LSC Area Percent Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.1 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_V\METHOD\SOMVTR092718WMA.M
Title : TRACE VOA SOM01.0

Signal : TIC

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.119 | 4 | 9 | 23 | rVB | 26926 | 26098 | 1.49% | 0.273% |
| 2 | 1.315 | 62 | 70 | 79 | rBV2 | 51270 | 71703 | 4.09% | 0.749% |
| 3 | 1.402 | 91 | 97 | 104 | rBV | 25326 | 33015 | 1.88% | 0.345% |
| 4 | 1.585 | 147 | 154 | 170 | rVB | 32030 | 38477 | 2.20% | 0.402% |
| 5 | 1.788 | 208 | 217 | 224 | rBV | 32491 | 41346 | 2.36% | 0.432% |
| 6 | 2.132 | 312 | 324 | 338 | rBV2 | 89879 | 147394 | 8.41% | 1.540% |
| 7 | 2.540 | 442 | 451 | 468 | rVB3 | 14689 | 27206 | 1.55% | 0.284% |
| 8 | 2.984 | 579 | 589 | 603 | rVB2 | 19582 | 38396 | 2.19% | 0.401% |
| 9 | 3.071 | 603 | 616 | 625 | rBV2 | 9620 | 18417 | 1.05% | 0.192% |
| 10 | 3.762 | 811 | 831 | 861 | rBV3 | 81977 | 217402 | 12.40% | 2.272% |
| 11 | 3.971 | 880 | 896 | 944 | rBV3 | 28877 | 117776 | 6.72% | 1.231% |
| 12 | 4.412 | 1015 | 1033 | 1056 | rBV3 | 59825 | 191627 | 10.93% | 2.003% |
| 13 | 4.788 | 1137 | 1150 | 1171 | rBV3 | 10433 | 27126 | 1.55% | 0.283% |
| 14 | 5.100 | 1228 | 1247 | 1265 | rBV2 | 118396 | 275368 | 15.71% | 2.878% |
| 15 | 5.418 | 1322 | 1346 | 1357 | rBV9 | 7647 | 19304 | 1.10% | 0.202% |
| 16 | 5.534 | 1371 | 1382 | 1397 | rBV3 | 9742 | 20363 | 1.16% | 0.213% |
| 17 | 5.666 | 1408 | 1423 | 1448 | rBV | 133450 | 261419 | 14.92% | 2.732% |
| 18 | 6.122 | 1551 | 1565 | 1583 | rVB2 | 67200 | 133074 | 7.59% | 1.391% |
| 19 | 6.338 | 1618 | 1632 | 1658 | rBV | 90682 | 179675 | 10.25% | 1.878% |
| 20 | 6.926 | 1802 | 1815 | 1833 | rBV2 | 13955 | 26165 | 1.49% | 0.273% |
| 21 | 7.035 | 1833 | 1849 | 1866 | rBV | 33919 | 59478 | 3.39% | 0.622% |
| 22 | 7.363 | 1937 | 1951 | 1966 | rBV | 140281 | 241167 | 13.76% | 2.520% |
| 23 | 7.608 | 2012 | 2027 | 2037 | rBV2 | 17292 | 29218 | 1.67% | 0.305% |
| 24 | 7.669 | 2037 | 2046 | 2058 | rVV2 | 18829 | 30610 | 1.75% | 0.320% |
| 25 | 7.984 | 2129 | 2144 | 2159 | rBV | 71762 | 137672 | 7.85% | 1.439% |
| 26 | 8.141 | 2180 | 2193 | 2220 | rBV | 154247 | 287807 | 16.42% | 3.008% |
| 27 | 8.286 | 2225 | 2238 | 2265 | rBV | 219609 | 365685 | 20.86% | 3.822% |
| 28 | 8.717 | 2361 | 2372 | 2390 | rBV2 | 31690 | 52083 | 2.97% | 0.544% |
| 29 | 8.900 | 2416 | 2429 | 2453 | rBV | 199084 | 325406 | 18.57% | 3.401% |
| 30 | 9.247 | 2526 | 2537 | 2552 | rBV2 | 13847 | 23553 | 1.34% | 0.246% |
| 31 | 9.530 | 2615 | 2625 | 2637 | rBV3 | 8390 | 18013 | 1.03% | 0.188% |
| 32 | 9.855 | 2714 | 2726 | 2759 | rBV | 402775 | 626004 | 35.72% | 6.542% |
| 33 | 10.212 | 2824 | 2837 | 2845 | rBV | 37079 | 57821 | 3.30% | 0.604% |
| 34 | 10.267 | 2845 | 2854 | 2864 | rVB | 50778 | 78626 | 4.49% | 0.822% |

LSC Area Percent Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.1 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_V\METHOD\SOMVTR092718WMA.M
Title : TRACE VOA SOM01.0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 10.427 | 2890 | 2904 | 2921 | rBV | 155624 | 263490 | 15.03% | 2.754% |
| 36 | 10.563 | 2936 | 2946 | 2959 | rBV3 | 29870 | 50275 | 2.87% | 0.525% |
| 37 | 10.755 | 2994 | 3006 | 3015 | rBV5 | 13144 | 21689 | 1.24% | 0.227% |
| 38 | 10.865 | 3030 | 3040 | 3060 | rBV2 | 24917 | 47761 | 2.73% | 0.499% |
| 39 | 11.199 | 3126 | 3144 | 3164 | rBV | 998837 | 1469863 | 83.86% | 15.361% |
| 40 | 11.299 | 3164 | 3175 | 3195 | rVB | 234007 | 373430 | 21.31% | 3.902% |
| 41 | 11.501 | 3227 | 3238 | 3252 | rBV | 41058 | 62768 | 3.58% | 0.656% |
| 42 | 11.582 | 3252 | 3263 | 3281 | rVV | 66883 | 125017 | 7.13% | 1.306% |
| 43 | 11.675 | 3281 | 3292 | 3315 | rVB | 165550 | 270429 | 15.43% | 2.826% |
| 44 | 11.826 | 3330 | 3339 | 3350 | rBV | 44715 | 66534 | 3.80% | 0.695% |
| 45 | 11.997 | 3376 | 3392 | 3402 | rBV6 | 19372 | 46713 | 2.67% | 0.488% |
| 46 | 12.058 | 3402 | 3411 | 3430 | rVB6 | 47574 | 103896 | 5.93% | 1.086% |
| 47 | 12.299 | 3472 | 3486 | 3503 | rBV2 | 82405 | 149375 | 8.52% | 1.561% |
| 48 | 12.392 | 3503 | 3515 | 3532 | rBV | 1212912 | 1752693 | 100.00% | 18.316% |
| 49 | 12.662 | 3590 | 3599 | 3610 | rBV2 | 23380 | 37007 | 2.11% | 0.387% |
| 50 | 12.977 | 3689 | 3697 | 3705 | rVB | 14908 | 20274 | 1.16% | 0.212% |
| 51 | 13.148 | 3743 | 3750 | 3763 | rVB | 46451 | 72605 | 4.14% | 0.759% |
| 52 | 13.373 | 3811 | 3820 | 3829 | rBV4 | 14221 | 23378 | 1.33% | 0.244% |
| 53 | 13.485 | 3844 | 3855 | 3870 | rBV | 251629 | 367332 | 20.96% | 3.839% |

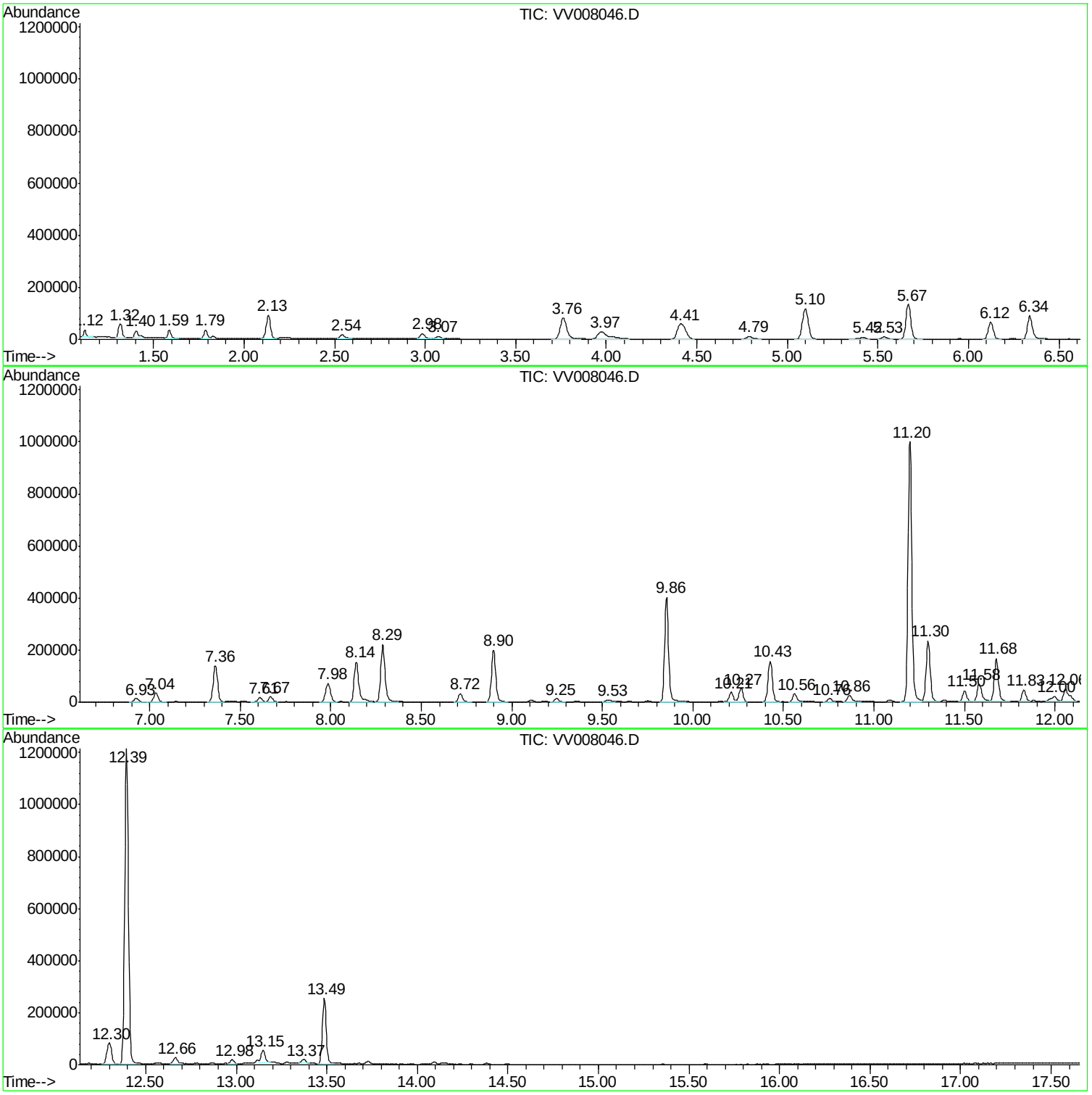
Sum of corrected areas: 9569023

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

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



Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

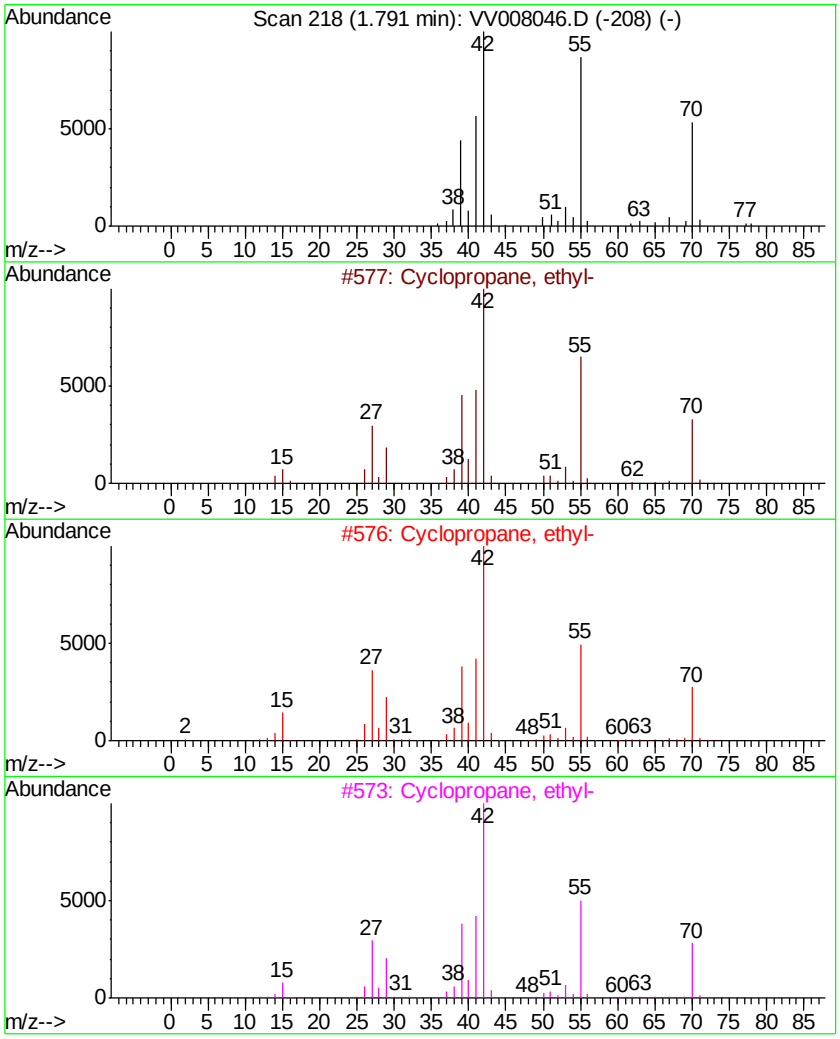
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

