

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN031020\  
 Data File : VN060420.D  
 Acq On : 10 Mar 2020 16:31  
 Operator : JC/MD  
 Sample : PB127392ZHE#15  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB127392ZHE#15

Quant Time: Mar 11 06:41:55 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N022720W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Feb 27 13:52:50 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 209132   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 339663   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 318949   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 146711   | 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   | 133371   | 49.71 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.42%  |          |
| 35) Dibromofluoromethane    | 7.57  | 113  | 99743    | 63.26 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 126.52% |          |
| 50) Toluene-d8              | 10.08 | 98   | 422097   | 52.90 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.80% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 155650   | 51.46 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.92% |          |

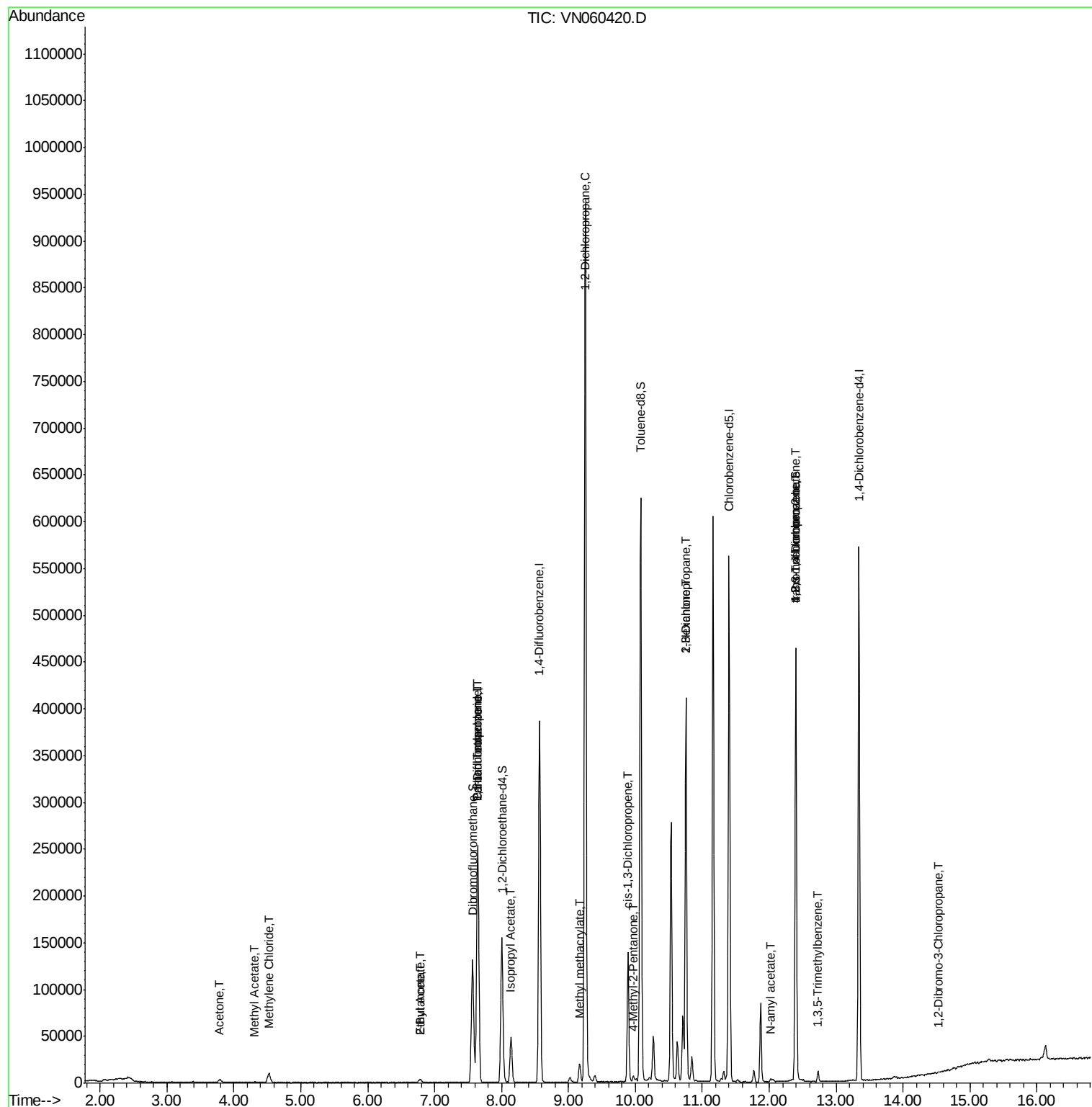
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 16) Acetone                    | 3.79  | 43   | 6513     | 7.517     | ug/l   | 93     |
| 18) Methyl Acetate             | 4.30  | 43   | 985      | 0.341     | ug/l # | 58     |
| 20) Methylene Chloride         | 4.53  | 84   | 7456     | 3.133     | ug/l   | 95     |
| 25) 2-Butanone                 | 6.80  | 43   | 1061     | 0.758     | ug/l # | 49     |
| 31) Cyclohexane                | 7.64  | 56   | 4378     | Below Cal | #      | 3      |
| 36) 1,1-Dichloropropene        | 7.64  | 75   | 16124    | 4.981     | ug/l # | 49     |
| 37) Ethyl Acetate              | 6.80  | 43   | 1061     | 0.346     | ug/l # | 68     |
| 38) Carbon Tetrachloride       | 7.64  | 117  | 20383    | 6.467     | ug/l # | 16     |
| 43) Isopropyl Acetate          | 8.14  | 43   | 57891    | 10.788    | ug/l # | 90     |
| 45) 1,2-Dichloropropane        | 9.25  | 63   | 1048     | 0.425     | ug/l # | 44     |
| 48) Methyl methacrylate        | 9.17  | 41   | 3094     | 1.264     | ug/l # | 13     |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 4475     | 1.471     | ug/l   | 94     |
| 54) cis-1,3-Dichloropropene    | 9.89  | 75   | 24175    | 5.857     | ug/l # | 60     |
| 57) 1,3-Dichloropropane        | 10.75 | 76   | 3974     | 1.024     | ug/l # | 42     |
| 59) 2-Hexanone                 | 10.75 | 43   | 61271    | 27.428    | ug/l # | 51     |
| 74) N-amyl acetate             | 12.02 | 43   | 3222     | 0.678     | ug/l # | 44     |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 80965    | 25.153    | ug/l # | 100    |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 6368     | 0.696     | ug/l   | 99     |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 80965    | 69.435    | ug/l # | 8      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.52 | 75   | 162      | 0.242     | ug/l # | 3      |
| 95) Naphthalene                | 15.13 | 128  | 60       | Below Cal | #      | 69     |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_N\DATA\VN031020\  
Data File : VN060420.D  
Acq On : 10 Mar 2020 16:31  
Operator : JC/MD  
Sample : PB127392ZHE#15  
Misc : 5.00mL/MSVOA\_N/WATER  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
PB127392ZHE#15

Quant Time: Mar 11 06:41:55 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N022720W.M  
Quant Title : SW846 8260  
QLast Update : Thu Feb 27 13:52:50 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: VN060420.D

Acq: 10 Mar 2020 16:31

Instrument :

MSVOA\_N

ClientSampleId :

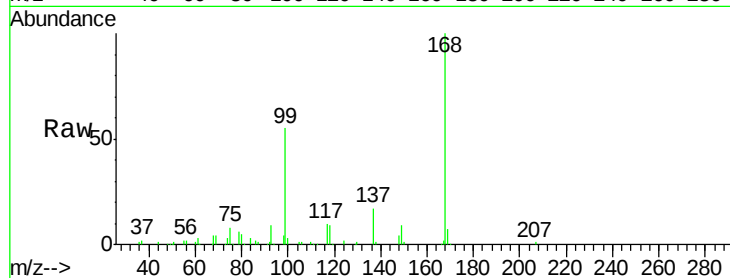
PB127392ZHE#15

Tgt Ion:168 Resp: 209132

Ion Ratio Lower Upper

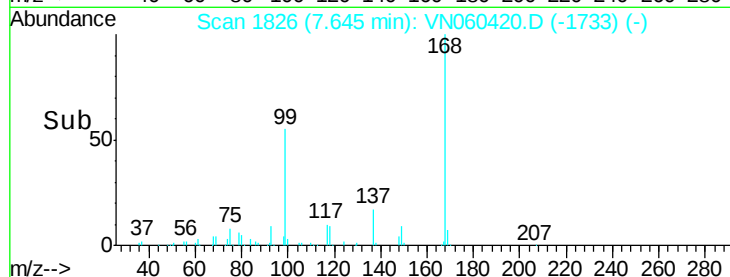
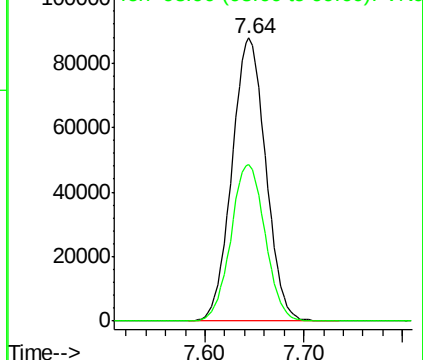
168 100

99 55.1 44.7 67.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN0



#16

Acetone

Concen: 7.517 ug/l

RT: 3.79 min Scan# 626

Delta R.T. 0.01 min

Lab File: VN060420.D

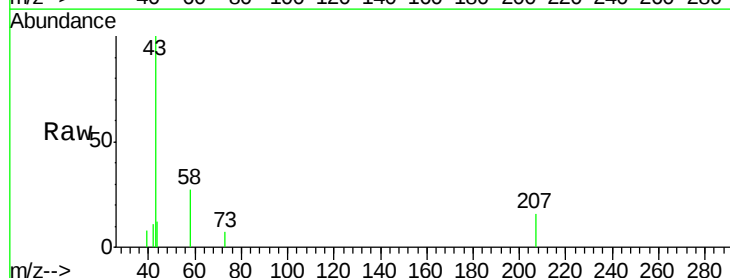
Acq: 10 Mar 2020 16:31

Tgt Ion: 43 Resp: 6513

Ion Ratio Lower Upper

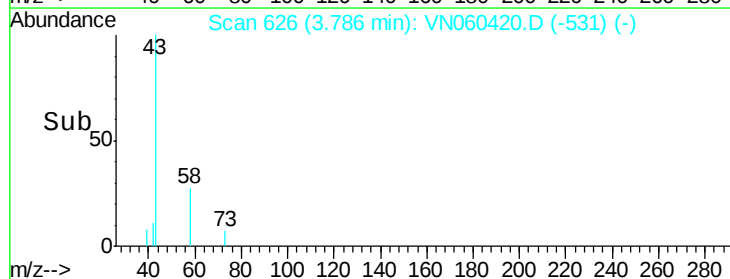
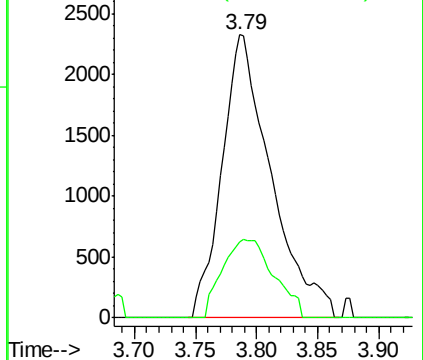
43 100

