

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN031919\  
 Data File : VN054447.D  
 Acq On : 19 Mar 2019 18:23  
 Operator : JC/SP  
 Sample : K1987-07  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Mar 20 03:54:53 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N031219W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 13 03:33:31 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.66  | 168  | 2165647  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 2997213  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 2449321  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 884224   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.03  | 65   | 894459   | 38.89 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 77.78% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 880318   | 45.54 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.08% |          |
| 50) Toluene-d8              | 10.09 | 98   | 3436487  | 48.14 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.28% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 993586   | 39.78 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 79.56% |          |

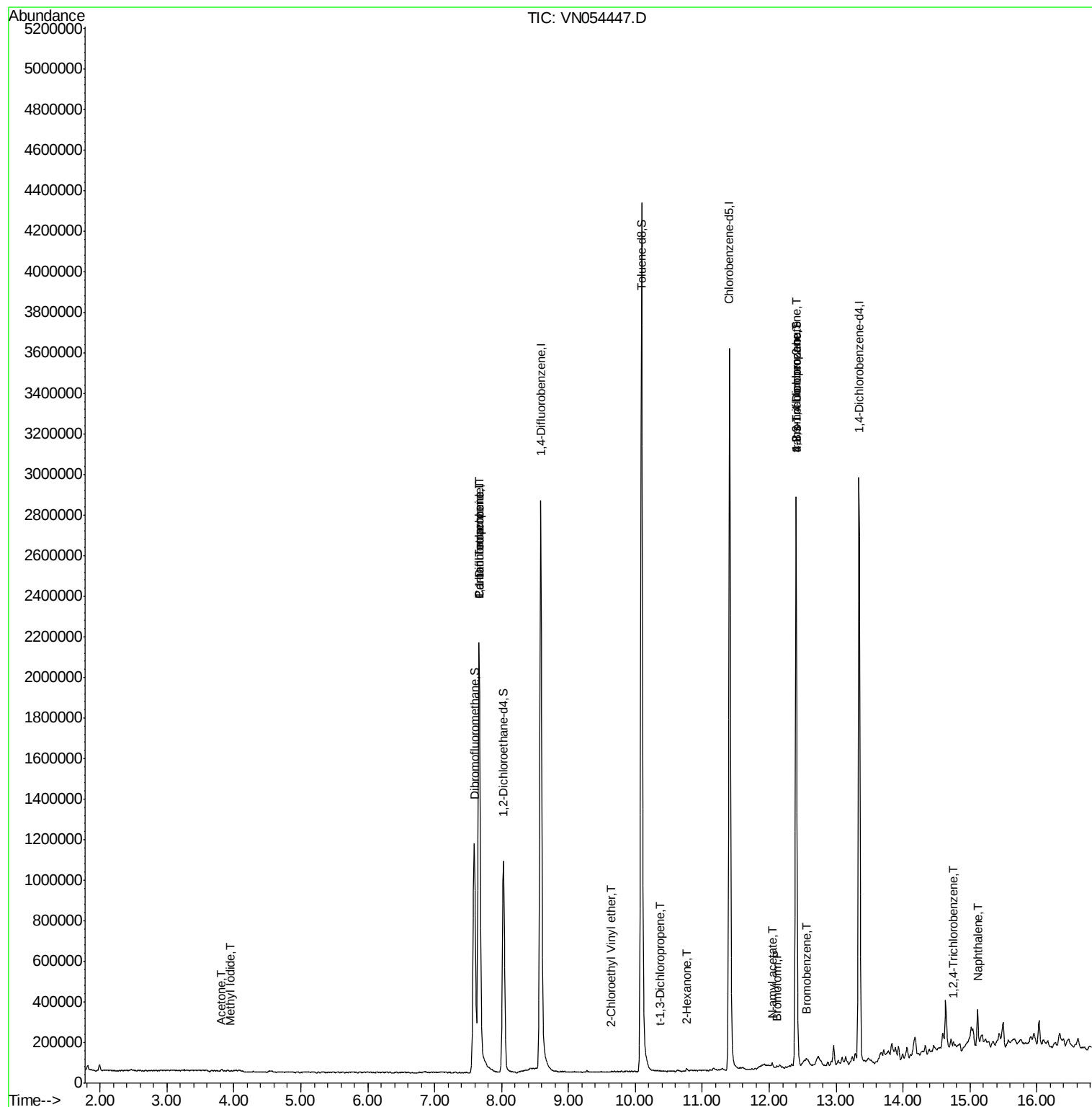
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 10) Methyl Iodide              | 3.94  | 142  | 417      | 1.509     | ug/l # | 72     |
| 16) Acetone                    | 3.82  | 43   | 7971     | 1.210     | ug/l   | 89     |
| 31) Cyclohexane                | 7.67  | 56   | 29233    | Below Cal | #      | 1      |
| 36) 1,1-Dichloropropene        | 7.66  | 75   | 117074   | 4.242     | ug/l # | 47     |
| 38) Carbon Tetrachloride       | 7.67  | 117  | 169381   | 5.852     | ug/l # | 16     |
| 53) t-1,3-Dichloropropene      | 10.37 | 75   | 127      | 1.990     | ug/l # | 42     |
| 58) 2-Chloroethyl Vinyl ether  | 9.63  | 63   | 30       | 16.831    | ug/l # | 44     |
| 59) 2-Hexanone                 | 10.77 | 43   | 2805     | 0.286     | ug/l   | 67     |
| 71) Bromoform                  | 12.12 | 173  | 227      | 2.365     | ug/l # | 28     |
| 74) N-amyl acetate             | 12.04 | 43   | 3702     | 0.236     | ug/l # | 66     |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 447657   | 34.427    | ug/l # | 100    |
| 77) Bromobenzene               | 12.56 | 156  | 45064    | 2.407     | ug/l # | 1      |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 447657   | 117.688   | ug/l # | 11     |
| 93) 1,2,4-Trichlorobenzene     | 14.74 | 180  | 276      | 2.531     | ug/l   | 73     |
| 95) Naphthalene                | 15.13 | 128  | 5832     | 3.610     | ug/l # | 71     |

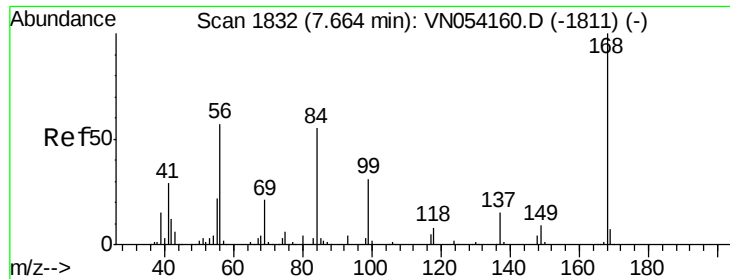
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN031919\  
Data File : VN054447.D  
Acq On : 19 Mar 2019 18:23  
Operator : JC/SP  
Sample : K1987-07  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 19 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :

Quant Time: Mar 20 03:54:53 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N031219W.M  
Quant Title : SW846 8260  
QLast Update : Wed Mar 13 03:33:31 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.00 min

Lab File: VN054447.D

Acq: 19 Mar 2019 18:23

Instrument :

MSVOA\_N

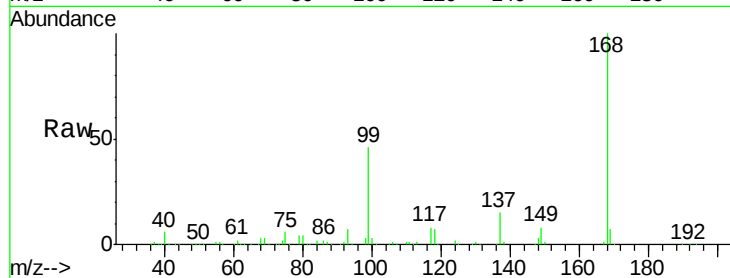
ClientSampleId :

Tot Ion:168 Resp: 2165647

Ion Ratio Lower Upper

168 100

99 45.7 37.1 55.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.66

800000

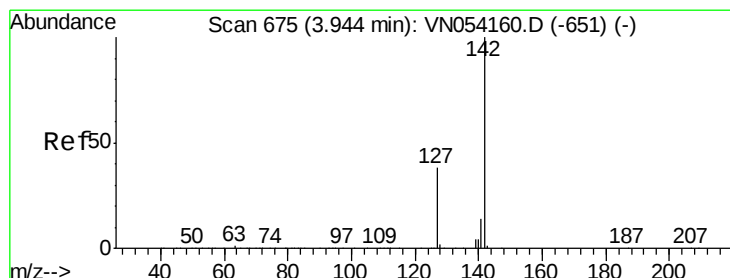
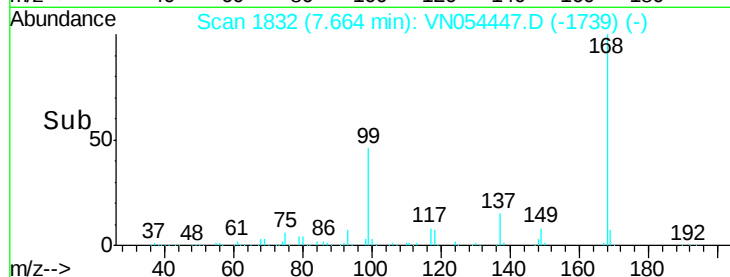
600000

