

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN101419\  
 Data File : VN058749.D  
 Acq On : 14 Oct 2019 15:04  
 Operator : JC/SP  
 Sample : K5111-07 0.2PPB LOD  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Oct 15 03:10:22 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N101319W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Oct 12 00:00:30 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.65  | 168  | 378548   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 636759   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 570059   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 234641   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.01   | 65  | 321668   | 60.70 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 121.40% |      |
| 35) Dibromofluoromethane  | 7.57   | 113 | 227411   | 57.82 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 115.64% |      |
| 50) Toluene-d8            | 10.08  | 98  | 839503   | 53.38 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.76% |      |
| 62) 4-Bromofluorobenzene  | 12.41  | 95  | 283724   | 47.66 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.32%  |      |

## Target Compounds

|                               |       |     |       |       |        | Qvalue |
|-------------------------------|-------|-----|-------|-------|--------|--------|
| 3) Chloromethane              | 2.04  | 50  | 1776  | 0.317 | ug/l # | 64     |
| 4) Vinyl Chloride             | 2.17  | 62  | 1485  | 0.266 | ug/l # | 64     |
| 5) Bromomethane               | 2.55  | 94  | 686   | 0.202 | ug/l   | 95     |
| 6) Chloroethane               | 2.68  | 64  | 842   | 0.244 | ug/l # | 75     |
| 7) Trichlorofluoromethane     | 3.00  | 101 | 1582  | 0.237 | ug/l # | 79     |
| 11) Tert butyl alcohol        | 4.76  | 59  | 520   | 0.606 | ug/l # | 72     |
| 13) Acrolein                  | 3.59  | 56  | 544   | 0.788 | ug/l # | 48     |
| 14) Allyl chloride            | 4.31  | 41  | 1949  | 0.266 | ug/l # | 65     |
| 15) Acrylonitrile             | 4.98  | 53  | 1346  | 0.622 | ug/l # | 91     |
| 16) Acetone                   | 3.81  | 43  | 3126  | 1.425 | ug/l   | 99     |
| 17) Carbon Disulfide          | 4.03  | 76  | 3258  | 0.280 | ug/l # | 89     |
| 20) Methylene Chloride        | 4.53  | 84  | 1557  | 0.340 | ug/l # | 62     |
| 23) Vinyl Acetate             | 5.89  | 43  | 10165 | 0.883 | ug/l # | 83     |
| 25) 2-Butanone                | 6.82  | 43  | 2702  | 0.852 | ug/l # | 50     |
| 26) 2,2-Dichloropropane       | 6.80  | 77  | 2256  | 0.304 | ug/l # | 66     |
| 29) Tetrahydrofuran           | 7.19  | 42  | 1976  | 0.964 | ug/l # | 54     |
| 30) Chloroform                | 7.36  | 83  | 2685  | 0.329 | ug/l # | 78     |
| 31) Cyclohexane               | 7.64  | 56  | 9839  | 1.266 | ug/l # | 1      |
| 36) 1,1-Dichloropropene       | 7.78  | 75  | 1415  | 0.220 | ug/l # | 59     |
| 38) Carbon Tetrachloride      | 7.65  | 117 | 37372 | 5.956 | ug/l # | 18     |
| 40) Benzene                   | 8.03  | 78  | 4087  | 0.221 | ug/l # | 88     |
| 42) 1,2-Dichloroethane        | 8.12  | 62  | 2154  | 0.303 | ug/l # | 78     |
| 43) Isopropyl Acetate         | 8.16  | 43  | 2243  | 0.202 | ug/l # | 60     |
| 47) Bromodichloromethane      | 9.39  | 83  | 1442  | 0.226 | ug/l # | 68     |
| 49) 1,4-Dioxane               | 9.19  | 88  | 107   | 1.376 | ug/l # | 22     |
| 51) 4-Methyl-2-Pentanone      | 9.98  | 43  | 6056  | 0.972 | ug/l   | 92     |
| 57) 1,3-Dichloropropane       | 10.71 | 76  | 1603  | 0.203 | ug/l # | 80     |
| 58) 2-Chloroethyl Vinyl ether | 9.69  | 63  | 2334  | 0.716 | ug/l   | 96     |
| 59) 2-Hexanone                | 10.75 | 43  | 4812  | 1.000 | ug/l   | 85     |
| 64) Tetrachloroethene         | 10.62 | 164 | 911   | 0.228 | ug/l # | 87     |
| 65) Chlorobenzene             | 11.43 | 112 | 2368  | 0.205 | ug/l # | 88     |
| 67) Ethyl Benzene             | 11.51 | 91  | 4542  | 0.220 | ug/l   | 92     |
| 68) m/p-Xylenes               | 11.62 | 106 | 2551  | 0.329 | ug/l   | 88     |
| 74) N-amyl acetate            | 12.08 | 43  | 1979  | 0.259 | ug/l # | 76     |

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 Quant Title : SW846 8260  
 QLast Update : Sat Oct 12 00:00:30 2019  
 Response via : Initial Calibration

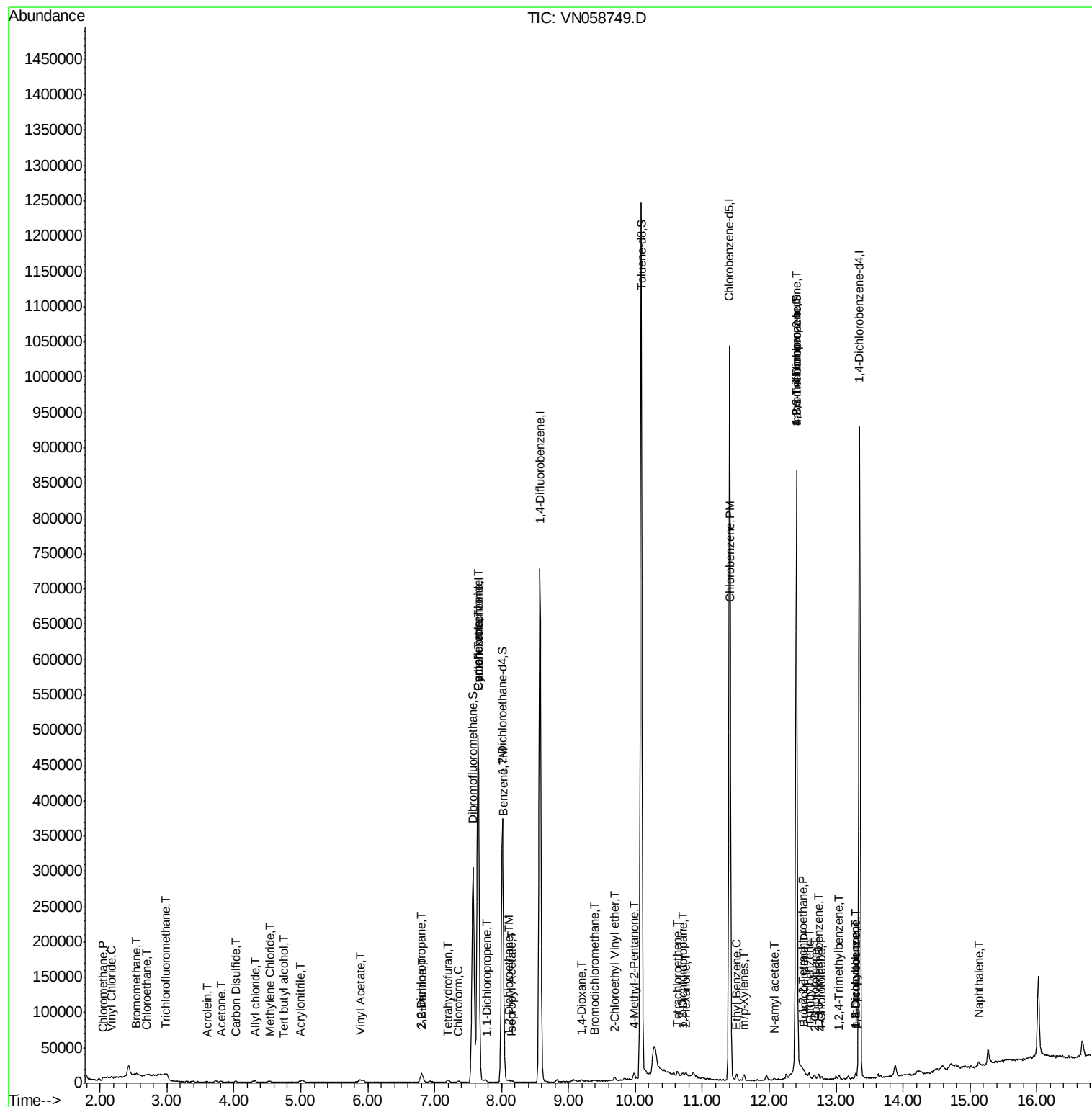
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 75) 1,1,2,2-Tetrachloroethane  | 12.51 | 83   | 1483     | 0.265  | ug/l # | 87       |
| 76) 1,2,3-Trichloropropane     | 12.41 | 75   | 152839   | 29.692 | ug/l # | 100      |
| 77) Bromobenzene               | 12.53 | 156  | 933      | 0.226  | ug/l   | 85       |
| 78) n-propylbenzene            | 12.59 | 91   | 4083     | 0.206  | ug/l   | 90       |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 2516     | 0.205  | ug/l   | 91       |
| 80) 1,3,5-Trimethylbenzene     | 12.74 | 105  | 3230     | 0.223  | ug/l   | 86       |
| 81) trans-1,4-Dichloro-2-buten | 12.41 | 75   | 152839   | 79.536 | ug/l # | 11       |
| 82) 4-Chlorotoluene            | 12.78 | 91   | 2677     | 0.212  | ug/l   | 95       |
| 84) 1,2,4-Trimethylbenzene     | 13.05 | 105  | 2959     | 0.205  | ug/l   | 87       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 3101     | 0.208  | ug/l   | 94       |
| 87) 1,3-Dichlorobenzene        | 13.29 | 146  | 1553     | 0.204  | ug/l   | 83       |
| 88) 1,4-Dichlorobenzene        | 13.29 | 146  | 1553     | 0.200  | ug/l   | 84       |
| 95) Naphthalene                | 15.13 | 128  | 2713     | 0.208  | ug/l # | 89       |

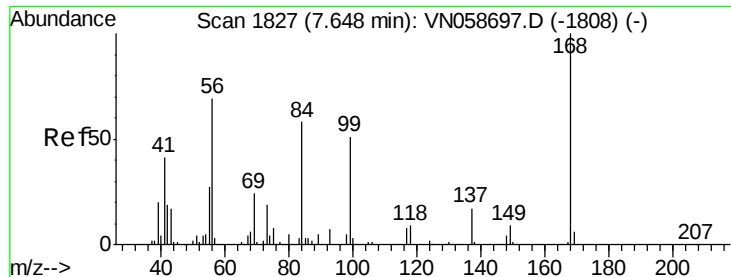
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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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: VN058749.D

Acq: 14 Oct 2019 15:04

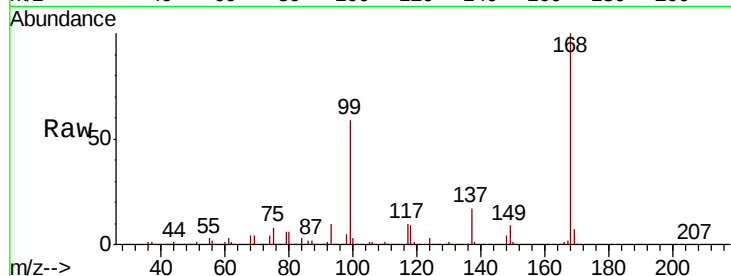
Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion:168 Resp: 378548

Ion Ratio Lower Upper

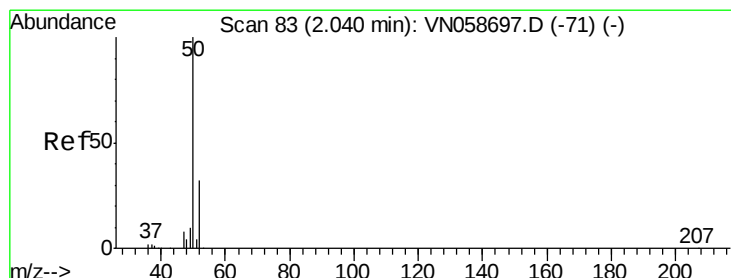
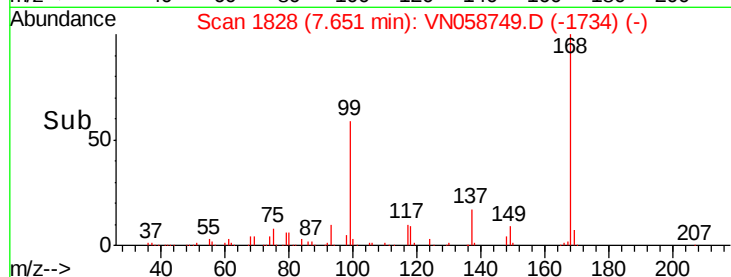
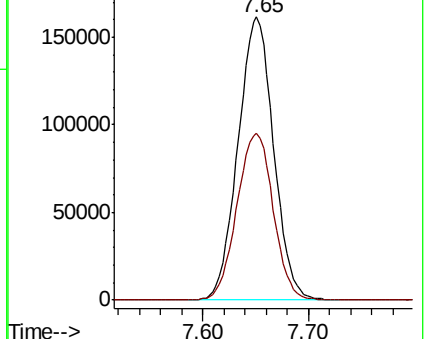
168 100

99 58.9 47.5 71.3



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO



#3

Chloromethane

Concen: 0.317 ug/l

RT: 2.04 min Scan# 84

Delta R.T. 0.00 min

Lab File: VN058749.D

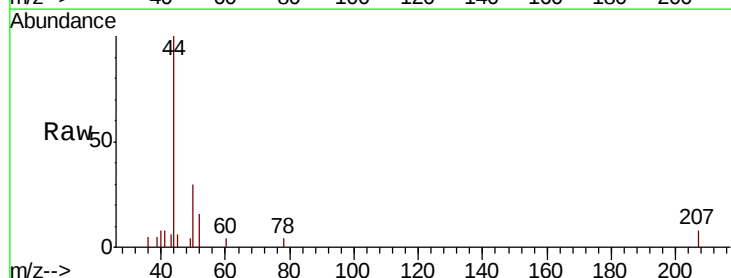
Acq: 14 Oct 2019 15:04

Tgt Ion: 50 Resp: 1776

Ion Ratio Lower Upper

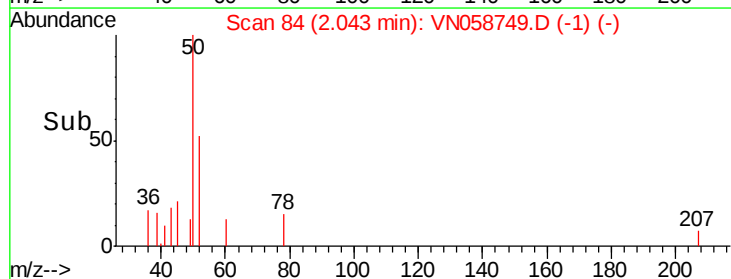
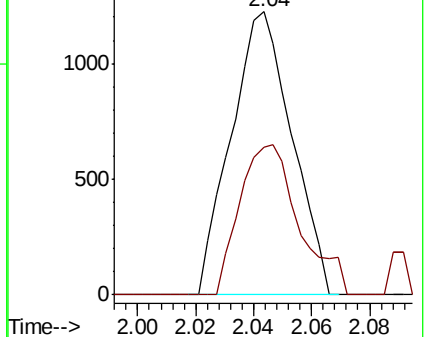
50 100

