

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV092520\  
 Data File : VV018446.D  
 Acq On : 25 Sep 2020 11:33  
 Operator : SY/MD  
 Sample : L4109-11  
 Misc : 5.91g/5.0mL/100uL/5.0mL/MSVOA\_V/MEOH  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 BG3X1ME

Quant Time: Sep 25 23:44:09 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM090920WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Sep 25 23:36:18 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 404017   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 400255   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.28 | 152  | 210264   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.31    | 65    | 95859    | 29.11    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 58.22%# |
| 7) Chloroethane-d5             | 1.58    | 69    | 84192    | 31.25    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 62.50%# |
| 11) 1,1-Dichloroethene-d2      | 2.10    | 63    | 136889   | 22.66    | ug/L | -0.02   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 45.32%# |
| 21) 2-Butanone-d5              | 3.93    | 46    | 118530   | 58.81    | ug/L | 0.02    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 58.81%  |
| 24) Chloroform-d               | 4.37    | 84    | 217114   | 38.01    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 76.02%  |
| 26) 1,2-Dichloroethane-d4      | 5.05    | 65    | 144732   | 39.52    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 79.04%  |
| 32) Benzene-d6                 | 5.07    | 84    | 451009   | 39.36    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 78.72%  |
| 36) 1,2-Dichloropropane-d6     | 6.09    | 67    | 149678   | 41.11    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 82.22%  |
| 41) Toluene-d8                 | 7.33    | 98    | 435940   | 41.75    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 83.50%  |
| 43) trans-1,3-Dichloropropene- | 7.65    | 79    | 75791    | 40.97    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 81.94%  |
| 47) 2-Hexanone-d5              | 8.14    | 63    | 127804   | 92.67    | ug/L | 0.04    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 92.67%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.25   | 84    | 213753   | 46.78    | ug/L | 0.01    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 93.56%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.65   | 152   | 196022   | 45.39    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 90.78%  |

## Target Compounds

| Target Compounds              | R.T.  | QIon | Response | Conc    | Units  | Ovalue |
|-------------------------------|-------|------|----------|---------|--------|--------|
| 20) cis-1,2-Dichloroethene    | 3.93  | 96   | 7326     | 2.507   | ug/L   | 95     |
| 29) Cyclohexane               | 4.69  | 56   | 47472    | 10.271  | ug/L   | 98     |
| 30) 1,1,1-Trichloroethane     | 4.62  | 97   | 68440    | 14.734  | ug/L   | 99     |
| 31) Carbon tetrachloride      | 4.63  | 117  | 9039     | 2.213   | ug/L   | 95     |
| 35) Methylcyclohexane         | 6.09  | 83   | 34945    | 7.445   | ug/L # | 18     |
| 39) cis-1,3-Dichloropropene   | 7.01  | 75   | 4119     | 0.882   | ug/L # | 50     |
| 42) Toluene                   | 7.41  | 91   | 1381778  | 114.097 | ug/L   | 100    |
| 48) 2-Hexanone                | 8.10  | 43   | 38785    | 13.373  | ug/L # | 25     |
| 52) Ethylbenzene              | 9.03  | 91   | 609882   | 46.127  | ug/L   | 99     |
| 53) m,p-Xylene                | 9.16  | 106  | 1043196  | 211.383 | ug/L   | 95     |
| 54) o-xylene                  | 9.57  | 106  | 425457   | 89.487  | ug/L   | 100    |
| 55) Styrene                   | 9.57  | 104  | 20921    | 2.532   | ug/L # | 1      |
| 56) Isopropylbenzene          | 9.95  | 105  | 604155   | 47.150  | ug/L   | 99     |
| 58) 1,1,2,2-Tetrachloroethane | 10.26 | 83   | 37681    | 9.063   | ug/L # | 48     |
| 59) 1,2,3-Trichloropropane    | 10.38 | 75   | 18088    | 5.071   | ug/L # | 1      |
| 62) 1,3-Dichlorobenzene       | 11.21 | 146  | 4725     | 0.756   | ug/L # | 1      |
| 63) 1,4-Dichlorobenzene       | 11.30 | 146  | 8963     | 1.395   | ug/L # | 1      |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV092520\  
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Acq On : 25 Sep 2020 11:33  
Operator : SY/MD  
Sample : L4109-11  
Misc : 5.91g/5.0mL/100uL/5.0mL/MSVOA\_V/MEOH  
ALS Vial : 7 Sample Multiplier: 1

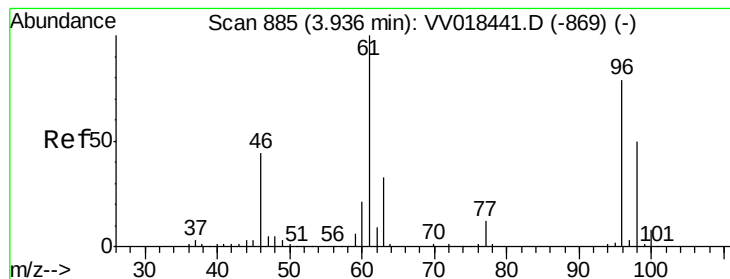
Instrument :  
MSVOA\_V  
ClientSampleId :  
BG3X1ME

Quant Time: Sep 25 23:44:09 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM090920WMA.M  
Quant Title : VOC Analysis  
QLast Update : Fri Sep 25 23:36:18 2020  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 65) 1,2-Dichlorobenzene        | 11.67 | 146  | 39689    | 6.280   | ug/L # | 78       |
| 66) 1,2-Dibromo-3-chloropropan | 12.43 | 75   | 8653     | 9.703   | ug/L # | 4        |
| 68) 1,2,4-trichlorobenzene     | 13.29 | 180  | 32056    | 7.303   | ug/L # | 64       |
| 69) Naphthalene                | 13.53 | 128  | 2168057  | 195.208 | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.77 | 180  | 9326     | 2.157   | ug/L # | 86       |

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

```
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_V\DATA\VV092520\  
Data File : VV018446.D  
Acq On    : 25 Sep 2020  11:33  
Operator  : SY/MD  
Sample    : L4109-11  
Misc      : 5.91q/5.0mL/100uL/5.0mL/MSVOA_V/MEOH  
ALS Vial  : 7      Sample Multiplier: 1
```



#20

cis-1,2-Dichloroethene

Concen: 2.507 ug/L

RT: 3.93 min Scan# 884

Delta R.T. -0.00 min

Lab File: VV018446.D

Acq: 25 Sep 2020 11:33

Instrument :

MSVOA\_V

ClientSampleId :

BG3X1ME

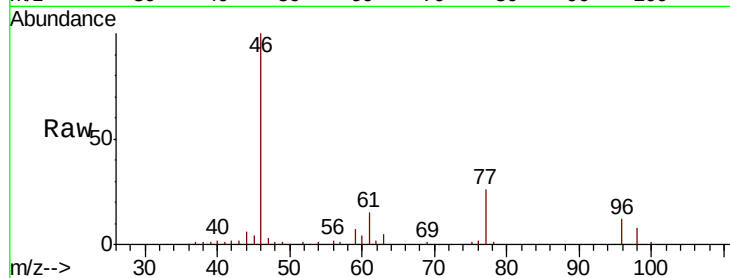
Tot Ion: 96 Resp: 7326

Ion Ratio Lower Upper

96 100

61 127.9 93.6 173.8

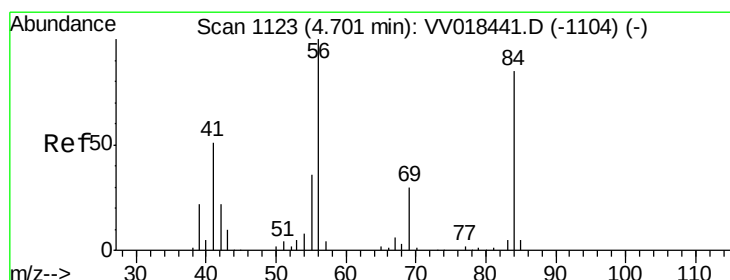
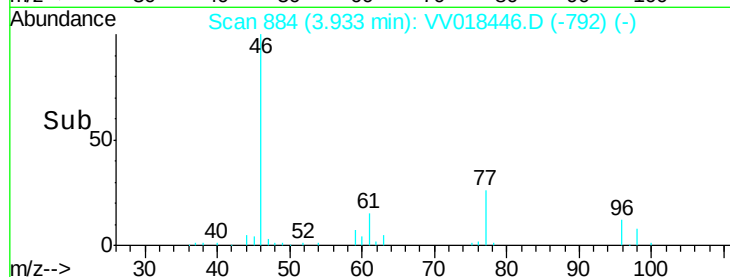
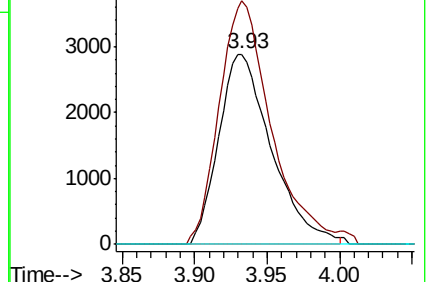
68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 68.00 (67.70 to 68.70): VV0



