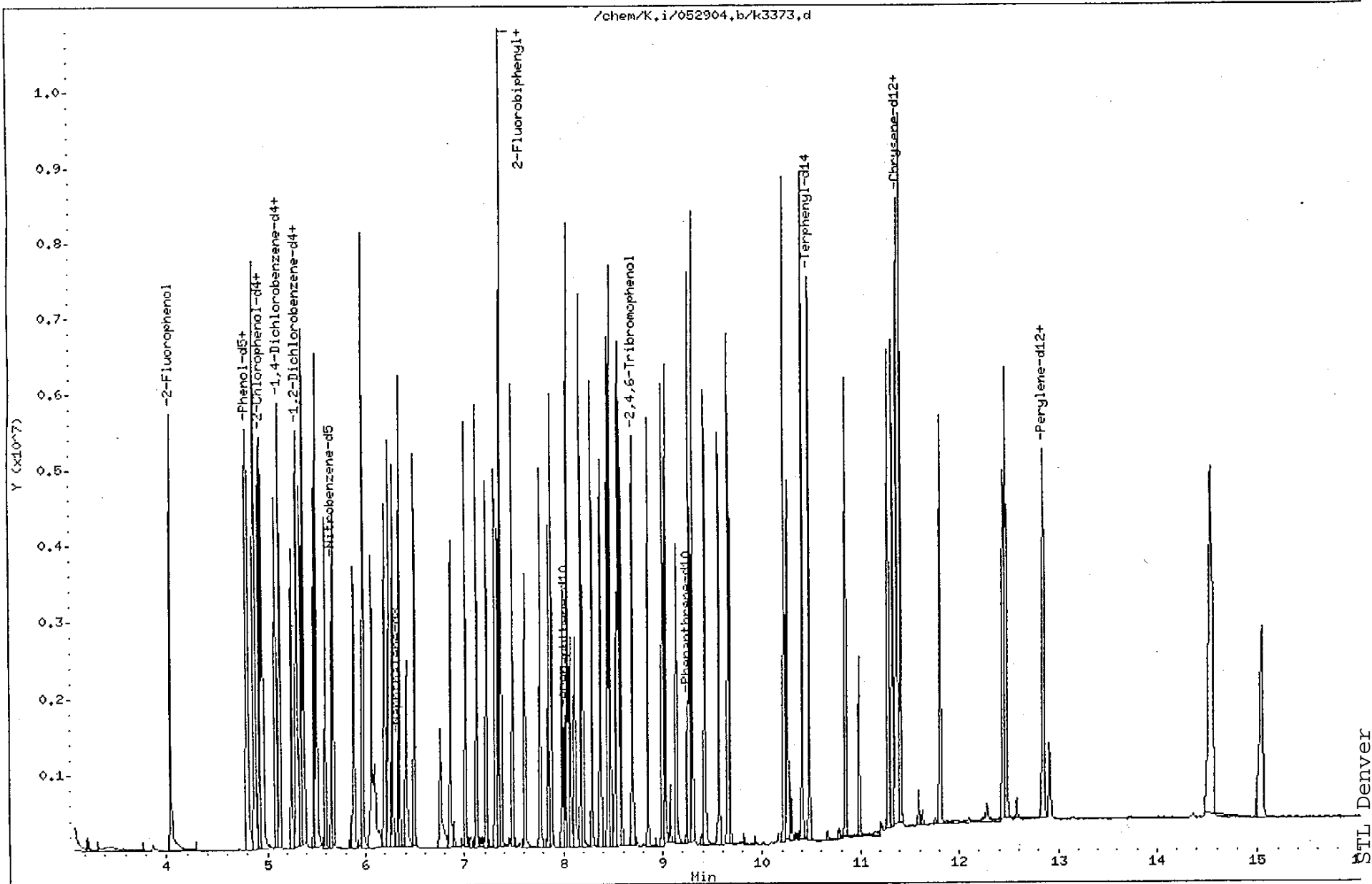
Volume Injected (uL): 0.5

Column phase: Rtx-5ms 30m 0.5um

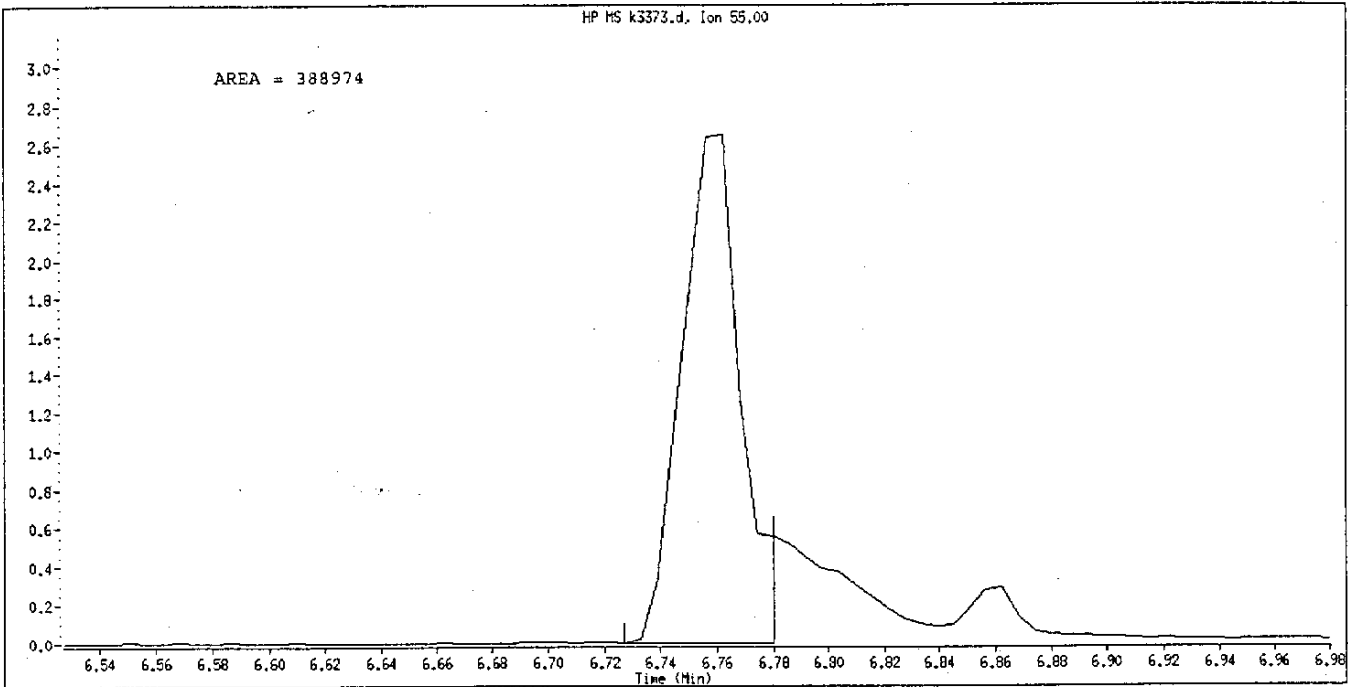
Instrument: K.i

Operator: kidd

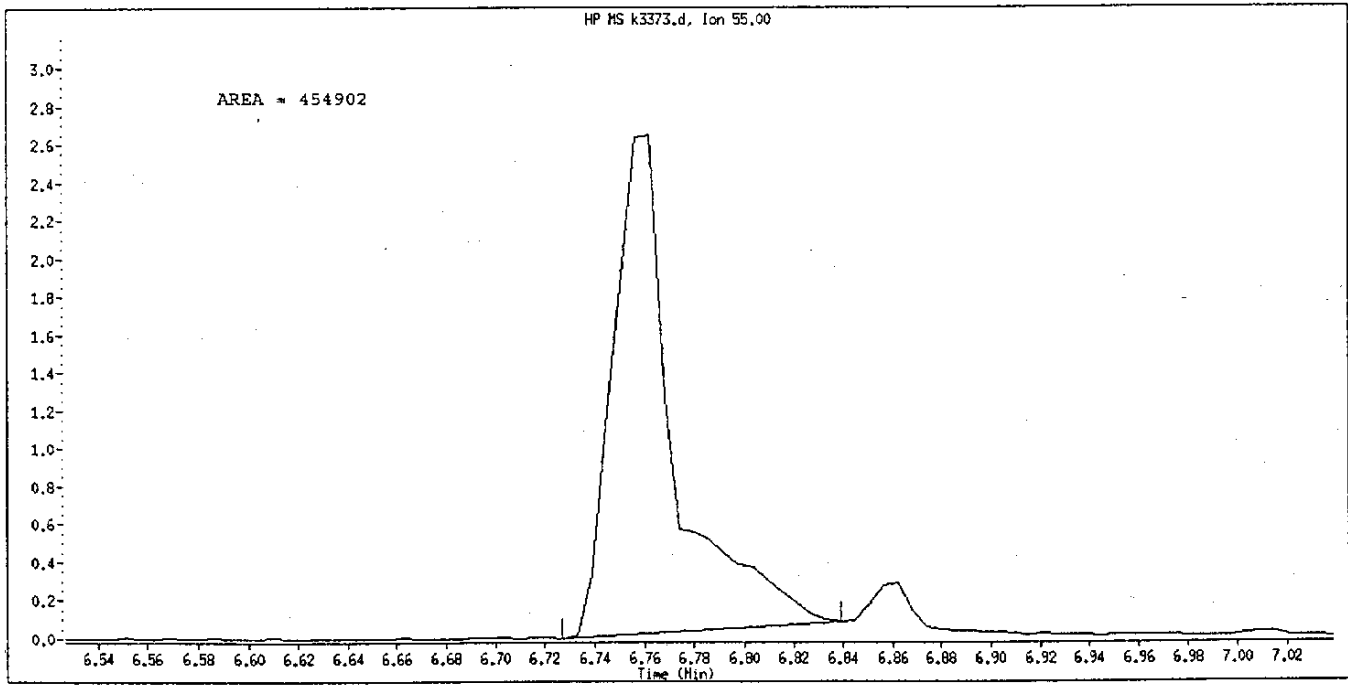
Column diameter: 0.25



Data File Name: k3373.d
Inj. Date and Time: 29-MAY-2004 11:25
Instrument ID: K.i
Client ID: HSL_0200
Compound Name: Caprolactam
CAS #: 105-60-2
Report Date: 05/31/2004



Original Integration



Manual Integration

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

MLV
05-31-04
6.1.04 B/B

mm
05-31-04

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3374.d
Lab Smp Id: HSL_0100 SSV Client Smp ID: HSL_0100 SSV
Inj Date : 29-MAY-2004 11:49
Operator : kiddd Inst ID: K.i
Smp Info : HSL_0100 SSV,BNA1346,P:051104,E:113004
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 14:26 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 11:25 Cal File: k3373.d
Als bottle: 14 QC Sample: SSV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HSLSSV.sub
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | |
|-----------------------------|-----------|----------------|--------|---------|---------|----------|------------------------------------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN FINAL (ug/ml) (ug/L) |
| ***** | **** | == | ===== | ===== | ===== | ===== | ===== |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 | (1.000) | 156714 | 40.0000 | |
| * 49 Naphthalene-d8 | 136 | 6.322 | 6.328 | (1.000) | 593058 | 40.0000 | |
| * 83 Acenaphthene-d10 | 164 | 8.014 | 8.014 | (1.000) | 355811 | 40.0000 | |
| * 117 Phenanthrene-d10 | 188 | 9.248 | 9.248 | (1.000) | 663041 | 40.0000 | |
| * 142 Chrysene-d12 | 240 | 11.392 | 11.392 | (1.000) | 654052 | 40.0000 | |
| * 151 Perylene-d12 | 264 | 12.914 | 12.914 | (1.000) | 541177 | 40.0000 | |
| \$ 36 Nitrobenzene-d5 | 82 | 5.652 | 5.658 | (1.104) | 619213 | 98.5817 | 98.5817 |
| \$ 70 2-Fluorobiphenyl | 172 | 7.368 | 7.368 | (0.919) | 966871 | 89.5785 | 89.5785 |
| \$ 133 Terphenyl-d14 | 244 | 10.476 | 10.476 | (0.920) | 1207742 | 109.413 | 109.413 |
| \$ 10 2-Fluorophenol | 112 | 4.048 | 4.048 | (0.791) | 760324 | 147.595 | 147.595 |
| \$ 14 Phenol-d5 | 99 | 4.800 | 4.806 | (0.938) | 866002 | 133.208 | 133.208 |
| \$ 103 2,4,6-Tribromophenol | 330 | 8.695 | 8.701 | (0.940) | 237588 | 161.579 | 161.579 |
| 5 Pyridine | 79 | 3.061 | 3.061 | (0.598) | 551540 | 89.4880 | 89.4880 |
| 4 N-Nitrosodimethylamine | 74 | 3.037 | 3.037 | (0.594) | 382610 | 99.1434 | 99.1434 |
| 16 Aniline | 93 | 4.870 | 4.865 | (0.952) | 398554 | 59.5840 | 59.5840(R) |

| Compounds | QUANT SIG | | | | | | CONCENTRATIONS | |
|---------------------------------|-----------|-------|--------|---------|----------|-----------|----------------|--|
| | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN | FINAL | |
| | | | | | | (ug/ml) | (ug/L) | |
| 15 Phenol | 94 | 4.812 | 4.818 | (0.940) | 647530 | 98.3976 | 98.3976 | |
| 18 Bis(2-chloroethyl) ether | 93 | 4.882 | 4.888 | (0.954) | 677499 | 118.104 | 118.104 | |
| 20 2-Chlorophenol | 128 | 4.964 | 4.970 | (0.970) | 492662 | 99.9635 | 99.9635 | |
| 21 1,3-Dichlorobenzene | 146 | 5.088 | 5.094 | (0.994) | 577798 | 99.8170 | 99.8170 | |
| 23 1,4-Dichlorobenzene | 146 | 5.135 | 5.135 | (1.003) | 571354 | 97.0053 | 97.0052 | |
| 24 Benzyl alcohol | 108 | 5.246 | 5.252 | (1.025) | 318885 | 93.9258 | 93.9258 | |
| 25 1,2-Dichlorobenzene | 146 | 5.311 | 5.311 | (1.038) | 536227 | 100.007 | 100.006 | |
| 26 2-Methylphenol | 108 | 5.346 | 5.346 | (1.045) | 467646 | 93.5493 | 93.5493 | |
| 27 1H-Indene | 116 | 5.376 | 5.382 | (1.051) | 819034 | 93.6408 | 93.6408 | |
| 28 2,2'-oxybis(1-chloropropane) | 45 | 5.364 | 5.370 | (1.048) | 855845 | 107.755 | 107.755 | |
| 29 4-Methylphenol | 108 | 5.470 | 5.476 | (1.069) | 494661 | 95.6435 | 95.6435 | |
| 30 N-nitrosodi-n-propylamine | 70 | 5.505 | 5.511 | (1.076) | 364249 | 96.4816 | 96.4816 | |
| 32 Acetophenone | 105 | 5.499 | 5.505 | (1.075) | 672299 | 93.9938 | 93.9938 | |
| 33 Hexachloroethane | 117 | 5.593 | 5.593 | (1.093) | 259563 | 101.733 | 101.733 | |
| 37 Nitrobenzene | 77 | 5.675 | 5.675 | (1.109) | 655150 | 101.400 | 101.400 | |
| 40 Isophorone | 82 | 5.875 | 5.881 | (0.929) | 1035657 | 95.2996 | 95.2996 | |
| 41 2-Nitrophenol | 139 | 5.969 | 5.975 | (0.944) | 234889 | 96.1052 | 96.1052 | |
| 42 2,4-Dimethylphenol | 107 | 5.975 | 5.975 | (0.945) | 470440 | 96.2318 | 96.2318 | |
| 43 Bis(2-chloroethoxy)methane | 93 | 6.063 | 6.063 | (0.959) | 613654 | 97.5487 | 97.5487 | |
| 45 Benzoic acid | 122 | 6.081 | 6.104 | (0.962) | 296392 | 94.4211 | 94.4211 | |
| 46 2,4-Dichlorophenol | 162 | 6.192 | 6.193 | (0.980) | 428153 | 99.8685 | 99.8685 | |
| 47 1,2,4-Trichlorobenzene | 180 | 6.275 | 6.275 | (0.993) | 458714 | 98.3093 | 98.3093 | |
| 50 Naphthalene | 128 | 6.345 | 6.345 | (1.004) | 1350727 | 94.1766 | 94.1766 | |
| 51 4-Chloroaniline | 127 | 6.410 | 6.416 | (1.014) | 486721 | 86.9768 | 86.9768 | |
| 52 Hexachlorobutadiene | 225 | 6.492 | 6.492 | (1.027) | 309066 | 101.894 | 101.894 | |
| 59 4-Chloro-3-methylphenol | 107 | 6.856 | 6.862 | (1.085) | 448273 | 99.3153 | 99.3153 | |
| 62 2-Methylnaphthalene | 142 | 7.009 | 7.009 | (1.109) | 838597 | 96.9677 | 96.9677 | |
| 64 1-Methylnaphthalene | 142 | 7.121 | 7.121 | (1.126) | 796204 | 90.1814 | 90.1814 | |
| 63 Hexachlorocyclopentadiene | 237 | 7.221 | 7.221 | (0.901) | 310915 | 96.7959 | 96.7959 | |
| 67 2,4,6-Trichlorophenol | 196 | 7.309 | 7.309 | (0.912) | 332099 | 103.475 | 103.474 | |
| 68 2,4,5-Trichlorophenol | 196 | 7.350 | 7.350 | (0.917) | 358858 | 102.179 | 102.179 | |
| 71 2-Chloronaphthalene | 162 | 7.485 | 7.485 | (0.934) | 877409 | 95.6352 | 95.6352 | |
| 74 2-Nitroaniline | 65 | 7.608 | 7.609 | (0.949) | 384839 | 104.296 | 104.296 | |
| 76 Dimethyl phthalate | 163 | 7.761 | 7.767 | (0.968) | 980083 | 98.1597 | 98.1597 | |
| 79 2,6-Dinitrotoluene | 165 | 7.843 | 7.849 | (0.979) | 222516 | 102.084 | 102.084 | |
| 81 Acenaphthylene | 152 | 7.879 | 7.879 | (0.983) | 1334709 | 91.5569 | 91.5569 | |
| 82 3-Nitroaniline | 138 | 7.984 | 7.990 | (0.996) | 249282 | 97.4262 | 97.4262 | |
| 84 Acenaphthene | 153 | 8.043 | 8.043 | (1.004) | 807622 | 96.0836 | 96.0836 | |
| 85 2,4-Dinitrophenol | 194 | 8.067 | 8.073 | (1.007) | 160085 | 101.929 | 101.929 | |
| 86 4-Nitrophenol | 109 | 8.114 | 8.114 | (1.012) | 231604 | 103.845 | 103.845 | |
| 87 2,4-Dinitrotoluene | 165 | 8.196 | 8.202 | (1.023) | 298096 | 102.861 | 102.861 | |
| 88 Dibenzofuran | 168 | 8.178 | 8.178 | (1.021) | 1181271 | 97.2706 | 97.2706 | |
| 93 Diethyl phthalate | 149 | 8.372 | 8.378 | (1.045) | 984867 | 98.7800 | 98.7800 | |
| 95 4-Chlorophenyl phenyl ether | 204 | 8.449 | 8.449 | (1.054) | 523871 | 97.2545 | 97.2545 | |
| 96 Fluorene | 166 | 8.472 | 8.478 | (1.057) | 1001110 | 96.1479 | 96.1479 | |
| 97 4-Nitroaniline | 138 | 8.525 | 8.531 | (1.064) | 242042 | 95.9411 | 95.9411 | |
| 99 4,6-Dinitro-2-methylphenol | 198 | 8.543 | 8.555 | (1.066) | 203385 | 99.1290 | 99.1290 | |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS | |
|---------------------------------|-------------------|------------------------|--------|---------|----------|----------------------|------------------|
| | | | | | | ON-COLUMN (ug/ml) | FINAL (ug/L) |
| 101 N-nitrosodiphenylamine | 169 | 8.554 | 8.560 | (1.067) | 732172 | 100.970 | 100.970 |
| 102 Azobenzene | 77 | 8.584 | 8.584 | (1.071) | 1241753 | 103.947 | 103.947 |
| 108 4-Bromophenyl phenyl ether | 248 | 8.854 | 8.854 | (0.957) | 298231 | 99.6129 | 99.6129 |
| 110 Hexachlorobenzene | 284 | 9.001 | 9.001 | (0.973) | 328572 | 103.040 | 103.040 |
| 113 Pentachlorophenol | 266 | 9.136 | 9.142 | (0.988) | 220434 | 114.931 | 114.931 |
| 118 Phenanthrene | 178 | 9.265 | 9.271 | (1.002) | 1450890 | 94.9262 | 94.9262 |
| 122 Anthracene | 178 | 9.301 | 9.307 | (1.006) | 1473138 | 94.5115 | 94.5115 |
| 123 Carbazole | 167 | 9.424 | 9.424 | (1.019) | 1311575 | 96.4257 | 96.4257 |
| 125 Di-n-butyl phthalate | 149 | 9.659 | 9.659 | (1.044) | 1613403 | 100.479 | 100.479 |
| 130 Fluoranthene | 202 | 10.217 | 10.217 | (1.105) | 1783113 | 100.231 | 100.231 |
| 131 Benzidine | 184 | 10.294 | 10.294 | (0.904) | 195792 | 97.3604 | 97.3604 |
| 132 Pyrene | 202 | 10.405 | 10.405 | (0.913) | 1741696 | 95.9287 | 95.9287 |
| 137 Butyl benzyl phthalate | 149 | 10.846 | 10.846 | (0.952) | 736318 | 101.591 | 101.591 |
| 140 3,3'-Dichlorobenzidine | 252 | 11.328 | 11.328 | (0.994) | 634776 | 101.741 | 101.741 |
| 141 Benzo(a)anthracene | 228 | 11.375 | 11.375 | (0.998) | 1724306 | 101.781 | 101.781 |
| 144 Chrysene | 228 | 11.416 | 11.416 | (1.002) | 1787384 | 110.686 | 110.686 |
| 143 Bis(2-ethylhexyl) phthalate | 149 | 11.287 | 11.281 | (0.991) | 995775 | 100.354 | 100.354 |
| 146 Di-n-octyl phthalate | 149 | 11.815 | 11.815 | (1.037) | 1720175 | 99.5623 | 99.5623 |
| 147 Benzo(b)fluoranthene | 252 | 12.444 | 12.450 | (0.964) | 1600803 | 104.084 | 104.084 |
| 148 Benzo(k)fluoranthene | 252 | 12.473 | 12.479 | (0.966) | 1910893 | 111.602 | 111.602 |
| 150 Benzo(a)pyrene | 252 | 12.849 | 12.855 | (0.995) | 1516629 | 107.562 | 107.562 |
| 155 Indeno(1,2,3-cd)pyrene | 276 | 14.536 | 14.553 | (1.126) | 1807809 | 115.314 | 115.314 |
| 156 Dibenz(a,h)anthracene | 278 | 14.524 | 14.542 | (1.125) | 1675461 | 126.799 | 126.799(R) |
| 157 Benzo(g,h,i)perylene | 276 | 15.035 | 15.047 | (1.164) | 1465087 | 110.146 | 110.146 |
| 168 Methyl Styrene | 118 | 4.876 | 4.882 | (0.953) | 513487 | 91.5360 | 91.5360 |
| 202 Alachlor | 188 | 9.565 | 9.571 | (1.034) | 212361 | 101.905 | 101.905 |
| 204 Atrazine | 200 | 8.989 | 8.989 | (0.972) | 89721 | 307.445 | 307.445(AR) |
| 205 Caprolactam | 55 | 6.745 | 6.762 | (1.067) | 268241 | 104.092 | 104.092 |
| 207 2,3-Dichlorobenzeneamine | 161 | 7.321 | 7.327 | (0.913) | 456893 | 91.7786 | 91.7786 |
| 206 Decane | 43 | 4.923 | 4.929 | (0.962) | 645873 | 107.927 | 107.927 |
| 213 n-Dodecane | 43 | 6.234 | 6.240 | (0.778) | 586819 | 96.3228 | 96.3228 |
| 210 Tetradecane | 43 | 7.373 | 7.373 | (0.920) | 476973 | 95.5333 | 95.5333 |
| 209 Hexadecane | 57 | Compound Not Detected. | | | | | |
| 208 n-Octadecane | 85 | 9.036 | 9.036 | (0.977) | 261321 | 102.912 | 102.912 |
| 211 n-Eicosane | 43 | 9.677 | 9.677 | (1.207) | 524645 | 100.905 | 100.905 |
| 212 n-docosane | 43 | 10.258 | 10.258 | (1.280) | 495459 | 116.317 | 116.317 |

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: K.i
Lab File ID: k3374.d
Lab Smp Id: HSL_0100 SSV
Analysis Type: SV
Quant Type: ISTD
Operator: kiddd
Method File: /chem/K.i/052904.b/8270C.m
Misc Info:

Calibration Date: 29-MAY-2004
Calibration Time: 10:14
Client Smp ID: HSL_0100 SSV
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 160879 | 80440 | 321758 | 156714 | -2.59 |
| 49 Naphthalene-d8 | 591401 | 295700 | 1182802 | 593058 | 0.28 |
| 83 Acenaphthene-d10 | 354180 | 177090 | 708360 | 355811 | 0.46 |
| 117 Phenanthrene-d10 | 683575 | 341788 | 1367150 | 663041 | -3.00 |
| 142 Chrysene-d12 | 669104 | 334552 | 1338208 | 654052 | -2.25 |
| 151 Perylene-d12 | 582855 | 291428 | 1165710 | 541177 | -7.15 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.07 |
| 117 Phenanthrene-d10 | 9.25 | 8.75 | 9.75 | 9.25 | 0.00 |
| 142 Chrysene-d12 | 11.39 | 10.89 | 11.89 | 11.39 | 0.00 |
| 151 Perylene-d12 | 12.92 | 12.42 | 13.42 | 12.91 | -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.

STL-Denver

RECOVERY REPORT

Client Name:
 Sample Matrix: LIQUID
 Lab Smp Id: HSL_0100 SSV
 Level: LOW
 Data Type: MS DATA
 SpikeList File: HSLSSV.spk
 Sublist File: HSLSSV.sub
 Method File: /chem/K.i/052904.b/8270C.m
 Misc Info:

Client SDG: 052904
 Fraction: SV
 Client Smp ID: HSL_0100 SSV
 Operator: kiddd
 SampleType: SSV
 Quant Type: ISTD

| SPIKE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|-----------------------|-----------------------|---------------------------|----------------|--------|
| 4 N-Nitrosodimethyla | 100.000 | 99.1434 | 99.14 | 75-125 |
| 15 Phenol | 100.000 | 98.3976 | 98.40 | 75-125 |
| 18 Bis(2-chloroethyl) | 100.000 | 118.104 | 118.10 | 75-125 |
| 20 2-Chlorophenol | 100.000 | 99.9635 | 99.96 | 75-125 |
| 21 1,3-Dichlorobenzen | 100.000 | 99.8170 | 99.82 | 75-125 |
| 23 1,4-Dichlorobenzen | 100.000 | 97.0052 | 97.01 | 75-125 |
| 25 1,2-Dichlorobenzen | 100.000 | 100.006 | 100.01 | 75-125 |
| 28 2,2'-oxybis(1-chlo | 100.000 | 107.755 | 107.76 | 75-125 |
| 30 N-nitrosodi-n-prop | 100.000 | 96.4816 | 96.48 | 75-125 |
| 33 Hexachloroethane | 100.000 | 101.733 | 101.73 | 75-125 |
| 37 Nitrobenzene | 100.000 | 101.400 | 101.40 | 75-125 |
| 40 Isophorone | 100.000 | 95.2996 | 95.30 | 75-125 |
| 41 2-Nitrophenol | 100.000 | 96.1052 | 96.11 | 75-125 |
| 42 2,4-Dimethylphenol | 100.000 | 96.2318 | 96.23 | 75-125 |
| 43 Bis(2-chloroethoxy | 100.000 | 97.5487 | 97.55 | 75-125 |
| 46 2,4-Dichlorophenol | 100.000 | 99.8685 | 99.87 | 75-125 |
| 47 1,2,4-Trichloroben | 100.000 | 98.3093 | 98.31 | 75-125 |
| 50 Naphthalene | 100.000 | 94.1766 | 94.18 | 75-125 |
| 52 Hexachlorobutadien | 100.000 | 101.894 | 101.89 | 75-125 |
| 59 4-Chloro-3-methylp | 100.000 | 99.3153 | 99.32 | 75-125 |
| 63 Hexachlorocyclopen | 100.000 | 96.7959 | 96.80 | 75-125 |
| 67 2,4,6-Trichlorophe | 100.000 | 103.474 | 103.47 | 75-125 |
| 71 2-Chloronaphthalen | 100.000 | 95.6352 | 95.64 | 75-125 |
| 76 Dimethyl phthalate | 100.000 | 98.1597 | 98.16 | 75-125 |
| 79 2,6-Dinitrotoluene | 100.000 | 102.084 | 102.08 | 75-125 |
| 81 Acenaphthylene | 100.000 | 91.5569 | 91.56 | 75-125 |
| 84 Acenaphthene | 100.000 | 96.0836 | 96.08 | 75-125 |
| 85 2,4-Dinitrophenol | 100.000 | 101.929 | 101.93 | 75-125 |
| 86 4-Nitrophenol | 100.000 | 103.845 | 103.85 | 75-125 |
| 87 2,4-Dinitrotoluene | 100.000 | 102.861 | 102.86 | 75-125 |
| 93 Diethyl phthalate | 100.000 | 98.7800 | 98.78 | 75-125 |
| 95 4-Chlorophenyl phe | 100.000 | 97.2545 | 97.25 | 75-125 |
| 96 Fluorene | 100.000 | 96.1479 | 96.15 | 75-125 |

| SPIKE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|-----------------|
| 99 4,6-Dinitro-2-meth | 100.000 | 99.1290 | 99.13 | 75-125 |
| 101 N-nitrosodiphenyla | 100.000 | 100.970 | 100.97 | 75-125 |
| 102 Azobenzene | 100.000 | 103.947 | 103.95 | 75-125 |
| 108 4-Bromophenyl phen | 100.000 | 99.6129 | 99.61 | 75-125 |
| 110 Hexachlorobenzene | 100.000 | 103.040 | 103.04 | 75-125 |
| 113 Pentachlorophenol | 100.000 | 114.931 | 114.93 | 75-125 |
| 118 Phenanthrene | 100.000 | 94.9262 | 94.93 | 75-125 |
| 122 Anthracene | 100.000 | 94.5115 | 94.51 | 75-125 |
| 125 Di-n-butyl phthala | 100.000 | 100.479 | 100.48 | 75-125 |
| 130 Fluoranthene | 100.000 | 100.231 | 100.23 | 75-125 |
| 131 Benzidine | 100.000 | 97.3604 | 97.36 | 45-155 |
| 132 Pyrene | 100.000 | 95.9287 | 95.93 | 75-125 |
| 137 Butyl benzyl phtha | 100.000 | 101.591 | 101.59 | 75-125 |
| 140 3,3'-Dichlorobenzi | 100.000 | 101.741 | 101.74 | 75-125 |
| 141 Benzo(a)anthracene | 100.000 | 101.781 | 101.78 | 75-125 |
| 144 Chrysene | 100.000 | 110.686 | 110.69 | 75-125 |
| 143 Bis(2-ethylhexyl) | 100.000 | 100.354 | 100.35 | 75-125 |
| 146 Di-n-octyl phthala | 100.000 | 99.5623 | 99.56 | 75-125 |
| 147 Benzo(b)fluoranthene | 100.000 | 104.084 | 104.08 | 75-125 |
| 148 Benzo(k)fluoranthene | 100.000 | 111.602 | 111.60 | 75-125 |
| 150 Benzo(a)pyrene | 100.000 | 107.562 | 107.56 | 75-125 |
| 155 Indeno(1,2,3-cd)py | 100.000 | 115.314 | 115.31 | 75-125 |
| 156 Dibenz(a,h)anthrac | 100.000 | 126.799 | 126.80* | 75-125 -narrat |
| 157 Benzo(g,h,i)peryle | 100.000 | 110.146 | 110.15 | 75-125 |
| 5 Pyridine | 100.000 | 89.4880 | 89.49 | 75-125 |
| 16 Aniline | 100.000 | 59.5840 | 59.58* | 75-125 -narrat |
| 24 Benzyl alcohol | 100.000 | 93.9258 | 93.93 | 75-125 |
| 26 2-Methylphenol | 100.000 | 93.5493 | 93.55 | 75-125 |
| 29 4-Methylphenol | 100.000 | 95.6435 | 95.64 | 75-125 |
| 45 Benzoic acid | 100.000 | 94.4211 | 94.42 | 75-125 |
| 51 4-Chloroaniline | 100.000 | 86.9768 | 86.98 | 75-125 |
| 62 2-Methylnaphthalen | 100.000 | 96.9677 | 96.97 | 75-125 |
| 68 2,4,5-Trichlorophe | 100.000 | 102.179 | 102.18 | 75-125 |
| 74 2-Nitroaniline | 100.000 | 104.296 | 104.30 | 75-125 |
| 82 3-Nitroaniline | 100.000 | 97.4262 | 97.43 | 75-125 |
| 88 Dibenzofuran | 100.000 | 97.2706 | 97.27 | 75-125 |
| 97 4-Nitroaniline | 100.000 | 95.9411 | 95.94 | 75-125 |
| 123 Carbazole | 100.000 | 96.4257 | 96.43 | 75-125 |
| 202 Alachlor | 100.000 | 101.905 | 101.91 | 75-125 |
| 204 Atrazine | 100.000 | 307.445 | 307.44* | 75-125 -narrate |
| 205 Caprolactam | 100.000 | 104.092 | 104.09 | 75-125 |
| 207 2,3-Dichlorobenzen | 100.000 | 91.7786 | 91.78 | 75-125 |
| 206 Decane | 100.000 | 107.927 | 107.93 | 75-125 |
| 213 n-Dodecane | 100.000 | 96.3228 | 96.32 | 75-125 |
| 210 Tetradecane | 100.000 | 95.5333 | 95.53 | 75-125 |
| 208 n-Octadecane | 100.000 | 102.912 | 102.91 | 75-125 |
| 211 n-Eicosane | 100.000 | 100.905 | 100.91 | 75-125 |

| SPIKE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|----------------|-----------------------|---------------------------|----------------|--------|
| 212 n-docosane | 100.000 | 116.317 | 116.32 | 75-125 |

| SURROGATE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|---------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 36 Nitrobenzene-d5 | 100.000 | 98.5817 | 98.58 | 75-125 |
| \$ 70 2-Fluorobiphenyl | 100.000 | 89.5785 | 89.58 | 75-125 |
| \$ 133 Terphenyl-d14 | 100.000 | 109.413 | 109.41 | 75-125 |
| \$ 10 2-Fluorophenol | 150.000 | 147.595 | 98.40 | 75-125 |
| \$ 14 Phenol-d5 | 150.000 | 133.208 | 88.81 | 75-125 |
| \$ 103 2,4,6-Tribromophen | 150.000 | 161.579 | 107.72 | 75-125 |

STL-Denver

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: HSL 0100 SSV
Operator : kiddd
Sample Location:
Sample Matrix: WATER
Analysis Type: SV

Client SDG: 052904
Client Smp ID: HSL 0100 SSV
Sample Date: 30-MAR-1998
Sample Point:
Date Received: 31-MAR-1998 00:00
Level: LOW

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|---------------|-------|------------|-------|
| ===== | ===== | ===== | ===== | ===== |

Data File: /chem/K.i/052904.b/k3374.d

Date : 29-MAY-2004 11:49

Client ID: HSL_0100 SSV

Sample Info: HSL_0100 SSV,BNA1346,P:051104,E:113004

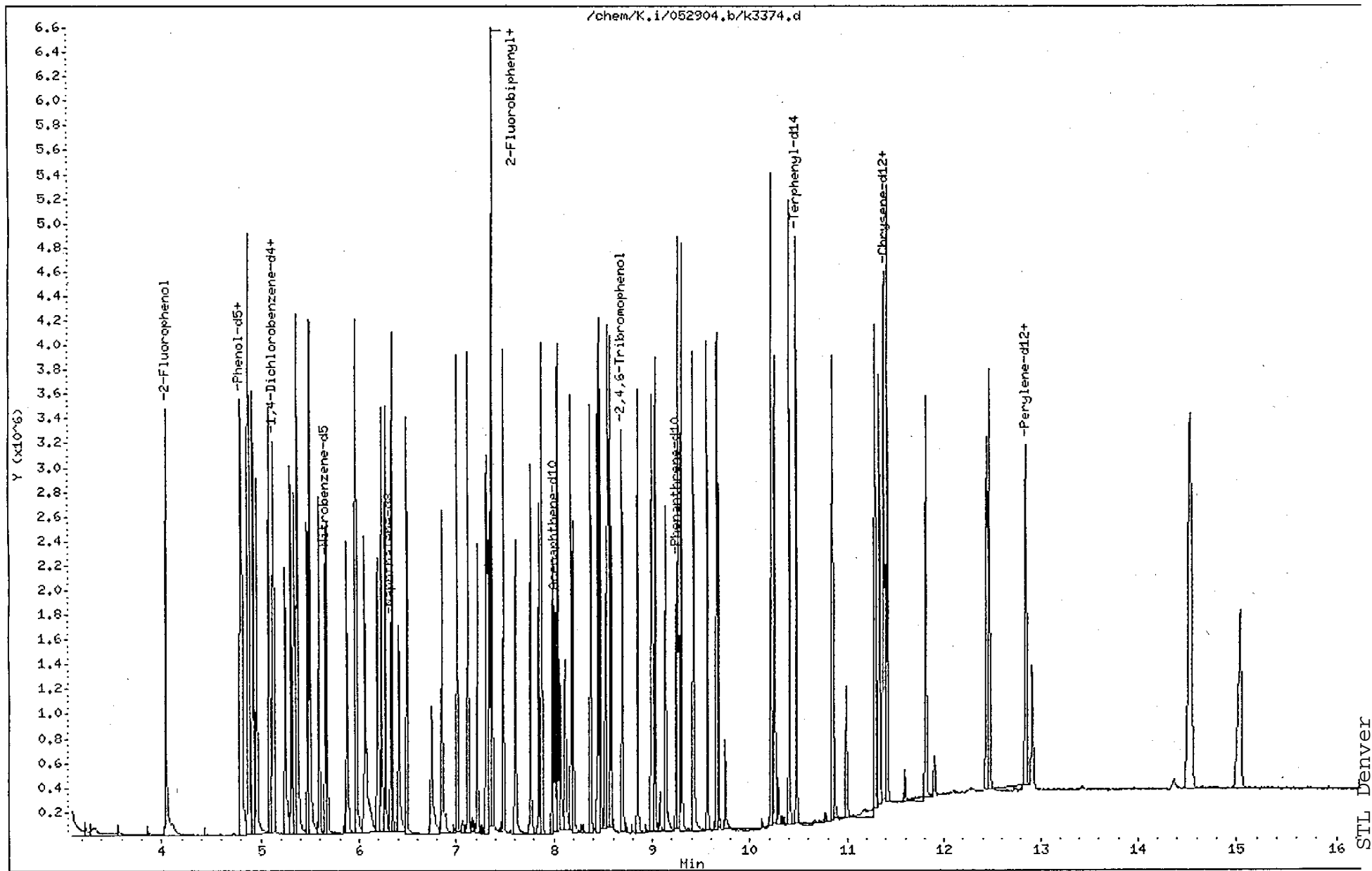
Volume Injected (uL): 0.5

Column phase: Rtx-5ms 30m 0.5um

Instrument: K.i

Operator: kidd

Column diameter: 0.25



GC/MS Initial Calibration Review Checklist

STL Denver

Instrument ID and Date: K 052904.bCheck Method Used: Analysis ☐ 625 ☒ 8270 ☒ Other SV AP9☐ 524.2 ☐ 624 ☐ 8260B ☐ Other VOAVOA Preparation ☐ 5mL ☐ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

| Review Items | Level 1 | | | Level 2 | Comments |
|---|---------|----|-----|---------|---------------------------------------|
| | Yes | No | N/A | | |
| Initial Calibration | | | | | |
| 1. BFB/DFTPP meets criteria? | ✓ | | | ✓ | |
| 2. ICAL date and instrument ID verified? | ✓ | | | ✓ | |
| 3. Sufficient number of calibration points used? | ✓ | | | ✓ | |
| 4. Reasons for removal of points documented? | ✓ | | | ✓ | some points removed below RL |
| 5. %RSD or correlation coefficient within method limits? | ✓ | | | ✓ | |
| 6. If RRF used for ICAL, were all compounds within 15% RSD? | ✓ | | | ✓ | List all exceptions below (cpd & RSD) |
| 7. Response factors meet criteria? | ✓ | | | ✓ | |
| 8. Isomeric pairs checked for correct peak assignment? | ✓ | | | ✓ | |
| 9. Data checked for detector saturation? | ✓ | | | ✓ | |
| 10. Standards traceability properly documented? | ✓ | | | ✓ | |
| 11. Manual integrations documented and checked? | ✓ | | | ✓ | |
| 12. 2 nd source ICV recovery 75-125% for DoD projects, 65-135% (±55% of expected for poor performers) for non-DoD? | ✓ | | | ✓ | see below |

