

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN112520\  
 Data File : VN064849.D  
 Acq On : 25 Nov 2020 11:52  
 Operator : JC/MD  
 Sample : L4798-06DL 100X  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 45BR-20201118DL

Quant Time: Nov 26 03:40:47 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N112320W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Nov 23 13:54:12 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.62  | 168  | 158661   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 282466   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 289687   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 128619   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 33) 1,2-Dichloroethane-d4 | 7.99   | 65    | 97520    | 52.87    | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 61 - 141 | Recovery | =    | 105.74% |
| 35) Dibromofluoromethane  | 7.55   | 113   | 91162    | 53.94    | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 69 - 133 | Recovery | =    | 107.88% |
| 50) Toluene-d8            | 10.06  | 98    | 352433   | 51.03    | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 65 - 126 | Recovery | =    | 102.06% |
| 62) 4-Bromofluorobenzene  | 12.38  | 95    | 134178   | 54.29    | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 58 - 135 | Recovery | =    | 108.58% |

## Target Compounds

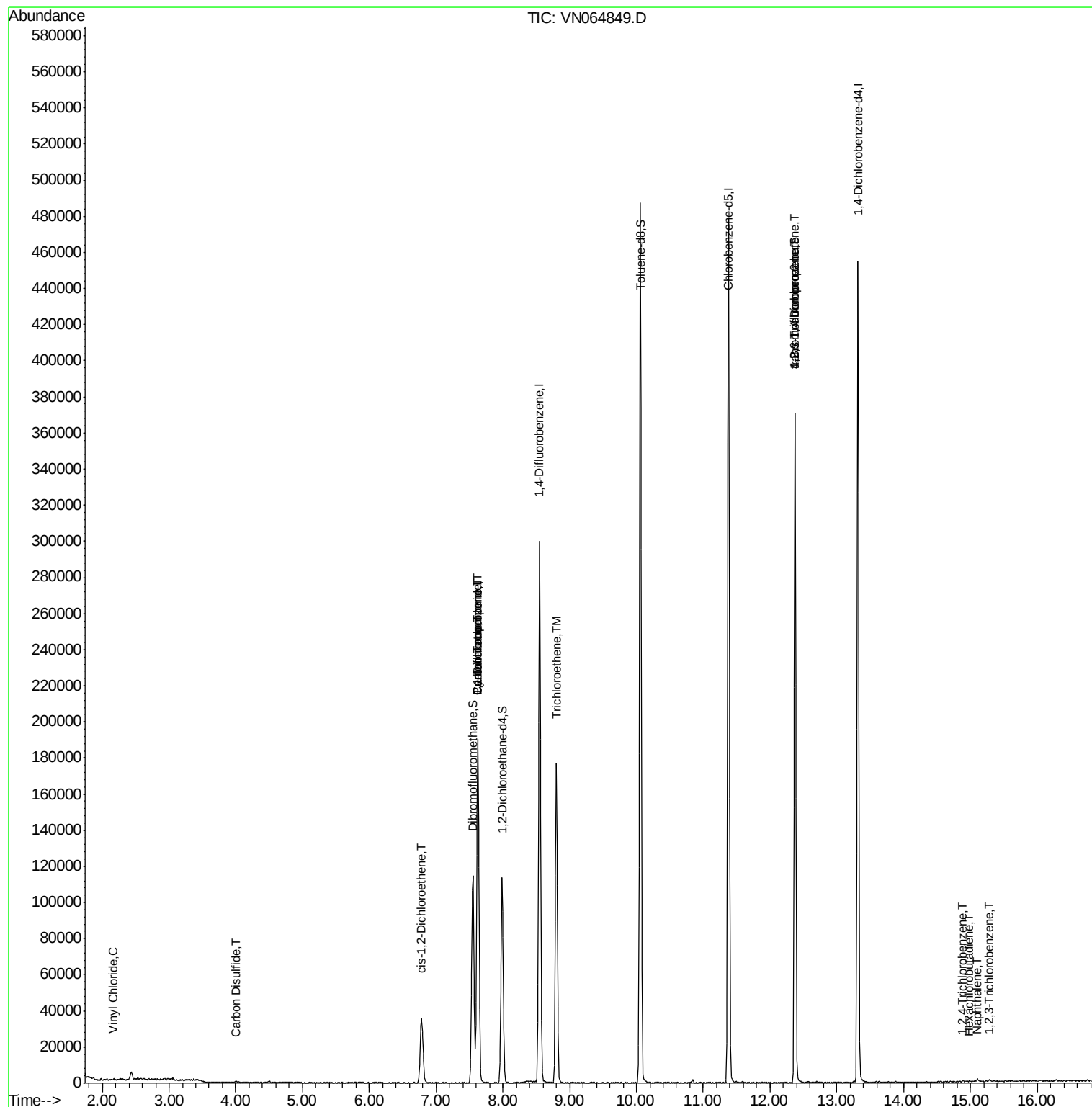
|                                |       |     |       |        | Qvalue |     |
|--------------------------------|-------|-----|-------|--------|--------|-----|
| 4) Vinyl Chloride              | 2.17  | 62  | 652   | 0.350  | ug/l # | 69  |
| 17) Carbon Disulfide           | 4.00  | 76  | 1251  | 0.320  | ug/l # | 75  |
| 27) cis-1,2-Dichloroethene     | 6.78  | 96  | 22899 | 11.911 | ug/l   | 90  |
| 31) Cyclohexane                | 7.63  | 56  | 2952  | 1.148  | ug/l # | 6   |
| 36) 1,1-Dichloropropene        | 7.62  | 75  | 10834 | 4.138  | ug/l # | 49  |
| 38) Carbon Tetrachloride       | 7.62  | 117 | 15447 | 5.670  | ug/l # | 17  |
| 44) Trichloroethene            | 8.80  | 130 | 67635 | 28.572 | ug/l   | 95  |
| 76) 1,2,3-Trichloropropane     | 12.37 | 75  | 62896 | 22.707 | ug/l # | 100 |
| 81) trans-1,4-Dichloro-2-buten | 12.37 | 75  | 62896 | 62.234 | ug/l # | 15  |
| 93) 1,2,4-Trichlorobenzene     | 14.88 | 180 | 623   | 0.239  | ug/l # | 75  |
| 94) Hexachlorobutadiene        | 14.98 | 225 | 241   | 0.577  | ug/l   | 77  |
| 95) Naphthalene                | 15.11 | 128 | 2226  | 0.285  | ug/l # | 71  |
| 96) 1,2,3-Trichlorobenzene     | 15.28 | 180 | 850   | 1.726  | ug/l # | 69  |

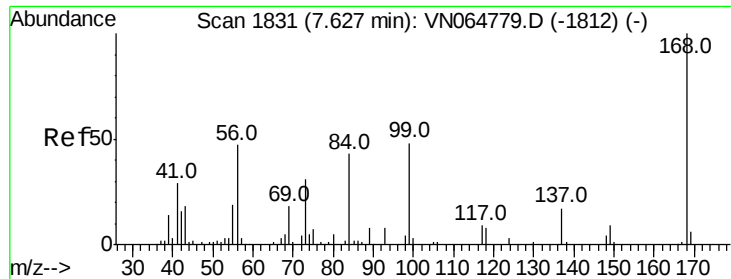
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN112520\  
Data File : VN064849.D  
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Sample : L4798-06DL 100X  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
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45BR-20201118DL

Quant Time: Nov 26 03:40:47 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N112320W.M  
Quant Title : SW846 8260  
QLast Update : Mon Nov 23 13:54:12 2020  
Response via : Initial Calibration

