

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD120519\  
 Data File : VD064445.D  
 Acq On : 05 Dec 2019 19:26  
 Operator : VA/SY  
 Sample : K6177-09  
 Misc : 6.23G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 EP-7

Quant Time: Dec 06 05:57:06 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  | 758920   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 1109269  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 1037088  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 510462   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.33  | 65   | 306133   | 44.57 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 89.14%  |          |
| 35) Dibromofluoromethane    | 7.91  | 113  | 332909   | 47.63 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.26%  |          |
| 50) Toluene-d8              | 10.34 | 98   | 1323721  | 50.28 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.56% |          |
| 62) 4-Bromofluorobenzene    | 12.64 | 95   | 451518   | 53.37 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 106.74% |          |

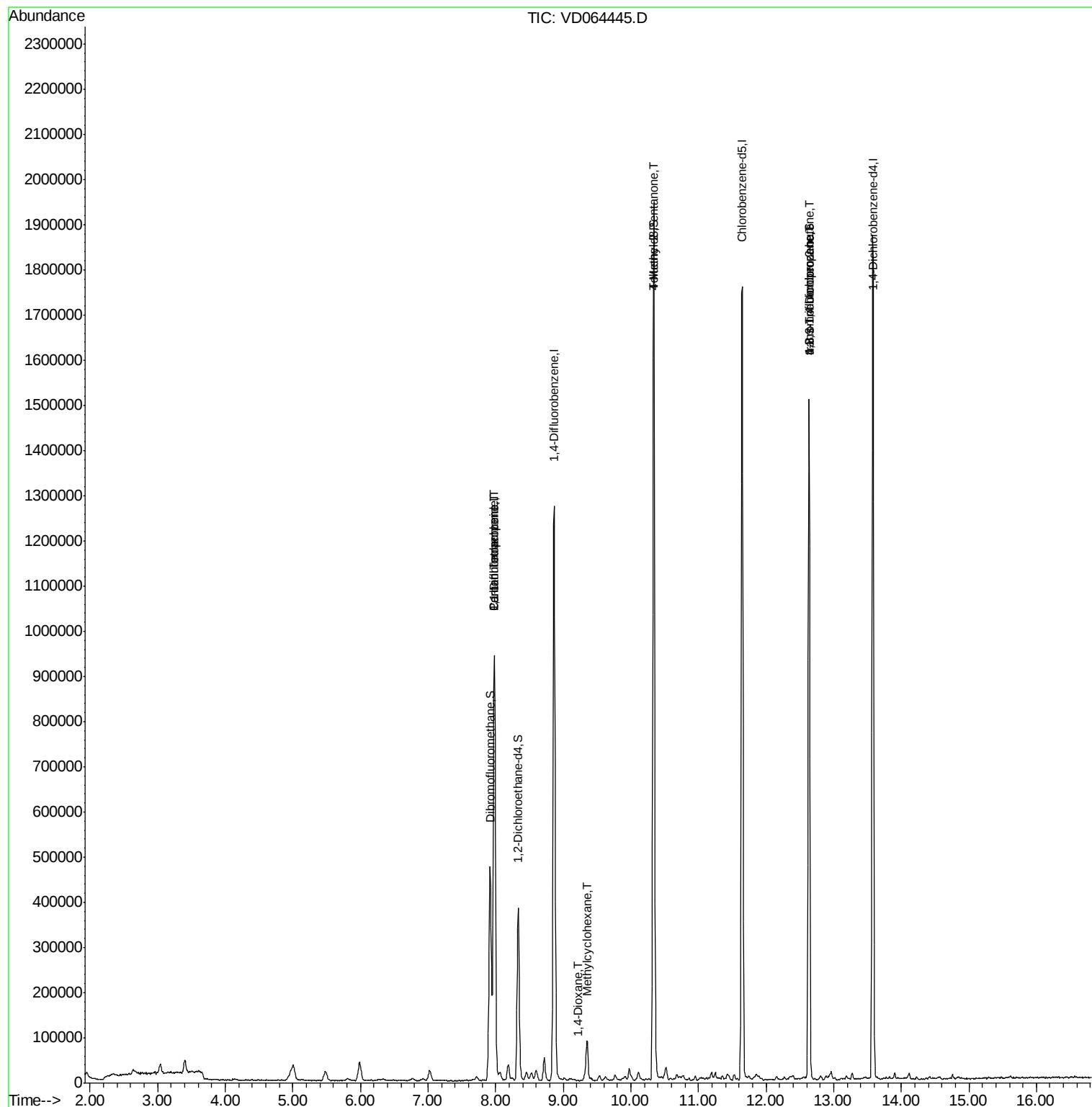
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 20) Methylene Chloride         | 4.97  | 84   | 6989     | Below Cal |        | 95     |
| 31) Cyclohexane                | 7.98  | 56   | 29242    | Below Cal | #      | 40     |
| 36) 1,1-Dichloropropene        | 7.98  | 75   | 51873    | 4.944     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 7.98  | 117  | 69883    | 6.311     | ug/l # | 14     |
| 39) Methylcyclohexane          | 9.35  | 83   | 38580    | 2.964     | ug/l   | 94     |
| 49) 1,4-Dioxane                | 9.22  | 88   | 66       | 1.359     | ug/l # | 25     |
| 51) 4-Methyl-2-Pentanone       | 10.33 | 43   | 7668     | 1.770     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75   | 233243   | 55.562    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.64 | 75   | 233243   | 121.155   | ug/l # | 9      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.26 | 75   | 59       | Below Cal | #      | 1      |

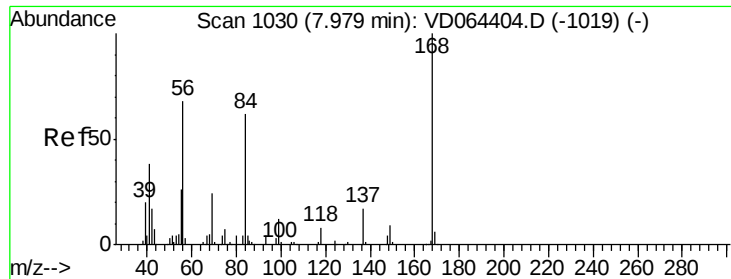
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Dec 06 05:57:06 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D112719S.M  
Quant Title : SW846 8260  
QLast Update : Fri Nov 29 07:18:03 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. 0.00 min

Lab File: VD064445.D

Acq: 05 Dec 2019 19:26

Instrument :

MSVOA\_D

ClientSampleId :

