7A

# VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Instrument ID: HP5970G Calibration Date: 11/15/96 Time: 1006

Lab File ID: G2636 Init. Calib. Date(s): 09/10/96 09/10/96

Heated Purge: (Y/N) N Init. Calib. Times: 1701 1544

GC Column: CAP ID: 0.53 (mm)

p 30443

<30% low in soils CLP '94

| COMPOUND | $\overline{RRF}$ | RRF10 | MIN RRF | %D | MAX %D | |
|---|---|---|---|---|---|---|
| Chloromethane | 0.662 | 0.804 | | 21.4 | | |
| Bromomethane | 1.474 | 1.668 | 0.100 | 13.2 | 25.0 | |
| Vinyl Chloride | 0.889 | 1.128 | 0.100 | 26.9 | 25.0 | <- |
| Chloroethane | 0.676 | 0.757 | | 12.0 | | |
| Methylene Chloride | 1.274 | 1.221 | | 4.2 | | |
| Acetone | 0.105 | 0.108 | | 2.8 | | |
| Carbon Disulfide | 4.251 | 5.064 | | 19.1 | | |
| 1,1-Dichloroethene | 1.615 | 1.976 | 0.100 | 22.4 | 25.0 | |
| 1,1-Dichloroethane | 3.311 | 3.249 | 0.200 | 1.9 | 25.0 | |
| 1,2-Dichloroethene (total) | 2.013 | 2.202 | | 9.4 | | |
| Chloroform | 4.860 | 4.688 | 0.200 | 3.5 | 25.0 | |
| 1,2-Dichloroethane | 2.160 | 1.870 | 0.100 | 13.4 | 25.0 | |
| 2-Butanone | 0.158 | 0.122 | | 22.8 | | |
| 1,1,1-Trichloroethane | 0.805 | 0.790 | 0.100 | 1.9 | 25.0 | |
| Carbon Tetrachloride | 0.794 | 0.843 | 0.100 | 6.2 | 25.0 | |
| Bromodichloromethane | 0.664 | 0.572 | 0.200 | 13.8 | 25.0 | |
| 1,2-Dichloropropane | 0.267 | 0.232 | | 13.1 | | |
| cis-1,3-Dichloropropene | 0.343 | 0.301 | 0.200 | 12.2 | 25.0 | |
| Trichloroethene | 0.435 | 0.490 | 0.300 | 12.6 | 25.0 | |
| Dibromochloromethane | 0.455 | 0.439 | 0.100 | 3.5 | 25.0 | |
| 1,1,2-Trichloroethane | 0.173 | 0.163 | 0.100 | 5.8 | 25.0 | |
| Benzene | 0.700 | 0.694 | 0.500 | 0.8 | 25.0 | |
| trans-1,3-Dichloropropene | 0.293 | 0.252 | 0.100 | 14.0 | 25.0 | |
| Bromoform | 0.255 | 0.257 | 0.100 | 0.8 | 25.0 | |
| 4-Methyl-2-Pentanone | 0.111 | 0.082 | | 26.1 | | |
| 2-Hexanone | 0.065 | 0.048 | | 26.2 | | |
| Tetrachloroethene | 0.597 | 0.743 | 0.200 | 24.4 | 25.0 | |
| 1,1,2,2-Tetrachloroethane | 0.283 | 0.239 | 0.200 | 15.5 | 25.0 | |
| Toluene | 1.311 | 1.340 | 0.400 | 2.2 | 25.0 | |
| Chlorobenzene | 1.024 | 1.074 | 0.500 | 4.9 | 25.0 | |
| Ethylbenzene | 0.503 | 0.530 | 0.100 | 5.4 | 25.0 | |
| Styrene | 0.919 | 0.921 | 0.300 | 0.2 | 25.0 | |
| Trichlorofluoromethane | 4.571 | 5.364 | | 17.3 | | |
| Vinyl Acetate | 0.148 | 0.113 | | 23.6 | | |
| 2-Chloroethylvinyl ether | 0.267 | 0.232 | | 13.1 | | |
| m and p-Xylene | 0.626 | 0.661 | | 5.6 | | |
| o-Xylene | 0.609 | 0.628 | | 3.1 | | |

All other compounds must meet a minimum RRF of 0.010.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Instrument ID: HP5970G Calibration Date: 11/15/96 Time: 1006

Lab File ID: G2636 Init. Calib. Date(s): 09/10/96 09/10/96

Heated Purge: (Y/N) N Init. Calib. Times: 1701 1544

GC Column: CAP ID: 0.53 (mm)

| COMPOUND | $\overline{RRF}$ | RRF10 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.962 | 1.030 | | 7.1 | |
| 1,4-Dichlorobenzene | 0.922 | 0.974 | | 5.6 | |
| 1,2-Dichlorobenzene | 0.739 | 0.786 | | 6.4 | |
| Toluene-d8 | 1.282 | 1.181 | | 7.9 | |
| Bromofluorobenzene | 0.776 | 0.669 | 0.200 | 13.8 | 25.0 |
| 1,2-Dichloroethane-d4 | 1.923 | 1.474 | | 23.3 | |

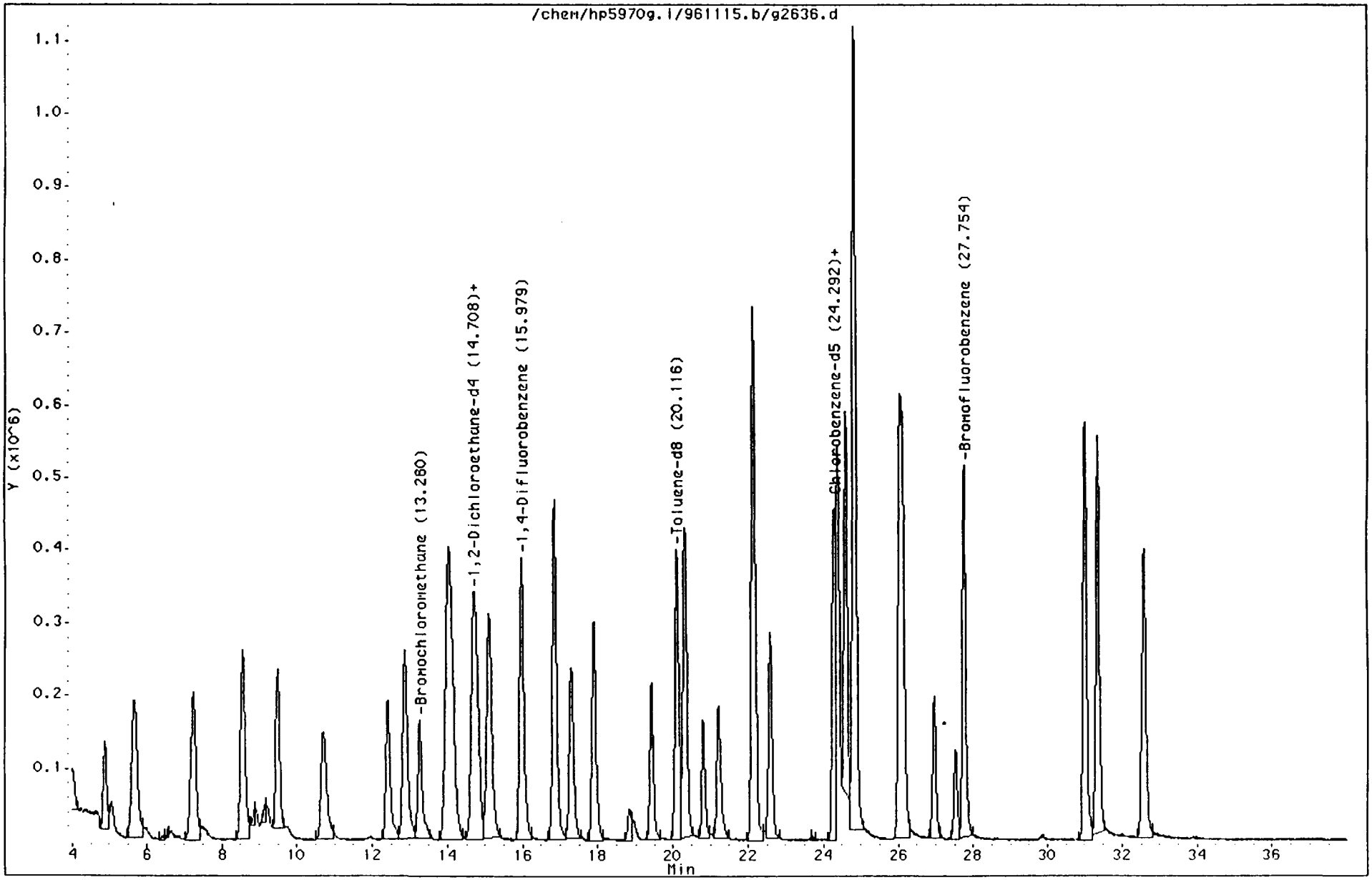
All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/hp5970g.i/961115.b/g2636.d
Date : 15-NOV-96 10:08
Client ID: vstd010
Sample Info: vstd010,vstd010,961115g,bel,,,NET
Purge Volume: 25.0
Column phase: CAP

Instrument: hp5970g.i
Operator: bel
Column diameter: 0.53



30442



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970g.i/961115.b/g2636.d
Lab Smp Id: vstd010 Client Smp ID: vstd010
Inj Date : 15-NOV-96 10:06
Operator : bel Inst ID: hp5970g.i
Smp Info : vstd010,vstd010,961115g,bel,,,NET
Misc Info : ,2,3,,1,0,,,,,,,
Comment :
Method : /chem/hp5970g.i/961115.b/gvoa25.m
Meth Date : 15-Nov-1996 10:45 Quant Type: ISTD
Cal Date : 15-NOV-96 10:06 Cal File: g2636.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 8240.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| | 1 Chloromethane | 50.00 | 3.774 | 3.774 | (0.284) | 150196 | 10 | 12 |
| | 2 Vinyl Chloride | 62.00 | 4.019 | 4.019 | (0.303) | 210815 | 10 | 13 |
| | 3 Bromomethane | 94.00 | 4.869 | 4.869 | (0.367) | 311644 | 10 | 11 |
| | 4 Chloroethane | 64.00 | 5.055 | 5.055 | (0.381) | 141468 | 10 | 11 |
| | 5 Trichlorofluoromethane | 101.00 | 5.681 | 5.681 | (0.428) | 1002103 | 10 | 12 |
| | 7 Acetone | 43.00 | 6.825 | 6.825 | (0.514) | 20169 | 10 | 10(M) |
| | 8 1,1-Dichloroethene | 96.00 | 7.236 | 7.236 | (0.545) | 369143 | 10 | 12 |
| | 9 Carbon Disulfide | 76.00 | 8.556 | 8.556 | (0.645) | 946084 | 10 | 12 |
| | 10 Methylene Chloride | 84.00 | 8.595 | 8.595 | (0.648) | 228175 | 10 | 9.6 |
| | 14 1,1-Dichloroethane | 63.00 | 10.698 | 10.698 | (0.806) | 607013 | 10 | 9.8 |
| | 15 Vinyl Acetate | 43.00 | 10.796 | 10.796 | (0.676) | 142407 | 10 | 7.7(M) |
| | 16 2-Butanone | 43.00 | 11.911 | 11.911 | (0.898) | 22886 | 10 | 7.8(M) |
| | 18 1,2-Dichloroethene (total) | 96.00 | 9.505 | 9.505 | (0.716) | 822723 | 20 | 22(M) |
| | 19 Chloroform | 83.00 | 12.879 | 12.879 | (0.971) | 875836 | 10 | 9.6 |
| * | 20 Bromochloromethane | 128.00 | 13.270 | 13.270 | (1.000) | 186832 | 10 | |
| | 22 1,1,1-Trichloroethane | 97.00 | 14.023 | 14.023 | (0.878) | 993472 | 10 | 9.8 |
| | 24 Carbon Tetrachloride | 117.00 | 14.717 | 14.717 | (0.922) | 1060024 | 10 | 11 |
| S | 25 1,2-Dichloroethane-d4 | 65.00 | 14.815 | 14.815 | (1.116) | 275488 | 10 | 7.7 |
| | 26 1,2-Dichloroethane | 62.00 | 15.069 | 15.069 | (1.136) | 349443 | 10 | 8.6 |
| | 27 Benzene | 78.00 | 15.138 | 15.138 | (0.948) | 872908 | 10 | 9.9 |
| * | 28 1,4-Difluorobenzene | 114.00 | 15.969 | 15.969 | (1.000) | 1256825 | 10 | |
| | 29 Trichloroethene | 130.00 | 16.849 | 16.849 | (1.055) | 616313 | 10 | 11 |
| | 30 1,2-Dichloropropane | 63.00 | 17.289 | 17.289 | (1.083) | 291602 | 10 | 8.7 |

BAL 11.18.96

IC $\frac{210815}{186832} \times \frac{10}{10} = 1.1284$

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| | 31 Bromodichloromethane | 83.00 | 17.906 | 17.906 | (1.121) | 719177 | 10 | 8.6 |
| | 32 2-Chloroethylvinyl ether | 63.00 | 17.289 | 17.289 | (1.083) | 291602 | 10 | 8.7 |
| | 33 4-Methyl-2-Pentanone | 43.00 | 18.923 | 18.923 | (0.779) | 72506 | 10 | 7.3 (M) |
| | 34 cis-1,3-Dichloropropene | 75.00 | 19.431 | 19.431 | (1.217) | 400695 | 11 | 9.3 |
| $ | 35 Toluene-d8 | 98.00 | 20.106 | 20.106 | (0.828) | 1050326 | 10 | 9.2 |
| | 36 Toluene | 91.00 | 20.331 | 20.331 | (0.837) | 1191768 | 10 | 10 |
| | 37 trans-1,3-Dichloropropene | 75.00 | 20.810 | 20.810 | (1.303) | 297872 | 9.4 | 8.1 |
| | 38 1,1,2-Trichloroethane | 97.00 | 21.221 | 21.221 | (1.329) | 204668 | 10 | 9.4 |
| | 39 1,1,2,2-Tetrachloroethane | 83.00 | 27.529 | 27.529 | (1.134) | 212630 | 10 | 8.5 |
| | 40 2-Hexanone | 43.00 | 21.368 | 21.368 | (0.880) | 42661 | 10 | 7.4 (M) |
| | 41 Tetrachloroethene | 164.00 | 22.160 | 22.160 | (0.913) | 660932 | 10 | 12 |
| | 42 Dibromochloromethane | 129.00 | 22.580 | 22.580 | (1.414) | 552250 | 10 | 9.6 |
| * | 43 Chlorobenzene-d5 | 117.00 | 24.282 | 24.282 | (1.000) | 889225 | 10 | |
| | 44 Chlorobenzene | 112.00 | 24.380 | 24.380 | (1.004) | 954604 | 10 | 10 |
| | 45 Ethylbenzene | 106.00 | 24.605 | 24.605 | (1.013) | 471650 | 10 | 10 |
| | 46 m and p-Xylene | 106.00 | 24.839 | 24.839 | (1.023) | 1175405 | 20 | 21 |
| | 47 o-Xylene | 106.00 | 26.042 | 26.042 | (1.072) | 558564 | 10 | 10 |
| | 49 Styrene | 104.00 | 26.140 | 26.140 | (1.077) | 819212 | 10 | 10 |
| | 50 Bromoform | 173.00 | 26.952 | 26.952 | (1.688) | 322658 | 10 | 10 |
| $ | 51 Bromofluorobenzene | 95.00 | 27.744 | 27.744 | (1.143) | 594951 | 10 | 8.6 |
| | 52 1,3-Dichlorobenzene | 146.00 | 31.010 | 31.010 | (1.277) | 916174 | 10 | 11 |
| | 53 1,4-Dichlorobenzene | 146.00 | 31.352 | 31.352 | (1.291) | 865807 | 10 | 10 |
| | 54 1,2-Dichlorobenzene | 146.00 | 32.575 | 32.575 | (1.342) | 698825 | 10 | 11 |

BJL 11.18.96

## QC Flag Legend

M - Compound response manually integrated.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Instrument ID: HP597QG Calibration Date: 11/16/96 Time: 0806

Lab File ID: G2652 Init. Calib. Date(s): 09/10/96 09/10/96

Heated Purge: (Y/N) N Init. Calib. Times: 1701 1544

GC Column: CAP ID: 0.53 (mm)

<30% low J
WATERS
CLP '94
DV criteria

| COMPOUND | RRF | RRF10 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Chloromethane | 0.662 | 0.677 | | 2.3 | |
| Bromomethane | 1.474 | 1.144 | 0.100 | 22.4 | 25.0 |
| Vinyl Chloride | 0.889 | 0.987 | 0.100 | 11.0 | 25.0 |
| Chloroethane | 0.676 | 0.698 | | 3.2 | |
| Methylene Chloride | 1.274 | 1.275 | | 0.1 | |
| Acetone | 0.105 | 0.133 | | 26.7 | |
| Carbon Disulfide | 4.251 | 4.868 | | 14.5 | |
| 1,1-Dichloroethene | 1.615 | 1.596 | 0.100 | 1.2 | 25.0 |
| 1,1-Dichloroethane | 3.311 | 2.957 | 0.200 | 10.7 | 25.0 |
| 1,2-Dichloroethene (total) | 2.013 | 1.731 | | 14.0 | |
| Chloroform | 4.860 | 3.931 | 0.200 | 19.1 | 25.0 |
| 1,2-Dichloroethane | 2.160 | 1.770 | 0.100 | 18.0 | 25.0 |
| 2-Butanone | 0.158 | 0.181 | | 14.6 | |
| 1,1,1-Trichloroethane | 0.805 | 0.609 | 0.100 | 24.3 | 25.0 |
| Carbon Tetrachloride | 0.794 | 0.636 | 0.100 | 19.9 | 25.0 |
| Bromodichloromethane | 0.664 | 0.547 | 0.200 | 17.6 | 25.0 |
| 1,2-Dichloropropane | 0.267 | 0.244 | | 8.6 | |
| cis-1,3-Dichloropropene | 0.343 | 0.301 | 0.200 | 12.2 | 25.0 |
| Trichloroethene | 0.435 | 0.417 | 0.300 | 4.1 | 25.0 |
| Dibromochloromethane | 0.455 | 0.436 | 0.100 | 4.2 | 25.0 |
| 1,1,2-Trichloroethane | 0.173 | 0.173 | 0.100 | 0.0 | 25.0 |
| Benzene | 0.700 | 0.726 | 0.500 | 3.7 | 25.0 |
| trans-1,3-Dichloropropene | 0.293 | 0.249 | 0.100 | 15.0 | 25.0 |
| Bromoform | 0.255 | 0.247 | 0.100 | 3.1 | 25.0 |
| 4-Methyl-2-Pentanone | 0.111 | 0.165 | | 48.6 | |
| 2-Hexanone | 0.065 | 0.071 | | 9.2 | |
| Tetrachloroethene | 0.597 | 0.564 | 0.200 | 5.5 | 25.0 |
| 1,1,2,2-Tetrachloroethane | 0.283 | 0.281 | 0.200 | 0.7 | 25.0 |
| Toluene | 1.311 | 1.153 | 0.400 | 12.0 | 25.0 |
| Chlorobenzene | 1.024 | 0.898 | 0.500 | 12.3 | 25.0 |
| Ethylbenzene | 0.503 | 0.453 | 0.100 | 9.9 | 25.0 |
| Styrene | 0.919 | 0.818 | 0.300 | 11.0 | 25.0 |
| Trichlorofluoromethane | 4.571 | 2.848 | | 37.7 | |
| Vinyl Acetate | 0.148 | 0.161 | | 8.8 | |
| 2-Chloroethylvinyl ether | 0.267 | 0.244 | | 8.6 | |
| m and p-Xylene | 0.626 | 0.545 | | 12.9 | |
| o-Xylene | 0.609 | 0.530 | | 13.0 | |

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Instrument ID: HP5970G Calibration Date: 11/16/96 Time: 0806

Lab File ID: G2652 Init. Calib. Date(s): 09/10/96 09/10/96

Heated Purge: (Y/N) N Init. Calib. Times: 1701 1544

GC Column: CAP ID: 0.53 (mm)

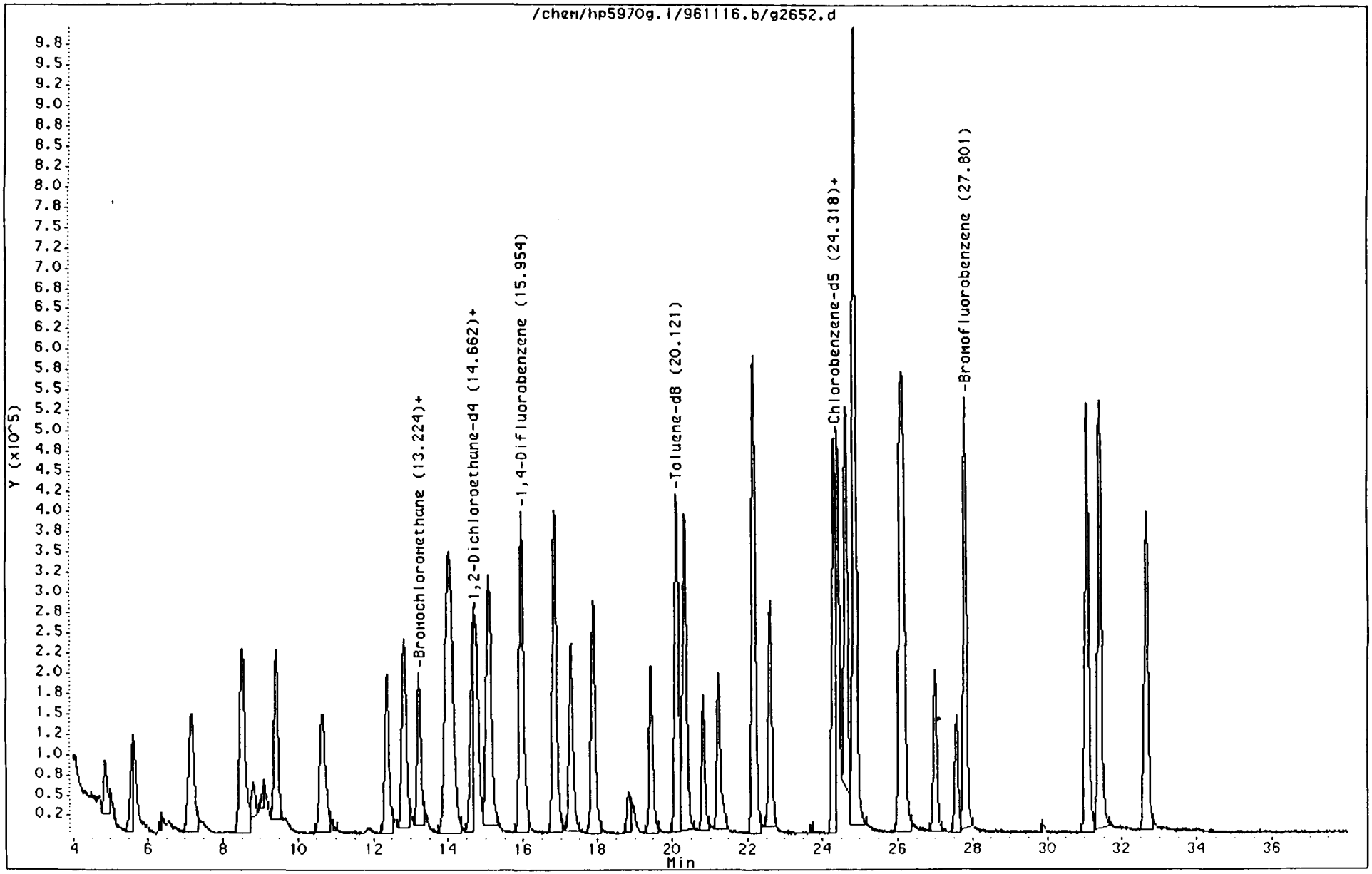
| COMPOUND | $\overline{RRF}$ | RRF10 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.962 | 0.906 | | 5.8 | |
| 1,4-Dichlorobenzene | 0.922 | 0.886 | | 3.9 | |
| 1,2-Dichlorobenzene | 0.739 | 0.714 | | 3.4 | |
| Toluene-d8 | 1.282 | 1.135 | | 11.5 | |
| Bromofluorobenzene | 0.776 | 0.665 | 0.200 | 14.3 | 25.0 |
| 1,2-Dichloroethane-d4 | 1.923 | 1.608 | | 16.4 | |

All other compounds must meet a minimum RRF of 0.010.

30447

Data File: /chem/hp5970g.i/961116.b/g2652.d
Date : 16-NOV-96 08:06
Client ID: vstd010
Sample Info: vstd010,vstd010,961116g,dry,,,NET
Purge Volume: 25.0
Column phase: CAP

Instrument: hp5970g.i
Operator: dry
Column diameter: 0.53



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970g.i/961116.b/g2652.d
Lab Smp Id: vstd010 Client Smp ID: vstd010
Inj Date : 16-NOV-96 08:06
Operator : dry Inst ID: hp5970g.i
Smp Info : vstd010,vstd010,961116g,dry,,,NET
Misc Info : ,2,3,,1,0,,,,,,,
Comment :
Method : /chem/hp5970g.i/961116.b/gvoa25.m
Meth Date : 16-Nov-1996 08:46 Quant Type: ISTD
Cal Date : 16-NOV-96 08:06 Cal File: g2652.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| 1 | Chloromethane | 50.00 | 3.803 | 3.803 | (0.288) | 140868 | 10 | 10 |
| 2 | Vinyl Chloride | 62.00 | 4.019 | 4.019 | (0.304) | 205223 | 10 | 11 |
| 3 | Bromomethane | 94.00 | 4.840 | 4.840 | (0.366) | 238010 | 10 | 7.8 |
| 4 | Chloroethane | 64.00 | 4.997 | 4.997 | (0.378) | 145069 | 10 | 10 (M) |
| 5 | Trichlorofluoromethane | 101.00 | 5.633 | 5.633 | (0.426) | 592355 | 10 | 6.2 (M) |
| 6 | Acrolein | 56.00 | 6.572 | 6.572 | (0.497) | 49286 | 100 | 290 (M) |
| 7 | Acetone | 43.00 | 6.728 | 6.728 | (0.509) | 27631 | 10 | 13 (M) |
| 8 | 1,1-Dichloroethene | 96.00 | 7.159 | 7.159 | (0.542) | 331908 | 10 | 9.9 (M) |
| 9 | Carbon Disulfide | 76.00 | 8.489 | 8.489 | (0.642) | 1012341 | 10 | 11 |
| 10 | Methylene Chloride | 84.00 | 8.499 | 8.499 | (0.643) | 265223 | 10 | 10 (M) |
| 11 | Acrylonitrile | 53.00 | 8.812 | 8.812 | (0.667) | 127863 | 100 | 95 |
| 12 | Methyl-t-butyl ether | 73.00 | 9.106 | 9.106 | (0.689) | 261036 | 10 | 6.5 |
| 13 | trans-1,2-Dichloroethene | 96.00 | 9.429 | 9.429 | (0.713) | 331024 | 10 | 8.8 |
| 14 | 1,1-Dichloroethane | 63.00 | 10.642 | 10.642 | (0.805) | 615053 | 10 | 8.9 |
| 15 | Vinyl Acetate | 43.00 | 10.739 | 10.739 | (0.673) | 202672 | 10 | 11 (M) |
| 16 | 2-Butanone | 43.00 | 11.864 | 11.864 | (0.898) | 37732 | 10 | 11 (M) |
| 17 | cis-1,2-Dichloroethene | 96.00 | 12.373 | 12.373 | (0.936) | 344120 | 10 | 8.9 |
| 18 | 1,2-Dichloroethene (total) | 96.00 | 9.429 | 9.429 | (0.713) | 719948 | 20 | 17 (M) |
| 19 | Chloroform | 83.00 | 12.833 | 12.833 | (0.971) | 817466 | 10 | 8.1 |
| * 20 | Bromochloromethane | 128.00 | 13.214 | 13.214 | (1.000) | 207974 | 10 | (M) |
| 21 | Tetrahydrofuran | 42.00 | 13.381 | 13.381 | (1.013) | 21702 | 10 | 14 (M) |
| 22 | 1,1,1-Trichloroethane | 97.00 | 13.978 | 13.978 | (0.876) | 764537 | 10 | 7.6 |
| 23 | Cyclohexane | 56.00 | 14.085 | 14.085 | (1.066) | 450122 | 10 | 9.3 |

BJL 11-18-96

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| | 24 Carbon Tetrachloride | 117.00 | 14.662 | 14.662 | (0.919) | 797605 | 10 | 8.0 |
| $ | 25 1,2-Dichloroethane-d4 | 65.00 | 14.770 | 14.770 | (1.118) | 334504 | 10 | 8.4 (M) |
| | 26 1,2-Dichloroethane | 62.00 | 15.024 | 15.024 | (1.137) | 368011 | 10 | 8.2 |
| | 27 Benzene | 78.00 | 15.093 | 15.093 | (0.946) | 910687 | 10 | 10 |
| * | 28 1,4-Difluorobenzene | 114.00 | 15.954 | 15.954 | (1.000) | 1255061 | 10 | |
| | 29 Trichloroethene | 130.00 | 16.834 | 16.834 | (1.055) | 523721 | 10 | 9.6 |
| | 30 1,2-Dichloropropane | 63.00 | 17.274 | 17.274 | (1.083) | 305637 | 10 | 9.1 |
| | 31 Bromodichloromethane | 83.00 | 17.891 | 17.891 | (1.121) | 686855 | 10 | 8.2 |
| | 32 2-Chloroethylvinyl ether | 63.00 | 17.274 | 17.274 | (1.083) | 305637 | 10 | 9.1 |
| | 33 4-Methyl-2-Pentanone | 43.00 | 18.947 | 18.947 | (0.779) | 154481 | 10 | 15 (M) |
| | 34 cis-1,3-Dichloropropene | 75.00 | 19.427 | 19.427 | (1.218) | 400642 | 11 | 9.3 |
| $ | 35 Toluene-d8 | 98.00 | 20.121 | 20.121 | (0.827) | 1061390 | 10 | 8.8 |
| | 36 Toluene | 91.00 | 20.327 | 20.327 | (0.836) | 1077841 | 10 | 8.8 |
| | 37 trans-1,3-Dichloropropene | 75.00 | 20.826 | 20.826 | (1.305) | 294295 | 9.4 | 8.0 |
| | 38 1,1,2-Trichloroethane | 97.00 | 21.236 | 21.236 | (1.331) | 217277 | 10 | 10 |
| | 39 1,1,2,2-Tetrachloroethane | 83.00 | 27.566 | 27.566 | (1.134) | 262712 | 10 | 9.9 |
| | 40 2-Hexanone | 43.00 | 21.383 | 21.383 | (0.879) | 66297 | 10 | 11 (M) |
| | 41 Tetrachloroethene | 164.00 | 22.176 | 22.176 | (0.912) | 527052 | 10 | 9.4 |
| | 42 Dibromochloromethane | 129.00 | 22.616 | 22.616 | (1.418) | 547138 | 10 | 9.6 |
| * | 43 Chlorobenzene-d5 | 117.00 | 24.318 | 24.318 | (1.000) | 934893 | 10 | |
| | 44 Chlorobenzene | 112.00 | 24.426 | 24.426 | (1.004) | 839427 | 10 | 8.8 |
| | 45 Ethylbenzene | 106.00 | 24.631 | 24.631 | (1.013) | 423684 | 10 | 9.0 |
| | 46 m and p-Xylene | 106.00 | 24.856 | 24.856 | (1.022) | 1018757 | 20 | 17 |
| | 47 o-Xylene | 106.00 | 26.079 | 26.079 | (1.072) | 495218 | 10 | 8.7 |
| | 48 Xylene (Total) | 106.00 | 26.079 | 26.079 | (1.072) | 495218 | 10 | 8.7 |
| | 49 Styrene | 104.00 | 26.167 | 26.167 | (1.076) | 764332 | 10 | 8.9 |
| | 50 Bromoform | 173.00 | 26.999 | 26.999 | (1.692) | 309763 | 10 | 9.7 |
| $ | 51 Bromofluorobenzene | 95.00 | 27.791 | 27.791 | (1.143) | 621506 | 10 | 8.6 |
| | 52 1,3-Dichlorobenzene | 146.00 | 31.068 | 31.068 | (1.278) | 847501 | 10 | 9.4 |
| | 53 1,4-Dichlorobenzene | 146.00 | 31.391 | 31.391 | (1.291) | 827927 | 10 | 9.6 |
| | 54 1,2-Dichlorobenzene | 146.00 | 32.633 | 32.633 | (1.342) | 667539 | 10 | 9.6 |

BJC 11.18.96

QC Flag Legend

M - Compound response manually integrated.

7A

# VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Instrument ID: HP5970G Calibration Date: 11/21/96 Time: 1315

Lab File ID: G2712 Init. Calib. Date(s): 09/10/96 09/10/96

Heated Purge: (Y/N) N Init. Calib. Times: 1701 1544

GC Column: CAP ID: 0.53 (mm)

| COMPOUND | RRF | RRF10 | MIN RRF | %D | MAX %D | |
|---|---|---|---|---|---|---|
| Chloromethane | 0.662 | 0.808 | | 22.0 | | |
| Bromomethane | 1.474 | 1.659 | 0.100 | 12.6 | 25.0 | |
| Vinyl Chloride | 0.889 | 1.235 | 0.100 | 38.9 | 25.0 | <- |
| Chloroethane | 0.676 | 0.808 | | 19.5 | | |
| Methylene Chloride | 1.274 | 1.510 | | 18.5 | | |
| Acetone | 0.105 | 0.127 | | 21.0 | | |
| Carbon Disulfide | 4.251 | 5.749 | | 35.2 | | |
| 1,1-Dichloroethene | 1.615 | 1.830 | 0.100 | 13.3 | 25.0 | |
| 1,1-Dichloroethane | 3.311 | 4.059 | 0.200 | 22.6 | 25.0 | |
| 1,2-Dichloroethene (total) | 2.013 | 1.006 | | 50.0 | | |
| Chloroform | 4.860 | 5.972 | 0.200 | 22.9 | 25.0 | |
| 1,2-Dichloroethane | 2.160 | 2.886 | 0.100 | 33.6 | 25.0 | <- |
| 2-Butanone | 0.158 | 0.212 | | 34.2 | | |
| 1,1,1-Trichloroethane | 0.805 | 0.898 | 0.100 | 11.6 | 25.0 | |
| Carbon Tetrachloride | 0.794 | 0.910 | 0.100 | 14.6 | 25.0 | |
| Bromodichloromethane | 0.664 | 0.780 | 0.200 | 17.5 | 25.0 | |
| 1,2-Dichloropropane | 0.267 | 0.292 | | 9.4 | | |
| cis-1,3-Dichloropropene | 0.343 | 0.373 | 0.200 | 8.7 | 25.0 | |
| Trichloroethene | 0.435 | 0.455 | 0.300 | 4.6 | 25.0 | |
| Dibromochloromethane | 0.455 | 0.519 | 0.100 | 14.1 | 25.0 | |
| 1,1,2-Trichloroethane | 0.173 | 0.197 | 0.100 | 13.9 | 25.0 | |
| Benzene | 0.700 | 0.780 | 0.500 | 11.4 | 25.0 | |
| trans-1,3-Dichloropropene | 0.293 | 0.329 | 0.100 | 12.3 | 25.0 | |
| Bromoform | 0.255 | 0.269 | 0.100 | 5.5 | 25.0 | |
| 4-Methyl-2-Pentanone | 0.111 | 0.144 | | 29.7 | | |
| 2-Hexanone | 0.065 | 0.077 | | 18.5 | | |
| Tetrachloroethene | 0.597 | 0.599 | 0.200 | 0.3 | 25.0 | |
| 1,1,2,2-Tetrachloroethane | 0.283 | 0.346 | 0.200 | 22.3 | 25.0 | |
| Toluene | 1.311 | 1.464 | 0.400 | 11.7 | 25.0 | |
| Chlorobenzene | 1.024 | 1.086 | 0.500 | 6.0 | 25.0 | |
| Ethylbenzene | 0.503 | 0.534 | 0.100 | 6.2 | 25.0 | |
| Styrene | 0.919 | 0.971 | 0.300 | 5.6 | 25.0 | |
| Trichlorofluoromethane | 4.571 | 4.077 | | 10.8 | | |
| Vinyl Acetate | 0.148 | 0.176 | | 18.9 | | |
| 2-Chloroethylvinyl ether | 0.267 | 0.292 | | 9.4 | | |
| m and p-Xylene | 0.626 | 0.646 | | 3.2 | | |
| o-Xylene | 0.609 | 0.639 | | 4.9 | | |

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Instrument ID: HP5970G Calibration Date: 11/21/96 Time: 1315

Lab File ID: G2712 Init. Calib. Date(s): 09/10/96 09/10/96

Heated Purge: (Y/N) N Init. Calib. Times: 1701 1544

GC Column: CAP ID: 0.53 (mm)

| COMPOUND | $\overline{RRF}$ | RRF10 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.962 | 0.959 | | 0.3 | |
| 1,4-Dichlorobenzene | 0.922 | 0.932 | | 1.1 | |
| 1,2-Dichlorobenzene | 0.739 | 0.774 | | 4.7 | |
| Toluene-d8 | 1.282 | 1.257 | | 2.0 | |
| Bromofluorobenzene | 0.776 | 0.777 | 0.200 | 0.1 | 25.0 |
| 1,2-Dichloroethane-d4 | 1.923 | 2.300 | | 19.6 | |

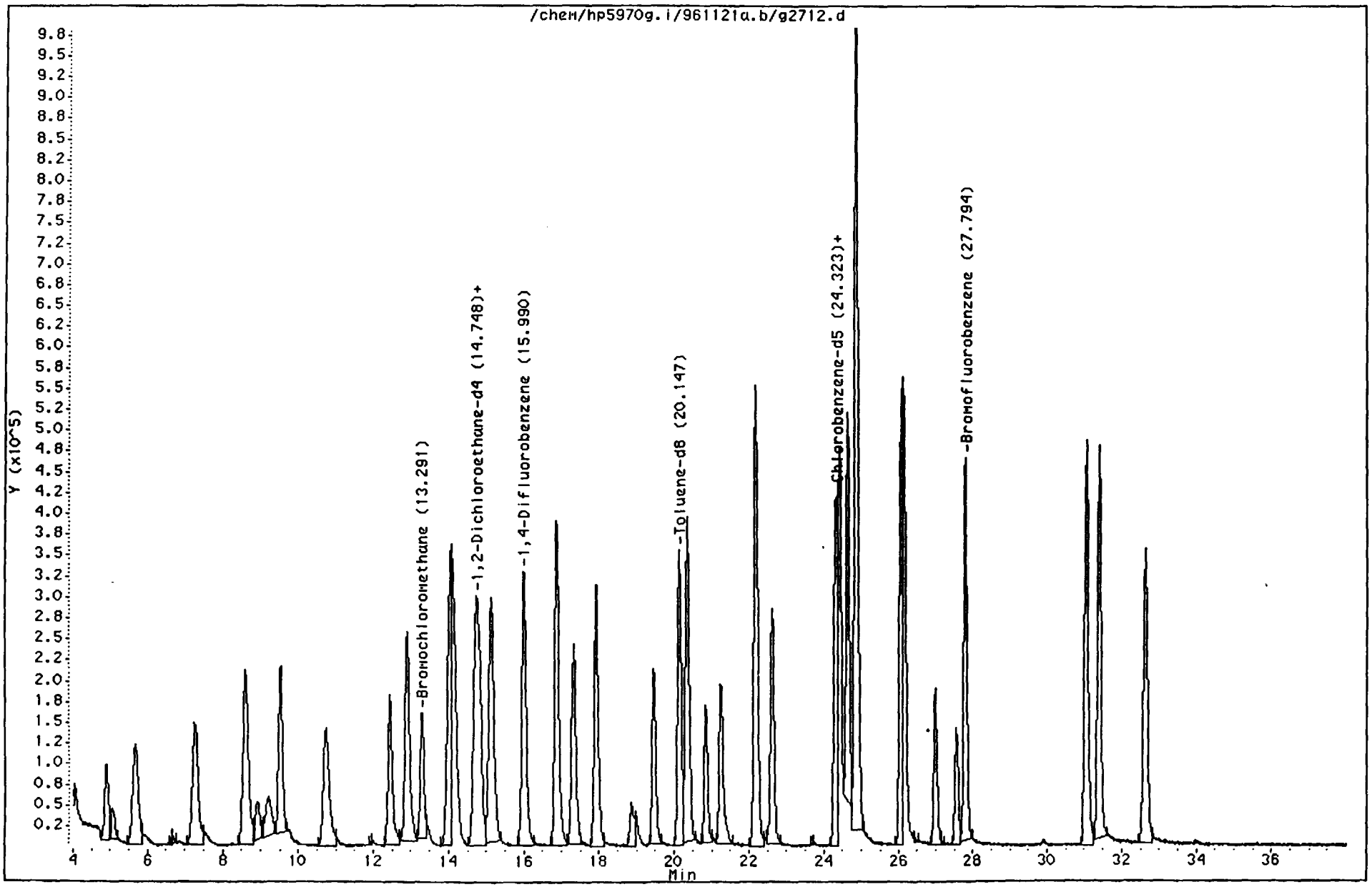
All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/hp5970g.i/961121a.b/g2712.d
Date : 21-NOV-96 13:15
Client ID: vstd010
Sample Info: vstd010,vstd010,961121ag,bel,,,NET
Purge Volume: 25.0
Column phase: CAP

Instrument: hp5970g.i
Operator: bel
Column diameter: 0.53



30452



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970g.i/961121a.b/g2712.d
Lab Smp Id: vstd010 Client Smp ID: vstd010
Inj Date : 21-NOV-96 13:15
Operator : bel Inst ID: hp5970g.i
Smp Info : vstd010,vstd010,961121ag,bel,,,NET
Misc Info : ,2,3,,1,0,,,,,,,
Comment :
Method : /chem/hp5970g.i/961121a.b/gvoa25.m
Meth Date : 21-Nov-1996 13:54 Quant Type: ISTD
Cal Date : 21-NOV-96 13:15 Cal File: g2712.d
Als bottle: 15 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 8240.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| 1 | Chloromethane | 50.00 | 3.795 | 3.795 | (0.285) | 116468 | 10 | 12 |
| 2 | Vinyl Chloride | 62.00 | 4.040 | 4.040 | (0.304) | 177895 | 10 | 14(M) |
| 3 | Bromomethane | 94.00 | 4.881 | 4.881 | (0.367) | 239073 | 10 | 11 |
| 4 | Chloroethane | 64.00 | 5.067 | 5.067 | (0.381) | 116364 | 10 | 12 |
| 5 | Trichlorofluoromethane | 101.00 | 5.673 | 5.673 | (0.426) | 587357 | 10 | 8.9(M) |
| 7 | Acetone | 43.00 | 6.846 | 6.846 | (0.515) | 18275 | 10 | 12(M) |
| 8 | 1,1-Dichloroethene | 96.00 | 7.287 | 7.287 | (0.548) | 263680 | 10 | 11 |
| 9 | Carbon Disulfide | 76.00 | 8.597 | 8.597 | (0.646) | 828333 | 10 | 14 |
| 10 | Methylene Chloride | 84.00 | 8.617 | 8.617 | (0.648) | 217565 | 10 | 12 |
| 14 | 1,1-Dichloroethane | 63.00 | 10.748 | 10.748 | (0.808) | 584757 | 10 | 12 |
| 15 | Vinyl Acetate | 43.00 | 10.836 | 10.836 | (0.677) | 174077 | 10 | 12(M) |
| 16 | 2-Butanone | 43.00 | 11.981 | 11.981 | (0.901) | 30481 | 10 | 13(M) |
| 18 | 1,2-Dichloroethene (total) | 96.00 | 9.536 | 9.536 | (0.717) | 289892 | 20 | 10 |
| 19 | Chloroform | 83.00 | 12.900 | 12.900 | (0.970) | 860454 | 10 | 12 |
| * 20 | Bromochloromethane | 128.00 | 13.301 | 13.301 | (1.000) | 144071 | 10 | |
| 22 | 1,1,1-Trichloroethane | 97.00 | 14.044 | 14.044 | (0.877) | 885508 | 10 | 11 |
| 24 | Carbon Tetrachloride | 117.00 | 14.739 | 14.739 | (0.921) | 897345 | 10 | 11 |
| $ 25 | 1,2-Dichloroethane-d4 | 65.00 | 14.846 | 14.846 | (1.116) | 331365 | 10 | 12 |
| 26 | 1,2-Dichloroethane | 62.00 | 15.091 | 15.091 | (1.135) | 415769 | 10 | 13 |
| 27 | Benzene | 78.00 | 15.159 | 15.159 | (0.947) | 769407 | 10 | 11 |
| * 28 | 1,4-Difluorobenzene | 114.00 | 16.010 | 16.010 | (1.000) | 986240 | 10 | |
| 29 | Trichloroethene | 130.00 | 16.870 | 16.870 | (1.054) | 449083 | 10 | 10 |
| 30 | 1,2-Dichloropropane | 63.00 | 17.320 | 17.320 | (1.082) | 288075 | 10 | 11 |

BTC 11.22.96

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) | |
|---|---|---|---|---|---|---|---|---|---|
| | 31 Bromodichloromethane | 83.00 | 17.917 | 17.917 | (1.119) | 769525 | 10 | 12 | |
| | 32 2-Chloroethylvinyl ether | 63.00 | 17.320 | 17.320 | (1.082) | 288075 | 10 | 11 | |
| | 33 4-Methyl-2-Pentanone | 43.00 | 18.993 | 18.993 | (0.781) | 100974 | 10 | 13 | (M) |
| | 34 cis-1,3-Dichloropropene | 75.00 | 19.462 | 19.462 | (1.216) | 390124 | 11 | 12 | |
| $ | 35 Toluene-d8 | 98.00 | 20.147 | 20.147 | (0.828) | 879022 | 10 | 9.8 | |
| | 36 Toluene | 91.00 | 20.362 | 20.362 | (0.837) | 1023997 | 10 | 11 | |
| | 37 trans-1,3-Dichloropropene | 75.00 | 20.851 | 20.851 | (1.302) | 304757 | 9.4 | 10 | |
| | 38 1,1,2-Trichloroethane | 97.00 | 21.252 | 21.252 | (1.327) | 194446 | 10 | 11 | |
| | 39 1,1,2,2-Tetrachloroethane | 83.00 | 27.569 | 27.569 | (1.133) | 241833 | 10 | 12 | |
| | 40 2-Hexanone | 43.00 | 21.398 | 21.398 | (0.880) | 53786 | 10 | 12 | |
| | 41 Tetrachloroethene | 164.00 | 22.181 | 22.181 | (0.912) | 418682 | 10 | 10 | |
| | 42 Dibromochloromethane | 129.00 | 22.621 | 22.621 | (1.413) | 511996 | 10 | 11 | |
| * | 43 Chlorobenzene-d5 | 117.00 | 24.323 | 24.323 | (1.000) | 699306 | 10 | | |
| | 44 Chlorobenzene | 112.00 | 24.420 | 24.420 | (1.004) | 759204 | 10 | 11 | |
| | 45 Ethylbenzene | 106.00 | 24.645 | 24.645 | (1.013) | 373275 | 10 | 11 | |
| | 46 m and p-Xylene | 106.00 | 24.860 | 24.860 | (1.022) | 903837 | 20 | 21 | |
| | 47 o-Xylene | 106.00 | 26.083 | 26.083 | (1.072) | 447186 | 10 | 10 | |
| | 49 Styrene | 104.00 | 26.161 | 26.161 | (1.076) | 678837 | 10 | 10 | |
| | 50 Bromoform | 173.00 | 27.002 | 27.002 | (1.687) | 265739 | 10 | 10 | |
| $ | 51 Bromofluorobenzene | 95.00 | 27.794 | 27.794 | (1.143) | 543326 | 10 | 10 | |
| | 52 1,3-Dichlorobenzene | 146.00 | 31.041 | 31.041 | (1.276) | 670357 | 10 | 10 | |
| | 53 1,4-Dichlorobenzene | 146.00 | 31.383 | 31.383 | (1.290) | 652101 | 10 | 10 | |
| | 54 1,2-Dichlorobenzene | 146.00 | 32.625 | 32.625 | (1.341) | 541568 | 10 | 10 | |

TSC 11-22-96

## QC Flag Legend

M - Compound response manually integrated.

7A

# VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Instrument ID: HP5970H Calibration Date: 11/22/96 Time: 1348

Lab File ID: H2215 Init. Calib. Date(s): 11/20/96 11/20/96

Heated Purge: (Y/N) N Init. Calib. Times: 1447 1716

GC Column: DB-VRX ID: 0.45 (mm)

| COMPOUND | RRF | RRF50 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Chloromethane | 0.445 | 0.420 | | 5.6 | |
| Bromomethane | 1.113 | 0.932 | 0.100 | 16.3 | 25.0 |
| Vinyl Chloride | 0.640 | 0.556 | 0.100 | 13.1 | 25.0 |
| Chloroethane | 0.486 | 0.408 | | 16.0 | |
| Methylene Chloride | 1.259 | 1.011 | | 19.7 | |
| Acetone | 0.185 | 0.194 | | 4.9 | |
| Carbon Disulfide | 3.402 | 2.808 | | 17.5 | |
| 1,1-Dichloroethene | 1.228 | 1.040 | 0.100 | 15.3 | 25.0 |
| 1,1-Dichloroethane | 2.090 | 1.811 | 0.200 | 13.3 | 25.0 |
| 1,2-Dichloroethene (total) | 1.361 | 1.148 | | 15.6 | |
| Chloroform | 2.959 | 2.530 | 0.200 | 14.5 | 25.0 |
| 1,2-Dichloroethane | 1.687 | 1.520 | 0.100 | 9.9 | 25.0 |
| 2-Butanone | 0.313 | 0.293 | | 6.4 | |
| 1,1,1-Trichloroethane | 0.635 | 0.552 | 0.100 | 13.1 | 25.0 |
| Carbon Tetrachloride | 0.562 | 0.466 | 0.100 | 17.1 | 25.0 |
| Bromodichloromethane | 0.751 | 0.643 | 0.200 | 14.4 | 25.0 |
| 1,2-Dichloropropane | 0.326 | 0.272 | | 16.6 | |
| cis-1,3-Dichloropropene | 0.479 | 0.409 | 0.200 | 14.6 | 25.0 |
| Trichloroethene | 0.505 | 0.454 | 0.300 | 10.1 | 25.0 |
| Dibromochloromethane | 0.775 | 0.662 | 0.100 | 14.6 | 25.0 |
| 1,1,2-Trichloroethane | 0.353 | 0.293 | 0.100 | 17.0 | 25.0 |
| Benzene | 0.785 | 0.654 | 0.500 | 16.7 | 25.0 |
| trans-1,3-Dichloropropene | 0.482 | 0.417 | 0.100 | 13.5 | 25.0 |
| Bromoform | 0.573 | 0.508 | 0.100 | 11.3 | 25.0 |
| 4-Methyl-2-Pentanone | 0.292 | 0.242 | | 17.1 | |
| 2-Hexanone | 0.196 | 0.167 | | 14.8 | |
| Tetrachloroethene | 0.625 | 0.552 | 0.200 | 11.7 | 25.0 |
| 1,1,2,2-Tetrachloroethane | 0.667 | 0.528 | 0.500 | 20.8 | 25.0 |
| Toluene | 1.309 | 1.074 | 0.400 | 18.0 | 25.0 |
| Chlorobenzene | 1.130 | 0.925 | 0.500 | 18.1 | 25.0 |
| Ethylbenzene | 0.483 | 0.404 | 0.100 | 16.4 | 25.0 |
| Styrene | 0.999 | 0.813 | 0.300 | 18.6 | 25.0 |
| Trichlorofluoromethane | 2.708 | 2.524 | | 6.8 | |
| Vinyl Acetate | 0.385 | 0.339 | | 11.9 | |
| 2-Chloroethylvinyl ether | 0.167 | 0.140 | | 16.2 | |
| m and p-Xylene | 0.555 | 0.473 | | 14.8 | |
| o-Xylene | 0.575 | 0.485 | | 15.6 | |

All other compounds must meet a minimum RRF of 0.010.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Instrument ID: HP5970H Calibration Date: 11/22/96 Time: 1348

Lab File ID: H2215 Init. Calib. Date(s): 11/20/96 11/20/96

Heated Purge: (Y/N) N Init. Calib. Times: 1447 1716

GC Column: DB-VRX ID: 0.45 (mm)

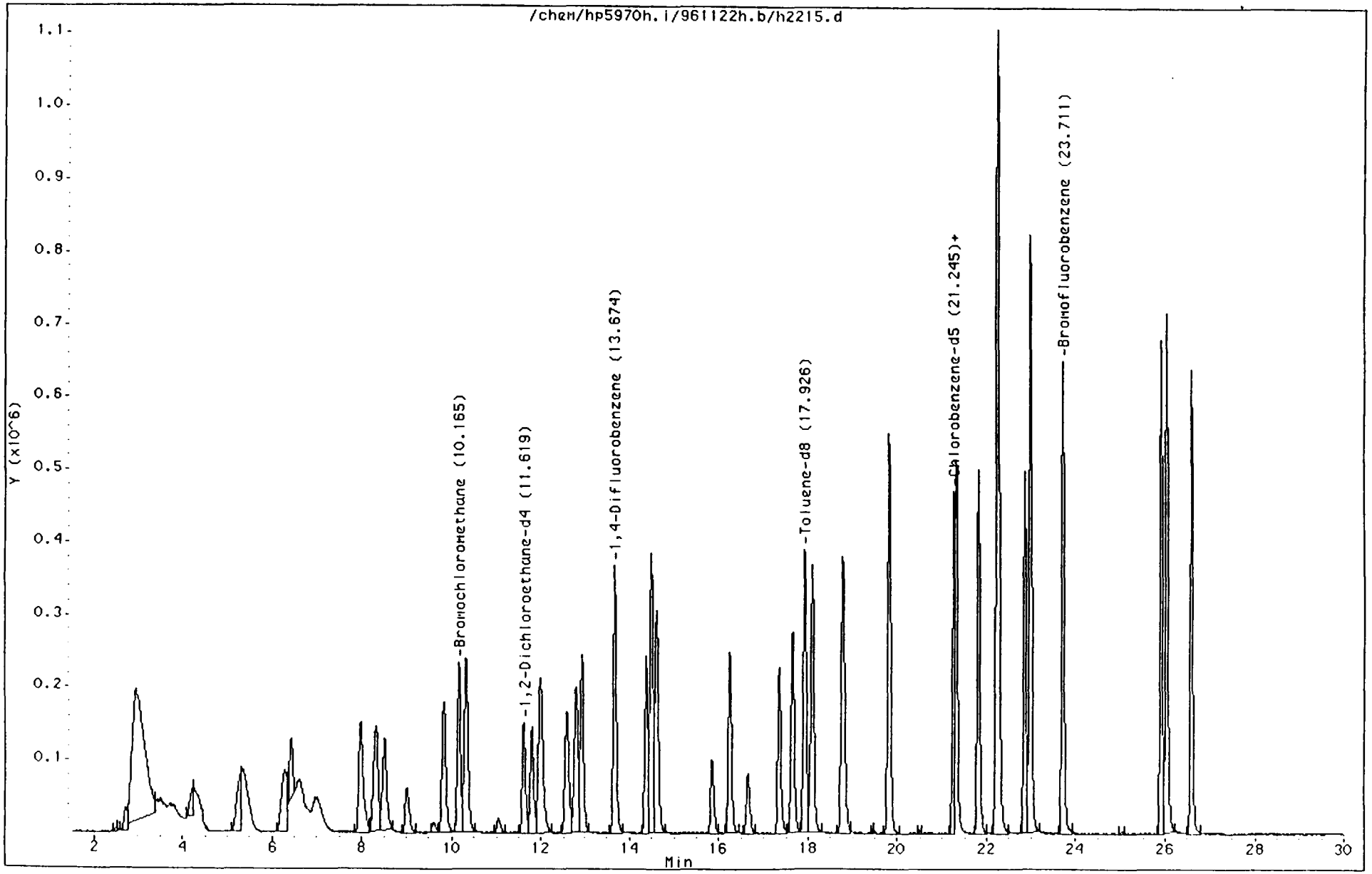
| COMPOUND | $\overline{RRF}$ | RRF50 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 1.066 | 0.963 | | 9.7 | |
| 1,4-Dichlorobenzene | 1.165 | 1.033 | | 11.3 | |
| 1,2-Dichlorobenzene | 1.022 | 0.897 | | 12.2 | |
| Toluene-d8 | 1.149 | 1.105 | | 3.8 | |
| Bromofluorobenzene | 0.771 | 0.763 | 0.200 | 1.0 | 25.0 |
| 1,2-Dichloroethane-d4 | 1.342 | 1.453 | | 8.3 | |

All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/hp5970h.i/961122h.b/h2215.d
Date : 22-NOV-96 13:48
Client ID: vstd050
Sample Info: vstd050,vstd050,961122h,jss,,, NET
Purge Volume: 5.0
Column phase: DB-VRX

