

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY100924\  
 Data File : VY019840.D  
 Acq On : 09 Oct 2024 18:14  
 Operator : SY/MD  
 Sample : P4359-01  
 Misc : 4.49g/5.0mL/MSVOA\_Y/SOIL/A  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 EXCAVATION-SOIL

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y100924S.M  
 Title : SW846 8260

Signal : TIC: VY019840.D\data.ms

| 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         | 4.616       | 467           | 475         | 484          | rBV3     | 9422           | 30873         | 1.14%           | 0.177%        |
| 2         | 5.647       | 633           | 644         | 656          | rBV3     | 58896          | 184500        | 6.82%           | 1.060%        |
| 3         | 6.890       | 837           | 848         | 856          | rBV      | 38738          | 117560        | 4.34%           | 0.675%        |
| 4         | 7.177       | 885           | 895         | 904          | rBV3     | 12466          | 30714         | 1.13%           | 0.176%        |
| 5         | 7.634       | 959           | 970         | 976          | rBV2     | 304286         | 722850        | 26.71%          | 4.153%        |
| 6         | 7.707       | 976           | 982         | 1000         | rVB      | 473366         | 1070235       | 39.55%          | 6.149%        |
| 7         | 8.061       | 1027          | 1040        | 1053         | rBV2     | 303003         | 762017        | 28.16%          | 4.378%        |
| 8         | 8.616       | 1121          | 1131        | 1146         | rBV      | 809548         | 1595430       | 58.96%          | 9.166%        |
| 9         | 10.103      | 1367          | 1375        | 1385         | rBV      | 1227028        | 2164404       | 79.98%          | 12.435%       |
| 10        | 10.195      | 1386          | 1390        | 1399         | rVB6     | 11194          | 29685         | 1.10%           | 0.171%        |
| 11        | 10.506      | 1435          | 1441        | 1449         | rBV      | 53878          | 100414        | 3.71%           | 0.577%        |
| 12        | 10.877      | 1496          | 1502        | 1514         | rBV      | 28040          | 54418         | 2.01%           | 0.313%        |
| 13        | 11.414      | 1582          | 1590        | 1601         | rBV      | 1208695        | 1939684       | 71.68%          | 11.144%       |
| 14        | 12.152      | 1704          | 1711        | 1717         | rBV5     | 14444          | 28453         | 1.05%           | 0.163%        |
| 15        | 12.255      | 1720          | 1728        | 1739         | rVB      | 1685671        | 2706087       | 100.00%         | 15.547%       |
| 16        | 12.402      | 1743          | 1752        | 1759         | rBV      | 898401         | 1483460       | 54.82%          | 8.523%        |
| 17        | 12.505      | 1764          | 1769        | 1773         | rVV2     | 41476          | 75207         | 2.78%           | 0.432%        |
| 18        | 12.548      | 1773          | 1776        | 1786         | rVB3     | 14133          | 33881         | 1.25%           | 0.195%        |
| 19        | 12.706      | 1794          | 1802        | 1807         | rBV3     | 197231         | 410485        | 15.17%          | 2.358%        |
| 20        | 12.749      | 1807          | 1809        | 1814         | rVV3     | 59778          | 89282         | 3.30%           | 0.513%        |
| 21        | 12.816      | 1814          | 1820        | 1828         | rVB3     | 223212         | 519279        | 19.19%          | 2.983%        |
| 22        | 12.993      | 1840          | 1849        | 1854         | rVB      | 63034          | 108779        | 4.02%           | 0.625%        |
| 23        | 13.097      | 1861          | 1866        | 1874         | rVB      | 27424          | 48441         | 1.79%           | 0.278%        |
| 24        | 13.200      | 1874          | 1883        | 1887         | rBV      | 87485          | 174272        | 6.44%           | 1.001%        |
| 25        | 13.243      | 1887          | 1890        | 1892         | rVV2     | 53232          | 86282         | 3.19%           | 0.496%        |
| 26        | 13.285      | 1892          | 1897        | 1902         | rVV      | 637051         | 1006438       | 37.19%          | 5.782%        |
| 27        | 13.340      | 1902          | 1906        | 1912         | rVV      | 955976         | 1554008       | 57.43%          | 8.928%        |
| 28        | 13.401      | 1912          | 1916        | 1927         | rVB2     | 78821          | 181440        | 6.70%           | 1.042%        |
| 29        | 13.566      | 1936          | 1943        | 1949         | rBV3     | 29922          | 56172         | 2.08%           | 0.323%        |
| 30        | 13.883      | 1990          | 1995        | 2003         | rVB      | 21807          | 41152         | 1.52%           | 0.236%        |

