

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD120519\  
 Data File : VD064441.D  
 Acq On : 05 Dec 2019 17:31  
 Operator : VA/SY  
 Sample : K6174-01RE  
 Misc : 10.07G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Dec 06 05:56:11 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  | 774326   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 1224840  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 1157458  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 567745   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.34   | 65  | 316316   | 45.13 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 90.26%  |      |
| 35) Dibromofluoromethane  | 7.92   | 113 | 316027   | 40.95 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 81.90%  |      |
| 50) Toluene-d8            | 10.34  | 98  | 2141926  | 73.68 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 147.36% |      |
| 62) 4-Bromofluorobenzene  | 12.63  | 95  | 610966   | 65.40 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 130.80% |      |

## Target Compounds

|                               |       |     |          |           |        | Qvalue |
|-------------------------------|-------|-----|----------|-----------|--------|--------|
| 11) Tert butyl alcohol        | 5.47  | 59  | 7058     | 15.820    | ug/l # | 100    |
| 13) Acrolein                  | 3.87  | 56  | 11454    | 18.822    | ug/l # | 1      |
| 14) Allyl chloride            | 4.79  | 41  | 321915   | 29.555    | ug/l # | 62     |
| 15) Acrylonitrile             | 5.49  | 53  | 347318   | 225.023   | ug/l # | 39     |
| 16) Acetone                   | 4.12  | 43  | 355759   | 251.183   | ug/l # | 56     |
| 18) Methyl Acetate            | 4.79  | 43  | 236525   | 57.251    | ug/l # | 51     |
| 20) Methylene Chloride        | 4.96  | 84  | 16234    | Below Cal | #      | 1      |
| 23) Vinyl Acetate             | 6.34  | 43  | 52027    | 4.104     | ug/l # | 79     |
| 25) 2-Butanone                | 7.21  | 43  | 111710   | 55.772    | ug/l # | 52     |
| 26) 2,2-Dichloropropane       | 7.03  | 77  | 58104    | 5.167     | ug/l # | 55     |
| 29) Tetrahydrofuran           | 7.56  | 42  | 15427    | 12.106    | ug/l # | 33     |
| 30) Chloroform                | 7.67  | 83  | 486684   | 36.340    | ug/l # | 18     |
| 31) Cyclohexane               | 7.98  | 56  | 7785934  | 754.253   | ug/l   | 94     |
| 37) Ethyl Acetate             | 7.21  | 43  | 111710   | 22.724    | ug/l # | 69     |
| 38) Carbon Tetrachloride      | 7.98  | 117 | 71036    | 5.810     | ug/l # | 15     |
| 39) Methylcyclohexane         | 9.36  | 83  | 20230031 | 1407.694  | ug/l # | 80     |
| 41) Methacrylonitrile         | 7.56  | 41  | 158898   | 56.363    | ug/l # | 59     |
| 42) 1,2-Dichloroethane        | 8.47  | 62  | 18853    | 2.009     | ug/l # | 1      |
| 43) Isopropyl Acetate         | 8.45  | 43  | 1148715  | 118.846   | ug/l # | 52     |
| 45) 1,2-Dichloropropane       | 9.36  | 63  | 248776   | 32.328    | ug/l # | 1      |
| 47) Bromodichloromethane      | 9.64  | 83  | 721745   | 64.673    | ug/l # | 26     |
| 48) Methyl methacrylate       | 9.54  | 41  | 1500290  | 339.210   | ug/l # | 66     |
| 49) 1,4-Dioxane               | 9.45  | 88  | 79       | 1.473     | ug/l # | 25     |
| 51) 4-Methyl-2-Pentanone      | 10.34 | 43  | 475654   | 99.459    | ug/l # | 45     |
| 52) Toluene                   | 10.41 | 92  | 36222    | 1.727     | ug/l # | 62     |
| 55) 1,1,2-Trichloroethane     | 10.78 | 97  | 1876559  | 315.536   | ug/l # | 20     |
| 56) Ethyl methacrylate        | 10.68 | 69  | 803736   | 105.959   | ug/l # | 5      |
| 58) 2-Chloroethyl Vinyl ether | 9.92  | 63  | 13398    | 4.431     | ug/l # | 49     |
| 59) 2-Hexanone                | 10.96 | 43  | 1412429  | 425.625   | ug/l # | 31     |
| 61) 1,2-Dibromoethane         | 11.22 | 107 | 13110    | 2.208     | ug/l # | 1      |
| 67) Ethyl Benzene             | 11.75 | 91  | 1806195  | 42.051    | ug/l   | 98     |
| 68) m/p-Xylenes               | 11.86 | 106 | 2024762  | 123.633   | ug/l   | 99     |
| 69) o-Xylene                  | 12.18 | 106 | 41552    | 2.747     | ug/l   | 77     |
| 71) Bromoform                 | 12.28 | 173 | 7306     | 1.366     | ug/l # | 27     |

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 MSVOA\_D  
 ClientSampleId :

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 Quant Title : SW846 8260  
 QLast Update : Fri Nov 29 07:18:03 2019  
 Response via : Initial Calibration

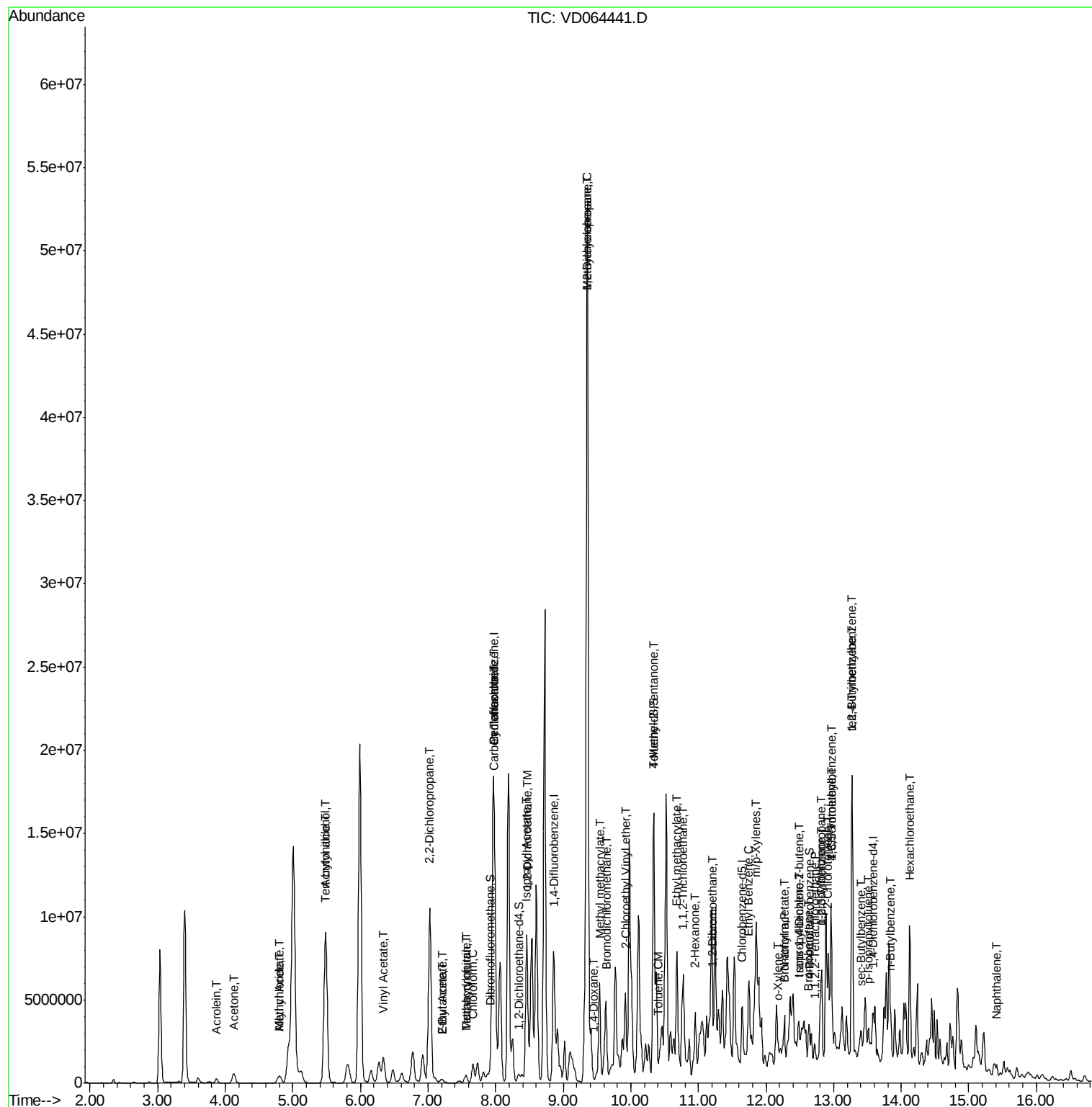
| Internal Standards             | R.T.  | QIon | Response | Conc      | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-----------|--------|----------|
| -----                          |       |      |          |           |        |          |
| 73) Isopropylbenzene           | 12.48 | 105  | 1344364  | 32.924    | ug/l   | 100      |
| 74) N-amyl acetate             | 12.27 | 43   | 617693   | 66.651    | ug/l # | 49       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 36448    | 5.398     | ug/l # | 56       |
| 76) 1,2,3-Trichloropropane     | 12.83 | 75   | 22624    | 4.846     | ug/l # | 100      |
| 77) Bromobenzene               | 12.62 | 156  | 208811   | 20.708    | ug/l # | 1        |
| 78) n-propylbenzene            | 12.83 | 91   | 3907255  | 82.933    | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.92 | 91   | 370788   | 14.303    | ug/l # | 39       |
| 80) 1,3,5-Trimethylbenzene     | 12.97 | 105  | 3412356  | 102.263   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.48 | 75   | 15605    | 7.288     | ug/l # | 1        |
| 82) 4-Chlorotoluene            | 12.97 | 91   | 369848   | 13.475    | ug/l # | 44       |
| 83) tert-Butylbenzene          | 13.27 | 119  | 1241382  | 42.792    | ug/l # | 68       |
| 84) 1,2,4-Trimethylbenzene     | 13.27 | 105  | 9167657  | 273.230   | ug/l   | 97       |
| 85) sec-Butylbenzene           | 13.41 | 105  | 911299   | 22.888    | ug/l # | 62       |
| 86) p-Isopropyltoluene         | 13.52 | 119  | 502539   | 13.369    | ug/l   | 96       |
| 89) n-Butylbenzene             | 13.85 | 91   | 1220293  | 35.748    | ug/l # | 74       |
| 90) Hexachloroethane           | 14.13 | 117  | 415843   | 59.148    | ug/l # | 5        |
| 92) 1,2-Dibromo-3-Chloropropan | 14.64 | 75   | 1716     | Below Cal |        | 79       |
| 95) Naphthalene                | 15.41 | 128  | 463825   | 22.188    | ug/l # | 95       |
| -----                          |       |      |          |           |        |          |

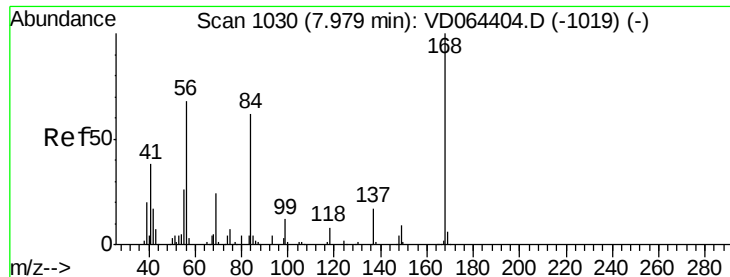
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD120519\  
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 MSVOA\_D  
 ClientSampled :

Quant Time: Dec 06 05:56:11 2019  
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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. 0.00 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

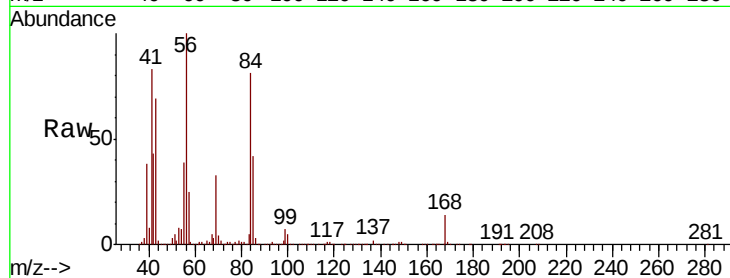
ClientSampleId :

Tot Ion:168 Resp: 774326

Ion Ratio Lower Upper

168 100

99 52.6 40.7 61.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC

7.98

400000

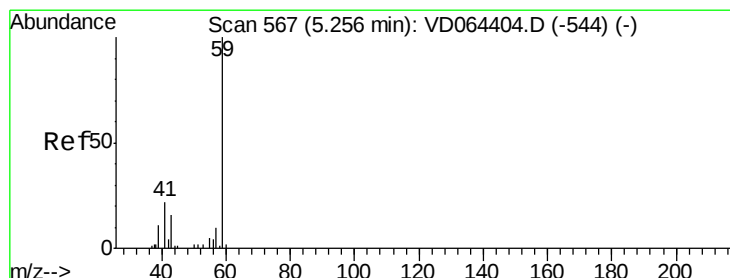
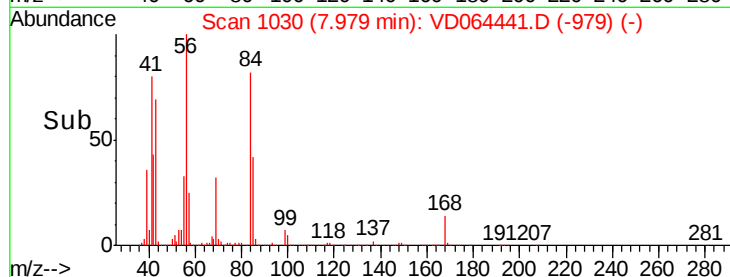
300000

200000

100000

0

Time-->



#11

Tert butyl alcohol

Concen: 15.820 ug/l

RT: 5.47 min Scan# 603

Delta R.T. 0.21 min

Lab File: VD064441.D

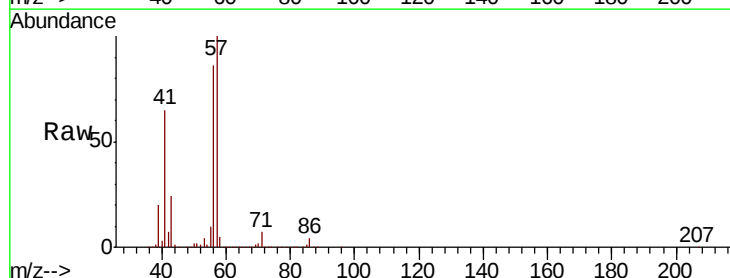
Acq: 05 Dec 2019 17:31

Tgt Ion: 59 Resp: 7058

Ion Ratio Lower Upper

59 100

57 122970.0 0.0 0.0#



Abundance Ion 59.00 (58.70 to 59.70): VDC

Ion 57.00 (56.70 to 57.70): VDC

3000000

2500000

2000000

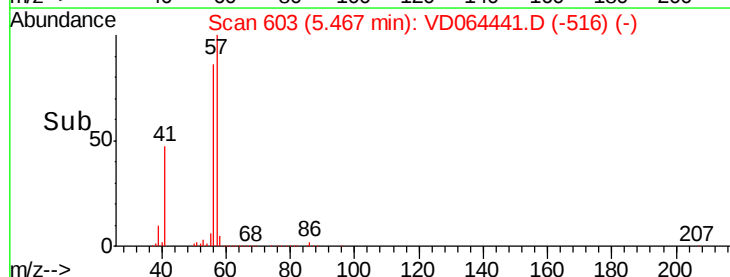
1500000

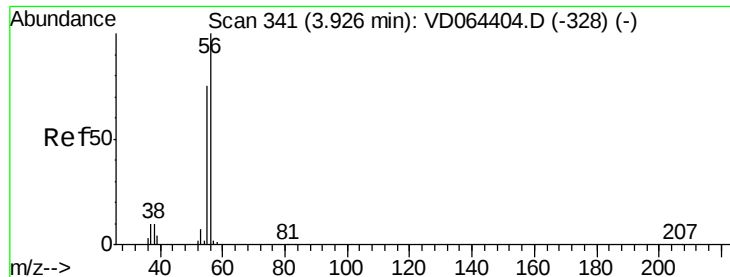
1000000

500000

0

Time-->





#13

Acrolein

Concen: 18.822 ug/l

RT: 3.87 min Scan# 332

Delta R.T. -0.05 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

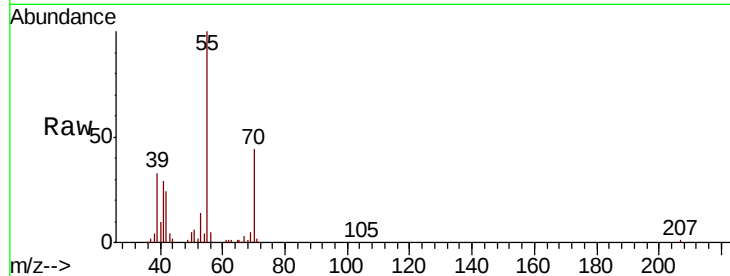
ClientSampleId :

Tot Ion: 56 Resp: 11454

Ion Ratio Lower Upper

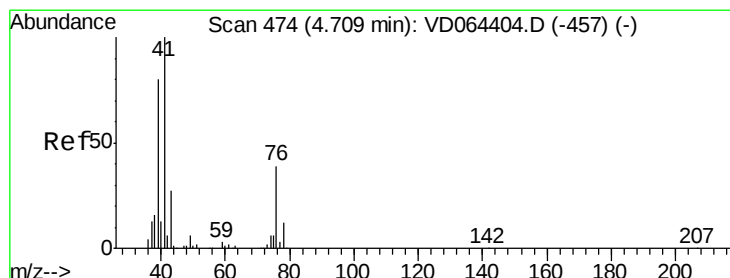
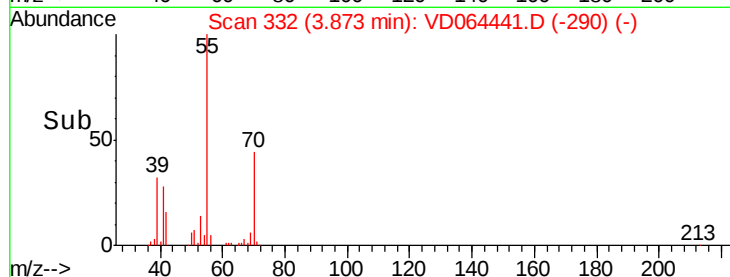
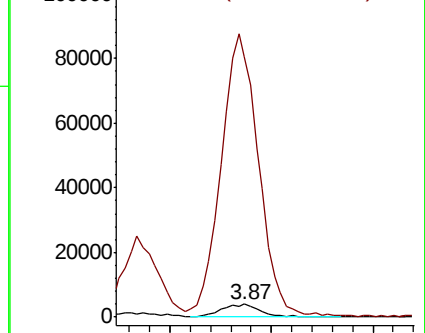
56 100

55 1913.9 56.9 85.3#



Abundance Ion 56.00 (55.70 to 56.70): VDC

Ion 55.00 (54.70 to 55.70): VDC



#14

Allyl chloride

Concen: 29.555 ug/l

RT: 4.79 min Scan# 488

Delta R.T. 0.08 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

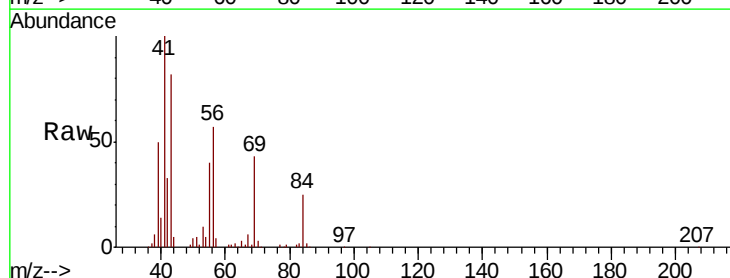
Tgt Ion: 41 Resp: 321915

Ion Ratio Lower Upper

41 100

39 54.6 62.1 93.1#

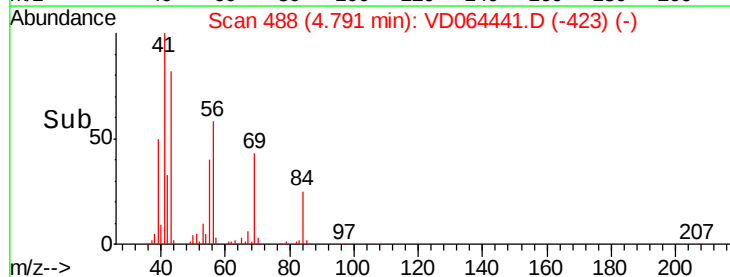
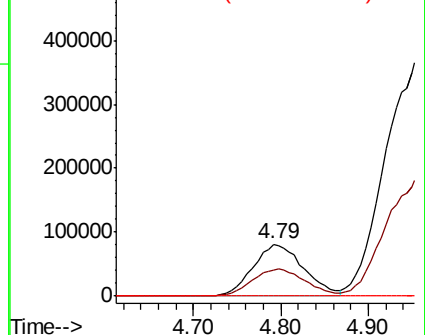
76 0.0 29.8 44.8#

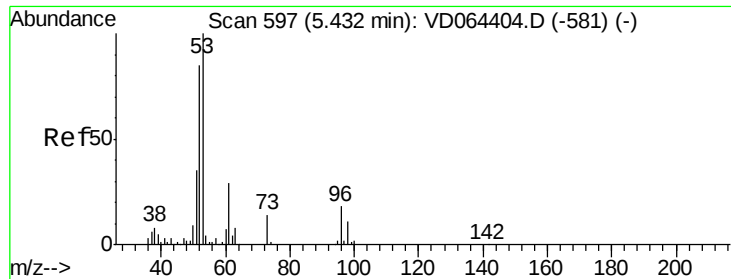


Abundance Ion 41.00 (40.70 to 41.70): VDC

Ion 39.00 (38.70 to 39.70): VDC

Ion 75.90 (75.60 to 76.60): VDC





#15

Acrylonitrile

Concen: 225.023 ug/l

RT: 5.49 min Scan# 607

Delta R.T. 0.06 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

ClientSampleId :