Instrument: hp5970h.i
Operator: jss
Column diameter: 0.45

30457



Data File: /chem/hp5970h.i/961122h.b/h2215.d
Report Date: 25-Nov-1996 15:28

NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970h.i/961122h.b/h2215.d
Lab Smp Id: vstd050 Client Smp ID: vstd050
Inj Date : 22-NOV-1996 13:48
Operator : jss Inst ID: hp5970h.i
Smp Info : vstd050,vstd050,961122h,jss,,, NET
Misc Info : ,1,3, ,1,0,,,,,,,,als 1
Comment :
Method : /chem/hp5970h.i/961122h.b/hvoa.m
Meth Date : 25-Nov-1996 14:54 jims Quant Type: ISTD
Cal Date : 22-NOV-96 13:48 Cal File: h2215.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 1 Chloromethane | 50.00 | 3.517 | 3.517 | (0.346) | 89129 | 50 | 48(M) |
| 2 Vinyl Chloride | 62.00 | 3.778 | 3.778 | (0.372) | 118241 | 50 | 45(M) |
| 3 Bromomethane | 94.00 | 4.229 | 4.229 | (0.416) | 198098 | 50 | 44(M) |
| 4 Chloroethane | 64.00 | 4.369 | 4.369 | (0.430) | 86664 | 50 | 44 |
| 5 Trichlorofluoromethane | 101.00 | 5.352 | 5.352 | (0.527) | 536245 | 50 | 49 |
| 6 Acrolein | 56.00 | 5.262 | 5.262 | (0.518) | 83407 | 500 | 430 |
| 7 Acetone | 43.00 | 5.513 | 5.513 | (0.542) | 41160 | 50 | 52 |
| 8 1,1-Dichloroethene | 96.00 | 6.295 | 6.295 | (0.619) | 221024 | 50 | 44 |
| 9 Carbon Disulfide | 76.00 | 7.007 | 7.007 | (0.689) | 596437 | 50 | 43 |
| 10 Methylene Chloride | 84.00 | 6.626 | 6.626 | (0.652) | 214704 | 50 | 42 |
| 11 Acrylonitrile | 53.00 | 6.435 | 6.435 | (0.633) | 253805 | 500 | 420 |
| 12 Methyl-t-butyl ether | 73.00 | 8.330 | 8.330 | (0.819) | 486121 | 50 | 42 |
| 13 trans-1,2-Dichloroethene | 96.00 | 7.979 | 7.979 | (0.785) | 239684 | 50 | 44 |
| 14 1,1-Dichloroethane | 63.00 | 8.521 | 8.521 | (0.838) | 384836 | 50 | 45 |
| 15 Vinyl Acetate | 43.00 | 9.022 | 9.022 | (0.660) | 280959 | 50 | 45 |
| 16 2-Butanone | 43.00 | 9.614 | 9.614 | (0.946) | 62250 | 50 | 47 |
| 17 cis-1,2-Dichloroethene | 96.00 | 9.834 | 9.834 | (0.967) | 242966 | 50 | 44 |
| 18 1,2-Dichloroethene (total) | 96.00 | 9.834 | 9.834 | (0.967) | 487678 | 100 | 88(M) |
| 19 Chloroform | 83.00 | 10.335 | 10.335 | (1.017) | 537379 | 50 | 44 |
| * 20 Bromochloromethane | 128.00 | 10.165 | 10.165 | (1.000) | 212443 | 50 | |
| 21 Tetrahydrofuran | 42.00 | 11.057 | 11.057 | (1.088) | 29247 | 50 | 46 |
| 22 1,1,1-Trichloroethane | 97.00 | 11.990 | 11.990 | (0.877) | 457353 | 50 | 45 |
| 23 Cyclohexane | 56.00 | 12.571 | 12.571 | (1.237) | 241743 | 50 | 46 |

11-25-96

30458

Data File: /chem/hp5970h.i/961122h.b/h2215.d
Report Date: 25-Nov-1996 15:28

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| | 24 Carbon Tetrachloride | 117.00 | 12.802 | 12.802 | (0.936) | 386732 | 50 | 44 |
| $ | 25 1,2-Dichloroethane-d4 | 65.00 | 11.619 | 11.619 | (1.143) | 308650 | 50 | 53 |
| | 26 1,2-Dichloroethane | 62.00 | 11.799 | 11.799 | (1.161) | 322938 | 50 | 46 |
| | 27 Benzene | 78.00 | 12.942 | 12.942 | (0.946) | 541738 | 50 | 43 |
| * | 28 1,4-Difluorobenzene | 114.00 | 13.674 | 13.674 | (1.000) | 828875 | 50 | |
| | 29 Trichloroethene | 130.00 | 14.497 | 14.497 | (1.060) | 376297 | 50 | 46 |
| | 30 1,2-Dichloropropane | 63.00 | 14.376 | 14.376 | (1.051) | 225831 | 50 | 43 |
| | 31 Bromodichloromethane | 83.00 | 14.607 | 14.607 | (1.068) | 533081 | 50 | 44 |
| | 32 2-Chloroethylvinyl ether | 63.00 | 15.840 | 15.840 | (1.158) | 116329 | 50 | 43 |
| | 33 4-Methyl-2-Pentanone | 43.00 | 16.652 | 16.652 | (0.784) | 158423 | 50 | 43 |
| | 34 cis-1,3-Dichloropropene | 75.00 | 16.241 | 16.241 | (1.188) | 359124 | 53 | 47 |
| $ | 35 Toluene-d8 | 98.00 | 17.936 | 17.936 | (0.844) | 723046 | 50 | 48 |
| | 36 Toluene | 91.00 | 18.096 | 18.096 | (0.852) | 702431 | 50 | 43 |
| | 37 trans-1,3-Dichloropropene | 75.00 | 17.354 | 17.354 | (1.269) | 325107 | 47 | 42 |
| | 38 1,1,2-Trichloroethane | 97.00 | 17.645 | 17.645 | (1.290) | 243041 | 50 | 43 |
| | 39 1,1,2,2-Tetrachloroethane | 83.00 | 22.989 | 22.989 | (1.082) | 345741 | 50 | 41 |
| | 40 2-Hexanone | 43.00 | 18.818 | 18.818 | (0.886) | 109013 | 50 | 43 |
| | 41 Tetrachloroethene | 164.00 | 19.811 | 19.811 | (0.932) | 361550 | 50 | 46 |
| | 42 Dibromochloromethane | 129.00 | 18.778 | 18.778 | (1.373) | 548581 | 50 | 44 |
| * | 43 Chlorobenzene-d5 | 117.00 | 21.245 | 21.245 | (1.000) | 654325 | 50 | |
| | 44 Chlorobenzene | 112.00 | 21.315 | 21.315 | (1.003) | 605134 | 50 | 42 |
| | 45 Ethylbenzene | 106.00 | 21.816 | 21.816 | (1.027) | 264553 | 50 | 44 |
| | 46 m and p-Xylene | 106.00 | 22.247 | 22.247 | (1.047) | 618777 | 100 | 88 |
| | 47 o-Xylene | 106.00 | 22.989 | 22.989 | (1.082) | 317141 | 50 | 44 |
| | 48 Xylene (Total) | 106.00 | 22.989 | 22.989 | (1.082) | 317141 | 50 | 44 |
| | 49 Styrene | 104.00 | 22.859 | 22.859 | (1.076) | 532271 | 50 | 42 |
| | 50 Bromoform | 173.00 | 22.267 | 22.267 | (1.628) | 421446 | 50 | 46 |
| $ | 51 Bromofluorobenzene | 95.00 | 23.711 | 23.711 | (1.116) | 499396 | 50 | 49 |
| | 52 1,3-Dichlorobenzene | 146.00 | 25.907 | 25.907 | (1.219) | 629892 | 50 | 46 |
| | 53 1,4-Dichlorobenzene | 146.00 | 26.028 | 26.028 | (1.225) | 675924 | 50 | 46(M) |
| | 54 1,2-Dichlorobenzene | 146.00 | 26.589 | 26.589 | (1.252) | 587036 | 50 | 45 |

11-25-96

## QC Flag Legend

M - Compound response manually integrated.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Instrument ID: HP597QH Calibration Date: 11/23/96 Time: 0837

Lab File ID: H2237 Init. Calib. Date(s): 11/20/96 11/20/96

Heated Purge: (Y/N) N Init. Calib. Times: 1447 1716

GC Column: DB-VRX ID: 0.45 (mm)

| COMPOUND | $\overline{RRF}$ | RRF50 | MIN RRF | %D | MAX %D | |
|---|---|---|---|---|---|---|
| Chloromethane | 0.445 | 0.395 | | 11.2 | | |
| Bromomethane | 1.113 | 0.923 | 0.100 | 17.1 | 25.0 | |
| Vinyl Chloride | 0.640 | 0.535 | 0.100 | 16.4 | 25.0 | |
| Chloroethane | 0.486 | 0.416 | | 14.4 | | |
| Methylene Chloride | 1.259 | 0.996 | | 20.9 | | |
| Acetone | 0.185 | 0.144 | | 22.2 | | |
| Carbon Disulfide | 3.402 | 2.851 | | 16.2 | | |
| 1,1-Dichloroethene | 1.228 | 1.021 | 0.100 | 16.8 | 25.0 | |
| 1,1-Dichloroethane | 2.090 | 1.759 | 0.200 | 15.8 | 25.0 | |
| 1,2-Dichloroethene (total) | 1.361 | 1.144 | | 15.9 | | |
| Chloroform | 2.959 | 2.466 | 0.200 | 16.7 | 25.0 | |
| 1,2-Dichloroethane | 1.687 | 1.382 | 0.100 | 18.1 | 25.0 | |
| 2-Butanone | 0.313 | 0.236 | | 24.6 | | |
| 1,1,1-Trichloroethane | 0.635 | 0.538 | 0.100 | 15.3 | 25.0 | |
| Carbon Tetrachloride | 0.562 | 0.442 | 0.100 | 21.4 | 25.0 | |
| Bromodichloromethane | 0.751 | 0.613 | 0.200 | 18.4 | 25.0 | |
| 1,2-Dichloropropane | 0.326 | 0.268 | | 17.8 | | |
| cis-1,3-Dichloropropene | 0.479 | 0.389 | 0.200 | 18.8 | 25.0 | |
| Trichloroethene | 0.505 | 0.440 | 0.300 | 12.9 | 25.0 | |
| Dibromochloromethane | 0.775 | 0.610 | 0.100 | 21.3 | 25.0 | |
| 1,1,2-Trichloroethane | 0.353 | 0.278 | 0.100 | 21.2 | 25.0 | |
| Benzene | 0.785 | 0.656 | 0.500 | 16.4 | 25.0 | |
| trans-1,3-Dichloropropene | 0.482 | 0.383 | 0.100 | 20.5 | 25.0 | |
| Bromoform | 0.573 | 0.440 | 0.100 | 23.2 | 25.0 | |
| 4-Methyl-2-Pentanone | 0.292 | 0.201 | | 31.2 | | |
| 2-Hexanone | 0.196 | 0.131 | | 33.2 | | |
| Tetrachloroethene | 0.625 | 0.543 | 0.200 | 13.1 | 25.0 | |
| 1,1,2,2-Tetrachloroethane | 0.667 | 0.458 | 0.500 | 31.3 | 25.0 | <- |
| Toluene | 1.309 | 1.048 | 0.400 | 19.9 | 25.0 | |
| Chlorobenzene | 1.130 | 0.901 | 0.500 | 20.3 | 25.0 | |
| Ethylbenzene | 0.483 | 0.398 | 0.100 | 17.6 | 25.0 | |
| Styrene | 0.999 | 0.796 | 0.300 | 20.3 | 25.0 | |
| Trichlorofluoromethane | 2.708 | 2.385 | | 11.9 | | |
| Vinyl Acetate | 0.385 | 0.309 | | 19.7 | | |
| 2-Chloroethylvinyl ether | 0.167 | 0.128 | | 23.4 | | |
| m and p-Xylene | 0.555 | 0.460 | | 17.1 | | |
| o-Xylene | 0.575 | 0.468 | | 18.6 | | |

All other compounds must meet a minimum RRF of 0.010.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Instrument ID: HP5970H Calibration Date: 11/23/96 Time: 0837

Lab File ID: H2237 Init. Calib. Date(s): 11/20/96 11/20/96

Heated Purge: (Y/N) N Init. Calib. Times: 1447 1716

GC Column: DB-VRX ID: 0.45 (mm)

| COMPOUND | $\overline{RRF}$ | RRF50 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 1.066 | 0.887 | | 16.8 | |
| 1,4-Dichlorobenzene | 1.165 | 0.976 | | 16.2 | |
| 1,2-Dichlorobenzene | 1.022 | 0.832 | | 18.6 | |
| Toluene-d8 | 1.149 | 1.088 | | 5.3 | |
| Bromofluorobenzene | 0.771 | 0.721 | 0.200 | 6.5 | 25.0 |
| 1,2-Dichloroethane-d4 | 1.342 | 1.304 | | 2.8 | |

All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/hp5970h.i/961123h.b/h2237.d
Report Date: 23-Nov-1996 09:06

NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970h.i/961123h.b/h2237.d
Lab Smp Id: vstd050 Client Smp ID: vstd050
Inj Date : 23-NOV-96 08:37
Operator : dry Inst ID: hp5970h.i
Smp Info : vstd050,vstd050,961123h,dry,,, NET
Misc Info : ,2,3, ,1,0,,,,,,,,als 1
Comment :
Method : /chem/hp5970h.i/961123h.b/hvoa.m
Meth Date : 23-Nov-1996 09:03 Quant Type: ISTD
Cal Date : 23-NOV-96 08:37 Cal File: h2237.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| 1 | Chloromethane | 50.00 | 3.591 | 3.591 | (0.345) | 83003 | 50 | 44(M) |
| 2 | Vinyl Chloride | 62.00 | 3.902 | 3.902 | (0.375) | 112282 | 50 | 42(M) |
| 3 | Bromomethane | 94.00 | 4.363 | 4.363 | (0.419) | 193820 | 50 | 41 |
| 4 | Chloroethane | 64.00 | 4.533 | 4.533 | (0.436) | 87370 | 50 | 43 |
| 5 | Trichlorofluoromethane | 101.00 | 5.536 | 5.536 | (0.532) | 500720 | 50 | 44(M) |
| 6 | Acrolein | 56.00 | 5.436 | 5.436 | (0.522) | 72362 | 500 | 360(M) |
| 7 | Acetone | 43.00 | 5.696 | 5.696 | (0.547) | 30321 | 50 | 39(M) |
| 8 | 1,1-Dichloroethene | 96.00 | 6.489 | 6.489 | (0.623) | 214433 | 50 | 42 |
| 9 | Carbon Disulfide | 76.00 | 7.190 | 7.190 | (0.691) | 598577 | 50 | 42(M) |
| 10 | Methylene Chloride | 84.00 | 6.819 | 6.819 | (0.655) | 209110 | 50 | 40 |
| 11 | Acrylonitrile | 53.00 | 6.659 | 6.659 | (0.640) | 216513 | 500 | 360 |
| 12 | Methyl-t-butyl ether | 73.00 | 8.564 | 8.564 | (0.823) | 429236 | 50 | 36 |
| 13 | trans-1,2-Dichloroethene | 96.00 | 8.213 | 8.213 | (0.789) | 238231 | 50 | 42 |
| 14 | 1,1-Dichloroethane | 63.00 | 8.755 | 8.755 | (0.841) | 369359 | 50 | 42 |
| 15 | Vinyl Acetate | 43.00 | 9.256 | 9.256 | (0.665) | 247122 | 50 | 40 |
| 16 | 2-Butanone | 43.00 | 9.848 | 9.848 | (0.946) | 49594 | 50 | 38 |
| 17 | cis-1,2-Dichloroethene | 96.00 | 10.068 | 10.068 | (0.967) | 239641 | 50 | 42 |
| 18 | 1,2-Dichloroethene (total) | 96.00 | 10.068 | 10.068 | (0.967) | 480325 | 100 | 84(M) |
| 19 | Chloroform | 83.00 | 10.580 | 10.580 | (1.016) | 517857 | 50 | 42 |
| * 20 | Bromochloromethane | 128.00 | 10.409 | 10.409 | (1.000) | 209974 | 50 | |
| 21 | Tetrahydrofuran | 42.00 | 11.301 | 11.301 | (1.086) | 24307 | 50 | 38 |
| 22 | 1,1,1-Trichloroethane | 97.00 | 12.234 | 12.234 | (0.880) | 429745 | 50 | 42 |
| 23 | Cyclohexane | 56.00 | 12.826 | 12.826 | (1.232) | 232939 | 50 | 43 |

Data File: /chem/hp5970h.i/961123h.b/h2237.d
Report Date: 23-Nov-1996 09:06

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| | 24 Carbon Tetrachloride | 117.00 | 13.046 | 13.046 | (0.938) | 353375 | 50 | 39 |
| $ | 25 1,2-Dichloroethane-d4 | 65.00 | 11.863 | 11.863 | (1.140) | 273850 | 50 | 48 |
| | 26 1,2-Dichloroethane | 62.00 | 12.043 | 12.043 | (1.157) | 290175 | 50 | 41 |
| | 27 Benzene | 78.00 | 13.187 | 13.187 | (0.948) | 523904 | 50 | 42 |
| * | 28 1,4-Difluorobenzene | 114.00 | 13.908 | 13.908 | (1.000) | 798626 | 50 | |
| | 29 Trichloroethene | 130.00 | 14.741 | 14.741 | (1.060) | 351181 | 50 | 44 |
| | 30 1,2-Dichloropropane | 63.00 | 14.610 | 14.610 | (1.050) | 214101 | 50 | 41 |
| | 31 Bromodichloromethane | 83.00 | 14.851 | 14.851 | (1.068) | 489900 | 50 | 41 |
| | 32 2-Chloroethylvinyl ether | 63.00 | 16.074 | 16.074 | (1.156) | 102150 | 50 | 38 |
| | 33 4-Methyl-2-Pentanone | 43.00 | 16.856 | 16.856 | (0.787) | 126275 | 50 | 34 |
| | 34 cis-1,3-Dichloropropene | 75.00 | 16.475 | 16.475 | (1.185) | 329236 | 53 | 43 |
| $ | 35 Toluene-d8 | 98.00 | 18.150 | 18.150 | (0.847) | 682008 | 50 | 47 |
| | 36 Toluene | 91.00 | 18.310 | 18.310 | (0.855) | 657187 | 50 | 40 |
| | 37 trans-1,3-Dichloropropene | 75.00 | 17.568 | 17.568 | (1.263) | 287727 | 47 | 37 |
| | 38 1,1,2-Trichloroethane | 97.00 | 17.869 | 17.869 | (1.285) | 221930 | 50 | 39 |
| | 39 1,1,2,2-Tetrachloroethane | 83.00 | 23.133 | 23.133 | (1.080) | 287157 | 50 | 34 |
| | 40 2-Hexanone | 43.00 | 19.022 | 19.022 | (0.888) | 82007 | 50 | 33 |
| | 41 Tetrachloroethene | 164.00 | 20.005 | 20.005 | (0.934) | 340607 | 50 | 43 |
| | 42 Dibromochloromethane | 129.00 | 18.992 | 18.992 | (1.365) | 487022 | 50 | 39 |
| * | 43 Chlorobenzene-d5 | 117.00 | 21.419 | 21.419 | (1.000) | 626767 | 50 | |
| | 44 Chlorobenzene | 112.00 | 21.479 | 21.479 | (1.003) | 564604 | 50 | 40 |
| | 45 Ethylbenzene | 106.00 | 21.970 | 21.970 | (1.026) | 249396 | 50 | 41 |
| | 46 m and p-Xylene | 106.00 | 22.391 | 22.391 | (1.045) | 577375 | 100 | 83 |
| | 47 o-Xylene | 106.00 | 23.133 | 23.133 | (1.080) | 293520 | 50 | 41 |
| | 48 Xylene (Total) | 106.00 | 23.133 | 23.133 | (1.080) | 293520 | 50 | 41 |
| | 49 Styrene | 104.00 | 23.013 | 23.013 | (1.074) | 498854 | 50 | 40 |
| | 50 Bromoform | 173.00 | 22.431 | 22.431 | (1.613) | 351184 | 50 | 38 |
| $ | 51 Bromofluorobenzene | 95.00 | 23.855 | 23.855 | (1.114) | 452097 | 50 | 47 |
| | 52 1,3-Dichlorobenzene | 146.00 | 26.031 | 26.031 | (1.215) | 556233 | 50 | 42 |
| | 53 1,4-Dichlorobenzene | 146.00 | 26.151 | 26.151 | (1.221) | 611934 | 50 | 42 |
| | 54 1,2-Dichlorobenzene | 146.00 | 26.703 | 26.703 | (1.247) | 521607 | 50 | 41 |

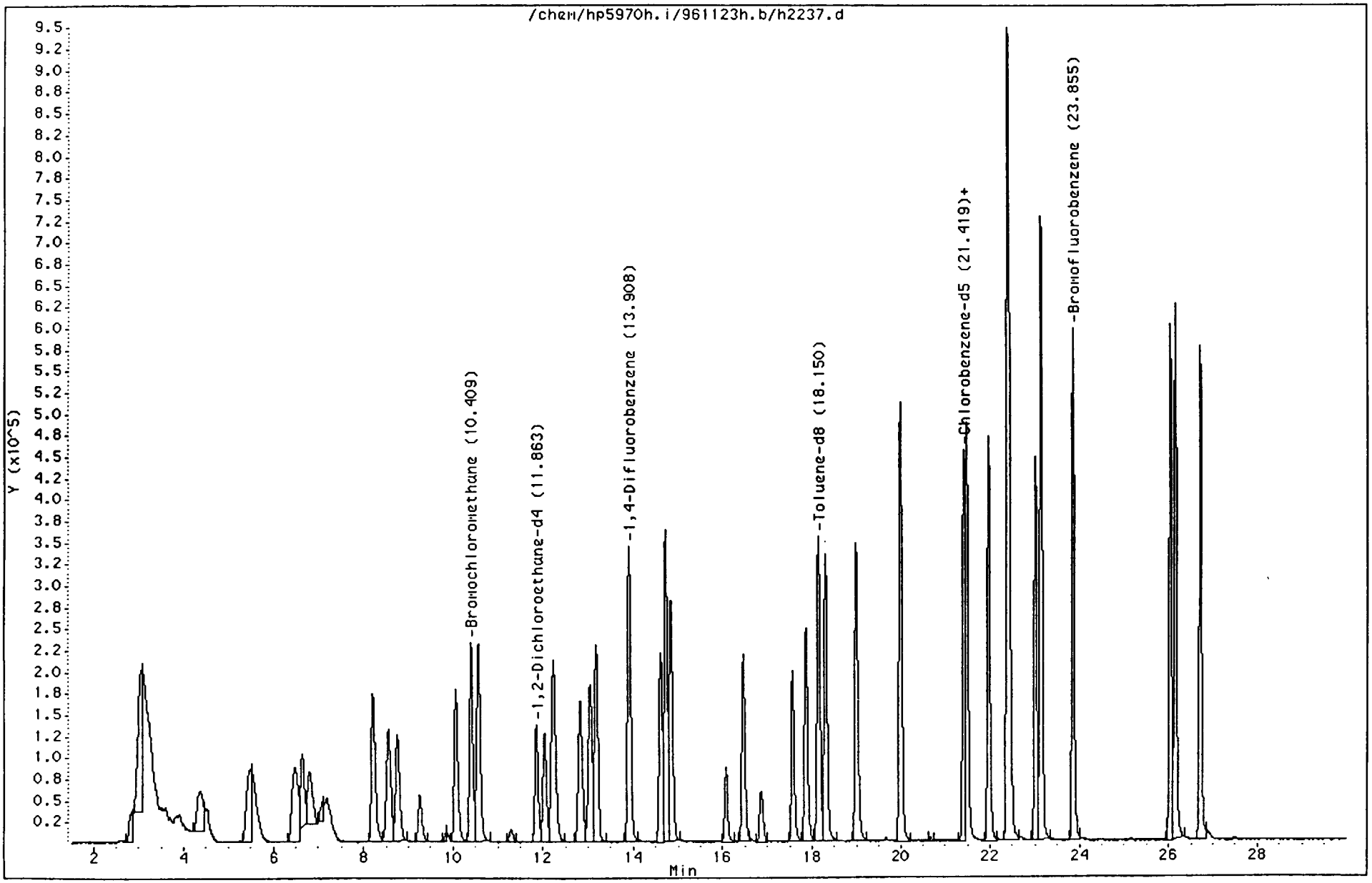
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/hp5970h.i/961123h.b/h2237.d
Date : 23-NOV-96 08:37
Client ID: vstd050
Sample Info: vstd050,vstd050,961123h,dry,,, NET
Purge Volume: 5.0
Column phase: DB-VRX

Instrument: hp5970h.i
Operator: dry
Column diameter: 0.45

30464



7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Instrument ID: HP5970H Calibration Date: 11/25/96 Time: 1116

Lab File ID: H2259 Init. Calib. Date(s): 11/20/96 11/20/96

Heated Purge: (Y/N) N Init. Calib. Times: 1447 1716

GC Column: DB-VRX ID: 0.45 (mm)

| COMPOUND | $\overline{RRF}$ | RRF50 | MIN RRF | %D | MAX %D | |
|---|---|---|---|---|---|---|
| Chloromethane | 0.445 | 0.446 | | 0.2 | | |
| Bromomethane | 1.113 | 0.981 | 0.100 | 11.8 | 25.0 | |
| Vinyl Chloride | 0.640 | 0.600 | 0.100 | 6.2 | 25.0 | |
| Chloroethane | 0.486 | 0.452 | | 7.0 | | |
| Methylene Chloride | 1.259 | 1.059 | | 15.9 | | |
| Acetone | 0.185 | 0.164 | | 11.4 | | |
| Carbon Disulfide | 3.402 | 3.037 | | 10.7 | | |
| 1,1-Dichloroethene | 1.228 | 1.069 | 0.100 | 12.9 | 25.0 | |
| 1,1-Dichloroethane | 2.090 | 1.862 | 0.200 | 10.9 | 25.0 | |
| 1,2-Dichloroethene (total) | 1.361 | 1.186 | | 12.8 | | |
| Chloroform | 2.959 | 2.505 | 0.200 | 15.3 | 25.0 | |
| 1,2-Dichloroethane | 1.687 | 1.407 | 0.100 | 16.6 | 25.0 | |
| 2-Butanone | 0.313 | 0.241 | | 23.0 | | |
| 1,1,1-Trichloroethane | 0.635 | 0.515 | 0.100 | 18.9 | 25.0 | |
| Carbon Tetrachloride | 0.562 | 0.458 | 0.100 | 18.5 | 25.0 | |
| Bromodichloromethane | 0.751 | 0.614 | 0.200 | 18.2 | 25.0 | |
| 1,2-Dichloropropane | 0.326 | 0.282 | | 13.5 | | |
| cis-1,3-Dichloropropene | 0.479 | 0.404 | 0.200 | 15.6 | 25.0 | |
| Trichloroethene | 0.505 | 0.439 | 0.300 | 13.1 | 25.0 | |
| Dibromochloromethane | 0.775 | 0.610 | 0.100 | 21.3 | 25.0 | |
| 1,1,2-Trichloroethane | 0.353 | 0.278 | 0.100 | 21.2 | 25.0 | |
| Benzene | 0.785 | 0.671 | 0.500 | 14.5 | 25.0 | |
| trans-1,3-Dichloropropene | 0.482 | 0.399 | 0.100 | 17.2 | 25.0 | |
| Bromoform | 0.573 | 0.422 | 0.100 | 26.4 | 25.0 | <- |
| 4-Methyl-2-Pentanone | 0.292 | 0.207 | | 29.1 | | |
| 2-Hexanone | 0.196 | 0.140 | | 28.6 | | |
| Tetrachloroethene | 0.625 | 0.525 | 0.200 | 16.0 | 25.0 | |
| 1,1,2,2-Tetrachloroethane | 0.667 | 0.455 | 0.500 | 31.8 | 25.0 | <- |
| Toluene | 1.309 | 1.084 | 0.400 | 17.2 | 25.0 | |
| Chlorobenzene | 1.130 | 0.904 | 0.500 | 20.0 | 25.0 | |
| Ethylbenzene | 0.483 | 0.394 | 0.100 | 18.4 | 25.0 | |
| Styrene | 0.999 | 0.844 | 0.300 | 15.5 | 25.0 | |
| Trichlorofluoromethane | 2.708 | 2.423 | | 10.5 | | |
| Vinyl Acetate | 0.385 | 0.316 | | 17.9 | | |
| 2-Chloroethylvinyl ether | 0.167 | 0.136 | | 18.6 | | |
| m and p-Xylene | 0.555 | 0.465 | | 16.2 | | |
| o-Xylene | 0.575 | 0.473 | | 17.7 | | |

All other compounds must meet a minimum RRF of 0.010.



30465

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Instrument ID: HP5970H Calibration Date: 11/25/96 Time: 1116

Lab File ID: H2259 Init. Calib. Date(s): 11/20/96 11/20/96

Heated Purge: (Y/N) N Init. Calib. Times: 1447 1716

GC Column: DB-VRX ID: 0.45 (mm)

| COMPOUND | $\overline{RRF}$ | RRF50 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 1.066 | 0.906 | | 15.0 | |
| 1,4-Dichlorobenzene | 1.165 | 0.939 | | 19.4 | |
| 1,2-Dichlorobenzene | 1.022 | 0.813 | | 20.4 | |
| Toluene-d8 | 1.149 | 1.115 | | 3.0 | |
| Bromofluorobenzene | 0.771 | 0.726 | 0.200 | 5.8 | 25.0 |
| 1,2-Dichloroethane-d4 | 1.342 | 1.345 | | 0.2 | |

All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/hp5970h.i/961125h.b/h2259.d
Report Date: 26-Nov-1996 10:04

NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970h.i/961125h.b/h2259.d
Lab Smp Id: vstd050 Client Smp ID: vstd050
Inj Date : 25-NOV-96 11:16
Operator : jss Inst ID: hp5970h.i
Smp Info : vstd050,vstd050,961125h,jss,,, NET
Misc Info : ,2,3, ,1,0,,,,,,,,als 1
Comment :
Method : /chem/hp5970h.i/961125h.b/hvoa.m
Meth Date : 26-Nov-1996 09:21 jims Quant Type: ISTD
Cal Date : 25-NOV-96 11:16 Cal File: h2259.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| 1 | Chloromethane | 50.00 | 3.618 | 3.618 | (0.345) | 92446 | 50 | 50(M) |
| 2 | Vinyl Chloride | 62.00 | 3.889 | 3.889 | (0.370) | 124405 | 50 | 47 |
| 3 | Bromomethane | 94.00 | 4.380 | 4.380 | (0.417) | 203507 | 50 | 44 |
| 4 | Chloroethane | 64.00 | 4.551 | 4.551 | (0.434) | 93671 | 50 | 46 |
| 5 | Trichlorofluoromethane | 101.00 | 5.564 | 5.564 | (0.530) | 502481 | 50 | 45 |
| 6 | Acrolein | 56.00 | 5.473 | 5.473 | (0.521) | 78061 | 500 | 390 |
| 7 | Acetone | 43.00 | 5.734 | 5.734 | (0.546) | 34120 | 50 | 44 |
| 8 | 1,1-Dichloroethene | 96.00 | 6.526 | 6.526 | (0.622) | 221751 | 50 | 44 |
| 9 | Carbon Disulfide | 76.00 | 7.218 | 7.218 | (0.688) | 629982 | 50 | 45(M) |
| 10 | Methylene Chloride | 84.00 | 6.877 | 6.877 | (0.655) | 219613 | 50 | 42 |
| 11 | Acrylonitrile | 53.00 | 6.707 | 6.707 | (0.639) | 241082 | 500 | 400 |
| 12 | Methyl-t-butyl ether | 73.00 | 8.632 | 8.632 | (0.822) | 427954 | 50 | 37 |
| 13 | trans-1,2-Dichloroethene | 96.00 | 8.281 | 8.281 | (0.789) | 243349 | 50 | 44 |
| 14 | 1,1-Dichloroethane | 63.00 | 8.822 | 8.822 | (0.840) | 386247 | 50 | 44 |
| 15 | Vinyl Acetate | 43.00 | 9.324 | 9.324 | (0.666) | 260101 | 50 | 41 |
| 16 | 2-Butanone | 43.00 | 9.925 | 9.925 | (0.946) | 50032 | 50 | 38 |
| 17 | cis-1,2-Dichloroethene | 96.00 | 10.146 | 10.146 | (0.967) | 245775 | 50 | 43 |
| 18 | 1,2-Dichloroethene (total) | 96.00 | 10.146 | 10.146 | (0.967) | 492138 | 100 | 87(M) |
| 19 | Chloroform | 83.00 | 10.657 | 10.657 | (1.015) | 519555 | 50 | 42 |
| * 20 | Bromochloromethane | 128.00 | 10.497 | 10.497 | (1.000) | 207406 | 50 | |
| 21 | Tetrahydrofuran | 42.00 | 11.379 | 11.379 | (1.084) | 25085 | 50 | 39 |
| 22 | 1,1,1-Trichloroethane | 97.00 | 12.312 | 12.312 | (0.880) | 423357 | 50 | 41 |
| 23 | Cyclohexane | 56.00 | 12.923 | 12.923 | (1.231) | 248925 | 50 | 47 |

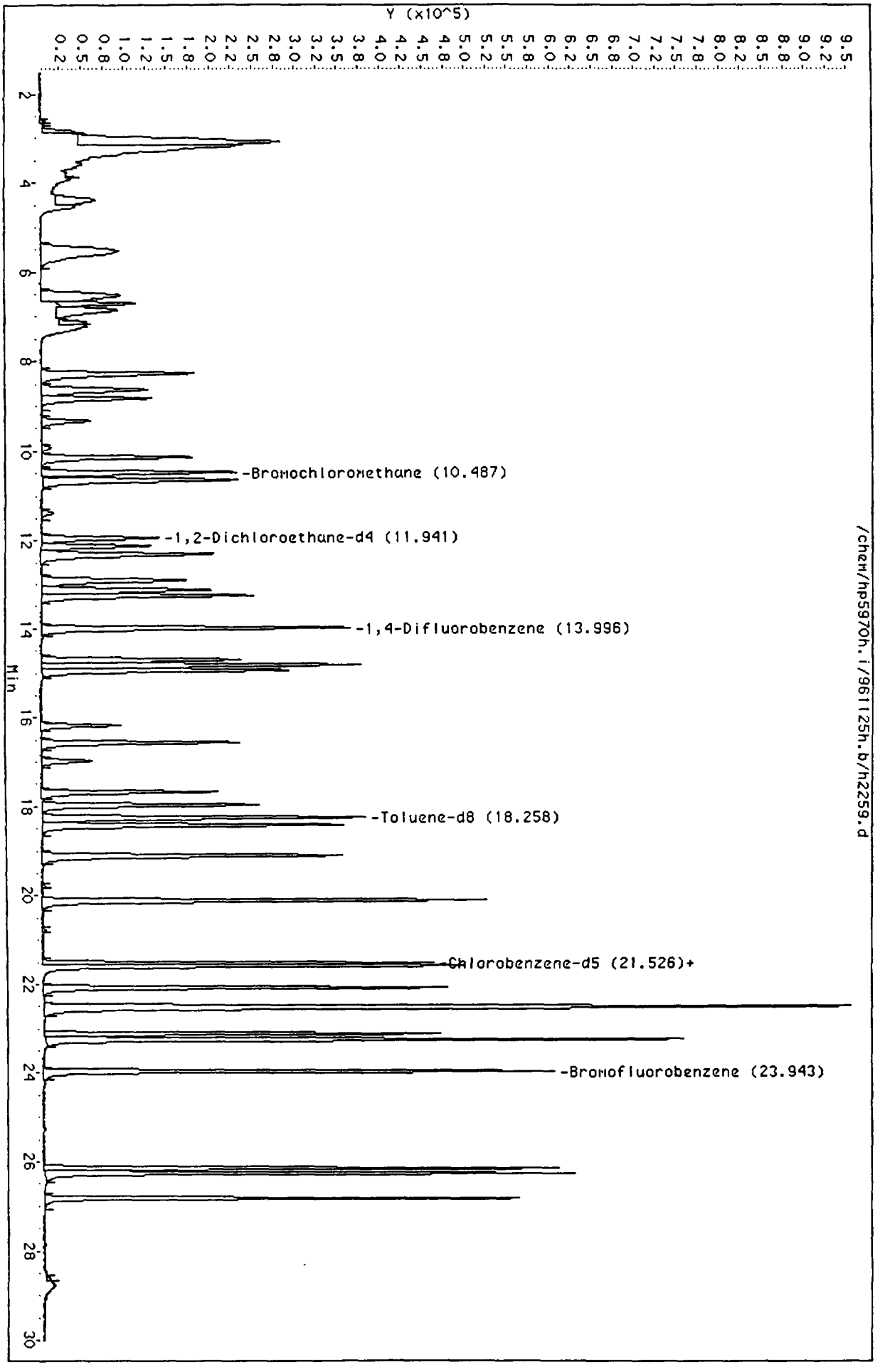
Data File: /chem/hp5970h.i/961125h.b/h2259.d
Report Date: 26-Nov-1996 10:04

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| | 24 Carbon Tetrachloride | 117.00 | 13.134 | 13.134 | (0.938) | 376025 | 50 | 41 |
| $ | 25 1,2-Dichloroethane-d4 | 65.00 | 11.941 | 11.941 | (1.138) | 278879 | 50 | 50 |
| | 26 1,2-Dichloroethane | 62.00 | 12.121 | 12.121 | (1.155) | 291915 | 50 | 42 |
| | 27 Benzene | 78.00 | 13.264 | 13.264 | (0.948) | 551353 | 50 | 43 |
| * | 28 1,4-Difluorobenzene | 114.00 | 13.996 | 13.996 | (1.000) | 821606 | 50 | |
| | 29 Trichloroethene | 130.00 | 14.828 | 14.828 | (1.059) | 361000 | 50 | 44 |
| | 30 1,2-Dichloropropane | 63.00 | 14.708 | 14.708 | (1.051) | 231964 | 50 | 43 |
| | 31 Bromodichloromethane | 83.00 | 14.939 | 14.939 | (1.067) | 504240 | 50 | 41 |
| | 32 2-Chloroethylvinyl ether | 63.00 | 16.172 | 16.172 | (1.155) | 111666 | 50 | 40 |
| | 33 4-Methyl-2-Pentanone | 43.00 | 16.964 | 16.964 | (0.788) | 131807 | 50 | 35 |
| | 34 cis-1,3-Dichloropropene | 75.00 | 16.573 | 16.573 | (1.184) | 352340 | 53 | 45 |
| $ | 35 Toluene-d8 | 98.00 | 18.247 | 18.247 | (0.848) | 709379 | 50 | 48 |
| | 36 Toluene | 91.00 | 18.418 | 18.418 | (0.856) | 690082 | 50 | 41 |
| | 37 trans-1,3-Dichloropropene | 75.00 | 17.676 | 17.676 | (1.263) | 308024 | 47 | 39 |
| | 38 1,1,2-Trichloroethane | 97.00 | 17.977 | 17.977 | (1.284) | 228232 | 50 | 39 |
| | 39 1,1,2,2-Tetrachloroethane | 83.00 | 23.231 | 23.231 | (1.080) | 289825 | 50 | 34 |
| | 40 2-Hexanone | 43.00 | 19.130 | 19.130 | (0.889) | 89352 | 50 | 36 |
| | 41 Tetrachloroethene | 164.00 | 20.113 | 20.113 | (0.935) | 334422 | 50 | 42 |
| | 42 Dibromochloromethane | 129.00 | 19.100 | 19.100 | (1.365) | 501168 | 50 | 39 |
| * | 43 Chlorobenzene-d5 | 117.00 | 21.516 | 21.516 | (1.000) | 636399 | 50 | |
| | 44 Chlorobenzene | 112.00 | 21.586 | 21.586 | (1.003) | 575286 | 50 | 40 |
| | 45 Ethylbenzene | 106.00 | 22.068 | 22.068 | (1.026) | 250467 | 50 | 41 |
| | 46 m and p-Xylene | 106.00 | 22.499 | 22.499 | (1.046) | 591689 | 100 | 84 |
| | 47 o-Xylene | 106.00 | 23.231 | 23.231 | (1.080) | 301155 | 50 | 41 |
| | 48 Xylene (Total) | 106.00 | 23.231 | 23.231 | (1.080) | 301146 | 50 | 41 |
| | 49 Styrene | 104.00 | 23.111 | 23.111 | (1.074) | 536899 | 50 | 42 |
| | 50 Bromoform | 173.00 | 22.529 | 22.529 | (1.610) | 347149 | 50 | 37 |
| $ | 51 Bromofluorobenzene | 95.00 | 23.943 | 23.943 | (1.113) | 461823 | 50 | 47 |
| | 52 1,3-Dichlorobenzene | 146.00 | 26.129 | 26.129 | (1.214) | 576641 | 50 | 42(M) |
| | 53 1,4-Dichlorobenzene | 146.00 | 26.249 | 26.249 | (1.220) | 597564 | 50 | 40 |
| | 54 1,2-Dichlorobenzene | 146.00 | 26.800 | 26.800 | (1.246) | 517672 | 50 | 40 |

QC Flag Legend

M - Compound response manually integrated.

= 0455



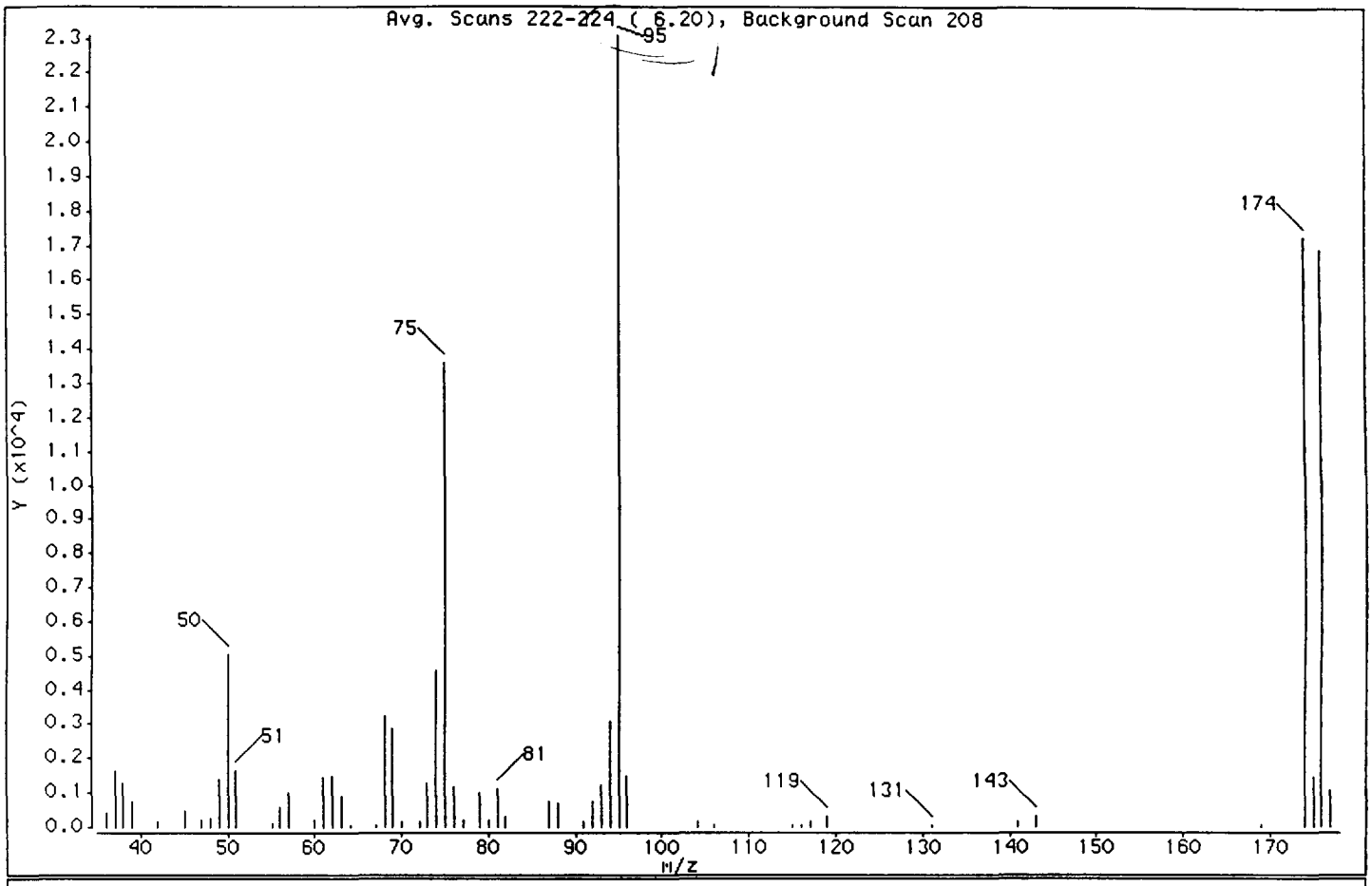

Data File: /chem/hp5970h.i/961125h.b/h2259.d
Date : 25-NOV-96 11:16
Client ID: vstd050
Sample Info: vstd050,vstd050,961125h,jss,,, NET
Purge Volume: 5.0
Column phase: DB-VRX

Instrument: hp5970h.i
Operator: jss
Column diameter: 0.45

## 3D. RAW QC DATA

# 3D(1). BFB TUNES

Data File: /chem/hp5970g.i/960910a.b/g2096.d
Date : 10-SEP-1996 10:33
Client ID: BFB
Instrument: hp5970g.i
Sample Info: BFB,BFB,960910ga,bel,,,NET
Operator: bel
Column phase: CAP
Column diameter: 0.53
1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 8.00 - 40.00% of mass 95 | 21.78 |
| 75 | 30.00 - 66.00% of mass 95 | 58.85 |
| 96 | 5.00 - 9.00% of mass 95 | 6.53 |
| 173 | Less than 2.00% of mass 174 | 0.00 ( 0.00) |
| 174 | 50.00 - 120.00% of mass 95 | 74.79 |
| 175 | 4.00 - 9.00% of mass 174 | 6.25 ( 8.35) |
| 176 | 93.00 - 101.00% of mass 174 | 73.08 ( 97.72) |
| 177 | 5.00 - 9.00% of mass 176 | 4.49 ( 6.14) |

30472

Data File: /chem/hp5970g.i/960910a.b/g2096.d

Date : 10-SEP-1996 10:33

Client ID: BFB

Instrument: hp5970g.i

Sample Info: BFB,BFB,960910ga,bel,,,NET

Operator: bel

Column phase: CAP

Column diameter: 0.53

Data File: g2096.d

Spectrum : Avg. Scans 222-224 ( 6.20), Background Scan 208

Largest m/z: 95.00

Number of peaks: 55

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 415 | 60.00 | 187 | 77.00 | 198 | 106.00 | 72 |
| 37.00 | 1632 | 61.00 | 1448 | 79.00 | 1007 | 115.00 | 69 |
| 38.00 | 1288 | 62.00 | 1476 | 80.00 | 196 | 116.00 | 73 |
| 39.00 | 760 | 63.00 | 891 | 81.00 | 1092 | 117.00 | 146 |
| 42.00 | 154 | 64.00 | 73 | 82.00 | 308 | 119.00 | 323 |
| 45.00 | 456 | 67.00 | 75 | 87.00 | 723 | 131.00 | 79 |
| 47.00 | 205 | 68.00 | 3250 | 88.00 | 693 | 141.00 | 183 |
| 48.00 | 285 | 69.00 | 2885 | 91.00 | 142 | 143.00 | 308 |
| 49.00 | 1374 | 70.00 | 159 | 92.00 | 744 | 169.00 | 74 |
| 50.00 | 5026 | 72.00 | 155 | 93.00 | 1221 | 174.00 | 17256 |
| 51.00 | 1651 | 73.00 | 1260 | 94.00 | 3069 | 175.00 | 1442 |
| 55.00 | 120 | 74.00 | 4568 | 95.00 | 23080 | 176.00 | 16864 |
| 56.00 | 610 | 75.00 | 13582 | 96.00 | 1508 | 177.00 | 1036 |
| 57.00 | 1009 | 76.00 | 1163 | 104.00 | 146 | | |

~/5 = 6 1508 × 100 = 6.5337 %

30473

Data File: /chem/hp5970g.i/960910a.b/g2096.d

Date : 10-SEP-1996 10:33

Client ID: BFB

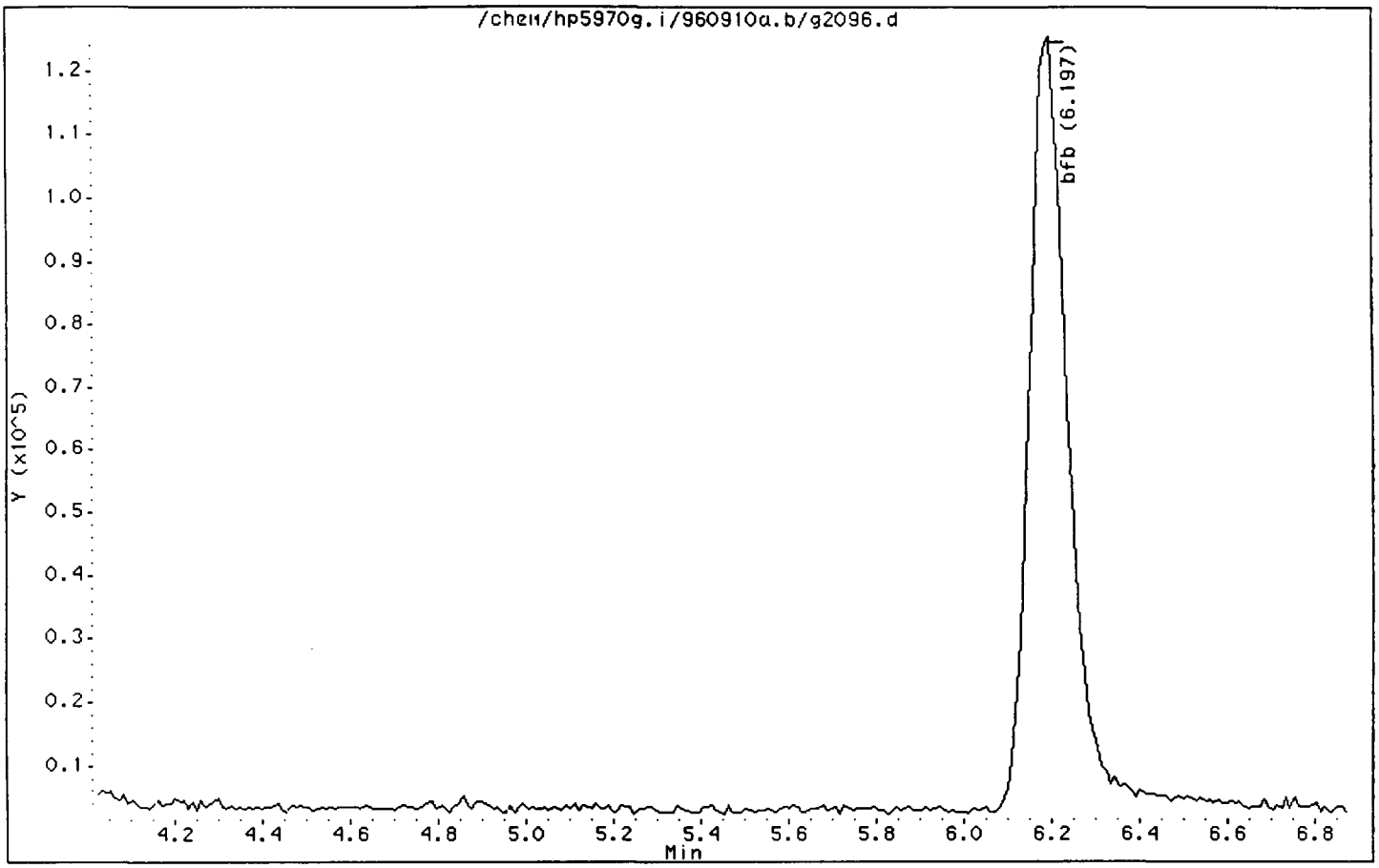
Instrument: hp5970g.i

Sample Info: BFB,BFB,960910ga,bel,,,NET

Operator: bel

Column phase: CAP

Column diameter: 0.53




30474

Data File: /chem/hp5970g.i/961115.b/g2635.d

Date : 15-NOV-96 09:46

Client ID: BFB

Instrument: hp5970g.i

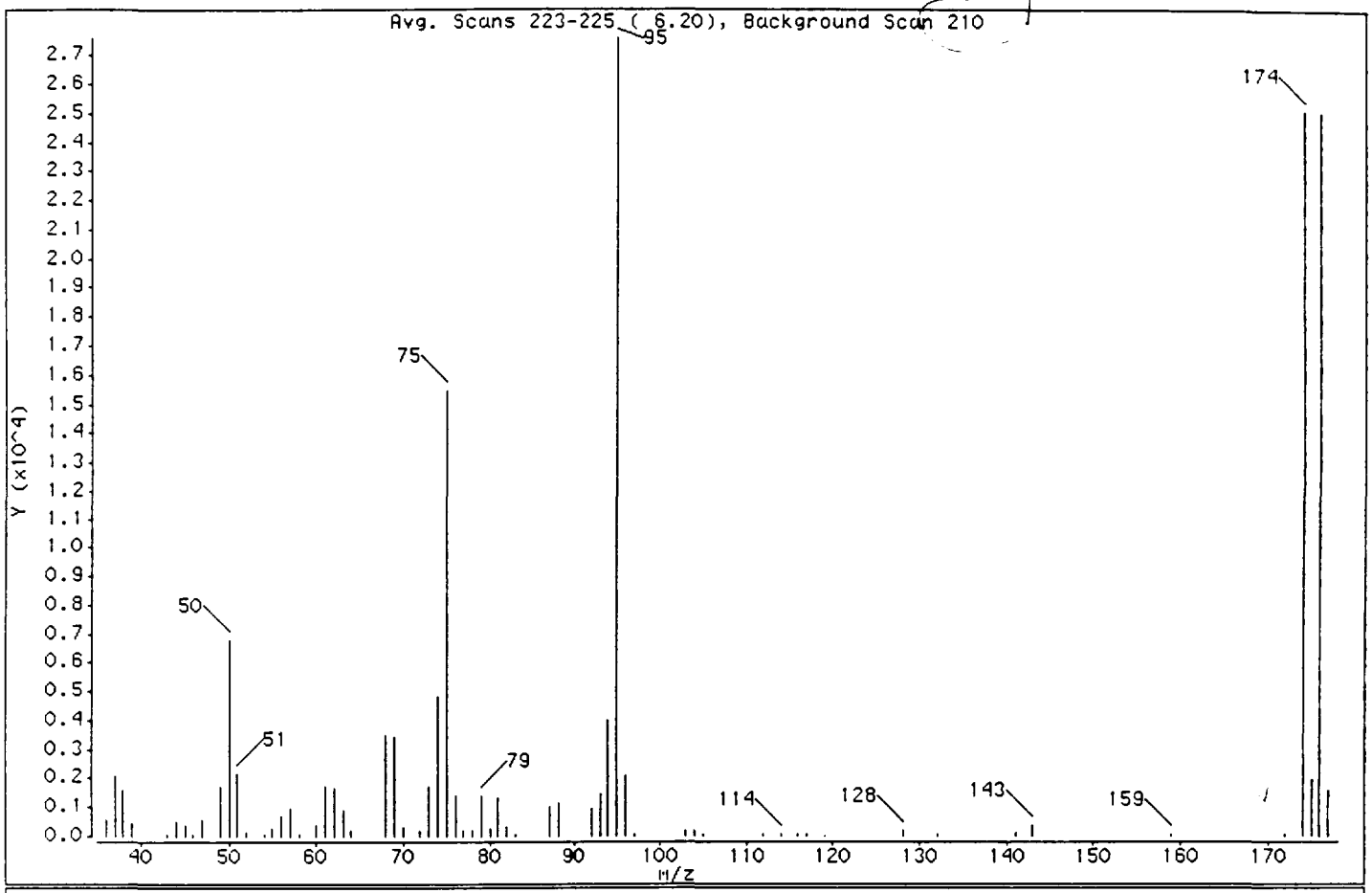
Sample Info: BFB,BFB,961115g,bel,,,NET

Operator: bel

Column phase: CAP

Column diameter: 0.53

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 8.00 - 40.00% of mass 95 | 24.68 |
| 75 | 30.00 - 66.00% of mass 95 | 55.89 |
| 96 | 5.00 - 9.00% of mass 95 | 7.62 |
| 173 | Less than 2.00% of mass 174 | 0.00 ( 0.00) |
| 174 | 50.00 - 120.00% of mass 95 | 90.94 |
| 175 | 4.00 - 9.00% of mass 174 | 7.23 ( 7.95) |
| 176 | 93.00 - 101.00% of mass 174 | 90.77 ( 99.82) |
| 177 | 5.00 - 9.00% of mass 176 | 5.69 ( 6.27) |

