

Data File : VD064218.D  
Acq On : 15 Nov 2019 10:40  
Operator : VA/SY  
Sample : VD1115SBL01  
Misc : 5.00G/5.00ml/MSVOA\_D/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
VD1115SBL01

Quant Time: Nov 16 04:48:28 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D110819S.M  
Quant Title : SW846 8260  
QLast Update : Tue Nov 12 02:43:24 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 958156   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 1402393  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 1364168  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 698503   | 50.00 | ug/l  | 0.00     |

System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.33   | 65  | 416175   | 52.81 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.62% |      |
| 35) Dibromofluoromethane  | 7.91   | 113 | 428802   | 53.27 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.54% |      |
| 50) Toluene-d8            | 10.34  | 98  | 1681854  | 55.38 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 110.76% |      |
| 62) 4-Bromofluorobenzene  | 12.64  | 95  | 623732   | 59.31 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 118.62% |      |

Target Compounds

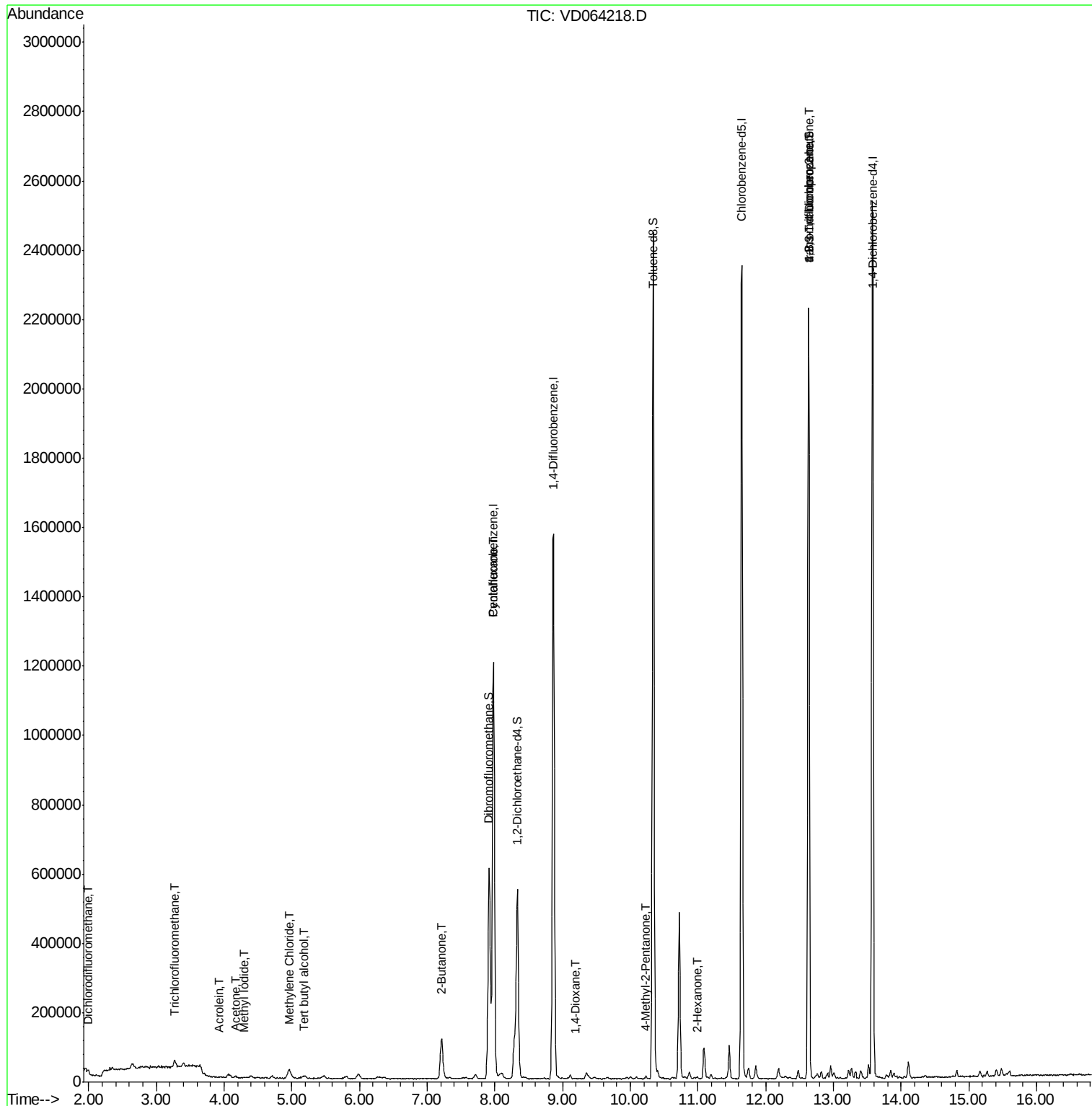
|                                |       |     |        |         |        | Qvalue |
|--------------------------------|-------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.99  | 85  | 8958   | 1.127   | ug/l   | 98     |
| 7) Trichlorofluoromethane      | 3.27  | 101 | 20407  | 1.381   | ug/l   | 94     |
| 10) Methyl Iodide              | 4.28  | 142 | 2630   | 2.293   | ug/l # | 48     |
| 11) Tert butyl alcohol         | 5.18  | 59  | 7067   | 12.840  | ug/l # | 69     |
| 13) Acrolein                   | 3.92  | 56  | 1080   | 2.319   | ug/l # | 15     |
| 16) Acetone                    | 4.17  | 43  | 7387   | 3.957   | ug/l # | 64     |
| 20) Methylene Chloride         | 4.96  | 84  | 18170  | 1.927   | ug/l # | 93     |
| 25) 2-Butanone                 | 7.21  | 43  | 9861   | 4.089   | ug/l # | 75     |
| 31) Cyclohexane                | 7.98  | 56  | 24469  | 1.582   | ug/l # | 18     |
| 49) 1,4-Dioxane                | 9.19  | 88  | 58     | 1.048   | ug/l # | 1      |
| 51) 4-Methyl-2-Pentanone       | 10.23 | 43  | 5509   | 1.022   | ug/l   | 92     |
| 59) 2-Hexanone                 | 10.98 | 43  | 5110   | 1.332   | ug/l   | 84     |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75  | 327162 | 58.149  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.64 | 75  | 327162 | 115.508 | ug/l # | 10     |

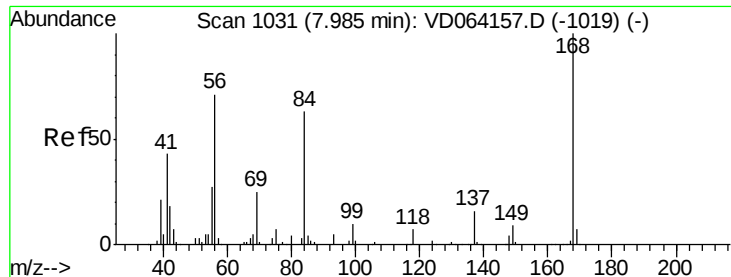
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Tue Nov 12 02:43:24 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.01 min

Lab File: VD064218.D

Acq: 15 Nov 2019 10:40

Instrument :

MSVOA\_D

ClientSampleId :

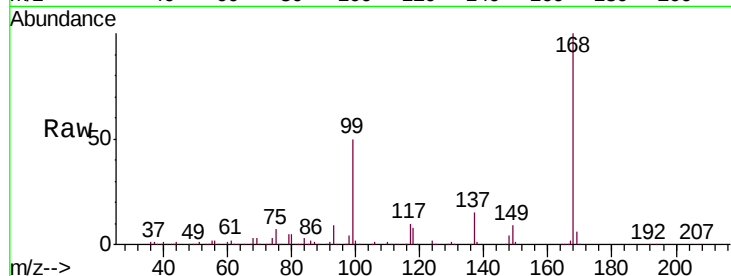
VD1115SBL01

Tgt Ion:168 Resp: 958156

Ion Ratio Lower Upper

168 100

99 50.3 41.6 62.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC

7.98

400000

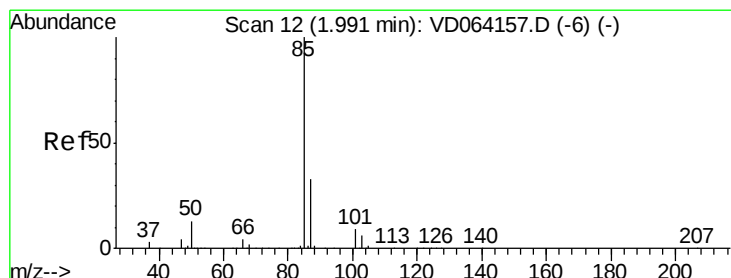
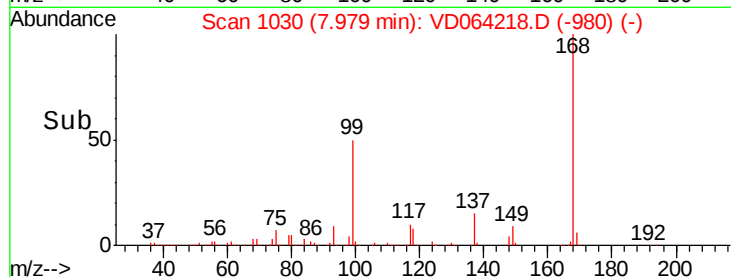
300000

