# APPENDIX B-3

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## INITIAL THREE-POINT CALIBRATION DATA

INITIAL CALIBRATION (3-POINT)

TIOGA 2
SUPPLY SOURCE: ACCUSTANDARD LOT #B1070297
INSTRUMENT: SHIMADZU GC14A

| | | | LOW STANDARD | | | | MID STANDARD | | | | HIGH STANDARD | | | | SUMMARY | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COMPOUND | DETECTOR | CAL DATE | RT | MASS | AREA | RF | RT | MASS | AREA | RF | RT | MASS | AREA | RF | AVE RT | AVE RF | SD | %RSD |
| CARBON TETRACHLORIDE | HALL | 1/17/02 | 7.7 | 5 | 215 | 43.0 | 7.7 | 20 | 885 | 44.3 | 7.7 | 200 | 10,100 | 50.5 | 7.7 | 45.9 | 4.02 | 8.8% |
| CHLOROETHANE | HALL | 1/17/02 | 3.3 | 5 | 79.4 | 15.9 | 3.2 | 25 | 431 | 17.2 | 3.3 | 50 | 756 | 15.1 | 3.3 | 16.1 | 1.07 | 6.7% |
| CHLOROFORM | HALL | 1/17/02 | 7.1 | 5 | 170 | 34.0 | 7.1 | 20 | 730 | 36.5 | 7.1 | 200 | 8,970 | 44.9 | 7.1 | 38.5 | 5.68 | 14.8% |
| CHLOROMETHANE | HALL | 1/17/02 | 2.6 | 4 | 84.0 | 21.0 | 2.6 | 20 | 431 | 21.6 | 2.6 | 40 | 708 | 17.7 | 2.6 | 20.1 | 2.08 | 10.4% |
| 1,1-DICHLORO ETHANE | HALL | 1/17/02 | 5.7 | 5 | 151 | 30.2 | 5.7 | 20 | 634 | 31.7 | 5.7 | 200 | 7,410 | 37.1 | 5.7 | 33.0 | 3.60 | 10.9% |
| 1,2-DICHLORO ETHANE | HALL | 1/17/02 | 8.0 | 5 | 194 | 38.8 | 8.1 | 20 | 728 | 36.4 | 8.0 | 200 | 7,950 | 39.8 | 8.0 | 38.3 | 1.73 | 4.5% |
| 1,1-DICHLORO ETHENE | PID | 1/17/02 | 4.1 | 5 | 3.79 | 0.758 | 4.1 | 20 | 14.7 | 0.735 | 4.1 | 200 | 149 | 0.745 | 4.1 | 0.750 | 0.012 | 1.5% |
| CIS-1,2-DICHLORO ETHENE | PID | 1/17/02 | 6.5 | 5 | 4.94 | 0.988 | 6.6 | 20 | 19.1 | 0.96 | 6.6 | 200 | 188 | 0.940 | 6.6 | 0.960 | 0.025 | 2.6% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1/17/02 | 5.1 | 5 | 9.08 | 1.82 | 5.1 | 20 | 34.8 | 1.74 | 5.1 | 200 | 340 | 1.70 | 5.1 | 1.75 | 0.059 | 3.4% |
| DICHLOROMETHANE | HALL | 1/17/02 | 4.8 | 5 | 146 | 29.2 | 4.8 | 20 | 651 | 32.6 | 4.8 | 200 | 7,850 | 39.3 | 4.8 | 33.7 | 5.12 | 15.2% |
| TETRACHLORO ETHENE | PID | 1/17/02 | 12.9 | 5 | 4.67 | 0.934 | 12.9 | 20 | 17.2 | 0.860 | 12.9 | 200 | 172 | 0.860 | 12.9 | 0.880 | 0.043 | 4.9% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 1/17/02 | 15.2 | 5 | 231 | 46.2 | 15.1 | 20 | 888 | 44.4 | 15.2 | 200 | 10,200 | 51.0 | 15.2 | 47.2 | 3.41 | 7.2% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 1/17/02 | 18.4 | 5 | 199 | 39.8 | 18.4 | 20 | 825 | 41.3 | 18.4 | 200 | 8,700 | 43.5 | 18.4 | 41.5 | 1.86 | 4.5% |
| 1,1,1-TRICHLORO ETHANE | HALL | 1/17/02 | 7.4 | 5 | 160 | 32.0 | 7.4 | 20 | 686 | 34.3 | 7.4 | 200 | 8,140 | 40.7 | 7.4 | 35.7 | 4.51 | 12.6% |
| 1,1,2-TRICHLORO ETHANE | HALL | 1/17/02 | 12.6 | 5 | 123 | 24.6 | 12.6 | 20 | 578 | 28.9 | 12.6 | 200 | 6,810 | 34.1 | 12.6 | 29.2 | 4.73 | 16.2% |
| TRICHLORO ETHENE | PID | 1/17/02 | 9.1 | 5 | 5.77 | 1.15 | 9.1 | 20 | 21.6 | 1.08 | 9.1 | 200 | 213 | 1.07 | 9.1 | 1.10 | 0.048 | 4.3% |
| VINYL CHLORIDE | HALL | 1/17/02 | 2.7 | 5.2 | 164 | 31.5 | 2.7 | 26 | 769 | 29.6 | 2.7 | 52 | 1,280 | 24.6 | 2.7 | 28.6 | 3.57 | 12.5% |
| TRICHLOROFLUOROMETHANE (FR11) | HALL | 1/17/02 | 3.6 | 10 | 432 | 43.2 | 3.6 | 50 | 1,920 | 38.4 | 3.6 | 100 | 3,044 | 30.4 | 3.6 | 37.3 | 6.44 | 17.3% |
| DICHLORODIFLUOROMETHANE (FR12) | HALL | 1/17/02 | 2.4 | 8.4 | 153 | 18.21 | 2.3 | 42 | 894 | 21.3 | 2.3 | 84 | 1,610 | 19.17 | 2.3 | 19.6 | 1.57 | 8.0% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 1/17/02 | 4.1 | 10 | 212 | 21.2 | 4.1 | 40 | 937 | 23.4 | 4.1 | 400 | 11,700 | 29.3 | 4.1 | 24.6 | 4.16 | 16.9% |
| 1,1,1-TRICHLORO ETHANE | FID | 11/7/01 | 1.3 | 100 | 4.52 | 0.0452 | 1.3 | 1,000 | 48.2 | 0.0482 | 1.3 | 10,000 | 482 | 0.0482 | 1.3 | 0.0470 | 0.0017 | 3.7% |
| TRICHLORO ETHENE | FID | 11/7/01 | 2.0 | 100 | 5.08 | 0.0508 | 2.0 | 1,000 | 50.2 | 0.0502 | 2.0 | 10,000 | 486 | 0.0486 | 2.0 | 0.0500 | 0.0011 | 2.3% |
| TETRACHLORO ETHENE | FID | 11/7/01 | 4.4 | 100 | 4.26 | 0.0426 | 4.4 | 1,000 | 41.5 | 0.0415 | 4.4 | 10,000 | 403 | 0.0403 | 4.4 | 0.0410 | 0.0012 | 2.8% |
| BENZENE | PID | 1/17/02 | 7.9 | 5 | 10.4 | 2.08 | 8.0 | 20 | 39.8 | 1.99 | 8.0 | 200 | 388 | 1.94 | 8.0 | 2.00 | 0.071 | 3.5% |
| CHLOROBENZENE | PID | 1/17/02 | 14.9 | 5 | 10.0 | 2.00 | 14.9 | 20 | 38.3 | 1.92 | 14.9 | 200 | 392 | 1.96 | 14.9 | 1.96 | 0.043 | 2.2% |
| ETHYLBENZENE | PID | 1/17/02 | 15.2 | 5 | 8.33 | 1.67 | 15.2 | 20 | 31.8 | 1.59 | 15.2 | 200 | 314 | 1.57 | 15.2 | 1.61 | 0.051 | 3.1% |
| TOLUENE | PID | 1/17/02 | 11.7 | 5 | 9.49 | 1.90 | 11.7 | 20 | 36.1 | 1.81 | 11.7 | 200 | 369 | 1.85 | 11.7 | 1.85 | 0.047 | 2.5% |
| m&p-XYLENES | PID | 1/17/02 | 15.5 | 10 | 19.2 | 1.92 | 15.5 | 40 | 74.1 | 1.85 | 15.5 | 400 | 782 | 1.96 | 15.5 | 1.91 | 0.052 | 2.7% |
| o-XYLENE | PID | 1/17/02 | 16.5 | 5 | 7.92 | 1.58 | 16.5 | 20 | 30.6 | 1.53 | 16.5 | 200 | 316 | 1.58 | 16.5 | 1.56 | 0.030 | 1.9% |
| MTBE | PID | 1/17/02 | 5.1 | 5 | 4.82 | 0.964 | 5.2 | 20 | 21.9 | 1.10 | 5.2 | 200 | 203 | 1.02 | 5.2 | 1.02 | 0.066 | 6.5% |
| METHANE | FID | 11/28/01 | 0.25 | 100 | 17.4 | 0.174 | 0.25 | 1000 | 151 | 0.151 | 0.25 | 10000 | 1703 | 0.170 | 0.25 | 0.165 | 0.012 | 7.5% |
| TPH (C4-C6) | FID | 10/25/01 | 0.4 | 600 | 483 | 0.805 | 0.4 | 1500 | 947 | 0.631 | 0.4 | 3000 | 2076 | 0.692 | 0.4 | 0.709 | 0.088 | 12.4% |
| CO2 | TCD | 1/23/02 | 1.5 | 1.0 | 39.8 | 39.8 | 1.5 | 5.0 | 212 | 42.4 | 1.5 | 10 | 413 | 41.3 | 1.5 | 41.2 | 1.31 | 3.2% |
| O2 | TCD | 1/23/02 | 2.7 | 4.16 | 192 | 45.9 | 2.7 | 10.45 | 458 | 43.8 | 2.7 | 20.9 | 907 | 43.4 | 2.7 | 44.4 | 1.36 | 3.1% |
| 1,4 DIFLUORO BENZENE | PID | 1/17/02 | 8.6 | 5 | 3.89 | 0.778 | 8.6 | 20 | 14.6 | 0.730 | 8.6 | 50 | 35.8 | 0.716 | 8.6 | 0.740 | 0.033 | 4.4% |
| TRIFLUORO TOULENE | PID | 1/17/02 | 9.6 | 5 | 3.34 | 0.668 | 9.7 | 20 | 12.6 | 0.630 | 9.7 | 50 | 31.1 | 0.622 | 9.7 | 0.600 | 0.025 | 4.1% |
| 4 BROMOFLUORO BENZENE | PID | 1/17/02 | 17.8 | 5 | 11.5 | 2.30 | 17.9 | 20 | 45.4 | 2.27 | 17.9 | 50 | 114 | 2.28 | 17.9 | 2.28 | 0.015 | 0.7% |