Data File: /chem/hp5970g.i/961115.b/g2635.d

Date : 15-NOV-96 09:46

Client ID: BFB

Instrument: hp5970g.i

Sample Info: BFB,BFB,961115g,bel,,,NET

Operator: bel

Column phase: CAP

Column diameter: 0.53

Data File: g2635.d

Spectrum : Avg. Scans 223-225 ( 6.20), Background Scan 210

Largest m/z: 95.00

Number of peaks: 64

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 574 | 58.00 | 70 | 80.00 | 254 | 116.00 | 73 |
| 37.00 | 2070 | 60.00 | 353 | 81.00 | 1333 | 117.00 | 91 |
| 38.00 | 1564 | 61.00 | 1743 | 82.00 | 338 | 119.00 | 12 |
| 39.00 | 466 | 62.00 | 1679 | 83.00 | 69 | 128.00 | 181 |
| 43.00 | 84 | 63.00 | 910 | 87.00 | 1035 | 132.00 | 69 |
| 44.00 | 484 | 64.00 | 181 | 88.00 | 1124 | 141.00 | 155 |
| 45.00 | 352 | 68.00 | 3491 | 92.00 | 976 | 143.00 | 350 |
| 46.00 | 91 | 69.00 | 3417 | 93.00 | 1442 | 159.00 | 75 |
| 47.00 | 564 | 70.00 | 328 | 94.00 | 3968 | 172.00 | 90 |
| 49.00 | 1712 | 72.00 | 211 | 95.00 | 27592 | 174.00 | 25096 |
| 50.00 | 6810 | 73.00 | 1719 | 96.00 | 2102 | 175.00 | 1995 |
| 51.00 | 2183 | 74.00 | 4831 | 97.00 | 70 | 176.00 | 25048 |
| 52.00 | 105 | 75.00 | 15424 | 103.00 | 163 | 177.00 | 1571 |
| 54.00 | 83 | 76.00 | 1399 | 104.00 | 164 | | |
| 55.00 | 277 | 77.00 | 168 | 105.00 | 93 | | |
| 56.00 | 697 | 78.00 | 202 | 112.00 | 77 | | |
| 57.00 | 980 | 79.00 | 1398 | 114.00 | 91 | | |

m/z 176 $\frac{25048}{25096} \times 100 = 99.8\%$ of 174

30476

Data File: /chem/hp5970g.i/961115.b/g2635.d



Date : 15-NOV-96 09:46

Client ID: BFB

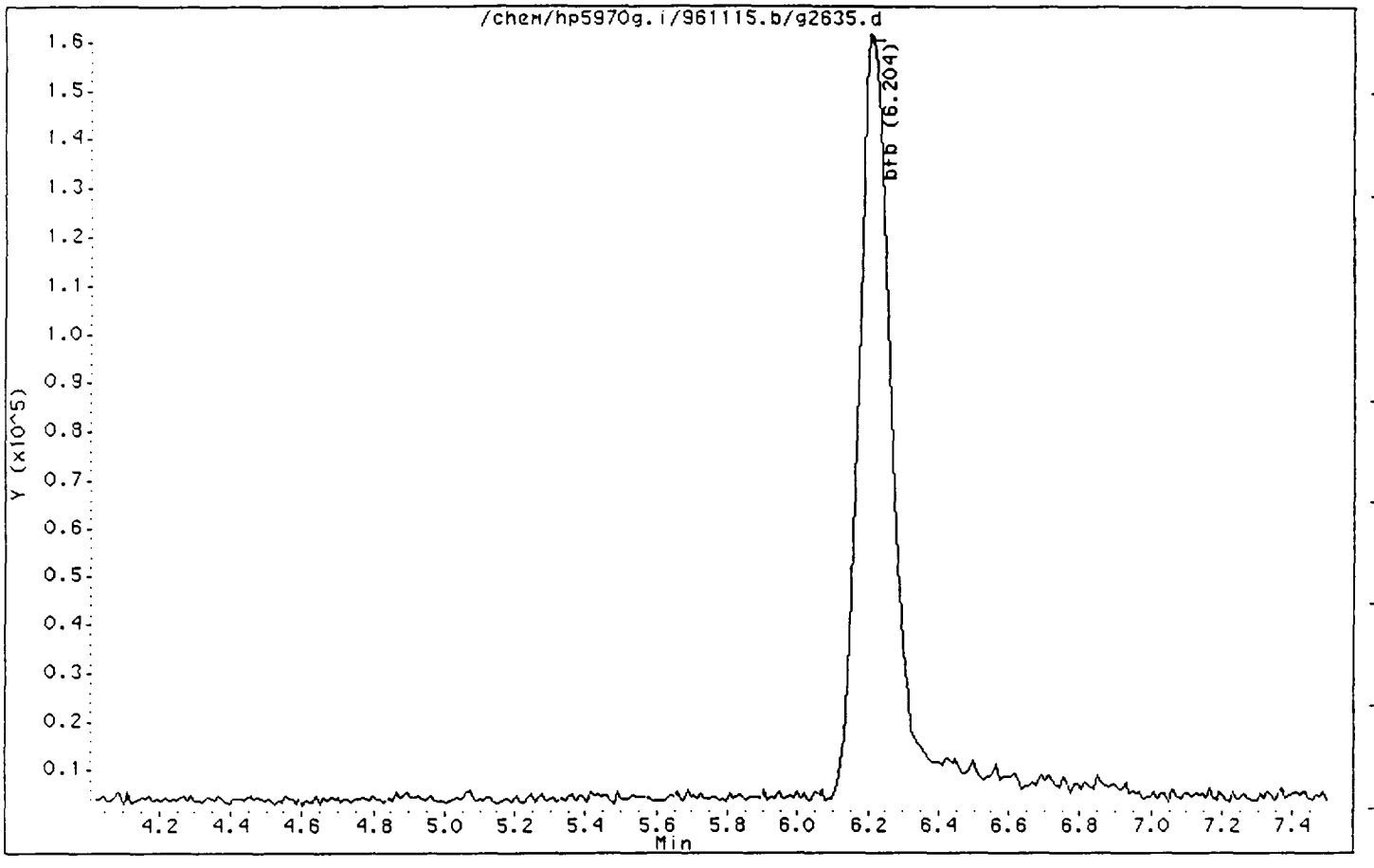
Instrument: hp5970g.i

Sample Info: BFB,BFB,961115g,bel,,,NET

Operator: bel

Column phase: CAP

Column diameter: 0.53




30477

Data File: /chem/hp5970g.i/961116.b/g2651.d

Date : 16-NOV-96 07:37

Client ID: BFB

Instrument: hp5970g.i

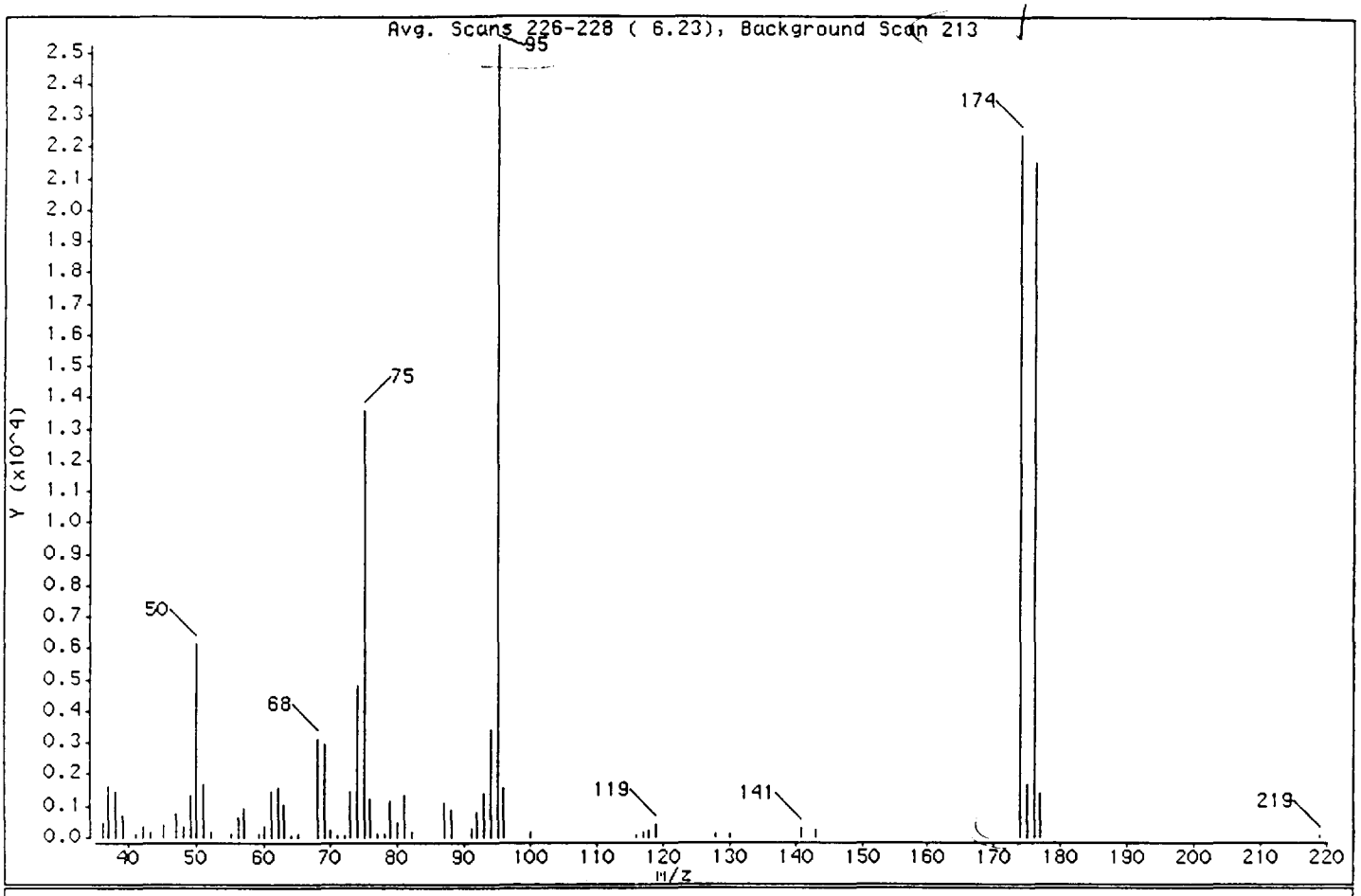
Sample Info: BFB,BFB,961116g,dry,,,NET

Operator: dry

Column phase: CAP

Column diameter: 0.53

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 8.00 - 40.00% of mass 95 | 24.31 |
| 75 | 30.00 - 66.00% of mass 95 | 53.82 |
| 96 | 5.00 - 9.00% of mass 95 | 6.23 |
| 173 | Less than 2.00% of mass 174 | 0.00 ( 0.00) |
| 174 | 50.00 - 120.00% of mass 95 | 88.67 |
| 175 | 4.00 - 9.00% of mass 174 | 6.66 ( 7.51) |
| 176 | 93.00 - 101.00% of mass 174 | 85.37 ( 96.27) |
| 177 | 5.00 - 9.00% of mass 176 | 5.44 ( 6.37) |

Data File: /chem/hp5970g.i/961116.b/g2651.d

Date : 16-NOV-96 07:37

Client ID: BFB

Instrument: hp5970g.i

Sample Info: BFB,BFB,961116g,dry,,,NET

Operator: dry

Column phase: CAP

Column diameter: 0.53

Data File: g2651.d

Spectrum : Avg. Scans 226-228 ( 6.23), Background Scan 213

Largest m/z: 95.00

Number of peaks: 61

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 486 | 57.00 | 951 | 76.00 | 1209 | 116.00 | 80 |
| 37.00 | 1628 | 59.00 | 107 | 77.00 | 113 | 117.00 | 199 |
| 38.00 | 1425 | 60.00 | 368 | 78.00 | 96 | 118.00 | 226 |
| 39.00 | 720 | 61.00 | 1430 | 79.00 | 1138 | 119.00 | 404 |
| 41.00 | 142 | 62.00 | 1567 | 80.00 | 466 | 128.00 | 87 |
| 42.00 | 343 | 63.00 | 1041 | 81.00 | 1330 | 130.00 | 139 |
| 43.00 | 186 | 64.00 | 67 | 82.00 | 184 | 141.00 | 284 |
| 45.00 | 400 | 65.00 | 87 | 87.00 | 1119 | 143.00 | 223 |
| 47.00 | 729 | 68.00 | 3142 | 88.00 | 869 | 174.00 | 22360 |
| 48.00 | 319 | 69.00 | 2979 | 91.00 | 291 | 175.00 | 1680 |
| 49.00 | 1312 | 70.00 | 240 | 92.00 | 801 | 176.00 | 21528 |
| 50.00 | 6131 | 71.00 | 73 | 93.00 | 1374 | 177.00 | 1371 |
| 51.00 | 1707 | 72.00 | 72 | 94.00 | 3420 | 219.00 | 72 |
| 52.00 | 183 | 73.00 | 1450 | 95.00 | 25216 | | |
| 55.00 | 112 | 74.00 | 4787 | 96.00 | 1570 | | |
| 56.00 | 655 | 75.00 | 13572 | 100.00 | 152 | | |

Data File: /chem/hp5970g.i/961116.b/g2651.d

Date : 16-NOV-96 07:37

Client ID: BFB

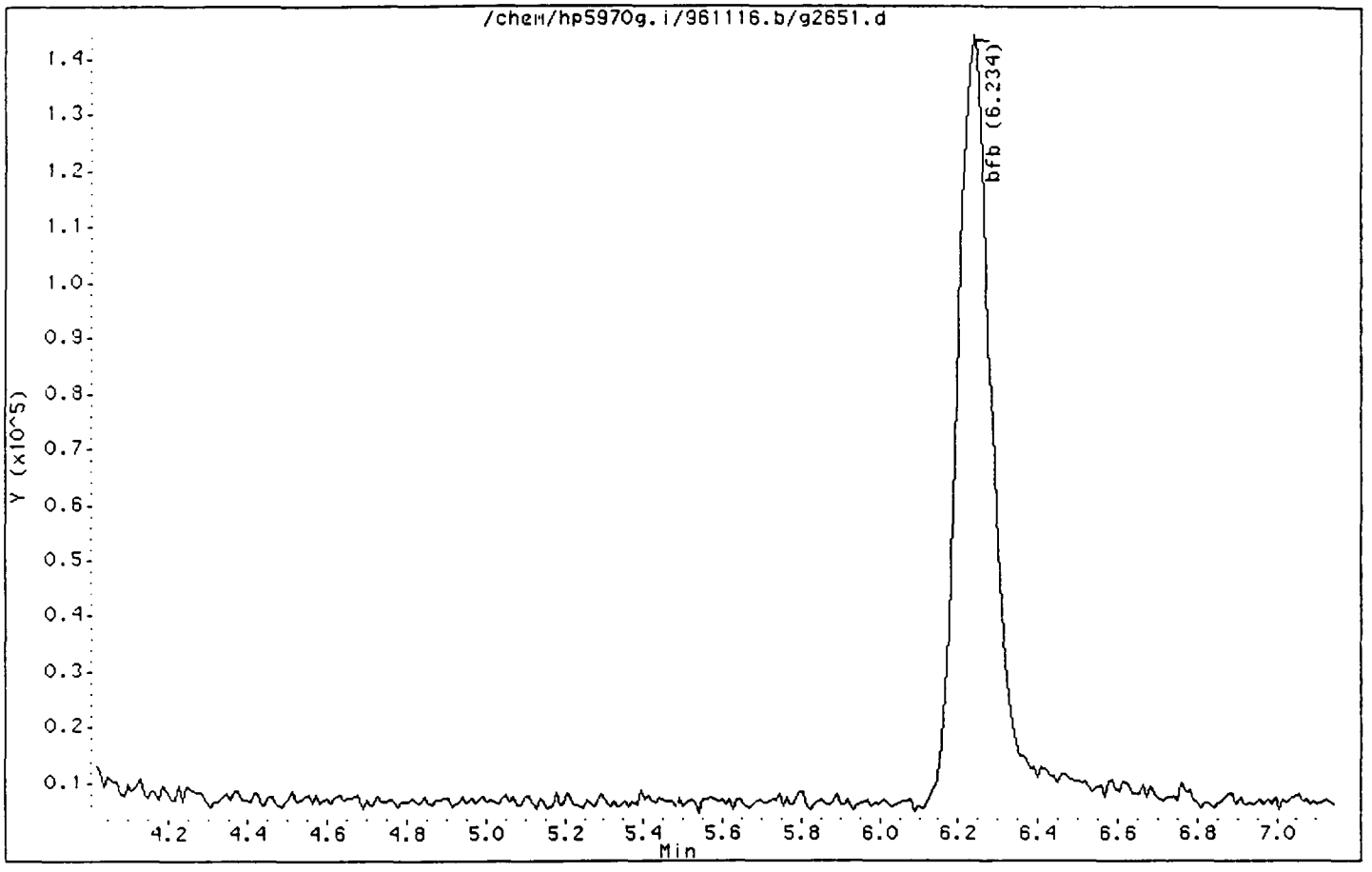
Instrument: hp5970g.i

Sample Info: BFB,BFB,961116g,dry,,,NET

Operator: dry

Column phase: CAP

Column diameter: 0.53




30480

Data File: /chem/hp5970h.i/961120h.b/h2189.d

Date : 20-NOV-1996 13:17

Client ID: bfb

Instrument: hp5970h.i

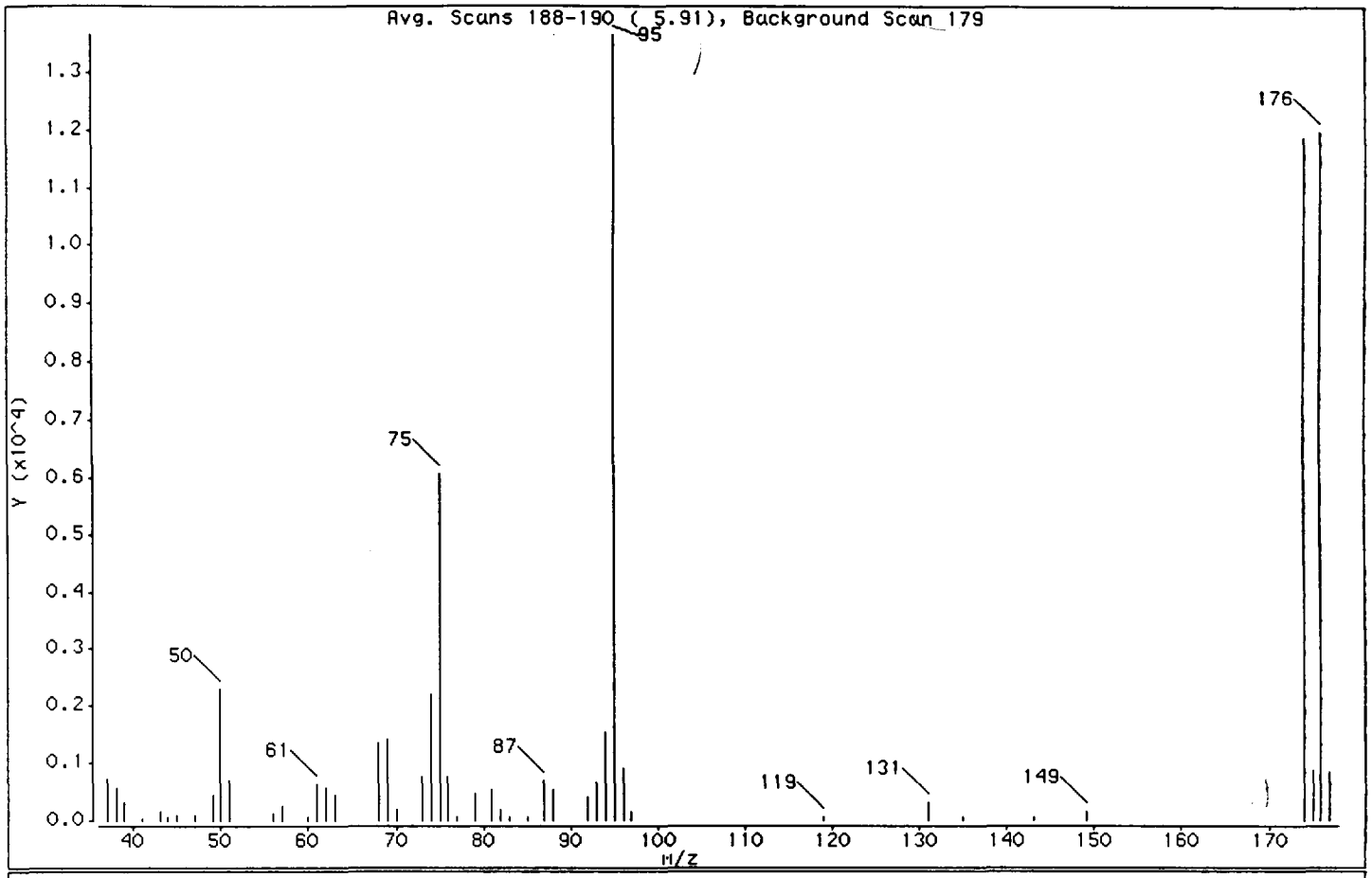
Sample Info: bfb ,bfb,961120h,jss,,, NET

Operator: jss

Column phase: DB502

Column diameter: 0.53

1 bfb




| M/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 8.00 - 40.00% of mass 95 | 16.74 |
| 75 | 30.00 - 66.00% of mass 95 | 44.40 |
| 96 | 5.00 - 9.00% of mass 95 | 6.62 |
| 173 | Less than 2.00% of mass 174 | 0.00 ( 0.00) |
| 174 | 50.00 - 120.00% of mass 95 | 86.80 |
| 175 | 4.00 - 9.00% of mass 174 | 6.54 ( 7.54) |
| 176 | 93.00 - 101.00% of mass 174 | 87.53 (100.84) |
| 177 | 5.00 - 9.00% of mass 176 | 6.17 ( 7.05) |

30481

Data File: /chem/hp5970h.i/961120h.b/h2189.d

Date : 20-NOV-1996 13:17

Client ID: bfb

Instrument: hp5970h.i

Sample Info: bfb ,bfb,961120h,jss,,, NET

Operator: jss

Column phase: DB502

Column diameter: 0.53

Data File: h2189.d

Spectrum : Avg. Scans 188-190 ( 5.91), Background Scan 179

Largest m/z: 95.00

Number of peaks: 47

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 37.00 | 724 | 57.00 | 261 | 77.00 | 69 | 96.00 | 904 |
| 38.00 | 564 | 60.00 | 70 | 79.00 | 485 | 97.00 | 157 |
| 39.00 | 324 | 61.00 | 638 | 81.00 | 541 | 119.00 | 73 |
| 41.00 | 22 | 62.00 | 550 | 82.00 | 177 | 131.00 | 305 |
| 43.00 | 147 | 63.00 | 435 | 83.00 | 71 | 135.00 | 74 |
| 44.00 | 53 | 68.00 | 1352 | 85.00 | 71 | 143.00 | 76 |
| 45.00 | 106 | 69.00 | 1423 | 87.00 | 678 | 149.00 | 171 |
| 47.00 | 88 | 70.00 | 182 | 88.00 | 524 | 174.00 | 11850 |
| 49.00 | 441 | 73.00 | 757 | 92.00 | 404 | 175.00 | 893 |
| 50.00 | 2286 | 74.00 | 2190 | 93.00 | 646 | 176.00 | 11950 |
| 51.00 | 676 | 75.00 | 6062 | 94.00 | 1542 | 177.00 | 843 |
| 56.00 | 112 | 76.00 | 765 | 95.00 | 13652 | | |

Data File: /chem/hp5970h.i/961120h.b/h2189.d

Page 1

Date : 20-NOV-1996 13:17

Client ID: bfb

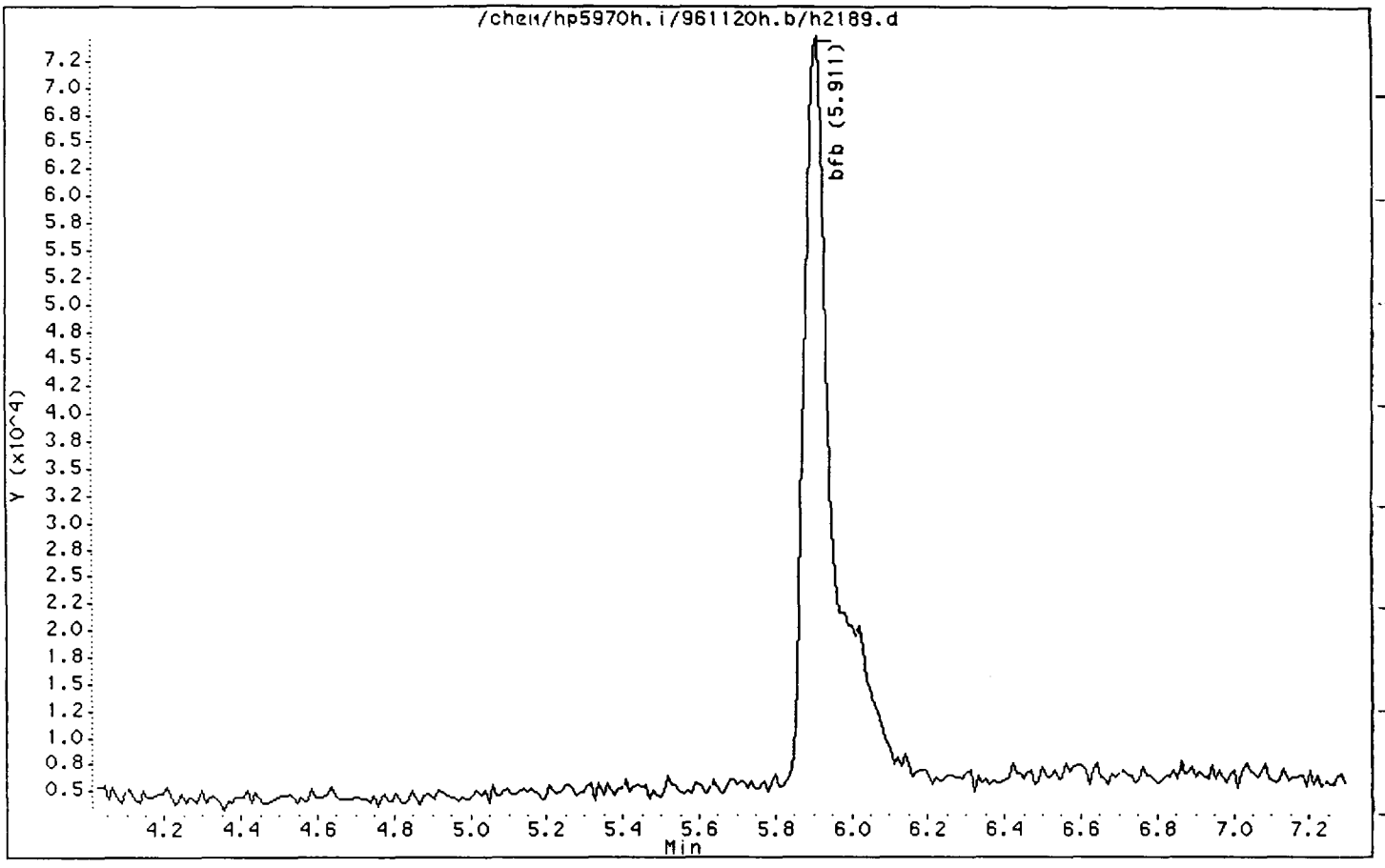
Instrument: hp5970h.i

Sample Info: bfb ,bfb,961120h,jss,,, NET

Operator: jss

Column phase: DB502

Column diameter: 0.53




30483

Data File: /chem/hp5970g.i/961121a.b/g2706.d

Date : 21-NOV-96 08:29

Client ID: BFB

Instrument: hp5970g.i

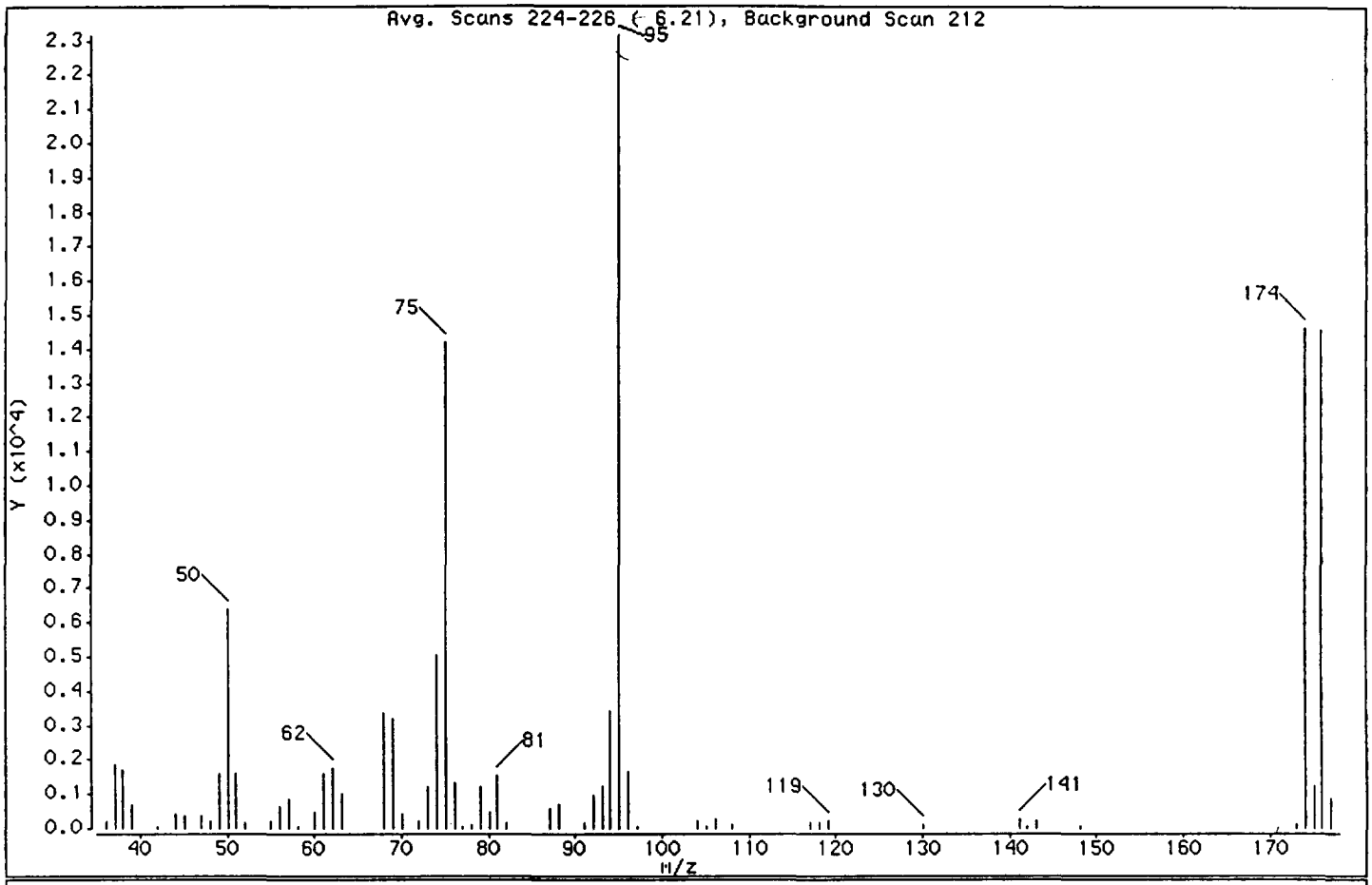
Sample Info: BFB,BFB,961121ag,bel,,,NET

Operator: bel

Column phase: CAP

Column diameter: 0.53

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 8.00 - 40.00% of mass 95 | 27.53 |
| 75 | 30.00 - 66.00% of mass 95 | 61.47 |
| 96 | 5.00 - 9.00% of mass 95 | 7.07 |
| 173 | Less than 2.00% of mass 174 | 0.42 ( 0.67) |
| 174 | 50.00 - 120.00% of mass 95 | 63.18 |
| 175 | 4.00 - 9.00% of mass 174 | 5.26 ( 8.32) |
| 176 | 93.00 - 101.00% of mass 174 | 63.04 ( 99.78) |
| 177 | 5.00 - 9.00% of mass 176 | 3.68 ( 5.84) |

Data File: /chem/hp5970g.i/961121a.b/g2706.d

Date : 21-NOV-96 08:29

Client ID: BFB

Instrument: hp5970g.i

Sample Info: BFB,BFB,961121ag,bel,,,NET

Operator: bel

Column phase: CAP

Column diameter: 0.53

Data File: g2706.d

Spectrum : Avg. Scans 224-226 ( 6.21), Background Scan 212

Largest m/z: 95.00

Number of peaks: 61

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 213 | 58.00 | 78 | 80.00 | 493 | 117.00 | 153 |
| 37.00 | 1875 | 60.00 | 459 | 81.00 | 1556 | 118.00 | 185 |
| 38.00 | 1695 | 61.00 | 1582 | 82.00 | 175 | 119.00 | 192 |
| 39.00 | 718 | 62.00 | 1740 | 87.00 | 590 | 130.00 | 81 |
| 42.00 | 75 | 63.00 | 1010 | 88.00 | 683 | 141.00 | 267 |
| 44.00 | 420 | 68.00 | 3375 | 91.00 | 160 | 142.00 | 70 |
| 45.00 | 348 | 69.00 | 3174 | 92.00 | 950 | 143.00 | 221 |
| 47.00 | 388 | 70.00 | 422 | 93.00 | 1199 | 148.00 | 79 |
| 48.00 | 193 | 72.00 | 202 | 94.00 | 3390 | 173.00 | 98 |
| 49.00 | 1571 | 73.00 | 1225 | 95.00 | 23136 | 174.00 | 14618 |
| 50.00 | 6370 | 74.00 | 5059 | 96.00 | 1637 | 175.00 | 1216 |
| 51.00 | 1622 | 75.00 | 14223 | 97.00 | 76 | 176.00 | 14586 |
| 52.00 | 138 | 76.00 | 1322 | 104.00 | 208 | 177.00 | 852 |
| 55.00 | 212 | 77.00 | 77 | 105.00 | 77 | | |
| 56.00 | 660 | 78.00 | 93 | 106.00 | 247 | | |
| 57.00 | 854 | 79.00 | 1213 | 108.00 | 83 | | |

Data File: /chem/hp5970g.i/961121a.b/g2706.d



Date : 21-NOV-96 08:29

Client ID: BFB

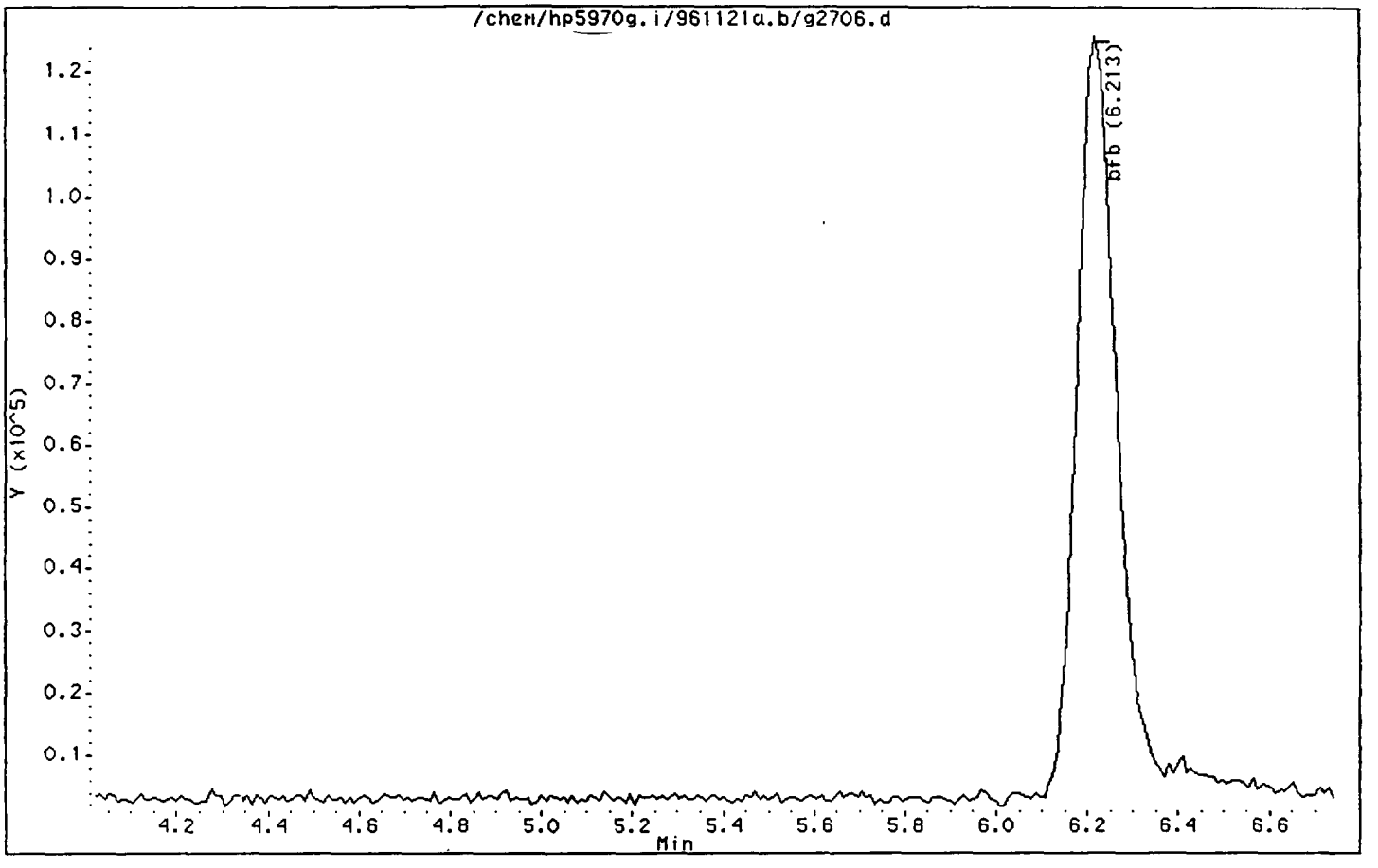
Instrument: hp5970g.i

Sample Info: BFB,BFB,961121ag,bel,,,NET

Operator: bel

Column phase: CAP

Column diameter: 0.53



Data File: /chem/hp5970h.i/961122h.b/h2214.d

Date : 22-NOV-96 13:21

Client ID: bfb

Instrument: hp5970h.i

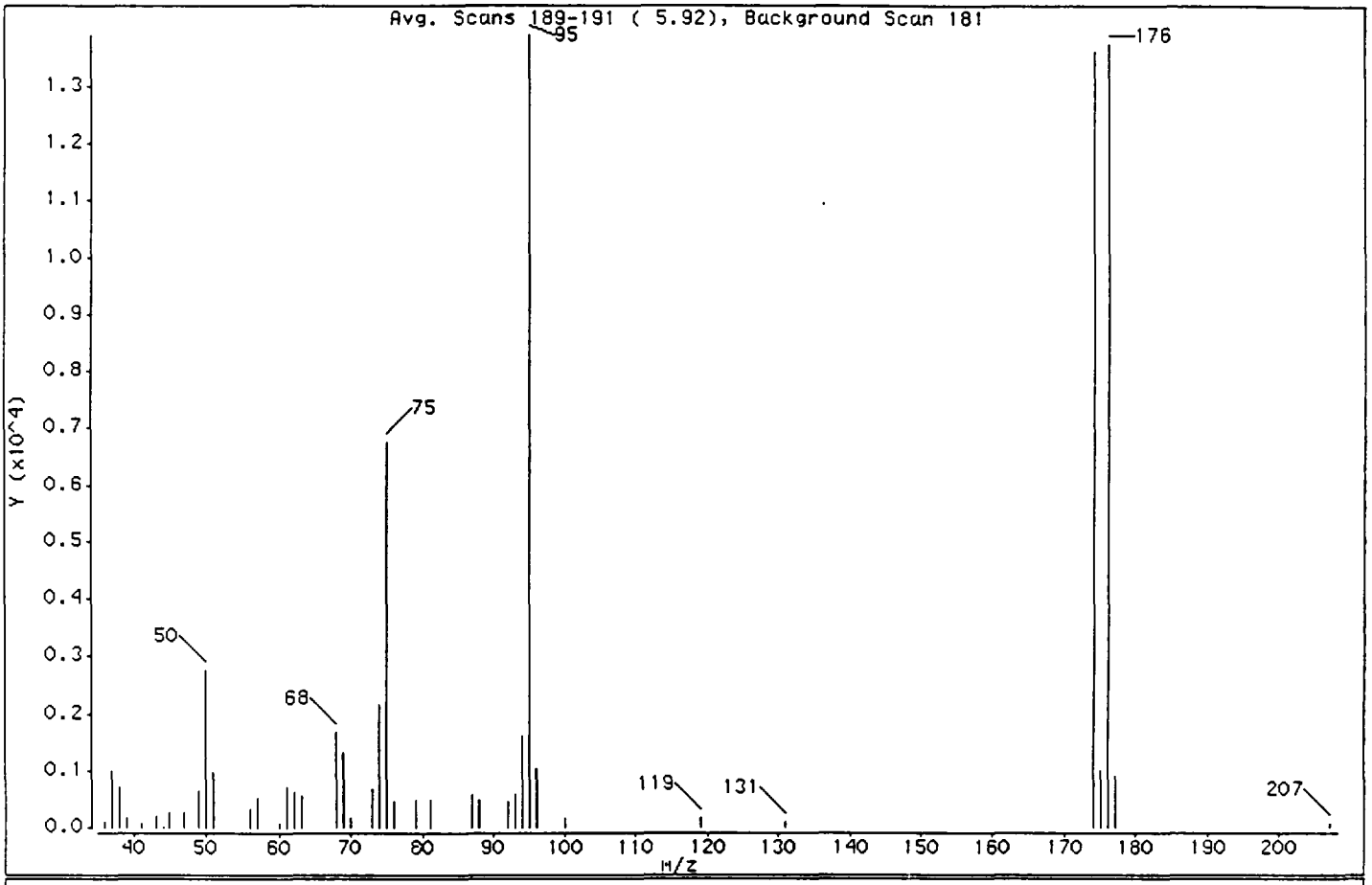
Sample Info: bfb ,bfb,961122h,jss,,, NET

Operator: jss

Column phase: DB502

Column diameter: 0.53

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 8.00 - 40.00% of mass 95 | 19.90 |
| 75 | 30.00 - 66.00% of mass 95 | 48.58 |
| 96 | 5.00 - 9.00% of mass 95 | 7.44 |
| 173 | Less than 2.00% of mass 174 | 0.00 ( 0.00) |
| 174 | 50.00 - 120.00% of mass 95 | 97.96 |
| 175 | 4.00 - 9.00% of mass 174 | 7.22 ( 7.37) |
| 176 | 93.00 - 101.00% of mass 174 | 98.78 (100.85) |
| 177 | 5.00 - 9.00% of mass 176 | 6.44 ( 6.52) |

30487

Data File: /chem/hp5970h.i/961122h.b/h2214.d

Date : 22-NOV-96 13:21

Client ID: bfb

Instrument: hp5970h.i

Sample Info: bfb ,bfb,961122h,jss,,, NET

Operator: jss

Column phase: DB502

Column diameter: 0.53

Data File: h2214.d

Spectrum : Avg. Scans 189-191 ( 5.92), Background Scan 181

Largest m/z: 95.00

Number of peaks: 42

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 84 | 51.00 | 964 | 74.00 | 2148 | 96.00 | 1034 |
| 37.00 | 1008 | 56.00 | 332 | 75.00 | 6748 | 100.00 | 154 |
| 38.00 | 719 | 57.00 | 519 | 76.00 | 452 | 119.00 | 153 |
| 39.00 | 156 | 60.00 | 78 | 79.00 | 474 | 131.00 | 100 |
| 41.00 | 69 | 61.00 | 692 | 81.00 | 476 | 174.00 | 13607 |
| 43.00 | 180 | 62.00 | 621 | 87.00 | 592 | 175.00 | 1003 |
| 44.00 | 16 | 63.00 | 529 | 88.00 | 482 | 176.00 | 13722 |
| 45.00 | 246 | 68.00 | 1671 | 92.00 | 433 | 177.00 | 894 |
| 47.00 | 258 | 69.00 | 1298 | 93.00 | 585 | 207.00 | 67 |
| 49.00 | 631 | 70.00 | 164 | 94.00 | 1612 | | |
| 50.00 | 2764 | 73.00 | 673 | 95.00 | 13891 | | |

$\frac{13722}{13607} \times$ [illegible] 100.85%

Data File: /chem/hp5970h.i/961122h.b/h2214.d



Date : 22-NOV-96 13:21

Client ID: bfb

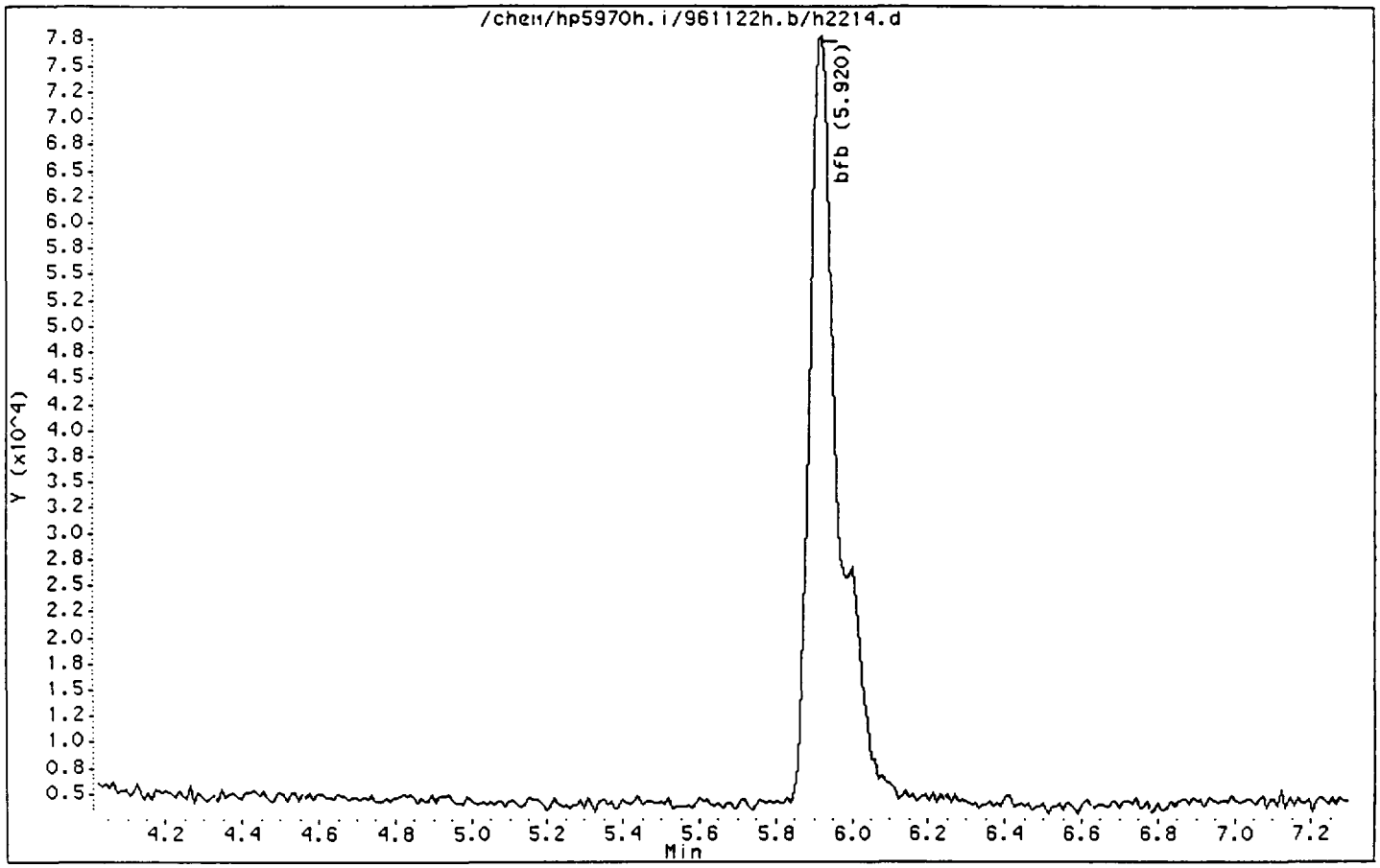
Instrument: hp5970h.i

Sample Info: bfb ,bfb,961122h,jss,,, NET

Operator: jss

Column phase: DB502

Column diameter: 0.53




30489

Data File: /chem/hp5970h.i/961123h.b/h2236.d

Date : 23-NOV-96 08:16

Client ID: bfb

Instrument: hp5970h.i

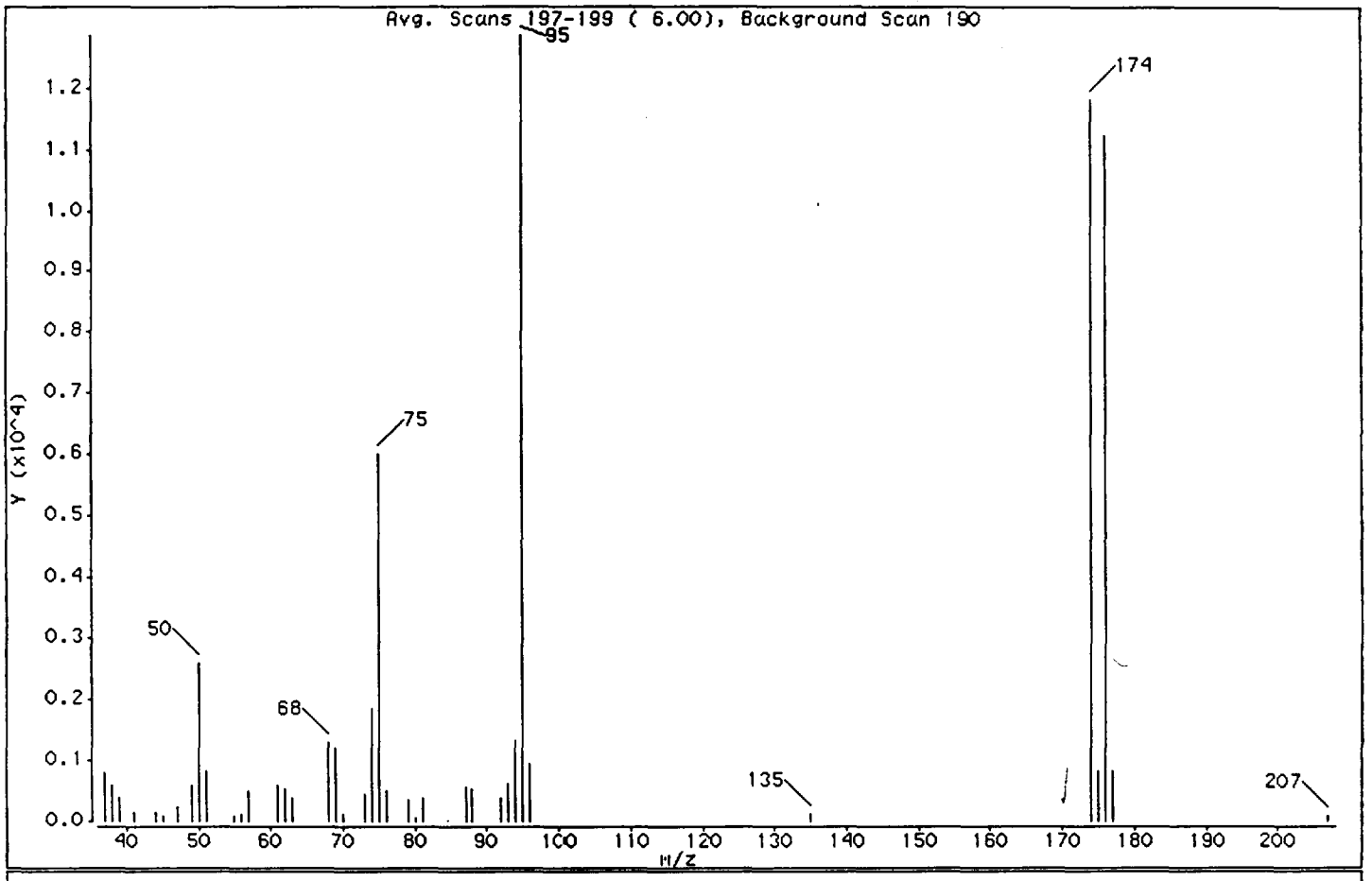
Sample Info: bfb ,bfb,961123h,dry,,, NET

Operator: dry

Column phase: DB502

Column diameter: 0.53

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 8.00 - 40.00% of Mass 95 | 20.14 |
| 75 | 30.00 - 66.00% of Mass 95 | 46.66 |
| 96 | 5.00 - 9.00% of Mass 95 | 7.39 |
| 173 | Less than 2.00% of Mass 174 | 0.00 ( 0.00) |
| 174 | 50.00 - 120.00% of Mass 95 | 91.91 |
| 175 | 4.00 - 9.00% of Mass 174 | 6.52 ( 7.09) |
| 176 | 93.00 - 101.00% of Mass 174 | 87.36 ( 95.06) |
| 177 | 5.00 - 9.00% of Mass 176 | 6.39 ( 7.31) |

30490

Data File: /chem/hp5970h.i/961123h.b/h2236.d

Date : 23-NOV-96 08:16

Client ID: bfb

Instrument: hp5970h.i

Sample Info: bfb ,bfb,961123h,dry,,, NET

Operator: dry

Column phase: DB502

Column diameter: 0.53

Data File: h2236.d

Spectrum : Avg. Scans 197-199 ( 6.00), Background Scan 190

Largest m/z: 95.00

Number of peaks: 39

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 37.00 | 810 | 55.00 | 92 | 74.00 | 1865 | 94.00 | 1325 |
| 38.00 | 602 | 56.00 | 122 | 75.00 | 5997 | 95.00 | 12852 |
| 39.00 | 380 | 57.00 | 488 | 76.00 | 496 | 96.00 | 950 |
| 41.00 | 156 | 61.00 | 599 | 79.00 | 351 | 135.00 | 110 |
| 44.00 | 152 | 62.00 | 527 | 80.00 | 68 | 174.00 | 11812 |
| 45.00 | 78 | 63.00 | 396 | 81.00 | 390 | 175.00 | 838 |
| 47.00 | 239 | 68.00 | 1289 | 87.00 | 568 | 176.00 | 11228 |
| 49.00 | 583 | 69.00 | 1211 | 88.00 | 540 | 177.00 | 821 |
| 50.00 | 2588 | 70.00 | 106 | 92.00 | 389 | 207.00 | 75 |
| 51.00 | 820 | 73.00 | 440 | 93.00 | 627 | | |

Data File: /chem/hp5970h.i/961123h.b/h2236.d

Date : 23-NOV-96 08:16

Client ID: bfb

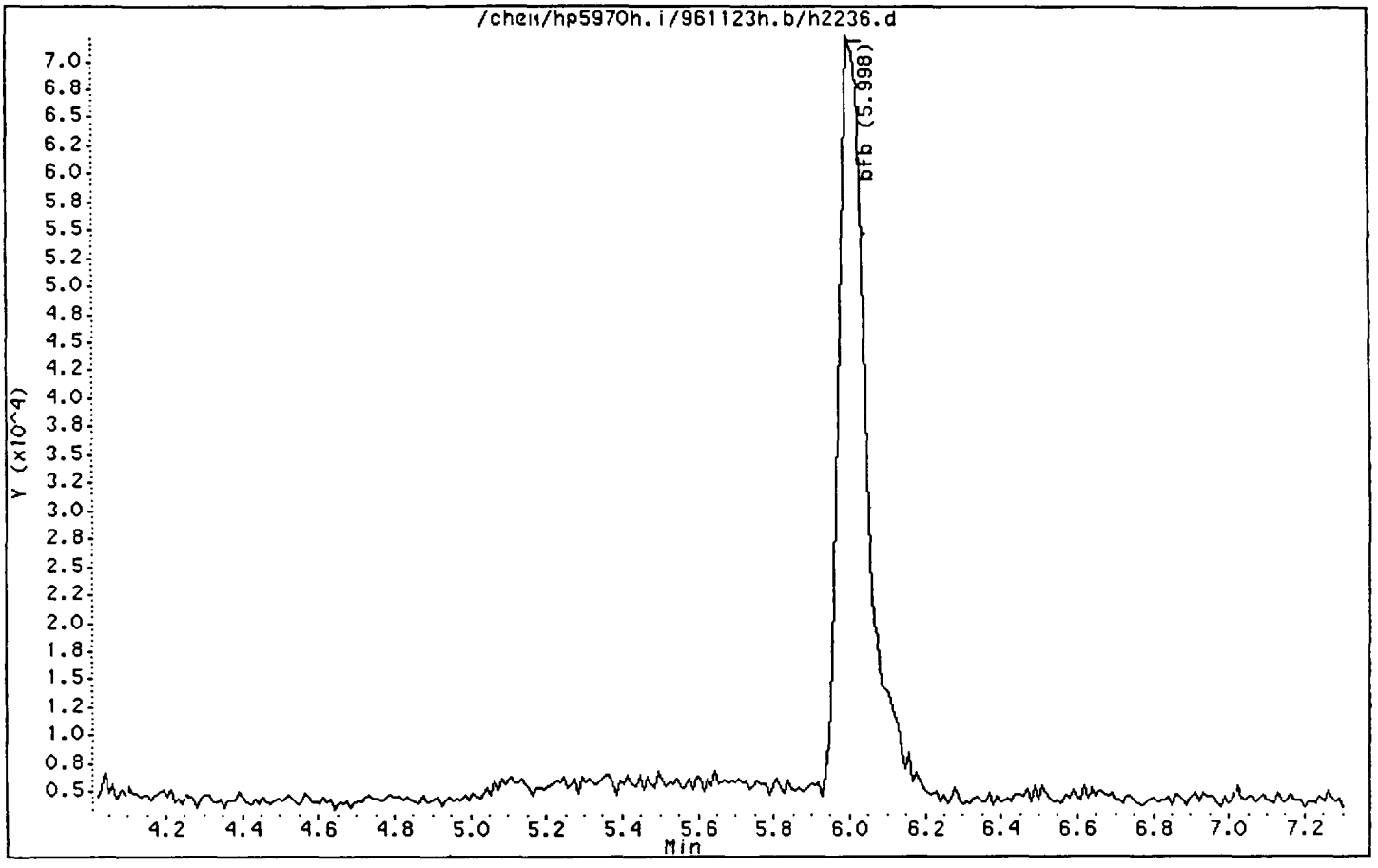
Instrument: hp5970h.i

Sample Info: bfb ,bfb,961123h,dry,,, NET

Operator: dry

Column phase: DB502

Column diameter: 0.53




30492

Data File: /chem/hp5970h.i/961125h.b/h2258.d

Date : 25-NOV-96 10:54

Client ID: bfb

Instrument: hp5970h.i

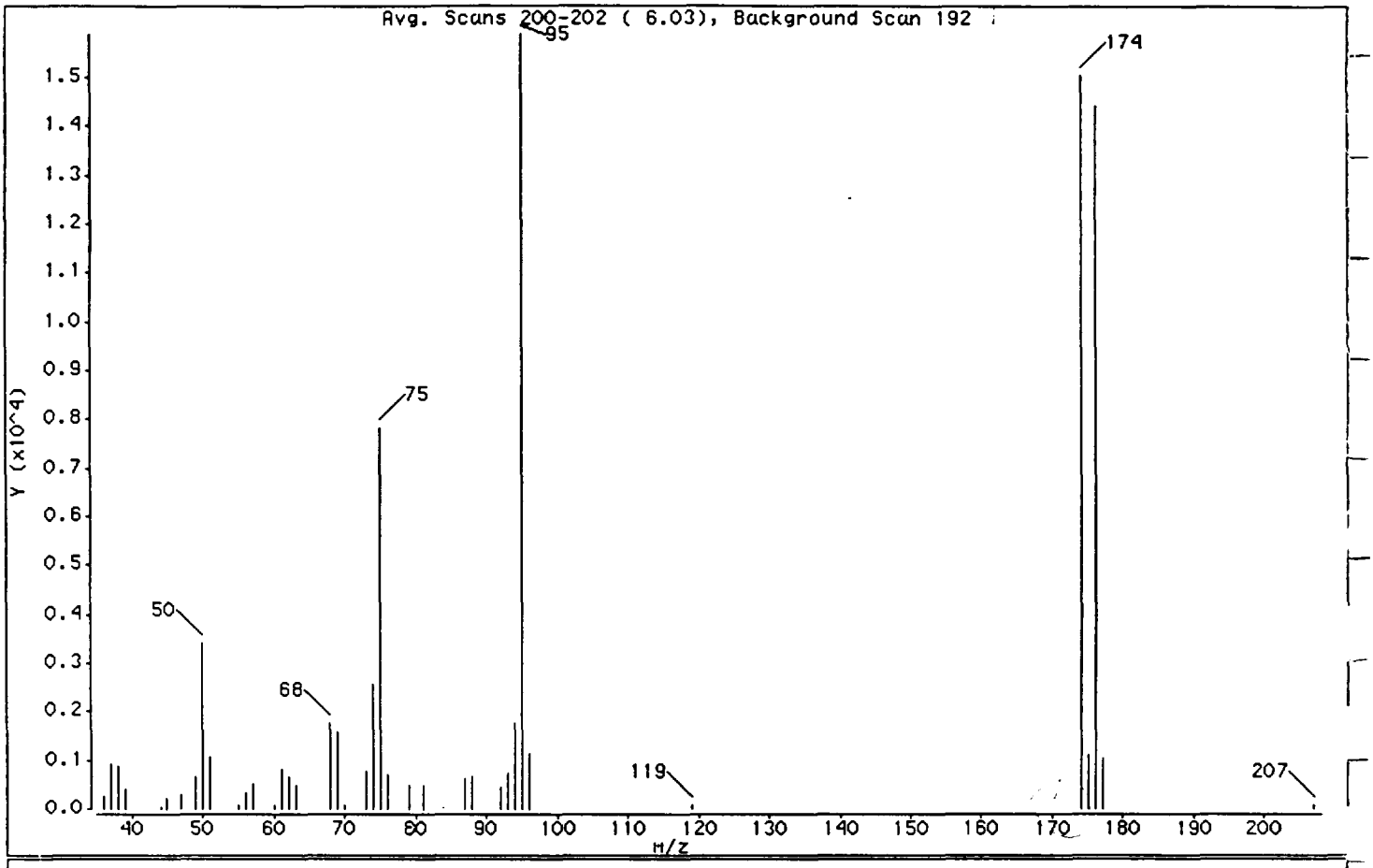
Sample Info: bfb ,bfb,961125h,jss,,, NET