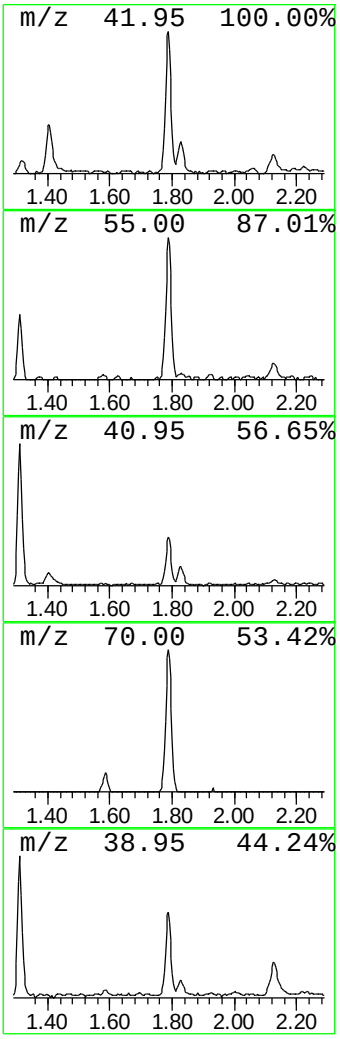
**********

Peak Number 2 (DEL) Alkane: Cyclic1.79 Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.79 | 0.79 ug/L | 41346 | 1,4-Difluorobenzene | 5.67 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclopropane, ethyl- | 70 | C5H10 | 001191-96-4 | 87 |
| 2 | Cyclopropane, ethyl- | 70 | C5H10 | 001191-96-4 | 78 |
| 3 | Cyclopropane, ethyl- | 70 | C5H10 | 001191-96-4 | 70 |
| 4 | 1-Pentene | 70 | C5H10 | 000109-67-1 | 64 |
| 5 | 2-Pentene, (Z)- | 70 | C5H10 | 000627-20-3 | 64 |



# Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

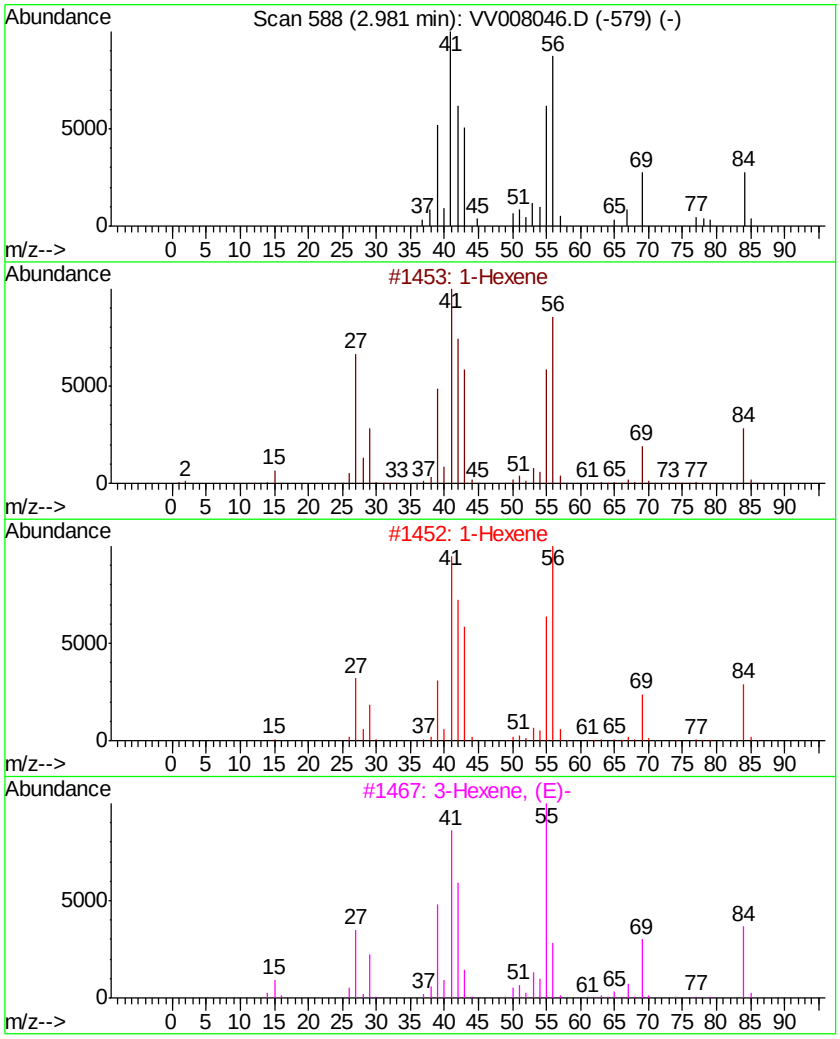
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

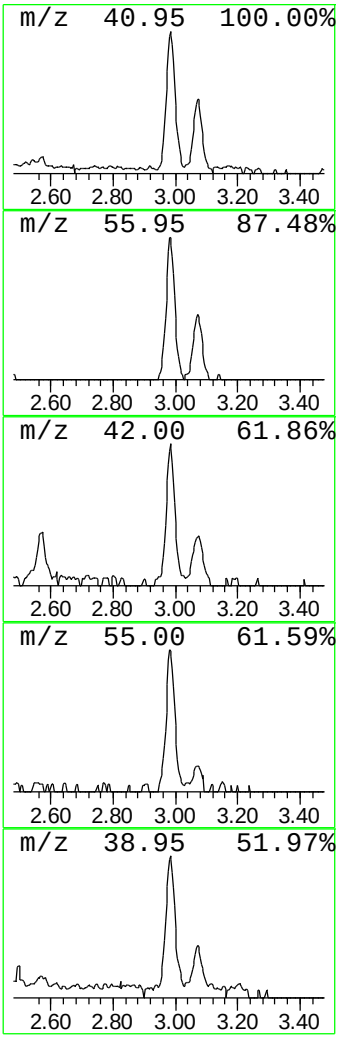
**********

Peak Number 3 (DEL) Alkane: Straight-Chai... Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 2.98 | 0.73 ug/L | 38396 | 1,4-Difluorobenzene | 5.67 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Hexene | 84 | C6H12 | 000592-41-6 | 91 |
| 2 | 1-Hexene | 84 | C6H12 | 000592-41-6 | 64 |
| 3 | 3-Hexene, (E)- | 84 | C6H12 | 013269-52-8 | 52 |
| 4 | 2-Hexene, (Z)- | 84 | C6H12 | 007688-21-3 | 49 |
| 5 | Cyanic acid, 2-methylpropyl ester | 99 | C5H9NO | 001768-25-8 | 47 |



# Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

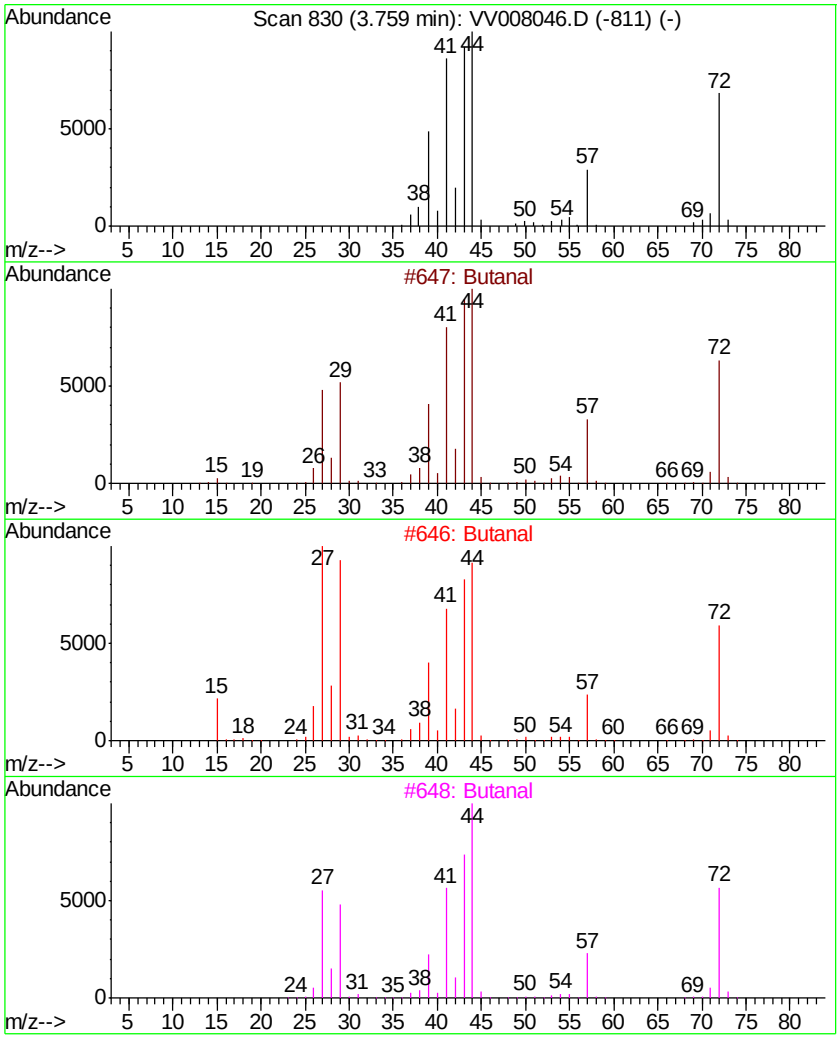
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

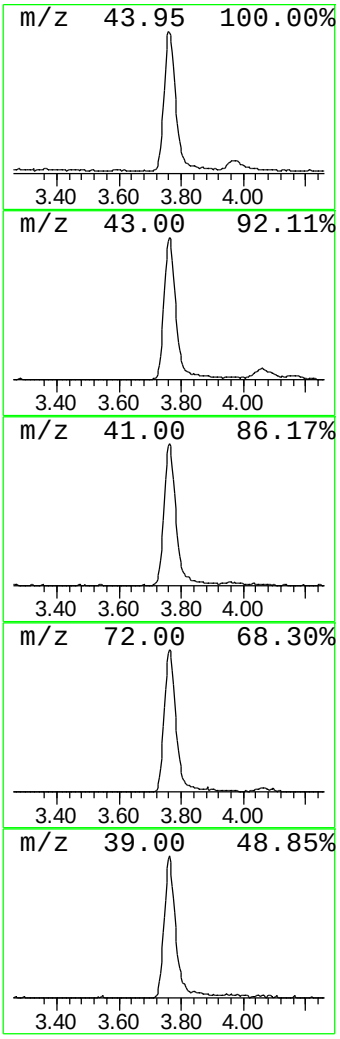
**********

Peak Number 4 Butanal Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 3.76 | 4.16 ug/L | 217402 | 1,4-Difluorobenzene | 5.67 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Butanal | 72 | C4H8O | 000123-72-8 | 94 |
| 2 | Butanal | 72 | C4H8O | 000123-72-8 | 91 |
| 3 | Butanal | 72 | C4H8O | 000123-72-8 | 58 |
| 4 | Butanal | 72 | C4H8O | 000123-72-8 | 47 |
| 5 | Ethene, ethoxy- | 72 | C4H8O | 000109-92-2 | 38 |



Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

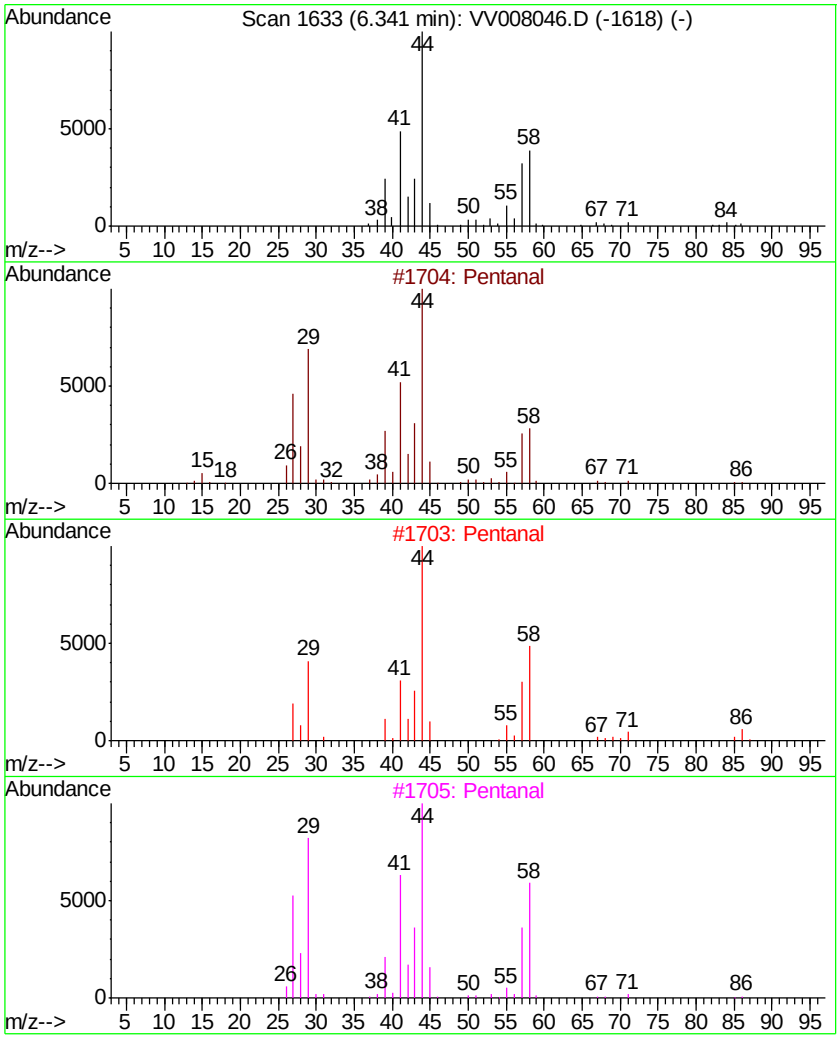
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

