

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD120419\  
 Data File : VD064424.D  
 Acq On : 04 Dec 2019 18:42  
 Operator : VA/SY  
 Sample : K6145-05  
 Misc : 7.22G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Dec 05 03:50:59 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D112719S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Nov 29 07:18:03 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 621985   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 1033297  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 974466   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 475913   | 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   | 312607   | 55.53 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 111.06% |          |
| 35) Dibromofluoromethane    | 7.92  | 113  | 324752   | 49.88 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 99.76%  |          |
| 50) Toluene-d8              | 10.34 | 98   | 1249823  | 50.96 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 101.92% |          |
| 62) 4-Bromofluorobenzene    | 12.64 | 95   | 421595   | 53.49 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 106.98% |          |

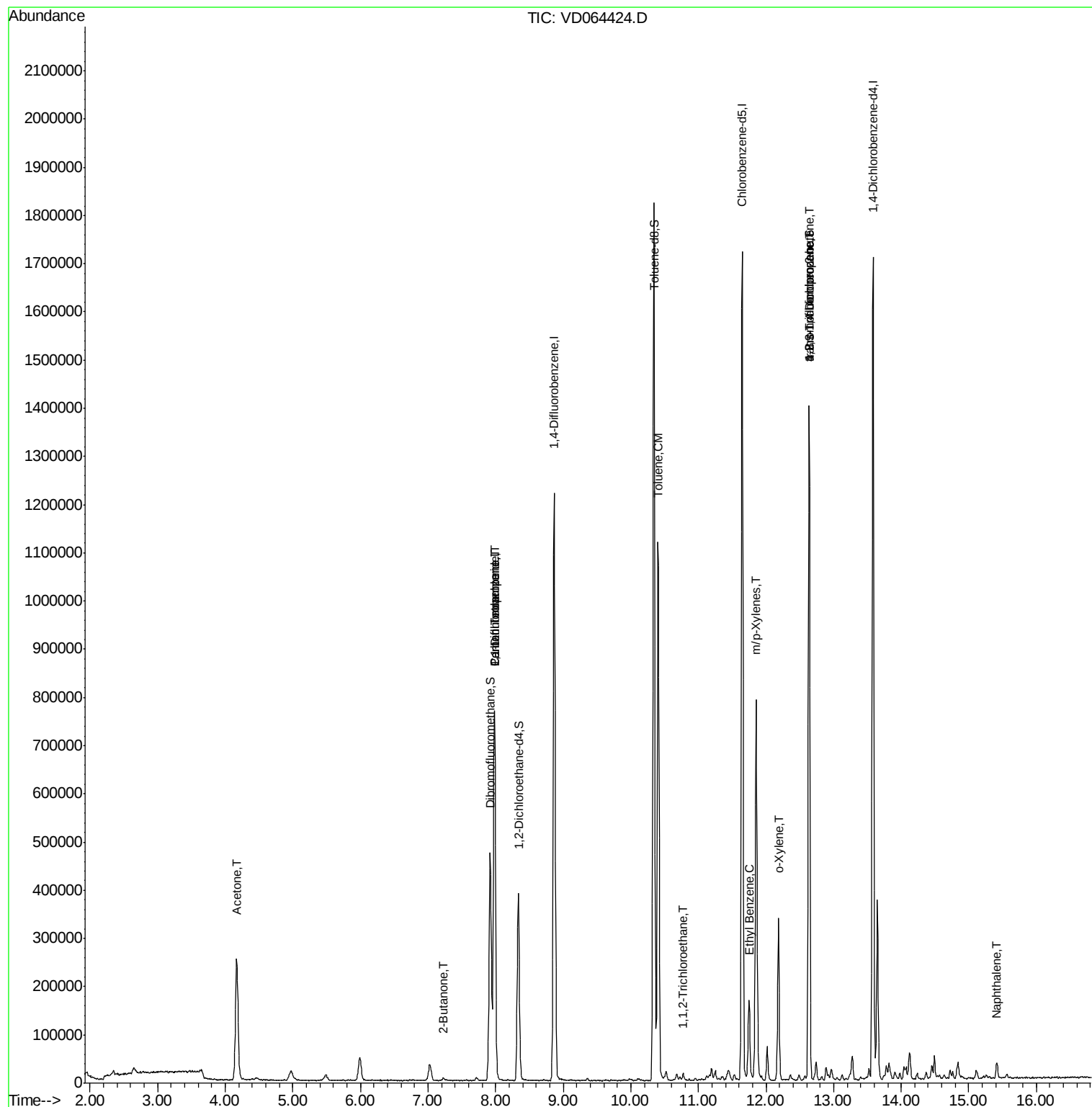
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 16) Acetone                    | 4.17  | 43   | 443497   | 389.824   | ug/l   | 96     |
| 20) Methylene Chloride         | 4.96  | 84   | 14586    | Below Cal | #      | 84     |
| 25) 2-Butanone                 | 7.22  | 43   | 6872     | 4.271     | ug/l   | 99     |
| 31) Cyclohexane                | 7.98  | 56   | 13619    | Below Cal | #      | 40     |
| 36) 1,1-Dichloropropene        | 7.98  | 75   | 42997    | 4.399     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 7.98  | 117  | 58871    | 5.707     | ug/l # | 14     |
| 52) Toluene                    | 10.40 | 92   | 481807   | 27.235    | ug/l   | 98     |
| 55) 1,1,2-Trichloroethane      | 10.77 | 97   | 5841     | 1.164     | ug/l # | 19     |
| 67) Ethyl Benzene              | 11.75 | 91   | 119030   | 3.292     | ug/l   | 99     |
| 68) m/p-Xylenes                | 11.86 | 106  | 253133   | 18.359    | ug/l   | 99     |
| 69) o-Xylene                   | 12.18 | 106  | 91613    | 7.194     | ug/l   | 98     |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75   | 216361   | 55.282    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.64 | 75   | 216361   | 120.544   | ug/l # | 9      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.48 | 75   | 257      | Below Cal | #      | 1      |
| 95) Naphthalene                | 15.41 | 128  | 29136    | 1.663     | ug/l # | 95     |

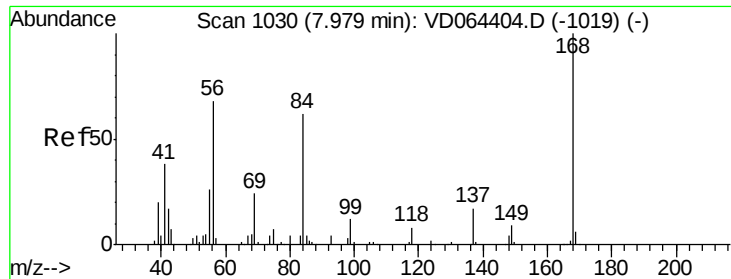
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD120419\  
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Sample : K6145-05  
Misc : 7.22G/5.00ml/MSVOA D/SOIL  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :

Quant Time: Dec 05 03:50:59 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D112719S.M  
Quant Title : SW846 8260  
QLast Update : Fri Nov 29 07:18:03 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. 0.00 min

Lab File: VD064424.D

Acq: 04 Dec 2019 18:42

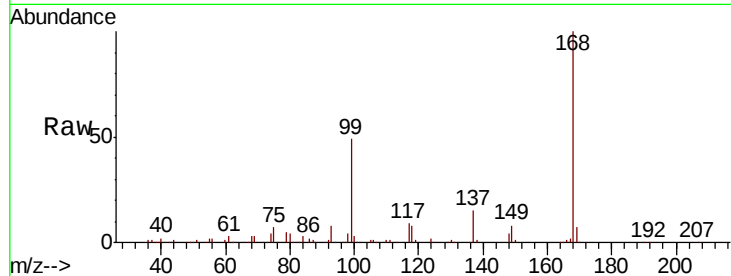
Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion:168 Resp: 621985

Ion Ratio Lower Upper

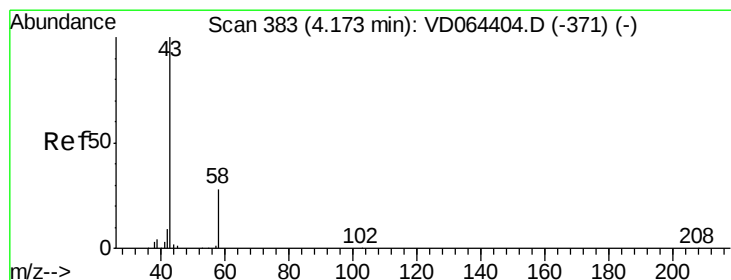
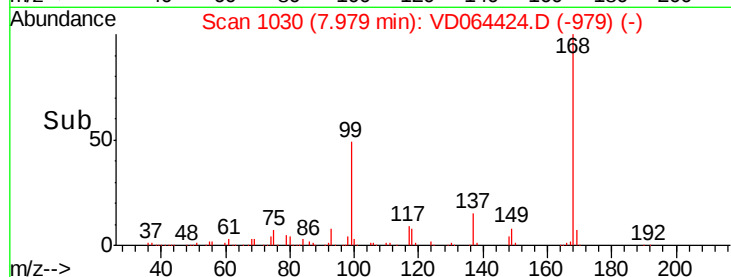
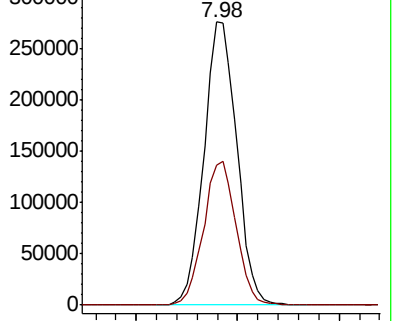
168 100

