

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN092719\  
 Data File : VN058416.D  
 Acq On : 27 Sep 2019 18:19  
 Operator : JC/SP  
 Sample : K5054-01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PAT-091019-B

Quant Time: Sep 30 08:41:53 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N092719W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Sep 30 08:07:38 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.65  | 168  | 492707   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 775418   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 659093   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 276522   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.01  | 65   | 337334   | 46.85 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.70%  |          |
| 35) Dibromofluoromethane    | 7.58  | 113  | 236266   | 49.71 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.42%  |          |
| 50) Toluene-d8              | 10.08 | 98   | 958079   | 51.46 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.92% |          |
| 62) 4-Bromofluorobenzene    | 12.41 | 95   | 317306   | 47.14 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.28%  |          |

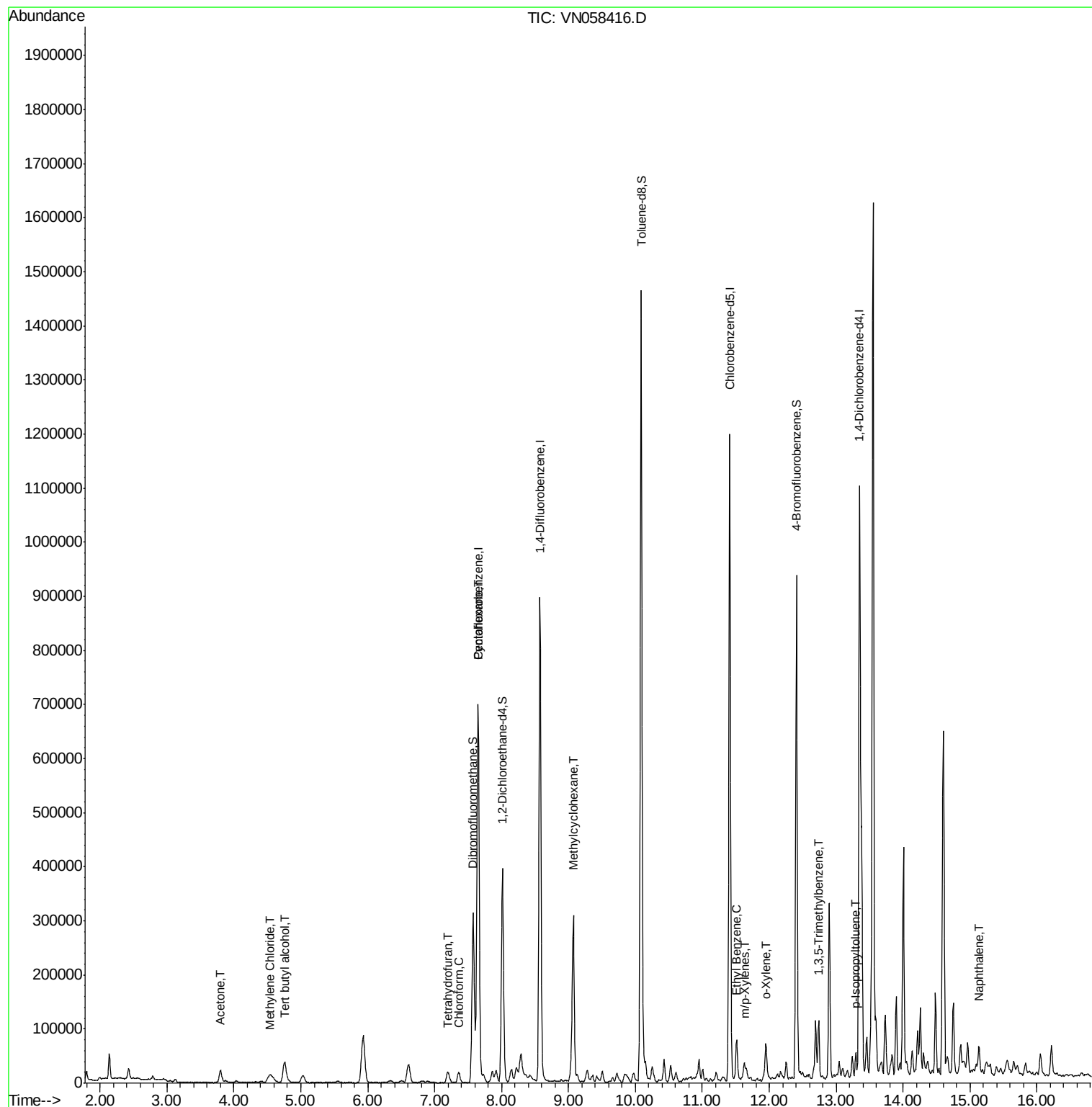
| Target Compounds           | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|----------------------------|-------|------|----------|--------|--------|--------|
| 11) Tert butyl alcohol     | 4.76  | 59   | 68511    | 85.652 | ug/l # | 86     |
| 16) Acetone                | 3.80  | 43   | 38111    | 15.527 | ug/l   | 93     |
| 20) Methylene Chloride     | 4.54  | 84   | 6706     | 1.184  | ug/l   | 92     |
| 29) Tetrahydrofuran        | 7.19  | 42   | 15933    | 7.449  | ug/l # | 82     |
| 30) Chloroform             | 7.35  | 83   | 16079    | 1.549  | ug/l   | 91     |
| 31) Cyclohexane            | 7.64  | 56   | 73671    | 7.393  | ug/l # | 92     |
| 39) Methylcyclohexane      | 9.07  | 83   | 134976   | 15.589 | ug/l   | 98     |
| 67) Ethyl Benzene          | 11.51 | 91   | 50411    | 2.124  | ug/l   | 98     |
| 68) m/p-Xylenes            | 11.63 | 106  | 9878     | 1.106  | ug/l   | 94     |
| 69) o-Xylene               | 11.95 | 106  | 17373    | 2.021  | ug/l   | 95     |
| 80) 1,3,5-Trimethylbenzene | 12.74 | 105  | 51923    | 3.035  | ug/l   | 96     |
| 86) p-Isopropyltoluene     | 13.30 | 119  | 21205    | 1.268  | ug/l   | 98     |
| 95) Naphthalene            | 15.14 | 128  | 39932    | 2.928  | ug/l   | 96     |

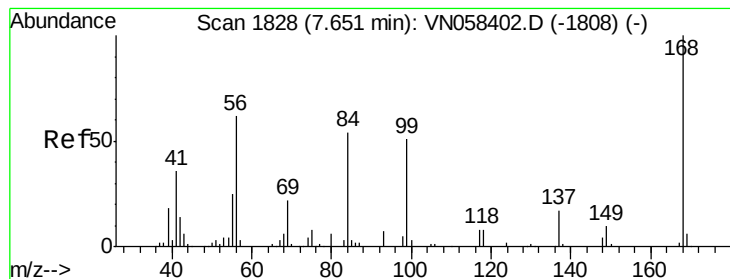
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Mon Sep 30 08:07:38 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.65 min Scan# 1828

Delta R.T. -0.00 min

Lab File: VN058416.D

Acq: 27 Sep 2019 18:19

Instrument :

MSVOA\_N

ClientSampleId :

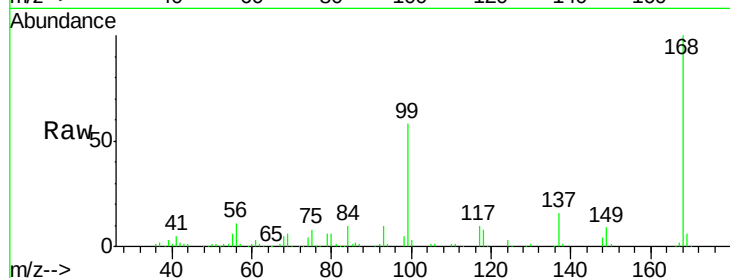
PAT-091019-B

Tot Ion:168 Resp: 492707

Ion Ratio Lower Upper

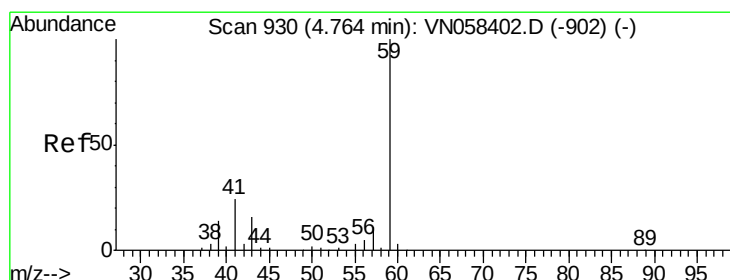
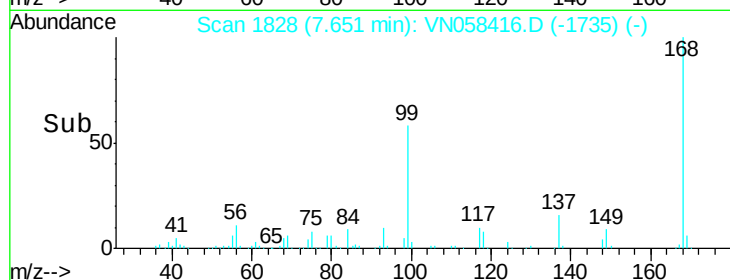
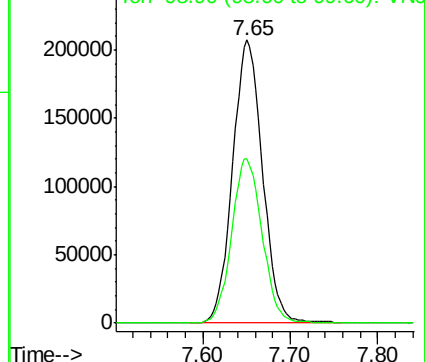
168 100

