

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN101519\  
 Data File : VN058779.D  
 Acq On : 15 Oct 2019 14:04  
 Operator : JC/SP  
 Sample : PB123953TB  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB123953TB

Quant Time: Oct 16 04:16:20 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N101319W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Oct 12 00:00:30 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.65  | 168  | 388026   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 617786   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 570717   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 217264   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.01   | 65  | 282531   | 52.01 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.02% |      |
| 35) Dibromofluoromethane  | 7.57   | 113 | 199901   | 52.39 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.78% |      |
| 50) Toluene-d8            | 10.08  | 98  | 792969   | 51.97 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.94% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 257354   | 44.55 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 89.10%  |      |

## Target Compounds

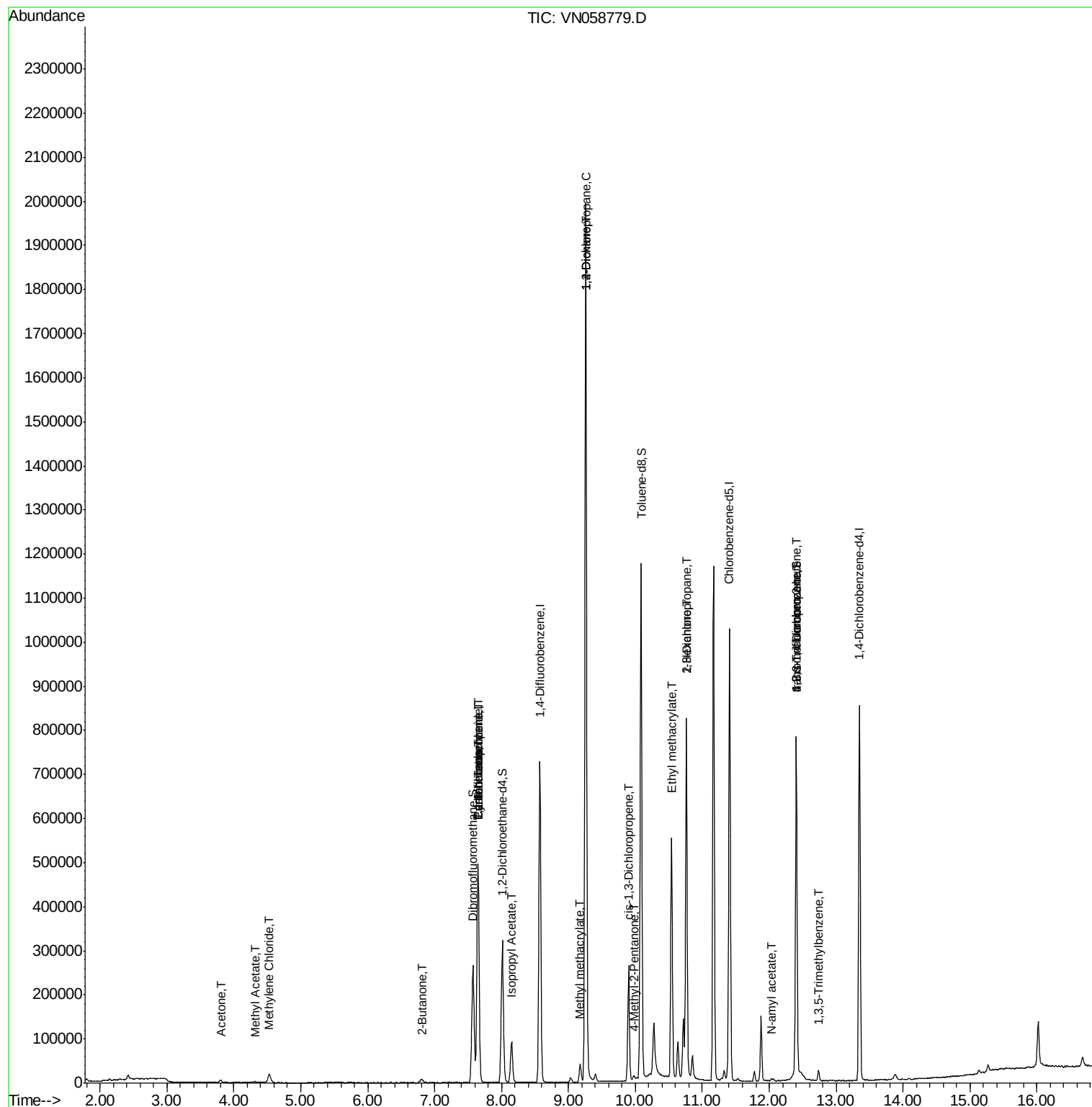
|                                |       |     |        |        | Qvalue |     |
|--------------------------------|-------|-----|--------|--------|--------|-----|
| 16) Acetone                    | 3.80  | 43  | 10587  | 4.708  | ug/l   | 100 |
| 18) Methyl Acetate             | 4.31  | 43  | 4489   | 0.787  | ug/l # | 74  |
| 20) Methylene Chloride         | 4.53  | 84  | 13886  | 2.954  | ug/l # | 93  |
| 25) 2-Butanone                 | 6.82  | 43  | 716    | 0.220  | ug/l # | 50  |
| 31) Cyclohexane                | 7.64  | 56  | 9149   | 1.148  | ug/l # | 1   |
| 36) 1,1-Dichloropropene        | 7.65  | 75  | 33591  | 5.378  | ug/l # | 50  |
| 38) Carbon Tetrachloride       | 7.64  | 117 | 39258  | 6.449  | ug/l # | 17  |
| 43) Isopropyl Acetate          | 8.15  | 43  | 110346 | 10.254 | ug/l # | 90  |
| 45) 1,2-Dichloropropane        | 9.26  | 63  | 2286   | 0.476  | ug/l # | 45  |
| 48) Methyl methacrylate        | 9.17  | 41  | 6781   | 1.390  | ug/l # | 14  |
| 49) 1,4-Dioxane                | 9.26  | 88  | 66     | 0.875  | ug/l # | 1   |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43  | 7564   | 1.252  | ug/l   | 90  |
| 54) cis-1,3-Dichloropropene    | 9.90  | 75  | 45146  | 5.979  | ug/l # | 68  |
| 56) Ethyl methacrylate         | 10.54 | 69  | 2256   | 0.344  | ug/l # | 1   |
| 57) 1,3-Dichloropropane        | 10.76 | 76  | 8042   | 1.051  | ug/l # | 43  |
| 59) 2-Hexanone                 | 10.76 | 43  | 126590 | 27.104 | ug/l # | 51  |
| 74) N-amyl acetate             | 12.03 | 43  | 4983   | 0.705  | ug/l # | 46  |
| 76) 1,2,3-Trichloropropane     | 12.41 | 75  | 138516 | 29.062 | ug/l # | 100 |
| 80) 1,3,5-Trimethylbenzene     | 12.74 | 105 | 12422  | 0.925  | ug/l   | 98  |
| 81) trans-1,4-Dichloro-2-buten | 12.41 | 75  | 138516 | 77.848 | ug/l # | 11  |

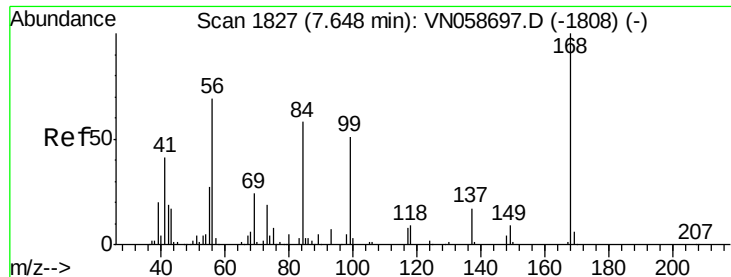
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
PB123953TB

Quant Time: Oct 16 04:16:20 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N101319W.M  
Quant Title : SW846 8260  
QLast Update : Sat Oct 12 00:00:30 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.65 min Scan# 1827

Delta R.T. 0.00 min

Lab File: VN058779.D

Acq: 15 Oct 2019 14:04

Instrument :

MSVOA\_N

ClientSampleId :

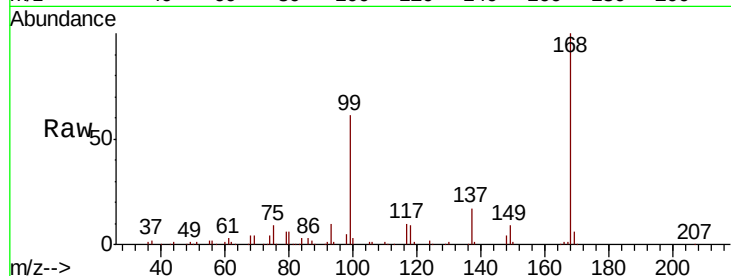
PB123953TB

Tot Ion:168 Resp: 388026

Ion Ratio Lower Upper

168 100

99 60.6 47.5 71.3



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.65

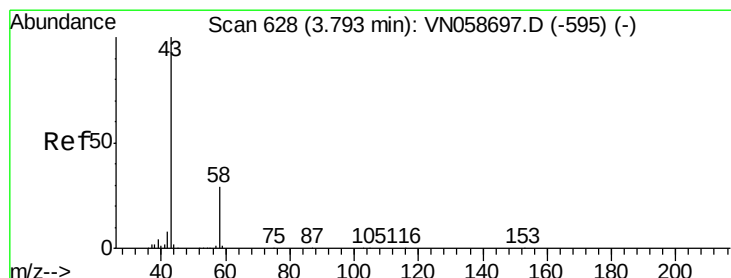
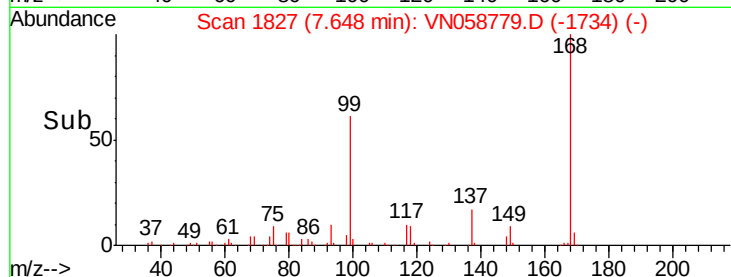
150000

