

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN021320\  
 Data File : VN060089.D  
 Acq On : 13 Feb 2020 13:06  
 Operator : JC/MD  
 Sample : L1385-04  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Feb 14 04:55:46 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N021220W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Feb 12 14:12:21 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 192712   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 303223   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 284178   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 128914   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.00  | 65   | 111120   | 47.39 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.78% |          |
| 35) Dibromofluoromethane    | 7.57  | 113  | 92009    | 49.36 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.72% |          |
| 50) Toluene-d8              | 10.08 | 98   | 366814   | 49.97 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.94% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 131649   | 48.81 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.62% |          |

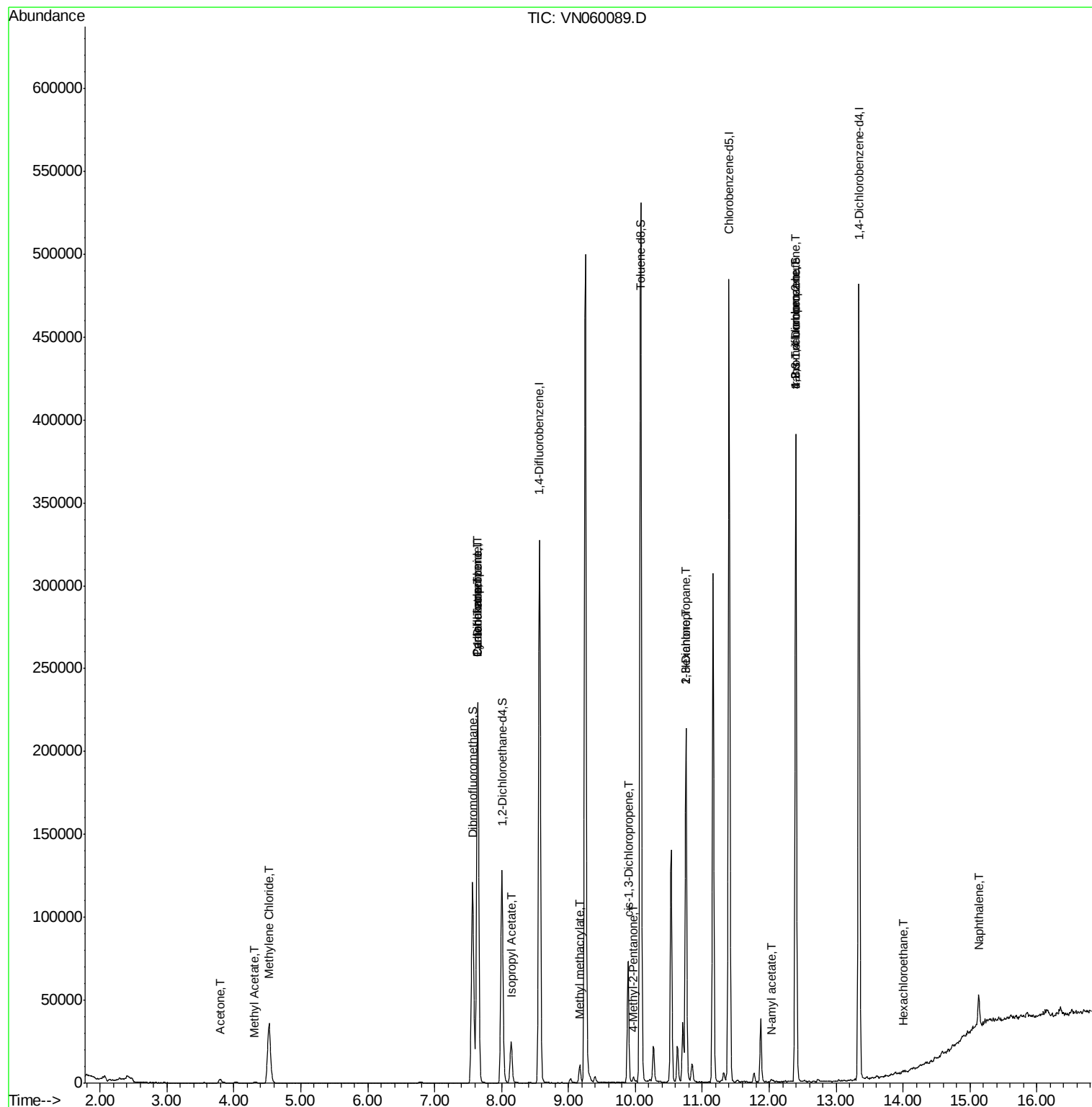
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 16) Acetone                    | 3.80  | 43   | 4712     | 4.607     | ug/l   | 97     |
| 18) Methyl Acetate             | 4.32  | 43   | 756      | 0.393     | ug/l # | 50     |
| 20) Methylene Chloride         | 4.52  | 84   | 28632    | 14.031    | ug/l   | 96     |
| 31) Cyclohexane                | 7.64  | 56   | 3706     | 1.117     | ug/l # | 3      |
| 36) 1,1-Dichloropropene        | 7.64  | 75   | 13840    | 4.928     | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 7.64  | 117  | 18005    | 5.903     | ug/l # | 14     |
| 43) Isopropyl Acetate          | 8.14  | 43   | 30170    | 6.953     | ug/l # | 90     |
| 48) Methyl methacrylate        | 9.16  | 41   | 1581     | 0.812     | ug/l # | 9      |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 2509     | 0.999     | ug/l   | 87     |
| 54) cis-1,3-Dichloropropene    | 9.89  | 75   | 13365    | 3.794     | ug/l # | 62     |
| 57) 1,3-Dichloropropane        | 10.76 | 76   | 2372     | 0.690     | ug/l # | 43     |
| 59) 2-Hexanone                 | 10.75 | 43   | 31334    | 16.151    | ug/l # | 52     |
| 74) N-amyl acetate             | 12.03 | 43   | 1165     | 0.336     | ug/l # | 43     |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 67595    | 27.406    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 67595    | 67.104    | ug/l # | 12     |
| 90) Hexachloroethane           | 13.99 | 117  | 509      | 0.321     | ug/l # | 8      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.26 | 75   | 61       | Below Cal | #      | 1      |
| 95) Naphthalene                | 15.13 | 128  | 16775    | 2.554     | ug/l   | 99     |

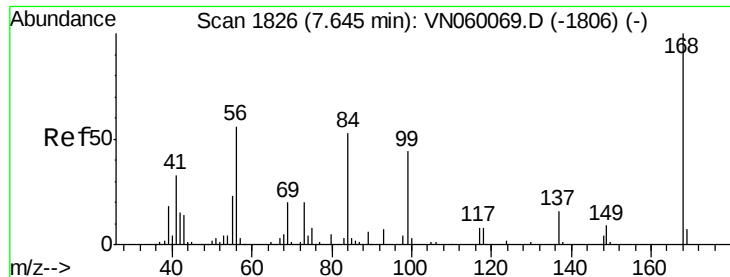
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN021320\  
Data File : VN060089.D  
Acq On : 13 Feb 2020 13:06  
Operator : JC/MD  
Sample : L1385-04  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :

Quant Time: Feb 14 04:55:46 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N021220W.M  
Quant Title : SW846 8260  
QLast Update : Wed Feb 12 14:12:21 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.64 min Scan# 1826

Delta R.T. 0.00 min

Lab File: VN060089.D

Acq: 13 Feb 2020 13:06

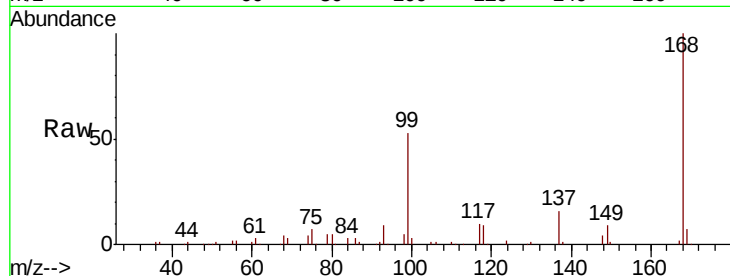
Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion:168 Resp: 192712

Ion Ratio Lower Upper

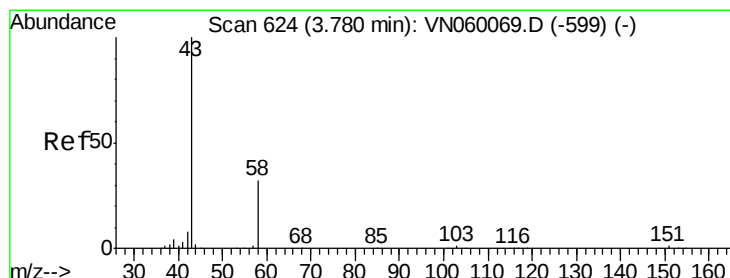
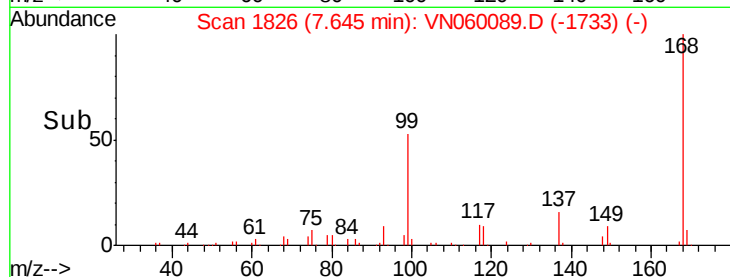
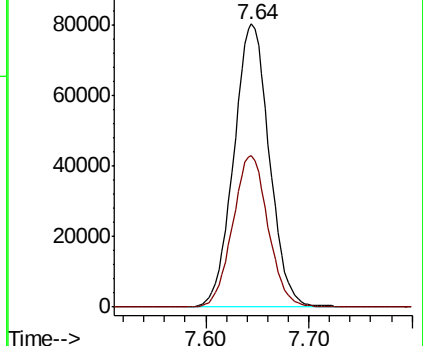
168 100