99 58.1 47.7 71.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO



#11

Tert butyl alcohol

Concen: 85.652 ug/l

RT: 4.76 min Scan# 929

Delta R.T. -0.00 min

Lab File: VN058416.D

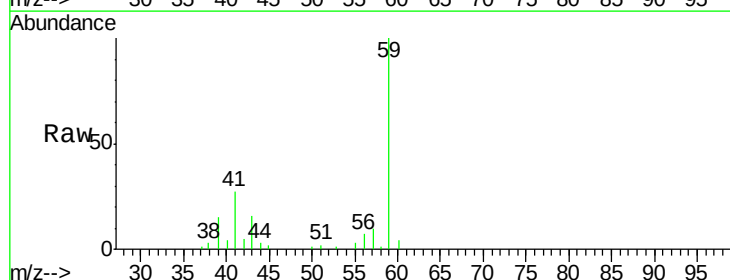
Acq: 27 Sep 2019 18:19

Tgt Ion: 59 Resp: 68511

Ion Ratio Lower Upper

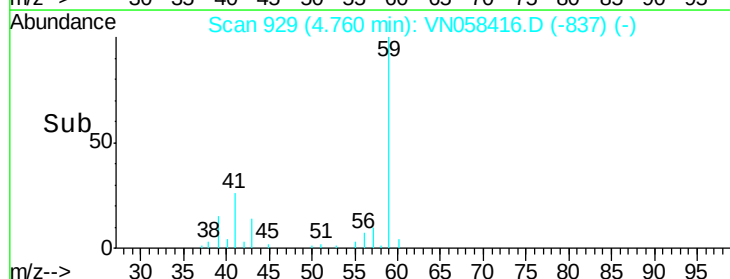
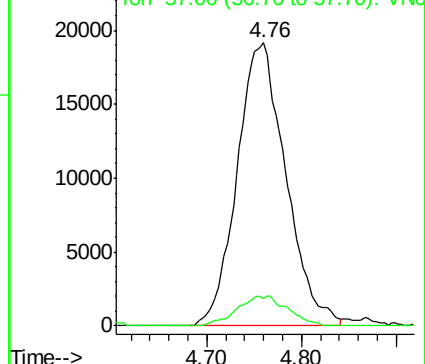
59 100

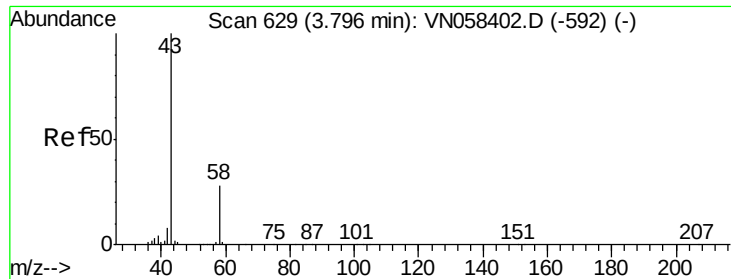
57 5.9 9.0 13.4#



Abundance Ion 59.00 (58.70 to 59.70): VNO

Ion 57.00 (56.70 to 57.70): VNO

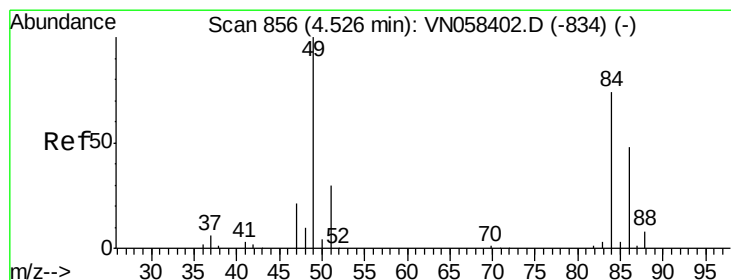
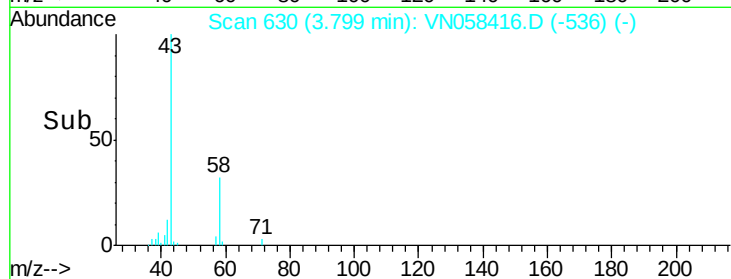
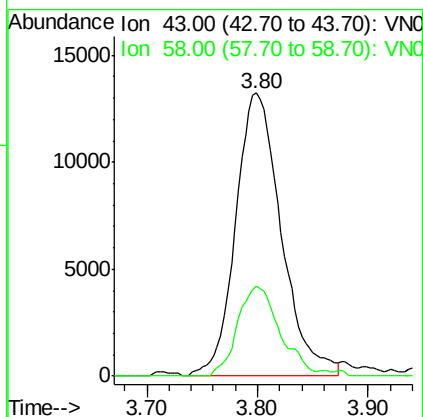
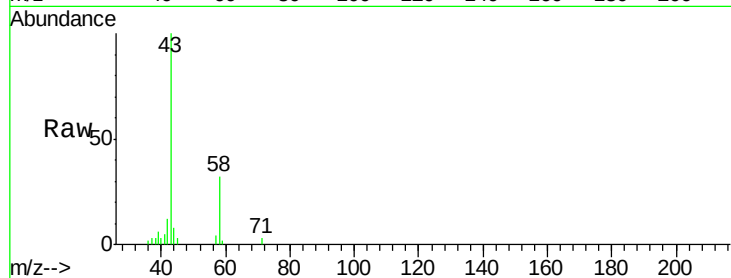




#16  
Acetone  
Concen: 15.527 ug/l  
RT: 3.80 min Scan# 630  
Delta R.T. 0.00 min  
Lab File: VN058416.D  
Acq: 27 Sep 2019 18:19

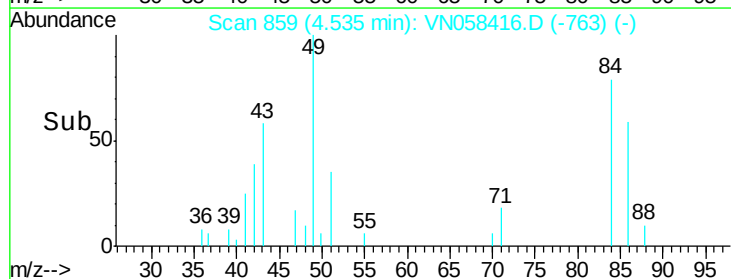
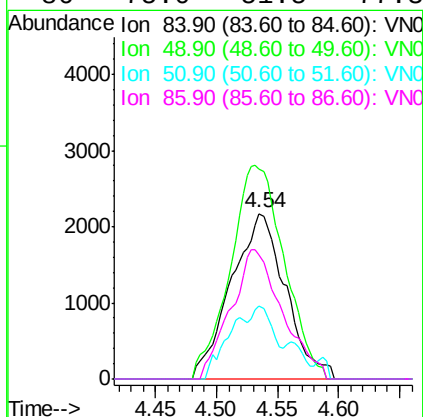
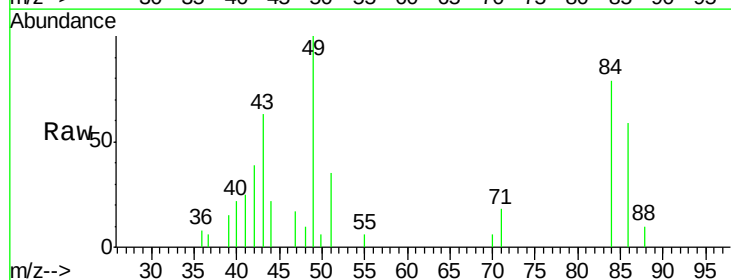
Instrument :  
MSVOA\_N  
ClientSampled :  
PAT-091019-B

