

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_F\Data\VF012319\  
 Data File : VF061490.D  
 Acq On : 23 Jan 2019 18:41  
 Operator : VA/AP  
 Sample : K1223-08  
 Misc : 5.38g/5mL/MSVOA-F/SOIL  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 TS-T

## Integration Parameters: RTEINT.P

Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.2  
 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: 5

Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F011519S.M  
 Title : SW846 8260

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         | 1.067       | 40            | 44          | 48           | rBV2     | 7464           | 18172         | 2.54%           | 0.406%        |
| 2         | 2.172       | 151           | 156         | 159          | rBV5     | 8151           | 19097         | 2.67%           | 0.427%        |
| 3         | 2.231       | 159           | 162         | 168          | rVV      | 24417          | 64702         | 9.04%           | 1.446%        |
| 4         | 3.059       | 245           | 246         | 253          | rVB2     | 5411           | 9942          | 1.39%           | 0.222%        |
| 5         | 4.016       | 337           | 343         | 346          | rBV2     | 2804           | 10130         | 1.42%           | 0.226%        |
| 6         | 4.115       | 346           | 353         | 362          | rVV      | 110116         | 349843        | 48.90%          | 7.817%        |
| 7         | 4.332       | 365           | 375         | 388          | rVB      | 45585          | 157570        | 22.02%          | 3.521%        |
| 8         | 4.855       | 420           | 428         | 442          | rBV2     | 199275         | 715452        | 100.00%         | 15.987%       |
| 9         | 5.594       | 496           | 503         | 513          | rBV      | 245190         | 644674        | 90.11%          | 14.406%       |
| 10        | 6.265       | 563           | 571         | 579          | rBV4     | 4475           | 14015         | 1.96%           | 0.313%        |
| 11        | 6.433       | 581           | 588         | 594          | rBV2     | 7382           | 30023         | 4.20%           | 0.671%        |
| 12        | 6.887       | 630           | 634         | 641          | rVB2     | 7788           | 19789         | 2.77%           | 0.442%        |
| 13        | 7.133       | 654           | 659         | 666          | rBV3     | 4860           | 13648         | 1.91%           | 0.305%        |
| 14        | 7.548       | 692           | 701         | 713          | rBV      | 250222         | 614675        | 85.91%          | 13.735%       |
| 15        | 9.501       | 896           | 899         | 904          | rVB3     | 3291           | 8283          | 1.16%           | 0.185%        |
| 16        | 9.767       | 921           | 926         | 935          | rBV      | 255104         | 571983        | 79.95%          | 12.781%       |
| 17        | 10.842      | 1031          | 1035        | 1039         | rVB      | 18214          | 32762         | 4.58%           | 0.732%        |
| 18        | 11.207      | 1070          | 1072        | 1078         | rBV4     | 3404           | 7336          | 1.03%           | 0.164%        |
| 19        | 11.405      | 1088          | 1092        | 1101         | rBV      | 168204         | 308895        | 43.17%          | 6.902%        |
| 20        | 11.572      | 1104          | 1109        | 1114         | rVB3     | 39424          | 72702         | 10.16%          | 1.625%        |
| 21        | 11.651      | 1114          | 1117        | 1121         | rBV5     | 6682           | 12695         | 1.77%           | 0.284%        |
| 22        | 12.006      | 1147          | 1153        | 1157         | rBV6     | 4537           | 12084         | 1.69%           | 0.270%        |
| 23        | 12.194      | 1169          | 1172        | 1177         | rVB5     | 4998           | 11056         | 1.55%           | 0.247%        |
| 24        | 12.282      | 1177          | 1181        | 1183         | rBV      | 21702          | 34253         | 4.79%           | 0.765%        |
| 25        | 12.312      | 1183          | 1184        | 1189         | rVB3     | 4706           | 7388          | 1.03%           | 0.165%        |
| 26        | 12.460      | 1194          | 1199        | 1203         | rVV2     | 25211          | 40588         | 5.67%           | 0.907%        |
| 27        | 12.549      | 1204          | 1208        | 1222         | rVB      | 222366         | 364454        | 50.94%          | 8.144%        |
| 28        | 12.894      | 1240          | 1243        | 1249         | rBV5     | 3086           | 7185          | 1.00%           | 0.161%        |
| 29        | 13.782      | 1328          | 1333        | 1338         | rVV      | 47903          | 82016         | 11.46%          | 1.833%        |
| 30        | 13.871      | 1338          | 1342        | 1345         | rVB4     | 4171           | 7333          | 1.02%           | 0.164%        |
| 31        | 14.423      | 1395          | 1398        | 1401         | rBV      | 52108          | 93685         | 13.09%          | 2.093%        |
| 32        | 14.601      | 1413          | 1416        | 1420         | rBV4     | 4139           | 9693          | 1.35%           | 0.217%        |
| 33        | 14.808      | 1434          | 1437        | 1440         | rVV3     | 5898           | 10858         | 1.52%           | 0.243%        |
| 34        | 15.192      | 1474          | 1476        | 1480         | rBV      | 16081          | 15307         | 2.14%           | 0.342%        |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_F\Data\VF012319\  
Data File : VF061490.D  
Acq On : 23 Jan 2019 18:41  
Operator : VA/AP  
Sample : K1223-08  
Misc : 5.38g/5mL/MSVOA-F/SOIL  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
TS-T

