

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD071619\  
 Data File : VD063109.D  
 Acq On : 16 Jul 2019 16:26  
 Operator : VA/AP  
 Sample : K3620-01  
 Misc : 7.73g/5ml/MSVOA D/SOIL  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 CL-01-071219-A

Quant Time: Jul 17 07:36:39 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D071519S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 16 08:11:56 2019  
 Response via : Initial Calibration

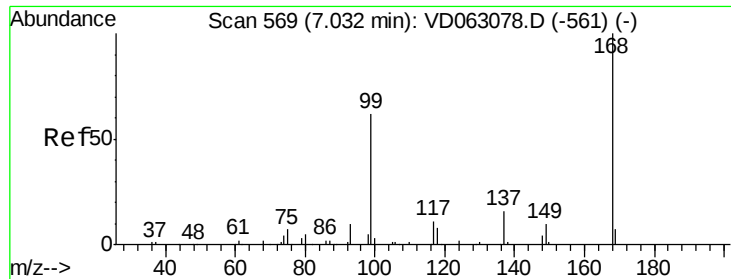
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.03  | 168  | 652615   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.21  | 114  | 855586   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 12.36 | 117  | 629604   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 14.52 | 152  | 332259   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.44  | 65   | 380577   | 46.81 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.62% |          |
| 35) Dibromofluoromethane    | 6.91  | 113  | 416412   | 48.86 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.72% |          |
| 50) Toluene-d8              | 10.40 | 98   | 678891   | 37.09 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 74.18% |          |
| 62) 4-Bromofluorobenzene    | 13.55 | 95   | 365095   | 43.11 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 86.22% |          |

| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.57  | 85   | 1075     | Below Cal |        | 76     |
| 3) Chloromethane               | 1.79  | 50   | 221      | Below Cal | #      | 48     |
| 5) Bromomethane                | 2.10  | 94   | 2438     | Below Cal | #      | 13     |
| 11) Tert butyl alcohol         | 4.09  | 59   | 3165     | 6.746     | ug/l # | 77     |
| 13) Acrolein                   | 3.03  | 56   | 407      | 2.874     | ug/l # | 17     |
| 18) Methyl Acetate             | 3.63  | 43   | 1819     | Below Cal | #      | 63     |
| 25) 2-Butanone                 | 6.16  | 43   | 11538    | 6.154     | ug/l   | 93     |
| 29) Tetrahydrofuran            | 6.45  | 42   | 986      | 1.160     | ug/l # | 64     |
| 31) Cyclohexane                | 7.03  | 56   | 13877    | 1.793     | ug/l # | 4      |
| 36) 1,1-Dichloropropene        | 7.03  | 75   | 51596    | 5.362     | ug/l # | 46     |
| 37) Ethyl Acetate              | 6.16  | 43   | 11539    | 2.802     | ug/l # | 1      |
| 38) Carbon Tetrachloride       | 7.03  | 117  | 65899    | 4.507     | ug/l # | 13     |
| 81) trans-1,4-Dichloro-2-buten | 13.55 | 75   | 169954   | 126.271   | ug/l # | 1      |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.03 min Scan# 570

Delta R.T. 0.00 min

Lab File: VD063109.D

Acq: 16 Jul 2019 16:26

Instrument :

MSVOA\_D

ClientSampleId :

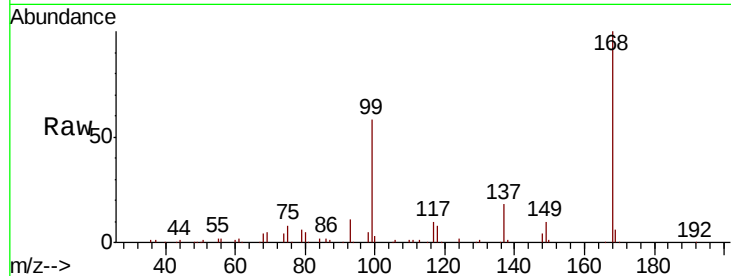
CL-01-071219-A

Tot Ion:168 Resp: 652615

Ion Ratio Lower Upper

168 100

99 57.5 50.8 76.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.03

250000

200000

150000

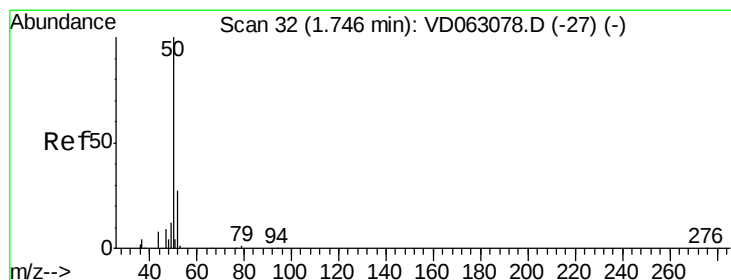
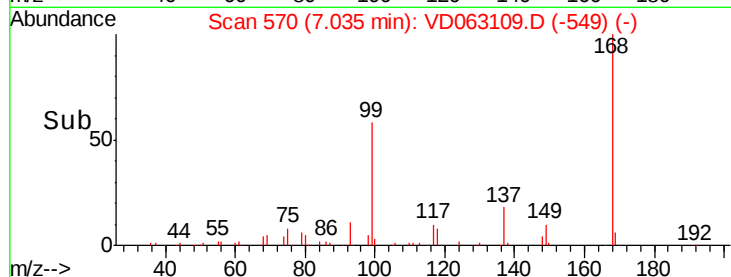
100000

