

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_D\DATA\VD121718\  
 Data File : VD060592.D  
 Acq On : 17 Dec 2018 11:40  
 Operator : VA/AP  
 Sample : VD1217SBL01  
 Misc : 5.00g/5ml/MSVOA\_D/SOIL  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VD1217SBL01

Quant Time: Dec 18 11:14:23 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D120518S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 06 01:49:20 2018  
 Response via : Initial Calibration

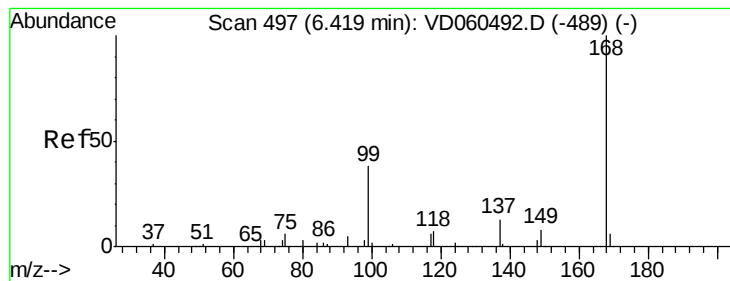
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 6.43  | 168  | 1550935  | 50.00 | ug/l  | 0.01     |
| 34) 1,4-Difluorobenzene    | 7.47  | 114  | 2112712  | 50.00 | ug/l  | 0.01     |
| 63) Chlorobenzene-d5       | 11.30 | 117  | 1719118  | 50.00 | ug/l  | 0.01     |
| 72) 1,4-Dichlorobenzene-d4 | 13.38 | 152  | 882864   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.82  | 65   | 555187   | 50.50 | ug/l    | 0.02     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 101.00% |          |
| 35) Dibromofluoromethane    | 6.36  | 113  | 778947   | 50.20 | ug/l    | 0.02     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 100.40% |          |
| 50) Toluene-d8              | 9.47  | 98   | 2221715  | 49.47 | ug/l    | 0.01     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 98.94%  |          |
| 62) 4-Bromofluorobenzene    | 12.44 | 95   | 803920   | 50.03 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 100.06% |          |

| Target Compounds               | R.T.  | QIon | Response | Conc           | Units | Qvalue |
|--------------------------------|-------|------|----------|----------------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.61  | 85   | 6057     | Below Cal      |       | 73     |
| 5) Bromomethane                | 2.22  | 94   | 3408     | 1.071 ug/l #   |       | 4      |
| 11) Tert butyl alcohol         | 3.92  | 59   | 504      | 1.128 ug/l #   |       | 73     |
| 20) Methylene Chloride         | 3.76  | 84   | 51847    | Below Cal      |       | 93     |
| 25) 2-Butanone                 | 5.69  | 43   | 6419     | 1.852 ug/l #   |       | 59     |
| 31) Cyclohexane                | 6.42  | 56   | 29786    | Below Cal #    |       | 1      |
| 36) 1,1-Dichloropropene        | 6.43  | 75   | 113631   | 5.502 ug/l #   |       | 48     |
| 38) Carbon Tetrachloride       | 6.43  | 117  | 120777   | 6.514 ug/l #   |       | 16     |
| 76) 1,2,3-Trichloropropane     | 12.44 | 75   | 324448   | 32.434 ug/l #  |       | 44     |
| 81) trans-1,4-Dichloro-2-buten | 12.44 | 75   | 329751   | 118.191 ug/l # |       | 14     |
| 89) n-Butylbenzene             | 13.66 | 91   | 4532     | Below Cal      |       | 97     |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 6.43 min Scan# 499

Delta R.T. 0.01 min

Lab File: VD060592.D

Acq: 17 Dec 2018 11:40

Instrument :

MSVOA\_D

ClientSampleId :

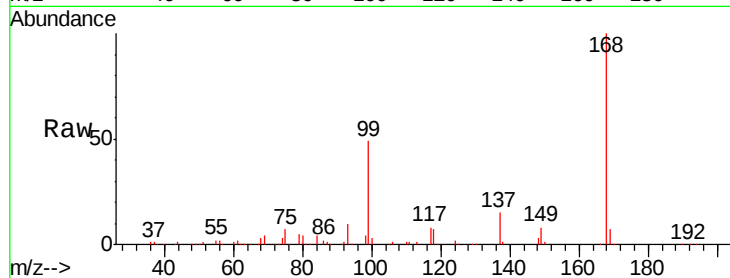
VD1217SBL01

Tgt Ion:168 Resp: 1550935

Ion Ratio Lower Upper

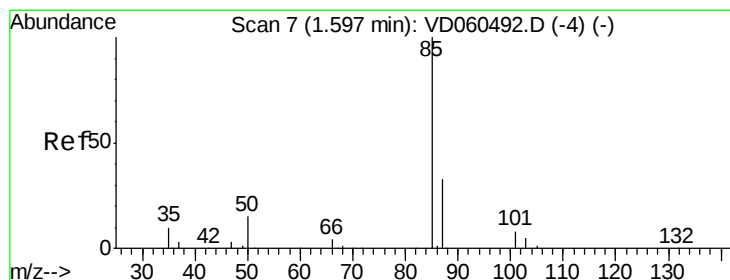
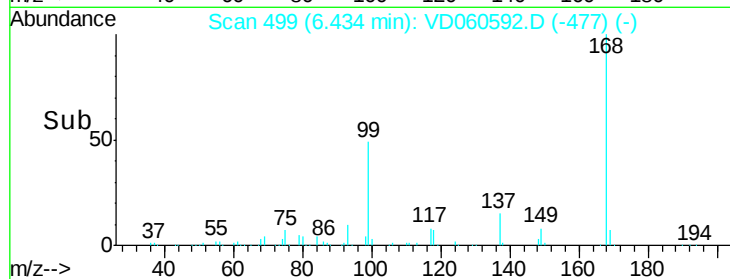
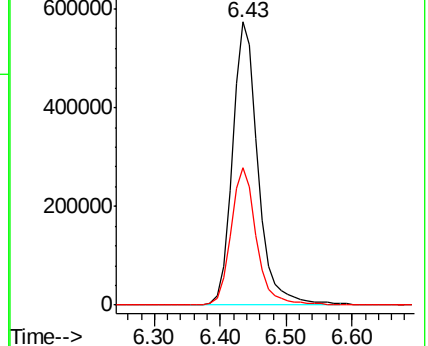
168 100

99 48.8 35.6 53.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.61 min Scan# 9

