

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN111920\  
 Data File : VN064725.D  
 Acq On : 19 Nov 2020 11:55  
 Operator : JC/MD  
 Sample : VN1119WBL01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1119WBL01

Quant Time: Nov 20 03:43:16 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N111820W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 18 15:29:54 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.63  | 168  | 200130   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 410226   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 434041   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 180619   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 7.99   | 65  | 206314   | 58.60 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 117.20% |      |
| 35) Dibromofluoromethane  | 7.55   | 113 | 125399   | 53.71 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.42% |      |
| 50) Toluene-d8            | 10.06  | 98  | 525349   | 49.51 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.02%  |      |
| 62) 4-Bromofluorobenzene  | 12.38  | 95  | 209032   | 52.70 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.40% |      |

## Target Compounds

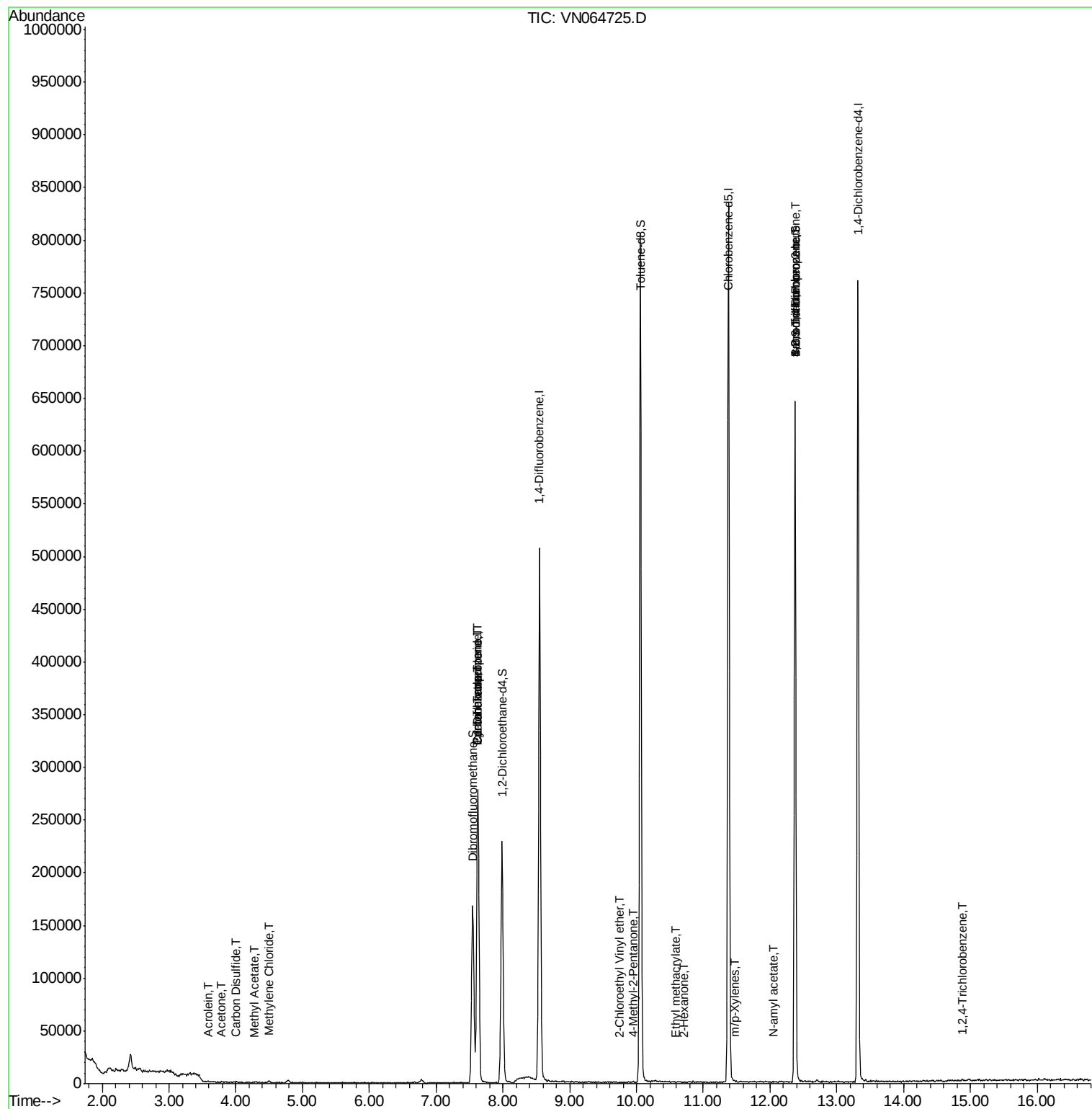
|                                |       |     |        |           |        | Qvalue |
|--------------------------------|-------|-----|--------|-----------|--------|--------|
| 13) Acrolein                   | 3.60  | 56  | 30     | 0.375     | ug/l # | 11     |
| 16) Acetone                    | 3.79  | 43  | 807    | 5.993     | ug/l # | 48     |
| 17) Carbon Disulfide           | 4.00  | 76  | 1061   | 0.300     | ug/l # | 75     |
| 18) Methyl Acetate             | 4.27  | 43  | 280    | 1.440     | ug/l # | 54     |
| 20) Methylene Chloride         | 4.51  | 84  | 546    | 0.209     | ug/l # | 26     |
| 31) Cyclohexane                | 7.63  | 56  | 6020   | 1.582     | ug/l # | 38     |
| 36) 1,1-Dichloropropene        | 7.62  | 75  | 19729  | 4.675     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 7.63  | 117 | 23600  | 5.262     | ug/l # | 16     |
| 51) 4-Methyl-2-Pentanone       | 9.96  | 43  | 328    | 6.207     | ug/l # | 39     |
| 56) Ethyl methacrylate         | 10.59 | 69  | 30     | 2.681     | ug/l # | 1      |
| 58) 2-Chloroethyl Vinyl ether  | 9.75  | 63  | 70     | 13.298    | ug/l # | 49     |
| 59) 2-Hexanone                 | 10.71 | 43  | 496    | 8.597     | ug/l # | 28     |
| 68) m/p-Xylenes                | 11.48 | 106 | 29     | 4.066     | ug/l # | 1      |
| 71) Bromoform                  | 12.37 | 173 | 383    | 2.583     | ug/l # | 1      |
| 74) N-amyl acetate             | 12.04 | 43  | 1210   | 0.202     | ug/l # | 46     |
| 76) 1,2,3-Trichloropropane     | 12.37 | 75  | 121294 | 31.167    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.37 | 75  | 121294 | 79.391    | ug/l # | 5      |
| 93) 1,2,4-Trichlorobenzene     | 14.88 | 180 | 204    | 1.395     | ug/l # | 12     |
| 94) Hexachlorobutadiene        | 14.99 | 225 | 125    | Below Cal | #      | 44     |

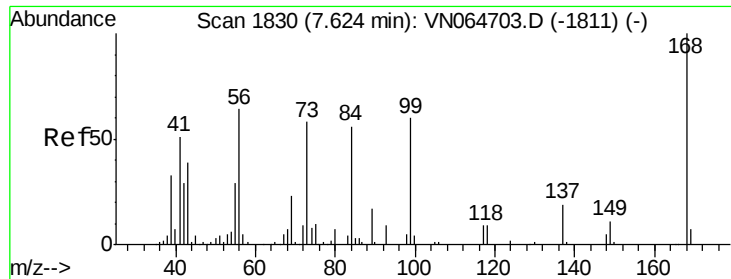
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Sample : VN1119WBL01  
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Quant Time: Nov 20 03:43:16 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N111820W.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 18 15:29:54 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.63 min Scan# 1831

Delta R.T. 0.00 min

Lab File: VN064725.D

Acq: 19 Nov 2020 11:55

Instrument :

MSVOA\_N

ClientSampleId :

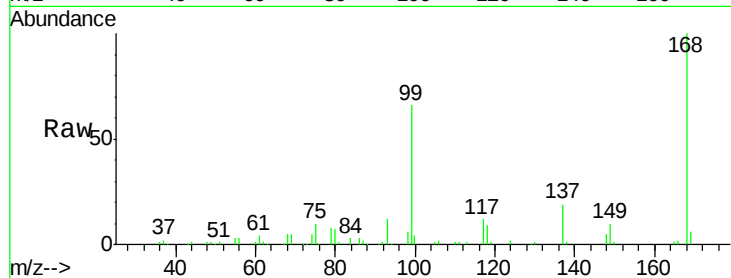
VN1119WBL01

Tot Ion:168 Resp: 200130

Ion Ratio Lower Upper

168 100

99 65.6 55.7 83.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN0

7.63

80000

60000

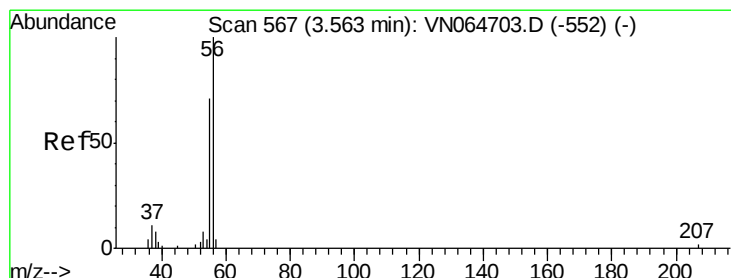
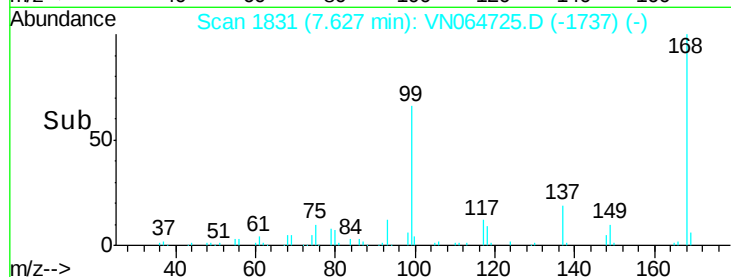
40000

20000

0

7.55 7.60 7.65 7.70

Time-->



#13

Acrolein

Concen: 0.375 ug/l

RT: 3.60 min Scan# 578

Delta R.T. 0.04 min

Lab File: VN064725.D

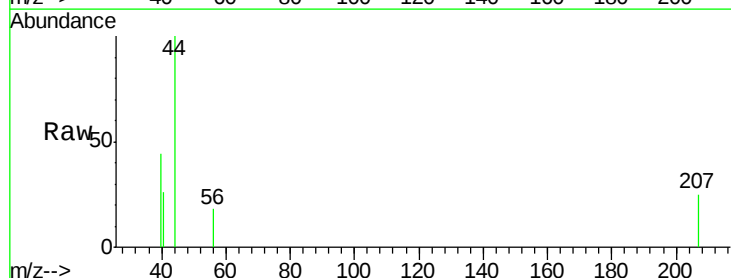
Acq: 19 Nov 2020 11:55

Tgt Ion: 56 Resp: 30

Ion Ratio Lower Upper

56 100

55 0.0 61.8 92.6#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 55.00 (54.70 to 55.70): VN0