## Integration Parameters: RTEINT.P

Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.2  
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: 5

Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F011519S.M  
Title : SW846 8260

|    |        |      |      |      |      |       |       |       |        |
|----|--------|------|------|------|------|-------|-------|-------|--------|
| 35 | 15.252 | 1480 | 1482 | 1484 | rBV  | 28313 | 21583 | 3.02% | 0.482% |
| 36 | 15.735 | 1527 | 1531 | 1534 | rBV2 | 22058 | 39802 | 5.56% | 0.889% |
| 37 | 15.843 | 1539 | 1542 | 1544 | rVV3 | 3661  | 8295  | 1.16% | 0.185% |
| 38 | 15.883 | 1544 | 1546 | 1551 | rVB4 | 6384  | 13220 | 1.85% | 0.295% |

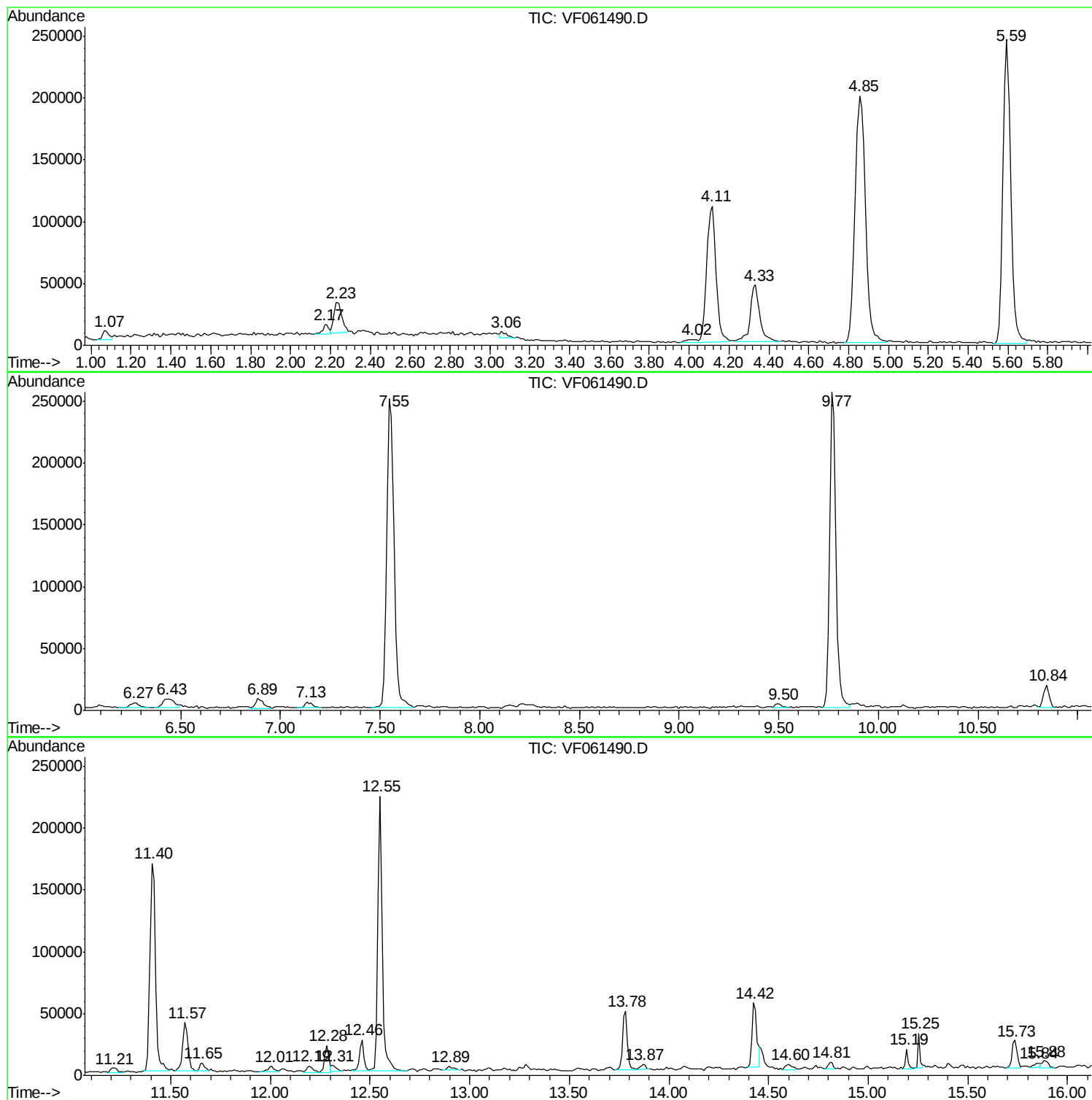
Sum of corrected areas: 4475188

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_F\Data\VF012319\  
Data File : VF061490.D  
