LSC Area Percent Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

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_U\METHOD\SOMUTR040120WMA.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 | 1.369 | 3 | 9 | 23 | rBV | 45194 | 44781 | 1.37% | 0.227% |
| 2 | 1.607 | 72 | 83 | 92 | rBV3 | 46237 | 63158 | 1.93% | 0.320% |
| 3 | 1.929 | 173 | 183 | 193 | rVB | 29227 | 38959 | 1.19% | 0.198% |
| 4 | 2.588 | 378 | 388 | 401 | rVB | 53270 | 86293 | 2.63% | 0.438% |
| 5 | 2.816 | 448 | 459 | 473 | rVB | 21040 | 35280 | 1.08% | 0.179% |
| 6 | 4.700 | 1026 | 1045 | 1076 | rBV | 31240 | 127872 | 3.90% | 0.649% |
| 7 | 5.105 | 1155 | 1171 | 1197 | rVB2 | 55336 | 137635 | 4.20% | 0.698% |
| 8 | 5.758 | 1353 | 1374 | 1395 | rBV4 | 101521 | 259697 | 7.92% | 1.317% |
| 9 | 6.282 | 1523 | 1537 | 1552 | rBV | 119929 | 221308 | 6.75% | 1.122% |
| 10 | 6.723 | 1656 | 1674 | 1689 | rBV2 | 67042 | 130225 | 3.97% | 0.660% |
| 11 | 7.591 | 1933 | 1944 | 1958 | rBV2 | 35778 | 61432 | 1.87% | 0.312% |
| 12 | 7.922 | 2034 | 2047 | 2062 | rBV | 120095 | 202895 | 6.19% | 1.029% |
| 13 | 8.205 | 2122 | 2135 | 2145 | rBV2 | 21965 | 36848 | 1.12% | 0.187% |
| 14 | 8.662 | 2262 | 2277 | 2302 | rBV | 200960 | 368187 | 11.23% | 1.867% |
| 15 | 8.809 | 2313 | 2323 | 2342 | rVB3 | 37776 | 63215 | 1.93% | 0.321% |
| 16 | 9.436 | 2503 | 2518 | 2535 | rVB | 171749 | 278047 | 8.48% | 1.410% |
| 17 | 10.774 | 2923 | 2934 | 2945 | rBV2 | 56531 | 90422 | 2.76% | 0.459% |
| 18 | 11.112 | 3028 | 3039 | 3049 | rBV5 | 28932 | 47173 | 1.44% | 0.239% |
| 19 | 11.825 | 3248 | 3261 | 3277 | rVB | 185068 | 307149 | 9.37% | 1.558% |
| 20 | 12.105 | 3341 | 3348 | 3360 | rVB2 | 26150 | 42524 | 1.30% | 0.216% |
| 21 | 12.205 | 3366 | 3379 | 3391 | rVB | 128619 | 204201 | 6.23% | 1.036% |
| 22 | 12.324 | 3404 | 3416 | 3430 | rVB2 | 35278 | 55728 | 1.70% | 0.283% |
| 23 | 13.546 | 3785 | 3796 | 3810 | rVB | 95179 | 154833 | 4.72% | 0.785% |
| 24 | 14.070 | 3943 | 3959 | 3961 | rBV5 | 25238 | 38632 | 1.18% | 0.196% |
| 25 | 14.115 | 3961 | 3973 | 3995 | rVB | 2000158 | 3277169 | 100.00% | 16.622% |
| 26 | 14.237 | 4001 | 4011 | 4026 | rVB | 49377 | 78962 | 2.41% | 0.400% |
| 27 | 15.208 | 4298 | 4313 | 4318 | rBV | 25376 | 44381 | 1.35% | 0.225% |
| 28 | 15.263 | 4318 | 4330 | 4350 | rVB | 1888384 | 3020592 | 92.17% | 15.320% |
| 29 | 15.378 | 4356 | 4366 | 4376 | rBV | 40027 | 65855 | 2.01% | 0.334% |
| 30 | 15.452 | 4376 | 4389 | 4407 | rVB | 884960 | 1455186 | 44.40% | 7.381% |
| 31 | 16.002 | 4547 | 4560 | 4574 | rBV | 487263 | 787060 | 24.02% | 3.992% |
| 32 | 16.198 | 4601 | 4621 | 4629 | rBV | 159859 | 275082 | 8.39% | 1.395% |
| 33 | 16.314 | 4643 | 4657 | 4680 | rVB | 296953 | 547339 | 16.70% | 2.776% |
| 34 | 16.462 | 4682 | 4703 | 4710 | rVV | 317012 | 563326 | 17.19% | 2.857% |

LSC Area Percent Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

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_U\METHOD\SOMUTR040120WMA.M
Title : TRACE VOA SOM01.0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 16.500 | 4710 | 4715 | 4729 | rVB | 190122 | 301683 | 9.21% | 1.530% |
| 36 | 16.693 | 4756 | 4775 | 4788 | rBV3 | 102881 | 246164 | 7.51% | 1.249% |
| 37 | 16.844 | 4811 | 4822 | 4836 | rVB3 | 54204 | 92416 | 2.82% | 0.469% |
| 38 | 16.944 | 4841 | 4853 | 4869 | rBV2 | 208880 | 355565 | 10.85% | 1.803% |
| 39 | 17.047 | 4871 | 4885 | 4897 | rVB3 | 50627 | 87323 | 2.66% | 0.443% |
| 40 | 17.160 | 4905 | 4920 | 4937 | rBV | 1729245 | 3124113 | 95.33% | 15.845% |
| 41 | 17.346 | 4968 | 4978 | 4989 | rBV2 | 66358 | 127265 | 3.88% | 0.645% |
| 42 | 17.401 | 4990 | 4995 | 5003 | rVV4 | 23250 | 34691 | 1.06% | 0.176% |
| 43 | 17.481 | 5003 | 5020 | 5040 | rVB | 1086073 | 2096164 | 63.96% | 10.632% |
| 44 | 17.619 | 5055 | 5063 | 5071 | rVB3 | 24141 | 39488 | 1.20% | 0.200% |

Sum of corrected areas: 19716318

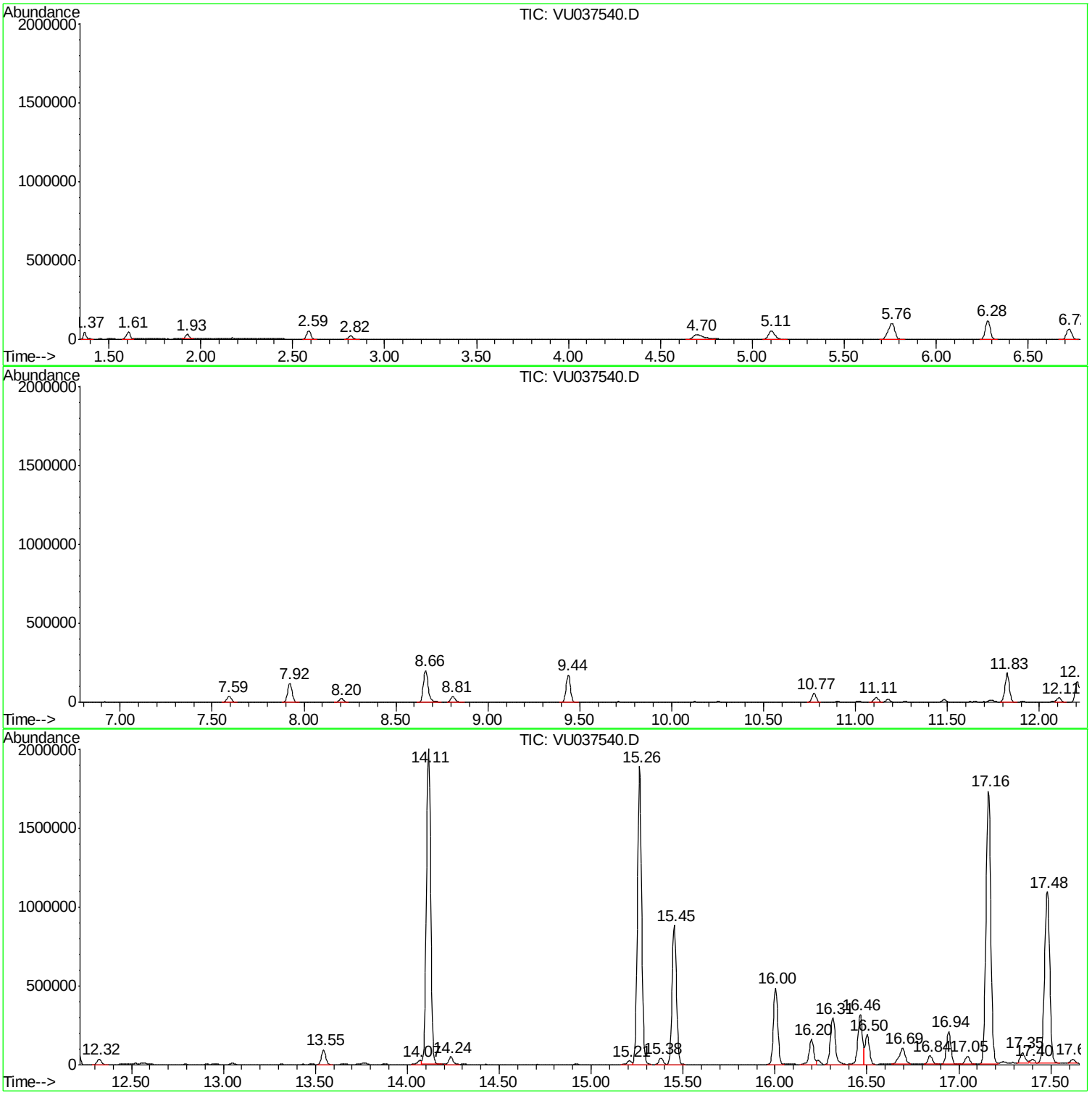
LSC Report - Integrated Chromatogram

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.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_U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

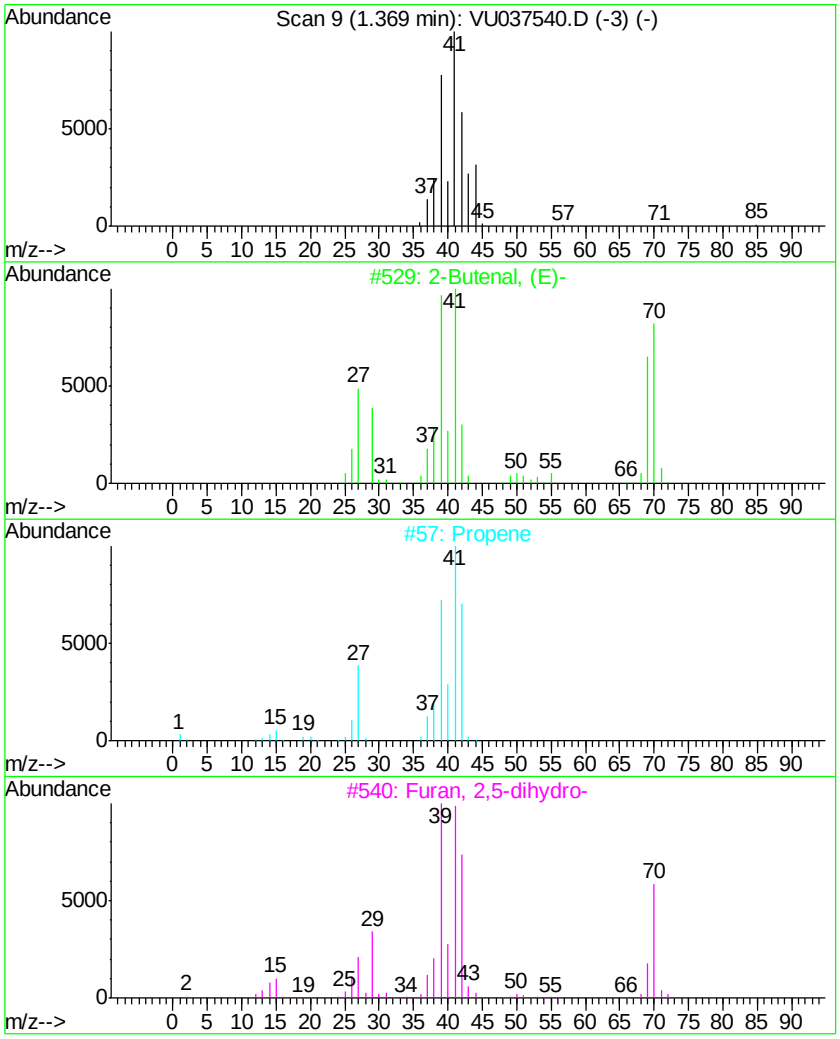
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

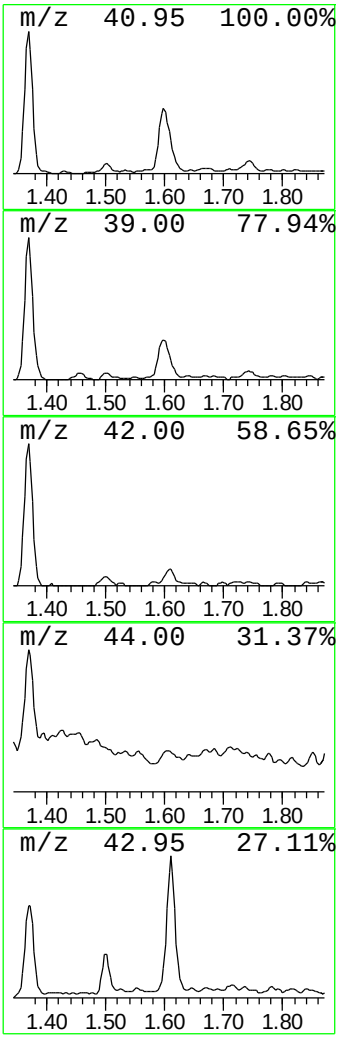
**********

Peak Number 1 2-Butenal, (E)- Concentration Rank 20

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 1.37 | 1.01 ug/L | 44781 | 1,4-Difluorobenzene | 6.28 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2-Butenal, (E)- | 70 | C4H6O | 000123-73-9 | 78 |
| 2 | Propene | 42 | C3H6 | 000115-07-1 | 72 |
| 3 | Furan, 2,5-dihydro- | 70 | C4H6O | 001708-29-8 | 64 |
| 4 | 2-Butenal | 70 | C4H6O | 004170-30-3 | 43 |
| 5 | Propene | 42 | C3H6 | 000115-07-1 | 42 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