1st Level Reviewer: ARKDate: 05-31-042nd Level Reviewer: B/bDate: 6/1/04

2nd source
Methyl methanesulfonate
p-Phenylenediamine 4

Date : 29-MAY-2004 08:25

Client ID: DFTPP

Instrument: K.i

Sample Info: DFTPP,BNA1512,P:041904,E:041905

Operator: kidd

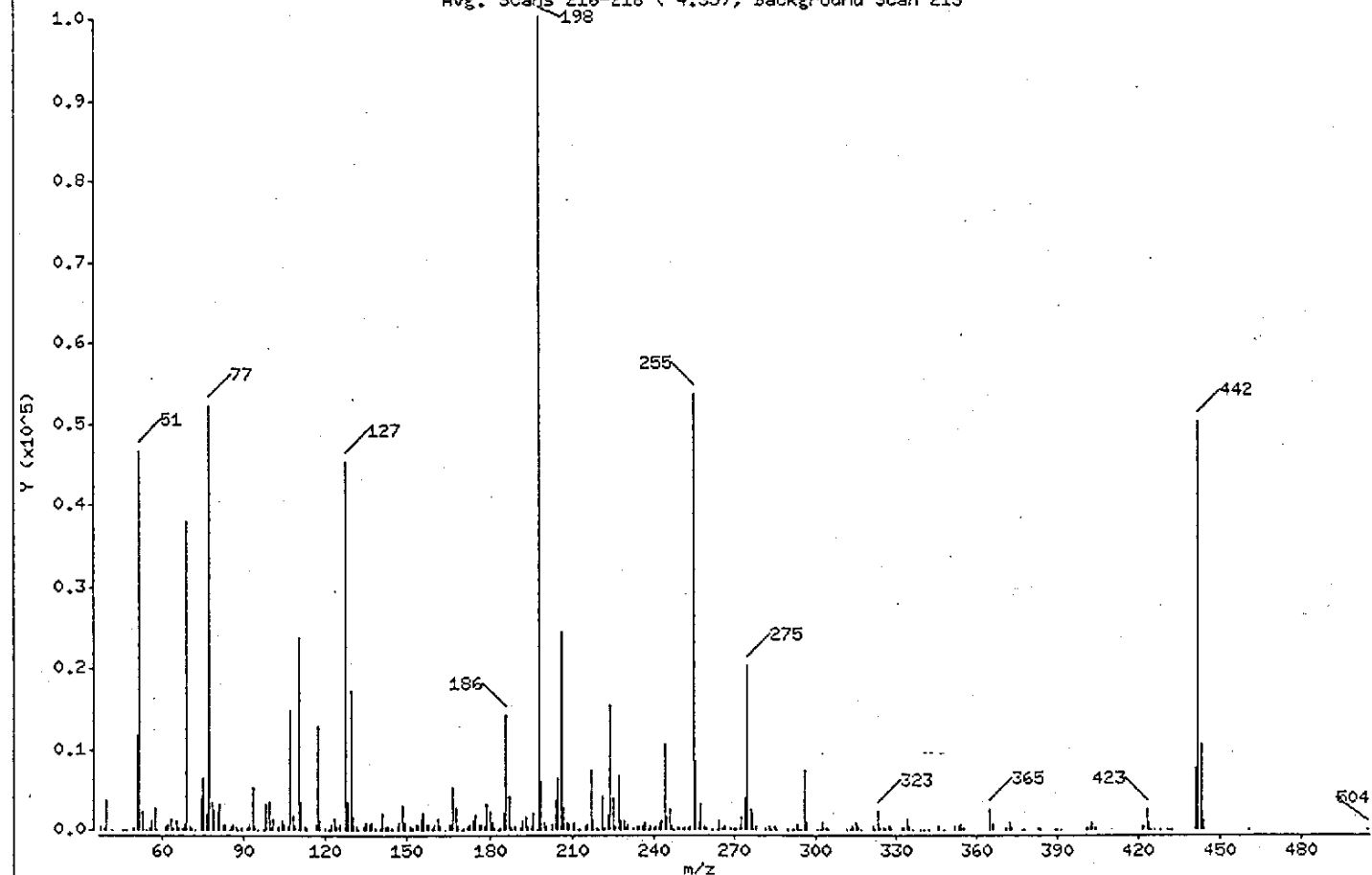
Column phase: Rtx-5ms, 30m,0.5um

Column diameter: 0.25

1 dftpp

MM
05-31-04

Avg. Scans 216-218 (4.35), Background Scan 213



| m/e | ION ABUNDANCE CRITERIA | * RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% relative abundance | 100.00 |
| 51 | 30.00 - 60.00% of mass 198 | 46.64 |
| 68 | Less than 2.00% of mass 69 | 0.71 (1.87) |
| 69 | Mass 69 relative abundance | 37.86 |
| 70 | Less than 2.00% of mass 69 | 0.39 (1.03) |
| 127 | 40.00 - 60.00% of mass 198 | 45.32 |
| 197 | Less than 1.00% of mass 198 | 0.04 |
| 199 | 5.00 - 9.00% of mass 198 | 6.06 |
| 275 | 10.00 - 30.00% of mass 198 | 20.14 |
| 365 | Greater than 1.00% of mass 198 | 2.63 |
| 441 | Present, but less than mass 442 | 7.57 |
| 442 | 40.00 - 100.00% of mass 198 | 50.07 |
| 443 | 17.00 - 23.00% of mass 442 | 10.61 (21.19) |

Date : 29-MAY-2004 08:25

Client ID: DFTPP

Instrument: K.i

Sample Info: DFTPP,BNA1512,P:041904,E:041905

Operator: kiddd

Column phase: Rtx-5ms, 30m,0.5um

Column diameter: 0.25

Data File: k3365.d

Spectrum: Avg. Scans 216-218 (4.35), Background Scan 213

Location of Maximum: 198.00

Number of points: 289

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|-------|-------|--------|-------|--------|-------|--------|------|
| 37.00 | 357 | 127.00 | 45368 | 207.00 | 2876 | 292.00 | 67 |
| 38.00 | 344 | 128.00 | 3408 | 208.00 | 839 | 293.00 | 617 |
| 39.00 | 3651 | 129.00 | 17208 | 209.00 | 640 | 294.00 | 65 |
| 41.00 | 115 | 130.00 | 1713 | 210.00 | 651 | 295.00 | 66 |
| 45.00 | 65 | 131.00 | 407 | 211.00 | 1025 | 296.00 | 7465 |
| 46.00 | 51 | 132.00 | 16 | 212.00 | 101 | 297.00 | 939 |
| 49.00 | 128 | 134.00 | 530 | 213.00 | 103 | 301.00 | 54 |
| 50.00 | 11666 | 135.00 | 858 | 215.00 | 359 | 302.00 | 92 |
| 51.00 | 46680 | 136.00 | 799 | 216.00 | 775 | 303.00 | 983 |
| 52.00 | 2241 | 137.00 | 889 | 217.00 | 7434 | 304.00 | 323 |
| 54.00 | 56 | 138.00 | 214 | 218.00 | 1056 | 305.00 | 52 |
| 55.00 | 153 | 140.00 | 323 | 219.00 | 152 | 312.00 | 55 |
| 56.00 | 1118 | 141.00 | 2028 | 220.00 | 67 | 313.00 | 57 |
| 57.00 | 2767 | 142.00 | 568 | 221.00 | 4065 | 314.00 | 448 |
| 58.00 | 35 | 143.00 | 460 | 222.00 | 217 | 315.00 | 1009 |
| 61.00 | 521 | 144.00 | 140 | 223.00 | 1772 | 316.00 | 547 |
| 62.00 | 630 | 146.00 | 402 | 224.00 | 15422 | 317.00 | 68 |
| 63.00 | 1373 | 147.00 | 870 | 225.00 | 3861 | 321.00 | 372 |
| 64.00 | 212 | 148.00 | 2998 | 226.00 | 519 | 322.00 | 95 |
| 65.00 | 1165 | 149.00 | 807 | 227.00 | 6635 | 323.00 | 2219 |
| 66.00 | 195 | 151.00 | 398 | 228.00 | 1102 | 324.00 | 309 |
| 67.00 | 127 | 152.00 | 167 | 229.00 | 1218 | 325.00 | 135 |
| 68.00 | 707 | 153.00 | 633 | 230.00 | 253 | 326.00 | 50 |
| 69.00 | 37896 | 154.00 | 576 | 231.00 | 667 | 327.00 | 471 |
| 70.00 | 389 | 155.00 | 1375 | 233.00 | 142 | 328.00 | 322 |
| 71.00 | 185 | 156.00 | 2113 | 234.00 | 378 | 332.00 | 155 |
| 72.00 | 73 | 157.00 | 647 | 235.00 | 498 | 333.00 | 253 |
| 74.00 | 3866 | 158.00 | 684 | 236.00 | 388 | 334.00 | 1314 |
| 75.00 | 6449 | 159.00 | 128 | 237.00 | 936 | 335.00 | 486 |
| 76.00 | 2074 | 160.00 | 756 | 238.00 | 79 | 336.00 | 63 |
| 77.00 | 52216 | 161.00 | 1428 | 239.00 | 436 | 339.00 | 54 |
| 78.00 | 3454 | 162.00 | 390 | 240.00 | 186 | 340.00 | 87 |
| 79.00 | 2633 | 164.00 | 53 | 241.00 | 418 | 342.00 | 86 |
| 80.00 | 2274 | 165.00 | 582 | 242.00 | 825 | 346.00 | 539 |
| 81.00 | 3213 | 166.00 | 767 | 243.00 | 1038 | 348.00 | 63 |

Date : 29-MAY-2004 08:25

Client ID: DFTPP

Instrument: K.i

Sample Info: DFTPP,BNA1512,P:041904,E:041905

Operator: kiddd

Column phase: Rtx-5ms, 30m,0.5um

Column diameter: 0.25

Data File: k3365.d

Spectrum: Avg. Scans 216-218 (4.35), Background Scan 213

Location of Maximum: 198.00

Number of points: 289

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|--------|-------|--------|--------|--------|-------|--------|-------|
| 82.00 | 686 | 167.00 | 5393 | 244.00 | 10693 | 352.00 | 498 |
| 83.00 | 681 | 168.00 | 2748 | 245.00 | 1533 | 353.00 | 457 |
| 84.00 | 113 | 169.00 | 536 | 246.00 | 2467 | 354.00 | 624 |
| 85.00 | 473 | 170.00 | 89 | 247.00 | 374 | 355.00 | 291 |
| 86.00 | 760 | 171.00 | 235 | 248.00 | 60 | 365.00 | 2628 |
| 87.00 | 458 | 172.00 | 558 | 249.00 | 204 | 366.00 | 577 |
| 88.00 | 107 | 173.00 | 741 | 250.00 | 122 | 371.00 | 173 |
| 89.00 | 179 | 174.00 | 1085 | 251.00 | 171 | 372.00 | 1024 |
| 91.00 | 336 | 175.00 | 1805 | 252.00 | 157 | 373.00 | 290 |
| 92.00 | 788 | 176.00 | 643 | 253.00 | 295 | 377.00 | 53 |
| 93.00 | 5402 | 177.00 | 682 | 254.00 | 380 | 378.00 | 78 |
| 94.00 | 503 | 178.00 | 393 | 255.00 | 53520 | 383.00 | 279 |
| 95.00 | 25 | 179.00 | 3207 | 256.00 | 8448 | 384.00 | 76 |
| 97.00 | 99 | 180.00 | 2394 | 257.00 | 906 | 389.00 | 63 |
| 98.00 | 3317 | 181.00 | 926 | 258.00 | 3299 | 390.00 | 96 |
| 99.00 | 3401 | 182.00 | 299 | 259.00 | 498 | 391.00 | 74 |
| 100.00 | 230 | 183.00 | 72 | 260.00 | 145 | 401.00 | 168 |
| 101.00 | 1364 | 184.00 | 193 | 262.00 | 60 | 402.00 | 432 |
| 103.00 | 575 | 185.00 | 2122 | 264.00 | 6 | 403.00 | 851 |
| 104.00 | 1039 | 186.00 | 14214 | 265.00 | 1247 | 404.00 | 188 |
| 105.00 | 684 | 187.00 | 4128 | 266.00 | 313 | 421.00 | 455 |
| 106.00 | 346 | 188.00 | 320 | 267.00 | 450 | 422.00 | 513 |
| 107.00 | 14768 | 189.00 | 421 | 269.00 | 174 | 423.00 | 2586 |
| 108.00 | 1940 | 191.00 | 298 | 270.00 | 243 | 424.00 | 856 |
| 109.00 | 385 | 192.00 | 1215 | 271.00 | 174 | 425.00 | 81 |
| 110.00 | 23712 | 193.00 | 1532 | 272.00 | 157 | 426.00 | 66 |
| 111.00 | 3547 | 194.00 | 442 | 273.00 | 1594 | 428.00 | 50 |
| 112.00 | 520 | 195.00 | 410 | 274.00 | 3842 | 431.00 | 65 |
| 113.00 | 167 | 196.00 | 2159 | 275.00 | 20152 | 432.00 | 57 |
| 116.00 | 794 | 197.00 | 41 | 276.00 | 2586 | 441.00 | 7582 |
| 117.00 | 12817 | 198.00 | 100104 | 277.00 | 1990 | 442.00 | 50120 |
| 118.00 | 1046 | 199.00 | 6068 | 278.00 | 354 | 443.00 | 10620 |
| 120.00 | 129 | 200.00 | 869 | 282.00 | 198 | 444.00 | 1148 |
| 121.00 | 96 | 201.00 | 569 | 283.00 | 503 | 461.00 | 51 |
| 122.00 | 580 | 203.00 | 677 | 284.00 | 104 | 504.00 | 67 |

Data File: /chem/K.i/052904.b/k3365.d

Page 5

Date : 29-MAY-2004 08:25

Client ID: DFTPP

Instrument: K.i

Sample Info: DFTPP,BNA1512,P:041904,E:041905

Operator: kiddd

Column phase: Rtx-5ms, 30m,0.5um

Column diameter: 0.25

Data File: k3365.d

Spectrum: Avg. Scans 216-218 (4.35), Background Scan 213

Location of Maximum: 198.00

Number of points: 289

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|--------|------|--------|-------|--------|-----|-----|---|
| 123.00 | 1353 | 204.00 | 3760 | 285.00 | 533 | | |
| 124.00 | 571 | 205.00 | 6526 | 286.00 | 69 | | |
| 125.00 | 620 | 206.00 | 24320 | 290.00 | 51 | | |

Data File: /chem/K.i/052904.b/k3365.d

Page 1

Date : 29-MAY-2004 08:25

Client ID: DFTPP

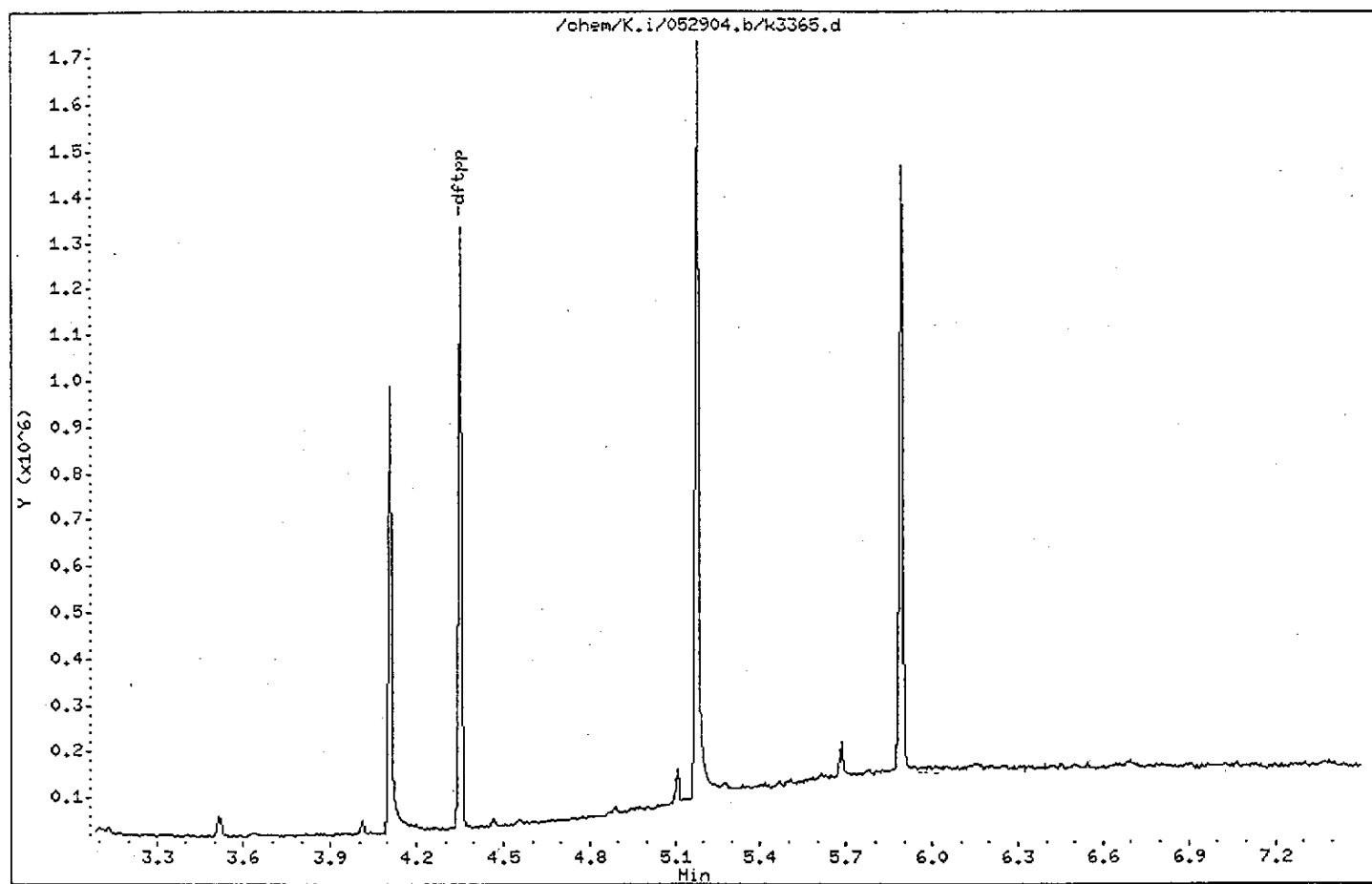
Instrument: K.i

Sample Info: DFTPP,BNA1512,P:041904,E:041905

Operator: kidd

Column phase: Rtx-5ms, 30m, 0.5um

Column diameter: 0.25



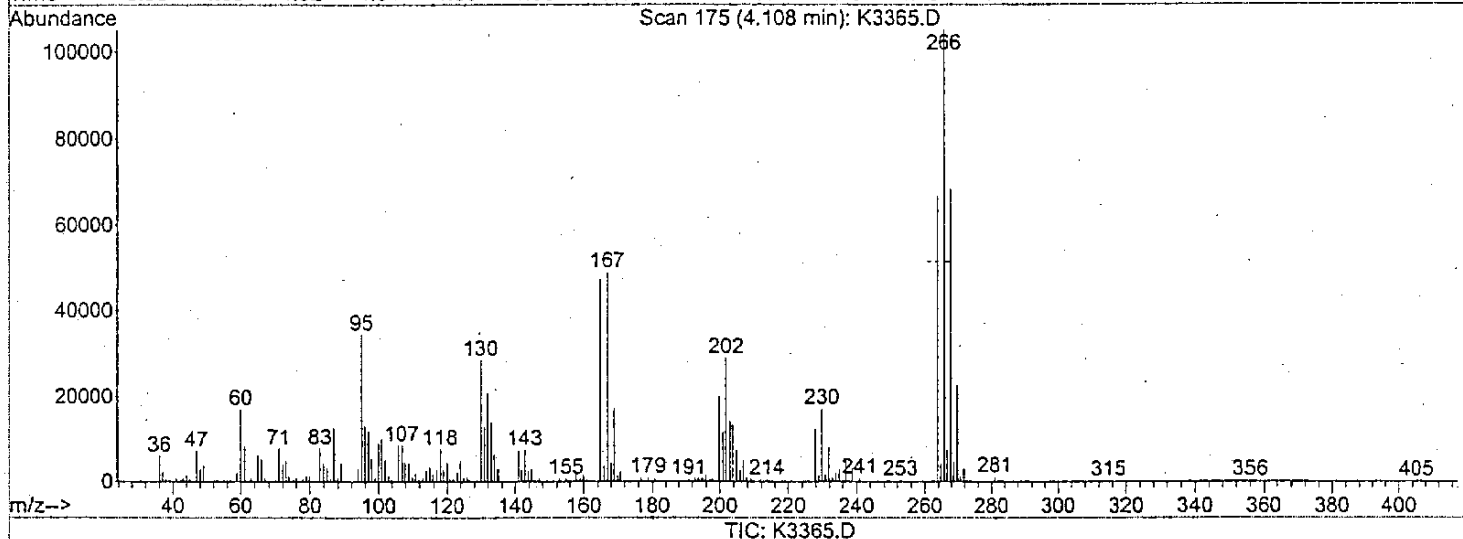
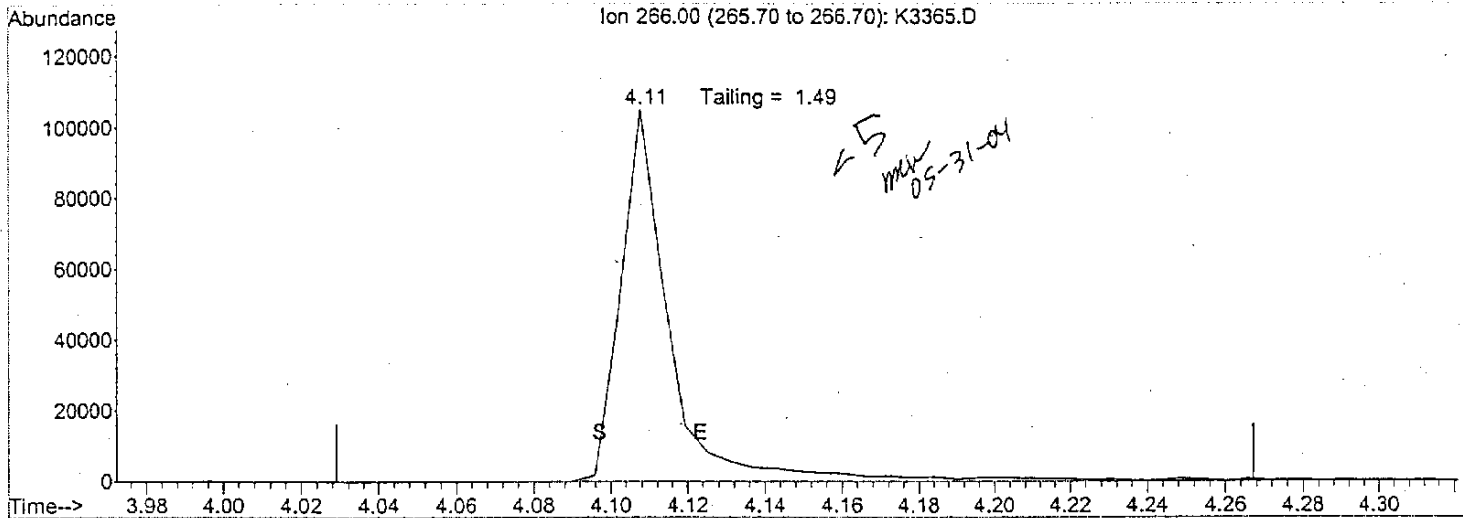
Quantitation Report (Qedit)

Data File : D:\DATA\052904.B\K3365.D
 Acq On : 29 May 2004 8:25 am
 Sample : DFTPP,BNA1512,P:041904,E:041905
 Misc :
 MS Integration Params: events.e
 Quant Time: May 31 15:03 2004

Vial: 2
 Operator: kiddd
 Inst : Instrumen
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPB.M (Chemstation Integrator)
 Title : 8270C DFTPP CHECK
 Last Update : Tue May 18 13:56:37 2004
 Response via : Single Level Calibration



TIC: K3365.D

(1) Pentachlorophenol

4.11min 0.00

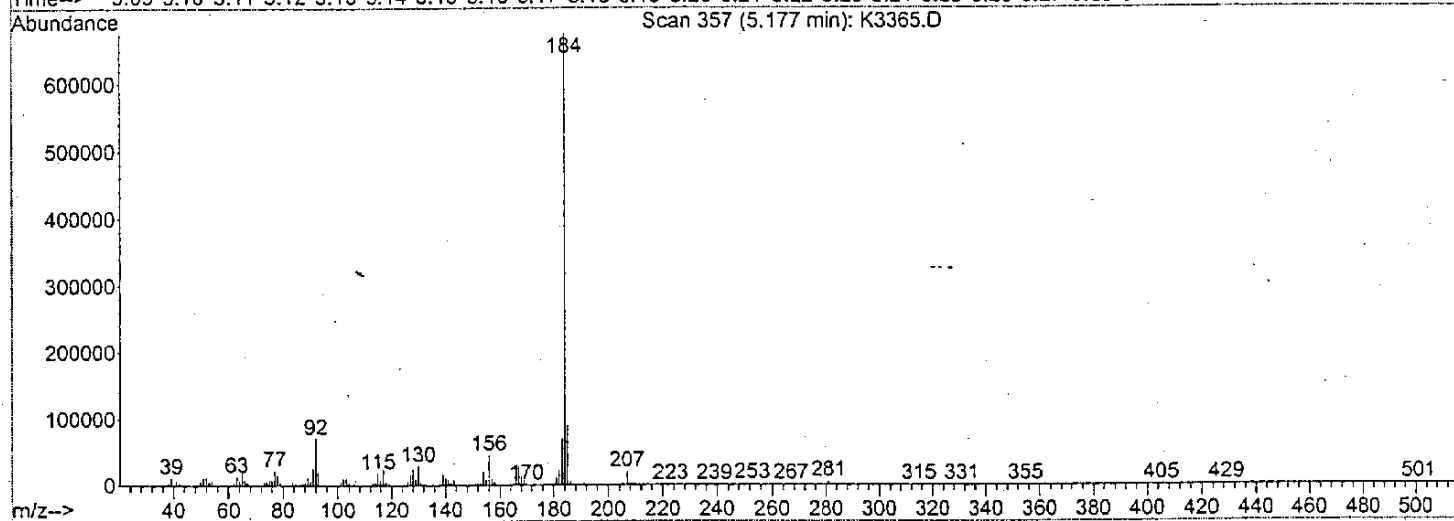
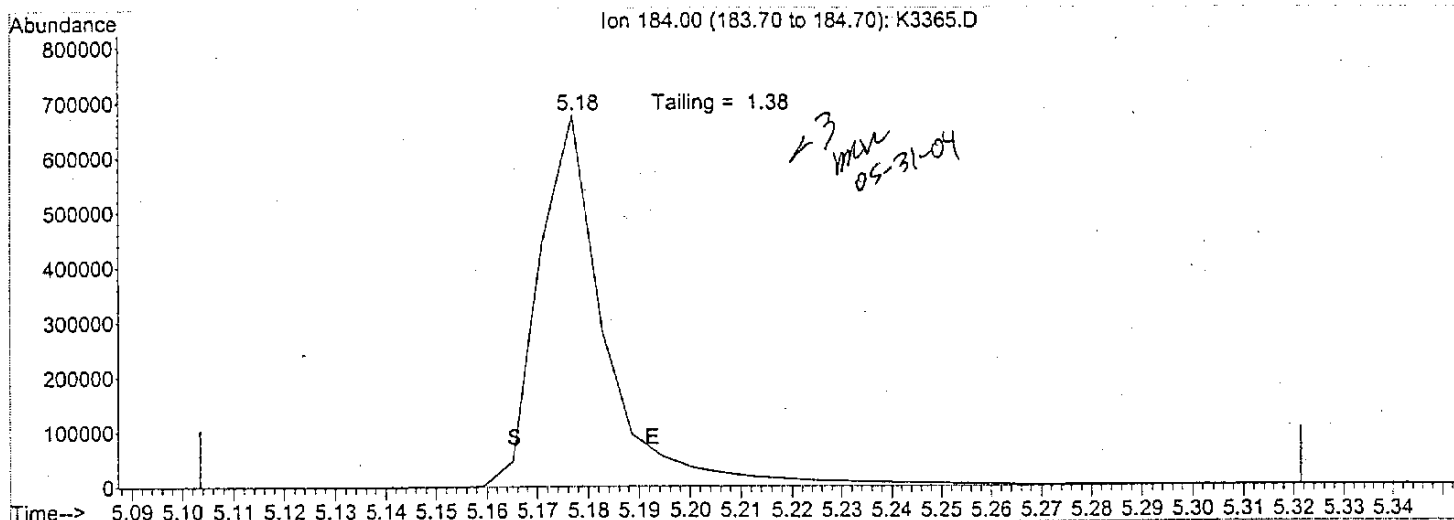
response 881321

| Ion | Exp% | Act% |
|--------|------|------|
| 266.00 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : D:\DATA\052904.B\K3365.D Vial: 2
 Acq On : 29 May 2004 8:25 am Operator: kidd
 Sample : DFTPP,BNA1512,P:041904,E:041905 Inst : Instrumen
 Misc : Multiplr: 1.00
 MS Integration Params: events.e
 Quant Time: May 31 15:03 2004 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPB.M (Chemstation Integrator)
 Title : 8270C DFTPP CHECK
 Last Update : Tue May 18 13:56:37 2004
 Response via : Single Level Calibration



TIC: K3365.D

(3) Benzidine

5.18min 0.00

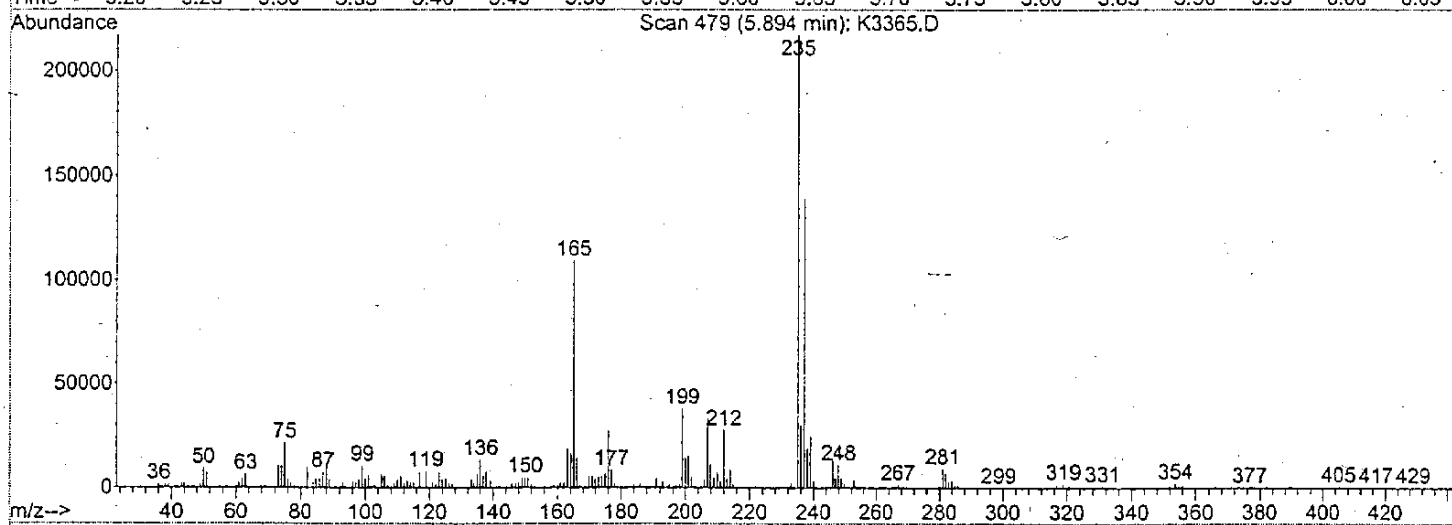
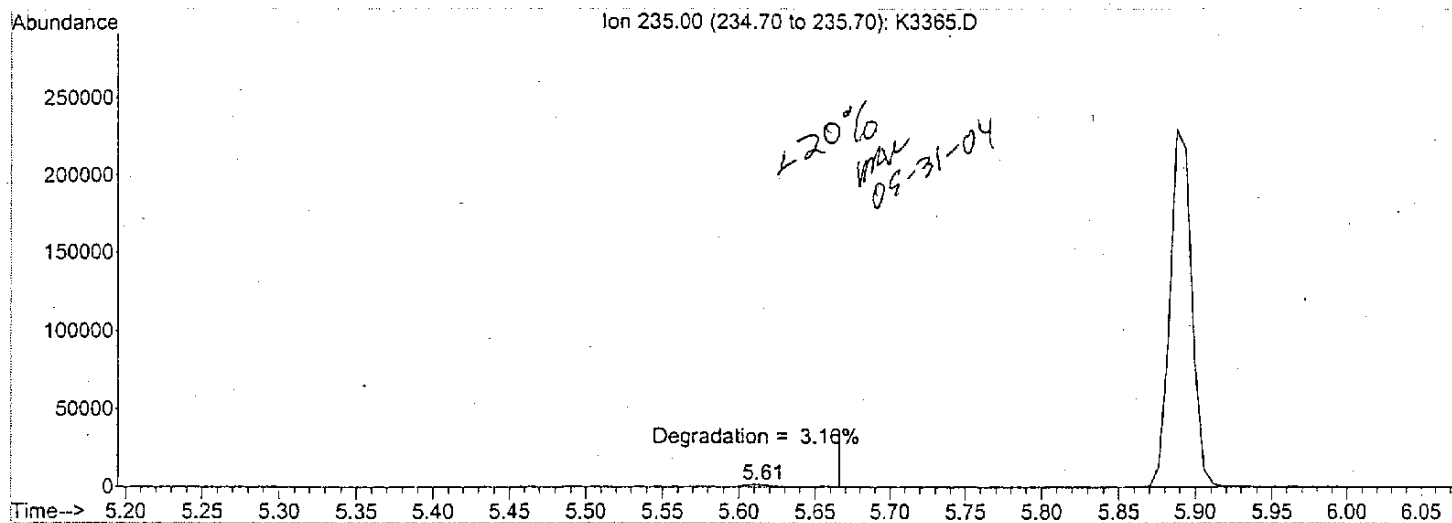
response 6095163

| Ion | Exp% | Act% |
|--------|------|------|
| 184.00 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : D:\DATA\052904.B\K3365.D Vial: 2
 Acq On : 29 May 2004 8:25 am Operator: kiddd
 Sample : DFTPP,BNA1512,P:041904,E:041905 Inst : Instrumen
 Misc : Multiplr: 1.00
 MS Integration Params: events.e
 Quant Time: May 31 15:03 2004 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPB.M (Chemstation Integrator)
 Title : 8270C DFTPP CHECK
 Last Update : Tue May 18 13:56:37 2004
 Response via : Single Level Calibration



TIC: K3365.D

(4) DDT

5.89min 0.00

response 2262503

| Ion | Exp% | Act% |
|--------|------|------|
| 235.00 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Calibration History

Method : /chem/K.i/052904.b/8270C.m
Start Cal Date: 29-MAY-2004 08:39
End Cal Date : 29-MAY-2004 14:36

Initial Calibration

| Injection Date | Sublist | Calibration File |
|--------------------------------------|----------|------------------------------|
| Cal Level: 1 , Cal Amount: 5.00000 | | |
| 29-MAY-2004 08:39 | 1-HSL | /chem/K.i/052904.b/k3366.d |
| Cal Level: 2 , Cal Amount: 10.00000 | | |
| 29-MAY-2004 12:13 | 2-AP9std | /chem/K.i/052904.b/k3375.d ✓ |
| 29-MAY-2004 09:03 | 1-HSL | /chem/K.i/052904.b/k3367.d |
| Cal Level: 3 , Cal Amount: 20.00000 | | |
| 29-MAY-2004 12:37 | 2-AP9std | /chem/K.i/052904.b/k3376.d ✓ |
| 29-MAY-2004 09:26 | 1-HSL | /chem/K.i/052904.b/k3368.d |
| Cal Level: 4 , Cal Amount: 50.00000 | | |
| 29-MAY-2004 13:00 | 2-AP9std | /chem/K.i/052904.b/k3377.d ✓ |
| 29-MAY-2004 09:50 | 1-HSL | /chem/K.i/052904.b/k3369.d |
| Cal Level: 5 , Cal Amount: 80.00000 | | |
| 29-MAY-2004 13:24 | 2-AP9std | /chem/K.i/052904.b/k3378.d ✓ |
| 29-MAY-2004 10:14 | 1-HSL | /chem/K.i/052904.b/k3370.d |
| Cal Level: 6 , Cal Amount: 120.00000 | | |
| 29-MAY-2004 13:48 | 2-AP9std | /chem/K.i/052904.b/k3379.d ✓ |
| 29-MAY-2004 10:38 | 1-HSL | /chem/K.i/052904.b/k3371.d |
| Cal Level: 7 , Cal Amount: 160.00000 | | |
| 29-MAY-2004 14:12 | 2-AP9std | /chem/K.i/052904.b/k3380.d ✓ |
| 29-MAY-2004 11:01 | 1-HSL | /chem/K.i/052904.b/k3372.d |
| Cal Level: 8 , Cal Amount: 200.00000 | | |
| 29-MAY-2004 14:36 | 2-AP9std | /chem/K.i/052904.b/k3381.d ✓ |
| 29-MAY-2004 11:25 | 1-HSL | /chem/K.i/052904.b/k3373.d |

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5

| | | | |
|--------------------------------------|----------|----------------------------|--|
| Ccal Level: 5 , Ccal Amount: 80.0000 | | | |
| ===== | | | |
| 29-MAY-2004 13.24 | 2-AP9std | /chem/K.i/052904.b/k3378.d | |
| ===== | | | |
| Ccal Level: 5 , Ccal Amount: 80.0000 | | | |
| ===== | | | |
| 29-MAY-2004 10.14 | 1-HSL | /chem/K.i/052904.b/k3370.d | |
| ===== | | | |

Report Date : 31-May-2004 16:58

Page 5

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 14:36
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 16:58 kiddd

Calibration File Names:

Level 1: /chem/K.i/052904.b/k3366.d
 Level 2: /chem/K.i/052904.b/k3375.d
 Level 3: /chem/K.i/052904.b/k3376.d
 Level 4: /chem/K.i/052904.b/k3377.d
 Level 5: /chem/K.i/052904.b/k3378.d
 Level 6: /chem/K.i/052904.b/k3379.d
 Level 7: /chem/K.i/052904.b/k3380.d
 Level 8: /chem/K.i/052904.b/k3381.d

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | | WRSD or R^2 |
|-----------------------------|----------------|----------------|---------|---------|---------|---------|-------|--------------|---------|----|----------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| | 160 Level 7 | 200 Level 8 | | | | | | | | | |
| 7 2-Picoline | +++++ | 1.54725 | 1.53578 | 1.73351 | 1.52990 | 1.52381 | | | | | |
| | 1.47195 | 1.46740 | | | | | AVRG | | 1.54423 | | 5.77128 |
| 8 N-Nitrosomethylethylamine | +++++ | 0.67833 | 0.66944 | 0.76136 | 0.69581 | 0.69643 | | | | | |
| | 0.69677 | 0.70487 | | | | | AVRG | | 0.70043 | | 4.21576 |
| 9 Methyl methanesulfonate | +++++ | 0.48522 | 0.41590 | 0.50833 | 0.47515 | 0.43912 | | | | | |
| | 0.43329 | 0.45699 | | | | | AVRG | | 0.45914 | | 7.05649 |
| 11 N-Nitrosodiethylamine | +++++ | 0.66017 | 0.65397 | 0.71925 | 0.64277 | 0.63945 | | | | | |
| | 0.61456 | 0.59324 | | | | | AVRG | | 0.64620 | | 6.14301 |
| 13 Ethyl methanesulfonate | +++++ | 1.07744 | 1.03359 | 1.10177 | 0.98295 | 0.99318 | | | | | |
| | 0.96328 | 0.98332 | | | | | AVRG | | 1.01936 | | 5.19449 |

Report Date : 31-May-2004 16:58

Page 6

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 14:36
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 16:58 kiddd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | | %RSD or R ² |
|---------------------------------|-----------------|--------------------|---------|---------|---------|---------|-------|--------------|---------|----|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| | 160 Level 7 | 200 Level 8 | | | | | | | | | |
| 19 Pentachloroethane | ++++ 0.41770 | 0.57820 0.41837 | 0.51839 | 0.52590 | 0.45943 | 0.44129 | | | | | |
| | | | | | | | AVRG | | 0.47990 | | 12.85207 |
| 31 N-Nitrosopyrrolidine | ++++ 0.56140 | 0.71079 0.56997 | 0.63900 | 0.66761 | 0.59923 | 0.57362 | | | | | |
| | | | | | | | AVRG | | 0.61737 | | 9.19645 |
| 34 N-Nitrosomorpholine | ++++ 0.23056 | 0.30769 0.22718 | 0.27983 | 0.28605 | 0.25258 | 0.24465 | | | | | |
| | | | | | | | AVRG | | 0.26122 | | 11.66416 |
| 35 o-Toluidine | ++++ 1.66887 | 2.25023 1.66459 | 2.10581 | 2.12729 | 1.77273 | 1.74955 | | | | | |
| | | | | | | | AVRG | | 1.90558 | | 12.92789 |
| 39 N-Nitrosopiperidine | ++++ 0.15646 | 0.17442 0.15860 | 0.17168 | 0.17796 | 0.17081 | 0.15770 | | | | | |
| | | | | | | | AVRG | | 0.16680 | | 5.36037 |
| 44 O,O,O-Triethyl phosphorothio | ++++ 0.17519 | 0.19682 0.18409 | 0.19270 | 0.18867 | 0.17393 | 0.17086 | | | | | |
| | | | | | | | AVRG | | 0.18318 | | 5.49872 |
| 48 a,a-Dimethylphenethylamine | ++++ 1.05707 | ++++ 1.11202 | ++++ | 0.78195 | 0.97642 | 1.05059 | | | | | |
| | | | | | | | AVRG | | 0.99561 | | 12.93777 |
| 53 2,6-Dichlorophenol | ++++ 0.25098 | 0.26362 0.25518 | 0.27970 | 0.28758 | 0.26611 | 0.25367 | | | | | |
| | | | | | | | AVRG | | 0.26526 | | 5.21908 |
| 54 Hexachloropropene | ++++ 0.24002 | 0.23346 0.24915 | 0.24028 | 0.26020 | 0.24380 | 0.24277 | | | | | |
| | | | | | | | AVRG | | 0.24424 | | 3.46956 |

Report Date : 31-May-2004 16:58

Page 7

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 14:36
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 16:58 kidd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | b | Coefficients | | %RSD or R ² |
|-------------------------------|-----------------|--------------------|---------|---------|---------|---------|-------|---|--------------|----|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | | m1 | m2 | |
| | 160 Level 7 | 200 Level 8 | | | | | | | | | |
| 57 N-Nitrosodi-n-butylamine | ++++ 0.21762 | 0.22769 0.21663 | 0.23380 | 0.23716 | 0.22597 | 0.21686 | AVRG | | 0.22510 | | 3.73520 |
| 58 p-Phenylenediamine | ++++ 0.28541 | ++++ 0.27918 | 0.28950 | 0.32775 | 0.29797 | 0.29493 | AVRG | | 0.29579 | | 5.75747 |
| 61 Safrole | ++++ 0.22964 | 0.26562 0.23903 | 0.27393 | 0.26440 | 0.24059 | 0.23402 | AVRG | | 0.24960 | | 7.13236 |
| 65 1,2,4,5-Tetrachlorobenzene | ++++ 0.30987 | 0.33948 0.33018 | 0.34067 | 0.33348 | 0.30570 | 0.30008 | AVRG | | 0.32278 | | 5.27886 |
| 66 Isosafrole (#1) | ++++ 0.32380 | 0.28485 0.31245 | 0.30157 | 0.35384 | 0.30882 | 0.30493 | AVRG | | 0.31289 | | 6.89237 |
| 72 Isosafrole (#2) | ++++ 0.33152 | 0.34156 0.33572 | 0.35454 | 0.37138 | 0.34563 | 0.33343 | AVRG | | 0.34482 | | 4.10209 |
| 73 1-Chloronaphthalene | ++++ 0.87629 | 1.06818 0.90262 | 0.98948 | 0.99470 | 0.90004 | 0.85273 | AVRG | | 0.94058 | | 8.29646 |
| 75 1,4-Naphthoquinone | ++++ 0.19856 | ++++ 0.18010 | 0.20094 | 0.23908 | 0.22845 | 0.21725 | AVRG | | 0.21073 | | 10.27072 |
| 78 1,4-Dinitrobenzene | ++++ 0.15517 | 0.10941 0.15372 | 0.12454 | 0.16245 | 0.15290 | 0.15890 | AVRG | | 0.14530 | | 13.83395 |