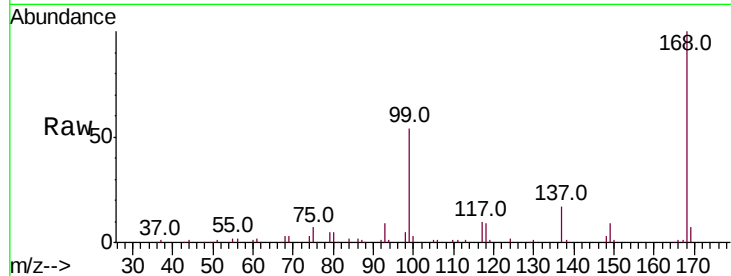




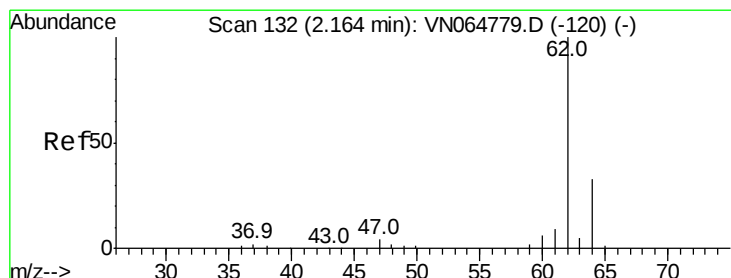
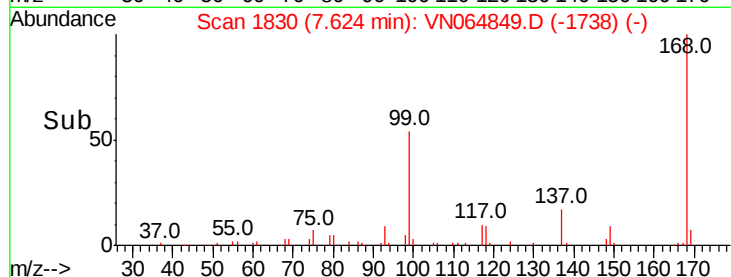
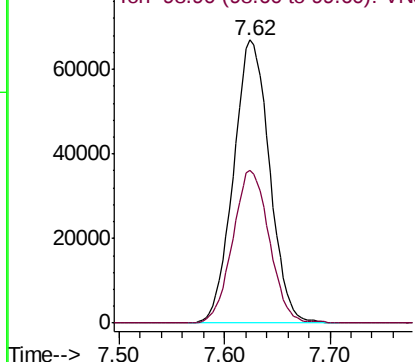
#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.62 min Scan# 1830  
Delta R.T. -0.00 min  
Lab File: VN064849.D  
Acq: 25 Nov 2020 11:52

Instrument :  
MSVOA\_N  
ClientSampleId :  
45BR-20201118DL

Tot Ion:168 Resp: 158661  
Ion Ratio Lower Upper  
168 100  
99 53.9 43.0 64.4

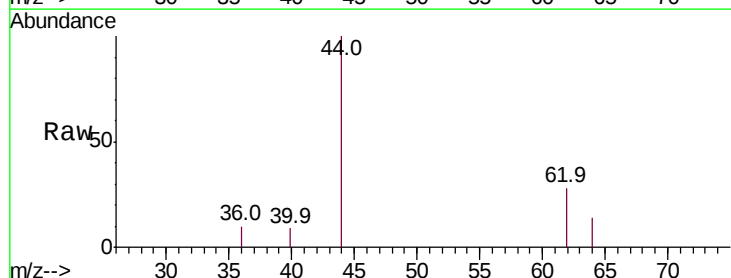


Abundance Ion 167.90 (167.60 to 168.60): V  
Ion 98.90 (98.60 to 99.60): VN

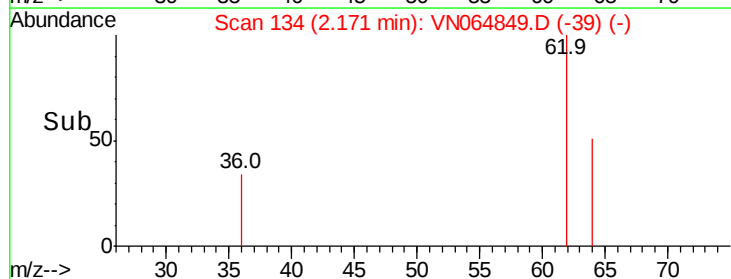
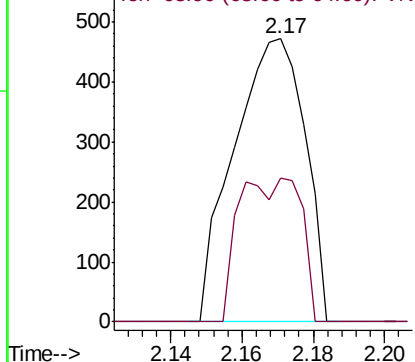


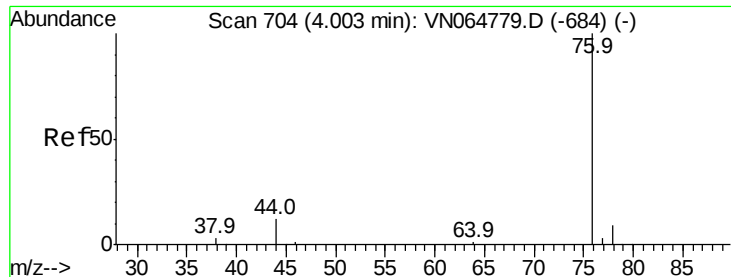
#4  
Vinyl Chloride  
Concen: 0.350 ug/l  
RT: 2.17 min Scan# 134  
Delta R.T. 0.01 min  
Lab File: VN064849.D  
Acq: 25 Nov 2020 11:52

Tgt Ion: 62 Resp: 652  
Ion Ratio Lower Upper  
62 100  
64 50.6 26.5 39.7#



Abundance Ion 61.90 (61.60 to 62.60): VN  
Ion 63.90 (63.60 to 64.60): VN





#17

Carbon Disulfide

Concen: 0.320 ug/l

RT: 4.00 min Scan# 704

Delta R.T. 0.00 min

Lab File: VN064849.D

Acq: 25 Nov 2020 11:52

Instrument :

MSVOA\_N

ClientSampleId :

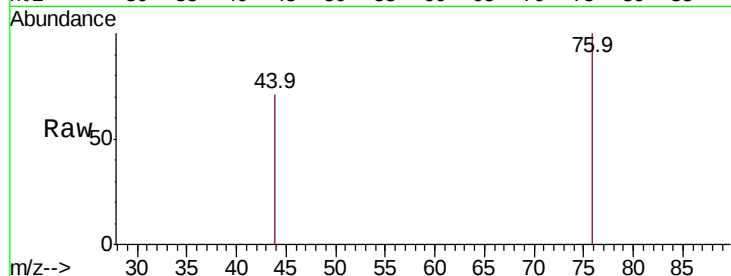
45BR-20201118DL

Tot Ion: 76 Resp: 1251

Ion Ratio Lower Upper

76 100

78 0.0 7.4 11.0#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0

4.00

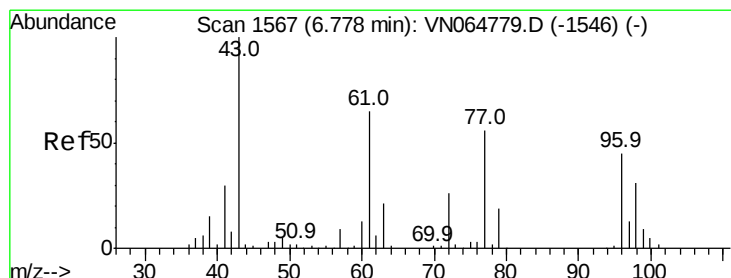
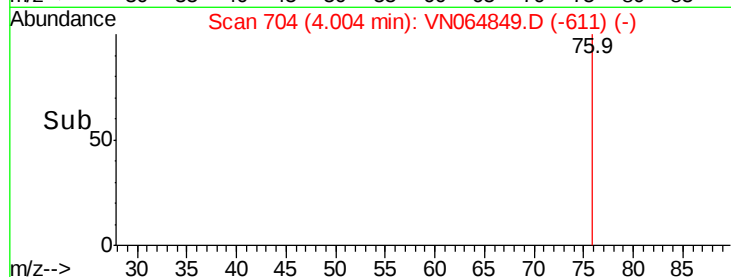
600