Delta R.T. 0.01 min

Lab File: VD060592.D

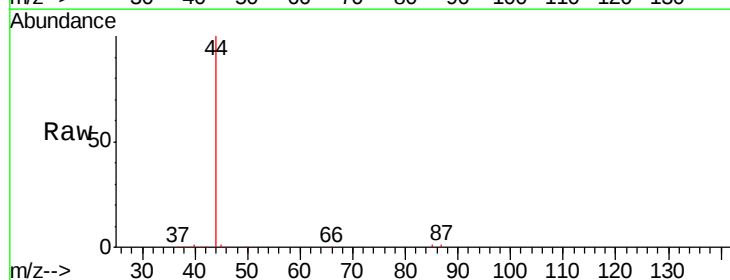
Acq: 17 Dec 2018 11:40

Tgt Ion: 85 Resp: 6057

Ion Ratio Lower Upper

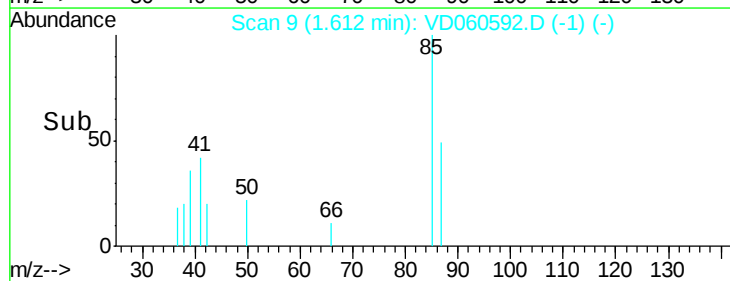
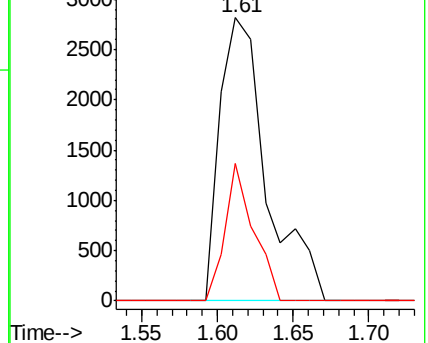
85 100

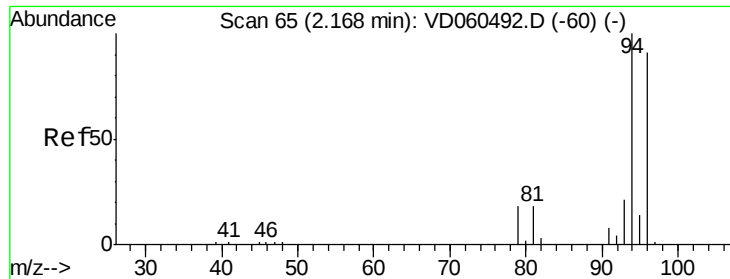
87 48.8 16.7 50.0



Abundance Ion 84.95 (84.65 to 85.65): VDC

Ion 86.90 (86.60 to 87.60): VDC





#5

Bromomethane

Concen: 1.071 ug/l

RT: 2.22 min Scan# 71

Delta R.T. 0.05 min

Lab File: VD060592.D

Acq: 17 Dec 2018 11:40

Instrument :

MSVOA\_D

ClientSampleId :

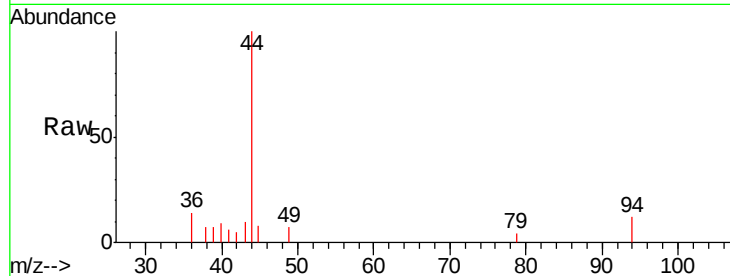
VD1217SBL01

Tgt Ion: 94 Resp: 3408

Ion Ratio Lower Upper

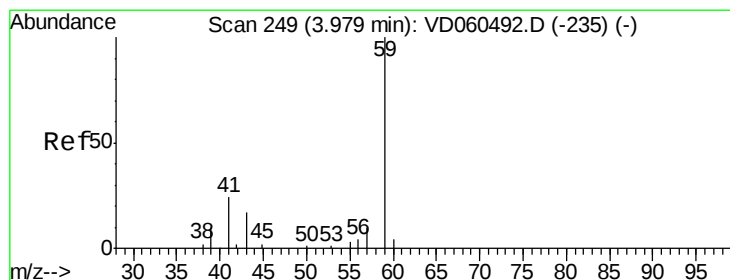
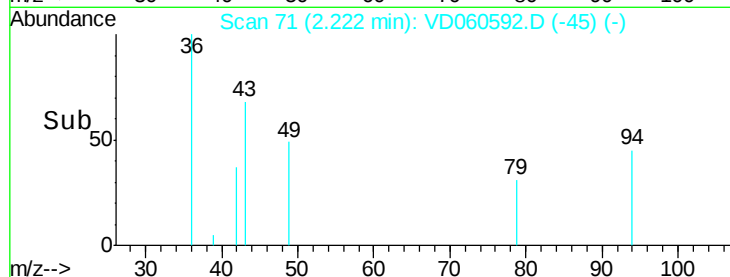
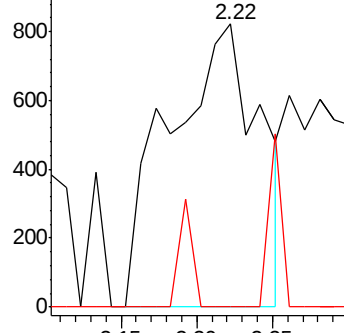
94 100

96 0.0 72.6 108.8#



Abundance Ion 93.90 (93.60 to 94.60): VDC

Ion 95.90 (95.60 to 96.60): VDC



#11

Tert butyl alcohol

Concen: 1.128 ug/l

RT: 3.92 min Scan# 244

Delta R.T. -0.05 min

Lab File: VD060592.D

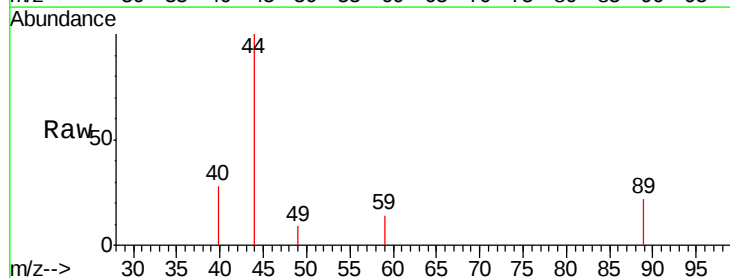
Acq: 17 Dec 2018 11:40

Tgt Ion: 59 Resp: 504

Ion Ratio Lower Upper

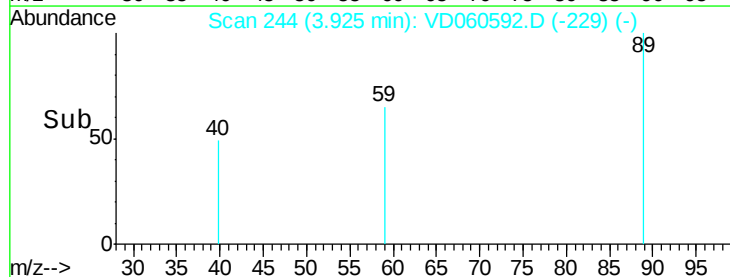
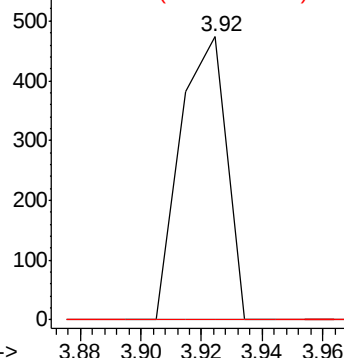
59 100

