

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN082020\  
 Data File : VN063056.D  
 Acq On : 21 Aug 2020 00:28  
 Operator : JC/MD  
 Sample : L3722-02  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 36 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 GW-02RE

Quant Time: Aug 21 06:40:37 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N081820W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Aug 19 06:09:27 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.63  | 168  | 135445   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 228480   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 229826   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 82753    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.99  | 65   | 92391    | 57.55 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 115.10% |          |
| 35) Dibromofluoromethane    | 7.55  | 113  | 78838    | 52.96 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.92% |          |
| 50) Toluene-d8              | 10.06 | 98   | 293484   | 51.32 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.64% |          |
| 62) 4-Bromofluorobenzene    | 12.38 | 95   | 93673    | 46.42 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.84%  |          |

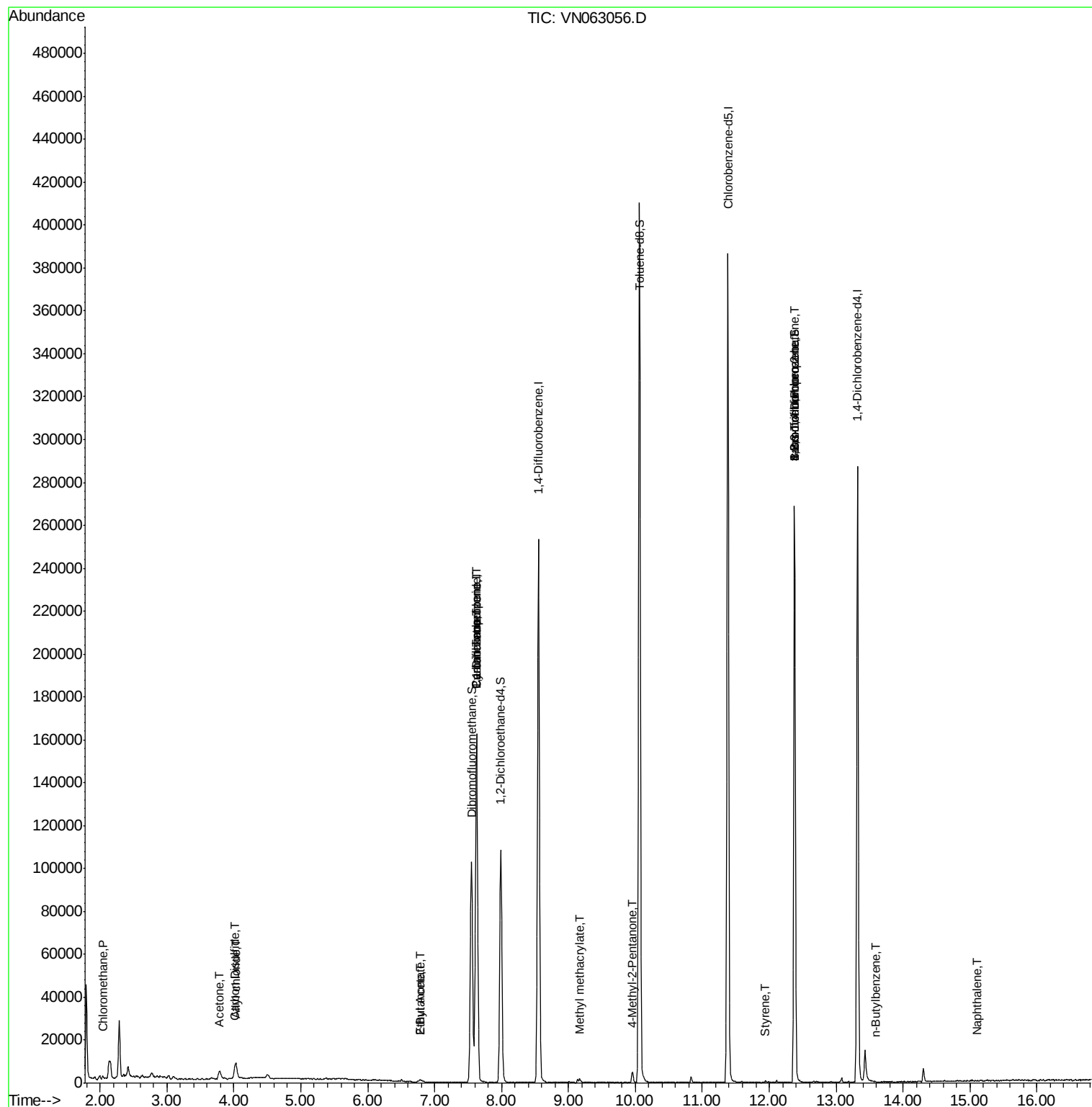
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 2.04  | 50   | 1368     | 0.737     | ug/l   | 90     |
| 14) Allyl chloride             | 4.02  | 41   | 408      | 0.201     | ug/l # | 1      |
| 16) Acetone                    | 3.78  | 43   | 7163     | 10.552    | ug/l   | 96     |
| 17) Carbon Disulfide           | 4.01  | 76   | 5428     | 1.803     | ug/l   | 100    |
| 20) Methylene Chloride         | 4.50  | 84   | 1193     | Below Cal | #      | 85     |
| 25) 2-Butanone                 | 6.80  | 43   | 524      | 0.615     | ug/l # | 48     |
| 31) Cyclohexane                | 7.63  | 56   | 2515     | 1.063     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.63  | 75   | 10307    | 5.119     | ug/l # | 49     |
| 37) Ethyl Acetate              | 6.80  | 43   | 524      | 0.278     | ug/l # | 68     |
| 38) Carbon Tetrachloride       | 7.63  | 117  | 12054    | 5.930     | ug/l # | 16     |
| 48) Methyl methacrylate        | 9.17  | 41   | 1595     | 1.079     | ug/l # | 55     |
| 51) 4-Methyl-2-Pentanone       | 9.96  | 43   | 3938     | 1.993     | ug/l   | 88     |
| 70) Styrene                    | 11.94 | 104  | 541      | 2.018     | ug/l # | 83     |
| 71) Bromoform                  | 12.38 | 173  | 924      | 0.647     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.38 | 75   | 45448    | 28.254    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 45448    | 77.599    | ug/l # | 15     |
| 89) n-Butylbenzene             | 13.59 | 91   | 104      | 2.792     | ug/l # | 34     |
| 95) Naphthalene                | 15.11 | 128  | 213      | 5.700     | ug/l # | 69     |

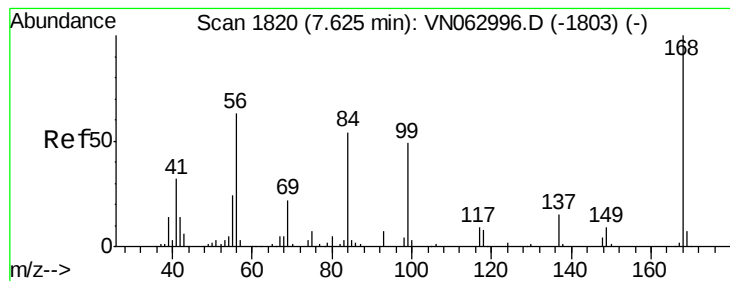
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN082020\  
Data File : VN063056.D  
Acq On : 21 Aug 2020 00:28  
Operator : JC/MD  
Sample : L3722-02  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 36 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
GW-02RE

Quant Time: Aug 21 06:40:37 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N081820W.M  
Quant Title : SW846 8260  
QLast Update : Wed Aug 19 06:09:27 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.63 min Scan# 1820

Delta R.T. 0.00 min

Lab File: VN063056.D

Acq: 21 Aug 2020 00:28

Instrument :

MSVOA\_N

ClientSampleId :

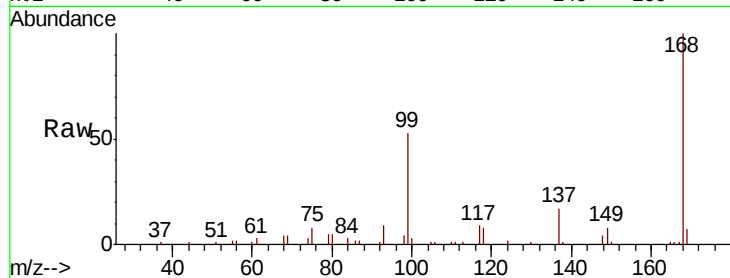
GW-02RE

Tot Ion:168 Resp: 135445

Ion Ratio Lower Upper

168 100

99 53.0 42.0 63.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

60000

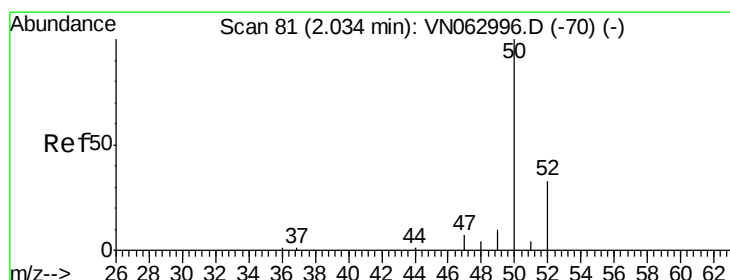
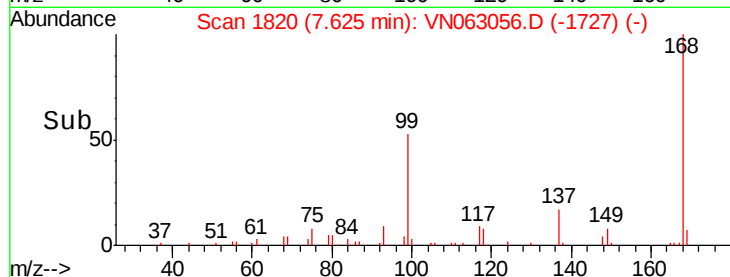
40000

