LSC Area Percent Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

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\SOMULM042719WMA.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 | 1.395 | 88 | 95 | 107 | rVB | 377928 | 418019 | 0.64% | 0.112% |
| 2 | 1.678 | 176 | 183 | 196 | rBV | 323016 | 412245 | 0.63% | 0.110% |
| 3 | 2.267 | 355 | 366 | 379 | rVB | 729676 | 1108648 | 1.69% | 0.297% |
| 4 | 2.540 | 448 | 451 | 458 | rVB6 | 1445 | 1327 | 0.00% | 0.000% |
| 5 | 2.694 | 492 | 499 | 510 | rVB9 | 5150 | 8647 | 0.01% | 0.002% |
| 6 | 2.826 | 536 | 540 | 543 | rBV4 | 1678 | 1597 | 0.00% | 0.000% |
| 7 | 2.891 | 557 | 560 | 568 | rBV4 | 1481 | 1752 | 0.00% | 0.000% |
| 8 | 2.926 | 568 | 571 | 574 | rBV4 | 1458 | 1169 | 0.00% | 0.000% |
| 9 | 2.974 | 583 | 586 | 591 | rVB8 | 1813 | 1482 | 0.00% | 0.000% |
| 10 | 3.003 | 591 | 595 | 597 | rBV | 5141 | 4140 | 0.01% | 0.001% |
| 11 | 3.103 | 624 | 626 | 629 | rVB | 2468 | 1294 | 0.00% | 0.000% |
| 12 | 3.125 | 629 | 633 | 638 | rVB2 | 2757 | 2787 | 0.00% | 0.001% |
| 13 | 3.154 | 638 | 642 | 646 | rVB | 3272 | 2743 | 0.00% | 0.001% |
| 14 | 3.177 | 646 | 649 | 654 | rBV2 | 4145 | 3495 | 0.01% | 0.001% |
| 15 | 3.247 | 668 | 671 | 675 | rVB | 2698 | 1730 | 0.00% | 0.000% |
| 16 | 3.296 | 684 | 686 | 691 | rVB5 | 2203 | 1615 | 0.00% | 0.000% |
| 17 | 3.347 | 698 | 702 | 706 | rBV6 | 1931 | 1501 | 0.00% | 0.000% |
| 18 | 3.399 | 712 | 718 | 720 | rBV3 | 1775 | 1247 | 0.00% | 0.000% |
| 19 | 3.447 | 729 | 733 | 738 | rVB6 | 1552 | 1494 | 0.00% | 0.000% |
| 20 | 3.508 | 748 | 752 | 755 | rVV3 | 1607 | 1330 | 0.00% | 0.000% |
| 21 | 3.540 | 760 | 762 | 766 | rVB4 | 1513 | 1054 | 0.00% | 0.000% |
| 22 | 3.585 | 773 | 776 | 779 | rVV3 | 1181 | 917 | 0.00% | 0.000% |
| 23 | 3.617 | 783 | 786 | 788 | rVV2 | 1249 | 991 | 0.00% | 0.000% |
| 24 | 3.743 | 823 | 825 | 830 | rVB3 | 1466 | 1180 | 0.00% | 0.000% |
| 25 | 3.833 | 850 | 853 | 859 | rVB2 | 1798 | 1887 | 0.00% | 0.001% |
| 26 | 3.903 | 871 | 875 | 884 | rBV4 | 1290 | 1925 | 0.00% | 0.001% |
| 27 | 4.038 | 909 | 917 | 919 | rBV4 | 1592 | 1839 | 0.00% | 0.000% |
| 28 | 4.186 | 950 | 963 | 1010 | rBV | 349979 | 1144207 | 1.75% | 0.307% |
| 29 | 4.505 | 1056 | 1062 | 1068 | rBV6 | 1744 | 2367 | 0.00% | 0.001% |
| 30 | 4.643 | 1088 | 1105 | 1136 | rBV | 573516 | 1392814 | 2.13% | 0.373% |
| 31 | 4.887 | 1178 | 1181 | 1184 | rBV4 | 1780 | 1131 | 0.00% | 0.000% |
| 32 | 5.042 | 1224 | 1229 | 1232 | rBV2 | 2612 | 2429 | 0.00% | 0.001% |
| 33 | 5.093 | 1241 | 1245 | 1249 | rVB5 | 1348 | 1227 | 0.00% | 0.000% |
| 34 | 5.231 | 1280 | 1288 | 1292 | rBV5 | 1782 | 2252 | 0.00% | 0.001% |

LSC Area Percent Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU050119\
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Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

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\SOMULM042719WMA.M
Title : VOC Analysis

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 5.334 | 1296 | 1320 | 1356 | rBV2 | 1223438 | 3661868 | 5.60% | 0.981% |
| 36 | 5.697 | 1431 | 1433 | 1438 | rVB3 | 1766 | 989 | 0.00% | 0.000% |
| 37 | 5.746 | 1445 | 1448 | 1454 | rBV6 | 1823 | 1471 | 0.00% | 0.000% |
| 38 | 5.794 | 1458 | 1463 | 1467 | rVB5 | 1763 | 1513 | 0.00% | 0.000% |
| 39 | 5.881 | 1475 | 1490 | 1528 | rBV | 1226192 | 2531129 | 3.87% | 0.678% |
| 40 | 6.177 | 1570 | 1582 | 1595 | rBV6 | 17115 | 38754 | 0.06% | 0.010% |
| 41 | 6.324 | 1614 | 1628 | 1658 | rBV | 823350 | 1701583 | 2.60% | 0.456% |
| 42 | 6.881 | 1795 | 1801 | 1802 | rBV4 | 2424 | 2451 | 0.00% | 0.001% |
| 43 | 7.000 | 1834 | 1838 | 1842 | rVB4 | 1974 | 1337 | 0.00% | 0.000% |
| 44 | 7.032 | 1842 | 1848 | 1852 | rBV7 | 1306 | 1442 | 0.00% | 0.000% |
| 45 | 7.054 | 1852 | 1855 | 1859 | rVB4 | 1008 | 933 | 0.00% | 0.000% |
| 46 | 7.141 | 1877 | 1882 | 1884 | rBV4 | 1445 | 1152 | 0.00% | 0.000% |
| 47 | 7.225 | 1893 | 1908 | 1929 | rBV | 462458 | 873485 | 1.33% | 0.234% |
| 48 | 7.418 | 1961 | 1968 | 1970 | rBV6 | 1855 | 2579 | 0.00% | 0.001% |
| 49 | 7.562 | 1999 | 2013 | 2026 | rBV | 1521458 | 2730863 | 4.17% | 0.732% |
| 50 | 7.633 | 2027 | 2035 | 2075 | rVB | 351170 | 728273 | 1.11% | 0.195% |
| 51 | 7.849 | 2092 | 2102 | 2127 | rVB | 306950 | 549060 | 0.84% | 0.147% |
| 52 | 8.103 | 2179 | 2181 | 2185 | rVB3 | 2756 | 1720 | 0.00% | 0.000% |
| 53 | 8.189 | 2205 | 2208 | 2212 | rVB3 | 2661 | 2002 | 0.00% | 0.001% |
| 54 | 8.225 | 2212 | 2219 | 2225 | rBV10 | 3735 | 5317 | 0.01% | 0.001% |
| 55 | 8.315 | 2233 | 2247 | 2290 | rBV | 1338721 | 2642637 | 4.04% | 0.708% |
| 56 | 8.903 | 2425 | 2430 | 2442 | rVB8 | 7644 | 12064 | 0.02% | 0.003% |
| 57 | 9.029 | 2454 | 2469 | 2475 | rBV8 | 13789 | 30469 | 0.05% | 0.008% |
| 58 | 9.086 | 2475 | 2487 | 2522 | rVV | 1780474 | 3076933 | 4.70% | 0.825% |
| 59 | 9.244 | 2523 | 2536 | 2563 | rVV | 10246754 | 16985187 | 25.96% | 4.553% |
| 60 | 9.373 | 2565 | 2576 | 2590 | rVV | 4422775 | 7439364 | 11.37% | 1.994% |
| 61 | 9.437 | 2592 | 2596 | 2620 | rVB2 | 266243 | 440675 | 0.67% | 0.118% |
| 62 | 9.774 | 2690 | 2701 | 2735 | rVB4 | 5671812 | 10505575 | 16.06% | 2.816% |
| 63 | 9.948 | 2748 | 2755 | 2765 | rVB2 | 159765 | 236281 | 0.36% | 0.063% |
| 64 | 10.038 | 2777 | 2783 | 2792 | rBV4 | 103912 | 161230 | 0.25% | 0.043% |
| 65 | 10.160 | 2814 | 2821 | 2831 | rBV2 | 104018 | 166199 | 0.25% | 0.045% |
| 66 | 10.430 | 2894 | 2905 | 2917 | rBV | 1180010 | 2163031 | 3.31% | 0.580% |
| 67 | 10.585 | 2945 | 2953 | 2961 | rBV | 287689 | 421027 | 0.64% | 0.113% |
| 68 | 10.701 | 2984 | 2989 | 2997 | rVB | 582091 | 804674 | 1.23% | 0.216% |
| 69 | 10.768 | 2998 | 3010 | 3016 | rVV | 1594304 | 2748006 | 4.20% | 0.737% |
| 70 | 10.810 | 3017 | 3023 | 3034 | rVB | 1975617 | 2808939 | 4.29% | 0.753% |
| 71 | 10.971 | 3065 | 3073 | 3075 | rBV2 | 443538 | 601929 | 0.92% | 0.161% |

LSC Area Percent Report

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Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

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\SOMULM042719WMA.M
Title : VOC Analysis

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72 | 11.112 | 3109 | 3117 | 3119 | rBV | 811759 | 991773 | 1.52% | 0.266% |
| 73 | 11.144 | 3120 | 3127 | 3138 | rVV | 4977283 | 7488001 | 11.44% | 2.007% |
| 74 | 11.212 | 3139 | 3148 | 3156 | rVV | 3705212 | 5557102 | 8.49% | 1.489% |
| 75 | 11.260 | 3156 | 3163 | 3175 | rVB | 1856632 | 2749756 | 4.20% | 0.737% |
| 76 | 11.395 | 3197 | 3205 | 3212 | rBV2 | 876053 | 1385655 | 2.12% | 0.371% |
| 77 | 11.479 | 3223 | 3231 | 3240 | rBV | 1920840 | 2826160 | 4.32% | 0.757% |
| 78 | 11.565 | 3251 | 3258 | 3266 | rBV | 1861152 | 2491061 | 3.81% | 0.668% |
| 79 | 11.697 | 3294 | 3299 | 3309 | rVB3 | 620397 | 852543 | 1.30% | 0.229% |
| 80 | 11.762 | 3311 | 3319 | 3327 | rBV | 1132166 | 1935370 | 2.96% | 0.519% |
| 81 | 11.858 | 3340 | 3349 | 3366 | rVB5 | 2643648 | 5563869 | 8.50% | 1.491% |
| 82 | 11.977 | 3375 | 3386 | 3394 | rBV | 18631301 | 29563784 | 45.18% | 7.924% |
| 83 | 12.356 | 3497 | 3504 | 3509 | rBV2 | 815561 | 1227823 | 1.88% | 0.329% |
| 84 | 12.607 | 3573 | 3582 | 3588 | rBV | 2640389 | 4181656 | 6.39% | 1.121% |
| 85 | 12.700 | 3603 | 3611 | 3629 | rBV4 | 2319616 | 6532290 | 9.98% | 1.751% |
| 86 | 13.118 | 3733 | 3741 | 3753 | rBV4 | 5187987 | 9064936 | 13.85% | 2.430% |
| 87 | 13.286 | 3783 | 3793 | 3814 | rBV7 | 5592671 | 12483068 | 19.08% | 3.346% |
| 88 | 13.739 | 3923 | 3934 | 3944 | rVB2 | 35492311 | 56749011 | 86.73% | 15.210% |
| 89 | 14.334 | 4111 | 4119 | 4129 | rBV7 | 2346957 | 4337574 | 6.63% | 1.163% |
| 90 | 14.874 | 4276 | 4287 | 4298 | rBV2 | 41380538 | 65433889 | 100.00% | 17.538% |
| 91 | 15.057 | 4334 | 4344 | 4362 | rVB | 17063899 | 26862772 | 41.05% | 7.200% |
| 92 | 15.794 | 4564 | 4573 | 4582 | rBV | 6756137 | 10627227 | 16.24% | 2.848% |
| 93 | 15.909 | 4597 | 4609 | 4624 | rBV | 10918824 | 19147183 | 29.26% | 5.132% |
| 94 | 16.054 | 4645 | 4654 | 4661 | rBV | 8714054 | 13639830 | 20.85% | 3.656% |
| 95 | 16.279 | 4710 | 4724 | 4733 | rBV2 | 2340116 | 4947898 | 7.56% | 1.326% |
| 96 | 16.424 | 4763 | 4769 | 4780 | rVB | 988216 | 1457197 | 2.23% | 0.391% |
| 97 | 16.527 | 4794 | 4801 | 4814 | rVB3 | 1298182 | 2167162 | 3.31% | 0.581% |
| 98 | 17.012 | 4946 | 4952 | 4977 | rVB2 | 1050147 | 2203195 | 3.37% | 0.591% |
| 99 | 17.160 | 4992 | 4998 | 5008 | rVB | 745708 | 1154781 | 1.76% | 0.310% |
| 100 | 17.221 | 5011 | 5017 | 5027 | rVV2 | 549358 | 855028 | 1.31% | 0.229% |

Sum of corrected areas: 373094217

LSC Report - Integrated Chromatogram

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
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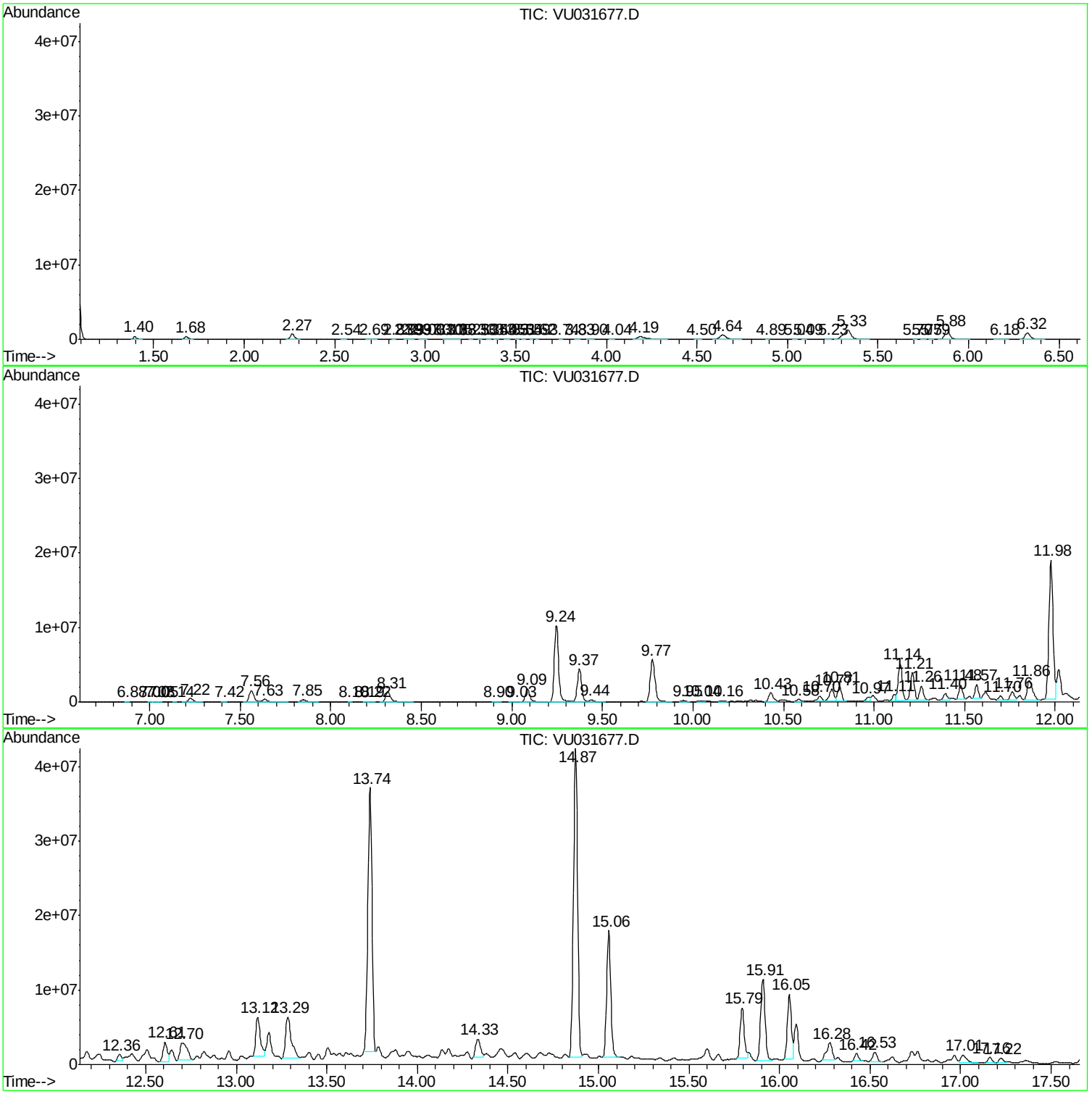
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