99 53.4 42.7 64.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN0



#16

Acetone

Concen: 4.607 ug/l

RT: 3.80 min Scan# 630

Delta R.T. 0.02 min

Lab File: VN060089.D

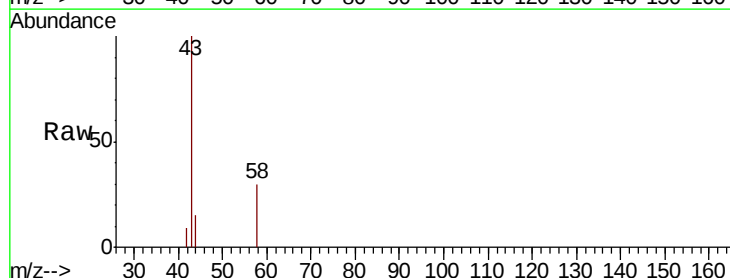
Acq: 13 Feb 2020 13:06

Tgt Ion: 43 Resp: 4712

Ion Ratio Lower Upper

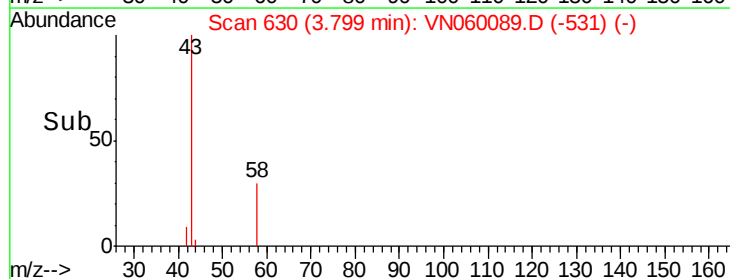
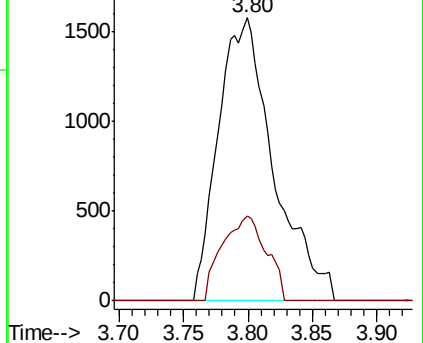
43 100

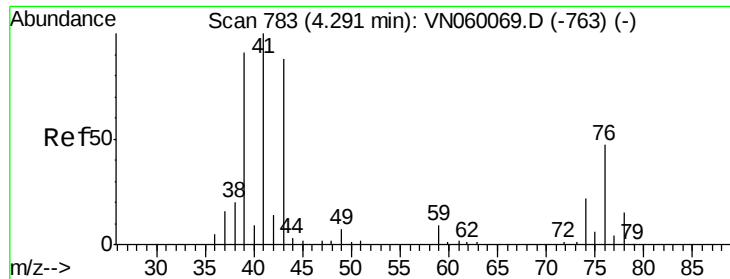
58 30.0 25.2 37.8



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

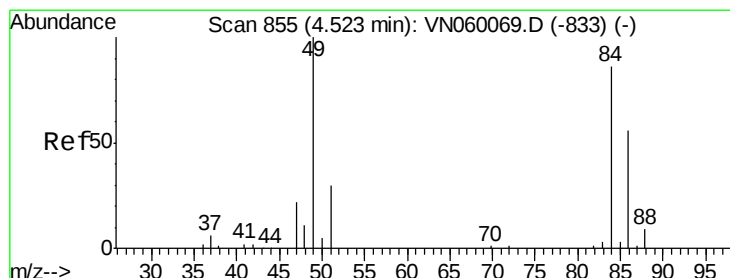
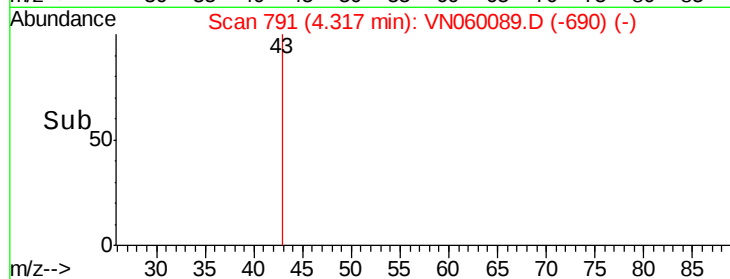
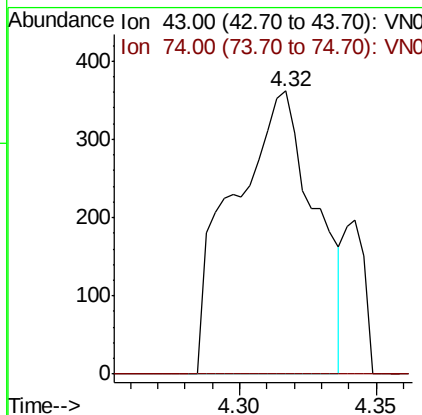
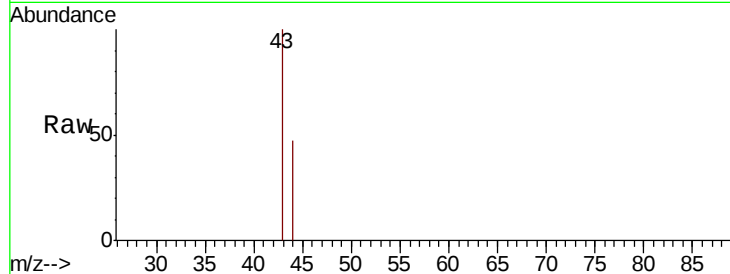




#18  
Methyl Acetate  
Concen: 0.393 ug/l  
RT: 4.32 min Scan# 791  
Delta R.T. 0.03 min  
Lab File: VN060089.D  
Acq: 13 Feb 2020 13:06

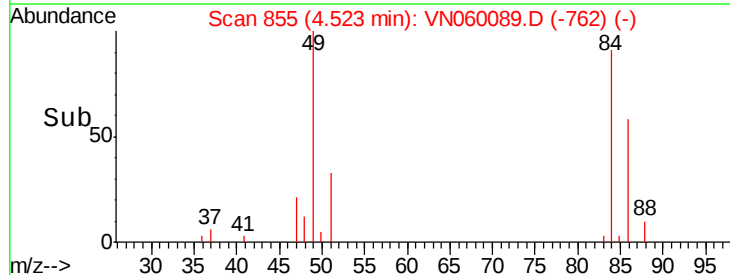
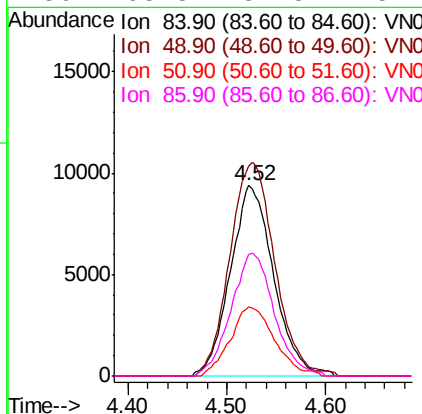
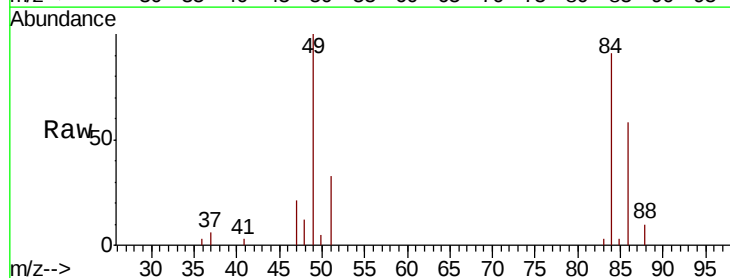
Instrument :  
MSVOA\_N  
ClientSampled :

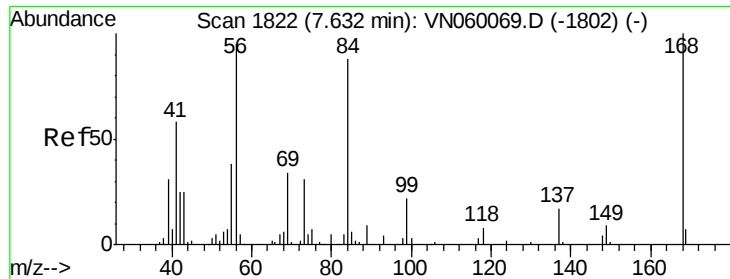
Tot Ion: 43 Resp: 756  
Ion Ratio Lower Upper  
43 100  
74 0.0 20.3 30.5#



#20  
Methylene Chloride  
Concen: 14.031 ug/l  
RT: 4.52 min Scan# 855  
Delta R.T. 0.00 min  
Lab File: VN060089.D  
Acq: 13 Feb 2020 13:06

Tgt Ion: 84 Resp: 28632  
Ion Ratio Lower Upper  
84 100  
49 110.3 93.4 140.0  
51 36.1 28.4 42.6  
86 63.8 52.5 78.7

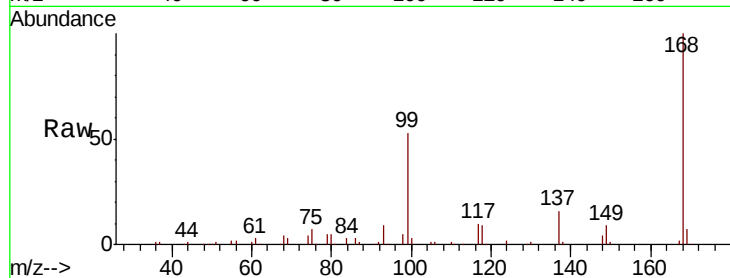




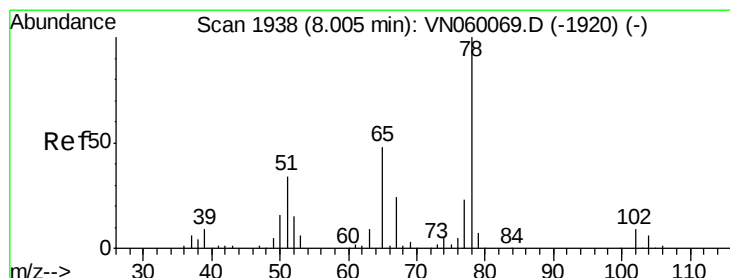
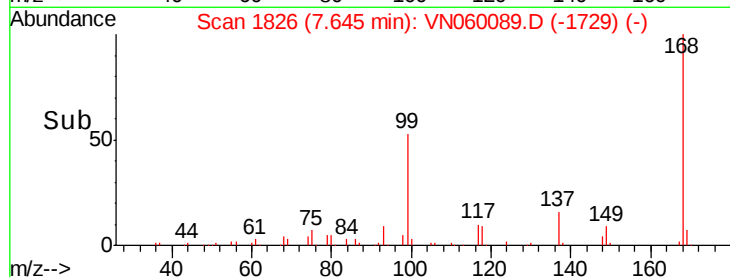
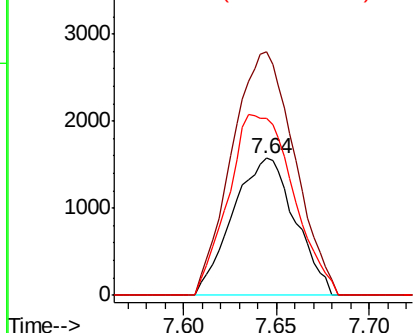
#31  
Cyclohexane  
Concen: 1.117 ug/l  
RT: 7.64 min Scan# 1826  
Delta R.T. 0.01 min  
Lab File: VN060089.D  
Acq: 13 Feb 2020 13:06

Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion: 56 Resp: 3706  
Ion Ratio Lower Upper  
56 100  
69 177.3 28.3 42.5#  
84 128.7 72.6 108.8#

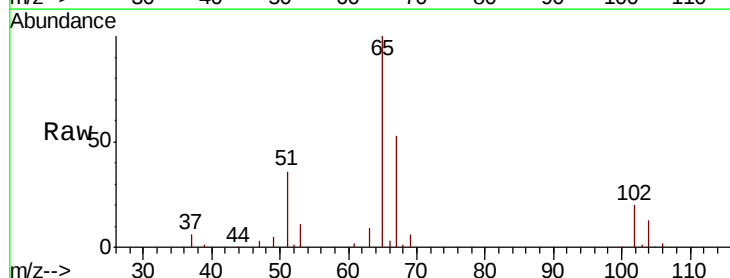


Abundance Ion 56.00 (55.70 to 56.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 84.00 (83.70 to 84.70): VN0

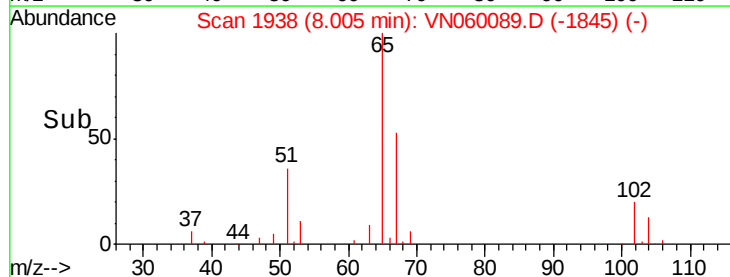
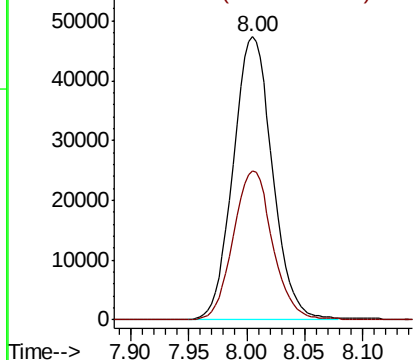


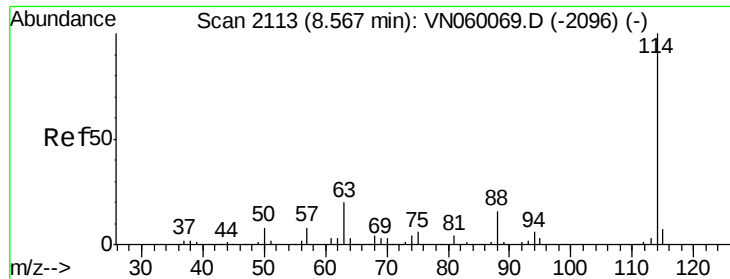
#33  
1,2-Dichloroethane-d4  
Concen: 47.386 ug/l  
RT: 8.00 min Scan# 1938  
Delta R.T. 0.00 min  
Lab File: VN060089.D  
Acq: 13 Feb 2020 13:06

Tgt Ion: 65 Resp: 111120  
Ion Ratio Lower Upper  
65 100  
67 52.9 0.0 104.0



Abundance Ion 64.90 (64.60 to 65.60): VN0  
Ion 66.90 (66.60 to 67.60): VN0

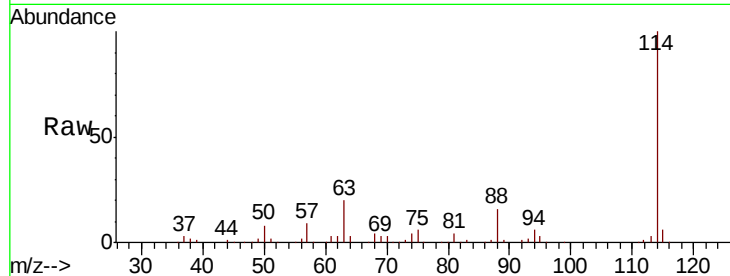




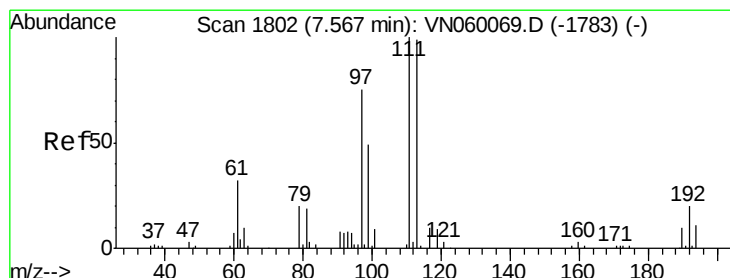
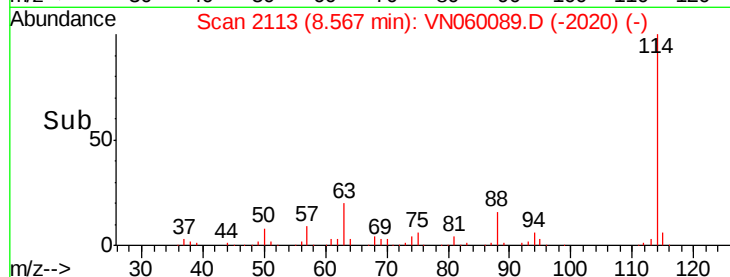
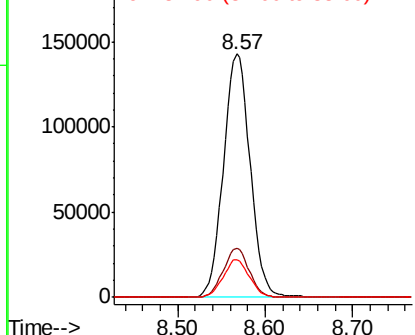
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.57 min Scan# 2113  
 Delta R.T. 0.00 min  
 Lab File: VN060089.D  
 Acq: 13 Feb 2020 13:06

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Tot Ion:114 Resp: 303223  
 Ion Ratio Lower Upper  
 114 100  
 63 20.1 0.0 40.0  
 88 15.6 0.0 31.6

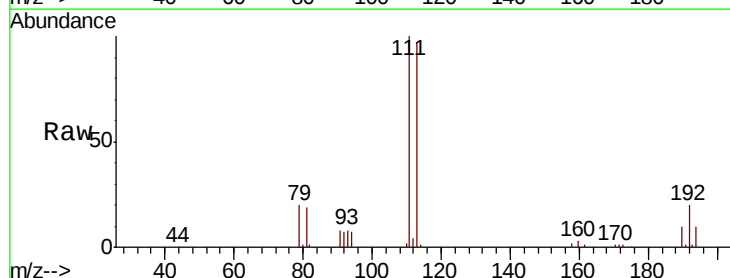


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VN  
 Ion 87.90 (87.60 to 88.60): VN

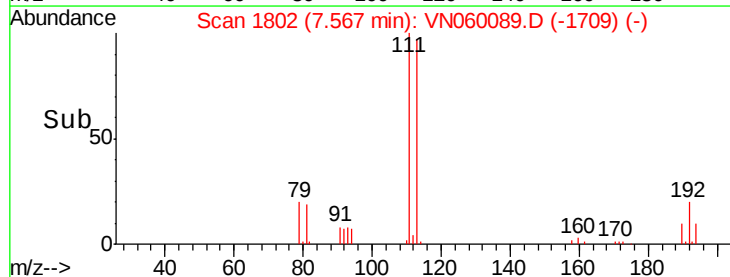
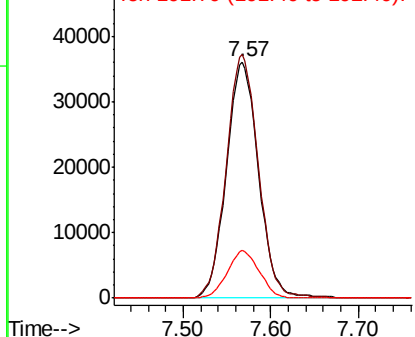


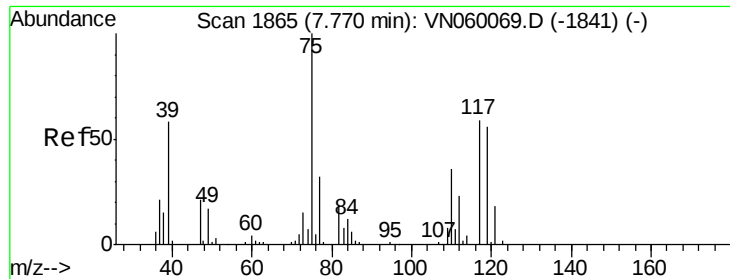
#35  
 Dibromofluoromethane  
 Concen: 49.363 ug/l  
 RT: 7.57 min Scan# 1802  
 Delta R.T. 0.00 min  
 Lab File: VN060089.D  
 Acq: 13 Feb 2020 13:06

Tgt Ion:113 Resp: 92009  
 Ion Ratio Lower Upper  
 113 100  
 111 103.0 81.4 122.2  
 192 20.0 16.2 24.2



Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V

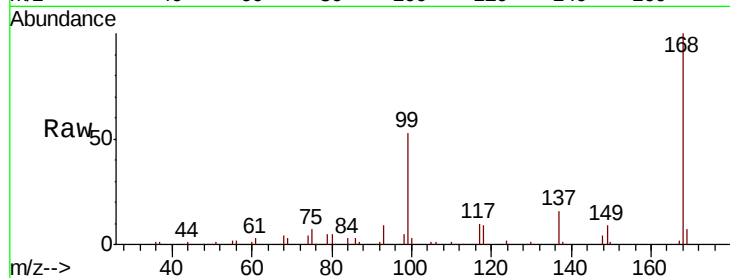




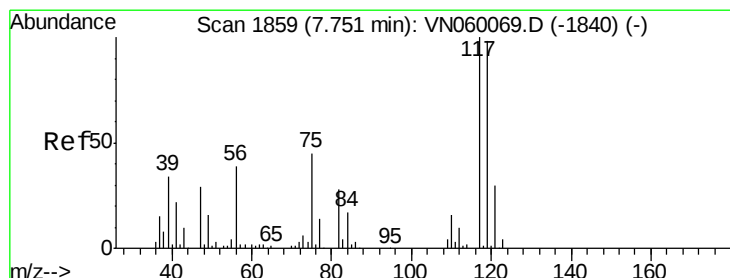
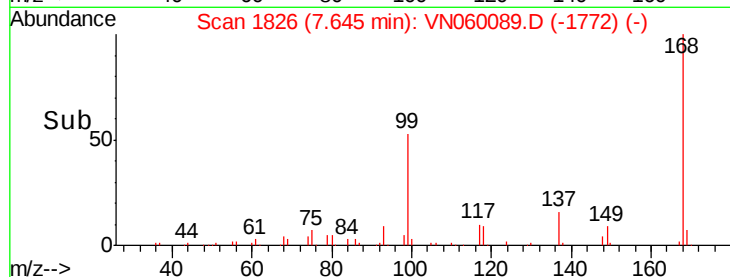
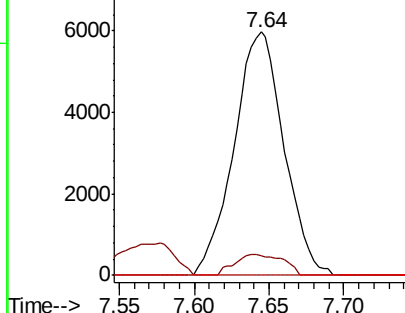
#36  
 1,1-Dichloropropene  
 Concen: 4.928 ug/l  
 RT: 7.64 min Scan# 1826  
 Delta R.T. -0.13 min  
 Lab File: VN060089.D  
 Acq: 13 Feb 2020 13:06

Instrument :  
 MSVOA\_N  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.3   | 18.1  | 54.3# |
| 77      | 0.0   | 25.1  | 37.7# |

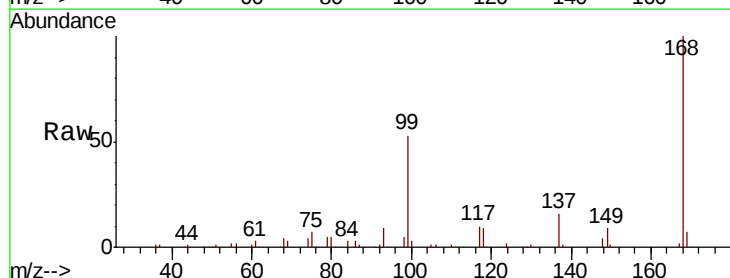


Abundance Ion 74.90 (74.60 to 75.60): VN060069.D (-1841) (-)  
 Ion 109.90 (109.60 to 110.60): VN060069.D (-1841) (-)  
 Ion 76.90 (76.60 to 77.60): VN060069.D (-1841) (-)

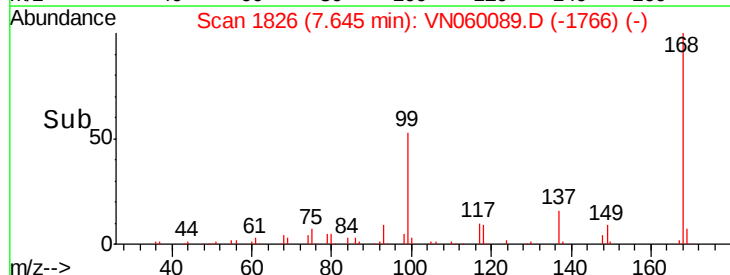
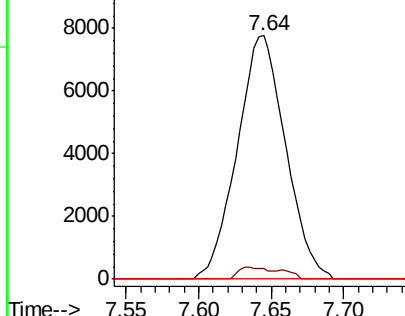


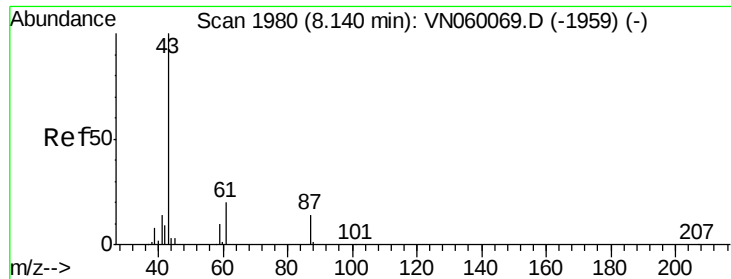
#38  
 Carbon Tetrachloride  
 Concen: 5.903 ug/l  
 RT: 7.64 min Scan# 1826  
 Delta R.T. -0.11 min  
 Lab File: VN060089.D  
 Acq: 13 Feb 2020 13:06

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 4.2   | 78.2  | 117.4# |
| 121     | 0.0   | 24.2  | 36.2#  |



Abundance Ion 116.80 (116.50 to 117.50): VN060069.D (-1840) (-)  
 Ion 118.80 (118.50 to 119.50): VN060069.D (-1840) (-)  
 Ion 120.80 (120.50 to 121.50): VN060069.D (-1840) (-)





#43

Isopropyl Acetate

Concen: 6.953 ug/l

RT: 8.14 min Scan# 1981

Delta R.T. 0.00 min

Lab File: VN060089.D

Acq: 13 Feb 2020 13:06

Instrument :

MSVOA\_N

ClientSampleId :

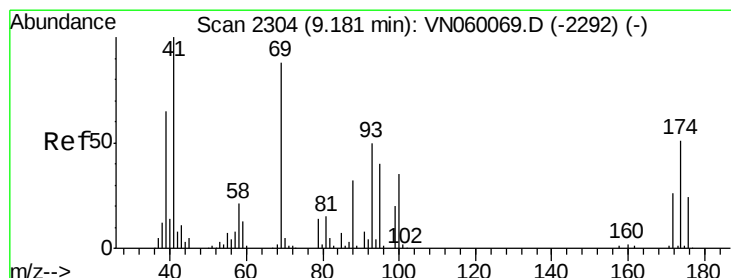
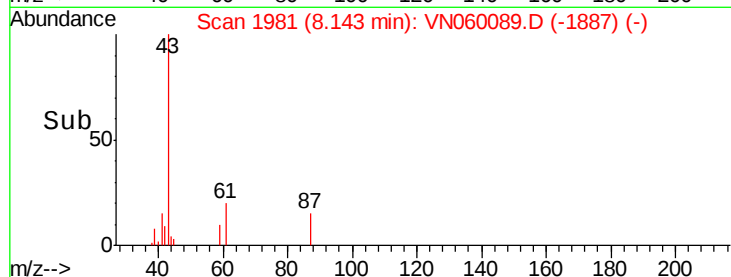
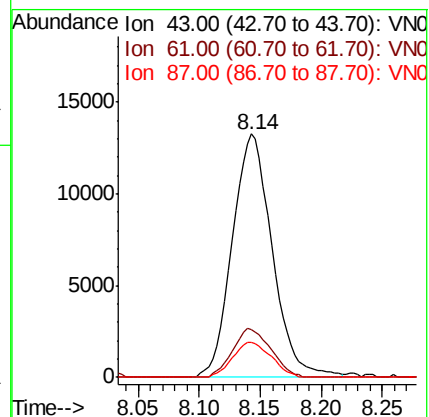
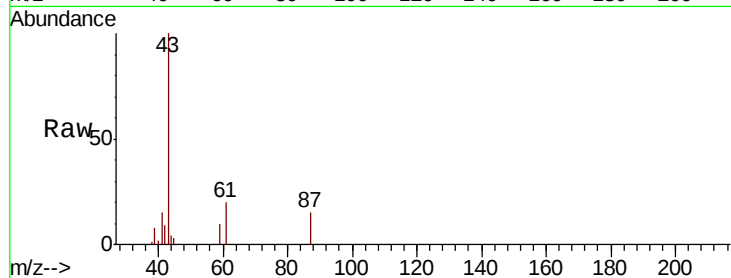
Tot Ion: 43 Resp: 30170

Ion Ratio Lower Upper

43 100

61 19.3 21.8 32.6#

87 13.9 11.4 17.2



#48

Methyl methacrylate

Concen: 0.812 ug/l

RT: 9.16 min Scan# 2298

Delta R.T. -0.02 min

Lab File: VN060089.D

Acq: 13 Feb 2020 13:06

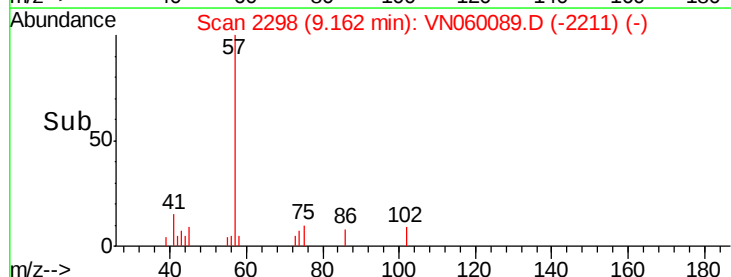
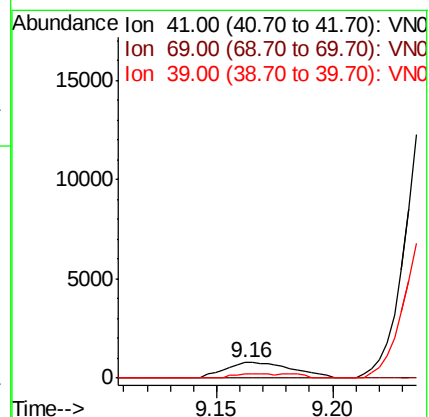
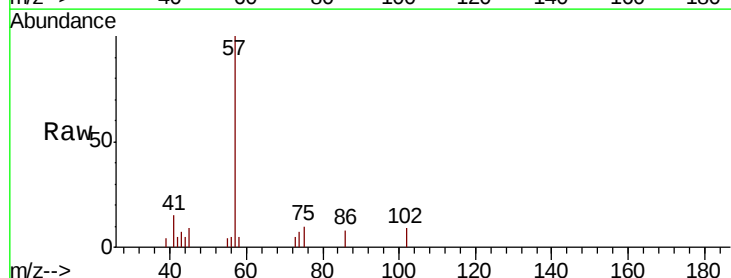
Tgt Ion: 41 Resp: 1581