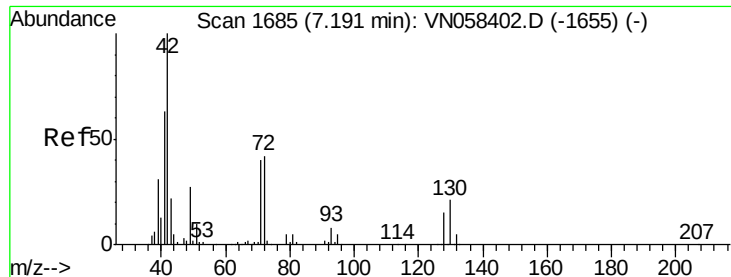
Tot Ion: 43 Resp: 38111  
Ion Ratio Lower Upper  
43 100  
58 31.6 22.4 33.6



#20  
Methylene Chloride  
Concen: 1.184 ug/l  
RT: 4.54 min Scan# 859  
Delta R.T. 0.01 min  
Lab File: VN058416.D  
Acq: 27 Sep 2019 18:19

Tgt Ion: 84 Resp: 6706  
Ion Ratio Lower Upper  
84 100  
49 127.1 107.9 161.9  
51 43.9 32.8 49.2  
86 75.0 51.5 77.3

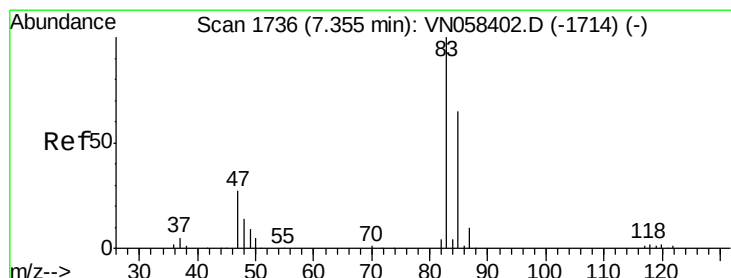
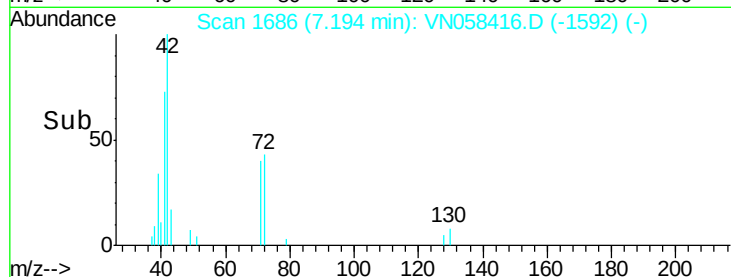
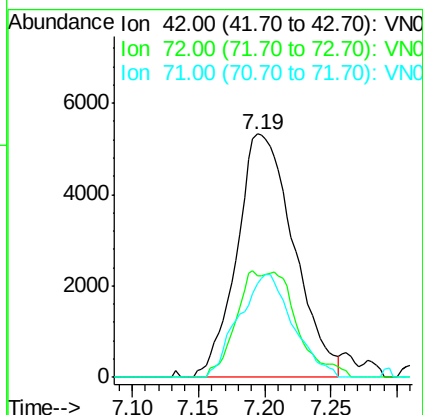
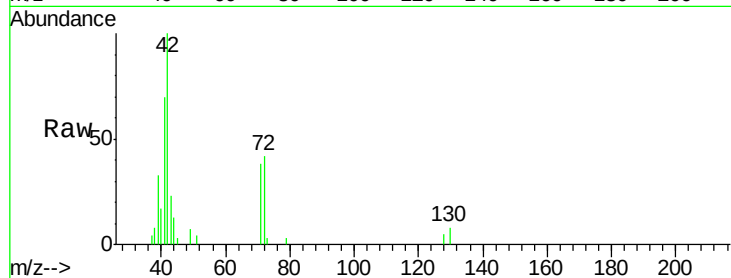




#29  
Tetrahydrofuran  
Concen: 7.449 ug/l  
RT: 7.19 min Scan# 1686  
Delta R.T. 0.00 min  
Lab File: VN058416.D  
Acq: 27 Sep 2019 18:19

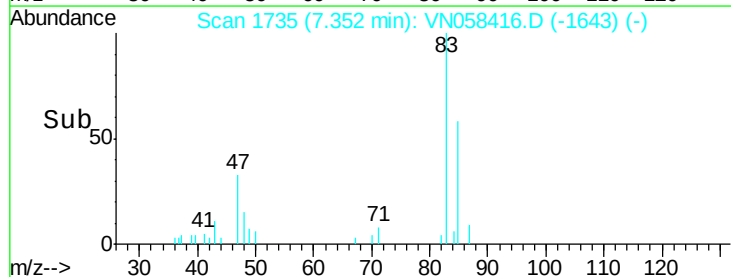
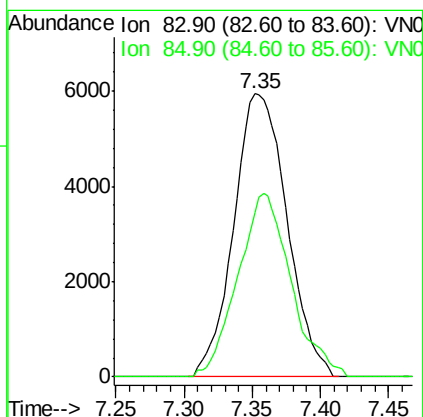
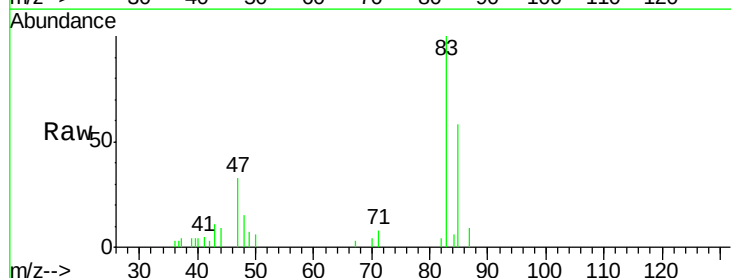
Instrument :  
MSVOA\_N  
ClientSampled :  
PAT-091019-B

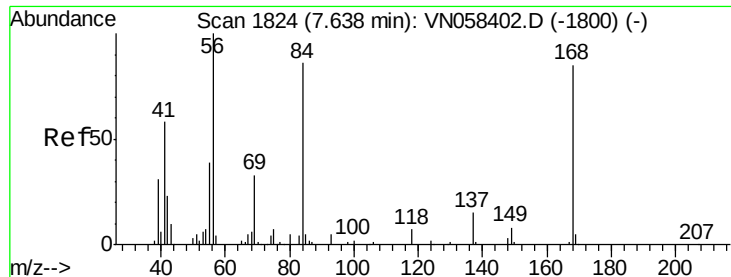
Tot Ion: 42 Resp: 15933  
Ion Ratio Lower Upper  
42 100  
72 20.1 33.7 50.5#  
71 39.9 31.8 47.6



#30  
Chloroform  
Concen: 1.549 ug/l  
RT: 7.35 min Scan# 1735  
Delta R.T. -0.00 min  
Lab File: VN058416.D  
Acq: 27 Sep 2019 18:19