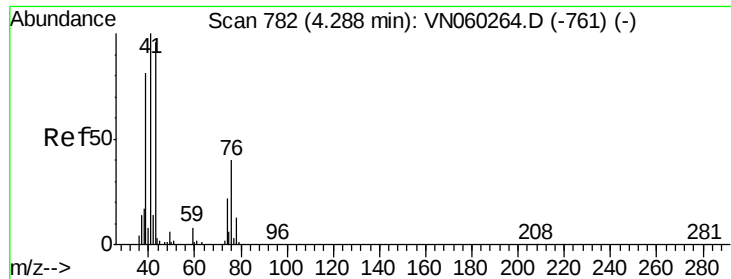
58 26.8 24.6 36.8



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

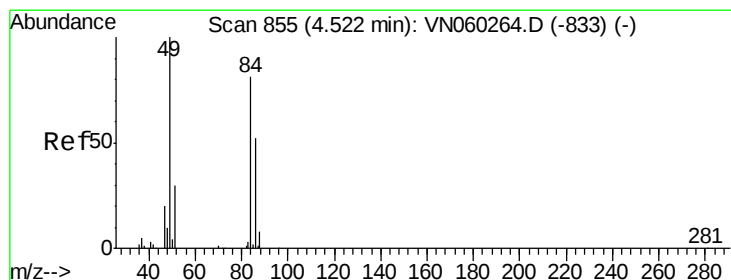
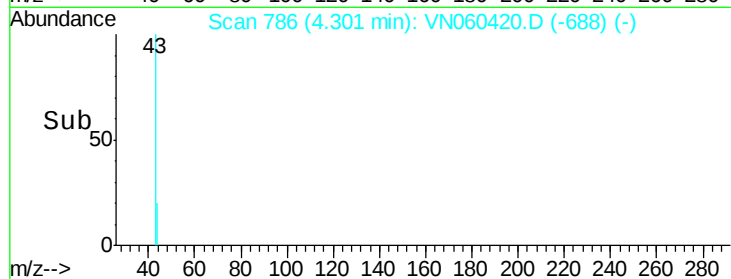
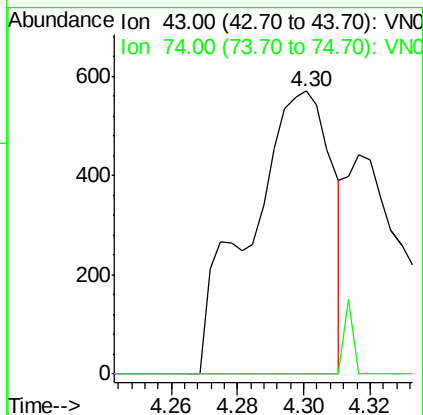
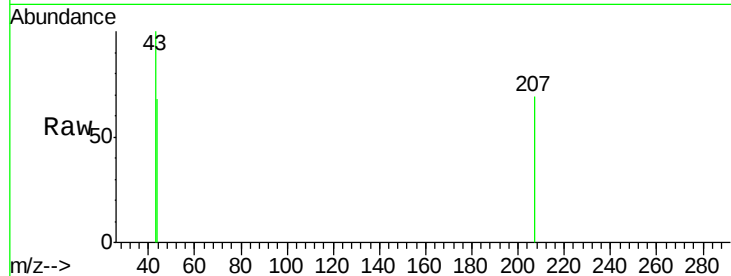




#18  
Methyl Acetate  
Concen: 0.341 ug/l  
RT: 4.30 min Scan# 786  
Delta R.T. 0.01 min  
Lab File: VN060420.D  
Acq: 10 Mar 2020 16:31

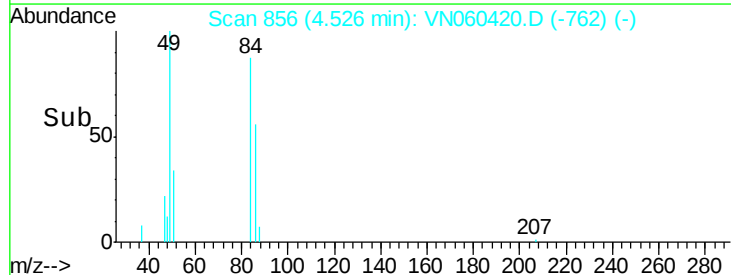
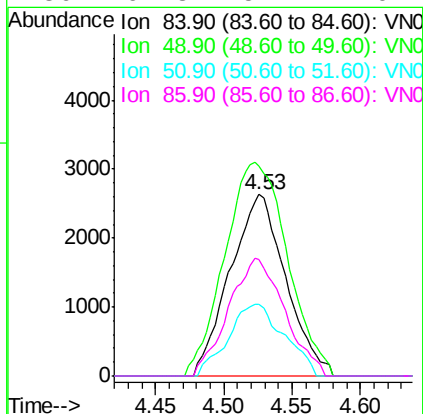
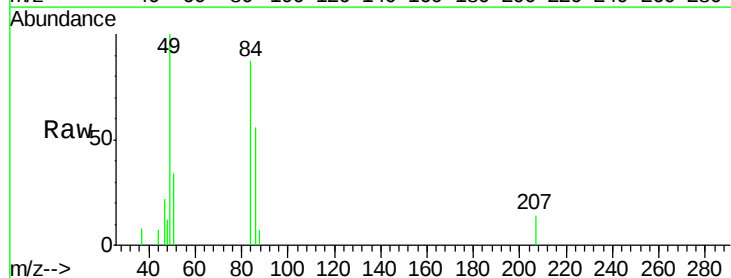
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB127392ZHE#15

Tgt Ion: 43 Resp: 985  
Ion Ratio Lower Upper  
43 100  
74 2.9 18.8 28.2#



#20  
Methylene Chloride  
Concen: 3.133 ug/l  
RT: 4.53 min Scan# 856  
Delta R.T. 0.00 min  
Lab File: VN060420.D  
Acq: 10 Mar 2020 16:31

Tgt Ion: 84 Resp: 7456  
Ion Ratio Lower Upper  
84 100  
49 115.4 99.3 148.9  
51 39.5 30.1 45.1  
86 64.3 51.1 76.7





#25

2-Butanone

Concen: 0.758 ug/l

RT: 6.80 min Scan# 1563

Delta R.T. 0.00 min

Lab File: VN060420.D

Acq: 10 Mar 2020 16:31

Instrument :

MSVOA\_N

ClientSampleId :

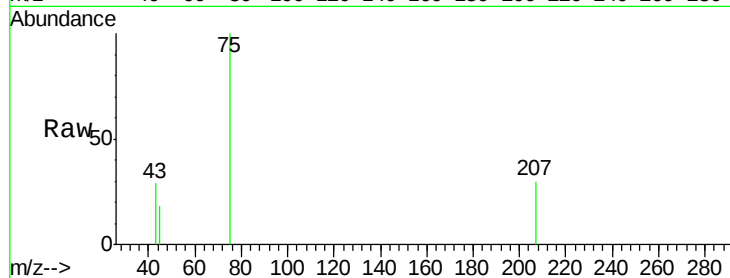
PB127392ZHE#15

Tgt Ion: 43 Resp: 1061

Ion Ratio Lower Upper

43 100

72 0.0 20.9 31.3#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 72.00 (71.70 to 72.70): VN0

6.80

400

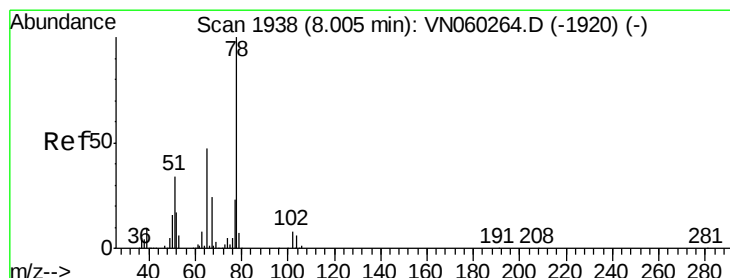
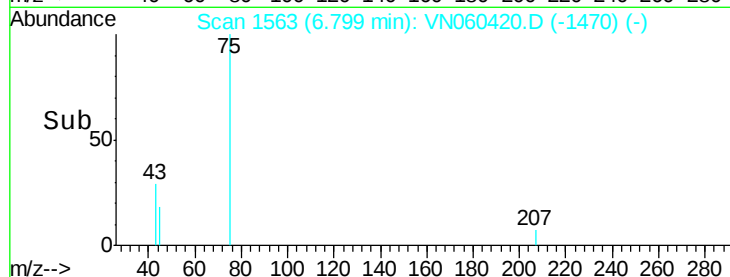
300