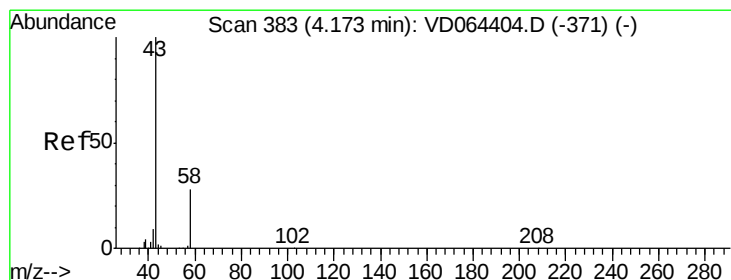
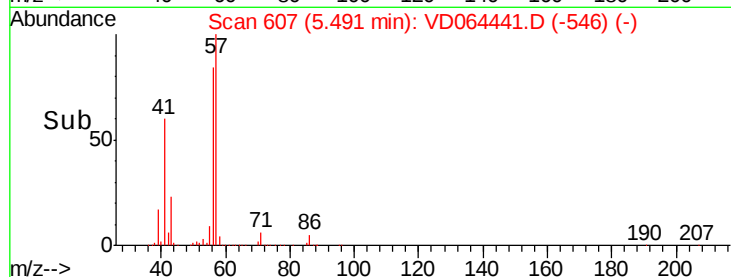
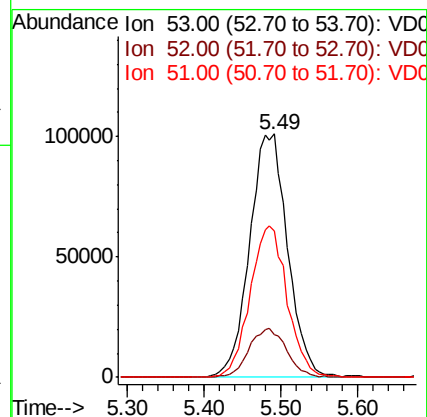
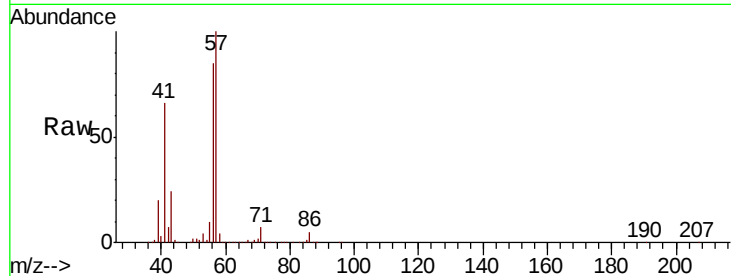
Tot Ion: 53 Resp: 347318

Ion Ratio Lower Upper

53 100

52 20.0 67.9 101.9#

51 60.9 30.6 45.8#



#16

Acetone

Concen: 251.183 ug/l

RT: 4.12 min Scan# 374

Delta R.T. -0.05 min

Lab File: VD064441.D

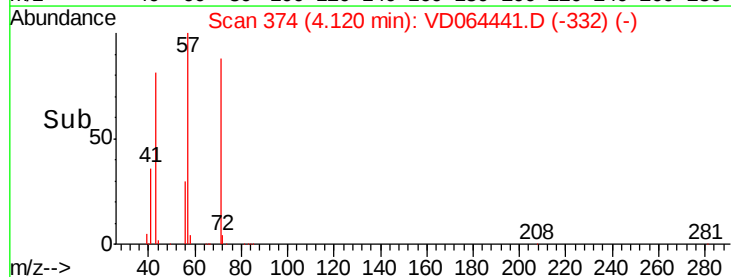
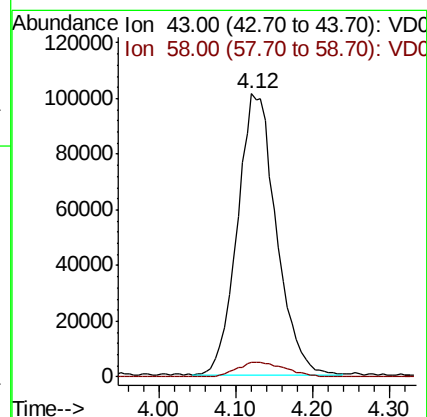
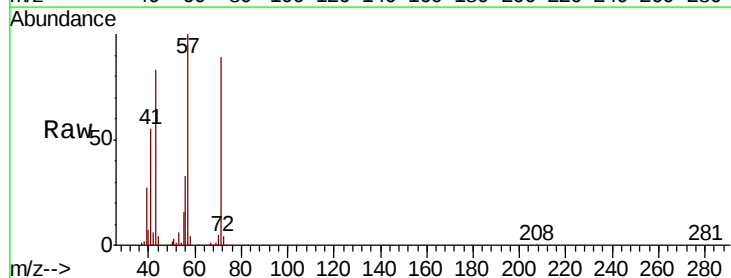
Acq: 05 Dec 2019 17:31

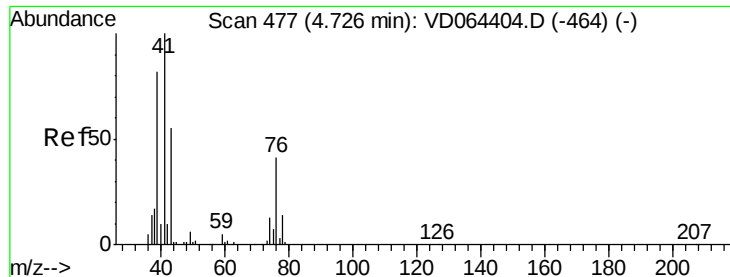
Tgt Ion: 43 Resp: 355759

Ion Ratio Lower Upper

43 100

58 4.9 22.6 33.8#

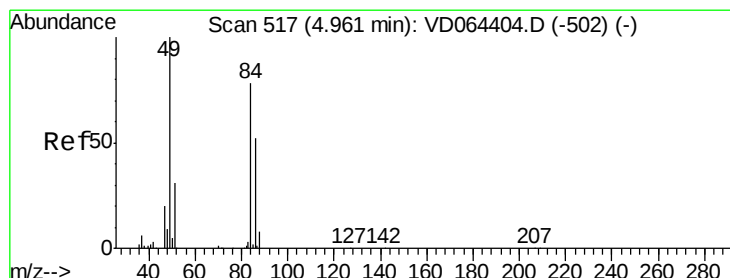
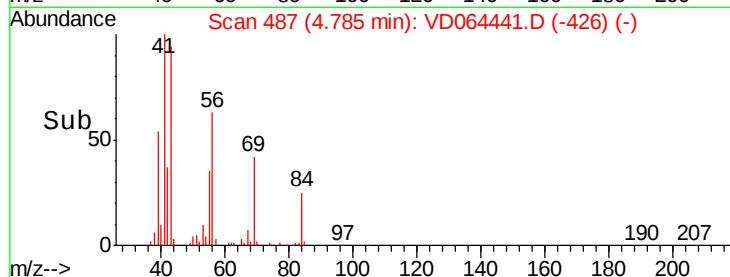
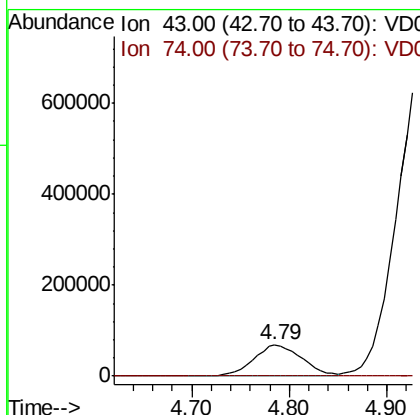
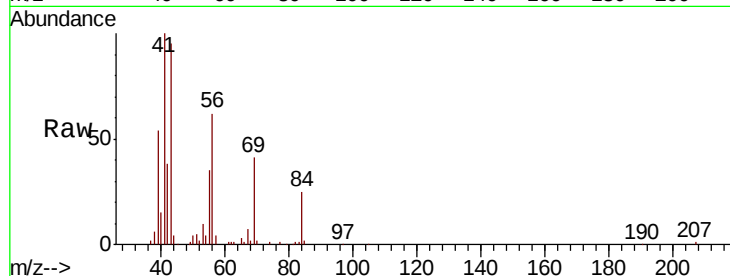




#18  
Methyl Acetate  
Concen: 57.251 ug/l  
RT: 4.79 min Scan# 487  
Delta R.T. 0.06 min  
Lab File: VD064441.D  
Acq: 05 Dec 2019 17:31

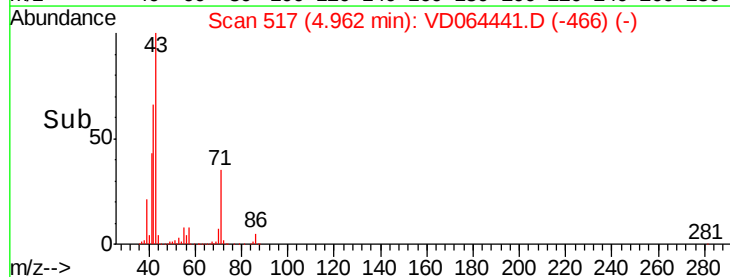
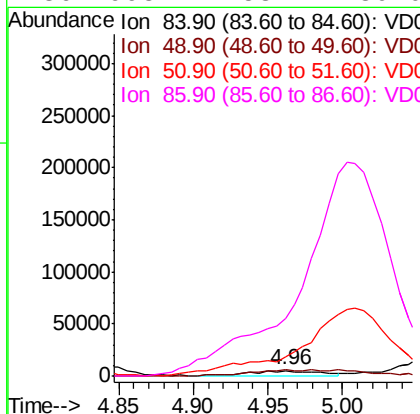
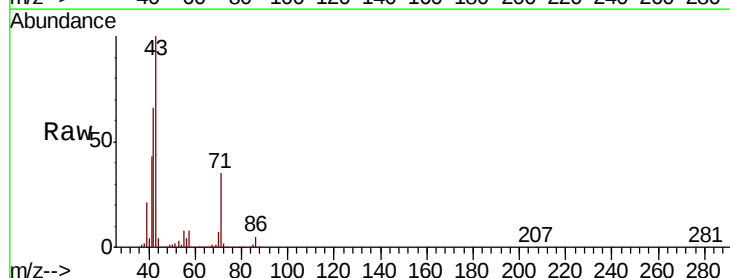
Instrument :  
MSVOA\_D  
ClientSampleId :

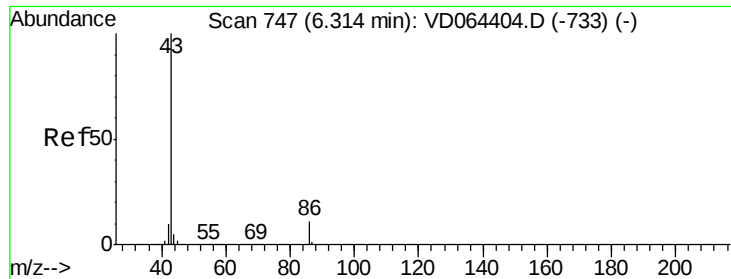
Tot Ion: 43 Resp: 236525  
Ion Ratio Lower Upper  
43 100  
74 0.2 19.7 29.5#



#20  
Methylene Chloride  
Concen: Below Cal  
RT: 4.96 min Scan# 517  
Delta R.T. 0.00 min  
Lab File: VD064441.D  
Acq: 05 Dec 2019 17:31

Tgt Ion: 84 Resp: 16234  
Ion Ratio Lower Upper  
84 100  
49 121.8 102.6 153.8  
51 326.5 32.0 48.0#  
86 995.2 53.4 80.0#





#23

Vinyl Acetate

Concen: 4.104 ug/l

RT: 6.34 min Scan# 751

Delta R.T. 0.02 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

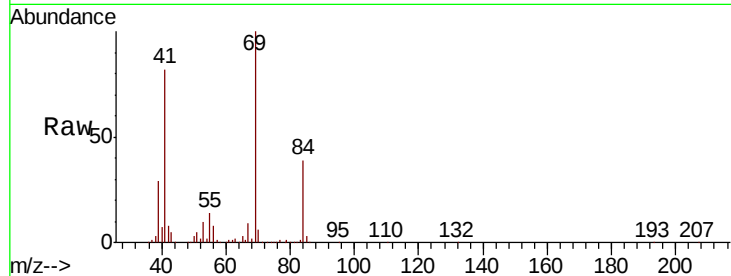
ClientSampleId :

Tot Ion: 43 Resp: 52027

Ion Ratio Lower Upper

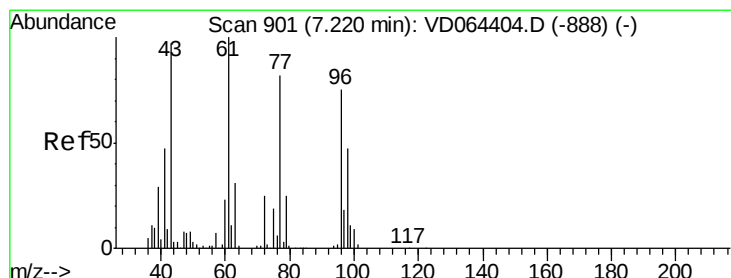
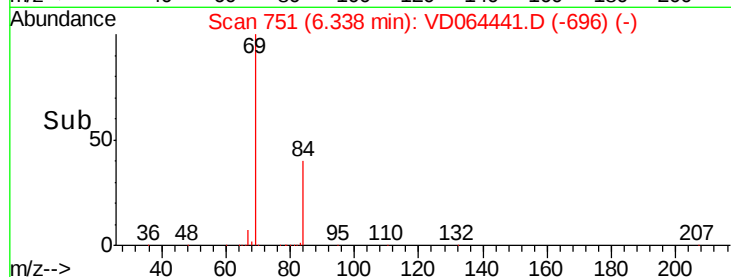
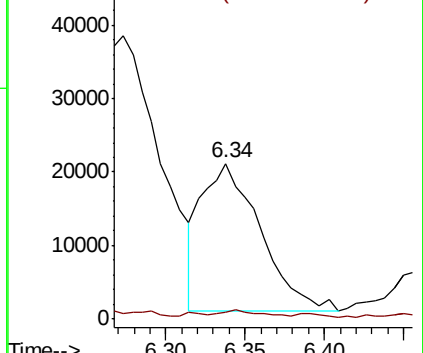
43 100

86 3.1 8.9 13.3#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 86.00 (85.70 to 86.70): VDC



#25

2-Butanone

Concen: 55.772 ug/l

RT: 7.21 min Scan# 899

Delta R.T. -0.01 min

Lab File: VD064441.D

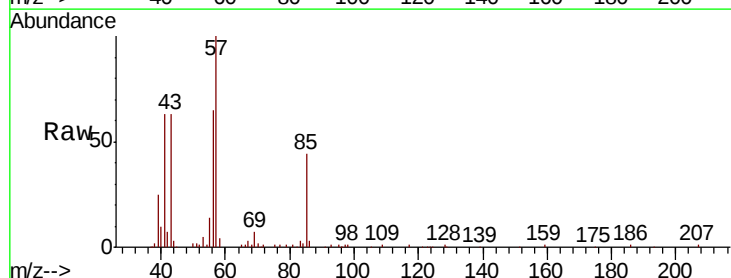
Acq: 05 Dec 2019 17:31

Tgt Ion: 43 Resp: 111710

Ion Ratio Lower Upper

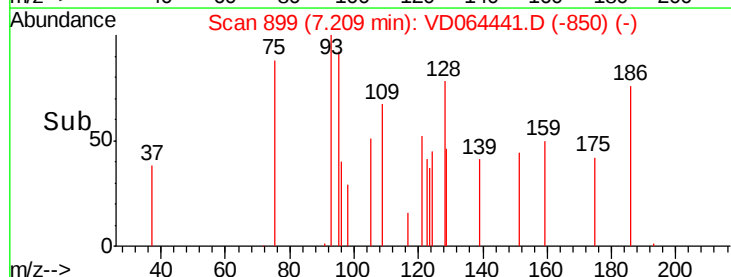
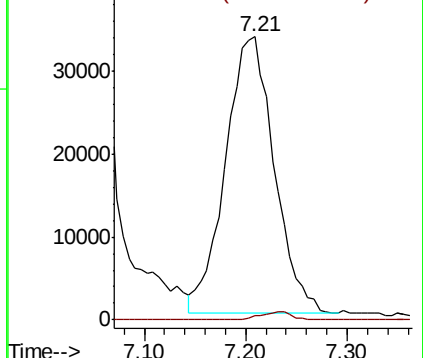
43 100

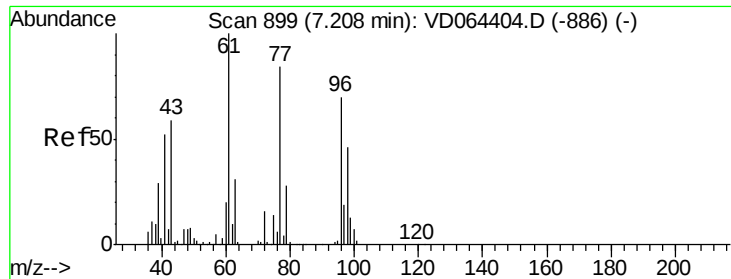
72 1.6 21.0 31.4#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 72.00 (71.70 to 72.70): VDC





#26

2,2-Dichloropropane

Concen: 5.167 ug/l

RT: 7.03 min Scan# 869

Delta R.T. -0.18 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

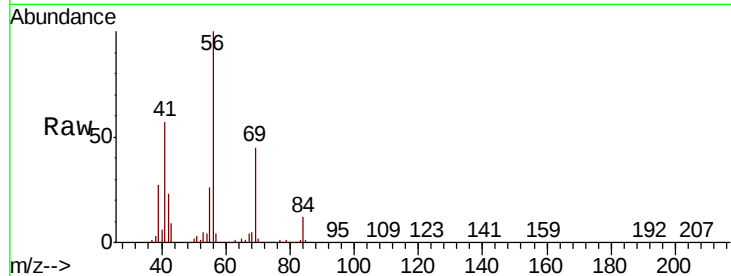
ClientSampleId :

Tot Ion: 77 Resp: 58104

Ion Ratio Lower Upper

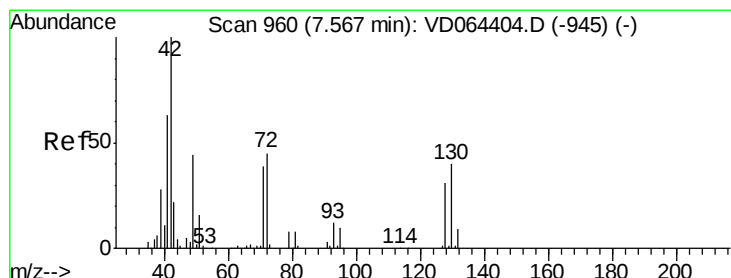
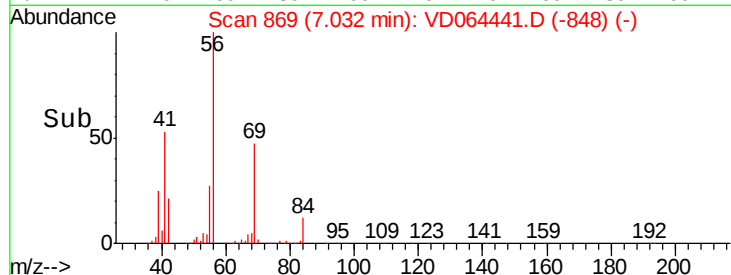
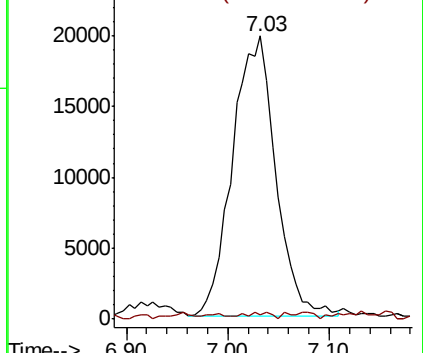
77 100

97 1.3 11.6 34.7#



Abundance Ion 76.90 (76.60 to 77.60): VDC

Ion 96.90 (96.60 to 97.60): VDC



#29

Tetrahydrofuran

Concen: 12.106 ug/l

RT: 7.56 min Scan# 959

Delta R.T. -0.01 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

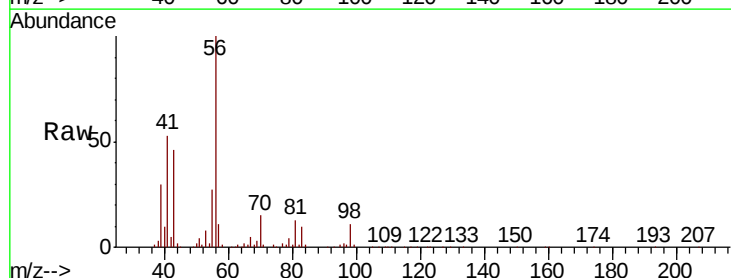
Tgt Ion: 42 Resp: 15427

Ion Ratio Lower Upper

42 100

72 0.0 35.8 53.8#

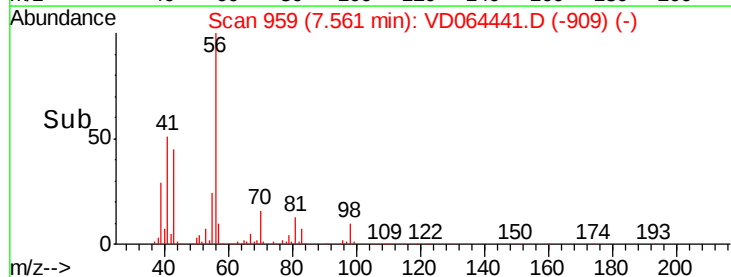
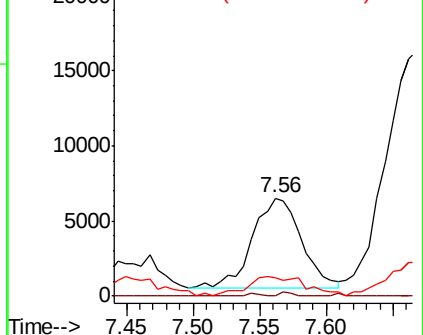
71 0.0 32.7 49.1#

