

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN032319\  
 Data File : VN054635.D  
 Acq On : 24 Mar 2019 6:10  
 Operator : JC/SP  
 Sample : K2043-16  
 Misc : 5.57g/5mL/100uL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 43 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 WP022SB433-190319-(25-27)

Quant Time: Mar 25 03:45:06 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N032019W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Mar 22 02:09:07 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.66  | 168  | 543522   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.58  | 114  | 874209   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 746363   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 320595   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|--------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.02  | 65   | 352613   | 52.16  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 104.32% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 263009   | 46.70  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 93.40%  |          |
| 50) Toluene-d8              | 10.09 | 98   | 1062035  | 50.16  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 100.32% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 348225   | 48.33  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 96.66%  |          |

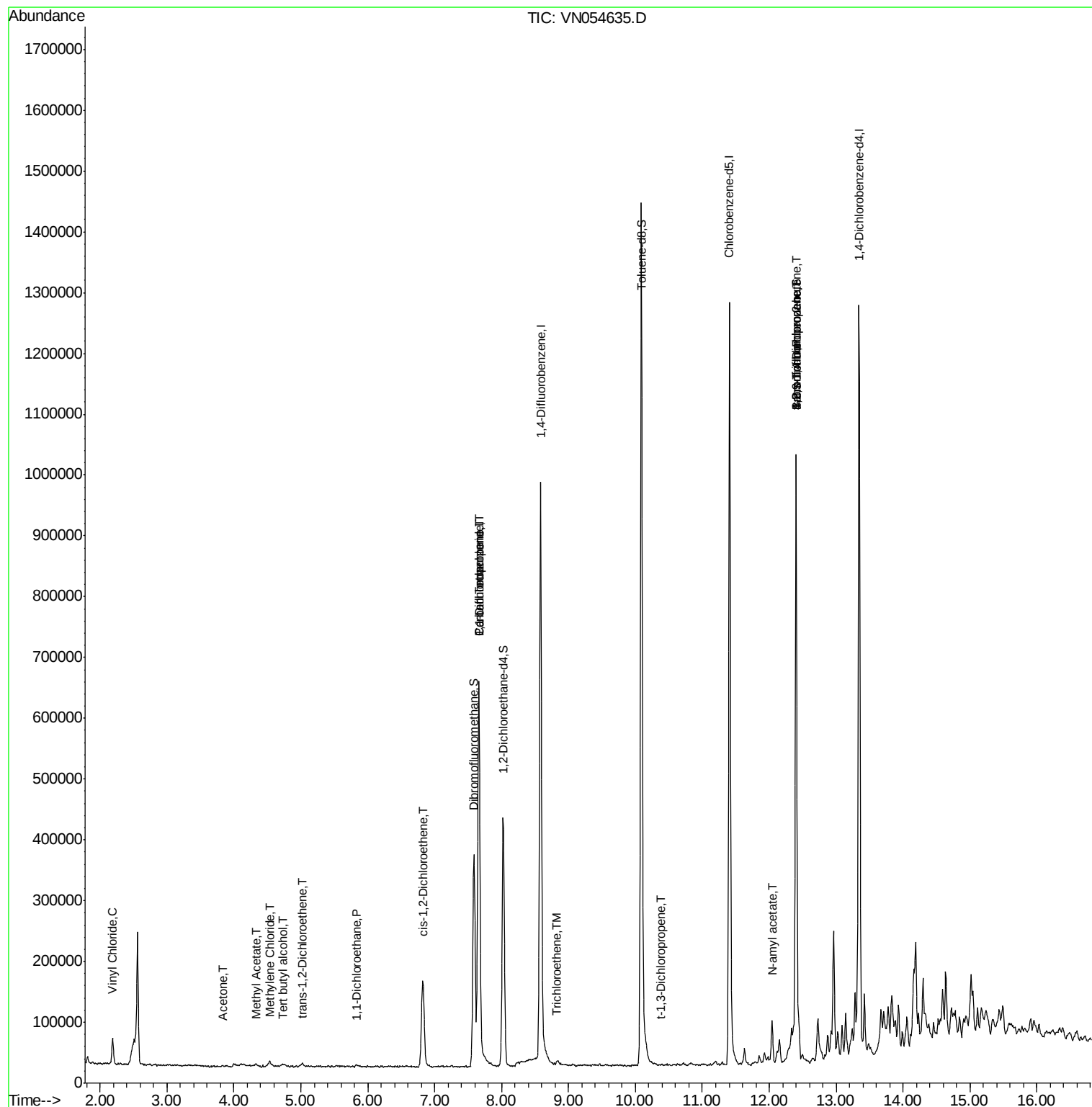
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 4) Vinyl Chloride              | 2.19  | 62   | 38168    | 5.377     | ug/l   | 99     |
| 11) Tert butyl alcohol         | 4.73  | 59   | 4383     | 10.709    | ug/l # | 70     |
| 16) Acetone                    | 3.82  | 43   | 426      | 0.210     | ug/l # | 49     |
| 18) Methyl Acetate             | 4.33  | 43   | 3606     | 0.796     | ug/l # | 88     |
| 20) Methylene Chloride         | 4.54  | 84   | 5207     | 0.869     | ug/l # | 79     |
| 21) trans-1,2-Dichloroethene   | 5.03  | 96   | 2652     | 0.495     | ug/l # | 90     |
| 24) 1,1-Dichloroethane         | 5.83  | 63   | 3933     | 0.375     | ug/l # | 83     |
| 27) cis-1,2-Dichloroethene     | 6.82  | 96   | 90495    | 14.173    | ug/l   | 97     |
| 31) Cyclohexane                | 7.66  | 56   | 11624    | Below Cal | #      | 23     |
| 36) 1,1-Dichloropropene        | 7.66  | 75   | 40309    | 4.931     | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 7.66  | 117  | 51264    | 6.454     | ug/l # | 16     |
| 44) Trichloroethene            | 8.83  | 130  | 2454     | 0.378     | ug/l   | 94     |
| 53) t-1,3-Dichloropropene      | 10.37 | 75   | 30       | 2.236     | ug/l # | 62     |
| 71) Bromoform                  | 12.40 | 173  | 1747     | 2.665     | ug/l # | 1      |
| 74) N-amyl acetate             | 12.04 | 43   | 15239    | 2.051     | ug/l # | 64     |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 177133   | 34.818    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 177133   | 115.589   | ug/l # | 11     |

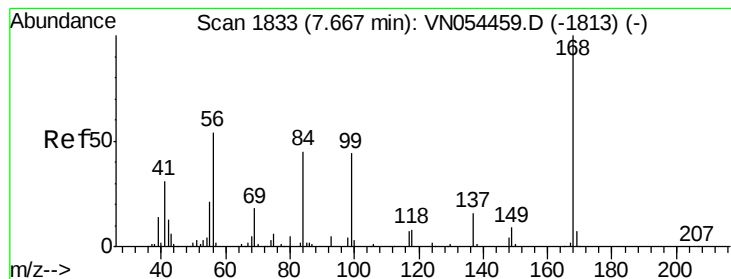
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN032319\  
Data File : VN054635.D  
Acq On : 24 Mar 2019 6:10  
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Sample : K2043-16  
Misc : 5.57µ/5mL/100µL/5.00mL/MSVOA\_N/MEOH  
ALS Vial : 43 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
WP022SB433-190319-(25-27)

Quant Time: Mar 25 03:45:06 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N032019W.M  
Quant Title : SW846 8260  
QLast Update : Fri Mar 22 02:09:07 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: VN054635.D

Acq: 24 Mar 2019 6:10

Instrument :

MSVOA\_N

ClientSampleId :

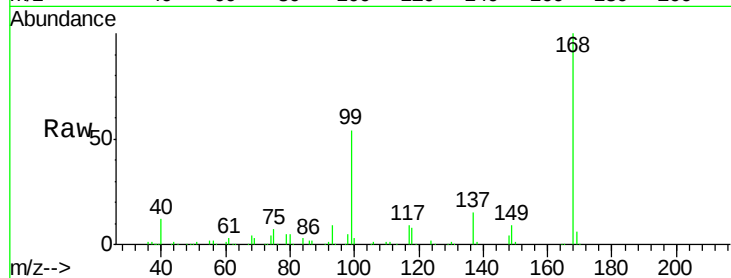
WP022SB433-190319-(25-27)

Tot Ion:168 Resp: 543522

Ion Ratio Lower Upper

168 100

99 53.8 37.1 55.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.66

250000

200000

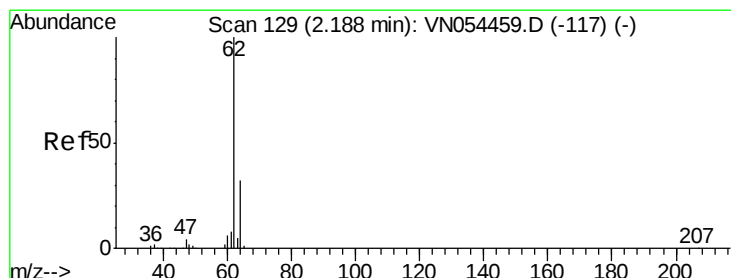
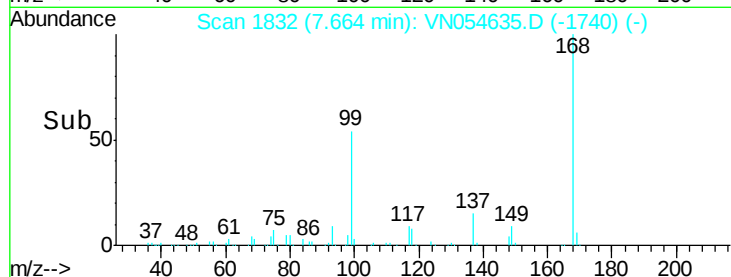
150000