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



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

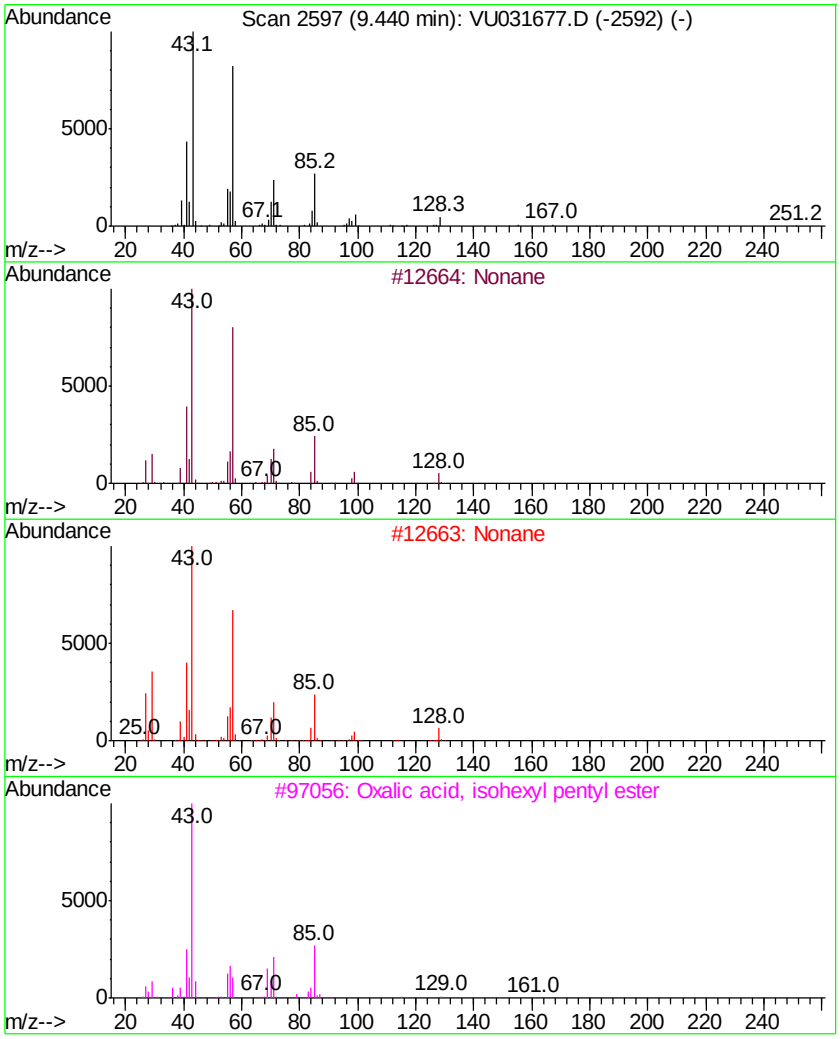
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

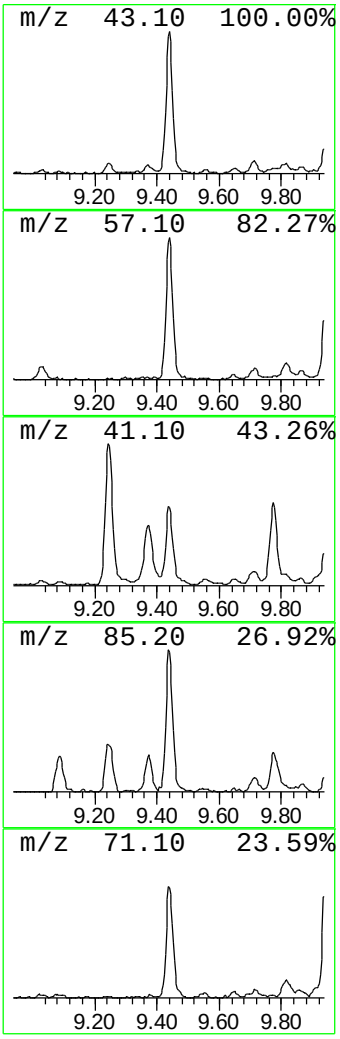
**********

Peak Number 2 (DEL) Alkane: Straight-Chai... Concentration Rank 34

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.44 | 7.16 ug/L | 440675 | Chlorobenzene-d5 | 9.09 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Nonane | 128 | C9H20 | 000111-84-2 | 80 |
| 2 | Nonane | 128 | C9H20 | 000111-84-2 | 78 |
| 3 | Oxalic acid, isohexyl pentyl ester | 244 | C13H24O4 | 1000309-32-8 | 64 |
| 4 | Decane | 142 | C10H22 | 000124-18-5 | 64 |
| 5 | Nonane | 128 | C9H20 | 000111-84-2 | 62 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

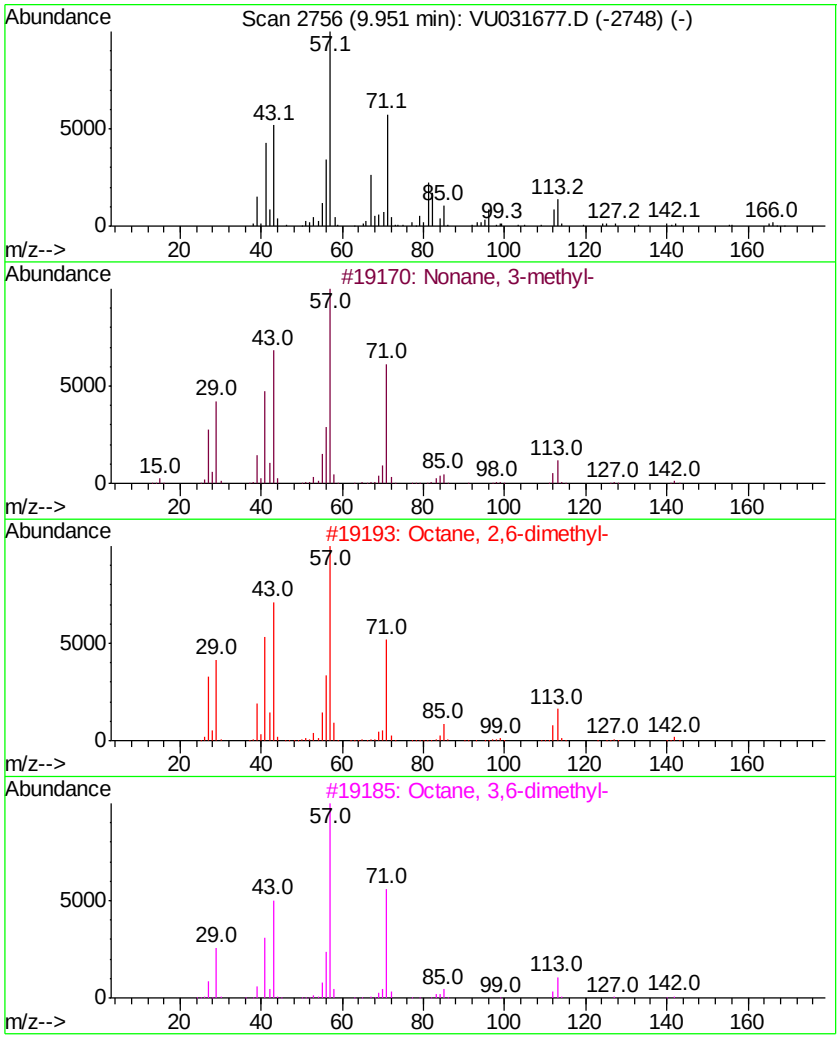
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

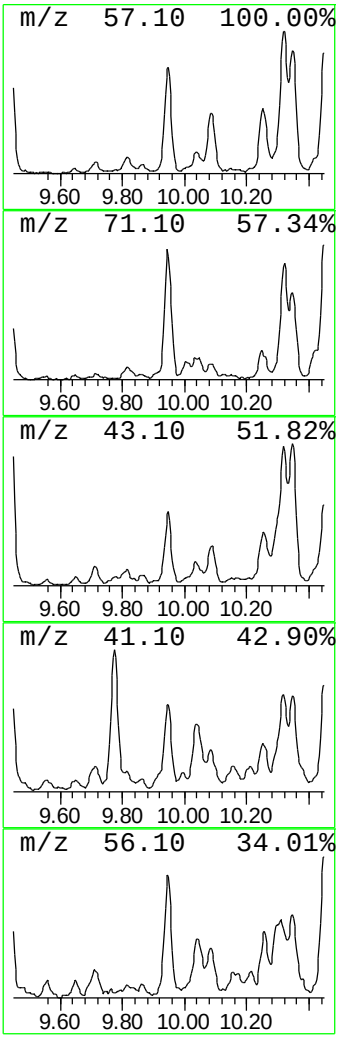
**********

Peak Number 3 (DEL) Alkane: Straight-Chai... Concentration Rank 35

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.95 | 3.84 ug/L | 236281 | Chlorobenzene-d5 | 9.09 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Nonane, 3-methyl- | 142 | C10H22 | 005911-04-6 | 76 |
| 2 | Octane, 2,6-dimethyl- | 142 | C10H22 | 002051-30-1 | 76 |
| 3 | Octane, 3,6-dimethyl- | 142 | C10H22 | 015869-94-0 | 76 |
| 4 | Nonane, 3-methyl- | 142 | C10H22 | 005911-04-6 | 70 |
| 5 | Nonane, 3-methyl- | 142 | C10H22 | 005911-04-6 | 70 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

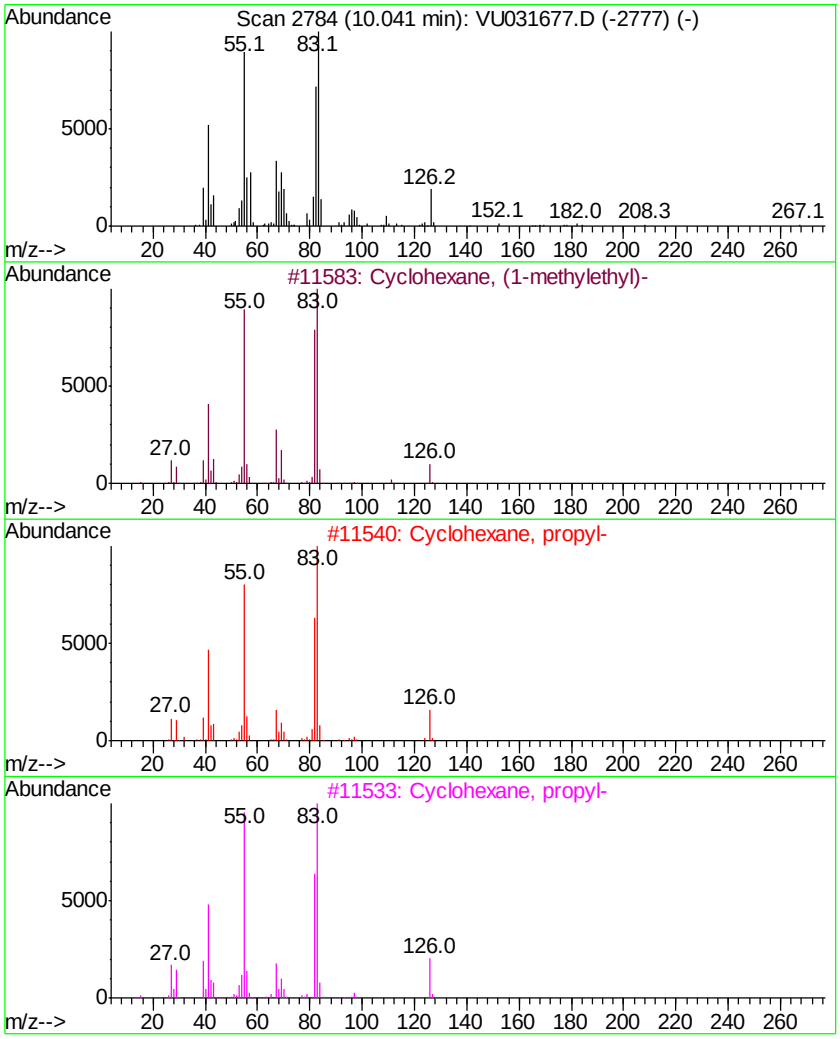
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

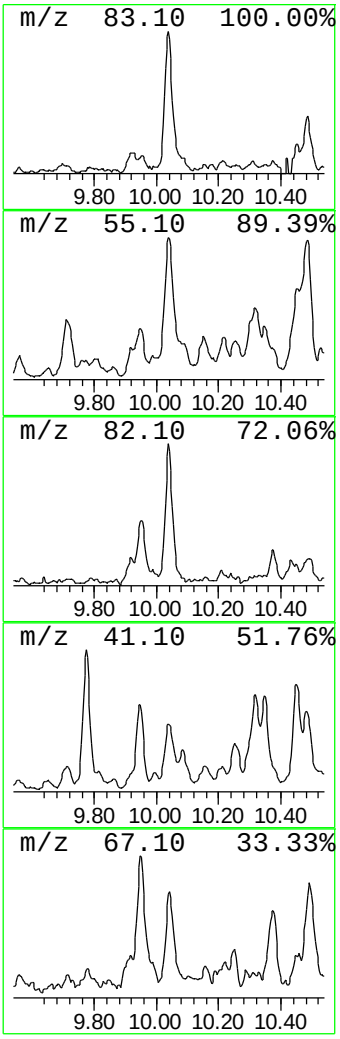
**********

Peak Number 4 (DEL) Alkane: Cyclic10.04 Concentration Rank 36

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.04 | 2.62 ug/L | 161230 | Chlorobenzene-d5 | 9.09 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexane, (1-methylethyl)- | 126 | C9H18 | 000696-29-7 | 87 |
| 2 | Cyclohexane, propyl- | 126 | C9H18 | 001678-92-8 | 83 |
| 3 | Cyclohexane, propyl- | 126 | C9H18 | 001678-92-8 | 80 |
| 4 | Cyclohexane, propyl- | 126 | C9H18 | 001678-92-8 | 80 |
| 5 | Cyclohexane, 1,1'-(1,3-propanedi... | 208 | C15H28 | 003178-24-3 | 76 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

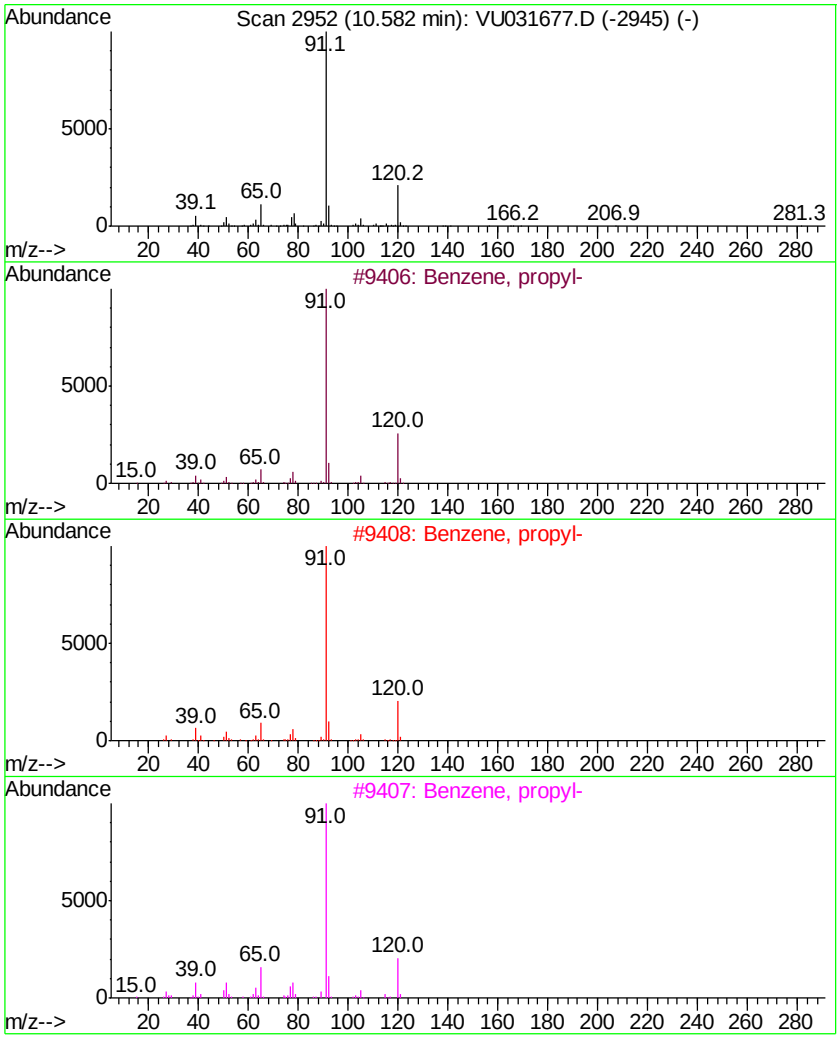
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

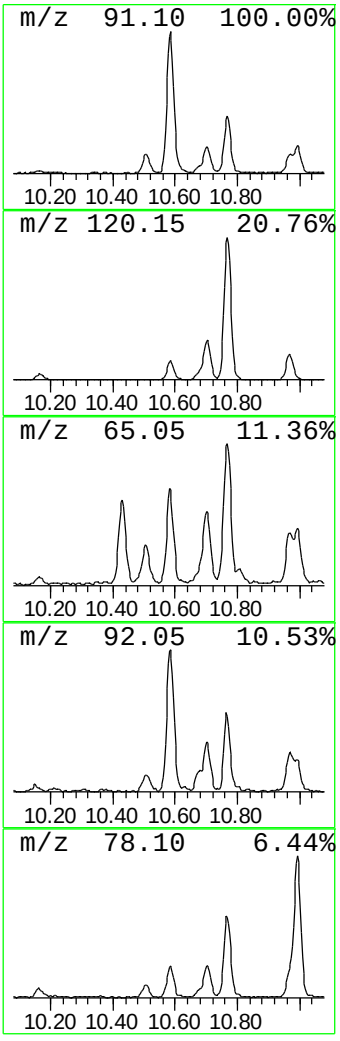
**********

Peak Number 5 Benzene, propyl- Concentration Rank 33

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.58 | 7.45 ug/L | 421027 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, propyl- | 120 | C9H12 | 000103-65-1 | 90 |
| 2 | Benzene, propyl- | 120 | C9H12 | 000103-65-1 | 90 |
| 3 | Benzene, propyl- | 120 | C9H12 | 000103-65-1 | 87 |
| 4 | N-Benzyl-2-phenethylamine | 211 | C15H17N | 003647-71-0 | 72 |
| 5 | Benzeneacetaldehyde | 120 | C8H8O | 000122-78-1 | 49 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