400000

200000

0

Time-->



#10

Methyl Iodide

Concen: 1.509 ug/l

RT: 3.94 min Scan# 675

Delta R.T. -0.00 min

Lab File: VN054447.D

Acq: 19 Mar 2019 18:23

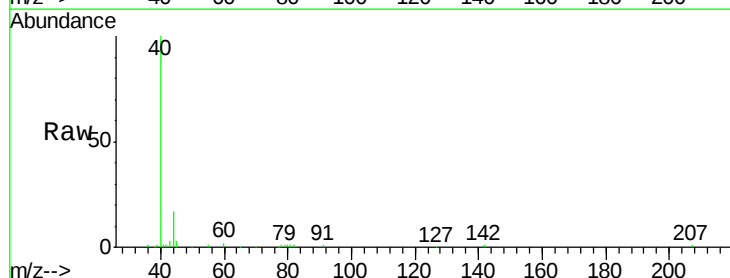
Tgt Ion:142 Resp: 417

Ion Ratio Lower Upper

142 100

127 15.1 30.3 45.5#

141 14.9 11.2 16.8



Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

3.94

500

400

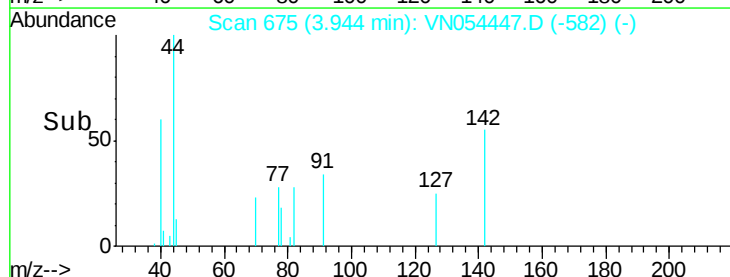
300

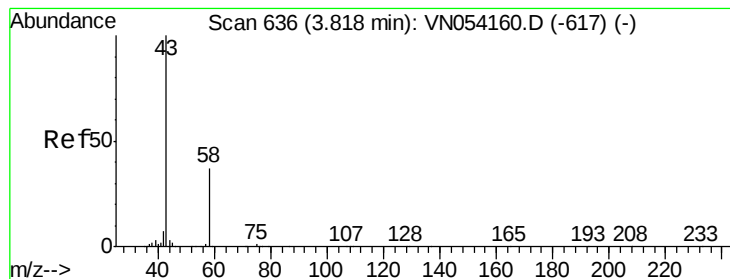
200

100

0

Time-->





#16

Acetone

Concen: 1.210 ug/l

RT: 3.82 min Scan# 636

Delta R.T. -0.00 min

Lab File: VN054447.D

Acq: 19 Mar 2019 18:23

Instrument :

MSVOA\_N

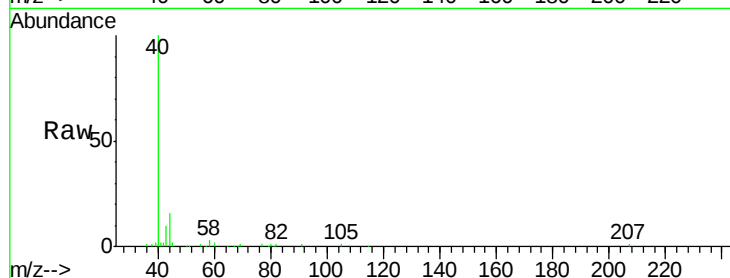
ClientSampled :

Tot Ion: 43 Resp: 7971

Ion Ratio Lower Upper

43 100

58 43.8 29.9 44.9



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

3.82

4000

3000

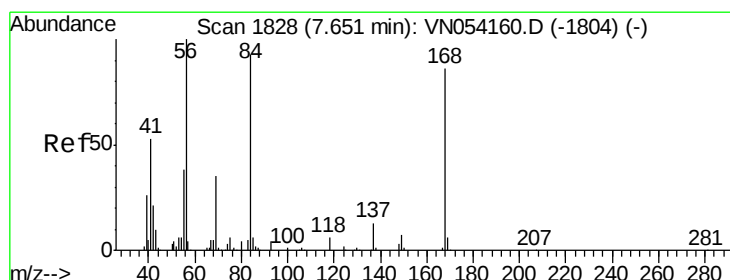
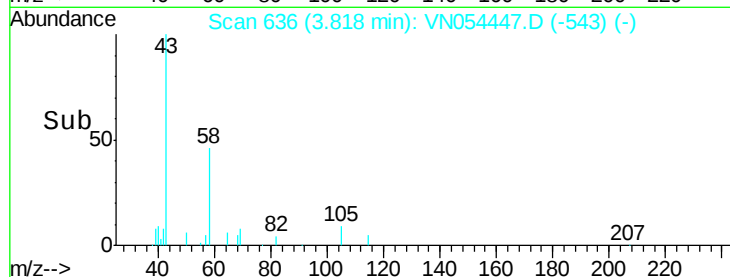
2000

1000

0

3.75 3.80 3.85 3.90

Time-->



#31

Cyclohexane

Concen: Below Cal

RT: 7.67 min Scan# 1833

Delta R.T. 0.02 min

Lab File: VN054447.D

Acq: 19 Mar 2019 18:23

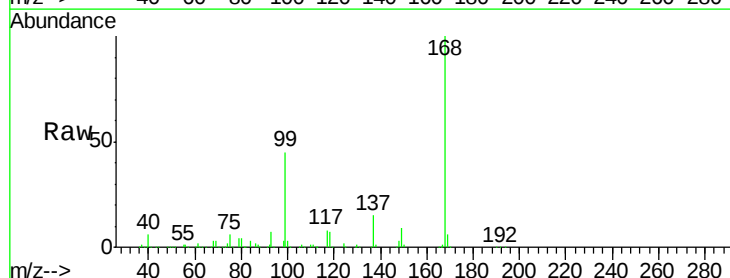
Tgt Ion: 56 Resp: 29233

Ion Ratio Lower Upper

56 100

69 177.2 27.8 41.6#

84 176.8 74.6 111.8#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 69.00 (68.70 to 69.70): VN0

Ion 84.00 (83.70 to 84.70): VN0

30000

25000

20000

15000

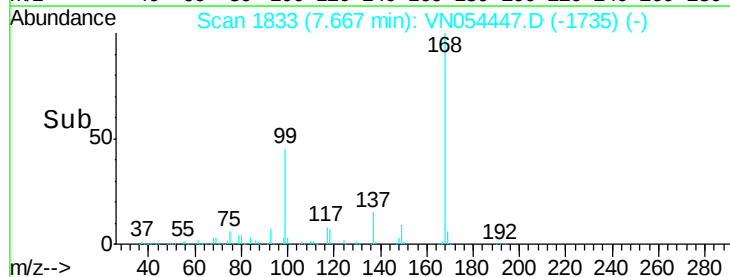
10000

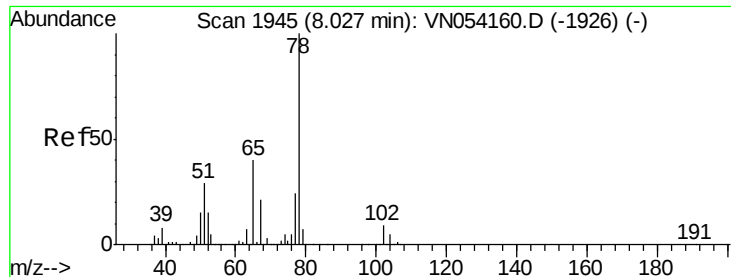
5000

0

7.55 7.60 7.65 7.70 7.75

Time-->





#33

1,2-Dichloroethane-d4

Concen: 38.891 ug/l

RT: 8.03 min Scan# 1945

Delta R.T. -0.00 min

Lab File: VN054447.D

Acq: 19 Mar 2019 18:23

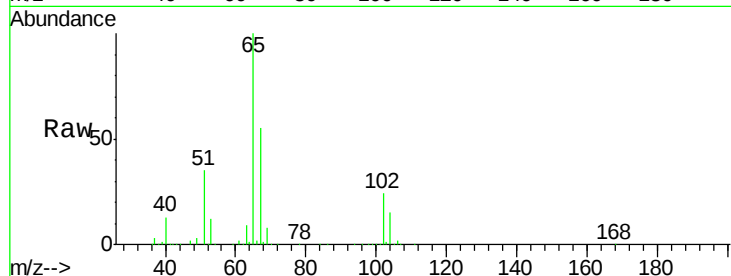
Instrument :  
MSVOA\_N  
ClientSampleId :