Acq On : 23 Jan 2019 18:41  
Operator : VA/AP  
Sample : K1223-08  
Misc : 5.38g/5mL/MSVOA-F/SOIL  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
TS-T

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F011519S.M  
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_F\Data\VF012319\  
Data File : VF061490.D  
Acq On : 23 Jan 2019 18:41  
Operator : VA/AP  
Sample : K1223-08  
Misc : 5.38g/5mL/MSVOA-F/SOIL  
ALS Vial : 14 Sample Multiplier: 1

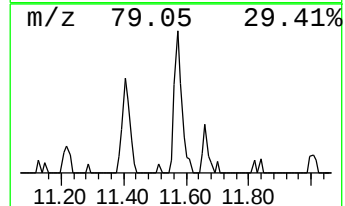
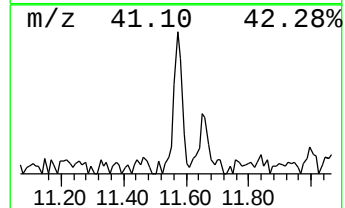
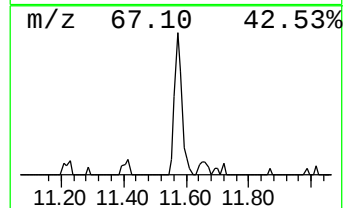
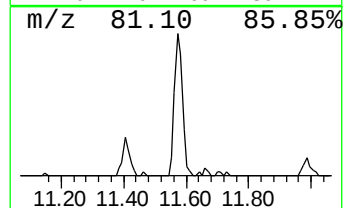
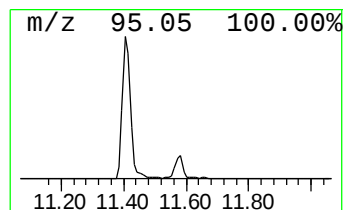
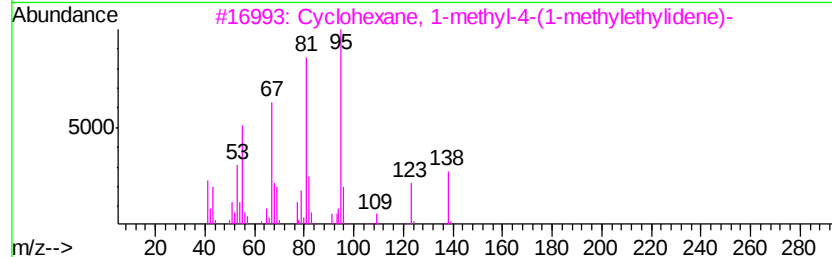
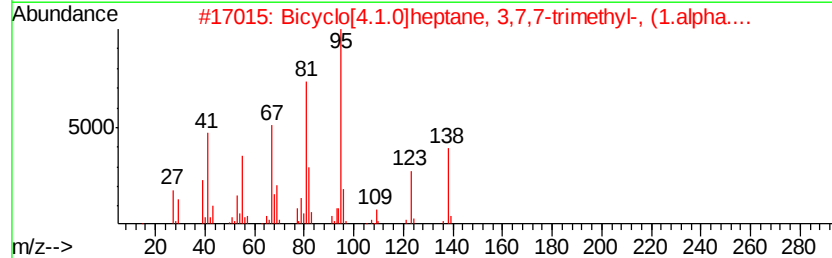
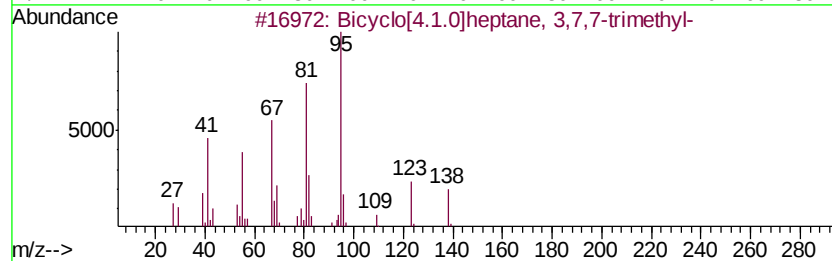
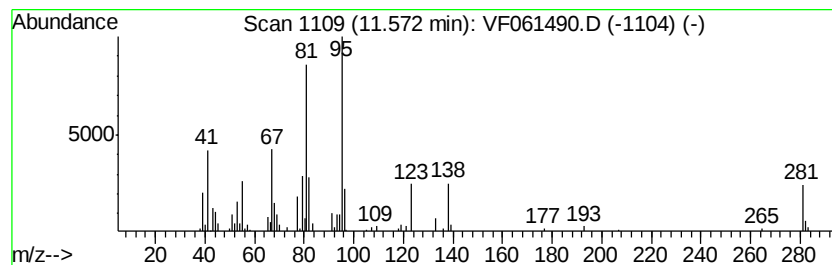
Instrument :  
MSVOA\_X  
ClientSampleId :  
TS-T