3.60

150

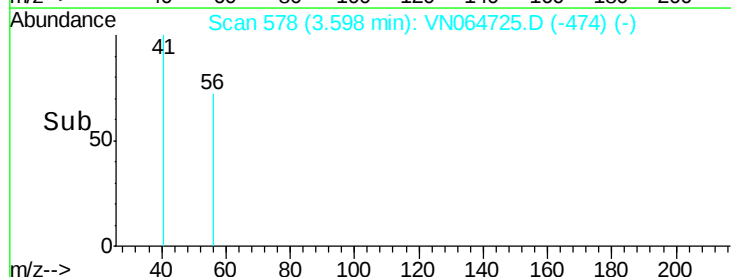
100

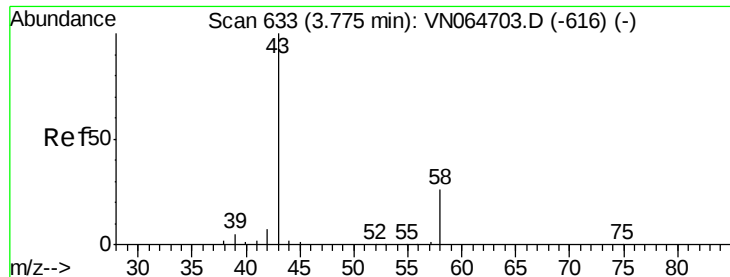
50

0

3.59 3.60 3.61

Time-->





#16

Acetone

Concen: 5.993 ug/l

RT: 3.79 min Scan# 638

Delta R.T. 0.02 min

Lab File: VN064725.D

Acq: 19 Nov 2020 11:55

Instrument :

MSVOA\_N

ClientSampled :

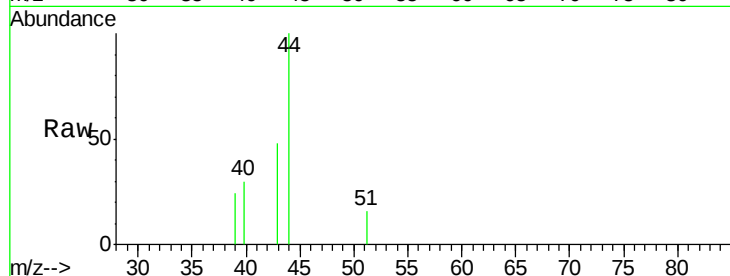
VN1119WBL01

Tot Ion: 43 Resp: 807

Ion Ratio Lower Upper

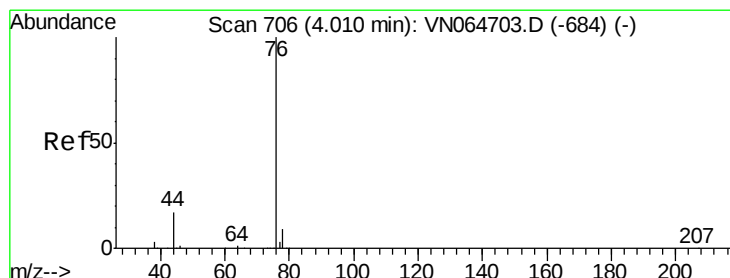
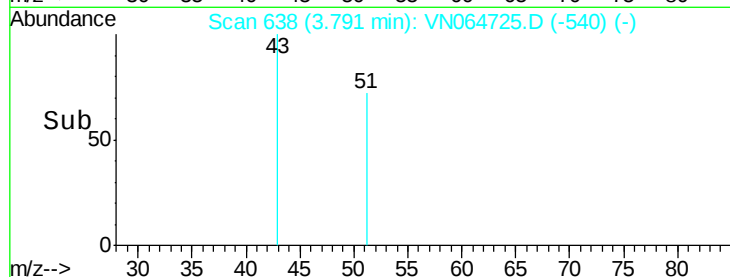
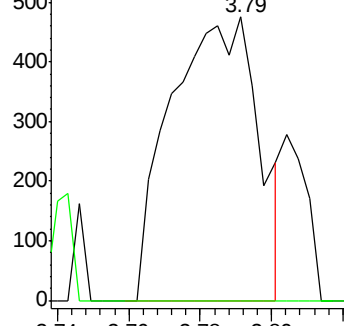
43 100

58 0.0 21.2 31.8#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#17

Carbon Disulfide

Concen: 0.300 ug/l

RT: 4.00 min Scan# 704

Delta R.T. -0.01 min

Lab File: VN064725.D

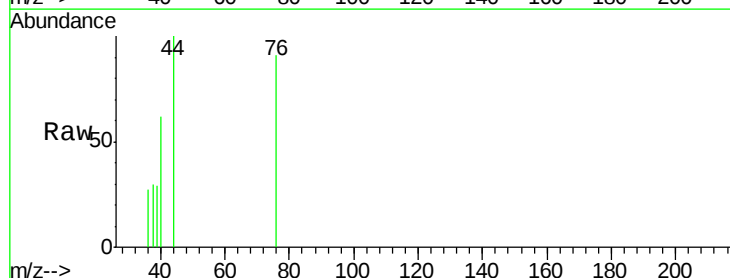
Acq: 19 Nov 2020 11:55

Tgt Ion: 76 Resp: 1061

Ion Ratio Lower Upper

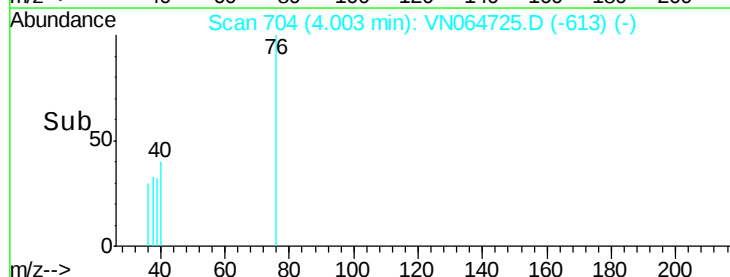
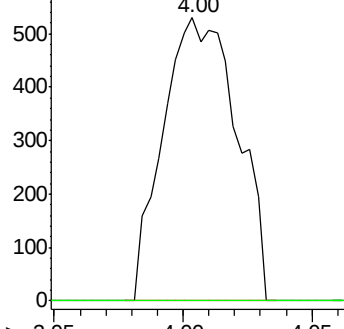
76 100

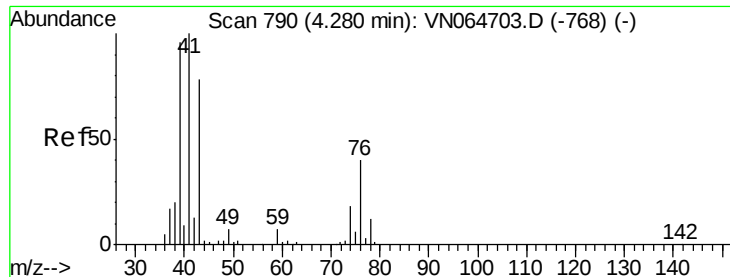
78 0.0 7.1 10.7#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0

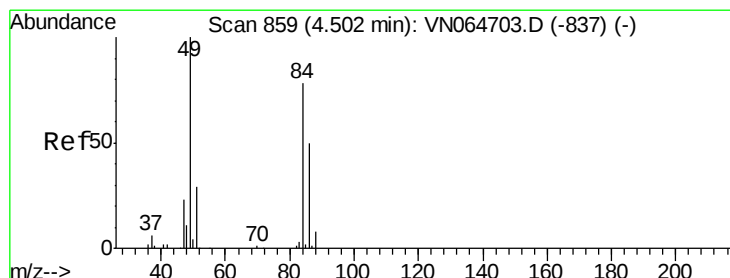
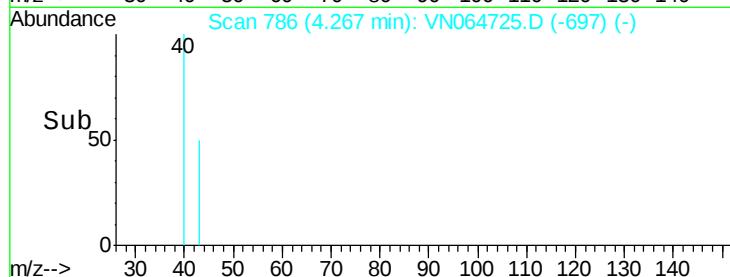
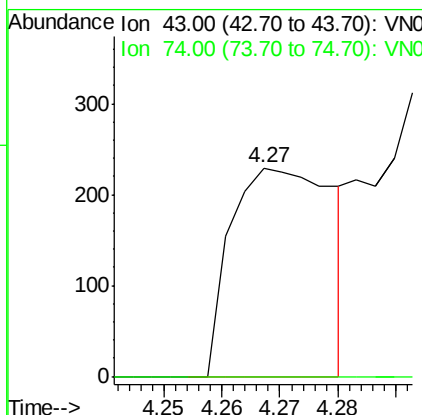
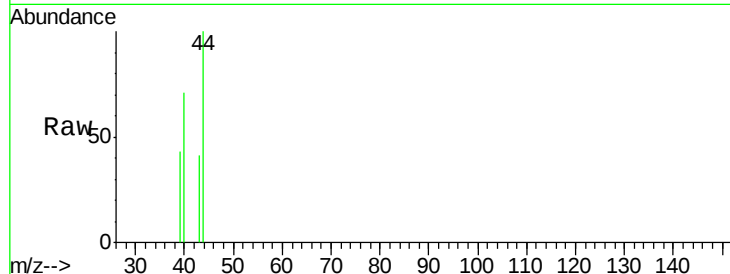




#18  
Methyl Acetate  
Concen: 1.440 ug/l  
RT: 4.27 min Scan# 786  
Delta R.T. -0.01 min  
Lab File: VN064725.D  
Acq: 19 Nov 2020 11:55