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

SOIL GAS INITIAL LCS STANDARD REPORT (3-POINT CALIBRATION VERIFICATION)

LAB: TIOGA 2
SUPPLY SOURCE: ACCUSTANDARD LOT #B0120302
INSTRUMENT: SHIMADZU GC14A

| COMPOUND | DETECTOR | CAL DATE | AVE RF | MASS | RT | AREA | RF | %DIFF |
|---|---|---|---|---|---|---|---|---|
| CARBON TETRACHLORIDE | HALL | 1/17/02 | 45.9 | 20 | 7.7 | 988 | 49.4 | 7.6% |
| CHLOROFORM | HALL | 1/17/02 | 38.5 | 20 | 7.1 | 770 | 38.5 | 0.0% |
| 1,1-DICHLORO ETHANE | HALL | 1/17/02 | 33.0 | 20 | 5.7 | 698 | 34.9 | 5.8% |
| 1,2-DICHLORO ETHANE | HALL | 1/17/02 | 38.3 | 20 | 8.1 | 827 | 41.4 | 8.0% |
| 1,1-DICHLORO ETHENE | PID | 1/17/02 | 0.750 | 20 | 4.1 | 15.4 | 0.77 | 2.7% |
| CIS-1,2-DICHLORO ETHENE | PID | 1/17/02 | 0.96 | 20 | 6.6 | 19.3 | 0.97 | 0.5% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1/17/02 | 1.75 | 20 | 5.1 | 35.9 | 1.80 | 2.6% |
| DICHLOROMETHANE | HALL | 1/17/02 | 33.7 | 20 | 4.8 | 725 | 36.3 | 7.6% |
| TETRACHLORO ETHENE | PID | 1/17/02 | 0.88 | 20 | 12.9 | 17.1 | 0.86 | 2.8% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 1/17/02 | 47.2 | 20 | 15.2 | 1,000 | 50.0 | 5.9% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 1/17/02 | 41.5 | 20 | 18.3 | 903 | 45.2 | 8.8% |
| 1,1,1-TRICHLORO ETHANE | HALL | 1/17/02 | 35.7 | 20 | 7.4 | 787 | 39.4 | 10.2% |
| 1,1,2-TRICHLORO ETHANE | HALL | 1/17/02 | 29.2 | 20 | 12.6 | 588 | 29.40 | 0.7% |
| TRICHLORO ETHENE | PID | 1/17/02 | 1.10 | 20 | 9.1 | 22.0 | 1.10 | 0.0% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 1/17/02 | 24.60 | 40 | 4.1 | 1,030 | 25.75 | 4.7% |
| BENZENE | PID | 1/17/02 | 2.00 | 20 | 8.0 | 39.4 | 1.97 | 1.5% |
| ETHYLBENZENE | PID | 1/17/02 | 1.61 | 20 | 15.2 | 31.7 | 1.59 | 1.6% |
| TOLUENE | PID | 1/17/02 | 1.85 | 20 | 11.7 | 35.8 | 1.79 | 3.2% |
| m&p-XYLENES | PID | 1/17/02 | 1.91 | 40 | 15.5 | 73.7 | 1.84 | 3.5% |
| o-XYLENE | PID | 1/17/02 | 1.56 | 20 | 16.5 | 30.5 | 1.53 | 2.2% |

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

# APPENDIX B-4

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## DAILY OPENING, CLOSING, AND CONTINUING CALIBRATION VERIFICATION REPORTS

QA/QC CALIBRATION DATA

DATE: 02/11/02
HP Labs Project #GF021102T2
TIOGA 2

SUPPLY SOURCE: CONTINUING CALIBRATION (OPENING) ACCUSTANDARD LOT #B1070297
SUPPLY SOURCE: QUALITY CONTROL (CLOSING) ACCUSTANDARD LOT #B0120302
INSTRUMENT: SHIMADZU GC14A FRONT

| | | | OPENING STANDARD | | | | | CLOSING STANDARD | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COMPOUND | DETECTOR | AVE RF | MASS | RT | AREA | RF | %DIFF | MASS | RT | AREA | RF | %DIFF |
| CARBON TETRACHLORIDE | HALL | 45.9 | 20 | 7.7 | 930 | 46.5 | 1.3% | 20 | 7.7 | 929 | 46.5 | 1.2% |
| CHLOROFORM | HALL | 38.5 | 20 | 7.1 | 731 | 36.6 | 5.1% | 20 | 7.1 | 716 | 35.8 | 7.0% |
| 1,1-DICHLORO ETHANE | HALL | 33.0 | 20 | 5.7 | 675 | 33.8 | 2.3% | 20 | 5.7 | 689 | 34.5 | 4.4% |
| 1,2-DICHLORO ETHANE | HALL | 38.3 | 20 | 8.0 | 801 | 40.1 | 4.6% | 20 | 8.0 | 871 | 43.6 | 13.7% |
| 1,1-DICHLORO ETHENE | PID | 0.750 | 20 | 4.1 | 15.4 | 0.8 | 2.7% | 20 | 4.1 | 15.0 | 0.8 | 0.0% |
| CIS-1,2-DICHLORO ETHENE | PID | 0.96 | 20 | 6.6 | 20.4 | 1.0 | 6.3% | 20 | 6.6 | 19.9 | 1.0 | 3.6% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1.75 | 20 | 5.1 | 36.4 | 1.8 | 4.0% | 20 | 5.1 | 35.8 | 1.8 | 2.3% |
| DICHLOROMETHANE | HALL | 33.7 | 20 | 4.8 | 630 | 31.5 | 6.5% | 20 | 4.8 | 697 | 34.9 | 3.4% |
| TETRACHLORO ETHENE | PID | 0.88 | 20 | 12.9 | 18.7 | 0.9 | 6.3% | 20 | 12.9 | 18.2 | 0.9 | 3.4% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 47.2 | 20 | 15.2 | 1020 | 51.0 | 8.1% | 20 | 15.2 | 996 | 49.8 | 5.5% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 41.5 | 20 | 18.4 | 824 | 41.2 | 0.7% | 20 | 18.4 | 901 | 45.1 | 8.6% |
| 1,1,1-TRICHLORO ETHANE | HALL | 35.7 | 20 | 7.4 | 736 | 36.8 | 3.1% | 20 | 7.4 | 748 | 37.4 | 4.8% |
| 1,1,2-TRICHLORO ETHANE | HALL | 29.20 | 20 | 12.6 | 633 | 31.7 | 8.4% | 20 | 12.6 | 595 | 29.8 | 1.9% |
| TRICHLORO ETHENE | PID | 1.10 | 20 | 9.1 | 23.2 | 1.2 | 5.5% | 20 | 9.1 | 22.7 | 1.1 | 3.2% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 24.60 | 40 | 4.1 | 919 | 23.0 | 6.6% | 40 | 4.1 | 927 | 23.2 | 5.8% |
| BENZENE | PID | 2.00 | 20 | 8.0 | 42.1 | 2.1 | 5.3% | 20 | 8.0 | 41.6 | 2.1 | 4.0% |
| CHLOROBENZENE | PID | 1.96 | 20 | 14.9 | 41.3 | 2.1 | 5.4% | 20 | 14.9 | 40.6 | 2.0 | 3.6% |
| ETHYLBENZENE | PID | 1.61 | 20 | 15.2 | 34.4 | 1.7 | 6.8% | 20 | 15.2 | 33.8 | 1.7 | 5.0% |
| TOLUENE | PID | 1.85 | 20 | 11.7 | 38.9 | 1.9 | 5.1% | 20 | 11.7 | 38.4 | 1.9 | 3.8% |
| m&p-XYLENES | PID | 1.91 | 40 | 15.5 | 79.9 | 2.0 | 4.6% | 40 | 15.5 | 78.8 | 2.0 | 3.1% |
| o-XYLENE | PID | 1.56 | 20 | 16.5 | 33.2 | 1.7 | 6.4% | 20 | 16.5 | 33.3 | 1.7 | 6.7% |
| 1,4 DIFLUORO BENZENE | PID | 0.740 | 20 | 8.6 | 15.7 | 0.8 | 6.1% | 20 | 8.6 | 15.3 | 0.8 | 3.4% |
| 4 BROMOFLUORO BENZENE | PID | 2.28 | 20 | 17.9 | 48.6 | 2.4 | 6.6% | 20 | 17.9 | 48.0 | 2.4 | 5.3% |

