

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY070522\  
 Data File : VY009431.D  
 Acq On : 05 Jul 2022 12:45  
 Operator : KP/MD  
 Sample : N3538-02RE  
 Misc : 5.08g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 GS-4ARE

Quant Time: Jul 06 04:48:05 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y062822S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 29 17:35:34 2022  
 Response via : Initial Calibration

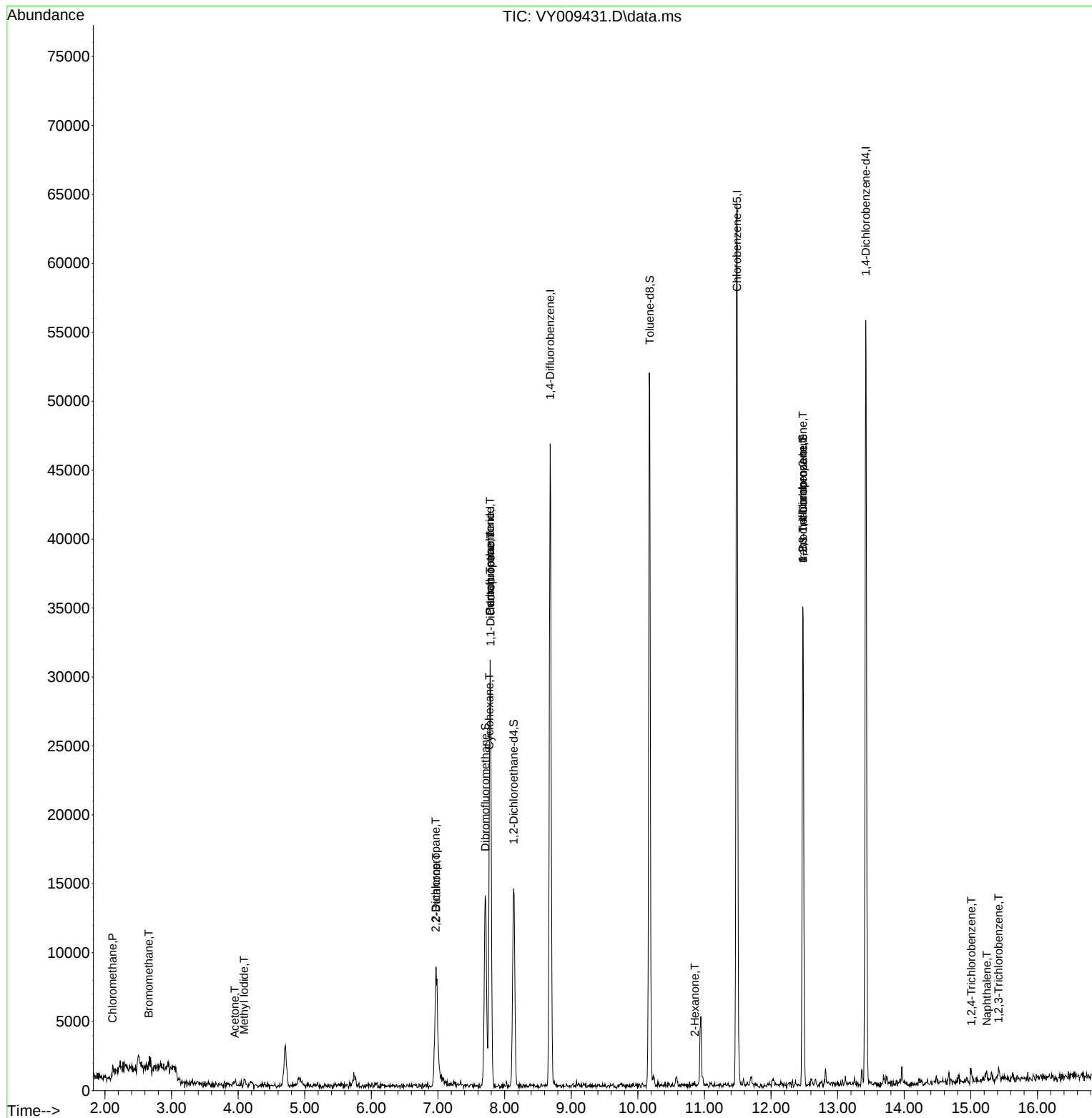
| Compound                      | R.T.           | QIon | Response            | Conc      | Units  | Dev(Min) |
|-------------------------------|----------------|------|---------------------|-----------|--------|----------|
| -----                         |                |      |                     |           |        |          |
| Internal Standards            |                |      |                     |           |        |          |
| 1) Pentafluorobenzene         | 7.783          | 168  | 24736               | 50.000    | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 8.685          | 114  | 38083               | 50.000    | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.489         | 117  | 35261               | 50.000    | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.422         | 152  | 13634               | 50.000    | ug/l   | 0.00     |
|                               |                |      |                     |           |        |          |
| System Monitoring Compounds   |                |      |                     |           |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.136          | 65   | 11227               | 56.666    | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 50 - 163 |      | Recovery = 113.340% |           |        |          |
| 35) Dibromofluoromethane      | 7.710          | 113  | 9353                | 44.623    | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 54 - 147 |      | Recovery = 89.240%  |           |        |          |
| 50) Toluene-d8                | 10.179         | 98   | 33571               | 52.240    | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 78 - 125 |      | Recovery = 104.480% |           |        |          |
| 62) 4-Bromofluorobenzene      | 12.477         | 95   | 9977                | 32.735    | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 50 - 146 |      | Recovery = 65.460%  |           |        |          |
|                               |                |      |                     |           |        |          |
| Target Compounds              |                |      |                     |           |        | Qvalue   |
| 3) Chloromethane              | 2.113          | 50   | 233                 | 1.052     | ug/l # | 72       |
| 5) Bromomethane               | 2.656          | 94   | 177                 | 1.076     | ug/l   | 92       |
| 10) Methyl Iodide             | 4.088          | 142  | 432                 | 1.614     | ug/l # | 79       |
| 11) Tert butyl alcohol        | 4.948          | 59   | 399                 | Below Cal | #      | 77       |
| 16) Acetone                   | 3.948          | 43   | 319                 | 4.903     | ug/l # | 47       |
| 18) Methyl Acetate            | 4.497          | 43   | 63                  | Below Cal | #      | 56       |
| 20) Methylene Chloride        | 4.710          | 84   | 2010                | Below Cal | #      | 95       |
| 25) 2-Butanone                | 6.972          | 43   | 579                 | 5.613     | ug/l # | 54       |
| 26) 2,2-Dichloropropane       | 6.966          | 77   | 632                 | 1.381     | ug/l # | 55       |
| 31) Cyclohexane               | 7.771          | 56   | 555                 | 1.245     | ug/l # | 17       |
| 36) 1,1-Dichloropropene       | 7.789          | 75   | 2081                | 5.678     | ug/l # | 43       |
| 38) Carbon Tetrachloride      | 7.783          | 117  | 2340                | 6.109     | ug/l # | 20       |
| 59) 2-Hexanone                | 10.855         | 43   | 197                 | 1.386     | ug/l # | 28       |
| 76) 1,2,3-Trichloropropane    | 12.477         | 75   | 5295                | 33.163    | ug/l # | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.477         | 75   | 5295                | 73.837    | ug/l # | 7        |
| 93) 1,2,4-Trichlorobenzene    | 15.007         | 180  | 335                 | 1.312     | ug/l # | 77       |
| 95) Naphthalene               | 15.239         | 128  | 798                 | 1.561     | ug/l # | 69       |
| 96) 1,2,3-Trichlorobenzene    | 15.416         | 180  | 323                 | 1.456     | ug/l # | 78       |
| -----                         |                |      |                     |           |        |          |

