

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN031620\  
 Data File : VN060529.D  
 Acq On : 16 Mar 2020 17:30  
 Operator : JC/MD  
 Sample : PB127541ZHE#02  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB127541ZHE#02

Quant Time: Mar 17 08:45:49 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  | 214655   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 360995   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 338107   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 154476   | 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   | 139489   | 50.65 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.30% |          |
| 35) Dibromofluoromethane    | 7.56  | 113  | 105329   | 62.86 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 125.72% |          |
| 50) Toluene-d8              | 10.08 | 98   | 446882   | 52.69 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.38% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 167790   | 52.19 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.38% |          |

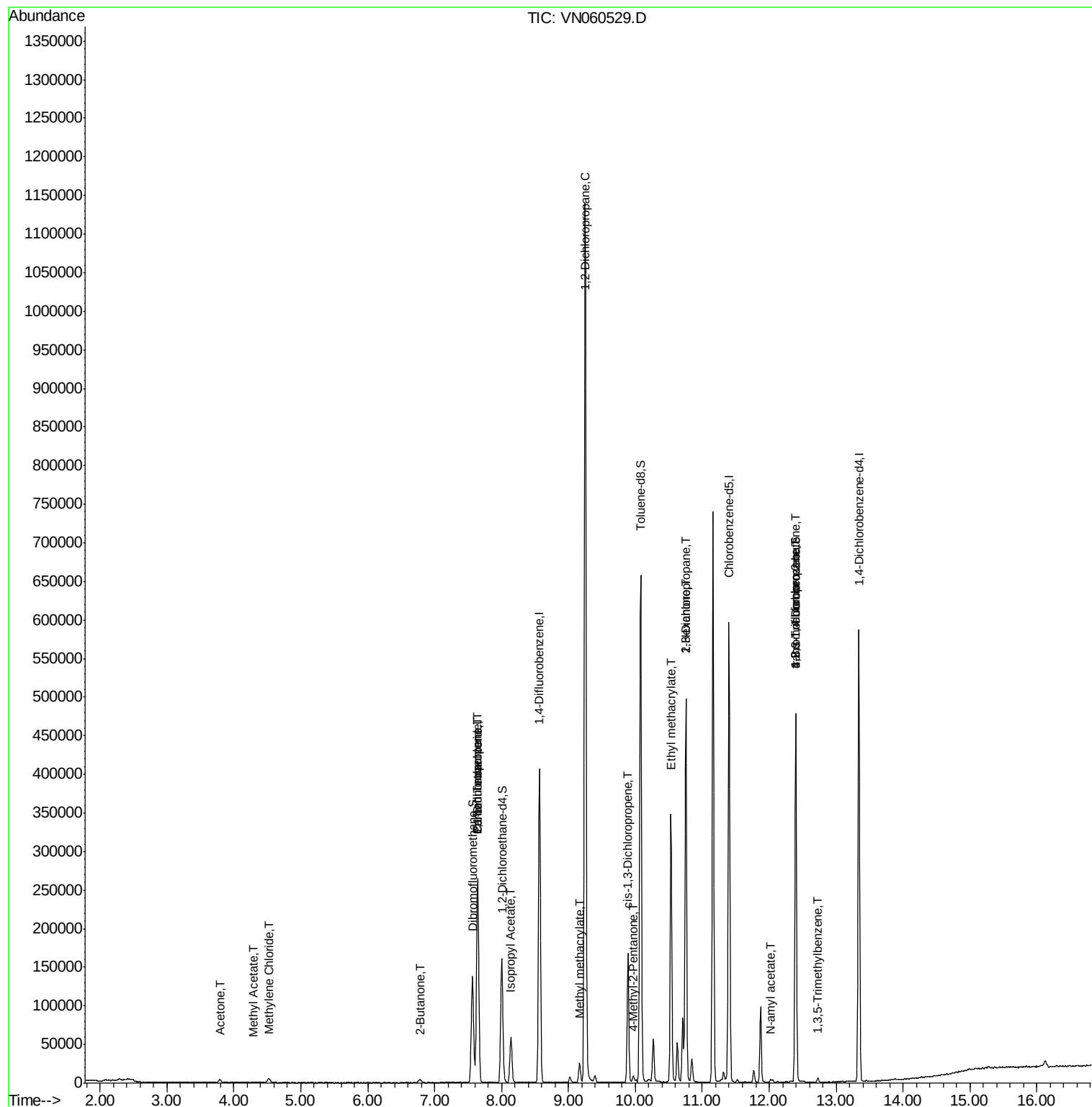
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 16) Acetone                    | 3.79  | 43   | 6984     | 7.853     | ug/l   | 98     |
| 18) Methyl Acetate             | 4.30  | 43   | 2144     | 0.722     | ug/l # | 55     |
| 20) Methylene Chloride         | 4.51  | 84   | 4145     | 1.697     | ug/l   | 91     |
| 25) 2-Butanone                 | 6.80  | 43   | 620      | 0.432     | ug/l # | 49     |
| 31) Cyclohexane                | 7.64  | 56   | 4588     | Below Cal | #      | 1      |
| 36) 1,1-Dichloropropene        | 7.64  | 75   | 16927    | 4.920     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 7.64  | 117  | 20388    | 6.087     | ug/l # | 16     |
| 43) Isopropyl Acetate          | 8.14  | 43   | 71244    | 12.492    | ug/l # | 90     |
| 45) 1,2-Dichloropropane        | 9.26  | 63   | 1194     | 0.456     | ug/l # | 44     |
| 48) Methyl methacrylate        | 9.16  | 41   | 3788     | 1.457     | ug/l # | 13     |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 6283     | 1.943     | ug/l   | 88     |
| 54) cis-1,3-Dichloropropene    | 9.89  | 75   | 30089    | 6.859     | ug/l # | 57     |
| 56) Ethyl methacrylate         | 10.53 | 69   | 741      | 0.204     | ug/l # | 1      |
| 57) 1,3-Dichloropropane        | 10.75 | 76   | 4682     | 1.135     | ug/l # | 42     |
| 59) 2-Hexanone                 | 10.75 | 43   | 72395    | 30.493    | ug/l # | 52     |
| 74) N-amyl acetate             | 12.02 | 43   | 3322     | 0.664     | ug/l # | 44     |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 84360    | 24.891    | ug/l # | 100    |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 3106     | 0.322     | ug/l   | 99     |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 84360    | 68.710    | ug/l # | 8      |
| 95) Naphthalene                | 15.14 | 128  | 206      | Below Cal | #      | 69     |

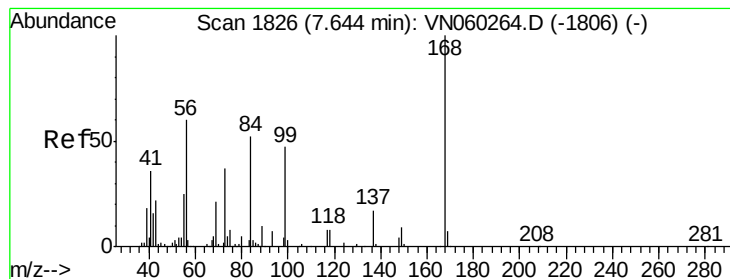
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Mar 17 08:45:49 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# 1825

Delta R.T. -0.00 min

Lab File: VN060529.D

Acq: 16 Mar 2020 17:30

Instrument :

MSVOA\_N

ClientSampleId :

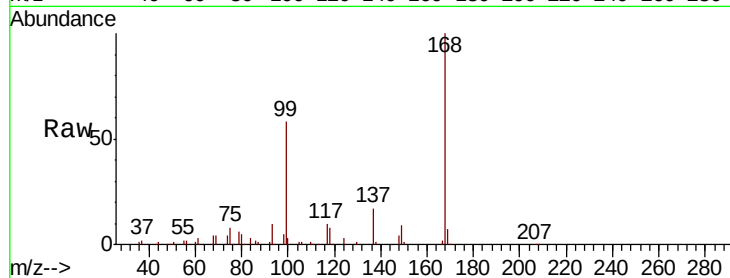
PB127541ZHE#02

Tot Ion:168 Resp: 214655

Ion Ratio Lower Upper

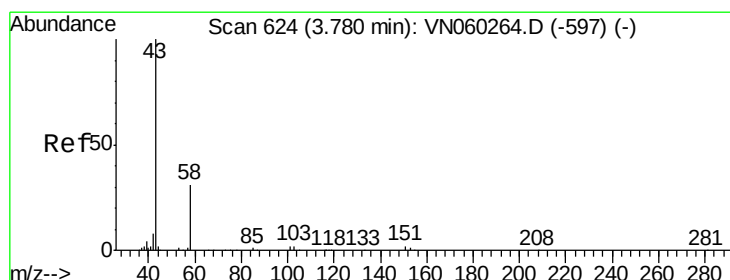
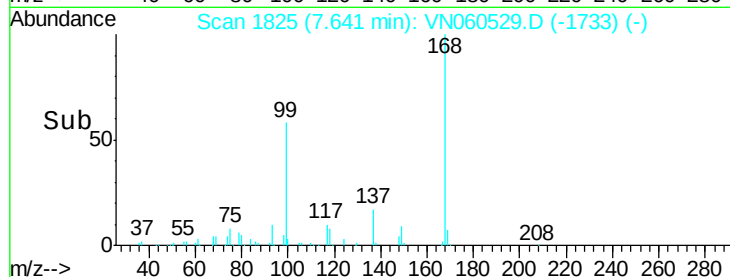
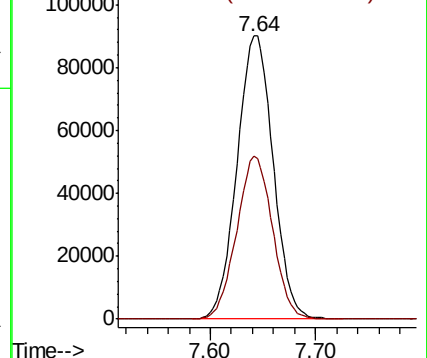
168 100

99 57.6 44.7 67.1



Abundance Ion 167.90 (167.60 to 168.60): VN060529.D (-1733) (-)

Ion 98.90 (98.60 to 99.60): VN060529.D (-1733) (-)