200

100

0

Time-->



#33

1,2-Dichloroethane-d4

Concen: 49.706 ug/l

RT: 8.00 min Scan# 1938

Delta R.T. 0.00 min

Lab File: VN060420.D

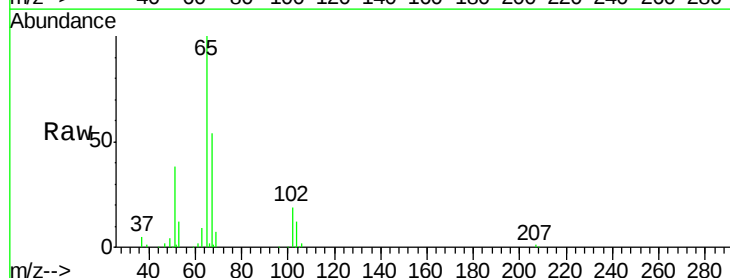
Acq: 10 Mar 2020 16:31

Tgt Ion: 65 Resp: 133371

Ion Ratio Lower Upper

65 100

67 52.1 0.0 103.8



Abundance Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0

8.00

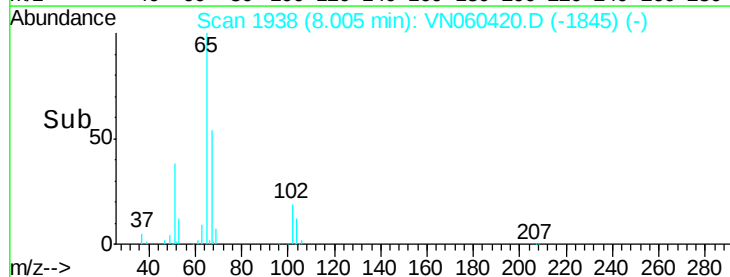
60000

40000

20000

0

Time-->





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.57 min Scan# 2113

Delta R.T. 0.00 min

Lab File: VN060420.D

Acq: 10 Mar 2020 16:31

Instrument :

MSVOA\_N

ClientSampleId :

PB127392ZHE#15

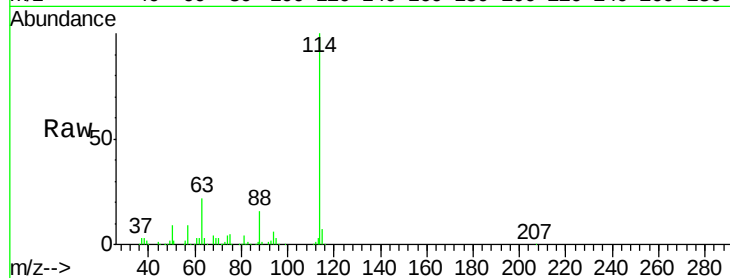
Tgt Ion:114 Resp: 339663

Ion Ratio Lower Upper

114 100

63 22.0 0.0 43.2

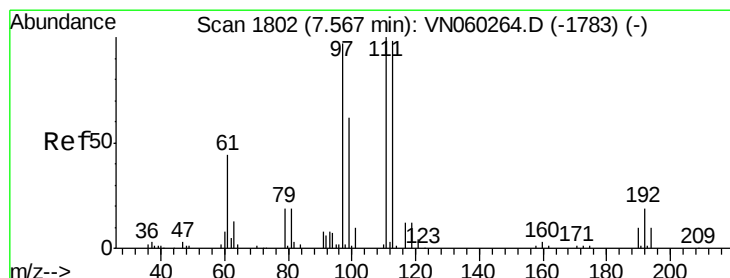
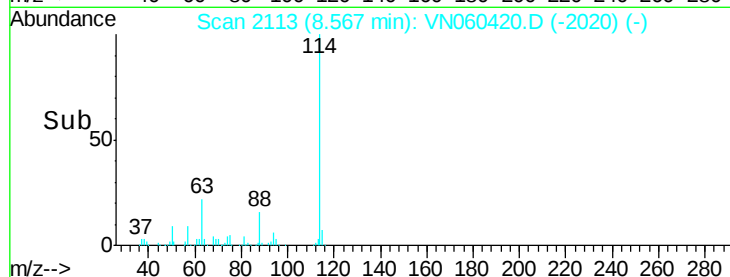
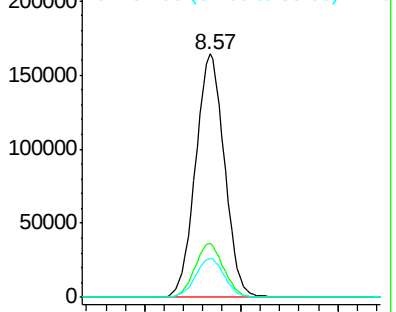
88 16.2 0.0 31.6



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): V

Ion 87.90 (87.60 to 88.60): V



#35

Dibromofluoromethane

Concen: 63.264 ug/l

RT: 7.57 min Scan# 1802

Delta R.T. 0.00 min

Lab File: VN060420.D

Acq: 10 Mar 2020 16:31

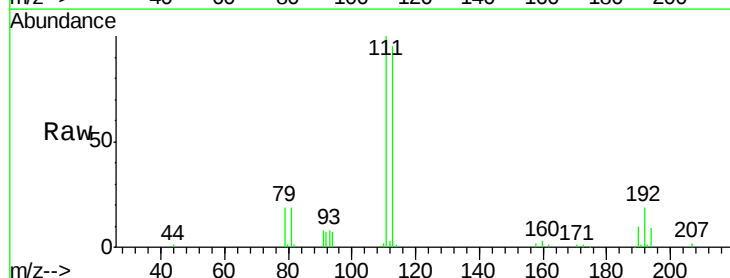
Tgt Ion:113 Resp: 99743

Ion Ratio Lower Upper

113 100

111 103.1 82.4 123.6

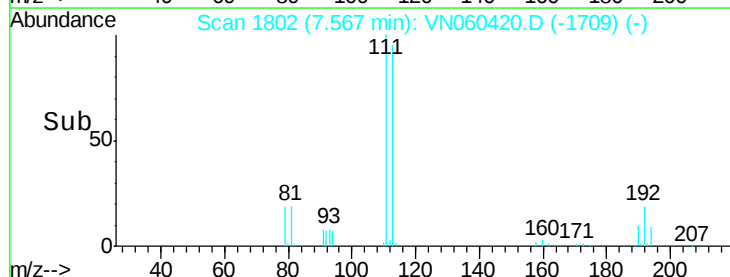
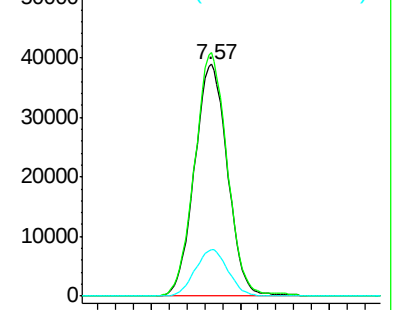
192 19.9 16.2 24.2



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

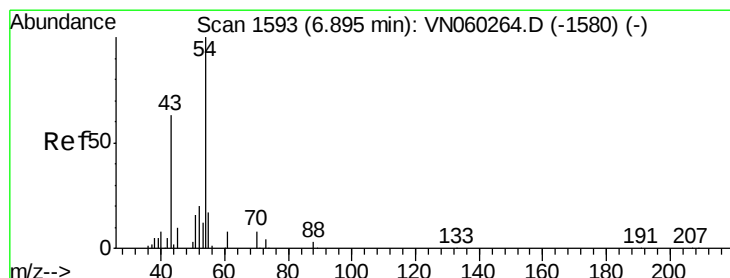
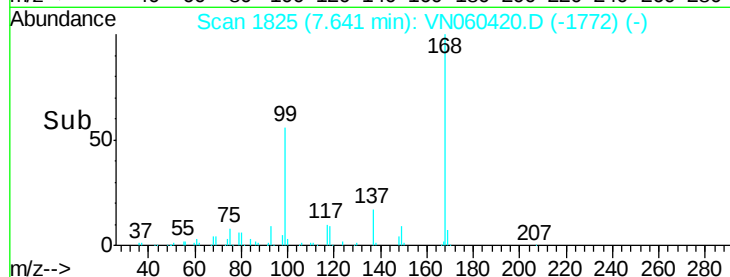
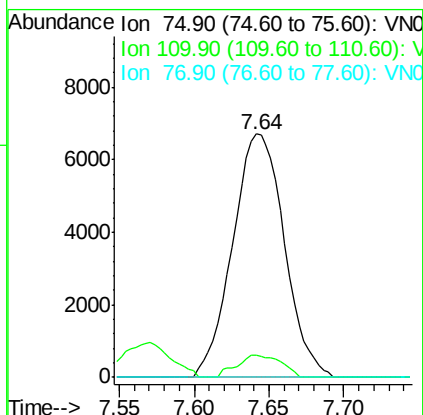
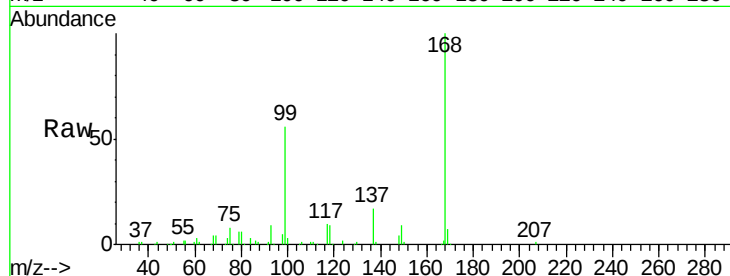




#36  
 1,1-Dichloropropene  
 Concen: 4.981 ug/l  
 RT: 7.64 min Scan# 1825  
 Delta R.T. -0.13 min  
 Lab File: VN060420.D  
 Acq: 10 Mar 2020 16:31

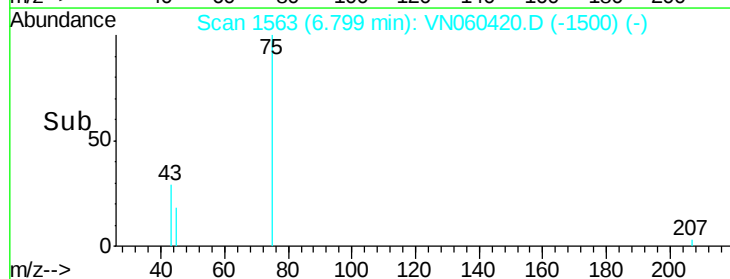
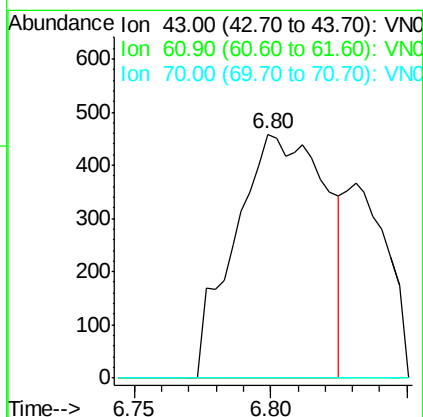
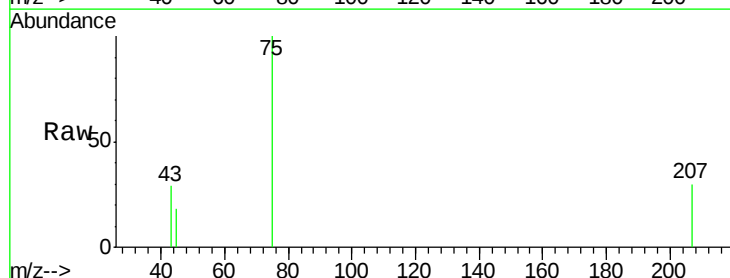
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB127392ZHE#15