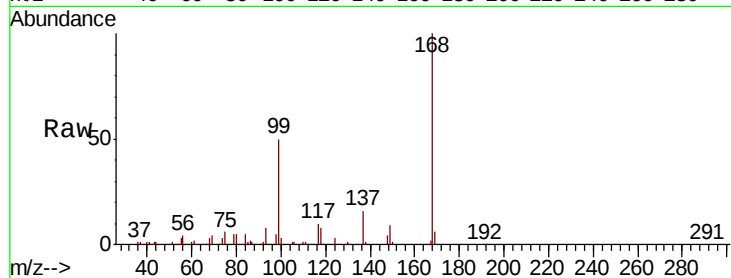
EP-7

Tot Ion:168 Resp: 758920

Ion Ratio Lower Upper

168 100

99 50.3 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

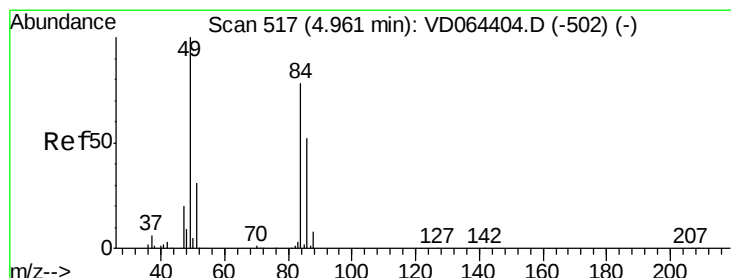
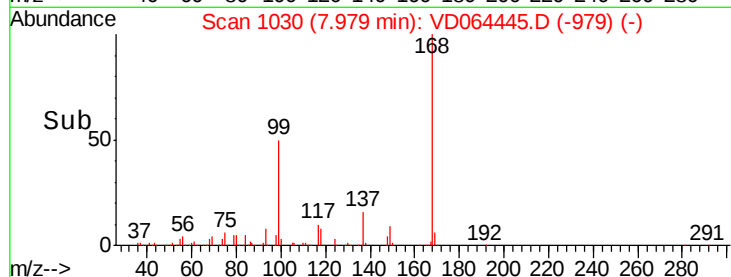
300000

200000

100000

0

Time-->



#20

Methylene Chloride

Concen: Below Cal

RT: 4.97 min Scan# 518

Delta R.T. 0.01 min

Lab File: VD064445.D

Acq: 05 Dec 2019 19:26

Tgt Ion: 84 Resp: 6989

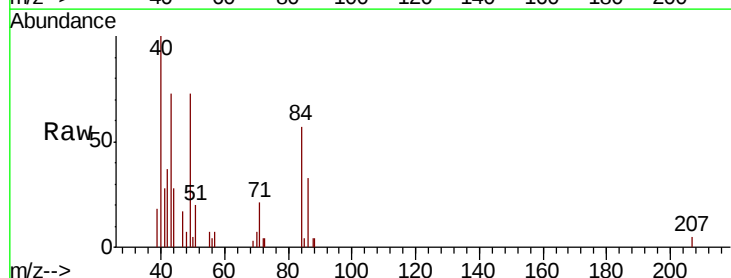
Ion Ratio Lower Upper

84 100

49 127.0 102.6 153.8

51 35.6 32.0 48.0

86 58.0 53.4 80.0



Abundance Ion 83.90 (83.60 to 84.60): VDC

Ion 48.90 (48.60 to 49.60): VDC

Ion 50.90 (50.60 to 51.60): VDC

Ion 85.90 (85.60 to 86.60): VDC

5000

4000

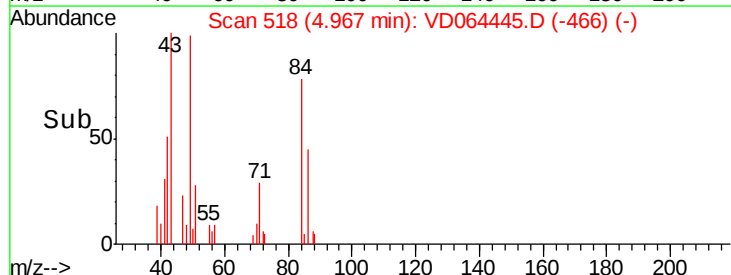
3000

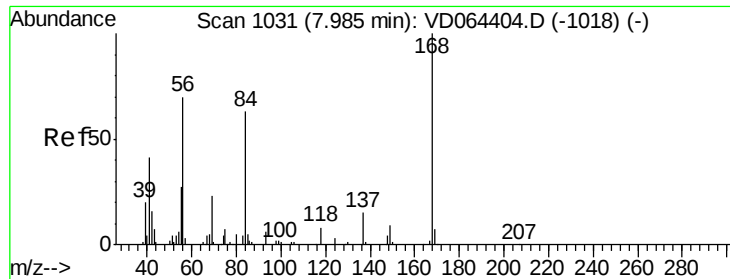
2000

1000

0

Time-->

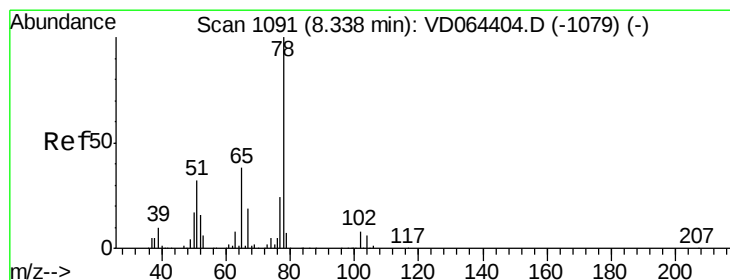
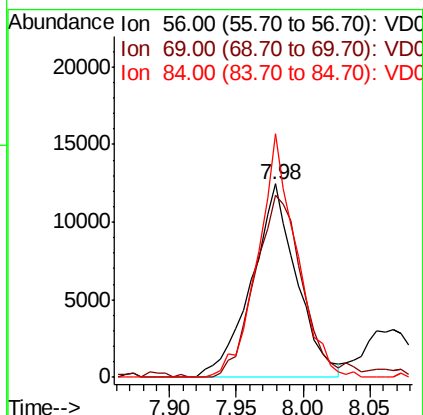
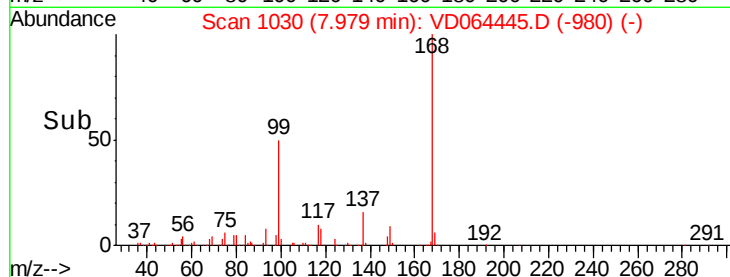
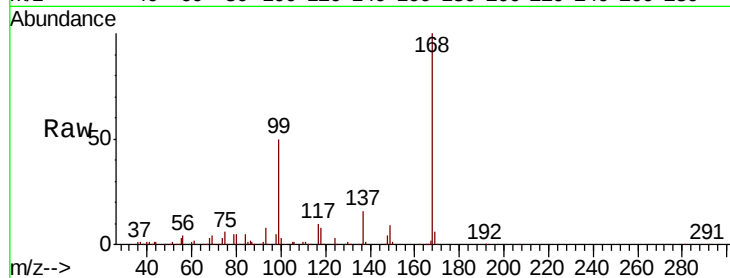




#31  
Cyclohexane  
Concen: Below Cal  
RT: 7.98 min Scan# 1030  
Delta R.T. -0.00 min  
Lab File: VD064445.D  
Acq: 05 Dec 2019 19:26