200000

100000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 1.127 ug/l

RT: 1.99 min Scan# 12

Delta R.T. -0.00 min

Lab File: VD064218.D

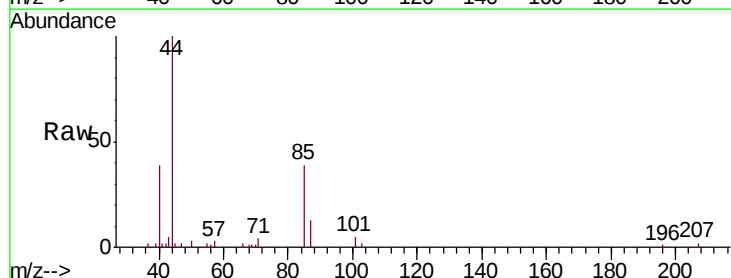
Acq: 15 Nov 2019 10:40

Tgt Ion: 85 Resp: 8958

Ion Ratio Lower Upper

85 100

87 33.7 16.4 49.2



Abundance Ion 84.90 (84.60 to 85.60): VDC

Ion 86.90 (86.60 to 87.60): VDC

1.99

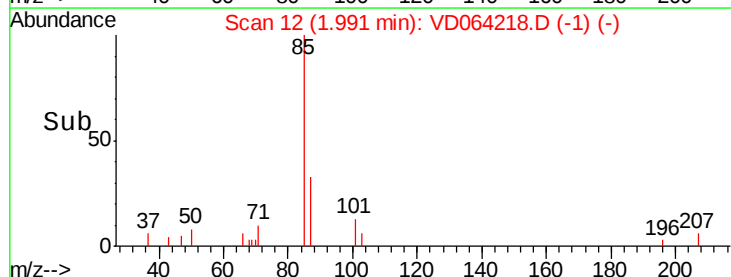
6000

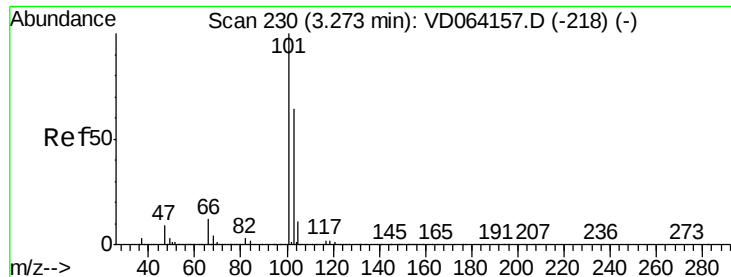
4000

2000

0

Time-->



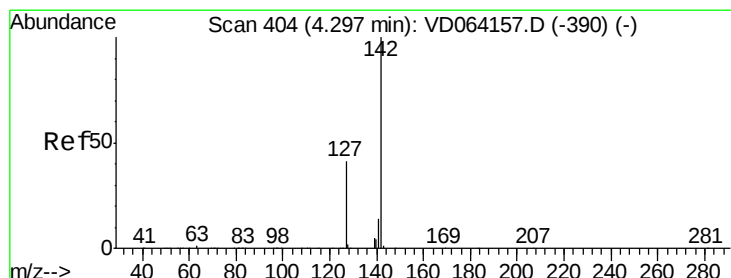
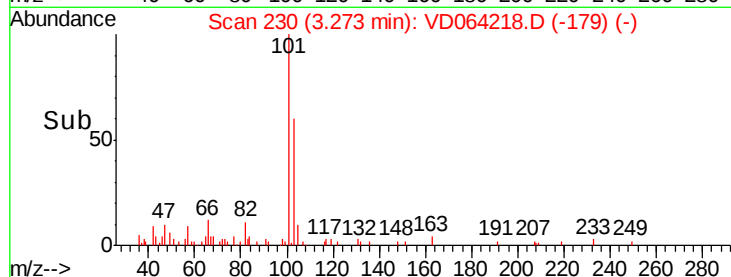
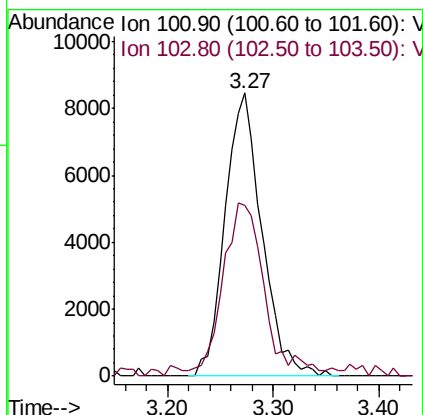
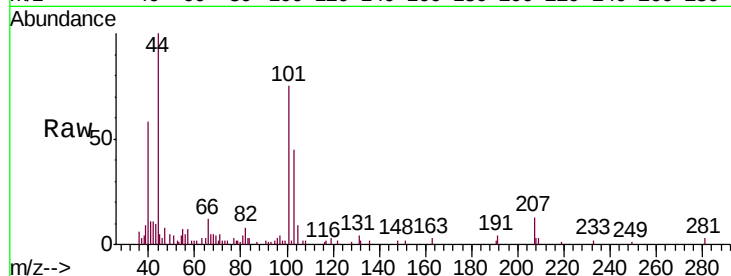


#7

Trichlorofluoromethane  
 Concen: 1.381 ug/l  
 RT: 3.27 min Scan# 230  
 Delta R.T. -0.00 min  
 Lab File: VD064218.D  
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Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VD1115SBL01

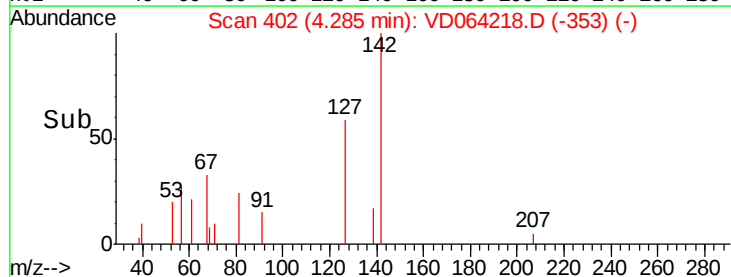
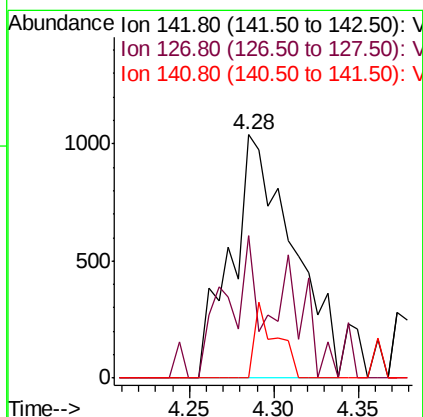
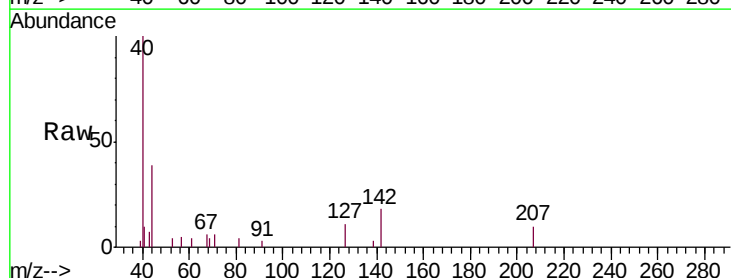
Tgt Ion:101 Resp: 20407  
 Ion Ratio Lower Upper  
 101 100  
 103 58.5 50.8 76.2

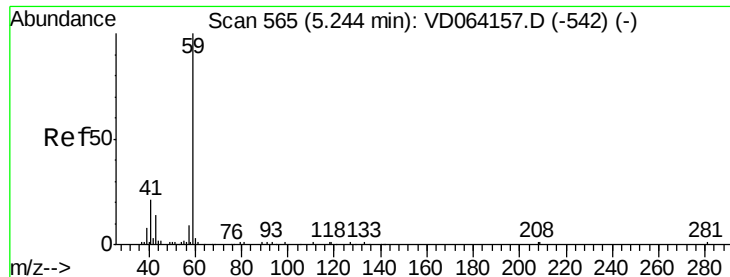


#10

Methyl Iodide  
 Concen: 2.293 ug/l  
 RT: 4.28 min Scan# 402  
 Delta R.T. -0.01 min  
 Lab File: VD064218.D  
 Acq: 15 Nov 2019 10:40

