

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD040219\  
 Data File : VD061526.D  
 Acq On : 2 Apr 2019 20:44  
 Operator : VA/AP  
 Sample : K2178-08RE  
 Misc : 5.48g/5ml/MSVOA D/SOIL  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VOC-17RE

Quant Time: Apr 03 01:55:27 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D032719S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Mar 28 09:22:37 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.05  | 168  | 389064   | 50.00 | ug/l  | 0.03     |
| 34) 1,4-Difluorobenzene    | 8.21  | 114  | 722472   | 50.00 | ug/l  | 0.02     |
| 63) Chlorobenzene-d5       | 12.37 | 117  | 447287   | 50.00 | ug/l  | 0.01     |
| 72) 1,4-Dichlorobenzene-d4 | 14.51 | 152  | 118924   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.46  | 65   | 216530   | 65.15 | ug/l    | 0.02     |
| Spiked Amount               |       |      | Recovery | =     | 130.30% |          |
| 35) Dibromofluoromethane    | 6.92  | 113  | 294135   | 53.28 | ug/l    | 0.02     |
| Spiked Amount               |       |      | Recovery | =     | 106.56% |          |
| 50) Toluene-d8              | 10.41 | 98   | 589574   | 44.52 | ug/l    | 0.02     |
| Spiked Amount               |       |      | Recovery | =     | 89.04%  |          |
| 62) 4-Bromofluorobenzene    | 13.55 | 95   | 162224   | 31.95 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 63.90%  |          |

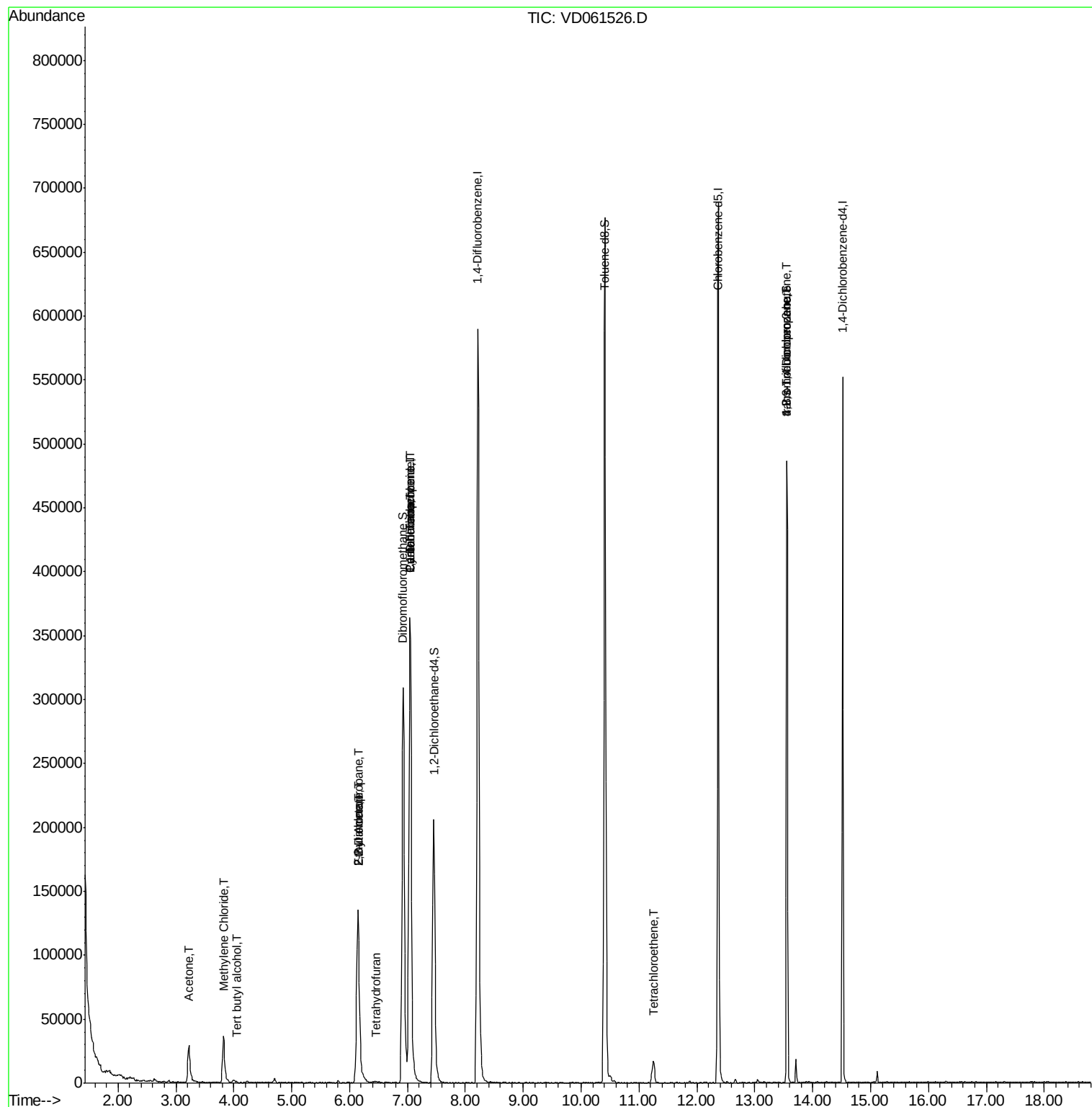
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 11) Tert butyl alcohol         | 4.05  | 59   | 983      | 4.749   | ug/l # | 76     |
| 16) Acetone                    | 3.22  | 43   | 63604    | 74.445  | ug/l   | 97     |
| 20) Methylene Chloride         | 3.82  | 84   | 27783    | 4.040   | ug/l   | 98     |
| 25) 2-Butanone                 | 6.15  | 43   | 9021     | 8.394   | ug/l # | 54     |
| 26) 2,2-Dichloropropane        | 6.14  | 77   | 10399    | 1.806   | ug/l # | 50     |
| 29) Tetrahydrofuran            | 6.47  | 42   | 802      | 1.540   | ug/l # | 30     |
| 31) Cyclohexane                | 7.04  | 56   | 6570     | 1.148   | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.05  | 75   | 28057    | 4.450   | ug/l # | 45     |
| 37) Ethyl Acetate              | 6.15  | 43   | 9021     | 3.345   | ug/l # | 1      |
| 38) Carbon Tetrachloride       | 7.04  | 117  | 37478    | 5.172   | ug/l # | 14     |
| 64) Tetrachloroethene          | 11.26 | 164  | 3560     | 1.014   | ug/l # | 88     |
| 76) 1,2,3-Trichloropropane     | 13.55 | 75   | 51175    | 29.790  | ug/l # | 45     |
| 81) trans-1,4-Dichloro-2-buten | 13.55 | 75   | 61084    | 116.620 | ug/l # | 18     |

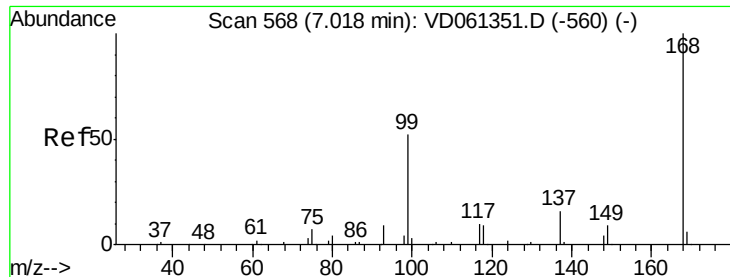
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD040219\  
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MSVOA\_D  
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VOC-17RE

Quant Time: Apr 03 01:55:27 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D032719S.M  
Quant Title : SW846 8260  
QLast Update : Thu Mar 28 09:22:37 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.05 min Scan# 572

Delta R.T. 0.03 min

Lab File: VD061526.D

Acq: 2 Apr 2019 20:44

Instrument :

MSVOA\_D

ClientSampleId :