Tot Ion: 65 Resp: 894459

Ion Ratio Lower Upper

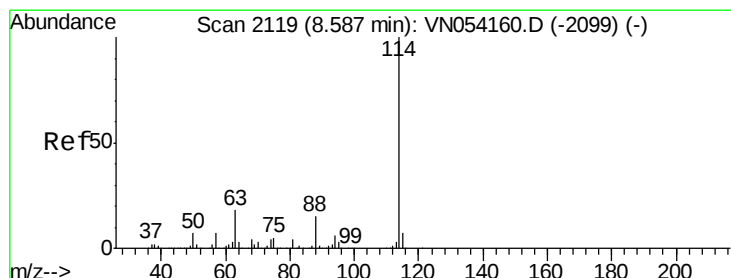
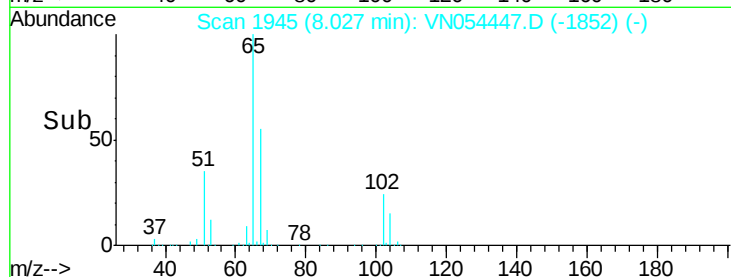
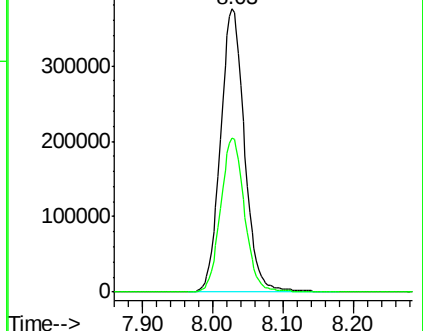
65 100

67 54.1 0.0 104.6



Abundance Ion 64.90 (64.60 to 65.60): VN054447.D (-1852) (-)

Ion 66.90 (66.60 to 67.60): VN054447.D (-1852) (-)



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.59 min Scan# 2119

Delta R.T. -0.00 min

Lab File: VN054447.D

Acq: 19 Mar 2019 18:23

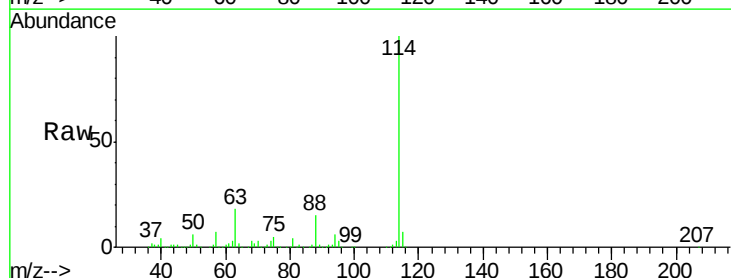
Tgt Ion: 114 Resp: 2997213

Ion Ratio Lower Upper

114 100

63 17.5 0.0 35.2

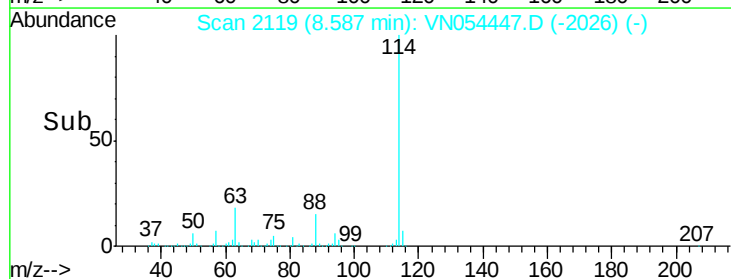
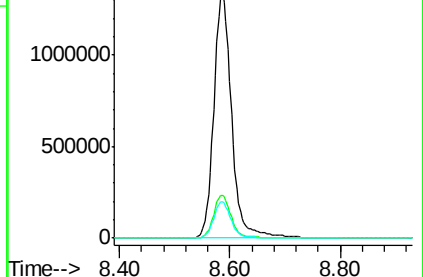
88 15.0 0.0 30.2

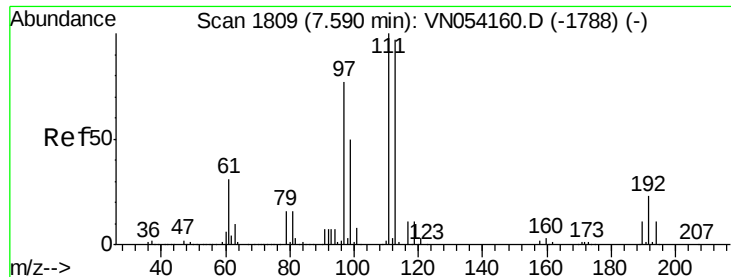


Abundance Ion 113.90 (113.60 to 114.60): VN054447.D (-2026) (-)

Ion 63.00 (62.70 to 63.70): VN054447.D (-2026) (-)

Ion 87.90 (87.60 to 88.60): VN054447.D (-2026) (-)

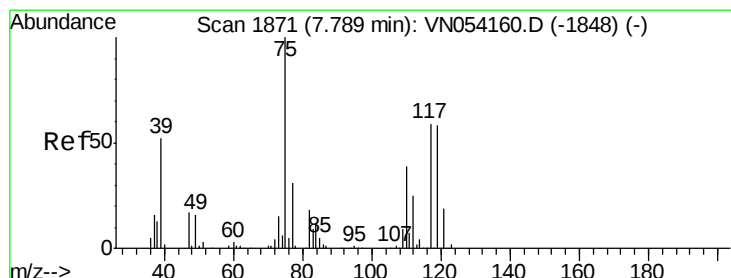
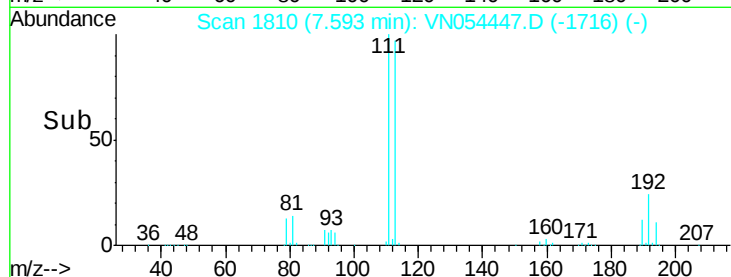
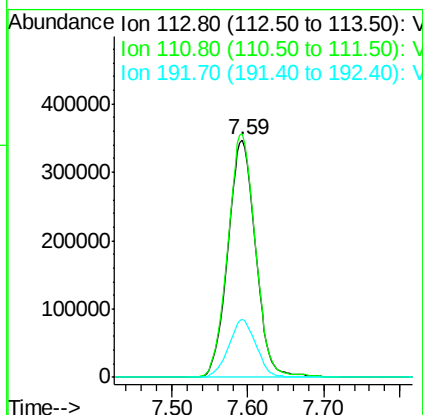
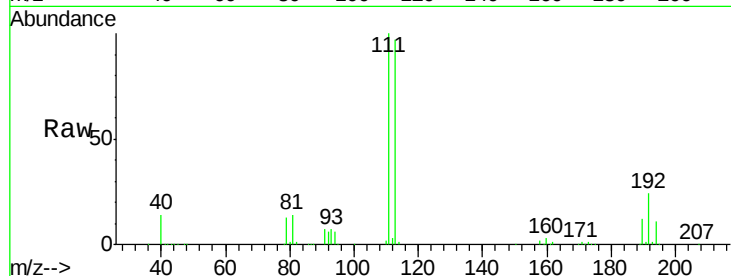




#35  
 Dibromofluoromethane  
 Concen: 45.540 ug/l  
 RT: 7.59 min Scan# 1810  
 Delta R.T. 0.00 min  
 Lab File: VN054447.D  
 Acq: 19 Mar 2019 18:23