100000

50000

0

Time-->



#4

Vinyl Chloride

Concen: 5.377 ug/l

RT: 2.19 min Scan# 129

Delta R.T. -0.00 min

Lab File: VN054635.D

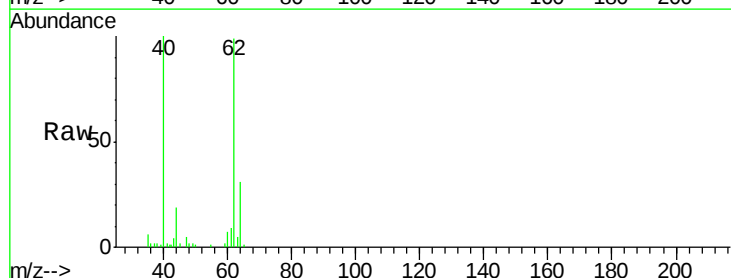
Acq: 24 Mar 2019 6:10

Tgt Ion: 62 Resp: 38168

Ion Ratio Lower Upper

62 100

64 31.5 25.5 38.3



Abundance Ion 61.90 (61.60 to 62.60): VNO

Ion 63.90 (63.60 to 64.60): VNO

2.19

25000

20000

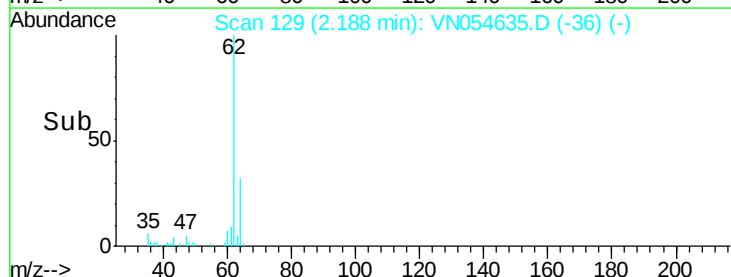
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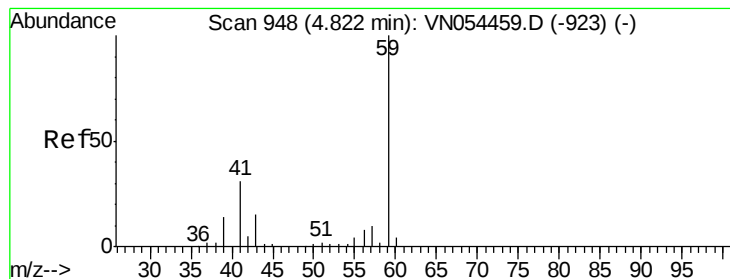
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5000

0

Time-->



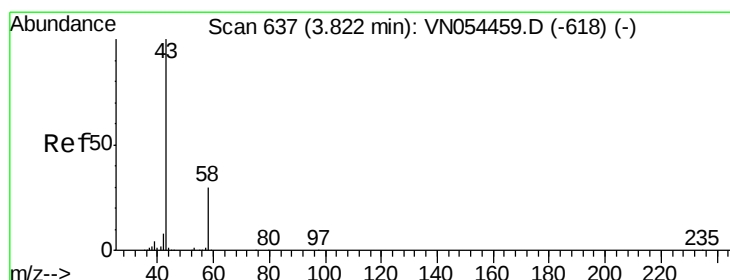
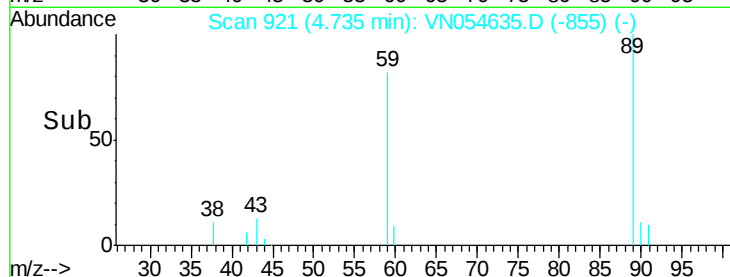
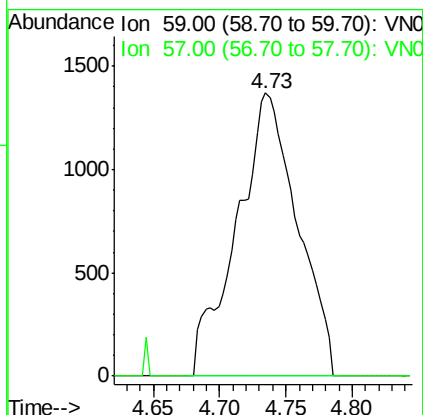
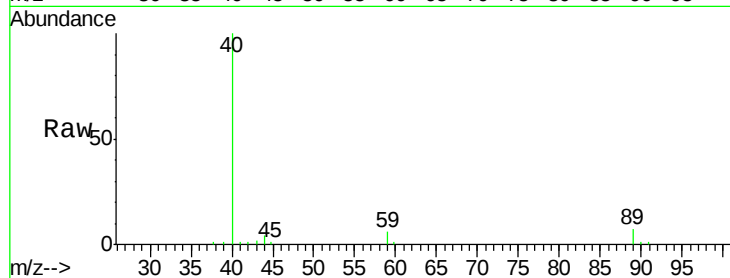


#11

Tert butyl alcohol  
 Concen: 10.709 ug/l  
 RT: 4.73 min Scan# 921  
 Delta R.T. -0.09 min  
 Lab File: VN054635.D  
 Acq: 24 Mar 2019 6:10

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 WP022SB433-190319-(25-27)

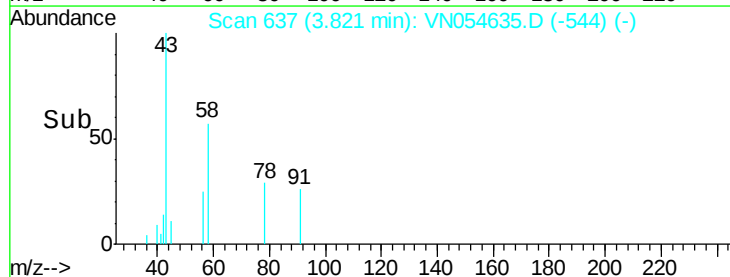
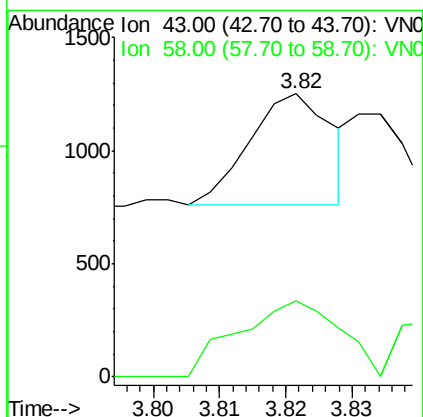
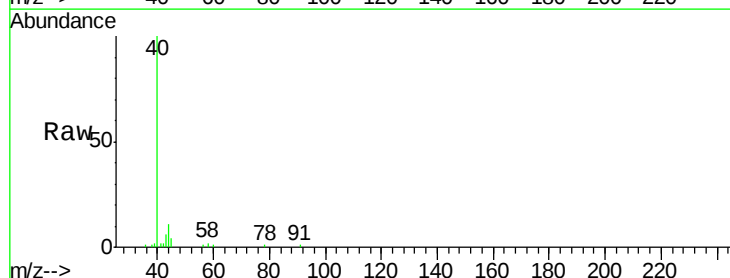
Tot Ion: 59 Resp: 4383  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 9.0 13.6#

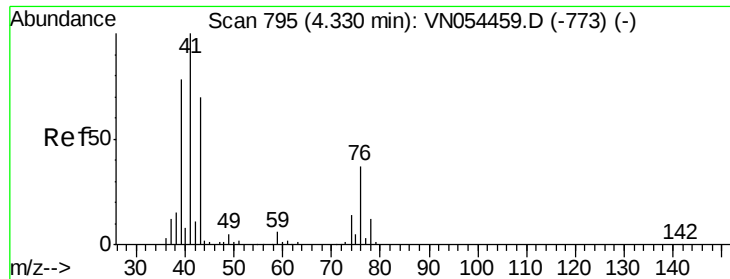


#16

Acetone  
 Concen: 0.210 ug/l  
 RT: 3.82 min Scan# 637  
 Delta R.T. -0.00 min  
 Lab File: VN054635.D  
 Acq: 24 Mar 2019 6:10

Tgt Ion: 43 Resp: 426  
 Ion Ratio Lower Upper  
 43 100  
 58 68.2 29.9 44.9#

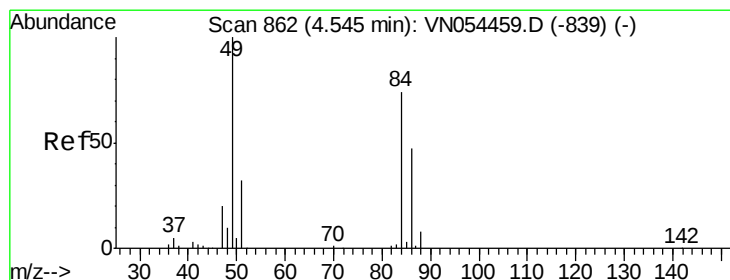
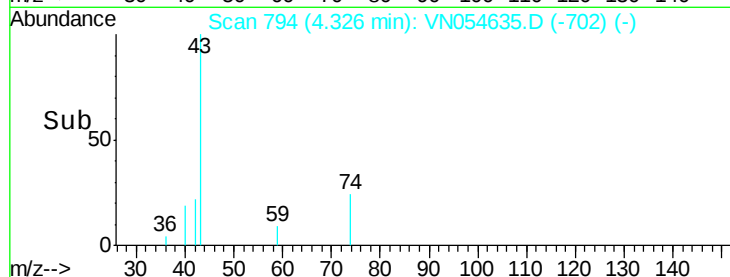
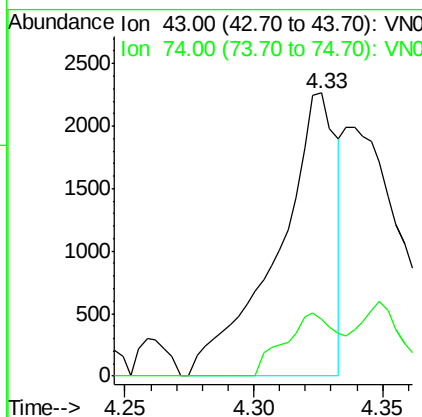
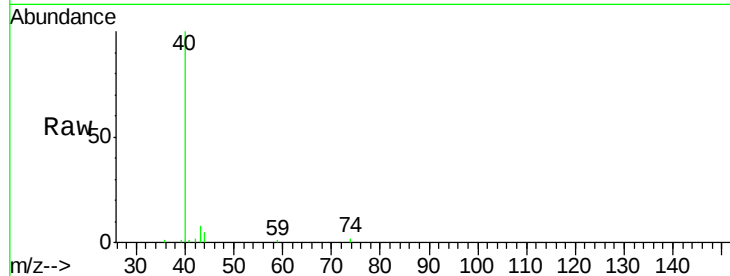