Tgt Ion: 83 Resp: 16079  
Ion Ratio Lower Upper  
83 100  
85 58.1 52.0 78.0





#31

Cyclohexane

Concen: 7.393 ug/l

RT: 7.64 min Scan# 1825

Delta R.T. 0.00 min

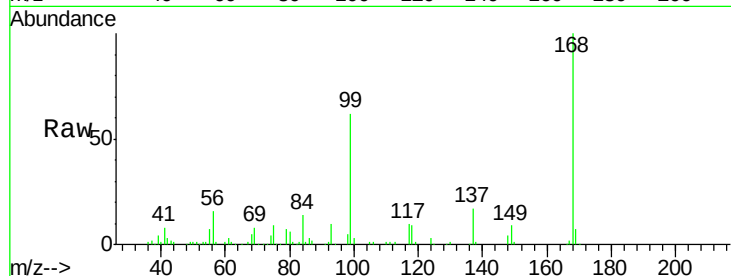
Lab File: VN058416.D

Acq: 27 Sep 2019 18:19

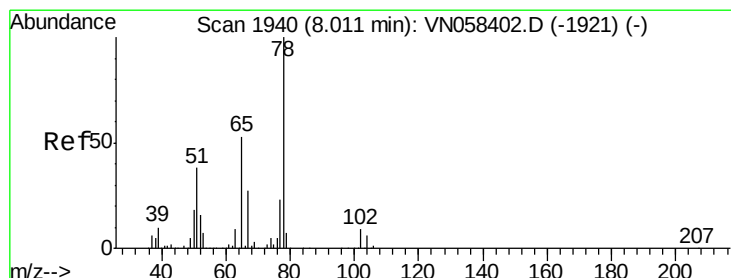
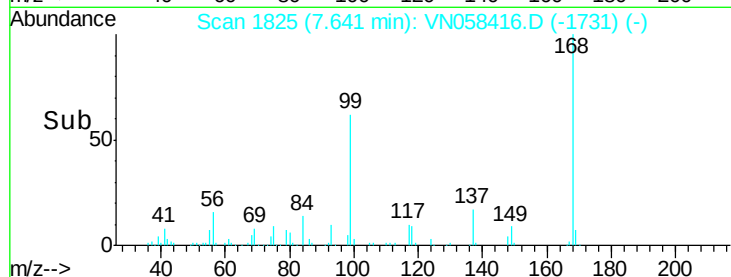
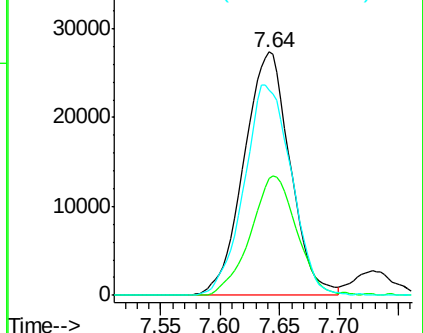
Instrument :  
MSVOA\_N  
ClientSampleId :  
PAT-091019-B

Tot Ion: 56 Resp: 73671

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 56  | 100   |       |       |
| 69  | 47.8  | 26.2  | 39.4# |
| 84  | 84.3  | 67.6  | 101.4 |



Abundance Ion 56.00 (55.70 to 56.70): VNC  
Ion 69.00 (68.70 to 69.70): VNC  
Ion 84.00 (83.70 to 84.70): VNC



#33

1,2-Dichloroethane-d4

Concen: 46.851 ug/l

RT: 8.01 min Scan# 1941

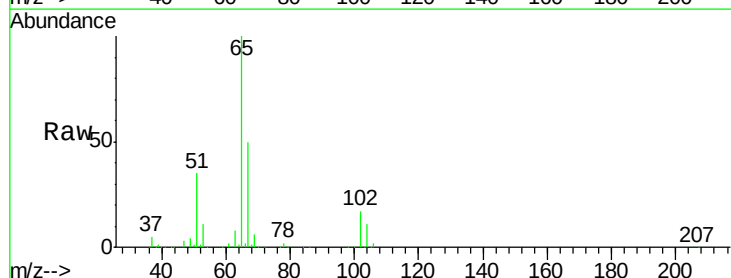
Delta R.T. 0.00 min

Lab File: VN058416.D

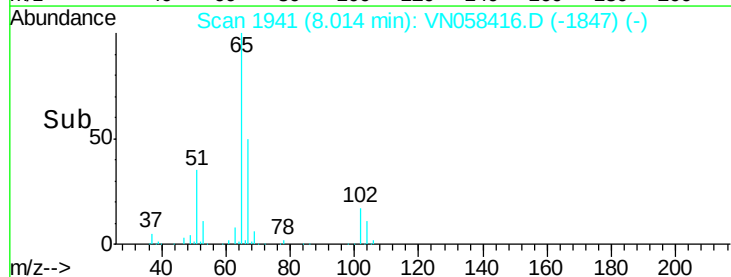
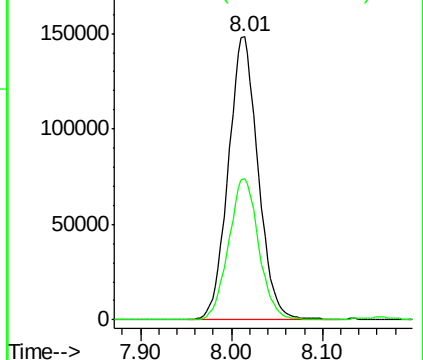
Acq: 27 Sep 2019 18:19

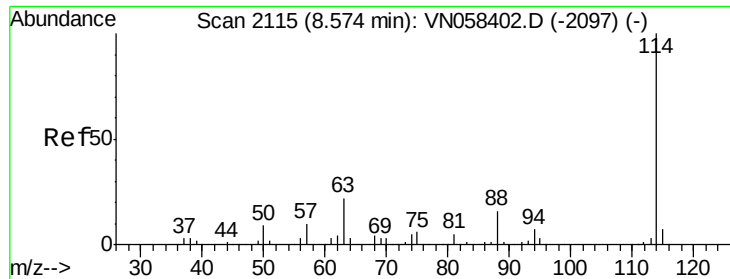
Tgt Ion: 65 Resp: 337334

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 65  | 100   |       |       |
| 67  | 50.6  | 0.0   | 102.4 |



Abundance Ion 64.90 (64.60 to 65.60): VNC  
Ion 66.90 (66.60 to 67.60): VNC

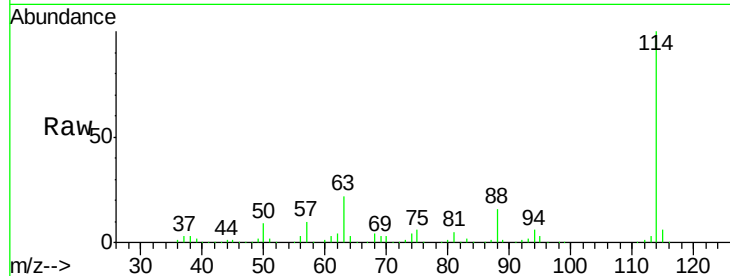




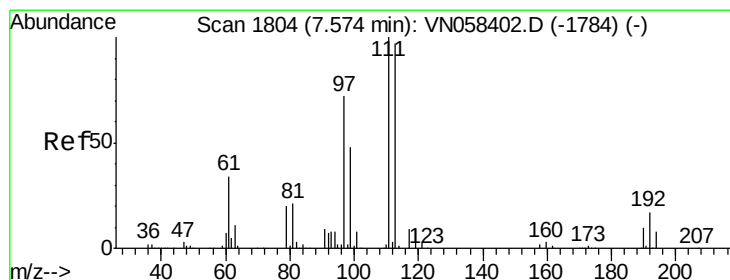
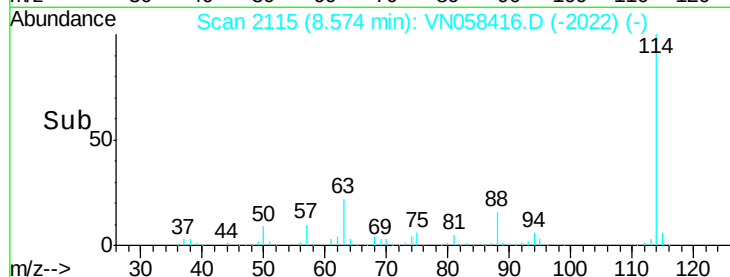
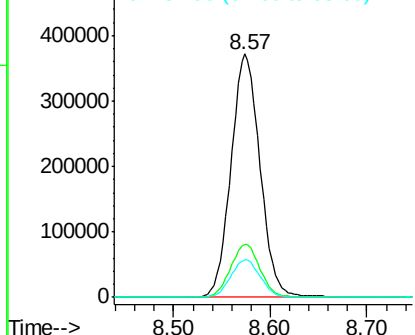
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.57 min Scan# 2115  
 Delta R.T. -0.00 min  
 Lab File: VN058416.D  
 Acq: 27 Sep 2019 18:19

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PAT-091019-B

Tot Ion:114 Resp: 775418  
 Ion Ratio Lower Upper  
 114 100  
 63 21.9 0.0 45.0  
 88 15.7 0.0 32.2

