

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040221\  
 Data File : VL036664.D  
 Acq On : 3 Apr 2021 3:22  
 Operator : SY/AP  
 Sample : M1834-03 1200X  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV3

Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : ON  
 Sampling : 3  
 Start Thrs: 0.001  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 0

Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
 Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

Signal : TIC

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 2.851       | 7             | 20          | 56           | rBV      | 3352555        | 7182780       | 2.21%           | 0.124%        |
| 2         | 3.186       | 111           | 124         | 148          | rBV      | 28967411       | 76809241      | 23.66%          | 1.331%        |
| 3         | 3.285       | 148           | 155         | 161          | rVV      | 10232640       | 16753752      | 5.16%           | 0.290%        |
| 4         | 3.330       | 161           | 169         | 265          | rVB2     | 54917486       | 217933634     | 67.13%          | 3.776%        |
| 5         | 3.713       | 273           | 288         | 318          | rBV2     | 3795333        | 8642332       | 2.66%           | 0.150%        |
| 6         | 3.851       | 318           | 331         | 335          | rBV4     | 80013912       | 124939884     | 38.49%          | 2.165%        |
| 7         | 3.870       | 335           | 337         | 389          | rVV3     | 81852949       | 324629065     | 100.00%         | 5.625%        |
| 8         | 4.079       | 389           | 402         | 406          | rVV      | 27536578       | 60318912      | 18.58%          | 1.045%        |
| 9         | 4.131       | 406           | 418         | 438          | rVV2     | 68154418       | 255667770     | 78.76%          | 4.430%        |
| 10        | 4.211       | 438           | 443         | 463          | rVV2     | 22924707       | 57400745      | 17.68%          | 0.995%        |
| 11        | 4.311       | 463           | 474         | 480          | rVV4     | 7020238        | 14933952      | 4.60%           | 0.259%        |
| 12        | 4.372       | 480           | 493         | 547          | rVB2     | 62666407       | 211820434     | 65.25%          | 3.670%        |
| 13        | 4.603       | 547           | 565         | 635          | rVB      | 39733924       | 122606527     | 37.77%          | 2.124%        |
| 14        | 4.883       | 635           | 652         | 656          | rBV2     | 4321186        | 8398327       | 2.59%           | 0.146%        |
| 15        | 4.935       | 663           | 668         | 691          | rVB4     | 4595244        | 10242408      | 3.16%           | 0.177%        |
| 16        | 5.070       | 691           | 710         | 711          | rBV2     | 61929194       | 101291922     | 31.20%          | 1.755%        |
| 17        | 5.076       | 711           | 712         | 715          | rVV3     | 61300125       | 46448152      | 14.31%          | 0.805%        |
| 18        | 5.089       | 715           | 716         | 721          | rVV3     | 60007173       | 62524690      | 19.26%          | 1.083%        |
| 19        | 5.144       | 721           | 733         | 793          | rVV3     | 83200529       | 307277481     | 94.65%          | 5.324%        |
| 20        | 5.401       | 793           | 813         | 827          | rVV      | 53982842       | 185235512     | 57.06%          | 3.210%        |
| 21        | 5.468       | 827           | 834         | 881          | rVB      | 23507474       | 61858610      | 19.06%          | 1.072%        |
| 22        | 5.719       | 881           | 912         | 938          | rBV      | 52663696       | 201883059     | 62.19%          | 3.498%        |
| 23        | 5.845       | 938           | 951         | 966          | rVV      | 34646539       | 98188675      | 30.25%          | 1.701%        |
| 24        | 5.931       | 966           | 978         | 992          | rVV3     | 28099604       | 76009312      | 23.41%          | 1.317%        |
| 25        | 6.002       | 992           | 1000        | 1023         | rVB4     | 6390488        | 15260418      | 4.70%           | 0.264%        |
| 26        | 6.131       | 1023          | 1040        | 1062         | rBV      | 30236653       | 85134614      | 26.23%          | 1.475%        |
| 27        | 6.246       | 1062          | 1076        | 1089         | rVV3     | 10160140       | 28747639      | 8.86%           | 0.498%        |
| 28        | 6.353       | 1089          | 1109        | 1114         | rVV2     | 59862745       | 179840754     | 55.40%          | 3.116%        |
| 29        | 6.385       | 1114          | 1119        | 1153         | rVV2     | 59972703       | 148834366     | 45.85%          | 2.579%        |
| 30        | 6.536       | 1153          | 1166        | 1196         | rVB2     | 10791420       | 28188184      | 8.68%           | 0.488%        |
| 31        | 6.748       | 1211          | 1232        | 1247         | rVB3     | 2494974        | 8324572       | 2.56%           | 0.144%        |
| 32        | 6.848       | 1247          | 1263        | 1271         | rBV2     | 22756178       | 57213476      | 17.62%          | 0.991%        |
| 33        | 6.902       | 1271          | 1280        | 1300         | rVV2     | 24340328       | 70232248      | 21.63%          | 1.217%        |
| 34        | 7.005       | 1300          | 1312        | 1323         | rVV2     | 8206267        | 23483427      | 7.23%           | 0.407%        |

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 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
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## Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : ON  
 Sampling : 3  
 Start Thrs: 0.001  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 3 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 0

Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M

Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

|    |        |      |      |      |      |          |           |        |        |
|----|--------|------|------|------|------|----------|-----------|--------|--------|
| 35 | 7.063  | 1323 | 1330 | 1342 | rVV3 | 5071454  | 12559886  | 3.87%  | 0.218% |
| 36 | 7.150  | 1342 | 1357 | 1376 | rVV2 | 32351362 | 104777904 | 32.28% | 1.816% |
| 37 | 7.291  | 1376 | 1401 | 1412 | rVV3 | 38218483 | 166969859 | 51.43% | 2.893% |
| 38 | 7.372  | 1412 | 1426 | 1448 | rVV  | 49800759 | 180147661 | 55.49% | 3.122% |
| 39 | 7.526  | 1448 | 1474 | 1521 | rVB2 | 45453119 | 192973211 | 59.44% | 3.344% |
| 40 | 7.742  | 1521 | 1541 | 1552 | rBV  | 20877483 | 65960742  | 20.32% | 1.143% |
| 41 | 7.816  | 1552 | 1564 | 1574 | rVV4 | 21007336 | 72010042  | 22.18% | 1.248% |
| 42 | 8.025  | 1624 | 1629 | 1645 | rVB3 | 6723704  | 11684769  | 3.60%  | 0.202% |
| 43 | 8.166  | 1654 | 1673 | 1682 | rBV2 | 41158168 | 112157635 | 34.55% | 1.943% |
| 44 | 8.221  | 1682 | 1690 | 1714 | rVB4 | 23924357 | 62151951  | 19.15% | 1.077% |
| 45 | 8.343  | 1714 | 1728 | 1739 | rBV2 | 4012021  | 9095089   | 2.80%  | 0.158% |
| 46 | 8.417  | 1739 | 1751 | 1764 | rVB2 | 6688942  | 14691064  | 4.53%  | 0.255% |
| 47 | 8.500  | 1764 | 1777 | 1787 | rBV3 | 7002396  | 17103577  | 5.27%  | 0.296% |
| 48 | 8.542  | 1787 | 1790 | 1809 | rVB  | 4129713  | 7766673   | 2.39%  | 0.135% |
| 49 | 8.844  | 1852 | 1884 | 1924 | rVB3 | 33979525 | 144027019 | 44.37% | 2.496% |
| 50 | 9.086  | 1924 | 1959 | 1969 | rBV2 | 31951447 | 117112667 | 36.08% | 2.029% |
| 51 | 9.156  | 1969 | 1981 | 2033 | rVB5 | 41522854 | 174581349 | 53.78% | 3.025% |
| 52 | 9.378  | 2033 | 2050 | 2067 | rBV4 | 9045944  | 26210100  | 8.07%  | 0.454% |
| 53 | 9.594  | 2092 | 2117 | 2118 | rBV5 | 3901674  | 8830498   | 2.72%  | 0.153% |
| 54 | 9.690  | 2118 | 2147 | 2173 | rVB  | 51265618 | 221968107 | 68.38% | 3.846% |
| 55 | 9.857  | 2173 | 2199 | 2212 | rBV2 | 58552238 | 214502807 | 66.08% | 3.717% |
| 56 | 9.947  | 2212 | 2227 | 2240 | rBV  | 26797309 | 72820080  | 22.43% | 1.262% |
| 57 | 9.996  | 2240 | 2242 | 2254 | rVB4 | 4012434  | 6037030   | 1.86%  | 0.105% |
| 58 | 10.079 | 2254 | 2268 | 2278 | rBV2 | 18610863 | 47387730  | 14.60% | 0.821% |
| 59 | 10.134 | 2278 | 2285 | 2300 | rVB2 | 11576415 | 25643390  | 7.90%  | 0.444% |
| 60 | 10.224 | 2300 | 2313 | 2327 | rBV2 | 7798186  | 19164627  | 5.90%  | 0.332% |
| 61 | 10.317 | 2327 | 2342 | 2354 | rBV2 | 17112589 | 47845608  | 14.74% | 0.829% |
| 62 | 10.504 | 2384 | 2400 | 2411 | rBV3 | 8560120  | 21437176  | 6.60%  | 0.371% |
| 63 | 10.555 | 2411 | 2416 | 2427 | rVB  | 3315767  | 5959758   | 1.84%  | 0.103% |
| 64 | 10.651 | 2427 | 2446 | 2470 | rVB  | 26656839 | 81815975  | 25.20% | 1.418% |
| 65 | 10.793 | 2470 | 2490 | 2502 | rBV3 | 4160244  | 11918716  | 3.67%  | 0.207% |
| 66 | 10.857 | 2502 | 2510 | 2517 | rVV4 | 2396416  | 5166880   | 1.59%  | 0.090% |
| 67 | 10.909 | 2517 | 2526 | 2534 | rVV3 | 3073804  | 7203963   | 2.22%  | 0.125% |
| 68 | 11.092 | 2568 | 2583 | 2602 | rVB4 | 11495915 | 30428045  | 9.37%  | 0.527% |
| 69 | 11.314 | 2633 | 2652 | 2661 | rBV3 | 4474744  | 11709386  | 3.61%  | 0.203% |
| 70 | 11.359 | 2661 | 2666 | 2676 | rVV  | 2930720  | 5979529   | 1.84%  | 0.104% |
| 71 | 11.516 | 2696 | 2715 | 2733 | rVB5 | 1324420  | 3764965   | 1.16%  | 0.065% |

