LSC Area Percent Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU092019\
Data File : VU034695.D
Acq On : 20 Sep 2019 17:42
Operator : JC/SP
Sample : K4948-07
Misc : 5.0mL/MSVOA U/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** BEDP1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM091919WMA.M
Title : VOC Analysis

Signal : TIC

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.177 | 21 | 27 | 37 | rBV | 137914 | 129800 | 5.69% | 0.679% |
| 2 | 1.392 | 86 | 94 | 107 | rBV | 358314 | 406350 | 17.80% | 2.126% |
| 3 | 1.672 | 174 | 181 | 194 | rVB | 269427 | 332896 | 14.58% | 1.742% |
| 4 | 2.260 | 354 | 364 | 372 | rBV | 472135 | 713890 | 31.27% | 3.735% |
| 5 | 2.305 | 373 | 378 | 393 | rVB | 108676 | 175307 | 7.68% | 0.917% |
| 6 | 2.431 | 408 | 417 | 435 | rVB | 34304 | 61436 | 2.69% | 0.321% |
| 7 | 2.675 | 490 | 493 | 494 | rBV3 | 1569 | 991 | 0.04% | 0.005% |
| 8 | 2.778 | 522 | 525 | 527 | rBV3 | 1590 | 1066 | 0.05% | 0.006% |
| 9 | 2.977 | 572 | 587 | 600 | rVV5 | 9104 | 24223 | 1.06% | 0.127% |
| 10 | 3.067 | 612 | 615 | 619 | rVB2 | 1701 | 1195 | 0.05% | 0.006% |
| 11 | 3.096 | 619 | 624 | 628 | rBV6 | 1171 | 1164 | 0.05% | 0.006% |
| 12 | 3.119 | 628 | 631 | 634 | rBV4 | 1657 | 1524 | 0.07% | 0.008% |
| 13 | 3.164 | 642 | 645 | 647 | rVV5 | 2420 | 1730 | 0.08% | 0.009% |
| 14 | 3.190 | 647 | 653 | 658 | rVB7 | 3281 | 4536 | 0.20% | 0.024% |
| 15 | 3.251 | 668 | 672 | 673 | rBV3 | 1131 | 851 | 0.04% | 0.004% |
| 16 | 3.264 | 673 | 676 | 680 | rVV5 | 2801 | 2915 | 0.13% | 0.015% |
| 17 | 3.289 | 680 | 684 | 688 | rVV6 | 3028 | 3295 | 0.14% | 0.017% |
| 18 | 3.331 | 694 | 697 | 702 | rVB5 | 1724 | 1166 | 0.05% | 0.006% |
| 19 | 3.415 | 718 | 723 | 727 | rBV7 | 1183 | 1222 | 0.05% | 0.006% |
| 20 | 3.440 | 727 | 731 | 733 | rBV3 | 1862 | 1254 | 0.05% | 0.007% |
| 21 | 3.521 | 753 | 756 | 762 | rVB7 | 1730 | 1519 | 0.07% | 0.008% |
| 22 | 3.598 | 775 | 780 | 783 | rBV5 | 1349 | 1321 | 0.06% | 0.007% |
| 23 | 3.633 | 787 | 791 | 796 | rVB7 | 1630 | 1768 | 0.08% | 0.009% |
| 24 | 3.669 | 798 | 802 | 805 | rBV4 | 2264 | 1253 | 0.05% | 0.007% |
| 25 | 3.723 | 814 | 819 | 821 | rBV5 | 2255 | 1850 | 0.08% | 0.010% |
| 26 | 3.785 | 835 | 838 | 843 | rBV7 | 1504 | 1533 | 0.07% | 0.008% |
| 27 | 3.923 | 877 | 881 | 883 | rBV3 | 1637 | 1060 | 0.05% | 0.006% |
| 28 | 3.997 | 899 | 904 | 906 | rBV4 | 1218 | 905 | 0.04% | 0.005% |
| 29 | 4.039 | 914 | 917 | 920 | rBV3 | 1270 | 989 | 0.04% | 0.005% |
| 30 | 4.058 | 920 | 923 | 925 | rBV3 | 1525 | 1016 | 0.04% | 0.005% |
| 31 | 4.151 | 940 | 952 | 989 | rBV | 223513 | 628928 | 27.55% | 3.290% |
| 32 | 4.473 | 1049 | 1052 | 1054 | rBV3 | 1893 | 1249 | 0.05% | 0.007% |
| 33 | 4.624 | 1084 | 1099 | 1118 | rBV | 370853 | 868256 | 38.03% | 4.543% |
| 34 | 4.829 | 1161 | 1163 | 1166 | rBV4 | 1271 | 949 | 0.04% | 0.005% |