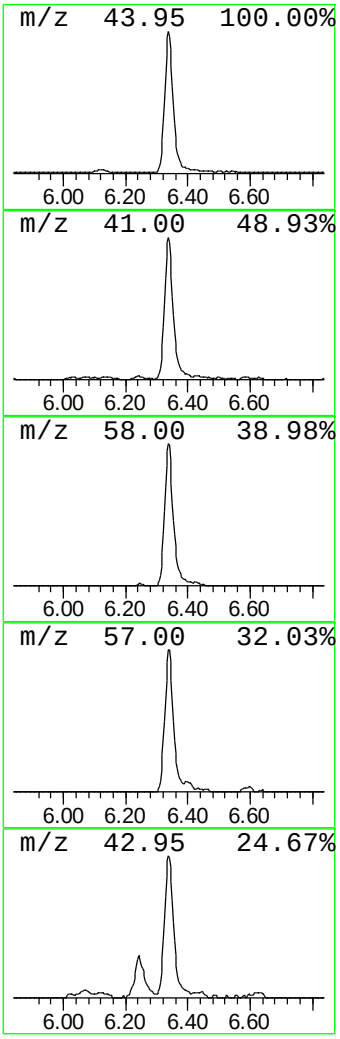
**********

Peak Number 6 Pentanal Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 6.34 | 3.44 ug/L | 179675 | 1,4-Difluorobenzene | 5.67 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Pentanal | 86 | C5H10O | 000110-62-3 | 86 |
| 2 | Pentanal | 86 | C5H10O | 000110-62-3 | 78 |
| 3 | Pentanal | 86 | C5H10O | 000110-62-3 | 52 |
| 4 | Cyclopropyl carbinol | 72 | C4H8O | 002516-33-8 | 40 |
| 5 | Butanal, 3-methyl- | 86 | C5H10O | 000590-86-3 | 36 |



Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

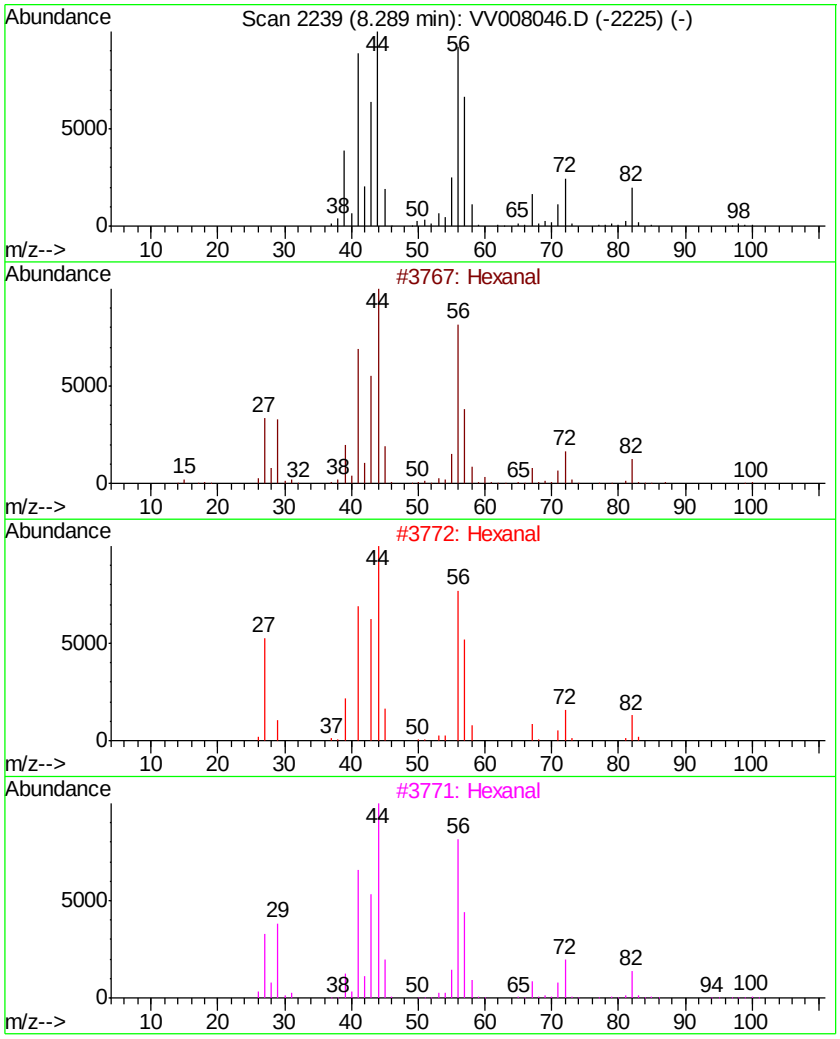
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

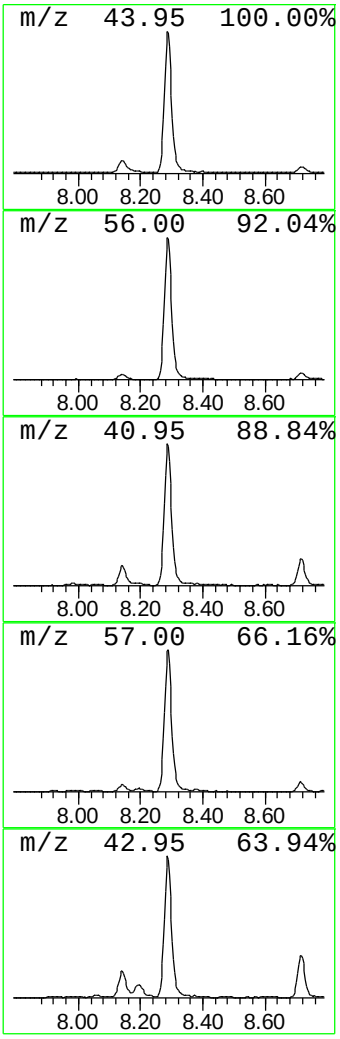
**********

Peak Number 10 Hexanal Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.29 | 5.62 ug/L | 365685 | Chlorobenzene-d5 | 8.90 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Hexanal | 100 | C6H12O | 000066-25-1 | 68 |
| 2 | Hexanal | 100 | C6H12O | 000066-25-1 | 64 |
| 3 | Hexanal | 100 | C6H12O | 000066-25-1 | 64 |
| 4 | Hexanal | 100 | C6H12O | 000066-25-1 | 64 |
| 5 | Butanal | 72 | C4H8O | 000123-72-8 | 43 |



Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

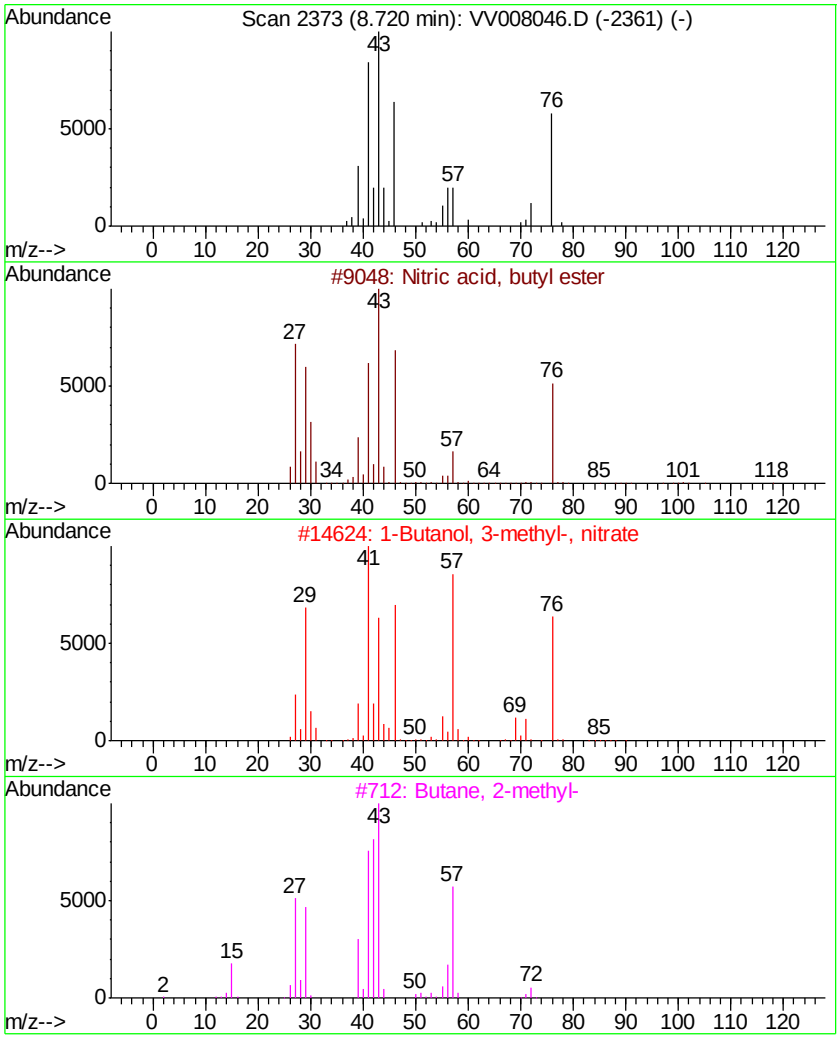
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

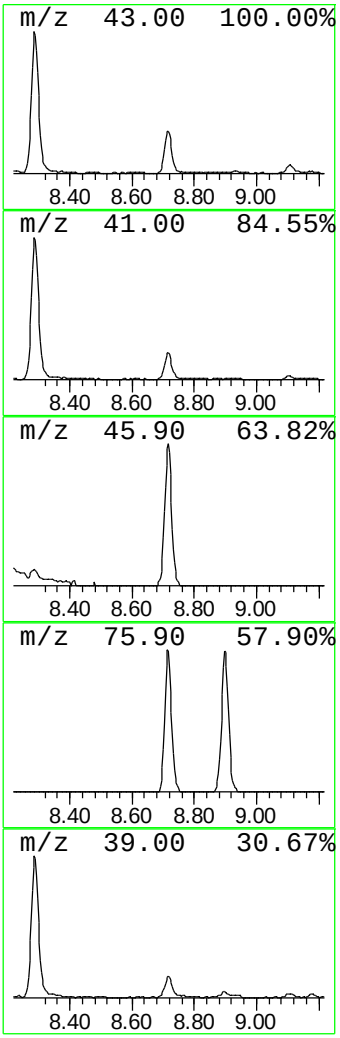
**********

Peak Number 11 Nitric acid, butyl ester Concentration Rank 17

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 8.72 | 0.80 ug/L | 52083 | Chlorobenzene-d5 | 8.90 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Nitric acid, butyl ester | 119 | C4H9NO3 | 000928-45-0 | 59 |
| 2 | 1-Butanol, 3-methyl-, nitrate | 133 | C5H11NO3 | 000543-87-3 | 36 |
| 3 | Butane, 2-methyl- | 72 | C5H12 | 000078-78-4 | 22 |
| 4 | Butane, 2-methyl- | 72 | C5H12 | 000078-78-4 | 14 |
| 5 | 1,3-Butanediol, (S)- | 90 | C4H10O2 | 024621-61-2 | 12 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

