

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD112219\  
 Data File : VD064347.D  
 Acq On : 22 Nov 2019 15:05  
 Operator : VA/SY  
 Sample : K5977-12  
 Misc : 8.41G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Nov 23 00:47:14 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D110819S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Nov 12 02:43:24 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 780449   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 1143383  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 1013263  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 487387   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|--------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.34  | 65   | 335653   | 52.29  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 104.58% |          |
| 35) Dibromofluoromethane    | 7.92  | 113  | 344942   | 52.56  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 105.12% |          |
| 50) Toluene-d8              | 10.34 | 98   | 1341127  | 54.17  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 108.34% |          |
| 62) 4-Bromofluorobenzene    | 12.64 | 95   | 428734   | 50.00  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 100.00% |          |

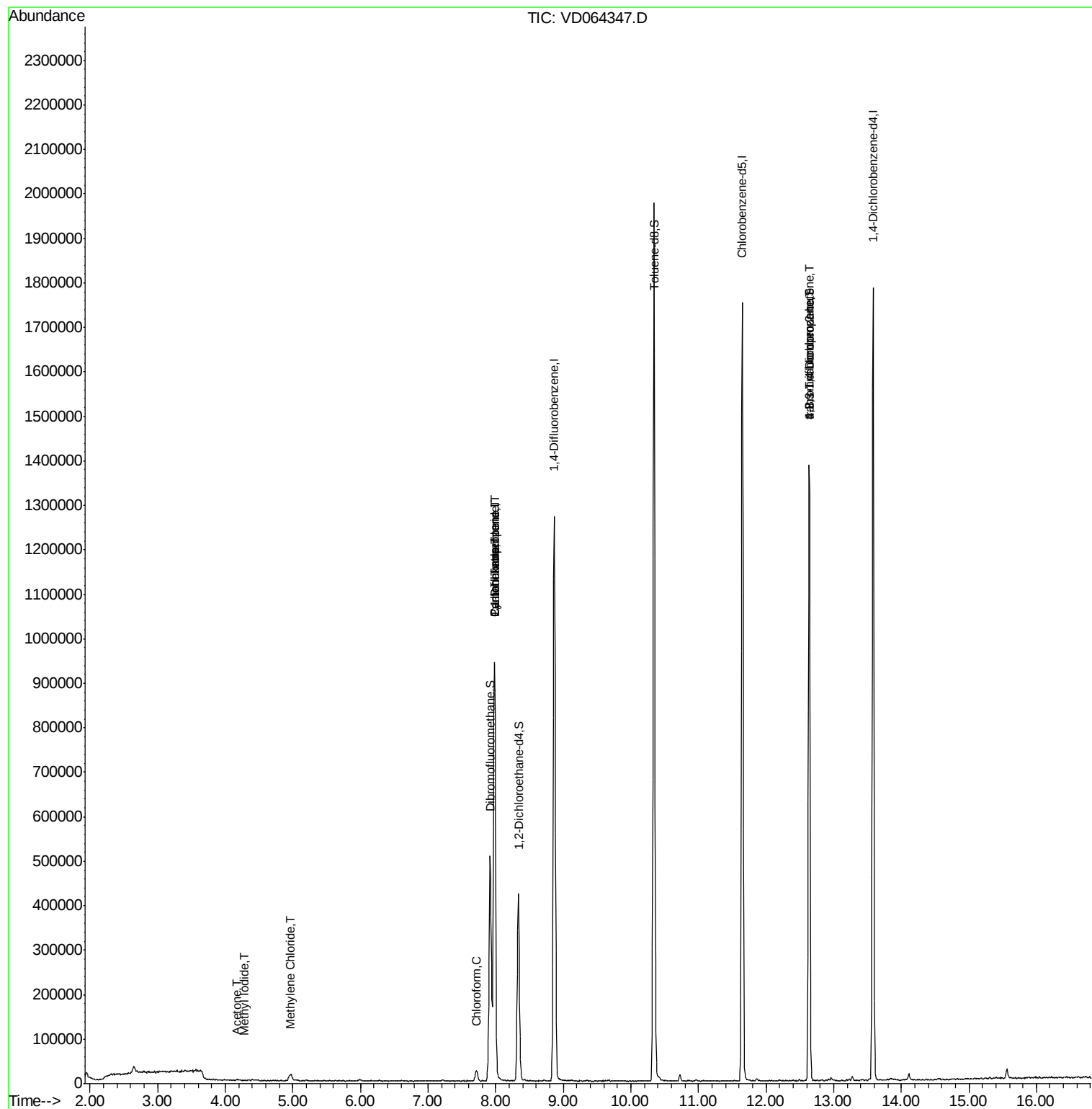
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 10) Methyl Iodide              | 4.28  | 142  | 301      | 2.068   | ug/l # | 47     |
| 16) Acetone                    | 4.17  | 43   | 2892     | 1.902   | ug/l   | 94     |
| 20) Methylene Chloride         | 4.97  | 84   | 11171    | 1.454   | ug/l # | 83     |
| 30) Chloroform                 | 7.71  | 83   | 23653    | 1.851   | ug/l   | 86     |
| 31) Cyclohexane                | 7.98  | 56   | 15051    | 1.195   | ug/l # | 19     |
| 36) 1,1-Dichloropropene        | 7.98  | 75   | 53677    | 5.087   | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 7.98  | 117  | 69739    | 6.176   | ug/l # | 14     |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75   | 224149   | 57.097  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.64 | 75   | 224149   | 113.417 | ug/l # | 10     |

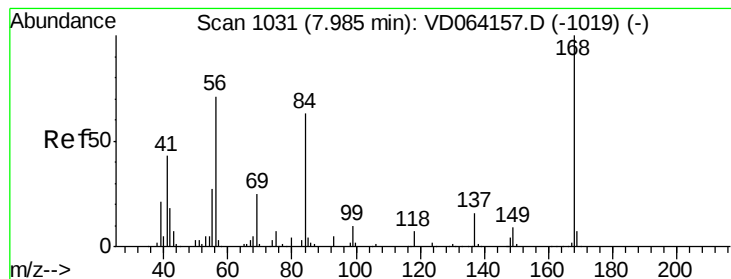
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Tue Nov 12 02:43:24 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1031

Delta R.T. -0.00 min

Lab File: VD064347.D

Acq: 22 Nov 2019 15:05

Instrument :