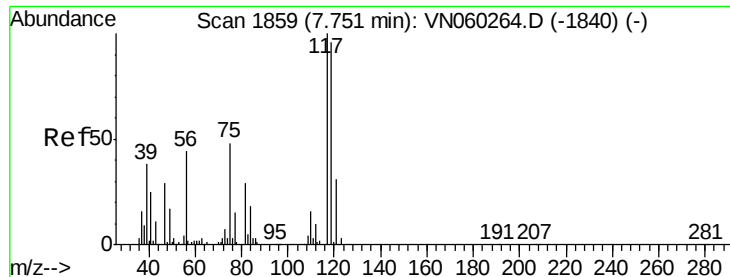
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 7.9   | 17.3  | 52.0# |
| 77      | 0.0   | 24.2  | 36.2# |



#37  
 Ethyl Acetate  
 Concen: 0.346 ug/l  
 RT: 6.80 min Scan# 1563  
 Delta R.T. -0.10 min  
 Lab File: VN060420.D  
 Acq: 10 Mar 2020 16:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 61      | 0.0   | 11.1  | 16.7# |
| 70      | 0.0   | 8.4   | 12.6# |





#38

Carbon Tetrachloride

Concen: 6.467 ug/l

RT: 7.64 min Scan# 1826

Delta R.T. -0.11 min

Lab File: VN060420.D

Acq: 10 Mar 2020 16:31

Instrument :

MSVOA\_N

ClientSampleId :

PB127392ZHE#15

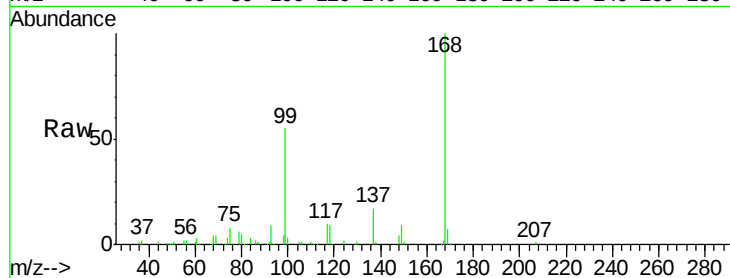
Tgt Ion:117 Resp: 20383

Ion Ratio Lower Upper

117 100

119 5.0 76.7 115.1#

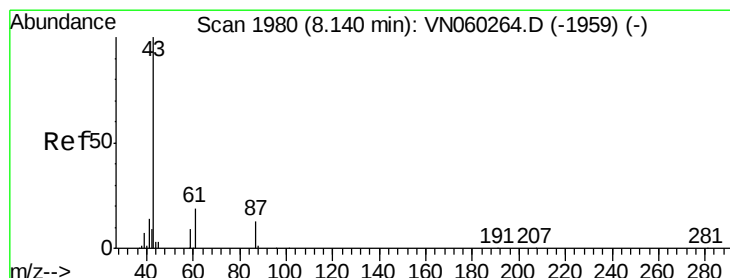
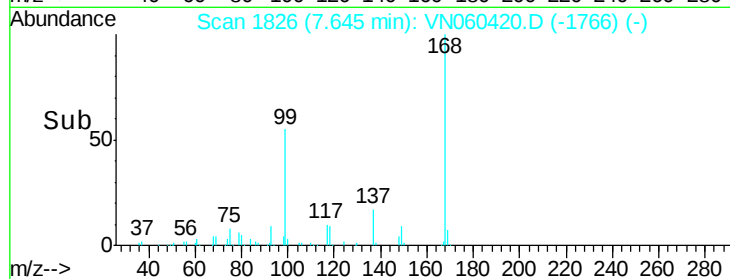
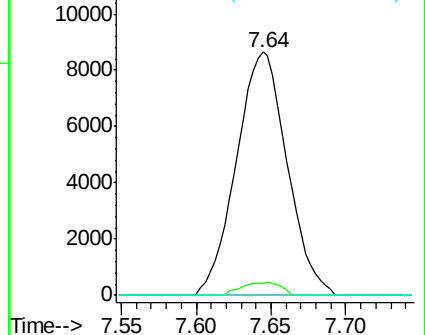
121 0.0 24.5 36.7#



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



#43

Isopropyl Acetate

Concen: 10.788 ug/l

RT: 8.14 min Scan# 1980

Delta R.T. 0.00 min

Lab File: VN060420.D

Acq: 10 Mar 2020 16:31

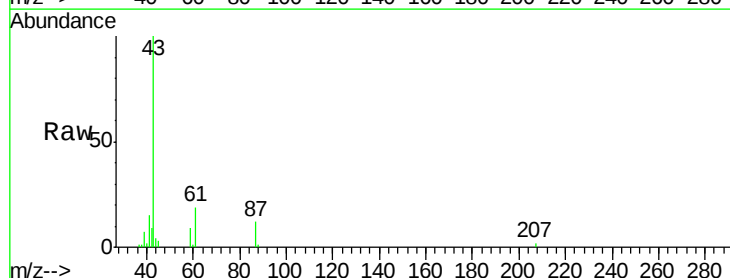
Tgt Ion: 43 Resp: 57891

Ion Ratio Lower Upper

43 100

61 19.2 20.9 31.3#

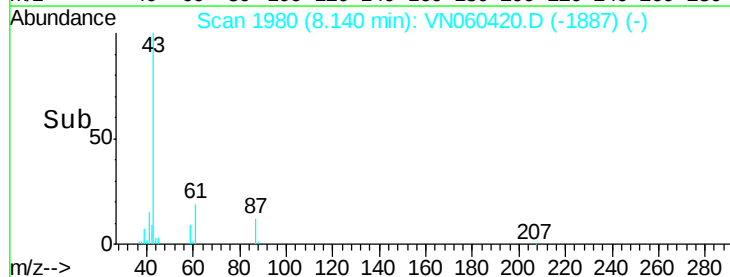
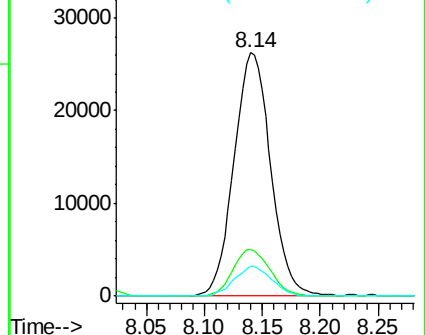
87 12.3 10.6 16.0

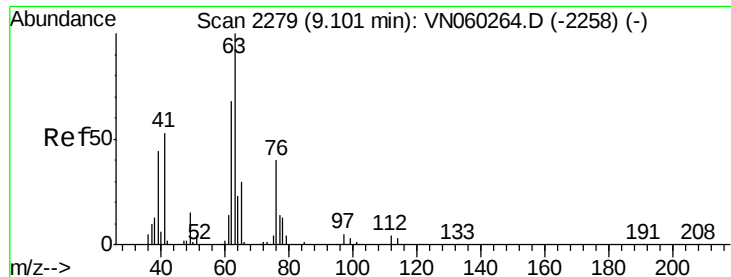


Abundance Ion 43.00 (42.70 to 43.70): V

Ion 61.00 (60.70 to 61.70): V

Ion 87.00 (86.70 to 87.70): V





#45

1,2-Dichloropropane

Concen: 0.425 ug/l

RT: 9.25 min Scan# 2326

Delta R.T. 0.15 min

Lab File: VN060420.D

Acq: 10 Mar 2020 16:31

Instrument :

MSVOA\_N

ClientSampleId :

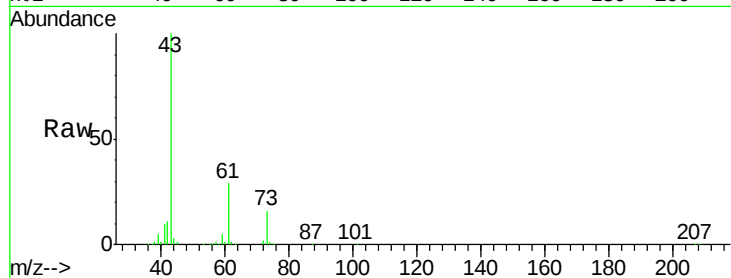
PB127392ZHE#15

Tgt Ion: 63 Resp: 1048

Ion Ratio Lower Upper

63 100

65 0.0 24.4 36.6#



Abundance Ion 62.90 (62.60 to 63.60): VN060420.D (-2186) (-)

Ion 64.90 (64.60 to 65.60): VN060420.D (-2186) (-)

9.25

600

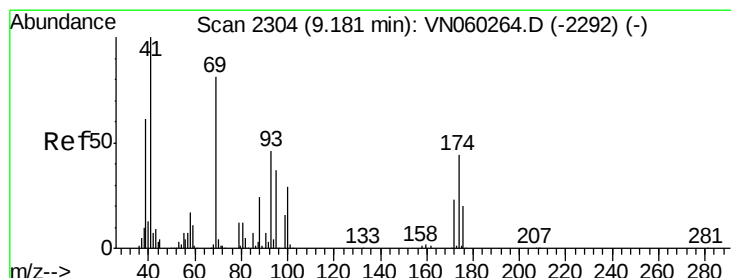
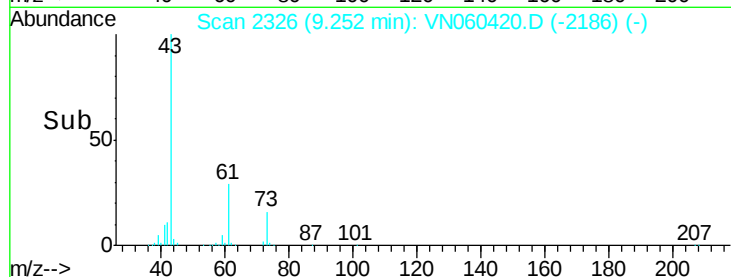
400