100000

50000

0

Time--> 7.50 7.60 7.70 7.80



#16

Acetone

Concen: 4.708 ug/l

RT: 3.80 min Scan# 630

Delta R.T. 0.01 min

Lab File: VN058779.D

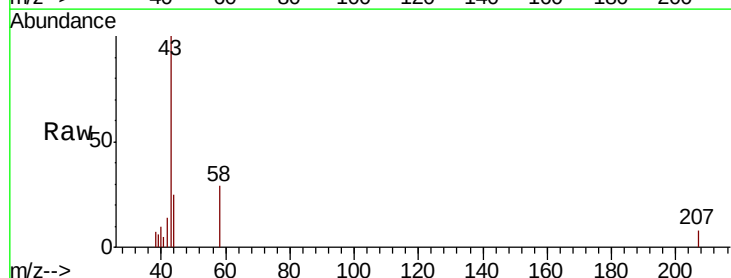
Acq: 15 Oct 2019 14:04

Tgt Ion: 43 Resp: 10587

Ion Ratio Lower Upper

43 100

58 28.9 23.3 34.9



Abundance Ion 43.00 (42.70 to 43.70): VN

Ion 58.00 (57.70 to 58.70): VN

3.80

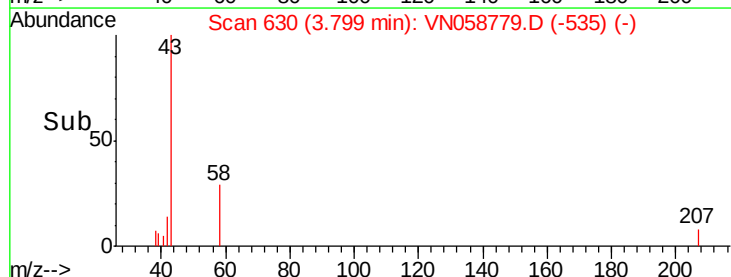
3000

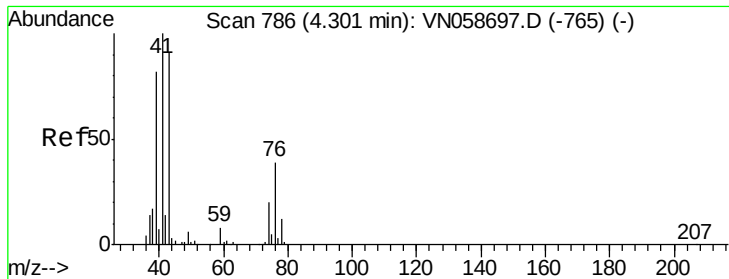
2000

1000

0

Time--> 3.70 3.80 3.90

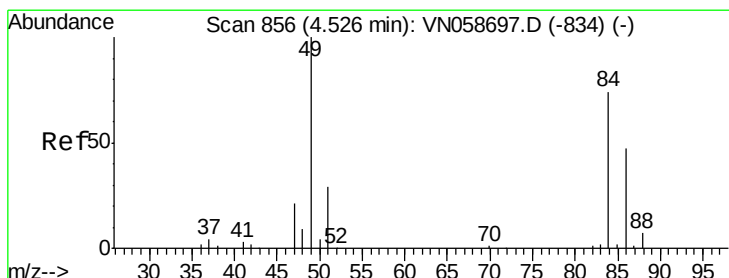
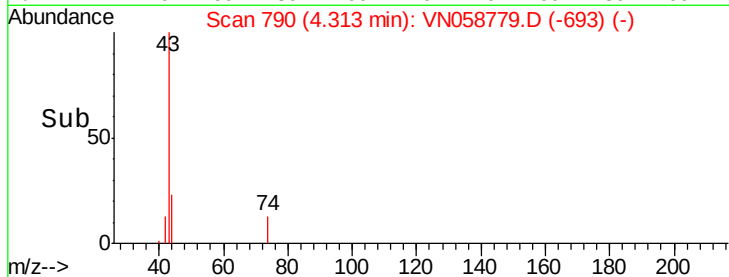
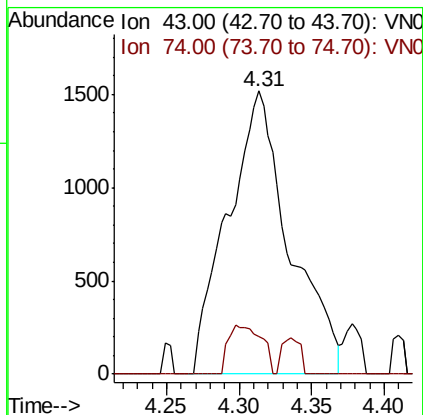
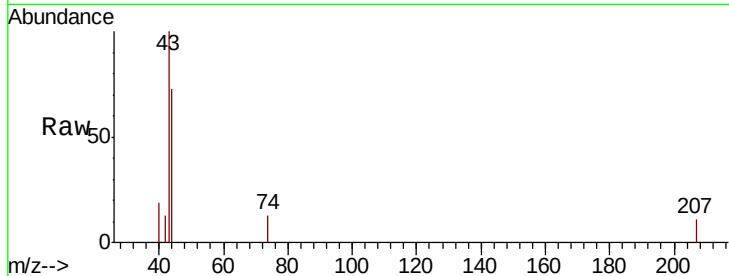




#18  
Methyl Acetate  
Concen: 0.787 ug/l  
RT: 4.31 min Scan# 790  
Delta R.T. 0.01 min  
Lab File: VN058779.D  
Acq: 15 Oct 2019 14:04

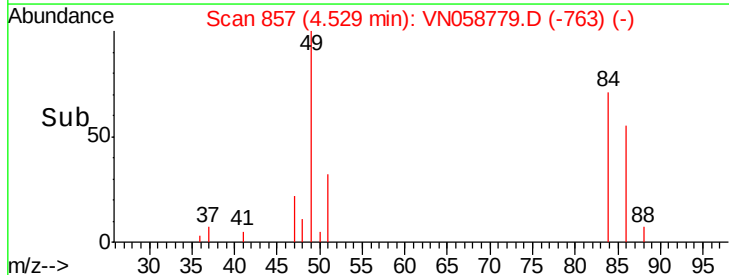
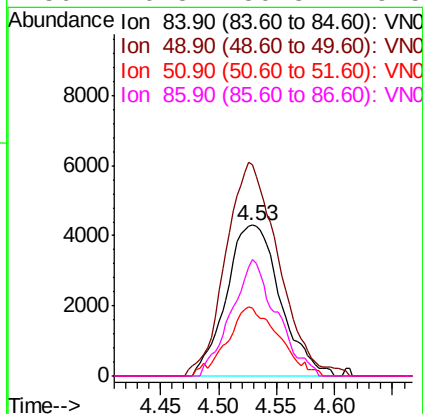
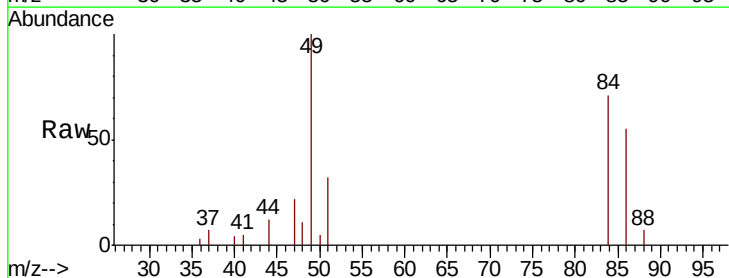
Instrument :  
MSVOA\_N  
ClientSampled :  
PB123953TB

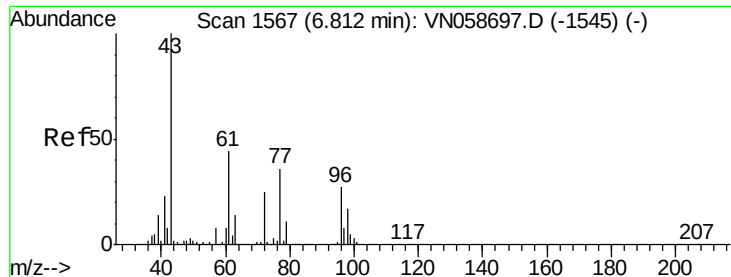
Tot Ion: 43 Resp: 4489  
Ion Ratio Lower Upper  
43 100  
74 9.2 17.2 25.8#



#20  
Methylene Chloride  
Concen: 2.954 ug/l  
RT: 4.53 min Scan# 857  
Delta R.T. 0.00 min  
Lab File: VN058779.D  
Acq: 15 Oct 2019 14:04

Tgt Ion: 84 Resp: 13886  
Ion Ratio Lower Upper  
84 100  
49 135.9 107.6 161.4  
51 44.5 31.4 47.0  
86 76.8 50.3 75.5#

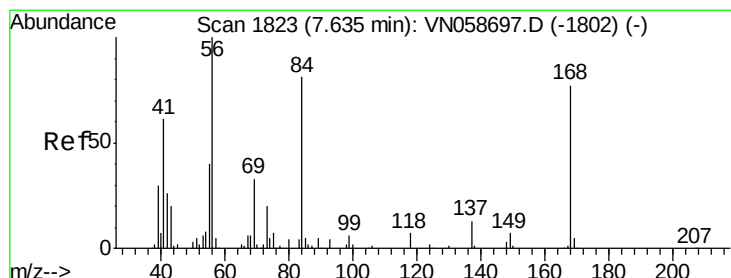
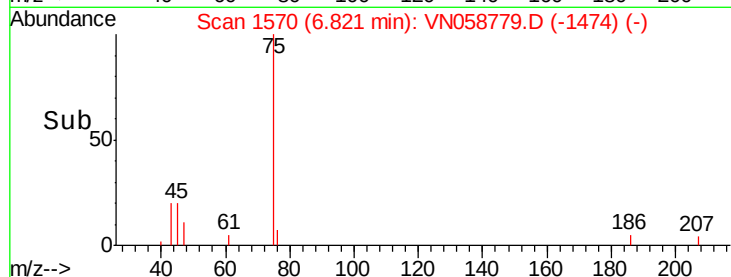
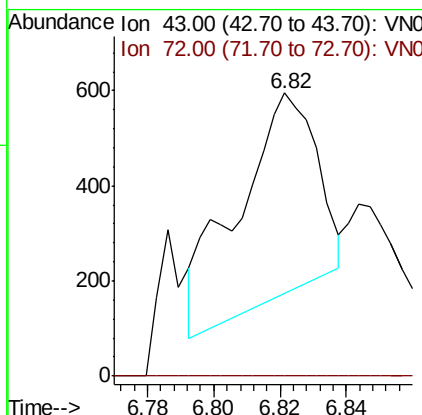
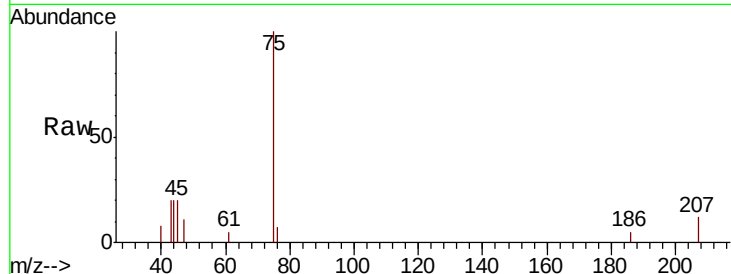