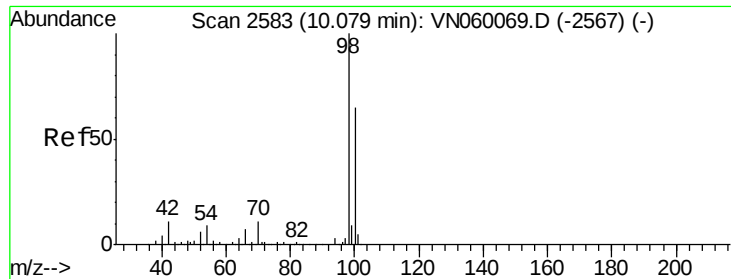
Ion Ratio Lower Upper

41 100

69 0.0 72.0 108.0#

39 0.0 54.1 81.1#

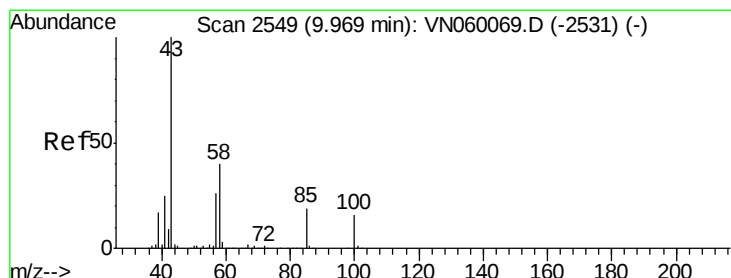
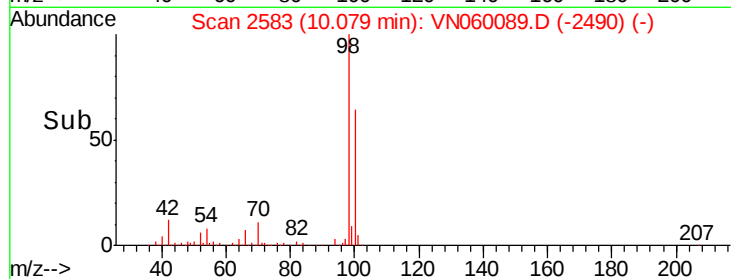
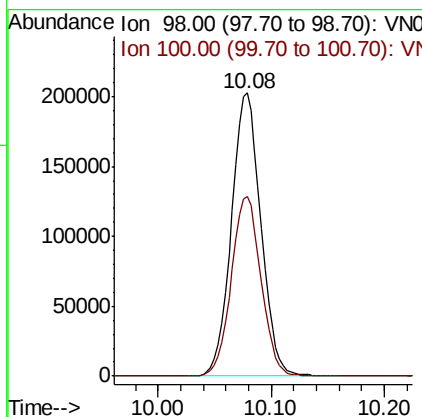
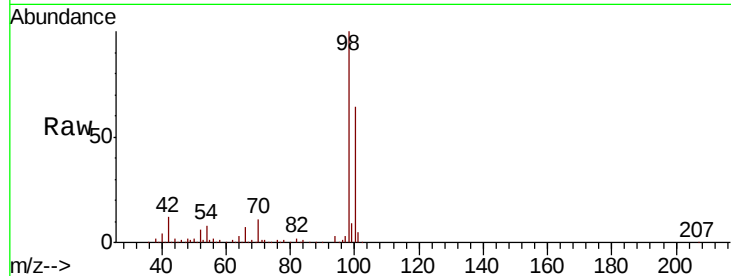




#50  
Toluene-d8  
Concen: 49.975 ug/l  
RT: 10.08 min Scan# 2583  
Delta R.T. 0.00 min  
Lab File: VN060089.D  
Acq: 13 Feb 2020 13:06

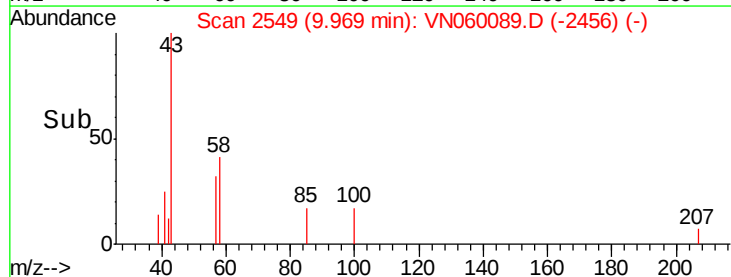
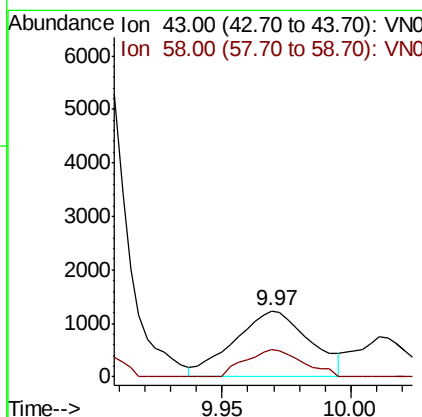
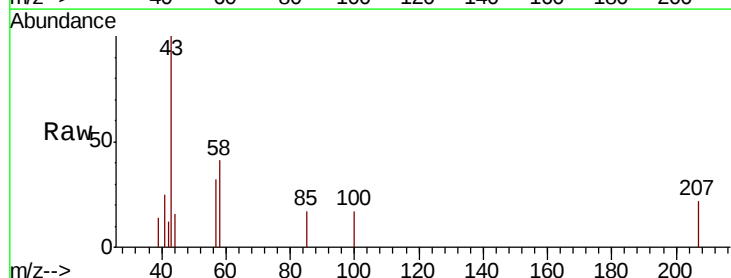
Instrument :  
MSVOA\_N  
ClientSampled :

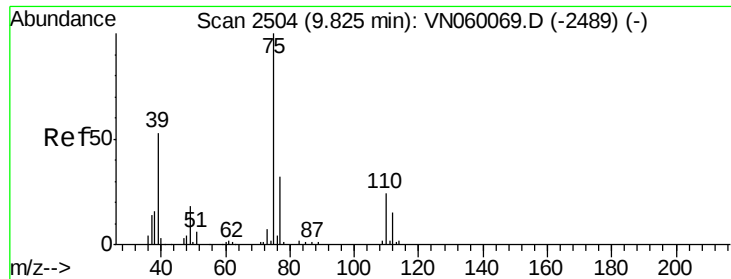
Tot Ion: 98 Resp: 366814  
Ion Ratio Lower Upper  
98 100  
100 64.1 51.7 77.5



#51  
4-Methyl-2-Pentanone  
Concen: 0.999 ug/l  
RT: 9.97 min Scan# 2549  
Delta R.T. 0.00 min  
Lab File: VN060089.D  
Acq: 13 Feb 2020 13:06

Tgt Ion: 43 Resp: 2509  
Ion Ratio Lower Upper  
43 100  
58 32.0 31.8 47.8





#54

cis-1,3-Dichloropropene

Concen: 3.794 ug/l

RT: 9.89 min Scan# 2525

Delta R.T. 0.07 min

Lab File: VN060089.D

Acq: 13 Feb 2020 13:06

Instrument :

MSVOA\_N

ClientSampleId :

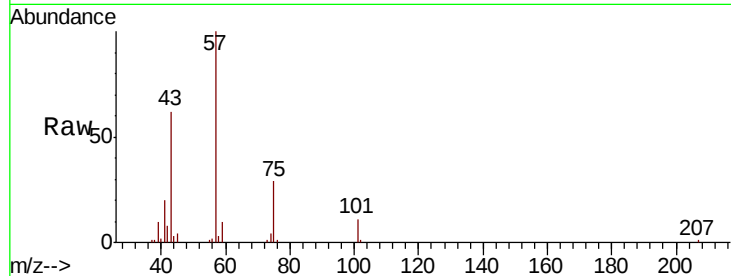
Tot Ion: 75 Resp: 13365

Ion Ratio Lower Upper

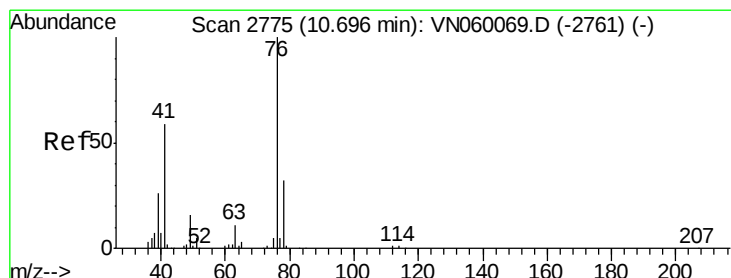
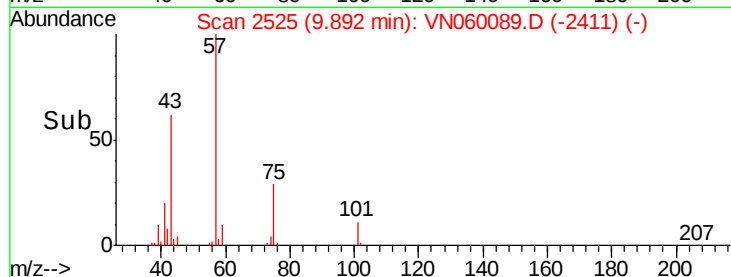
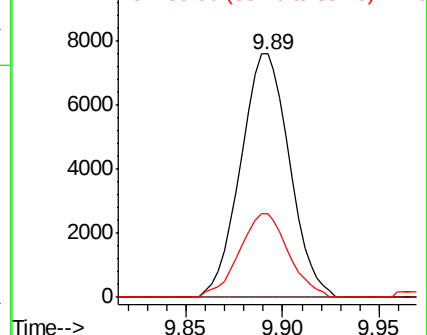
75 100

77 0.0 25.6 38.4#

39 34.1 42.2 63.4#



Abundance Ion 74.90 (74.60 to 75.60): VN0  
Ion 76.90 (76.60 to 77.60): VN0  
Ion 39.00 (38.70 to 39.70): VN0