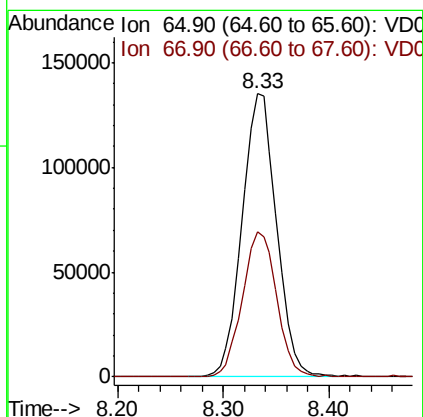
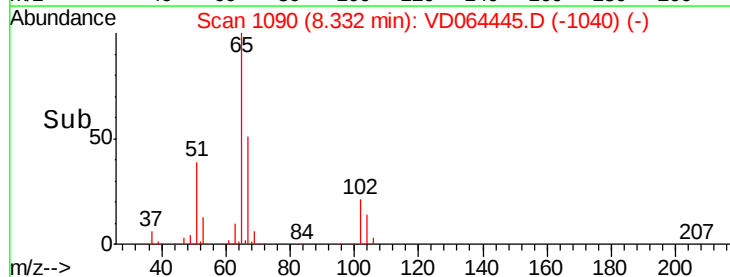
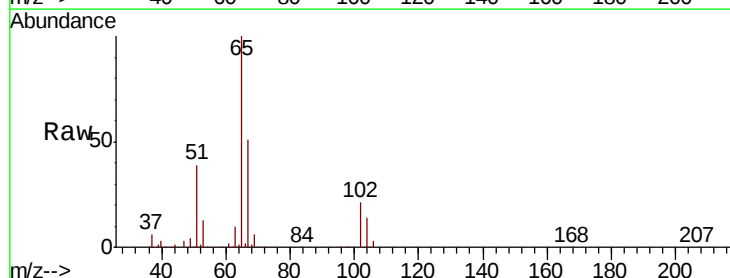
Instrument :  
MSVOA\_D  
ClientSampled :  
EP-7

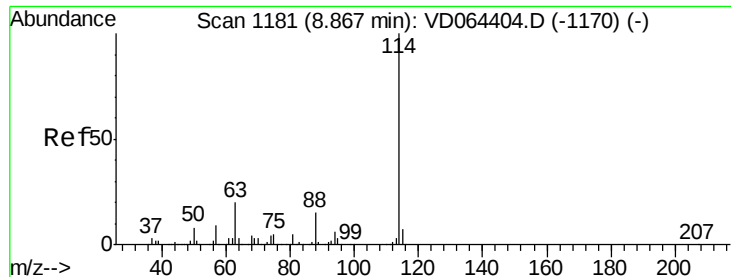
Tot Ion: 56 Resp: 29242  
Ion Ratio Lower Upper  
56 100  
69 94.4 26.2 39.4#  
84 126.0 70.3 105.5#



#33  
1,2-Dichloroethane-d4  
Concen: 44.565 ug/l  
RT: 8.33 min Scan# 1090  
Delta R.T. -0.01 min  
Lab File: VD064445.D  
Acq: 05 Dec 2019 19:26

Tgt Ion: 65 Resp: 306133  
Ion Ratio Lower Upper  
65 100  
67 51.2 0.0 102.0



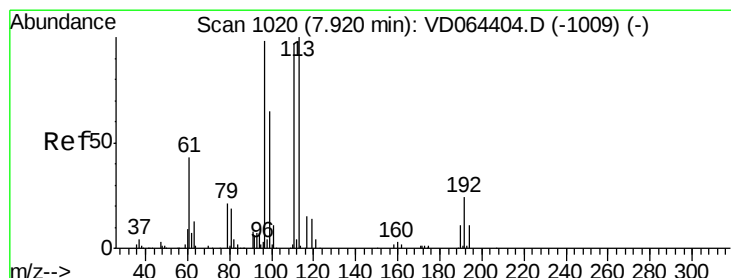
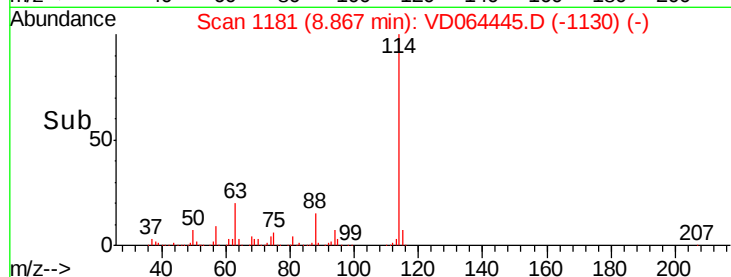
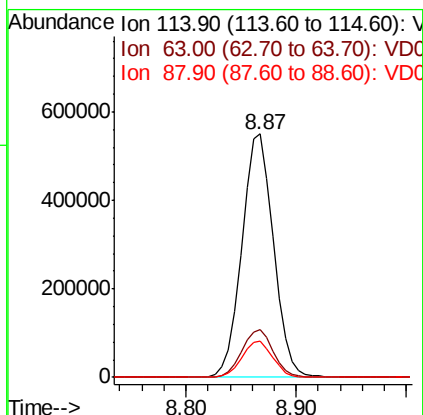
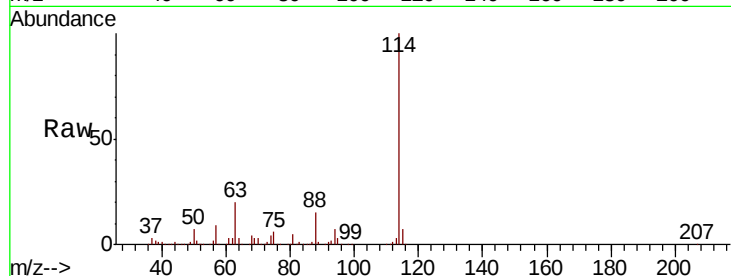


#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.87 min Scan# 1181  
 Delta R.T. 0.00 min  
 Lab File: VD064445.D  
 Acq: 05 Dec 2019 19:26

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 EP-7

Tot Ion:114 Resp: 1109269  

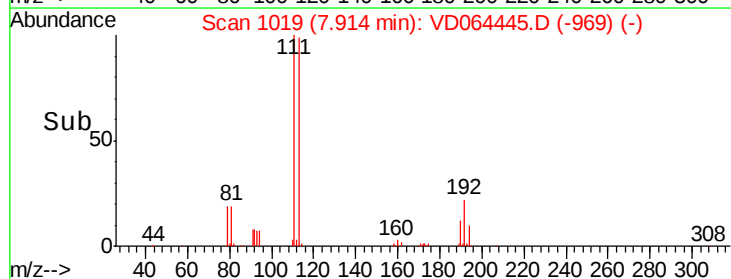
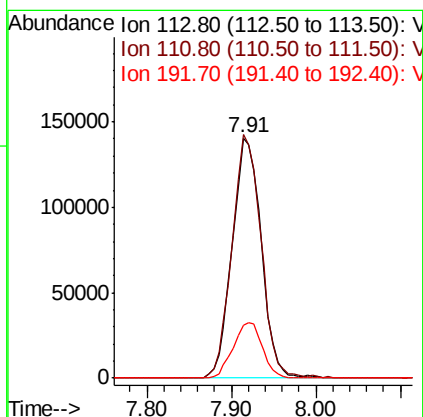
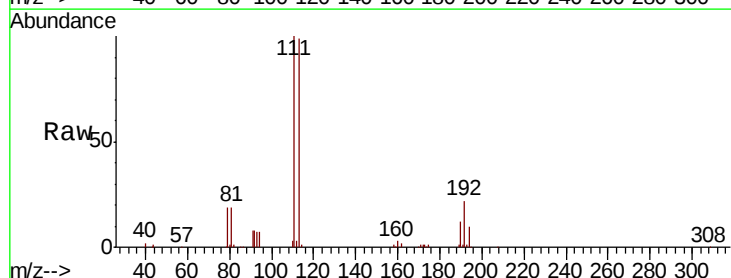
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 114 | 100   |       |       |
| 63  | 19.6  | 0.0   | 40.0  |
| 88  | 15.1  | 0.0   | 29.2  |