400

200

0

Time-->



#27

cis-1,2-Dichloroethene

Concen: 11.911 ug/l

RT: 6.78 min Scan# 1567

Delta R.T. 0.00 min

Lab File: VN064849.D

Acq: 25 Nov 2020 11:52

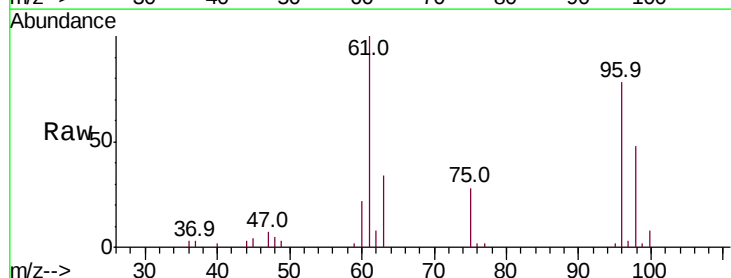
Tgt Ion: 96 Resp: 22899

Ion Ratio Lower Upper

96 100

61 127.3 0.0 285.8

98 63.2 0.0 130.6



Abundance Ion 95.90 (95.60 to 96.60): VN0

Ion 60.90 (60.60 to 61.60): VN0

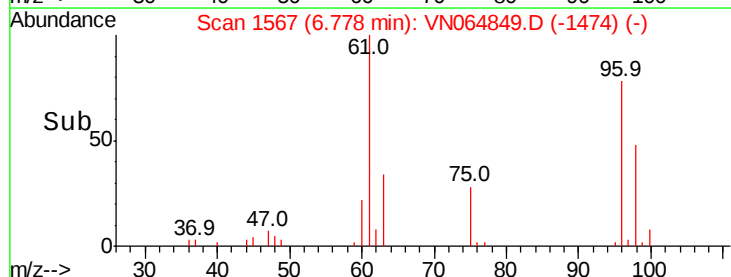
Ion 97.90 (97.60 to 98.60): VN0

10000

5000

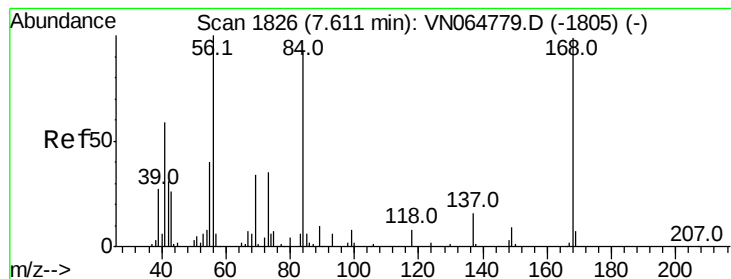
0

Time-->



6.78

6.70 6.75 6.80 6.85 6.90



#31

Cvclohexane

Concen: 1.148 ug/l

RT: 7.63 min Scan# 1831

Delta R.T. 0.02 min

Lab File: VN064849.D

Acq: 25 Nov 2020 11:52

Instrument :

MSVOA\_N

ClientSampleId :

45BR-20201118DL

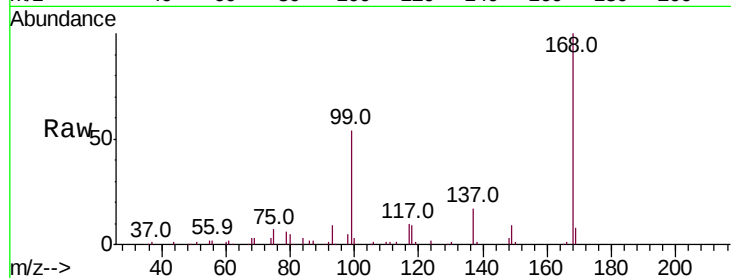
Tot Ion: 56 Resp: 2952

Ion Ratio Lower Upper

56 100

69 167.8 27.5 41.3#

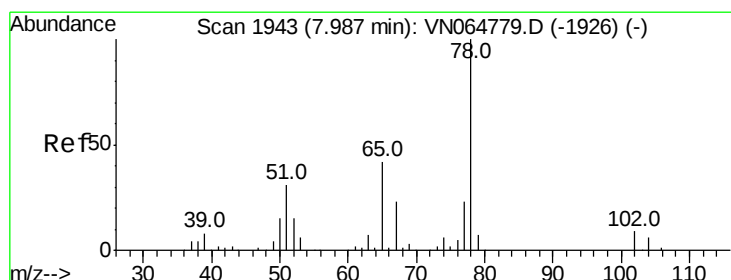
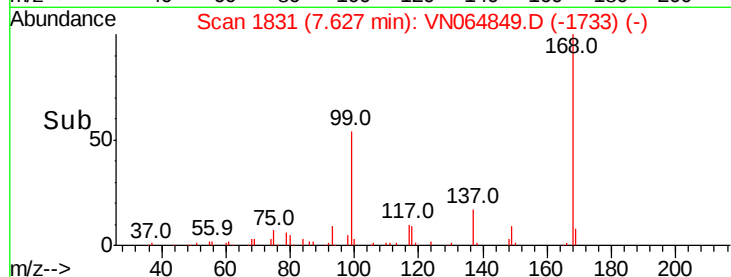
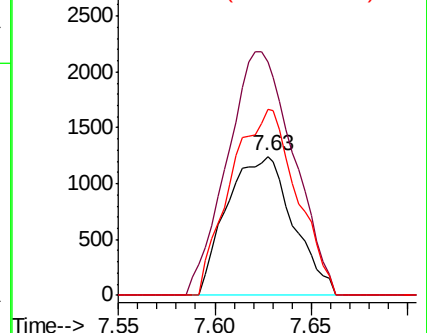
84 133.2 73.9 110.9#



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: 52.870 ug/l

RT: 7.99 min Scan# 1943

Delta R.T. 0.00 min

Lab File: VN064849.D

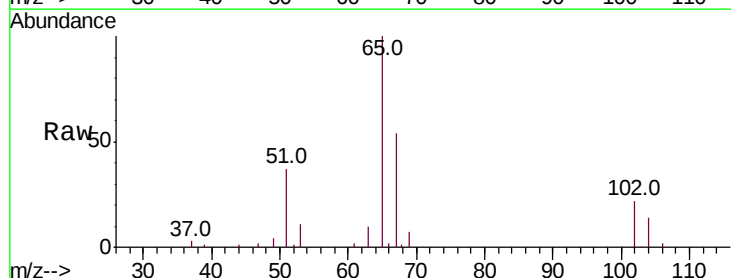
Acq: 25 Nov 2020 11:52

Tgt Ion: 65 Resp: 97520

Ion Ratio Lower Upper

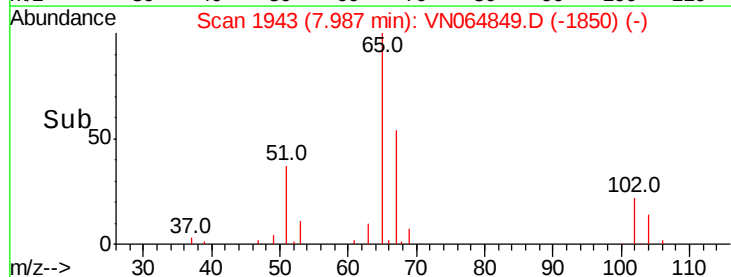
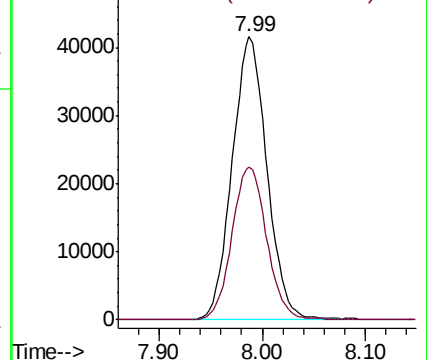
65 100