MSVOA\_D

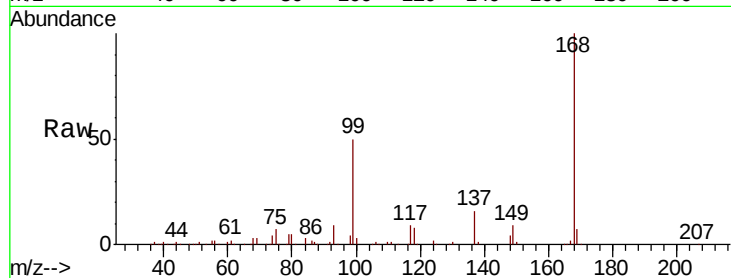
ClientSampleId :

Tot Ion:168 Resp: 780449

Ion Ratio Lower Upper

168 100

99 49.7 41.6 62.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): V

400000

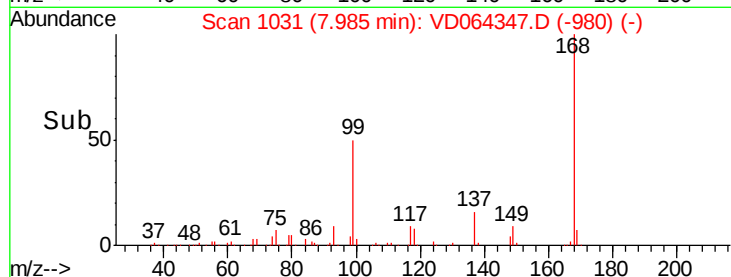
300000

200000

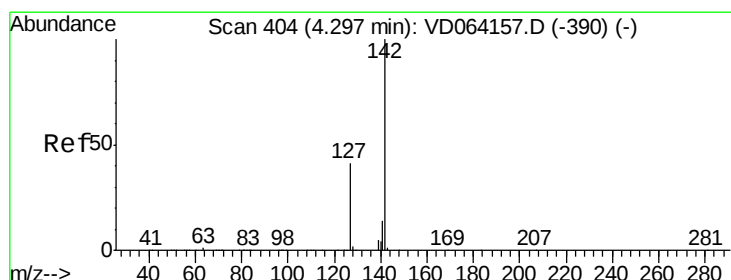
100000

0

Time-->



Time-->



#10

Methyl Iodide

Concen: 2.068 ug/l

RT: 4.28 min Scan# 402

Delta R.T. -0.01 min

Lab File: VD064347.D

Acq: 22 Nov 2019 15:05

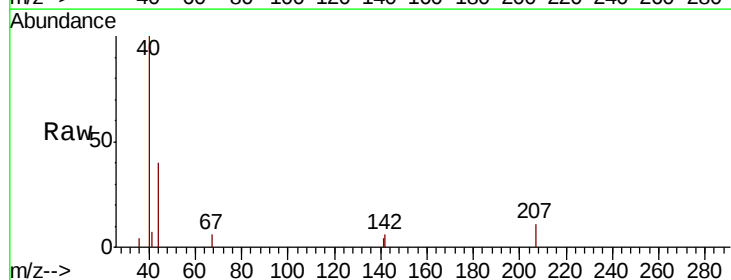
Tgt Ion:142 Resp: 301

Ion Ratio Lower Upper

142 100

127 0.0 34.4 51.6#

141 18.6 11.2 16.8#



Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

400

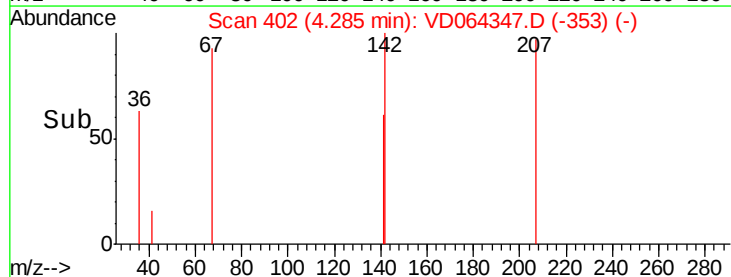
300

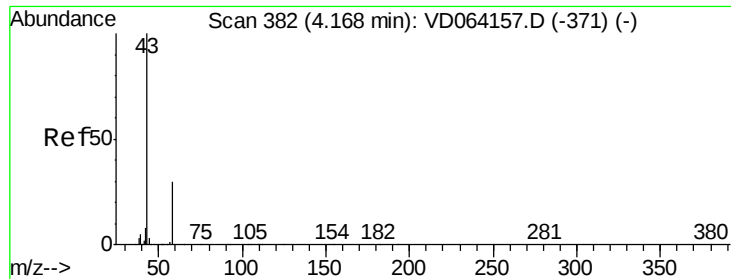
200

100

0

Time-->





#16

Acetone

Concen: 1.902 ug/l

RT: 4.17 min Scan# 383

Delta R.T. 0.01 min

Lab File: VD064347.D

Acq: 22 Nov 2019 15:05

Instrument :

MSVOA\_D

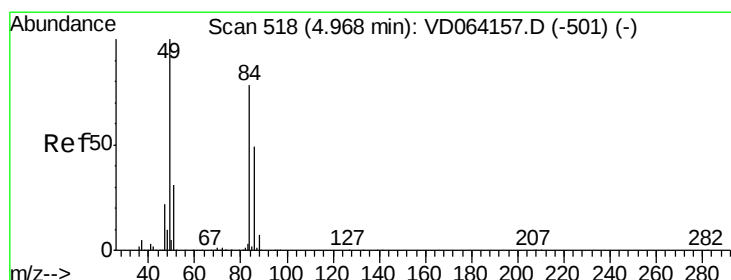
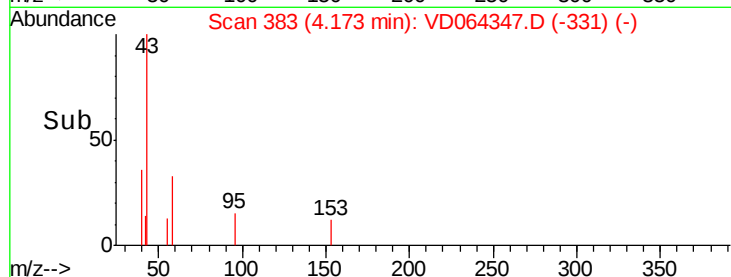
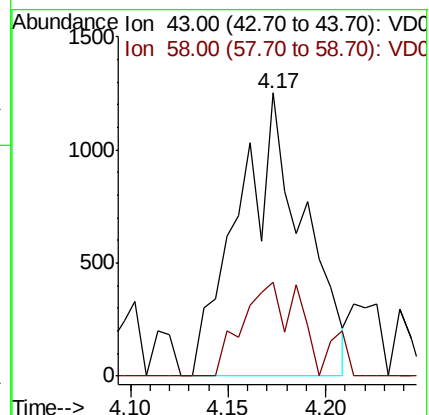
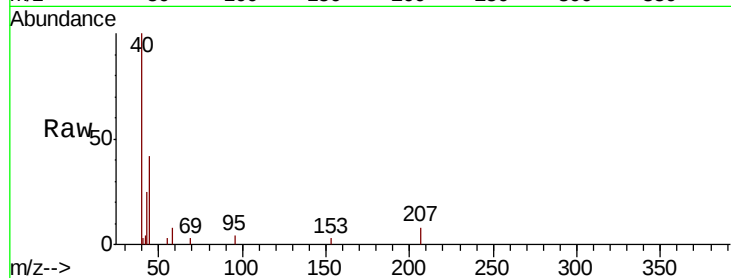
ClientSampled :