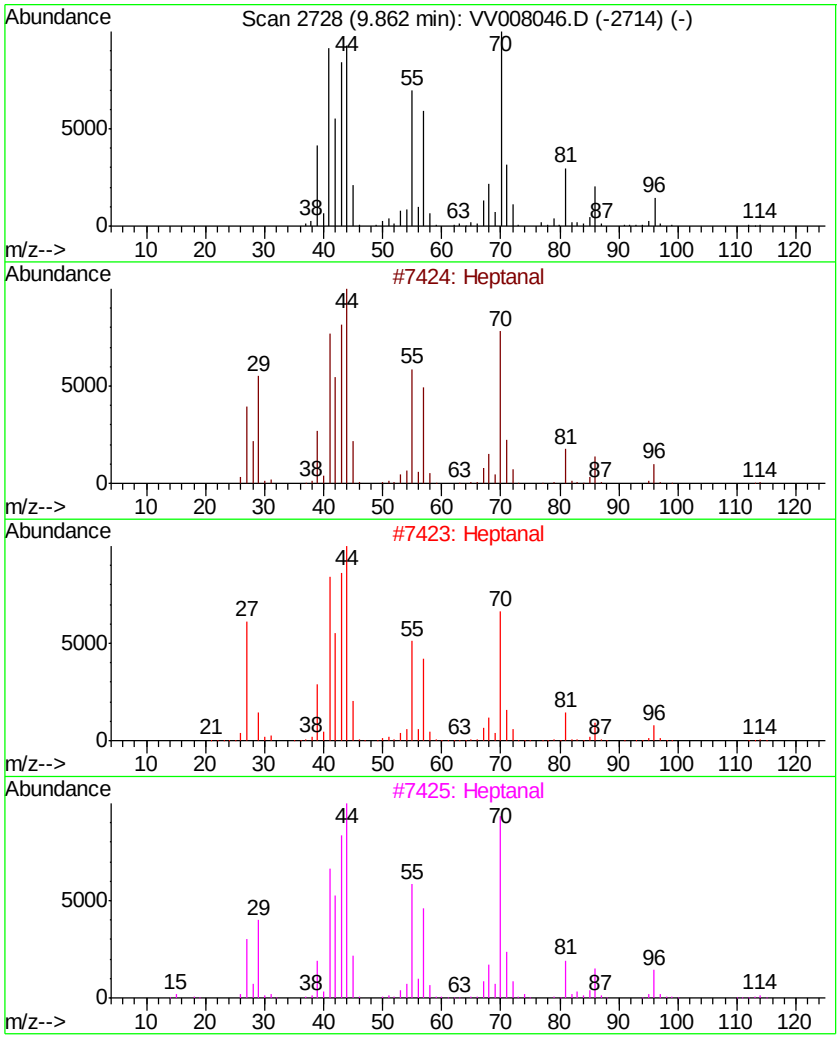
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

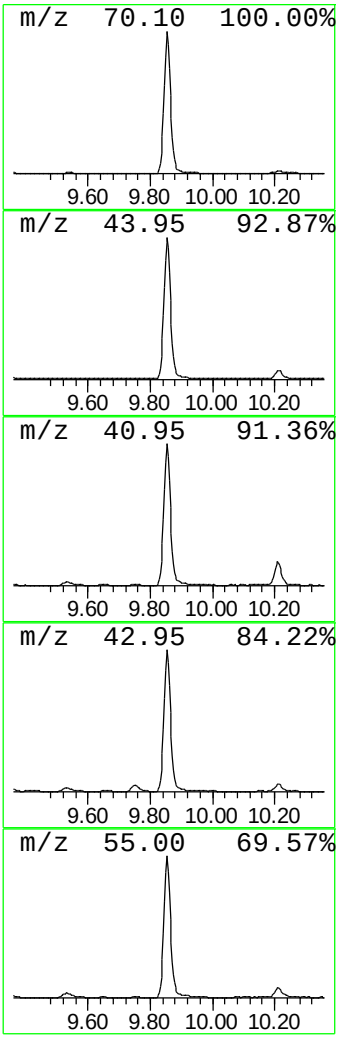
**********

Peak Number 12 Heptanal Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 9.86 | 9.62 ug/L | 626004 | Chlorobenzene-d5 | 8.90 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Heptanal | 114 | C7H14O | 000111-71-7 | 95 |
| 2 | Heptanal | 114 | C7H14O | 000111-71-7 | 95 |
| 3 | Heptanal | 114 | C7H14O | 000111-71-7 | 83 |
| 4 | Heptanal | 114 | C7H14O | 000111-71-7 | 70 |
| 5 | 2-Butene, 2-methyl- | 70 | C5H10 | 000513-35-9 | 38 |



Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

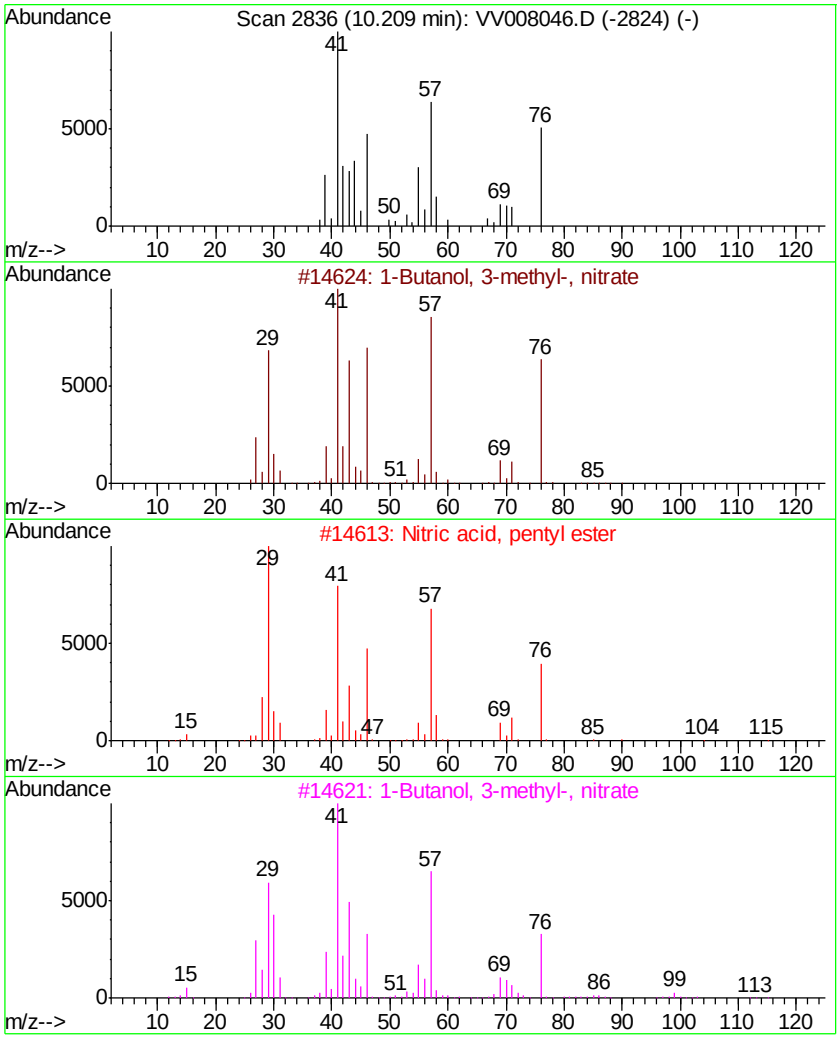
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

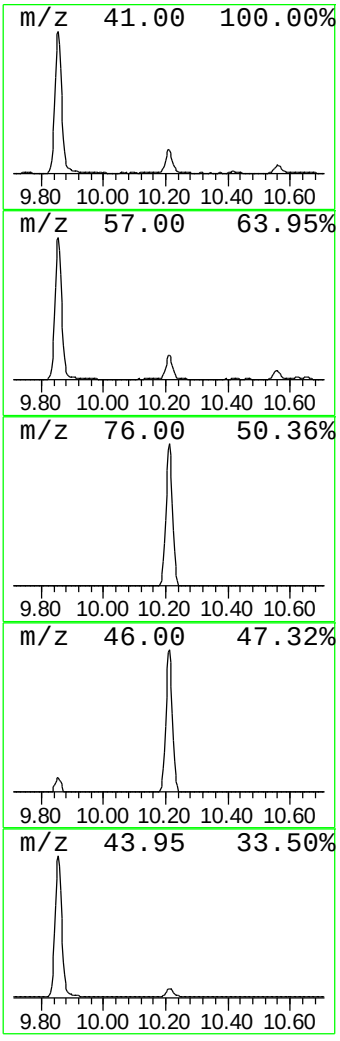
**********

Peak Number 13 1-Butanol, 3-methyl-, nitrate Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.21 | 0.77 ug/L | 57821 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Butanol, 3-methyl-, nitrate | 133 | C5H11NO3 | 000543-87-3 | 59 |
| 2 | Nitric acid, pentyl ester | 133 | C5H11NO3 | 001002-16-0 | 40 |
| 3 | 1-Butanol, 3-methyl-, nitrate | 133 | C5H11NO3 | 000543-87-3 | 28 |
| 4 | Isoamyl nitrite | 117 | C5H11NO2 | 000110-46-3 | 12 |
| 5 | Cyclopropanecarboxaldehyde | 70 | C4H6O | 001489-69-6 | 10 |



# Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

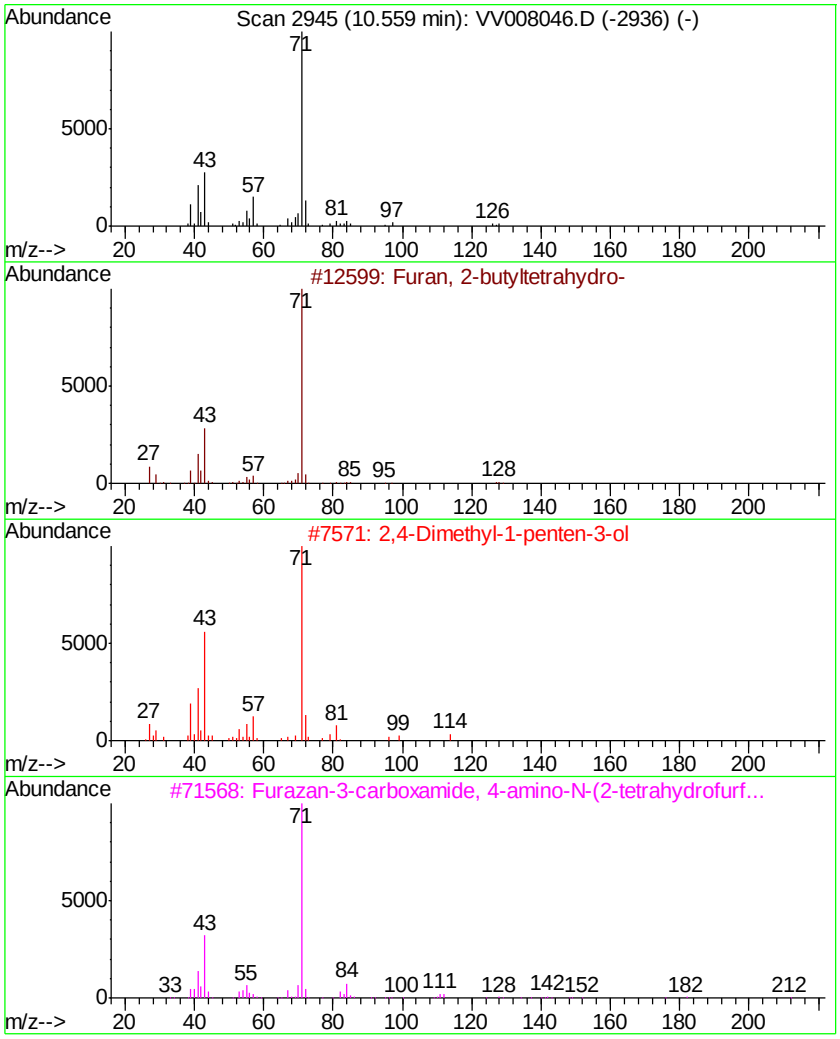
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

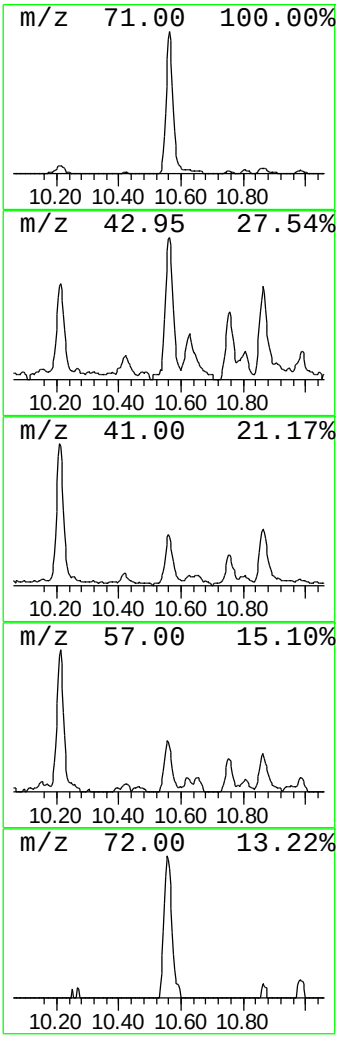
**********

Peak Number 15 Furan, 2-butyltetrahydro- Concentration Rank 21

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.56 | 0.67 ug/L | 50275 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Furan, 2-butyltetrahydro- | 128 | C8H16O | 001004-29-1 | 64 |
| 2 | 2,4-Dimethyl-1-penten-3-ol | 114 | C7H14O | 019781-54-5 | 56 |
| 3 | Furazan-3-carboxamide, 4-amino-N... | 212 | C8H12N4O3 | 309735-27-1 | 45 |
| 4 | 2,2'-Bifuran, octahydro- | 142 | C8H14O2 | 001592-33-2 | 42 |
| 5 | Butyric acid, 1-propylpentyl ester | 200 | C12H24O2 | 020286-46-8 | 40 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