99 49.3 40.7 61.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC



#16

Acetone

Concen: 389.824 ug/l

RT: 4.17 min Scan# 382

Delta R.T. -0.01 min

Lab File: VD064424.D

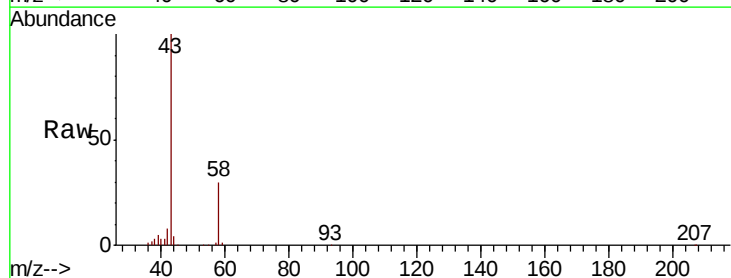
Acq: 04 Dec 2019 18:42

Tgt Ion: 43 Resp: 443497

Ion Ratio Lower Upper

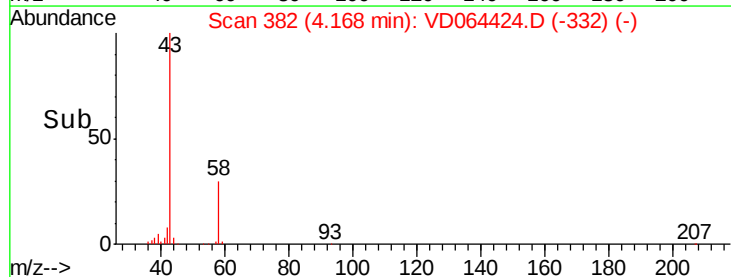
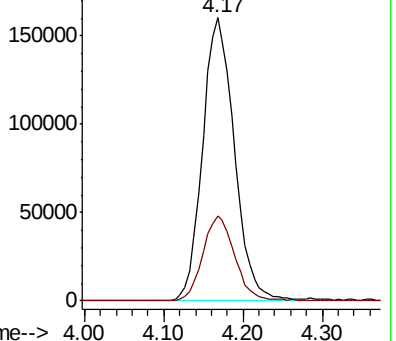
43 100

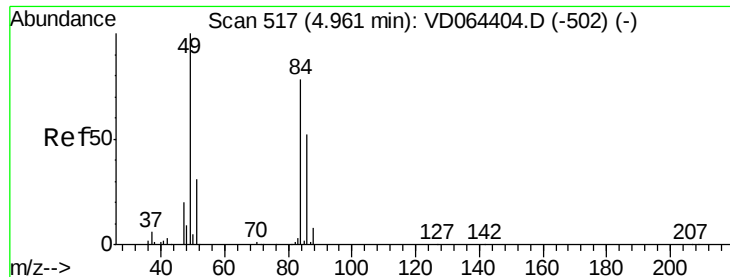
58 30.1 22.6 33.8



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 58.00 (57.70 to 58.70): VDC

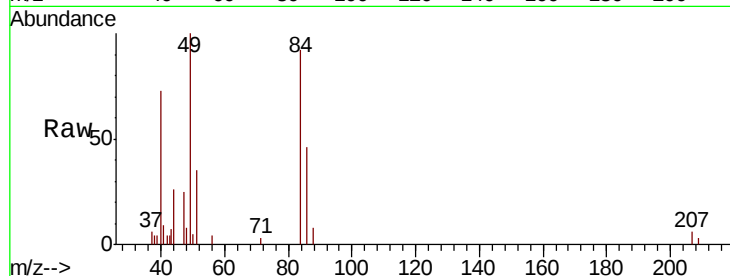




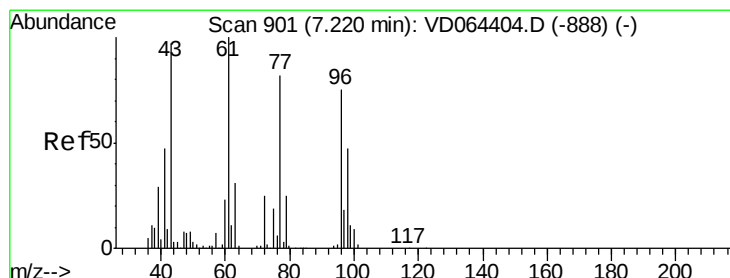
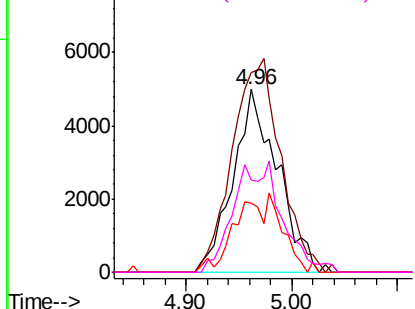
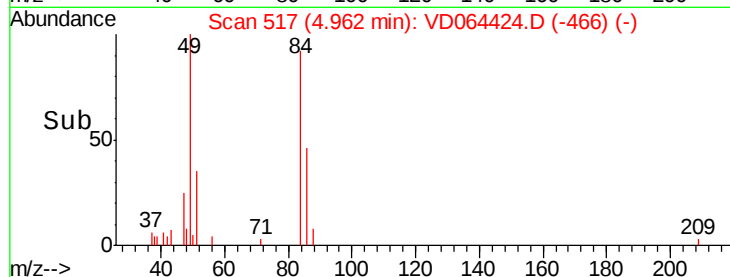
#20  
Methvlene Chloride  
Concen: Below Cal  
RT: 4.96 min Scan# 517  
Delta R.T. 0.00 min  
Lab File: VD064424.D  
Acq: 04 Dec 2019 18:42

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion: 84 Resp: 14586  
Ion Ratio Lower Upper  
84 100  
49 109.1 102.6 153.8  
51 37.7 32.0 48.0  
86 50.1 53.4 80.0#

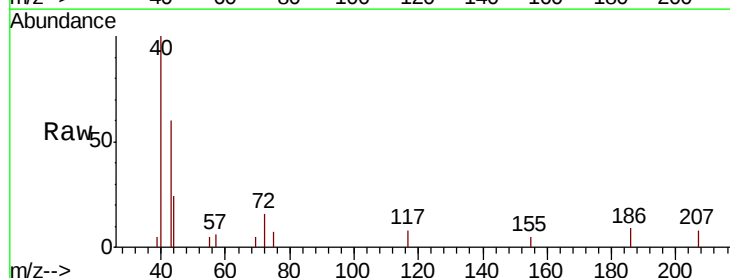


Abundance Ion 83.90 (83.60 to 84.60): VDC  
Ion 48.90 (48.60 to 49.60): VDC  
Ion 50.90 (50.60 to 51.60): VDC  
Ion 85.90 (85.60 to 86.60): VDC

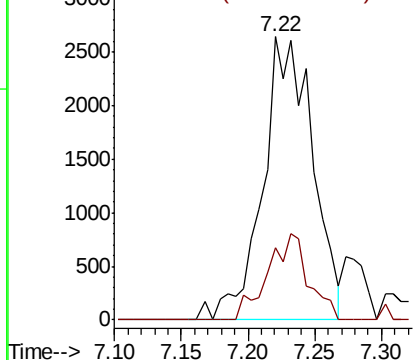
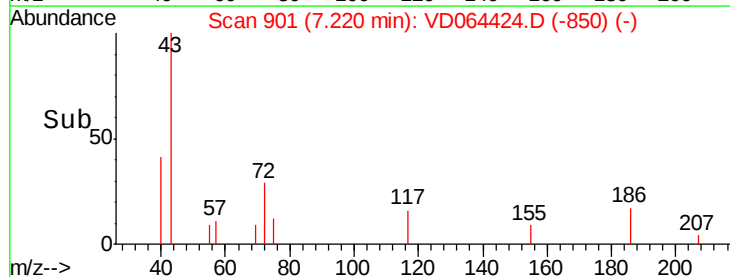


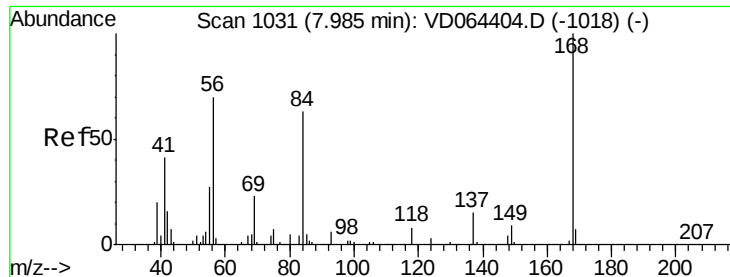
#25  
2-Butanone  
Concen: 4.271 ug/l  
RT: 7.22 min Scan# 901  
Delta R.T. 0.00 min  
Lab File: VD064424.D  
Acq: 04 Dec 2019 18:42