Report Date : 31-May-2004 16:58

Page 8

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 14:36
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 16:58 kidd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | | RSD or R^2 |
|------------------------------|-----------------|--------------------|---------|---------|---------|---------|-------|--------------|---------|----|---------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| | 160 Level 7 | 200 Level 8 | | | | | | | | | |
| 80 1,3-Dinitrobenzene | ++++ 0.17418 | 0.15076 0.17014 | 0.15372 | 0.19351 | 0.17369 | 0.17668 | AVRG | | 0.17038 | | 8.51469 |
| 89 Pentachlorobenzene | ++++ 0.45198 | 0.45206 0.49071 | 0.46677 | 0.46275 | 0.43205 | 0.42350 | AVRG | | 0.45426 | | 4.92784 |
| 90 1-Naphthylamine | ++++ 0.84112 | 0.94330 0.85473 | 0.96297 | 1.01304 | 0.88726 | 0.85992 | AVRG | | 0.90891 | | 7.15132 |
| 91 2,3,4,6-Tetrachlorophenol | ++++ 0.32283 | ++++ 0.36344 | 0.30710 | 0.30063 | 0.28486 | 0.28445 | AVRG | | 0.31055 | | 9.55205 |
| 92 2-Naphthylamine | ++++ 0.86115 | 0.97842 0.93642 | 0.90207 | 0.96546 | 0.88435 | 0.84271 | AVRG | | 0.91008 | | 5.69011 |
| 98 Thionazin | ++++ 0.26129 | 0.26983 0.26685 | 0.28753 | 0.29290 | 0.26622 | 0.26058 | AVRG | | 0.27217 | | 4.71424 |
| 100 5-Nitro-o-toluidine | ++++ 0.29938 | ++++ 0.29772 | 0.29456 | 0.33284 | 0.31657 | 0.29231 | AVRG | | 0.30556 | | 5.19847 |
| 182 Diphenylamine | ++++ 0.96361 | 1.05057 1.01961 | 1.01872 | 1.01348 | 0.93407 | 0.91716 | AVRG | | 0.98818 | | 5.06461 |
| 104 Sulfotepp | ++++ 0.11264 | 0.11916 0.11743 | 0.11689 | 0.12107 | 0.11139 | 0.10765 | AVRG | | 0.11518 | | 4.13465 |

Report Date : 31-May-2004 16:58

Page 9

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 14:36
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 16:58 kiddd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | | %RSD or R^2 |
|-----------------------------|-----------------|--------------------|---------|---------|---------|---------|-------|--------------|---------|----|----------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| | 160 Level 7 | 200 Level 8 | | | | | | | | | |
| 105 1,3,5-Trinitrobenzene | ++++ 148568 | ++++ 204791 | 12731 | 41686 | 64055 | 100246 | WLINR | 0.19101 | 0.06859 | | 0.99330 |
| 106 Diallylate (#1) | ++++ 0.30043 | ++++ | 0.34826 | 0.36631 | 0.32370 | 0.30153 | AVRG | | 0.32805 | | 8.83192 |
| 107 Phorate | ++++ 0.09624 | ++++ 0.10136 | 0.11423 | 0.11709 | 0.10068 | 0.09268 | AVRG | | 0.10371 | | 9.46469 |
| 109 Phenacetin | ++++ 0.29595 | ++++ 0.30352 | 0.27670 | 0.32241 | 0.28998 | 0.29355 | AVRG | | 0.29702 | | 5.13371 |
| 111 Diallylate (#2) | ++++ 0.21129 | 0.20669 0.21593 | 0.19798 | 0.21815 | 0.20857 | 0.20123 | AVRG | | 0.20855 | | 3.51820 |
| 112 Dimethoate | ++++ 0.21630 | 0.24120 0.20351 | 0.26122 | 0.28610 | 0.24630 | 0.22518 | AVRG | | 0.23997 | | 11.69934 |
| 114 4-Aminobiphenyl | ++++ 0.65279 | ++++ 0.70001 | 0.68797 | 0.74554 | 0.64825 | 0.63052 | AVRG | | 0.67751 | | 6.23401 |
| 115 Pentachloronitrobenzene | ++++ 0.10502 | ++++ 0.11249 | 0.09373 | 0.10575 | 0.09820 | 0.10055 | AVRG | | 0.10262 | | 6.40512 |
| 116 Pronamide | ++++ 0.28524 | 0.25815 0.30096 | 0.26820 | 0.29084 | 0.26532 | 0.26455 | AVRG | | 0.27618 | | 5.82487 |

Report Date : 31-May-2004 16:58

Page 10

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 14:36
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 16:58 kiddd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | | %RSD or R ² |
|---------------------------------|-----------------|--------------------|---------|---------|---------|---------|-------|--------------|---------|----|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| | 160 Level 7 | 200 Level 8 | | | | | | | | | |
| 120 2-secbutyl-4,6-dinitropheno | ++++ 386225 | 11575 542677 | 31155 | 103412 | 167498 | 264479 | WLINR | 0.15360 | 0.17416 | | 0.99149 ✓ |
| 121 Disulfoton | ++++ 0.30059 | ++++ 0.29986 | 0.35004 | 0.38004 | 0.33059 | 0.30707 | AVRG | | 0.32803 | | 9.81392 |
| 124 Methyl parathion | ++++ 0.17959 | ++++ 0.17325 | ++++ | 0.21790 | 0.20299 | 0.18833 | AVRG | | 0.19241 | | 9.40477 |
| 126 Parathion | ++++ 0.13448 | ++++ 0.13717 | ++++ | 0.14226 | 0.13295 | 0.12747 | AVRG | | 0.13487 | | 4.03454 |
| 127 4-Nitroquinoline-1-oxide | ++++ 139103 | ++++ 182839 | ++++ | 29146 | 57605 | 93284 | WLINR | 0.50571 | 0.06945 | | 0.99833 ✓ |
| 128 Methapyrilene | ++++ 0.22913 | ++++ 0.22655 | 0.25513 | 0.27787 | 0.24563 | 0.22531 | AVRG | | 0.24327 | | 8.51513 |
| 129 Isodrin | ++++ 0.10238 | 0.10624 0.10738 | 0.11136 | 0.11467 | 0.10401 | 0.10051 | AVRG | | 0.10665 | | 4.69082 |
| 134 Aramite (#1) | ++++ 0.09897 | ++++ 0.10440 | 0.10530 | 0.11662 | 0.11421 | 0.10465 | AVRG | | 0.10736 | | 6.22745 |
| 135 Aramite (#2) | ++++ 0.12343 | ++++ 0.13283 | 0.13476 | 0.15633 | 0.14121 | 0.12919 | AVRG | | 0.13629 | | 8.40628 |

Report Date : 31-May-2004 16:58

Page 11

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 14:36
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 16:58 kidd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | b | Coefficients | | %RSD or R ² |
|---------------------------------|-----------------|--------------------|---------|---------|---------|---------|-------|---|--------------|----|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | | m1 | m2 | |
| | 160 | 200 | | | | | | | | | |
| | Level 7 | Level 8 | | | | | | | | | |
| 136 p-Dimethylaminoazobenzene | ++++ 0.20277 | 0.21618 0.21281 | 0.23441 | 0.25395 | 0.23172 | 0.21674 | AVRG | | 0.22408 | | 7.63163 |
| 138 3,3'-Dimethylbenzidine | ++++ 0.54943 | 0.55870 0.58808 | 0.54944 | 0.61775 | 0.60121 | 0.56473 | AVRG | | 0.57562 | | 4.68360 |
| 139 2-Acetylaminofluorene | ++++ 0.37182 | ++++ 0.39907 | 0.31939 | 0.39520 | 0.38629 | 0.36522 | AVRG | | 0.37283 | | 7.85133 |
| 149 7,12-Dimethylbenz(a)anthrac | ++++ 0.53503 | ++++ 0.57569 | 0.46890 | 0.51350 | 0.49439 | 0.49443 | AVRG | | 0.51366 | | 7.31004 |
| 152 3-Methylcholanthrene | ++++ 0.56832 | 0.46961 0.61159 | 0.48462 | 0.53185 | 0.51204 | 0.51747 | AVRG | | 0.52793 | | 9.24197 |
| 153 Dibenz(a,j)acridine | ++++ 0.80130 | 0.65840 0.88084 | 0.69545 | 0.78484 | 0.74024 | 0.74524 | AVRG | | 0.75804 | | 9.63318 |
| M 1 Total Isosafrole | ++++ 0.33016 | 0.33164 0.33164 | 0.34527 | 0.36831 | 0.33919 | 0.32844 | AVRG | | 0.33924 | | 4.16127 |
| M 2 Total Diallate | ++++ 0.27547 | 0.31225 0.28256 | 0.30618 | 0.32482 | 0.29280 | 0.27344 | AVRG | | 0.29536 | | 6.65338 |
| M 3 Total Aramite | ++++ 0.11218 | ++++ 0.11975 | 0.12121 | 0.13807 | 0.12765 | 0.11790 | AVRG | | 0.12279 | | 7.33241 |

Report Date : 31-May-2004 16:58

Page 12

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
 End Cal Date : 29-MAY-2004 14:36
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/K.i/052904.b/8270C.m
 Cal Date : 31-May-2004 16:58 kiddd

| Compound | 5 | 10 | 20 | 50 | 80 | 120 | Curve | Coefficients | | | %RSD or R ² |
|---------------------|-----------------|--------------------|---------|---------|---------|---------|-------|--------------|---------|----|---------------------------|
| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | | b | m1 | m2 | |
| | 160 | 200 | | | | | | | | | |
| | Level 7 | Level 8 | | | | | | | | | |
| 165 Chlorobenzilate | ++++ 0.25531 | 0.24632 0.28219 | 0.24768 | 0.27083 | 0.25503 | 0.25022 | AVRG | | 0.25823 | | 5.16804 |
| 199 1,4-Dioxane | ++++ 0.61146 | 0.77198 0.60807 | 0.72945 | 0.73283 | 0.64827 | 0.64205 | AVRG | | 0.67773 | | 9.70924 |
| 175 Biphenyl | ++++ 1.08284 | 1.33758 1.16106 | 1.21864 | 1.22845 | 1.10453 | 1.06671 | AVRG | | 1.17140 | | 8.28269 |

STL-Denver

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2004 08:39
End Cal Date : 29-MAY-2004 14:36
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/K.i/052904.b/8270C.m
Cal Date : 31-May-2004 16:58 kidd

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

INITIAL CALIBRATION REPORT

Instrument ID: K.i
Lab File ID: k3381.d
Analysis Type: WATER

Injection Date: 29-MAY-2004 14:36
Lab Sample ID: AP9 0200
Method File: /chem/K.i/052904.b/8270C.m

| COMPOUND | %RSD |
|------------------------------|------|
| 1,4-Dioxane | 9.7 |
| 2-Picoline | 5.8 |
| N-Nitrosomethylethylamine | 4.2 |
| Methyl methanesulfonate | 7.1 |
| N-Nitrosodiethylamine | 6.1 |
| Ethyl methanesulfonate | 5.2 |
| Pentachloroethane | 12.9 |
| N-Nitrosopyrrolidine | 9.2 |
| N-Nitrosomorpholine | 11.7 |
| o-Toluidine | 12.9 |
| N-Nitrosopiperidine | 5.4 |
| O,O,O-Triethyl phosphorothio | 5.5 |
| a,a-Dimethylphenethylamine | 12.9 |
| 2,6-Dichlorophenol | 5.2 |
| Hexachloropropene | 3.5 |
| N-Nitrosodi-n-butylamine | 3.7 |
| p-Phenylenediamine | 5.8 |
| Safrole | 7.1 |
| Isosafrole (#1) | 6.9 |
| 1,2,4,5-Tetrachlorobenzene | 5.3 |
| Isosafrole (#2) | 4.1 |
| Biphenyl | 8.3 |
| 1-Chloronaphthalene | 8.3 |
| 1,4-Naphthoquinone | 10.3 |
| 1,4-Dinitrobenzene | 13.8 |
| 1,3-Dinitrobenzene | 8.5 |
| Pentachlorobenzene | 4.9 |
| 1-Naphthylamine | 7.2 |
| 2-Naphthylamine | 5.7 |
| 2,3,4,6-Tetrachlorophenol | 9.6 |
| Thionazin | 4.7 |
| 5-Nitro-o-toluidine | 5.2 |
| Diphenylamine | 5.1 |
| Sulfotepp | 4.1 |
| Diallate (#1) | 8.8 |
| 1,3,5-Trinitrobenzene | 16.2 |
| Phorate | 9.5 |
| Phenacetin | 5.1 |
| Diallate (#2) | 3.5 |

— WL 1/82

INITIAL CALIBRATION REPORT

Instrument ID: K.i
Lab File ID: k3381.d
Analysis Type: WATER

Injection Date: 29-MAY-2004 14:36
Lab Sample ID: AP9 0200
Method File: /chem/K.i/052904.b/8270C.m

| COMPOUND | %RSD |
|--------------------------------|------|
| Dimethoate | 11.7 |
| 4-Aminobiphenyl | 6.2 |
| Pronamide | 5.8 |
| Pentachloronitrobenzene | 6.4 |
| Disulfoton | 9.8 |
| 2-secbutyl-4,6-dinitrophenol | 27.3 |
| Methyl parathion | 9.4 |
| Parathion | 4.0 |
| 4-Nitroquinoline-1-oxide | 15.7 |
| Methapyrilene | 8.5 |
| Total Diallate | 6.7 |
| Total Isosafrole | 4.2 |
| Total Aramite | 7.3 |
| Isodrin | 4.7 |
| Aramite (#1) | 6.2 |
| Aramite (#2) | 8.4 |
| p-Dimethylaminoazobenzene | 7.6 |
| Chlorobenzilate | 5.2 |
| 3,3'-Dimethylbenzidine | 4.7 |
| 2-Acetylaminofluorene | 7.9 |
| 7,12-Dimethylbenz(a)anthracene | 7.3 |
| 3-Methylcholanthrene | 9.2 |
| Dibenz(a,j)acridine | 9.6 |

$WL \frac{1}{x^2}$

$WL \frac{1}{x^2}$

The average of all %RSD's in the initial calibration is 7.8 ✓

REV
05-31-04

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3375.d
Lab Smp Id: AP9_0010 Client Smp ID: AP9_0010
Inj Date : 29-MAY-2004 12:13
Operator : kiddd Inst ID: K.i
Smp Info : AP9_0010,BNA1406,P:050403,E:073104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 16:54 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 12:13 Cal File: k3375.d
Als bottle: 15 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-AP9std.sub
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS | |
|-----------------------------|-------------------|--------|--------|---------|----------|--------------------|-------------------|
| | | | | | | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ***** | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 | (1.000) | 141454 | 40.0000 | |
| * 49 Naphthalene-d8 | 136 | 6.322 | 6.322 | (1.000) | 553711 | 40.0000 | |
| * 83 Acenaphthene-d10 | 164 | 8.008 | 8.008 | (1.000) | 330278 | 40.0000 | |
| * 117 Phenanthrene-d10 | 188 | 9.242 | 9.242 | (1.000) | 605471 | 40.0000 | |
| * 142 Chrysene-d12 | 240 | 11.381 | 11.381 | (1.000) | 617444 | 40.0000 | |
| * 151 Perylene-d12 | 264 | 12.908 | 12.908 | (1.000) | 506937 | 40.0000 | |
| 7 2-Picoline | 93 | 3.619 | 3.619 | (0.707) | 54716 | 10.0000 | 10.0195 |
| 8 N-Nitrosomethylethylamine | 88 | 3.707 | 3.707 | (0.724) | 23988 | 10.0000 | 9.68445(a) |
| 9 Methyl methanesulfonate | 80 | 3.942 | 3.942 | (0.770) | 17159 | 10.0000 | 10.5679 |
| 11 N-Nitrosodiethylamine | 102 | 4.248 | 4.248 | (0.830) | 23346 | 10.0000 | 10.2162 |
| 13 Ethyl methanesulfonate | 79 | 4.489 | 4.489 | (0.877) | 38102 | 10.0000 | 10.5697 |
| 19 Pentachloroethane | 117 | 4.871 | 4.871 | (0.952) | 20447 | 10.0000 | 12.0484 |
| 31 N-Nitrosopyrrolidine | 100 | 5.505 | 5.505 | (1.076) | 25136 | 10.0000 | 11.5131 |
| 34 N-Nitrosomorpholine | 116 | 5.511 | 5.511 | (1.077) | 10881 | 10.0000 | 11.7790 |
| 35 o-Toluidine | 106 | 5.540 | 5.540 | (1.083) | 79576 | 10.0000 | 11.8086 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| 39 N-Nitrosopiperidine | 114 | 5.817 | 5.817 | (0.920) | 24145 | 10.0000 | 10.4568 |
| 44 O,O,O-Triethyl phosphorothio | 198 | 6.057 | 6.057 | (0.958) | 27245 | 10.0000 | 10.7444 |
| 48 a,a-Dimethylphenethylamine | 58 | 6.245 | 6.245 | (0.988) | 110426 | 10.0000 | 8.01234(aM) |
| 53 2,6-Dichlorophenol | 162 | 6.416 | 6.416 | (1.015) | 36493 | 10.0000 | 9.93823(a) |
| 54 Hexachloropropene | 213 | 6.451 | 6.451 | (1.020) | 32318 | 10.0000 | 9.55884(a) |
| 57 N-Nitrosodi-n-butylamine | 84 | 6.710 | 6.710 | (1.061) | 31519 | 10.0000 | 10.1150 |
| 58 p-Phenylenediamine | 108 | 6.757 | 6.757 | (1.069) | 32204 | 10.0000 | 7.86504(aM) |
| 61 Safrole | 162 | 6.909 | 6.909 | (1.093) | 36769 | 10.0000 | 10.6416 |
| 65 1,2,4,5-Tetrachlorobenzene | 216 | 7.209 | 7.209 | (1.140) | 46993 | 10.0000 | 10.5173 |
| 66 Isosafrole (#1) | 162 | 7.197 | 7.197 | (0.899) | 4116 | 1.75000 | 1.59316(a) |
| 72 Isosafrole (#2) | 104 | 7.403 | 7.403 | (0.924) | 23267 | 8.25000 | 8.17192(a) |
| 73 1-Chloronaphthalene | 162 | 7.520 | 7.520 | (0.939) | 88199 | 10.0000 | 11.3566 |
| 75 1,4-Naphthoquinone | 158 | 7.656 | 7.656 | (0.956) | 12527 | 10.0000 | 7.19954(a) |
| 78 1,4-Dinitrobenzene | 168 | 7.703 | 7.703 | (0.962) | 9034 | 10.0000 | 7.53006(a) |
| 80 1,3-Dinitrobenzene | 168 | 7.808 | 7.808 | (0.975) | 12448 | 10.0000 | 8.84825(a) |
| 89 Pentachlorobenzene | 250 | 8.190 | 8.190 | (1.023) | 37326 | 10.0000 | 9.95146(a) |
| 90 1-Naphthylamine | 143 | 8.249 | 8.249 | (1.030) | 77888 | 10.0000 | 10.3784 |
| 91 2,3,4,6-Tetrachlorophenol | 232 | 8.314 | 8.314 | (1.038) | 23174 | 10.0000 | 9.03755(a) |
| 92 2-Naphthylamine | 143 | 8.314 | 8.314 | (1.038) | 80788 | 10.0000 | 10.7509 |
| 98 Thionazin | 97 | 8.443 | 8.443 | (1.054) | 22280 | 10.0000 | 9.91404(a) |
| 100 5-Nitro-o-toluidine | 152 | 8.502 | 8.502 | (1.062) | 20445 | 10.0000 | 8.10343(a) |
| 182 Diphenylamine | 169 | 8.549 | 8.549 | (1.067) | 86745 | 10.0000 | 10.6314 |
| 104 Sulfotepp | 97 | 8.719 | 8.719 | (0.943) | 18037 | 10.0000 | 10.3458 |
| 105 1,3,5-Trinitrobenzene | 213 | 8.801 | 8.801 | (0.952) | 4846 | 10.0000 | 12.3079(Q) |
| 106 Diallate (#1) | 86 | 8.795 | 8.795 | (0.952) | 38505 | 7.20000 | 7.75443(a) |
| 107 Phorate | 121 | 8.813 | 8.813 | (0.954) | 17668 | 10.0000 | 11.2542 |
| 109 Phenacetin | 108 | 8.813 | 8.813 | (0.954) | 36663 | 10.0000 | 8.15479(a) |
| 111 Diallate (#2) | 86 | 8.872 | 8.872 | (0.960) | 8760 | 2.80000 | 2.77502(a) |
| 112 Dimethoate | 87 | 8.972 | 8.972 | (0.971) | 36510 | 10.0000 | 10.0511 |
| 114 4-Aminobiphenyl | 169 | 9.077 | 9.077 | (0.982) | 101744 | 10.0000 | 9.92106(a) |
| 115 Pentachloronitrobenzene | 237 | 9.189 | 9.189 | (0.994) | 14018 | 10.0000 | 9.02414(a) |
| 116 Pronamide | 173 | 9.107 | 9.107 | (0.985) | 39076 | 10.0000 | 9.34720(a) |
| 120 2-secbutyl-4,6-dinitropheno | 211 | 9.248 | 9.248 | (1.001) | 11575 | 10.0000 | 10.5347 |
| 121 Disulfoton | 88 | 9.224 | 9.224 | (0.998) | 52348 | 10.0000 | 10.5426 |
| 124 Methyl parathion | 109 | 9.536 | 9.536 | (1.032) | 24534 | 10.0000 | 8.42370(a) |
| 126 Parathion | 109 | 9.830 | 9.830 | (1.064) | 15118 | 10.0000 | 7.40546(a) |
| 127 4-Nitroquinoline-1-oxide | 190 | 9.894 | 9.894 | (1.071) | 878 | 10.0000 | 21.0637(Q) |
| 128 Methapyrilene | 97 | 9.918 | 9.918 | (1.073) | 38084 | 10.0000 | 10.3424 |
| 129 Isodrin | 193 | 10.106 | 10.106 | (1.093) | 16081 | 10.0000 | 9.96125(a) |
| 134 Aramite (#1) | 185 | 10.423 | 10.423 | (0.916) | 7694 | 4.60000 | 4.64277(a) |
| 135 Aramite (#2) | 185 | 10.482 | 10.482 | (0.921) | 11060 | 5.40000 | 5.25714(a) |
| 136 p-Dimethylaminoazobenzene | 120 | 10.593 | 10.593 | (0.931) | 33369 | 10.0000 | 9.64718(a) |
| 138 3,3'-Dimethylbenzidine | 212 | 10.864 | 10.864 | (0.955) | 86241 | 10.0000 | 9.70600(aH) |
| 139 2-Acetylaminofluorene | 181 | 11.093 | 11.093 | (0.975) | 45515 | 10.0000 | 7.90869(aH) |
| 149 7,12-Dimethylbenz(a)anthrac | 256 | 12.432 | 12.432 | (0.963) | 59000 | 10.0000 | 9.06327(aH) |
| 152 3-Methylcholanthrene | 268 | 13.290 | 13.290 | (1.030) | 59516 | 10.0000 | 8.89537(aH) |
| 153 Dibenz(a,j)acridine | 279 | 14.154 | 14.154 | (1.096) | 83442 | 10.0000 | 8.68554(aH) |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|----------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| M 1 Total Isosafrole | 162 | | | | 27383 | 10.0000 | 9.77598(a) |
| M 2 Total Diallate | 86 | | | | 47265 | 10.0000 | 10.5719 |
| M 3 Total Aramite | 185 | | | | 18754 | 10.0000 | 9.89433(a) |
| 165 Chlorobenzilate | 251 | 10.611 | 10.611 | (0.932) | 38022 | 10.0000 | 9.53887(a) |
| 199 1,4-Dioxane | 88 | 2.767 | 2.767 | (0.541) | 27300 | 10.0000 | 11.3907 |
| 175 Biphenyl | 154 | 7.456 | 7.456 | (0.931) | 110443 | 10.0000 | 11.4186 |

QC Flag Legend

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

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|---|-------------------------------|
| Instrument ID: K.i | Calibration Date: 29-MAY-2004 |
| Lab File ID: k3375.d | Calibration Time: 13:24 |
| Lab Smp Id: AP9_0010 | Client Smp ID: AP9_0010 |
| Analysis Type: SV | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: kiddd | |
| Method File: /chem/K.i/052904.b/8270C.m | |
| Misc Info: | |

Test Mode:
Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 147164 | 73582 | 294328 | 141454 | -3.88 |
| 49 Naphthalene-d8 | 530122 | 265061 | 1060244 | 553711 | 4.45 |
| 83 Acenaphthene-d10 | 318542 | 159271 | 637084 | 330278 | 3.68 |
| 117 Phenanthrene-d10 | 562072 | 281036 | 1124144 | 605471 | 7.72 |
| 142 Chrysene-d12 | 593593 | 296796 | 1187186 | 617444 | 4.02 |
| 151 Perylene-d12 | 499739 | 249870 | 999478 | 506937 | 1.44 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.00 |
| 117 Phenanthrene-d10 | 9.24 | 8.74 | 9.74 | 9.24 | 0.00 |
| 142 Chrysene-d12 | 11.36 | 10.86 | 11.86 | 11.38 | 0.21 |
| 151 Perylene-d12 | 12.87 | 12.37 | 13.37 | 12.91 | 0.27 |

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/K.i/052904.b/k3375.d

Date : 29-MAY-2004 12:13

Client ID: AP9_0010

Sample Info: AP9_0010,BNA1406,P:050403,E:073104

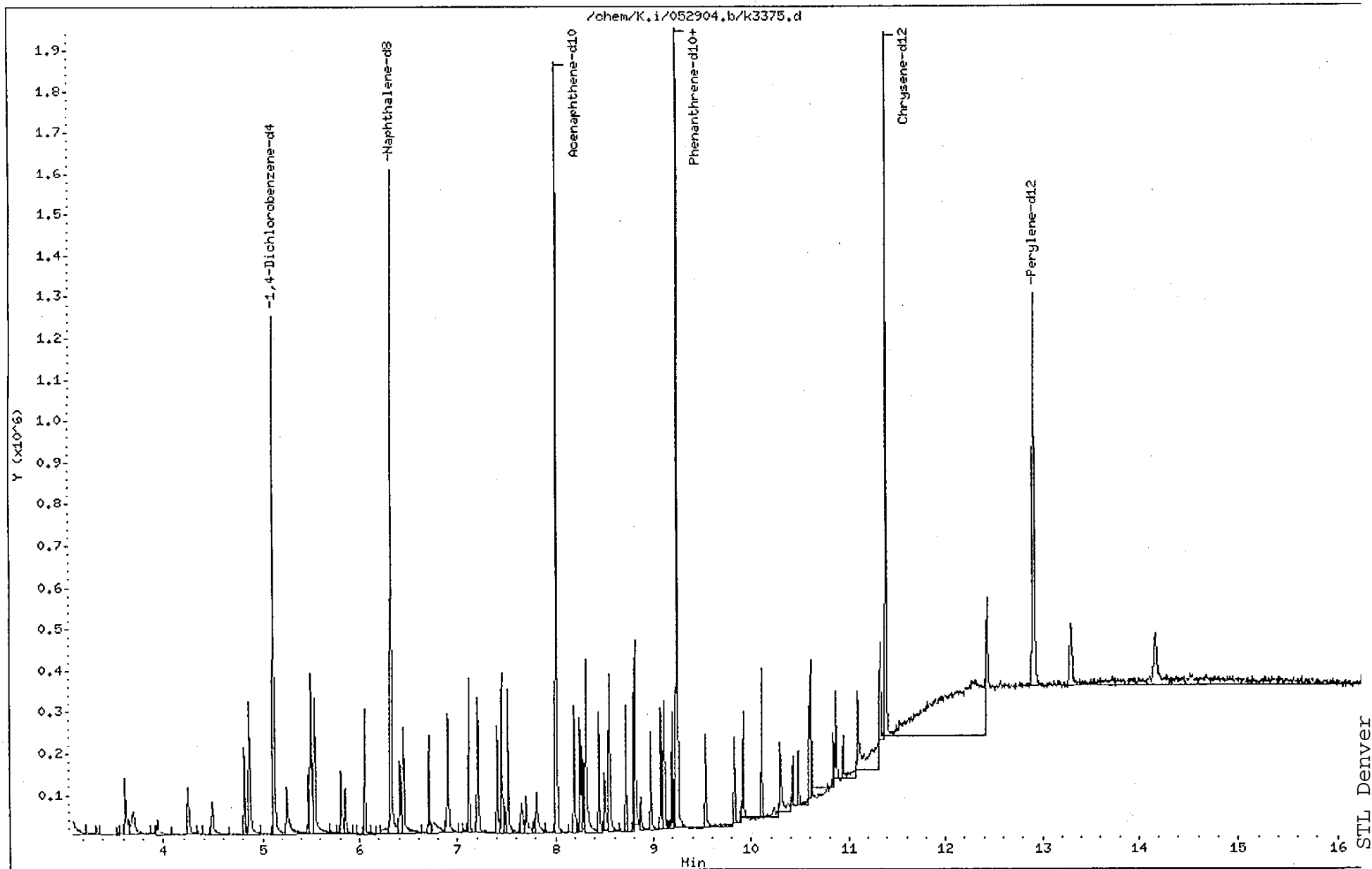
Volume Injected (uL): 0.5

Column phase: Rtx-5ms 30m 0.5um

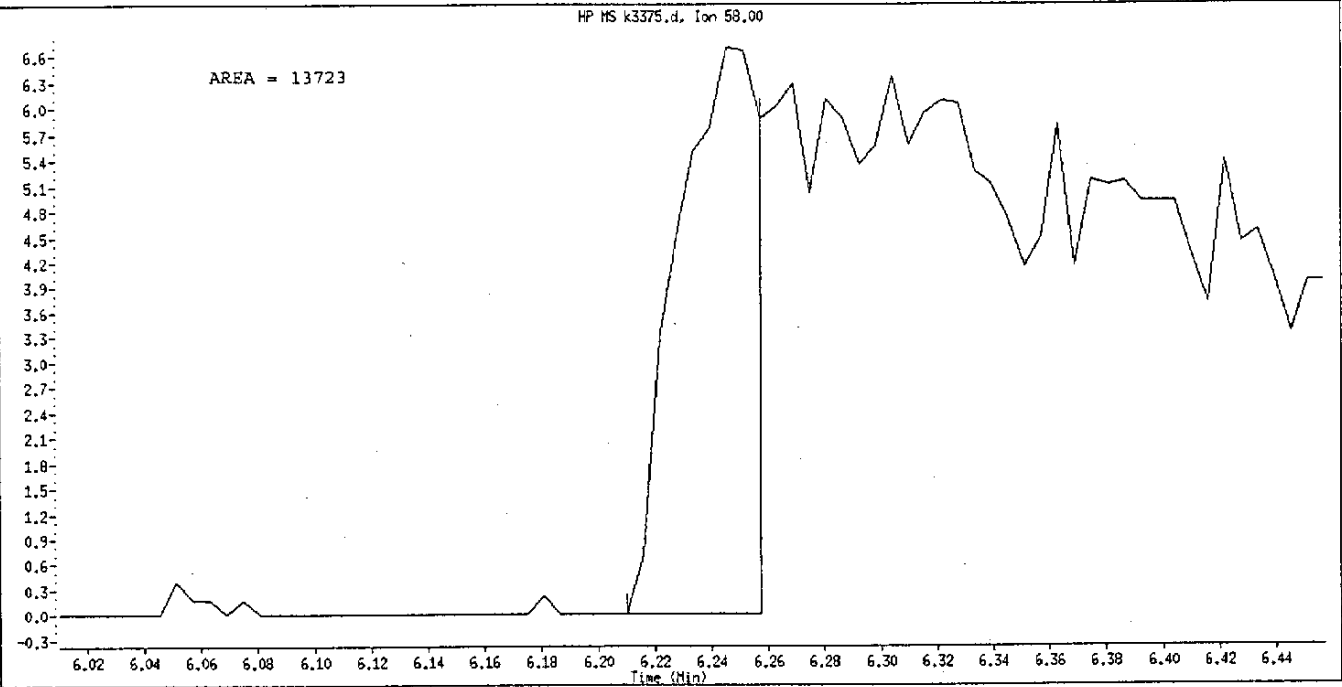
Instrument: K.i

Operator: kidd

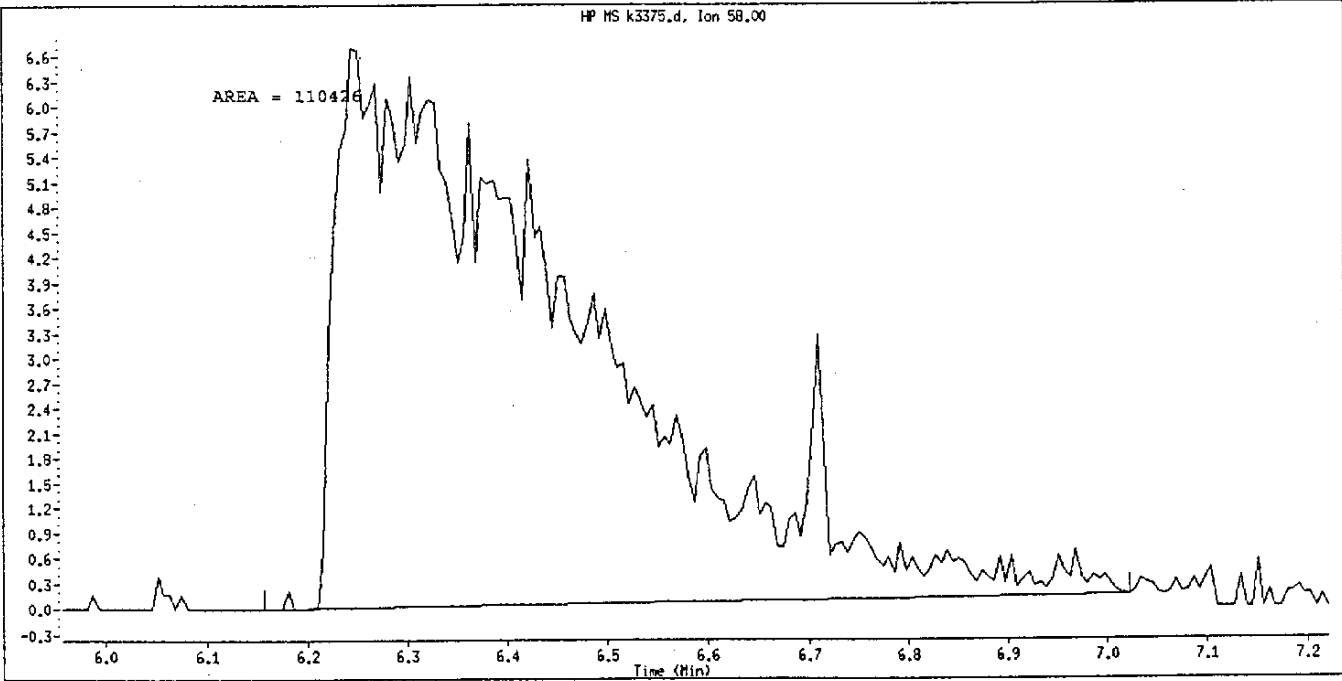
Column diameter: 0.25



Data File Name: k3375.d
Inj. Date and Time: 29-MAY-2004 12:13
Instrument ID: K.i
Client ID: AP9_0010
Compound Name: a,a-Dimethylphenethylamine
CAS #: 122-09-8
Report Date: 05/31/2004



Original Integration



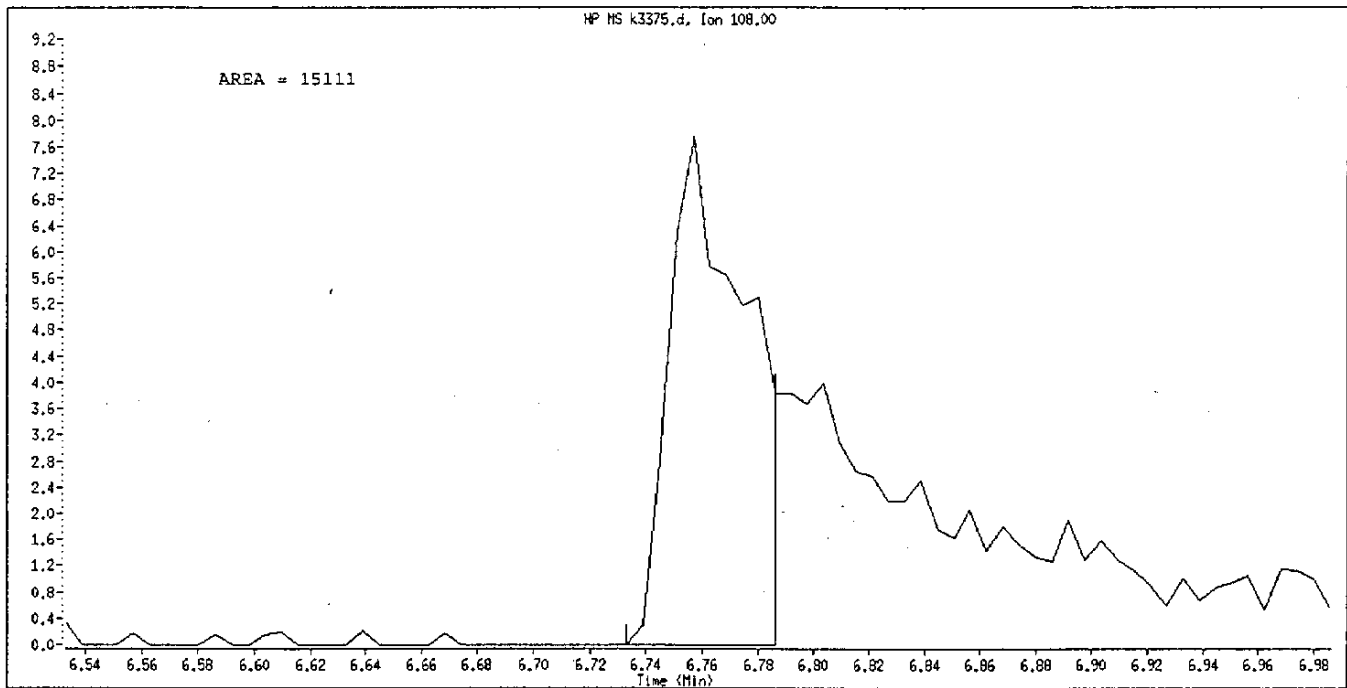
Manual Integration

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

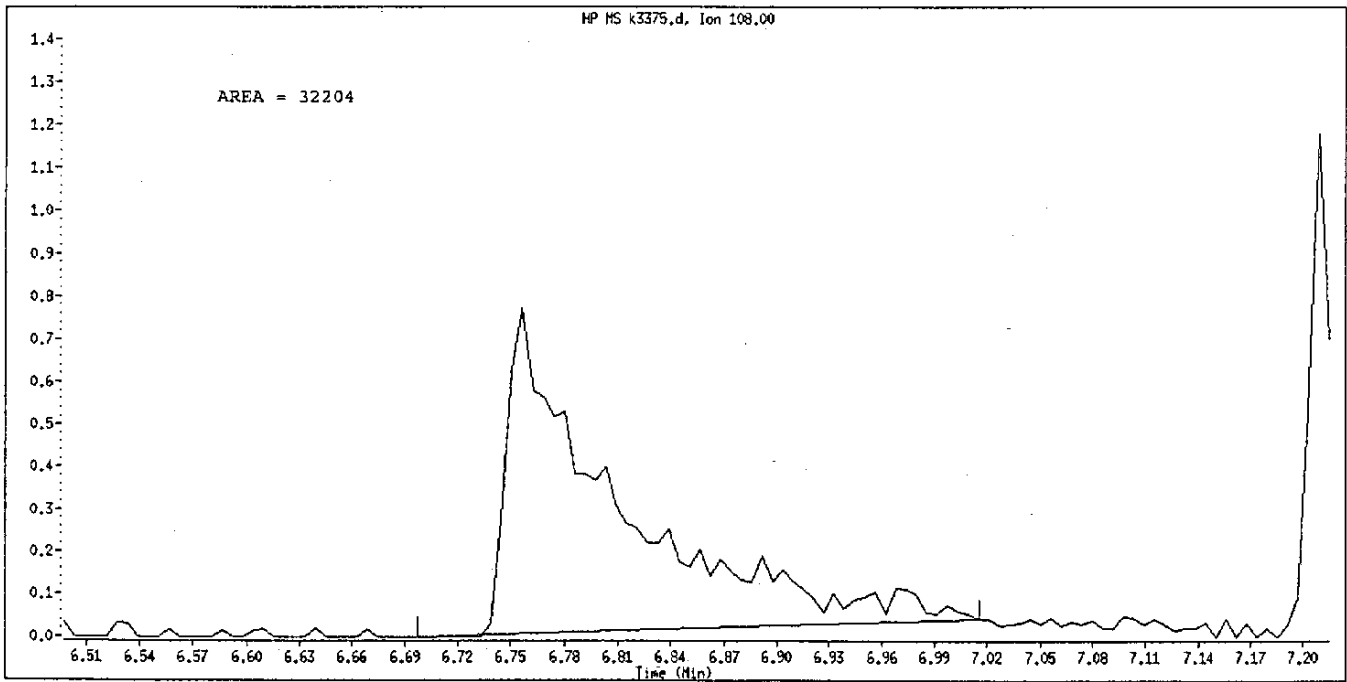
mk
05-31-04

6/1/04 BJS

Data File Name: k3375.d
Inj. Date and Time: 29-MAY-2004 12:13
Instrument ID: K.i
Client ID: AP9_0010
Compound Name: p-Phenylenediamine
CAS #: 106-50-3
Report Date: 05/31/2004