Tot Ion: 43 Resp: 2892

Ion Ratio Lower Upper

43 100

58 33.3 24.1 36.1



#20

Methylene Chloride

Concen: 1.454 ug/l

RT: 4.97 min Scan# 518

Delta R.T. -0.00 min

Lab File: VD064347.D

Acq: 22 Nov 2019 15:05

Tgt Ion: 84 Resp: 11171

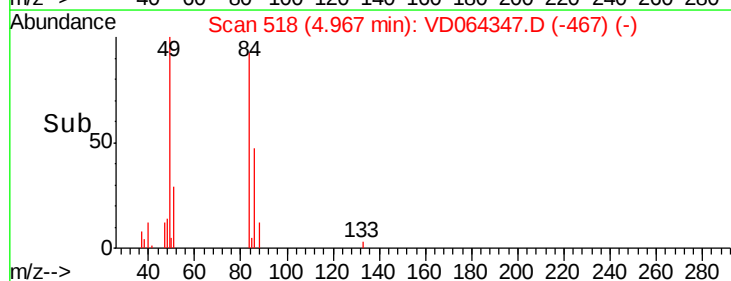
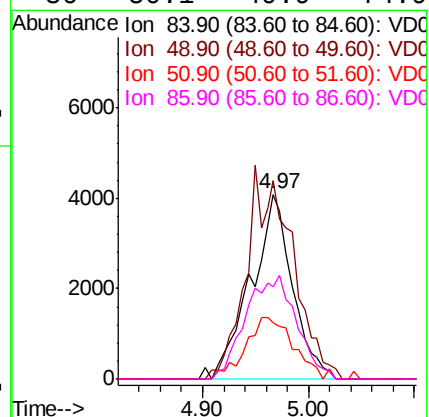
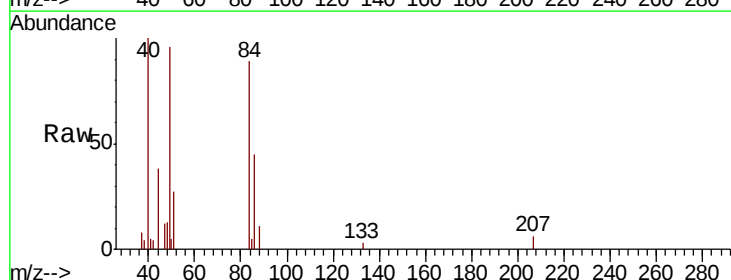
Ion Ratio Lower Upper

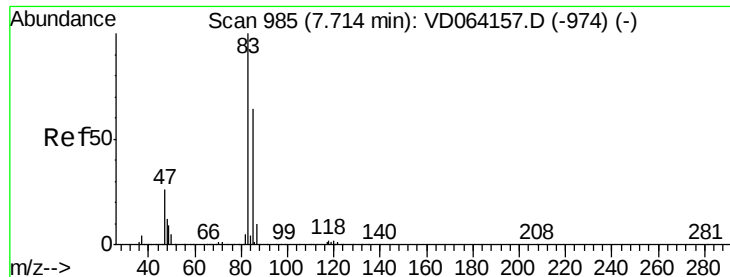
84 100

49 107.6 102.1 153.1

51 30.8 32.2 48.2#

86 50.1 49.9 74.9





#30

Chloroform

Concen: 1.851 ug/l

RT: 7.71 min Scan# 985

Delta R.T. -0.00 min

Lab File: VD064347.D

Acq: 22 Nov 2019 15:05

Instrument :

MSVOA\_D

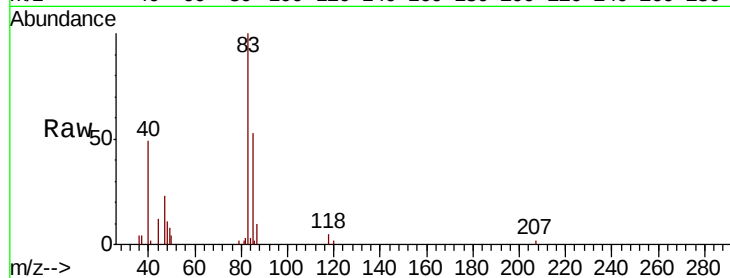
ClientSampled :

Tot Ion: 83 Resp: 23653

Ion Ratio Lower Upper

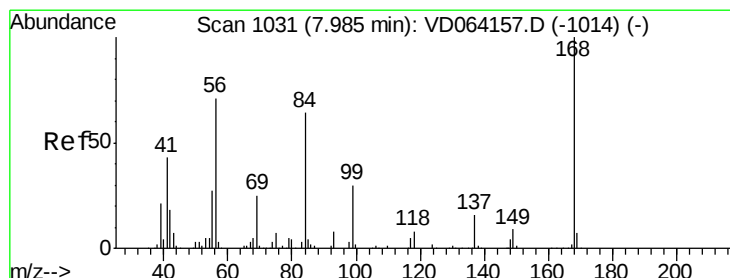
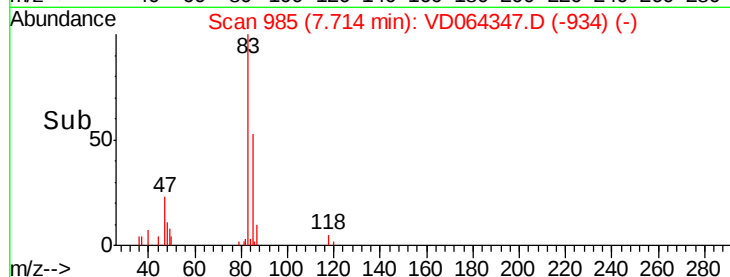
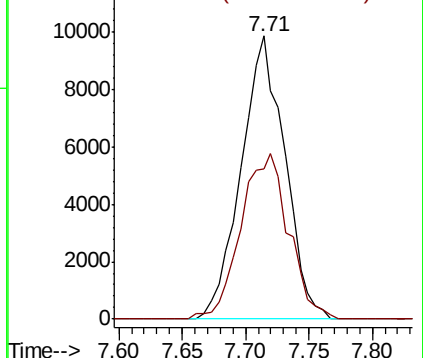
83 100