#18  
Methvl Acetate  
Concen: 0.796 ug/l  
RT: 4.33 min Scan# 794  
Delta R.T. -0.00 min  
Lab File: VN054635.D  
Acq: 24 Mar 2019 6:10

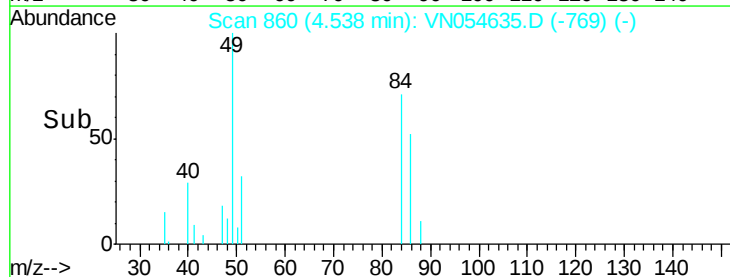
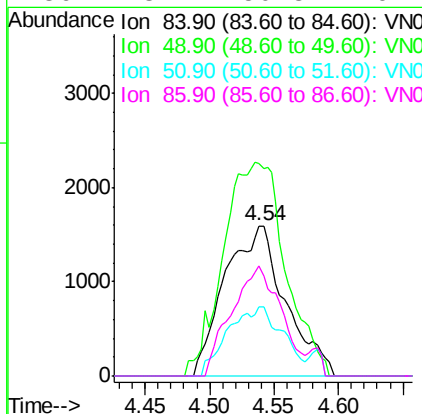
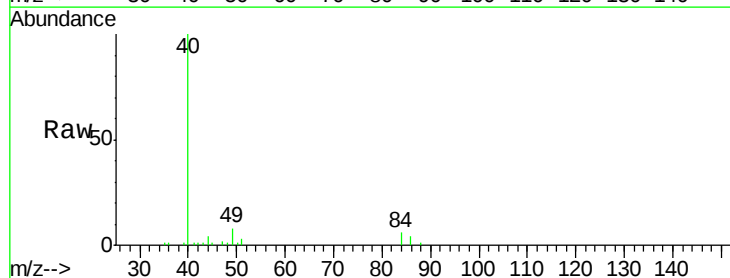
Instrument :  
MSVOA\_N  
ClientSampleId :  
WP022SB433-190319-(25-27)

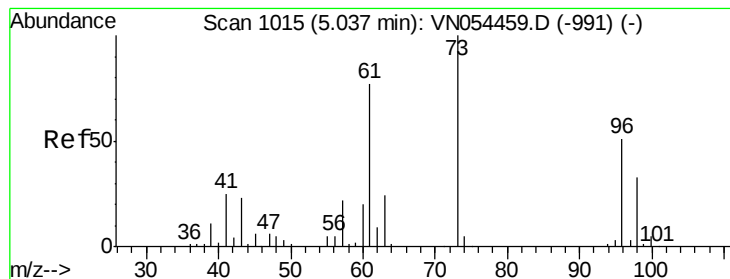
Tot Ion: 43 Resp: 3606  
Ion Ratio Lower Upper  
43 100  
74 20.1 20.8 31.2#



#20  
Methylene Chloride  
Concen: 0.869 ug/l  
RT: 4.54 min Scan# 860  
Delta R.T. -0.01 min  
Lab File: VN054635.D  
Acq: 24 Mar 2019 6:10

Tgt Ion: 84 Resp: 5207  
Ion Ratio Lower Upper  
84 100  
49 141.5 89.7 134.5#  
51 45.7 28.2 42.4#  
86 73.2 50.8 76.2





#21

trans-1,2-Dichloroethene

Concen: 0.495 ug/l

RT: 5.03 min Scan# 1012

Delta R.T. -0.01 min

Lab File: VN054635.D

Acq: 24 Mar 2019 6:10

Instrument :

MSVOA\_N

ClientSampleId :

WP022SB433-190319-(25-27)

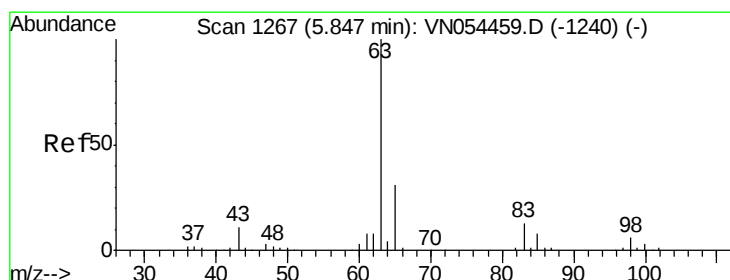
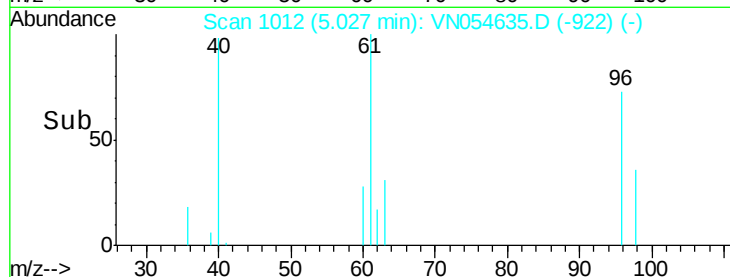
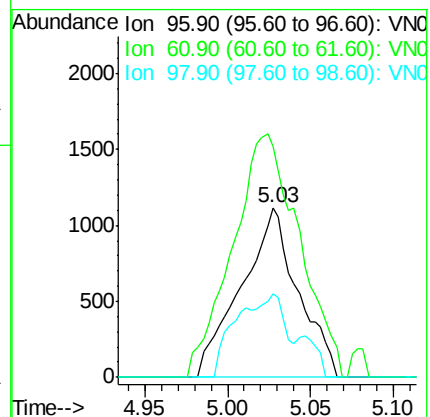
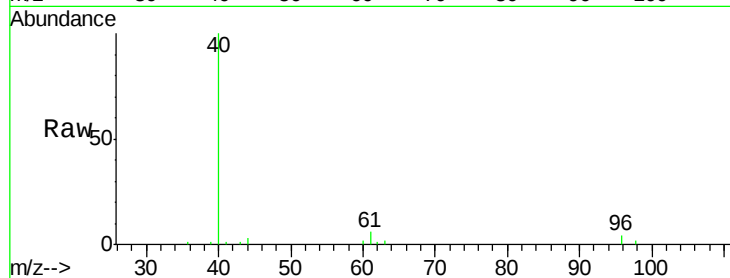
Tot Ion: 96 Resp: 2652

Ion Ratio Lower Upper

96 100

61 136.5 102.8 154.2

98 49.5 50.0 75.0#



#24

1,1-Dichloroethane

Concen: 0.375 ug/l

RT: 5.83 min Scan# 1263

Delta R.T. -0.01 min

Lab File: VN054635.D

Acq: 24 Mar 2019 6:10

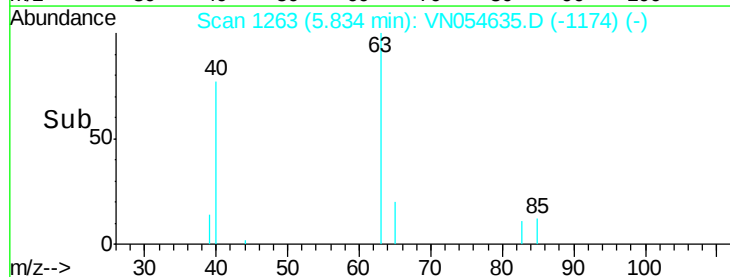
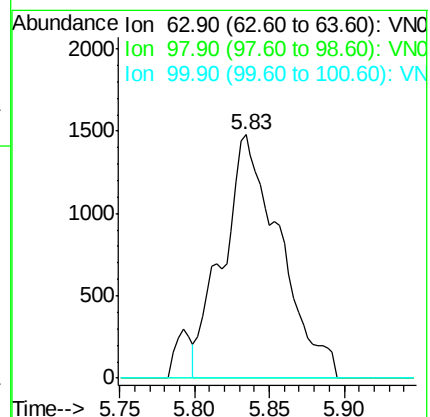
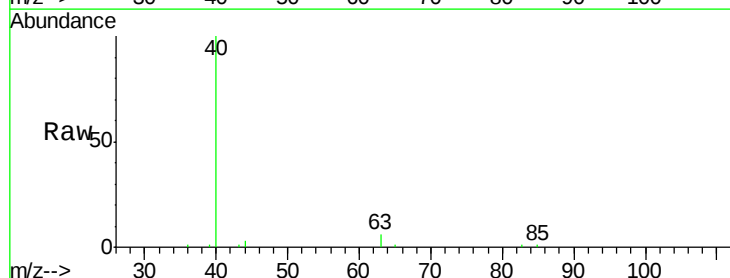
Tgt Ion: 63 Resp: 3933