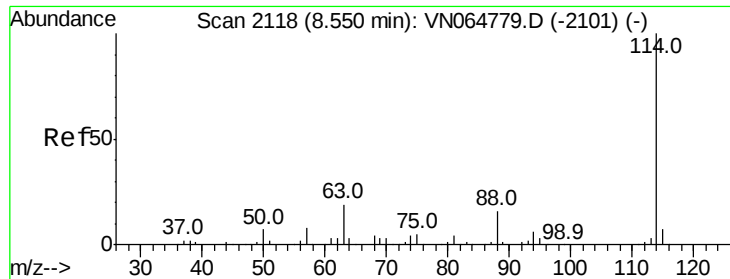
67 54.1 0.0 108.2



Abundance Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0

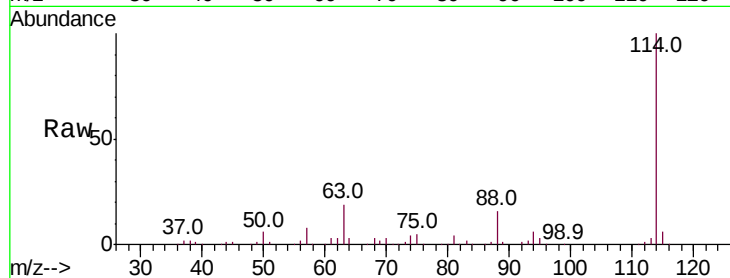




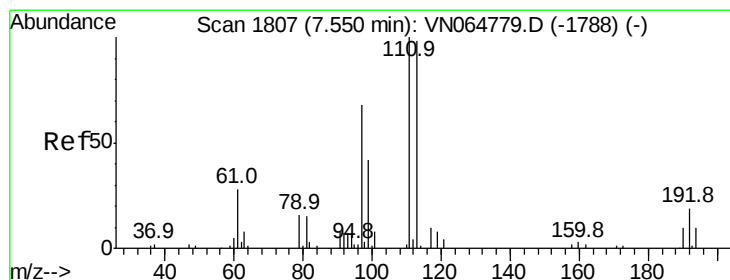
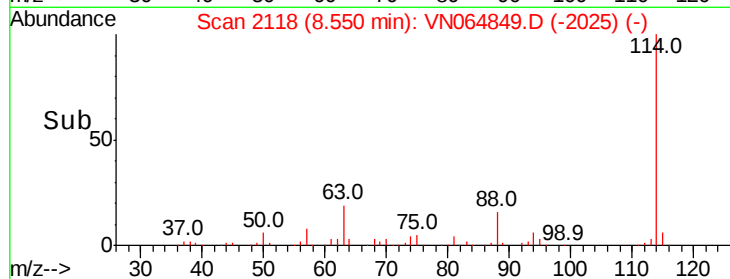
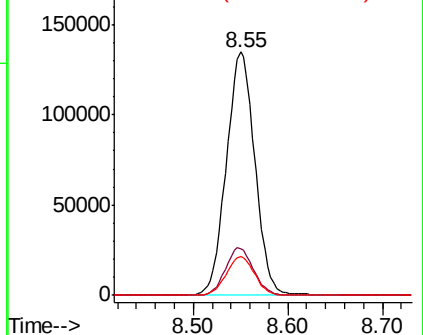
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.55 min Scan# 2118  
 Delta R.T. 0.00 min  
 Lab File: VN064849.D  
 Acq: 25 Nov 2020 11:52

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 45BR-20201118DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 19.3  | 0.0   | 38.6  |
| 88      | 15.7  | 0.0   | 32.6  |

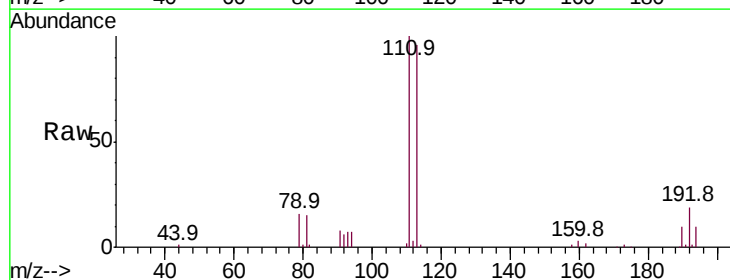


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VN  
 Ion 87.90 (87.60 to 88.60): VN

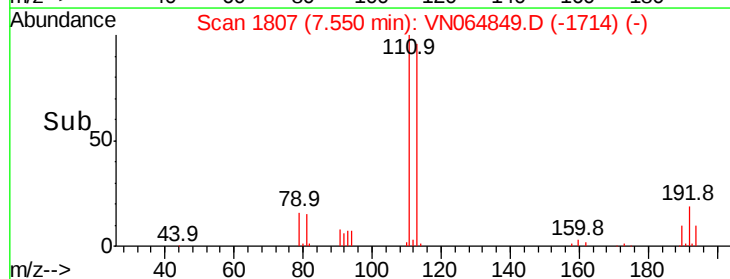
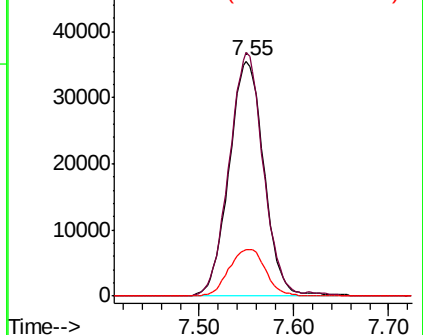


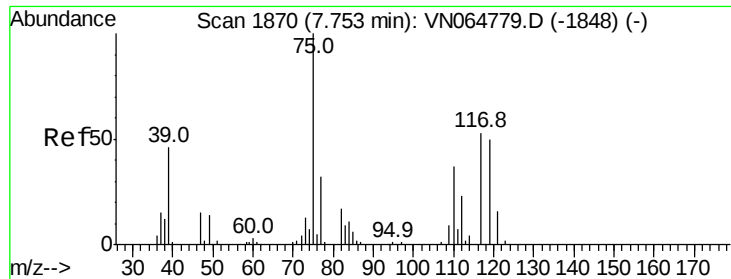
#35  
 Dibromofluoromethane  
 Concen: 53.936 ug/l  
 RT: 7.55 min Scan# 1807  
 Delta R.T. 0.00 min  
 Lab File: VN064849.D  
 Acq: 25 Nov 2020 11:52

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 100.9 | 81.6  | 122.4 |
| 192     | 20.8  | 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

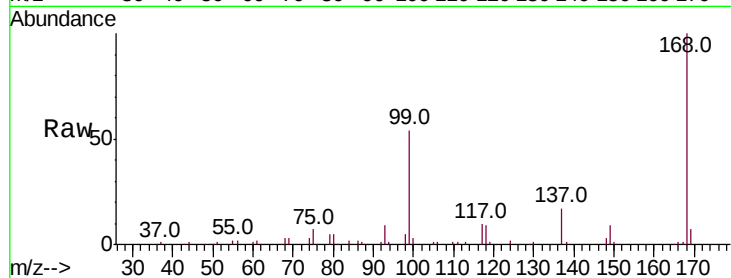




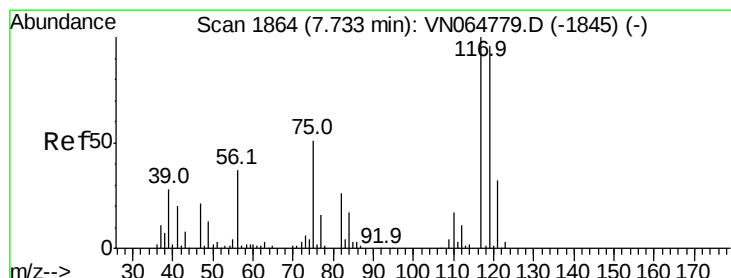
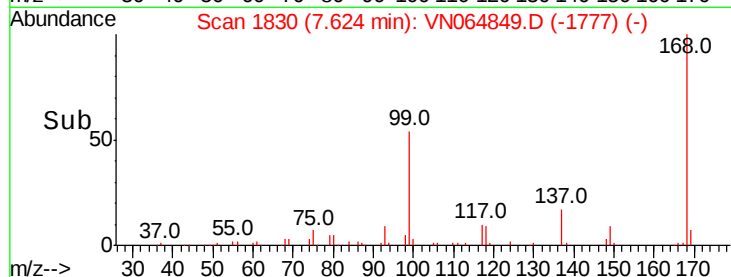
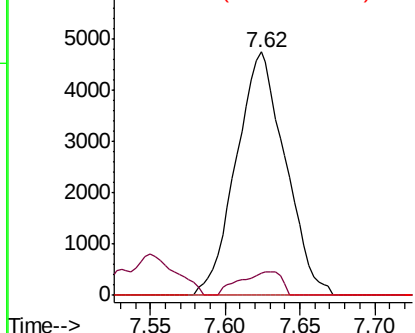
#36  
 1,1-Dichloropropene  
 Concen: 4.138 ug/l  
 RT: 7.62 min Scan# 1830  
 Delta R.T. -0.13 min  
 Lab File: VN064849.D  
 Acq: 25 Nov 2020 11:52