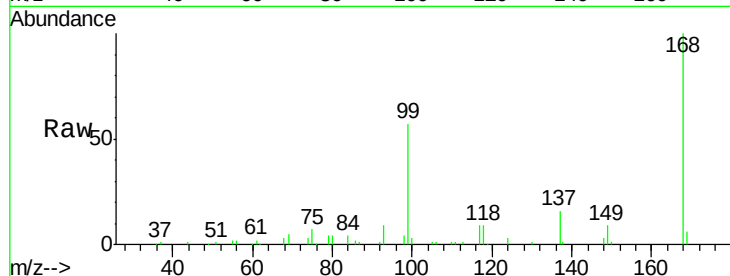
VOC-17RE

Tot Ion:168 Resp: 389064

Ion Ratio Lower Upper

168 100

99 56.6 43.1 64.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.05

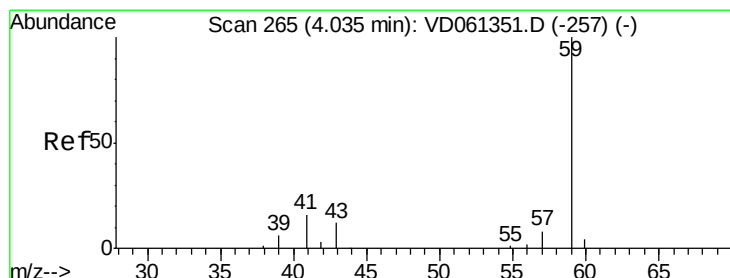
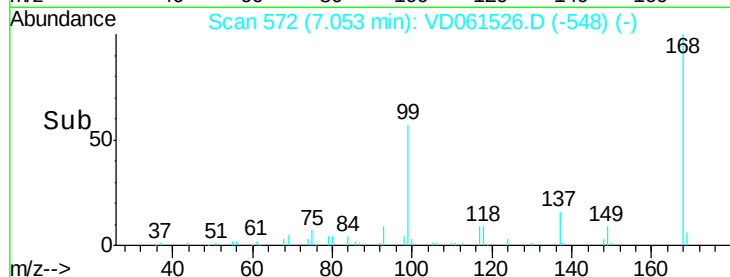
150000

100000

50000

0

Time-->



#11

Tert butyl alcohol

Concen: 4.749 ug/l

RT: 4.05 min Scan# 267

Delta R.T. 0.01 min

Lab File: VD061526.D

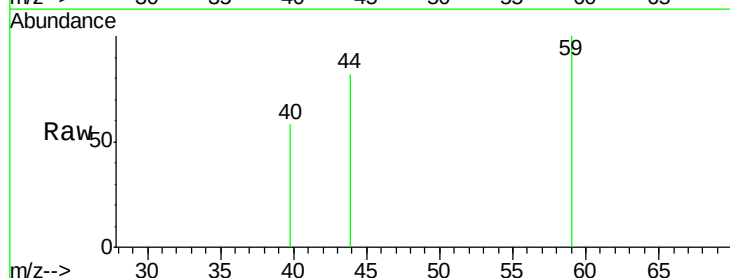
Acq: 2 Apr 2019 20:44

Tgt Ion: 59 Resp: 983

Ion Ratio Lower Upper

59 100

57 0.0 6.7 10.1#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC

4.05

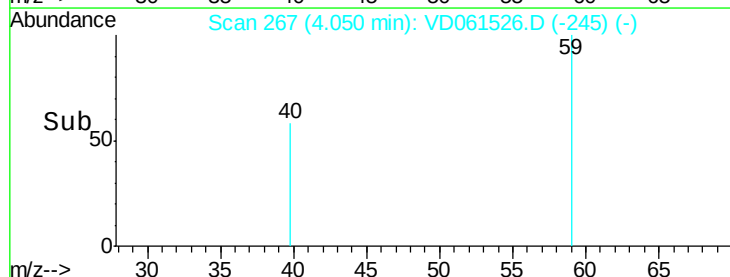
600

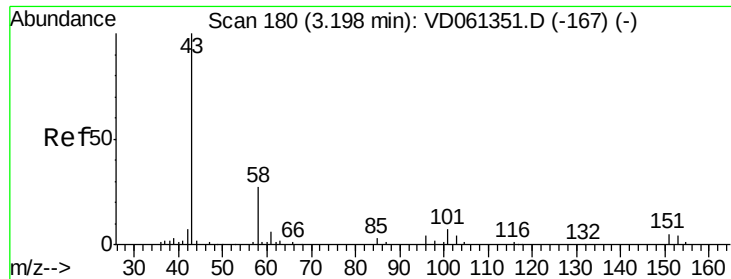
400

200

0

Time-->





#16

Acetone

Concen: 74.445 ug/l

RT: 3.22 min Scan# 183

Delta R.T. 0.02 min

Lab File: VD061526.D

Acq: 2 Apr 2019 20:44

Instrument :

MSVOA\_D

ClientSampleId :

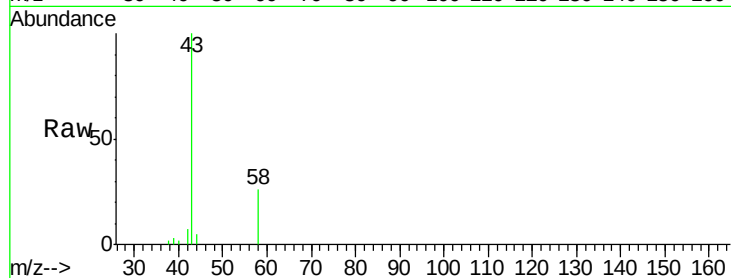
VOC-17RE

Tot Ion: 43 Resp: 63604

Ion Ratio Lower Upper

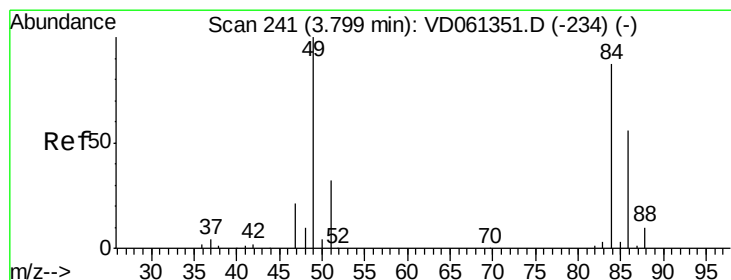
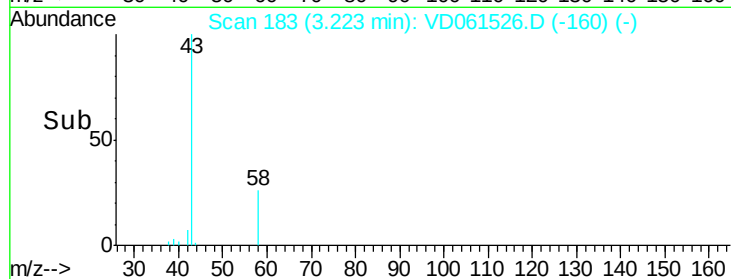
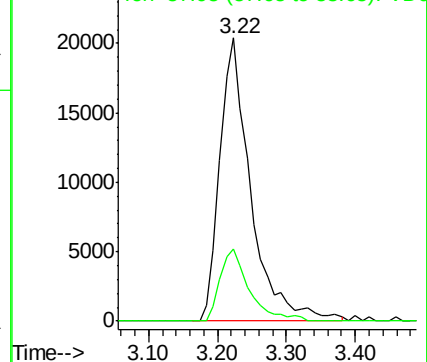
43 100

58 25.5 21.5 32.3



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC



#20

Methylene Chloride

Concen: 4.040 ug/l

RT: 3.82 min Scan# 244

Delta R.T. 0.02 min

Lab File: VD061526.D

Acq: 2 Apr 2019 20:44

Tgt Ion: 84 Resp: 27783

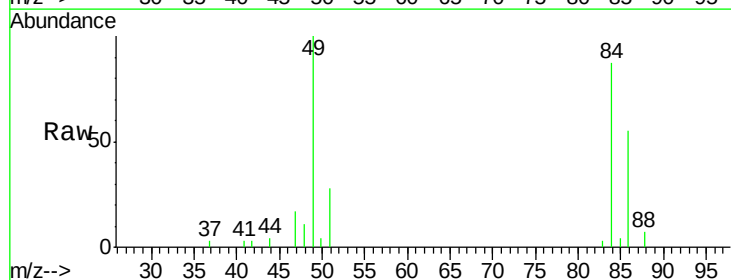
Ion Ratio Lower Upper

84 100

49 114.7 91.8 137.8

51 32.3 29.8 44.8

86 63.4 51.8 77.6

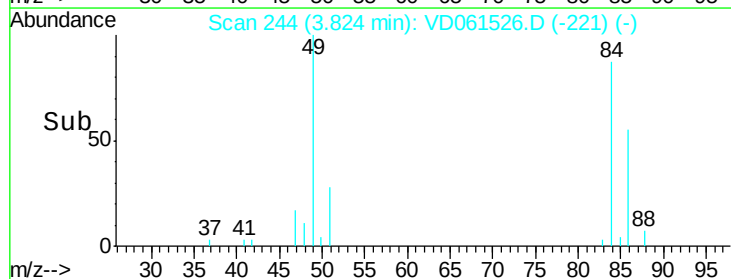
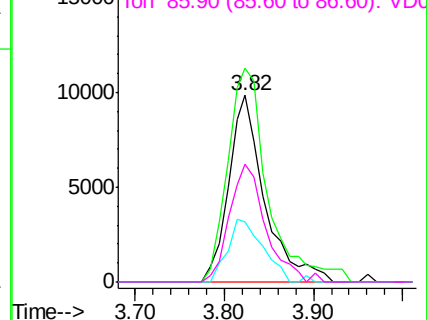


