

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN041919\  
 Data File : VN055136.D  
 Acq On : 19 Apr 2019 12:40  
 Operator : JC/SP  
 Sample : K2479-05  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 DUP

Quant Time: Apr 20 03:38:52 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N041119W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Apr 12 07:55:25 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 7.20  | 128  | 69660    | 30.00 | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene | 8.59  | 114  | 357446   | 30.00 | ug/l  | 0.00     |
| 57) Chlorobenzene-d5    | 11.41 | 117  | 289346   | 30.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 27) 1,2-Dichloroethane-d4 | 8.03   | 65    | 161689   | 30.45    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 50 - 169 | Recovery | =    | 101.50% |
| 60) 4-Bromofluorobenzene  | 12.40  | 95    | 100291   | 22.26    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 56 - 143 | Recovery | =    | 74.20%  |
| 63) Toluene-d8            | 10.09  | 98    | 427399   | 31.07    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 66 - 137 | Recovery | =    | 103.57% |

## Target Compounds

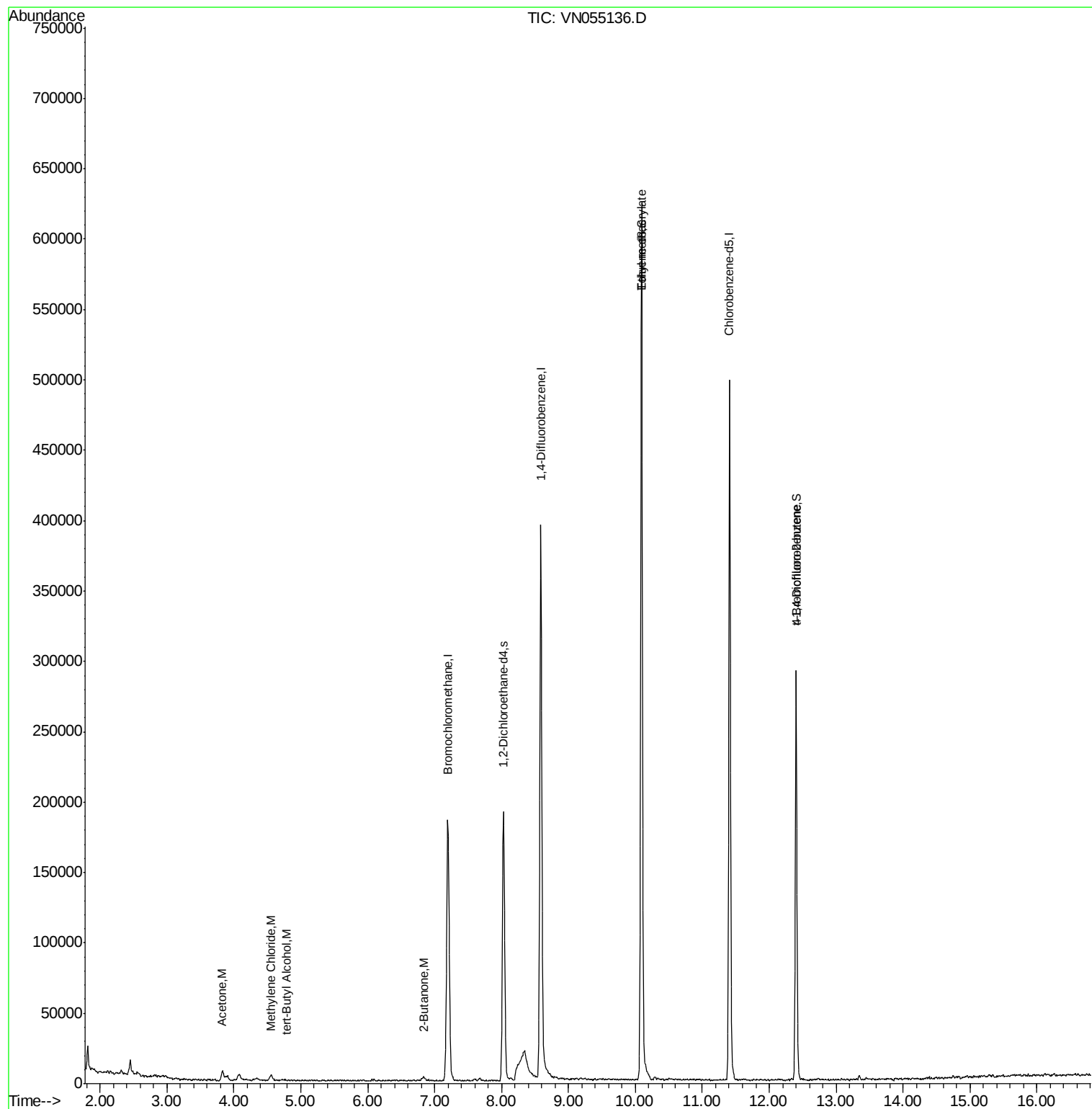
|                             |       |    |       |        | Ovalue |     |
|-----------------------------|-------|----|-------|--------|--------|-----|
| 15) Acetone                 | 3.83  | 58 | 1477  | 3.832  | ug/l   | 99  |
| 18) Methylene Chloride      | 4.54  | 84 | 924   | 0.202  | ug/l # | 64  |
| 23) tert-Butyl Alcohol      | 4.79  | 59 | 63    | 0.254  | ug/l # | 100 |
| 30) 2-Butanone              | 6.84  | 43 | 463   | 0.251  | ug/l # | 59  |
| 51) Ethyl methacrylate      | 10.09 | 69 | 1344  | 0.322  | ug/l   | 86  |
| 77) t-1,4-Dichloro-2-butene | 12.40 | 75 | 51387 | 64.303 | ug/l # | 1   |