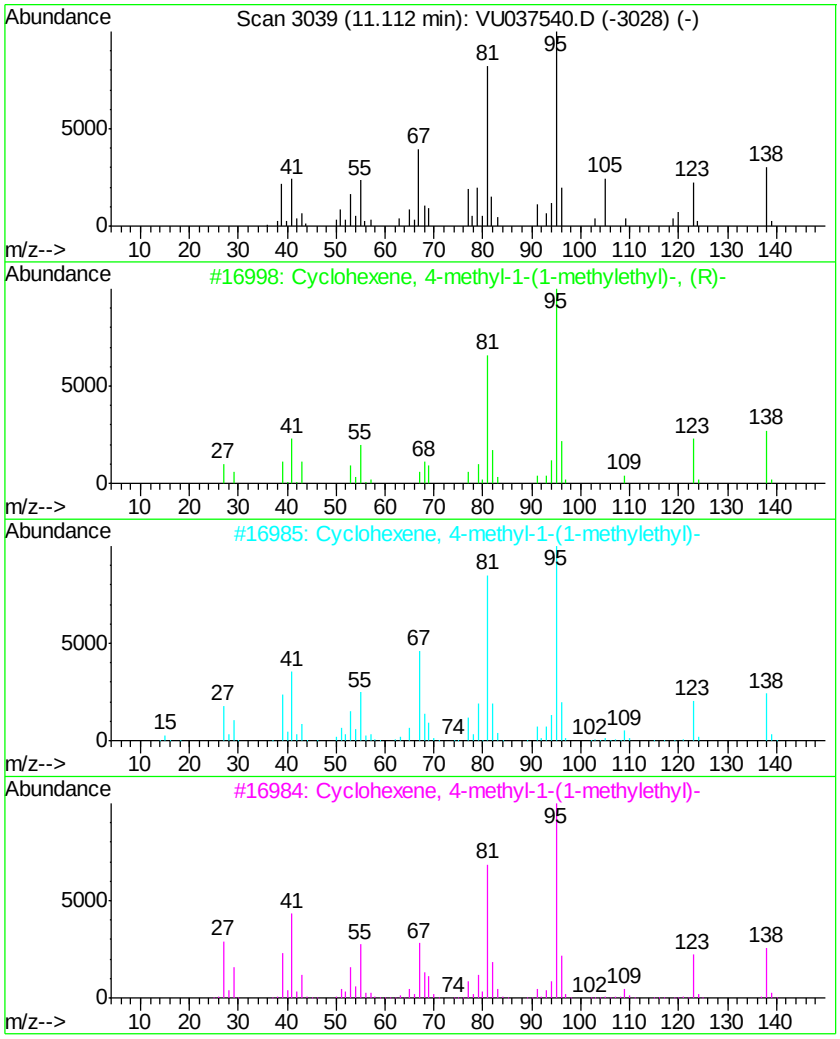
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

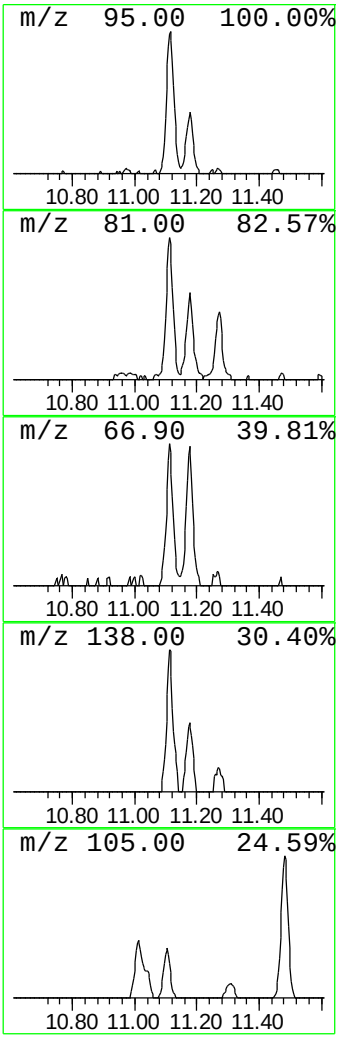
**********

Peak Number 3 Cyclohexene, 4-methyl-1-(1-... Concentration Rank 22

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.11 | 0.77 ug/L | 47173 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexene, 4-methyl-1-(1-methy... | 138 | C10H18 | 000619-52-3 | 93 |
| 2 | Cyclohexene, 4-methyl-1-(1-methy... | 138 | C10H18 | 000500-00-5 | 90 |
| 3 | Cyclohexene, 4-methyl-1-(1-methy... | 138 | C10H18 | 000500-00-5 | 87 |
| 4 | Bicyclo[4.1.0]heptane, 3,7,7-tri... | 138 | C10H18 | 018968-23-5 | 80 |
| 5 | Cyclohexene, 4-methyl-1-(1-methy... | 138 | C10H18 | 000500-00-5 | 76 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

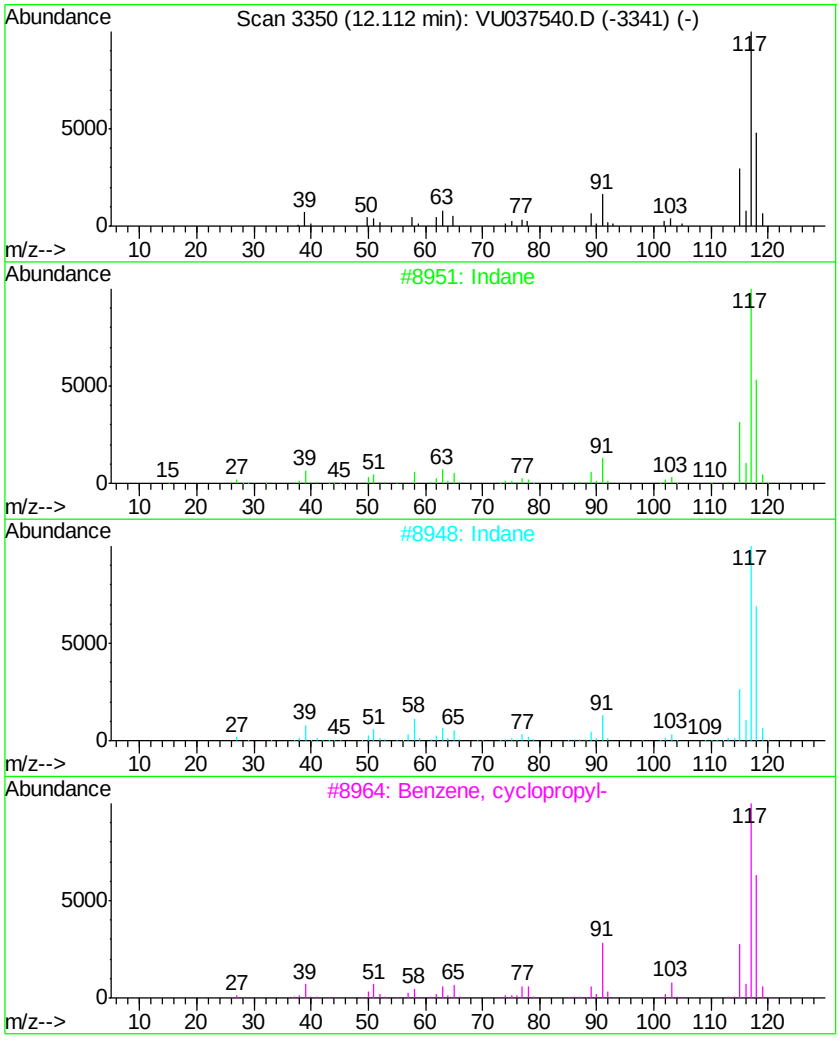
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

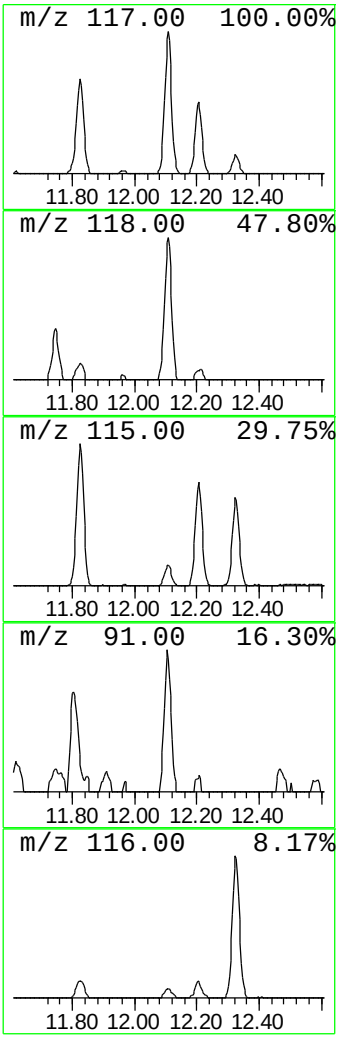
**********

Peak Number 4 Indane Concentration Rank 24

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.11 | 0.69 ug/L | 42524 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Indane | 118 | C9H10 | 000496-11-7 | 87 |
| 2 | Indane | 118 | C9H10 | 000496-11-7 | 81 |
| 3 | Benzene, cyclopropyl- | 118 | C9H10 | 000873-49-4 | 68 |
| 4 | Indane | 118 | C9H10 | 000496-11-7 | 64 |
| 5 | Indane | 118 | C9H10 | 000496-11-7 | 64 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

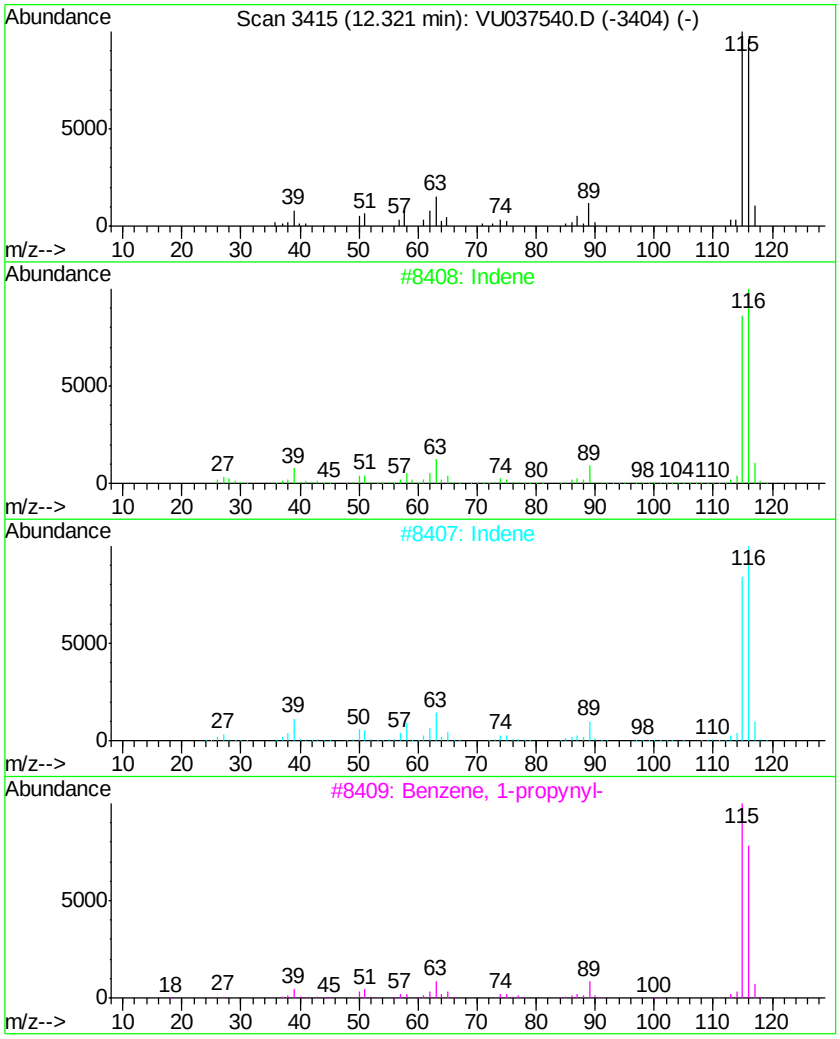
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

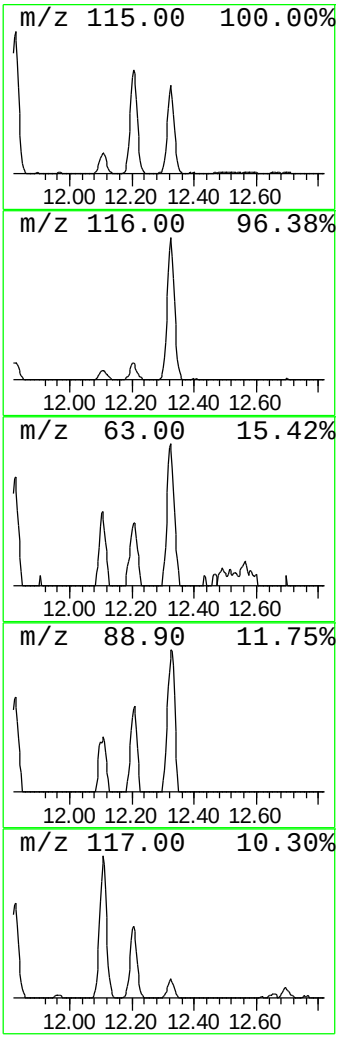
**********

Peak Number 5 Indene Concentration Rank 21

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.32 | 0.91 ug/L | 55728 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Indene | 116 | C9H8 | 000095-13-6 | 95 |
| 2 | Indene | 116 | C9H8 | 000095-13-6 | 94 |
| 3 | Benzene, 1-propynyl- | 116 | C9H8 | 000673-32-5 | 91 |
| 4 | Indene | 116 | C9H8 | 000095-13-6 | 91 |
| 5 | 3-Methylphenylacetylene | 116 | C9H8 | 000766-82-5 | 90 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