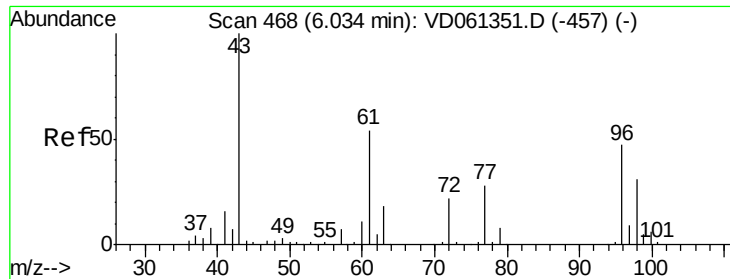
Abundance Ion 83.95 (83.65 to 84.65): VDC

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

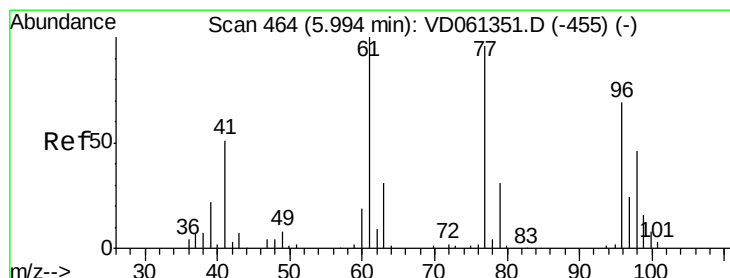
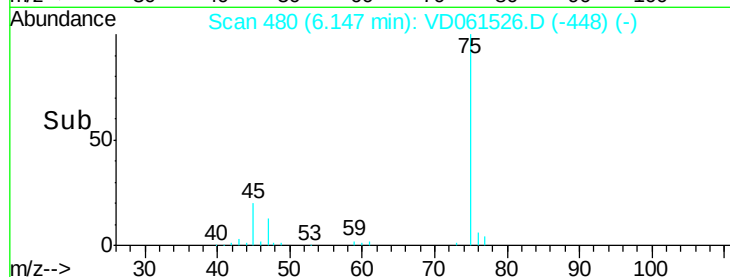
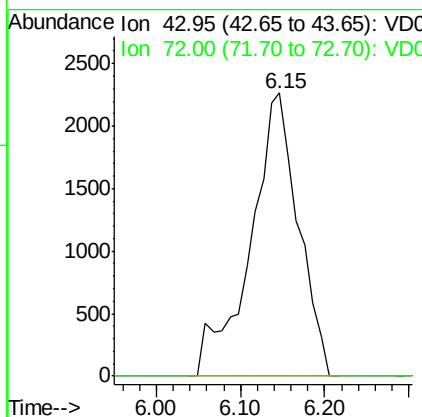
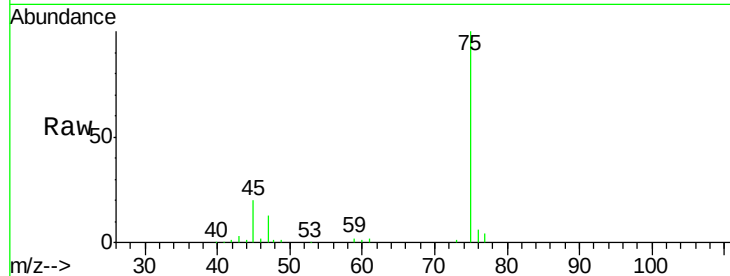




#25  
 2-Butanone  
 Concen: 8.394 ug/l  
 RT: 6.15 min Scan# 480  
 Delta R.T. 0.11 min  
 Lab File: VD061526.D  
 Acq: 2 Apr 2019 20:44

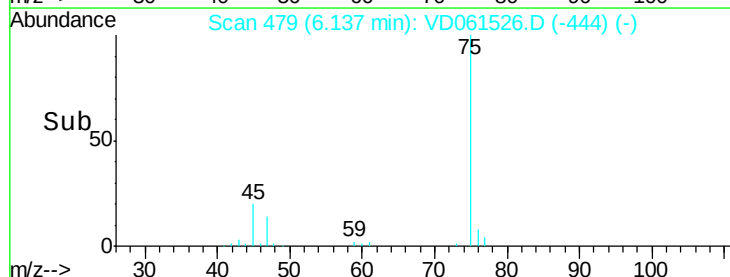
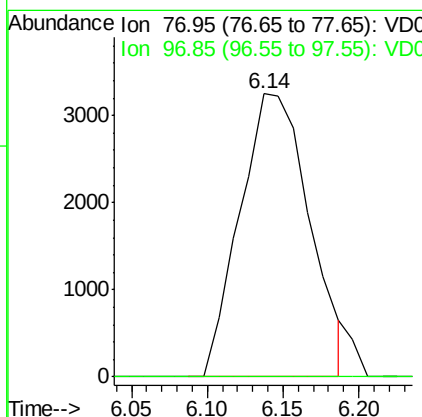
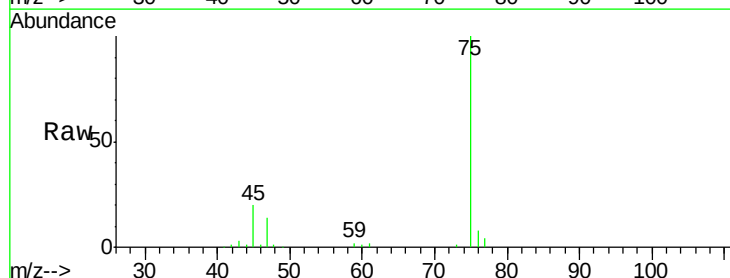
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VOC-17RE

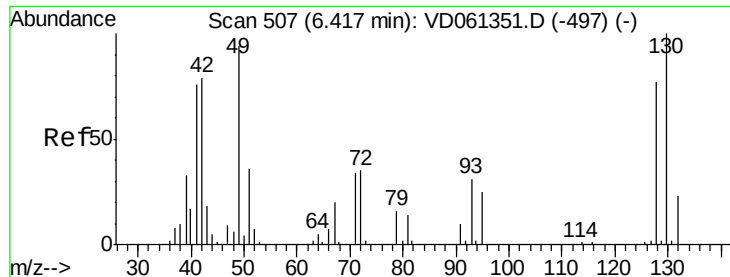
Tot Ion: 43 Resp: 9021  
 Ion Ratio Lower Upper  
 43 100  
 72 0.0 17.2 25.8#



#26  
 2,2-Dichloropropane  
 Concen: 1.806 ug/l  
 RT: 6.14 min Scan# 479  
 Delta R.T. 0.14 min  
 Lab File: VD061526.D  
 Acq: 2 Apr 2019 20:44

Tgt Ion: 77 Resp: 10399  
 Ion Ratio Lower Upper  
 77 100  
 97 0.0 12.7 38.0#





#29

Tetrahydrofuran

Concen: 1.540 ug/l

RT: 6.47 min Scan# 513

Delta R.T. 0.05 min

Lab File: VD061526.D

Acq: 2 Apr 2019 20:44

Instrument :

MSVOA\_D

ClientSampleId :