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 45BR-20201118DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.3   | 17.8  | 53.3# |
| 77      | 0.0   | 25.0  | 37.4# |

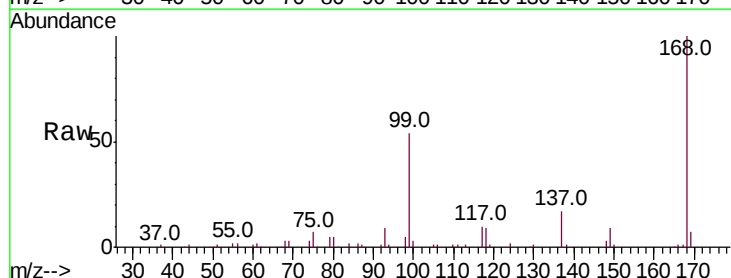


Abundance Ion 74.90 (74.60 to 75.60): VN064779.D (-1848) (-)  
 Ion 109.90 (109.60 to 110.60): VN064779.D (-1848) (-)  
 Ion 76.90 (76.60 to 77.60): VN064779.D (-1848) (-)

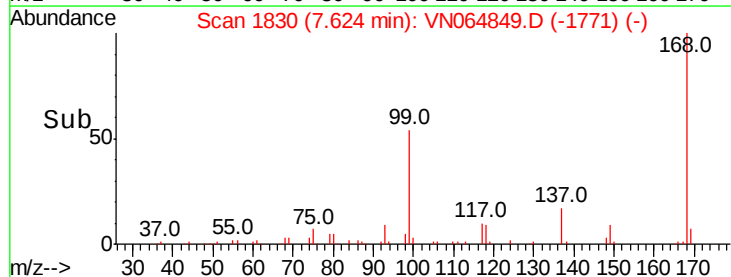
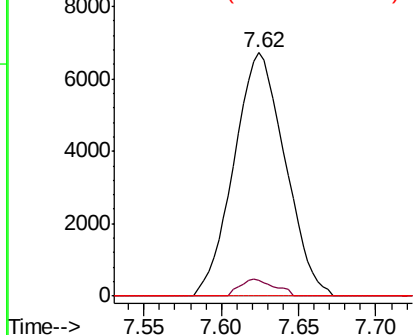


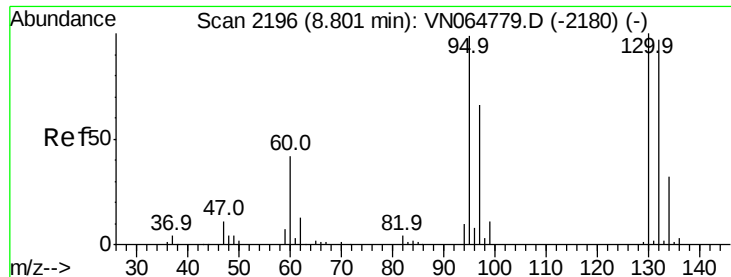
#38  
 Carbon Tetrachloride  
 Concen: 5.670 ug/l  
 RT: 7.62 min Scan# 1830  
 Delta R.T. -0.11 min  
 Lab File: VN064849.D  
 Acq: 25 Nov 2020 11:52

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 6.5   | 76.7  | 115.1# |
| 121     | 0.0   | 25.4  | 38.2#  |



Abundance Ion 116.80 (116.50 to 117.50): VN064779.D (-1845) (-)  
 Ion 118.80 (118.50 to 119.50): VN064779.D (-1845) (-)  
 Ion 120.80 (120.50 to 121.50): VN064779.D (-1845) (-)





#44

Trichloroethene

Concen: 28.572 ug/l

RT: 8.80 min Scan# 2196

Delta R.T. 0.00 min

Lab File: VN064849.D

Acq: 25 Nov 2020 11:52

Instrument :

MSVOA\_N

ClientSampleId :

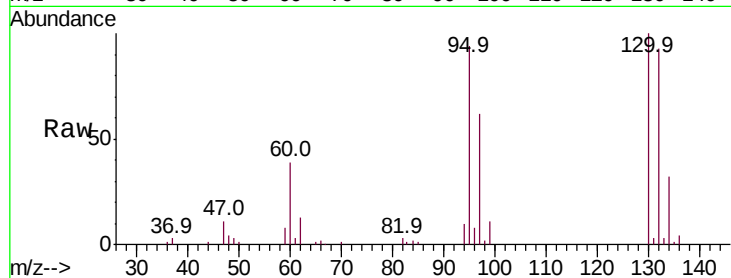
45BR-20201118DL

Tot Ion:130 Resp: 67635

Ion Ratio Lower Upper

130 100

95 93.6 0.0 197.8



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VN

8.80

40000

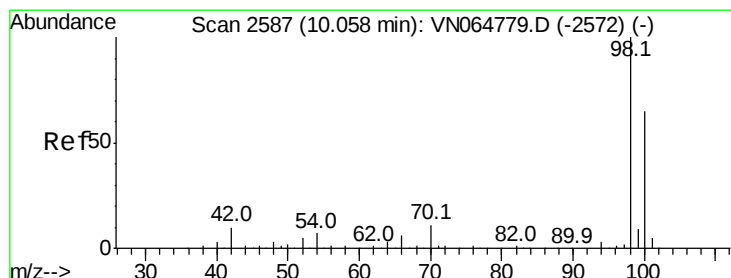
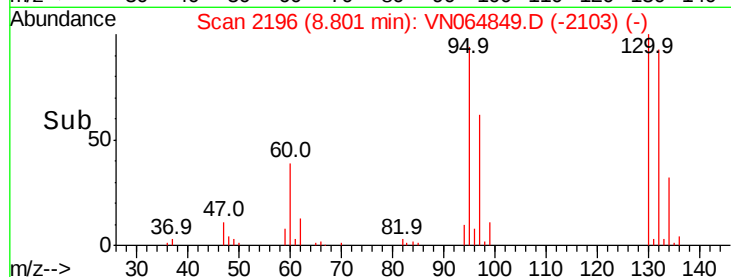
30000

20000

10000

0

Time--> 8.70 8.75 8.80 8.85 8.90



#50

Toluene-d8

Concen: 51.033 ug/l

RT: 10.06 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN064849.D

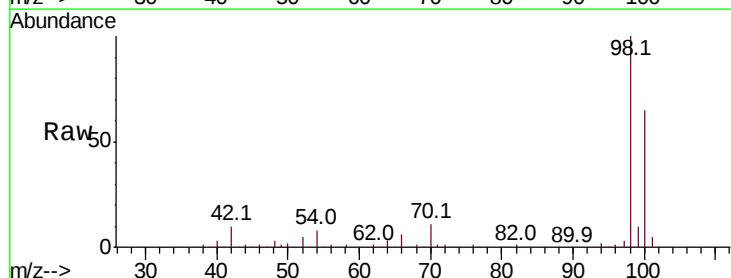
Acq: 25 Nov 2020 11:52

Tgt Ion: 98 Resp: 352433

Ion Ratio Lower Upper

98 100

100 64.2 51.7 77.5



Abundance Ion 98.00 (97.70 to 98.70): VN

Ion 100.00 (99.70 to 100.70): VN

10.06

200000

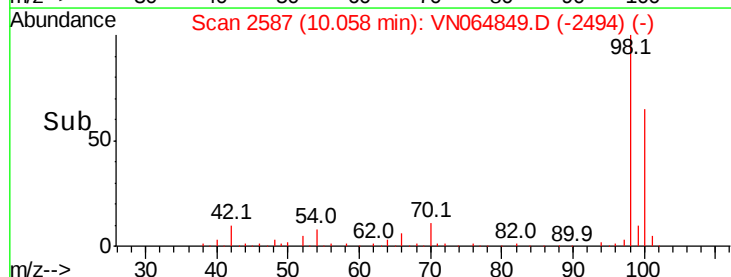
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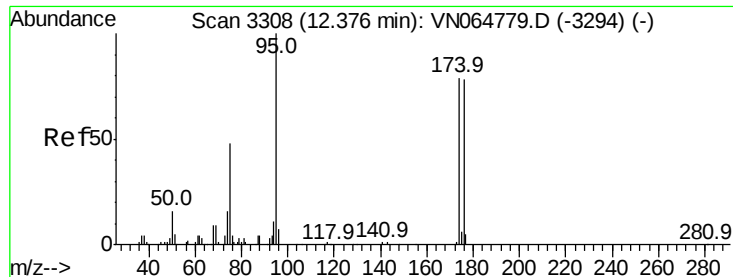
100000