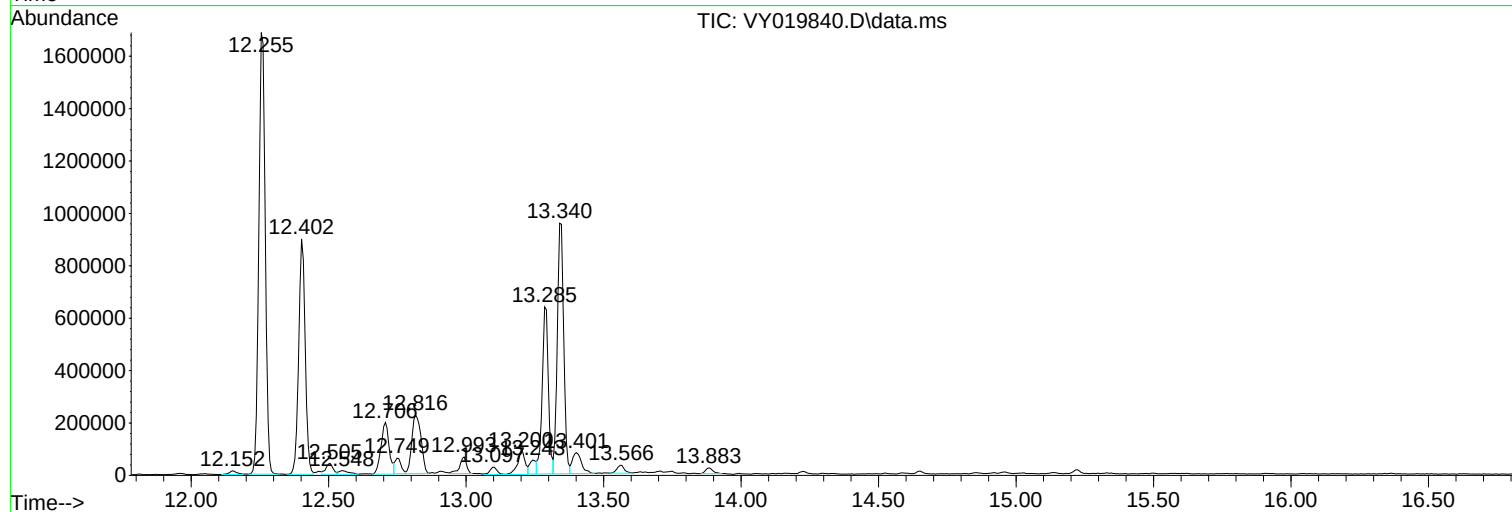
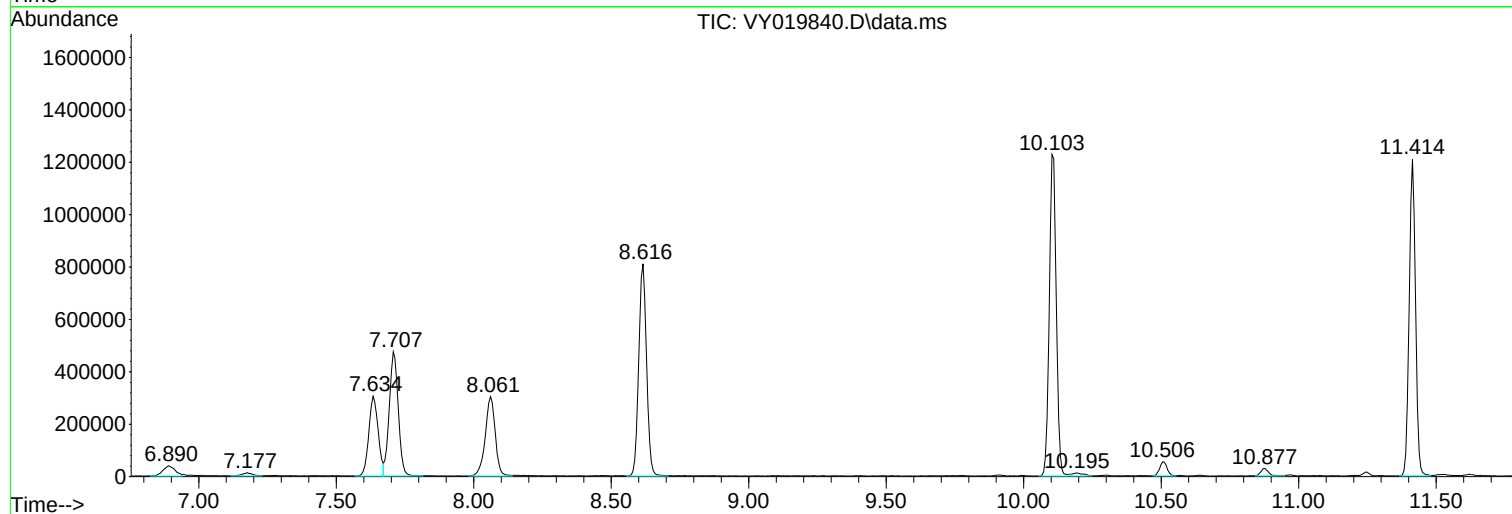
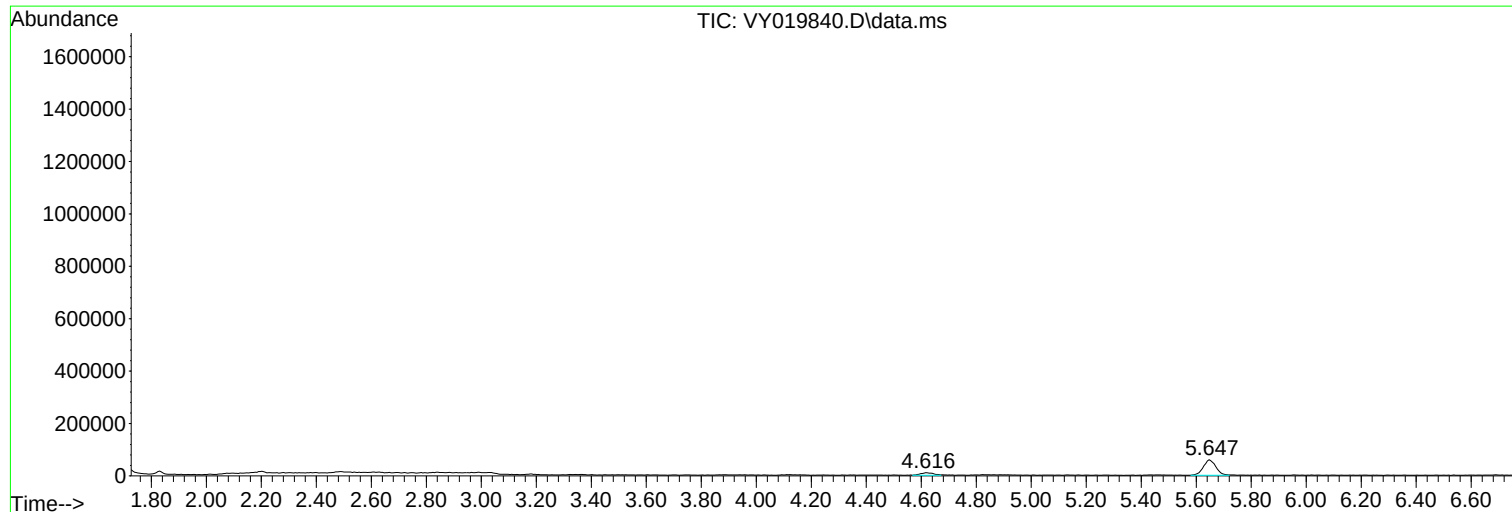
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ALS Vial : 16 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
EXCAVATION-SOIL