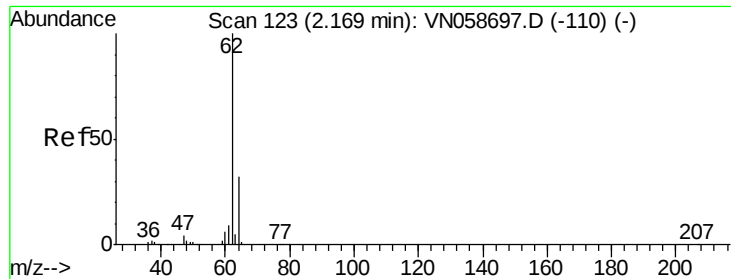
52 52.2 25.8 38.6#



Abundance Ion 49.90 (49.60 to 50.60): VNO

Ion 51.90 (51.60 to 52.60): VNO





#4

Vinyl Chloride

Concen: 0.266 ug/l

RT: 2.17 min Scan# 123

Delta R.T. -0.00 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

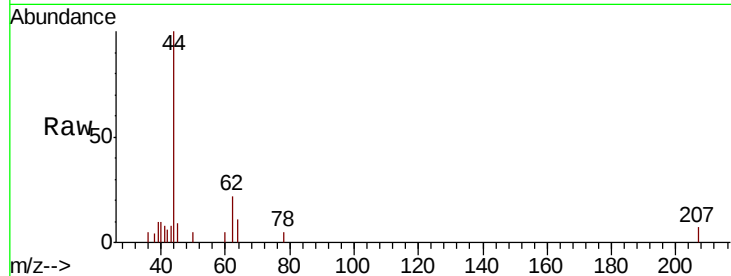
ClientSampled :

Tot Ion: 62 Resp: 1485

Ion Ratio Lower Upper

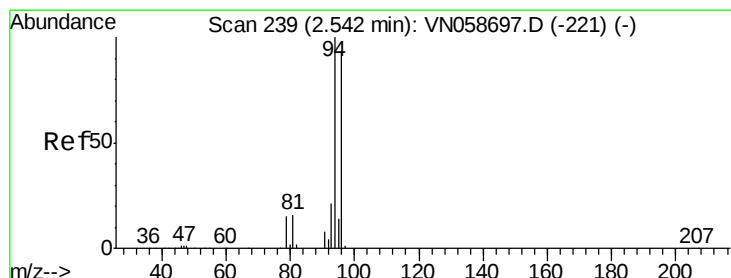
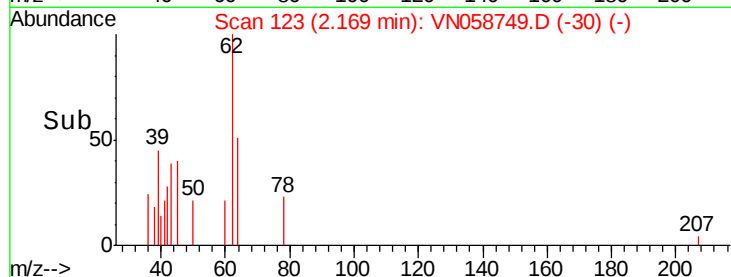
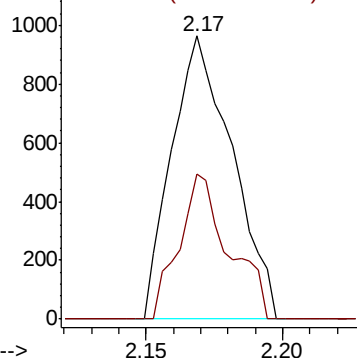
62 100

64 51.3 25.3 37.9#



Abundance Ion 61.90 (61.60 to 62.60): VNO

Ion 63.90 (63.60 to 64.60): VNO



#5

Bromomethane

Concen: 0.202 ug/l

RT: 2.55 min Scan# 241

Delta R.T. 0.01 min

Lab File: VN058749.D

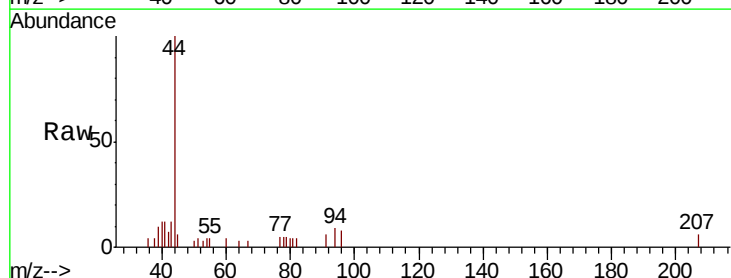
Acq: 14 Oct 2019 15:04

Tgt Ion: 94 Resp: 686

Ion Ratio Lower Upper

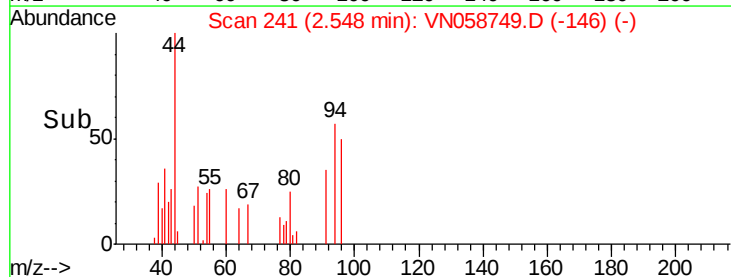
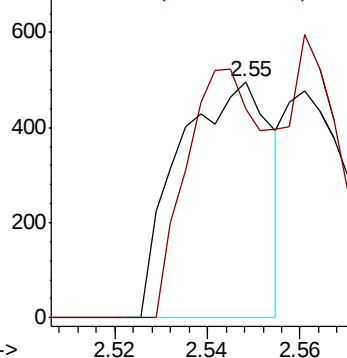
94 100

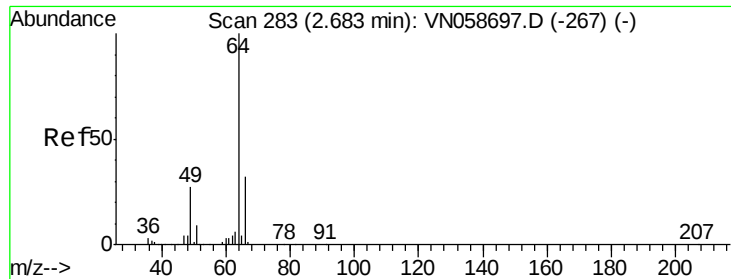
96 88.3 74.5 111.7



Abundance Ion 93.90 (93.60 to 94.60): VNO

Ion 95.90 (95.60 to 96.60): VNO





#6

Chloroethane

Concen: 0.244 ug/l

RT: 2.68 min Scan# 283

Delta R.T. -0.00 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

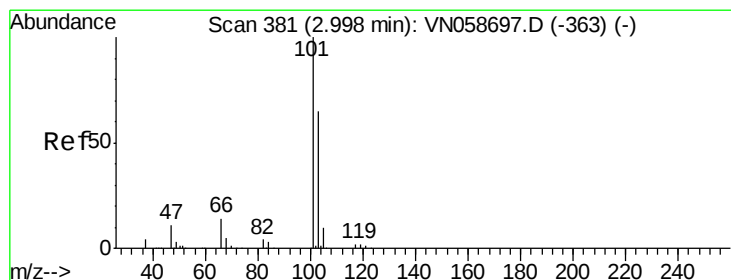
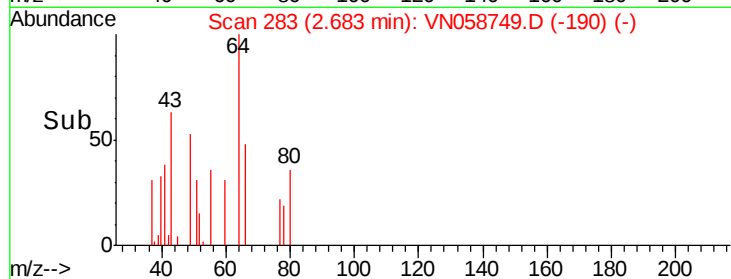
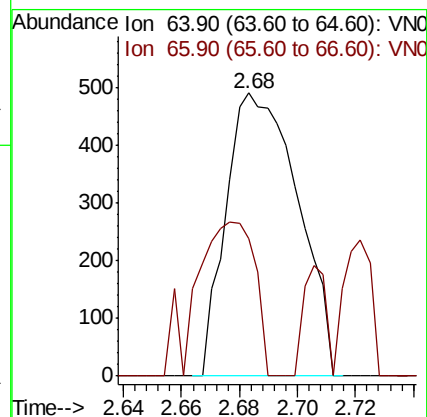
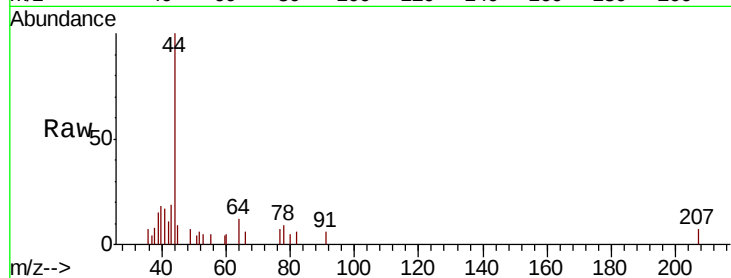
ClientSampleId :

Tot Ion: 64 Resp: 842

Ion Ratio Lower Upper

64 100

66 17.7 25.4 38.2#



#7

Trichlorofluoromethane

Concen: 0.237 ug/l

RT: 3.00 min Scan# 380

Delta R.T. -0.00 min

Lab File: VN058749.D

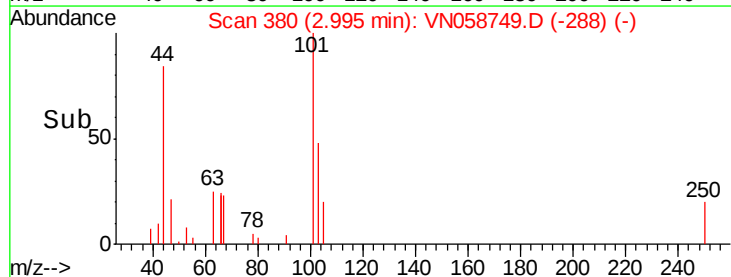
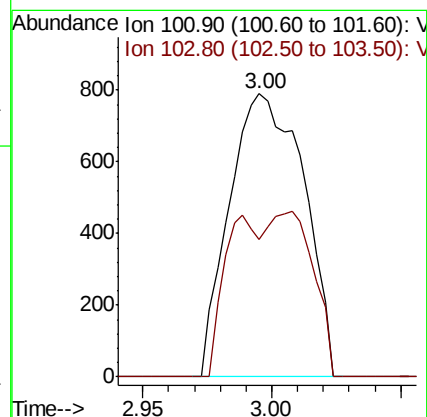
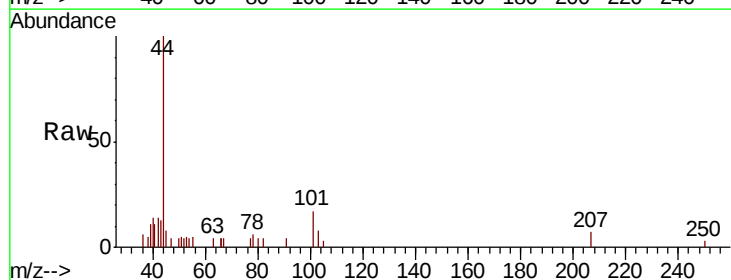
Acq: 14 Oct 2019 15:04

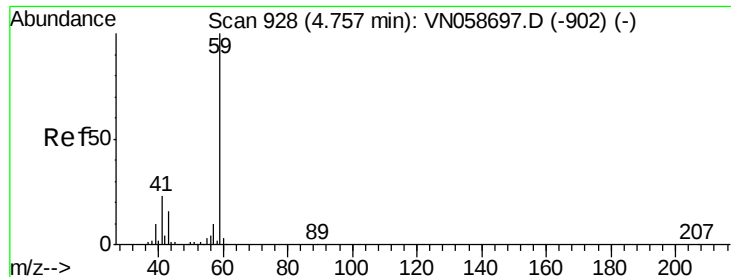
Tgt Ion: 101 Resp: 1582

Ion Ratio Lower Upper

101 100

103 48.5 51.8 77.6#





#11

Tert butyl alcohol

Concen: 0.606 ug/l

RT: 4.76 min Scan# 928

Delta R.T. -0.00 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

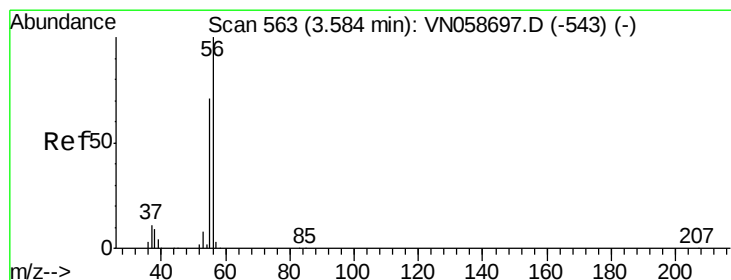
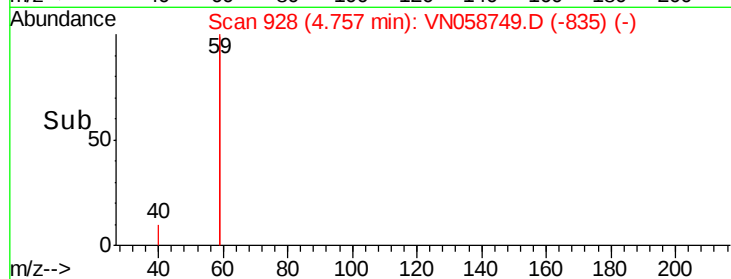
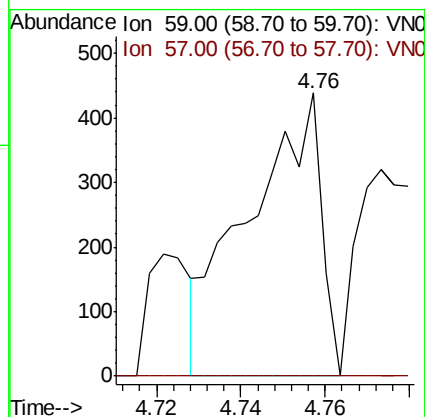
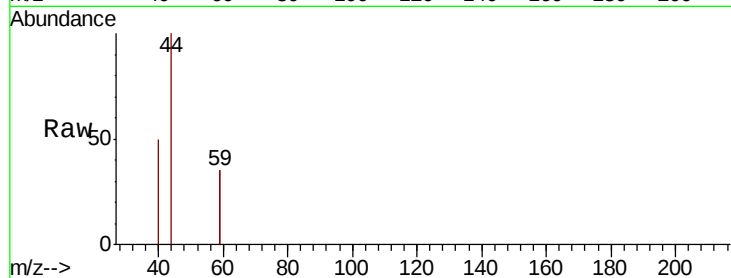
ClientSampleId :

Tot Ion: 59 Resp: 520

Ion Ratio Lower Upper

59 100

57 0.0 8.4 12.6#



#13

Acrolein

Concen: 0.788 ug/l

RT: 3.59 min Scan# 564

Delta R.T. 0.00 min

Lab File: VN058749.D

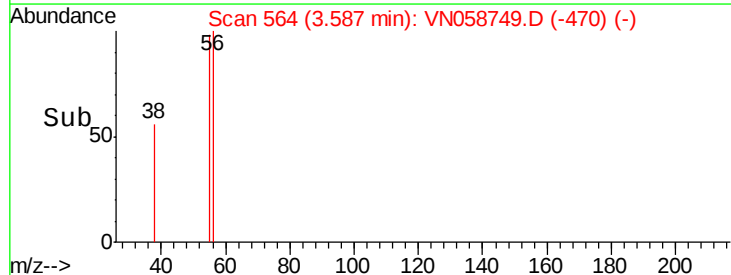
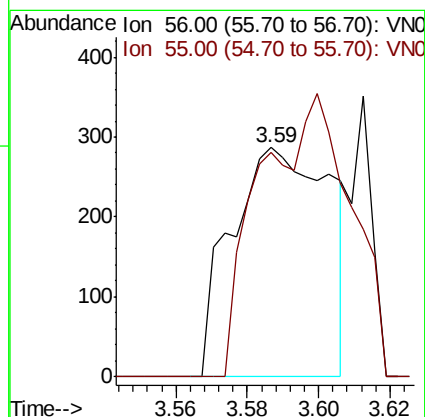
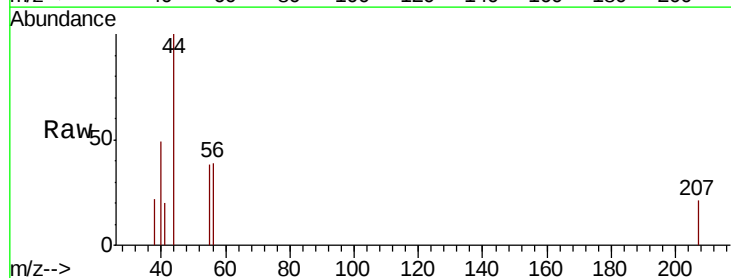
Acq: 14 Oct 2019 15:04

