

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD062719\  
 Data File : VD062925.D  
 Acq On : 27 Jun 2019 12:11  
 Operator : VA/AP  
 Sample : VD0627SBL01  
 Misc : 5.00g/5ml/MSVOA D/SOIL  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Jun 28 02:19:30 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D061919S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jun 20 01:50:56 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.02  | 168  | 854892   | 50.00 | ug/l  | -0.03    |
| 34) 1,4-Difluorobenzene    | 8.20  | 114  | 1089244  | 50.00 | ug/l  | -0.02    |
| 63) Chlorobenzene-d5       | 12.35 | 117  | 950952   | 50.00 | ug/l  | -0.02    |
| 72) 1,4-Dichlorobenzene-d4 | 14.51 | 152  | 503927   | 50.00 | ug/l  | -0.01    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.43  | 65   | 485371   | 52.23 | ug/l    | -0.03    |
| Spiked Amount               |       |      | Recovery | =     | 104.46% |          |
| 35) Dibromofluoromethane    | 6.90  | 113  | 494863   | 53.88 | ug/l    | -0.03    |
| Spiked Amount               |       |      | Recovery | =     | 107.76% |          |
| 50) Toluene-d8              | 10.39 | 98   | 1075464  | 53.80 | ug/l    | -0.02    |
| Spiked Amount               |       |      | Recovery | =     | 107.60% |          |
| 62) 4-Bromofluorobenzene    | 13.54 | 95   | 453195   | 49.86 | ug/l    | -0.01    |
| Spiked Amount               |       |      | Recovery | =     | 99.72%  |          |

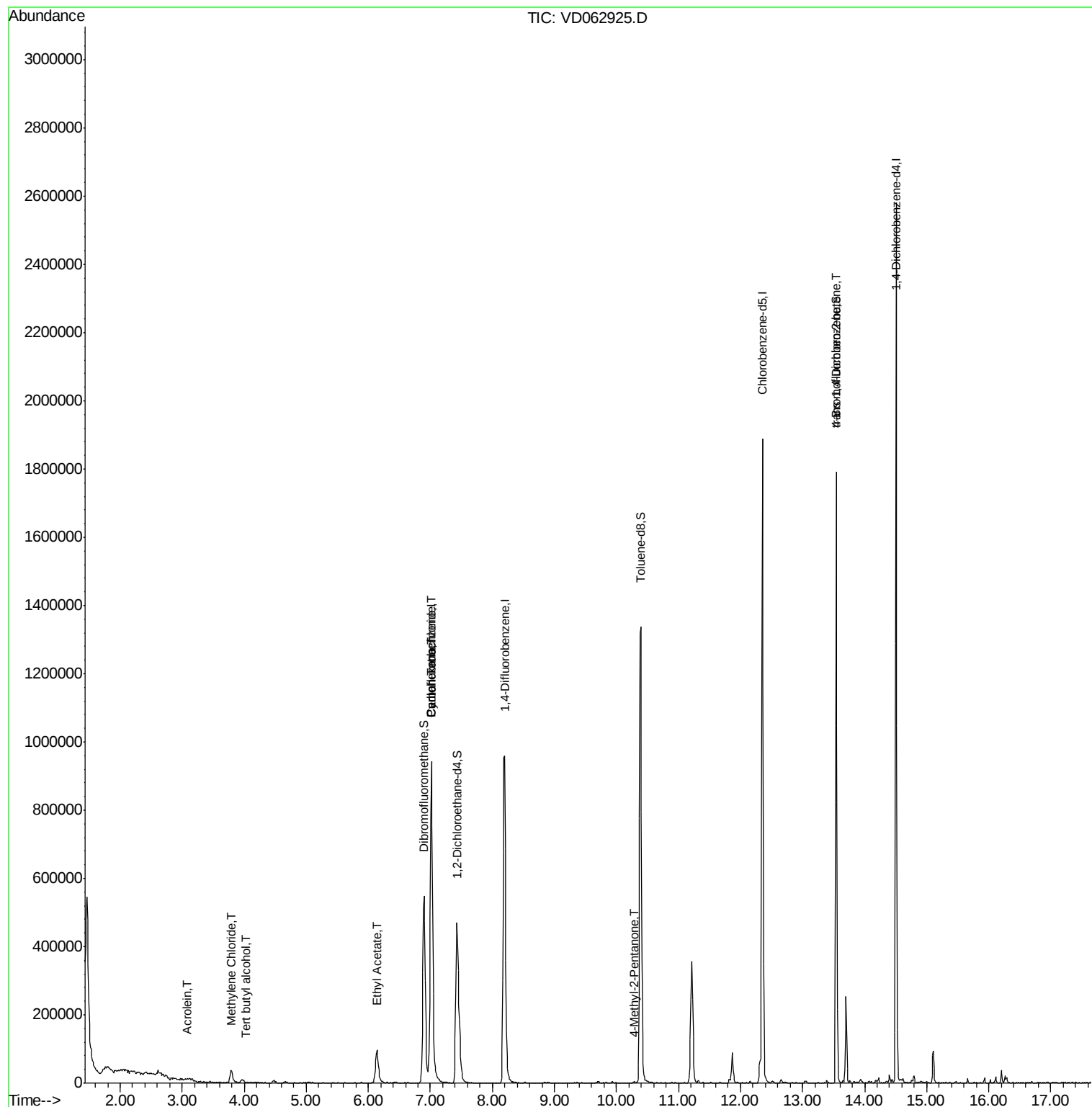
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 4.03  | 59   | 1439     | 3.400     | ug/l # | 77     |
| 13) Acrolein                   | 3.07  | 56   | 726      | 1.680     | ug/l   | 100    |
| 16) Acetone                    | 3.20  | 43   | 8253     | Below Cal | #      | 88     |
| 20) Methylene Chloride         | 3.79  | 84   | 21038    | 2.969     | ug/l   | 90     |
| 31) Cyclohexane                | 7.01  | 56   | 21387    | 2.451     | ug/l # | 28     |
| 37) Ethyl Acetate              | 6.14  | 43   | 9311     | 1.072     | ug/l # | 17     |
| 38) Carbon Tetrachloride       | 7.02  | 117  | 88851    | 5.729     | ug/l # | 15     |
| 51) 4-Methyl-2-Pentanone       | 10.29 | 43   | 4064     | 1.060     | ug/l   | 99     |
| 81) trans-1,4-Dichloro-2-buten | 13.54 | 75   | 213077   | 139.753   | ug/l # | 2      |