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y100924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P



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Quant Title : SW846 8260

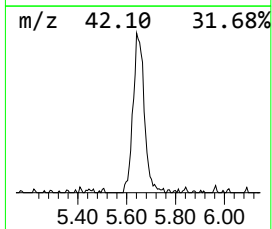
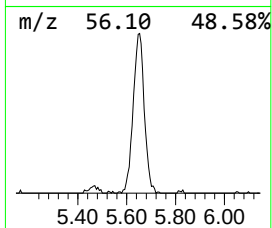
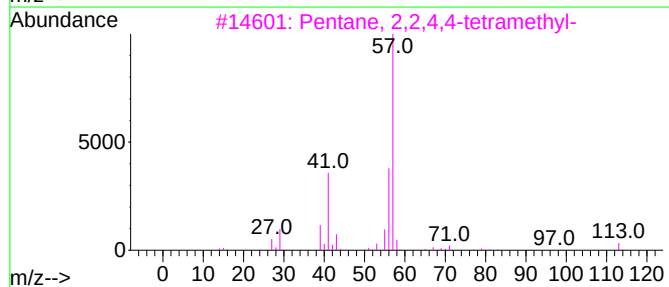
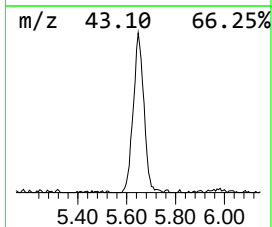
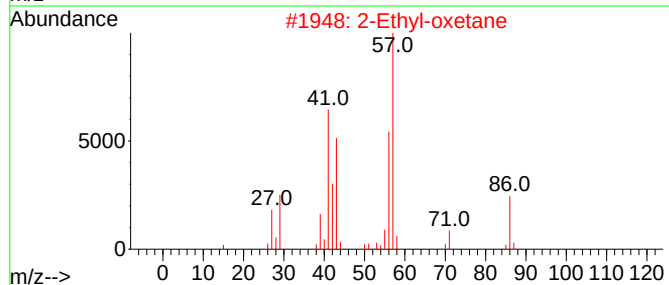
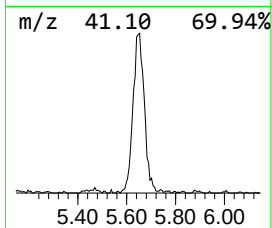
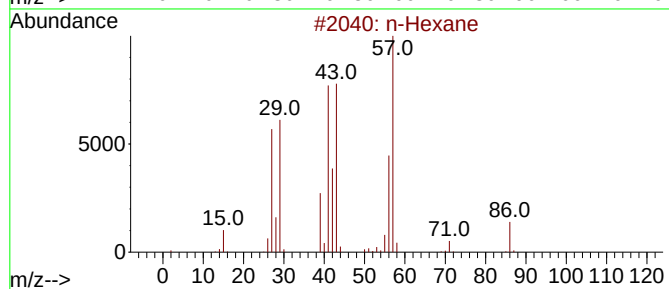
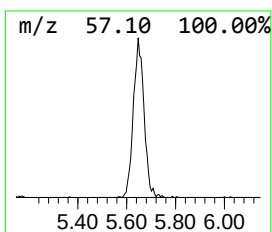
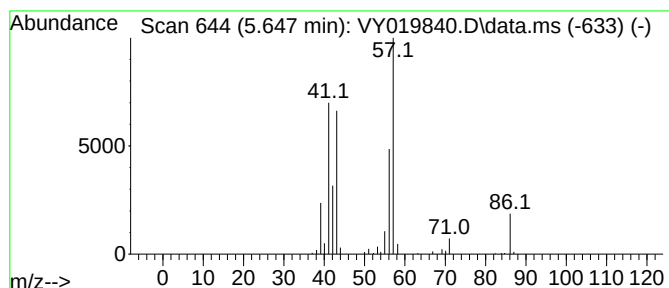
TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 1 n-Hexane Concentration Rank 4

| R.T.  | EstConc   | Area   | Relative to ISTD   | R.T.  |
|-------|-----------|--------|--------------------|-------|
| 5.647 | 8.62 ug/l | 184500 | Pentafluorobenzene | 7.707 |