#16

Acetone

Concen: 7.853 ug/l

RT: 3.79 min Scan# 626

Delta R.T. 0.01 min

Lab File: VN060529.D

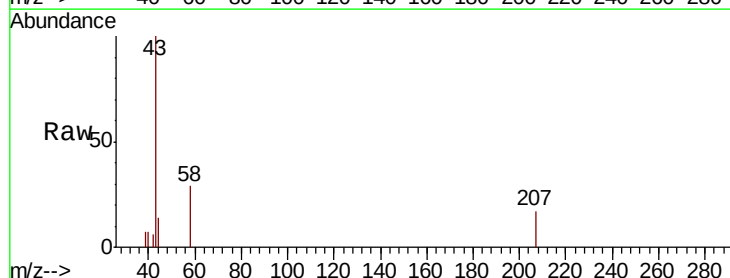
Acq: 16 Mar 2020 17:30

Tgt Ion: 43 Resp: 6984

Ion Ratio Lower Upper

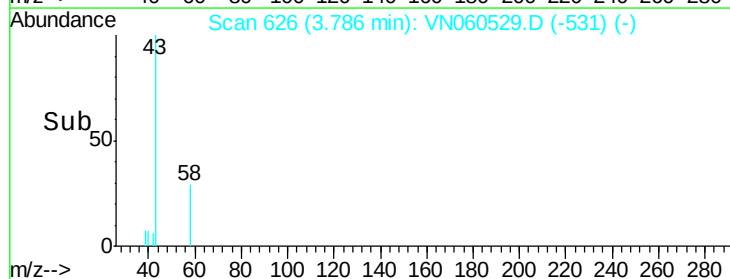
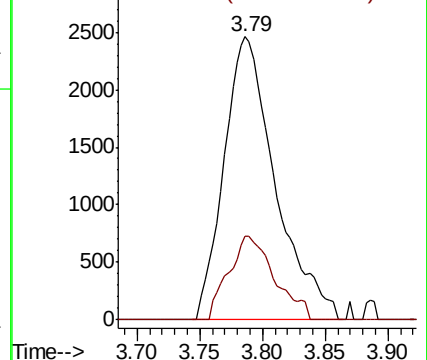
43 100

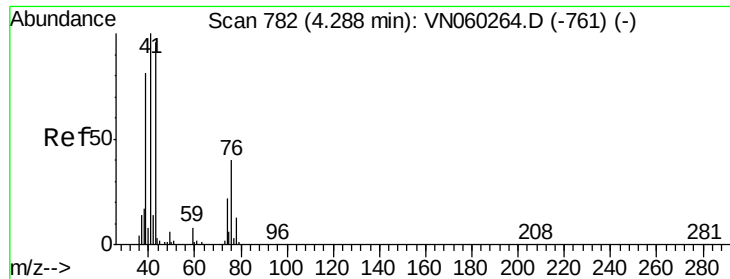
58 29.5 24.6 36.8



Abundance Ion 43.00 (42.70 to 43.70): VN060529.D (-531) (-)

Ion 58.00 (57.70 to 58.70): VN060529.D (-531) (-)

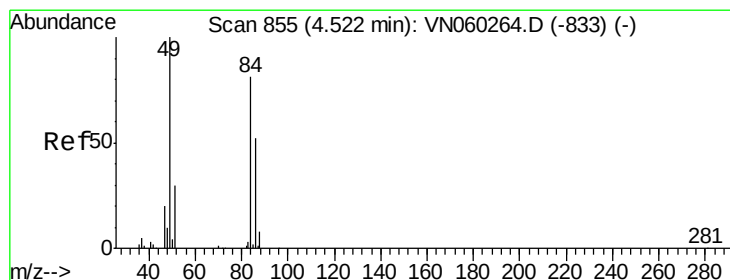
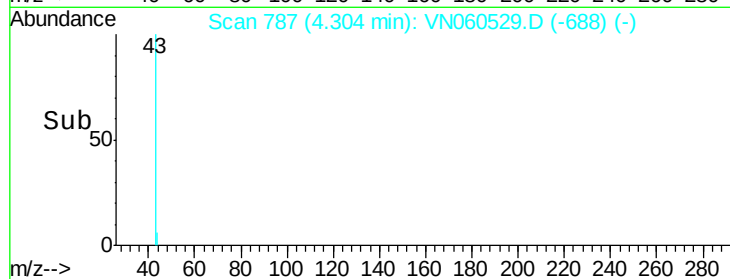
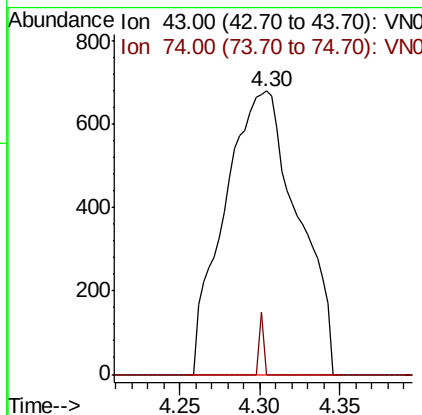
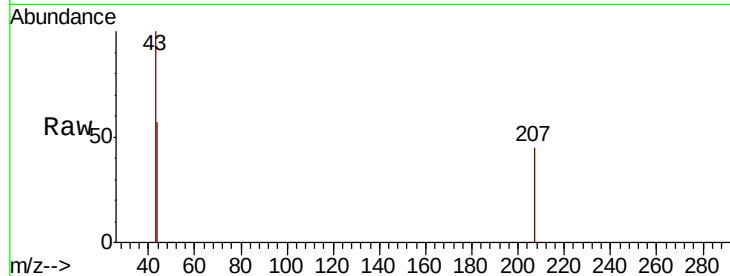




#18  
Methvl Acetate  
Concen: 0.722 ug/l  
RT: 4.30 min Scan# 787  
Delta R.T. 0.02 min  
Lab File: VN060529.D  
Acq: 16 Mar 2020 17:30

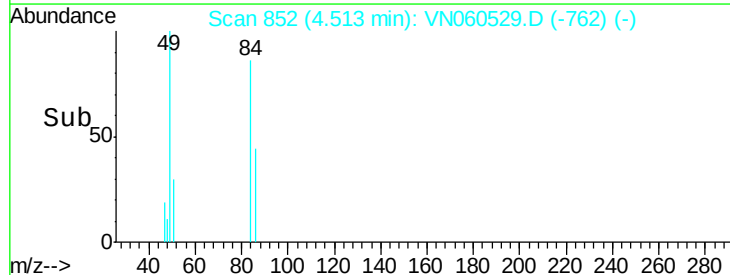
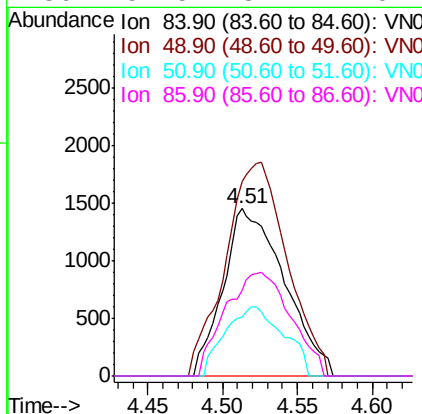
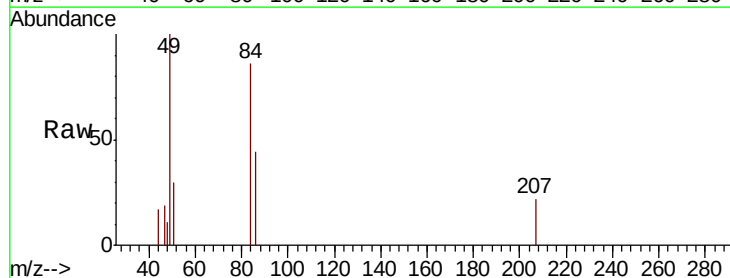
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB127541ZHE#02

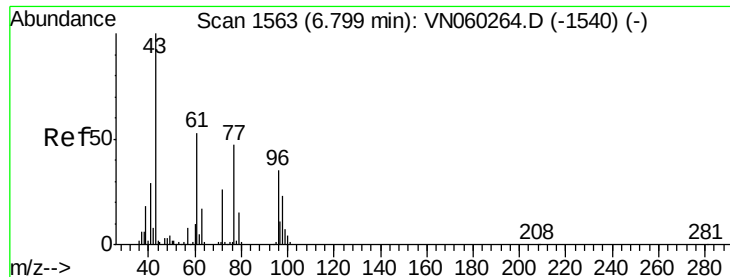
Tot Ion: 43 Resp: 2144  
Ion Ratio Lower Upper  
43 100  
74 1.4 18.8 28.2#



#20  
Methylene Chloride  
Concen: 1.697 ug/l  
RT: 4.51 min Scan# 852  
Delta R.T. -0.01 min  
Lab File: VN060529.D  
Acq: 16 Mar 2020 17:30

Tgt Ion: 84 Resp: 4145  
Ion Ratio Lower Upper  
84 100  
49 116.4 99.3 148.9  
51 35.3 30.1 45.1  
86 51.5 51.1 76.7





#25

2-Butanone

Concen: 0.432 ug/l

RT: 6.80 min Scan# 1562

Delta R.T. -0.00 min

Lab File: VN060529.D

Acq: 16 Mar 2020 17:30

Instrument :

MSVOA\_N

ClientSampleId :

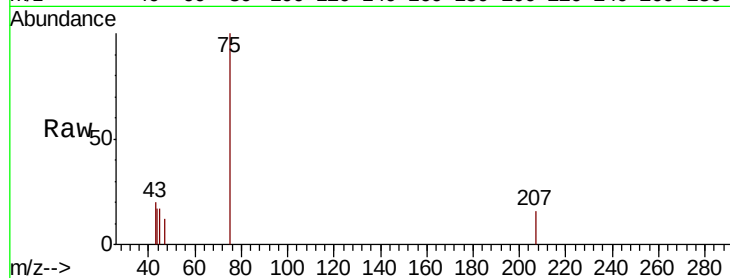
PB127541ZHE#02

Tot Ion: 43 Resp: 620

Ion Ratio Lower Upper

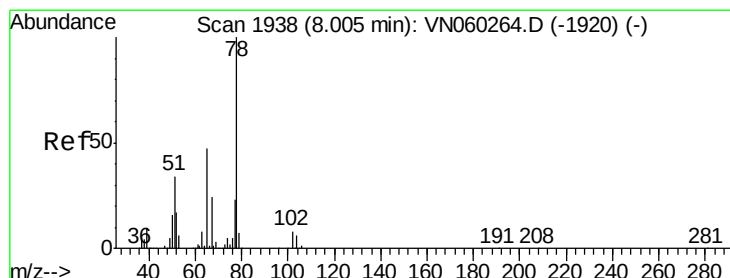
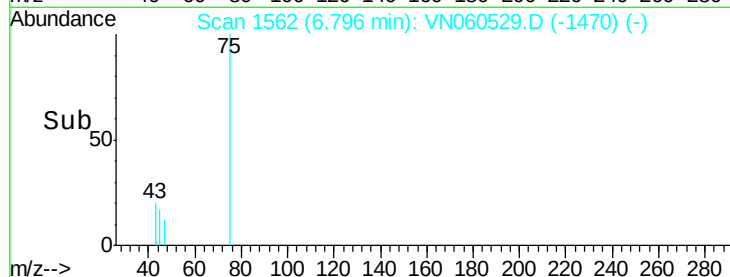
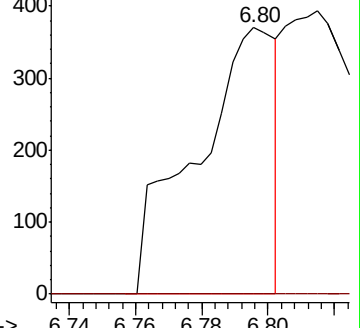
43 100

