

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD051219\  
 Data File : VD062259.D  
 Acq On : 12 May 2019 15:19  
 Operator : FY/SY  
 Sample : K2733-04  
 Misc : 5.36g/5mL/MSVOA D/SOIL  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 P021-SS001-0002-02

Quant Time: May 13 01:33:42 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D050719S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 07 14:26:29 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.07  | 168  | 441109   | 50.00 | ug/l  | 0.05     |
| 34) 1,4-Difluorobenzene    | 8.24  | 114  | 730414   | 50.00 | ug/l  | 0.05     |
| 63) Chlorobenzene-d5       | 12.38 | 117  | 500825   | 50.00 | ug/l  | 0.03     |
| 72) 1,4-Dichlorobenzene-d4 | 14.53 | 152  | 174725   | 50.00 | ug/l  | 0.02     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.47  | 65   | 264786   | 64.59 | ug/l    | 0.05     |
| Spiked Amount               |       |      | Recovery | =     | 129.18% |          |
| 35) Dibromofluoromethane    | 6.94  | 113  | 348180   | 57.45 | ug/l    | 0.05     |
| Spiked Amount               |       |      | Recovery | =     | 114.90% |          |
| 50) Toluene-d8              | 10.42 | 98   | 525569   | 35.97 | ug/l    | 0.03     |
| Spiked Amount               |       |      | Recovery | =     | 71.94%  |          |
| 62) 4-Bromofluorobenzene    | 13.56 | 95   | 182311   | 31.07 | ug/l    | 0.02     |
| Spiked Amount               |       |      | Recovery | =     | 62.14%  |          |

| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 5) Bromomethane                | 2.16  | 94   | 800      | 1.140   | ug/l # | 12     |
| 11) Tert butyl alcohol         | 4.08  | 59   | 712      | 3.403   | ug/l # | 76     |
| 16) Acetone                    | 3.24  | 43   | 4590     | 5.339   | ug/l # | 75     |
| 20) Methylene Chloride         | 3.83  | 84   | 16359    | 4.558   | ug/l   | 94     |
| 31) Cyclohexane                | 7.06  | 56   | 9118     | 2.120   | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.07  | 75   | 34635    | 5.783   | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 7.07  | 117  | 44256    | 5.339   | ug/l # | 16     |
| 51) 4-Methyl-2-Pentanone       | 10.42 | 43   | 2413     | 1.042   | ug/l # | 1      |
| 58) 2-Chloroethyl Vinyl ether  | 9.86  | 63   | 3062     | 1.733   | ug/l # | 46     |
| 59) 2-Hexanone                 | 11.53 | 43   | 1900     | 1.113   | ug/l # | 27     |
| 76) 1,2,3-Trichloropropane     | 13.56 | 75   | 71279    | 34.327  | ug/l # | 44     |
| 81) trans-1,4-Dichloro-2-buten | 13.56 | 75   | 72463    | 123.615 | ug/l # | 16     |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.07 min Scan# 573

Delta R.T. 0.05 min

Lab File: VD062259.D

Acq: 12 May 2019 15:19

Instrument :

MSVOA\_D

ClientSampleId :

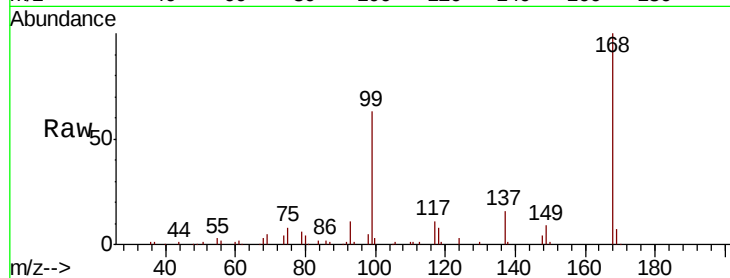
P021-SS001-0002-02

Tot Ion:168 Resp: 441109

Ion Ratio Lower Upper

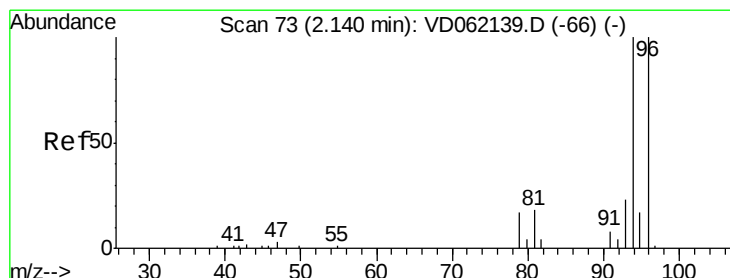
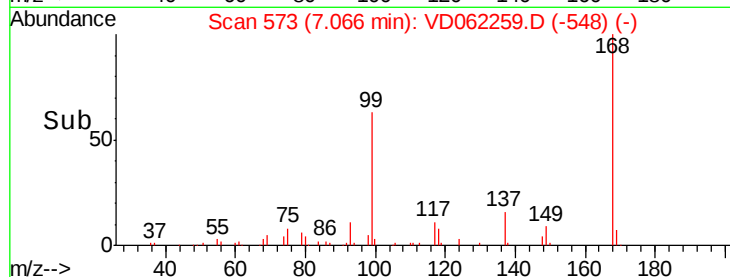
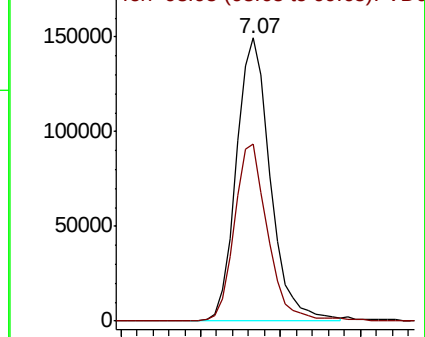
168 100

99 62.7 46.5 69.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#5

Bromomethane

Concen: 1.140 ug/l

RT: 2.16 min Scan# 74

Delta R.T. 0.02 min

Lab File: VD062259.D

Acq: 12 May 2019 15:19

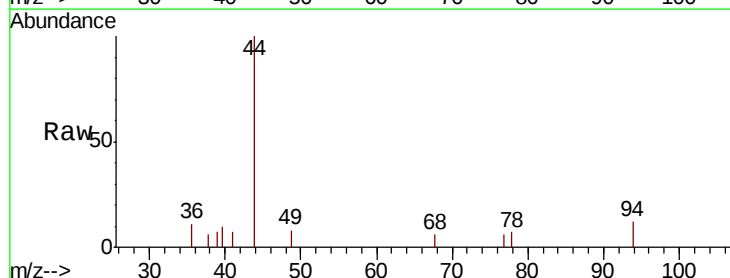
Tgt Ion: 94 Resp: 800

Ion Ratio Lower Upper

94 100

96 0.0 76.6 115.0#

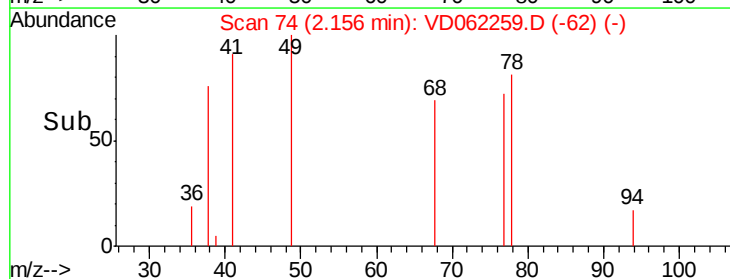
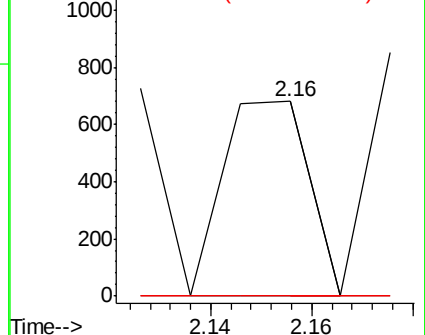
93 0.0 18.5 27.7#