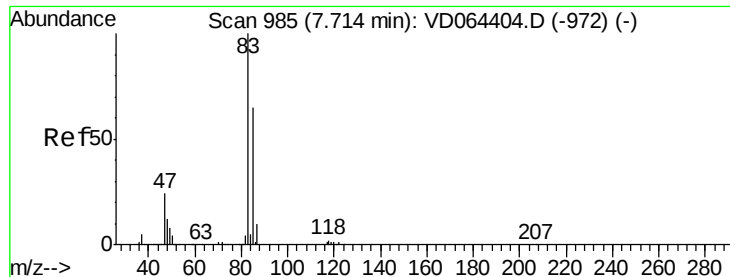


Abundance Ion 42.00 (41.70 to 42.70): VDC

Ion 72.00 (71.70 to 72.70): VDC

Ion 71.00 (70.70 to 71.70): VDC

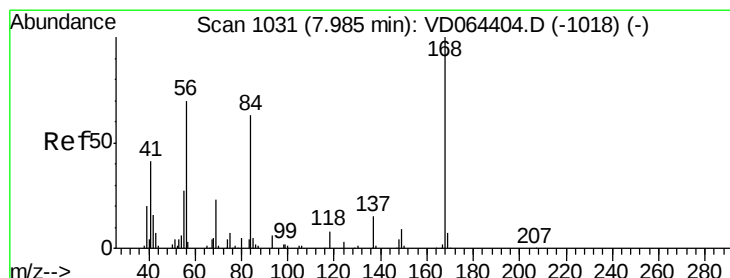
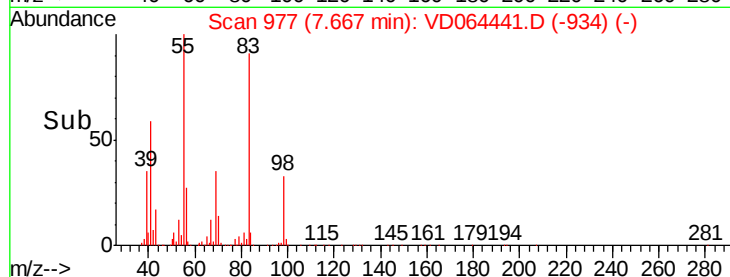
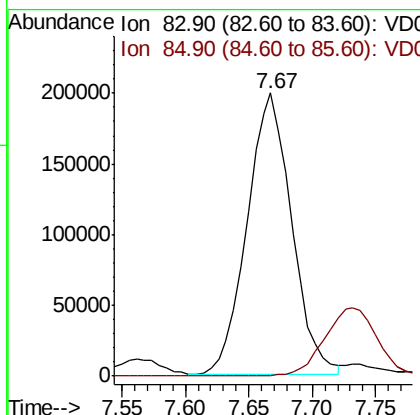
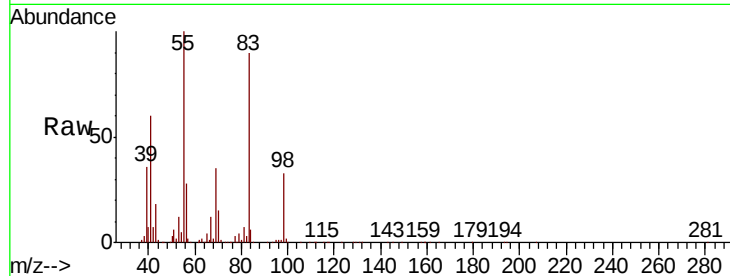




#30  
Chloroform  
Concen: 36.340 ug/l  
RT: 7.67 min Scan# 977  
Delta R.T. -0.05 min  
Lab File: VD064441.D  
Acq: 05 Dec 2019 17:31

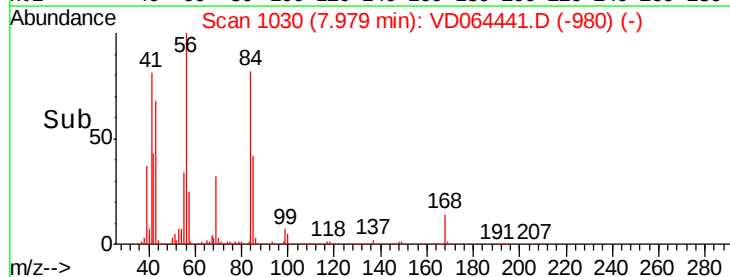
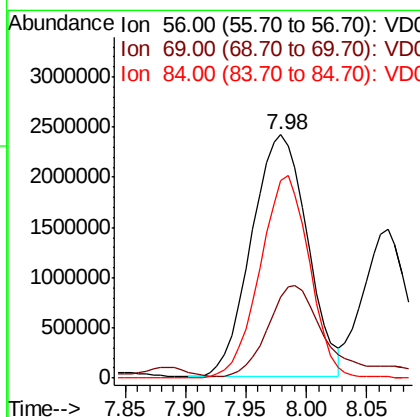
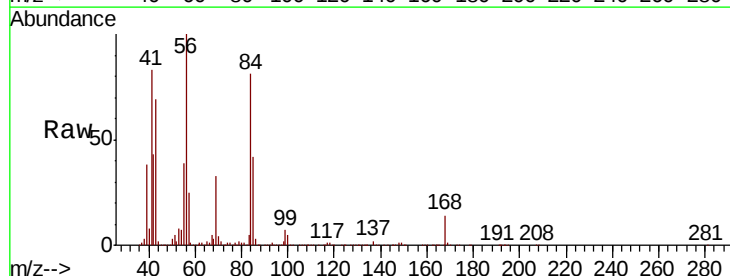
Instrument :  
MSVOA\_D  
ClientSampleId :

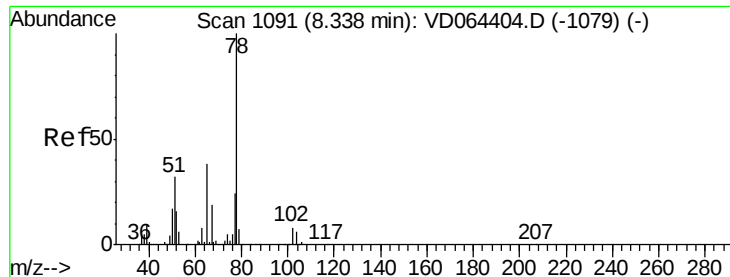
Tot Ion: 83 Resp: 486684  
Ion Ratio Lower Upper  
83 100  
85 0.4 51.8 77.6#



#31  
Cyclohexane  
Concen: 754.253 ug/l  
RT: 7.98 min Scan# 1030  
Delta R.T. -0.00 min  
Lab File: VD064441.D  
Acq: 05 Dec 2019 17:31

Tgt Ion: 56 Resp: 7785934  
Ion Ratio Lower Upper  
56 100  
69 30.8 26.2 39.4  
84 81.6 70.3 105.5





#33

1,2-Dichloroethane-d4

Concen: 45.131 ug/l

RT: 8.34 min Scan# 1091

Delta R.T. 0.00 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

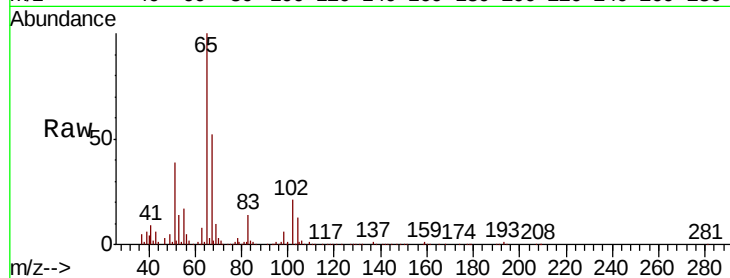
ClientSampleId :

Tot Ion: 65 Resp: 316316

Ion Ratio Lower Upper

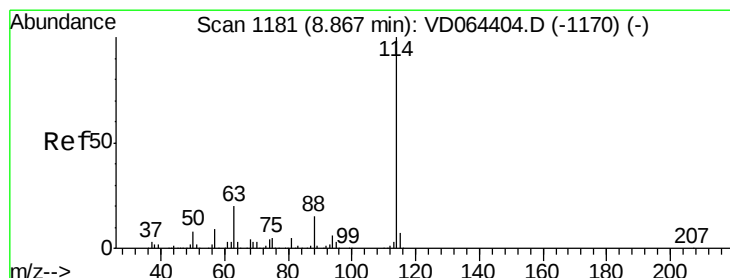
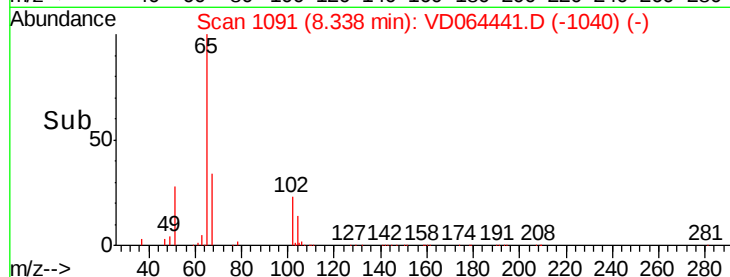
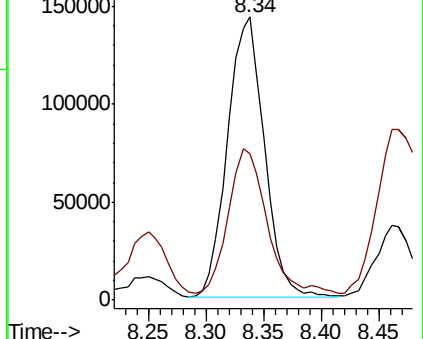
65 100

67 53.5 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: VD064441.D

Acq: 05 Dec 2019 17:31

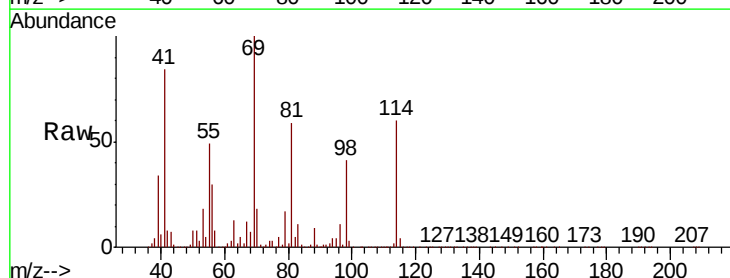
Tgt Ion: 114 Resp: 1224840

Ion Ratio Lower Upper

114 100

63 22.3 0.0 40.0

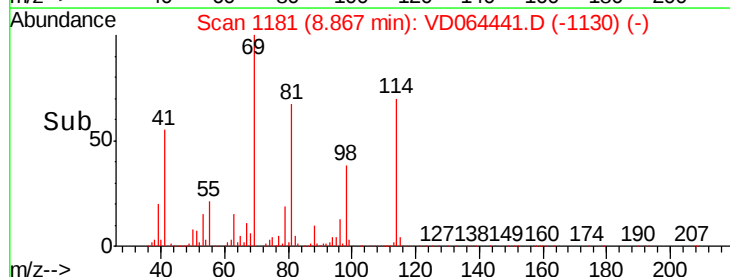
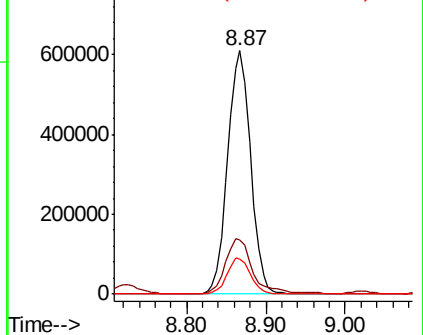
88 14.5 0.0 29.2

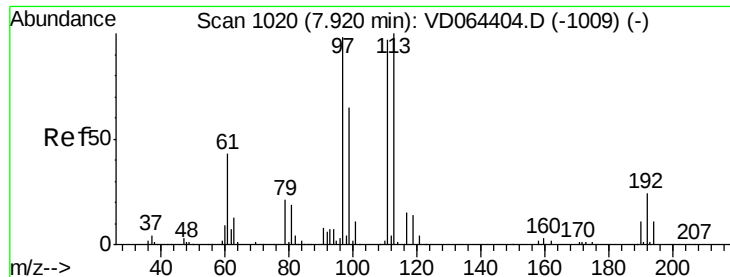


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VDC

Ion 87.90 (87.60 to 88.60): VDC

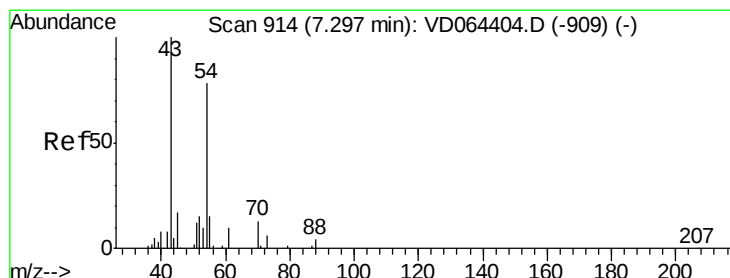
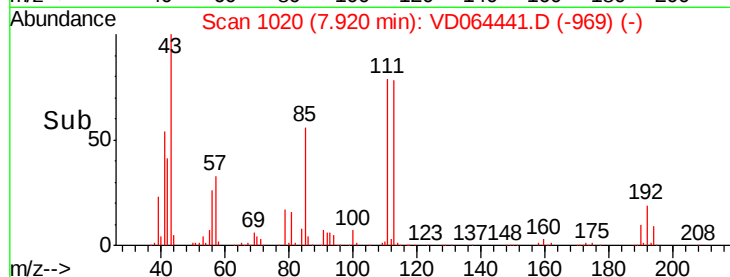
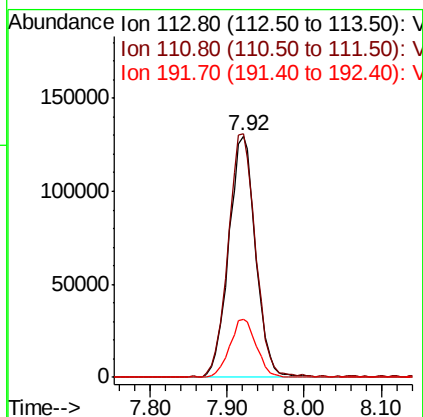
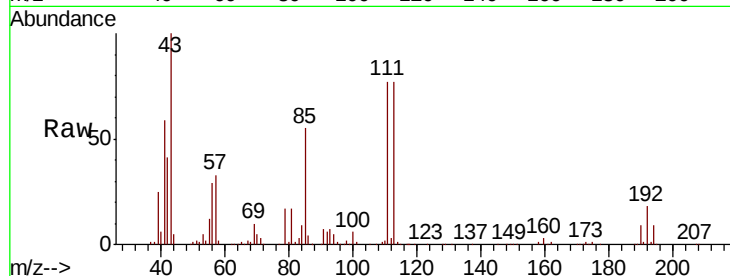




#35  
 Dibromofluoromethane  
 Concen: 40.951 ug/l  
 RT: 7.92 min Scan# 1020  
 Delta R.T. 0.00 min  
 Lab File: VD064441.D  
 Acq: 05 Dec 2019 17:31

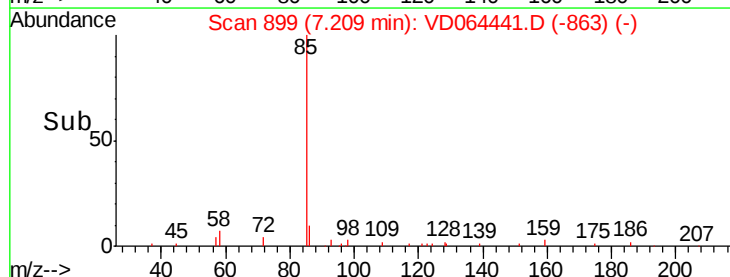
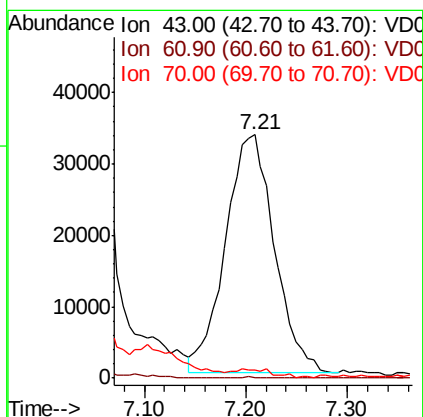
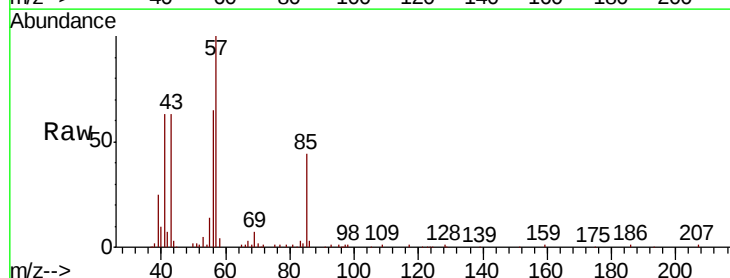
Instrument :  
 MSVOA\_D  
 ClientSampleId :

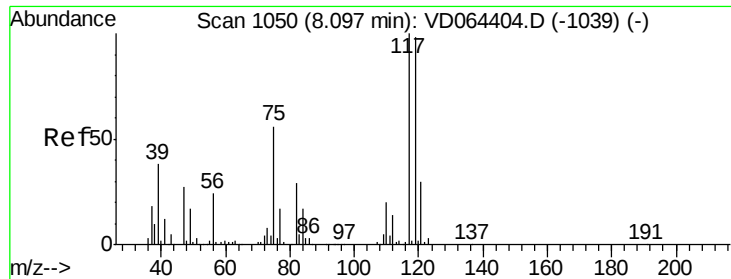
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 103.0 | 79.4  | 119.2 |
| 192     | 23.7  | 18.6  | 28.0  |



#37  
 Ethyl Acetate  
 Concen: 22.724 ug/l  
 RT: 7.21 min Scan# 899  
 Delta R.T. -0.09 min  
 Lab File: VD064441.D  
 Acq: 05 Dec 2019 17:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 61      | 0.0   | 10.9  | 16.3# |
| 70      | 0.0   | 8.3   | 12.5# |

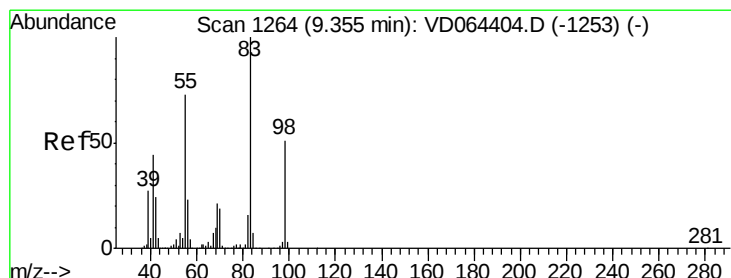
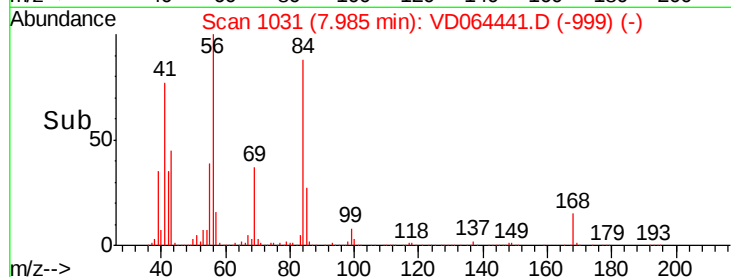
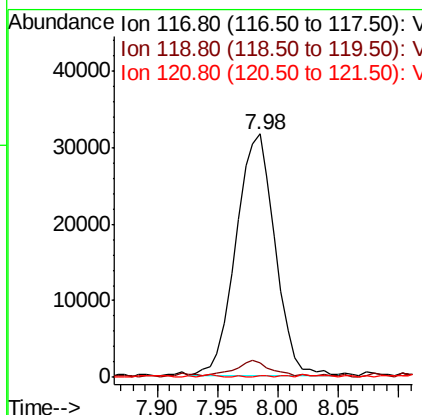
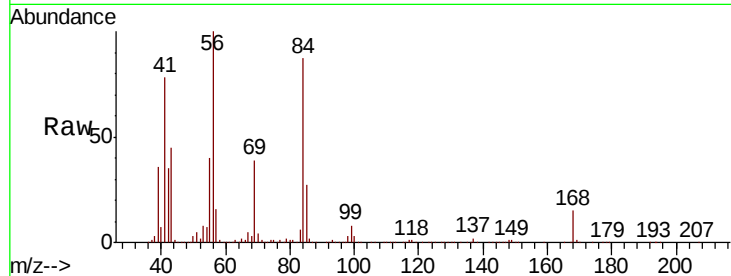




#38  
Carbon Tetrachloride  
Concen: 5.810 ug/l  
RT: 7.98 min Scan# 1031  
Delta R.T. -0.11 min  
Lab File: VD064441.D  
Acq: 05 Dec 2019 17:31

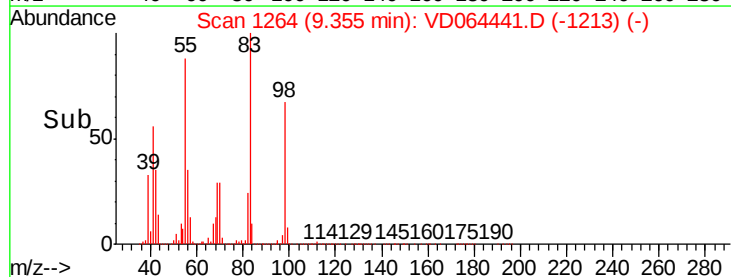
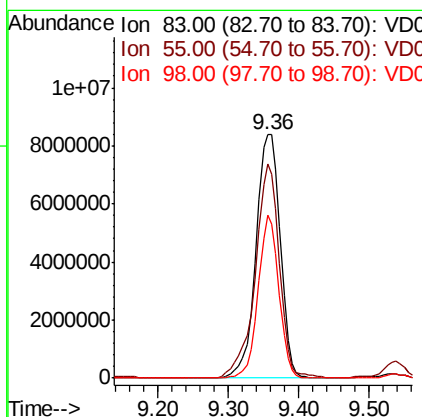
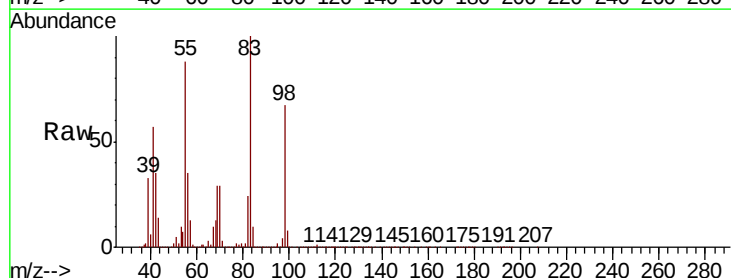
Instrument :  
MSVOA\_D  
ClientSampleId :

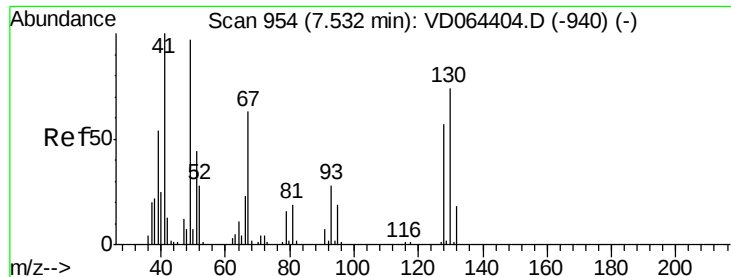
Tot Ion:117 Resp: 71036  
Ion Ratio Lower Upper  
117 100  
119 5.3 78.8 118.2#  
121 0.5 24.2 36.2#