Tgt Ion:142 Resp: 2630  
 Ion Ratio Lower Upper  
 142 100  
 127 0.0 34.4 51.6#  
 141 11.1 11.2 16.8#

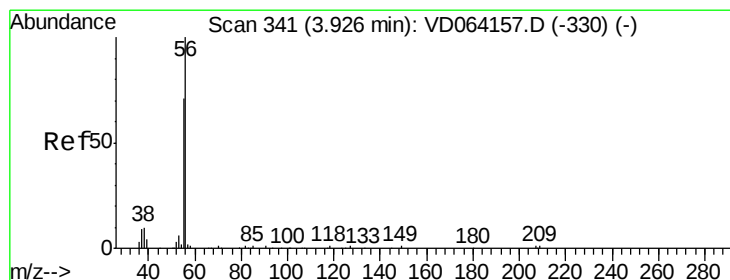
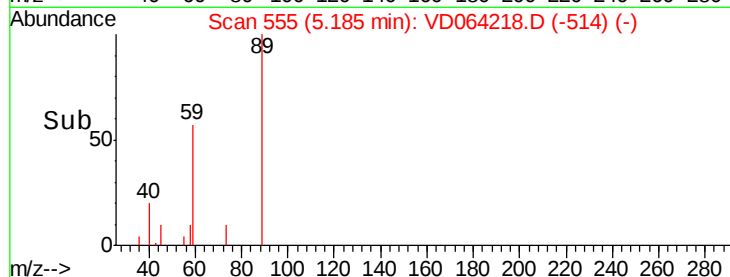
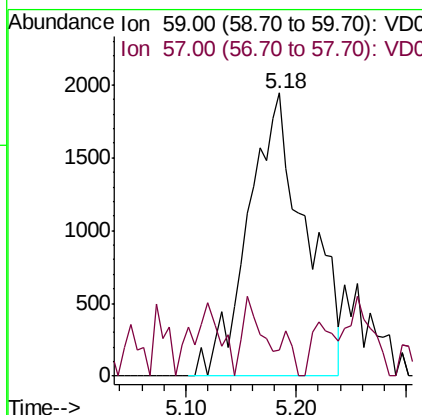
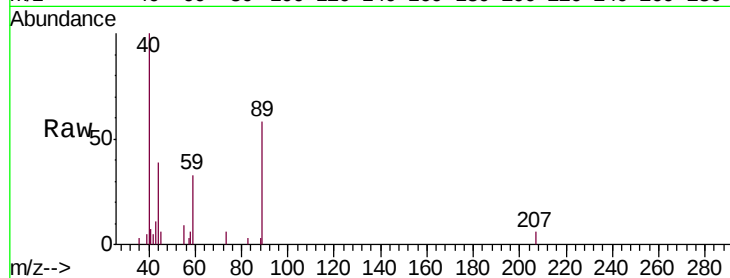




#11  
Tert butyl alcohol  
Concen: 12.840 ug/l  
RT: 5.18 min Scan# 555  
Delta R.T. -0.06 min  
Lab File: VD064218.D  
Acq: 15 Nov 2019 10:40

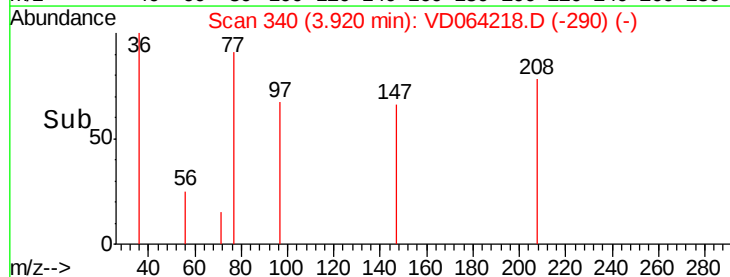
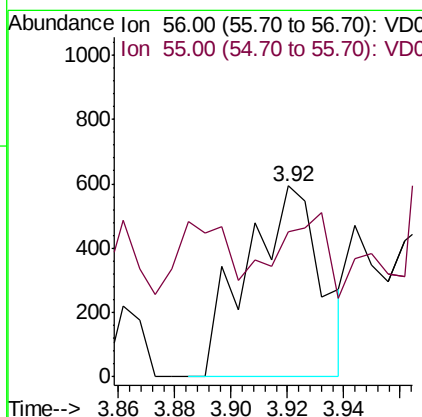
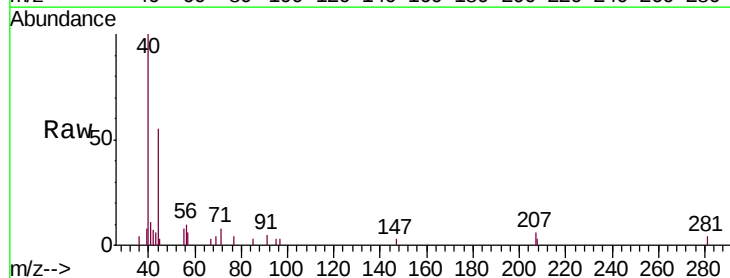
Instrument :  
MSVOA\_D  
ClientSampleId :  
VD1115SBL01

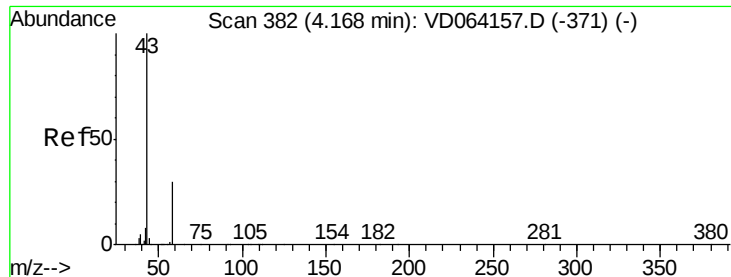
Tgt Ion: 59 Resp: 7067  
Ion Ratio Lower Upper  
59 100  
57 0.0 9.4 14.2#



#13  
Acrolein  
Concen: 2.319 ug/l  
RT: 3.92 min Scan# 340  
Delta R.T. -0.01 min  
Lab File: VD064218.D  
Acq: 15 Nov 2019 10:40

Tgt Ion: 56 Resp: 1080  
Ion Ratio Lower Upper  
56 100  
55 0.0 56.1 84.1#





#16

Acetone

Concen: 3.957 ug/l

RT: 4.17 min Scan# 382

Delta R.T. -0.00 min

Lab File: VD064218.D

Acq: 15 Nov 2019 10:40

Instrument :

MSVOA\_D

ClientSampleId :

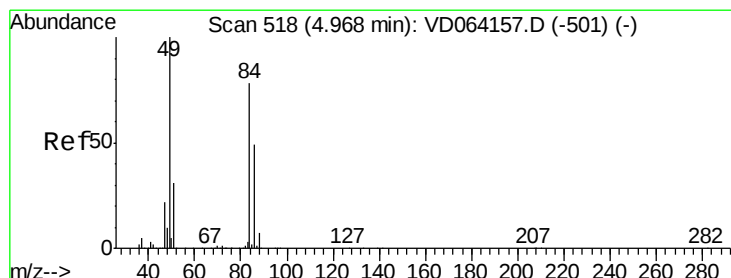
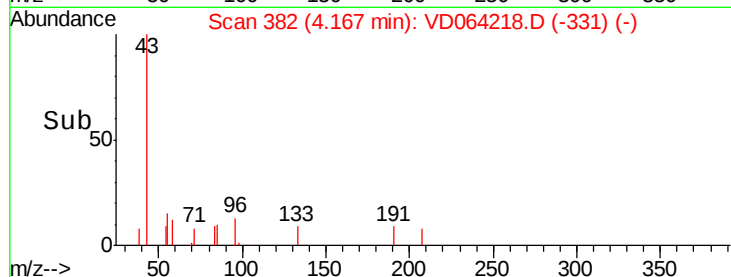
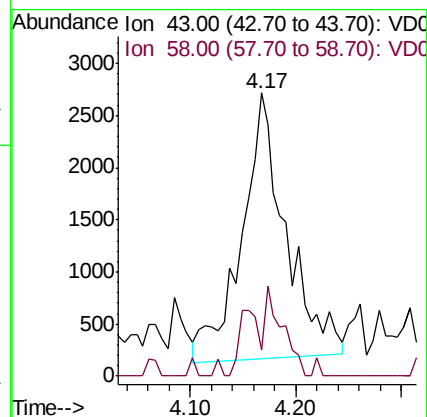
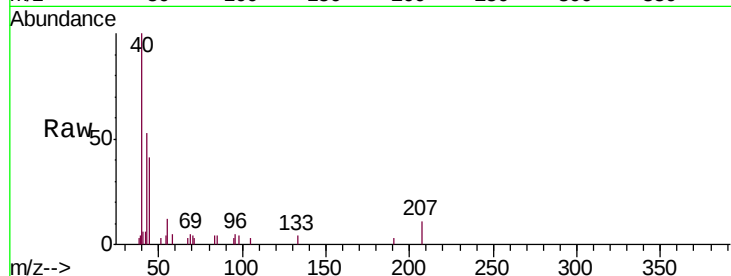
VD1115SBL01