200

0

9.22 9.24 9.26 9.28

Time-->



#48

Methyl methacrylate

Concen: 1.264 ug/l

RT: 9.17 min Scan# 2299

Delta R.T. -0.02 min

Lab File: VN060420.D

Acq: 10 Mar 2020 16:31

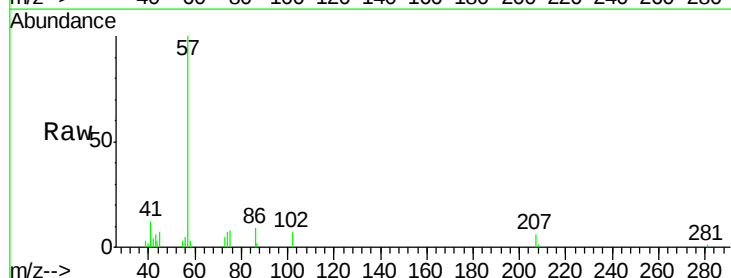
Tgt Ion: 41 Resp: 3094

Ion Ratio Lower Upper

41 100

69 0.0 66.7 100.1#

39 0.0 50.1 75.1#



Abundance Ion 41.00 (40.70 to 41.70): VN060420.D (-2211) (-)

Ion 69.00 (68.70 to 69.70): VN060420.D (-2211) (-)

Ion 39.00 (38.70 to 39.70): VN060420.D (-2211) (-)

60000

50000

40000

30000

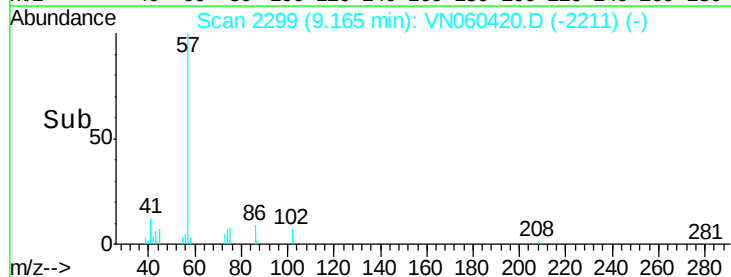
20000

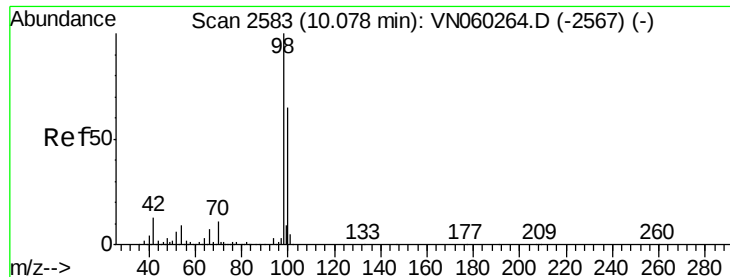
10000

0

9.10 9.15 9.20

Time-->





#50

Toluene-d8

Concen: 52.898 ug/l

RT: 10.08 min Scan# 2583

Delta R.T. 0.00 min

Lab File: VN060420.D

Acq: 10 Mar 2020 16:31

Instrument :

MSVOA\_N

ClientSampleId :

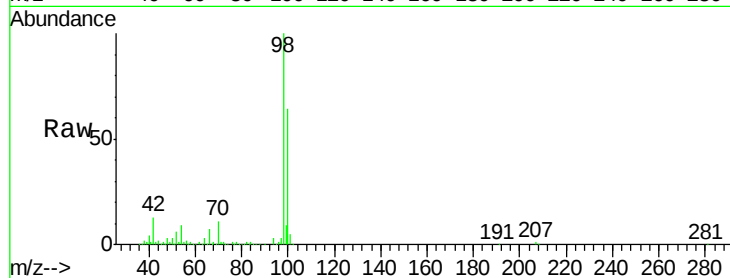
PB127392ZHE#15

Tgt Ion: 98 Resp: 422097

Ion Ratio Lower Upper

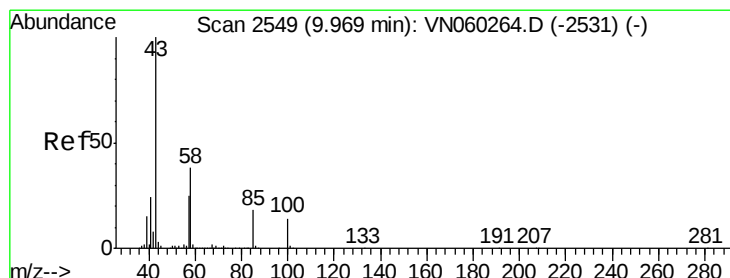
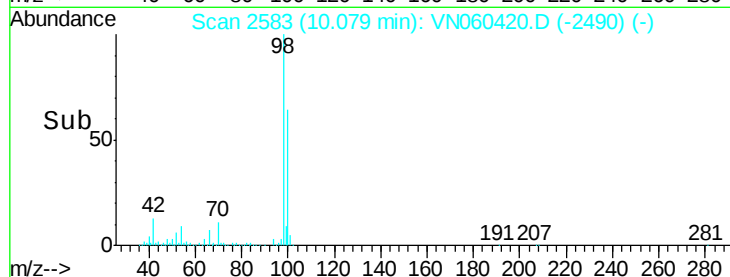
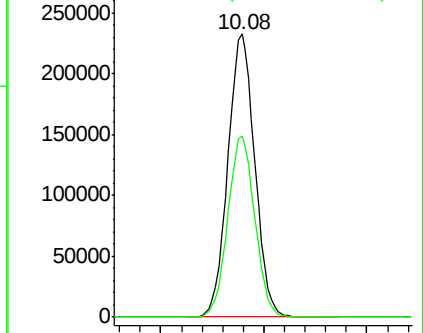
98 100

100 64.4 52.2 78.2



Abundance Ion 98.00 (97.70 to 98.70): VN0

Ion 100.00 (99.70 to 100.70): VN



#51

4-Methyl-2-Pentanone

Concen: 1.471 ug/l

RT: 9.97 min Scan# 2549

Delta R.T. 0.00 min

Lab File: VN060420.D

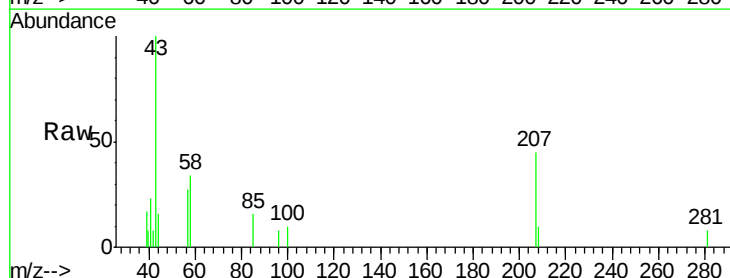
Acq: 10 Mar 2020 16:31

Tgt Ion: 43 Resp: 4475

Ion Ratio Lower Upper

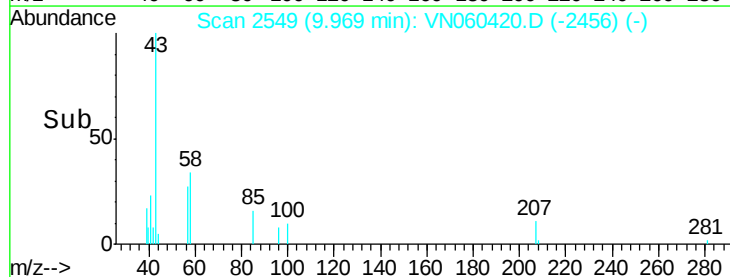
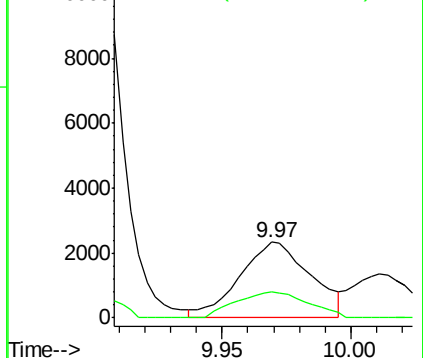
43 100

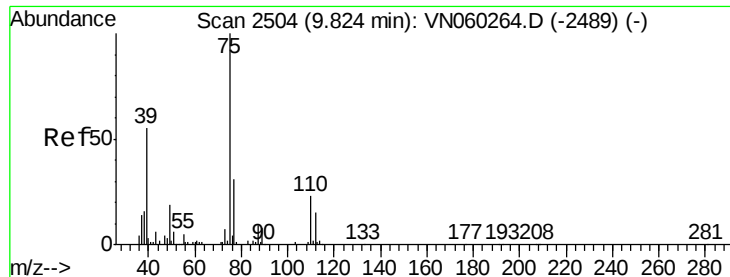
58 34.7 30.9 46.3



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0





#54

cis-1,3-Dichloropropene

Concen: 5.857 ug/l

RT: 9.89 min Scan# 2525

Delta R.T. 0.07 min

Lab File: VN060420.D

Acq: 10 Mar 2020 16:31

Instrument :

MSVOA\_N

ClientSampleId :