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

QA/QC - CALIBRATION DATA

DATE: 02/11/02
HP Labs Project #GF021102T2
TIOGA 2

SUPPLY SOURCE: (CALIBRATION VERIFICATION)
ACCUSTANDARD LOT # B1070297
INSTRUMENT: SHIMADZU GC14A

| COMPOUND | DETECTOR | AVE RF | CONTINUING STANDARD MASS | RT | AREA | CF | %DIFF |
|---|---|---|---|---|---|---|---|
| CARBON TETRACHLORIDE | HALL | 45.9 | 20 | 10.1 | 865 | 43 | 5.8% |
| CHLOROFORM | HALL | 38.5 | 20 | 9.2 | 629 | 31.5 | 18.3% |
| 1,1-DICHLORO ETHANE | HALL | 33.0 | 20 | 7.7 | 639 | 32 | 3.2% |
| 1,2-DICHLORO ETHANE | HALL | 38.3 | 20 | 10.3 | 775 | 39 | 1.2% |
| 1,1-DICHLORO ETHENE | PID | 0.75 | 20 | 5.8 | 14.5 | 0.7 | 3.3% |
| CIS-1,2-DICHLORO ETHENE | PID | 0.960 | 20 | 8.5 | 19.4 | 1.0 | 1.0% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1.75 | 20 | 6.9 | 34.8 | 1.7 | 0.6% |
| DICHLOROMETHANE | HALL | 33.7 | 20 | 6.8 | 620 | 31.0 | 8.0% |
| TETRACHLORO ETHENE | PID | 0.88 | 20 | 15.7 | 18.0 | 0.9 | 2.3% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 47.2 | 20 | 18.2 | 968 | 48.4 | 2.5% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 41.5 | 20 | 21.0 | 826 | 41.3 | 0.5% |
| 1,1,1-TRICHLORO ETHANE | HALL | 35.7 | 20 | 9.6 | 633 | 32 | 11.3% |
| 1,1,2-TRICHLORO ETHANE | HALL | 29.2 | 20 | 14.9 | 531 | 27 | 9.1% |
| TRICHLORO ETHENE | PID | 1.10 | 20 | 11.5 | 22.0 | 1.1 | 0.0% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 24.6 | 40 | 5.7 | 866 | 22 | 12.0% |
| BENZENE | PID | 2.00 | 20 | 10.3 | 40.2 | 2.0 | 0.5% |
| CHLOROBENZENE | PID | 1.96 | 20 | 17.6 | 39.5 | 2.0 | 0.8% |
| ETHYLBENZENE | PID | 1.61 | 20 | 17.7 | 32.8 | 1.6 | 1.9% |
| TOLUENE | PID | 1.85 | 20 | 14.1 | 37.2 | 1.9 | 0.5% |
| m&p-XYLENES | PID | 1.91 | 40 | 17.9 | 76.3 | 1.9 | 0.1% |
| o-XYLENE | PID | 1.56 | 20 | 19.1 | 31.8 | 1.6 | 1.9% |
| 1,4 DIFLUORO BENZENE | PID | 0.740 | 20 | 10.7 | 15.0 | 0.8 | 1.4% |
| 4 BROMOFLUORO BENZENE | PID | 2.28 | 20 | 20.8 | 46.8 | 2.3 | 2.6% |

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

QA/QC CALIBRATION DATA

DATE: 02/12/02
HP Labs Project #GF021102T2
TIOGA 2

SUPPLY SOURCE: CONTINUING CALIBRATION (OPENING) ACCUSTANDARD LOT #B1070297
SUPPLY SOURCE: QUALITY CONTROL (CLOSING) ACCUSTANDARD LOT #B0120302
INSTRUMENT: SHIMADZU GC14A FRONT

| | | | OPENING STANDARD | | | | | CLOSING STANDARD | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COMPOUND | DETECTOR | AVE RF | MASS | RT | AREA | RF | %DIFF | MASS | RT | AREA | RF | %DIFF |
| CARBON TETRACHLORIDE | HALL | 45.9 | 20 | 7.7 | 955 | 47.8 | 4.0% | 20 | 7.7 | 958 | 47.9 | 4.4% |
| CHLOROFORM | HALL | 38.5 | 20 | 7.1 | 751 | 37.6 | 2.5% | 20 | 7.1 | 803 | 40.2 | 4.3% |
| 1,1-DICHLORO ETHANE | HALL | 33.0 | 20 | 5.7 | 679 | 34.0 | 2.9% | 20 | 5.7 | 687 | 34.4 | 4.1% |
| 1,2-DICHLORO ETHANE | HALL | 38.3 | 20 | 8.0 | 844 | 42.2 | 10.2% | 20 | 8.0 | 837 | 41.9 | 9.3% |
| 1,1-DICHLORO ETHENE | PID | 0.750 | 20 | 4.1 | 14.0 | 0.7 | 6.7% | 20 | 4.1 | 14.2 | 0.7 | 5.3% |
| CIS-1,2-DICHLORO ETHENE | PID | 0.96 | 20 | 6.6 | 18.8 | 0.9 | 2.1% | 20 | 6.6 | 19.1 | 1.0 | 0.5% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1.75 | 20 | 5.1 | 33.7 | 1.7 | 3.7% | 20 | 5.1 | 34.1 | 1.7 | 2.6% |
| DICHLOROMETHANE | HALL | 33.7 | 20 | 4.8 | 717 | 35.9 | 6.4% | 20 | 4.8 | 665 | 33.3 | 1.3% |
| TETRACHLORO ETHENE | PID | 0.88 | 20 | 12.9 | 17.4 | 0.9 | 1.1% | 20 | 12.9 | 17.5 | 0.9 | 0.6% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 47.2 | 20 | 15.2 | 1070 | 53.5 | 13.3% | 20 | 15.2 | 1020 | 51.0 | 8.1% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 41.5 | 20 | 18.4 | 948 | 47.4 | 14.2% | 20 | 18.4 | 898 | 44.9 | 8.2% |
| 1,1,1-TRICHLORO ETHANE | HALL | 35.7 | 20 | 7.4 | 797 | 39.9 | 11.6% | 20 | 7.4 | 709 | 35.5 | 0.7% |
| 1,1,2-TRICHLORO ETHANE | HALL | 29.20 | 20 | 12.6 | 602 | 30.1 | 3.1% | 20 | 12.6 | 605 | 30.3 | 3.6% |
| TRICHLORO ETHENE | PID | 1.10 | 20 | 9.1 | 21.5 | 1.1 | 2.3% | 20 | 9.1 | 21.7 | 1.1 | 1.4% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 24.60 | 40 | 4.1 | 1020 | 25.5 | 3.7% | 40 | 4.1 | 961 | 24.0 | 2.3% |
| BENZENE | PID | 2.00 | 20 | 8.0 | 39.3 | 2.0 | 1.8% | 20 | 8.0 | 40.0 | 2.0 | 0.0% |
| CHLOROBENZENE | PID | 1.96 | 20 | 14.9 | 38.5 | 1.9 | 1.8% | 20 | 14.9 | 39.0 | 2.0 | 0.5% |
| ETHYLBENZENE | PID | 1.61 | 20 | 15.2 | 32.0 | 1.6 | 0.6% | 20 | 15.2 | 32.5 | 1.6 | 0.9% |
| TOLUENE | PID | 1.85 | 20 | 11.7 | 36.3 | 1.8 | 1.9% | 20 | 11.7 | 36.9 | 1.8 | 0.3% |
| m&p-XYLENES | PID | 1.91 | 40 | 15.5 | 74.5 | 1.9 | 2.5% | 40 | 15.5 | 75.8 | 1.9 | 0.8% |
| o-XYLENE | PID | 1.56 | 20 | 16.5 | 31.3 | 1.6 | 0.3% | 20 | 16.5 | 31.6 | 1.6 | 1.3% |
| 1,4 DIFLUORO BENZENE | PID | 0.740 | 20 | 8.6 | 14.6 | 0.7 | 1.4% | 20 | 8.6 | 14.7 | 0.7 | 0.7% |
| 4 BROMOFLUORO BENZENE | PID | 2.28 | 20 | 17.9 | 45.8 | 2.3 | 0.4% | 20 | 17.9 | 45.7 | 2.3 | 0.2% |