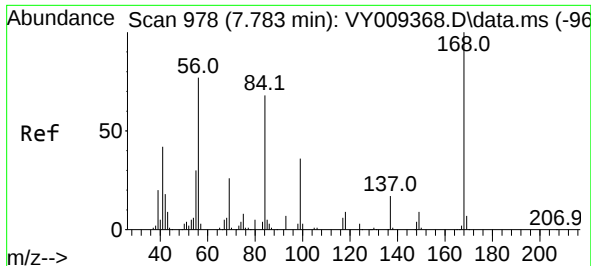
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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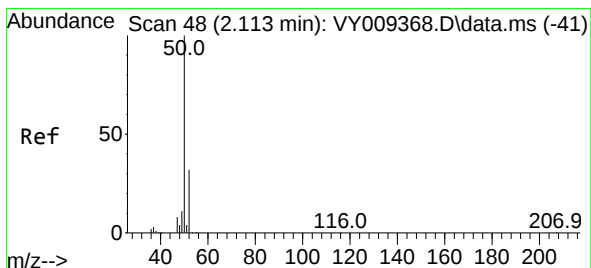
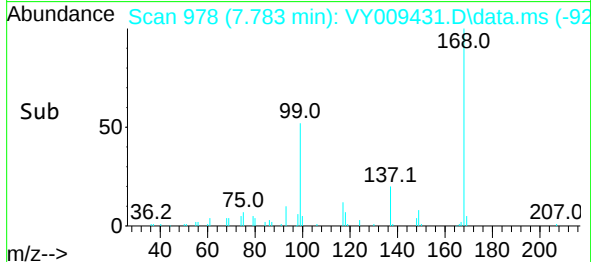
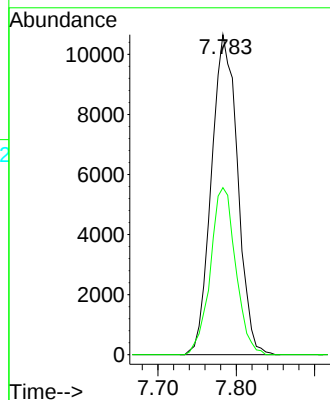
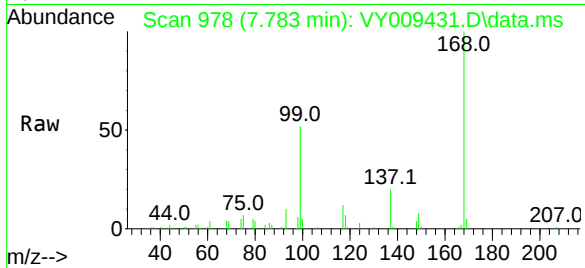




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.783 min Scan# 91  
Delta R.T. -0.000 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

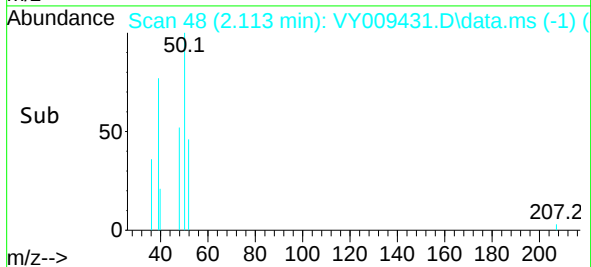
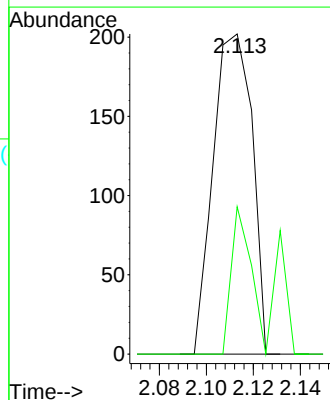
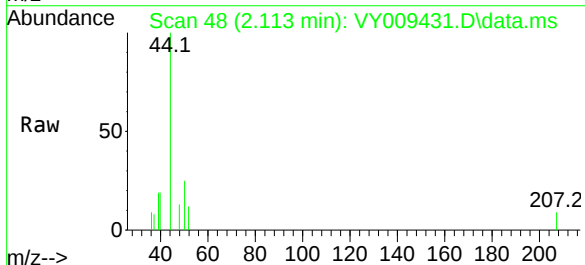
Instrument :  
MSVOA\_Y  
ClientSampleId :  
GS-4ARE

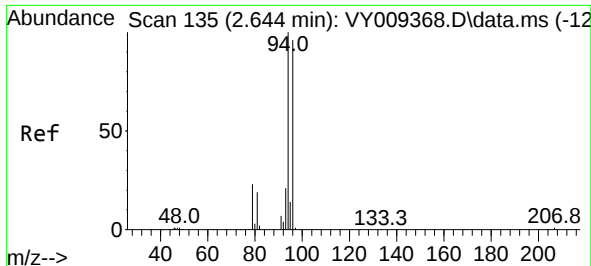
Tgt Ion:168 Resp: 24736  
Ion Ratio Lower Upper  
168 100  
99 52.2 46.9 70.3



#3  
Chloromethane  
Concen: 1.052 ug/l  
RT: 2.113 min Scan# 48  
Delta R.T. 0.006 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

Tgt Ion: 50 Resp: 233  
Ion Ratio Lower Upper  
50 100  
52 46.0 24.6 37.0#

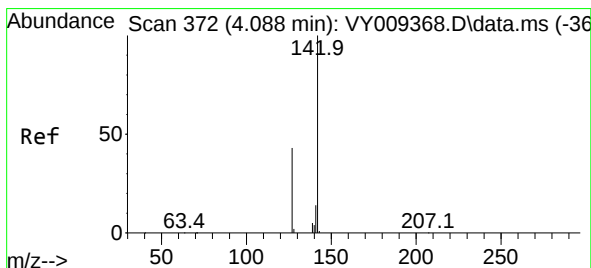
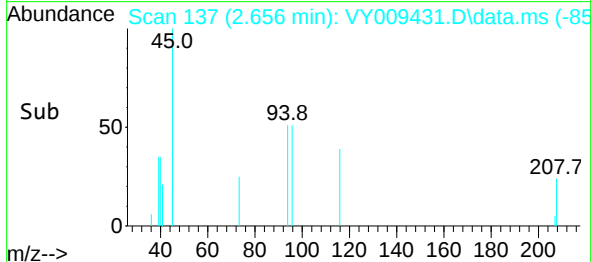
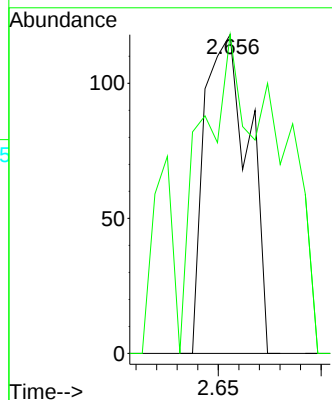
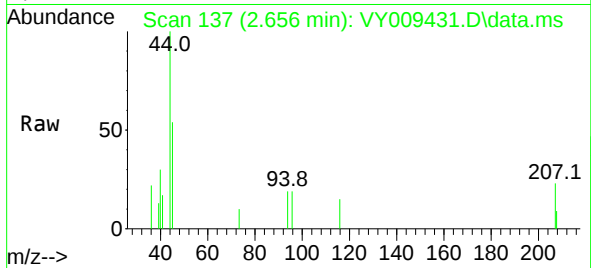




#5  
Bromomethane  
Concen: 1.076 ug/l  
RT: 2.656 min Scan# 11  
Delta R.T. 0.019 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

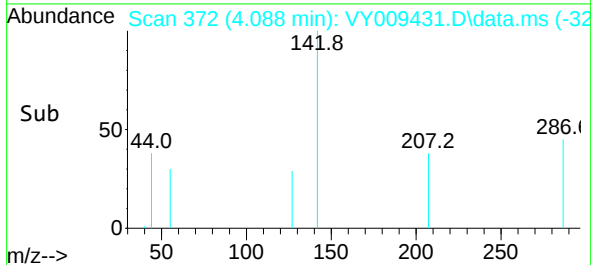
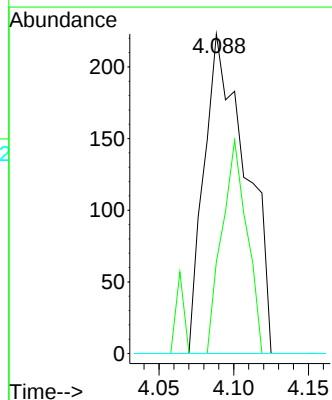
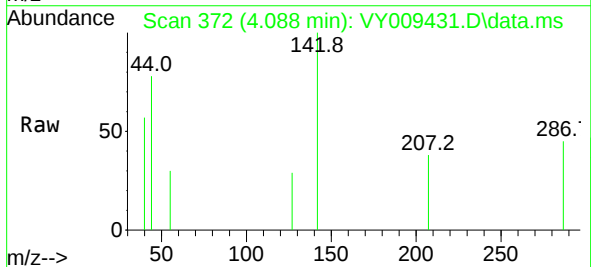
Instrument :  
MSVOA\_Y  
ClientSampleId :  
GS-4ARE