85 53.1 51.4 77.0



Abundance Ion 82.90 (82.60 to 83.60): VDC

Ion 84.90 (84.60 to 85.60): VDC



#31

Cyclohexane

Concen: 1.195 ug/l

RT: 7.98 min Scan# 1031

Delta R.T. -0.00 min

Lab File: VD064347.D

Acq: 22 Nov 2019 15:05

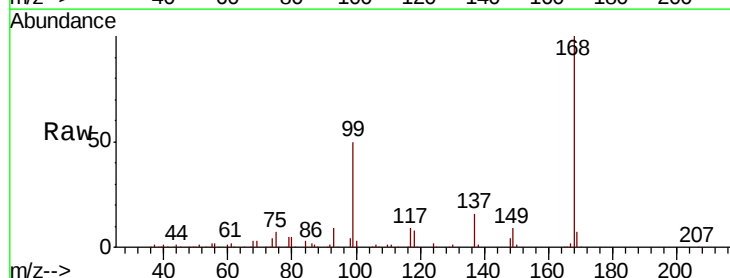
Tgt Ion: 56 Resp: 15051

Ion Ratio Lower Upper

56 100

69 147.9 28.2 42.4#

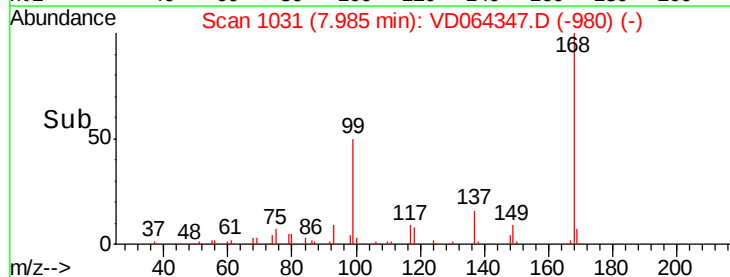
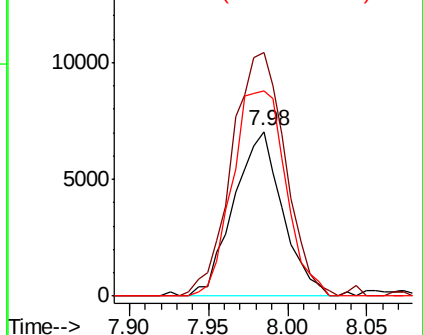
84 124.3 71.8 107.6#

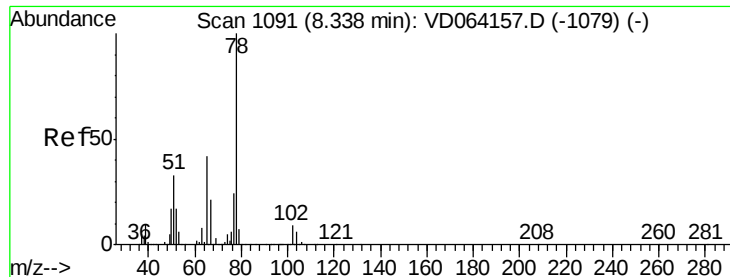


Abundance Ion 56.00 (55.70 to 56.70): VDC

Ion 69.00 (68.70 to 69.70): VDC

Ion 84.00 (83.70 to 84.70): VDC





#33

1,2-Dichloroethane-d4

Concen: 52.293 ug/l

RT: 8.34 min Scan# 1091

Delta R.T. -0.00 min

Lab File: VD064347.D

Acq: 22 Nov 2019 15:05

Instrument :

MSVOA\_D

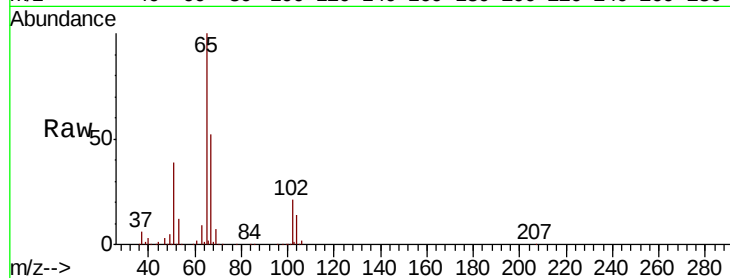
ClientSampleId :

Tot Ion: 65 Resp: 335653

Ion Ratio Lower Upper

65 100

67 51.7 0.0 104.4



Abundance Ion 64.90 (64.60 to 65.60): VDC

Ion 66.90 (66.60 to 67.60): VDC

8.34

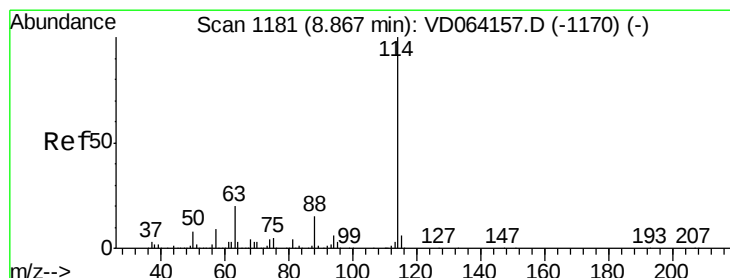
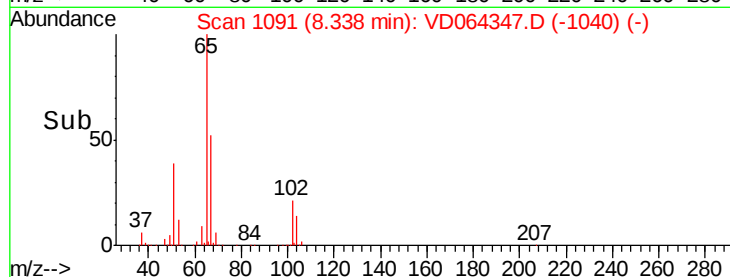
150000