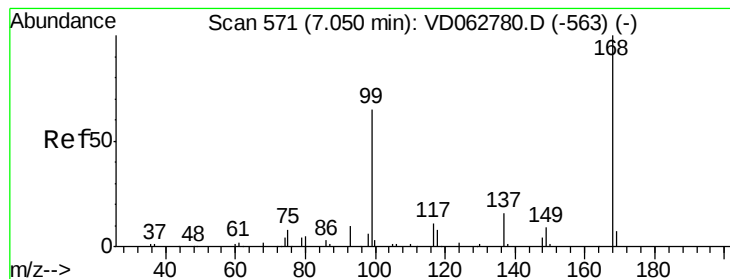
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Sample : VD0627SBL01  
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MSVOA\_D  
ClientSampleId :

Quant Time: Jun 28 02:19:30 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D061919S.M  
Quant Title : SW846 8260  
QLast Update : Thu Jun 20 01:50:56 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.02 min Scan# 568

Delta R.T. -0.03 min

Lab File: VD062925.D

Acq: 27 Jun 2019 12:11

Instrument :

MSVOA\_D

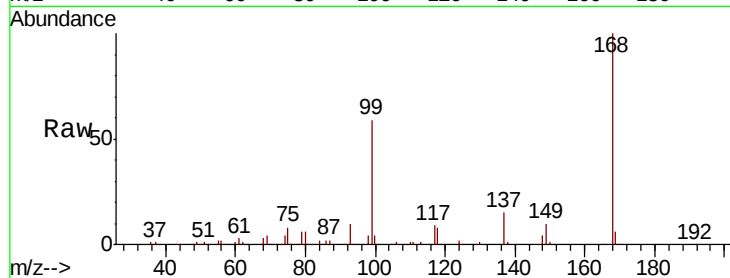
ClientSampleId :

Tot Ion:168 Resp: 854892

Ion Ratio Lower Upper

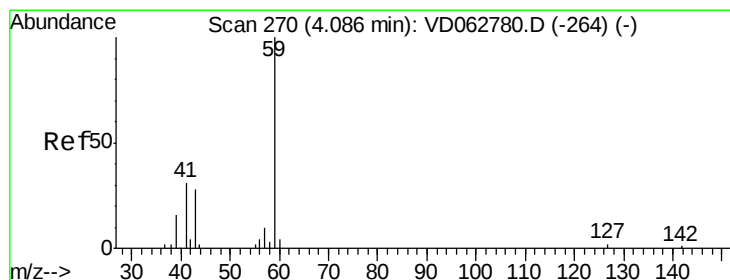
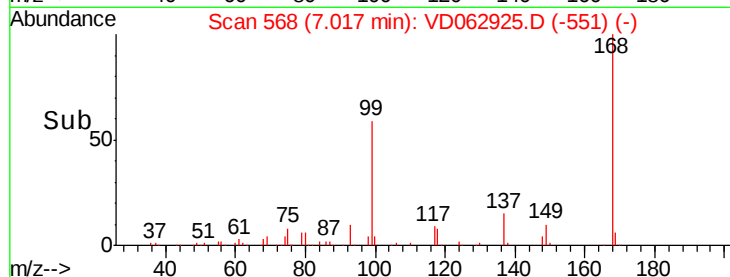
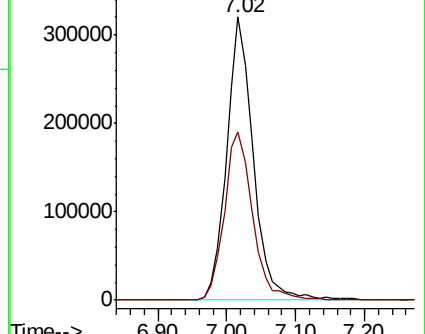
168 100

99 59.5 53.0 79.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#11

Tert butyl alcohol

Concen: 3.400 ug/l

RT: 4.03 min Scan# 265

Delta R.T. -0.05 min

Lab File: VD062925.D

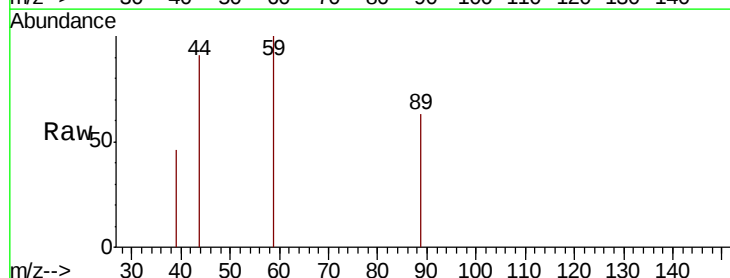
Acq: 27 Jun 2019 12:11

Tgt Ion: 59 Resp: 1439

Ion Ratio Lower Upper

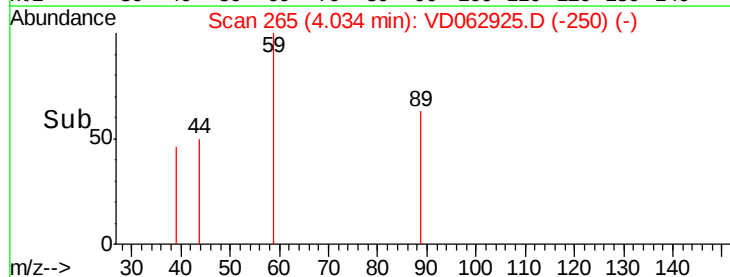
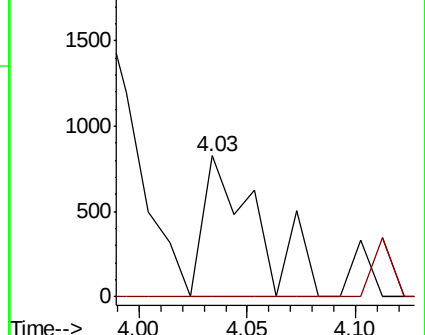
59 100

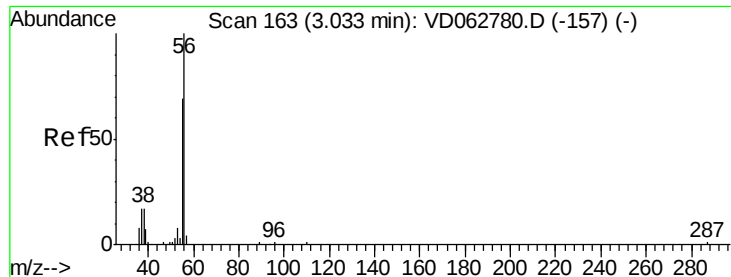
57 0.0 6.6 10.0#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC





#13

Acrolein

Concen: 1.680 ug/l

RT: 3.07 min Scan# 167

Delta R.T. 0.04 min

Lab File: VD062925.D

Acq: 27 Jun 2019 12:11

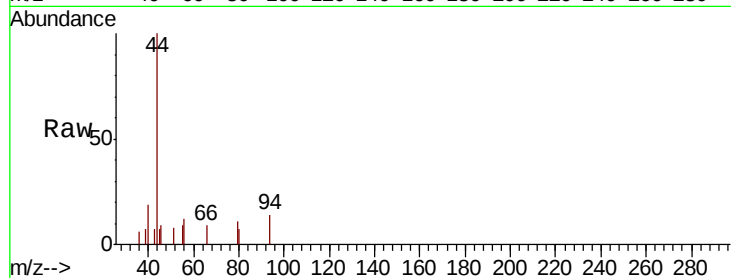
Instrument :  
MSVOA\_D  
ClientSampled :

Tot Ion: 56 Resp: 726

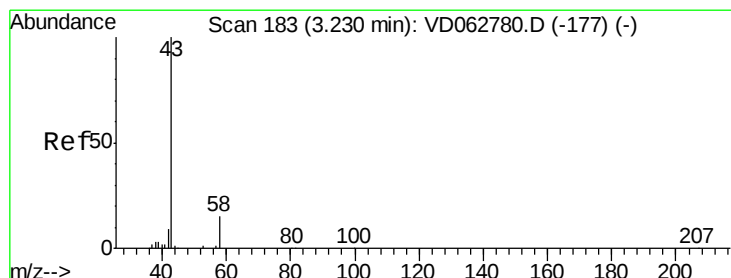
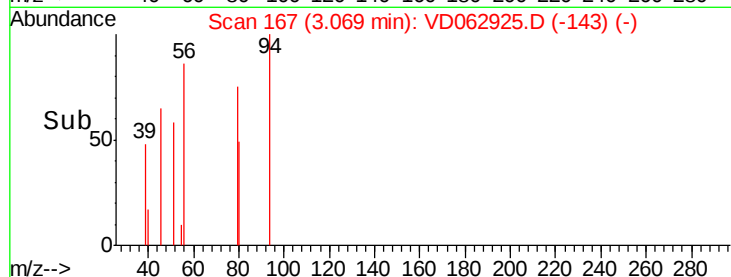
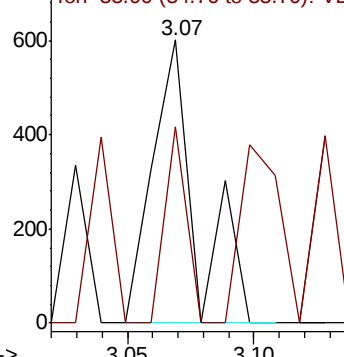
Ion Ratio Lower Upper

56 100

55 69.2 55.4 83.0



Abundance Ion 55.95 (55.65 to 56.65): VDC  
Ion 55.00 (54.70 to 55.70): VDC



#16

Acetone

Concen: Below Cal

RT: 3.20 min Scan# 180

Delta R.T. -0.03 min

Lab File: VD062925.D

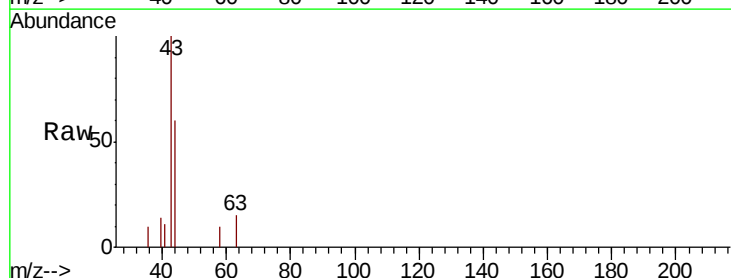
Acq: 27 Jun 2019 12:11

Tgt Ion: 43 Resp: 8253

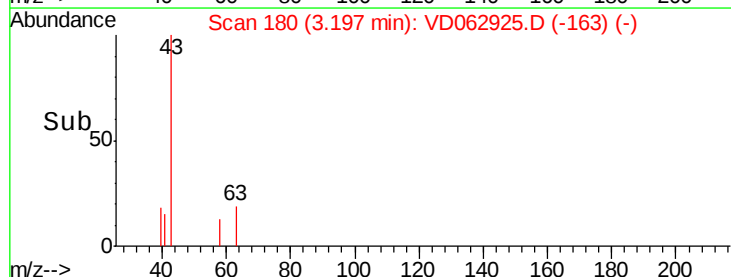
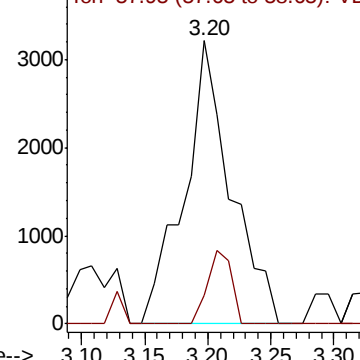
Ion Ratio Lower Upper

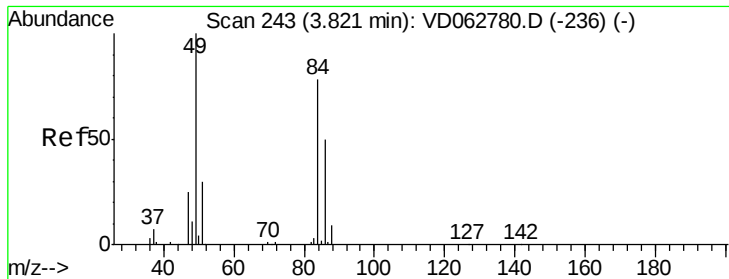
43 100

58 9.9 11.9 17.9#



Abundance Ion 42.95 (42.65 to 43.65): VDC  
Ion 57.95 (57.65 to 58.65): VDC

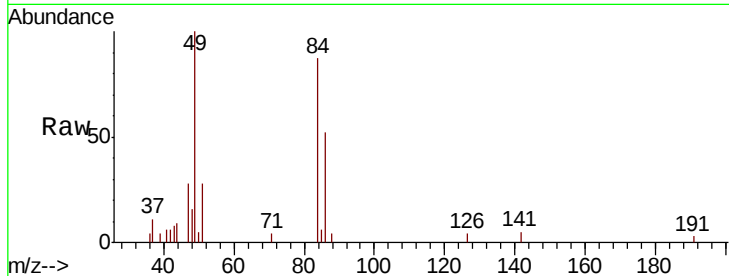




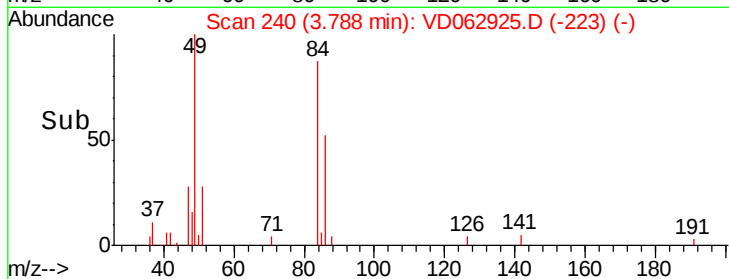
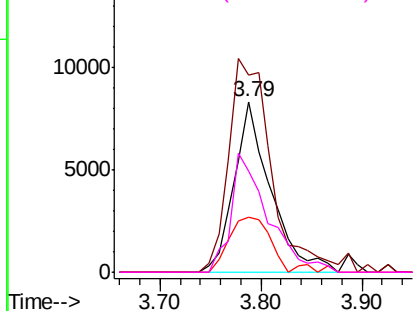
#20  
Methvlene Chloride  
Concen: 2.969 ug/l  
RT: 3.79 min Scan# 240  
Delta R.T. -0.03 min  
Lab File: VD062925.D  
Acq: 27 Jun 2019 12:11