Tgt Ion: 43 Resp: 7387

Ion Ratio Lower Upper

43 100

58 10.6 24.1 36.1#



#20

Methylene Chloride

Concen: 1.927 ug/l

RT: 4.96 min Scan# 517

Delta R.T. -0.01 min

Lab File: VD064218.D

Acq: 15 Nov 2019 10:40

Tgt Ion: 84 Resp: 18170

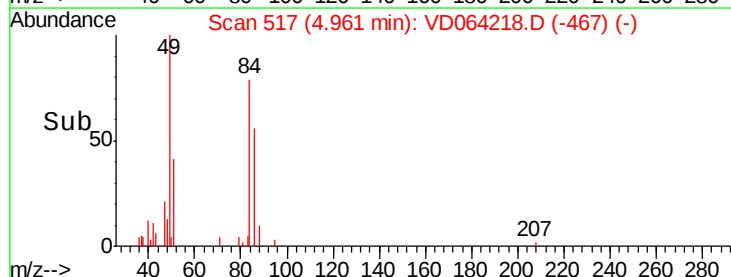
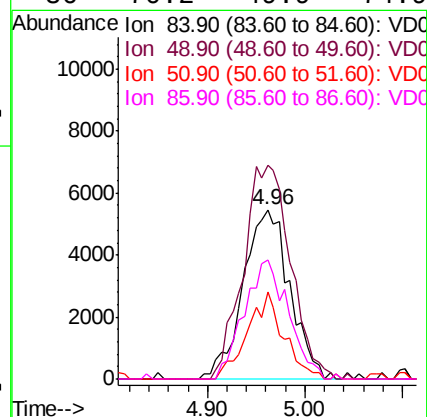
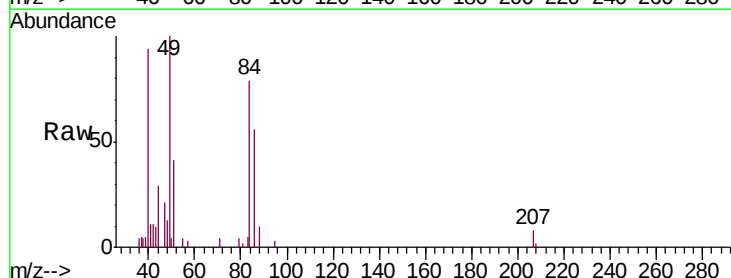
Ion Ratio Lower Upper

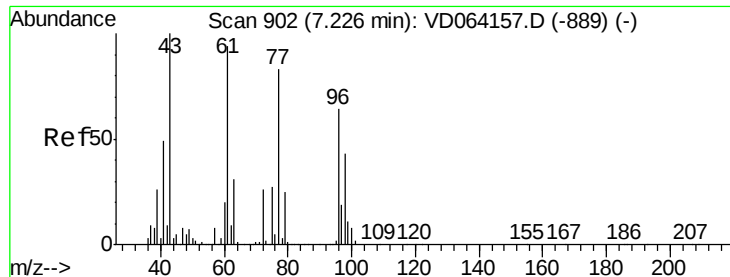
84 100

49 126.4 102.1 153.1

51 51.7 32.2 48.2#

86 70.2 49.9 74.9





#25

2-Butanone

Concen: 4.089 ug/l

RT: 7.21 min Scan# 900

Delta R.T. -0.01 min

Lab File: VD064218.D

Acq: 15 Nov 2019 10:40

Instrument :

MSVOA\_D

ClientSampleId :

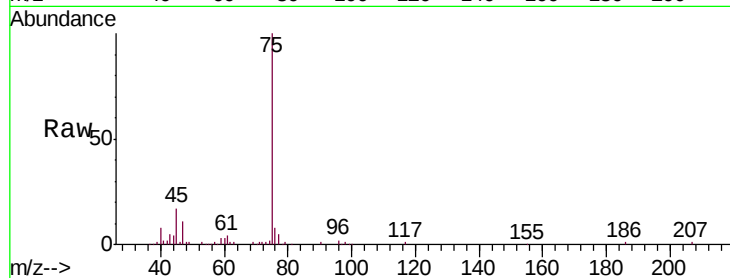
VD1115SBL01

Tgt Ion: 43 Resp: 9861

Ion Ratio Lower Upper

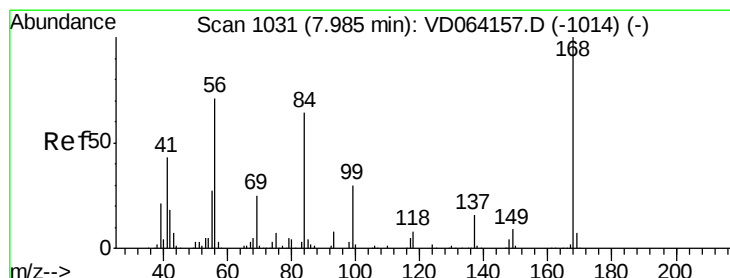
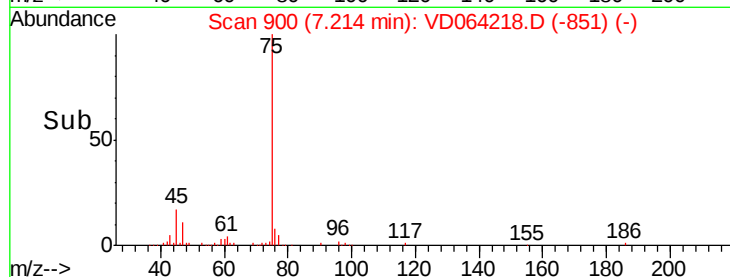
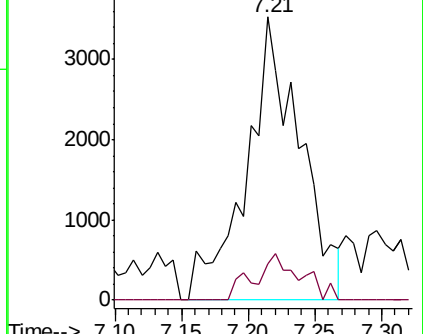
43 100

72 12.8 20.6 30.8#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 72.00 (71.70 to 72.70): VDC



#31

Cyclohexane

Concen: 1.582 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.01 min

Lab File: VD064218.D

Acq: 15 Nov 2019 10:40

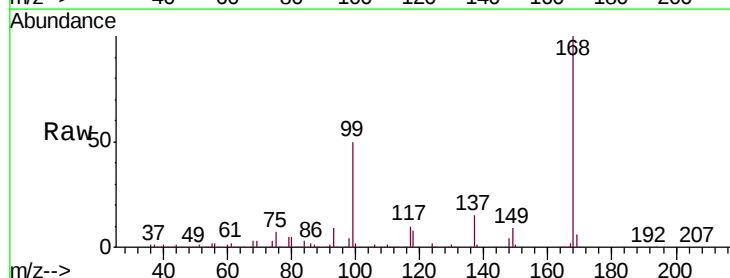
Tgt Ion: 56 Resp: 24469

Ion Ratio Lower Upper

56 100

69 136.4 28.2 42.4#

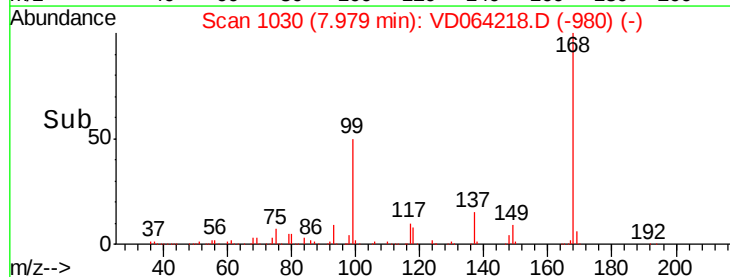
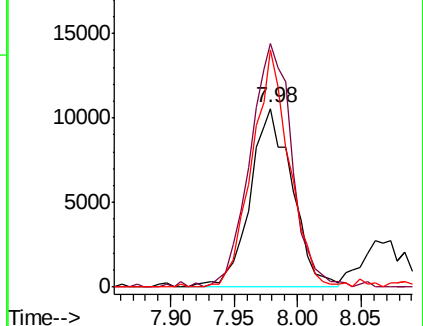
84 132.7 71.8 107.6#