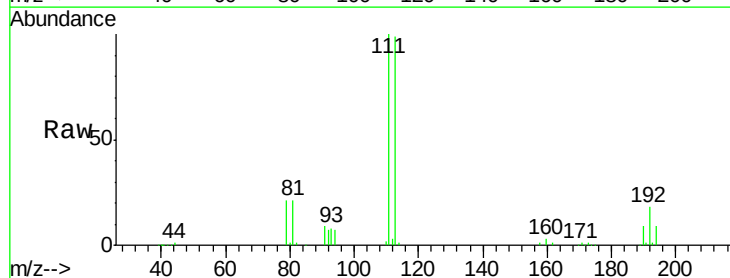


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): V  
 Ion 87.90 (87.60 to 88.60): V

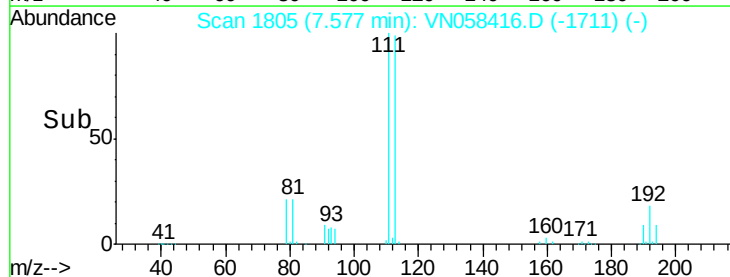
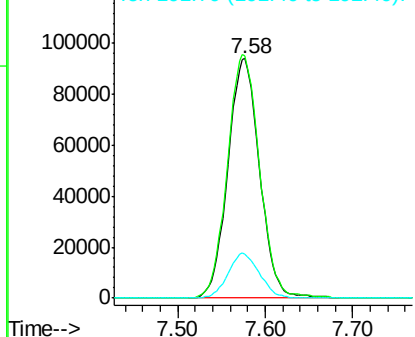


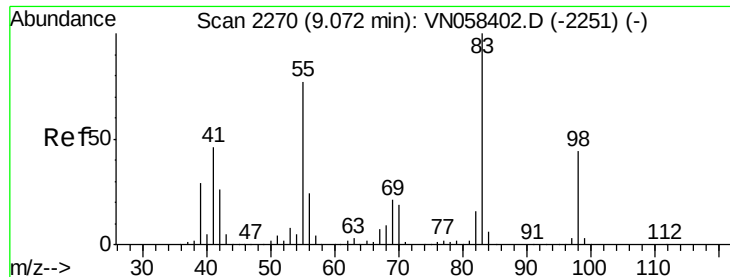
#35  
 Dibromofluoromethane  
 Concen: 49.715 ug/l  
 RT: 7.58 min Scan# 1805  
 Delta R.T. 0.00 min  
 Lab File: VN058416.D  
 Acq: 27 Sep 2019 18:19

Tgt Ion:113 Resp: 236266  
 Ion Ratio Lower Upper  
 113 100  
 111 103.4 83.4 125.2  
 192 18.6 14.9 22.3



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

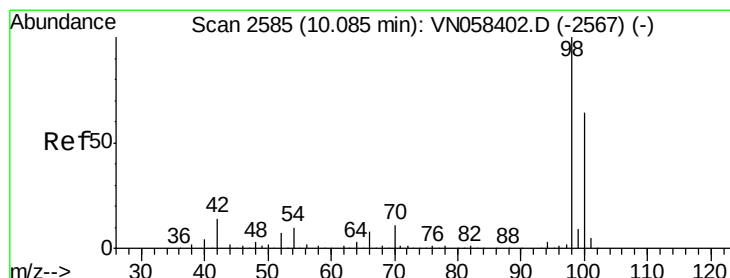
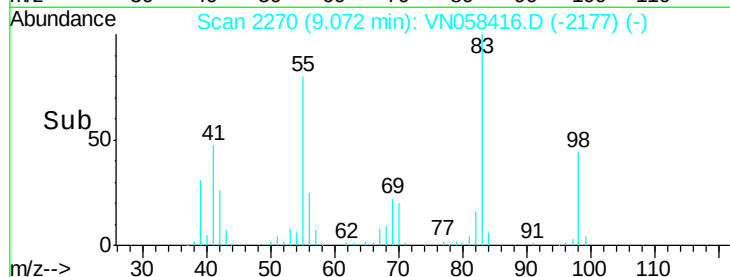
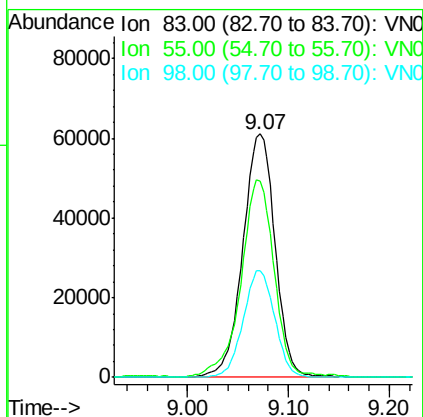
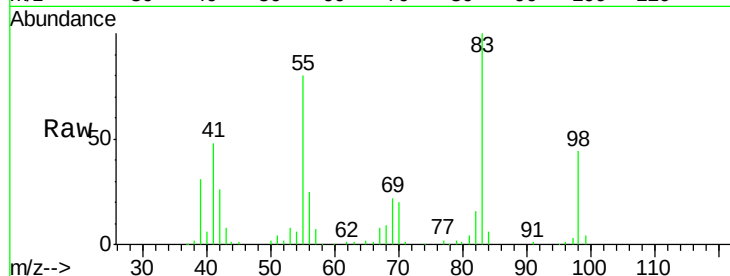




#39  
Methylvlcyclohexane  
Concen: 15.589 ug/l  
RT: 9.07 min Scan# 2270  
Delta R.T. -0.00 min  
Lab File: VN058416.D  
Acq: 27 Sep 2019 18:19

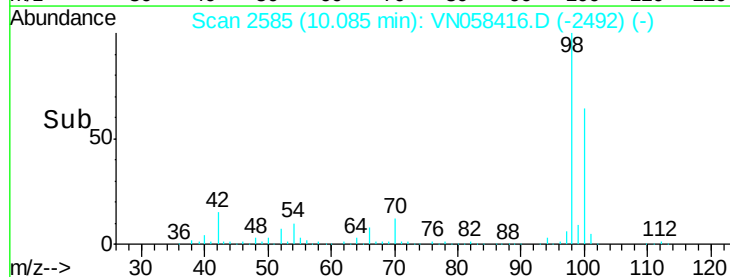
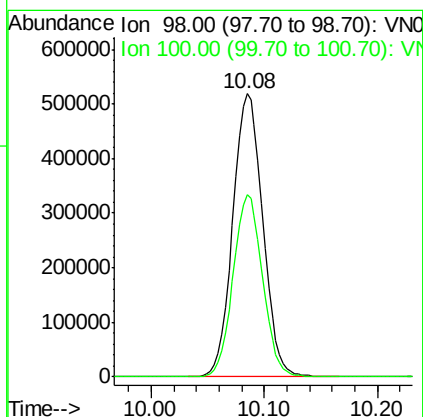
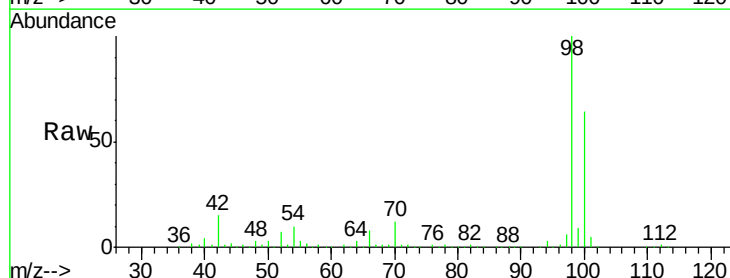
Instrument :  
MSVOA\_N  
ClientSampleId :  
PAT-091019-B

Tot Ion: 83 Resp: 134976  
Ion Ratio Lower Upper  
83 100  
55 79.9 61.8 92.6  
98 44.0 35.4 53.0

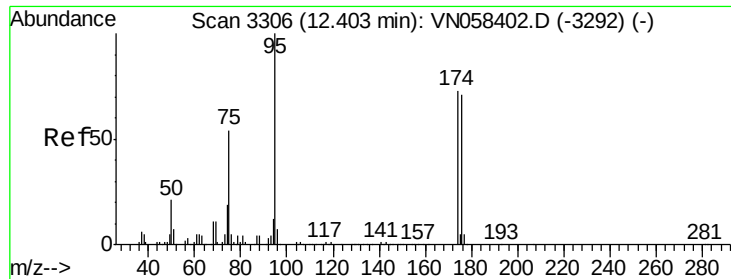


#50  
Toluene-d8  
Concen: 51.462 ug/l  
RT: 10.08 min Scan# 2585  
Delta R.T. -0.00 min  
Lab File: VN058416.D  
Acq: 27 Sep 2019 18:19