Tgt Ion: 43 Resp: 6872  
Ion Ratio Lower Upper  
43 100  
72 25.7 21.0 31.4



Abundance Ion 43.00 (42.70 to 43.70): VDC  
Ion 72.00 (71.70 to 72.70): VDC





#31

Cyclohexane

Concen: Below Cal

RT: 7.98 min Scan# 1031

Delta R.T. 0.00 min

Lab File: VD064424.D

Acq: 04 Dec 2019 18:42

Instrument :

MSVOA\_D

ClientSampleId :

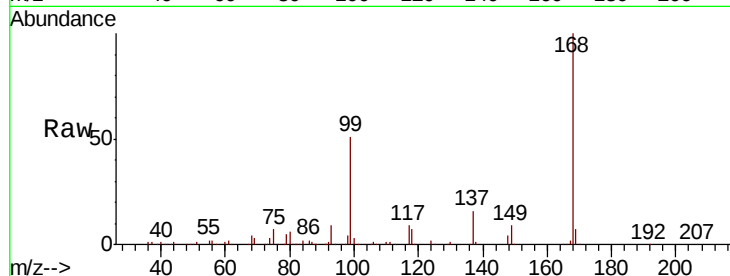
Tot Ion: 56 Resp: 13619

Ion Ratio Lower Upper

56 100

69 124.2 26.2 39.4#

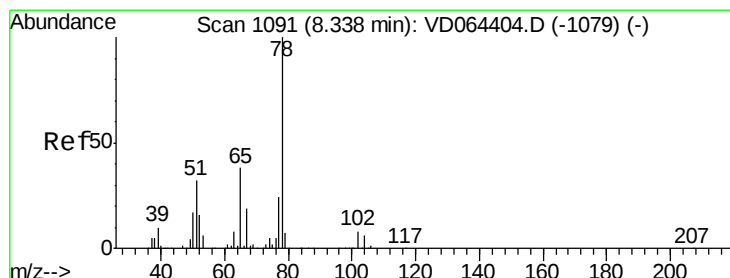
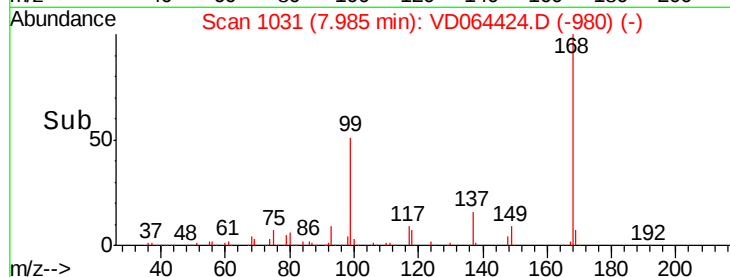
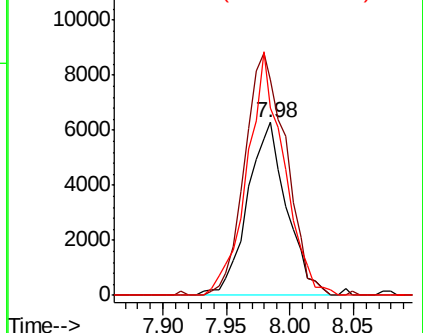
84 108.0 70.3 105.5#



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: 55.526 ug/l

RT: 8.34 min Scan# 1091

Delta R.T. 0.00 min

Lab File: VD064424.D

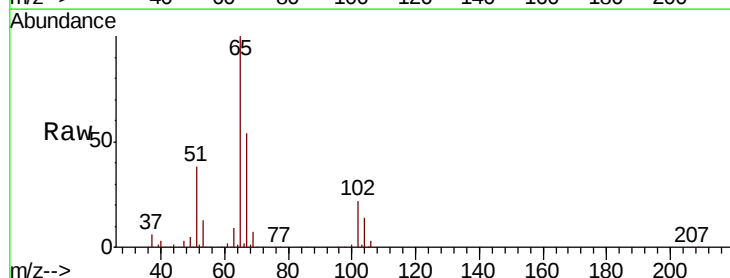
Acq: 04 Dec 2019 18:42

Tgt Ion: 65 Resp: 312607

Ion Ratio Lower Upper

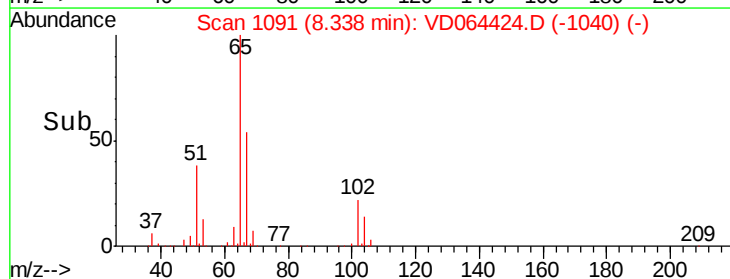
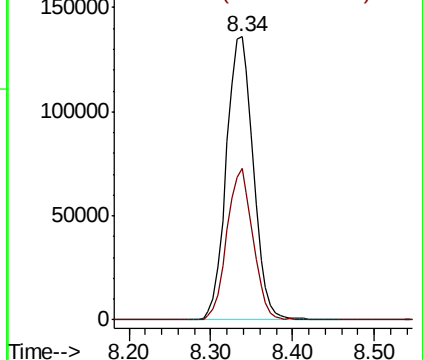
65 100

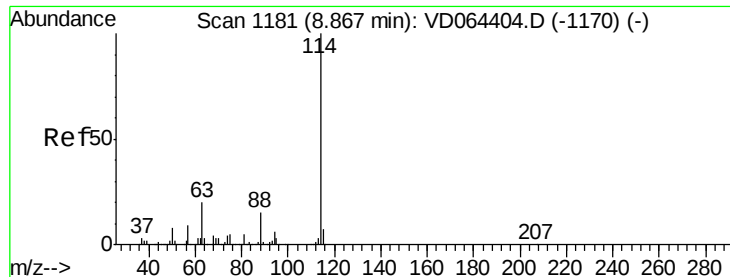
67 51.7 0.0 102.0



Abundance Ion 64.90 (64.60 to 65.60): VDC

Ion 66.90 (66.60 to 67.60): VDC



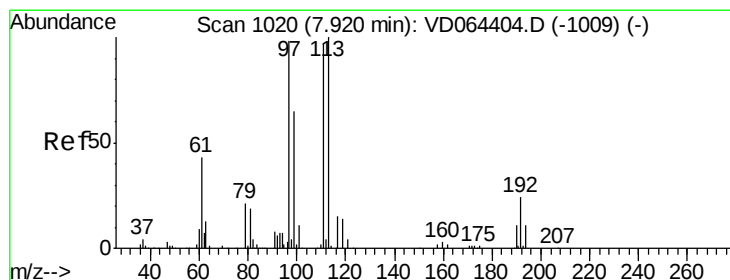
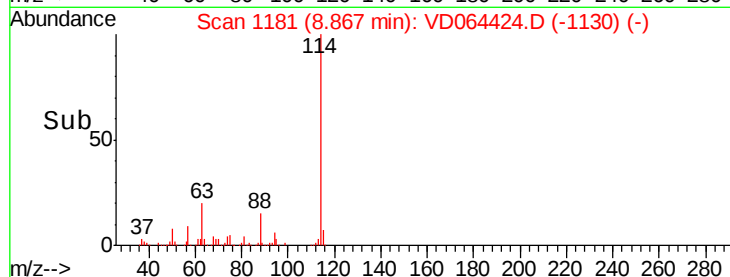
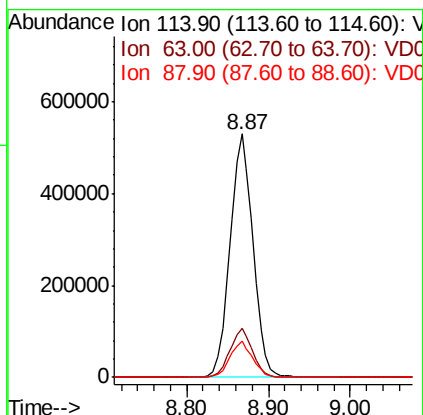
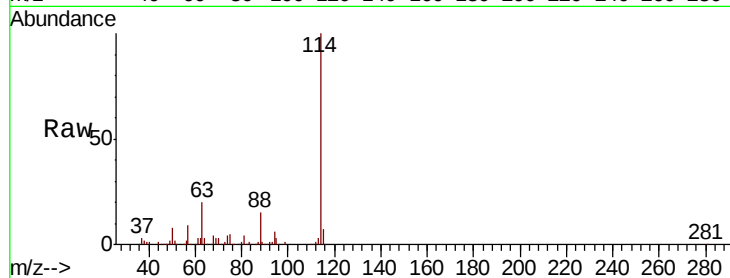


#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.87 min Scan# 1181  
 Delta R.T. 0.00 min  
 Lab File: VD064424.D  
 Acq: 04 Dec 2019 18:42

