

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV052120\  
 Data File : VV016166.D  
 Acq On : 21 May 2020 20:04  
 Operator : SY/MD  
 Sample : VSTDCCC005EC  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: May 22 01:58:39 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR050720WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri May 22 01:50:48 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 146383   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 140415   | 5.00 | ug/L  | 0.00     |
| 61) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 69599    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 34086    | 4.29     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 85.80%  |
| 7) Chloroethane-d5             | 1.58   | 69    | 37682    | 5.01     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 100.20% |
| 11) 1,1-Dichloroethene-d2      | 2.13   | 63    | 85407    | 5.00     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 100.00% |
| 20) 2-Butanone-d5              | 3.93   | 46    | 115818   | 51.13    | ug/L | -0.01   |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 102.26% |
| 24) Chloroform-d               | 4.38   | 84    | 87796    | 5.06     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 101.20% |
| 26) 1,2-Dichloroethane-d4      | 5.06   | 65    | 49152    | 4.94     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 98.80%  |
| 32) Benzene-d6                 | 5.08   | 84    | 176507   | 5.28     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 105.60% |
| 36) 1,2-Dichloropropane-d6     | 6.10   | 67    | 55858    | 5.48     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 109.60% |
| 41) Toluene-d8                 | 7.34   | 98    | 162671   | 5.15     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 103.00% |
| 45) trans-1,3-Dichloropropene- | 7.65   | 79    | 18217    | 4.55     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 91.00%  |
| 48) 2-Hexanone-d5              | 8.11   | 63    | 90506    | 51.47    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 102.94% |
| 59) 1,1,2,2-Tetrachloroethane- | 10.24  | 84    | 38415    | 5.36     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 107.20% |
| 65) 1,2-Dichlorobenzene-d4     | 11.65  | 152   | 59353    | 5.25     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 105.00% |

## Target Compounds

|                                |      |     |        |        | Ovalue   |
|--------------------------------|------|-----|--------|--------|----------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 47867  | 4.267  | ug/L 97  |
| 3) Chloromethane               | 1.25 | 50  | 50704  | 4.465  | ug/L 99  |
| 5) Vinyl chloride              | 1.32 | 62  | 51193  | 4.714  | ug/L 98  |
| 6) Bromomethane                | 1.53 | 94  | 23772  | 3.857  | ug/L 100 |
| 8) Chloroethane                | 1.60 | 64  | 33305  | 4.305  | ug/L 100 |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 74278  | 4.987  | ug/L 100 |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 45196  | 5.372  | ug/L 99  |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 41889  | 5.200  | ug/L 97  |
| 13) Acetone                    | 2.22 | 43  | 61898  | 41.422 | ug/L 71  |
| 14) Carbon disulfide           | 2.32 | 76  | 111930 | 4.209  | ug/L 98  |
| 15) Methyl Acetate             | 2.47 | 43  | 14060  | 4.072  | ug/L 95  |
| 16) Methylene chloride         | 2.53 | 84  | 48583  | 5.040  | ug/L 96  |
| 17) Methyl tert-butyl Ether    | 2.79 | 73  | 91133  | 4.354  | ug/L 99  |
| 18) trans-1,2-Dichloroethene   | 2.78 | 96  | 44031  | 4.946  | ug/L 97  |
| 19) 1,1-Dichloroethane         | 3.22 | 63  | 86319  | 5.034  | ug/L 97  |
| 21) 2-Butanone                 | 4.02 | 43  | 99017  | 43.510 | ug/L 100 |
| 22) cis-1,2-Dichloroethene     | 3.94 | 96  | 45687  | 4.902  | ug/L 96  |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV052120\  
 Data File : VV016166.D  
 Acq On : 21 May 2020 20:04  
 Operator : SY/MD  
 Sample : VSTDCCC005EC  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 24 Sample Multiplier: 1

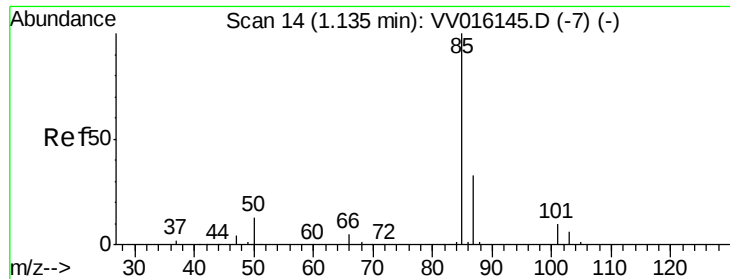
Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: May 22 01:58:39 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR050720WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri May 22 01:50:48 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane         | 4.28  | 128  | 18358    | 4.615  | ug/L   | 96       |
| 25) Chloroform                 | 4.41  | 83   | 99702    | 5.280  | ug/L   | 97       |
| 27) 1,2-Dichloroethane         | 5.16  | 62   | 52564    | 4.530  | ug/L   | 98       |
| 29) 1,1,1-Trichloroethane      | 4.64  | 97   | 79343    | 5.124  | ug/L   | 100      |
| 30) Cyclohexane                | 4.71  | 56   | 76198    | 4.911  | ug/L   | 99       |
| 31) Carbon tetrachloride       | 4.86  | 117  | 65279    | 4.885  | ug/L   | 99       |
| 33) Benzene                    | 5.13  | 78   | 184876   | 5.233  | ug/L   | 100      |
| 34) Trichloroethene            | 5.94  | 95   | 47073    | 4.668  | ug/L   | 92       |
| 35) Methylcyclohexane          | 6.16  | 83   | 75118    | 4.925  | ug/L   | 99       |
| 37) 1,2-Dichloropropane        | 6.20  | 63   | 46549    | 5.186  | ug/L   | 99       |
| 38) Bromodichloromethane       | 6.53  | 83   | 54947    | 4.821  | ug/L   | 99       |
| 39) cis-1,3-Dichloropropene    | 7.05  | 75   | 57928    | 4.566  | ug/L   | 99       |
| 40) 4-Methyl-2-pentanone       | 7.25  | 43   | 238364   | 42.609 | ug/L   | 100      |
| 42) Toluene                    | 7.41  | 91   | 199381   | 5.324  | ug/L   | 99       |
| 43) 1,3,5-Trimethylbenzene     | 10.56 | 105  | 185007   | 5.382  | ug/L # | 100      |
| 44) 1,2,4-Trimethylbenzene     | 10.94 | 105  | 183469   | 5.341  | ug/L # | 100      |
| 46) trans-1,3-Dichloropropene  | 7.68  | 75   | 46727    | 4.361  | ug/L   | 98       |
| 47) 1,1,2-Trichloroethane      | 7.86  | 97   | 28295    | 4.721  | ug/L   | 98       |
| 49) Tetrachloroethene          | 8.00  | 164  | 35851    | 5.096  | ug/L   | 99       |
| 50) 2-Hexanone                 | 8.16  | 43   | 169977   | 42.966 | ug/L   | 99       |
| 51) Dibromochloromethane       | 8.27  | 129  | 30425    | 4.518  | ug/L   | 99       |
| 52) 1,2-Dibromoethane          | 8.38  | 107  | 25545    | 4.595  | ug/L   | 98       |
| 53) Chlorobenzene              | 8.90  | 112  | 126415   | 5.249  | ug/L   | 99       |
| 54) Ethylbenzene               | 9.04  | 91   | 226890   | 5.329  | ug/L   | 100      |
| 55) m,p-xylene                 | 9.16  | 106  | 85267    | 5.408  | ug/L   | 97       |
| 56) o-xylene                   | 9.57  | 106  | 81660    | 5.417  | ug/L   | 96       |
| 57) Styrene                    | 9.58  | 104  | 136357   | 5.408  | ug/L   | 99       |
| 58) Isopropylbenzene           | 9.95  | 105  | 223361   | 5.394  | ug/L   | 99       |
| 60) 1,1,2,2-Tetrachloroethane  | 10.26 | 83   | 32973    | 5.148  | ug/L   | 99       |
| 62) Bromoform                  | 9.75  | 173  | 12648    | 3.956  | ug/L   | 97       |
| 63) 1,3-Dichlorobenzene        | 11.20 | 146  | 99410    | 5.301  | ug/L   | 97       |
| 64) 1,4-Dichlorobenzene        | 11.30 | 146  | 98879    | 5.249  | ug/L   | 99       |
| 66) 1,2-Dichlorobenzene        | 11.67 | 146  | 88310    | 5.204  | ug/L   | 97       |
| 67) 1,2-Dibromo-3-chloropropan | 12.45 | 75   | 5167     | 4.665  | ug/L   | 93       |
| 68) 1,3,5-Trichlorobenzene     | 12.67 | 180  | 70117    | 5.114  | ug/L   | 100      |
| 69) 1,2,4-trichlorobenzene     | 13.28 | 180  | 56976    | 4.837  | ug/L   | 99       |
| 70) Naphthalene                | 13.53 | 128  | 91107    | 4.863  | ug/L   | 99       |
| 71) 1,2,3-Trichlorobenzene     | 13.77 | 180  | 50267    | 4.837  | ug/L   | 98       |

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





#2

Dichlorodifluoromethane

Concen: 4.267 ug/L

RT: 1.14 min Scan# 14

Delta R.T. 0.00 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

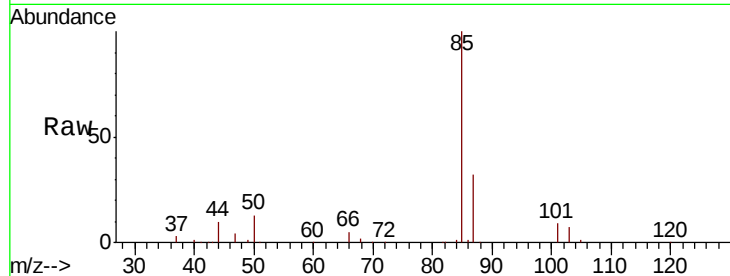
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 85 Resp: 47867

Ion Ratio Lower Upper

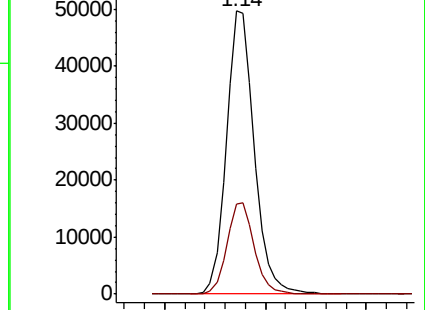
85 100

87 31.6 26.4 39.6

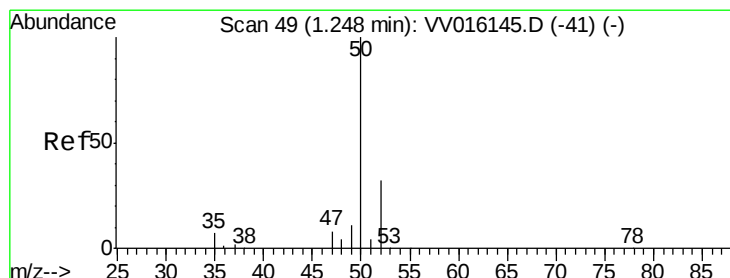
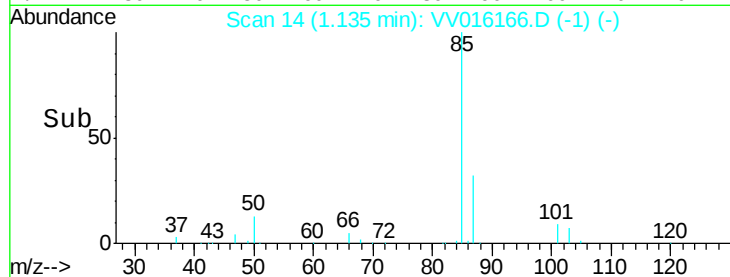


Abundance Ion 85.00 (84.70 to 85.70): VV016166.D (-1) (-)

Ion 87.00 (86.70 to 87.70): VV016166.D (-1) (-)



Time-->



#3

Chloromethane

Concen: 4.465 ug/L

RT: 1.25 min Scan# 50

Delta R.T. 0.00 min

Lab File: VV016166.D

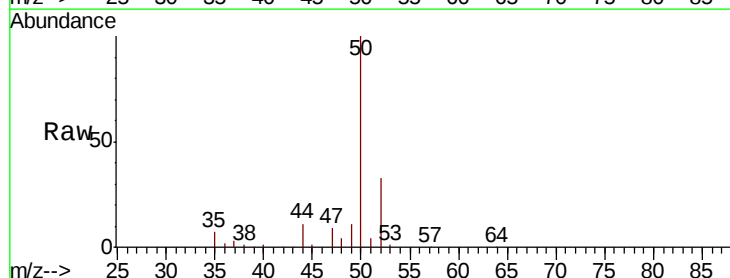
Acq: 21 May 2020 20:04

Tgt Ion: 50 Resp: 50704

Ion Ratio Lower Upper

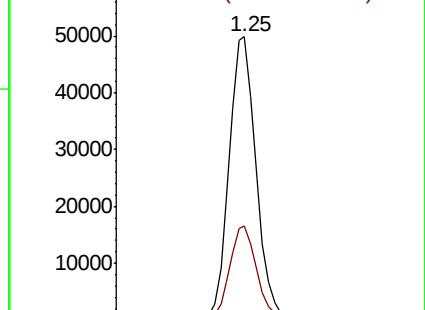
50 100

52 33.4 22.8 42.4

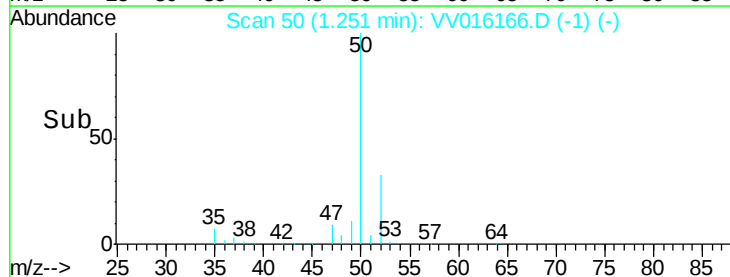


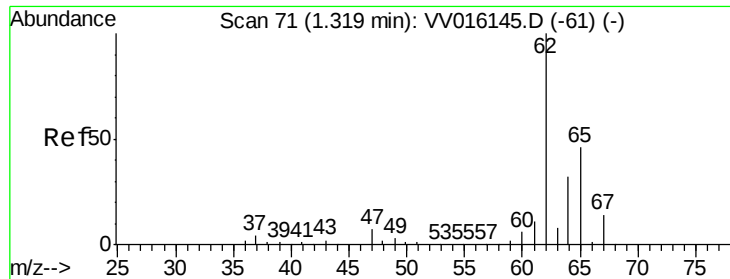
Abundance Ion 50.05 (49.75 to 50.75): VV016166.D (-1) (-)

Ion 52.05 (51.75 to 52.75): VV016166.D (-1) (-)



Time-->





#5

Vinyl chloride

Concen: 4.714 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

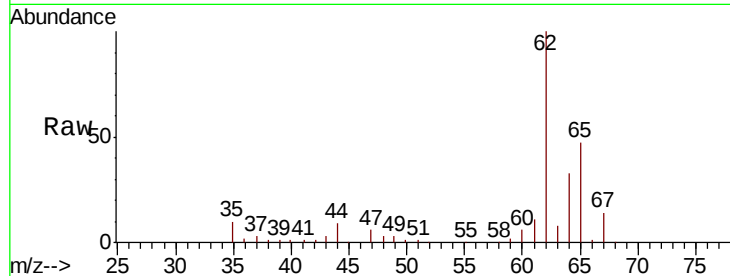
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 62 Resp: 51193

Ion Ratio Lower Upper

62 100

64 33.3 22.4 41.6



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 64.10 (63.80 to 64.80): VV0

1.32

50000

40000

30000

20000

10000

0

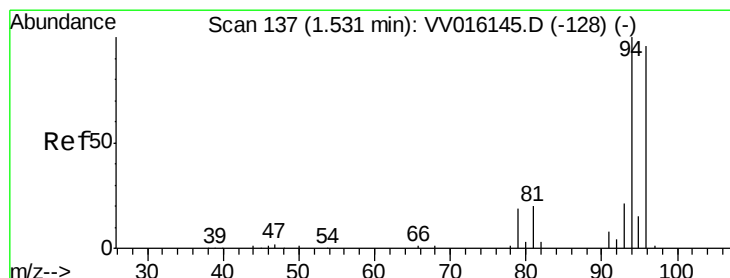
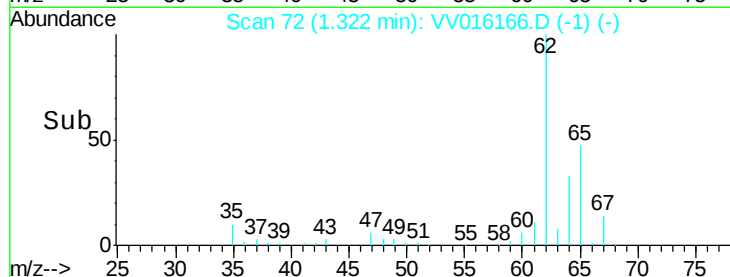
Time-->

1.25

1.30

1.35

1.40



#6

Bromomethane

Concen: 3.857 ug/L

RT: 1.53 min Scan# 138

Delta R.T. 0.00 min

Lab File: VV016166.D

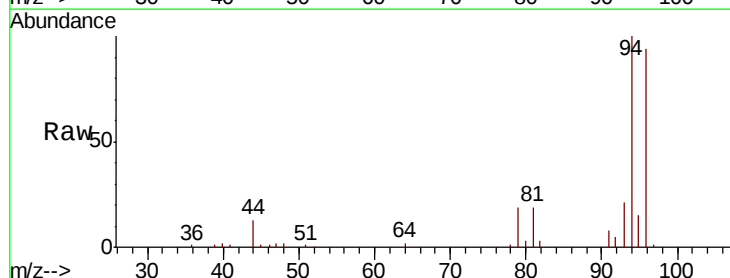
Acq: 21 May 2020 20:04

Tgt Ion: 94 Resp: 23772

Ion Ratio Lower Upper

94 100

96 93.6 65.4 121.4



Abundance Ion 94.00 (93.70 to 94.70): VV0

Ion 96.00 (95.70 to 96.70): VV0

1.53

25000

20000

15000

10000

5000

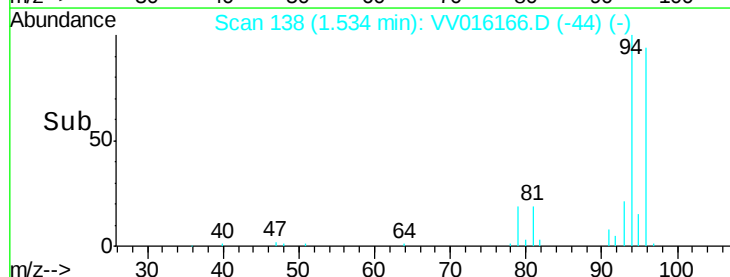
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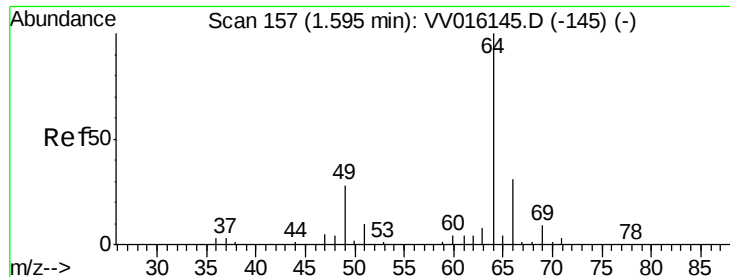
Time-->

1.50

1.55

1.60





#8

Chloroethane

Concen: 4.305 ug/L

RT: 1.60 min Scan# 158

Delta R.T. 0.00 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

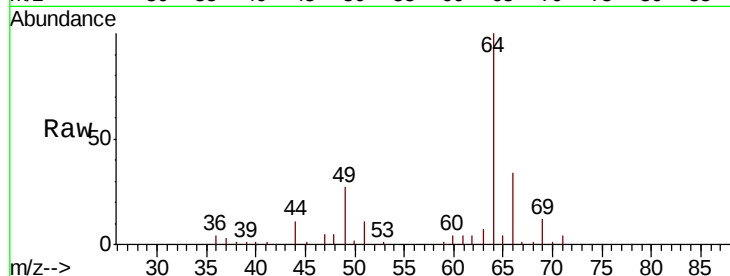
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 64 Resp: 33305