20000

0

7.50 7.60 7.70

Time-->



#3

Chloromethane

Concen: 0.737 ug/l

RT: 2.04 min Scan# 82

Delta R.T. 0.00 min

Lab File: VN063056.D

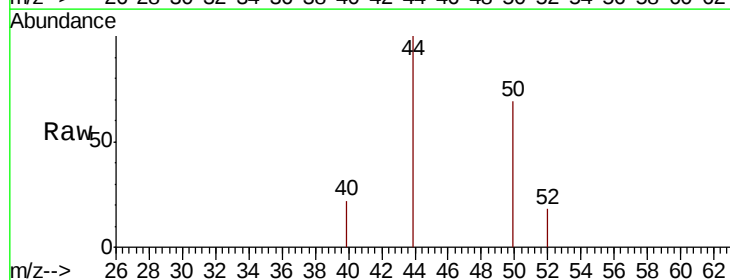
Acq: 21 Aug 2020 00:28

Tgt Ion: 50 Resp: 1368

Ion Ratio Lower Upper

50 100

52 26.8 26.0 39.0



Abundance Ion 49.90 (49.60 to 50.60): VN

Ion 51.90 (51.60 to 52.60): VN

1200

1000

800

600

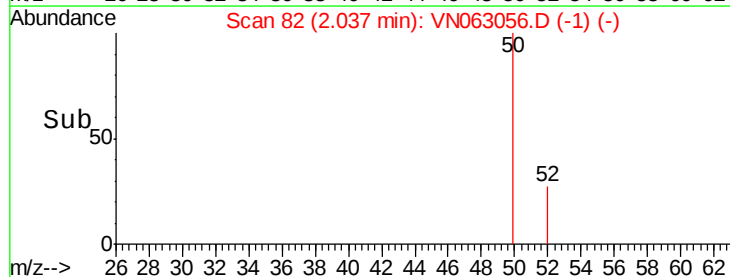
400

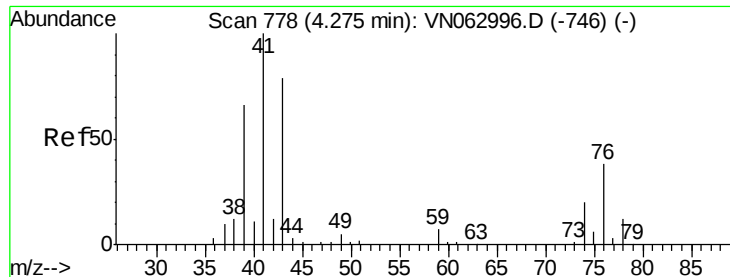
200

0

2.00 2.02 2.04 2.06 2.08

Time-->





#14

Allvl chloride

Concen: 0.201 ug/l

RT: 4.02 min Scan# 698

Delta R.T. -0.26 min

Lab File: VN063056.D

Acq: 21 Aug 2020 00:28

Instrument :

MSVOA\_N

ClientSampleId :

GW-02RE

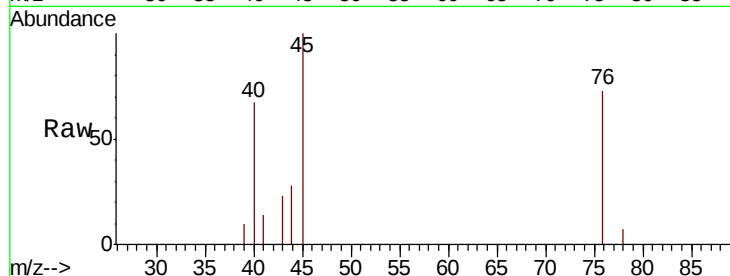
Tot Ion: 41 Resp: 408

Ion Ratio Lower Upper

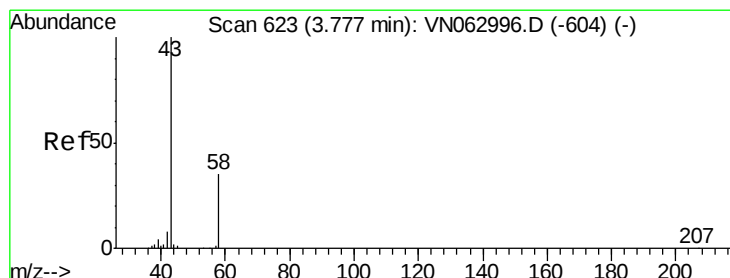
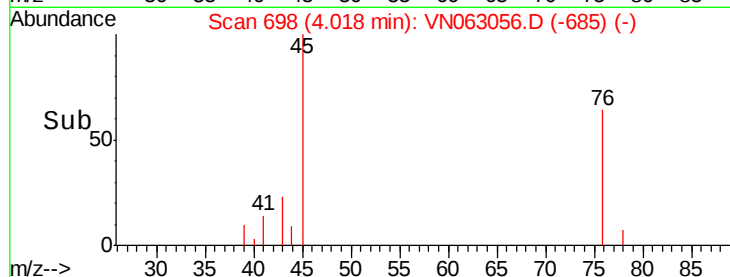
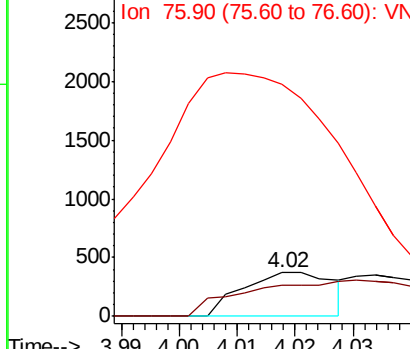
41 100

39 0.0 47.9 71.9#

76 1267.2 27.0 40.6#



Abundance Ion 41.00 (40.70 to 41.70): VN0  
Ion 39.00 (38.70 to 39.70): VN0  
Ion 75.90 (75.60 to 76.60): VN0



#16

Acetone

Concen: 10.552 ug/l

RT: 3.78 min Scan# 625

Delta R.T. 0.01 min

Lab File: VN063056.D

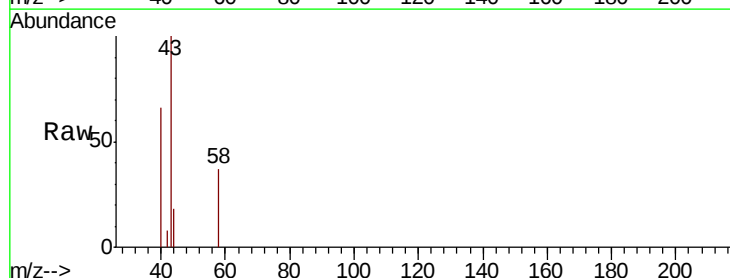
Acq: 21 Aug 2020 00:28

Tgt Ion: 43 Resp: 7163

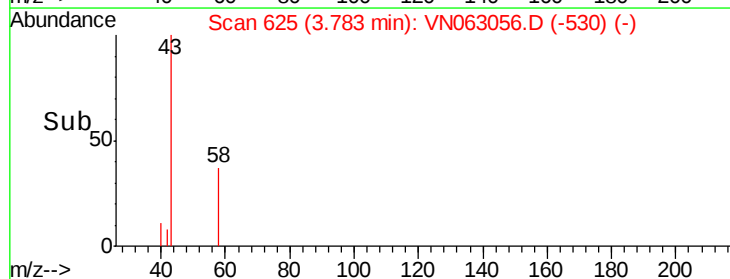
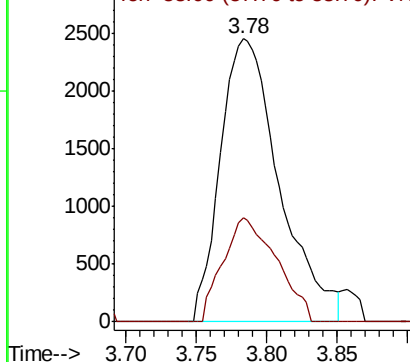
Ion Ratio Lower Upper

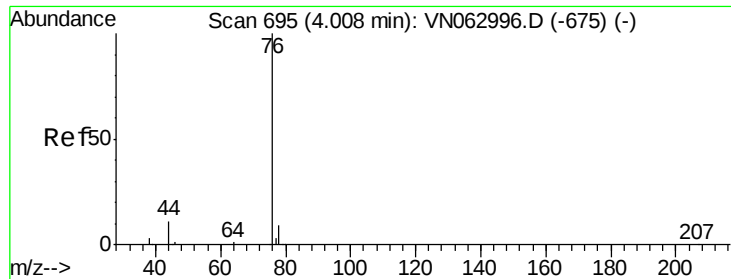
43 100

58 36.8 27.8 41.6



Abundance Ion 43.00 (42.70 to 43.70): VN0  
Ion 58.00 (57.70 to 58.70): VN0

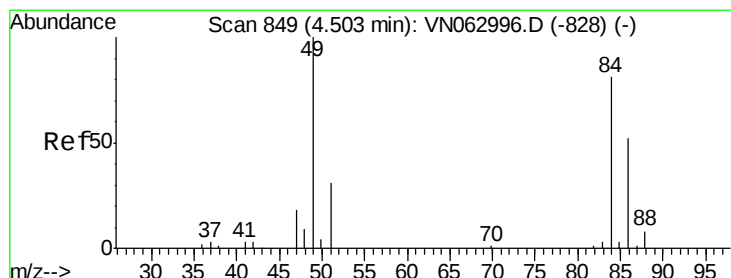
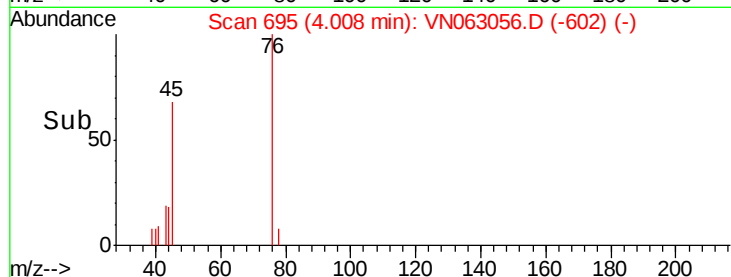
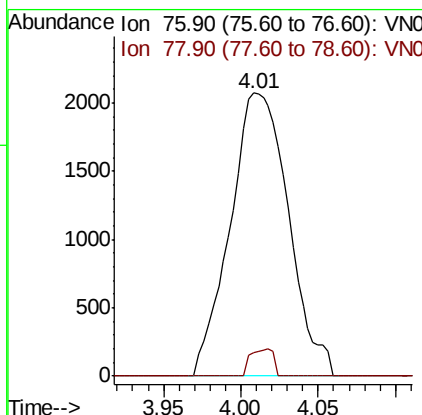
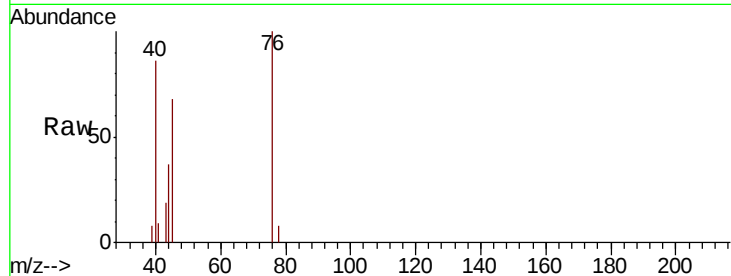