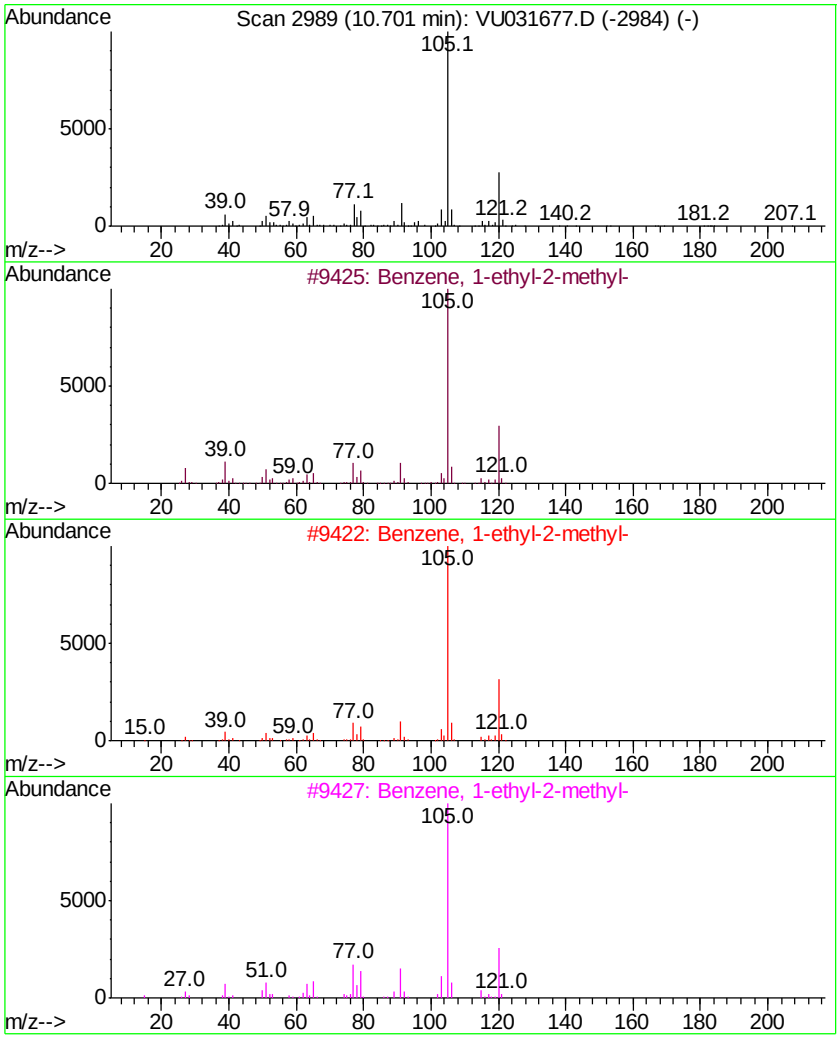
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

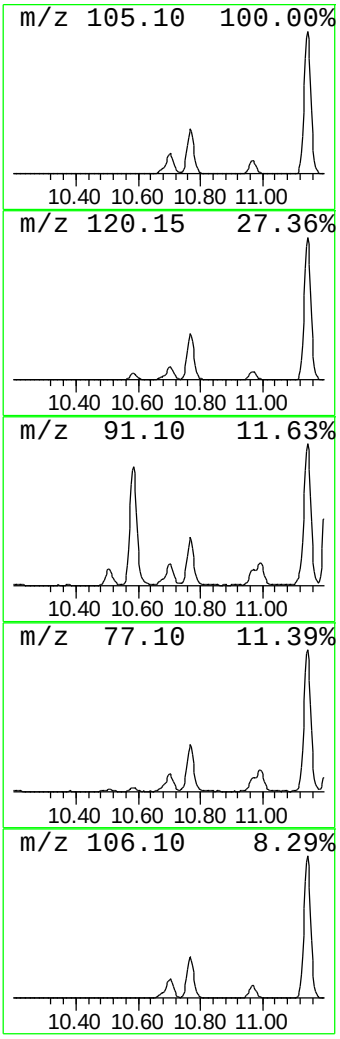
**********

Peak Number 6 Benzene, 1-ethyl-2-methyl- Concentration Rank 31

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.70 | 14.24 ug/L | 804674 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-ethyl-2-methyl- | 120 | C9H12 | 000611-14-3 | 95 |
| 2 | Benzene, 1-ethyl-2-methyl- | 120 | C9H12 | 000611-14-3 | 94 |
| 3 | Benzene, 1-ethyl-2-methyl- | 120 | C9H12 | 000611-14-3 | 93 |
| 4 | Benzene, 1,2,3-trimethyl- | 120 | C9H12 | 000526-73-8 | 91 |
| 5 | Benzene, 1,2,4-trimethyl- | 120 | C9H12 | 000095-63-6 | 91 |



Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

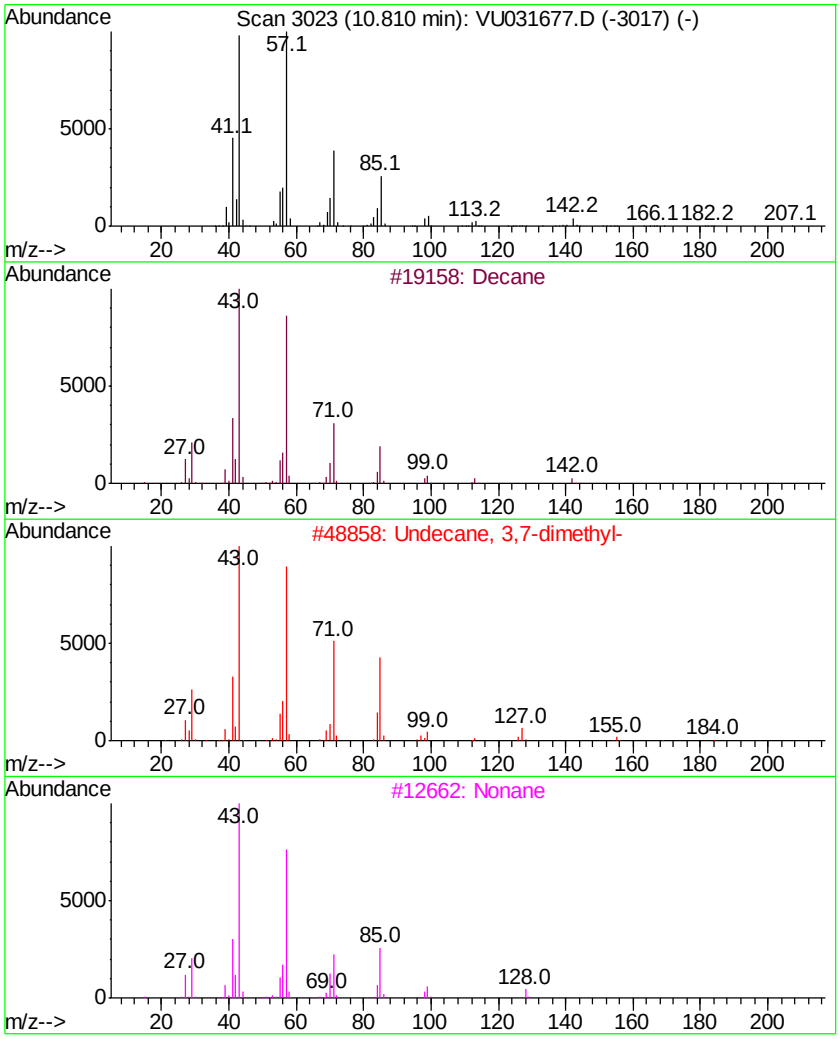
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

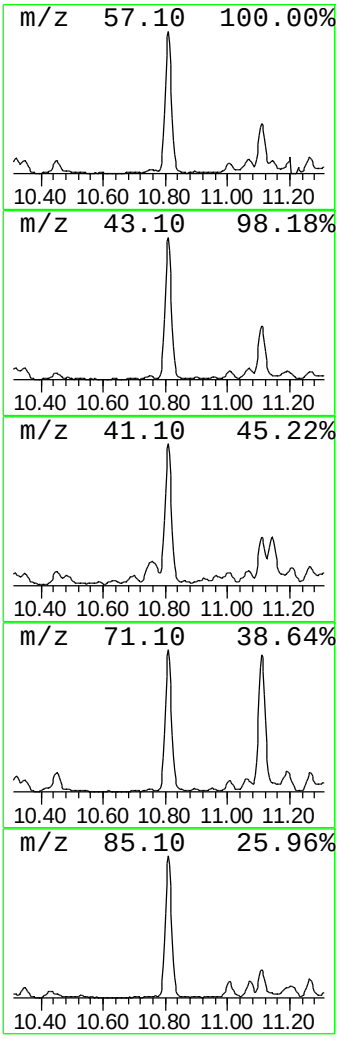
**********

Peak Number 8 (DEL) Alkane: Straight-Chai... Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.81 | 49.70 ug/L | 2808940 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Decane | 142 | C10H22 | 000124-18-5 | 87 |
| 2 | Undecane, 3,7-dimethyl- | 184 | C13H28 | 017301-29-0 | 72 |
| 3 | Nonane | 128 | C9H20 | 000111-84-2 | 72 |
| 4 | Octane, 4-ethyl- | 142 | C10H22 | 015869-86-0 | 68 |
| 5 | Undecane | 156 | C11H24 | 001120-21-4 | 64 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

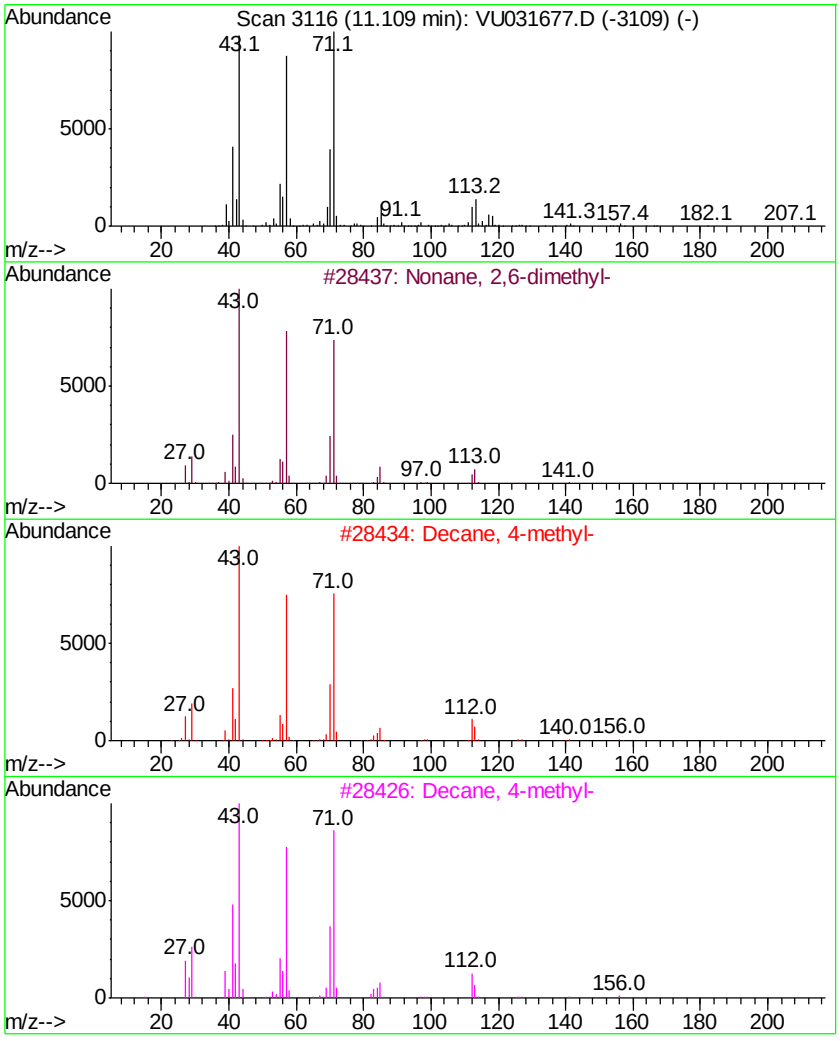
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

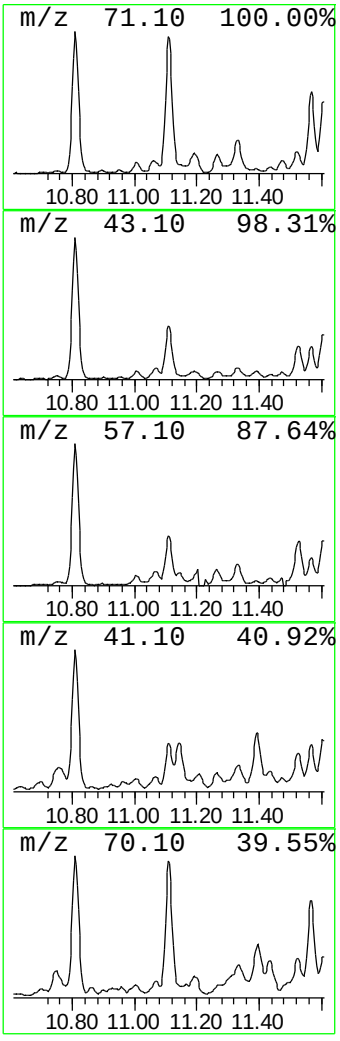
**********

Peak Number 10 (DEL) Alkane: Straight-Chai... Concentration Rank 27

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.11 | 17.55 ug/L | 991773 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Nonane, 2,6-dimethyl- | 156 | C11H24 | 017302-28-2 | 83 |
| 2 | Decane, 4-methyl- | 156 | C11H24 | 002847-72-5 | 83 |
| 3 | Decane, 4-methyl- | 156 | C11H24 | 002847-72-5 | 64 |
| 4 | Octane, 3,3-dimethyl- | 142 | C10H22 | 004110-44-5 | 59 |
| 5 | Dodecane, 4-methyl- | 184 | C13H28 | 006117-97-1 | 59 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

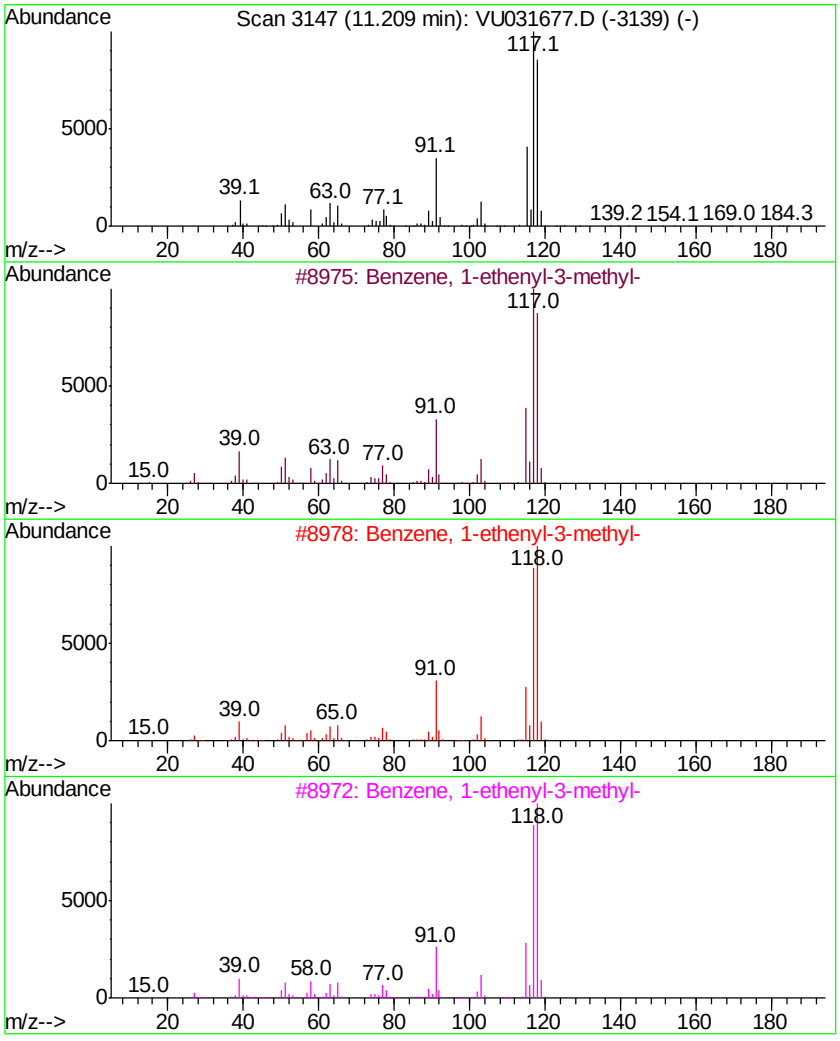
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