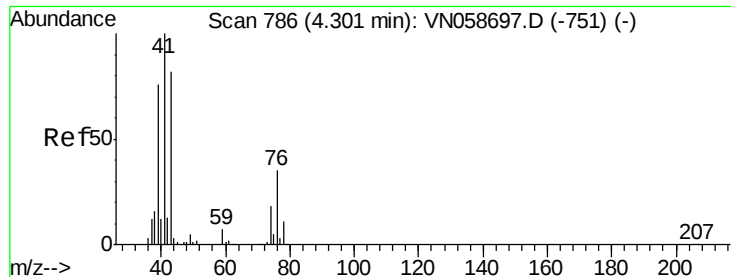
Tgt Ion: 56 Resp: 544

Ion Ratio Lower Upper

56 100

55 114.0 56.7 85.1#





#14

Allvl chloride

Concen: 0.266 ug/l

RT: 4.31 min Scan# 788

Delta R.T. 0.01 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

ClientSampleId :

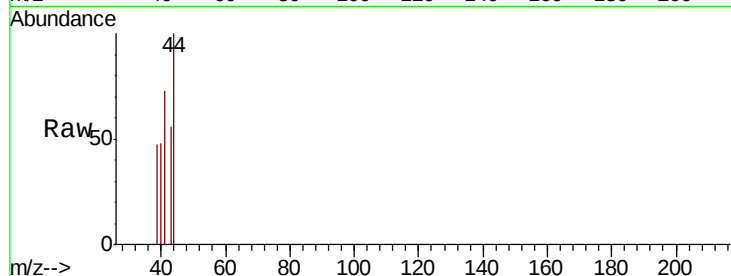
Tot Ion: 41 Resp: 1949

Ion Ratio Lower Upper

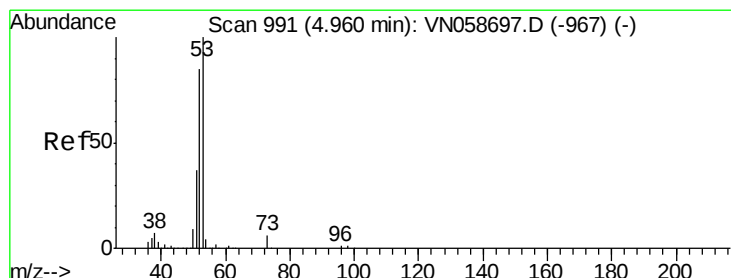
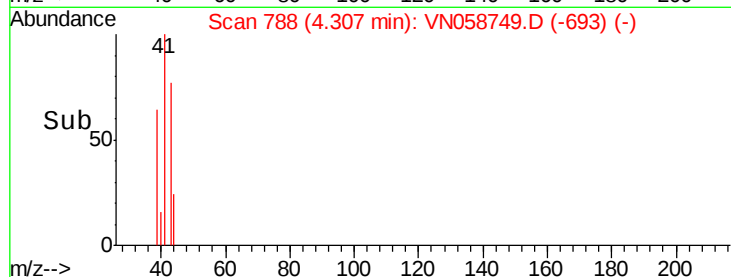
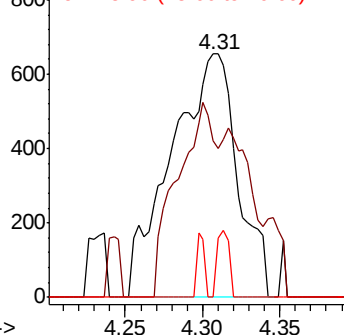
41 100

39 47.2 57.2 85.8#

76 4.9 25.0 37.6#



Abundance Ion 41.00 (40.70 to 41.70): VN0  
Ion 39.00 (38.70 to 39.70): VN0  
Ion 75.90 (75.60 to 76.60): VN0



#15

Acrylonitrile

Concen: 0.622 ug/l

RT: 4.98 min Scan# 998

Delta R.T. 0.02 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

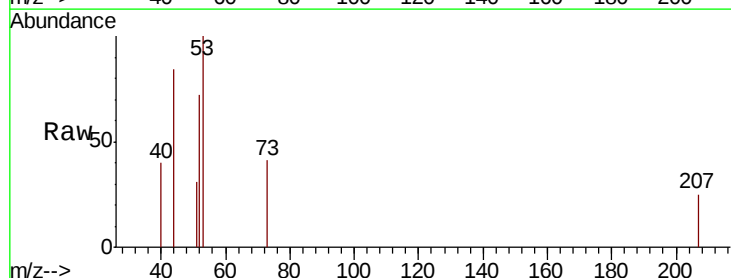
Tgt Ion: 53 Resp: 1346

Ion Ratio Lower Upper

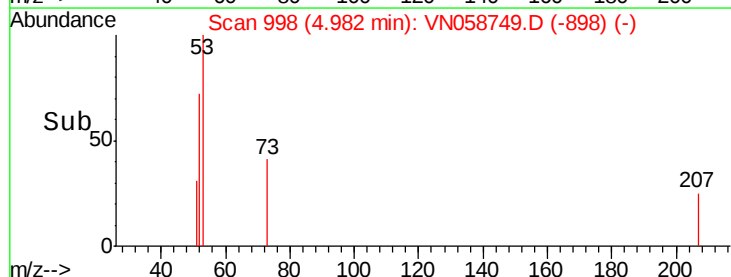
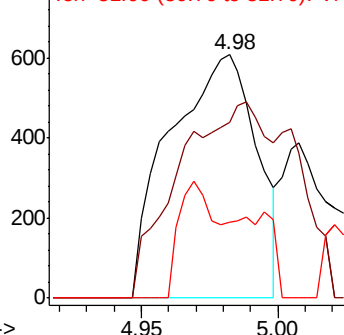
53 100

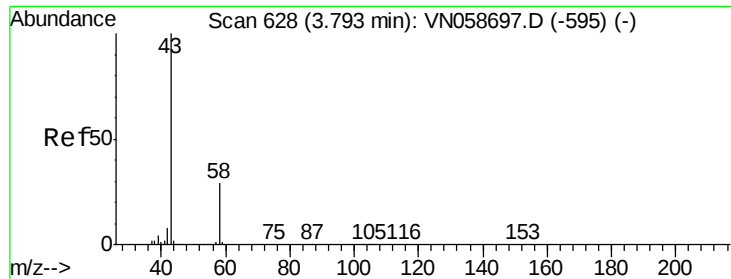
52 82.5 66.2 99.2

51 19.5 29.4 44.2#



Abundance Ion 53.00 (52.70 to 53.70): VN0  
Ion 52.00 (51.70 to 52.70): VN0  
Ion 51.00 (50.70 to 51.70): VN0





#16

Acetone

Concen: 1.425 ug/l

RT: 3.81 min Scan# 633

Delta R.T. 0.02 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

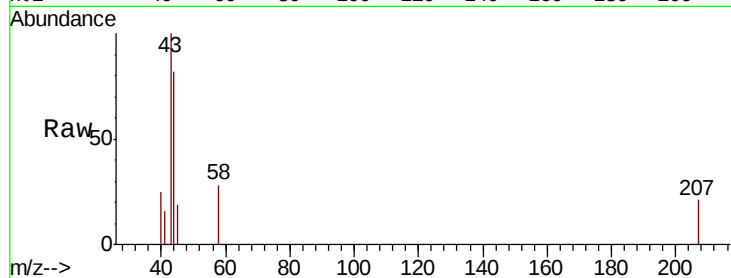
ClientSampled :

Tot Ion: 43 Resp: 3126

Ion Ratio Lower Upper

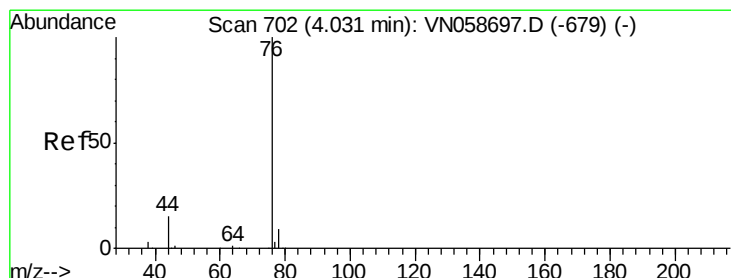
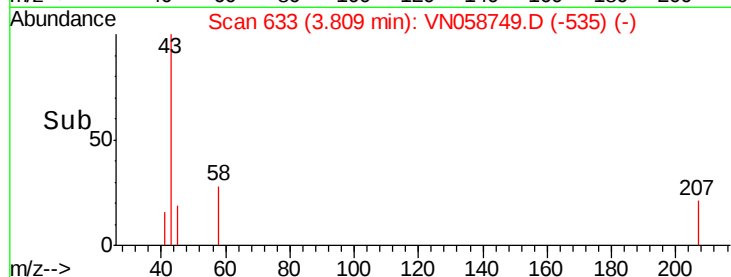
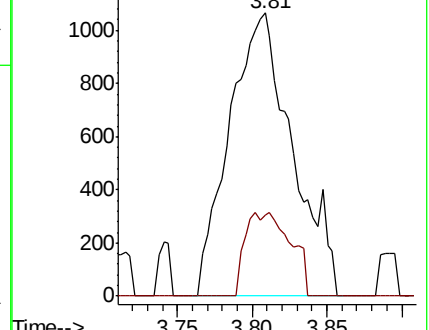
43 100

58 28.5 23.3 34.9



Abundance Ion 43.00 (42.70 to 43.70): VN058697.D (-595) (-)

Ion 58.00 (57.70 to 58.70): VN058697.D (-595) (-)



#17

Carbon Disulfide

Concen: 0.280 ug/l

RT: 4.03 min Scan# 702

Delta R.T. -0.00 min

Lab File: VN058749.D

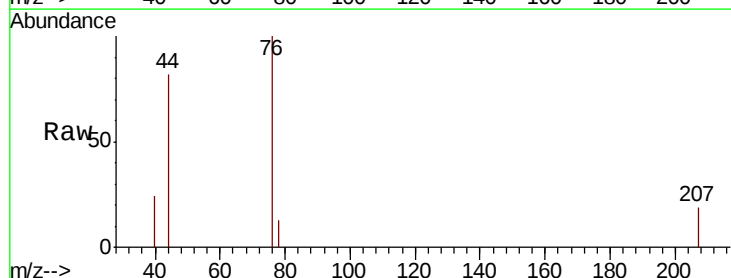
Acq: 14 Oct 2019 15:04

Tgt Ion: 76 Resp: 3258

Ion Ratio Lower Upper

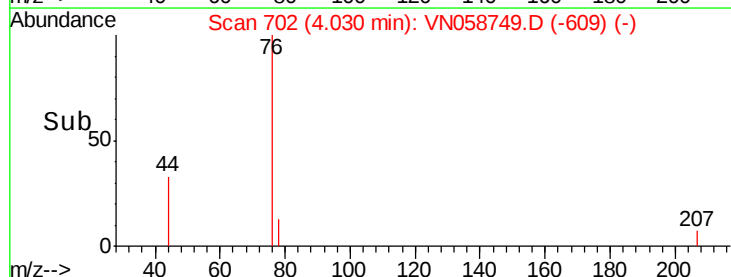
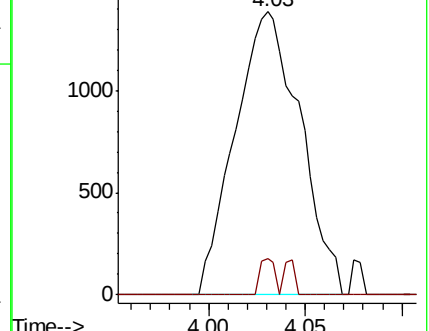
76 100

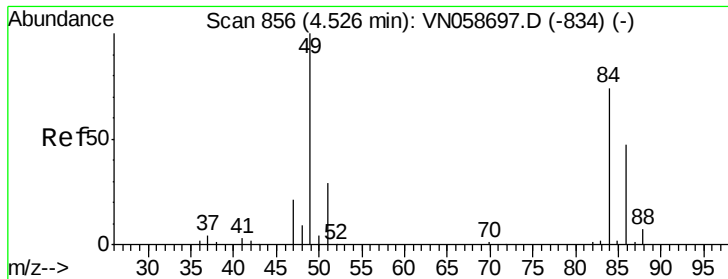
78 12.8 7.1 10.7#



Abundance Ion 75.90 (75.60 to 76.60): VN058697.D (-679) (-)

Ion 77.90 (77.60 to 78.60): VN058697.D (-679) (-)





#20

Methylene Chloride

Concen: 0.340 ug/l

RT: 4.53 min Scan# 858

Delta R.T. 0.01 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

ClientSampled :

Tot Ion: 84 Resp: 1557

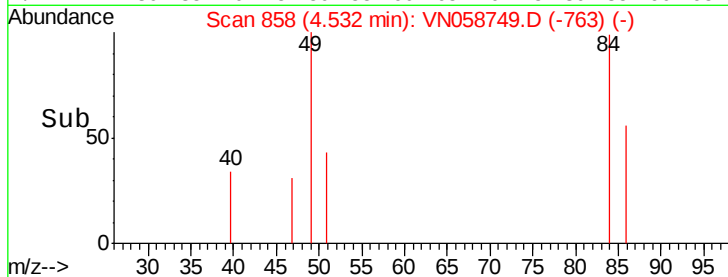
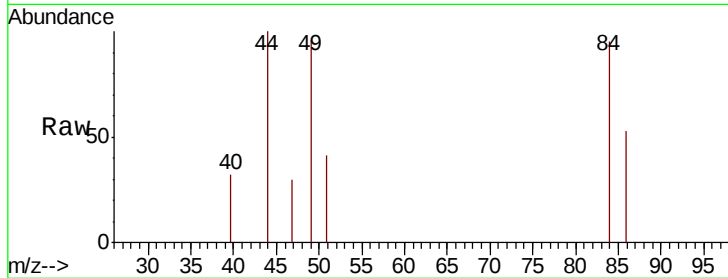
Ion Ratio Lower Upper

84 100

49 63.3 107.6 161.4#

51 43.6 31.4 47.0

86 56.2 50.3 75.5

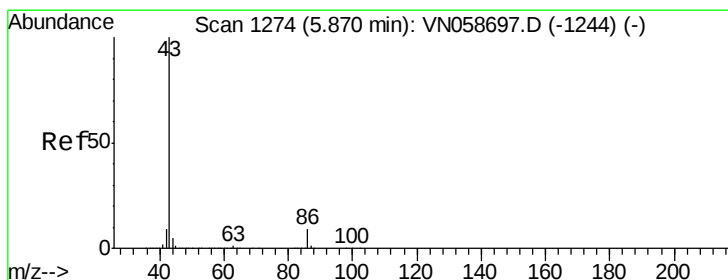
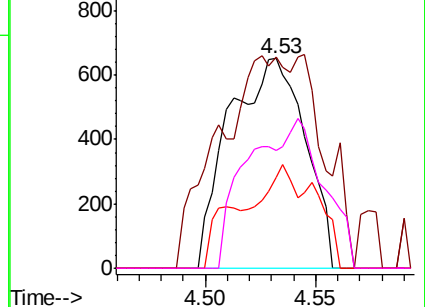


Abundance Ion 83.90 (83.60 to 84.60): VN0

Ion 48.90 (48.60 to 49.60): VN0

Ion 50.90 (50.60 to 51.60): VN0

Ion 85.90 (85.60 to 86.60): VN0



#23

Vinyl Acetate

Concen: 0.883 ug/l

RT: 5.89 min Scan# 1279

Delta R.T. 0.02 min

Lab File: VN058749.D

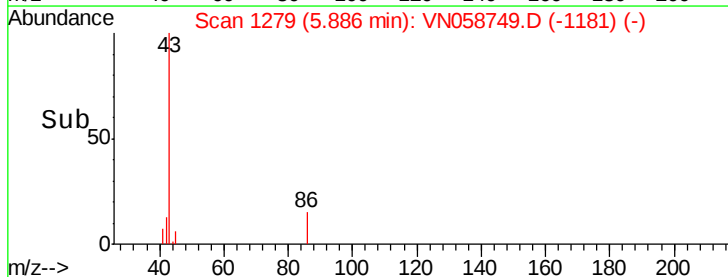
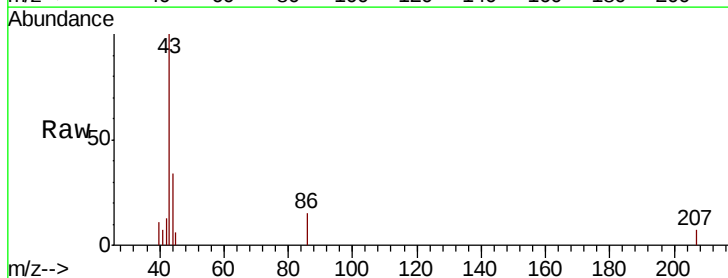
Acq: 14 Oct 2019 15:04