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



#33

1,2-Dichloroethane-d4

Concen: 50.649 ug/l

RT: 8.00 min Scan# 1937

Delta R.T. -0.00 min

Lab File: VN060529.D

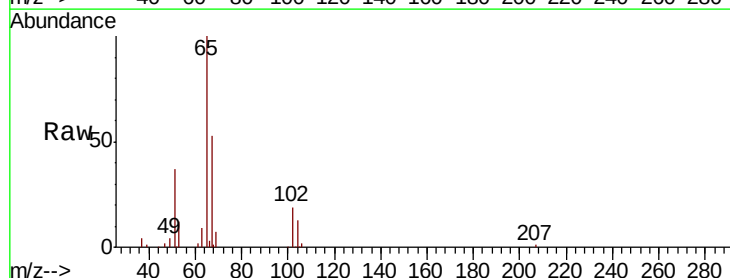
Acq: 16 Mar 2020 17:30

Tgt Ion: 65 Resp: 139489

Ion Ratio Lower Upper

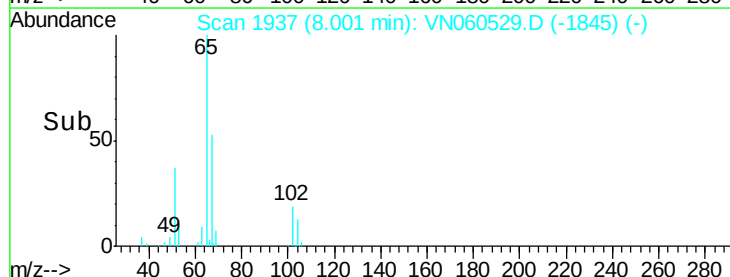
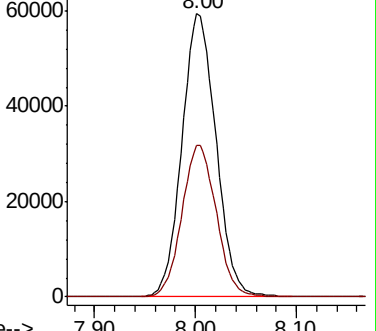
65 100

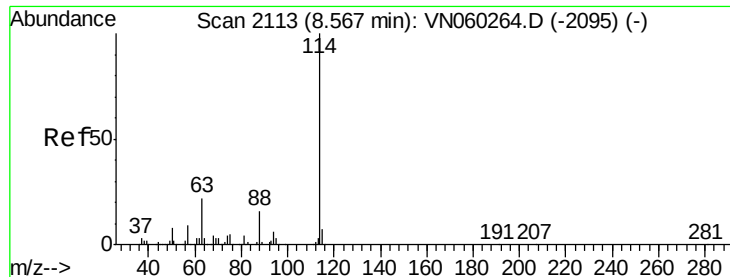
67 53.9 0.0 103.8



Abundance Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0

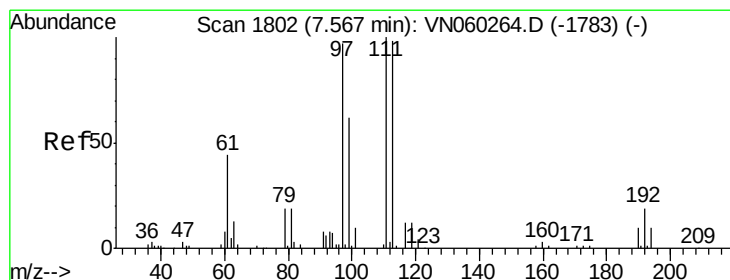
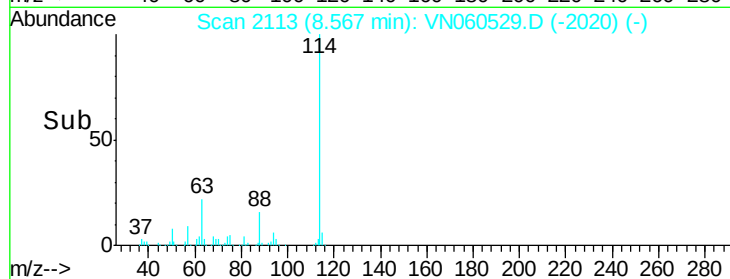
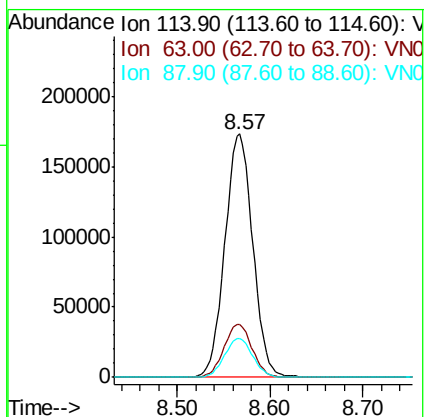
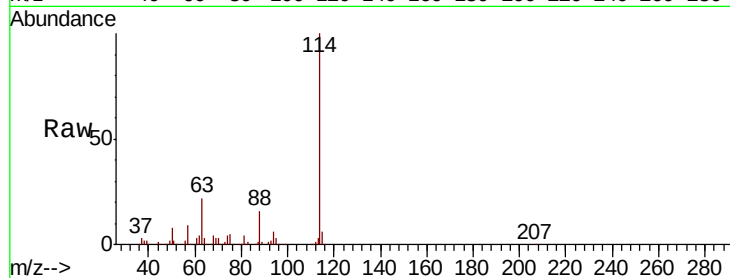




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.57 min Scan# 2113  
 Delta R.T. 0.00 min  
 Lab File: VN060529.D  
 Acq: 16 Mar 2020 17:30

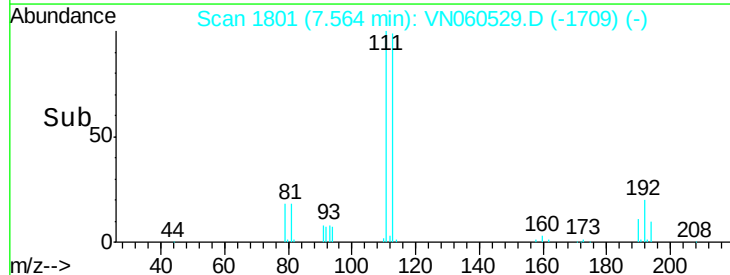
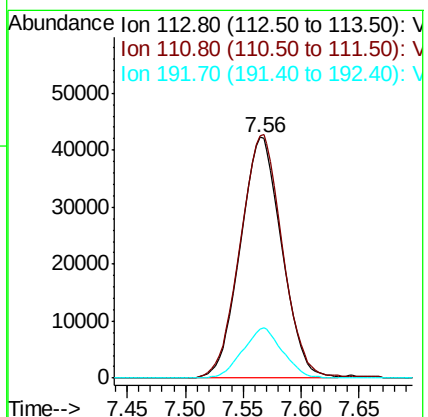
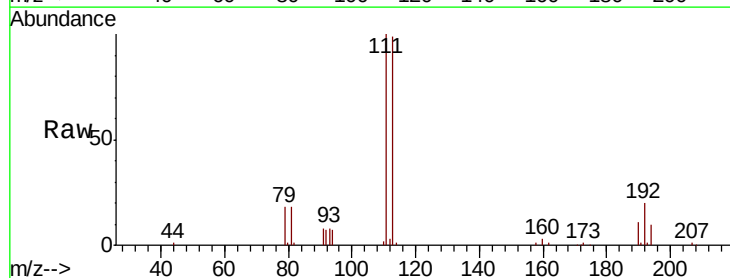
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB127541ZHE#02

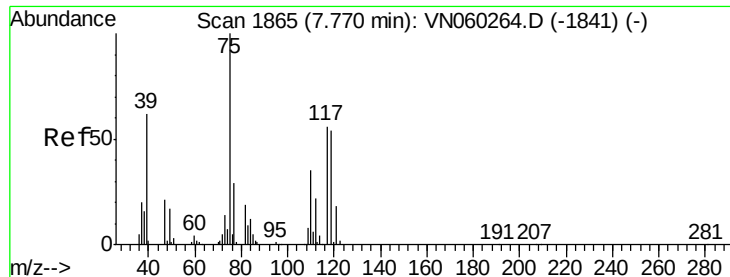
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 21.9  | 0.0   | 43.2  |
| 88      | 16.0  | 0.0   | 31.6  |



#35  
 Dibromofluoromethane  
 Concen: 62.860 ug/l  
 RT: 7.56 min Scan# 1801  
 Delta R.T. -0.00 min  
 Lab File: VN060529.D  
 Acq: 16 Mar 2020 17:30

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 103.0 | 82.4  | 123.6 |
| 192     | 20.0  | 16.2  | 24.2  |





#36

1,1-Dichloropropene

Concen: 4.920 ug/l

RT: 7.64 min Scan# 1825

Delta R.T. -0.13 min

Lab File: VN060529.D

Acq: 16 Mar 2020 17:30

Instrument :

MSVOA\_N

ClientSampleId :

PB127541ZHE#02

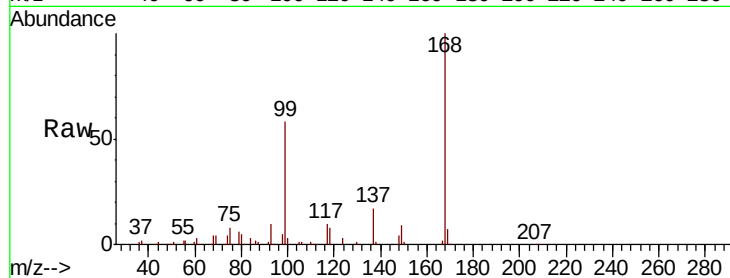
Tot Ion: 75 Resp: 16927

Ion Ratio Lower Upper

75 100

110 7.3 17.3 52.0#

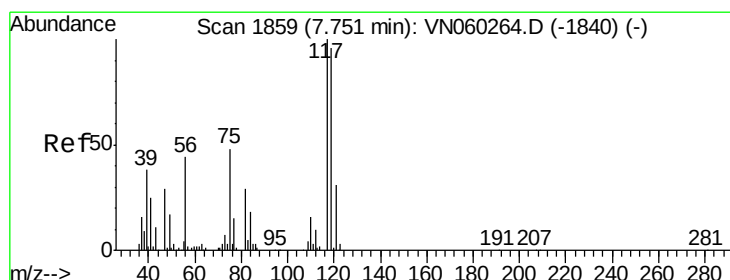
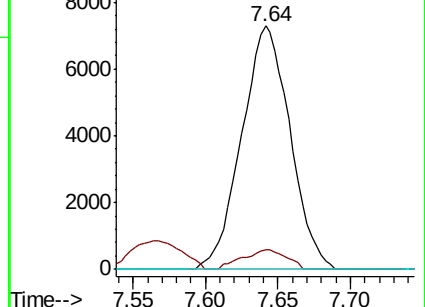
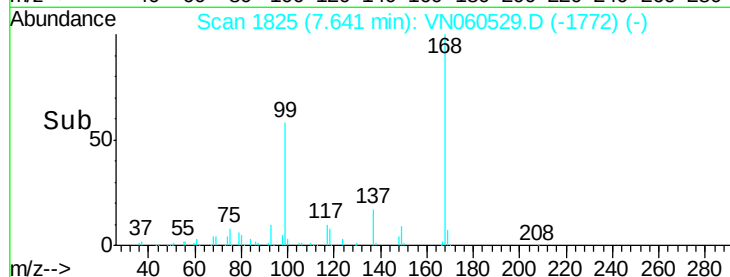
77 0.0 24.2 36.2#