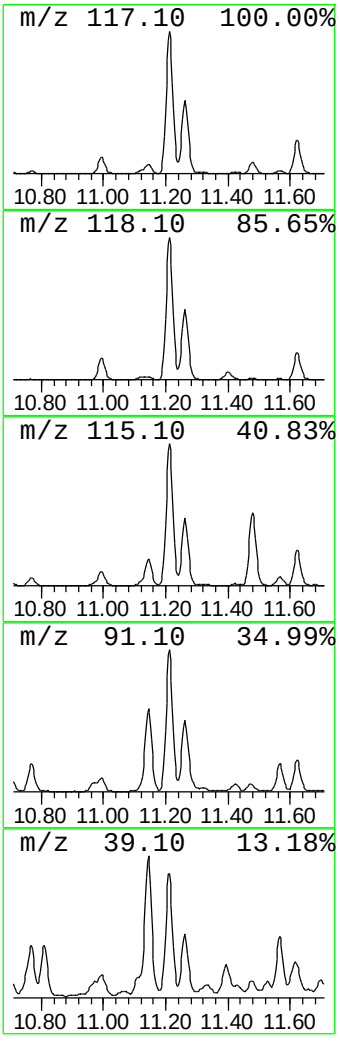
**********

Peak Number 12 Benzene, 1-ethenyl-3-methyl- Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.21 | 98.32 ug/L | 5557100 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-ethenyl-3-methyl- | 118 | C9H10 | 000100-80-1 | 96 |
| 2 | Benzene, 1-ethenyl-3-methyl- | 118 | C9H10 | 000100-80-1 | 96 |
| 3 | Benzene, 1-ethenyl-3-methyl- | 118 | C9H10 | 000100-80-1 | 94 |
| 4 | Benzene, cyclopropyl- | 118 | C9H10 | 000873-49-4 | 94 |
| 5 | Benzene, 1-ethenyl-2-methyl- | 118 | C9H10 | 000611-15-4 | 94 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

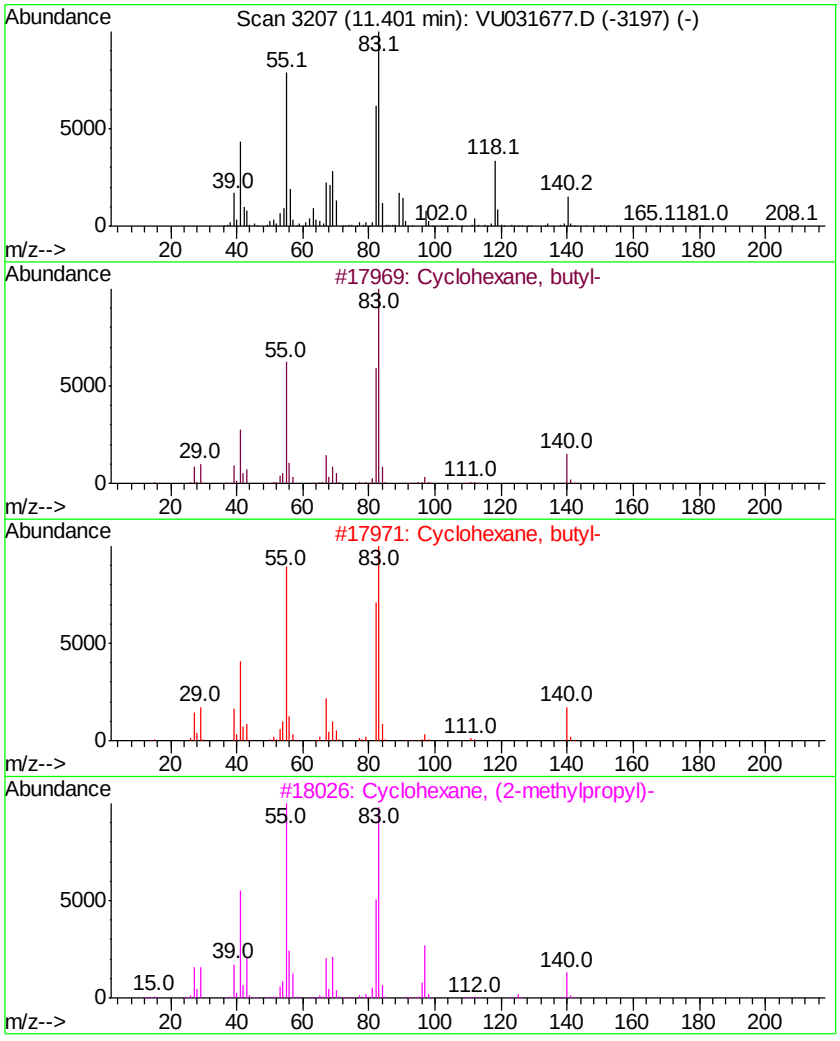
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

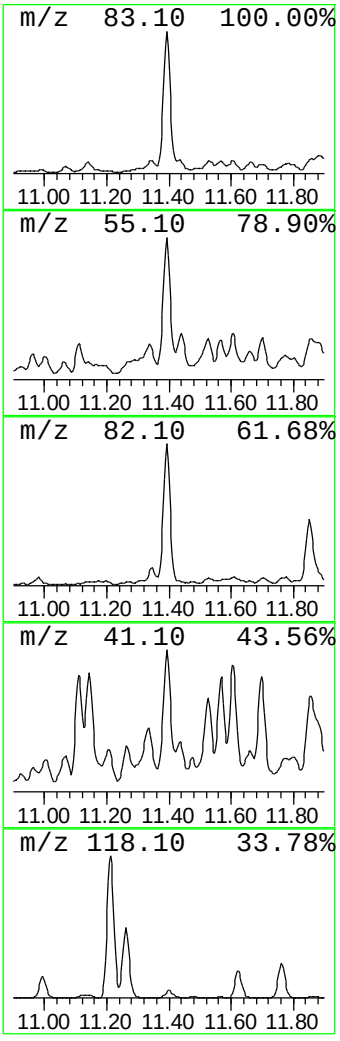
**********

Peak Number 14 (DEL) Alkane: Cyclic11.40 Concentration Rank 24

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.40 | 24.51 ug/L | 1385660 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexane, butyl- | 140 | C10H20 | 001678-93-9 | 81 |
| 2 | Cyclohexane, butyl- | 140 | C10H20 | 001678-93-9 | 74 |
| 3 | Cyclohexane, (2-methylpropyl)- | 140 | C10H20 | 001678-98-4 | 64 |
| 4 | Cyclohexane, propyl- | 126 | C9H18 | 001678-92-8 | 59 |
| 5 | Cyclohexane, (2-methylpropyl)- | 140 | C10H20 | 001678-98-4 | 59 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

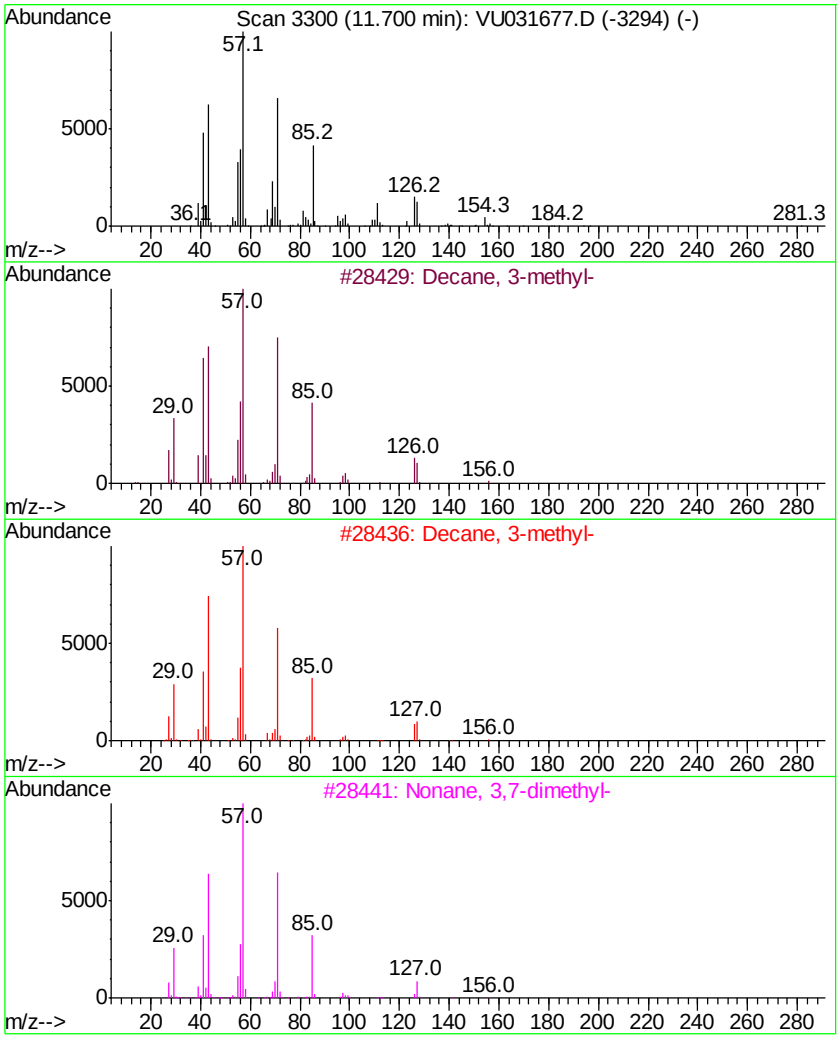
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

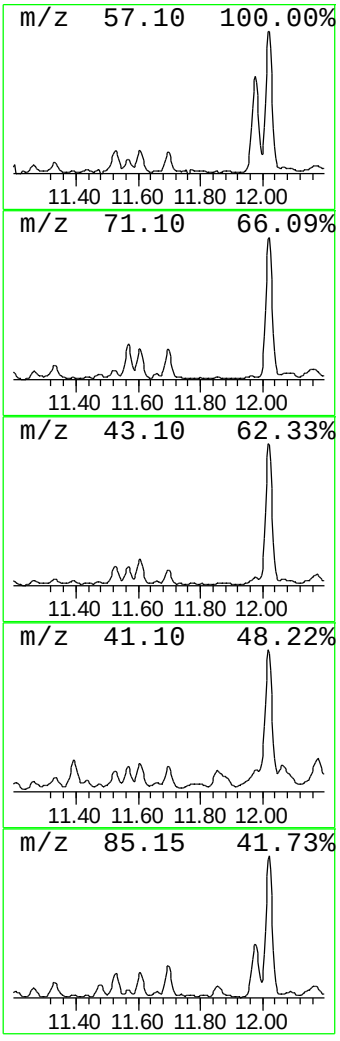
**********

Peak Number 16 (DEL) Alkane: Straight-Chai... Concentration Rank 30

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.70 | 15.08 ug/L | 852543 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Decane, 3-methyl- | 156 | C11H24 | 013151-34-3 | 94 |
| 2 | Decane, 3-methyl- | 156 | C11H24 | 013151-34-3 | 91 |
| 3 | Nonane, 3,7-dimethyl- | 156 | C11H24 | 017302-32-8 | 86 |
| 4 | Octane, 5-ethyl-2-methyl- | 156 | C11H24 | 062016-18-6 | 59 |
| 5 | Decane, 5-propyl- | 184 | C13H28 | 017312-62-8 | 52 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

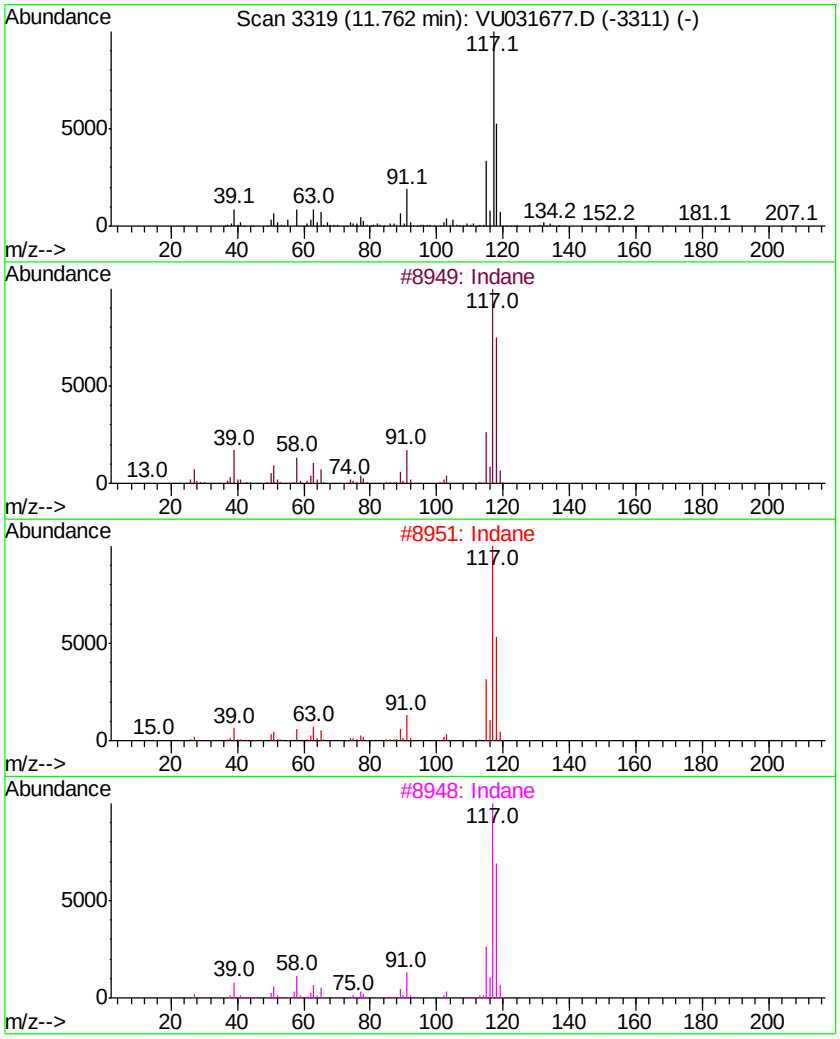
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

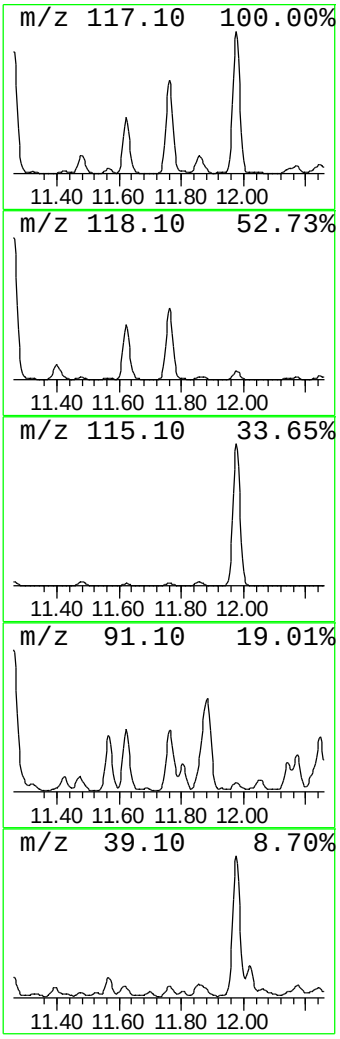
**********

Peak Number 17 Indane Concentration Rank 22

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.76 | 34.24 ug/L | 1935370 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Indane | 118 | C9H10 | 000496-11-7 | 93 |
| 2 | Indane | 118 | C9H10 | 000496-11-7 | 93 |
| 3 | Indane | 118 | C9H10 | 000496-11-7 | 87 |
| 4 | Deltacyclene | 118 | C9H10 | 007785-10-6 | 74 |
| 5 | Benzene, 1-propenyl- | 118 | C9H10 | 000637-50-3 | 74 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

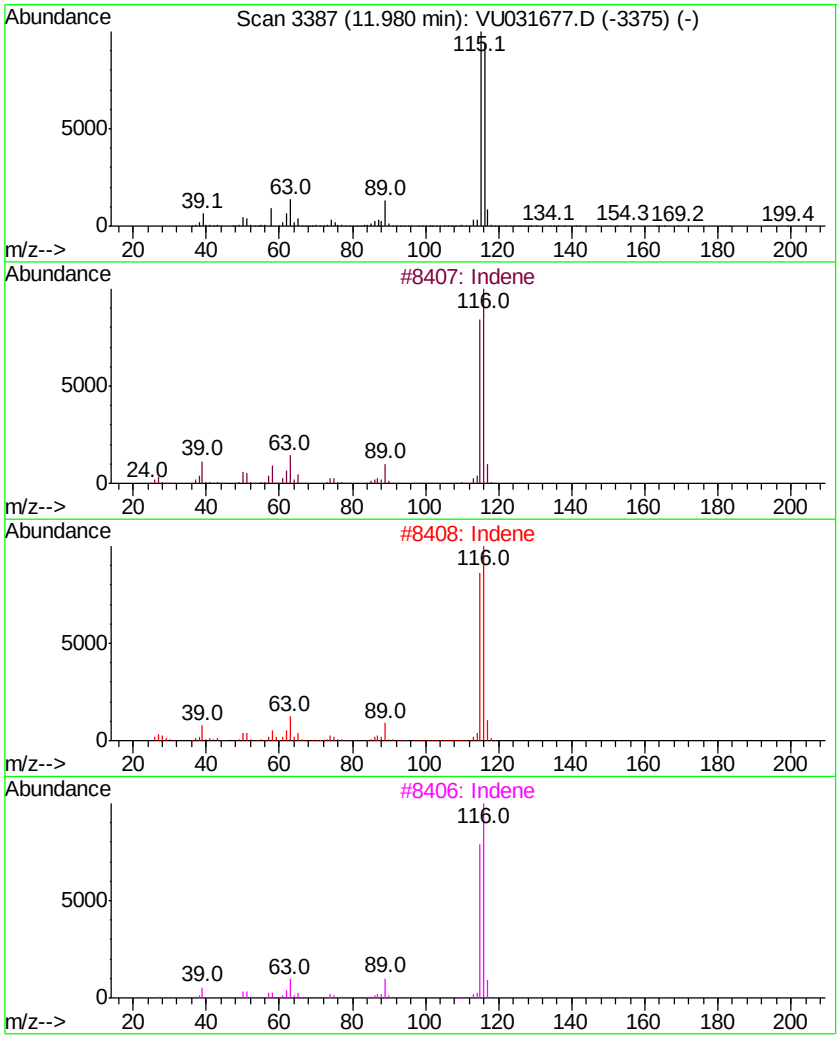
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