| Hit# | of | 5 | Tentative ID                  | MW  | MolForm | CAS#         | Qual |
|------|----|---|-------------------------------|-----|---------|--------------|------|
| 1    |    |   | n-Hexane                      | 86  | C6H14   | 000110-54-3  | 83   |
| 2    |    |   | 2-Ethyl-oxetane               | 86  | C5H10O  | 1010386-40-2 | 56   |
| 3    |    |   | Pentane, 2,2,4,4-tetramethyl- | 128 | C9H20   | 001070-87-7  | 50   |
| 4    |    |   | Pentane, 2,2,3,4-tetramethyl- | 128 | C9H20   | 001186-53-4  | 40   |
| 5    |    |   | 1-Pentene, 4-methyl-          | 84  | C6H12   | 000691-37-2  | 40   |



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ALS Vial : 16 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
EXCAVATION-SOIL

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y100924S.M  
Quant Title : SW846 8260

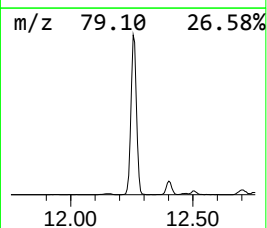
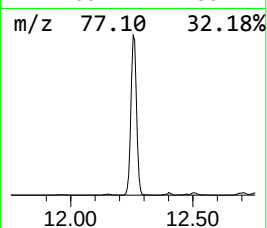
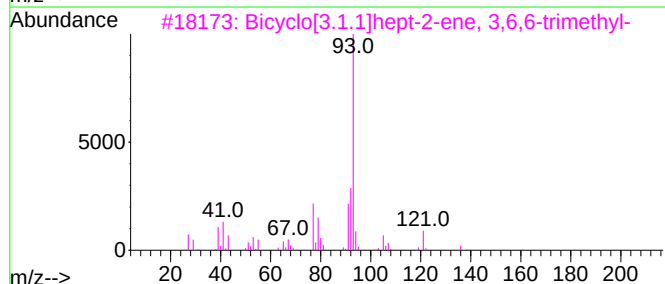
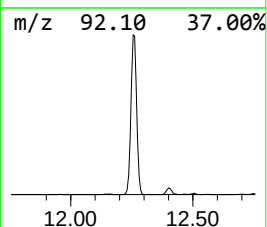
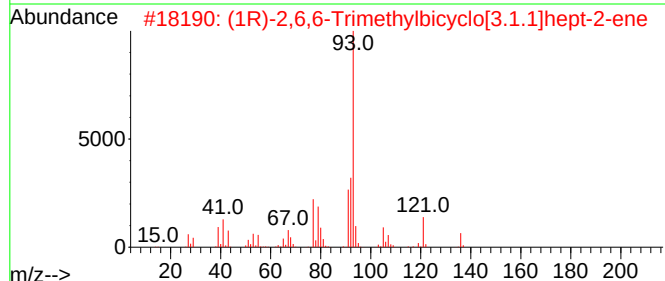
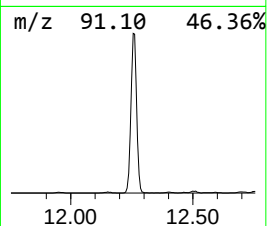
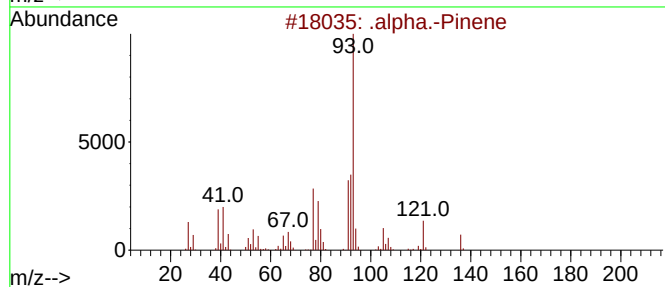
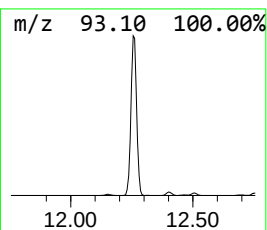
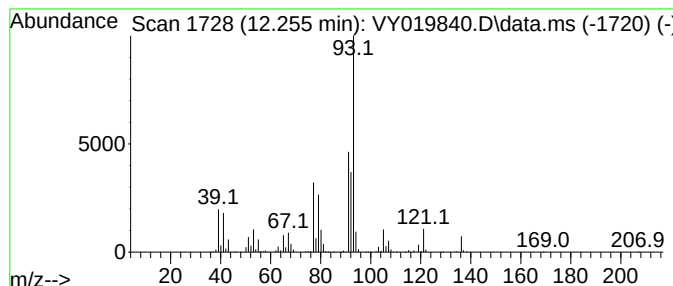
TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 3 .alpha.-Pinene Concentration Rank 1

| R.T.   | EstConc    | Area    | Relative to ISTD | R.T.   |
|--------|------------|---------|------------------|--------|
| 12.255 | 69.76 ug/l | 2706090 | Chlorobenzene-d5 | 11.414 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | .alpha.-Pinene                      | 136 | C10H16  | 000080-56-8 | 96   |
| 2    |    |   | (1R)-2,6,6-Trimethylbicyclo[3.1.... | 136 | C10H16  | 007785-70-8 | 94   |
| 3    |    |   | Bicyclo[3.1.1]hept-2-ene, 3,6,6-... | 136 | C10H16  | 004889-83-2 | 91   |
| 4    |    |   | 3-Carene                            | 136 | C10H16  | 013466-78-9 | 91   |
| 5    |    |   | (+)-3-Carene                        | 136 | C10H16  | 000498-15-7 | 91   |