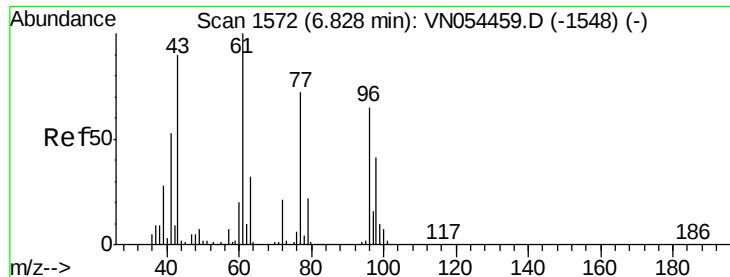
Ion Ratio Lower Upper

63 100

98 0.0 3.5 10.5#

100 0.0 2.0 6.0#





#27

cis-1,2-Dichloroethene

Concen: 14.173 ug/l

RT: 6.82 min Scan# 1571

Delta R.T. -0.00 min

Lab File: VN054635.D

Acq: 24 Mar 2019 6:10

Instrument :

MSVOA\_N

ClientSampleId :

WP022SB433-190319-(25-27)

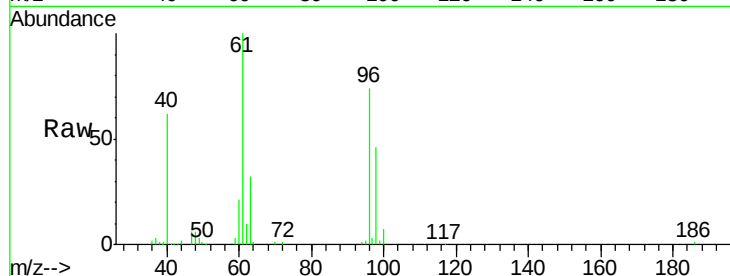
Tot Ion: 96 Resp: 90495

Ion Ratio Lower Upper

96 100

61 141.1 0.0 273.0

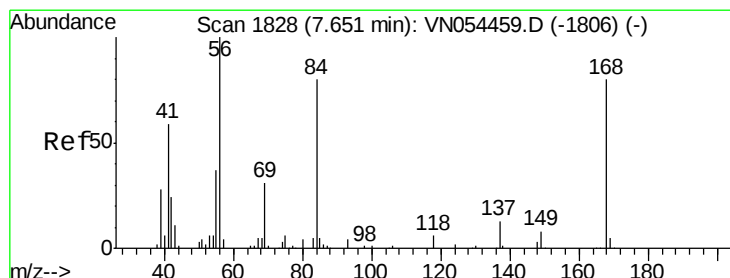
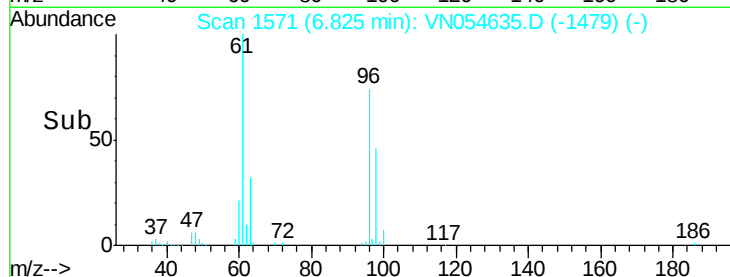
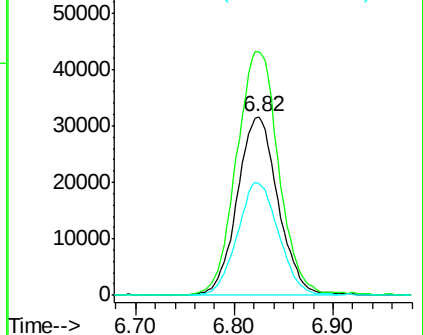
98 63.7 0.0 130.6



Abundance Ion 95.90 (95.60 to 96.60): VN0

Ion 60.90 (60.60 to 61.60): VN0

Ion 97.90 (97.60 to 98.60): VN0



#31

Cyclohexane

Concen: Below Cal

RT: 7.66 min Scan# 1830

Delta R.T. 0.01 min

Lab File: VN054635.D

Acq: 24 Mar 2019 6:10

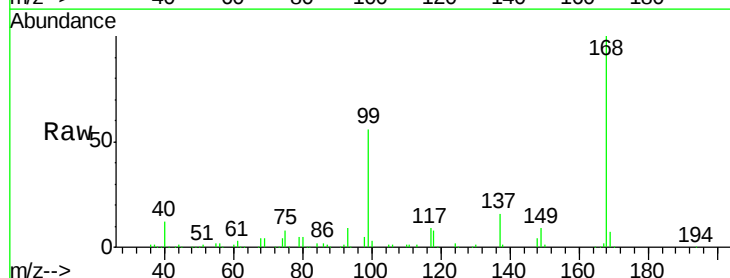
Tgt Ion: 56 Resp: 11624

Ion Ratio Lower Upper

56 100

69 176.4 27.8 41.6#

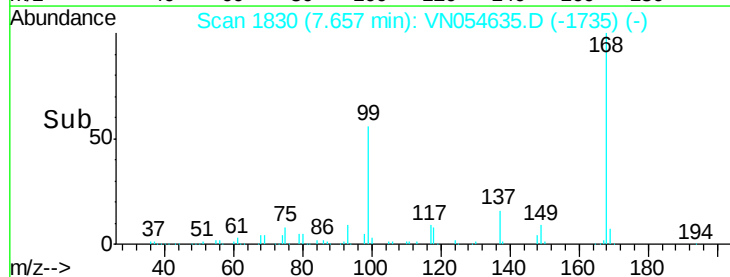
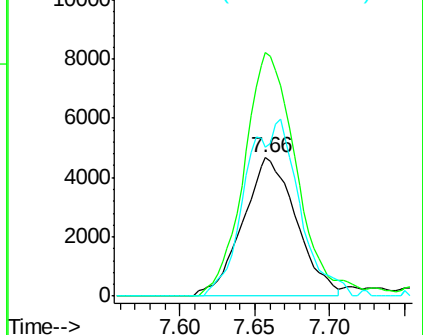
84 107.4 74.6 111.8

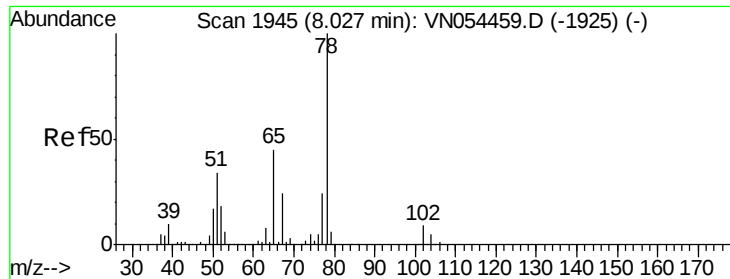


Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 69.00 (68.70 to 69.70): VN0

Ion 84.00 (83.70 to 84.70): VN0

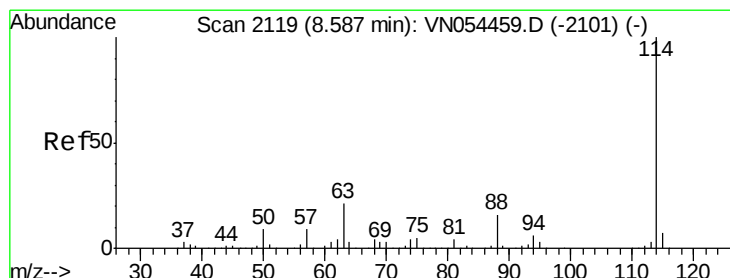
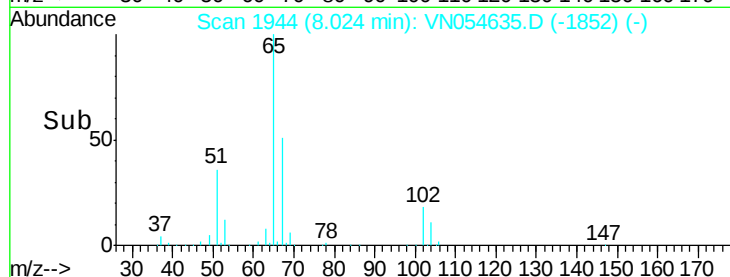
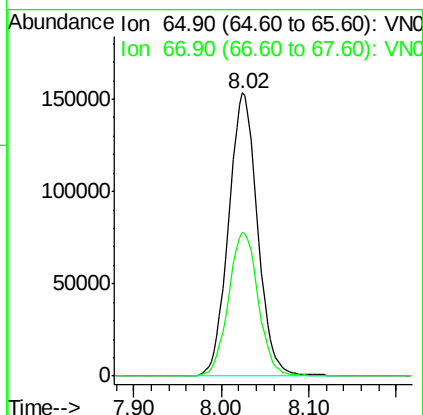
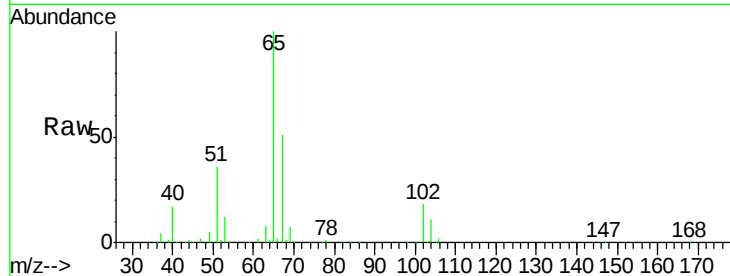




#33  
 1,2-Dichloroethane-d4  
 Concen: 52.157 ug/l  
 RT: 8.02 min Scan# 1944  
 Delta R.T. -0.00 min  
 Lab File: VN054635.D  
 Acq: 24 Mar 2019 6:10