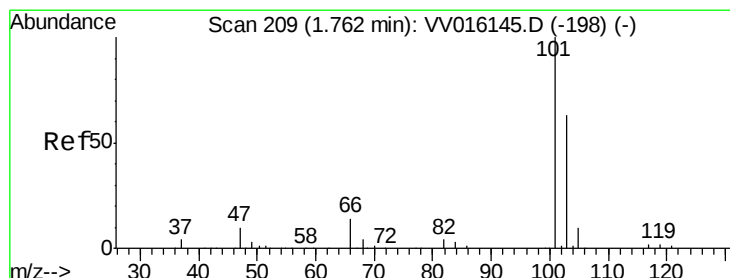
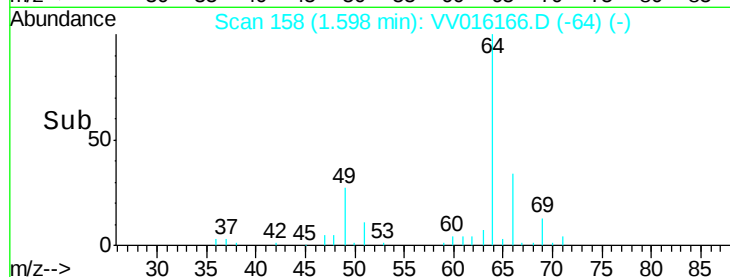
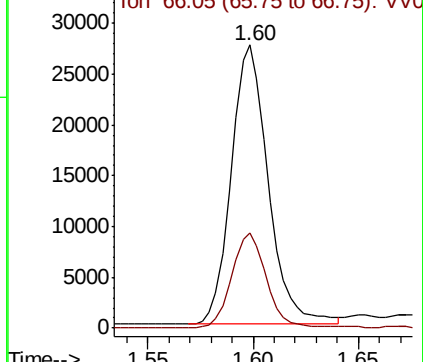
Ion Ratio Lower Upper

64 100

66 33.7 23.6 43.8



Abundance Ion 64.10 (63.80 to 64.80): VV016145.D (-145) (-)



#9

Trichlorofluoromethane

Concen: 4.987 ug/L

RT: 1.77 min Scan# 210

Delta R.T. 0.00 min

Lab File: VV016166.D

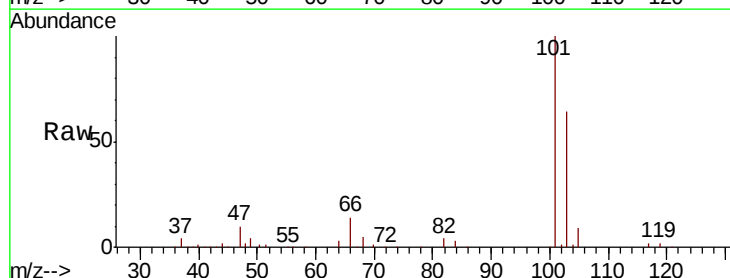
Acq: 21 May 2020 20:04

Tgt Ion:101 Resp: 74278

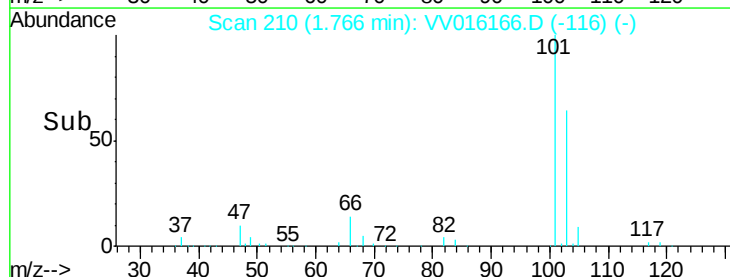
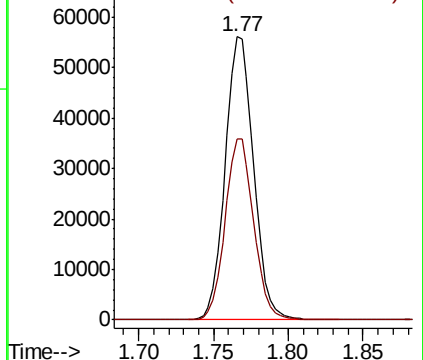
Ion Ratio Lower Upper

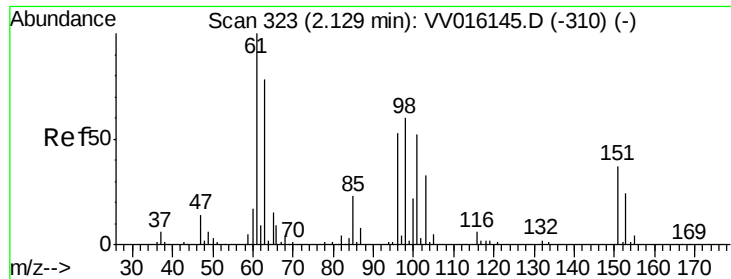
101 100

103 64.0 51.4 77.2



Abundance Ion 101.00 (100.70 to 101.70): VV016145.D (-198) (-)





#10

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 5.372 ug/L

RT: 2.14 min Scan# 325

Delta R.T. 0.01 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

Instrument :

MSVOA\_V

ClientSampleId :

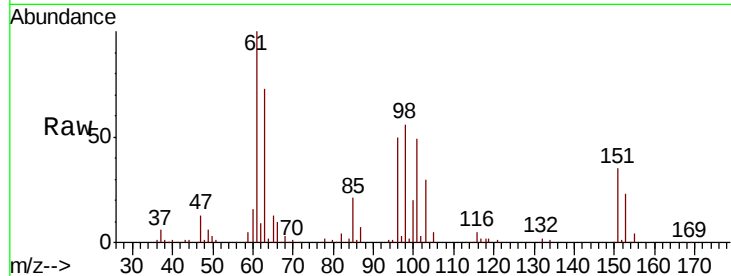
Tot Ion:101 Resp: 45196

Ion Ratio Lower Upper

101 100

85 44.9 35.7 53.5

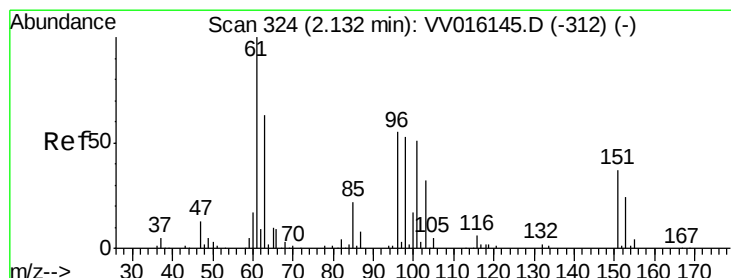
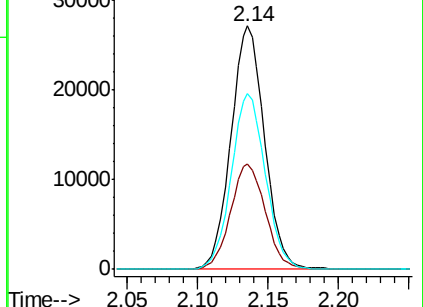
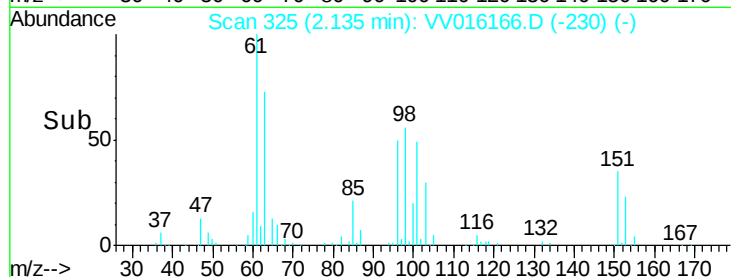
151 73.2 58.0 87.0



Abundance Ion 101.00 (100.70 to 101.70): VV016166.D (-230) (-)

Ion 85.00 (84.70 to 85.70): VV016166.D (-230) (-)

Ion 151.00 (150.70 to 151.70): VV016166.D (-230) (-)



#12

1,1-Dichloroethene

Concen: 5.200 ug/L

RT: 2.14 min Scan# 325

Delta R.T. 0.00 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

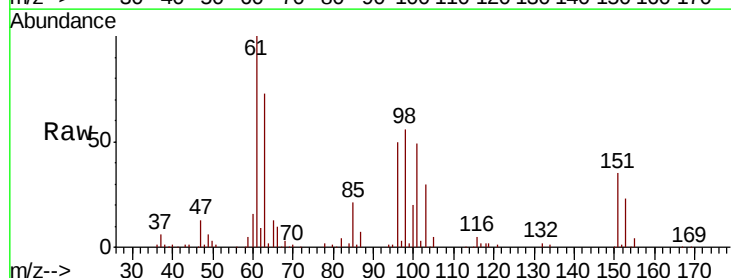
Tgt Ion: 96 Resp: 41889

Ion Ratio Lower Upper

96 100

61 198.7 139.9 259.7

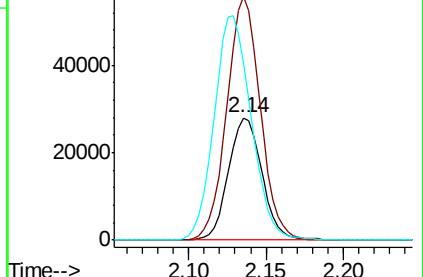
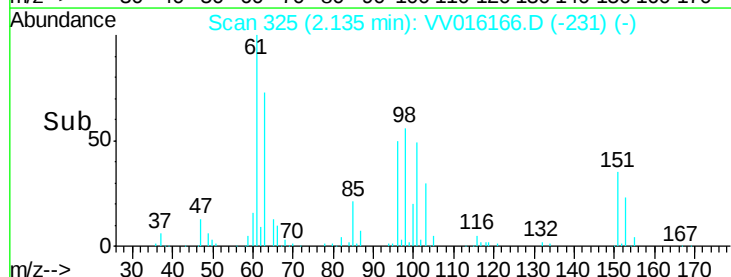
63 144.2 106.4 197.6

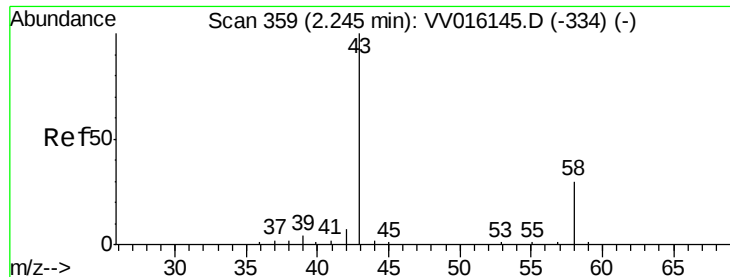


Abundance Ion 96.00 (95.70 to 96.70): VV016166.D (-231) (-)

Ion 61.05 (60.75 to 61.75): VV016166.D (-231) (-)

Ion 63.00 (62.70 to 63.70): VV016166.D (-231) (-)





#13

Acetone

Concen: 41.422 ug/L

RT: 2.22 min Scan# 352

Delta R.T. -0.02 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

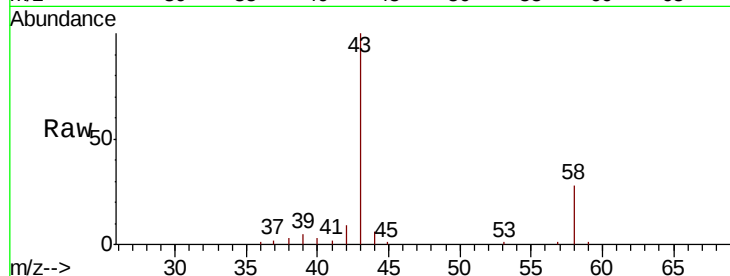
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 43 Resp: 61898

Ion Ratio Lower Upper

43 100

58 27.5 0.0 30.8



Abundance Ion 43.05 (42.75 to 43.75): VV016145.D (-334) (-)

Ion 58.05 (57.75 to 58.75): VV016145.D (-334) (-)

2.22

15000

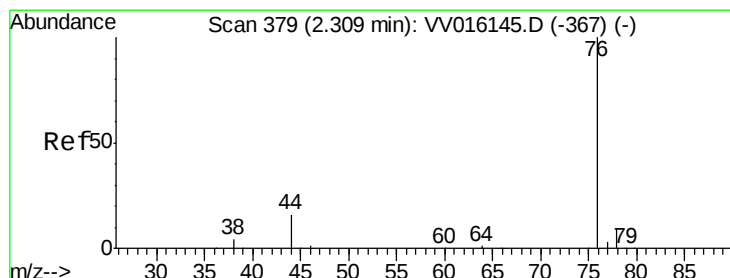
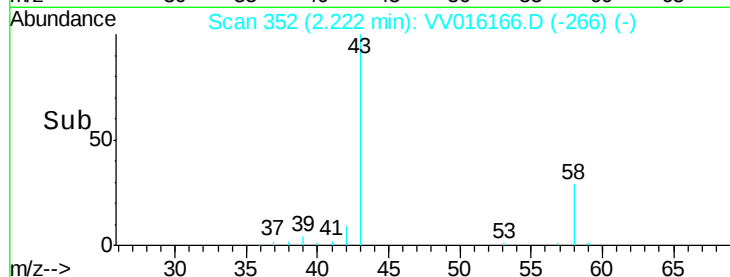
10000

5000

0

Time-->

2.10 2.20 2.30 2.40



#14

Carbon disulfide

Concen: 4.209 ug/L

RT: 2.32 min Scan# 381

Delta R.T. 0.01 min

Lab File: VV016166.D

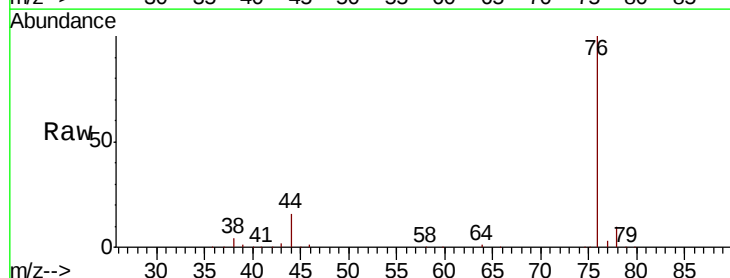
Acq: 21 May 2020 20:04

Tgt Ion: 76 Resp: 111930

Ion Ratio Lower Upper

76 100

78 9.6 7.0 10.6



Abundance Ion 76.05 (75.75 to 76.75): VV016145.D (-367) (-)

Ion 78.00 (77.70 to 78.70): VV016145.D (-367) (-)

2.32

80000

60000

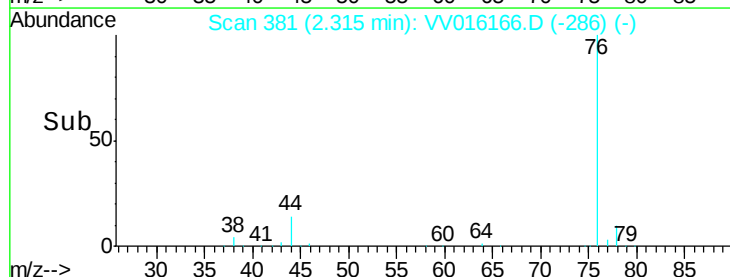
40000

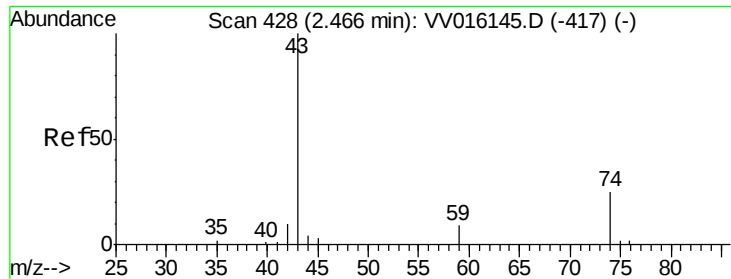
20000

0

Time-->

2.25 2.30 2.35 2.40

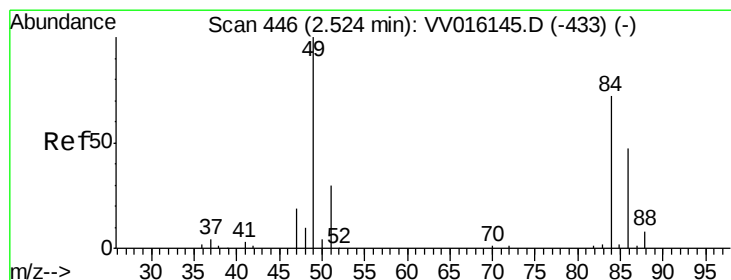
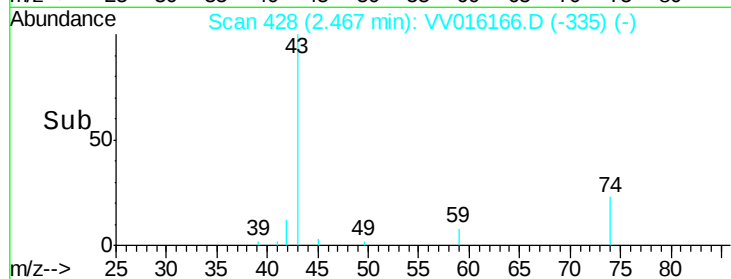
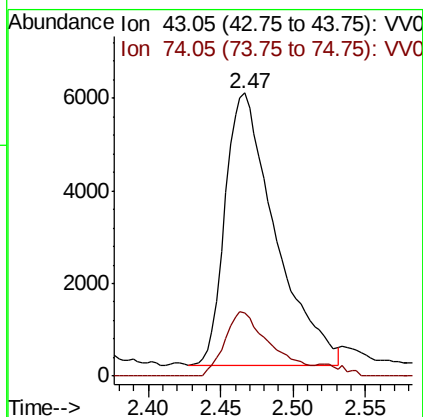
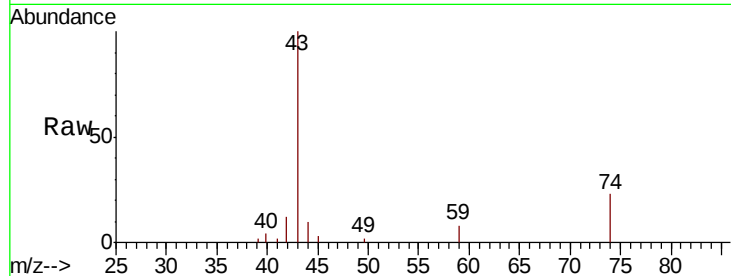




#15  
Methvl Acetate  
Concen: 4.072 ug/L  
RT: 2.47 min Scan# 428  
Delta R.T. 0.00 min  
Lab File: VV016166.D  
Acq: 21 May 2020 20:04

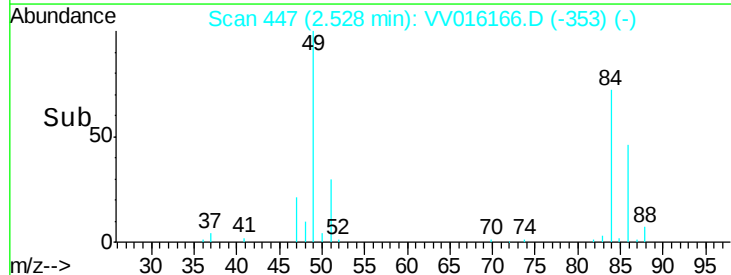
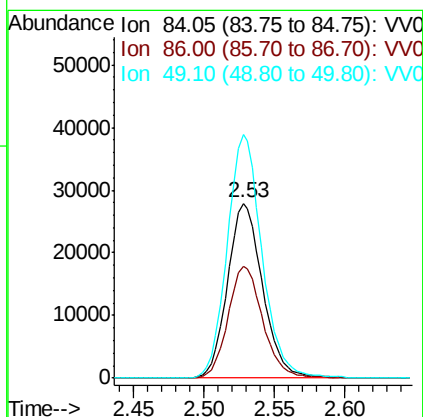
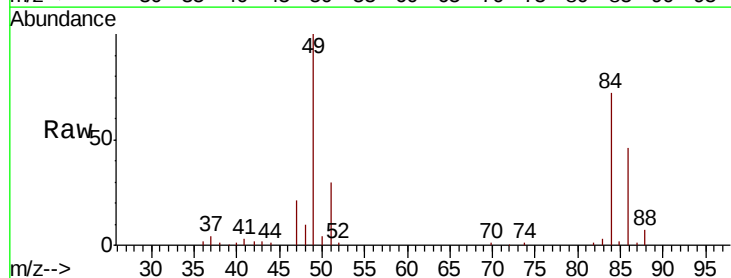
Instrument :  
MSVOA\_V  
ClientSampleId :