#39  
Methylcyclohexane  
Concen: 1407.694 ug/l  
RT: 9.36 min Scan# 1264  
Delta R.T. 0.00 min  
Lab File: VD064441.D  
Acq: 05 Dec 2019 17:31

Tgt Ion: 83 Resp:20230031  
Ion Ratio Lower Upper  
83 100  
55 87.8 58.6 87.8  
98 66.9 40.9 61.3#





#41

Methacrylonitrile

Concen: 56.363 ug/l

RT: 7.56 min Scan# 959

Delta R.T. 0.03 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

ClientSampleId :

Tot Ion: 41 Resp: 158898

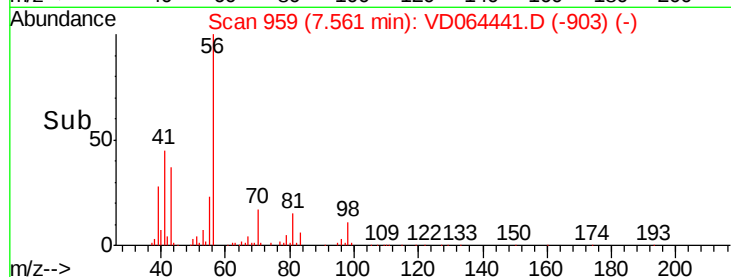
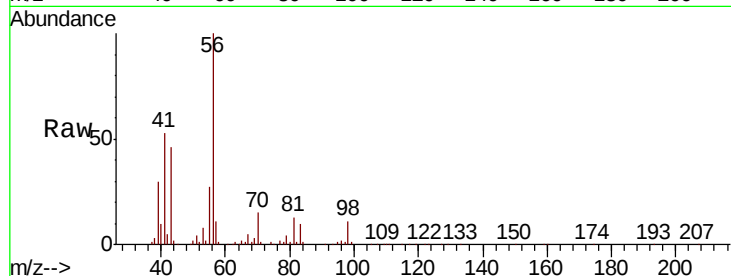
Ion Ratio Lower Upper

41 100

39 62.3 44.6 67.0

67 11.0 50.9 76.3#

52 4.1 22.5 33.7#

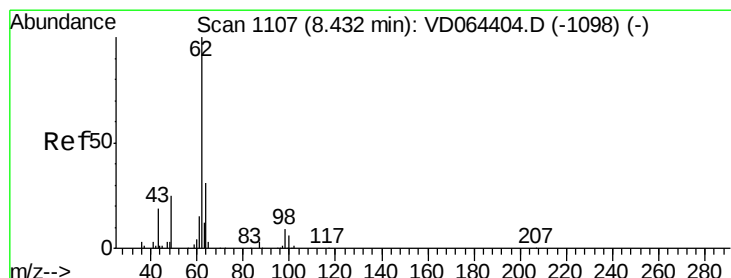
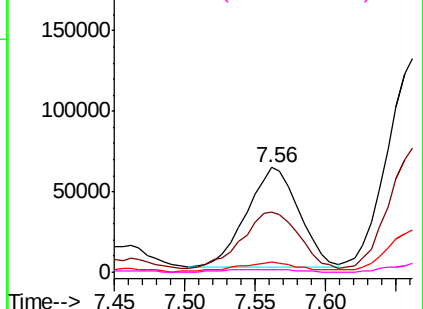


Abundance Ion 41.00 (40.70 to 41.70): VDC

Ion 39.00 (38.70 to 39.70): VDC

Ion 67.00 (66.70 to 67.70): VDC

Ion 52.00 (51.70 to 52.70): VDC



#42

1,2-Dichloroethane

Concen: 2.009 ug/l

RT: 8.47 min Scan# 1113

Delta R.T. 0.04 min

Lab File: VD064441.D

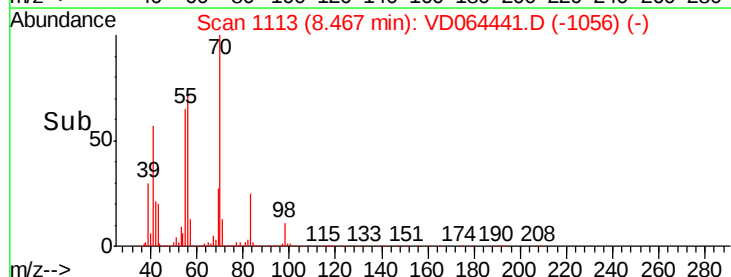
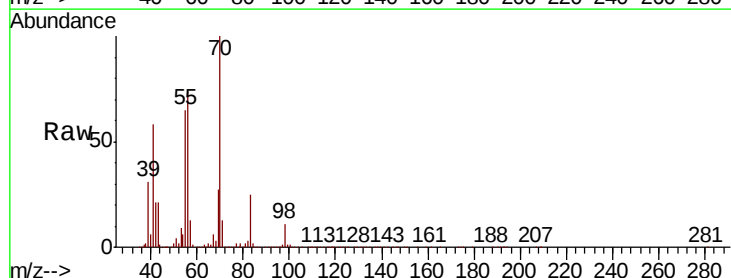
Acq: 05 Dec 2019 17:31

Tgt Ion: 62 Resp: 18853

Ion Ratio Lower Upper

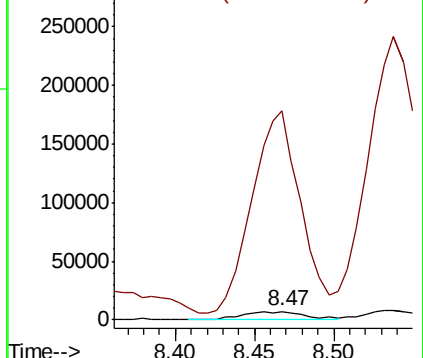
62 100

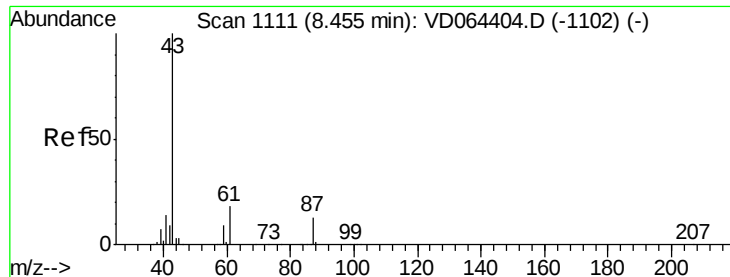
98 1936.4 0.0 20.6#



Abundance Ion 61.90 (61.60 to 62.60): VDC

Ion 97.90 (97.60 to 98.60): VDC





#43

Isopropyl Acetate

Concen: 118.846 ug/l

RT: 8.45 min Scan# 1110

Delta R.T. -0.01 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

ClientSampleId :

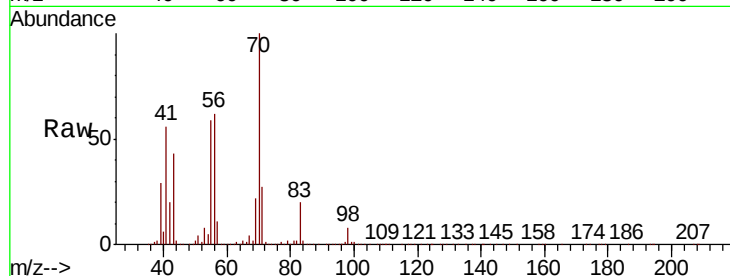
Tot Ion: 43 Resp: 1148715

Ion Ratio Lower Upper

43 100

61 0.6 24.0 36.0#

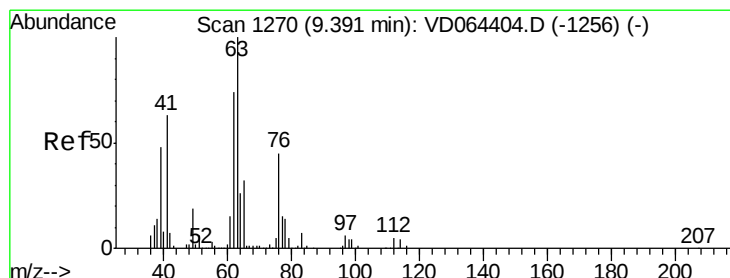
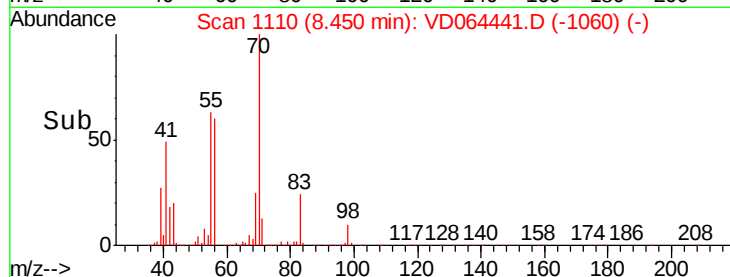
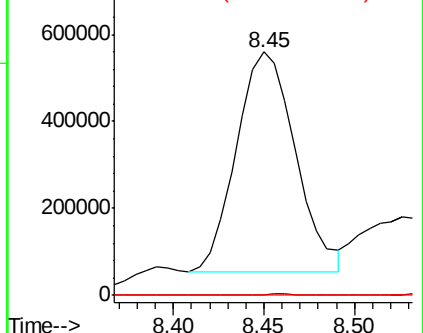
87 0.0 10.6 15.8#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 61.00 (60.70 to 61.70): VDC

Ion 87.00 (86.70 to 87.70): VDC



#45

1,2-Dichloropropane

Concen: 32.328 ug/l

RT: 9.36 min Scan# 1264

Delta R.T. -0.04 min

Lab File: VD064441.D

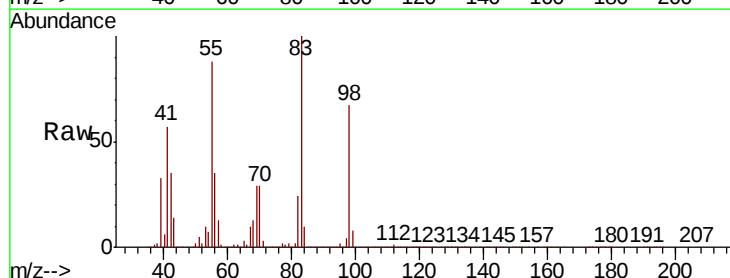
Acq: 05 Dec 2019 17:31

Tgt Ion: 63 Resp: 248776

Ion Ratio Lower Upper

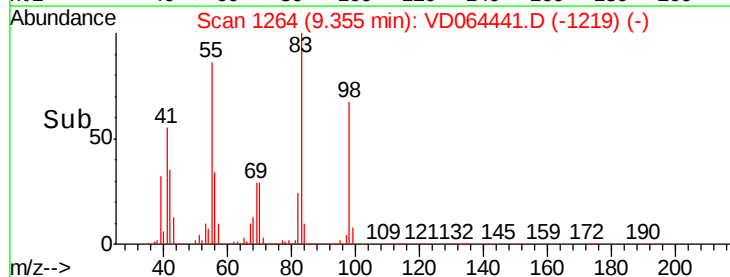
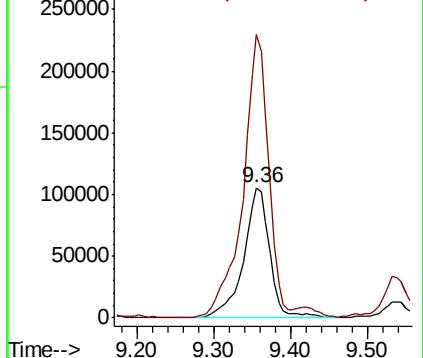
63 100

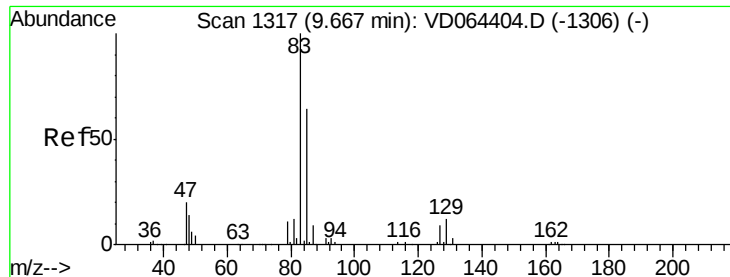
65 218.0 25.4 38.0#



Abundance Ion 62.90 (62.60 to 63.60): VDC

Ion 64.90 (64.60 to 65.60): VDC





#47

Bromodichloromethane

Concen: 64.673 ug/l

RT: 9.64 min Scan# 1313

Delta R.T. -0.02 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

ClientSampleId :

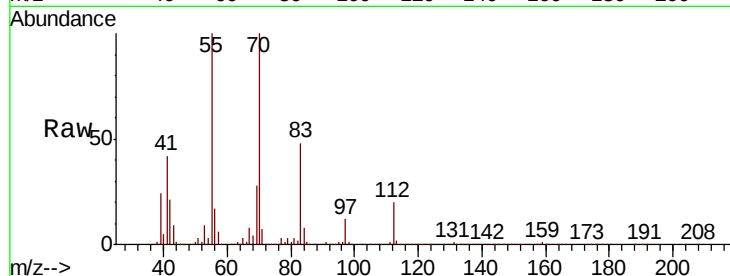
Tot Ion: 83 Resp: 721745

Ion Ratio Lower Upper

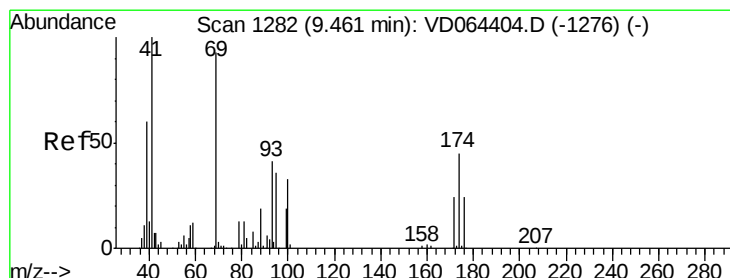
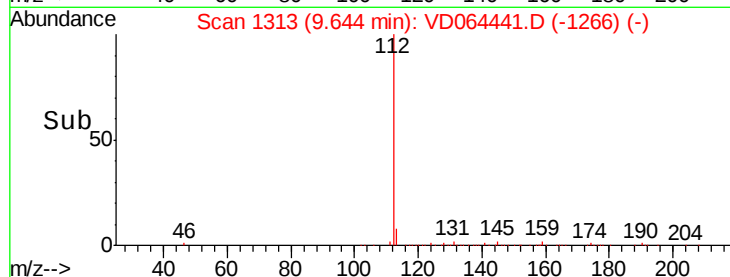
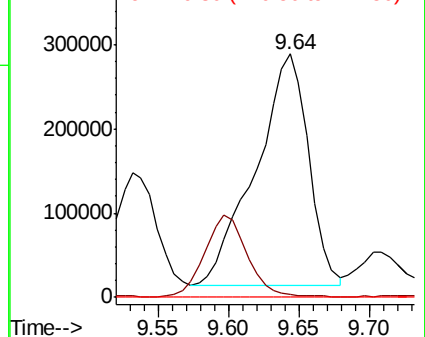
83 100

85 0.9 51.1 76.7#

127 0.1 7.4 11.0#



Abundance Ion 82.90 (82.60 to 83.60): VDC  
Ion 84.90 (84.60 to 85.60): VDC  
Ion 126.80 (126.50 to 127.50): VDC



#48

Methyl methacrylate

Concen: 339.210 ug/l

RT: 9.54 min Scan# 1295

Delta R.T. 0.08 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

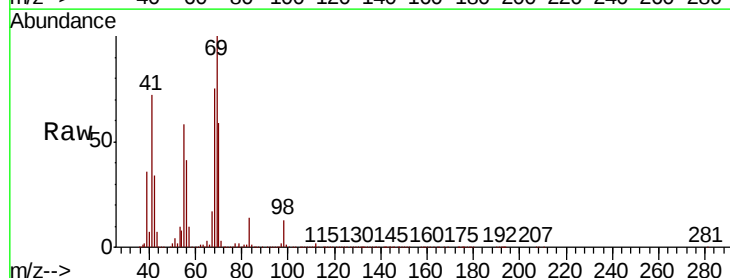
Tgt Ion: 41 Resp: 1500290

Ion Ratio Lower Upper

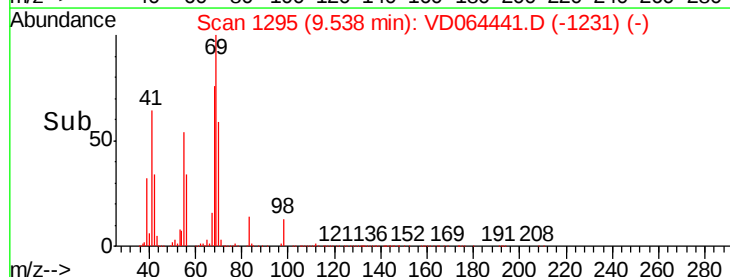
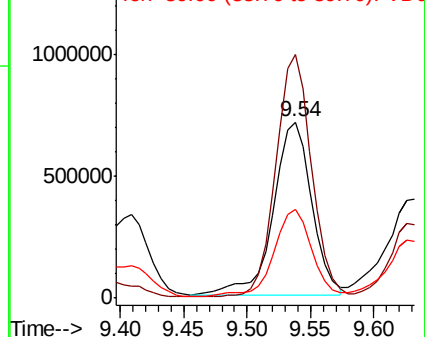
41 100

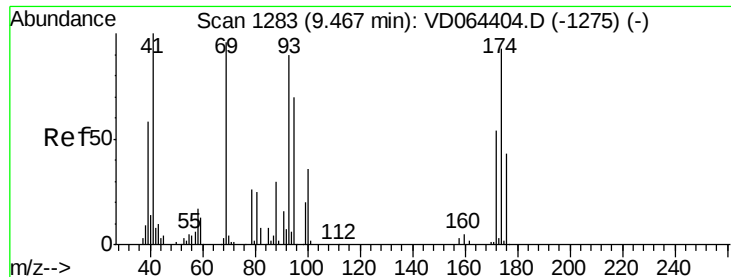
69 130.0 72.0 108.0#

39 49.4 55.2 82.8#



Abundance Ion 41.00 (40.70 to 41.70): VDC  
Ion 69.00 (68.70 to 69.70): VDC  
Ion 39.00 (38.70 to 39.70): VDC





#49

1,4-Dioxane

Concen: 1.473 ug/l

RT: 9.45 min Scan# 1280

Delta R.T. -0.02 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :  
MSVOA\_D  
ClientSampled :

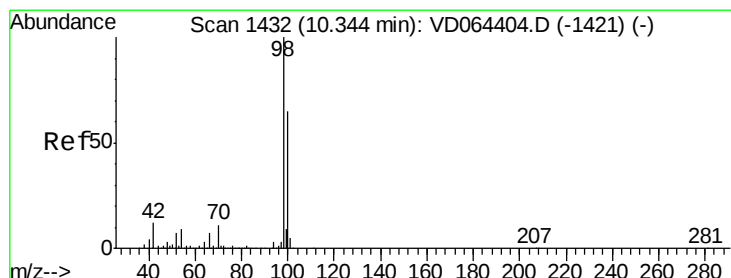
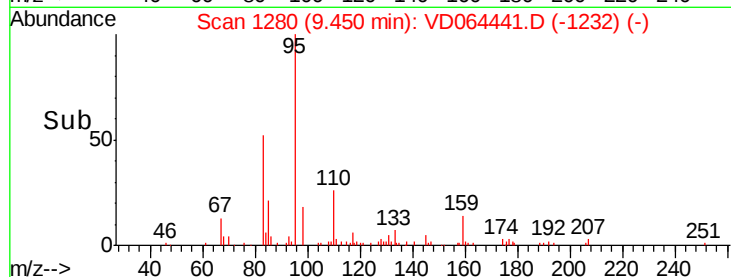
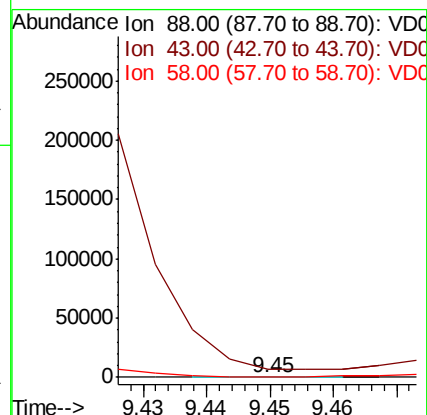
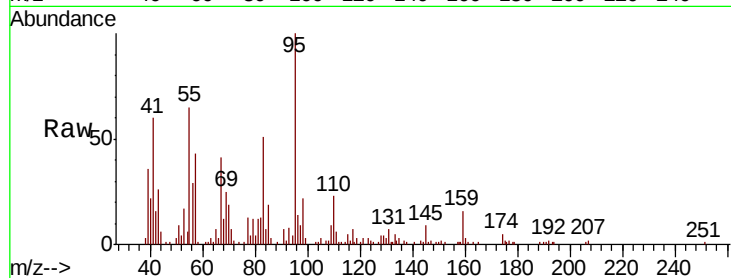
Tot Ion: 88 Resp: 79

Ion Ratio Lower Upper

88 100

43 0.0 26.7 40.1#

58 0.0 52.3 78.5#



#50

Toluene-d8

Concen: 73.683 ug/l

RT: 10.34 min Scan# 1431

Delta R.T. -0.01 min

Lab File: VD064441.D

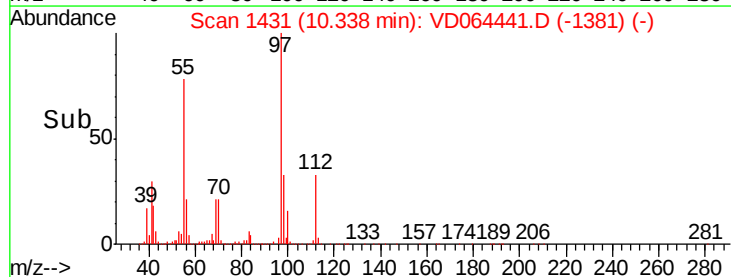
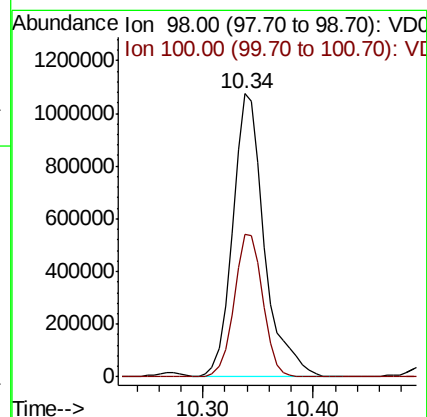
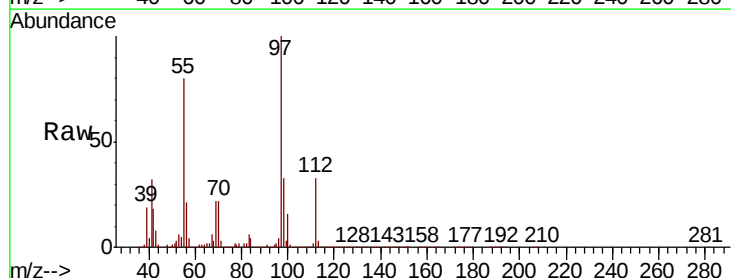
Acq: 05 Dec 2019 17:31