#29

Cyclohexane

Concen: 10.271 ug/L

RT: 4.69 min Scan# 1119

Delta R.T. -0.01 min

Lab File: VV018446.D

Acq: 25 Sep 2020 11:33

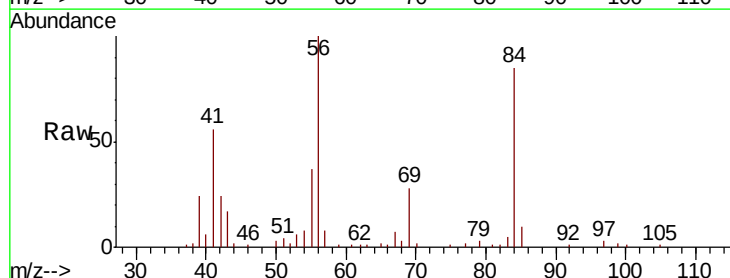
Tgt Ion: 56 Resp: 47472

Ion Ratio Lower Upper

56 100

69 30.0 24.2 36.2

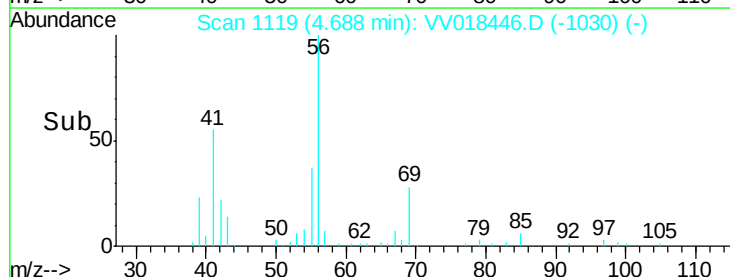
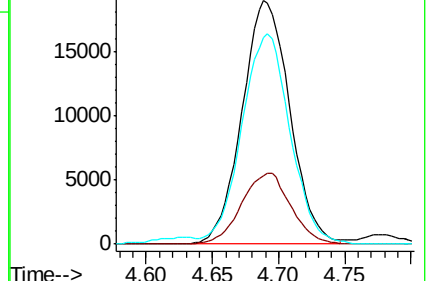
84 87.5 68.3 102.5

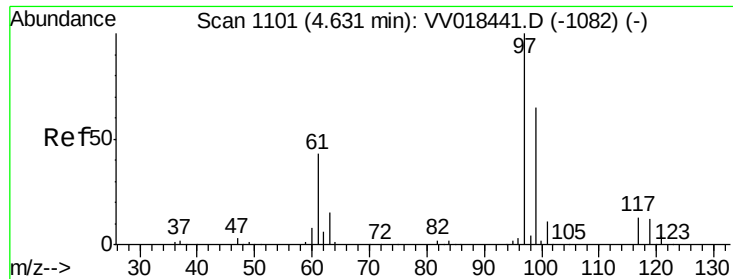


Abundance Ion 56.00 (55.70 to 56.70): VV0

Ion 69.00 (68.70 to 69.70): VV0

Ion 84.00 (83.70 to 84.70): VV0

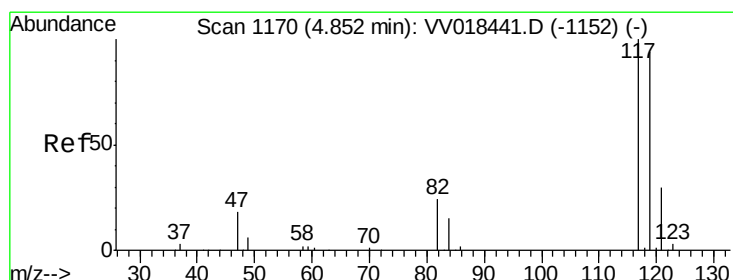
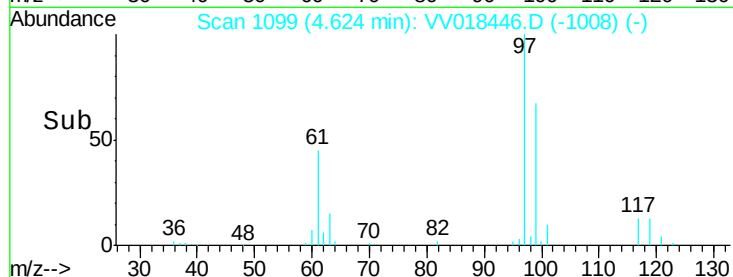
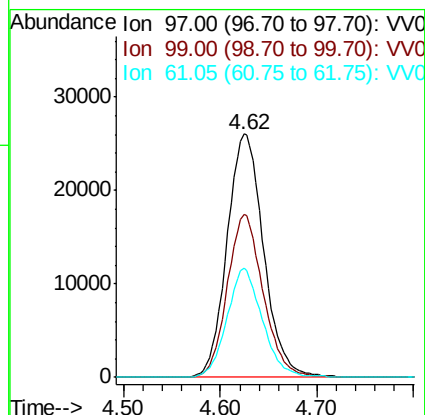
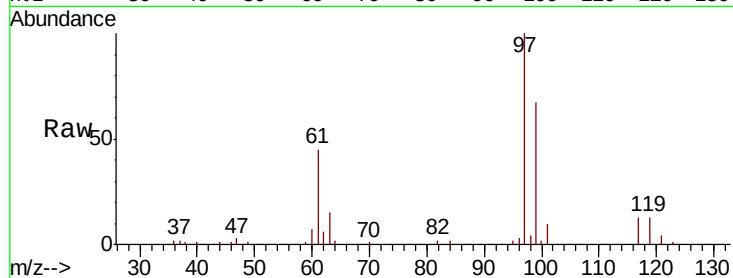




#30  
 1,1,1-Trichloroethane  
 Concen: 14.734 ug/L  
 RT: 4.62 min Scan# 1099  
 Delta R.T. -0.01 min  
 Lab File: VV018446.D  
 Acq: 25 Sep 2020 11:33

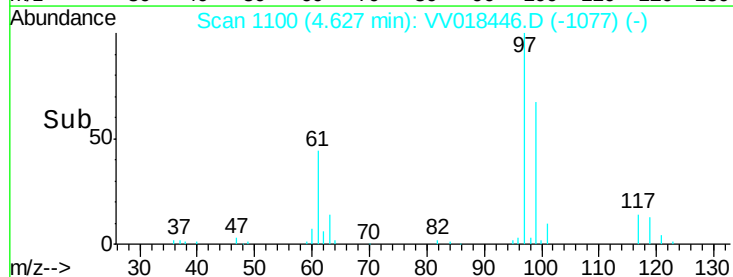
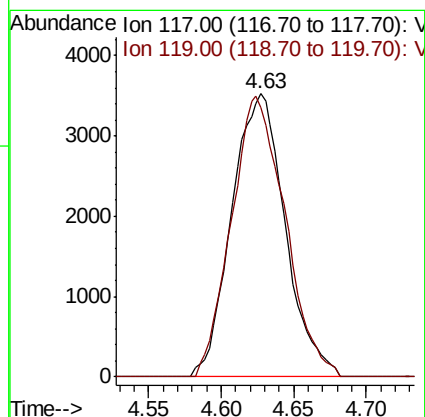
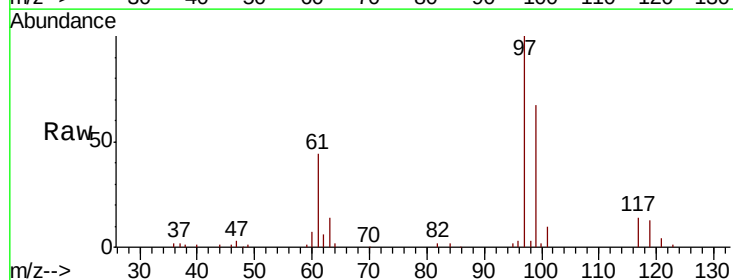
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 BG3X1ME