Operator: jss

Column phase: DB502

Column diameter: 0.53

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 8.00 - 40.00% of mass 95 | 21.42 |
| 75 | 30.00 - 66.00% of mass 95 | 49.36 |
| 96 | 5.00 - 9.00% of mass 95 | 7.21 |
| 173 | Less than 2.00% of mass 174 | 0.00 ( 0.00) |
| 174 | 50.00 - 120.00% of mass 95 | 94.72 |
| 175 | 4.00 - 9.00% of mass 174 | 6.83 ( 7.21) |
| 176 | 93.00 - 101.00% of mass 174 | 90.68 ( 95.74) |
| 177 | 5.00 - 9.00% of mass 176 | 6.48 ( 7.15) |

Data File: /chem/hp5970h.i/961125h.b/h2258.d

Date : 25-NOV-96 10:54

Client ID: bfb

Instrument: hp5970h.i

Sample Info: bfb ,bfb,961125h,jss,,, NET

Operator: jss

Column phase: DB502

Column diameter: 0.53

Data File: h2258.d

Spectrum : Avg. Scans 200-202 ( 6.03), Background Scan 192

Largest m/z: 95.00

Number of peaks: 39

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 272 | 55.00 | 78 | 73.00 | 763 | 94.00 | 1747 |
| 37.00 | 908 | 56.00 | 324 | 74.00 | 2553 | 95.00 | 15872 |
| 38.00 | 867 | 57.00 | 523 | 75.00 | 7835 | 96.00 | 1145 |
| 39.00 | 403 | 60.00 | 69 | 76.00 | 710 | 119.00 | 70 |
| 44.00 | 50 | 61.00 | 789 | 79.00 | 492 | 174.00 | 15034 |
| 45.00 | 209 | 62.00 | 654 | 81.00 | 467 | 175.00 | 1084 |
| 47.00 | 298 | 63.00 | 489 | 87.00 | 606 | 176.00 | 14393 |
| 49.00 | 658 | 68.00 | 1739 | 88.00 | 643 | 177.00 | 1029 |
| 50.00 | 3399 | 69.00 | 1577 | 92.00 | 444 | 207.00 | 69 |
| 51.00 | 1060 | 70.00 | 84 | 93.00 | 722 | | |

Data File: /chem/hp5970h.i/961125h.b/h2258.d

Date : 25-NOV-96 10:54

Client ID: bfb

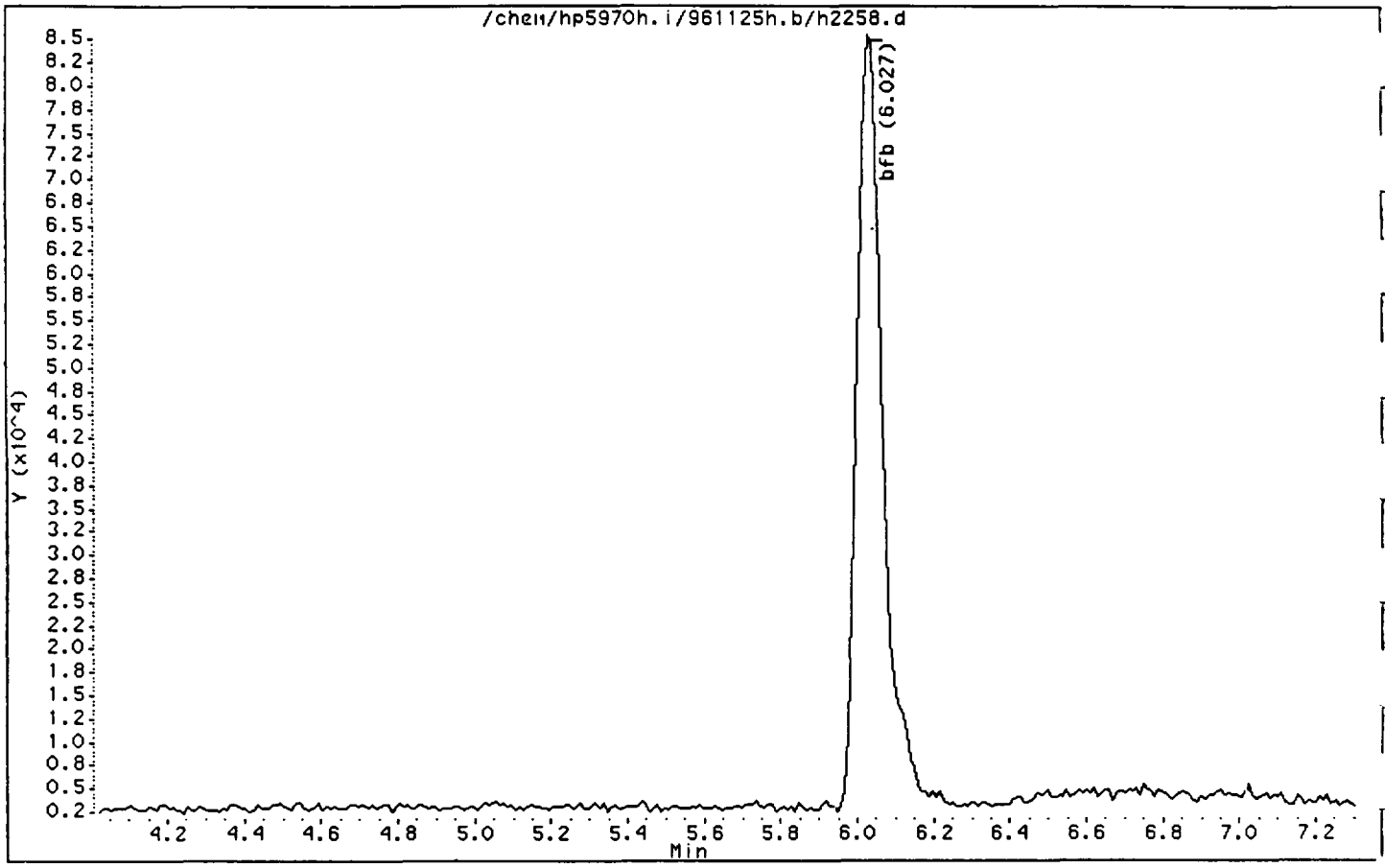
Instrument: hp5970h.i

Sample Info: bfb ,bfb,961125h,jss,,, NET

Operator: jss

Column phase: DB502

Column diameter: 0.53




30495

## 3D(2). BLANK DATA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1115G

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: VBLK1115G

Sample wt/vol: 25.00 (g/mL) ML Lab File ID: G2637

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/15/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | U |
| 75-09-2 | Methylene Chloride | 1.0 | U |
| 67-64-1 | Acetone | 5.0 | U |
| 75-15-0 | Carbon Disulfide | 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.0 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | U |
| 78-93-3 | 2-Butanone | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | U |
| 71-43-2 | Benzene | 1.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | U |
| 75-25-2 | Bromoform | 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 5.0 | U |
| 591-78-6 | 2-Hexanone | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | U |
| 108-88-3 | Toluene | 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | U |
| 100-41-4 | Ethylbenzene | 1.0 | U |
| 100-42-5 | Styrene | 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | U |

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1115G

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: VBLK1115G

Sample wt/vol: 25.00 (g/mL) ML Lab File ID: G2637

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/15/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

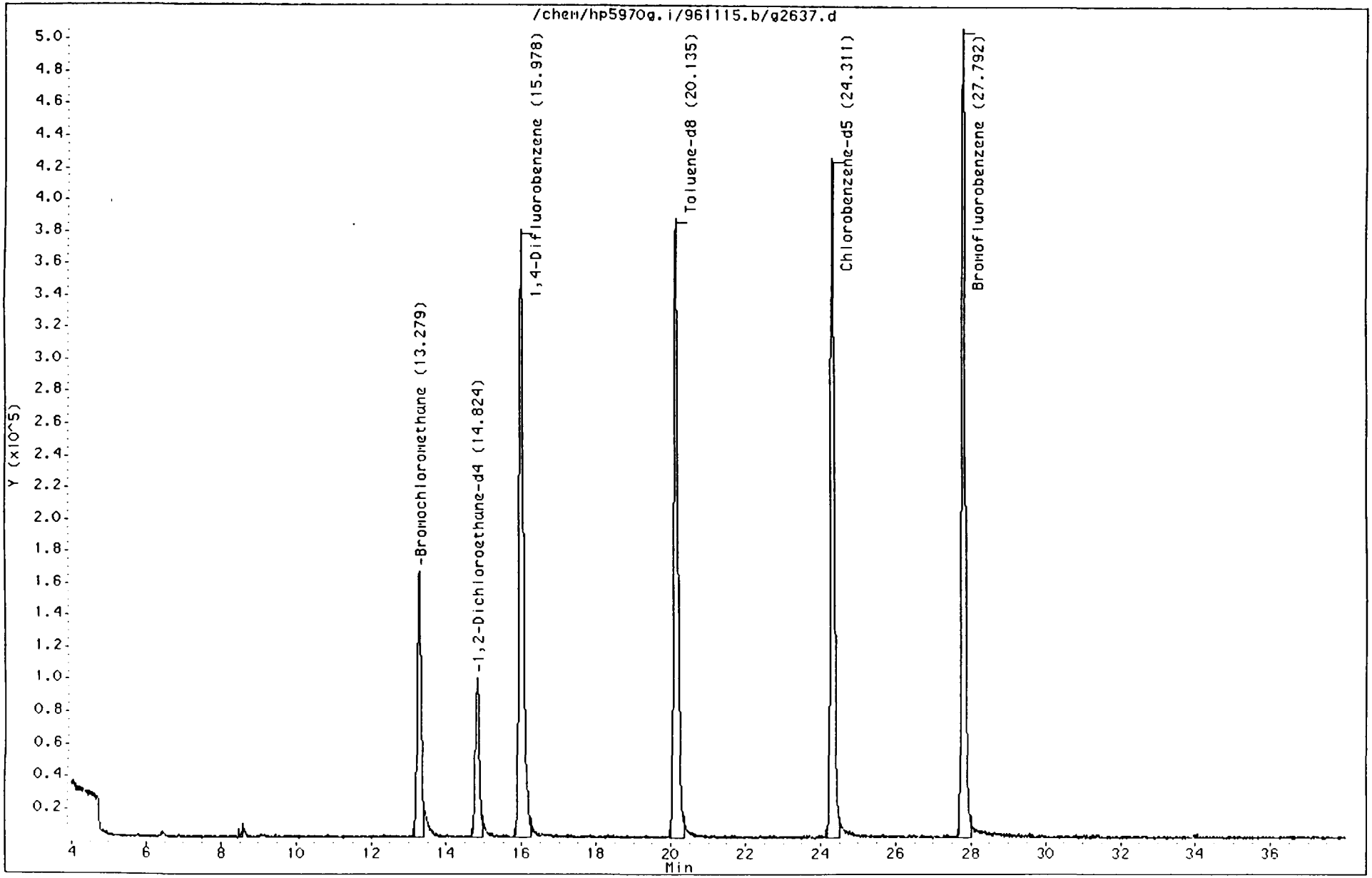
Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-05-4 | Vinyl Acetate | 1.0 | U |
| 110-75-8 | 2-Chloroethylvinyl ether | 1.0 | U |
| ---------- | m and p-Xylene | 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | U |

30499

Data File: /chem/hp5970g.i/961115.b/g2637.d
Date : 15-NOV-1996 11:00
Client ID: vblk1115g
Sample Info: vblk1115g,vblk1115g,961115g,bel,,,NET
Purge Volume: 25.0
Column phase: CAP

Instrument: hp5970g.i
Operator: bel
Column diameter: 0.53



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970g.i/961115.b/g2637.d
Lab Smp Id: vblk1115g  Client Smp ID: vblk1115g
Inj Date : 15-NOV-1996 11:00
Operator : bel  Inst ID: hp5970g.i
Smp Info : vblk1115g,vblk1115g,961115g,bel,,,NET
Misc Info : ,3,,BLANK,1,0,,,,,,,
Comment :
Method : /chem/hp5970g.i/961115.b/gvoa25.m
Meth Date : 15-Nov-1996 10:45  Quant Type: ISTD
Cal Date : 15-NOV-96 10:06  Cal File: g2636.d
Als bottle: 4  QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE  Compound Sublist: 8240.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ug/L) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 20 Bromochloromethane | 128.00 | 13.260 | 13.270 | (1.000) | 174378 | 10 | |
| $ 25 1,2-Dichloroethane-d4 | 65.00 | 14.824 | 14.815 | (1.118) | 289735 | 11 | 11 |
| * 28 1,4-Difluorobenzene | 114.00 | 15.978 | 15.969 | (1.000) | 1200835 | 10 | |
| $ 35 Toluene-d8 | 98.00 | 20.135 | 20.106 | (0.828) | 1042719 | 10 | 10 |
| * 43 Chlorobenzene-d5 | 117.00 | 24.320 | 24.282 | (1.000) | 867430 | 10 | |
| $ 51 Bromofluorobenzene | 95.00 | 27.792 | 27.744 | (1.143) | 591979 | 10 | 10 |

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1116G

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: VBLK1116G

Sample wt/vol: 25.00 (g/mL) ML Lab File ID: G2653

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/16/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | U |
| 75-09-2 | Methylene Chloride | 1.0 | U |
| 67-64-1 | Acetone | 5.0 | U |
| 75-15-0 | Carbon Disulfide | 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.0 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | U |
| 78-93-3 | 2-Butanone | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | U |
| 71-43-2 | Benzene | 1.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | U |
| 75-25-2 | Bromoform | 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 5.0 | U |
| 591-78-6 | 2-Hexanone | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | U |
| 108-88-3 | Toluene | 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | U |
| 100-41-4 | Ethylbenzene | 1.0 | U |
| 100-42-5 | Styrene | 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | U |

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1116G

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: VBLK1116G

Sample wt/vol: 25.00 (g/mL) ML Lab File ID: G2653

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/16/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

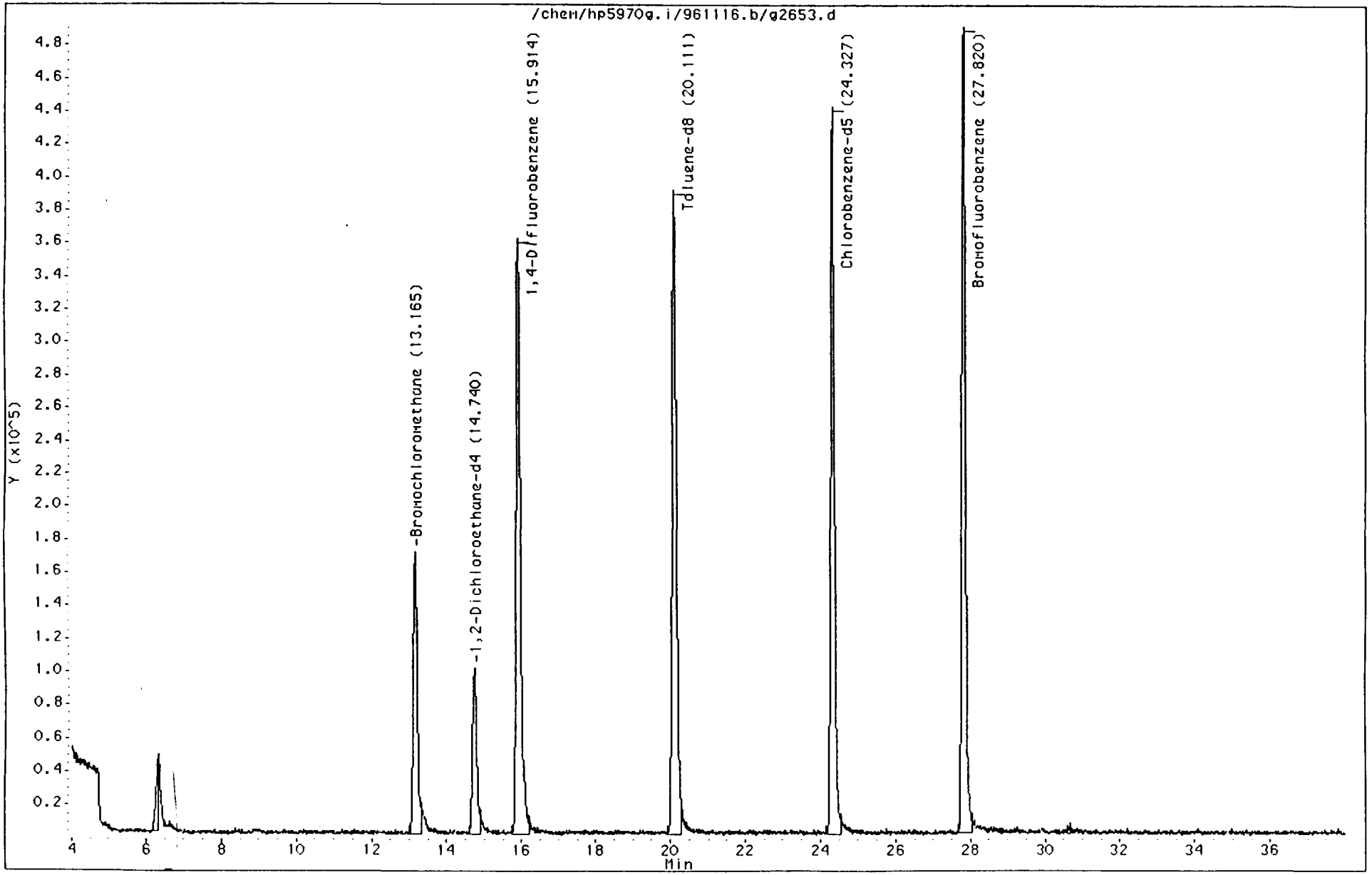
Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-05-4 | Vinyl Acetate | 1.0 | U |
| 110-75-8 | 2-Chloroethylvinyl ether | 1.0 | U |
| ---------- | m and p-Xylene | 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | U |

30503

Data File: /chem/hp5970g.i/961116.b/g2653.d
Date : 16-NOV-1996 09:19
Client ID: vblk1116g
Sample Info: vblk1116g,vblk1116g,961116g,dry,,,NET
Purge Volume: 25.0
Column phase: CAP

Instrument: hp5970g.i
Operator: dry
Column diameter: 0.53



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970g.i/961116.b/g2653.d
Lab Smp Id: vblk1116g Client Smp ID: vblk1116g
Inj Date : 16-NOV-1996 09:19
Operator : dry Inst ID: hp5970g.i
Smp Info : vblk1116g,vblk1116g,961116g,dry,,,NET
Misc Info : ,3,,BLANK,1,0,,,,,,,
Comment :
Method : /chem/hp5970g.i/961116.b/gvoa25.m
Meth Date : 16-Nov-1996 08:46 Quant Type: ISTD
Cal Date : 16-NOV-96 08:06 Cal File: g2652.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 8240.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ug/L) | FINAL ( ug/L) | |
|---|---|---|---|---|---|---|---|---|
| * 20 Bromochloromethane | 128.00 | 13.165 | 13.214 | (1.000) | 164633 | 10 | | (Q) |
| $ 25 1,2-Dichloroethane-d4 | 65.00 | 14.730 | 14.770 | (1.119) | 267021 | 10 | 10 | |
| * 28 1,4-Difluorobenzene | 114.00 | 15.914 | 15.954 | (1.000) | 1170674 | 10 | | |
| $ 35 Toluene-d8 | 98.00 | 20.121 | 20.121 | (0.827) | 1040992 | 10 | 10 | |
| * 43 Chlorobenzene-d5 | 117.00 | 24.327 | 24.318 | (1.000) | 871839 | 10 | | |
| $ 51 Bromofluorobenzene | 95.00 | 27.820 | 27.791 | (1.144) | 574442 | 9.9 | 9.9 | |

QC Flag Legend

Q - Qualifier signal failed the ratio test.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1121AG

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: VBLK1121AG

Sample wt/vol: 25.00 (g/mL) ML Lab File ID: G2713

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/21/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | U |
| 75-09-2 | Methylene Chloride | 1.0 | U |
| 67-64-1 | Acetone | 5.0 | U |
| 75-15-0 | Carbon Disulfide | 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.0 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | U |
| 78-93-3 | 2-Butanone | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | U |
| 71-43-2 | Benzene | 1.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | U |
| 75-25-2 | Bromoform | 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 5.0 | U |
| 591-78-6 | 2-Hexanone | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | U |
| 108-88-3 | Toluene | 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | U |
| 100-41-4 | Ethylbenzene | 1.0 | U |
| 100-42-5 | Styrene | 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | U |

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1121AG

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: VBLK1121AG

Sample wt/vol: 25.00 (g/mL) ML Lab File ID: G2713

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/21/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

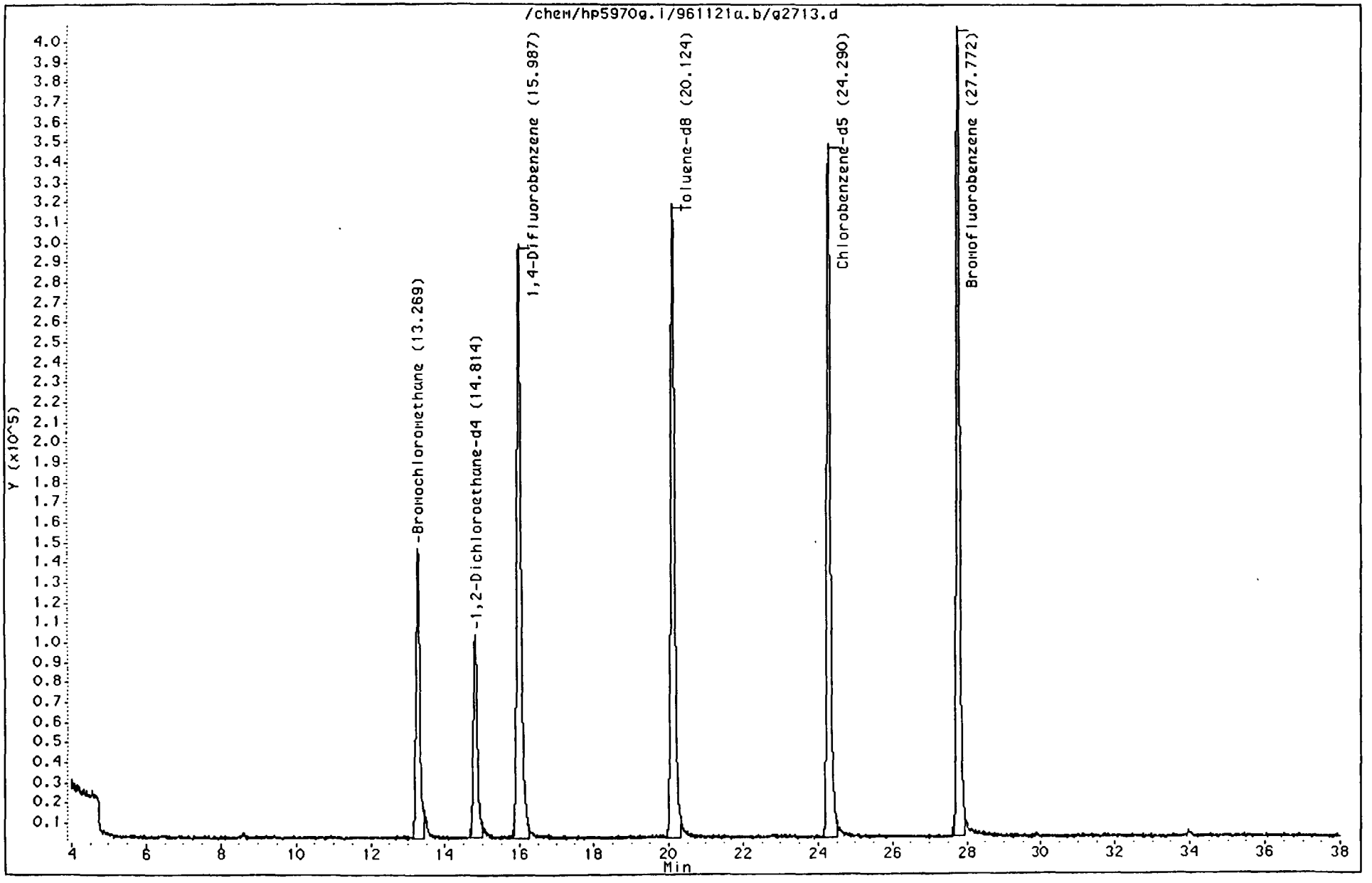
Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-05-4 | Vinyl Acetate | 1.0 | U |
| 110-75-8 | 2-Chloroethylvinyl ether | 1.0 | U |
| ---------- | m and p-Xylene | 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | U |

30507

Data File: /chem/hp5970g.i/961121a.b/g2713.d
Date : 21-NOV-1996 14:08
Client ID: vblk1121ag
Sample Info: vblk1121ag,vblk1121ag,961121ag,bel,,,NET
Purge Volume: 25.0
Column phase: CAP

Instrument: hp5970g.i
Operator: bel
Column diameter: 0.53



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970g.i/961121a.b/g2713.d
Lab Smp Id: vblk1121ag  Client Smp ID: vblk1121ag
Inj Date : 21-NOV-1996 14:08
Operator : bel  Inst ID: hp5970g.i
Smp Info : vblk1121ag,vblk1121ag,961121ag,bel,,,NET
Misc Info : ,3,,BLANK,1,0,,,,,,,
Comment :
Method : /chem/hp5970g.i/961121a.b/gvoa25.m
Meth Date : 21-Nov-1996 13:54  Quant Type: ISTD
Cal Date : 21-NOV-96 13:15  Cal File: g2712.d
Als bottle: 16  QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE  Compound Sublist: 8240.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ug/L) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 20 Bromochloromethane | 128.00 | 13.269 | 13.301 | (1.000) | 127223 | 10 | |
| $ 25 1,2-Dichloroethane-d4 | 65.00 | 14.814 | 14.846 | (1.116) | 310030 | 10 | 10 |
| * 28 1,4-Difluorobenzene | 114.00 | 15.968 | 16.010 | (1.000) | 874439 | 10 | |
| $ 35 Toluene-d8 | 98.00 | 20.124 | 20.147 | (0.828) | 815277 | 10 | 10 |
| * 43 Chlorobenzene-d5 | 117.00 | 24.290 | 24.323 | (1.000) | 619566 | 10 | |
| $ 51 Bromofluorobenzene | 95.00 | 27.762 | 27.794 | (1.143) | 506279 | 10 | 10 |

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1122H

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: VBLK1122H

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: H2216

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: DB-VRX ID: 0.45 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 5 | U |
| 74-83-9 | Bromomethane | 5 | U |
| 75-01-4 | Vinyl Chloride | 5 | U |
| 75-00-3 | Chloroethane | 5 | U |
| 75-09-2 | Methylene Chloride | 5 | U |
| 67-64-1 | Acetone | 25 | U |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 25 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 5 | U |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 25 | U |
| 591-78-6 | 2-Hexanone | 25 | U |
| 127-18-4 | Tetrachloroethene | 5 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 75-69-4 | Trichlorofluoromethane | 5 | U |



30509 Re

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1122H

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: VBLK1122H

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: H2216

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: DB-VRX ID: 0.45 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

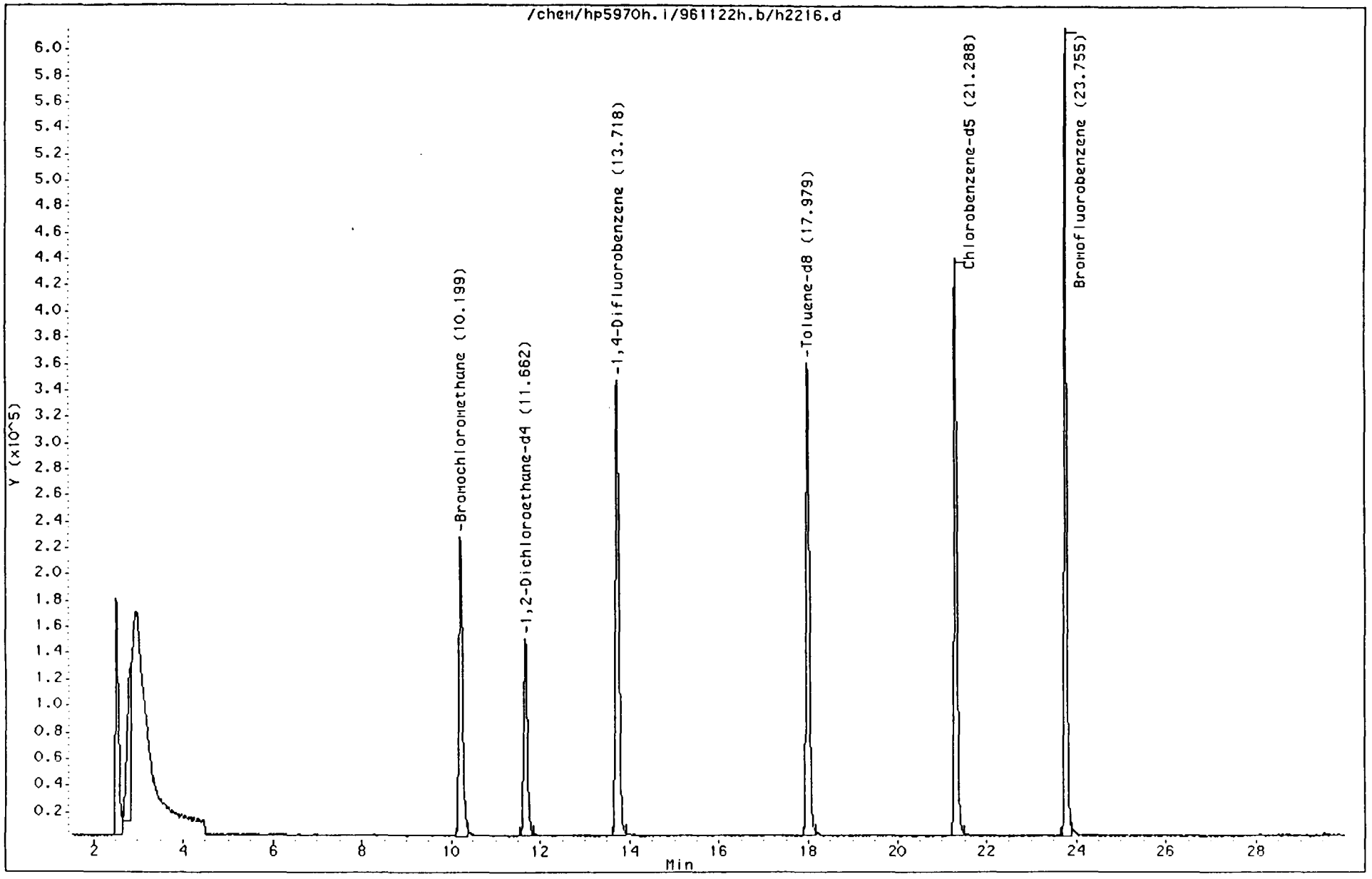
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-05-4 | Vinyl Acetate | 5 | U |
| 110-75-8 | 2-Chloroethylvinyl ether | 5 | U |
| ---------- | m and p-Xylene | 5 | U |
| 95-47-6 | o-Xylene | 5 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5 | U |



3051022

30511

Data File: /chem/hp5970h.i/961122h.b/h2216.d
Date : 22-NOV-1996 14:26
Client ID: vblk1122h
Instrument: hp5970h.i
Sample Info: vblk1122h,vblk1122h,961122h,jss,,, NET
Purge Volume: 5.0
Operator: jss
Column phase: DB-VRX
Column diameter: 0.45



Data File: /chem/hp5970h.i/961122h.b/h2216.d
Report Date: 22-Nov-1996 14:58

NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970h.i/961122h.b/h2216.d
Lab Smp Id: vblk1122h  Client Smp ID: vblk1122h
Inj Date : 22-NOV-1996 14:26
Operator : jss  Inst ID: hp5970h.i
Smp Info : vblk1122h,vblk1122h,961122h,jss,,, NET
Misc Info : ,3,,BLANK ,1,0,,,,,,,,als 2
Comment :
Method : /chem/hp5970h.i/961122h.b/hvoa.m
Meth Date : 22-Nov-1996 14:12  Quant Type: ISTD
Cal Date : 22-NOV-96 13:48  Cal File: h2215.d
Als bottle: 2  QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE  Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ug/L) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 20 Bromochloromethane | 128.00 | 10.209 | 10.165 | (1.000) | 211261 | 50 | |
| $ 25 1,2-Dichloroethane-d4 | 65.00 | 11.652 | 11.619 | (1.141) | 308756 | 50 | 50 |
| * 28 1,4-Difluorobenzene | 114.00 | 13.718 | 13.674 | (1.000) | 804114 | 50 | |
| $ 35 Toluene-d8 | 98.00 | 17.979 | 17.936 | (0.845) | 687900 | 49 | 49 |
| * 43 Chlorobenzene-d5 | 117.00 | 21.288 | 21.245 | (1.000) | 628979 | 50 | |
| $ 51 Bromofluorobenzene | 95.00 | 23.755 | 23.711 | (1.116) | 473998 | 49 | 49 |

Data File: /chem/hp5970h.i/961122h.b/h2216.d
Report Date: 25-Nov-1996 15:21

NET Cambridge

Unknown Compounds Quantitation Report

Data file : /chem/hp5970h.i/961122h.b/h2216.d
Lab Smp Id: vblk1122h  Client Smp ID: vblk1122h
Inj Date : 22-NOV-1996 14:26
Operator : jss  Inst ID: hp5970h.i
Smp Info : vblk1122h,vblk1122h,961122h,jss,,, NET
Misc Info : ,3,,BLANK ,1,0,,,,,,,,als 2
Comment :
Method : /chem/hp5970h.i/961122h.b/hvoa.m
Meth Date : 25-Nov-1996 14:54 jims
Cal Date : 22-NOV-96 13:48  Cal File: h2215.d
Als bottle: 2  QC Sample: BLANK
Dil Factor: 1.000  Target Version: 3.12
Integrator: HP RTE  Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1123H

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: VBLK1123H

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: H2238

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/23/96

GC Column: DB-VRX ID: 0.45 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 5 | U |
| 74-83-9 | Bromomethane | 5 | U |
| 75-01-4 | Vinyl Chloride | 5 | U |
| 75-00-3 | Chloroethane | 5 | U |
| 75-09-2 | Methylene Chloride | 5 | U |
| 67-64-1 | Acetone | 25 | U |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 25 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 5 | U |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 25 | U |
| 591-78-6 | 2-Hexanone | 25 | U |
| 127-18-4 | Tetrachloroethene | 5 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 75-69-4 | Trichlorofluoromethane | 5 | U |



30514RE

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1123H

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: VBLK1123H

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: H2238

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/23/96

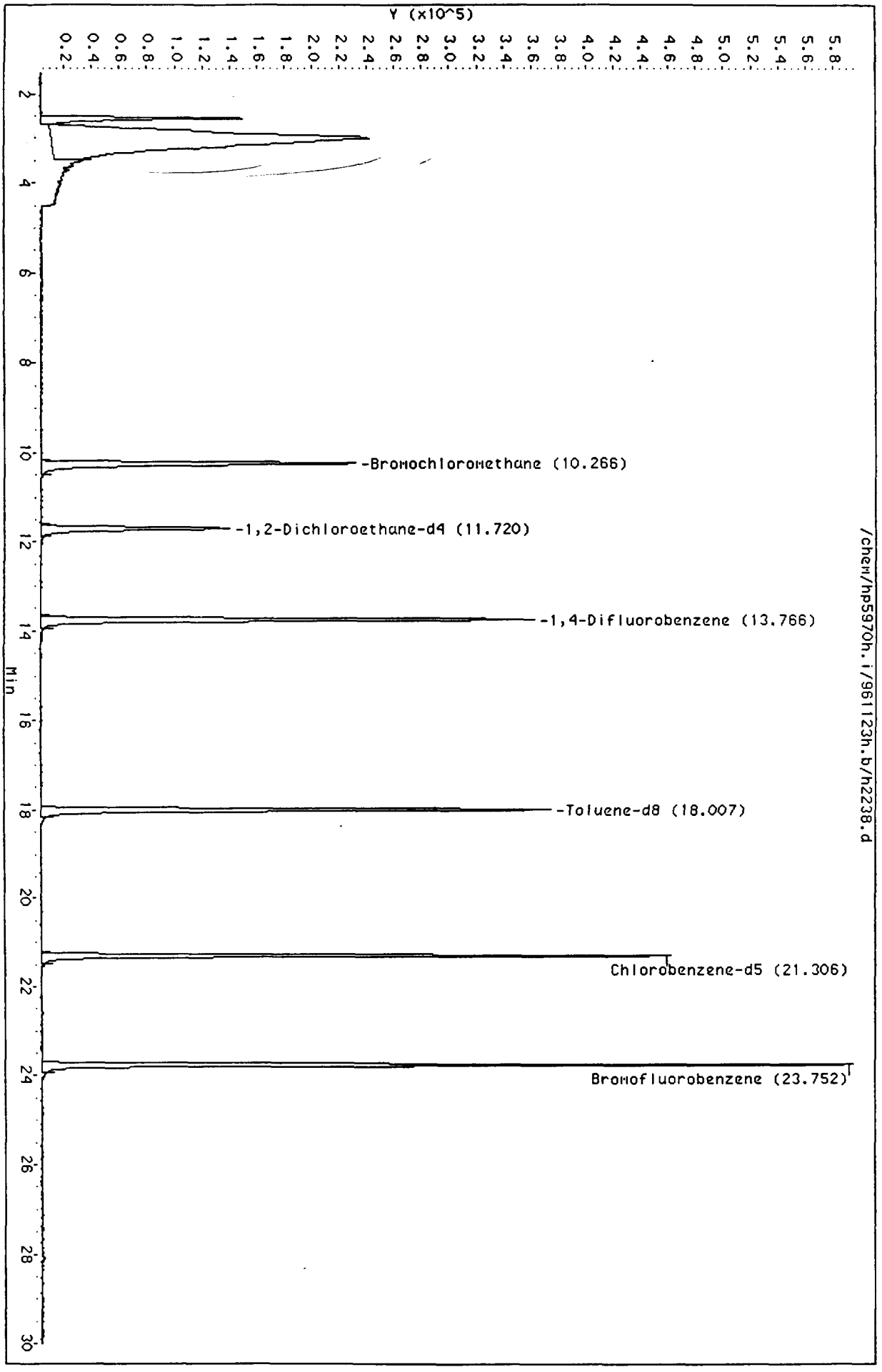
GC Column: DB-VRX ID: 0.45 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-05-4 | Vinyl Acetate | 5 | U |
| 110-75-8 | 2-Chloroethylvinyl ether | 5 | U |
| ---------- | m and p-Xylene | 5 | U |
| 95-47-6 | o-Xylene | 5 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5 | U |



30515RE




Data File: /chem/hp5970h.i/961123h.b/h2238.d
Date : 23-NOV-1996 09:15
Client ID: vblk1123h
Sample Info: vblk1123h,vblk1123h,961123h,dry,,, NET
Purge Volume: 5.0
Column phase: DB-VRX

Instrument: hp5970h.i
Operator: dry
Column diameter: 0.45

Data File: /chem/hp5970h.i/961123h.b/h2238.d
Report Date: 25-Nov-1996 14:24

NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970h.i/961123h.b/h2238.d
Lab Smp Id: vblk1123h  Client Smp ID: vblk1123h
Inj Date : 23-NOV-1996 09:15
Operator : dry  Inst ID: hp5970h.i
Smp Info : vblk1123h,vblk1123h,961123h,dry,,, NET
Misc Info : ,3,,BLANK ,1,0,,,,,,,,als 2
Comment :
Method : /chem/hp5970h.i/961123h.b/hvoa.m
Meth Date : 23-Nov-1996 09:03  Quant Type: ISTD
Cal Date : 23-NOV-96 08:37  Cal File: h2237.d
Als bottle: 2  QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE  Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ug/L) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 20 Bromochloromethane | 128.00 | 10.256 | 10.409 | (1.000) | 205920 | 50 | |
| $ 25 1,2-Dichloroethane-d4 | 65.00 | 11.710 | 11.863 | (1.142) | 284692 | 53 | 53 |
| * 28 1,4-Difluorobenzene | 114.00 | 13.766 | 13.908 | (1.000) | 809955 | 50 | |
| $ 35 Toluene-d8 | 98.00 | 18.007 | 18.150 | (0.845) | 687650 | 49 | 49 |
| * 43 Chlorobenzene-d5 | 117.00 | 21.306 | 21.419 | (1.000) | 641820 | 50 | |
| $ 51 Bromofluorobenzene | 95.00 | 23.762 | 23.855 | (1.115) | 454936 | 49 | 49 |

Data File: /chem/hp5970h.i/961123h.b/h2238.d
Report Date: 25-Nov-1996 14:24

NET Cambridge

Unknown Compounds Quantitation Report

Data file : /chem/hp5970h.i/961123h.b/h2238.d
Lab Smp Id: vblk1123h  Client Smp ID: vblk1123h
Inj Date : 23-NOV-1996 09:15
Operator : dry  Inst ID: hp5970h.i
Smp Info : vblk1123h,vblk1123h,961123h,dry,,, NET
Misc Info : ,3,,BLANK ,1,0,,,,,,,,als 2
Comment :
Method : /chem/hp5970h.i/961123h.b/hvoa.m
Meth Date : 23-Nov-1996 09:03
Cal Date : 23-NOV-96 08:37  Cal File: h2237.d
Als bottle: 2  QC Sample: BLANK
Dil Factor: 1.000  Target Version: 3.12
Integrator: HP RTE  Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 20 Bromochloromethane | 10.256 | 1258461 | 50.000 |

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ug/L) | FINAL( ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | CAS #: | | | |
| 2.545 | 710700 | 28 | 28 | 0 | | 0 | 20 |
| Unknown | | | | CAS #: | | | |
| 3.007 | 5093143 | 200 | 200 | 0 | | 0 | 20 |

ERROR: Free() passed a NULL pointer.
ERROR: Free() passed a NULL pointer.
ERROR: Free() passed a NULL pointer.

Data File: /chem/hp5970h.i/961123h.b/h2238.d

Date : 23-NOV-1996 09:15

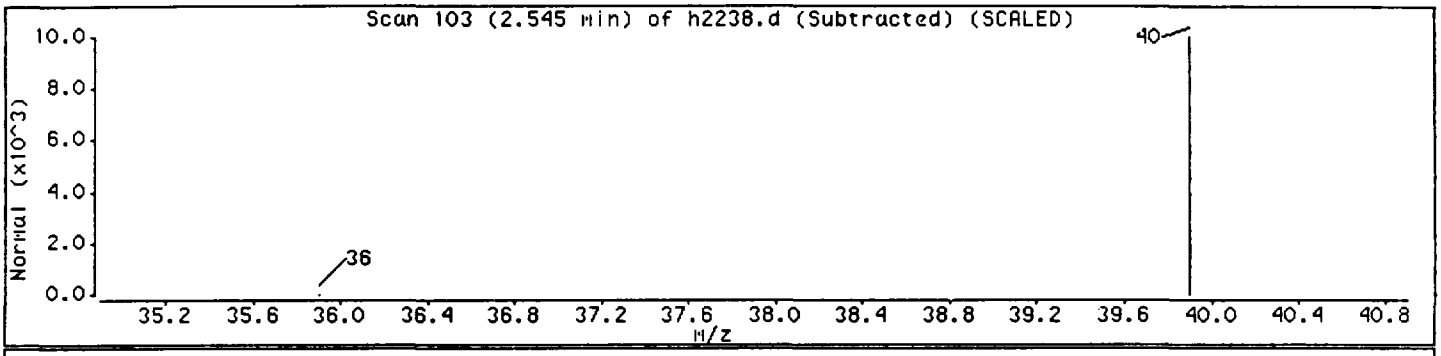
Client ID: vblk1123h  Instrument: hp5970h.i

Sample Info: vblk1123h,vblk1123h,961123h,dry,,, NET

Purge Volume: 5.0  Operator: dry

Column phase: DB-VRX  Column diameter: 0.45

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



ERROR: Free() passed a NULL pointer.
ERROR: Free() passed a NULL pointer.
ERROR: Free() passed a NULL pointer.

Data File: /chem/hp5970h.i/961123h.b/h2238.d

Date : 23-NOV-1996 09:15

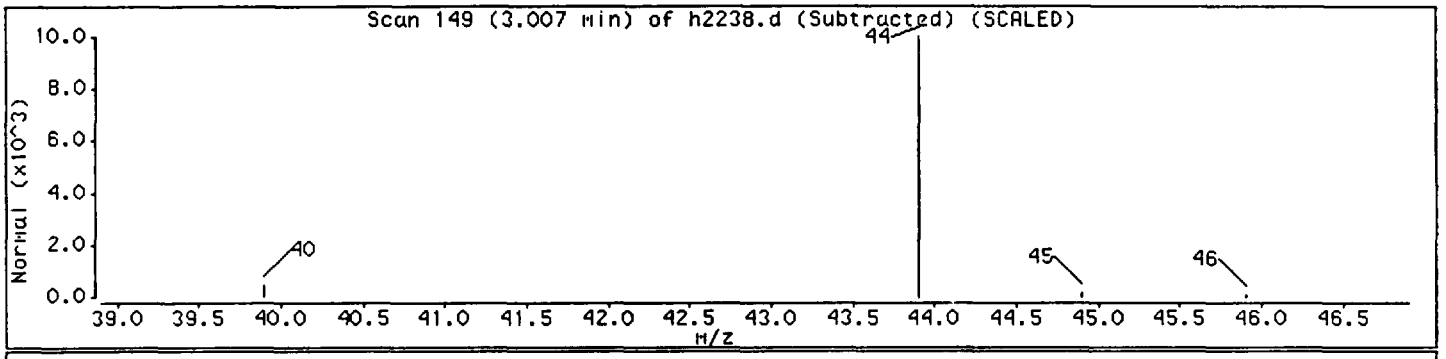
Client ID: vblk1123h Instrument: hp5970h.i

Sample Info: vblk1123h,vblk1123h,961123h,dry,,, NET

Purge Volume: 5.0 Operator: dry

Column phase: DB-VRX Column diameter: 0.45

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




30520

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1125H

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: VBLK1125H

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: H2260

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/25/96

GC Column: DB-VRX ID: 0.45 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 5 | U |
| 74-83-9 | Bromomethane | 5 | U |
| 75-01-4 | Vinyl Chloride | 5 | U |
| 75-00-3 | Chloroethane | 5 | U |
| 75-09-2 | Methylene Chloride | 5 | U |
| 67-64-1 | Acetone | 25 | U |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 25 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 5 | U |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 25 | U |
| 591-78-6 | 2-Hexanone | 25 | U |
| 127-18-4 | Tetrachloroethene | 5 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 75-69-4 | Trichlorofluoromethane | 5 | U |



30521RE

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1125H

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: VBLK1125H

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: H2260

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/25/96

GC Column: DB-VRX ID: 0.45 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-05-4 | Vinyl Acetate | 5 | U |
| 110-75-8 | 2-Chloroethylvinyl ether | 5 | U |
| ---------- | m and p-Xylene | 5 | U |
| 95-47-6 | o-Xylene | 5 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5 | U |

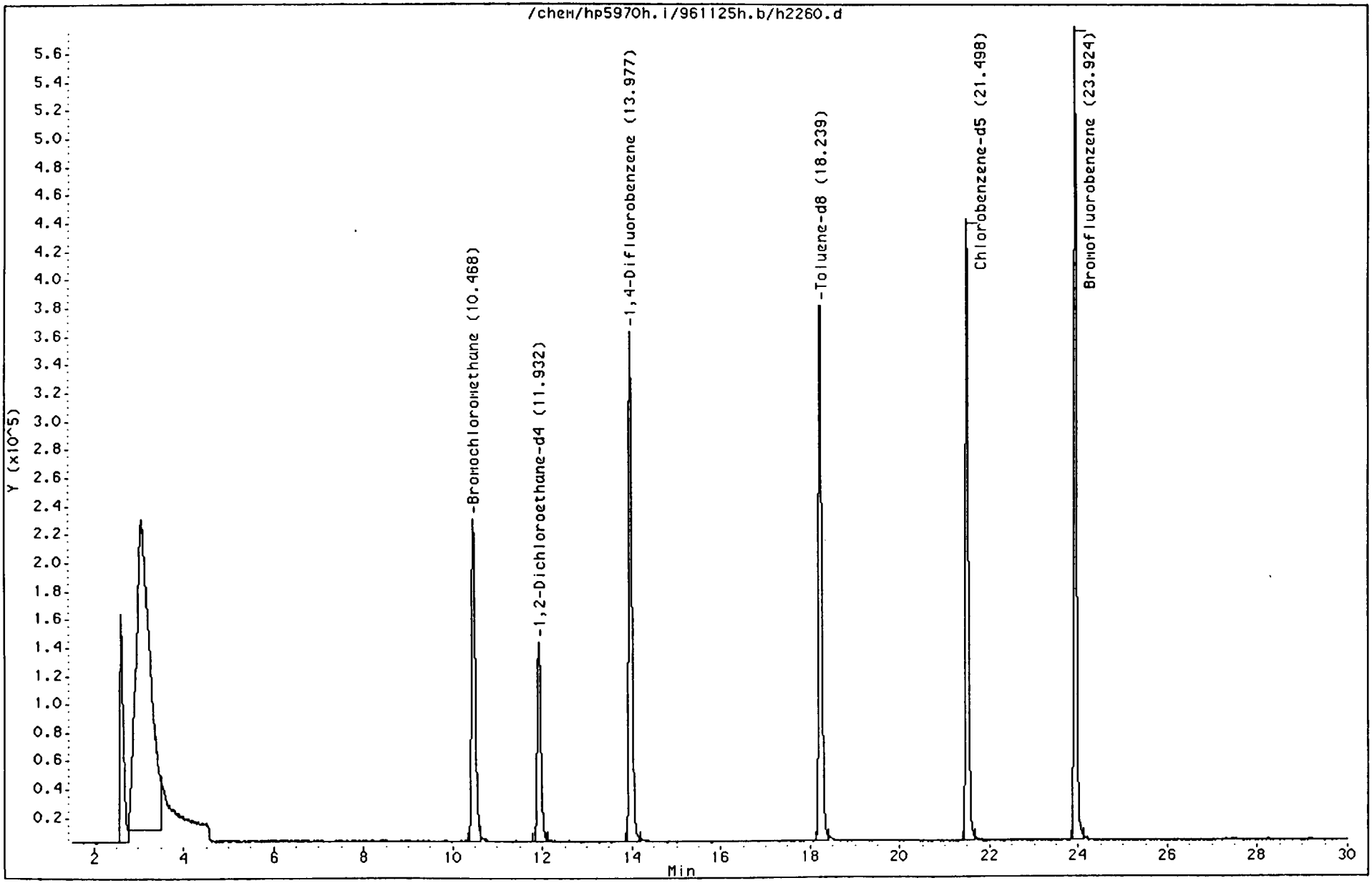


3052244

30523

Data File: /chem/hp5970h.i/961125h.b/h2260.d
Date : 25-NOV-1996 11:52
Client ID: vblk1125h
Sample Info: vblk1125h,vblk1125h,961125h,jss,,, NET
Purge Volume: 5.0
Column phase: DB-VRX

Instrument: hp5970h.i
Operator: jss
Column diameter: 0.45



Data File: /chem/hp5970h.i/961125h.b/h2260.d
Report Date: 25-Nov-1996 12:23

NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970h.i/961125h.b/h2260.d
Lab Smp Id: vblk1125h  Client Smp ID: vblk1125h
Inj Date : 25-NOV-1996 11:52
Operator : jss  Inst ID: hp5970h.i
Smp Info : vblk1125h,vblk1125h,961125h,jss,,, NET
Misc Info : ,3,,BLANK ,1,0,,,,,,,,als 2
Comment :
Method : /chem/hp5970h.i/961125h.b/hvoa.m
Meth Date : 25-Nov-1996 12:12  Quant Type: ISTD
Cal Date : 25-NOV-96 11:16  Cal File: h2259.d
Als bottle: 2  QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE  Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ug/L) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 20 Bromochloromethane | 128.00 | 10.478 | 10.497 | (1.000) | 208775 | 50 | |
| $ 25 1,2-Dichloroethane-d4 | 65.00 | 11.932 | 11.941 | (1.139) | 287620 | 51 | 51 |
| * 28 1,4-Difluorobenzene | 114.00 | 13.977 | 13.996 | (1.000) | 828771 | 50 | |
| $ 35 Toluene-d8 | 98.00 | 18.239 | 18.247 | (0.848) | 718591 | 52 | 52 |
| * 43 Chlorobenzene-d5 | 117.00 | 21.498 | 21.516 | (1.000) | 620228 | 50 | |
| $ 51 Bromofluorobenzene | 95.00 | 23.924 | 23.943 | (1.113) | 460279 | 51 | 51 |

Data File: /chem/hp5970h.i/961125h.b/h2260.d
Report Date: 25-Nov-1996 12:23

NET Cambridge

Unknown Compounds Quantitation Report

Data file : /chem/hp5970h.i/961125h.b/h2260.d
Lab Smp Id: vblk1125h  Client Smp ID: vblk1125h
Inj Date : 25-NOV-1996 11:52
Operator : jss  Inst ID: hp5970h.i
Smp Info : vblk1125h,vblk1125h,961125h,jss,,, NET
Misc Info : ,3,,BLANK ,1,0,,,,,,,,als 2
Comment :
Method : /chem/hp5970h.i/961125h.b/hvoa.m
Meth Date : 25-Nov-1996 12:12
Cal Date : 25-NOV-96 11:16  Cal File: h2259.d
Als bottle: 2  QC Sample: BLANK
Dil Factor: 1.000  Target Version: 3.12
Integrator: HP RTE  Compound Sublist: all.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 20 Bromochloromethane | 10.478 | 1266376 | 50.000 |

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ug/L) | FINAL( ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | CAS #: | | | |
| 3.078 | 4796243 | 190 | 190 | 0 | | 0 | 20(L) |

QC Flag Legend

L - Operator selected an alternate library search match.

ERROR: Free() passed a NULL pointer.
ERROR: Free() passed a NULL pointer.
ERROR: Free() passed a NULL pointer.

