

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD013019\  
 Data File : VD060808.D  
 Acq On : 30 Jan 2019 16:25  
 Operator : VA/AP  
 Sample : K1282-21RE  
 Misc : 4.44g/5ml/MSVOA D/SOIL  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 TP-6RE

Quant Time: Jan 31 05:02:35 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D012819S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jan 29 13:53:55 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 6.80  | 168  | 396642   | 50.00 | ug/l  | 0.01     |
| 34) 1,4-Difluorobenzene    | 7.99  | 114  | 480584   | 50.00 | ug/l  | 0.01     |
| 63) Chlorobenzene-d5       | 12.16 | 117  | 248774   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 14.33 | 152  | 39523    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.22  | 65   | 233698   | 38.43 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 76.86% |          |
| 35) Dibromofluoromethane    | 6.69  | 113  | 191856   | 41.63 | ug/l   | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 83.26% |          |
| 50) Toluene-d8              | 10.19 | 98   | 347816   | 32.32 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 64.64% |          |
| 62) 4-Bromofluorobenzene    | 13.35 | 95   | 66522    | 12.30 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 24.60% |          |

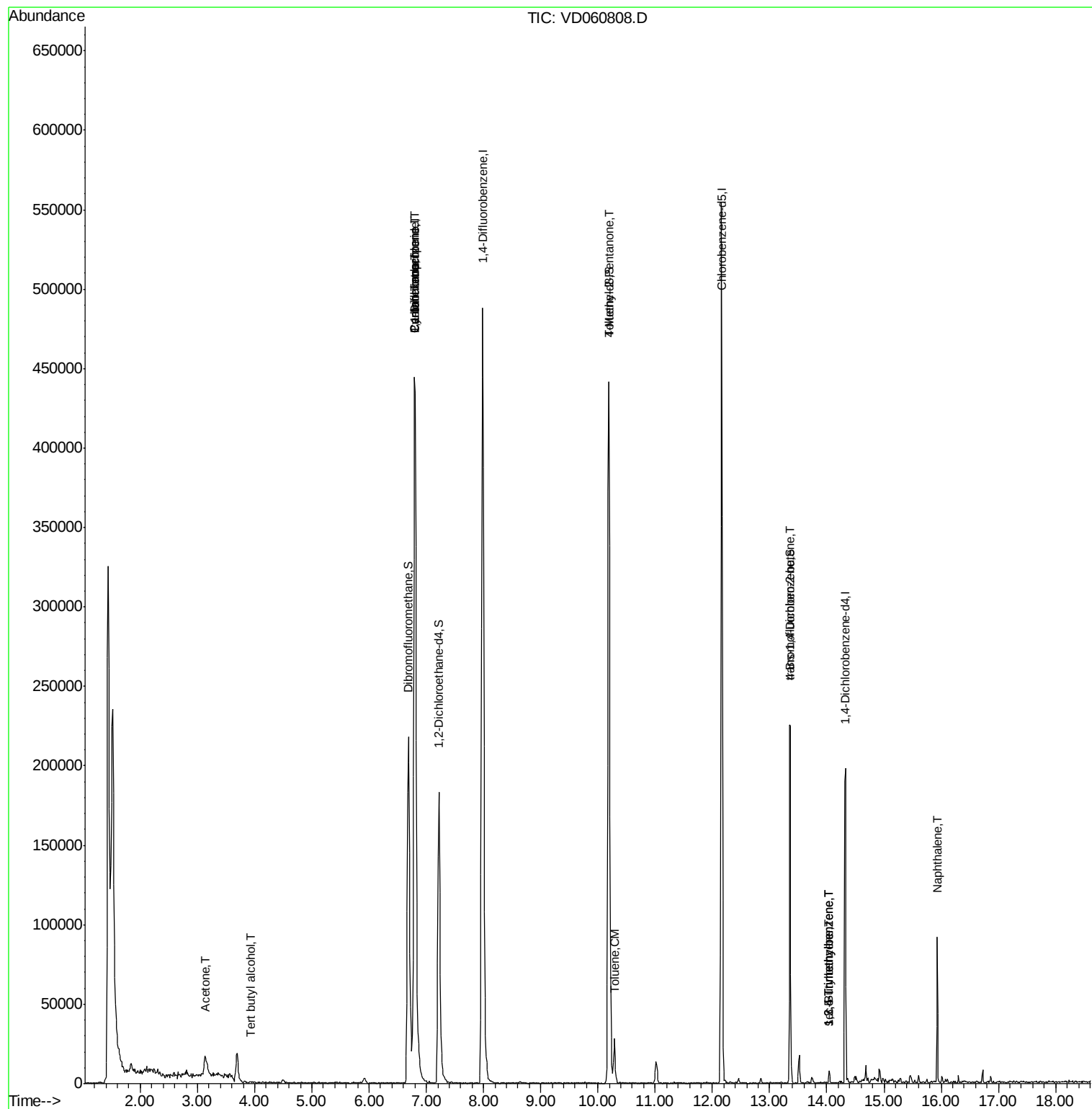
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 3.92  | 59   | 429      | 1.476     | ug/l # | 69     |
| 13) Acrolein                   | 2.92  | 56   | 390      | Below Cal | #      | 66     |
| 16) Acetone                    | 3.13  | 43   | 36017    | 41.009    | ug/l   | 100    |
| 20) Methylene Chloride         | 3.69  | 84   | 10157    | Below Cal | #      | 86     |
| 31) Cyclohexane                | 6.79  | 56   | 12044    | 2.158     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 6.79  | 75   | 41634    | 7.256     | ug/l # | 53     |
| 38) Carbon Tetrachloride       | 6.79  | 117  | 47276    | 6.570     | ug/l # | 15     |
| 51) 4-Methyl-2-Pentanone       | 10.19 | 43   | 3408     | 1.575     | ug/l # | 1      |
| 52) Toluene                    | 10.29 | 92   | 10735    | 1.494     | ug/l   | 87     |
| 80) 1,3,5-Trimethylbenzene     | 14.04 | 105  | 4097     | 1.510     | ug/l   | 94     |
| 81) trans-1,4-Dichloro-2-buten | 13.36 | 75   | 36670    | 194.072   | ug/l # | 1      |
| 84) 1,2,4-Trimethylbenzene     | 14.04 | 105  | 4097     | 1.510     | ug/l   | 94     |
| 85) sec-Butylbenzene           | 14.04 | 105  | 4097     | 1.268     | ug/l # | 64     |
| 95) Naphthalene                | 15.93 | 128  | 46300    | 28.939    | ug/l # | 96     |

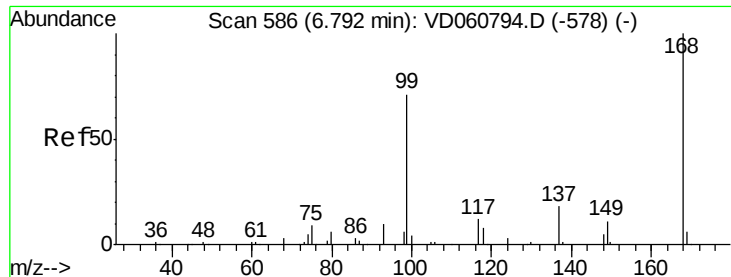
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD013019\  
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ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
TP-6RE

Quant Time: Jan 31 05:02:35 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D012819S.M  
Quant Title : SW846 8260  
QLast Update : Tue Jan 29 13:53:55 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 6.80 min Scan# 587

Delta R.T. 0.01 min

Lab File: VD060808.D

Acq: 30 Jan 2019 16:25

Instrument :

MSVOA\_D

ClientSampleId :