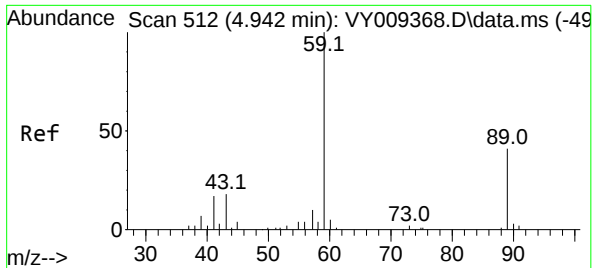
Tgt Ion: 94 Resp: 177  
Ion Ratio Lower Upper  
94 100  
96 100.0 73.5 110.3



#10  
Methyl Iodide  
Concen: 1.614 ug/l  
RT: 4.088 min Scan# 372  
Delta R.T. 0.006 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

Tgt Ion:142 Resp: 432  
Ion Ratio Lower Upper  
142 100  
127 40.0 41.5 62.3#  
141 0.0 11.9 17.9#

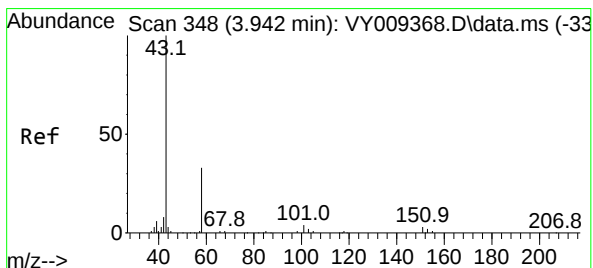
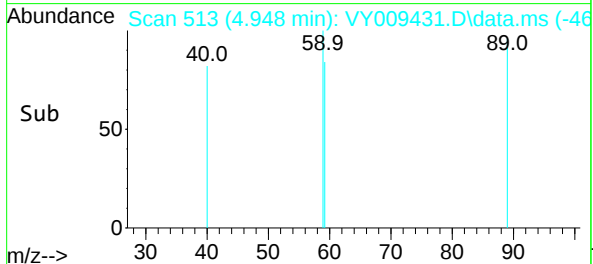
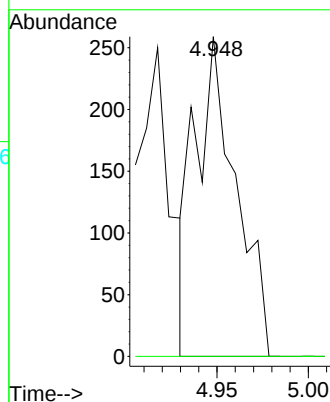
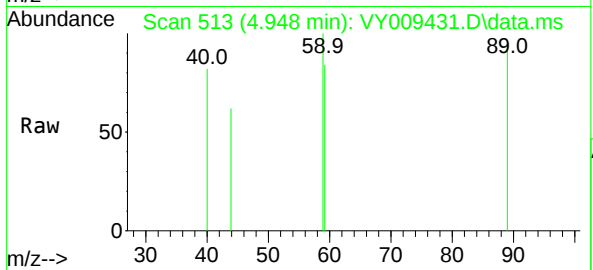




#11  
Tert butyl alcohol  
Concen: Below Cal  
RT: 4.948 min Scan# 512  
Delta R.T. 0.006 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

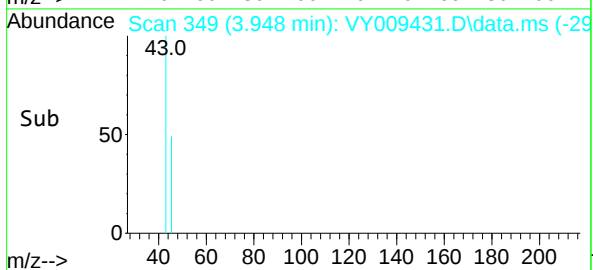
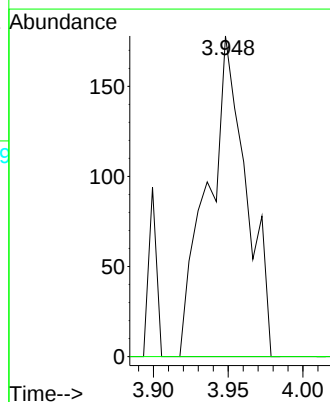
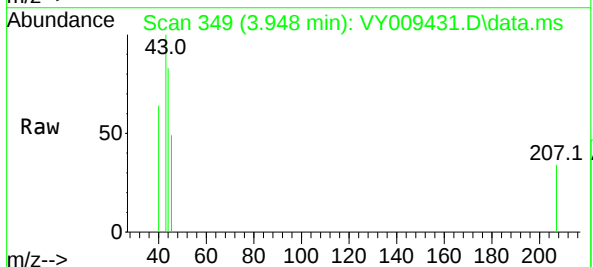
Instrument :  
MSVOA\_Y  
ClientSampleId :  
GS-4ARE

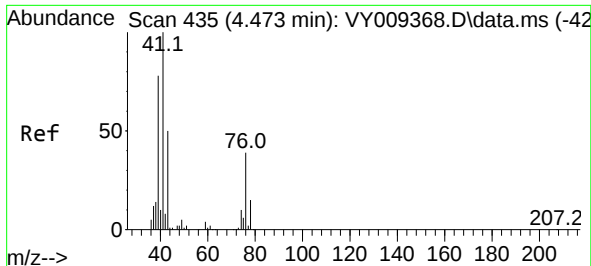
Tgt Ion: 59 Resp: 399  
Ion Ratio Lower Upper  
59 100  
57 0.0 6.4 9.6#



#16  
Acetone  
Concen: 4.903 ug/l  
RT: 3.948 min Scan# 349  
Delta R.T. 0.006 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

Tgt Ion: 43 Resp: 319  
Ion Ratio Lower Upper  
43 100  
58 0.0 22.0 33.0#

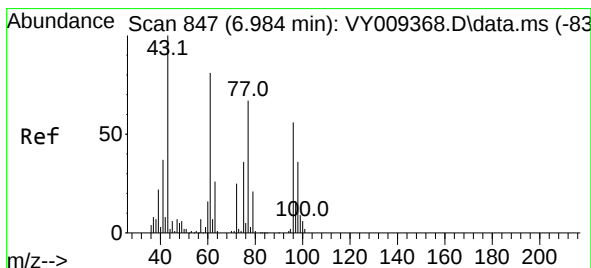
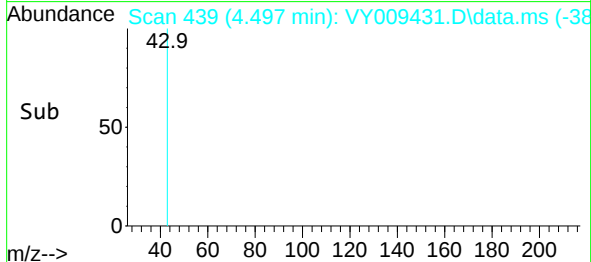
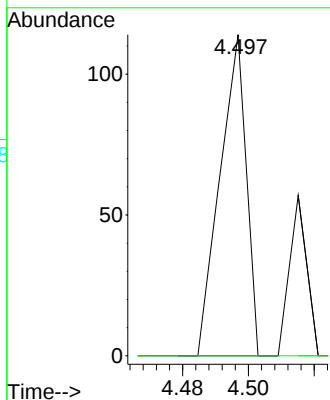
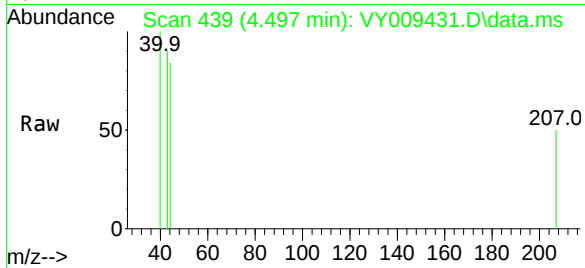




#18  
Methyl Acetate  
Concen: Below Cal  
RT: 4.497 min Scan# 41  
Delta R.T. 0.024 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