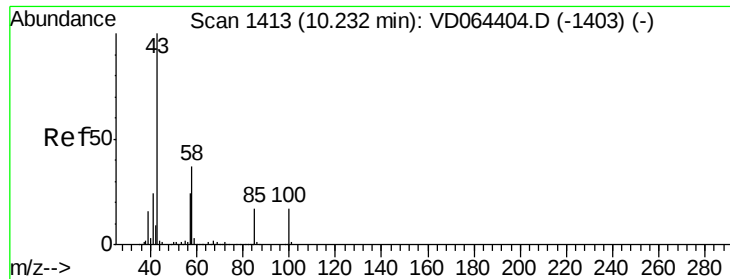
Tgt Ion: 98 Resp: 2141926

Ion Ratio Lower Upper

98 100

100 46.0 52.6 79.0#

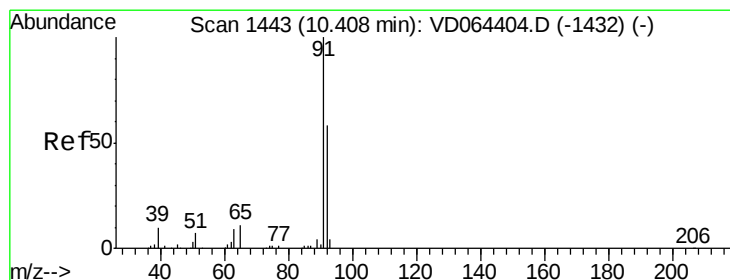
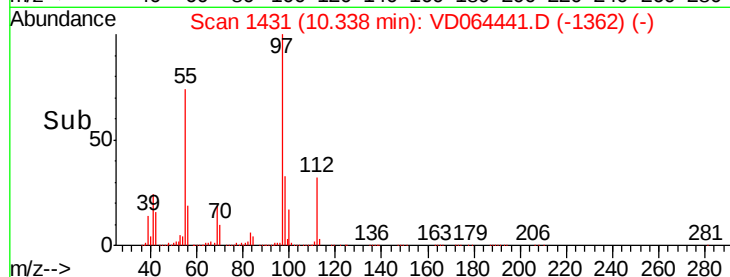
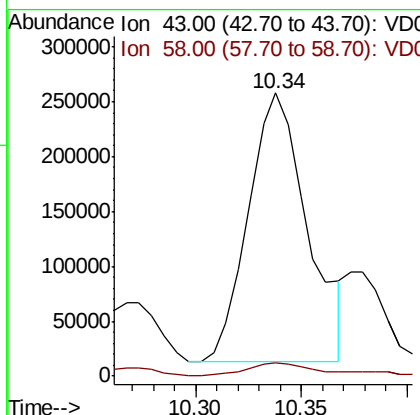
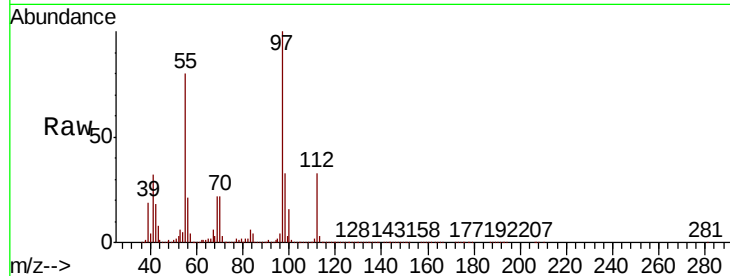




#51  
 4-Methyl-2-Pentanone  
 Concen: 99.459 ug/l  
 RT: 10.34 min Scan# 1431  
 Delta R.T. 0.11 min  
 Lab File: VD064441.D  
 Acq: 05 Dec 2019 17:31

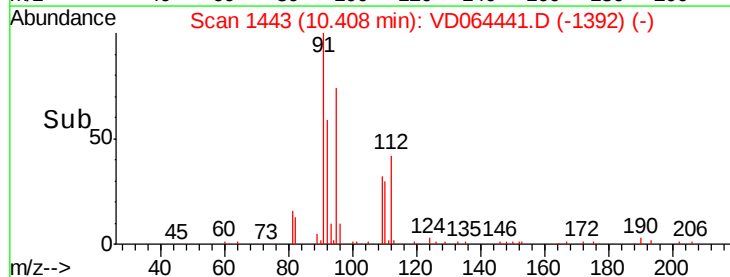
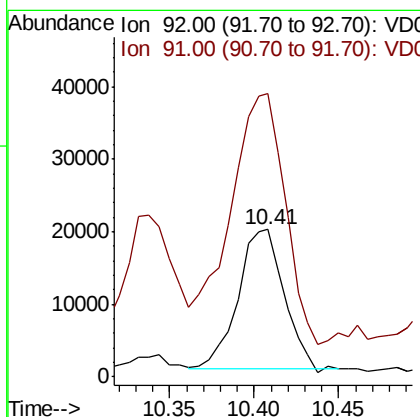
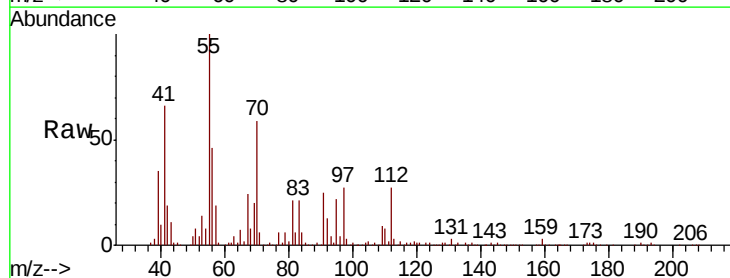
Instrument :  
 MSVOA\_D  
 ClientSampled :

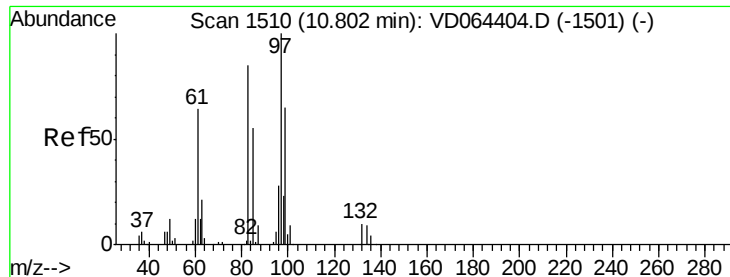
Tot Ion: 43 Resp: 475654  
 Ion Ratio Lower Upper  
 43 100  
 58 4.8 30.6 46.0#



#52  
 Toluene  
 Concen: 1.727 ug/l  
 RT: 10.41 min Scan# 1443  
 Delta R.T. 0.00 min  
 Lab File: VD064441.D  
 Acq: 05 Dec 2019 17:31

Tgt Ion: 92 Resp: 36222  
 Ion Ratio Lower Upper  
 92 100  
 91 225.3 137.8 206.6#

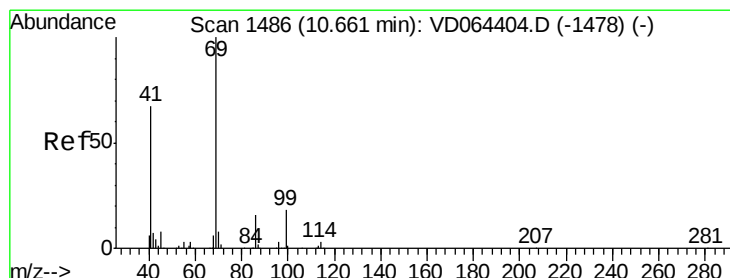
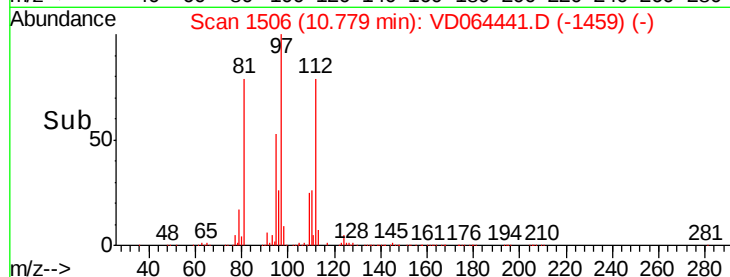
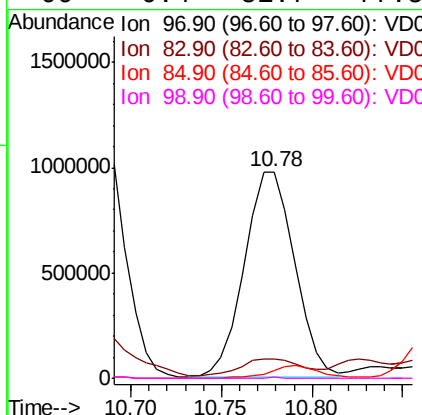
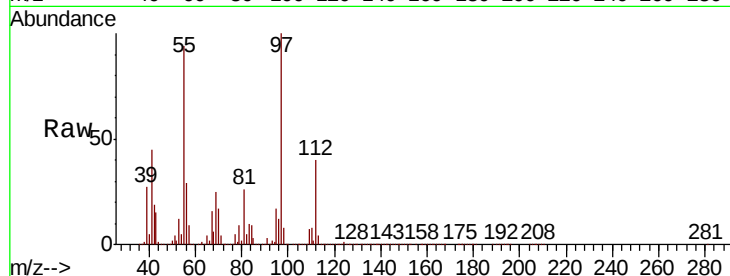




#55  
 1,1,2-Trichloroethane  
 Concen: 315.536 ug/l  
 RT: 10.78 min Scan# 1506  
 Delta R.T. -0.02 min  
 Lab File: VD064441.D  
 Acq: 05 Dec 2019 17:31

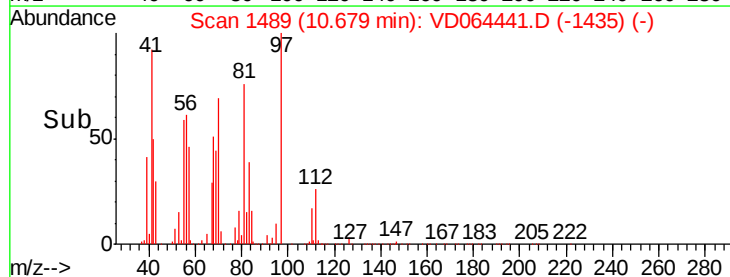
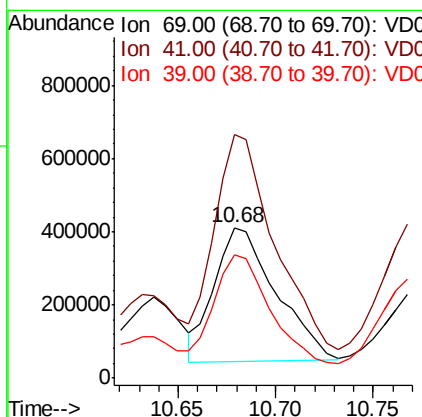
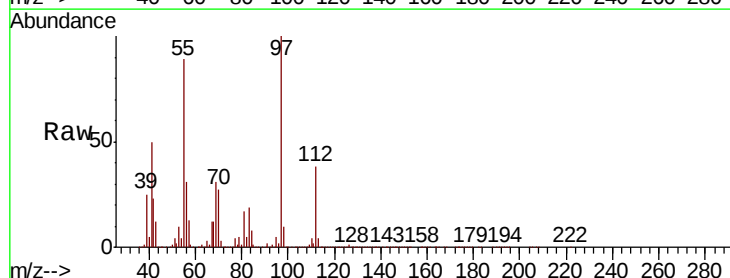
Instrument :  
 MSVOA\_D  
 ClientSampleId :

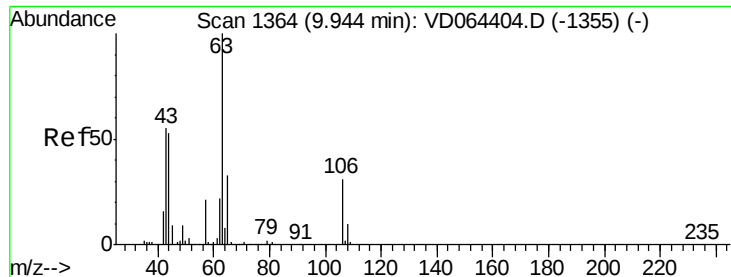
Tot Ion: 97 Resp: 1876559  
 Ion Ratio Lower Upper  
 97 100  
 83 8.1 67.8 101.8#  
 85 3.3 43.7 65.5#  
 99 0.4 51.7 77.5#



#56  
 Ethyl methacrylate  
 Concen: 105.959 ug/l  
 RT: 10.68 min Scan# 1489  
 Delta R.T. 0.02 min  
 Lab File: VD064441.D  
 Acq: 05 Dec 2019 17:31

Tgt Ion: 69 Resp: 803736  
 Ion Ratio Lower Upper  
 69 100  
 41 164.0 55.0 82.4#  
 39 77.5 33.0 49.6#

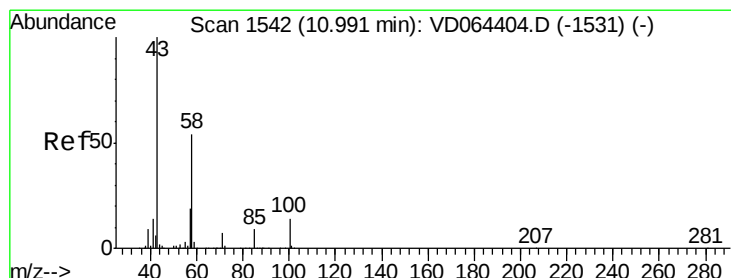
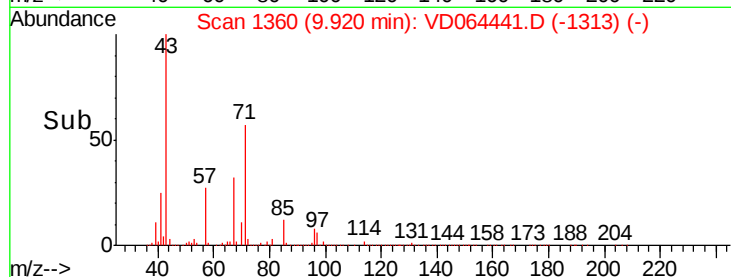
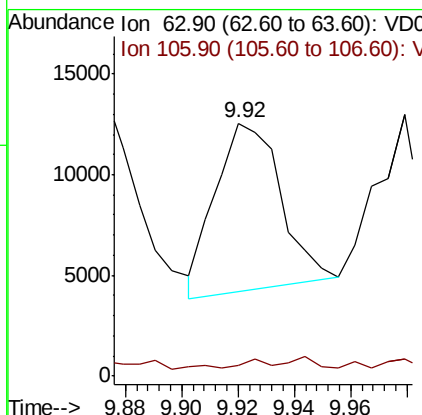
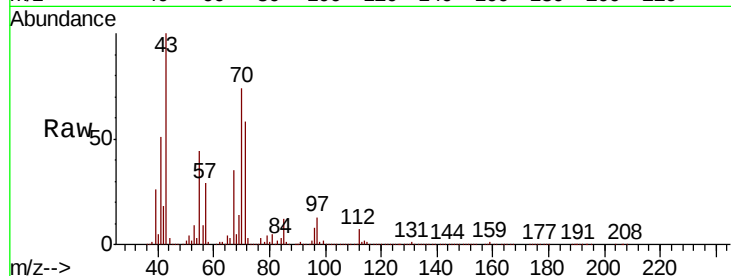




#58  
2-Chloroethyl Vinyl ether  
Concen: 4.431 ug/l  
RT: 9.92 min Scan# 1360  
Delta R.T. -0.02 min  
Lab File: VD064441.D  
Acq: 05 Dec 2019 17:31

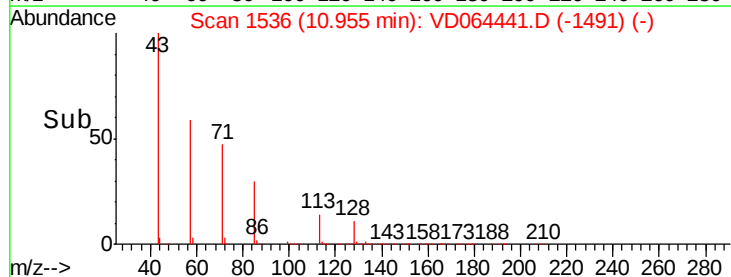
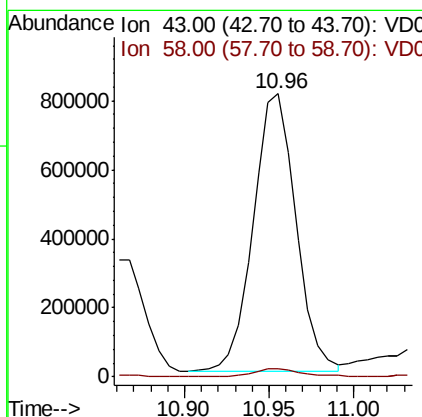
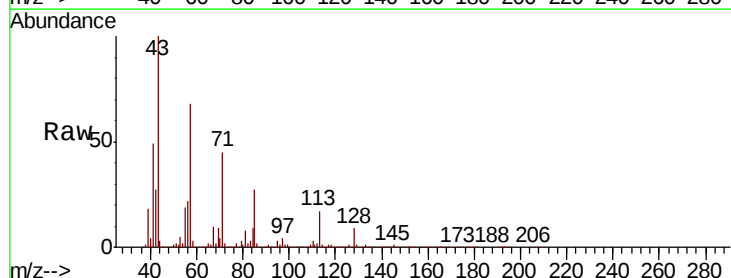
Instrument :  
MSVOA\_D  
ClientSampleId :

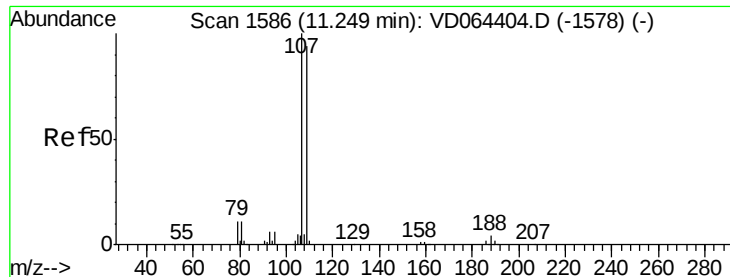
Tot Ion: 63 Resp: 13398  
Ion Ratio Lower Upper  
63 100  
106 2.7 24.2 36.4#



#59  
2-Hexanone  
Concen: 425.625 ug/l  
RT: 10.96 min Scan# 1536  
Delta R.T. -0.04 min  
Lab File: VD064441.D  
Acq: 05 Dec 2019 17:31

Tgt Ion: 43 Resp: 1412429  
Ion Ratio Lower Upper  
43 100  
58 3.5 26.3 78.8#





#61

1,2-Dibromoethane

Concen: 2.208 ug/l

RT: 11.22 min Scan# 1581

Delta R.T. -0.03 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

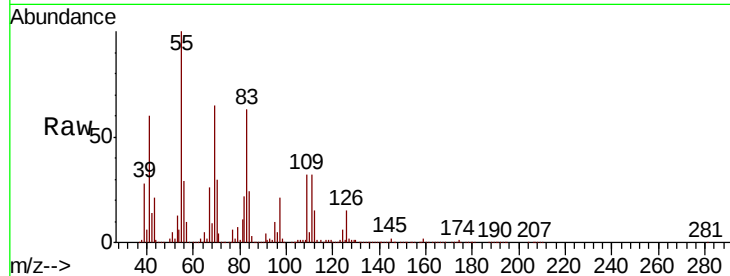
ClientSampleId :

Tot Ion:107 Resp: 13110

Ion Ratio Lower Upper

107 100

109 2192.4 76.2 114.2#



Abundance Ion 106.90 (106.60 to 107.60): V

Ion 108.80 (108.50 to 109.50): V

150000

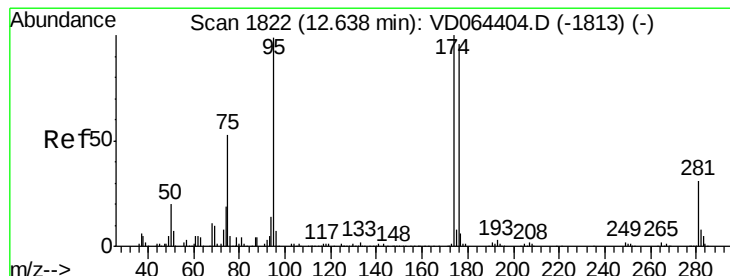
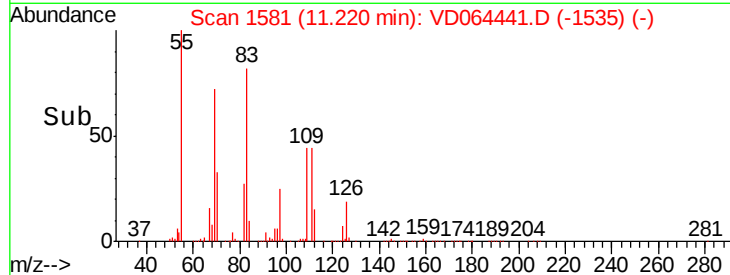
100000