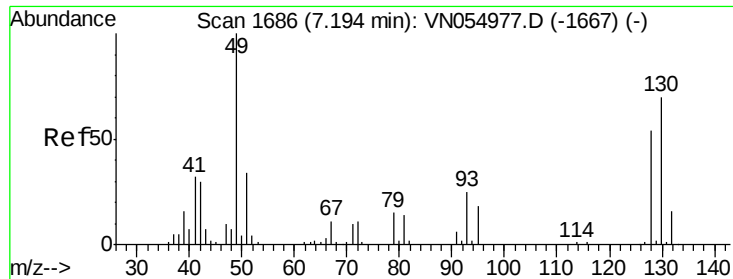
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN041919\  
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ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
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DUP

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA N\METHODS\624N041119W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Fri Apr 12 07:55:25 2019  
Response via : Initial Calibration

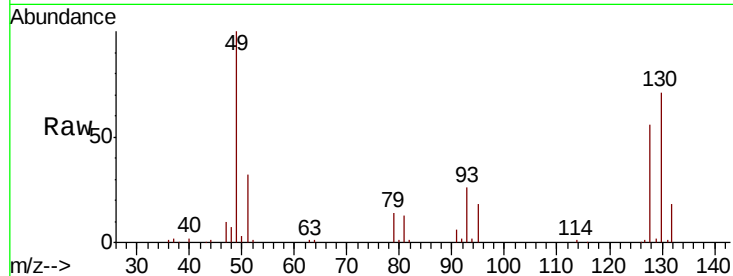




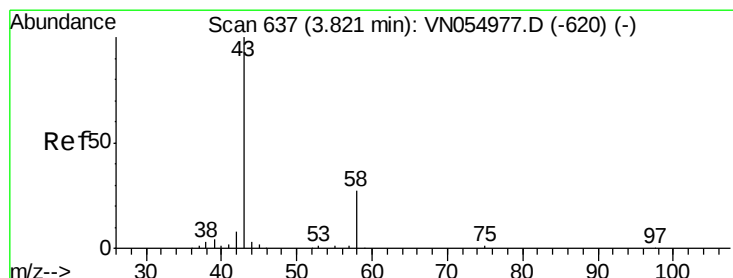
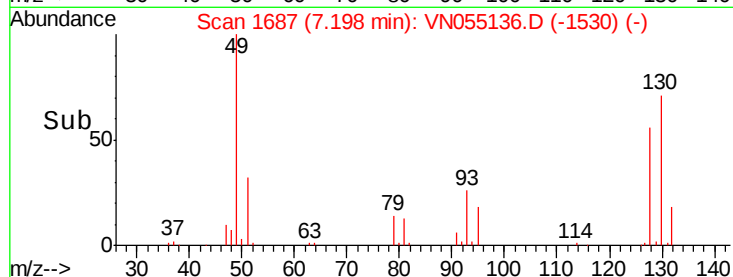
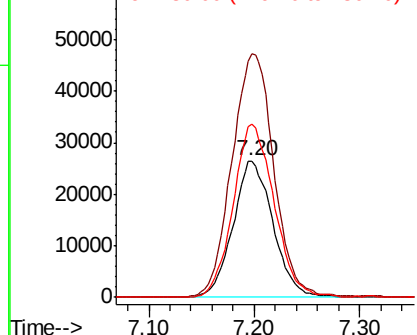
#1  
Bromochloromethane  
Concen: 30.000 ug/l  
RT: 7.20 min Scan# 1687  
Delta R.T. 0.00 min  
Lab File: VN055136.D  
Acq: 19 Apr 2019 12:40

Instrument :  
MSVOA\_N  
ClientSampled :  
DUP

Tot Ion:128 Resp: 69660  
Ion Ratio Lower Upper  
128 100  
49 186.6 0.0 480.3  
130 129.6 0.0 322.2

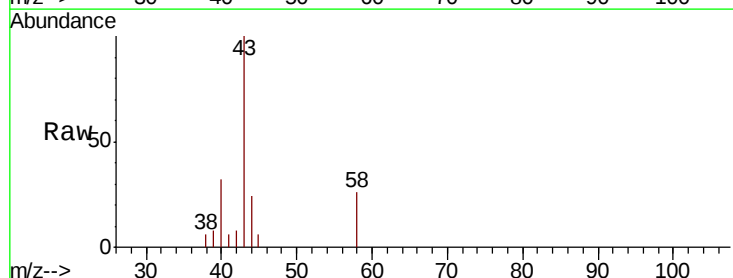


Abundance Ion 128.00 (127.70 to 128.70): V  
Ion 49.00 (48.70 to 49.70): VN  
Ion 130.00 (129.70 to 130.70): V