#17  
Carbon Disulfide  
Concen: 1.803 ug/l  
RT: 4.01 min Scan# 695  
Delta R.T. 0.00 min  
Lab File: VN063056.D  
Acq: 21 Aug 2020 00:28

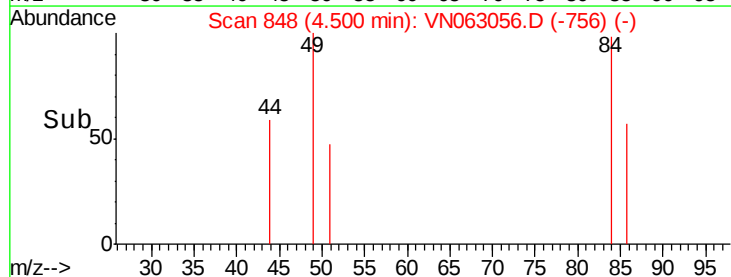
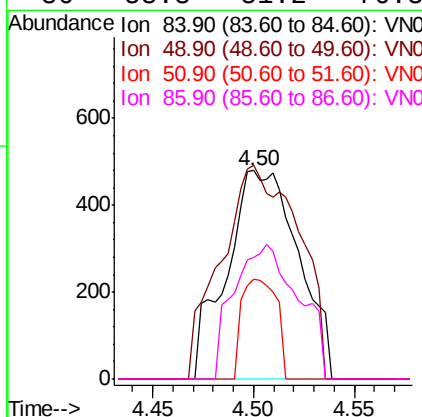
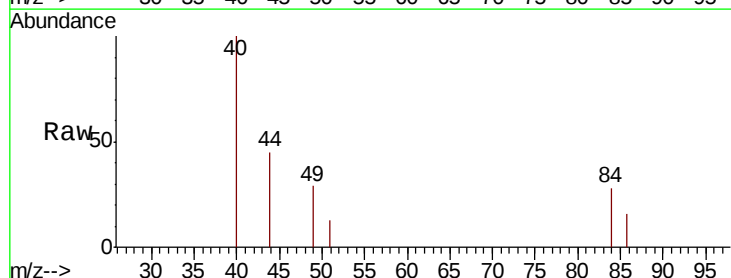
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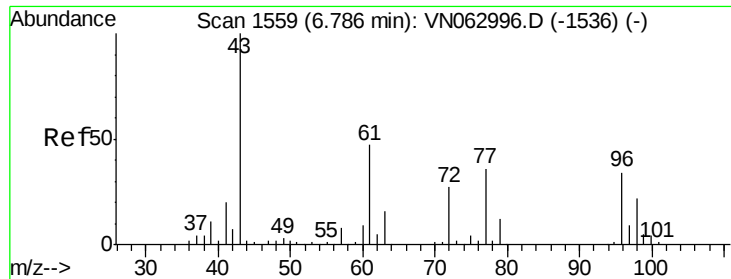
Tot Ion: 76 Resp: 5428  
Ion Ratio Lower Upper  
76 100  
78 8.4 6.9 10.3



#20  
Methylene Chloride  
Concen: Below Cal  
RT: 4.50 min Scan# 848  
Delta R.T. -0.00 min  
Lab File: VN063056.D  
Acq: 21 Aug 2020 00:28

Tgt Ion: 84 Resp: 1193  
Ion Ratio Lower Upper  
84 100  
49 102.5 98.7 148.1  
51 47.9 30.8 46.2#  
86 58.3 51.2 76.8

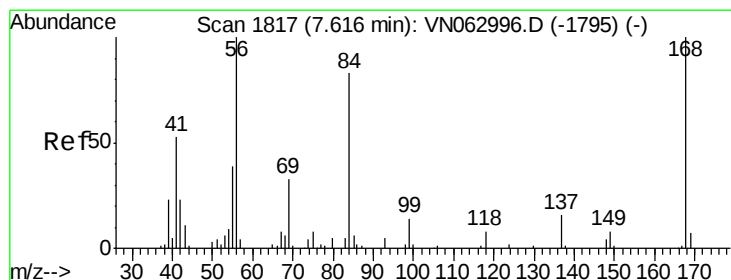
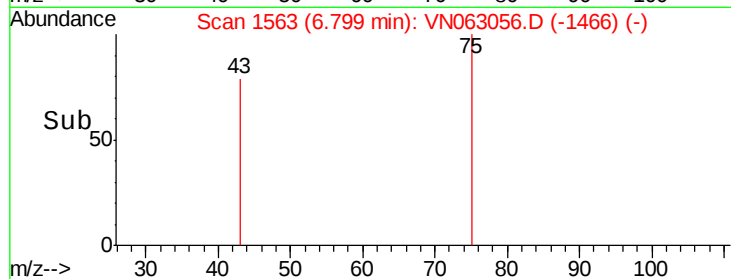
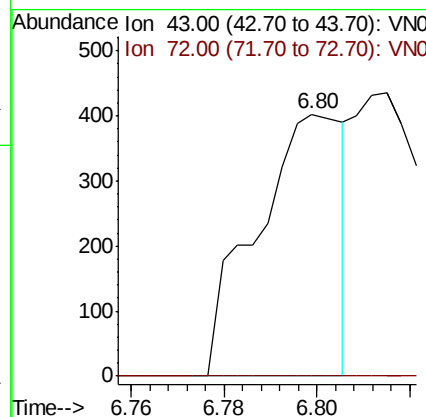
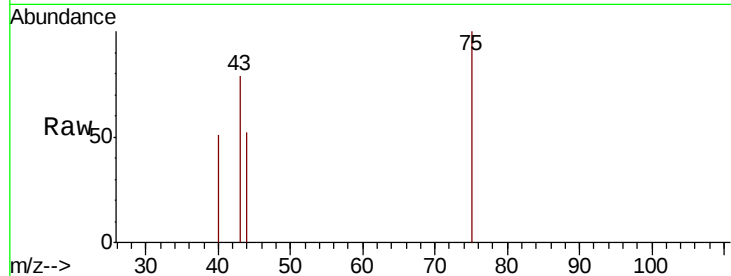




#25  
2-Butanone  
Concen: 0.615 ug/l  
RT: 6.80 min Scan# 1563  
Delta R.T. 0.01 min  
Lab File: VN063056.D  
Acq: 21 Aug 2020 00:28

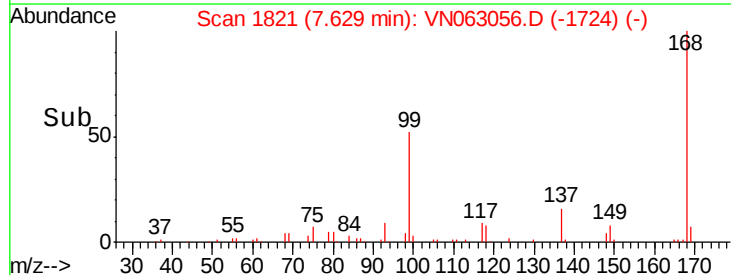
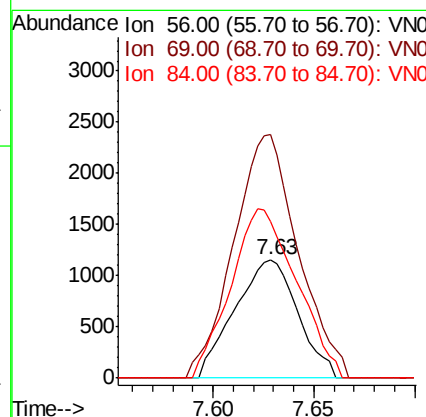
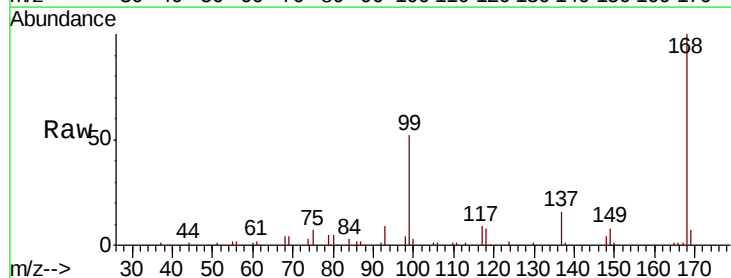
Instrument :  
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ClientSampleId :  
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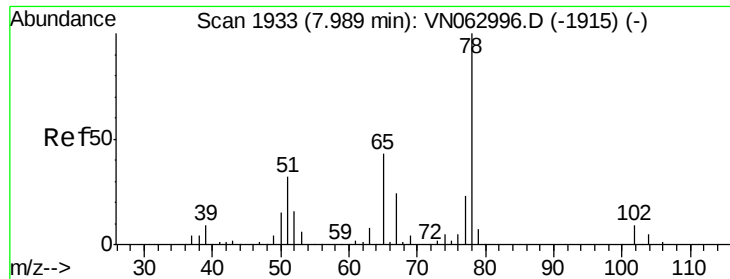
Tot Ion: 43 Resp: 524  
Ion Ratio Lower Upper  
43 100  
72 0.0 21.8 32.6#



#31  
Cyclohexane  
Concen: 1.063 ug/l  
RT: 7.63 min Scan# 1821  
Delta R.T. 0.01 min  
Lab File: VN063056.D  
Acq: 21 Aug 2020 00:28

Tgt Ion: 56 Resp: 2515  
Ion Ratio Lower Upper  
56 100  
69 192.1 26.6 40.0#  
84 132.7 66.4 99.6#