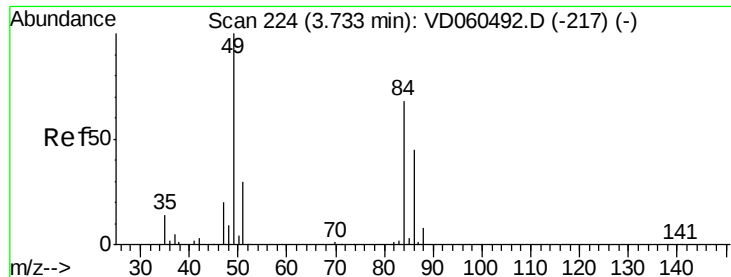
57 0.0 8.1 12.1#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC

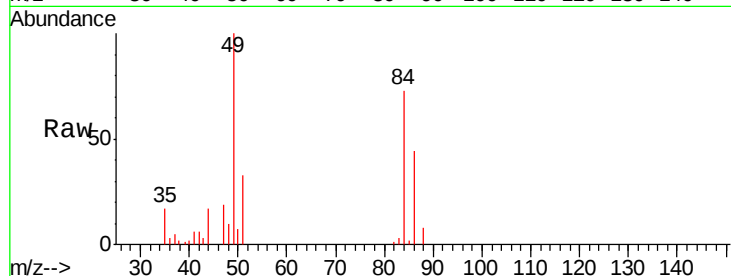




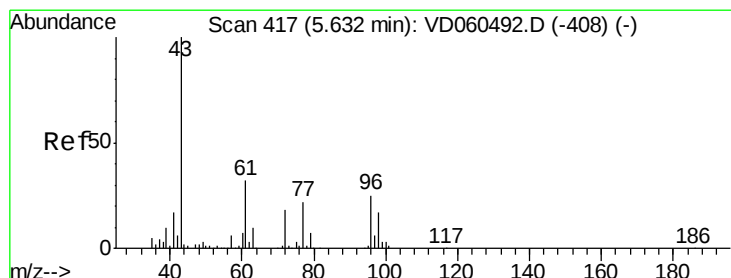
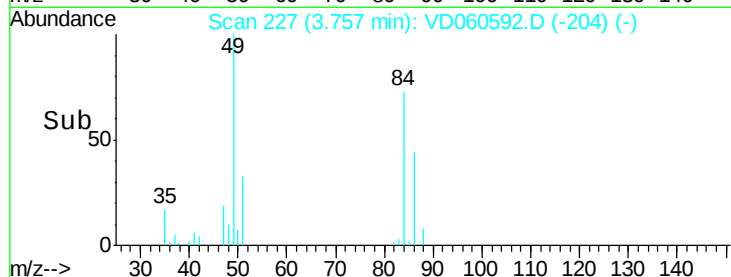
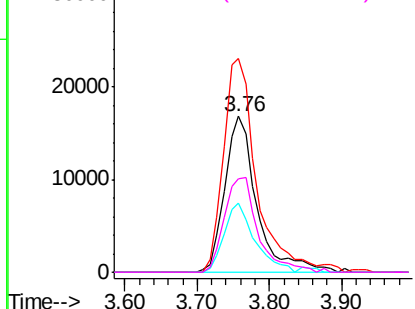
#20  
Methylene Chloride  
Concen: Below Cal  
RT: 3.76 min Scan# 227  
Delta R.T. 0.03 min  
Lab File: VD060592.D  
Acq: 17 Dec 2018 11:40

Instrument :  
MSVOA\_D  
ClientSampleId :  
VD1217SBL01

Tgt Ion: 84 Resp: 51847  
Ion Ratio Lower Upper  
84 100  
49 137.0 117.2 175.8  
51 44.7 35.3 52.9  
86 60.2 53.2 79.8

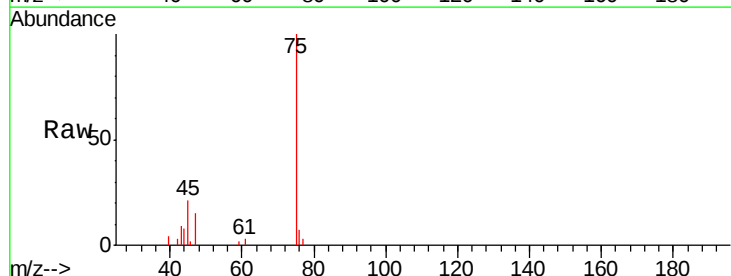


Abundance Ion 83.95 (83.65 to 84.65): VDC  
Ion 48.90 (48.60 to 49.60): VDC  
Ion 50.90 (50.60 to 51.60): VDC  
Ion 85.90 (85.60 to 86.60): VDC

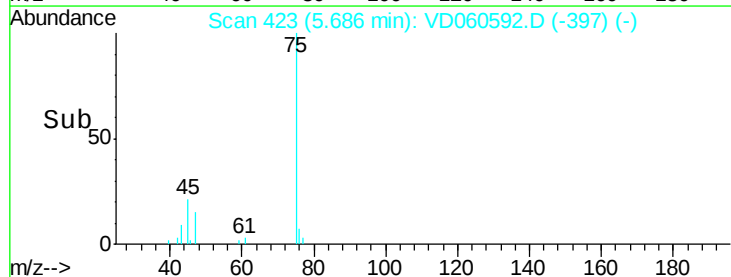
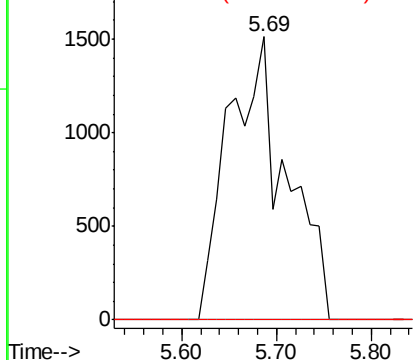


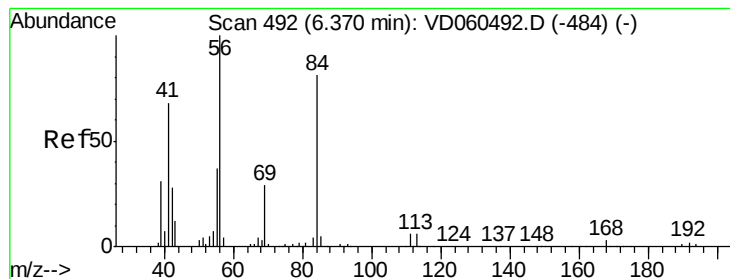
#25  
2-Butanone  
Concen: 1.852 ug/l  
RT: 5.69 min Scan# 423  
Delta R.T. 0.05 min  
Lab File: VD060592.D  
Acq: 17 Dec 2018 11:40