Original Integration



Manual Integration

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

MLK
05-31-04

6-1-04 B/M

mk
05-31-04

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3376.d
Lab Smp Id: AP9_0020 Client Smp ID: AP9_0020
Inj Date : 29-MAY-2004 12:37
Operator : kiddd Inst ID: K.i
Smp Info : AP9_0020,BNA1406,P:050403,E:073104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 16:54 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 12:37 Cal File: k3376.d
Als bottle: 16 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-AP9std.sub
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|-----------------------------|-----------|--------|--------|---------|----------|---------|---------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT | ON-COL |
| | ===== | == | ===== | ===== | ===== | (ug/ml) | (ug/ml) |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 | (1.000) | 150251 | 40.0000 | |
| * 49 Naphthalene-d8 | 136 | 6.321 | 6.321 | (1.000) | 554524 | 40.0000 | |
| * 83 Acenaphthene-d10 | 164 | 8.008 | 8.008 | (1.000) | 328343 | 40.0000 | |
| * 117 Phenanthrene-d10 | 188 | 9.242 | 9.242 | (1.000) | 592486 | 40.0000 | |
| * 142 Chrysene-d12 | 240 | 11.374 | 11.374 | (1.000) | 613530 | 40.0000 | |
| * 151 Perylene-d12 | 264 | 12.896 | 12.896 | (1.000) | 492192 | 40.0000 | |
| 7 2-Picoline | 93 | 3.613 | 3.613 | (0.706) | 115376 | 20.0000 | 19.8906 |
| 8 N-Nitrosomethylethylamine | 88 | 3.701 | 3.701 | (0.723) | 50292 | 20.0000 | 19.1151 |
| 9 Methyl methanesulfonate | 80 | 3.942 | 3.942 | (0.770) | 31245 | 20.0000 | 18.1165 |
| 11 N-Nitrosodiethylamine | 102 | 4.247 | 4.247 | (0.830) | 49130 | 20.0000 | 20.2405 |
| 13 Ethyl methanesulfonate | 79 | 4.482 | 4.482 | (0.876) | 77649 | 20.0000 | 20.2792 |
| 19 Pentachloroethane | 117 | 4.870 | 4.870 | (0.952) | 38944 | 20.0000 | 21.6041 |
| 31 N-Nitrosopyrrolidine | 100 | 5.499 | 5.499 | (1.075) | 48005 | 20.0000 | 20.7005 |
| 34 N-Nitrosomorpholine | 116 | 5.511 | 5.511 | (1.077) | 21022 | 20.0000 | 21.4246 |
| 35 o-Toluidine | 106 | 5.540 | 5.540 | (1.083) | 158200 | 20.0000 | 22.1015 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ---- | == | ===== | ===== | ===== | ===== | ===== |
| 39 N-Nitrosopiperidine | 114 | 5.810 | 5.810 | (0.919) | 47600 | 20.0000 | 20.5846 |
| 44 O,O,O-Triethyl phosphorothio | 198 | 6.057 | 6.057 | (0.958) | 53429 | 20.0000 | 21.0396 |
| 48 a,a-Dimethylphenethylamine | 58 | 6.163 | 6.163 | (0.975) | 171255 | 20.0000 | 12.4078(MH) |
| 53 2,6-Dichlorophenol | 162 | 6.410 | 6.410 | (1.014) | 77550 | 20.0000 | 21.0884 |
| 54 Hexachloropropene | 213 | 6.451 | 6.451 | (1.020) | 66620 | 20.0000 | 19.6756 |
| 57 N-Nitrosodi-n-butylamine | 84 | 6.709 | 6.709 | (1.061) | 64823 | 20.0000 | 20.7722 |
| 58 p-Phenylenediamine | 108 | 6.744 | 6.744 | (1.067) | 80268 | 20.0000 | 19.5748(M) |
| 61 Safrole | 162 | 6.909 | 6.909 | (1.093) | 75950 | 20.0000 | 21.9491 |
| 65 1,2,4,5-Tetrachlorobenzene | 216 | 7.209 | 7.209 | (1.140) | 94456 | 20.0000 | 21.1088 |
| 66 Isosafrole (#1) | 162 | 7.197 | 7.197 | (0.899) | 8664 | 3.50000 | 3.37330(a) |
| 72 Isosafrole (#2) | 104 | 7.402 | 7.402 | (0.924) | 48019 | 16.5000 | 16.9648 |
| 73 1-Chloronaphthalene | 162 | 7.520 | 7.520 | (0.939) | 162444 | 20.0000 | 21.0398 |
| 75 1,4-Napththoquinone | 158 | 7.649 | 7.649 | (0.955) | 32988 | 20.0000 | 19.0706 |
| 78 1,4-Dinitrobenzene | 168 | 7.696 | 7.696 | (0.961) | 20446 | 20.0000 | 17.1427 |
| 80 1,3-Dinitrobenzene | 168 | 7.808 | 7.808 | (0.975) | 25236 | 20.0000 | 18.0439 |
| 89 Pentachlorobenzene | 250 | 8.196 | 8.196 | (1.023) | 76631 | 20.0000 | 20.5509 |
| 90 1-Naphthylamine | 143 | 8.249 | 8.249 | (1.030) | 158093 | 20.0000 | 21.1897 |
| 91 2,3,4,6-Tetrachlorophenol | 232 | 8.313 | 8.313 | (1.038) | 50417 | 20.0000 | 19.7778 |
| 92 2-Naphthylamine | 143 | 8.313 | 8.313 | (1.038) | 148094 | 20.0000 | 19.8239 |
| 98 Thionazin | 97 | 8.442 | 8.442 | (1.054) | 47205 | 20.0000 | 21.1288 |
| 100 5-Nitro-o-toluidine | 152 | 8.501 | 8.501 | (1.062) | 48359 | 20.0000 | 19.2802 |
| 182 Diphenylamine | 169 | 8.548 | 8.548 | (1.067) | 167245 | 20.0000 | 20.6182 |
| 104 Sulfotepp | 97 | 8.719 | 8.719 | (0.943) | 34627 | 20.0000 | 20.2970 |
| 105 1,3,5-Trinitrobenzene | 213 | 8.801 | 8.801 | (0.952) | 12731 | 20.0000 | 20.1711 |
| 106 Diallate (#1) | 86 | 8.795 | 8.795 | (0.952) | 74283 | 14.4000 | 15.2875 |
| 107 Phorate | 121 | 8.813 | 8.813 | (0.954) | 33841 | 20.0000 | 22.0286 |
| 109 Phenacetin | 108 | 8.813 | 8.813 | (0.954) | 81971 | 20.0000 | 18.6320 |
| 111 Diallate (#2) | 86 | 8.871 | 8.871 | (0.960) | 16422 | 5.60000 | 5.31622(a) |
| 112 Dimethoate | 87 | 8.971 | 8.971 | (0.971) | 77386 | 20.0000 | 21.7711 |
| 114 4-Aminobiphenyl | 169 | 9.077 | 9.077 | (0.982) | 203805 | 20.0000 | 20.3086 |
| 115 Pentachloronitrobenzene | 237 | 9.189 | 9.189 | (0.994) | 27766 | 20.0000 | 18.2662 |
| 116 Pronamide | 173 | 9.112 | 9.112 | (0.986) | 79452 | 20.0000 | 19.4219 |
| 120 2-secbutyl-4,6-dinitropheno | 211 | 9.247 | 9.247 | (1.001) | 31155 | 20.0000 | 18.2211 |
| 121 Disulfoton | 88 | 9.224 | 9.224 | (0.998) | 103698 | 20.0000 | 21.3419 |
| 124 Methyl parathion | 109 | 9.535 | 9.535 | (1.032) | 55093 | 20.0000 | 19.3306 |
| 126 Parathion | 109 | 9.823 | 9.823 | (1.063) | 35317 | 20.0000 | 17.6790 |
| 127 4-Nitroquinoline-1-oxide | 190 | 9.894 | 9.894 | (1.071) | 5455 | 20.0000 | 25.5314 |
| 128 Methapyrilene | 97 | 9.917 | 9.917 | (1.073) | 75579 | 20.0000 | 20.9746 |
| 129 Isodrin | 193 | 10.105 | 10.105 | (1.093) | 32990 | 20.0000 | 20.8832 |
| 134 Aramite (#1) | 185 | 10.417 | 10.417 | (0.916) | 14859 | 9.20000 | 9.02352(a) |
| 135 Aramite (#2) | 185 | 10.475 | 10.475 | (0.921) | 22323 | 10.8000 | 10.6785 |
| 136 p-Dimethylaminoazobenzene | 120 | 10.587 | 10.587 | (0.931) | 71910 | 20.0000 | 20.9222 |
| 138 3,3'-Dimethylbenzidine | 212 | 10.857 | 10.857 | (0.955) | 168549 | 20.0000 | 19.0904 |
| 139 2-Acetylaminofluorene | 181 | 11.086 | 11.086 | (0.975) | 97979 | 20.0000 | 17.1334 |
| 149 7,12-Dimethylbenz(a)anthrac | 256 | 12.420 | 12.420 | (0.963) | 115395 | 20.0000 | 18.2574(H) |
| 152 3-Methylcholanthrene | 268 | 13.278 | 13.278 | (1.030) | 119264 | 20.0000 | 18.3594(H) |
| 153 Dibenz(a,j)acridine | 279 | 14.142 | 14.142 | (1.097) | 171147 | 20.0000 | 18.3485 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|----------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| M 1 Total Isosafrole | 162 | | | | 56683 | 20.0000 | 20.3556 |
| M 2 Total Diallate | 86 | | | | 90705 | 20.0000 | 20.7328 |
| M 3 Total Aramite | 185 | | | | 37182 | 20.0000 | 19.7418 |
| 165 Chlorobenzilate | 251 | 10.611 | 10.611 | (0.933) | 75981 | 20.0000 | 19.1835 |
| 199 1,4-Dioxane | 88 | 2.767 | 2.767 | (0.541) | 54800 | 20.0000 | 21.5262 |
| 175 Biphenyl | 154 | 7.455 | 7.455 | (0.931) | 200066 | 20.0000 | 20.8065 |

QC Flag Legend

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

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|---|-------------------------------|
| Instrument ID: K.i | Calibration Date: 29-MAY-2004 |
| Lab File ID: k3376.d | Calibration Time: 13:24 |
| Lab Smp Id: AP9 0020 | Client Smp ID: AP9_0020 |
| Analysis Type: SV | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: kiddd | |
| Method File: /chem/K.i/052904.b/8270C.m | |
| Misc Info: | |

Test Mode: Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 147164 | 73582 | 294328 | 150251 | 2.10 |
| 49 Naphthalene-d8 | 530122 | 265061 | 1060244 | 554524 | 4.60 |
| 83 Acenaphthene-d10 | 318542 | 159271 | 637084 | 328343 | 3.08 |
| 117 Phenanthrene-d10 | 562072 | 281036 | 1124144 | 592486 | 5.41 |
| 142 Chrysene-d12 | 593593 | 296796 | 1187186 | 613530 | 3.36 |
| 151 Perylene-d12 | 499739 | 249870 | 999478 | 492192 | -1.51 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | -0.01 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.00 |
| 117 Phenanthrene-d10 | 9.24 | 8.74 | 9.74 | 9.24 | 0.00 |
| 142 Chrysene-d12 | 11.36 | 10.86 | 11.86 | 11.37 | 0.15 |
| 151 Perylene-d12 | 12.87 | 12.37 | 13.37 | 12.90 | 0.18 |

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/K,i/052904,b/k3376.d

Page 5

Date : 29-MAY-2004 12:37

Client ID: AP9_0020

Instrument: K.i

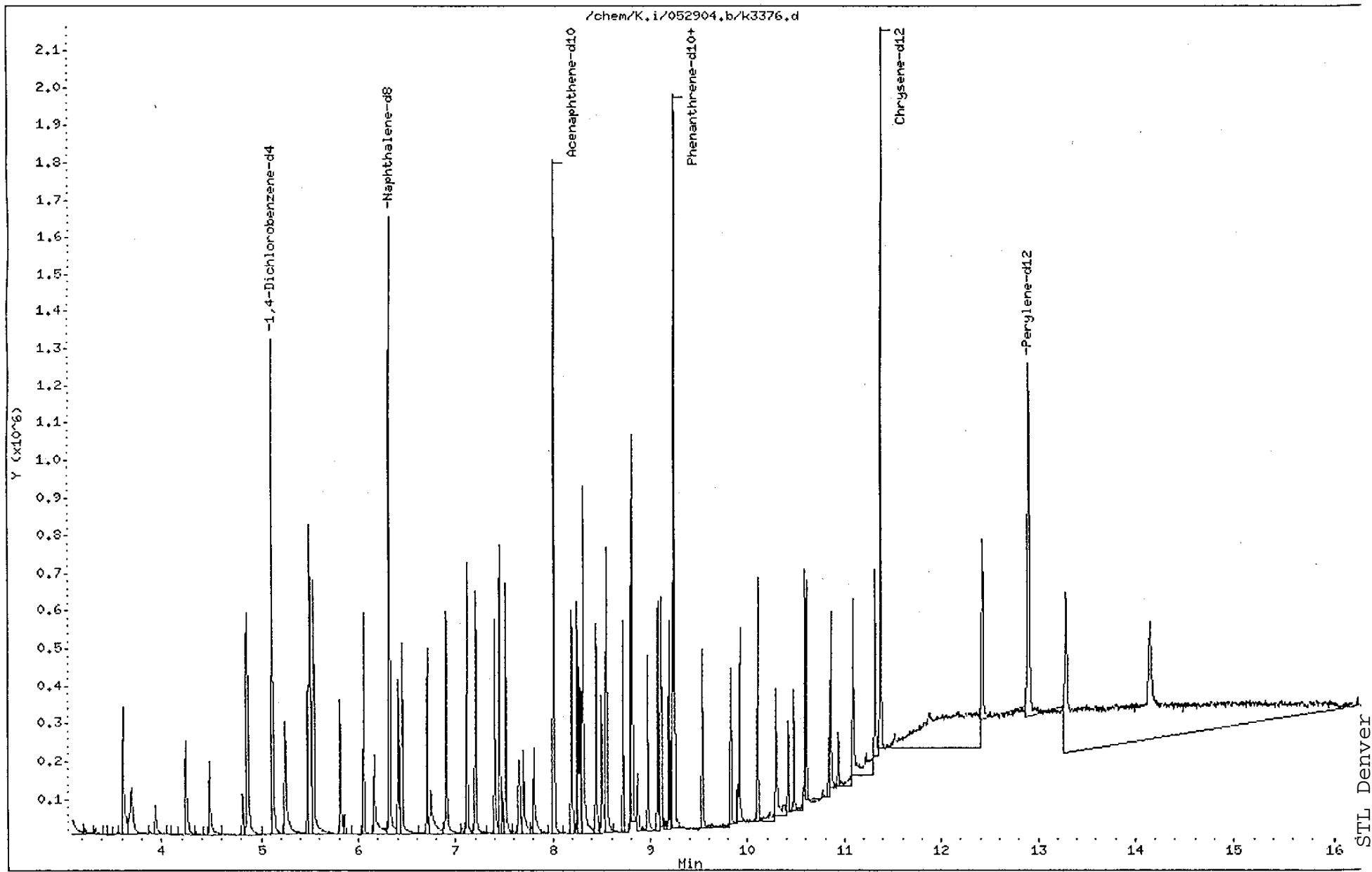
Sample Info: AP9_0020,BNA1406,P:050403,E:073104

Volume Injected (uL): 0.5

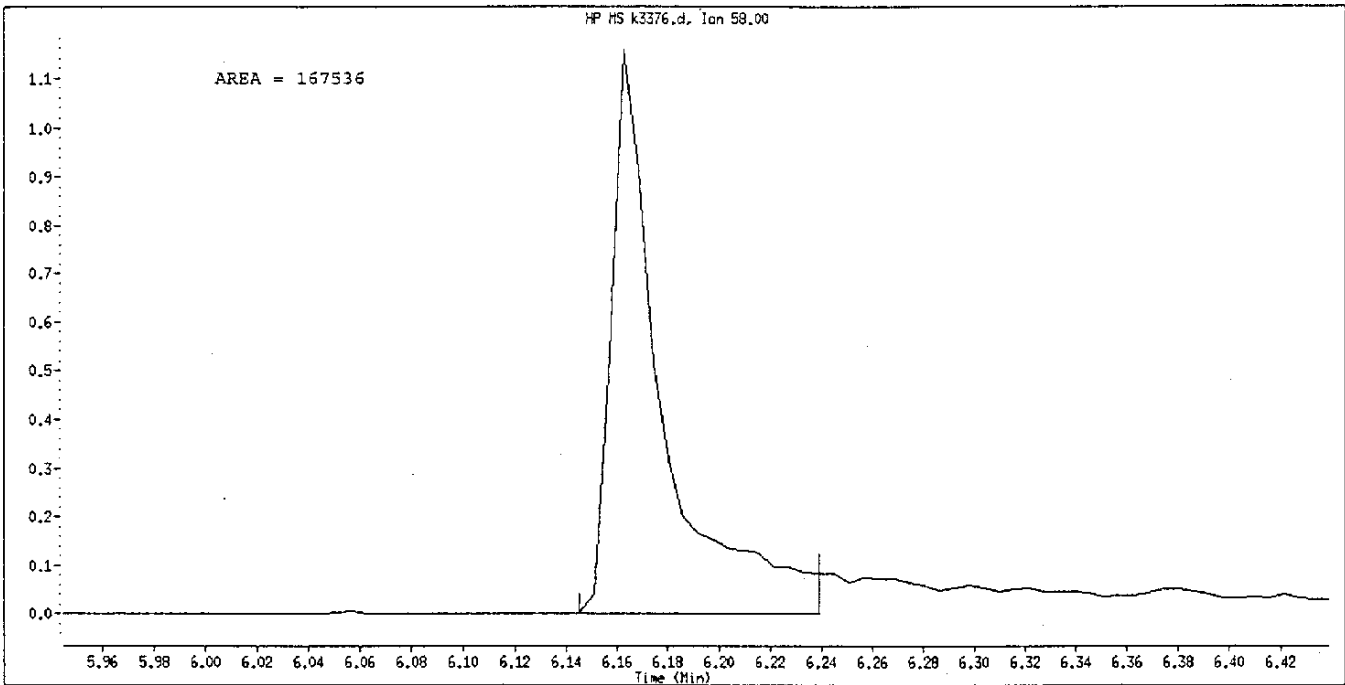
Operator: kidd

Column phase: Rtx-5ms 30m 0.5um

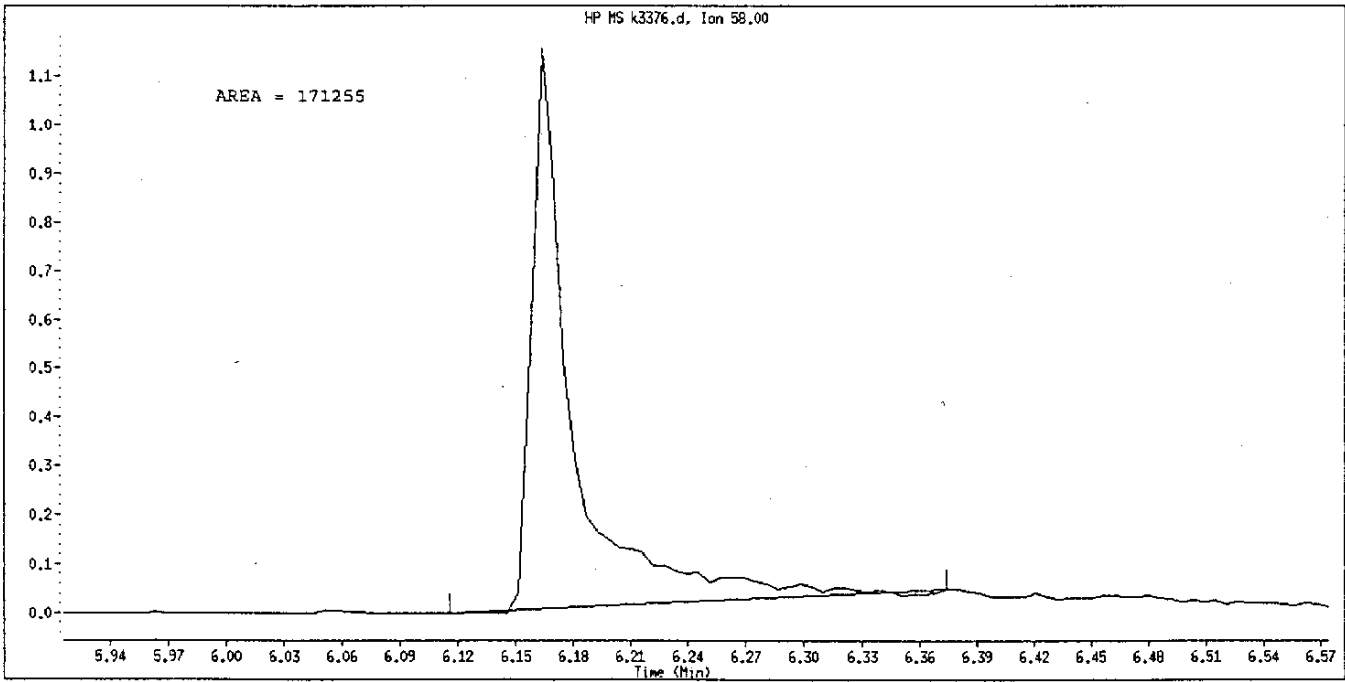
Column diameter: 0.25



Data File Name: k3376.d
Inj. Date and Time: 29-MAY-2004 12:37
Instrument ID: K.i
Client ID: AP9_0020
Compound Name: a,a-Dimethylphenethylamine
CAS #: 122-09-8
Report Date: 05/31/2004



Original Integration



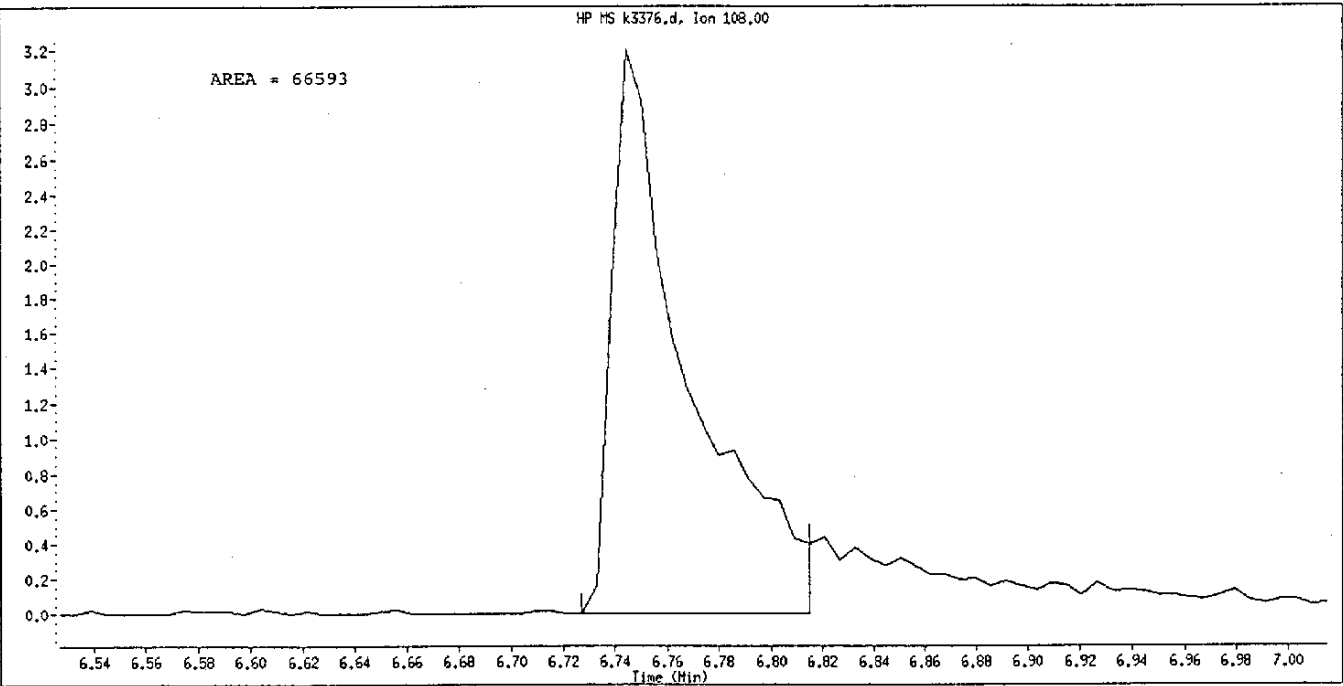
Manual Integration

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

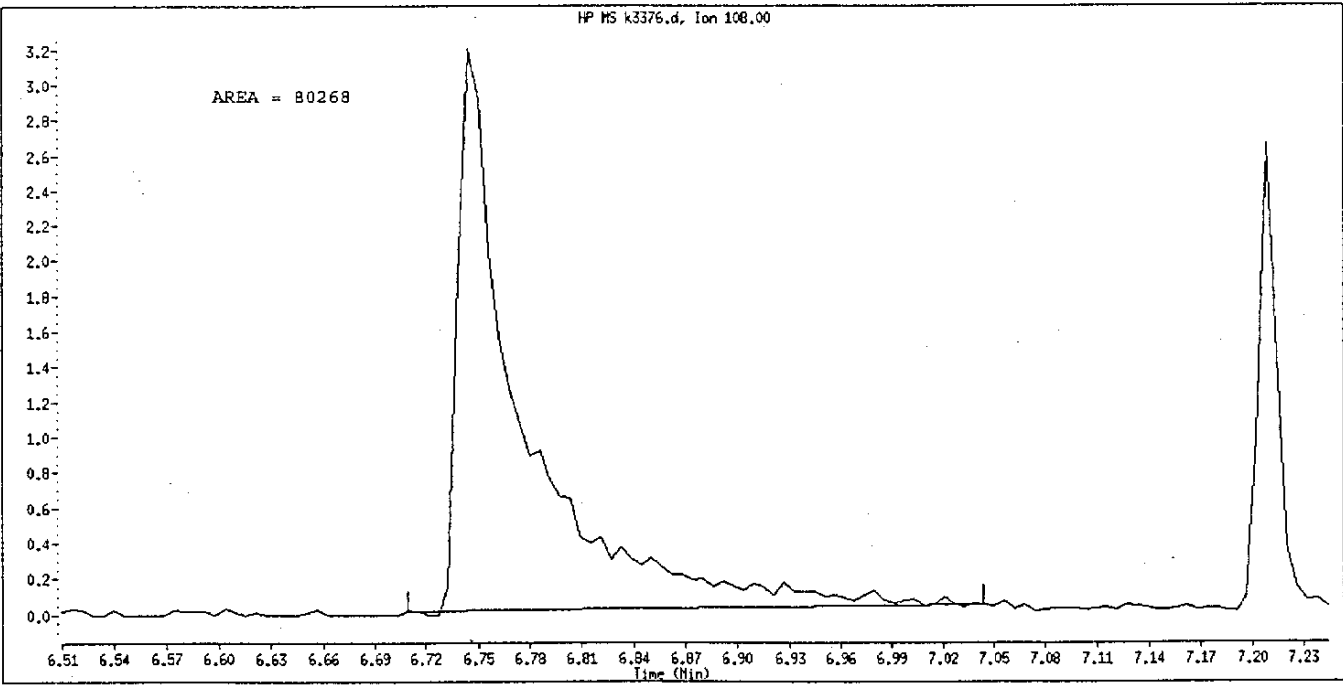
max
05-31-04

6.1.04 p/b

Data File Name: k3376.d
Inj. Date and Time: 29-MAY-2004 12:37
Instrument ID: K.i
Client ID: AP9_0020
Compound Name: p-Phenylenediamine
CAS #: 106-50-3
Report Date: 05/31/2004



Original Integration



Manual Integration

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

mm
05-31-04

6.1.04
B/B

MLK
05-31-04

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3377.d
Lab Smp Id: AP9_0050 Client Smp ID: AP9_0050
Inj Date : 29-MAY-2004 13:00
Operator : kiddd Inst ID: K.i
Smp Info : AP9_0050,BNA1406,P:050403,E:073104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 16:55 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 13:00 Cal File: k3377.d
Als bottle: 17 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-AP9std.sub
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | | | | AMOUNTS | | |
|-----------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 | (1.000) | 143014 | 40.0000 | |
| * 49 Naphthalene-d8 | 136 | 6.322 | 6.322 | (1.000) | 537666 | 40.0000 | |
| * 83 Acenaphthene-d10 | 164 | 8.008 | 8.008 | (1.000) | 311269 | 40.0000 | |
| * 117 Phenanthrene-d10 | 188 | 9.248 | 9.248 | (1.000) | 552872 | 40.0000 | |
| * 142 Chrysene-d12 | 240 | 11.375 | 11.375 | (1.000) | 580323 | 40.0000 | |
| * 151 Perylene-d12 | 264 | 12.902 | 12.902 | (1.000) | 477898 | 40.0000 | |
| 7 2-Picoline | 93 | 3.607 | 3.607 | (0.705) | 309895 | 50.0000 | 56.1287 |
| 8 N-Nitrosomethylethylamine | 88 | 3.695 | 3.695 | (0.722) | 136106 | 50.0000 | 54.3494 |
| 9 Methyl methanesulfonate | 80 | 3.936 | 3.936 | (0.769) | 90872 | 50.0000 | 55.3558 |
| 11 N-Nitrosodiethylamine | 102 | 4.242 | 4.242 | (0.829) | 128578 | 50.0000 | 55.6519 |
| 13 Ethyl methanesulfonate | 79 | 4.483 | 4.483 | (0.876) | 196961 | 50.0000 | 54.0423 |
| 19 Pentachloroethane | 117 | 4.870 | 4.870 | (0.952) | 94014 | 50.0000 | 54.7933 |
| 31 N-Nitrosopyrrolidine | 100 | 5.499 | 5.499 | (1.075) | 119347 | 50.0000 | 54.0686 |
| 34 N-Nitrosomorpholine | 116 | 5.511 | 5.511 | (1.077) | 51136 | 50.0000 | 54.7526 |
| 35 o-Toluidine | 106 | 5.540 | 5.540 | (1.083) | 380291 | 50.0000 | 55.8174 |

| Compounds | QUANT SIG | | | | | | | AMOUNTS | |
|----------------------------------|-----------|--------|--------|---------|----------|---------|------------|---------|---------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT | ON-COL | (ug/ml) | (ug/ml) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== | ===== | ===== |
| 39 N-Nitrosopiperidine | 114 | 5.810 | 5.810 | (0.919) | 119602 | 50.0000 | 53.3436 | | |
| 44 O,O,O-Triethyl phosphorothio | 198 | 6.057 | 6.057 | (0.958) | 126804 | 50.0000 | 51.4993 | | |
| 48 a,a-Dimethylphenethylamine | 58 | 6.175 | 6.175 | (0.977) | 525537 | 50.0000 | 39.2701(M) | | |
| 53 2,6-Dichlorophenol | 162 | 6.410 | 6.410 | (1.014) | 193279 | 50.0000 | 54.2069 | | |
| 54 Hexachloropropene | 213 | 6.451 | 6.451 | (1.020) | 174876 | 50.0000 | 53.2674 | | |
| 57 N-Nitrosodi-n-butylamine | 84 | 6.709 | 6.709 | (1.061) | 159393 | 50.0000 | 52.6783 | | |
| 58 p-Phenylenediamine | 108 | 6.745 | 6.745 | (1.067) | 220276 | 50.0000 | 55.4024 | | |
| 61 Saffrole | 162 | 6.909 | 6.909 | (1.093) | 177698 | 50.0000 | 52.9638 | | |
| 65 1,2,4,5-Tetrachlorobenzene | 216 | 7.209 | 7.209 | (1.140) | 224129 | 50.0000 | 51.6582 | | |
| 66 Isosafrole (#1) | 162 | 7.197 | 7.197 | (0.899) | 24093 | 8.75000 | 9.89510(a) | | |
| 72 Isosafrole (#2) | 104 | 7.403 | 7.403 | (0.924) | 119210 | 41.2500 | 44.4263 | | |
| 73 1-Chloronaphthalene | 162 | 7.520 | 7.520 | (0.939) | 387025 | 50.0000 | 52.8772 | | |
| 75 1,4-Napthoquinone | 158 | 7.649 | 7.649 | (0.955) | 93022 | 50.0000 | 56.7266 | | |
| 78 1,4-Dinitrobenzene | 168 | 7.697 | 7.697 | (0.961) | 63207 | 50.0000 | 55.9020 | | |
| 80 1,3-Dinitrobenzene | 168 | 7.802 | 7.802 | (0.974) | 75292 | 50.0000 | 56.7872 | | |
| 89 Pentachlorobenzene | 250 | 8.196 | 8.196 | (1.023) | 180049 | 50.0000 | 50.9342 | | |
| 90 1-Naphthylamine | 143 | 8.249 | 8.249 | (1.030) | 394161 | 50.0000 | 55.7286 | | |
| 91 2,3,4,6-Tetrachlorophenol | 232 | 8.313 | 8.313 | (1.038) | 116971 | 50.0000 | 48.4029 | | |
| 92 2-Naphthylamine | 143 | 8.313 | 8.313 | (1.038) | 375646 | 50.0000 | 53.0422 | | |
| 98 Thionazin | 97 | 8.443 | 8.443 | (1.054) | 113964 | 50.0000 | 53.8080 | | |
| 100 5-Nitro-o-toluidine | 152 | 8.501 | 8.501 | (1.062) | 129502 | 50.0000 | 54.4631 | | |
| 182 Diphenylamine | 169 | 8.554 | 8.554 | (1.068) | 394333 | 50.0000 | 51.2806 | | |
| 104 Sulfotepp | 97 | 8.719 | 8.719 | (0.943) | 83673 | 50.0000 | 52.5600 | | |
| 105 1,3,5-Trinitrobenzene | 213 | 8.801 | 8.801 | (0.952) | 41686 | 50.0000 | 51.6102 | | |
| 106 Diallate (#1) | 86 | 8.795 | 8.795 | (0.951) | 182269 | 36.0000 | 40.1989 | | |
| 107 Phorate | 121 | 8.813 | 8.813 | (0.953) | 80919 | 50.0000 | 56.4478 | | |
| 109 Phenacetin | 108 | 8.819 | 8.819 | (0.954) | 222813 | 50.0000 | 54.2743 | | |
| 111 Diallate (#2) | 86 | 8.872 | 8.872 | (0.959) | 42214 | 14.0000 | 14.6449 | | |
| 112 Dimethoate | 87 | 8.977 | 8.977 | (0.971) | 197721 | 50.0000 | 59.6107 | | |
| 114 4-Aminobiphenyl | 169 | 9.077 | 9.077 | (0.982) | 515235 | 50.0000 | 55.0204 | | |
| 115 Pentachloronitrobenzene | 237 | 9.189 | 9.189 | (0.994) | 73085 | 50.0000 | 51.5248 | | |
| 116 Pronamide | 173 | 9.113 | 9.113 | (0.985) | 200997 | 50.0000 | 52.6538 | | |
| 120 2-secbutyl-4,6-dinitrophenol | 211 | 9.248 | 9.248 | (1.000) | 103412 | 50.0000 | 49.1037 | | |
| 121 Disulfoton | 88 | 9.224 | 9.224 | (0.997) | 262643 | 50.0000 | 57.9272 | | |
| 124 Methyl parathion | 109 | 9.536 | 9.536 | (1.031) | 150588 | 50.0000 | 56.6231 | | |
| 126 Parathion | 109 | 9.829 | 9.829 | (1.063) | 98314 | 50.0000 | 52.7402 | | |
| 127 4-Nitroquinoline-1-oxide | 190 | 9.894 | 9.894 | (1.070) | 29146 | 50.0000 | 50.5926(Q) | | |
| 128 Methapyrilene | 97 | 9.917 | 9.917 | (1.072) | 192035 | 50.0000 | 57.1119 | | |
| 129 Isodrin | 193 | 10.105 | 10.105 | (1.093) | 79250 | 50.0000 | 53.7612 | | |
| 134 Aramite (#1) | 185 | 10.417 | 10.417 | (0.916) | 38915 | 23.0000 | 24.9844 | | |
| 135 Aramite (#2) | 185 | 10.476 | 10.476 | (0.921) | 61239 | 27.0000 | 30.9706 | | |
| 136 p-Dimethylaminoazobenzene | 120 | 10.587 | 10.587 | (0.931) | 184213 | 50.0000 | 56.6638 | | |
| 138 3,3'-Dimethylbenzidine | 212 | 10.863 | 10.863 | (0.955) | 448115 | 50.0000 | 53.6592 | | |
| 139 2-Acetylaminofluorene | 181 | 11.093 | 11.093 | (0.975) | 286681 | 50.0000 | 53.0001 | | |
| 149 7,12-Dimethylbenz(a)anthrac | 256 | 12.420 | 12.420 | (0.963) | 306748 | 50.0000 | 49.9843(H) | | |
| 152 3-Methylcholanthrene | 268 | 13.284 | 13.284 | (1.030) | 317712 | 50.0000 | 50.3712(H) | | |
| 153 Dibenz(a,j)acridine | 279 | 14.148 | 14.148 | (1.097) | 468842 | 50.0000 | 51.7675 | | |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|----------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ----- | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| M 1 Total Isosafrole | 162 | | | | 143303 | 50.0000 | 54.2848 |
| M 2 Total Diallate | 86 | | | | 224483 | 50.0000 | 54.9876 |
| M 3 Total Aramite | 185 | | | | 100154 | 50.0000 | 56.2197 |
| 165 Chlorobenzilate | 251 | 10.611 | 10.611 | (0.933) | 196458 | 50.0000 | 52.4396 |
| 199 1,4-Dioxane | 88 | 2.767 | 2.767 | (0.541) | 131006 | 50.0000 | 54.0650 |
| 175 Biphenyl | 154 | 7.456 | 7.456 | (0.931) | 477974 | 50.0000 | 52.4351 |

QC Flag Legend

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

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: K.i
Lab File ID: k3377.d
Lab Smp Id: AP9_0050
Analysis Type: SV
Quant Type: ISTD
Operator: kiddd
Method File: /chem/K.i/052904.b/8270C.m
Misc Info:

Calibration Date: 29-MAY-2004
Calibration Time: 13:24
Client Smp ID: AP9_0050
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 147164 | 73582 | 294328 | 143014 | -2.82 |
| 49 Naphthalene-d8 | 530122 | 265061 | 1060244 | 537666 | 1.42 |
| 83 Acenaphthene-d10 | 318542 | 159271 | 637084 | 311269 | -2.28 |
| 117 Phenanthrene-d10 | 562072 | 281036 | 1124144 | 552872 | -1.64 |
| 142 Chrysene-d12 | 593593 | 296796 | 1187186 | 580323 | -2.24 |
| 151 Perylene-d12 | 499739 | 249870 | 999478 | 477898 | -4.37 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.00 |
| 117 Phenanthrene-d10 | 9.24 | 8.74 | 9.74 | 9.25 | 0.06 |
| 142 Chrysene-d12 | 11.36 | 10.86 | 11.86 | 11.37 | 0.15 |
| 151 Perylene-d12 | 12.87 | 12.37 | 13.37 | 12.90 | 0.23 |

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/K.i/052904.b/k3377.d

Page 5

Date : 29-MAY-2004 13:00

Client ID: AP9_0050

Instrument: K.i

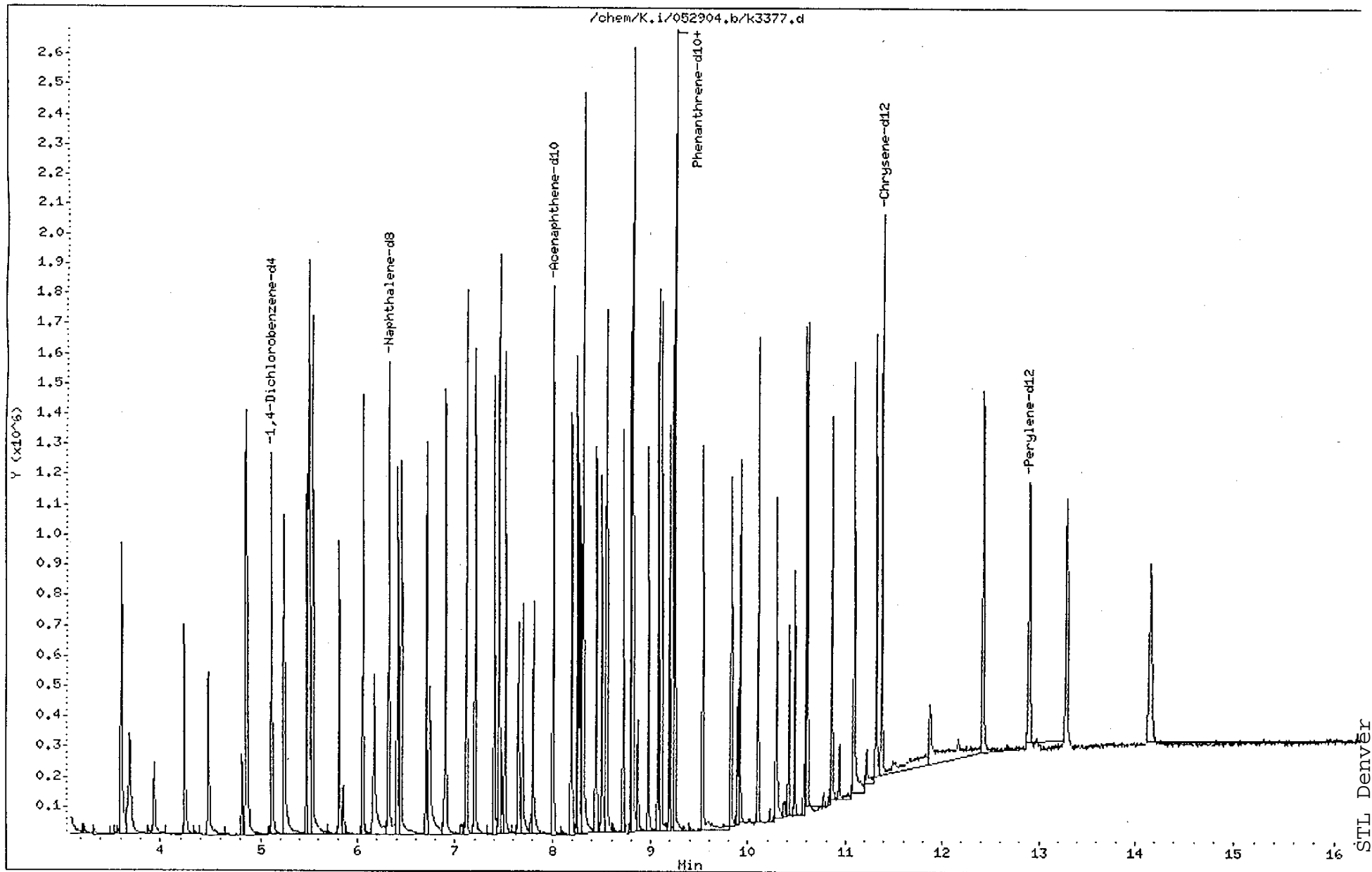
Sample Info: AP9_0050,BHA1406,P:050403,E:073104