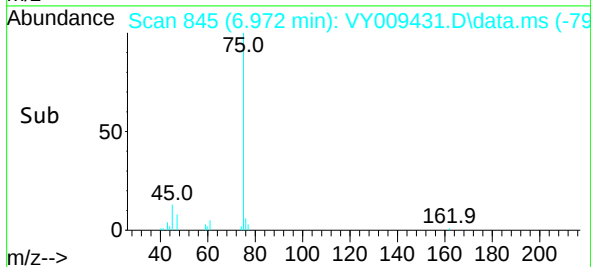
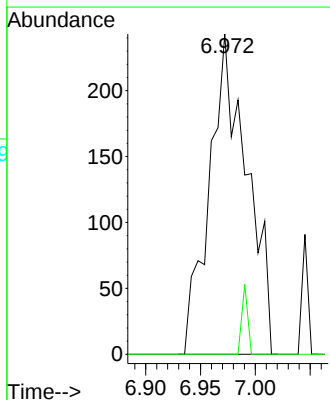
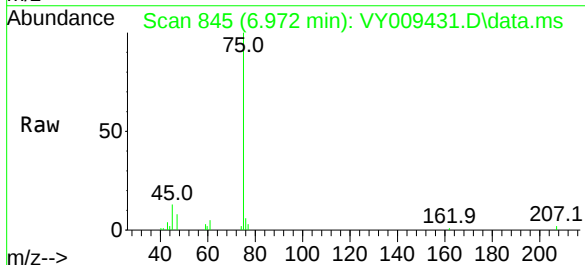
Instrument :  
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ClientSampleId :  
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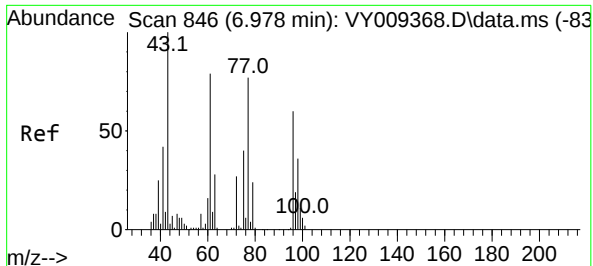
Tgt Ion: 43 Resp: 63  
Ion Ratio Lower Upper  
43 100  
74 0.0 16.6 24.8#



#25  
2-Butanone  
Concen: 5.613 ug/l  
RT: 6.972 min Scan# 845  
Delta R.T. -0.006 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

Tgt Ion: 43 Resp: 579  
Ion Ratio Lower Upper  
43 100  
72 0.0 17.7 26.5#





#26

2,2-Dichloropropane

Concen: 1.381 ug/l

RT: 6.966 min Scan# 846

Delta R.T. -0.006 min

Lab File: VY009431.D

Acq: 05 Jul 2022 12:45

Instrument :

MSVOA\_Y

ClientSampleId :

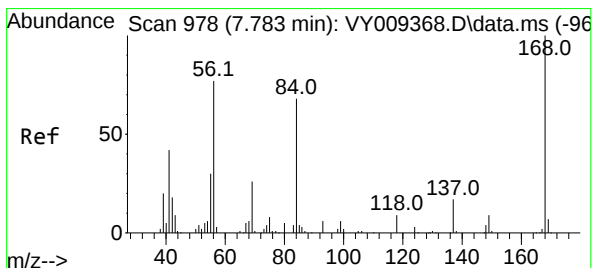
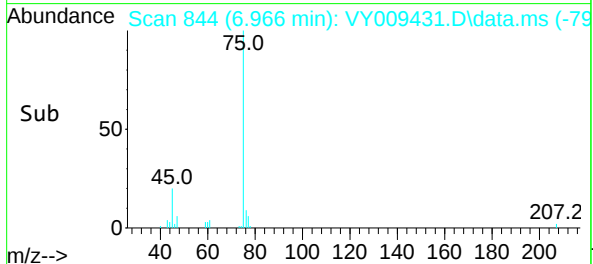
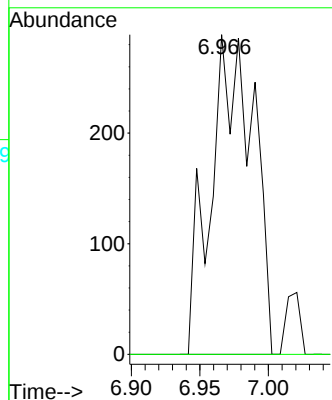
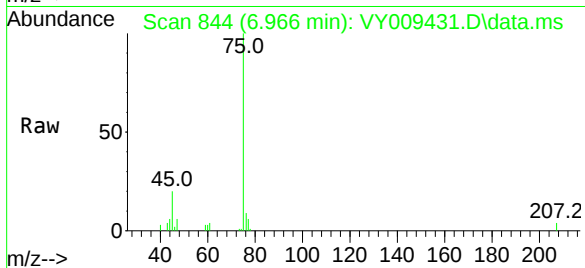
GS-4ARE

Tgt Ion: 77 Resp: 632

Ion Ratio Lower Upper

77 100

97 0.0 10.4 31.4#



#31

Cyclohexane

Concen: 1.245 ug/l

RT: 7.771 min Scan# 976

Delta R.T. -0.012 min

Lab File: VY009431.D

Acq: 05 Jul 2022 12:45

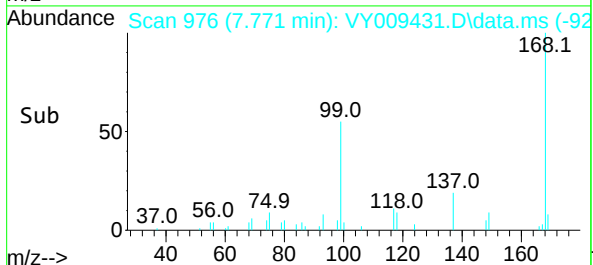
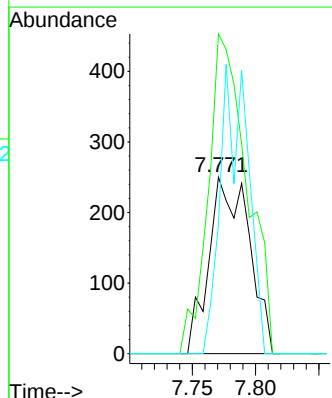
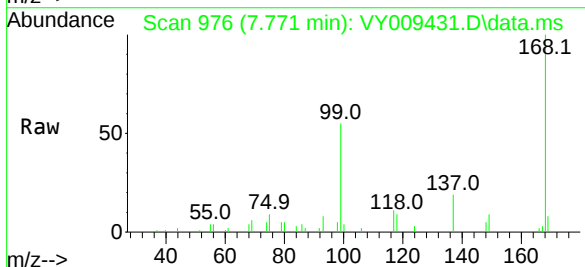
Tgt Ion: 56 Resp: 555

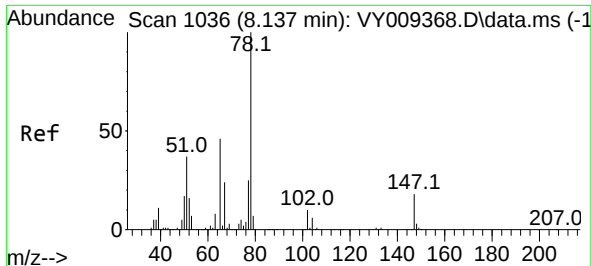
Ion Ratio Lower Upper

56 100

69 181.2 26.7 40.1#

84 73.2 67.2 100.8





#33

1,2-Dichloroethane-d4

Concen: 56.666 ug/l

RT: 8.136 min Scan# 1103

Delta R.T. 0.000 min

Lab File: VY009431.D

Acq: 05 Jul 2022 12:45

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ClientSampleId :

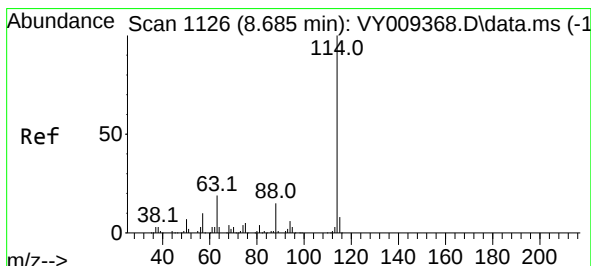
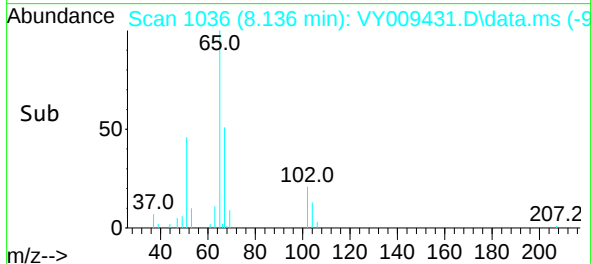
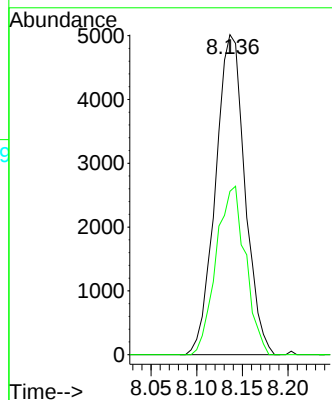
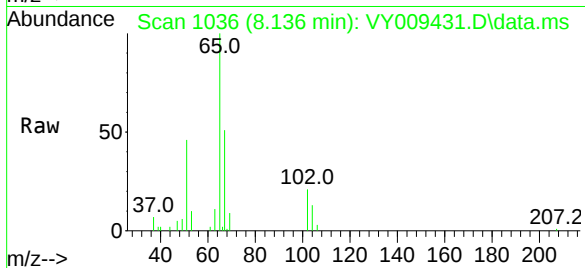
GS-4ARE