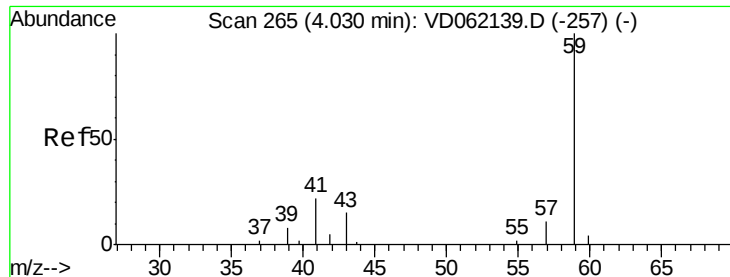


Abundance Ion 94.00 (93.70 to 94.70): VDC

Ion 96.00 (95.70 to 96.70): VDC

Ion 93.00 (92.70 to 93.70): VDC

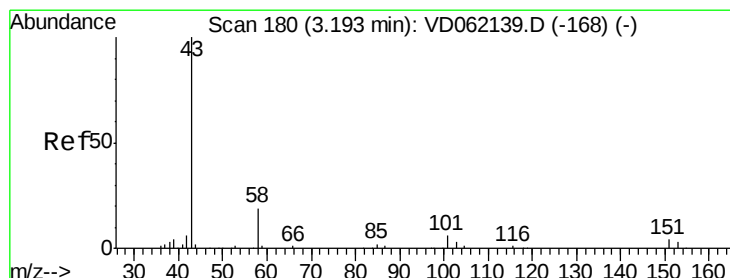
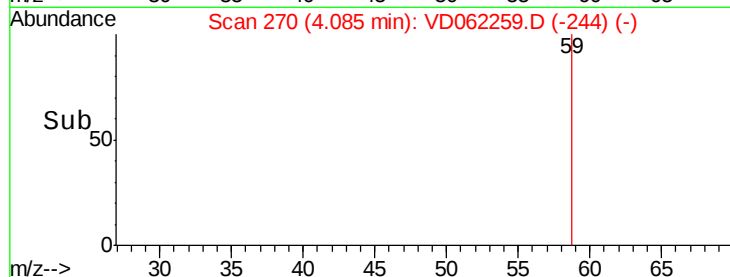
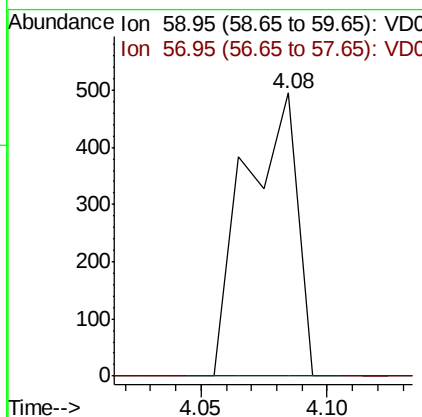
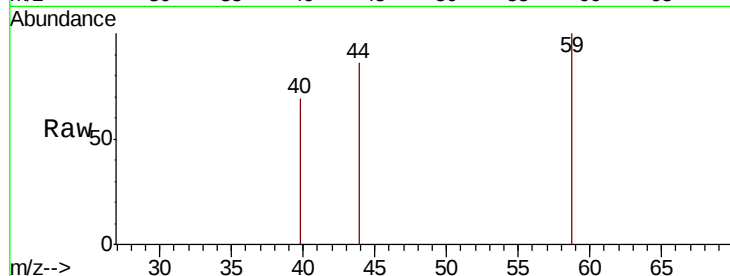




#11  
Tert butyl alcohol  
Concen: 3.403 ug/l  
RT: 4.08 min Scan# 270  
Delta R.T. 0.05 min  
Lab File: VD062259.D  
Acq: 12 May 2019 15:19

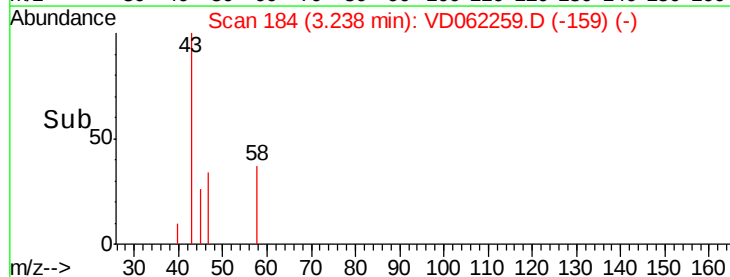
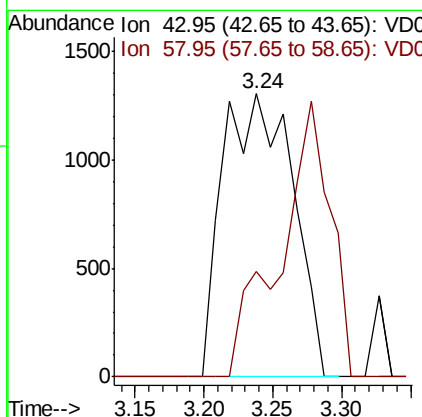
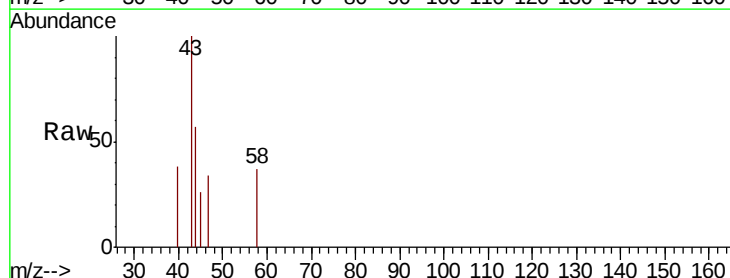
Instrument :  
MSVOA\_D  
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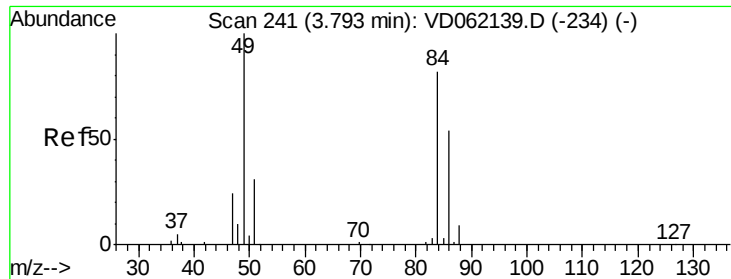
Tot Ion: 59 Resp: 712  
Ion Ratio Lower Upper  
59 100  
57 0.0 6.9 10.3#



#16  
Acetone  
Concen: 5.339 ug/l  
RT: 3.24 min Scan# 184  
Delta R.T. 0.05 min  
Lab File: VD062259.D  
Acq: 12 May 2019 15:19