LSC Area Percent Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU092019\
Data File : VU034695.D
Acq On : 20 Sep 2019 17:42
Operator : JC/SP
Sample : K4948-07
Misc : 5.0mL/MSVOA U/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** BEDP1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM091919WMA.M
Title : VOC Analysis

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 4.923 | 1190 | 1192 | 1196 | rVB4 | 1660 | 1105 | 0.05% | 0.006% |
| 36 | 5.193 | 1273 | 1276 | 1278 | rBV4 | 1573 | 1162 | 0.05% | 0.006% |
| 37 | 5.315 | 1291 | 1314 | 1343 | rVV2 | 756227 | 2282797 | 100.00% | 11.943% |
| 38 | 5.714 | 1436 | 1438 | 1442 | rBV4 | 1583 | 1226 | 0.05% | 0.006% |
| 39 | 5.865 | 1471 | 1485 | 1502 | rBV | 633683 | 1259998 | 55.20% | 6.592% |
| 40 | 6.309 | 1609 | 1623 | 1643 | rBV | 530442 | 1074169 | 47.05% | 5.620% |
| 41 | 6.563 | 1700 | 1702 | 1706 | rBV4 | 1530 | 847 | 0.04% | 0.004% |
| 42 | 6.781 | 1767 | 1770 | 1772 | rBV5 | 1295 | 868 | 0.04% | 0.005% |
| 43 | 6.936 | 1815 | 1818 | 1821 | rBV3 | 1982 | 1699 | 0.07% | 0.009% |
| 44 | 7.161 | 1885 | 1888 | 1891 | rBV5 | 1357 | 979 | 0.04% | 0.005% |
| 45 | 7.206 | 1891 | 1902 | 1923 | rBV2 | 310450 | 580638 | 25.44% | 3.038% |
| 46 | 7.495 | 1988 | 1992 | 1993 | rBV4 | 2718 | 1645 | 0.07% | 0.009% |
| 47 | 7.543 | 1993 | 2007 | 2024 | rVV | 1015684 | 1775437 | 77.77% | 9.289% |
| 48 | 7.829 | 2085 | 2096 | 2117 | rBV | 205642 | 379654 | 16.63% | 1.986% |
| 49 | 8.141 | 2188 | 2193 | 2196 | rBV7 | 3084 | 3324 | 0.15% | 0.017% |
| 50 | 8.206 | 2201 | 2213 | 2226 | rVV3 | 185049 | 317331 | 13.90% | 1.660% |
| 51 | 8.289 | 2229 | 2239 | 2272 | rBV | 701072 | 1324150 | 58.01% | 6.928% |
| 52 | 8.566 | 2322 | 2325 | 2326 | rBV3 | 2280 | 1158 | 0.05% | 0.006% |
| 53 | 8.582 | 2326 | 2330 | 2334 | rVV6 | 4539 | 4352 | 0.19% | 0.023% |
| 54 | 8.800 | 2394 | 2398 | 2401 | rBV4 | 2166 | 1680 | 0.07% | 0.009% |
| 55 | 8.993 | 2455 | 2458 | 2460 | rBV4 | 1442 | 1063 | 0.05% | 0.006% |
| 56 | 9.067 | 2469 | 2481 | 2507 | rBV | 949457 | 1594146 | 69.83% | 8.340% |
| 57 | 9.231 | 2525 | 2532 | 2542 | rVB5 | 9226 | 16671 | 0.73% | 0.087% |
| 58 | 9.276 | 2542 | 2546 | 2549 | rBV5 | 1278 | 1167 | 0.05% | 0.006% |
| 59 | 9.318 | 2555 | 2559 | 2561 | rBV4 | 2537 | 2158 | 0.09% | 0.011% |
| 60 | 9.363 | 2564 | 2573 | 2586 | rVB4 | 15593 | 31037 | 1.36% | 0.162% |
| 61 | 9.598 | 2643 | 2646 | 2651 | rBV5 | 1998 | 1553 | 0.07% | 0.008% |
| 62 | 9.675 | 2663 | 2670 | 2671 | rBV5 | 2492 | 2455 | 0.11% | 0.013% |
| 63 | 9.694 | 2671 | 2676 | 2684 | rVB5 | 4183 | 6180 | 0.27% | 0.032% |
| 64 | 9.765 | 2694 | 2698 | 2701 | rBV6 | 2797 | 2555 | 0.11% | 0.013% |
| 65 | 10.025 | 2769 | 2779 | 2790 | rBV6 | 7506 | 15113 | 0.66% | 0.079% |
| 66 | 10.148 | 2811 | 2817 | 2826 | rVB3 | 10075 | 14182 | 0.62% | 0.074% |
| 67 | 10.196 | 2830 | 2832 | 2837 | rVB5 | 2607 | 1734 | 0.08% | 0.009% |
| 68 | 10.408 | 2886 | 2898 | 2926 | rVB | 680779 | 1118657 | 49.00% | 5.853% |
| 69 | 10.543 | 2936 | 2940 | 2941 | rBV2 | 1513 | 972 | 0.04% | 0.005% |
| 70 | 10.572 | 2941 | 2949 | 2961 | rVB3 | 11164 | 22980 | 1.01% | 0.120% |
| 71 | 10.662 | 2968 | 2977 | 2993 | rBV3 | 21717 | 55708 | 2.44% | 0.291% |