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ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV3

## Integration Parameters: RTEINT.P

Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 3 Min Area: 3 % of largest Peak  
Start Thrs: 0.001 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 0

Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

|    |        |      |      |      |      |         |          |       |        |
|----|--------|------|------|------|------|---------|----------|-------|--------|
| 72 | 11.635 | 2733 | 2752 | 2766 | rBV3 | 5933100 | 15090842 | 4.65% | 0.261% |
| 73 | 11.825 | 2790 | 2811 | 2830 | rBV5 | 3045431 | 8223791  | 2.53% | 0.142% |
| 74 | 12.015 | 2854 | 2870 | 2879 | rBV2 | 2668784 | 6955322  | 2.14% | 0.121% |
| 75 | 12.082 | 2879 | 2891 | 2910 | rVV  | 5480081 | 15161002 | 4.67% | 0.263% |
| 76 | 12.198 | 2910 | 2927 | 2928 | rVV2 | 2790750 | 4940528  | 1.52% | 0.086% |
| 77 | 12.227 | 2928 | 2936 | 2960 | rVB2 | 3727141 | 10699208 | 3.30% | 0.185% |
| 78 | 12.349 | 2960 | 2974 | 2987 | rVB5 | 1521518 | 3803345  | 1.17% | 0.066% |
| 79 | 12.706 | 3070 | 3085 | 3105 | rVV  | 8175965 | 20239835 | 6.23% | 0.351% |
| 80 | 12.873 | 3126 | 3137 | 3151 | rVV3 | 1375759 | 3591165  | 1.11% | 0.062% |
| 81 | 13.085 | 3186 | 3203 | 3220 | rVB7 | 2711144 | 8500320  | 2.62% | 0.147% |
| 82 | 13.310 | 3247 | 3273 | 3291 | rVB3 | 2162890 | 6528505  | 2.01% | 0.113% |
| 83 | 13.565 | 3343 | 3352 | 3364 | rVV2 | 1537402 | 3830074  | 1.18% | 0.066% |
| 84 | 13.783 | 3395 | 3420 | 3441 | rBV2 | 1671250 | 4997159  | 1.54% | 0.087% |
| 85 | 14.404 | 3595 | 3613 | 3630 | rBV2 | 5309264 | 12801789 | 3.94% | 0.222% |

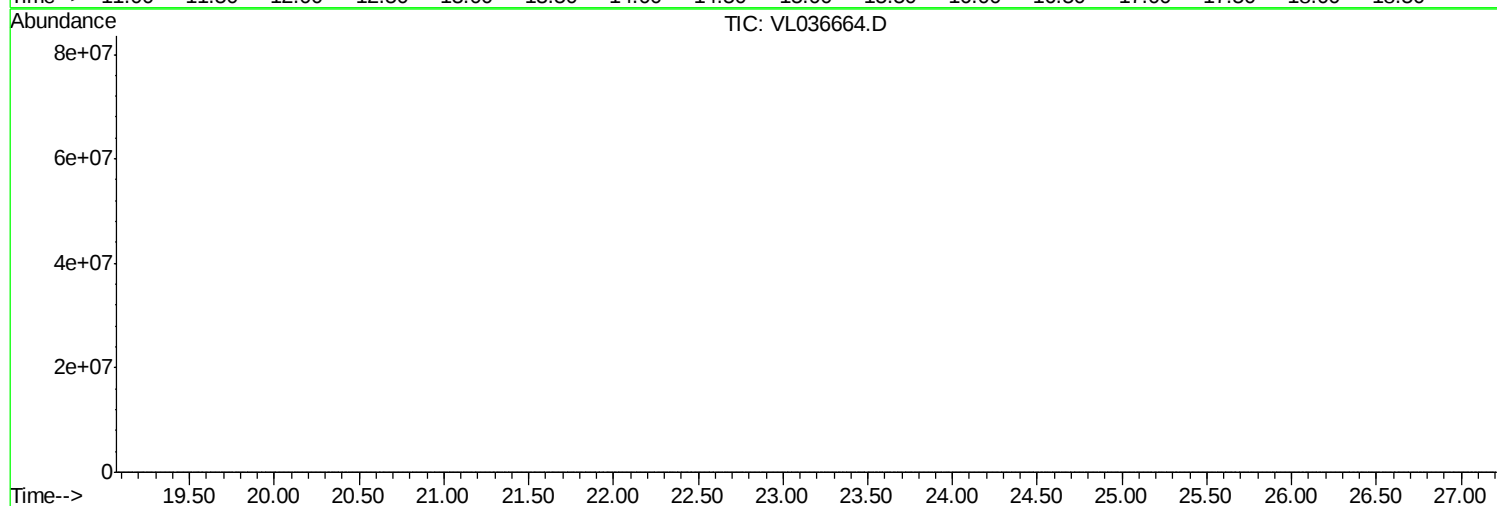
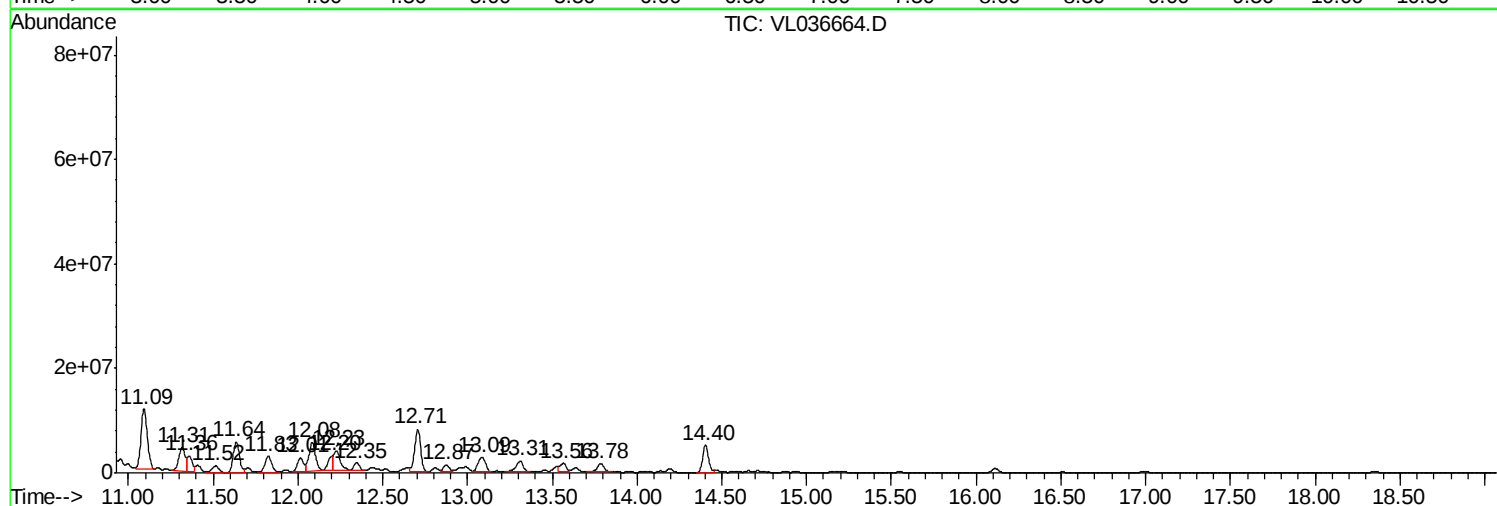
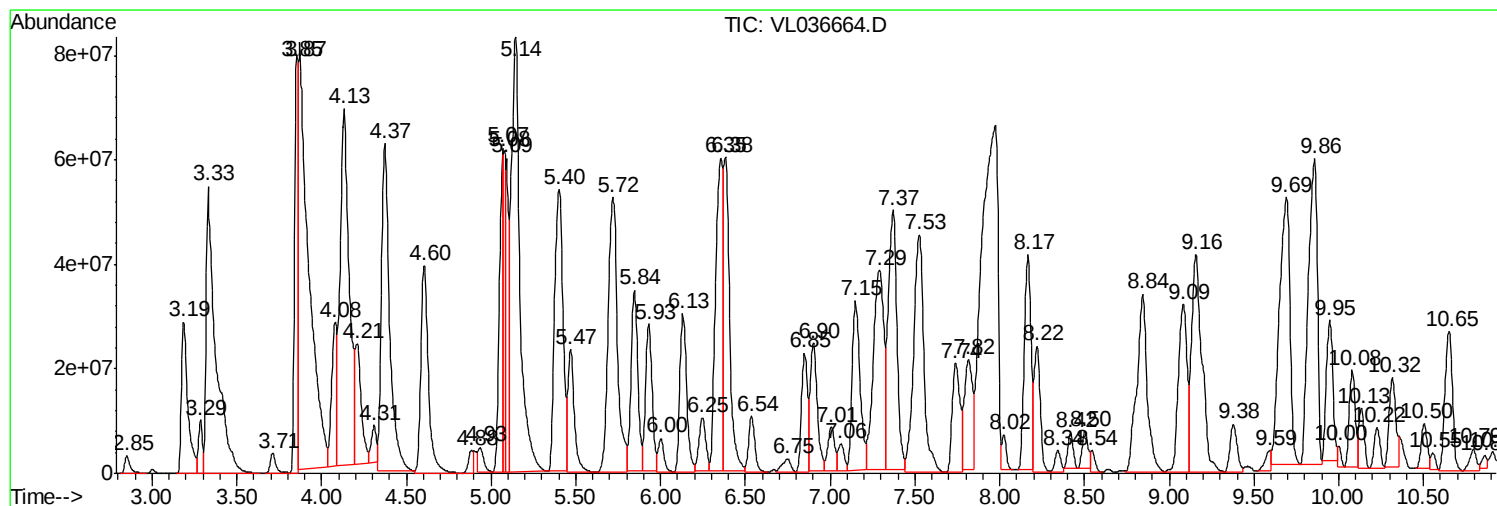
Sum of corrected areas: 5771185227