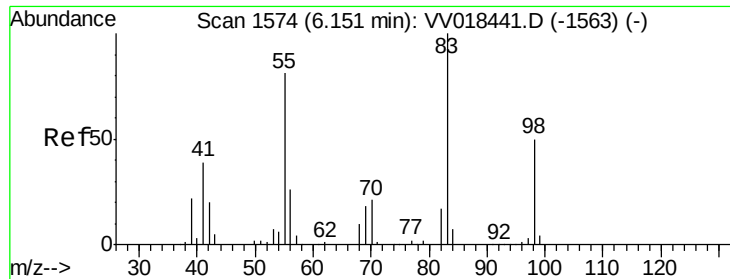
Tot Ion: 97 Resp: 68440  
 Ion Ratio Lower Upper  
 97 100  
 99 65.6 51.6 77.4  
 61 43.2 34.9 52.3



#31  
 Carbon tetrachloride  
 Concen: 2.213 ug/L  
 RT: 4.63 min Scan# 1100  
 Delta R.T. -0.23 min  
 Lab File: VV018446.D  
 Acq: 25 Sep 2020 11:33

Tgt Ion: 117 Resp: 9039  
 Ion Ratio Lower Upper  
 117 100  
 119 99.6 75.7 113.5

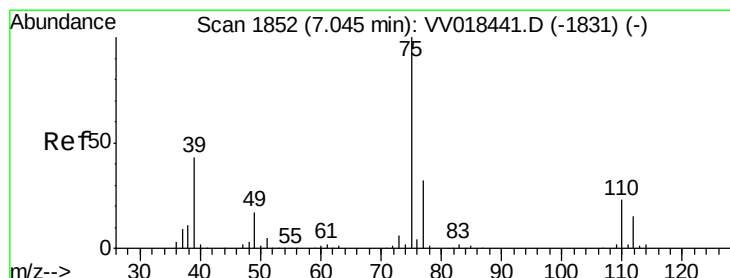
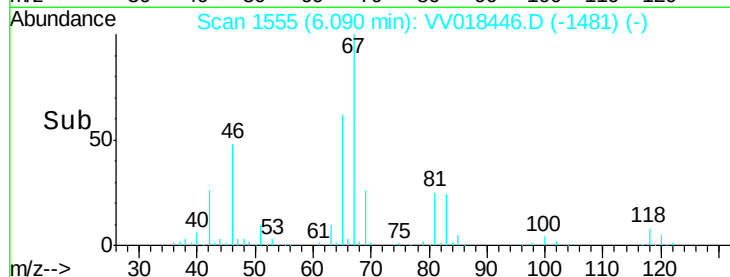
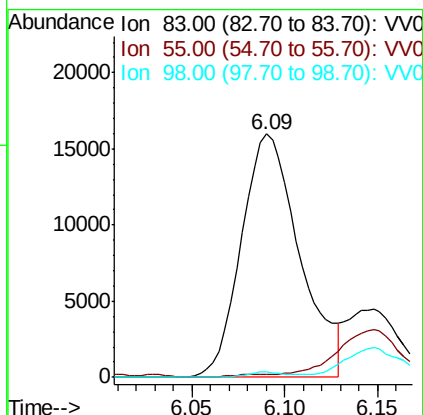
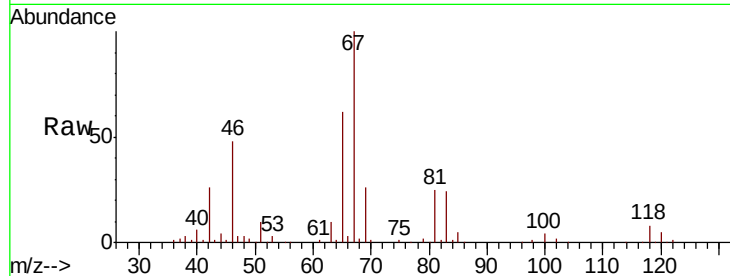




#35  
Methylvlcyclohexane  
Concen: 7.445 ug/L  
RT: 6.09 min Scan# 1555  
Delta R.T. -0.06 min  
Lab File: VV018446.D  
Acq: 25 Sep 2020 11:33

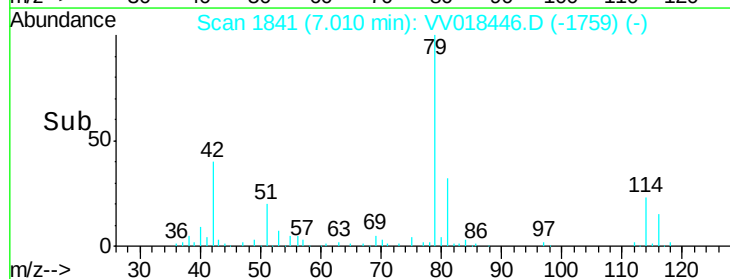
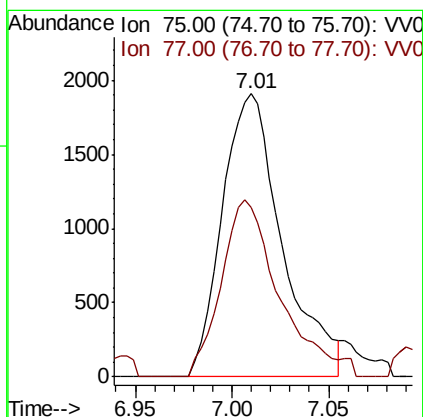
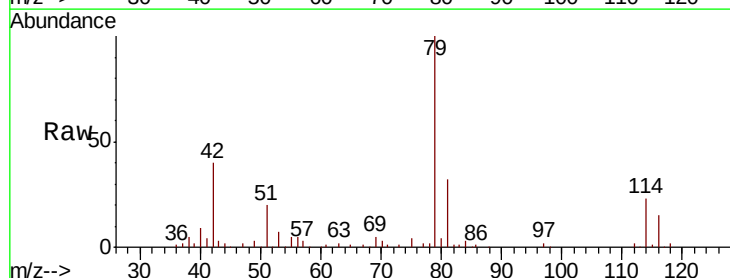
Instrument :  
MSVOA\_V  
ClientSampleId :  
BG3X1ME

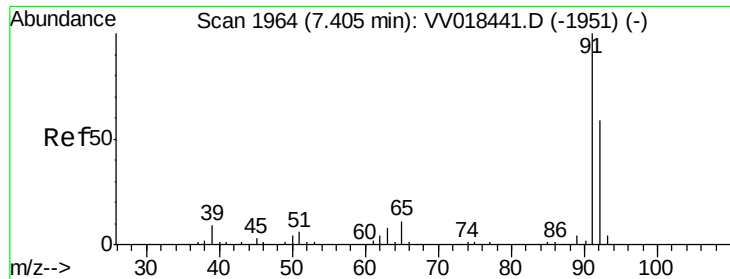
Tot Ion: 83 Resp: 34945  
Ion Ratio Lower Upper  
83 100  
55 0.8 63.4 95.2#  
98 1.3 38.8 58.2#



#39  
cis-1,3-Dichloropropene  
Concen: 0.882 ug/L  
RT: 7.01 min Scan# 1841  
Delta R.T. -0.04 min  
Lab File: VV018446.D  
Acq: 25 Sep 2020 11:33

Tgt Ion: 75 Resp: 4119  
Ion Ratio Lower Upper  
75 100  
77 59.8 22.3 41.3#





#42

Toluene

Concen: 114.097 ug/L

RT: 7.41 min Scan# 1964

Delta R.T. -0.00 min

Lab File: VV018446.D

Acq: 25 Sep 2020 11:33

Instrument :

MSVOA\_V

ClientSampleId :

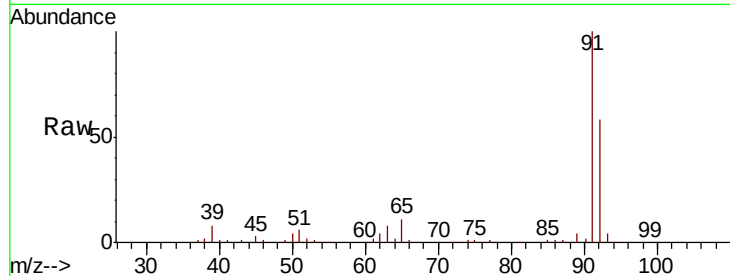
BG3X1ME

Tot Ion: 91 Resp: 1381778

Ion Ratio Lower Upper

91 100

92 58.2 40.7 75.5



Abundance Ion 91.00 (90.70 to 91.70): VV0

Ion 92.00 (91.70 to 92.70): VV0

7.41

800000

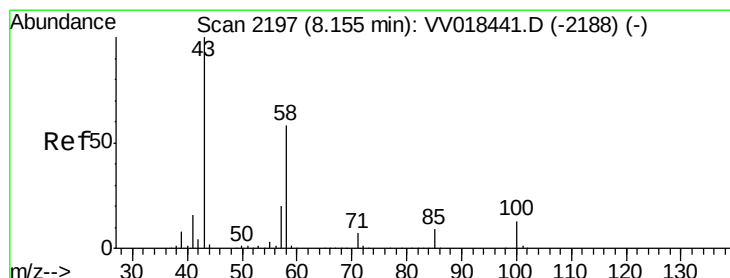
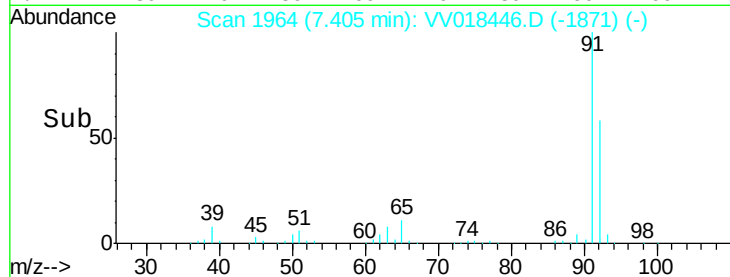
600000