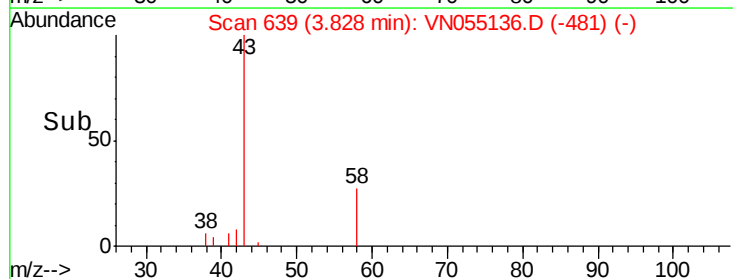
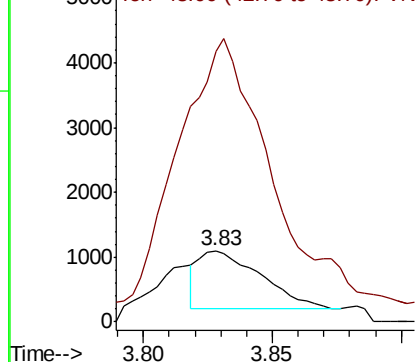


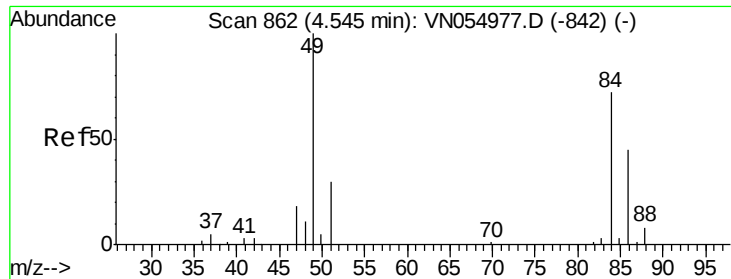
#15  
Acetone  
Concen: 3.832 ug/l  
RT: 3.83 min Scan# 639  
Delta R.T. 0.01 min  
Lab File: VN055136.D  
Acq: 19 Apr 2019 12:40

Tgt Ion: 58 Resp: 1477  
Ion Ratio Lower Upper  
58 100  
43 374.3 297.2 445.8



Abundance Ion 58.00 (57.70 to 58.70): VN  
Ion 43.00 (42.70 to 43.70): VN

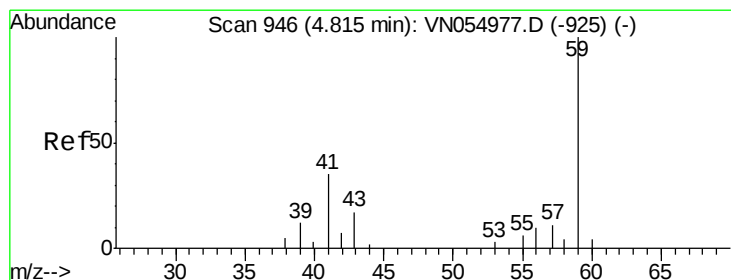
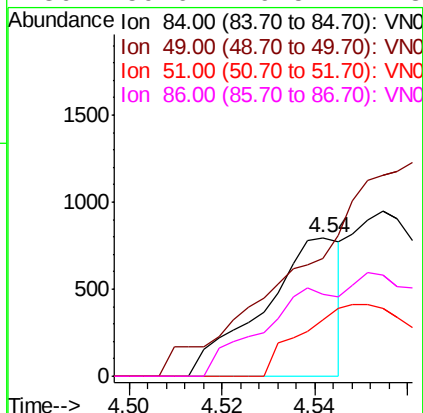
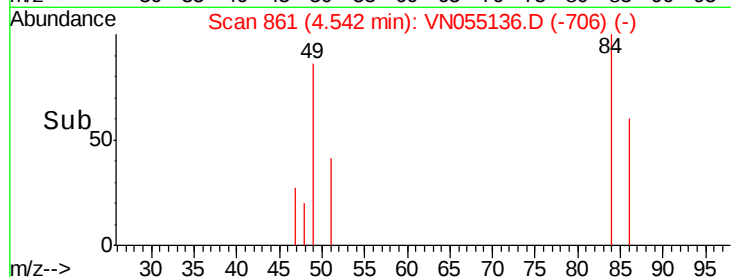
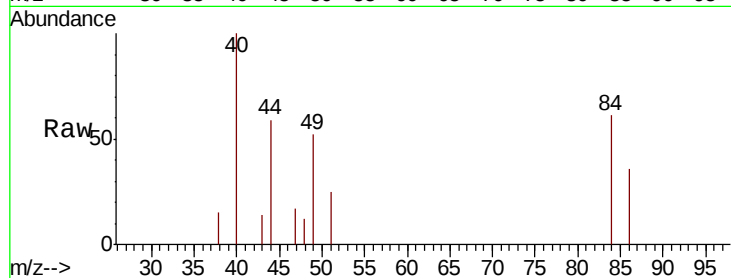




#18  
Methvlene Chloride  
Concen: 0.202 ug/l  
RT: 4.54 min Scan# 861  
Delta R.T. -0.00 min  
Lab File: VN055136.D  
Acq: 19 Apr 2019 12:40