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040221\  
Data File : VL036664.D  
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ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampled :  
SV3

Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

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



Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040221\  
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Sample : M1834-03 1200X  
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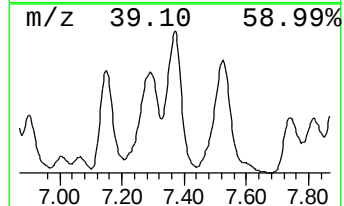
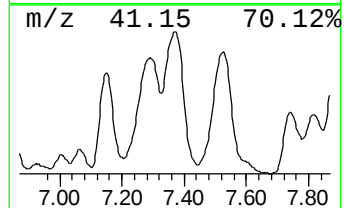
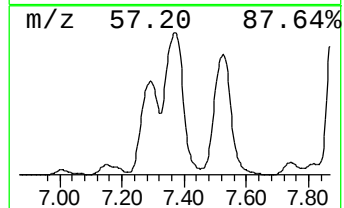
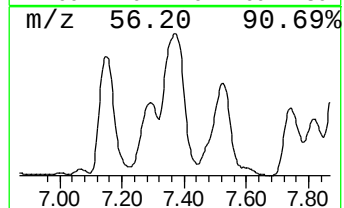
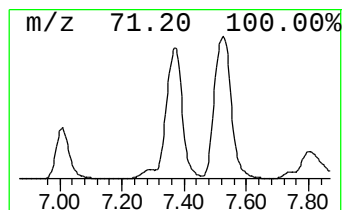
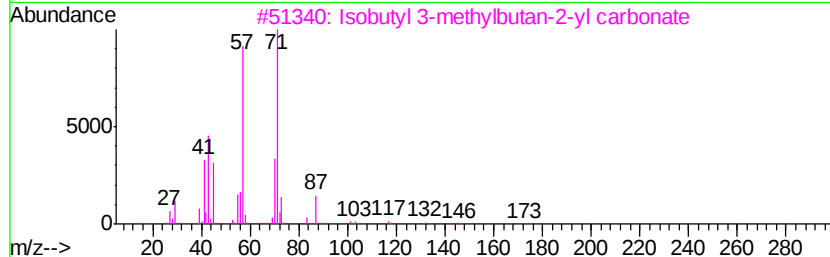
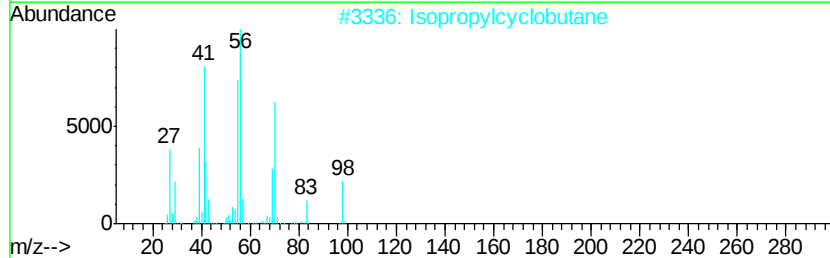
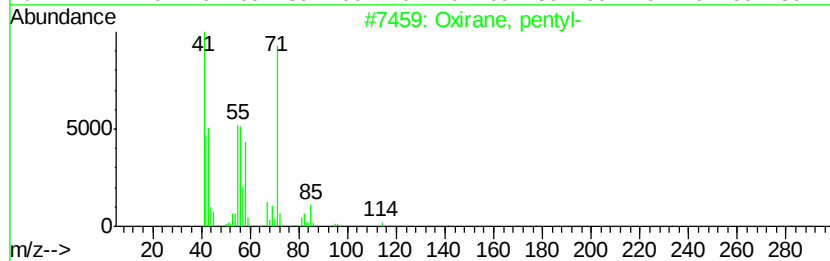
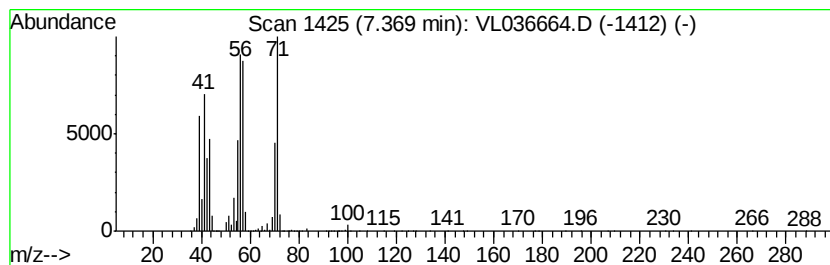
Instrument :  
MSVOA\_L  
ClientSampleId :  
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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

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

\*\*\*\*\*  
Peak Number 1 unknown7.37 Concentration Rank 8

| R.T.    | EstConc                             | Area         | Relative to ISTD    | R.T.      |
|---------|-------------------------------------|--------------|---------------------|-----------|
| 7.37    | 17.19 ppbv                          | 180148000    | 1,4-Difluorobenzene | 7.18      |
| Hit# of | 5                                   | Tentative ID | MW MolForm          | CAS# Qual |
| 1       | Oxirane, pentyl-                    | 114 C7H14O   | 005063-65-0         | 37        |
| 2       | Isopropylcyclobutane                | 98 C7H14     | 000872-56-0         | 32        |
| 3       | Isobutyl 3-methylbutan-2-yl carb... | 188 C10H20O3 | 1000372-77-0        | 32        |
| 4       | 1-Pentene, 2-methyl-                | 84 C6H12     | 000763-29-1         | 32        |
| 5       | Cyclopentanol, 3-methyl-            | 100 C6H12O   | 018729-48-1         | 25        |



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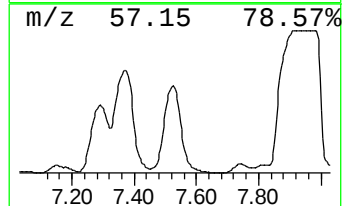
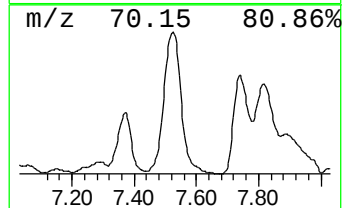
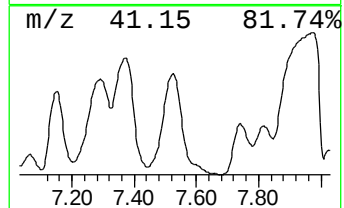
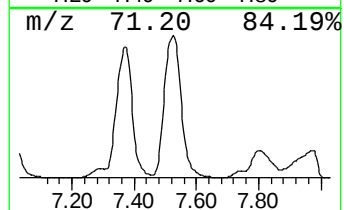
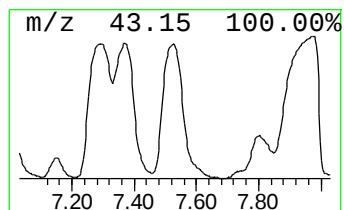
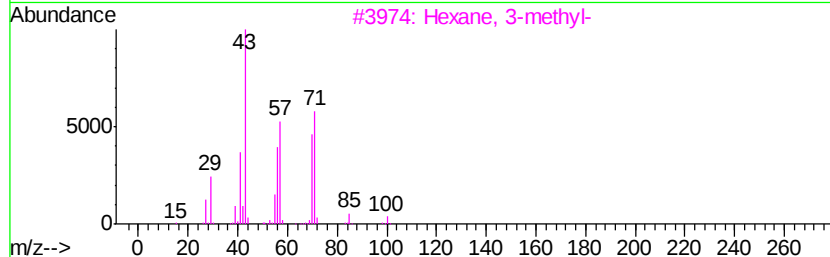
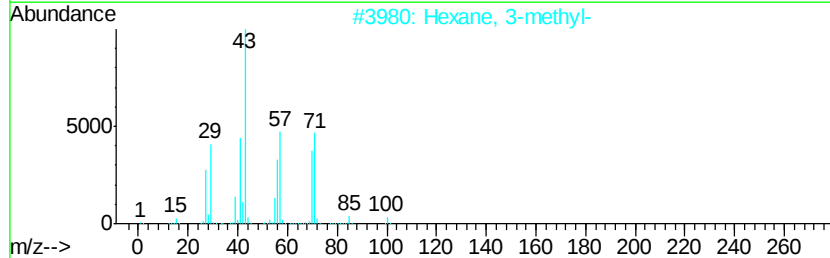
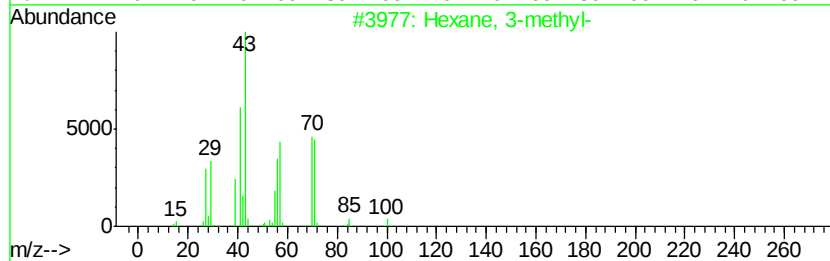
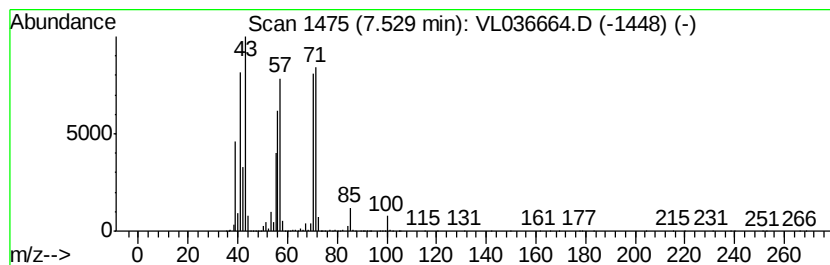
Instrument :  
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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