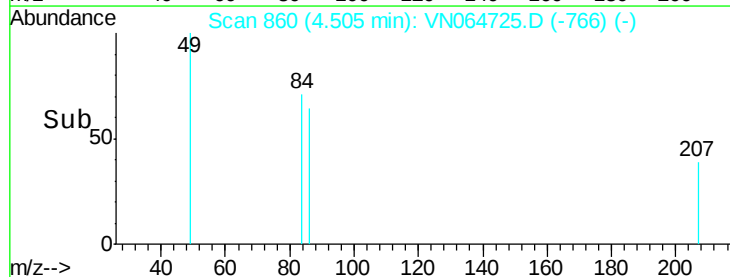
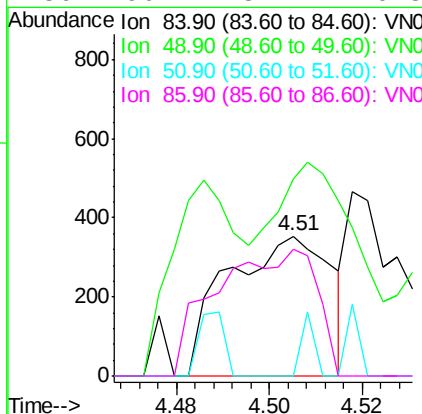
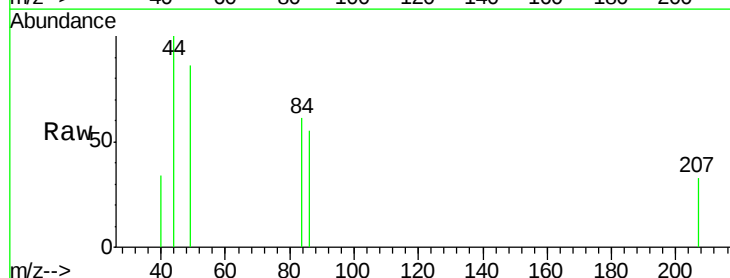
Instrument :  
MSVOA\_N  
ClientSampled :  
VN1119WBL01

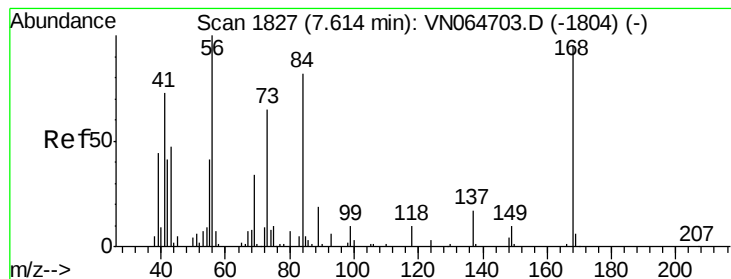
Tot Ion: 43 Resp: 280  
Ion Ratio Lower Upper  
43 100  
74 0.0 17.6 26.4#



#20  
Methylene Chloride  
Concen: 0.209 ug/l  
RT: 4.51 min Scan# 860  
Delta R.T. 0.00 min  
Lab File: VN064725.D  
Acq: 19 Nov 2020 11:55

Tgt Ion: 84 Resp: 546  
Ion Ratio Lower Upper  
84 100  
49 16.1 102.4 153.6#  
51 0.0 29.4 44.2#  
86 90.7 51.2 76.8#





#31

Cyclohexane

Concen: 1.582 ug/l

RT: 7.63 min Scan# 1832

Delta R.T. 0.02 min

Lab File: VN064725.D

Acq: 19 Nov 2020 11:55

Instrument :

MSVOA\_N

ClientSampled :

VN1119WBL01

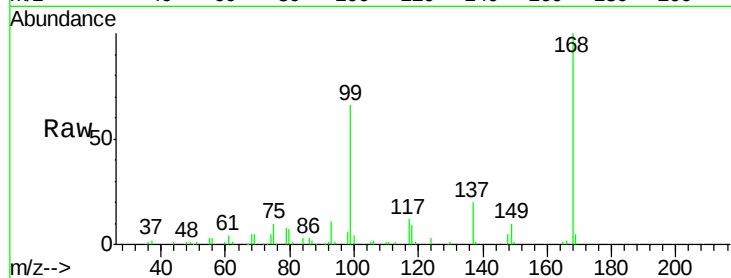
Tot Ion: 56 Resp: 6020

Ion Ratio Lower Upper

56 100

69 152.2 27.2 40.8#

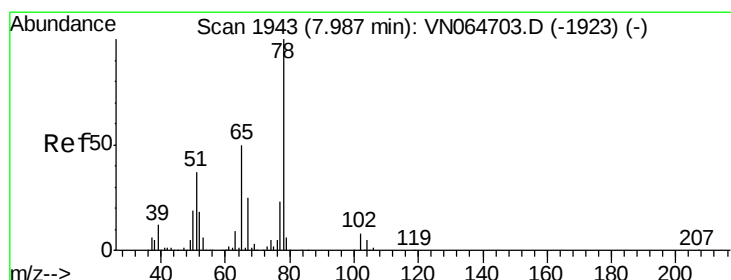
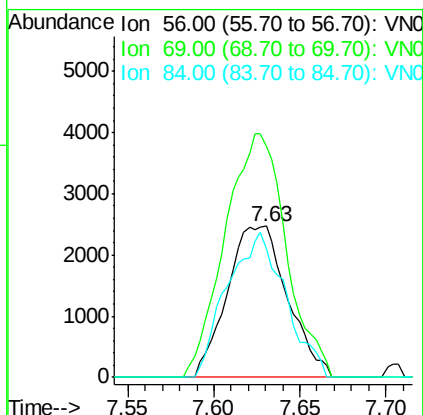
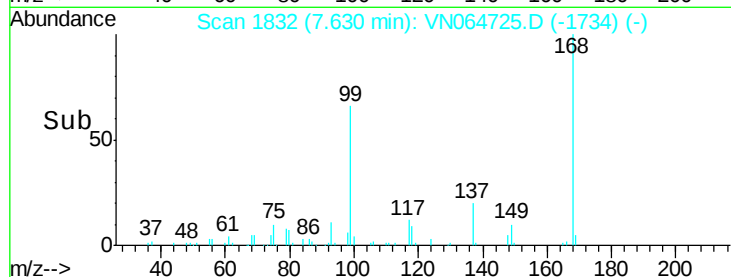
84 85.1 65.9 98.9



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: 58.602 ug/l

RT: 7.99 min Scan# 1943

Delta R.T. -0.00 min

Lab File: VN064725.D

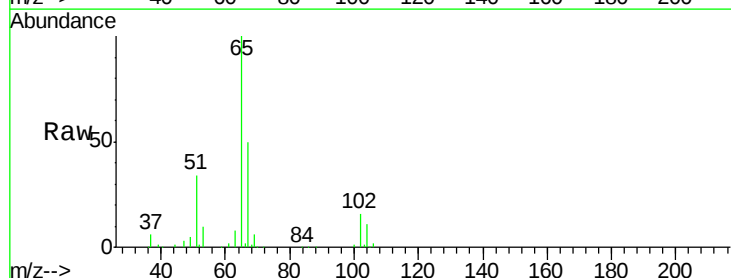
Acq: 19 Nov 2020 11:55

Tgt Ion: 65 Resp: 206314

Ion Ratio Lower Upper

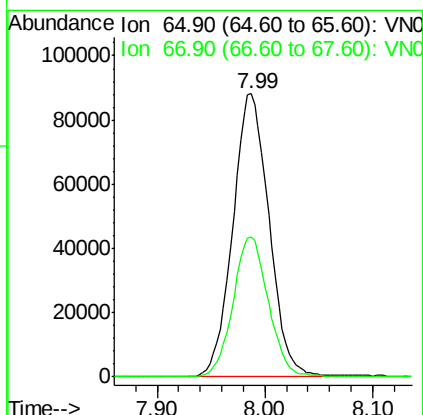
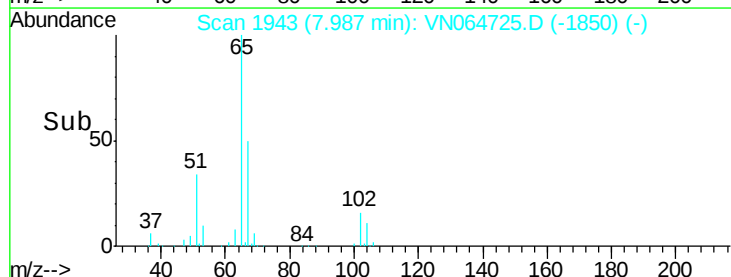
65 100

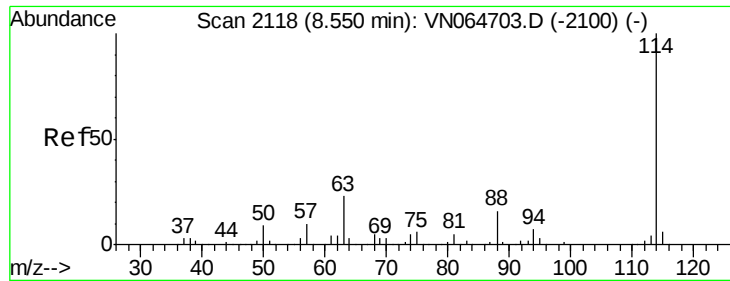
67 48.4 0.0 99.8



Abundance Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0

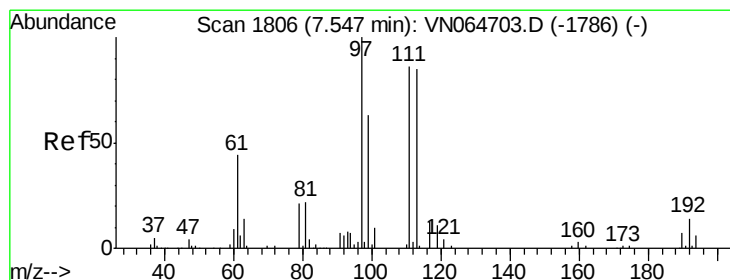
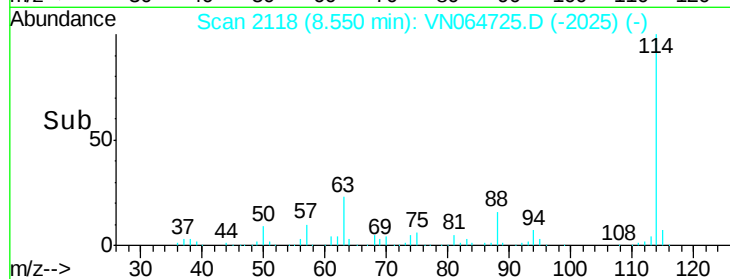
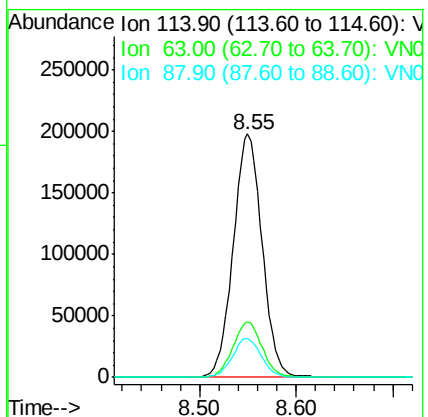
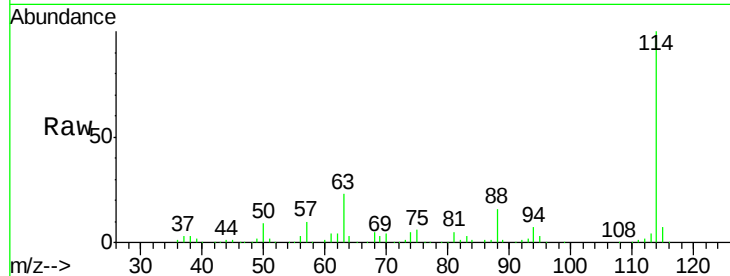