PB127392ZHE#15

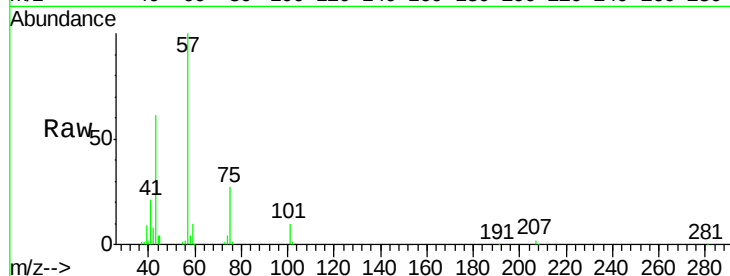
Tgt Ion: 75 Resp: 24175

Ion Ratio Lower Upper

75 100

77 0.0 24.8 37.2#

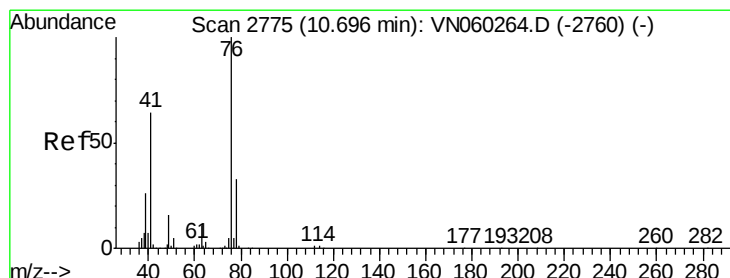
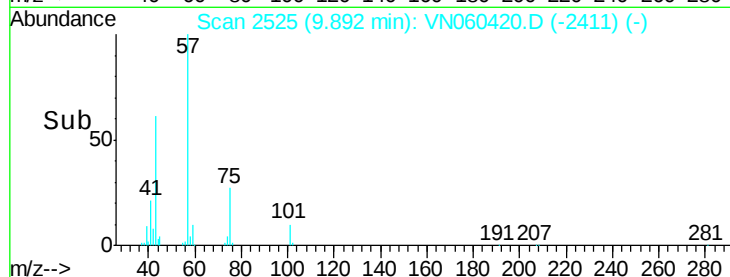
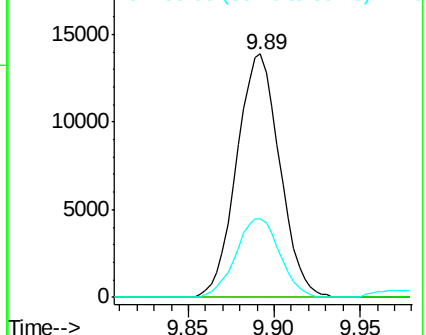
39 32.1 43.8 65.8#



Abundance Ion 74.90 (74.60 to 75.60): VN060420.D (-2411) (-)

Ion 76.90 (76.60 to 77.60): VN060420.D (-2411) (-)

Ion 39.00 (38.70 to 39.70): VN060420.D (-2411) (-)



#57

1,3-Dichloropropane

Concen: 1.024 ug/l

RT: 10.75 min Scan# 2793

Delta R.T. 0.06 min

Lab File: VN060420.D

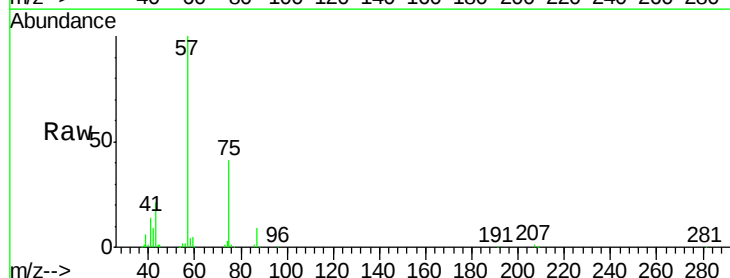
Acq: 10 Mar 2020 16:31

Tgt Ion: 76 Resp: 3974

Ion Ratio Lower Upper

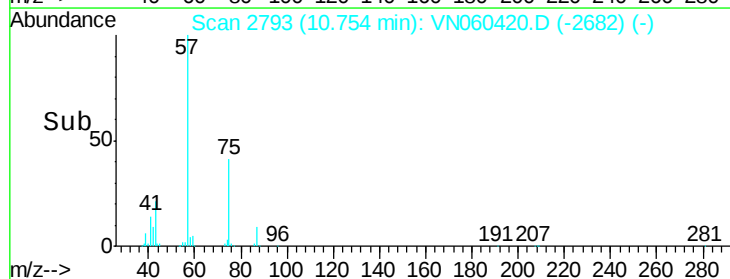
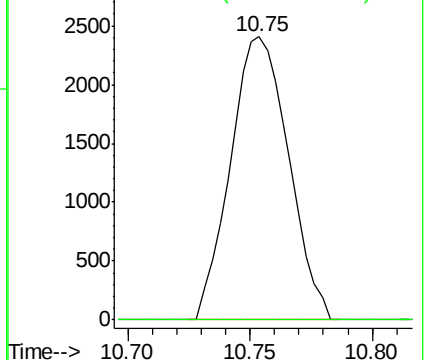
76 100

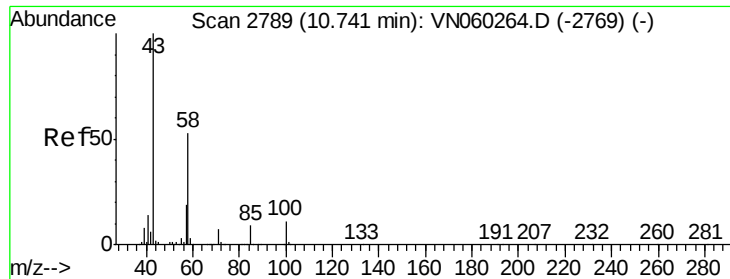
78 0.0 26.2 39.2#



Abundance Ion 75.90 (75.60 to 76.60): VN060420.D (-2682) (-)

Ion 77.90 (77.60 to 78.60): VN060420.D (-2682) (-)

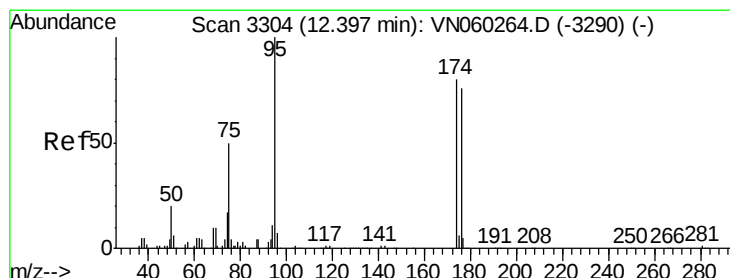
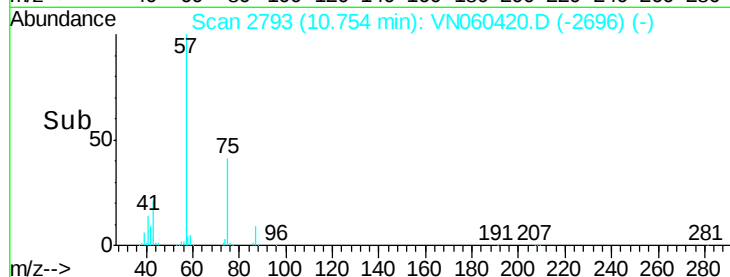
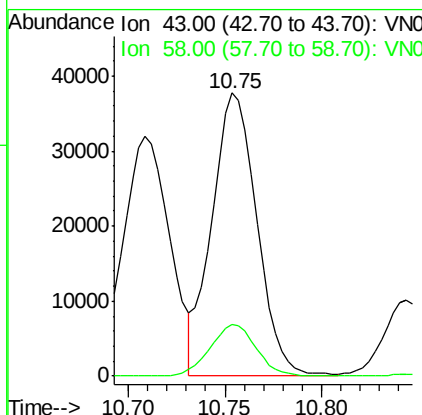
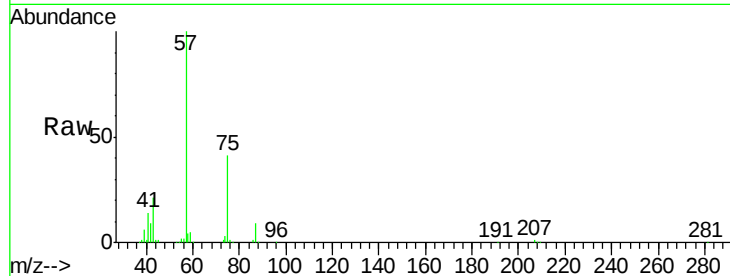




#59  
2-Hexanone  
Concen: 27.428 ug/l  
RT: 10.75 min Scan# 2793  
Delta R.T. 0.01 min  
Lab File: VN060420.D  
Acq: 10 Mar 2020 16:31

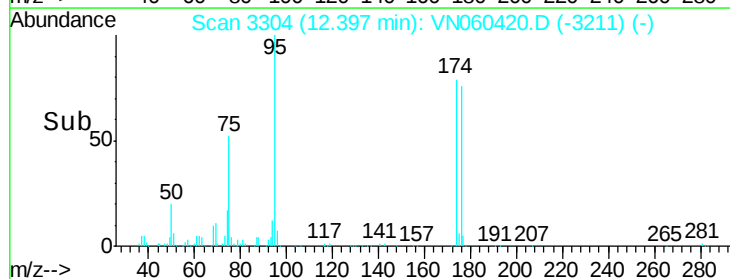
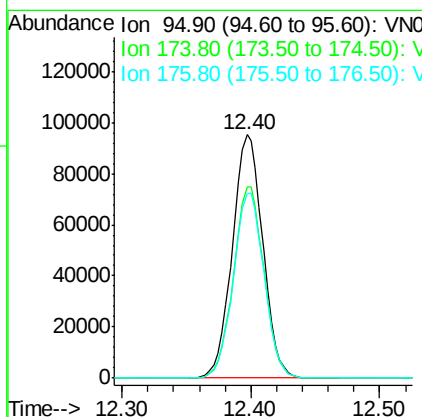
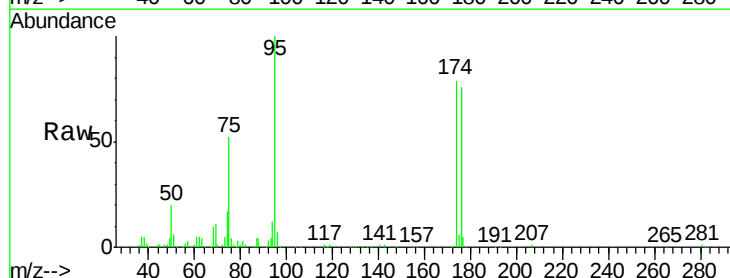
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB127392ZHE#15

Tgt Ion: 43 Resp: 61271  
Ion Ratio Lower Upper  
43 100  
58 18.5 26.5 79.5#



#62  
4-Bromofluorobenzene  
Concen: 51.458 ug/l  
RT: 12.40 min Scan# 3304  
Delta R.T. 0.00 min  
Lab File: VN060420.D  
Acq: 10 Mar 2020 16:31

Tgt Ion: 95 Resp: 155650  
Ion Ratio Lower Upper  
95 100  
174 79.0 0.0 159.2  
176 77.0 0.0 153.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.40 min Scan# 2994

Delta R.T. 0.00 min

Lab File: VN060420.D

Acq: 10 Mar 2020 16:31

Instrument :

MSVOA\_N

ClientSampleId :