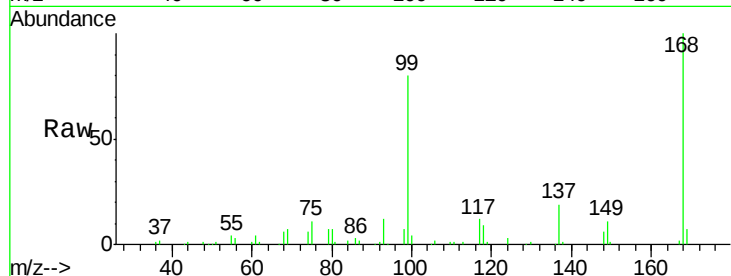
TP-6RE

Tot Ion:168 Resp: 396642

Ion Ratio Lower Upper

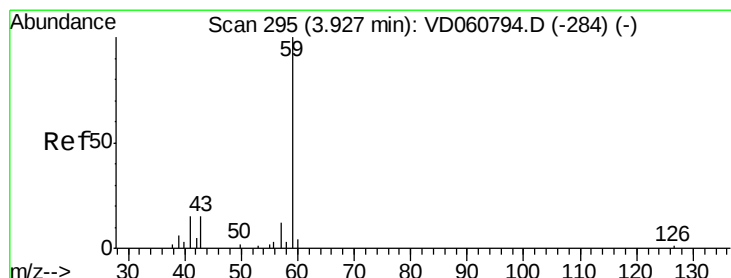
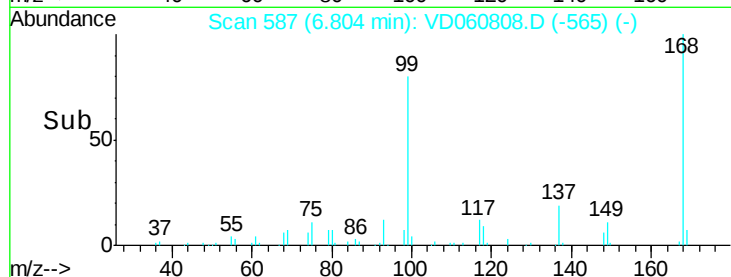
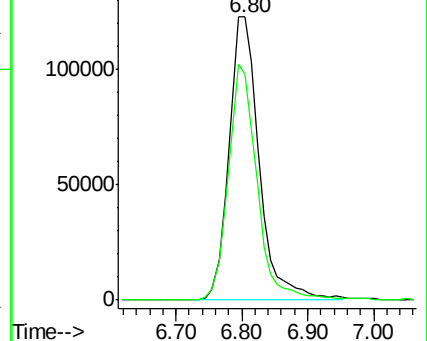
168 100

99 79.8 59.2 88.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#11

Tert butyl alcohol

Concen: 1.476 ug/l

RT: 3.92 min Scan# 294

Delta R.T. -0.01 min

Lab File: VD060808.D

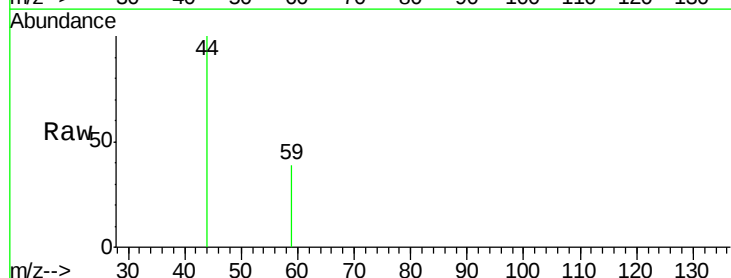
Acq: 30 Jan 2019 16:25

Tgt Ion: 59 Resp: 429

Ion Ratio Lower Upper

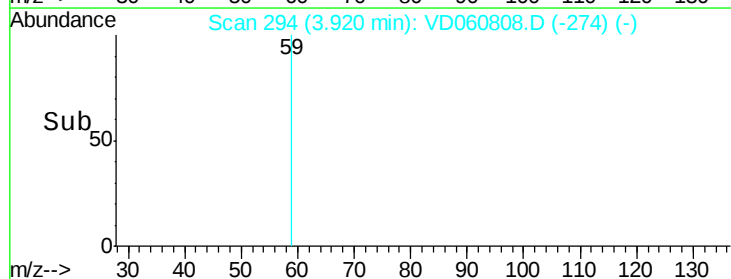
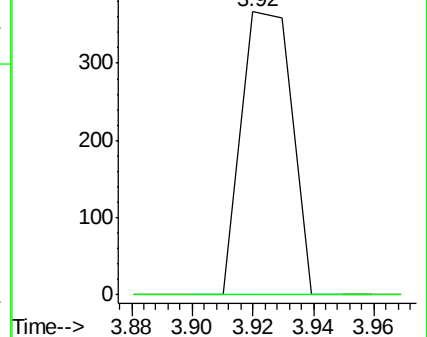
59 100

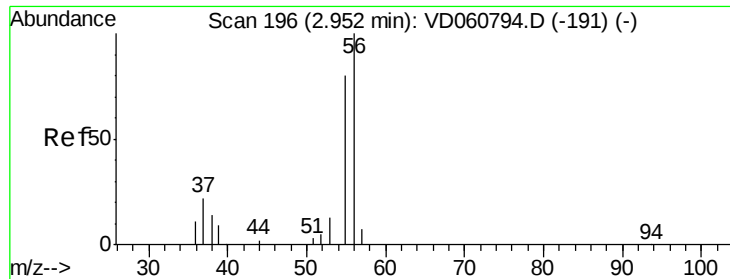
57 0.0 9.8 14.6#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC





#13

Acrolein

Concen: Below Cal

RT: 2.92 min Scan# 192

Delta R.T. -0.04 min

Lab File: VD060808.D

Acq: 30 Jan 2019 16:25

Instrument :

MSVOA\_D

ClientSampleId :

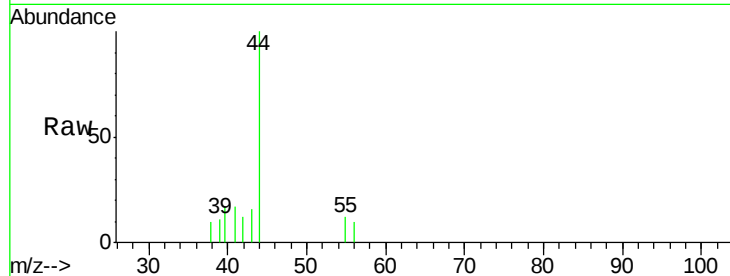
TP-6RE

Tot Ion: 56 Resp: 390

Ion Ratio Lower Upper

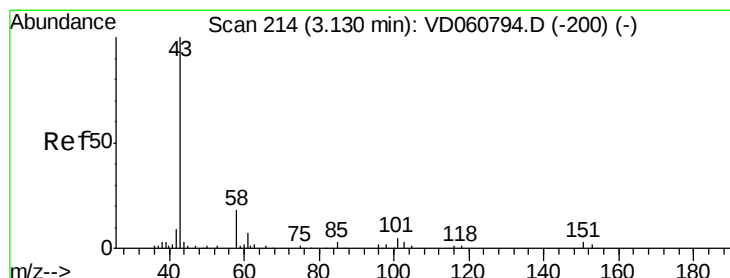
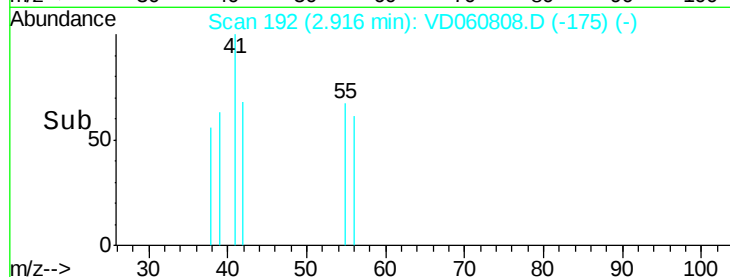
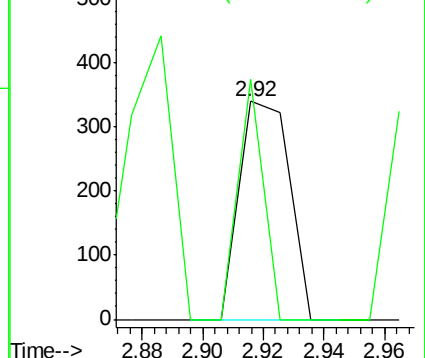
56 100

55 110.3 64.2 96.2#



Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 55.00 (54.70 to 55.70): VDC



#16

Acetone

Concen: 41.009 ug/l

RT: 3.13 min Scan# 214

Delta R.T. 0.00 min

Lab File: VD060808.D

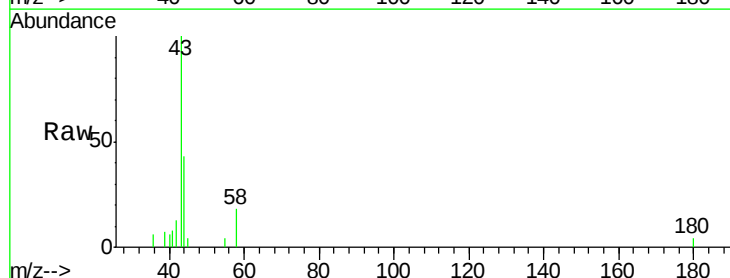
Acq: 30 Jan 2019 16:25

Tgt Ion: 43 Resp: 36017

Ion Ratio Lower Upper

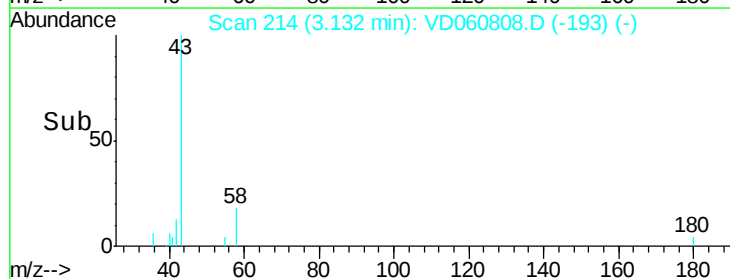
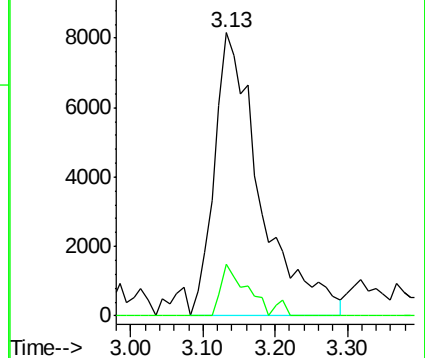
43 100