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Sample : P4359-01  
Misc : 4.49g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
EXCAVATION-SOIL

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y100924S.M  
Quant Title : SW846 8260

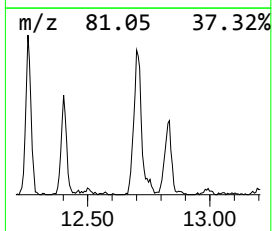
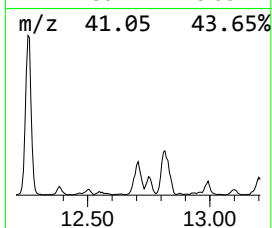
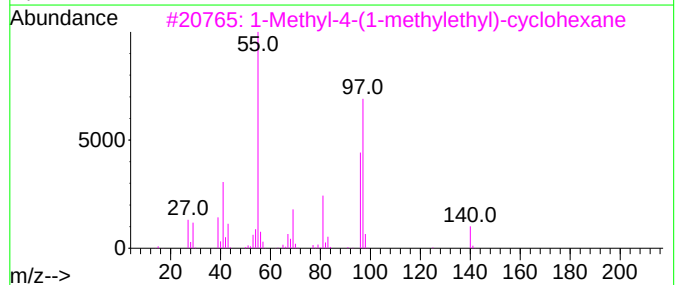
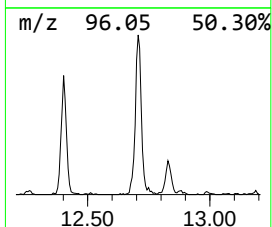
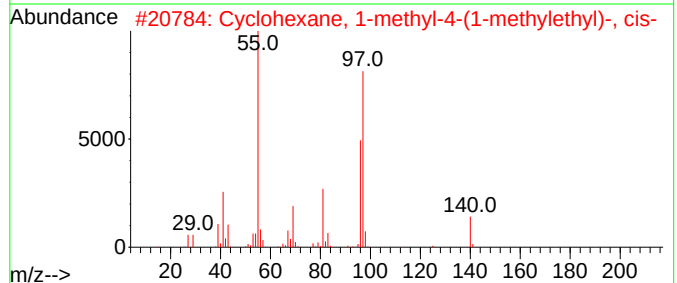
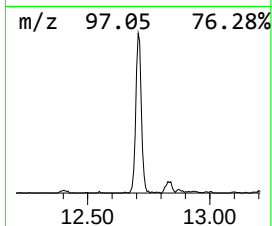
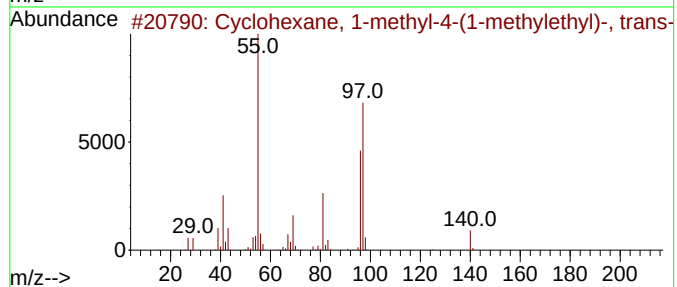
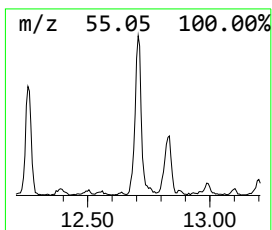
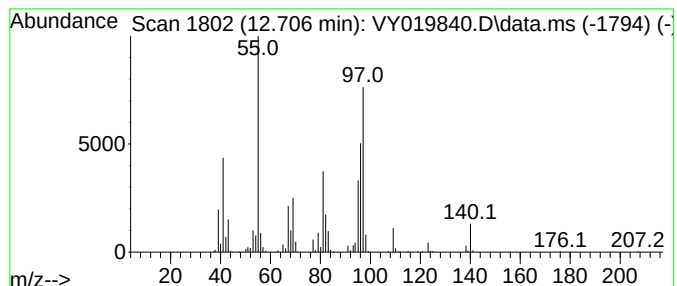
TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

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

| R.T.   | EstConc    | Area   | Relative to ISTD       | R.T.   |
|--------|------------|--------|------------------------|--------|
| 12.706 | 13.21 ug/l | 410485 | 1,4-Dichlorobenzene-d4 | 13.347 |

| Hit# | of | 5 | Tentative ID                         | MW  | MolForm  | CAS#         | Qual |
|------|----|---|--------------------------------------|-----|----------|--------------|------|
| 1    |    |   | Cyclohexane, 1-methyl-4-(1-methy...  | 140 | C10H20   | 001678-82-6  | 76   |
| 2    |    |   | Cyclohexane, 1-methyl-4-(1-methy...  | 140 | C10H20   | 006069-98-3  | 76   |
| 3    |    |   | 1-Methyl-4-(1-methylethyl)-cyclo...  | 140 | C10H20   | 000099-82-1  | 68   |
| 4    |    |   | Oxalic acid, di(cyclohexylmethyl)... | 282 | C16H26O4 | 1000309-68-5 | 59   |
| 5    |    |   | Aziridine, 1-(2-methyl-1-propenyl)-  | 97  | C6H11N   | 080839-93-6  | 52   |