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.55 min Scan# 2118  
 Delta R.T. -0.00 min  
 Lab File: VN064725.D  
 Acq: 19 Nov 2020 11:55

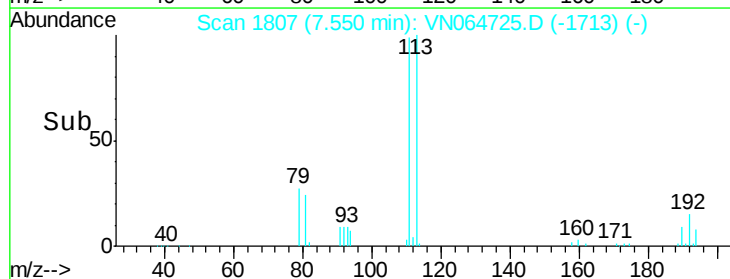
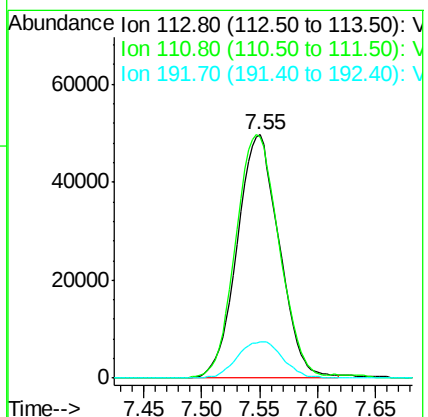
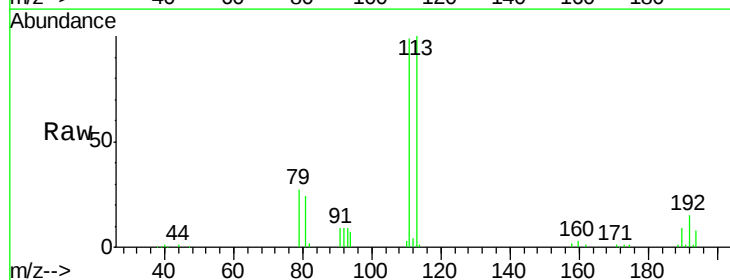
Instrument :  
 MSVOA\_N  
 ClientSampled :  
 VN1119WBL01

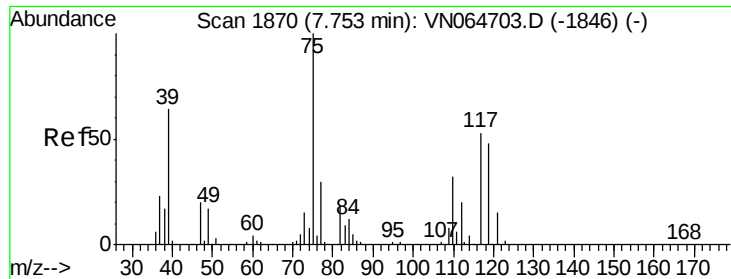
Tot Ion:114 Resp: 410226  
 Ion Ratio Lower Upper  
 114 100  
 63 22.9 0.0 46.0  
 88 15.8 0.0 31.2



#35  
 Dibromofluoromethane  
 Concen: 53.706 ug/l  
 RT: 7.55 min Scan# 1807  
 Delta R.T. 0.00 min  
 Lab File: VN064725.D  
 Acq: 19 Nov 2020 11:55

Tgt Ion:113 Resp: 125399  
 Ion Ratio Lower Upper  
 113 100  
 111 103.3 82.2 123.4  
 192 16.2 12.7 19.1

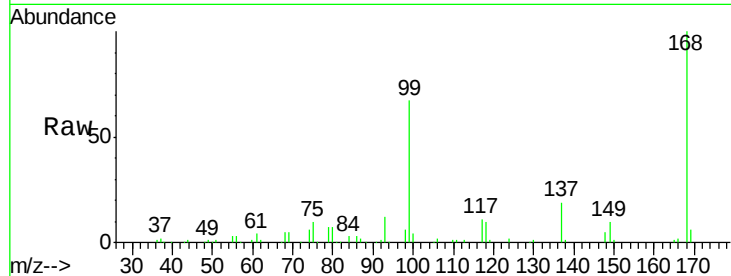




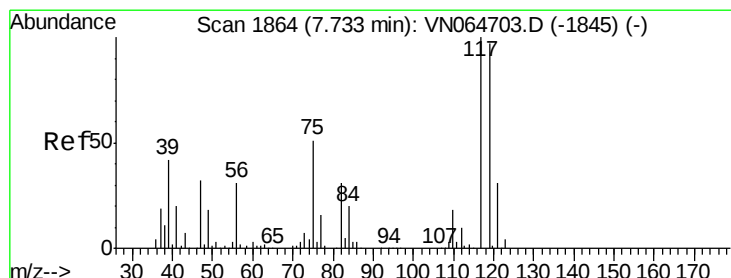
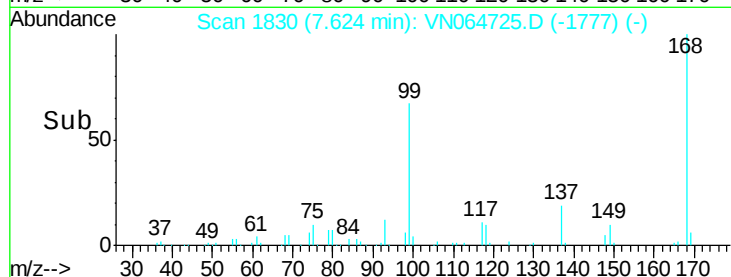
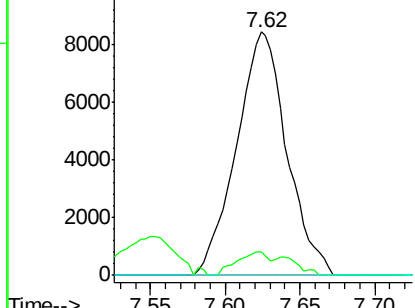
#36  
 1,1-Dichloropropene  
 Concen: 4.675 ug/l  
 RT: 7.62 min Scan# 1830  
 Delta R.T. -0.13 min  
 Lab File: VN064725.D  
 Acq: 19 Nov 2020 11:55

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1119WBL01

Tot Ion: 75 Resp: 19729  
 Ion Ratio Lower Upper  
 75 100  
 110 6.1 16.2 48.6#  
 77 0.0 24.4 36.6#

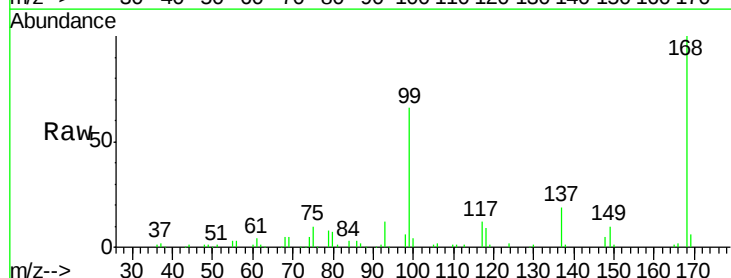


Abundance Ion 74.90 (74.60 to 75.60): VN0  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VN0

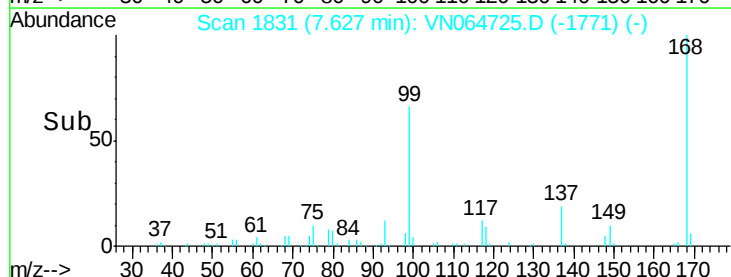
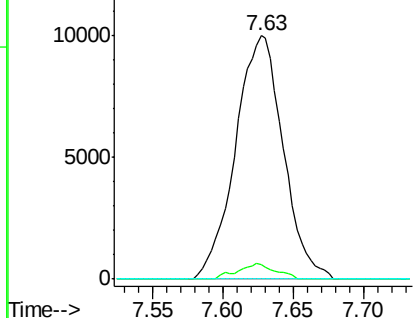


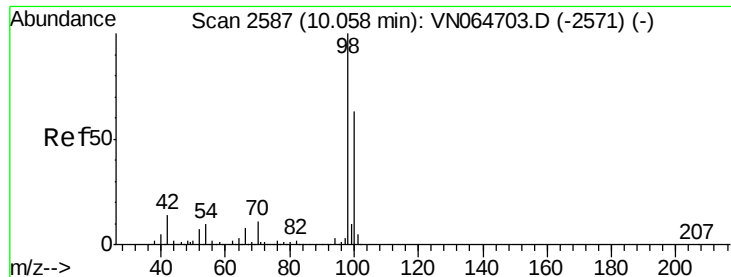
#38  
 Carbon Tetrachloride  
 Concen: 5.262 ug/l  
 RT: 7.63 min Scan# 1831  
 Delta R.T. -0.11 min  
 Lab File: VN064725.D  
 Acq: 19 Nov 2020 11:55

Tgt Ion: 117 Resp: 23600  
 Ion Ratio Lower Upper  
 117 100  
 119 6.0 77.8 116.6#  
 121 0.0 24.9 37.3#



Abundance Ion 116.80 (116.50 to 117.50): V  
 Ion 118.80 (118.50 to 119.50): V  
 Ion 120.80 (120.50 to 121.50): V





#50

Toluene-d8

Concen: 49.506 ug/l

RT: 10.06 min Scan# 2587

Delta R.T. -0.00 min

Lab File: VN064725.D

Acq: 19 Nov 2020 11:55

Instrument :

MSVOA\_N

ClientSampleId :