VOC-17RE

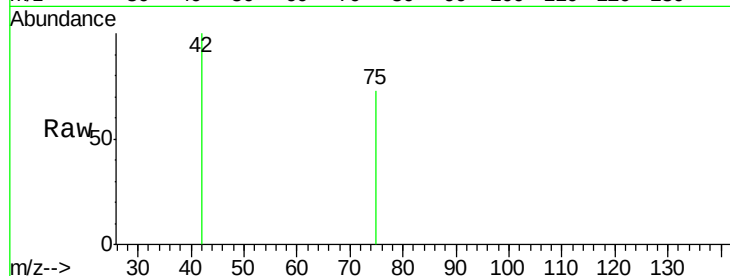
Tot Ion: 42 Resp: 802

Ion Ratio Lower Upper

42 100

72 0.0 37.4 56.0#

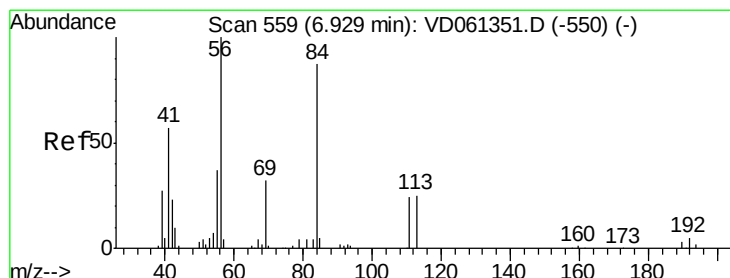
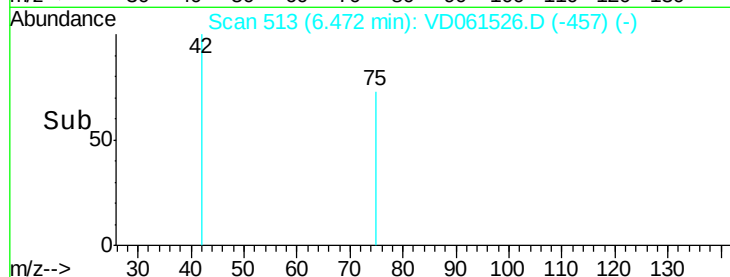
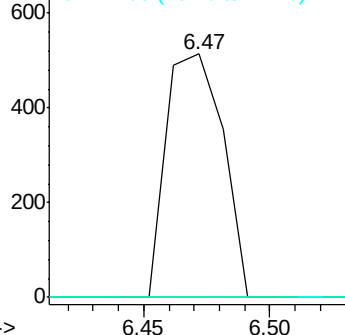
71 0.0 36.7 55.1#



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: 1.148 ug/l

RT: 7.04 min Scan# 571

Delta R.T. 0.11 min

Lab File: VD061526.D

Acq: 2 Apr 2019 20:44

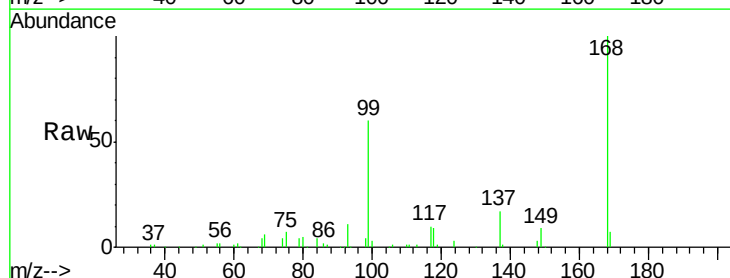
Tgt Ion: 56 Resp: 6570

Ion Ratio Lower Upper

56 100

69 267.7 25.7 38.5#

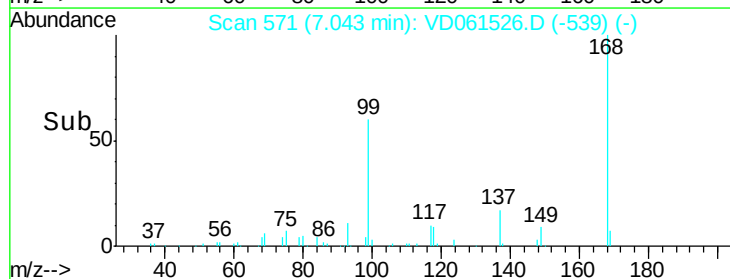
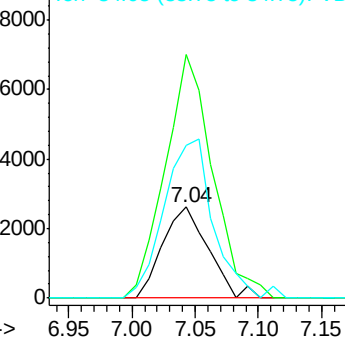
84 168.3 70.6 105.8#

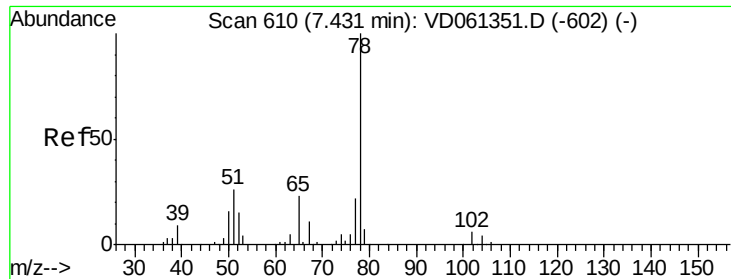


Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 69.00 (68.70 to 69.70): VDC

Ion 84.05 (83.75 to 84.75): VDC





#33

1,2-Dichloroethane-d4

Concen: N.D. ug/l

RT: 7.46 min Scan# 613

Delta R.T. 0.02 min

Lab File: VD061526.D

Acq: 2 Apr 2019 20:44

Instrument :

MSVOA\_D

ClientSampleId :

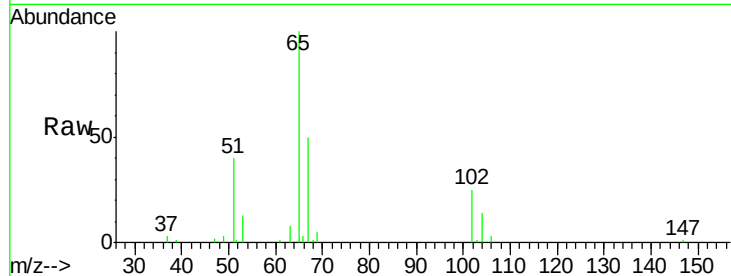
VOC-17RE

Tot Ion: 65 Resp: 216530

Ion Ratio Lower Upper

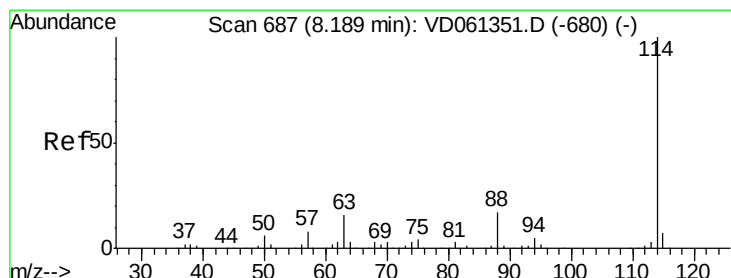
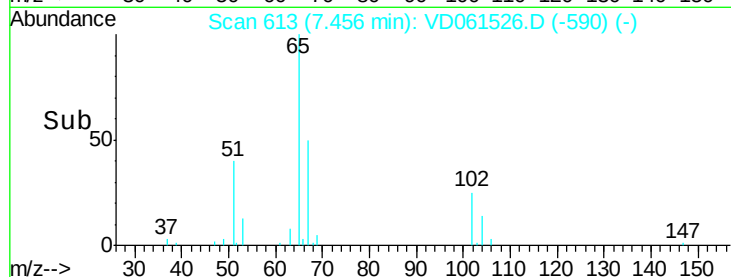
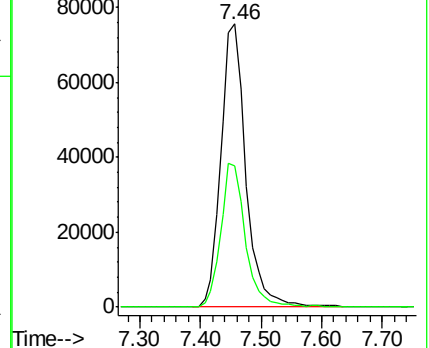
65 100