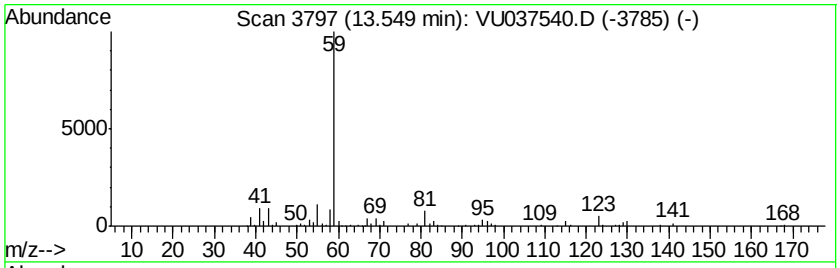
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

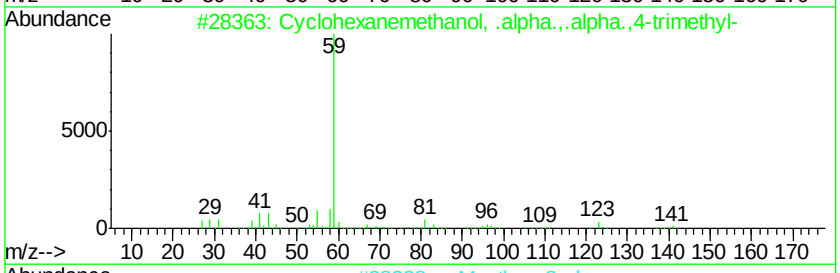
**********

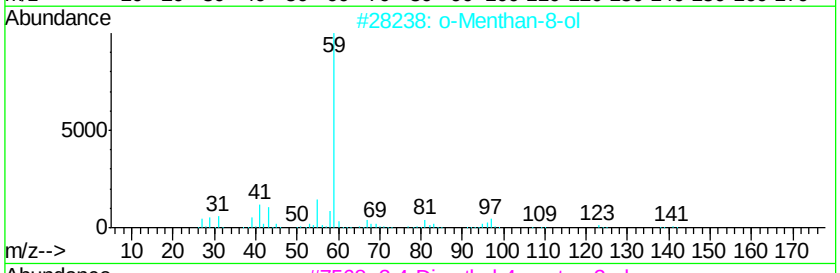
Peak Number 6 Cyclohexanemethanol, .alpha... Concentration Rank 13

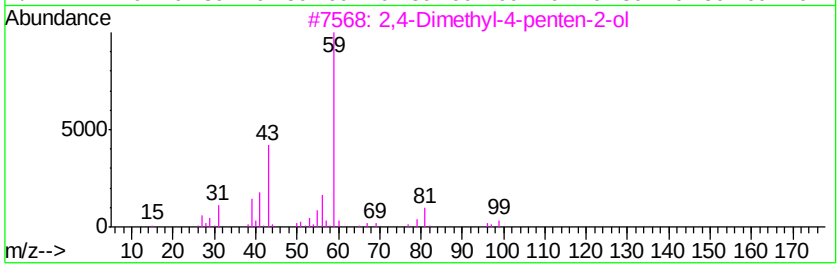
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.55 | 2.52 ug/L | 154833 | 1,4-Dichlorobenzene-d4 | 11.83 |

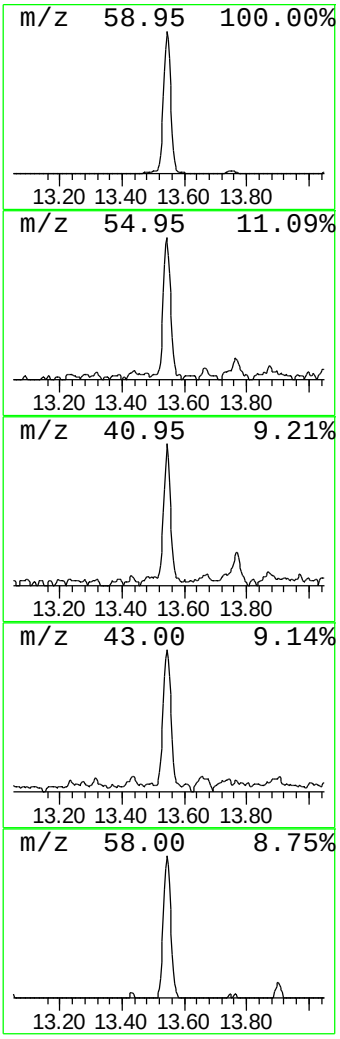
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexanemethanol, .alpha.,.al... | 156 | C10H20O | 000498-81-7 | 78 |
| 2 | o-Menthan-8-ol | 156 | C10H20O | 343855-44-7 | 72 |
| 3 | 2,4-Dimethyl-4-penten-2-ol | 114 | C7H14O | 019781-53-4 | 64 |
| 4 | Cyclohexanemethanol, .alpha.,.al... | 156 | C10H20O | 007322-63-6 | 64 |
| 5 | 4-Methoxy-1-pentene | 100 | C6H12O | 098386-09-5 | 59 |



# Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

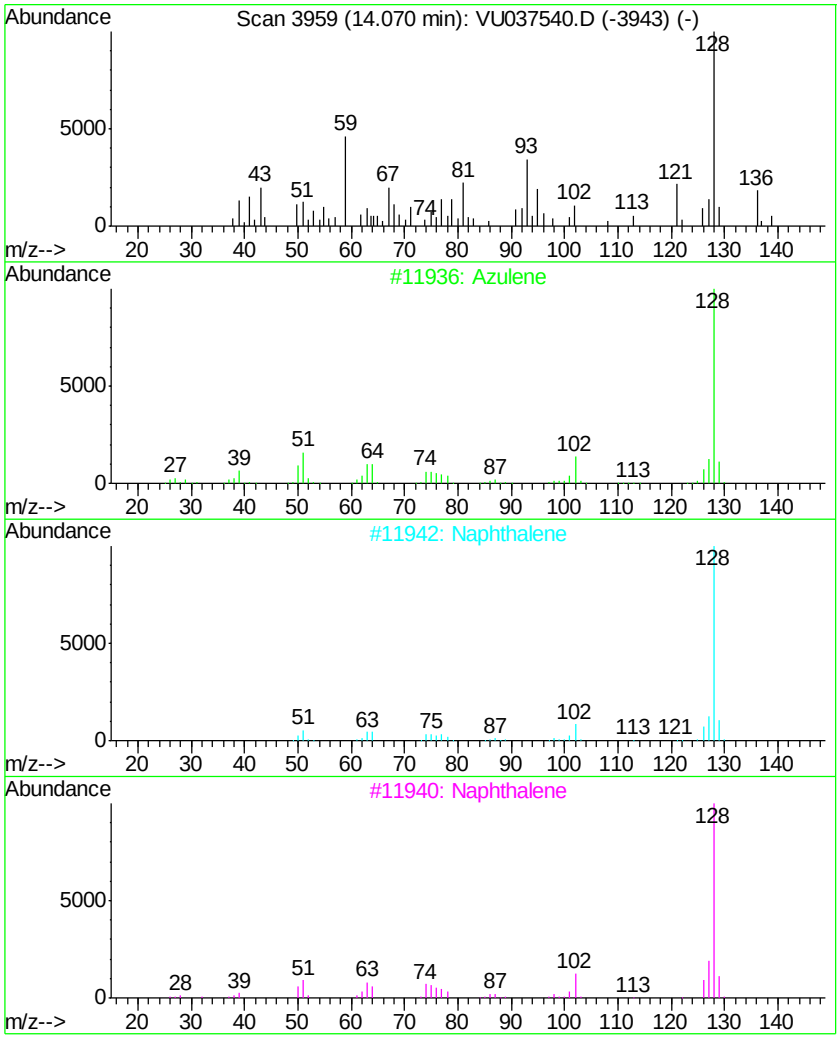
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

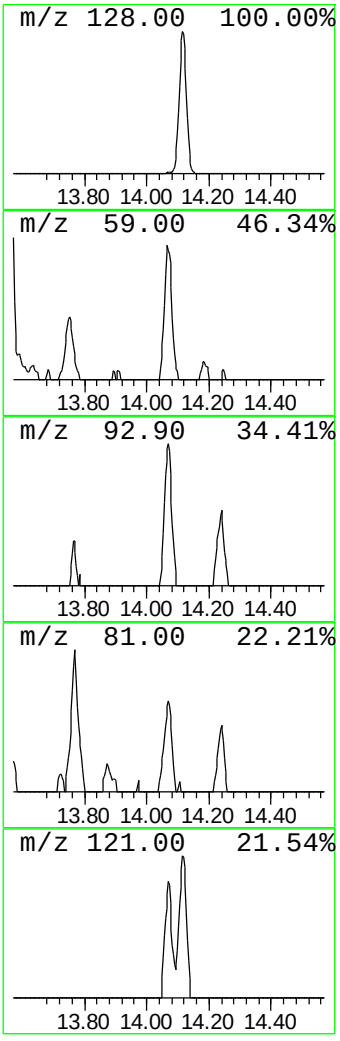
**********

Peak Number 7 Azulene Concentration Rank 26

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.07 | 0.63 ug/L | 38632 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Azulene | 128 | C10H8 | 000275-51-4 | 87 |
| 2 | Naphthalene | 128 | C10H8 | 000091-20-3 | 55 |
| 3 | Naphthalene | 128 | C10H8 | 000091-20-3 | 55 |
| 4 | Naphthalene | 128 | C10H8 | 000091-20-3 | 55 |
| 5 | 1H-Indene, 1-methylene- | 128 | C10H8 | 002471-84-3 | 55 |



# Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

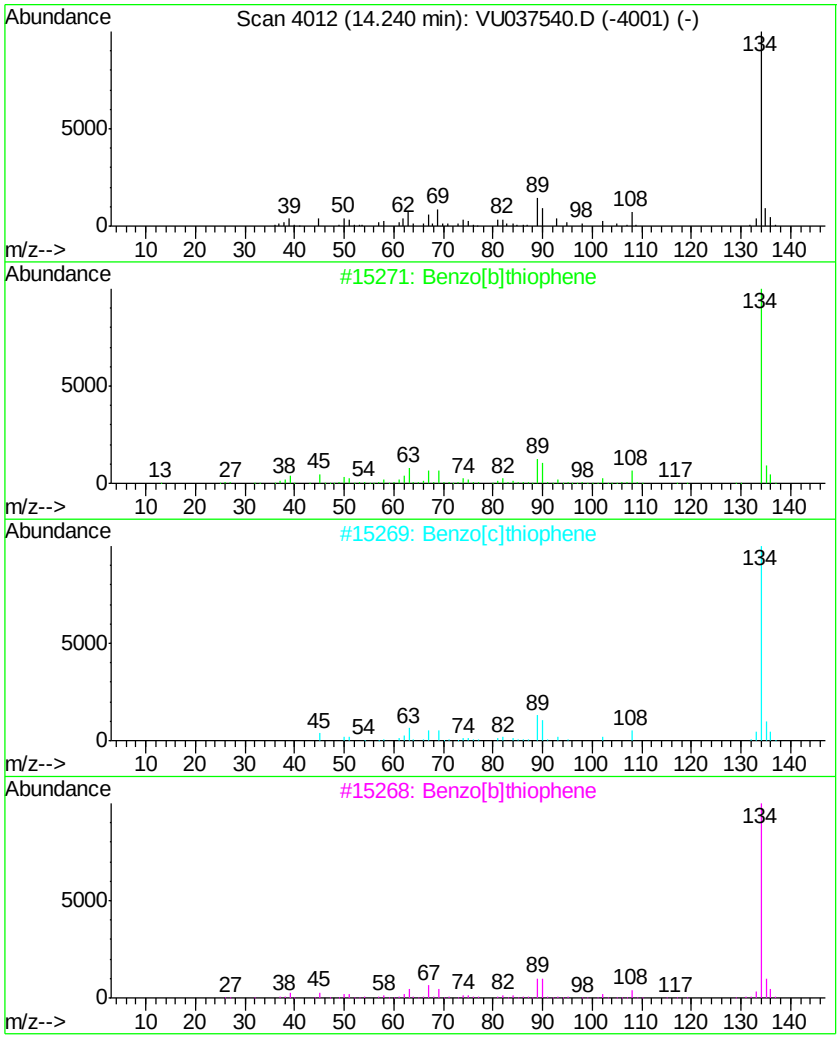
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