50000

0

6.90 7.00 7.10 7.20

Time-->



#3

Chloromethane

Concen: Below Cal

RT: 1.79 min Scan# 37

Delta R.T. 0.04 min

Lab File: VD063109.D

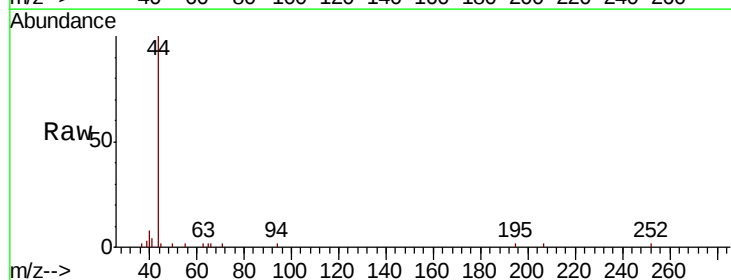
Acq: 16 Jul 2019 16:26

Tgt Ion: 50 Resp: 221

Ion Ratio Lower Upper

50 100

52 0.0 21.4 32.2#



Abundance Ion 49.90 (49.60 to 50.60): VDC

Ion 51.90 (51.60 to 52.60): VDC

1.79

400

300

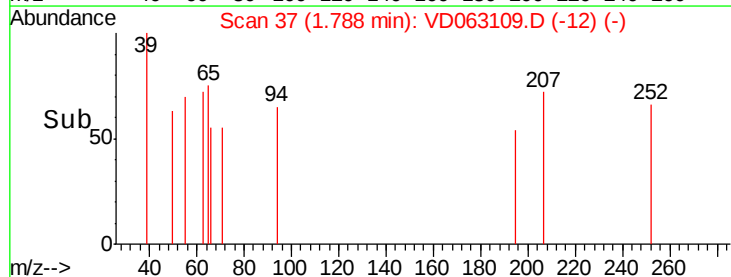
200

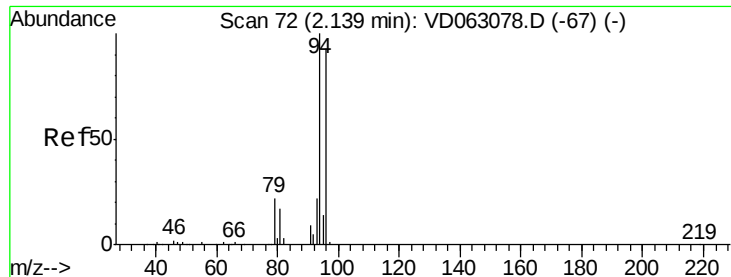
100

0

1.76 1.78 1.80

Time-->





#5

Bromomethane

Concen: Below Cal

RT: 2.10 min Scan# 69

Delta R.T. -0.04 min

Lab File: VD063109.D

Acq: 16 Jul 2019 16:26

Instrument :

MSVOA\_D

ClientSampleId :

CL-01-071219-A

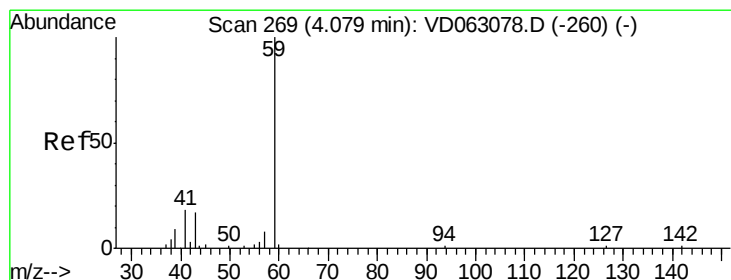
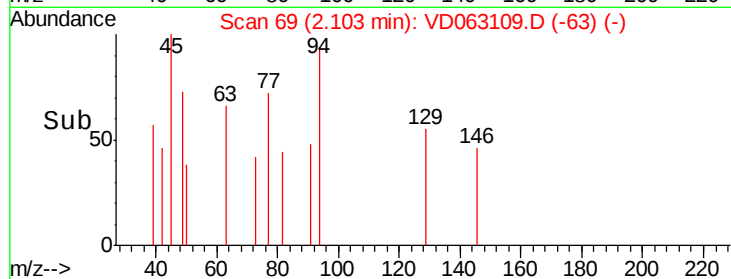
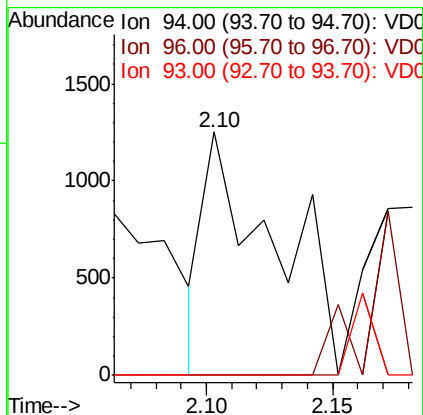
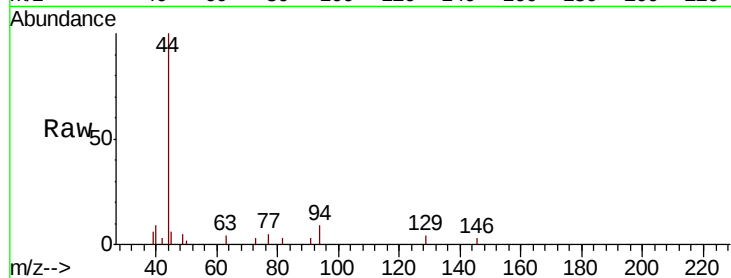
Tot Ion: 94 Resp: 2438

Ion Ratio Lower Upper

94 100

96 0.0 74.2 111.2#

93 0.0 17.8 26.6#



#11

Tert butyl alcohol

Concen: 6.746 ug/l

RT: 4.09 min Scan# 271

Delta R.T. 0.01 min

Lab File: VD063109.D

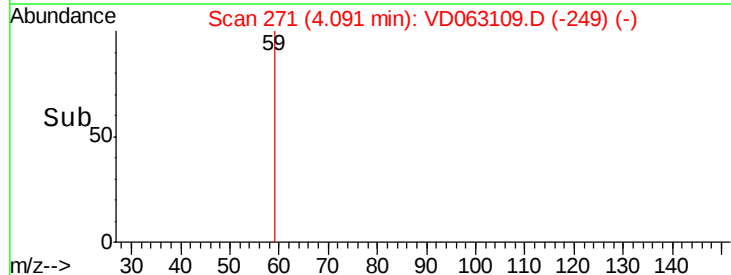
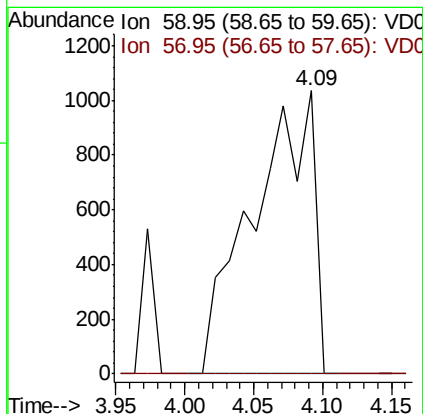
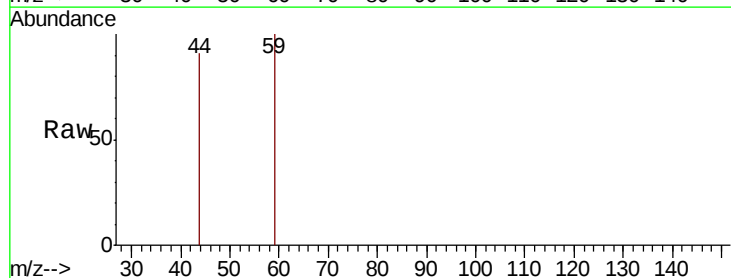
Acq: 16 Jul 2019 16:26

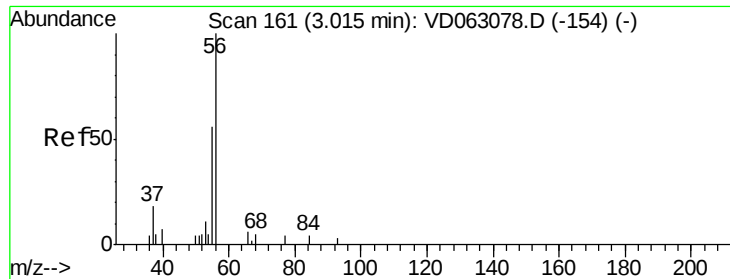
Tgt Ion: 59 Resp: 3165

Ion Ratio Lower Upper

59 100

57 0.0 6.4 9.6#





#13

Acrolein

Concen: 2.874 ug/l

RT: 3.03 min Scan# 163

Delta R.T. 0.01 min

Lab File: VD063109.D

Acq: 16 Jul 2019 16:26

Instrument :