Instrument :  
MSVOA\_D  
ClientSampleId :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 21038 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 115.4 | 102.9 | 154.3 |
| 51       | 32.6  | 31.2  | 46.8  |
| 86       | 59.5  | 51.4  | 77.2  |

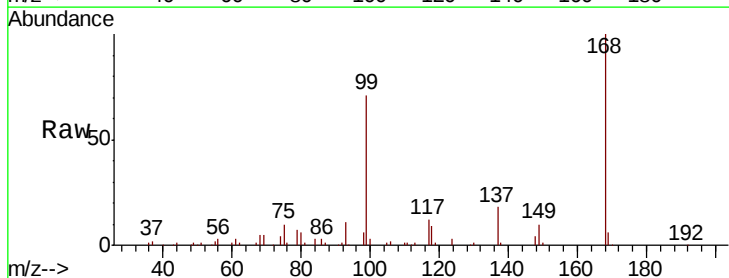
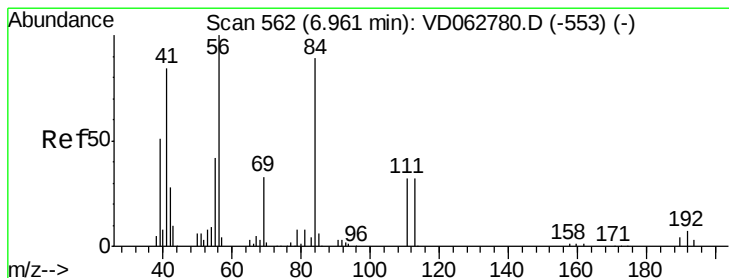


Abundance Ion 83.95 (83.65 to 84.65): VDC  
Ion 48.90 (48.60 to 49.60): VDC  
Ion 50.90 (50.60 to 51.60): VDC  
Ion 85.90 (85.60 to 86.60): VDC

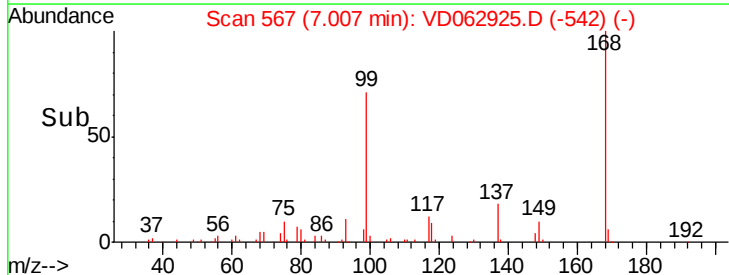
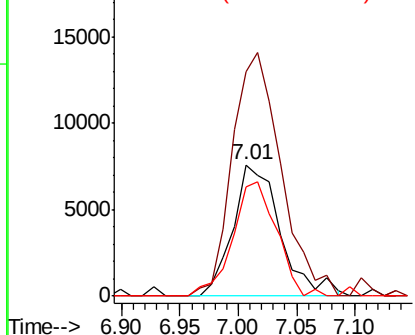


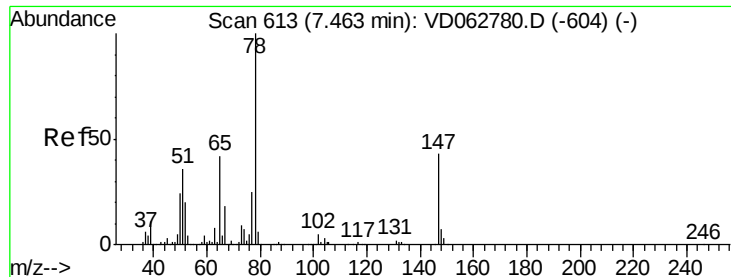
#31  
Cyclohexane  
Concen: 2.451 ug/l  
RT: 7.01 min Scan# 567  
Delta R.T. 0.05 min  
Lab File: VD062925.D  
Acq: 27 Jun 2019 12:11

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 56    | Resp: | 21387 |
| Ion      | Ratio | Lower | Upper |
| 56       | 100   |       |       |
| 69       | 171.3 | 26.6  | 39.8# |
| 84       | 83.0  | 75.5  | 113.3 |



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

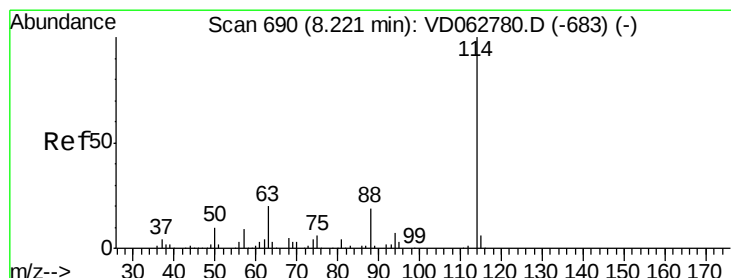
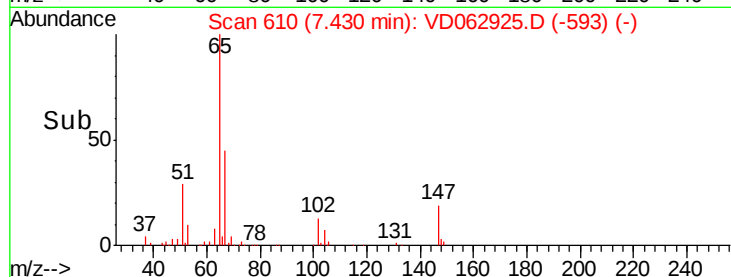
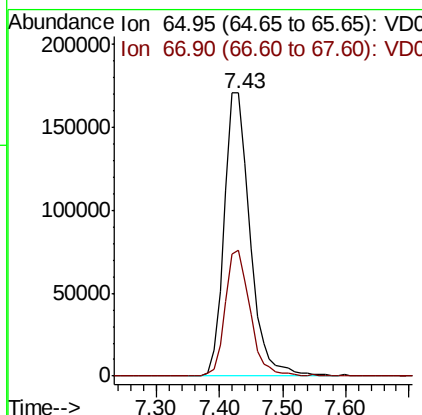
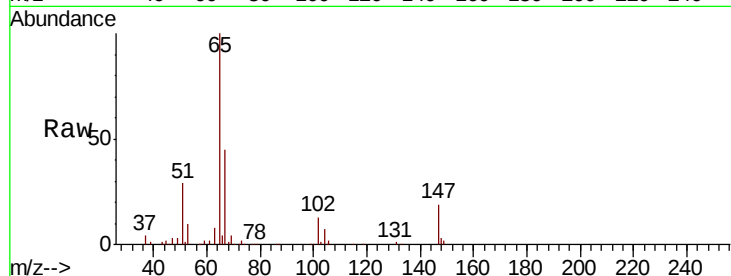