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Tot Ion:114 Resp: 1033297  

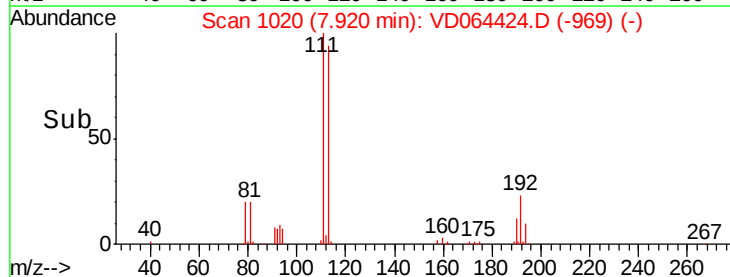
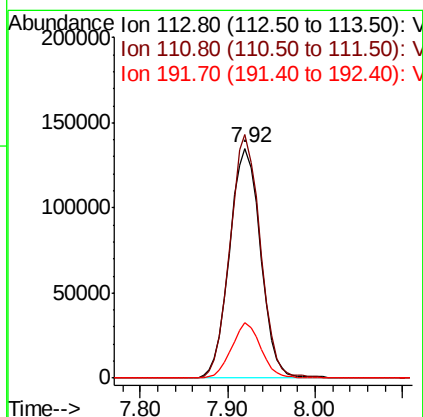
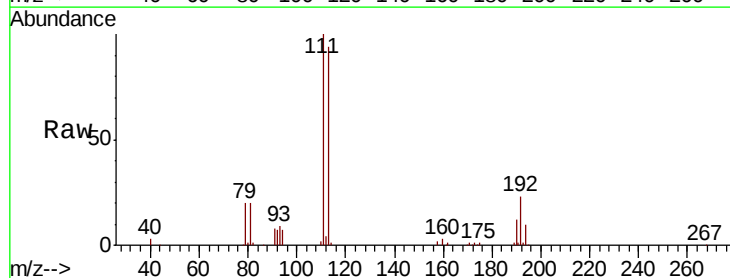
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 114 | 100   |       |       |
| 63  | 20.1  | 0.0   | 40.0  |
| 88  | 14.9  | 0.0   | 29.2  |

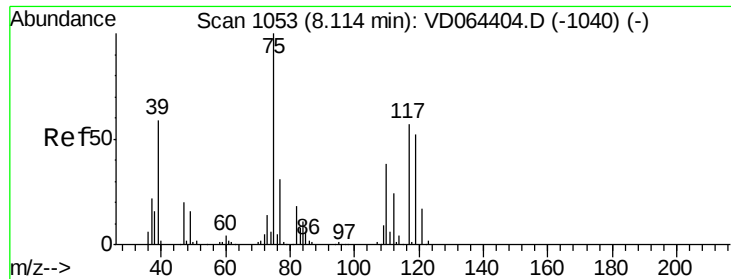


#35  
 Dibromofluoromethane  
 Concen: 49.883 ug/l  
 RT: 7.92 min Scan# 1020  
 Delta R.T. 0.00 min  
 Lab File: VD064424.D  
 Acq: 04 Dec 2019 18:42

Tgt Ion:113 Resp: 324752  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 113 | 100   |       |       |
| 111 | 103.0 | 79.4  | 119.2 |
| 192 | 22.6  | 18.6  | 28.0  |

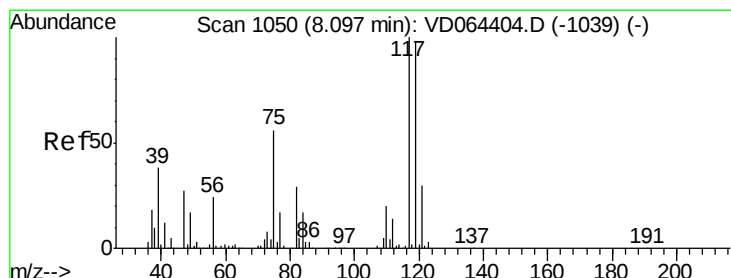
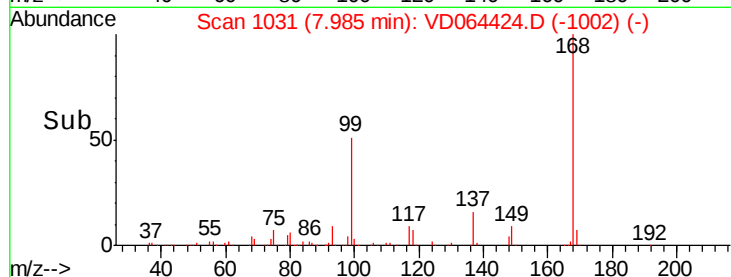
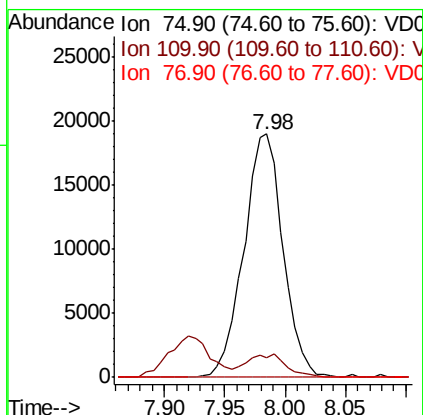
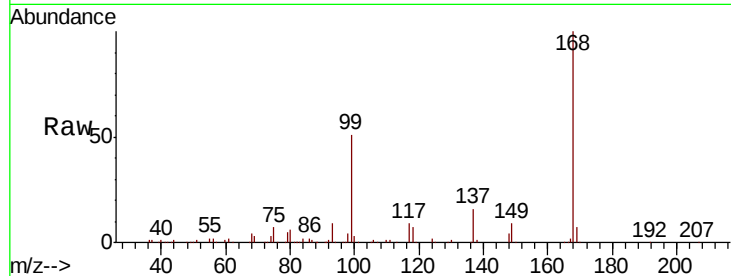




#36  
 1,1-Dichloropropene  
 Concen: 4.399 ug/l  
 RT: 7.98 min Scan# 1031  
 Delta R.T. -0.13 min  
 Lab File: VD064424.D  
 Acq: 04 Dec 2019 18:42

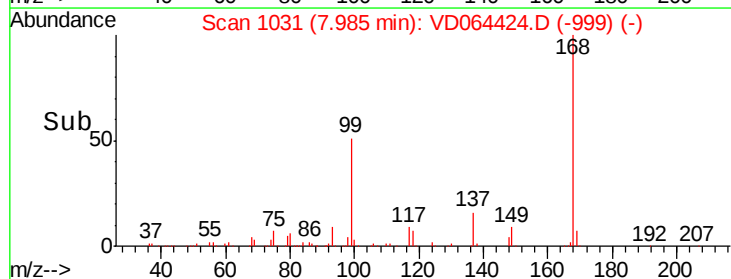
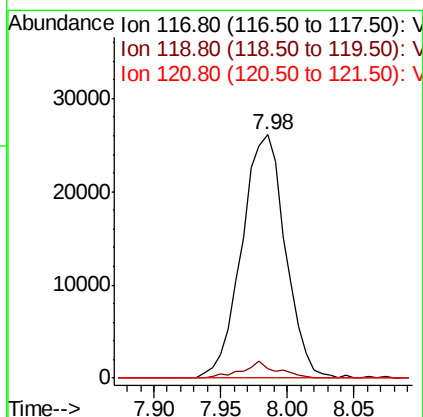
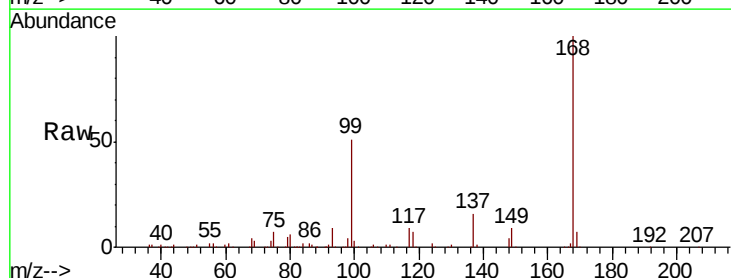
Instrument :  
 MSVOA\_D  
 ClientSampled :

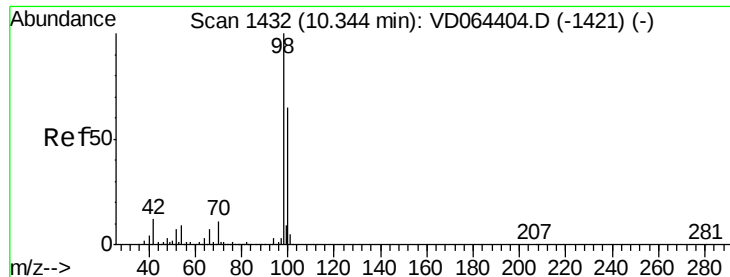
Tot Ion: 75 Resp: 42997  
 Ion Ratio Lower Upper  
 75 100  
 110 9.7 18.6 55.8#  
 77 0.0 25.0 37.4#



#38  
 Carbon Tetrachloride  
 Concen: 5.707 ug/l  
 RT: 7.98 min Scan# 1031  
 Delta R.T. -0.11 min  
 Lab File: VD064424.D  
 Acq: 04 Dec 2019 18:42