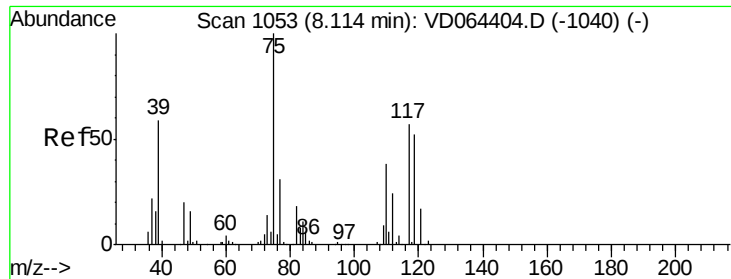


#35  
 Dibromofluoromethane  
 Concen: 47.634 ug/l  
 RT: 7.91 min Scan# 1019  
 Delta R.T. -0.01 min  
 Lab File: VD064445.D  
 Acq: 05 Dec 2019 19:26

Tgt Ion:113 Resp: 332909  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 113 | 100   |       |       |
| 111 | 101.4 | 79.4  | 119.2 |
| 192 | 23.4  | 18.6  | 28.0  |

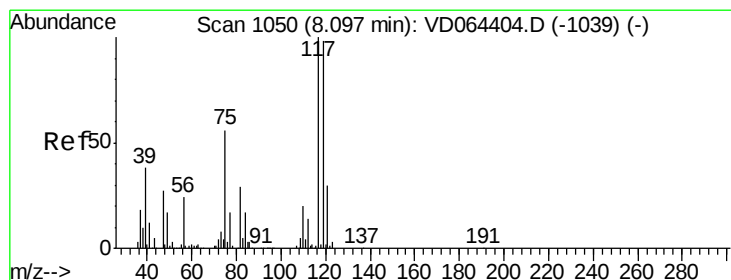
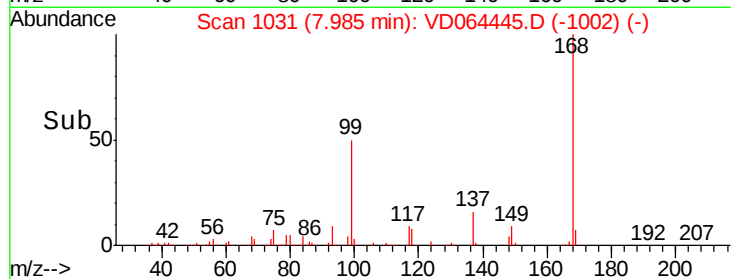
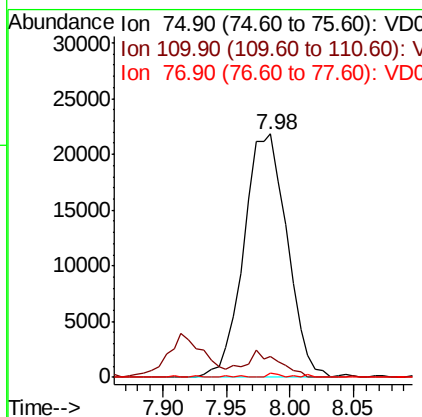
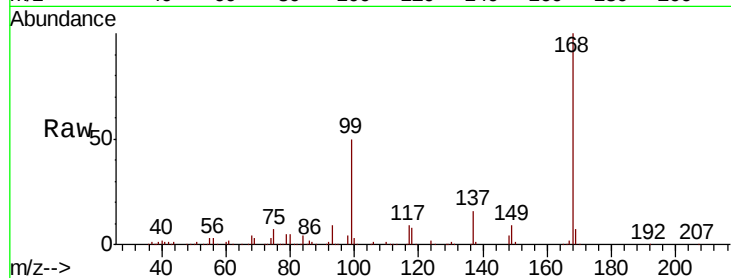




#36  
 1,1-Dichloropropene  
 Concen: 4.944 ug/l  
 RT: 7.98 min Scan# 1031  
 Delta R.T. -0.13 min  
 Lab File: VD064445.D  
 Acq: 05 Dec 2019 19:26

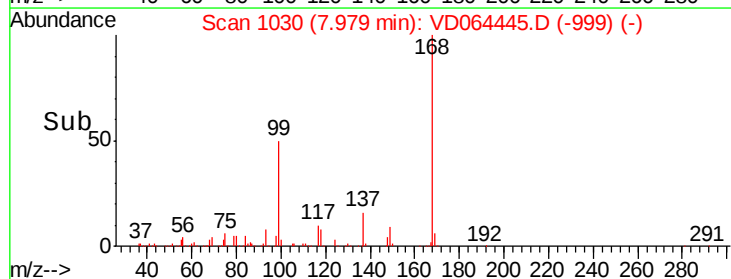
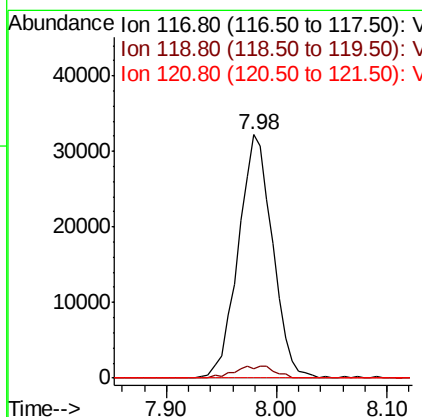
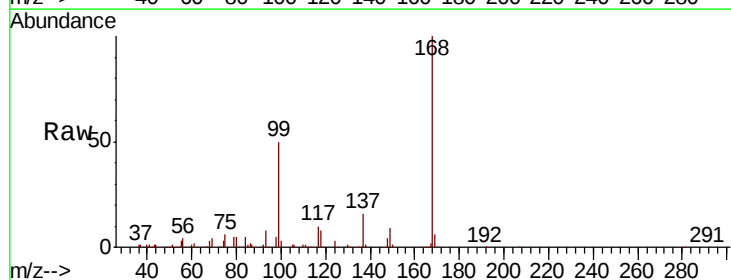
Instrument :  
 MSVOA\_D  
 ClientSampled :  
 EP-7

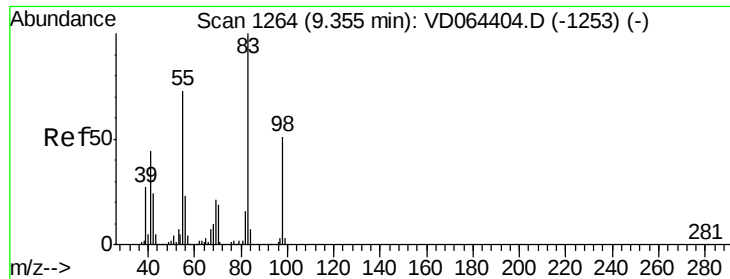
Tot Ion: 75 Resp: 51873  
 Ion Ratio Lower Upper  
 75 100  
 110 8.7 18.6 55.8#  
 77 0.4 25.0 37.4#