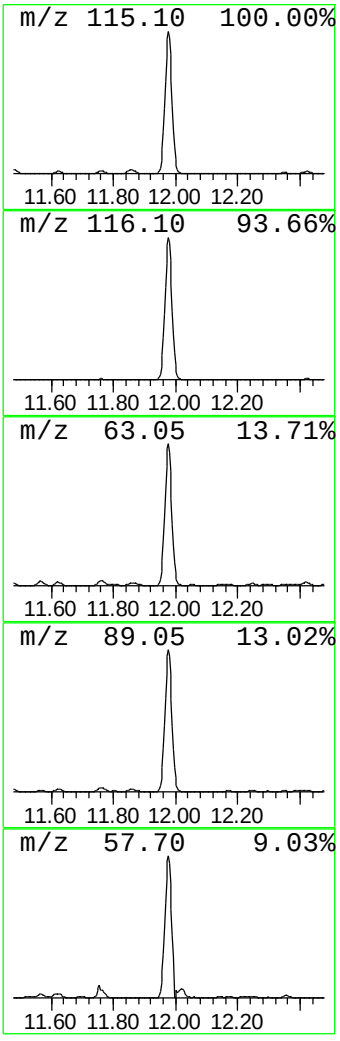
**********

Peak Number 18 Indene Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.98 | 523.04 ug/L | 29563800 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Indene | 116 | C9H8 | 000095-13-6 | 96 |
| 2 | Indene | 116 | C9H8 | 000095-13-6 | 95 |
| 3 | Indene | 116 | C9H8 | 000095-13-6 | 95 |
| 4 | 3-Methylphenylacetylene | 116 | C9H8 | 000766-82-5 | 94 |
| 5 | Benzene, 1,2-propadienyl- | 116 | C9H8 | 002327-99-3 | 91 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

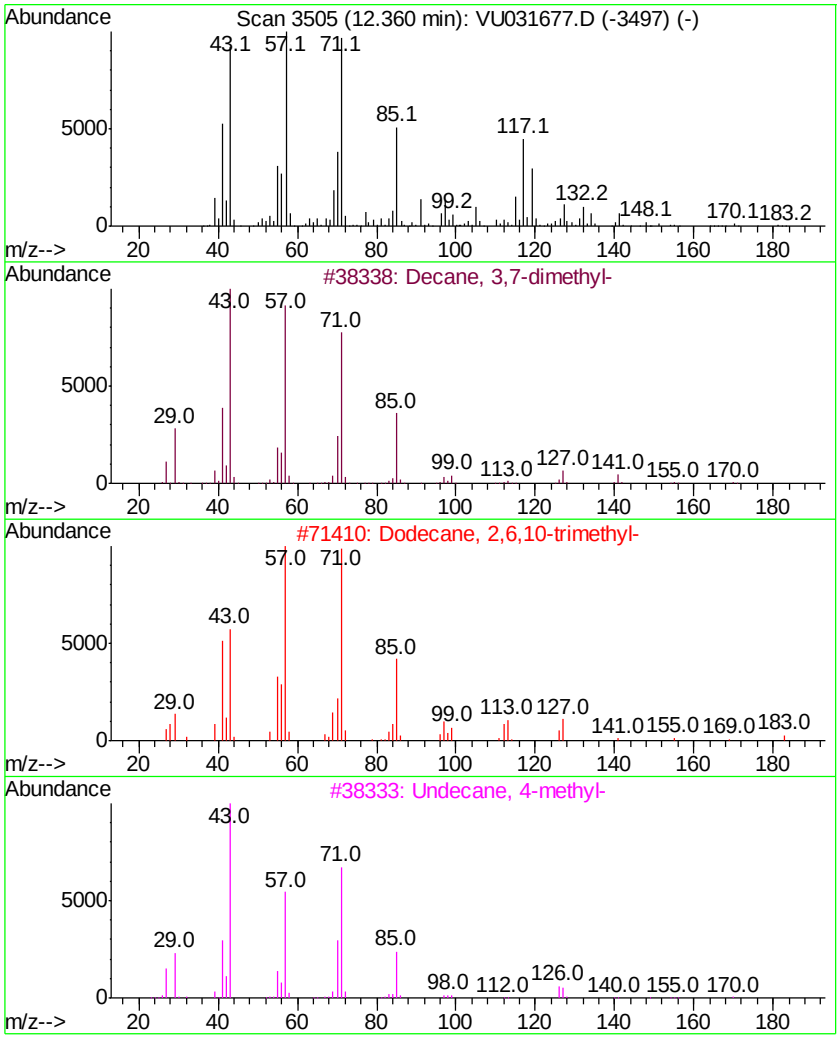
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

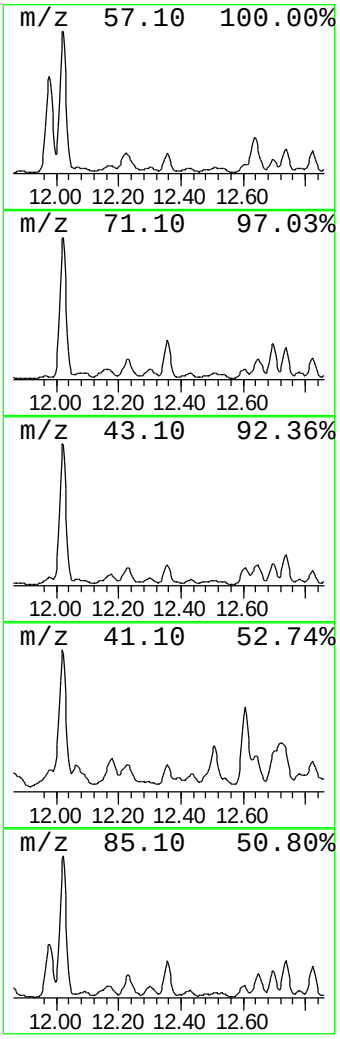
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 19 (DEL) Alkane: Straight-Chai... Concentration Rank 25

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.36 | 21.72 ug/L | 1227820 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Decane, 3,7-dimethyl- | 170 | C12H26 | 017312-54-8 | 55 |
| 2 | Dodecane, 2,6,10-trimethyl- | 212 | C15H32 | 003891-98-3 | 52 |
| 3 | Undecane, 4-methyl- | 170 | C12H26 | 002980-69-0 | 46 |
| 4 | Sulfurous acid, butyl nonyl ester | 264 | C13H28O3S | 1000309-17-6 | 35 |
| 5 | Decane, 1-iodo- | 268 | C10H21I | 002050-77-3 | 27 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

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

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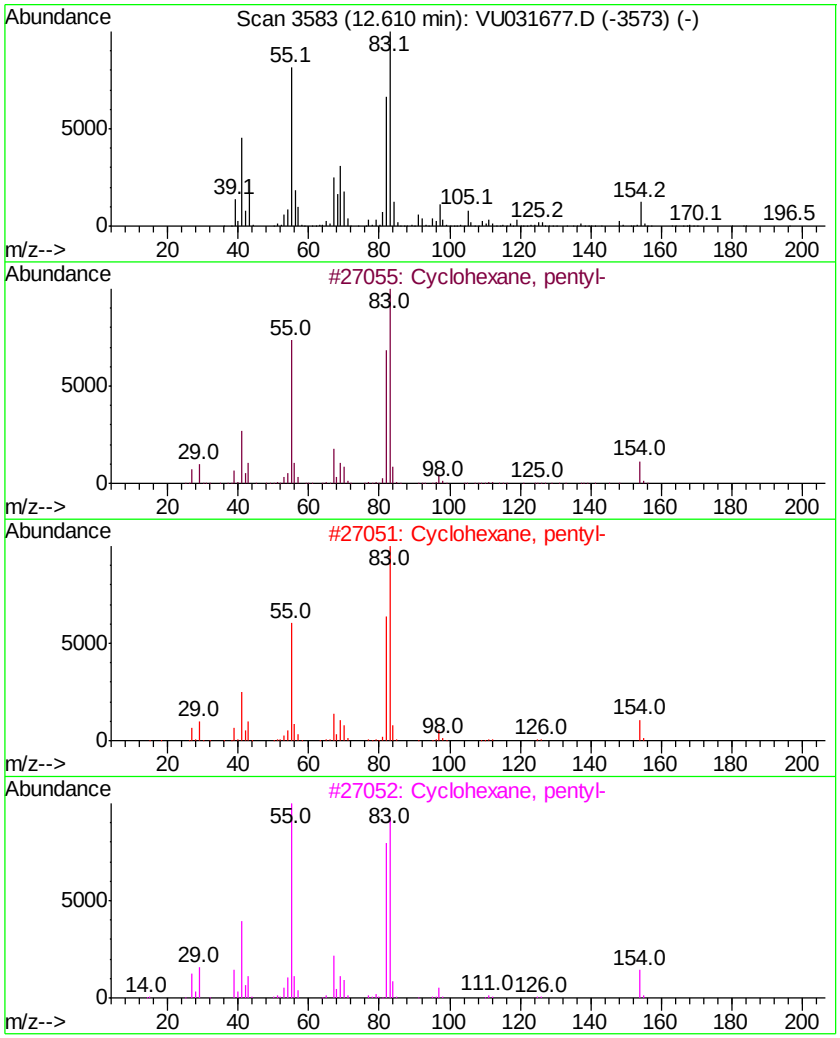
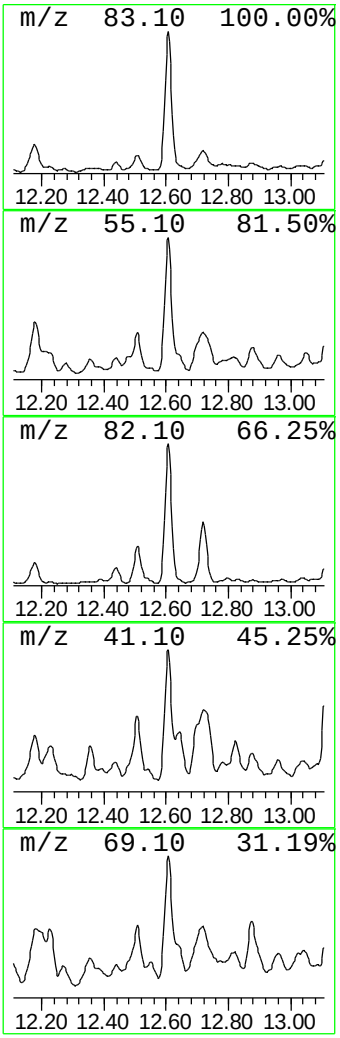
Peak Number 20 (DEL) Alkane: Cyclic12.61 Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.61 | 73.98 ug/L | 4181660 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexane, pentyl- | 154 | C11H22 | 004292-92-6 | 87 |
| 2 | Cyclohexane, pentyl- | 154 | C11H22 | 004292-92-6 | 83 |
| 3 | Cyclohexane, pentyl- | 154 | C11H22 | 004292-92-6 | 83 |
| 4 | Cyclohexane, (4-methylpentyl)- | 168 | C12H24 | 061142-20-9 | 72 |
| 5 | Cyclohexane, (1-methylethyl)- | 126 | C9H18 | 000696-29-7 | 64 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

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

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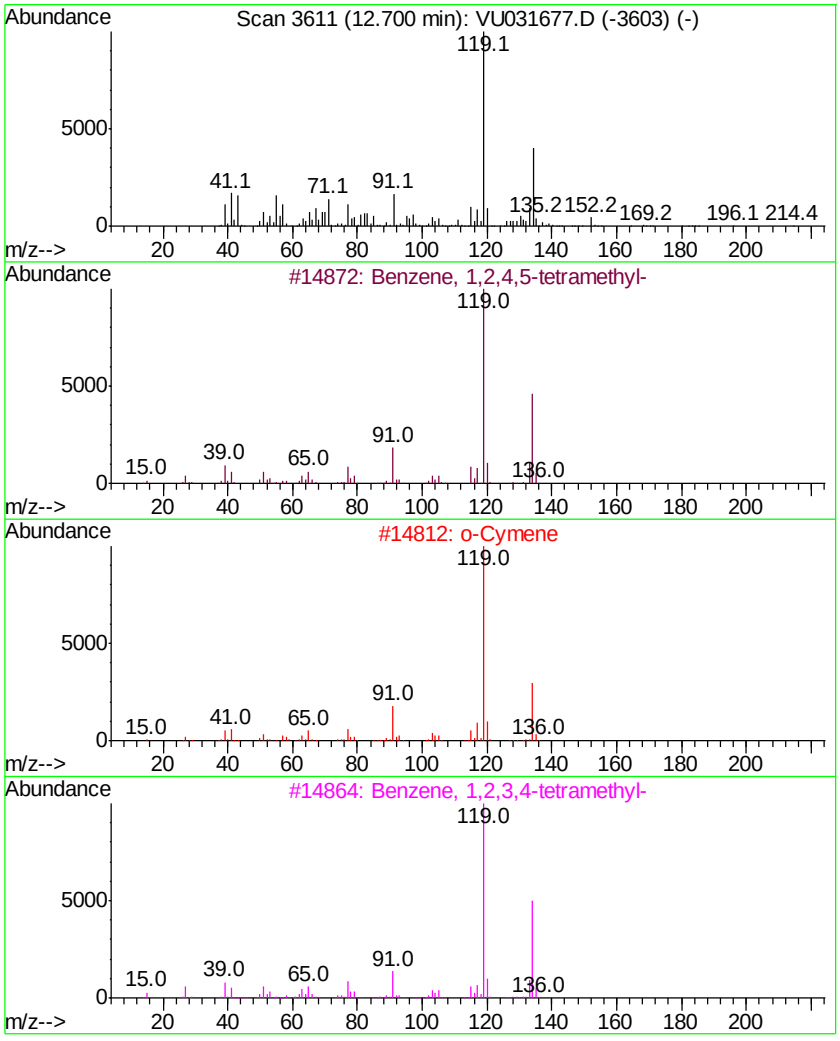
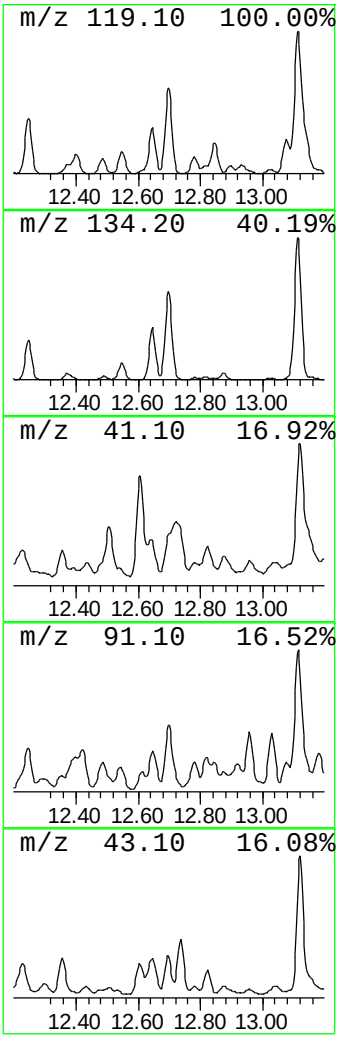
Peak Number 21 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.70 | 115.57 ug/L | 6532290 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 95 |
| 2 | o-Cymene | 134 | C10H14 | 000527-84-4 | 94 |
| 3 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 93 |
| 4 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 93 |
| 5 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 93 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