#25  
2-Butanone  
Concen: 0.220 ug/l  
RT: 6.82 min Scan# 1570  
Delta R.T. 0.01 min  
Lab File: VN058779.D  
Acq: 15 Oct 2019 14:04

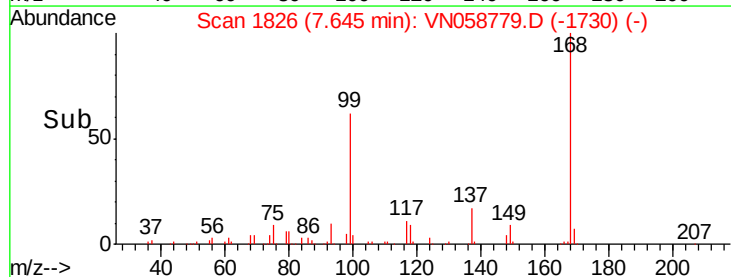
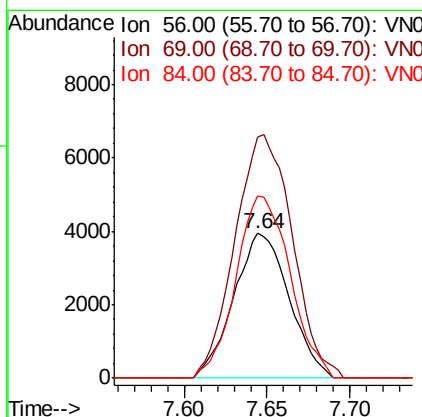
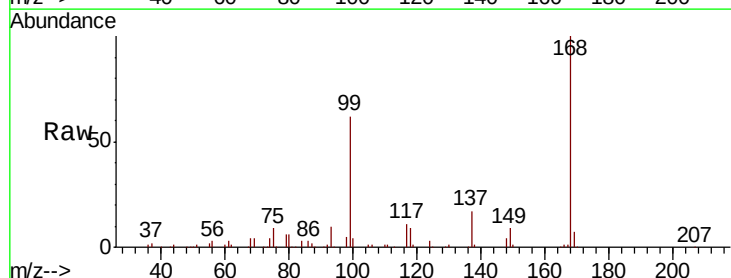
Instrument :  
MSVOA\_N  
ClientSampled :  
PB123953TB

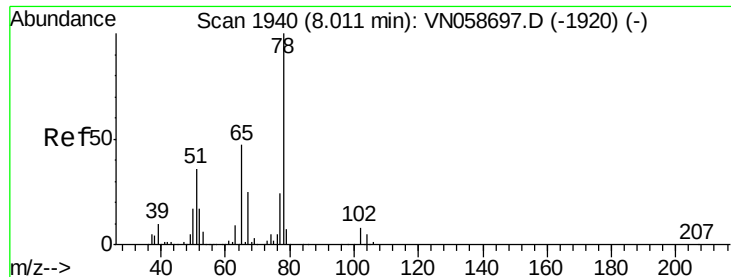
Tot Ion: 43 Resp: 716  
Ion Ratio Lower Upper  
43 100  
72 0.0 20.2 30.2#



#31  
Cyclohexane  
Concen: 1.148 ug/l  
RT: 7.64 min Scan# 1826  
Delta R.T. 0.01 min  
Lab File: VN058779.D  
Acq: 15 Oct 2019 14:04

Tgt Ion: 56 Resp: 9149  
Ion Ratio Lower Upper  
56 100  
69 166.6 26.2 39.4#  
84 126.0 64.9 97.3#

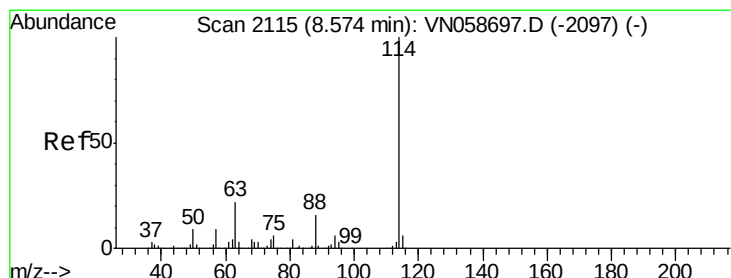
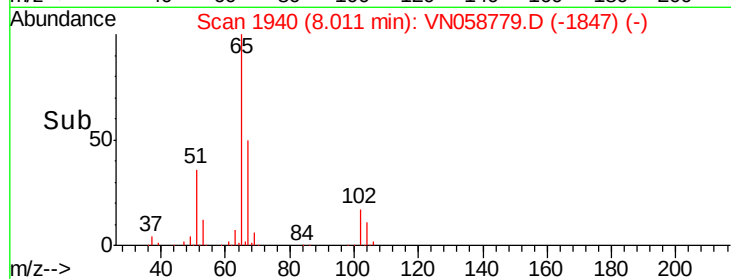
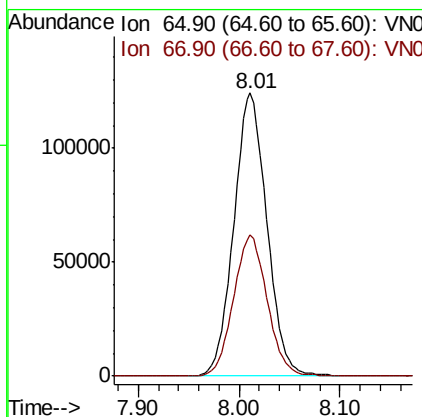
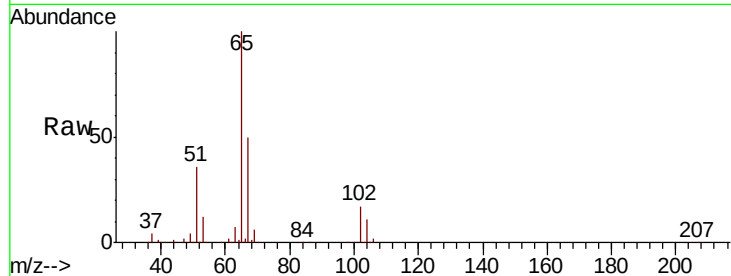




#33  
 1,2-Dichloroethane-d4  
 Concen: 52.009 ug/l  
 RT: 8.01 min Scan# 1940  
 Delta R.T. 0.00 min  
 Lab File: VN058779.D  
 Acq: 15 Oct 2019 14:04

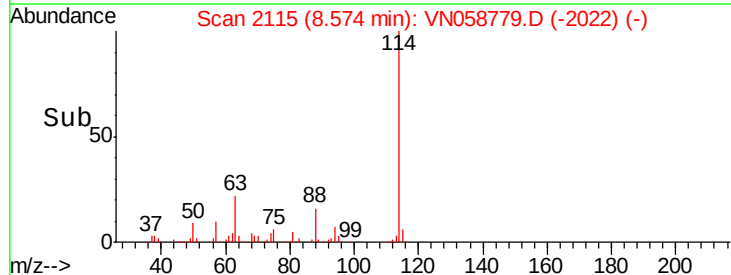
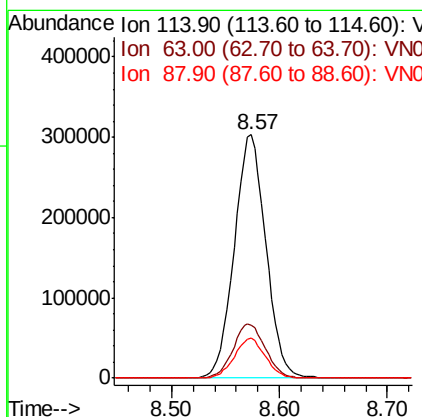
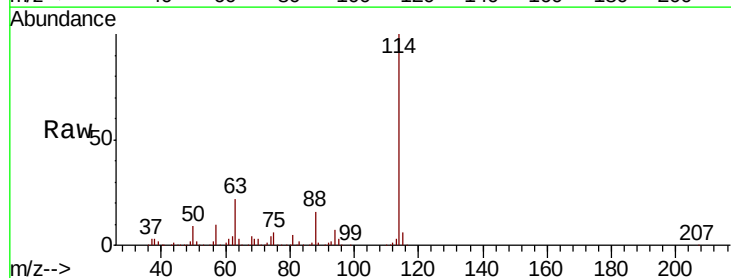
Instrument :  
 MSVOA\_N  
 ClientSampled :  
 PB123953TB

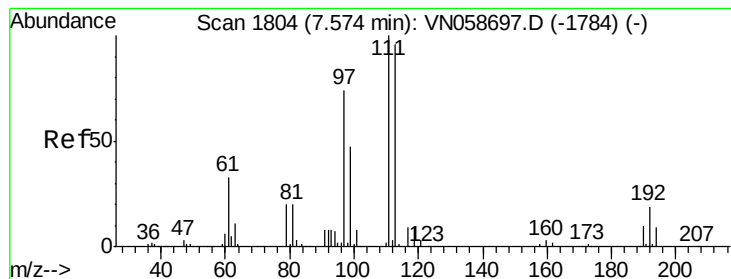
Tot Ion: 65 Resp: 282531  
 Ion Ratio Lower Upper  
 65 100  
 67 50.7 0.0 103.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.57 min Scan# 2115  
 Delta R.T. 0.00 min  
 Lab File: VN058779.D  
 Acq: 15 Oct 2019 14:04

Tgt Ion: 114 Resp: 617786  
 Ion Ratio Lower Upper  
 114 100  
 63 21.9 0.0 43.8  
 88 16.2 0.0 32.0





#35

Dibromofluoromethane

Concen: 52.386 ug/l

RT: 7.57 min Scan# 1804

Delta R.T. 0.00 min

Lab File: VN058779.D

Acq: 15 Oct 2019 14:04

Instrument :

MSVOA\_N

ClientSampled :