#33  
 1,2-Dichloroethane-d4  
 Concen: 52.232 ug/l  
 RT: 7.43 min Scan# 610  
 Delta R.T. -0.03 min  
 Lab File: VD062925.D  
 Acq: 27 Jun 2019 12:11

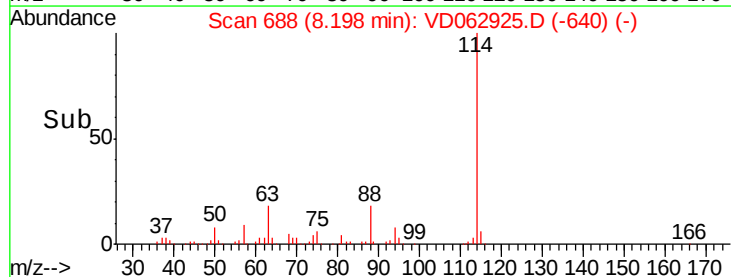
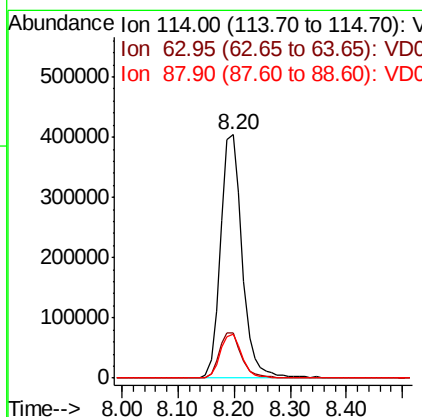
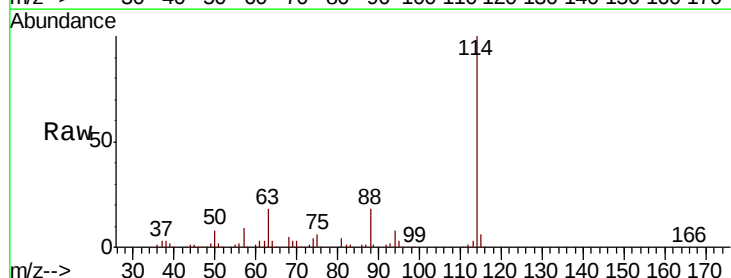
Instrument :  
 MSVOA\_D  
 ClientSampleId :

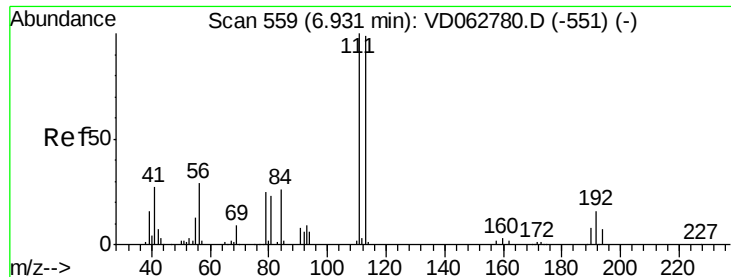
Tot Ion: 65 Resp: 485371  
 Ion Ratio Lower Upper  
 65 100  
 67 44.6 0.0 87.4



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.20 min Scan# 688  
 Delta R.T. -0.02 min  
 Lab File: VD062925.D  
 Acq: 27 Jun 2019 12:11

Tgt Ion: 114 Resp: 1089244  
 Ion Ratio Lower Upper  
 114 100  
 63 18.4 0.0 40.0  
 88 18.2 0.0 38.8





#35

Dibromofluoromethane

Concen: 53.880 ug/l

RT: 6.90 min Scan# 556

Delta R.T. -0.03 min

Lab File: VD062925.D

Acq: 27 Jun 2019 12:11

Instrument :

MSVOA\_D

ClientSampleId :

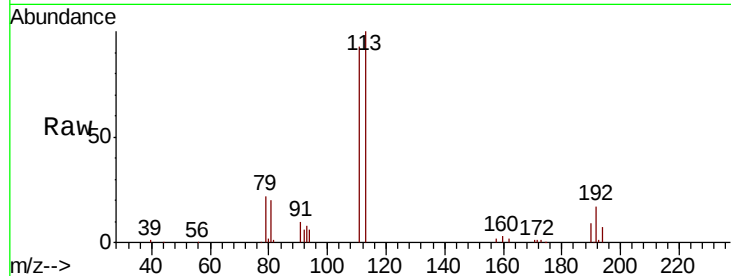
Tot Ion:113 Resp: 494863

Ion Ratio Lower Upper

113 100

111 93.2 81.2 121.8

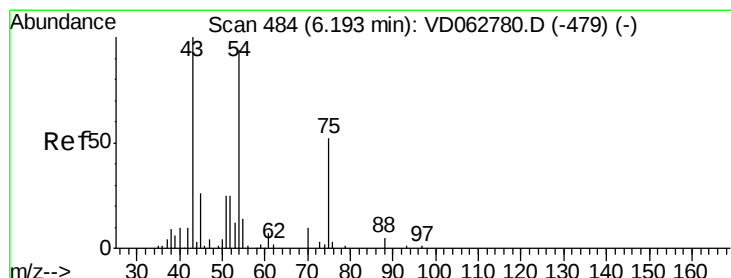
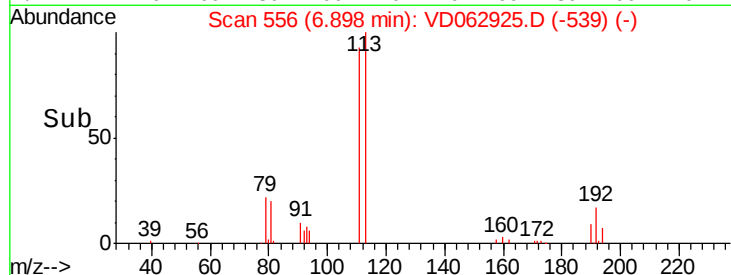
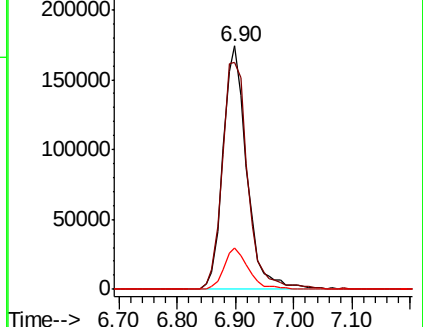
192 16.9 12.9 19.3