Tgt Ion: 43 Resp: 6419  
Ion Ratio Lower Upper  
43 100  
72 0.0 14.6 21.8#



Abundance Ion 42.95 (42.65 to 43.65): VDC  
Ion 72.00 (71.70 to 72.70): VDC





#31

Cyclohexane

Concen: Below Cal

RT: 6.42 min Scan# 498

Delta R.T. 0.05 min

Lab File: VD060592.D

Acq: 17 Dec 2018 11:40

Instrument :

MSVOA\_D

ClientSampleId :

VD1217SBL01

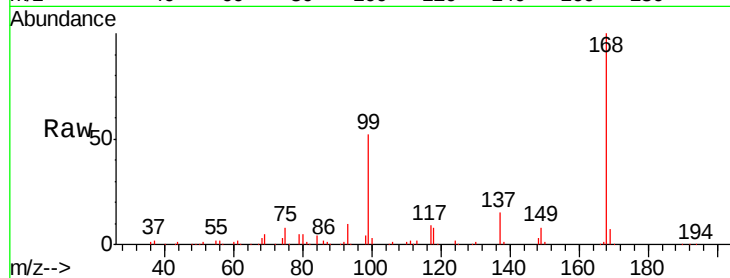
Tgt Ion: 56 Resp: 29786

Ion Ratio Lower Upper

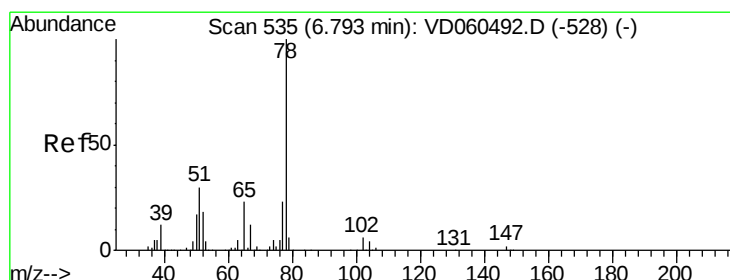
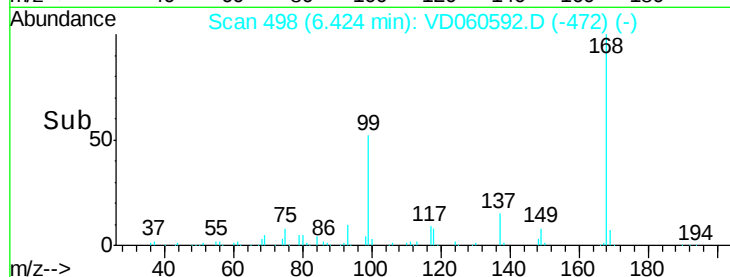
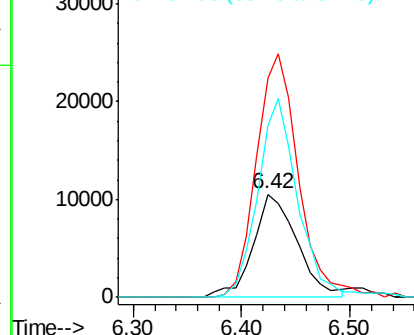
56 100

69 212.3 22.8 34.2#

84 166.2 65.1 97.7#



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: Below ug/l

RT: 6.82 min Scan# 538

Delta R.T. 0.02 min

Lab File: VD060592.D

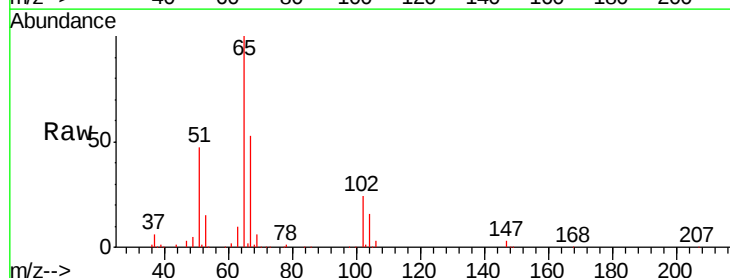
Acq: 17 Dec 2018 11:40

Tgt Ion: 65 Resp: 555187

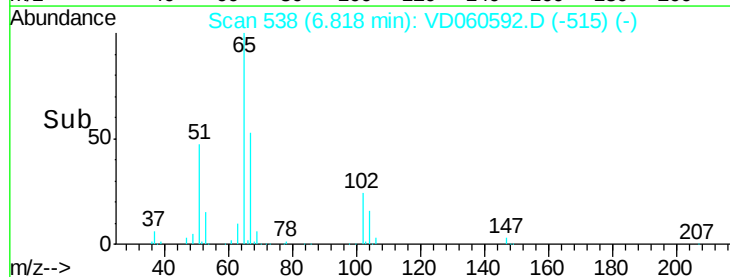
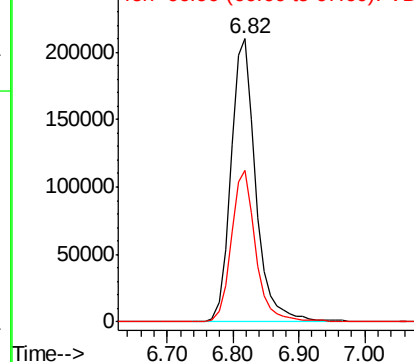
Ion Ratio Lower Upper