PB127392ZHE#15

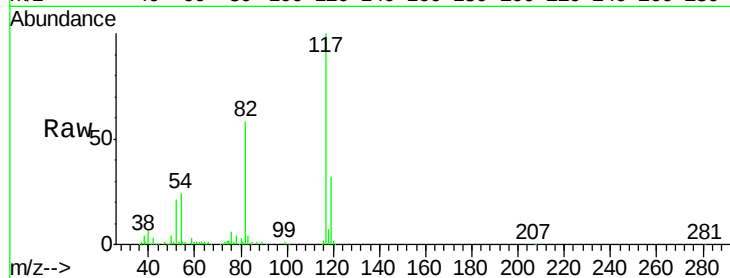
Tgt Ion:117 Resp: 318949

Ion Ratio Lower Upper

117 100

82 57.9 45.8 68.6

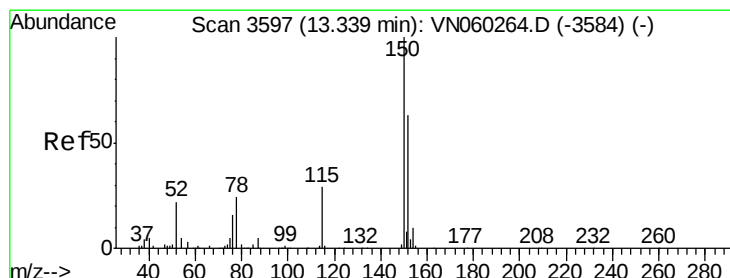
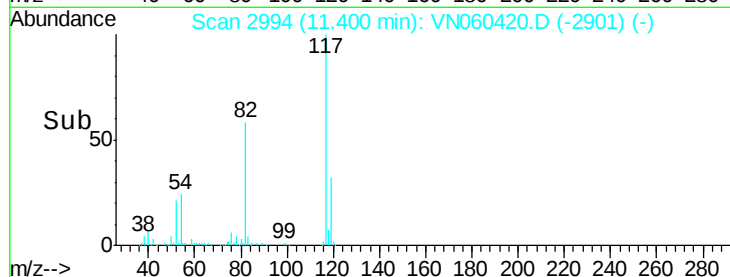
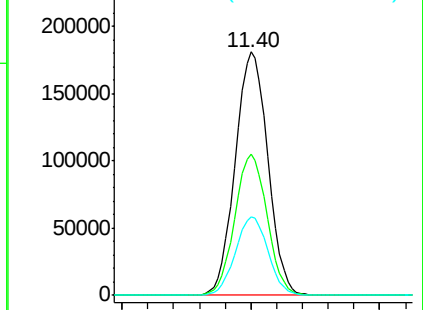
119 32.3 25.8 38.8



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# 3598

Delta R.T. 0.00 min

Lab File: VN060420.D

Acq: 10 Mar 2020 16:31

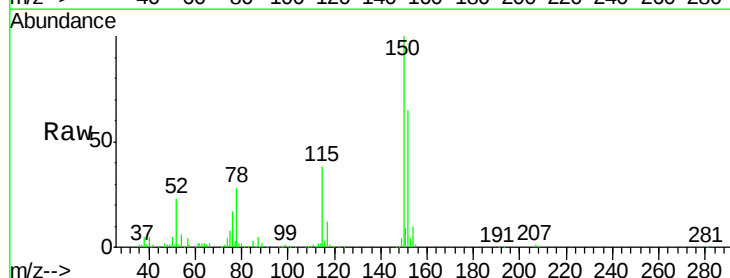
Tgt Ion:152 Resp: 146711

Ion Ratio Lower Upper

152 100

115 59.0 30.0 90.0

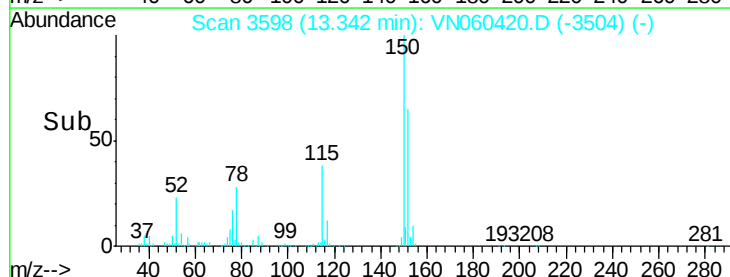
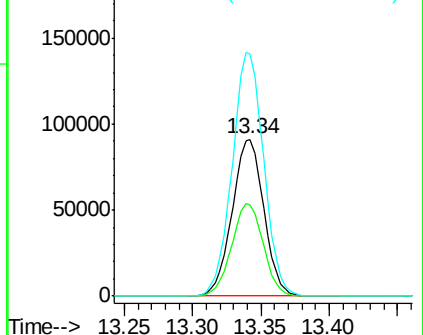
150 155.0 0.0 349.6

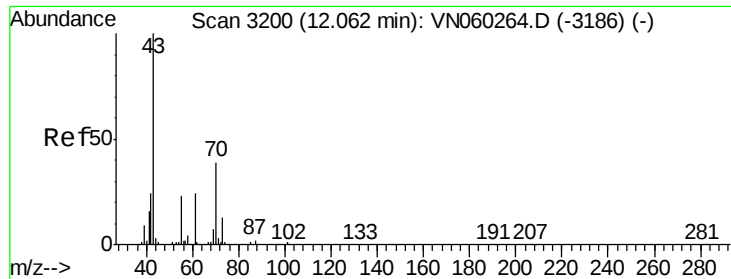


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-ethyl acetate

Concen: 0.678 ug/l

RT: 12.02 min Scan# 3188

Delta R.T. -0.04 min

Lab File: VN060420.D

Acq: 10 Mar 2020 16:31

Instrument :

MSVOA\_N

ClientSampleId :

PB127392ZHE#15

Tgt Ion: 43 Resp: 3222

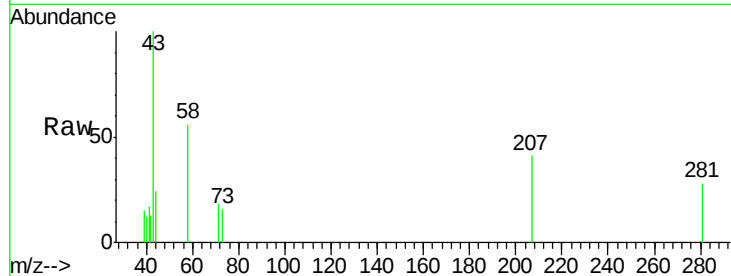
Ion Ratio Lower Upper

43 100

70 0.0 32.2 48.2#

55 0.0 18.2 27.4#

61 0.0 19.2 28.8#

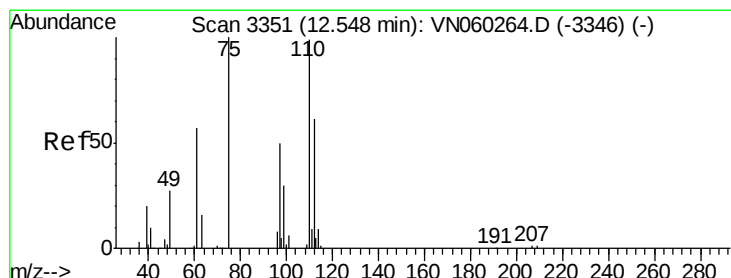
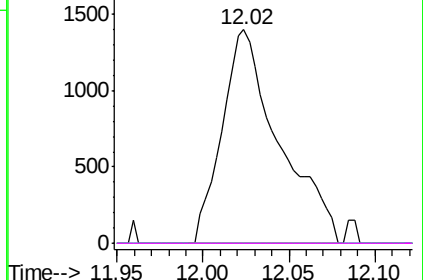
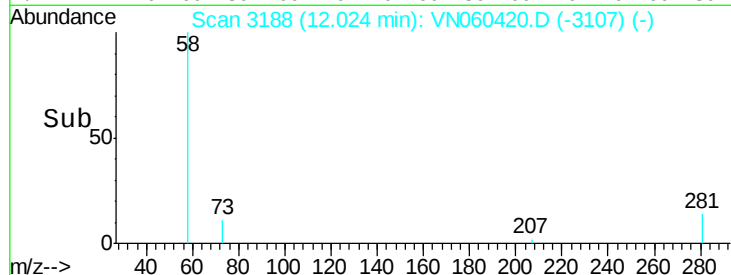


Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 70.00 (69.70 to 70.70): VN0

Ion 55.00 (54.70 to 55.70): VN0

Ion 61.00 (60.70 to 61.70): VN0



#76

1,2,3-Trichloropropane

Concen: 25.153 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. -0.15 min

Lab File: VN060420.D

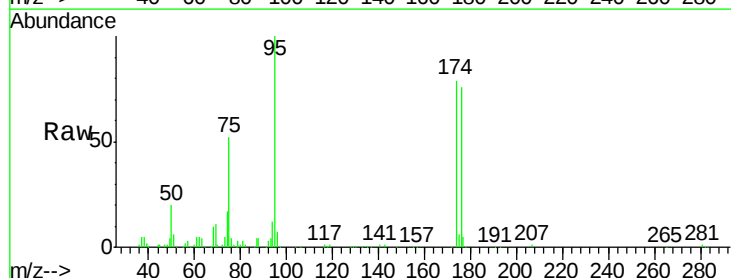
Acq: 10 Mar 2020 16:31

Tgt Ion: 75 Resp: 80965

Ion Ratio Lower Upper

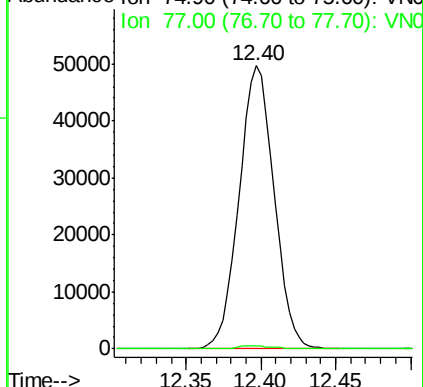
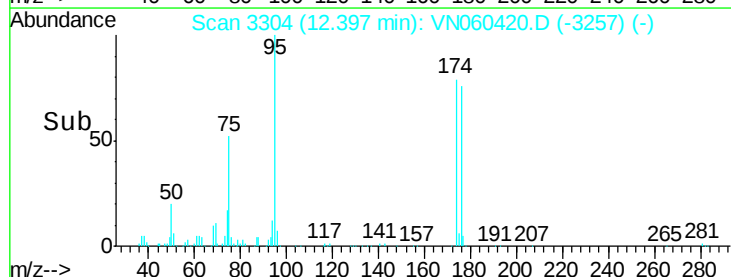
75 100