Volume Injected (uL): 0.5

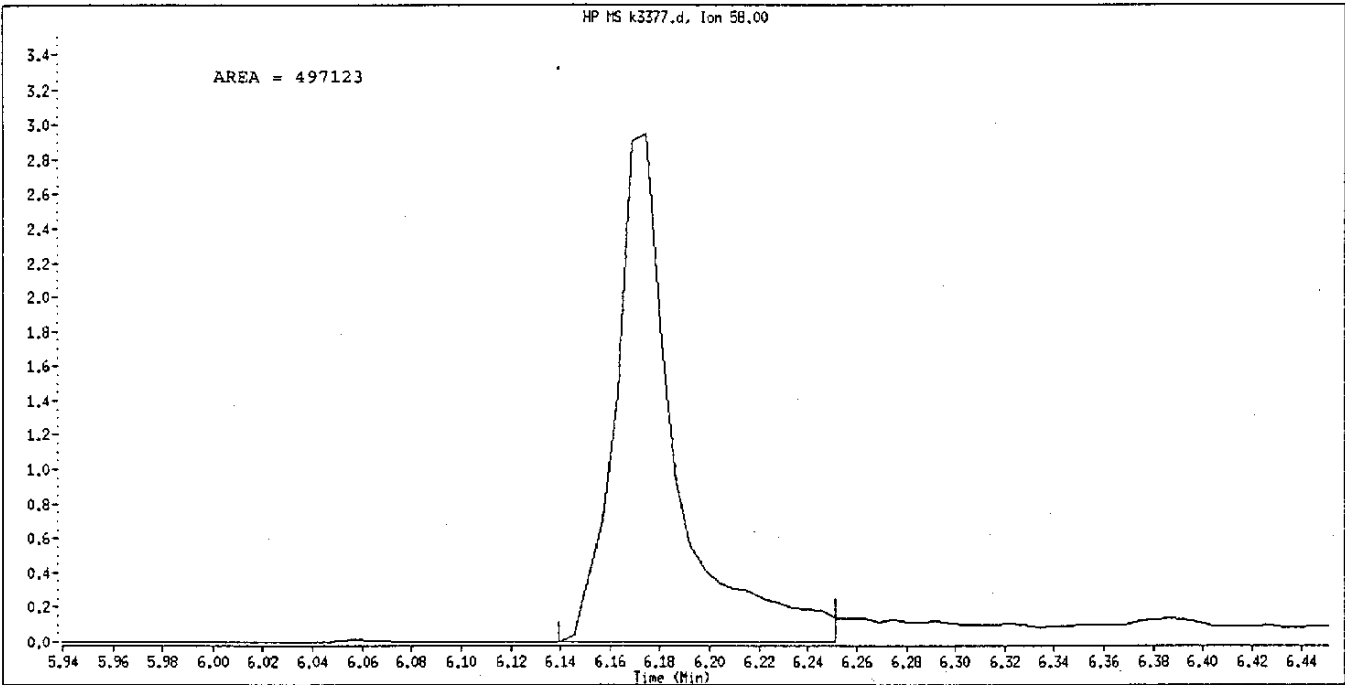
Operator: kidd

Column phase: Rtx-5ms 30m 0.5um

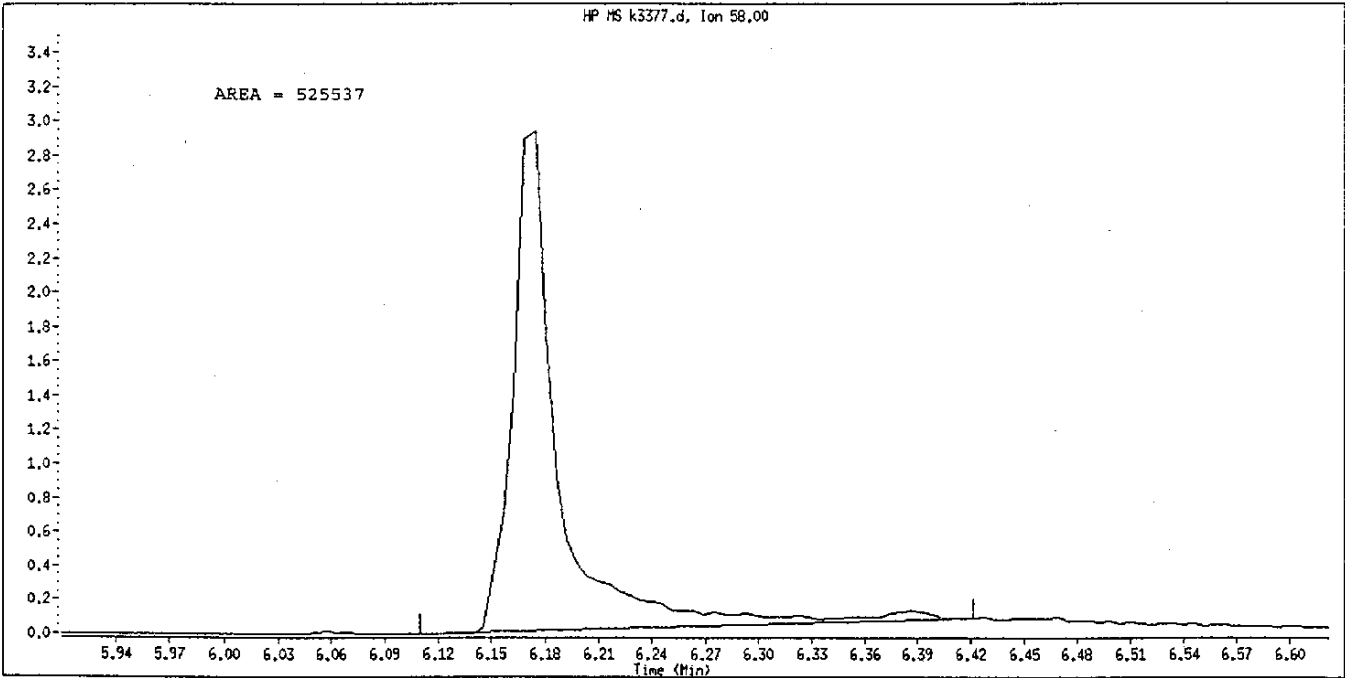
Column diameter: 0.25



Data File Name: k3377.d
Inj. Date and Time: 29-MAY-2004 13:00
Instrument ID: K.i
Client ID: AP9_0050
Compound Name: a,a-Dimethylphenethylamine
CAS #: 122-09-8
Report Date: 05/31/2004



Original Integration



Manual Integration

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

max
05-31-04

6-11-04 B/S

mv
05-31-04

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3378.d
Lab Smp Id: AP9_0080 Client Smp ID: AP9_0080
Inj Date : 29-MAY-2004 13:24
Operator : kiddd Inst ID: K.i
Smp Info : AP9_0080,BNA1406,P:050403,E:073104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 16:56 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 13:24 Cal File: k3378.d
Als bottle: 18 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-AP9std.sub
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | | | | | | AMOUNTS | |
|-----------------------------|-----------|--------|--------|---------|----------|--|---------|---------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | | CAL-AMT | ON-COL |
| | | | | | | | (ug/ml) | (ug/ml) |
| ***** | **** | == | ===== | ===== | ***** | | ***** | ***** |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 | (1.000) | 147164 | | 40.0000 | |
| * 49 Naphthalene-d8 | 136 | 6.322 | 6.322 | (1.000) | 530122 | | 40.0000 | |
| * 83 Acenaphthene-d10 | 164 | 8.008 | 8.008 | (1.000) | 318542 | | 40.0000 | |
| * 117 Phenanthrene-d10 | 188 | 9.242 | 9.242 | (1.000) | 562072 | | 40.0000 | |
| * 142 Chrysene-d12 | 240 | 11.357 | 11.357 | (1.000) | 593593 | | 40.0000 | |
| * 151 Perylene-d12 | 264 | 12.873 | 12.873 | (1.000) | 499739 | | 40.0000 | |
| 7 2-Picoline | 93 | 3.601 | 3.601 | (0.704) | 450292 | | 80.0000 | 79.2577 |
| 8 N-Nitrosomethylethylamine | 88 | 3.695 | 3.695 | (0.722) | 204796 | | 80.0000 | 79.4723 |
| 9 Methyl methanesulfonate | 80 | 3.936 | 3.936 | (0.769) | 139850 | | 80.0000 | 82.7890 |
| 11 N-Nitrosodiethylamine | 102 | 4.242 | 4.242 | (0.829) | 189186 | | 80.0000 | 79.5754 |
| 13 Ethyl methanesulfonate | 79 | 4.483 | 4.483 | (0.876) | 289309 | | 80.0000 | 77.1422 |
| 19 Pentachloroethane | 117 | 4.870 | 4.870 | (0.952) | 135222 | | 80.0000 | 76.5877 |
| 31 N-Nitrosopyrrolidine | 100 | 5.505 | 5.505 | (1.076) | 176369 | | 80.0000 | 77.6484 |
| 34 N-Nitrosomorpholine | 116 | 5.511 | 5.511 | (1.077) | 74340 | | 80.0000 | 77.3531 |
| 35 o-Toluidine | 106 | 5.540 | 5.540 | (1.083) | 521764 | | 80.0000 | 74.4226 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ----- | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| 39 N-Nitrosopiperidine | 114 | 5.811 | 5.811 | (0.919) | 181103 | 80.0000 | 81.9231 |
| 44 O,O,O-Triethyl phosphorothio | 198 | 6.057 | 6.057 | (0.958) | 184413 | 80.0000 | 75.9620 |
| 48 a,a-Dimethylphenethylamine | 58 | 6.181 | 6.181 | (0.978) | 1035247 | 80.0000 | 78.4583(M) |
| 53 2,6-Dichlorophenol | 162 | 6.410 | 6.410 | (1.014) | 282137 | 80.0000 | 80.2540 |
| 54 Hexachloropropene | 213 | 6.451 | 6.451 | (1.020) | 258483 | 80.0000 | 79.8546 |
| 57 N-Nitrosodi-n-butylamine | 84 | 6.709 | 6.709 | (1.061) | 239583 | 80.0000 | 80.3073 |
| 58 p-Phenylenediamine | 108 | 6.745 | 6.745 | (1.067) | 315921 | 80.0000 | 80.5892 |
| 61 Saffrole | 162 | 6.909 | 6.909 | (1.093) | 255084 | 80.0000 | 77.1111 |
| 65 1,2,4,5-Tetrachlorobenzene | 216 | 7.209 | 7.209 | (1.140) | 324121 | 80.0000 | 75.7679 |
| 66 Isosafrole (#1) | 162 | 7.191 | 7.191 | (0.898) | 34430 | 14.0000 | 13.8177 |
| 72 Isosafrole (#2) | 104 | 7.403 | 7.403 | (0.924) | 181660 | 66.0000 | 66.1540 |
| 73 1-Chloronaphthalene | 162 | 7.520 | 7.520 | (0.939) | 573403 | 80.0000 | 76.5524 |
| 75 1,4-Naphthoquinone | 158 | 7.650 | 7.650 | (0.955) | 145542 | 80.0000 | 86.7279 |
| 78 1,4-Dinitrobenzene | 168 | 7.697 | 7.697 | (0.961) | 97407 | 80.0000 | 84.1824 |
| 80 1,3-Dinitrobenzene | 168 | 7.802 | 7.802 | (0.974) | 110655 | 80.0000 | 81.5534 |
| 89 Pentachlorobenzene | 250 | 8.196 | 8.196 | (1.023) | 275252 | 80.0000 | 76.0885 |
| 90 1-Naphthylamine | 143 | 8.255 | 8.255 | (1.031) | 565256 | 80.0000 | 78.0943 |
| 91 2,3,4,6-Tetrachlorophenol | 232 | 8.313 | 8.313 | (1.038) | 181478 | 80.0000 | 73.3815 |
| 92 2-Naphthylamine | 143 | 8.313 | 8.313 | (1.038) | 563403 | 80.0000 | 77.7377 |
| 98 Thionazin | 97 | 8.449 | 8.449 | (1.055) | 169605 | 80.0000 | 78.2505 |
| 100 5-Nitro-o-toluidine | 152 | 8.502 | 8.502 | (1.062) | 201682 | 80.0000 | 82.8824 |
| 182 Diphenylamine | 169 | 8.554 | 8.554 | (1.068) | 595084 | 80.0000 | 75.6201 |
| 104 Sulfotepp | 97 | 8.719 | 8.719 | (0.943) | 125222 | 80.0000 | 77.3719 |
| 105 1,3,5-Trinitrobenzene | 213 | 8.801 | 8.801 | (0.952) | 64055 | 80.0000 | 74.0988 |
| 106 Diallate (#1) | 86 | 8.795 | 8.795 | (0.952) | 262909 | 57.8000 | 57.0347 |
| 107 Phorate | 121 | 8.813 | 8.813 | (0.954) | 113175 | 80.0000 | 77.6569 |
| 109 Phenacetin | 108 | 8.819 | 8.819 | (0.954) | 325974 | 80.0000 | 78.1032 |
| 111 Diallate (#2) | 86 | 8.872 | 8.872 | (0.960) | 66237 | 22.6000 | 22.6028 |
| 112 Dimethoate | 87 | 8.977 | 8.977 | (0.971) | 276872 | 80.0000 | 82.1076 |
| 114 4-Aminobiphenyl | 169 | 9.077 | 9.077 | (0.982) | 728724 | 80.0000 | 76.5445 |
| 115 Pentachloronitrobenzene | 237 | 9.189 | 9.189 | (0.994) | 110386 | 80.0000 | 76.5482 |
| 116 Pronamide | 173 | 9.113 | 9.113 | (0.986) | 298263 | 80.0000 | 76.8550 |
| 120 2-secbutyl-4,6-dinitropheno | 211 | 9.248 | 9.248 | (1.001) | 167498 | 80.0000 | 74.5877 |
| 121 Disulfoton | 88 | 9.224 | 9.224 | (0.998) | 371632 | 80.0000 | 80.6237 |
| 124 Methyl parathion | 109 | 9.536 | 9.536 | (1.032) | 228193 | 80.0000 | 84.3992 |
| 126 Parathion | 109 | 9.824 | 9.824 | (1.063) | 149459 | 80.0000 | 78.8644 |
| 127 4-Nitroquinoline-1-oxide | 190 | 9.888 | 9.888 | (1.070) | 57605 | 80.0000 | 79.2587 |
| 128 Methapyrilene | 97 | 9.912 | 9.912 | (1.072) | 276129 | 80.0000 | 80.7775 |
| 129 Isodrin | 193 | 10.100 | 10.100 | (1.093) | 116921 | 80.0000 | 78.0180 |
| 134 Aramite (#1) | 185 | 10.411 | 10.411 | (0.917) | 61017 | 36.0000 | 38.2987 |
| 135 Aramite (#2) | 185 | 10.464 | 10.464 | (0.921) | 90530 | 43.2000 | 44.7606 |
| 136 p-Dimethylaminoazobenzene | 120 | 10.576 | 10.576 | (0.931) | 275090 | 80.0000 | 82.7258 |
| 138 3,3'-Dimethylbenzidine | 212 | 10.846 | 10.846 | (0.955) | 713751 | 80.0000 | 83.5568 |
| 139 2-Acetylaminofluorene | 181 | 11.075 | 11.075 | (0.975) | 458596 | 80.0000 | 82.8875 |
| 149 7,12-Dimethylbenz(a)anthrac | 256 | 12.397 | 12.397 | (0.963) | 494127 | 80.0000 | 76.9985 |
| 152 3-Methylcholanthrene | 268 | 13.261 | 13.261 | (1.030) | 511772 | 80.0000 | 77.5921 |
| 153 Dibenz(a,j)acridine | 279 | 14.119 | 14.119 | (1.097) | 739853 | 80.0000 | 78.1211 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|----------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ---- | == | ===== | ===== | ===== | ===== | ===== |
| M 1 Total Isosafrole | 162 | | | | 216090 | 80.0000 | 79.9884 |
| M 2 Total Diallate | 86 | | | | 329146 | 80.0000 | 79.3053 |
| M 3 Total Aramite | 185 | | | | 151547 | 80.0000 | 83.1665 |
| 165 Chlorobenzilate | 251 | 10.599 | 10.599 | (0.933) | 302773 | 80.0000 | 79.0111 |
| 199 1,4-Dioxane | 88 | 2.767 | 2.767 | (0.541) | 190805 | 80.0000 | 76.5230 |
| 175 Biphenyl | 154 | 7.456 | 7.456 | (0.931) | 703681 | 80.0000 | 75.4333 |

QC Flag Legend

M - Compound response manually integrated.

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: K.i
Lab File ID: k3378.d
Lab Smp Id: AP9_0080
Analysis Type: SV
Quant Type: ISTD
Operator: kidd
Method File: /chem/K.i/052904.b/8270C.m
Misc Info:

Calibration Date: 29-MAY-2004
Calibration Time: 13:24
Client Smp ID: AP9_0080
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 147164 | 73582 | 294328 | 147164 | 0.00 |
| 49 Naphthalene-d8 | 530122 | 265061 | 1060244 | 530122 | 0.00 |
| 83 Acenaphthene-d10 | 318542 | 159271 | 637084 | 318542 | 0.00 |
| 117 Phenanthrene-d10 | 562072 | 281036 | 1124144 | 562072 | 0.00 |
| 142 Chrysene-d12 | 593593 | 296796 | 1187186 | 593593 | 0.00 |
| 151 Perylene-d12 | 499739 | 249870 | 999478 | 499739 | 0.00 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.00 |
| 117 Phenanthrene-d10 | 9.24 | 8.74 | 9.74 | 9.24 | 0.00 |
| 142 Chrysene-d12 | 11.36 | 10.86 | 11.86 | 11.36 | 0.00 |
| 151 Perylene-d12 | 12.87 | 12.37 | 13.37 | 12.87 | 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/K.i/052904.b/k3378.d

Page 5

Date : 29-MAY-2004 13:24

Client ID: AP9_0080

Instrument: K.i

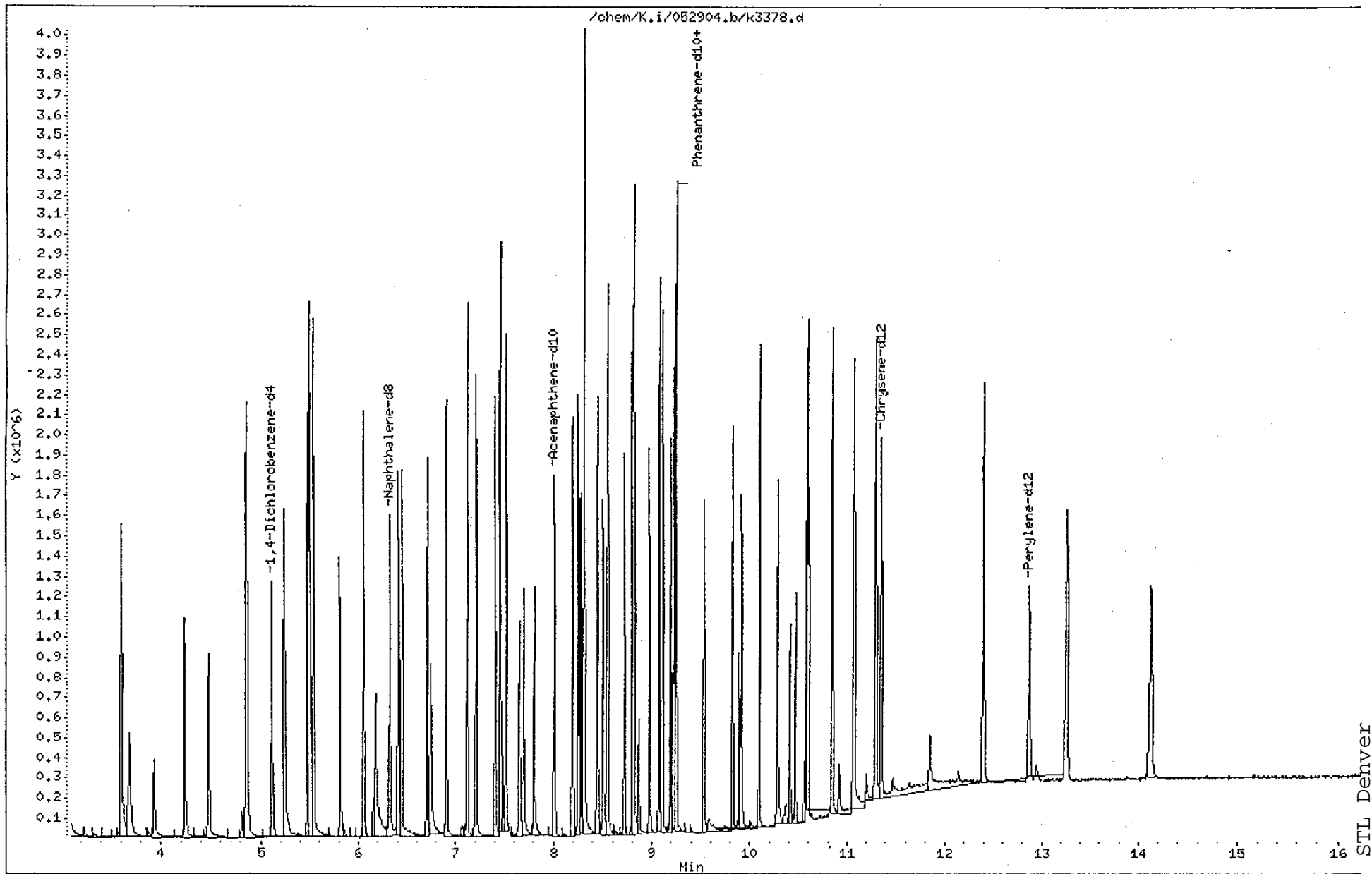
Sample Info: AP9_0080,BNA1406,P:050403,E:073104

Volume Injected (uL): 0.5

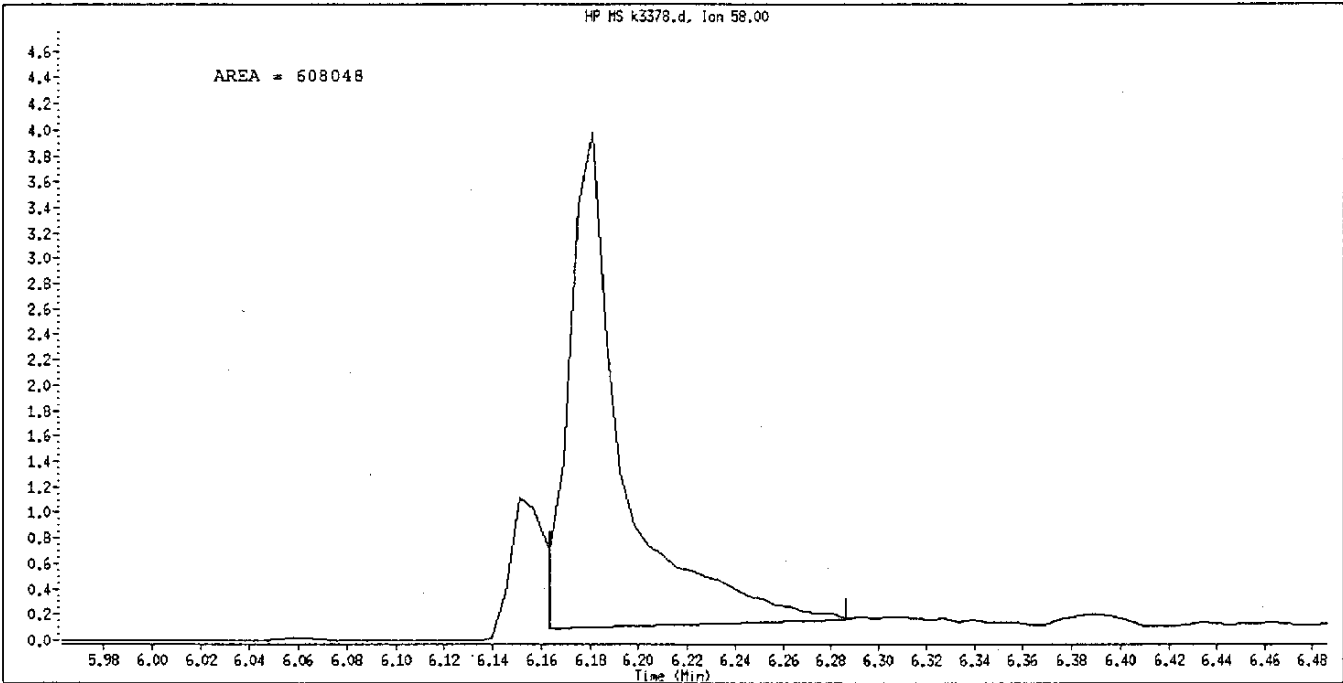
Operator: kiddd

Column phase: Rtx-5ms 30m 0.5um

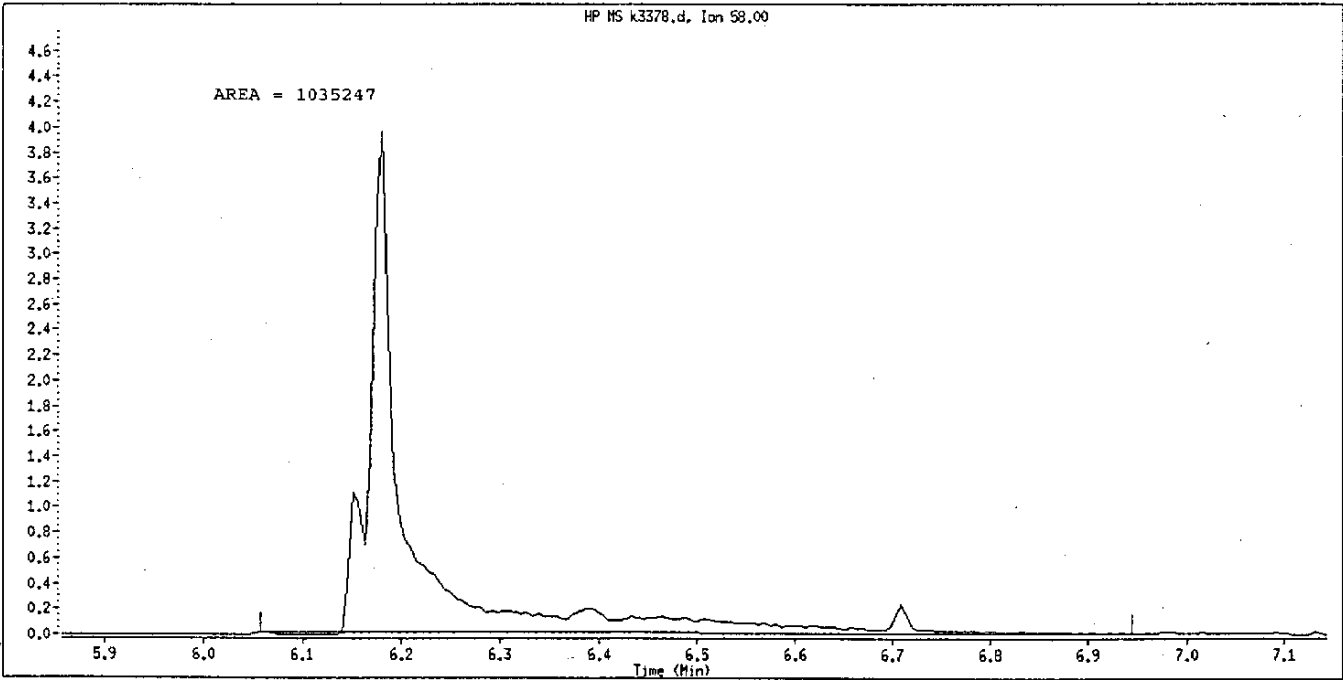
Column diameter: 0.25



Data File Name: k3378.d
Inj. Date and Time: 29-MAY-2004 13:24
Instrument ID: K.i
Client ID: AP9_0080
Compound Name: a,a-Dimethylphenethylamine
CAS #: 122-09-8
Report Date: 05/31/2004



Original Integration



Manual Integration

Manually Integrated By: Kidd
Manual Integration Reason: Split Peak

max 05-31-04
4.104 B/S

MS
05-31-04

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3379.d
Lab Smp Id: AP9_0120 Client Smp ID: AP9_0120
Inj Date : 29-MAY-2004 13:48
Operator : kiddd Inst ID: K.i
Smp Info : AP9_0120,BNA1406,P:050403,E:073104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 16:57 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 13:48 Cal File: k3379.d
Als bottle: 19 Calibration Sample, Level: 6
Dil Factor: 1.00000 Compound Sublist: 2-AP9std.sub
Integrator: HP RTE
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | | | | AMOUNTS | |
|-----------------------------|-----------|--------|--------|---------|----------|--------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) |
| 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 | (1.000) | 139051 | 40.0000 |
| 49 Naphthalene-d8 | 136 | 6.322 | 6.322 | (1.000) | 521960 | 40.0000 |
| 83 Acenaphthene-d10 | 164 | 8.008 | 8.008 | (1.000) | 313636 | 40.0000 |
| 117 Phenanthrene-d10 | 188 | 9.248 | 9.248 | (1.000) | 558203 | 40.0000 |
| 142 Chrysene-d12 | 240 | 11.363 | 11.363 | (1.000) | 610012 | 40.0000 |
| 151 Perylene-d12 | 264 | 12.885 | 12.885 | (1.000) | 510299 | 40.0000 |
| 7 2-Picoline | 93 | 3.601 | 3.601 | (0.704) | 635661 | 120.000 |
| 8 N-Nitrosomethylethylamine | 88 | 3.695 | 3.695 | (0.722) | 290517 | 120.000 |
| 9 Methyl methanesulfonate | 80 | 3.936 | 3.936 | (0.769) | 183182 | 120.000 |
| 11 N-Nitrosodiethylamine | 102 | 4.247 | 4.247 | (0.830) | 266749 | 120.000 |
| 13 Ethyl methanesulfonate | 79 | 4.483 | 4.483 | (0.876) | 414309 | 120.000 |
| 19 Pentachloroethane | 117 | 4.870 | 4.870 | (0.952) | 184085 | 120.000 |
| 31 N-Nitrosopyrrolidine | 100 | 5.505 | 5.505 | (1.076) | 239288 | 120.000 |
| 34 N-Nitrosomorpholine | 116 | 5.517 | 5.517 | (1.078) | 102056 | 120.000 |
| 35 o-Toluidine | 106 | 5.540 | 5.540 | (1.083) | 729832 | 120.000 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 39 N-Nitrosopiperidine | 114 | 5.816 | 5.816 | (0.920) | 246936 | 120.000 | 113.450 |
| 44 O,O,O-Triethyl phosphorothio | 198 | 6.057 | 6.057 | (0.958) | 267547 | 120.000 | 111.929 |
| 48 a,a-Dimethylphenethylamine | 58 | 6.192 | 6.192 | (0.980) | 1645093 | 120.000 | 126.626(M) |
| 53 2,6-Dichlorophenol | 162 | 6.410 | 6.410 | (1.014) | 397224 | 120.000 | 114.757 |
| 54 Hexachloropropene | 213 | 6.451 | 6.451 | (1.020) | 380146 | 120.000 | 119.277 |
| 57 N-Nitrosodi-n-butylamine | 84 | 6.709 | 6.709 | (1.061) | 339582 | 120.000 | 115.606 |
| 58 p-Phenylenediamine | 108 | 6.745 | 6.745 | (1.067) | 461830 | 120.000 | 119.652 |
| 61 Safrole | 162 | 6.909 | 6.909 | (1.093) | 366445 | 120.000 | 112.507 |
| 65 1,2,4,5-Tetrachlorobenzene | 216 | 7.215 | 7.215 | (1.141) | 469887 | 120.000 | 111.560 |
| 66 Isosafrole (#1) | 162 | 7.191 | 7.191 | (0.898) | 50209 | 21.0000 | 20.4654 |
| 72 Isosafrole (#2) | 104 | 7.409 | 7.409 | (0.925) | 258826 | 99.0000 | 95.7294 |
| 73 1-Chloronaphthalene | 162 | 7.520 | 7.520 | (0.939) | 802344 | 120.000 | 108.793 |
| 75 1,4-Napththoquinone | 158 | 7.649 | 7.649 | (0.955) | 204408 | 120.000 | 123.711 |
| 78 1,4-Dinitrobenzene | 168 | 7.696 | 7.696 | (0.961) | 149513 | 120.000 | 131.235 |
| 80 1,3-Dinitrobenzene | 168 | 7.802 | 7.802 | (0.974) | 166238 | 120.000 | 124.435 |
| 89 Pentachlorobenzene | 250 | 8.196 | 8.196 | (1.023) | 398477 | 120.000 | 111.875 |
| 90 1-Naphthylamine | 143 | 8.255 | 8.255 | (1.031) | 809105 | 120.000 | 113.532 |
| 91 2,3,4,6-Tetrachlorophenol | 232 | 8.313 | 8.313 | (1.038) | 267637 | 120.000 | 109.913 |
| 92 2-Naphthylamine | 143 | 8.313 | 8.313 | (1.038) | 792914 | 120.000 | 111.117 |
| 98 Thionazin | 97 | 8.449 | 8.449 | (1.055) | 245180 | 120.000 | 114.888 |
| 100 5-Nitro-o-toluidine | 152 | 8.507 | 8.507 | (1.062) | 275033 | 120.000 | 114.794 |
| 182 Diphenylamine | 169 | 8.554 | 8.554 | (1.068) | 862966 | 120.000 | 111.376 |
| 104 Sulfotepp | 97 | 8.719 | 8.719 | (0.943) | 180272 | 120.000 | 112.158 |
| 105 1,3,5-Trinitrobenzene | 213 | 8.801 | 8.801 | (0.952) | 100246 | 120.000 | 112.369 |
| 106 Diallate (#1) | 86 | 8.801 | 8.801 | (0.952) | 363557 | 86.4000 | 79.4157 |
| 107 Phorate | 121 | 8.813 | 8.813 | (0.953) | 155211 | 120.000 | 107.239 |
| 109 Phenacetin | 108 | 8.825 | 8.825 | (0.954) | 491574 | 120.000 | 118.597 |
| 111 Diallate (#2) | 86 | 8.872 | 8.872 | (0.959) | 94353 | 33.6000 | 32.4204 |
| 112 Dimethoate | 87 | 8.983 | 8.983 | (0.971) | 377093 | 120.000 | 112.604 |
| 114 4-Aminobiphenyl | 169 | 9.077 | 9.077 | (0.982) | 1055867 | 120.000 | 111.676 |
| 115 Pentachloronitrobenzene | 237 | 9.195 | 9.195 | (0.994) | 168380 | 120.000 | 117.574 |
| 116 Pronamide | 173 | 9.118 | 9.118 | (0.986) | 443024 | 120.000 | 114.948 |
| 120 2-secbutyl-4,6-dinitropheno | 211 | 9.248 | 9.248 | (1.000) | 264479 | 120.000 | 114.966 |
| 121 Disulfoton | 88 | 9.224 | 9.224 | (0.997) | 514221 | 120.000 | 112.331 |
| 124 Methyl parathion | 109 | 9.536 | 9.536 | (1.031) | 315377 | 120.000 | 117.453 |
| 126 Parathion | 109 | 9.823 | 9.823 | (1.062) | 213468 | 120.000 | 113.420 |
| 127 4-Nitroquinoline-1-oxide | 190 | 9.894 | 9.894 | (1.070) | 93284 | 120.000 | 116.483(Q) |
| 128 Methapyrilene | 97 | 9.917 | 9.917 | (1.072) | 377310 | 120.000 | 111.142 |
| 129 Isodrin | 193 | 10.100 | 10.100 | (1.092) | 168316 | 120.000 | 113.091 |
| 134 Aramite (#1) | 185 | 10.417 | 10.417 | (0.917) | 88094 | 55.2000 | 53.8060 |
| 135 Aramite (#2) | 185 | 10.470 | 10.470 | (0.921) | 127664 | 64.8000 | 61.4217 |
| 136 p-Dimethylaminoazobenzene | 120 | 10.581 | 10.581 | (0.931) | 396641 | 120.000 | 116.068 |
| 138 3,3'-Dimethylbenzidine | 212 | 10.852 | 10.852 | (0.955) | 1033481 | 120.000 | 117.730 |
| 139 2-Acetylaminofluorene | 181 | 11.081 | 11.081 | (0.975) | 668366 | 120.000 | 117.550 |
| 149 7,12-Dimethylbenz(a)anthrac | 256 | 12.409 | 12.409 | (0.963) | 756926 | 120.000 | 115.509 |
| 152 3-Methylcholanthrene | 268 | 13.278 | 13.278 | (1.031) | 792197 | 120.000 | 117.623 |
| 153 Dibenz(a,j)acridine | 279 | 14.142 | 14.142 | (1.098) | 1140885 | 120.000 | 117.973 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|----------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| M 1 Total Isosafrole | 162 | | | | 309035 | 120.000 | 116.182 |
| M 2 Total Diallate | 86 | | | | 457910 | 120.000 | 111.095 |
| M 3 Total Aramite | 185 | | | | 215758 | 120.000 | 115.218 |
| 165 Chlorobenzilate | 251 | 10.605 | 10.605 | (0.933) | 457913 | 120.000 | 116.280 |
| 199 1,4-Dioxane | 88 | 2.767 | 2.767 | (0.541) | 267831 | 120.000 | 113.682 |
| 175 Biphenyl | 154 | 7.456 | 7.456 | (0.931) | 1003679 | 120.000 | 109.276 |

QC Flag Legend

- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

| | |
|---|-------------------------------|
| Instrument ID: K.i | Calibration Date: 29-MAY-2004 |
| Lab File ID: k3379.d | Calibration Time: 13:24 |
| Lab Smp Id: AP9_0120 | Client Smp ID: AP9_0120 |
| Analysis Type: SV | Level: LOW |
| Quant Type: ISTD | Sample Type: WATER |
| Operator: kiddd | |
| Method File: /chem/K.i/052904.b/8270C.m | |
| Misc Info: | |

Test Mode: Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 147164 | 73582 | 294328 | 139051 | -5.51 |
| 49 Naphthalene-d8 | 530122 | 265061 | 1060244 | 521960 | -1.54 |
| 83 Acenaphthene-d10 | 318542 | 159271 | 637084 | 313636 | -1.54 |
| 117 Phenanthrene-d10 | 562072 | 281036 | 1124144 | 558203 | -0.69 |
| 142 Chrysene-d12 | 593593 | 296796 | 1187186 | 610012 | 2.77 |
| 151 Perylene-d12 | 499739 | 249870 | 999478 | 510299 | 2.11 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.00 |
| 117 Phenanthrene-d10 | 9.24 | 8.74 | 9.74 | 9.25 | 0.06 |
| 142 Chrysene-d12 | 11.36 | 10.86 | 11.86 | 11.36 | 0.05 |
| 151 Perylene-d12 | 12.87 | 12.37 | 13.37 | 12.88 | 0.09 |

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/K.i/052904.b/k3379.d

Page 5

Date : 29-MAY-2004 13:48

Client ID: AP9_0120

Instrument: K.i

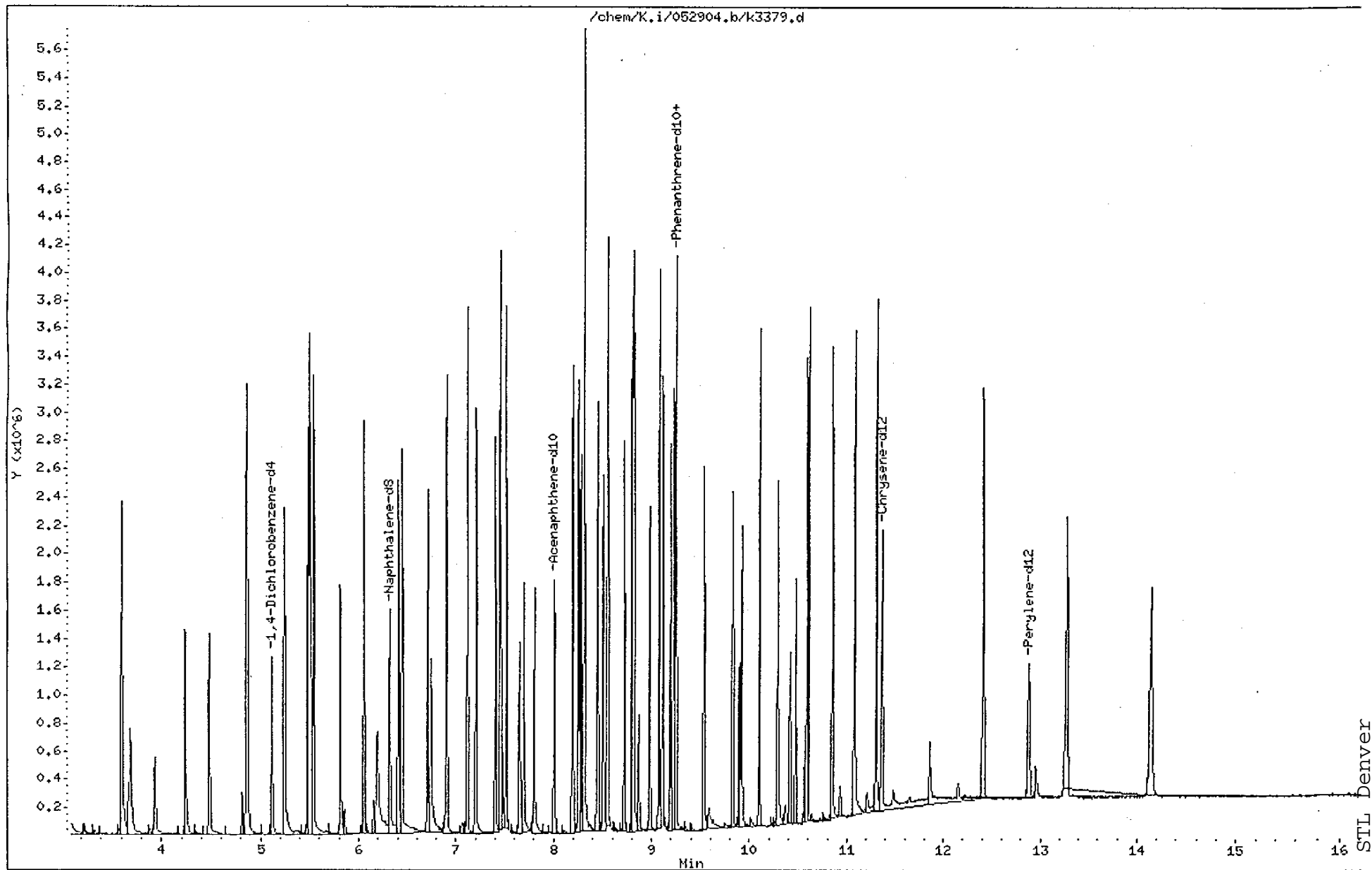
Sample Info: AP9_0120,ENA1406,P:050403,E:073104