400000

200000

0

Time--> 7.30 7.40 7.50



#48

2-Hexanone

Concen: 13.373 ug/L

RT: 8.10 min Scan# 2179

Delta R.T. -0.06 min

Lab File: VV018446.D

Acq: 25 Sep 2020 11:33

Tgt Ion: 43 Resp: 38785

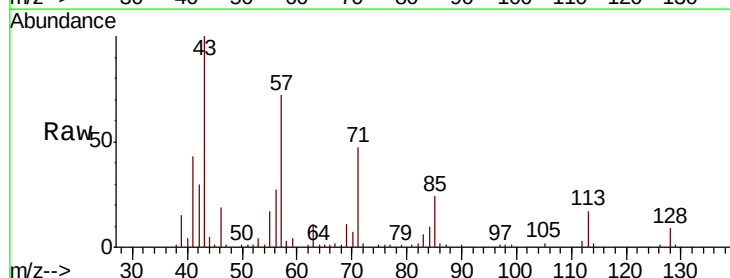
Ion Ratio Lower Upper

43 100

58 5.1 44.8 67.2#

57 73.8 15.8 23.6#

100 0.0 10.2 15.4#



Abundance Ion 43.00 (42.70 to 43.70): VV0

Ion 58.00 (57.70 to 58.70): VV0

Ion 57.00 (56.70 to 57.70): VV0

Ion 100.00 (99.70 to 100.70): VV0

30000

25000

20000

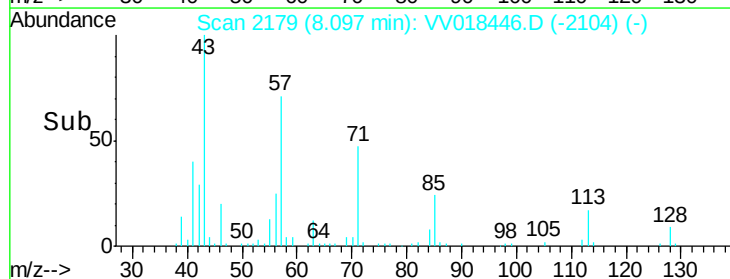
15000

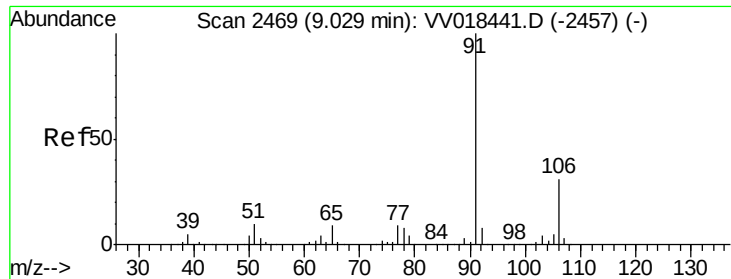
10000

5000

0

Time--> 8.00 8.05 8.10 8.15

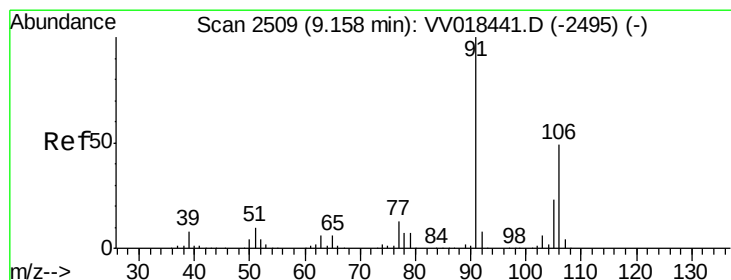
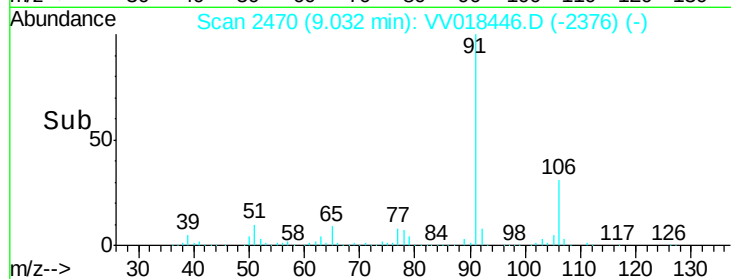
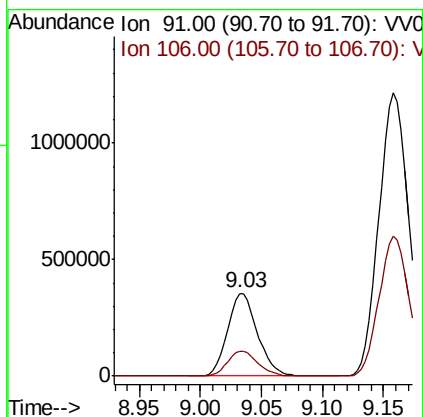
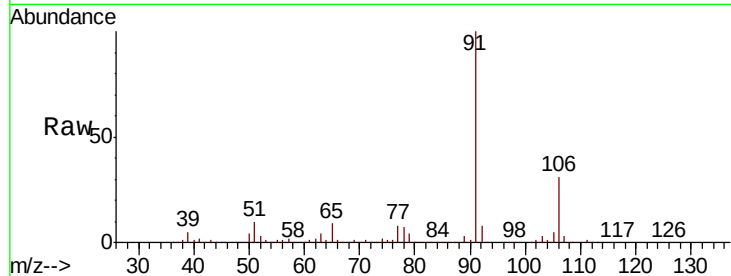




#52  
Ethylbenzene  
Concen: 46.127 ug/L  
RT: 9.03 min Scan# 2470  
Delta R.T. 0.00 min  
Lab File: VV018446.D  
Acq: 25 Sep 2020 11:33

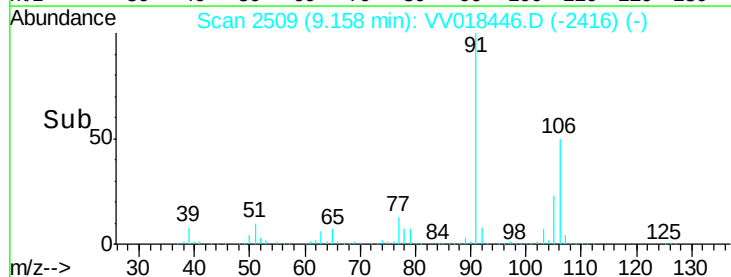
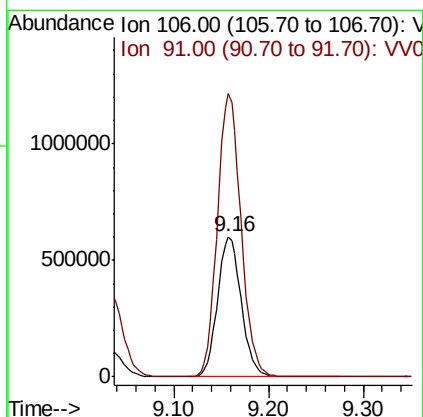
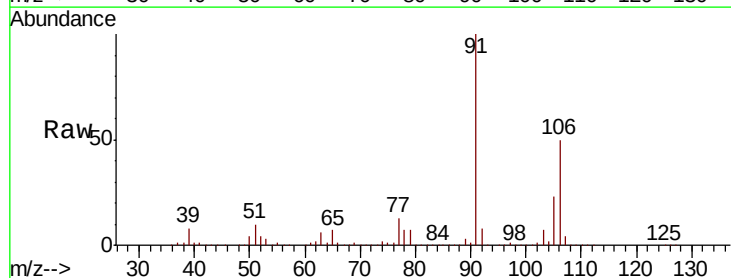
Instrument :  
MSVOA\_V  
ClientSampleId :  
BG3X1ME