Tgt Ion: 98 Resp: 958079  
Ion Ratio Lower Upper  
98 100  
100 63.3 51.0 76.6







#62

4-Bromofluorobenzene

Concen: 47.136 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.00 min

Lab File: VN058416.D

Acq: 27 Sep 2019 18:19

Instrument :

MSVOA\_N

ClientSampled :

PAT-091019-B

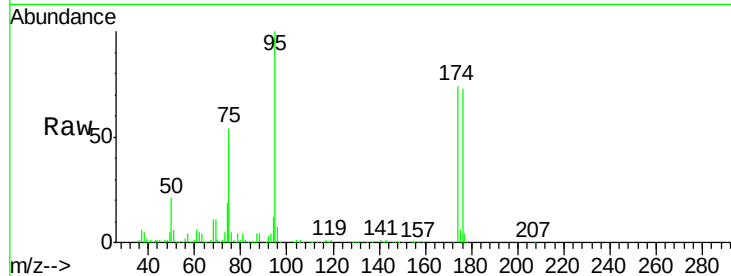
Tot Ion: 95 Resp: 317306

Ion Ratio Lower Upper

95 100

174 74.8 0.0 150.6

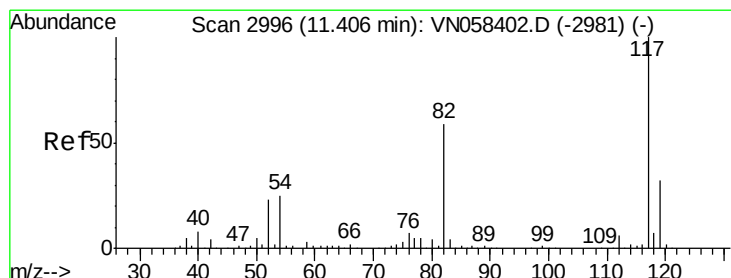
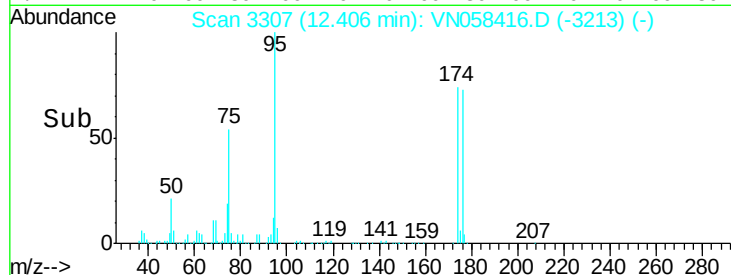
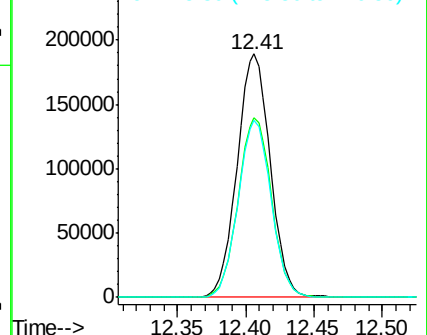
176 72.9 0.0 146.2



Abundance Ion 94.90 (94.60 to 95.60): VN058402.D (-3292) (-)

Ion 173.80 (173.50 to 174.50): VN058402.D (-3292) (-)

Ion 175.80 (175.50 to 176.50): VN058402.D (-3292) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2997

Delta R.T. 0.00 min

Lab File: VN058416.D

Acq: 27 Sep 2019 18:19

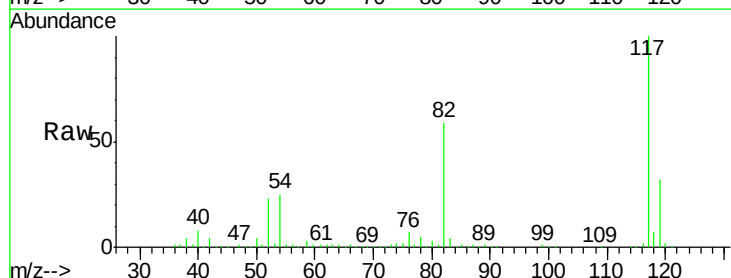
Tgt Ion: 117 Resp: 659093

Ion Ratio Lower Upper

117 100

82 59.1 47.4 71.0

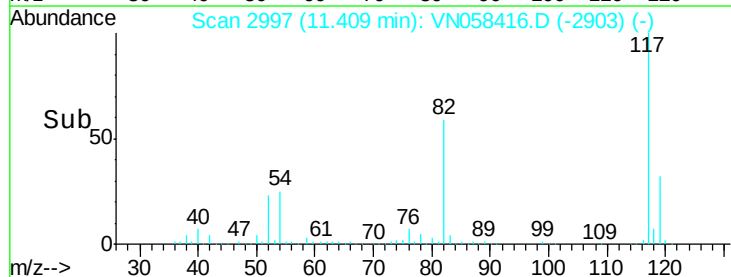
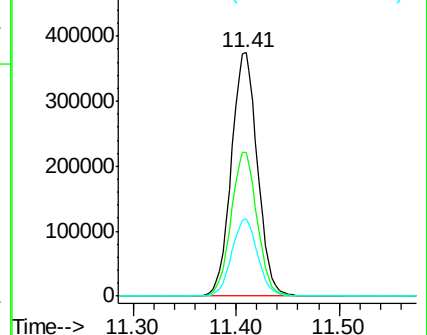
119 31.6 25.5 38.3

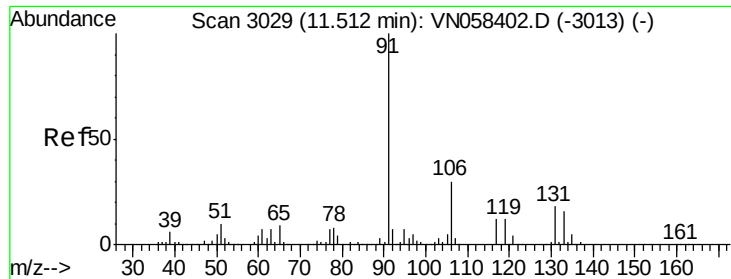


Abundance Ion 116.90 (116.60 to 117.60): VN058402.D (-2981) (-)

Ion 82.00 (81.70 to 82.70): VN058402.D (-2981) (-)

Ion 118.90 (118.60 to 119.60): VN058402.D (-2981) (-)

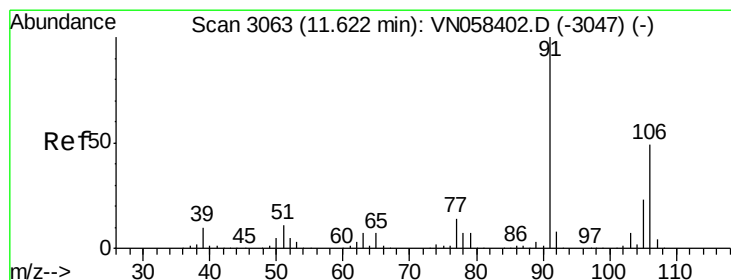
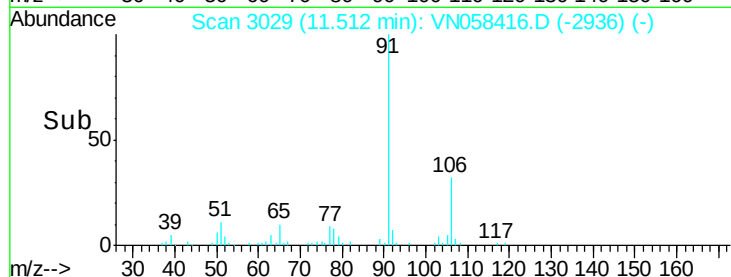
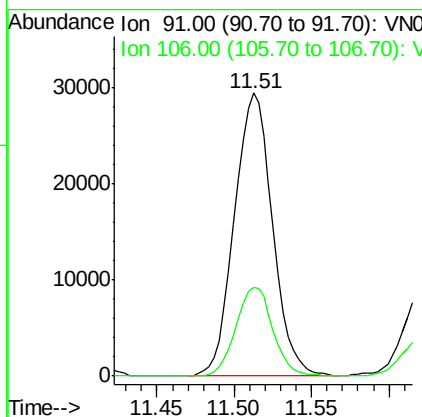
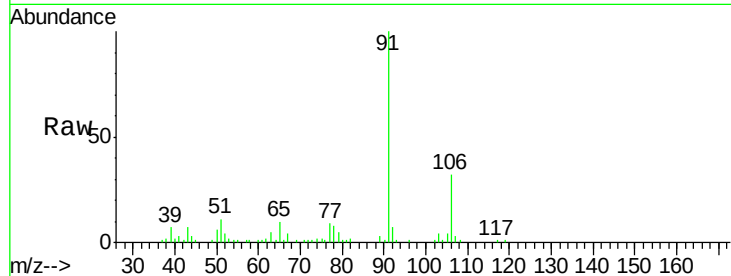