Tgt Ion: 43 Resp: 10165

Ion Ratio Lower Upper

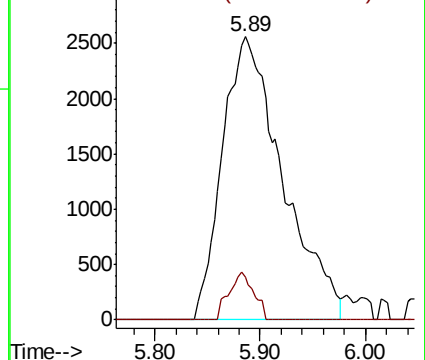
43 100

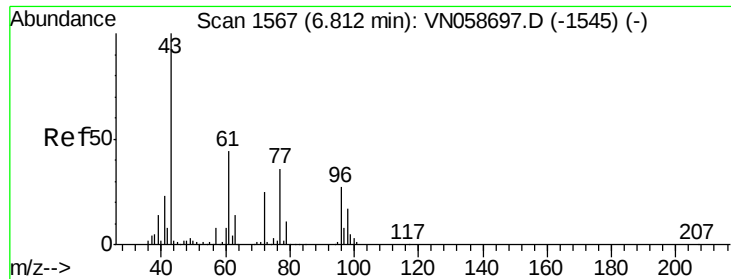
86 15.3 7.4 11.0#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 86.00 (85.70 to 86.70): VN0





#25

2-Butanone

Concen: 0.852 ug/l

RT: 6.82 min Scan# 1570

Delta R.T. 0.01 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

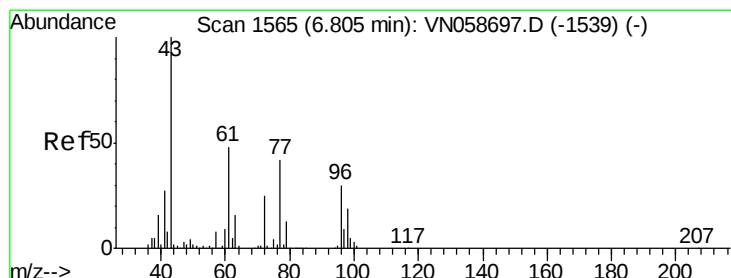
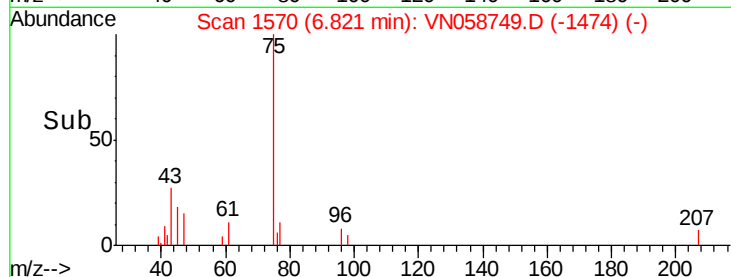
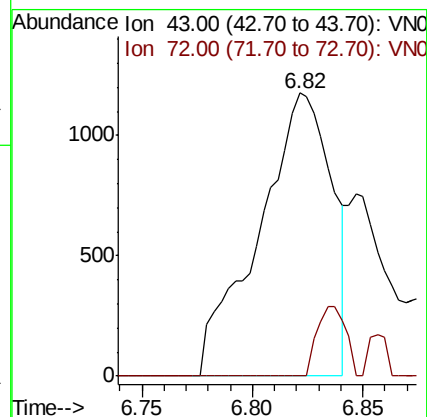
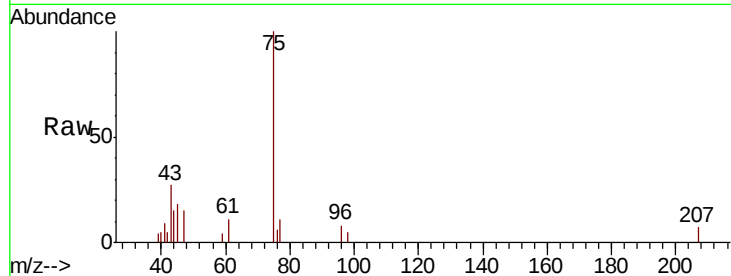
ClientSampled :

Tot Ion: 43 Resp: 2702

Ion Ratio Lower Upper

43 100

72 0.0 20.2 30.2#



#26

2,2-Dichloropropane

Concen: 0.304 ug/l

RT: 6.80 min Scan# 1564

Delta R.T. -0.00 min

Lab File: VN058749.D

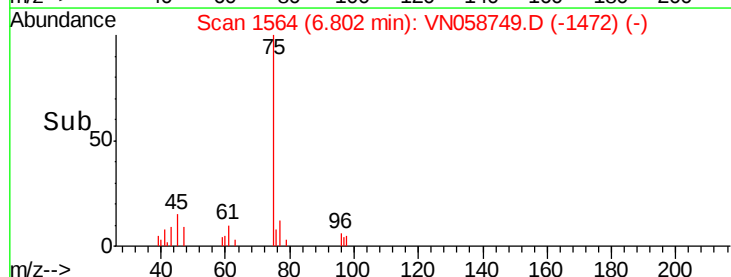
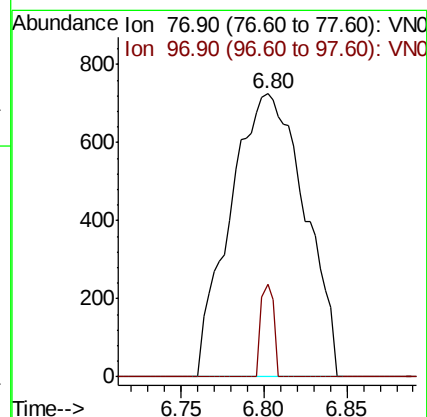
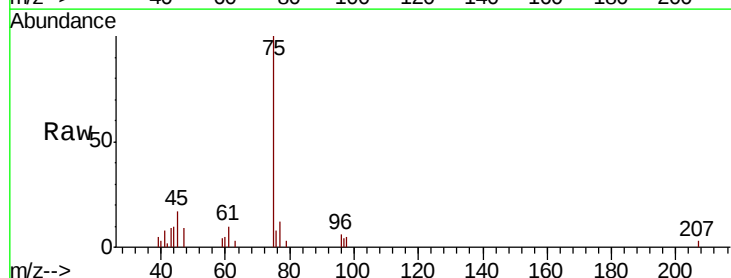
Acq: 14 Oct 2019 15:04

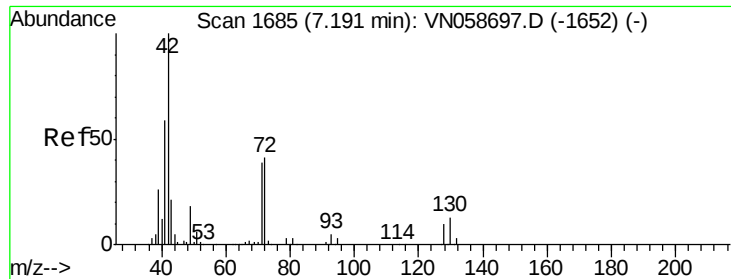
Tgt Ion: 77 Resp: 2256

Ion Ratio Lower Upper

77 100

97 5.5 10.7 31.9#

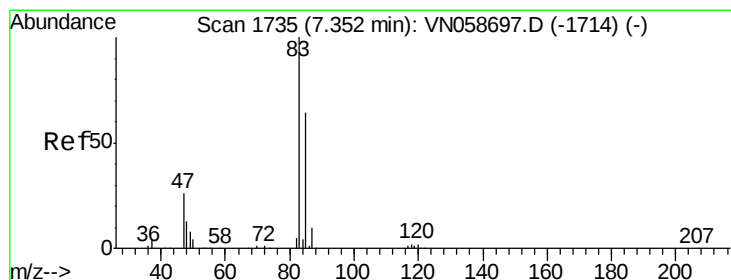
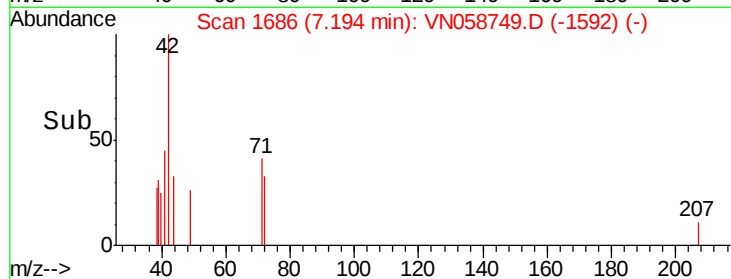
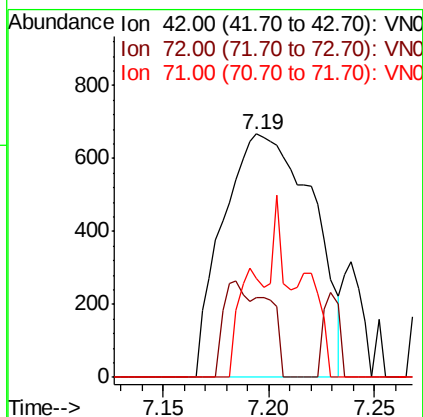
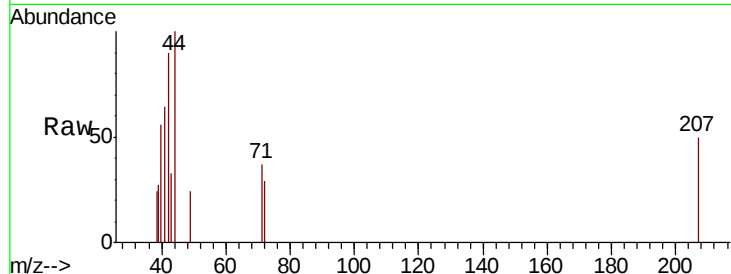




#29  
Tetrahydrofuran  
Concen: 0.964 ug/l  
RT: 7.19 min Scan# 1686  
Delta R.T. 0.00 min  
Lab File: VN058749.D  
Acq: 14 Oct 2019 15:04

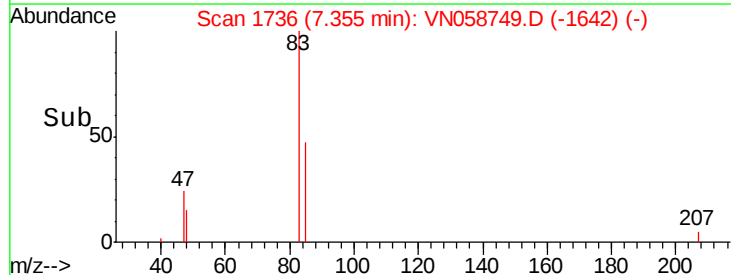
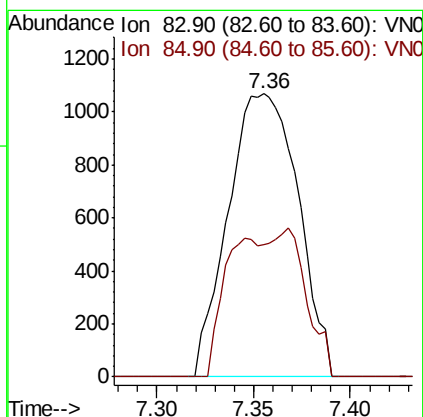
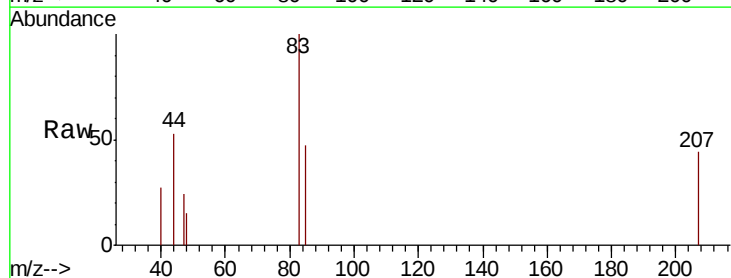
Instrument :  
MSVOA\_N  
ClientSampled :

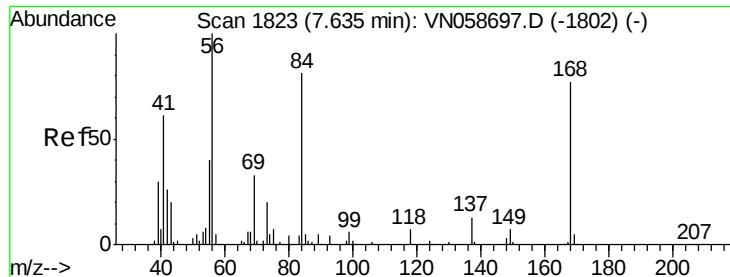
Tot Ion: 42 Resp: 1976  
Ion Ratio Lower Upper  
42 100  
72 11.1 32.8 49.2#  
71 12.3 31.1 46.7#



#30  
Chloroform  
Concen: 0.329 ug/l  
RT: 7.36 min Scan# 1736  
Delta R.T. 0.00 min  
Lab File: VN058749.D  
Acq: 14 Oct 2019 15:04

Tgt Ion: 83 Resp: 2685  
Ion Ratio Lower Upper  
83 100  
85 46.8 51.0 76.6#

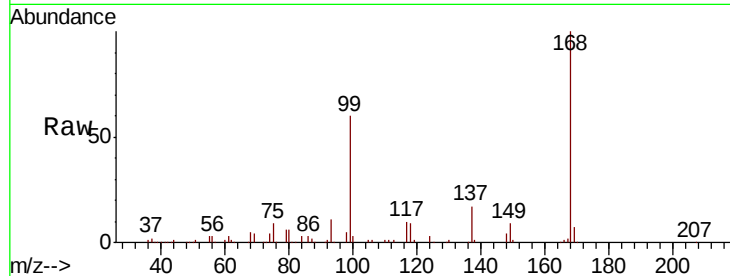




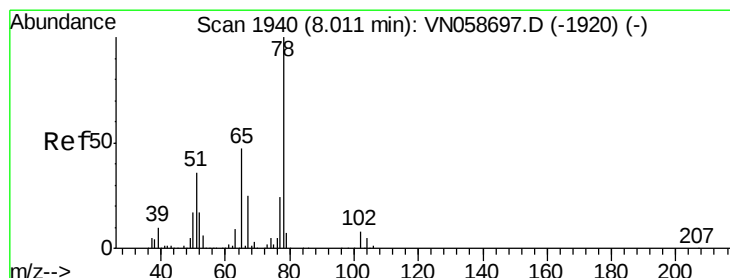
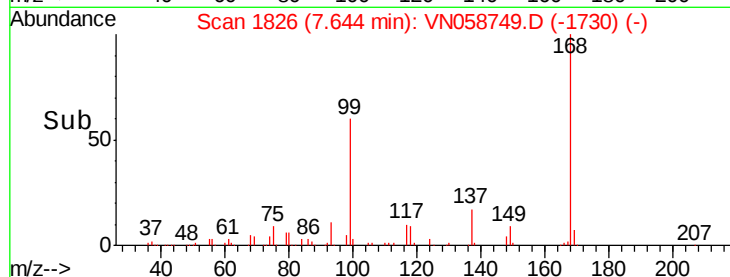
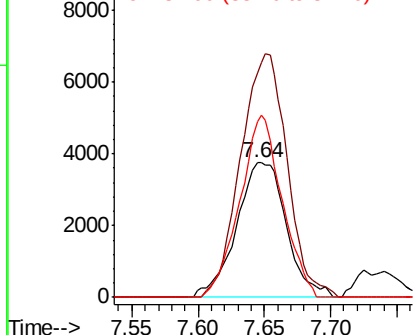
#31  
Cyclohexane  
Concen: 1.266 ug/l  
RT: 7.64 min Scan# 1826  
Delta R.T. 0.01 min  
Lab File: VN058749.D  
Acq: 14 Oct 2019 15:04

Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion: 56 Resp: 9839  
Ion Ratio Lower Upper  
56 100  
69 166.5 26.2 39.4#  
84 130.4 64.9 97.3#

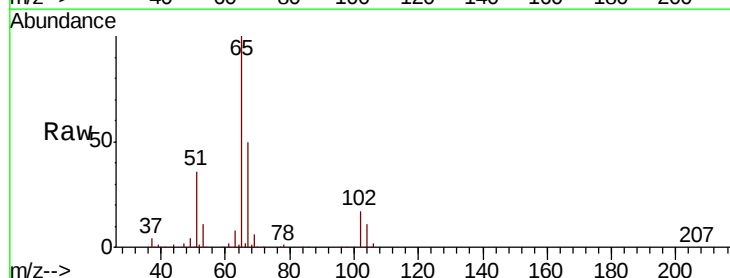


Abundance Ion 56.00 (55.70 to 56.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 84.00 (83.70 to 84.70): VN0

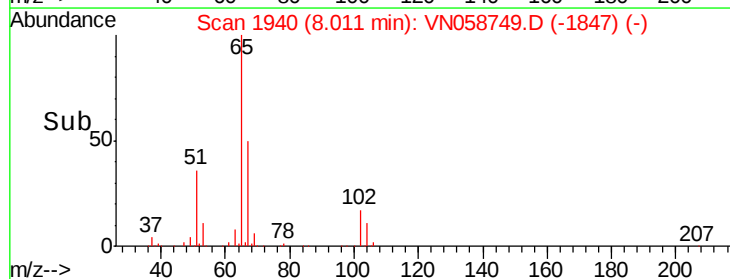
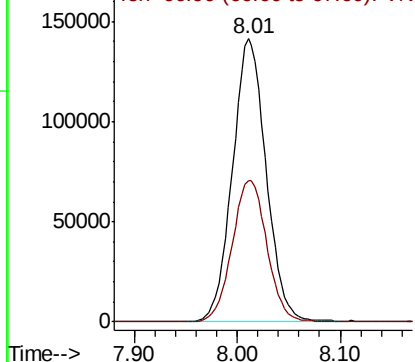


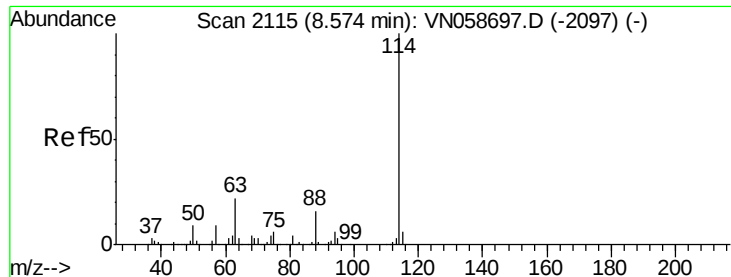
#33  
1,2-Dichloroethane-d4  
Concen: 60.697 ug/l  
RT: 8.01 min Scan# 1940  
Delta R.T. -0.00 min  
Lab File: VN058749.D  
Acq: 14 Oct 2019 15:04

Tgt Ion: 65 Resp: 321668  
Ion Ratio Lower Upper  
65 100  
67 51.6 0.0 103.8



Abundance Ion 64.90 (64.60 to 65.60): VN0  
Ion 66.90 (66.60 to 67.60): VN0

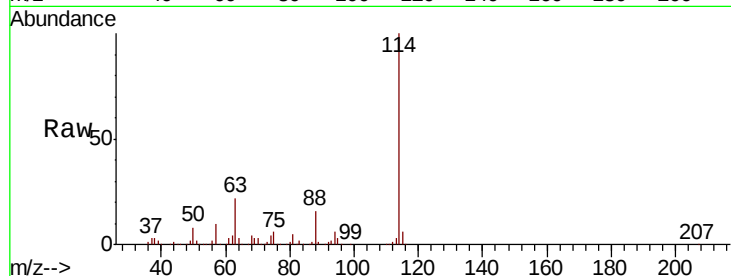




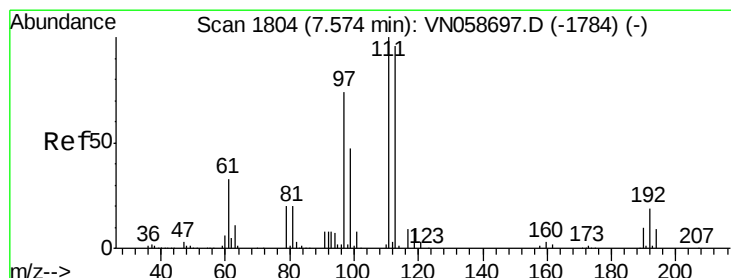
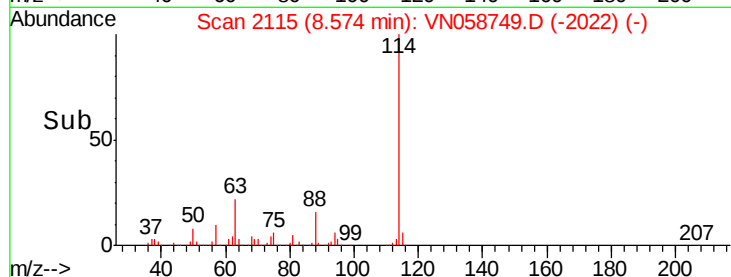
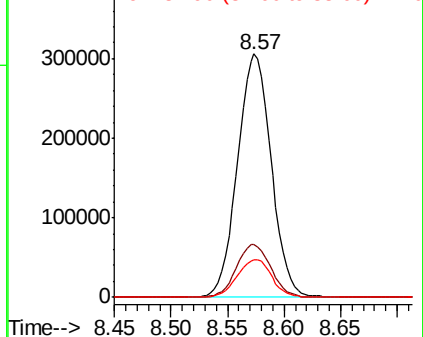
#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 8.57 min Scan# 2115  
Delta R.T. -0.00 min  
Lab File: VN058749.D  
Acq: 14 Oct 2019 15:04

Instrument :  
MSVOA\_N  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 21.7  | 0.0   | 43.8  |
| 88      | 15.6  | 0.0   | 32.0  |

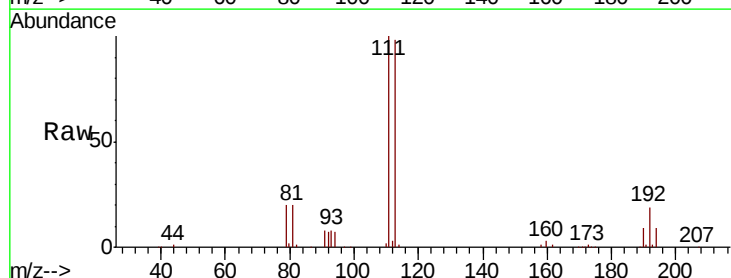


Abundance Ion 113.90 (113.60 to 114.60): V  
Ion 63.00 (62.70 to 63.70): VN  
Ion 87.90 (87.60 to 88.60): VN

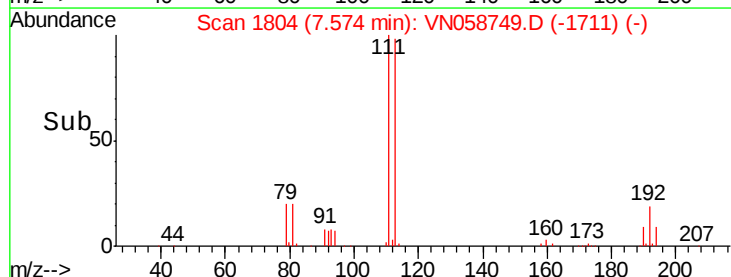
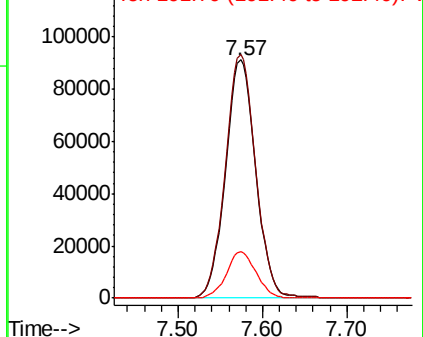


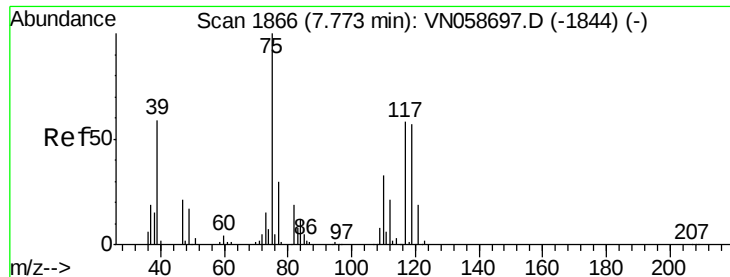
#35  
Dibromofluoromethane  
Concen: 57.819 ug/l  
RT: 7.57 min Scan# 1804  
Delta R.T. -0.00 min  
Lab File: VN058749.D  
Acq: 14 Oct 2019 15:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.3 | 82.3  | 123.5 |
| 192     | 19.1  | 15.0  | 22.6  |



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

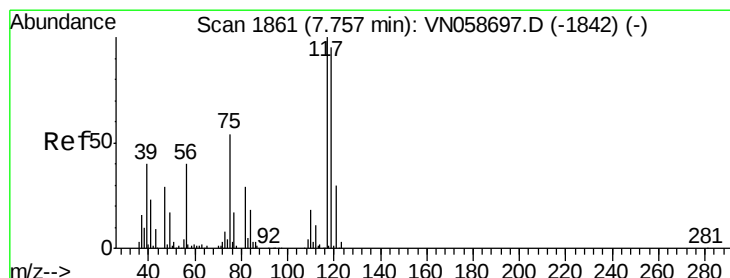
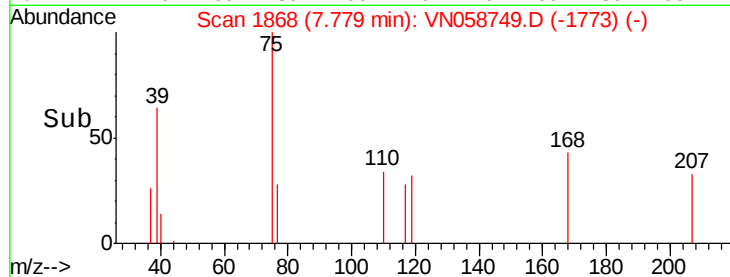
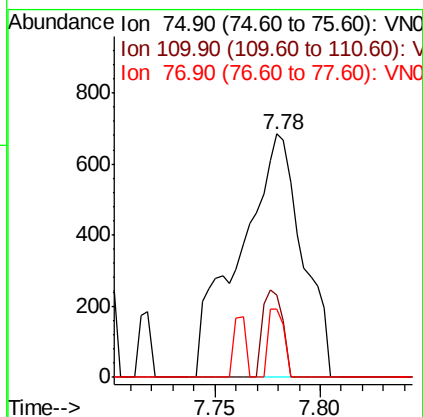
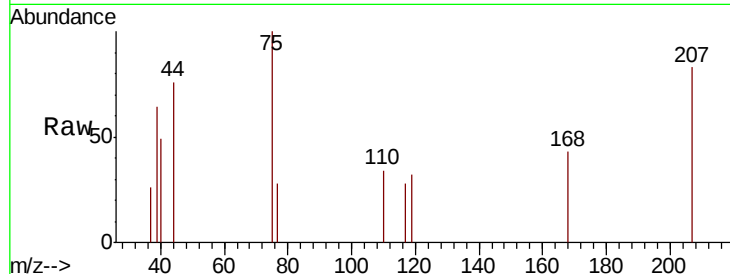




#36  
 1,1-Dichloropropene  
 Concen: 0.220 ug/l  
 RT: 7.78 min Scan# 1868  
 Delta R.T. 0.01 min  
 Lab File: VN058749.D  
 Acq: 14 Oct 2019 15:04

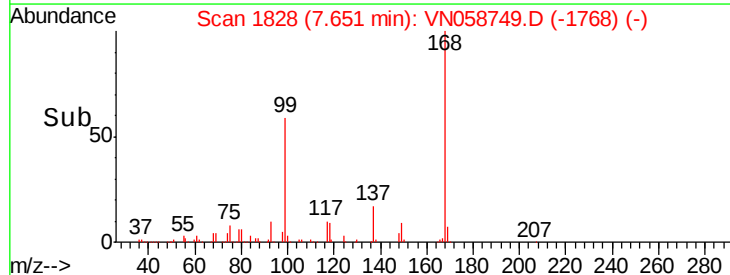
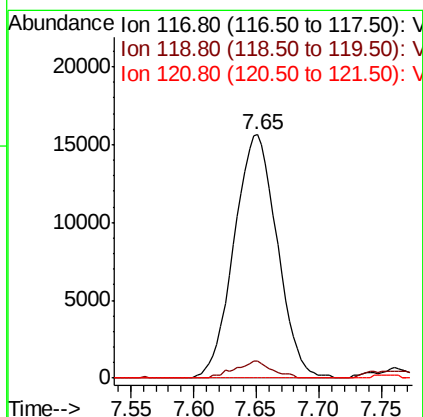
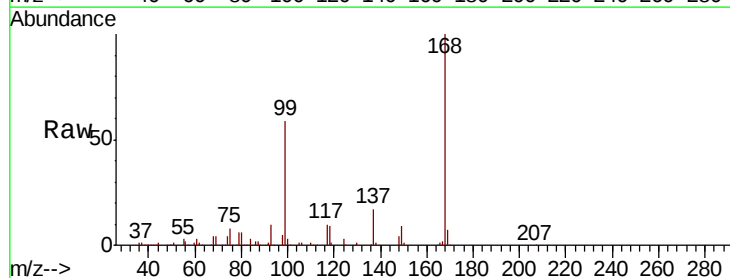
Instrument :  
 MSVOA\_N  
 ClientSampleId :

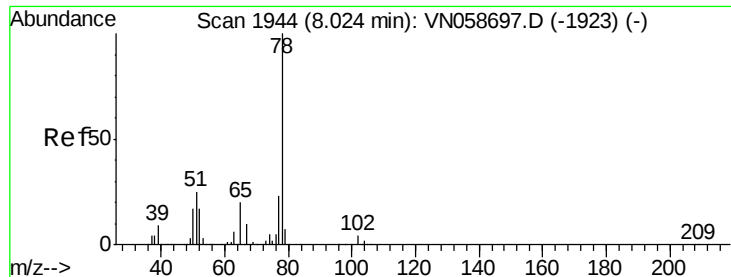
Tot Ion: 75 Resp: 1415  
 Ion Ratio Lower Upper  
 75 100  
 110 11.4 16.6 49.8#  
 77 7.3 24.6 37.0#



#38  
 Carbon Tetrachloride  
 Concen: 5.956 ug/l  
 RT: 7.65 min Scan# 1828  
 Delta R.T. -0.11 min  
 Lab File: VN058749.D  
 Acq: 14 Oct 2019 15:04

Tgt Ion: 117 Resp: 37372  
 Ion Ratio Lower Upper  
 117 100  
 119 6.8 75.7 113.5#  
 121 0.0 23.9 35.9#