#57

1,3-Dichloropropane

Concen: 0.690 ug/l

RT: 10.76 min Scan# 2794

Delta R.T. 0.06 min

Lab File: VN060089.D

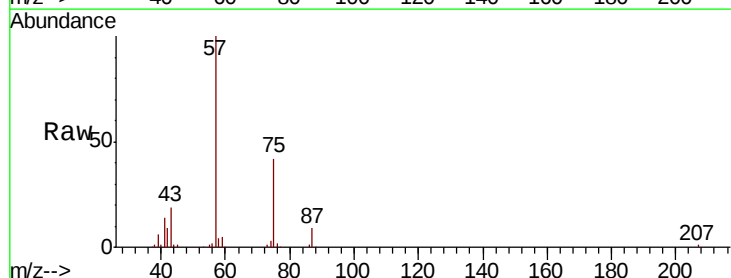
Acq: 13 Feb 2020 13:06

Tgt Ion: 76 Resp: 2372

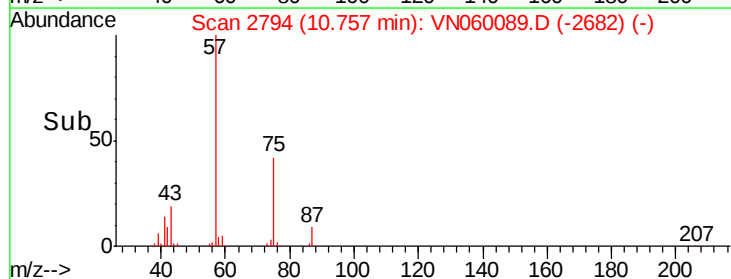
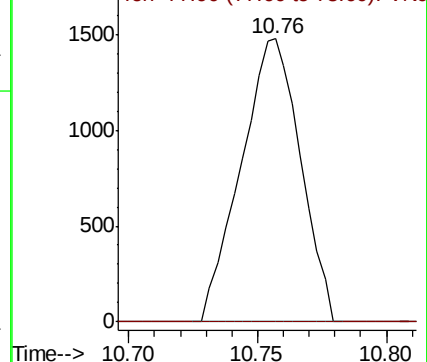
Ion Ratio Lower Upper

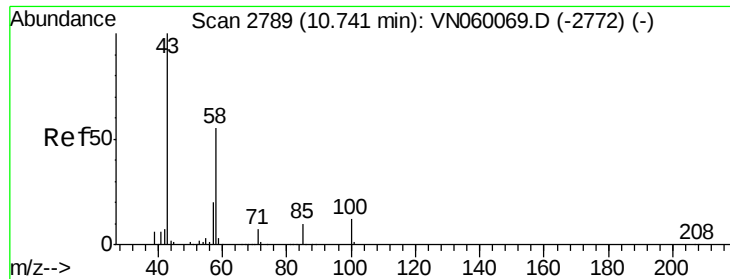
76 100

78 0.0 25.7 38.5#



Abundance Ion 75.90 (75.60 to 76.60): VN0  
Ion 77.90 (77.60 to 78.60): VN0

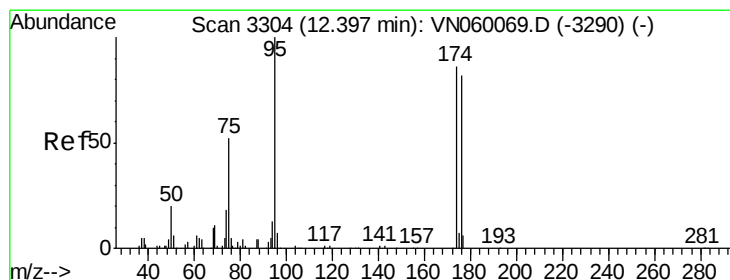
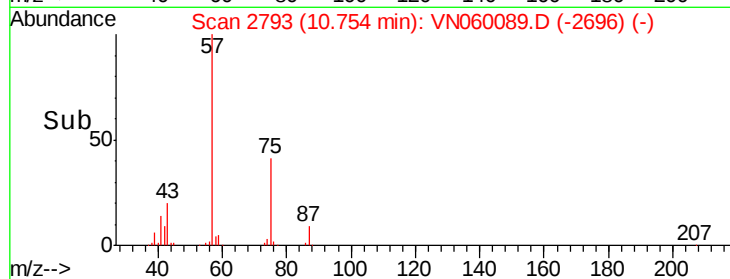
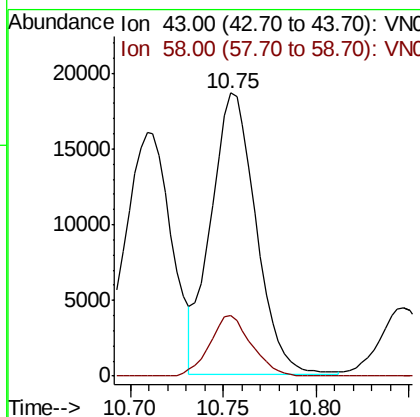
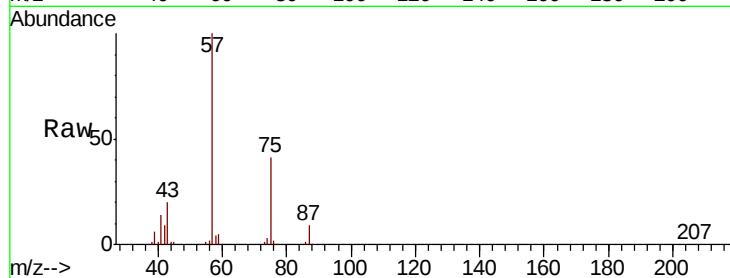




#59  
2-Hexanone  
Concen: 16.151 ug/l  
RT: 10.75 min Scan# 2793  
Delta R.T. 0.01 min  
Lab File: VN060089.D  
Acq: 13 Feb 2020 13:06

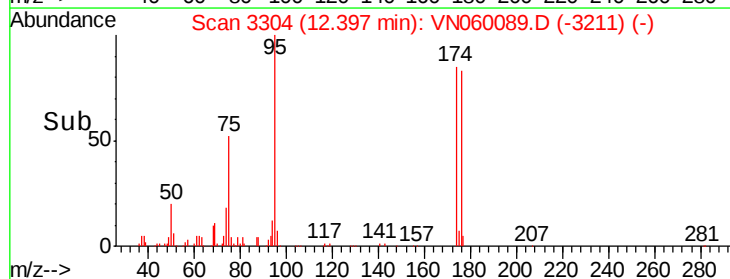
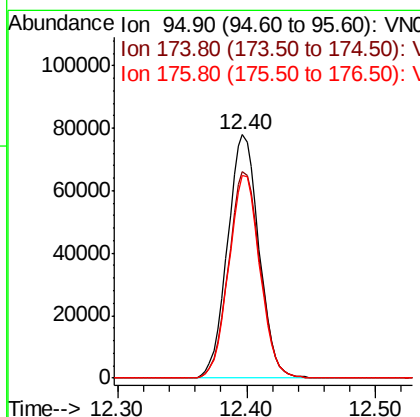
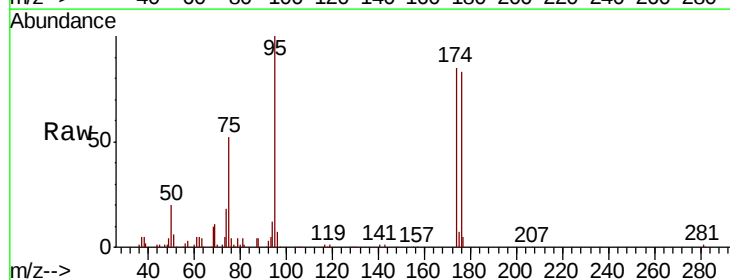
Instrument :  
MSVOA\_N  
ClientSampled :

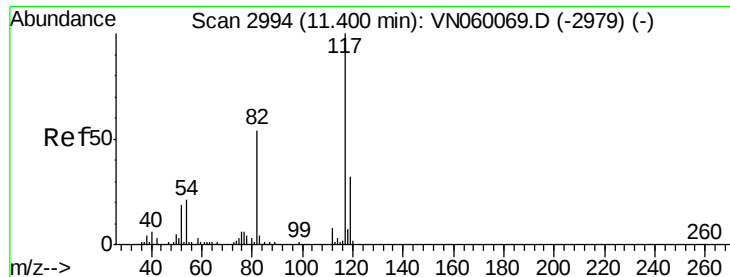
Tot Ion: 43 Resp: 31334  
Ion Ratio Lower Upper  
43 100  
58 20.0 27.5 82.4#



#62  
4-Bromofluorobenzene  
Concen: 48.811 ug/l  
RT: 12.40 min Scan# 3304  
Delta R.T. 0.00 min  
Lab File: VN060089.D  
Acq: 13 Feb 2020 13:06

Tgt Ion: 95 Resp: 131649  
Ion Ratio Lower Upper  
95 100  
174 85.4 0.0 169.8  
176 82.6 0.0 164.8

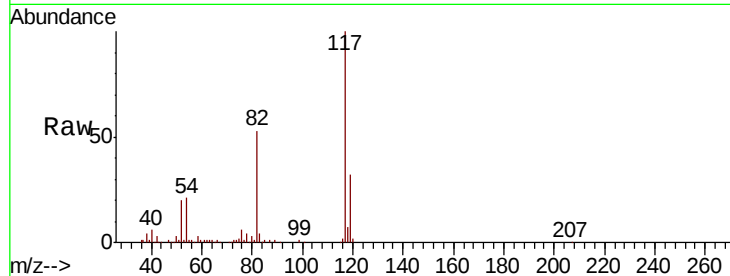




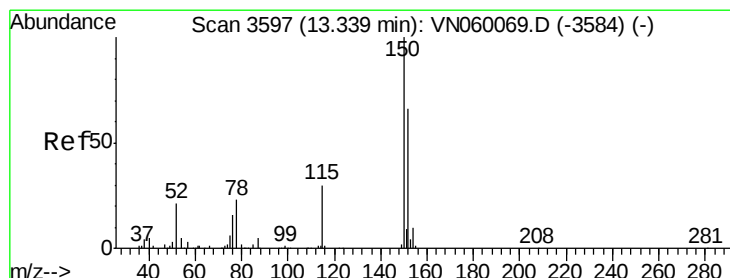
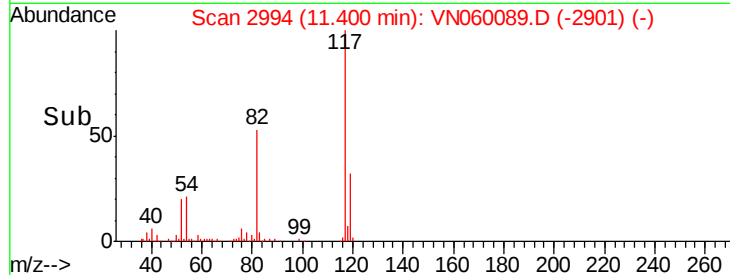
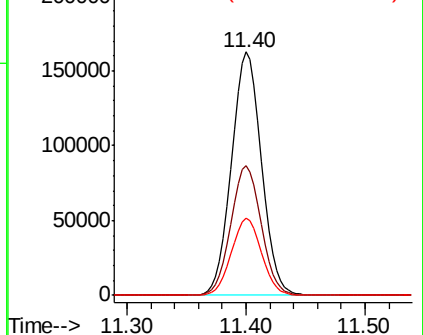
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.40 min Scan# 2994  
Delta R.T. 0.00 min  
Lab File: VN060089.D  
Acq: 13 Feb 2020 13:06

Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion:117 Resp: 284178  
Ion Ratio Lower Upper  
117 100  
82 53.2 43.4 65.0  
119 31.7 25.8 38.6

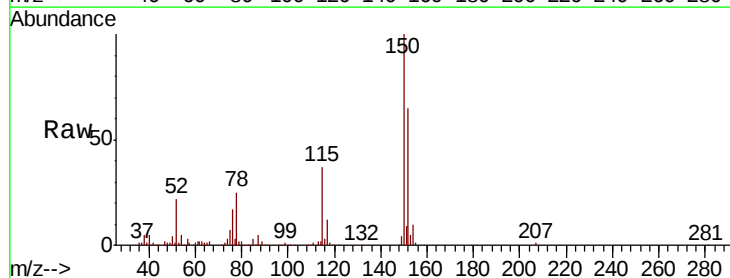


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 118.90 (118.60 to 119.60): V

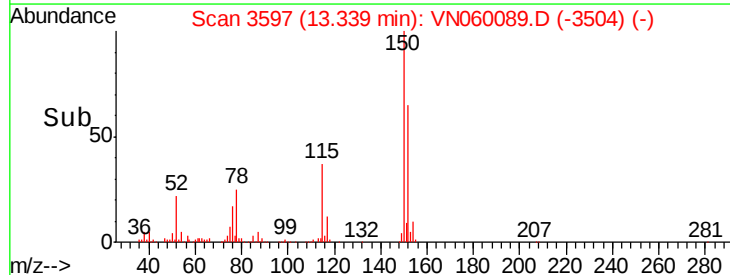
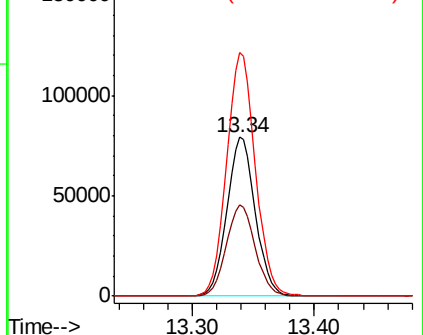


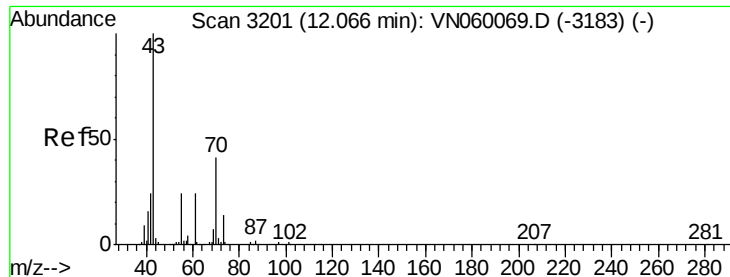
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.34 min Scan# 3597  
Delta R.T. 0.00 min  
Lab File: VN060089.D  
Acq: 13 Feb 2020 13:06

Tgt Ion:152 Resp: 128914  
Ion Ratio Lower Upper  
152 100  
115 58.5 28.9 86.8  
150 155.3 0.0 342.4



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





#74

N-amvl acetate

Concen: 0.336 ug/l

RT: 12.03 min Scan# 3191

Delta R.T. -0.03 min

Lab File: VN060089.D

Acq: 13 Feb 2020 13:06

Instrument :

MSVOA\_N

ClientSampleId :

Tot Ion: 43 Resp: 1165

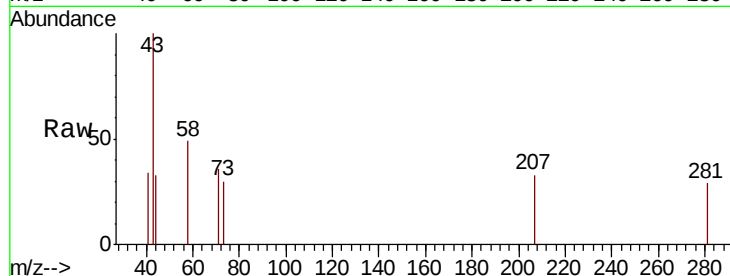
Ion Ratio Lower Upper

43 100

70 0.0 33.4 50.0#

55 0.0 18.8 28.2#

61 0.0 19.2 28.8#

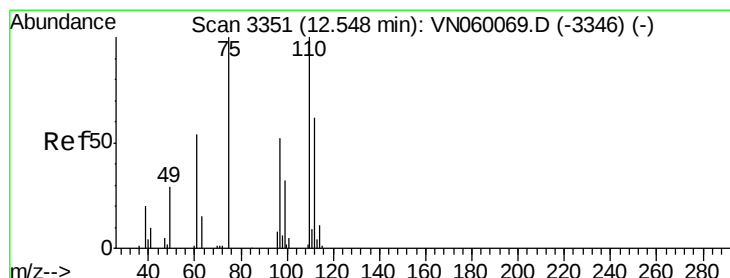
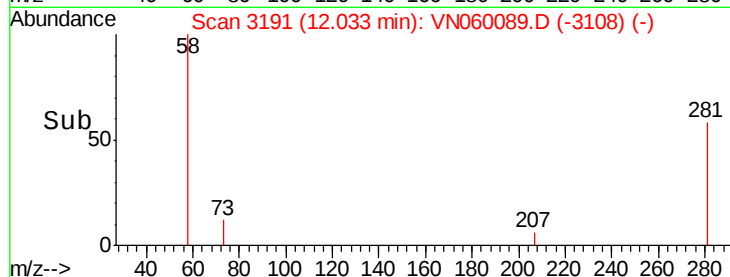
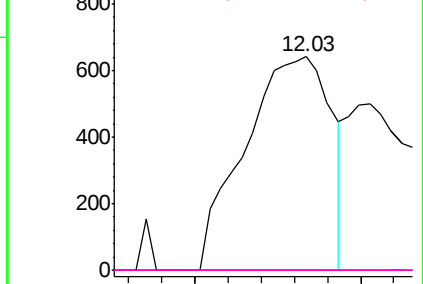


Abundance Ion 43.00 (42.70 to 43.70): VN060069.D (-3183) (-)

Ion 70.00 (69.70 to 70.70): VN060069.D (-3183) (-)

Ion 55.00 (54.70 to 55.70): VN060069.D (-3183) (-)

Ion 61.00 (60.70 to 61.70): VN060069.D (-3183) (-)



#76

1,2,3-Trichloropropane

Concen: 27.406 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. -0.15 min

Lab File: VN060089.D

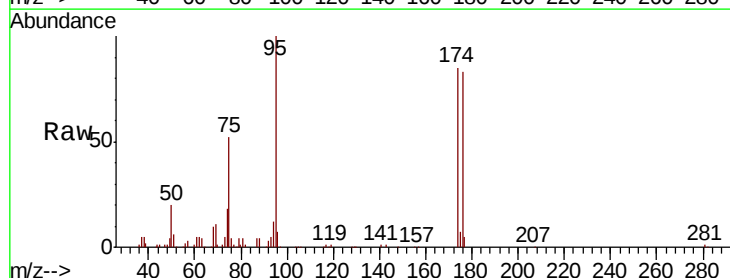
Acq: 13 Feb 2020 13:06

Tgt Ion: 75 Resp: 67595

Ion Ratio Lower Upper

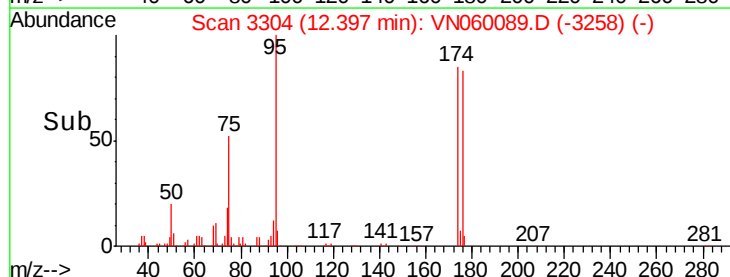
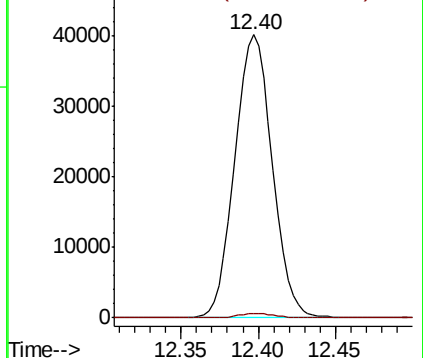
75 100

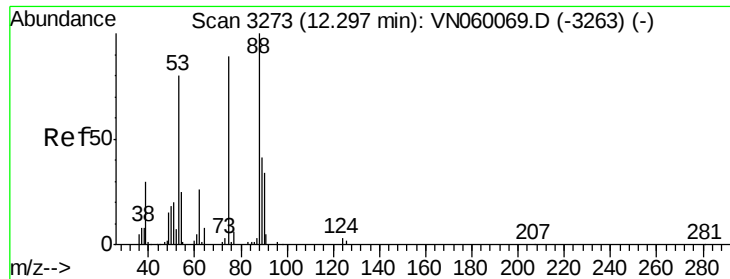
77 1.3 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN060069.D (-3346) (-)

Ion 77.00 (76.70 to 77.70): VN060069.D (-3346) (-)





#81

trans-1,4-Dichloro-2-butene

Concen: 67.104 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. 0.10 min

Lab File: VN060089.D

Acq: 13 Feb 2020 13:06

Instrument :

MSVOA\_N

ClientSampled :