Tgt Ion: 43 Resp: 4590  
Ion Ratio Lower Upper  
43 100  
58 37.4 19.9 29.9#

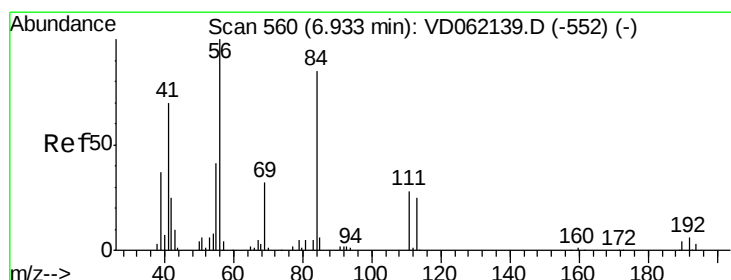
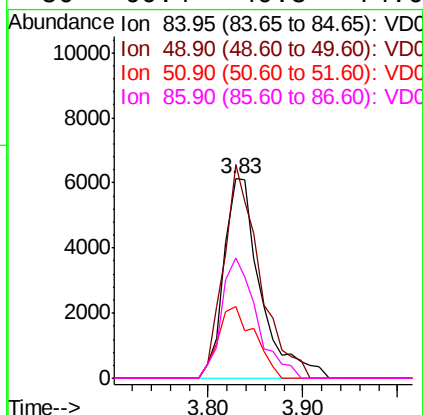
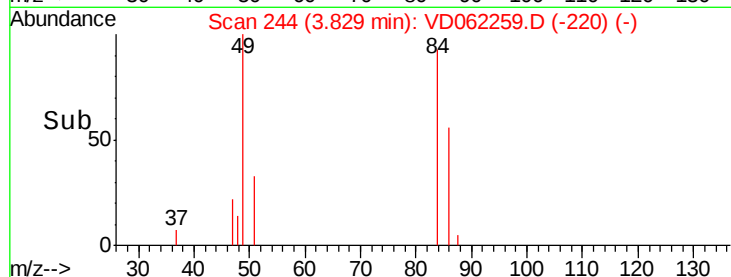
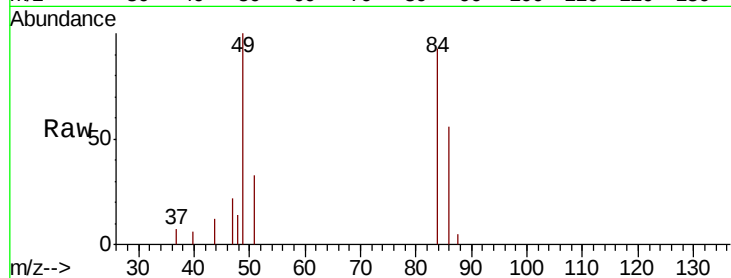




#20  
Methylene Chloride  
Concen: 4.558 ug/l  
RT: 3.83 min Scan# 244  
Delta R.T. 0.04 min  
Lab File: VD062259.D  
Acq: 12 May 2019 15:19

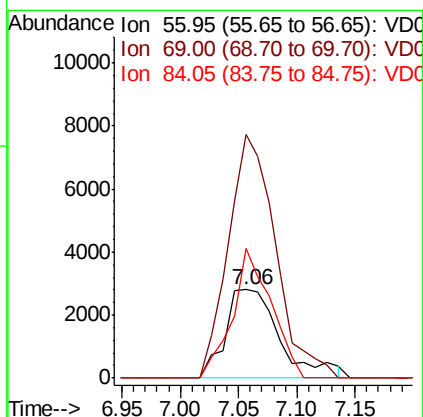
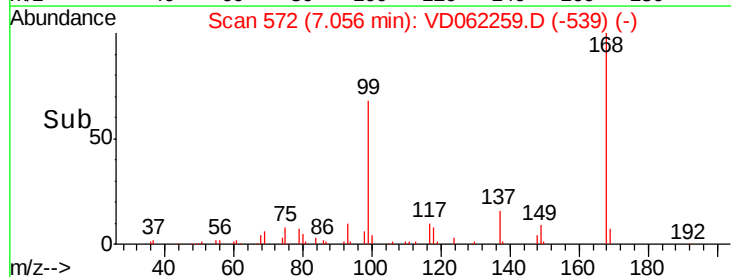
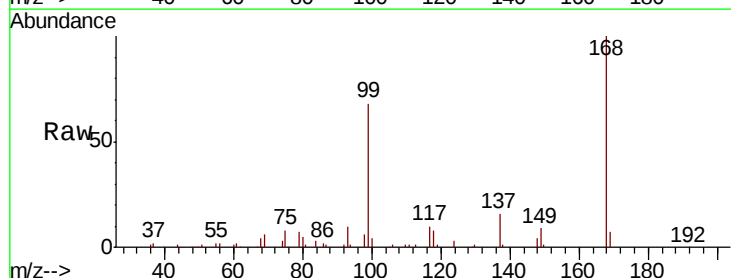
Instrument :  
MSVOA\_D  
ClientSampleId :  
P021-SS001-0002-02

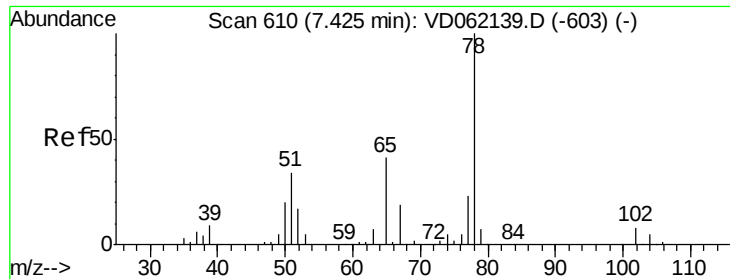
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 16359 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 107.3 | 94.0  | 141.0 |
| 51       | 35.9  | 29.0  | 43.4  |
| 86       | 60.4  | 49.8  | 74.6  |



#31  
Cyclohexane  
Concen: 2.120 ug/l  
RT: 7.06 min Scan# 572  
Delta R.T. 0.12 min  
Lab File: VD062259.D  
Acq: 12 May 2019 15:19

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 56    | Resp: | 9118   |
| Ion      | Ratio | Lower | Upper  |
| 56       | 100   |       |        |
| 69       | 274.7 | 25.8  | 38.6#  |
| 84       | 146.7 | 72.2  | 108.4# |

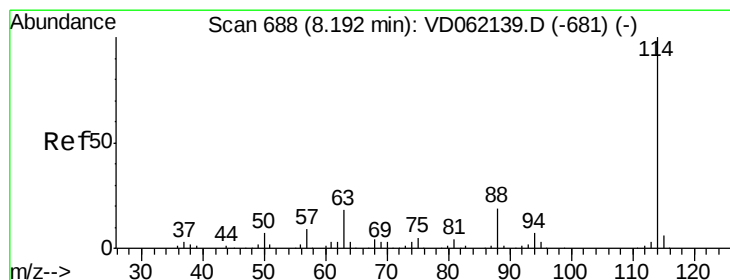
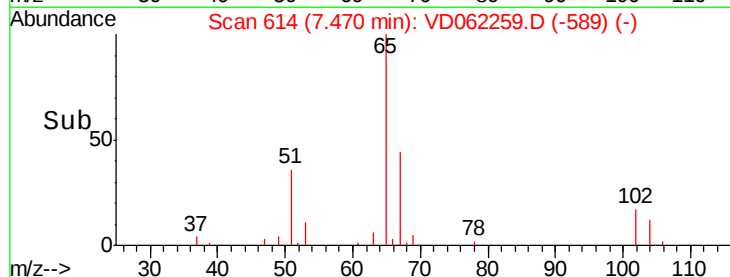
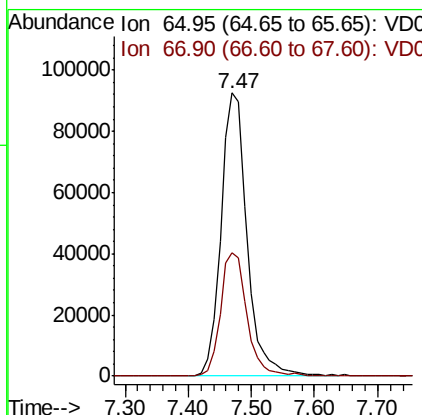
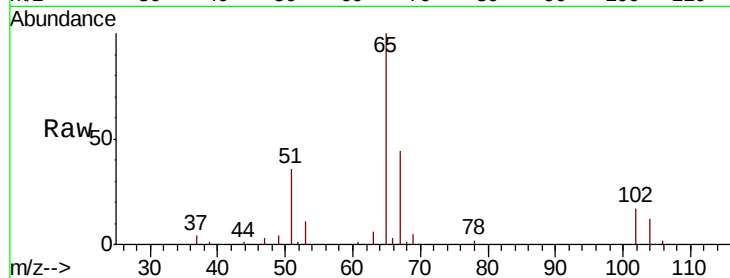