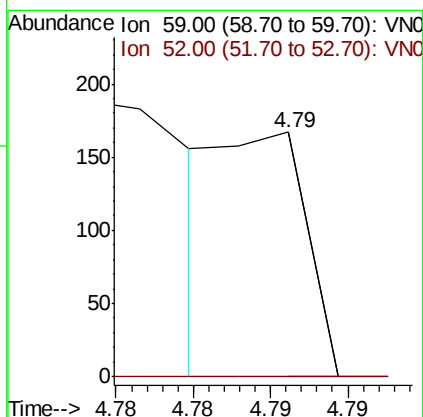
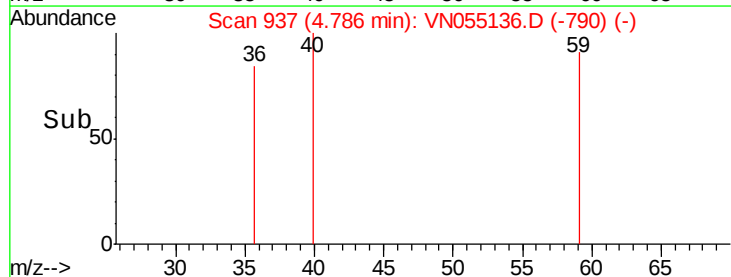
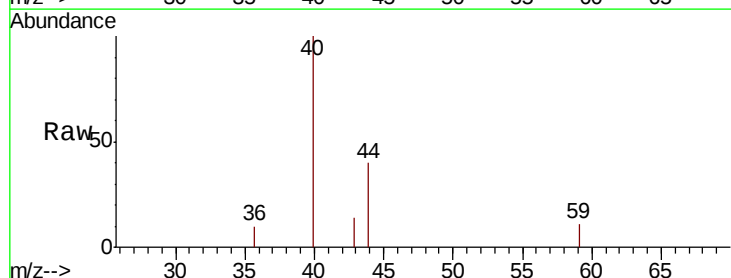
Instrument :  
MSVOA\_N  
ClientSampled :  
DUP

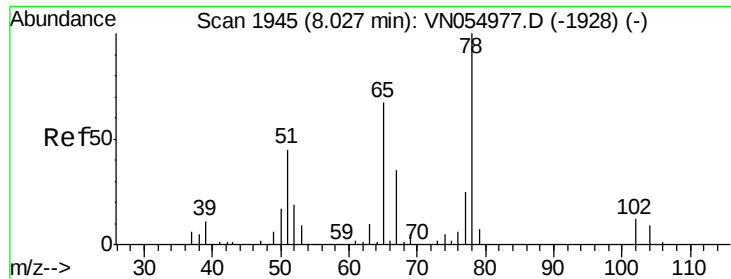
Tot Ion: 84 Resp: 924  
Ion Ratio Lower Upper  
84 100  
49 64.4 111.0 166.4#  
51 40.9 33.4 50.2  
86 59.6 49.5 74.3



#23  
tert-Butyl Alcohol  
Concen: 0.254 ug/l  
RT: 4.79 min Scan# 937  
Delta R.T. -0.03 min  
Lab File: VN055136.D  
Acq: 19 Apr 2019 12:40

Tgt Ion: 59 Resp: 63  
Ion Ratio Lower Upper  
59 100  
52 0.0 0.0 0.0

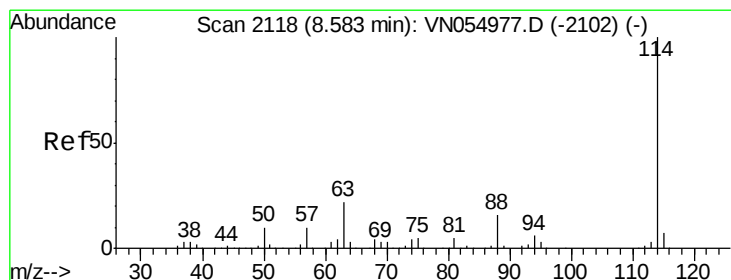
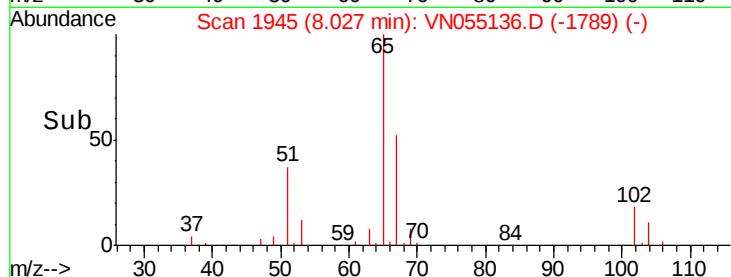
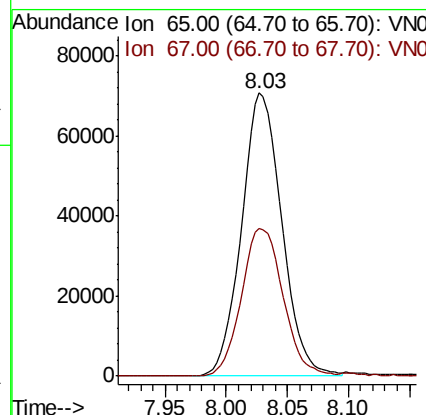
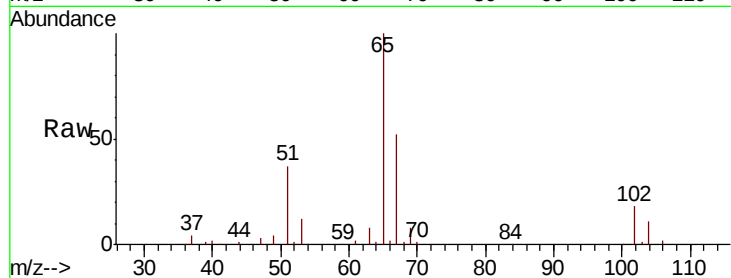