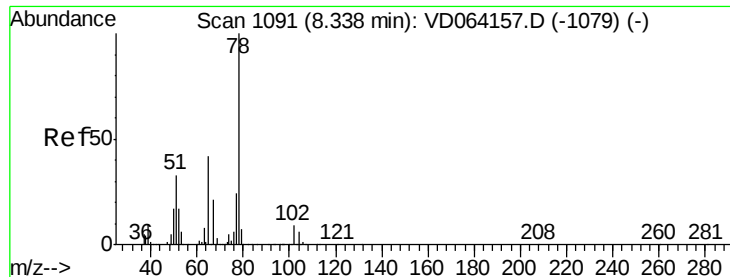


Abundance Ion 56.00 (55.70 to 56.70): VDC

Ion 69.00 (68.70 to 69.70): VDC

Ion 84.00 (83.70 to 84.70): VDC

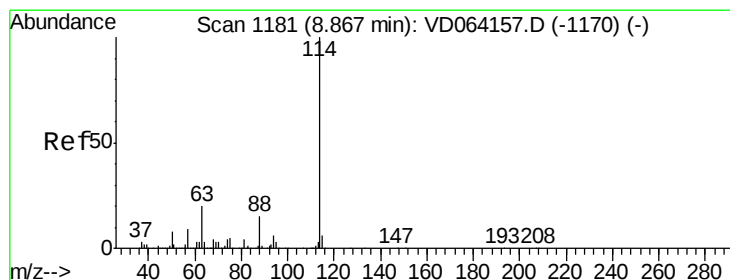
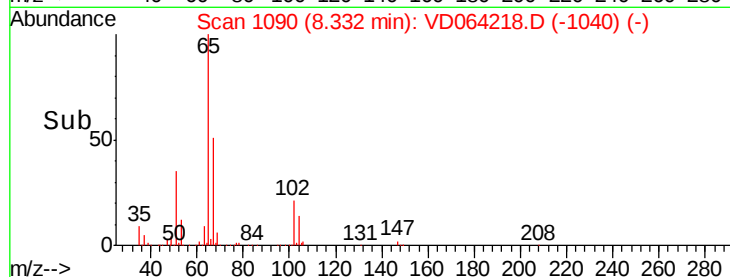
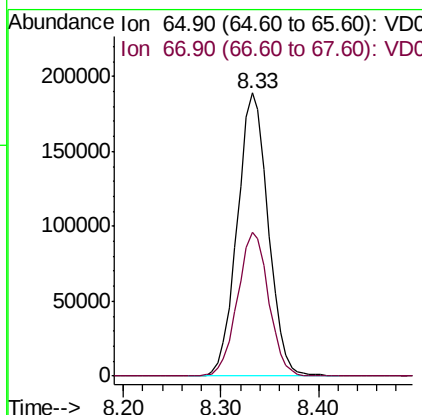
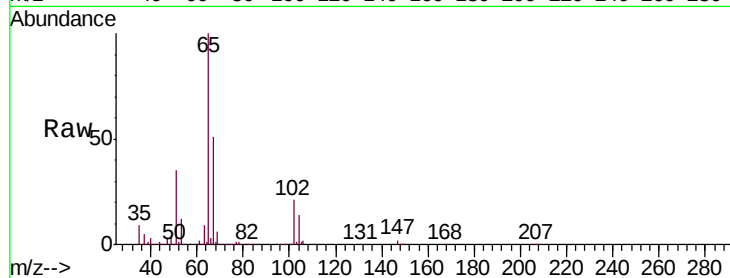




#33  
 1,2-Dichloroethane-d4  
 Concen: 52.812 ug/l  
 RT: 8.33 min Scan# 1090  
 Delta R.T. -0.01 min  
 Lab File: VD064218.D  
 Acq: 15 Nov 2019 10:40

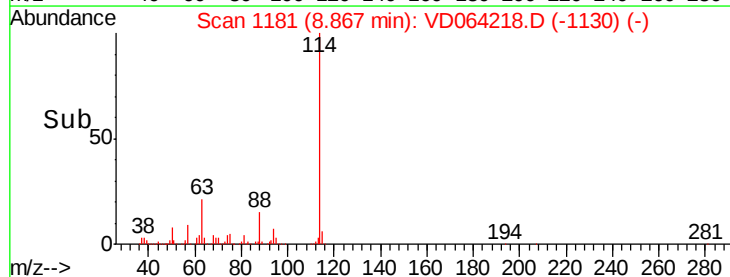
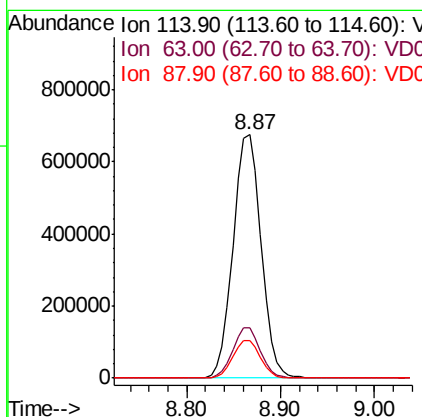
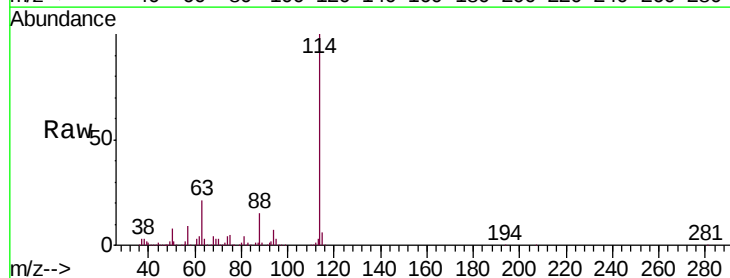
Instrument :  
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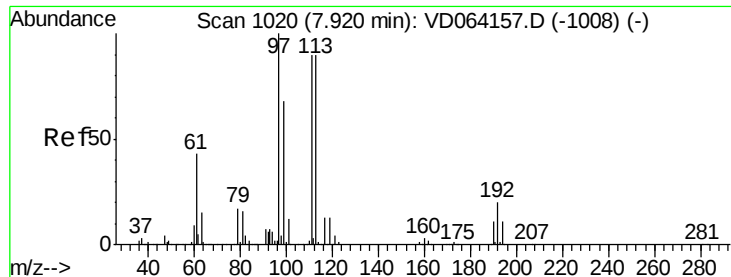
Tgt Ion: 65 Resp: 416175  
 Ion Ratio Lower Upper  
 65 100  
 67 51.3 0.0 104.4



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.87 min Scan# 1181  
 Delta R.T. -0.00 min  
 Lab File: VD064218.D  
 Acq: 15 Nov 2019 10:40

Tgt Ion: 114 Resp: 1402393  
 Ion Ratio Lower Upper  
 114 100  
 63 20.7 0.0 40.0  
 88 15.5 0.0 30.2

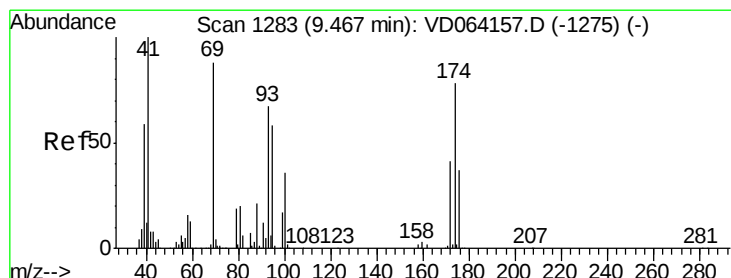
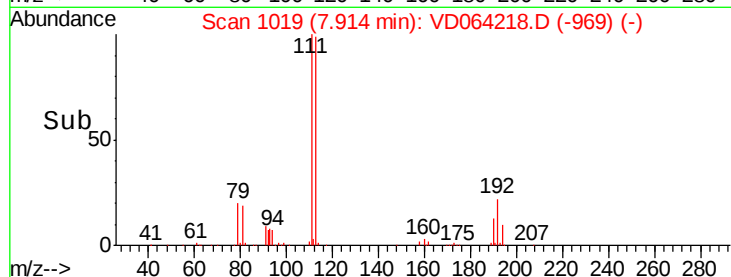
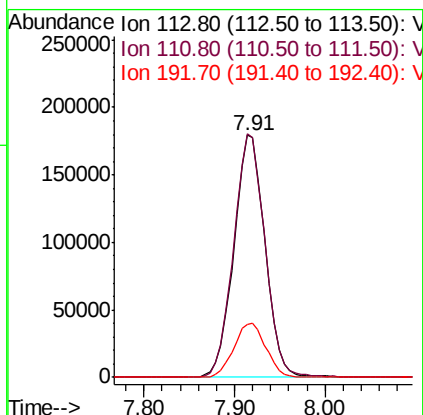
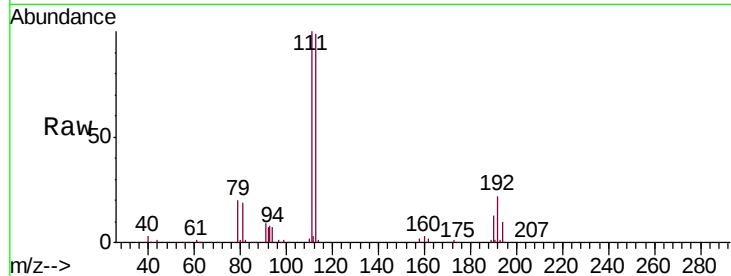