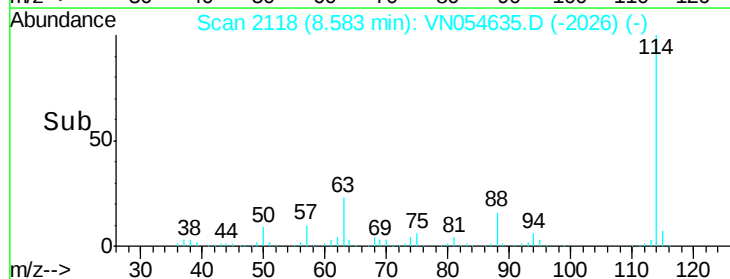
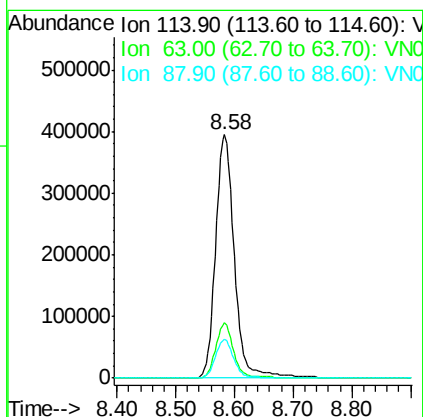
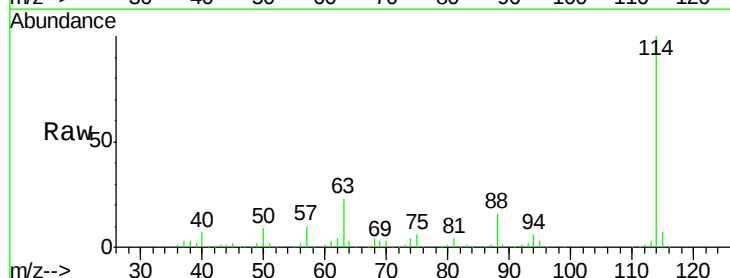
Instrument :  
 MSVOA\_N  
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 WP022SB433-190319-(25-27)

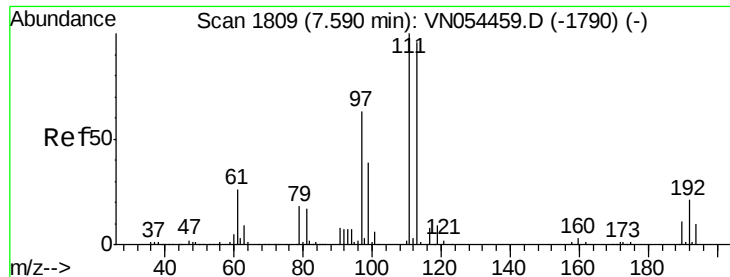
Tot Ion: 65 Resp: 352613  
 Ion Ratio Lower Upper  
 65 100  
 67 52.0 0.0 104.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.58 min Scan# 2118  
 Delta R.T. -0.00 min  
 Lab File: VN054635.D  
 Acq: 24 Mar 2019 6:10

Tgt Ion: 114 Resp: 874209  
 Ion Ratio Lower Upper  
 114 100  
 63 22.6 0.0 35.2  
 88 16.0 0.0 30.2

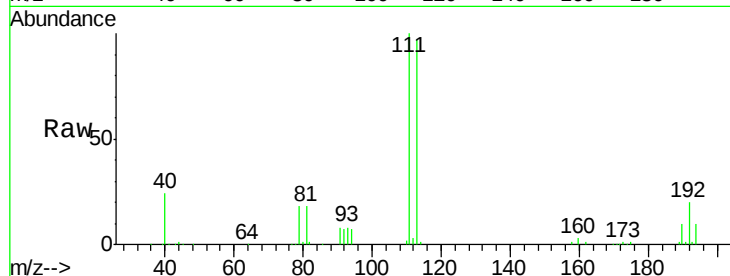




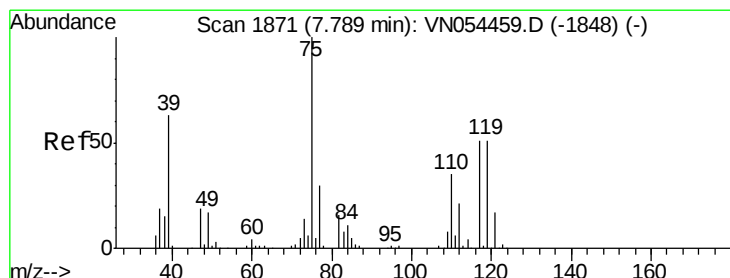
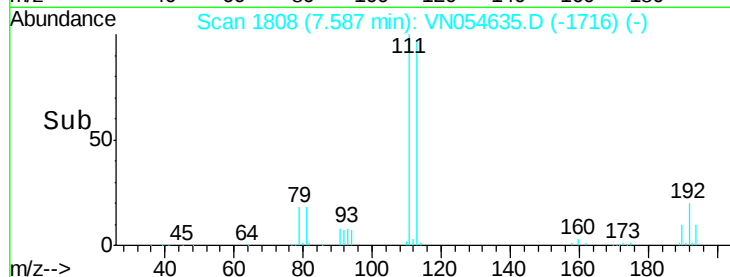
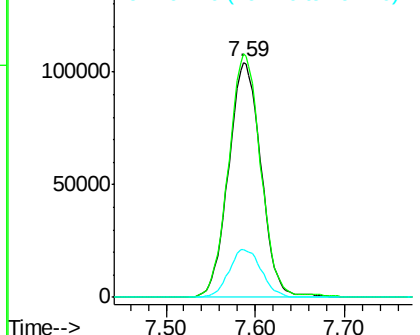
#35  
 Dibromofluoromethane  
 Concen: 46.698 ug/l  
 RT: 7.59 min Scan# 1808  
 Delta R.T. -0.00 min  
 Lab File: VN054635.D  
 Acq: 24 Mar 2019 6:10

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 WP022SB433-190319-(25-27)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.0 | 82.2  | 123.4 |
| 192     | 20.4  | 19.2  | 28.8  |

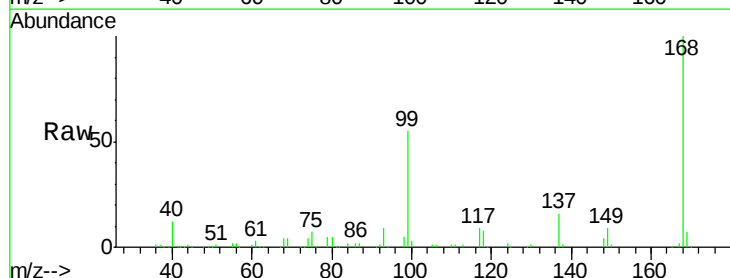


Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V

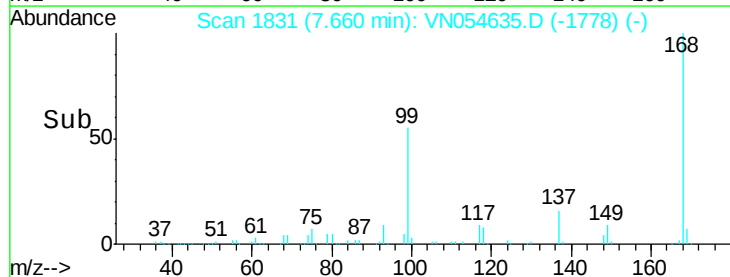
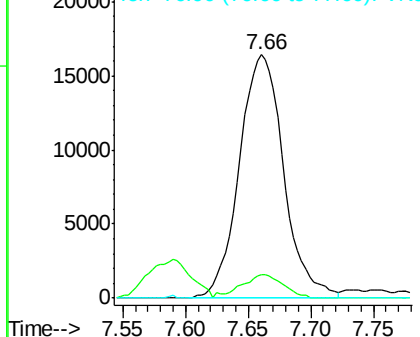


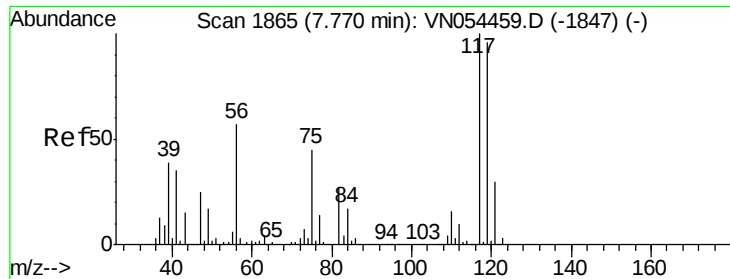
#36  
 1,1-Dichloropropene  
 Concen: 4.931 ug/l  
 RT: 7.66 min Scan# 1831  
 Delta R.T. -0.13 min  
 Lab File: VN054635.D  
 Acq: 24 Mar 2019 6:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 9.2   | 19.1  | 57.5# |
| 77      | 0.0   | 25.0  | 37.4# |



Abundance Ion 74.90 (74.60 to 75.60): VNO  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VNO





#38

Carbon Tetrachloride

Concen: 6.454 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.11 min

Lab File: VN054635.D

Acq: 24 Mar 2019 6:10

Instrument :

MSVOA\_N

ClientSampleId :

WP022SB433-190319-(25-27)