Volume Injected (uL): 0.5

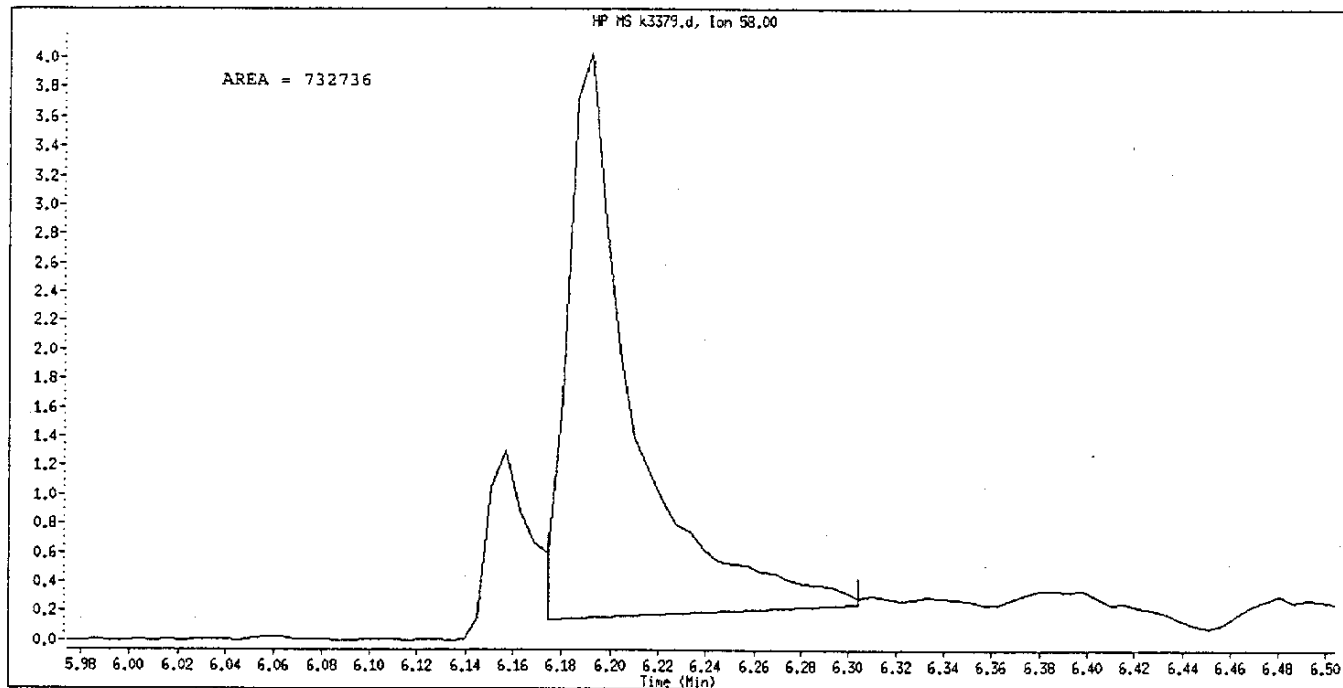
Operator: kiddd

Column phase: Rtx-5ms 30m 0.5um

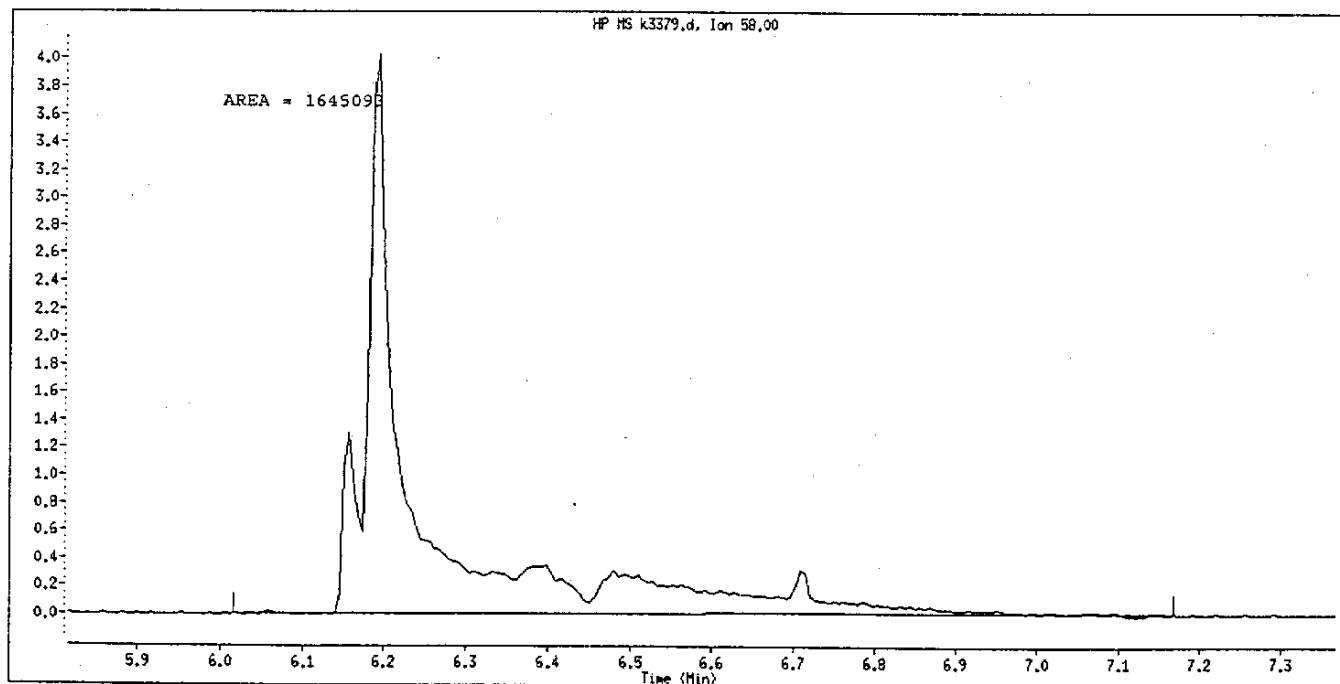
Column diameter: 0.25



Data File Name: k3379.d
Inj. Date and Time: 29-MAY-2004 13:48
Instrument ID: K.i
Client ID: AP9_0120
Compound Name: a,a-Dimethylphenethylamine
CAS #: 122-09-8
Report Date: 05/31/2004



Original Integration



Manual Integration

Manually Integrated By: kiddd
Manual Integration Reason: Split Peak

mmk
05-31-04

6.1.04 B/S

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3380.d
Lab Smp Id: AP9_0160 Client Smp ID: AP9_0160
Inj Date : 29-MAY-2004 14:12
Operator : kiddd Inst ID: K.i
Smp Info : AP9_0160,BNA1406,P:050403,E:073104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 16:57 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 14:12 Cal File: k3380.d
Als bottle: 20 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-AP9std.sub
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | | | | | | AMOUNTS | |
|-----------------------------|-----------|--------|--------|---------|----------|--|---------|---------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | | CAL-AMT | ON-COL |
| | | | | | | | (ug/ml) | (ug/ml) |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 | (1.000) | 148236 | | 40.0000 | |
| * 49 Naphthalene-d8 | 136 | 6.322 | 6.322 | (1.000) | 543897 | | 40.0000 | |
| * 83 Acenaphthene-d10 | 164 | 8.008 | 8.008 | (1.000) | 328093 | | 40.0000 | |
| * 117 Phenanthrene-d10 | 188 | 9.248 | 9.248 | (1.000) | 574116 | | 40.0000 | |
| * 142 Chrysene-d12 | 240 | 11.363 | 11.363 | (1.000) | 658344 | | 40.0000 | |
| * 151 Perylene-d12 | 264 | 12.885 | 12.885 | (1.000) | 539337 | | 40.0000 | |
| 7 2-Picoline | 93 | 3.601 | 3.601 | (0.704) | 872784 | | 160.000 | 152.511 |
| 8 N-Nitrosomethylethylamine | 88 | 3.695 | 3.695 | (0.722) | 413148 | | 160.000 | 159.165 |
| 9 Methyl methanesulfonate | 80 | 3.936 | 3.936 | (0.769) | 256917 | | 160.000 | 150.991 |
| 11 N-Nitrosodiethylamine | 102 | 4.248 | 4.248 | (0.830) | 364399 | | 160.000 | 152.165 |
| 13 Ethyl methanesulfonate | 79 | 4.483 | 4.483 | (0.876) | 571170 | | 160.000 | 151.197 |
| 19 Pentachloroethane | 117 | 4.871 | 4.871 | (0.952) | 247670 | | 160.000 | 139.262 |
| 31 N-Nitrosopyrrolidine | 100 | 5.511 | 5.511 | (1.077) | 332879 | | 160.000 | 145.494 |
| 34 N-Nitrosomorpholine | 116 | 5.523 | 5.523 | (1.079) | 136710 | | 160.000 | 141.222 |
| 35 o-Toluidine | 106 | 5.546 | 5.546 | (1.084) | 989548 | | 160.000 | 140.125 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|----------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| 39 N-Nitrosopiperidine | 114 | 5.817 | 5.817 | (0.920) | 340383 | 160.000 | 150.075 |
| 44 O,O,O-Triethyl phosphorothio | 198 | 6.057 | 6.057 | (0.958) | 381141 | 160.000 | 153.020 |
| 48 a,a-Dimethylphenethylamine | 58 | 6.204 | 6.204 | (0.981) | 2299738 | 160.000 | 169.876(M) |
| 53 2,6-Dichlorophenol | 162 | 6.416 | 6.416 | (1.015) | 546022 | 160.000 | 151.383 |
| 54 Hexachloropropene | 213 | 6.451 | 6.451 | (1.020) | 522179 | 160.000 | 157.234 |
| 57 N-Nitrosodi-n-butylamine | 84 | 6.716 | 6.716 | (1.062) | 473458 | 160.000 | 154.682 |
| 58 p-Phenylenediamine | 108 | 6.751 | 6.751 | (1.068) | 620935 | 160.000 | 154.384 |
| 61 Safrole | 162 | 6.909 | 6.909 | (1.093) | 499601 | 160.000 | 147.203 |
| 65 1,2,4,5-Tetrachlorobenzene | 216 | 7.215 | 7.215 | (1.141) | 674139 | 160.000 | 153.598 |
| 66 Isosafrole (#1) | 162 | 7.191 | 7.191 | (0.898) | 74365 | 28.0000 | 28.9759 |
| 72 Isosafrole (#2) | 104 | 7.409 | 7.409 | (0.925) | 358934 | 132.000 | 126.906 |
| 73 1-Chloronaphthalene | 162 | 7.520 | 7.520 | (0.939) | 1150017 | 160.000 | 149.064 |
| 75 1,4-Naphthoquinone | 158 | 7.650 | 7.650 | (0.955) | 260580 | 160.000 | 150.758 |
| 78 1,4-Dinitrobenzene | 168 | 7.703 | 7.703 | (0.962) | 203645 | 160.000 | 170.873 |
| 80 1,3-Dinitrobenzene | 168 | 7.808 | 7.808 | (0.975) | 228591 | 160.000 | 163.568 |
| 89 Pentachlorobenzene | 250 | 8.196 | 8.196 | (1.023) | 593170 | 160.000 | 159.198 |
| 90 1-Naphthylamine | 143 | 8.255 | 8.255 | (1.031) | 1103868 | 160.000 | 148.068 |
| 91 2,3,4,6-Tetrachlorophenol | 232 | 8.320 | 8.320 | (1.039) | 423667 | 160.000 | 166.325 |
| 92 2-Naphthylamine | 143 | 8.320 | 8.320 | (1.039) | 1130154 | 160.000 | 151.398 |
| 98 Thionazin | 97 | 8.449 | 8.449 | (1.055) | 342906 | 160.000 | 153.601 |
| 100 5-Nitro-o-toluidine | 152 | 8.513 | 8.513 | (1.063) | 392892 | 160.000 | 156.761 |
| 182 Diphenylamine | 169 | 8.555 | 8.555 | (1.068) | 1264609 | 160.000 | 156.022 |
| 104 Sulfotepp | 97 | 8.725 | 8.725 | (0.943) | 258672 | 160.000 | 156.475 |
| 105 1,3,5-Trinitrobenzene | 213 | 8.807 | 8.807 | (0.952) | 148568 | 160.000 | 158.549 |
| 106 Diallate (#1) | 86 | 8.801 | 8.801 | (0.952) | 496741 | 115.200 | 105.501 |
| 107 Phorate | 121 | 8.819 | 8.819 | (0.954) | 221018 | 160.000 | 148.474 |
| 109 Phenacetin | 108 | 8.831 | 8.831 | (0.955) | 679640 | 160.000 | 159.425 |
| 111 Diallate (#2) | 86 | 8.872 | 8.872 | (0.959) | 135859 | 44.8000 | 45.3882 |
| 112 Dimethoate | 87 | 8.983 | 8.983 | (0.971) | 496720 | 160.000 | 144.214 |
| 114 4-Aminobiphenyl | 169 | 9.083 | 9.083 | (0.982) | 1499113 | 160.000 | 154.162 |
| 115 Pentachloronitrobenzene | 237 | 9.195 | 9.195 | (0.994) | 241180 | 160.000 | 163.740 |
| 116 Pronamide | 173 | 9.119 | 9.119 | (0.986) | 655048 | 160.000 | 165.249 |
| 120 2-secbutyl-4,6-dinitrophenol | 211 | 9.254 | 9.254 | (1.001) | 386225 | 160.000 | 160.654 |
| 121 Disulfoton | 88 | 9.224 | 9.224 | (0.997) | 690303 | 160.000 | 146.616 |
| 124 Methyl parathion | 109 | 9.536 | 9.536 | (1.031) | 412422 | 160.000 | 149.338 |
| 126 Parathion | 109 | 9.830 | 9.830 | (1.063) | 308835 | 160.000 | 159.543 |
| 127 4-Nitroquinoline-1-oxide | 190 | 9.894 | 9.894 | (1.070) | 139103 | 160.000 | 159.783(Q) |
| 128 Methapyrilene | 97 | 9.918 | 9.918 | (1.072) | 526186 | 160.000 | 150.699 |
| 129 Isodrin | 193 | 10.100 | 10.100 | (1.092) | 235117 | 160.000 | 153.595 |
| 134 Aramite (#1) | 185 | 10.411 | 10.411 | (0.916) | 119890 | 73.6000 | 67.8504 |
| 135 Aramite (#2) | 185 | 10.470 | 10.470 | (0.921) | 175514 | 86.4000 | 78.2440 |
| 136 p-Dimethylaminoazobenzene | 120 | 10.582 | 10.582 | (0.931) | 533962 | 160.000 | 144.781 |
| 138 3,3'-Dimethylbenzidine | 212 | 10.852 | 10.852 | (0.955) | 1446860 | 160.000 | 152.721 |
| 139 2-Acetylaminofluorene | 181 | 11.087 | 11.087 | (0.976) | 979133 | 160.000 | 159.564 |
| 149 7,12-Dimethylbenz(a)anthrac | 256 | 12.415 | 12.415 | (0.964) | 1154249 | 160.000 | 166.658(A) |
| 152 3-Methylcholanthrene | 268 | 13.279 | 13.279 | (1.031) | 1226068 | 160.000 | 172.242 |
| 153 Dibenz(a,j)acridine | 279 | 14.142 | 14.142 | (1.098) | 1728674 | 160.000 | 169.129 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|----------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ---- | -- | ===== | ===== | ===== | ===== | ===== |
| M 1 Total Isosafrole | 162 | | | | 433299 | 160.000 | 155.722 |
| M 2 Total Diallate | 86 | | | | 632600 | 160.000 | 149.223 |
| M 3 Total Aramite | 185 | | | | 295404 | 160.000 | 146.168 |
| 165 Chlorobenzilate | 251 | 10.605 | 10.605 | (0.933) | 672332 | 160.000 | 158.194 |
| 199 1,4-Dioxane | 88 | 2.767 | 2.767 | (0.541) | 362560 | 160.000 | 144.354 |
| 175 Biphenyl | 154 | 7.462 | 7.462 | (0.932) | 1421088 | 160.000 | 147.903 |

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: K.i
Lab File ID: k3380.d
Lab Smp Id: AP9_0160
Analysis Type: SV
Quant Type: ISTD
Operator: kiddd
Method File: /chem/K.i/052904.b/8270C.m
Misc Info:

Calibration Date: 29-MAY-2004
Calibration Time: 13:24
Client Smp ID: AP9_0160
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 147164 | 73582 | 294328 | 148236 | 0.73 |
| 49 Naphthalene-d8 | 530122 | 265061 | 1060244 | 543897 | 2.60 |
| 83 Acenaphthene-d10 | 318542 | 159271 | 637084 | 328093 | 3.00 |
| 117 Phenanthrene-d10 | 562072 | 281036 | 1124144 | 574116 | 2.14 |
| 142 Chrysene-d12 | 593593 | 296796 | 1187186 | 658344 | 10.91 |
| 151 Perylene-d12 | 499739 | 249870 | 999478 | 539337 | 7.92 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.00 |
| 117 Phenanthrene-d10 | 9.24 | 8.74 | 9.74 | 9.25 | 0.07 |
| 142 Chrysene-d12 | 11.36 | 10.86 | 11.86 | 11.36 | 0.05 |
| 151 Perylene-d12 | 12.87 | 12.37 | 13.37 | 12.88 | 0.09 |

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/K.i/052904.b/k3380.d

Date : 29-MAY-2004 14:12

Client ID: AP9_0160

Sample Info: AP9_0160,BNA1406,P:050403,E:073104

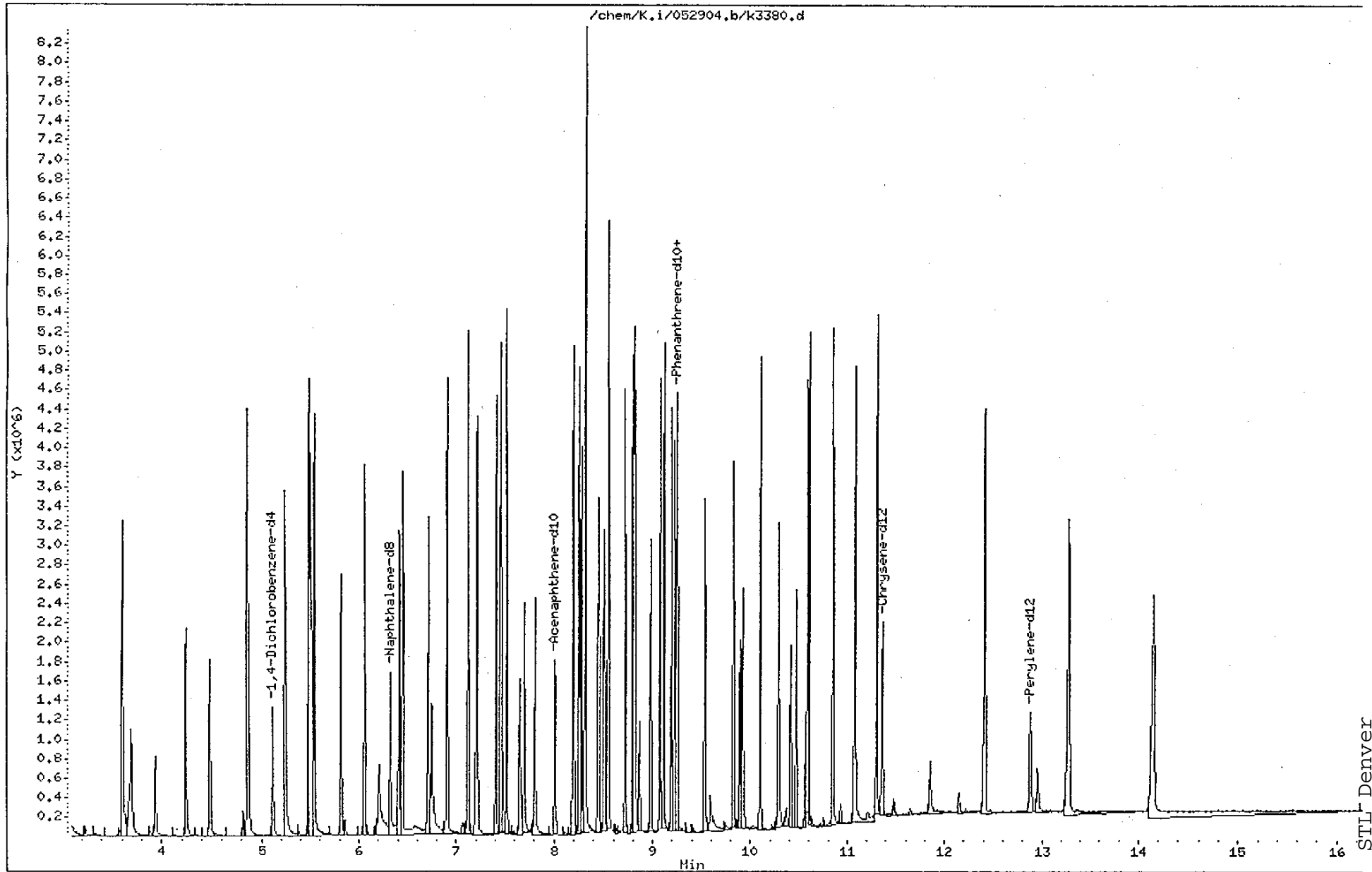
Volume Injected (uL): 0.5

Column phase: Rtx-5ms 30m 0.5um

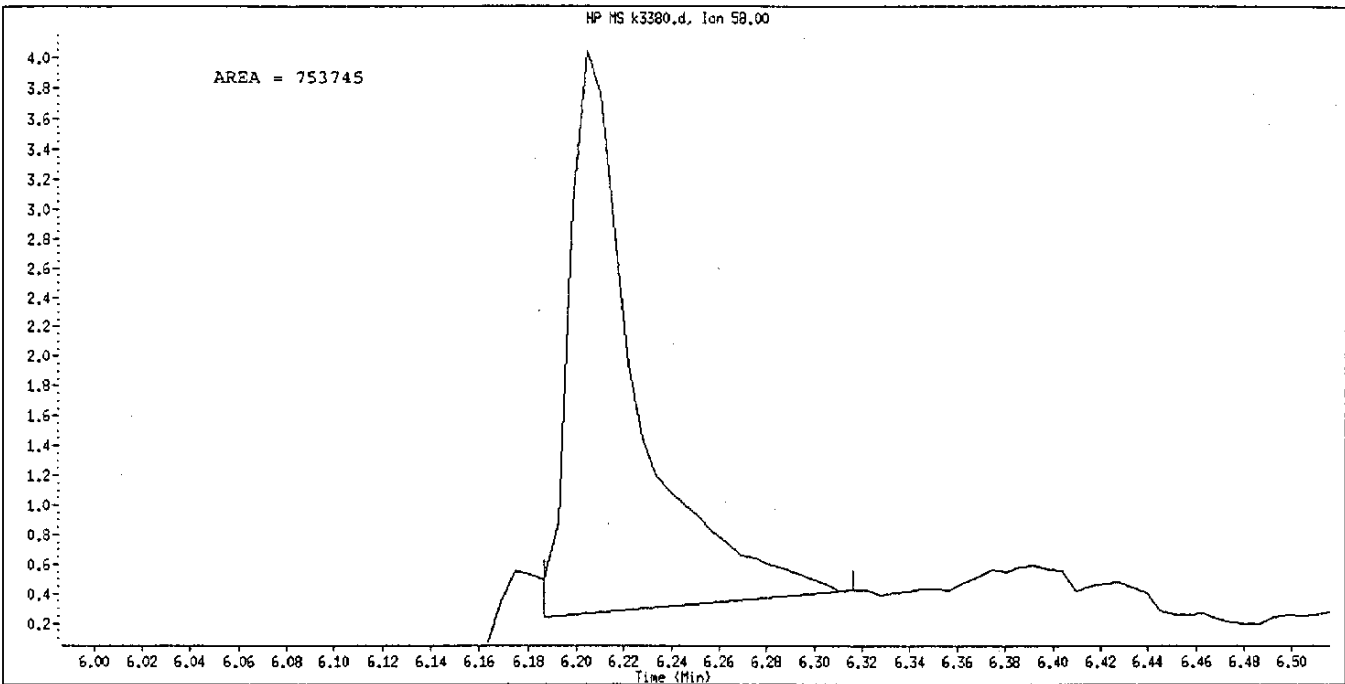
Instrument: K.i

Operator: kiddd

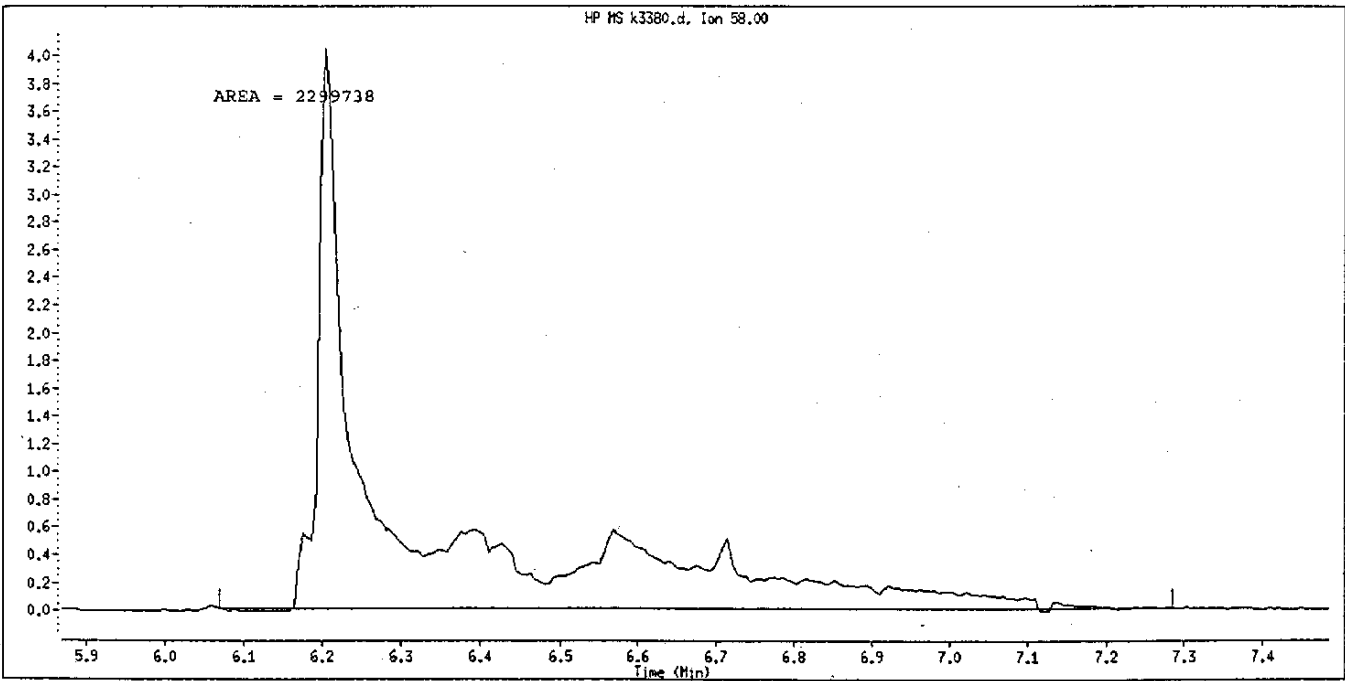
Column diameter: 0.25



Data File Name: k3380.d
Inj. Date and Time: 29-MAY-2004 14:12
Instrument ID: K.i
Client ID: AP9_0160
Compound Name: a,a-Dimethylphenethylamine
CAS #: 122-09-8
Report Date: 05/31/2004



Original Integration



Manual Integration

Manually Integrated By: kidd
Manual Integration Reason: Split Peak

mm
05-31-04
6.1.04 B/B

MLV
05-31-04

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3381.d
Lab Smp Id: AP9_0200 Client Smp ID: AP9_0200
Inj Date : 29-MAY-2004 14:36
Operator : kiddd Inst ID: K.i
Smp Info : AP9_0200,BNA1406,P:050403,E:073104
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 16:58 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 14:36 Cal File: k3381.d
Als bottle: 21 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-AP9std.sub
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | | | | | | AMOUNTS | |
|-----------------------------|-----------|--------|--------|---------|----------|--|---------|------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | | CAL-AMT | ON-COL |
| | | | | | | | (ug/ml) | (ug/ml) |
| ***** | **** | == | ===== | ===== | ***** | | ***** | ***** |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 | (1.000) | 148455 | | 40.0000 | |
| * 49 Naphthalene-d8 | 136 | 6.322 | 6.322 | (1.000) | 543346 | | 40.0000 | |
| * 83 Acenaphthene-d10 | 164 | 8.008 | 8.008 | (1.000) | 335256 | | 40.0000 | |
| * 117 Phenanthrene-d10 | 188 | 9.248 | 9.248 | (1.000) | 569154 | | 40.0000 | |
| * 142 Chrysene-d12 | 240 | 11.363 | 11.363 | (1.000) | 636411 | | 40.0000 | |
| * 151 Perylene-d12 | 264 | 12.885 | 12.885 | (1.000) | 550108 | | 40.0000 | |
| 7 2-Picoline | 93 | 3.601 | 3.601 | (0.704) | 1089217 | | 200.000 | 190.050 |
| 8 N-Nitrosomethylethylamine | 88 | 3.695 | 3.695 | (0.722) | 523205 | | 200.000 | 201.267(A) |
| 9 Methyl methanesulfonate | 80 | 3.936 | 3.936 | (0.769) | 339214 | | 200.000 | 199.063 |
| 11 N-Nitrosodiethylamine | 102 | 4.247 | 4.247 | (0.830) | 440347 | | 200.000 | 183.608 |
| 13 Ethyl methanesulfonate | 79 | 4.488 | 4.488 | (0.877) | 729893 | | 200.000 | 192.928 |
| 19 Pentachloroethane | 117 | 4.870 | 4.870 | (0.952) | 310549 | | 200.000 | 174.361 |
| 31 N-Nitrosopyrrolidine | 100 | 5.511 | 5.511 | (1.077) | 423075 | | 200.000 | 184.644 |
| 34 N-Nitrosomorpholine | 116 | 5.522 | 5.522 | (1.079) | 168629 | | 200.000 | 173.938 |
| 35 o-Toluidine | 106 | 5.546 | 5.546 | (1.084) | 1235580 | | 200.000 | 174.706 |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|---------------------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ----- | ---- | -- | ----- | ----- | ----- | ----- | ----- |
| 39 N-Nitrosopiperidine | 114 | 5.816 | 5.816 | (0.920) | 430860 | 200.000 | 190.159 |
| 44 O,O,O-Triethyl phosphorothio | 198 | 6.063 | 6.063 | (0.959) | 500111 | 200.000 | 200.988(A) |
| 48 a,a-Dimethylphenethylamine | 58 | 6.222 | 6.222 | (0.984) | 3021057 | 200.000 | 223.385(AM) |
| 53 2,6-Dichlorophenol | 162 | 6.416 | 6.416 | (1.015) | 693257 | 200.000 | 192.398 |
| 54 Hexachloropropene | 213 | 6.451 | 6.451 | (1.020) | 676880 | 200.000 | 204.023(A) |
| 57 N-Nitrosodi-n-butylamine | 84 | 6.715 | 6.715 | (1.062) | 588515 | 200.000 | 192.467 |
| 58 p-Phenylenediamine | 108 | 6.750 | 6.750 | (1.068) | 758462 | 200.000 | 188.769 |
| 61 Saffrole | 162 | 6.909 | 6.909 | (1.093) | 649380 | 200.000 | 191.528 |
| 65 1,2,4,5-Tetrachlorobenzene | 216 | 7.215 | 7.215 | (1.141) | 896997 | 200.000 | 204.582(A) |
| 66 Isosafrole (#1) | 162 | 7.191 | 7.191 | (0.898) | 91656 | 35.0000 | 34.9502 |
| 72 Isosafrole (#2) | 104 | 7.409 | 7.409 | (0.925) | 464271 | 165.000 | 160.642 |
| 73 1-Chloronaphthalene | 162 | 7.520 | 7.520 | (0.939) | 1513039 | 200.000 | 191.928 |
| 75 1,4-Napthoquinone | 158 | 7.649 | 7.649 | (0.955) | 301904 | 200.000 | 170.934 |
| 78 1,4-Dinitrobenzene | 168 | 7.702 | 7.702 | (0.962) | 257677 | 200.000 | 211.591(A) |
| 80 1,3-Dinitrobenzene | 168 | 7.808 | 7.808 | (0.975) | 285195 | 200.000 | 199.711 |
| 89 Pentachlorobenzene | 250 | 8.196 | 8.196 | (1.023) | 822567 | 200.000 | 216.048(A) |
| 90 1-Naphthylamine | 143 | 8.255 | 8.255 | (1.031) | 1432763 | 200.000 | 188.078 |
| 91 2,3,4,6-Tetrachlorophenol | 232 | 8.319 | 8.319 | (1.039) | 609224 | 200.000 | 234.061(A) |
| 92 2-Naphthylamine | 143 | 8.319 | 8.319 | (1.039) | 1569700 | 200.000 | 205.788(A) |
| 98 Thionazin | 97 | 8.454 | 8.454 | (1.056) | 447323 | 200.000 | 196.092 |
| 100 5-Nitro-o-toluidine | 152 | 8.513 | 8.513 | (1.063) | 499055 | 200.000 | 194.865 |
| 182 Diphenylamine | 169 | 8.554 | 8.554 | (1.068) | 1709159 | 200.000 | 206.363(A) |
| 104 Sulfotepp | 97 | 8.725 | 8.725 | (0.943) | 334191 | 200.000 | 203.920(A) |
| 105 1,3,5-Trinitrobenzene | 213 | 8.807 | 8.807 | (0.952) | 204791 | 200.000 | 217.471(A) |
| 106 Diallate (#1) | 86 | 8.801 | 8.801 | (0.952) | 632057 | 144.000 | 135.410 |
| 107 Phorate | 121 | 8.819 | 8.819 | (0.954) | 288443 | 200.000 | 195.457 |
| 109 Phenacetin | 108 | 8.830 | 8.830 | (0.955) | 863756 | 200.000 | 204.380(A) |
| 111 Diallate (#2) | 86 | 8.872 | 8.872 | (0.959) | 172054 | 56.0000 | 57.9815 |
| 112 Dimethoate | 87 | 8.989 | 8.989 | (0.972) | 579155 | 200.000 | 169.614 |
| 114 4-Aminobiphenyl | 169 | 9.083 | 9.083 | (0.982) | 1992076 | 200.000 | 206.642(A) |
| 115 Pentachloronitrobenzene | 237 | 9.195 | 9.195 | (0.994) | 320132 | 200.000 | 219.236(A) |
| 116 Pronamide | 173 | 9.118 | 9.118 | (0.986) | 856463 | 200.000 | 217.943(A) |
| 120 2-secbutyl-4,6-dinitropheno | 211 | 9.253 | 9.253 | (1.001) | 542677 | 200.000 | 225.136(A) |
| 121 Disulfoton | 88 | 9.224 | 9.224 | (0.997) | 853337 | 200.000 | 182.824 |
| 124 Methyl parathion | 109 | 9.535 | 9.535 | (1.031) | 493027 | 200.000 | 180.081 |
| 126 Parathion | 109 | 9.829 | 9.829 | (1.063) | 390358 | 200.000 | 203.416(A) |
| 127 4-Nitroquinoline-1-oxide | 190 | 9.894 | 9.894 | (1.070) | 182839 | 200.000 | 205.260(AQ) |
| 128 Methapyrilene | 97 | 9.923 | 9.923 | (1.073) | 644707 | 200.000 | 186.253 |
| 129 Isodrin | 193 | 10.105 | 10.105 | (1.093) | 305590 | 200.000 | 201.374(A) |
| 134 Aramite (#1) | 185 | 10.417 | 10.417 | (0.917) | 152812 | 92.0000 | 89.4628 |
| 135 Aramite (#2) | 185 | 10.476 | 10.476 | (0.922) | 228242 | 108.000 | 105.257 |
| 136 p-Dimethylaminoazobenzene | 120 | 10.587 | 10.587 | (0.932) | 677173 | 200.000 | 189.940 |
| 138 3,3'-Dimethylbenzidine | 212 | 10.857 | 10.857 | (0.956) | 1871305 | 200.000 | 204.329(A) |
| 139 2-Acetylaminofluorene | 181 | 11.092 | 11.092 | (0.976) | 1269853 | 200.000 | 214.074(A) |
| 149 7,12-Dimethylbenz(a)anthrac | 256 | 12.420 | 12.420 | (0.964) | 1583470 | 200.000 | 224.155(A) |
| 152 3-Methylcholanthrene | 268 | 13.284 | 13.284 | (1.031) | 1682192 | 200.000 | 231.692(A) |
| 153 Dibenz(a,j)acridine | 279 | 14.154 | 14.154 | (1.099) | 2422777 | 200.000 | 232.398(A) |

| Compounds | QUANT SIG | | | | | AMOUNTS | |
|----------------------|-----------|--------|--------|---------|----------|--------------------|-------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | CAL-AMT (ug/ml) | ON-COL (ug/ml) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| M 1 Total Isosafrole | 162 | | | | 555927 | 200.000 | 195.524 |
| M 2 Total Diallate | 86 | | | | 804111 | 200.000 | 191.334 |
| M 3 Total Aramite | 185 | | | | 381054 | 200.000 | 195.047 |
| 165 Chlorobenzilate | 251 | 10.605 | 10.605 | (0.933) | 897936 | 200.000 | 218.558(A) |
| 199 1,4-Dioxane | 88 | 2.767 | 2.767 | (0.541) | 451355 | 200.000 | 179.443 |
| 175 Biphenyl | 154 | 7.461 | 7.461 | (0.932) | 1946260 | 200.000 | 198.234 |

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.