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

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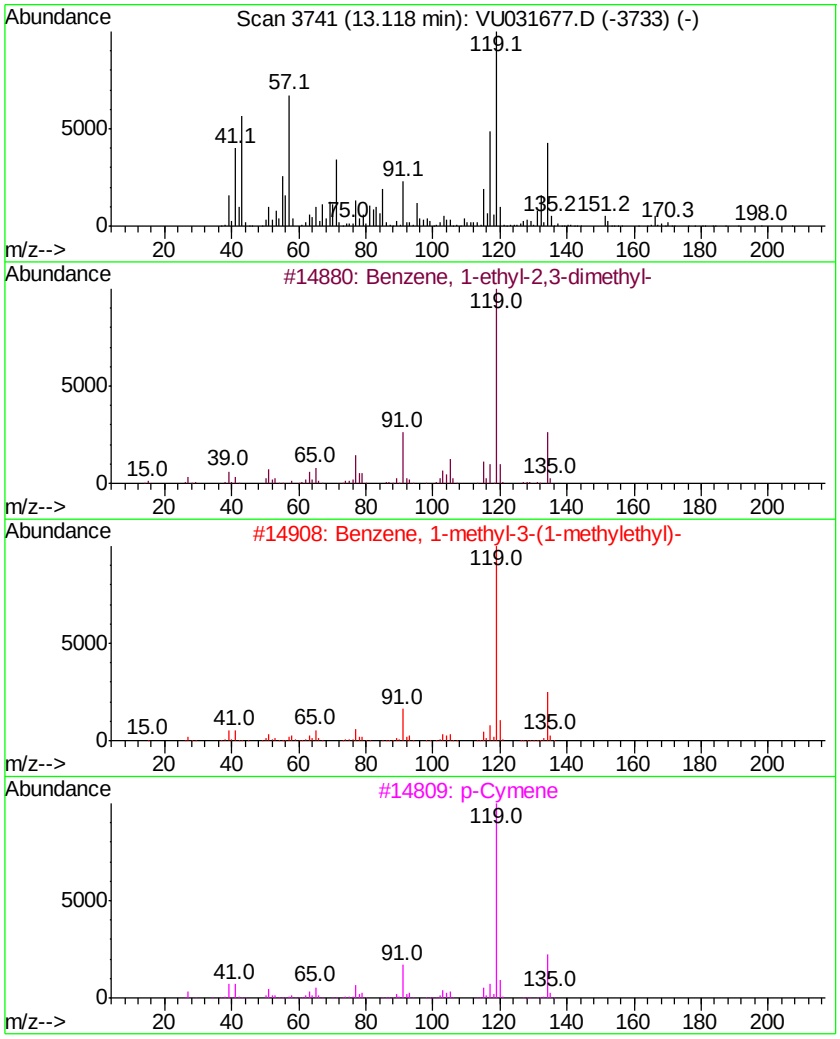
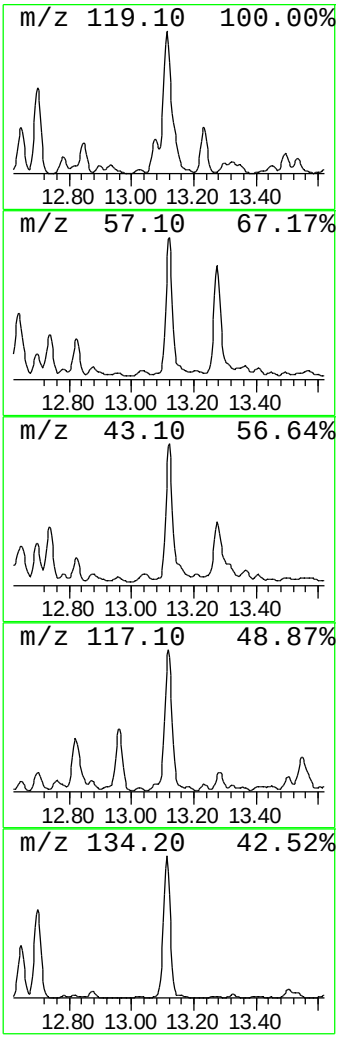
Peak Number 22 Benzene, 1-ethyl-2,3-dimethyl- Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.12 | 160.38 ug/L | 9064940 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 60 |
| 2 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 55 |
| 3 | p-Cymene | 134 | C10H14 | 000099-87-6 | 55 |
| 4 | p-Cymene | 134 | C10H14 | 000099-87-6 | 55 |
| 5 | o-Cymene | 134 | C10H14 | 000527-84-4 | 55 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

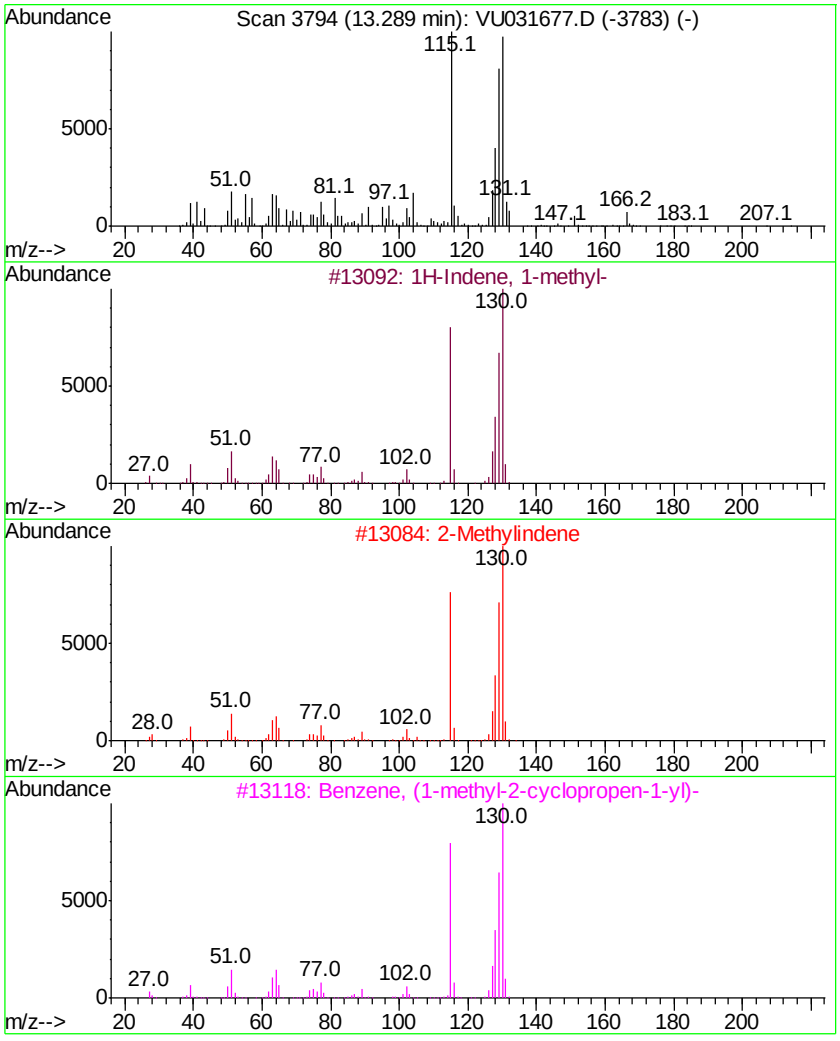
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

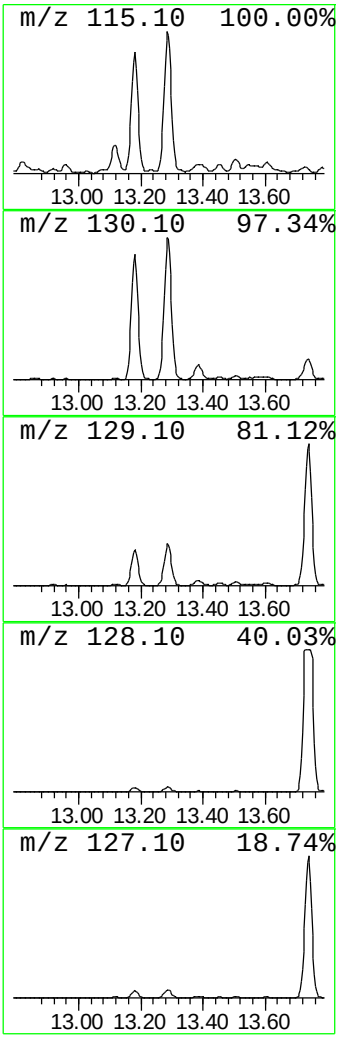
**********

Peak Number 23 1H-Indene, 1-methyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.29 | 220.85 ug/L | 12483100 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1H-Indene, 1-methyl- | 130 | C10H10 | 000767-59-9 | 96 |
| 2 | 2-Methylindene | 130 | C10H10 | 002177-47-1 | 96 |
| 3 | Benzene, (1-methyl-2-cyclopropen... | 130 | C10H10 | 065051-83-4 | 95 |
| 4 | 1H-Indene, 3-methyl- | 130 | C10H10 | 000767-60-2 | 94 |
| 5 | Benzene,1-methyl-1,2-propadienyl- | 130 | C10H10 | 022433-39-2 | 94 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

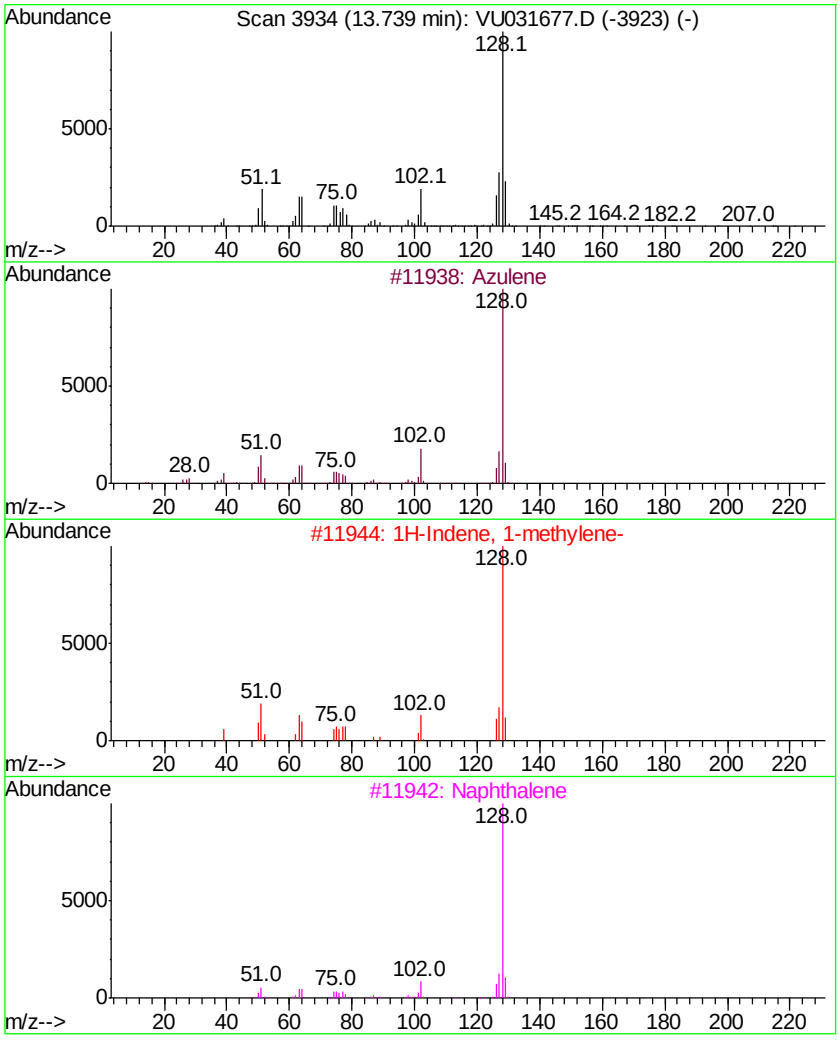
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

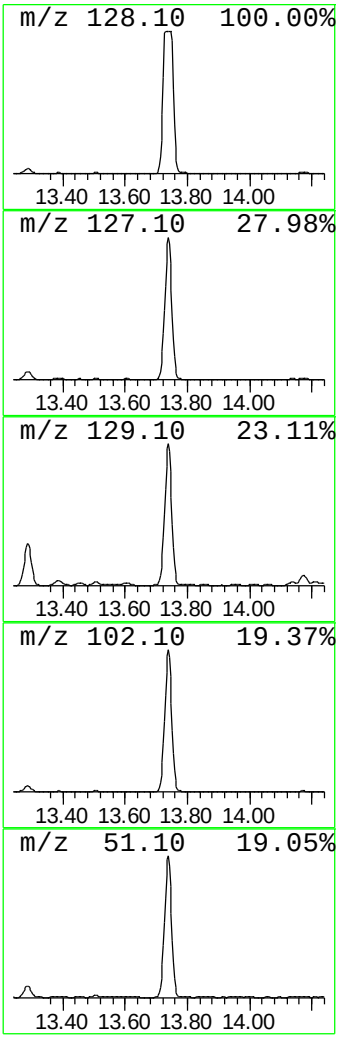
**********

Peak Number 24 Azulene Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.74 | 1004.00 ug/L | 56749000 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Azulene | 128 | C10H8 | 000275-51-4 | 93 |
| 2 | 1H-Indene, 1-methylene- | 128 | C10H8 | 002471-84-3 | 90 |
| 3 | Naphthalene | 128 | C10H8 | 000091-20-3 | 87 |
| 4 | Azulene | 128 | C10H8 | 000275-51-4 | 81 |
| 5 | Azulene | 128 | C10H8 | 000275-51-4 | 81 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

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

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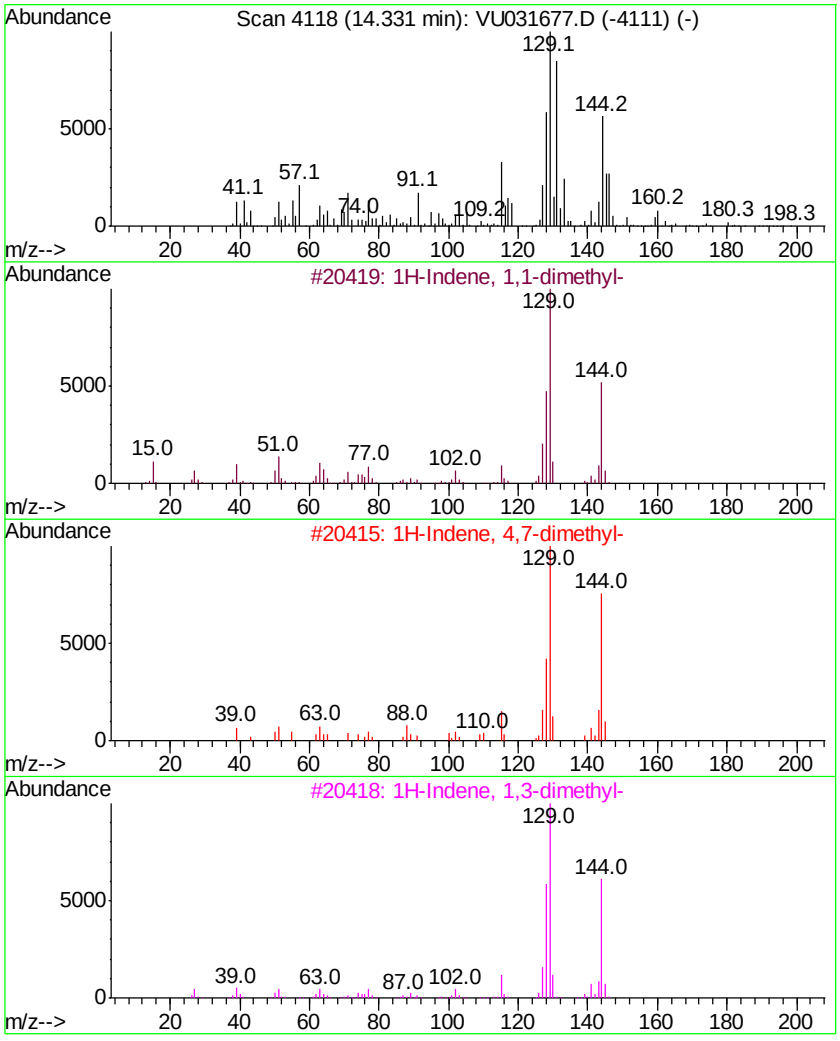
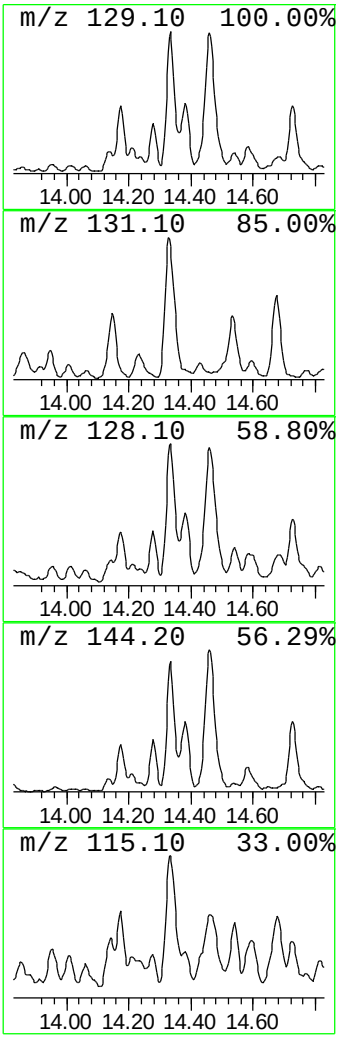
Peak Number 25 1H-Indene, 1,1-dimethyl- Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.33 | 76.74 ug/L | 4337570 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1H-Indene, 1,1-dimethyl- | 144 | C11H12 | 018636-55-0 | 87 |
| 2 | 1H-Indene, 4,7-dimethyl- | 144 | C11H12 | 006974-97-6 | 60 |
| 3 | 1H-Indene, 1,3-dimethyl- | 144 | C11H12 | 002177-48-2 | 60 |
| 4 | 1H-Indene, 2,3-dimethyl- | 144 | C11H12 | 004773-82-4 | 60 |
| 5 | 1H-Indene, 1,1-dimethyl- | 144 | C11H12 | 018636-55-0 | 55 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