67 49.9 0.0 99.8



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: 8.21 min Scan# 690

Delta R.T. 0.02 min

Lab File: VD061526.D

Acq: 2 Apr 2019 20:44

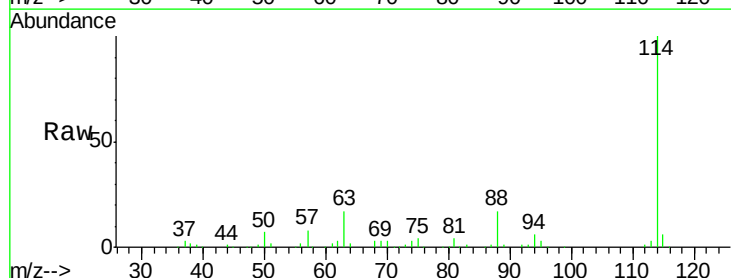
Tgt Ion:114 Resp: 722472

Ion Ratio Lower Upper

114 100

63 16.6 0.0 31.6

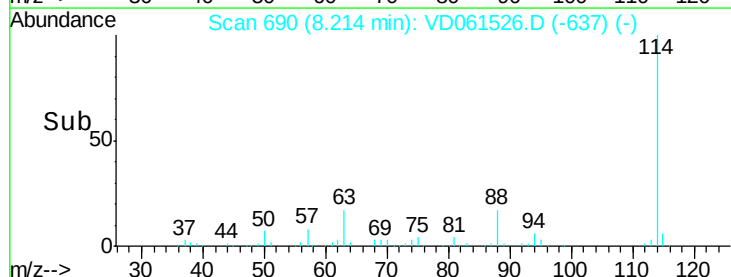
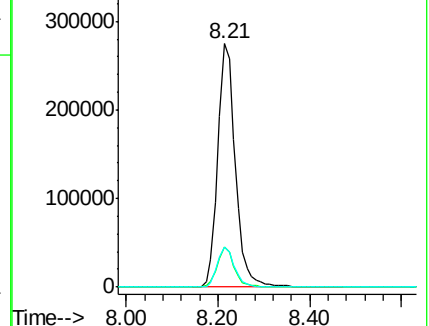
88 16.7 0.0 33.4

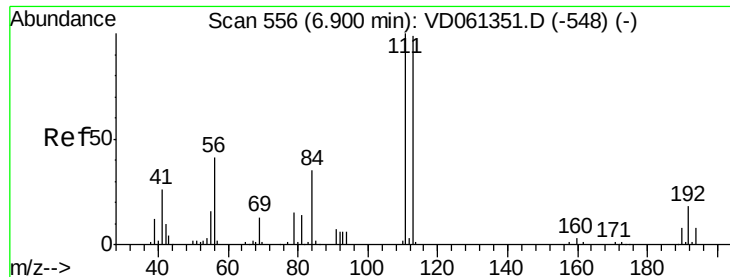


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 62.95 (62.65 to 63.65): VDC

Ion 87.90 (87.60 to 88.60): VDC

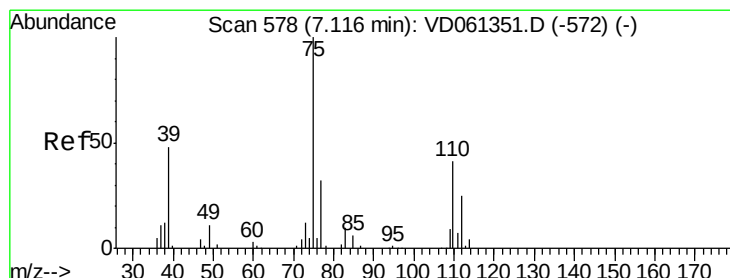
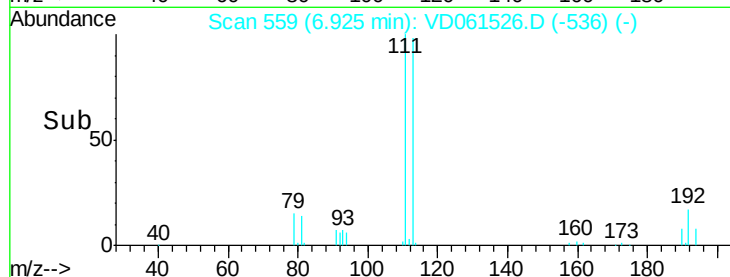
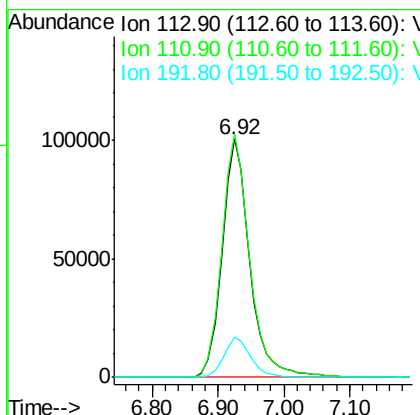
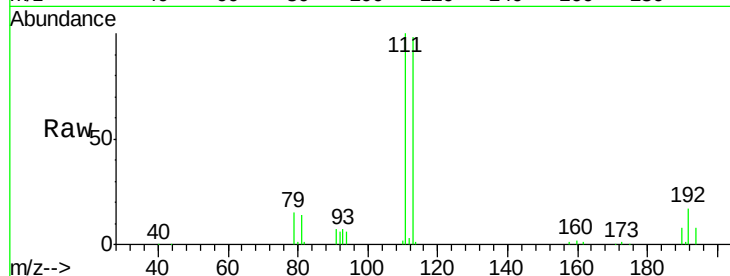




#35  
 Dibromofluoromethane  
 Concen: 50.000 ug/l  
 RT: 6.92 min Scan# 559  
 Delta R.T. 0.02 min  
 Lab File: VD061526.D  
 Acq: 2 Apr 2019 20:44

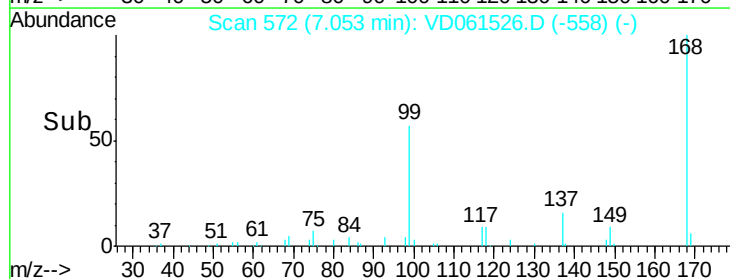
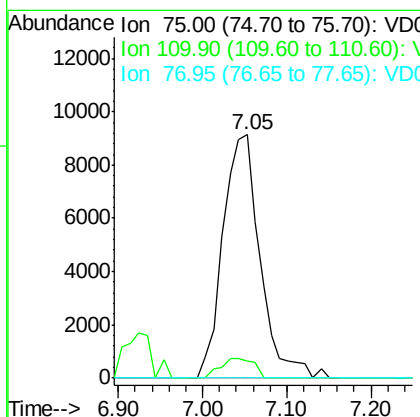
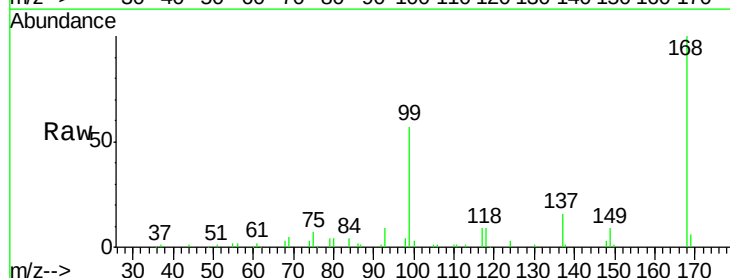
Instrument :  
 MSVOA\_D  
 ClientSampled :  
 VOC-17RE

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.3 | 81.0  | 121.6 |
| 192     | 17.0  | 14.4  | 21.6  |

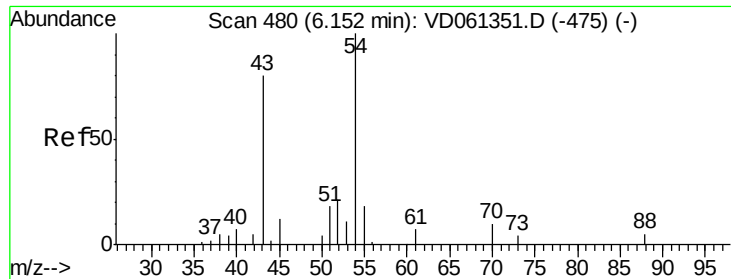


#36  
 1,1-Dichloropropene  
 Concen: 4.450 ug/l  
 RT: 7.05 min Scan# 572  
 Delta R.T. -0.06 min  
 Lab File: VD061526.D  
 Acq: 2 Apr 2019 20:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 7.1   | 20.4  | 61.3# |
| 77      | 0.0   | 24.9  | 37.3# |