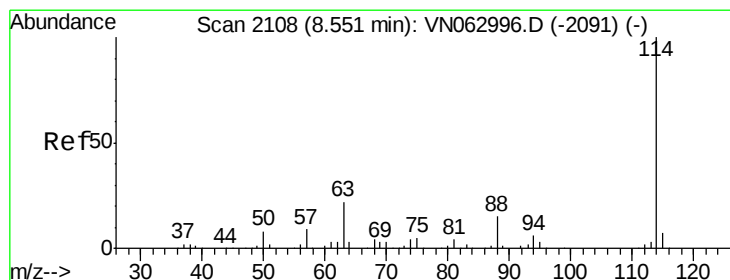
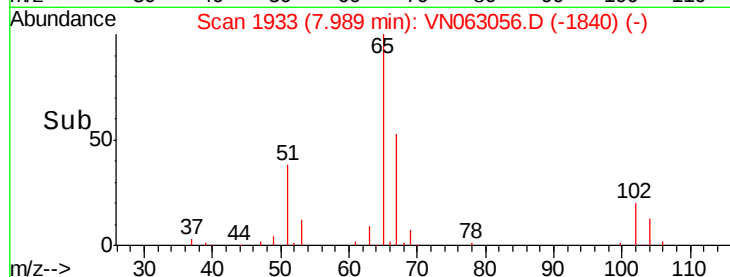
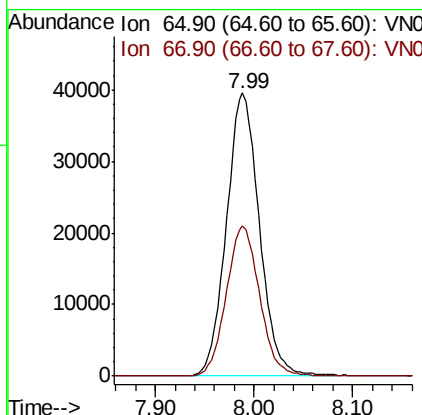
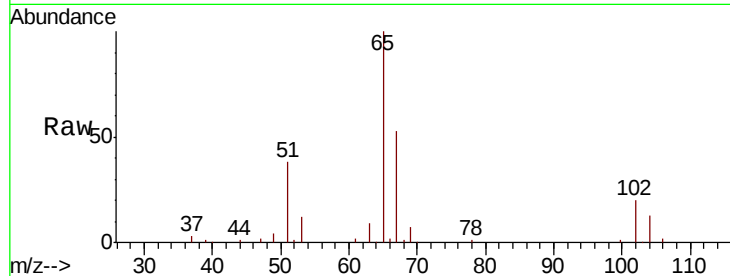




#33  
 1,2-Dichloroethane-d4  
 Concen: 57.555 ug/l  
 RT: 7.99 min Scan# 1933  
 Delta R.T. 0.00 min  
 Lab File: VN063056.D  
 Acq: 21 Aug 2020 00:28

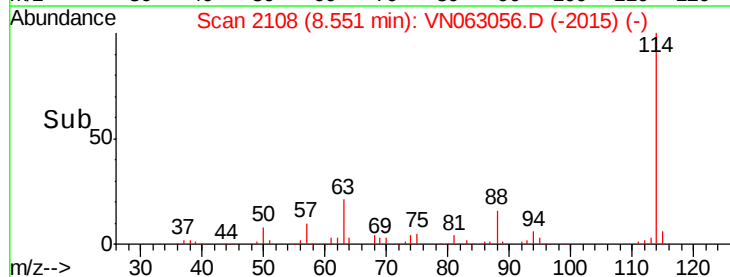
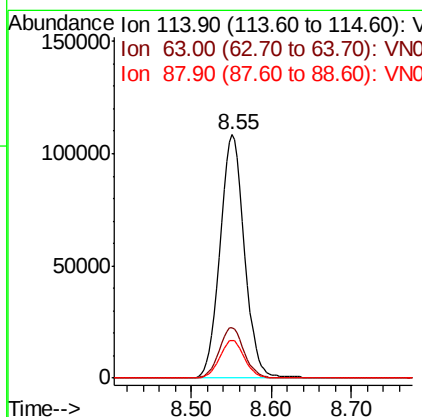
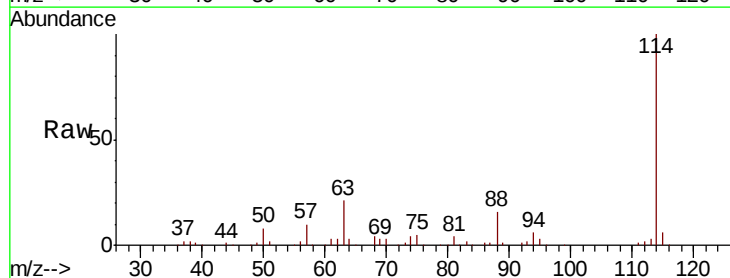
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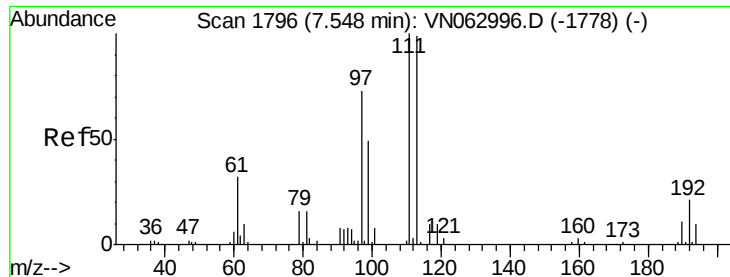
Tot Ion: 65 Resp: 92391  
 Ion Ratio Lower Upper  
 65 100  
 67 53.3 0.0 112.0



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.55 min Scan# 2108  
 Delta R.T. 0.00 min  
 Lab File: VN063056.D  
 Acq: 21 Aug 2020 00:28

Tgt Ion: 114 Resp: 228480  
 Ion Ratio Lower Upper  
 114 100  
 63 20.9 0.0 43.2  
 88 15.7 0.0 30.6

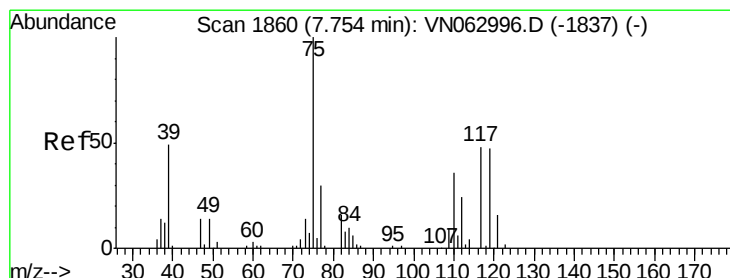
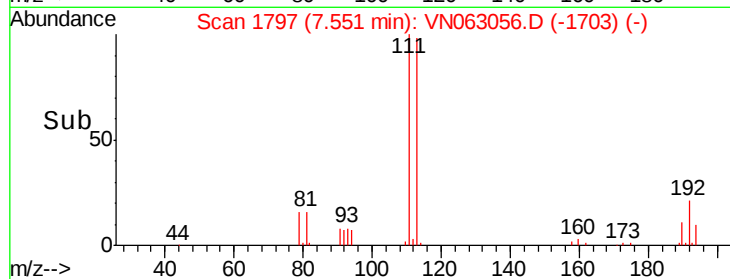
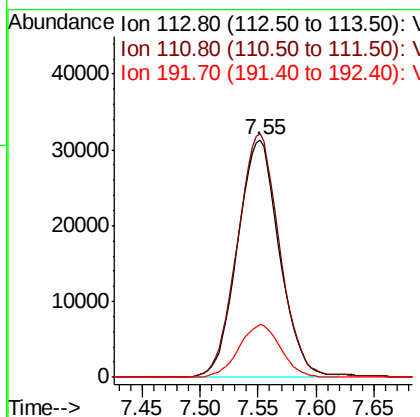
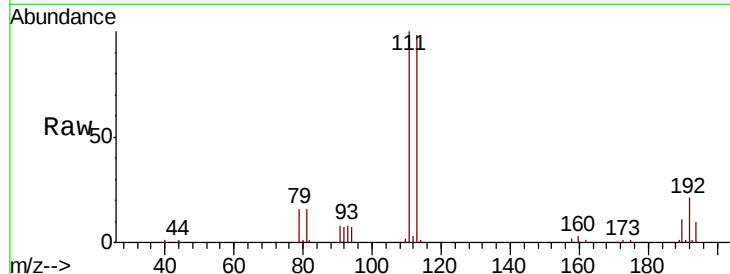




#35  
 Dibromofluoromethane  
 Concen: 52.955 ug/l  
 RT: 7.55 min Scan# 1797  
 Delta R.T. 0.00 min  
 Lab File: VN063056.D  
 Acq: 21 Aug 2020 00:28

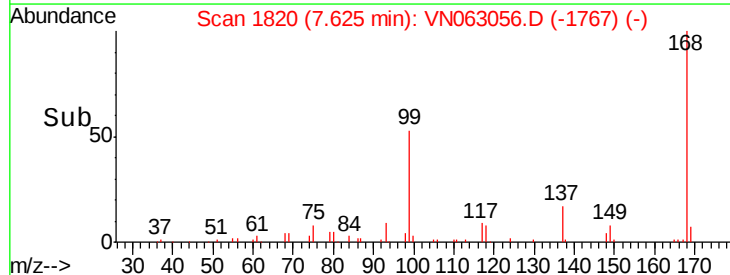
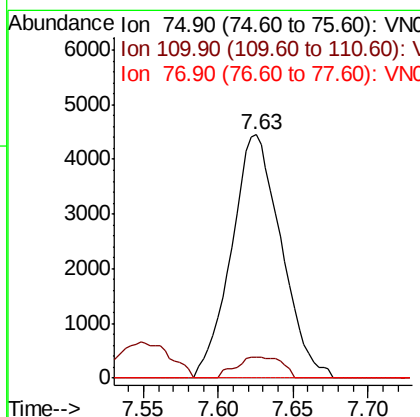
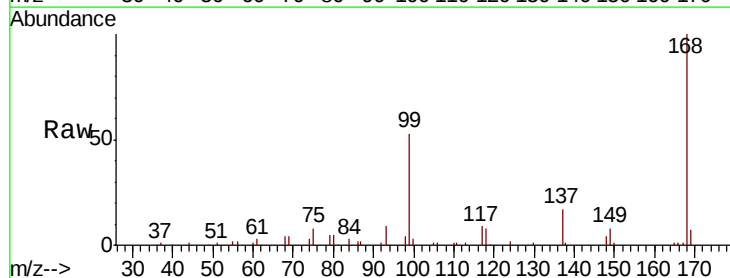
Instrument :  
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 GW-02RE