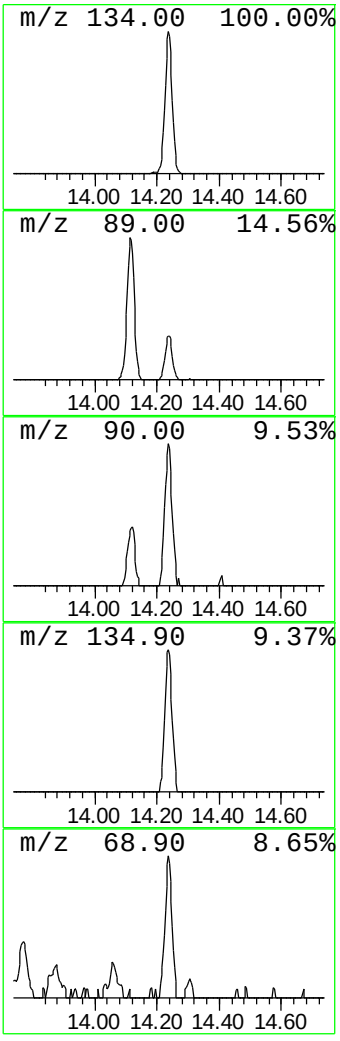
**********

Peak Number 9 Benzo[b]thiophene Concentration Rank 18

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 14.24 | 1.29 ug/L | 78962 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[b]thiophene | 134 | C8H6S | 000095-15-8 | 97 |
| 2 | Benzo[c]thiophene | 134 | C8H6S | 000270-82-6 | 95 |
| 3 | Benzo[b]thiophene | 134 | C8H6S | 000095-15-8 | 94 |
| 4 | Cyclopenta[c]thiapyran | 134 | C8H6S | 000270-63-3 | 93 |
| 5 | Benzo[b]thiophene | 134 | C8H6S | 000095-15-8 | 91 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

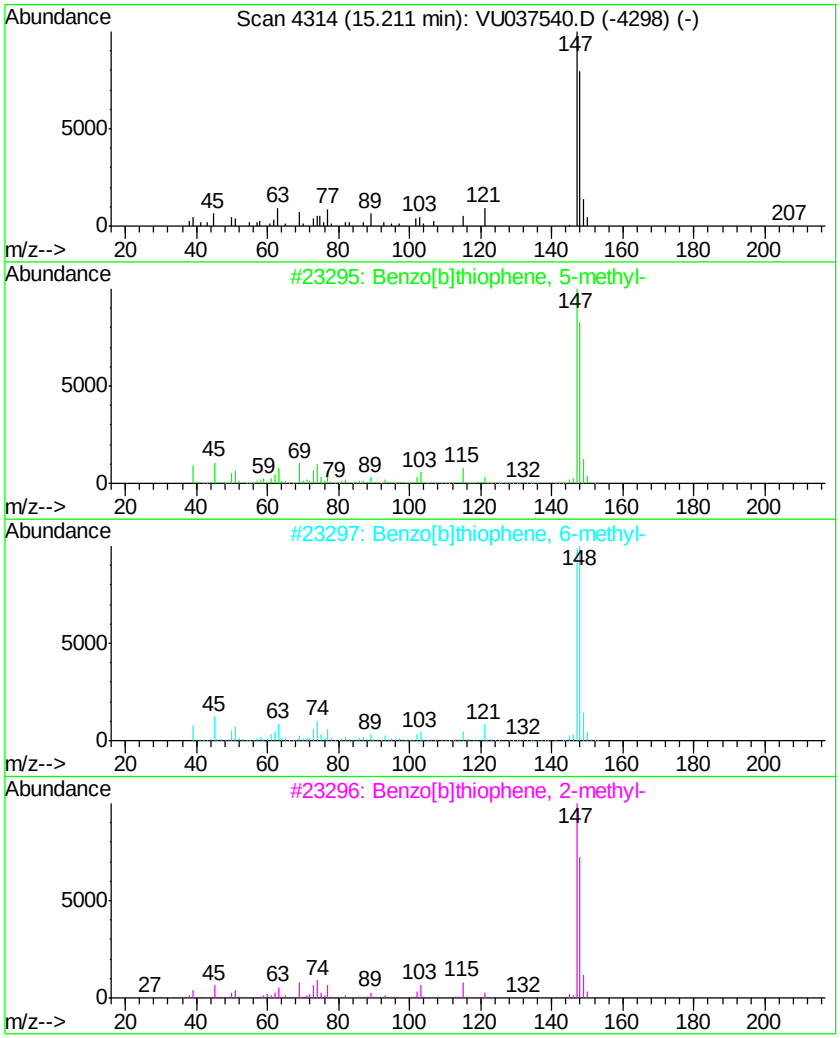
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

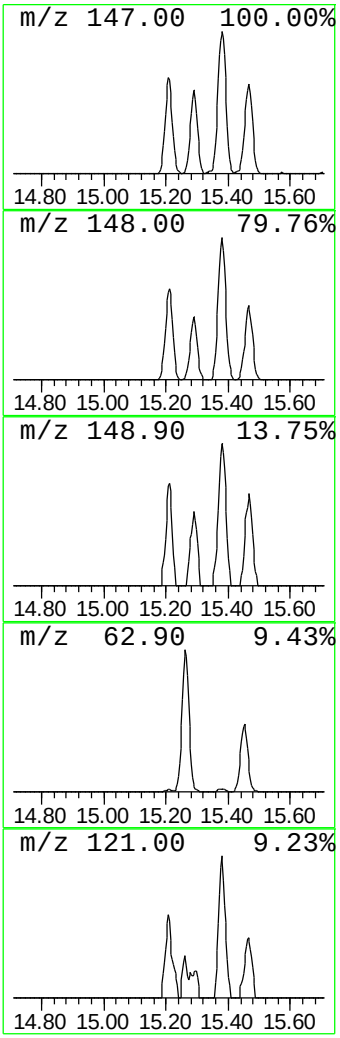
**********

Peak Number 10 Benzo[b]thiophene, 5-methyl- Concentration Rank 23

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.21 | 0.72 ug/L | 44381 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzo[b]thiophene, 5-methyl- | 148 | C9H8S | 014315-14-1 | 87 |
| 2 | Benzo[b]thiophene, 6-methyl- | 148 | C9H8S | 016587-47-6 | 87 |
| 3 | Benzo[b]thiophene, 2-methyl- | 148 | C9H8S | 001195-14-8 | 86 |
| 4 | Benzo[b]thiophene, 4-methyl- | 148 | C9H8S | 014315-11-8 | 83 |
| 5 | 3-Methylbenzothiophene | 148 | C9H8S | 001455-18-1 | 83 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

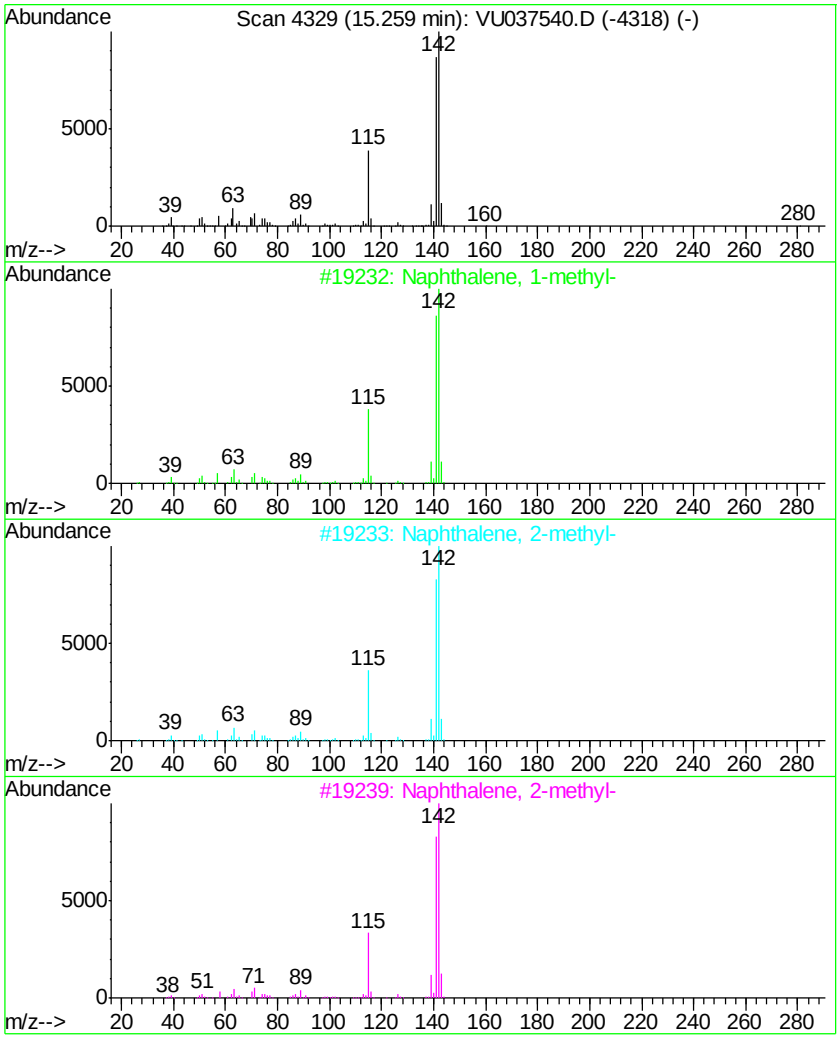
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

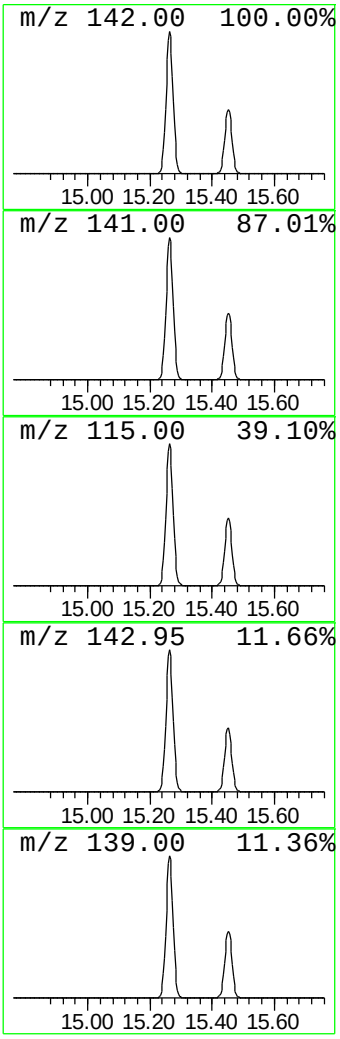
**********

Peak Number 11 Naphthalene, 1-methyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.26 | 49.17 ug/L | 3020590 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1-methyl- | 142 | C11H10 | 000090-12-0 | 96 |
| 2 | Naphthalene, 2-methyl- | 142 | C11H10 | 000091-57-6 | 96 |
| 3 | Naphthalene, 2-methyl- | 142 | C11H10 | 000091-57-6 | 96 |
| 4 | Naphthalene, 1-methyl- | 142 | C11H10 | 000090-12-0 | 94 |
| 5 | 1,4-Methanonaphthalene, 1,4-dihy... | 142 | C11H10 | 004453-90-1 | 94 |



Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

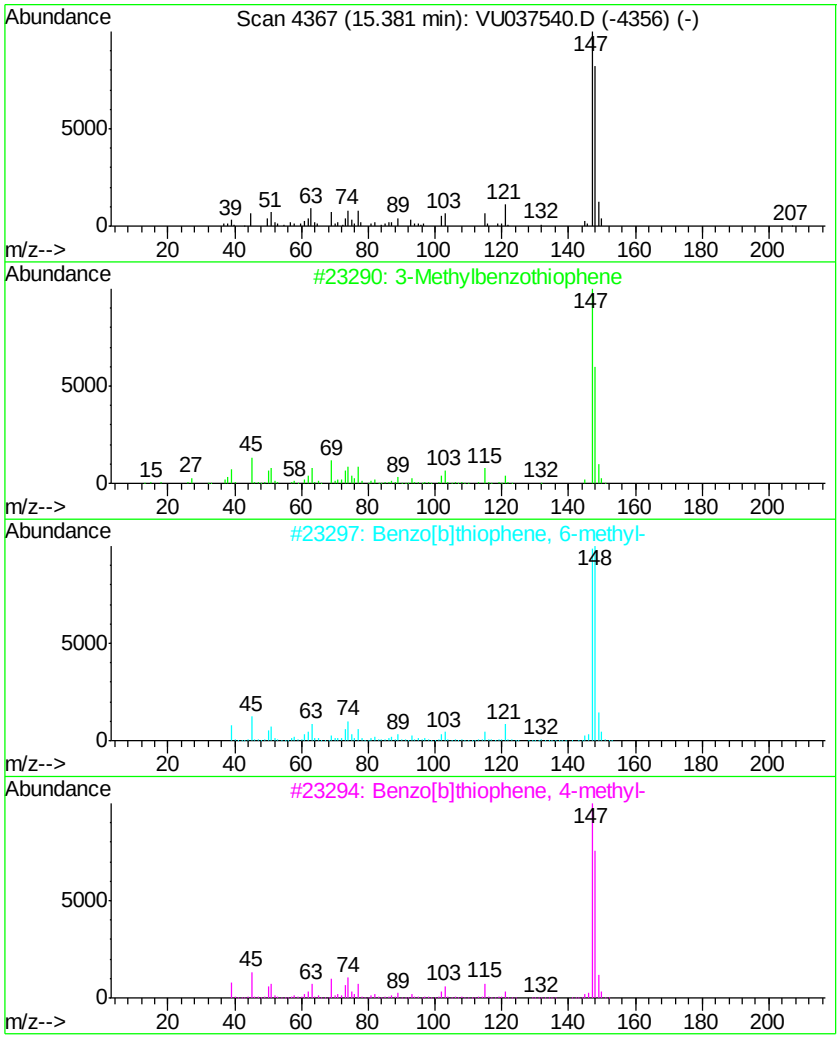
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