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



#37

Ethyl Acetate

Concen: 1.072 ug/l

RT: 6.14 min Scan# 479

Delta R.T. -0.05 min

Lab File: VD062925.D

Acq: 27 Jun 2019 12:11

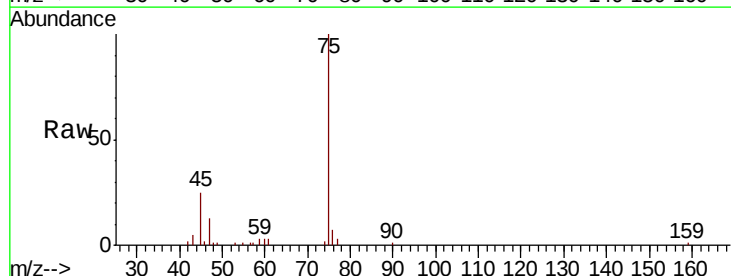
Tgt Ion: 43 Resp: 9311

Ion Ratio Lower Upper

43 100

61 62.1 11.6 17.4#

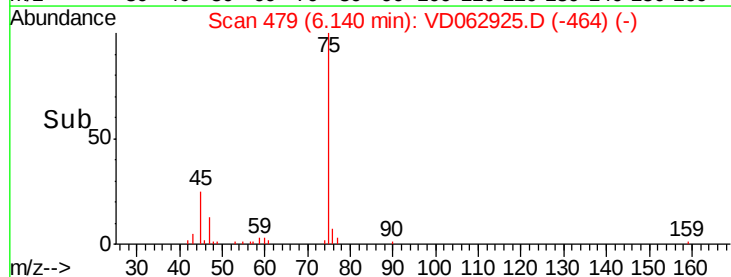
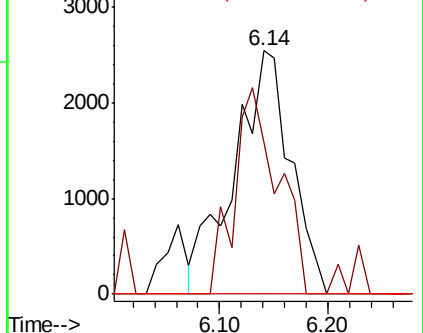
70 0.0 6.4 9.6#

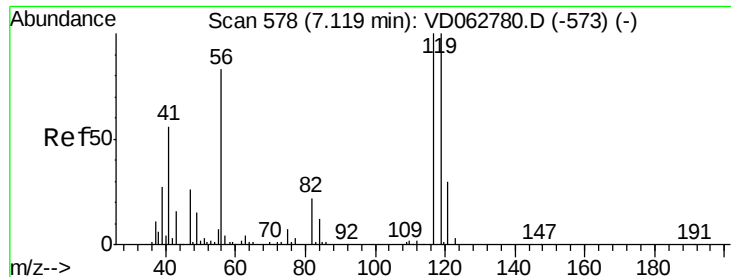


Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 60.95 (60.65 to 61.65): VDC

Ion 70.00 (69.70 to 70.70): VDC





#38

Carbon Tetrachloride

Concen: 5.729 ug/l

RT: 7.02 min Scan# 568

Delta R.T. -0.10 min

Lab File: VD062925.D

Acq: 27 Jun 2019 12:11

Instrument :

MSVOA\_D

ClientSampleId :

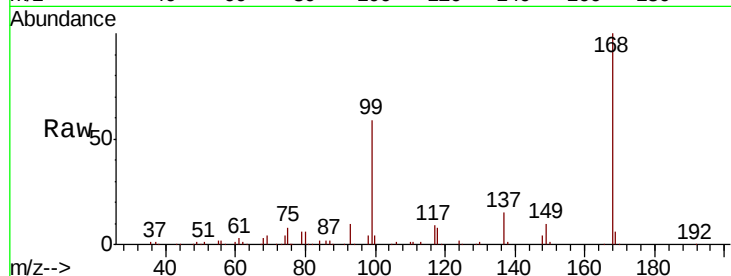
Tot Ion:117 Resp: 88851

Ion Ratio Lower Upper

117 100

119 3.4 75.4 113.2#

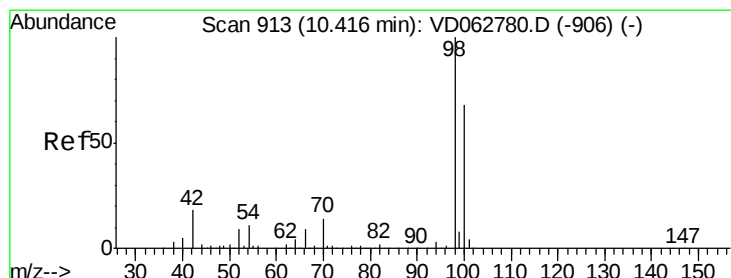
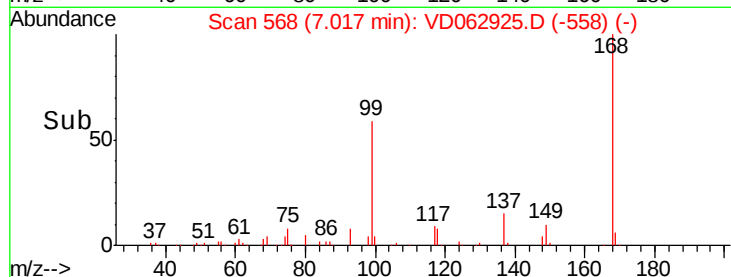
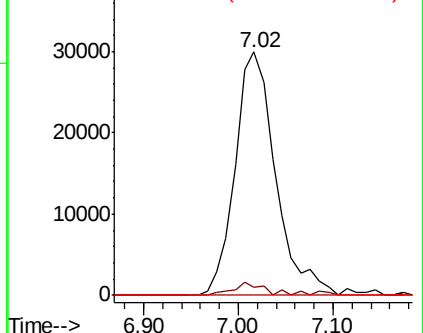
121 0.0 22.3 33.5#