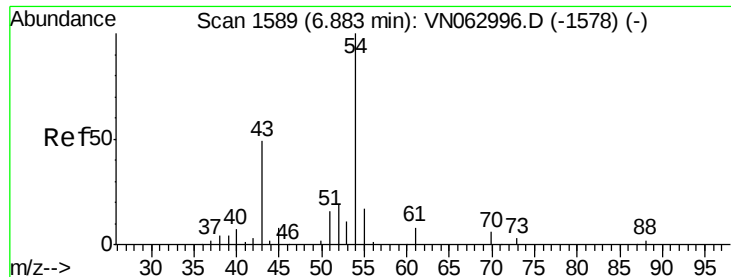
Tot Ion:113 Resp: 78838  
 Ion Ratio Lower Upper  
 113 100  
 111 102.9 81.7 122.5  
 192 22.1 17.5 26.3



#36  
 1,1-Dichloropropene  
 Concen: 5.119 ug/l  
 RT: 7.63 min Scan# 1820  
 Delta R.T. -0.13 min  
 Lab File: VN063056.D  
 Acq: 21 Aug 2020 00:28

Tgt Ion: 75 Resp: 10307  
 Ion Ratio Lower Upper  
 75 100  
 110 8.0 17.5 52.6#  
 77 0.0 24.2 36.4#

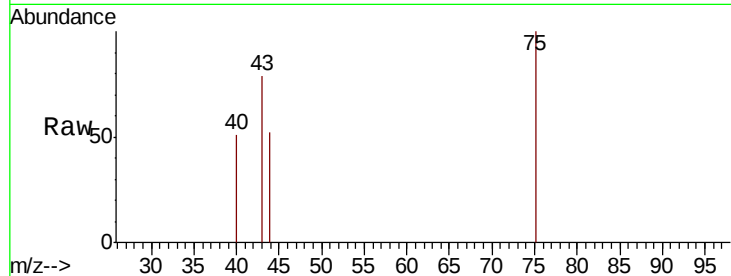




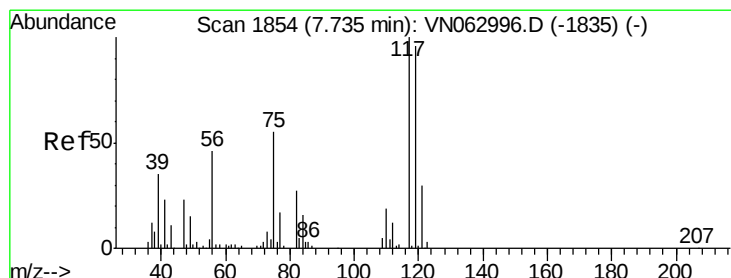
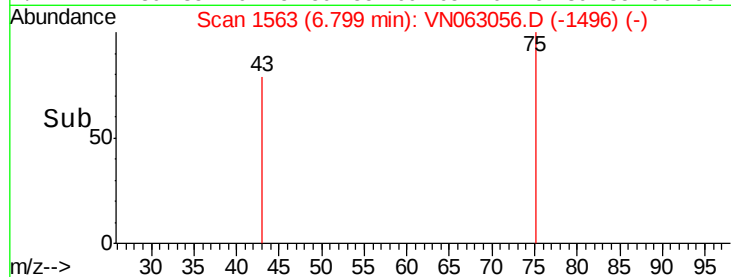
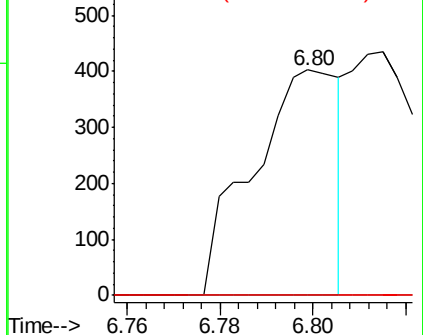
#37  
Ethyl Acetate  
Concen: 0.278 ug/l  
RT: 6.80 min Scan# 1563  
Delta R.T. -0.08 min  
Lab File: VN063056.D  
Acq: 21 Aug 2020 00:28

Instrument :  
MSVOA\_N  
ClientSampleId :  
GW-02RE

Tot Ion: 43 Resp: 524  
Ion Ratio Lower Upper  
43 100  
61 0.0 11.8 17.8#  
70 0.0 8.2 12.2#

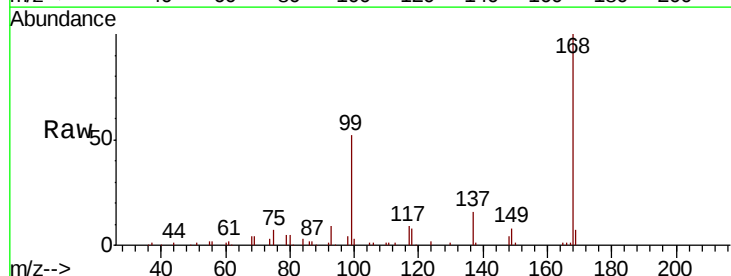


Abundance Ion 43.00 (42.70 to 43.70): VN062996.D (-1578) (-)  
Ion 60.90 (60.60 to 61.60): VN062996.D (-1578) (-)  
Ion 70.00 (69.70 to 70.70): VN062996.D (-1578) (-)

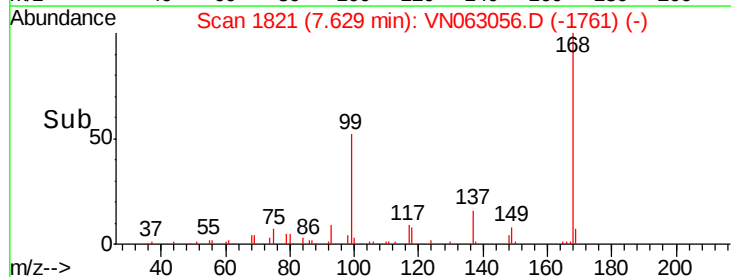
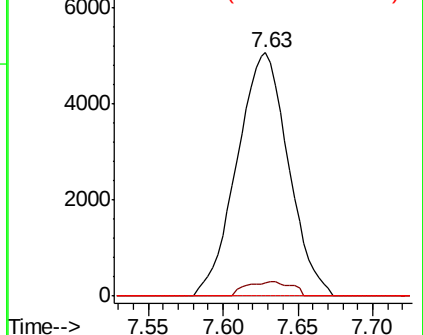


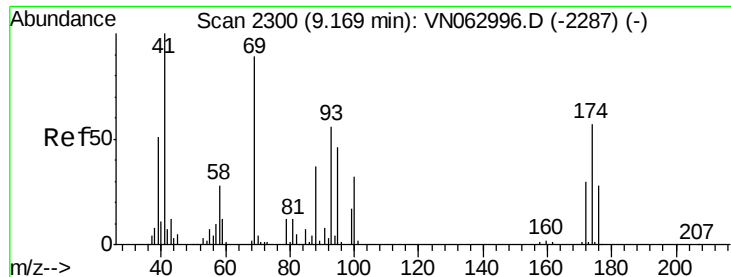
#38  
Carbon Tetrachloride  
Concen: 5.930 ug/l  
RT: 7.63 min Scan# 1821  
Delta R.T. -0.11 min  
Lab File: VN063056.D  
Acq: 21 Aug 2020 00:28

Tgt Ion: 117 Resp: 12054  
Ion Ratio Lower Upper  
117 100  
119 5.2 76.2 114.4#  
121 0.0 24.2 36.2#



Abundance Ion 116.80 (116.50 to 117.50): VN062996.D (-1835) (-)  
Ion 118.80 (118.50 to 119.50): VN062996.D (-1835) (-)  
Ion 120.80 (120.50 to 121.50): VN062996.D (-1835) (-)

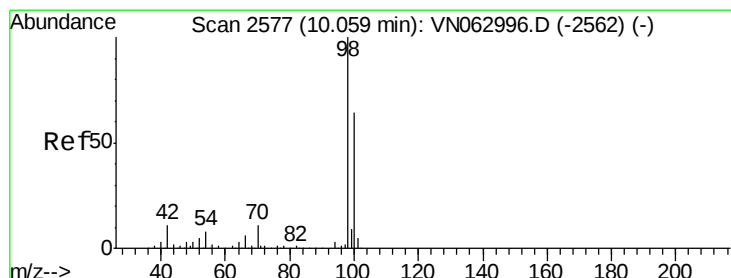
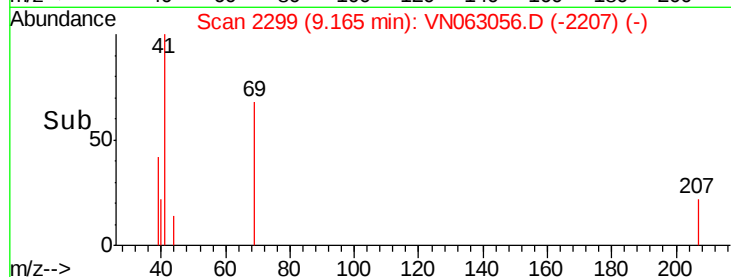
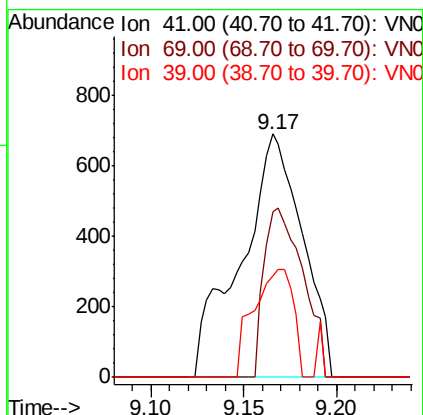
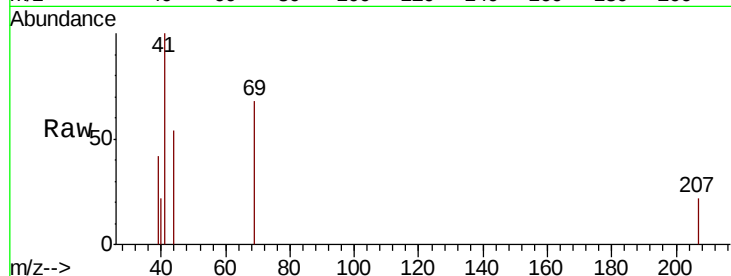