#27  
 1,2-Dichloroethane-d4  
 Concen: N.D. ug/l  
 RT: 8.03 min Scan# 1945  
 Delta R.T. 0.00 min  
 Lab File: VN055136.D  
 Acq: 19 Apr 2019 12:40

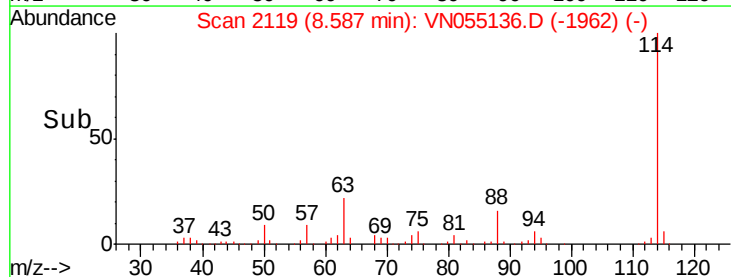
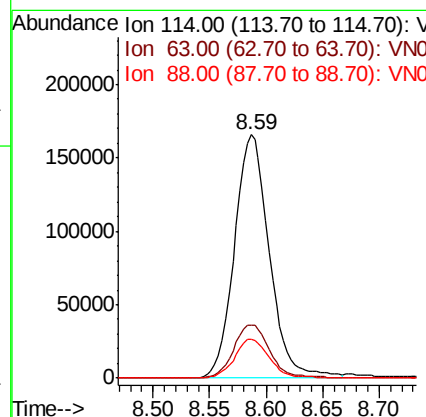
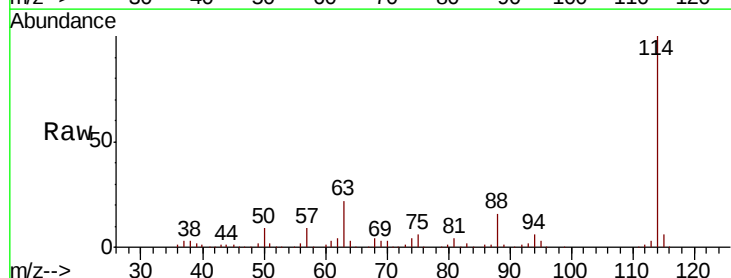
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 DUP

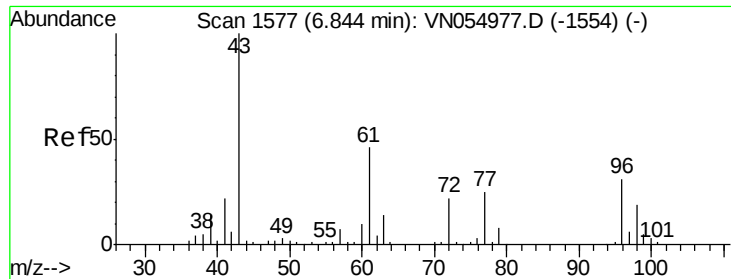
Tot Ion: 65 Resp: 161689  
 Ion Ratio Lower Upper  
 65 100  
 67 53.9 41.8 62.8



#28  
 1,4-Difluorobenzene  
 Concen: 30.000 ug/l  
 RT: 8.59 min Scan# 2119  
 Delta R.T. 0.00 min  
 Lab File: VN055136.D  
 Acq: 19 Apr 2019 12:40

Tgt Ion: 114 Resp: 357446  
 Ion Ratio Lower Upper  
 114 100  
 63 22.5 17.0 25.4  
 88 15.9 12.3 18.5