50000

0

Time--> 10.00 10.10

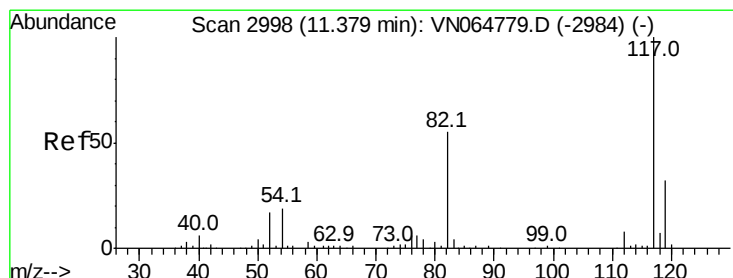
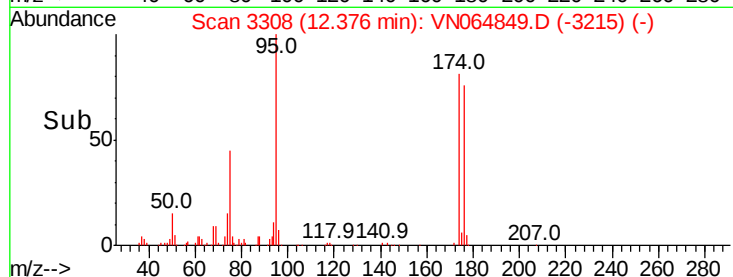
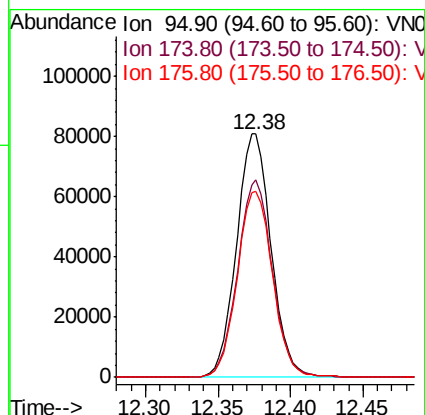
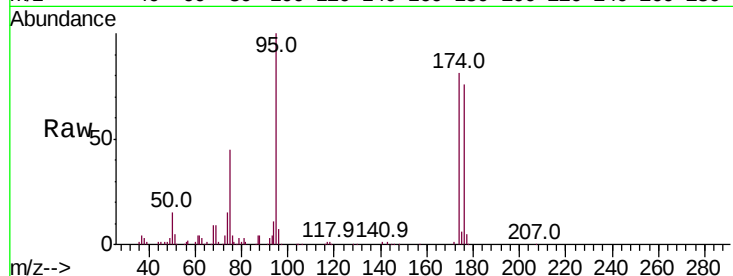




#62  
4-Bromofluorobenzene  
Concen: 54.290 ug/l  
RT: 12.38 min Scan# 3308  
Delta R.T. 0.00 min  
Lab File: VN064849.D  
Acq: 25 Nov 2020 11:52

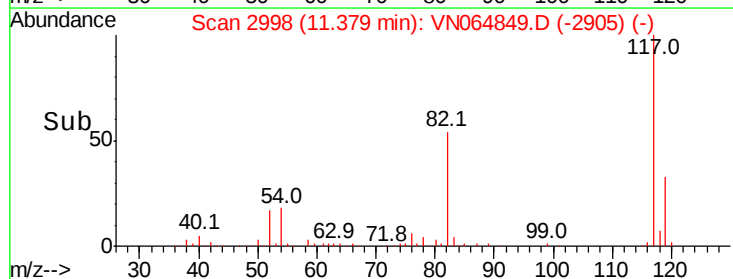
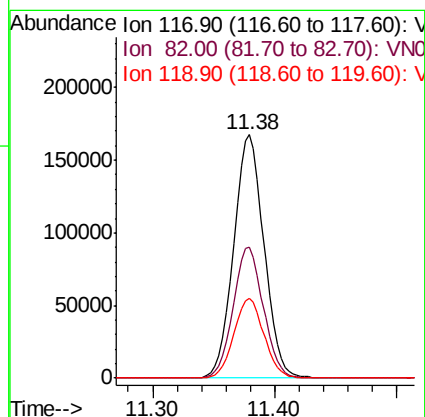
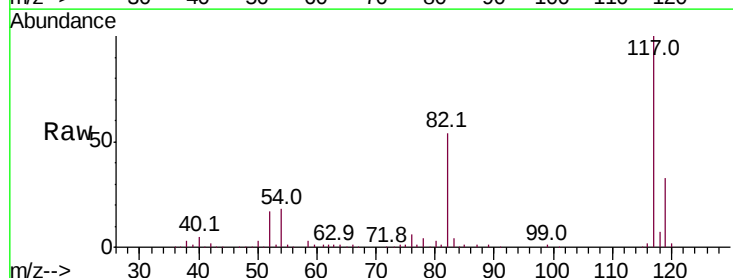
Instrument :  
MSVOA\_N  
ClientSampleId :  
45BR-20201118DL

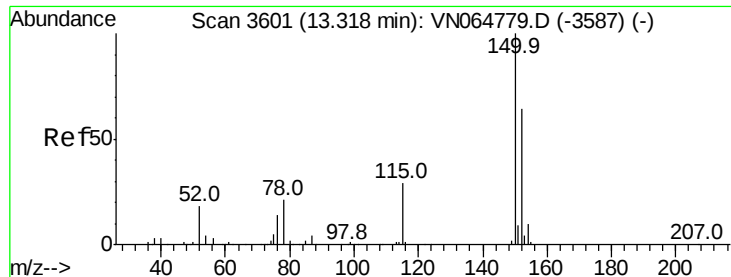
Tot Ion: 95 Resp: 134178  
Ion Ratio Lower Upper  
95 100  
174 81.7 0.0 160.4  
176 78.6 0.0 158.4



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.38 min Scan# 2998  
Delta R.T. 0.00 min  
Lab File: VN064849.D  
Acq: 25 Nov 2020 11:52

Tgt Ion: 117 Resp: 289687  
Ion Ratio Lower Upper  
117 100  
82 53.6 44.2 66.2  
119 32.8 25.8 38.6





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.32 min Scan# 3600

Delta R.T. -0.00 min

Lab File: VN064849.D

Acq: 25 Nov 2020 11:52

Instrument :

MSVOA\_N

ClientSampleId :

45BR-20201118DL

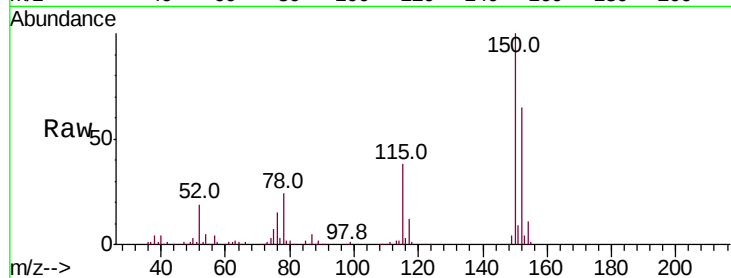
Tot Ion:152 Resp: 128619

Ion Ratio Lower Upper

152 100

115 57.6 29.7 89.1

150 155.2 0.0 350.6



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

150000

100000

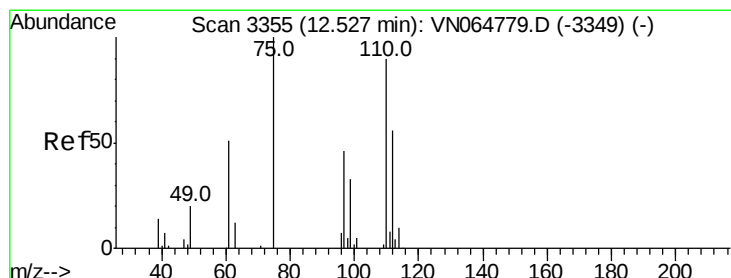
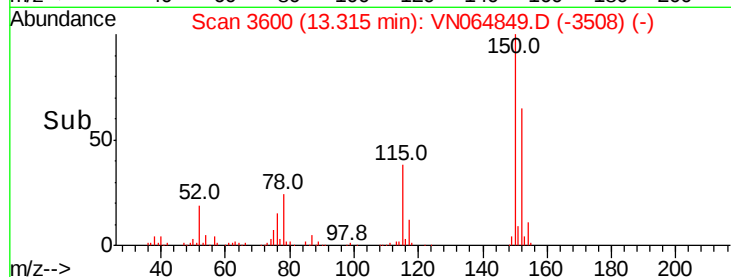
50000