#35  
 Dibromofluoromethane  
 Concen: 53.268 ug/l  
 RT: 7.91 min Scan# 1019  
 Delta R.T. -0.01 min  
 Lab File: VD064218.D  
 Acq: 15 Nov 2019 10:40

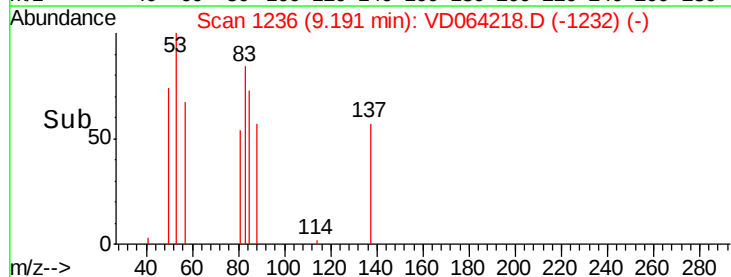
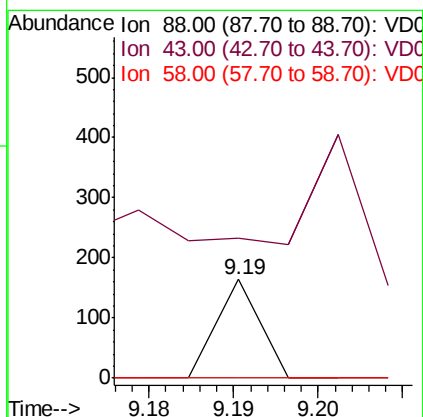
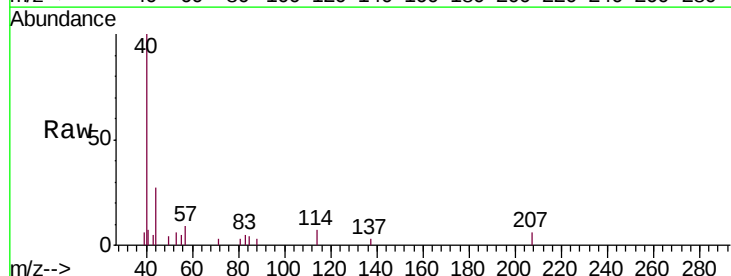
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VD1115SBL01

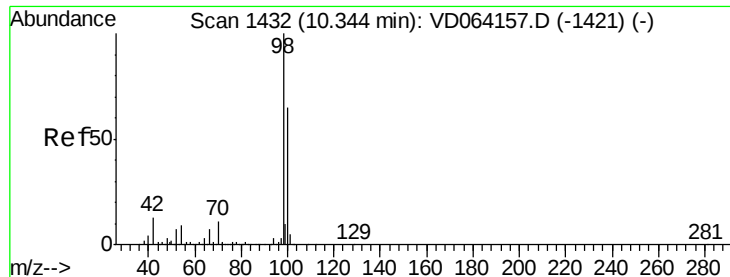
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 101.2 | 81.5  | 122.3 |
| 192     | 22.9  | 18.8  | 28.2  |



#49  
 1,4-Dioxane  
 Concen: 1.048 ug/l  
 RT: 9.19 min Scan# 1236  
 Delta R.T. -0.28 min  
 Lab File: VD064218.D  
 Acq: 15 Nov 2019 10:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 88      | 100   |       |       |
| 43      | 341.4 | 29.8  | 44.8# |
| 58      | 0.0   | 58.1  | 87.1# |





#50

Toluene-d8

Concen: 55.383 ug/l

RT: 10.34 min Scan# 1431

Delta R.T. -0.01 min

Lab File: VD064218.D

Acq: 15 Nov 2019 10:40

Instrument :

MSVOA\_D

ClientSampleId :

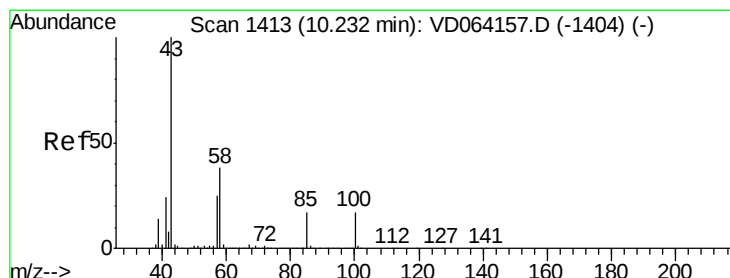
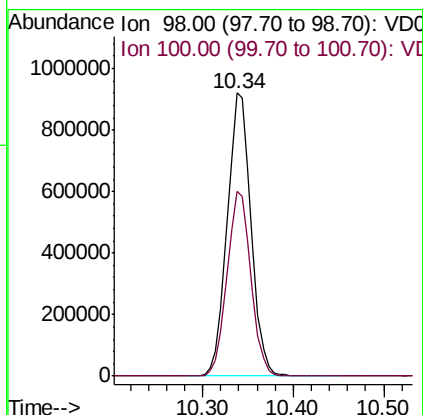
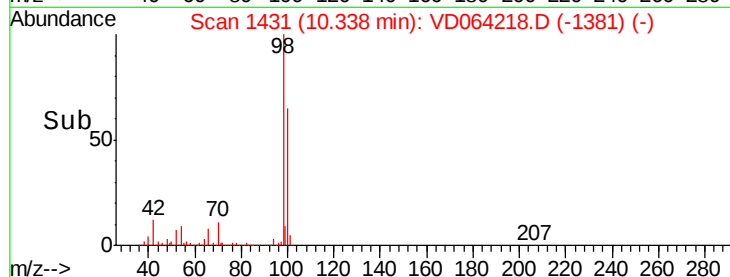
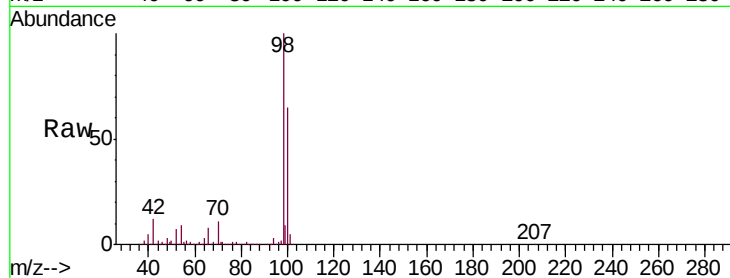
VD1115SBL01