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

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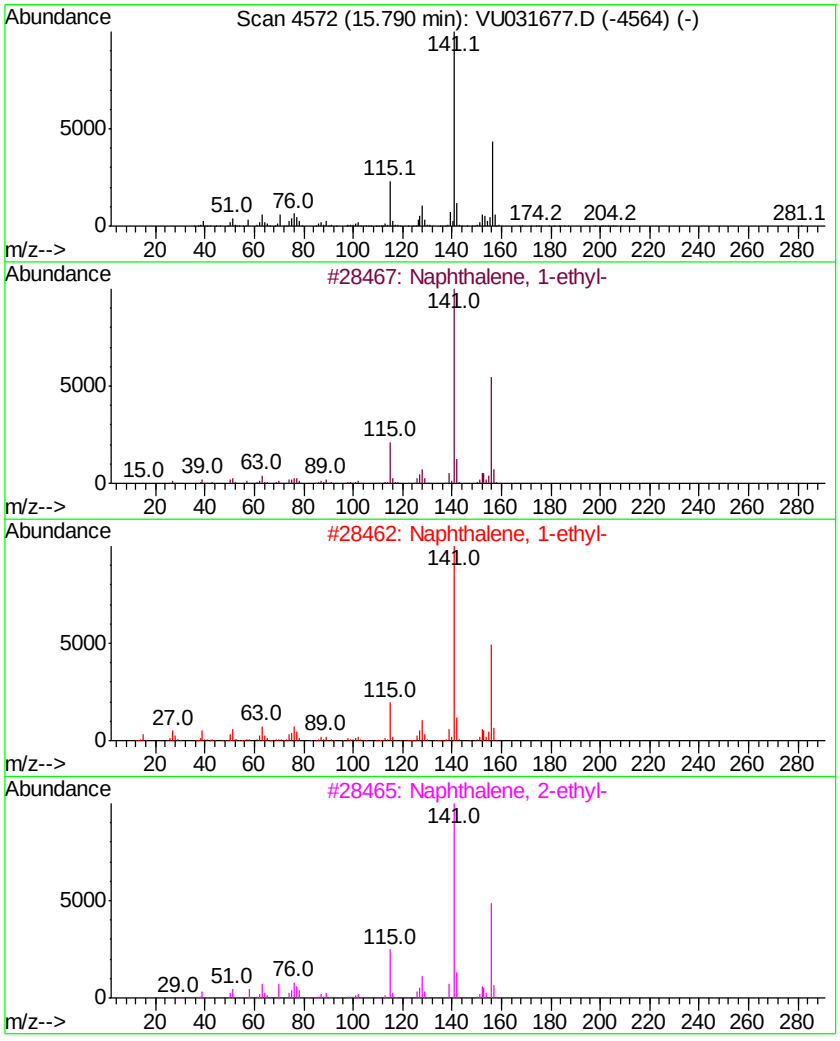
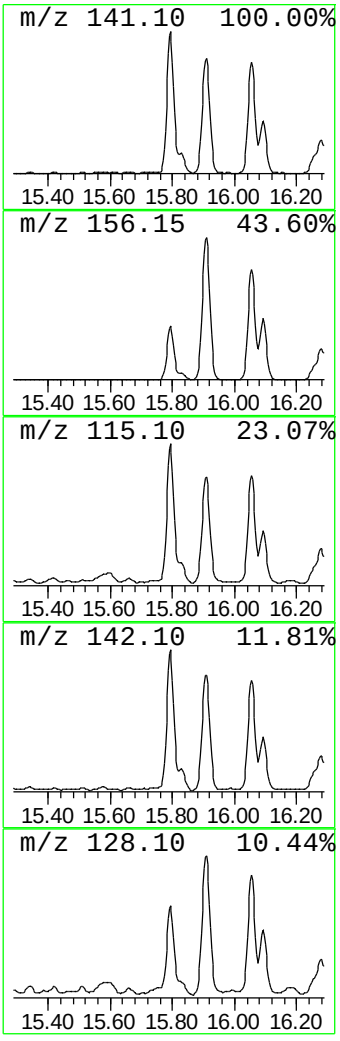
Peak Number 28 Naphthalene, 1-ethyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.79 | 188.02 ug/L | 10627200 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1-ethyl- | 156 | C12H12 | 001127-76-0 | 97 |
| 2 | Naphthalene, 1-ethyl- | 156 | C12H12 | 001127-76-0 | 96 |
| 3 | Naphthalene, 2-ethyl- | 156 | C12H12 | 000939-27-5 | 96 |
| 4 | Naphthalene, 1-ethyl- | 156 | C12H12 | 001127-76-0 | 95 |
| 5 | Naphthalene, 2-ethyl- | 156 | C12H12 | 000939-27-5 | 95 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

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

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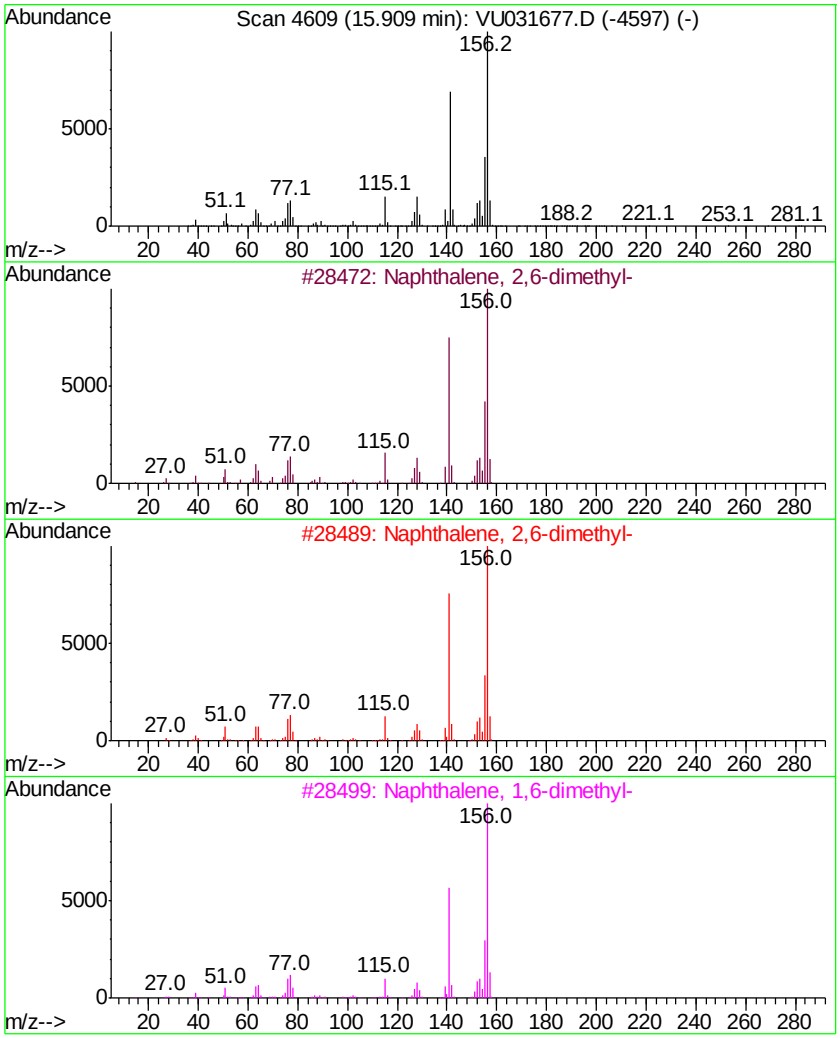
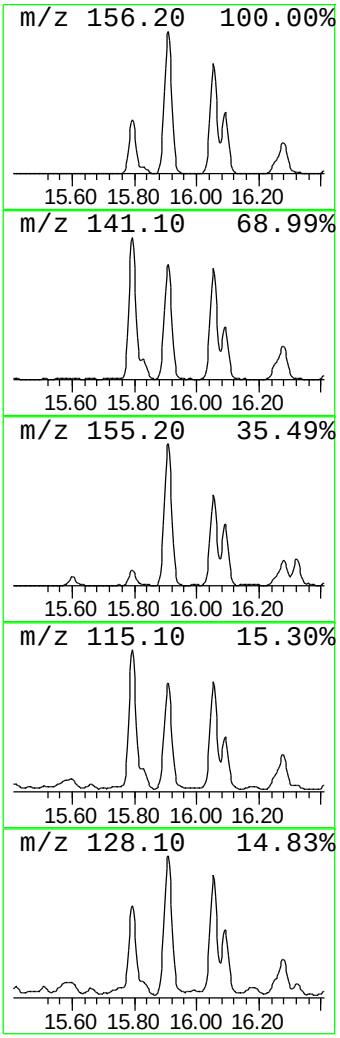
Peak Number 29 Naphthalene, 2,6-dimethyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.91 | 338.75 ug/L | 19147200 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2,6-dimethyl- | 156 | C12H12 | 000581-42-0 | 98 |
| 2 | Naphthalene, 2,6-dimethyl- | 156 | C12H12 | 000581-42-0 | 98 |
| 3 | Naphthalene, 1,6-dimethyl- | 156 | C12H12 | 000575-43-9 | 98 |
| 4 | Naphthalene, 1,6-dimethyl- | 156 | C12H12 | 000575-43-9 | 98 |
| 5 | Naphthalene, 1,7-dimethyl- | 156 | C12H12 | 000575-37-1 | 98 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

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

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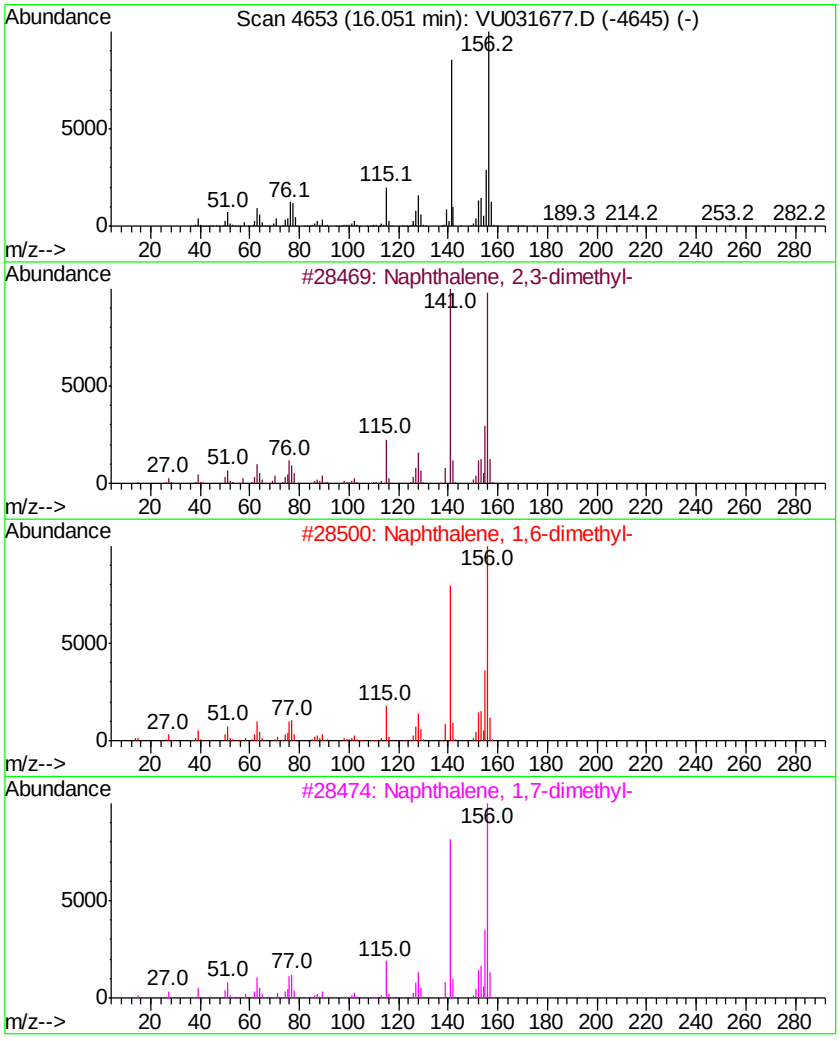
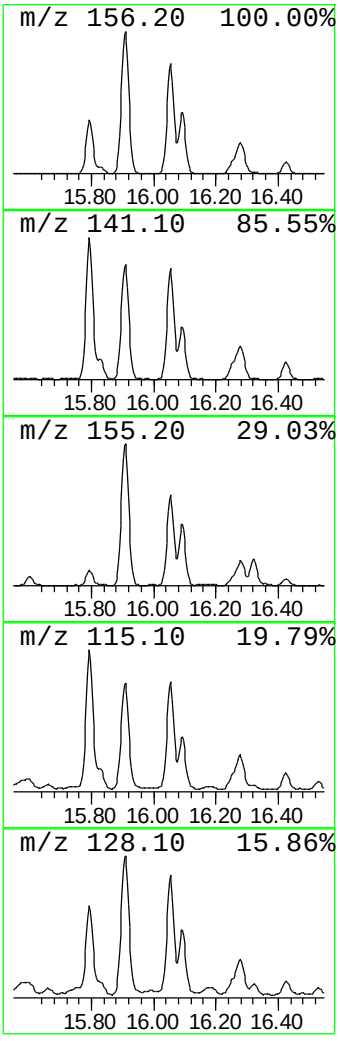
Peak Number 30 Naphthalene, 2,3-dimethyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.05 | 241.31 ug/L | 13639800 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 98 |
| 2 | Naphthalene, 1,6-dimethyl- | 156 | C12H12 | 000575-43-9 | 98 |
| 3 | Naphthalene, 1,7-dimethyl- | 156 | C12H12 | 000575-37-1 | 98 |
| 4 | Naphthalene, 1,7-dimethyl- | 156 | C12H12 | 000575-37-1 | 97 |
| 5 | Naphthalene, 1,4-dimethyl- | 156 | C12H12 | 000571-58-4 | 97 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

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

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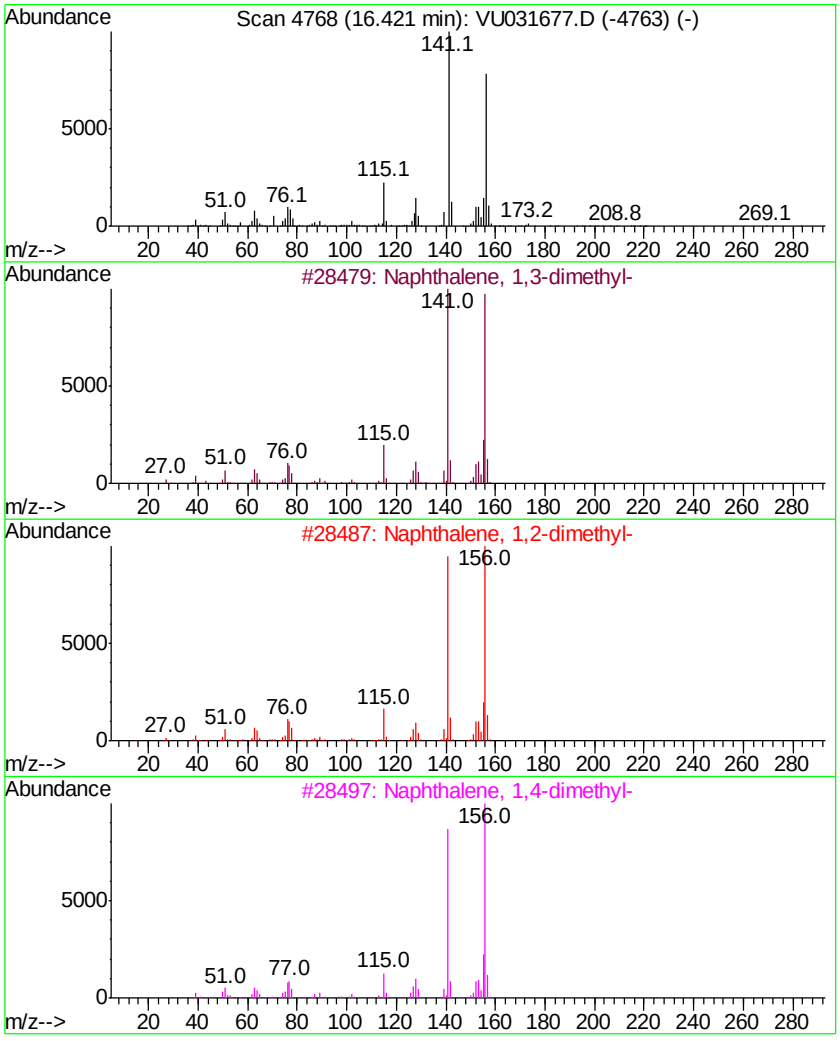
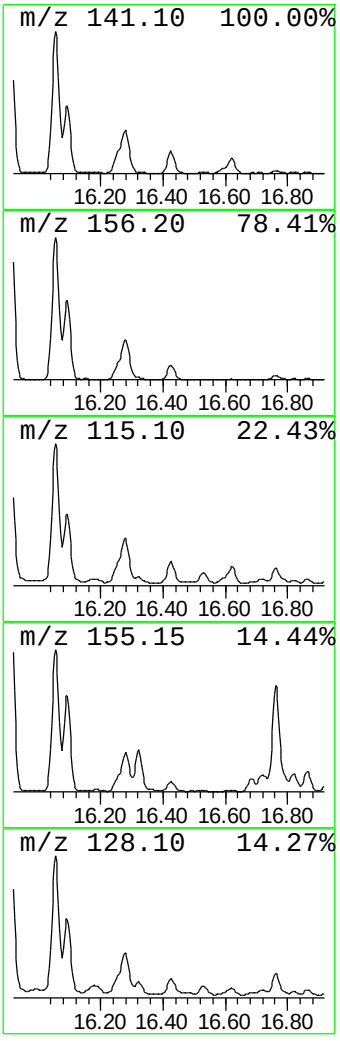
Peak Number 32 Naphthalene, 1,3-dimethyl- Concentration Rank 23

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.42 | 25.78 ug/L | 1457200 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,3-dimethyl- | 156 | C12H12 | 000575-41-7 | 97 |
| 2 | Naphthalene, 1,2-dimethyl- | 156 | C12H12 | 000573-98-8 | 96 |
| 3 | Naphthalene, 1,4-dimethyl- | 156 | C12H12 | 000571-58-4 | 96 |
| 4 | Naphthalene, 1,4-dimethyl- | 156 | C12H12 | 000571-58-4 | 96 |
| 5 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 95 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