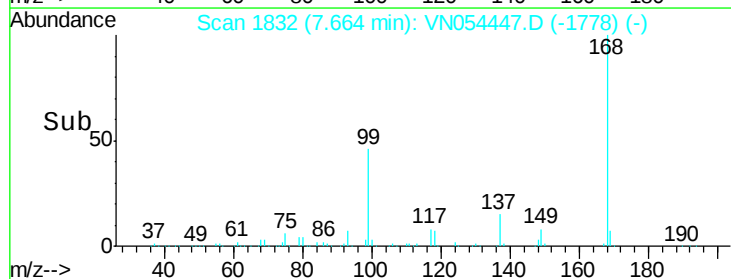
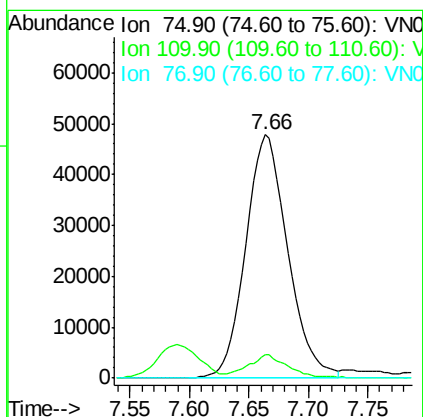
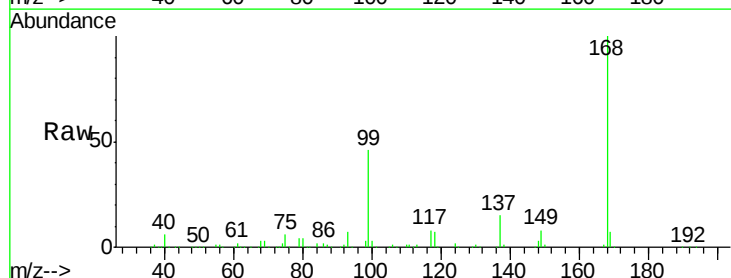
Instrument :  
 MSVOA\_N  
 ClientSampleId :

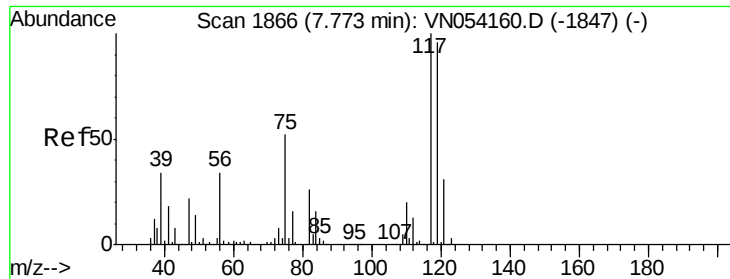
Tot Ion:113 Resp: 880318  
 Ion Ratio Lower Upper  
 113 100  
 111 102.6 82.2 123.4  
 192 24.1 19.2 28.8



#36  
 1,1-Dichloropropene  
 Concen: 4.242 ug/l  
 RT: 7.66 min Scan# 1832  
 Delta R.T. -0.13 min  
 Lab File: VN054447.D  
 Acq: 19 Mar 2019 18:23

Tgt Ion: 75 Resp: 117074  
 Ion Ratio Lower Upper  
 75 100  
 110 8.0 19.1 57.5#  
 77 0.0 25.0 37.4#

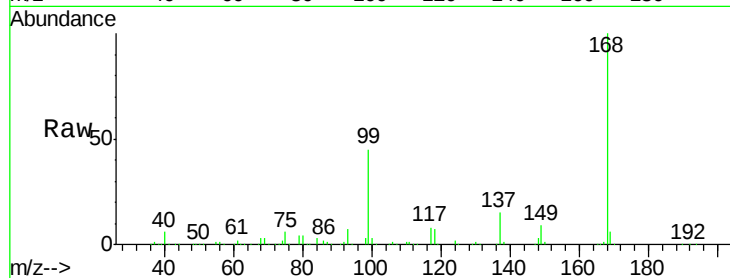




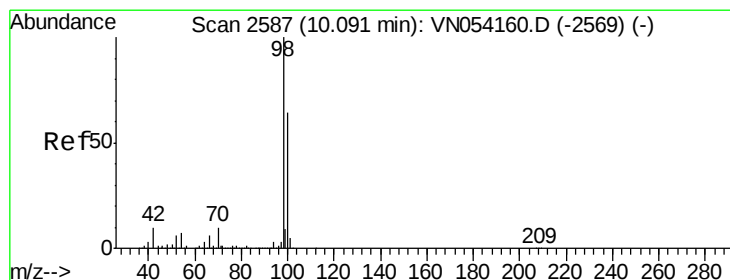
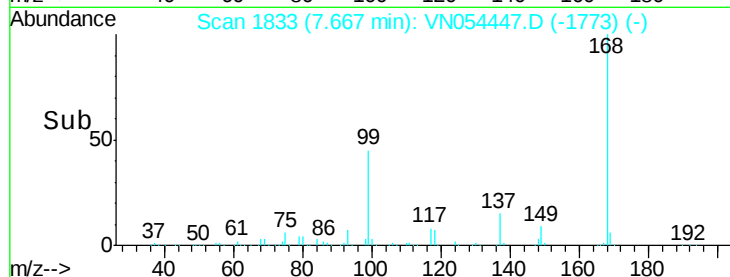
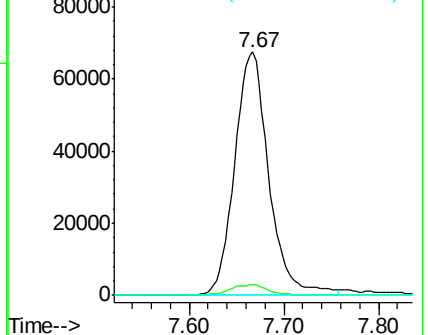
#38  
Carbon Tetrachloride  
Concen: 5.852 ug/l  
RT: 7.67 min Scan# 1833  
Delta R.T. -0.11 min  
Lab File: VN054447.D  
Acq: 19 Mar 2019 18:23

Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion:117 Resp: 169381  
Ion Ratio Lower Upper  
117 100  
119 4.5 76.3 114.5#  
121 0.0 24.6 36.8#

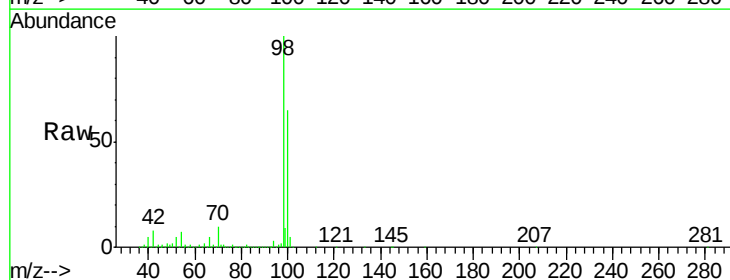


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

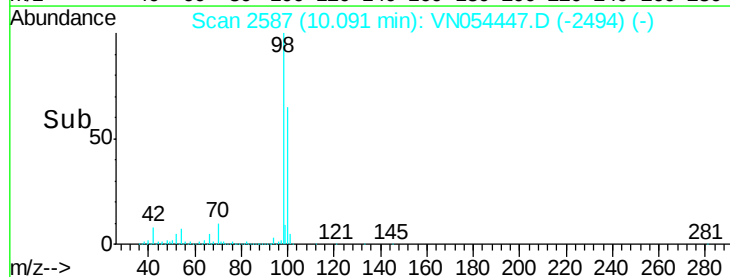
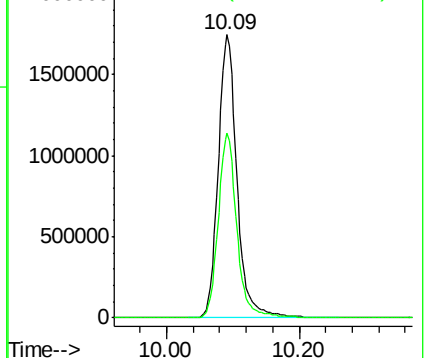


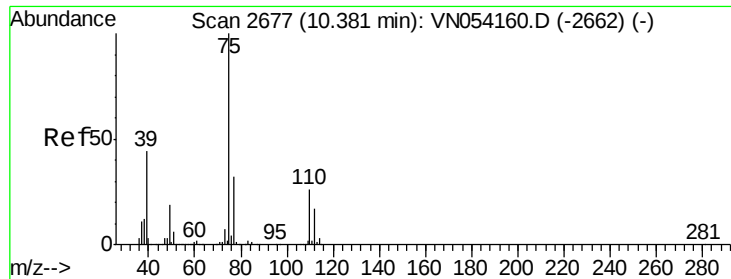
#50  
Toluene-d8  
Concen: 48.136 ug/l  
RT: 10.09 min Scan# 2587  
Delta R.T. -0.00 min  
Lab File: VN054447.D  
Acq: 19 Mar 2019 18:23