Tot Ion: 91 Resp: 609882  
Ion Ratio Lower Upper  
91 100  
106 30.8 21.3 39.5

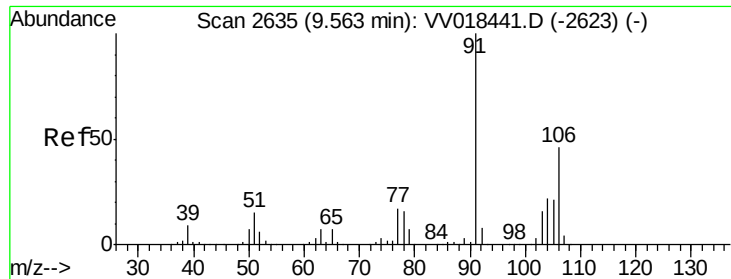


#53  
m,p-Xylene  
Concen: 211.383 ug/L  
RT: 9.16 min Scan# 2509  
Delta R.T. -0.00 min  
Lab File: VV018446.D  
Acq: 25 Sep 2020 11:33

Tgt Ion: 106 Resp: 1043196  
Ion Ratio Lower Upper  
106 100  
91 202.0 146.7 272.5







#54

o-xylene

Concen: 89.487 ug/L

RT: 9.57 min Scan# 2636

Delta R.T. 0.00 min

Lab File: VV018446.D

Acq: 25 Sep 2020 11:33

Instrument :

MSVOA\_V

ClientSampleId :

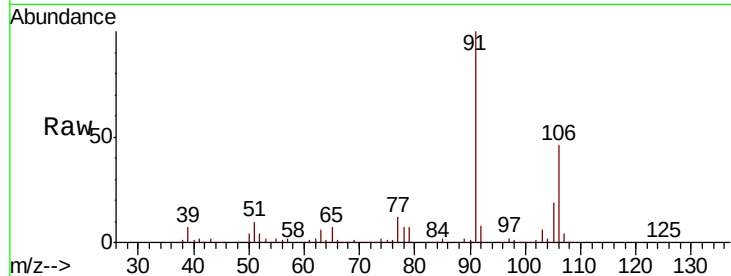
BG3X1ME

Tot Ion:106 Resp: 425457

Ion Ratio Lower Upper

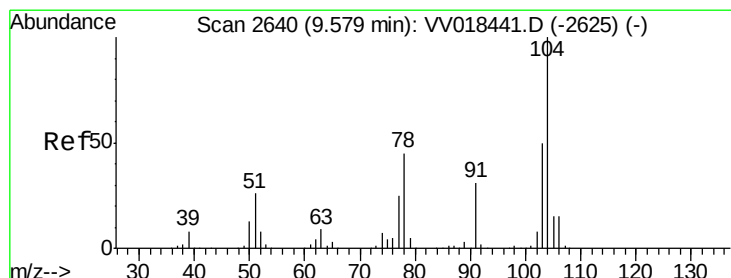
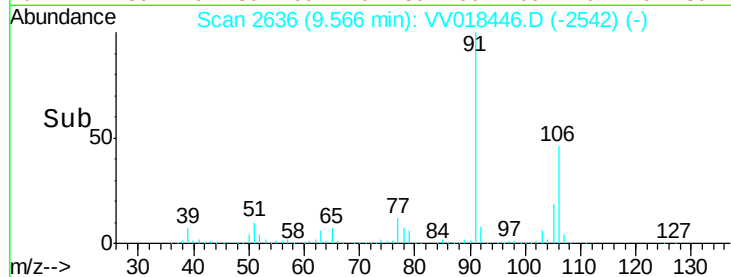
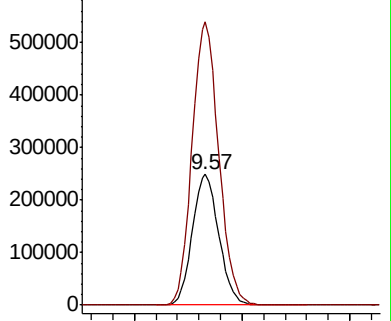
106 100

91 217.0 152.2 282.6



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VV0



#55

Styrene

Concen: 2.532 ug/L

RT: 9.57 min Scan# 2636

Delta R.T. -0.01 min

Lab File: VV018446.D

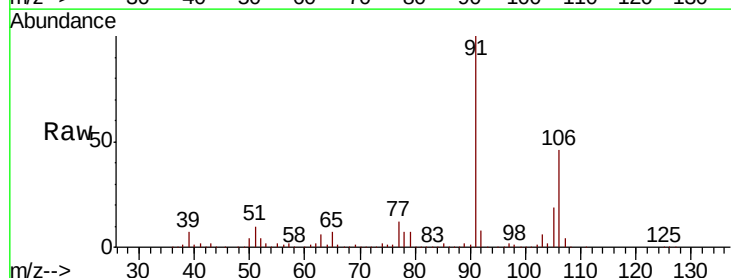
Acq: 25 Sep 2020 11:33

Tgt Ion:104 Resp: 20921

Ion Ratio Lower Upper

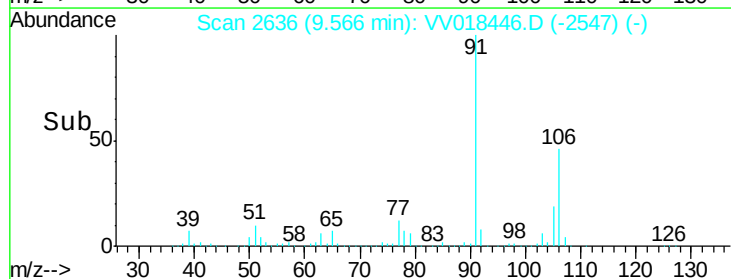
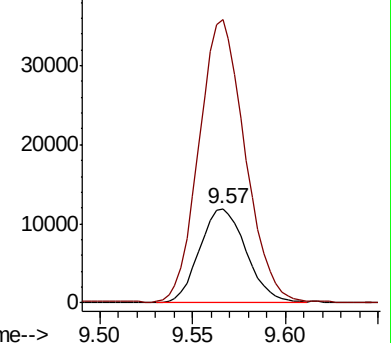
104 100

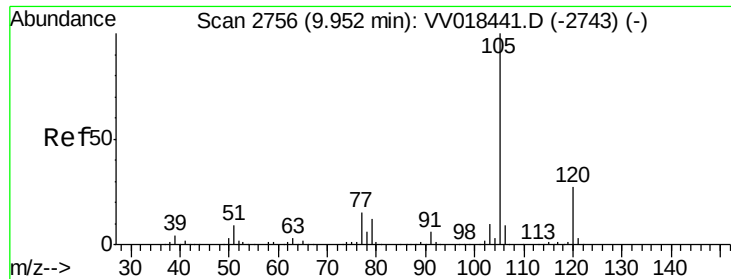
78 300.3 31.4 58.2#



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VV0





#56

Isopropylbenzene

Concen: 47.150 ug/L

RT: 9.95 min Scan# 2757

Delta R.T. 0.00 min

Lab File: VV018446.D

Acq: 25 Sep 2020 11:33

Instrument :

MSVOA\_V

ClientSampleId :

BG3X1ME

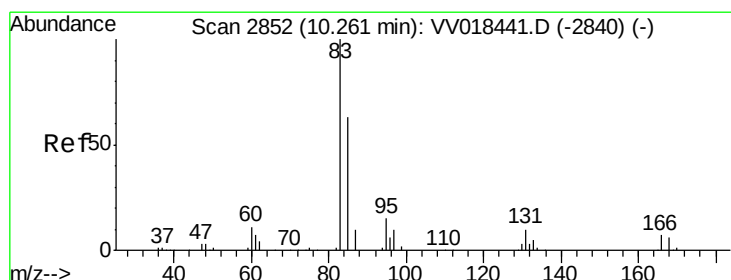
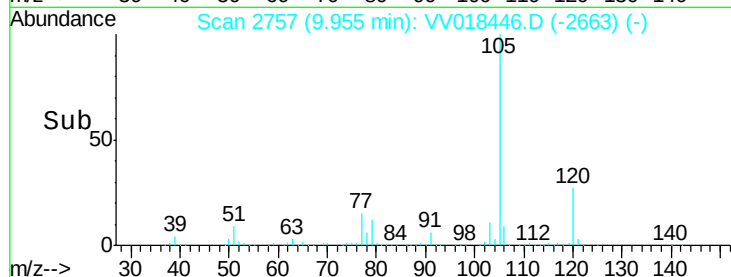
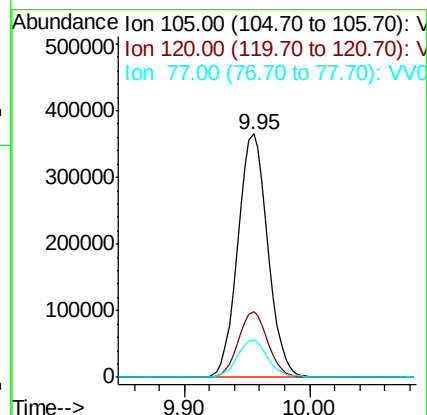
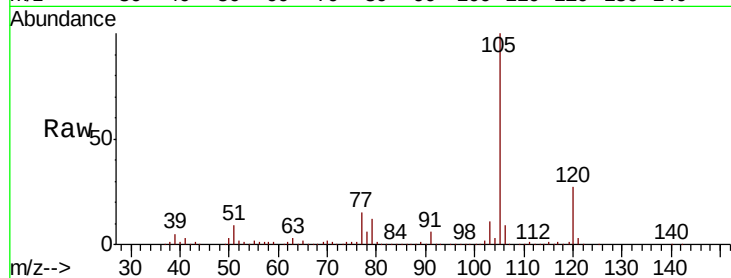
Tot Ion:105 Resp: 604155