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

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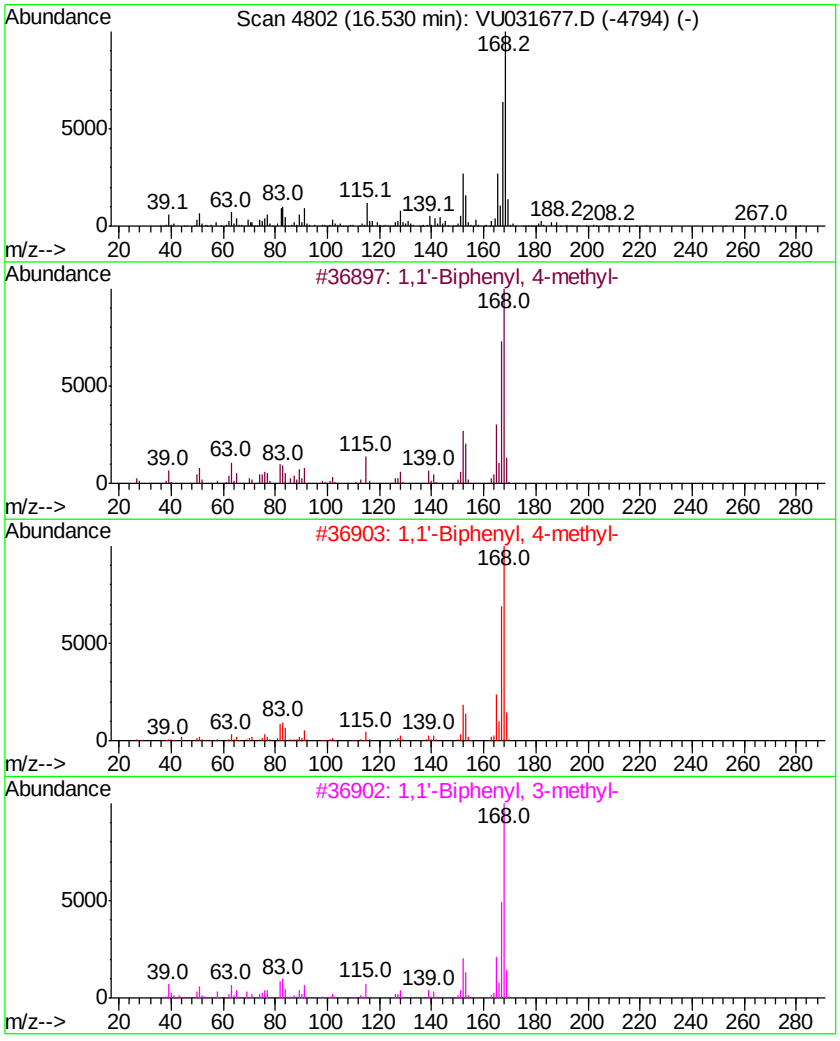
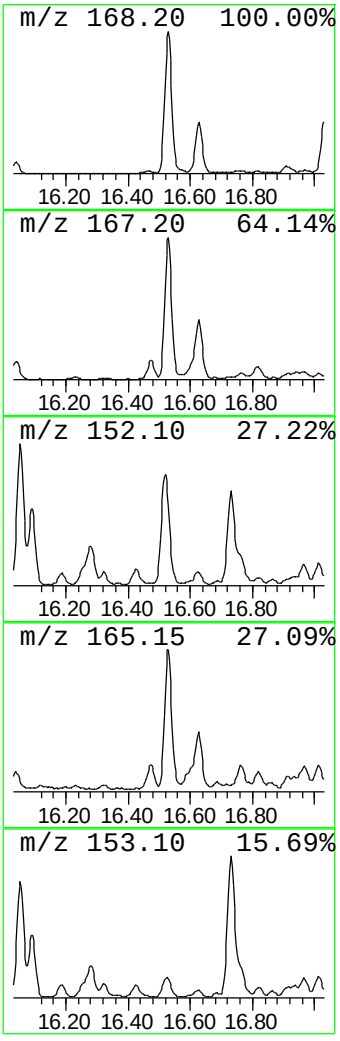
Peak Number 33 1,1'-Biphenyl, 4-methyl- Concentration Rank 21

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.53 | 38.34 ug/L | 2167160 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,1'-Biphenyl, 4-methyl- | 168 | C13H12 | 000644-08-6 | 96 |
| 2 | 1,1'-Biphenyl, 4-methyl- | 168 | C13H12 | 000644-08-6 | 95 |
| 3 | 1,1'-Biphenyl, 3-methyl- | 168 | C13H12 | 000643-93-6 | 95 |
| 4 | 1,1'-Biphenyl, 4-methyl- | 168 | C13H12 | 000644-08-6 | 95 |
| 5 | 1,1'-Biphenyl, 2-methyl- | 168 | C13H12 | 000643-58-3 | 95 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

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

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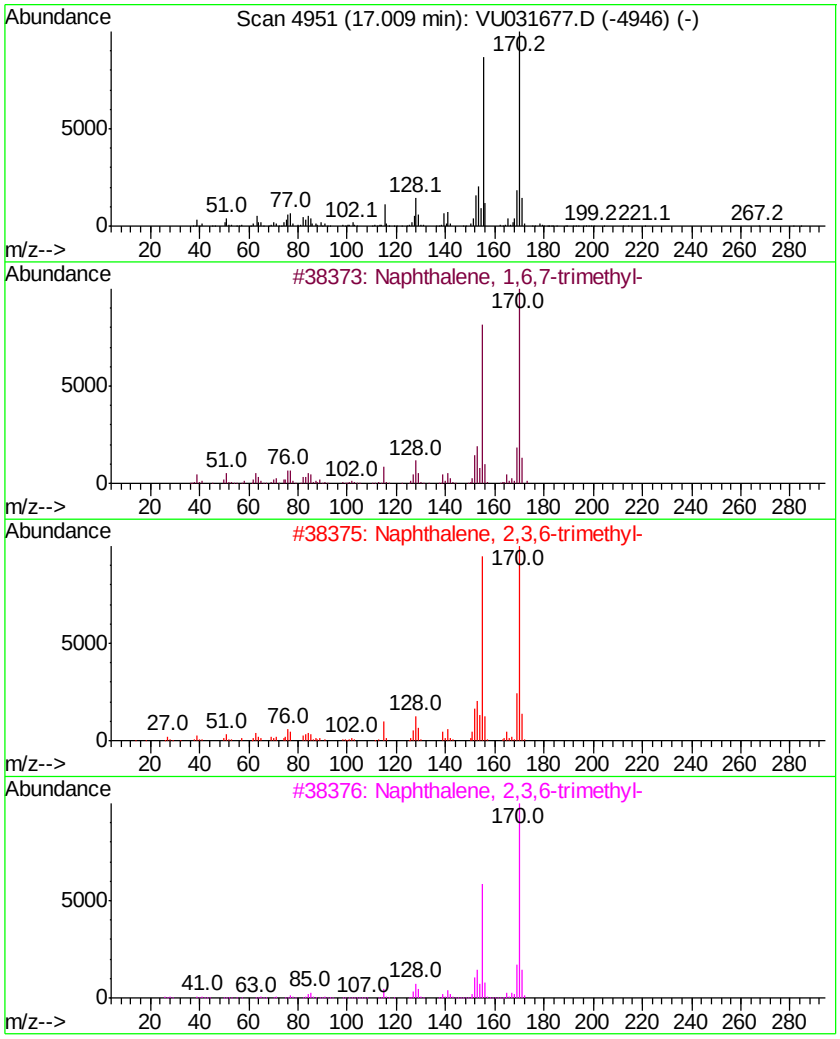
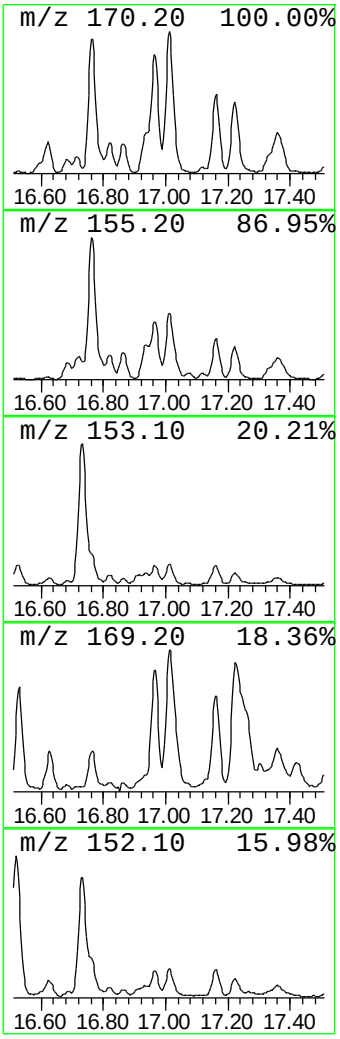
Peak Number 34 Naphthalene, 1,6,7-trimethyl- Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.01 | 38.98 ug/L | 2203200 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 98 |
| 2 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 97 |
| 3 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 96 |
| 4 | Naphthalene, 1,4,6-trimethyl- | 170 | C13H14 | 002131-42-2 | 96 |
| 5 | Naphthalene, 1,4,6-trimethyl- | 170 | C13H14 | 002131-42-2 | 95 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.M
Quant Title : VOC Analysis

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

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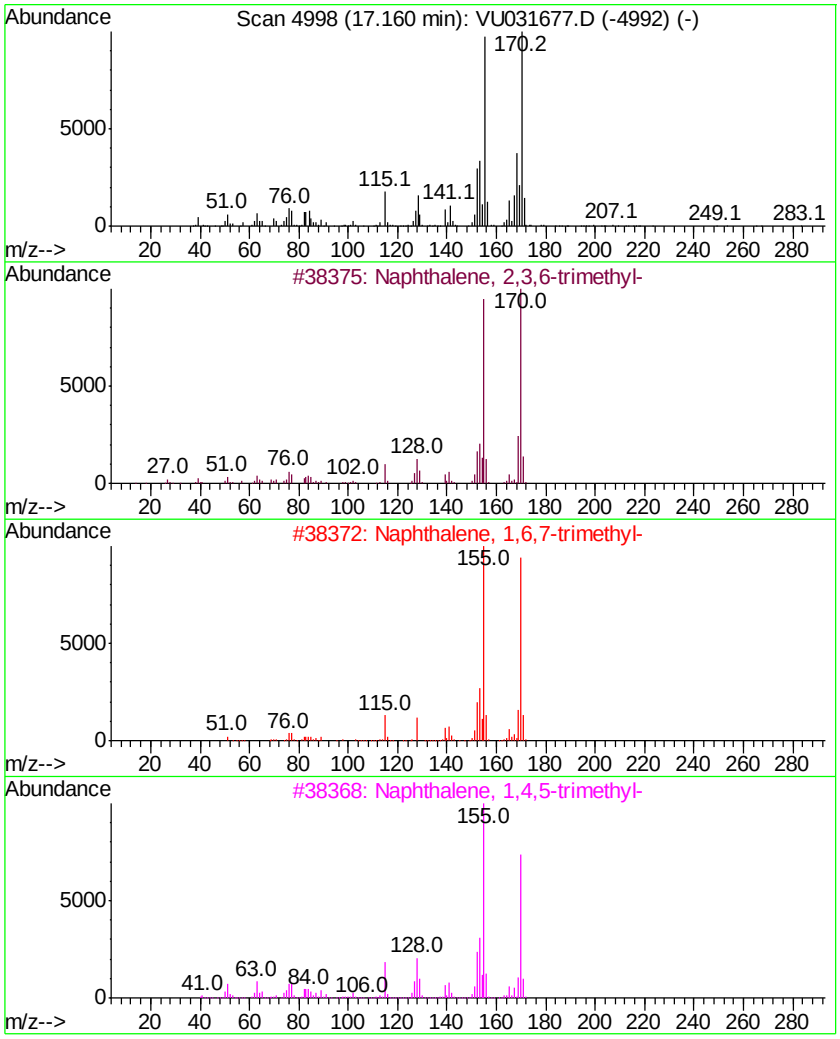
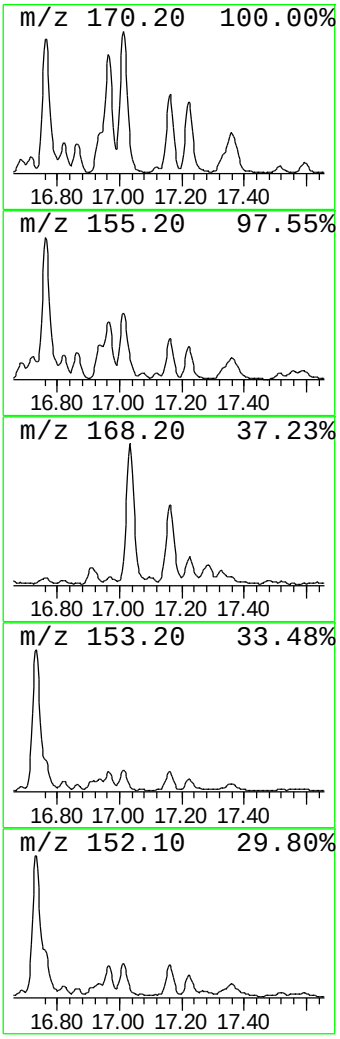
Peak Number 35 Naphthalene, 2,3,6-trimethyl- Concentration Rank 26

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.16 | 20.43 ug/L | 1154780 | 1,4-Dichlorobenzene-d4 | 11.48 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 96 |
| 2 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 96 |
| 3 | Naphthalene, 1,4,5-trimethyl- | 170 | C13H14 | 002131-41-1 | 95 |
| 4 | Naphthalene, 1,4,6-trimethyl- | 170 | C13H14 | 002131-42-2 | 94 |
| 5 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 93 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU050119\
Data File : VU031677.D
Acq On : 01 May 2019 12:23
Operator : JC/SP
Sample : K2604-12 5X
Misc : 5.09g/5mL/100uL/5.0mL/MSVOA_U/MEOH
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** GAJ86

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM042719WMA.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: Str... | 9.44 | 7.2 | ug/L | 440675 | 2 | 9.09 | 3076930 | 50.0 |
| (DEL) Alkane: Str... | 9.95 | 3.8 | ug/L | 236281 | 2 | 9.09 | 3076930 | 50.0 |
| (DEL) Alkane: Cyc... | 10.04 | 2.6 | ug/L | 161230 | 2 | 9.09 | 3076930 | 50.0 |
| Benzene, propyl- | 10.58 | 7.5 | ug/L | 421027 | 3 | 11.48 | 2826160 | 50.0 |
| Benzene, 1-ethyl-... | 10.70 | 14.2 | ug/L | 804674 | 3 | 11.48 | 2826160 | 50.0 |
| (DEL) Alkane: Str... | 10.81 | 49.7 | ug/L | 2808940 | 3 | 11.48 | 2826160 | 50.0 |
| (DEL) Alkane: Str... | 11.11 | 17.6 | ug/L | 991773 | 3 | 11.48 | 2826160 | 50.0 |
| Benzene, 1-etheny... | 11.21 | 98.3 | ug/L | 5557100 | 3 | 11.48 | 2826160 | 50.0 |
| (DEL) Alkane: Cyc... | 11.40 | 24.5 | ug/L | 1385660 | 3 | 11.48 | 2826160 | 50.0 |
| (DEL) Alkane: Str... | 11.70 | 15.1 | ug/L | 852543 | 3 | 11.48 | 2826160 | 50.0 |
| Indane | 11.76 | 34.2 | ug/L | 1935370 | 3 | 11.48 | 2826160 | 50.0 |
| Indene | 11.98 | 523.0 | ug/L | 29563800 | 3 | 11.48 | 2826160 | 50.0 |
| (DEL) Alkane: Str... | 12.36 | 21.7 | ug/L | 1227820 | 3 | 11.48 | 2826160 | 50.0 |
| (DEL) Alkane: Cyc... | 12.61 | 74.0 | ug/L | 4181660 | 3 | 11.48 | 2826160 | 50.0 |
| Benzene, 1,2,4,5-... | 12.70 | 115.6 | ug/L | 6532290 | 3 | 11.48 | 2826160 | 50.0 |
| Benzene, 1-ethyl-... | 13.12 | 160.4 | ug/L | 9064940 | 3 | 11.48 | 2826160 | 50.0 |
| 1H-Indene, 1-methyl- | 13.29 | 220.8 | ug/L | 12483100 | 3 | 11.48 | 2826160 | 50.0 |
| Azulene | 13.74 | 1004.0 | ug/L | 56749000 | 3 | 11.48 | 2826160 | 50.0 |
| 1H-Indene, 1,1-di... | 14.33 | 76.7 | ug/L | 4337570 | 3 | 11.48 | 2826160 | 50.0 |
| Naphthalene, 1-et... | 15.79 | 188.0 | ug/L | 10627200 | 3 | 11.48 | 2826160 | 50.0 |
| Naphthalene, 2,6-... | 15.91 | 338.8 | ug/L | 19147200 | 3 | 11.48 | 2826160 | 50.0 |
| Naphthalene, 2,3-... | 16.05 | 241.3 | ug/L | 13639800 | 3 | 11.48 | 2826160 | 50.0 |
| Naphthalene, 1,3-... | 16.42 | 25.8 | ug/L | 1457200 | 3 | 11.48 | 2826160 | 50.0 |
| 1,1'-Biphenyl, 4-... | 16.53 | 38.3 | ug/L | 2167160 | 3 | 11.48 | 2826160 | 50.0 |
| Naphthalene, 1,6,... | 17.01 | 39.0 | ug/L | 2203200 | 3 | 11.48 | 2826160 | 50.0 |
| Naphthalene, 2,3,... | 17.16 | 20.4 | ug/L | 1154780 | 3 | 11.48 | 2826160 | 50.0 |