LSC Area Percent Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU092019\
Data File : VU034695.D
Acq On : 20 Sep 2019 17:42
Operator : JC/SP
Sample : K4948-07
Misc : 5.0mL/MSVOA U/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** BEDP1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM091919WMA.M
Title : VOC Analysis

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 10.749 | 2999 | 3004 | 3005 | rBV2 | 8983 | 7341 | 0.32% | 0.038% |
| 73 | 10.832 | 3026 | 3030 | 3034 | rVB7 | 2558 | 2404 | 0.11% | 0.013% |
| 74 | 10.887 | 3043 | 3047 | 3049 | rBV4 | 1678 | 1321 | 0.06% | 0.007% |
| 75 | 10.951 | 3058 | 3067 | 3078 | rVB4 | 19142 | 33224 | 1.46% | 0.174% |
| 76 | 11.093 | 3107 | 3111 | 3113 | rBV4 | 1937 | 1435 | 0.06% | 0.008% |
| 77 | 11.128 | 3114 | 3122 | 3132 | rVB2 | 19848 | 31724 | 1.39% | 0.166% |
| 78 | 11.302 | 3170 | 3176 | 3189 | rVB2 | 16566 | 27339 | 1.20% | 0.143% |
| 79 | 11.405 | 3201 | 3208 | 3213 | rBV3 | 10270 | 14587 | 0.64% | 0.076% |
| 80 | 11.459 | 3214 | 3225 | 3246 | rBV | 885801 | 1441756 | 63.16% | 7.543% |
| 81 | 11.755 | 3307 | 3317 | 3321 | rBV6 | 12118 | 22677 | 0.99% | 0.119% |
| 82 | 11.836 | 3332 | 3342 | 3368 | rVB | 946149 | 1560144 | 68.34% | 8.162% |
| 83 | 12.334 | 3491 | 3497 | 3502 | rBV6 | 10976 | 15712 | 0.69% | 0.082% |
| 84 | 12.469 | 3534 | 3539 | 3550 | rVB7 | 11893 | 20219 | 0.89% | 0.106% |
| 85 | 12.598 | 3572 | 3579 | 3581 | rBV6 | 6510 | 7555 | 0.33% | 0.040% |
| 86 | 12.684 | 3597 | 3606 | 3622 | rVB5 | 18795 | 36404 | 1.59% | 0.190% |
| 87 | 12.771 | 3626 | 3633 | 3638 | rBV9 | 11111 | 18432 | 0.81% | 0.096% |
| 88 | 13.012 | 3704 | 3708 | 3716 | rVB8 | 7418 | 9227 | 0.40% | 0.048% |
| 89 | 13.070 | 3717 | 3726 | 3727 | rBV4 | 11603 | 17160 | 0.75% | 0.090% |
| 90 | 13.102 | 3731 | 3736 | 3752 | rVB4 | 40096 | 71480 | 3.13% | 0.374% |
| 91 | 13.389 | 3818 | 3825 | 3831 | rBV10 | 7970 | 12700 | 0.56% | 0.066% |
| 92 | 13.437 | 3833 | 3840 | 3848 | rBV4 | 14509 | 22757 | 1.00% | 0.119% |
| 93 | 13.488 | 3852 | 3856 | 3865 | rVB8 | 16259 | 23830 | 1.04% | 0.125% |
| 94 | 13.836 | 3956 | 3964 | 3972 | rBV3 | 31915 | 55566 | 2.43% | 0.291% |
| 95 | 13.929 | 3985 | 3993 | 4003 | rBV6 | 33180 | 62038 | 2.72% | 0.325% |
| 96 | 14.131 | 4048 | 4056 | 4069 | rBV3 | 22538 | 39126 | 1.71% | 0.205% |
| 97 | 14.331 | 4107 | 4118 | 4136 | rVB6 | 60985 | 132158 | 5.79% | 0.691% |
| 98 | 14.588 | 4192 | 4198 | 4206 | rVB9 | 11048 | 17311 | 0.76% | 0.091% |
| 99 | 14.659 | 4212 | 4220 | 4235 | rBV5 | 38303 | 72455 | 3.17% | 0.379% |
| 100 | 14.842 | 4270 | 4277 | 4281 | rBV4 | 35371 | 53645 | 2.35% | 0.281% |