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F011519S.M  
Quant Title : SW846 8260

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

\*\*\*\*\*  
Peak Number 1 Bicyclo[4.1.0]heptane, 3,7,... Concentration Rank 3

| R.T.    | EstConc                             | Area         | Relative to ISTD       | R.T.      |
|---------|-------------------------------------|--------------|------------------------|-----------|
| 11.57   | 9.97 ug/l                           | 72702        | 1,4-Dichlorobenzene-d4 | 12.55     |
| Hit# of | 5                                   | Tentative ID | MW MolForm             | CAS# Qual |
| 1       | Bicyclo[4.1.0]heptane, 3,7,7-tri... | 138 C10H18   | 000554-59-6            | 90        |
| 2       | Bicyclo[4.1.0]heptane, 3,7,7-tri... | 138 C10H18   | 018968-23-5            | 90        |
| 3       | Cyclohexane, 1-methyl-4-(1-methy... | 138 C10H18   | 001124-27-2            | 90        |
| 4       | Bicyclo[4.1.0]heptane, 3,7,7-tri... | 138 C10H18   | 002778-68-9            | 90        |
| 5       | Cyclohexene, 4-methyl-1-(1-methy... | 138 C10H18   | 000500-00-5            | 87        |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_F\Data\VF012319\  
Data File : VF061490.D  
Acq On : 23 Jan 2019 18:41  
Operator : VA/AP  
Sample : K1223-08  
Misc : 5.38g/5mL/MSVOA-F/SOIL  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
TS-T

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F011519S.M  
Quant Title : SW846 8260