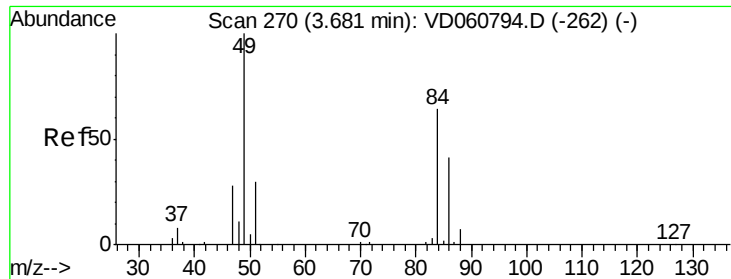
58 18.3 14.5 21.7



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC

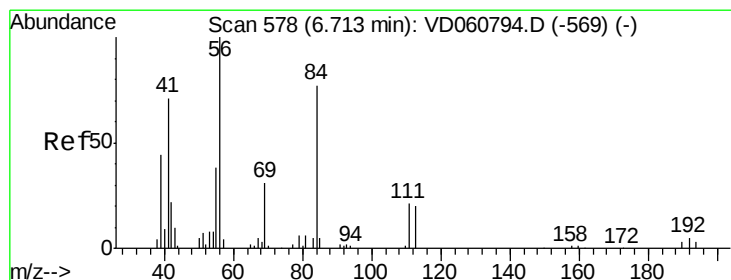
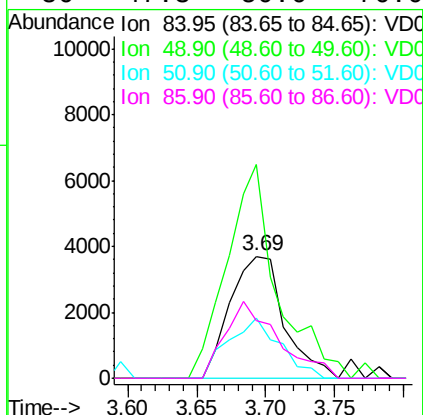
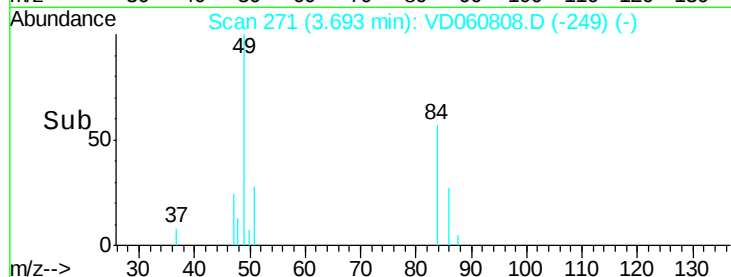
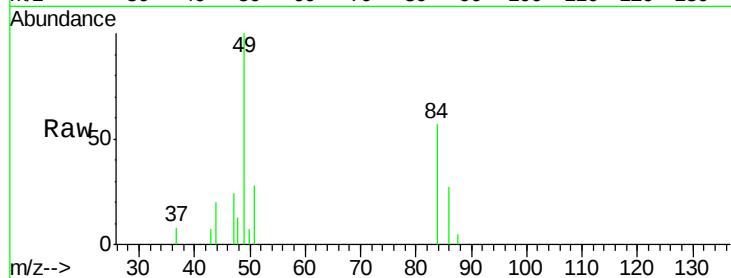




#20  
Methvlene Chloride  
Concen: Below Cal  
RT: 3.69 min Scan# 271  
Delta R.T. 0.01 min  
Lab File: VD060808.D  
Acq: 30 Jan 2019 16:25

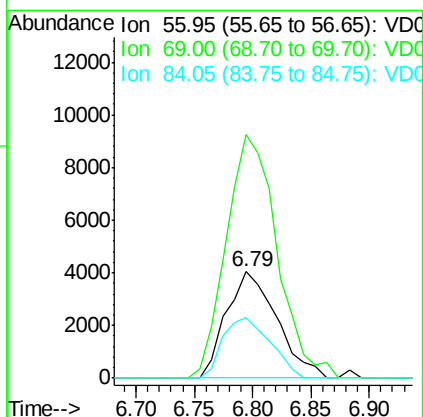
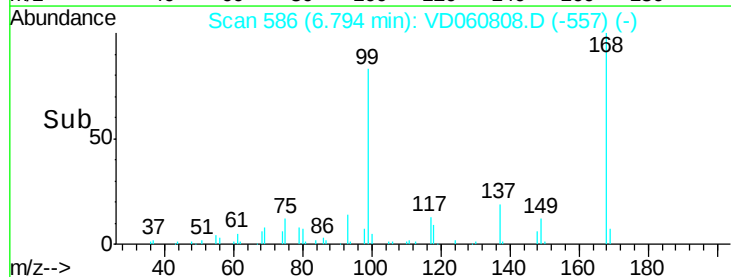
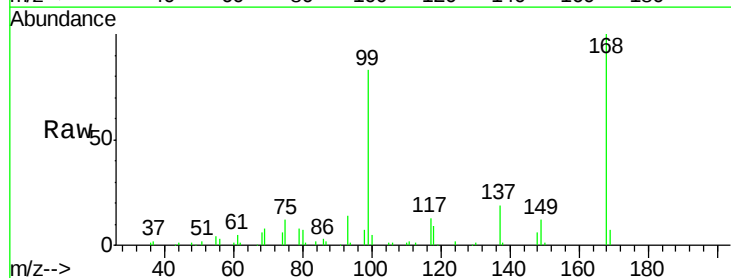
Instrument :  
MSVOA\_D  
ClientSampleId :  
TP-6RE

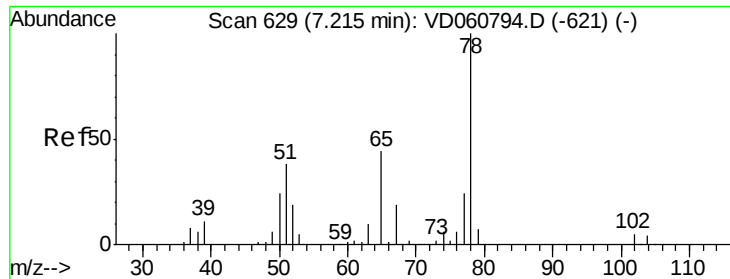
Tot Ion: 84 Resp: 10157  
Ion Ratio Lower Upper  
84 100  
49 174.8 124.2 186.2  
51 49.6 38.1 57.1  
86 47.3 50.6 76.0#



#31  
Cyclohexane  
Concen: 2.158 ug/l  
RT: 6.79 min Scan# 586  
Delta R.T. 0.08 min  
Lab File: VD060808.D  
Acq: 30 Jan 2019 16:25

Tgt Ion: 56 Resp: 12044  
Ion Ratio Lower Upper  
56 100  
69 229.4 25.1 37.7#  
84 56.8 63.9 95.9#





#33

1,2-Dichloroethane-d4

Concen: N.D. ug/l

RT: 7.22 min Scan# 629

Delta R.T. 0.00 min

Lab File: VD060808.D

Acq: 30 Jan 2019 16:25

Instrument :

MSVOA\_D

ClientSampleId :