PB123953TB

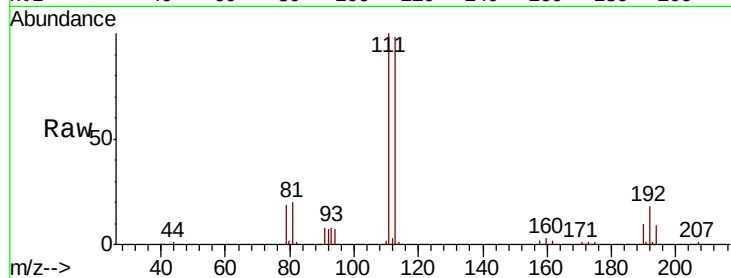
Tot Ion:113 Resp: 199901

Ion Ratio Lower Upper

113 100

111 103.5 82.3 123.5

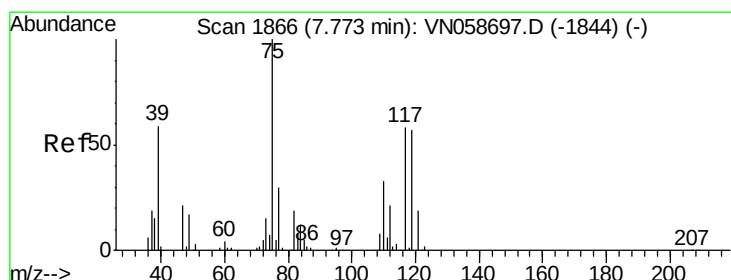
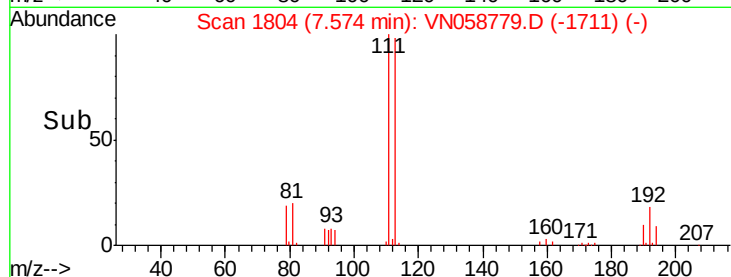
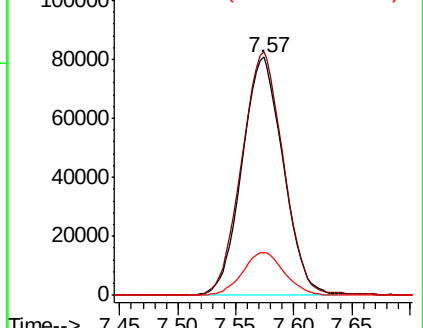
192 18.5 15.0 22.6



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: 5.378 ug/l

RT: 7.65 min Scan# 1827

Delta R.T. -0.13 min

Lab File: VN058779.D

Acq: 15 Oct 2019 14:04

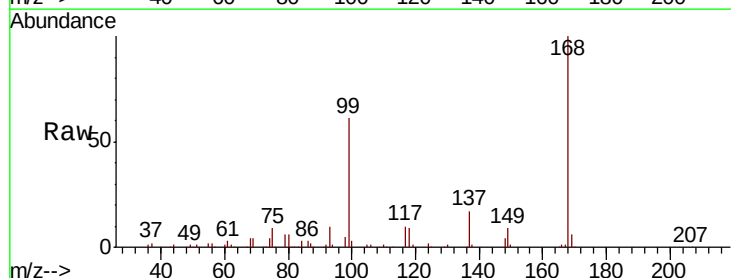
Tgt Ion: 75 Resp: 33591

Ion Ratio Lower Upper

75 100

110 8.2 16.6 49.8#

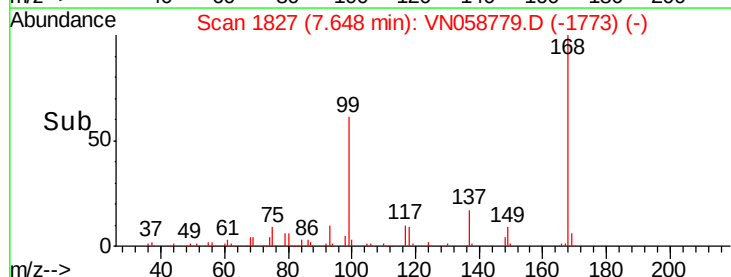
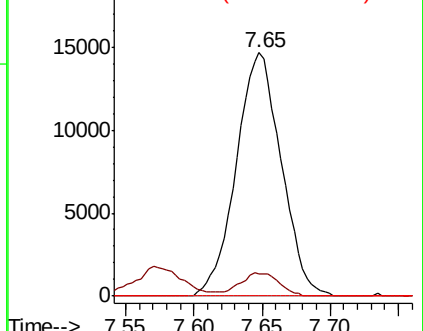
77 0.0 24.6 37.0#

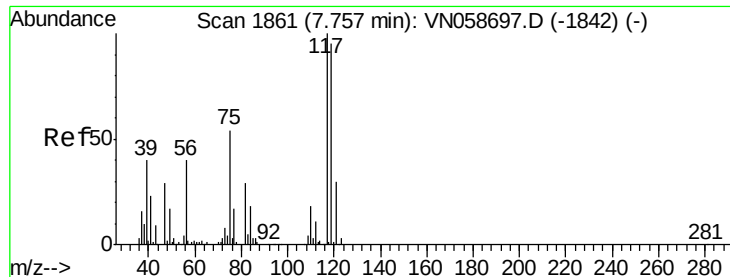


Abundance Ion 74.90 (74.60 to 75.60): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): V





#38

Carbon Tetrachloride

Concen: 6.449 ug/l

RT: 7.64 min Scan# 1826

Delta R.T. -0.11 min

Lab File: VN058779.D

Acq: 15 Oct 2019 14:04

Instrument :

MSVOA\_N

ClientSampled :

PB123953TB

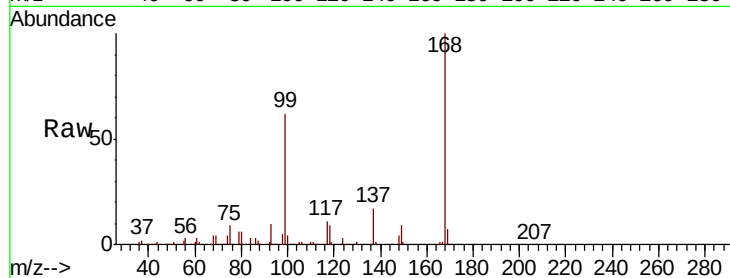
Tot Ion:117 Resp: 39258

Ion Ratio Lower Upper

117 100

119 5.7 75.7 113.5#

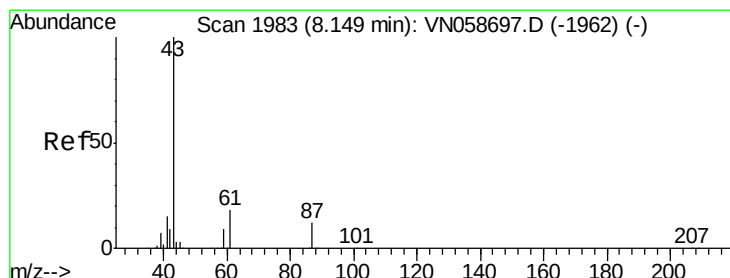
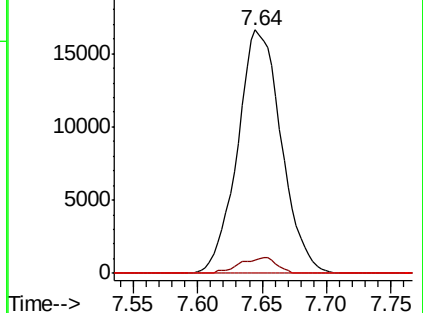
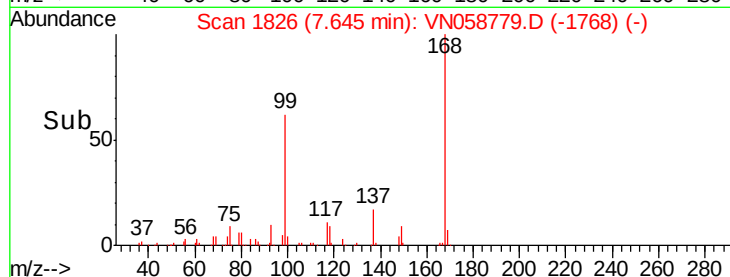
121 0.0 23.9 35.9#



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: 10.254 ug/l

RT: 8.15 min Scan# 1983

Delta R.T. 0.00 min

Lab File: VN058779.D

Acq: 15 Oct 2019 14:04

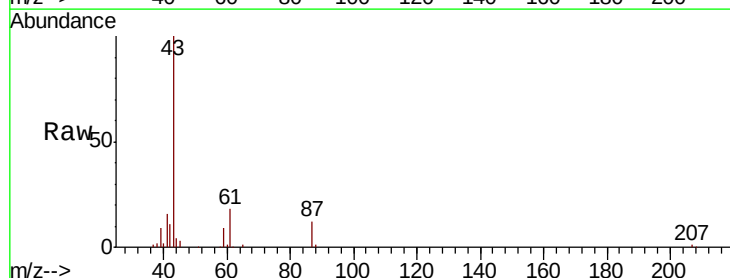
Tgt Ion: 43 Resp: 110346

Ion Ratio Lower Upper

43 100

61 18.4 20.3 30.5#

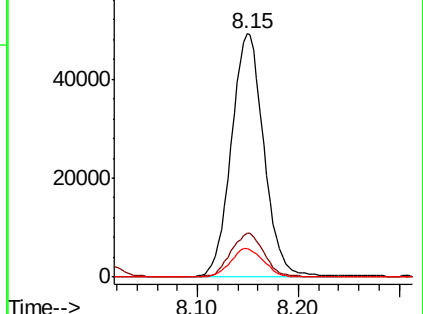
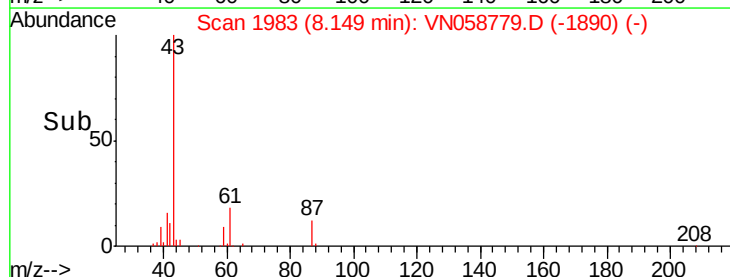
87 11.8 9.8 14.6



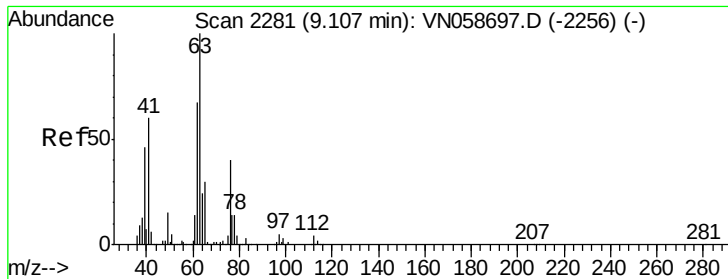
Abundance Ion 43.00 (42.70 to 43.70): V

Ion 61.00 (60.70 to 61.70): V

Ion 87.00 (86.70 to 87.70): V







#45

1,2-Dichloropropane

Concen: 0.476 ug/l

RT: 9.26 min Scan# 2327

Delta R.T. 0.15 min

Lab File: VN058779.D

Acq: 15 Oct 2019 14:04

Instrument :

MSVOA\_N

ClientSampled :