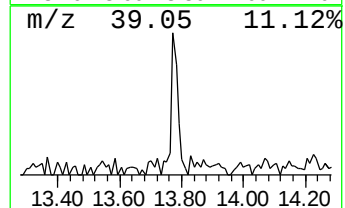
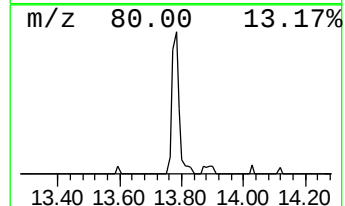
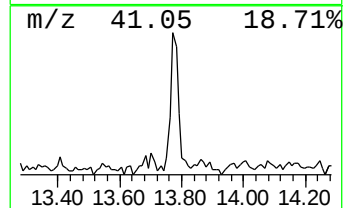
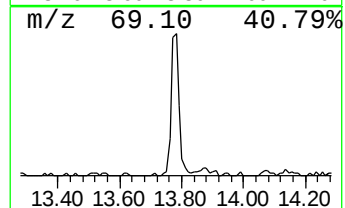
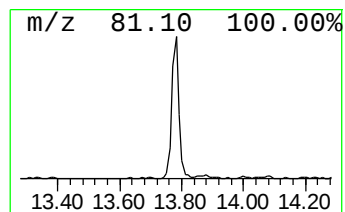
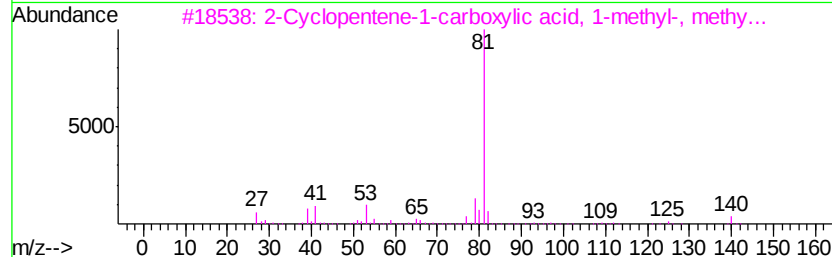
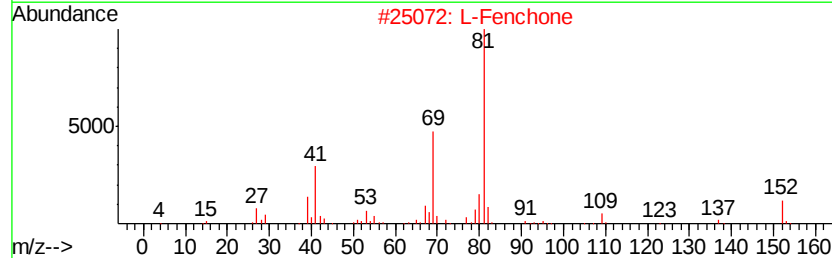
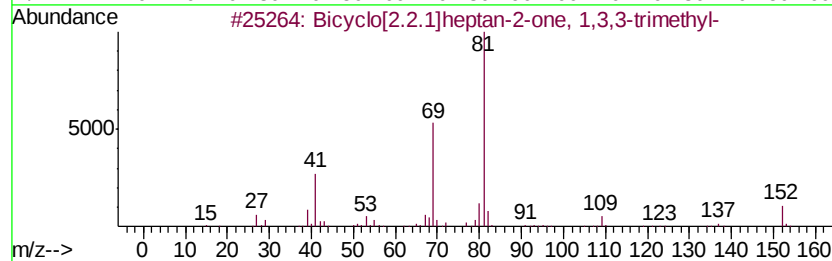
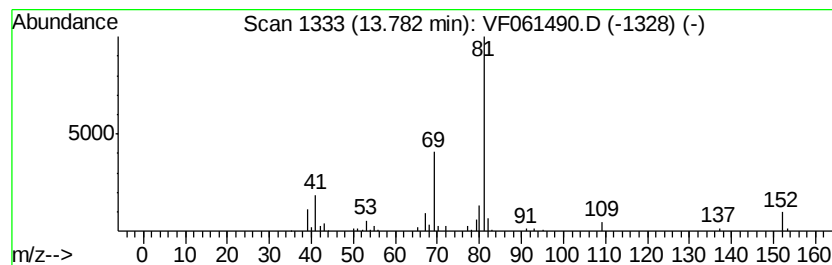
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 2 Bicyclo[2.2.1]heptan-2-one,... Concentration Rank 2

| R.T.  | EstConc    | Area  | Relative to ISTD       | R.T.  |
|-------|------------|-------|------------------------|-------|
| 13.78 | 11.25 ug/l | 82016 | 1,4-Dichlorobenzene-d4 | 12.55 |

| Hit# of | 5                                      | Tentative ID | MW      | MolForm     | CAS# | Qual |
|---------|----------------------------------------|--------------|---------|-------------|------|------|
| 1       | Bicyclo[2.2.1]heptan-2-one, 1,3,...    | 152          | C10H16O | 001195-79-5 | 94   |      |
| 2       | L-Fenchone                             | 152          | C10H16O | 007787-20-4 | 91   |      |
| 3       | 2-Cyclopentene-1-carboxylic acid...    | 140          | C8H12O2 | 068317-73-7 | 50   |      |
| 4       | Ethanone, 1-(2-methyl-2-cyclopenten... | 124          | C8H12O  | 001767-84-6 | 42   |      |
| 5       | D-Fenchone                             | 152          | C10H16O | 004695-62-9 | 38   |      |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_F\Data\VF012319\  
Data File : VF061490.D  
Acq On : 23 Jan 2019 18:41  
Operator : VA/AP  
Sample : K1223-08  
Misc : 5.38g/5mL/MSVOA-F/SOIL  
ALS Vial : 14 Sample Multiplier: 1