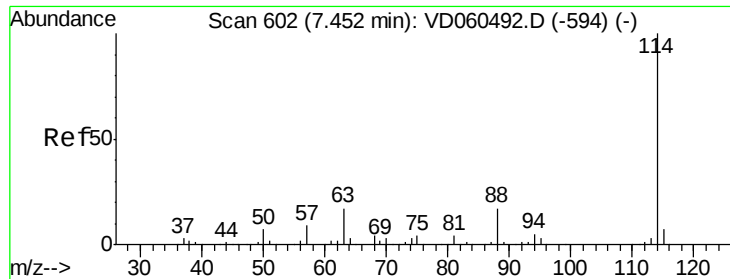
65 100

67 53.5 0.0 106.8



Abundance Ion 64.95 (64.65 to 65.65): VDC  
Ion 66.90 (66.60 to 67.60): VDC

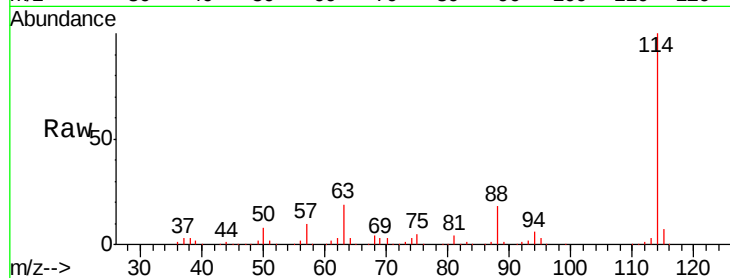




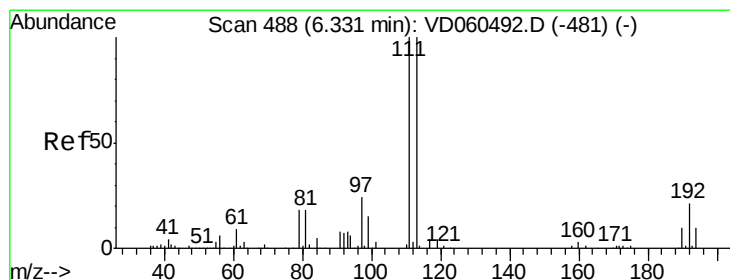
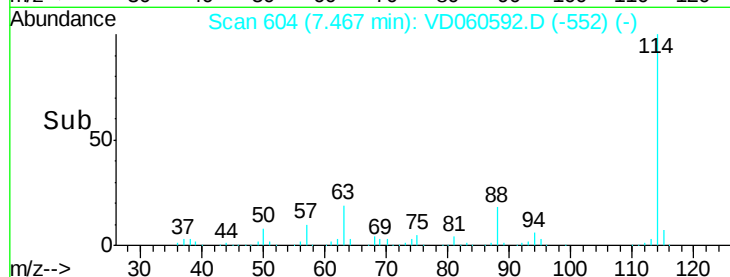
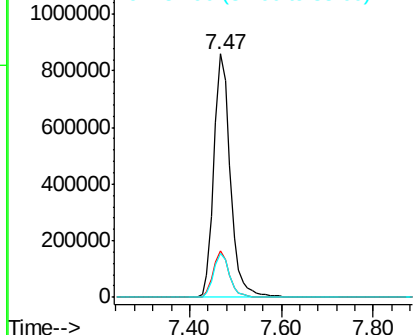
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 7.47 min Scan# 604  
 Delta R.T. 0.01 min  
 Lab File: VD060592.D  
 Acq: 17 Dec 2018 11:40

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VD1217SBL01

Tgt Ion:114 Resp: 2112712  
 Ion Ratio Lower Upper  
 114 100  
 63 18.9 0.0 34.2  
 88 18.1 0.0 35.0

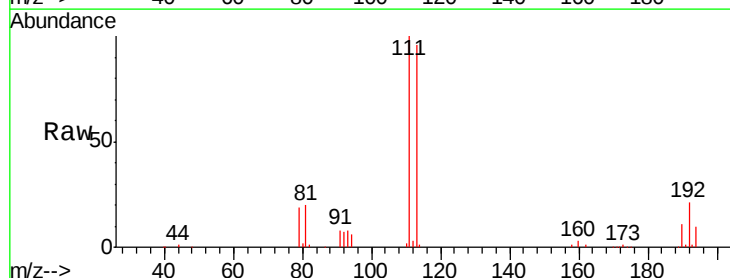


Abundance Ion 114.00 (113.70 to 114.70): V  
 Ion 62.95 (62.65 to 63.65): VDC  
 Ion 87.90 (87.60 to 88.60): VDC

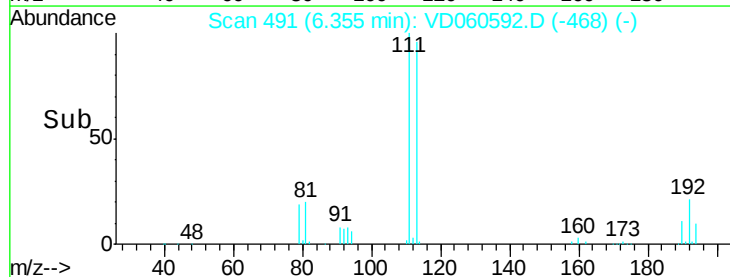
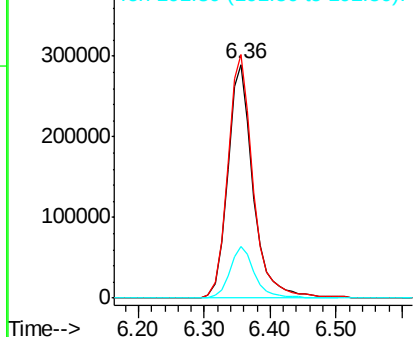


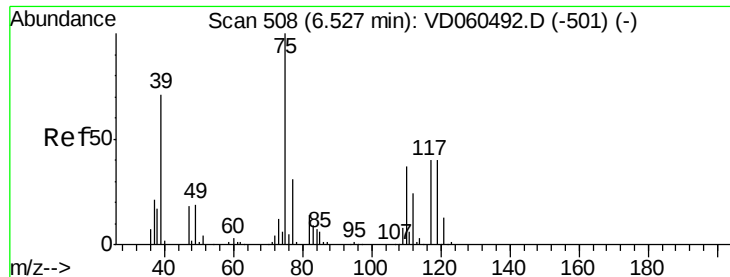
#35  
 Dibromofluoromethane  
 Concen: 50.000 ug/l  
 RT: 6.36 min Scan# 491  
 Delta R.T. 0.02 min  
 Lab File: VD060592.D  
 Acq: 17 Dec 2018 11:40

Tgt Ion:113 Resp: 778947  
 Ion Ratio Lower Upper  
 113 100  
 111 104.1 80.2 120.4  
 192 22.2 16.6 24.8



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

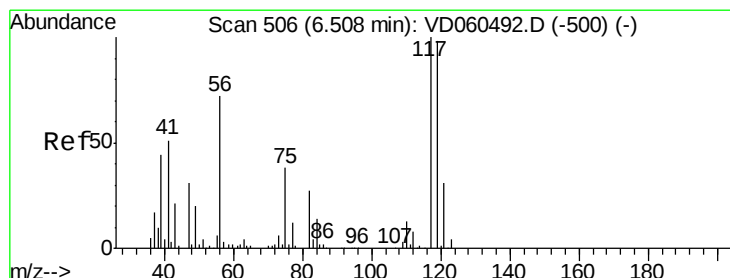
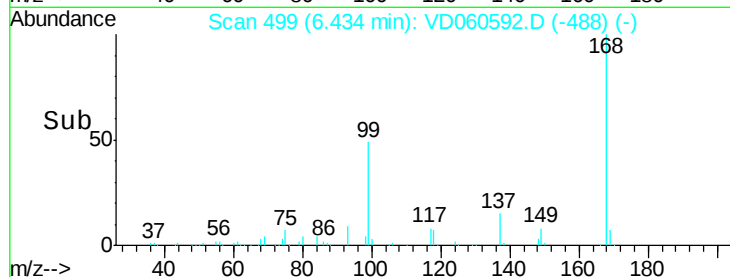
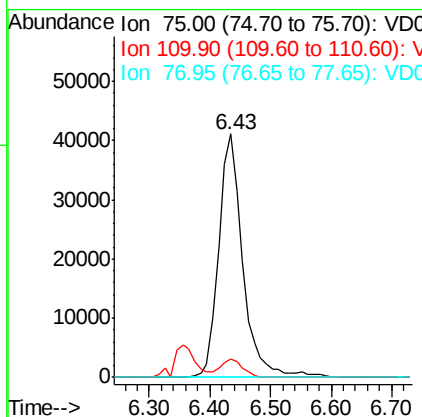
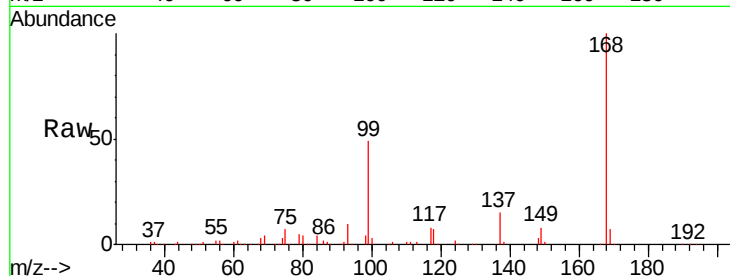