STL-Denver

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: K.i
 Lab File ID: k3381.d
 Lab Smp Id: AP9_0200
 Analysis Type: SV
 Quant Type: ISTD
 Operator: kidd
 Method File: /chem/K.i/052904.b/8270C.m
 Misc Info:

Calibration Date: 29-MAY-2004
 Calibration Time: 13:24
 Client Smp ID: AP9_0200
 Level: LOW
 Sample Type: WATER

Test Mode:
 Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 147164 | 73582 | 294328 | 148455 | 0.88 |
| 49 Naphthalene-d8 | 530122 | 265061 | 1060244 | 543346 | 2.49 |
| 83 Acenaphthene-d10 | 318542 | 159271 | 637084 | 335256 | 5.25 |
| 117 Phenanthrene-d10 | 562072 | 281036 | 1124144 | 569154 | 1.26 |
| 142 Chrysene-d12 | 593593 | 296796 | 1187186 | 636411 | 7.21 |
| 151 Perylene-d12 | 499739 | 249870 | 999478 | 550108 | 10.08 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.00 |
| 117 Phenanthrene-d10 | 9.24 | 8.74 | 9.74 | 9.25 | 0.06 |
| 142 Chrysene-d12 | 11.36 | 10.86 | 11.86 | 11.36 | 0.05 |
| 151 Perylene-d12 | 12.87 | 12.37 | 13.37 | 12.88 | 0.09 |

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/K.i/052904.b/k3381.d

Page 14

Date : 29-MAY-2004 14:36

Client ID: AP9_0200

Instrument: K.i

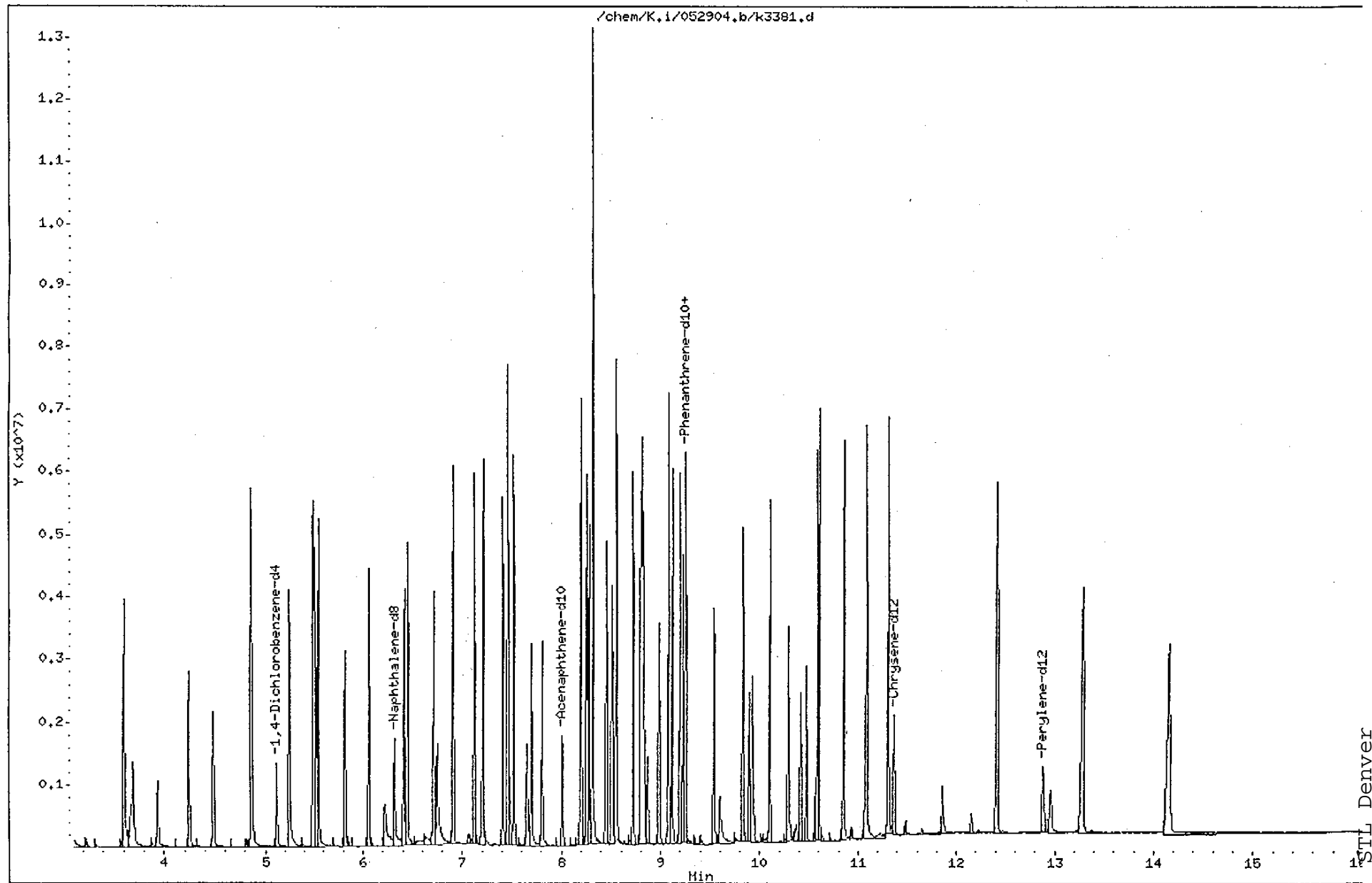
Sample Info: AP9_0200,BNA1406,P:050403,E:073104

Volume Injected (uL): 0.5

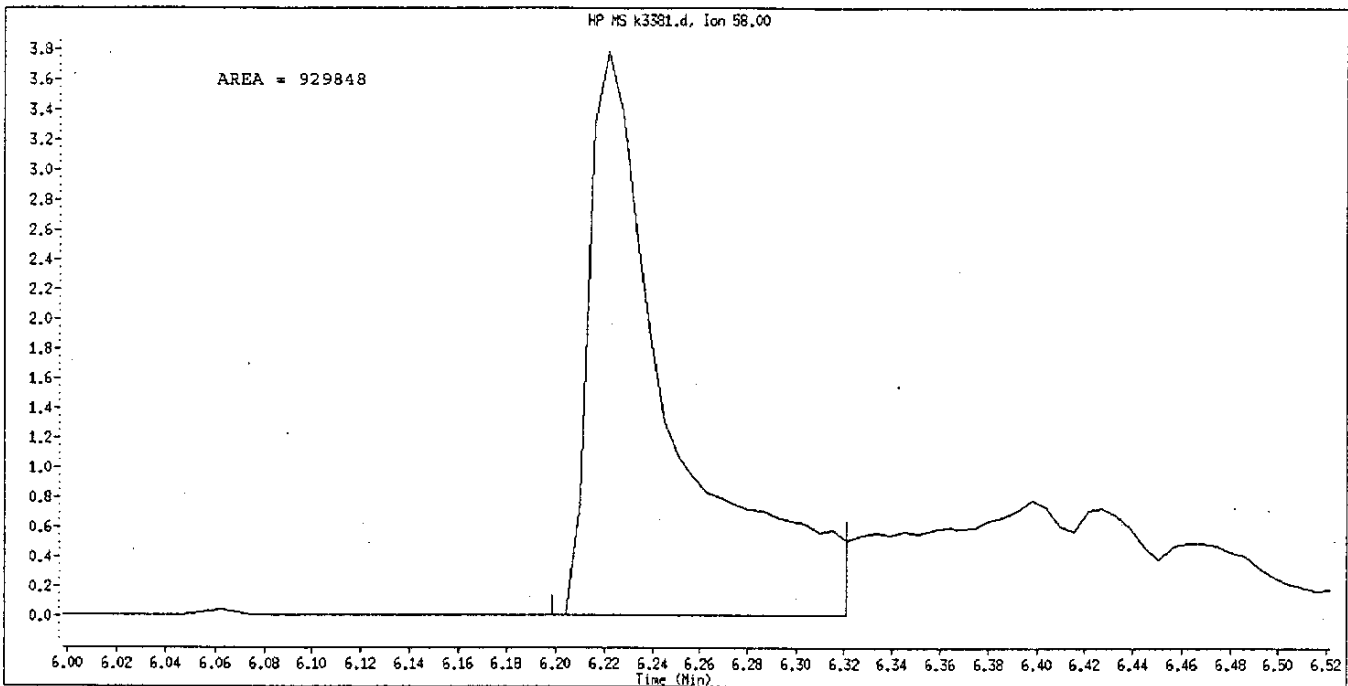
Operator: kidd

Column phase: Rtx-5ms 30m 0.5um

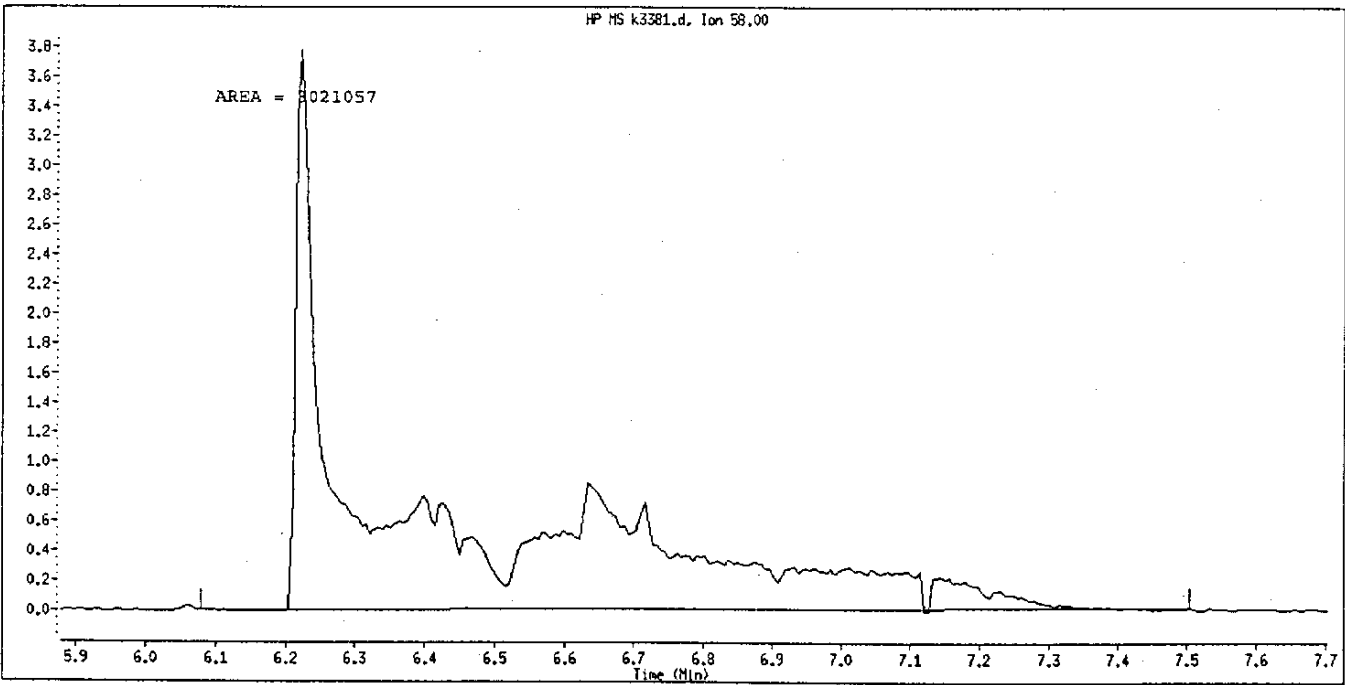
Column diameter: 0.25



Data File Name: k3381.d
Inj. Date and Time: 29-MAY-2004 14:36
Instrument ID: K.i
Client ID: AP9_0200
Compound Name: a,a-Dimethylphenethylamine
CAS #: 122-09-8
Report Date: 05/31/2004



Original Integration



Manual Integration

Manually Integrated By: kidd
Manual Integration Reason: Split Peak

mm
05-31-04

6-1-04 B/S

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/K.i/052904.b/k3382.d
Lab Smp Id: AP9_0100 SSV Client Smp ID: AP9_0100 SSV
Inj Date : 29-MAY-2004 15:00
Operator : kiddd Inst ID: K.i
Smp Info : AP9_0100 SSV,BNA1417,P:050404,E:071304
Misc Info :
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/K.i/052904.b/8270C.m
Meth Date : 31-May-2004 17:01 kiddd Quant Type: ISTD
Cal Date : 29-MAY-2004 14:36 Cal File: k3381.d
Als bottle: 22 QC Sample: SSV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-AP9std.sub
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

| Name | Value | Description |
|------|------------|--|
| DF | 1.00000 | Dilution Factor |
| Vf | 1000.00000 | final volume at end of extraction (uL) |
| Vs | 1000.00000 | volume of sample extracted (mL) |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG | CONCENTRATIONS | | | | | |
|-----------------------------|-----------|----------------|----------------|--------|---------|----------|------------------------------------|
| | | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN FINAL (ug/ml) (ug/L) |
| ***** | ---- | ---- | -- | ----- | ----- | ----- | ----- |
| * 22 1,4-Dichlorobenzene-d4 | 152 | 5.117 | 5.117 (1.000) | 125998 | 40.0000 | | |
| * 49 Naphthalene-d8 | 136 | 6.322 | 6.322 (1.000) | 480811 | 40.0000 | | |
| * 83 Acenaphthene-d10 | 164 | 8.008 | 8.008 (1.000) | 302539 | 40.0000 | | |
| * 117 Phenanthrene-d10 | 188 | 9.248 | 9.248 (1.000) | 516385 | 40.0000 | | |
| * 142 Chrysene-d12 | 240 | 11.375 | 11.363 (1.000) | 595061 | 40.0000 | | |
| * 151 Perylene-d12 | 264 | 12.891 | 12.885 (1.000) | 496390 | 40.0000 | | |
| 7 2-Picoline | 93 | 3.601 | 3.601 (0.704) | 451279 | 92.7748 | | 92.7748 |
| 8 N-Nitrosomethylethylamine | 88 | 3.695 | 3.695 (0.722) | 227721 | 103.213 | | 103.213 |
| 9 Methyl methanesulfonate | 80 | 3.936 | 3.936 (0.769) | 250452 | 173.170 | | 173.170 (R) |
| 11 N-Nitrosodiethylamine | 102 | 4.248 | 4.247 (0.830) | 214452 | 105.356 | | 105.356 |
| 13 Ethyl methanesulfonate | 79 | 4.483 | 4.488 (0.876) | 332019 | 103.403 | | 103.402 |
| 19 Pentachloroethane | 117 | 4.870 | 4.870 (0.952) | 137764 | 91.1351 | | 91.1351 |
| 31 N-Nitrosopyrrolidine | 100 | 5.511 | 5.511 (1.077) | 190651 | 98.0364 | | 98.0364 (Q) |
| 34 N-Nitrosomorpholine | 116 | 5.517 | 5.522 (1.078) | 77365 | 94.0237 | | 94.0237 |
| 35 o-Toluidine | 106 | 5.540 | 5.546 (1.083) | 593454 | 98.8680 | | 98.8680 |

| Compounds | QUANT SIG | | | | RESPONSE | CONCENTRATIONS | |
|----------------------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
| | MASS | RT | EXP RT | REL RT | | ON-COLUMN (ug/ml) | FINAL (ug/L) |
| ===== | ===== | == | ===== | ===== | ===== | ===== | ===== |
| 39 N-Nitrosopiperidine | 114 | 5.816 | 5.816 | (0.920) | 197099 | 98.3029 | 98.3029 |
| 44 O,O,O-Triethyl phosphorothio | 198 | 6.063 | 6.063 | (0.959) | 202419 | 91.9301 | 91.9301(Q) |
| 48 a,a-Dimethylphenethylamine | 58 | 6.563 | 6.222 | (1.038) | 1085501 | 90.7041 | 90.7041(M) |
| 53 2,6-Dichlorophenol | 162 | 6.410 | 6.416 | (1.014) | 299285 | 93.8627 | 93.8627 |
| 54 Hexachloropropene | 213 | 6.451 | 6.451 | (1.020) | 341025 | 116.160 | 116.160 |
| 57 N-Nitrosodi-n-butylamine | 84 | 6.710 | 6.715 | (1.061) | 263433 | 97.3578 | 97.3578 |
| 58 p-Phenylenediamine | 108 | 6.751 | 6.750 | (1.068) | 153043 | 43.0441 | 43.0441(R) |
| 61 Safrole | 162 | 6.909 | 6.909 | (1.093) | 285626 | 95.1991 | 95.1991 |
| 65 1,2,4,5-Tetrachlorobenzene | 216 | 7.209 | 7.215 | (1.140) | 360750 | 92.9792 | 92.9792 |
| 66 Isosafrole (#1) | 162 | 7.191 | 7.191 | (0.898) | 54408 | 22.9904 | 22.9904 |
| 72 Isosafrole (#2) | 104 | 7.403 | 7.409 | (0.924) | 203163 | 77.8981 | 77.8981 |
| 73 1-Chloronaphthalene | 162 | 7.520 | 7.520 | (0.939) | 570189 | 80.1499 | 80.1499 |
| 75 1,4-Naphthoquinone | 158 | 7.650 | 7.649 | (0.955) | 223631 | 140.310 | 140.310 |
| 78 1,4-Dinitrobenzene | 168 | 7.702 | 7.702 | (0.962) | 118906 | 108.198 | 108.198 |
| 80 1,3-Dinitrobenzene | 168 | 7.808 | 7.808 | (0.975) | 134614 | 104.459 | 104.459 |
| 89 Pentachlorobenzene | 250 | 8.196 | 8.196 | (1.023) | 297217 | 86.5062 | 86.5062 |
| 90 1-Naphthylamine | 143 | 8.255 | 8.255 | (1.031) | 586834 | 85.3640 | 85.3640 |
| 91 2,3,4,6-Tetrachlorophenol | 232 | 8.314 | 8.319 | (1.038) | 213724 | 90.9916 | 90.9916 |
| 92 2-Naphthylamine | 143 | 8.314 | 8.319 | (1.038) | 630619 | 91.6146 | 91.6146 |
| 98 Thionazin | 97 | 8.449 | 8.454 | (1.055) | 174849 | 84.9370 | 84.9370 |
| 100 5-Nitro-o-toluidine | 152 | 8.507 | 8.513 | (1.062) | 228688 | 98.9518 | 98.9518 |
| 182 Diphenylamine | 169 | 8.554 | 8.554 | (1.068) | 649406 | 86.8882 | 86.8882 |
| 104 Sulfotepp | 97 | 8.719 | 8.725 | (0.943) | 143238 | 96.3339 | 96.3339 |
| 105 1,3,5-Trinitrobenzene | 213 | 8.813 | 8.807 | (0.953) | 82083 | 100.338 | 100.338 |
| 106 Diallate (#1) | 86 | 8.801 | 8.801 | (0.952) | 310811 | 73.3920 | 73.3920 |
| 107 Phorate | 121 | 8.813 | 8.819 | (0.953) | 126718 | 94.6425 | 94.6425 |
| 109 Phenacetin | 108 | 8.825 | 8.830 | (0.954) | 380060 | 99.1189 | 99.1189 |
| 111 Diallate (#2) | 86 | 8.872 | 8.872 | (0.959) | 67071 | 24.9124 | 24.9124 |
| 112 Dimethoate | 87 | 8.983 | 8.989 | (0.971) | 320535 | 103.466 | 103.466 |
| 114 4-Aminobiphenyl | 169 | 9.077 | 9.083 | (0.982) | 819577 | 93.7042 | 93.7042 |
| 115 Pentachloronitrobenzene | 237 | 9.195 | 9.195 | (0.994) | 129530 | 97.7710 | 97.7710 |
| 116 Pronamide | 173 | 9.113 | 9.118 | (0.985) | 345050 | 96.7773 | 96.7773 |
| 120 2-secbutyl-4,6-dinitrophenol | 211 | 9.248 | 9.253 | (1.000) | 223818 | 105.693 | 105.693 |
| 121 Disulfoton | 88 | 9.224 | 9.224 | (0.997) | 384853 | 90.8789 | 90.8789 |
| 124 Methyl parathion | 109 | 9.536 | 9.535 | (1.031) | 264291 | 106.399 | 106.399 |
| 126 Parathion | 109 | 9.829 | 9.829 | (1.063) | 170070 | 97.6798 | 97.6798 |
| 127 4-Nitroquinoline-1-oxide | 190 | 9.894 | 9.894 | (1.070) | 83838 | 113.742 | 113.742(Q) |
| 128 Methapyrilene | 97 | 9.923 | 9.923 | (1.073) | 381186 | 121.376 | 121.376 |
| 129 Isodrin | 193 | 10.100 | 10.105 | (1.092) | 139495 | 101.316 | 101.316 |
| 134 Aramite (#1) | 185 | 10.417 | 10.417 | (0.916) | 70865 | 44.3703 | 44.3703(R) |
| 135 Aramite (#2) | 185 | 10.476 | 10.476 | (0.921) | 89474 | 44.1293 | 44.1293 |
| 136 p-Dimethylaminoazobenzene | 120 | 10.587 | 10.587 | (0.931) | 348699 | 104.603 | 104.603 |
| 138 3,3'-Dimethylbenzidine | 212 | 10.858 | 10.857 | (0.955) | 806484 | 94.1799 | 94.1799 |
| 139 2-Acetylaminofluorene | 181 | 11.087 | 11.092 | (0.975) | 561703 | 101.273 | 101.273 |
| 149 7,12-Dimethylbenz(a)anthrac | 256 | 12.426 | 12.420 | (0.964) | 603360 | 94.6543 | 94.6543 |
| 152 3-Methylcholanthrene | 268 | 13.284 | 13.284 | (1.031) | 717522 | 109.521 | 109.521 |
| 153 Dibenz(a,j)acridine | 279 | 14.148 | 14.154 | (1.098) | 1001762 | 106.490 | 106.490 |

| Compounds | QUANT SIG | | | | | CONCENTRATIONS | |
|----------------------|-----------|--------|--------|---------|----------|----------------------|------------------|
| | MASS | RT | EXP RT | REL RT | RESPONSE | ON-COLUMN (ug/ml) | FINAL (ug/L) |
| ===== | ==== | == | ===== | ===== | ===== | ===== | ===== |
| M 1 Total Isosafrole | 162 | | | | 257571 | 100.386 | 100.386 |
| M 2 Total Diallate | 86 | | | | 377882 | 99.1033 | 99.1033 |
| M 3 Total Aramite | 185 | | | | 160339 | 87.7744 | 87.7744 |
| 165 Chlorobenzilate | 251 | 10.605 | 10.605 | (0.932) | 350256 | 91.1767 | 91.1767 |
| 199 1,4-Dioxane | 88 | 2.761 | 2.767 | (0.540) | 208284 | 97.5655 | 97.5655 |
| 175 Biphenyl | 154 | 7.456 | 7.461 | (0.931) | 835137 | 94.3735 | 94.3735 |

QC Flag Legend

- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.
- M - Compound response manually integrated.

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INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: K.i
 Lab File ID: k3382.d
 Lab Smp Id: AP9_0100 SSV
 Analysis Type: SV
 Quant Type: ISTD
 Operator: kiddd
 Method File: /chem/K.i/052904.b/8270C.m
 Misc Info:

Calibration Date: 29-MAY-2004
 Calibration Time: 13:24
 Client Smp ID: AP9_0100 SSV
 Level: LOW
 Sample Type: WATER

Test Mode:
 Use Last Continuing Calibrator.

| COMPOUND | STANDARD | AREA LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|------------|---------|--------|--------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 147164 | 73582 | 294328 | 125998 | -14.38 |
| 49 Naphthalene-d8 | 530122 | 265061 | 1060244 | 480811 | -9.30 |
| 83 Acenaphthene-d10 | 318542 | 159271 | 637084 | 302539 | -5.02 |
| 117 Phenanthrene-d10 | 562072 | 281036 | 1124144 | 516385 | -8.13 |
| 142 Chrysene-d12 | 593593 | 296796 | 1187186 | 595061 | 0.25 |
| 151 Perylene-d12 | 499739 | 249870 | 999478 | 496390 | -0.67 |

| COMPOUND | STANDARD | RT LIMIT | | SAMPLE | %DIFF |
|----------------------|----------|----------|-------|--------|-------|
| | | LOWER | UPPER | | |
| 22 1,4-Dichlorobenze | 5.12 | 4.62 | 5.62 | 5.12 | 0.00 |
| 49 Naphthalene-d8 | 6.32 | 5.82 | 6.82 | 6.32 | 0.00 |
| 83 Acenaphthene-d10 | 8.01 | 7.51 | 8.51 | 8.01 | 0.00 |
| 117 Phenanthrene-d10 | 9.24 | 8.74 | 9.74 | 9.25 | 0.06 |
| 142 Chrysene-d12 | 11.36 | 10.86 | 11.86 | 11.37 | 0.16 |
| 151 Perylene-d12 | 12.87 | 12.37 | 13.37 | 12.89 | 0.14 |

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.

STL-Denver

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: AP9_0100 SSV
Level: LOW
Data Type: MS DATA
SpikeList File: AP9SSV.spk
Sublist File: 2-AP9std.sub
Method File: /chem/K.i/052904.b/8270C.m
Misc Info:

Client SDG: 052904
Fraction: SV
Client Smp ID: AP9_0100 SSV
Operator: kiddd
SampleType: SSV
Quant Type: ISTD

| SPIKE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS | |
|------------------------|-----------------------|---------------------------|----------------|--------|---------|
| 7 2-Picoline | 100.000 | 92.7748 | 92.77 | 45-155 | |
| 8 N-Nitrosomethyleth | 100.000 | 103.213 | 103.21 | 45-155 | |
| 9 Methyl methanesulf | 100.000 | 173.170 | 173.17* | 45-155 | narrate |
| 11 N-Nitrosodiethylam | 100.000 | 105.356 | 105.36 | 45-155 | |
| 13 Ethyl methanesulfo | 100.000 | 103.402 | 103.40 | 45-155 | |
| 19 Pentachloroethane | 100.000 | 91.1351 | 91.14 | 45-155 | |
| 31 N-Nitrosopyrrolidi | 100.000 | 98.0364 | 98.04 | 45-155 | |
| 34 N-Nitrosomorpholin | 100.000 | 94.0237 | 94.02 | 45-155 | |
| 35 o-Toluidine | 100.000 | 98.8680 | 98.87 | 45-155 | |
| 39 N-Nitrosopiperidin | 100.000 | 98.3029 | 98.30 | 45-155 | |
| 44 O,O,O-Triethyl pho | 100.000 | 91.9301 | 91.93 | 45-155 | |
| 48 a,a-Dimethylphenet | 100.000 | 90.7041 | 90.70 | 45-155 | |
| 53 2,6-Dichlorophenol | 100.000 | 93.8627 | 93.86 | 45-155 | |
| 54 Hexachloropropene | 100.000 | 116.160 | 116.16 | 45-155 | |
| 57 N-Nitrosodi-n-buty | 100.000 | 97.3578 | 97.36 | 45-155 | |
| 58 p-Phenylenediamine | 100.000 | 43.0441 | 43.04* | 45-155 | narrate |
| 61 Safrole | 100.000 | 95.1991 | 95.20 | 45-155 | |
| 65 1,2,4,5-Tetrachlor | 100.000 | 92.9792 | 92.98 | 45-155 | |
| 66 Isosafrole (#1) | 17.5000 | 22.9904 | 131.37 | 45-155 | |
| 72 Isosafrole (#2) | 82.5000 | 77.8981 | 94.42 | 45-155 | |
| 73 1-Chloronaphthalen | 100.000 | 80.1499 | 80.15 | 45-155 | |
| 75 1,4-Naphthoquinone | 100.000 | 140.310 | 140.31 | 45-155 | |
| 78 1,4-Dinitrobenzene | 100.000 | 108.198 | 108.20 | 45-155 | |
| 80 1,3-Dinitrobenzene | 100.000 | 104.459 | 104.46 | 45-155 | |
| 89 Pentachlorobenzene | 100.000 | 86.5062 | 86.51 | 45-155 | |
| 90 1-Naphthylamine | 100.000 | 85.3640 | 85.36 | 45-155 | |
| 91 2,3,4,6-Tetrachlor | 100.000 | 90.9916 | 90.99 | 45-155 | |
| 92 2-Naphthylamine | 100.000 | 91.6146 | 91.61 | 45-155 | |
| 98 Thionazin | 100.000 | 84.9370 | 84.94 | 45-155 | |
| 100 5-Nitro-o-toluidin | 100.000 | 98.9518 | 98.95 | 45-155 | |
| 182 Diphenylamine | 100.000 | 86.8882 | 86.89 | 45-155 | |
| 104 Sulfotepp | 100.000 | 96.3339 | 96.33 | 45-155 | |
| 105 1,3,5-Trinitrobenz | 100.000 | 100.338 | 100.34 | 45-155 | |

| SPIKE COMPOUND | CONC ADDED ug/L | CONC RECOVERED ug/L | % RECOVERED | LIMITS |
|-----------------------------|-----------------------|---------------------------|----------------|--------|
| 106 Diallate (#1) | 72.0000 | 73.3920 | 101.93 | 45-155 |
| 107 Phorate | 100.000 | 94.6425 | 94.64 | 45-155 |
| 109 Phenacetin | 100.000 | 99.1189 | 99.12 | 45-155 |
| 111 Diallate (#2) | 28.0000 | 24.9124 | 88.97 | 45-155 |
| 112 Dimethoate | 100.000 | 103.466 | 103.47 | 45-155 |
| 114 4-Aminobiphenyl | 100.000 | 93.7042 | 93.70 | 45-155 |
| 115 Pentachloronitrobenzene | 100.000 | 97.7710 | 97.77 | 45-155 |
| 116 Pronamide | 100.000 | 96.7773 | 96.78 | 45-155 |
| 120 2-secbutyl-4,6-din | 100.000 | 105.693 | 105.69 | 45-155 |
| 121 Disulfoton | 100.000 | 90.8789 | 90.88 | 45-155 |
| 124 Methyl parathion | 100.000 | 106.399 | 106.40 | 45-155 |
| 126 Parathion | 100.000 | 97.6798 | 97.68 | 45-155 |
| 127 4-Nitroquinoline-1 | 100.000 | 113.742 | 113.74 | 45-155 |
| 128 Methapyrilene | 100.000 | 121.376 | 121.38 | 45-155 |
| 129 Isodrin | 100.000 | 101.316 | 101.32 | 45-155 |
| 134 Aramite (#1) | 17.5000 | 44.3703 | 253.54* | 45-155 |
| 135 Aramite (#2) | 82.5000 | 44.1293 | 53.49 | 45-155 |
| 136 p-Dimethylaminoazo | 100.000 | 104.603 | 104.60 | 45-155 |
| 138 3,3'-Dimethylbenzidine | 100.000 | 94.1799 | 94.18 | 45-155 |
| 139 2-Acetylaminofluor | 100.000 | 101.273 | 101.27 | 45-155 |
| 152 3-Methylcholanthrene | 100.000 | 109.521 | 109.52 | 45-155 |
| 149 7,12-Dimethylbenzidine | 100.000 | 94.6543 | 94.65 | 45-155 |
| 153 Dibenz(a,j)acridin | 100.000 | 106.490 | 106.49 | 45-155 |
| M 1 Total Isosafrole | 100.000 | 100.386 | 100.39 | 45-155 |
| M 2 Total Diallate | 100.000 | 99.1033 | 99.10 | 45-155 |
| M 3 Total Aramite | 100.000 | 87.7744 | 87.77 | 45-155 |
| 165 Chlorobenzilate | 100.000 | 91.1767 | 91.18 | 45-155 |
| 199 1,4-Dioxane | 100.000 | 97.5655 | 97.57 | 45-155 |
| 175 Biphenyl | 100.000 | 94.3735 | 94.37 | 45-155 |

see total
 per

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TENTATIVELY IDENTIFIED COMPOUNDS

| | |
|--------------------------|----------------------------------|
| Client Name: | Client SDG: 052904 |
| Lab Smp Id: AP9 0100 SSV | Client Smp ID: AP9 0100 SSV |
| Operator : kiddd | Sample Date: 30-MAR-1998 |
| Sample Location: | Sample Point: |
| Sample Matrix: WATER | Date Received: 31-MAR-1998 00:00 |
| Analysis Type: SV | Level: LOW |

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|---------------|-------|------------|-------|
| ===== | ===== | ===== | ===== | ===== |

Data File: /chem/K.i/052904.b/k3382.d

Page 8

Date : 29-MAY-2004 15:00

Client ID: AP9_0100 SSV

Instrument: K.i

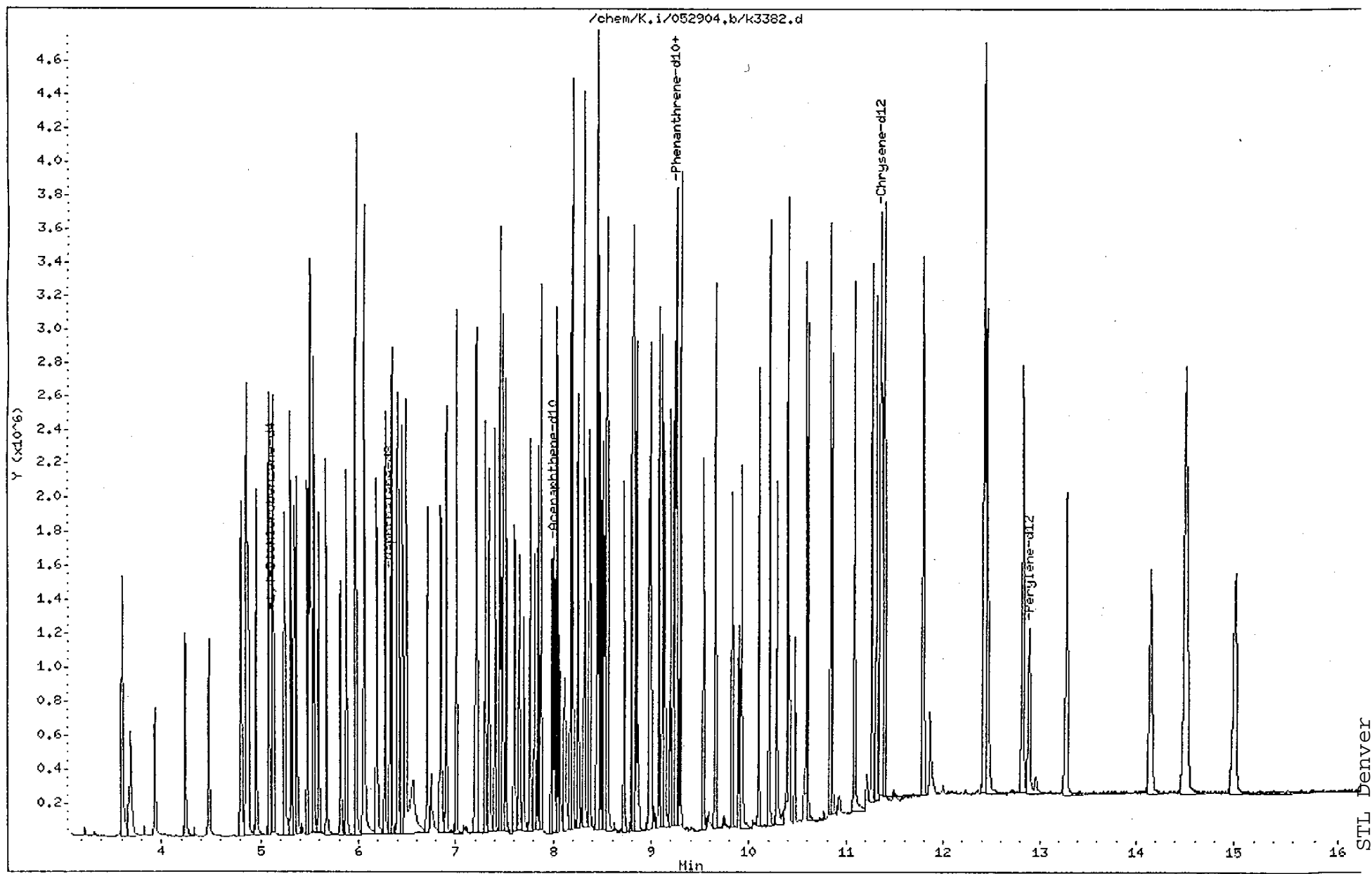
Sample Info: AP9_0100 SSV,BNA1417,P:050404,E:071304

Volume Injected (uL): 0.5

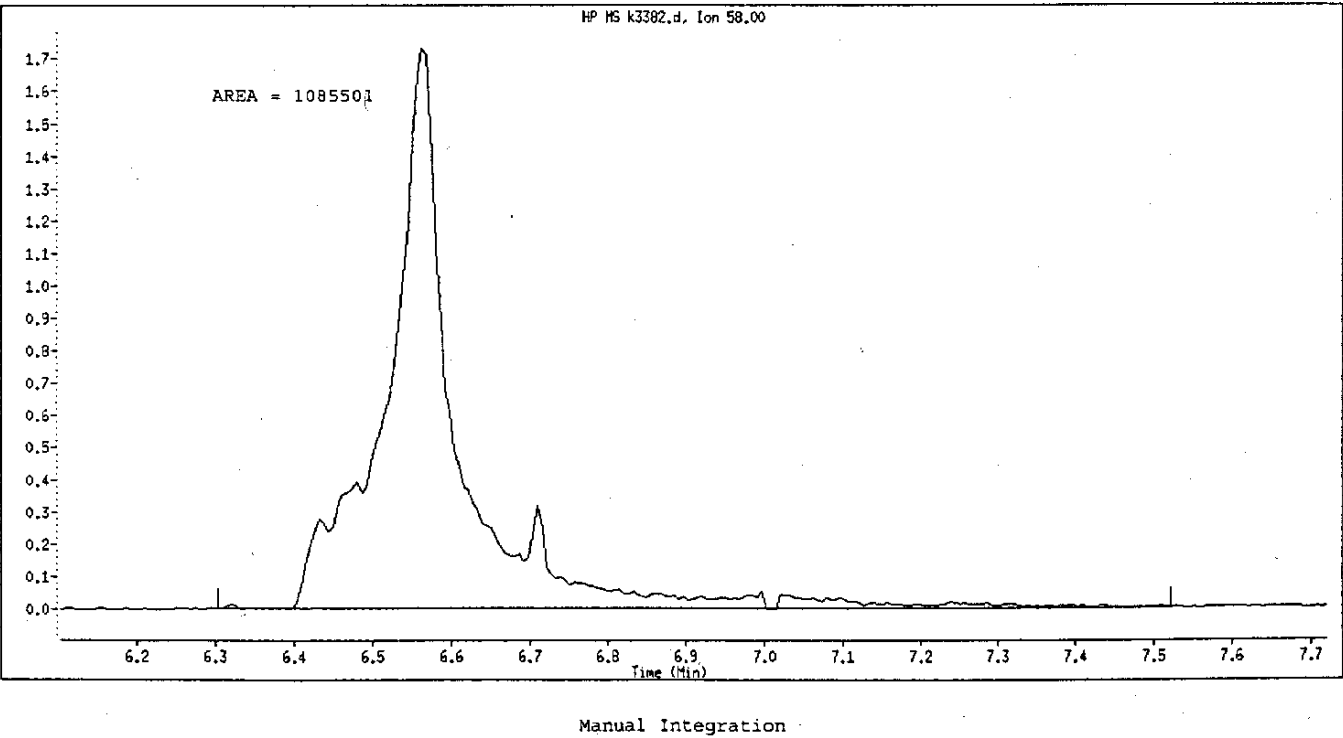
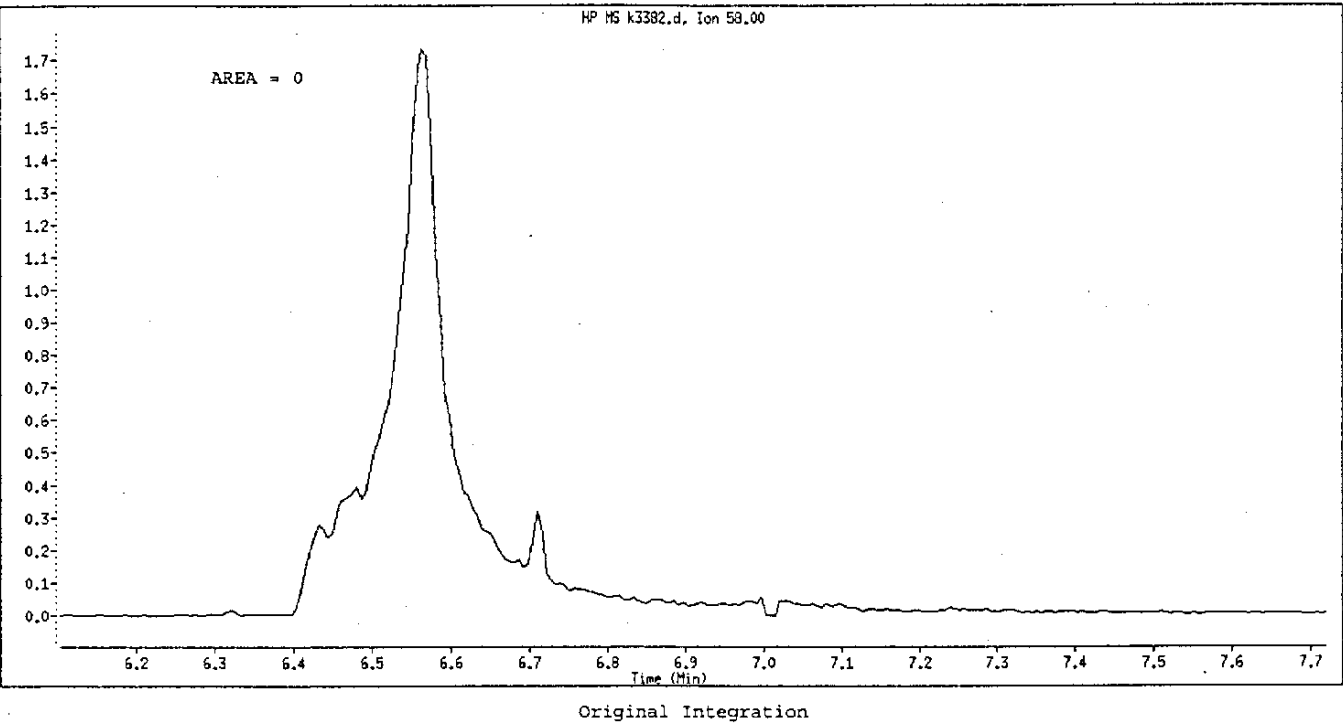
Operator: kidd

Column phase: Rtx-5ms 30m 0.5um

Column diameter: 0.25



Data File Name: k3382.d
Inj. Date and Time: 29-MAY-2004 15:00
Instrument ID: K.i
Client ID: AP9_0100 SSV
Compound Name: a,a-Dimethylphenethylamine
CAS #: 122-09-8
Report Date: 05/31/2004



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

mw
05-31-04

6.1.04 B/K

GC/MS Continuing Calibration Review Checklist

Instrument ID and Date: K-06/02/04 ; 060204.bCheck Method Used: Analysis ☐ 625 ☒ 8270 ☒ Other SV HSL/AP9☐ 524.2 ☐ 624 ☐ 8260B ☐ Other VOAVOA Preparation ☐ 5mL ☐ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

| Review Items | Level 1 | | | Level 2 | | Comments |
|---|---------|----|-----|---------|--|----------|
| | Yes | No | N/A | | | |
| Continuing Calibration: | | | | | | |
| 1. BFB/DFTPP meets criteria? | ✓ | | | ✓ | | |
| 2. ICAL date and instrument ID verified? | ✓ | | | ✓ | | |
| 3. Do SPCC RRFs and CCC %Ds meet method criteria? | ✓ | | | ✓ | | |
| 4. Does %D meet criteria for non-CCC compounds? | ✓ | | | ✓ | | |
| 5. Isomeric pairs checked for correct peak assignment? | ✓ | | | ✓ | | |
| 6. Standards traceability properly documented? | ✓ | | | ✓ | | |
| 7. Manual integrations documented and checked? | ✓ | | | ✓ | | |
| 8. Do the Internal Standards meet criteria for %D against ICAL? | ✓ | | | ✓ | | |

1st Level Reviewer: JMPDate: 6/2/042nd Level Reviewer: MRKDate: 06-03-04>50% D:
Benzidine 59.5% t

Date : 02-JUN-2004 17:03

Client ID: DFTPP

Instrument: K.i

Sample Info: 25NG DFTPP,BNA1512,P041904 E041905

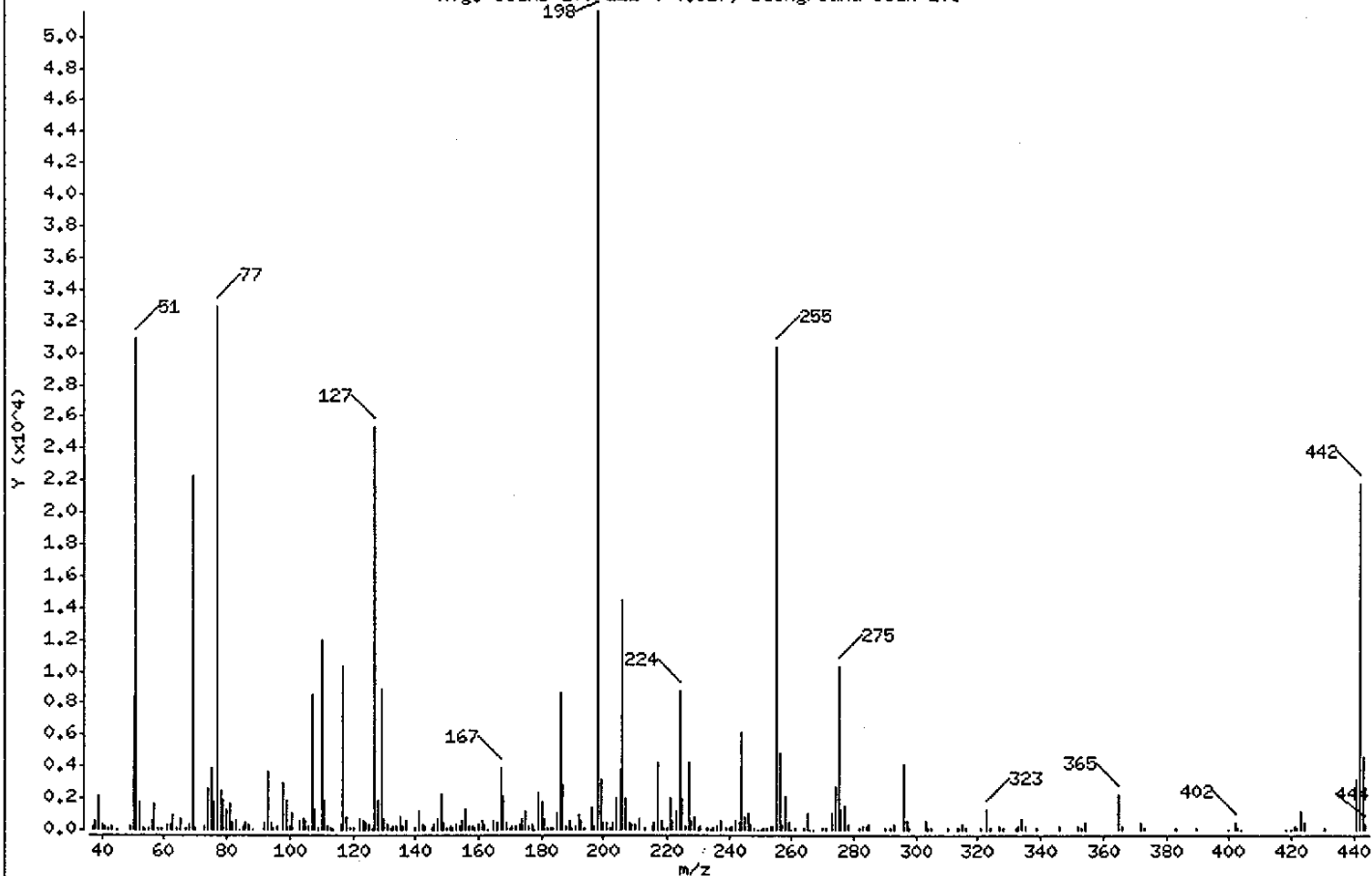
Operator: petersonj

Column phase: Rtx-5ms, 30m,0.5um

Column diameter: 0.25

1 dftpp

Avg. Scans 209-211 (4.31), Background Scan 206



| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% relative abundance | 100.00 |
| 51 | 30.00 - 60.00% of mass 198 | 59.90 |
| 68 | Less than 2.00% of mass 69 | 0.72 (1.67) |
| 69 | Mass 69 relative abundance | 43.15 |
| 70 | Less than 2.00% of mass 69 | 0.21 (0.48) |
| 127 | 40.00 - 60.00% of mass 198 | 49.16 |
| 197 | Less than 1.00% of mass 198 | 0.50 |
| 199 | 5.00 - 9.00% of mass 198 | 6.25 |
| 275 | 10.00 - 30.00% of mass 198 | 20.02 |
| 365 | Greater than 1.00% of mass 198 | 4.32 |
| 441 | Present, but less than mass 443 | 6.13 |
| 442 | 40.00 - 100.00% of mass 198 | 42.34 |
| 443 | 17.00 - 23.00% of mass 442 | 8.95 (21.13) |