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

QA/QC - CALIBRATION DATA

DATE: 02/12/02
HP Labs Project #GF021102T2
TIOGA 2

SUPPLY SOURCE: (CALIBRATION VERIFICATION)
ACCUSTANDARD LOT # B1070297
INSTRUMENT: SHIMADZU GC14A

| COMPOUND | DETECTOR | AVE RF | CONTINUING STANDARD MASS | RT | AREA | CF | %DIFF |
|---|---|---|---|---|---|---|---|
| CARBON TETRACHLORIDE | HALL | 45.9 | 20 | 10.1 | 901 | 45 | 1.9% |
| CHLOROFORM | HALL | 38.5 | 20 | 9.2 | 704 | 35.2 | 8.6% |
| 1,1-DICHLORO ETHANE | HALL | 33.0 | 20 | 7.7 | 598 | 30 | 9.4% |
| 1,2-DICHLORO ETHANE | HALL | 38.3 | 20 | 10.3 | 798 | 40 | 4.2% |
| 1,1-DICHLORO ETHENE | PID | 0.75 | 20 | 5.8 | 14.3 | 0.7 | 4.7% |
| CIS-1,2-DICHLORO ETHENE | PID | 0.960 | 20 | 8.5 | 19.4 | 1.0 | 1.0% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1.75 | 20 | 6.9 | 34.8 | 1.7 | 0.6% |
| DICHLOROMETHANE | HALL | 33.7 | 20 | 6.8 | 554 | 27.7 | 17.8% |
| TETRACHLORO ETHENE | PID | 0.88 | 20 | 15.7 | 17.8 | 0.9 | 1.1% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 47.2 | 20 | 18.2 | 979 | 49.0 | 3.7% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 41.5 | 20 | 21.0 | 959 | 48.0 | 15.5% |
| 1,1,1-TRICHLORO ETHANE | HALL | 35.7 | 20 | 9.6 | 716 | 36 | 0.3% |
| 1,1,2-TRICHLORO ETHANE | HALL | 29.2 | 20 | 14.9 | 579 | 29 | 0.9% |
| TRICHLORO ETHENE | PID | 1.10 | 20 | 11.5 | 22.1 | 1.1 | 0.5% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 24.6 | 40 | 5.7 | 855 | 21 | 13.1% |
| BENZENE | PID | 2.00 | 20 | 10.3 | 40.3 | 2.0 | 0.7% |
| CHLOROBENZENE | PID | 1.96 | 20 | 17.6 | 39.6 | 2.0 | 1.0% |
| ETHYLBENZENE | PID | 1.61 | 20 | 17.7 | 32.9 | 1.6 | 2.2% |
| TOLUENE | PID | 1.85 | 20 | 14.1 | 37.5 | 1.9 | 1.4% |
| m&p-XYLENES | PID | 1.91 | 40 | 17.9 | 76.7 | 1.9 | 0.4% |
| o-XYLENE | PID | 1.56 | 20 | 19.1 | 32.1 | 1.6 | 2.9% |
| 1,4 DIFLUORO BENZENE | PID | 0.740 | 20 | 10.7 | 14.9 | 0.7 | 0.7% |
| 4 BROMOFLUORO BENZENE | PID | 2.28 | 20 | 20.8 | 47.2 | 2.4 | 3.5% |

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

QA/QC CALIBRATION DATA

DATE: 02/13/02
HP Labs Project #GF021102T2
TIOGA 2

SUPPLY SOURCE: CONTINUING CALIBRATION (OPENING) ACCUSTANDARD LOT #B1070297
SUPPLY SOURCE: QUALITY CONTROL (CLOSING) ACCUSTANDARD LOT #B0120302
INSTRUMENT: SHIMADZU GC14A FRONT

| | | | OPENING STANDARD | | | | | CLOSING STANDARD | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COMPOUND | DETECTOR | AVE RF | MASS | RT | AREA | RF | %DIFF | MASS | RT | AREA | RF | %DIFF |
| CARBON TETRACHLORIDE | HALL | 45.9 | 20 | 7.7 | 977 | 48.9 | 6.4% | 20 | 7.7 | 922 | 46.1 | 0.4% |
| CHLOROFORM | HALL | 38.5 | 20 | 7.1 | 775 | 38.8 | 0.6% | 20 | 7.1 | 718 | 35.9 | 6.8% |
| 1,1-DICHLORO ETHANE | HALL | 33.0 | 20 | 5.7 | 662 | 33.1 | 0.3% | 20 | 5.7 | 662 | 33.1 | 0.3% |
| 1,2-DICHLORO ETHANE | HALL | 38.3 | 20 | 8.0 | 811 | 40.6 | 5.9% | 20 | 8.0 | 864 | 43.2 | 12.8% |
| 1,1-DICHLORO ETHENE | PID | 0.750 | 20 | 4.1 | 14.3 | 0.7 | 4.7% | 20 | 4.1 | 14.4 | 0.7 | 4.0% |
| CIS-1,2-DICHLORO ETHENE | PID | 0.96 | 20 | 6.6 | 19.4 | 1.0 | 1.0% | 20 | 6.6 | 19.8 | 1.0 | 3.1% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1.75 | 20 | 5.1 | 34.5 | 1.7 | 1.4% | 20 | 5.1 | 35.4 | 1.8 | 1.1% |
| DICHLOROMETHANE | HALL | 33.7 | 20 | 4.8 | 642 | 32.1 | 4.7% | 20 | 4.8 | 633 | 31.7 | 6.1% |
| TETRACHLORO ETHENE | PID | 0.88 | 20 | 12.9 | 18.0 | 0.9 | 2.3% | 20 | 12.9 | 18.1 | 0.9 | 2.8% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 47.2 | 20 | 15.2 | 954 | 47.7 | 1.1% | 20 | 15.2 | 999 | 50.0 | 5.8% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 41.5 | 20 | 18.4 | 958 | 47.9 | 15.4% | 20 | 18.4 | 932 | 46.6 | 12.3% |
| 1,1,1-TRICHLORO ETHANE | HALL | 35.7 | 20 | 7.4 | 751 | 37.6 | 5.2% | 20 | 7.4 | 699 | 35.0 | 2.1% |
| 1,1,2-TRICHLORO ETHANE | HALL | 29.20 | 20 | 12.6 | 578 | 28.9 | 1.0% | 20 | 12.6 | 569 | 28.5 | 2.6% |
| TRICHLORO ETHENE | PID | 1.10 | 20 | 9.1 | 22.2 | 1.1 | 0.9% | 20 | 9.1 | 22.6 | 1.1 | 2.7% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 24.60 | 40 | 4.1 | 992 | 24.8 | 0.8% | 40 | 4.1 | 901 | 22.5 | 8.4% |
| BENZENE | PID | 2.00 | 20 | 8.0 | 40.5 | 2.0 | 1.3% | 20 | 8.0 | 41.2 | 2.1 | 3.0% |
| CHLOROBENZENE | PID | 1.96 | 20 | 14.9 | 40.1 | 2.0 | 2.3% | 20 | 14.9 | 40.4 | 2.0 | 3.1% |
| ETHYLBENZENE | PID | 1.61 | 20 | 15.2 | 33.4 | 1.7 | 3.7% | 20 | 15.2 | 33.7 | 1.7 | 4.7% |
| TOLUENE | PID | 1.85 | 20 | 11.7 | 37.8 | 1.9 | 2.2% | 20 | 11.7 | 38.2 | 1.9 | 3.2% |
| m&p-XYLENES | PID | 1.91 | 40 | 15.5 | 77.1 | 1.9 | 0.9% | 40 | 15.5 | 78.3 | 2.0 | 2.5% |
| o-XYLENE | PID | 1.56 | 20 | 16.5 | 32.1 | 1.6 | 2.9% | 20 | 16.5 | 32.7 | 1.6 | 4.8% |
| 1,4 DIFLUORO BENZENE | PID | 0.740 | 20 | 8.6 | 15.1 | 0.8 | 2.0% | 20 | 8.6 | 15.5 | 0.8 | 4.7% |
| 4 BROMOFLUORO BENZENE | PID | 2.28 | 20 | 17.9 | 47.7 | 2.4 | 4.6% | 20 | 17.9 | 48.0 | 2.4 | 5.3% |