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

\*\*\*\*\*  
Peak Number 2 Hexane, 3-methyl- Concentration Rank 7

| R.T.    | EstConc                  | Area         | Relative to ISTD    | R.T.      |
|---------|--------------------------|--------------|---------------------|-----------|
| 7.53    | 18.42 ppbv               | 192973000    | 1,4-Difluorobenzene | 7.18      |
| Hit# of | 5                        | Tentative ID | MW MolForm          | CAS# Qual |
| 1       | Hexane, 3-methyl-        | 100 C7H16    | 000589-34-4         | 81        |
| 2       | Hexane, 3-methyl-        | 100 C7H16    | 000589-34-4         | 72        |
| 3       | Hexane, 3-methyl-        | 100 C7H16    | 000589-34-4         | 72        |
| 4       | Hexane, 3,3,4-trimethyl- | 128 C9H20    | 016747-31-2         | 50        |
| 5       | Hexane, 3,3,4-trimethyl- | 128 C9H20    | 016747-31-2         | 50        |



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SV3

Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

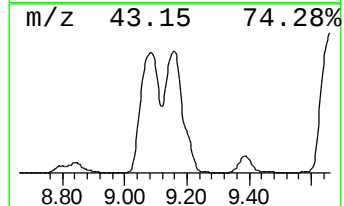
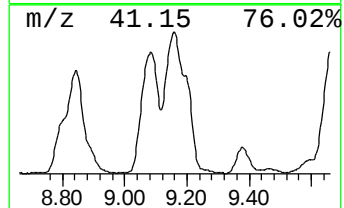
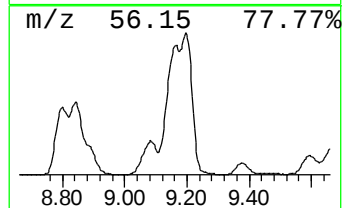
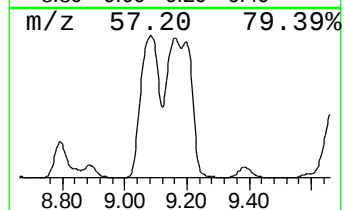
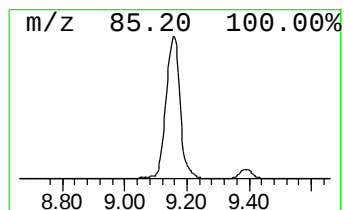
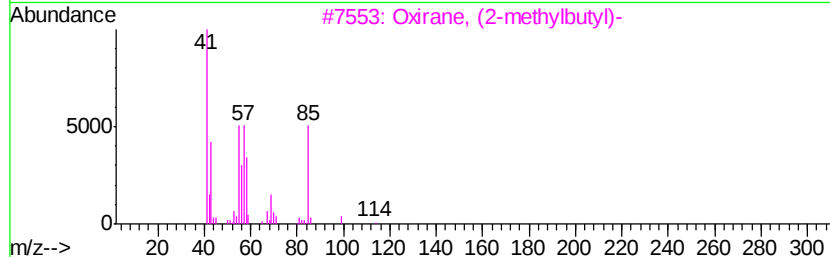
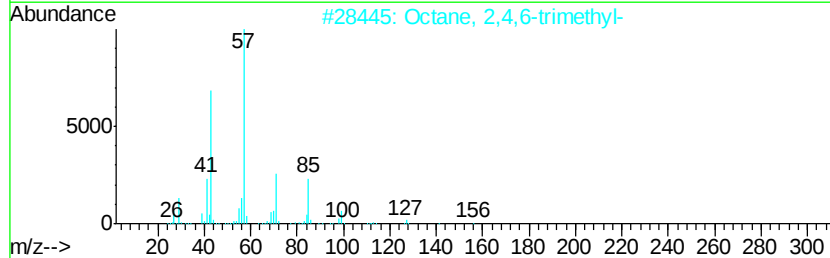
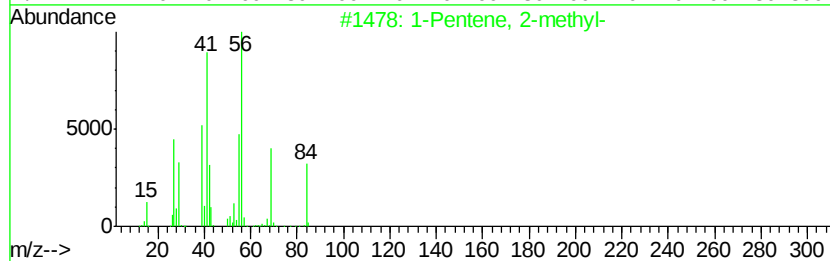
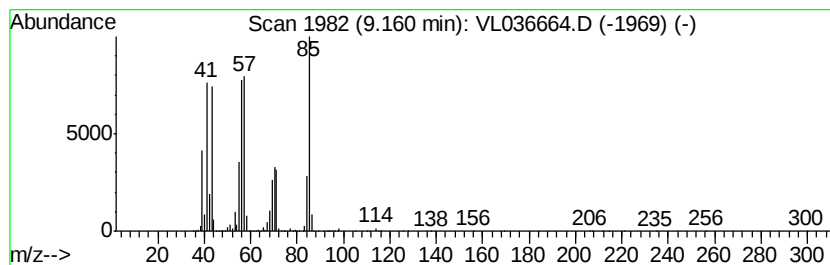
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TIC Integration Parameters: LSCINT.P

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Peak Number 3 Hexane, 2,4-dimethyl- Concentration Rank 10

| R.T. | EstConc    | Area      | Relative to ISTD    | R.T. |
|------|------------|-----------|---------------------|------|
| 9.16 | 16.66 ppbv | 174581000 | 1,4-Difluorobenzene | 7.18 |

| Hit# | of | Tentative ID                   | MW  | MolForm | CAS#        | Qual |
|------|----|--------------------------------|-----|---------|-------------|------|
| 1    | 5  | 1-Pentene, 2-methyl-           | 84  | C6H12   | 000763-29-1 | 50   |
| 2    |    | Octane, 2,4,6-trimethyl-       | 156 | C11H24  | 062016-37-9 | 50   |
| 3    |    | Oxirane, (2-methylbutyl)-      | 114 | C7H14O  | 053229-42-8 | 50   |
| 4    |    | Hexane, 2,4-dimethyl-          | 114 | C8H18   | 000589-43-5 | 47   |
| 5    |    | Hexane, 1-(hexyloxy)-2-methyl- | 200 | C13H28O | 074421-17-3 | 43   |



Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040221\  
Data File : VL036664.D  
Acq On : 3 Apr 2021 3:22  
Operator : SY/AP  
Sample : M1834-03 1200X  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