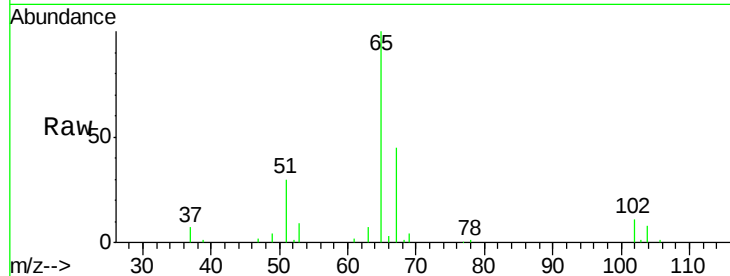
TP-6RE

Tot Ion: 65 Resp: 233698

Ion Ratio Lower Upper

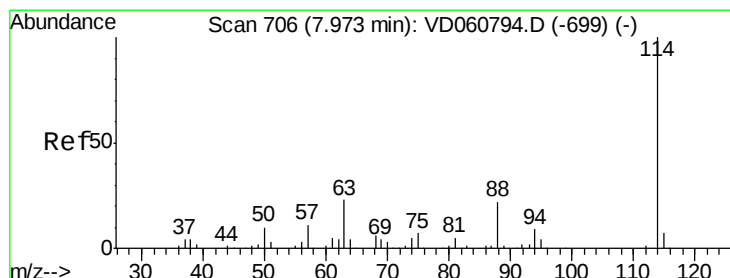
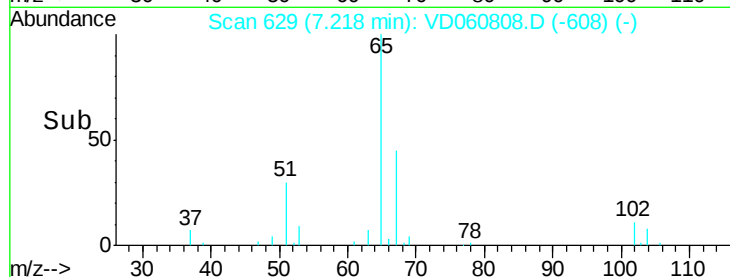
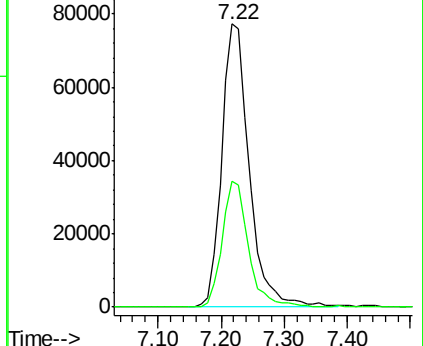
65 100

67 44.5 0.0 85.8



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: 7.99 min Scan# 707

Delta R.T. 0.01 min

Lab File: VD060808.D

Acq: 30 Jan 2019 16:25

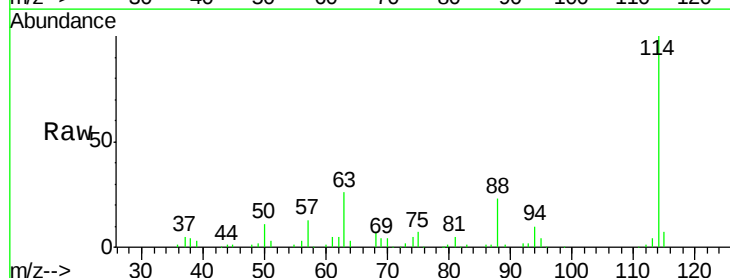
Tgt Ion: 114 Resp: 480584

Ion Ratio Lower Upper

114 100

63 25.9 0.0 46.6

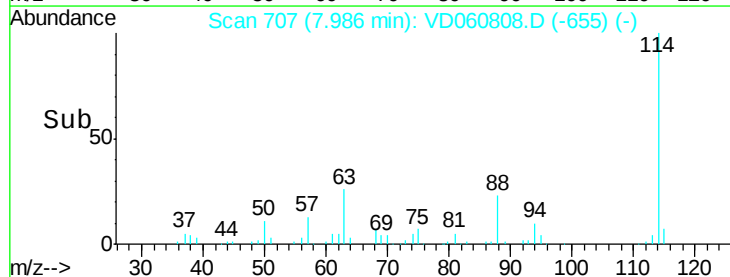
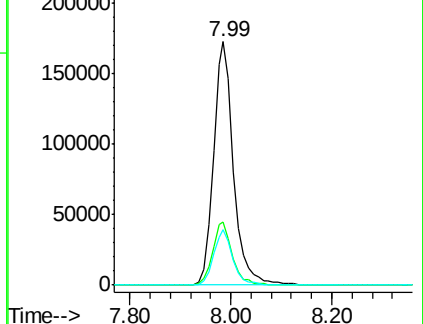
88 23.0 0.0 44.0

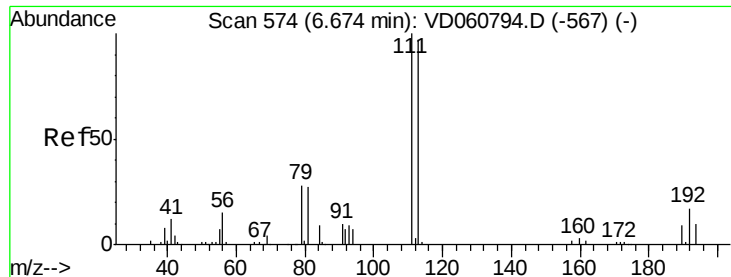


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 62.95 (62.65 to 63.65): VDC

Ion 87.90 (87.60 to 88.60): VDC

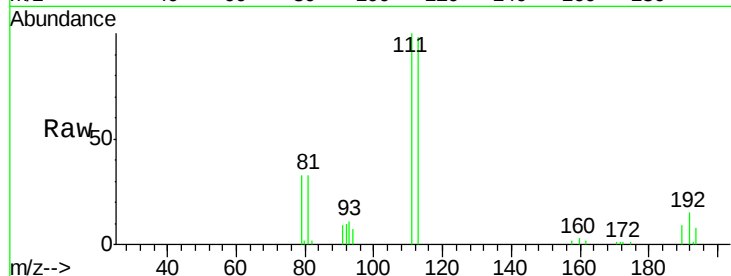




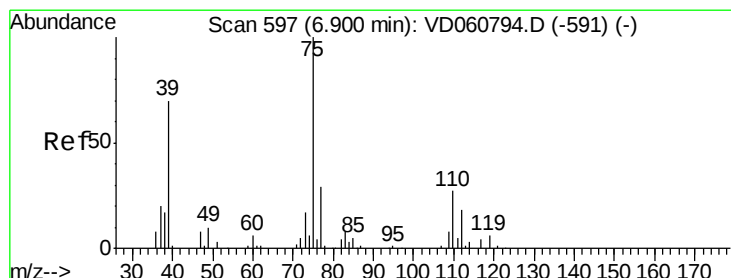
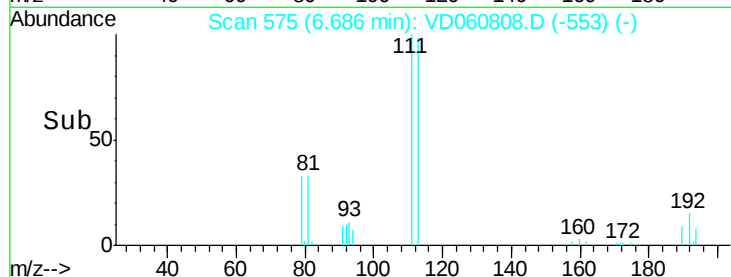
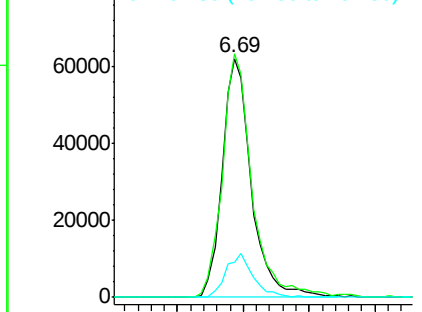
#35  
 Dibromofluoromethane  
 Concen: 50.000 ug/l  
 RT: 6.69 min Scan# 575  
 Delta R.T. 0.01 min  
 Lab File: VD060808.D  
 Acq: 30 Jan 2019 16:25

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 TP-6RE

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 101.9 | 82.3  | 123.5 |
| 192     | 14.8  | 14.4  | 21.6  |

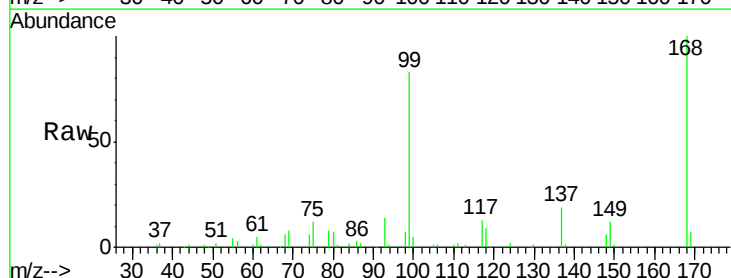


Abundance Ion 112.90 (112.60 to 113.60): V  
 Ion 110.90 (110.60 to 111.60): V  
 Ion 191.80 (191.50 to 192.50): V