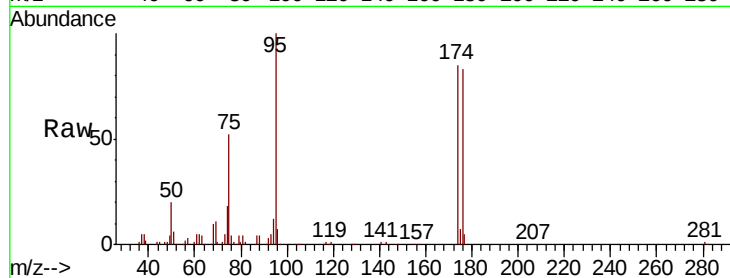
Tot Ion: 75 Resp: 67595

Ion Ratio Lower Upper

75 100

53 0.0 73.9 110.9#

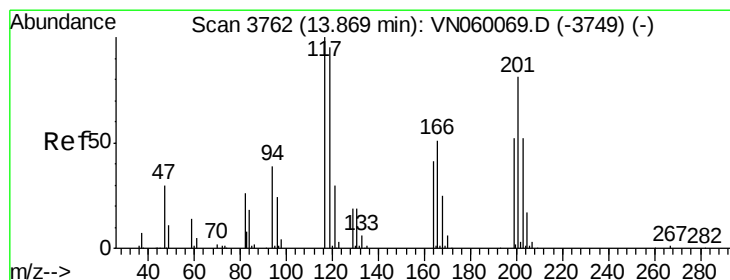
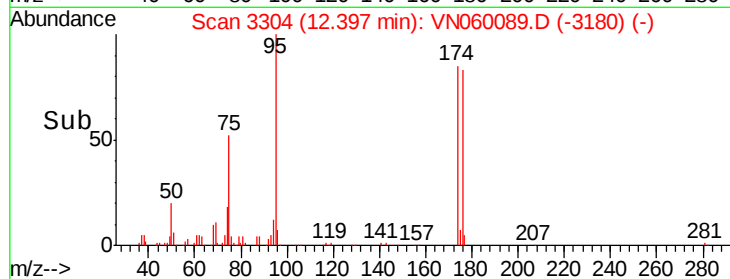
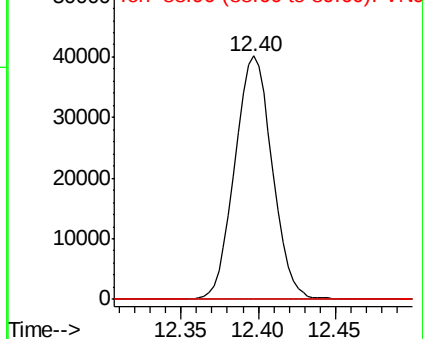
89 0.0 37.0 55.4#



Abundance Ion 74.90 (74.60 to 75.60): VN060069.D (-3263) (-)

Ion 53.00 (52.70 to 53.70): VN060069.D (-3263) (-)

Ion 88.90 (88.60 to 89.60): VN060069.D (-3263) (-)



#90

Hexachloroethane

Concen: 0.321 ug/l

RT: 13.99 min Scan# 3801

Delta R.T. 0.13 min

Lab File: VN060089.D

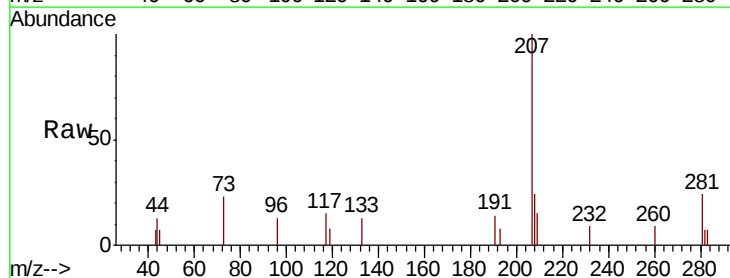
Acq: 13 Feb 2020 13:06

Tgt Ion: 117 Resp: 509

Ion Ratio Lower Upper

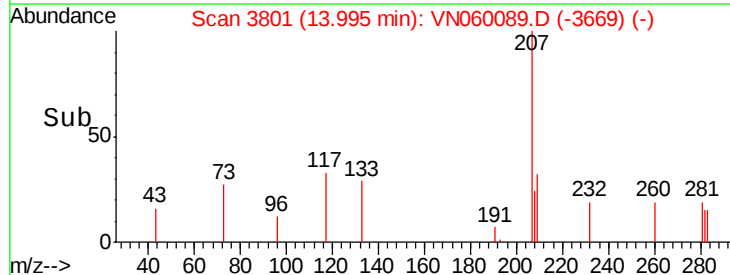
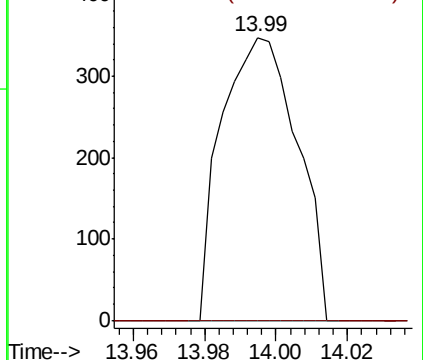
117 100

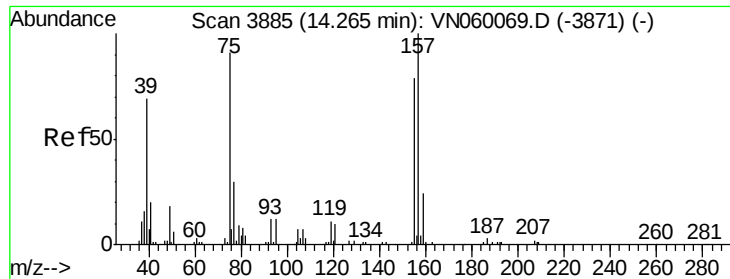
201 0.0 41.7 125.1#



Abundance Ion 116.80 (116.50 to 117.50): VN060069.D (-3749) (-)

Ion 200.70 (200.40 to 201.40): VN060069.D (-3749) (-)





#92

1,2-Dibromo-3-Chloropropane

Concen: Below Cal

RT: 14.26 min Scan# 3885

Delta R.T. 0.00 min

Lab File: VN060089.D

Acq: 13 Feb 2020 13:06

Instrument :

MSVOA\_N

ClientSampleId :

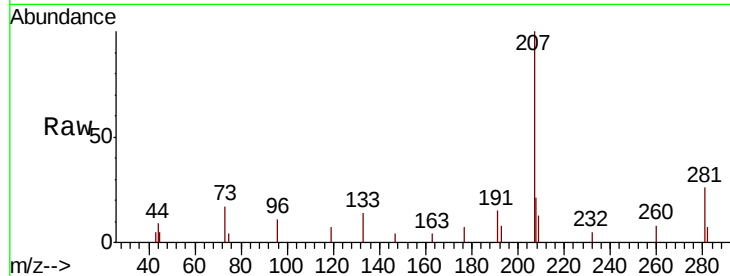
Tot Ion: 75 Resp: 61

Ion Ratio Lower Upper

75 100

155 0.0 43.0 129.0#

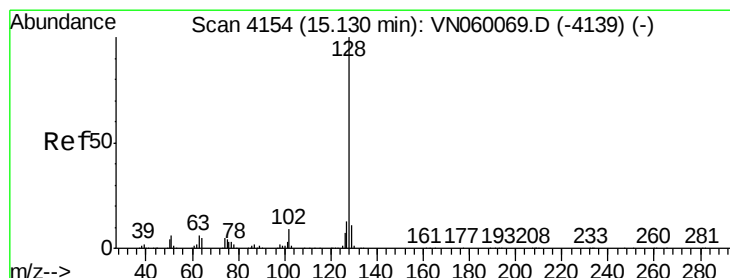
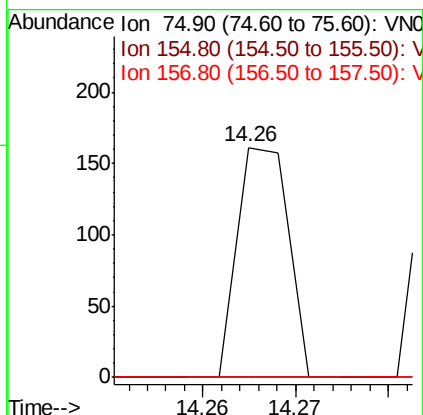
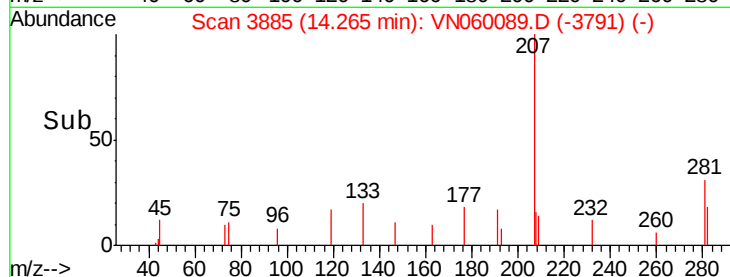
157 0.0 54.9 164.5#



Abundance Ion 74.90 (74.60 to 75.60): VN060089.D (-3871) (-)

Ion 154.80 (154.50 to 155.50): VN060089.D (-3871) (-)

Ion 156.80 (156.50 to 157.50): VN060089.D (-3871) (-)



#95

Naphthalene

Concen: 2.554 ug/l

RT: 15.13 min Scan# 4154

Delta R.T. 0.00 min

Lab File: VN060089.D

Acq: 13 Feb 2020 13:06

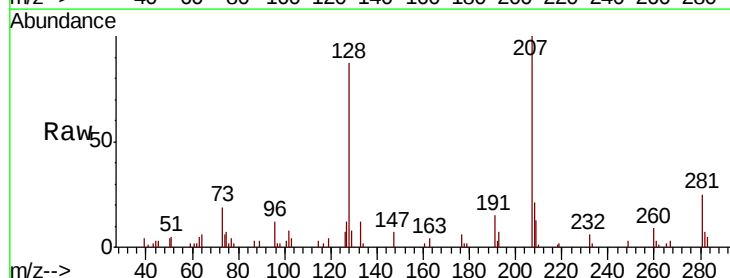
Tgt Ion: 128 Resp: 16775

Ion Ratio Lower Upper

128 100

127 13.0 10.3 15.5

129 10.0 8.6 13.0



Abundance Ion 128.00 (127.70 to 128.70): VN060089.D (-4139) (-)

Ion 127.00 (126.70 to 127.70): VN060089.D (-4139) (-)

Ion 129.00 (128.70 to 129.70): VN060089.D (-4139) (-)