Sum of corrected areas: 19113684

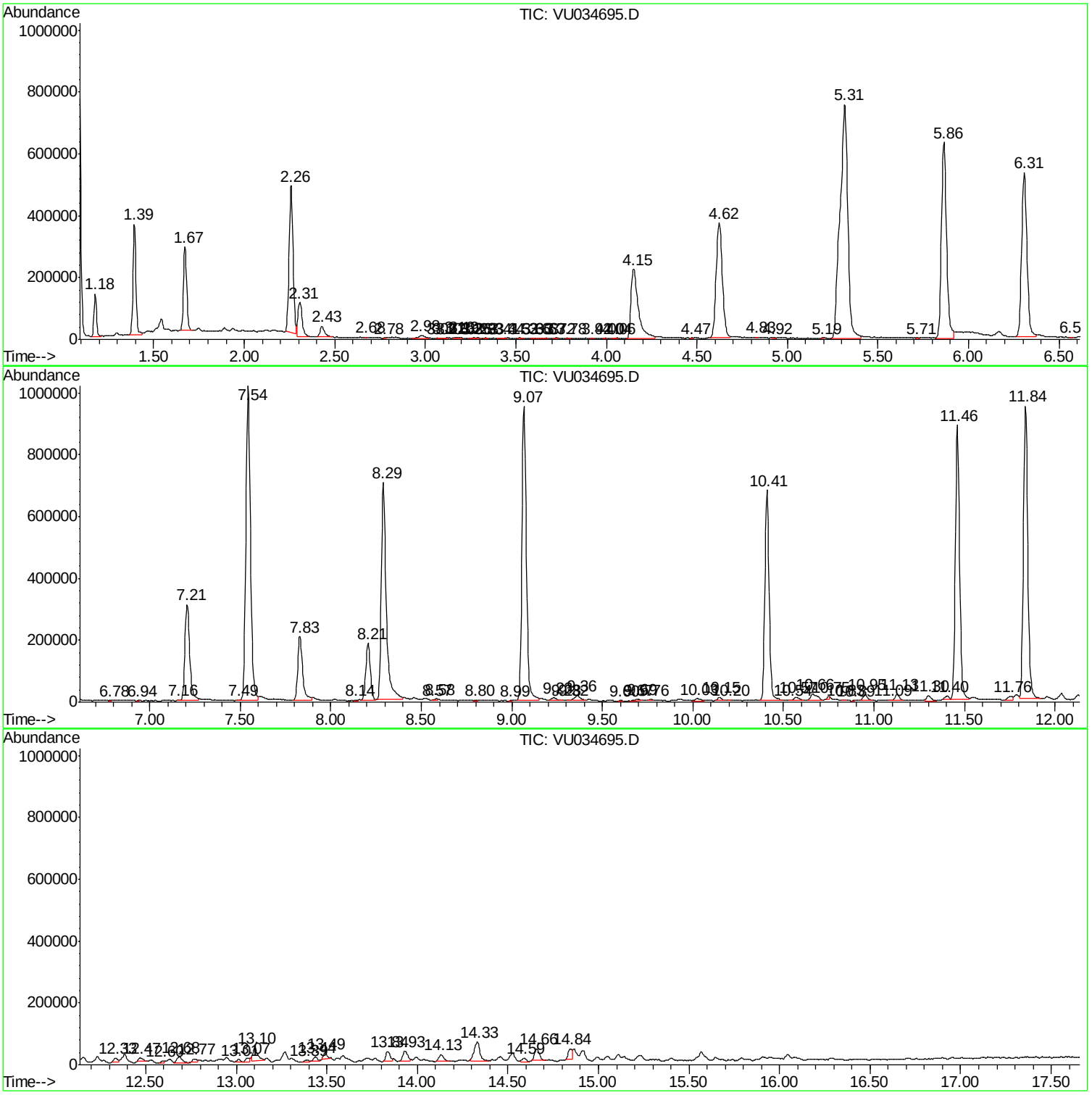
LSC Report - Integrated Chromatogram

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU092019\
Data File : VU034695.D
Acq On : 20 Sep 2019 17:42
Operator : JC/SP
Sample : K4948-07
Misc : 5.0mL/MSVOA_U/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** BEDP1

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM091919WMA.M
Quant Title : VOC Analysis