100000

50000

0

Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.87 min Scan# 1181

Delta R.T. -0.00 min

Lab File: VD064347.D

Acq: 22 Nov 2019 15:05

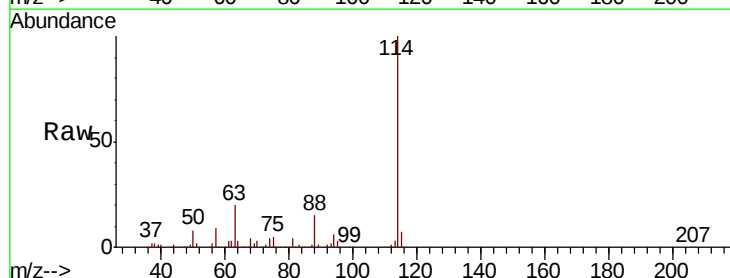
Tgt Ion: 114 Resp: 1143383

Ion Ratio Lower Upper

114 100

63 19.6 0.0 40.0

88 14.9 0.0 30.2



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VDC

Ion 87.90 (87.60 to 88.60): VDC

8.87

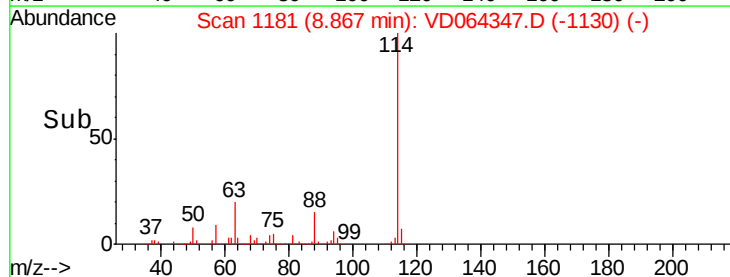
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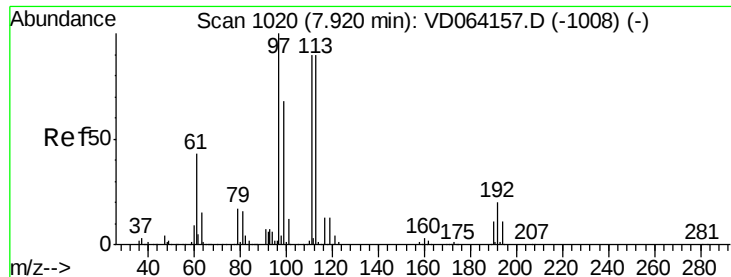
400000

200000

0

Time-->

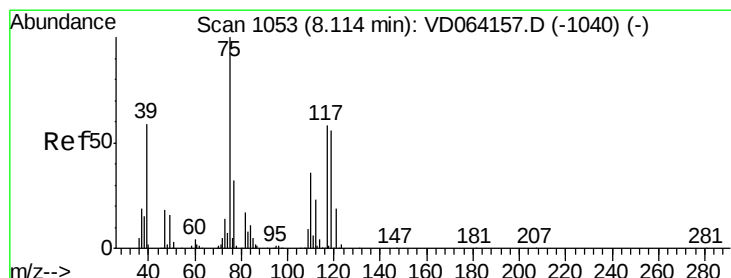
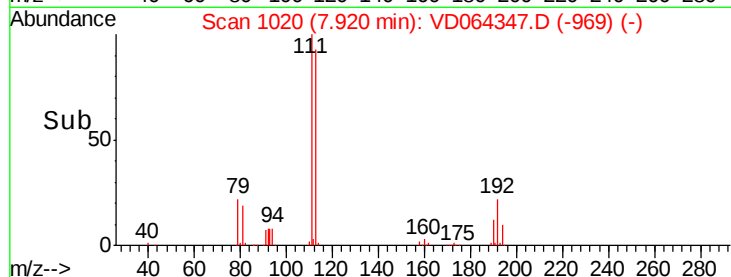
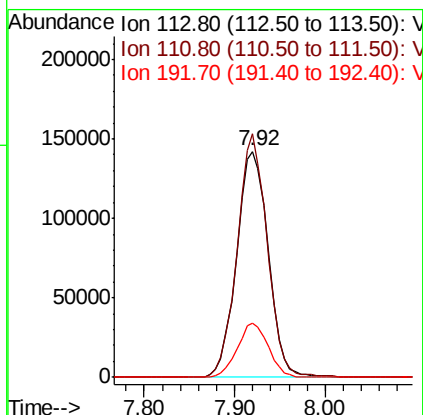
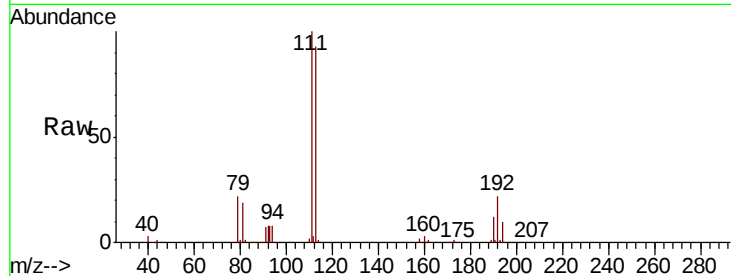




#35  
 Dibromofluoromethane  
 Concen: 52.557 ug/l  
 RT: 7.92 min Scan# 1020  
 Delta R.T. -0.00 min  
 Lab File: VD064347.D  
 Acq: 22 Nov 2019 15:05

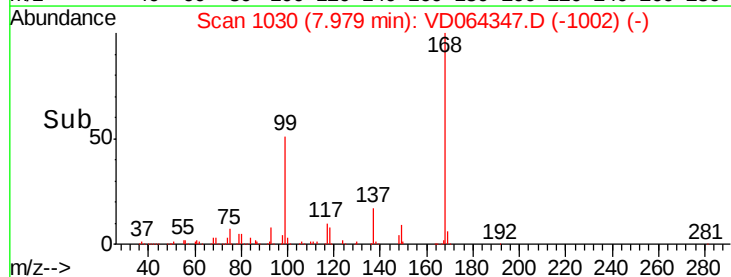
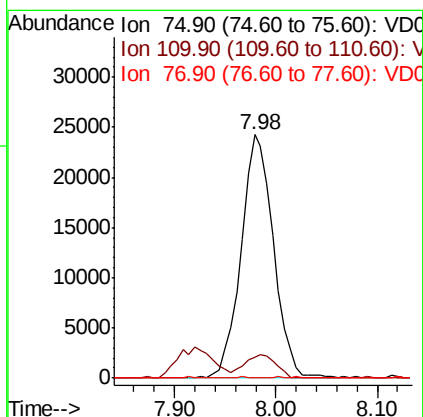
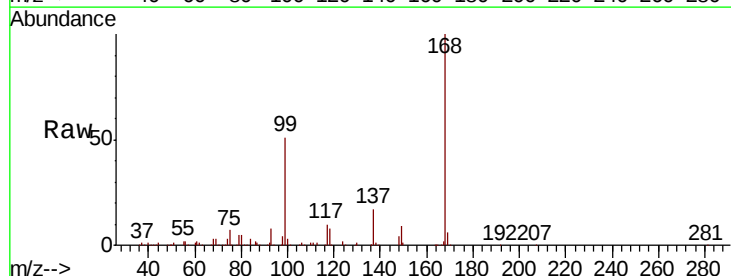
Instrument :  
 MSVOA\_D  
 ClientSampleId :