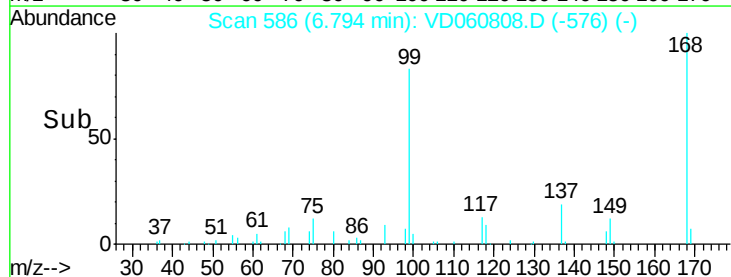
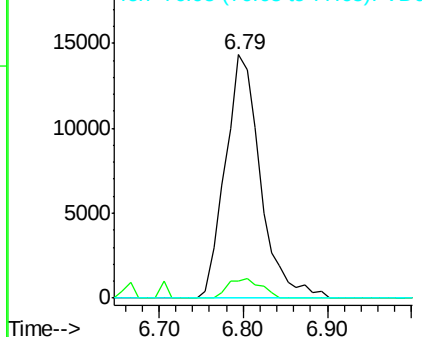


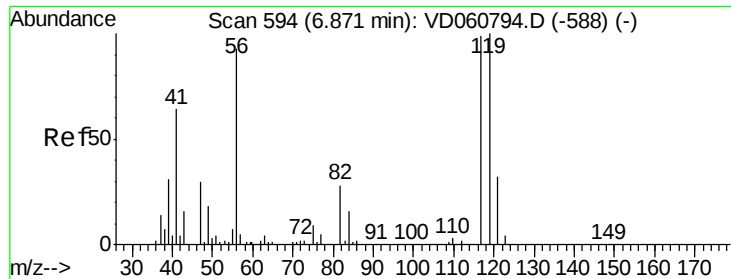
#36  
 1,1-Dichloropropene  
 Concen: 7.256 ug/l  
 RT: 6.79 min Scan# 586  
 Delta R.T. -0.11 min  
 Lab File: VD060808.D  
 Acq: 30 Jan 2019 16:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 7.0   | 13.5  | 40.4# |
| 77      | 0.0   | 23.4  | 35.2# |



Abundance Ion 75.00 (74.70 to 75.70): VDC  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.95 (76.65 to 77.65): VDC





#38

Carbon Tetrachloride

Concen: 6.570 ug/l

RT: 6.79 min Scan# 586

Delta R.T. -0.08 min

Lab File: VD060808.D

Acq: 30 Jan 2019 16:25

Instrument :

MSVOA\_D

ClientSampleId :

TP-6RE

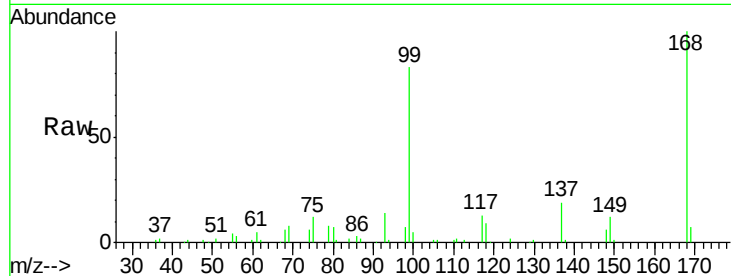
Tot Ion:117 Resp: 47276

Ion Ratio Lower Upper

117 100

119 3.1 75.6 113.4#

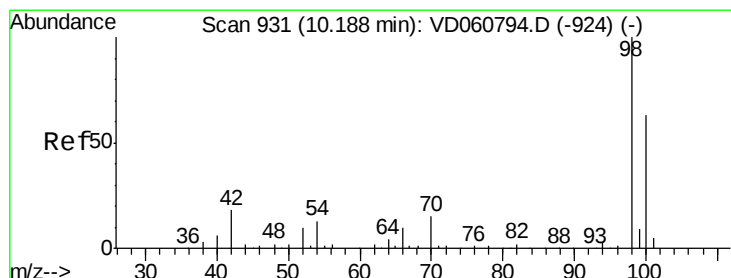
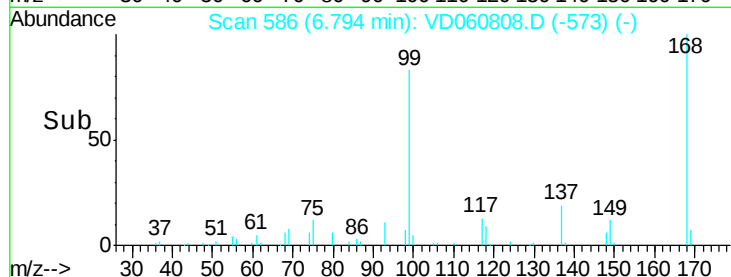
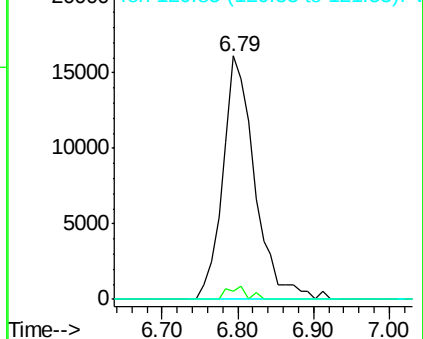
121 0.0 23.4 35.2#



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: 10.19 min Scan# 931

Delta R.T. 0.00 min

Lab File: VD060808.D

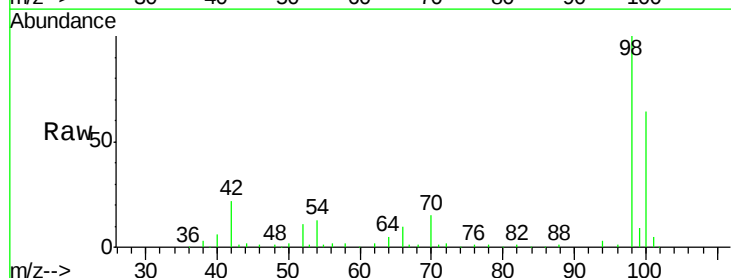
Acq: 30 Jan 2019 16:25

Tgt Ion: 98 Resp: 347816

Ion Ratio Lower Upper

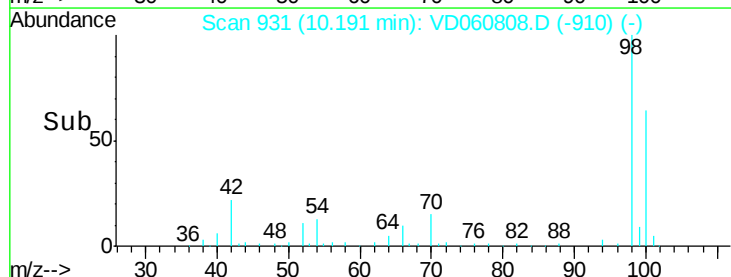
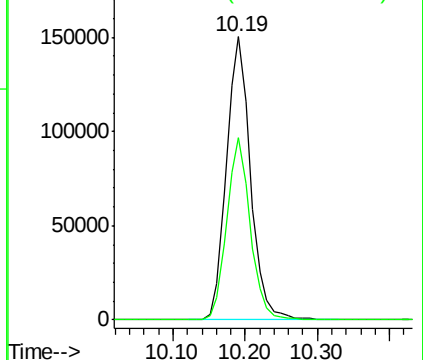
98 100

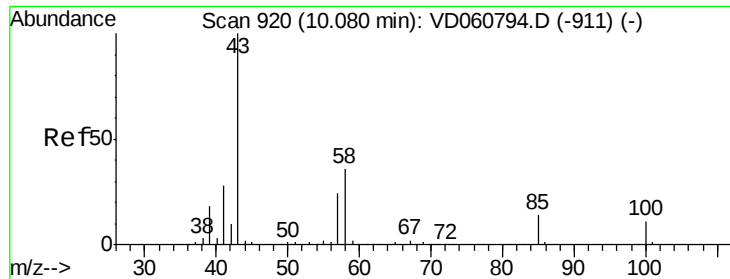
100 64.3 51.0 76.6



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: 1.575 ug/l

RT: 10.19 min Scan# 931

Delta R.T. 0.11 min

Lab File: VD060808.D

Acq: 30 Jan 2019 16:25

Instrument :

MSVOA\_D

ClientSampleId :