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU092019\
Data File : VU034695.D
Acq On : 20 Sep 2019 17:42
Operator : JC/SP
Sample : K4948-07
Misc : 5.0mL/MSVOA U/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** BEDP1

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM091919WMA.M
Quant Title : VOC Analysis

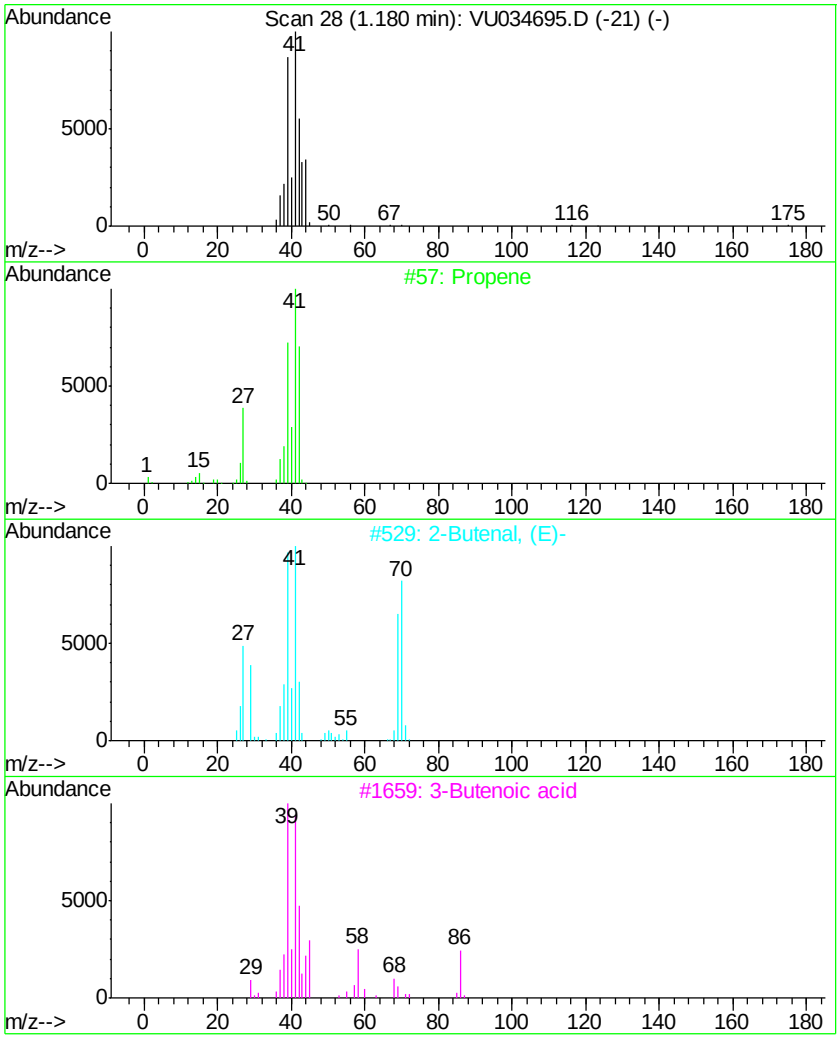
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