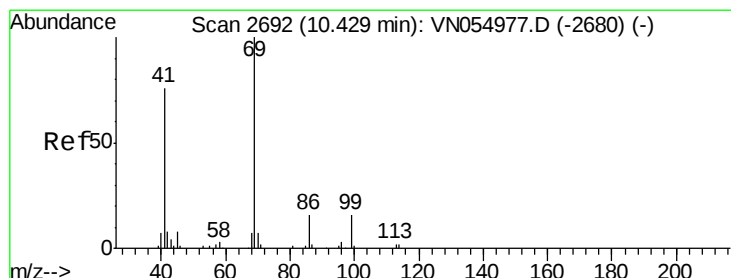
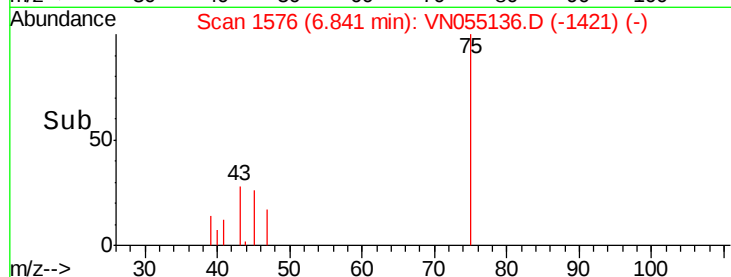
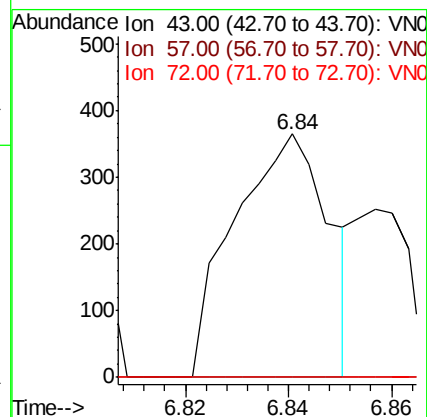
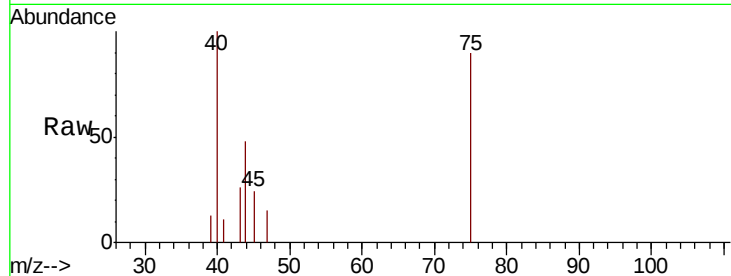




#30  
2-Butanone  
Concen: 0.251 ug/l  
RT: 6.84 min Scan# 1576  
Delta R.T. -0.00 min  
Lab File: VN055136.D  
Acq: 19 Apr 2019 12:40

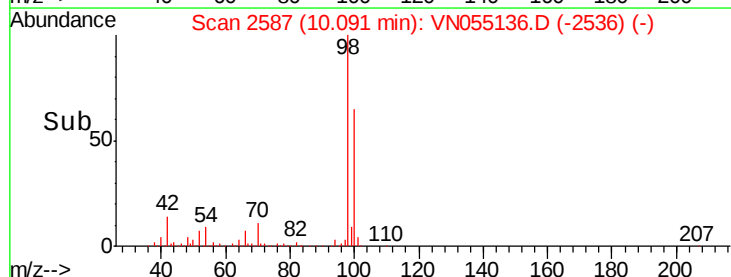
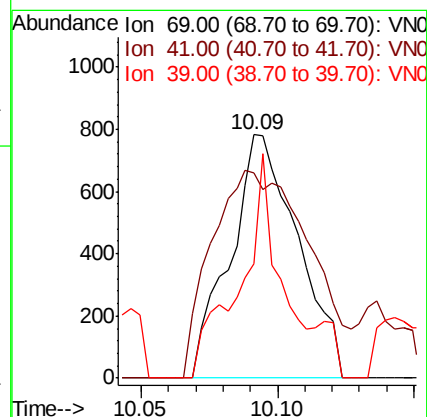
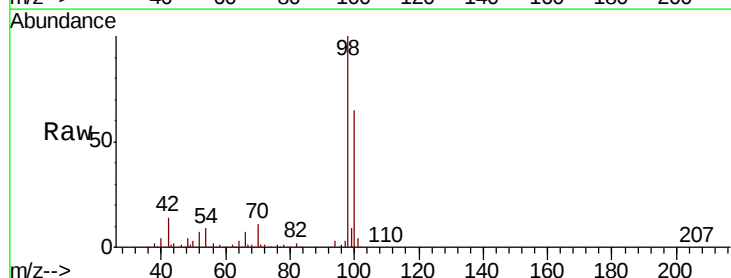
Instrument :  
MSVOA\_N  
ClientSampled :  
DUP

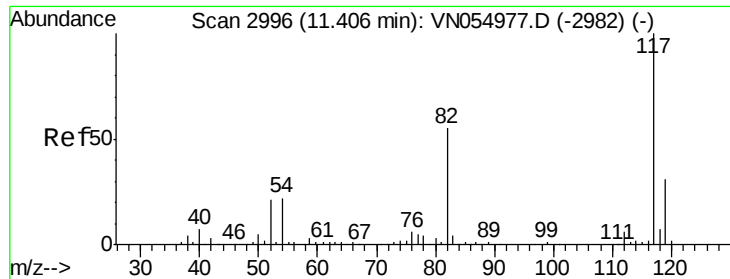
Tot Ion: 43 Resp: 463  
Ion Ratio Lower Upper  
43 100  
57 0.0 6.0 9.0#  
72 0.0 18.6 27.8#



#51  
Ethyl methacrylate  
Concen: 0.322 ug/l  
RT: 10.09 min Scan# 2587  
Delta R.T. -0.34 min  
Lab File: VN055136.D  
Acq: 19 Apr 2019 12:40

Tgt Ion: 69 Resp: 1344  
Ion Ratio Lower Upper  
69 100  
41 62.5 37.9 113.7  
39 46.7 19.8 59.4