Data File: /chem/hp5970h.i/961125h.b/h2260.d

Date : 25-NOV-1996 11:52

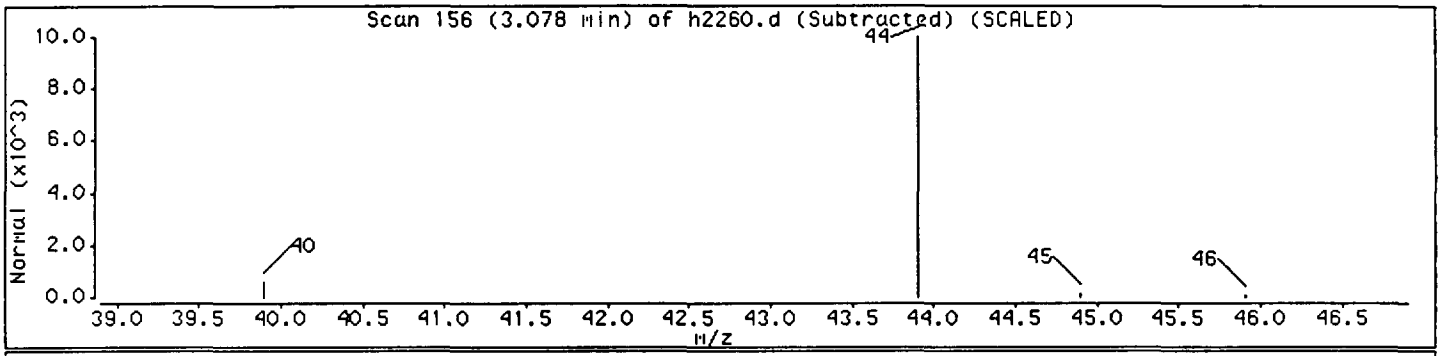
Client ID: vblk1125h  Instrument: hp5970h.i

Sample Info: vblk1125h,vblk1125h,961125h,jss,,, NET

Purge Volume: 5.0  Operator: jss

Column phase: DB-VRX  Column diameter: 0.45

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



## 3D(3). MATRIX SPIKE DATA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NA1M1MS

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: 157380MS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: H2244

Level: (low/med) LOW Date Received: 11/15/96

% Moisture: not dec. _____ Date Analyzed: 11/23/96

GC Column: DB-VRX ID: 0.45 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 5 | U |
| 74-83-9 | Bromomethane | 5 | U |
| 75-01-4 | Vinyl Chloride | 69 | |
| 75-00-3 | Chloroethane | 5 | U |
| 75-09-2 | Methylene Chloride | 5 | U |
| 67-64-1 | Acetone | 25 | U |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 49 | |
| 75-34-3 | 1,1-Dichloroethane | 19 | |
| 540-59-0 | 1,2-Dichloroethene (total) | 110 | |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 11 | |
| 78-93-3 | 2-Butanone | 25 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 80 | |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 4 | J |
| 71-43-2 | Benzene | 55 | |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 25 | U |
| 591-78-6 | 2-Hexanone | 25 | U |
| 127-18-4 | Tetrachloroethene | 10 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 49 | |
| 108-90-7 | Chlorobenzene | 48 | |
| 100-41-4 | Ethylbenzene | 2 | J |
| 100-42-5 | Styrene | 5 | U |
| 75-69-4 | Trichlorofluoromethane | 5 | U |



30528RE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NA1M1MS

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: 157380MS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: H2244

Level: (low/med) LOW Date Received: 11/15/96

% Moisture: not dec. _____ Date Analyzed: 11/23/96

GC Column: DB-VRX ID: 0.45 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-05-4 | Vinyl Acetate | 5 | U |
| 110-75-8 | 2-Chloroethylvinyl ether | 5 | U |
| ---------- | m and p-Xylene | 5 | U |
| 95-47-6 | o-Xylene | 5 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 2 | J |
| 95-50-1 | 1,2-Dichlorobenzene | 20 | |

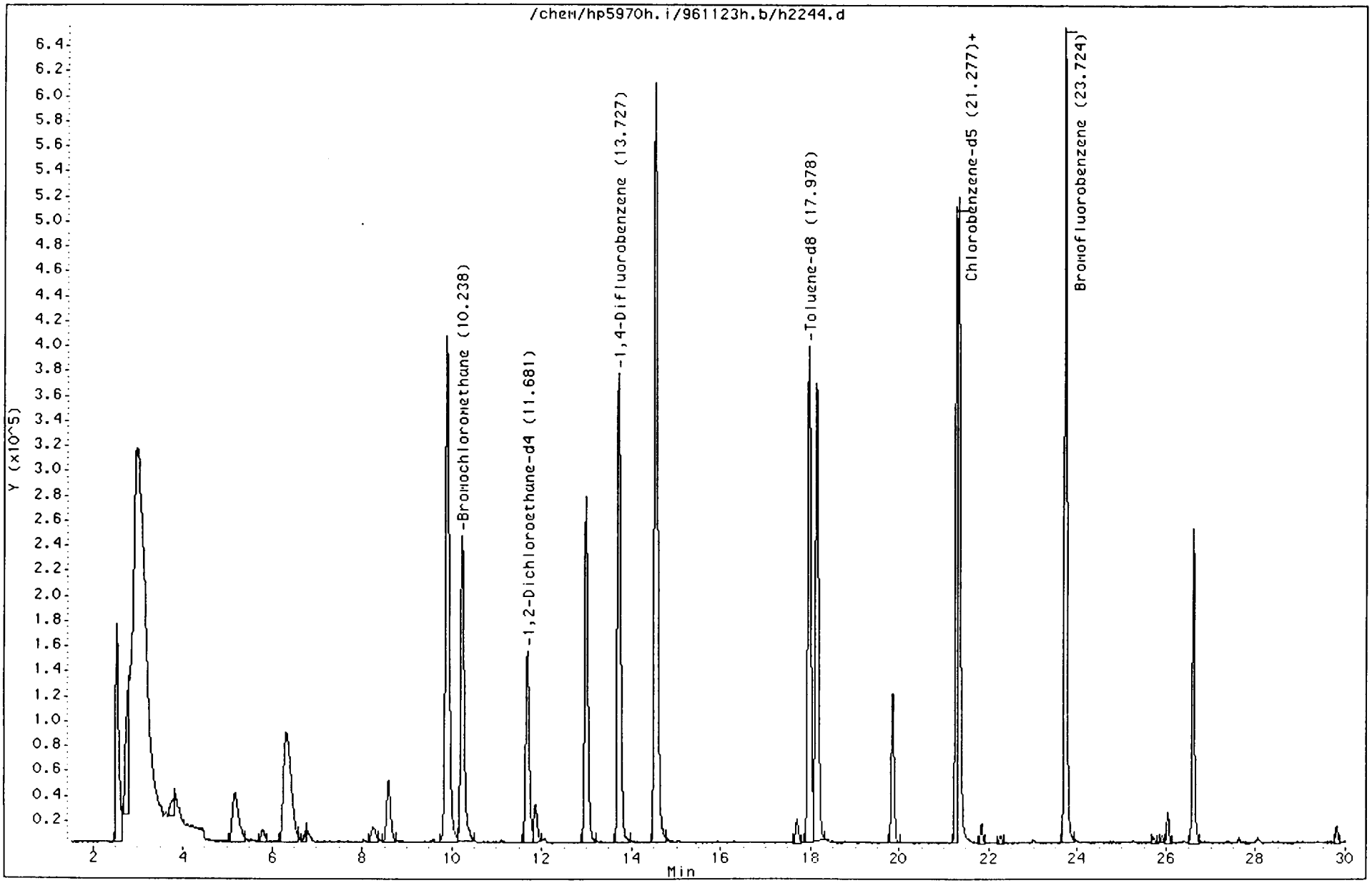


30529PE

30530

Data File: /chem/hp5970h.i/961123h.b/h2244.d
Date : 23-NOV-96 13:17
Client ID: 92113na1m11196MS
Sample Info: 157380MS,92113na1m11196MS,961123h,dry,,3754,
Purge Volume: 5.0
Column phase: DB-VRX

Instrument: hp5970h.i
Operator: dry
Column diameter: 0.45



Data File: /chem/hp5970h.i/961123h.b/h2244.d
Report Date: 26-Nov-1996 15:18

NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970h.i/961123h.b/h2244.d
Lab Smp Id: 157380MS  Client Smp ID: 92113na1m11196MS
Inj Date : 23-NOV-96 13:17
Operator : dry  Inst ID: hp5970h.i
Smp Info : 157380MS,92113na1m11196MS,961123h,dry,,3754,
Misc Info : 2083,3,,MS,1,0,,,,,,,15-NOV-1996, als5
Comment :
Method : /chem/hp5970h.i/961123h.b/hvoa.m
Meth Date : 23-Nov-1996 09:03  Quant Type: ISTD
Cal Date : 23-NOV-96 08:37  Cal File: h2237.d
Als bottle: 8  QC Sample: MS
Dil Factor: 1.000
Integrator: HP RTE  Compound Sublist: 8240.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ug/L) | CONCENTRATIONS FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| 2 | Vinyl Chloride | 62.00 | 3.830 | 3.902 | (0.375) | 164899 | 69 | 69(QM) |
| 8 | 1,1-Dichloroethene | 96.00 | 6.317 | 6.489 | (0.618) | 225714 | 49 | 49 |
| 14 | 1,1-Dichloroethane | 63.00 | 8.593 | 8.755 | (0.840) | 151845 | 19 | 19 |
| 18 | 1,2-Dichloroethene (total) | 96.00 | 9.897 | 10.068 | (0.968) | 553334 | 110 | 110(Q) |
| * 20 | Bromochloromethane | 128.00 | 10.228 | 10.409 | (1.000) | 224518 | 50 | |
| $ 25 | 1,2-Dichloroethane-d4 | 65.00 | 11.681 | 11.863 | (1.142) | 311149 | 53 | 53 |
| 26 | 1,2-Dichloroethane | 62.00 | 11.872 | 12.043 | (1.161) | 70754 | 11 | 11 |
| 27 | Benzene | 78.00 | 13.005 | 13.187 | (0.947) | 621085 | 55 | 55 |
| * 28 | 1,4-Difluorobenzene | 114.00 | 13.737 | 13.908 | (1.000) | 866350 | 50 | |
| 29 | Trichloroethene | 130.00 | 14.549 | 14.741 | (1.059) | 609634 | 80 | 80(R) |
| $ 35 | Toluene-d8 | 98.00 | 17.968 | 18.150 | (0.844) | 736165 | 49 | 49 |
| 36 | Toluene | 91.00 | 18.139 | 18.310 | (0.852) | 712706 | 49 | 49 |
| 38 | 1,1,2-Trichloroethane | 97.00 | 17.698 | 17.869 | (1.288) | 17093 | 4 | 4(a) |
| 41 | Tetrachloroethene | 164.00 | 19.843 | 20.005 | (0.933) | 77619 | 10 | 10 |
| * 43 | Chlorobenzene-d5 | 117.00 | 21.277 | 21.419 | (1.000) | 693363 | 50 | |
| 44 | Chlorobenzene | 112.00 | 21.337 | 21.479 | (1.003) | 602065 | 48 | 48 |
| 45 | Ethylbenzene | 106.00 | 21.849 | 21.970 | (1.027) | 8900 | 2 | 2(a) |
| $ 51 | Bromofluorobenzene | 95.00 | 23.724 | 23.855 | (1.115) | 492909 | 49 | 49 |
| 53 | 1,4-Dichlorobenzene | 146.00 | 26.030 | 26.151 | (1.223) | 25071 | 2 | 2(a) |
| 54 | 1,2-Dichlorobenzene | 146.00 | 26.591 | 26.703 | (1.250) | 228247 | 20 | 20 |

30531

Data File: /chem/hp5970h.i/961123h.b/h2244.d
Report Date: 26-Nov-1996 15:18

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/hp5970h.i/961123h.b/h2244.d
Report Date: 26-Nov-1996 15:18

NET Cambridge

Unknown Compounds Quantitation Report

Data file : /chem/hp5970h.i/961123h.b/h2244.d
Lab Smp Id: 157380MS  Client Smp ID: 92113na1m11196MS
Inj Date : 23-NOV-96 13:17
Operator : dry  Inst ID: hp5970h.i
Smp Info : 157380MS,92113na1m11196MS,961123h,dry,,3754,
Misc Info : 2083,3,,MS,1,0,,,,,,,15-NOV-1996, als5
Comment :
Method : /chem/hp5970h.i/961123h.b/hvoa.m
Meth Date : 23-Nov-1996 09:03
Cal Date : 23-NOV-96 08:37  Cal File: h2237.d
Als bottle: 8  QC Sample: MS
Dil Factor: 1.000  Target Version: 3.12
Integrator: HP RTE  Compound Sublist: 8240.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 20 Bromochloromethane | 10.228 | 1383591 | 50.000 |

| | CONCENTRATIONS | | | QUANT | | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | CN-COL( ug/L) | FINAL( ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| 5.174 | 385304 | 14 | 14 | 91 | NBS75K.1 | 10049 | 20 |

Ethane, 1,2-dichloro-1,1,2-trifluoro-  CAS #: 354-23-4

30533

ERROR: Free() passed a NULL pointer.
ERROR: Free() passed a NULL pointer.
ERROR: Free() passed a NULL pointer.

Data File: /chem/hp5970h.i/961123h.b/h2244.d

Date : 23-NOV-96 13:17

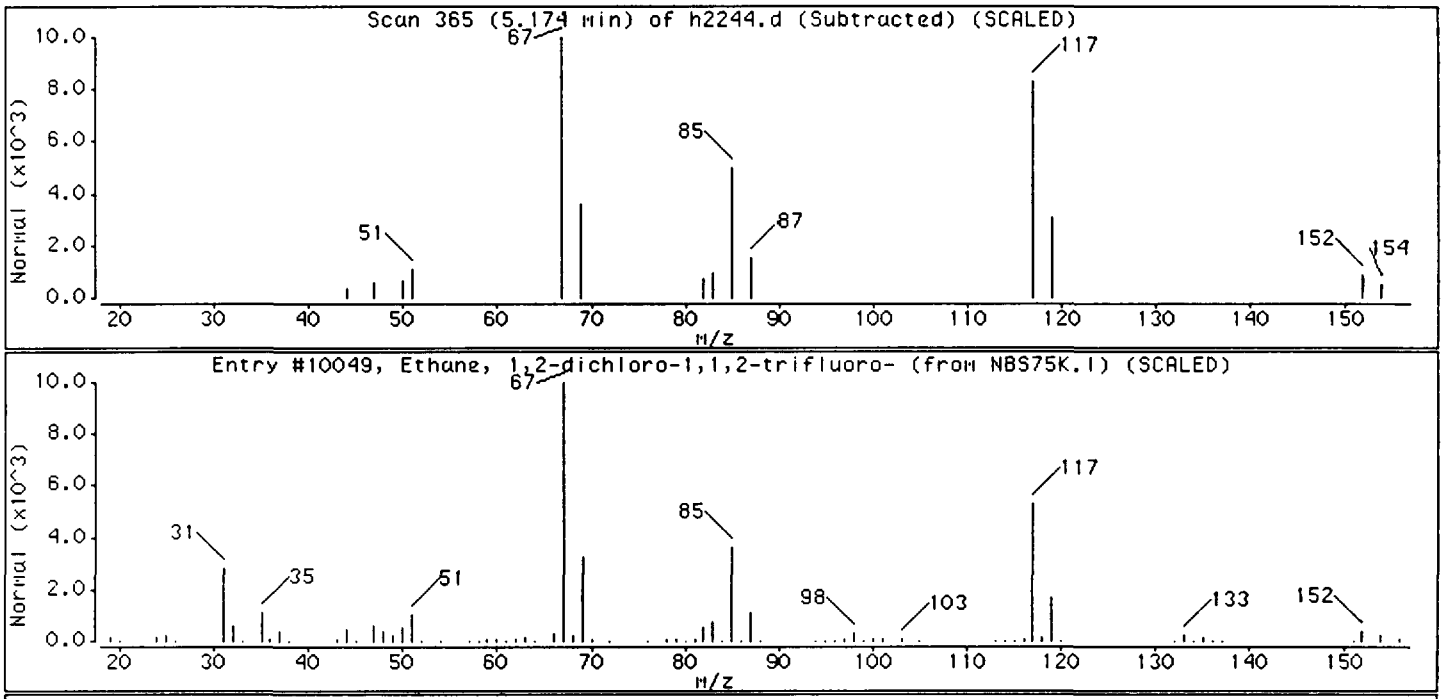
Client ID: 92113na1m11196MS  Instrument: hp5970h.i

Sample Info: 157380MS,92113na1m11196MS,961123h,dry,,3754,

Purge Volume: 5.0  Operator: dry

Column phase: DB-VRX  Column diameter: 0.45

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Ethane, 1,2-dichloro-1,1,2-trifluoro- | 354-23-4 | NBS75K.l | 10049 | 91 | C2HCl2F3 | 152 |



## 3D(4). MATRIX SPIKE DUPL.DATA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NA1M1MSD

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: 157380MSD

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: H2245

Level: (low/med) LOW Date Received: 11/15/96

% Moisture: not dec. _____ Date Analyzed: 11/23/96

GC Column: DB-VRX ID: 0.45 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 5 | U |
| 74-83-9 | Bromomethane | 5 | U |
| 75-01-4 | Vinyl Chloride | 67 | |
| 75-00-3 | Chloroethane | 5 | U |
| 75-09-2 | Methylene Chloride | 5 | U |
| 67-64-1 | Acetone | 25 | U |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 51 | |
| 75-34-3 | 1,1-Dichloroethane | 19 | |
| 540-59-0 | 1,2-Dichloroethene (total) | 110 | |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 12 | |
| 78-93-3 | 2-Butanone | 25 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 82 | |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 4 | J |
| 71-43-2 | Benzene | 56 | |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 25 | U |
| 591-78-6 | 2-Hexanone | 25 | U |
| 127-18-4 | Tetrachloroethene | 10 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 55 | |
| 108-90-7 | Chlorobenzene | 52 | |
| 100-41-4 | Ethylbenzene | 2 | J |
| 100-42-5 | Styrene | 5 | U |
| 75-69-4 | Trichlorofluoromethane | 5 | U |



30536RE

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NA1M1MSD

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2083

Matrix: (soil/water) WATER Lab Sample ID: 157380MSD

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: H2245

Level: (low/med) LOW Date Received: 11/15/96

% Moisture: not dec. _____ Date Analyzed: 11/23/96

GC Column: DB-VRX ID: 0.45 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

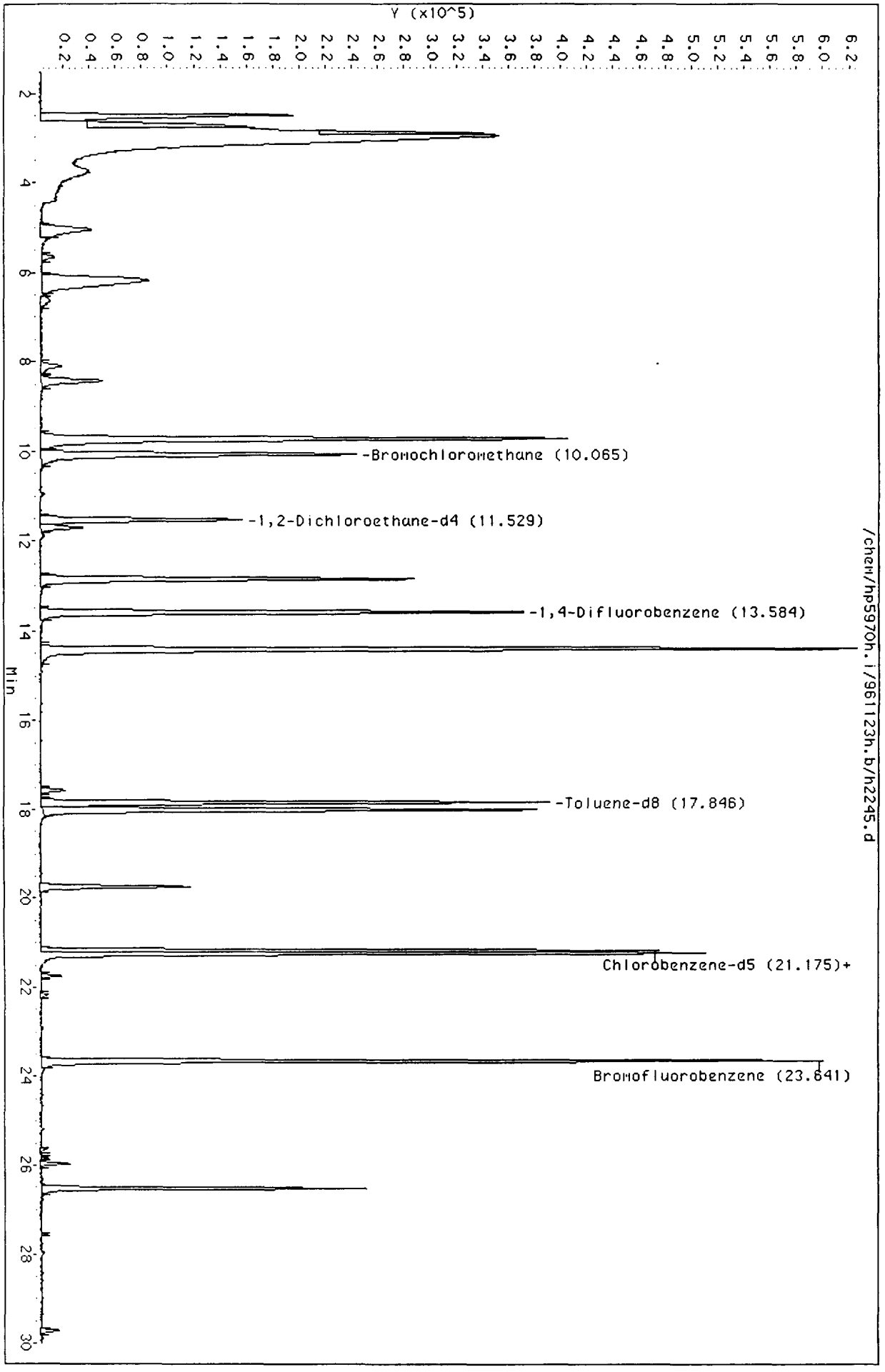
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-05-4 | Vinyl Acetate | 5 | U |
| 110-75-8 | 2-Chloroethylvinyl ether | 5 | U |
| ---------- | m and p-Xylene | 5 | U |
| 95-47-6 | o-Xylene | 5 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 2 | J |
| 95-50-1 | 1,2-Dichlorobenzene | 20 | |



30537R4

Data File: /chem/hp5970h.i/961123h.b/h2245.d
Date : 23-NOV-96 14:00
Client ID: 92113na1m11196MSD
Sample Info: 15738OMSD,92113na1m11196MSD,961123h,dry,,375
Purge Volume: 5.0
Column phase: DB-VRX

Instrument: hp5970h.i
Operator: dry
Column diameter: 0.45




30538

Data File: /chem/hp5970h.i/961123h.b/h2245.d
Report Date: 26-Nov-1996 15:18

NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970h.i/961123h.b/h2245.d
Lab Smp Id: 157380MSD  Client Smp ID: 92113na1m11196MSD
Inj Date : 23-NOV-96 14:00
Operator : dry  Inst ID: hp5970h.i
Smp Info : 157380MSD,92113na1m11196MSD,961123h,dry,,375
Misc Info : 2083,3,,MSD,1,0,,,,,,,15-NOV-1996, als5
Comment :
Method : /chem/hp5970h.i/961123h.b/hvoa.m
Meth Date : 23-Nov-1996 09:03  Quant Type: ISTD
Cal Date : 23-NOV-96 08:37  Cal File: h2237.d
Als bottle: 9  QC Sample: MSD
Dil Factor: 1.000
Integrator: HP RTE  Compound Sublist: 8240.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ug/L) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| | 2 Vinyl Chloride | 62.00 | 3.768 | 3.902 | (0.374) | 163562 | 67 | 67(M) |
| | 8 1,1-Dichloroethene | 96.00 | 6.185 | 6.489 | (0.614) | 238066 | 51 | 51(M) |
| | 14 1,1-Dichloroethane | 63.00 | 8.431 | 8.755 | (0.838) | 154497 | 19 | 19 |
| | 18 1,2-Dichloroethene (total) | 96.00 | 9.724 | 10.068 | (0.966) | 574809 | 110 | 110(Q) |
| * | 20 Bromochloromethane | 128.00 | 10.065 | 10.409 | (1.000) | 228975 | 50 | |
| $ | 25 1,2-Dichloroethane-d4 | 65.00 | 11.529 | 11.863 | (1.145) | 320129 | 54 | 54 |
| | 26 1,2-Dichloroethane | 62.00 | 11.699 | 12.043 | (1.162) | 74177 | 12 | 12 |
| | 27 Benzene | 78.00 | 12.852 | 13.187 | (0.945) | 634759 | 56 | 56 |
| * | 28 1,4-Difluorobenzene | 114.00 | 13.594 | 13.908 | (1.000) | 857608 | 50 | |
| | 29 Trichloroethene | 130.00 | 14.417 | 14.741 | (1.060) | 615853 | 82 | 82(R) |
| $ | 35 Toluene-d8 | 98.00 | 17.846 | 18.150 | (0.843) | 710155 | 51 | 51 |
| | 36 Toluene | 91.00 | 18.016 | 18.310 | (0.851) | 741069 | 55 | 55 |
| | 38 1,1,2-Trichloroethane | 97.00 | 17.565 | 17.869 | (1.292) | 18416 | 4 | 4(a) |
| | 41 Tetrachloroethene | 164.00 | 19.731 | 20.005 | (0.932) | 74006 | 10 | 10 |
| * | 43 Chlorobenzene-d5 | 117.00 | 21.175 | 21.419 | (1.000) | 643964 | 50 | |
| | 44 Chlorobenzene | 112.00 | 21.245 | 21.479 | (1.003) | 600885 | 52 | 52 |
| | 45 Ethylbenzene | 106.00 | 21.736 | 21.970 | (1.027) | 7944 | 2 | 2(aQ) |
| $ | 51 Bromofluorobenzene | 95.00 | 23.641 | 23.855 | (1.116) | 462704 | 50 | 50 |
| | 53 1,4-Dichlorobenzene | 146.00 | 25.958 | 26.151 | (1.226) | 22789 | 2 | 2(a) |
| | 54 1,2-Dichlorobenzene | 146.00 | 26.519 | 26.703 | (1.252) | 217779 | 20 | 20 |

Data File: /chem/hp5970h.i/961123h.b/h2245.d
Report Date: 26-Nov-1996 15:18

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/hp5970h.i/961123h.b/h2245.d
Report Date: 26-Nov-1996 15:18

NET Cambridge

Unknown Compounds Quantitation Report

Data file : /chem/hp5970h.i/961123h.b/h2245.d
Lab Smp Id: 157380MSD  Client Smp ID: 92113na1m11196MSD
Inj Date : 23-NOV-96 14:00
Operator : dry  Inst ID: hp5970h.i
Smp Info : 157380MSD,92113na1m11196MSD,961123h,dry,,375
Misc Info : 2083,3,,MSD,1,0,,,,,,,15-NOV-1996, als5
Comment :
Method : /chem/hp5970h.i/961123h.b/hvoa.m
Meth Date : 23-Nov-1996 09:03
Cal Date : 23-NOV-96 08:37  Cal File: h2237.d
Als bottle: 9  QC Sample: MSD
Dil Factor: 1.000  Target Version: 3.12
Integrator: HP RTE  Compound Sublist: 8240.sub
Sample Matrix: WATER
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 20 Bromochloromethane | 10.065 | 1430524 | 50.000 |

| | CONCENTRATIONS | | | QUANT | | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ug/L) | FINAL( ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Ethane, 1,2-dichloro-1,1,2-trifluoro- | | | CAS #: 354-23-4 | | | | |
| 5.052 | 365097 | 13 | 13 | 53 | NBS75K.1 | 10049 | 20 |

30541

**FD CASE 2124**

# ANALYTICAL REPORT

| | |
|---|---|
| Report To: | Mr. Bob Mullin<br>GEI Consultants/NH<br>Suffolk Building<br>53 Regional Drive<br>Concord, NH 03301 |
| Project: | Tinkham Garage |
| FD Case: | 2124 |
| | Section One |

NET Job Number: 96.04043

National Environmental Testing, Inc.

Cambridge Division
12 Oak Park
Bedford, MA 01730

Massachusetts Certification Number
M MA023

TABLE OF CONTENTS

NATIONAL ENVIRONMENTAL TESTING, INC.

Cambridge Division
12 Oak Park
Bedford, MA 01730
Tel: (617) 275-3535
Fax: (617) 275-1151
Fax: (617) 275-7411

January 3, 1997

Mr. Bob Mullin
GEI Consultants/NH
Suffolk Building
53 Regional Drive
Concord, NH 03301

RE: Tinkham Garage

Dear Mr. Mullin:

Enclosed please find the results of the chemical analyses performed by NET Cambridge Division for the Tinkham Garage project (FD Case 2124, NET job number 96.04043).

This narrative addresses all comments for all samples as listed below:

NET JOB NUMBER: 96.04043

| SAMPLE ID | NET ID | DATE TAKEN | TIME TAKEN | DATE REC'D | MATRIX |
|---|---|---|---|---|---|
| 92113-LGAW-1296 | 158550 | 12/06/1996 | 11:55 | 12/07/1996 | GROUND WATER |
| 92113-LGSW-1296 | 158551 | 12/06/1996 | 13:05 | 12/07/1996 | GROUND WATER |

NET® NATIONAL ENVIRONMENTAL TESTING, INC.

Cambridge Division
12 Oak Park
Bedford, MA 01730
Tel: (617) 275-3535
Fax: (617) 275-1151
Fax: (617) 275-7411

All laboratory comments for the data packages have been summarized in the following tables:

| | |
|---|---|
| Sample Receipt and Login | TABLE 1 |
| Metals Analysis | No Analysis Requested |
| Volatile Organics Analysis | TABLE 3 |
| Semi-Volatile Organics Analysis | No Analysis Requested |
| Pesticide/PCB Organics Analysis | No Analysis Requested |
| Herbicides Analysis | No Analysis Requested |
| Organophosphorus Pesticides Analysis | No Analysis Requested |
| Diesel Range Organics Analysis | No Analysis Requested |
| Gasoline Range Organics Analysis | No Analysis Requested |
| Cyanide Analysis | No Analysis Requested |
| Total Petroleum Hydrocarbons Analysis | No Analysis Requested |
| General Chemistry Analysis | No Analysis Requested |

These narrative tables are also enclosed with each data package section.

Please find enclosed a diskette of the results for this case.

Thank you for this opportunity to be of service to you. Please do not hesitate to call or write if you have any questions or require further information.

Sincerely,

Peter M. Conroy
Project Manager

enclosures

# TABLE 1
# SAMPLE RECEIPT & LOGIN
# FD 2124

**GENERAL COMMENTS:** No comments necessary.

# TABLE 3

## VOLATILES ORGANICS NARRATIVE SUMMARY

## FD 2124

**GENERAL COMMENTS:** The samples were analyzed using a modified low level method 624, with a 25 ml sample purge volume. Data forms were produced using our CLP forms software.

**MANUAL INTEGRATIONS:** Manual integrations are performed on standards and samples when the integration is not complete due to peak shape and chromatography. This is confirmed by visual inspection by the analysts. The "M" flag indicates that a manual integration has been performed.

Compound Total 1,2-Dichloroethene must be integrated in the initial and continuing calibration standards to include the total area of the cis- and trans- isomers.

**SURROGATES:** All system monitoring compound recoveries were within the contract required QC limits.

**BLANKS:** A method blank was analyzed for each twelve hour time period on each GC/MS system used for analysis. No blank contained greater than five times the reporting limit of Methylene Chloride, Acetone, and 2-Butanone, or greater than or equal to the reporting limit of any other volatile target compound.

**TUNE:** All instrument performance check criteria were met prior to the start of sample analysis.

**CALIBRATION:** All calibrations met the QC criteria.

**INTERNAL STANDARDS:** All internal standard areas and retention times were within the QC limits.

**HOLDING TIMES:** All samples were analyzed within required holding times.

**DILUTIONS:** No dilutions were necessary.

# NET Cambridge Division

# ANALYTICAL REPORT

| Report To: | Reported By: |
|---|---|
| Mr. Bob Mullin | National Environmental Testing |
| GEI Consultants/NH | NET Atlantic, Incorporated |
| Suffolk Building | Cambridge Division |
| 53 Regional Drive | 12 Oak Park |
| Concord, NH 03301 | Bedford, MA 01730 |

Report Date: 01/03/1997 — NET Job Number: 96.04043

Project: Tinkham Garage — NET Client No: 14755

P.O. No: 7889 — Collected By: R.Van Etten — Shipped Via: FedEx

Job Description: Tinkham — Airbill No: 9110820471

This report has been approved and certified for release by the following staff. Please feel free to call the NET Project Manager at 617-275-3535 with any questions or comments.

Peter M. Conroy
NET Project Manager

Report prepared by
NET Reports Group

Analytical data for the following samples are included in this data report.

| SAMPLE ID | NET ID | DATE TAKEN | TIME TAKEN | DATE REC'D | MATRIX |
|---|---|---|---|---|---|
| 92113-LGAW-1296 | 158550 | 12/06/1996 | 11:55 | 12/07/1996 | GROUND WATER |
| 92113-LGSW-1296 | 158551 | 12/06/1996 | 13:05 | 12/07/1996 | GROUND WATER |

Note: Where a compound or analyte is not detected, the result is reported as less than (<) the laboratory reporting limit.

96-04043

NET® NATIONAL ENVIRONMENTAL TESTING, INC.

# CHAIN OF CUSTODY RECORD

COMPANY GEI CONSULTANTS, INC.
ADDRESS 53 REGIONAL DRIVE, CONCORD, NH
PHONE 603-224-7971 FAX 03301
PROJECT NAME/LOCATION TINKHAM GARAGE SITE
PROJECT NUMBER 92113-2003
PROJECT MANAGER ROBERT MULLIN

REPORT TO: ROBERT MULLIN
INVOICE TO: R. MULLIN
P.O. NO. WILL PROVIDE RVE
NET QUOTE NO. —

SAMPLED BY
RICHARD VANETTEN (PRINT NAME) — R. Van Ett SIGNATURE
(PRINT NAME) — SIGNATURE

| DATE | TIME | SAMPLE ID/DESCRIPTION | MATRIX | GRAB | COMP | # and Type of Containers: HCl | NaOH | $HNO_3$ | $H_2SO_4$ | OTHER | ANALYSES: LOW LEVEL, SOIL HCl |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12/6/96 | 11:55 | 92113-LGAW-1296 | AQ | X | | 3 VOA | | | | | X |
| 12/6/96 | 13:05 | 92113-LGSW-1296 | AQ | X | | 3 VOA | | | | | X |

To assist us in selecting the proper method
Is this work being conducted for regulatory compliance monitoring? Yes X No ___
Is this work being conducted for regulatory enforcement action? Yes ___ No X
Which regulations apply: RCRA ___ NPDES Wastewater ___ UST ___ Drinking Water ___ Other CERCLA None ___

COMMENTS
LOW LEVEL = 25 ml PURGE VOL.

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO — FIELD FILTERED? YES / NO
COC SEALS PRESENT AND INTACT? YES / NO — VOLATILES FREE OF HEADSPACE? YES / NO
TEMPERATURE UPON RECEIPT: ___ Bottles supplied by NET? YES / NO

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA ___
I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS R. Van Ett DATE 12/6/96

| RELINQUISHED BY: | DATE | TIME | RECEIVED BY: | RELINQUISHED BY: | DATE | TIME | RECEIVED FOR NET BY |
|---|---|---|---|---|---|---|---|
| R. Van Ett | 12/6/96 | 17:30 | FED EX AIR BILL # | 911082047 1 | 12/7/96 | 11:00 | A Cole |

METHOD OF SHIPMENT: FED EX / PRIORITY / SAT. DELIVERY
REMARKS: LOW LEVEL 624 VOA, PLEASE L

## ORGANIC FLAGS AND SAMPLE SUFFIXES

The following qualifiers have been used for reporting results:

B - The "B" flag indicates that the analyte was found in the associated blank as well as in the sample.

E - The "E" flag indentifies compound concentrations that exceed the calibration range of the GC/MS instrument. For Benzo (b) and Benzo (k) Flouranthene, the calibration range of each peak will be considered separately. Ortho, para, and meta xylene are quantified as two peaks, the calibration range of each peak will be considered separately.

D - If a sample is re-analyzed due to high concentrations and both the original analysis and re-analysis have been reported, the diluted analysis will have the "DL" suffix. All concentration values reported for the diluted analysis will be flagged with a "D".

U - The "U" flag indicates that the compound was analyzed for but not detected. The reported "U" value is the detection limit for the given compound. The value is corrected for dilution and for percent moisture.

J - The "J" flag indicates an estimated value. The flag is used for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral or chromatographic data indicate the presence of a compound that meets the identification criteria but the quantitated value is less than the method quantitation limit.

P - The "P" flag indicates that the quantitated value of a target pesticide/PCB differs by more than 25% on the two GC columns that were reported.

Y - Compound values that are flagged with a "Y" have been edited on our RTE/MS data system.

X - Compound values that are flagged with a "X" have been edited on our Foremaster data reporting system.

The following sample suffixes have been used:

XXXXX = sample number
XXXXXMS = matrix spike sample
XXXXXMSD = matrix spike duplicate sample
XXXXXRE = re-analyzed sample
XXXXXDL = sample analyzed at a secondary dilution

# EPA CLP 3/90 Deliverables Inventory

Project Name: GEI Consultants/NH

NET Job Numbers: 96.04043 Tinkham Garage

FD Number: 2124 Tinkham

# ANALYTICAL REPORT

| | |
|---|---|
| Report To: | Mr. Bob Mullin<br>GEI Consultants/NH<br>Suffolk Building<br>53 Regional Drive<br>Concord, NH 03301 |
| Project: | Tinkham Garage |
| FD Case: | 2124 |

Section Three Volatiles Analysis

NET Job Number: 96.04043

National Environmental Testing, Inc.

Cambridge Division
12 Oak Park
Bedford, MA 01730

Massachusetts Certification Number
M MA023

# TABLE 3
# VOLATILES ORGANICS NARRATIVE SUMMARY
# FD 2124

**GENERAL COMMENTS**: The samples were analyzed using a modified low level method 624, with a 25 ml sample purge volume. Data forms were produced using our CLP forms software.

**MANUAL INTEGRATIONS**: Manual integrations are performed on standards and samples when the integration is not complete due to peak shape and chromatography. This is confirmed by visual inspection by the analysts. The "M" flag indicates that a manual integration has been performed.

Compound Total 1,2-Dichloroethene must be integrated in the initial and continuing calibration standards to include the total area of the cis- and trans- isomers.

**SURROGATES**: All system monitoring compound recoveries were within the contract required QC limits.

**BLANKS**: A method blank was analyzed for each twelve hour time period on each GC/MS system used for analysis. No blank contained greater than five times the reporting limit of Methylene Chloride, Acetone, and 2-Butanone, or greater than or equal to the reporting limit of any other volatile target compound.

**TUNE**: All instrument performance check criteria were met prior to the start of sample analysis.

**CALIBRATION**: All calibrations met the QC criteria.

**INTERNAL STANDARDS**: All internal standard areas and retention times were within the QC limits.

**HOLDING TIMES**: All samples were analyzed within required holding times.

**DILUTIONS**: No dilutions were necessary.

# EPA CLP 3/90 Deliverables Inventory

Project Name: GEI Consultants/NH

NET Job Numbers: 96.04043 Tinkham Garage

FD Number: 2124 Tinkham

| | ITEM | | PAGE |
|---|---|---|---|
| 3. | GC/MS VOLATILE ORGANIC ANALYSIS DATA | | 3 0000 |
| 3A. | QC Summary | -Forms II, III, IV, V | 3 0001 |
| 3B. | Sample Data | -Forms I, Ib, Raw Data | 3 0007 |
| 3C. | Standards Data | -Forms VI, VII, VIII, Raw Data | 3 0026 |
| 3D. | Raw QC Data | | |
| 3D1. | BFB Tunes | | 3 0049 |
| 3D2. | Blank Data | -Form I, Ib, Raw Data | 3 0056 |
| 3D4. | Matrix Spike Raw Data | | NR |
| 3D4. | Matrix Spike Duplicate Raw Data | | NR |

3. VOLATILES DATA

GEI
2124
96.04043

## 3A. QC SUMMARY

2A

# WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2124

| | EPA SAMPLE NO. | SMC1 (TOL) # | SMC2 (BFB) # | SMC3 (DCE) # | OTHER | TOT OUT |
|---|---|---|---|---|---|---|
| 01 | VBLK1213G | 100 | 101 | 102 | | 0 |
| 02 | LGAW | 110 | 110 | 94 | | 0 |
| 03 | LGSW | 103 | 105 | 100 | | 0 |
| 04 | | | | | | |
| 05 | | | | | | |
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| | QC LIMITS |
|---|---|
| SMC1 (TOL) = Toluene-d8 | (80-120) |
| SMC2 (BFB) = Bromofluorobenzene | (80-120) |
| SMC3 (DCE) = 1,2-Dichloroethane-d4 | (80-120) |

# Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

4A

# VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK1213G

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2124

Lab File ID: G2870 Lab Sample ID: VBLK1213G

Date Analyzed: 12/13/96 Time Analyzed: 1214

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: HP5970G

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | TIME ANALYZED |
|---|---|---|---|---|
| 01 | LGAW | 158550 | G2871 | 1414 |
| 02 | LGSW | 158551 | G2872 | 1458 |
| 03 | | | | |
| 04 | | | | |
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COMMENTS:

5A

# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
## BROMOFLUOROBENZENE (BFB)

Lab Name: NET CAMBRIDGE  Contract: GEI

Lab Code: CAMBRG  Case No.:  SAS No.:  SDG No.: 2124

Lab File ID: G2096  BFB Injection Date: 09/10/96

Instrument ID: HP5970G  BFB Injection Time: 1033

GC Column: CAP  ID: 0.53 (mm)  Heated Purge: (Y/N) N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 8.0 - 40.0% of mass 95 | 21.8 |
| 75 | 30.0 - 66.0% of mass 95 | 58.8 |
| 95 | Base Peak, 100% relative abundance | 100.0 |
| 96 | 5.0 - 9.0% of mass 95 | 6.5 |
| 173 | Less than 2.0% of mass 174 | 0.0 ( 0.0)1 |
| 174 | 50.0 - 120.0% of mass 95 | 74.8 |
| 175 | 4.0 - 9.0% of mass 174 | 6.2 ( 8.4)1 |
| 176 | 93.0 - 101.0% of mass 174 | 73.1 ( 97.7)1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.5 ( 6.1)2 |

1-Value is % mass 174  2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | VSTD010 | VSTD010 | G2102 | 09/10/96 | 1544 |
| 02 | VSTD002 | VSTD002 | G2103 | 09/10/96 | 1701 |
| 03 | VSTD004 | VSTD004 | G2104 | 09/10/96 | 1744 |
| 04 | VSTD020 | VSTD020 | G2105 | 09/10/96 | 1827 |
| 05 | VSTD040 | VSTD040 | G2106 | 09/10/96 | 1910 |
| 06 | | | | | |
| 07 | | | | | |
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5A

# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
## BROMOFLUOROBENZENE (BFB)

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2124

Lab File ID: G2867 BFB Injection Date: 12/13/96

Instrument ID: HP5970G BFB Injection Time: 1002

GC Column: DB502 ID: 0.53 (mm) Heated Purge: (Y/N) N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 8.0 - 40.0% of mass 95 | 26.3 |
| 75 | 30.0 - 66.0% of mass 95 | 57.6 |
| 95 | Base Peak, 100% relative abundance | 100.0 |
| 96 | 5.0 - 9.0% of mass 95 | 8.1 |
| 173 | Less than 2.0% of mass 174 | 0.0 ( 0.0)1 |
| 174 | 50.0 - 120.0% of mass 95 | 58.7 |
| 175 | 4.0 - 9.0% of mass 174 | 4.7 ( 7.9)1 |
| 176 | 93.0 - 101.0% of mass 174 | 56.1 ( 95.6)1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.0 ( 7.2)2 |

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | VSTD010 | VSTD010 | G2868 | 12/13/96 | 1022 |
| 02 | VBLK1213G | VBLK1213G | G2870 | 12/13/96 | 1214 |
| 03 | LGAW | 158550 | G2871 | 12/13/96 | 1414 |
| 04 | LGSW | 158551 | G2872 | 12/13/96 | 1458 |
| 05 | | | | | |
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8A

# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2124

Lab File ID (Standard): G2868 Date Analyzed: 12/13/96

Instrument ID: HP5970G Time Analyzed: 1022

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

| | | IS1 (BCM) AREA # | RT # | IS2 (DFB) AREA # | RT # | IS3 (CBZ) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 230250 | 13.28 | 1588200 | 16.00 | 1109936 | 24.31 |
| | UPPER LIMIT | 460500 | 13.78 | 3176400 | 16.50 | 2219872 | 24.81 |
| | LOWER LIMIT | 115125 | 12.78 | 794100 | 15.50 | 554968 | 23.81 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | VBLK1213G | 213339 | 13.30 | 1452439 | 16.01 | 1019624 | 24.30 |
| 02 | LGAW | 203807 | 13.27 | 1410850 | 15.97 | 853734 | 24.30 |
| 03 | LGSW | 190097 | 13.29 | 1340286 | 15.99 | 903540 | 24.30 |
| 04 | | | | | | | |
| 05 | | | | | | | |
| 06 | | | | | | | |
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| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

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

# Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

## 3B. SAMPLE DATA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LGAW

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2124

Matrix: (soil/water) WATER Lab Sample ID: 158550

Sample wt/vol: 25.00 (g/mL) ML Lab File ID: G2871

Level: (low/med) LOW Date Received: 12/07/96

% Moisture: not dec. _____ Date Analyzed: 12/13/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | U |
| 75-09-2 | Methylene Chloride | 1.0 | U |
| 67-64-1 | Acetone | 1.0 | U |
| 75-15-0 | Carbon Disulfide | 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 8.2 | |
| 540-59-0 | 1,2-Dichloroethene (total) | 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | U |
| 78-93-3 | 2-Butanone | 1.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | U |
| 71-43-2 | Benzene | 1.3 | |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | U |
| 75-25-2 | Bromoform | 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1.0 | U |
| 591-78-6 | 2-Hexanone | 1.0 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | U |
| 108-88-3 | Toluene | 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | U |
| 100-41-4 | Ethylbenzene | 2.5 | |
| 100-42-5 | Styrene | 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | U |

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LGAW

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2124

Matrix: (soil/water) WATER Lab Sample ID: 158550

Sample wt/vol: 25.00 (g/mL) ML Lab File ID: G2871

Level: (low/med) LOW Date Received: 12/07/96

% Moisture: not dec. _____ Date Analyzed: 12/13/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

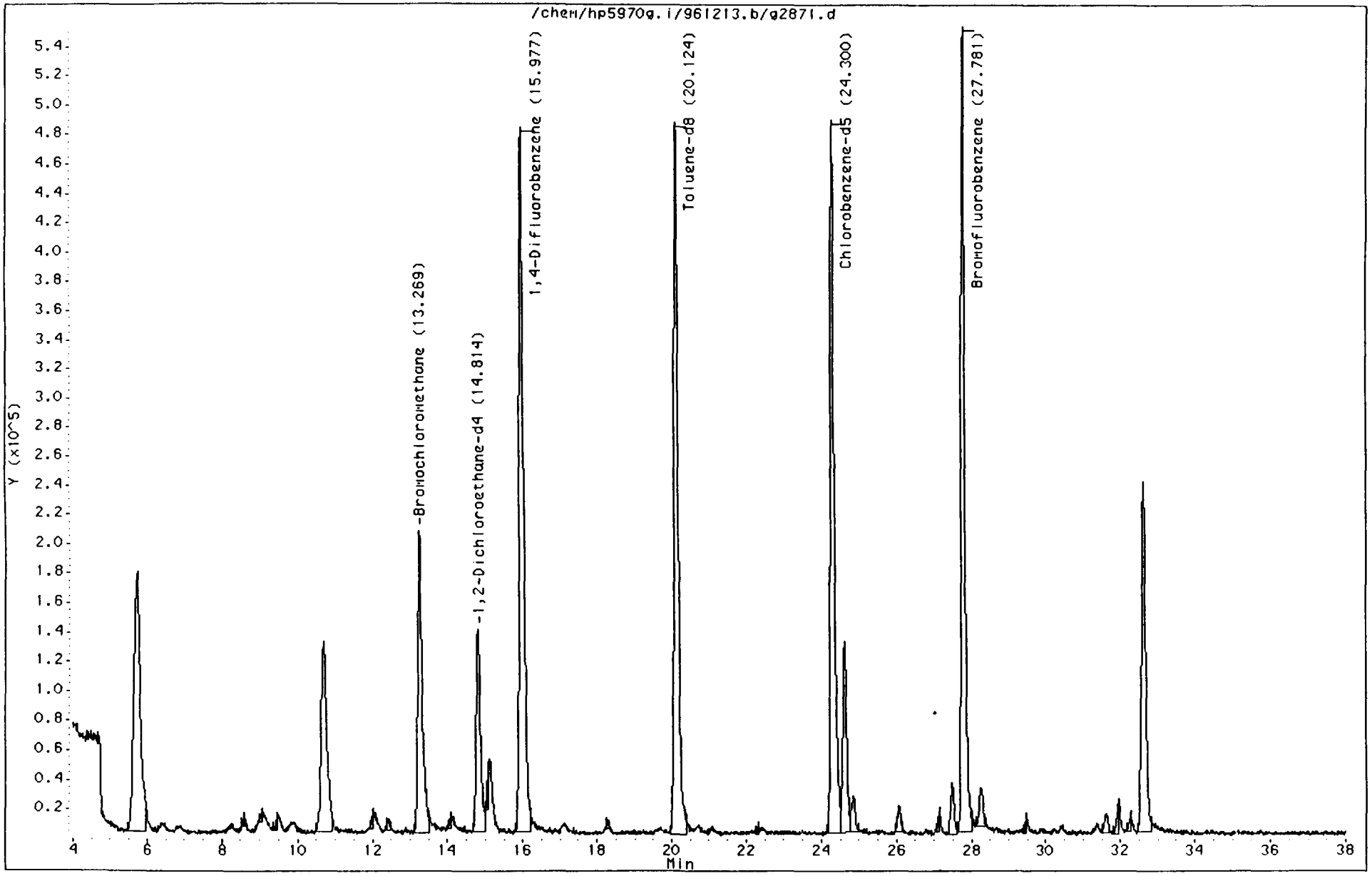
Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-05-4 | Vinyl Acetate | 1.0 | U |
| 110-75-8 | 2-Chloroethylvinyl ether | 1.0 | U |
| ---------- | m and p-Xylene | 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 8.4 | |

Data File: /chem/hp5970g.i/961213.b/g2871.d
Date : 13-DEC-1996 14:14
Client ID: lgaw
Sample Info: 158550,lgaw,961213g,bel,,,GEI
Purge Volume: 25.0
Column phase: CAP

Instrument: hp5970g.i
Operator: bel
Column diameter: 0.53

30010



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970g.i/961213.b/g2871.d
Lab Smp Id: 158550 Client Smp ID: lgaw
Inj Date : 13-DEC-1996 14:14
Operator : bel Inst ID: hp5970g.i
Smp Info : 158550,lgaw,961213g,bel,,,GEI
Misc Info : ,0,,,1,0,,,,,,,07-DEC-1996
Comment :
Method : /chem/hp5970g.i/961213.b/gvoa25.m
Meth Date : 13-Dec-1996 11:10 Quant Type: ISTD
Cal Date : 13-DEC-96 10:22 Cal File: g2868.d
Als bottle: 7
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 8240.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ug/L) | FINAL ( ug/L) | |
|---|---|---|---|---|---|---|---|---|---|
| | 14 1,1-Dichloroethane | 63.00 | 10.706 | 10.707 | (0.807) | 595149 | 8.2 | 8.2 | |
| * | 20 Bromochloromethane | 128.00 | 13.269 | 13.279 | (1.000) | 203807 | 10 | | (Q) |
| $ | 25 1,2-Dichloroethane-d4 | 65.00 | 14.814 | 14.834 | (1.116) | 401549 | 9.4 | 9.4 | |
| | 27 Benzene | 78.00 | 15.127 | 15.147 | (0.947) | 119672 | 1.3 | 1.3 | |
| * | 28 1,4-Difluorobenzene | 114.00 | 15.968 | 15.998 | (1.000) | 1410850 | 10 | | |
| $ | 35 Toluene-d8 | 98.00 | 20.124 | 20.125 | (0.828) | 1224112 | 11 | 11 | |
| * | 43 Chlorobenzene-d5 | 117.00 | 24.300 | 24.310 | (1.000) | 853734 | 10 | | |
| | 45 Ethylbenzene | 106.00 | 24.613 | 24.623 | (1.013) | 94298 | 2.5 | 2.5 | (Q) |
| $ | 51 Bromofluorobenzene | 95.00 | 27.781 | 27.772 | (1.143) | 695441 | 11 | 11 | |
| | 54 1,2-Dichlorobenzene | 146.00 | 32.593 | 32.623 | (1.341) | 362243 | 8.4 | 8.4 | |