Tgt Ion: 117 Resp: 58871  
 Ion Ratio Lower Upper  
 117 100  
 119 3.8 78.8 118.2#  
 121 0.0 24.2 36.2#

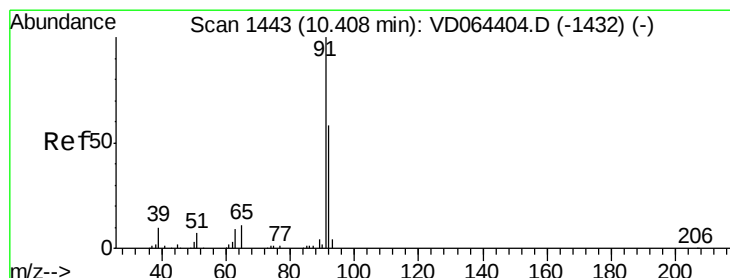
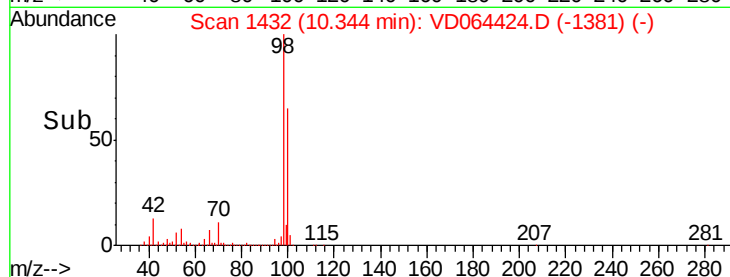
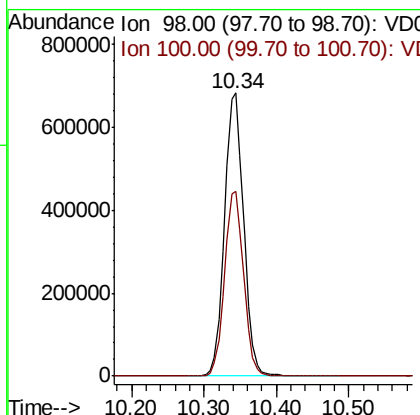
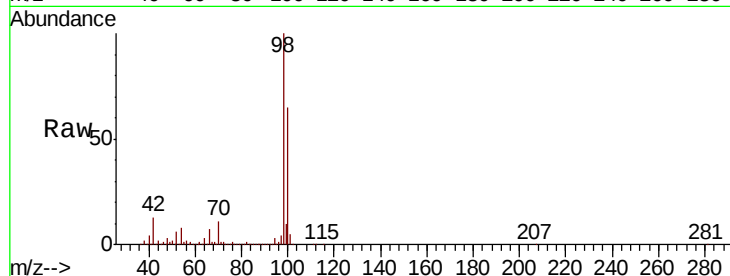




#50  
Toluene-d8  
Concen: 50.964 ug/l  
RT: 10.34 min Scan# 1432  
Delta R.T. 0.00 min  
Lab File: VD064424.D  
Acq: 04 Dec 2019 18:42

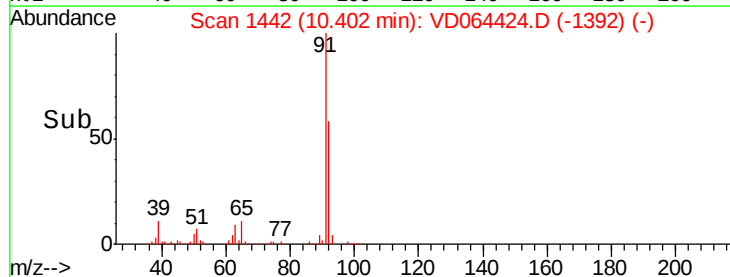
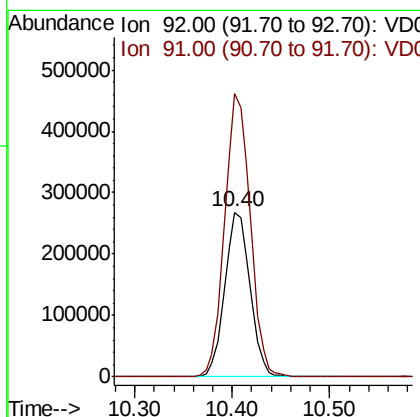
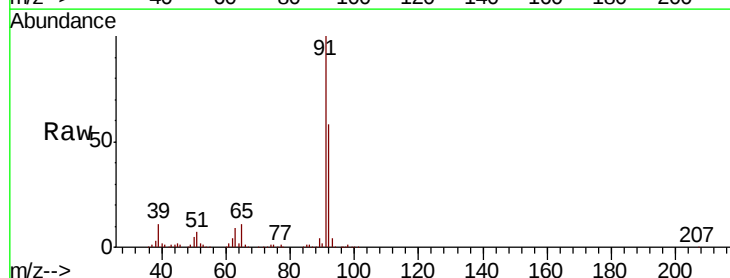
Instrument :  
MSVOA\_D  
ClientSampleId :

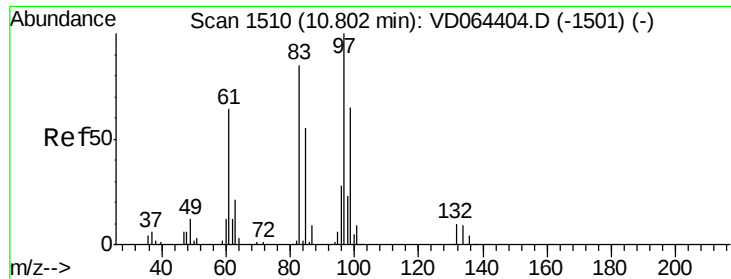
Tot Ion: 98 Resp: 1249823  
Ion Ratio Lower Upper  
98 100  
100 64.9 52.6 79.0



#52  
Toluene  
Concen: 27.235 ug/l  
RT: 10.40 min Scan# 1442  
Delta R.T. -0.01 min  
Lab File: VD064424.D  
Acq: 04 Dec 2019 18:42

Tgt Ion: 92 Resp: 481807  
Ion Ratio Lower Upper  
92 100  
91 174.4 137.8 206.6

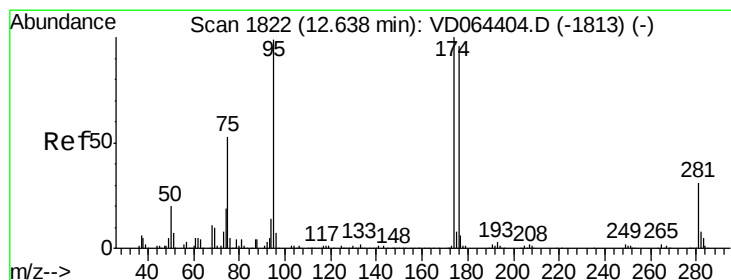
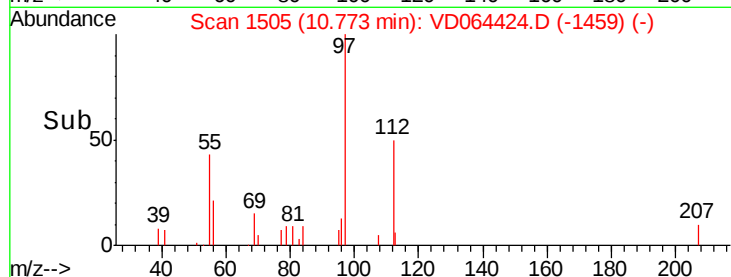
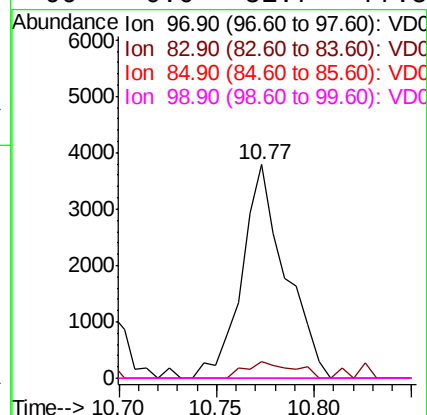
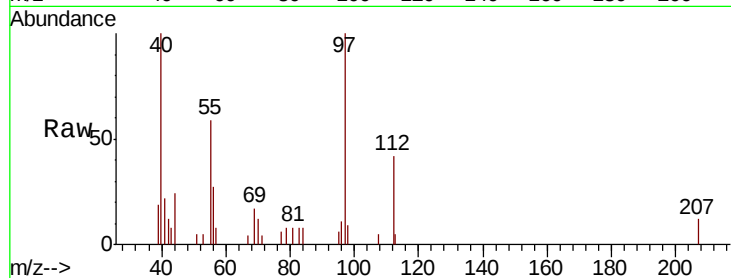




#55  
 1,1,2-Trichloroethane  
 Concen: 1.164 ug/l  
 RT: 10.77 min Scan# 1505  
 Delta R.T. -0.03 min  
 Lab File: VD064424.D  
 Acq: 04 Dec 2019 18:42