#40

Benzene

Concen: 0.221 ug/l

RT: 8.03 min Scan# 1946

Delta R.T. 0.01 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

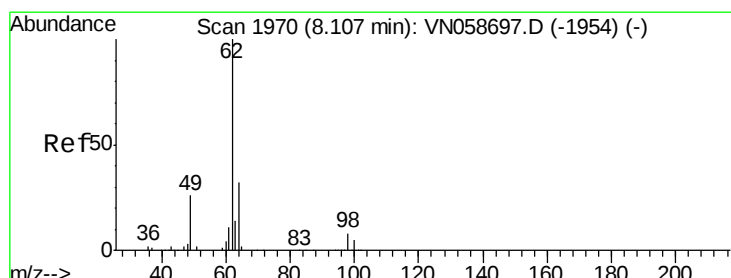
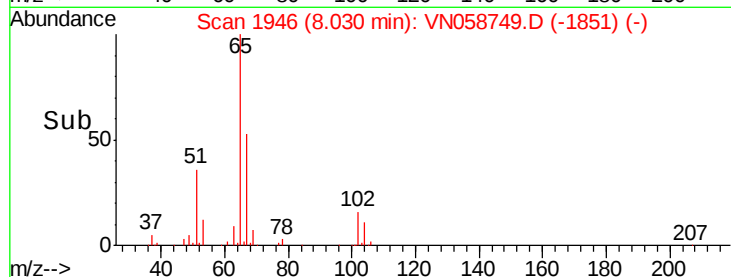
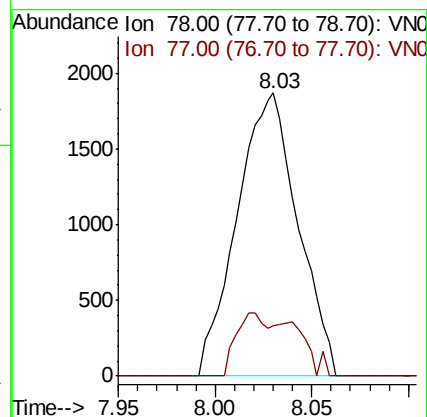
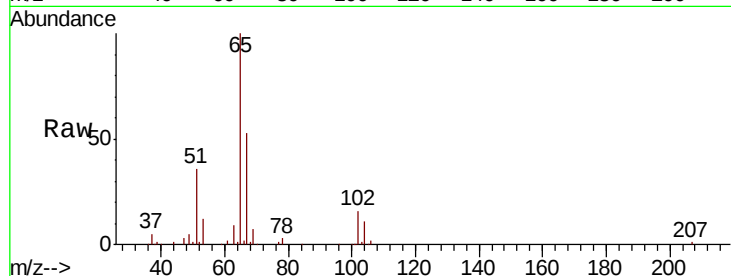
Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion: 78 Resp: 4087

Ion Ratio Lower Upper

78 100

77 17.7 18.8 28.2#



#42

1,2-Dichloroethane

Concen: 0.303 ug/l

RT: 8.12 min Scan# 1973

Delta R.T. 0.01 min

Lab File: VN058749.D

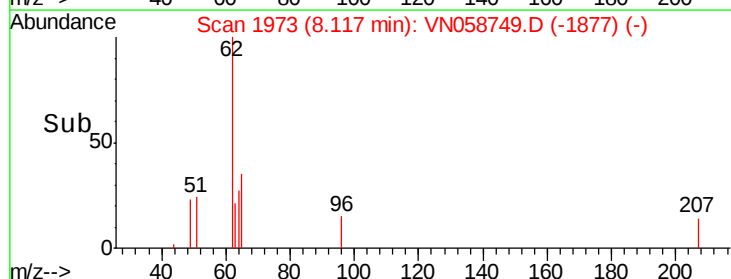
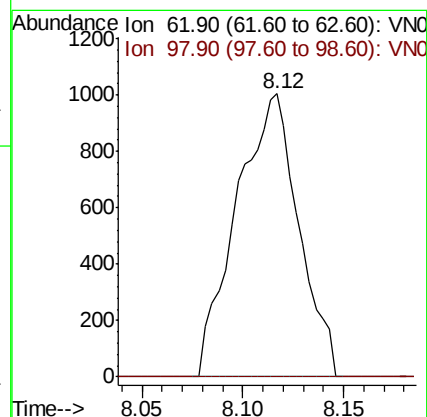
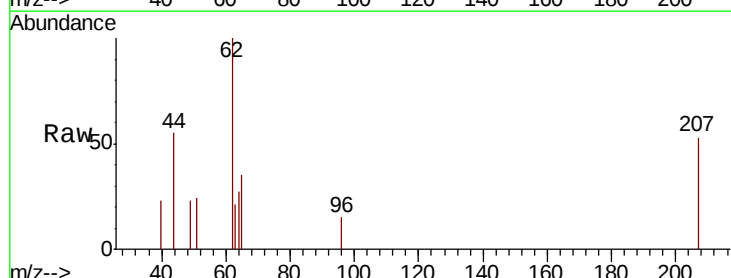
Acq: 14 Oct 2019 15:04

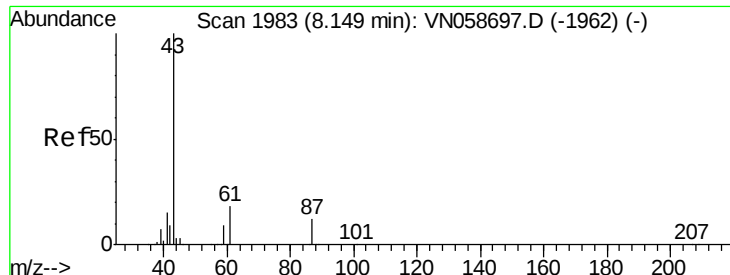
Tgt Ion: 62 Resp: 2154

Ion Ratio Lower Upper

62 100

98 0.0 0.0 15.8





#43

Isopropyl Acetate

Concen: 0.202 ug/l

RT: 8.16 min Scan# 1985

Delta R.T. 0.01 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

ClientSampleId :

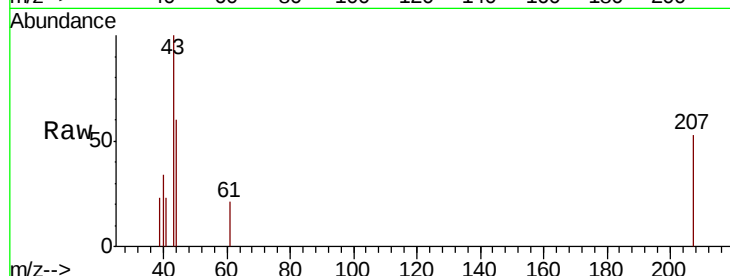
Tot Ion: 43 Resp: 2243

Ion Ratio Lower Upper

43 100

61 0.0 20.3 30.5#

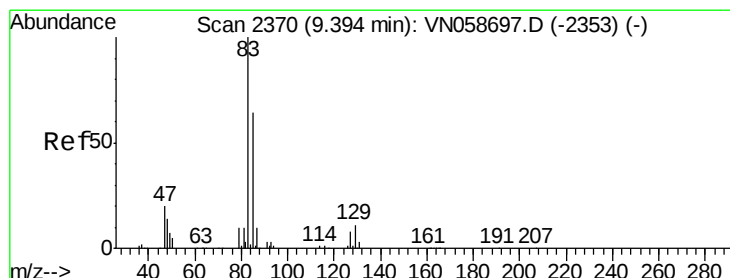
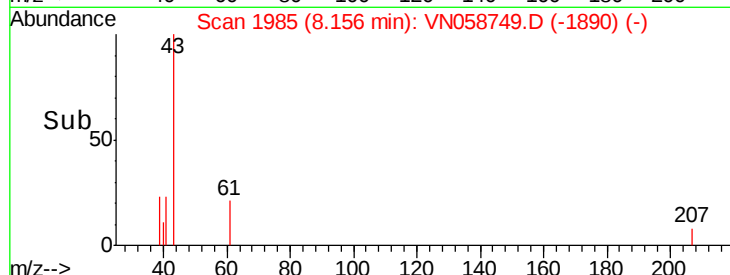
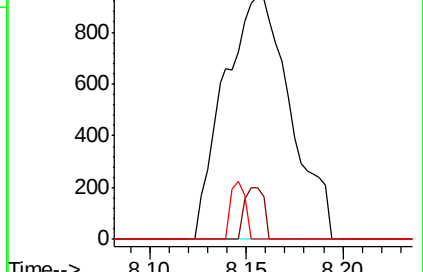
87 5.1 9.8 14.6#



Abundance Ion 43.00 (42.70 to 43.70): VN058697.D (-1962) (-)

Ion 61.00 (60.70 to 61.70): VN058697.D (-1962) (-)

Ion 87.00 (86.70 to 87.70): VN058697.D (-1962) (-)



#47

Bromodichloromethane

Concen: 0.226 ug/l

RT: 9.39 min Scan# 2370

Delta R.T. -0.00 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

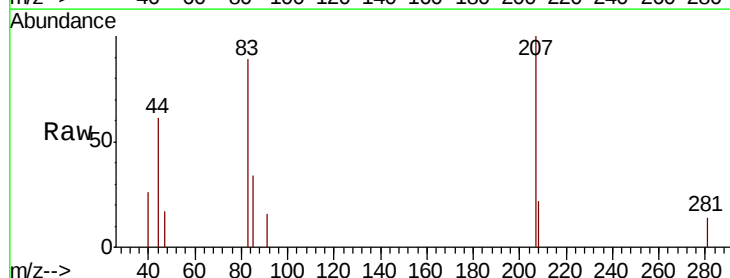
Tgt Ion: 83 Resp: 1442

Ion Ratio Lower Upper

83 100

85 38.0 50.9 76.3#

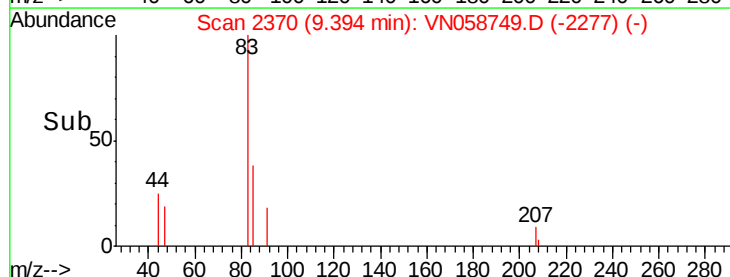
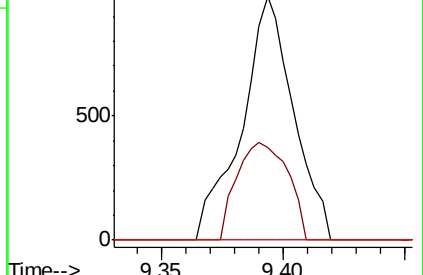
127 0.0 6.3 9.5#

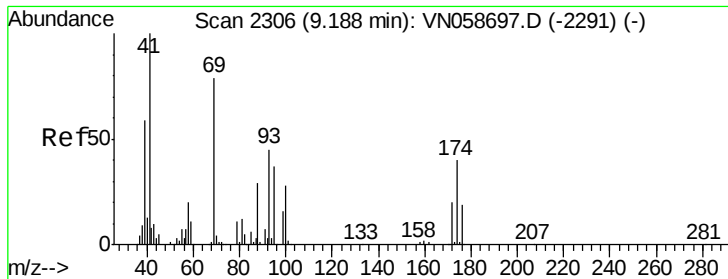


Abundance Ion 82.90 (82.60 to 83.60): VN058697.D (-2353) (-)

Ion 84.90 (84.60 to 85.60): VN058697.D (-2353) (-)

Ion 126.80 (126.50 to 127.50): VN058697.D (-2353) (-)

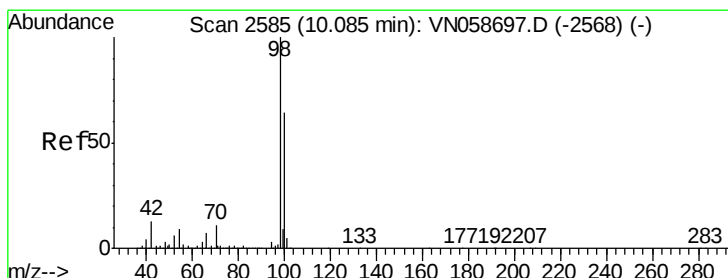
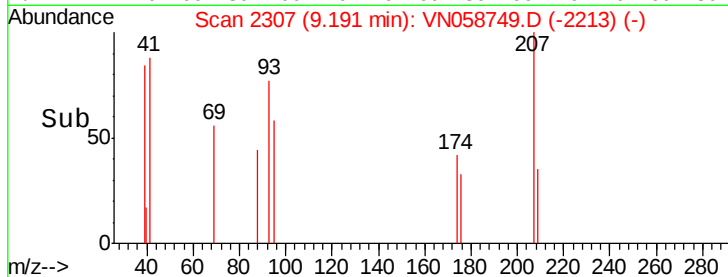
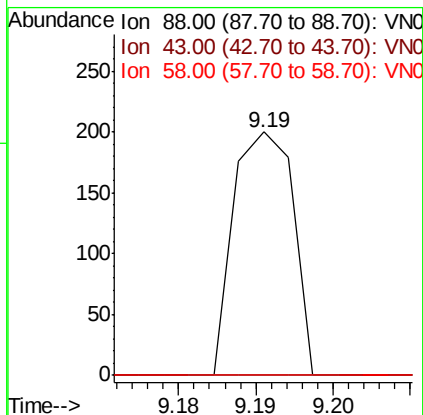
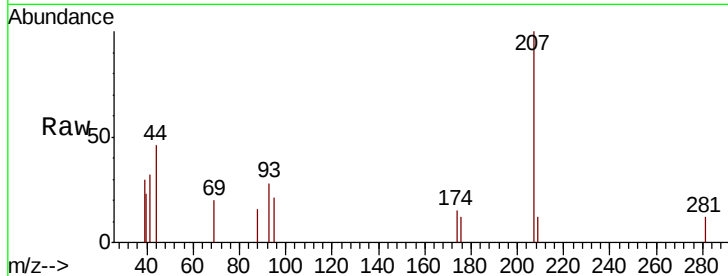




#49  
 1,4-Dioxane  
 Concen: 1.376 ug/l  
 RT: 9.19 min Scan# 2307  
 Delta R.T. 0.00 min  
 Lab File: VN058749.D  
 Acq: 14 Oct 2019 15:04

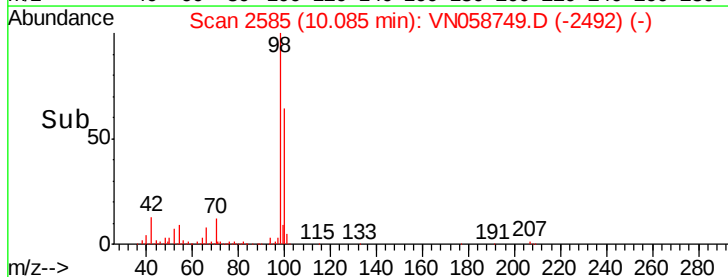
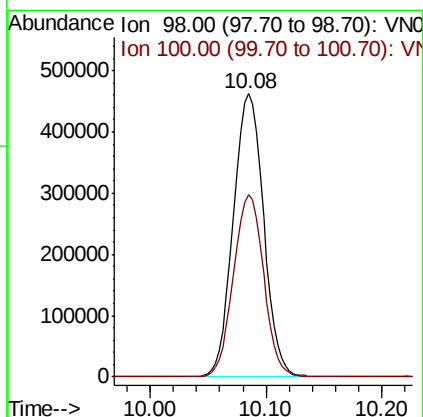
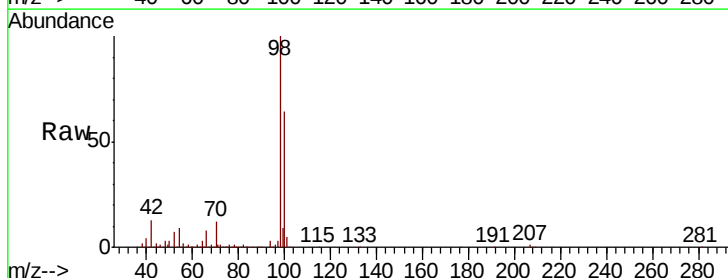
Instrument :  
 MSVOA\_N  
 ClientSampled :

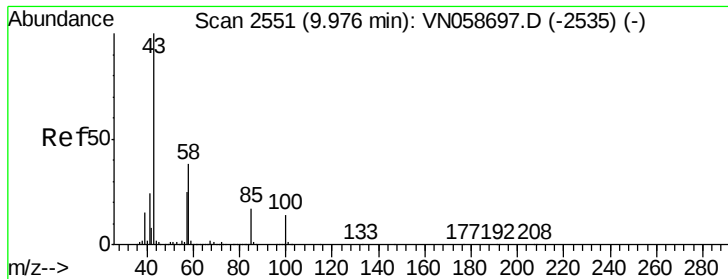
Tot Ion: 88 Resp: 107  
 Ion Ratio Lower Upper  
 88 100  
 43 0.0 28.6 43.0#  
 58 0.0 57.2 85.8#



#50  
 Toluene-d8  
 Concen: 53.376 ug/l  
 RT: 10.08 min Scan# 2585  
 Delta R.T. -0.00 min  
 Lab File: VN058749.D  
 Acq: 14 Oct 2019 15:04

Tgt Ion: 98 Resp: 839503  
 Ion Ratio Lower Upper  
 98 100  
 100 64.2 51.1 76.7