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

QA/QC - CALIBRATION DATA

DATE: 02/13/02
HP Labs Project #GF021102T2
TIOGA 2

SUPPLY SOURCE: (CALIBRATION VERIFICATION)
ACCUSTANDARD LOT # B1070297
INSTRUMENT: SHIMADZU GC14A

| | | | CONTINUING STANDARD | | | | |
|---|---|---|---|---|---|---|---|
| COMPOUND | DETECTOR | AVE RF | MASS | RT | AREA | CF | %DIFF |
| CARBON TETRACHLORIDE | HALL | 45.9 | 20 | 10.1 | 917 | 46 | 0.1% |
| CHLOROFORM | HALL | 38.5 | 20 | 9.2 | 718 | 35.9 | 6.8% |
| 1,1-DICHLORO ETHANE | HALL | 33.0 | 20 | 7.7 | 635 | 32 | 3.8% |
| 1,2-DICHLORO ETHANE | HALL | 38.3 | 20 | 10.3 | 828 | 41 | 8.1% |
| 1,1-DICHLORO ETHENE | PID | 0.75 | 20 | 5.8 | 13.5 | 0.7 | 10.0% |
| CIS-1,2-DICHLORO ETHENE | PID | 0.960 | 20 | 8.5 | 18.5 | 0.9 | 3.6% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1.75 | 20 | 6.9 | 33.1 | 1.7 | 5.4% |
| DICHLOROMETHANE | HALL | 33.7 | 20 | 6.8 | 665 | 33.3 | 1.3% |
| TETRACHLORO ETHENE | PID | 0.88 | 20 | 15.7 | 17.1 | 0.9 | 2.8% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 47.2 | 20 | 18.2 | 985 | 49.3 | 4.3% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 41.5 | 20 | 21.0 | 950 | 47.5 | 14.5% |
| 1,1,1-TRICHLORO ETHANE | HALL | 35.7 | 20 | 9.6 | 706 | 35 | 1.1% |
| 1,1,2-TRICHLORO ETHANE | HALL | 29.2 | 20 | 14.9 | 572 | 29 | 2.1% |
| TRICHLORO ETHENE | PID | 1.10 | 20 | 11.5 | 21.1 | 1.1 | 4.1% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 24.6 | 40 | 5.7 | 947 | 24 | 3.8% |
| BENZENE | PID | 2.00 | 20 | 10.3 | 38.6 | 1.9 | 3.5% |
| CHLOROBENZENE | PID | 1.96 | 20 | 17.6 | 38.1 | 1.9 | 2.8% |
| ETHYLBENZENE | PID | 1.61 | 20 | 17.7 | 31.7 | 1.6 | 1.6% |
| TOLUENE | PID | 1.85 | 20 | 14.1 | 35.9 | 1.8 | 3.0% |
| m&p-XYLENES | PID | 1.91 | 40 | 17.9 | 74.5 | 1.9 | 2.5% |
| o-XYLENE | PID | 1.56 | 20 | 19.1 | 31.2 | 1.6 | 0.0% |
| 1,4 DIFLUORO BENZENE | PID | 0.740 | 20 | 10.7 | 14.2 | 0.7 | 4.1% |
| 4 BROMOFLUORO BENZENE | PID | 2.28 | 20 | 20.8 | 44.6 | 2.2 | 2.2% |

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

QA/QC CALIBRATION DATA

DATE: 02/14/02
HP Labs Project #GF021102T2
TIOGA 2

SUPPLY SOURCE: CONTINUING CALIBRATION (OPENING) ACCUSTANDARD LOT #B1070297
SUPPLY SOURCE: QUALITY CONTROL (CLOSING) ACCUSTANDARD LOT #B0120302
INSTRUMENT: SHIMADZU GC14A FRONT

| | | | OPENING STANDARD | | | | | CLOSING STANDARD | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COMPOUND | DETECTOR | AVE RF | MASS | RT | AREA | RF | %DIFF | MASS | RT | AREA | RF | %DIFF |
| CARBON TETRACHLORIDE | HALL | 45.9 | 20 | 7.7 | 905 | 45.3 | 1.4% | 20 | 7.7 | 841 | 42.1 | 8.4% |
| CHLOROFORM | HALL | 38.5 | 20 | 7.1 | 735 | 36.8 | 4.5% | 20 | 7.1 | 663 | 33.2 | 13.9% |
| 1,1-DICHLORO ETHANE | HALL | 33.0 | 20 | 5.7 | 697 | 34.9 | 5.6% | 20 | 5.7 | 609 | 30.5 | 7.7% |
| 1,2-DICHLORO ETHANE | HALL | 38.3 | 20 | 8.0 | 850 | 42.5 | 11.0% | 20 | 8.0 | 732 | 36.6 | 4.4% |
| 1,1-DICHLORO ETHENE | PID | 0.750 | 20 | 4.1 | 13.5 | 0.7 | 10.0% | 20 | 4.1 | 13.8 | 0.7 | 8.0% |
| CIS-1,2-DICHLORO ETHENE | PID | 0.96 | 20 | 6.6 | 18.7 | 0.9 | 2.6% | 20 | 6.6 | 19.0 | 1.0 | 1.0% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1.75 | 20 | 5.1 | 33.1 | 1.7 | 5.4% | 20 | 5.1 | 34.0 | 1.7 | 2.9% |
| DICHLOROMETHANE | HALL | 33.7 | 20 | 4.8 | 691 | 34.6 | 2.5% | 20 | 4.8 | 574 | 28.7 | 14.8% |
| TETRACHLORO ETHENE | PID | 0.88 | 20 | 12.9 | 17.2 | 0.9 | 2.3% | 20 | 12.9 | 17.5 | 0.9 | 0.6% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 47.2 | 20 | 15.2 | 1006 | 50.3 | 6.6% | 20 | 15.2 | 953 | 47.7 | 1.0% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 41.5 | 20 | 18.4 | 916 | 45.8 | 10.4% | 20 | 18.4 | 836 | 41.8 | 0.7% |
| 1,1,1-TRICHLORO ETHANE | HALL | 35.7 | 20 | 7.4 | 717 | 35.9 | 0.4% | 20 | 7.4 | 659 | 33.0 | 7.7% |
| 1,1,2-TRICHLORO ETHANE | HALL | 29.20 | 20 | 12.6 | 569 | 28.5 | 2.6% | 20 | 12.6 | 556 | 27.8 | 4.8% |
| TRICHLORO ETHENE | PID | 1.10 | 20 | 9.1 | 21.3 | 1.1 | 3.2% | 20 | 9.1 | 21.6 | 1.1 | 1.8% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 24.60 | 40 | 4.1 | 969 | 24.2 | 1.5% | 40 | 4.1 | 845 | 21.1 | 14.1% |
| BENZENE | PID | 2.00 | 20 | 8.0 | 38.8 | 1.9 | 3.0% | 20 | 8.0 | 39.6 | 2.0 | 1.0% |
| CHLOROBENZENE | PID | 1.96 | 20 | 14.9 | 38.5 | 1.9 | 1.8% | 20 | 14.9 | 38.8 | 1.9 | 1.0% |
| ETHYLBENZENE | PID | 1.61 | 20 | 15.2 | 31.9 | 1.6 | 0.9% | 20 | 15.2 | 32.2 | 1.6 | 0.0% |
| TOLUENE | PID | 1.85 | 20 | 11.7 | 36.0 | 1.8 | 2.7% | 20 | 11.7 | 36.4 | 1.8 | 1.6% |
| m&p-XYLENES | PID | 1.91 | 40 | 15.5 | 74.4 | 1.9 | 2.6% | 40 | 15.5 | 74.9 | 1.9 | 2.0% |
| o-XYLENE | PID | 1.56 | 20 | 16.5 | 31.3 | 1.6 | 0.3% | 20 | 16.5 | 31.0 | 1.6 | 0.6% |
| 1,4 DIFLUORO BENZENE | PID | 0.740 | 20 | 8.6 | 14.4 | 0.7 | 2.7% | 20 | 8.6 | 14.9 | 0.7 | 0.7% |
| 4 BROMOFLUORO BENZENE | PID | 2.28 | 20 | 17.9 | 44.9 | 2.2 | 1.5% | 20 | 17.9 | 46.5 | 2.3 | 2.0% |