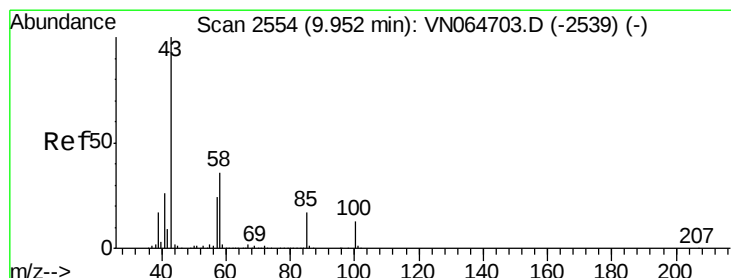
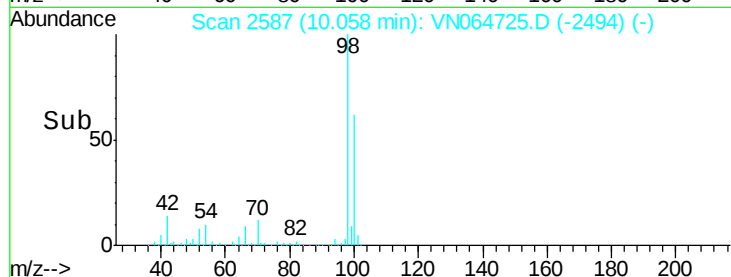
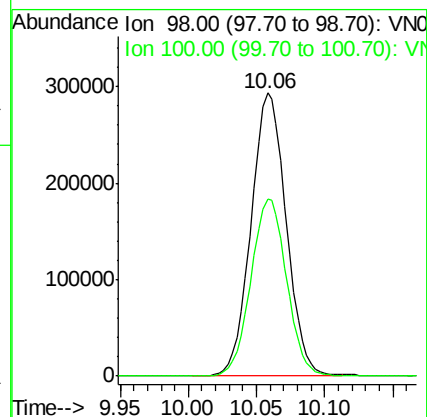
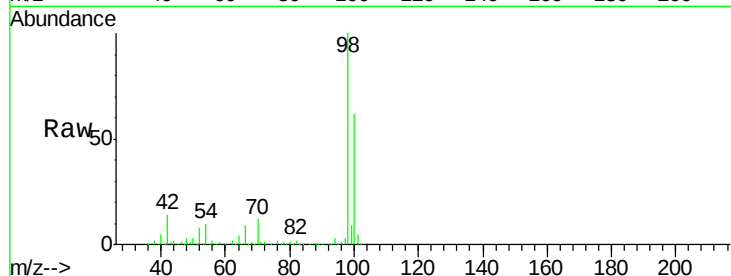
VN1119WBL01

Tot Ion: 98 Resp: 525349

Ion Ratio Lower Upper

98 100

100 63.5 50.4 75.6



#51

4-Methyl-2-Pentanone

Concen: 6.207 ug/l

RT: 9.96 min Scan# 2555

Delta R.T. 0.00 min

Lab File: VN064725.D

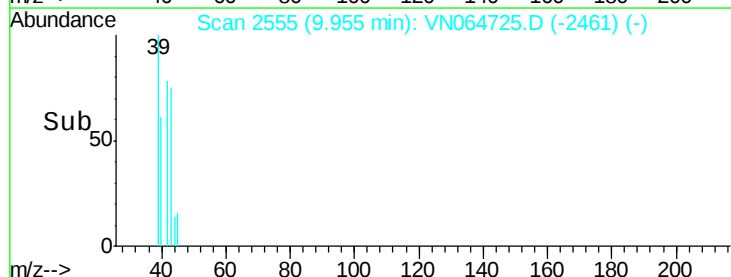
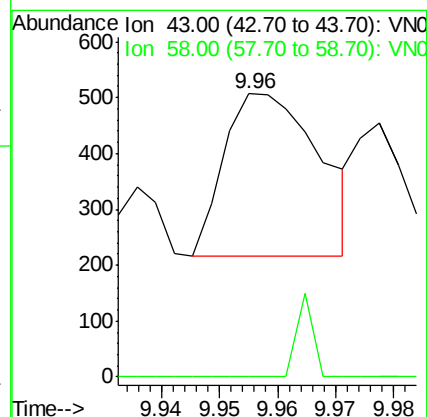
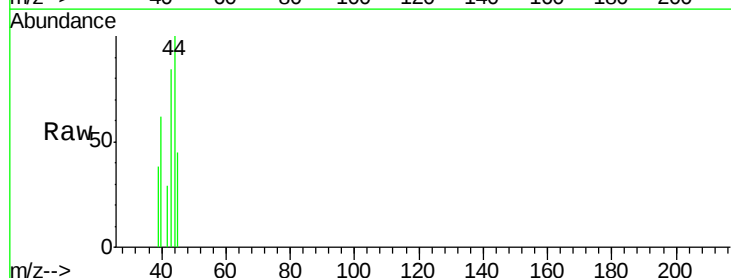
Acq: 19 Nov 2020 11:55

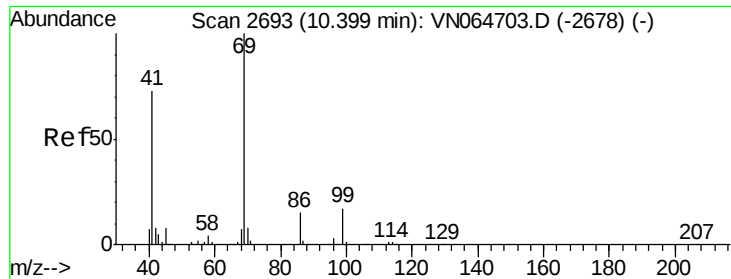
Tgt Ion: 43 Resp: 328

Ion Ratio Lower Upper

43 100

58 0.0 28.5 42.7#





#56

Ethyl methacrylate

Concen: 2.681 ug/l

RT: 10.59 min Scan# 2753

Delta R.T. 0.19 min

Lab File: VN064725.D

Acq: 19 Nov 2020 11:55

Instrument :

MSVOA\_N

ClientSampleId :

VN1119WBL01

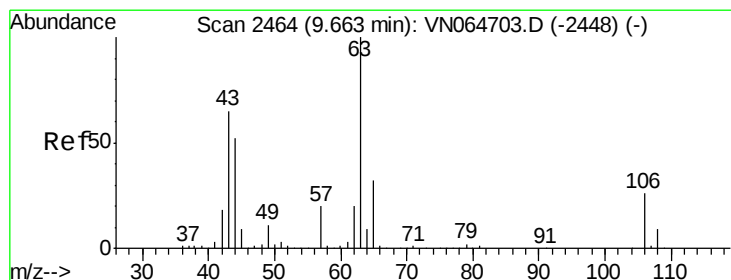
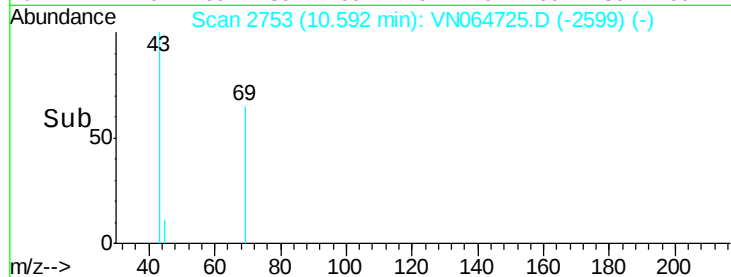
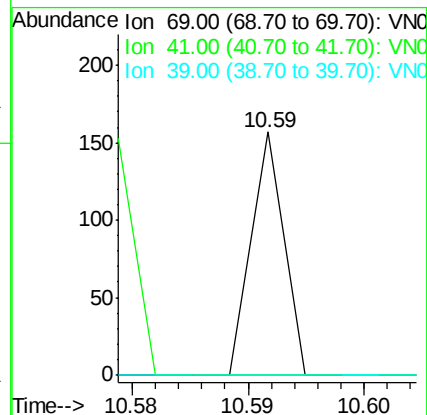
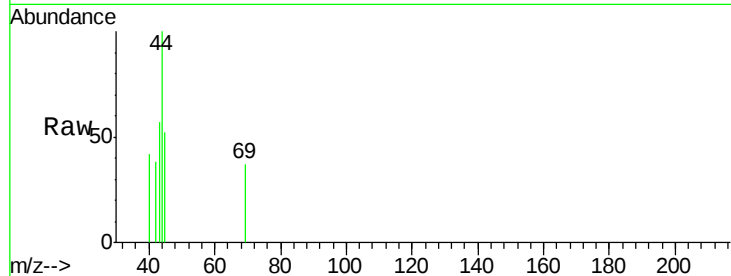
Tot Ion: 69 Resp: 30

Ion Ratio Lower Upper

69 100

41 486.7 59.0 88.4#

39 0.0 38.4 57.6#



#58

2-Chloroethyl Vinyl ether

Concen: 13.298 ug/l

RT: 9.75 min Scan# 2491

Delta R.T. 0.09 min

Lab File: VN064725.D

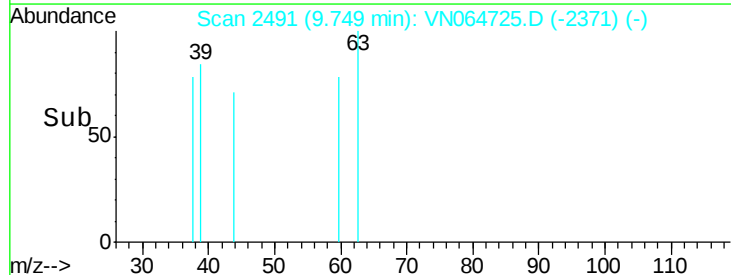
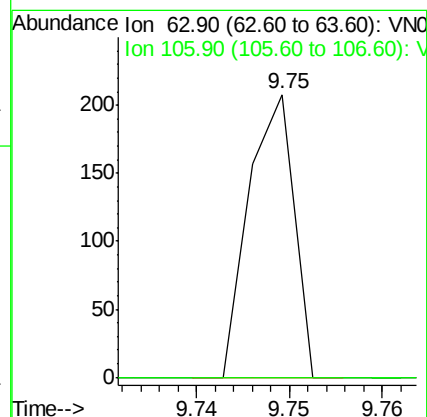
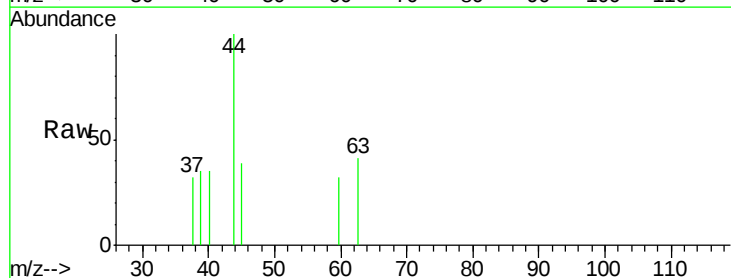
Acq: 19 Nov 2020 11:55