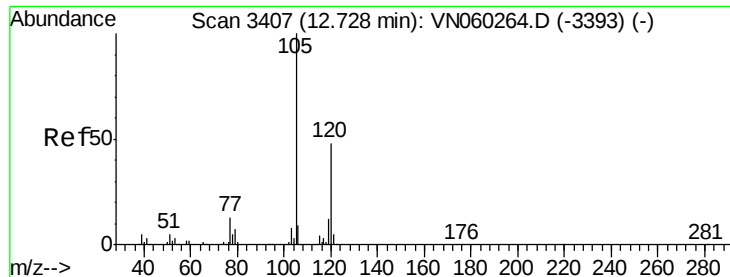
77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0

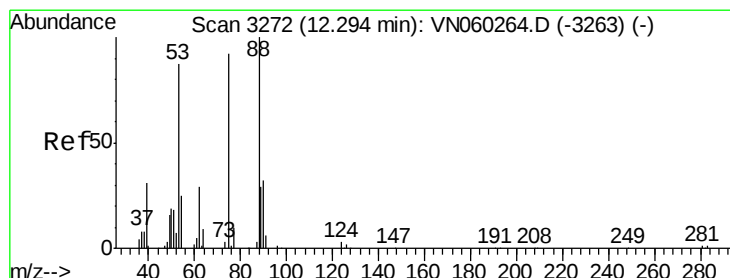
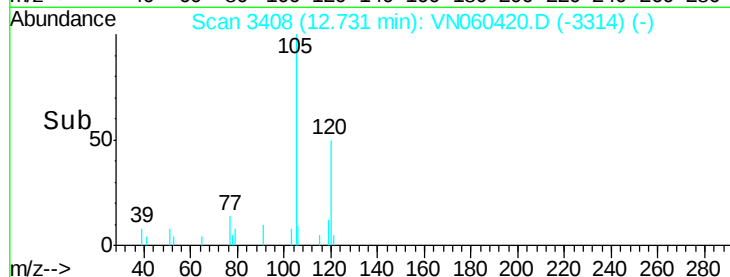
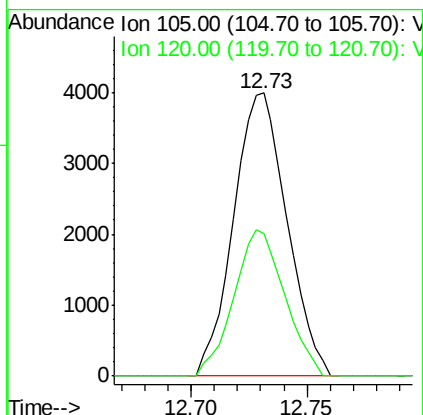
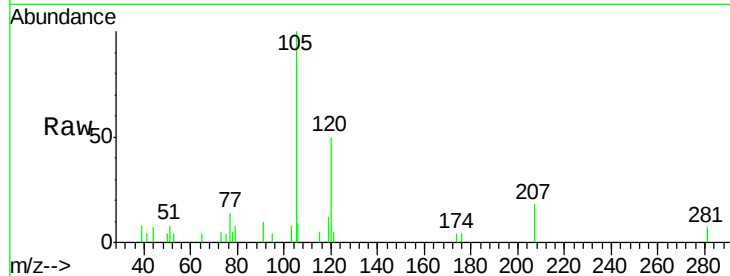




#80  
 1,3,5-Trimethylbenzene  
 Concen: 0.696 ug/l  
 RT: 12.73 min Scan# 3408  
 Delta R.T. 0.00 min  
 Lab File: VN060420.D  
 Acq: 10 Mar 2020 16:31

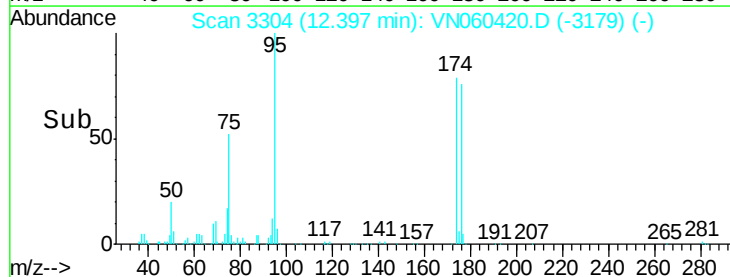
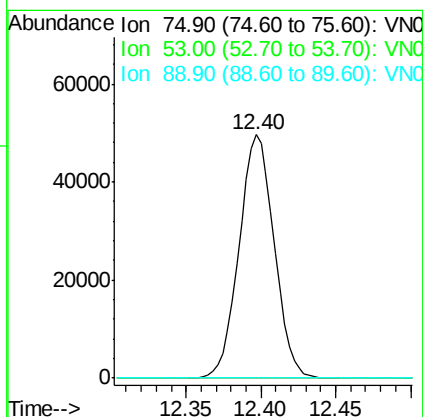
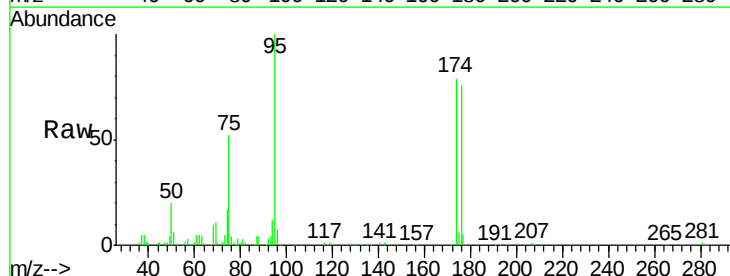
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB127392ZHE#15

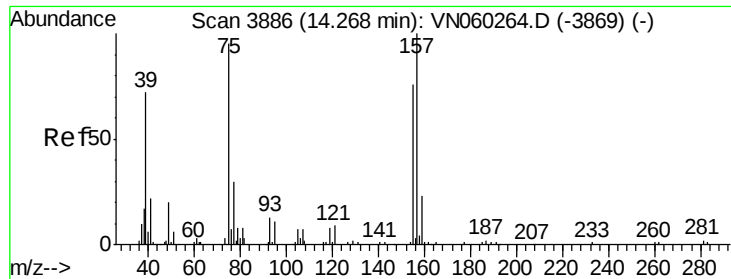
Tgt Ion: 105 Resp: 6368  
 Ion Ratio Lower Upper  
 105 100  
 120 49.3 24.1 72.4



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 69.435 ug/l  
 RT: 12.40 min Scan# 3304  
 Delta R.T. 0.10 min  
 Lab File: VN060420.D  
 Acq: 10 Mar 2020 16:31

Tgt Ion: 75 Resp: 80965  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 73.8 110.6#  
 89 0.0 57.1 85.7#

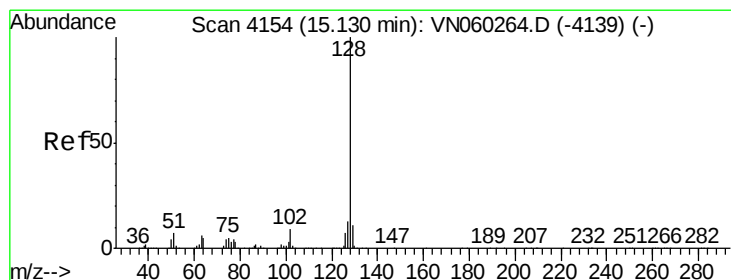
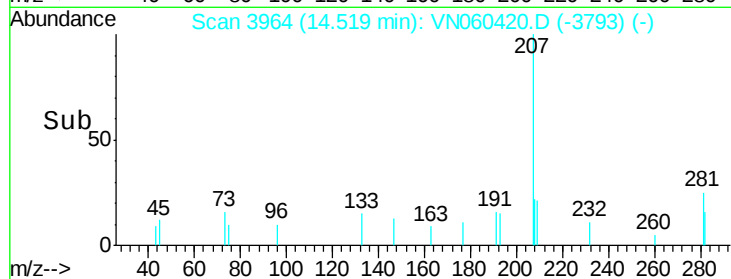
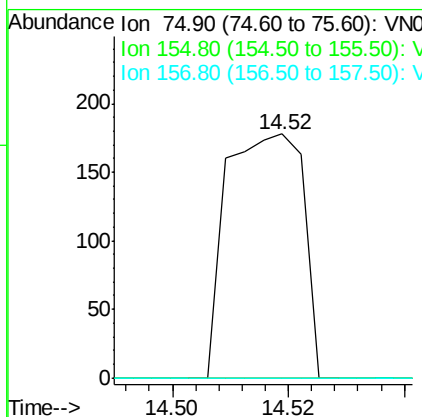
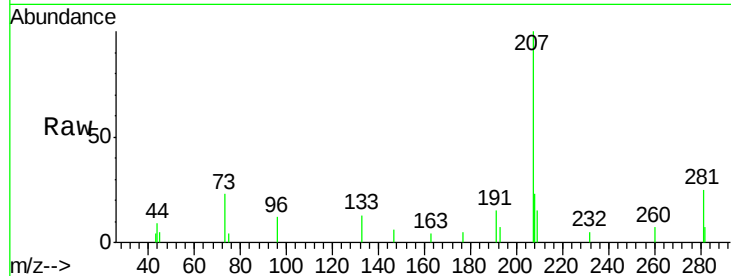




#92  
 1,2-Dibromo-3-Chloropropane  
 Concen: 0.242 ug/l  
 RT: 14.52 min Scan# 3964  
 Delta R.T. 0.25 min  
 Lab File: VN060420.D  
 Acq: 10 Mar 2020 16:31

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB127392ZHE#15

Tgt Ion: 75 Resp: 162  
 Ion Ratio Lower Upper  
 75 100  
 155 0.0 40.4 121.2#  
 157 0.0 52.5 157.5#



#95  
 Naphthalene  
 Concen: Below Cal  
 RT: 15.13 min Scan# 4153  
 Delta R.T. -0.00 min  
 Lab File: VN060420.D  
 Acq: 10 Mar 2020 16:31

Tgt Ion: 128 Resp: 60  
 Ion Ratio Lower Upper  
 128 100  
 127 0.0 10.4 15.6#  
 129 0.0 8.6 13.0#