#37

Ethyl Acetate

Concen: 3.345 ug/l

RT: 6.15 min Scan# 480

Delta R.T. -0.00 min

Lab File: VD061526.D

Acq: 2 Apr 2019 20:44

Instrument :

MSVOA\_D

ClientSampleId :

VOC-17RE

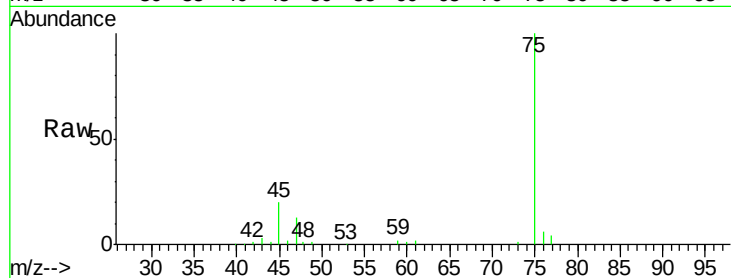
Tot Ion: 43 Resp: 9021

Ion Ratio Lower Upper

43 100

61 94.4 13.8 20.8#

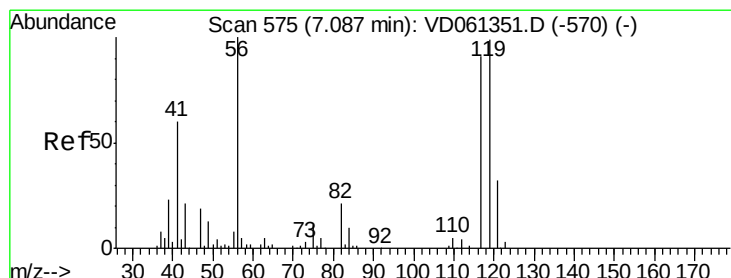
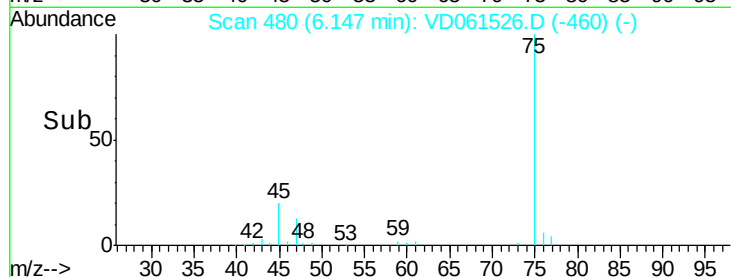
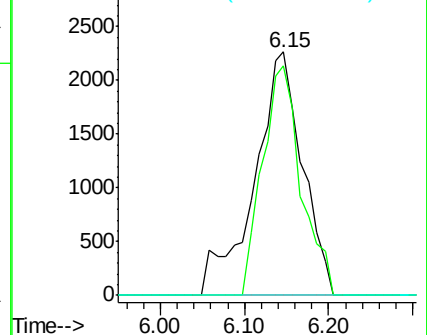
70 0.0 7.8 11.8#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 60.95 (60.65 to 61.65): VDC

Ion 70.00 (69.70 to 70.70): VDC



#38

Carbon Tetrachloride

Concen: 5.172 ug/l

RT: 7.04 min Scan# 571

Delta R.T. -0.04 min

Lab File: VD061526.D

Acq: 2 Apr 2019 20:44

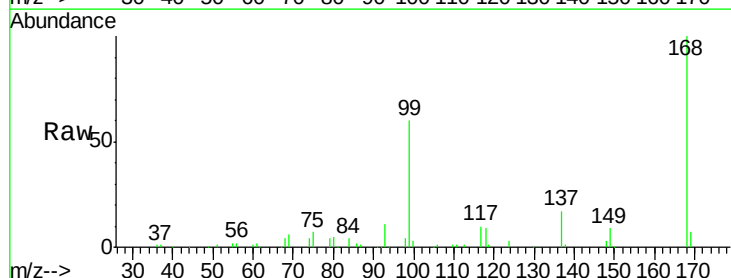
Tgt Ion: 117 Resp: 37478

Ion Ratio Lower Upper

117 100

119 5.5 80.1 120.1#

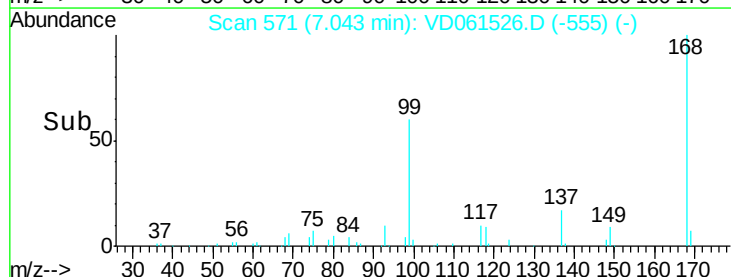
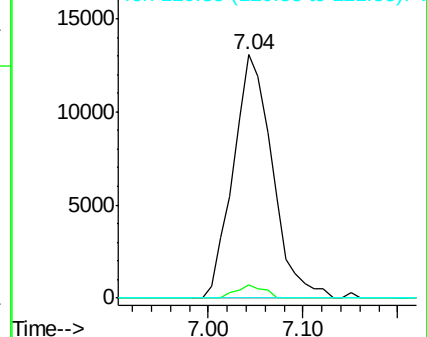
121 0.0 25.6 38.4#

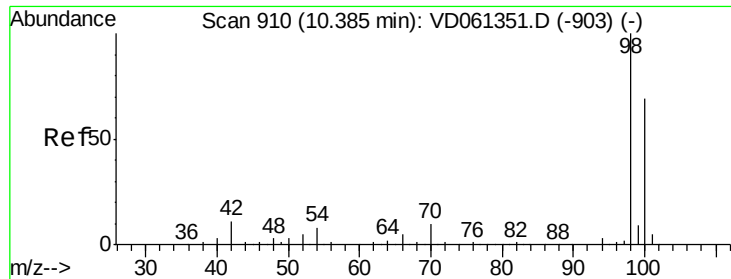


Abundance Ion 116.85 (116.55 to 117.55): V

Ion 118.85 (118.55 to 119.55): V

Ion 120.85 (120.55 to 121.55): V

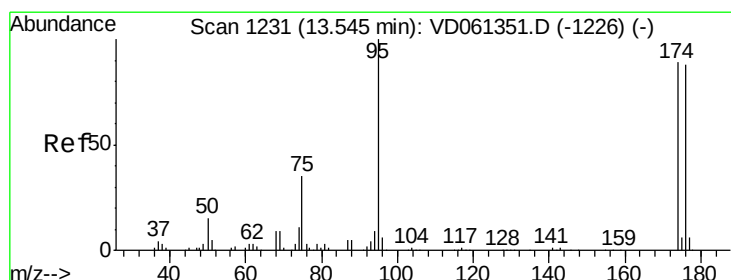
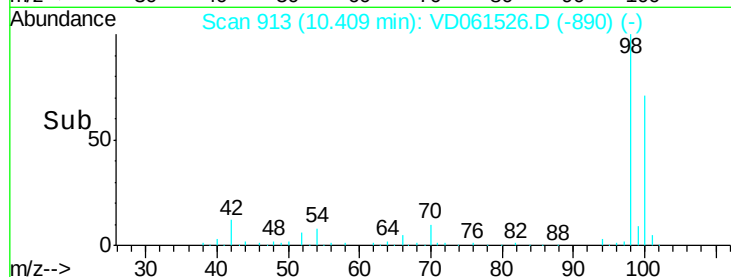
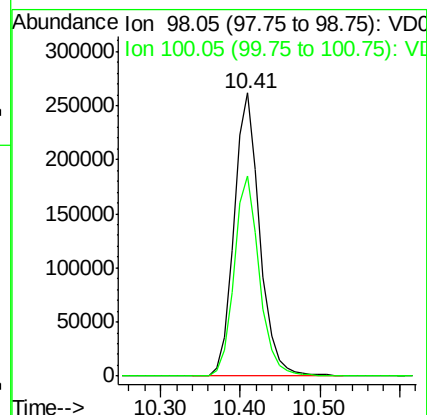
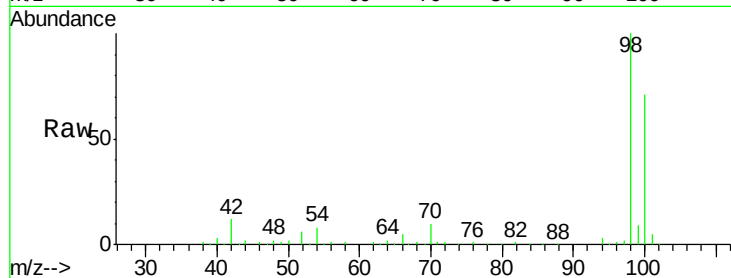