50000

0

11.15 11.20 11.25 11.30

Time-->



#62

4-Bromofluorobenzene

Concen: 65.399 ug/l

RT: 12.63 min Scan# 1821

Delta R.T. -0.01 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

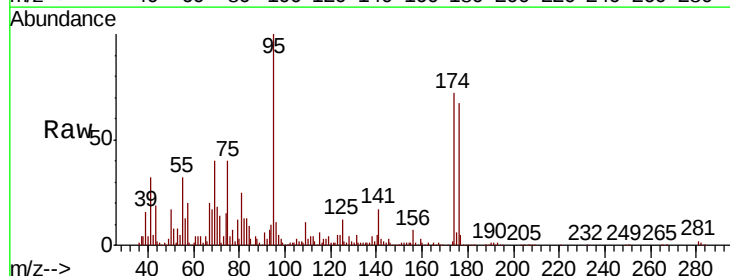
Tgt Ion: 95 Resp: 610966

Ion Ratio Lower Upper

95 100

174 81.8 0.0 197.2

176 71.9 0.0 189.6



Abundance Ion 94.90 (94.60 to 95.60): V

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

500000

400000

300000

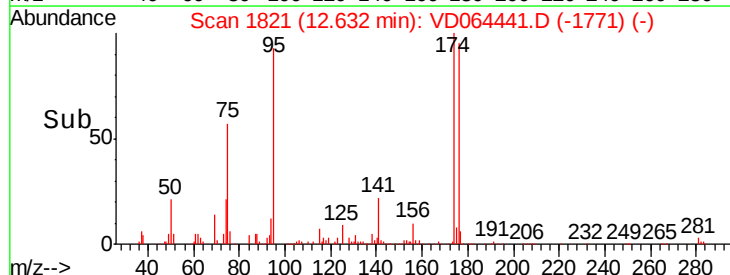
200000

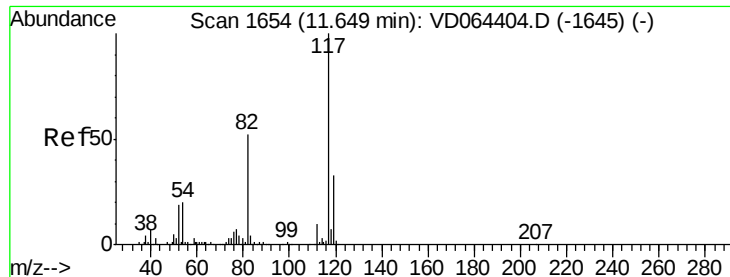
100000

0

12.60 12.65 12.70

Time-->

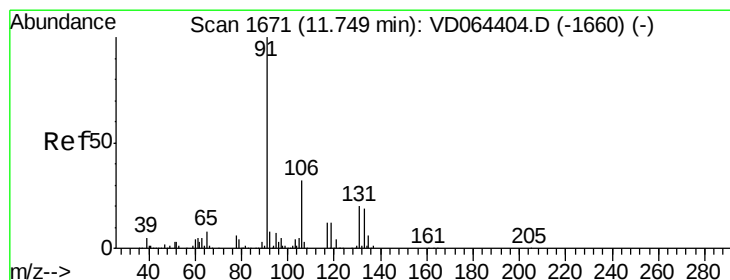
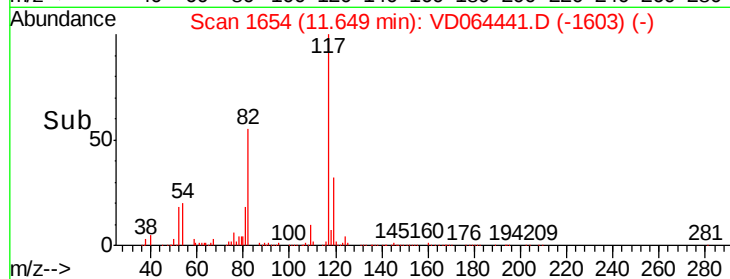
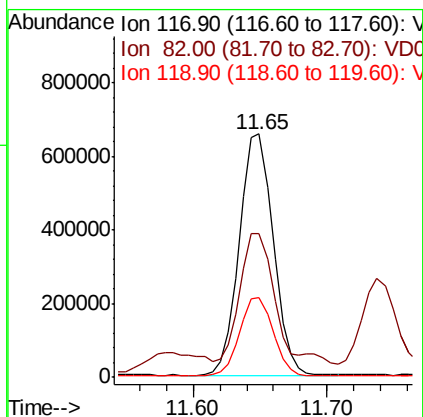
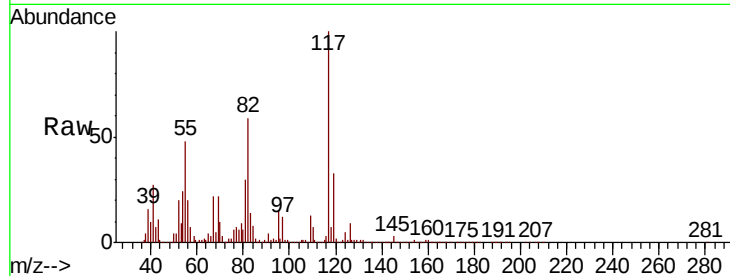




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.65 min Scan# 1654  
Delta R.T. 0.00 min  
Lab File: VD064441.D  
Acq: 05 Dec 2019 17:31

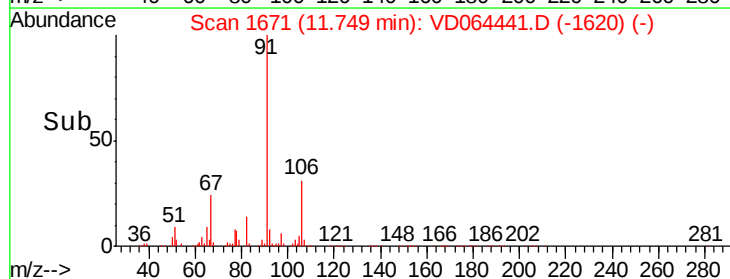
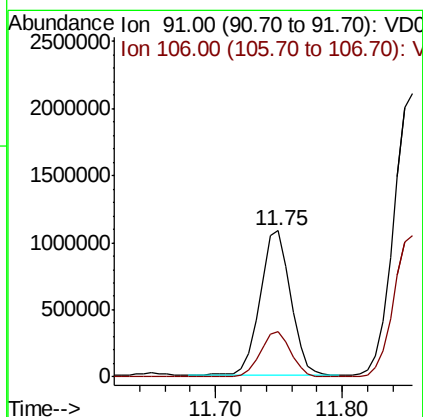
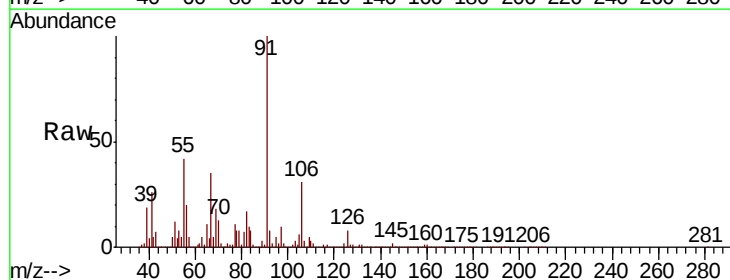
Instrument :  
MSVOA\_D  
ClientSampleId :

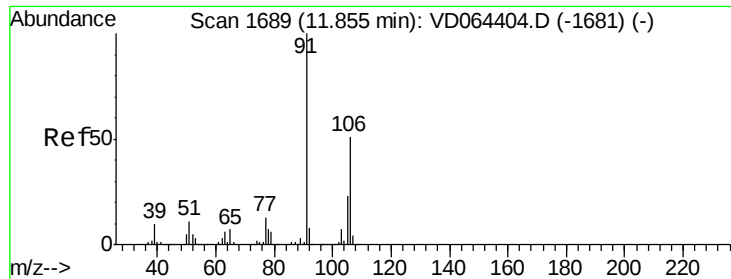
Tot Ion:117 Resp: 1157458  
Ion Ratio Lower Upper  
117 100  
82 54.1 41.4 62.2  
119 32.5 26.2 39.2



#67  
Ethyl Benzene  
Concen: 42.051 ug/l  
RT: 11.75 min Scan# 1671  
Delta R.T. 0.00 min  
Lab File: VD064441.D  
Acq: 05 Dec 2019 17:31

Tgt Ion: 91 Resp: 1806195  
Ion Ratio Lower Upper  
91 100  
106 31.2 25.8 38.8

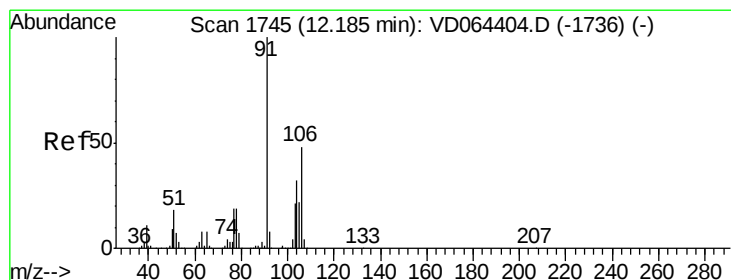
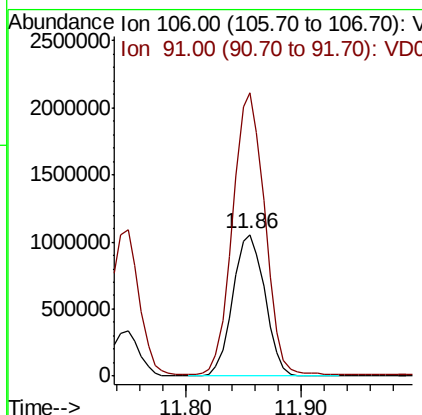
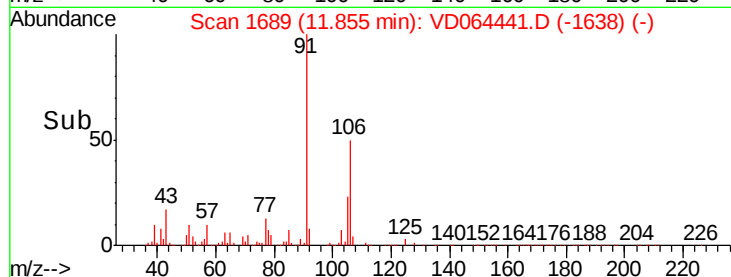
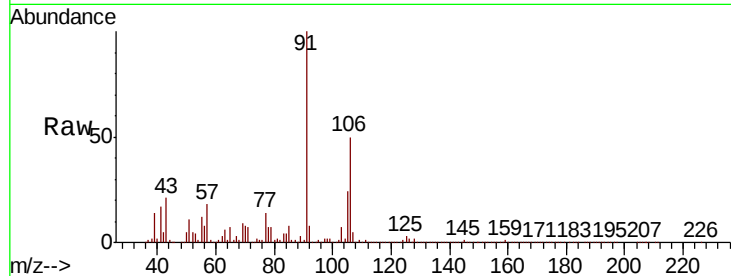




#68  
m/p-Xylenes  
Concen: 123.633 ug/l  
RT: 11.86 min Scan# 1689  
Delta R.T. 0.00 min  
Lab File: VD064441.D  
Acq: 05 Dec 2019 17:31

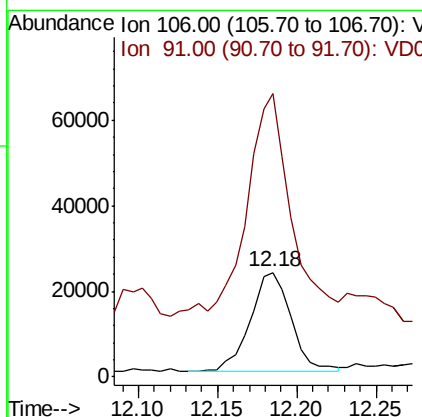
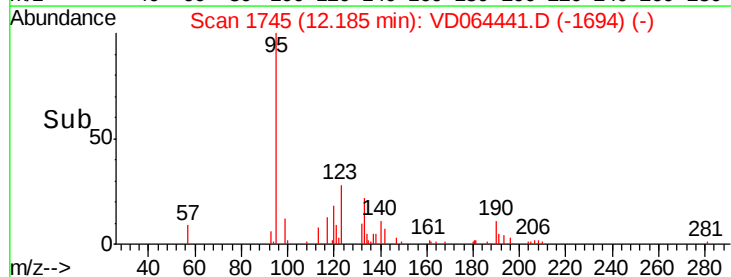
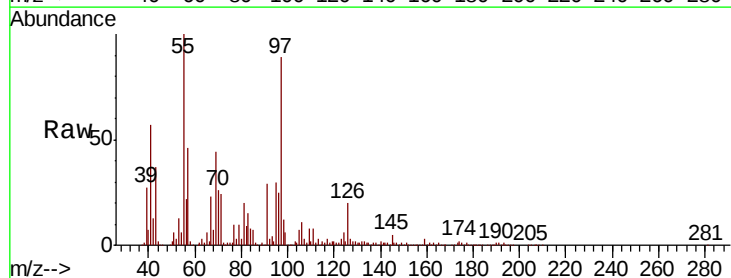
Instrument :  
MSVOA\_D  
ClientSampleId :

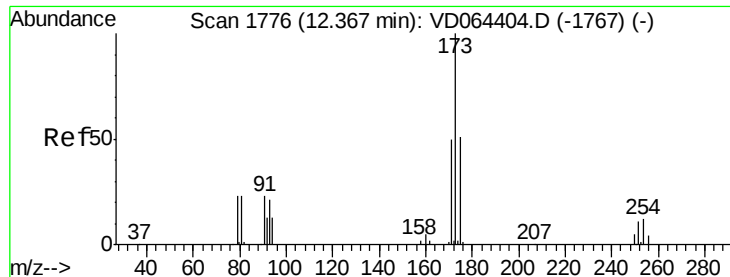
Tot Ion:106 Resp: 2024762  
Ion Ratio Lower Upper  
106 100  
91 199.0 157.4 236.2



#69  
o-Xylene  
Concen: 2.747 ug/l  
RT: 12.18 min Scan# 1745  
Delta R.T. 0.00 min  
Lab File: VD064441.D  
Acq: 05 Dec 2019 17:31

Tgt Ion:106 Resp: 41552  
Ion Ratio Lower Upper  
106 100  
91 242.6 103.8 311.4





#71

Bromoform

Concen: 1.366 ug/l

RT: 12.28 min Scan# 1762

Delta R.T. -0.08 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

ClientSampleId :

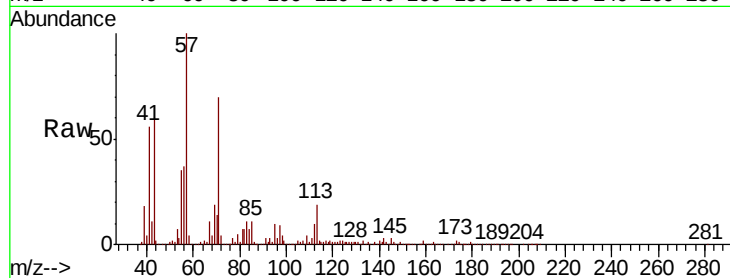
Tot Ion:173 Resp: 7306

Ion Ratio Lower Upper

173 100

175 0.0 25.3 75.8#

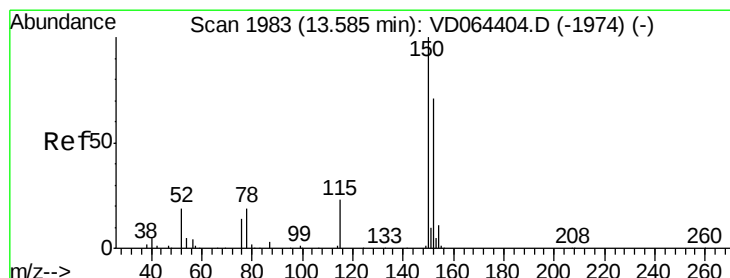
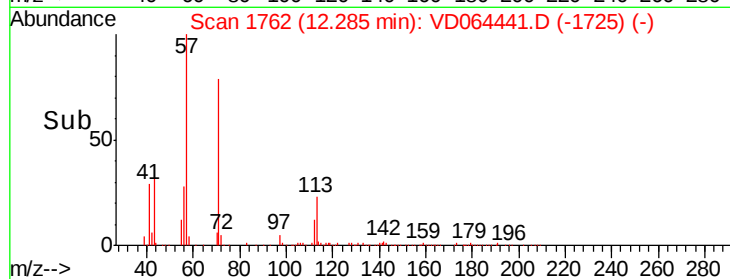
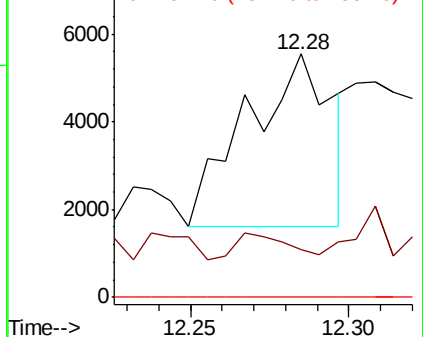
254 0.0 0.0 0.0



Abundance Ion 172.70 (172.40 to 173.40): V

Ion 174.70 (174.40 to 175.40): V

Ion 254.40 (254.10 to 255.10): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.58 min Scan# 1982

Delta R.T. -0.01 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

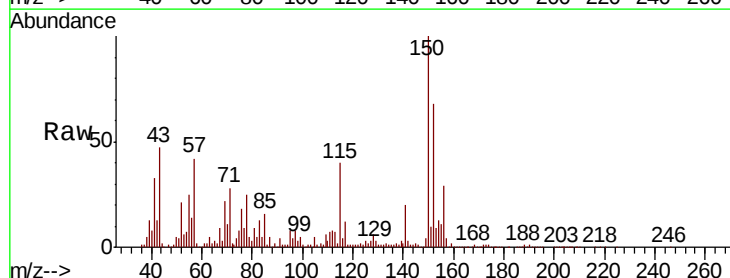
Tgt Ion:152 Resp: 567745

Ion Ratio Lower Upper

152 100

115 69.0 26.7 80.1

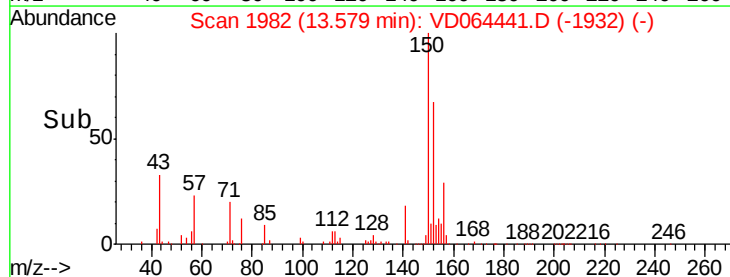
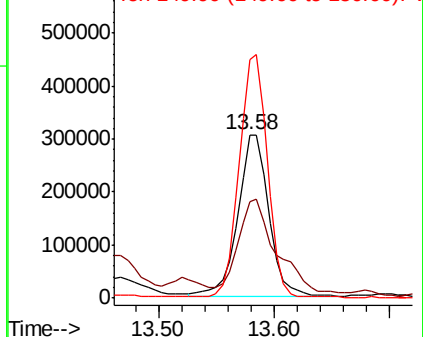
150 136.5 0.0 347.2

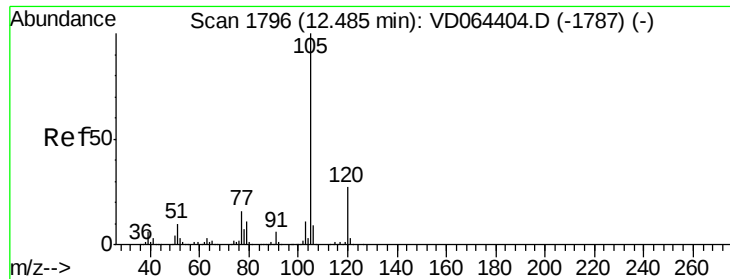


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#73

Isopropylbenzene

Concen: 32.924 ug/l

RT: 12.48 min Scan# 1796

Delta R.T. 0.00 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

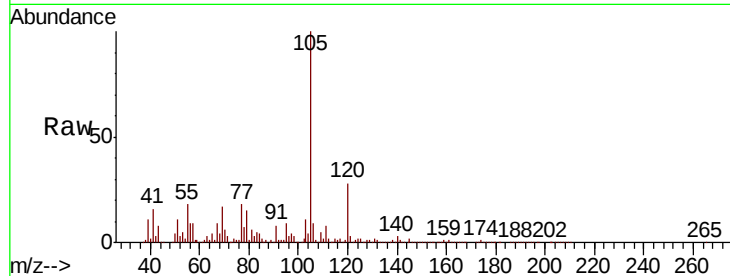
ClientSampleId :

Tot Ion:105 Resp: 1344364

Ion Ratio Lower Upper

105 100

120 26.8 13.4 40.2



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

12.48

800000

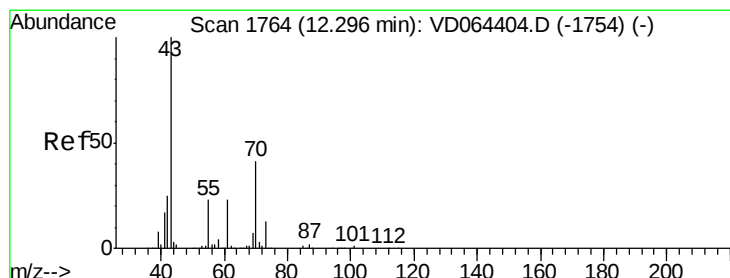
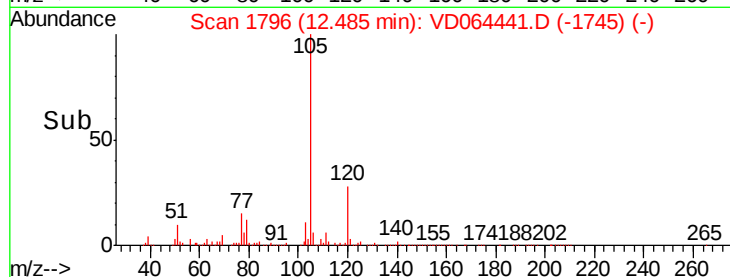
600000

400000

200000

0

Time--> 12.40 12.45 12.50 12.55



#74

N-ethyl acetate

Concen: 66.651 ug/l

RT: 12.27 min Scan# 1760

Delta R.T. -0.02 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Tgt Ion: 43 Resp: 617693

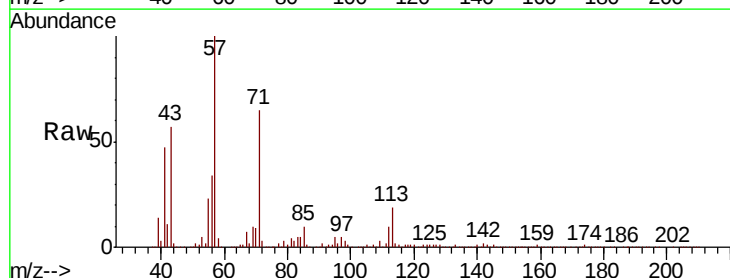
Ion Ratio Lower Upper

43 100

70 7.5 33.4 50.2#

55 0.0 18.9 28.3#

61 0.1 18.5 27.7#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 70.00 (69.70 to 70.70): VDC