Tgt Ion: 65 Resp: 11227

Ion Ratio Lower Upper

65 100

67 52.6 0.0 99.4



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.685 min Scan# 1126

Delta R.T. 0.000 min

Lab File: VY009431.D

Acq: 05 Jul 2022 12:45

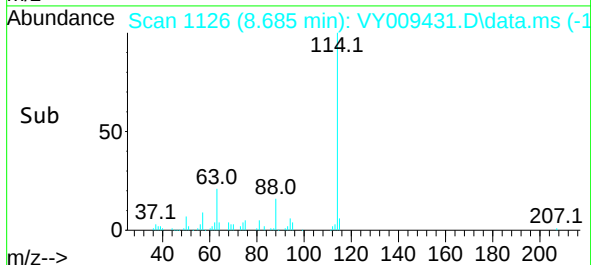
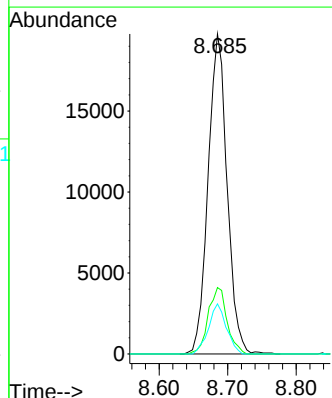
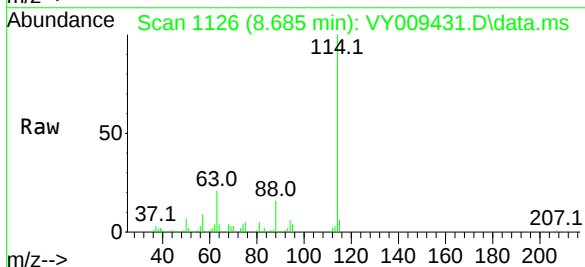
Tgt Ion: 114 Resp: 38083

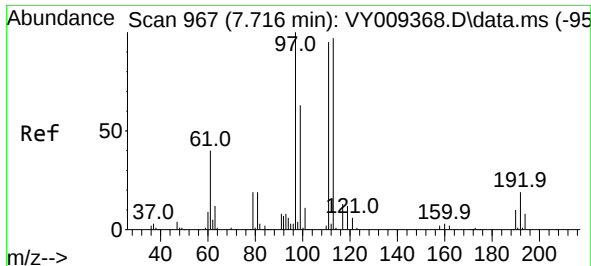
Ion Ratio Lower Upper

114 100

63 20.8 0.0 43.2

88 15.7 0.0 31.8





#35

Dibromofluoromethane

Concen: 44.623 ug/l

RT: 7.710 min Scan# 91

Delta R.T. -0.000 min

Lab File: VY009431.D

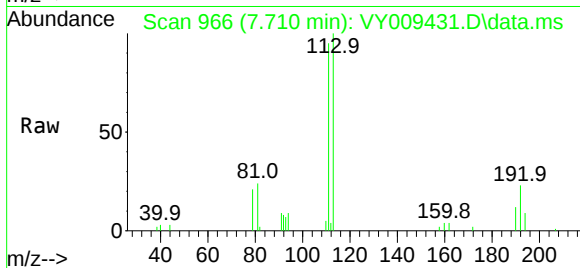
Acq: 05 Jul 2022 12:45

Instrument :

MSVOA\_Y

ClientSampleId :

GS-4ARE



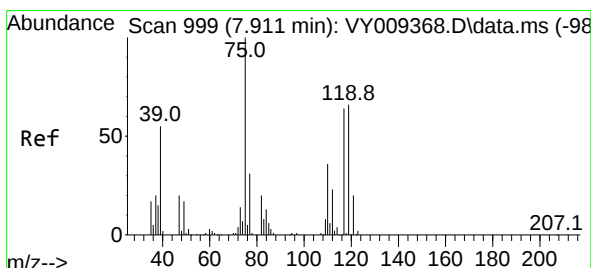
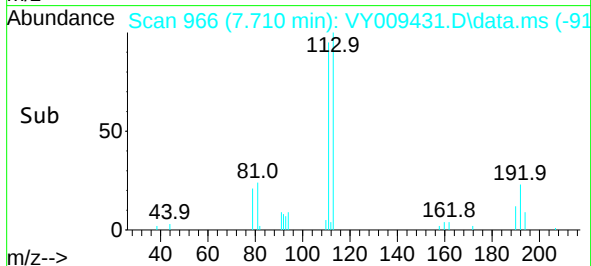
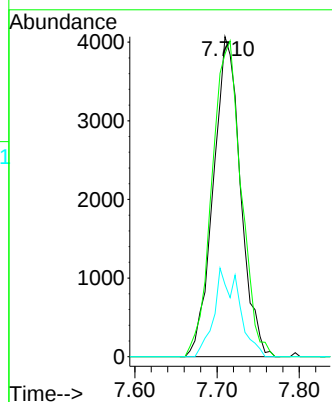
Tgt Ion:113 Resp: 9353

Ion Ratio Lower Upper

113 100

111 105.9 82.6 124.0

192 25.4 17.6 26.4



#36

1,1-Dichloropropene

Concen: 5.678 ug/l

RT: 7.789 min Scan# 979

Delta R.T. -0.122 min

Lab File: VY009431.D

Acq: 05 Jul 2022 12:45

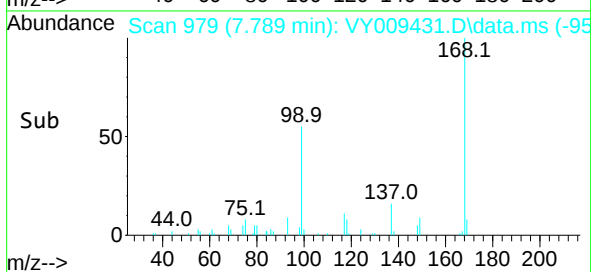
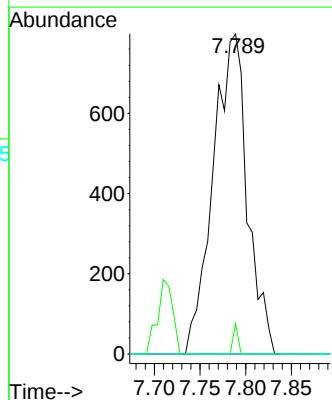
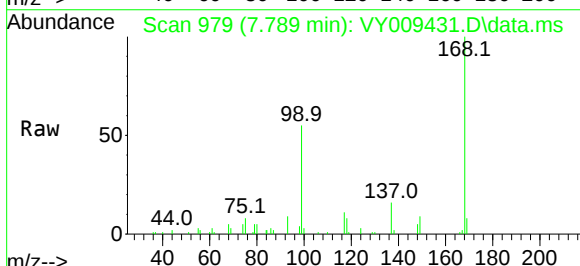
Tgt Ion: 75 Resp: 2081