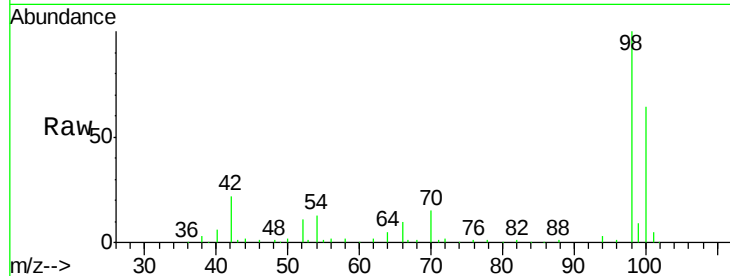
TP-6RE

Tot Ion: 43 Resp: 3408

Ion Ratio Lower Upper

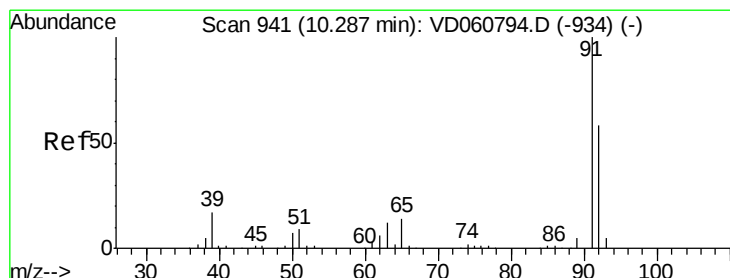
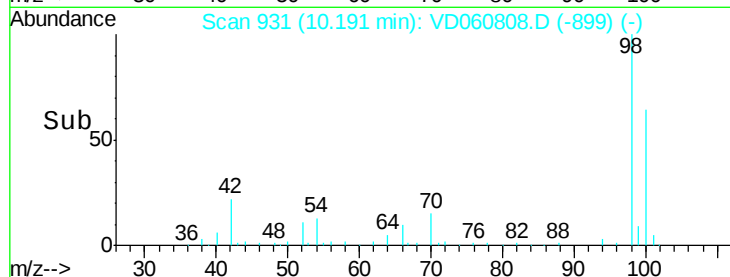
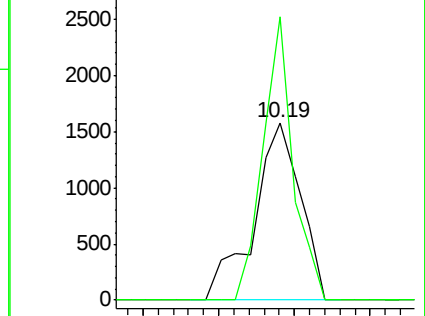
43 100

58 159.4 28.4 42.6#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC



#52

Toluene

Concen: 1.494 ug/l

RT: 10.29 min Scan# 941

Delta R.T. 0.00 min

Lab File: VD060808.D

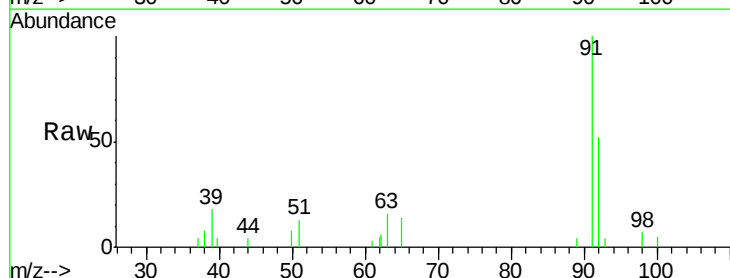
Acq: 30 Jan 2019 16:25

Tgt Ion: 92 Resp: 10735

Ion Ratio Lower Upper

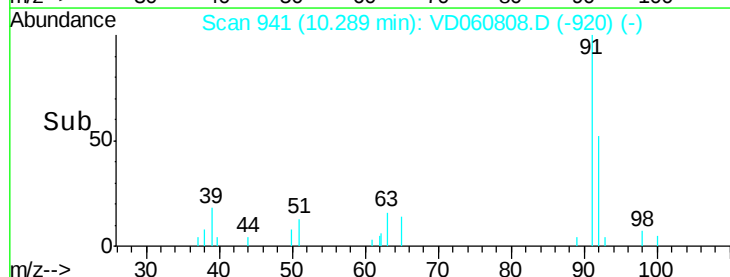
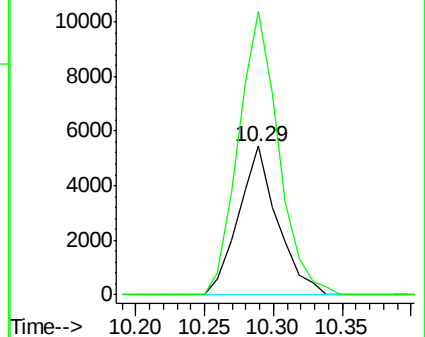
92 100

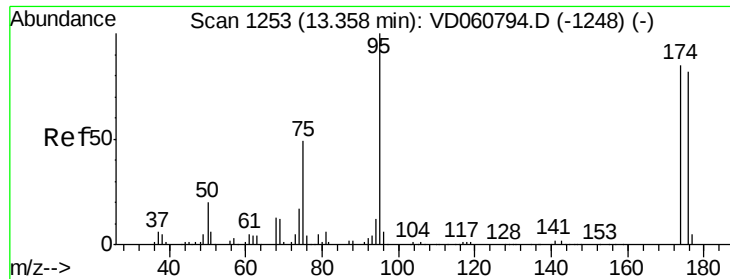
91 190.6 137.7 206.5



Abundance Ion 92.00 (91.70 to 92.70): VDC

Ion 91.00 (90.70 to 91.70): VDC

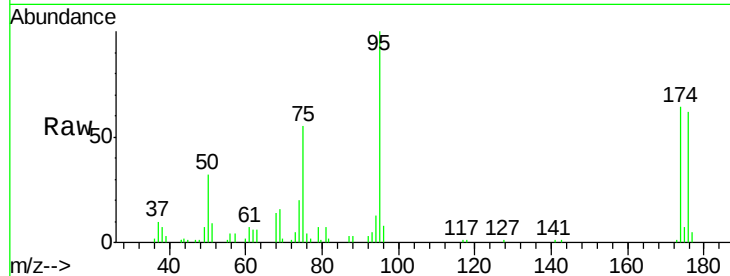




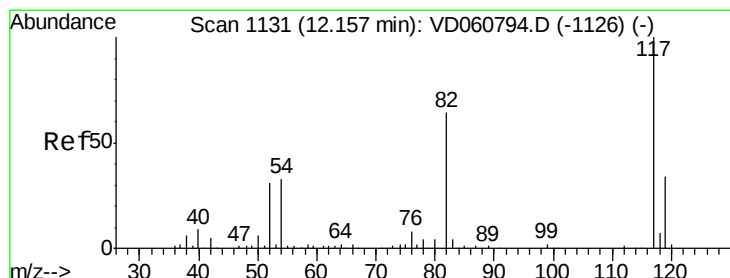
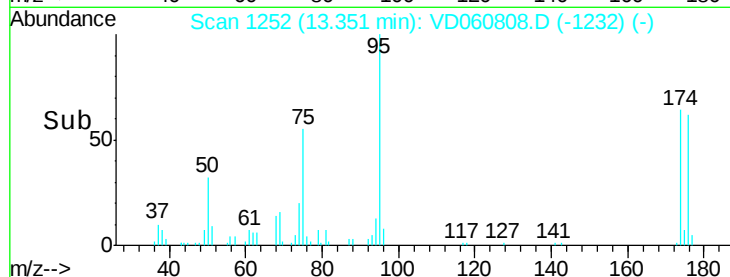
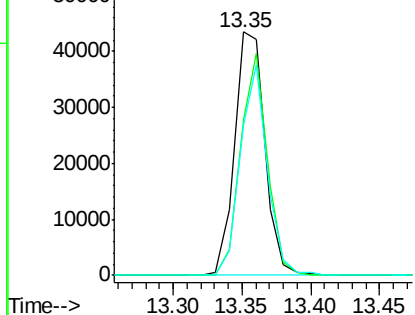
#62  
4-Bromofluorobenzene  
Concen: N.D. ug/l  
RT: 13.35 min Scan# 1252  
Delta R.T. -0.01 min  
Lab File: VD060808.D  
Acq: 30 Jan 2019 16:25

Instrument :  
MSVOA\_D  
ClientSampleId :  
TP-6RE

Tot Ion: 95 Resp: 66522  
Ion Ratio Lower Upper  
95 100  
174 63.5 0.0 169.6  
176 61.5 0.0 163.8

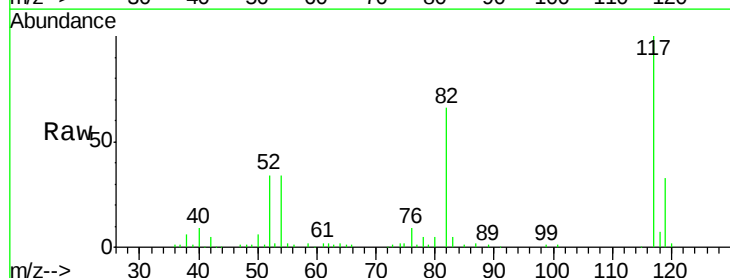


Abundance Ion 95.00 (94.70 to 95.70): V  
Ion 173.90 (173.60 to 174.60): V  
Ion 175.90 (175.60 to 176.60): V