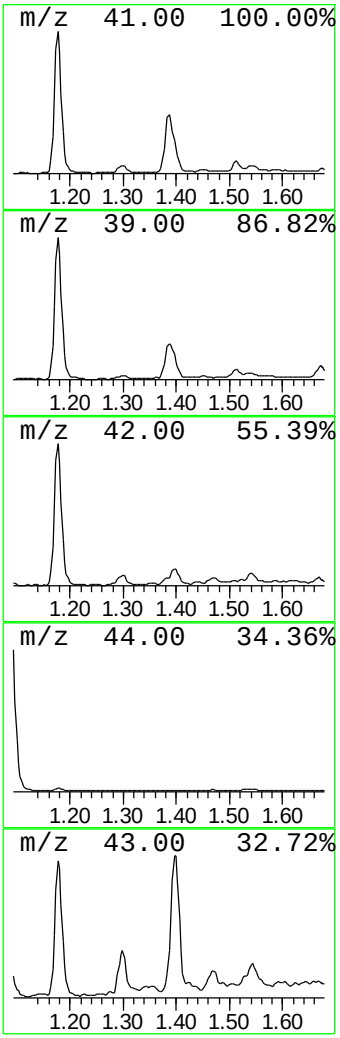
**********

Peak Number 1 (DEL) Alkane: Cyclic1.18 Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.18 | 5.15 ug/L | 129800 | 1,4-Difluorobenzene | 5.86 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Propene | 42 | C3H6 | 000115-07-1 | 90 |
| 2 | 2-Butenal, (E)- | 70 | C4H6O | 000123-73-9 | 78 |
| 3 | 3-Butenoic acid | 86 | C4H6O2 | 000625-38-7 | 78 |
| 4 | Cyclopropanecarboxylic acid | 86 | C4H6O2 | 001759-53-1 | 74 |
| 5 | Furan, 2,5-dihydro- | 70 | C4H6O | 001708-29-8 | 64 |



# Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU092019\
Data File : VU034695.D
Acq On : 20 Sep 2019 17:42
Operator : JC/SP
Sample : K4948-07
Misc : 5.0mL/MSVOA U/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** BEDP1

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM091919WMA.M
Quant Title : VOC Analysis

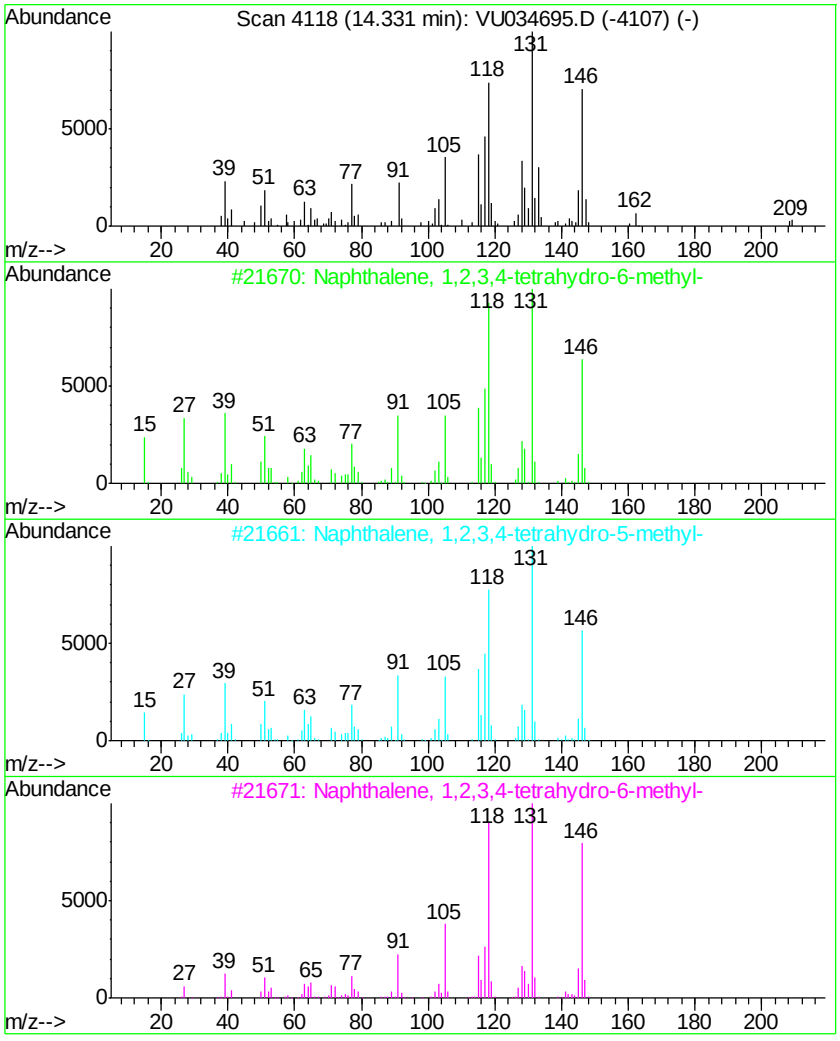
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