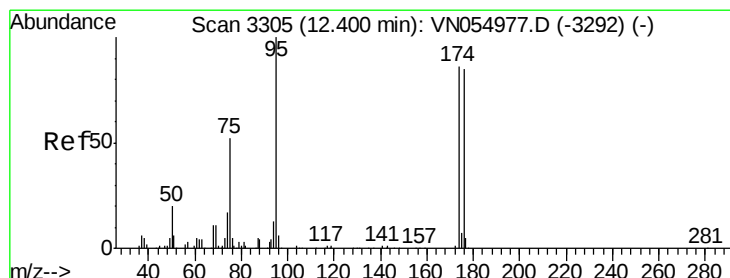
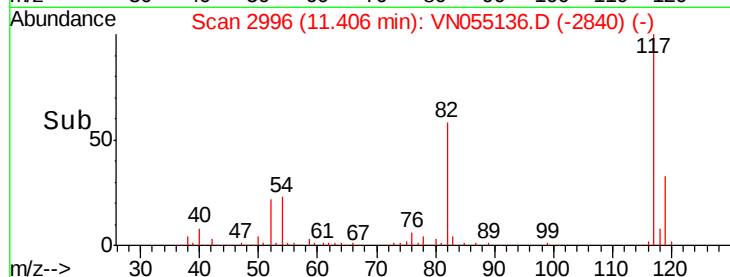
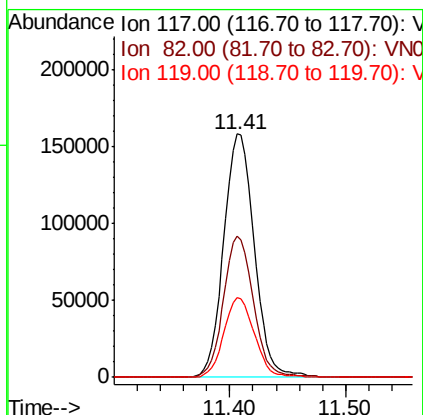
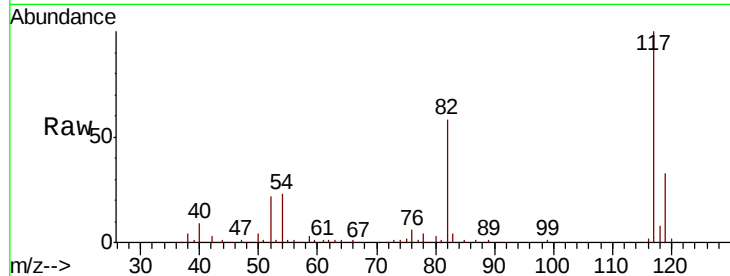




#57  
Chlorobenzene-d5  
Concen: 30.000 ug/l  
RT: 11.41 min Scan# 2996  
Delta R.T. 0.00 min  
Lab File: VN055136.D  
Acq: 19 Apr 2019 12:40

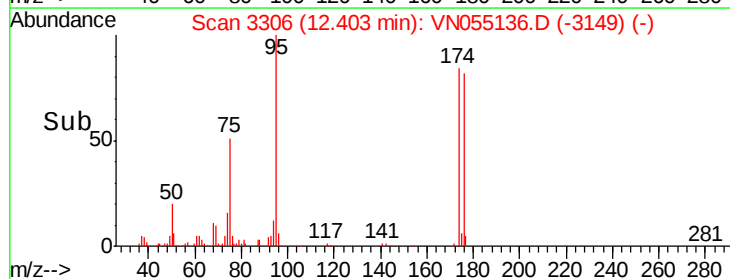
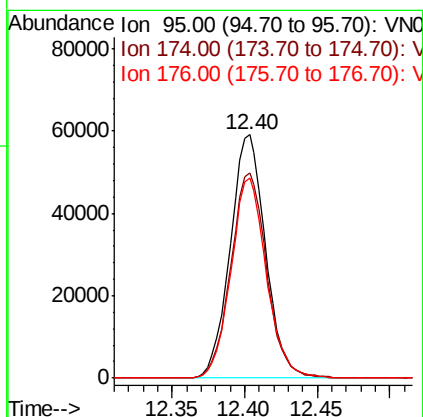
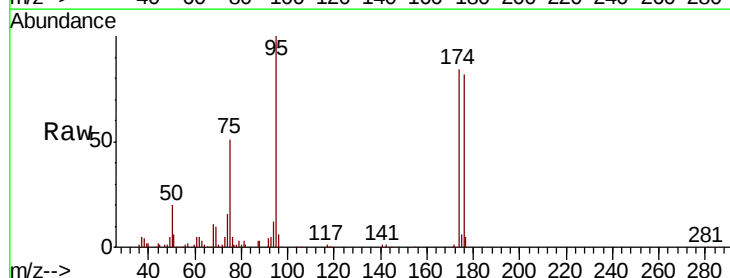
Instrument :  
MSVOA\_N  
ClientSampleId :  
DUP