#48  
Methvl methacrylate  
Concen: 1.079 ug/l  
RT: 9.17 min Scan# 2299  
Delta R.T. -0.00 min  
Lab File: VN063056.D  
Acq: 21 Aug 2020 00:28

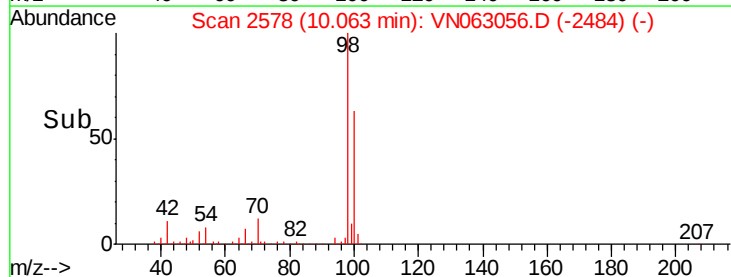
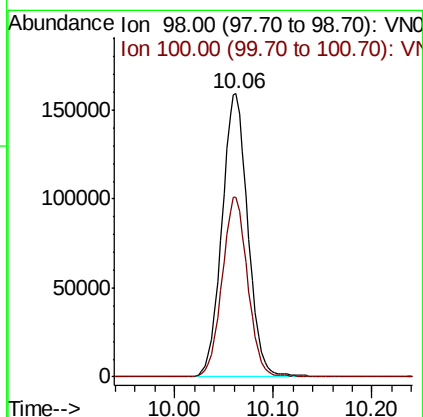
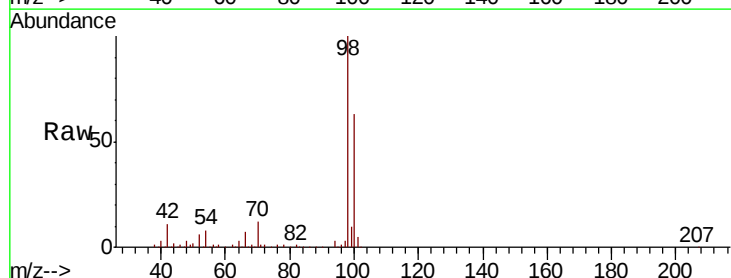
Instrument :  
MSVOA\_N  
ClientSampleId :  
GW-02RE

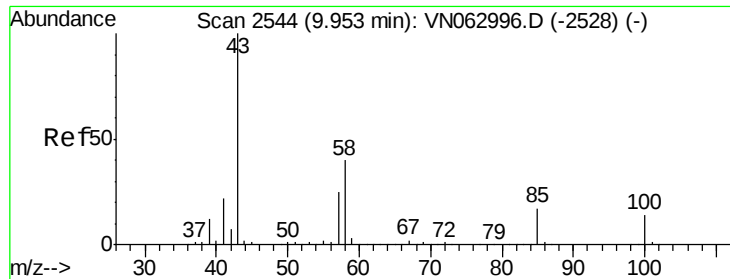
Tot Ion: 41 Resp: 1595  
Ion Ratio Lower Upper  
41 100  
69 43.9 74.2 111.4#  
39 28.4 42.5 63.7#



#50  
Toluene-d8  
Concen: 51.322 ug/l  
RT: 10.06 min Scan# 2578  
Delta R.T. 0.00 min  
Lab File: VN063056.D  
Acq: 21 Aug 2020 00:28

Tgt Ion: 98 Resp: 293484  
Ion Ratio Lower Upper  
98 100  
100 62.6 51.2 76.8





#51

4-Methyl-2-Pentanone

Concen: 1.993 ug/l

RT: 9.96 min Scan# 2545

Delta R.T. 0.00 min

Lab File: VN063056.D

Acq: 21 Aug 2020 00:28

Instrument :

MSVOA\_N

ClientSampleId :

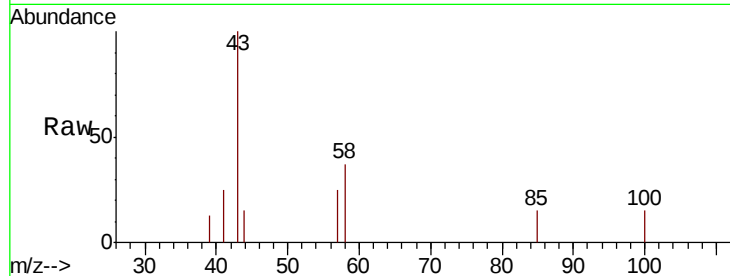
GW-02RE

Tot Ion: 43 Resp: 3938

Ion Ratio Lower Upper

43 100

58 32.5 32.2 48.2



Abundance Ion 43.00 (42.70 to 43.70): VN062996.D (-2528) (-)

Ion 58.00 (57.70 to 58.70): VN062996.D (-2528) (-)

9.96

2000

1500

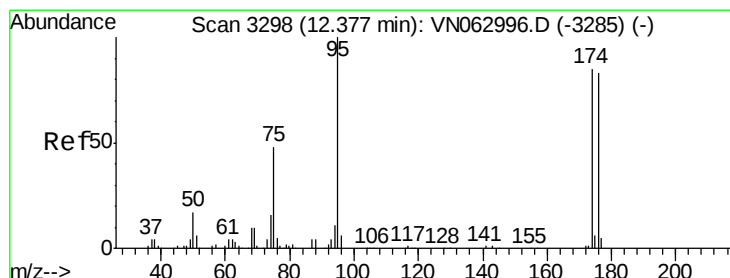
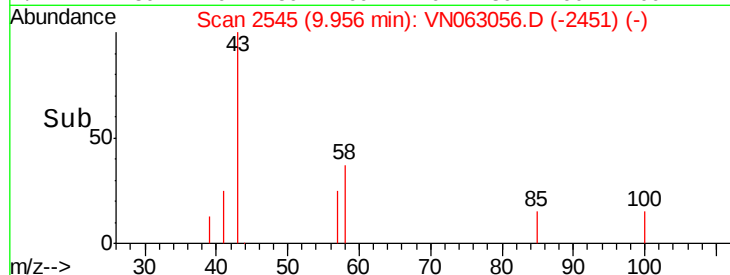
1000

500

0

9.90 9.95 10.00

Time-->



#62

4-Bromofluorobenzene

Concen: 46.420 ug/l

RT: 12.38 min Scan# 3298

Delta R.T. 0.00 min

Lab File: VN063056.D

Acq: 21 Aug 2020 00:28

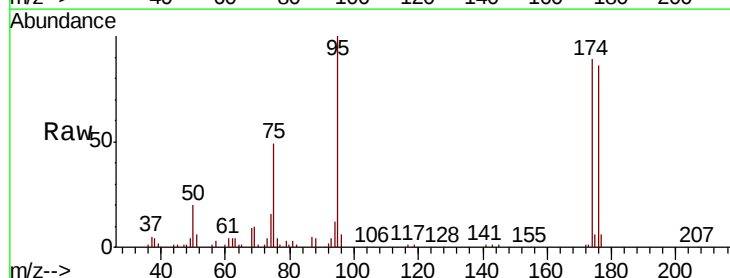
Tgt Ion: 95 Resp: 93673

Ion Ratio Lower Upper

95 100

174 89.1 0.0 170.8

176 84.1 0.0 164.8



Abundance Ion 94.90 (94.60 to 95.60): VN062996.D (-3285) (-)

Ion 173.80 (173.50 to 174.50): VN062996.D (-3285) (-)

Ion 175.80 (175.50 to 176.50): VN062996.D (-3285) (-)