Tgt Ion: 98 Resp: 3436487  
Ion Ratio Lower Upper  
98 100  
100 64.4 51.2 76.8



Abundance Ion 98.00 (97.70 to 98.70): V  
Ion 100.00 (99.70 to 100.70): V





#53

t-1,3-Dichloropropene

Concen: 1.990 ug/l

RT: 10.37 min Scan# 2675

Delta R.T. -0.01 min

Lab File: VN054447.D

Acq: 19 Mar 2019 18:23

Instrument :

MSVOA\_N

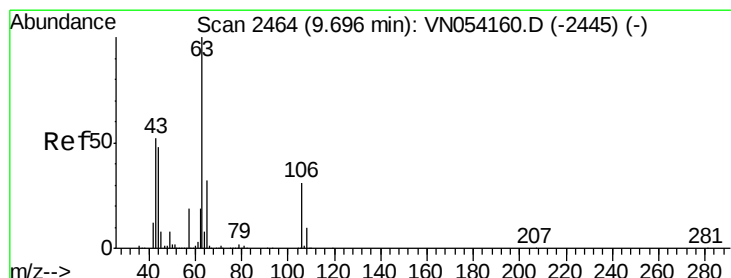
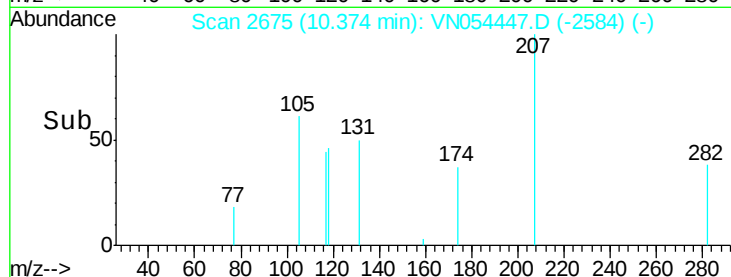
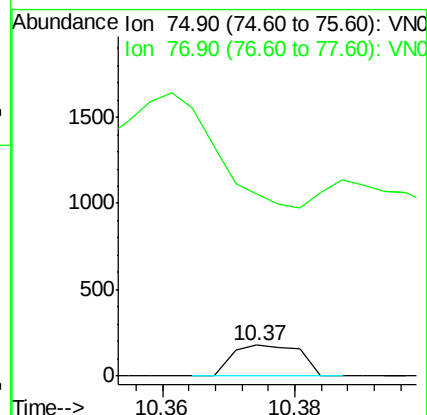
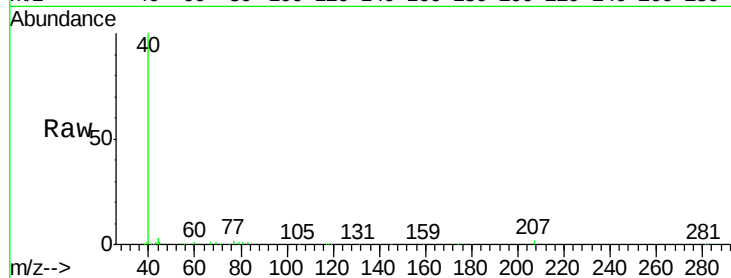
ClientSampled :

Tot Ion: 75 Resp: 127

Ion Ratio Lower Upper

75 100

77 0.0 25.8 38.8#



#58

2-Chloroethyl Vinyl ether

Concen: 16.831 ug/l

RT: 9.63 min Scan# 2443

Delta R.T. -0.07 min

Lab File: VN054447.D

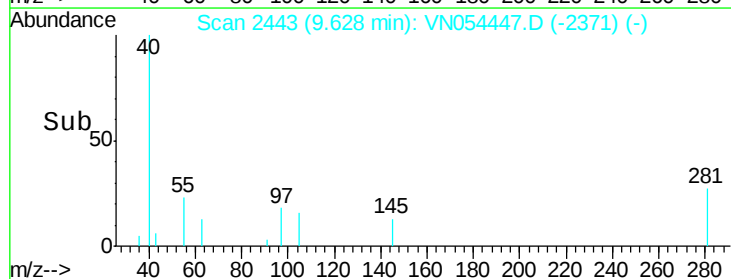
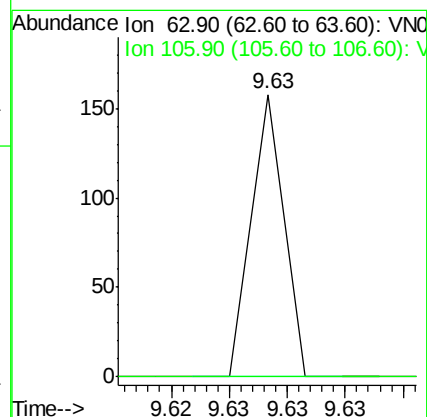
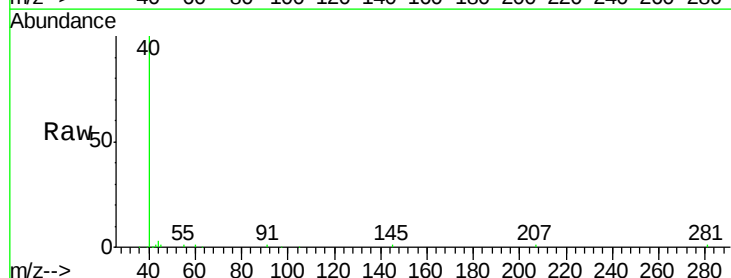
Acq: 19 Mar 2019 18:23

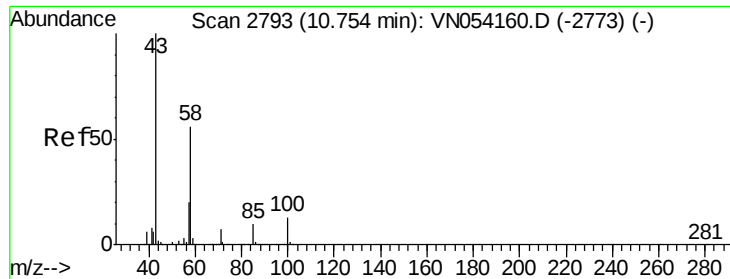
Tgt Ion: 63 Resp: 30

Ion Ratio Lower Upper

63 100

106 0.0 24.4 36.6#





#59

2-Hexanone

Concen: 0.286 ug/l

RT: 10.77 min Scan# 2797

Delta R.T. 0.01 min

Lab File: VN054447.D

Acq: 19 Mar 2019 18:23

Instrument :

MSVOA\_N

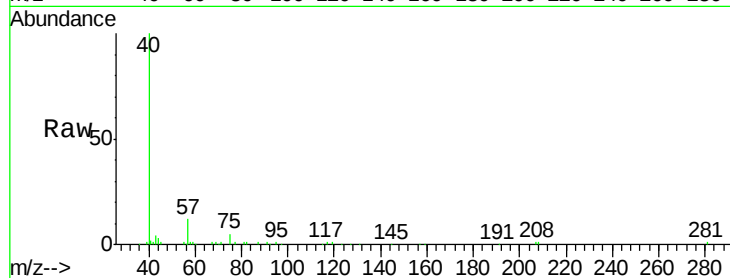
ClientSampled :

Tot Ion: 43 Resp: 2805

Ion Ratio Lower Upper

43 100

58 31.7 28.0 83.9



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

10.77

1500

1000

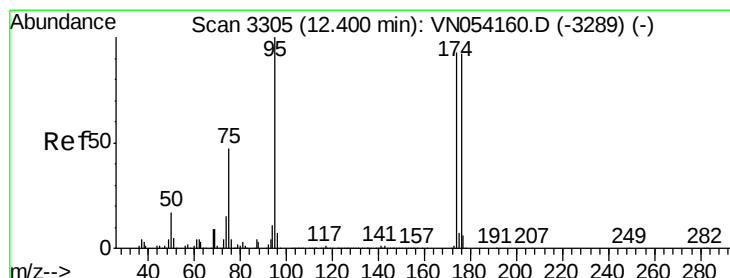
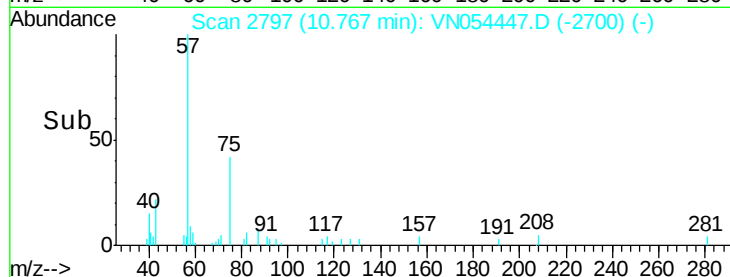
500