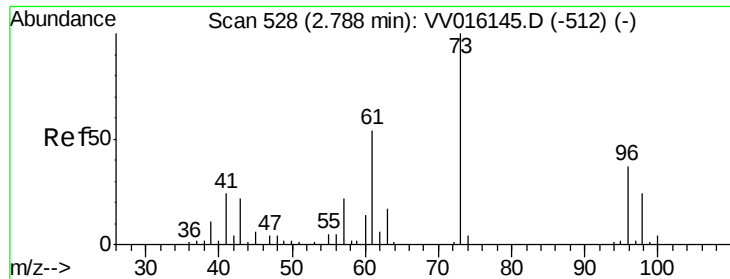
Tot Ion: 43 Resp: 14060  
Ion Ratio Lower Upper  
43 100  
74 21.7 19.2 28.8



#16  
Methylene chloride  
Concen: 5.040 ug/L  
RT: 2.53 min Scan# 447  
Delta R.T. 0.00 min  
Lab File: VV016166.D  
Acq: 21 May 2020 20:04

Tgt Ion: 84 Resp: 48583  
Ion Ratio Lower Upper  
84 100  
86 63.7 45.6 84.8  
49 139.1 93.6 173.8

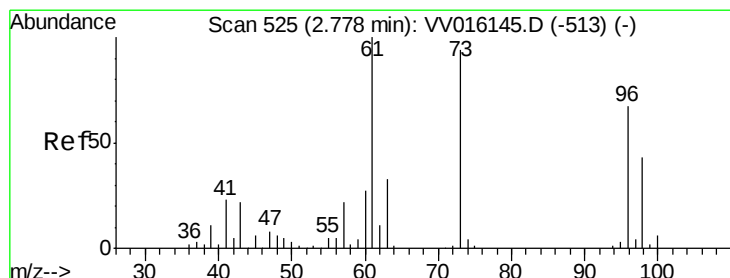
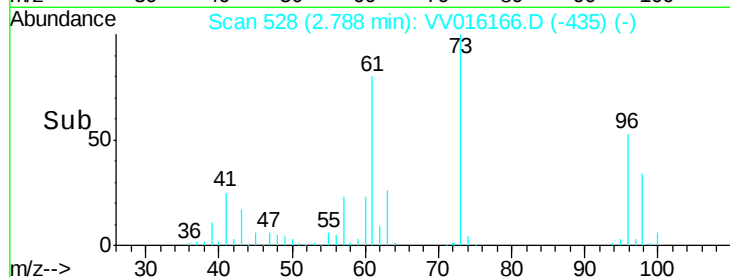
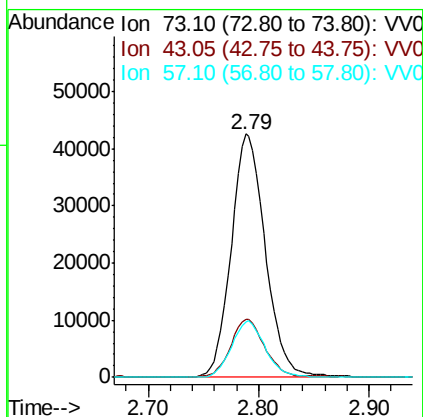
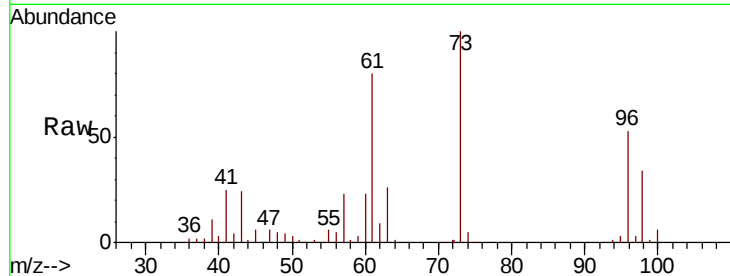




#17  
Methvl tert-butvl Ether  
Concen: 4.354 ug/L  
RT: 2.79 min Scan# 528  
Delta R.T. 0.00 min  
Lab File: VV016166.D  
Acq: 21 May 2020 20:04

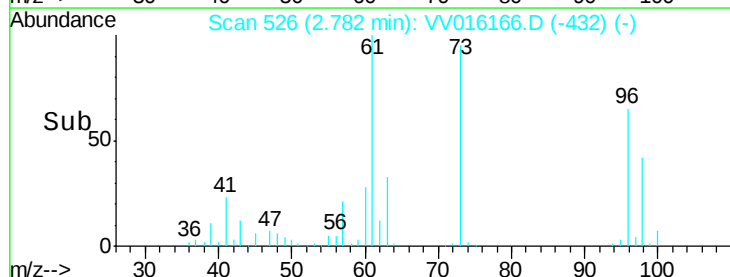
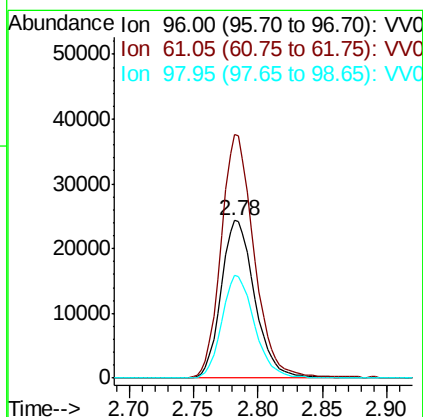
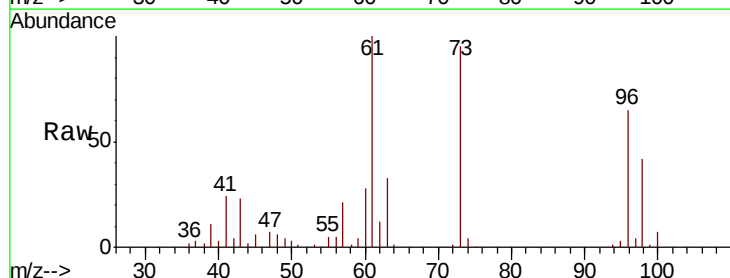
Instrument :  
MSVOA\_V  
ClientSampled :

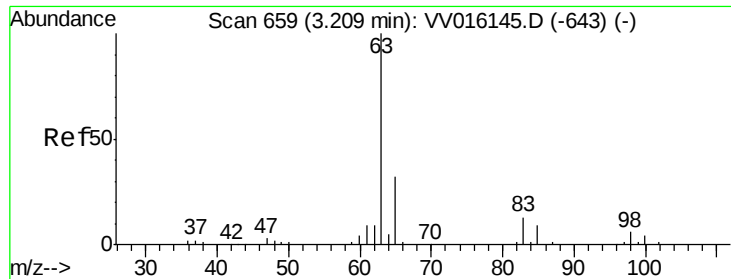
Tot Ion: 73 Resp: 91133  
Ion Ratio Lower Upper  
73 100  
43 24.2 18.8 28.2  
57 22.9 17.8 26.6



#18  
trans-1,2-Dichloroethene  
Concen: 4.946 ug/L  
RT: 2.78 min Scan# 526  
Delta R.T. 0.00 min  
Lab File: VV016166.D  
Acq: 21 May 2020 20:04

Tgt Ion: 96 Resp: 44031  
Ion Ratio Lower Upper  
96 100  
61 154.6 105.3 195.5  
98 65.1 44.0 81.6

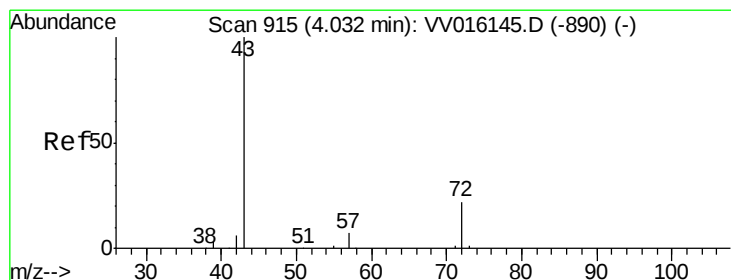
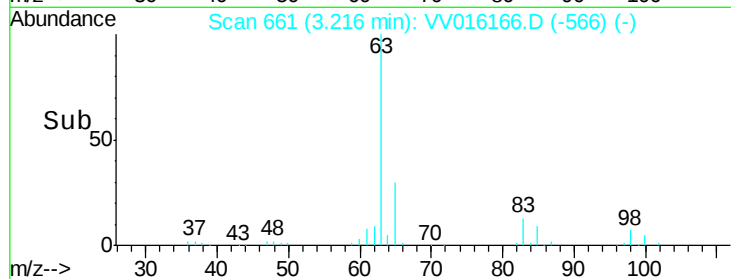
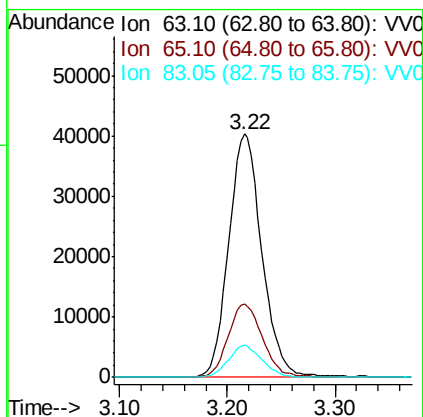
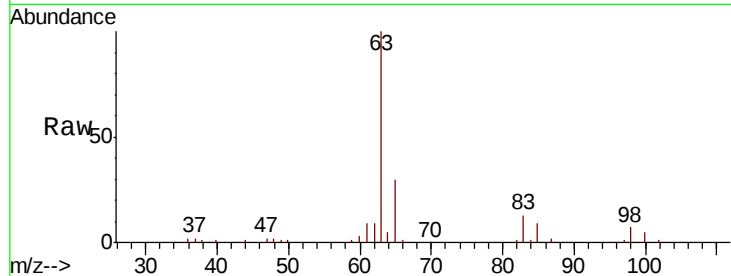




#19  
 1,1-Dichloroethane  
 Concen: 5.034 ug/L  
 RT: 3.22 min Scan# 661  
 Delta R.T. 0.01 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

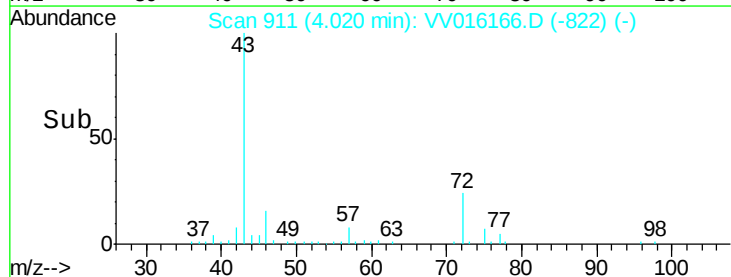
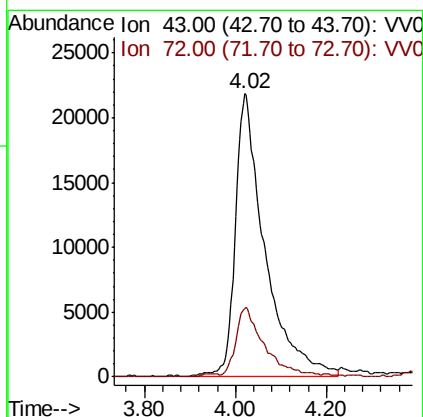
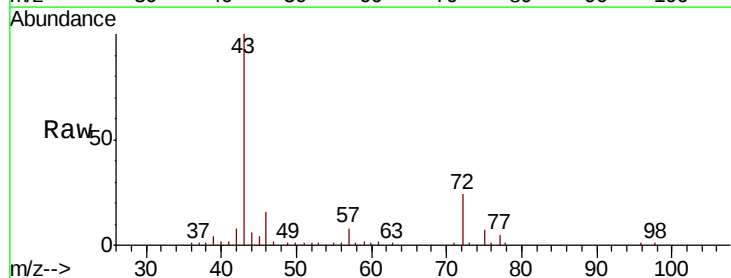
Instrument :  
 MSVOA\_V  
 ClientSampled :

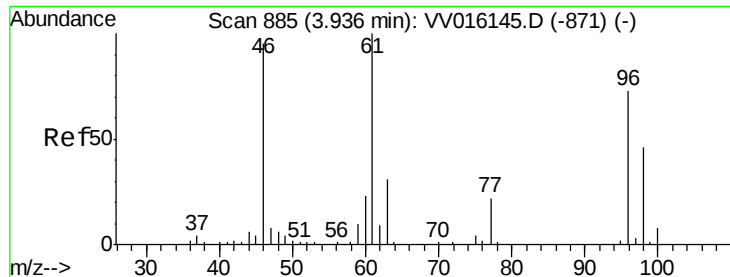
Tot Ion: 63 Resp: 86319  
 Ion Ratio Lower Upper  
 63 100  
 65 30.0 22.0 41.0  
 83 13.1 9.8 18.2



#21  
 2-Butanone  
 Concen: 43.510 ug/L  
 RT: 4.02 min Scan# 911  
 Delta R.T. -0.01 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

Tgt Ion: 43 Resp: 99017  
 Ion Ratio Lower Upper  
 43 100  
 72 20.8 10.5 31.5



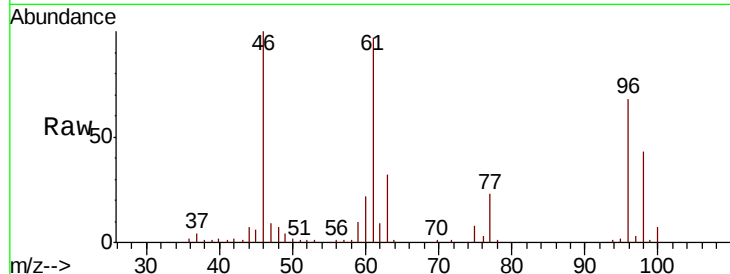


#22

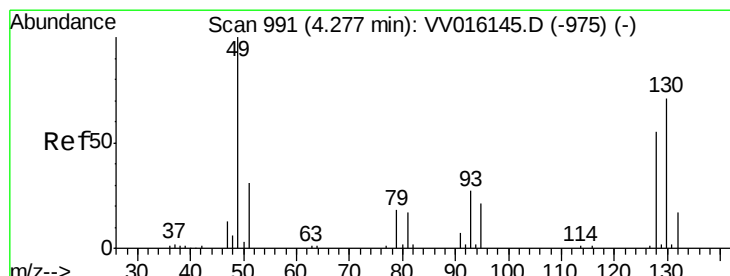
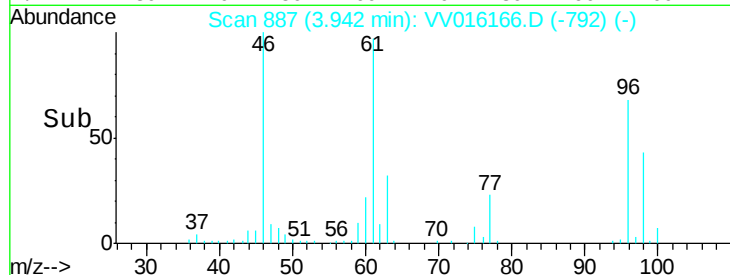
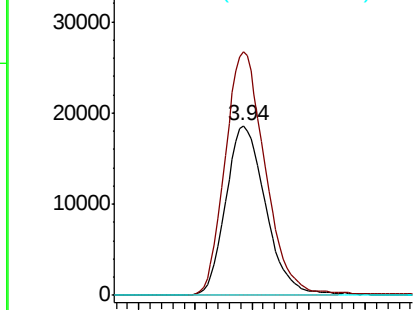
cis-1,2-Dichloroethene  
Concen: 4.902 ug/L  
RT: 3.94 min Scan# 887  
Delta R.T. 0.01 min  
Lab File: VV016166.D  
Acq: 21 May 2020 20:04

Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 96 Resp: 45687  
Ion Ratio Lower Upper  
96 100  
61 143.2 97.2 180.6  
68 0.0 0.0 0.0



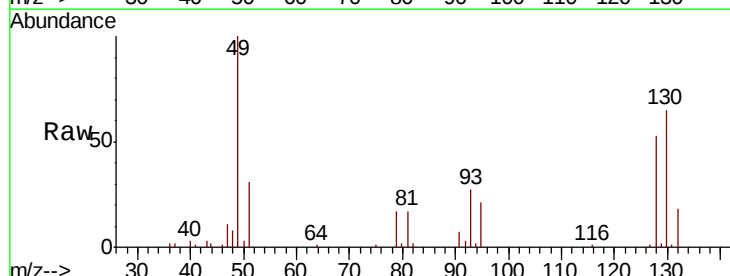
Abundance Ion 96.00 (95.70 to 96.70): VV0  
Ion 61.05 (60.75 to 61.75): VV0  
Ion 68.15 (67.85 to 68.85): VV0



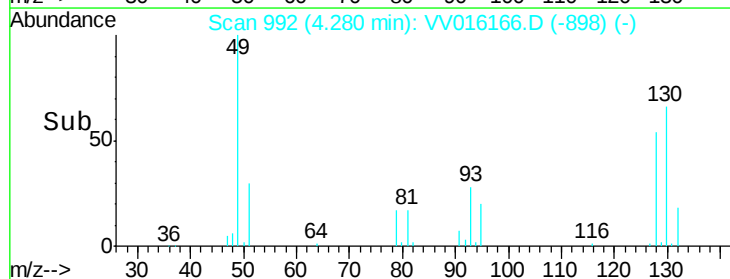
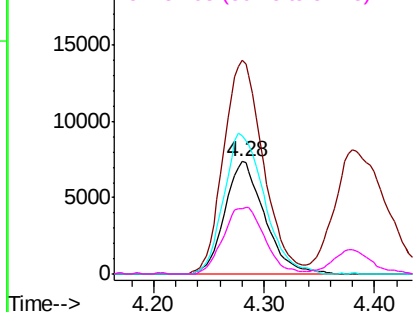
#23

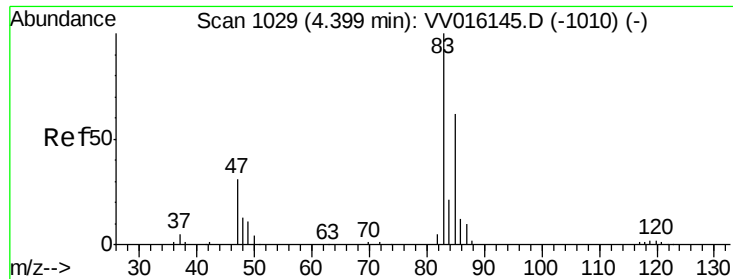
Bromochloromethane  
Concen: 4.615 ug/L  
RT: 4.28 min Scan# 992  
Delta R.T. 0.00 min  
Lab File: VV016166.D  
Acq: 21 May 2020 20:04

Tgt Ion: 128 Resp: 18358  
Ion Ratio Lower Upper  
128 100  
49 190.4 131.3 243.8  
130 123.1 91.8 170.4  
51 58.3 48.8 73.2



Abundance Ion 127.90 (127.60 to 128.60): V  
Ion 49.10 (48.80 to 49.80): VV0  
Ion 129.95 (129.65 to 130.65): V  
Ion 51.05 (50.75 to 51.75): VV0

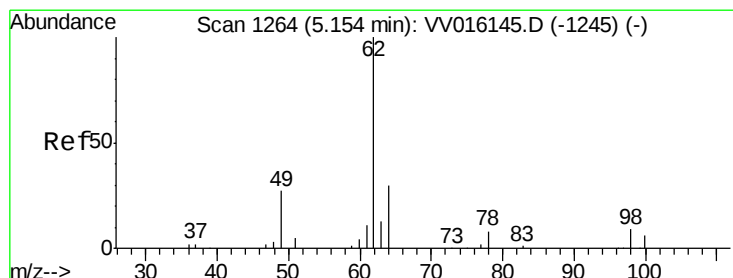
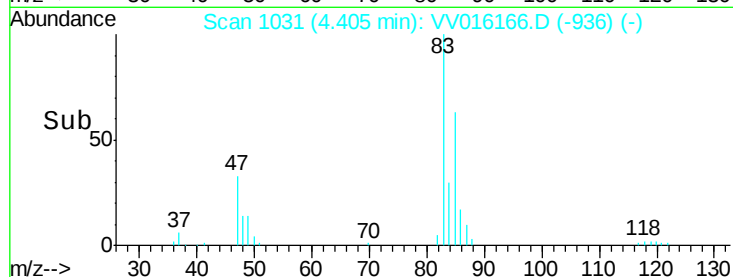
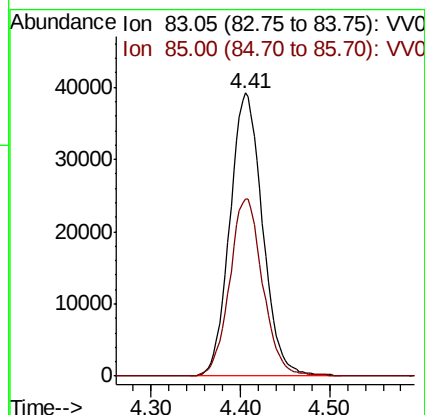
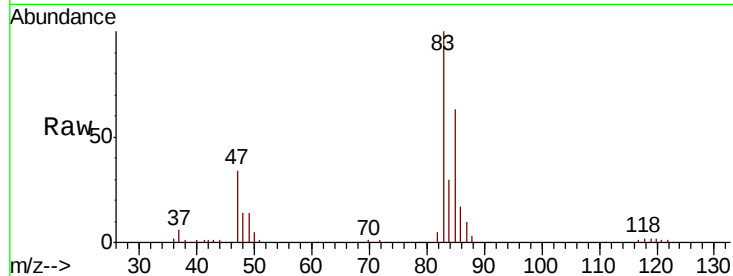