MSVOA\_D

ClientSampleId :

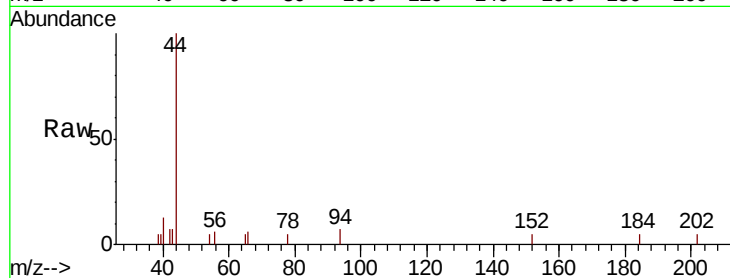
CL-01-071219-A

Tot Ion: 56 Resp: 407

Ion Ratio Lower Upper

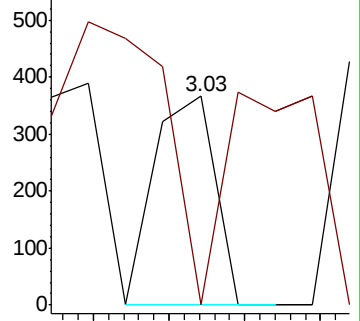
56 100

55 0.0 53.0 79.4#

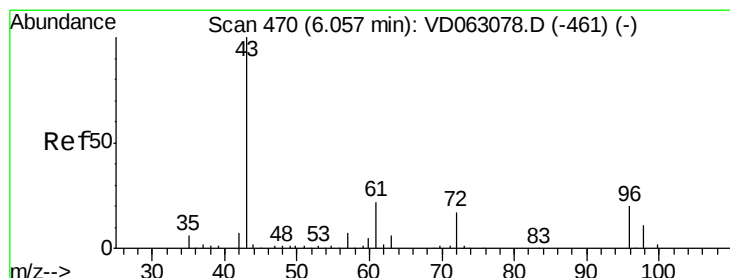
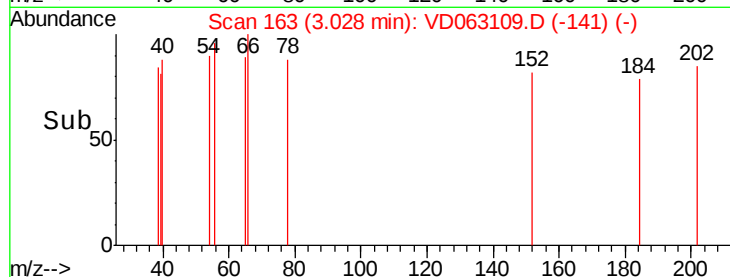


Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 55.00 (54.70 to 55.70): VDC



Time-->



#25

2-Butanone

Concen: 6.154 ug/l

RT: 6.16 min Scan# 481

Delta R.T. 0.10 min

Lab File: VD063109.D

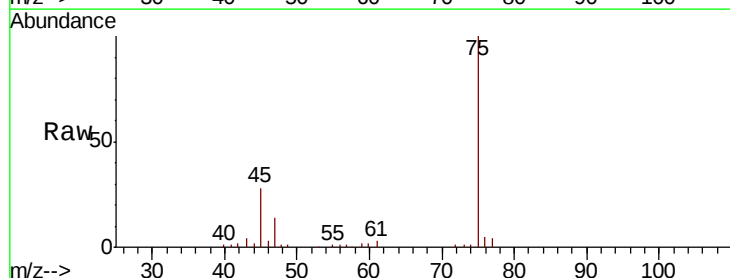
Acq: 16 Jul 2019 16:26

Tgt Ion: 43 Resp: 11538

Ion Ratio Lower Upper

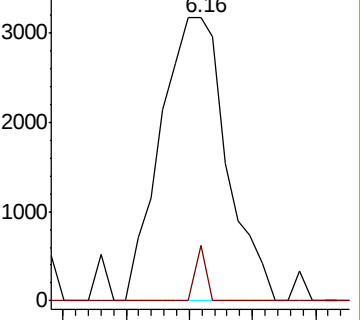
43 100

72 19.5 13.4 20.0

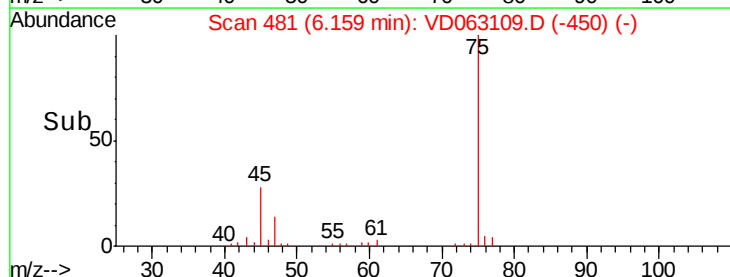


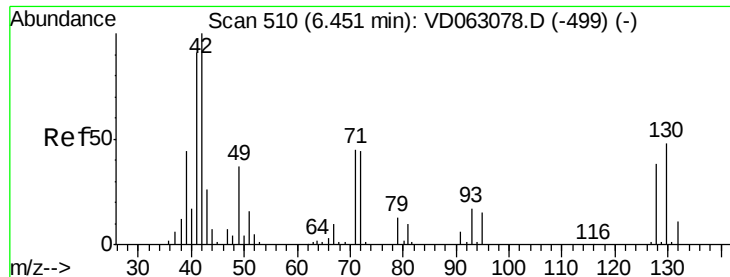
Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 72.00 (71.70 to 72.70): VDC



Time-->





#29

Tetrahydrofuran

Concen: 1.160 ug/l

RT: 6.45 min Scan# 511

Delta R.T. 0.00 min

Lab File: VD063109.D

Acq: 16 Jul 2019 16:26

Instrument :

MSVOA\_D

ClientSampleId :