Date : 02-JUN-2004 17:03

Client ID: DFTPP

Instrument: K.i

Sample Info: 25NG DFTPP,BNA1512,P041904 E041905

Operator: petersonj

Column phase: Rtx-5ms, 30m,0.5um

Column diameter: 0.25

Data File: k3465.d

Spectrum: Avg. Scans 209-211 (4.31), Background Scan 206

Location of Maximum: 198.00

Number of points: 266

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|-------|-------|--------|-------|--------|-------|--------|-------|
| 37.00 | 186 | 118.00 | 840 | 190.00 | 70 | 264.00 | 97 |
| 38.00 | 579 | 119.00 | 136 | 191.00 | 249 | 265.00 | 1103 |
| 39.00 | 2139 | 120.00 | 138 | 192.00 | 982 | 266.00 | 33 |
| 40.00 | 320 | 122.00 | 667 | 193.00 | 583 | 267.00 | 52 |
| 41.00 | 237 | 123.00 | 561 | 194.00 | 173 | 270.00 | 87 |
| 42.00 | 117 | 124.00 | 421 | 196.00 | 1419 | 271.00 | 120 |
| 43.00 | 251 | 125.00 | 334 | 197.00 | 255 | 273.00 | 1066 |
| 45.00 | 59 | 126.00 | 90 | 198.00 | 51504 | 274.00 | 2702 |
| 49.00 | 207 | 127.00 | 25320 | 199.00 | 3221 | 275.00 | 10314 |
| 50.00 | 8401 | 128.00 | 1855 | 200.00 | 531 | 276.00 | 1355 |
| 51.00 | 30848 | 129.00 | 8839 | 201.00 | 428 | 277.00 | 1557 |
| 52.00 | 1729 | 130.00 | 706 | 202.00 | 86 | 278.00 | 384 |
| 53.00 | 75 | 131.00 | 399 | 203.00 | 514 | 282.00 | 104 |
| 54.00 | 55 | 132.00 | 144 | 204.00 | 2053 | 283.00 | 179 |
| 55.00 | 136 | 133.00 | 225 | 205.00 | 3790 | 284.00 | 232 |
| 56.00 | 593 | 134.00 | 223 | 206.00 | 14493 | 285.00 | 318 |
| 57.00 | 1709 | 135.00 | 866 | 207.00 | 1984 | 290.00 | 70 |
| 58.00 | 64 | 136.00 | 236 | 208.00 | 513 | 292.00 | 66 |
| 59.00 | 84 | 137.00 | 551 | 209.00 | 318 | 293.00 | 387 |
| 61.00 | 300 | 140.00 | 66 | 210.00 | 333 | 296.00 | 4131 |
| 62.00 | 341 | 141.00 | 1190 | 211.00 | 662 | 297.00 | 648 |
| 63.00 | 929 | 142.00 | 414 | 213.00 | 78 | 298.00 | 102 |
| 64.00 | 124 | 143.00 | 272 | 215.00 | 267 | 303.00 | 609 |
| 65.00 | 721 | 145.00 | 60 | 216.00 | 424 | 304.00 | 84 |
| 67.00 | 77 | 146.00 | 333 | 217.00 | 4261 | 305.00 | 66 |
| 68.00 | 371 | 147.00 | 691 | 218.00 | 639 | 310.00 | 62 |
| 69.00 | 22224 | 148.00 | 2305 | 219.00 | 154 | 313.00 | 67 |
| 70.00 | 107 | 149.00 | 519 | 220.00 | 141 | 314.00 | 99 |
| 73.00 | 216 | 150.00 | 141 | 221.00 | 2019 | 315.00 | 377 |
| 74.00 | 2631 | 151.00 | 200 | 222.00 | 543 | 316.00 | 152 |
| 75.00 | 3868 | 152.00 | 73 | 223.00 | 1180 | 321.00 | 115 |
| 76.00 | 1738 | 153.00 | 322 | 224.00 | 8799 | 323.00 | 1295 |
| 77.00 | 32880 | 154.00 | 295 | 225.00 | 2065 | 324.00 | 117 |
| 78.00 | 2456 | 155.00 | 603 | 226.00 | 285 | 327.00 | 284 |
| 79.00 | 1867 | 156.00 | 1329 | 227.00 | 4221 | 328.00 | 146 |

Date : 02-JUN-2004 17:03

Client ID: DFTPP

Instrument: K.i

Sample Info: 25NG DFTPP,BNA1S12,P041904 E041905

Operator: petersonj

Column phase: Rtx-5ms, 30m,0.5um

Column diameter: 0.25

Data File: k3465.d

Spectrum: Avg. Scans 209-211 (4.31), Background Scan 206

Location of Maximum: 198.00

Number of points: 266

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|--------|-------|--------|------|--------|-------|--------|-------|
| ----- | | | | | | | |
| 80.00 | 1334 | 157.00 | 212 | 228.00 | 634 | 332.00 | 171 |
| 81.00 | 1648 | 158.00 | 246 | 229.00 | 817 | 333.00 | 188 |
| 82.00 | 470 | 159.00 | 164 | 230.00 | 110 | 334.00 | 741 |
| 83.00 | 594 | 160.00 | 356 | 231.00 | 190 | 335.00 | 240 |
| 84.00 | 55 | 161.00 | 558 | 233.00 | 61 | 339.00 | 65 |
| ----- | | | | | | | |
| 85.00 | 252 | 162.00 | 315 | 234.00 | 57 | 346.00 | 188 |
| 86.00 | 531 | 163.00 | 50 | 235.00 | 173 | 352.00 | 276 |
| 87.00 | 328 | 165.00 | 630 | 236.00 | 253 | 353.00 | 136 |
| 88.00 | 53 | 166.00 | 438 | 237.00 | 557 | 354.00 | 443 |
| 92.00 | 518 | 167.00 | 3909 | 239.00 | 103 | 365.00 | 2227 |
| ----- | | | | | | | |
| 93.00 | 3725 | 168.00 | 2122 | 240.00 | 173 | 366.00 | 227 |
| 94.00 | 416 | 169.00 | 478 | 241.00 | 229 | 372.00 | 458 |
| 95.00 | 74 | 170.00 | 115 | 242.00 | 618 | 373.00 | 123 |
| 96.00 | 293 | 171.00 | 218 | 243.00 | 478 | 383.00 | 60 |
| 98.00 | 2931 | 172.00 | 262 | 244.00 | 6111 | 390.00 | 94 |
| ----- | | | | | | | |
| 99.00 | 1953 | 173.00 | 370 | 245.00 | 837 | 400.00 | 51 |
| 100.00 | 251 | 174.00 | 655 | 246.00 | 1097 | 402.00 | 435 |
| 101.00 | 1102 | 175.00 | 1234 | 247.00 | 307 | 403.00 | 75 |
| 103.00 | 538 | 176.00 | 233 | 248.00 | 78 | 404.00 | 50 |
| 104.00 | 731 | 177.00 | 413 | 249.00 | 13 | 418.00 | 50 |
| ----- | | | | | | | |
| 105.00 | 611 | 178.00 | 55 | 250.00 | 54 | 420.00 | 52 |
| 106.00 | 253 | 179.00 | 2326 | 251.00 | 128 | 421.00 | 215 |
| 107.00 | 8558 | 180.00 | 1755 | 252.00 | 143 | 422.00 | 84 |
| 108.00 | 1325 | 181.00 | 761 | 253.00 | 291 | 423.00 | 1140 |
| 109.00 | 74 | 182.00 | 94 | 254.00 | 226 | 424.00 | 442 |
| ----- | | | | | | | |
| 110.00 | 12016 | 183.00 | 105 | 255.00 | 30352 | 431.00 | 71 |
| 111.00 | 1837 | 184.00 | 102 | 256.00 | 4905 | 441.00 | 3157 |
| 112.00 | 204 | 185.00 | 1057 | 257.00 | 334 | 442.00 | 21808 |
| 113.00 | 75 | 186.00 | 8653 | 258.00 | 2074 | 443.00 | 4609 |
| 114.00 | 53 | 187.00 | 2837 | 259.00 | 501 | 444.00 | 375 |
| ----- | | | | | | | |
| 116.00 | 399 | 188.00 | 260 | 260.00 | 53 | | |
| 117.00 | 10280 | 189.00 | 562 | 261.00 | 100 | | |
| ----- | | | | | | | |

Data File: /chem/K.i/060204.b/k3465.d

Page 1

Date : 02-JUN-2004 17:03

Client ID: DFTPP

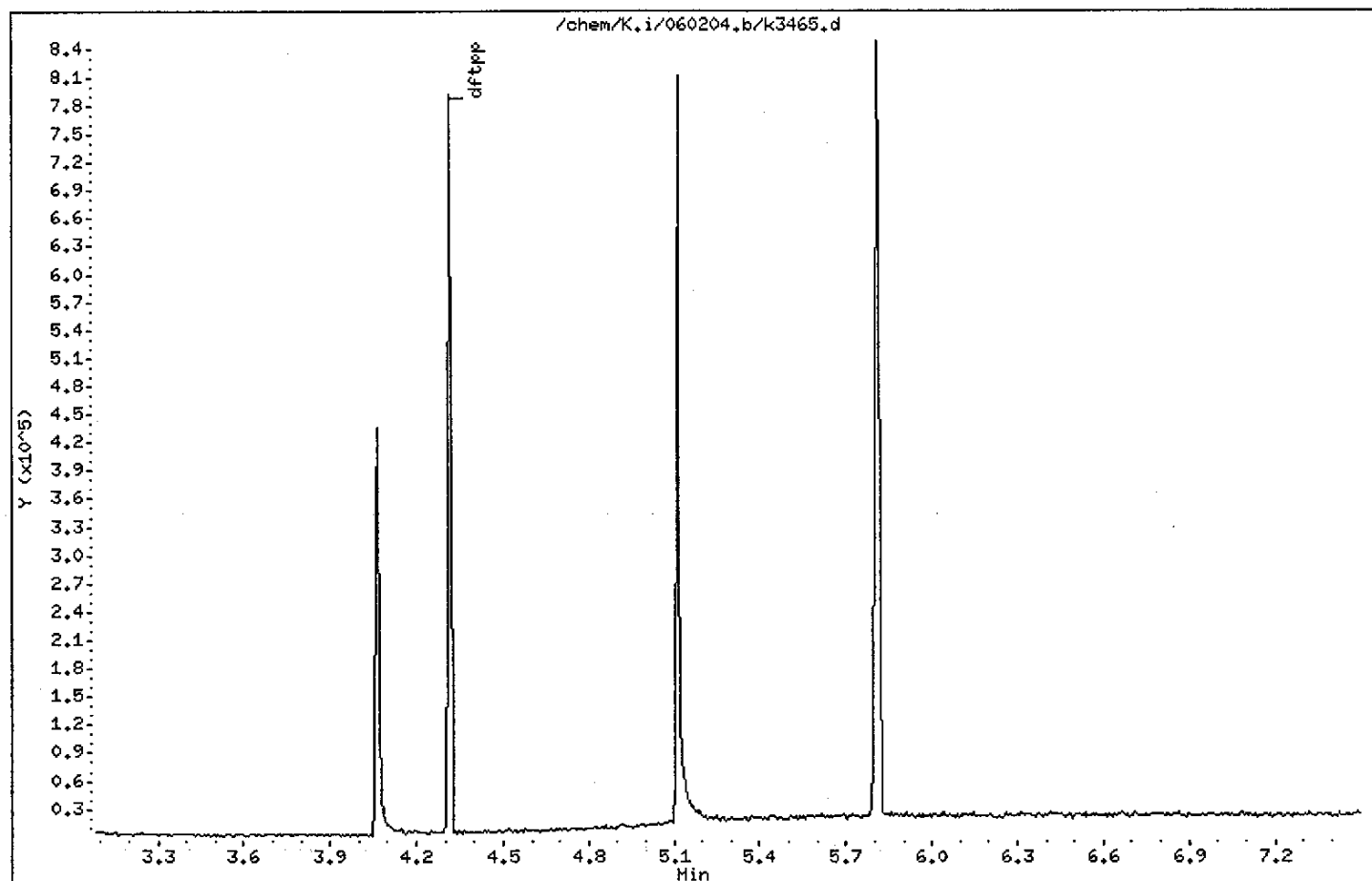
Instrument: K.i

Sample Info: 25NG DFTPP,BNA1512,P041904 E041905

Operator: petersonj

Column phase: Rtx-5ms, 30m,0.5um

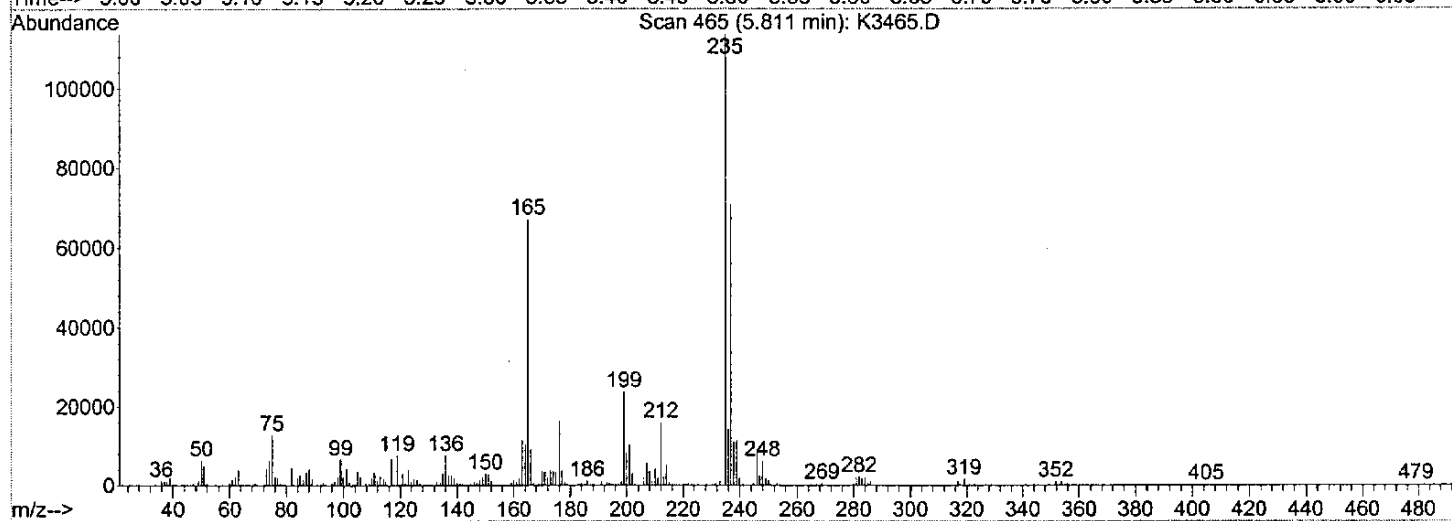
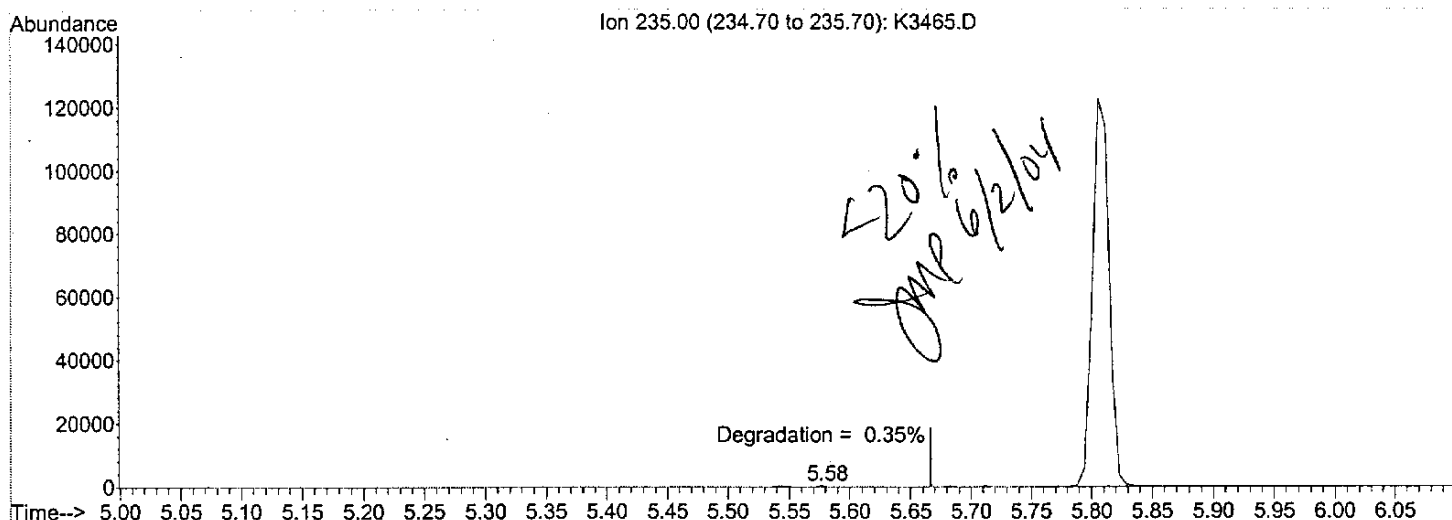
Column diameter: 0.25



Quantitation Report (Qedit)

Data File : D:\DATA\060204.B\K3465.D Vial: 2
 Acq On : 2 Jun 2004 5:03 pm Operator: petersonj
 Sample : 25NG DFTPP, BNA1512, P041904 E041905 Inst : Instrumen
 Misc : Multiplr: 1.00
 MS Integration Params: events.e
 Quant Time: Jun 2 17:14 2004 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPB.M (Chemstation Integrator)
 Title : 8270C DFTPP CHECK
 Last Update : Tue May 18 13:56:37 2004
 Response via : Single Level Calibration



TIC: K3465.D

(4) DDT

5.81min 0.00

response 1177542

| Ion | Exp% | Act% |
|--------|------|------|
| 235.00 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : D:\DATA\060204.B\K3465.D

Vial: 2

Acq On : 2 Jun 2004 5:03 pm

Operator: petersonj

Sample : 25NG DFTPP, BNA1512, P041904 E041905

Inst : Instrumen

Misc :

Multiplr: 1.00

MS Integration Params: events.e

Quant Time: Jun 2 17:14 2004

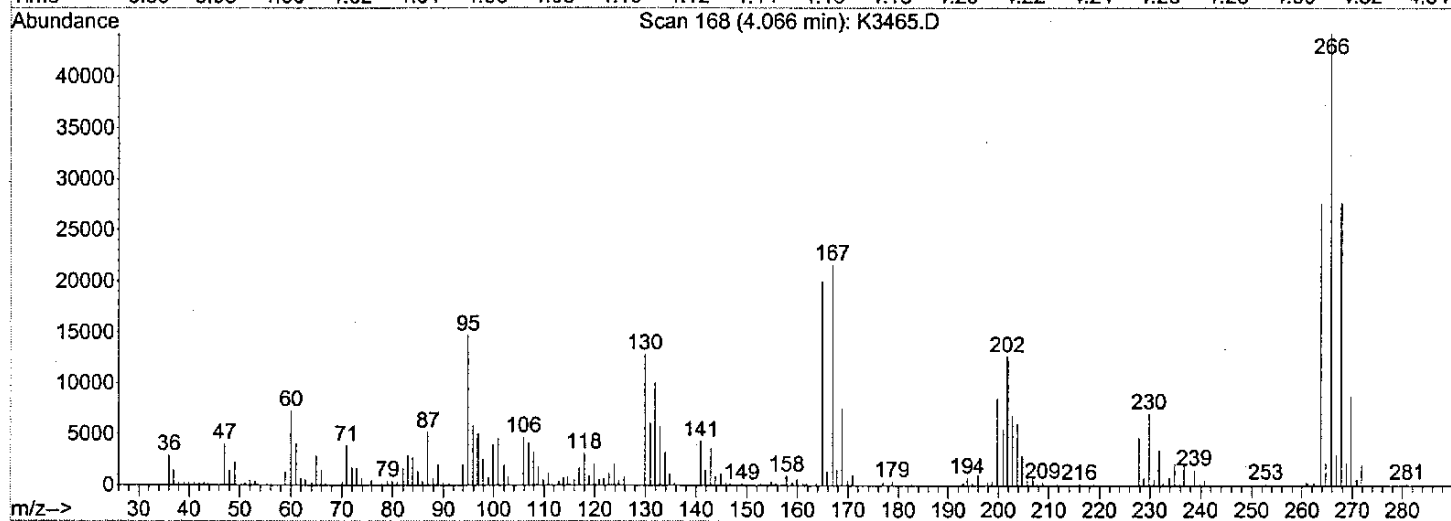
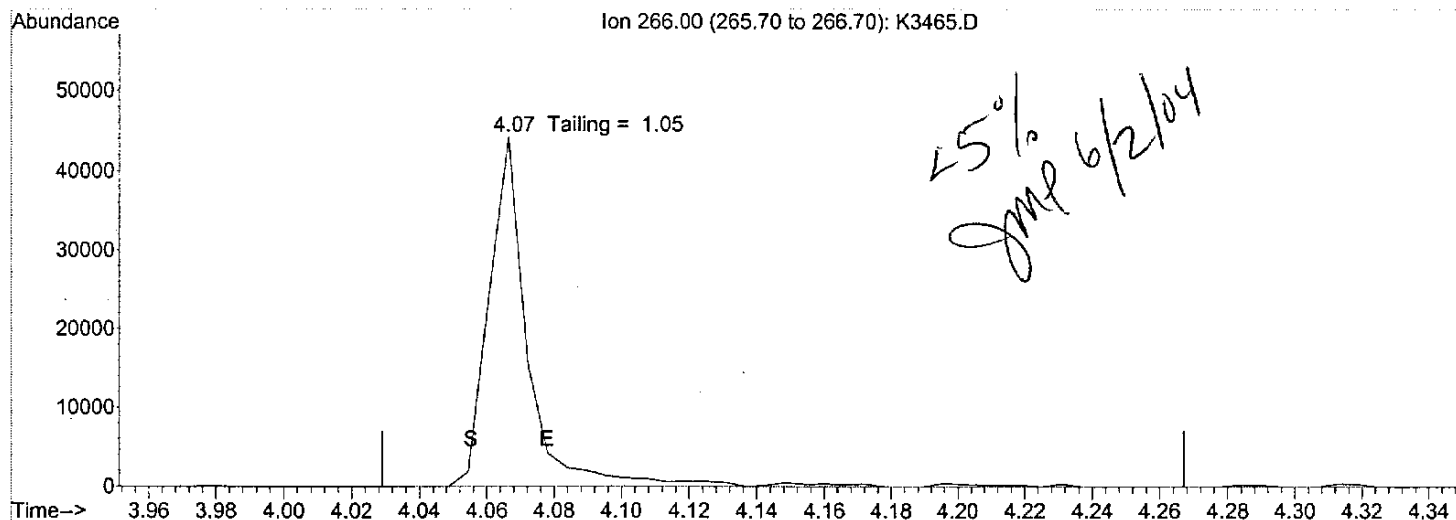
Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPB.M (Chemstation Integrator)

Title : 8270C DFTPP CHECK

Last Update : Tue May 18 13:56:37 2004

Response via : Single Level Calibration



TIC: K3465.D

(1) Pentachlorophenol

4.07min 0.00

response 348041

| Ion | Exp% | Act% |
|--------|------|------|
| 266.00 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (Qedit)

Data File : D:\DATA\060204.B\K3465.D

Vial: 2

Acq On : 2 Jun 2004 5:03 pm

Operator: petersonj

Sample : 25NG DFTPP, BNA1512, P041904 E041905

Inst : Instrumen

Misc :

Multiplr: 1.00

MS Integration Params: events.e

Quant Time: Jun 2 17:14 2004

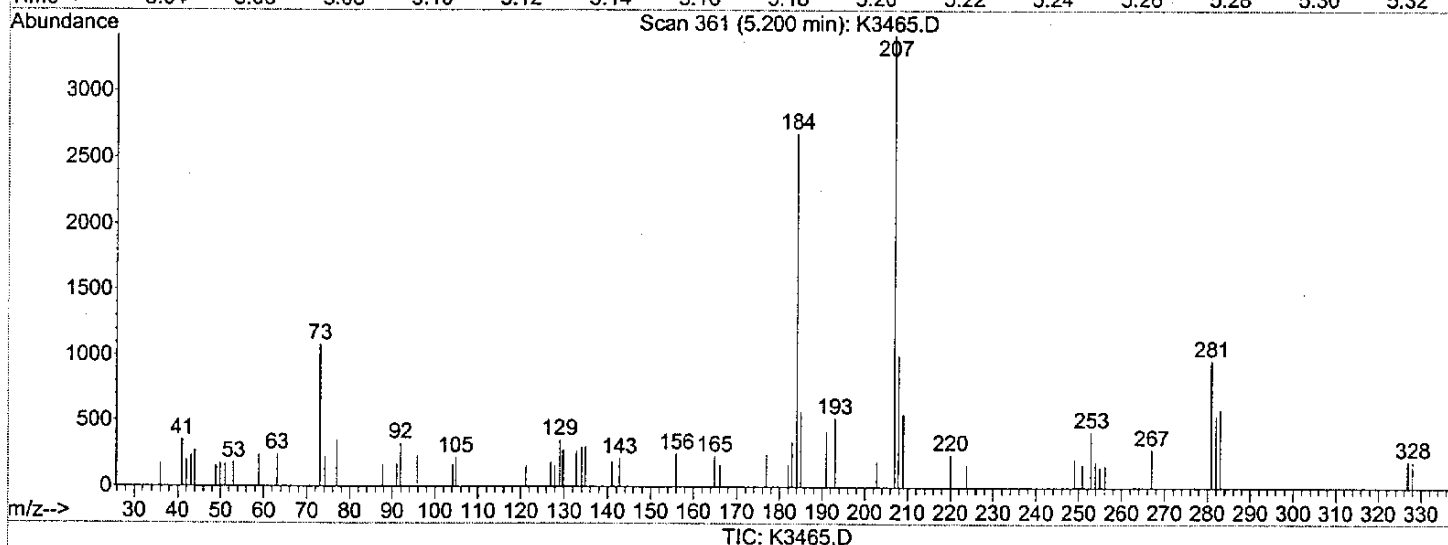
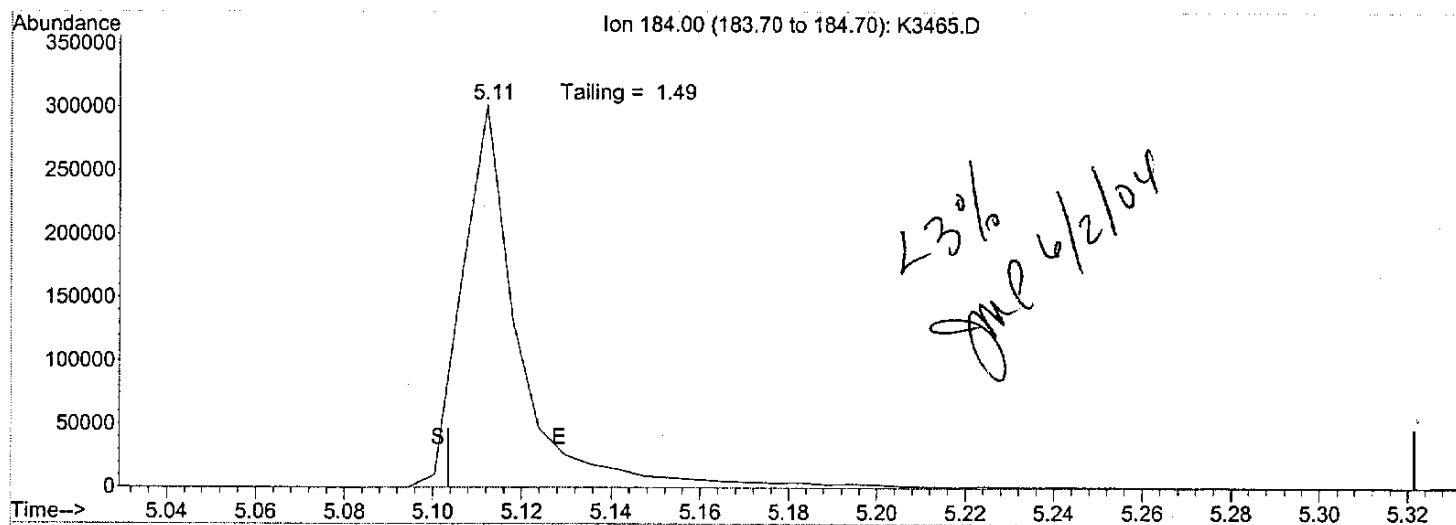
Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPB.M (Chemstation Integrator)

Title : 8270C DFTPP CHECK

Last Update : Tue May 18 13:56:37 2004

Response via : Single Level Calibration



(3) Benzidine

5.20min 0.00

response 0

| Ion | Exp% | Act% |
|--------|------|------|
| 184.00 | 100 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: K.i
Lab File ID: k3466.d
Analysis Type: WATER

Injection Date: 02-JUN-2004 17:18
Lab Sample ID: HSL 0080
Method File: /chem/K.i/060204.b/8270C.m

| COMPOUND | RRF/CONC | RRF/CONC | CCAL RRF | MIN RRF | %D | MAX %D | CURVE TYPE |
|---------------------------------|----------|----------|-------------|------------|-------|-----------|------------|
| 3 N-Nitrosodimethylamine | 0.985019 | 0.949475 | 0.94948 | 0.01 | 3.61 | 50.0 | Average |
| 2 Pyridine | 1.57313 | 1.71193 | 1.7119 | 0.01 | 8.82 | 50.0 | Average |
| 89 2-Fluorophenol | 1.31486 | 1.39416 | 1.3942 | 0.01 | 6.03 | 50.0 | Average |
| 59 Phenol-d5 | 1.65936 | 1.73550 | 1.7355 | 0.01 | 4.59 | 50.0 | Average |
| 9 Phenol | 1.67968 | 1.83821 | 1.8382 | 0.01 | 9.44 | 20.0 | Average |
| 13 Aniline | 80.0000 | 115.288 | 1.8498 | 0.01 | 44.1 | 50.0 | Quadratic |
| 168 Methyl Styrene | 1.43182 | 1.55408 | 1.5541 | 0.01 | 8.54 | 50.0 | Average |
| 15 Bis(2-chloroethyl) ether | 80.0000 | 78.5905 | 1.4862 | 0.01 | 1.76 | 50.0 | Linear |
| 206 Decane | 80.0000 | 110.269 | 2.1011 | 0.01 | 37.8 | 50.0 | Linear |
| 142 2-Chlorophenol-d4 | 1.21763 | 1.27916 | 1.2792 | 0.01 | 5.05 | 50.0 | Average |
| 9 2-Chlorophenol | 1.25794 | 1.28929 | 1.2893 | 0.01 | 2.49 | 50.0 | Average |
| 17 1,3-Dichlorobenzene | 1.47749 | 1.53169 | 1.5317 | 0.01 | 3.67 | 50.0 | Average |
| 9 1,4-Dichlorobenzene | 1.50336 | 1.57583 | 1.5758 | 0.01 | 4.82 | 20.0 | Average |
| 20 Benzyl alcohol | 0.866565 | 0.906525 | 0.90652 | 0.01 | 4.61 | 50.0 | Average |
| 143 1,2-Dichlorobenzene-d4 | 0.819202 | 0.858759 | 0.85876 | 0.01 | 4.83 | 50.0 | Average |
| 21 1,2-Dichlorobenzene | 1.36859 | 1.41671 | 1.4167 | 0.01 | 3.52 | 50.0 | Average |
| 22 2-Methylphenol | 1.27594 | 1.32251 | 1.3225 | 0.01 | 3.65 | 50.0 | Average |
| 23 2,2'-oxybis(1-chloropropane) | 80.0000 | 102.425 | 2.6236 | 0.01 | 28.0 | 50.0 | Quadratic |
| 136 1H-Indene | 2.23249 | 2.36443 | 2.3644 | 0.01 | 5.91 | 50.0 | Average |
| 25 4-Methylphenol | 1.32009 | 1.32623 | 1.3262 | 0.01 | 0.465 | 50.0 | Average |
| 9 N-nitrosodi-n-propylamine | 0.963621 | 1.11436 | 1.1144 | 0.05 | 15.6 | 50.0 | Average |
| 26 Acetophenone | 1.82564 | 1.96796 | 1.9680 | 0.01 | 7.80 | 50.0 | Average |
| 30 Hexachloroethane | 0.651225 | 0.704550 | 0.70455 | 0.01 | 8.19 | 50.0 | Average |
| 8 Nitrobenzene-d5 | 1.60323 | 1.76342 | 1.7634 | 0.01 | 9.99 | 50.0 | Average |
| 32 Nitrobenzene | 1.64914 | 1.80270 | 1.8027 | 0.01 | 9.31 | 50.0 | Average |
| 34 Isophorone | 0.732973 | 0.811544 | 0.81154 | 0.01 | 10.7 | 50.0 | Average |
| 36 2,4-Dimethylphenol | 0.329722 | 0.380401 | 0.38040 | 0.01 | 15.4 | 50.0 | Average |
| 35 2-Nitrophenol | 0.164846 | 0.176541 | 0.17654 | 0.01 | 7.09 | 20.0 | Average |
| 39 Bis(2-chloroethoxy)methane | 0.424292 | 0.447283 | 0.44728 | 0.01 | 5.42 | 50.0 | Average |
| 38 Benzoic acid | 0.211719 | 0.205227 | 0.20523 | 0.01 | 3.07 | 50.0 | Average |
| 40 2,4-Dichlorophenol | 0.289157 | 0.311702 | 0.31170 | 0.01 | 7.80 | 20.0 | Average |
| 213 n-Dodecane | 80.0000 | 96.8951 | 0.82849 | 0.01 | 21.1 | 50.0 | Quadratic |
| 9 1,2,4-Trichlorobenzene | 0.314710 | 0.338774 | 0.33877 | 0.01 | 7.65 | 50.0 | Average |
| 44 Naphthalene | 0.967358 | 1.02507 | 1.0251 | 0.01 | 5.96 | 50.0 | Average |
| 45 4-Chloroaniline | 0.377432 | 0.400055 | 0.40006 | 0.01 | 5.99 | 50.0 | Average |
| 48 Hexachlorobutadiene | 0.204582 | 0.237463 | 0.23746 | 0.01 | 16.1 | 20.0 | Average |
| 205 Caprolactam | 0.173808 | 0.242856 | 0.24286 | 0.01 | 39.7 | 50.0 | Average |
| 9 4-Chloro-3-methylphenol | 0.304431 | 0.332749 | 0.33275 | 0.01 | 9.30 | 20.0 | Average |
| 53 2-Methylnaphthalene | 0.583296 | 0.635728 | 0.63573 | 0.01 | 8.99 | 50.0 | Average |

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: K.i
Lab File ID: k3466.d
Analysis Type: WATER

Injection Date: 02-JUN-2004 17:18
Lab Sample ID: HSL 0080
Method File: /chem/K.i/060204.b/8270C.m

| COMPOUND | RRF/CONC | RRF/CONC | CCAL RRF | MIN RRF | %D | MAX %D | CURVE TYPE |
|--------------------------------|-----------|-----------|-------------|------------|--------|-----------|------------|
| 138 1-Methylnaphthalene | 0.595484 | 0.651623 | 0.65162 | 0.01 | 9.43 | 50.0 | Average |
| 54 Hexachlorocyclopentadiene | 0.361098 | 0.406210 | 0.40621 | 0.05 | 12.5 | 50.0 | Average |
| 57 2,4,6-Trichlorophenol | 0.360807 | 0.369134 | 0.36913 | 0.01 | 2.31 | 20.0 | Average |
| 207 2,3-Dichlorobenzeneamine | 0.559647 | 0.553403 | 0.55340 | 0.01 | 1.12 | 50.0 | Average |
| 58 2,4,5-Trichlorophenol | 0.394821 | 0.397666 | 0.39766 | 0.01 | 0.720 | 50.0 | Average |
| 11 2-Fluorobiphenyl | 1.21340 | 1.23141 | 1.2314 | 0.01 | 1.48 | 50.0 | Average |
| 210 Tetradecane | 80.0000 | 113.774 | 0.75845 | 0.01 | 42.2 | 50.0 | Quadratic |
| 61 2-Chloronaphthalene | 1.03139 | 1.00146 | 1.0014 | 0.01 | 2.90 | 50.0 | Average |
| 63 2-Nitroaniline | 0.414811 | 0.463849 | 0.46385 | 0.01 | 11.8 | 50.0 | Average |
| 65 Dimethyl phthalate | 1.12246 | 1.13851 | 1.1385 | 0.01 | 1.43 | 50.0 | Average |
| 67 2,6-Dinitrotoluene | 0.245044 | 0.242325 | 0.24232 | 0.01 | 1.11 | 50.0 | Average |
| 68 Acenaphthylene | 1.63884 | 1.64016 | 1.6402 | 0.01 | 0.0805 | 50.0 | Average |
| 69 3-Nitroaniline | 0.287644 | 0.284327 | 0.28433 | 0.01 | 1.15 | 50.0 | Average |
| 9 Acenaphthene | 0.944930 | 0.966482 | 0.96648 | 0.01 | 2.28 | 20.0 | Average |
| 72 2,4-Dinitrophenol | 80.0000 | 81.0945 | 0.17325 | 0.05 | 1.37 | 50.0 | WtLinear |
| 9 4-Nitrophenol | 0.250726 | 0.287558 | 0.28756 | 0.05 | 14.7 | 50.0 | Average |
| 76 Dibenzofuran | 1.36524 | 1.38300 | 1.3830 | 0.01 | 1.30 | 50.0 | Average |
| 9 2,4-Dinitrotoluene | 0.325797 | 0.329662 | 0.32966 | 0.01 | 1.19 | 50.0 | Average |
| 209 Hexadecane | 80.0000 | 90.5213 | 0.85226 | 0.01 | 13.2 | 50.0 | Quadratic |
| 80 Diethyl phthalate | 1.12085 | 1.20431 | 1.2043 | 0.01 | 7.45 | 50.0 | Average |
| 84 4-Chlorophenyl phenyl ether | 0.605557 | 0.626684 | 0.62668 | 0.01 | 3.49 | 50.0 | Average |
| 82 Fluorene | 1.17053 | 1.22012 | 1.2201 | 0.01 | 4.24 | 50.0 | Average |
| 85 4-Nitroaniline | 0.283613 | 0.306634 | 0.30663 | 0.01 | 8.12 | 50.0 | Average |
| 86 4,6-Dinitro-2-methylphenol | 0.230653 | 0.264928 | 0.26493 | 0.01 | 14.8 | 50.0 | Average |
| 87 N-nitrosodiphenylamine | 0.815195 | 0.854853 | 0.85485 | 0.01 | 4.86 | 20.0 | Average |
| 88 Azobenzene | 1.34296 | 1.54563 | 1.5456 | 0.01 | 15.1 | 50.0 | Average |
| 114 2,4,6-Tribromophenol | 0.0887073 | 0.0991467 | 0.099147 | 0.01 | 11.8 | 50.0 | Average |
| 94 4-Bromophenyl phenyl ether | 0.180616 | 0.182763 | 0.18276 | 0.01 | 1.19 | 50.0 | Average |
| 204 Atrazine | 0.0176054 | 0.0169638 | 0.016964 | 0.01 | 3.64 | 50.0 | Average |
| 95 Hexachlorobenzene | 0.192372 | 0.200575 | 0.20057 | 0.01 | 4.26 | 50.0 | Average |
| 208 n-Octadecane | 80.0000 | 84.1277 | 0.16454 | 0.01 | 5.16 | 50.0 | Linear |
| 9 Pentachlorophenol | 0.115708 | 0.112642 | 0.11264 | 0.01 | 2.65 | 20.0 | Average |
| 104 Phenanthrene | 0.922079 | 0.946522 | 0.94652 | 0.01 | 2.65 | 50.0 | Average |
| 105 Anthracene | 0.940326 | 0.950982 | 0.95098 | 0.01 | 1.13 | 50.0 | Average |
| 134 Carbazole | 0.820578 | 0.842342 | 0.84234 | 0.01 | 2.65 | 50.0 | Average |
| 202 Alachlor | 0.125718 | 0.139699 | 0.13970 | 0.01 | 11.1 | 50.0 | Average |
| 107 Di-n-butyl phthalate | 0.968695 | 1.07112 | 1.0711 | 0.01 | 10.6 | 50.0 | Average |
| 211 n-Eicosane | 0.584509 | 0.770758 | 0.77076 | 0.01 | 31.9 | 50.0 | Average |
| 111 Fluoranthene | 1.07324 | 1.20515 | 1.2052 | 0.01 | 12.3 | 20.0 | Average |