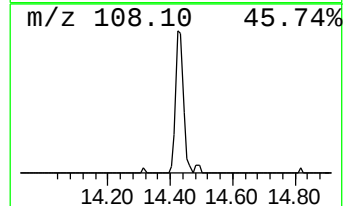
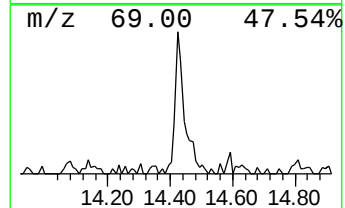
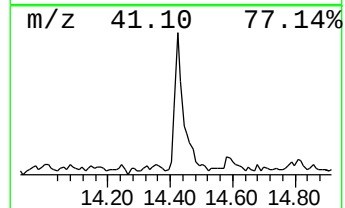
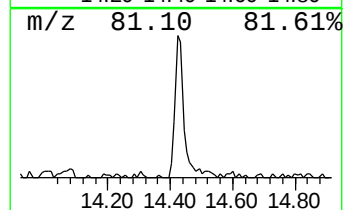
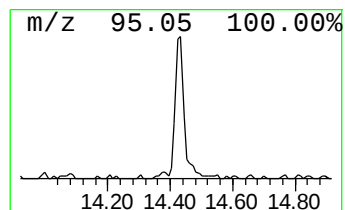
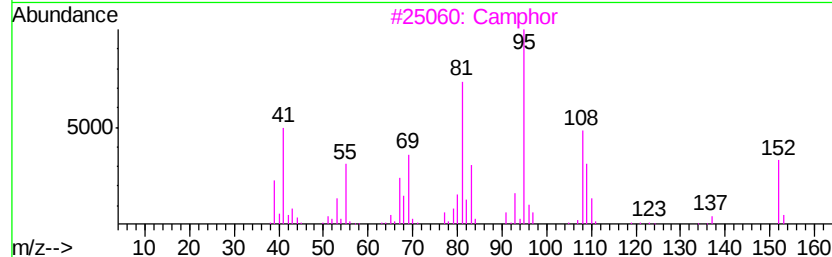
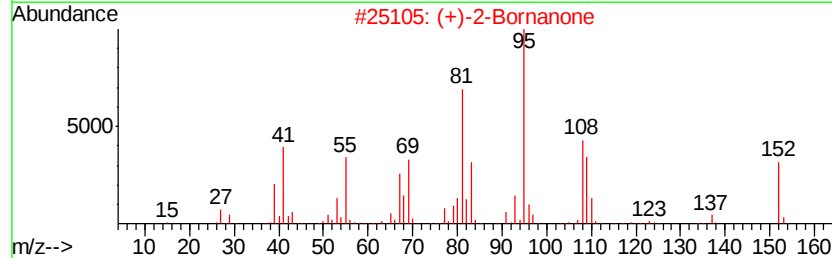
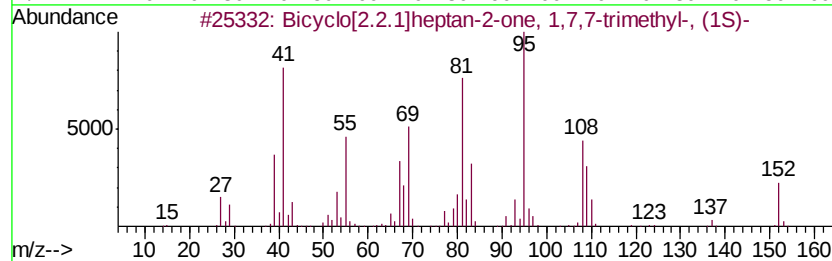
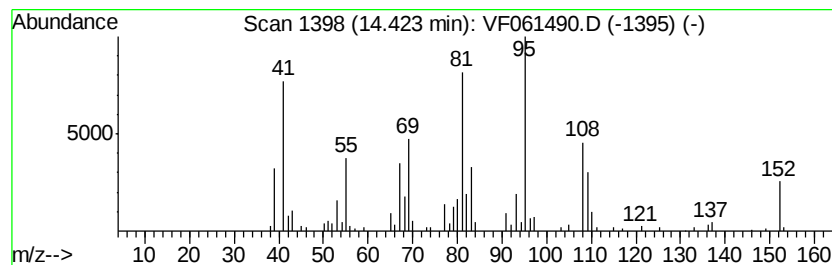
Instrument :  
MSVOA\_X  
ClientSampleId :  
TS-T