CL-01-071219-A

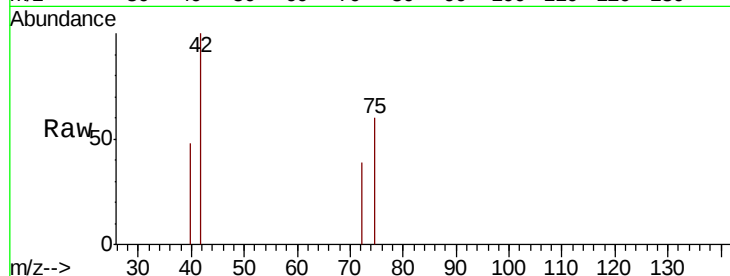
Tot Ion: 42 Resp: 986

Ion Ratio Lower Upper

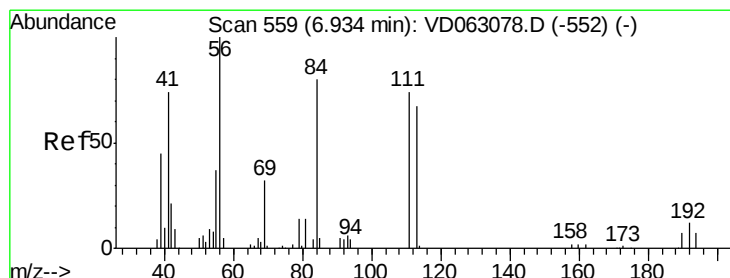
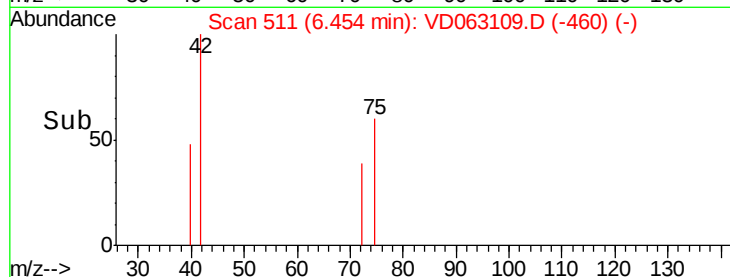
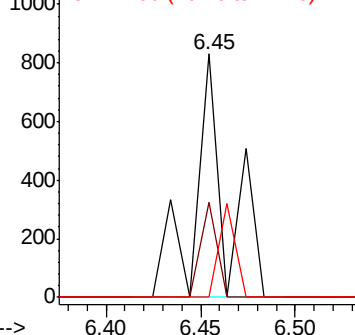
42 100

72 19.4 33.7 50.5#

71 19.1 34.2 51.2#



Abundance Ion 42.00 (41.70 to 42.70): VDC  
Ion 72.00 (71.70 to 72.70): VDC  
Ion 71.00 (70.70 to 71.70): VDC



#31

Cyclohexane

Concen: 1.793 ug/l

RT: 7.03 min Scan# 569

Delta R.T. 0.09 min

Lab File: VD063109.D

Acq: 16 Jul 2019 16:26

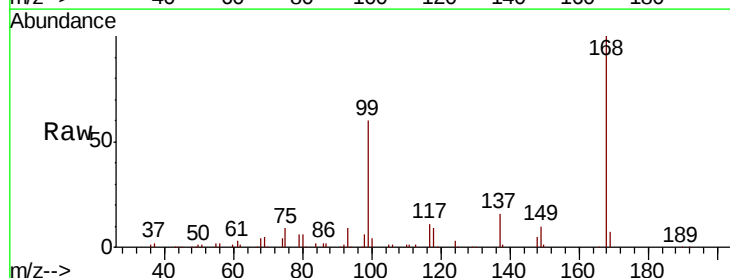
Tgt Ion: 56 Resp: 13877

Ion Ratio Lower Upper

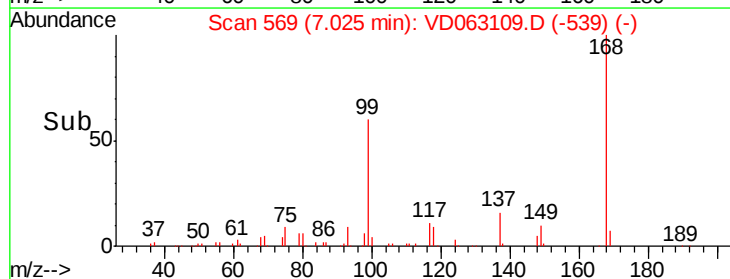
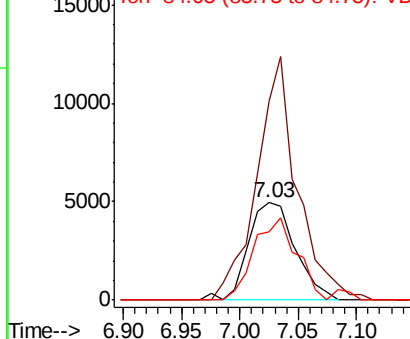
56 100

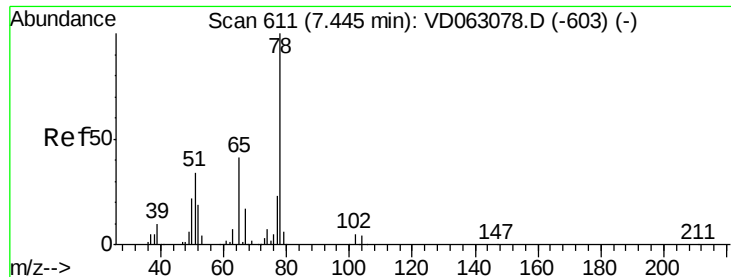
69 204.1 25.3 37.9#

84 70.7 64.2 96.4



Abundance Ion 55.95 (55.65 to 56.65): VDC  
Ion 69.00 (68.70 to 69.70): VDC  
Ion 84.05 (83.75 to 84.75): VDC





#33

1,2-Dichloroethane-d4

Concen: 46.814 ug/l

RT: 7.44 min Scan# 611

Delta R.T. -0.01 min

Lab File: VD063109.D

Acq: 16 Jul 2019 16:26

Instrument :

MSVOA\_D

ClientSampleId :

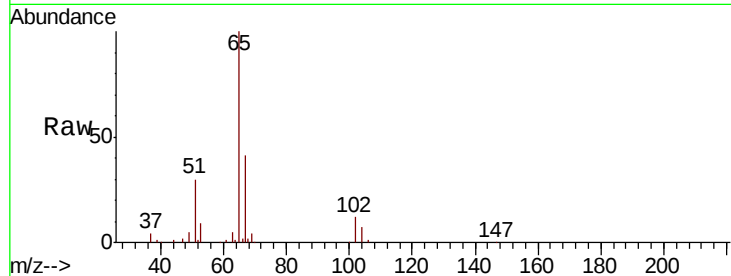
CL-01-071219-A

Tot Ion: 65 Resp: 380577

Ion Ratio Lower Upper

65 100

67 40.8 0.0 86.0



Abundance Ion 64.95 (64.65 to 65.65): VDC

Ion 66.90 (66.60 to 67.60): VDC

7.44

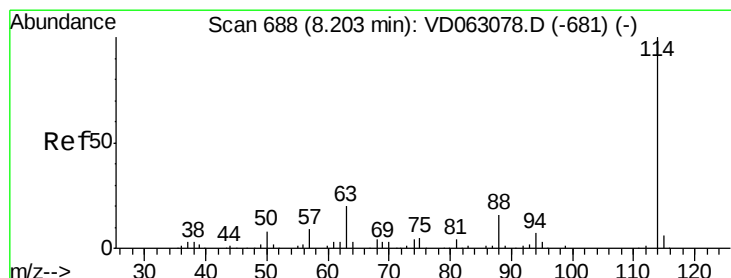
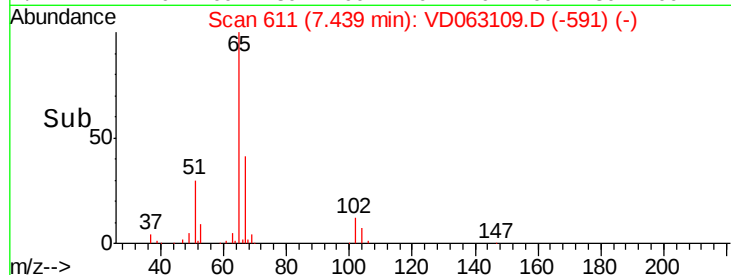
150000