0

Time-->

10.75

10.80



#62

4-Bromofluorobenzene

Concen: 39.775 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.00 min

Lab File: VN054447.D

Acq: 19 Mar 2019 18:23

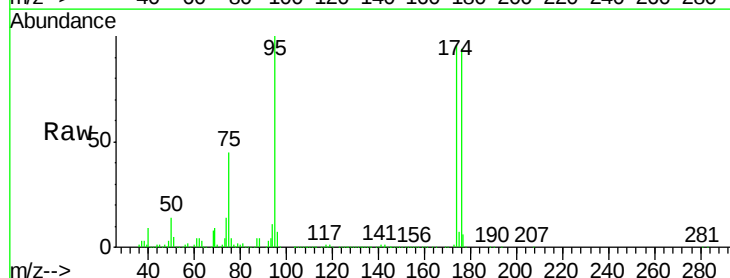
Tgt Ion: 95 Resp: 993586

Ion Ratio Lower Upper

95 100

174 96.7 0.0 191.0

176 94.4 0.0 187.4



Abundance Ion 94.90 (94.60 to 95.60): VN0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

800000

600000

400000

200000

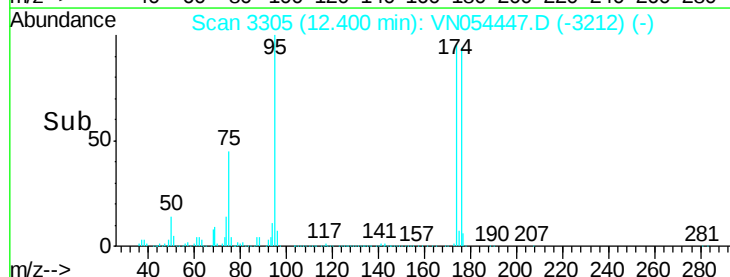
0

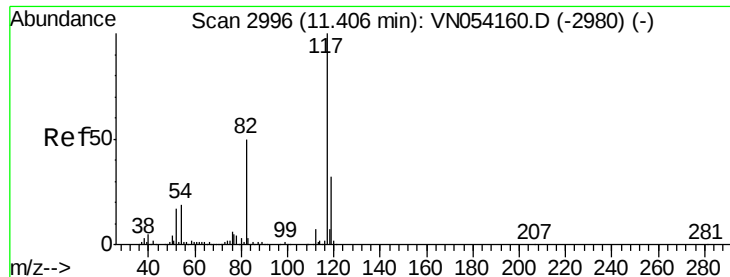
Time-->

12.30

12.40

12.50





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2997

Delta R.T. 0.00 min

Lab File: VN054447.D

Acq: 19 Mar 2019 18:23

Instrument :

MSVOA\_N

ClientSampleId :

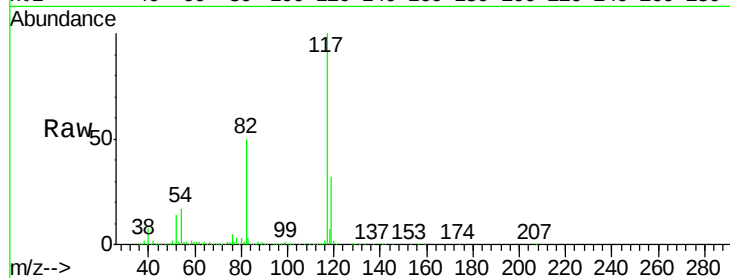
Tot Ion:117 Resp: 2449321

Ion Ratio Lower Upper

117 100

82 50.2 40.0 60.0

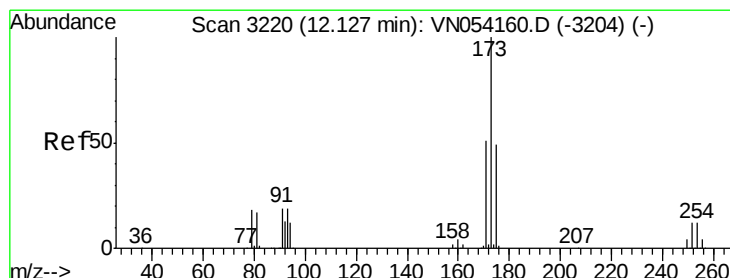
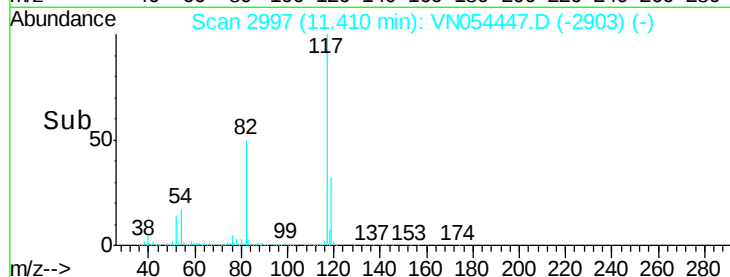
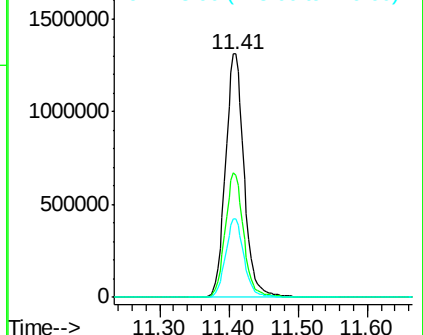
119 32.2 25.8 38.6



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



#71

Bromoform

Concen: 2.365 ug/l

RT: 12.12 min Scan# 3217

Delta R.T. -0.01 min

Lab File: VN054447.D

Acq: 19 Mar 2019 18:23

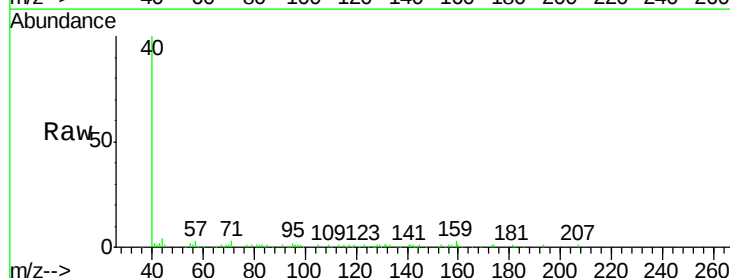
Tgt Ion:173 Resp: 227

Ion Ratio Lower Upper

173 100

175 0.0 24.4 73.2#

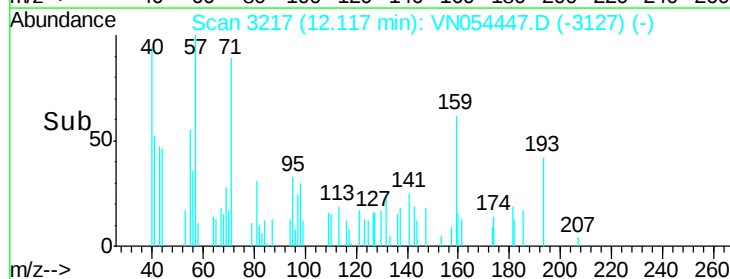
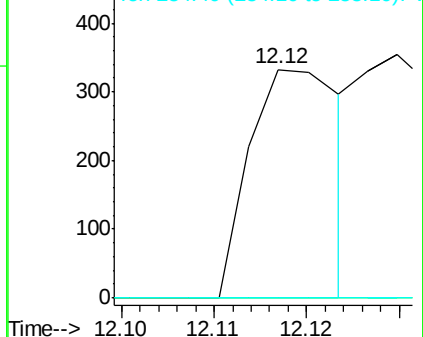
254 0.0 0.1 0.1#

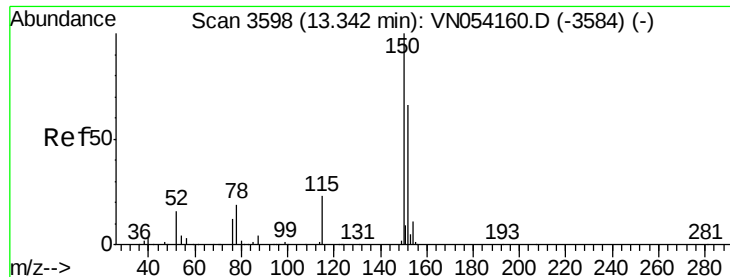


Abundance Ion 172.70 (172.40 to 173.40): V

Ion 174.70 (174.40 to 175.40): V

Ion 254.40 (254.10 to 255.10): 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: VN054447.D

Acq: 19 Mar 2019 18:23

Instrument :

MSVOA\_N

ClientSampleId :