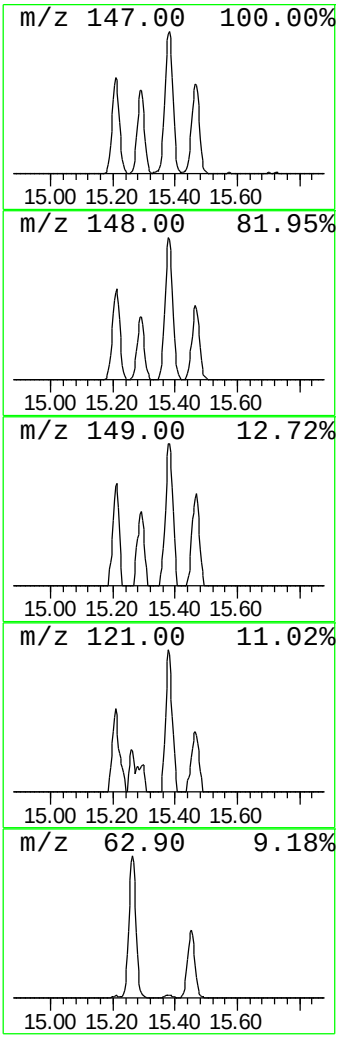
**********

Peak Number 12 3-Methylbenzothiophene Concentration Rank 19

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 15.38 | 1.07 ug/L | 65855 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Methylbenzothiophene | 148 | C9H8S | 001455-18-1 | 91 |
| 2 | Benzo[b]thiophene, 6-methyl- | 148 | C9H8S | 016587-47-6 | 91 |
| 3 | Benzo[b]thiophene, 4-methyl- | 148 | C9H8S | 014315-11-8 | 90 |
| 4 | Benzo[b]thiophene, 2-methyl- | 148 | C9H8S | 001195-14-8 | 90 |
| 5 | Benzo[b]thiophene, 2-methyl- | 148 | C9H8S | 001195-14-8 | 90 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

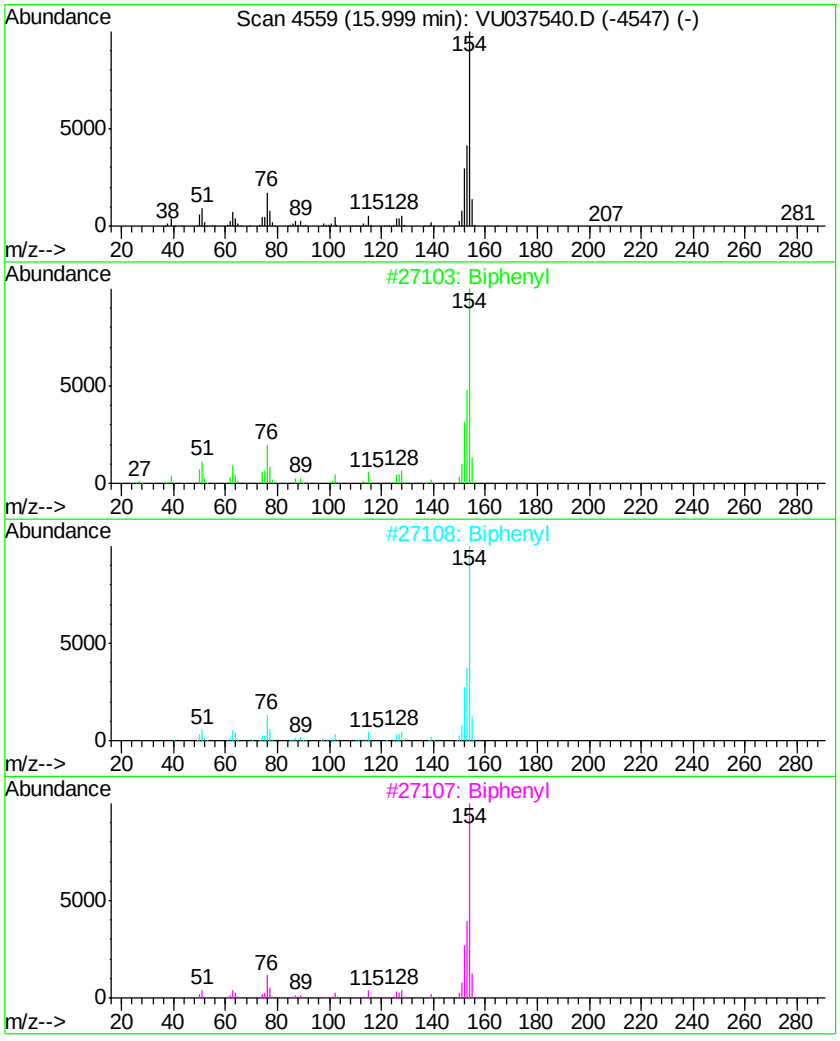
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

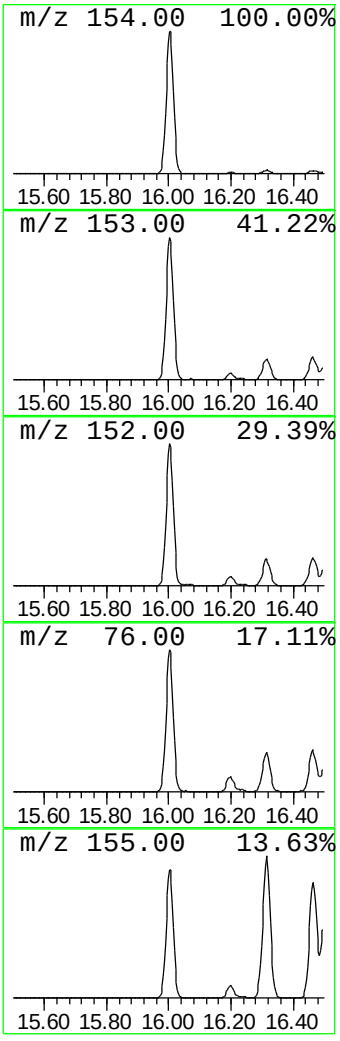
**********

Peak Number 14 Biphenyl Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.00 | 12.81 ug/L | 787060 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Biphenyl | 154 | C12H10 | 000092-52-4 | 96 |
| 2 | Biphenyl | 154 | C12H10 | 000092-52-4 | 95 |
| 3 | Biphenyl | 154 | C12H10 | 000092-52-4 | 94 |
| 4 | Biphenyl | 154 | C12H10 | 000092-52-4 | 94 |
| 5 | Biphenyl | 154 | C12H10 | 000092-52-4 | 93 |



# Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

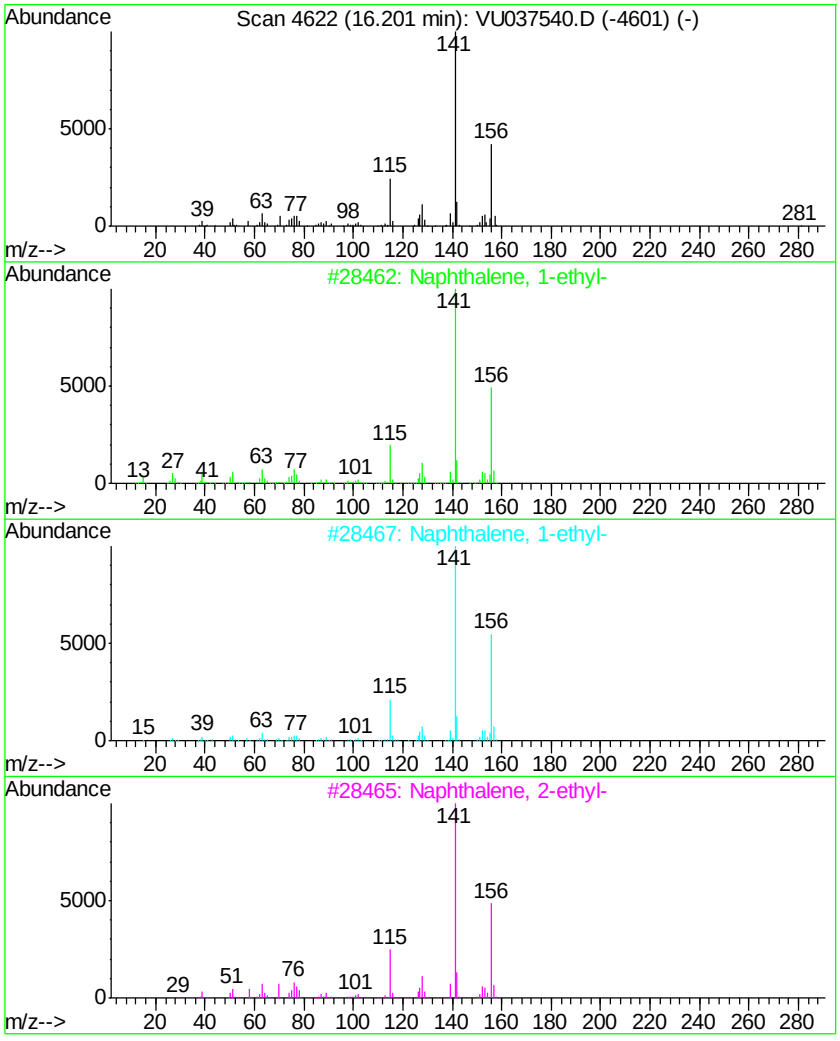
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

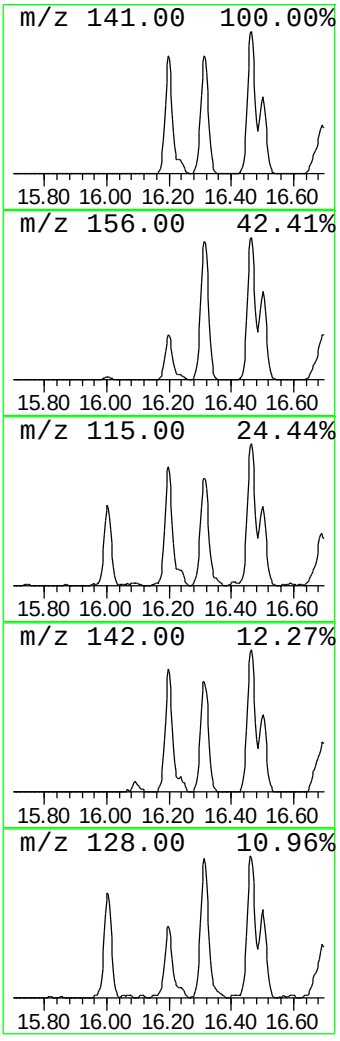
**********

Peak Number 15 Naphthalene, 1-ethyl- Concentration Rank 11

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.20 | 4.48 ug/L | 275082 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1-ethyl- | 156 | C12H12 | 001127-76-0 | 95 |
| 2 | Naphthalene, 1-ethyl- | 156 | C12H12 | 001127-76-0 | 95 |
| 3 | Naphthalene, 2-ethyl- | 156 | C12H12 | 000939-27-5 | 94 |
| 4 | Naphthalene, 2-ethyl- | 156 | C12H12 | 000939-27-5 | 94 |
| 5 | Naphthalene, 2-ethyl- | 156 | C12H12 | 000939-27-5 | 93 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

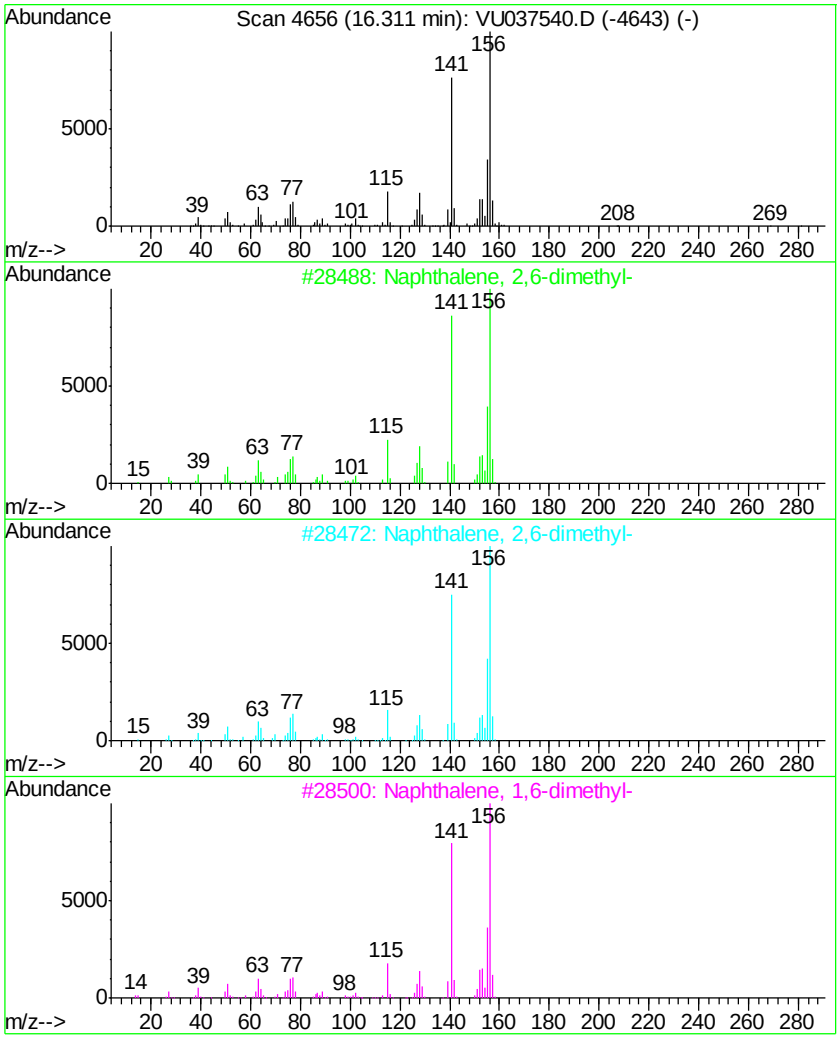
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