#33  
 1,2-Dichloroethane-d4  
 Concen: 64.593 ug/l  
 RT: 7.47 min Scan# 614  
 Delta R.T. 0.05 min  
 Lab File: VD062259.D  
 Acq: 12 May 2019 15:19

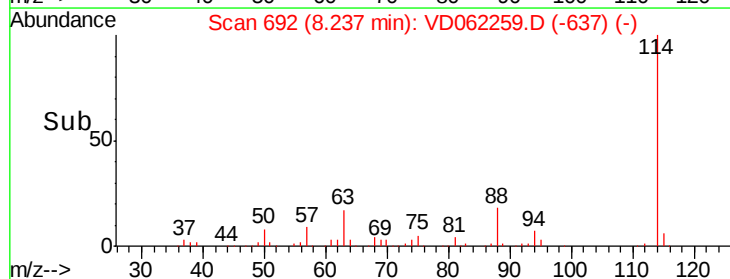
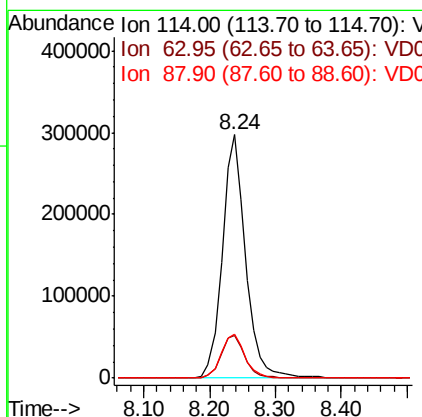
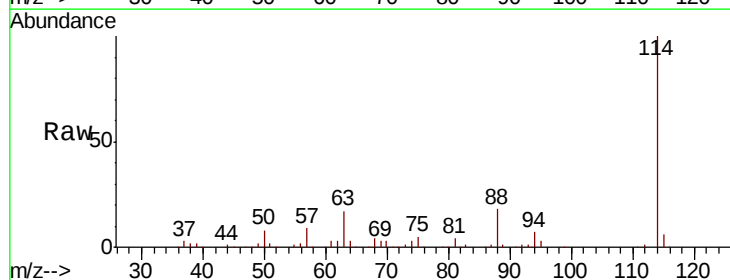
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 P021-SS001-0002-02

Tot Ion: 65 Resp: 264786  
 Ion Ratio Lower Upper  
 65 100  
 67 43.7 0.0 98.0



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.24 min Scan# 692  
 Delta R.T. 0.05 min  
 Lab File: VD062259.D  
 Acq: 12 May 2019 15:19

Tgt Ion: 114 Resp: 730414  
 Ion Ratio Lower Upper  
 114 100  
 63 17.5 0.0 32.4  
 88 17.9 0.0 33.6

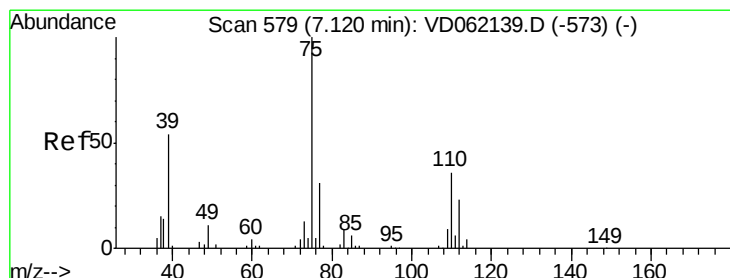
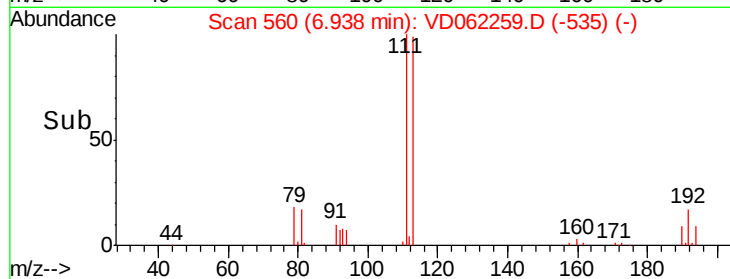
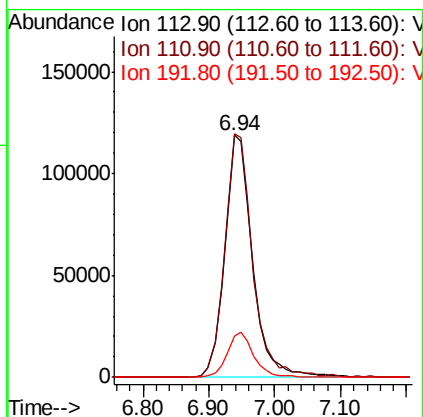
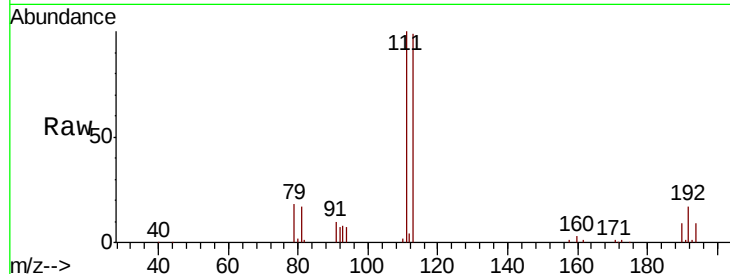




#35  
 Dibromofluoromethane  
 Concen: 57.452 ug/l  
 RT: 6.94 min Scan# 560  
 Delta R.T. 0.05 min  
 Lab File: VD062259.D  
 Acq: 12 May 2019 15:19

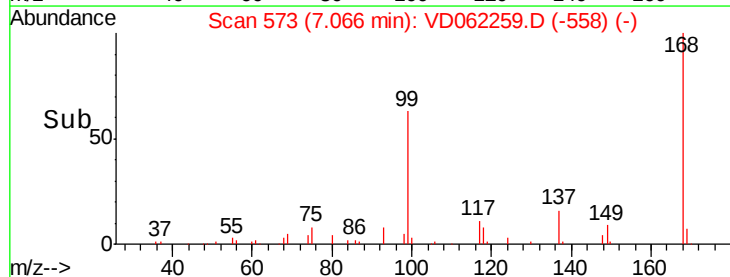
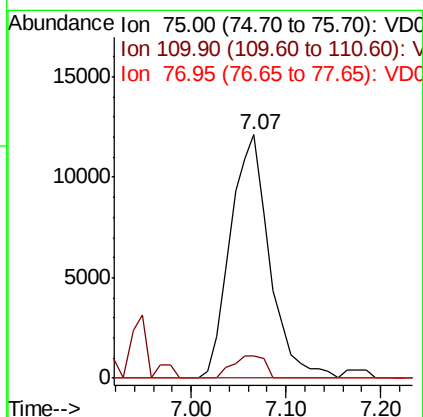
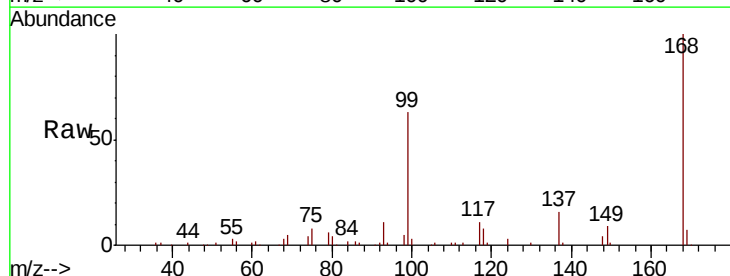
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 P021-SS001-0002-02