Abundance Ion 74.90 (74.60 to 75.60): VN060529.D (-1772) (-)

Ion 109.90 (109.60 to 110.60): VN060529.D (-1772) (-)

Ion 76.90 (76.60 to 77.60): VN060529.D (-1772) (-)



#38

Carbon Tetrachloride

Concen: 6.087 ug/l

RT: 7.64 min Scan# 1825

Delta R.T. -0.11 min

Lab File: VN060529.D

Acq: 16 Mar 2020 17:30

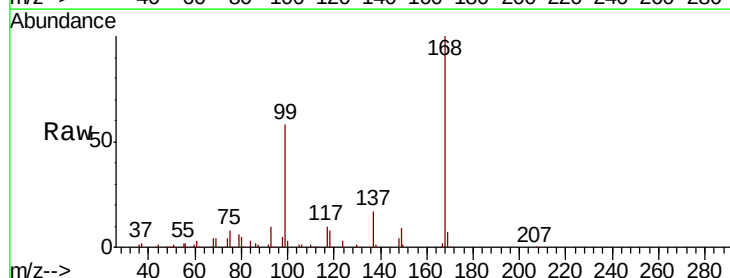
Tgt Ion: 117 Resp: 20388

Ion Ratio Lower Upper

117 100

119 5.0 76.7 115.1#

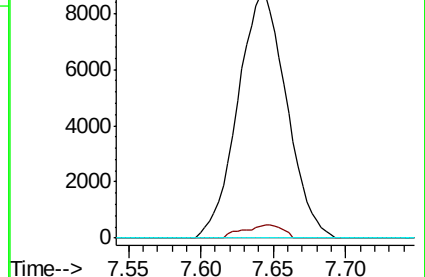
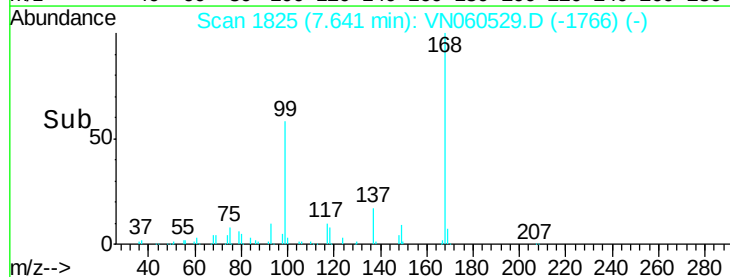
121 0.0 24.5 36.7#

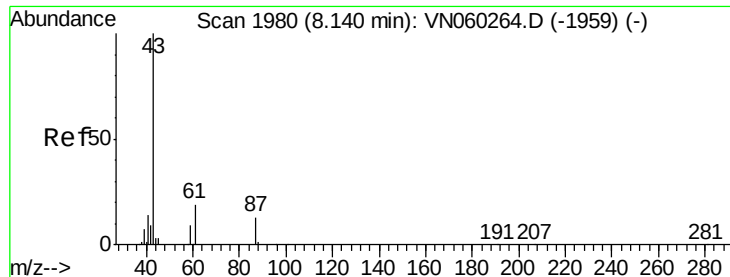


Abundance Ion 116.80 (116.50 to 117.50): VN060529.D (-1766) (-)

Ion 118.80 (118.50 to 119.50): VN060529.D (-1766) (-)

Ion 120.80 (120.50 to 121.50): VN060529.D (-1766) (-)





#43

Isopropyl Acetate

Concen: 12.492 ug/l

RT: 8.14 min Scan# 1980

Delta R.T. 0.00 min

Lab File: VN060529.D

Acq: 16 Mar 2020 17:30

Instrument :

MSVOA\_N

ClientSampleId :

PB127541ZHE#02

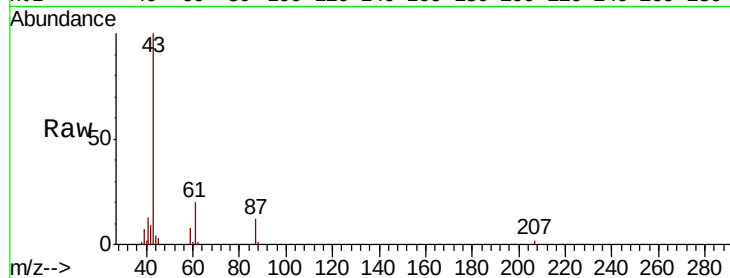
Tot Ion: 43 Resp: 71244

Ion Ratio Lower Upper

43 100

61 19.6 20.9 31.3#

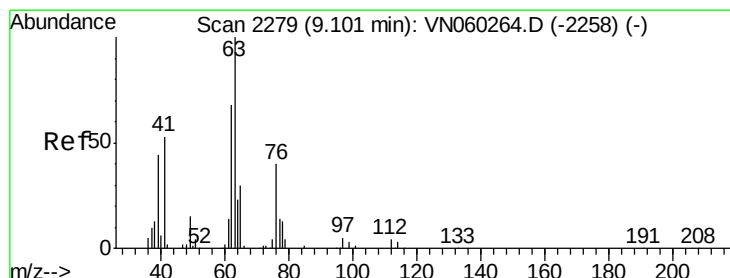
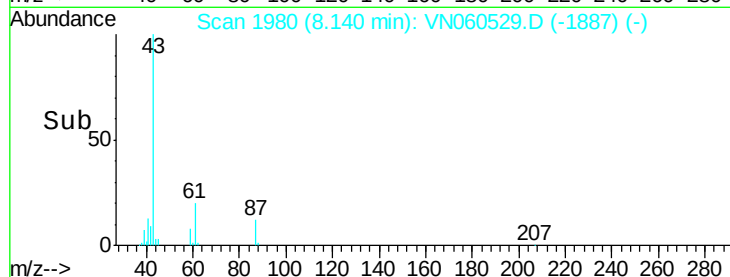
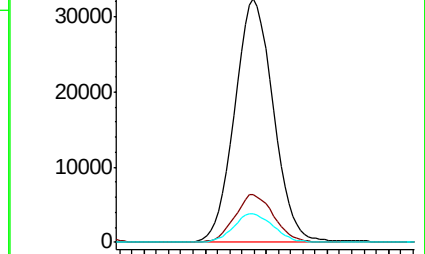
87 12.0 10.6 16.0



Abundance Ion 43.00 (42.70 to 43.70): VN060529.D (-1887) (-)

Ion 61.00 (60.70 to 61.70): VN060529.D (-1887) (-)

Ion 87.00 (86.70 to 87.70): VN060529.D (-1887) (-)



#45

1,2-Dichloropropane

Concen: 0.456 ug/l

RT: 9.26 min Scan# 2327

Delta R.T. 0.15 min

Lab File: VN060529.D

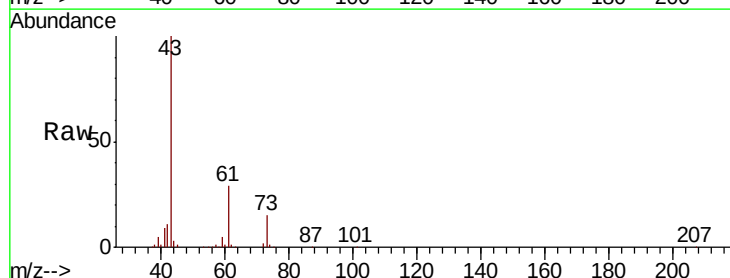
Acq: 16 Mar 2020 17:30

Tgt Ion: 63 Resp: 1194

Ion Ratio Lower Upper

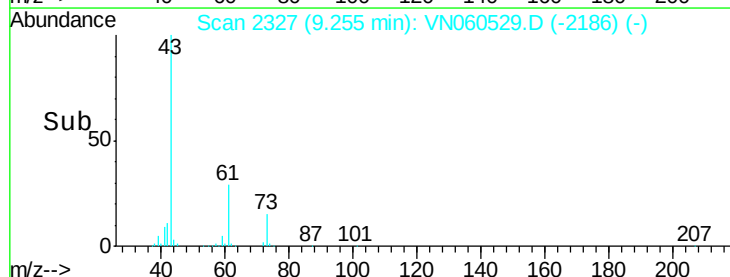
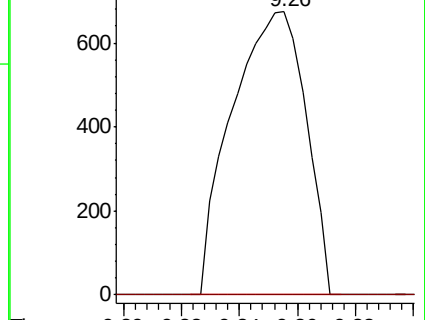
63 100

65 0.0 24.4 36.6#

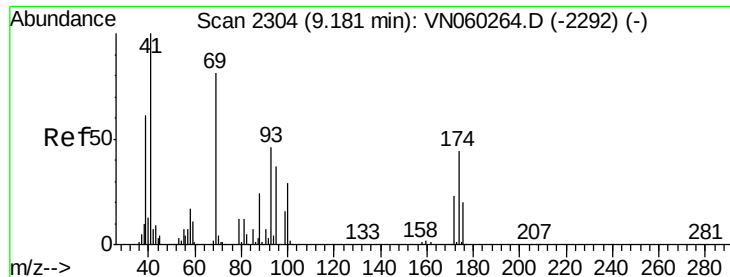


Abundance Ion 62.90 (62.60 to 63.60): VN060529.D (-2186) (-)

Ion 64.90 (64.60 to 65.60): VN060529.D (-2186) (-)