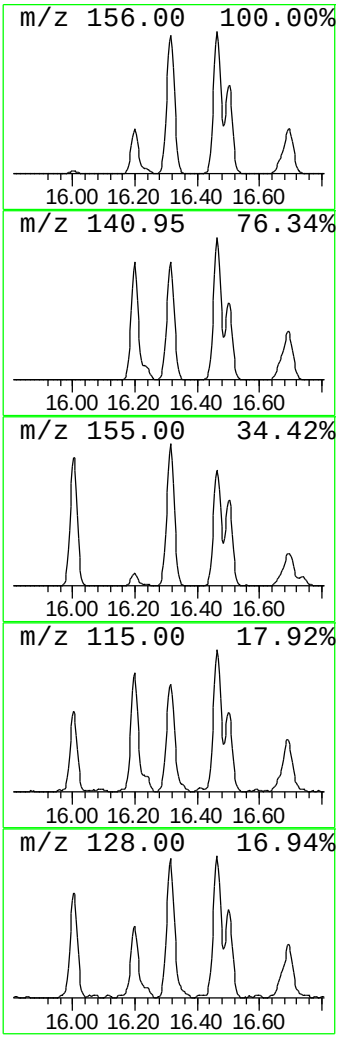
**********

Peak Number 16 Naphthalene, 2,6-dimethyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.31 | 8.91 ug/L | 547339 | 1,4-Dichlorobenzene-d4 | 11.83 |

| 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, 1,5-dimethyl- | 156 | C12H12 | 000571-61-9 | 98 |
| 5 | Naphthalene, 1,7-dimethyl- | 156 | C12H12 | 000575-37-1 | 98 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

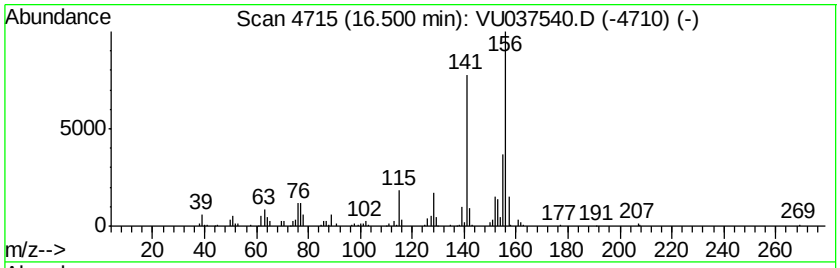
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

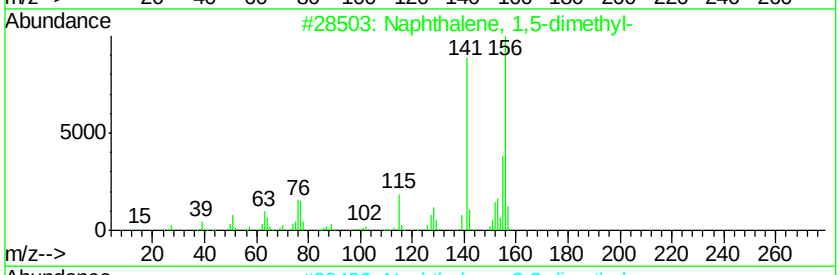
**********

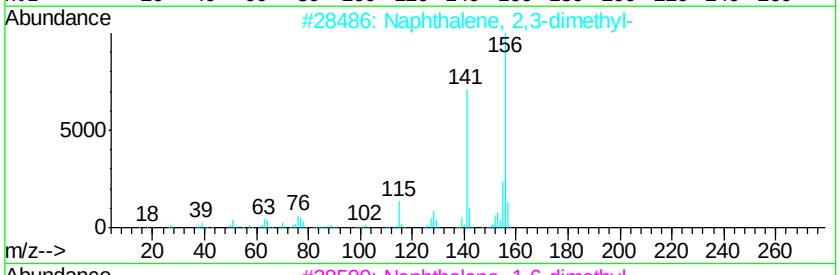
Peak Number 18 Naphthalene, 1,5-dimethyl- Concentration Rank 10

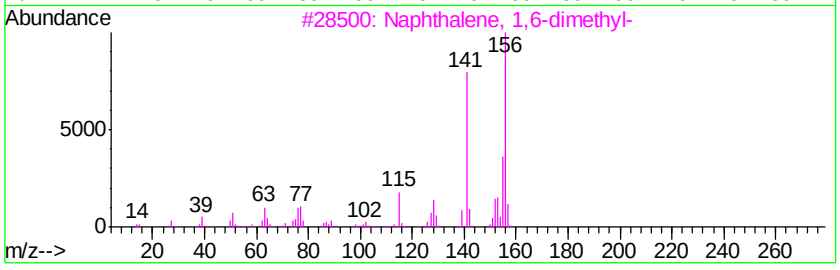
| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.50 | 4.91 ug/L | 301683 | 1,4-Dichlorobenzene-d4 | 11.83 |

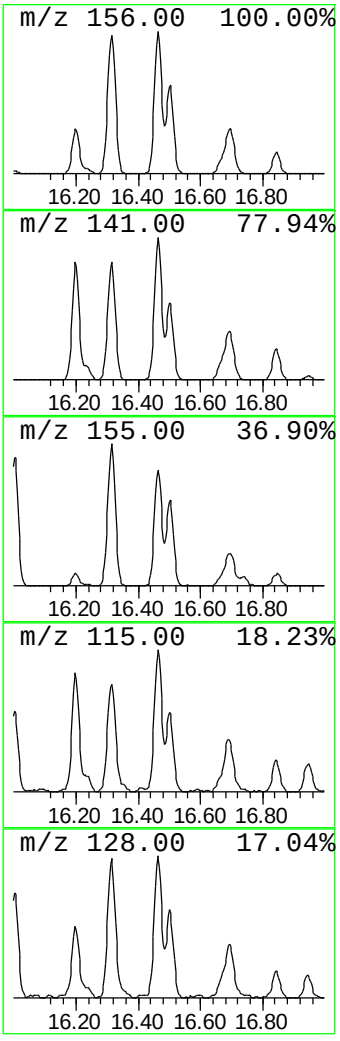
| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,5-dimethyl- | 156 | C12H12 | 000571-61-9 | 98 |
| 2 | Naphthalene, 2,3-dimethyl- | 156 | C12H12 | 000581-40-8 | 97 |
| 3 | Naphthalene, 1,6-dimethyl- | 156 | C12H12 | 000575-43-9 | 96 |
| 4 | Naphthalene, 1,7-dimethyl- | 156 | C12H12 | 000575-37-1 | 96 |
| 5 | Naphthalene, 1,4-dimethyl- | 156 | C12H12 | 000571-58-4 | 96 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

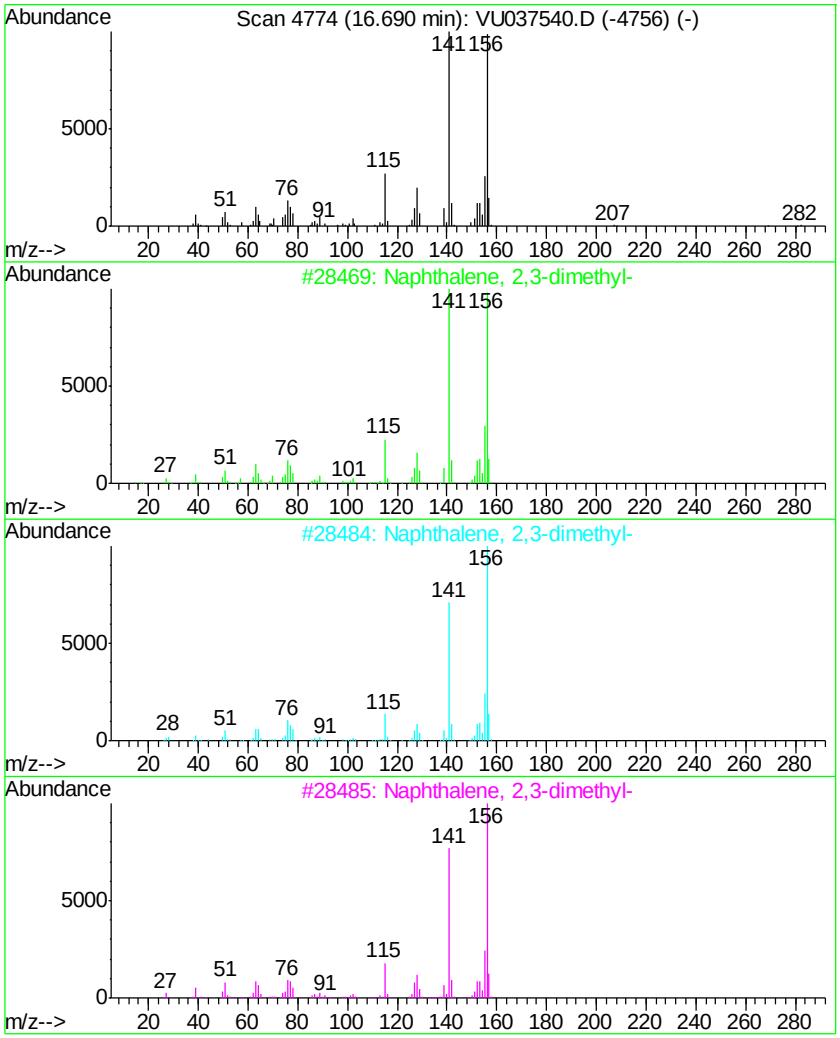
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

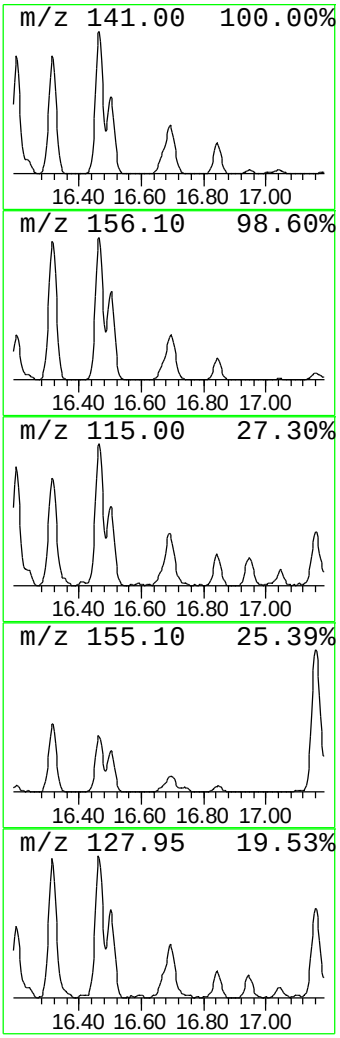
**********

Peak Number 19 Naphthalene, 2,3-dimethyl- Concentration Rank 12

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.69 | 4.01 ug/L | 246164 | 1,4-Dichlorobenzene-d4 | 11.83 |

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



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

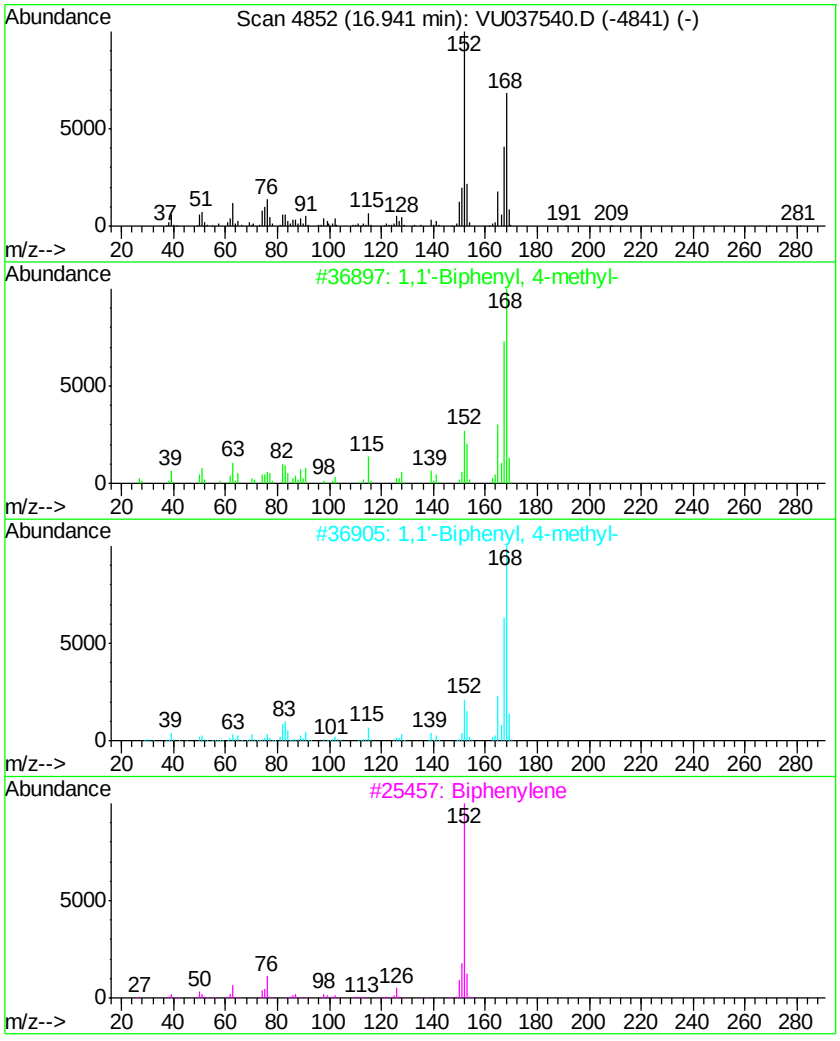
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