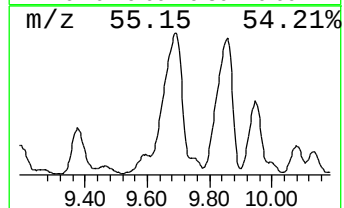
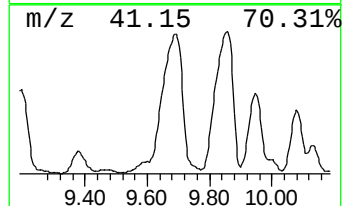
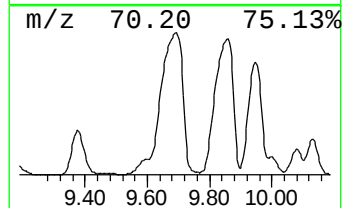
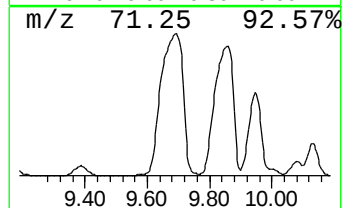
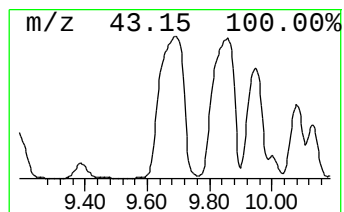
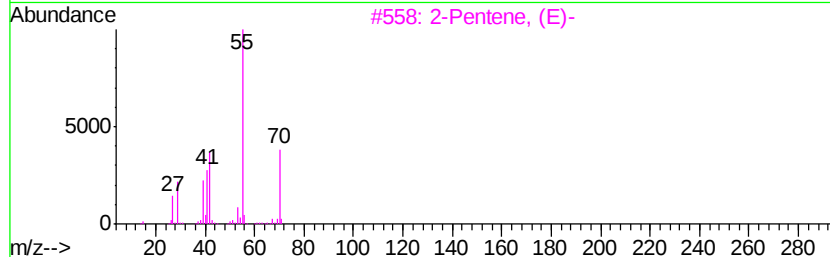
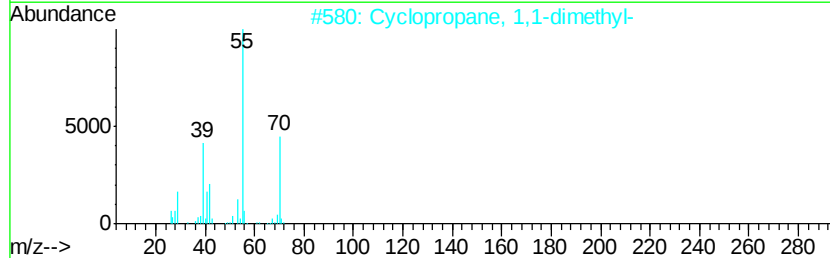
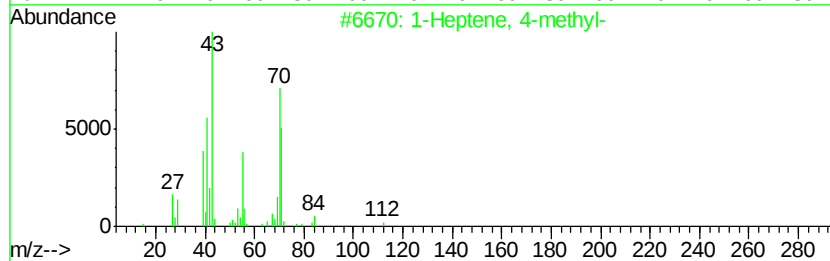
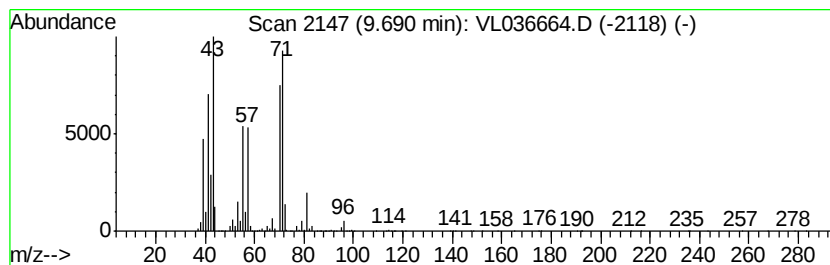
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV3

Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

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

\*\*\*\*\*  
Peak Number 4 1-Heptene, 4-methyl- Concentration Rank 1

| R.T.    | EstConc                     | Area         | Relative to ISTD | R.T.      |
|---------|-----------------------------|--------------|------------------|-----------|
| 9.69    | 146.41 ppbv                 | 221968000    | Chlorobenzene-d5 | 12.08     |
| Hit# of | 5                           | Tentative ID | MW MolForm       | CAS# Qual |
| 1       | 1-Heptene, 4-methyl-        | 112 C8H16    | 013151-05-8      | 53        |
| 2       | Cyclopropane, 1,1-dimethyl- | 70 C5H10     | 001630-94-0      | 47        |
| 3       | 2-Pentene, (E)-             | 70 C5H10     | 000646-04-8      | 43        |
| 4       | 2-Pentene                   | 70 C5H10     | 000109-68-2      | 43        |
| 5       | 2,4,4-Trimethyl-1-hexene    | 126 C9H18    | 051174-12-0      | 42        |



Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040221\  
Data File : VL036664.D  
Acq On : 3 Apr 2021 3:22  
Operator : SY/AP  
Sample : M1834-03 1200X  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampled :  
SV3

Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

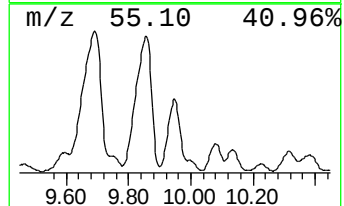
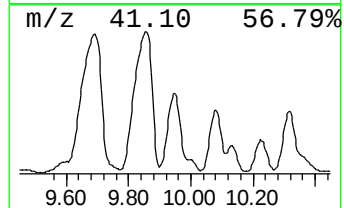
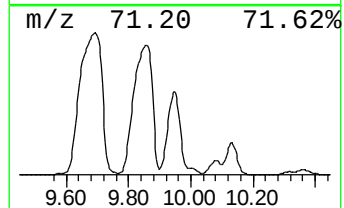
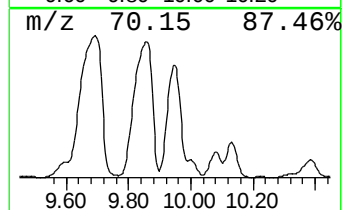
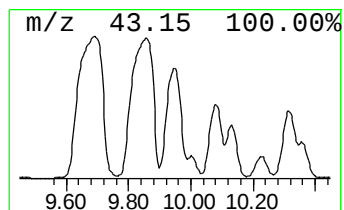
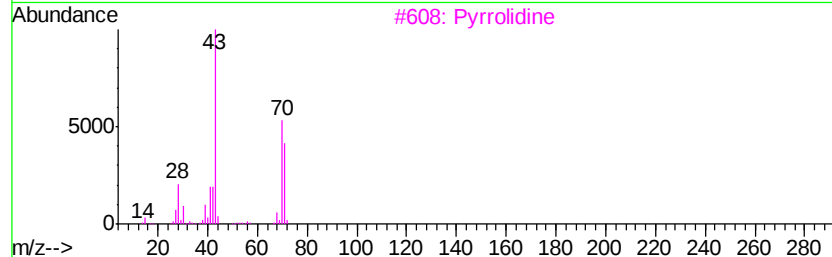
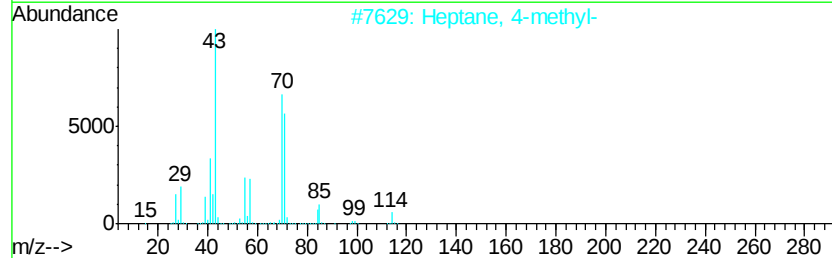
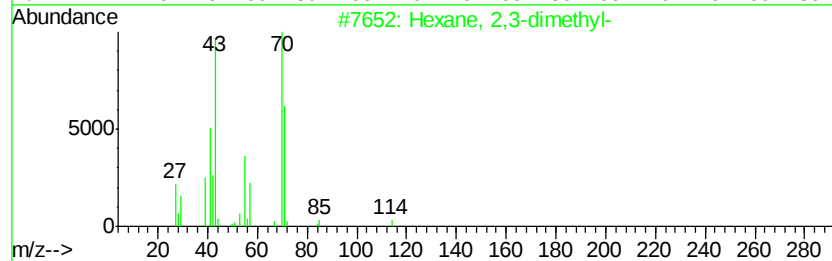
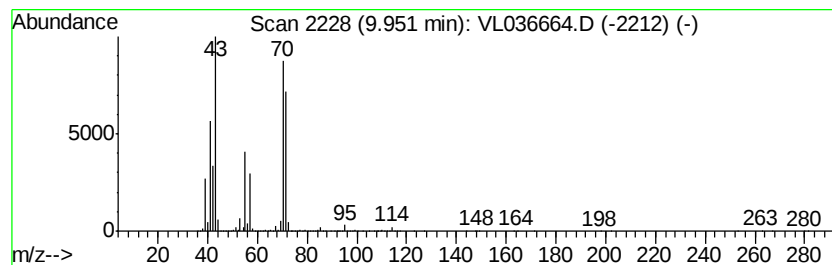
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 5 Hexane, 2,3-dimethyl- Concentration Rank 3

| R.T. | EstConc    | Area     | Relative to ISTD | R.T.  |
|------|------------|----------|------------------|-------|
| 9.95 | 48.03 ppbv | 72820100 | Chlorobenzene-d5 | 12.08 |

| Hit# of | 5                     | Tentative ID | MW  | MolForm | CAS#        | Qual |
|---------|-----------------------|--------------|-----|---------|-------------|------|
| 1       | Hexane, 2,3-dimethyl- |              | 114 | C8H18   | 000584-94-1 | 78   |
| 2       | Heptane, 4-methyl-    |              | 114 | C8H18   | 000589-53-7 | 78   |
| 3       | Pyrrolidine           |              | 71  | C4H9N   | 000123-75-1 | 72   |
| 4       | Hexane, 2,3-dimethyl- |              | 114 | C8H18   | 000584-94-1 | 72   |
| 5       | Hexane, 2,3-dimethyl- |              | 114 | C8H18   | 000584-94-1 | 72   |



Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040221\  
Data File : VL036664.D  
Acq On : 3 Apr 2021 3:22  
Operator : SY/AP  
Sample : M1834-03 1200X  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