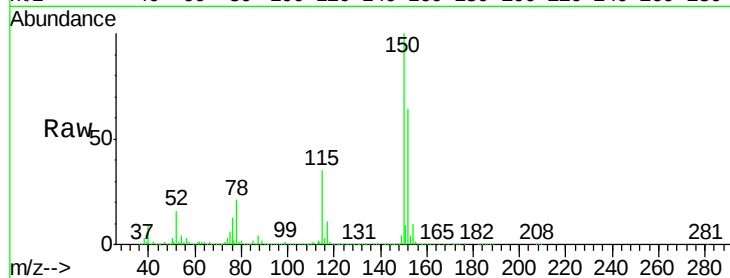
Tot Ion:152 Resp: 884224

Ion Ratio Lower Upper

152 100

115 55.2 27.2 81.6

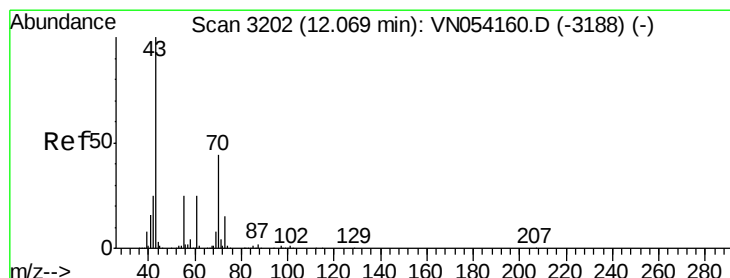
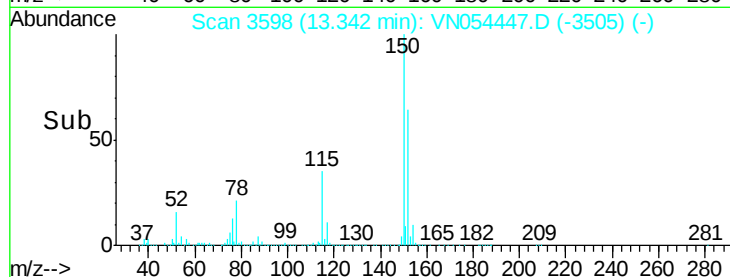
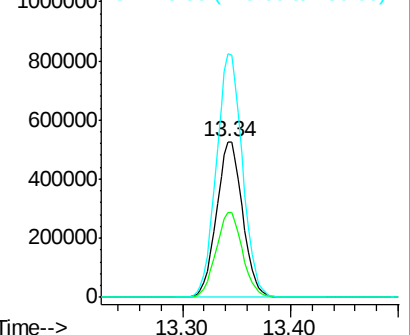
150 157.3 0.0 349.2



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: 0.236 ug/l

RT: 12.04 min Scan# 3193

Delta R.T. -0.03 min

Lab File: VN054447.D

Acq: 19 Mar 2019 18:23

Tgt Ion: 43 Resp: 3702

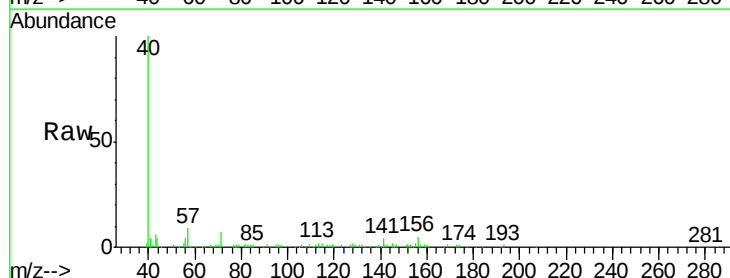
Ion Ratio Lower Upper

43 100

70 18.6 35.4 53.0#

55 20.4 19.8 29.6

61 0.0 19.8 29.6#

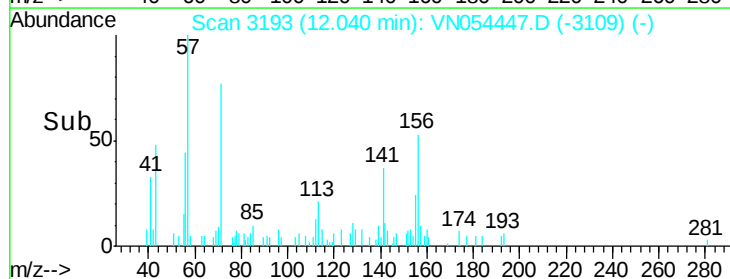
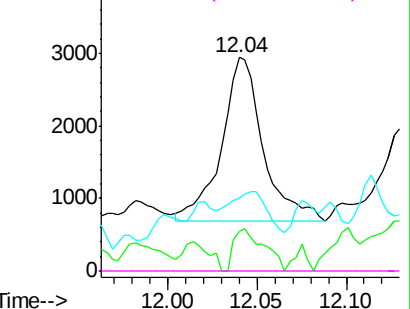


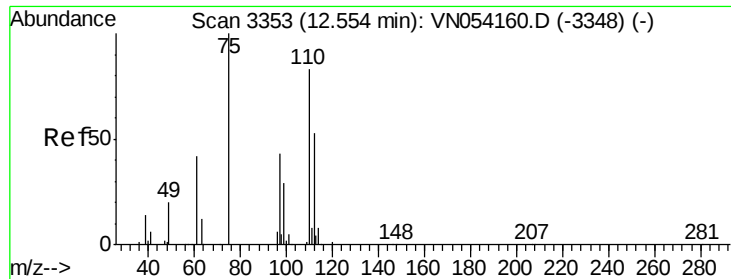
Abundance Ion 43.00 (42.70 to 43.70): V

Ion 70.00 (69.70 to 70.70): V

Ion 55.00 (54.70 to 55.70): V

Ion 61.00 (60.70 to 61.70): V





#76

1,2,3-Trichloropropane

Concen: 34.427 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN054447.D

Acq: 19 Mar 2019 18:23

Instrument :

MSVOA\_N

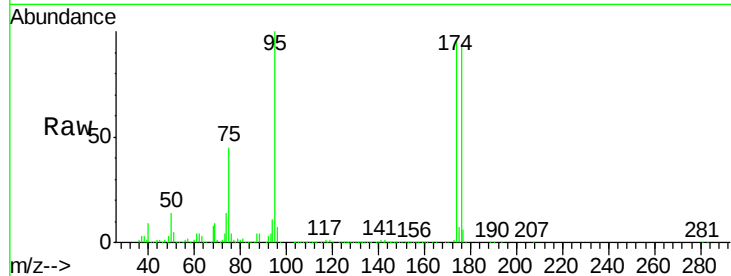
ClientSampleId :

Tot Ion: 75 Resp: 447657

Ion Ratio Lower Upper

75 100

77 1.0 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN054447.D (-3305) (-)

Ion 77.00 (76.70 to 77.70): VN054447.D (-3305) (-)

12.40

250000

200000

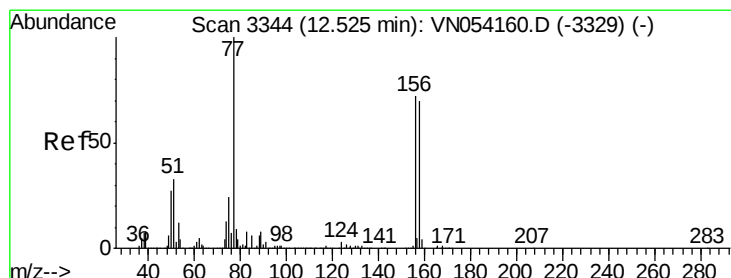
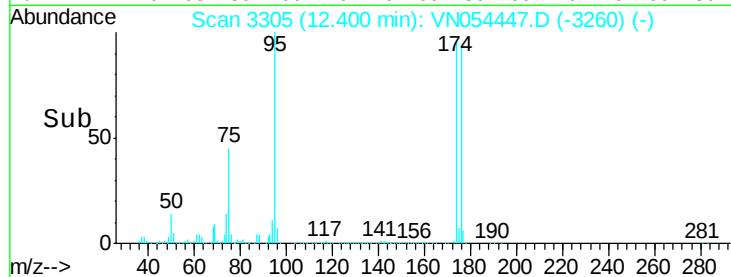
150000

100000

50000

0

Time--> 12.30 12.40 12.50



#77

Bromobenzene

Concen: 2.407 ug/l

RT: 12.56 min Scan# 3354

Delta R.T. 0.03 min

Lab File: VN054447.D

Acq: 19 Mar 2019 18:23

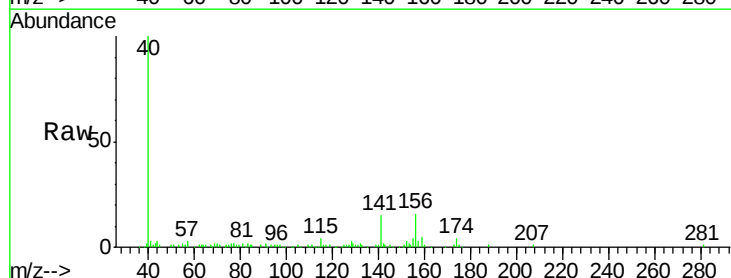
Tgt Ion: 156 Resp: 45064

Ion Ratio Lower Upper

156 100

77 0.9 81.5 244.4#

158 0.2 49.0 147.2#



Abundance Ion 155.80 (155.50 to 156.50): VN054447.D (-3354) (-)