Ion Ratio Lower Upper

105 100

120 26.6 20.9 31.3

77 15.7 12.5 18.7



#58

1,1,2,2-Tetrachloroethane

Concen: 9.063 ug/L

RT: 10.26 min Scan# 2852

Delta R.T. -0.00 min

Lab File: VV018446.D

Acq: 25 Sep 2020 11:33

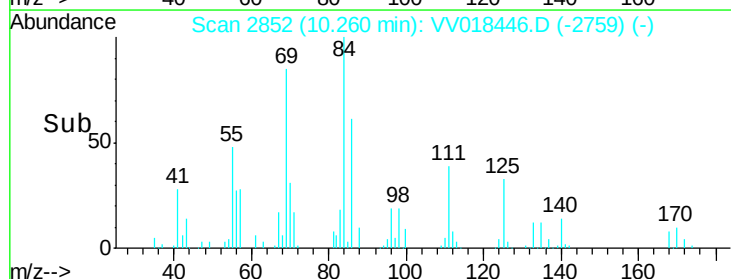
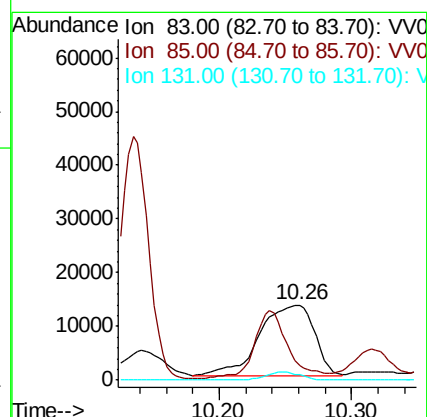
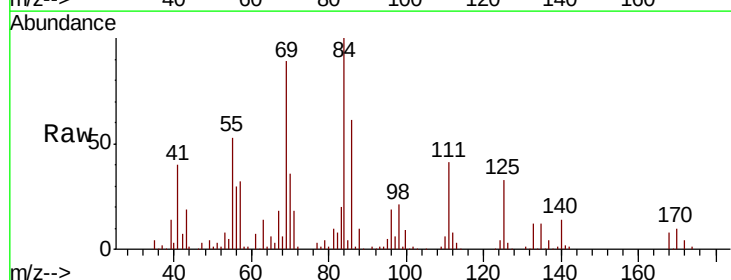
Tgt Ion: 83 Resp: 37681

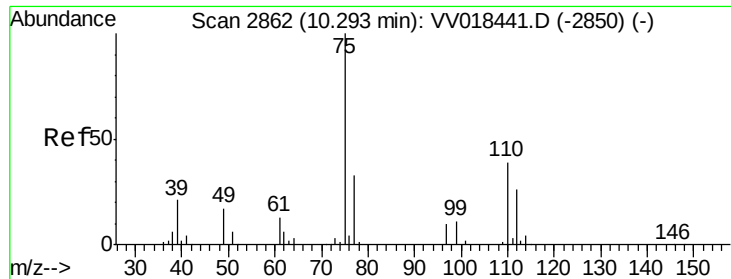
Ion Ratio Lower Upper

83 100

85 19.6 45.8 85.2#

131 6.6 8.0 12.0#





#59

1,2,3-Trichloropropane

Concen: 5.071 ug/L

RT: 10.38 min Scan# 2888

Delta R.T. 0.08 min

Lab File: VV018446.D

Acq: 25 Sep 2020 11:33

Instrument :

MSVOA\_V

ClientSampleId :

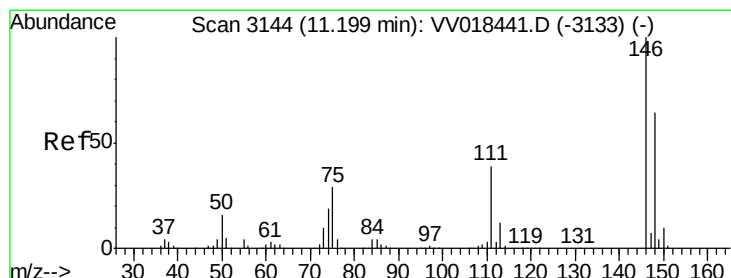
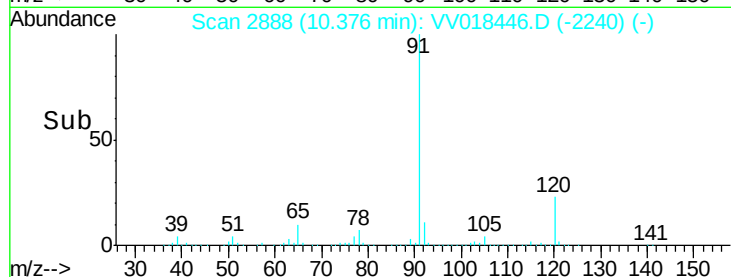
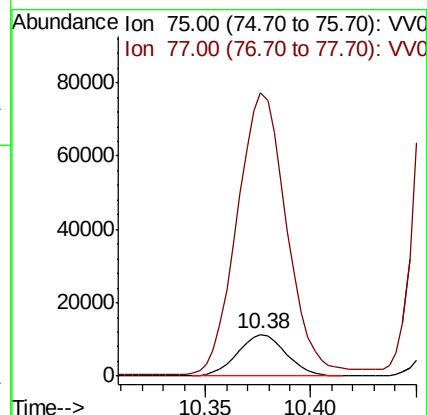
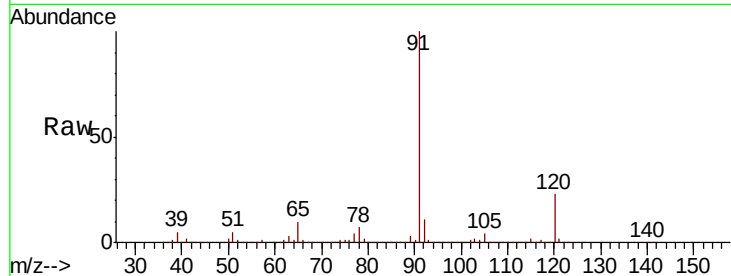
BG3X1ME

Tot Ion: 75 Resp: 18088

Ion Ratio Lower Upper

75 100

77 692.7 25.8 38.6#



#62

1,3-Dichlorobenzene

Concen: 0.756 ug/L

RT: 11.21 min Scan# 3147

Delta R.T. 0.01 min

Lab File: VV018446.D

Acq: 25 Sep 2020 11:33

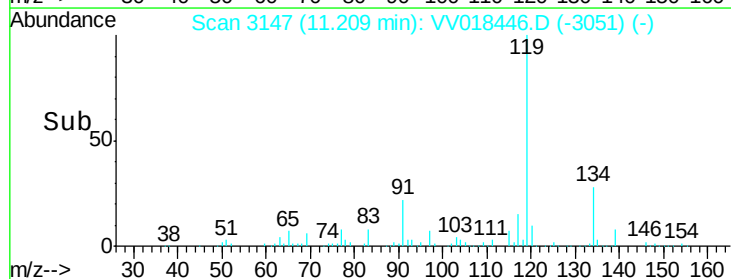
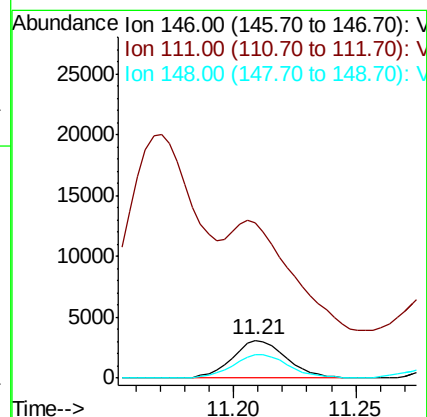
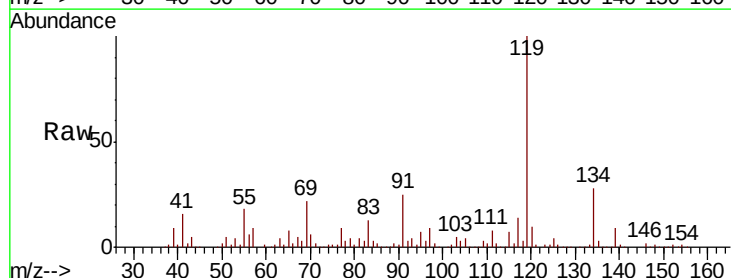
Tgt Ion: 146 Resp: 4725