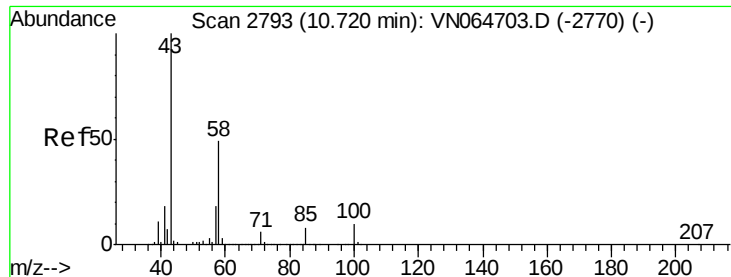
Tgt Ion: 63 Resp: 70

Ion Ratio Lower Upper

63 100

106 0.0 20.9 31.3#

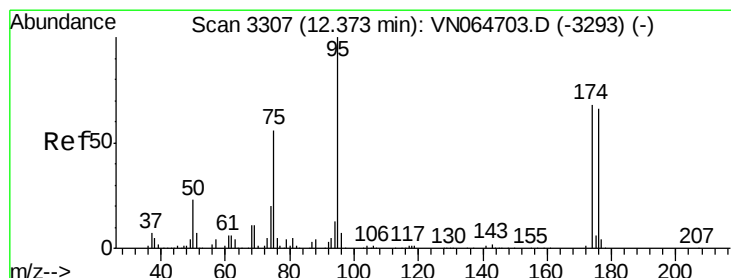
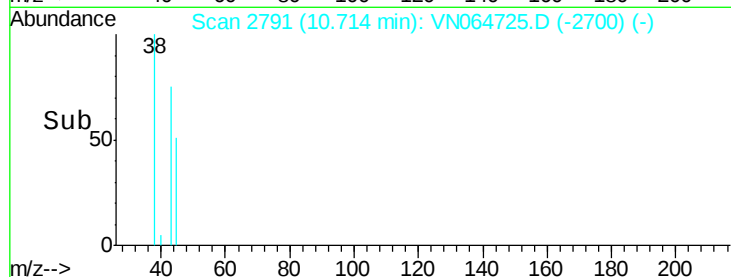
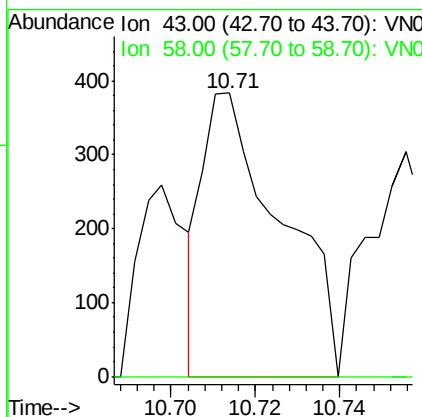
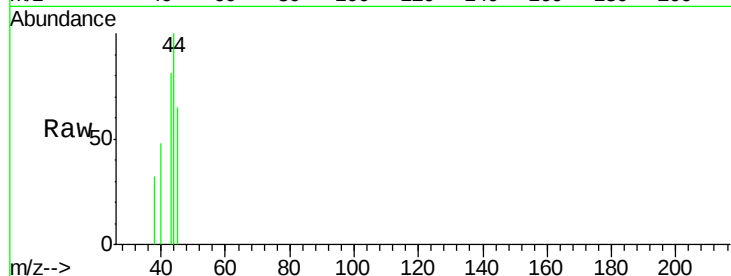




#59  
2-Hexanone  
Concen: 8.597 ug/l  
RT: 10.71 min Scan# 2791  
Delta R.T. -0.01 min  
Lab File: VN064725.D  
Acq: 19 Nov 2020 11:55

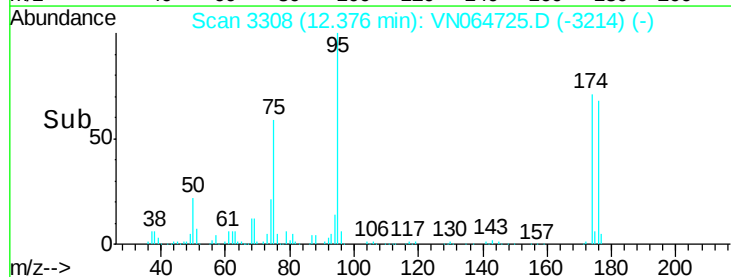
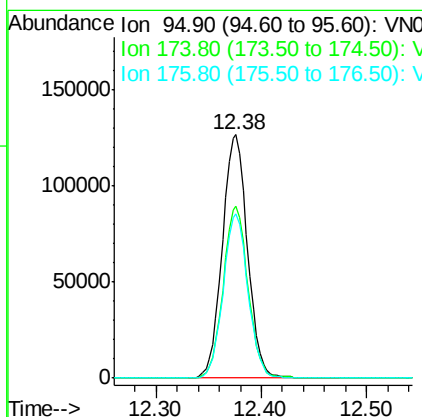
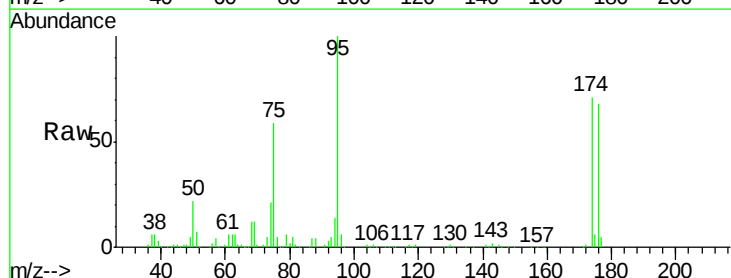
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1119WBL01

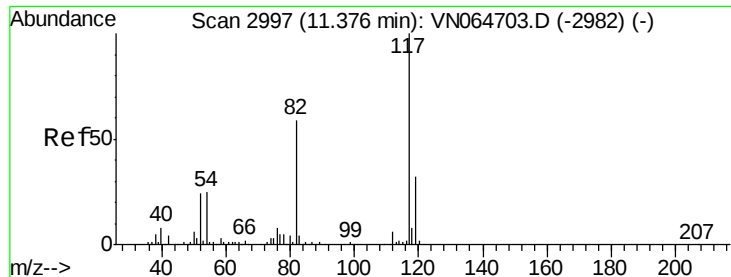
Tot Ion: 43 Resp: 496  
Ion Ratio Lower Upper  
43 100  
58 0.0 24.4 73.4#



#62  
4-Bromofluorobenzene  
Concen: 52.700 ug/l  
RT: 12.38 min Scan# 3308  
Delta R.T. 0.00 min  
Lab File: VN064725.D  
Acq: 19 Nov 2020 11:55

Tgt Ion: 95 Resp: 209032  
Ion Ratio Lower Upper  
95 100  
174 69.6 0.0 136.8  
176 66.4 0.0 134.2

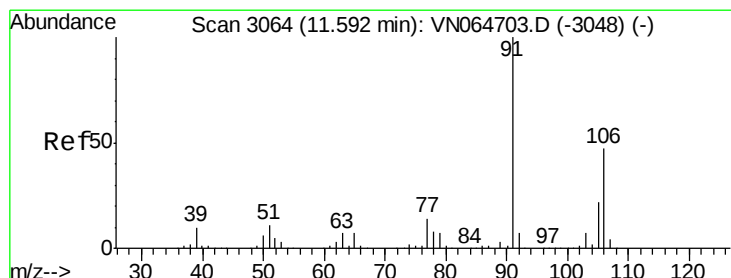
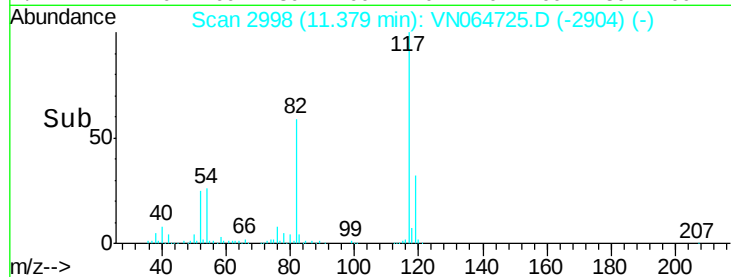
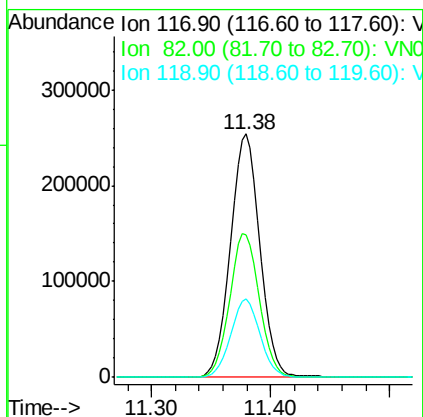
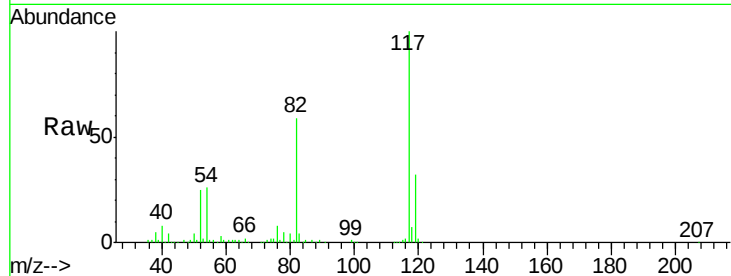




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.38 min Scan# 2998  
Delta R.T. 0.00 min  
Lab File: VN064725.D  
Acq: 19 Nov 2020 11:55

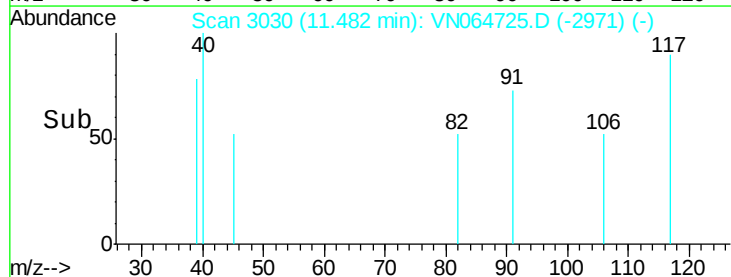
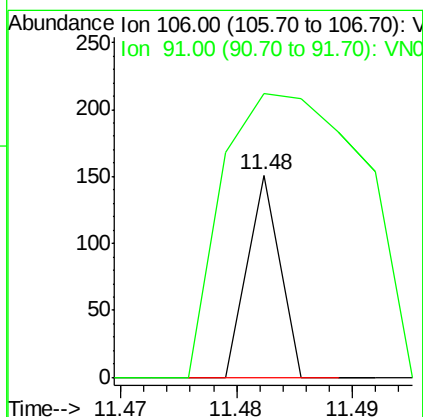
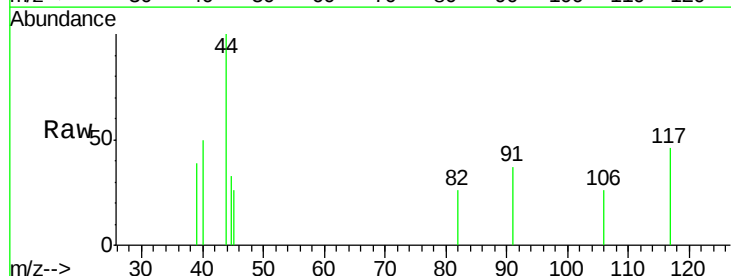
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1119WBL01