#38  
 Carbon Tetrachloride  
 Concen: 6.311 ug/l  
 RT: 7.98 min Scan# 1030  
 Delta R.T. -0.12 min  
 Lab File: VD064445.D  
 Acq: 05 Dec 2019 19:26

Tgt Ion: 117 Resp: 69883  
 Ion Ratio Lower Upper  
 117 100  
 119 4.0 78.8 118.2#  
 121 0.0 24.2 36.2#

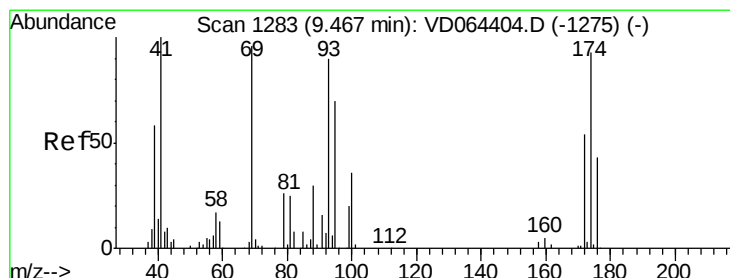
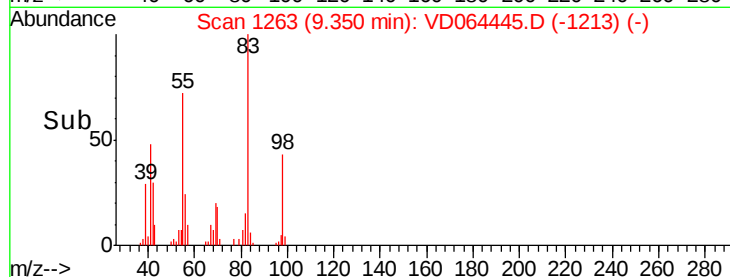
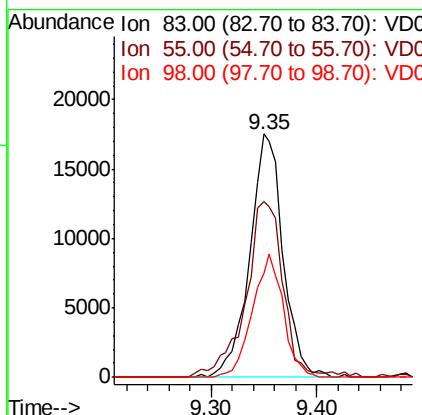
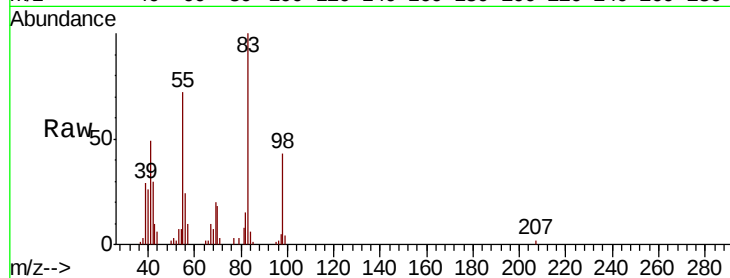




#39  
Methylcyclohexane  
Concen: 2.964 ug/l  
RT: 9.35 min Scan# 1263  
Delta R.T. -0.01 min  
Lab File: VD064445.D  
Acq: 05 Dec 2019 19:26

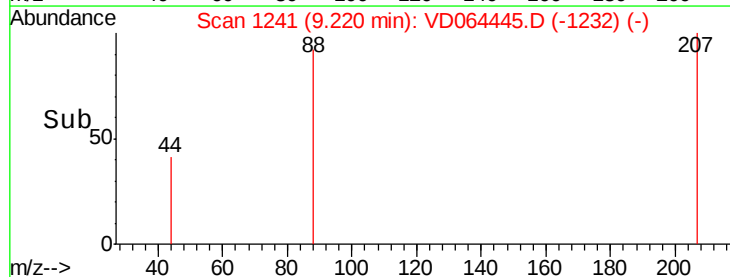
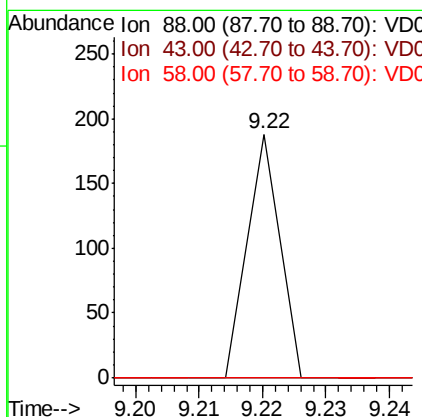
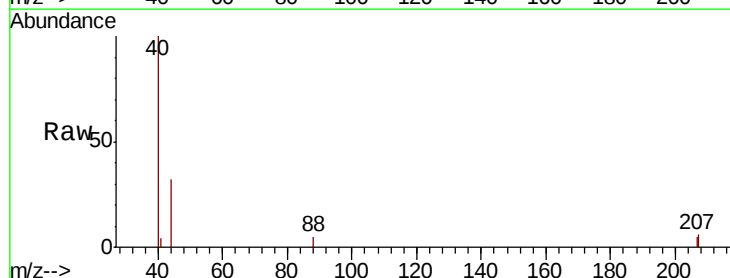
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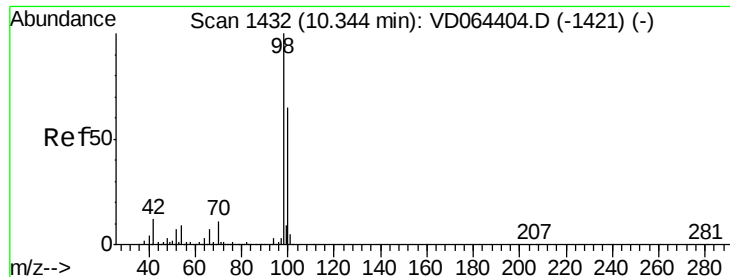
Tot Ion: 83 Resp: 38580  
Ion Ratio Lower Upper  
83 100  
55 72.4 58.6 87.8  
98 42.7 40.9 61.3



#49  
1,4-Dioxane  
Concen: 1.359 ug/l  
RT: 9.22 min Scan# 1241  
Delta R.T. -0.25 min  
Lab File: VD064445.D  
Acq: 05 Dec 2019 19:26

Tgt Ion: 88 Resp: 66  
Ion Ratio Lower Upper  
88 100  
43 0.0 26.7 40.1#  
58 0.0 52.3 78.5#