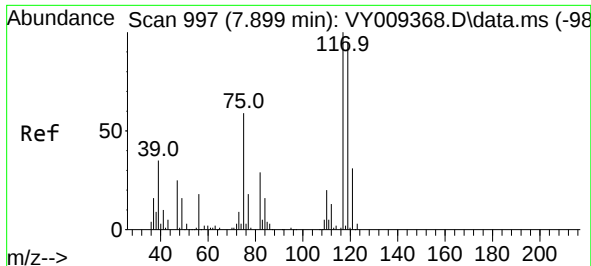
Ion Ratio Lower Upper

75 100

110 1.3 17.1 51.2#

77 0.0 24.4 36.6#

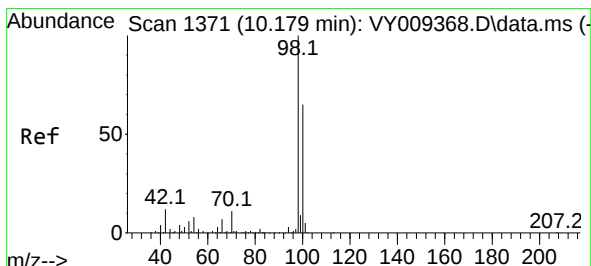
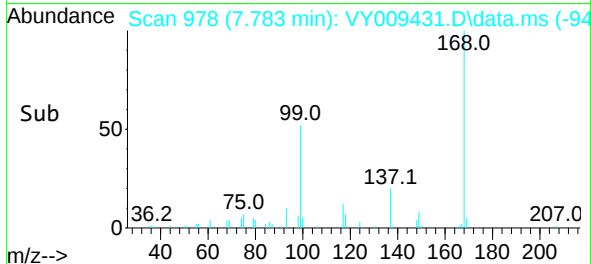
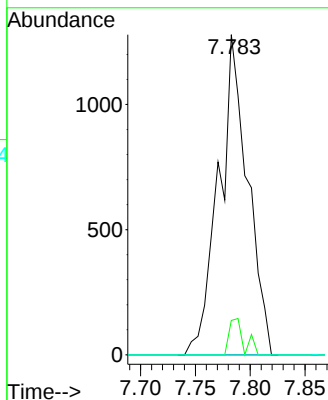
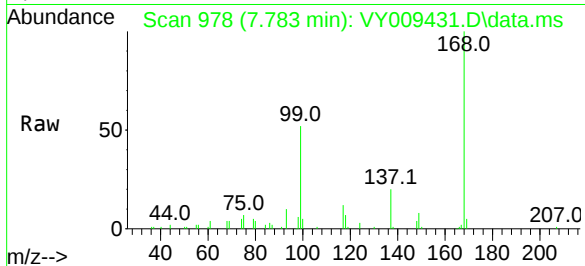




#38  
Carbon Tetrachloride  
Concen: 6.109 ug/l  
RT: 7.783 min Scan# 91  
Delta R.T. -0.110 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

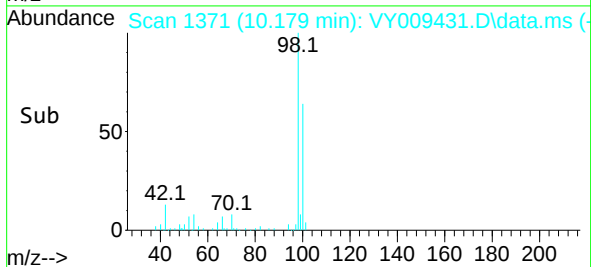
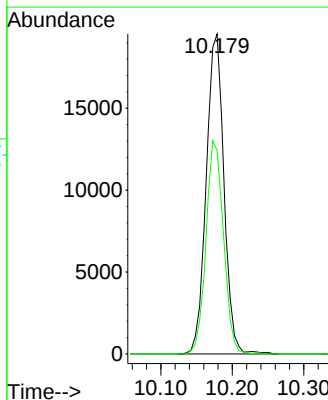
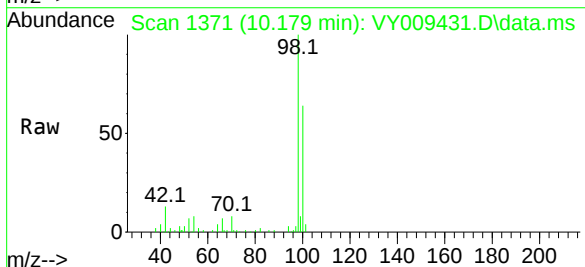
Instrument :  
MSVOA\_Y  
ClientSampleId :  
GS-4ARE

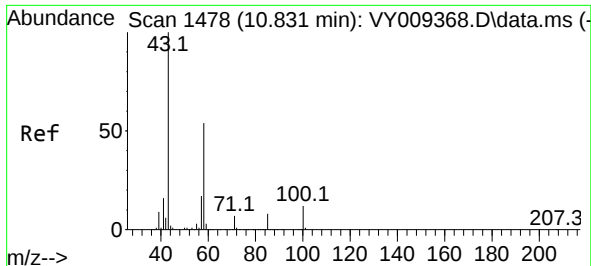
Tgt Ion:117 Resp: 2340  
Ion Ratio Lower Upper  
117 100  
119 10.7 77.9 116.9#  
121 0.0 24.8 37.2#



#50  
Toluene-d8  
Concen: 52.240 ug/l  
RT: 10.179 min Scan# 1371  
Delta R.T. -0.000 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

Tgt Ion: 98 Resp: 33571  
Ion Ratio Lower Upper  
98 100  
100 65.8 50.2 75.2

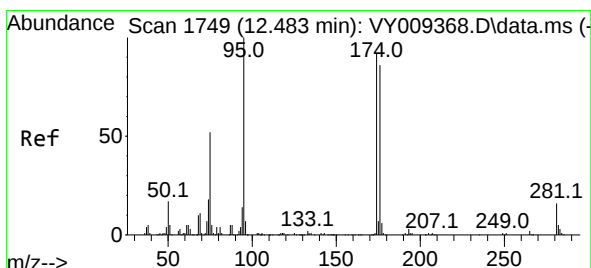
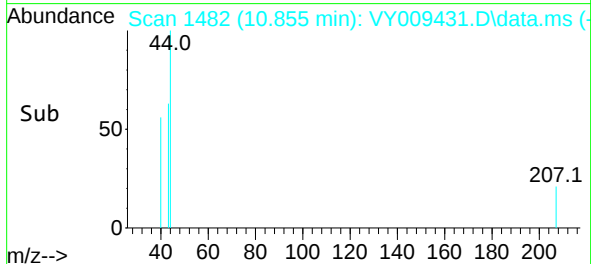
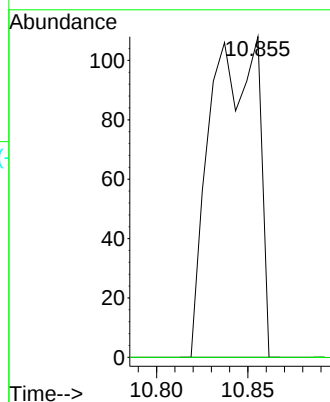
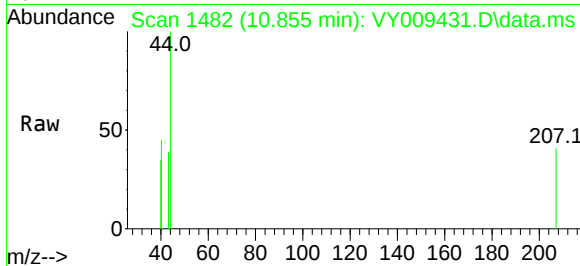




#59  
2-Hexanone  
Concen: 1.386 ug/l  
RT: 10.855 min Scan# 1478  
Delta R.T. 0.024 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

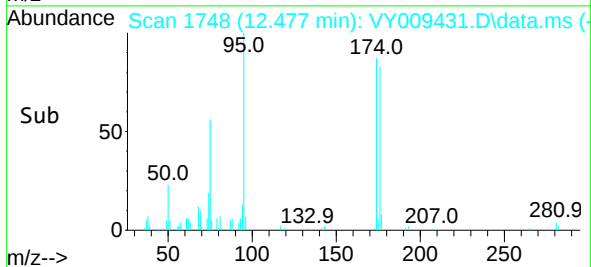
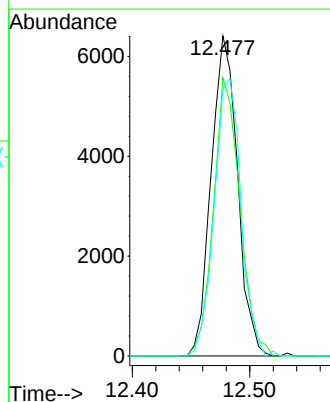
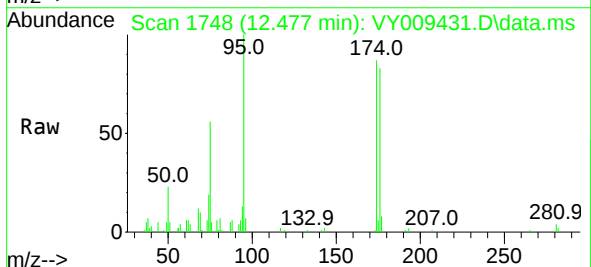
Instrument :  
MSVOA\_Y  
ClientSampleId :  
GS-4ARE