#67  
Ethyl Benzene  
Concen: 2.124 ug/l  
RT: 11.51 min Scan# 3029  
Delta R.T. -0.00 min  
Lab File: VN058416.D  
Acq: 27 Sep 2019 18:19

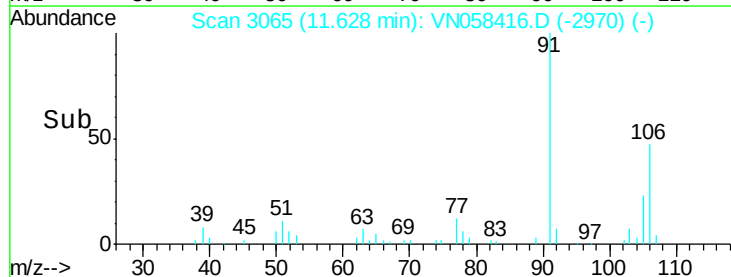
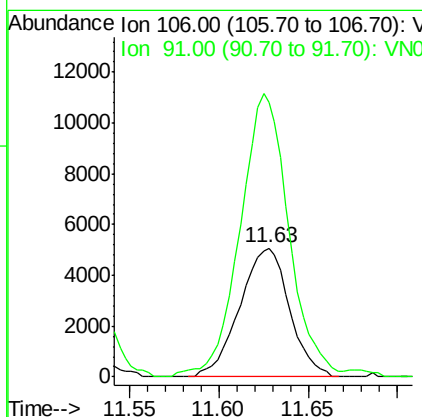
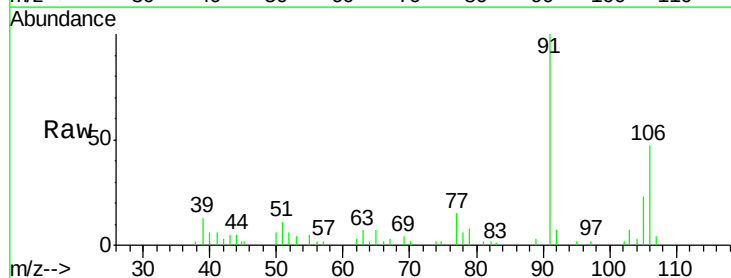
Instrument :  
MSVOA\_N  
ClientSampled :  
PAT-091019-B

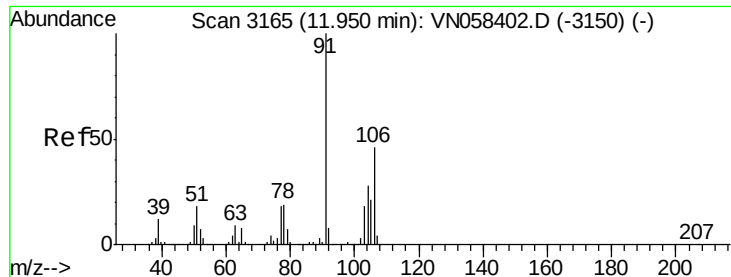
Tot Ion: 91 Resp: 50411  
Ion Ratio Lower Upper  
91 100  
106 31.6 24.3 36.5



#68  
m/p-Xylenes  
Concen: 1.106 ug/l  
RT: 11.63 min Scan# 3065  
Delta R.T. 0.01 min  
Lab File: VN058416.D  
Acq: 27 Sep 2019 18:19

Tgt Ion: 106 Resp: 9878  
Ion Ratio Lower Upper  
106 100  
91 215.8 165.0 247.4

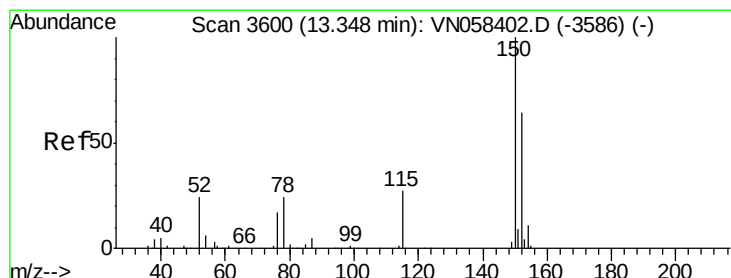
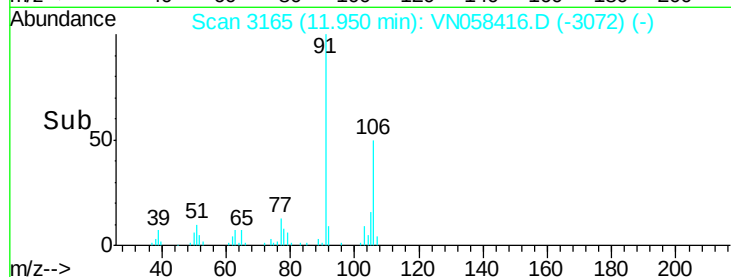
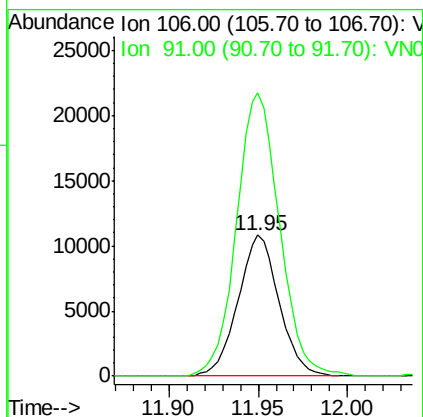
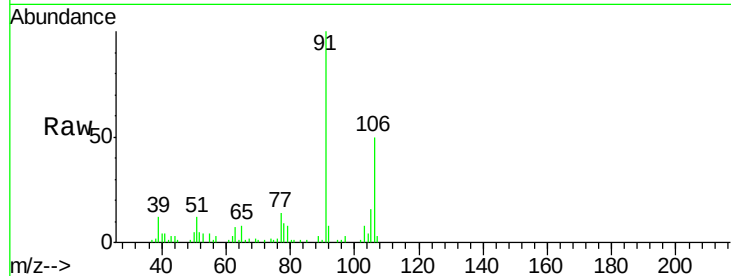




#69  
o-Xylene  
Concen: 2.021 ug/l  
RT: 11.95 min Scan# 3165  
Delta R.T. -0.00 min  
Lab File: VN058416.D  
Acq: 27 Sep 2019 18:19

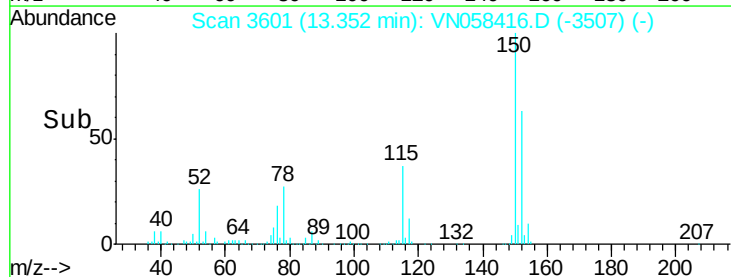
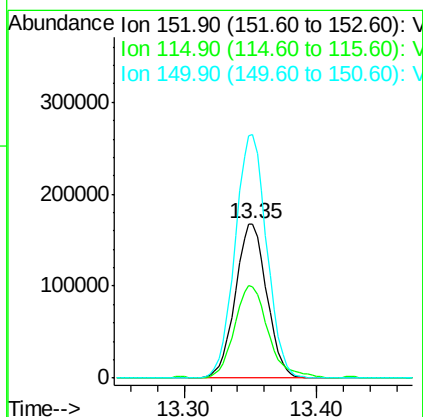
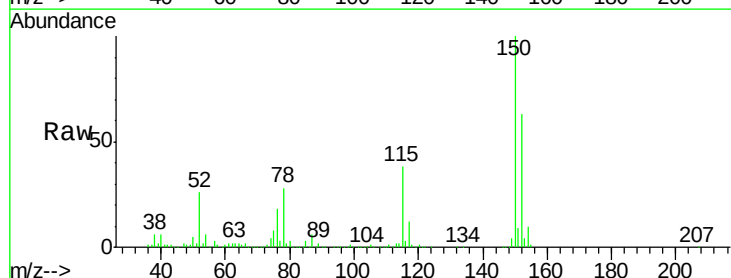
Instrument :  
MSVOA\_N  
ClientSampled :  
PAT-091019-B