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F011519S.M  
Quant Title : SW846 8260

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

\*\*\*\*\*  
Peak Number 3 Bicyclo[2.2.1]heptan-2-one,... Concentration Rank 1

| R.T.      | EstConc                             | Area  | Relative to ISTD       | R.T.        |      |
|-----------|-------------------------------------|-------|------------------------|-------------|------|
| 14.42     | 12.85 ug/l                          | 93685 | 1,4-Dichlorobenzene-d4 | 12.55       |      |
| Hit# of 5 | Tentative ID                        | MW    | MolForm                | CAS#        | Qual |
| 1         | Bicyclo[2.2.1]heptan-2-one, 1,7,... | 152   | C10H16O                | 000464-48-2 | 96   |
| 2         | (+)-2-Bornanone                     | 152   | C10H16O                | 000464-49-3 | 94   |
| 3         | Camphor                             | 152   | C10H16O                | 000076-22-2 | 94   |
| 4         | Cyclohexanone, 5-methyl-2-(1-met... | 152   | C10H16O                | 000529-00-0 | 38   |
| 5         | 2-Butanone, 4-(5-methyl-2-furanyl)- | 152   | C9H12O2                | 013679-56-6 | 25   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_F\Data\VF012319\  
Data File : VF061490.D  
Acq On : 23 Jan 2019 18:41  
Operator : VA/AP  
Sample : K1223-08  
Misc : 5.38g/5mL/MSVOA-F/SOIL  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
TS-T

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F011519S.M  
Quant Title : SW846 8260

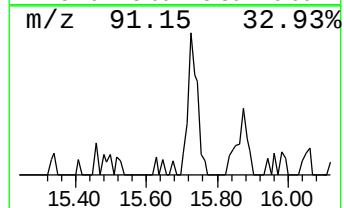
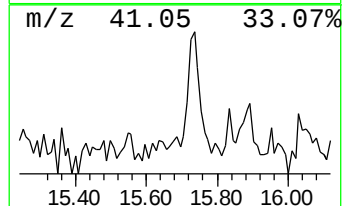
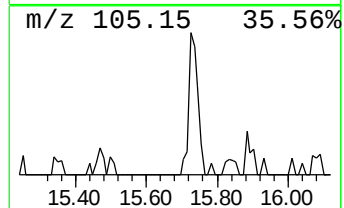
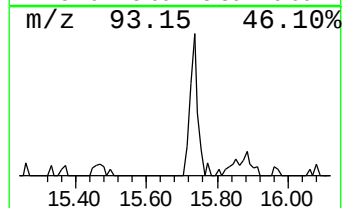
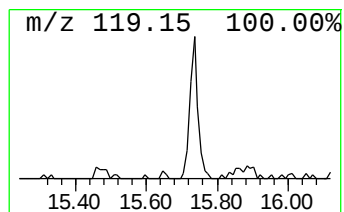
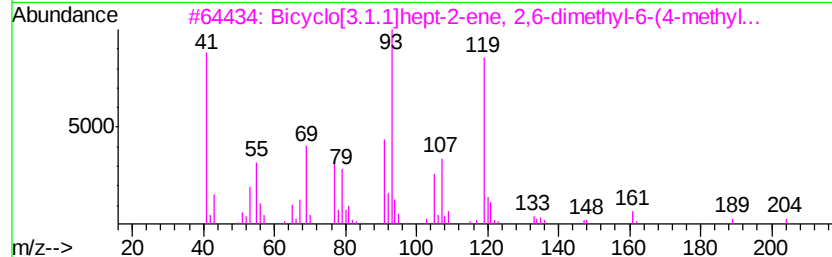
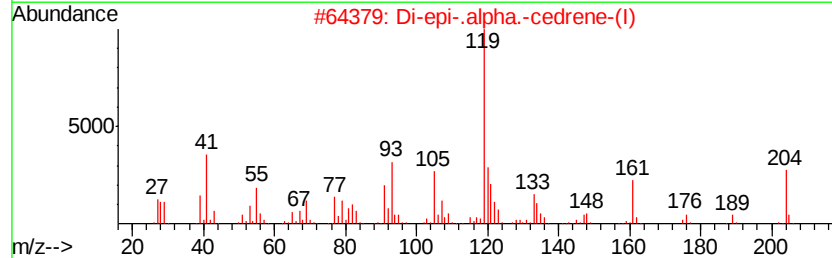
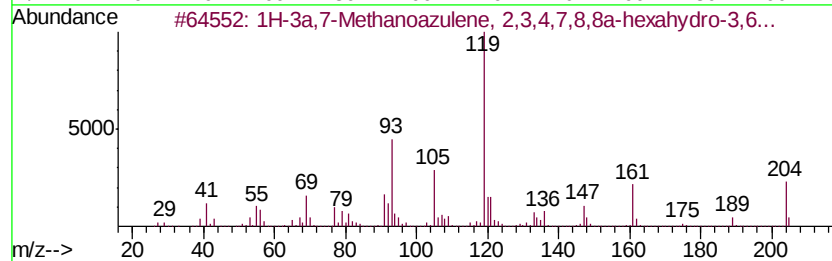
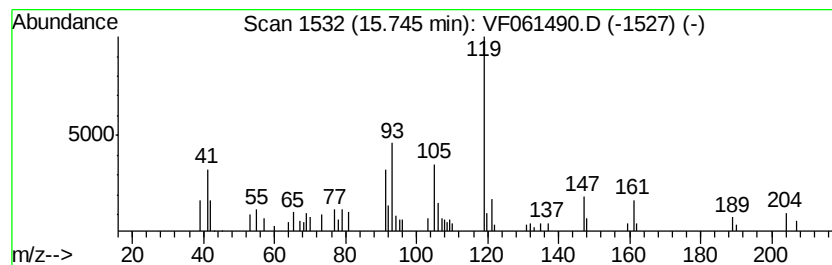
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 4 1H-3a,7-Methanoazulene, 2,3... Concentration Rank 4