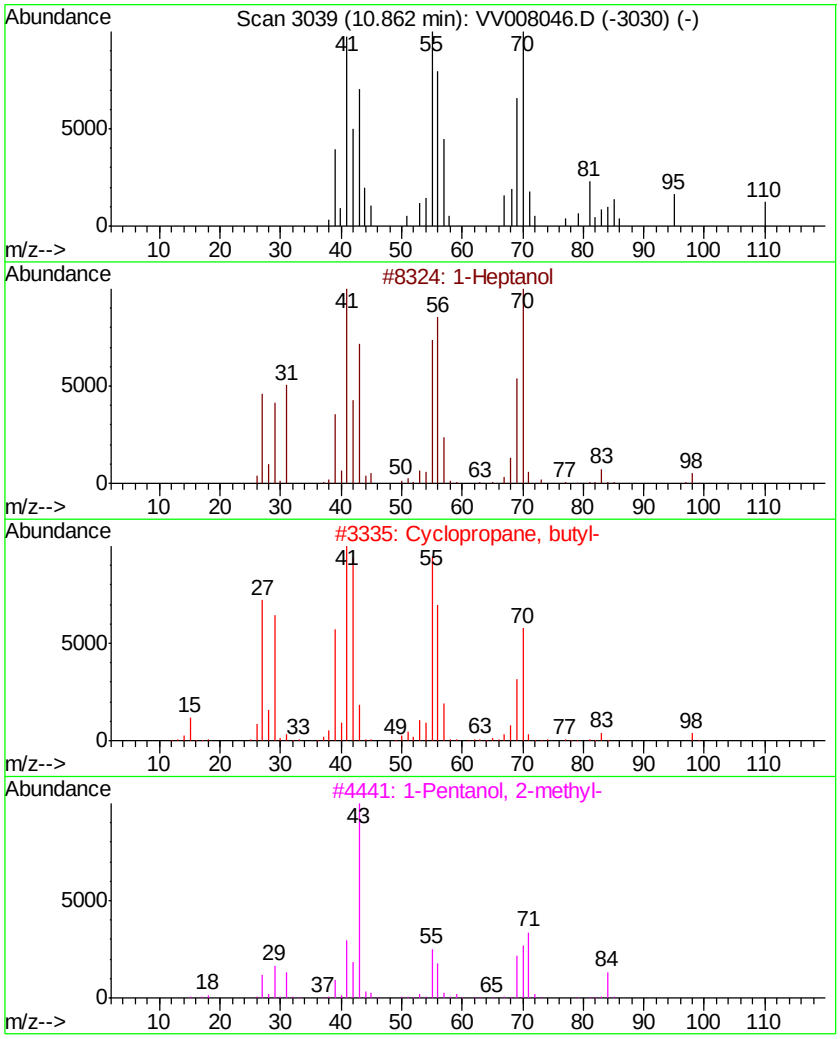
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

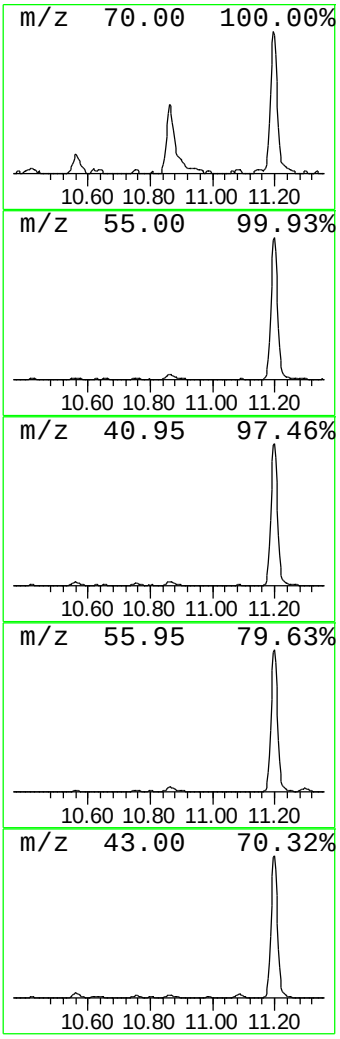
**********

Peak Number 16 1-Heptanol Concentration Rank 22

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.86 | 0.64 ug/L | 47761 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Heptanol | 116 | C7H16O | 000111-70-6 | 59 |
| 2 | Cyclopropane, butyl- | 98 | C7H14 | 000930-57-4 | 53 |
| 3 | 1-Pentanol, 2-methyl- | 102 | C6H14O | 000105-30-6 | 53 |
| 4 | 1-Heptanol | 116 | C7H16O | 000111-70-6 | 53 |
| 5 | Cyclopentane, 1,2-dimethyl-, cis- | 98 | C7H14 | 001192-18-3 | 50 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

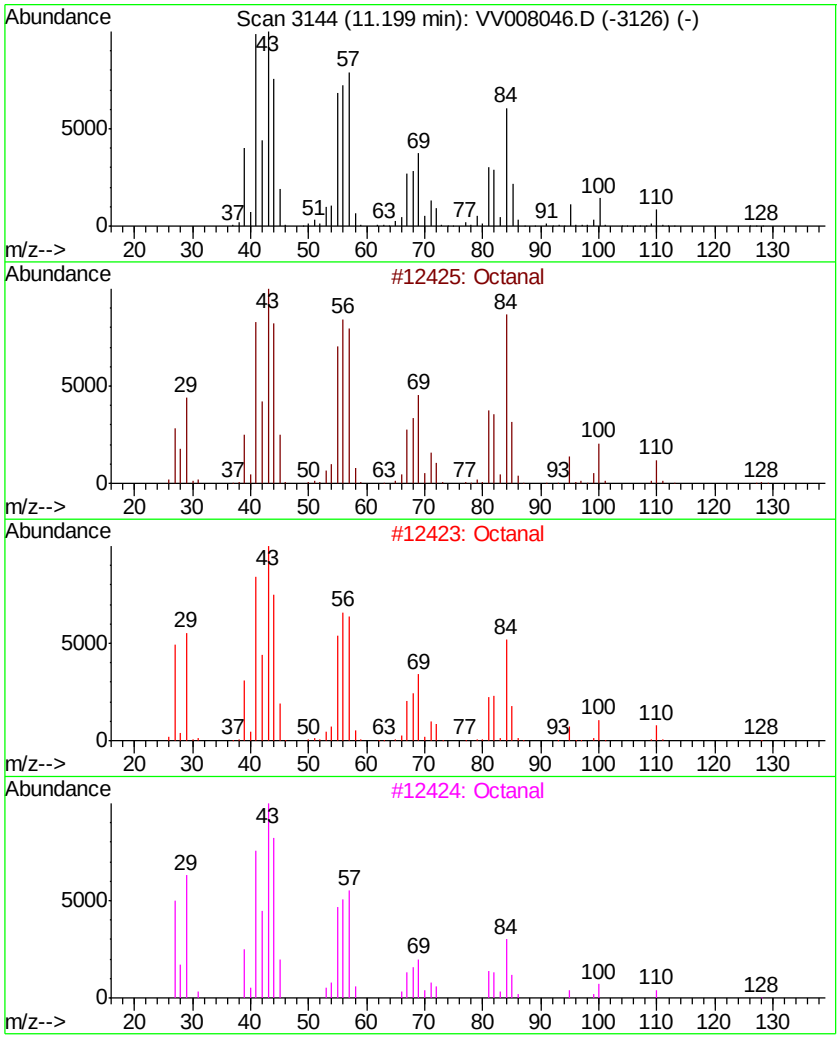
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

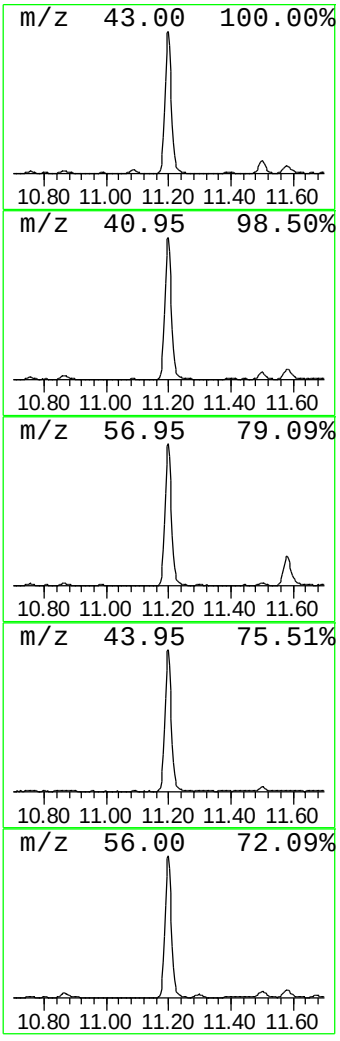
**********

Peak Number 17 Octanal Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.20 | 19.68 ug/L | 1469860 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Octanal | 128 | C8H16O | 000124-13-0 | 98 |
| 2 | Octanal | 128 | C8H16O | 000124-13-0 | 97 |
| 3 | Octanal | 128 | C8H16O | 000124-13-0 | 95 |
| 4 | Octanal | 128 | C8H16O | 000124-13-0 | 91 |
| 5 | Octanal | 128 | C8H16O | 000124-13-0 | 90 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

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

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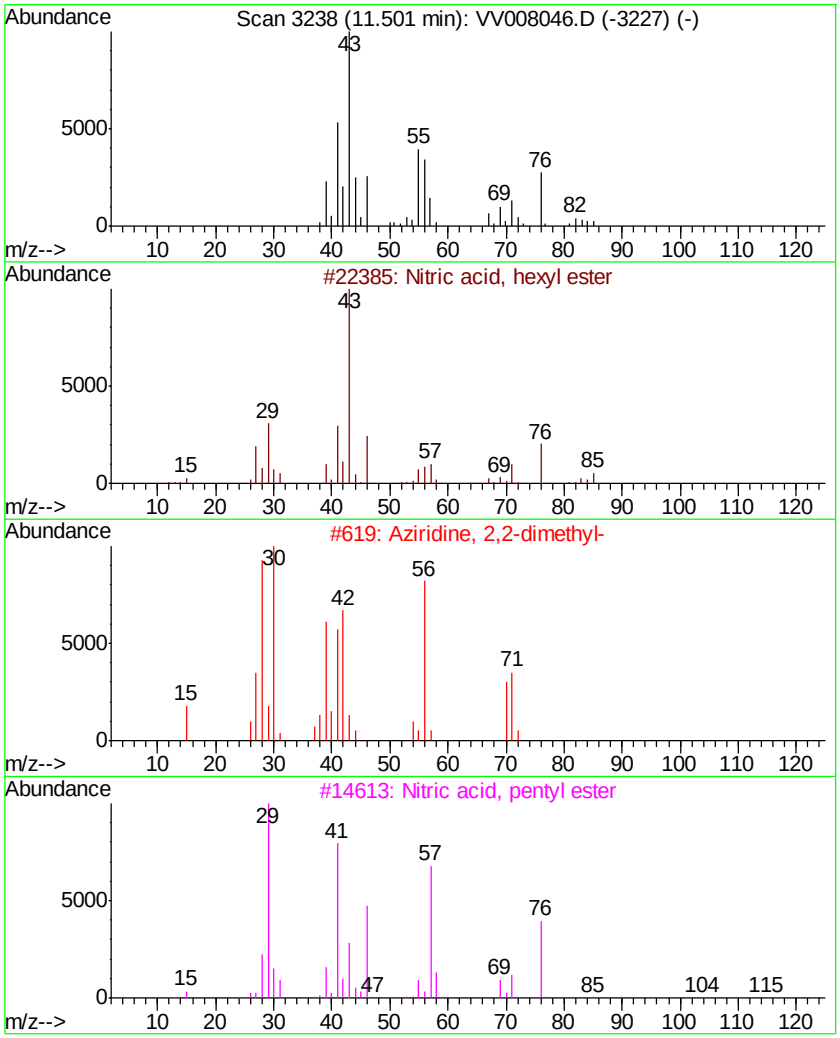
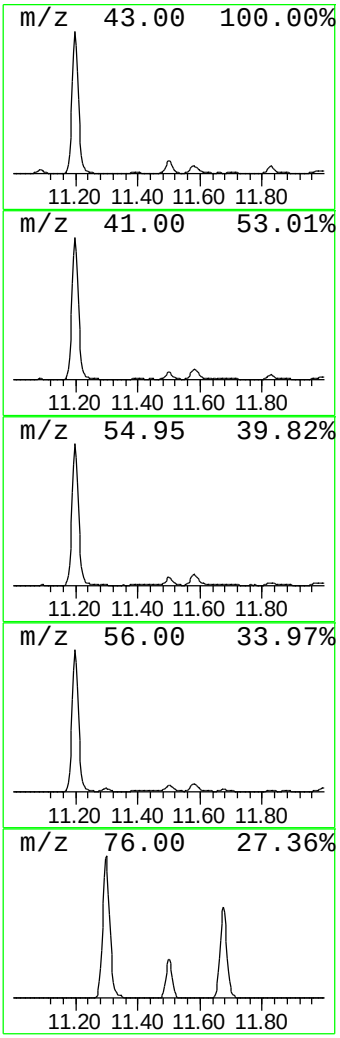
Peak Number 18 unknown-01 Concentration Rank 16

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.50 | 0.84 ug/L | 62768 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Nitric acid, hexyl ester | 147 | C6H13NO3 | 020633-11-8 | 38 |
| 2 | Aziridine, 2,2-dimethyl- | 71 | C4H9N | 002658-24-4 | 27 |
| 3 | Nitric acid, pentyl ester | 133 | C5H11NO3 | 001002-16-0 | 17 |
| 4 | 1-Pentene, 4-methyl- | 84 | C6H12 | 000691-37-2 | 12 |
| 5 | Methoxyacetonitrile | 71 | C3H5NO | 001738-36-9 | 9 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