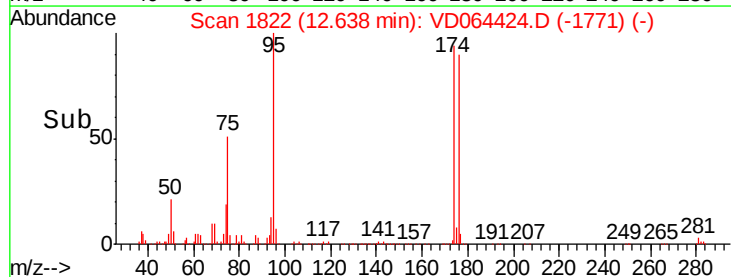
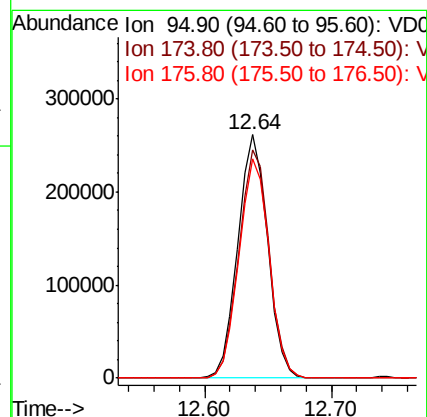
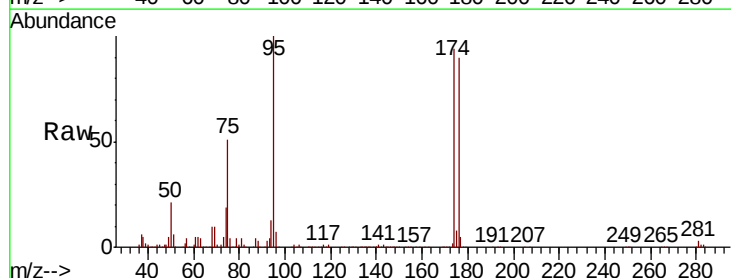
Instrument :  
 MSVOA\_D  
 ClientSampleId :

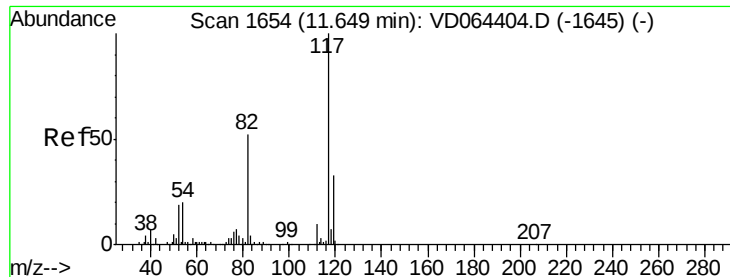
Tot Ion: 97 Resp: 5841  
 Ion Ratio Lower Upper  
 97 100  
 83 7.8 67.8 101.8#  
 85 0.0 43.7 65.5#  
 99 0.0 51.7 77.5#



#62  
 4-Bromofluorobenzene  
 Concen: 53.494 ug/l  
 RT: 12.64 min Scan# 1822  
 Delta R.T. 0.00 min  
 Lab File: VD064424.D  
 Acq: 04 Dec 2019 18:42

Tgt Ion: 95 Resp: 421595  
 Ion Ratio Lower Upper  
 95 100  
 174 95.9 0.0 197.2  
 176 92.0 0.0 189.6

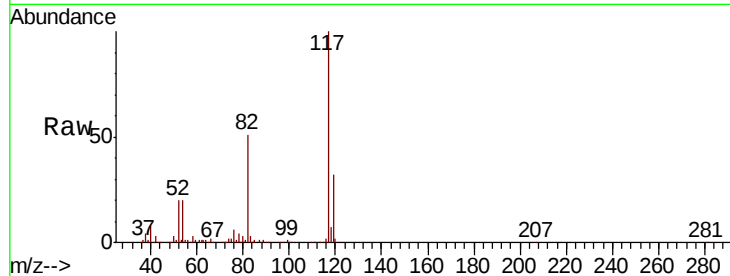




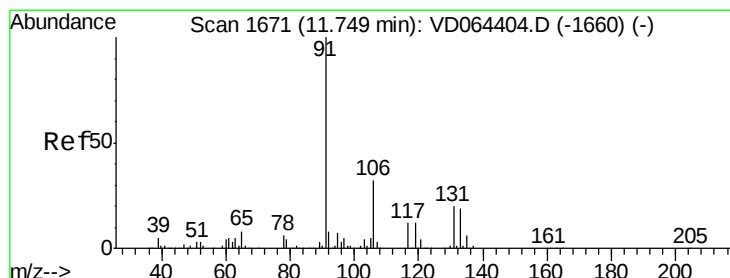
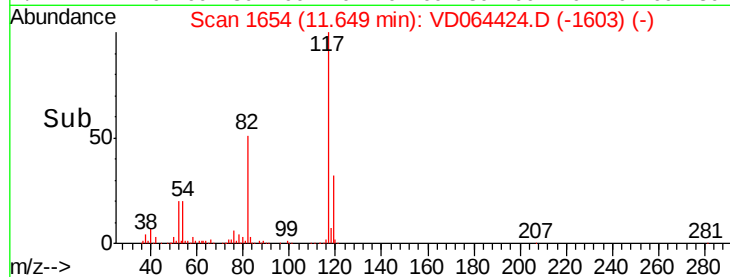
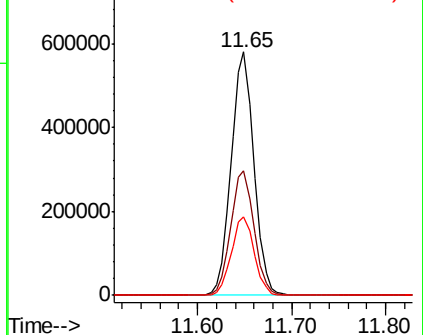
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.65 min Scan# 1654  
Delta R.T. 0.00 min  
Lab File: VD064424.D  
Acq: 04 Dec 2019 18:42

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion:117 Resp: 974466  
Ion Ratio Lower Upper  
117 100  
82 51.2 41.4 62.2  
119 32.5 26.2 39.2

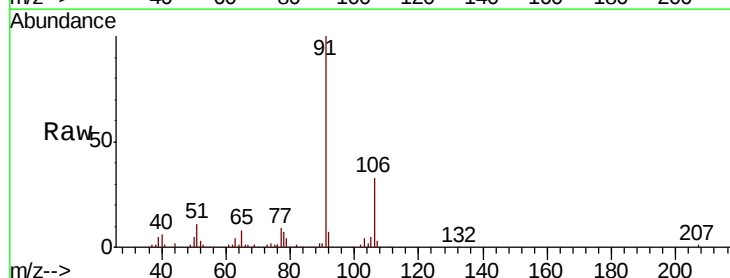


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VDC  
Ion 118.90 (118.60 to 119.60): V

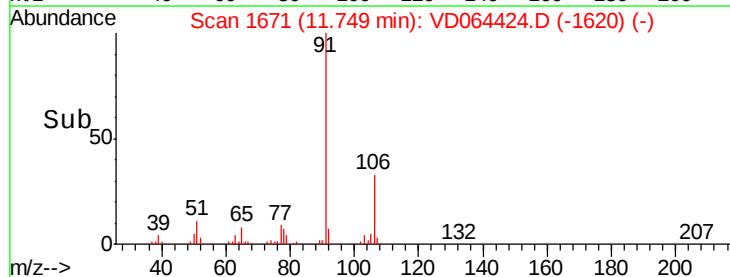
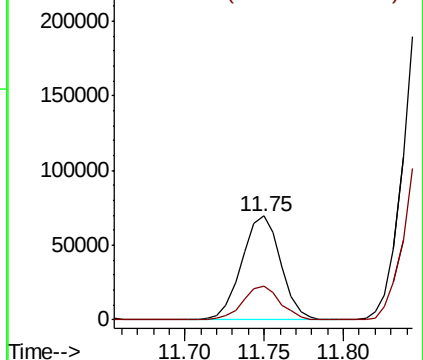


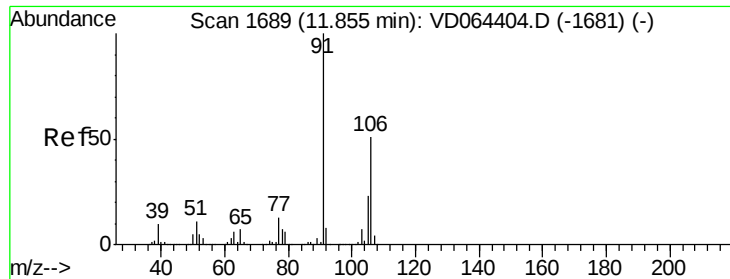
#67  
Ethyl Benzene  
Concen: 3.292 ug/l  
RT: 11.75 min Scan# 1671  
Delta R.T. 0.00 min  
Lab File: VD064424.D  
Acq: 04 Dec 2019 18:42