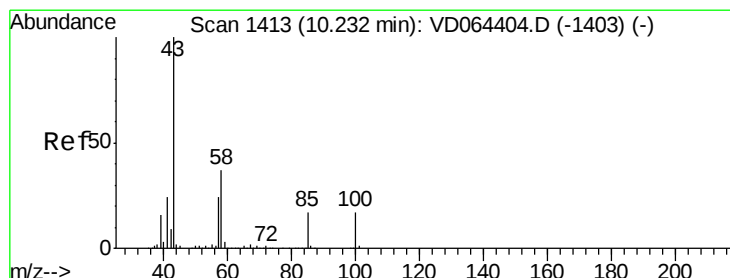
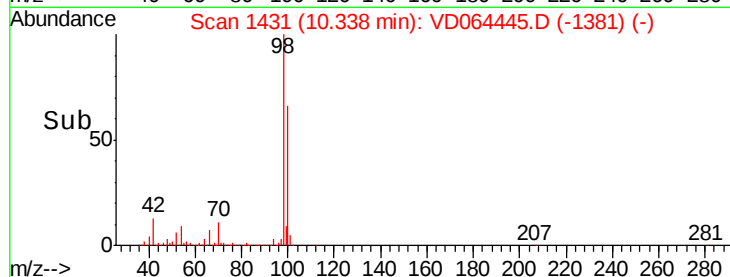
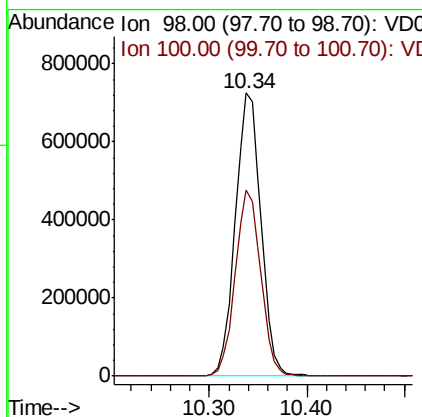
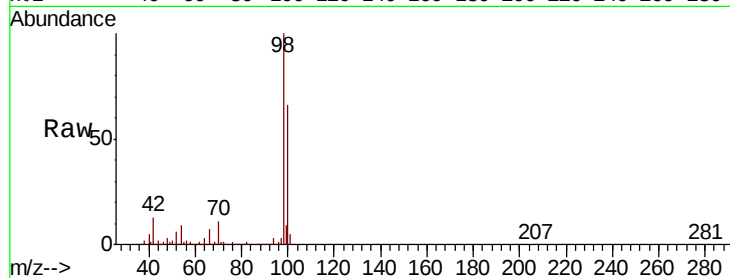




#50  
Toluene-d8  
Concen: 50.281 ug/l  
RT: 10.34 min Scan# 1431  
Delta R.T. -0.01 min  
Lab File: VD064445.D  
Acq: 05 Dec 2019 19:26

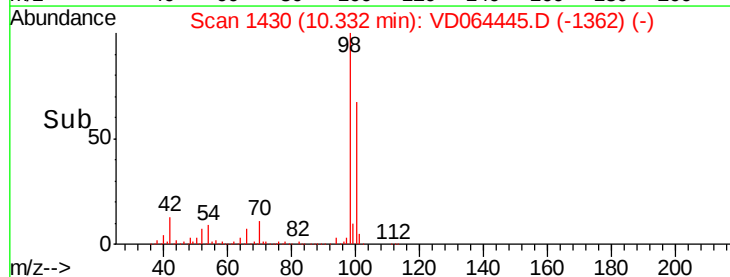
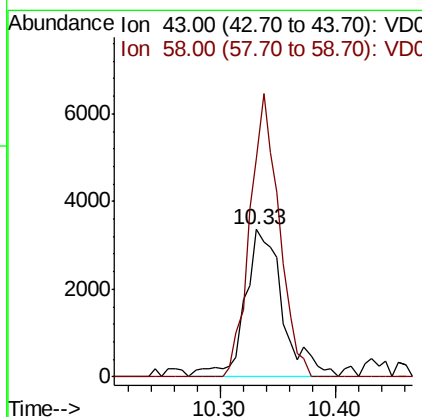
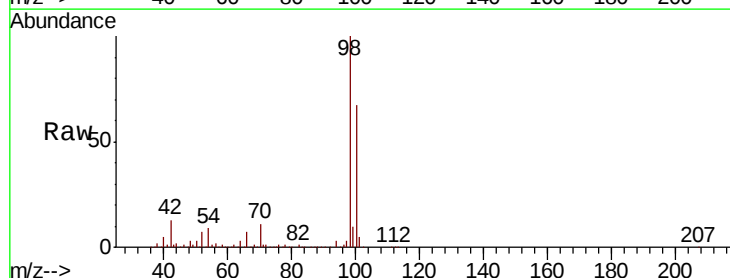
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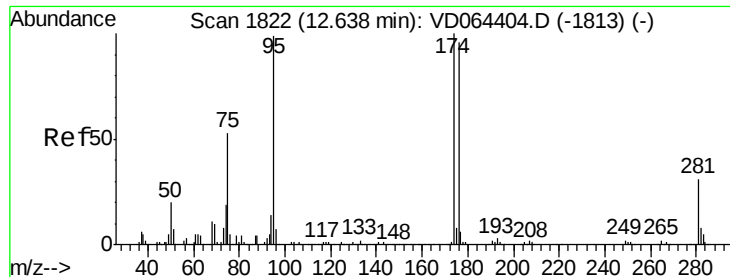
Tot Ion: 98 Resp: 1323721  
Ion Ratio Lower Upper  
98 100  
100 65.4 52.6 79.0



#51  
4-Methyl-2-Pentanone  
Concen: 1.770 ug/l  
RT: 10.33 min Scan# 1430  
Delta R.T. 0.10 min  
Lab File: VD064445.D  
Acq: 05 Dec 2019 19:26

Tgt Ion: 43 Resp: 7668  
Ion Ratio Lower Upper  
43 100  
58 148.4 30.6 46.0#

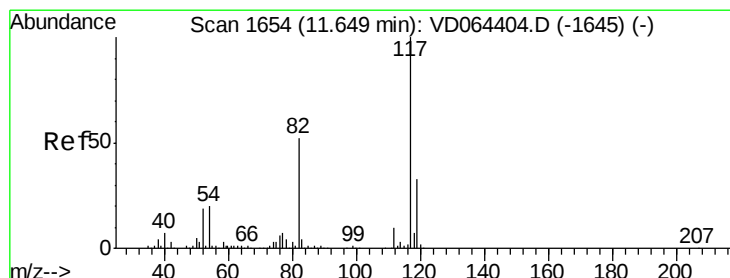
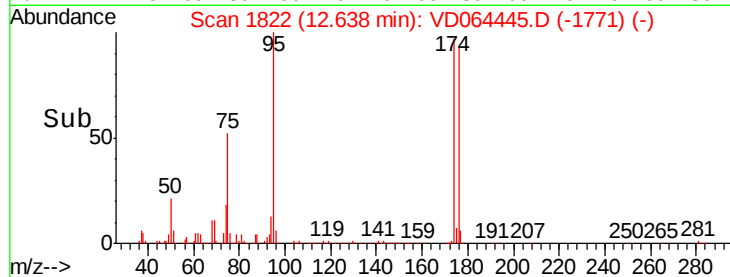
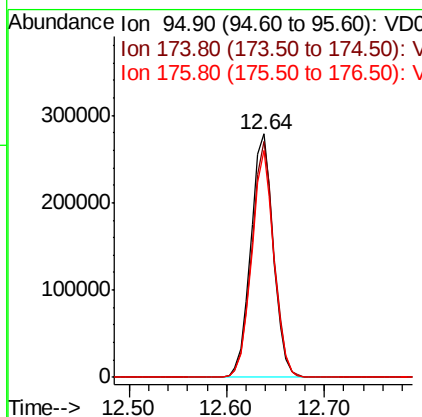
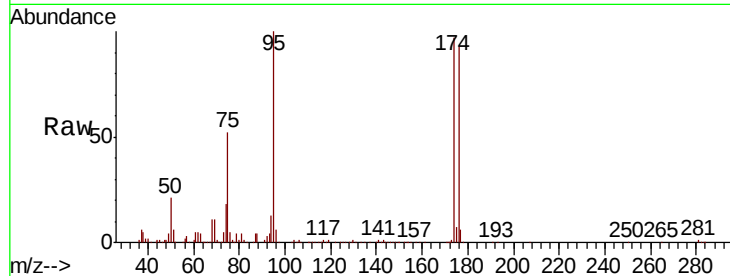