12.38

60000

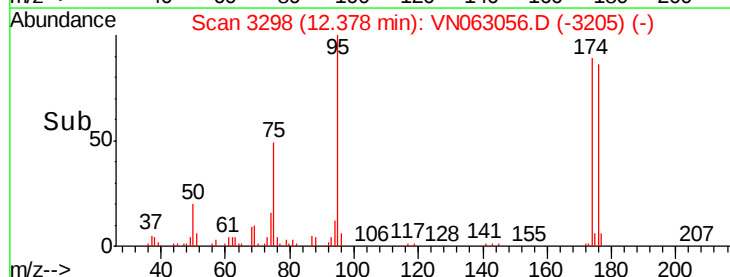
40000

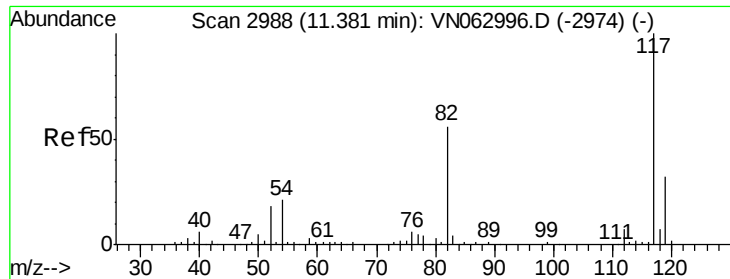
20000

0

12.30 12.35 12.40 12.45

Time-->

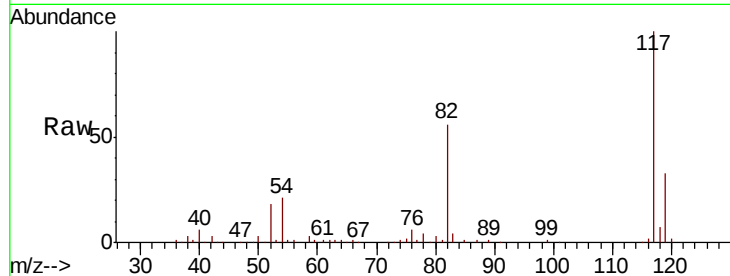




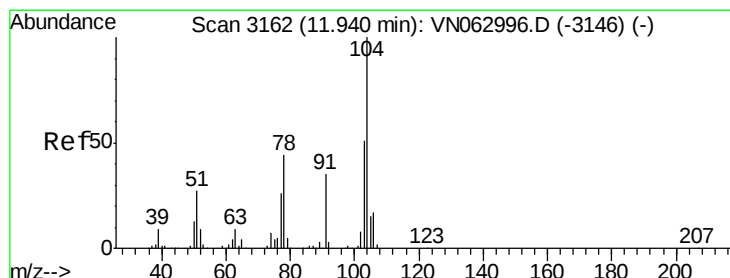
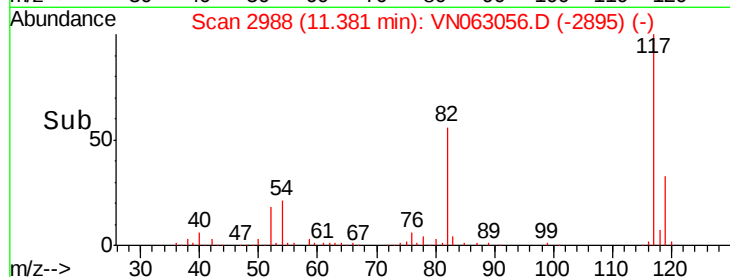
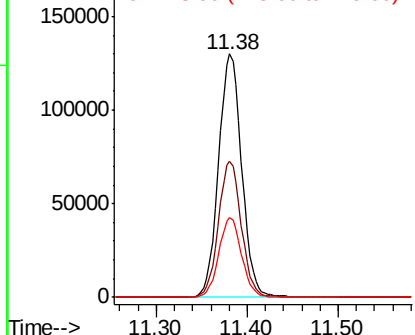
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.38 min Scan# 2988  
Delta R.T. 0.00 min  
Lab File: VN063056.D  
Acq: 21 Aug 2020 00:28

Instrument :  
MSVOA\_N  
ClientSampleId :  
GW-02RE

Tot Ion:117 Resp: 229826  
Ion Ratio Lower Upper  
117 100  
82 56.1 44.5 66.7  
119 32.7 25.5 38.3

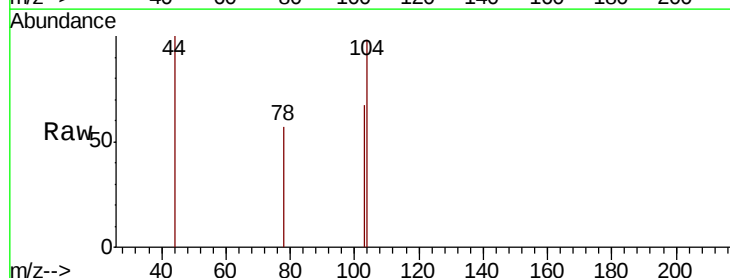


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VN  
Ion 118.90 (118.60 to 119.60): V

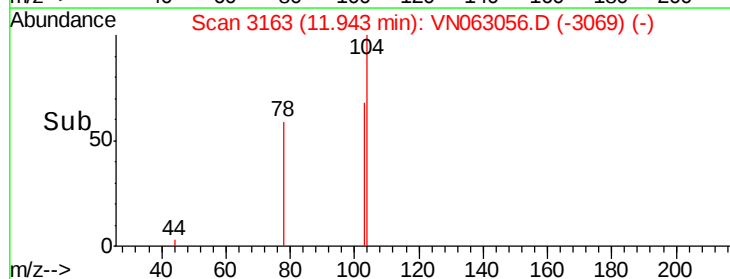
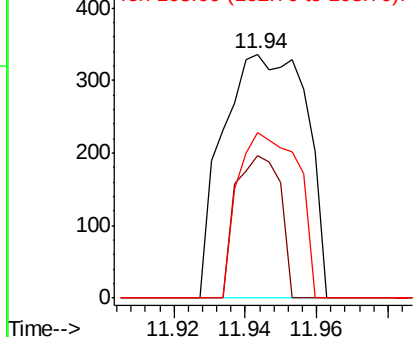


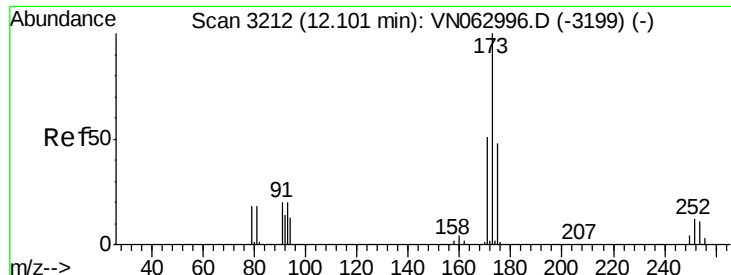
#70  
Styrene  
Concen: 2.018 ug/l  
RT: 11.94 min Scan# 3163  
Delta R.T. 0.00 min  
Lab File: VN063056.D  
Acq: 21 Aug 2020 00:28

Tgt Ion:104 Resp: 541  
Ion Ratio Lower Upper  
104 100  
78 31.2 39.0 58.6#  
103 49.2 44.3 66.5



Abundance Ion 104.00 (103.70 to 104.70): V  
Ion 78.00 (77.70 to 78.70): VN  
Ion 103.00 (102.70 to 103.70): V





#71

Bromoform

Concen: 0.647 ug/l

RT: 12.38 min Scan# 3298

Delta R.T. 0.28 min

Lab File: VN063056.D

Acq: 21 Aug 2020 00:28

Instrument :

MSVOA\_N

ClientSampled :

GW-02RE

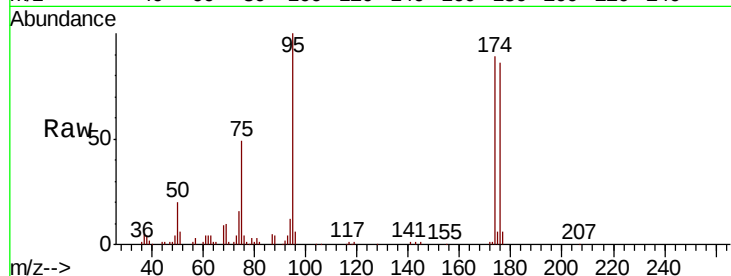
Tot Ion:173 Resp: 924

Ion Ratio Lower Upper

173 100

175 536.0 24.3 72.8#

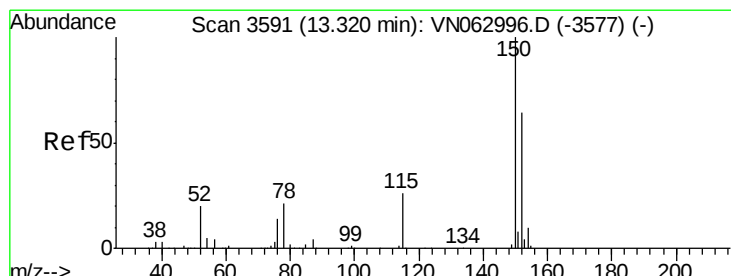
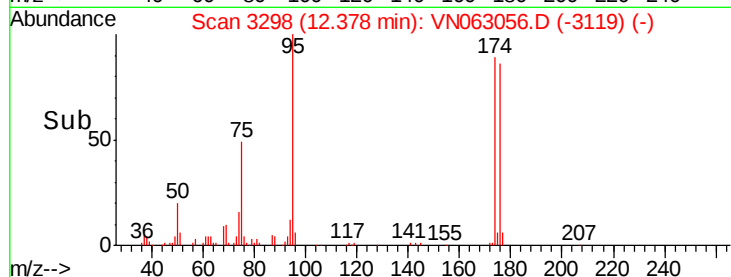
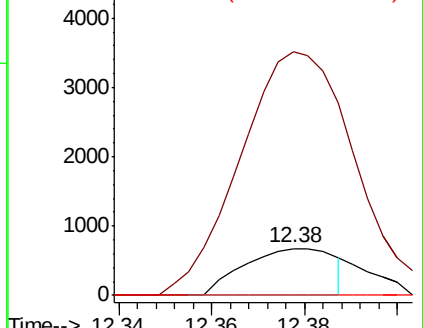
254 0.0 0.0 0.0



Abundance Ion 172.70 (172.40 to 173.40): V

Ion 174.70 (174.40 to 175.40): V

Ion 254.40 (254.10 to 255.10): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.32 min Scan# 3591

Delta R.T. 0.00 min

Lab File: VN063056.D

Acq: 21 Aug 2020 00:28

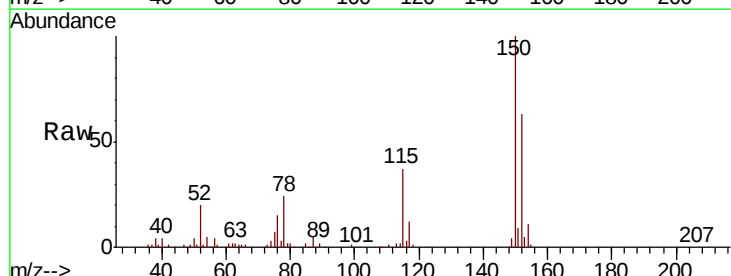
Tgt Ion:152 Resp: 82753

Ion Ratio Lower Upper

152 100

115 57.7 28.7 86.3

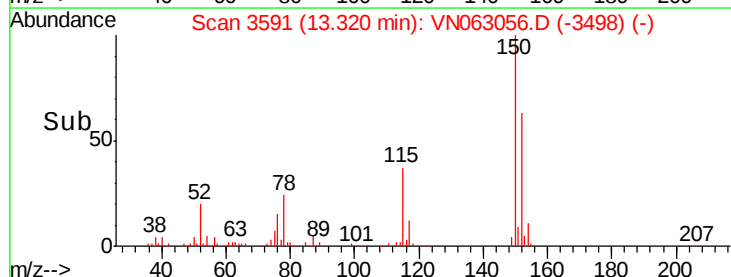
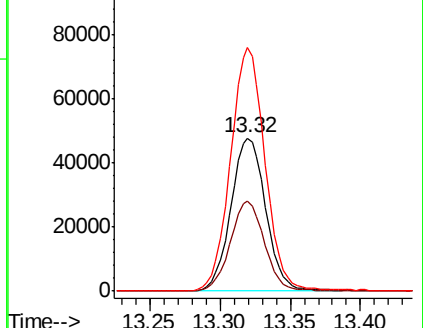
150 158.0 0.0 348.8