#25  
Chloroform  
Concen: 5.280 ug/L  
RT: 4.41 min Scan# 1031  
Delta R.T. 0.01 min  
Lab File: VV016166.D  
Acq: 21 May 2020 20:04

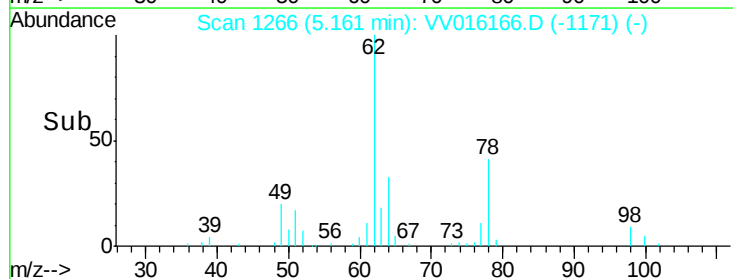
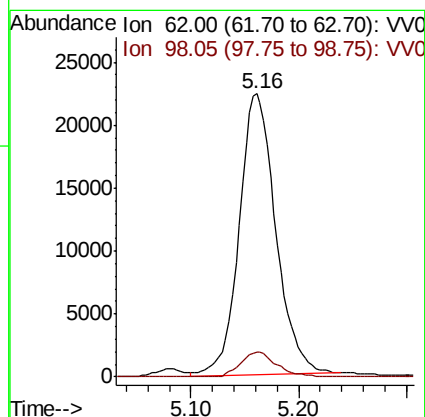
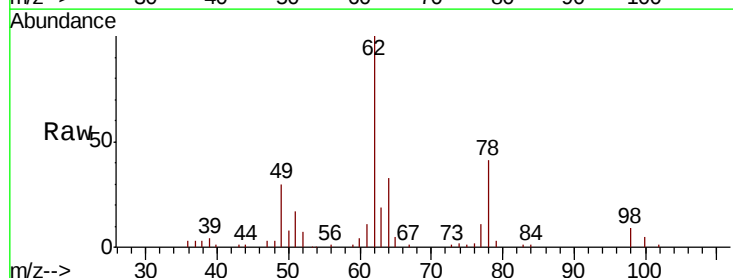
Instrument :  
MSVOA\_V  
ClientSampleId :

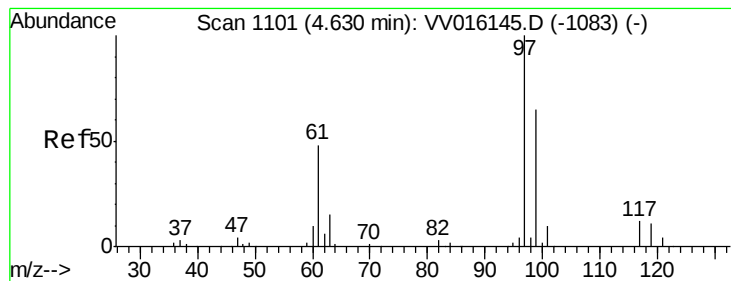
Tot Ion: 83 Resp: 99702  
Ion Ratio Lower Upper  
83 100  
85 62.6 45.7 84.9



#27  
1,2-Dichloroethane  
Concen: 4.530 ug/L  
RT: 5.16 min Scan# 1266  
Delta R.T. 0.01 min  
Lab File: VV016166.D  
Acq: 21 May 2020 20:04

Tgt Ion: 62 Resp: 52564  
Ion Ratio Lower Upper  
62 100  
98 9.0 6.7 10.1





#29

1,1,1-Trichloroethane

Concen: 5.124 ug/L

RT: 4.64 min Scan# 1103

Delta R.T. 0.01 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

Instrument :

MSVOA\_V

ClientSampleId :

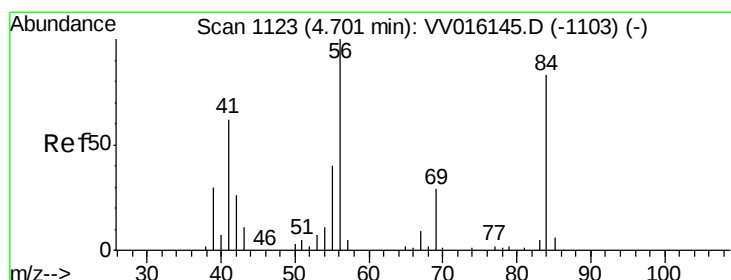
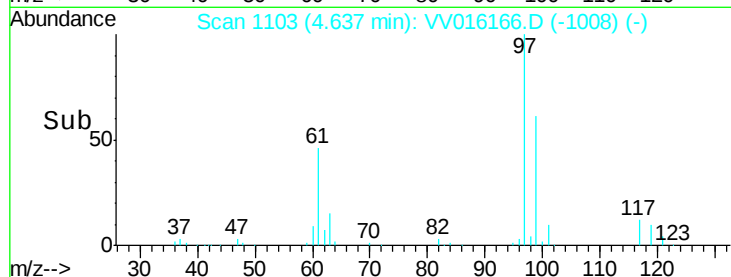
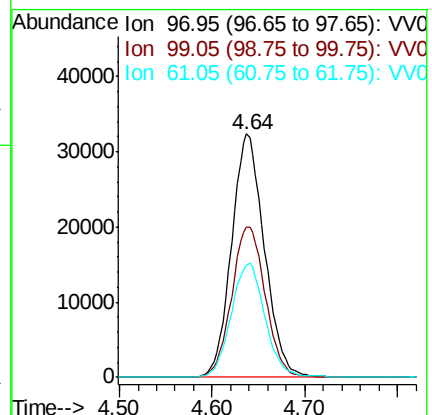
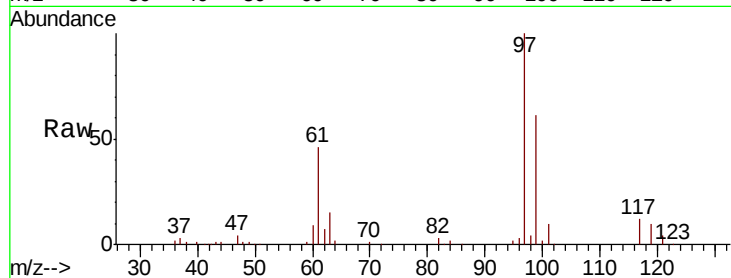
Tot Ion: 97 Resp: 79343

Ion Ratio Lower Upper

97 100

99 63.4 50.7 76.1

61 48.4 38.8 58.2



#30

Cyclohexane

Concen: 4.911 ug/L

RT: 4.71 min Scan# 1125

Delta R.T. 0.01 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

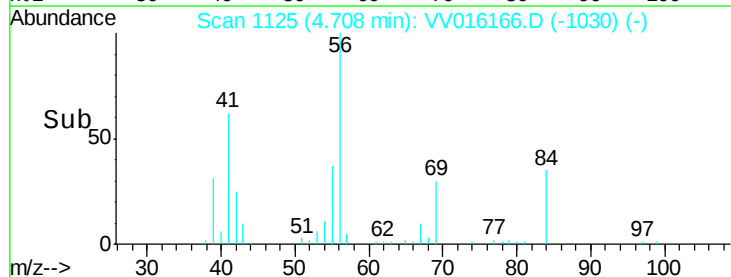
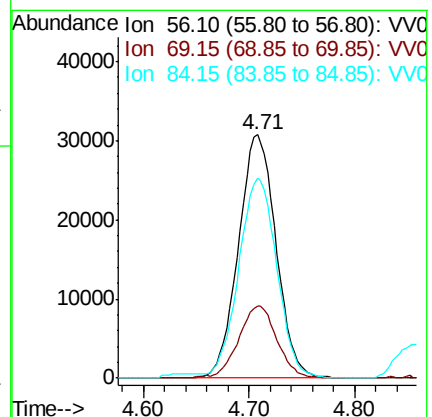
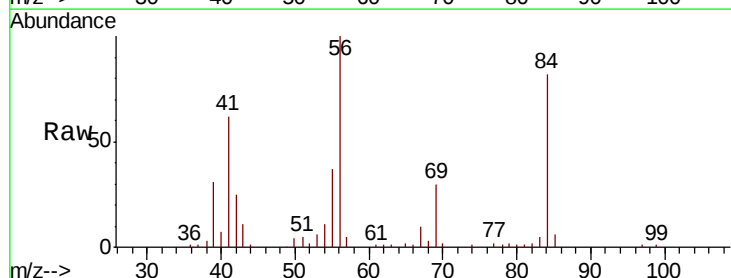
Tgt Ion: 56 Resp: 76198

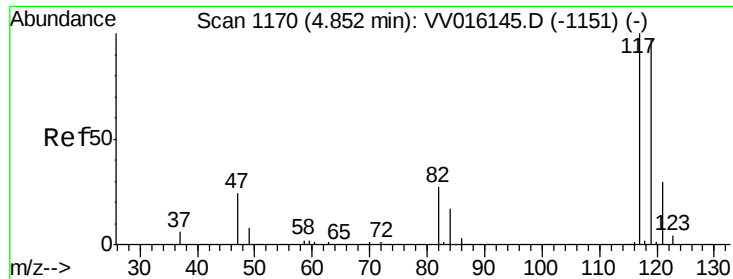
Ion Ratio Lower Upper

56 100

69 30.2 24.2 36.2

84 83.6 68.3 102.5





#31

Carbon tetrachloride

Concen: 4.885 ug/L

RT: 4.86 min Scan# 1172

Delta R.T. 0.01 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

Instrument :

MSVOA\_V

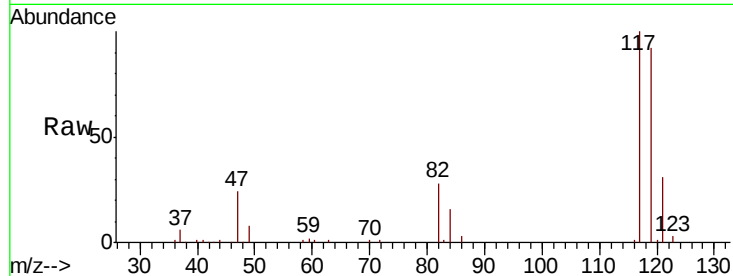
ClientSampled :

Tot Ion:117 Resp: 65279

Ion Ratio Lower Upper

117 100

119 95.3 77.3 115.9



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V

4.86

30000

25000

20000

15000

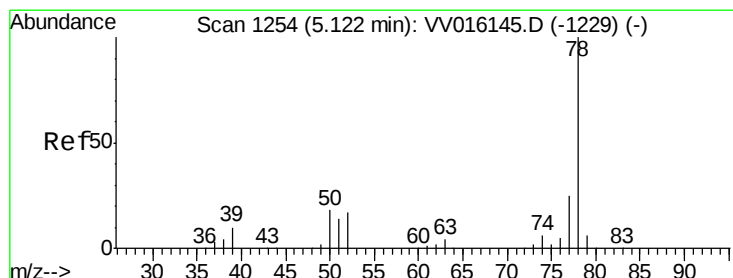
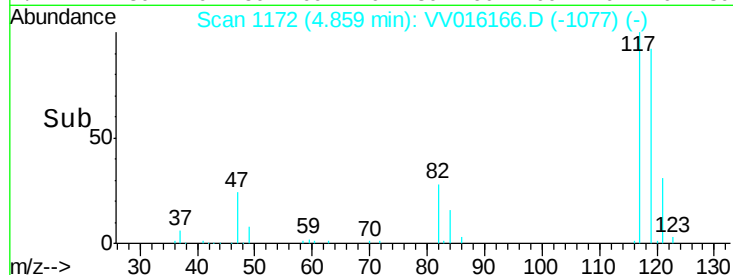
10000

5000

0

Time-->

4.80 4.90



#33

Benzene

Concen: 5.233 ug/L

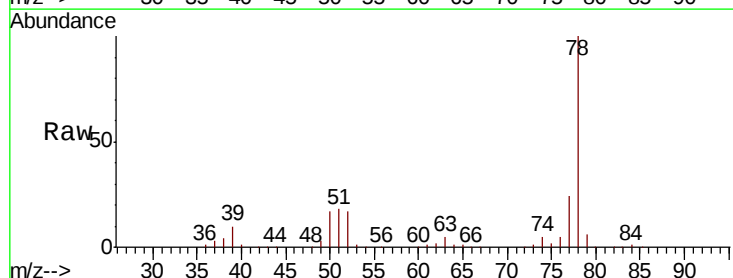
RT: 5.13 min Scan# 1256

Delta R.T. 0.01 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

Tgt Ion: 78 Resp: 184876



Abundance Ion 78.10 (77.80 to 78.80): VV0

100000

80000

60000

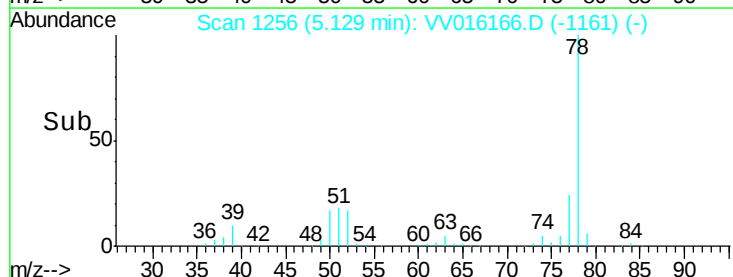
40000

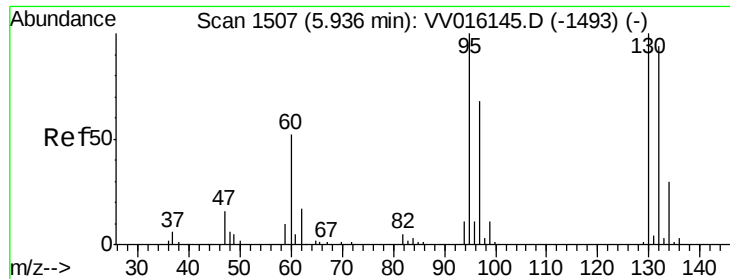
20000

0

Time-->

5.00 5.10 5.20 5.30





#34

Trichloroethene

Concen: 4.668 ug/L

RT: 5.94 min Scan# 1508

Delta R.T. 0.00 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

Instrument :

MSVOA\_V

ClientSampleId :

Tot Ion: 95 Resp: 47073

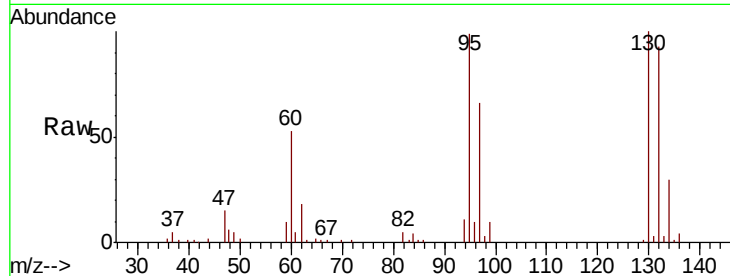
Ion Ratio Lower Upper

95 100

97 66.9 43.3 80.5

132 94.4 60.3 112.1

130 101.4 66.0 122.6

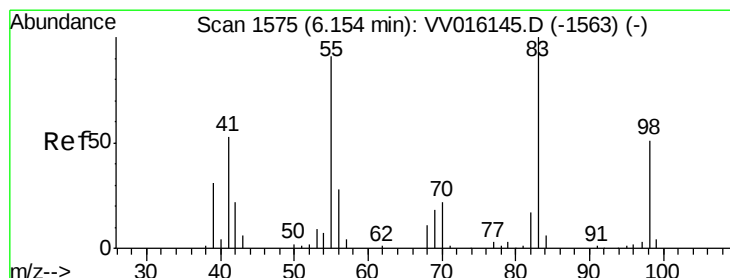
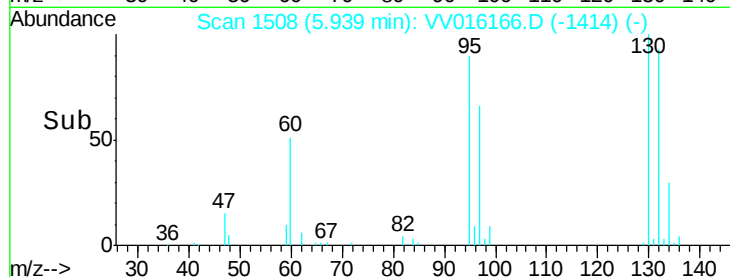
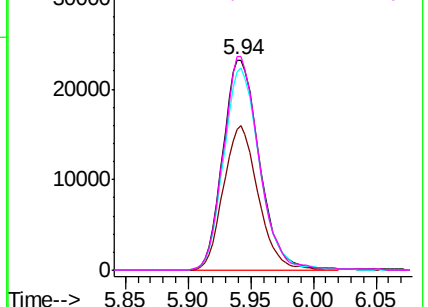


Abundance Ion 95.00 (94.70 to 95.70): VV0

Ion 96.95 (96.65 to 97.65): VV0

Ion 131.95 (131.65 to 132.65): VV0

Ion 129.95 (129.65 to 130.65): VV0



#35

Methylcyclohexane

Concen: 4.925 ug/L

RT: 6.16 min Scan# 1576

Delta R.T. 0.00 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

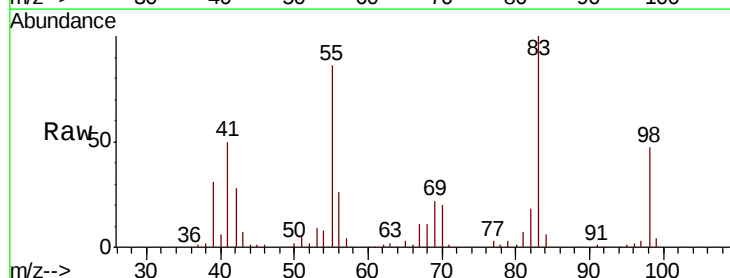
Tgt Ion: 83 Resp: 75118

Ion Ratio Lower Upper

83 100

55 83.6 66.2 99.2

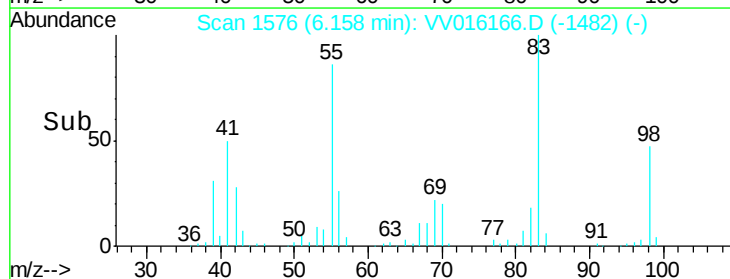
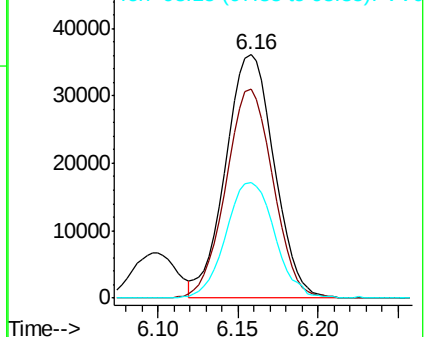
98 47.7 37.9 56.9