#62  
4-Bromofluorobenzene  
Concen: 53.367 ug/l  
RT: 12.64 min Scan# 1822  
Delta R.T. 0.00 min  
Lab File: VD064445.D  
Acq: 05 Dec 2019 19:26

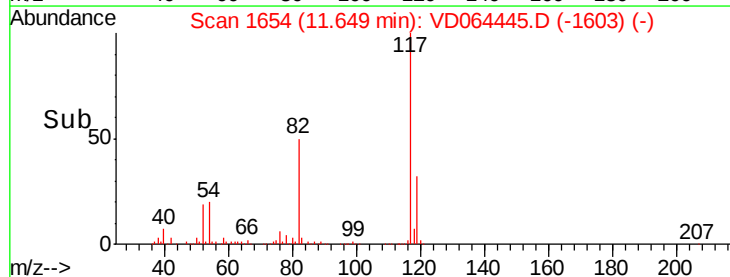
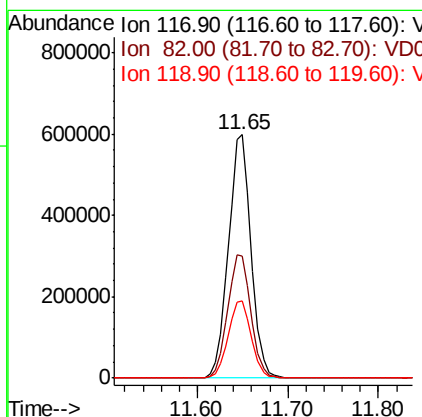
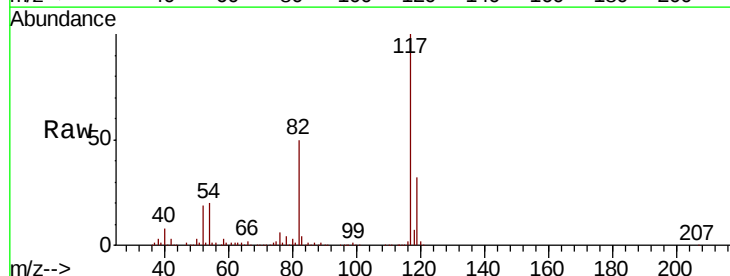
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MSVOA\_D  
ClientSampleId :  
EP-7

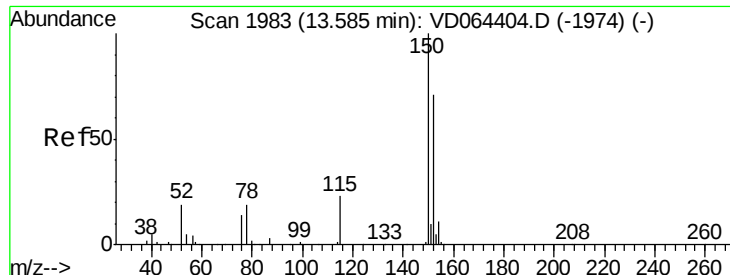
Tot Ion: 95 Resp: 451518  
Ion Ratio Lower Upper  
95 100  
174 96.1 0.0 197.2  
176 92.2 0.0 189.6



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.65 min Scan# 1654  
Delta R.T. 0.00 min  
Lab File: VD064445.D  
Acq: 05 Dec 2019 19:26

Tgt Ion: 117 Resp: 1037088  
Ion Ratio Lower Upper  
117 100  
82 50.3 41.4 62.2  
119 31.5 26.2 39.2





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.58 min Scan# 1982

Delta R.T. -0.01 min

Lab File: VD064445.D

Acq: 05 Dec 2019 19:26

Instrument :

MSVOA\_D

ClientSampleId :

EP-7

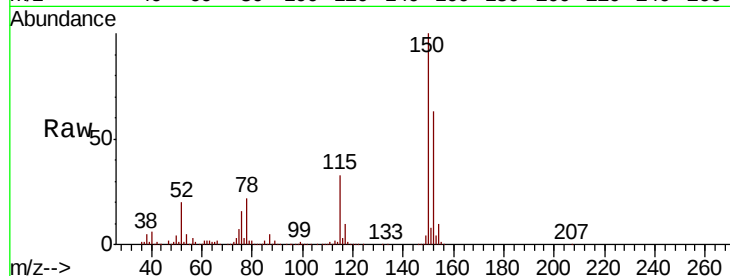
Tot Ion:152 Resp: 510462

Ion Ratio Lower Upper

152 100

115 53.5 26.7 80.1

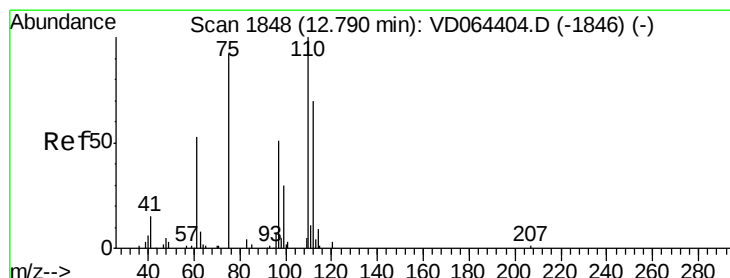
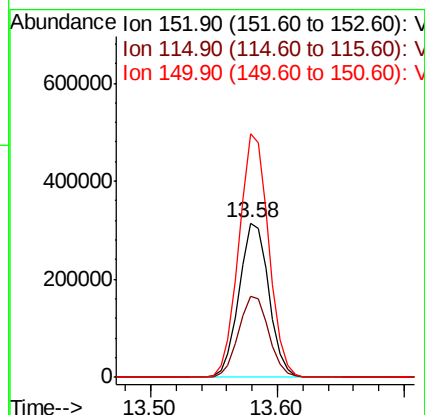
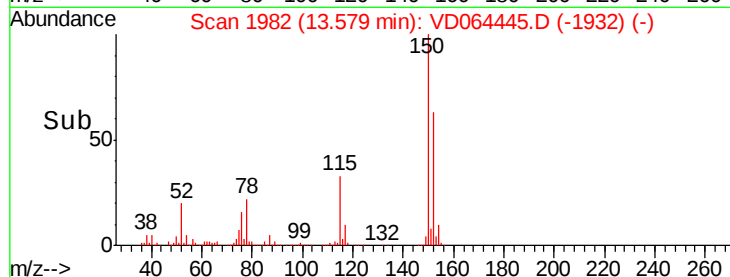
150 157.8 0.0 347.2