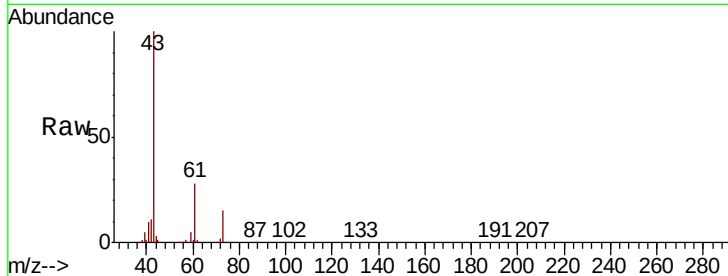
PB123953TB

Tot Ion: 63 Resp: 2286

Ion Ratio Lower Upper

63 100

65 0.0 24.1 36.1#



Abundance Ion 62.90 (62.60 to 63.60): VN0

Ion 64.90 (64.60 to 65.60): VN0

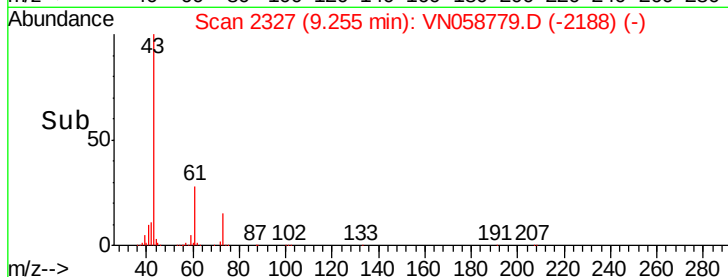
1500

1000

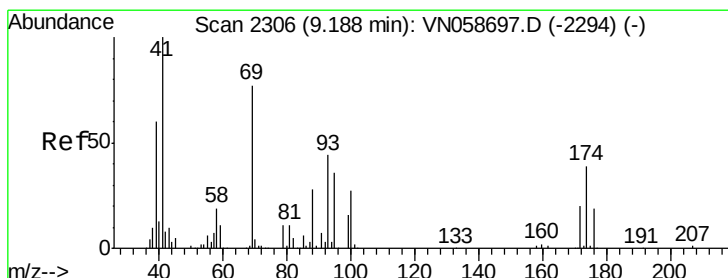
500

0

9.20 9.25 9.30



Time-->



#48

Methyl methacrylate

Concen: 1.390 ug/l

RT: 9.17 min Scan# 2300

Delta R.T. -0.02 min

Lab File: VN058779.D

Acq: 15 Oct 2019 14:04

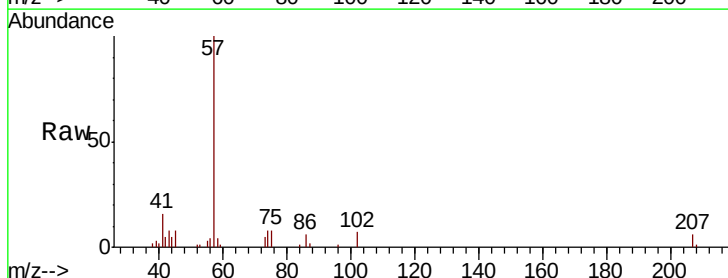
Tgt Ion: 41 Resp: 6781

Ion Ratio Lower Upper

41 100

69 0.0 63.4 95.2#

39 0.0 48.9 73.3#



Abundance Ion 41.00 (40.70 to 41.70): VN0

Ion 69.00 (68.70 to 69.70): VN0

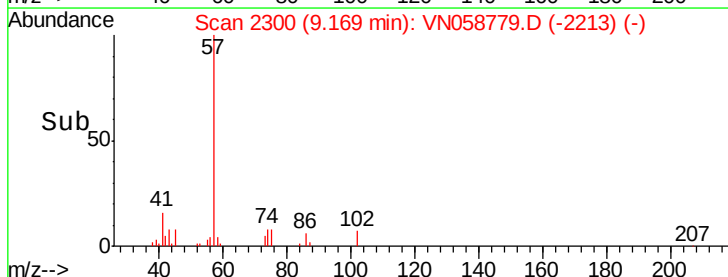
Ion 39.00 (38.70 to 39.70): VN0

100000

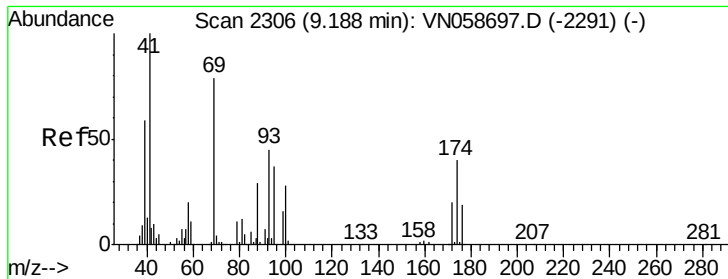
50000

0

9.10 9.15 9.20



Time-->



#49

1,4-Dioxane

Concen: 0.875 ug/l

RT: 9.26 min Scan# 2328

Delta R.T. 0.07 min

Lab File: VN058779.D

Acq: 15 Oct 2019 14:04

Instrument :

MSVOA\_N

ClientSampled :

PB123953TB

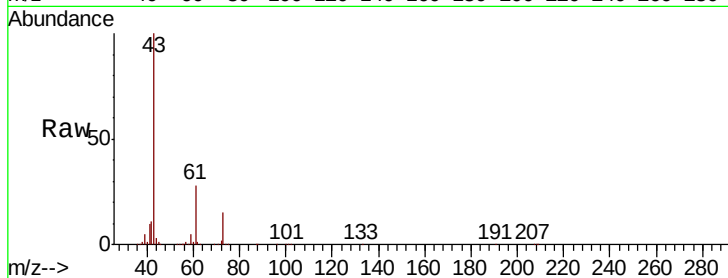
Tot Ion: 88 Resp: 66

Ion Ratio Lower Upper

88 100

43 2950077.3 28.6 43.0#

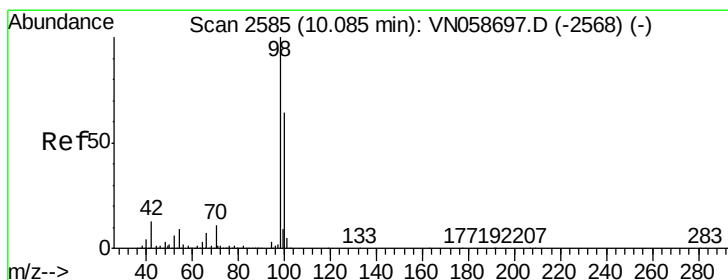
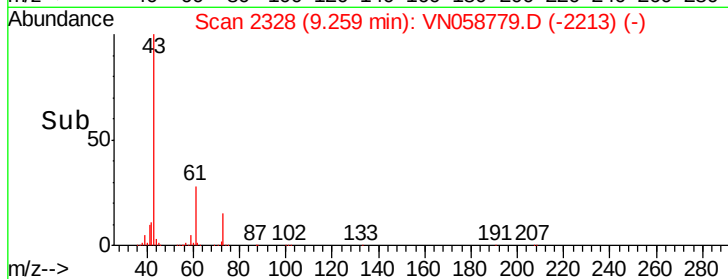
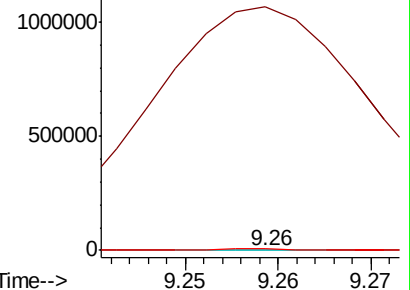
58 13386.4 57.2 85.8#



Abundance Ion 88.00 (87.70 to 88.70): VN0

Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#50

Toluene-d8

Concen: 51.966 ug/l

RT: 10.08 min Scan# 2585

Delta R.T. 0.00 min

Lab File: VN058779.D

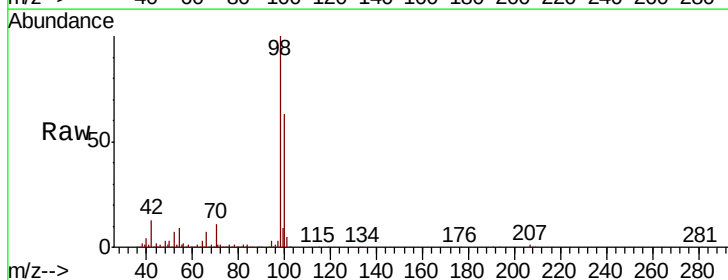
Acq: 15 Oct 2019 14:04

Tgt Ion: 98 Resp: 792969

Ion Ratio Lower Upper

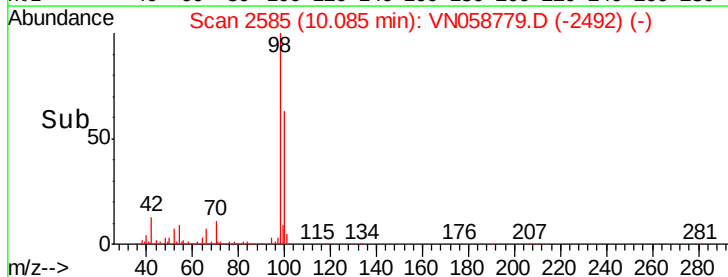
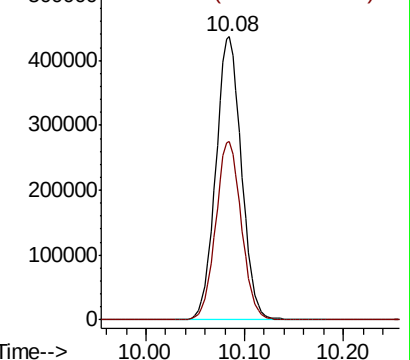
98 100

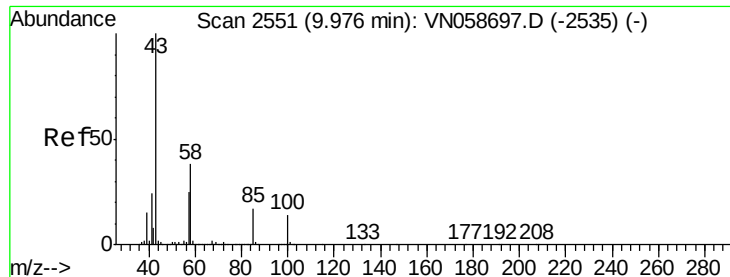
100 62.9 51.1 76.7



Abundance Ion 98.00 (97.70 to 98.70): VN0

Ion 100.00 (99.70 to 100.70): VN0





#51

4-Methyl-2-Pentanone

Concen: 1.252 ug/l

RT: 9.98 min Scan# 2551

Delta R.T. 0.00 min

Lab File: VN058779.D

Acq: 15 Oct 2019 14:04

Instrument :