#50  
Toluene-d8  
Concen: N.D. ug/l  
RT: 10.41 min Scan# 913  
Delta R.T. 0.02 min  
Lab File: VD061526.D  
Acq: 2 Apr 2019 20:44

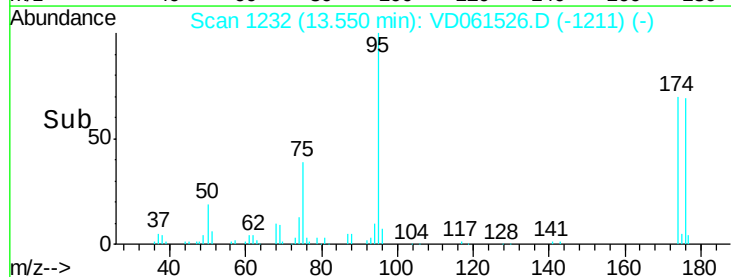
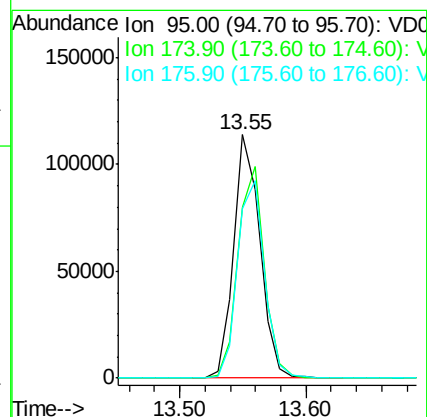
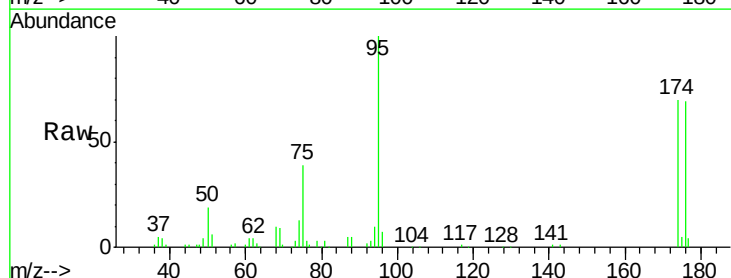
Instrument :  
MSVOA\_D  
ClientSampled :  
VOC-17RE

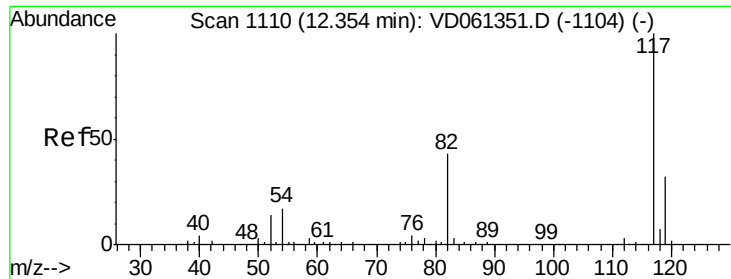
Tot Ion: 98 Resp: 589574  
Ion Ratio Lower Upper  
98 100  
100 70.6 56.2 84.2



#62  
4-Bromofluorobenzene  
Concen: N.D. ug/l  
RT: 13.55 min Scan# 1232  
Delta R.T. 0.01 min  
Lab File: VD061526.D  
Acq: 2 Apr 2019 20:44

Tgt Ion: 95 Resp: 162224  
Ion Ratio Lower Upper  
95 100  
174 70.2 0.0 178.0  
176 69.4 0.0 175.0

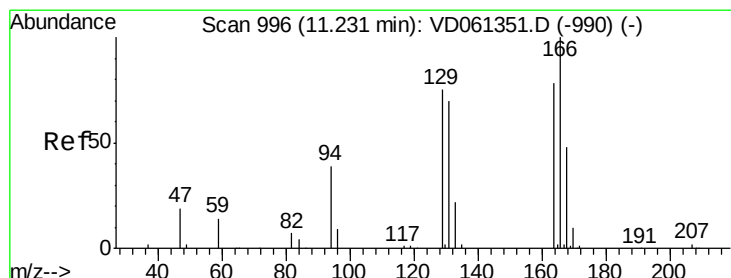
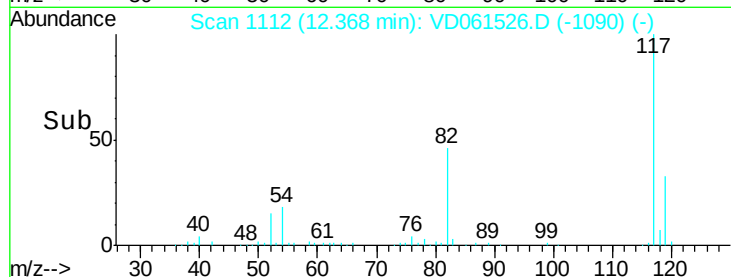
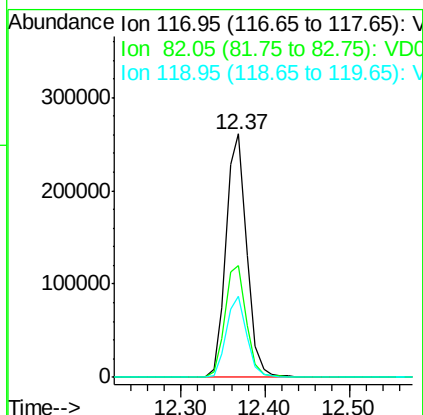
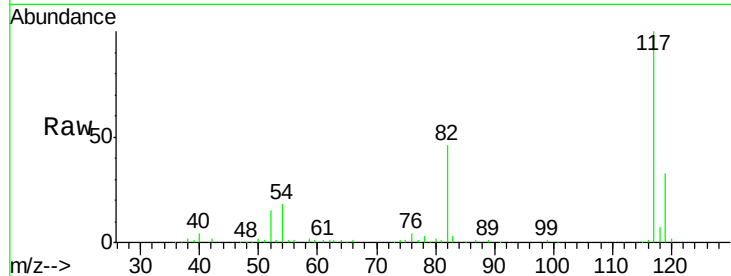




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.37 min Scan# 1112  
Delta R.T. 0.01 min  
Lab File: VD061526.D  
Acq: 2 Apr 2019 20:44

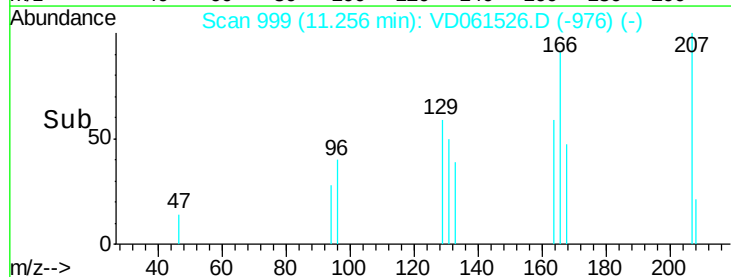
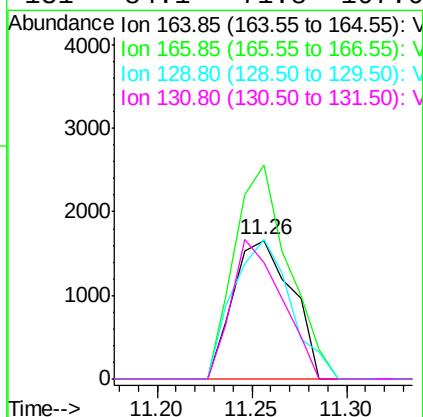
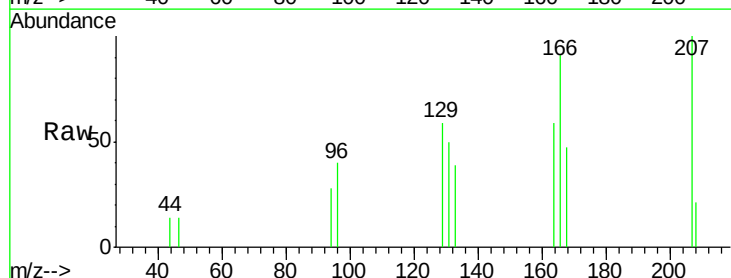
Instrument :  
MSVOA\_D  
ClientSampleId :  
VOC-17RE