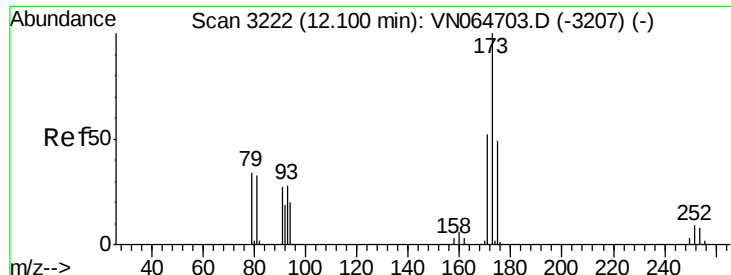
Tot Ion:117 Resp: 434041  
Ion Ratio Lower Upper  
117 100  
82 58.6 47.0 70.6  
119 32.1 25.4 38.2



#68  
m/p-Xylenes  
Concen: 4.066 ug/l  
RT: 11.48 min Scan# 3030  
Delta R.T. -0.11 min  
Lab File: VN064725.D  
Acq: 19 Nov 2020 11:55

Tgt Ion:106 Resp: 29  
Ion Ratio Lower Upper  
106 100  
91 613.8 171.9 257.9#





#71

Bromoform

Concen: 2.583 ug/l

RT: 12.37 min Scan# 3305

Delta R.T. 0.27 min

Lab File: VN064725.D

Acq: 19 Nov 2020 11:55

Instrument :

MSVOA\_N

ClientSampleId :

VN1119WBL01

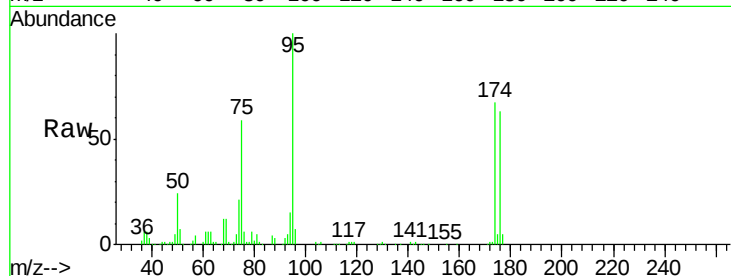
Tot Ion:173 Resp: 383

Ion Ratio Lower Upper

173 100

175 2573.6 24.3 72.9#

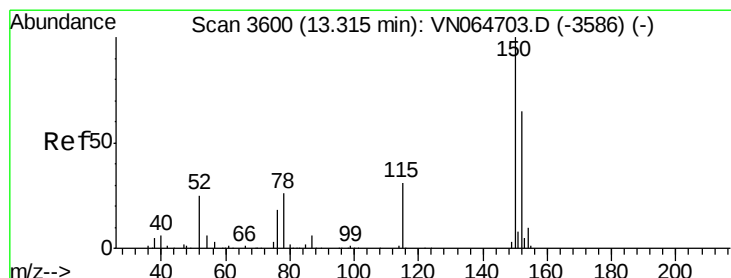
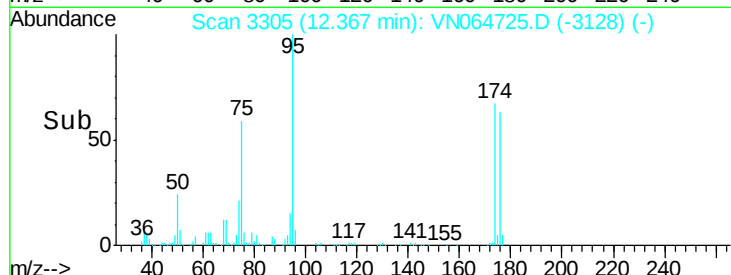
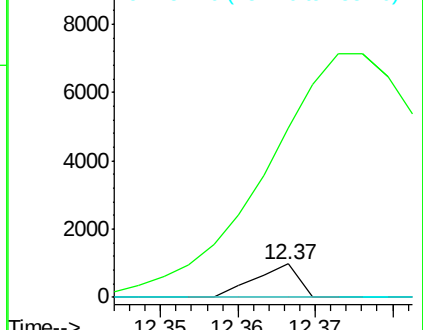
254 0.0 0.1 0.1#



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# 3600

Delta R.T. -0.00 min

Lab File: VN064725.D

Acq: 19 Nov 2020 11:55

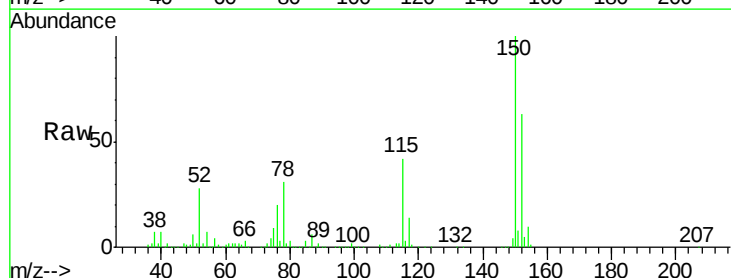
Tgt Ion:152 Resp: 180619

Ion Ratio Lower Upper

152 100

115 66.1 32.1 96.3

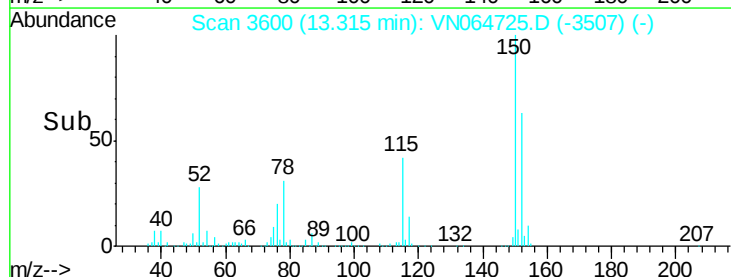
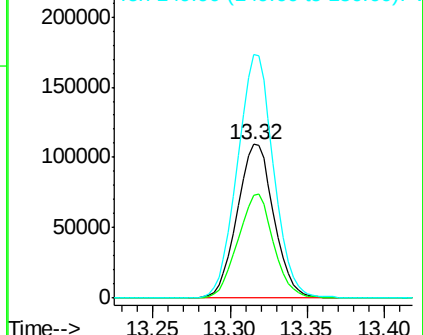
150 156.2 0.0 344.8

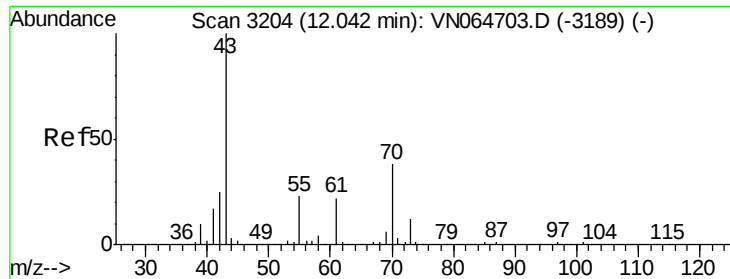


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-amvl acetate

Concen: 0.202 ug/l

RT: 12.04 min Scan# 3205

Delta R.T. 0.00 min

Lab File: VN064725.D

Acq: 19 Nov 2020 11:55

Instrument :

MSVOA\_N

ClientSampleId :

VN1119WBL01

Tot Ion: 43 Resp: 1210

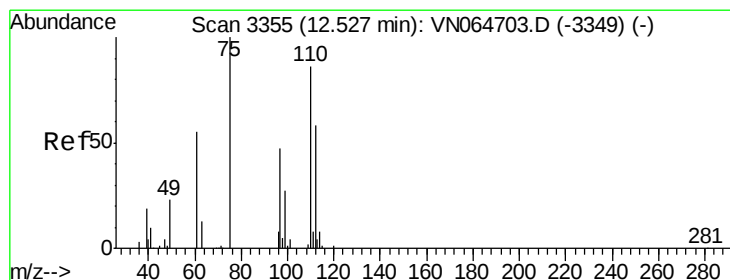
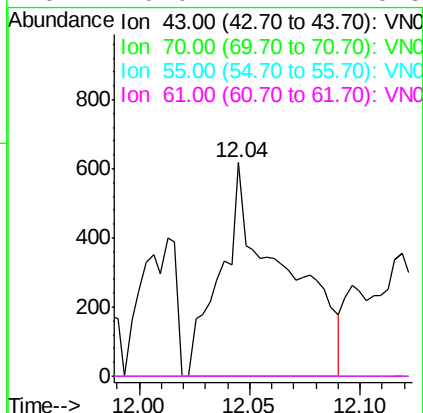
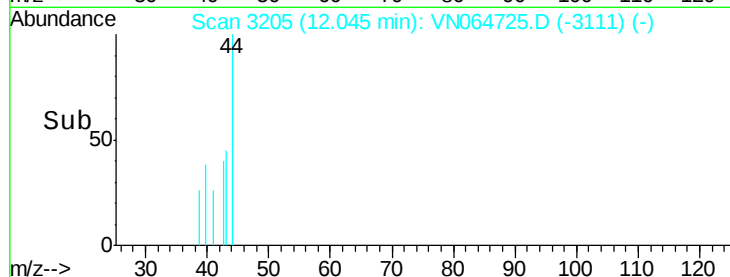
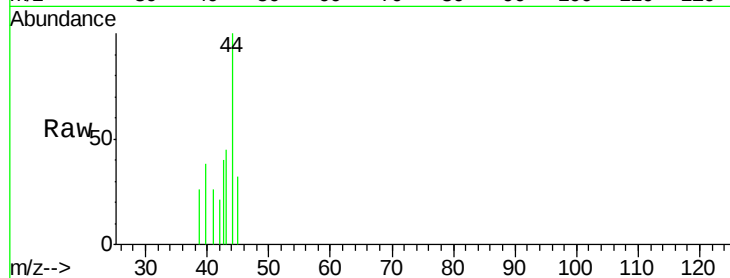
Ion Ratio Lower Upper