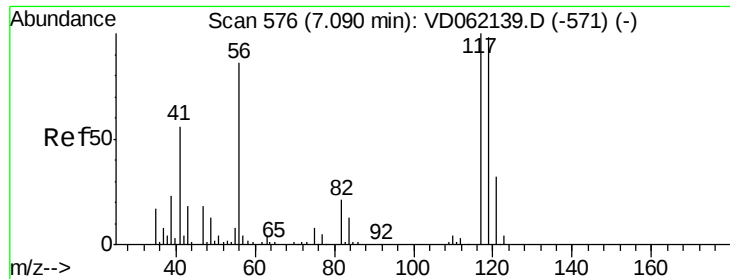
Tot Ion:113 Resp: 348180  
 Ion Ratio Lower Upper  
 113 100  
 111 100.6 78.5 117.7  
 192 17.2 13.0 19.4



#36  
 1,1-Dichloropropene  
 Concen: 5.783 ug/l  
 RT: 7.07 min Scan# 573  
 Delta R.T. -0.05 min  
 Lab File: VD062259.D  
 Acq: 12 May 2019 15:19

Tgt Ion: 75 Resp: 34635  
 Ion Ratio Lower Upper  
 75 100  
 110 9.0 19.1 57.1#  
 77 0.0 25.6 38.4#

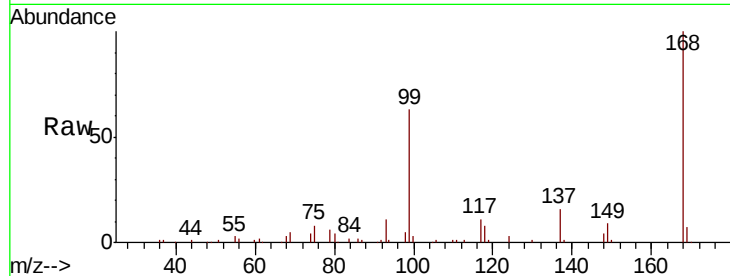




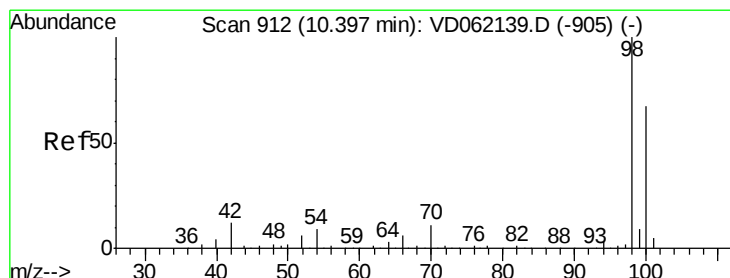
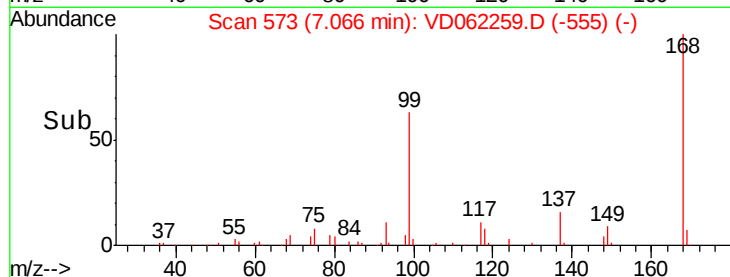
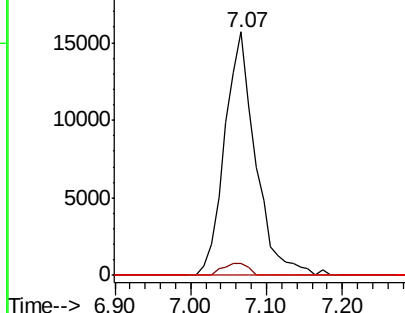
#38  
Carbon Tetrachloride  
Concen: 5.339 ug/l  
RT: 7.07 min Scan# 573  
Delta R.T. -0.02 min  
Lab File: VD062259.D  
Acq: 12 May 2019 15:19

Instrument :  
MSVOA\_D  
ClientSampleId :  
P021-SS001-0002-02

Tot Ion:117 Resp: 44256  
Ion Ratio Lower Upper  
117 100  
119 4.9 75.8 113.8#  
121 0.0 25.9 38.9#

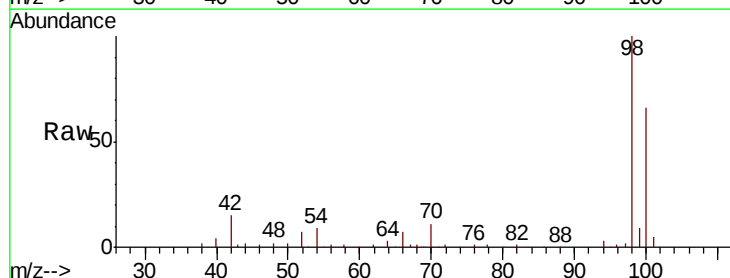


Abundance Ion 116.85 (116.55 to 117.55): V  
Ion 118.85 (118.55 to 119.55): V  
Ion 120.85 (120.55 to 121.55): V

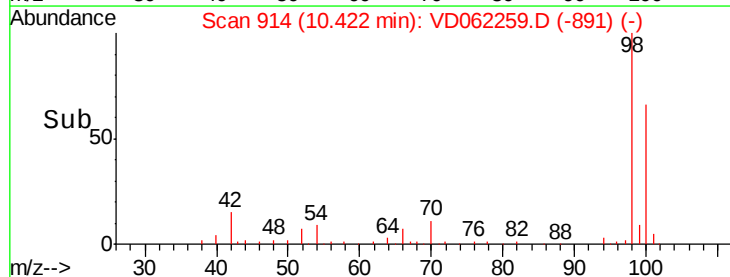
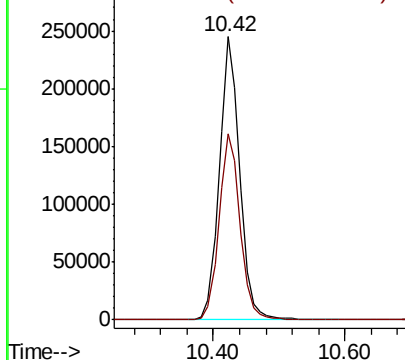


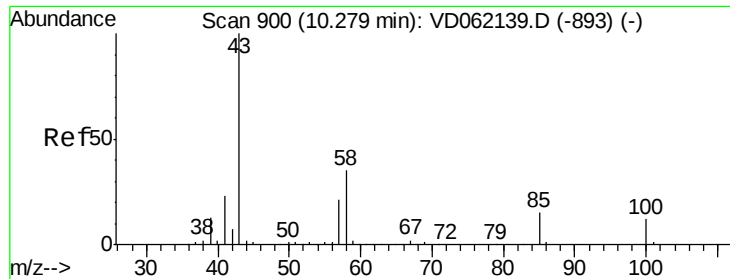
#50  
Toluene-d8  
Concen: 35.969 ug/l  
RT: 10.42 min Scan# 914  
Delta R.T. 0.03 min  
Lab File: VD062259.D  
Acq: 12 May 2019 15:19