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

QA/QC - CALIBRATION DATA

DATE: 02/14/02
HP Labs Project #GF021102T2
TIOGA 2

SUPPLY SOURCE: (CALIBRATION VERIFICATION)
ACCUSTANDARD LOT # B1070297
INSTRUMENT: SHIMADZU GC14A

| COMPOUND | DETECTOR | AVE RF | CONTINUING STANDARD MASS | RT | AREA | CF | %DIFF |
|---|---|---|---|---|---|---|---|
| CARBON TETRACHLORIDE | HALL | 45.9 | 20 | 10.1 | 908 | 45 | 1.1% |
| CHLOROFORM | HALL | 38.5 | 20 | 9.2 | 675 | 33.8 | 12.3% |
| 1,1-DICHLORO ETHANE | HALL | 33.0 | 20 | 7.7 | 647 | 32 | 2.0% |
| 1,2-DICHLORO ETHANE | HALL | 38.3 | 20 | 10.3 | 804 | 40 | 5.0% |
| 1,1-DICHLORO ETHENE | PID | 0.75 | 20 | 5.8 | 14.4 | 0.7 | 4.0% |
| CIS-1,2-DICHLORO ETHENE | PID | 0.960 | 20 | 8.5 | 19.8 | 1.0 | 3.1% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1.75 | 20 | 6.9 | 35.2 | 1.8 | 0.6% |
| DICHLOROMETHANE | HALL | 33.7 | 20 | 6.8 | 619 | 31.0 | 8.2% |
| TETRACHLORO ETHENE | PID | 0.88 | 20 | 15.7 | 18.2 | 0.9 | 3.4% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 47.2 | 20 | 18.2 | 930 | 46.5 | 1.5% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 41.5 | 20 | 21.0 | 882 | 44.1 | 6.3% |
| 1,1,1-TRICHLORO ETHANE | HALL | 35.7 | 20 | 9.6 | 734 | 37 | 2.8% |
| 1,1,2-TRICHLORO ETHANE | HALL | 29.2 | 20 | 14.9 | 566 | 28 | 3.1% |
| TRICHLORO ETHENE | PID | 1.10 | 20 | 11.5 | 22.7 | 1.1 | 3.2% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 24.6 | 40 | 5.7 | 906 | 23 | 7.9% |
| BENZENE | PID | 2.00 | 20 | 10.3 | 41.2 | 2.1 | 3.0% |
| CHLOROBENZENE | PID | 1.96 | 20 | 17.6 | 40.4 | 2.0 | 3.1% |
| ETHYLBENZENE | PID | 1.61 | 20 | 17.7 | 33.6 | 1.7 | 4.3% |
| TOLUENE | PID | 1.85 | 20 | 14.1 | 38.0 | 1.9 | 2.7% |
| m&p-XYLENES | PID | 1.91 | 40 | 17.9 | 78.0 | 2.0 | 2.1% |
| o-XYLENE | PID | 1.56 | 20 | 19.1 | 32.8 | 1.6 | 5.1% |
| 1,4 DIFLUORO BENZENE | PID | 0.740 | 20 | 10.7 | 15.4 | 0.8 | 4.1% |
| 4 BROMOFLUORO BENZENE | PID | 2.28 | 20 | 20.8 | 47.9 | 2.4 | 5.0% |

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

QA/QC CALIBRATION DATA

DATE: 02/15/02
HP Labs Project #GF021102T2
TIOGA 2

SUPPLY SOURCE: CONTINUING CALIBRATION (OPENING) ACCUSTANDARD LOT #B1070297
SUPPLY SOURCE: QUALITY CONTROL (CLOSING) ACCUSTANDARD LOT #B0120302
INSTRUMENT: SHIMADZU GC14A FRONT

| | | | OPENING STANDARD | | | | | CLOSING STANDARD | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COMPOUND | DETECTOR | AVE RF | MASS | RT | AREA | RF | %DIFF | MASS | RT | AREA | RF | %DIFF |
| CARBON TETRACHLORIDE | HALL | 45.9 | 20 | 7.7 | 920 | 46.0 | 0.2% | 20 | 7.7 | 787 | 39.4 | 14.3% |
| CHLOROFORM | HALL | 38.5 | 20 | 7.1 | 656 | 32.8 | 14.8% | 20 | 7.1 | 651 | 32.6 | 15.5% |
| 1,1-DICHLORO ETHANE | HALL | 33.0 | 20 | 5.7 | 659 | 33.0 | 0.2% | 20 | 5.7 | 600 | 30.0 | 9.1% |
| 1,2-DICHLORO ETHANE | HALL | 38.3 | 20 | 8.0 | 809 | 40.5 | 5.6% | 20 | 8.0 | 734 | 36.7 | 4.2% |
| 1,1-DICHLORO ETHENE | PID | 0.750 | 20 | 4.1 | 14.5 | 0.7 | 3.3% | 20 | 4.1 | 13.8 | 0.7 | 8.0% |
| CIS-1,2-DICHLORO ETHENE | PID | 0.96 | 20 | 6.6 | 19.6 | 1.0 | 2.1% | 20 | 6.6 | 19.3 | 1.0 | 0.5% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1.75 | 20 | 5.1 | 35.4 | 1.8 | 1.1% | 20 | 5.1 | 34.2 | 1.7 | 2.3% |
| DICHLOROMETHANE | HALL | 33.7 | 20 | 4.8 | 582 | 29.1 | 13.6% | 20 | 4.8 | 570 | 28.5 | 15.4% |
| TETRACHLORO ETHENE | PID | 0.88 | 20 | 12.9 | 17.8 | 0.9 | 1.1% | 20 | 12.9 | 17.7 | 0.9 | 0.6% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 47.2 | 20 | 15.2 | 996 | 49.8 | 5.5% | 20 | 15.2 | 913 | 45.7 | 3.3% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 41.5 | 20 | 18.4 | 891 | 44.6 | 7.3% | 20 | 18.4 | 827 | 41.4 | 0.4% |
| 1,1,1-TRICHLORO ETHANE | HALL | 35.7 | 20 | 7.4 | 700 | 35.0 | 2.0% | 20 | 7.4 | 636 | 31.8 | 10.9% |
| 1,1,2-TRICHLORO ETHANE | HALL | 29.20 | 20 | 12.6 | 551 | 27.6 | 5.7% | 20 | 12.6 | 520 | 26.0 | 11.0% |
| TRICHLORO ETHENE | PID | 1.10 | 20 | 9.1 | 22.2 | 1.1 | 0.9% | 20 | 9.1 | 22.0 | 1.1 | 0.0% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 24.60 | 40 | 4.1 | 773 | 19.3 | 21.4% | 40 | 4.1 | 810 | 20.3 | 17.7% |
| BENZENE | PID | 2.00 | 20 | 8.0 | 40.5 | 2.0 | 1.3% | 20 | 8.0 | 39.9 | 2.0 | 0.3% |
| CHLOROBENZENE | PID | 1.96 | 20 | 14.9 | 38.9 | 1.9 | 0.8% | 20 | 14.9 | 39.2 | 2.0 | 0.0% |
| ETHYLBENZENE | PID | 1.61 | 20 | 15.2 | 32.3 | 1.6 | 0.3% | 20 | 15.2 | 32.7 | 1.6 | 1.6% |
| TOLUENE | PID | 1.85 | 20 | 11.7 | 37.1 | 1.9 | 0.3% | 20 | 11.7 | 37.2 | 1.9 | 0.5% |
| m&p-XYLENES | PID | 1.91 | 40 | 15.5 | 74.9 | 1.9 | 2.0% | 40 | 15.5 | 76.2 | 1.9 | 0.3% |
| o-XYLENE | PID | 1.56 | 20 | 16.5 | 31.2 | 1.6 | 0.0% | 20 | 16.5 | 31.6 | 1.6 | 1.3% |
| 1,4 DIFLUORO BENZENE | PID | 0.740 | 20 | 8.6 | 15.0 | 0.8 | 1.4% | 20 | 8.6 | 14.9 | 0.7 | 0.7% |
| 4 BROMOFLUORO BENZENE | PID | 2.28 | 20 | 17.9 | 45.2 | 2.3 | 0.9% | 20 | 17.9 | 46.3 | 2.3 | 1.5% |

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

QA/QC - CALIBRATION DATA

DATE: 02/15/02
HP Labs Project #GF021102T2
TIOGA 2

SUPPLY SOURCE: (CALIBRATION VERIFICATION)
ACCUSTANDARD LOT # B1070297
INSTRUMENT: SHIMADZU GC14A

| COMPOUND | DETECTOR | AVE RF | CONTINUING STANDARD MASS | RT | AREA | CF | %DIFF |
|---|---|---|---|---|---|---|---|
| CARBON TETRACHLORIDE | HALL | 45.9 | 20 | 10.1 | 864 | 43 | 5.9% |
| CHLOROFORM | HALL | 38.5 | 20 | 9.2 | 669 | 33.5 | 13.1% |
| 1,1-DICHLORO ETHANE | HALL | 33.0 | 20 | 7.7 | 575 | 29 | 12.9% |
| 1,2-DICHLORO ETHANE | HALL | 38.3 | 20 | 10.3 | 783 | 39 | 2.2% |
| 1,1-DICHLORO ETHENE | PID | 0.75 | 20 | 5.8 | 13.9 | 0.7 | 7.3% |
| CIS-1,2-DICHLORO ETHENE | PID | 0.960 | 20 | 8.5 | 19.5 | 1.0 | 1.6% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1.75 | 20 | 6.9 | 34.4 | 1.7 | 1.7% |
| DICHLOROMETHANE | HALL | 33.7 | 20 | 6.8 | 577 | 28.9 | 14.4% |
| TETRACHLORO ETHENE | PID | 0.88 | 20 | 15.7 | 17.9 | 0.9 | 1.7% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 47.2 | 20 | 18.2 | 932 | 46.6 | 1.3% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 41.5 | 20 | 21.0 | 836 | 41.8 | 0.7% |
| 1,1,1-TRICHLORO ETHANE | HALL | 35.7 | 20 | 9.6 | 679 | 34 | 4.9% |
| 1,1,2-TRICHLORO ETHANE | HALL | 29.2 | 20 | 14.9 | 575 | 29 | 1.5% |
| TRICHLORO ETHENE | PID | 1.10 | 20 | 11.5 | 22.1 | 1.1 | 0.5% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 24.6 | 40 | 5.7 | 823 | 21 | 16.4% |
| BENZENE | PID | 2.00 | 20 | 10.3 | 40.3 | 2.0 | 0.7% |
| CHLOROBENZENE | PID | 1.96 | 20 | 17.6 | 39.8 | 2.0 | 1.5% |
| ETHYLBENZENE | PID | 1.61 | 20 | 17.7 | 32.9 | 1.6 | 2.2% |
| TOLUENE | PID | 1.85 | 20 | 14.1 | 37.5 | 1.9 | 1.4% |
| m&p-XYLENES | PID | 1.91 | 40 | 17.9 | 76.8 | 1.9 | 0.5% |
| o-XYLENE | PID | 1.56 | 20 | 19.1 | 31.8 | 1.6 | 1.9% |
| 1,4 DIFLUORO BENZENE | PID | 0.740 | 20 | 10.7 | 14.9 | 0.7 | 0.7% |
| 4 BROMOFLUORO BENZENE | PID | 2.28 | 20 | 20.8 | 46.7 | 2.3 | 2.4% |