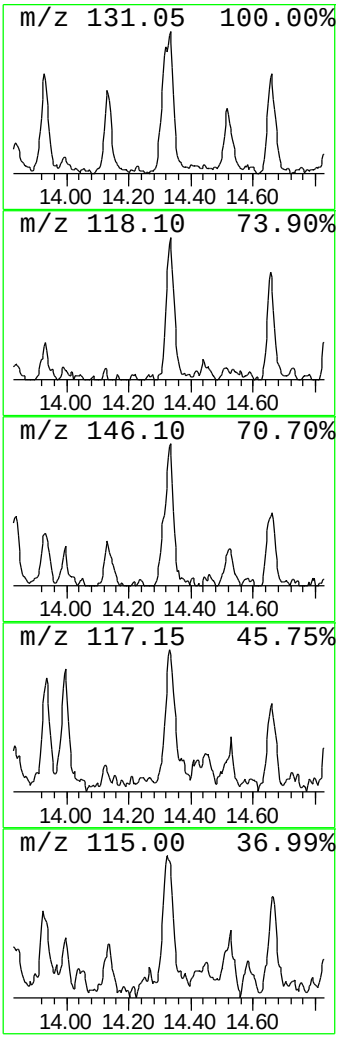
**********

Peak Number 3 Naphthalene, 1,2,3,4-tetrah... Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.33 | 4.58 ug/L | 132158 | 1,4-Dichlorobenzene-d4 | 11.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,2,3,4-tetrahydro-... | 146 | C11H14 | 001680-51-9 | 98 |
| 2 | Naphthalene, 1,2,3,4-tetrahydro-... | 146 | C11H14 | 002809-64-5 | 96 |
| 3 | Naphthalene, 1,2,3,4-tetrahydro-... | 146 | C11H14 | 001680-51-9 | 94 |
| 4 | Naphthalene, 1,2,3,4-tetrahydro-... | 146 | C11H14 | 001680-51-9 | 94 |
| 5 | Naphthalene, 1,2,3,4-tetrahydro-... | 146 | C11H14 | 002809-64-5 | 93 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU092019\
Data File : VU034695.D
Acq On : 20 Sep 2019 17:42
Operator : JC/SP
Sample : K4948-07
Misc : 5.0mL/MSVOA_U/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** BEDP1

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM091919WMA.M
Quant Title : VOC Analysis