0

13.32

13.25 13.30 13.35 13.40

Time-->



#76

1,2,3-Trichloropropane

Concen: 22.707 ug/l

RT: 12.37 min Scan# 3307

Delta R.T. -0.15 min

Lab File: VN064849.D

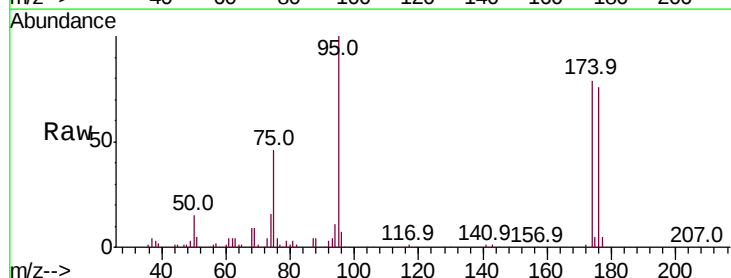
Acq: 25 Nov 2020 11:52

Tgt Ion: 75 Resp: 62896

Ion Ratio Lower Upper

75 100

77 1.2 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V

40000

30000

20000

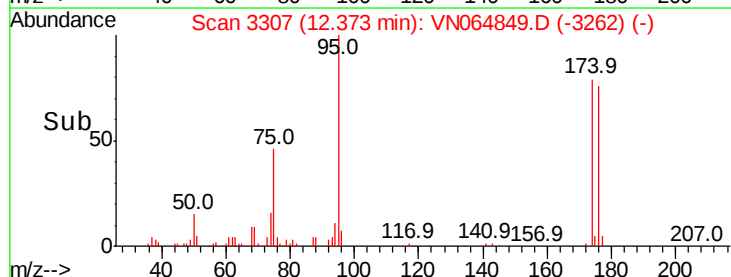
10000

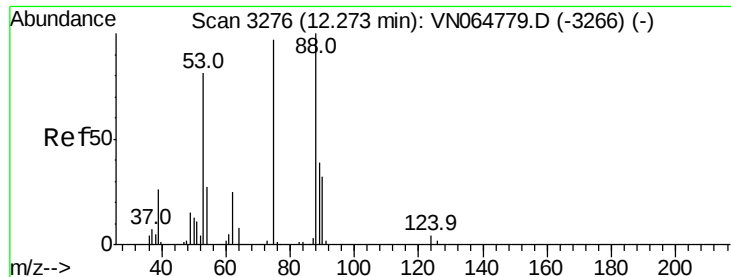
0

12.37

12.30 12.35 12.40 12.45

Time-->





#81

trans-1,4-Dichloro-2-butene

Concen: 62.234 ug/l

RT: 12.37 min Scan# 3307

Delta R.T. 0.10 min

Lab File: VN064849.D

Acq: 25 Nov 2020 11:52

Instrument :

MSVOA\_N

ClientSampleId :

45BR-20201118DL

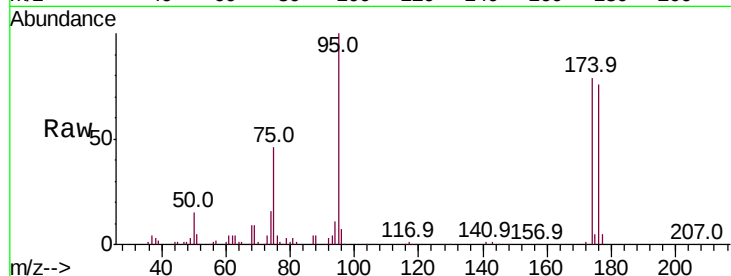
Tot Ion: 75 Resp: 62896

Ion Ratio Lower Upper

75 100

53 0.0 67.0 100.4#

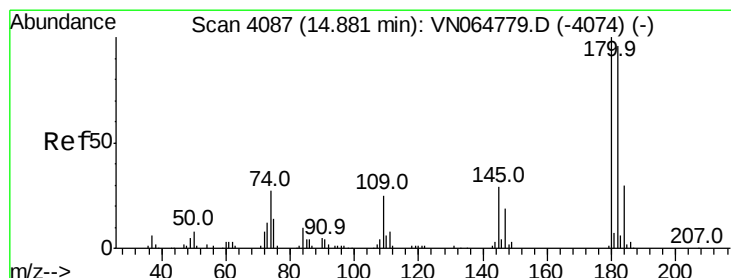
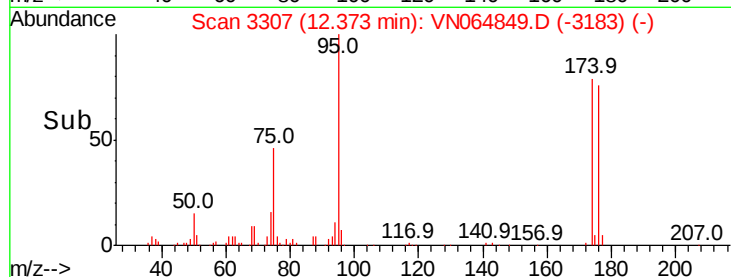
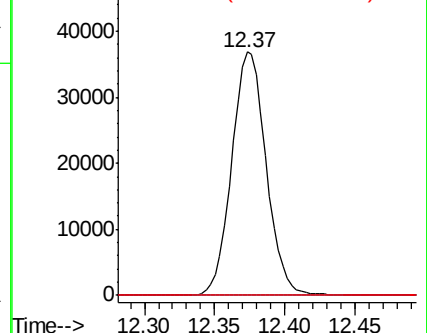
89 0.0 39.6 59.4#



Abundance Ion 74.90 (74.60 to 75.60): VN064779.D (-3266) (-)

Ion 53.00 (52.70 to 53.70): VN064779.D (-3266) (-)

Ion 88.90 (88.60 to 89.60): VN064779.D (-3266) (-)



#93

1,2,4-Trichlorobenzene

Concen: 0.239 ug/l

RT: 14.88 min Scan# 4088

Delta R.T. 0.00 min

Lab File: VN064849.D

Acq: 25 Nov 2020 11:52

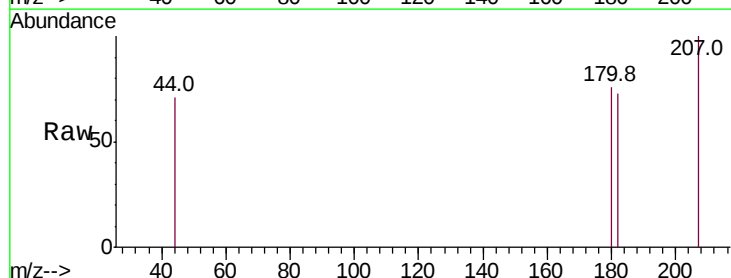
Tgt Ion: 180 Resp: 623

Ion Ratio Lower Upper

180 100

182 80.1 47.6 142.9

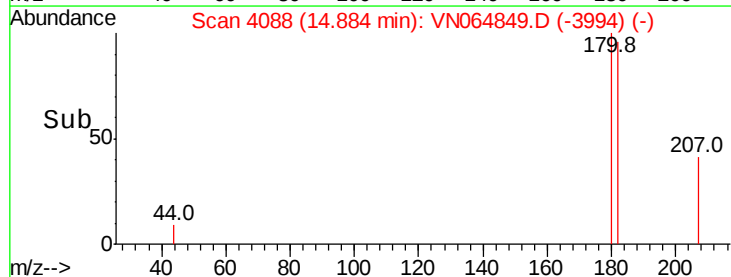
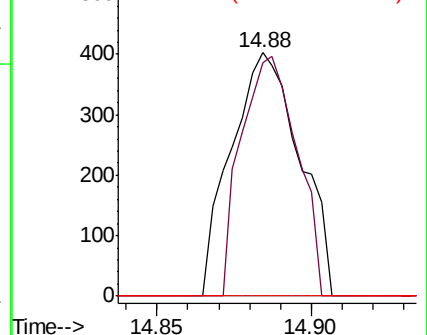
145 0.0 15.3 45.8#