Ion 55.00 (54.70 to 55.70): VDC

Ion 61.00 (60.70 to 61.70): VDC

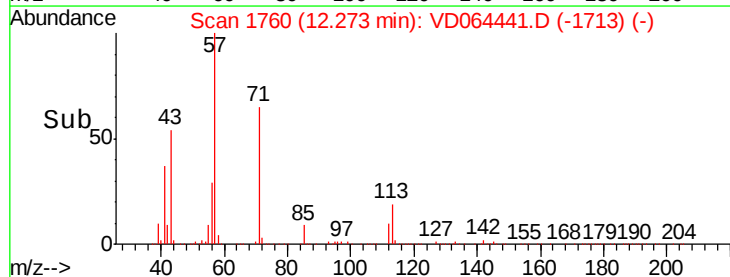
600000

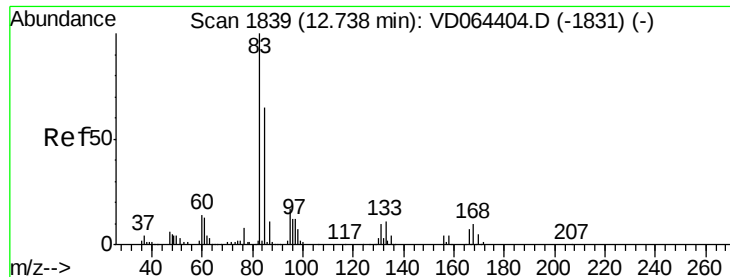
400000

200000

0

Time--> 12.20 12.25 12.30





#75

1,1,2,2-Tetrachloroethane

Concen: 5.398 ug/l

RT: 12.72 min Scan# 1836

Delta R.T. -0.02 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

ClientSampleId :

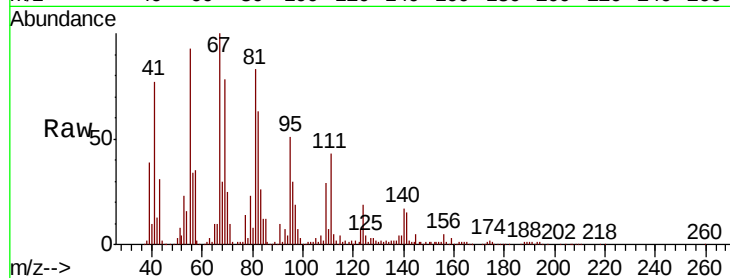
Tot Ion: 83 Resp: 36448

Ion Ratio Lower Upper

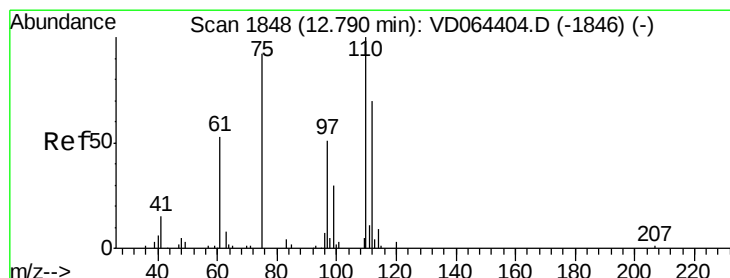
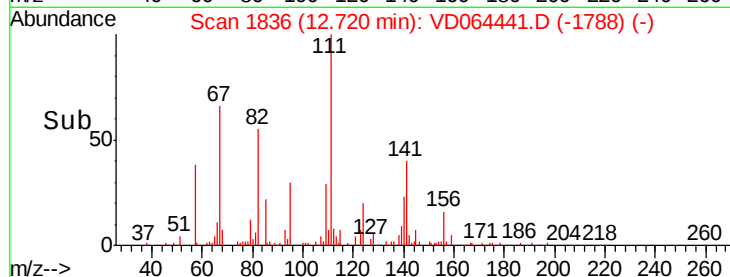
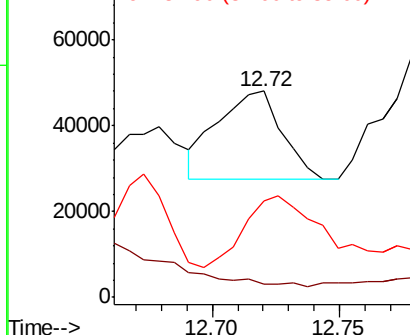
83 100

131 0.0 5.7 17.0#

85 99.0 31.3 93.9#



Abundance Ion 82.90 (82.60 to 83.60): VDC  
Ion 130.80 (130.50 to 131.50): VDC  
Ion 84.90 (84.60 to 85.60): VDC



#76

1,2,3-Trichloropropane

Concen: 4.846 ug/l

RT: 12.83 min Scan# 1854

Delta R.T. 0.04 min

Lab File: VD064441.D

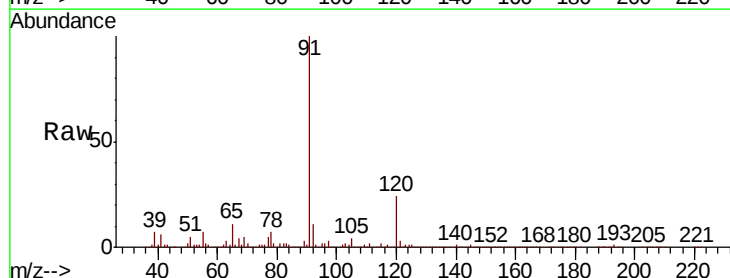
Acq: 05 Dec 2019 17:31

Tgt Ion: 75 Resp: 22624

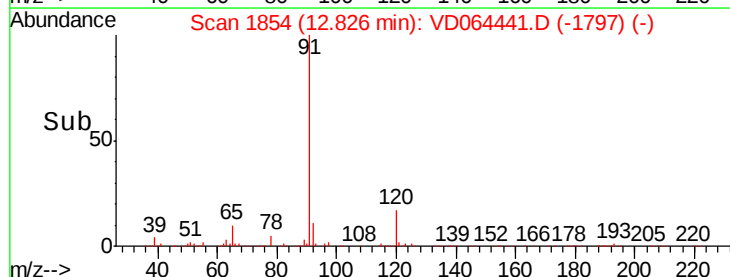
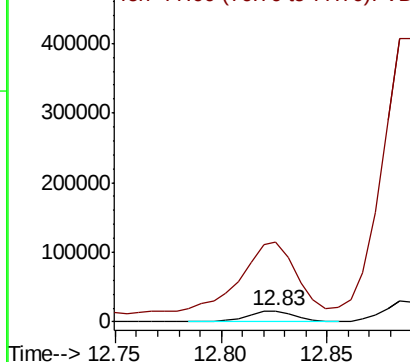
Ion Ratio Lower Upper

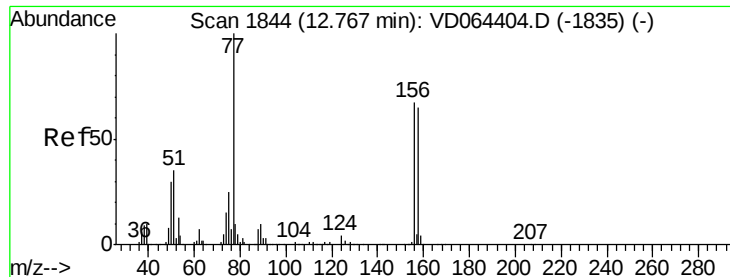
75 100

77 862.3 0.0 0.0#



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





#77

Bromobenzene

Concen: 20.708 ug/l

RT: 12.62 min Scan# 1819

Delta R.T. -0.15 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

ClientSampleId :

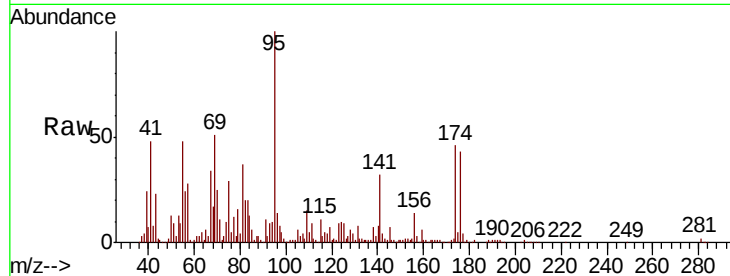
Tot Ion:156 Resp: 208811

Ion Ratio Lower Upper

156 100

77 0.0 80.0 240.2#

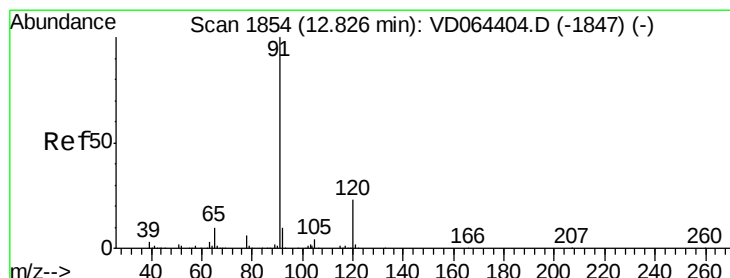
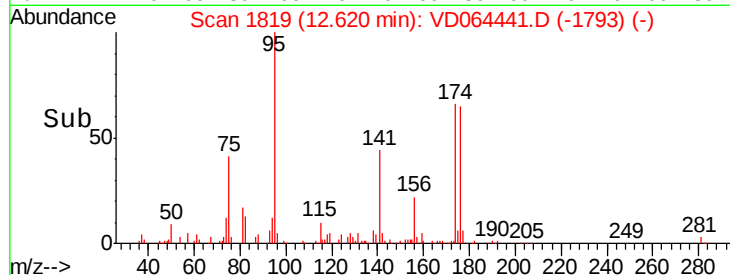
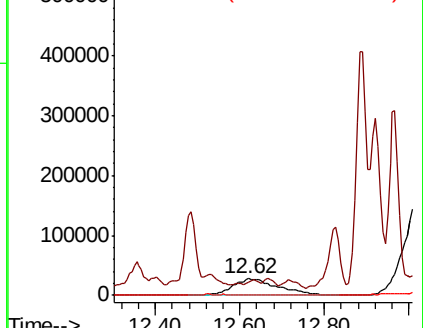
158 0.3 48.9 146.6#



Abundance Ion 155.80 (155.50 to 156.50): V

Ion 77.00 (76.70 to 77.70): VDC

Ion 157.80 (157.50 to 158.50): V



#78

n-propylbenzene

Concen: 82.933 ug/l

RT: 12.83 min Scan# 1854

Delta R.T. 0.00 min

Lab File: VD064441.D

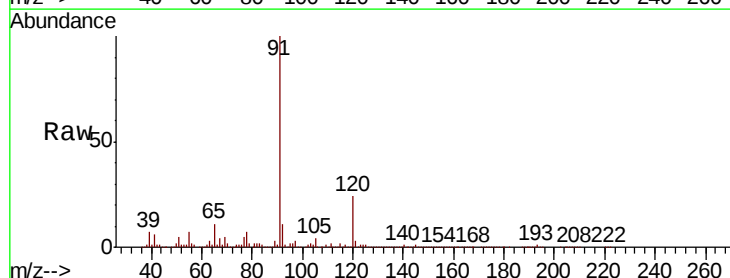
Acq: 05 Dec 2019 17:31

Tgt Ion: 91 Resp: 3907255

Ion Ratio Lower Upper

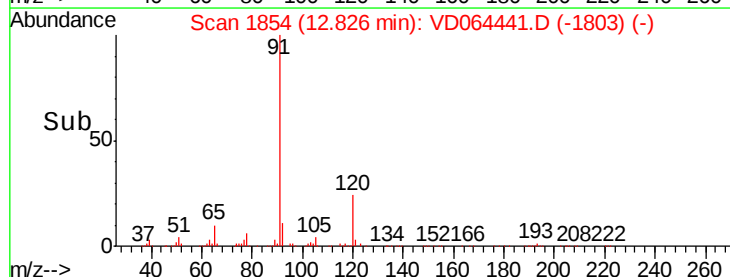
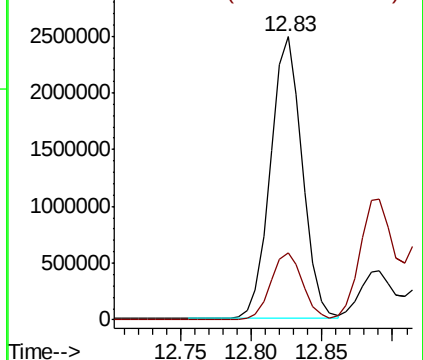
91 100

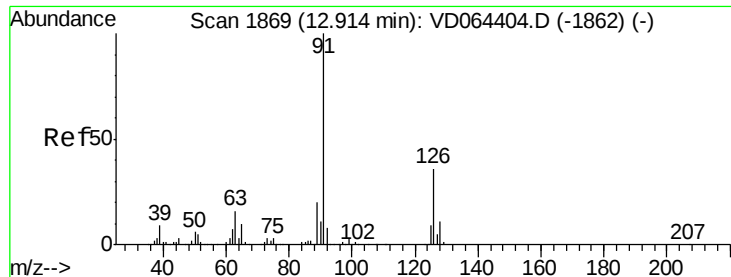
120 23.9 11.9 35.9



Abundance Ion 91.00 (90.70 to 91.70): VDC

Ion 120.00 (119.70 to 120.70): V

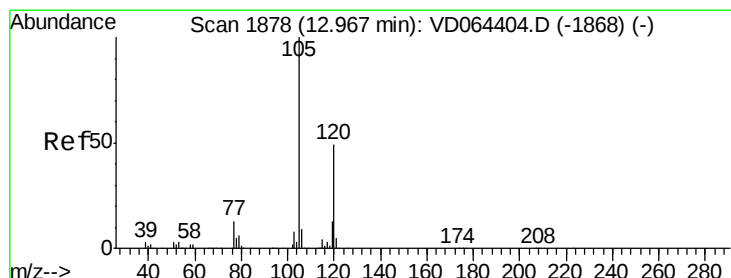
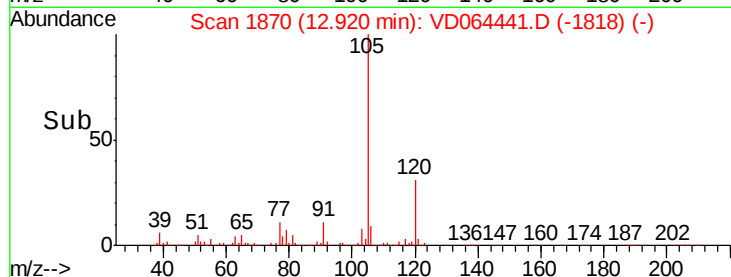
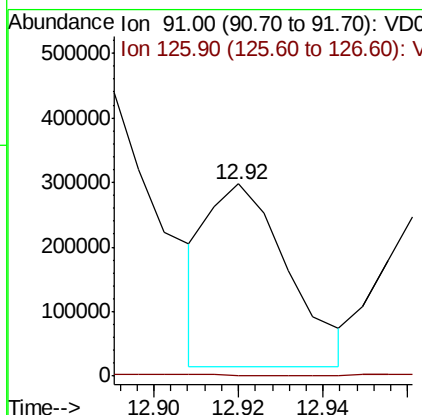
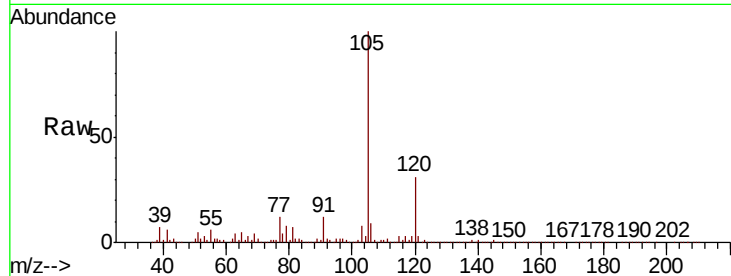




#79  
 2-Chlorotoluene  
 Concen: 14.303 ug/l  
 RT: 12.92 min Scan# 1870  
 Delta R.T. 0.01 min  
 Lab File: VD064441.D  
 Acq: 05 Dec 2019 17:31

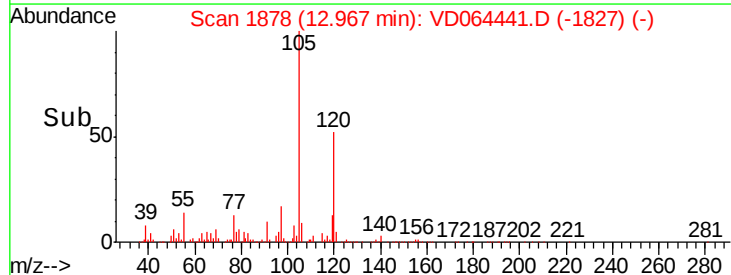
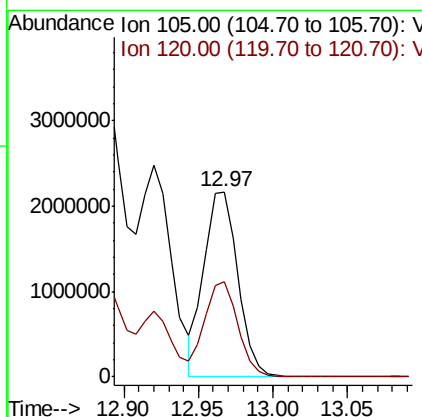
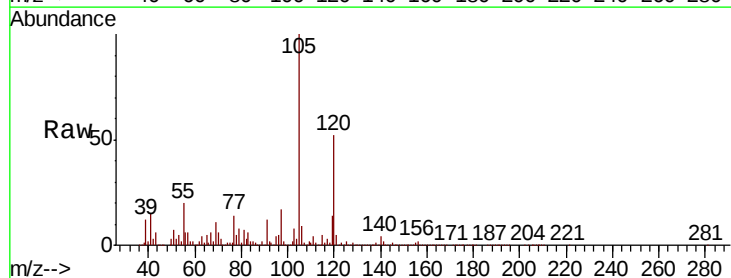
Instrument :  
 MSVOA\_D  
 ClientSampleID :

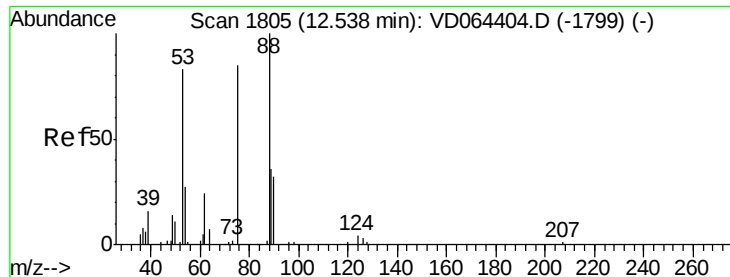
Tot Ion: 91 Resp: 370788  
 Ion Ratio Lower Upper  
 91 100  
 126 0.0 18.0 54.0#



#80  
 1,3,5-Trimethylbenzene  
 Concen: 102.263 ug/l  
 RT: 12.97 min Scan# 1878  
 Delta R.T. 0.00 min  
 Lab File: VD064441.D  
 Acq: 05 Dec 2019 17:31

Tgt Ion: 105 Resp: 3412356  
 Ion Ratio Lower Upper  
 105 100  
 120 50.6 25.1 75.3

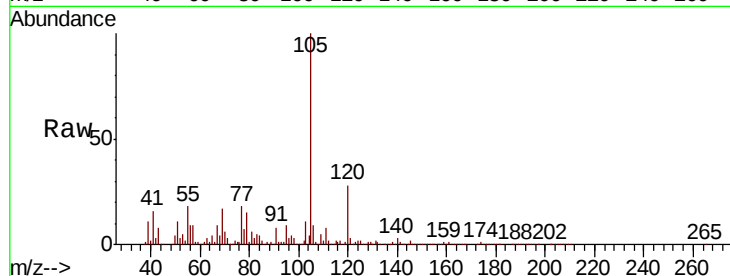




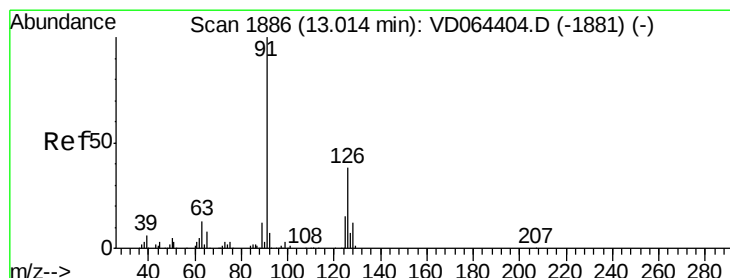
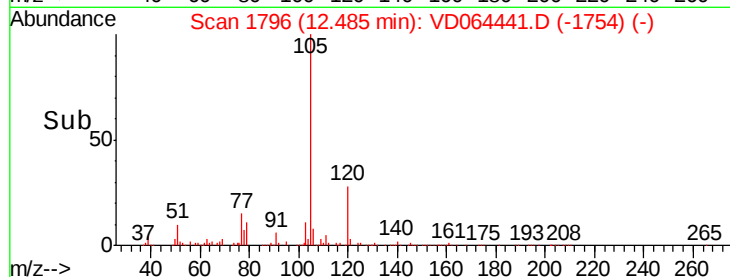
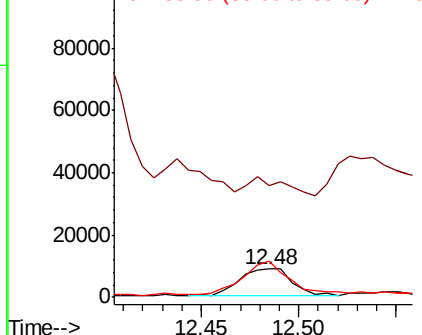
#81  
trans-1,4-Dichloro-2-butene  
Concen: 7.288 ug/l  
RT: 12.48 min Scan# 1796  
Delta R.T. -0.05 min  
Lab File: VD064441.D  
Acq: 05 Dec 2019 17:31

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion: 75 Resp: 15605  
Ion Ratio Lower Upper  
75 100  
53 0.0 81.0 121.6#  
89 115.7 38.5 57.7#

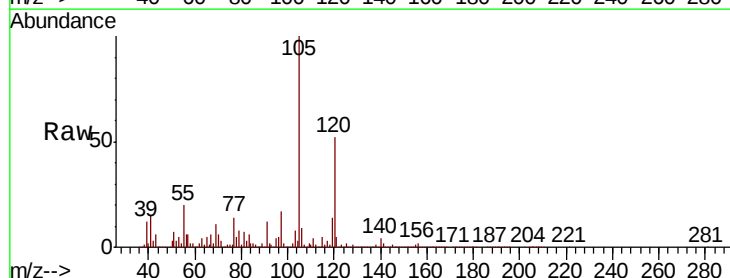


Abundance Ion 74.90 (74.60 to 75.60): VDC  
Ion 53.00 (52.70 to 53.70): VDC  
Ion 88.90 (88.60 to 89.60): VDC