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ClientSampleId :  
EXCAVATION-SOIL

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y100924S.M  
Quant Title : SW846 8260

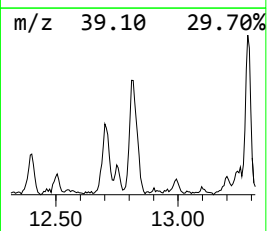
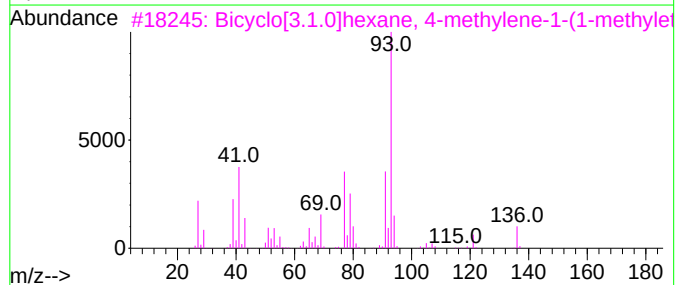
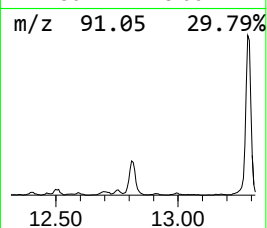
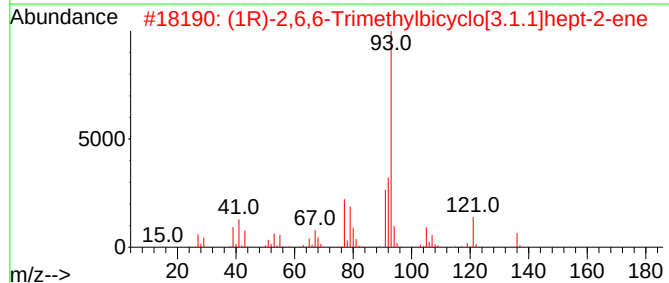
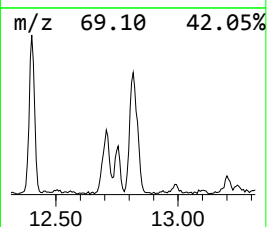
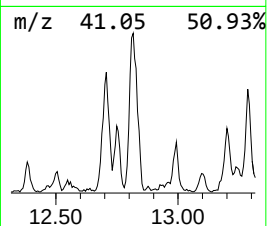
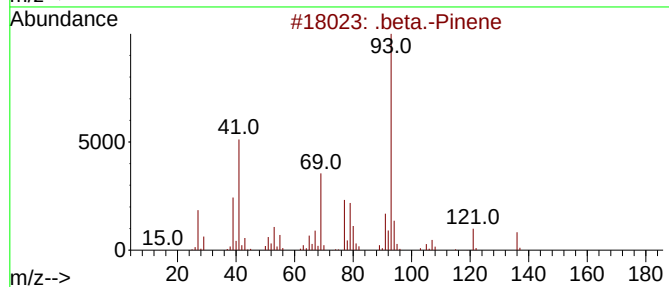
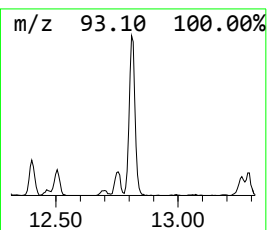
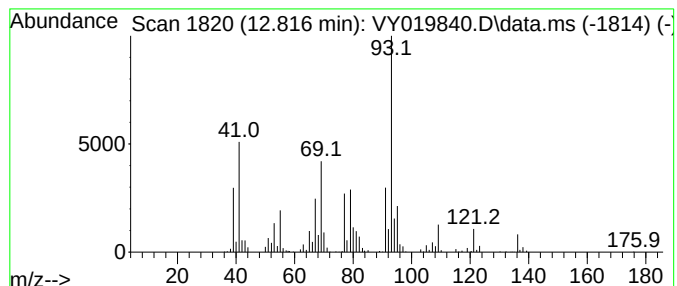
TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 5 .beta.-Pinene Concentration Rank 2

| R.T.   | EstConc    | Area   | Relative to ISTD       | R.T.   |
|--------|------------|--------|------------------------|--------|
| 12.816 | 16.71 ug/l | 519279 | 1,4-Dichlorobenzene-d4 | 13.347 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|------|----|---|-------------------------------------|-----|---------|-------------|------|
| 1    |    |   | .beta.-Pinene                       | 136 | C10H16  | 000127-91-3 | 94   |
| 2    |    |   | (1R)-2,6,6-Trimethylbicyclo[3.1.... | 136 | C10H16  | 007785-70-8 | 70   |
| 3    |    |   | Bicyclo[3.1.0]hexane, 4-methylen... | 136 | C10H16  | 003387-41-5 | 70   |
| 4    |    |   | Bicyclo[3.1.1]heptane, 6,6-dimet... | 136 | C10H16  | 018172-67-3 | 68   |
| 5    |    |   | .beta.-Myrcene                      | 136 | C10H16  | 000123-35-3 | 62   |



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EXCAVATION-SOIL

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y100924S.M  
Quant Title : SW846 8260