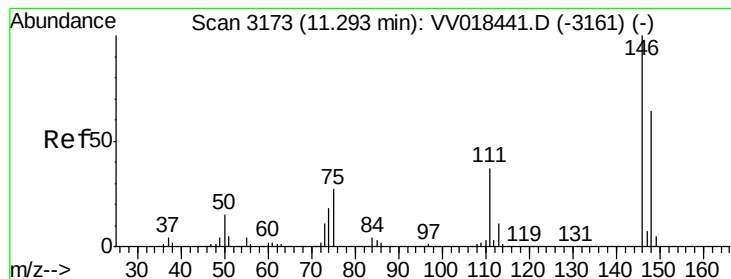
Ion Ratio Lower Upper

146 100

111 408.0 27.6 51.2#

148 60.9 45.4 84.2





#63

1,4-Dichlorobenzene

Concen: 1.395 ug/L

RT: 11.30 min Scan# 3175

Delta R.T. 0.01 min

Lab File: VV018446.D

Acq: 25 Sep 2020 11:33

Instrument :

MSVOA\_V

ClientSampleId :

BG3X1ME

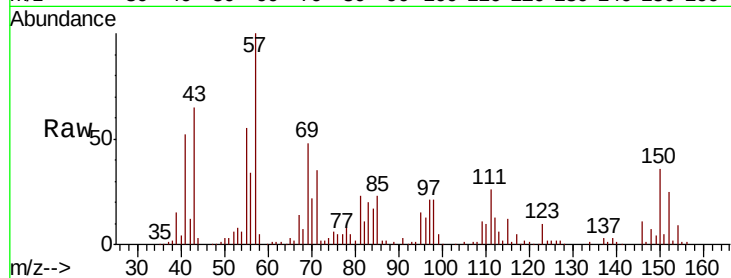
Tot Ion:146 Resp: 8963

Ion Ratio Lower Upper

146 100

111 230.1 27.1 50.3#

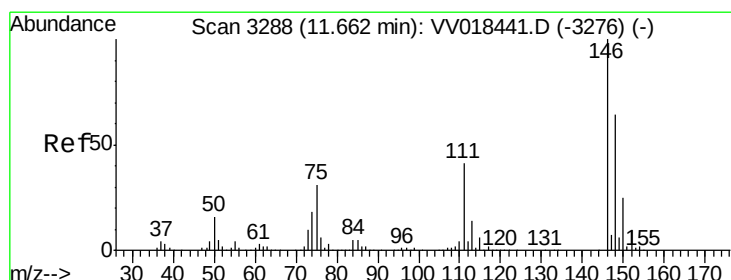
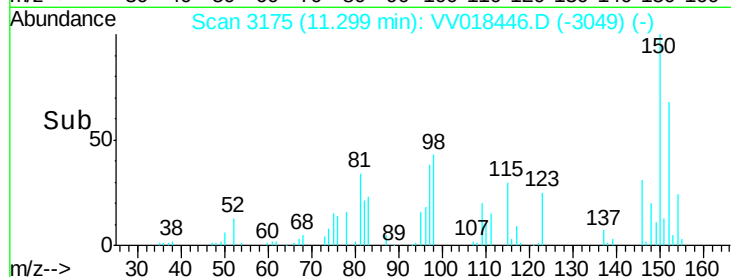
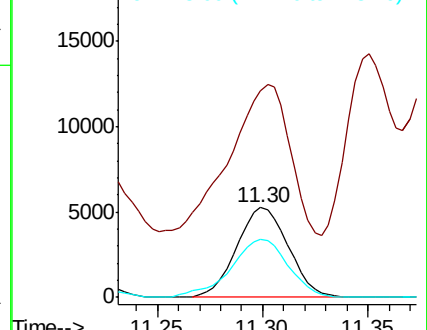
148 65.2 45.4 84.2



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#65

1,2-Dichlorobenzene

Concen: 6.280 ug/L

RT: 11.67 min Scan# 3290

Delta R.T. 0.01 min

Lab File: VV018446.D

Acq: 25 Sep 2020 11:33

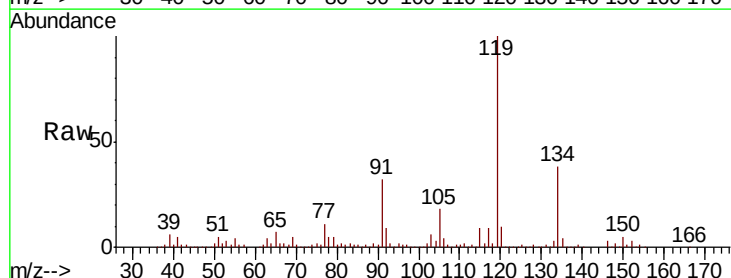
Tgt Ion:146 Resp: 39689

Ion Ratio Lower Upper

146 100

111 73.7 32.8 49.2#

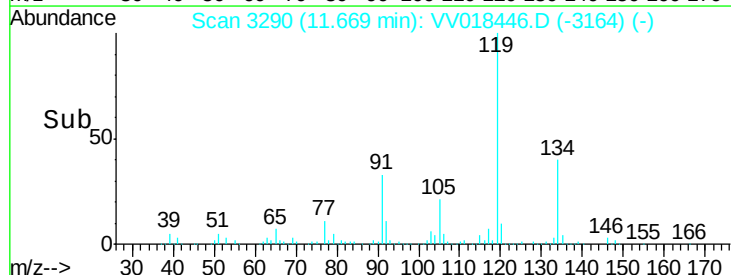
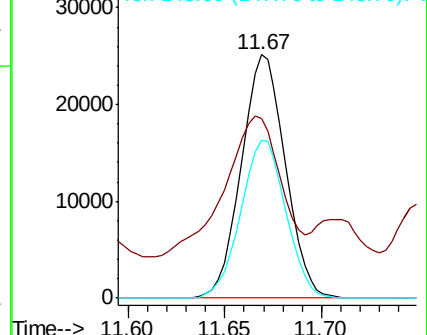
148 65.0 50.7 76.1

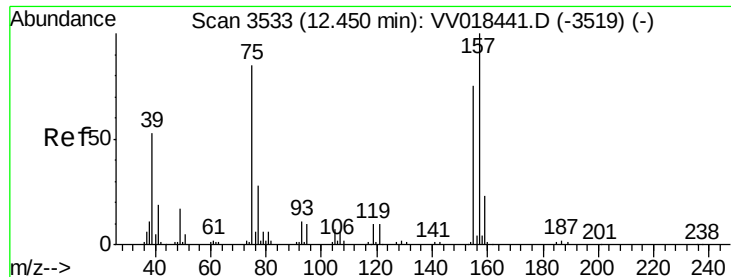


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

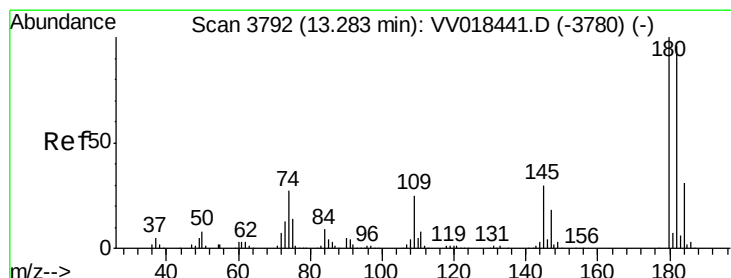
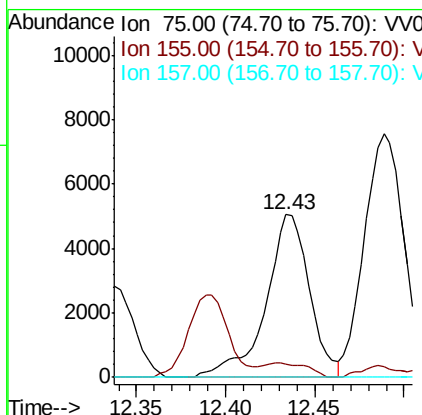
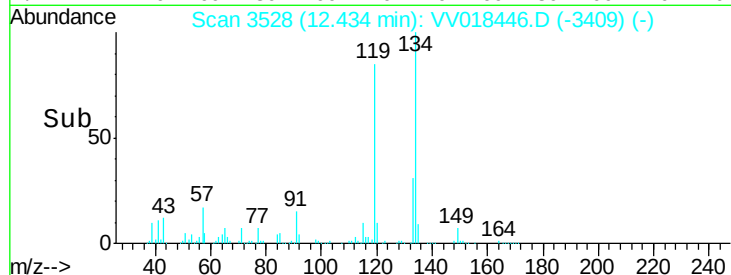
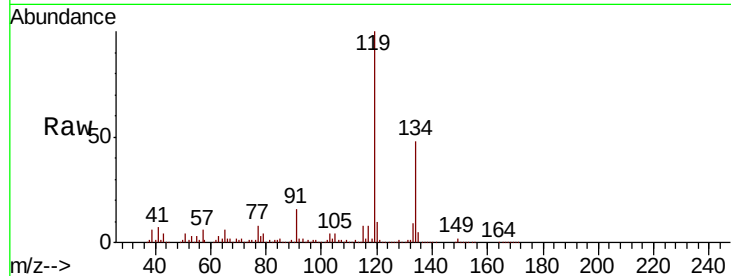