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

QA/QC CALIBRATION DATA

DATE: 02/19/02
HP Labs Project #GF021102T2
TIOGA 2

SUPPLY SOURCE: CONTINUING CALIBRATION (OPENING) ACCUSTANDARD LOT #B1070297
SUPPLY SOURCE: QUALITY CONTROL (CLOSING) ACCUSTANDARD LOT #B0120302
INSTRUMENT: SHIMADZU GC14A FRONT

| | | | OPENING STANDARD | | | | | CLOSING STANDARD | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COMPOUND | DETECTOR | AVE RF | MASS | RT | AREA | RF | %DIFF | MASS | RT | AREA | RF | %DIFF |
| CARBON TETRACHLORIDE | HALL | 45.9 | 20 | 7.7 | 924 | 46.2 | 0.7% | 20 | 7.7 | 873 | 43.7 | 4.9% |
| CHLOROFORM | HALL | 38.5 | 20 | 7.1 | 706 | 35.3 | 8.3% | 20 | 7.1 | 670 | 33.5 | 13.0% |
| 1,1-DICHLORO ETHANE | HALL | 33.0 | 20 | 5.7 | 640 | 32.0 | 3.0% | 20 | 5.7 | 591 | 29.6 | 10.5% |
| 1,2-DICHLORO ETHANE | HALL | 38.3 | 20 | 8.0 | 800 | 40.0 | 4.4% | 20 | 8.0 | 756 | 37.8 | 1.3% |
| 1,1-DICHLORO ETHENE | PID | 0.750 | 20 | 4.1 | 14.0 | 0.7 | 6.7% | 20 | 4.1 | 16.4 | 0.8 | 9.3% |
| CIS-1,2-DICHLORO ETHENE | PID | 0.96 | 20 | 6.6 | 19.0 | 1.0 | 1.0% | 20 | 6.6 | 20.5 | 1.0 | 6.8% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1.75 | 20 | 5.1 | 34.0 | 1.7 | 2.9% | 20 | 5.1 | 37.9 | 1.9 | 8.3% |
| DICHLOROMETHANE | HALL | 33.7 | 20 | 4.8 | 612 | 30.6 | 9.2% | 20 | 4.8 | 633 | 31.7 | 6.1% |
| TETRACHLORO ETHENE | PID | 0.88 | 20 | 12.9 | 17.3 | 0.9 | 1.7% | 20 | 12.9 | 18.4 | 0.9 | 4.5% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 47.2 | 20 | 15.2 | 1020 | 51.0 | 8.1% | 20 | 15.2 | 837 | 41.9 | 11.3% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 41.5 | 20 | 18.4 | 894 | 44.7 | 7.7% | 20 | 18.4 | 720 | 36.0 | 13.3% |
| 1,1,1-TRICHLORO ETHANE | HALL | 35.7 | 20 | 7.4 | 652 | 32.6 | 8.7% | 20 | 7.4 | 683 | 34.2 | 4.3% |
| 1,1,2-TRICHLORO ETHANE | HALL | 29.20 | 20 | 12.6 | 623 | 31.2 | 6.7% | 20 | 12.6 | 512 | 25.6 | 12.3% |
| TRICHLORO ETHENE | PID | 1.10 | 20 | 9.1 | 21.6 | 1.1 | 1.8% | 20 | 9.1 | 23.5 | 1.2 | 6.8% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 24.60 | 40 | 4.1 | 773 | 19.3 | 21.4% | 40 | 4.1 | 891 | 22.3 | 9.5% |
| BENZENE | PID | 2.00 | 20 | 8.0 | 39.4 | 2.0 | 1.5% | 20 | 8.0 | 41.7 | 2.1 | 4.3% |
| CHLOROBENZENE | PID | 1.96 | 20 | 14.9 | 38.4 | 1.9 | 2.0% | 20 | 14.9 | 38.3 | 1.9 | 2.3% |
| ETHYLBENZENE | PID | 1.61 | 20 | 15.2 | 31.7 | 1.6 | 1.6% | 20 | 15.2 | 33.1 | 1.7 | 2.8% |
| TOLUENE | PID | 1.85 | 20 | 11.7 | 36.3 | 1.8 | 1.9% | 20 | 11.7 | 38.0 | 1.9 | 2.7% |
| m&p-XYLENES | PID | 1.91 | 40 | 15.5 | 73.8 | 1.8 | 3.4% | 40 | 15.5 | 77.2 | 1.9 | 1.0% |
| o-XYLENE | PID | 1.56 | 20 | 16.5 | 31.0 | 1.6 | 0.6% | 20 | 16.5 | 32.1 | 1.6 | 2.9% |
| 1,4 DIFLUORO BENZENE | PID | 0.740 | 20 | 8.6 | 14.8 | 0.7 | 0.0% | 20 | 8.6 | 15.9 | 0.8 | 7.4% |
| 4 BROMOFLUORO BENZENE | PID | 2.28 | 20 | 17.9 | 45.3 | 2.3 | 0.7% | 20 | 17.9 | 47.3 | 2.4 | 3.7% |

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

QA/QC - CALIBRATION DATA

DATE: 02/19/02
HP Labs Project #GF021102T2
TIOGA 2

SUPPLY SOURCE: (CALIBRATION VERIFICATION)
ACCUSTANDARD LOT # B1070297
INSTRUMENT: SHIMADZU GC14A

| COMPOUND | DETECTOR | AVE RF | CONTINUING STANDARD MASS | RT | AREA | CF | %DIFF |
|---|---|---|---|---|---|---|---|
| CARBON TETRACHLORIDE | HALL | 45.9 | 20 | 10.1 | 928 | 46 | 1.1% |
| CHLOROFORM | HALL | 38.5 | 20 | 9.2 | 747 | 37.4 | 3.0% |
| 1,1-DICHLORO ETHANE | HALL | 33.0 | 20 | 7.7 | 693 | 35 | 5.0% |
| 1,2-DICHLORO ETHANE | HALL | 38.3 | 20 | 10.3 | 814 | 41 | 6.3% |
| 1,1-DICHLORO ETHENE | PID | 0.75 | 20 | 5.8 | 13.3 | 0.7 | 11.3% |
| CIS-1,2-DICHLORO ETHENE | PID | 0.960 | 20 | 8.5 | 18.4 | 0.9 | 4.2% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1.75 | 20 | 6.9 | 32.8 | 1.6 | 6.3% |
| DICHLOROMETHANE | HALL | 33.7 | 20 | 6.8 | 625 | 31.3 | 7.3% |
| TETRACHLORO ETHENE | PID | 0.88 | 20 | 15.7 | 16.9 | 0.8 | 4.0% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 47.2 | 20 | 18.2 | 993 | 49.7 | 5.2% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 41.5 | 20 | 21.0 | 945 | 47.3 | 13.9% |
| 1,1,1-TRICHLORO ETHANE | HALL | 35.7 | 20 | 9.6 | 715 | 36 | 0.1% |
| 1,1,2-TRICHLORO ETHANE | HALL | 29.2 | 20 | 14.9 | 621 | 31 | 6.3% |
| TRICHLORO ETHENE | PID | 1.10 | 20 | 11.5 | 21.0 | 1.1 | 4.5% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 24.6 | 40 | 5.7 | 893 | 22 | 9.2% |
| BENZENE | PID | 2.00 | 20 | 10.3 | 38.4 | 1.9 | 4.0% |
| CHLOROBENZENE | PID | 1.96 | 20 | 17.6 | 37.8 | 1.9 | 3.6% |
| ETHYLBENZENE | PID | 1.61 | 20 | 17.7 | 31.3 | 1.6 | 2.8% |
| TOLUENE | PID | 1.85 | 20 | 14.1 | 35.5 | 1.8 | 4.1% |
| m&p-XYLENES | PID | 1.91 | 40 | 17.9 | 72.9 | 1.8 | 4.6% |
| o-XYLENE | PID | 1.56 | 20 | 19.1 | 30.3 | 1.5 | 2.9% |
| 1,4 DIFLUORO BENZENE | PID | 0.740 | 20 | 10.7 | 14.4 | 0.7 | 2.7% |
| 4 BROMOFLUORO BENZENE | PID | 2.28 | 20 | 20.8 | 45.7 | 2.3 | 0.2% |