MSVOA\_N

ClientSampleId :

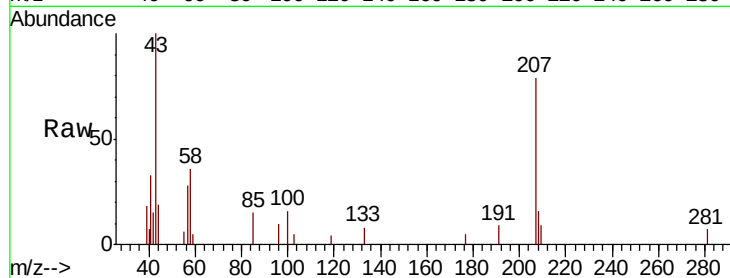
PB123953TB

Tot Ion: 43 Resp: 7564

Ion Ratio Lower Upper

43 100

58 32.2 30.3 45.5



Abundance Ion 43.00 (42.70 to 43.70): VN058697.D (-2535) (-)

Ion 58.00 (57.70 to 58.70): VN058697.D (-2535) (-)

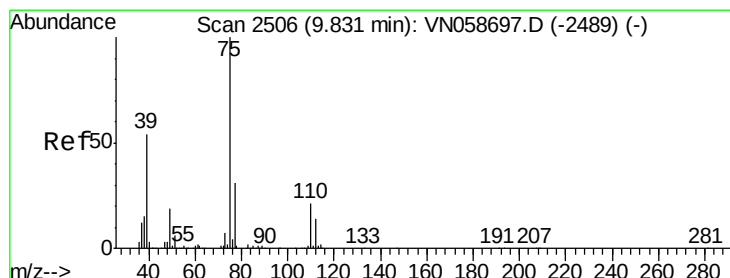
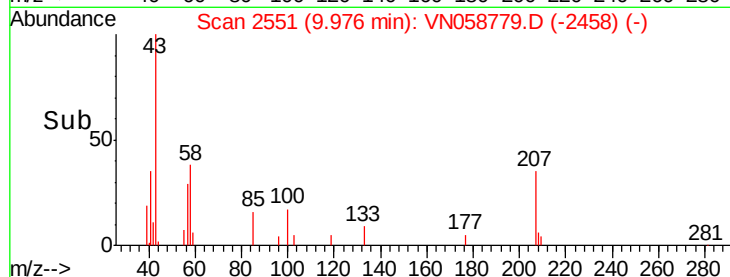
10000

5000

0

9.95 9.98 10.00

Time-->



#54

cis-1,3-Dichloropropene

Concen: 5.979 ug/l

RT: 9.90 min Scan# 2527

Delta R.T. 0.07 min

Lab File: VN058779.D

Acq: 15 Oct 2019 14:04

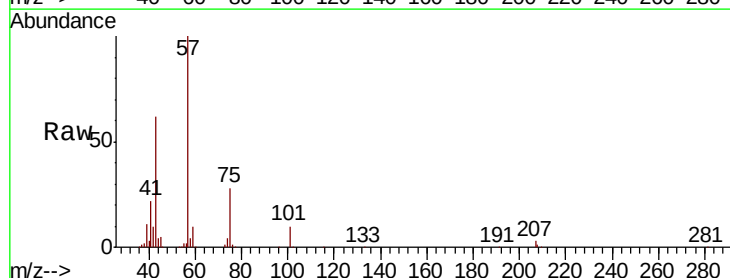
Tgt Ion: 75 Resp: 45146

Ion Ratio Lower Upper

75 100

77 0.9 24.4 36.6#

39 39.6 43.1 64.7#



Abundance Ion 74.90 (74.60 to 75.60): VN058697.D (-2489) (-)

Ion 76.90 (76.60 to 77.60): VN058697.D (-2489) (-)

Ion 39.00 (38.70 to 39.70): VN058697.D (-2489) (-)

30000

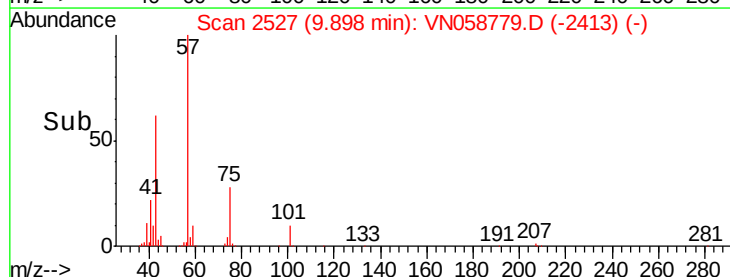
20000

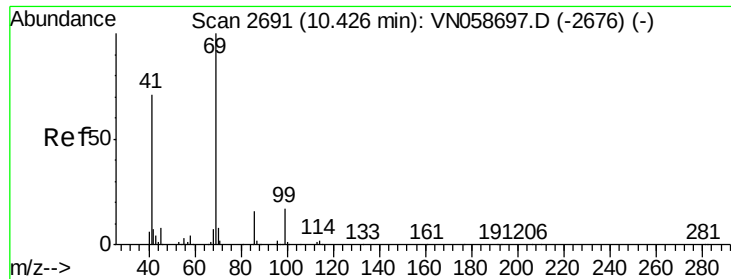
10000

0

9.85 9.90 9.95

Time-->





#56

Ethyl methacrylate

Concen: 0.344 ug/l

RT: 10.54 min Scan# 2726

Delta R.T. 0.11 min

Lab File: VN058779.D

Acq: 15 Oct 2019 14:04

Instrument :

MSVOA\_N

ClientSampleId :

PB123953TB

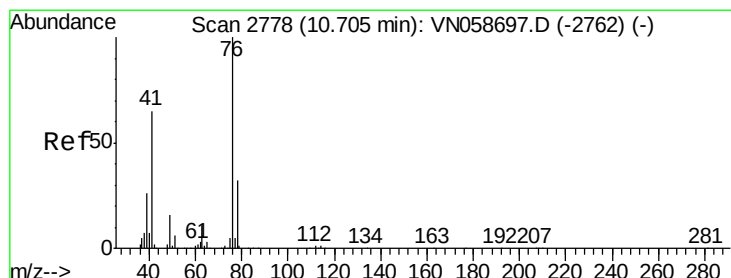
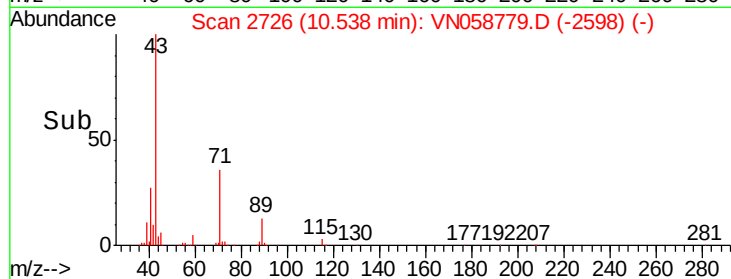
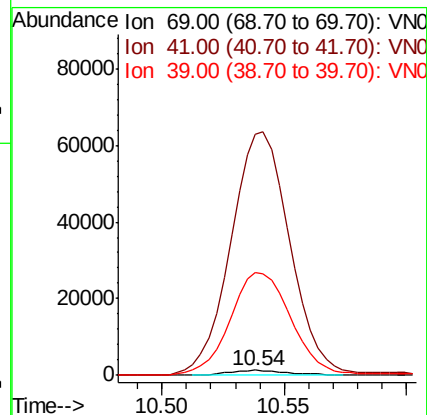
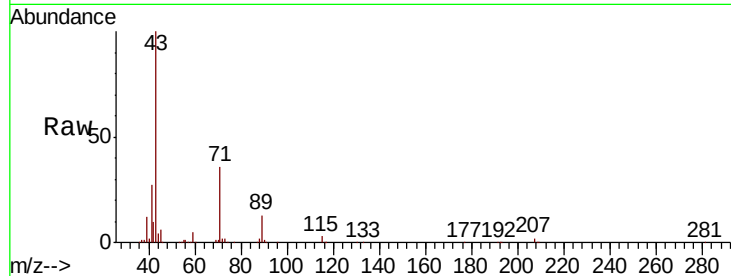
Tot Ion: 69 Resp: 2256

Ion Ratio Lower Upper

69 100

41 4766.6 56.8 85.2#

39 2086.3 32.5 48.7#



#57

1,3-Dichloropropane

Concen: 1.051 ug/l

RT: 10.76 min Scan# 2796

Delta R.T. 0.06 min

Lab File: VN058779.D

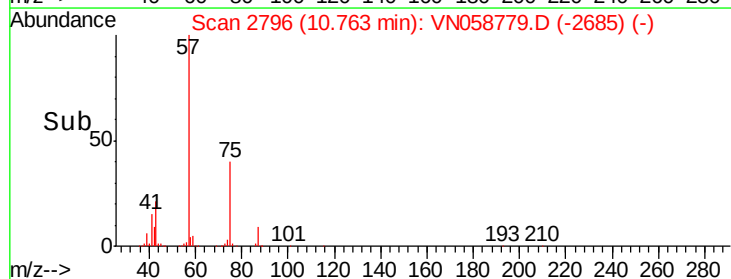
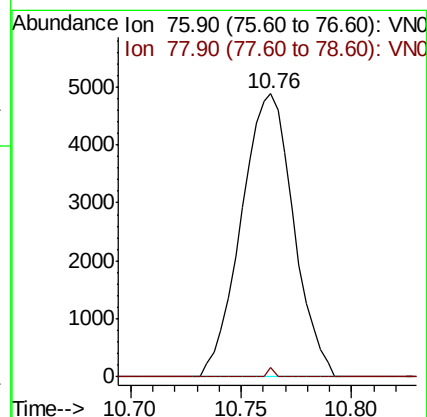
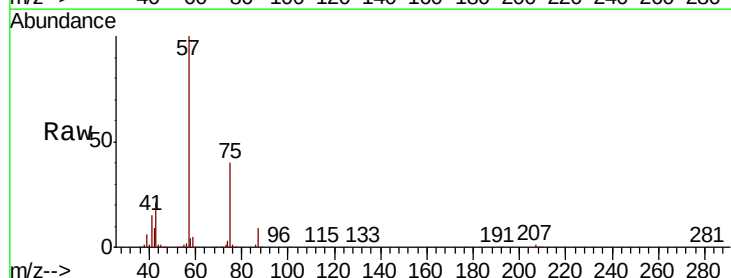
Acq: 15 Oct 2019 14:04