#36  
 1,1-Dichloropropene  
 Concen: 5.502 ug/l  
 RT: 6.43 min Scan# 499  
 Delta R.T. -0.09 min  
 Lab File: VD060592.D  
 Acq: 17 Dec 2018 11:40

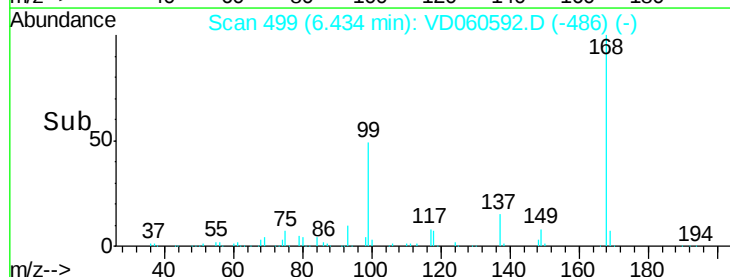
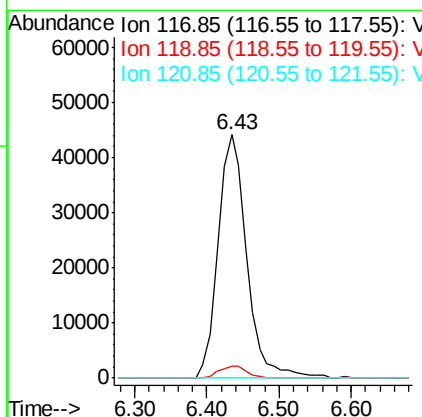
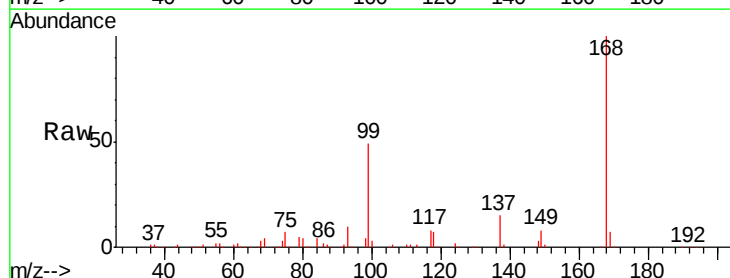
Instrument :  
 MSVOA\_D  
 ClientSampleID :  
 VD1217SBL01

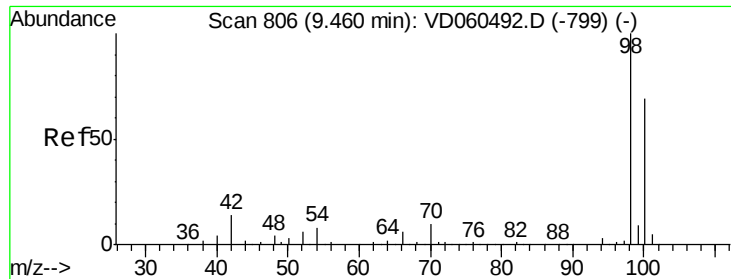
Tgt Ion: 75 Resp: 113631  
 Ion Ratio Lower Upper  
 75 100  
 110 7.4 18.3 54.8#  
 77 0.0 24.6 37.0#



#38  
 Carbon Tetrachloride  
 Concen: 6.514 ug/l  
 RT: 6.43 min Scan# 499  
 Delta R.T. -0.07 min  
 Lab File: VD060592.D  
 Acq: 17 Dec 2018 11:40

Tgt Ion: 117 Resp: 120777  
 Ion Ratio Lower Upper  
 117 100  
 119 4.9 76.8 115.2#  
 121 0.0 24.4 36.6#

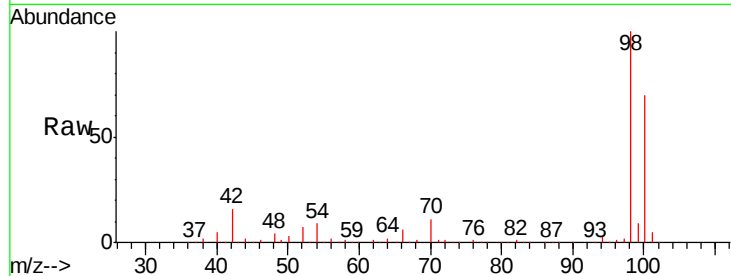




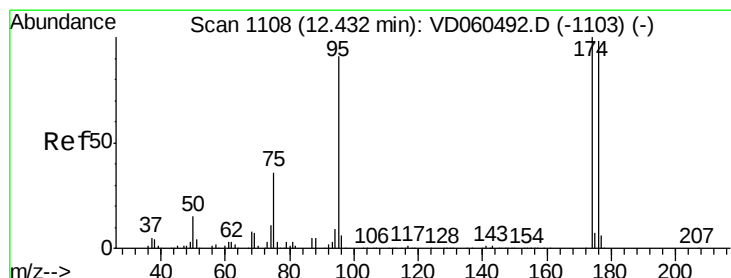
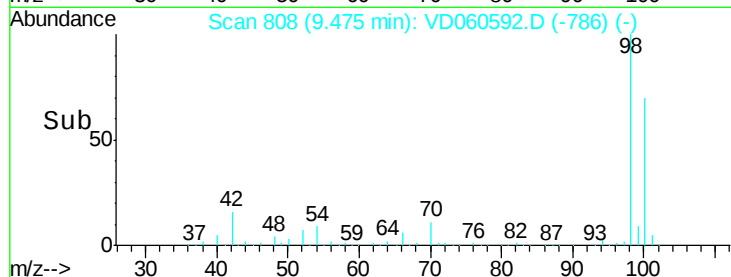
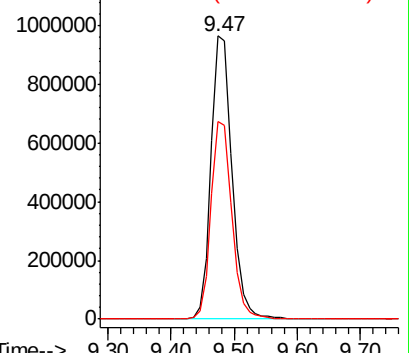
#50  
Toluene-d8  
Concen: N.D. ug/l  
RT: 9.47 min Scan# 808  
Delta R.T. 0.01 min  
Lab File: VD060592.D  
Acq: 17 Dec 2018 11:40