Ion 77.00 (76.70 to 77.70): VN054447.D (-3354) (-)

Ion 157.80 (157.50 to 158.50): VN054447.D (-3354) (-)

12.56

10000

8000

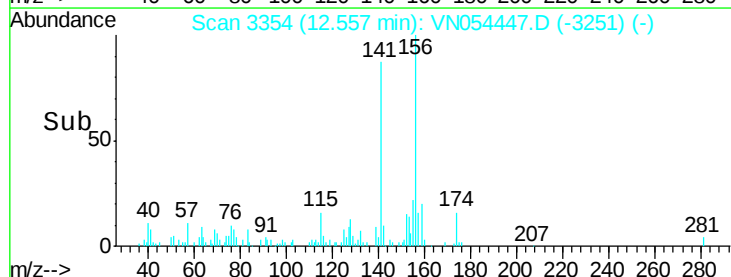
6000

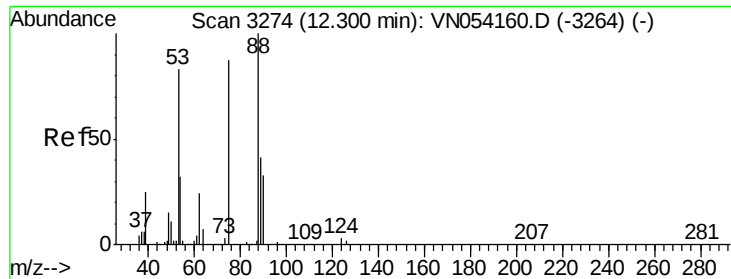
4000

2000

0

Time--> 12.40 12.50 12.60 12.70

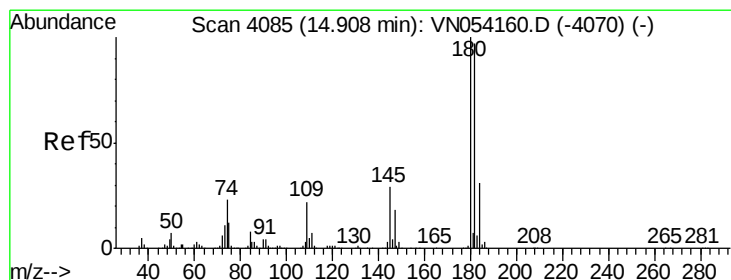
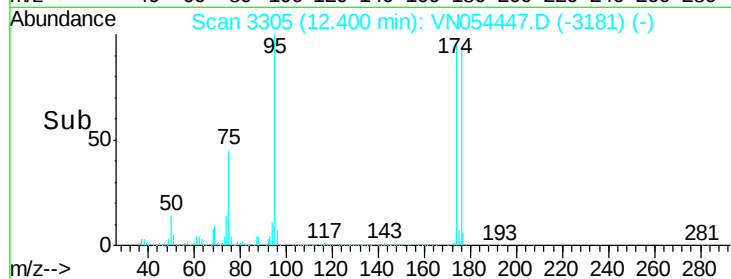
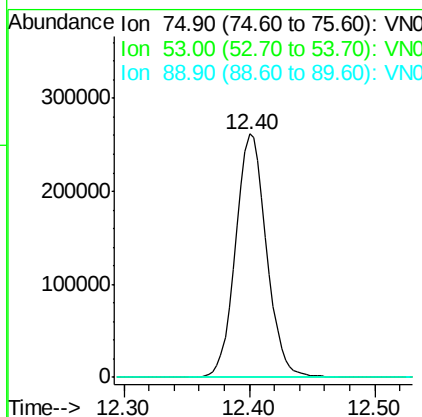
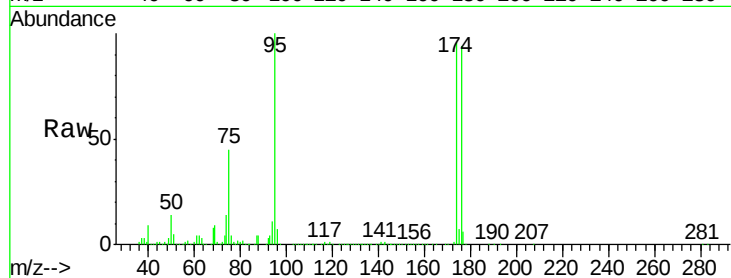




#81  
trans-1,4-Dichloro-2-butene  
Concen: 117.688 ug/l  
RT: 12.40 min Scan# 3305  
Delta R.T. 0.10 min  
Lab File: VN054447.D  
Acq: 19 Mar 2019 18:23

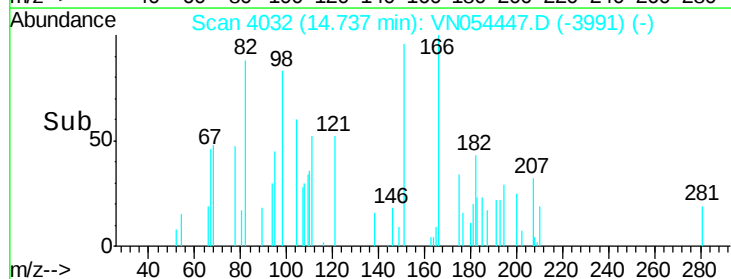
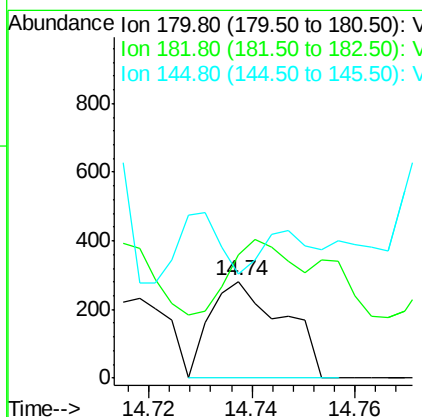
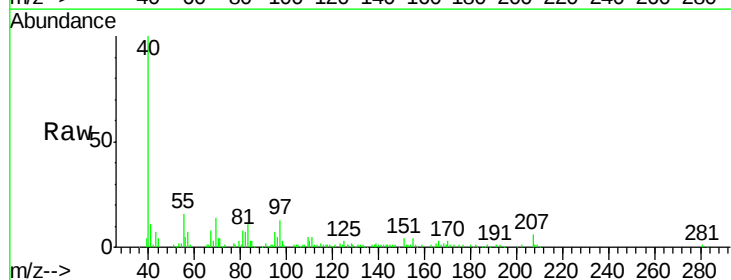
Instrument :  
MSVOA\_N  
ClientSampleId :

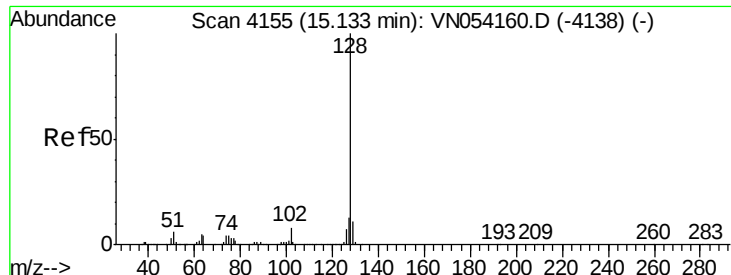
Tot Ion: 75 Resp: 447657  
Ion Ratio Lower Upper  
75 100  
53 0.2 76.2 114.2#  
89 0.0 39.2 58.8#



#93  
1,2,4-Trichlorobenzene  
Concen: 2.531 ug/l  
RT: 14.74 min Scan# 4032  
Delta R.T. -0.17 min  
Lab File: VN054447.D  
Acq: 19 Mar 2019 18:23

Tgt Ion:180 Resp: 276  
Ion Ratio Lower Upper  
180 100  
182 129.3 48.0 144.2  
145 30.1 14.2 42.8





#95  
Naphthalene  
Concen: 3.610 ug/l  
RT: 15.13 min Scan# 4155  
Delta R.T. -0.00 min  
Lab File: VN054447.D  
Acq: 19 Mar 2019 18:23

Instrument :  
MSVOA\_N  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 31.3  | 10.1  | 15.1# |
| 129     | 13.9  | 8.7   | 13.1# |