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: 53.801 ug/l

RT: 10.39 min Scan# 911

Delta R.T. -0.02 min

Lab File: VD062925.D

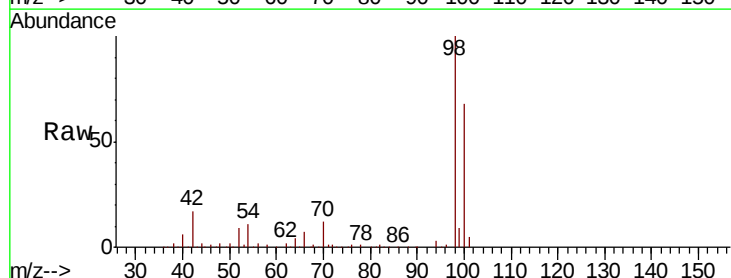
Acq: 27 Jun 2019 12:11

Tgt Ion: 98 Resp: 1075464

Ion Ratio Lower Upper

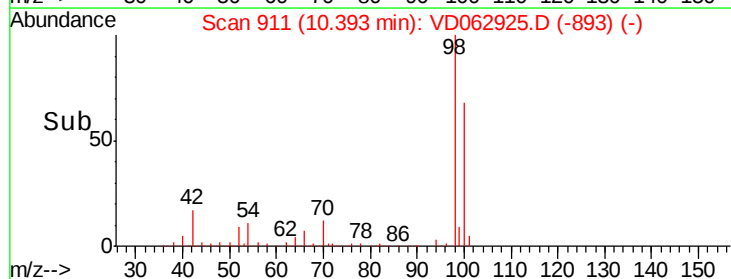
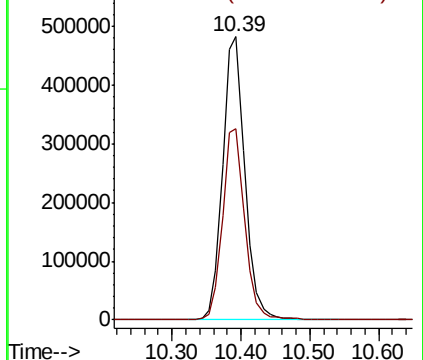
98 100

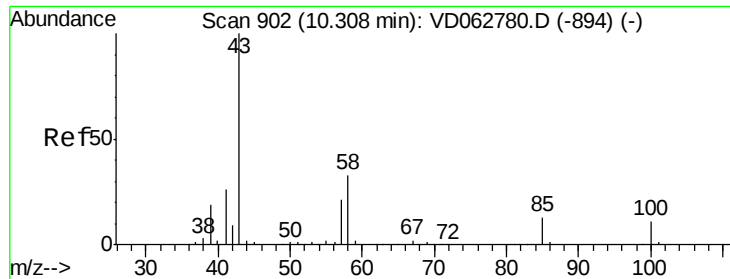
100 67.5 54.7 82.1



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: 1.060 ug/l

RT: 10.29 min Scan# 901

Delta R.T. -0.01 min

Lab File: VD062925.D

Acq: 27 Jun 2019 12:11

Instrument :

MSVOA\_D

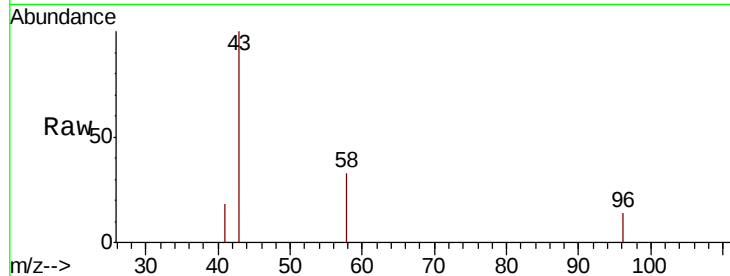
ClientSampleId :

Tot Ion: 43 Resp: 4064

Ion Ratio Lower Upper

43 100

58 32.6 26.6 40.0



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC

2500

2000

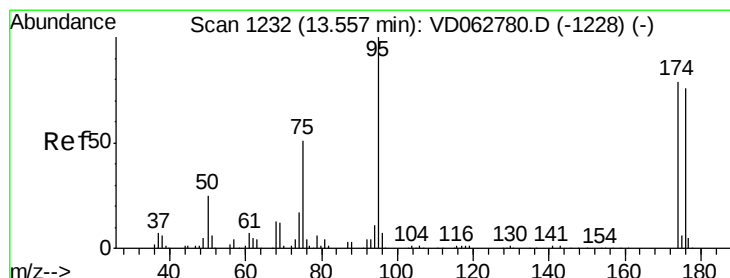
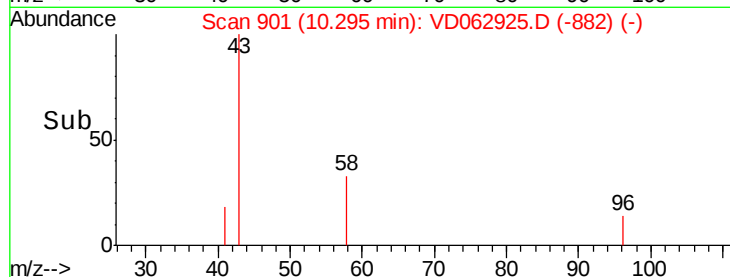
1500