#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 9.703 ug/L  
 RT: 12.43 min Scan# 3528  
 Delta R.T. -0.02 min  
 Lab File: VV018446.D  
 Acq: 25 Sep 2020 11:33

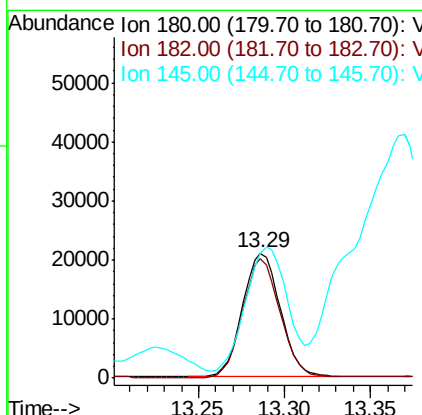
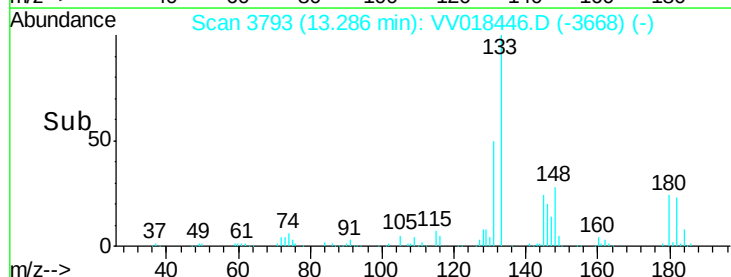
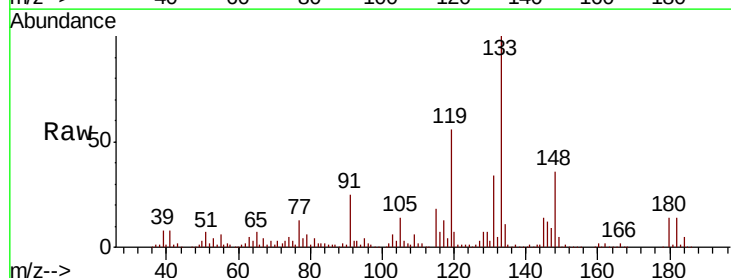
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 BG3X1ME

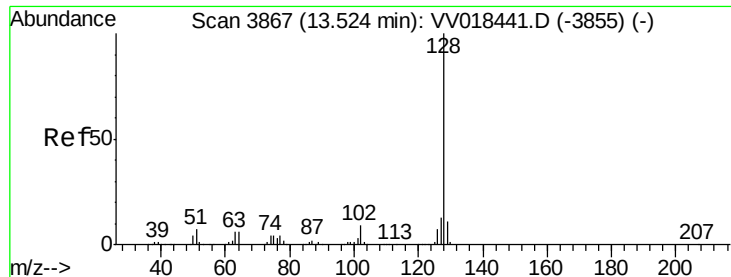
Tot Ion: 75 Resp: 8653  
 Ion Ratio Lower Upper  
 75 100  
 155 8.0 69.7 104.5#  
 157 0.0 88.2 132.4#



#68  
 1,2,4-trichlorobenzene  
 Concen: 7.303 ug/L  
 RT: 13.29 min Scan# 3793  
 Delta R.T. 0.00 min  
 Lab File: VV018446.D  
 Acq: 25 Sep 2020 11:33

Tgt Ion: 180 Resp: 32056  
 Ion Ratio Lower Upper  
 180 100  
 182 95.0 77.4 116.2  
 145 109.2 23.2 34.8#





#69

Naphthalene

Concen: 195.208 ug/L

RT: 13.53 min Scan# 3868

Delta R.T. 0.00 min

Lab File: VV018446.D

Acq: 25 Sep 2020 11:33

Instrument :

MSVOA\_V

ClientSampleId :

BG3X1ME

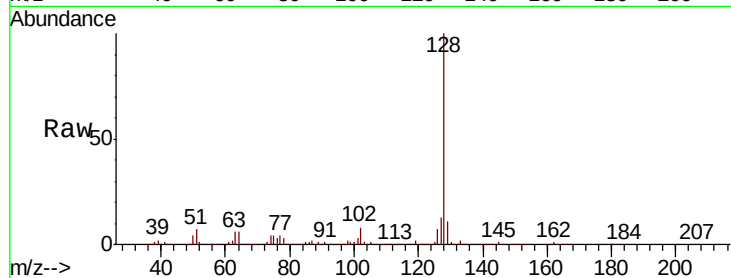
Tot Ion:128 Resp: 2168057

Ion Ratio Lower Upper

128 100

127 13.1 10.6 15.8

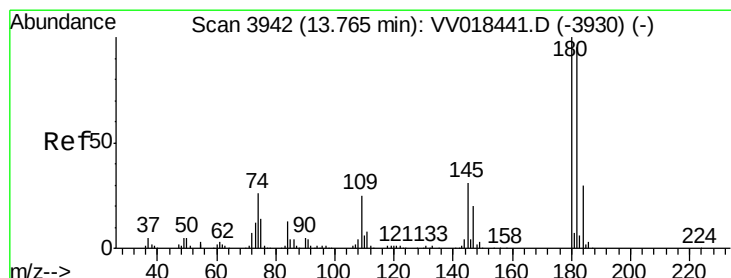
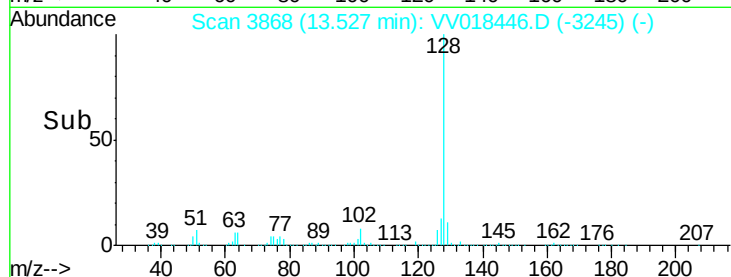
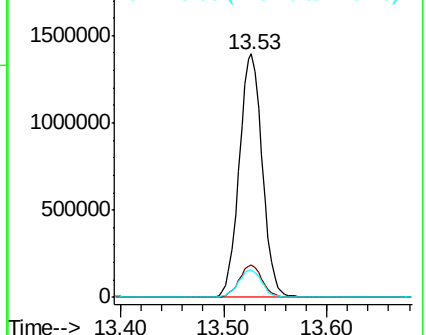
129 11.6 8.6 13.0



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



#70

1,2,3-Trichlorobenzene

Concen: 2.157 ug/L

RT: 13.77 min Scan# 3944

Delta R.T. 0.01 min

Lab File: VV018446.D

Acq: 25 Sep 2020 11:33

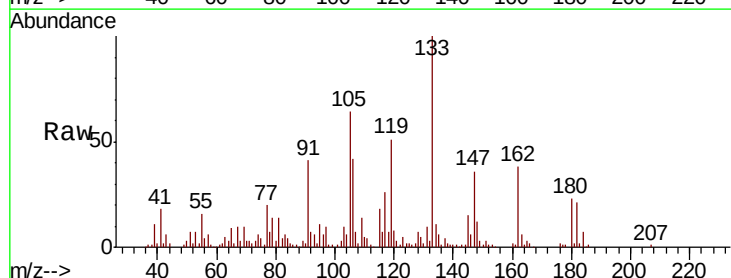
Tgt Ion:180 Resp: 9326

Ion Ratio Lower Upper

180 100

182 95.1 76.5 114.7

145 0.0 24.9 37.3#



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