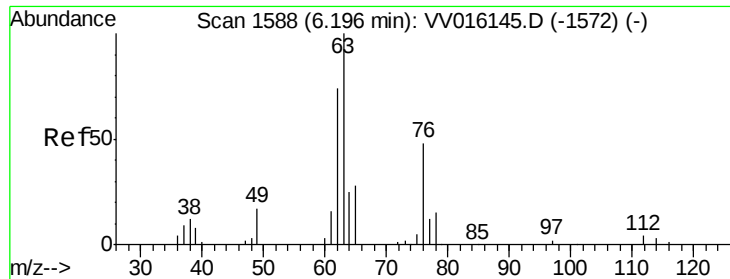


Abundance Ion 83.15 (82.85 to 83.85): VV0

Ion 55.10 (54.80 to 55.80): VV0

Ion 98.15 (97.85 to 98.85): VV0

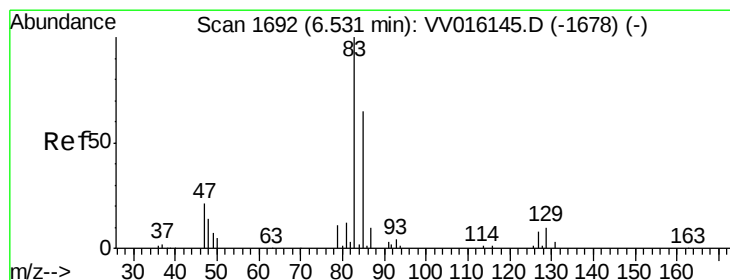
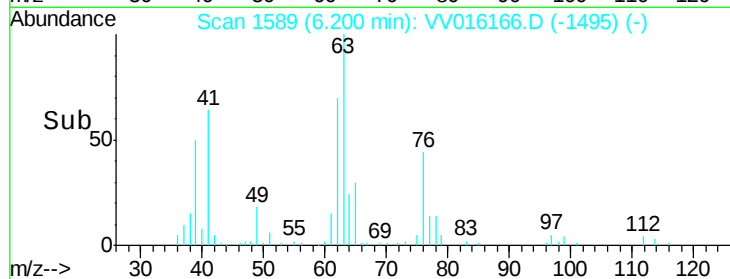
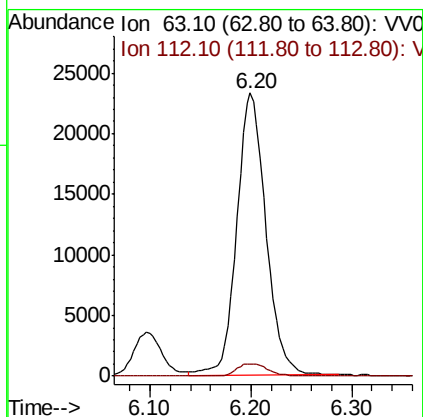
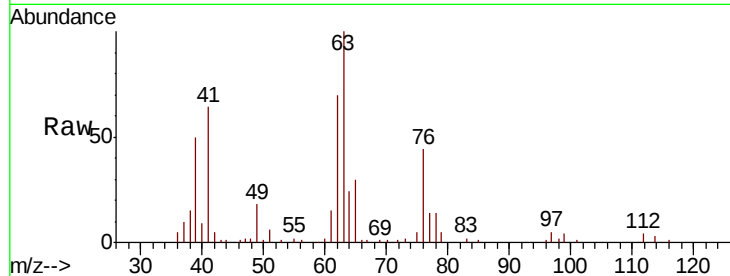




#37  
 1,2-Dichloropropane  
 Concen: 5.186 ug/L  
 RT: 6.20 min Scan# 1589  
 Delta R.T. 0.00 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

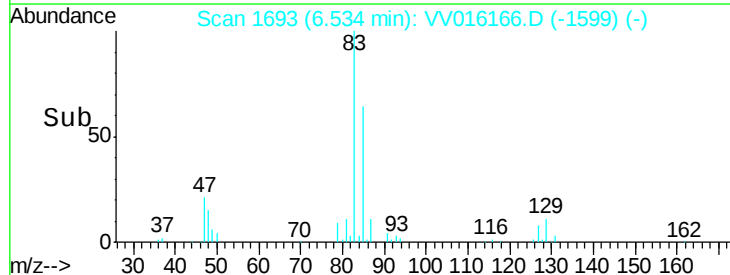
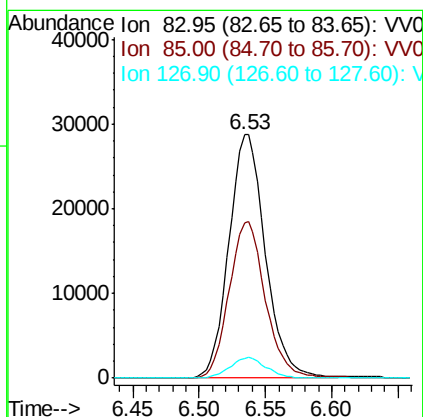
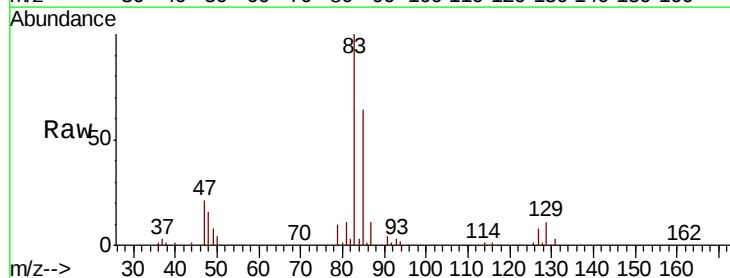
Instrument :  
 MSVOA\_V  
 ClientSampled :

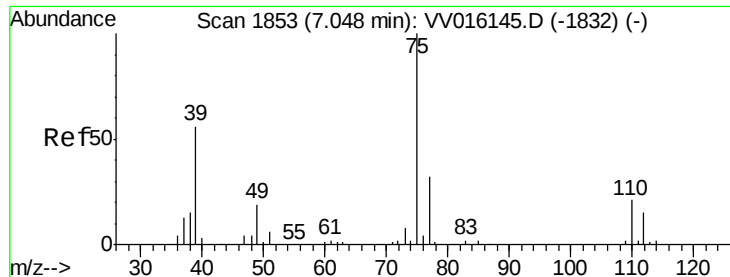
Tot Ion: 63 Resp: 46549  
 Ion Ratio Lower Upper  
 63 100  
 112 4.5 3.4 5.0



#38  
 Bromodichloromethane  
 Concen: 4.821 ug/L  
 RT: 6.53 min Scan# 1693  
 Delta R.T. 0.00 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

Tgt Ion: 83 Resp: 54947  
 Ion Ratio Lower Upper  
 83 100  
 85 63.8 45.5 84.5  
 127 8.2 6.2 9.4

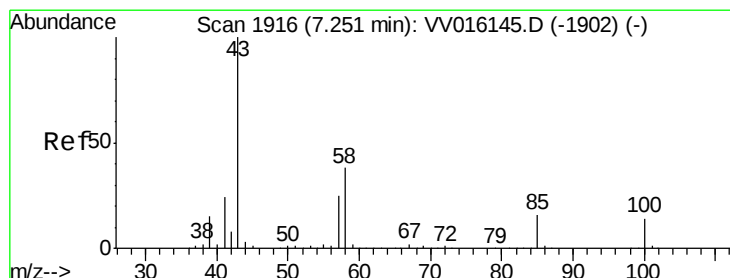
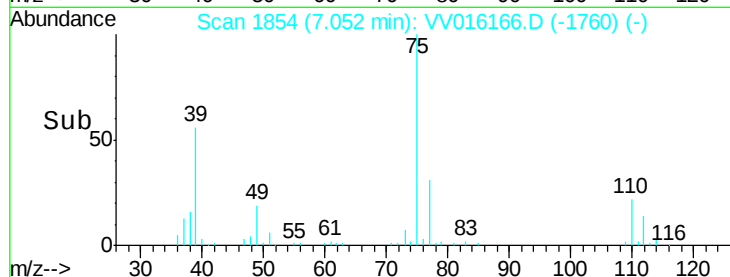
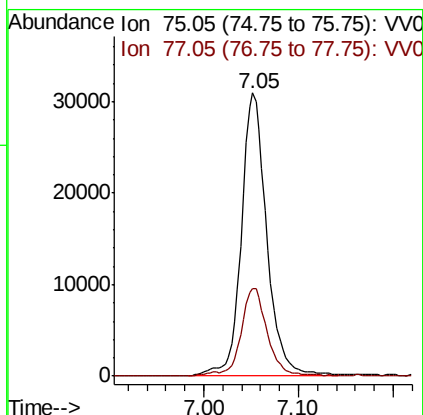
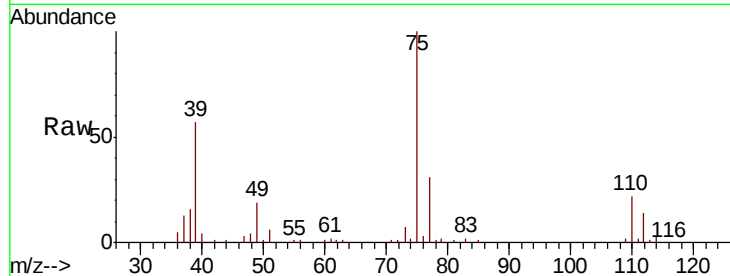




#39  
 cis-1,3-Dichloropropene  
 Concen: 4.566 ug/L  
 RT: 7.05 min Scan# 1854  
 Delta R.T. 0.00 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

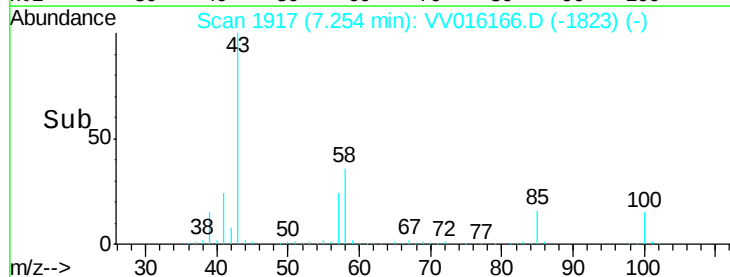
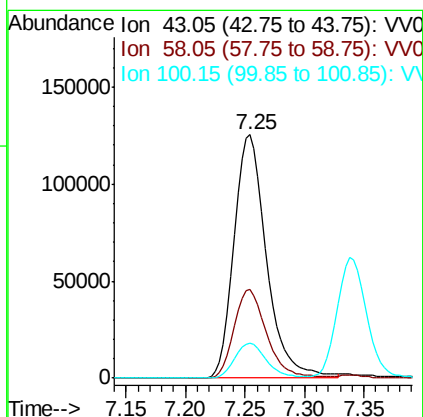
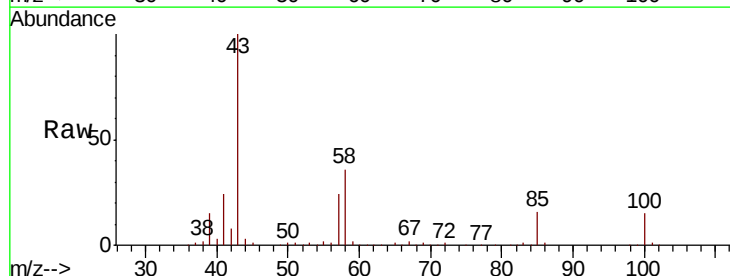
Instrument :  
 MSVOA\_V  
 ClientSampleId :

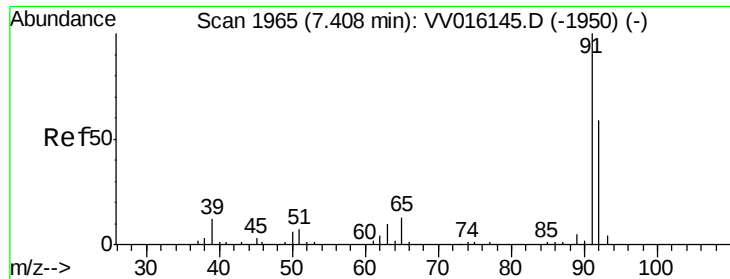
Tot Ion: 75 Resp: 57928  
 Ion Ratio Lower Upper  
 75 100  
 77 31.1 21.3 39.5



#40  
 4-Methyl-2-pentanone  
 Concen: 42.609 ug/L  
 RT: 7.25 min Scan# 1917  
 Delta R.T. 0.00 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

Tgt Ion: 43 Resp: 238364  
 Ion Ratio Lower Upper  
 43 100  
 58 36.4 29.0 43.4  
 100 14.0 10.9 16.3





#42

Toluene

Concen: 5.324 ug/L

RT: 7.41 min Scan# 1966

Delta R.T. 0.00 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

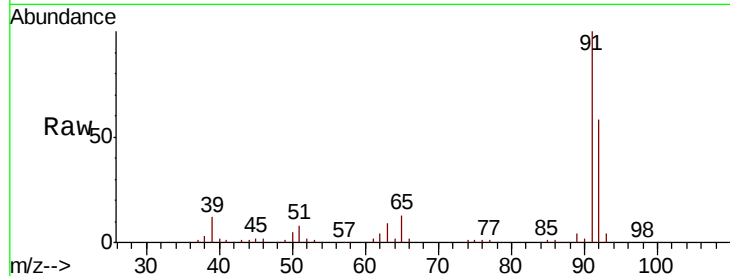
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 91 Resp: 199381

Ion Ratio Lower Upper

91 100

92 58.1 40.1 74.5



Abundance Ion 91.15 (90.85 to 91.85): VV016145.D (-1950) (-)

Ion 92.15 (91.85 to 92.85): VV016145.D (-1950) (-)

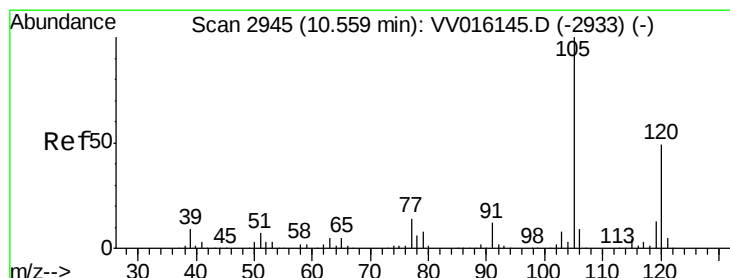
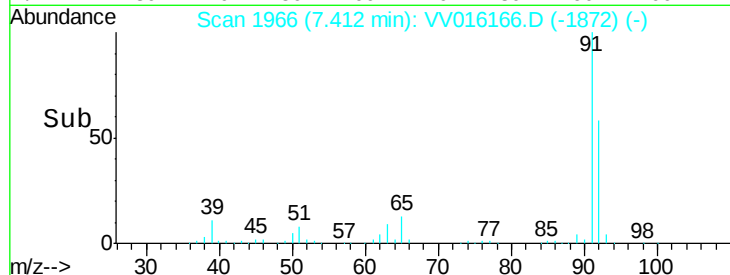
7.41

100000

50000

0

Time-->



#43

1,3,5-Trimethylbenzene

Concen: 5.382 ug/L

RT: 10.56 min Scan# 2945

Delta R.T. 0.00 min

Lab File: VV016166.D

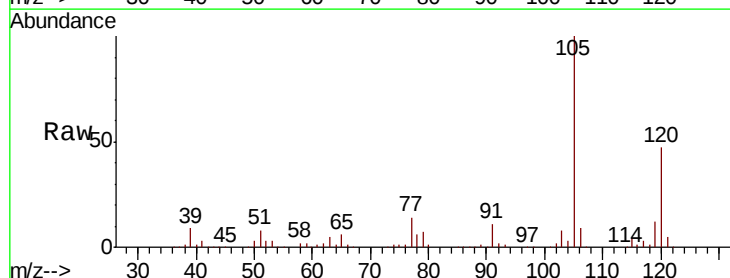
Acq: 21 May 2020 20:04

Tgt Ion:105 Resp: 185007

Ion Ratio Lower Upper

105 100

120 47.9 0.0 0.0#



Abundance Ion 105.00 (104.70 to 105.70): VV016145.D (-2933) (-)

Ion 120.00 (119.70 to 120.70): VV016145.D (-2933) (-)

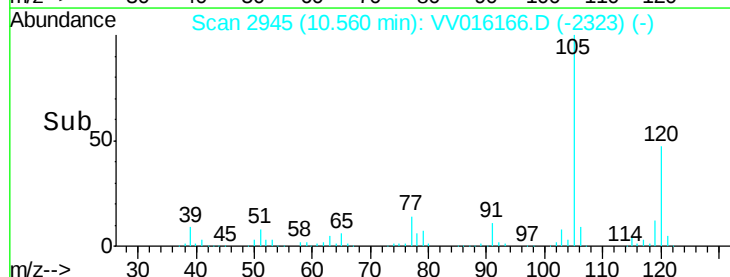
10.56

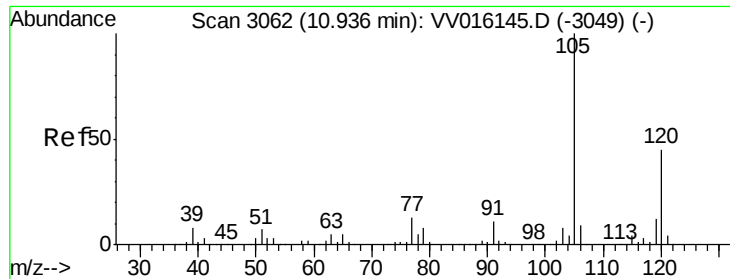
100000

50000

0

Time-->

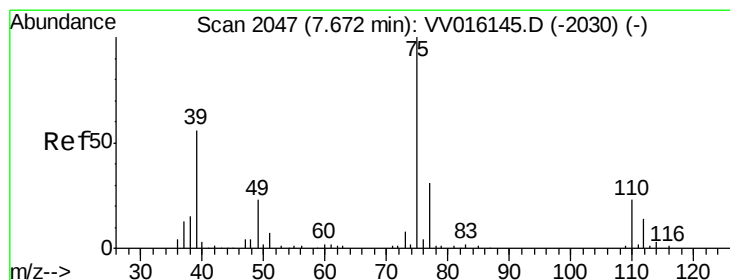
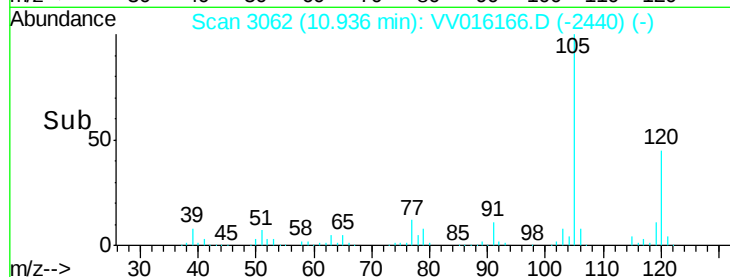
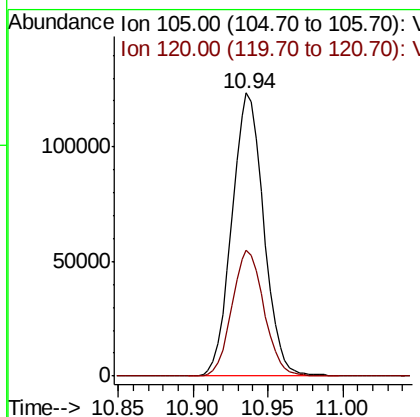
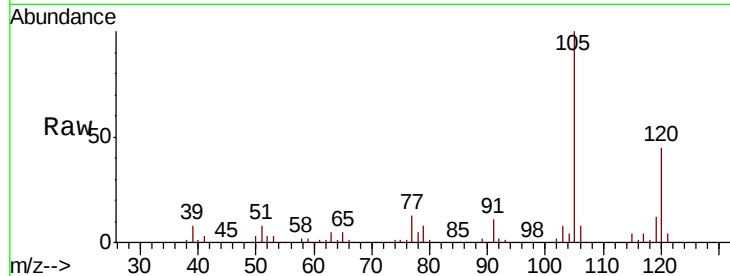




#44  
 1,2,4-Trimethylbenzene  
 Concen: 5.341 ug/L  
 RT: 10.94 min Scan# 3062  
 Delta R.T. 0.00 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

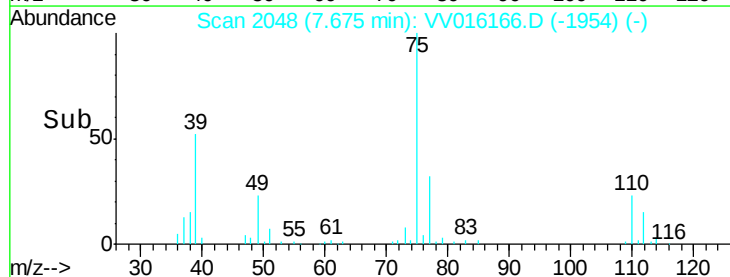
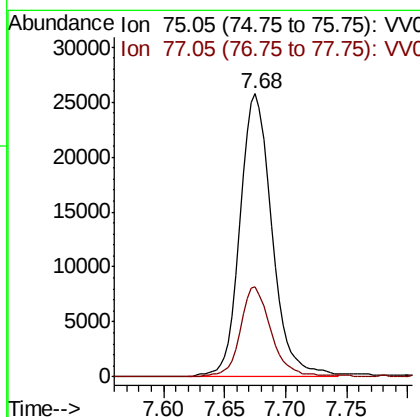
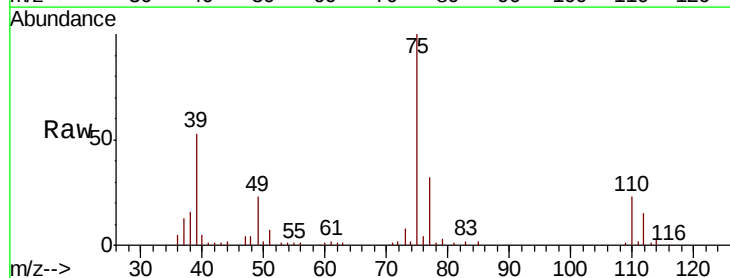
Instrument :  
 MSVOA\_V  
 ClientSampled :