| R.T.  | EstConc   | Area  | Relative to ISTD       | R.T.  |
|-------|-----------|-------|------------------------|-------|
| 15.74 | 5.46 ug/l | 39802 | 1,4-Dichlorobenzene-d4 | 12.55 |

| Hit# | of | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 1H-3a,7-Methanoazulene, 2,3,4,7,... | 204 | C15H24  | 000469-61-4 | 93   |
| 2    |    | Di-epi-.alpha.-cedrene-(I)          | 204 | C15H24  | 021996-77-0 | 68   |
| 3    |    | Bicyclo[3.1.1]hept-2-ene, 2,6-di... | 204 | C15H24  | 017699-05-7 | 49   |
| 4    |    | 1,3-Cyclohexadiene, 5-(1,5-dimet... | 204 | C15H24  | 000495-60-3 | 47   |
| 5    |    | Benzene, 1-(1,5-dimethylhexyl)-4... | 204 | C15H24  | 001461-02-5 | 46   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_F\Data\VF012319\  
Data File : VF061490.D  
Acq On : 23 Jan 2019 18:41  
Operator : VA/AP  
Sample : K1223-08  
Misc : 5.38g/5mL/MSVOA-F/SOIL  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
TS-T

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F011519S.M  
Quant Title : SW846 8260

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

| TIC Top Hit name     | RT    | EstConc | Units | Response | --Internal Standard-- |       |        |      |
|----------------------|-------|---------|-------|----------|-----------------------|-------|--------|------|
|                      |       |         |       |          | #                     | RT    | Resp   | Conc |
| Bicyclo[4.1.0]hep... | 11.57 | 10.0    | ug/l  | 72702    | 4                     | 12.55 | 364454 | 50.0 |
| Bicyclo[2.2.1]hep... | 13.78 | 11.3    | ug/l  | 82016    | 4                     | 12.55 | 364454 | 50.0 |
| Bicyclo[2.2.1]hep... | 14.42 | 12.9    | ug/l  | 93685    | 4                     | 12.55 | 364454 | 50.0 |
| 1H-3a,7-Methanoaz... | 15.74 | 5.5     | ug/l  | 39802    | 4                     | 12.55 | 364454 | 50.0 |