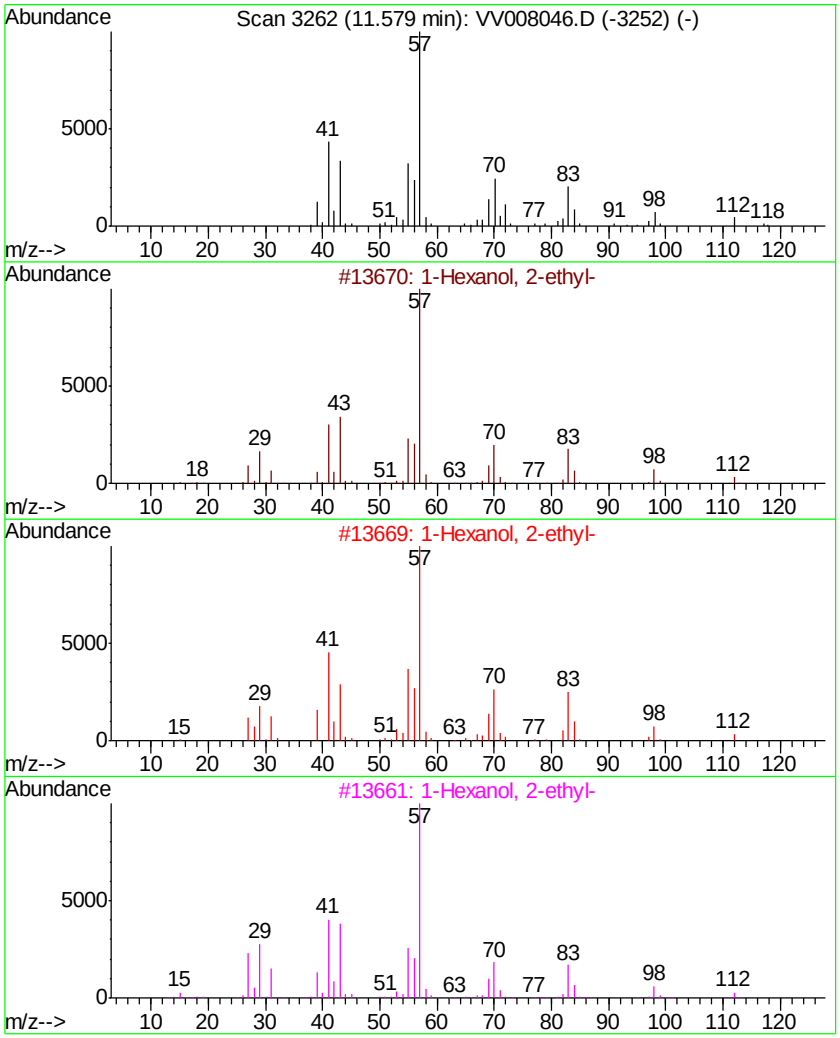
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

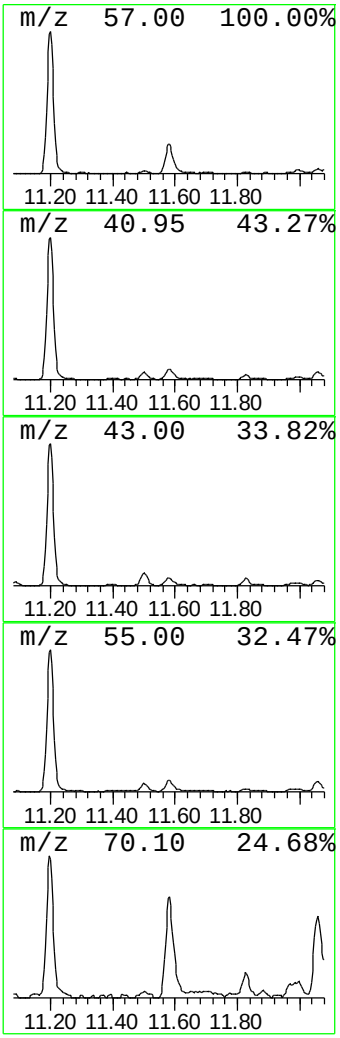
**********

Peak Number 19 1-Hexanol, 2-ethyl- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.58 | 1.67 ug/L | 125017 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Hexanol, 2-ethyl- | 130 | C8H18O | 000104-76-7 | 86 |
| 2 | 1-Hexanol, 2-ethyl- | 130 | C8H18O | 000104-76-7 | 86 |
| 3 | 1-Hexanol, 2-ethyl- | 130 | C8H18O | 000104-76-7 | 86 |
| 4 | 1-Hexanol, 2-ethyl- | 130 | C8H18O | 000104-76-7 | 72 |
| 5 | Oxirane, [[(2-ethylhexyl)oxy]met... | 186 | C11H22O2 | 002461-15-6 | 56 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

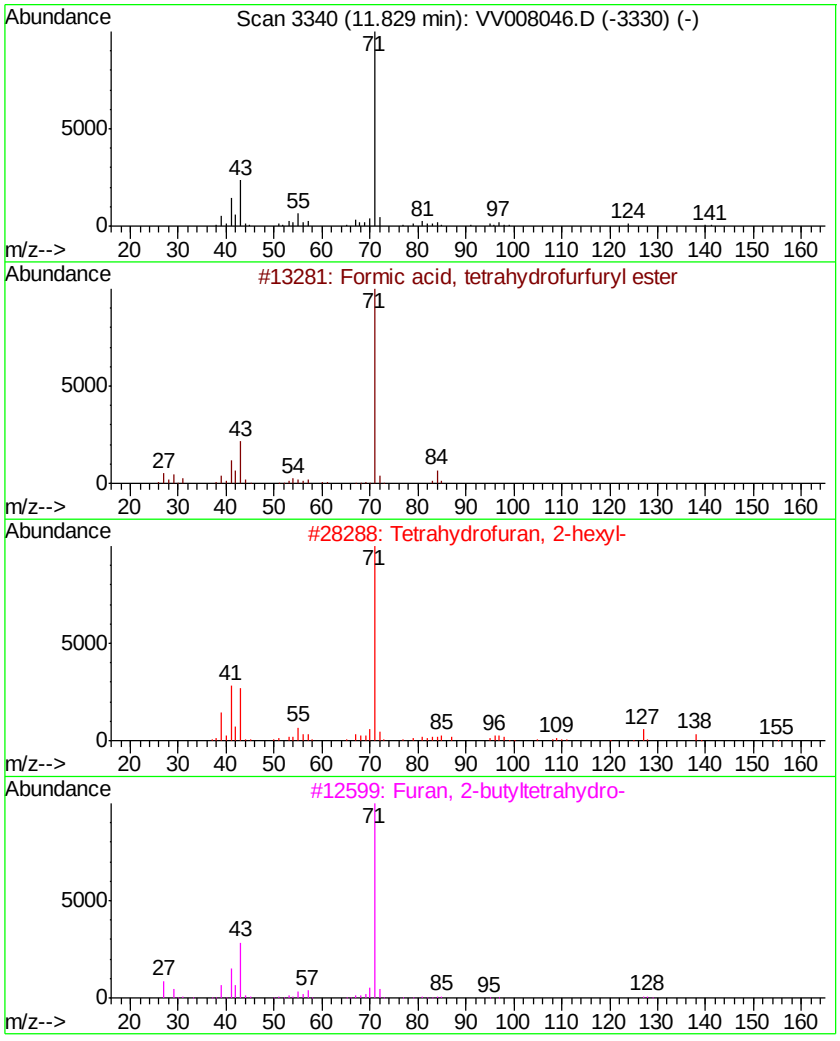
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

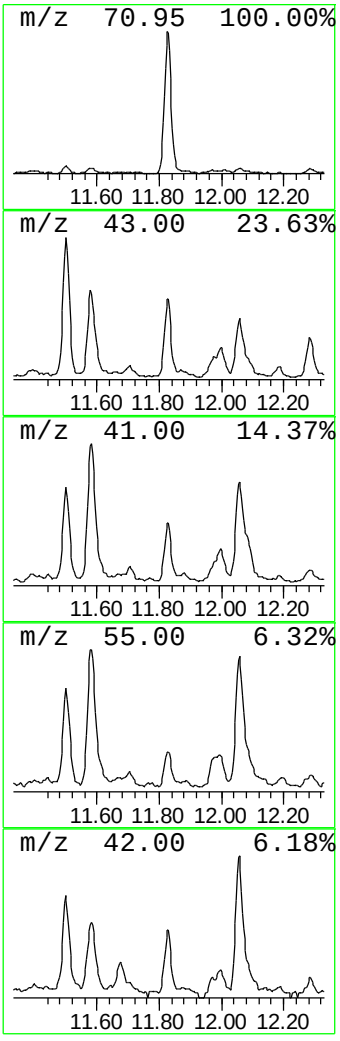
**********

Peak Number 20 Formic acid, tetrahydrofurf... Concentration Rank 15

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.83 | 0.89 ug/L | 66534 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Formic acid, tetrahydrofurfuryl ... | 130 | C6H10O3 | 1000368-75-5 | 72 |
| 2 | Tetrahydrofuran, 2-hexyl- | 156 | C10H20O | 003208-32-0 | 72 |
| 3 | Furan, 2-butyltetrahydro- | 128 | C8H16O | 001004-29-1 | 72 |
| 4 | Furan, 2-butyltetrahydro- | 128 | C8H16O | 001004-29-1 | 56 |
| 5 | Ethane-1,1-diol dibutanoate | 202 | C10H18O4 | 025572-25-2 | 56 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

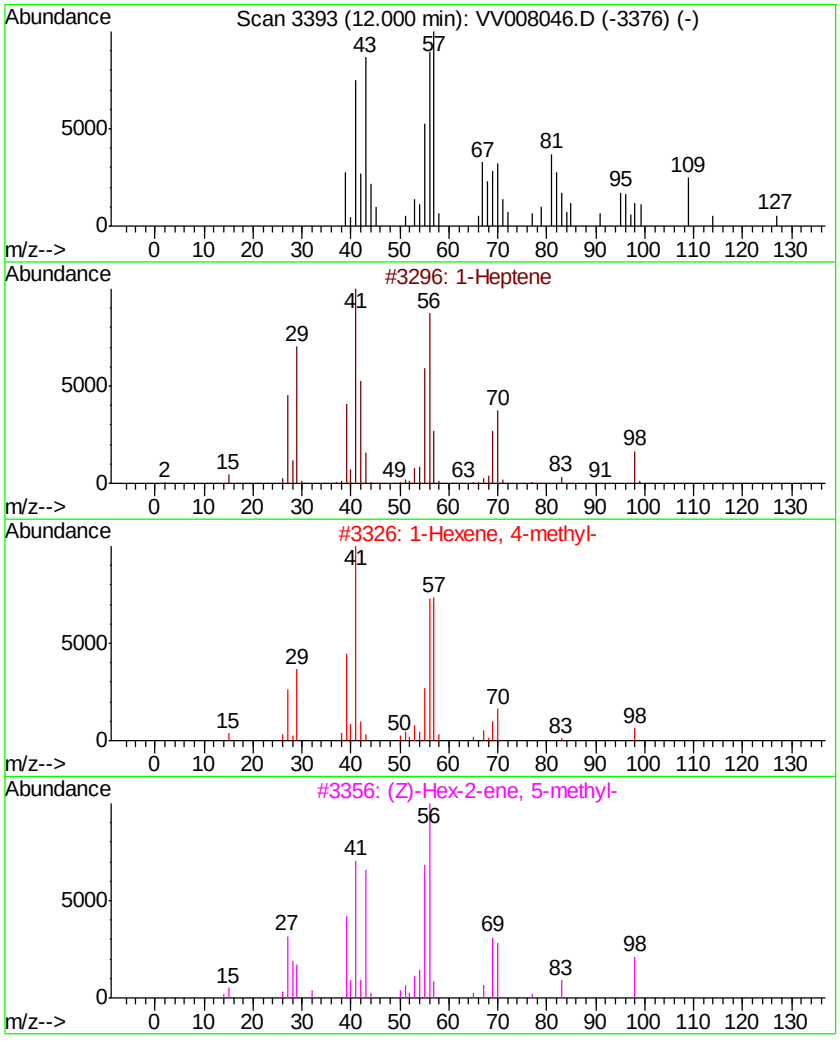
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

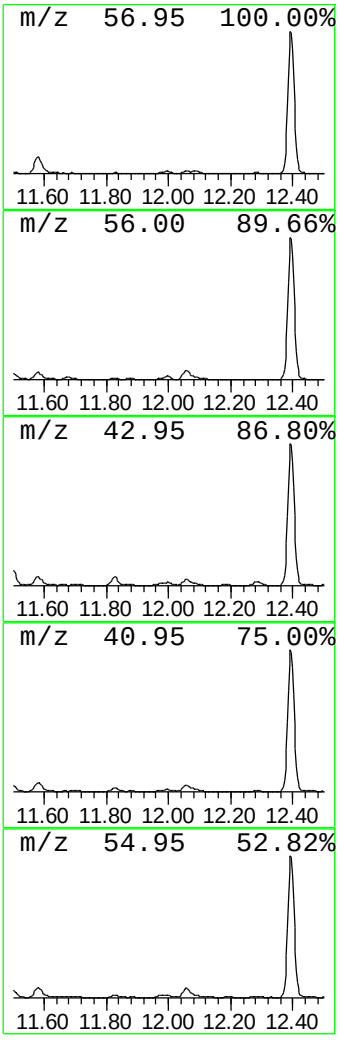
**********

Peak Number 21 (DEL) Alkane: Cyclic12.00 Concentration Rank 24

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.00 | 0.63 ug/L | 46713 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Heptene | 98 | C7H14 | 000592-76-7 | 43 |
| 2 | 1-Hexene, 4-methyl- | 98 | C7H14 | 003769-23-1 | 43 |
| 3 | (Z)-Hex-2-ene, 5-methyl- | 98 | C7H14 | 013151-17-2 | 38 |
| 4 | 1-Pentene, 2-methyl- | 84 | C6H12 | 000763-29-1 | 38 |
| 5 | (Z)-2-Heptene | 98 | C7H14 | 006443-92-1 | 38 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