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/hp5970g.i/961213.b/g2871.d

Date : 13-DEC-1996 14:14

Client ID: lgam

Instrument: hp5970g.i

Sample Info: 158550,lgam,961213g,bel,,,GEI

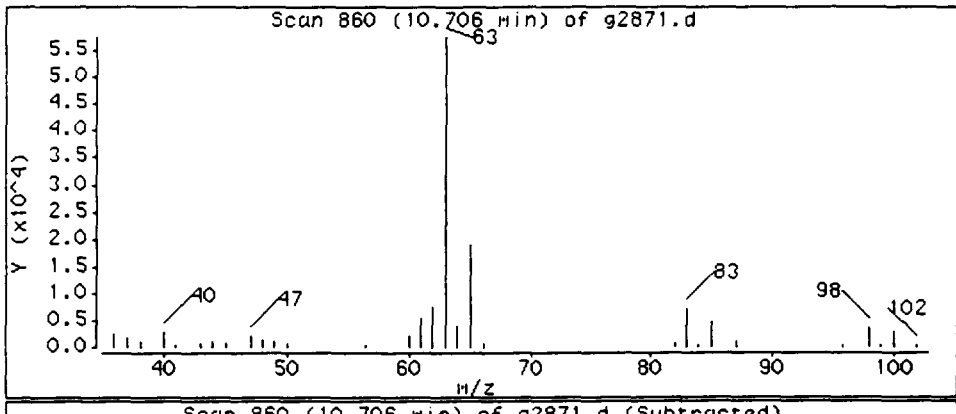
Purge Volume: 25.0

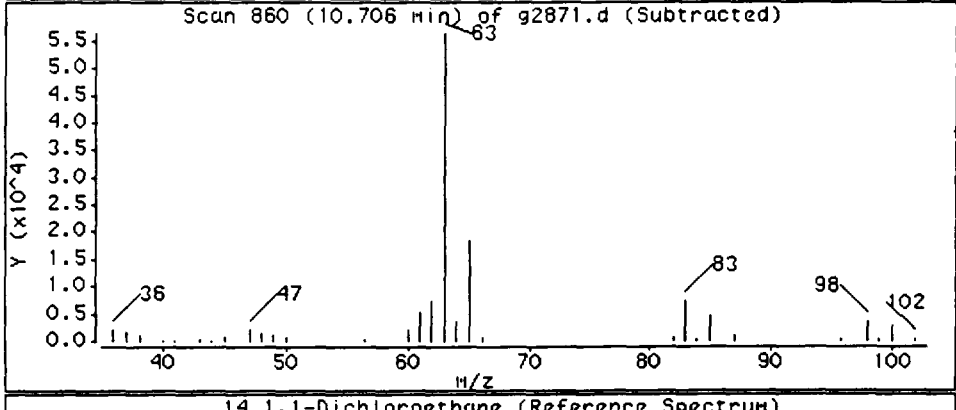
Operator: bel

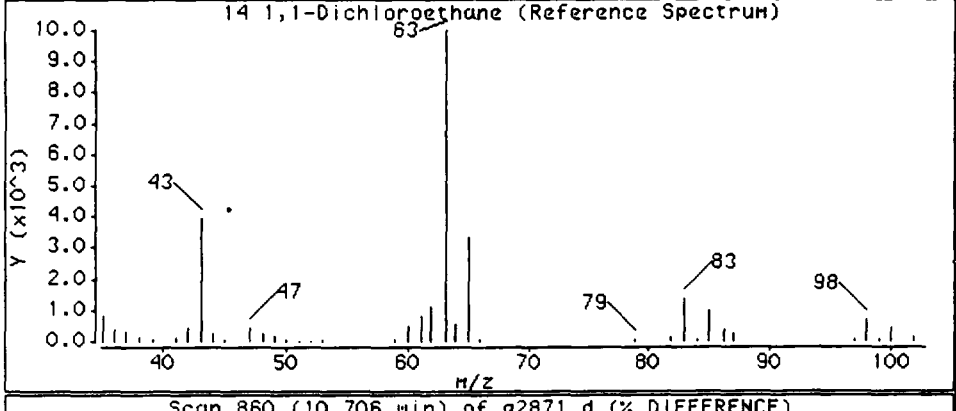
Column phase: CAP

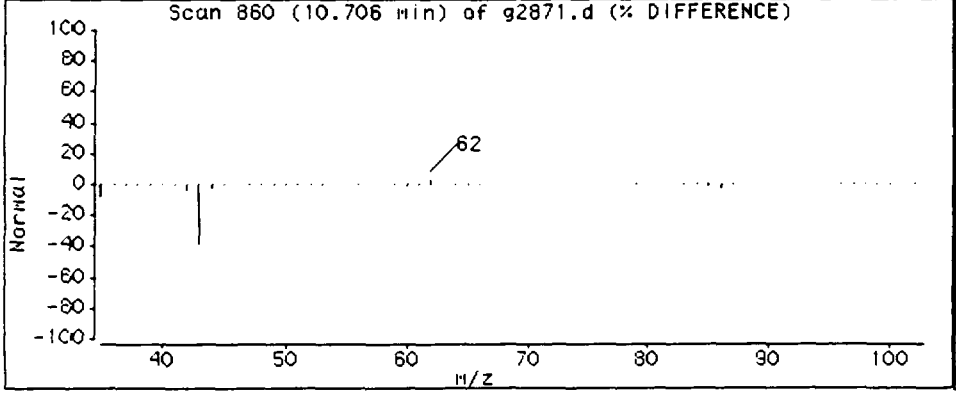
Column diameter: 0.53

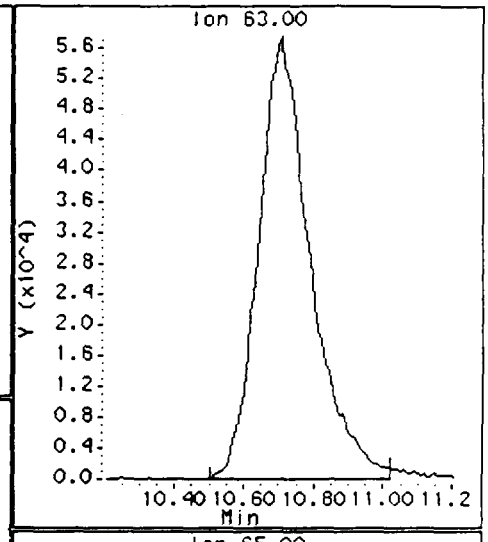
14 1,1-Dichloroethane

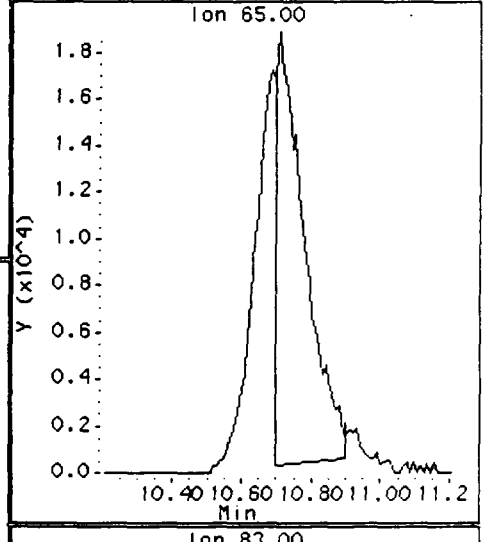


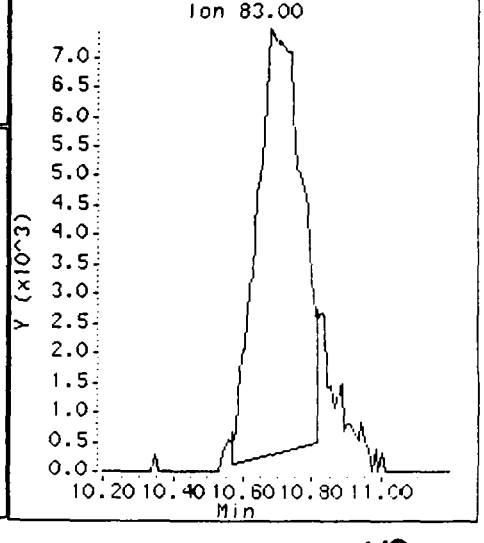



Data File: /chem/hp5970g.i/961213.b/g2871.d

Date : 13-DEC-1996 14:14

Client ID: lgam

Instrument: hp5970g.i

Sample Info: 158550,lgam,961213g,bel,,,GEI

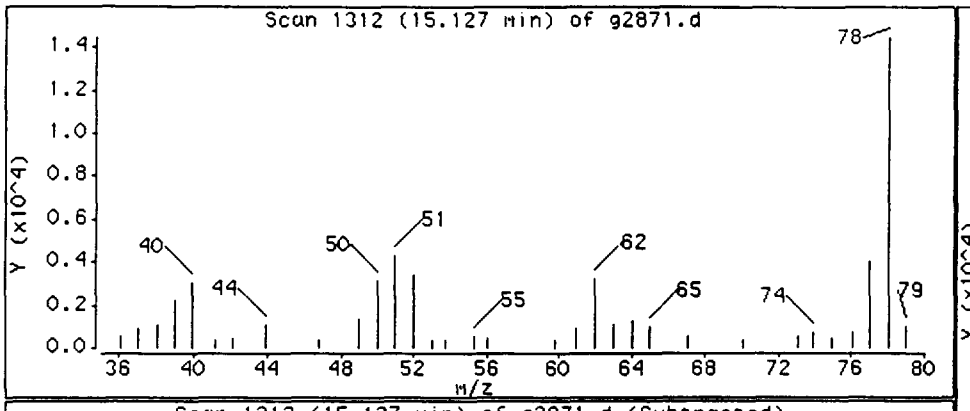
Purge Volume: 25.0

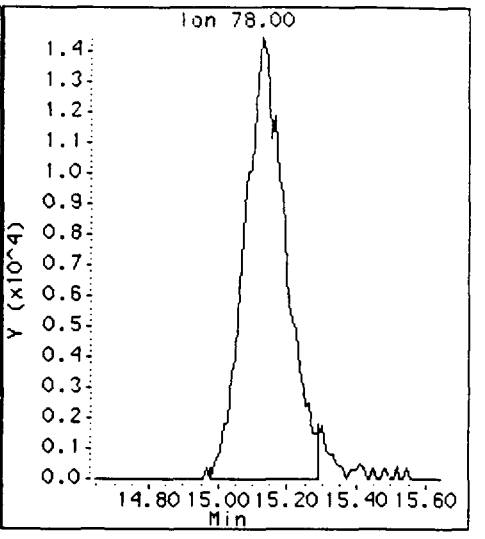
Operator: bel

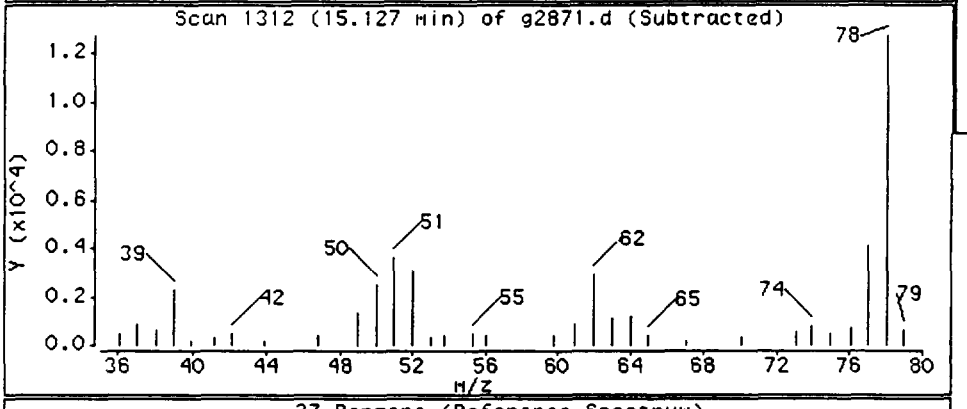
Column phase: CAP

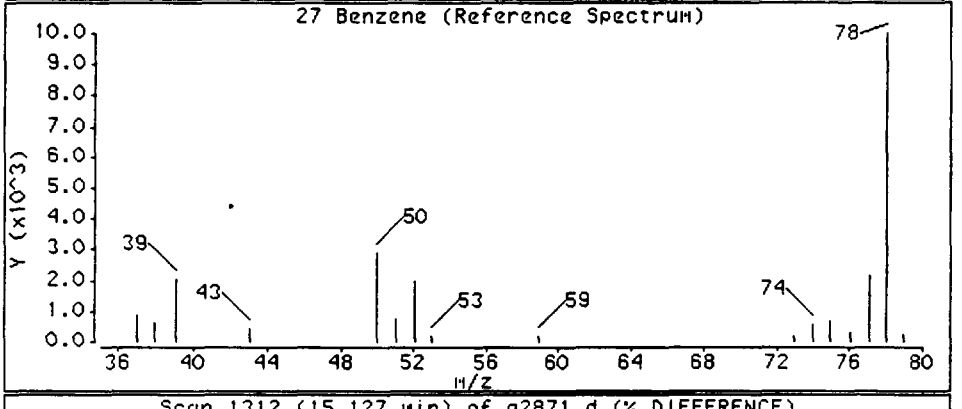
Column diameter: 0.53

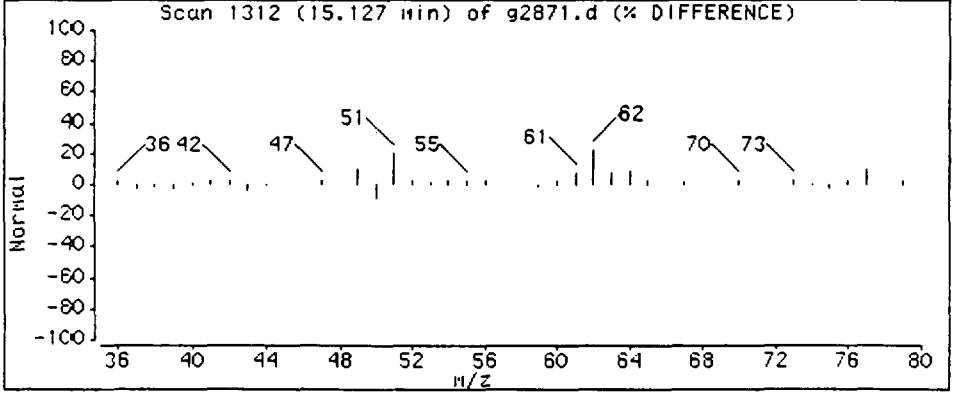
27 Benzene




30013

Data File: /chem/hp5970g.i/961213.b/g2871.d

Date : 13-DEC-1996 14:14

Client ID: lgaw

Instrument: hp5970g.i

Sample Info: 158550,lgaw,961213g,bel,,,GEI

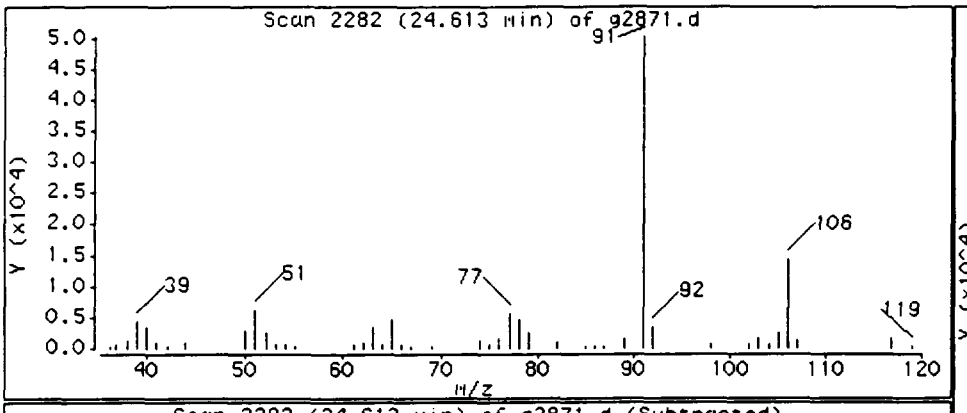
Purge Volume: 25.0

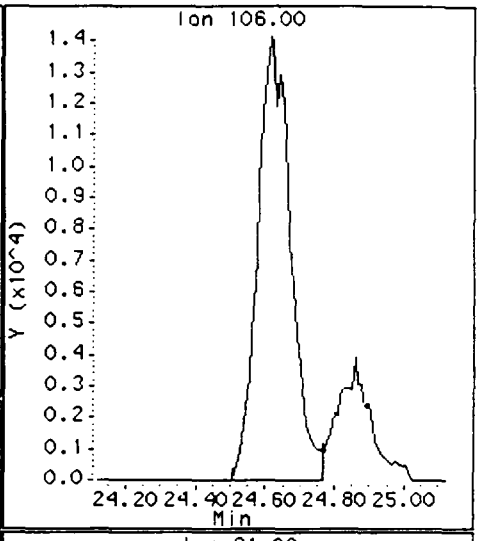
Operator: bel

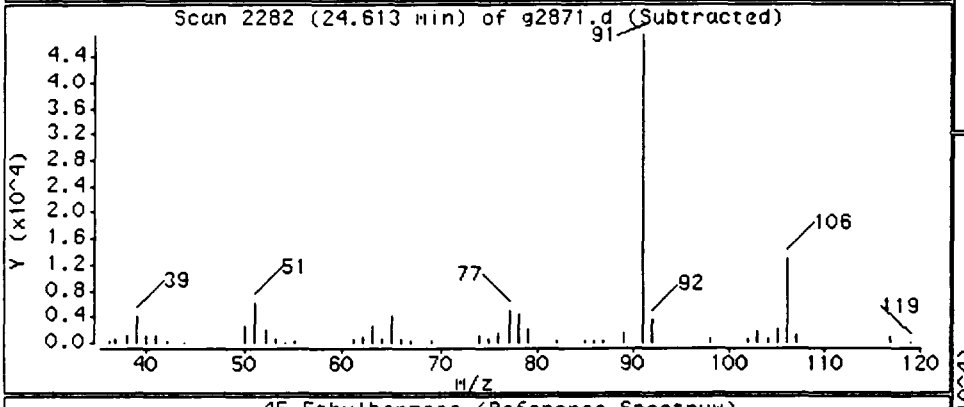
Column phase: CAP

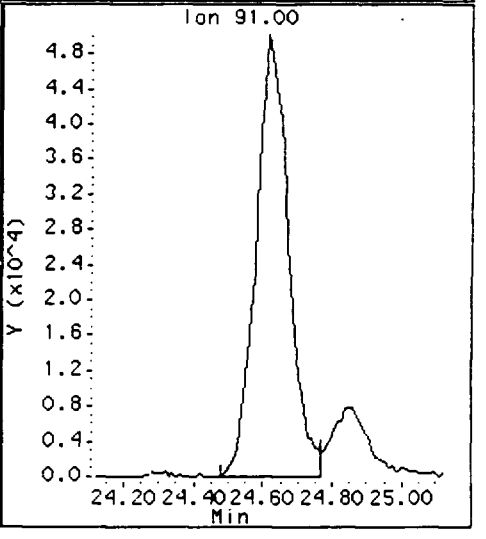
Column diameter: 0.53

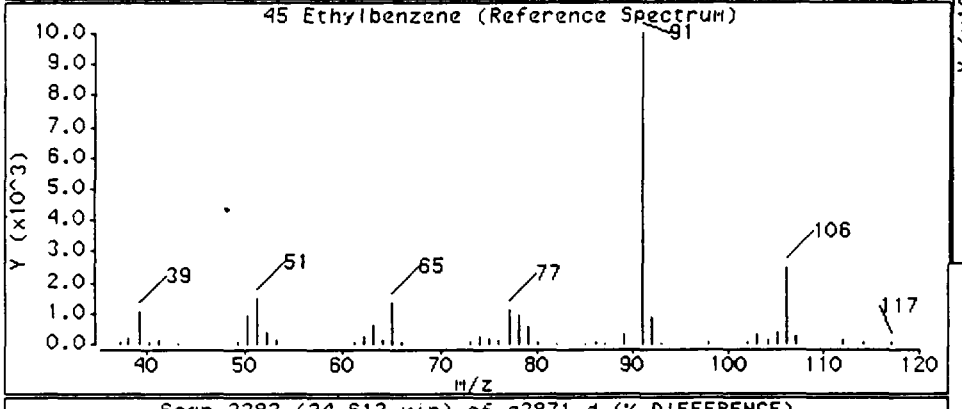
45 Ethylbenzene

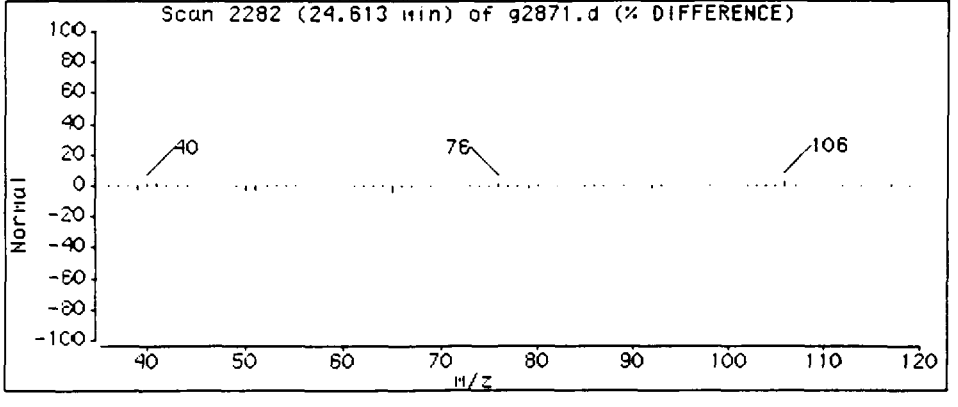



30014

Data File: /chem/hp5970g.i/961213.b/g2871.d

Date : 13-DEC-1996 14:14

Client ID: lgam

Instrument: hp5970g.i

Sample Info: 158550,lgam,961213g,bel,,,GEI

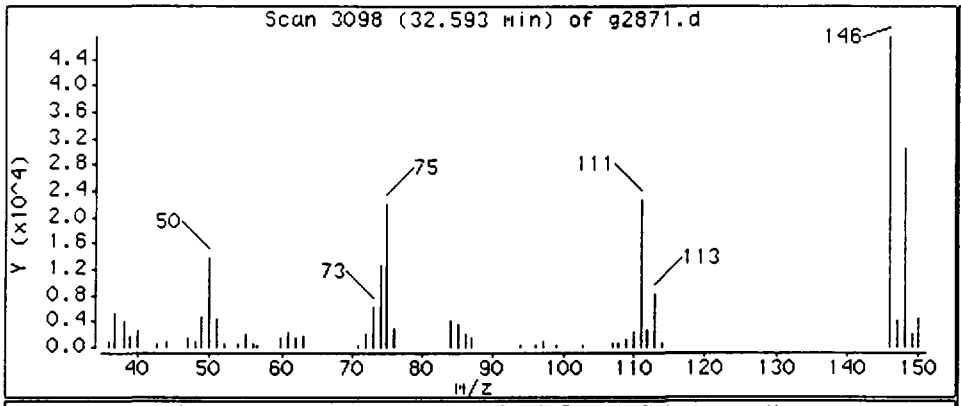
Purge Volume: 25.0

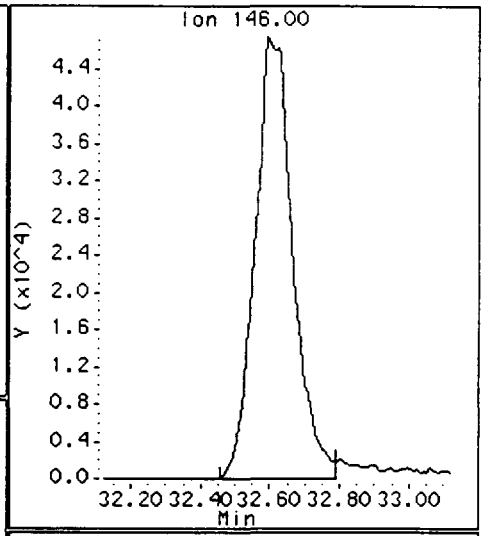
Operator: bel

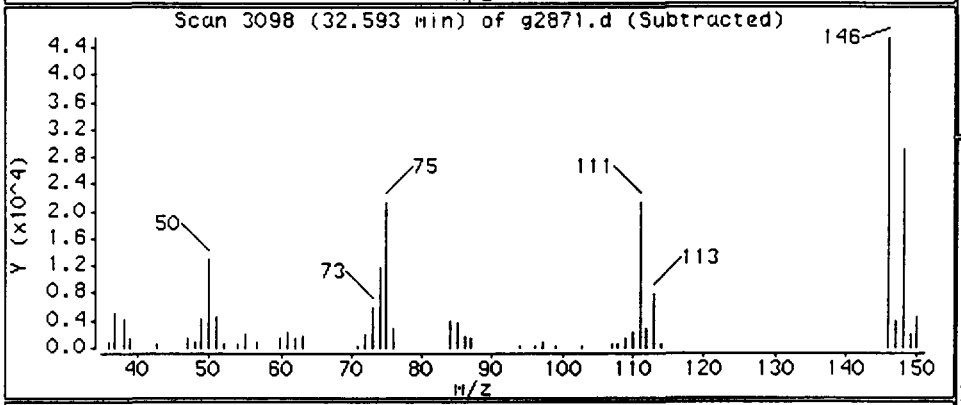
Column phase: CAP

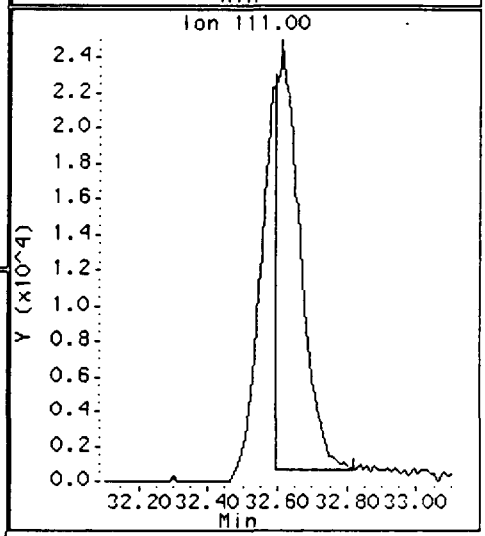
Column diameter: 0.53

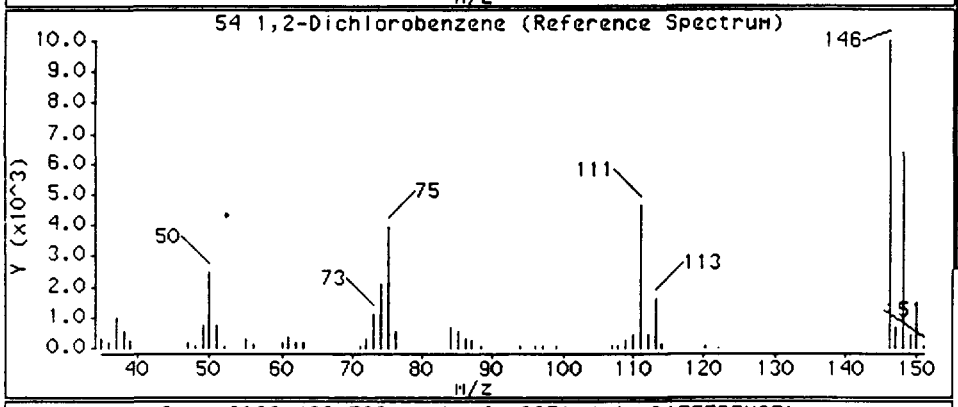
54 1,2-Dichlorobenzene

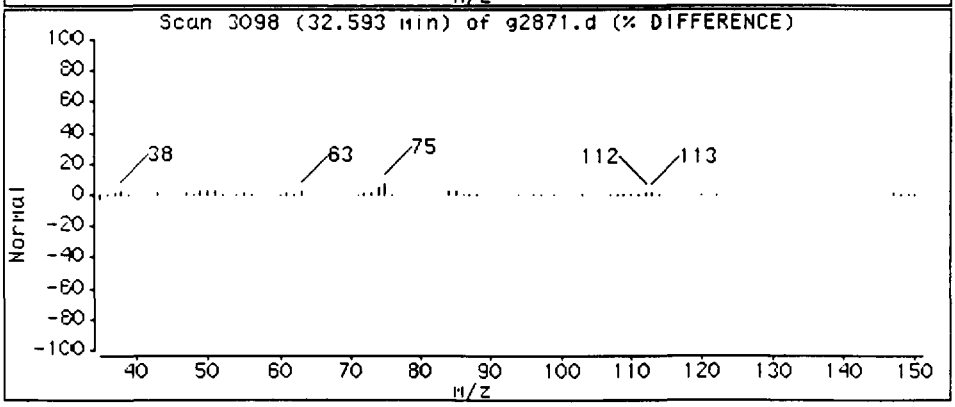



30015

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LGSW

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2124

Matrix: (soil/water) WATER Lab Sample ID: 158551

Sample wt/vol: 25.00 (g/mL) ML Lab File ID: G2872

Level: (low/med) LOW Date Received: 12/07/96

% Moisture: not dec. _____ Date Analyzed: 12/13/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | U |
| 75-01-4 | Vinyl Chloride | 3.1 | |
| 75-00-3 | Chloroethane | 1.0 | U |
| 75-09-2 | Methylene Chloride | 1.0 | U |
| 67-64-1 | Acetone | 1.0 | U |
| 75-15-0 | Carbon Disulfide | 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 2.6 | |
| 540-59-0 | 1,2-Dichloroethene (total) | 1.6 | |
| 67-66-3 | Chloroform | 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | U |
| 78-93-3 | 2-Butanone | 1.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | U |
| 79-01-6 | Trichloroethene | 1.6 | |
| 124-48-1 | Dibromochloromethane | 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | U |
| 71-43-2 | Benzene | 6.0 | |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | U |
| 75-25-2 | Bromoform | 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1.0 | U |
| 591-78-6 | 2-Hexanone | 1.0 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | U |
| 108-88-3 | Toluene | 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | U |
| 100-41-4 | Ethylbenzene | 2.6 | |
| 100-42-5 | Styrene | 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | U |

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LGSW

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2124

Matrix: (soil/water) WATER Lab Sample ID: 158551

Sample wt/vol: 25.00 (g/mL) ML Lab File ID: G2872

Level: (low/med) LOW Date Received: 12/07/96

% Moisture: not dec. _____ Date Analyzed: 12/13/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

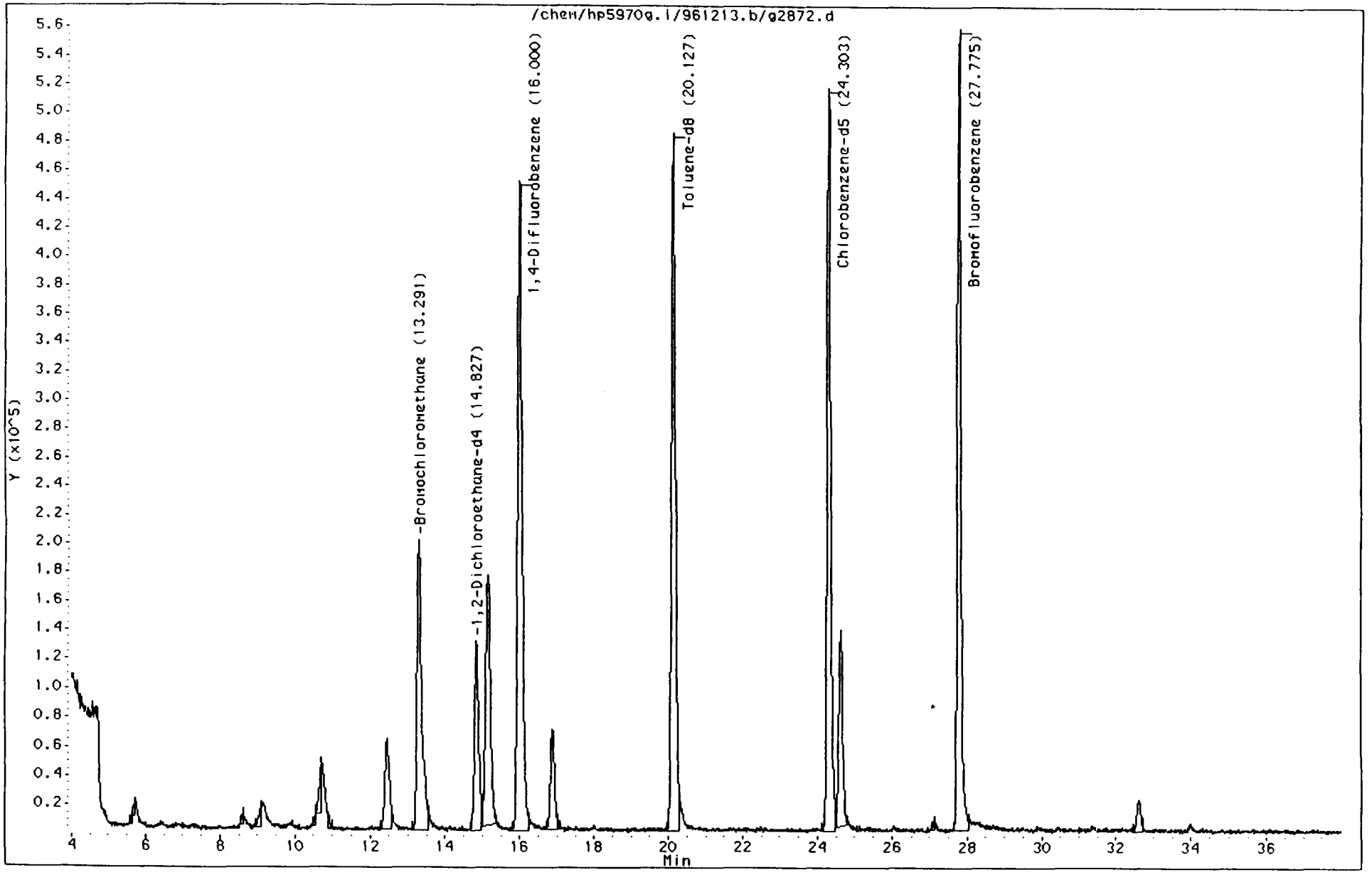
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-05-4 | Vinyl Acetate | 1.0 | U |
| 110-75-8 | 2-Chloroethylvinyl ether | 1.0 | U |
| ---------- | m and p-Xylene | 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | U |

30018

Data File: /chem/hp5970g.i/961213.b/g2872.d
Date : 13-DEC-1996 14:58
Client ID: lgsw
Sample Info: 158551,lgsw,961213g,bel,,,GEI
Purge Volume: 25.0
Column phase: CAP

Instrument: hp5970g.i

Operator: bel
Column diameter: 0.53



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970g.i/961213.b/g2872.d
Lab Smp Id: 158551 Client Smp ID: lgsw
Inj Date : 13-DEC-1996 14:58
Operator : bel Inst ID: hp5970g.i
Smp Info : 158551,lgsw,961213g,bel,,,GEI
Misc Info : ,0,,,1,0,,,,,,,07-DEC-1996
Comment :
Method : /chem/hp5970g.i/961213.b/gvoa25.m
Meth Date : 13-Dec-1996 11:10 Quant Type: ISTD
Cal Date : 13-DEC-96 10:22 Cal File: g2868.d
Als bottle: 8
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 8240.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ug/L) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| | 2 Vinyl Chloride | 62.00 | 4.050 | 4.018 | (0.305) | 65350 | 3.1 | 3.1(M) |
| | 14 1,1-Dichloroethane | 63.00 | 10.749 | 10.707 | (0.809) | 178934 | 2.6 | 2.6(M) |
| | 18 1,2-Dichloroethene (total) | 96.00 | 12.441 | 9.524 | (0.936) | 109578 | 3.2 | 3.2(QM) |
| * | 20 Bromochloromethane | 128.00 | 13.291 | 13.279 | (1.000) | 190097 | 10 | |
| $ | 25 1,2-Dichloroethane-d4 | 65.00 | 14.836 | 14.834 | (1.116) | 401953 | 10 | 10 |
| | 27 Benzene | 78.00 | 15.159 | 15.147 | (0.948) | 541374 | 6.0 | 6.0 |
| * | 28 1,4-Difluorobenzene | 114.00 | 15.991 | 15.998 | (1.000) | 1340286 | 10 | |
| | 29 Trichloroethene | 130.00 | 16.861 | 16.878 | (1.054) | 77485 | 1.6 | 1.6 |
| $ | 35 Toluene-d8 | 98.00 | 20.127 | 20.125 | (0.828) | 1209370 | 10 | 10 |
| * | 43 Chlorobenzene-d5 | 117.00 | 24.303 | 24.310 | (1.000) | 903540 | 10 | |
| | 45 Ethylbenzene | 106.00 | 24.616 | 24.623 | (1.013) | 102777 | 2.6 | 2.6(Q) |
| $ | 51 Bromofluorobenzene | 95.00 | 27.785 | 27.772 | (1.143) | 703825 | 10 | 10 |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: /chem/hp5970g.i/961213.b/g2872.d

Date : 13-DEC-1996 14:58

Client ID: lgsw

Instrument: hp5970g.i

Sample Info: 158551,lgsw,961213g,bel,,,GEI

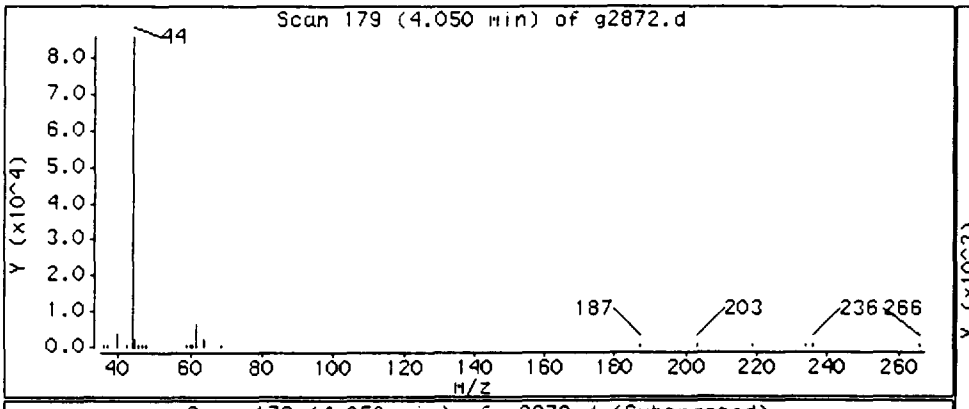
Purge Volume: 25.0

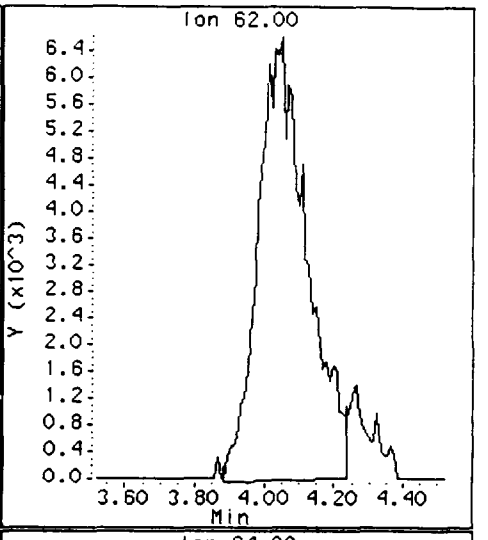
Operator: bel

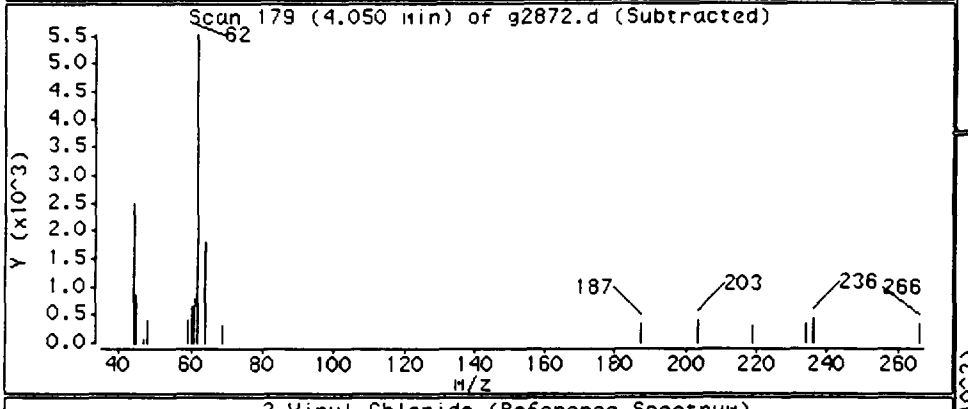
Column phase: CAP

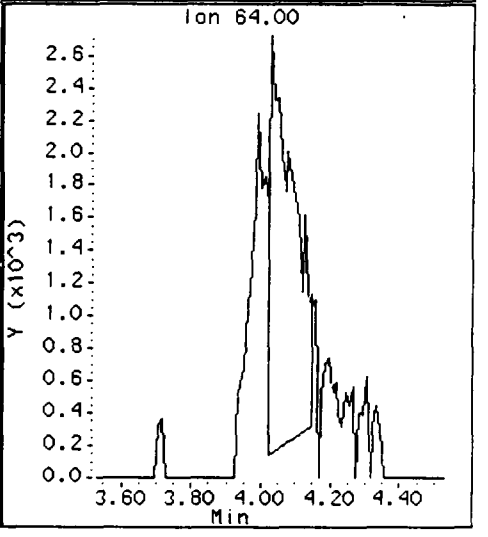
Column diameter: 0.53

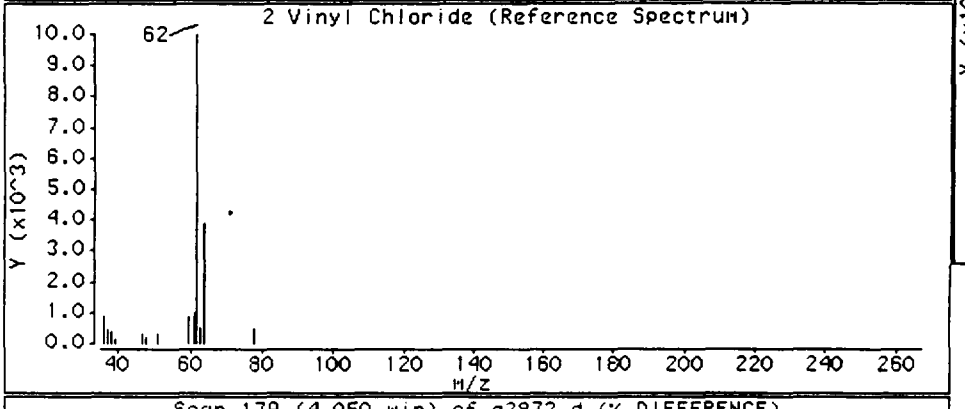
2 Vinyl Chloride

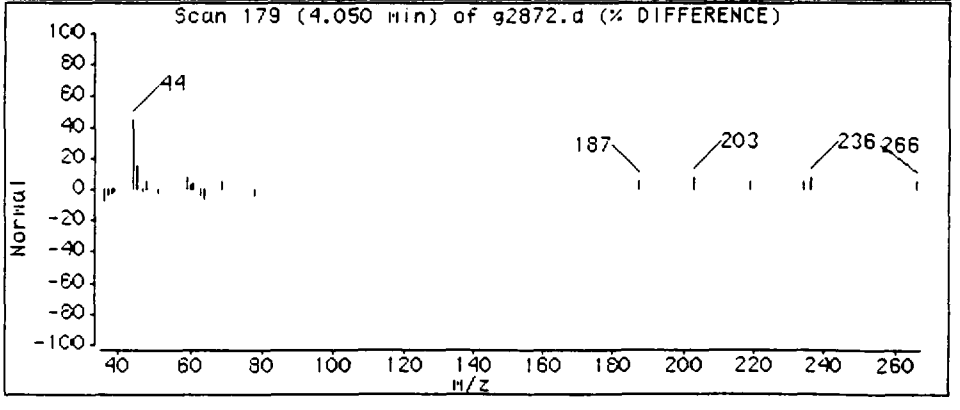


Data File: /chem/hp5970g.i/961213.b/g2872.d

Date : 13-DEC-1996 14:58

Client ID: lgsw

Instrument: hp5970g.i

Sample Info: 158551,lgsw,961213g,bel,,,GEI

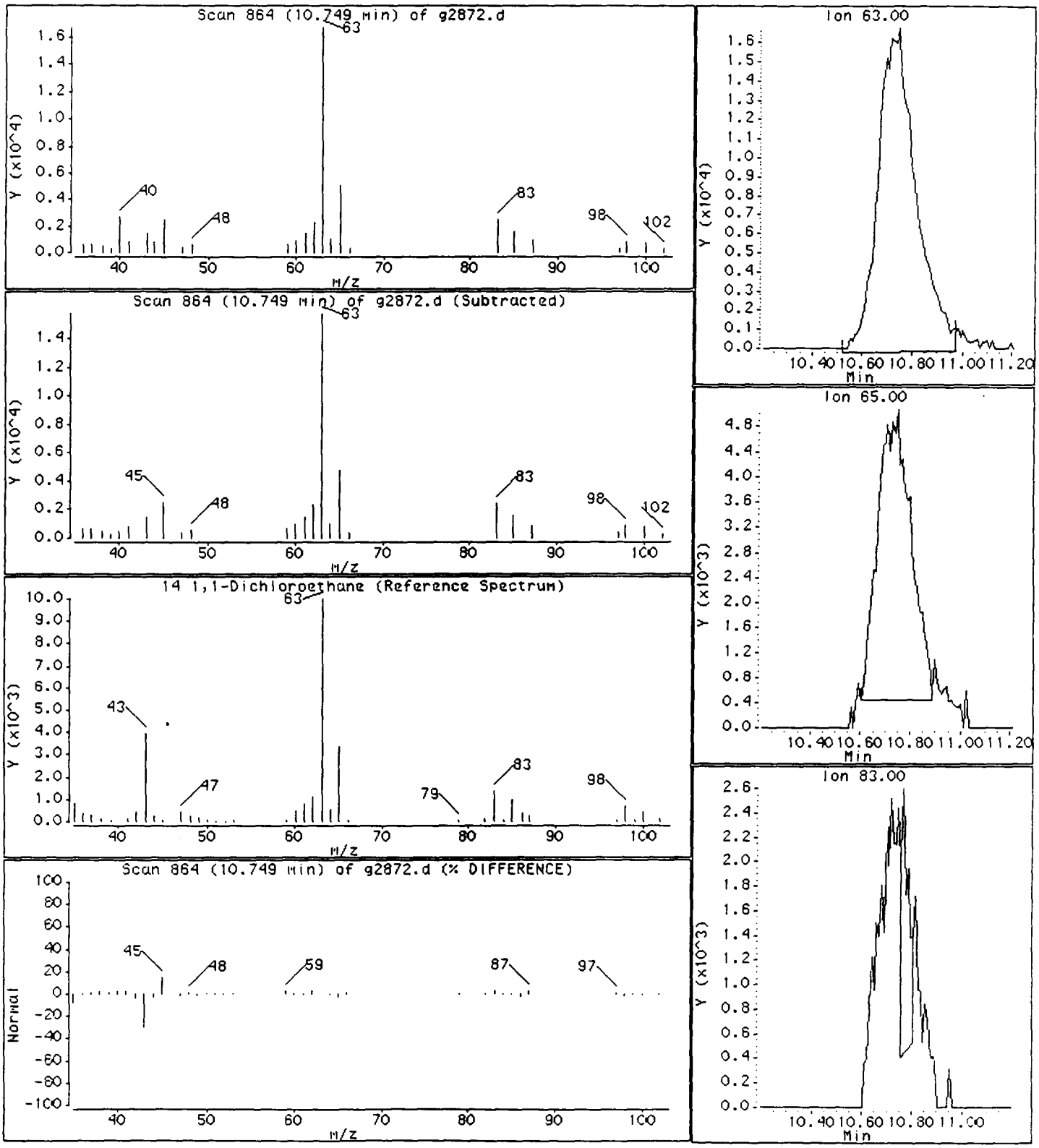
Purge Volume: 25.0

Operator: bel

Column phase: CAP

Column diameter: 0.53

14 1,1-Dichloroethane



Data File: /chem/hp5970g.i/961213.b/g2872.d

Date : 13-DEC-1996 14:58

Client ID: lgsw

Instrument: hp5970g.i

Sample Info: 158551,lgsw,961213g,bel,,,GEI

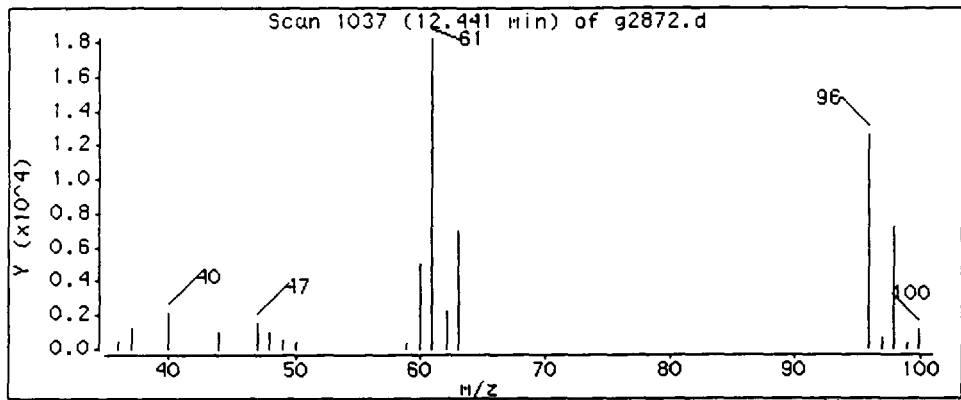
Purge Volume: 25.0

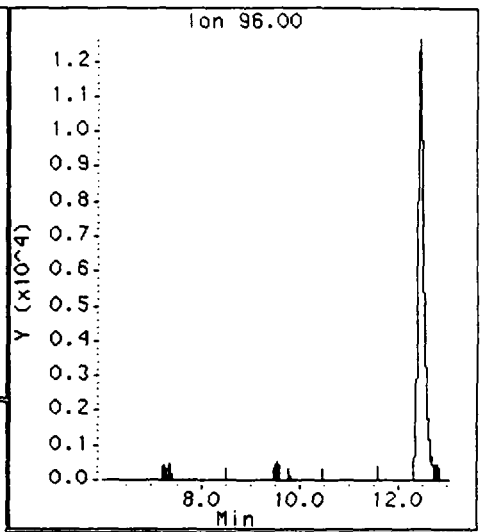
Operator: bel

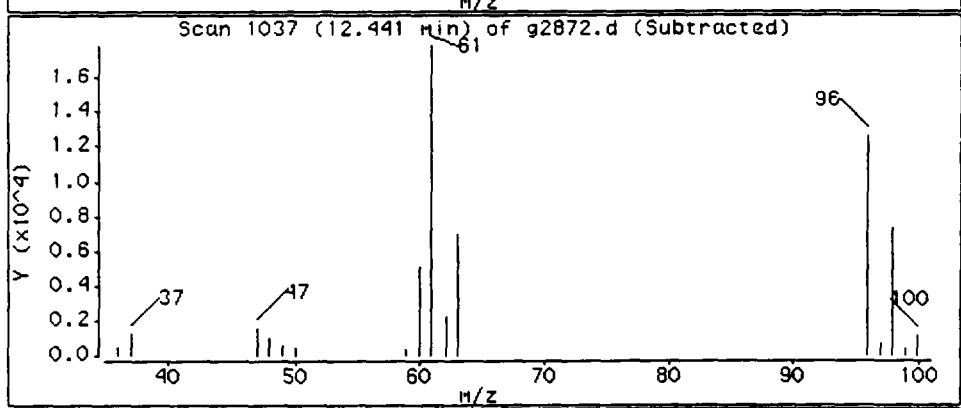
Column phase: CAP

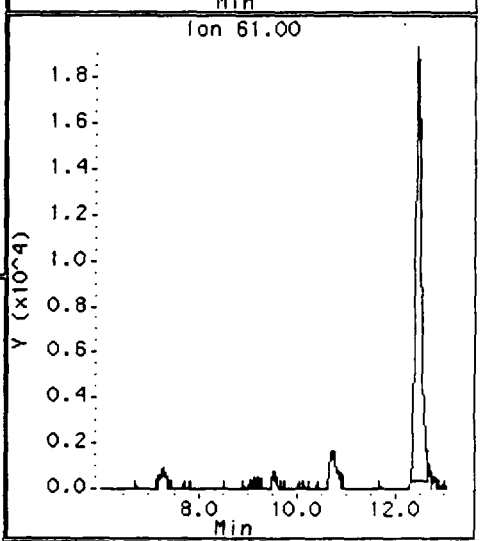
Column diameter: 0.53

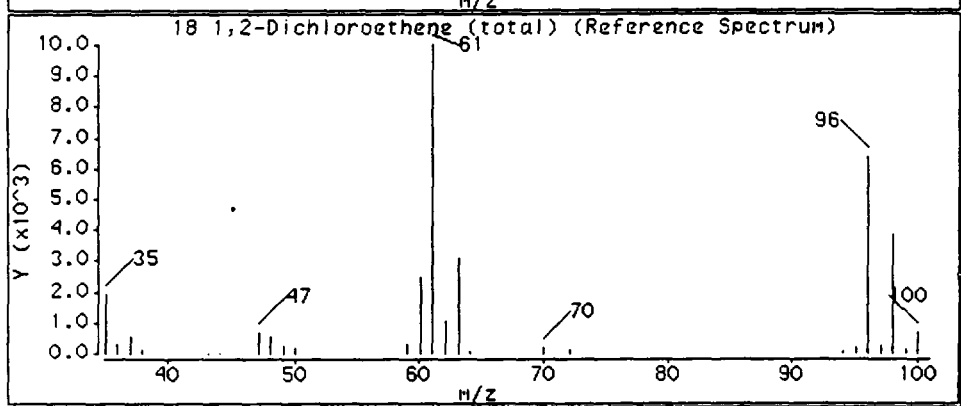
18 1,2-Dichloroethene (total)