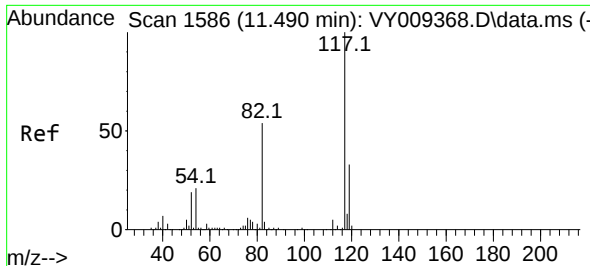
Tgt Ion: 43 Resp: 197  
Ion Ratio Lower Upper  
43 100  
58 0.0 24.4 73.4#



#62  
4-Bromofluorobenzene  
Concen: 32.735 ug/l  
RT: 12.477 min Scan# 1748  
Delta R.T. 0.000 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

Tgt Ion: 95 Resp: 9977  
Ion Ratio Lower Upper  
95 100  
174 87.2 0.0 177.0  
176 88.2 0.0 175.8

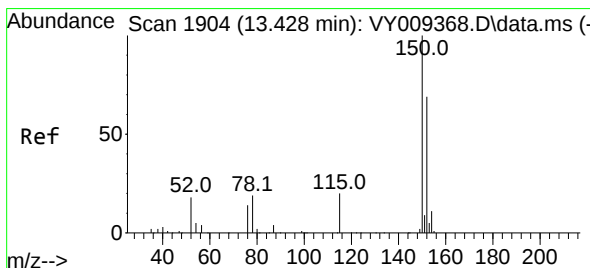
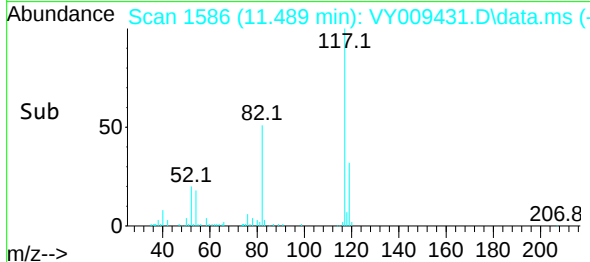
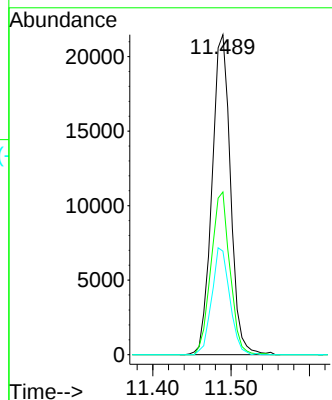
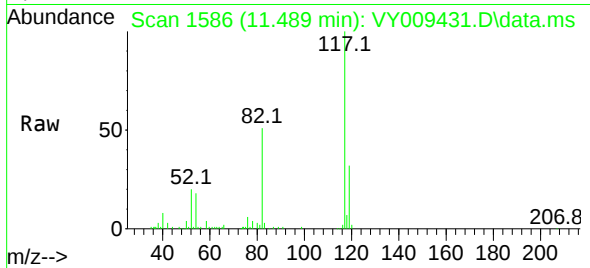




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.489 min Scan# 11  
Delta R.T. -0.001 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

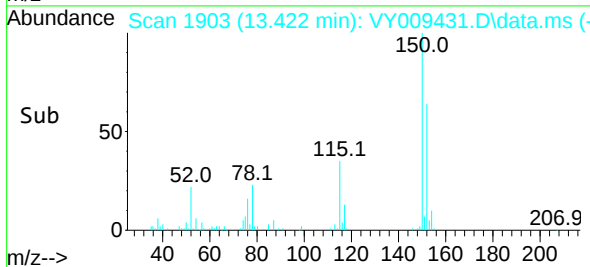
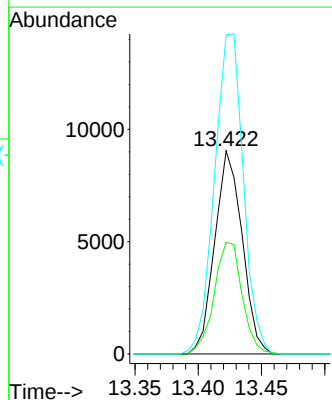
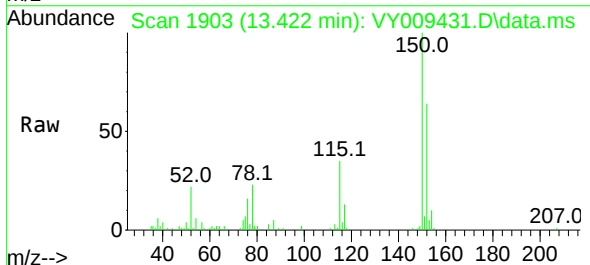
Instrument :  
MSVOA\_Y  
ClientSampleId :  
GS-4ARE

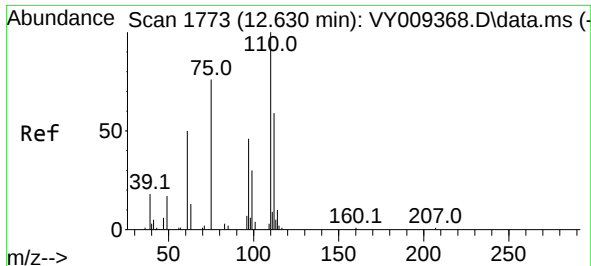
Tgt Ion:117 Resp: 35261  
Ion Ratio Lower Upper  
117 100  
82 50.9 43.0 64.4  
119 32.4 25.4 38.0



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.422 min Scan# 1903  
Delta R.T. 0.000 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

Tgt Ion:152 Resp: 13634  
Ion Ratio Lower Upper  
152 100  
115 56.1 28.2 84.7  
150 165.9 0.0 347.6

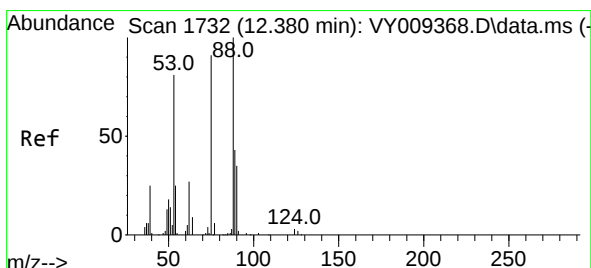
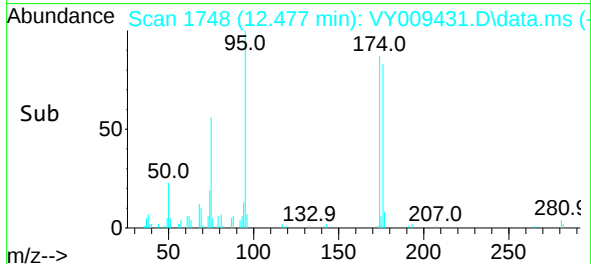
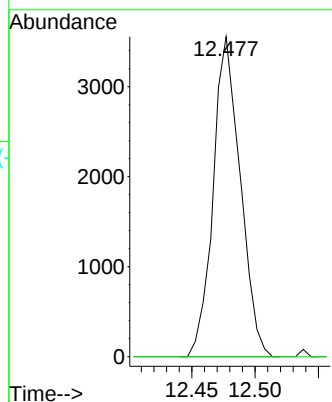
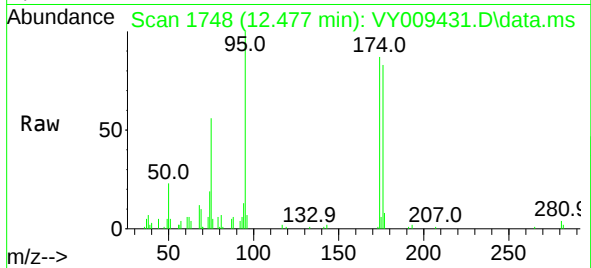




#76  
1,2,3-Trichloropropane  
Concen: 33.163 ug/l  
RT: 12.477 min Scan# 1748  
Delta R.T. -0.153 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