1000

500

0

Time-->



#62

4-Bromofluorobenzene

Concen: 49.860 ug/l

RT: 13.54 min Scan# 1231

Delta R.T. -0.01 min

Lab File: VD062925.D

Acq: 27 Jun 2019 12:11

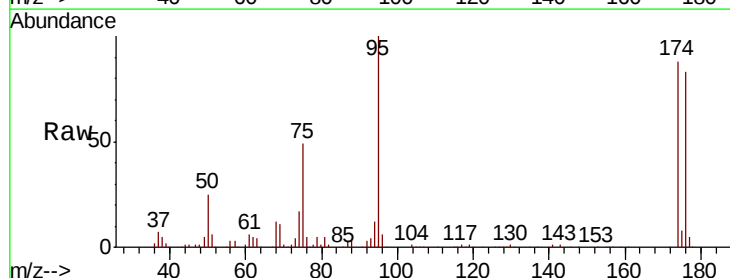
Tgt Ion: 95 Resp: 453195

Ion Ratio Lower Upper

95 100

174 87.8 0.0 158.0

176 83.5 0.0 151.6



Abundance Ion 95.00 (94.70 to 95.70): VDC

Ion 173.90 (173.60 to 174.60): V

Ion 175.90 (175.60 to 176.60): V

400000

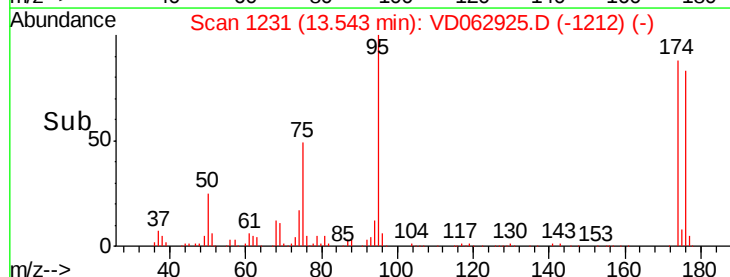
300000

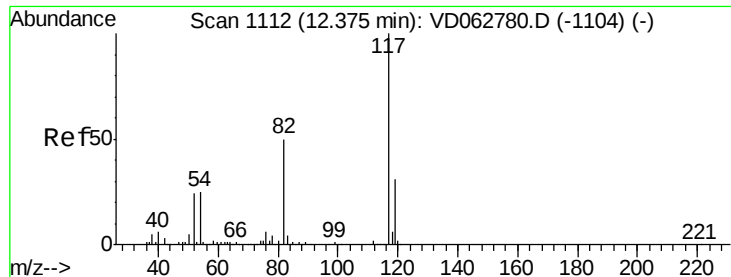
200000

100000

0

Time-->

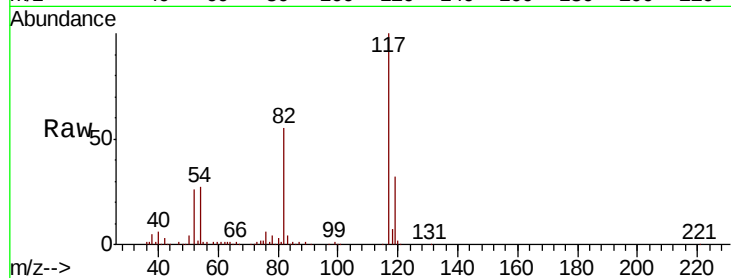




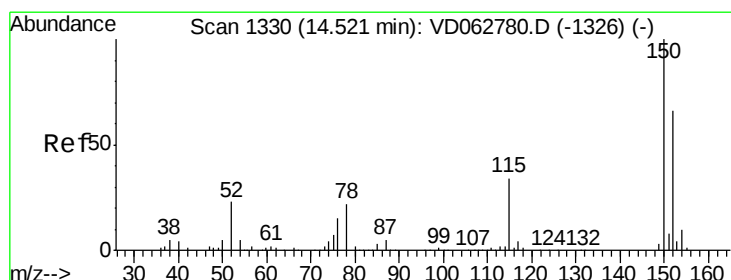
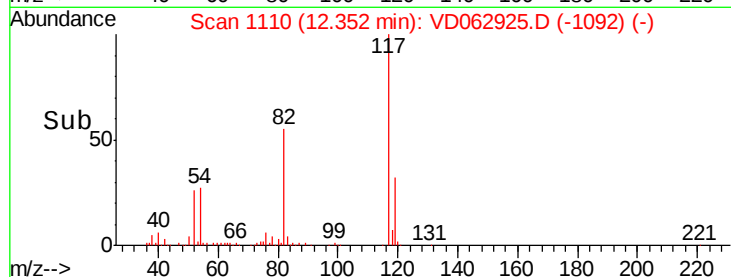
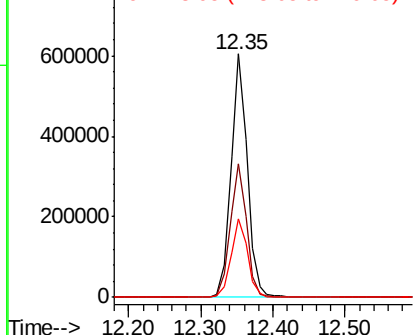
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.35 min Scan# 1110  
Delta R.T. -0.02 min  
Lab File: VD062925.D  
Acq: 27 Jun 2019 12:11

Instrument :  
MSVOA\_D  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 55.1  | 40.4  | 60.6  |
| 119     | 32.4  | 25.2  | 37.8  |

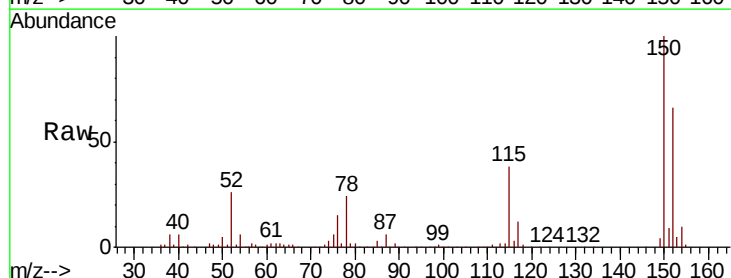


Abundance Ion 116.95 (116.65 to 117.65): V  
Ion 82.05 (81.75 to 82.75): V  
Ion 118.95 (118.65 to 119.65): V

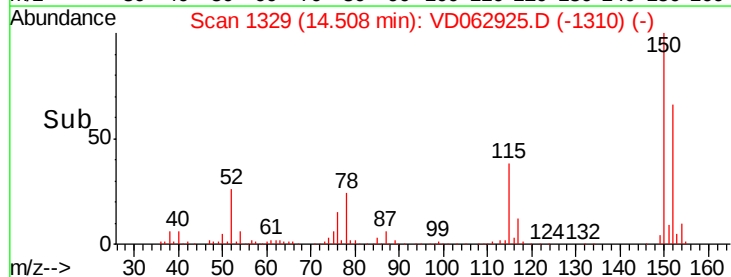
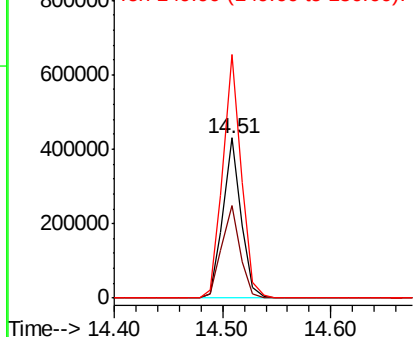


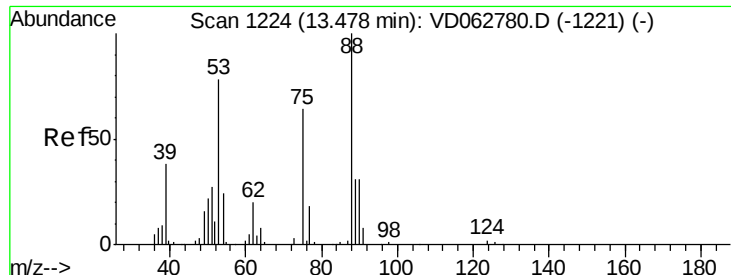
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 14.51 min Scan# 1329  
Delta R.T. -0.01 min  
Lab File: VD062925.D  
Acq: 27 Jun 2019 12:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 58.0  | 29.2  | 87.6  |
| 150     | 151.8 | 0.0   | 305.8 |



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: 139.753 ug/l

RT: 13.54 min Scan# 1231

Delta R.T. 0.07 min

Lab File: VD062925.D

Acq: 27 Jun 2019 12:11

Instrument :

MSVOA\_D

ClientSampleId :

Tot Ion: 75 Resp: 213077

Ion Ratio Lower Upper

75 100

53 0.0 97.8 146.8#

89 0.0 39.4 59.2#