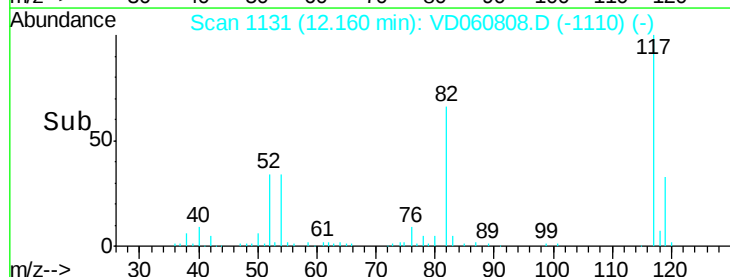
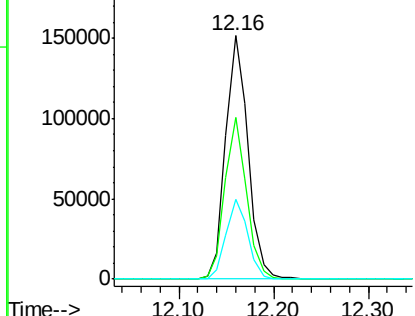


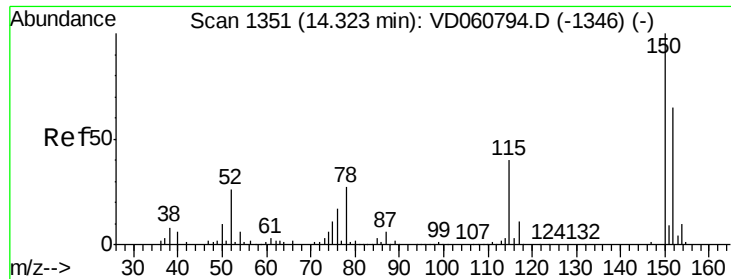
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.16 min Scan# 1131  
Delta R.T. 0.00 min  
Lab File: VD060808.D  
Acq: 30 Jan 2019 16:25

Tgt Ion: 117 Resp: 248774  
Ion Ratio Lower Upper  
117 100  
82 66.2 51.5 77.3  
119 32.9 27.1 40.7



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: 14.33 min Scan# 1351

Delta R.T. 0.00 min

Lab File: VD060808.D

Acq: 30 Jan 2019 16:25

Instrument :

MSVOA\_D

ClientSampleId :

TP-6RE

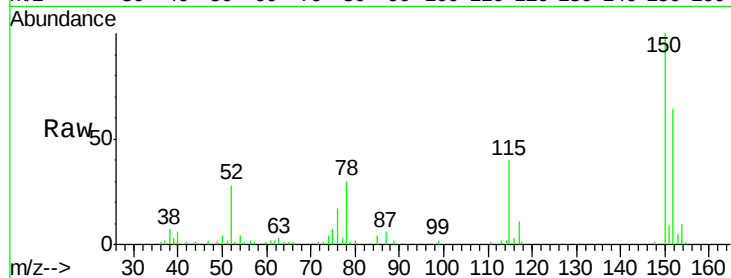
Tot Ion:152 Resp: 39523

Ion Ratio Lower Upper

152 100

115 62.4 31.6 95.0

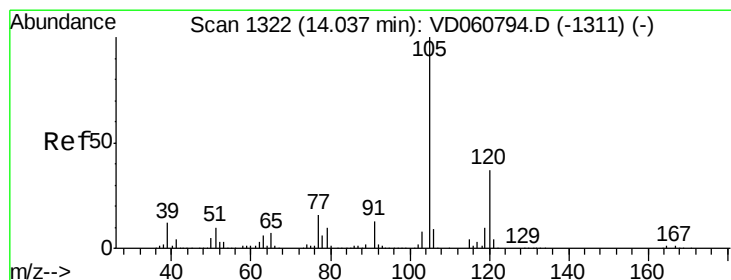
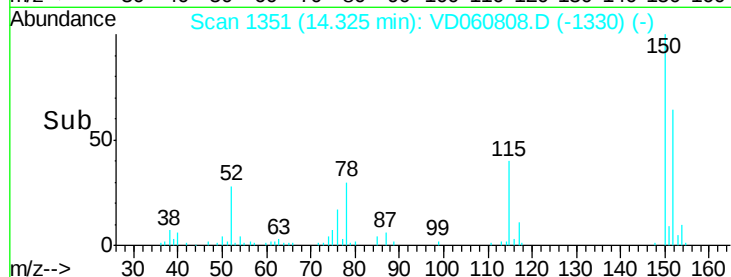
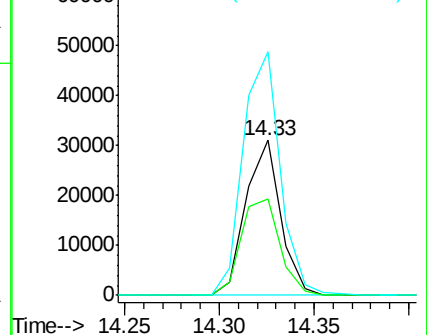
150 156.8 0.0 317.6



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



#80

1,3,5-Trimethylbenzene

Concen: 1.510 ug/l

RT: 14.04 min Scan# 1322

Delta R.T. 0.00 min

Lab File: VD060808.D

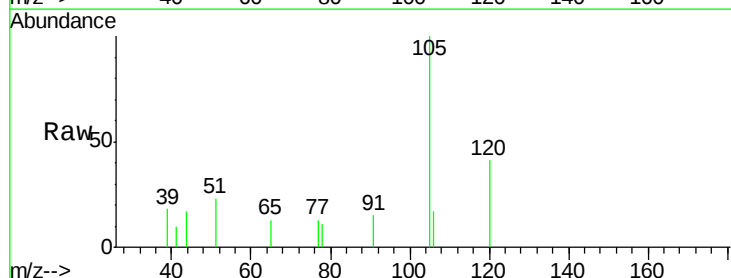
Acq: 30 Jan 2019 16:25

Tgt Ion:105 Resp: 4097

Ion Ratio Lower Upper

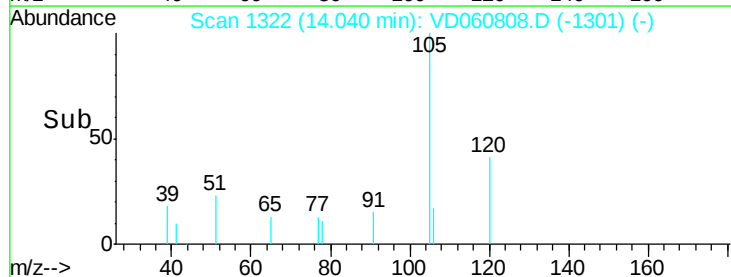
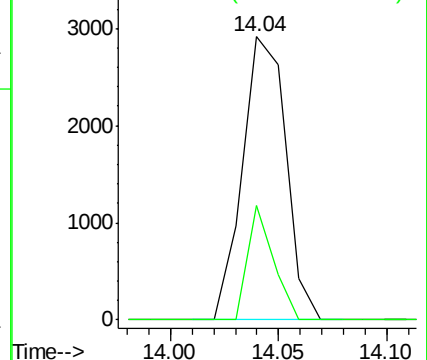
105 100

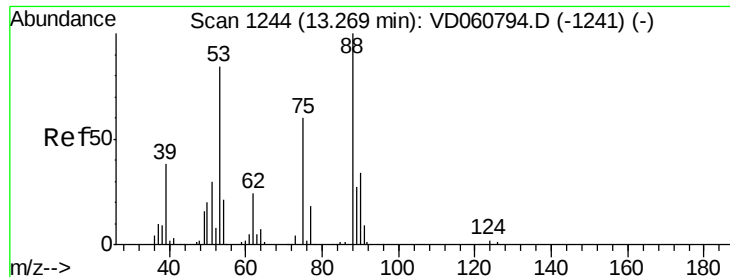
120 40.5 18.4 55.2



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.05 (119.75 to 120.75): V





#81

trans-1,4-Dichloro-2-butene

Concen: 194.072 ug/l

RT: 13.36 min Scan# 1253

Delta R.T. 0.09 min

Lab File: VD060808.D

Acq: 30 Jan 2019 16:25

Instrument :

MSVOA\_D

ClientSampleId :