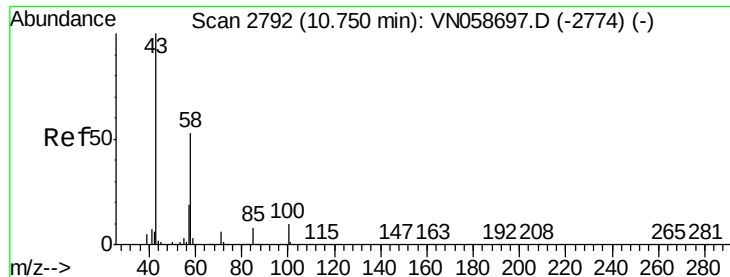
Tgt Ion: 76 Resp: 8042

Ion Ratio Lower Upper

76 100

78 0.4 25.9 38.9#





#59

2-Hexanone

Concen: 27.104 ug/l

RT: 10.76 min Scan# 2795

Delta R.T. 0.01 min

Lab File: VN058779.D

Acq: 15 Oct 2019 14:04

Instrument :

MSVOA\_N

ClientSampled :

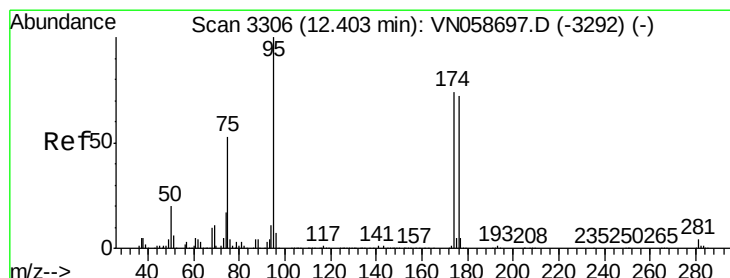
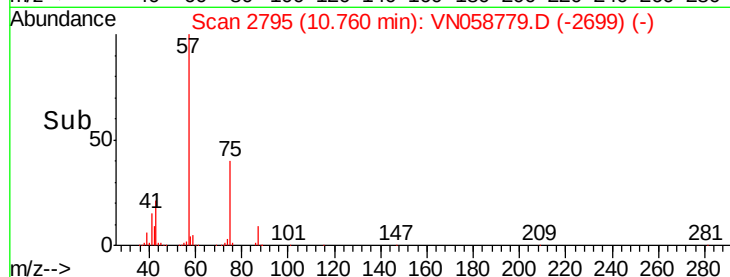
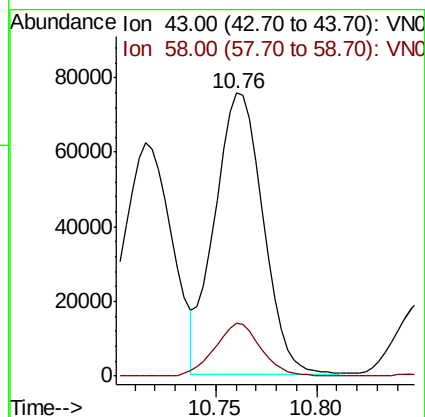
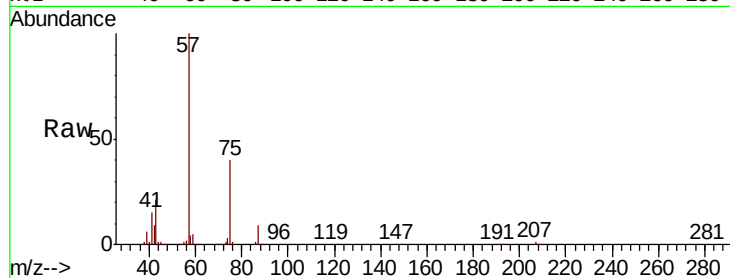
PB123953TB

Tot Ion: 43 Resp: 126590

Ion Ratio Lower Upper

43 100

58 17.8 26.1 78.3#



#62

4-Bromofluorobenzene

Concen: 44.555 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.00 min

Lab File: VN058779.D

Acq: 15 Oct 2019 14:04

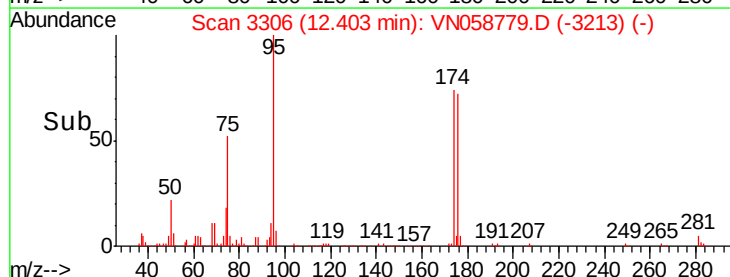
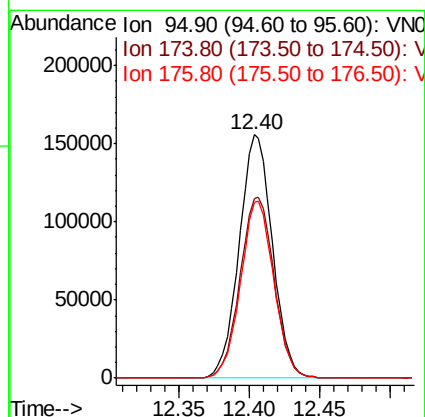
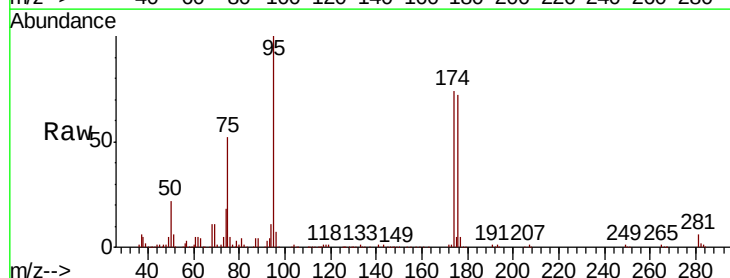
Tgt Ion: 95 Resp: 257354

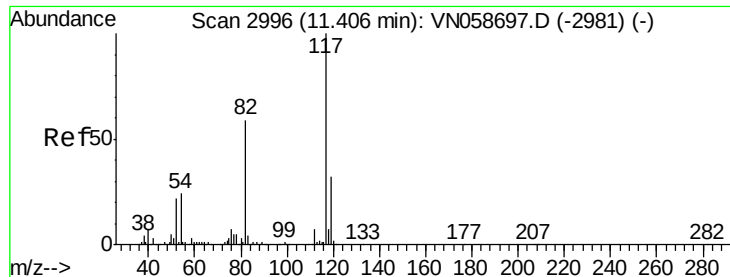
Ion Ratio Lower Upper

95 100

174 76.4 0.0 150.4

176 73.0 0.0 146.8

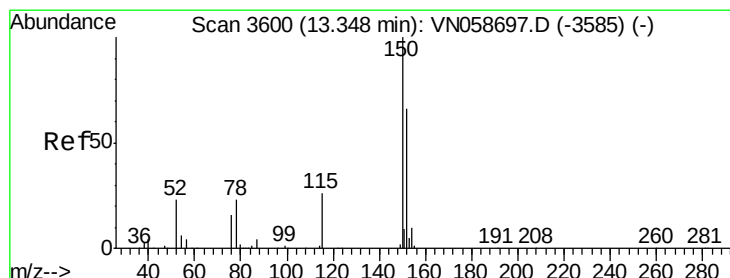
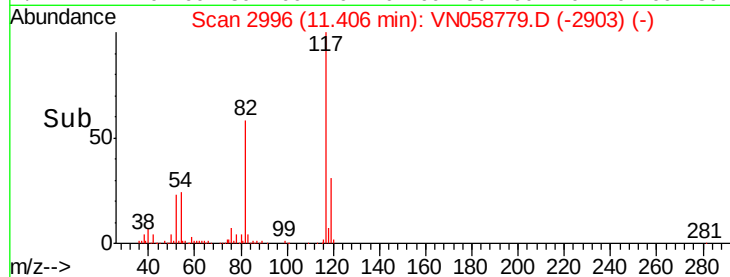
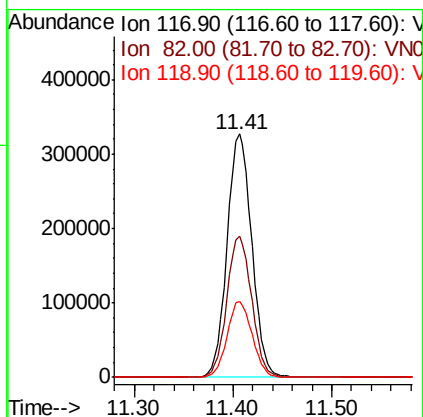
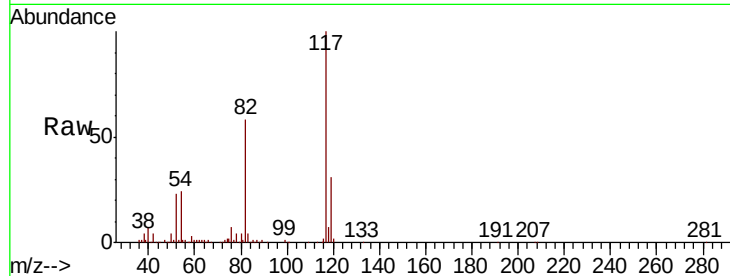




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.41 min Scan# 2996  
Delta R.T. 0.00 min  
Lab File: VN058779.D  
Acq: 15 Oct 2019 14:04

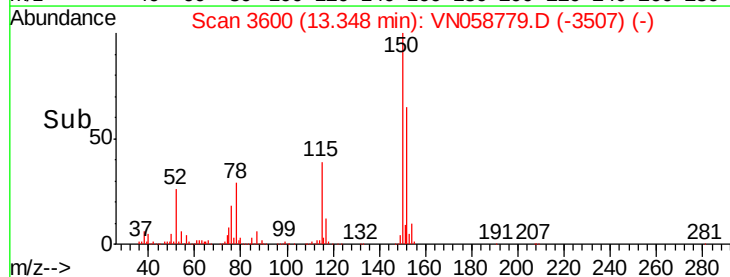
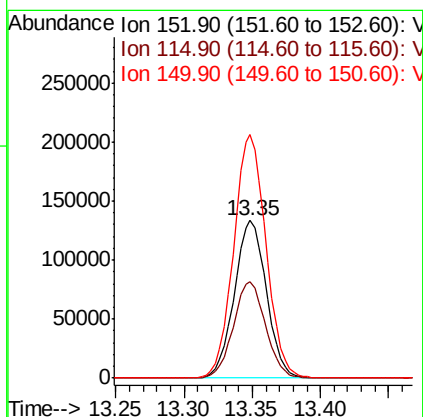
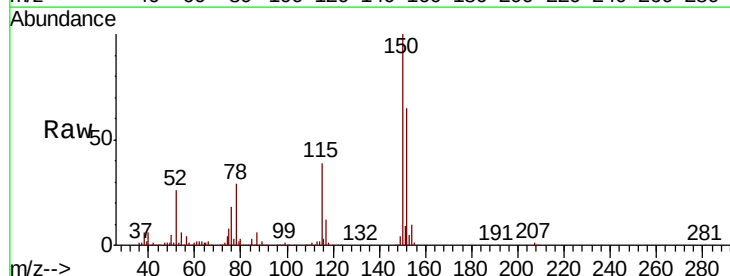
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB123953TB