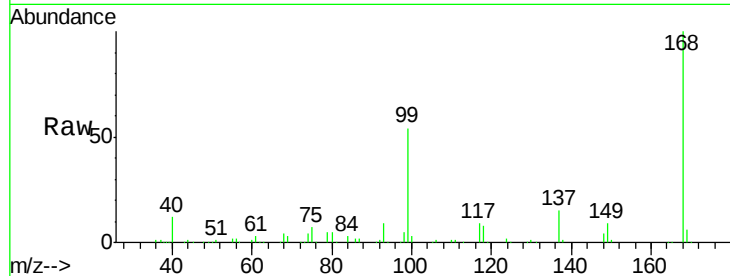
Tot Ion:117 Resp: 51264

Ion Ratio Lower Upper

117 100

119 4.3 76.3 114.5#

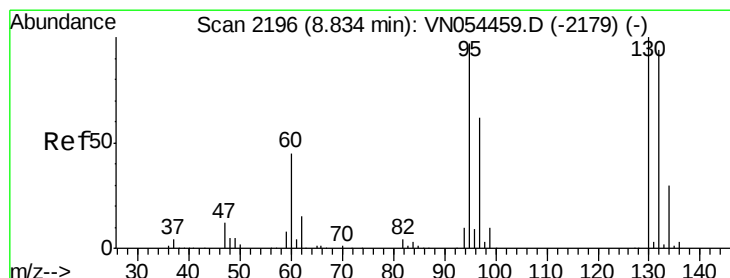
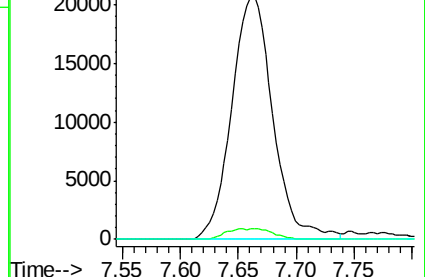
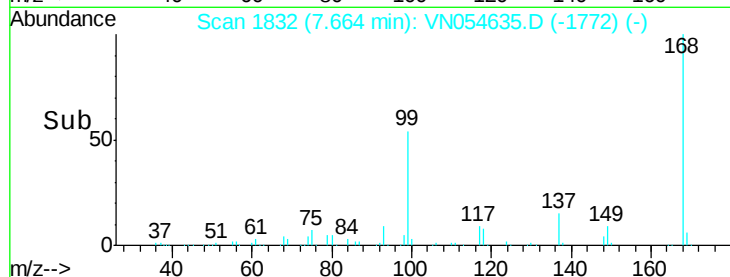
121 0.0 24.6 36.8#



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



#44

Trichloroethene

Concen: 0.378 ug/l

RT: 8.83 min Scan# 2194

Delta R.T. -0.01 min

Lab File: VN054635.D

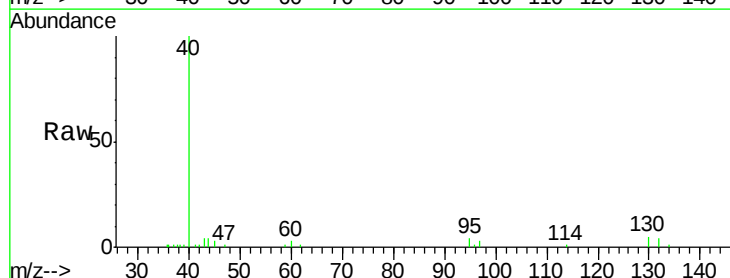
Acq: 24 Mar 2019 6:10

Tgt Ion:130 Resp: 2454

Ion Ratio Lower Upper

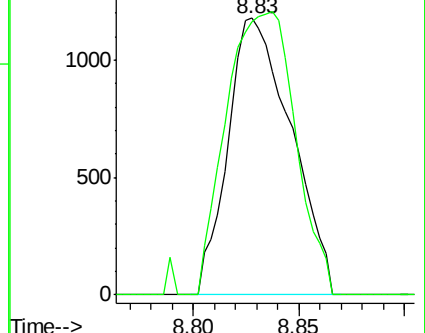
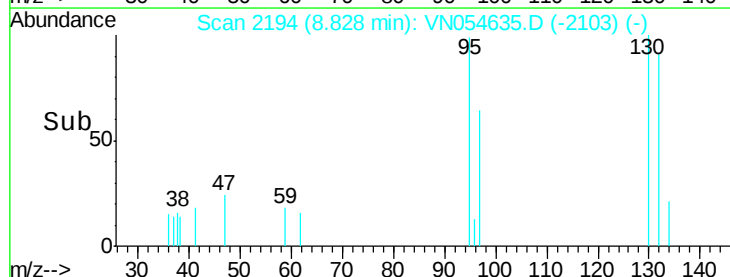
130 100

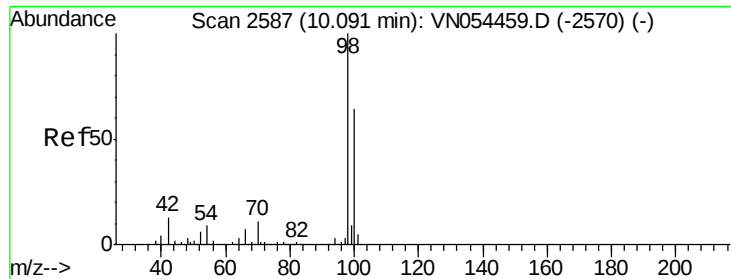
95 98.7 0.0 185.2



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): V

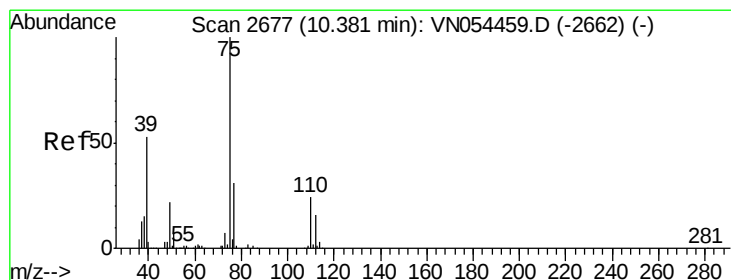
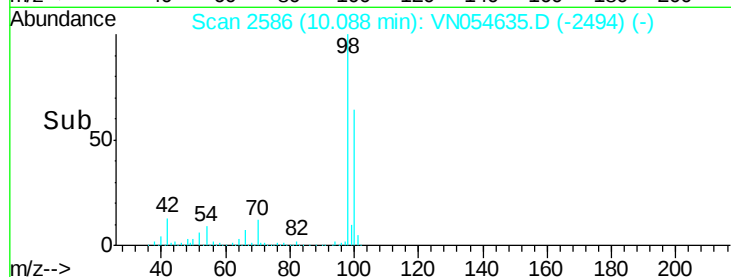
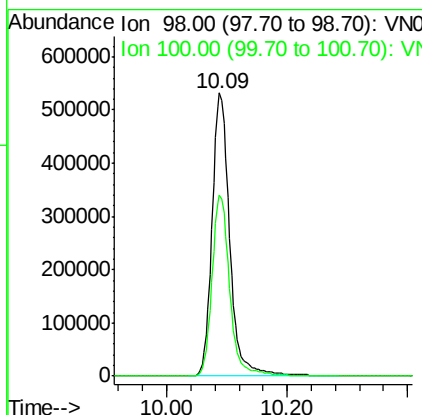
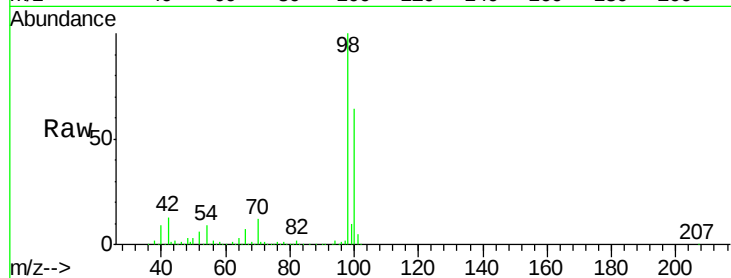




#50  
Toluene-d8  
Concen: 50.159 ug/l  
RT: 10.09 min Scan# 2586  
Delta R.T. -0.00 min  
Lab File: VN054635.D  
Acq: 24 Mar 2019 6:10

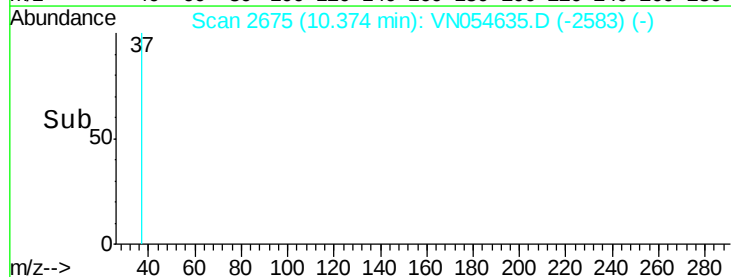
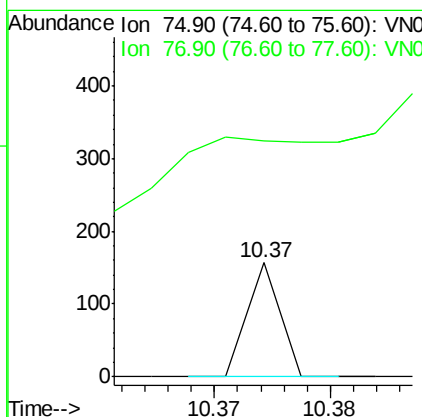
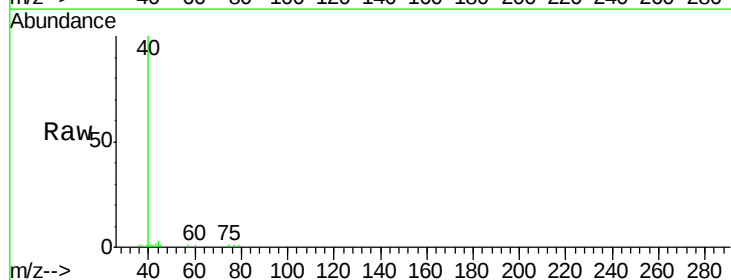
Instrument :  
MSVOA\_N  
ClientSampleId :  
WP022SB433-190319-(25-27)