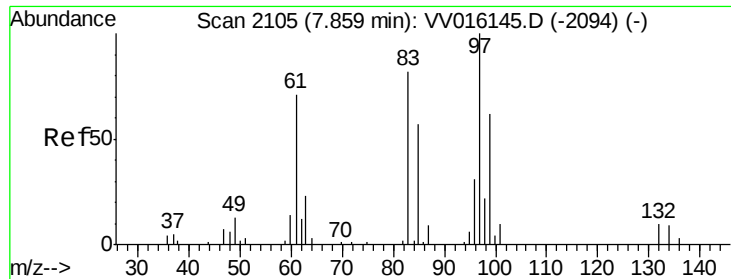
Tot Ion:105 Resp: 183469  
 Ion Ratio Lower Upper  
 105 100  
 120 44.7 0.0 0.0#



#46  
 trans-1,3-Dichloropropene  
 Concen: 4.361 ug/L  
 RT: 7.68 min Scan# 2048  
 Delta R.T. 0.00 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

Tgt Ion: 75 Resp: 46727  
 Ion Ratio Lower Upper  
 75 100  
 77 31.6 21.3 39.6

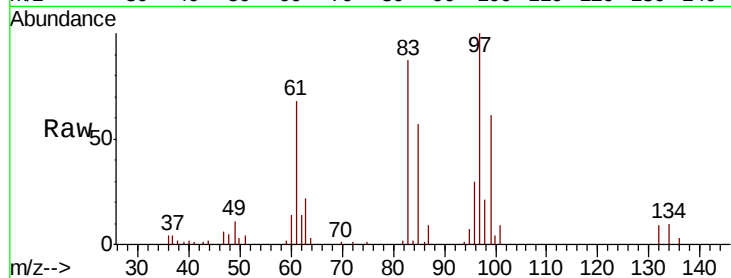




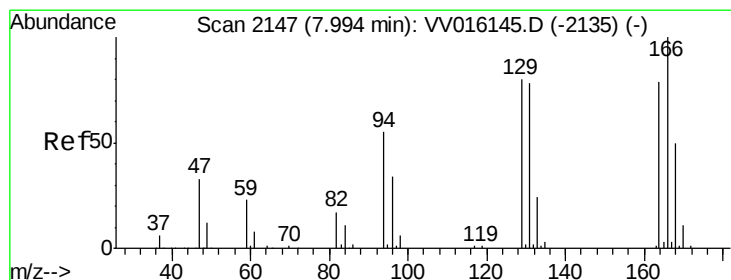
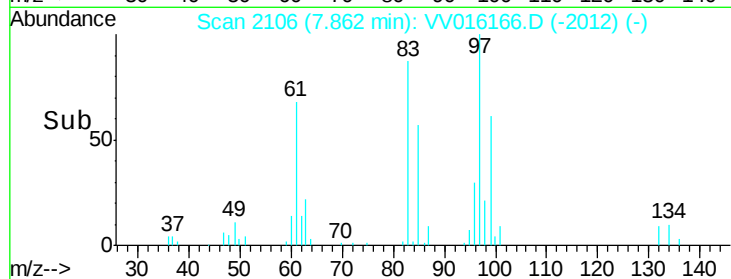
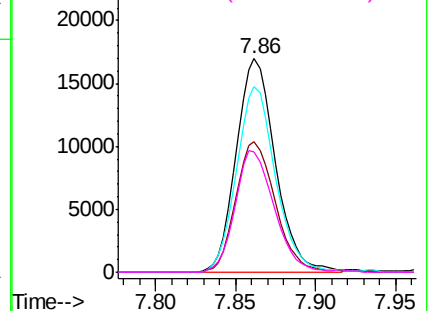
#47  
 1,1,2-Trichloroethane  
 Concen: 4.721 ug/L  
 RT: 7.86 min Scan# 2106  
 Delta R.T. 0.00 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

Instrument :  
 MSVOA\_V  
 ClientSampled :

Tot Ion: 97 Resp: 28295  
 Ion Ratio Lower Upper  
 97 100  
 99 61.0 42.1 78.1  
 83 87.2 59.2 110.0  
 85 56.5 38.6 71.8

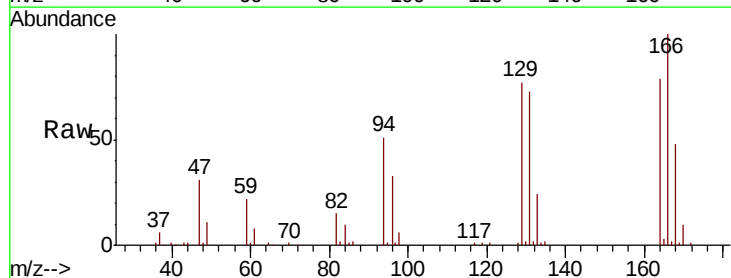


Abundance Ion 96.95 (96.65 to 97.65): VV0  
 Ion 99.05 (98.75 to 99.75): VV0  
 Ion 82.95 (82.65 to 83.65): VV0  
 Ion 85.00 (84.70 to 85.70): VV0

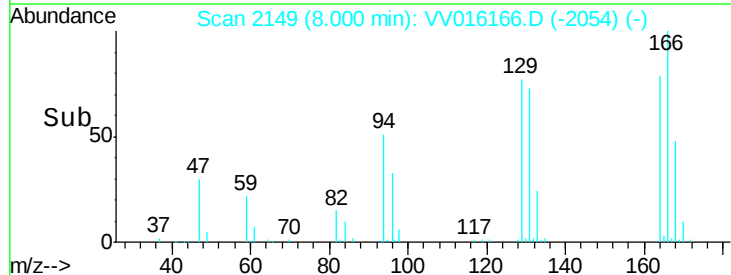
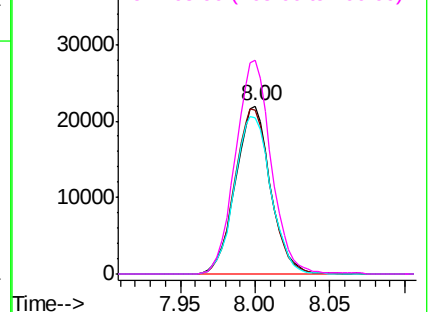


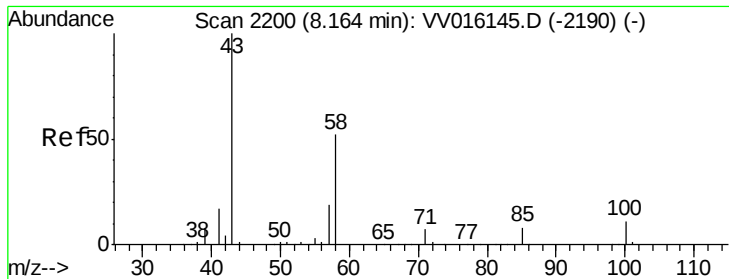
#49  
 Tetrachloroethene  
 Concen: 5.096 ug/L  
 RT: 8.00 min Scan# 2149  
 Delta R.T. 0.01 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

Tgt Ion: 164 Resp: 35851  
 Ion Ratio Lower Upper  
 164 100  
 129 97.4 69.7 129.4  
 131 93.2 66.8 124.2  
 166 127.3 89.1 165.5



Abundance Ion 163.90 (163.60 to 164.60): V  
 Ion 128.95 (128.65 to 129.65): V  
 Ion 130.95 (130.65 to 131.65): V  
 Ion 165.90 (165.60 to 166.60): V

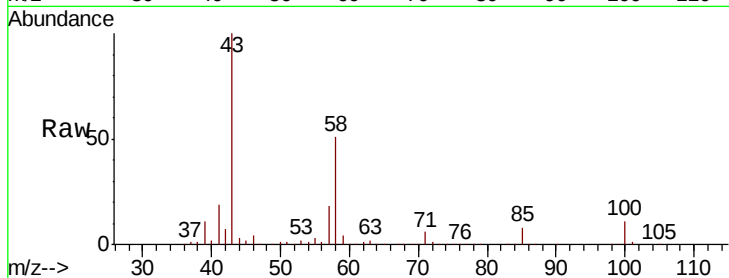




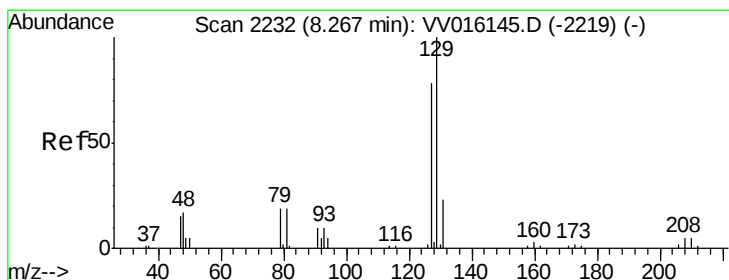
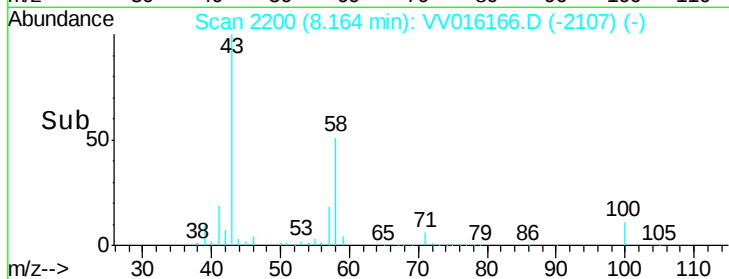
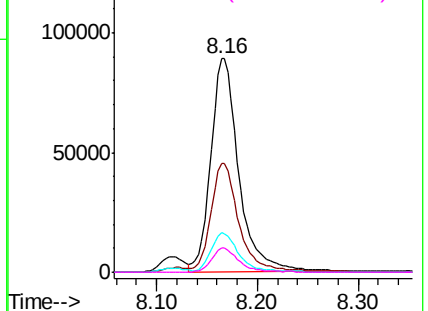
#50  
2-Hexanone  
Concen: 42.966 ug/L  
RT: 8.16 min Scan# 2200  
Delta R.T. 0.00 min  
Lab File: VV016166.D  
Acq: 21 May 2020 20:04

Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 43 Resp: 169977  
Ion Ratio Lower Upper  
43 100  
58 52.1 40.8 61.2  
57 18.3 14.7 22.1  
100 11.1 9.0 13.6

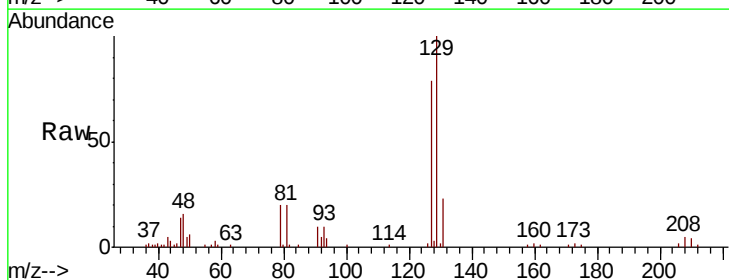


Abundance Ion 43.05 (42.75 to 43.75): VV016166.D (-2107) (-)  
Ion 58.05 (57.75 to 58.75): VV016166.D (-2107) (-)  
Ion 57.20 (56.90 to 57.90): VV016166.D (-2107) (-)  
Ion 100.15 (99.85 to 100.85): VV016166.D (-2107) (-)

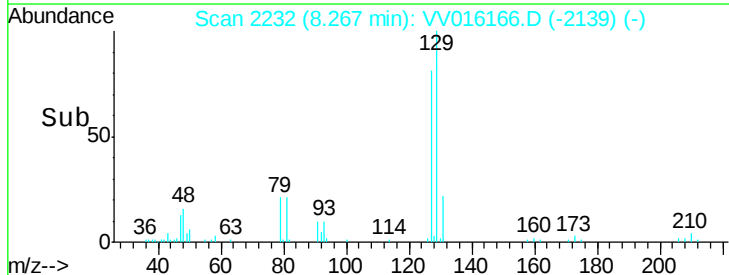
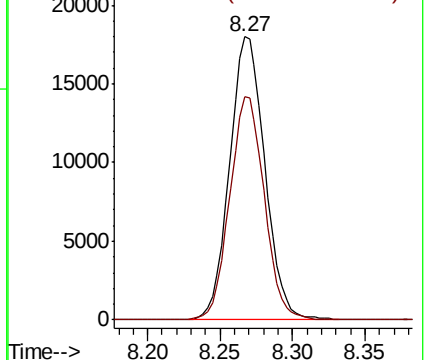


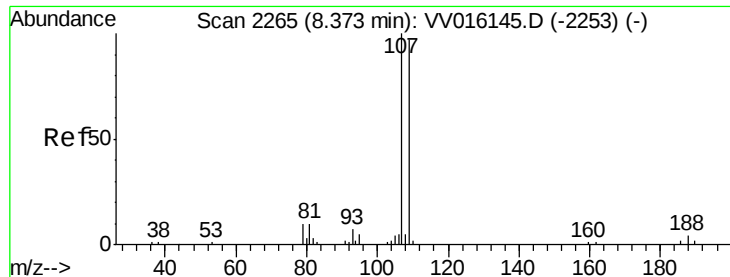
#51  
Dibromochloromethane  
Concen: 4.518 ug/L  
RT: 8.27 min Scan# 2232  
Delta R.T. 0.00 min  
Lab File: VV016166.D  
Acq: 21 May 2020 20:04

Tgt Ion: 129 Resp: 30425  
Ion Ratio Lower Upper  
129 100  
127 78.8 56.0 104.0



Abundance Ion 128.95 (128.65 to 129.65): VV016166.D (-2139) (-)  
Ion 126.90 (126.60 to 127.60): VV016166.D (-2139) (-)

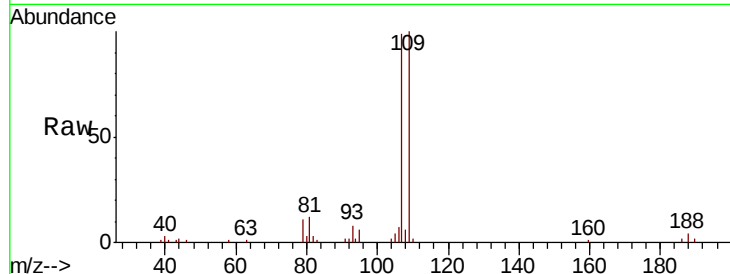




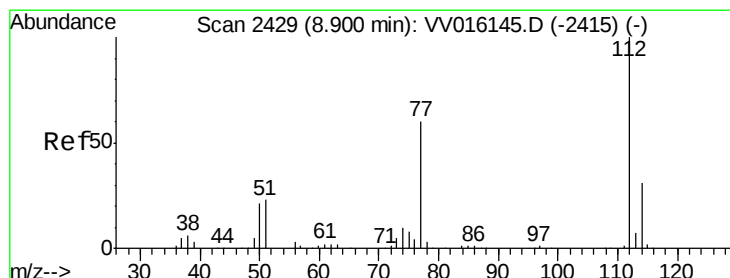
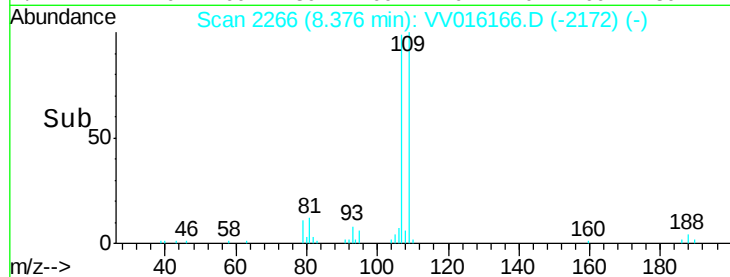
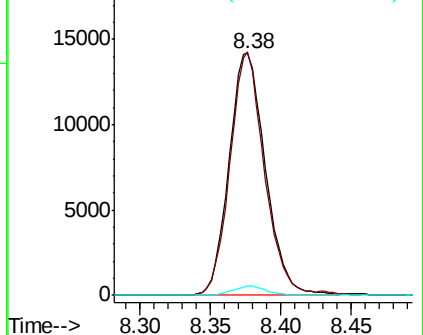
#52  
 1,2-Dibromoethane  
 Concen: 4.595 ug/L  
 RT: 8.38 min Scan# 2266  
 Delta R.T. 0.00 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Tot Ion:107 Resp: 25545  
 Ion Ratio Lower Upper  
 107 100  
 109 100.5 68.9 127.9  
 188 3.7 2.7 4.1

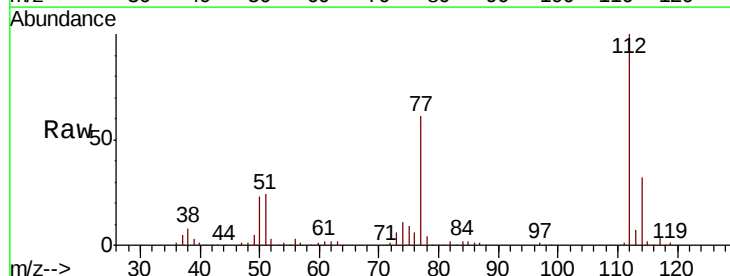


Abundance Ion 106.95 (106.65 to 107.65): V  
 Ion 109.00 (108.70 to 109.70): V  
 Ion 187.90 (187.60 to 188.60): V

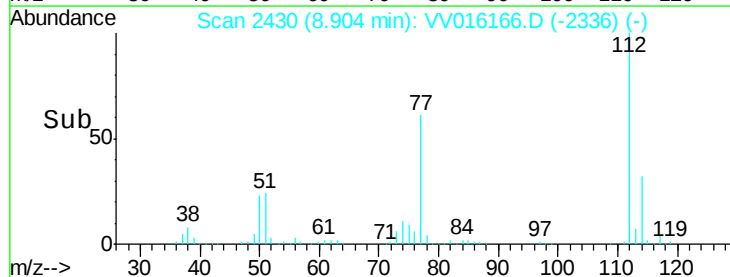
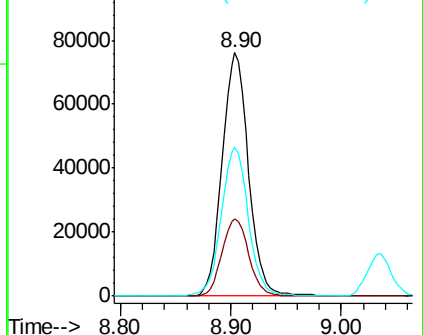


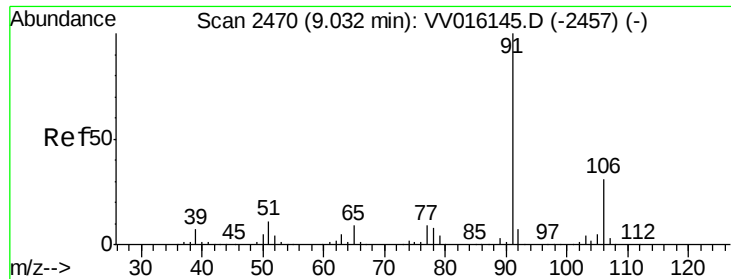
#53  
 Chlorobenzene  
 Concen: 5.249 ug/L  
 RT: 8.90 min Scan# 2430  
 Delta R.T. 0.00 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

Tgt Ion:112 Resp: 126415  
 Ion Ratio Lower Upper  
 112 100  
 114 31.9 21.6 40.0  
 77 61.3 48.6 73.0



Abundance Ion 112.10 (111.80 to 112.80): V  
 Ion 114.05 (113.75 to 114.75): V  
 Ion 77.10 (76.80 to 77.80): V





#54

Ethylbenzene

Concen: 5.329 ug/L

RT: 9.04 min Scan# 2471

Delta R.T. 0.00 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

Instrument :

MSVOA\_V

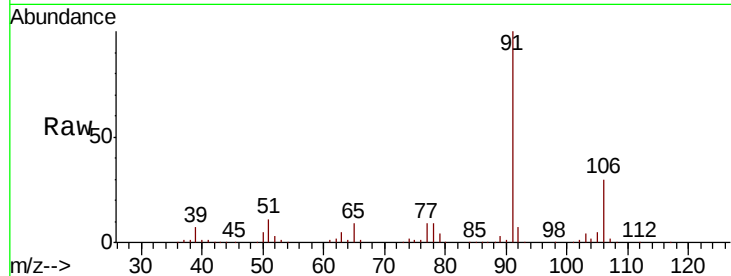
ClientSampleId :