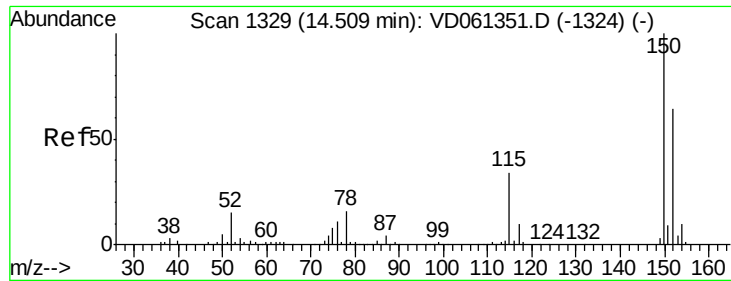
Tot Ion:117 Resp: 447287  
Ion Ratio Lower Upper  
117 100  
82 46.1 34.4 51.6  
119 33.2 25.8 38.6



#64  
Tetrachloroethene  
Concen: 1.014 ug/l  
RT: 11.26 min Scan# 999  
Delta R.T. 0.02 min  
Lab File: VD061526.D  
Acq: 2 Apr 2019 20:44

Tgt Ion:164 Resp: 3560  
Ion Ratio Lower Upper  
164 100  
166 154.1 102.4 153.6#  
129 100.2 76.8 115.2  
131 84.1 71.8 107.6



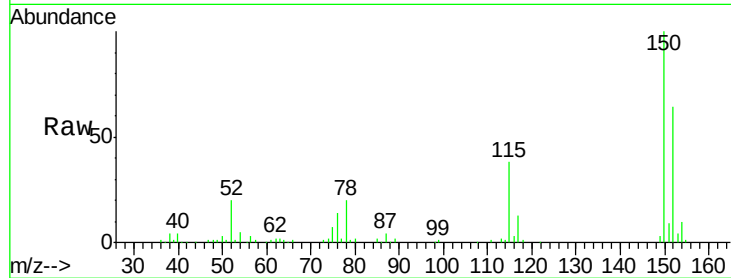


#72

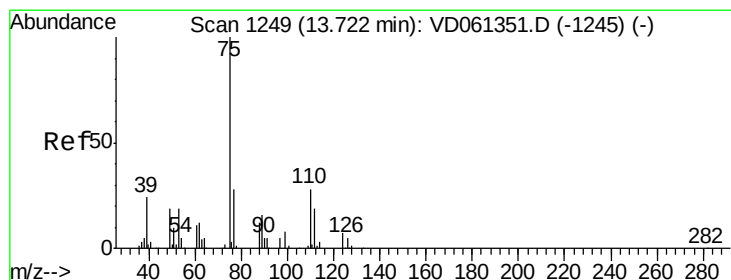
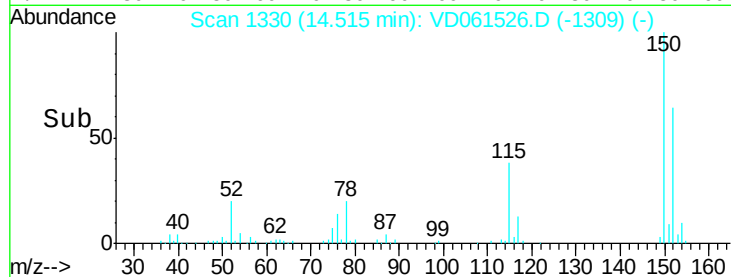
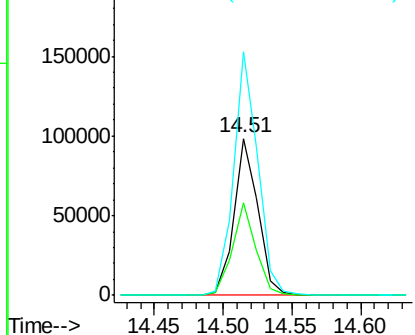
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 14.51 min Scan# 1330  
Delta R.T. 0.01 min  
Lab File: VD061526.D  
Acq: 2 Apr 2019 20:44

Instrument :  
MSVOA\_D  
ClientSampleId :  
VOC-17RE

Tot Ion:152 Resp: 118924  
Ion Ratio Lower Upper  
152 100  
115 59.1 26.9 80.6  
150 155.4 0.0 318.0



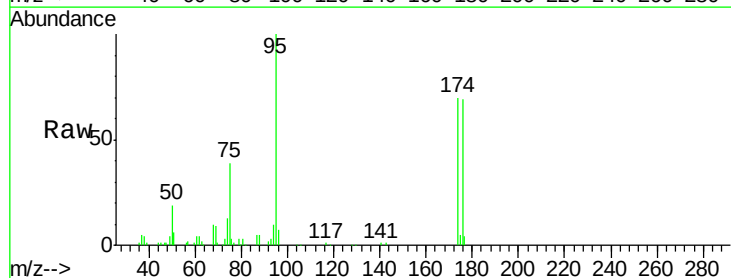
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 115.00 (114.70 to 115.70): V  
Ion 149.90 (149.60 to 150.60): V



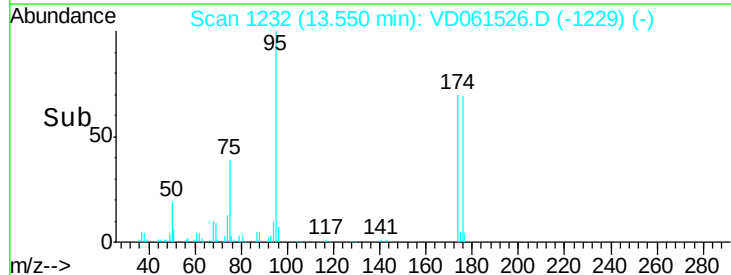
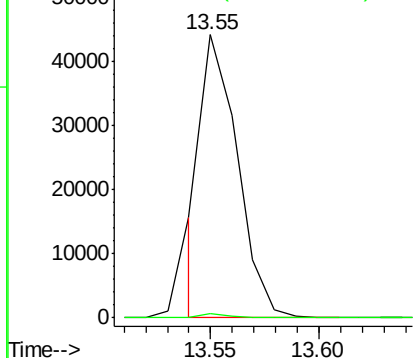
#76

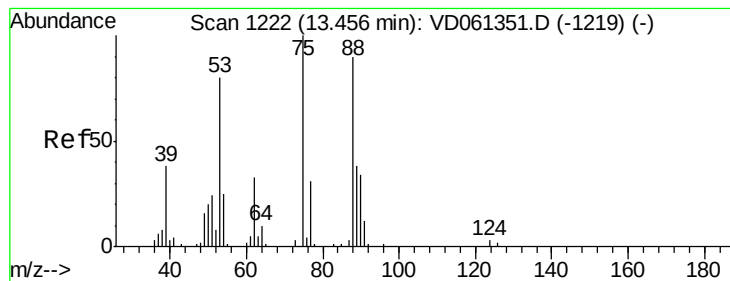
1,2,3-Trichloropropane  
Concen: 29.790 ug/l  
RT: 13.55 min Scan# 1232  
Delta R.T. -0.17 min  
Lab File: VD061526.D  
Acq: 2 Apr 2019 20:44

Tgt Ion: 75 Resp: 51175  
Ion Ratio Lower Upper  
75 100  
77 1.5 16.2 48.5#



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: 116.620 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. 0.09 min

Lab File: VD061526.D

Acq: 2 Apr 2019 20:44

Instrument :

MSVOA\_D

ClientSampleId :

VOC-17RE

Tot Ion: 75 Resp: 61084

Ion Ratio Lower Upper

75 100

53 0.0 63.8 95.8#

89 0.0 30.5 45.7#