Tgt Ion: 91 Resp: 119030  
Ion Ratio Lower Upper  
91 100  
106 32.7 25.8 38.8



Abundance Ion 91.00 (90.70 to 91.70): VDC  
Ion 106.00 (105.70 to 106.70): V

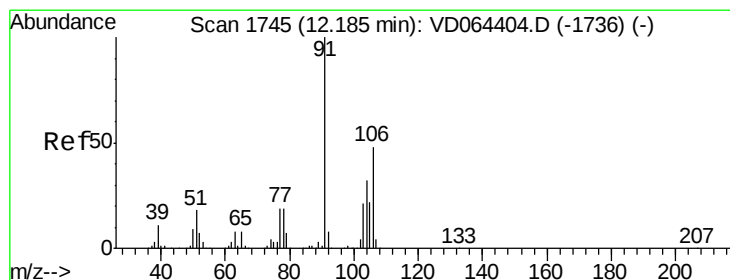
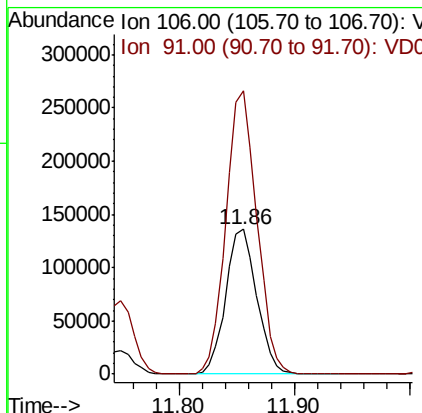
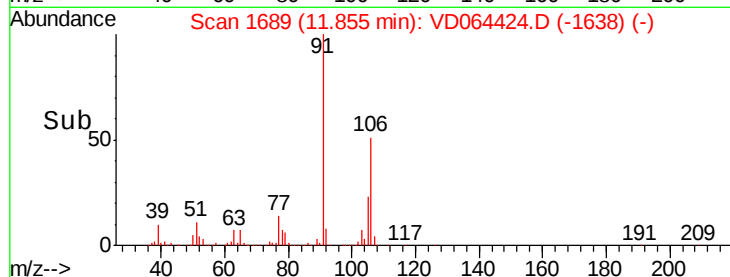
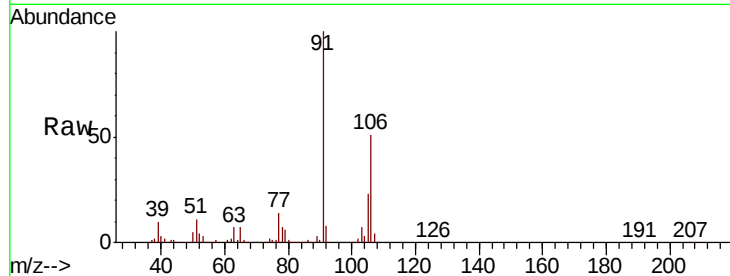




#68  
m/p-Xylenes  
Concen: 18.359 ug/l  
RT: 11.86 min Scan# 1689  
Delta R.T. 0.00 min  
Lab File: VD064424.D  
Acq: 04 Dec 2019 18:42

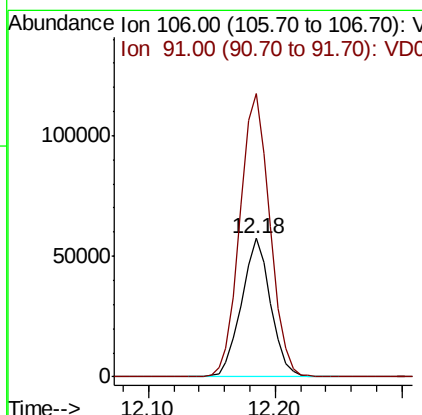
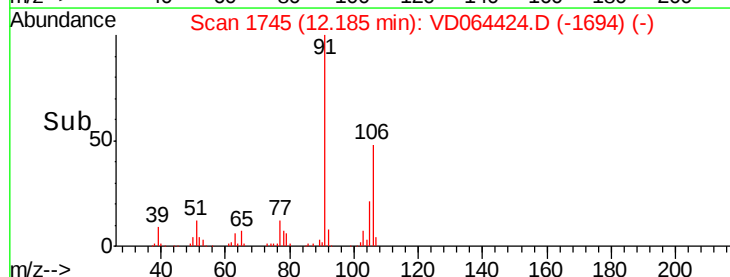
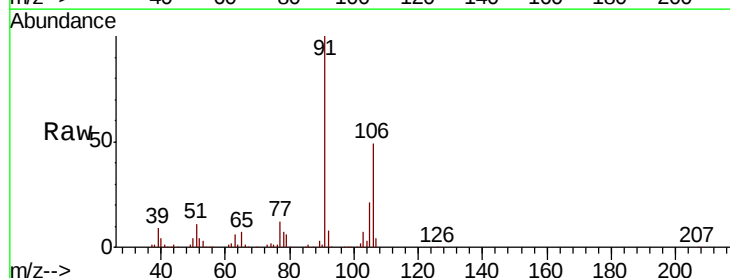
Instrument :  
MSVOA\_D  
ClientSampled :

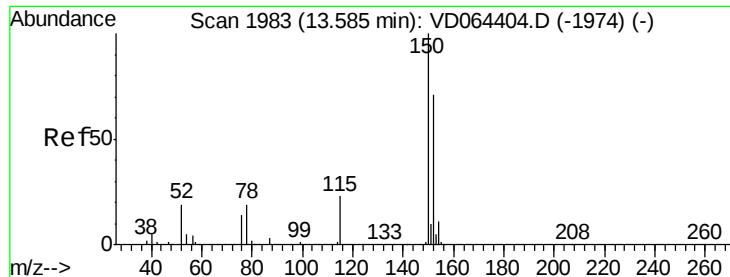
Tot Ion:106 Resp: 253133  
Ion Ratio Lower Upper  
106 100  
91 195.7 157.4 236.2



#69  
o-Xylene  
Concen: 7.194 ug/l  
RT: 12.18 min Scan# 1745  
Delta R.T. 0.00 min  
Lab File: VD064424.D  
Acq: 04 Dec 2019 18:42

Tgt Ion:106 Resp: 91613  
Ion Ratio Lower Upper  
106 100  
91 210.1 103.8 311.4





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.58 min Scan# 1983

Delta R.T. 0.00 min

Lab File: VD064424.D

Acq: 04 Dec 2019 18:42

Instrument :

MSVOA\_D

ClientSampleId :

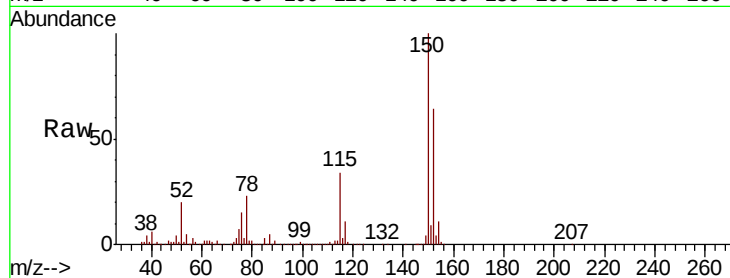
Tot Ion:152 Resp: 475913

Ion Ratio Lower Upper

152 100

115 54.5 26.7 80.1

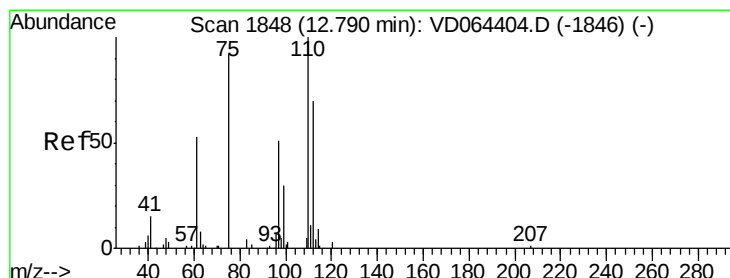
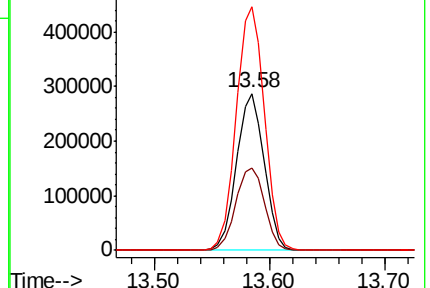
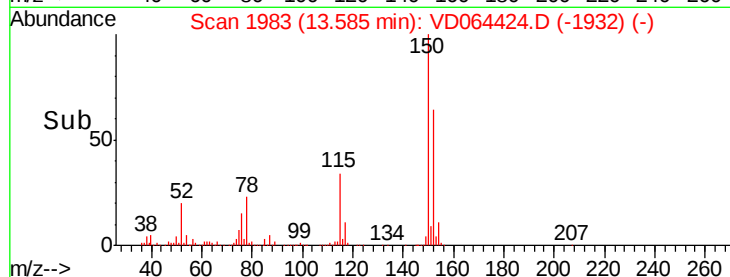
150 157.6 0.0 347.2



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: 55.282 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. -0.15 min