Tgt Ion: 98 Resp: 525569  
Ion Ratio Lower Upper  
98 100  
100 65.7 53.8 80.8



Abundance Ion 98.05 (97.75 to 98.75): V  
Ion 100.05 (99.75 to 100.75): V





#51

4-Methyl-2-Pentanone

Concen: 1.042 ug/l

RT: 10.42 min Scan# 914

Delta R.T. 0.14 min

Lab File: VD062259.D

Acq: 12 May 2019 15:19

Instrument :

MSVOA\_D

ClientSampleId :

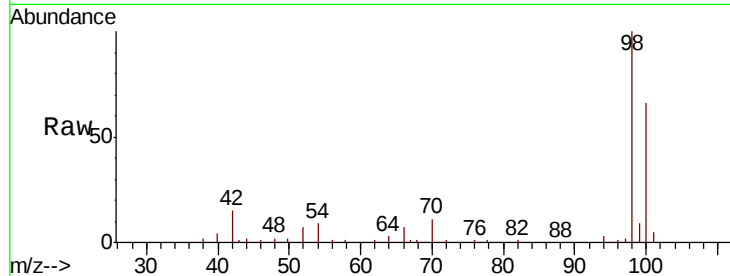
P021-SS001-0002-02

Tot Ion: 43 Resp: 2413

Ion Ratio Lower Upper

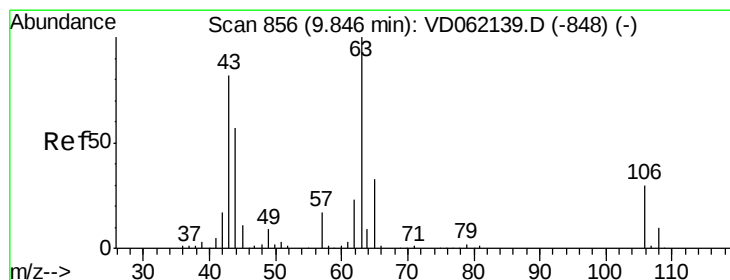
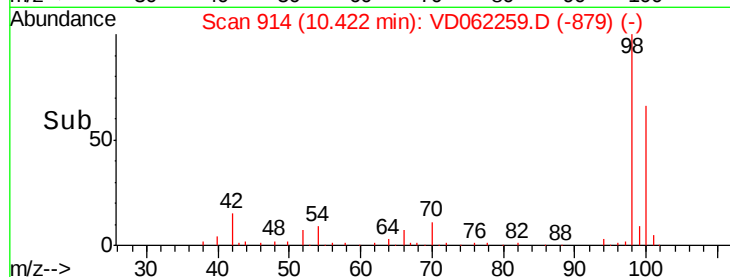
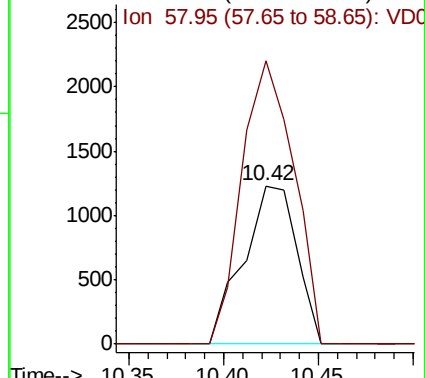
43 100

58 178.9 30.4 45.6#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC



#58

2-Chloroethyl Vinyl ether

Concen: 1.733 ug/l

RT: 9.86 min Scan# 857

Delta R.T. 0.02 min

Lab File: VD062259.D

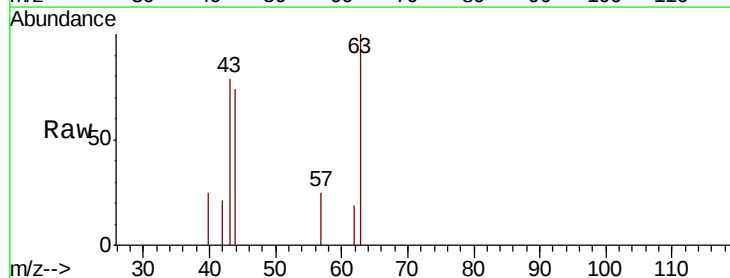
Acq: 12 May 2019 15:19

Tgt Ion: 63 Resp: 3062

Ion Ratio Lower Upper

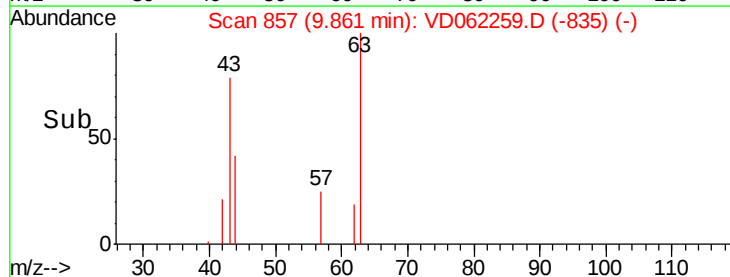
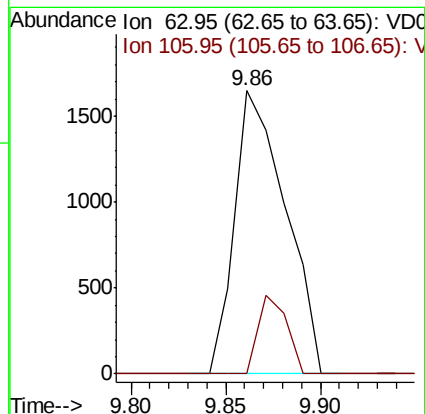
63 100