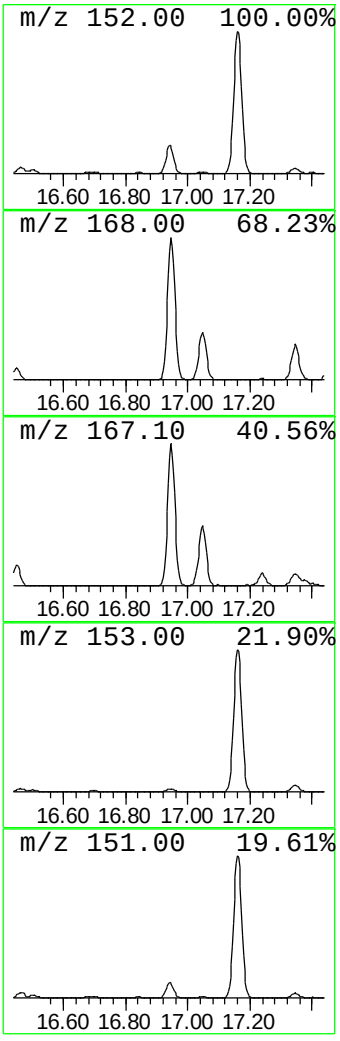
**********

Peak Number 21 1,1'-Biphenyl, 4-methyl- Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 16.94 | 5.79 ug/L | 355565 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1,1'-Biphenyl, 4-methyl- | 168 | C13H12 | 000644-08-6 | 86 |
| 2 | 1,1'-Biphenyl, 4-methyl- | 168 | C13H12 | 000644-08-6 | 50 |
| 3 | Biphenylene | 152 | C12H8 | 000259-79-0 | 46 |
| 4 | Biphenylene | 152 | C12H8 | 000259-79-0 | 46 |
| 5 | Diphenylmethane | 168 | C13H12 | 000101-81-5 | 45 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

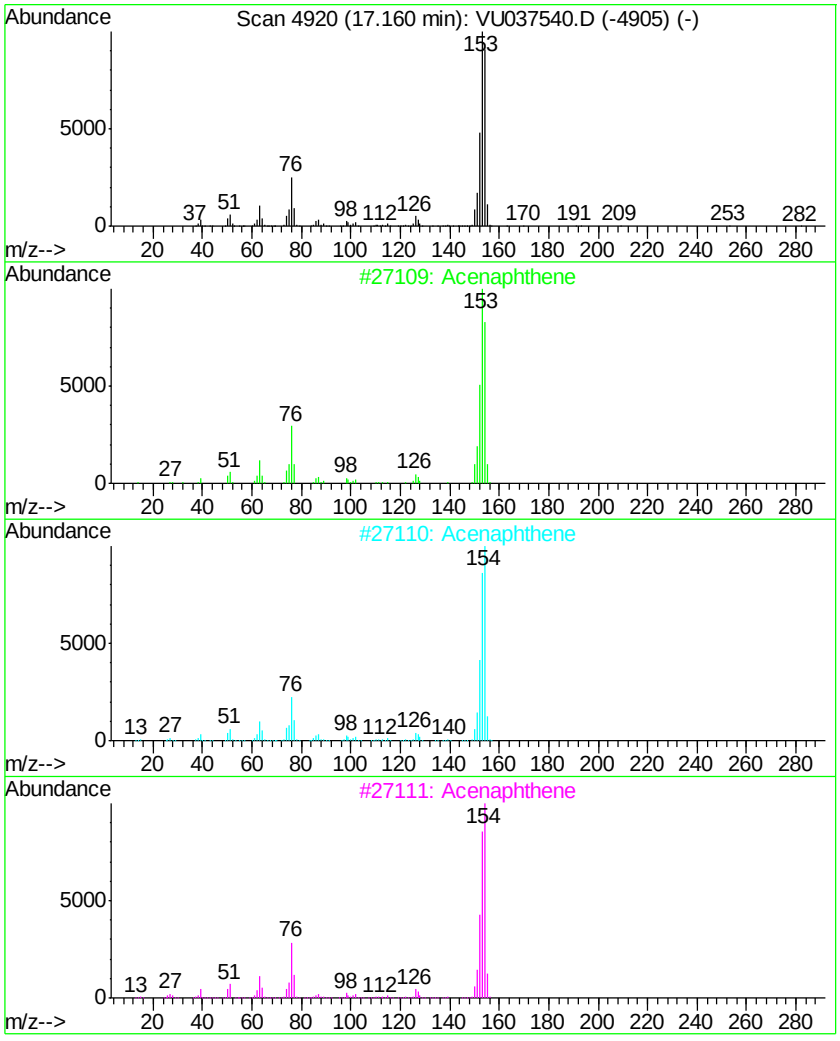
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

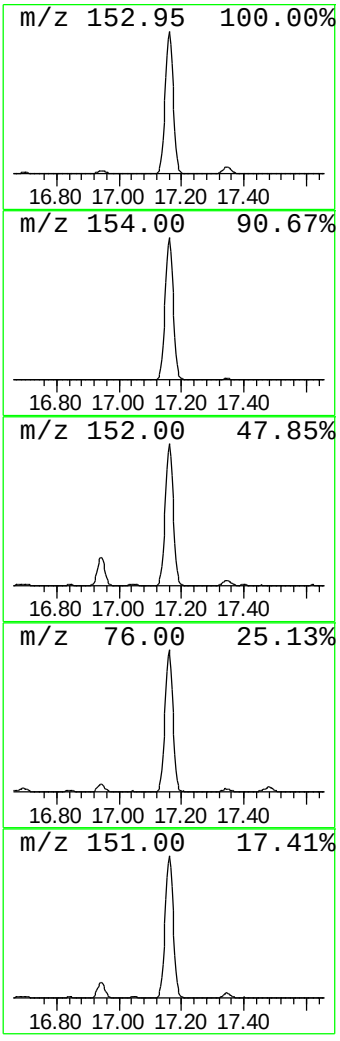
**********

Peak Number 23 Acenaphthene Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.16 | 50.86 ug/L | 3124110 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Acenaphthene | 154 | C12H10 | 000083-32-9 | 96 |
| 2 | Acenaphthene | 154 | C12H10 | 000083-32-9 | 93 |
| 3 | Acenaphthene | 154 | C12H10 | 000083-32-9 | 92 |
| 4 | Acenaphthene | 154 | C12H10 | 000083-32-9 | 81 |
| 5 | 1,4-Ethenonaphthalene, 1,4-dihydro- | 154 | C12H10 | 007322-47-6 | 64 |



Library Search Compound Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

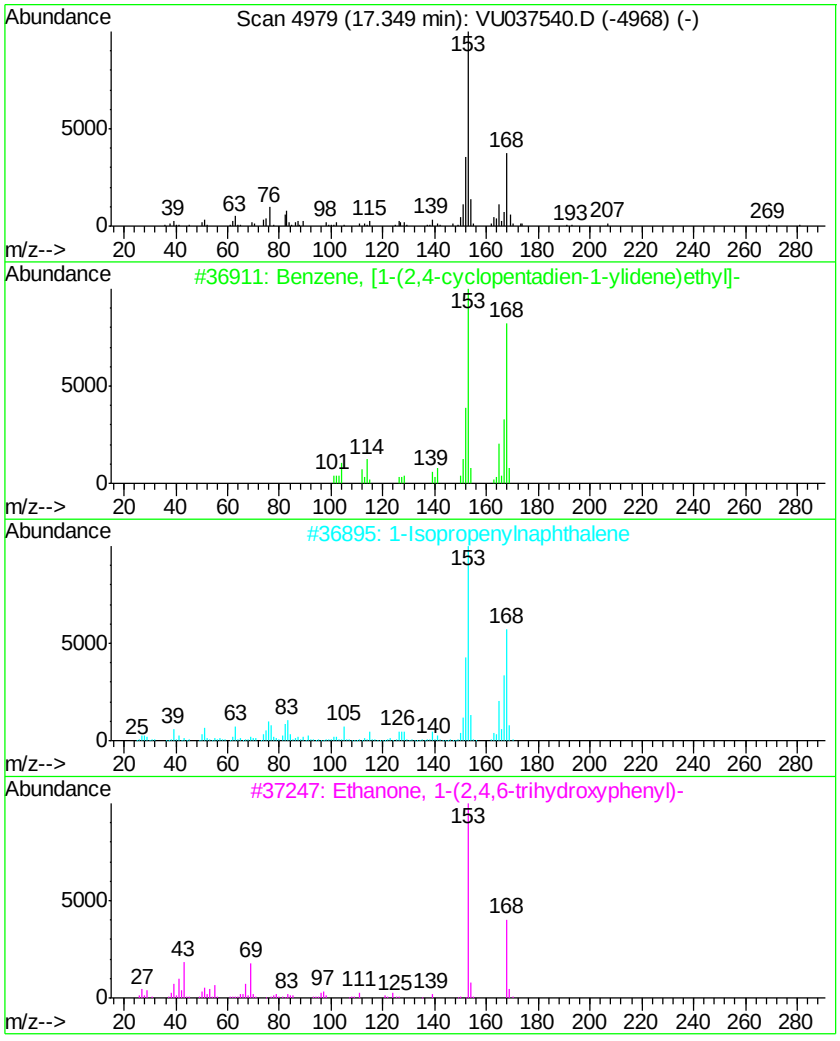
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

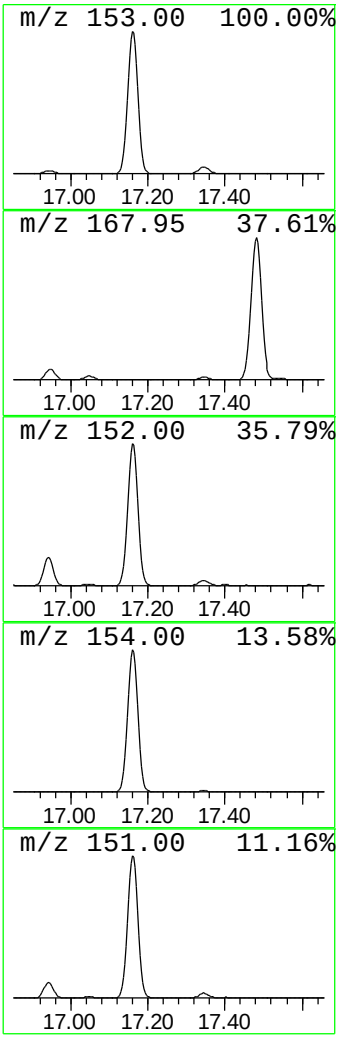
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 24 Benzene, [1-(2,4-cyclopenta... Concentration Rank 14

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.35 | 2.07 ug/L | 127265 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, [1-(2,4-cyclopentadien-... | 168 | C13H12 | 002320-32-3 | 64 |
| 2 | 1-Isopropenylnaphthalene | 168 | C13H12 | 001855-47-6 | 58 |
| 3 | Ethanone, 1-(2,4,6-trihydroxyphe... | 168 | C8H8O4 | 000480-66-0 | 50 |
| 4 | 2-Naphthalenecarbonitrile | 153 | C11H7N | 000613-46-7 | 47 |
| 5 | .beta.-(1-Naphthyl)acrylic acid | 198 | C13H10O2 | 013026-12-5 | 45 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

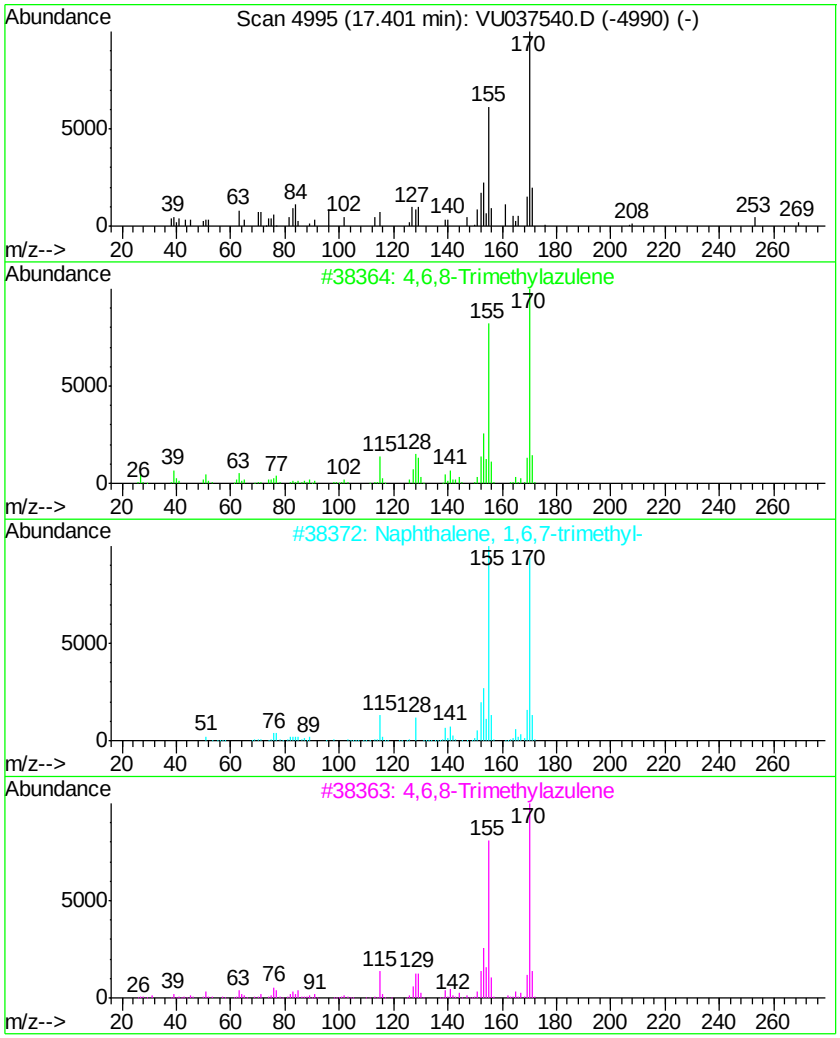
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