100000

50000

0

Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.21 min Scan# 689

Delta R.T. 0.00 min

Lab File: VD063109.D

Acq: 16 Jul 2019 16:26

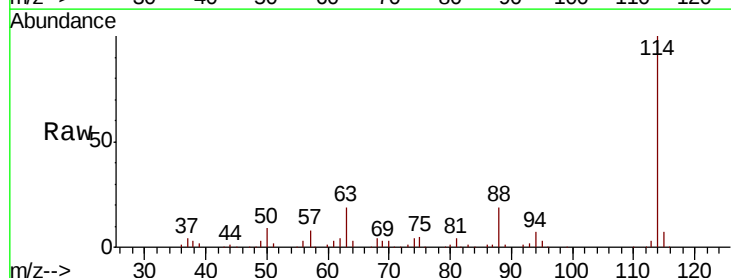
Tgt Ion: 114 Resp: 855586

Ion Ratio Lower Upper

114 100

63 18.7 0.0 40.6

88 19.0 0.0 32.6



Abundance Ion 114.00 (113.70 to 114.70): V

Ion 62.95 (62.65 to 63.65): VDC

Ion 87.90 (87.60 to 88.60): VDC

8.21

400000

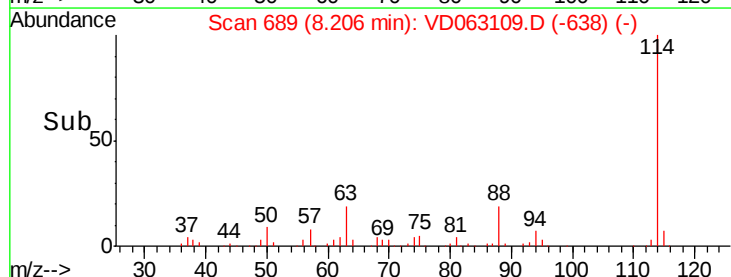
300000

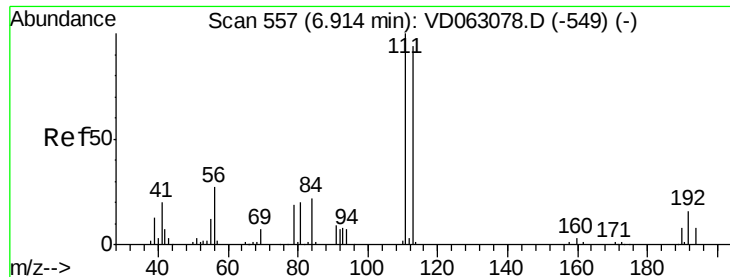
200000

100000

0

Time-->





#35

Dibromofluoromethane

Concen: 48.864 ug/l

RT: 6.91 min Scan# 557

Delta R.T. -0.01 min

Lab File: VD063109.D

Acq: 16 Jul 2019 16:26

Instrument :

MSVOA\_D

ClientSampleId :

CL-01-071219-A

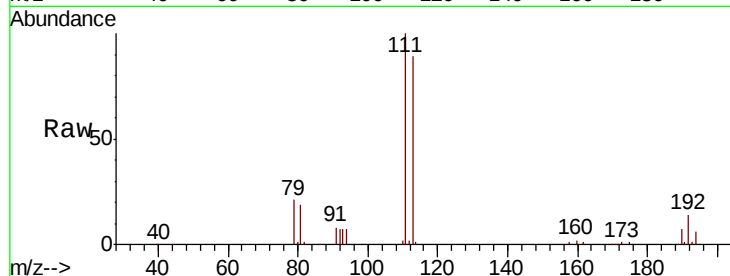
Tot Ion:113 Resp: 416412

Ion Ratio Lower Upper

113 100

111 112.7 84.8 127.2

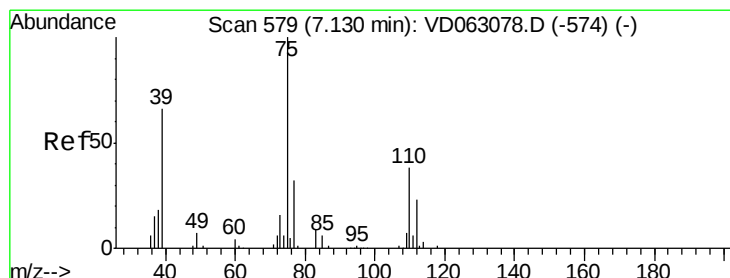
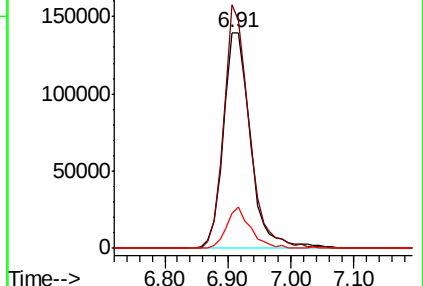
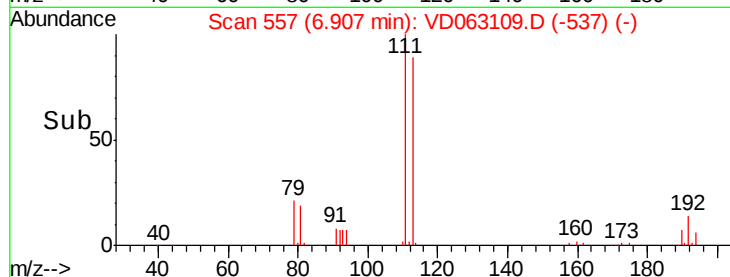
192 16.2 13.4 20.0



Abundance Ion 112.90 (112.60 to 113.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 191.80 (191.50 to 192.50): V



#36

1,1-Dichloropropene

Concen: 5.362 ug/l

RT: 7.03 min Scan# 569

Delta R.T. -0.11 min

Lab File: VD063109.D

Acq: 16 Jul 2019 16:26

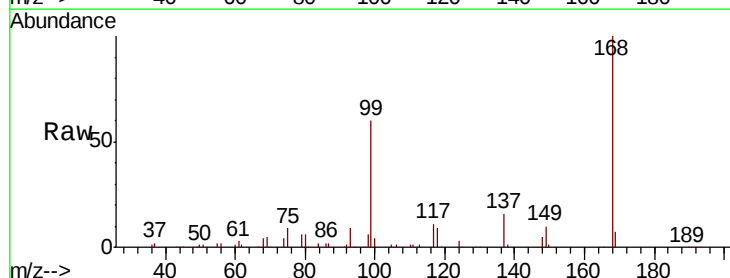
Tgt Ion: 75 Resp: 51596

Ion Ratio Lower Upper

75 100

110 6.4 18.9 56.5#

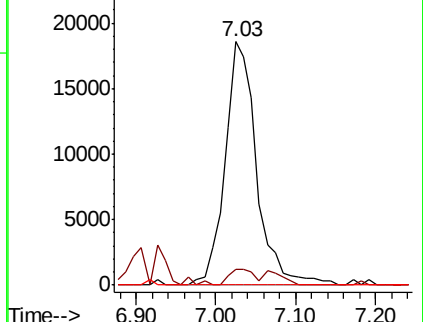
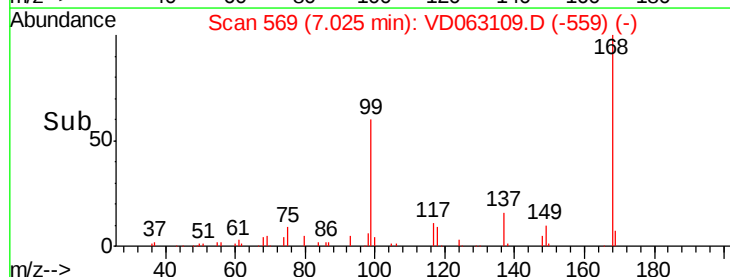
77 0.0 25.2 37.8#