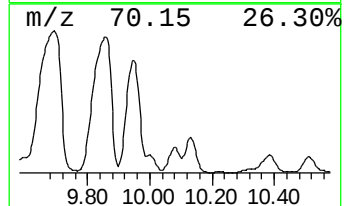
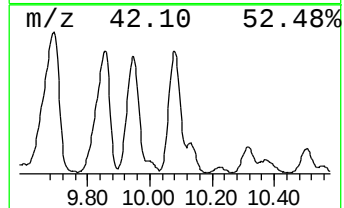
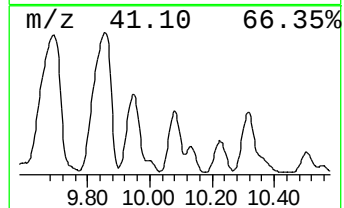
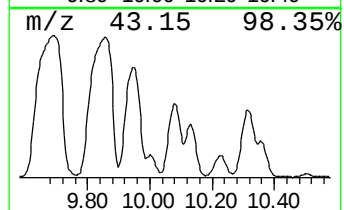
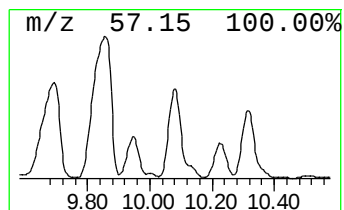
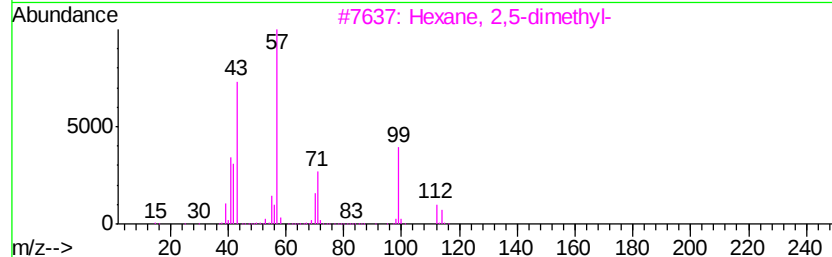
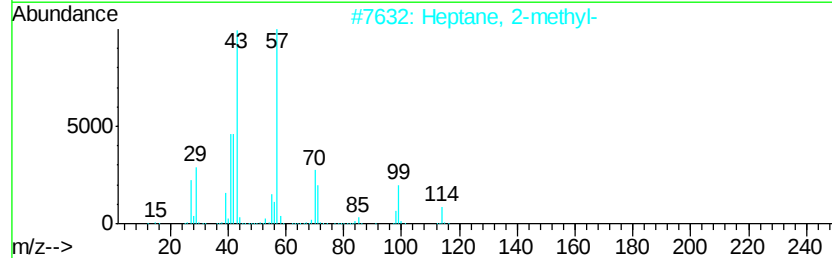
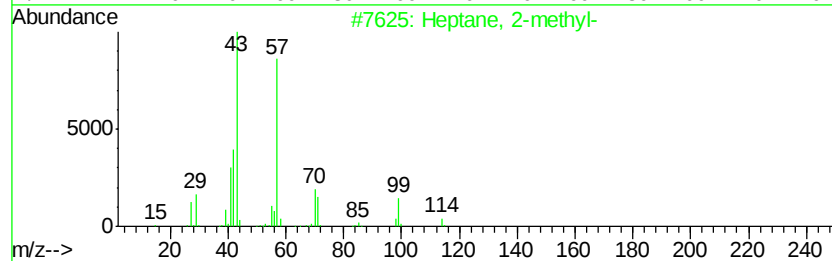
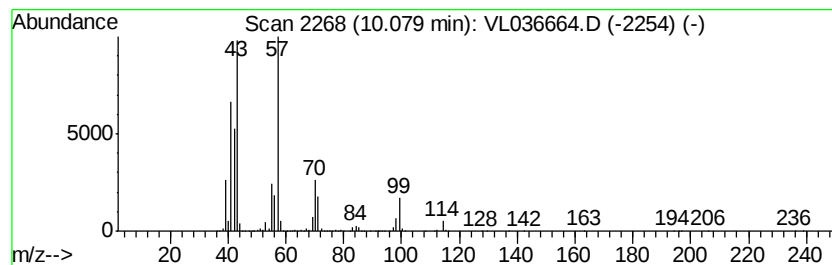
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV3

Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

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

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Peak Number 6 Heptane, 2-methyl- Concentration Rank 5

| R.T.      | EstConc               | Area     | Relative to ISTD | R.T.        |      |
|-----------|-----------------------|----------|------------------|-------------|------|
| 10.08     | 31.26 ppbv            | 47387700 | Chlorobenzene-d5 | 12.08       |      |
| Hit# of 5 | Tentative ID          | MW       | MolForm          | CAS#        | Qual |
| 1         | Heptane, 2-methyl-    | 114      | C8H18            | 000592-27-8 | 91   |
| 2         | Heptane, 2-methyl-    | 114      | C8H18            | 000592-27-8 | 90   |
| 3         | Hexane, 2,5-dimethyl- | 114      | C8H18            | 000592-13-2 | 87   |
| 4         | Heptane, 2-methyl-    | 114      | C8H18            | 000592-27-8 | 83   |
| 5         | 2-Piperidinone        | 99       | C5H9NO           | 000675-20-7 | 50   |



Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040221\  
Data File : VL036664.D  
Acq On : 3 Apr 2021 3:22  
Operator : SY/AP  
Sample : M1834-03 1200X  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampled :  
SV3

Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

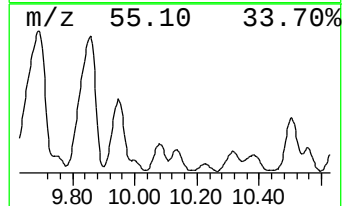
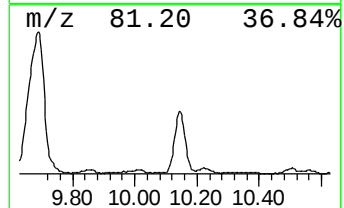
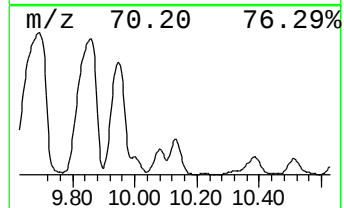
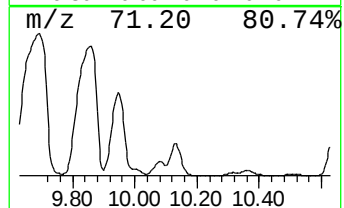
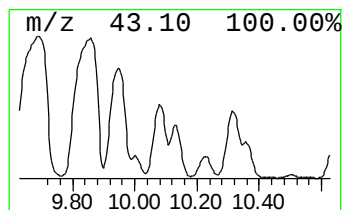
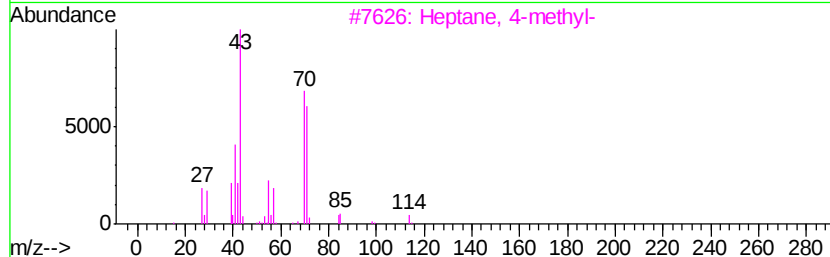
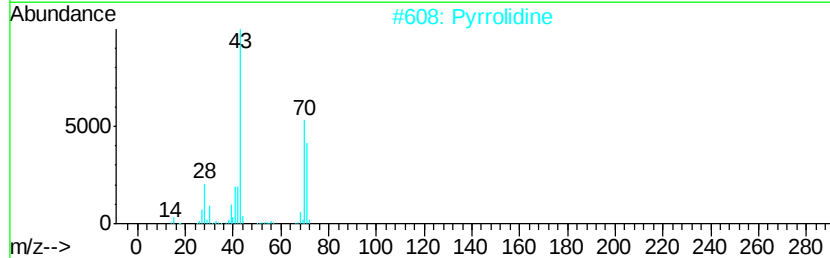
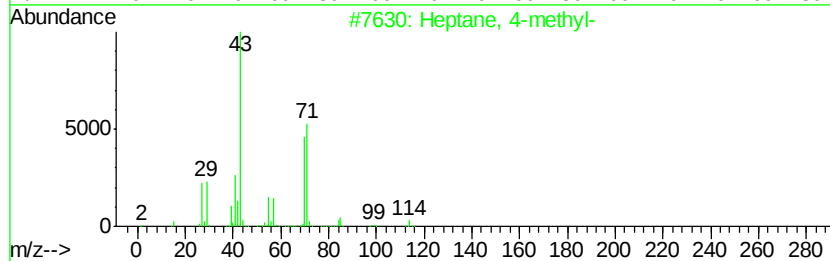
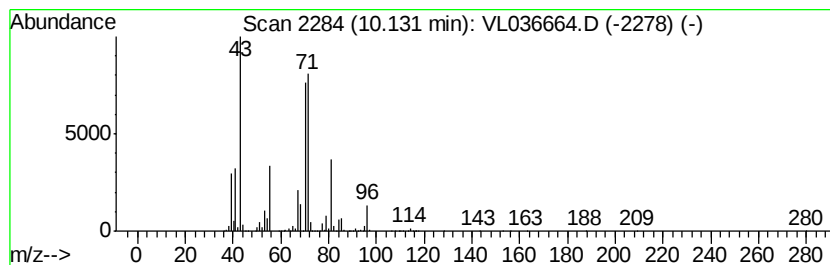
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 7 Heptane, 4-methyl- Concentration Rank 9

| R.T.  | EstConc    | Area     | Relative to ISTD | R.T.  |
|-------|------------|----------|------------------|-------|
| 10.13 | 16.91 ppbv | 25643400 | Chlorobenzene-d5 | 12.08 |

| Hit# | of | Tentative ID                   | MW  | MolForm  | CAS#        | Qual |
|------|----|--------------------------------|-----|----------|-------------|------|
| 1    | 5  | Heptane, 4-methyl-             | 114 | C8H18    | 000589-53-7 | 64   |
| 2    |    | Pyrrolidine                    | 71  | C4H9N    | 000123-75-1 | 59   |
| 3    |    | Heptane, 4-methyl-             | 114 | C8H18    | 000589-53-7 | 59   |
| 4    |    | 3,4-Diethyl hexane             | 142 | C10H22   | 019398-77-7 | 59   |
| 5    |    | Hexane, 1,1-dichloro-3-methyl- | 168 | C7H14Cl2 | 016703-32-5 | 50   |



Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040221\  
Data File : VL036664.D  
Acq On : 3 Apr 2021 3:22  
Operator : SY/AP  
Sample : M1834-03 1200X  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV3

Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

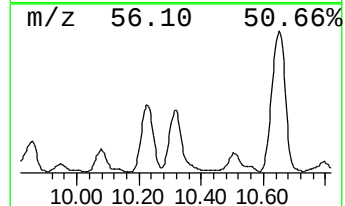
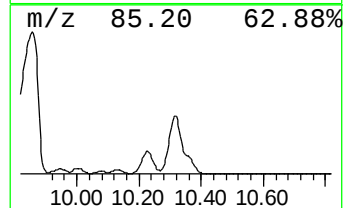
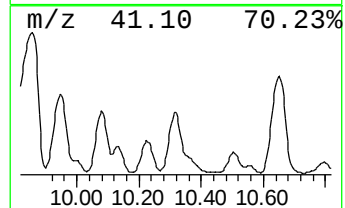
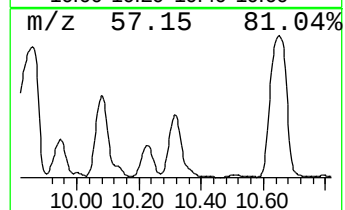
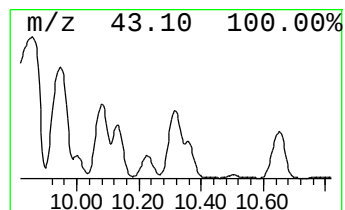
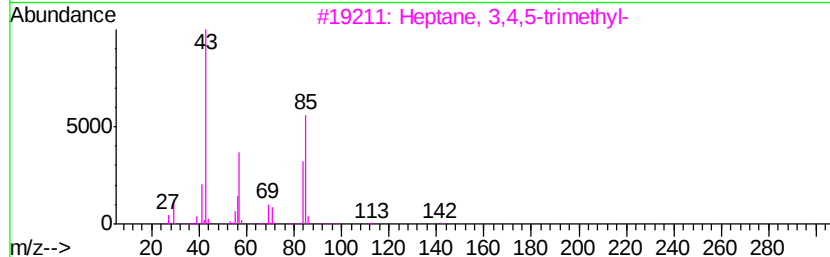
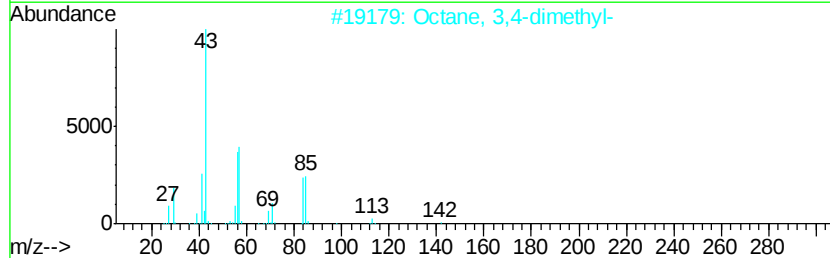
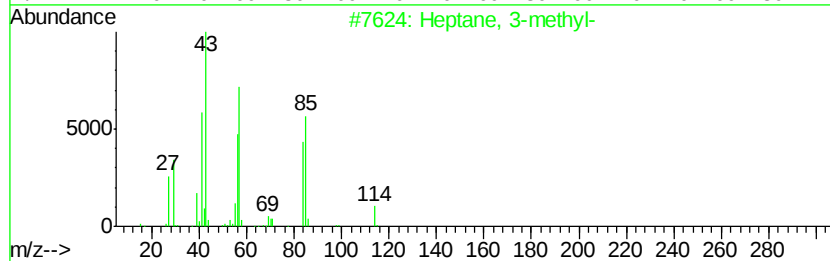
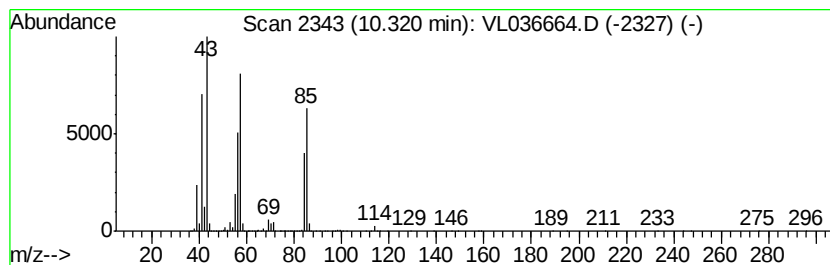
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 8 Heptane, 3-methyl- Concentration Rank 4

| R.T.  | EstConc    | Area     | Relative to ISTD | R.T.  |
|-------|------------|----------|------------------|-------|
| 10.32 | 31.56 ppbv | 47845600 | Chlorobenzene-d5 | 12.08 |

| Hit# of | 5                         | Tentative ID | MW     | MolForm     | CAS# | Qual |
|---------|---------------------------|--------------|--------|-------------|------|------|
| 1       | Heptane, 3-methyl-        | 114          | C8H18  | 000589-81-1 | 90   |      |
| 2       | Octane, 3,4-dimethyl-     | 142          | C10H22 | 015869-92-8 | 72   |      |
| 3       | Heptane, 3,4,5-trimethyl- | 142          | C10H22 | 020278-89-1 | 68   |      |
| 4       | Hexane, 2,3,3-trimethyl-  | 128          | C9H20  | 016747-28-7 | 64   |      |
| 5       | Heptane, 3-methyl-        | 114          | C8H18  | 000589-81-1 | 64   |      |



Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040221\  
Data File : VL036664.D  
Acq On : 3 Apr 2021 3:22  
Operator : SY/AP  
Sample : M1834-03 1200X  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

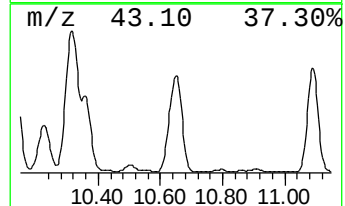
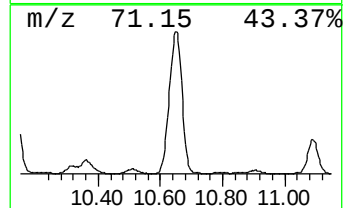
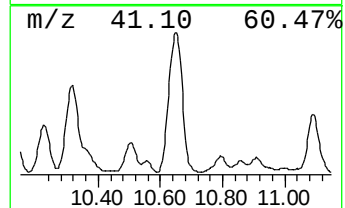
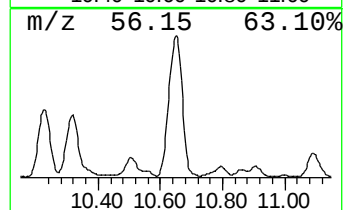
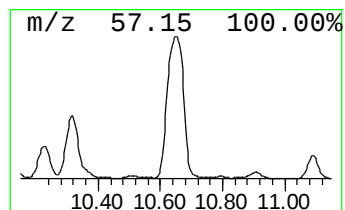
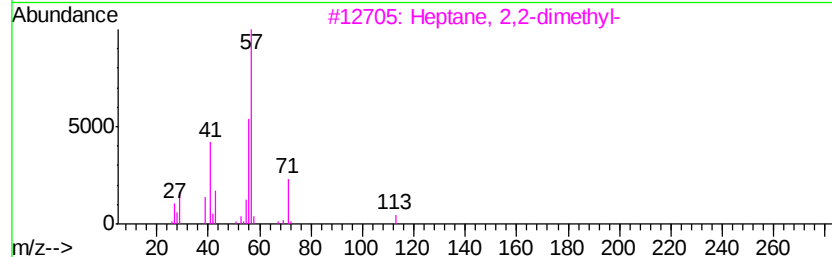
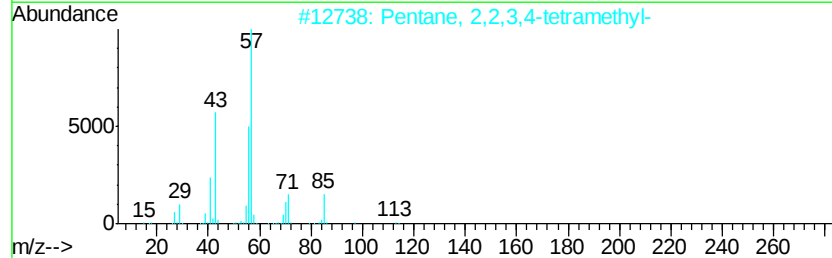
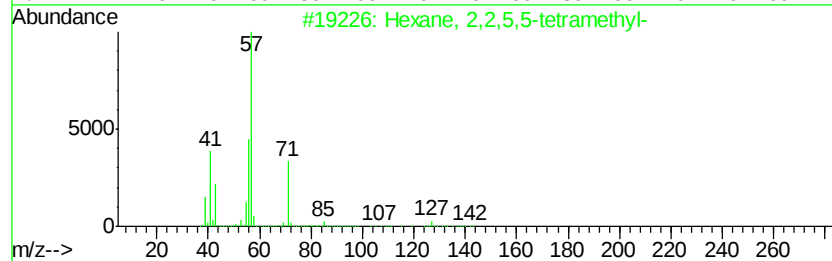
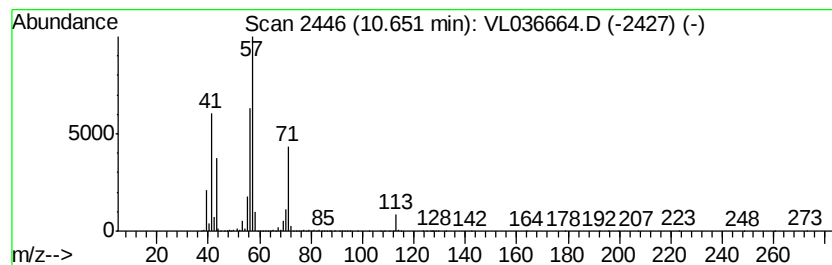
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV3

Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

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

\*\*\*\*\*  
Peak Number 9 Hexane, 2,2,5,5-tetramethyl- Concentration Rank 2

| R.T.      | EstConc                        | Area     | Relative to ISTD | R.T.        |      |
|-----------|--------------------------------|----------|------------------|-------------|------|
| 10.65     | 53.96 ppbv                     | 81816000 | Chlorobenzene-d5 | 12.08       |      |
| Hit# of 5 | Tentative ID                   | MW       | MolForm          | CAS#        | Qual |
| 1         | Hexane, 2,2,5,5-tetramethyl-   | 142      | C10H22           | 001071-81-4 | 64   |
| 2         | Pentane, 2,2,3,4-tetramethyl-  | 128      | C9H20            | 001186-53-4 | 53   |
| 3         | Heptane, 2,2-dimethyl-         | 128      | C9H20            | 001071-26-7 | 53   |
| 4         | Hexane, 2,2,5-trimethyl-       | 128      | C9H20            | 003522-94-9 | 50   |
| 5         | Pentane, 3-ethyl-2,2-dimethyl- | 128      | C9H20            | 016747-32-3 | 47   |



Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040221\  
Data File : VL036664.D  
Acq On : 3 Apr 2021 3:22  
Operator : SY/AP  
Sample : M1834-03 1200X  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV3

Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

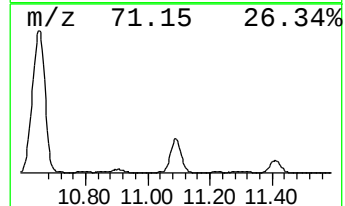
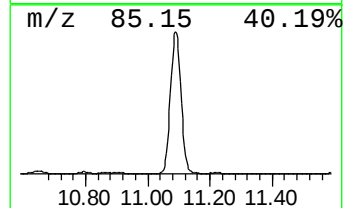
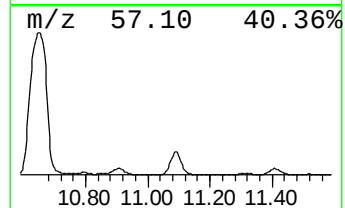
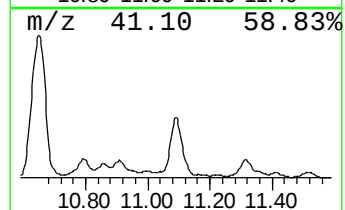
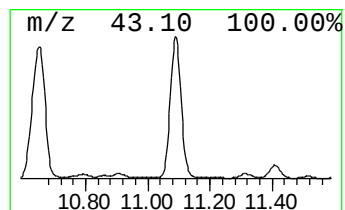
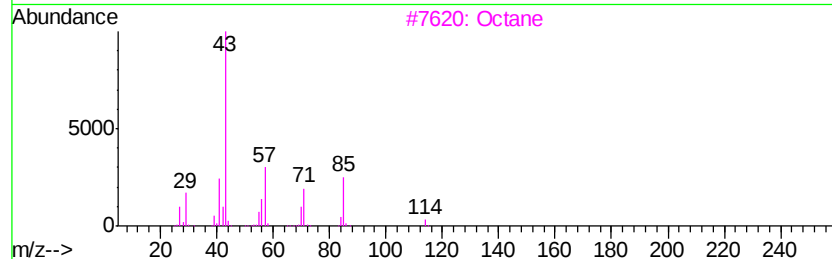
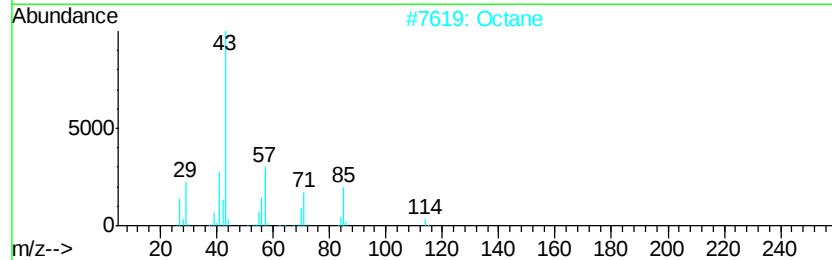
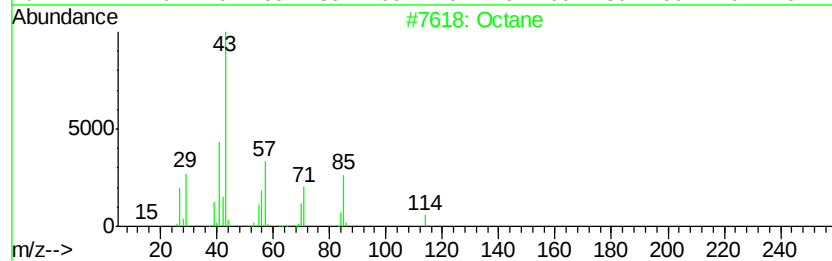
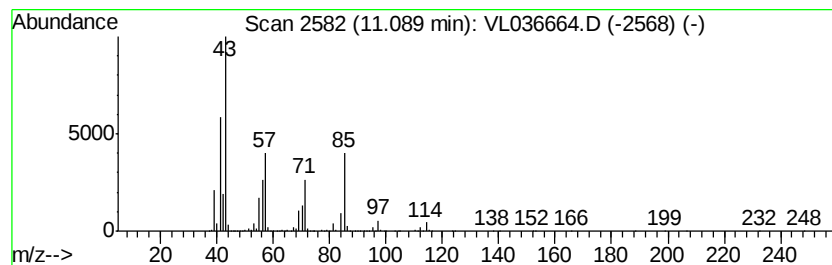
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 10 Octane Concentration Rank 6

| R.T.  | EstConc    | Area     | Relative to ISTD | R.T.  |
|-------|------------|----------|------------------|-------|
| 11.09 | 20.07 ppbv | 30428000 | Chlorobenzene-d5 | 12.08 |

| Hit# of | 5                       | Tentative ID | MW  | MolForm  | CAS#        | Qual |
|---------|-------------------------|--------------|-----|----------|-------------|------|
| 1       | Octane                  |              | 114 | C8H18    | 000111-65-9 | 83   |
| 2       | Octane                  |              | 114 | C8H18    | 000111-65-9 | 64   |
| 3       | Octane                  |              | 114 | C8H18    | 000111-65-9 | 64   |
| 4       | Heptane, 2,4-dimethyl-  |              | 128 | C9H20    | 002213-23-2 | 59   |
| 5       | Hydroxylamine, O-decyl- |              | 173 | C10H23NO | 029812-79-1 | 53   |



Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL040221\  
 Data File : VL036664.D  
 Acq On : 3 Apr 2021 3:22  
 Operator : SY/AP  
 Sample : M1834-03 1200X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV3

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL032521AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 25 09:42:40 2021

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

| TIC Top Hit name     | RT    | EstConc | Units | Response  | --Internal Standard-- |       |           |      |
|----------------------|-------|---------|-------|-----------|-----------------------|-------|-----------|------|
|                      |       |         |       |           | #                     | RT    | Resp      | Conc |
| unknown7.37          | 7.37  | 17.2    | ppbv  | 180148000 | 2                     | 7.18  | 104778000 | 10.0 |
| Hexane, 3-methyl-    | 7.53  | 18.4    | ppbv  | 192973000 | 2                     | 7.18  | 104778000 | 10.0 |
| Hexane, 2,4-dimet... | 9.16  | 16.7    | ppbv  | 174581000 | 2                     | 7.18  | 104778000 | 10.0 |
| 1-Heptene, 4-methyl- | 9.69  | 146.4   | ppbv  | 221968000 | 3                     | 12.08 | 15161000  | 10.0 |
| Hexane, 2,3-dimet... | 9.95  | 48.0    | ppbv  | 72820100  | 3                     | 12.08 | 15161000  | 10.0 |
| Heptane, 2-methyl-   | 10.08 | 31.3    | ppbv  | 47387700  | 3                     | 12.08 | 15161000  | 10.0 |
| Heptane, 4-methyl-   | 10.13 | 16.9    | ppbv  | 25643400  | 3                     | 12.08 | 15161000  | 10.0 |
| Heptane, 3-methyl-   | 10.32 | 31.6    | ppbv  | 47845600  | 3                     | 12.08 | 15161000  | 10.0 |
| Hexane, 2,2,5,5-t... | 10.65 | 54.0    | ppbv  | 81816000  | 3                     | 12.08 | 15161000  | 10.0 |
| Octane               | 11.09 | 20.1    | ppbv  | 30428000  | 3                     | 12.08 | 15161000  | 10.0 |