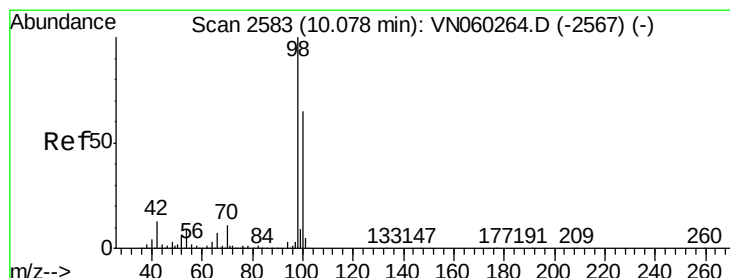
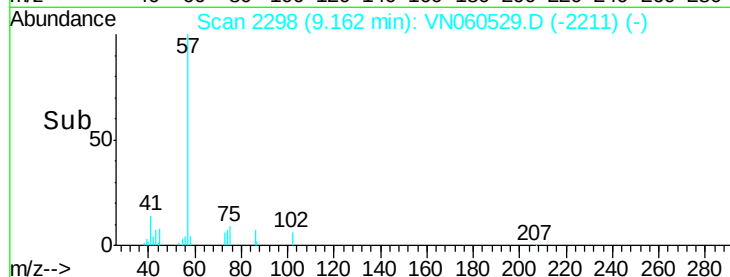
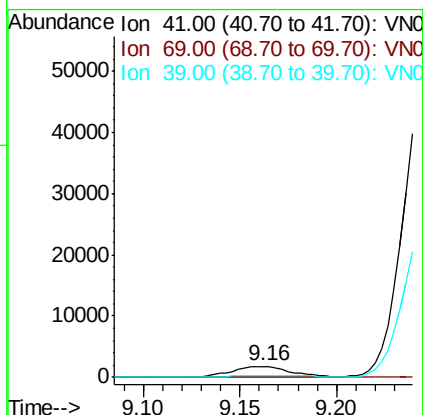
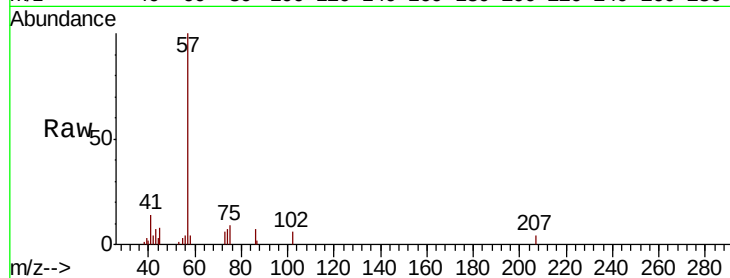




#48  
Methvl methacrylate  
Concen: 1.457 ug/l  
RT: 9.16 min Scan# 2298  
Delta R.T. -0.02 min  
Lab File: VN060529.D  
Acq: 16 Mar 2020 17:30

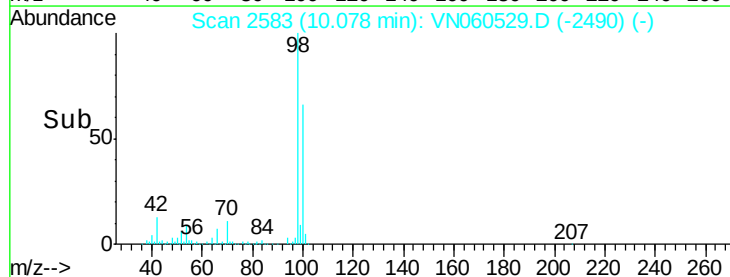
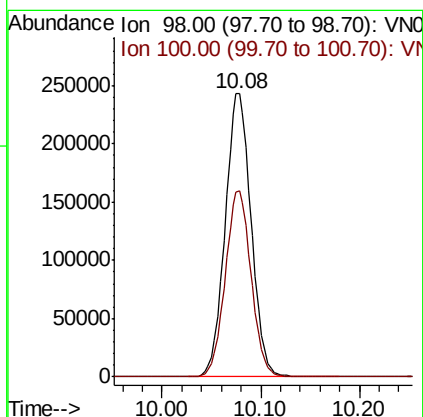
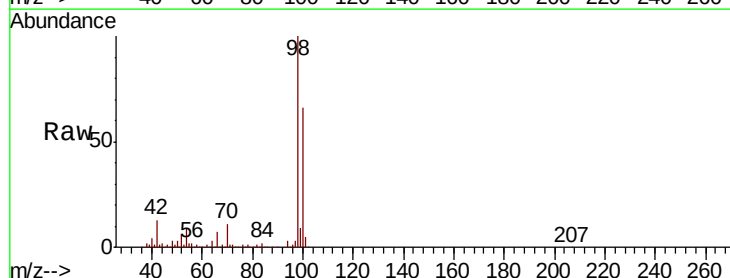
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB127541ZHE#02

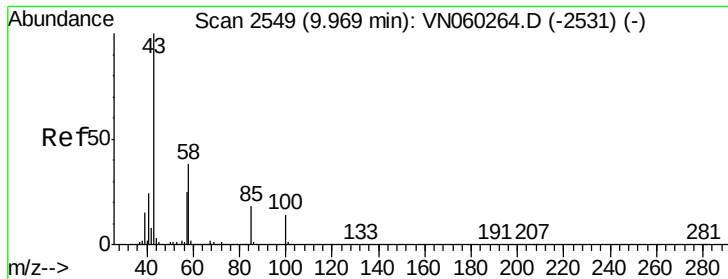
Tot Ion: 41 Resp: 3788  
Ion Ratio Lower Upper  
41 100  
69 0.0 66.7 100.1#  
39 0.0 50.1 75.1#



#50  
Toluene-d8  
Concen: 52.695 ug/l  
RT: 10.08 min Scan# 2583  
Delta R.T. 0.00 min  
Lab File: VN060529.D  
Acq: 16 Mar 2020 17:30

Tgt Ion: 98 Resp: 446882  
Ion Ratio Lower Upper  
98 100  
100 65.4 52.2 78.2

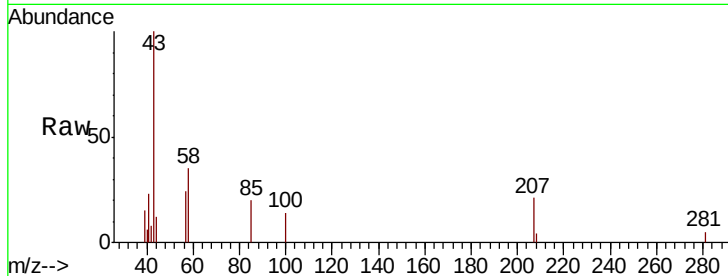




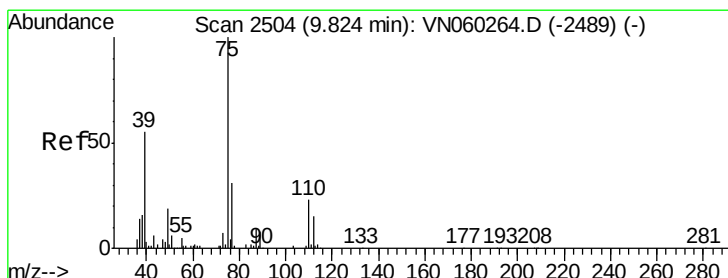
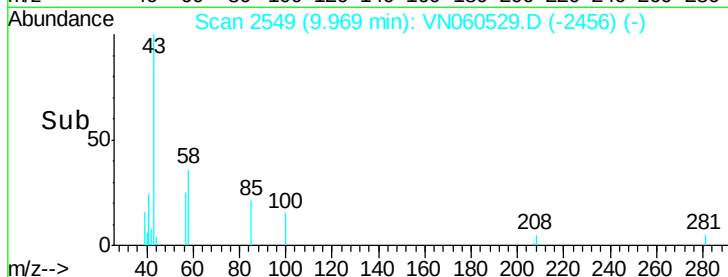
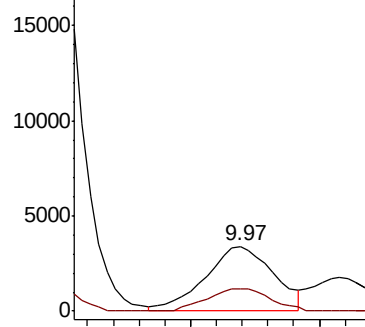
#51  
 4-Methyl-2-Pentanone  
 Concen: 1.943 ug/l  
 RT: 9.97 min Scan# 2549  
 Delta R.T. 0.00 min  
 Lab File: VN060529.D  
 Acq: 16 Mar 2020 17:30

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB127541ZHE#02

Tot Ion: 43 Resp: 6283  
 Ion Ratio Lower Upper  
 43 100  
 58 31.6 30.9 46.3

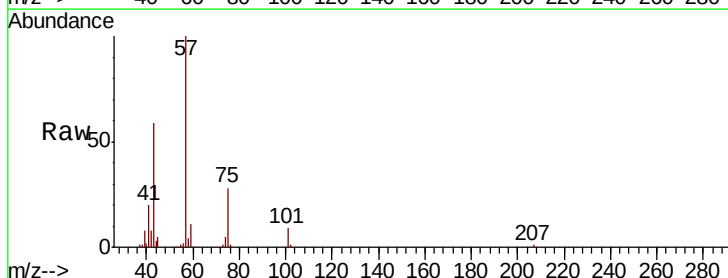


Abundance Ion 43.00 (42.70 to 43.70): VNO  
 Ion 58.00 (57.70 to 58.70): VNO

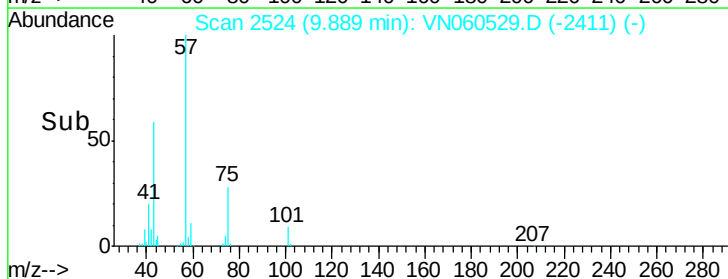
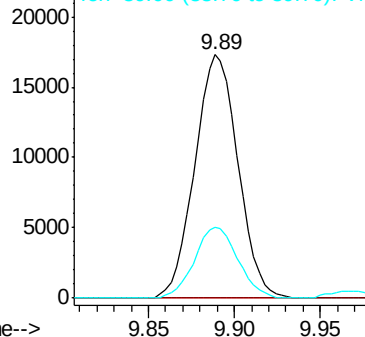