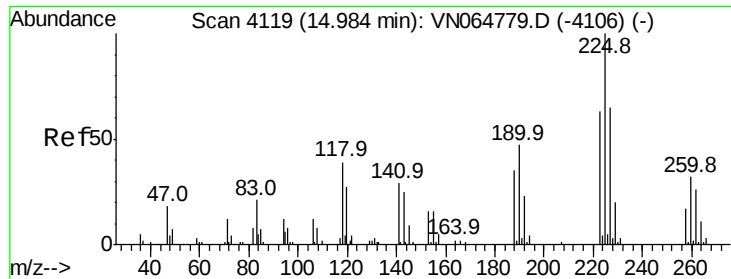


Abundance Ion 179.80 (179.50 to 180.50): VN064779.D (-4074) (-)

Ion 181.80 (181.50 to 182.50): VN064779.D (-4074) (-)

Ion 144.80 (144.50 to 145.50): VN064779.D (-4074) (-)





#94

Hexachlorobutadiene

Concen: 0.577 ug/l

RT: 14.98 min Scan# 4118

Delta R.T. -0.00 min

Lab File: VN064849.D

Acq: 25 Nov 2020 11:52

Instrument :

MSVOA\_N

ClientSampleId :

45BR-20201118DL

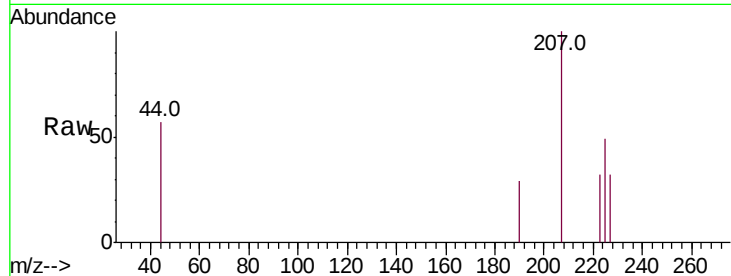
Tot Ion:225 Resp: 241

Ion Ratio Lower Upper

225 100

223 43.6 31.0 93.0

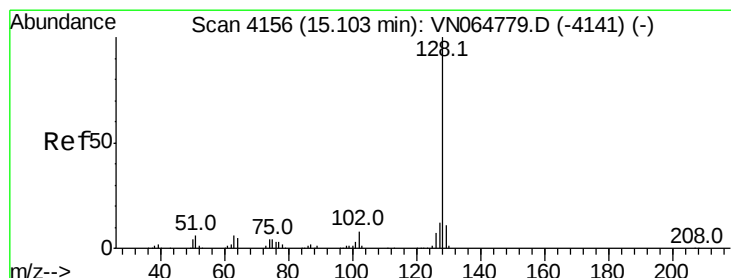
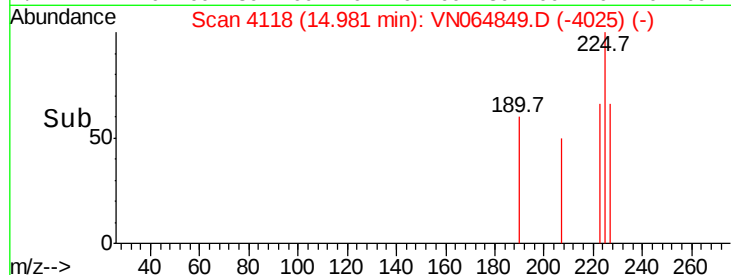
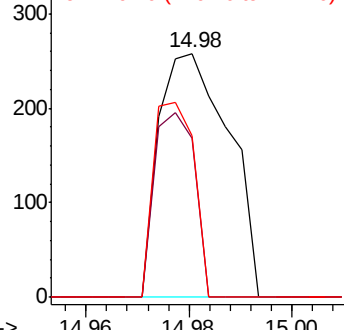
227 46.5 32.0 96.0



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



#95

Naphthalene

Concen: 0.285 ug/l

RT: 15.11 min Scan# 4157

Delta R.T. 0.00 min

Lab File: VN064849.D

Acq: 25 Nov 2020 11:52

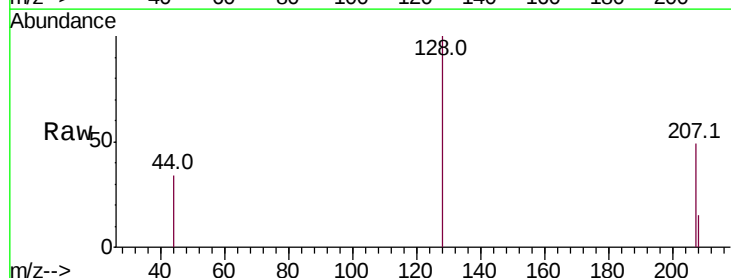
Tgt Ion:128 Resp: 2226

Ion Ratio Lower Upper

128 100

127 1.3 10.3 15.5#

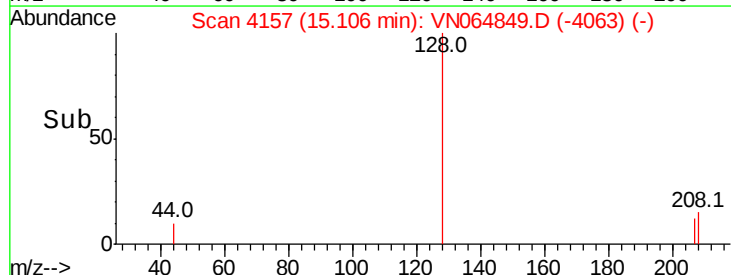
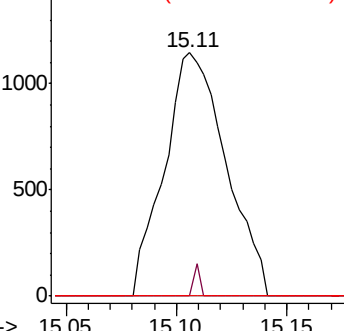
129 0.0 8.7 13.1#

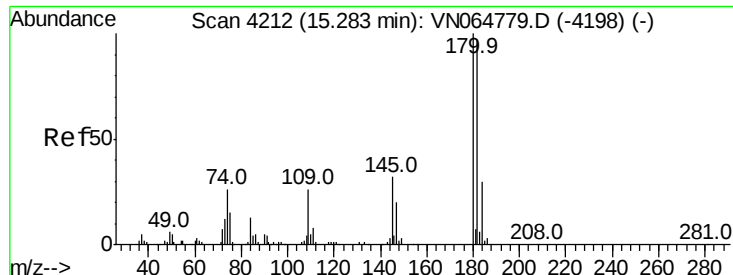


Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V





#96

1,2,3-Trichlorobenzene

Concen: 1.726 ug/l

RT: 15.28 min Scan# 4212

Delta R.T. 0.00 min

Lab File: VN064849.D

Acq: 25 Nov 2020 11:52

Instrument :

MSVOA\_N

ClientSampleId :

45BR-20201118DL

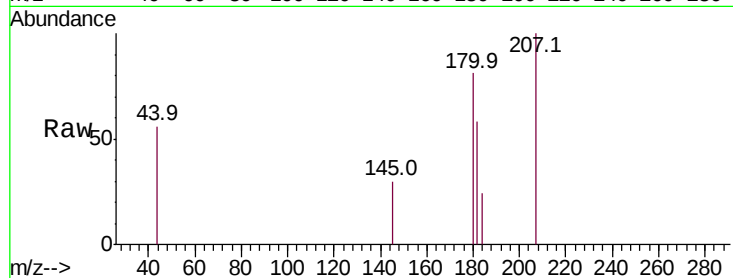
Tot Ion:180 Resp: 850

Ion Ratio Lower Upper

180 100

182 67.5 48.1 144.4

145 12.2 16.4 49.1#



Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.90 (144.60 to 145.60): V