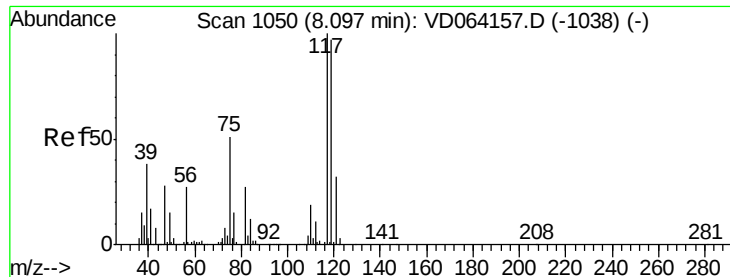
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.5 | 81.5  | 122.3 |
| 192     | 23.4  | 18.8  | 28.2  |



#36  
 1,1-Dichloropropene  
 Concen: 5.087 ug/l  
 RT: 7.98 min Scan# 1030  
 Delta R.T. -0.14 min  
 Lab File: VD064347.D  
 Acq: 22 Nov 2019 15:05

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 9.4   | 18.3  | 54.9# |
| 77      | 0.1   | 25.0  | 37.6# |

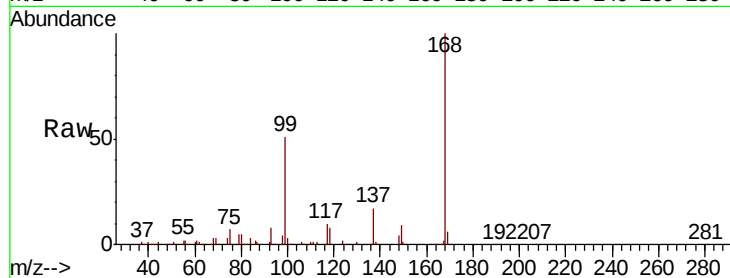




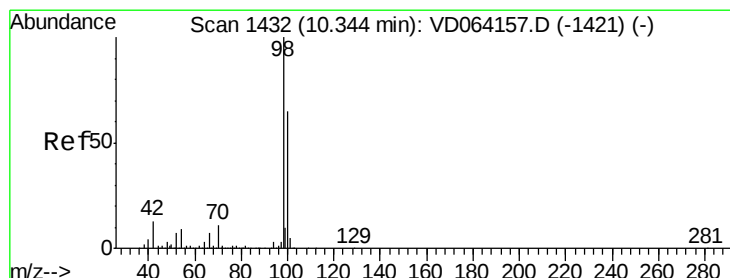
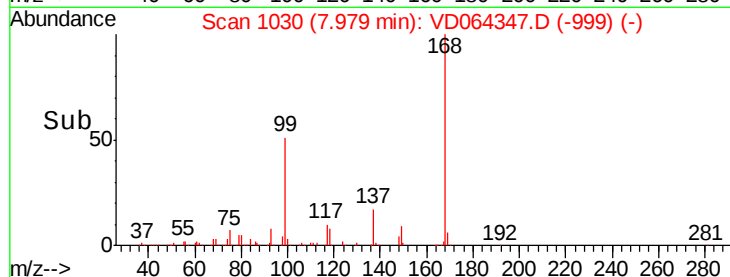
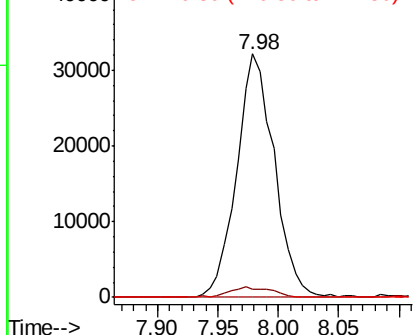
#38  
Carbon Tetrachloride  
Concen: 6.176 ug/l  
RT: 7.98 min Scan# 1030  
Delta R.T. -0.12 min  
Lab File: VD064347.D  
Acq: 22 Nov 2019 15:05

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion:117 Resp: 69739  
Ion Ratio Lower Upper  
117 100  
119 3.1 77.2 115.8#  
121 0.0 25.5 38.3#

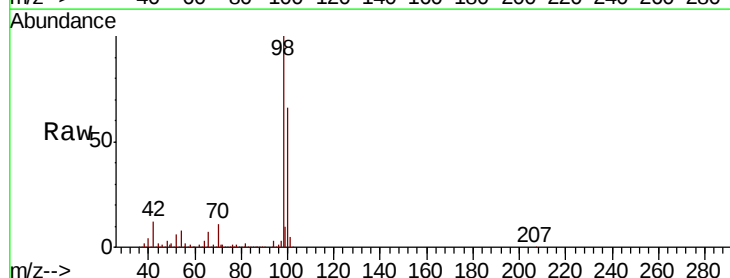


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

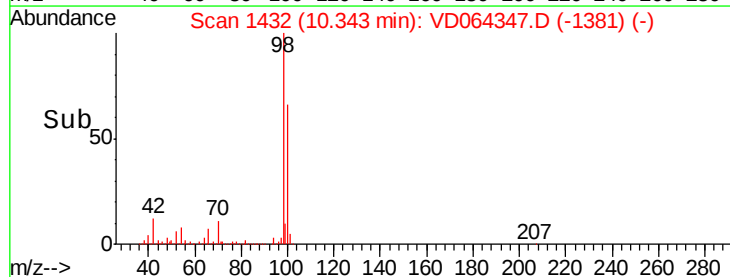
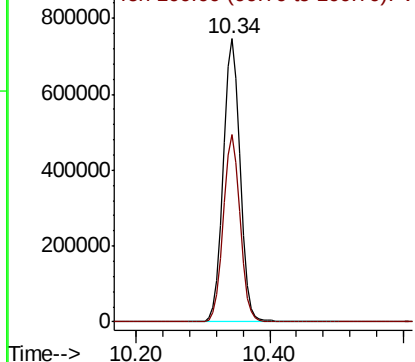


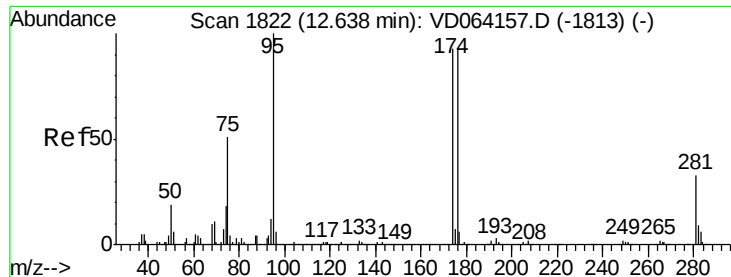
#50  
Toluene-d8  
Concen: 54.167 ug/l  
RT: 10.34 min Scan# 1432  
Delta R.T. -0.00 min  
Lab File: VD064347.D  
Acq: 22 Nov 2019 15:05