Tot Ion: 91 Resp: 226890

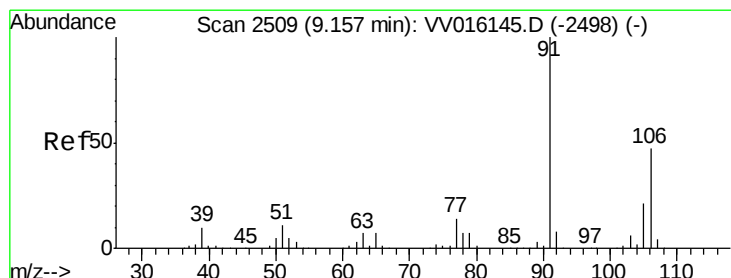
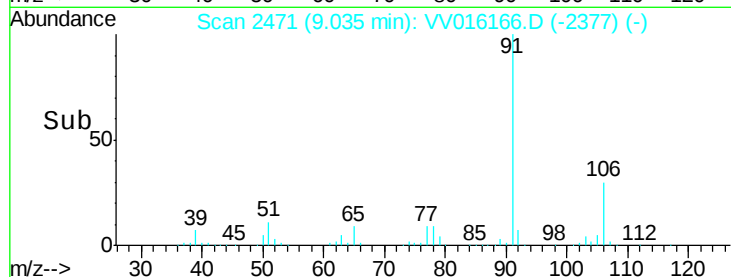
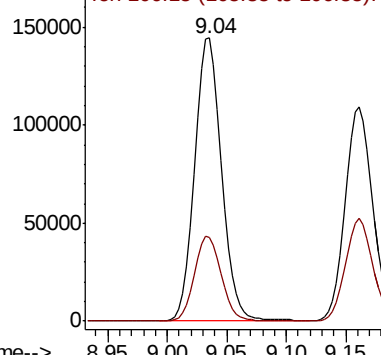
Ion Ratio Lower Upper

91 100

106 29.7 20.6 38.4



Abundance Ion 91.15 (90.85 to 91.85): VV016166.D (-2377) (-)



#55

m,p-xylene

Concen: 5.408 ug/L

RT: 9.16 min Scan# 2510

Delta R.T. 0.00 min

Lab File: VV016166.D

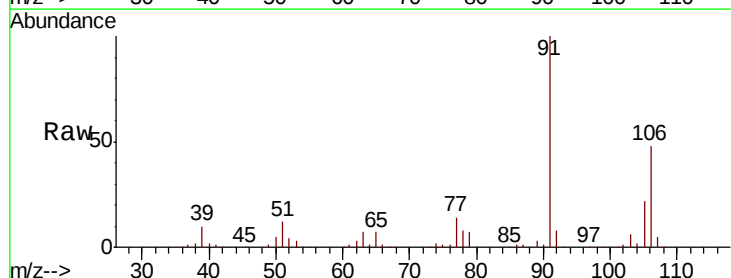
Acq: 21 May 2020 20:04

Tgt Ion: 106 Resp: 85267

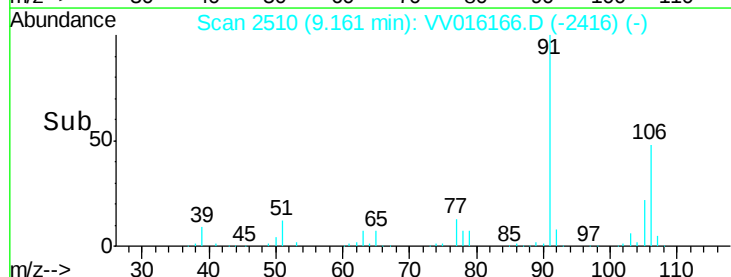
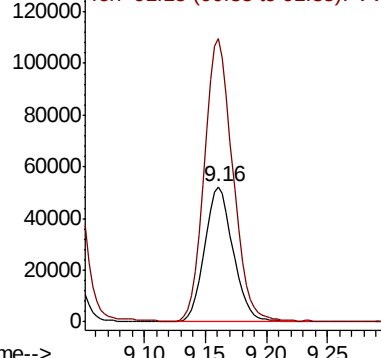
Ion Ratio Lower Upper

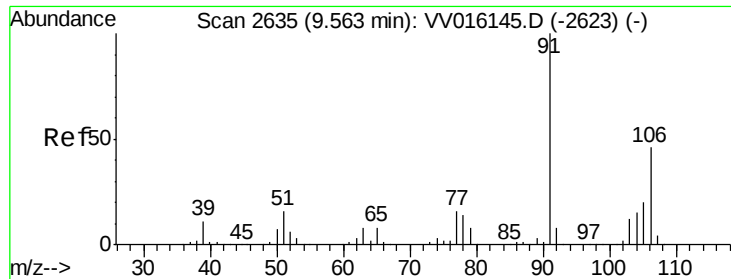
106 100

91 208.9 149.9 278.3



Abundance Ion 106.15 (105.85 to 106.85): VV016166.D (-2416) (-)

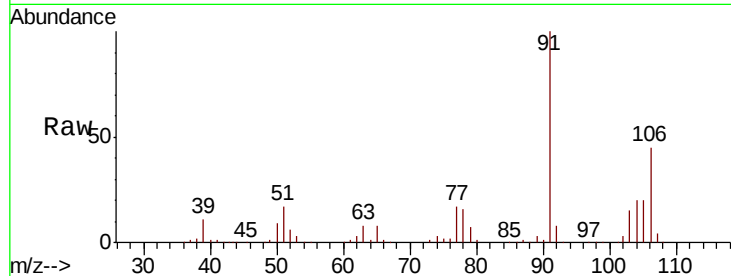




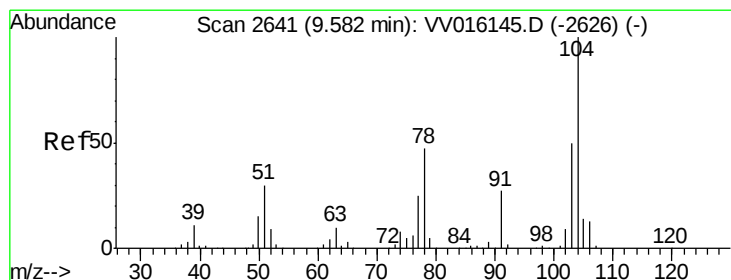
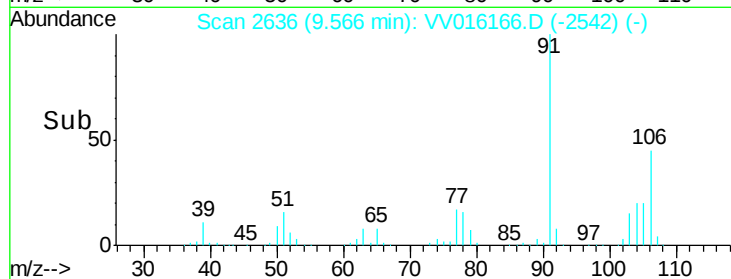
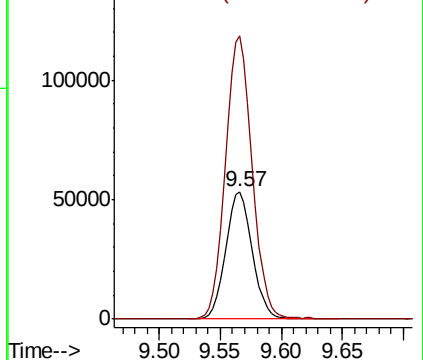
#56  
o-xylene  
Concen: 5.417 ug/L  
RT: 9.57 min Scan# 2636  
Delta R.T. 0.00 min  
Lab File: VV016166.D  
Acq: 21 May 2020 20:04

Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion:106 Resp: 81660  
Ion Ratio Lower Upper  
106 100  
91 221.9 159.7 296.5

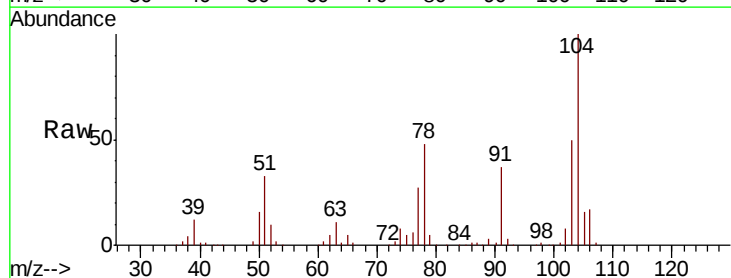


Abundance Ion 106.15 (105.85 to 106.85): VV016166.D (-2542) (-)  
Ion 91.15 (90.85 to 91.85): VV016166.D (-2542) (-)

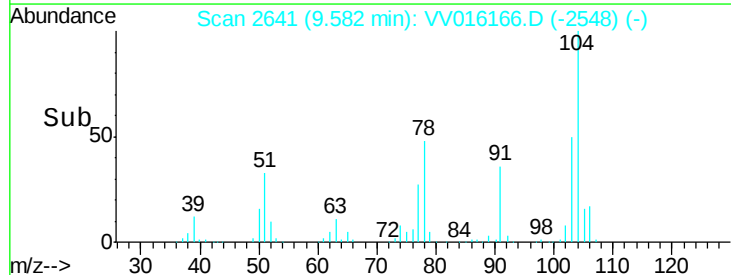
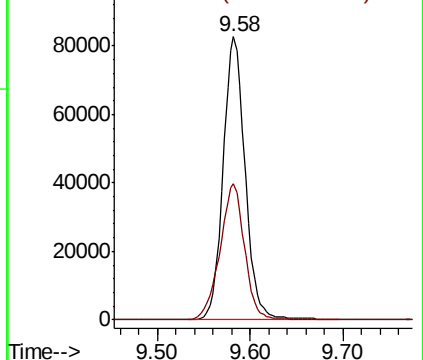


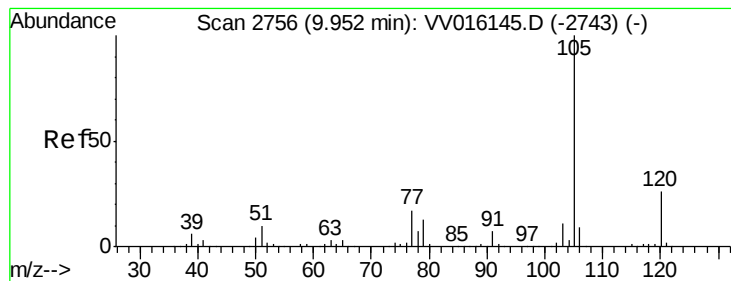
#57  
Styrene  
Concen: 5.408 ug/L  
RT: 9.58 min Scan# 2641  
Delta R.T. 0.00 min  
Lab File: VV016166.D  
Acq: 21 May 2020 20:04

Tgt Ion:104 Resp: 136357  
Ion Ratio Lower Upper  
104 100  
78 48.0 33.9 63.0



Abundance Ion 104.10 (103.80 to 104.80): VV016166.D (-2548) (-)  
Ion 78.10 (77.80 to 78.80): VV016166.D (-2548) (-)





#58

Isopropylbenzene

Concen: 5.394 ug/L

RT: 9.95 min Scan# 2756

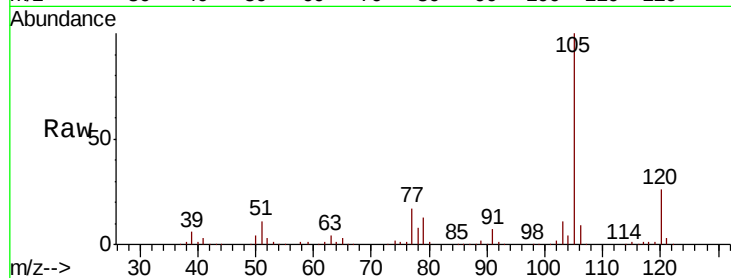
Delta R.T. 0.00 min

Lab File: VV016166.D

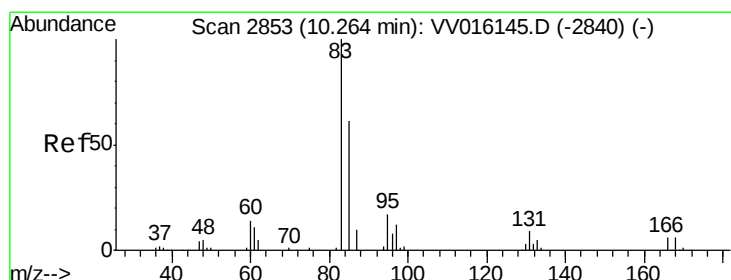
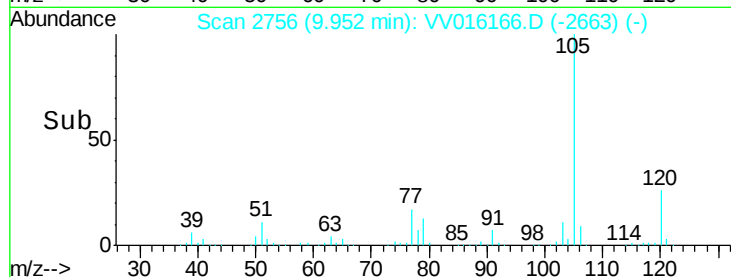
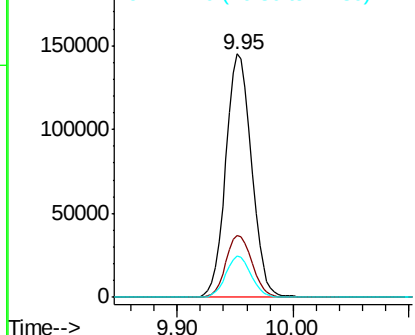
Acq: 21 May 2020 20:04

Instrument :  
MSVOA\_V  
ClientSampleId :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 105   | Resp: | 223361 |
| Ion      | Ratio | Lower | Upper  |
| 105      | 100   |       |        |
| 120      | 25.9  | 20.8  | 31.2   |
| 77       | 16.8  | 14.1  | 21.1   |



Abundance Ion 105.05 (104.75 to 105.75): V  
Ion 120.10 (119.80 to 120.80): V  
Ion 77.10 (76.80 to 77.80): V



#60

1,1,2,2-Tetrachloroethane

Concen: 5.148 ug/L

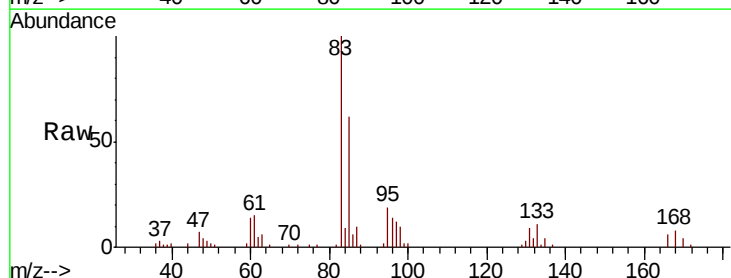
RT: 10.26 min Scan# 2853

Delta R.T. 0.00 min

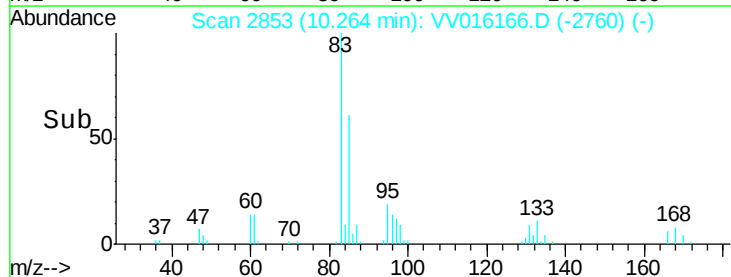
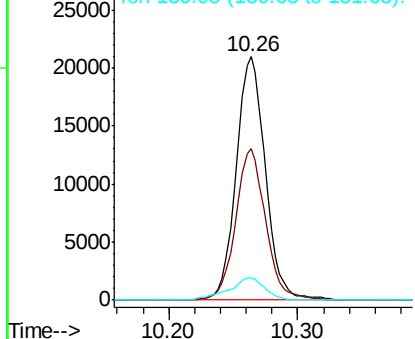
Lab File: VV016166.D

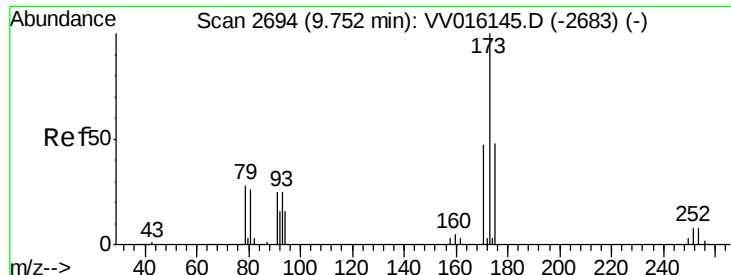
Acq: 21 May 2020 20:04

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 32973 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 85       | 62.1  | 44.0  | 81.6  |
| 131      | 9.2   | 7.7   | 11.5  |



Abundance Ion 82.95 (82.65 to 83.65): VV0  
Ion 85.00 (84.70 to 85.70): VV0  
Ion 130.95 (130.65 to 131.65): V





#62

Bromoform

Concen: 3.956 ug/L

RT: 9.75 min Scan# 2694

Delta R.T. 0.00 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

Instrument :  
MSVOA\_V  
ClientSampled :

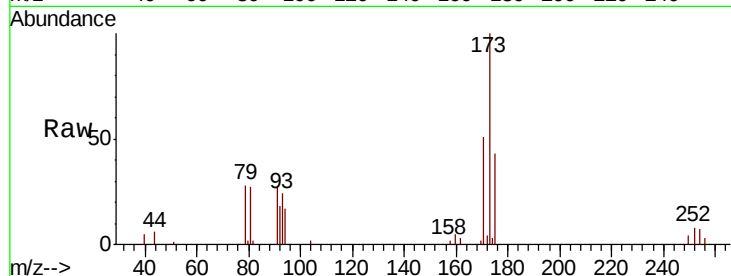
Tot Ion:173 Resp: 12648

Ion Ratio Lower Upper

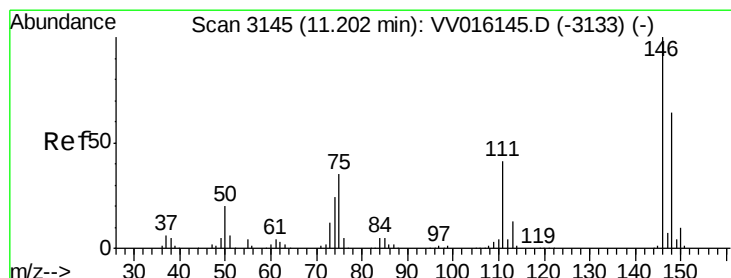
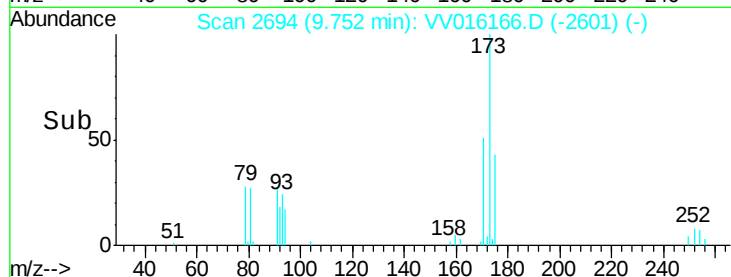
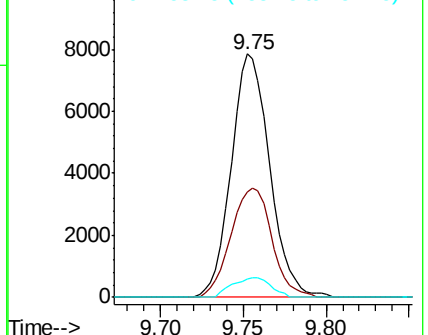
173 100

175 47.6 39.8 59.8

254 8.0 7.1 10.7



Abundance Ion 172.90 (172.60 to 173.60): V  
Ion 174.90 (174.60 to 175.60): V  
Ion 253.75 (253.45 to 254.45): V