#51

4-Methyl-2-Pentanone

Concen: 0.972 ug/l

RT: 9.98 min Scan# 2552

Delta R.T. 0.00 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

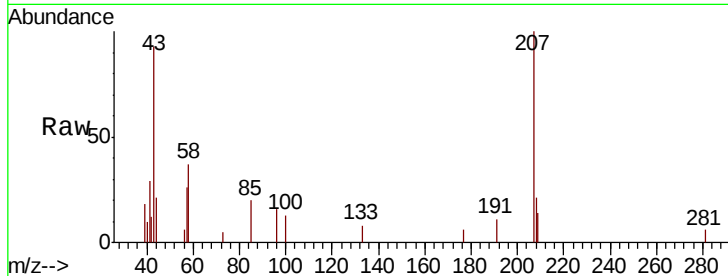
ClientSampled :

Tot Ion: 43 Resp: 6056

Ion Ratio Lower Upper

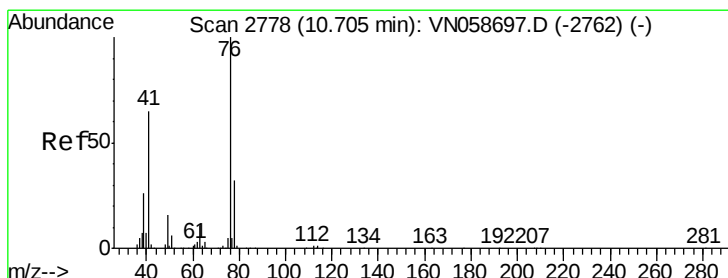
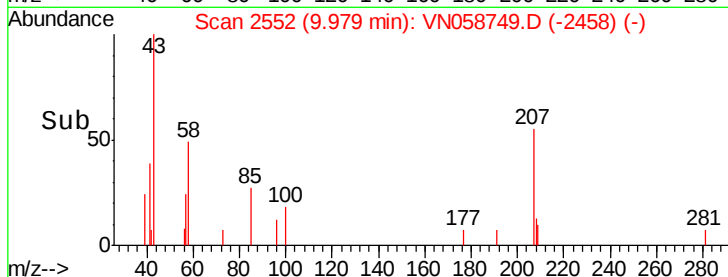
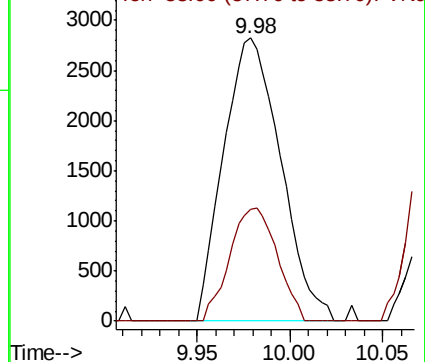
43 100

58 33.2 30.3 45.5



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#57

1,3-Dichloropropane

Concen: 0.203 ug/l

RT: 10.71 min Scan# 2778

Delta R.T. -0.00 min

Lab File: VN058749.D

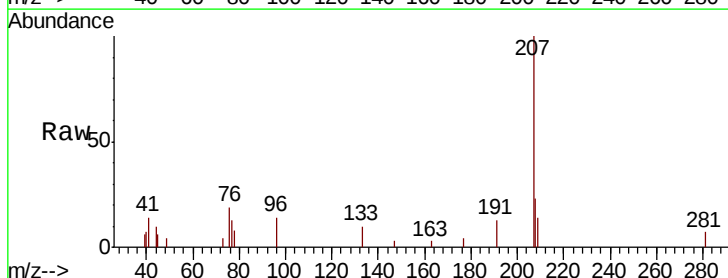
Acq: 14 Oct 2019 15:04

Tgt Ion: 76 Resp: 1603

Ion Ratio Lower Upper

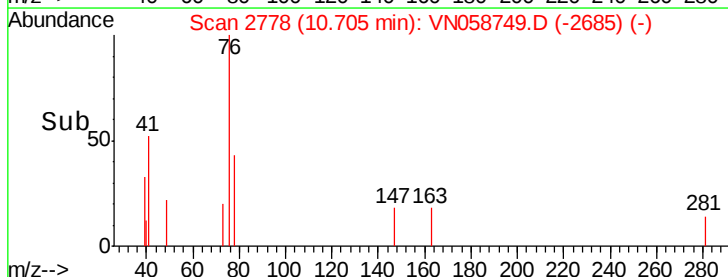
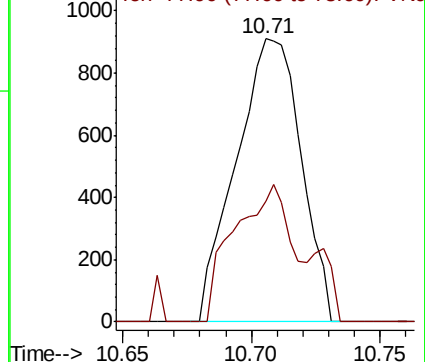
76 100

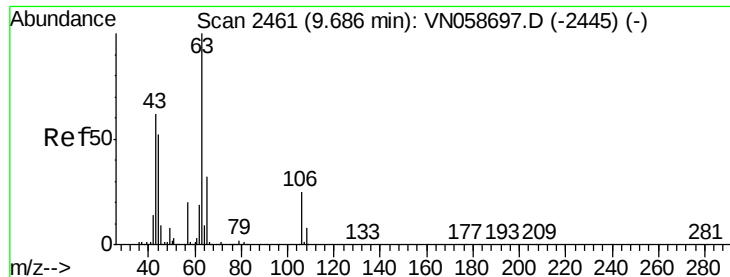
78 43.9 25.9 38.9#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0

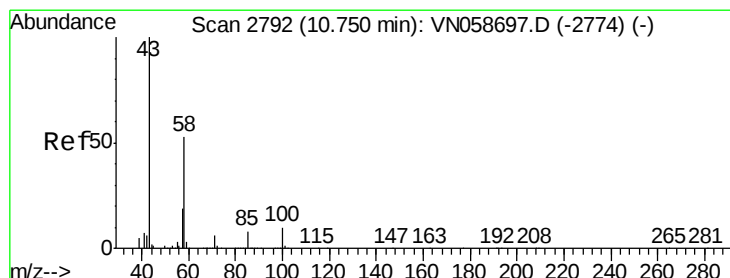
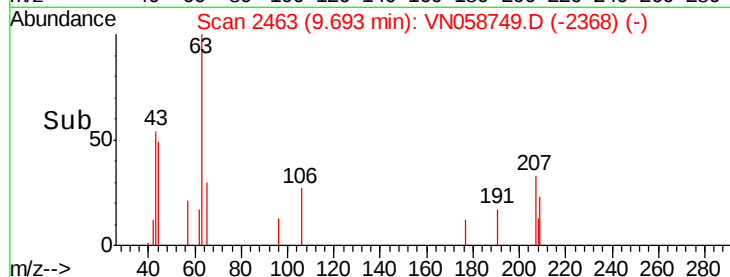
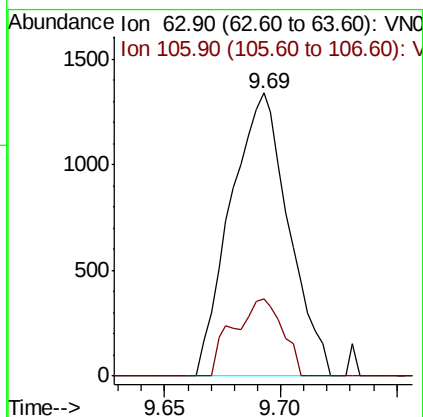
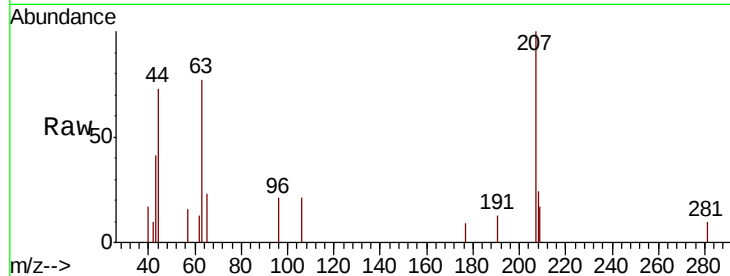




#58  
2-Chloroethyl Vinyl ether  
Concen: 0.716 ug/l  
RT: 9.69 min Scan# 2463  
Delta R.T. 0.01 min  
Lab File: VN058749.D  
Acq: 14 Oct 2019 15:04

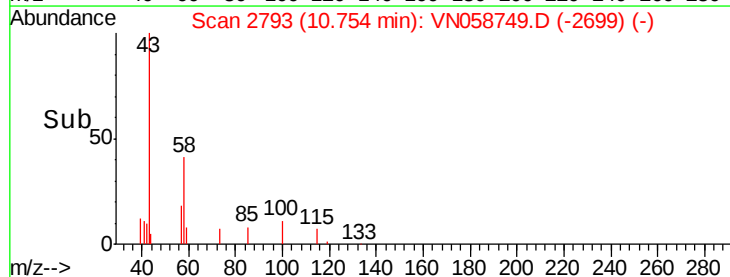
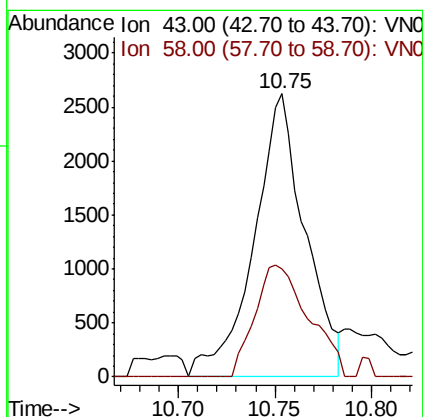
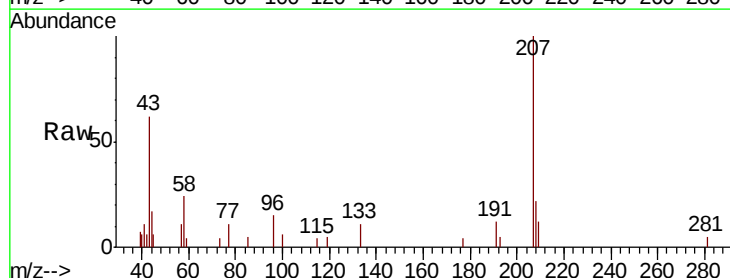
Instrument :  
MSVOA\_N  
ClientSampled :

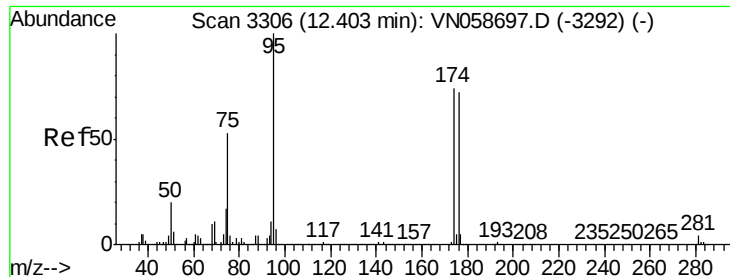
Tot Ion: 63 Resp: 2334  
Ion Ratio Lower Upper  
63 100  
106 23.1 20.0 30.0



#59  
2-Hexanone  
Concen: 1.000 ug/l  
RT: 10.75 min Scan# 2793  
Delta R.T. 0.00 min  
Lab File: VN058749.D  
Acq: 14 Oct 2019 15:04

Tgt Ion: 43 Resp: 4812  
Ion Ratio Lower Upper  
43 100  
58 41.6 26.1 78.3

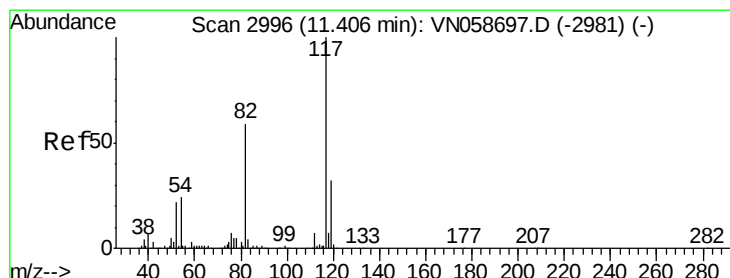
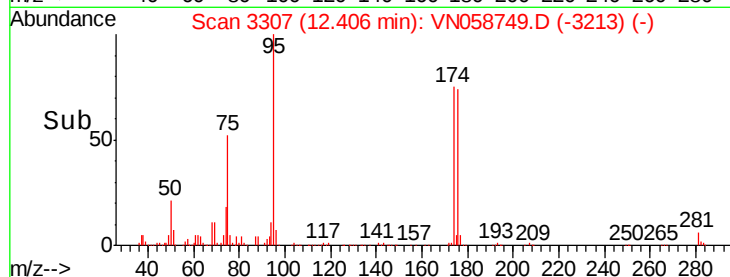
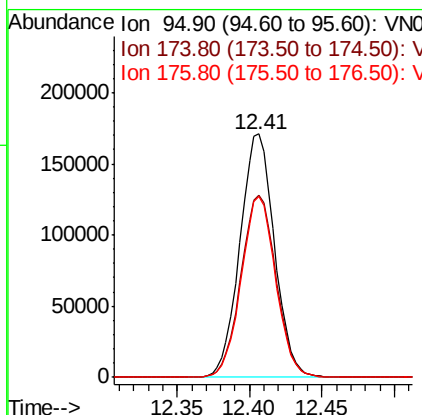
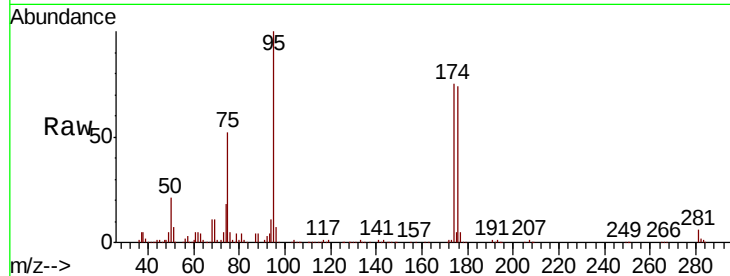




#62  
4-Bromofluorobenzene  
Concen: 47.657 ug/l  
RT: 12.41 min Scan# 3307  
Delta R.T. 0.00 min  
Lab File: VN058749.D  
Acq: 14 Oct 2019 15:04

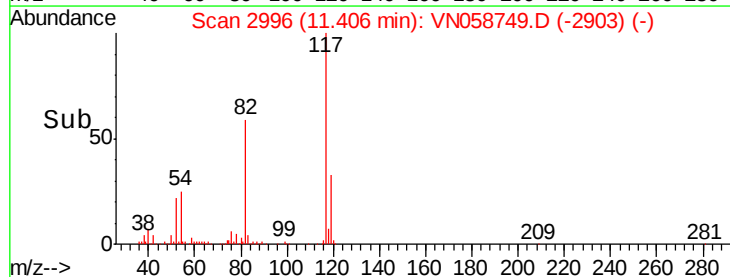
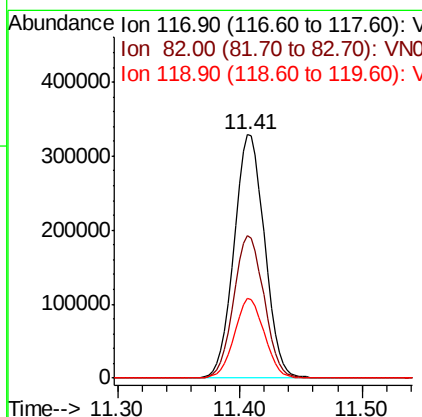
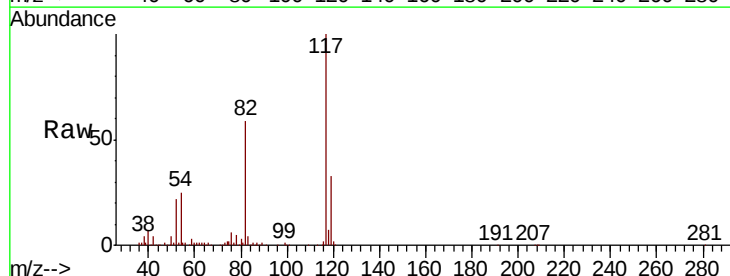
Instrument :  
MSVOA\_N  
ClientSampleId :