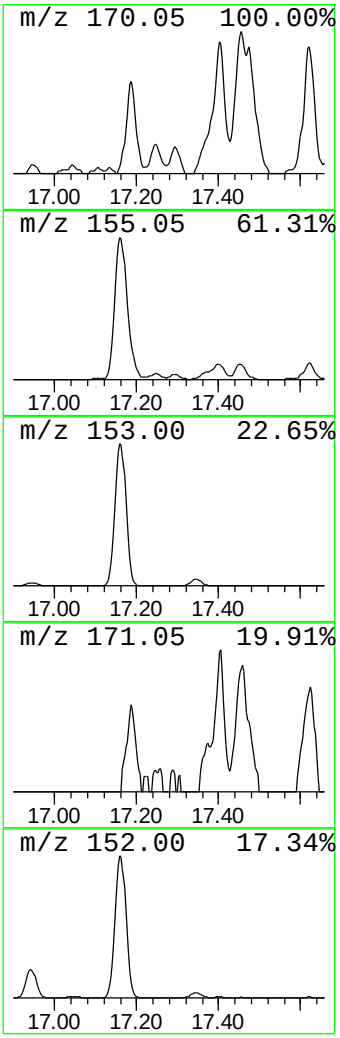
**********

Peak Number 25 4,6,8-Trimethylazulene Concentration Rank 27

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.40 | 0.56 ug/L | 34691 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 4,6,8-Trimethylazulene | 170 | C13H14 | 000941-81-1 | 90 |
| 2 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 83 |
| 3 | 4,6,8-Trimethylazulene | 170 | C13H14 | 000941-81-1 | 80 |
| 4 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 72 |
| 5 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 64 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

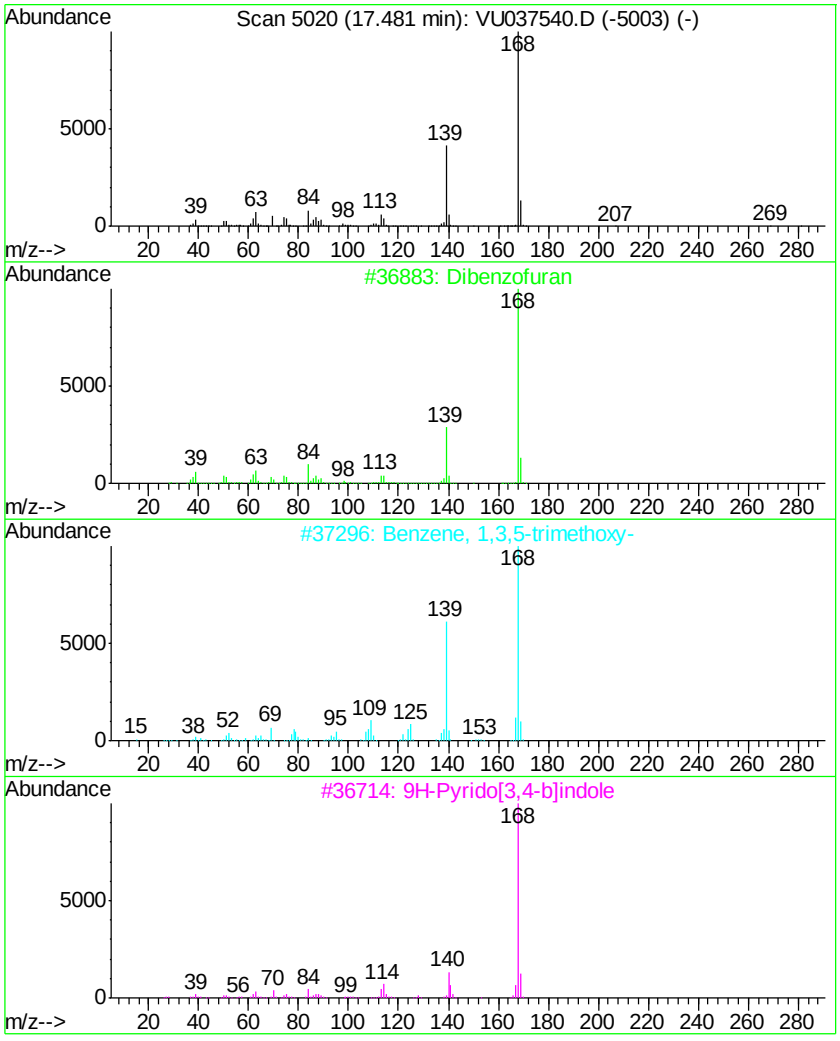
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

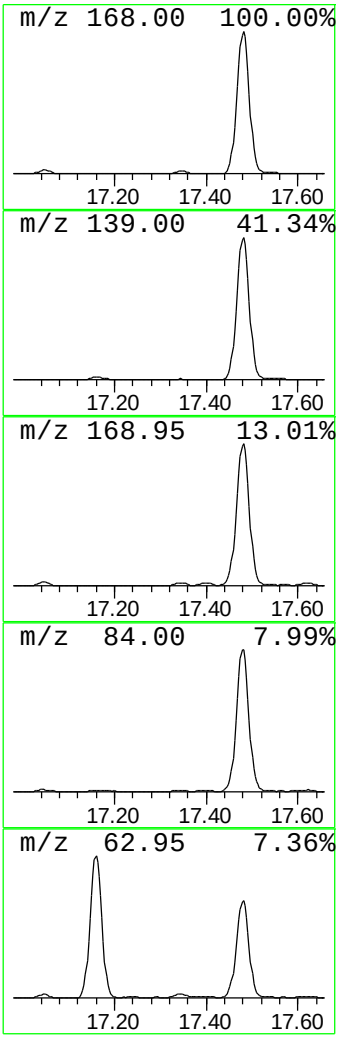
**********

Peak Number 26 Dibenzofuran Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.48 | 34.12 ug/L | 2096160 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Dibenzofuran | 168 | C12H8O | 000132-64-9 | 91 |
| 2 | Benzene, 1,3,5-trimethoxy- | 168 | C9H12O3 | 000621-23-8 | 72 |
| 3 | 9H-Pyrido[3,4-b]indole | 168 | C11H8N2 | 000244-63-3 | 53 |
| 4 | Naphtho[2,1-d]imidazole | 168 | C11H8N2 | 000233-53-4 | 50 |
| 5 | 3,5-Dimethoxybenzyl alcohol | 168 | C9H12O3 | 000705-76-0 | 50 |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.M
Quant Title : TRACE VOA SOM01.0

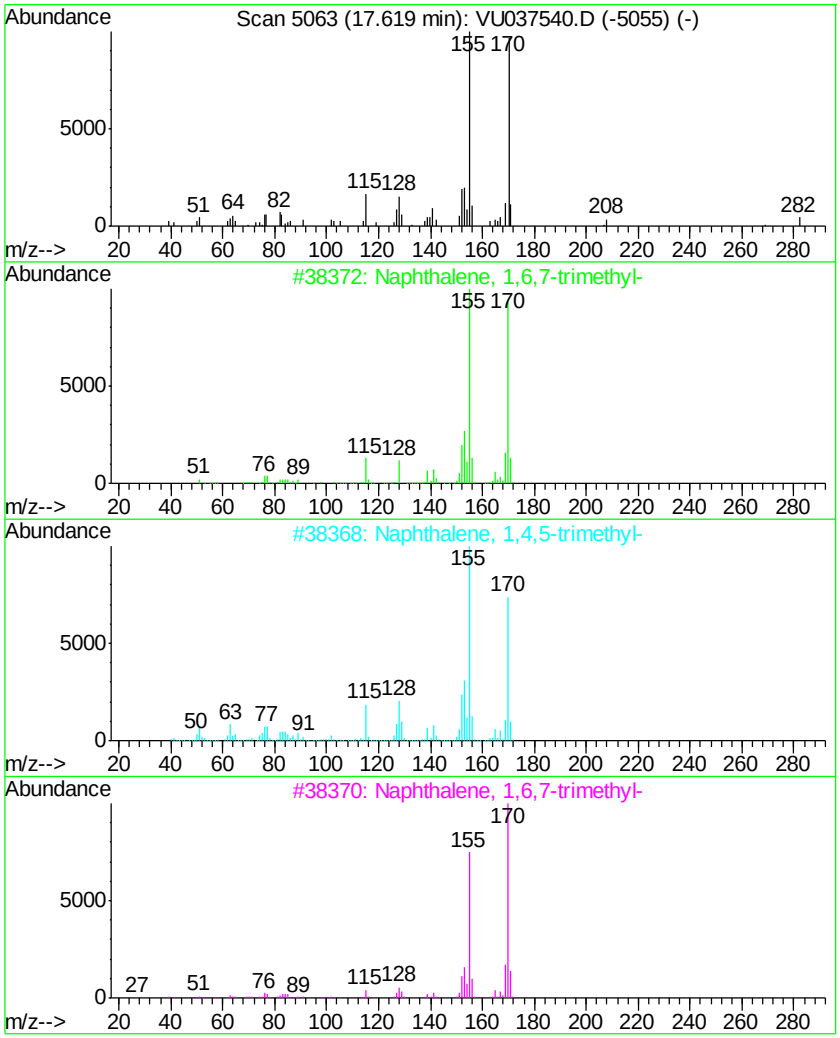
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

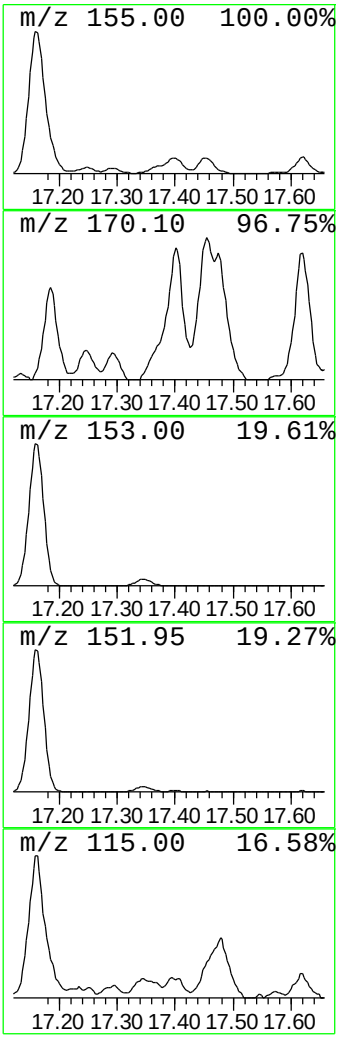
**********

Peak Number 27 Naphthalene, 1,6,7-trimethyl- Concentration Rank 25

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 17.62 | 0.64 ug/L | 39488 | 1,4-Dichlorobenzene-d4 | 11.83 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 97 |
| 2 | Naphthalene, 1,4,5-trimethyl- | 170 | C13H14 | 002131-41-1 | 95 |
| 3 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 94 |
| 4 | Naphthalene, 2,3,6-trimethyl- | 170 | C13H14 | 000829-26-5 | 94 |
| 5 | Naphthalene, 1,6,7-trimethyl- | 170 | C13H14 | 002245-38-7 | 91 |



Tentatively Identified Compound (LSC) summary

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU040120\
Data File : VU037540.D
Acq On : 01 Apr 2020 23:18
Operator : JC/MD
Sample : L2065-19
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_U
**ClientSampleId :** DBF15

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR040120WMA.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 |
| 2-Butenal, (E)- | 1.37 | 1.0 | ug/L | 44781 | 1 | 6.28 | 221308 | 5.0 |
| Cyclohexene, 4-me... | 11.11 | 0.8 | ug/L | 47173 | 3 | 11.83 | 307149 | 5.0 |
| Indane | 12.11 | 0.7 | ug/L | 42524 | 3 | 11.83 | 307149 | 5.0 |
| Indene | 12.32 | 0.9 | ug/L | 55728 | 3 | 11.83 | 307149 | 5.0 |
| Cyclohexanemethan... | 13.55 | 2.5 | ug/L | 154833 | 3 | 11.83 | 307149 | 5.0 |
| Azulene | 14.07 | 0.6 | ug/L | 38632 | 3 | 11.83 | 307149 | 5.0 |
| Benzo[b]thiophene | 14.24 | 1.3 | ug/L | 78962 | 3 | 11.83 | 307149 | 5.0 |
| Benzo[b]thiophene... | 15.21 | 0.7 | ug/L | 44381 | 3 | 11.83 | 307149 | 5.0 |
| Naphthalene, 1-me... | 15.26 | 49.2 | ug/L | 3020590 | 3 | 11.83 | 307149 | 5.0 |
| 3-Methylbenzothio... | 15.38 | 1.1 | ug/L | 65855 | 3 | 11.83 | 307149 | 5.0 |
| Biphenyl | 16.00 | 12.8 | ug/L | 787060 | 3 | 11.83 | 307149 | 5.0 |
| Naphthalene, 1-et... | 16.20 | 4.5 | ug/L | 275082 | 3 | 11.83 | 307149 | 5.0 |
| Naphthalene, 2,6-... | 16.31 | 8.9 | ug/L | 547339 | 3 | 11.83 | 307149 | 5.0 |
| Naphthalene, 1,5-... | 16.50 | 4.9 | ug/L | 301683 | 3 | 11.83 | 307149 | 5.0 |
| Naphthalene, 2,3-... | 16.69 | 4.0 | ug/L | 246164 | 3 | 11.83 | 307149 | 5.0 |
| 1,1'-Biphenyl, 4-... | 16.94 | 5.8 | ug/L | 355565 | 3 | 11.83 | 307149 | 5.0 |
| Acenaphthene | 17.16 | 50.9 | ug/L | 3124110 | 3 | 11.83 | 307149 | 5.0 |
| Benzene, [1-(2,4-... | 17.35 | 2.1 | ug/L | 127265 | 3 | 11.83 | 307149 | 5.0 |
| 4,6,8-Trimethylaz... | 17.40 | 0.6 | ug/L | 34691 | 3 | 11.83 | 307149 | 5.0 |
| Dibenzofuran | 17.48 | 34.1 | ug/L | 2096160 | 3 | 11.83 | 307149 | 5.0 |
| Naphthalene, 1,6,... | 17.62 | 0.6 | ug/L | 39488 | 3 | 11.83 | 307149 | 5.0 |