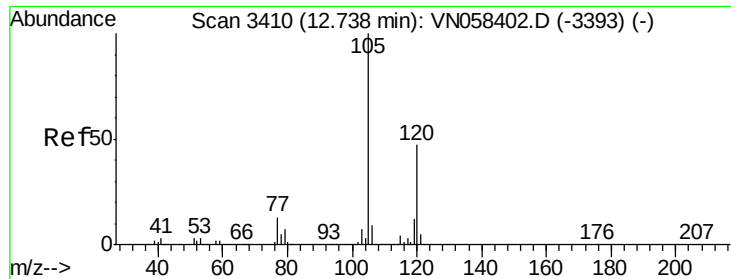
Tot Ion:106 Resp: 17373  
Ion Ratio Lower Upper  
106 100  
91 210.5 109.1 327.4



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.35 min Scan# 3601  
Delta R.T. 0.00 min  
Lab File: VN058416.D  
Acq: 27 Sep 2019 18:19

Tgt Ion:152 Resp: 276522  
Ion Ratio Lower Upper  
152 100  
115 63.0 30.0 90.0  
150 158.9 0.0 348.2

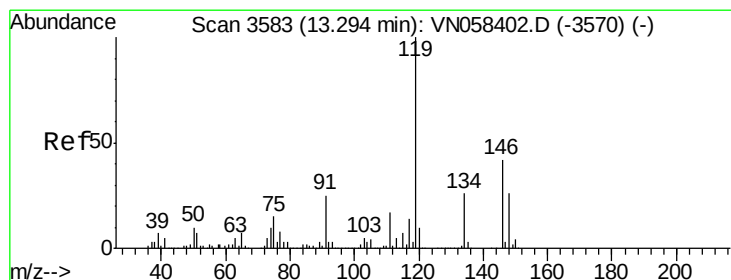
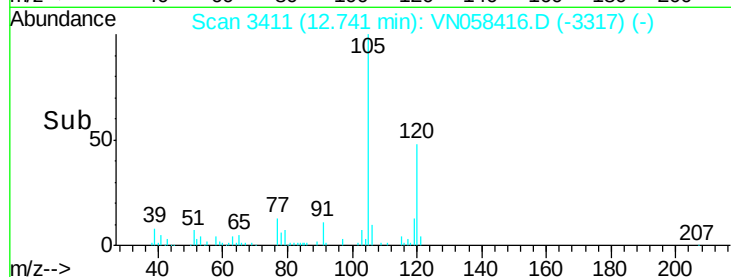
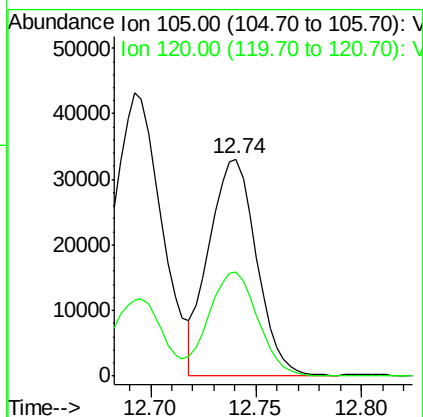
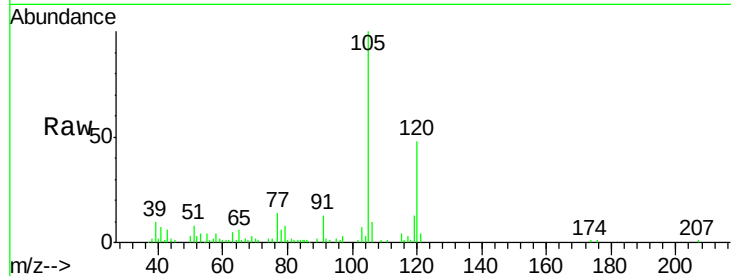




#80  
 1,3,5-Trimethylbenzene  
 Concen: 3.035 ug/l  
 RT: 12.74 min Scan# 3411  
 Delta R.T. 0.00 min  
 Lab File: VN058416.D  
 Acq: 27 Sep 2019 18:19

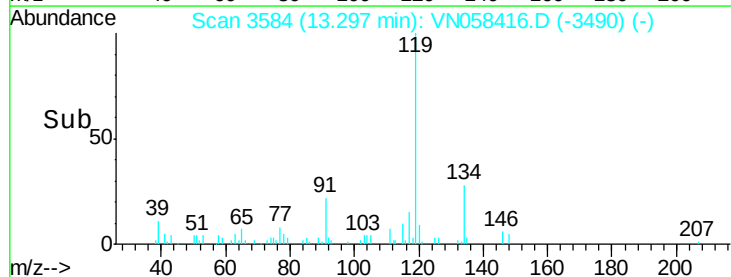
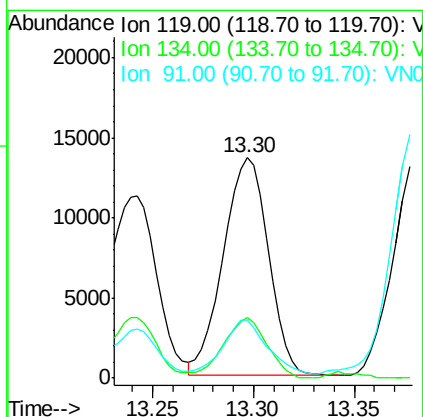
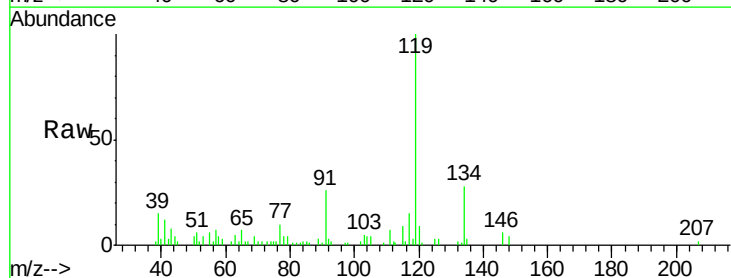
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PAT-091019-B

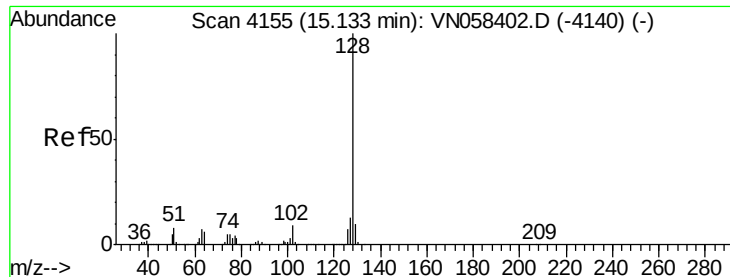
Tot Ion:105 Resp: 51923  
 Ion Ratio Lower Upper  
 105 100  
 120 50.0 23.5 70.6



#86  
 p-Isopropyltoluene  
 Concen: 1.268 ug/l  
 RT: 13.30 min Scan# 3584  
 Delta R.T. 0.00 min  
 Lab File: VN058416.D  
 Acq: 27 Sep 2019 18:19

Tgt Ion:119 Resp: 21205  
 Ion Ratio Lower Upper  
 119 100  
 134 26.9 13.0 39.0  
 91 23.7 12.4 37.0





#95

Naphthalene

Concen: 2.928 ug/l

RT: 15.14 min Scan# 4156

Delta R.T. 0.00 min

Lab File: VN058416.D

Acq: 27 Sep 2019 18:19

Instrument :

MSVOA\_N

ClientSampleId :

PAT-091019-B

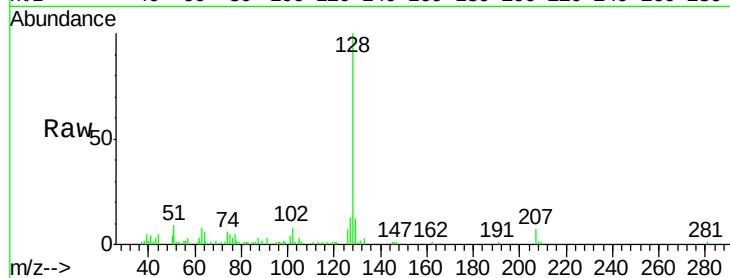
Tot Ion:128 Resp: 39932

Ion Ratio Lower Upper

128 100

127 14.8 10.2 15.4

129 9.1 8.3 12.5



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