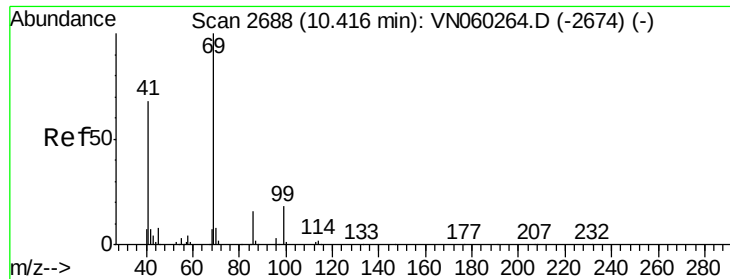
#54  
 cis-1,3-Dichloropropene  
 Concen: 6.859 ug/l  
 RT: 9.89 min Scan# 2524  
 Delta R.T. 0.06 min  
 Lab File: VN060529.D  
 Acq: 16 Mar 2020 17:30

Tgt Ion: 75 Resp: 30089  
 Ion Ratio Lower Upper  
 75 100  
 77 0.0 24.8 37.2#  
 39 29.3 43.8 65.8#



Abundance Ion 74.90 (74.60 to 75.60): VNO  
 Ion 76.90 (76.60 to 77.60): VNO  
 Ion 39.00 (38.70 to 39.70): VNO





#56

Ethyl methacrylate

Concen: 0.204 ug/l

RT: 10.53 min Scan# 2724

Delta R.T. 0.12 min

Lab File: VN060529.D

Acq: 16 Mar 2020 17:30

Instrument :

MSVOA\_N

ClientSampleId :

PB127541ZHE#02

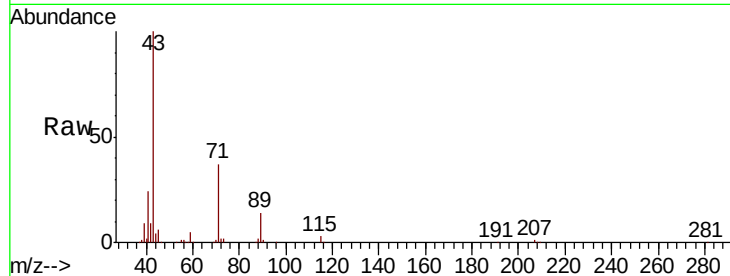
Tot Ion: 69 Resp: 741

Ion Ratio Lower Upper

69 100

41 8382.7 54.1 81.1#

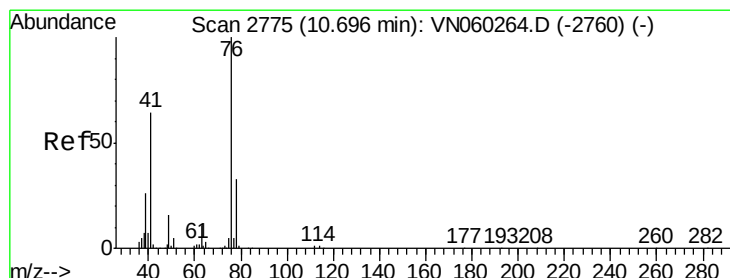
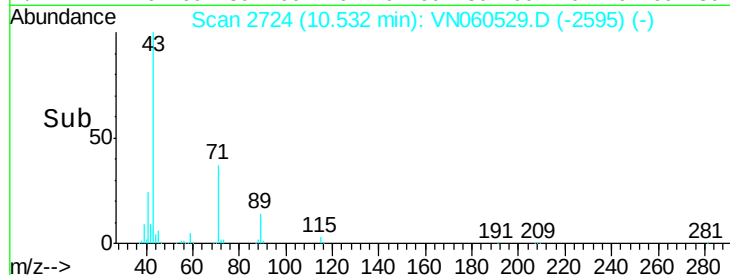
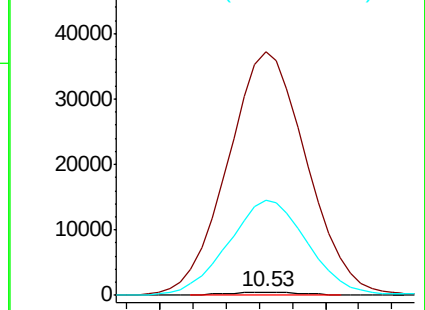
39 3304.7 32.5 48.7#



Abundance Ion 69.00 (68.70 to 69.70): VN060529.D (-2595) (-)

Ion 41.00 (40.70 to 41.70): VN060529.D (-2595) (-)

Ion 39.00 (38.70 to 39.70): VN060529.D (-2595) (-)



#57

1,3-Dichloropropane

Concen: 1.135 ug/l

RT: 10.75 min Scan# 2793

Delta R.T. 0.06 min

Lab File: VN060529.D

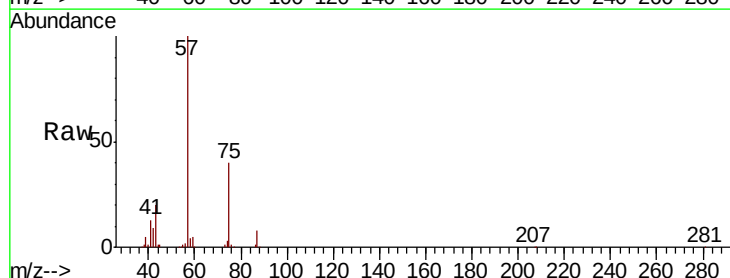
Acq: 16 Mar 2020 17:30

Tgt Ion: 76 Resp: 4682

Ion Ratio Lower Upper

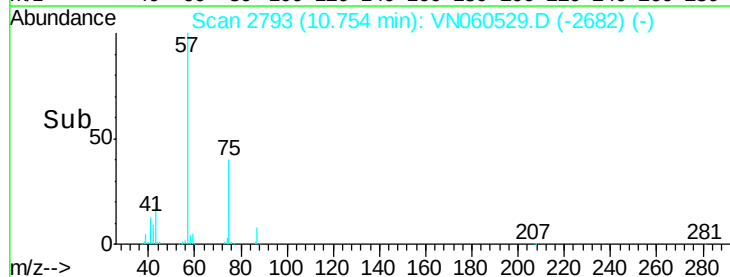
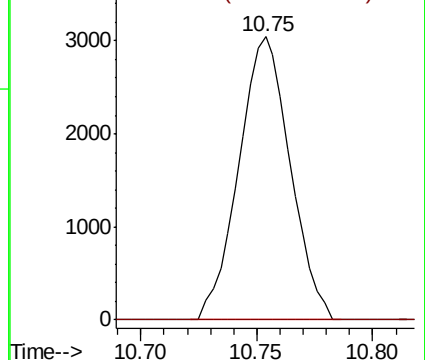
76 100

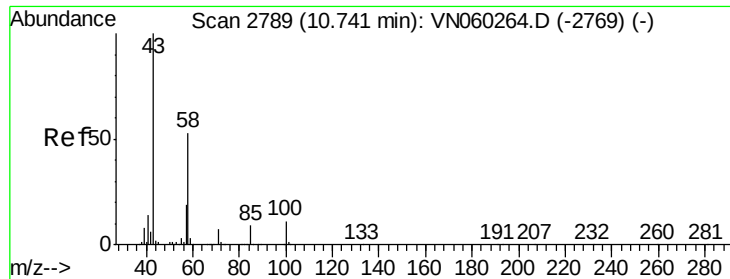
78 0.0 26.2 39.2#



Abundance Ion 75.90 (75.60 to 76.60): VN060529.D (-2682) (-)

Ion 77.90 (77.60 to 78.60): VN060529.D (-2682) (-)

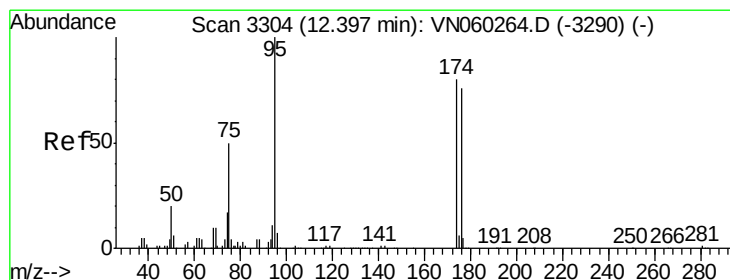
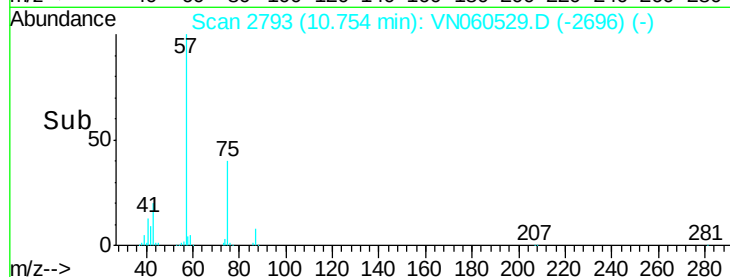
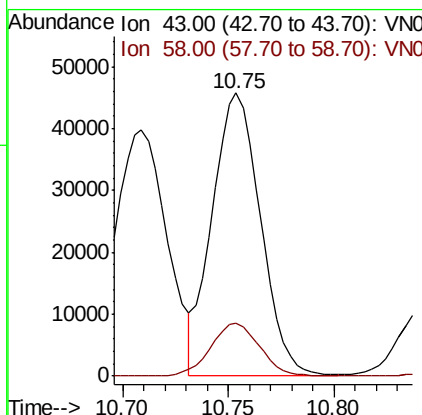
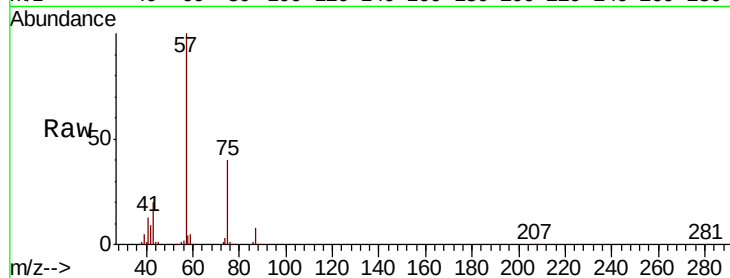




#59  
2-Hexanone  
Concen: 30.493 ug/l  
RT: 10.75 min Scan# 2793  
Delta R.T. 0.01 min  
Lab File: VN060529.D  
Acq: 16 Mar 2020 17:30