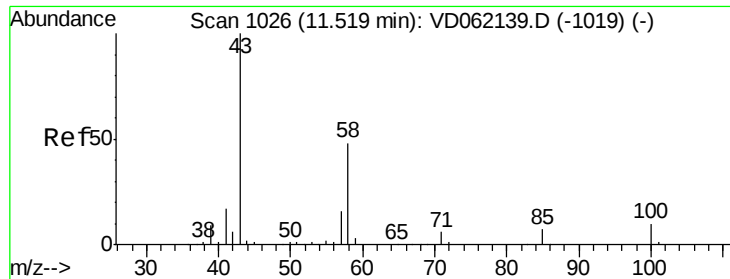
106 0.0 22.6 34.0#



Abundance Ion 62.95 (62.65 to 63.65): VDC

Ion 105.95 (105.65 to 106.65): VDC

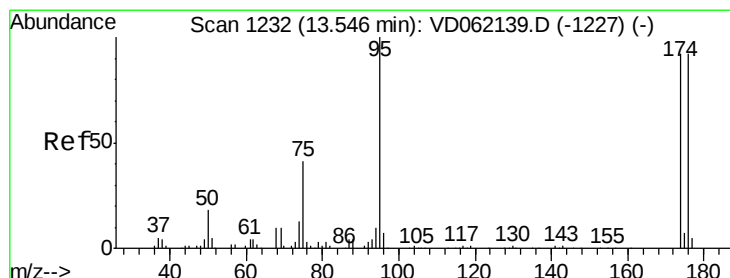
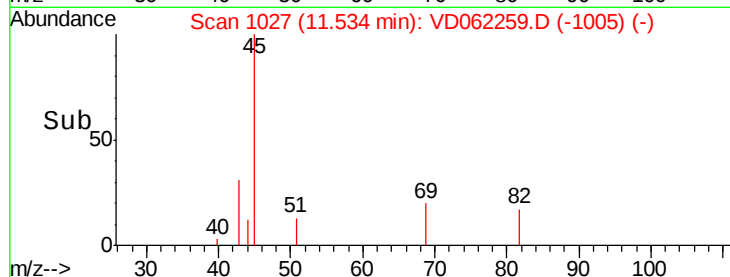
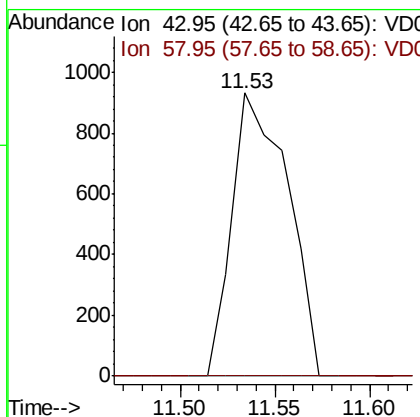
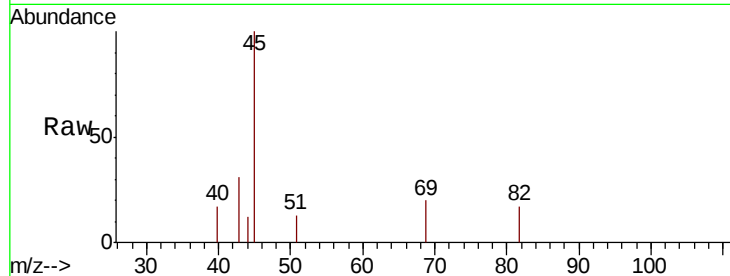




#59  
2-Hexanone  
Concen: 1.113 ug/l  
RT: 11.53 min Scan# 1027  
Delta R.T. 0.02 min  
Lab File: VD062259.D  
Acq: 12 May 2019 15:19

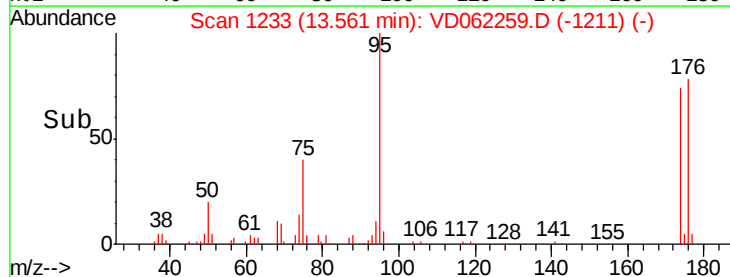
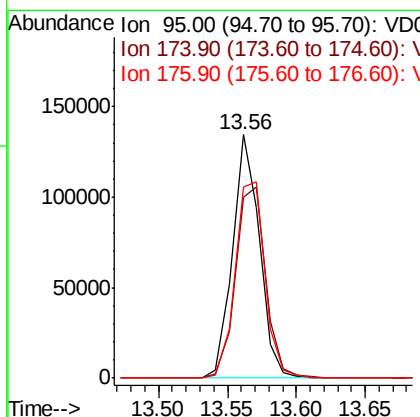
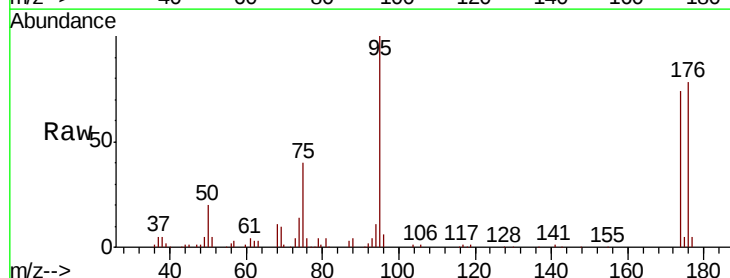
Instrument :  
MSVOA\_D  
ClientSampleId :  
P021-SS001-0002-02

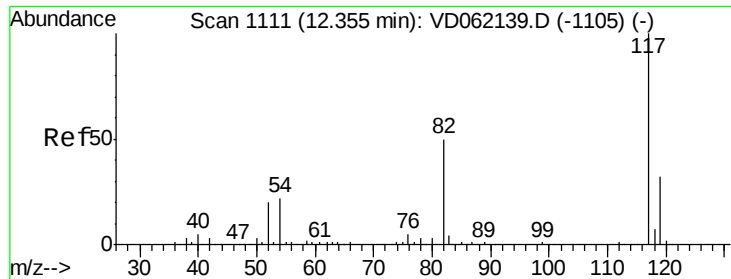
Tot Ion: 43 Resp: 1900  
Ion Ratio Lower Upper  
43 100  
58 0.0 25.4 76.4#



#62  
4-Bromofluorobenzene  
Concen: 31.071 ug/l  
RT: 13.56 min Scan# 1233  
Delta R.T. 0.02 min  
Lab File: VD062259.D  
Acq: 12 May 2019 15:19

Tgt Ion: 95 Resp: 182311  
Ion Ratio Lower Upper  
95 100  
174 74.5 0.0 181.8  
176 78.3 0.0 174.4

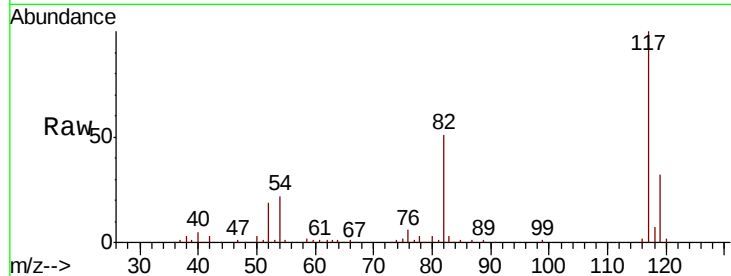




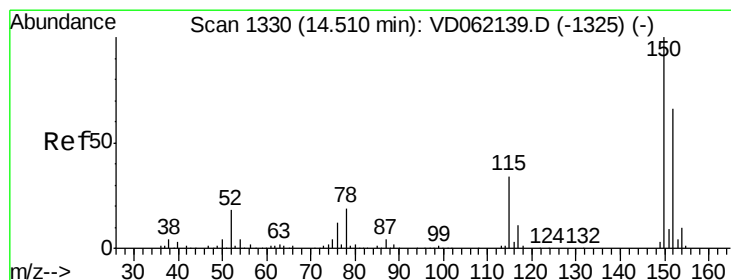
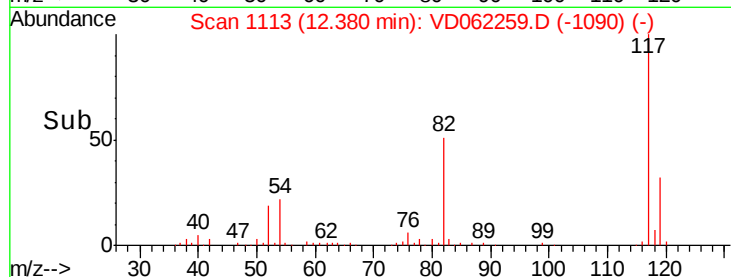
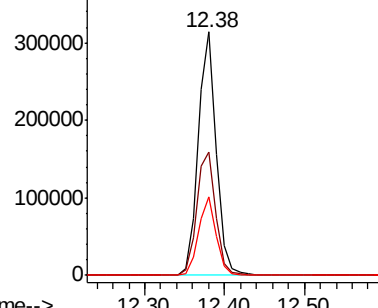
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.38 min Scan# 1113  
Delta R.T. 0.03 min  
Lab File: VD062259.D  
Acq: 12 May 2019 15:19