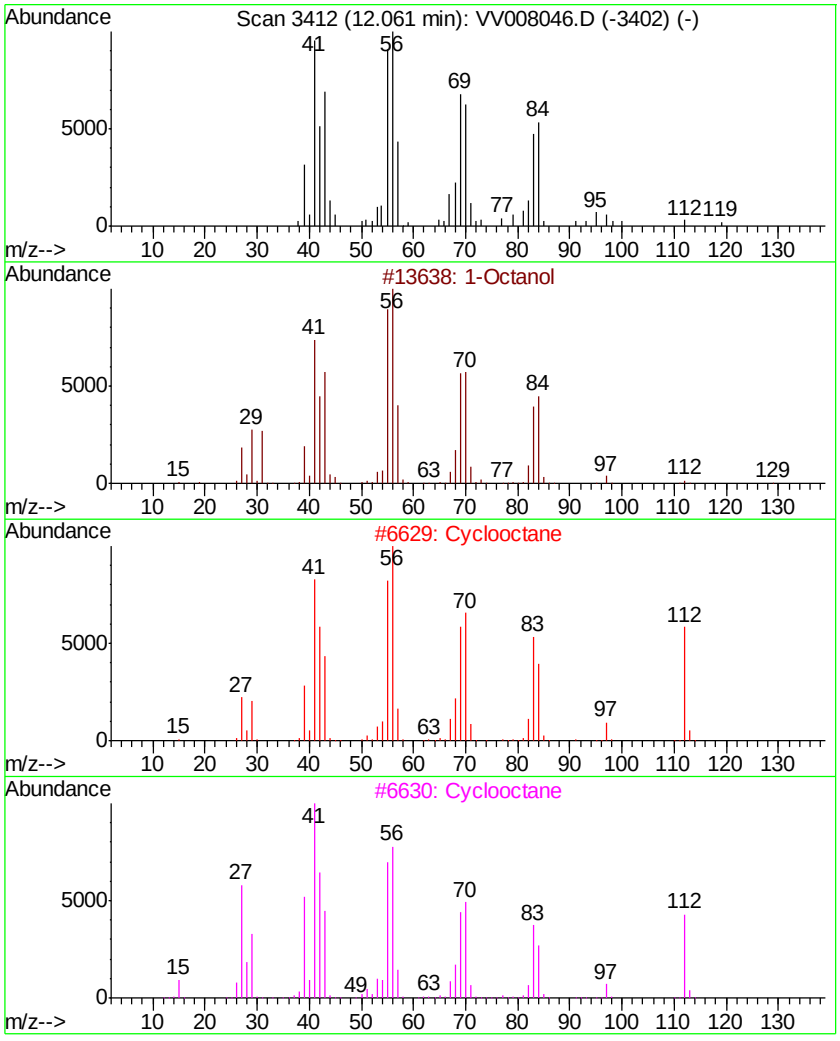
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

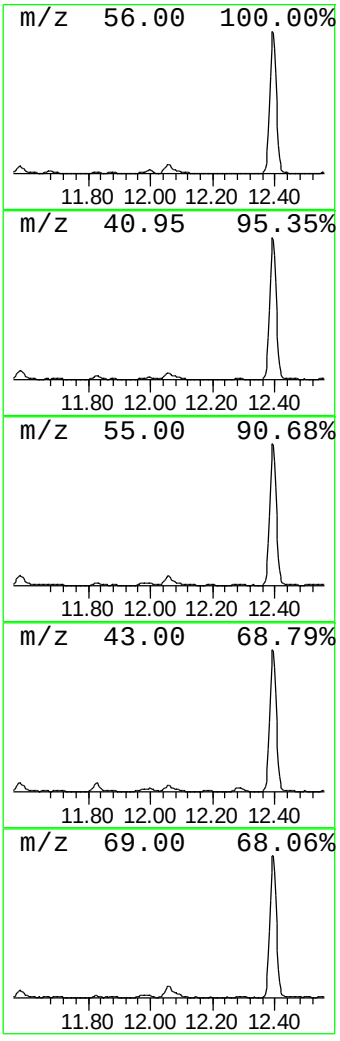
**********

Peak Number 22 1-Octanol Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.06 | 1.39 ug/L | 103896 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Octanol | 130 | C8H18O | 000111-87-5 | 91 |
| 2 | Cyclooctane | 112 | C8H16 | 000292-64-8 | 90 |
| 3 | Cyclooctane | 112 | C8H16 | 000292-64-8 | 87 |
| 4 | 1-Octanol | 130 | C8H18O | 000111-87-5 | 86 |
| 5 | 1-Octanol | 130 | C8H18O | 000111-87-5 | 80 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

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

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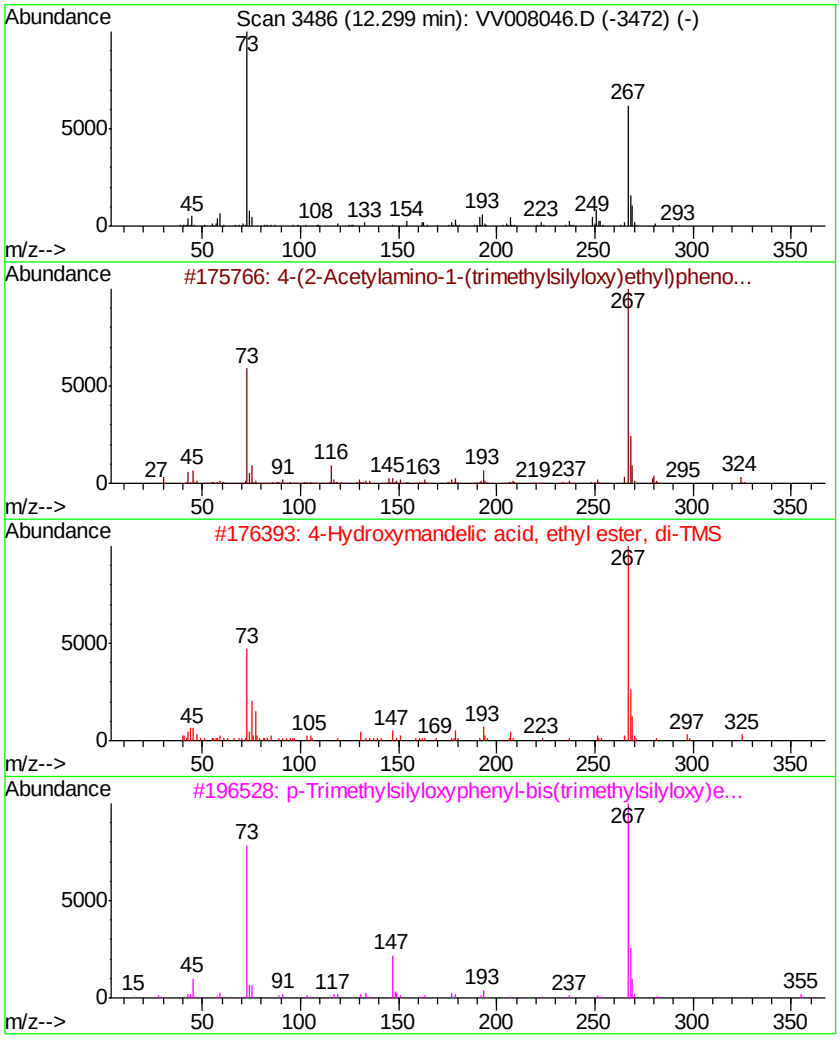
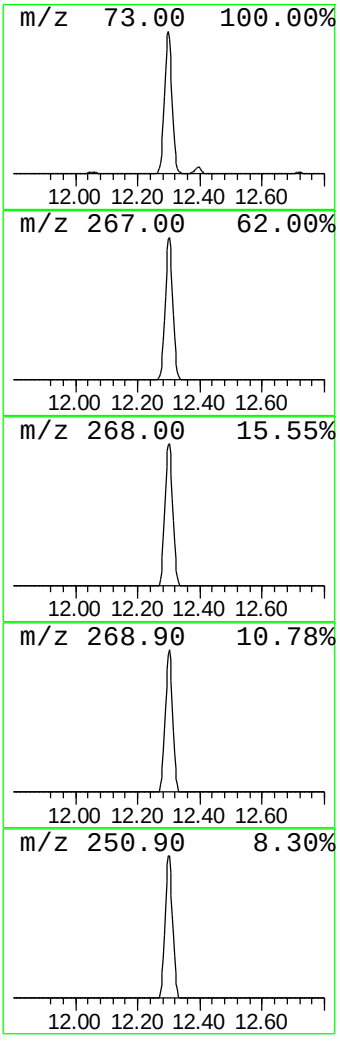
Peak Number 23 4-(2-Acetylamino-1-(trimeth... Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.30 | 2.00 ug/L | 149375 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4-(2-Acetylamino-1-(trimethylsil... | 339 | C16H29NO3Si2 | 1000373-43-5 | 72 |
| 2 | 4-Hydroxymandelic acid, ethyl es... | 340 | C16H28O4Si2 | 1000071-53-3 | 56 |
| 3 | p-Trimethylsilyloxyphenyl-bis(tr... | 370 | C17H34O3Si3 | 1000079-08-1 | 45 |
| 4 | Plumbane, diethyldimethyl- | 296 | C6H16Pb | 001762-27-2 | 43 |
| 5 | 4-Trimethylsilyl-9,9-dimethyl-9-... | 282 | C17H22Si2 | 058263-56-2 | 42 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

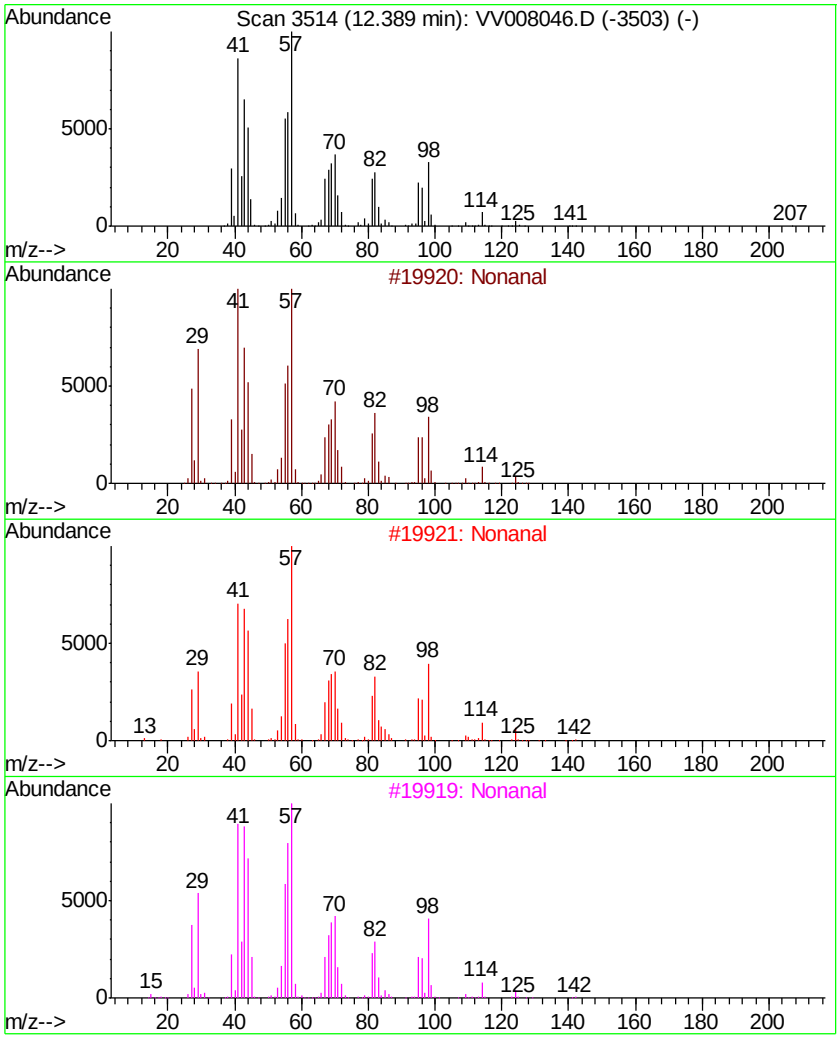
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