Tgt Ion: 98 Resp: 1681854

Ion Ratio Lower Upper

98 100

100 65.1 52.6 78.8



#51

4-Methyl-2-Pentanone

Concen: 1.022 ug/l

RT: 10.23 min Scan# 1412

Delta R.T. -0.01 min

Lab File: VD064218.D

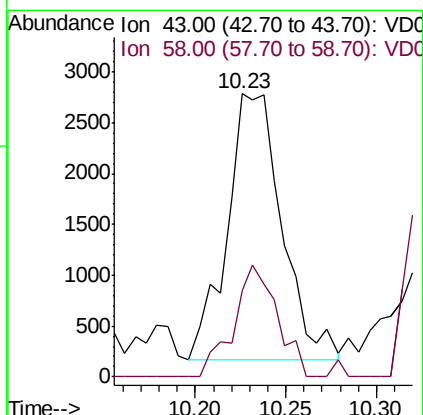
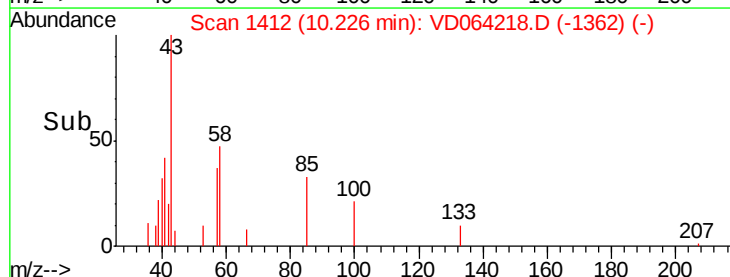
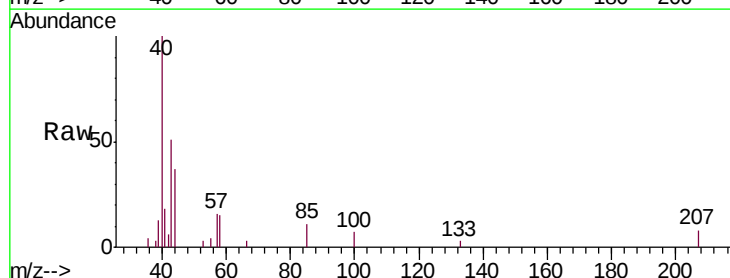
Acq: 15 Nov 2019 10:40

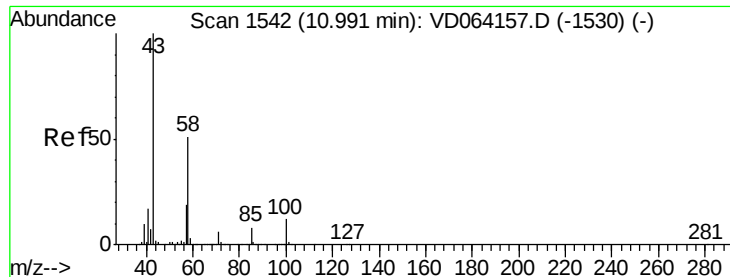
Tgt Ion: 43 Resp: 5509

Ion Ratio Lower Upper

43 100

58 33.2 30.2 45.4

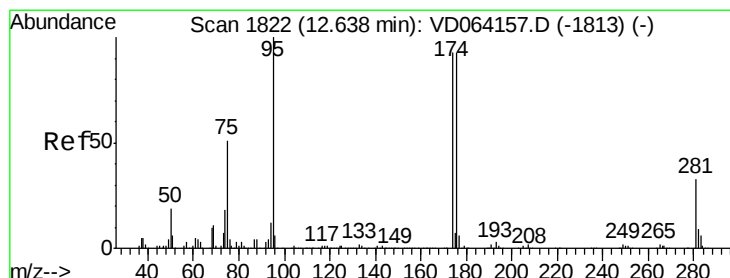
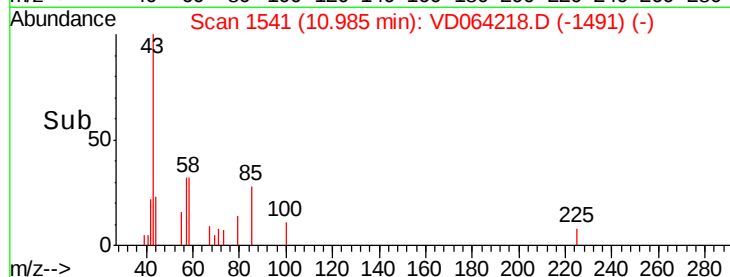
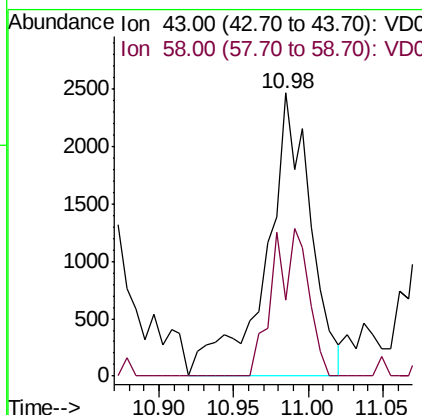
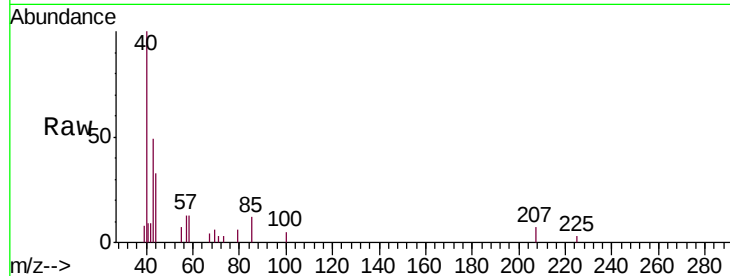




#59  
2-Hexanone  
Concen: 1.332 ug/l  
RT: 10.98 min Scan# 1541  
Delta R.T. -0.01 min  
Lab File: VD064218.D  
Acq: 15 Nov 2019 10:40

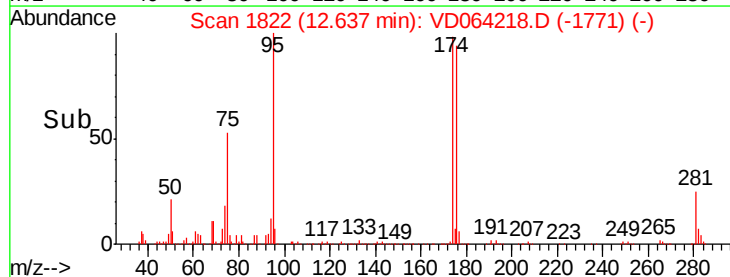
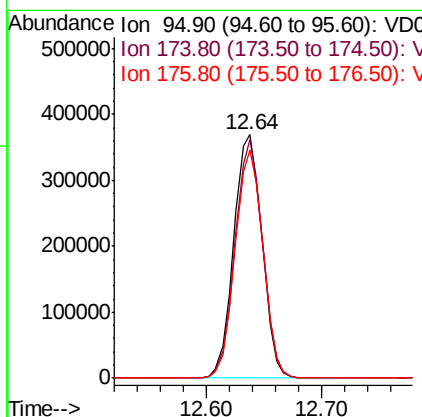
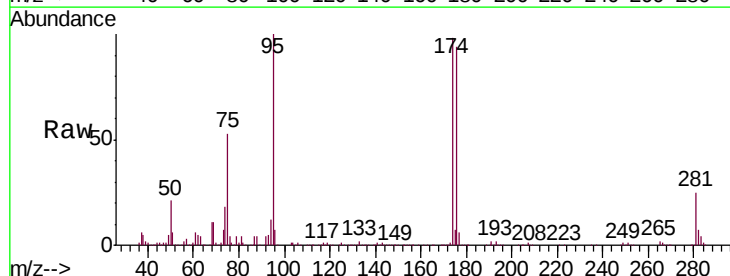
Instrument :  
MSVOA\_D  
ClientSampleId :  
VD1115SBL01

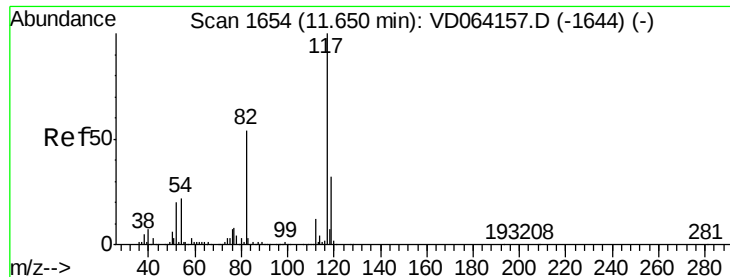
Tgt Ion: 43 Resp: 5110  
Ion Ratio Lower Upper  
43 100  
58 40.9 25.9 77.7



#62  
4-Bromofluorobenzene  
Concen: 59.309 ug/l  
RT: 12.64 min Scan# 1822  
Delta R.T. -0.00 min  
Lab File: VD064218.D  
Acq: 15 Nov 2019 10:40

Tgt Ion: 95 Resp: 623732  
Ion Ratio Lower Upper  
95 100  
174 95.8 0.0 183.6  
176 92.6 0.0 180.2