Instrument :  
MSVOA\_D  
ClientSampleId :  
P021-SS001-0002-02

Tot Ion:117 Resp: 500825  
Ion Ratio Lower Upper  
117 100  
82 50.6 36.2 54.2  
119 32.1 26.2 39.4

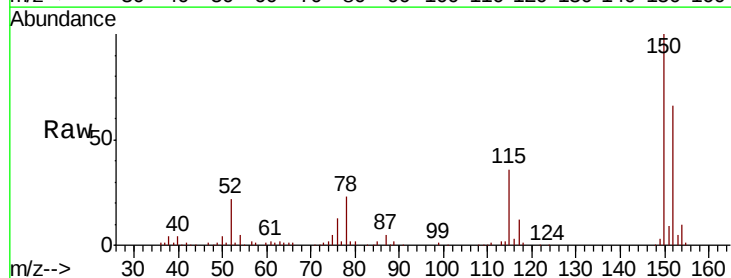


Abundance Ion 116.95 (116.65 to 117.65): V  
Ion 82.05 (81.75 to 82.75): V  
Ion 118.95 (118.65 to 119.65): V

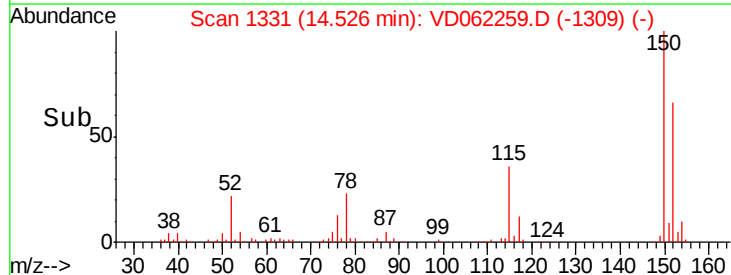
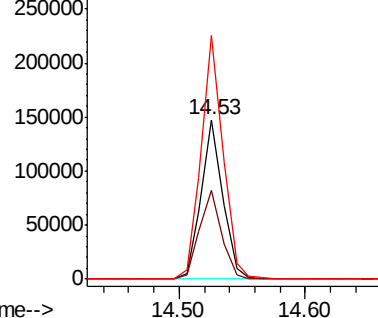


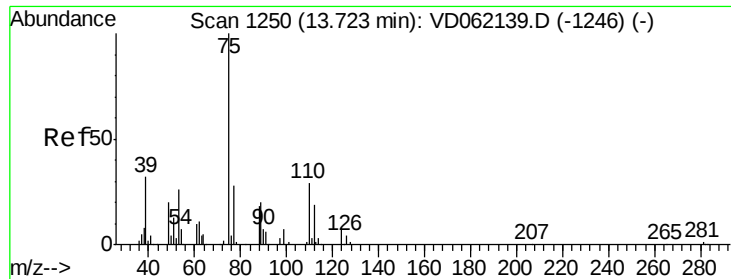
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 14.53 min Scan# 1331  
Delta R.T. 0.02 min  
Lab File: VD062259.D  
Acq: 12 May 2019 15:19

Tgt Ion:152 Resp: 174725  
Ion Ratio Lower Upper  
152 100  
115 55.6 30.9 92.7  
150 152.4 0.0 314.8



Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 115.00 (114.70 to 115.70): V  
Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 34.327 ug/l

RT: 13.56 min Scan# 1233

Delta R.T. -0.16 min

Lab File: VD062259.D

Acq: 12 May 2019 15:19

Instrument :

MSVOA\_D

ClientSampleId :

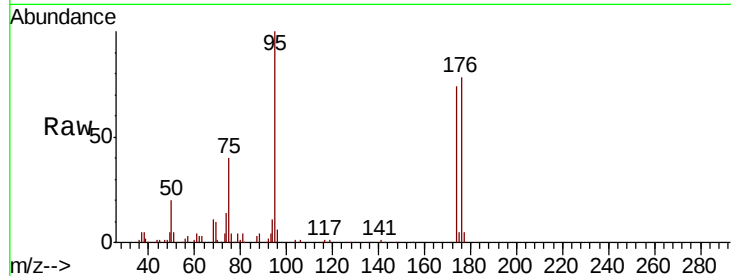
P021-SS001-0002-02

Tot Ion: 75 Resp: 71279

Ion Ratio Lower Upper

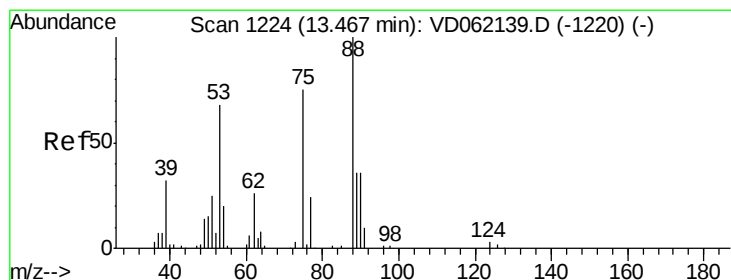
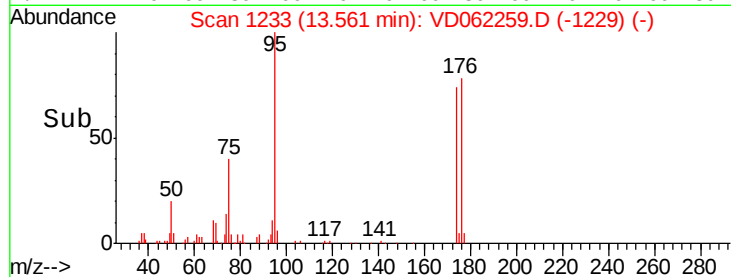
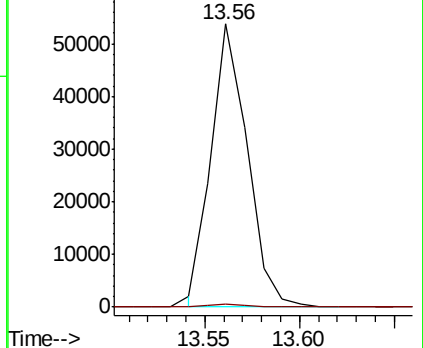
75 100

77 1.1 16.4 49.4#



Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 76.95 (76.65 to 77.65): VDC



#81

trans-1,4-Dichloro-2-butene

Concen: 123.615 ug/l

RT: 13.56 min Scan# 1233

Delta R.T. 0.09 min

Lab File: VD062259.D

Acq: 12 May 2019 15:19

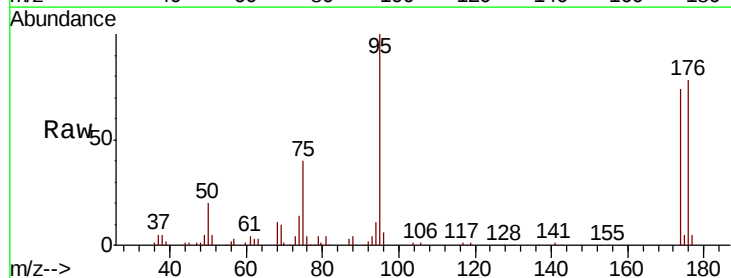
Tgt Ion: 75 Resp: 72463

Ion Ratio Lower Upper

75 100

53 0.0 65.8 98.8#

89 0.0 35.0 52.6#



Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 53.00 (52.70 to 53.70): VDC

Ion 89.00 (88.70 to 89.70): VDC