Instrument :  
MSVOA\_D  
ClientSampleId :  
VD1217SBL01

Tgt Ion: 98 Resp: 2221715  
Ion Ratio Lower Upper  
98 100  
100 69.8 55.7 83.5

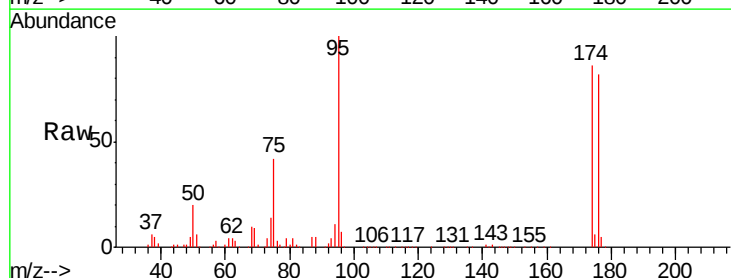


Abundance Ion 98.05 (97.75 to 98.75): VD060492.D (-799) (-)  
Ion 100.05 (99.75 to 100.75): VD060492.D (-799) (-)

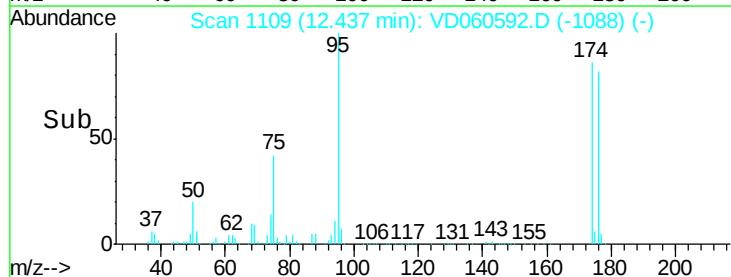
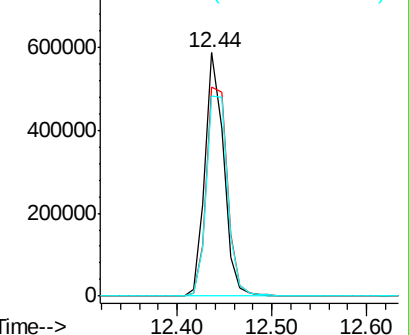


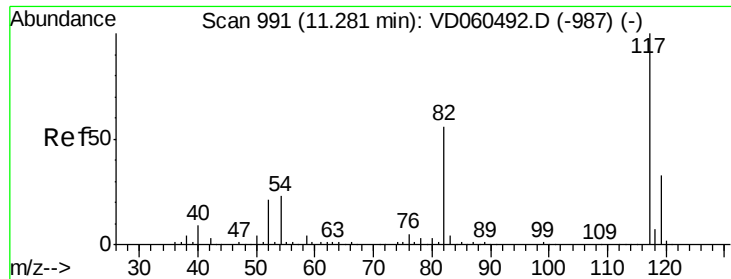
#62  
4-Bromofluorobenzene  
Concen: Below ug/l  
RT: 12.44 min Scan# 1109  
Delta R.T. 0.00 min  
Lab File: VD060592.D  
Acq: 17 Dec 2018 11:40

Tgt Ion: 95 Resp: 803920  
Ion Ratio Lower Upper  
95 100  
174 85.8 0.0 219.4  
176 82.0 0.0 214.6



Abundance Ion 95.00 (94.70 to 95.70): VD060492.D (-1103) (-)  
Ion 173.90 (173.60 to 174.60): VD060492.D (-1103) (-)  
Ion 175.90 (175.60 to 176.60): VD060492.D (-1103) (-)

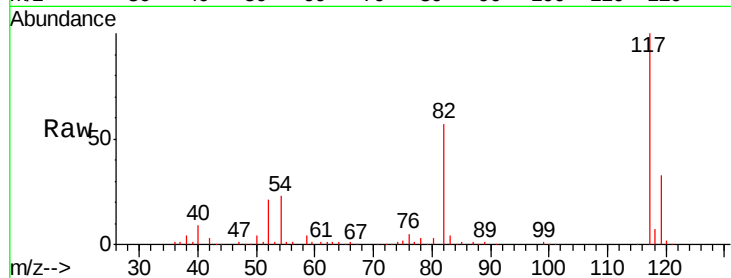




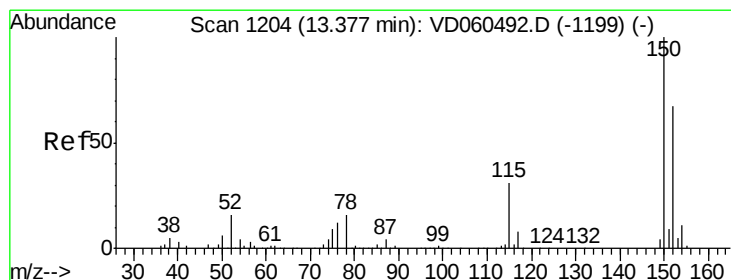
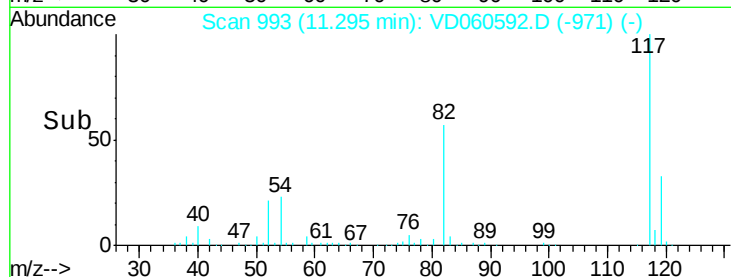
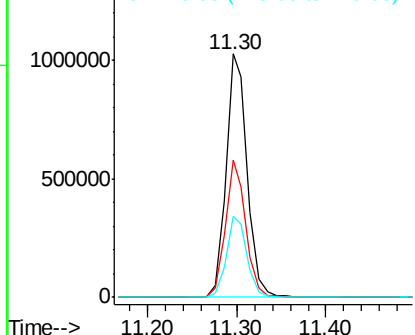
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.30 min Scan# 993  
Delta R.T. 0.01 min  
Lab File: VD060592.D  
Acq: 17 Dec 2018 11:40

Instrument :  
MSVOA\_D  
ClientSampleId :  
VD1217SBL01

Tgt Ion:117 Resp: 1719118  
Ion Ratio Lower Upper  
117 100  
82 56.5 45.2 67.8  
119 33.2 26.1 39.1