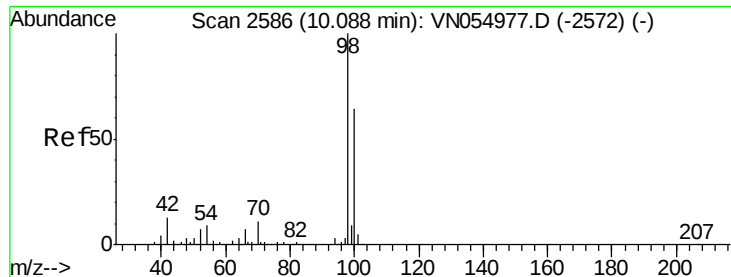
Tot Ion:117 Resp: 289346  
Ion Ratio Lower Upper  
117 100  
82 56.8 45.2 67.8  
119 32.8 25.4 38.2



#60  
4-Bromofluorobenzene  
Concen: Below ug/l  
RT: 12.40 min Scan# 3306  
Delta R.T. 0.00 min  
Lab File: VN055136.D  
Acq: 19 Apr 2019 12:40

Tgt Ion: 95 Resp: 100291  
Ion Ratio Lower Upper  
95 100  
174 85.1 69.4 104.2  
176 81.9 67.4 101.2





#63

Toluene-d8

Concen: Below ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN055136.D

Acq: 19 Apr 2019 12:40

Instrument :

MSVOA\_N

ClientSampled :

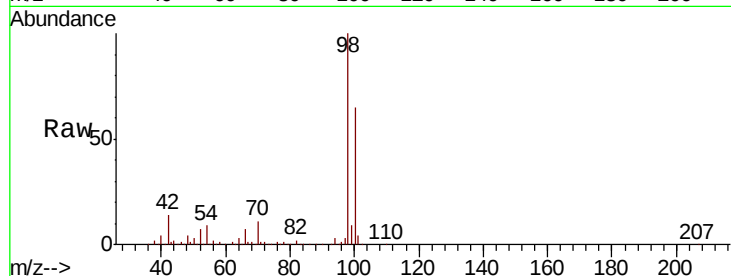
DUP

Tot Ion: 98 Resp: 427399

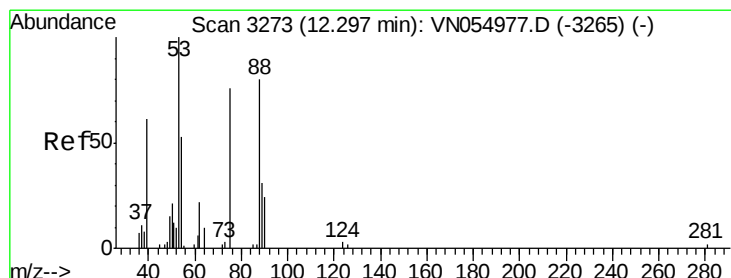
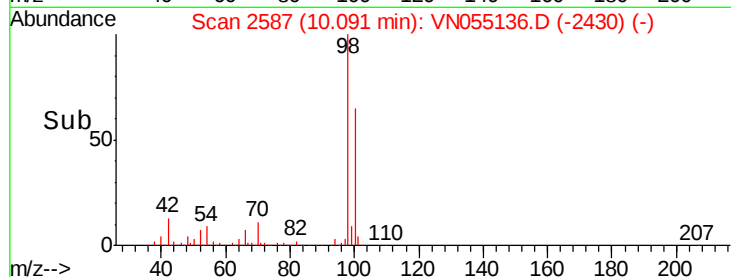
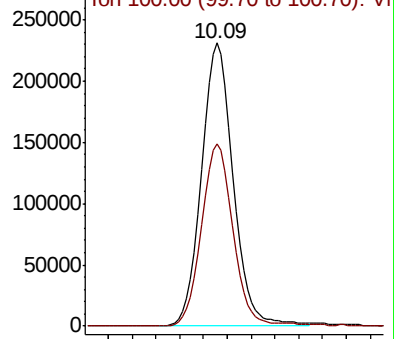
Ion Ratio Lower Upper

98 100

100 63.4 51.1 76.7



Abundance Ion 98.00 (97.70 to 98.70): VN054977.D (-2572) (-)



#77

t-1,4-Dichloro-2-butene

Concen: 64.303 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.11 min

Lab File: VN055136.D

Acq: 19 Apr 2019 12:40

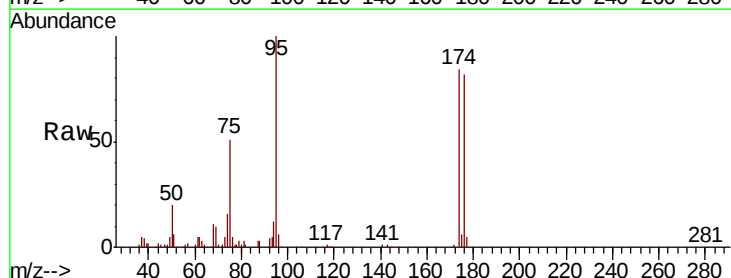
Tgt Ion: 75 Resp: 51387

Ion Ratio Lower Upper

75 100

53 0.0 64.3 192.7#

89 0.0 21.6 65.0#



Abundance Ion 75.00 (74.70 to 75.70): VN054977.D (-3265) (-)

Ion 53.00 (52.70 to 53.70): VN054977.D (-3265) (-)

Ion 89.00 (88.70 to 89.70): VN054977.D (-3265) (-)