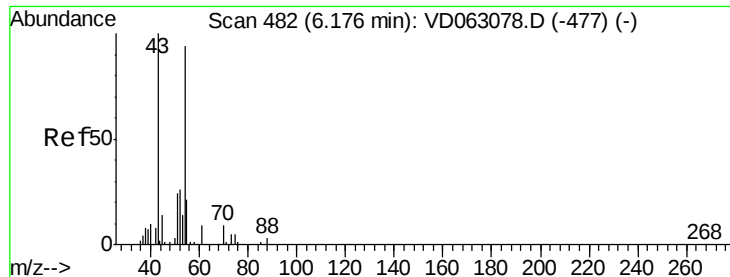


Abundance Ion 75.00 (74.70 to 75.70): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.95 (76.65 to 77.65): V

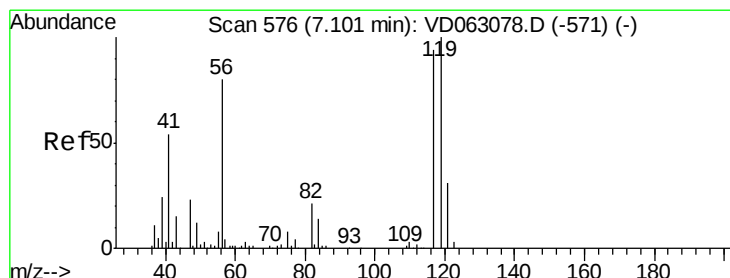
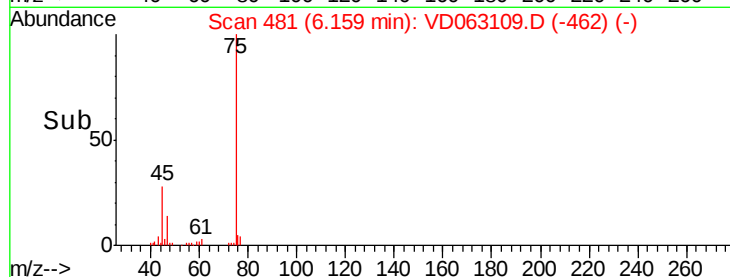
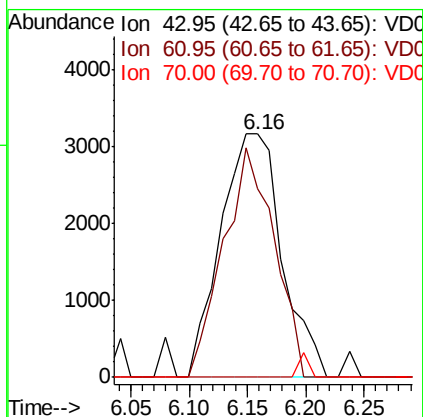
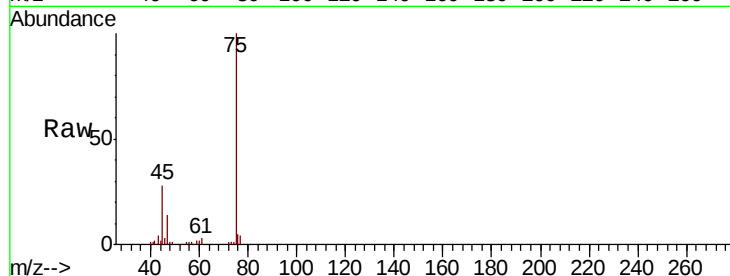




#37  
Ethyl Acetate  
Concen: 2.802 ug/l  
RT: 6.16 min Scan# 481  
Delta R.T. -0.02 min  
Lab File: VD063109.D  
Acq: 16 Jul 2019 16:26

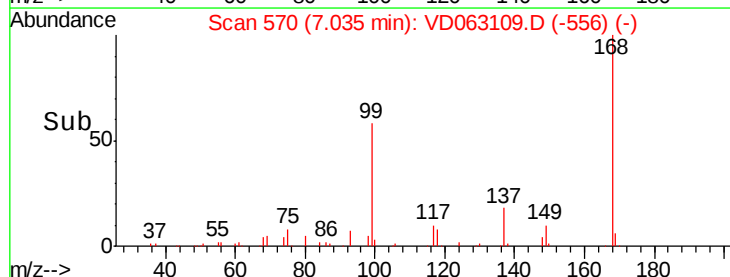
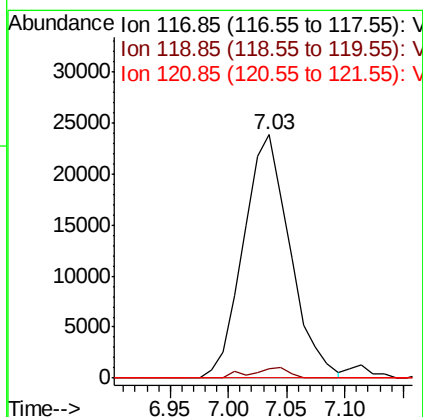
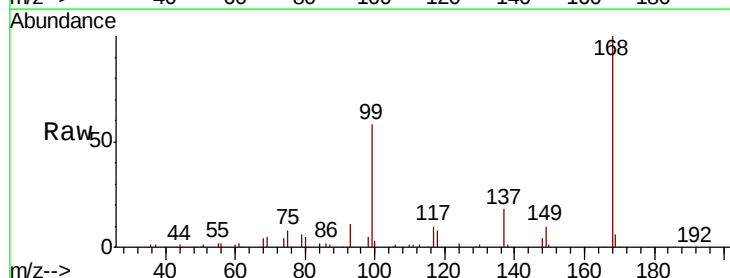
Instrument :  
MSVOA\_D  
ClientSampleId :  
CL-01-071219-A

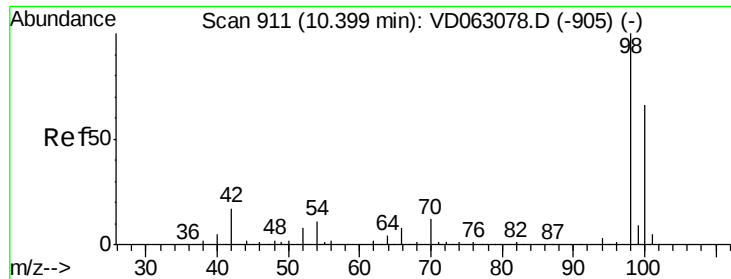
Tot Ion: 43 Resp: 11539  
Ion Ratio Lower Upper  
43 100  
61 77.4 10.6 16.0#  
70 0.0 6.6 9.8#