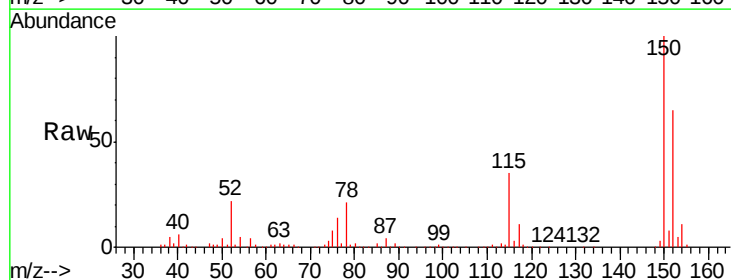


Abundance Ion 116.95 (116.65 to 117.65): V  
Ion 82.05 (81.75 to 82.75): V  
Ion 118.95 (118.65 to 119.65): V

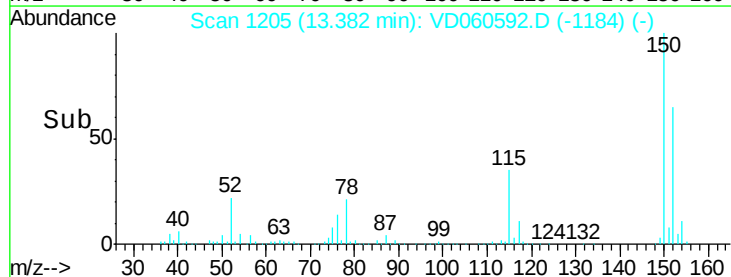
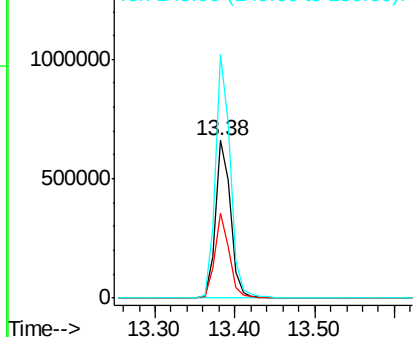


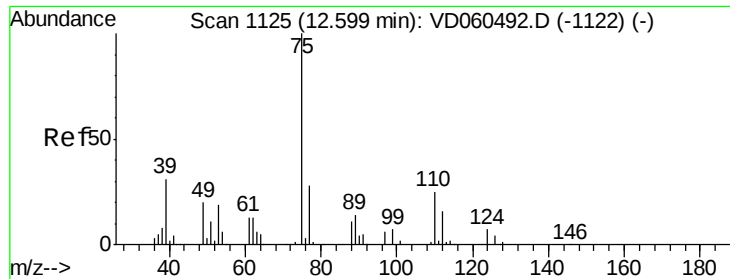
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.38 min Scan# 1205  
Delta R.T. 0.00 min  
Lab File: VD060592.D  
Acq: 17 Dec 2018 11:40

Tgt Ion:152 Resp: 882864  
Ion Ratio Lower Upper  
152 100  
115 54.0 24.6 74.0  
150 154.6 0.0 309.0



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: 32.434 ug/l

RT: 12.44 min Scan# 1109

Delta R.T. -0.16 min

Lab File: VD060592.D

Acq: 17 Dec 2018 11:40

Instrument :

MSVOA\_D

ClientSampleId :

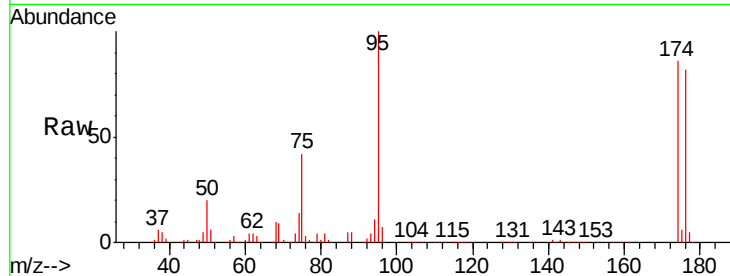
VD1217SBL01

Tgt Ion: 75 Resp: 324448

Ion Ratio Lower Upper

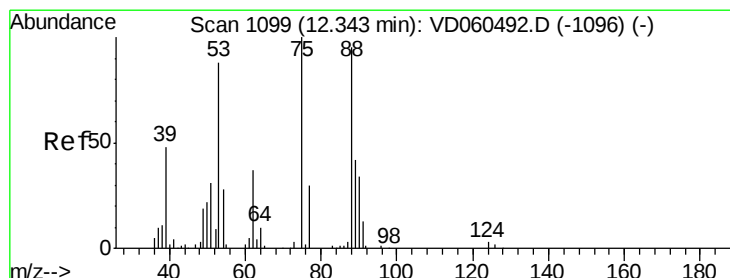
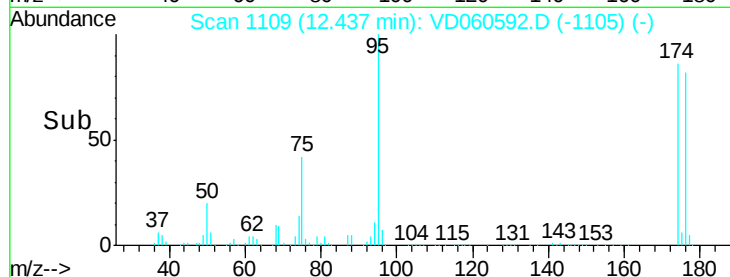
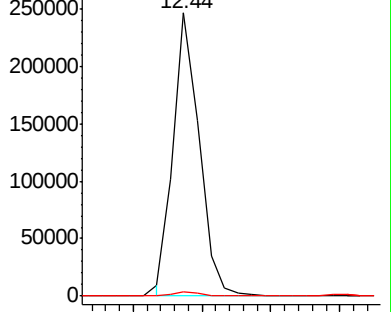
75 100

77 1.4 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: 118.191 ug/l

RT: 12.44 min Scan# 1109

Delta R.T. 0.09 min

Lab File: VD060592.D

Acq: 17 Dec 2018 11:40

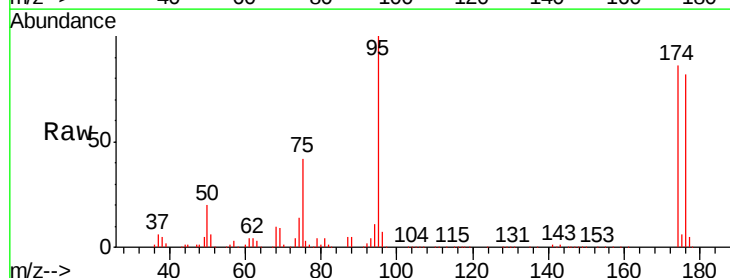
Tgt Ion: 75 Resp: 329751

Ion Ratio Lower Upper

75 100

53 0.0 70.5 105.7#

89 0.0 33.6 50.4#



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