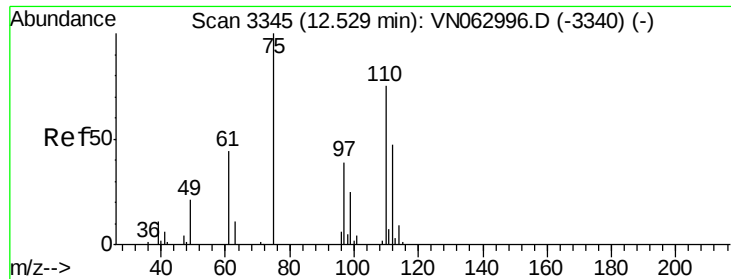


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 28.254 ug/l

RT: 12.38 min Scan# 3298

Delta R.T. -0.15 min

Lab File: VN063056.D

Acq: 21 Aug 2020 00:28

Instrument :

MSVOA\_N

ClientSampleId :

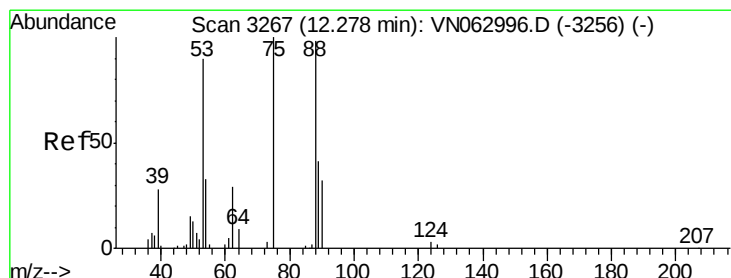
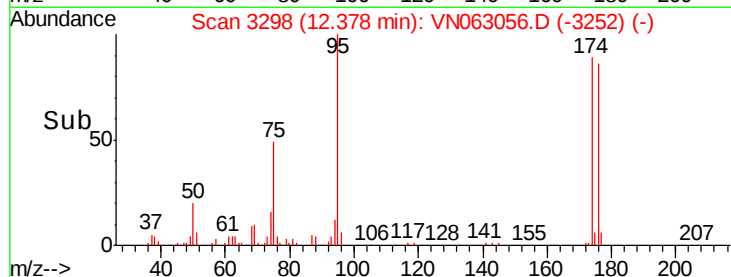
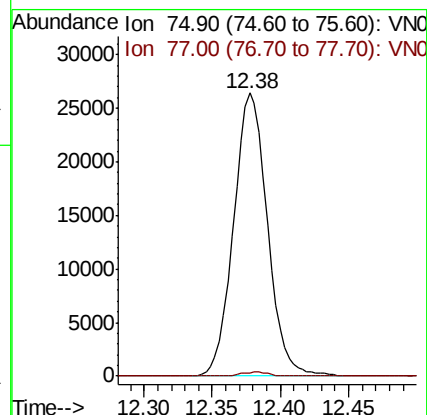
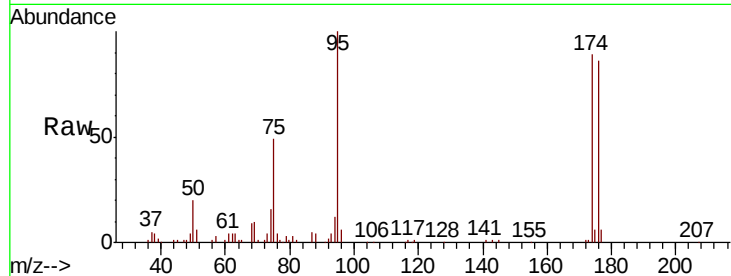
GW-02RE

Tot Ion: 75 Resp: 45448

Ion Ratio Lower Upper

75 100

77 1.1 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 77.599 ug/l

RT: 12.38 min Scan# 3298

Delta R.T. 0.10 min

Lab File: VN063056.D

Acq: 21 Aug 2020 00:28

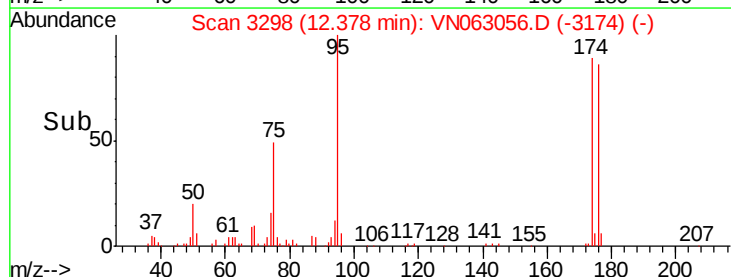
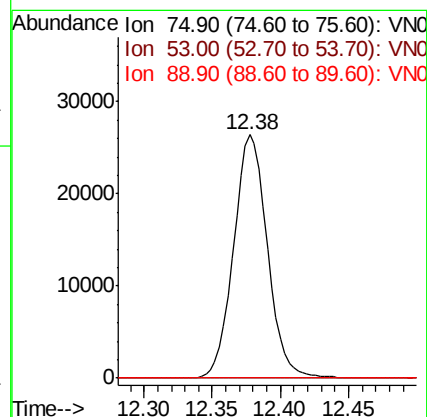
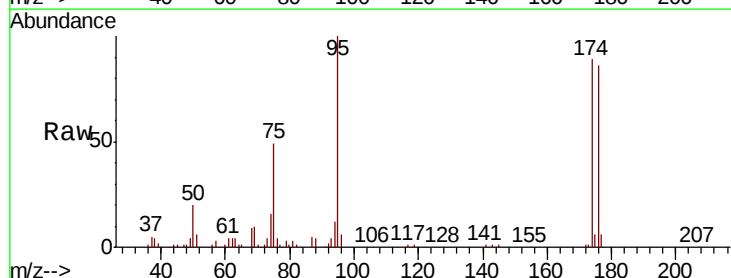
Tgt Ion: 75 Resp: 45448

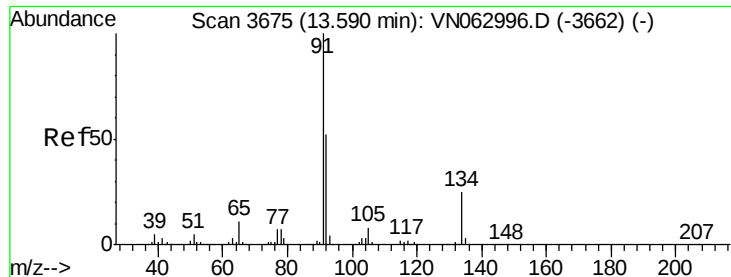
Ion Ratio Lower Upper

75 100

53 0.0 69.2 103.8#

89 0.0 34.2 51.4#

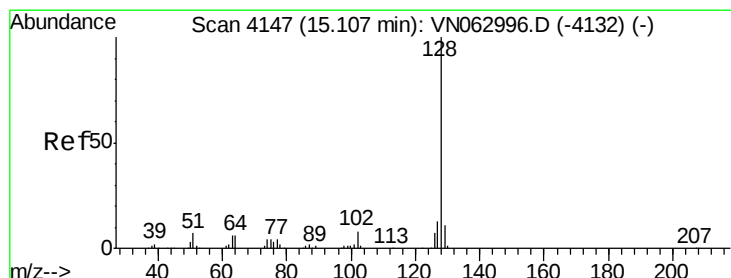
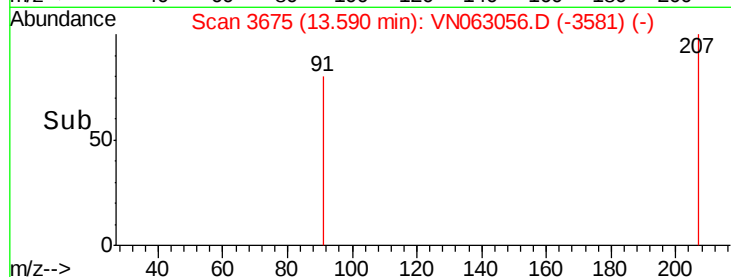
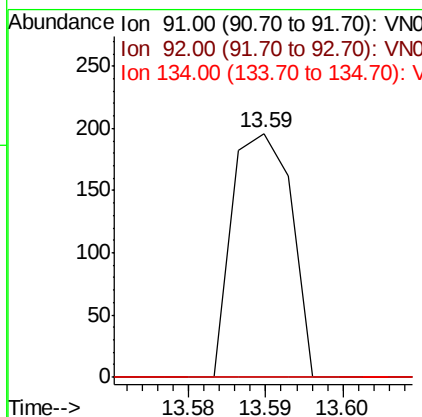
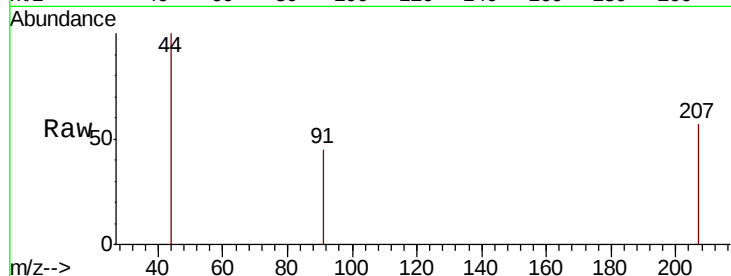




#89  
n-Butylbenzene  
Concen: 2.792 ug/l  
RT: 13.59 min Scan# 3675  
Delta R.T. 0.00 min  
Lab File: VN063056.D  
Acq: 21 Aug 2020 00:28

Instrument :  
MSVOA\_N  
ClientSampled :  
GW-02RE

Tot Ion: 91 Resp: 104  
Ion Ratio Lower Upper  
91 100  
92 0.0 25.9 77.6#  
134 0.0 12.4 37.0#



#95  
Naphthalene  
Concen: 5.700 ug/l  
RT: 15.11 min Scan# 4149  
Delta R.T. 0.01 min  
Lab File: VN063056.D  
Acq: 21 Aug 2020 00:28

Tgt Ion: 128 Resp: 213  
Ion Ratio Lower Upper  
128 100  
127 0.0 10.6 16.0#  
129 0.0 8.9 13.3#