Tgt Ion: 98 Resp: 1341127  
Ion Ratio Lower Upper  
98 100  
100 65.9 52.6 78.8



Abundance Ion 98.00 (97.70 to 98.70): V  
Ion 100.00 (99.70 to 100.70): V

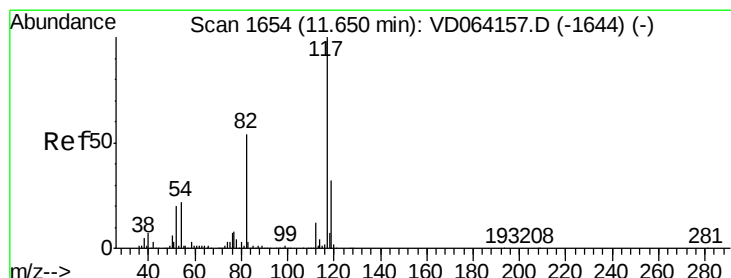
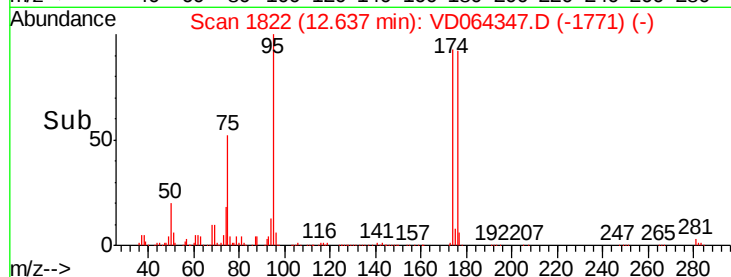
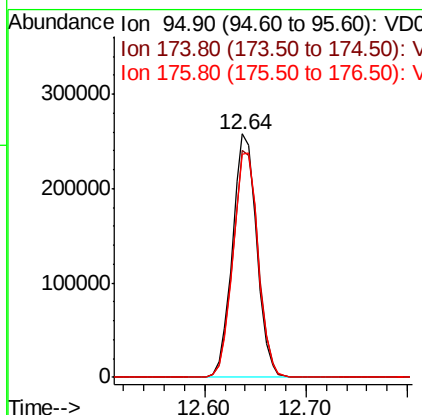
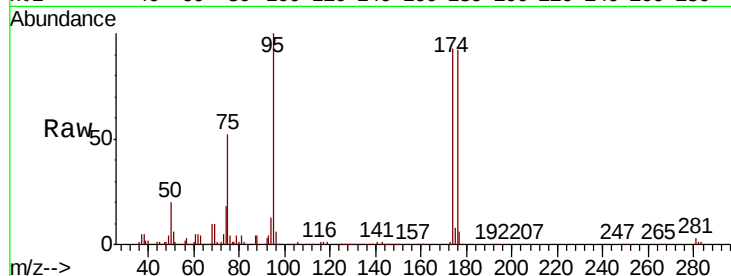




#62  
4-Bromofluorobenzene  
Concen: 50.002 ug/l  
RT: 12.64 min Scan# 1822  
Delta R.T. -0.00 min  
Lab File: VD064347.D  
Acq: 22 Nov 2019 15:05

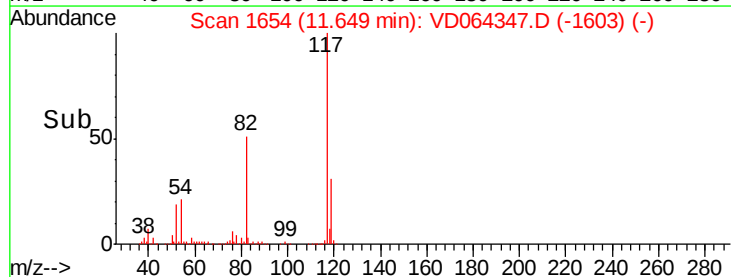
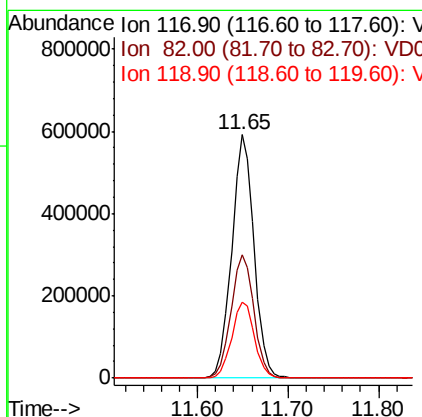
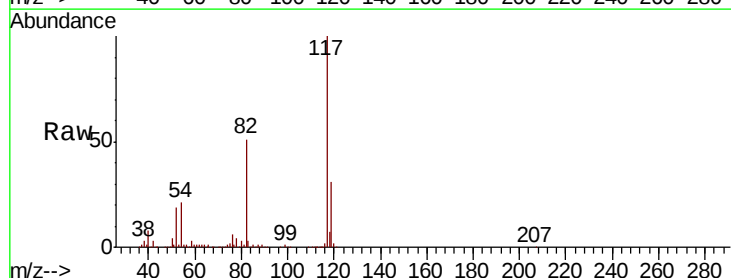
Instrument :  
MSVOA\_D  
ClientSampleId :

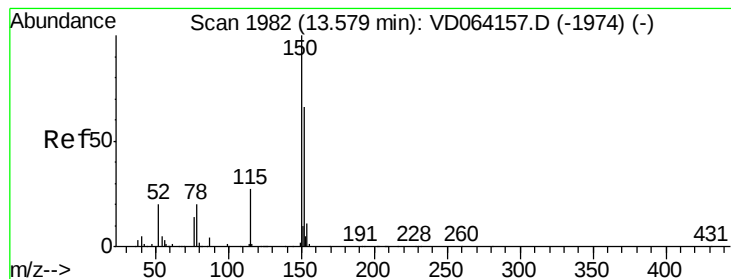
Tot Ion: 95 Resp: 428734  
Ion Ratio Lower Upper  
95 100  
174 96.0 0.0 183.6  
176 95.2 0.0 180.2



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.65 min Scan# 1654  
Delta R.T. -0.00 min  
Lab File: VD064347.D  
Acq: 22 Nov 2019 15:05

Tgt Ion: 117 Resp: 1013263  
Ion Ratio Lower Upper  
117 100  
82 50.9 42.8 64.2  
119 31.4 25.6 38.4