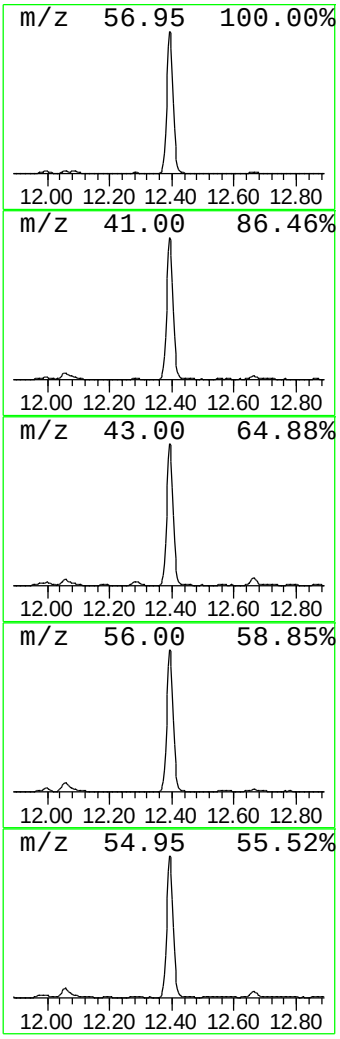
**********

Peak Number 24 Nonanal Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.39 | 23.47 ug/L | 1752690 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Nonanal | 142 | C9H18O | 000124-19-6 | 91 |
| 2 | Nonanal | 142 | C9H18O | 000124-19-6 | 91 |
| 3 | Nonanal | 142 | C9H18O | 000124-19-6 | 90 |
| 4 | Nonanal | 142 | C9H18O | 000124-19-6 | 90 |
| 5 | Cyclohexanol, 2-methyl-, trans- | 114 | C7H14O | 007443-52-9 | 38 |



Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

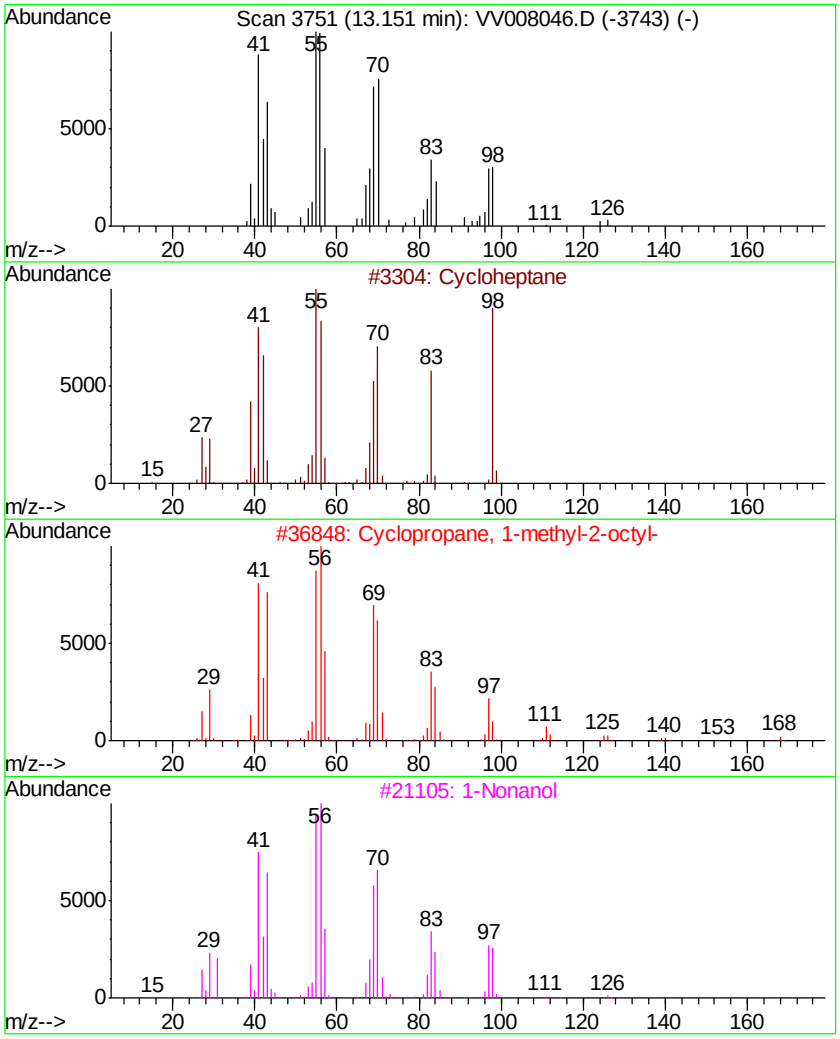
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

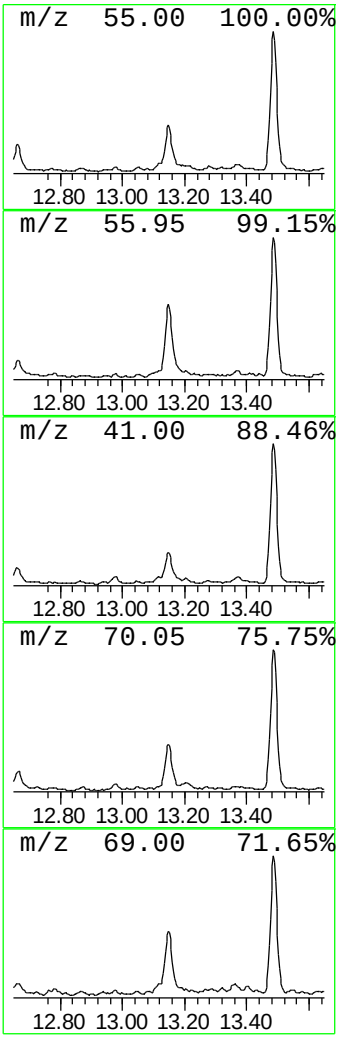
**********

Peak Number 25 (DEL) Alkane: Cyclic13.15 Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.15 | 0.97 ug/L | 72605 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cycloheptane | 98 | C7H14 | 000291-64-5 | 76 |
| 2 | Cyclopropane, 1-methyl-2-octyl- | 168 | C12H24 | 037617-26-8 | 72 |
| 3 | 1-Nonanol | 144 | C9H20O | 000143-08-8 | 72 |
| 4 | 1-Heptene | 98 | C7H14 | 000592-76-7 | 70 |
| 5 | Isopropylcyclobutane | 98 | C7H14 | 000872-56-0 | 58 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

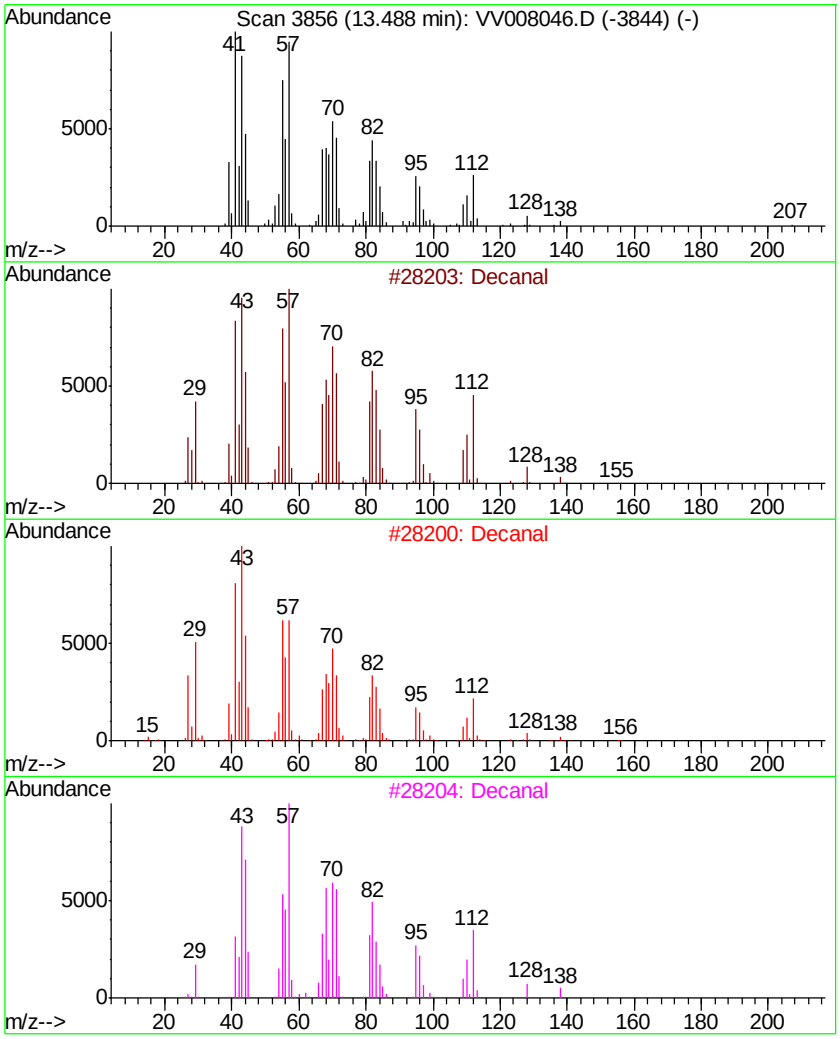
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

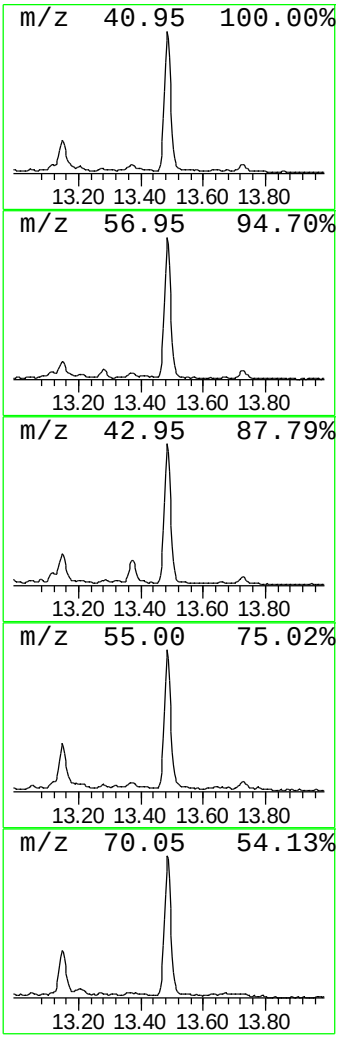
**********

Peak Number 26 Decanal Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.49 | 4.92 ug/L | 367332 | 1,4-Dichlorobenzene-d4 | 11.30 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Decanal | 156 | C10H20O | 000112-31-2 | 91 |
| 2 | Decanal | 156 | C10H20O | 000112-31-2 | 91 |
| 3 | Decanal | 156 | C10H20O | 000112-31-2 | 87 |
| 4 | Decanal | 156 | C10H20O | 000112-31-2 | 80 |
| 5 | Bromoacetic acid, 10-undecenyl e... | 290 | C13H23BrO2 | 195373-65-0 | 45 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_V\DATA\VV100318\
Data File : VV008046.D
Acq On : 03 Oct 2018 11:33
Operator : SY/MD
Sample : J5185-12
Misc : 25.0 mL/MSVOA_V/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :** MSVOA_V
**ClientSampleId :** JLC92

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR092718WMA.M
Quant Title : TRACE VOA SOM01.0

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... | 1.79 | 0.8 | ug/L | 41346 | 1 | 5.67 | 261419 | 5.0 |
| (DEL) Alkane: Str... | 2.98 | 0.7 | ug/L | 38396 | 1 | 5.67 | 261419 | 5.0 |
| Butanal | 3.76 | 4.2 | ug/L | 217402 | 1 | 5.67 | 261419 | 5.0 |
| Pentanal | 6.34 | 3.4 | ug/L | 179675 | 1 | 5.67 | 261419 | 5.0 |
| Hexanal | 8.29 | 5.6 | ug/L | 365685 | 2 | 8.90 | 325406 | 5.0 |
| Nitric acid, buty... | 8.72 | 0.8 | ug/L | 52083 | 2 | 8.90 | 325406 | 5.0 |
| Heptanal | 9.86 | 9.6 | ug/L | 626004 | 2 | 8.90 | 325406 | 5.0 |
| 1-Butanol, 3-meth... | 10.21 | 0.8 | ug/L | 57821 | 3 | 11.30 | 373430 | 5.0 |
| Furan, 2-butyltet... | 10.56 | 0.7 | ug/L | 50275 | 3 | 11.30 | 373430 | 5.0 |
| 1-Heptanol | 10.86 | 0.6 | ug/L | 47761 | 3 | 11.30 | 373430 | 5.0 |
| Octanal | 11.20 | 19.7 | ug/L | 1469860 | 3 | 11.30 | 373430 | 5.0 |
| unknown-01 | 11.50 | 0.8 | ug/L | 62768 | 3 | 11.30 | 373430 | 5.0 |
| 1-Hexanol, 2-ethyl- | 11.58 | 1.7 | ug/L | 125017 | 3 | 11.30 | 373430 | 5.0 |
| Formic acid, tetr... | 11.83 | 0.9 | ug/L | 66534 | 3 | 11.30 | 373430 | 5.0 |
| (DEL) Alkane: Cyc... | 12.00 | 0.6 | ug/L | 46713 | 3 | 11.30 | 373430 | 5.0 |
| 1-Octanol | 12.06 | 1.4 | ug/L | 103896 | 3 | 11.30 | 373430 | 5.0 |
| 4-(2-Acetylamino-... | 12.30 | 2.0 | ug/L | 149375 | 3 | 11.30 | 373430 | 5.0 |
| Nonanal | 12.39 | 23.5 | ug/L | 1752690 | 3 | 11.30 | 373430 | 5.0 |
| (DEL) Alkane: Cyc... | 13.15 | 1.0 | ug/L | 72605 | 3 | 11.30 | 373430 | 5.0 |
| Decanal | 13.49 | 4.9 | ug/L | 367332 | 3 | 11.30 | 373430 | 5.0 |