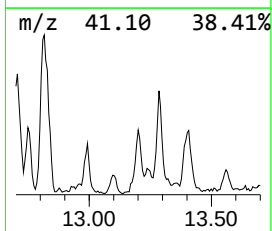
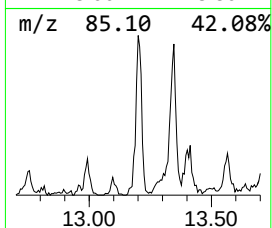
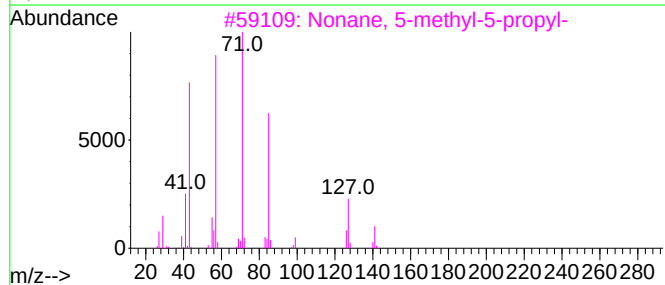
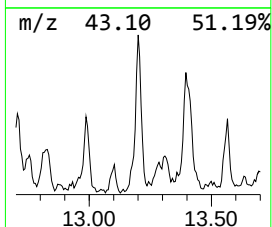
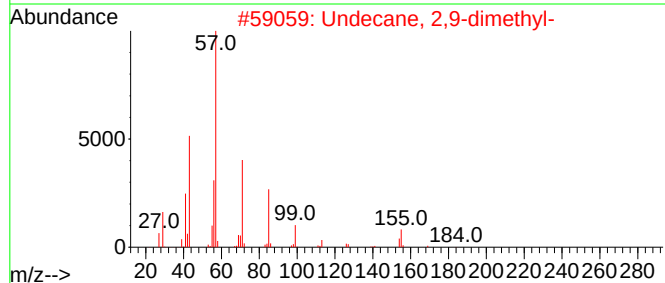
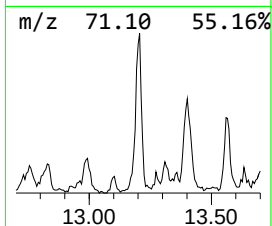
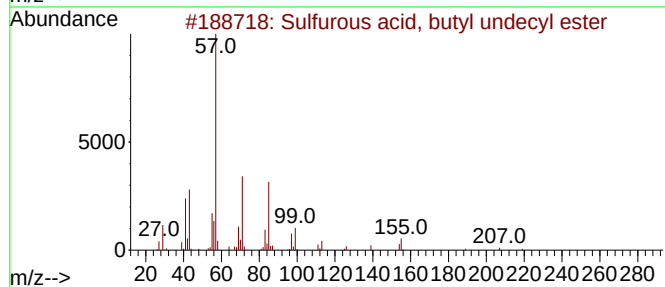
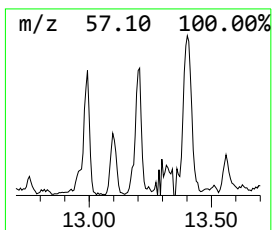
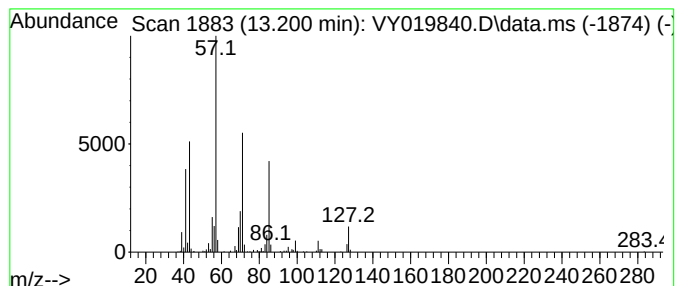
TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 6 Sulfurous acid, butyl undec... Concentration Rank 6

| R.T.   | EstConc   | Area   | Relative to ISTD       | R.T.   |
|--------|-----------|--------|------------------------|--------|
| 13.200 | 5.61 ug/l | 174272 | 1,4-Dichlorobenzene-d4 | 13.347 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm   | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|-----------|--------------|------|
| 1    |    |   | Sulfurous acid, butyl undecyl ester | 292 | C15H32O3S | 1000309-17-8 | 72   |
| 2    |    |   | Undecane, 2,9-dimethyl-             | 184 | C13H28    | 017301-26-7  | 72   |
| 3    |    |   | Nonane, 5-methyl-5-propyl-          | 184 | C13H28    | 017312-75-3  | 64   |
| 4    |    |   | 10-Methylnonadecane                 | 282 | C20H42    | 056862-62-5  | 64   |
| 5    |    |   | Tridecane                           | 184 | C13H28    | 000629-50-5  | 64   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY100924\  
Data File : VY019840.D  
Acq On : 09 Oct 2024 18:14  
Operator : SY/MD  
Sample : P4359-01  
Misc : 4.49g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
EXCAVATION-SOIL