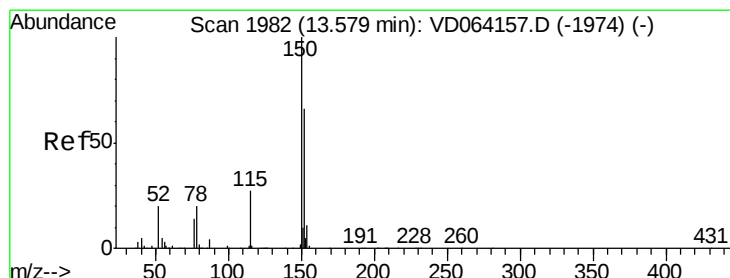
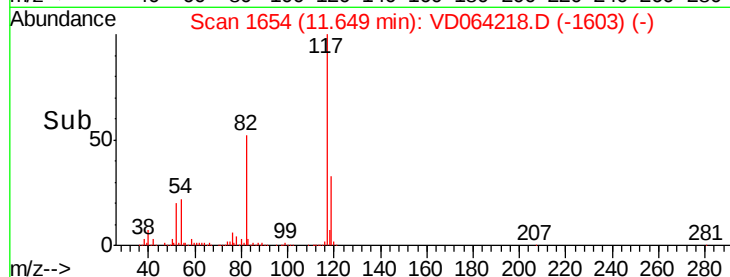
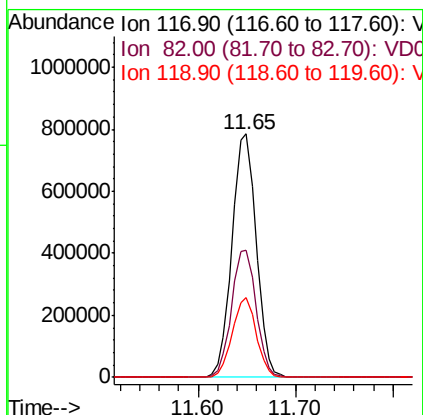
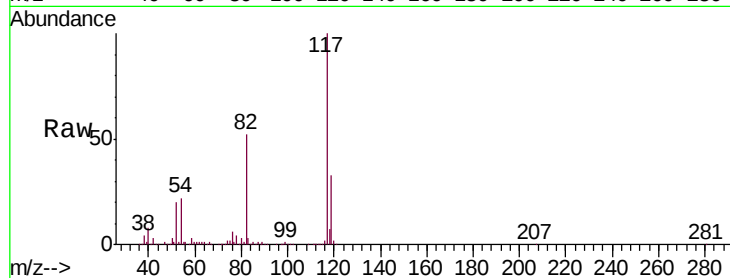




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.65 min Scan# 1654  
Delta R.T. -0.00 min  
Lab File: VD064218.D  
Acq: 15 Nov 2019 10:40

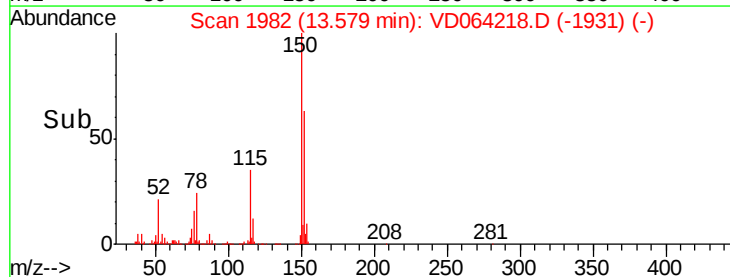
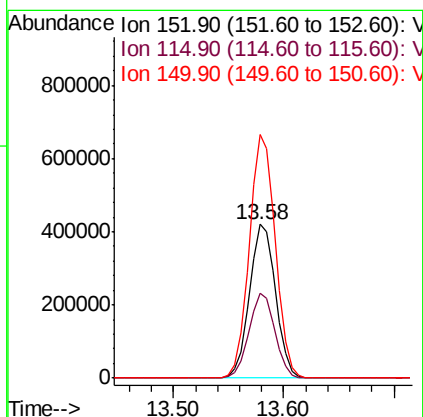
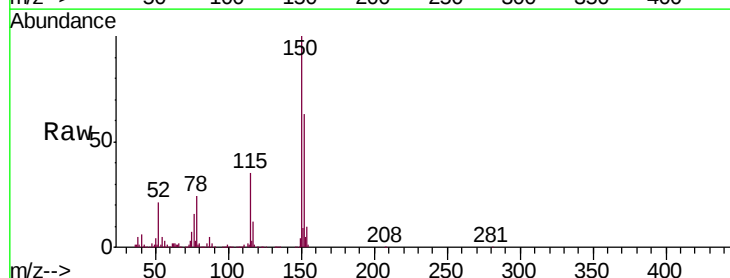
Instrument :  
MSVOA\_D  
ClientSampleId :  
VD1115SBL01

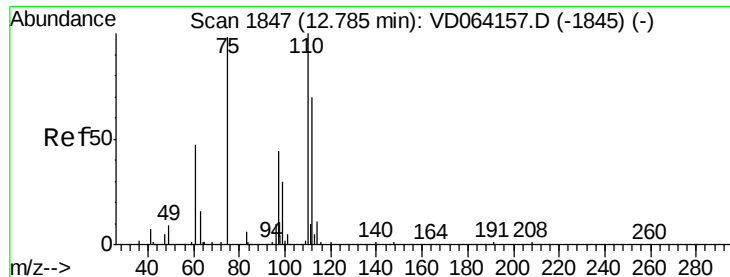
Tgt Ion:117 Resp: 1364168  
Ion Ratio Lower Upper  
117 100  
82 52.2 42.8 64.2  
119 33.0 25.6 38.4



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.58 min Scan# 1982  
Delta R.T. -0.00 min  
Lab File: VD064218.D  
Acq: 15 Nov 2019 10:40

Tgt Ion:152 Resp: 698503  
Ion Ratio Lower Upper  
152 100  
115 54.9 27.4 82.2  
150 157.2 0.0 351.6

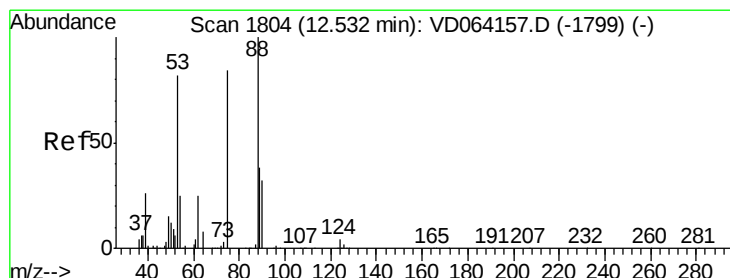
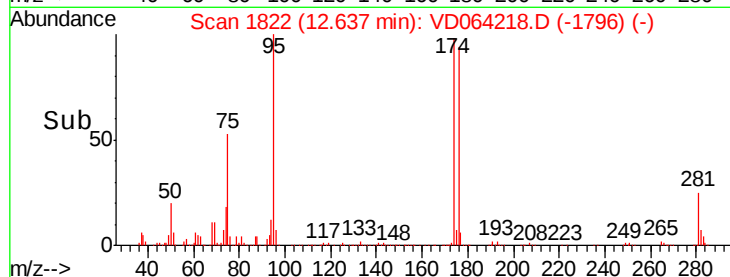
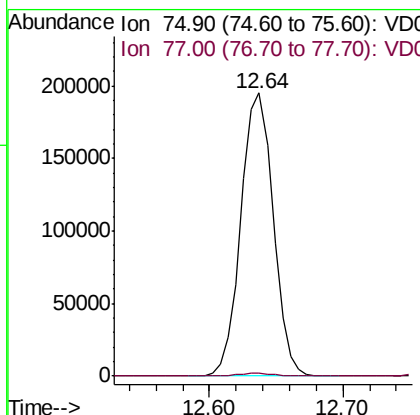
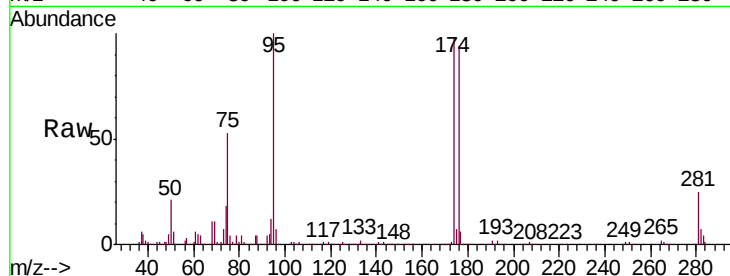




#76  
 1,2,3-Trichloropropane  
 Concen: 58.149 ug/l  
 RT: 12.64 min Scan# 1822  
 Delta R.T. -0.15 min  
 Lab File: VD064218.D  
 Acq: 15 Nov 2019 10:40

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VD1115SBL01

Tgt Ion: 75 Resp: 327162  
 Ion Ratio Lower Upper  
 75 100  
 77 1.1 0.0 0.0#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 115.508 ug/l  
 RT: 12.64 min Scan# 1822  
 Delta R.T. 0.11 min  
 Lab File: VD064218.D  
 Acq: 15 Nov 2019 10:40

Tgt Ion: 75 Resp: 327162  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 79.4 119.0#  
 89 0.3 36.6 55.0#