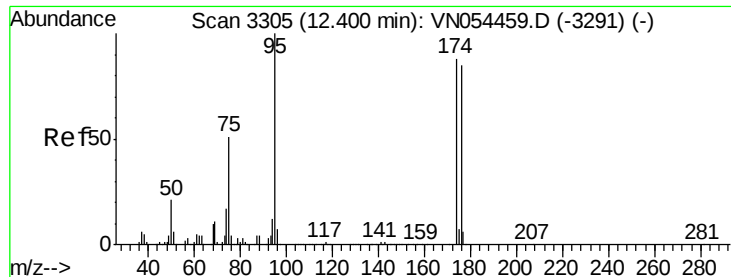
Tot Ion: 98 Resp: 1062035  
Ion Ratio Lower Upper  
98 100  
100 64.0 51.2 76.8



#53  
t-1,3-Dichloropropene  
Concen: 2.236 ug/l  
RT: 10.37 min Scan# 2675  
Delta R.T. -0.01 min  
Lab File: VN054635.D  
Acq: 24 Mar 2019 6:10

Tgt Ion: 75 Resp: 30  
Ion Ratio Lower Upper  
75 100  
77 10.8 25.8 38.8#





#62

4-Bromofluorobenzene

Concen: 48.332 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.00 min

Lab File: VN054635.D

Acq: 24 Mar 2019 6:10

Instrument :

MSVOA\_N

ClientSampleId :

WP022SB433-190319-(25-27)

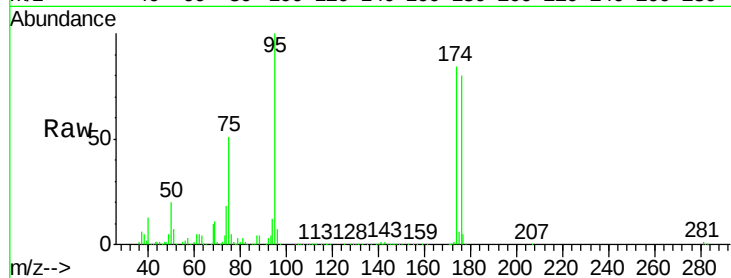
Tot Ion: 95 Resp: 348225

Ion Ratio Lower Upper

95 100

174 83.3 0.0 191.0

176 80.0 0.0 187.4

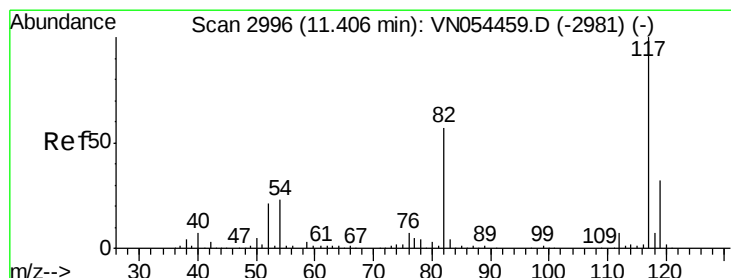
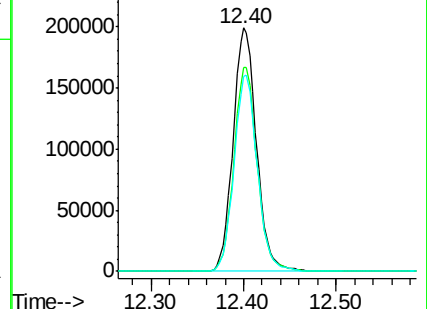
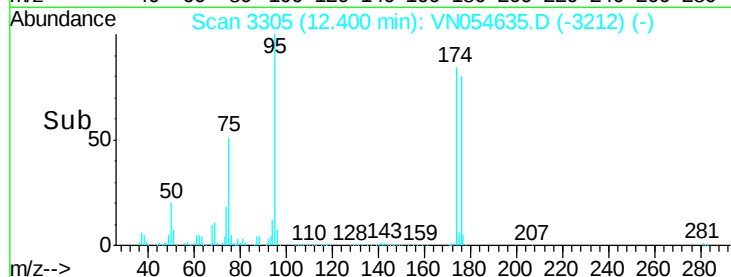


Abundance Ion 94.90 (94.60 to 95.60): VN054459.D (-3291) (-)

Ion 173.80 (173.50 to 174.50): VN054459.D (-3291) (-)

Ion 175.80 (175.50 to 176.50): VN054459.D (-3291) (-)

12.40



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. -0.00 min

Lab File: VN054635.D

Acq: 24 Mar 2019 6:10

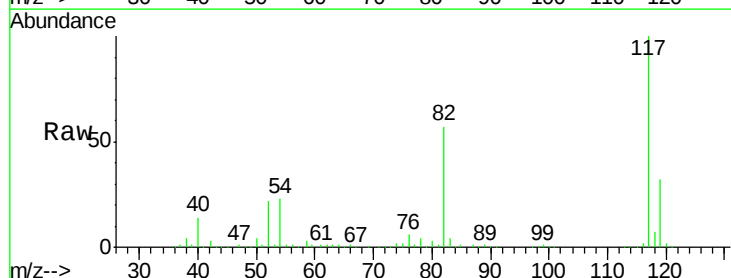
Tgt Ion: 117 Resp: 746363

Ion Ratio Lower Upper

117 100

82 56.9 40.0 60.0

119 32.3 25.8 38.6

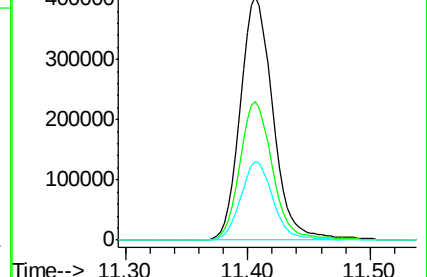
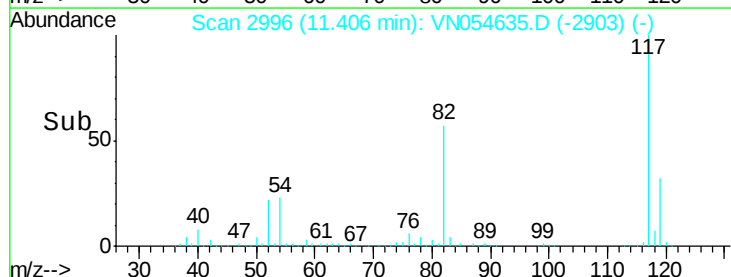


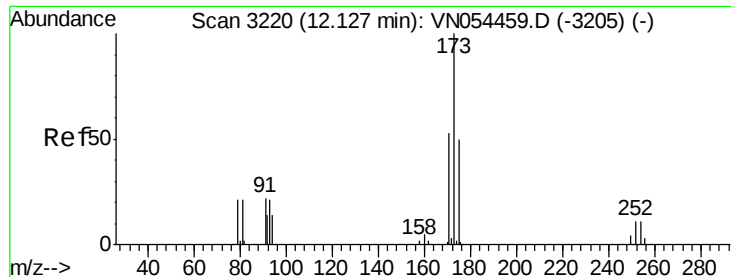
Abundance Ion 116.90 (116.60 to 117.60): VN054459.D (-2981) (-)

Ion 82.00 (81.70 to 82.70): VN054459.D (-2981) (-)

Ion 118.90 (118.60 to 119.60): VN054459.D (-2981) (-)

11.41





#71

Bromoform

Concen: 2.665 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. 0.27 min

Lab File: VN054635.D

Acq: 24 Mar 2019 6:10

Instrument :

MSVOA\_N

ClientSampleId :

WP022SB433-190319-(25-27)

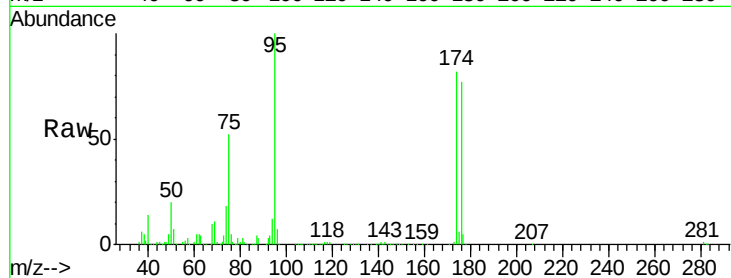
Tot Ion:173 Resp: 1747

Ion Ratio Lower Upper

173 100

175 1115.2 24.4 73.2#

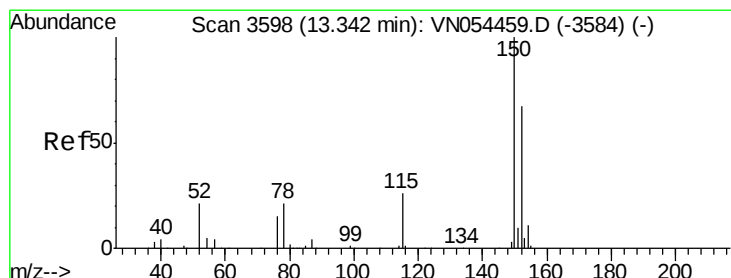
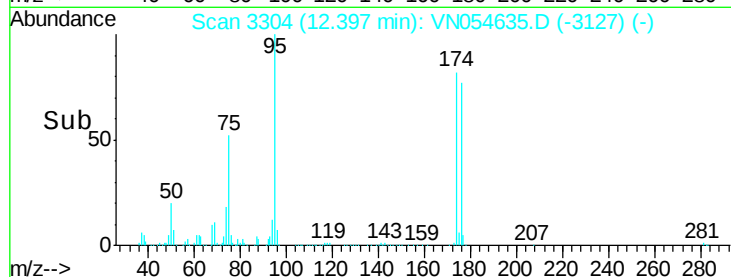
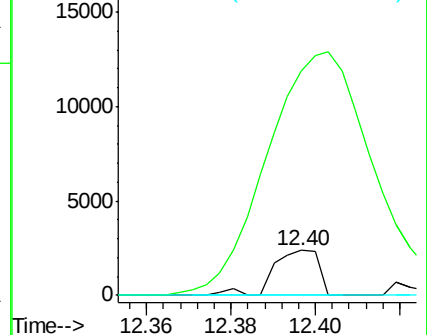
254 0.0 0.1 0.1#