#38  
Carbon Tetrachloride  
Concen: 4.507 ug/l  
RT: 7.03 min Scan# 570  
Delta R.T. -0.07 min  
Lab File: VD063109.D  
Acq: 16 Jul 2019 16:26

Tgt Ion: 117 Resp: 65899  
Ion Ratio Lower Upper  
117 100  
119 4.0 80.0 120.0#  
121 0.0 25.0 37.4#

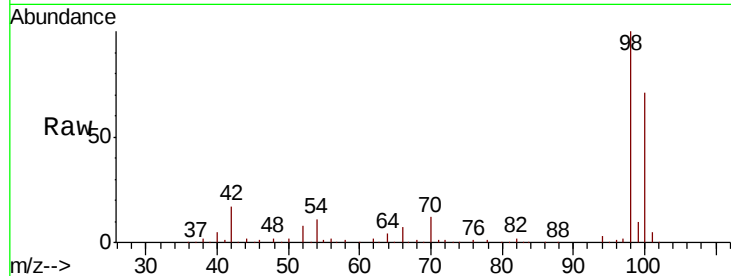




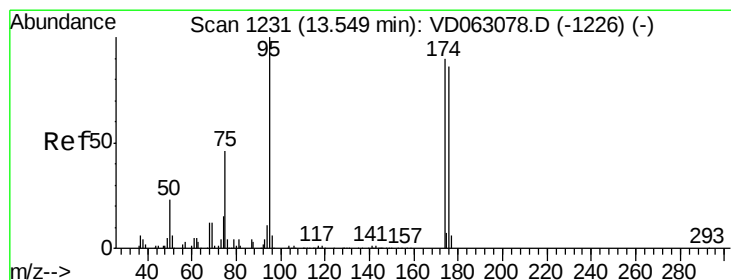
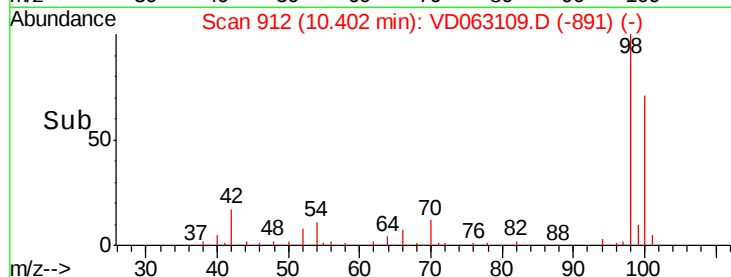
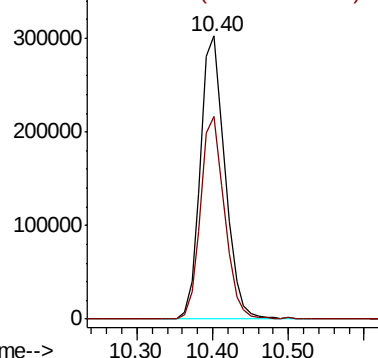
#50  
Toluene-d8  
Concen: 37.088 ug/l  
RT: 10.40 min Scan# 912  
Delta R.T. 0.00 min  
Lab File: VD063109.D  
Acq: 16 Jul 2019 16:26

Instrument :  
MSVOA\_D  
ClientSampleId :  
CL-01-071219-A

Tot Ion: 98 Resp: 678891  
Ion Ratio Lower Upper  
98 100  
100 71.4 53.5 80.3

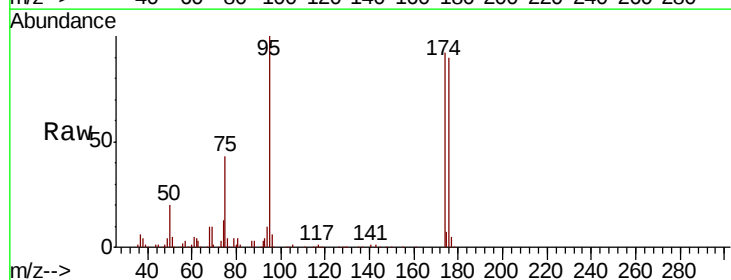


Abundance Ion 98.05 (97.75 to 98.75): VD0  
Ion 100.05 (99.75 to 100.75): VD

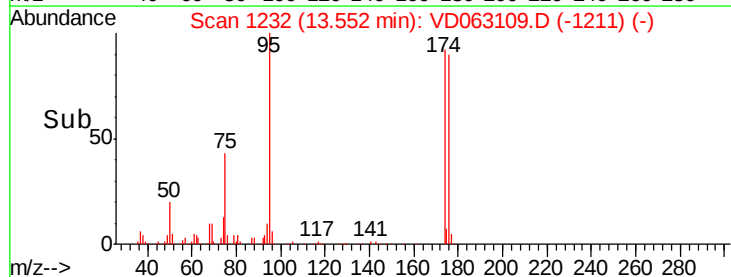
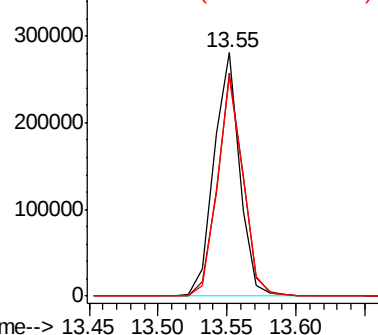


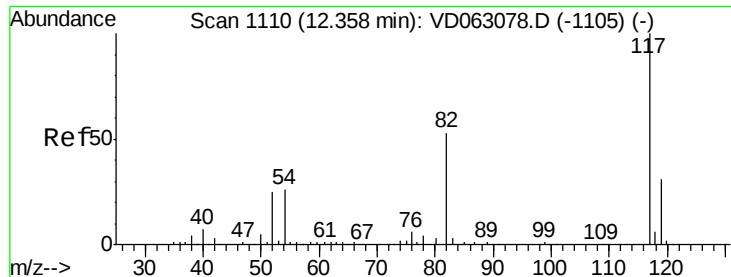
#62  
4-Bromofluorobenzene  
Concen: 43.112 ug/l  
RT: 13.55 min Scan# 1232  
Delta R.T. 0.00 min  
Lab File: VD063109.D  
Acq: 16 Jul 2019 16:26

Tgt Ion: 95 Resp: 365095  
Ion Ratio Lower Upper  
95 100  
174 91.9 0.0 180.6  
176 90.3 0.0 172.2



Abundance Ion 95.00 (94.70 to 95.70): VD0  
Ion 173.90 (173.60 to 174.60): V  
Ion 175.90 (175.60 to 176.60): V