Lab File: VD064424.D

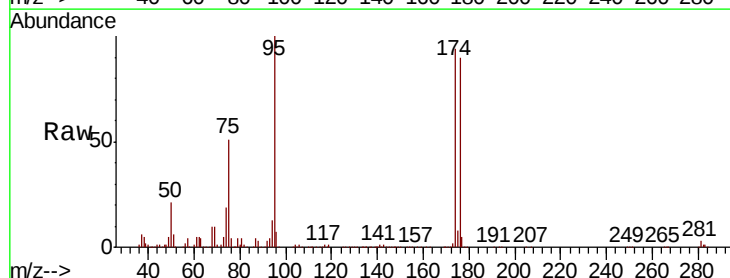
Acq: 04 Dec 2019 18:42

Tgt Ion: 75 Resp: 216361

Ion Ratio Lower Upper

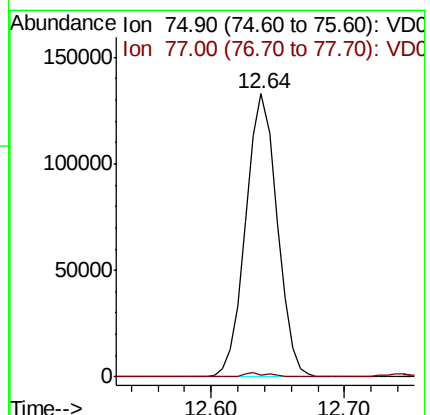
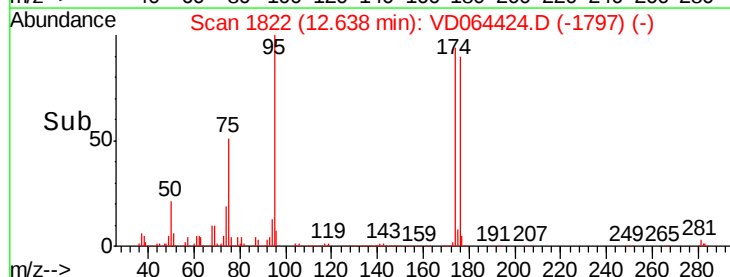
75 100

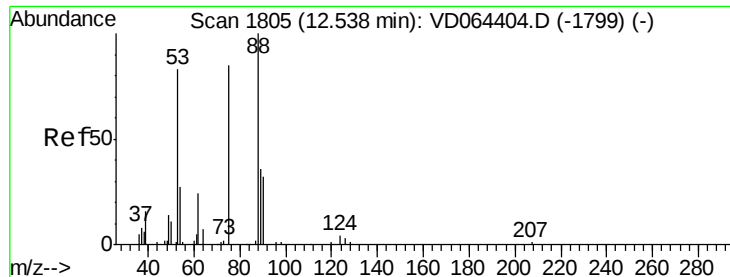
77 1.3 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V





#81

trans-1,4-Dichloro-2-butene

Concen: 120.544 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.10 min

Lab File: VD064424.D

Acq: 04 Dec 2019 18:42

Instrument :

MSVOA\_D

ClientSampleId :

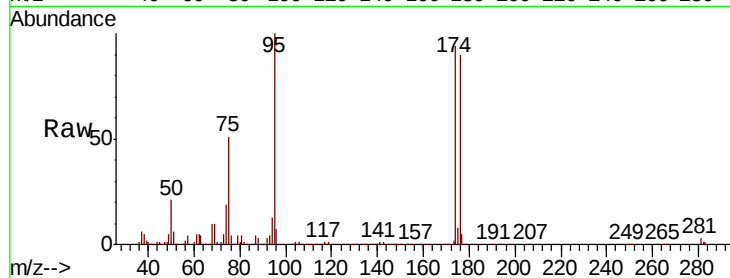
Tot Ion: 75 Resp: 216361

Ion Ratio Lower Upper

75 100

53 0.0 81.0 121.6#

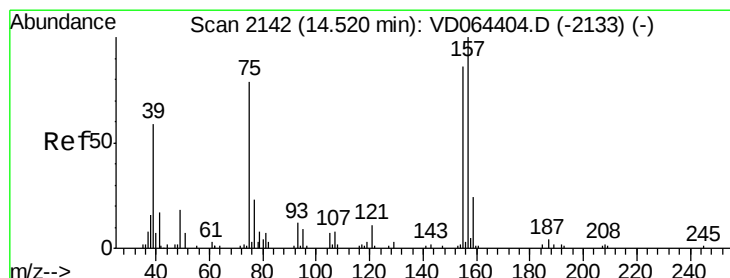
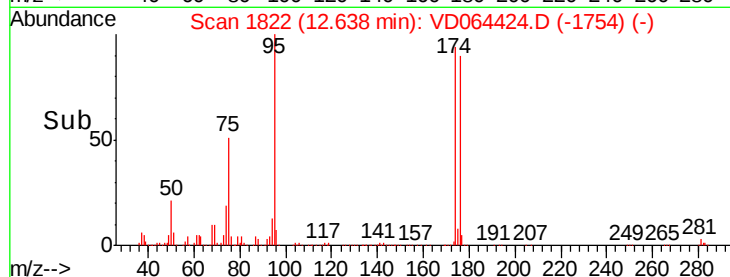
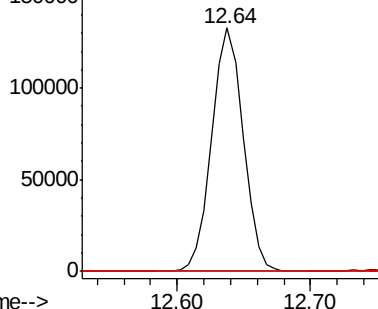
89 0.0 38.5 57.7#



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



#92

1,2-Dibromo-3-Chloropropane

Concen: Below Cal

RT: 14.48 min Scan# 2136

Delta R.T. -0.03 min

Lab File: VD064424.D

Acq: 04 Dec 2019 18:42

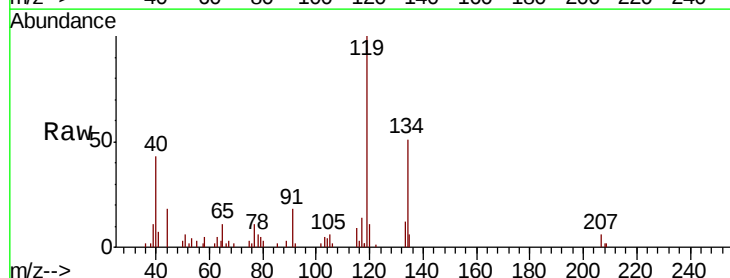
Tgt Ion: 75 Resp: 257

Ion Ratio Lower Upper

75 100

155 0.0 51.9 155.7#

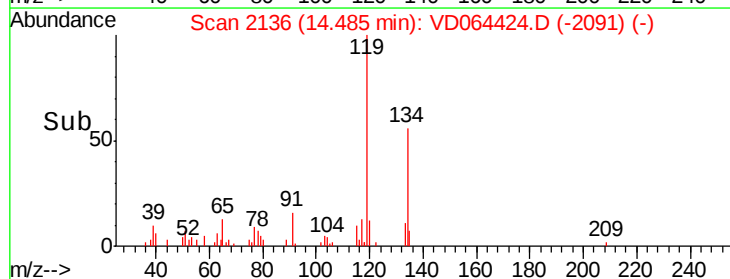
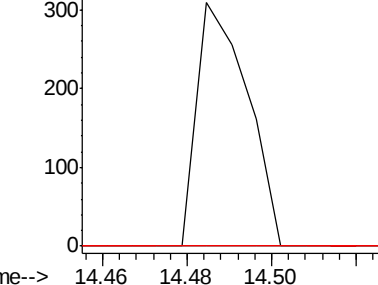
157 0.0 63.2 189.8#

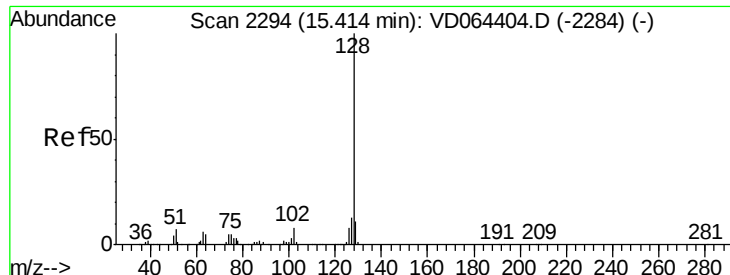


Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V





#95

Naphthalene

Concen: 1.663 ug/l

RT: 15.41 min Scan# 2294

Delta R.T. 0.00 min

Lab File: VD064424.D

Acq: 04 Dec 2019 18:42

Instrument :

MSVOA\_D

ClientSampleId :

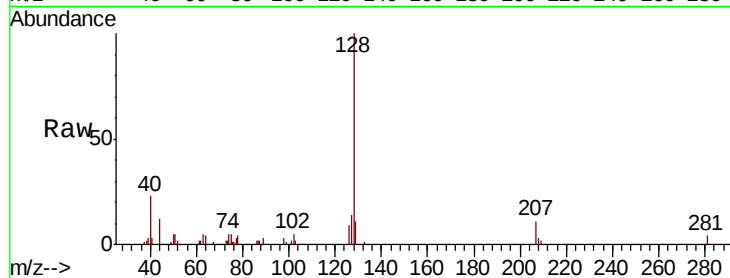
Tot Ion:128 Resp: 29136

Ion Ratio Lower Upper

128 100

127 14.7 10.5 15.7

129 13.5 8.8 13.2#



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