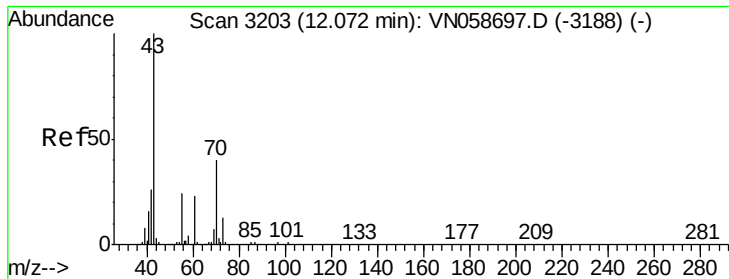
Tot Ion:117 Resp: 570717  
Ion Ratio Lower Upper  
117 100  
82 57.8 47.0 70.4  
119 31.3 25.4 38.2



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.35 min Scan# 3600  
Delta R.T. 0.00 min  
Lab File: VN058779.D  
Acq: 15 Oct 2019 14:04

Tgt Ion:152 Resp: 217264  
Ion Ratio Lower Upper  
152 100  
115 61.5 30.4 91.2  
150 155.8 0.0 345.4





#74

N-amvl acetate

Concen: 0.705 ug/l

RT: 12.03 min Scan# 3189

Delta R.T. -0.04 min

Lab File: VN058779.D

Acq: 15 Oct 2019 14:04

Instrument :

MSVOA\_N

ClientSampleId :

PB123953TB

Tot Ion: 43 Resp: 4983

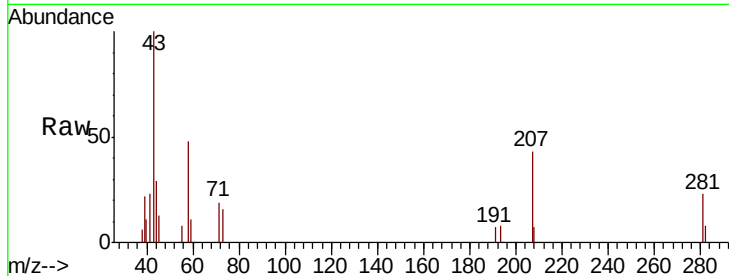
Ion Ratio Lower Upper

43 100

70 0.0 32.2 48.4#

55 3.5 19.6 29.4#

61 0.0 18.6 28.0#

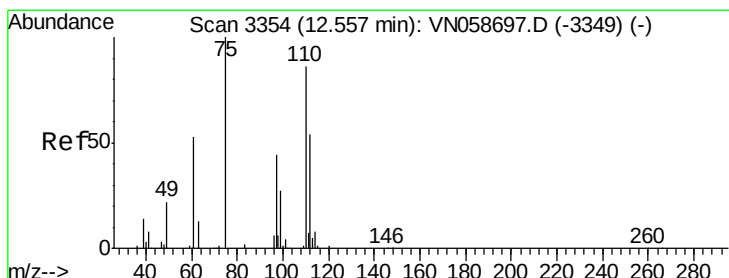
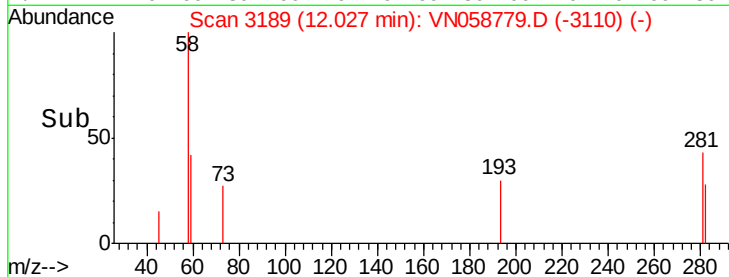
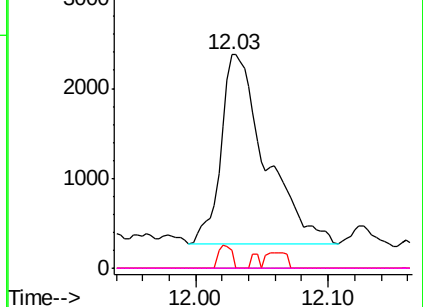


Abundance Ion 43.00 (42.70 to 43.70): VNO

Ion 70.00 (69.70 to 70.70): VNO

Ion 55.00 (54.70 to 55.70): VNO

Ion 61.00 (60.70 to 61.70): VNO



#76

1,2,3-Trichloropropane

Concen: 29.062 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. -0.15 min

Lab File: VN058779.D

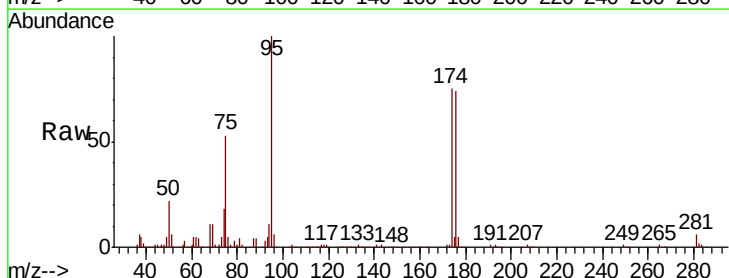
Acq: 15 Oct 2019 14:04

Tgt Ion: 75 Resp: 138516

Ion Ratio Lower Upper

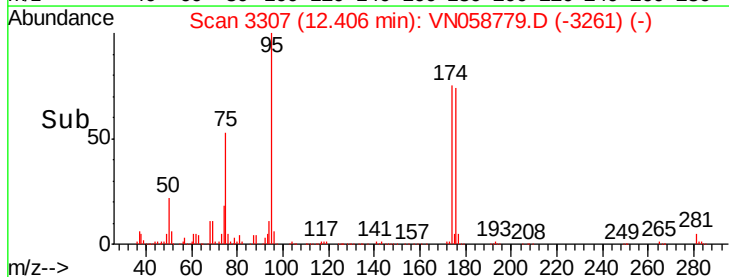
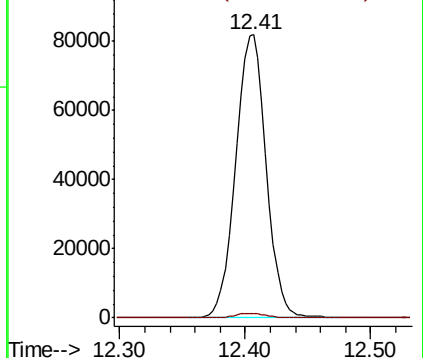
75 100

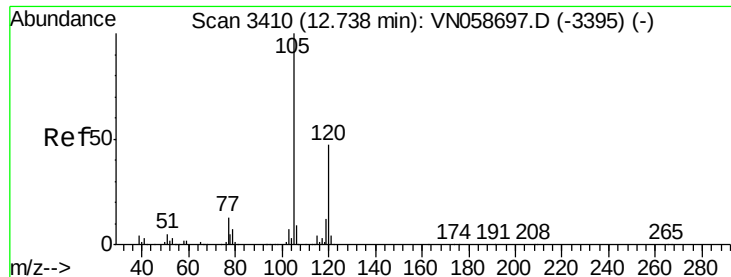
77 1.7 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 77.00 (76.70 to 77.70): VNO

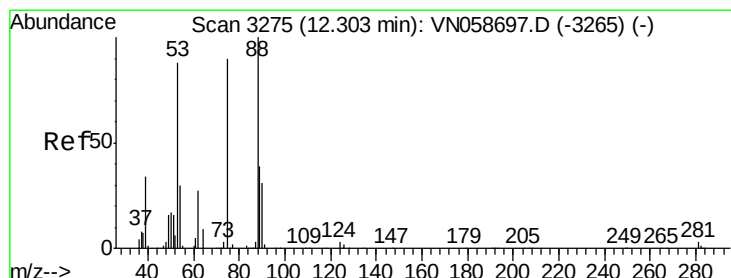
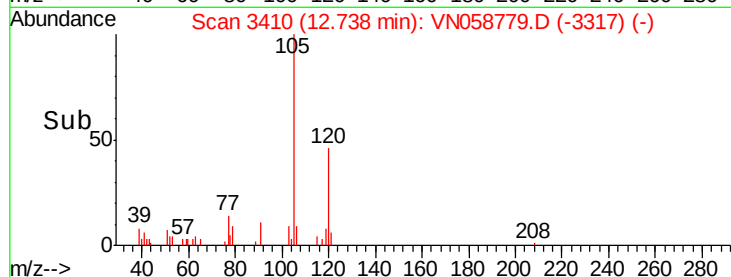
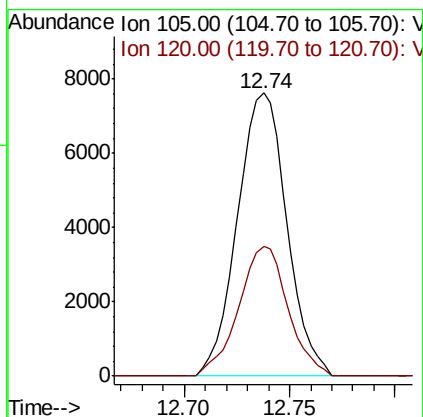
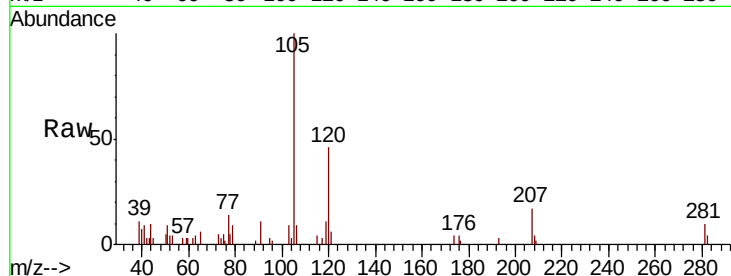




#80  
 1,3,5-Trimethylbenzene  
 Concen: 0.925 ug/l  
 RT: 12.74 min Scan# 3410  
 Delta R.T. 0.00 min  
 Lab File: VN058779.D  
 Acq: 15 Oct 2019 14:04

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB123953TB

Tot Ion:105 Resp: 12422  
 Ion Ratio Lower Upper  
 105 100  
 120 45.7 23.4 70.2



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 77.848 ug/l  
 RT: 12.41 min Scan# 3307  
 Delta R.T. 0.10 min  
 Lab File: VN058779.D  
 Acq: 15 Oct 2019 14:04

Tgt Ion: 75 Resp: 138516  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 78.4 117.6#  
 89 0.1 34.9 52.3#