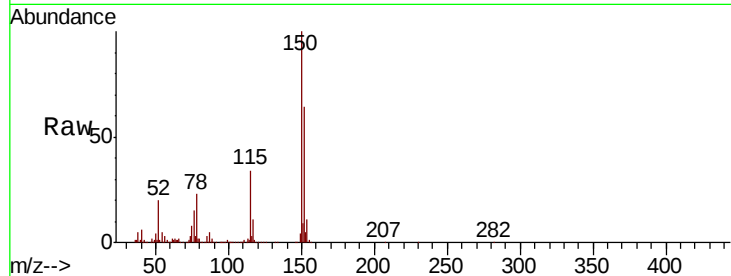


#72

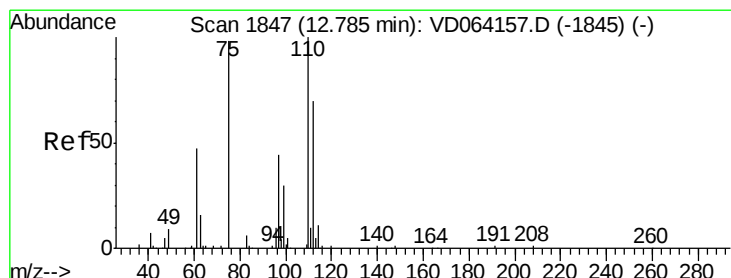
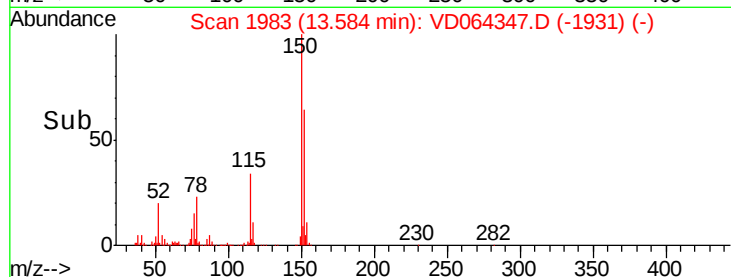
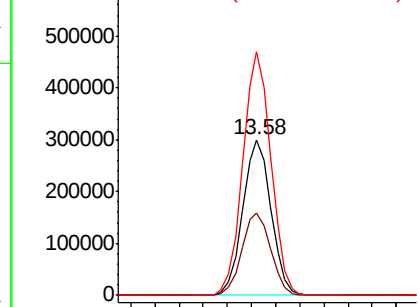
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.58 min Scan# 1983  
Delta R.T. 0.01 min  
Lab File: VD064347.D  
Acq: 22 Nov 2019 15:05

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion:152 Resp: 487387  
Ion Ratio Lower Upper  
152 100  
115 54.2 27.4 82.2  
150 156.2 0.0 351.6



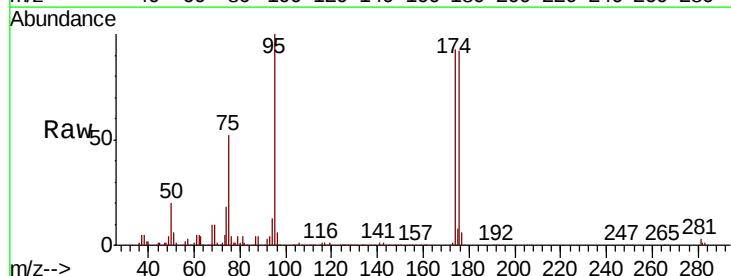
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



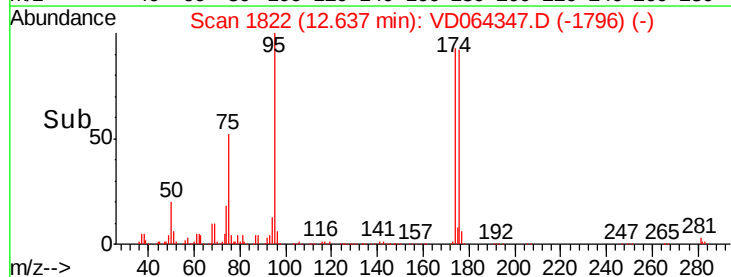
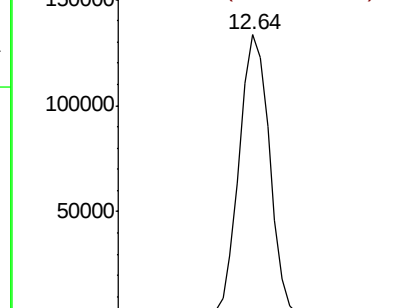
#76

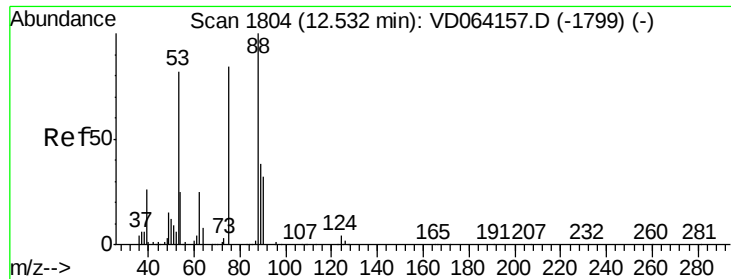
1,2,3-Trichloropropane  
Concen: 57.097 ug/l  
RT: 12.64 min Scan# 1822  
Delta R.T. -0.15 min  
Lab File: VD064347.D  
Acq: 22 Nov 2019 15:05

Tgt Ion: 75 Resp: 224149  
Ion Ratio Lower Upper  
75 100  
77 1.3 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VDC  
Ion 77.00 (76.70 to 77.70): VDC





#81

trans-1,4-Dichloro-2-butene

Concen: 113.417 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.11 min

Lab File: VD064347.D

Acq: 22 Nov 2019 15:05

Instrument :

MSVOA\_D

ClientSampleId :

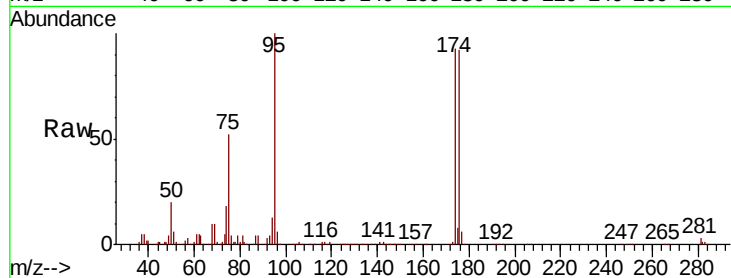
Tot Ion: 75 Resp: 224149

Ion Ratio Lower Upper

75 100

53 0.0 79.4 119.0#

89 0.0 36.6 55.0#



Abundance Ion 74.90 (74.60 to 75.60): VDC  
Ion 53.00 (52.70 to 53.70): VDC  
Ion 88.90 (88.60 to 89.60): VDC