#63

1,3-Dichlorobenzene

Concen: 5.301 ug/L

RT: 11.20 min Scan# 3145

Delta R.T. 0.00 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

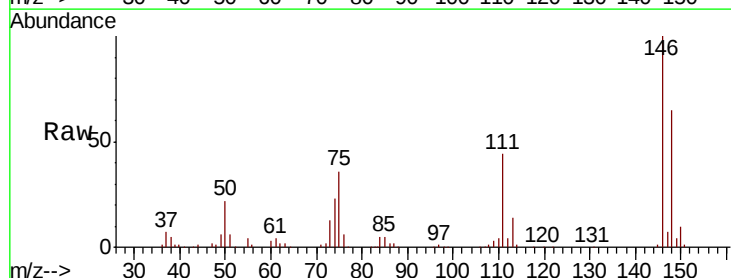
Tgt Ion:146 Resp: 99410

Ion Ratio Lower Upper

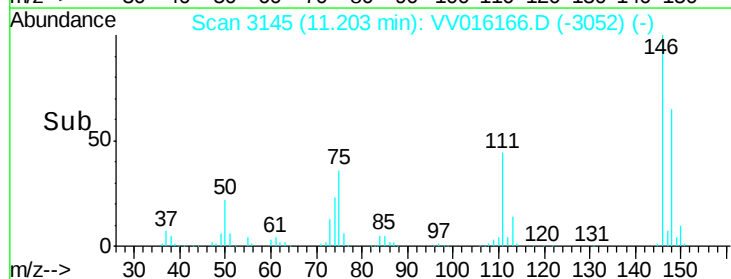
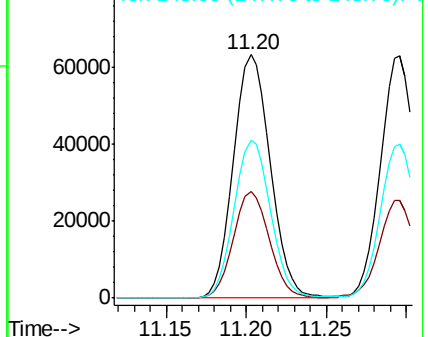
146 100

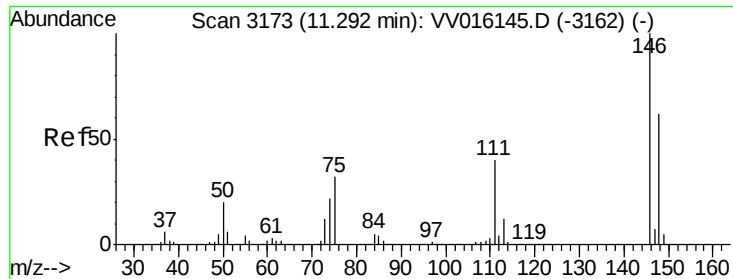
111 43.6 28.7 53.3

148 64.6 44.0 81.8



Abundance Ion 145.95 (145.65 to 146.65): V  
Ion 111.00 (110.70 to 111.70): V  
Ion 148.00 (147.70 to 148.70): V





#64

1,4-Dichlorobenzene

Concen: 5.249 ug/L

RT: 11.30 min Scan# 3174

Delta R.T. 0.00 min

Lab File: VV016166.D

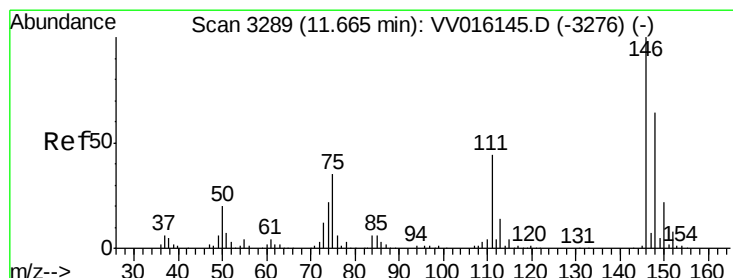
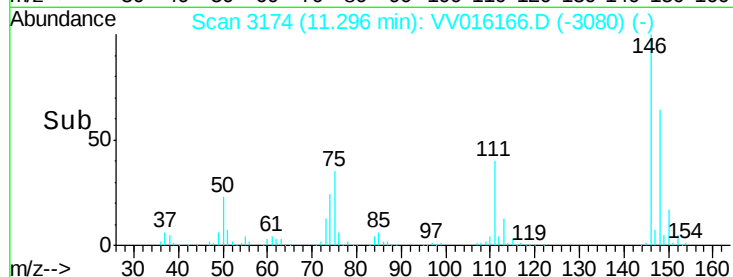
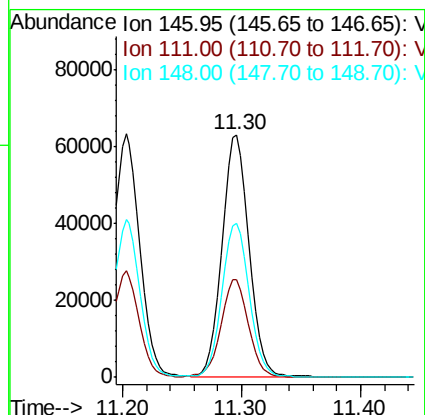
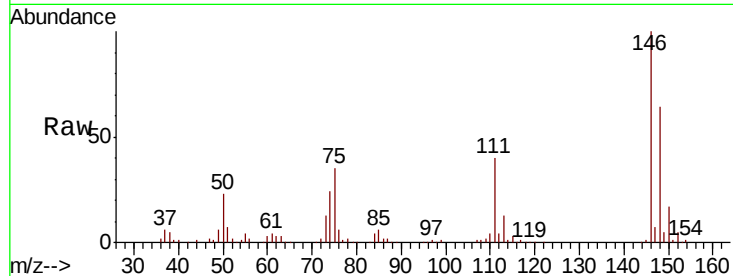
Acq: 21 May 2020 20:04

Instrument :

MSVOA\_V

ClientSampleId :

|             |       |             |
|-------------|-------|-------------|
| Tot Ion:146 | Resp: | 98879       |
| Ion         | Ratio | Lower Upper |
| 146         | 100   |             |
| 111         | 40.2  | 28.9 53.7   |
| 148         | 63.5  | 44.6 82.8   |



#66

1,2-Dichlorobenzene

Concen: 5.204 ug/L

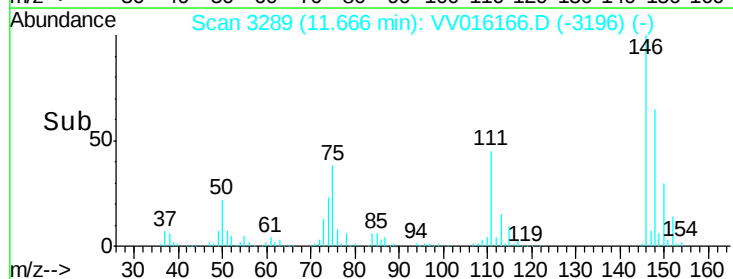
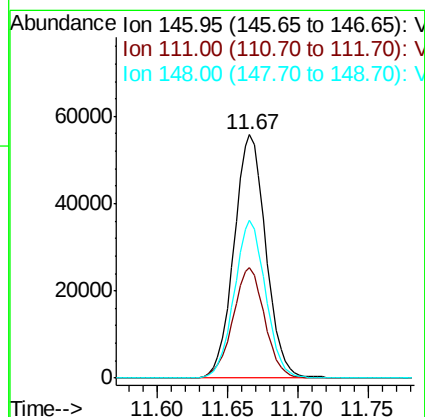
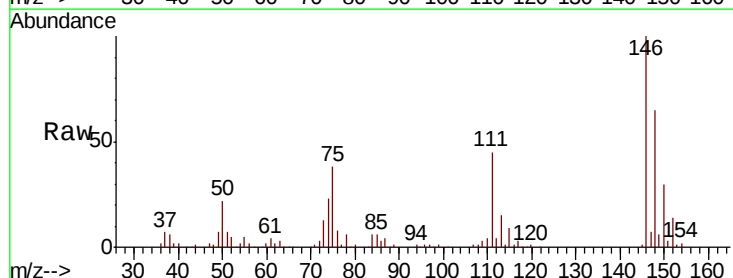
RT: 11.67 min Scan# 3289

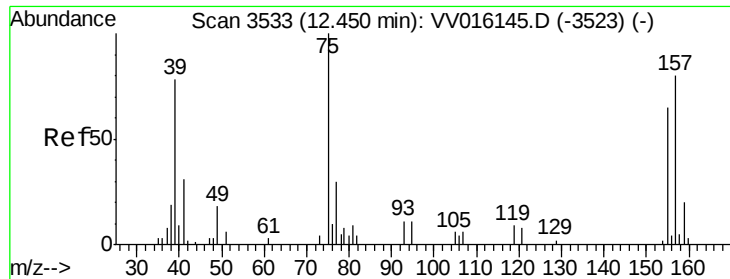
Delta R.T. 0.00 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

|             |       |             |
|-------------|-------|-------------|
| Tgt Ion:146 | Resp: | 88310       |
| Ion         | Ratio | Lower Upper |
| 146         | 100   |             |
| 111         | 45.3  | 37.0 55.4   |
| 148         | 65.0  | 49.8 74.6   |

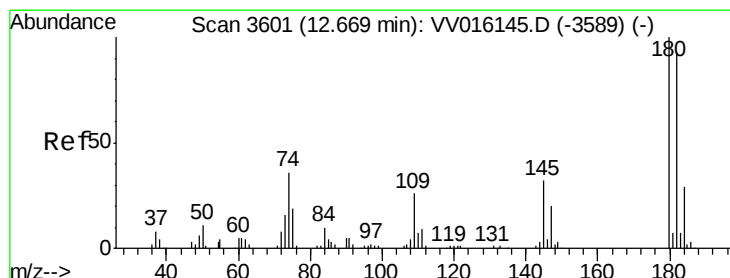
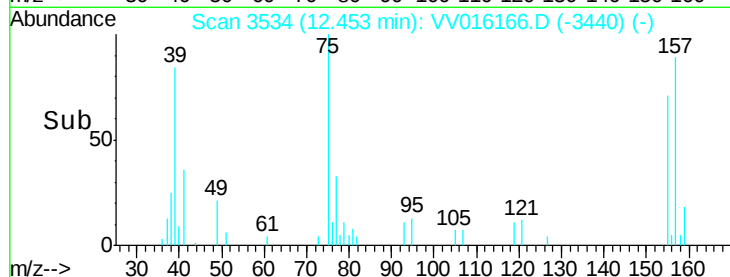
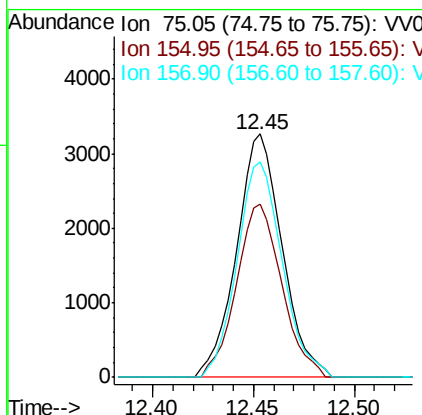
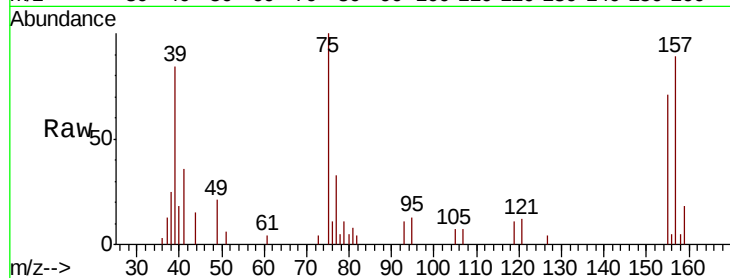




#67  
 1,2-Dibromo-3-chloropropane  
 Concen: 4.665 ug/L  
 RT: 12.45 min Scan# 3534  
 Delta R.T. 0.00 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

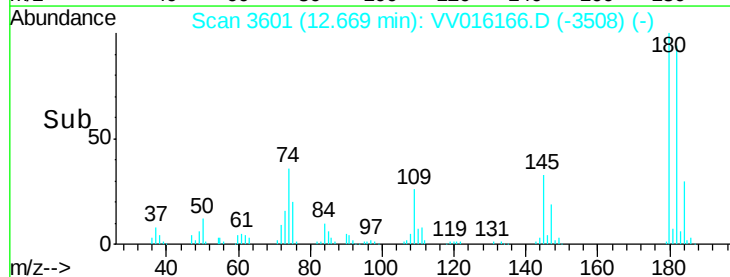
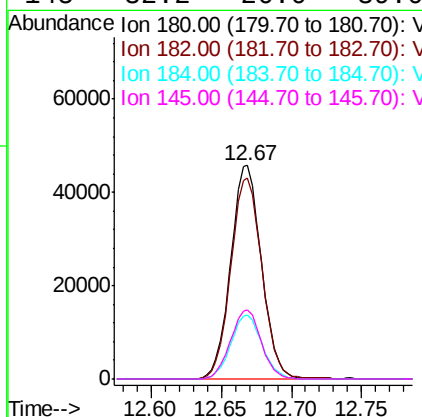
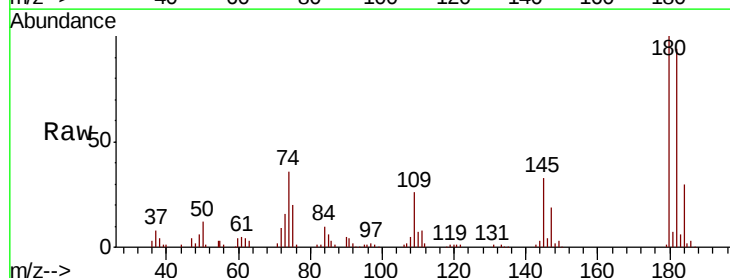
Instrument :  
 MSVOA\_V  
 ClientSampleId :

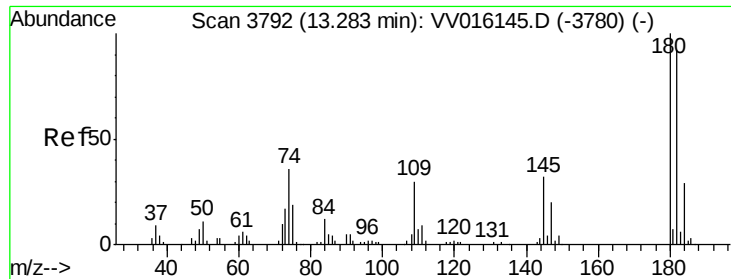
Tot Ion: 75 Resp: 5167  
 Ion Ratio Lower Upper  
 75 100  
 155 71.3 58.2 87.4  
 157 88.6 79.4 119.2



#68  
 1,3,5-Trichlorobenzene  
 Concen: 5.114 ug/L  
 RT: 12.67 min Scan# 3601  
 Delta R.T. 0.00 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

Tgt Ion: 180 Resp: 70117  
 Ion Ratio Lower Upper  
 180 100  
 182 94.9 75.8 113.6  
 184 30.3 24.6 36.8  
 145 32.2 26.0 39.0





#69

1,2,4-trichlorobenzene

Concen: 4.837 ug/L

RT: 13.28 min Scan# 3792

Delta R.T. 0.00 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

Instrument :

MSVOA\_V

ClientSampled :

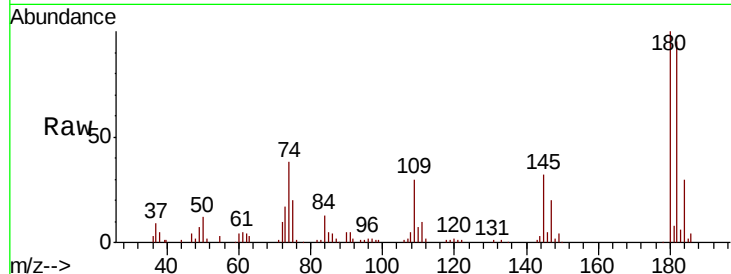
Tot Ion:180 Resp: 56976

Ion Ratio Lower Upper

180 100

182 95.5 76.7 115.1

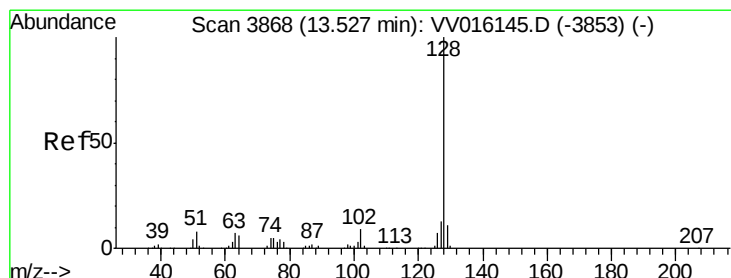
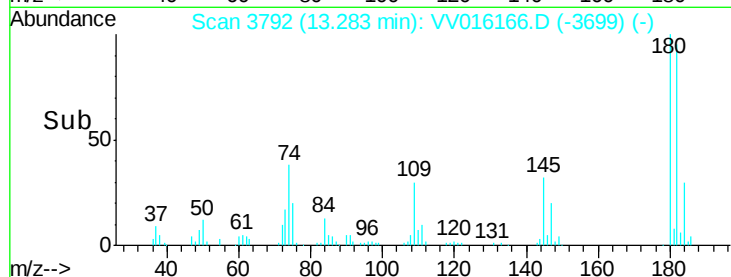
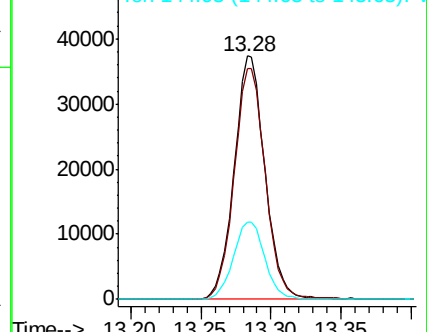
145 32.4 26.4 39.6



Abundance Ion 179.90 (179.60 to 180.60): V

Ion 182.00 (181.70 to 182.70): V

Ion 144.95 (144.65 to 145.65): V



#70

Naphthalene

Concen: 4.863 ug/L

RT: 13.53 min Scan# 3868

Delta R.T. 0.00 min

Lab File: VV016166.D

Acq: 21 May 2020 20:04

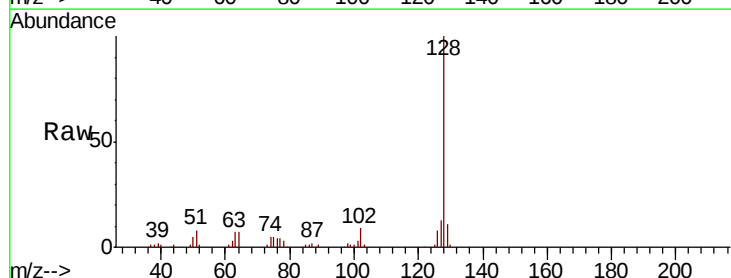
Tgt Ion:128 Resp: 91107

Ion Ratio Lower Upper

128 100

129 10.6 8.5 12.7

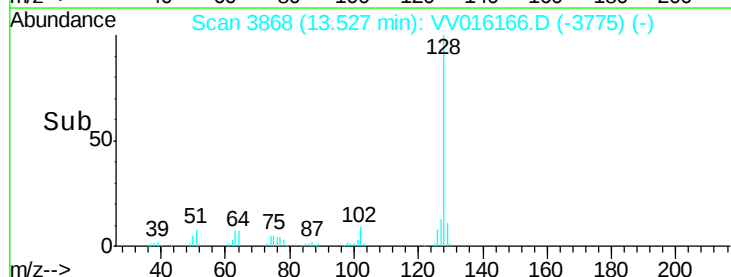
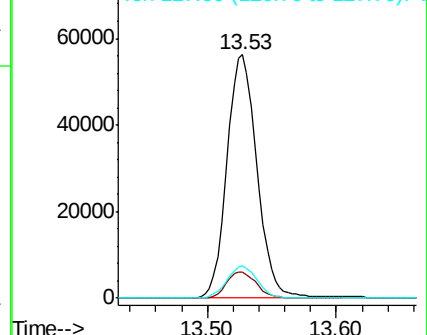
127 13.2 10.2 15.2

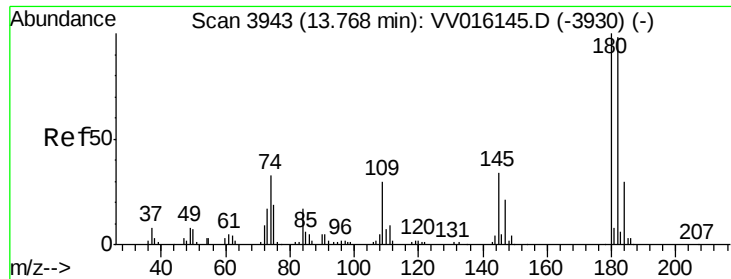


Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#71  
 1,2,3-Trichlorobenzene  
 Concen: 4.837 ug/L  
 RT: 13.77 min Scan# 3943  
 Delta R.T. 0.00 min  
 Lab File: VV016166.D  
 Acq: 21 May 2020 20:04

Instrument :  
 MSVOA\_V  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 93.8  | 77.0  | 115.6 |
| 145     | 35.5  | 28.3  | 42.5  |