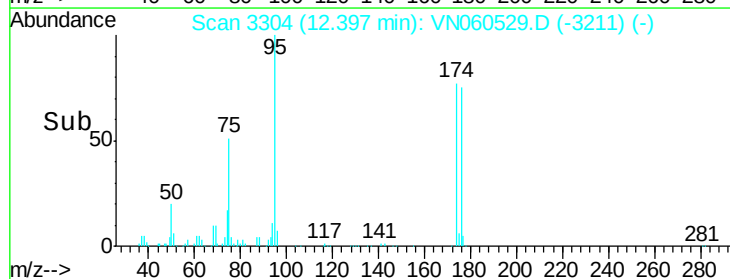
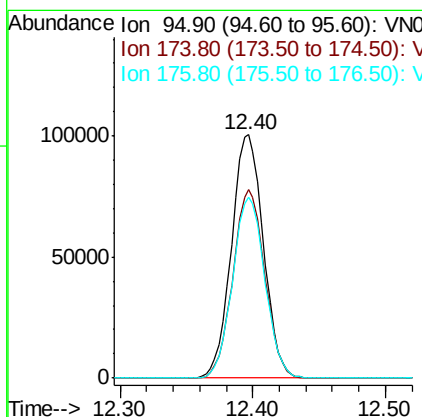
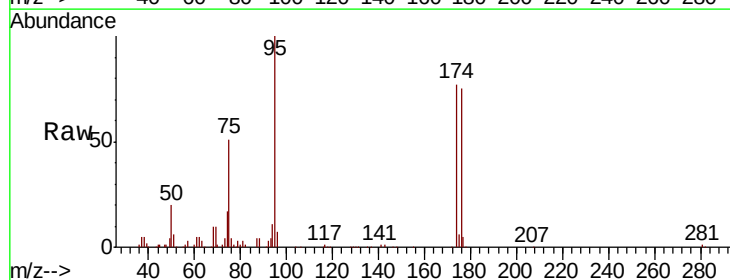
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB127541ZHE#02

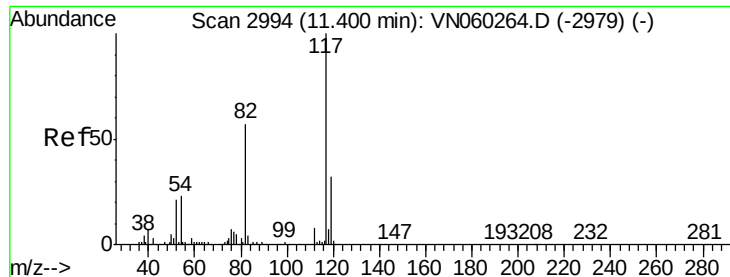
Tot Ion: 43 Resp: 72395  
Ion Ratio Lower Upper  
43 100  
58 19.1 26.5 79.5#



#62  
4-Bromofluorobenzene  
Concen: 52.194 ug/l  
RT: 12.40 min Scan# 3304  
Delta R.T. 0.00 min  
Lab File: VN060529.D  
Acq: 16 Mar 2020 17:30

Tgt Ion: 95 Resp: 167790  
Ion Ratio Lower Upper  
95 100  
174 77.4 0.0 159.2  
176 75.2 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: VN060529.D

Acq: 16 Mar 2020 17:30

Instrument :

MSVOA\_N

ClientSampleId :

PB127541ZHE#02

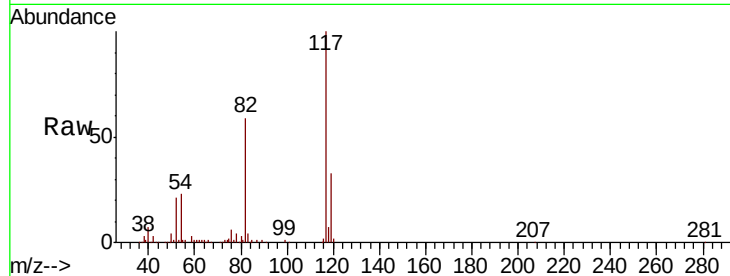
Tot Ion:117 Resp: 338107

Ion Ratio Lower Upper

117 100

82 58.6 45.8 68.6

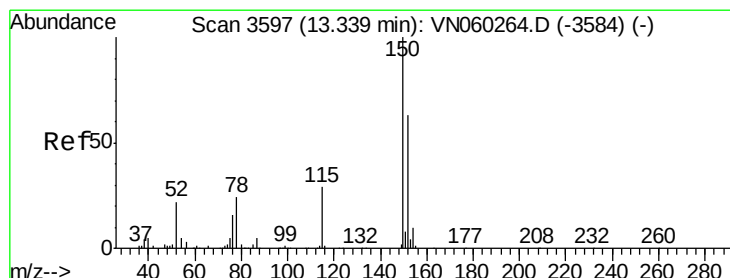
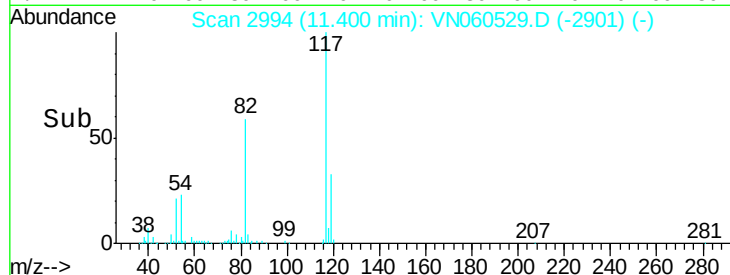
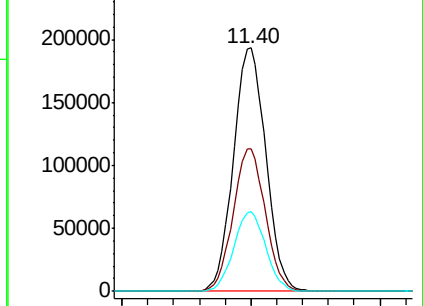
119 32.7 25.8 38.8



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# 3597

Delta R.T. 0.00 min

Lab File: VN060529.D

Acq: 16 Mar 2020 17:30

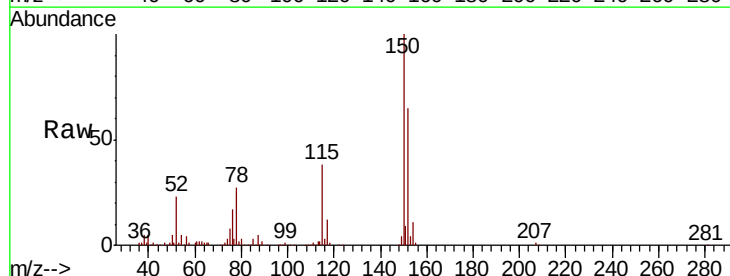
Tgt Ion:152 Resp: 154476

Ion Ratio Lower Upper

152 100

115 59.6 30.0 90.0

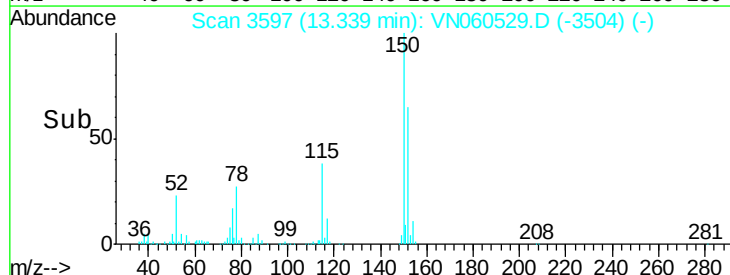
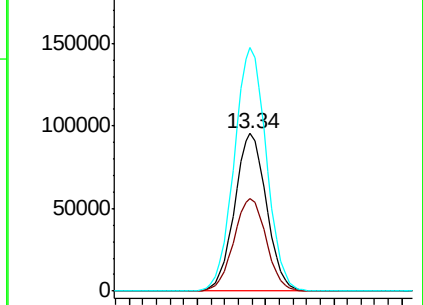
150 156.6 0.0 349.6

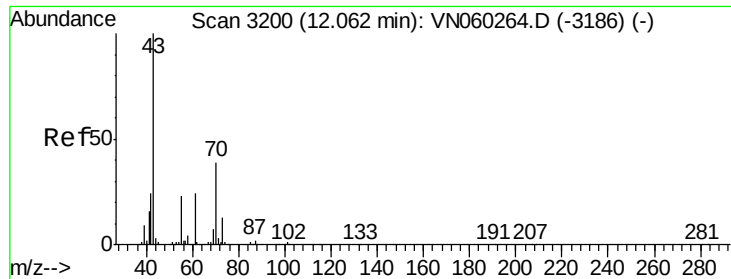


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V

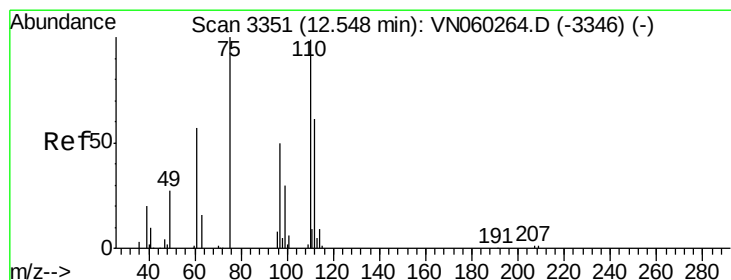
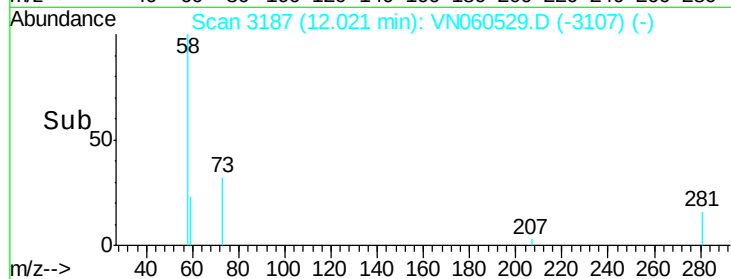
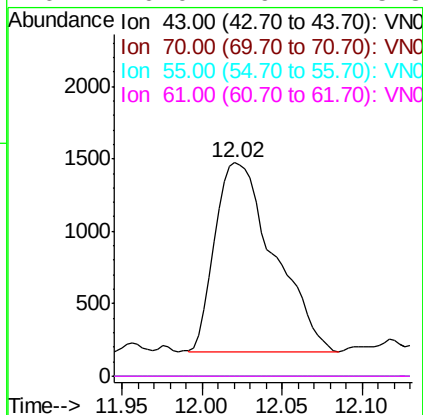
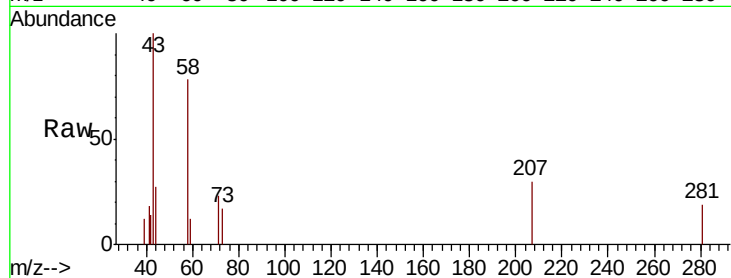




#74  
N-amyl acetate  
Concen: 0.664 ug/l  
RT: 12.02 min Scan# 3187  
Delta R.T. -0.04 min  
Lab File: VN060529.D  
Acq: 16 Mar 2020 17:30