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: VN054635.D

Acq: 24 Mar 2019 6:10

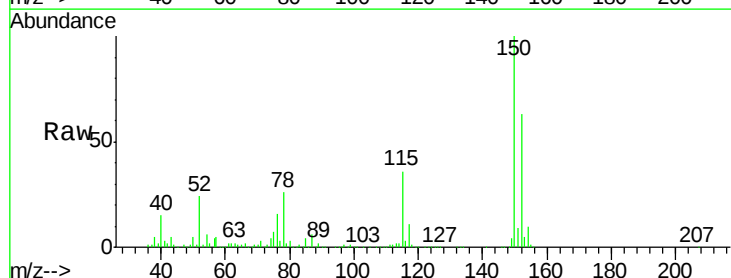
Tgt Ion:152 Resp: 320595

Ion Ratio Lower Upper

152 100

115 56.6 27.2 81.6

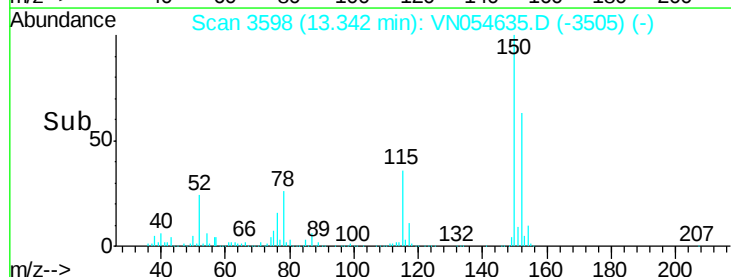
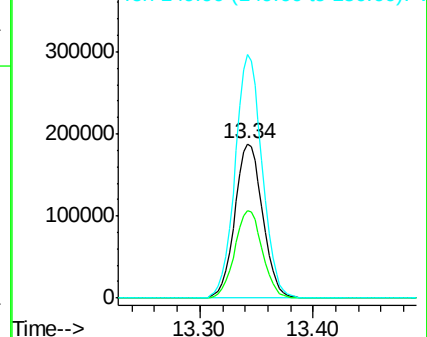
150 153.8 0.0 349.2

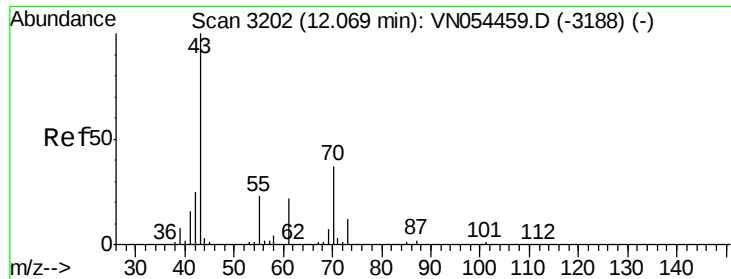


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-amyl acetate

Concen: 2.051 ug/l

RT: 12.04 min Scan# 3194

Delta R.T. -0.03 min

Lab File: VN054635.D

Acq: 24 Mar 2019 6:10

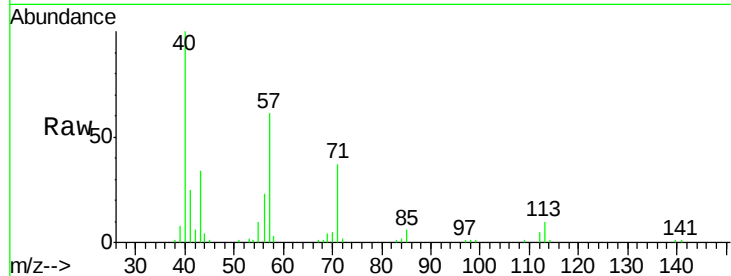
Instrument :

MSVOA\_N

ClientSampleId :

WP022SB433-190319-(25-27)

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 43    | Resp: | 15239 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 70       | 14.9  | 35.4  | 53.0# |
| 55       | 28.2  | 19.8  | 29.6  |
| 61       | 0.0   | 19.8  | 29.6# |

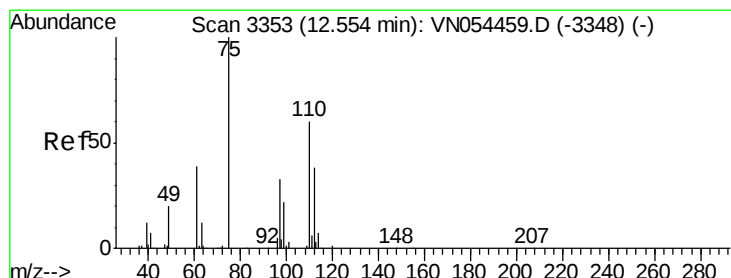
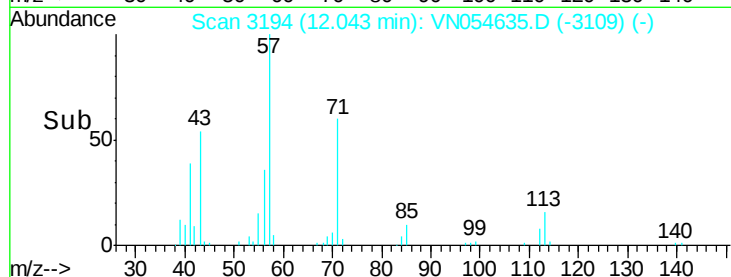
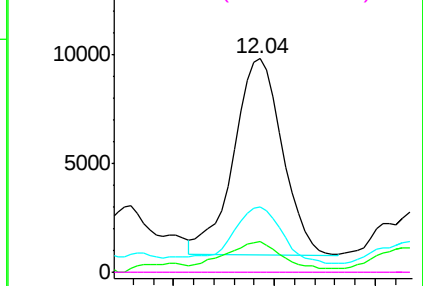


Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 70.00 (69.70 to 70.70): VN0

Ion 55.00 (54.70 to 55.70): VN0

Ion 61.00 (60.70 to 61.70): VN0



#76

1,2,3-Trichloropropane

Concen: 34.818 ug/l

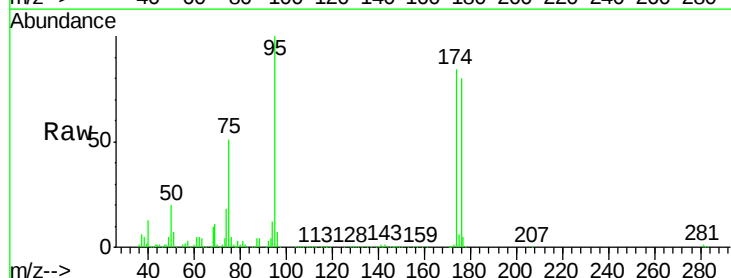
RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN054635.D

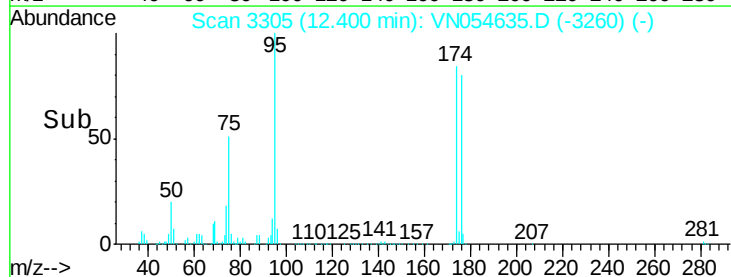
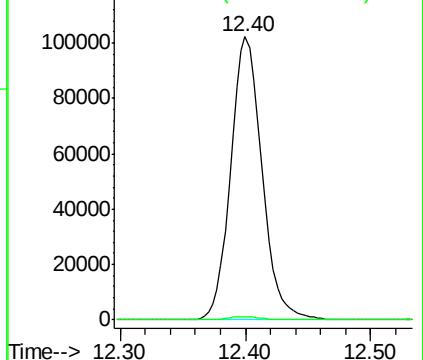
Acq: 24 Mar 2019 6:10

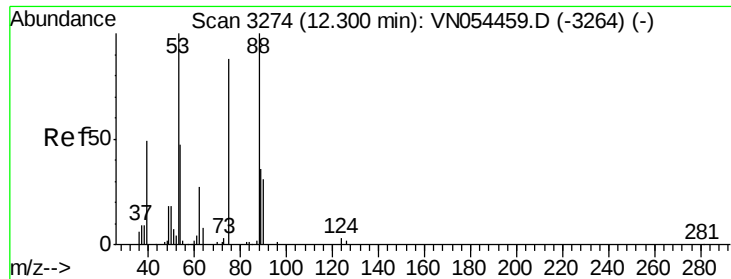
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 75    | Resp: | 177133 |
| Ion      | Ratio | Lower | Upper  |
| 75       | 100   |       |        |
| 77       | 1.2   | 0.0   | 0.0#   |



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0





#81

trans-1,4-Dichloro-2-butene

Concen: 115.589 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN054635.D

Acq: 24 Mar 2019 6:10

Instrument :

MSVOA\_N

ClientSampleId :

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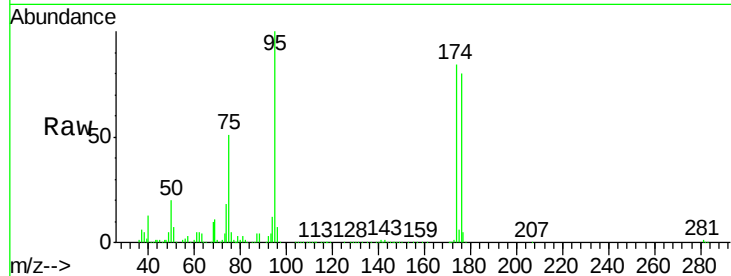
Tot Ion: 75 Resp: 177133

Ion Ratio Lower Upper

75 100

53 0.0 76.2 114.2#

89 0.0 39.2 58.8#



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