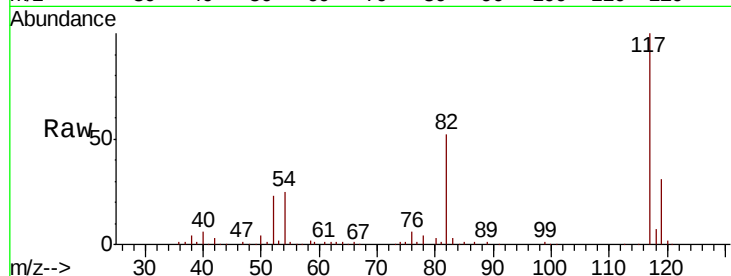




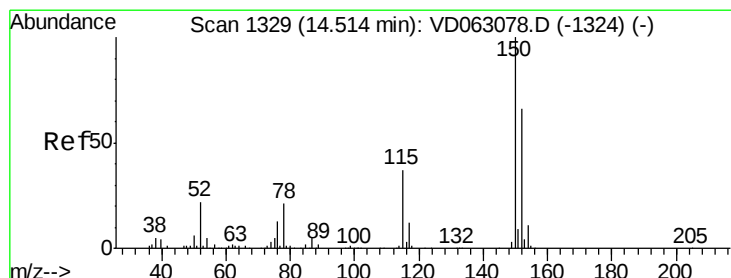
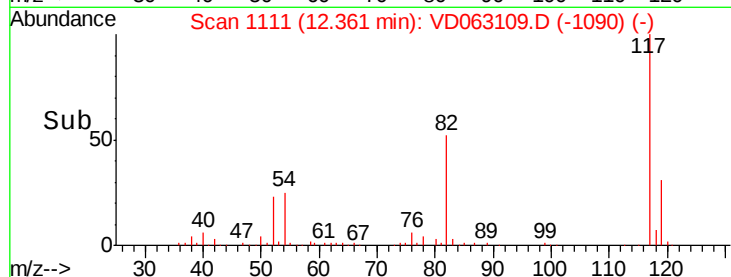
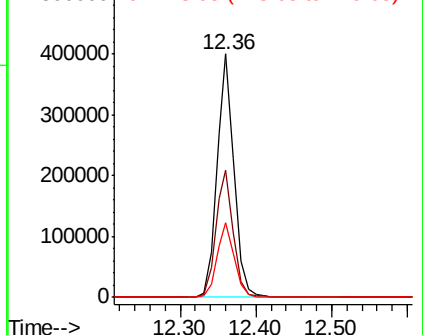
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.36 min Scan# 1111  
Delta R.T. 0.00 min  
Lab File: VD063109.D  
Acq: 16 Jul 2019 16:26

Instrument :  
MSVOA\_D  
ClientSampleId :  
CL-01-071219-A

Tot Ion:117 Resp: 629604  
Ion Ratio Lower Upper  
117 100  
82 52.2 42.3 63.5  
119 30.8 25.2 37.8

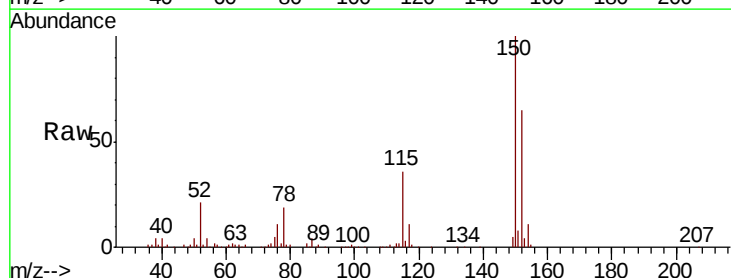


Abundance Ion 116.95 (116.65 to 117.65): V  
Ion 82.05 (81.75 to 82.75): V  
Ion 118.95 (118.65 to 119.65): V

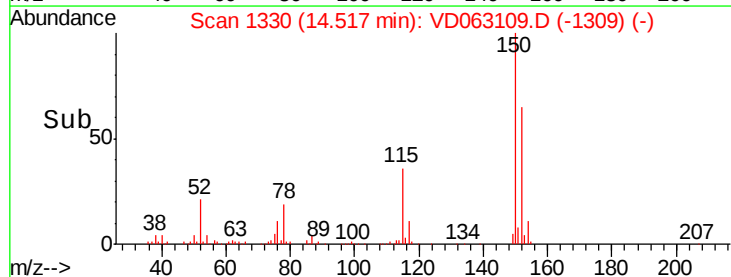
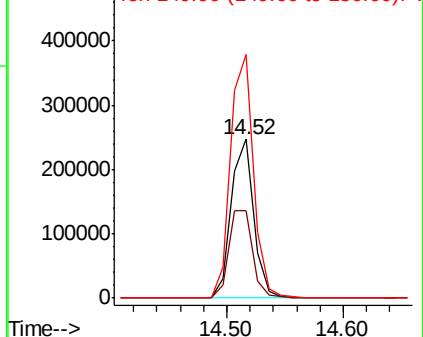


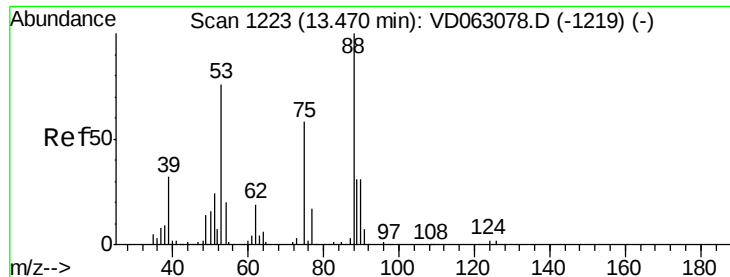
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 14.52 min Scan# 1330  
Delta R.T. 0.00 min  
Lab File: VD063109.D  
Acq: 16 Jul 2019 16:26

Tgt Ion:152 Resp: 332259  
Ion Ratio Lower Upper  
152 100  
115 54.7 28.9 86.8  
150 153.1 0.0 313.8



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





#81

trans-1,4-Dichloro-2-butene

Concen: 126.271 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. 0.08 min

Lab File: VD063109.D

Acq: 16 Jul 2019 16:26

Instrument :

MSVOA\_D

ClientSampleId :

CL-01-071219-A

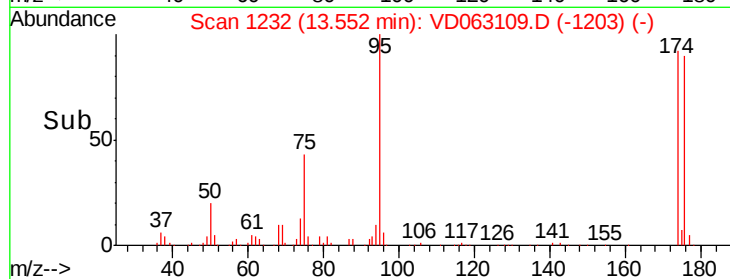
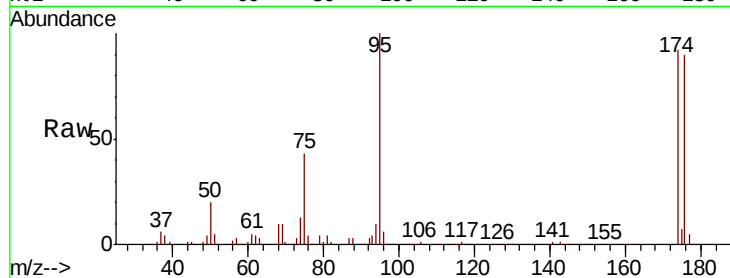
Tot Ion: 75 Resp: 169954

Ion Ratio Lower Upper

75 100

53 0.0 104.4 156.6#

89 0.0 43.1 64.7#



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