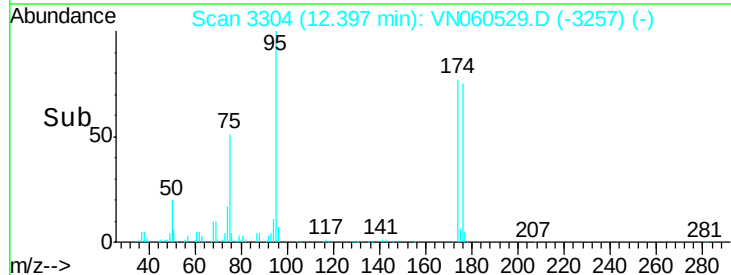
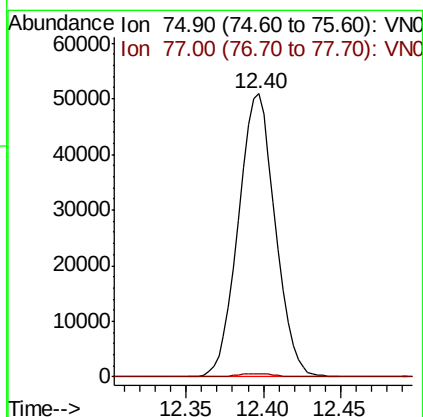
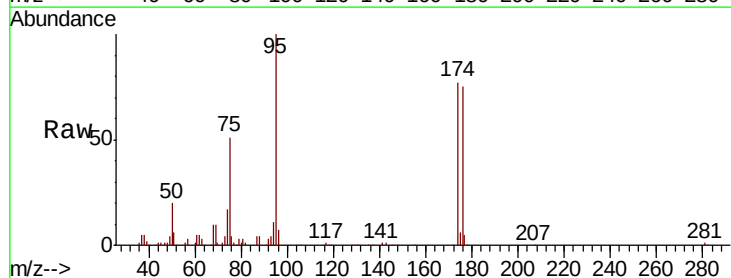
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB127541ZHE#02

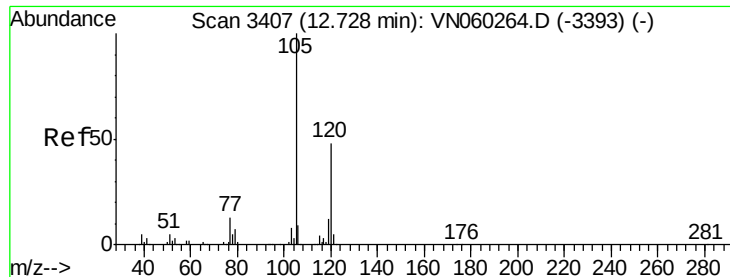
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 43    | Resp: | 3322  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 70       | 0.0   | 32.2  | 48.2# |
| 55       | 0.0   | 18.2  | 27.4# |
| 61       | 0.0   | 19.2  | 28.8# |



#76  
1,2,3-Trichloropropane  
Concen: 24.891 ug/l  
RT: 12.40 min Scan# 3304  
Delta R.T. -0.15 min  
Lab File: VN060529.D  
Acq: 16 Mar 2020 17:30

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 84360 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 77       | 1.1   | 0.0   | 0.0#  |





#80

1,3,5-Trimethylbenzene

Concen: 0.322 ug/l

RT: 12.73 min Scan# 3407

Delta R.T. 0.00 min

Lab File: VN060529.D

Acq: 16 Mar 2020 17:30

Instrument :

MSVOA\_N

ClientSampleId :

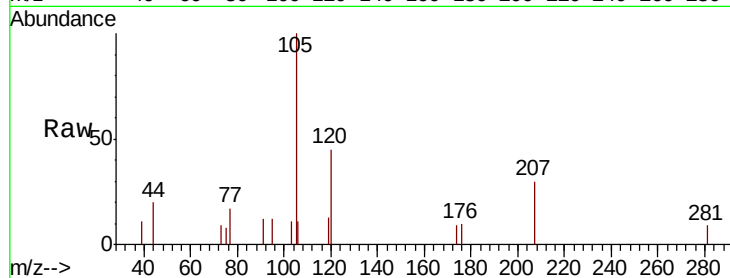
PB127541ZHE#02

Tot Ion:105 Resp: 3106

Ion Ratio Lower Upper

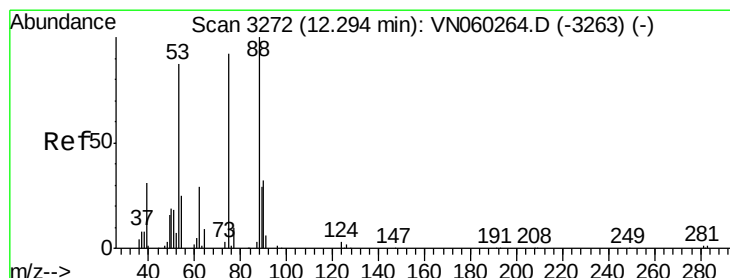
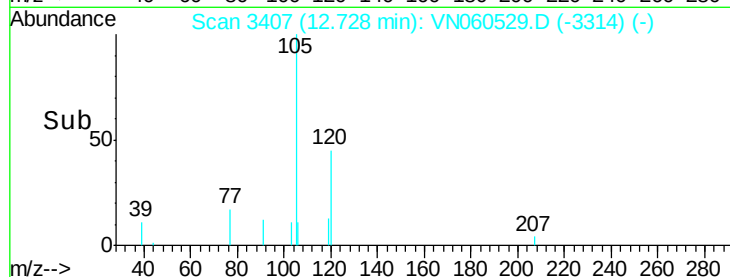
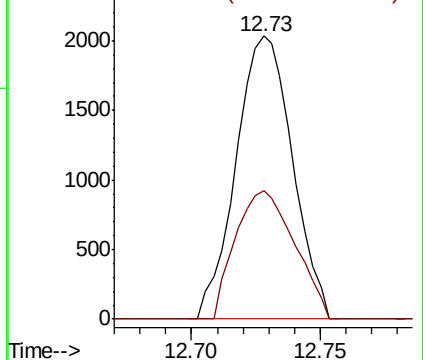
105 100

120 47.6 24.1 72.4



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#81

trans-1,4-Dichloro-2-butene

Concen: 68.710 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. 0.10 min

Lab File: VN060529.D

Acq: 16 Mar 2020 17:30

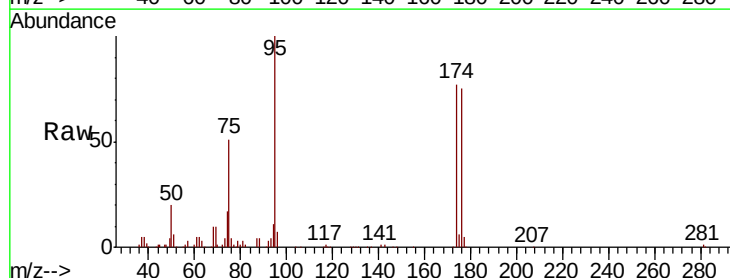
Tgt Ion: 75 Resp: 84360

Ion Ratio Lower Upper

75 100

53 0.0 73.8 110.6#

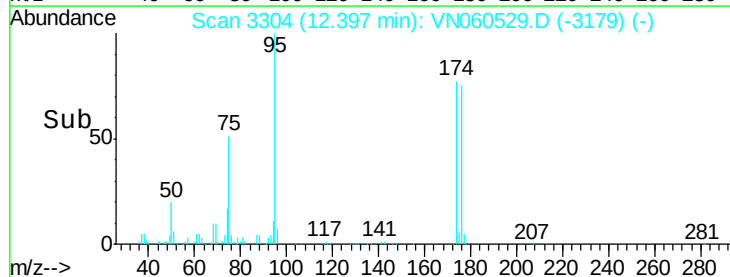
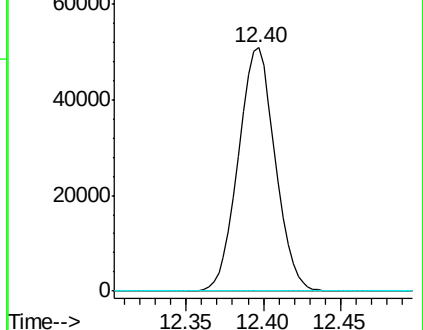
89 0.0 57.1 85.7#

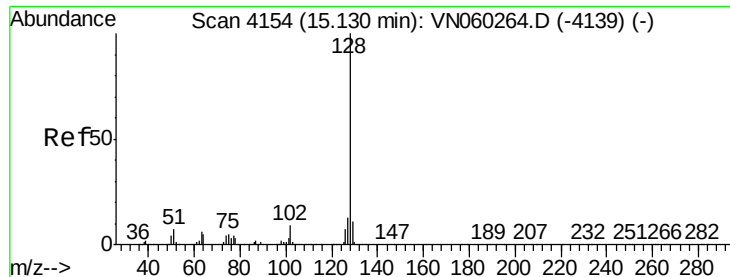


Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 53.00 (52.70 to 53.70): VNO

Ion 88.90 (88.60 to 89.60): VNO





#95

Naphthalene

Concen: Below Cal

RT: 15.14 min Scan# 4156

Delta R.T. 0.01 min

Lab File: VN060529.D

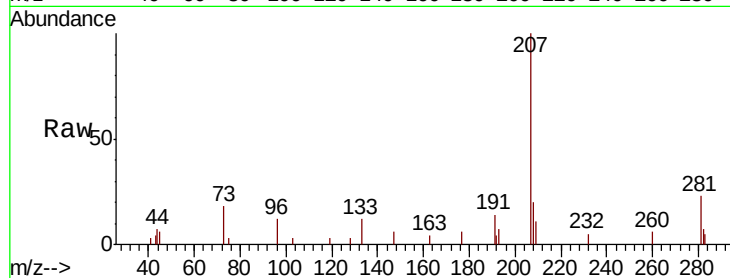
Acq: 16 Mar 2020 17:30

Instrument :

MSVOA\_N

ClientSampleId :

PB127541ZHE#02



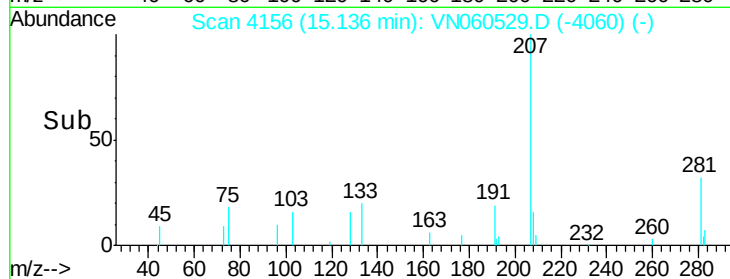
Tot Ion:128 Resp: 206

Ion Ratio Lower Upper

128 100

127 0.0 10.4 15.6#

129 0.0 8.6 13.0#



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