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

QA/QC CALIBRATION DATA

DATE: 02/20/02
HP Labs Project #GF021102T2
TIOGA 2

SUPPLY SOURCE: CONTINUING CALIBRATION (OPENING) ACCUSTANDARD LOT #B1070297
SUPPLY SOURCE: QUALITY CONTROL (CLOSING) ACCUSTANDARD LOT #B0120302
INSTRUMENT: SHIMADZU GC14A FRONT

| | | | OPENING STANDARD | | | | | CLOSING STANDARD | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COMPOUND | DETECTOR | AVE RF | MASS | RT | AREA | RF | %DIFF | MASS | RT | AREA | RF | %DIFF |
| CARBON TETRACHLORIDE | HALL | 45.9 | 20 | 7.7 | 1004 | 50.2 | 9.4% | 20 | 7.7 | 774 | 38.7 | 15.7% |
| CHLOROFORM | HALL | 38.5 | 20 | 7.1 | 818 | 40.9 | 6.2% | 20 | 7.1 | 624 | 31.2 | 19.0% |
| 1,1-DICHLORO ETHANE | HALL | 33.0 | 20 | 5.7 | 715 | 35.8 | 8.3% | 20 | 5.7 | 624 | 31.2 | 5.5% |
| 1,2-DICHLORO ETHANE | HALL | 38.3 | 20 | 8.0 | 875 | 43.8 | 14.2% | 20 | 8.0 | 742 | 37.1 | 3.1% |
| 1,1-DICHLORO ETHENE | PID | 0.750 | 20 | 4.1 | 15.3 | 0.8 | 2.0% | 20 | 4.1 | 13.1 | 0.7 | 12.7% |
| CIS-1,2-DICHLORO ETHENE | PID | 0.96 | 20 | 6.6 | 20.9 | 1.0 | 8.9% | 20 | 6.6 | 18.3 | 0.9 | 4.7% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1.75 | 20 | 5.1 | 37.1 | 1.9 | 6.0% | 20 | 5.1 | 32.4 | 1.6 | 7.4% |
| DICHLOROMETHANE | HALL | 33.7 | 20 | 4.8 | 661 | 33.1 | 1.9% | 20 | 4.8 | 614 | 30.7 | 8.9% |
| TETRACHLORO ETHENE | PID | 0.88 | 20 | 12.9 | 19.0 | 1.0 | 8.0% | 20 | 12.9 | 16.7 | 0.8 | 5.1% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 47.2 | 20 | 15.2 | 1087 | 54.4 | 15.1% | 20 | 15.2 | 837 | 41.9 | 11.3% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 41.5 | 20 | 18.4 | 941 | 47.1 | 13.4% | 20 | 18.4 | 779 | 39.0 | 6.1% |
| 1,1,1-TRICHLORO ETHANE | HALL | 35.7 | 20 | 7.4 | 775 | 38.8 | 8.5% | 20 | 7.4 | 618 | 30.9 | 13.4% |
| 1,1,2-TRICHLORO ETHANE | HALL | 29.20 | 20 | 12.6 | 671 | 33.6 | 14.9% | 20 | 12.6 | 519 | 26.0 | 11.1% |
| TRICHLORO ETHENE | PID | 1.10 | 20 | 9.1 | 23.8 | 1.2 | 8.2% | 20 | 9.1 | 21.0 | 1.1 | 4.5% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 24.60 | 40 | 4.1 | 940 | 23.5 | 4.5% | 40 | 4.1 | 816 | 20.4 | 17.1% |
| BENZENE | PID | 2.00 | 20 | 8.0 | 43.3 | 2.2 | 8.3% | 20 | 8.0 | 37.9 | 1.9 | 5.3% |
| CHLOROBENZENE | PID | 1.96 | 20 | 14.9 | 42.6 | 2.1 | 8.7% | 20 | 14.9 | 37.5 | 1.9 | 4.3% |
| ETHYLBENZENE | PID | 1.61 | 20 | 15.2 | 35.4 | 1.8 | 9.9% | 20 | 15.2 | 31.0 | 1.6 | 3.7% |
| TOLUENE | PID | 1.85 | 20 | 11.7 | 40.1 | 2.0 | 8.4% | 20 | 11.7 | 35.1 | 1.8 | 5.1% |
| m&p-XYLENES | PID | 1.91 | 40 | 15.5 | 82.0 | 2.1 | 7.3% | 40 | 15.5 | 72.7 | 1.8 | 4.8% |
| o-XYLENE | PID | 1.56 | 20 | 16.5 | 34.2 | 1.7 | 9.6% | 20 | 16.5 | 30.2 | 1.5 | 3.2% |
| 1,4 DIFLUORO BENZENE | PID | 0.740 | 20 | 8.6 | 16.2 | 0.8 | 9.5% | 20 | 8.6 | 14.4 | 0.7 | 2.7% |
| 4 BROMOFLUORO BENZENE | PID | 2.28 | 20 | 17.9 | 49.6 | 2.5 | 8.8% | 20 | 17.9 | 44.8 | 2.2 | 1.8% |

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS

QA/QC - CALIBRATION DATA

DATE: 02/20/02
HP Labs Project #GF021102T2
TIOGA 2

SUPPLY SOURCE: (CALIBRATION VERIFICATION)
ACCUSTANDARD LOT # B1070297
INSTRUMENT: SHIMADZU GC14A

| | | | CONTINUING STANDARD | | | | |
|---|---|---|---|---|---|---|---|
| COMPOUND | DETECTOR | AVE RF | MASS | RT | AREA | CF | %DIFF |
| CARBON TETRACHLORIDE | HALL | 45.9 | 20 | 10.1 | 831 | 42 | 9.5% |
| CHLOROFORM | HALL | 38.5 | 20 | 9.2 | 676 | 33.8 | 12.2% |
| 1,1-DICHLORO ETHANE | HALL | 33.0 | 20 | 7.7 | 634 | 32 | 3.9% |
| 1,2-DICHLORO ETHANE | HALL | 38.3 | 20 | 10.3 | 775 | 39 | 1.2% |
| 1,1-DICHLORO ETHENE | PID | 0.75 | 20 | 5.8 | 13.2 | 0.7 | 12.0% |
| CIS-1,2-DICHLORO ETHENE | PID | 0.960 | 20 | 8.5 | 18.3 | 0.9 | 4.7% |
| TRANS-1,2-DICHLORO ETHENE | PID | 1.75 | 20 | 6.9 | 32.4 | 1.6 | 7.4% |
| DICHLOROMETHANE | HALL | 33.7 | 20 | 6.8 | 595 | 29.8 | 11.7% |
| TETRACHLORO ETHENE | PID | 0.88 | 20 | 15.7 | 17.0 | 0.9 | 3.4% |
| 1,1,1,2-TETRACHLORO ETHANE | HALL | 47.2 | 20 | 18.2 | 982 | 49.1 | 4.0% |
| 1,1,2,2-TETRACHLORO ETHANE | HALL | 41.5 | 20 | 21.0 | 814 | 40.7 | 1.9% |
| 1,1;1-TRICHLORO ETHANE | HALL | 35.7 | 20 | 9.6 | 655 | 33 | 8.3% |
| 1,1,2-TRICHLORO ETHANE | HALL | 29.2 | 20 | 14.9 | 540 | 27 | 7.5% |
| TRICHLORO ETHENE | PID | 1.10 | 20 | 11.5 | 21.1 | 1.1 | 4.1% |
| 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) | HALL | 24.6 | 40 | 5.7 | 861 | 22 | 12.5% |
| BENZENE | PID | 2.00 | 20 | 10.3 | 38.2 | 1.9 | 4.5% |
| CHLOROBENZENE | PID | 1.96 | 20 | 17.6 | 38.0 | 1.9 | 3.1% |
| ETHYLBENZENE | PID | 1.61 | 20 | 17.7 | 31.4 | 1.6 | 2.5% |
| TOLUENE | PID | 1.85 | 20 | 14.1 | 35.6 | 1.8 | 3.8% |
| m&p-XYLENES | PID | 1.91 | 40 | 17.9 | 73.5 | 1.8 | 3.8% |
| o-XYLENE | PID | 1.56 | 20 | 19.1 | 30.6 | 1.5 | 1.9% |
| 1,4 DIFLUORO BENZENE | PID | 0.740 | 20 | 10.7 | 14.3 | 0.7 | 3.4% |
| 4 BROMOFLUORO BENZENE | PID | 2.28 | 20 | 20.8 | 45.0 | 2.3 | 1.3% |

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)
ANALYSES PERFORMED BY: MARK BURKE
DATA REVIEWED BY: TAMARA DAVIS