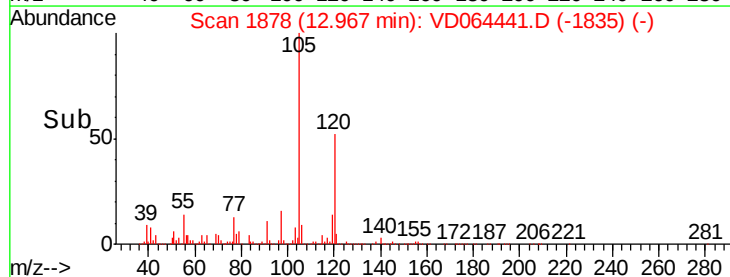
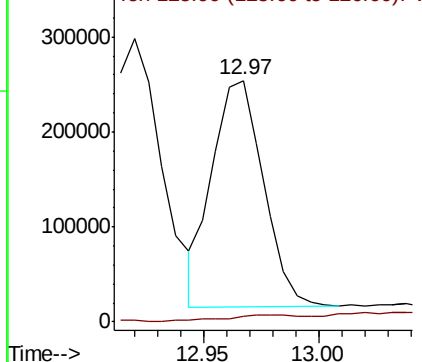


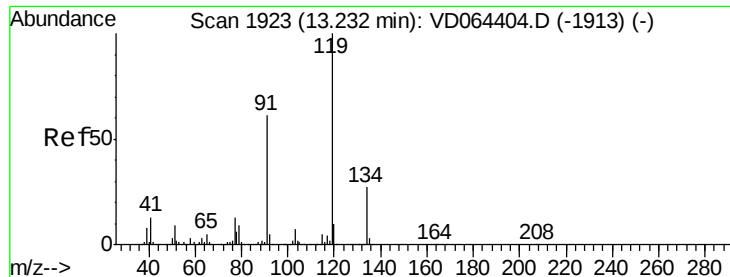
#82  
4-Chlorotoluene  
Concen: 13.475 ug/l  
RT: 12.97 min Scan# 1878  
Delta R.T. -0.05 min  
Lab File: VD064441.D  
Acq: 05 Dec 2019 17:31

Tgt Ion: 91 Resp: 369848  
Ion Ratio Lower Upper  
91 100  
126 3.4 18.2 54.6#



Abundance Ion 91.00 (90.70 to 91.70): VDC  
Ion 125.90 (125.60 to 126.60): V





#83

tert-Butylbenzene

Concen: 42.792 ug/l

RT: 13.27 min Scan# 1930

Delta R.T. 0.04 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

ClientSampled :

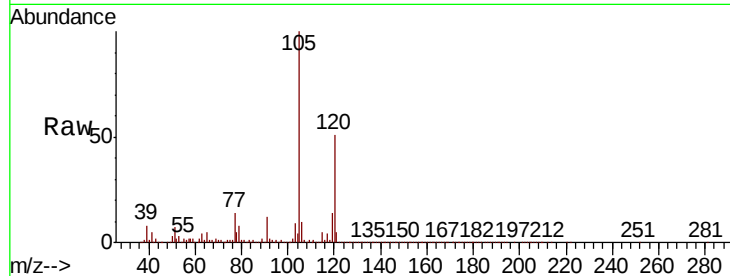
Tot Ion:119 Resp: 1241382

Ion Ratio Lower Upper

119 100

91 79.3 31.2 93.6

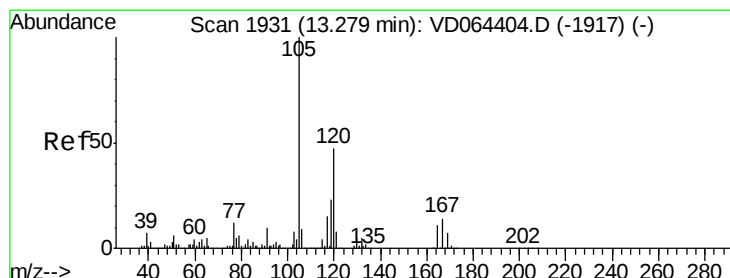
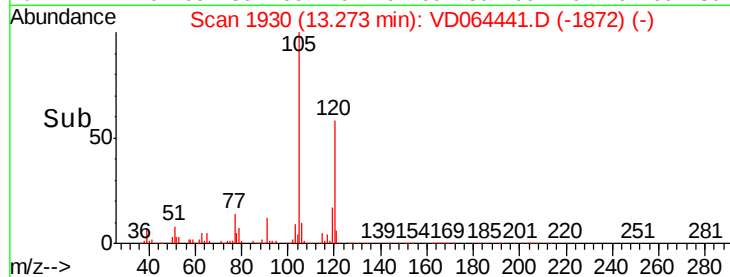
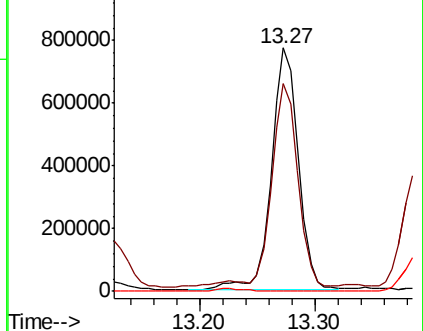
134 0.0 13.9 41.7#



Abundance Ion 119.00 (118.70 to 119.70): V

Ion 91.00 (90.70 to 91.70): V

Ion 134.00 (133.70 to 134.70): V



#84

1,2,4-Trimethylbenzene

Concen: 273.230 ug/l

RT: 13.27 min Scan# 1930

Delta R.T. -0.01 min

Lab File: VD064441.D

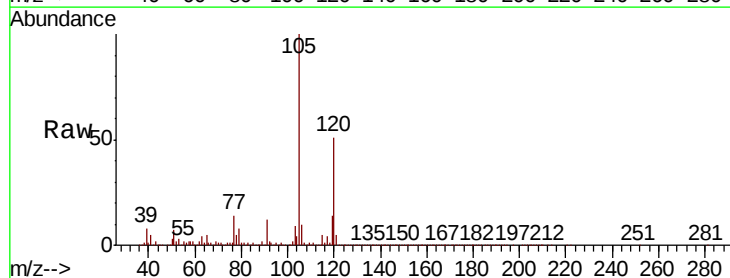
Acq: 05 Dec 2019 17:31

Tgt Ion:105 Resp: 9167657

Ion Ratio Lower Upper

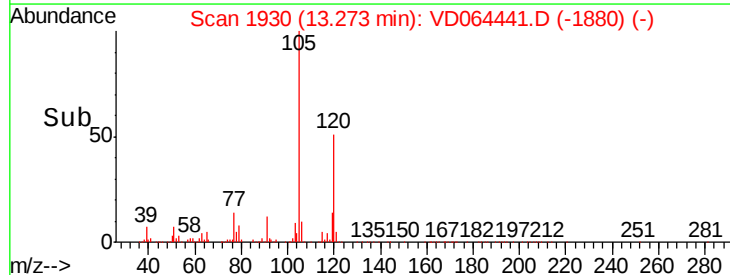
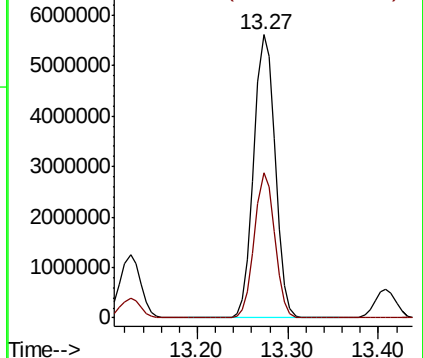
105 100

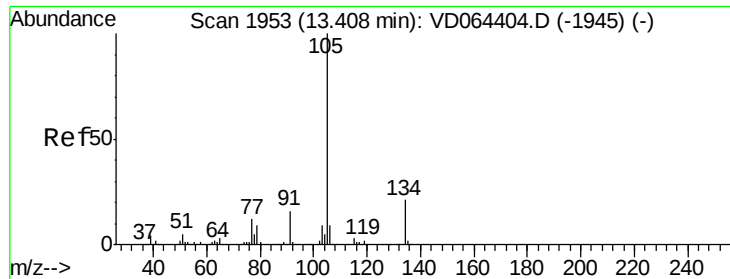
120 49.0 23.6 70.8



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





#85

sec-Butylbenzene

Concen: 22.888 ug/l

RT: 13.41 min Scan# 1953

Delta R.T. 0.00 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

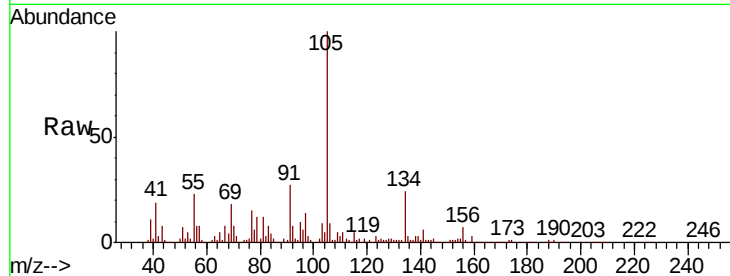
ClientSampleId :

Tot Ion:105 Resp: 911299

Ion Ratio Lower Upper

105 100

134 38.6 10.5 31.5#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V

13.41

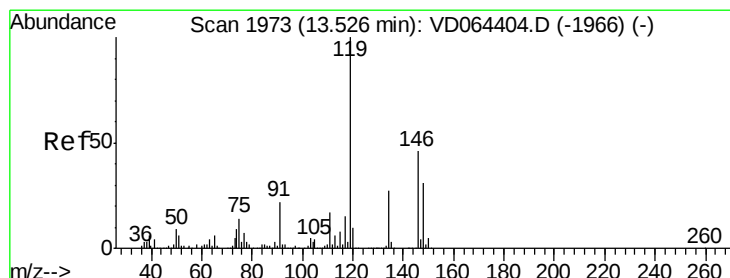
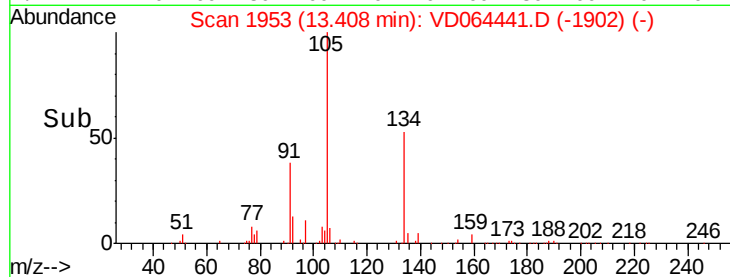
600000

400000

200000

0

Time-->



#86

p-Isopropyltoluene

Concen: 13.369 ug/l

RT: 13.52 min Scan# 1972

Delta R.T. -0.01 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

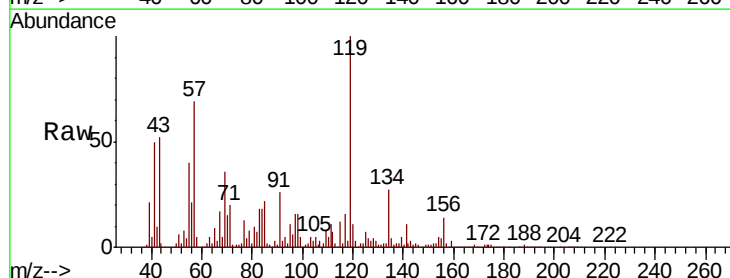
Tgt Ion:119 Resp: 502539

Ion Ratio Lower Upper

119 100

134 29.7 13.5 40.4

91 23.5 11.2 33.5



Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): V

500000

400000

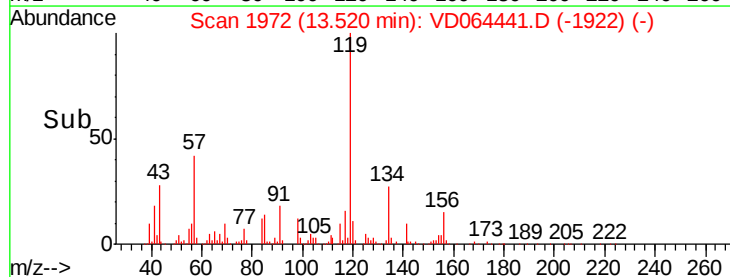
300000

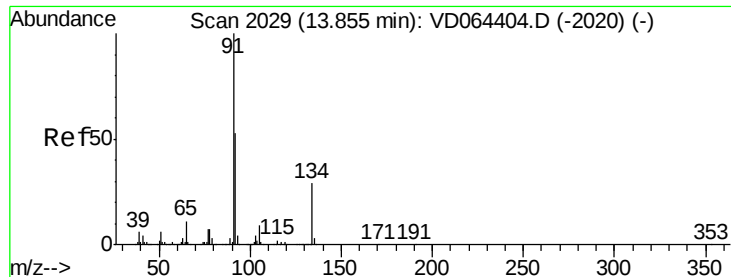
200000

100000

0

Time-->





#89

n-Butylbenzene

Concen: 35.748 ug/l

RT: 13.85 min Scan# 2028

Delta R.T. -0.01 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

ClientSampleId :

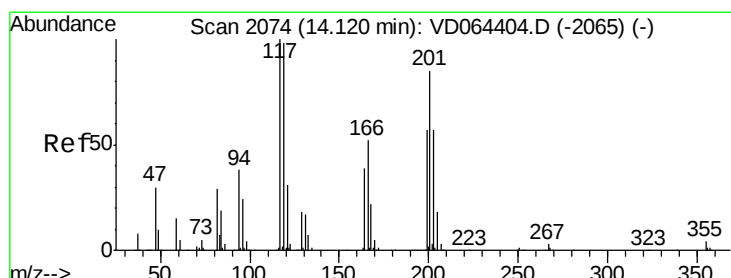
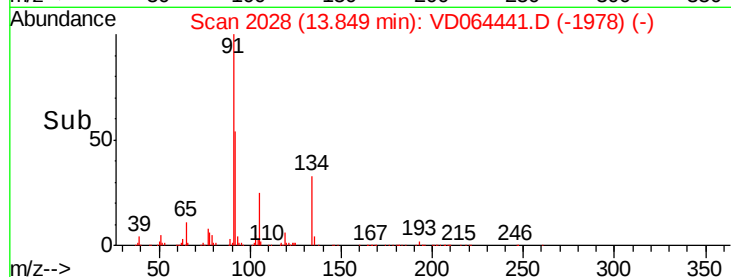
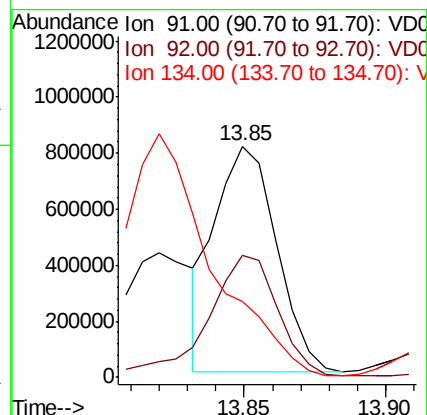
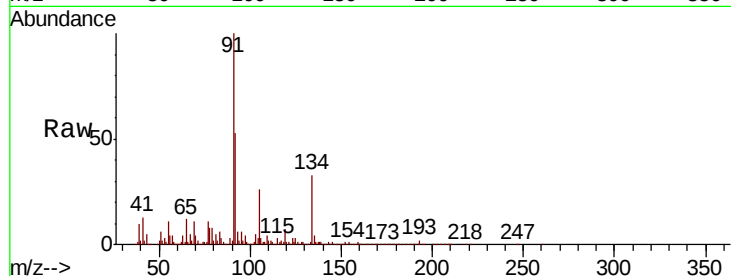
Tot Ion: 91 Resp: 1220293

Ion Ratio Lower Upper

91 100

92 60.8 26.5 79.4

134 0.0 13.9 41.7#



#90

Hexachloroethane

Concen: 59.148 ug/l

RT: 14.13 min Scan# 2075

Delta R.T. 0.01 min

Lab File: VD064441.D

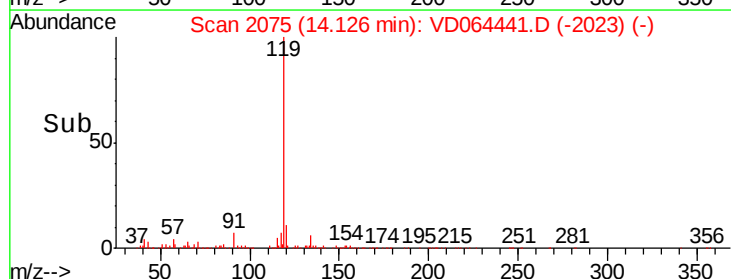
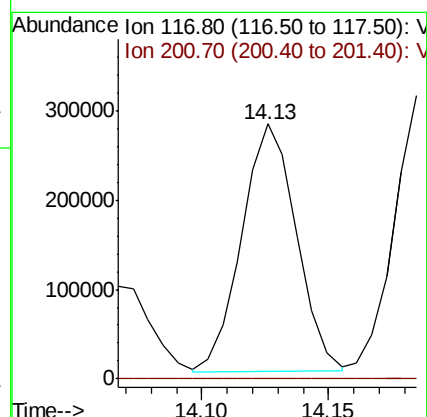
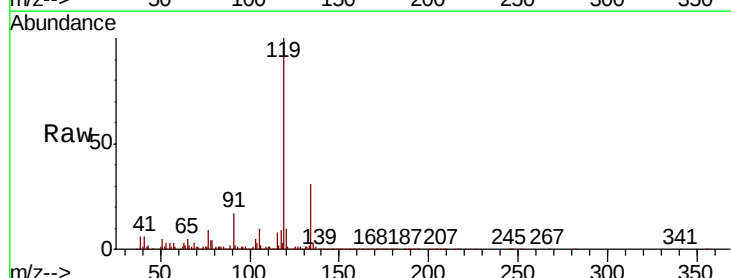
Acq: 05 Dec 2019 17:31

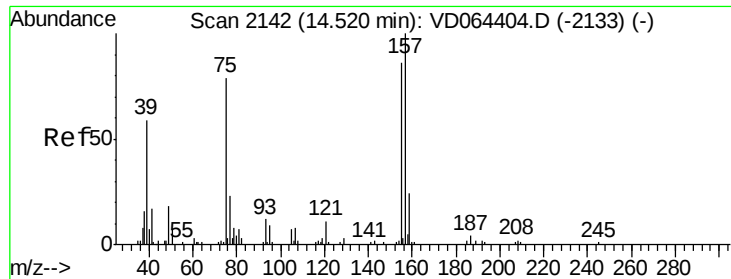
Tgt Ion: 117 Resp: 415843

Ion Ratio Lower Upper

117 100

201 0.1 44.3 132.8#





#92

1,2-Dibromo-3-Chloropropane

Concen: Below Cal

RT: 14.64 min Scan# 2162

Delta R.T. 0.12 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

Instrument :

MSVOA\_D

ClientSampleId :

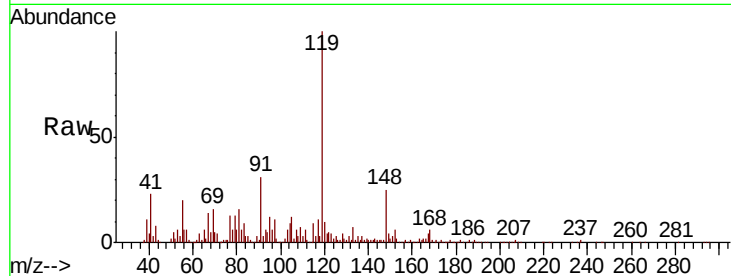
Tot Ion: 75 Resp: 1716

Ion Ratio Lower Upper

75 100

155 77.3 51.9 155.7

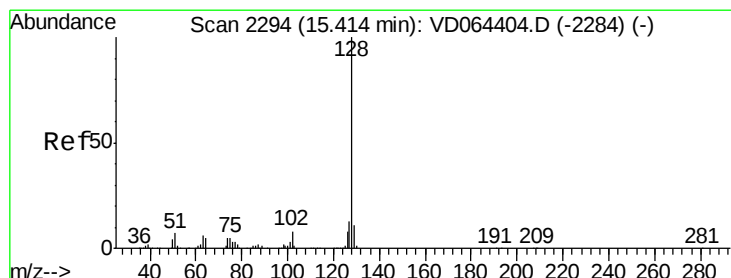
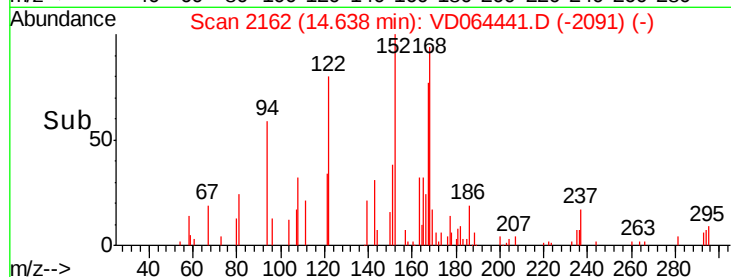
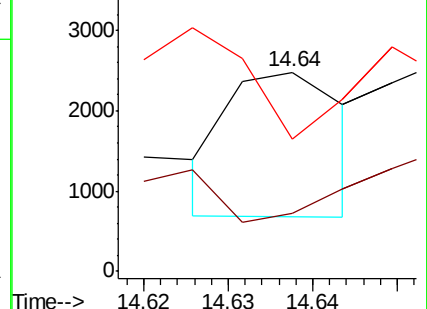
157 106.3 63.2 189.8



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V



#95

Naphthalene

Concen: 22.188 ug/l

RT: 15.41 min Scan# 2294

Delta R.T. 0.00 min

Lab File: VD064441.D

Acq: 05 Dec 2019 17:31

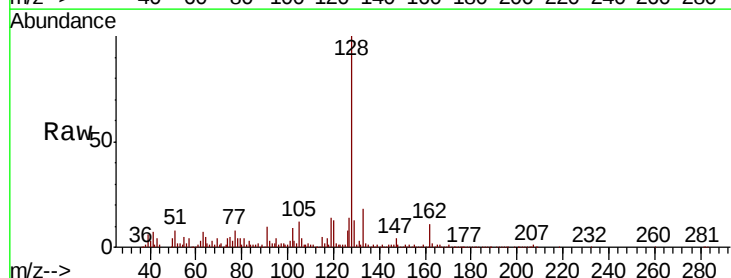
Tgt Ion: 128 Resp: 463825

Ion Ratio Lower Upper

128 100

127 14.6 10.5 15.7

129 13.8 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