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 55.562 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. -0.15 min

Lab File: VD064445.D

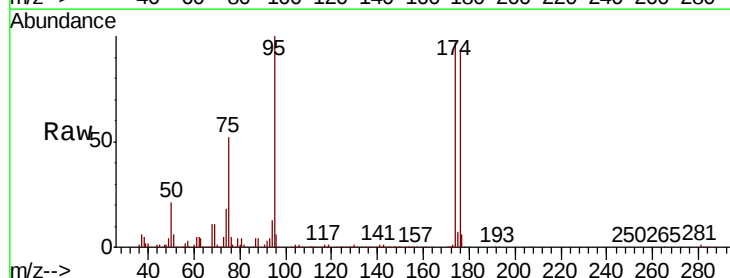
Acq: 05 Dec 2019 19:26

Tgt Ion: 75 Resp: 233243

Ion Ratio Lower Upper

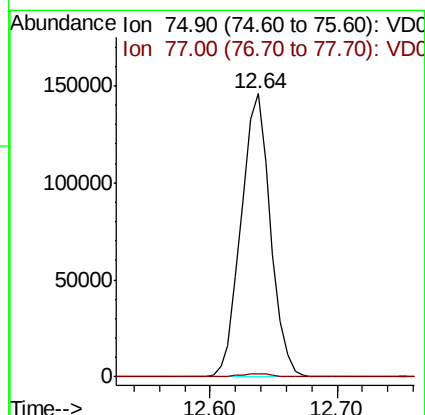
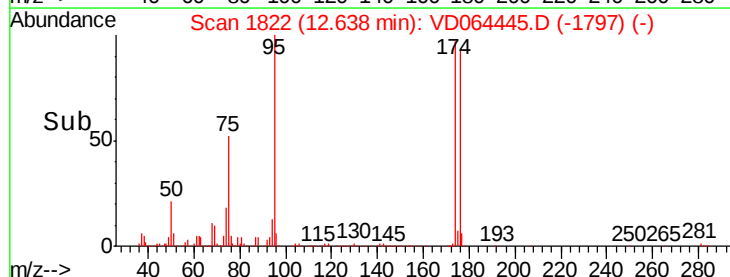
75 100

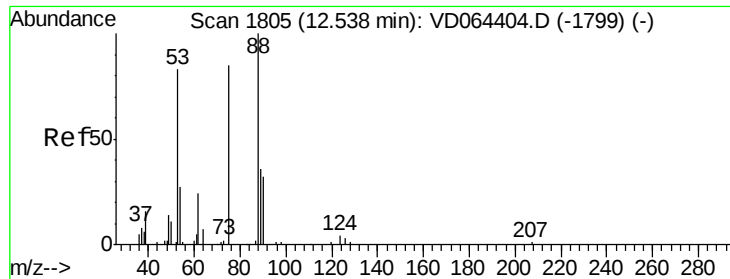
77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V





#81

trans-1,4-Dichloro-2-butene

Concen: 121.155 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.10 min

Lab File: VD064445.D

Acq: 05 Dec 2019 19:26

Instrument :

MSVOA\_D

ClientSampleId :

EP-7

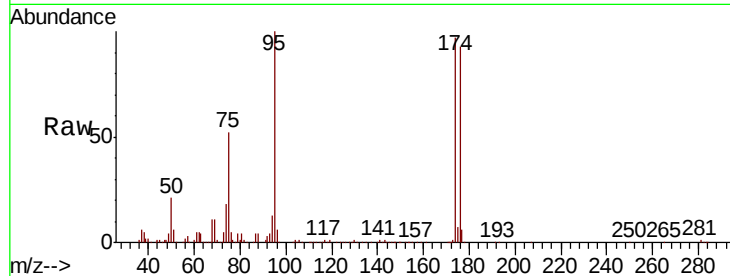
Tot Ion: 75 Resp: 233243

Ion Ratio Lower Upper

75 100

53 0.0 81.0 121.6#

89 0.1 38.5 57.7#

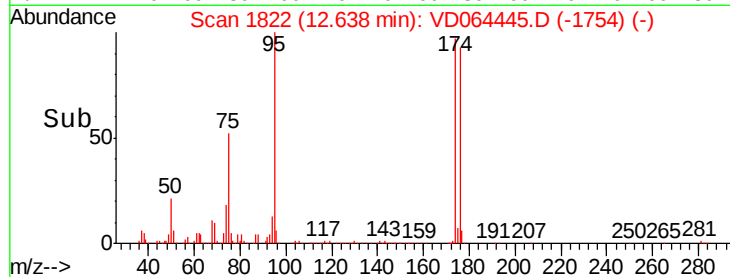


Abundance Ion 74.90 (74.60 to 75.60): VDC

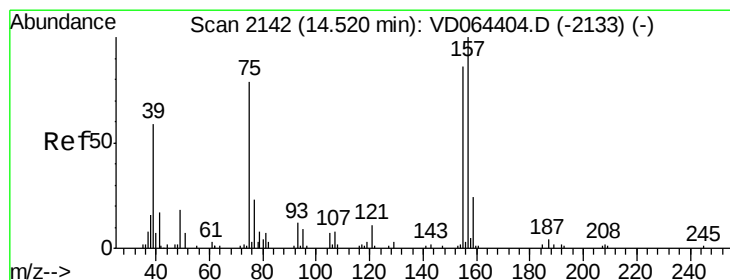
Ion 53.00 (52.70 to 53.70): VDC

Ion 88.90 (88.60 to 89.60): VDC

12.64



Time-->



#92

1,2-Dibromo-3-Chloropropane

Concen: Below Cal

RT: 14.26 min Scan# 2097

Delta R.T. -0.26 min

Lab File: VD064445.D

Acq: 05 Dec 2019 19:26

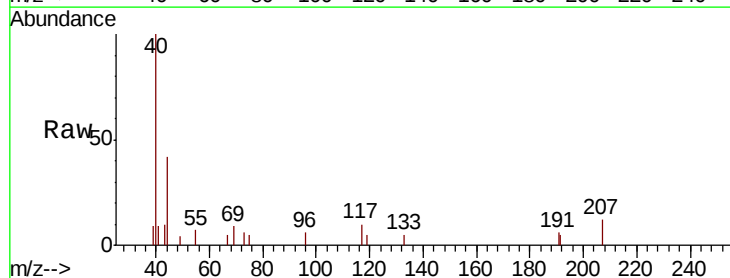
Tgt Ion: 75 Resp: 59

Ion Ratio Lower Upper

75 100

155 0.0 51.9 155.7#

157 0.0 63.2 189.8#

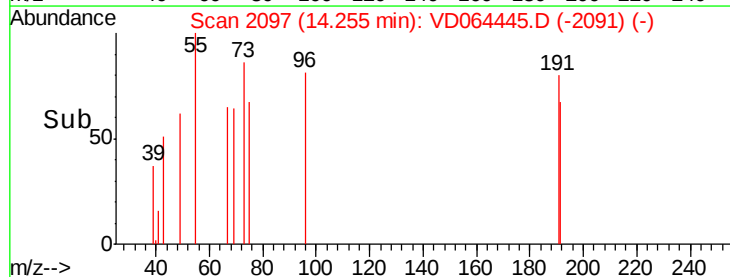


Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V

14.26



Time-->