43 100

70 0.0 30.3 45.5#

55 0.0 18.9 28.3#

61 0.0 17.7 26.5#



#76

1,2,3-Trichloropropane

Concen: 31.167 ug/l

RT: 12.37 min Scan# 3307

Delta R.T. -0.15 min

Lab File: VN064725.D

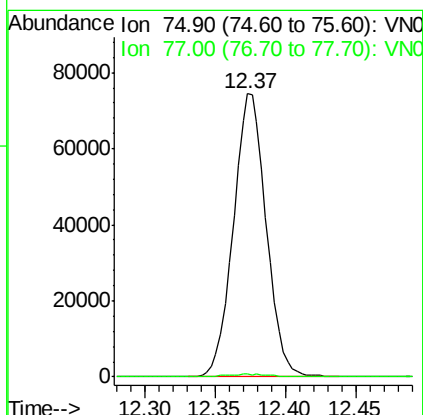
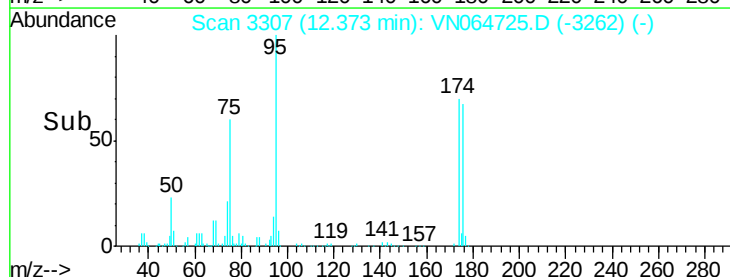
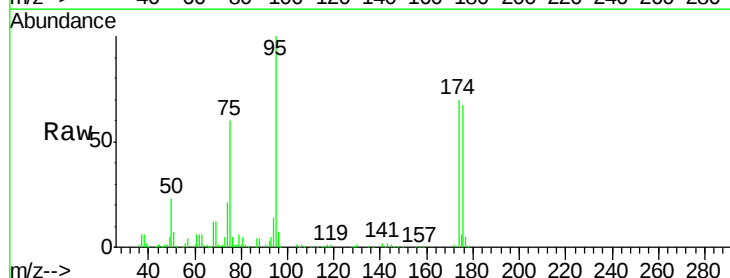
Acq: 19 Nov 2020 11:55

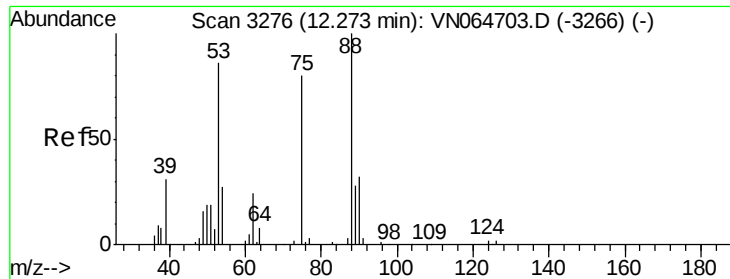
Tgt Ion: 75 Resp: 121294

Ion Ratio Lower Upper

75 100

77 1.1 0.0 0.0#





#81

trans-1,4-Dichloro-2-butene

Concen: 79.391 ug/l

RT: 12.37 min Scan# 3307

Delta R.T. 0.10 min

Lab File: VN064725.D

Acq: 19 Nov 2020 11:55

Instrument :

MSVOA\_N

ClientSampled :

VN1119WBL01

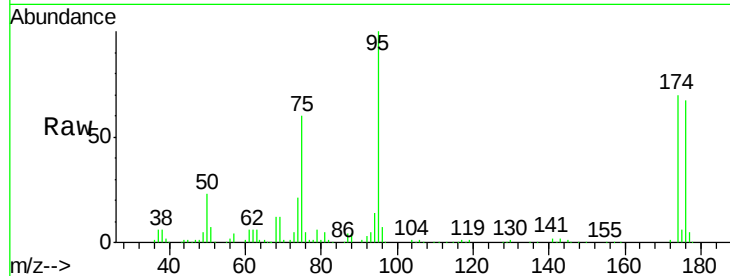
Tot Ion: 75 Resp: 121294

Ion Ratio Lower Upper

75 100

53 0.1 88.8 133.2#

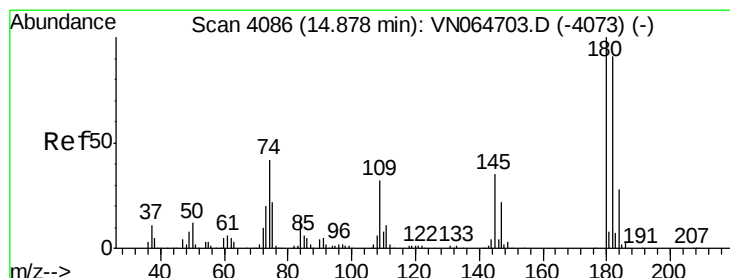
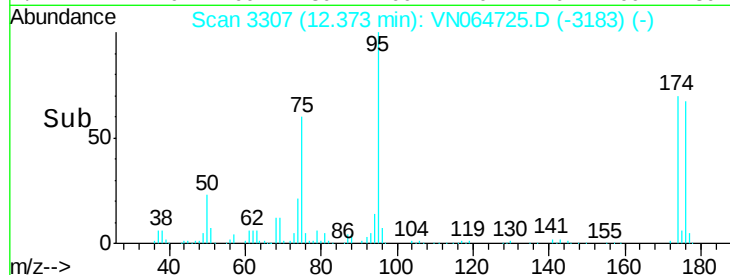
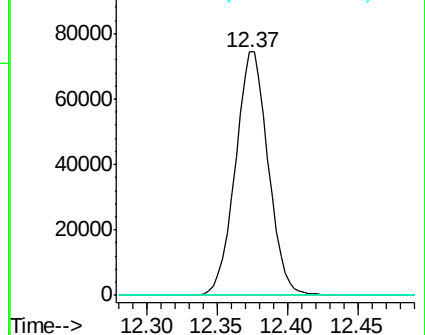
89 0.0 43.1 64.7#



Abundance Ion 74.90 (74.60 to 75.60): VN064725.D (-3183) (-)

Ion 53.00 (52.70 to 53.70): VN064725.D (-3183) (-)

Ion 88.90 (88.60 to 89.60): VN064725.D (-3183) (-)



#93

1,2,4-Trichlorobenzene

Concen: 1.395 ug/l

RT: 14.88 min Scan# 4088

Delta R.T. 0.01 min

Lab File: VN064725.D

Acq: 19 Nov 2020 11:55

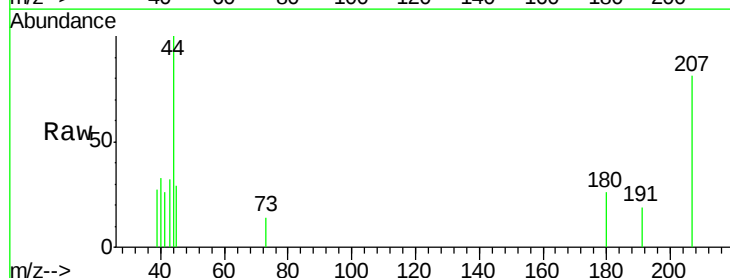
Tgt Ion: 180 Resp: 204

Ion Ratio Lower Upper

180 100

182 0.0 47.3 141.8#

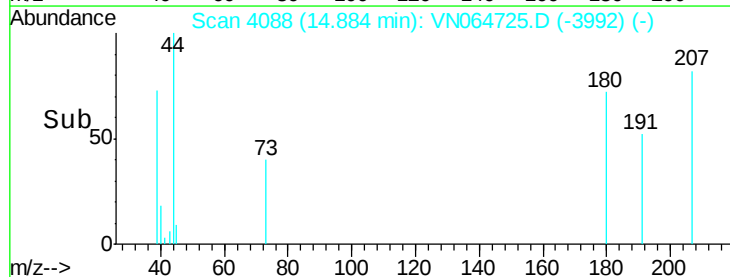
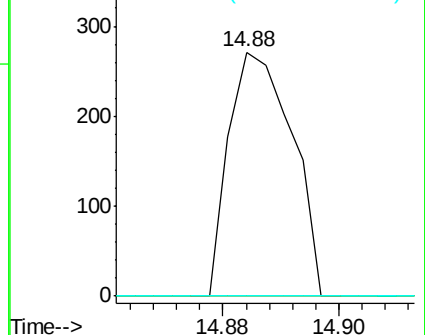
145 0.0 17.5 52.5#

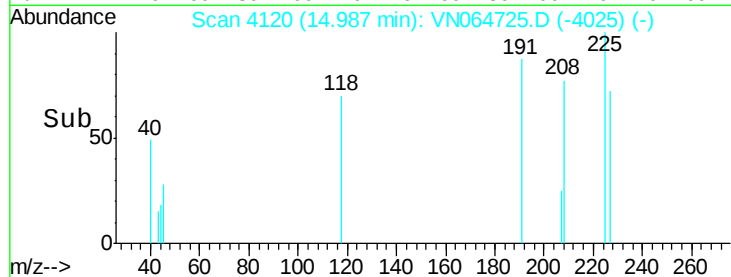
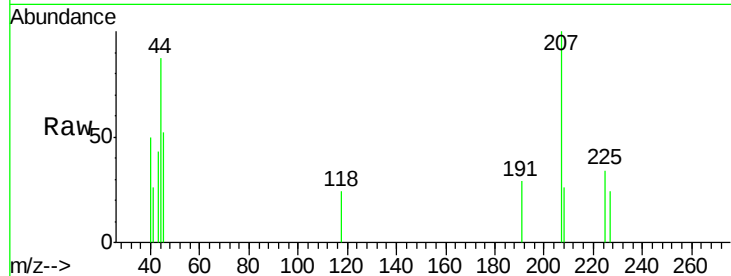
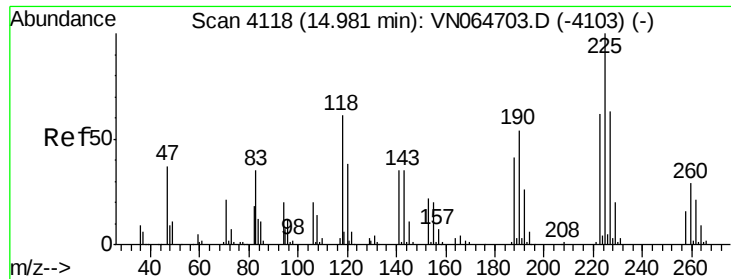


Abundance Ion 179.80 (179.50 to 180.50): VN064725.D (-3992) (-)

Ion 181.80 (181.50 to 182.50): VN064725.D (-3992) (-)

Ion 144.80 (144.50 to 145.50): VN064725.D (-3992) (-)





#94

Hexachlorobutadiene

Concen: Below Cal

RT: 14.99 min Scan# 4120

Delta R.T. 0.01 min

Lab File: VN064725.D

Acq: 19 Nov 2020 11:55

Instrument :

MSVOA\_N

ClientSampleId :

VN1119WBL01

Tot Ion:225 Resp: 125

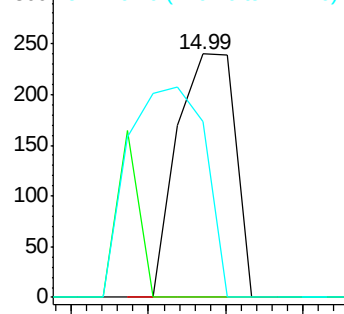
Ion Ratio Lower Upper

225 100

223 25.6 31.2 93.6#

227 114.4 32.1 96.3#

Abundance Ion 224.70 (224.40 to 225.40): V  
Ion 222.70 (222.40 to 223.40): V  
Ion 226.70 (226.40 to 227.40): V



Time--> 14.97 14.98 14.99 15.00