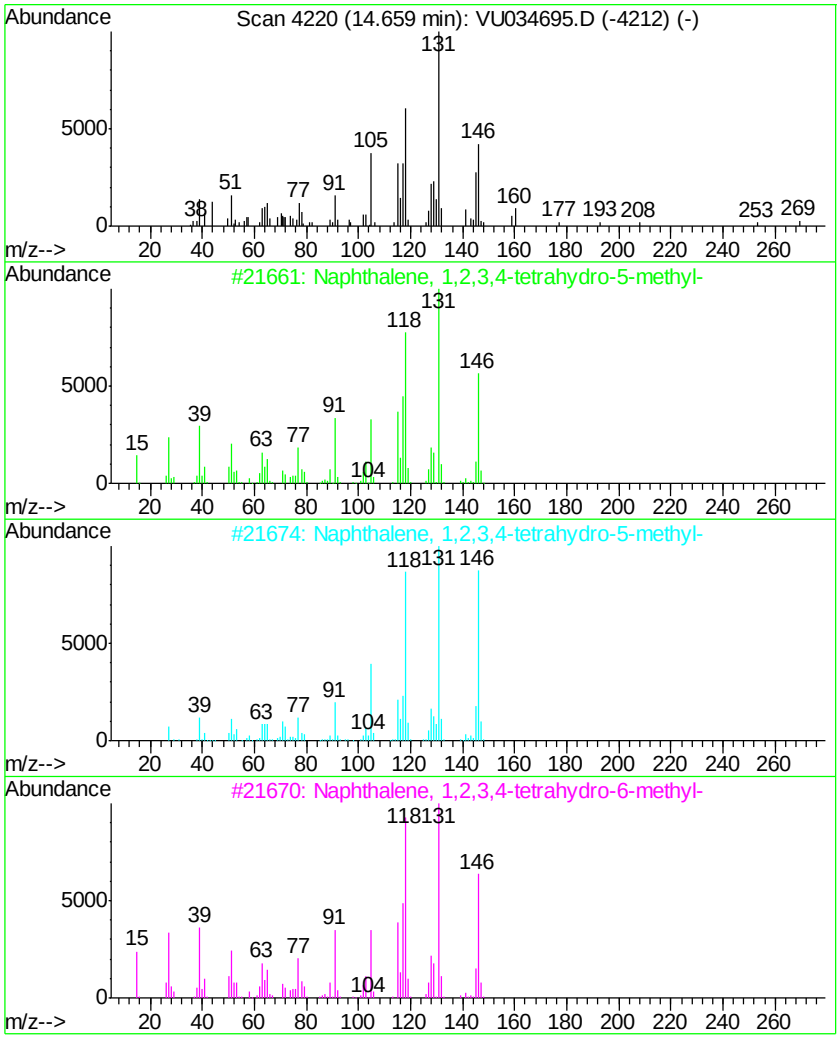
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

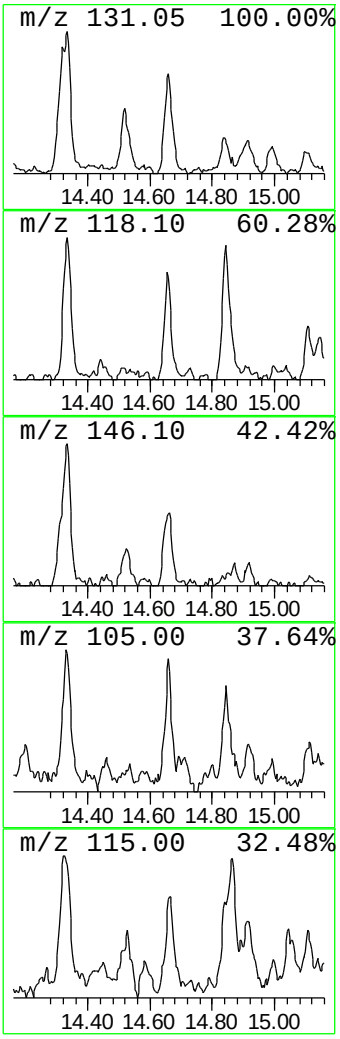
**********

Peak Number 4 Naphthalene, 1,2,3,4-tetrah... Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.66 | 2.51 ug/L | 72455 | 1,4-Dichlorobenzene-d4 | 11.46 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,2,3,4-tetrahydro-... | 146 | C11H14 | 002809-64-5 | 74 |
| 2 | Naphthalene, 1,2,3,4-tetrahydro-... | 146 | C11H14 | 002809-64-5 | 72 |
| 3 | Naphthalene, 1,2,3,4-tetrahydro-... | 146 | C11H14 | 001680-51-9 | 60 |
| 4 | 2-Propenal, 3-(4-methylphenyl)- | 146 | C10H10O | 001504-75-2 | 58 |
| 5 | Benzene, (3-methyl-2-butenyl)- | 146 | C11H14 | 004489-84-3 | 49 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU092019\
Data File : VU034695.D
Acq On : 20 Sep 2019 17:42
Operator : JC/SP
Sample : K4948-07
Misc : 5.0mL/MSVOA_U/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** BEDP1

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM091919WMA.M
Quant Title : VOC Analysis

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| (DEL) Alkane: Cyc... | 1.18 | 5.2 | ug/L | 129800 | 1 | 5.86 | 1260000 | 50.0 |
| Naphthalene, 1,2,... | 14.33 | 4.6 | ug/L | 132158 | 3 | 11.46 | 1441760 | 50.0 |
| Naphthalene, 1,2,... | 14.66 | 2.5 | ug/L | 72455 | 3 | 11.46 | 1441760 | 50.0 |