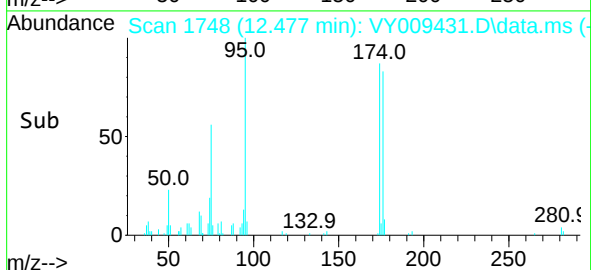
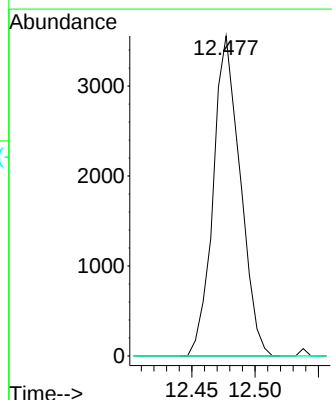
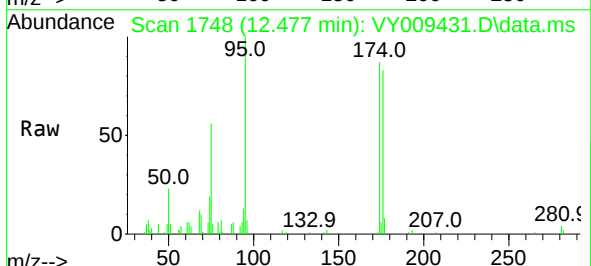
Instrument :  
MSVOA\_Y  
ClientSampleId :  
GS-4ARE

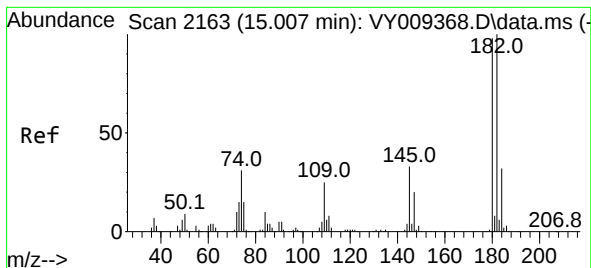
Tgt Ion: 75 Resp: 5295  
Ion Ratio Lower Upper  
75 100  
77 0.0 0.0 0.0



#81  
trans-1,4-Dichloro-2-butene  
Concen: 73.837 ug/l  
RT: 12.477 min Scan# 1748  
Delta R.T. 0.103 min  
Lab File: VY009431.D  
Acq: 05 Jul 2022 12:45

Tgt Ion: 75 Resp: 5295  
Ion Ratio Lower Upper  
75 100  
53 0.0 85.3 127.9#  
89 0.0 37.0 55.4#





#93

1,2,4-Trichlorobenzene

Concen: 1.312 ug/l

RT: 15.007 min Scan# 2163

Delta R.T. 0.000 min

Lab File: VY009431.D

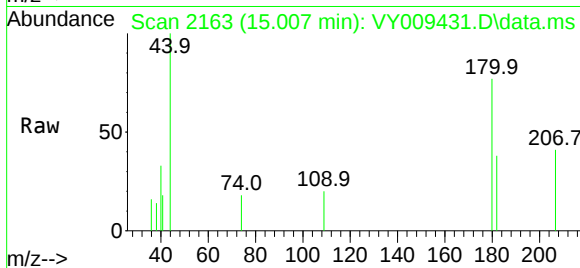
Acq: 05 Jul 2022 12:45

Instrument :

MSVOA\_Y

ClientSampleId :

GS-4ARE



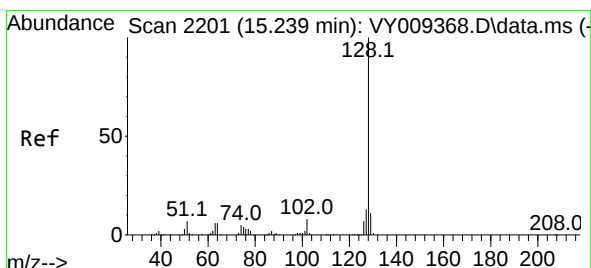
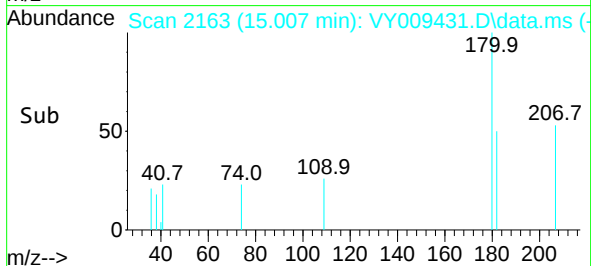
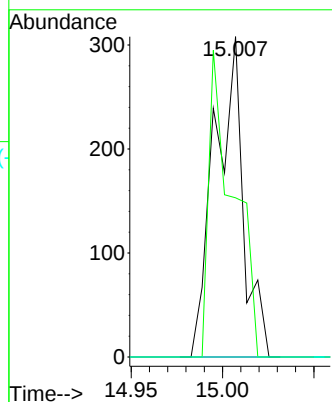
Tgt Ion:180 Resp: 335

Ion Ratio Lower Upper

180 100

182 82.1 47.3 141.9

145 0.0 14.6 43.8#



#95

Naphthalene

Concen: 1.561 ug/l

RT: 15.239 min Scan# 2201

Delta R.T. 0.006 min

Lab File: VY009431.D

Acq: 05 Jul 2022 12:45

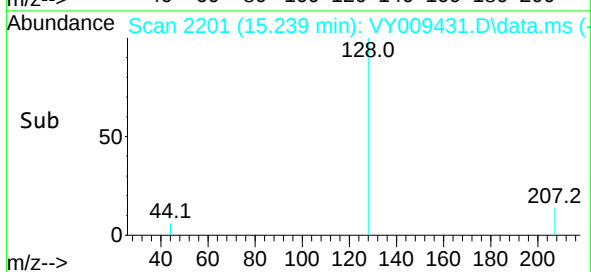
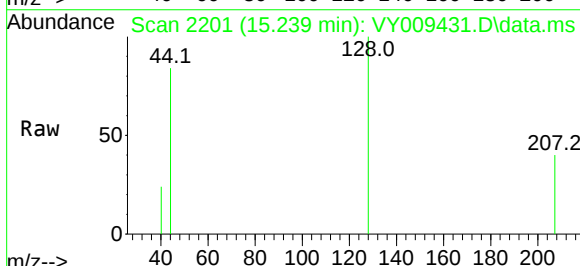
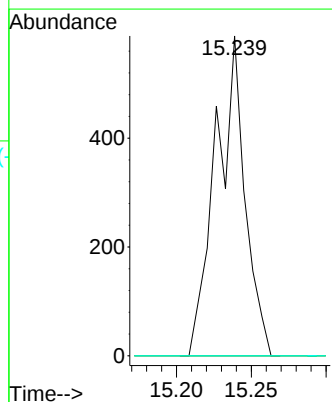
Tgt Ion:128 Resp: 798

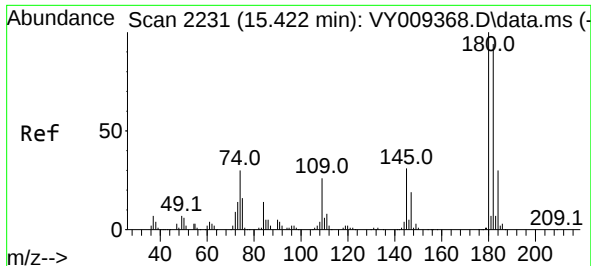
Ion Ratio Lower Upper

128 100

127 0.0 11.0 16.4#

129 0.0 8.4 12.6#





#96

1,2,3-Trichlorobenzene

Concen: 1.456 ug/l

RT: 15.416 min Scan# 21

Delta R.T. -0.006 min

Lab File: VY009431.D

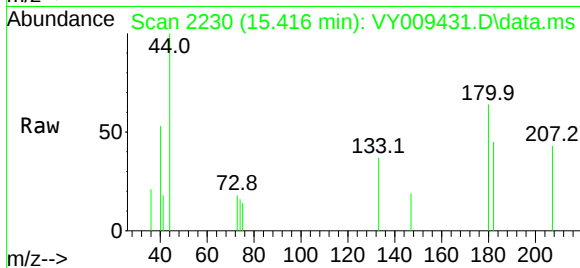
Acq: 05 Jul 2022 12:45

Instrument :

MSVOA\_Y

ClientSampleId :

GS-4ARE



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 180   | Resp: | 323   |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 83.6  | 47.3  | 141.9 |
| 145      | 0.0   | 15.3  | 45.9# |