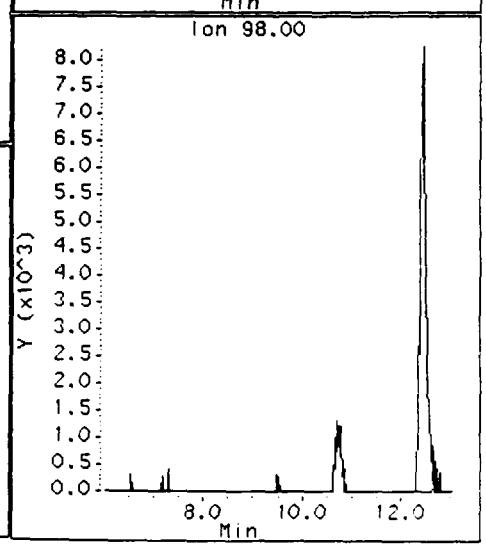


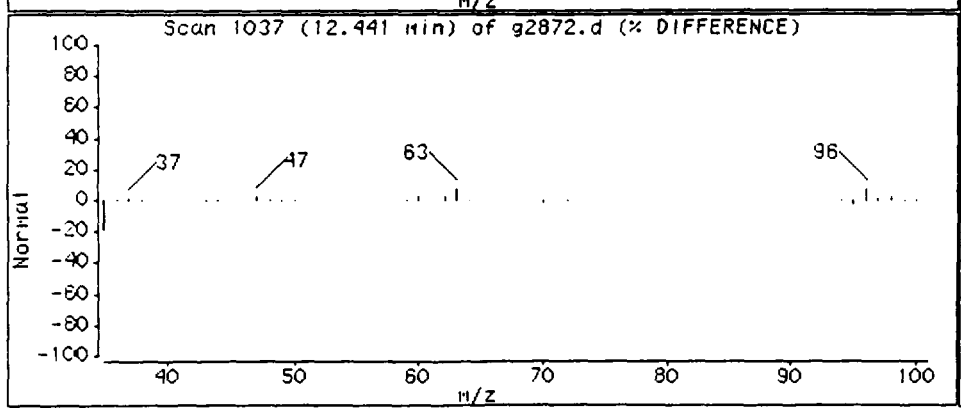




30022

Data File: /chem/hp5970g.i/961213.b/g2872.d

Date : 13-DEC-1996 14:58

Client ID: lgsm

Instrument: hp5970g.i

Sample Info: 158551,lgsm,961213g,bel,,,GEI

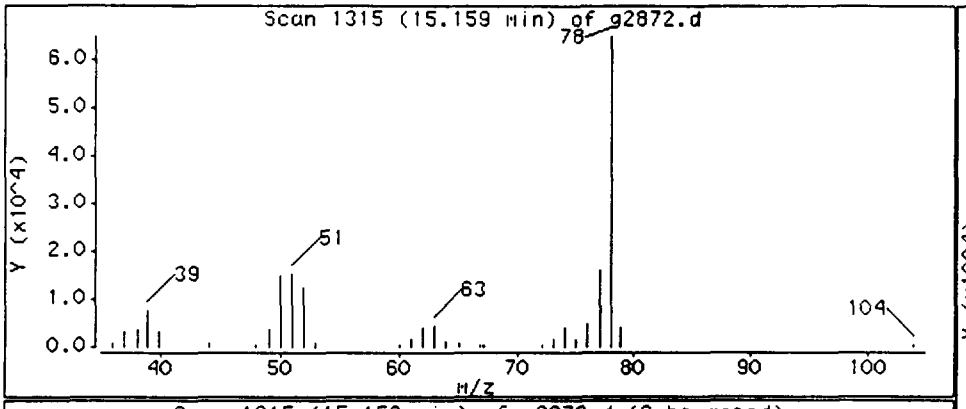
Purge Volume: 25.0

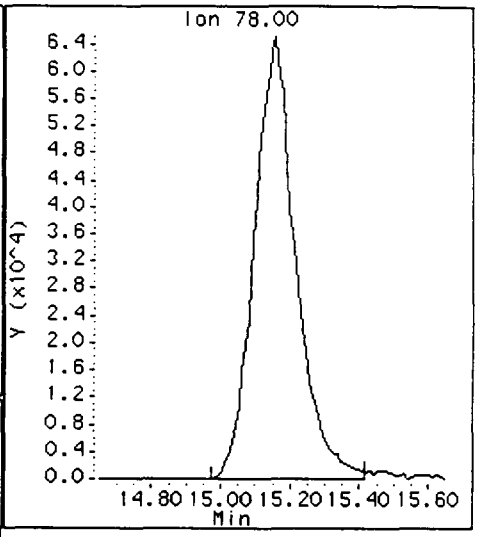
Operator: bel

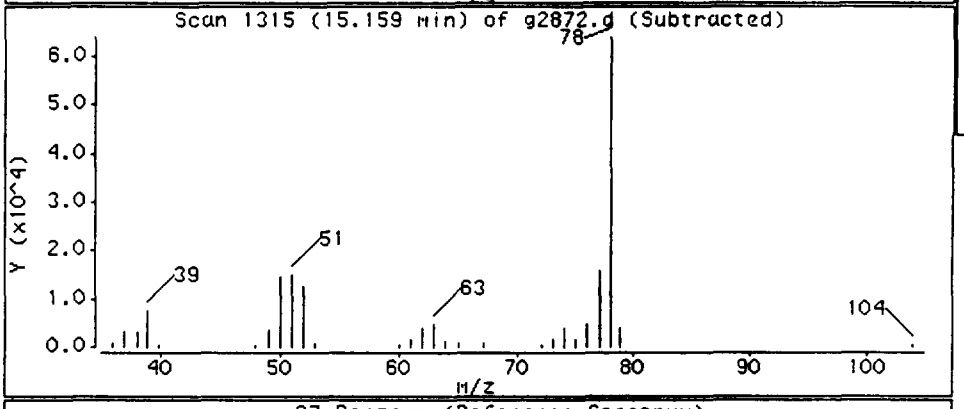
Column phase: CAP

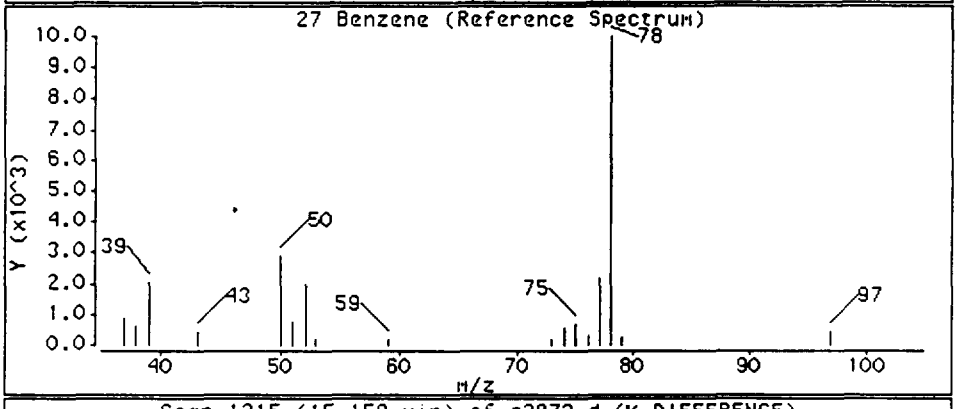
Column diameter: 0.53

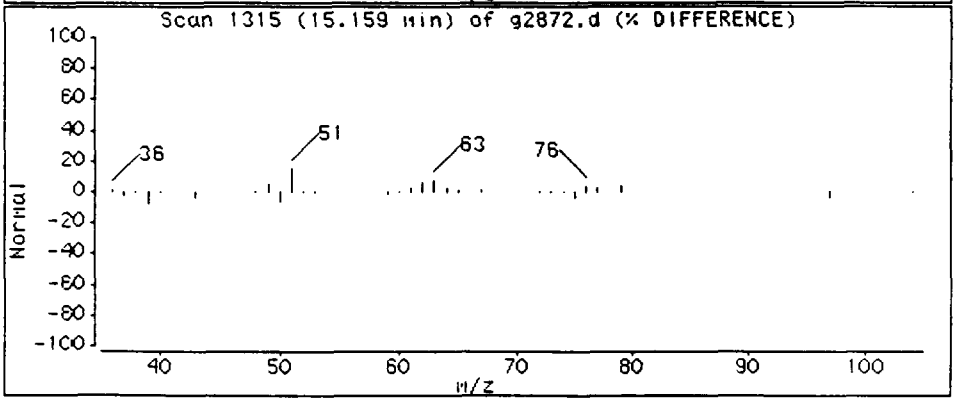
27 Benzene




30023

Data File: /chem/hp5970g.i/961213.b/g2872.d

Date : 13-DEC-1996 14:58

Client ID: lgsw

Instrument: hp5970g.i

Sample Info: 158551,lgsw,961213g,bel,,,GEI

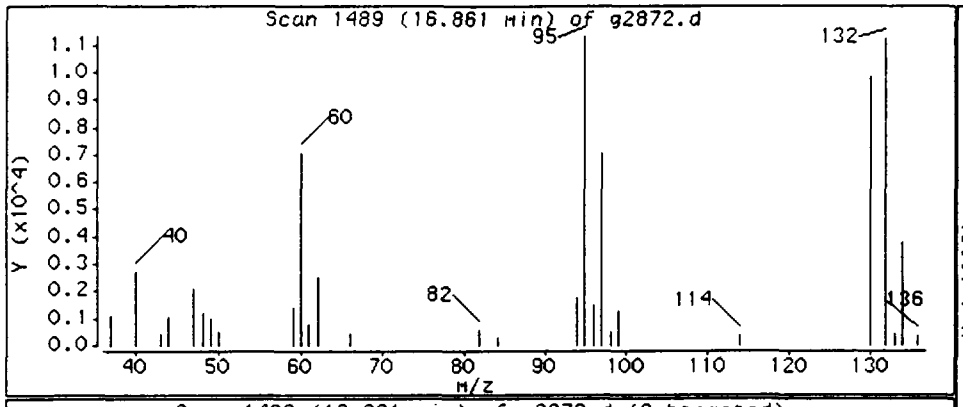
Purge Volume: 25.0

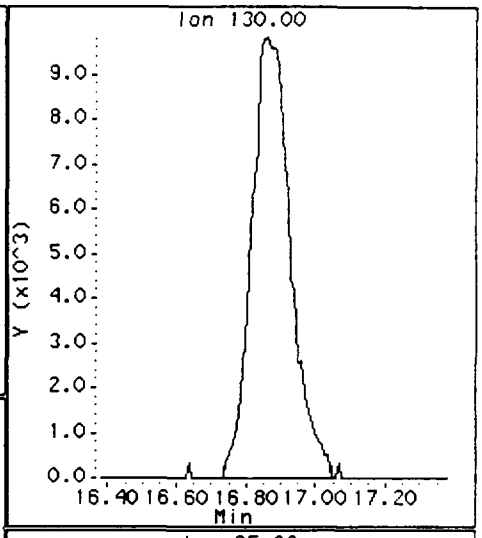
Operator: bel

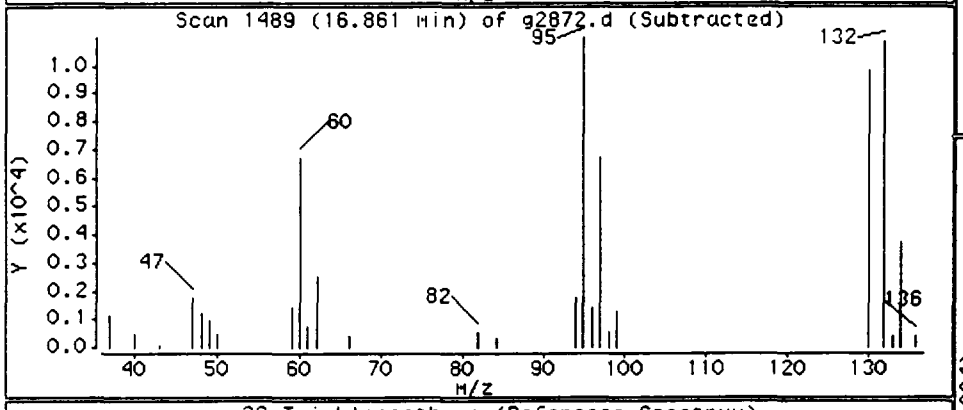
Column phase: CAP

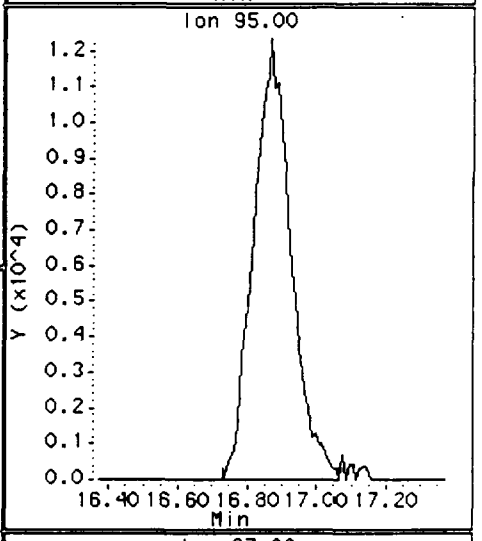
Column diameter: 0.53

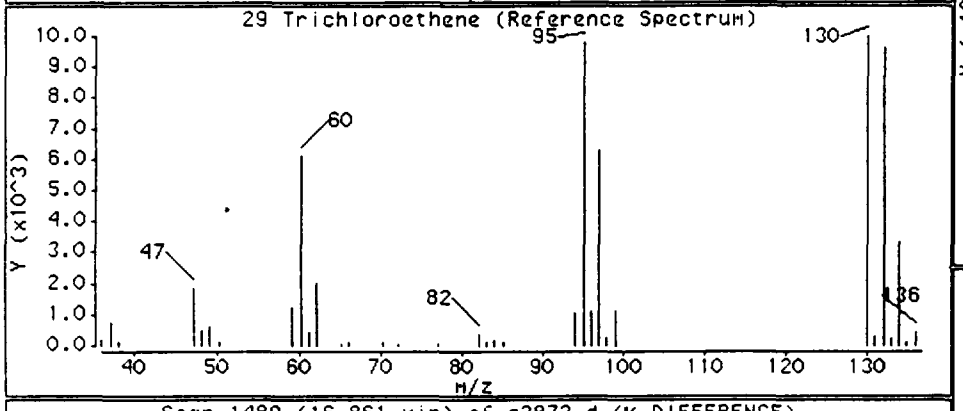
29 Trichloroethene

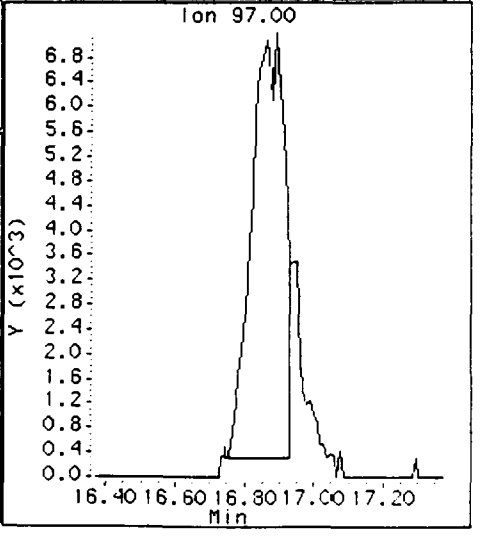


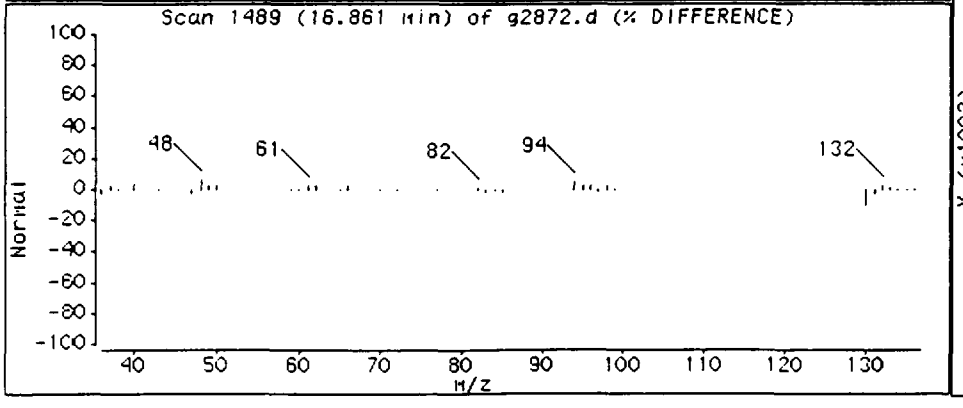



Data File: /chem/hp5970g.i/961213.b/g2872.d

Date : 13-DEC-1996 14:58

Client ID: lgsw

Instrument: hp5970g.i

Sample Info: 158551,lgsw,961213g,bel,,,GEI

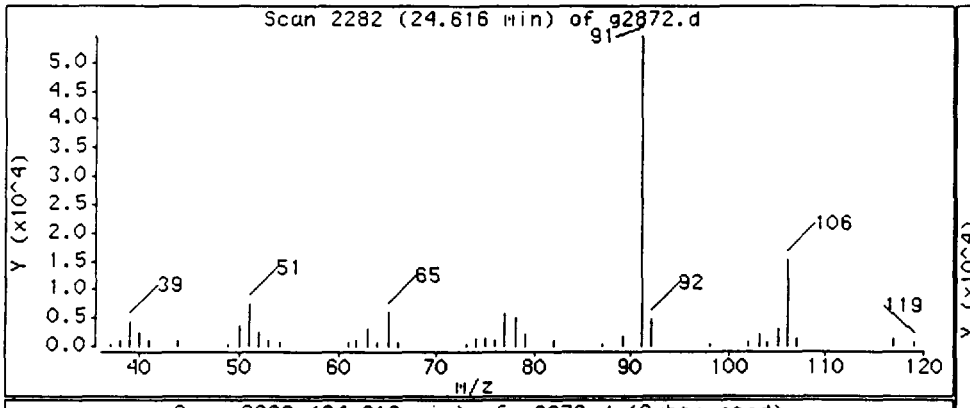
Purge Volume: 25.0

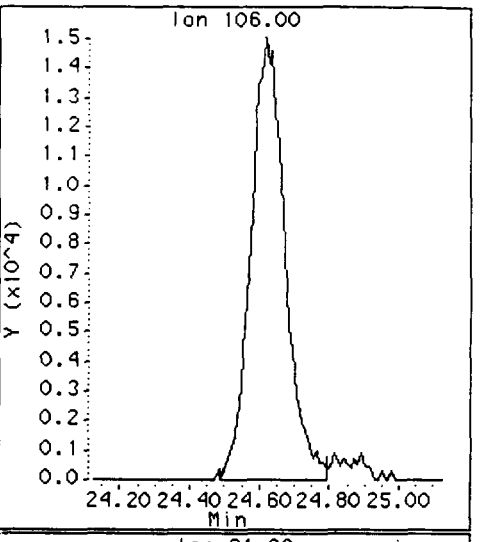
Operator: bel

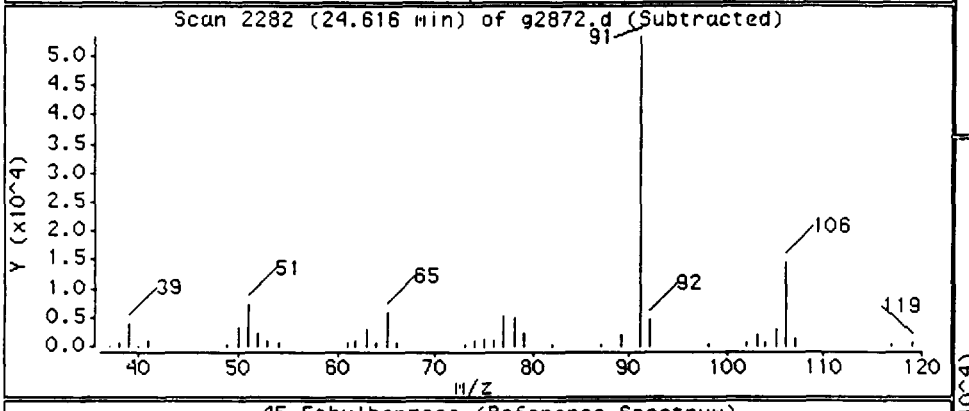
Column phase: CAP

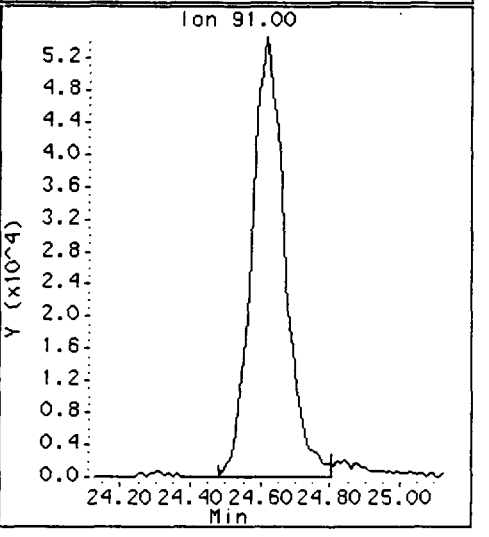
Column diameter: 0.53

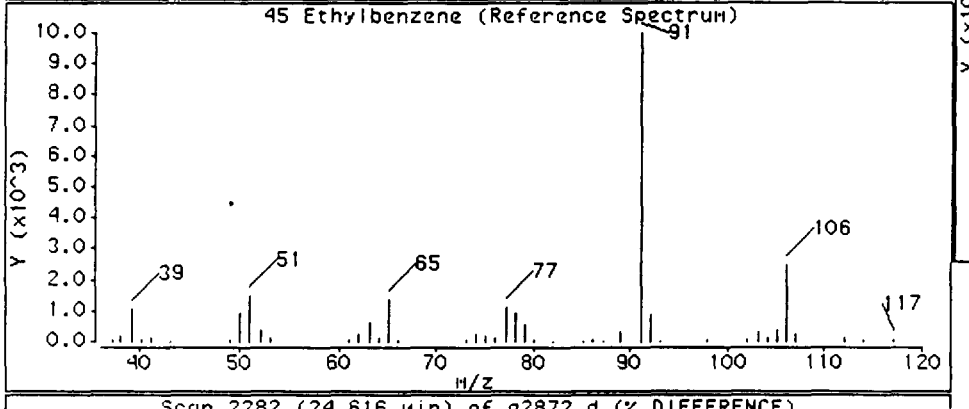
45 Ethylbenzene

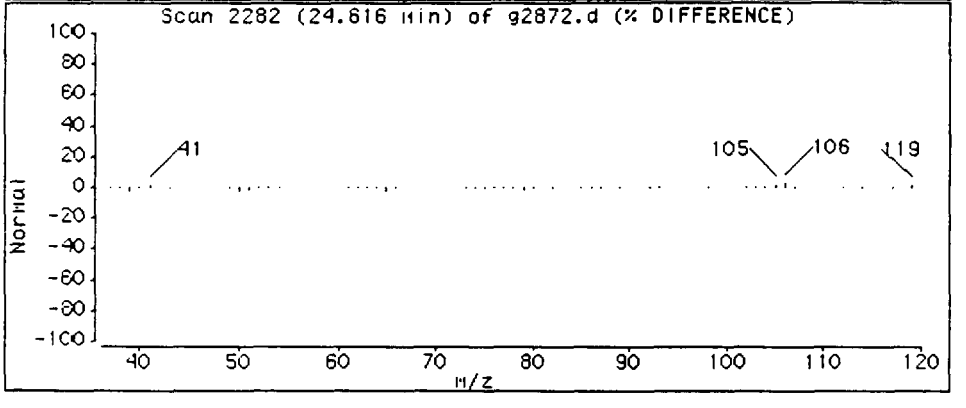



30026

## 3C. STANDARDS DATA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2124

Instrument ID: HP5970G Calibration Date(s): 09/10/96 09/10/96

Heated Purge: (Y/N) N Calibration Time(s): 1544 1910

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF2 =G2103 RRF4 =G2104
RRF10 =G2102 RRF20 =G2105 RRF40 =G2106

| COMPOUND | | RRF2 | RRF4 | RRF10 | RRF20 | RRF40 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|---|
| Chloromethane | | 0.787 | 0.727 | 0.550 | 0.692 | 0.552 | 0.662 | 16.1 |
| Bromomethane | * | 1.570 | 1.607 | 1.298 | 1.571 | 1.324 | 1.474 | 10.2* |
| Vinyl Chloride | * | 1.000 | 1.006 | 0.803 | 0.911 | 0.726 | 0.889 | 13.8* |
| Chloroethane | | 0.703 | 0.737 | 0.671 | 0.700 | 0.569 | 0.676 | 9.5 |
| Methylene Chloride | | 1.363 | 1.341 | 1.309 | 1.238 | 1.121 | 1.274 | 7.7 |
| Acetone | | 0.111 | 0.117 | 0.110 | 0.101 | 0.085 | 0.105 | 11.9 |
| Carbon Disulfide | | 4.440 | 4.723 | 4.325 | 4.034 | 3.733 | 4.251 | 9.0 |
| 1,1-Dichloroethene | * | 1.713 | 1.780 | 1.616 | 1.562 | 1.402 | 1.615 | 9.0* |
| 1,1-Dichloroethane | * | 3.013 | 3.612 | 3.658 | 3.170 | 3.104 | 3.311 | 9.1* |
| 1,2-Dichloroethene (total) | | 3.936 | 4.332 | 4.413 | 3.916 | 3.538 | 4.027 | 8.8 |
| Chloroform | * | 4.826 | 5.395 | 4.770 | 4.815 | 4.494 | 4.860 | 6.8* |
| 1,2-Dichloroethane | * | 2.284 | 2.352 | 1.962 | 2.162 | 2.041 | 2.160 | 7.5* |
| 2-Butanone | | 0.173 | 0.161 | 0.152 | 0.156 | 0.148 | 0.158 | 6.1 |
| 1,1,1-Trichloroethane | * | 0.800 | 0.866 | 0.783 | 0.792 | 0.786 | 0.805 | 4.3* |
| Carbon Tetrachloride | * | 0.764 | 0.844 | 0.738 | 0.816 | 0.810 | 0.794 | 5.4* |
| Bromodichloromethane | * | 0.662 | 0.682 | 0.648 | 0.661 | 0.666 | 0.664 | 1.8* |
| 1,2-Dichloropropane | | 0.272 | 0.272 | 0.270 | 0.257 | 0.264 | 0.267 | 2.3 |
| cis-1,3-Dichloropropene | * | 0.345 | 0.360 | 0.365 | 0.361 | 0.379 | 0.362 | 3.0* |
| Trichloroethene | * | 0.430 | 0.457 | 0.420 | 0.437 | 0.432 | 0.435 | 3.2* |
| Dibromochloromethane | * | 0.458 | 0.434 | 0.446 | 0.473 | 0.465 | 0.455 | 3.4* |
| 1,1,2-Trichloroethane | * | 0.171 | 0.172 | 0.168 | 0.176 | 0.178 | 0.173 | 2.2* |
| Benzene | * | 0.726 | 0.736 | 0.672 | 0.682 | 0.685 | 0.700 | 4.1* |
| trans-1,3-Dichloropropene | * | 0.253 | 0.266 | 0.281 | 0.283 | 0.298 | 0.276 | 6.7* |
| Bromoform | * | 0.236 | 0.239 | 0.258 | 0.273 | 0.270 | 0.255 | 6.7* |
| 4-Methyl-2-Pentanone | | 0.114 | 0.098 | 0.117 | 0.100 | 0.126 | 0.111 | 10.8 |
| 2-Hexanone | | 0.054 | 0.059 | 0.072 | 0.067 | 0.071 | 0.065 | 11.6 |
| Tetrachloroethene | * | 0.572 | 0.597 | 0.660 | 0.590 | 0.566 | 0.597 | 6.3* |
| 1,1,2,2-Tetrachloroethane | * | 0.292 | 0.266 | 0.283 | 0.280 | 0.292 | 0.283 | 3.7* |
| Toluene | * | 1.306 | 1.364 | 1.328 | 1.270 | 1.288 | 1.311 | 2.8* |
| Chlorobenzene | * | 1.021 | 1.037 | 1.061 | 0.996 | 1.005 | 1.024 | 2.5* |
| Ethylbenzene | * | 0.506 | 0.514 | 0.504 | 0.489 | 0.501 | 0.503 | 1.8* |
| Styrene | * | 0.883 | 0.895 | 0.917 | 0.944 | 0.958 | 0.919 | 3.5* |
| Trichlorofluoromethane | | 4.844 | 5.062 | 4.169 | 4.788 | 3.994 | 4.571 | 10.1 |
| Vinyl Acetate | | 0.144 | 0.145 | 0.162 | 0.137 | 0.150 | 0.148 | 6.2 |
| 2-Chloroethylvinyl ether | | 0.270 | 0.272 | 0.270 | 0.257 | 0.264 | 0.267 | 2.2 |
| m and p-Xylene | | 1.212 | 1.253 | 1.286 | 1.251 | 1.255 | 1.251 | 2.1 |
| o-Xylene | | 0.577 | 0.627 | 0.634 | 0.600 | 0.606 | 0.609 | 3.8 |

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A

# VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2124

Instrument ID: HP5970G Calibration Date(s): 09/10/96 09/10/96

Heated Purge: (Y/N) N Calibration Time(s): 1544 1910

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF2 =G2103 RRF4 =G2104
RRF10 =G2102 RRF20 =G2105 RRF40 =G2106

| COMPOUND | RRF2 | RRF4 | RRF10 | RRF20 | RRF40 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.945 | 0.933 | 0.973 | 0.984 | 0.976 | 0.962 | 2.3 |
| 1,4-Dichlorobenzene | 0.857 | 0.869 | 0.965 | 0.963 | 0.957 | 0.922 | 5.9 |
| 1,2-Dichlorobenzene | 0.653 | 0.730 | 0.768 | 0.777 | 0.768 | 0.739 | 7.0 |
| Toluene-d8 | 1.332 | 1.300 | 1.376 | 1.209 | 1.194 | 1.282 | 6.1 |
| Bromofluorobenzene * | 0.803 | 0.746 | 0.823 | 0.752 | 0.756 | 0.776 | 4.5* |
| 1,2-Dichloroethane-d4 | 2.070 | 2.038 | 1.837 | 1.856 | 1.813 | 1.923 | 6.3 |

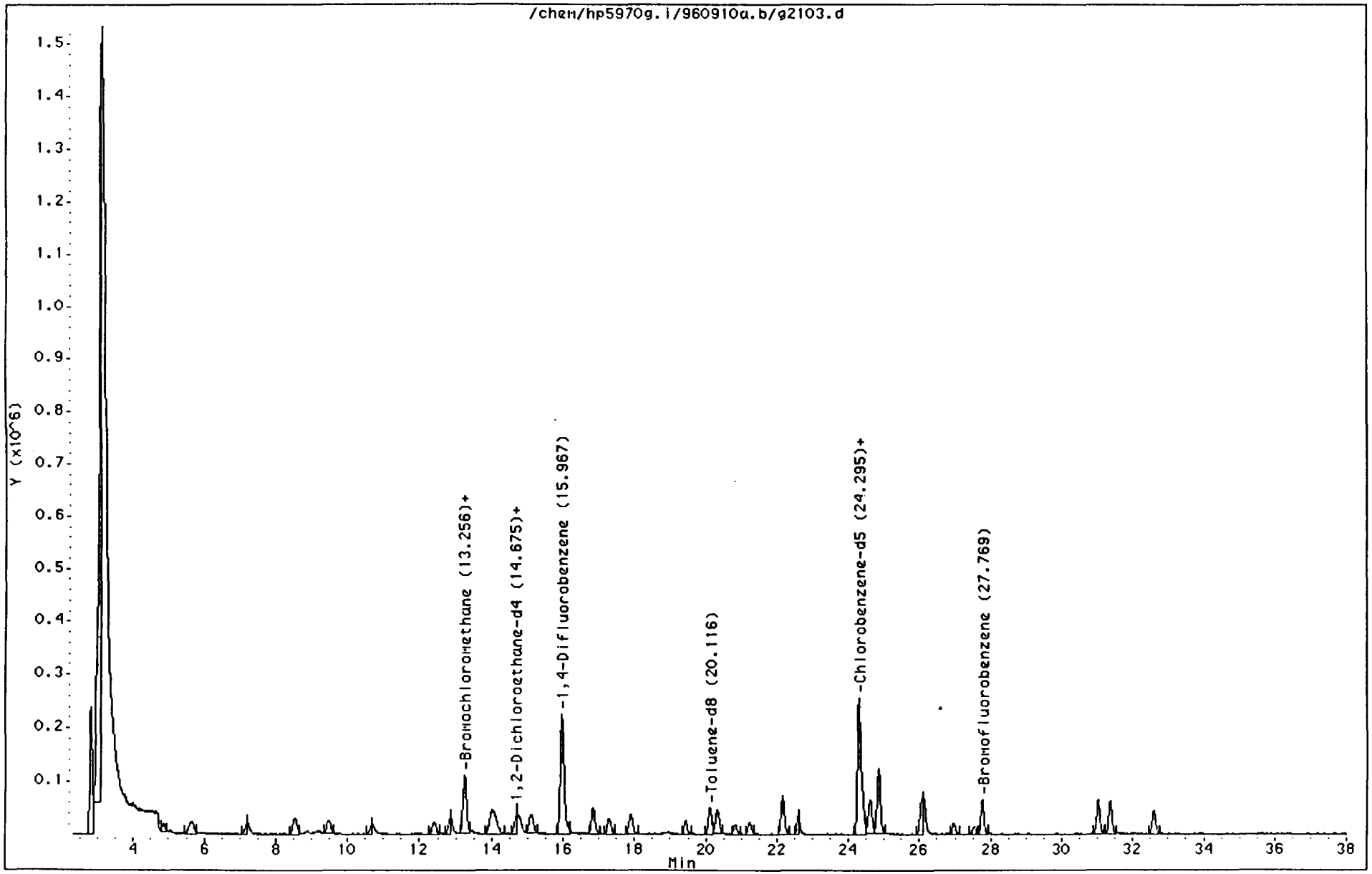
* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

Data File: /chem/hp5970g.i/960910a.b/g2103.d
Date : 10-SEP-96 17:01
Client ID: vstd002
Sample Info: vstd002,vstd002,960910ga,bel,,,NET
Purge Volume: 25.0
Column phase: CAP

Instrument: hp5970g.i
Operator: bel
Column diameter: 0.53



30029



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970g.i/960910a.b/g2103.d
Lab Smp Id: vstd002 Client Smp ID: vstd002
Inj Date : 10-SEP-96 17:01
Operator : bel Inst ID: hp5970g.i
Smp Info : vstd002,vstd002,960910ga,bel,,,NET
Misc Info : ,1,1,,1,0,,,,,,,
Comment :
Method : /chem/hp5970g.i/960910a.b/gvoa25.m
Meth Date : 11-Sep-1996 09:59 Quant Type: ISTD
Cal Date : 10-SEP-1996 15:44 Cal File: g2102.d
Als bottle: 7 Calibration Sample, Level: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 1 Chloromethane | 50.00 | 3.754 | 3.754 | (0.283) | 16585 | 2.0 | 2.4(a) |
| 2 Vinyl Chloride | 62.00 | 3.979 | 3.979 | (0.300) | 21079 | 2.0 | 2.2(a) |
| 3 Bromomethane | 94.00 | 4.869 | 4.869 | (0.367) | 33074 | 2.0 | 2.1(a) |
| 4 Chloroethane | 64.00 | 5.016 | 5.016 | (0.378) | 14824 | 2.0 | 2.1(aM) |
| 5 Trichlorofluoromethane | 101.00 | 5.642 | 5.642 | (0.426) | 102064 | 2.0 | 2.1(aQ) |
| 6 Acrolein | 56.00 | 6.611 | 6.611 | (0.499) | 1194 | 20 | 14(QM) |
| 7 Acetone | 43.00 | 6.846 | 6.846 | (0.516) | 2337 | 2.0 | 2.1(aM) |
| 8 1,1-Dichloroethene | 96.00 | 7.198 | 7.198 | (0.543) | 36104 | 2.0 | 2.1(aQM) |
| 9 Carbon Disulfide | 76.00 | 8.539 | 8.539 | (0.644) | 93573 | 2.0 | 2.1(a) |
| 10 Methylene Chloride | 84.00 | 8.568 | 8.568 | (0.646) | 28715 | 2.0 | 2.1(a) |
| 11 Acrylonitrile | 53.00 | 8.882 | 8.882 | (0.670) | 13806 | 20 | 20(QM) |
| 12 Methyl-t-butyl ether | 73.00 | 9.165 | 9.165 | (0.691) | 43446 | 2.0 | 2.1(aM) |
| 13 trans-1,2-Dichloroethene | 96.00 | 9.478 | 9.478 | (0.715) | 39146 | 2.0 | 2.1(aM) |
| 14 1,1-Dichloroethane | 63.00 | 10.682 | 10.682 | (0.806) | 63494 | 2.0 | 1.8(a) |
| 15 Vinyl Acetate | 43.00 | 10.780 | 10.780 | (0.675) | 19992 | 2.0 | 2.0(aM) |
| 16 2-Butanone | 43.00 | 11.964 | 11.964 | (0.903) | 3645 | 2.0 | 2.2(aM) |
| 17 cis-1,2-Dichloroethene | 96.00 | 12.395 | 12.395 | (0.935) | 38006 | 2.0 | 1.9(a) |
| 18 1,2-Dichloroethene (total) | 96.00 | 12.395 | 12.395 | (0.935) | 82946 | 4.0 | 3.9(aM) |
| 19 Chloroform | 83.00 | 12.864 | 12.864 | (0.970) | 101704 | 2.0 | 2.0(a) |
| * 20 Bromochloromethane | 128.00 | 13.256 | 13.256 | (1.000) | 105361 | 10 | (Q) |
| 21 Tetrahydrofuran | 42.00 | 13.383 | 13.383 | (1.010) | 415 | 2.0 | 0.55(aM) |
| 22 1,1,1-Trichloroethane | 97.00 | 14.009 | 14.009 | (0.877) | 110885 | 2.0 | 2.0(a) |
| 23 Cyclohexane | 56.00 | 14.107 | 14.107 | (1.064) | 49619 | 2.0 | 2.0(aQM) |

| | | | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|---|
| | 24 | Carbon Tetrachloride | 117.00 | 14.714 | 14.714 | (0.922) | 105955 | 2.0 | 1.9(aQ) |
| $ | 25 | 1,2-Dichloroethane-d4 | 65.00 | 14.802 | 14.802 | (1.117) | 43619 | 2.0 | 2.2(aM) |
| | 26 | 1,2-Dichloroethane | 62.00 | 15.057 | 15.057 | (1.136) | 48137 | 2.0 | 2.1(aQM) |
| | 27 | Benzene | 78.00 | 15.096 | 15.096 | (0.945) | 100688 | 2.0 | 2.1(aM) |
| * | 28 | 1,4-Difluorobenzene | 114.00 | 15.967 | 15.967 | (1.000) | 693110 | 10 | |
| | 29 | Trichloroethene | 130.00 | 16.838 | 16.838 | (1.055) | 59551 | 2.0 | 2.0(aQ) |
| | 30 | 1,2-Dichloropropane | 63.00 | 17.278 | 17.278 | (1.082) | 37683 | 2.0 | 2.0(aM) |
| | 31 | Bromodichloromethane | 83.00 | 17.885 | 17.885 | (1.120) | 91791 | 2.0 | 2.0(a) |
| | 32 | 2-Chloroethylvinyl ether | 63.00 | 17.278 | 17.278 | (1.082) | 37500 | 2.0 | 2.0(aM) |
| | 33 | 4-Methyl-2-Pentanone | 43.00 | 18.961 | 18.961 | (0.781) | 11121 | 2.0 | 2.1(aM) |
| | 34 | cis-1,3-Dichloropropene | 75.00 | 19.431 | 19.431 | (1.217) | 47845 | 2.1 | 2.0(a) |
| $ | 35 | Toluene-d8 | 98.00 | 20.116 | 20.116 | (0.828) | 129314 | 2.0 | 2.1(a) |
| | 36 | Toluene | 91.00 | 20.331 | 20.331 | (0.837) | 126766 | 2.0 | 2.0(a) |
| | 37 | trans-1,3-Dichloropropene | 75.00 | 20.821 | 20.821 | (1.304) | 35018 | 1.9 | 1.7(a) |
| | 38 | 1,1,2-Trichloroethane | 97.00 | 21.232 | 21.232 | (1.330) | 23704 | 2.0 | 2.0(a) |
| | 39 | 1,1,2,2-Tetrachloroethane | 83.00 | 27.534 | 27.534 | (1.134) | 28311 | 2.0 | 2.1(a) |
| | 40 | 2-Hexanone | 43.00 | 21.378 | 21.378 | (0.880) | 5290 | 2.0 | 1.7(aQM) |
| | 41 | Tetrachloroethene | 164.00 | 22.142 | 22.142 | (0.912) | 55526 | 2.0 | 1.9(a) |
| | 42 | Dibromochloromethane | 129.00 | 22.592 | 22.592 | (1.415) | 63461 | 2.0 | 2.0(a) |
| * | 43 | Chlorobenzene-d5 | 117.00 | 24.285 | 24.285 | (1.000) | 485441 | 10 | |
| | 44 | Chlorobenzene | 112.00 | 24.393 | 24.393 | (1.004) | 99117 | 2.0 | 2.0(a) |
| | 45 | Ethylbenzene | 106.00 | 24.598 | 24.598 | (1.013) | 49171 | 2.0 | 2.0(aM) |
| | 46 | m and p-Xylene | 106.00 | 24.843 | 24.843 | (1.023) | 117634 | 4.0 | 3.9(a) |
| | 47 | o-Xylene | 106.00 | 26.056 | 26.056 | (1.073) | 55985 | 2.0 | 1.9(a) |
| | 48 | Xylene (Total) | 106.00 | 26.056 | 26.056 | (1.073) | 55985 | 2.0 | 1.9(a) |
| | 49 | Styrene | 104.00 | 26.135 | 26.135 | (1.076) | 85747 | 2.0 | 1.9(a) |
| | 50 | Bromoform | 173.00 | 26.976 | 26.976 | (1.690) | 32720 | 2.0 | 1.8(aQM) |
| $ | 51 | Bromofluorobenzene | 95.00 | 27.769 | 27.769 | (1.143) | 78003 | 2.0 | 2.1(a) |
| | 52 | 1,3-Dichlorobenzene | 146.00 | 31.028 | 31.028 | (1.278) | 91738 | 2.0 | 2.0(a) |
| | 53 | 1,4-Dichlorobenzene | 146.00 | 31.360 | 31.360 | (1.291) | 83174 | 2.0 | 1.8(a) |
| | 54 | 1,2-Dichlorobenzene | 146.00 | 32.603 | 32.603 | (1.343) | 63366 | 2.0 | 1.8(a) |

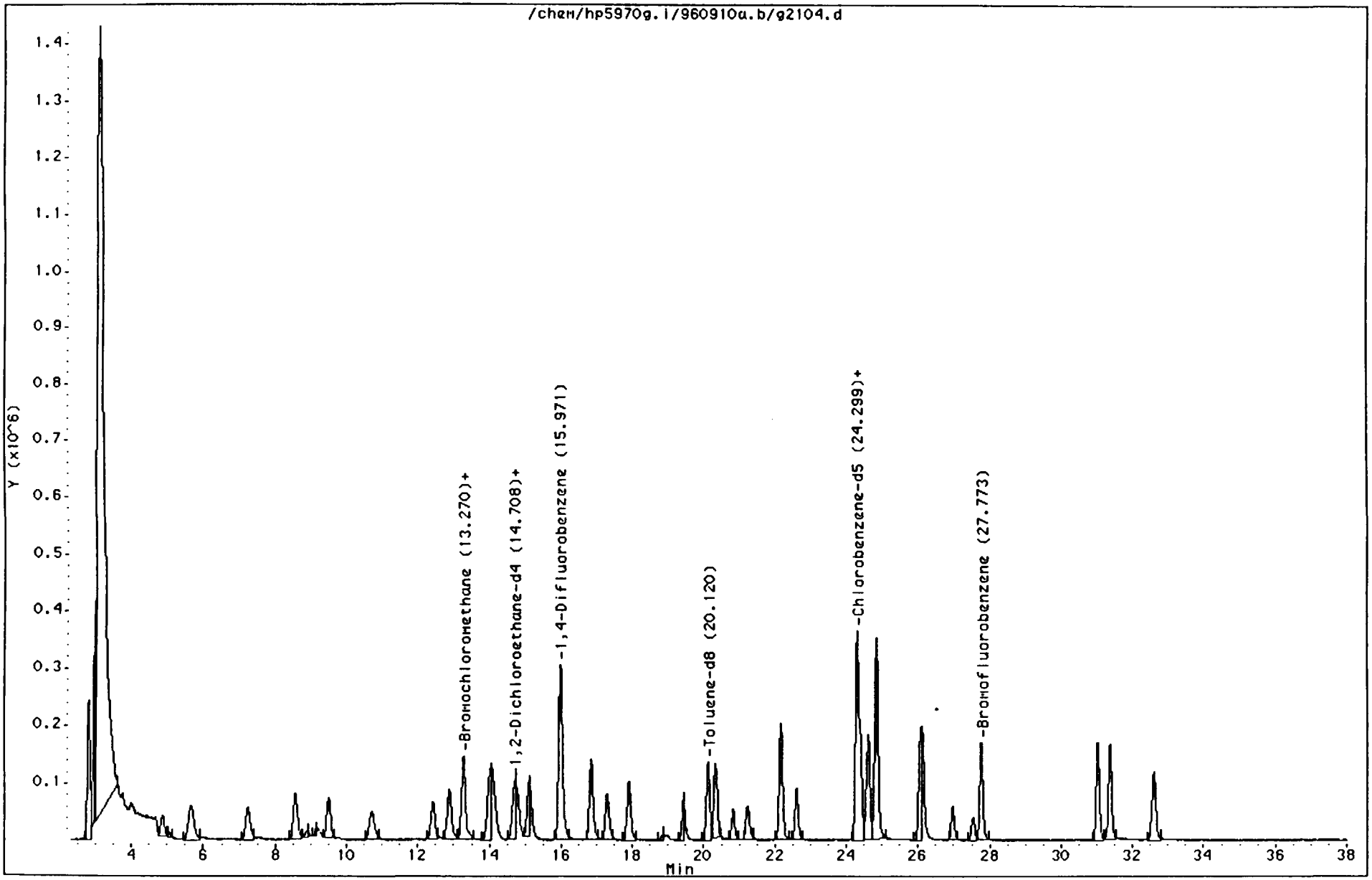
## QC Flag Legend

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

30032

Data File: /chem/hp5970g.i/960910a.b/g2104.d
Date : 10-SEP-96 17:44
Client ID: vstd004
Sample Info: vstd004,vstd004,960910ga,bei,,,NET
Purge Volume: 25.0
Column phase: CAP

Instrument: hp5970g.i
Operator: bei
Column diameter: 0.53



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970g.i/960910a.b/g2104.d
Lab Smp Id: vstd004 Client Smp ID: vstd004
Inj Date : 10-SEP-96 17:44
Operator : bel Inst ID: hp5970g.i
Smp Info : vstd004,vstd004,960910ga,bel,,,NET
Misc Info : ,1,2,,1,0,,,,,,,
Comment :
Method : /chem/hp5970g.i/960910a.b/gvoa25.m
Meth Date : 11-Sep-1996 09:59 Quant Type: ISTD
Cal Date : 10-SEP-1996 15:44 Cal File: g2102.d
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| 1 | Chloromethane | 50.00 | 3.757 | 3.757 | (0.283) | 39015 | 4.0 | 4.4(a) |
| 2 | Vinyl Chloride | 62.00 | 4.002 | 4.002 | (0.302) | 53989 | 4.0 | 4.5(a) |
| 3 | Bromomethane | 94.00 | 4.873 | 4.873 | (0.367) | 86244 | 4.0 | 4.4(a) |
| 4 | Chloroethane | 64.00 | 5.049 | 5.049 | (0.381) | 39524 | 4.0 | 4.4(a) |
| 5 | Trichlorofluoromethane | 101.00 | 5.656 | 5.656 | (0.427) | 271578 | 4.0 | 4.4(a) |
| 6 | Acrolein | 56.00 | 6.654 | 6.654 | (0.502) | 4872 | 40 | 45(QM) |
| 7 | Acetone | 43.00 | 6.801 | 6.801 | (0.513) | 6285 | 4.0 | 4.5(aM) |
| 8 | 1,1-Dichloroethene | 96.00 | 7.241 | 7.241 | (0.546) | 95491 | 4.0 | 4.4(aQ) |
| 9 | Carbon Disulfide | 76.00 | 8.553 | 8.553 | (0.645) | 253415 | 4.0 | 4.4(a) |
| 10 | Methylene Chloride | 84.00 | 8.582 | 8.582 | (0.647) | 71951 | 4.0 | 4.2(aQ) |
| 11 | Acrylonitrile | 53.00 | 8.925 | 8.925 | (0.673) | 35803 | 40 | 41(M) |
| 12 | Methyl-t-butyl ether | 73.00 | 9.189 | 9.189 | (0.693) | 106708 | 4.0 | 4.1(aM) |
| 13 | trans-1,2-Dichloroethene | 96.00 | 9.512 | 9.512 | (0.717) | 105842 | 4.0 | 4.4(a) |
| 14 | 1,1-Dichloroethane | 63.00 | 10.706 | 10.706 | (0.807) | 193797 | 4.0 | 4.4(a) |
| 15 | Vinyl Acetate | 43.00 | 10.784 | 10.784 | (0.675) | 53693 | 4.0 | 3.9(aM) |
| 16 | 2-Butanone | 43.00 | 11.929 | 11.929 | (0.900) | 8618 | 4.0 | 4.1(aM) |
| 17 | cis-1,2-Dichloroethene | 96.00 | 12.418 | 12.418 | (0.937) | 109299 | 4.0 | 4.4(a) |
| 18 | 1,2-Dichloroethene (total) | 96.00 | 12.418 | 12.418 | (0.937) | 232426 | 8.0 | 10(M) |
| 19 | Chloroform | 83.00 | 12.868 | 12.868 | (0.970) | 289447 | 4.0 | 4.4(a) |
| * 20 | Bromochloromethane | 128.00 | 13.260 | 13.260 | (1.000) | 134130 | 10 | (Q) |
| 21 | Tetrahydrofuran | 42.00 | 13.397 | 13.397 | (1.010) | 4263 | 4.0 | 4.4(aM) |
| 22 | 1,1,1-Trichloroethane | 97.00 | 14.033 | 14.033 | (0.879) | 320512 | 4.0 | 4.3(a) |
| 23 | Cyclohexane | 56.00 | 14.111 | 14.111 | (1.064) | 143943 | 4.0 | 4.6(a) |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| | 24 Carbon Tetrachloride | 117.00 | 14.708 | 14.708 | (0.921) | 312385 | 4.0 | 4.2(a) |
| $ | 25 1,2-Dichloroethane-d4 | 65.00 | 14.816 | 14.816 | (1.117) | 109334 | 4.0 | 4.2(a) |
| | 26 1,2-Dichloroethane | 62.00 | 15.080 | 15.080 | (1.137) | 126188 | 4.0 | 4.4(aM) |
| | 27 Benzene | 78.00 | 15.139 | 15.139 | (0.948) | 272175 | 4.0 | 4.2(a) |
| * | 28 1,4-Difluorobenzene | 114.00 | 15.971 | 15.971 | (1.000) | 924920 | 10 | |
| | 29 Trichloroethene | 130.00 | 16.861 | 16.861 | (1.056) | 169079 | 4.0 | 4.2(a) |
| | 30 1,2-Dichloropropane | 63.00 | 17.292 | 17.292 | (1.083) | 100494 | 4.0 | 4.1(a) |
| | 31 Bromodichloromethane | 83.00 | 17.908 | 17.908 | (1.121) | 252256 | 4.0 | 4.1(a) |
| | 32 2-Chloroethylvinyl ether | 63.00 | 17.292 | 17.292 | (1.083) | 100494 | 4.0 | 4.1(a) |
| | 33 4-Methyl-2-Pentanone | 43.00 | 18.965 | 18.965 | (0.780) | 25840 | 4.0 | 3.5(aM) |
| | 34 cis-1 3-Dichloropropene | 75.00 | 19.454 | 19.454 | (1.218) | 133235 | 4.2 | 4.2(aM) |
| $ | 35 Toluene-d8 | 98.00 | 20.120 | 20.120 | (0.828) | 343767 | 4.0 | 4.0(a) |
| | 36 Toluene | 91.00 | 20.345 | 20.345 | (0.837) | 360798 | 4.0 | 4.2(a) |
| | 37 trans-1,3-Dichloropropene | 75.00 | 20.834 | 20.834 | (1.305) | 98622 | 3.8 | 3.6(a) |
| | 38 1,1,2-Trichloroethane | 97.00 | 21.235 | 21.235 | (1.330) | 63787 | 4.0 | 4.0(a) |
| | 39 1,1,2,2-Tetrachloroethane | 83.00 | 27.538 | 27.538 | (1.133) | 70488 | 4.0 | 3.8(a) |
| | 40 2-Hexanone | 43.00 | 21.382 | 21.382 | (0.880) | 15735 | 4.0 | 3.7(aQM) |
| | 41 Tetrachloroethene | 164.00 | 22.165 | 22.165 | (0.912) | 157854 | 4.0 | 4.0(a) |
| | 42 Dibromochloromethane | 129.00 | 22.606 | 22.606 | (1.415) | 160723 | 4.0 | 3.8(a) |
| * | 43 Chlorobenzene-d5 | 117.00 | 24.299 | 24.299 | (1.000) | 661165 | 10 | |
| | 44 Chlorobenzene | 112.00 | 24.396 | 24.396 | (1.004) | 274271 | 4.0 | 4.0(a) |
| | 45 Ethylbenzene | 106.00 | 24.602 | 24.602 | (1.012) | 136092 | 4.0 | 4.1(a) |
| | 46 m and p-Xylene | 106.00 | 24.837 | 24.837 | (1.022) | 331459 | 8.0 | 8.0(a) |
| | 47 o-Xylene | 106.00 | 26.050 | 26.050 | (1.072) | 165823 | 4.0 | 4.1(a) |
| | 48 Xylene (Total) | 106.00 | 26.050 | 26.050 | (1.072) | 165823 | 4.0 | 4.1(a) |
| | 49 Styrene | 104.00 | 26.148 | 26.148 | (1.076) | 236661 | 4.0 | 3.9(a) |
| | 50 Bromoform | 173.00 | 26.970 | 26.970 | (1.689) | 88466 | 4.0 | 4.2(a) |
| $ | 51 Bromofluorobenzene | 95.00 | 27.773 | 27.773 | (1.143) | 197380 | 4.0 | 3.8(a) |
| | 52 1,3-Dichlorobenzene | 146.00 | 31.022 | 31.022 | (1.277) | 246796 | 4.0 | 3.9(a) |
| | 53 1,4-Dichlorobenzene | 146.00 | 31.364 | 31.364 | (1.291) | 229827 | 4.0 | 3.8(a) |
| | 54 1,2-Dichlorobenzene | 146.00 | 32.597 | 32.597 | (1.342) | 193122 | 4.0 | 4.0(a) |

QC Flag Legend

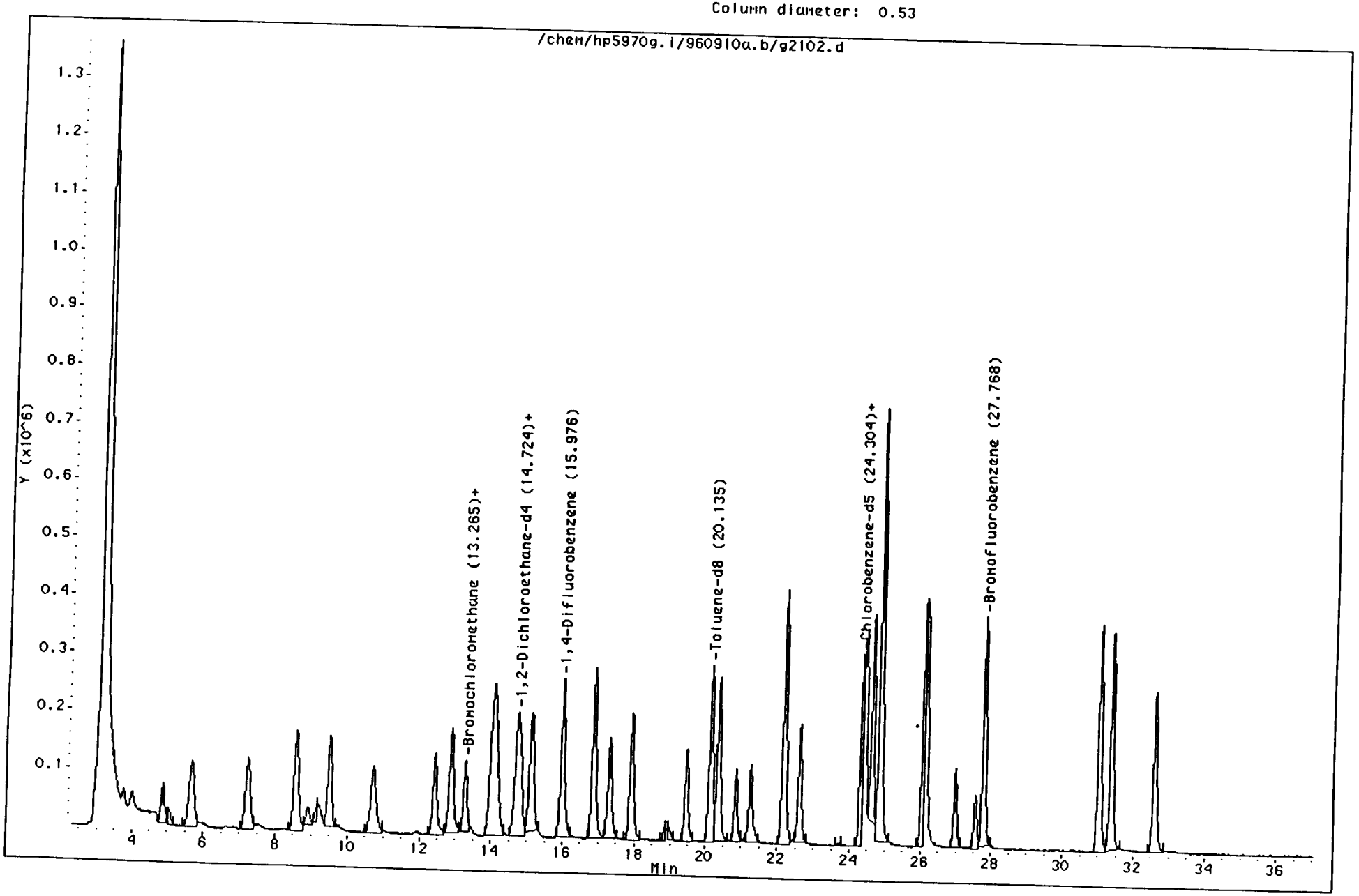
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: /chem/hp5970g.i/960910a.b/g2102.d
Date : 10-SEP-1996 15:44
Client ID: vstd010
Sample Info: vstd010,vstd010,960910g,bel,,,NET
Purge Volume: 25.0
Column phase: CAP

Instrument: hp5970g.i
Operator: bel
Column diameter: 0.53



30035



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970g.i/960910a.b/g2102.d
Lab Smp Id: vstd010 Client Smp ID: vstd010
Inj Date : 10-SEP-1996 15:44
Operator : bel Inst ID: hp5970g.i
Smp Info : vstd010,vstd010,960910g,bel,,,NET
Misc Info : ,2,3,,1,0,,,,,,,
Comment :
Method : /chem/hp5970g.i/960910a.b/gvoa25.m
Meth Date : 11-Sep-1996 09:58 brian Quant Type: ISTD
Cal Date : 10-SEP-1996 15:44 Cal File: g2102.d
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 1 Chloromethane | 50.00 | 3.763 | 3.763 | (0.283) | 70416 | 10 | 10 |
| 2 Vinyl Chloride | 62.00 | 3.998 | 3.998 | (0.301) | 102765 | 10 | 10 |
| 3 Bromomethane | 94.00 | 4.879 | 4.879 | (0.367) | 166067 | 10 | 10 |
| 4 Chloroethane | 64.00 | 5.045 | 5.045 | (0.380) | 85888 | 10 | 10 |
| 5 Trichlorofluoromethane | 101.00 | 5.671 | 5.671 | (0.427) | 533226 | 10 | 10 |
| 6 Acrolein | 56.00 | 6.670 | 6.670 | (0.502) | 10985 | 100 | 100 (M) |
| 7 Acetone | 43.00 | 6.826 | 6.826 | (0.514) | 14138 | 10 | 10 (M) |
| 8 1,1-Dichloroethene | 96.00 | 7.227 | 7.227 | (0.544) | 206782 | 10 | 10 |
| 9 Carbon Disulfide | 76.00 | 8.539 | 8.539 | (0.643) | 553206 | 10 | 10 |
| 10 Methylene Chloride | 84.00 | 8.578 | 8.578 | (0.646) | 167427 | 10 | 10 |
| 11 Acrylonitrile | 53.00 | 8.911 | 8.911 | (0.671) | 87359 | 100 | 100 |
| 12 Methyl-t-butyl ether | 73.00 | 9.175 | 9.175 | (0.691) | 271054 | 10 | 10 (M) |
| 13 trans-1,2-Dichloroethene | 96.00 | 9.498 | 9.498 | (0.715) | 243055 | 10 | 10 |
| 14 1,1-Dichloroethane | 63.00 | 10.711 | 10.711 | (0.807) | 467886 | 10 | 10 |
| 15 Vinyl Acetate | 43.00 | 10.790 | 10.790 | (0.675) | 134157 | 10 | 10 (M) |
| 16 2-Butanone | 43.00 | 11.944 | 11.944 | (0.900) | 19410 | 10 | 10 (M) |
| 17 cis-1,2-Dichloroethene | 96.00 | 12.434 | 12.434 | (0.937) | 245329 | 10 | 10 |
| 18 1,2-Dichloroethene (total) | 96.00 | 9.498 | 9.498 | (0.715) | 564431 | 20 | 20 (M) |
| 19 Chloroform | 83.00 | 12.874 | 12.874 | (0.970) | 610112 | 10 | 10 |
| * 20 Bromochloromethane | 128.00 | 13.275 | 13.275 | (1.000) | 127912 | 10 | |
| 21 Tetrahydrofuran | 42.00 | 13.442 | 13.442 | (1.013) | 11028 | 10 | 10 (M) |
| 22 1,1,1-Trichloroethane | 97.00 | 14.019 | 14.019 | (0.877) | 648947 | 10 | 10 |
| 23 Cyclohexane | 56.00 | 14.117 | 14.117 | (1.063) | 288183 | 10 | 10 |

| | | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|---|
| | 24 | Carbon Tetrachloride | 117.00 | 14.714 | 14.714 | (0.920) | 611711 | 10 | 10 |
| $ | 25 | 1,2-Dichloroethane-d4 | 65.00 | 14.812 | 14.812 | (1.116) | 235020 | 10 | 10 |
| | 26 | 1,2-Dichloroethane | 62.00 | 15.086 | 15.086 | (1.136) | 250976 | 10 | 10 |
| | 27 | Benzene | 78.00 | 15.135 | 15.135 | (0.947) | 556700 | 10 | 10 |
| * | 28 | 1,4-Difluorobenzene | 114.00 | 15.986 | 15.986 | (1.000) | 828862 | 10 | |
| | 29 | Trichloroethene | 130.00 | 16.857 | 16.857 | (1.054) | 347819 | 10 | 10 |
| | 30 | 1,2-Dichloropropane | 63.00 | 17.307 | 17.307 | (1.083) | 223517 | 10 | 10 |
| | 31 | Bromodichloromethane | 83.00 | 17.914 | 17.914 | (1.121) | 536902 | 10 | 10 |
| | 32 | 2-Chloroethylvinyl ether | 63.00 | 17.307 | 17.307 | (1.083) | 223517 | 10 | 10 |
| | 33 | 4-Methyl-2-Pentanone | 43.00 | 18.961 | 18.961 | (0.780) | 66764 | 10 | 10 (M) |
| | 34 | cis-1,3-Dichloropropene | 75.00 | 19.450 | 19.450 | (1.217) | 302627 | 11 | 11 |
| $ | 35 | Toluene-d8 | 98.00 | 20.135 | 20.135 | (0.828) | 784593 | 10 | 10 |
| | 36 | Toluene | 91.00 | 20.351 | 20.351 | (0.837) | 756949 | 10 | 10 |
| | 37 | trans-1,3-Dichloropropene | 75.00 | 20.830 | 20.830 | (1.303) | 233274 | 9.4 | 9.4 (a) |
| | 38 | 1,1,2-Trichloroethane | 97.00 | 21.241 | 21.241 | (1.329) | 139502 | 10 | 10 |
| | 39 | 1,1,2,2-Tetrachloroethane | 83.00 | 27.543 | 27.543 | (1.133) | 161207 | 10 | 10 |
| | 40 | 2-Hexanone | 43.00 | 21.368 | 21.368 | (0.879) | 40919 | 10 | 10 (M) |
| | 41 | Tetrachloroethene | 164.00 | 22.171 | 22.171 | (0.912) | 376324 | 10 | 10 |
| | 42 | Dibromochloromethane | 129.00 | 22.611 | 22.611 | (1.414) | 369309 | 10 | 10 |
| * | 43 | Chlorobenzene-d5 | 117.00 | 24.304 | 24.304 | (1.000) | 570123 | 10 | |
| | 44 | Chlorobenzene | 112.00 | 24.412 | 24.412 | (1.004) | 604958 | 10 | 10 |
| | 45 | Ethylbenzene | 106.00 | 24.627 | 24.627 | (1.013) | 287459 | 10 | 10 |
| | 46 | m and p-Xylene | 106.00 | 24.852 | 24.852 | (1.023) | 733022 | 20 | 20 |
| | 47 | o-Xylene | 106.00 | 26.066 | 26.066 | (1.072) | 361474 | 10 | 10 |
| | 48 | Xylene (Total) | 106.00 | 26.066 | 26.066 | (1.072) | 361474 | 10 | 10 |
| | 49 | Styrene | 104.00 | 26.144 | 26.144 | (1.076) | 522839 | 10 | 10 |
| | 50 | Bromoform | 173.00 | 26.976 | 26.976 | (1.687) | 213730 | 10 | 10 |
| $ | 51 | Bromofluorobenzene | 95.00 | 27.768 | 27.768 | (1.143) | 469409 | 10 | 10 |
| | 52 | 1,3-Dichlorobenzene | 146.00 | 31.017 | 31.017 | (1.276) | 554694 | 10 | 10 |
| | 53 | 1,4-Dichlorobenzene | 146.00 | 31.370 | 31.370 | (1.291) | 550166 | 10 | 10 |
| | 54 | 1,2-Dichlorobenzene | 146.00 | 32.593 | 32.593 | (1.341) | 437941 | 10 | 10 |

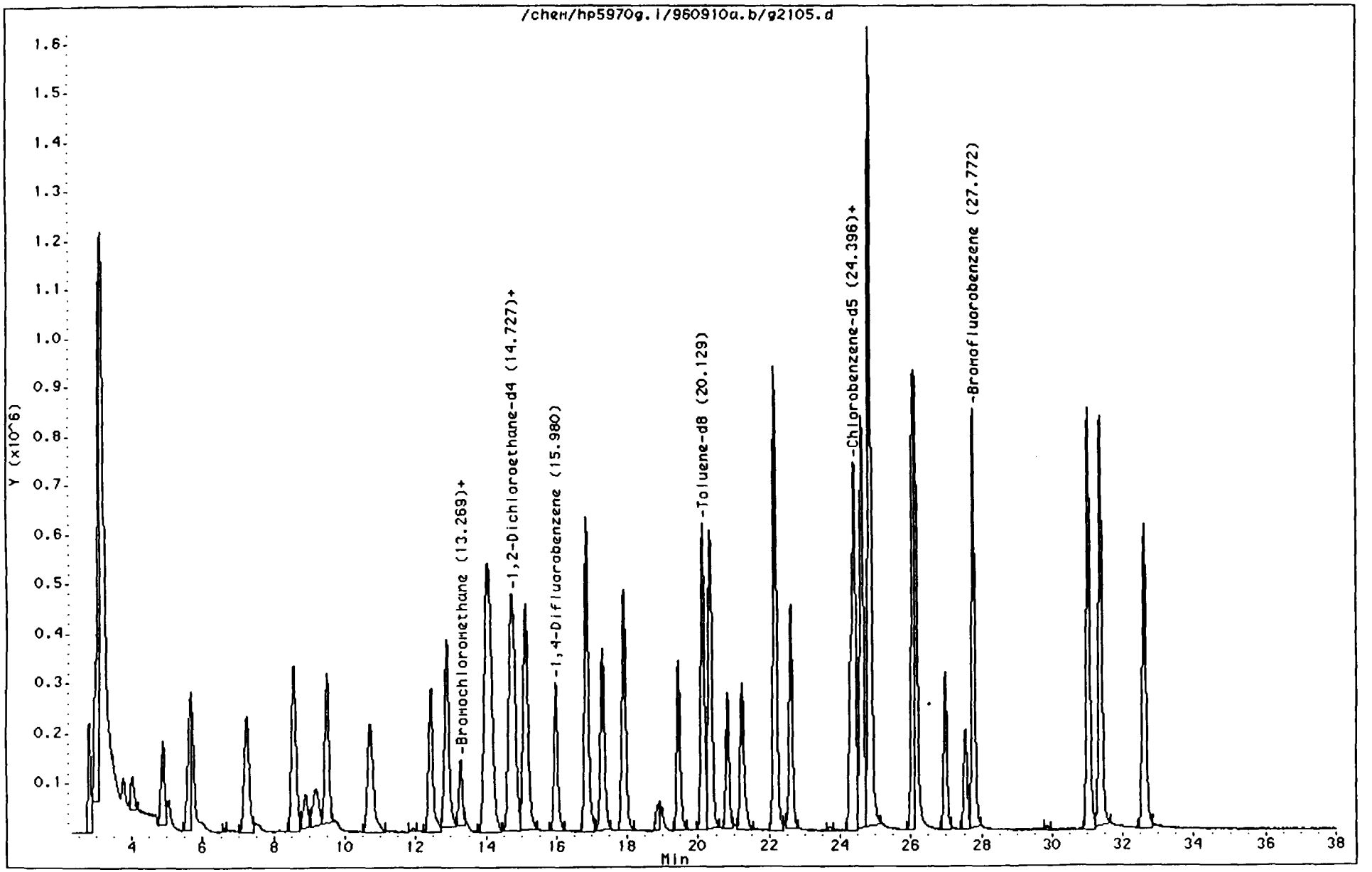
QC Flag Legend

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

30038

Data File: /chem/hp5970g.i/960910a.b/g2105.d
Date : 10-SEP-96 18:27
Client ID: vstd020
Sample Info: vstd020,vstd020,960910ga,bel,,,NET
Purge Volume: 25.0
Column phase: CAP