TP-6RE

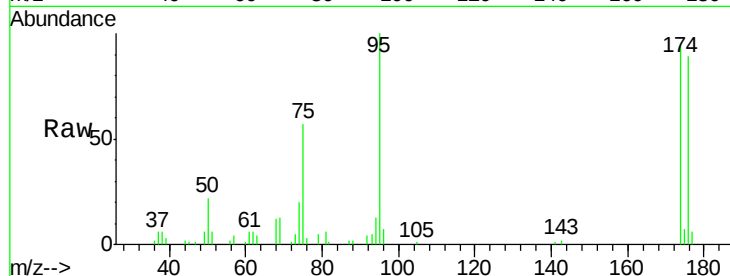
Tot Ion: 75 Resp: 36670

Ion Ratio Lower Upper

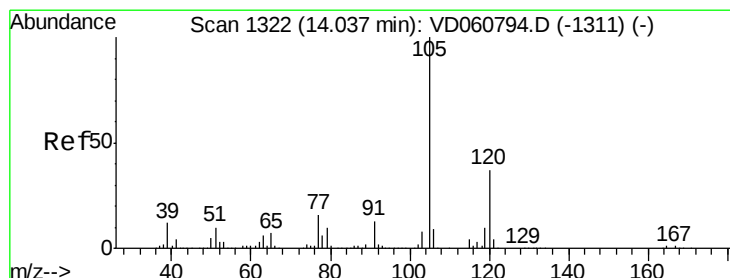
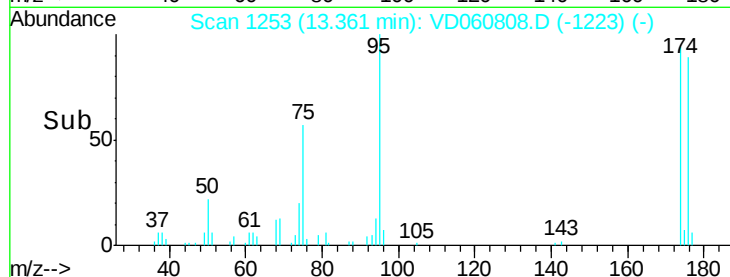
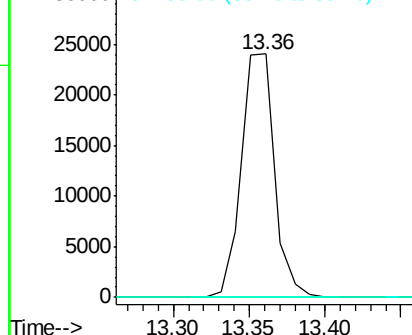
75 100

53 0.0 111.6 167.4#

89 0.0 35.9 53.9#



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



#84

1,2,4-Trimethylbenzene

Concen: 1.510 ug/l

RT: 14.04 min Scan# 1322

Delta R.T. 0.00 min

Lab File: VD060808.D

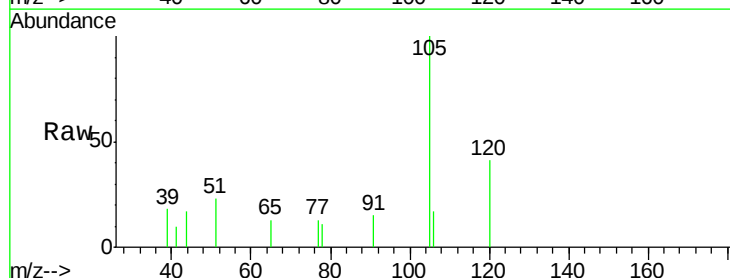
Acq: 30 Jan 2019 16:25

Tgt Ion: 105 Resp: 4097

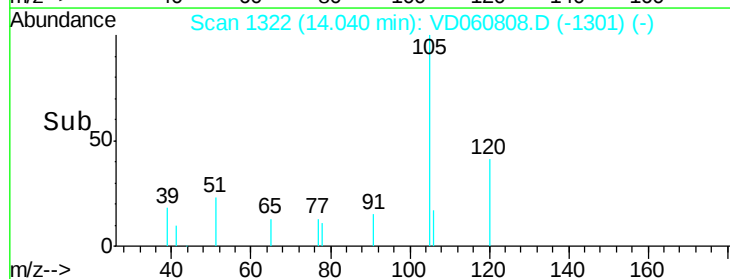
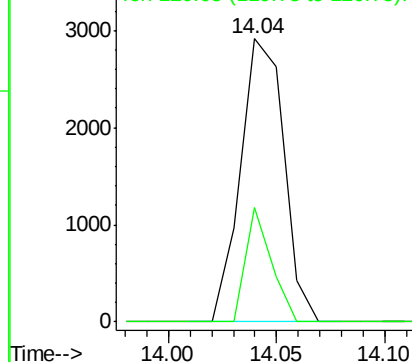
Ion Ratio Lower Upper

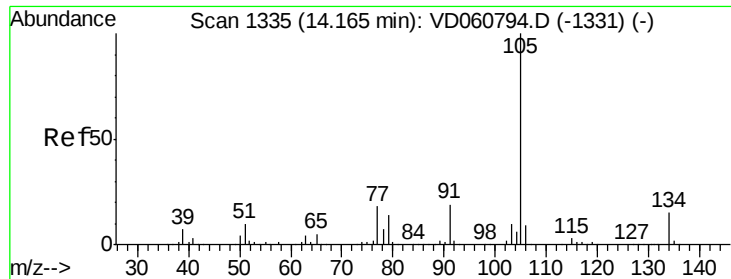
105 100

120 40.5 18.4 55.2



Abundance Ion 105.05 (104.75 to 105.75): V  
Ion 120.05 (119.75 to 120.75): V





#85

sec-Butylbenzene

Concen: 1.268 ug/l

RT: 14.04 min Scan# 1322

Delta R.T. -0.13 min

Lab File: VD060808.D

Acq: 30 Jan 2019 16:25

Instrument :

MSVOA\_D

ClientSampleId :

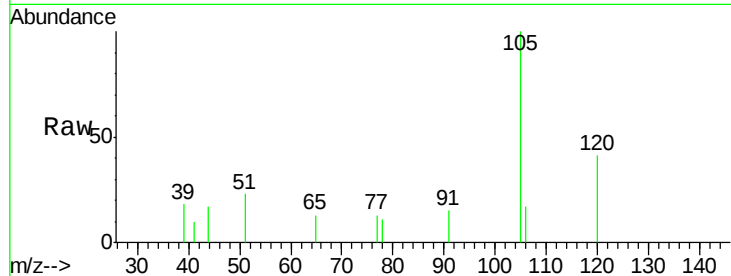
TP-6RE

Tot Ion:105 Resp: 4097

Ion Ratio Lower Upper

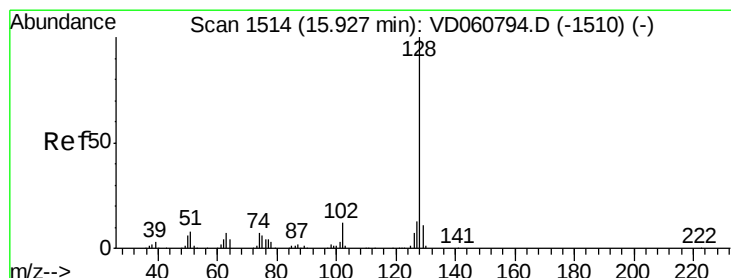
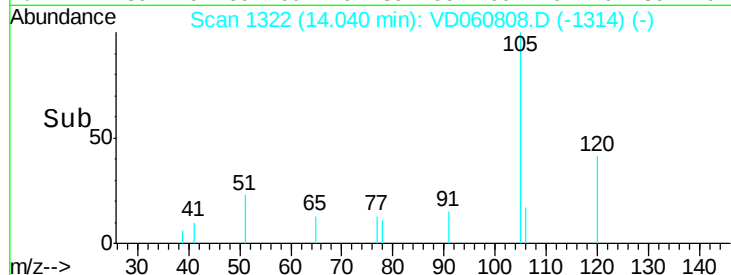
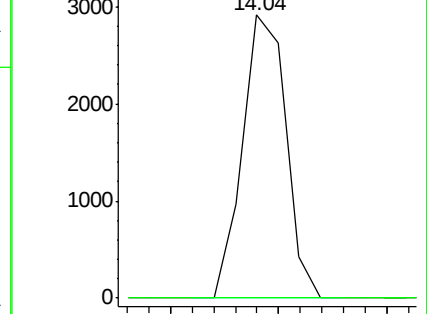
105 100

134 0.0 7.4 22.2#



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 134.10 (133.80 to 134.80): V



#95

Naphthalene

Concen: 28.939 ug/l

RT: 15.93 min Scan# 1514

Delta R.T. 0.00 min

Lab File: VD060808.D

Acq: 30 Jan 2019 16:25

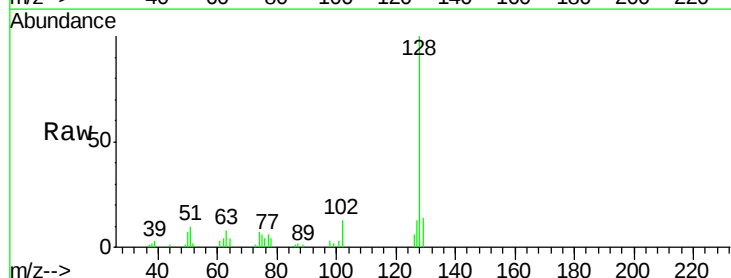
Tgt Ion:128 Resp: 46300

Ion Ratio Lower Upper

128 100

127 12.7 10.4 15.6

129 14.0 8.7 13.1#



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