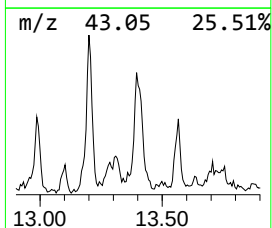
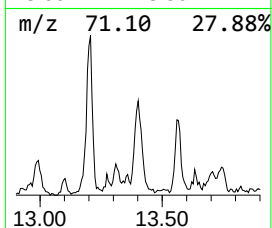
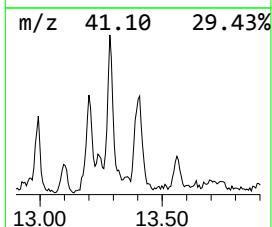
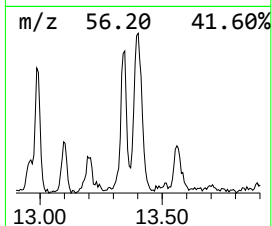
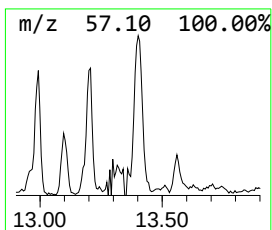
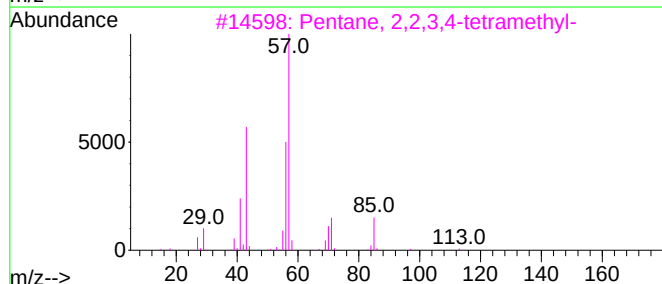
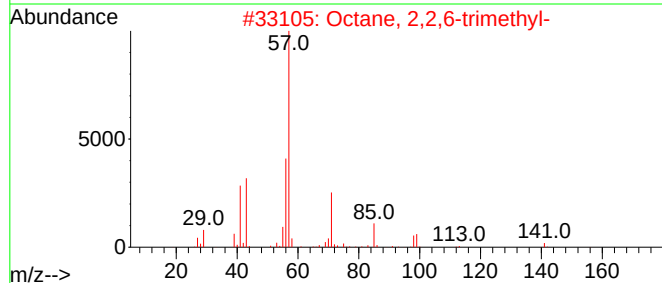
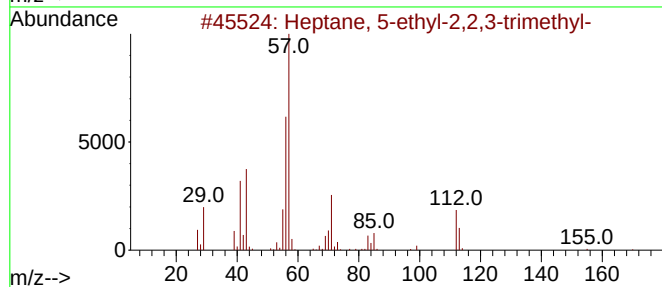
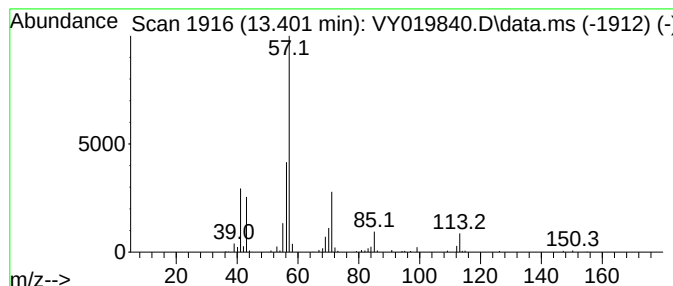
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Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 7 Heptane, 5-ethyl-2,2,3-trimethyl- Concentration Rank 5

| R.T.      | EstConc                           | Area   | Relative to ISTD       | R.T.        |      |
|-----------|-----------------------------------|--------|------------------------|-------------|------|
| 13.401    | 5.84 ug/l                         | 181440 | 1,4-Dichlorobenzene-d4 | 13.347      |      |
| Hit# of 5 | Tentative ID                      | MW     | MolForm                | CAS#        | Qual |
| 1         | Heptane, 5-ethyl-2,2,3-trimethyl- | 170    | C12H26                 | 062199-06-8 | 78   |
| 2         | Octane, 2,2,6-trimethyl-          | 156    | C11H24                 | 062016-28-8 | 64   |
| 3         | Pentane, 2,2,3,4-tetramethyl-     | 128    | C9H20                  | 001186-53-4 | 64   |
| 4         | Decane, 2,2,6-trimethyl-          | 184    | C13H28                 | 062237-97-2 | 59   |
| 5         | Undecane, 3,6-dimethyl-           | 184    | C13H28                 | 017301-28-9 | 53   |





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY100924\  
Data File : VY019840.D  
Acq On : 09 Oct 2024 18:14  
Operator : SY/MD  
Sample : P4359-01  
Misc : 4.49g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
EXCAVATION-SOIL

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y100924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name   | RT     | EstConc | Units | Response | --Internal Standard-- |        |         |      |
|--------------------|--------|---------|-------|----------|-----------------------|--------|---------|------|
|                    |        |         |       |          | #                     | RT     | Resp    | Conc |
| n-Hexane           | 5.647  | 8.6     | ug/l  | 184500   | 1                     | 7.707  | 1070240 | 50.0 |
| .alpha.-Pinene     | 12.255 | 69.8    | ug/l  | 2706090  | 3                     | 11.414 | 1939680 | 50.0 |
| Cyclohexane, 1-... | 12.706 | 13.2    | ug/l  | 410485   | 4                     | 13.347 | 1554010 | 50.0 |
| .beta.-Pinene      | 12.816 | 16.7    | ug/l  | 519279   | 4                     | 13.347 | 1554010 | 50.0 |
| Sulfurous acid,... | 13.200 | 5.6     | ug/l  | 174272   | 4                     | 13.347 | 1554010 | 50.0 |
| Heptane, 5-ethy... | 13.401 | 5.8     | ug/l  | 181440   | 4                     | 13.347 | 1554010 | 50.0 |