Instrument: hp5970g.i
Operator: bel
Column diameter: 0.53



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

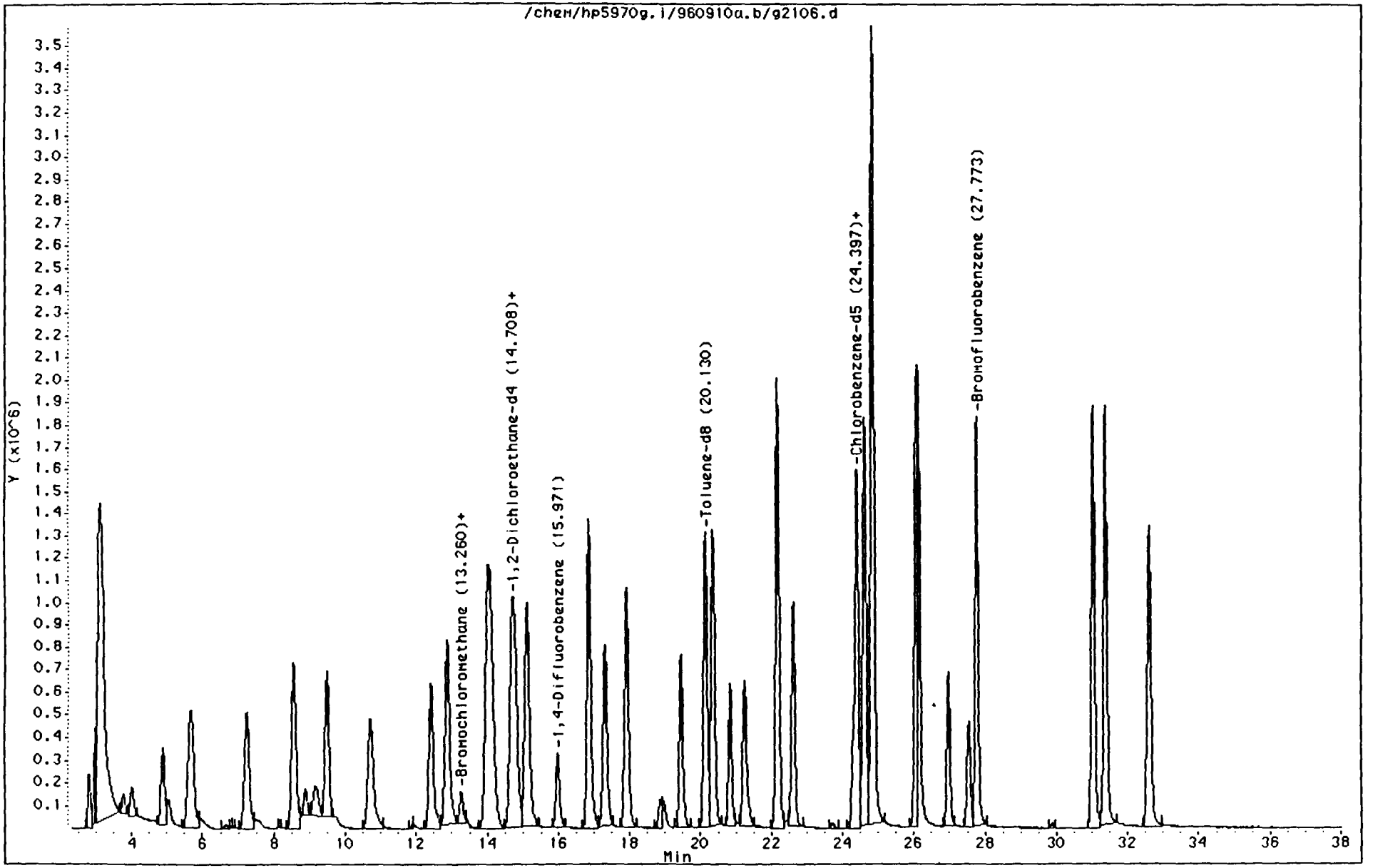
Data file : /chem/hp5970g.i/960910a.b/g2105.d
Lab Smp Id: vstd020 Client Smp ID: vstd020
Inj Date : 10-SEP-96 18:27
Operator : bel Inst ID: hp5970g.i
Smp Info : vstd020,vstd020,960910ga,bel,,,NET
Misc Info : ,1,4,,1,0,,,,,,,
Comment :
Method : /chem/hp5970g.i/960910a.b/gvoa25.m
Meth Date : 11-Sep-1996 09:59 Quant Type: ISTD
Cal Date : 10-SEP-1996 15:44 Cal File: g2102.d
Als bottle: 9 Calibration Sample, Level: 4
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| 1 | Chloromethane | 50.00 | 3.767 | 3.767 | (0.284) | 185751 | 20 | 21 |
| 2 | Vinyl Chloride | 62.00 | 4.002 | 4.002 | (0.302) | 244532 | 20 | 20 |
| 3 | Bromomethane | 94.00 | 4.873 | 4.873 | (0.367) | 421560 | 20 | 21 |
| 4 | Chloroethane | 64.00 | 5.049 | 5.049 | (0.380) | 187964 | 20 | 21 |
| 5 | Trichlorofluoromethane | 101.00 | 5.646 | 5.646 | (0.425) | 1284986 | 20 | 21 |
| 6 | Acrolein | 56.00 | 6.644 | 6.644 | (0.501) | 24308 | 200 | 220(M) |
| 7 | Acetone | 43.00 | 6.840 | 6.840 | (0.515) | 27149 | 20 | 19(M) |
| 8 | 1,1-Dichloroethene | 96.00 | 7.251 | 7.251 | (0.546) | 419230 | 20 | 19 |
| 9 | Carbon Disulfide | 76.00 | 8.552 | 8.552 | (0.645) | 1082635 | 20 | 19 |
| 10 | Methylene Chloride | 84.00 | 8.591 | 8.591 | (0.647) | 332157 | 20 | 19 |
| 11 | Acrylonitrile | 53.00 | 8.895 | 8.895 | (0.670) | 167900 | 200 | 190(Q) |
| 12 | Methyl-t-butyl ether | 73.00 | 9.179 | 9.179 | (0.692) | 497126 | 20 | 19(M) |
| 13 | trans-1,2-Dichloroethene | 96.00 | 9.502 | 9.502 | (0.716) | 457274 | 20 | 19 |
| 14 | 1,1-Dichloroethane | 63.00 | 10.705 | 10.705 | (0.807) | 850732 | 20 | 19 |
| 15 | Vinyl Acetate | 43.00 | 10.784 | 10.784 | (0.675) | 244343 | 20 | 18 |
| 16 | 2-Butanone | 43.00 | 11.938 | 11.938 | (0.900) | 41798 | 20 | 20(M) |
| 17 | cis-1,2-Dichloroethene | 96.00 | 12.418 | 12.418 | (0.936) | 474913 | 20 | 19 |
| 18 | 1,2-Dichloroethene (total) | 96.00 | 12.418 | 12.418 | (0.936) | 1051073 | 40 | 54(M) |
| 19 | Chloroform | 83.00 | 12.868 | 12.868 | (0.970) | 1292193 | 20 | 20 |
| * 20 | Bromochloromethane | 128.00 | 13.269 | 13.269 | (1.000) | 134194 | 10 | (Q) |
| 21 | Tetrahydrofuran | 42.00 | 13.426 | 13.426 | (1.012) | 23658 | 20 | 25(M) |
| 22 | 1,1,1-Trichloroethane | 97.00 | 14.013 | 14.013 | (0.877) | 1410407 | 20 | 20 |
| 23 | Cyclohexane | 56.00 | 14.121 | 14.121 | (1.064) | 605630 | 20 | 19(Q) |

30040

Data File: /chem/hp5970g.i/960910a.b/g2106.d
Date : 10-SEP-96 19:10
Client ID: vstd040
Instrument: hp5970g.i
Sample Info: vstd040,vstd040,960910ga,bel,,,NET
Purge Volume: 25.0
Operator: bel
Column phase: CAP
Column diameter: 0.53



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970g.i/960910a.b/g2106.d
Lab Smp Id: vstd040 Client Smp ID: vstd040
Inj Date : 10-SEP-96 19:10
Operator : bel Inst ID: hp5970g.i
Smp Info : vstd040,vstd040,960910ga,bel,,,NET
Misc Info : ,1,5,,1,0,,,,,,,
Comment :
Method : /chem/hp5970g.i/960910a.b/gvoa25.m
Meth Date : 11-Sep-1996 09:59 Quant Type: ISTD
Cal Date : 10-SEP-1996 15:44 Cal File: g2102.d
Als bottle: 10 Calibration Sample, Level: 5
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| 1 | Chloromethane | 50.00 | 3.758 | 3.758 | (0.283) | 353603 | 40 | 33 |
| 2 | Vinyl Chloride | 62.00 | 4.012 | 4.012 | (0.302) | 464850 | 40 | 33 |
| 3 | Bromomethane | 94.00 | 4.873 | 4.873 | (0.367) | 848422 | 40 | 36 |
| 4 | Chloroethane | 64.00 | 5.049 | 5.049 | (0.380) | 364796 | 40 | 34 |
| 5 | Trichlorofluoromethane | 101.00 | 5.646 | 5.646 | (0.425) | 2558726 | 40 | 35 |
| 6 | Acrolein | 56.00 | 6.635 | 6.635 | (0.500) | 50355 | 400 | 390(M) |
| 7 | Acetone | 43.00 | 6.830 | 6.830 | (0.514) | 54564 | 40 | 32 |
| 8 | 1,1-Dichloroethene | 96.00 | 7.242 | 7.242 | (0.545) | 898252 | 40 | 35 |
| 9 | Carbon Disulfide | 76.00 | 8.543 | 8.543 | (0.643) | 2391694 | 40 | 35 |
| 10 | Methylene Chloride | 84.00 | 8.582 | 8.582 | (0.646) | 717978 | 40 | 35 |
| 11 | Acrylonitrile | 53.00 | 8.895 | 8.895 | (0.670) | 384938 | 400 | 370(Q) |
| 12 | Methyl-t-butyl ether | 73.00 | 9.209 | 9.209 | (0.693) | 1036832 | 40 | 34 |
| 13 | trans-1,2-Dichloroethene | 96.00 | 9.502 | 9.502 | (0.716) | 1010562 | 40 | 35 |
| 14 | 1,1-Dichloroethane | 63.00 | 10.706 | 10.706 | (0.806) | 1988940 | 40 | 37 |
| 15 | Vinyl Acetate | 43.00 | 10.784 | 10.784 | (0.675) | 585495 | 40 | 40(A) |
| 16 | 2-Butanone | 43.00 | 11.919 | 11.919 | (0.898) | 94809 | 40 | 38(M) |
| 17 | cis-1,2-Dichloroethene | 96.00 | 12.418 | 12.418 | (0.935) | 1128042 | 40 | 38 |
| 18 | 1,2-Dichloroethene (total) | 96.00 | 12.418 | 12.418 | (0.935) | 2266980 | 80 | 110(AM) |
| 19 | Chloroform | 83.00 | 12.869 | 12.869 | (0.969) | 2879414 | 40 | 37 |
| * 20 | Bromochloromethane | 128.00 | 13.280 | 13.280 | (1.000) | 160175 | 10 | (Q) |
| 21 | Tetrahydrofuran | 42.00 | 13.426 | 13.426 | (1.011) | 54015 | 40 | 47(AQM) |
| 22 | 1,1,1-Trichloroethane | 97.00 | 14.014 | 14.014 | (0.877) | 3076802 | 40 | 39 |
| 23 | Cyclohexane | 56.00 | 14.121 | 14.121 | (1.063) | 1351481 | 40 | 36 |

30041

Data File: /chem/hp5970g.i/960910a.b/g2105.d
Report Date: 11-Sep-1996 10:13

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| | 24 Carbon Tetrachloride | 117.00 | 14.708 | 14.708 | (0.920) | 1453008 | 20 | 20 |
| $ | 25 1,2-Dichloroethane-d4 | 65.00 | 14.815 | 14.815 | (1.117) | 498038 | 20 | 19 |
| | 26 1,2-Dichloroethane | 62.00 | 15.070 | 15.070 | (1.136) | 580403 | 20 | 20 |
| | 27 Benzene | 78.00 | 15.129 | 15.129 | (0.947) | 1215187 | 20 | 19 |
| * | 28 1,4-Difluorobenzene | 114.00 | 15.980 | 15.980 | (1.000) | 890652 | 10 | |
| | 29 Trichloroethene | 130.00 | 16.851 | 16.851 | (1.054) | 778576 | 20 | 20 |
| | 30 1,2-Dichloropropane | 63.00 | 17.301 | 17.301 | (1.083) | 458620 | 20 | 19 |
| | 31 Bromodichloromethane | 83.00 | 17.898 | 17.898 | (1.120) | 1177958 | 20 | 20 |
| | 32 2-Chloroethylvinyl ether | 63.00 | 17.301 | 17.301 | (1.083) | 458620 | 20 | 19 |
| | 33 4-Methyl-2-Pentanone | 43.00 | 18.945 | 18.945 | (0.780) | 128510 | 20 | 18 (QM) |
| | 34 cis-1,3-Dichloropropene | 75.00 | 19.435 | 19.435 | (1.216) | 642445 | 21 | 21 |
| $ | 35 Toluene-d8 | 98.00 | 20.129 | 20.129 | (0.828) | 1558838 | 20 | 19 |
| | 36 Toluene | 91.00 | 20.335 | 20.335 | (0.837) | 1637678 | 20 | 19 |
| | 37 trans-1,3-Dichloropropene | 75.00 | 20.824 | 20.824 | (1.303) | 504100 | 19 | 19 |
| | 38 1,1,2-Trichloroethane | 97.00 | 21.245 | 21.245 | (1.329) | 313834 | 20 | 20 |
| | 39 1,1,2,2-Tetrachloroethane | 83.00 | 27.547 | 27.547 | (1.134) | 360599 | 20 | 20 |
| | 40 2-Hexanone | 43.00 | 21.362 | 21.362 | (0.879) | 85931 | 20 | 20 |
| | 41 Tetrachloroethene | 164.00 | 22.165 | 22.165 | (0.912) | 760178 | 20 | 20 |
| | 42 Dibromochloromethane | 129.00 | 22.605 | 22.605 | (1.415) | 842784 | 20 | 21 |
| * | 43 Chlorobenzene-d5 | 117.00 | 24.298 | 24.298 | (1.000) | 644698 | 10 | |
| | 44 Chlorobenzene | 112.00 | 24.396 | 24.396 | (1.004) | 1284636 | 20 | 19 |
| | 45 Ethylbenzene | 106.00 | 24.611 | 24.611 | (1.013) | 630634 | 20 | 19 |
| | 46 m and p-Xylene | 106.00 | 24.856 | 24.856 | (1.023) | 1612734 | 40 | 40 |
| | 47 o-Xylene | 106.00 | 26.060 | 26.060 | (1.072) | 773669 | 20 | 20 |
| | 48 Xylene (Total) | 106.00 | 26.060 | 26.060 | (1.072) | 773669 | 20 | 20 |
| | 49 Styrene | 104.00 | 26.148 | 26.148 | (1.076) | 1217842 | 20 | 20 |
| | 50 Bromoform | 173.00 | 26.980 | 26.980 | (1.688) | 485893 | 20 | 24 |
| $ | 51 Bromofluorobenzene | 95.00 | 27.772 | 27.772 | (1.143) | 969361 | 20 | 19 |
| | 52 1,3-Dichlorobenzene | 146.00 | 31.031 | 31.031 | (1.277) | 1268412 | 20 | 20 |
| | 53 1,4-Dichlorobenzene | 146.00 | 31.374 | 31.374 | (1.291) | 1242260 | 20 | 21 |
| | 54 1,2-Dichlorobenzene | 146.00 | 32.587 | 32.587 | (1.341) | 1001676 | 20 | 21 |

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

7A

# VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2124

Instrument ID: HP5970G Calibration Date: 12/13/96 Time: 1022

Lab File ID: G2868 Init. Calib. Date(s): 09/10/96 09/10/96

Heated Purge: (Y/N) N Init. Calib. Times: 1544 1910

GC Column: CAP ID: 0.53 (mm)

| COMPOUND | $\overline{RRF}$ | RRF10 | MIN RRF | %D | MAX %D | |
|---|---|---|---|---|---|---|
| Chloromethane | 0.662 | 0.739 | | 11.6 | | |
| Bromomethane | 1.474 | 1.424 | 0.100 | 3.4 | 25.0 | |
| Vinyl Chloride | 0.889 | 1.094 | 0.100 | 23.0 | 25.0 | |
| Chloroethane | 0.676 | 0.690 | | 2.1 | | |
| Methylene Chloride | 1.274 | 1.262 | | 0.9 | | |
| Acetone | 0.105 | 0.119 | | 13.3 | | |
| Carbon Disulfide | 4.251 | 4.616 | | 8.6 | | |
| 1,1-Dichloroethene | 1.615 | 1.558 | 0.100 | 3.5 | 25.0 | |
| 1,1-Dichloroethane | 3.311 | 3.551 | 0.200 | 7.2 | 25.0 | |
| 1,2-Dichloroethene (total) | 4.027 | 3.539 | | 12.1 | | |
| Chloroform | 4.860 | 4.860 | 0.200 | 0.0 | 25.0 | |
| 1,2-Dichloroethane | 2.160 | 2.218 | 0.100 | 2.7 | 25.0 | |
| 2-Butanone | 0.158 | 0.179 | | 13.3 | | |
| 1,1,1-Trichloroethane | 0.805 | 0.734 | 0.100 | 8.8 | 25.0 | |
| Carbon Tetrachloride | 0.794 | 0.747 | 0.100 | 5.9 | 25.0 | |
| Bromodichloromethane | 0.664 | 0.596 | 0.200 | 10.2 | 25.0 | |
| 1,2-Dichloropropane | 0.267 | 0.244 | | 8.6 | | |
| cis-1,3-Dichloropropene | 0.362 | 0.317 | 0.200 | 12.4 | 25.0 | |
| Trichloroethene | 0.435 | 0.364 | 0.300 | 16.3 | 25.0 | |
| Dibromochloromethane | 0.455 | 0.363 | 0.100 | 20.2 | 25.0 | |
| 1,1,2-Trichloroethane | 0.173 | 0.141 | 0.100 | 18.5 | 25.0 | |
| Benzene | 0.700 | 0.668 | 0.500 | 4.6 | 25.0 | |
| trans-1,3-Dichloropropene | 0.276 | 0.230 | 0.100 | 16.7 | 25.0 | |
| Bromoform | 0.255 | 0.169 | 0.100 | 33.7 | 25.0 | <- |
| 4-Methyl-2-Pentanone | 0.111 | 0.097 | | 12.6 | | |
| 2-Hexanone | 0.065 | 0.059 | | 9.2 | | |
| Tetrachloroethene | 0.597 | 0.476 | 0.200 | 20.3 | 25.0 | |
| 1,1,2,2-Tetrachloroethane | 0.283 | 0.225 | 0.200 | 20.5 | 25.0 | |
| Toluene | 1.311 | 1.205 | 0.400 | 8.1 | 25.0 | |
| Chlorobenzene | 1.024 | 0.858 | 0.500 | 16.2 | 25.0 | |
| Ethylbenzene | 0.503 | 0.433 | 0.100 | 13.9 | 25.0 | |
| Styrene | 0.919 | 0.740 | 0.300 | 19.5 | 25.0 | |
| Trichlorofluoromethane | 4.571 | 3.824 | | 16.3 | | |
| Vinyl Acetate | 0.148 | 0.170 | | 14.9 | | |
| 2-Chloroethylvinyl ether | 0.267 | 0.244 | | 8.6 | | |
| m and p-Xylene | 1.251 | 1.092 | | 12.7 | | |
| o-Xylene | 0.609 | 0.473 | | 22.3 | | |

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.. SAS No.: SDG No.: 2124

Instrument ID: HP5970G Calibration Date: 12/13/96 Time: 1022

Lab File ID: G2868 Init. Calib. Date(s): 09/10/96 09/10/96

Heated Purge: (Y/N) N Init. Calib. Times: 1544 1910

GC Column: CAP ID: 0.53 (mm)

| COMPOUND | $\overline{RRF}$ | RRF10 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.962 | 0.647 | | 32.7 | |
| 1,4-Dichlorobenzene | 0.922 | 0.620 | | 32.8 | |
| 1,2-Dichlorobenzene | 0.739 | 0.504 | | 31.8 | |
| Toluene-d8 | 1.282 | 1.302 | | 1.6 | |
| Bromofluorobenzene | 0.776 | 0.738 | 0.200 | 4.9 | 25.0 |
| 1,2-Dichloroethane-d4 | 1.923 | 2.106 | | 9.5 | |

All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/hp5970g.i/961213.b/g2868.d
Date : 13-DEC-96 10:22
Client ID: vstd010
Sample Info: vstd010,vstd010,961213g,bel,,,NET
Purge Volume: 25.0
Column phase: CAP

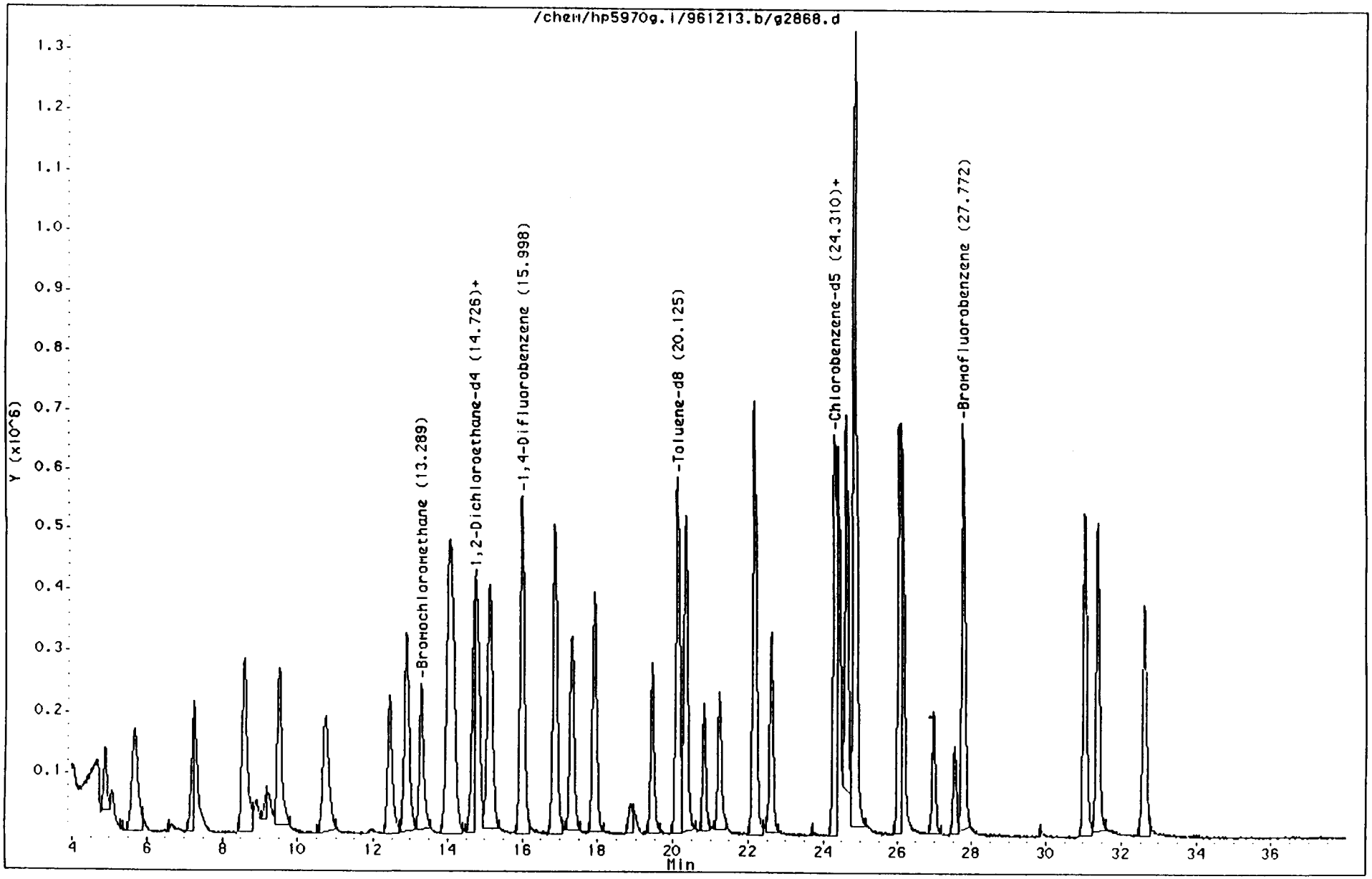
Instrument: hp5970g.i

Operator: bel
Column diameter: 0.53



5

30044



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970g.i/961213.b/g2868.d
Lab Smp Id: vstd010 Client Smp ID: vstd010
Inj Date : 13-DEC-96 10:22
Operator : bel Inst ID: hp5970g.i
Smp Info : vstd010,vstd010,961213g,bel,,,NET
Misc Info : ,2,3,,1,0,,,,,,,
Comment :
Method : /chem/hp5970g.i/961213.b/gvoa25.m
Meth Date : 13-Dec-1996 11:10 Quant Type: ISTD
Cal Date : 13-DEC-96 10:22 Cal File: g2868.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 8240.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| | 1 Chloromethane | 50.00 | 3.783 | 3.783 | (0.285) | 170236 | 10 | 11 |
| | 2 Vinyl Chloride | 62.00 | 4.018 | 4.018 | (0.303) | 251835 | 10 | 12(M) |
| | 3 Bromomethane | 94.00 | 4.898 | 4.898 | (0.369) | 327908 | 10 | 9.7 |
| | 4 Chloroethane | 64.00 | 5.074 | 5.074 | (0.382) | 158949 | 10 | 10 |
| | 5 Trichlorofluoromethane | 101.00 | 5.671 | 5.671 | (0.427) | 880383 | 10 | 8.4 |
| | 7 Acetone | 43.00 | 6.893 | 6.893 | (0.519) | 27362 | 10 | 11(M) |
| | 8 1,1-Dichloroethene | 96.00 | 7.274 | 7.274 | (0.548) | 358865 | 10 | 9.6 |
| | 9 Carbon Disulfide | 76.00 | 8.575 | 8.575 | (0.646) | 1062965 | 10 | 11 |
| | 10 Methylene Chloride | 84.00 | 8.614 | 8.614 | (0.649) | 290711 | 10 | 9.9 |
| | 14 1,1-Dichloroethane | 63.00 | 10.707 | 10.707 | (0.806) | 817726 | 10 | 11 |
| | 15 Vinyl Acetate | 43.00 | 10.795 | 10.795 | (0.675) | 269231 | 10 | 11(M) |
| | 16 2-Butanone | 43.00 | 11.949 | 11.949 | (0.900) | 41244 | 10 | 11(M) |
| | 18 1,2-Dichloroethene (total) | 96.00 | 9.524 | 9.524 | (0.717) | 814826 | 20 | 18(M) |
| | 19 Chloroform | 83.00 | 12.888 | 12.888 | (0.971) | 1119055 | 10 | 10 |
| * | 20 Bromochloromethane | 128.00 | 13.279 | 13.279 | (1.000) | 230250 | 10 | |
| | 22 1,1,1-Trichloroethane | 97.00 | 14.022 | 14.022 | (0.876) | 1165909 | 10 | 9.1 |
| | 24 Carbon Tetrachloride | 117.00 | 14.726 | 14.726 | (0.921) | 1185805 | 10 | 9.4 |
| $ | 25 1,2-Dichloroethane-d4 | 65.00 | 14.834 | 14.834 | (1.117) | 484796 | 10 | 11 |
| | 26 1,2-Dichloroethane | 62.00 | 15.079 | 15.079 | (1.135) | 510830 | 10 | 10 |
| | 27 Benzene | 78.00 | 15.147 | 15.147 | (0.947) | 1060341 | 10 | 9.5 |
| * | 28 1,4-Difluorobenzene | 114.00 | 15.998 | 15.998 | (1.000) | 1588200 | 10 | |
| | 29 Trichloroethene | 130.00 | 16.878 | 16.878 | (1.055) | 578584 | 10 | 9.4 |
| | 30 1,2-Dichloropropane | 63.00 | 17.318 | 17.318 | (1.083) | 388133 | 10 | 9.2 |

| | Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ug/L) | AMOUNTS ON-COL ( ug/L) |
|---|---|---|---|---|---|---|---|---|
| 31 | Bromodichloromethane | 83.00 | 17.915 | 17.915 | (1.120) | 947348 | 10 | 9.0 |
| 32 | 2-Chloroethylvinyl ether | 63.00 | 17.318 | 17.318 | (1.083) | 388133 | 10 | 9.2 |
| 33 | 4-Methyl-2-Pentanone | 43.00 | 18.961 | 18.961 | (0.780) | 107889 | 10 | 8.8 (M) |
| 34 | cis-1,3-Dichloropropene | 75.00 | 19.460 | 19.460 | (1.216) | 503101 | 11 | 9.2 |
| $ 35 | Toluene-d8 | 98.00 | 20.125 | 20.125 | (0.828) | 1445727 | 10 | 10 |
| 36 | Toluene | 91.00 | 20.350 | 20.350 | (0.837) | 1337813 | 10 | 9.2 |
| 37 | trans-1,3-Dichloropropene | 75.00 | 20.829 | 20.829 | (1.302) | 365210 | 9.4 | 7.8 |
| 38 | 1,1,2-Trichloroethane | 97.00 | 21.240 | 21.240 | (1.328) | 224554 | 10 | 8.2 |
| 39 | 1,1,2,2-Tetrachloroethane | 83.00 | 27.538 | 27.538 | (1.133) | 249294 | 10 | 8.0 |
| 40 | 2-Hexanone | 43.00 | 21.377 | 21.377 | (0.879) | 65286 | 10 | 9.1 (M) |
| 41 | Tetrachloroethene | 164.00 | 22.178 | 22.178 | (0.912) | 527837 | 10 | 8.0 |
| 42 | Dibromochloromethane | 129.00 | 22.619 | 22.619 | (1.414) | 576820 | 10 | 8.0 |
| * 43 | Chlorobenzene-d5 | 117.00 | 24.310 | 24.310 | (1.000) | 1109936 | 10 | |
| 44 | Chlorobenzene | 112.00 | 24.408 | 24.408 | (1.004) | 952648 | 10 | 8.4 |
| 45 | Ethylbenzene | 106.00 | 24.623 | 24.623 | (1.013) | 480818 | 10 | 8.6 |
| 46 | m and p-Xylene | 106.00 | 24.858 | 24.858 | (1.023) | 1212315 | 20 | 17 |
| 47 | o-Xylene | 106.00 | 26.071 | 26.071 | (1.072) | 525489 | 10 | 7.8 |
| 49 | Styrene | 104.00 | 26.149 | 26.149 | (1.076) | 821750 | 10 | 8.0 |
| 50 | Bromoform | 173.00 | 26.990 | 26.990 | (1.687) | 269002 | 10 | 6.6 |
| $ 51 | Bromofluorobenzene | 95.00 | 27.772 | 27.772 | (1.142) | 819766 | 10 | 9.5 |
| 52 | 1,3-Dichlorobenzene | 146.00 | 31.039 | 31.039 | (1.277) | 718495 | 10 | 6.7 |
| 53 | 1,4-Dichlorobenzene | 146.00 | 31.381 | 31.381 | (1.291) | 687985 | 10 | 6.7 |
| 54 | 1,2-Dichlorobenzene | 146.00 | 32.623 | 32.623 | (1.342) | 559056 | 10 | 6.8 |

## QC Flag Legend

M - Compound response manually integrated.

## 3D. RAW QC DATA

# 3D(1). BFB TUNES

Data File: /chem/hp5970g.i/960910a.b/g2096.d

Date : 10-SEP-1996 10:33

Client ID: BFB

Instrument: hp5970g.i

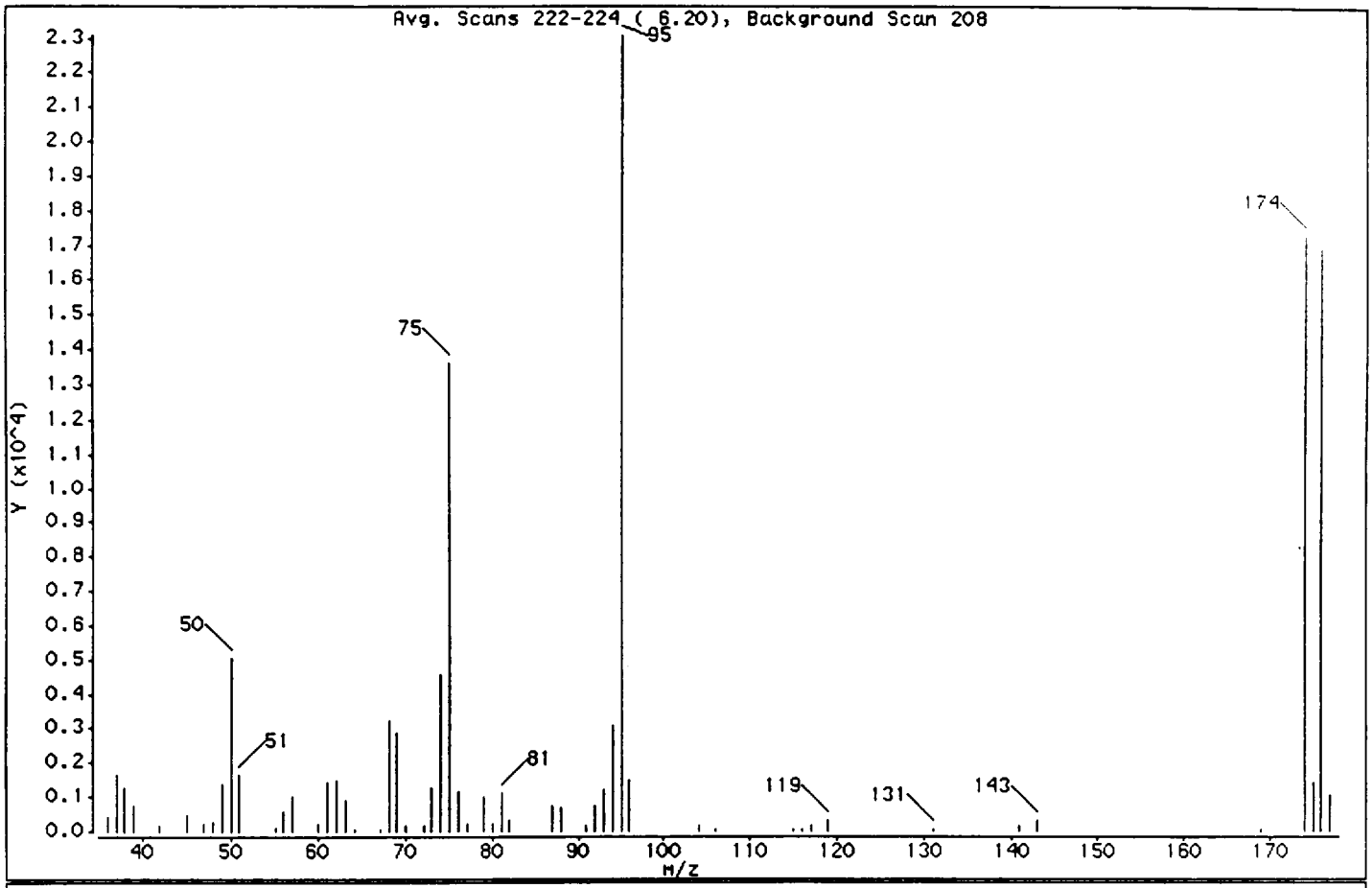
Sample Info: BFB,BFB,960910ga,bel,,,NET

Operator: bel

Column phase: CAP

Column diameter: 0.53

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 8.00 - 40.00% of mass 95 | 21.78 |
| 75 | 30.00 - 66.00% of mass 95 | 58.85 |
| 96 | 5.00 - 9.00% of mass 95 | 6.53 |
| 173 | Less than 2.00% of mass 174 | 0.00 ( 0.00) |
| 174 | 50.00 - 120.00% of mass 95 | 74.79 |
| 175 | 4.00 - 9.00% of mass 174 | 6.25 ( 8.35) |
| 176 | 93.00 - 101.00% of mass 174 | 73.08 ( 97.72) |
| 177 | 5.00 - 9.00% of mass 176 | 4.49 ( 6.14) |

Data File: /chem/hp5970g.i/960910a.b/g2096.d

Date : 10-SEP-1996 10:33

Client ID: BFB

Instrument: hp5970g.i

Sample Info: BFB,BFB,960910ga,bel,,,NET

Operator: bel

Column phase: CAP

Column diameter: 0.53

Data File: g2096.d

Spectrum : Avg. Scans 222-224 ( 6.20), Background Scan 208

Largest m/z: 95.00

Number of peaks: 55

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 415 | 60.00 | 187 | 77.00 | 198 | 106.00 | 72 |
| 37.00 | 1632 | 61.00 | 1448 | 79.00 | 1007 | 115.00 | 69 |
| 38.00 | 1288 | 62.00 | 1476 | 80.00 | 196 | 116.00 | 73 |
| 39.00 | 760 | 63.00 | 891 | 81.00 | 1092 | 117.00 | 146 |
| 42.00 | 154 | 64.00 | 73 | 82.00 | 308 | 119.00 | 323 |
| 45.00 | 456 | 67.00 | 75 | 87.00 | 723 | 131.00 | 79 |
| 47.00 | 205 | 68.00 | 3250 | 88.00 | 693 | 141.00 | 183 |
| 48.00 | 285 | 69.00 | 2885 | 91.00 | 142 | 143.00 | 308 |
| 49.00 | 1374 | 70.00 | 159 | 92.00 | 744 | 169.00 | 74 |
| 50.00 | 5026 | 72.00 | 155 | 93.00 | 1221 | 174.00 | 17256 |
| 51.00 | 1651 | 73.00 | 1260 | 94.00 | 3069 | 175.00 | 1442 |
| 55.00 | 120 | 74.00 | 4568 | 95.00 | 23080 | 176.00 | 16864 |
| 56.00 | 610 | 75.00 | 13582 | 96.00 | 1508 | 177.00 | 1036 |
| 57.00 | 1009 | 76.00 | 1163 | 104.00 | 146 | | |

Data File: /chem/hp5970g.i/960910a.b/g2096.d



Date : 10-SEP-1996 10:33

Client ID: BFB

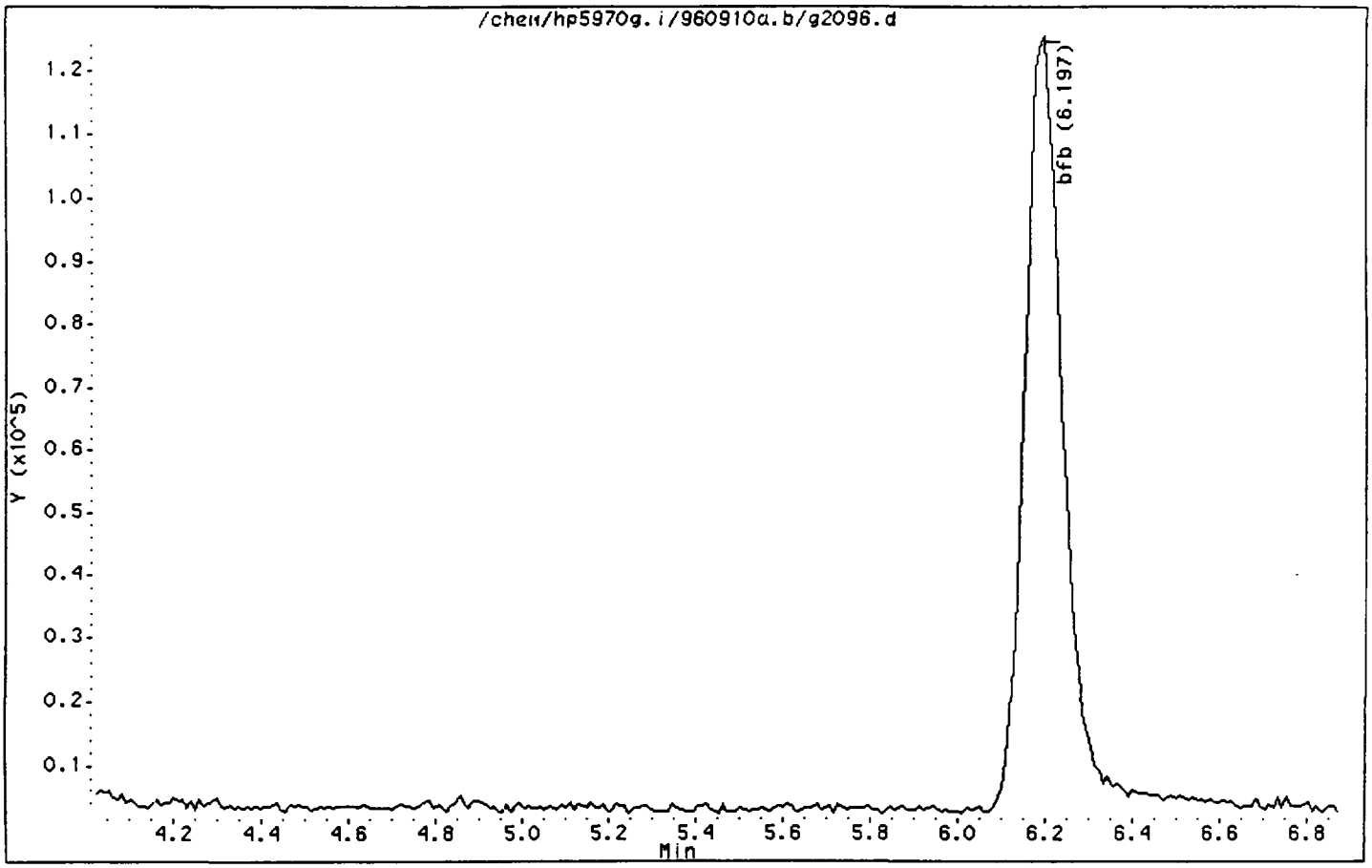
Instrument: hp5970g.i

Sample Info: BFB,BFB,960910ga,bel,,,NET

Operator: bel

Column phase: CAP

Column diameter: 0.53



Data File: /chem/hp5970g.i/961213.b/g2867.d

Date : 13-DEC-96 10:02

Client ID: BFB

Instrument: hp5970g.i

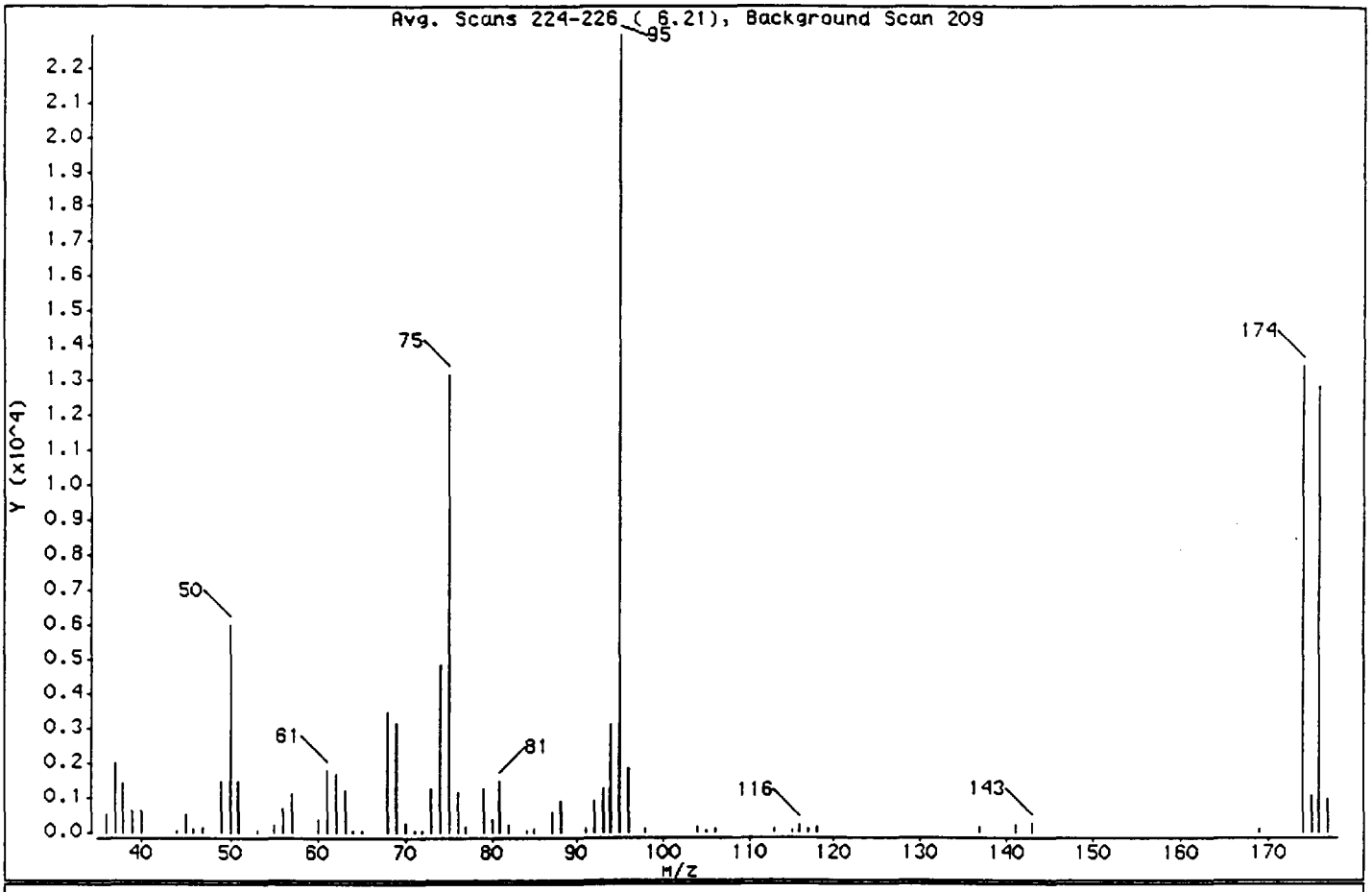
Sample Info: BFB,BFB,961213g,bel,,,NET

Operator: bel

Column phase: DB502

Column diameter: 0.53

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 8.00 - 40.00% of mass 95 | 26.27 |
| 75 | 30.00 - 66.00% of mass 95 | 57.57 |
| 96 | 5.00 - 9.00% of mass 95 | 8.07 |
| 173 | Less than 2.00% of mass 174 | 0.00 ( 0.00) |
| 174 | 50.00 - 120.00% of mass 95 | 58.70 |
| 175 | 4.00 - 9.00% of mass 174 | 4.66 ( 7.93) |
| 176 | 93.00 - 101.00% of mass 174 | 56.12 ( 95.60) |
| 177 | 5.00 - 9.00% of mass 176 | 4.05 ( 7.21) |

Date : 13-DEC-96 10:02

Client ID: BFB Instrument: hp5970g.i

Sample Info: BFB,BFB,961213g,bel,,,NET

Operator: bel

Column phase: DB502 Column diameter: 0.53

Data File: g2867.d

Spectrum : Avg. Scans 224-226 ( 6.21), Background Scan 209

Largest m/z: 95.00

Number of peaks: 63

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 551 | 60.00 | 373 | 79.00 | 1287 | 105.00 | 69 |
| 37.00 | 2029 | 61.00 | 1801 | 80.00 | 352 | 106.00 | 103 |
| 38.00 | 1445 | 62.00 | 1686 | 81.00 | 1493 | 113.00 | 81 |
| 39.00 | 626 | 63.00 | 1225 | 82.00 | 215 | 115.00 | 74 |
| 40.00 | 654 | 64.00 | 67 | 84.00 | 71 | 116.00 | 192 |
| 44.00 | 58 | 65.00 | 78 | 85.00 | 115 | 117.00 | 88 |
| 45.00 | 549 | 68.00 | 3496 | 87.00 | 571 | 118.00 | 146 |
| 46.00 | 108 | 69.00 | 3177 | 88.00 | 872 | 137.00 | 149 |
| 47.00 | 166 | 70.00 | 247 | 91.00 | 105 | 141.00 | 224 |
| 49.00 | 1455 | 71.00 | 73 | 92.00 | 895 | 143.00 | 243 |
| 50.00 | 6024 | 72.00 | 75 | 93.00 | 1247 | 169.00 | 92 |
| 51.00 | 1500 | 73.00 | 1265 | 94.00 | 3126 | 174.00 | 13462 |
| 53.00 | 67 | 74.00 | 4830 | 95.00 | 22928 | 175.00 | 1068 |
| 55.00 | 234 | 75.00 | 13203 | 96.00 | 1850 | 176.00 | 12870 |
| 56.00 | 682 | 76.00 | 1174 | 98.00 | 80 | 177.00 | 928 |
| 57.00 | 1114 | 77.00 | 162 | 104.00 | 178 | | |

Data File: /chem/hp5970g.i/961213.b/g2867.d



Date : 13-DEC-96 10:02

Client ID: BFB

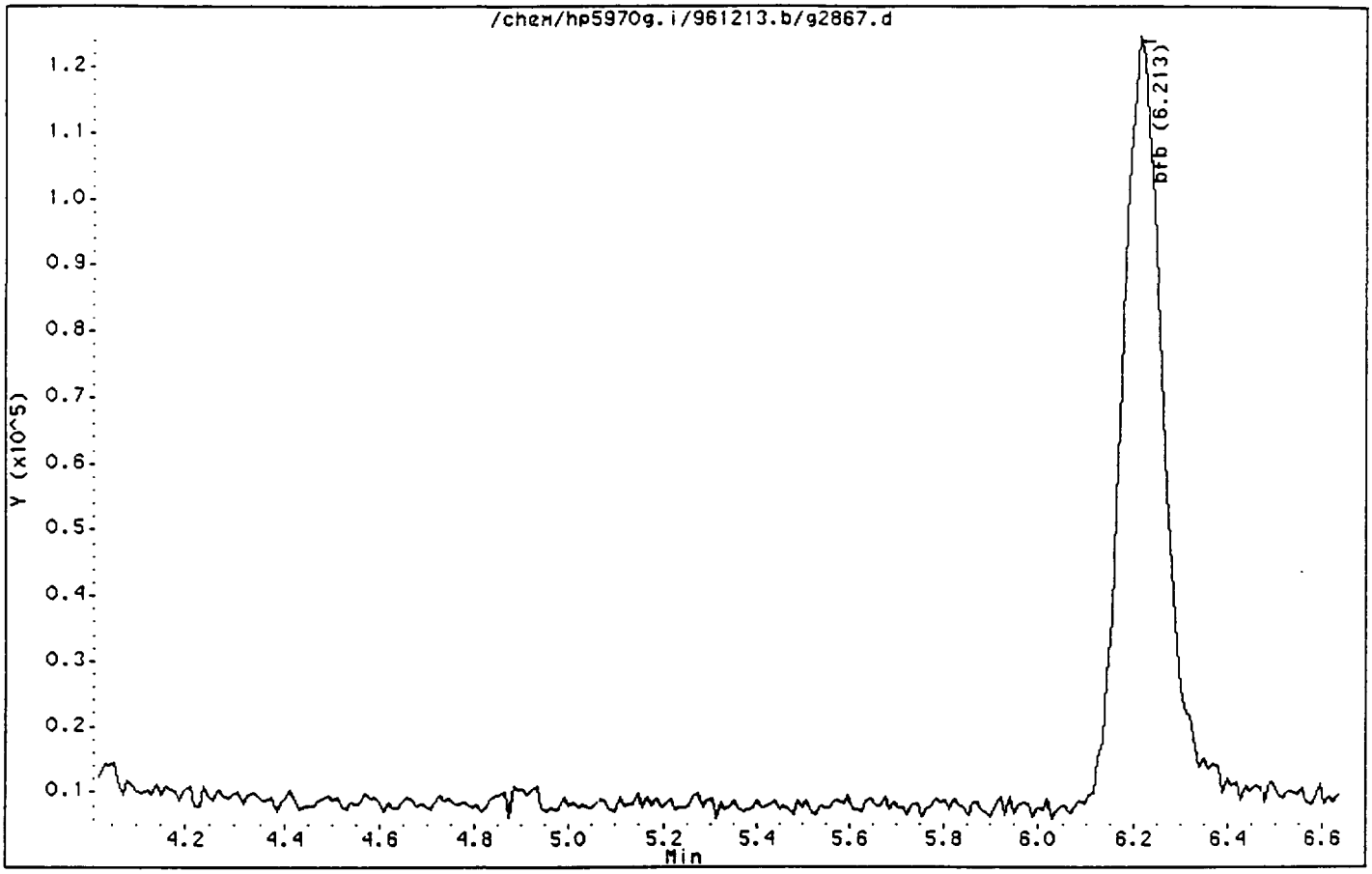
Instrument: hp5970g.i

Sample Info: BFB,BFB,961213g,bel,,,NET

Operator: bel

Column phase: DB502

Column diameter: 0.53



## 3D(2). BLANK DATA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1213G

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2124

Matrix: (soil/water) WATER Lab Sample ID: VBLK1213G

Sample wt/vol: 25.00 (g/mL) ML Lab File ID: G2870

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/13/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 1.0 | U |
| 74-83-9 | Bromomethane | 1.0 | U |
| 75-01-4 | Vinyl Chloride | 1.0 | U |
| 75-00-3 | Chloroethane | 1.0 | U |
| 75-09-2 | Methylene Chloride | 1.0 | U |
| 67-64-1 | Acetone | 1.0 | U |
| 75-15-0 | Carbon Disulfide | 1.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.0 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 1.0 | U |
| 67-66-3 | Chloroform | 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 1.0 | U |
| 78-93-3 | 2-Butanone | 1.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 1.0 | U |
| 56-23-5 | Carbon Tetrachloride | 1.0 | U |
| 75-27-4 | Bromodichloromethane | 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.0 | U |
| 79-01-6 | Trichloroethene | 1.0 | U |
| 124-48-1 | Dibromochloromethane | 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 1.0 | U |
| 71-43-2 | Benzene | 1.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 1.0 | U |
| 75-25-2 | Bromoform | 1.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 1.0 | U |
| 591-78-6 | 2-Hexanone | 1.0 | U |
| 127-18-4 | Tetrachloroethene | 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.0 | U |
| 108-88-3 | Toluene | 1.0 | U |
| 108-90-7 | Chlorobenzene | 1.0 | U |
| 100-41-4 | Ethylbenzene | 1.0 | U |
| 100-42-5 | Styrene | 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | 1.0 | U |

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1213G

Lab Name: NET CAMBRIDGE Contract: GEI

Lab Code: CAMBRG Case No.: SAS No.: SDG No.: 2124

Matrix: (soil/water) WATER Lab Sample ID: VBLK1213G

Sample wt/vol: 25.00 (g/mL) ML Lab File ID: G2870

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/13/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

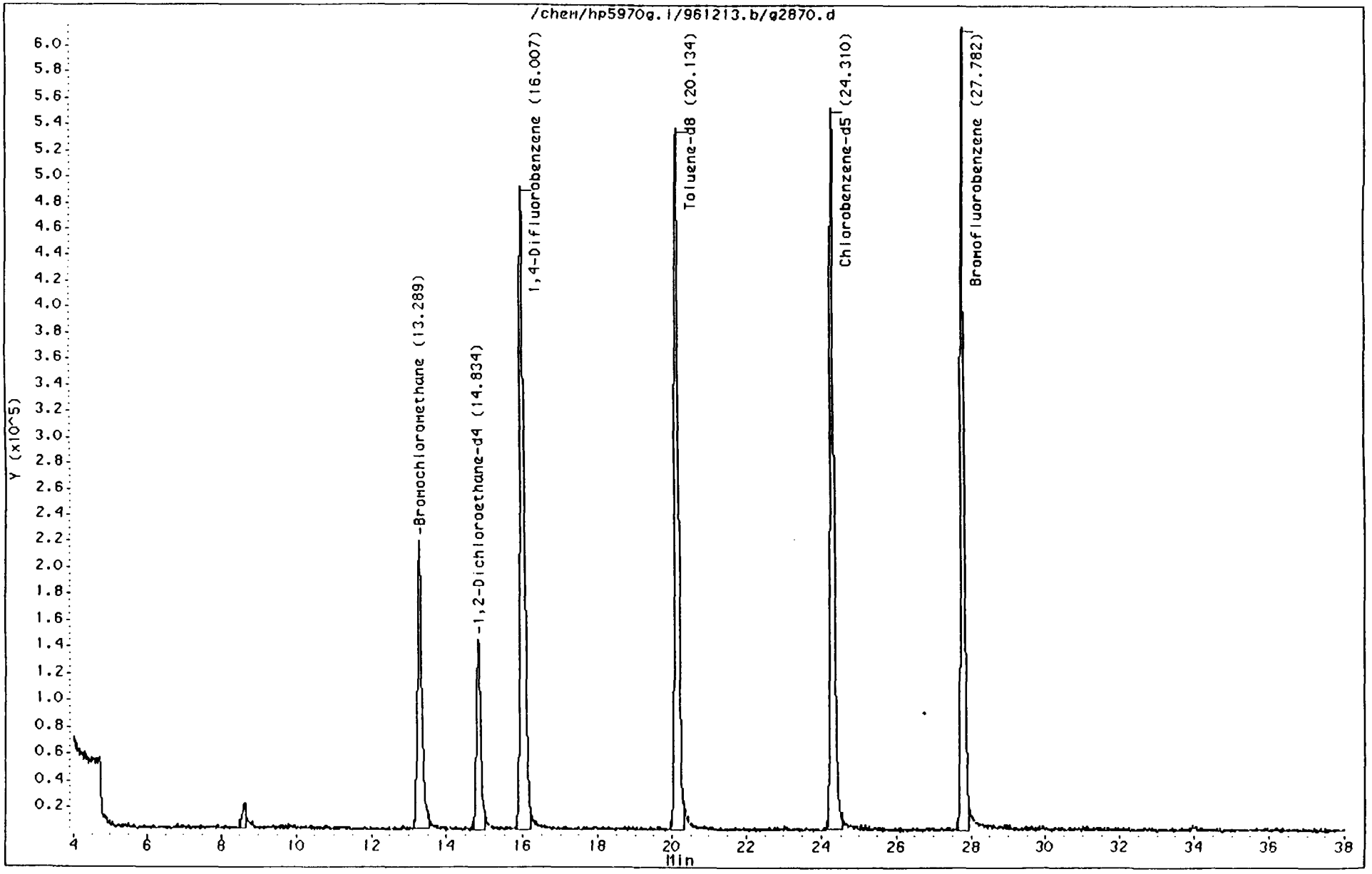
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-05-4 | Vinyl Acetate | 1.0 | U |
| 110-75-8 | 2-Chloroethylvinyl ether | 1.0 | U |
| ---------- | m and p-Xylene | 1.0 | U |
| 95-47-6 | o-Xylene | 1.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 1.0 | U |

30059

Data File: /chem/hp5970g.i/961213.b/g2870.d
Date : 13-DEC-1996 12:14
Client ID: vblk1213g
Sample Info: vblk1213g,vblk1213g,961213g,bel,,,NET
Purge Volume: 25.0
Column phase: CAP

Instrument: hp5970g.i

Operator: bel
Column diameter: 0.53



NET Cambridge

VOLATILE ISTD AND RATIO REPORT

Data file : /chem/hp5970g.i/961213.b/g2870.d
Lab Smp Id: vblk1213g  Client Smp ID: vblk1213g
Inj Date : 13-DEC-1996 12:14
Operator : bel  Inst ID: hp5970g.i
Smp Info : vblk1213g,vblk1213g,961213g,bel,,,NET
Misc Info : ,3,,BLANK,1,0,,,,,,,
Comment :
Method : /chem/hp5970g.i/961213.b/gvoa25.m
Meth Date : 13-Dec-1996 11:10  Quant Type: ISTD
Cal Date : 13-DEC-96 10:22  Cal File: g2868.d
Als bottle: 4  QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE  Compound Sublist: 8240.sub
Target Version: 3.12
Concentration Formula: Uf * 1

| Name | Value | Description |
|---|---|---|
| Uf | 1.000 | ng unit correction factor |

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ug/L) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 20 Bromochloromethane | 128.00 | 13.298 | 13.279 | (1.000) | 213339 | 10 | |
| $ 25 1,2-Dichloroethane-d4 | 65.00 | 14.834 | 14.834 | (1.115) | 457034 | 10 | 10 |
| * 28 1,4-Difluorobenzene | 114.00 | 16.007 | 15.998 | (1.000) | 1452439 | 10 | |
| $ 35 Toluene-d8 | 98.00 | 20.134 | 20.125 | (0.829) | 1324386 | 10 | 10 |
| * 43 Chlorobenzene-d5 | 117.00 | 24.300 | 24.310 | (1.000) | 1019624 | 10 | |
| $ 51 Bromofluorobenzene | 95.00 | 27.782 | 27.772 | (1.143) | 760515 | 10 | 10 |