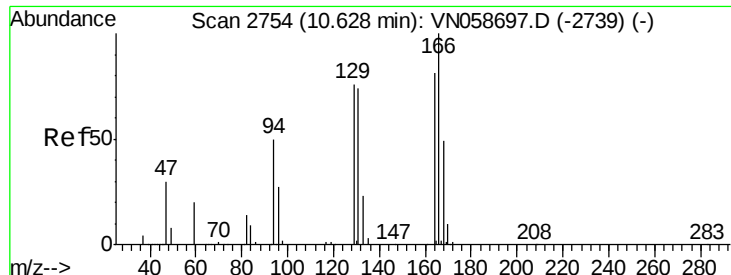
Tot Ion: 95 Resp: 283724  
Ion Ratio Lower Upper  
95 100  
174 76.3 0.0 150.4  
176 74.0 0.0 146.8



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.41 min Scan# 2996  
Delta R.T. -0.00 min  
Lab File: VN058749.D  
Acq: 14 Oct 2019 15:04

Tgt Ion: 117 Resp: 570059  
Ion Ratio Lower Upper  
117 100  
82 58.7 47.0 70.4  
119 32.5 25.4 38.2





#64

Tetrachloroethene

Concen: 0.228 ug/l

RT: 10.62 min Scan# 2753

Delta R.T. -0.00 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

ClientSampleId :

Tot Ion:164 Resp: 911

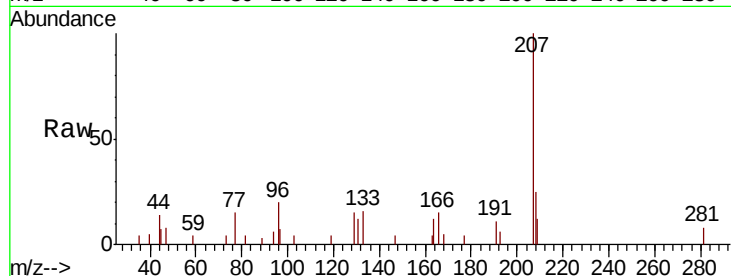
Ion Ratio Lower Upper

164 100

166 126.7 99.3 148.9

129 120.9 75.2 112.8#

131 101.6 73.0 109.4

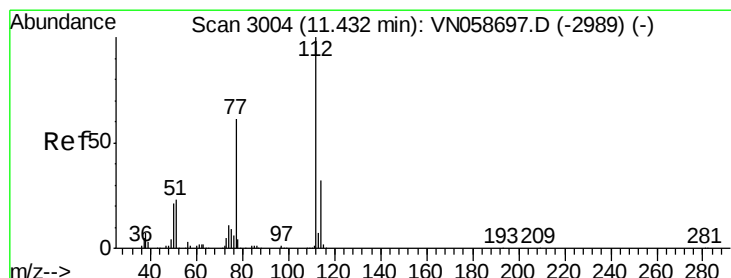
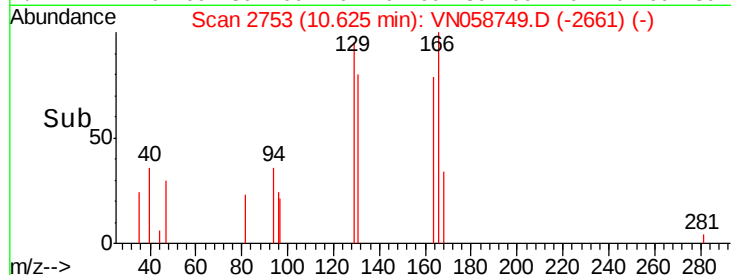
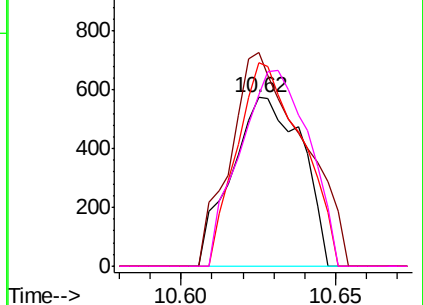


Abundance Ion 163.80 (163.50 to 164.50): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.80 (128.50 to 129.50): V

Ion 130.80 (130.50 to 131.50): V



#65

Chlorobenzene

Concen: 0.205 ug/l

RT: 11.43 min Scan# 3003

Delta R.T. -0.00 min

Lab File: VN058749.D

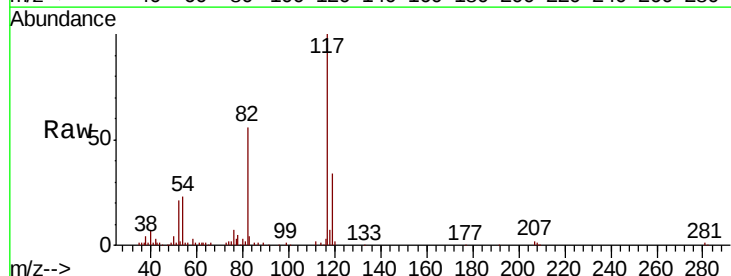
Acq: 14 Oct 2019 15:04

Tgt Ion:112 Resp: 2368

Ion Ratio Lower Upper

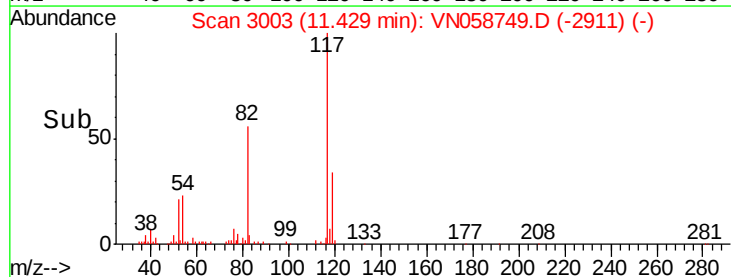
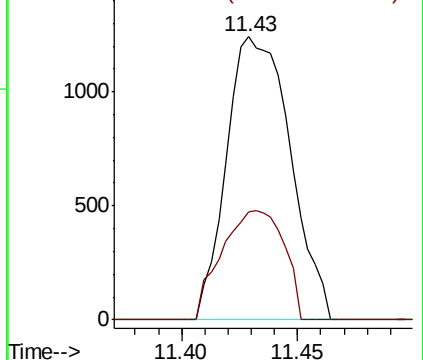
112 100

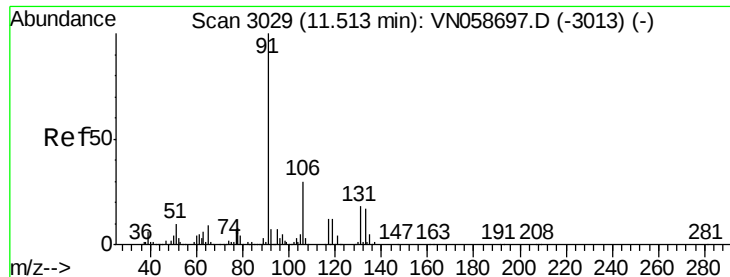
114 38.0 25.2 37.8#



Abundance Ion 111.90 (111.60 to 112.60): V

Ion 113.90 (113.60 to 114.60): V

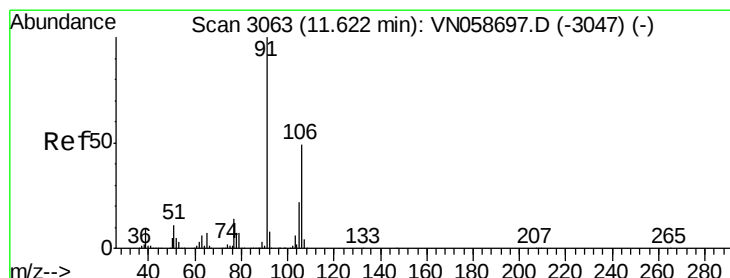
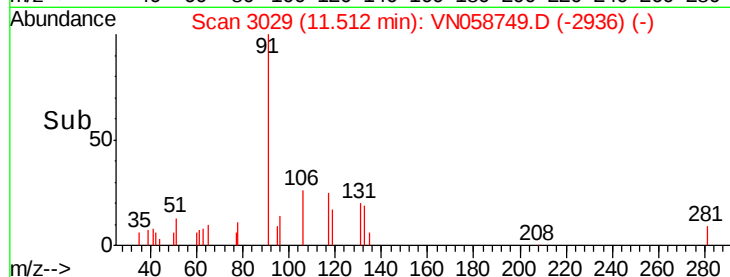
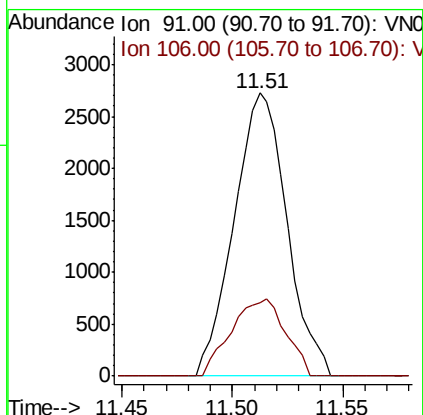
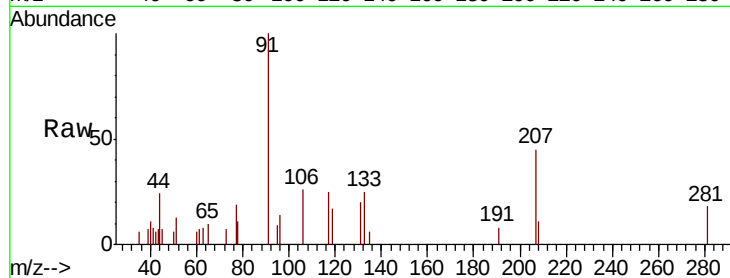




#67  
Ethyl Benzene  
Concen: 0.220 ug/l  
RT: 11.51 min Scan# 3029  
Delta R.T. -0.00 min  
Lab File: VN058749.D  
Acq: 14 Oct 2019 15:04

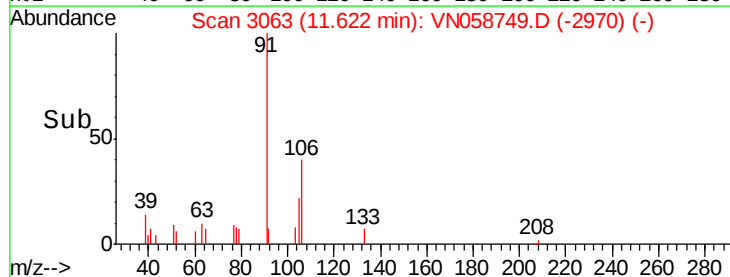
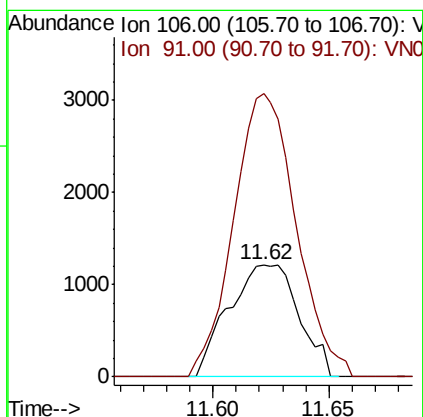
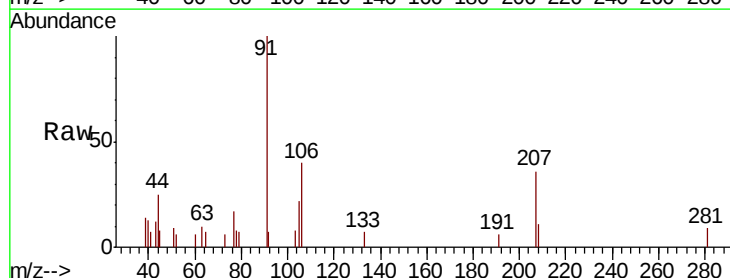
Instrument :  
MSVOA\_N  
ClientSampled :

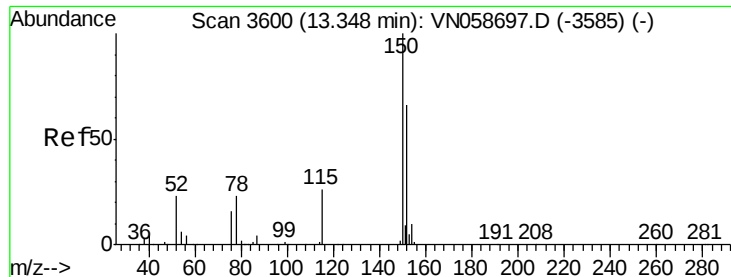
Tot Ion: 91 Resp: 4542  
Ion Ratio Lower Upper  
91 100  
106 25.9 24.1 36.1



#68  
m/p-Xylenes  
Concen: 0.329 ug/l  
RT: 11.62 min Scan# 3063  
Delta R.T. -0.00 min  
Lab File: VN058749.D  
Acq: 14 Oct 2019 15:04

Tgt Ion: 106 Resp: 2551  
Ion Ratio Lower Upper  
106 100  
91 225.4 165.7 248.5





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3600

Delta R.T. -0.00 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

ClientSampleId :

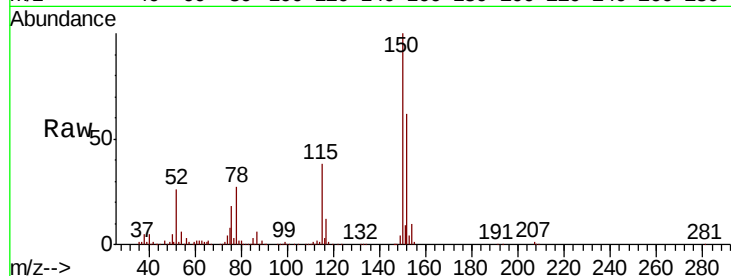
Tot Ion:152 Resp: 234641

Ion Ratio Lower Upper

152 100

115 61.6 30.4 91.2

150 160.1 0.0 345.4

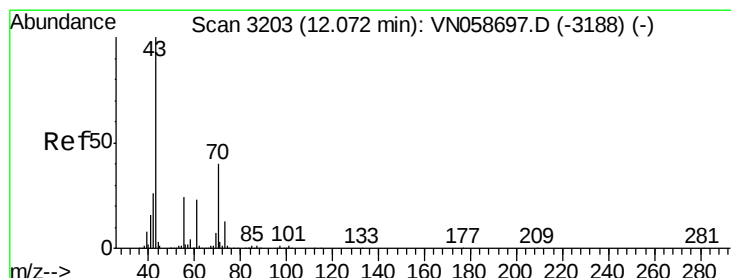
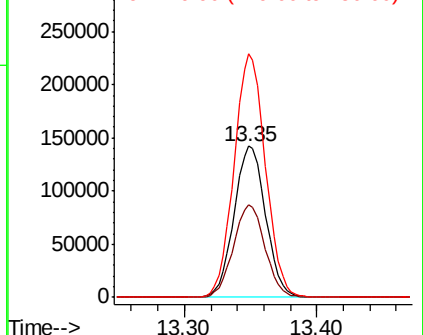
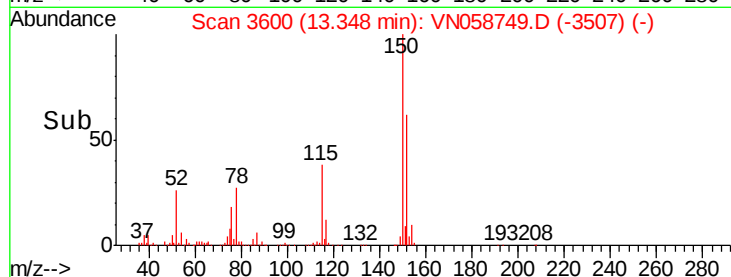


Abundance

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: 0.259 ug/l

RT: 12.08 min Scan# 3204

Delta R.T. 0.00 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Tgt Ion: 43 Resp: 1979

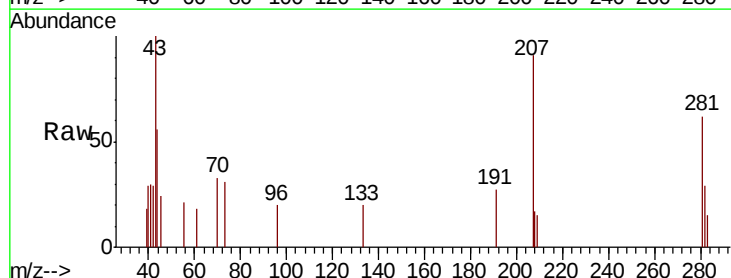
Ion Ratio Lower Upper

43 100

70 25.5 32.2 48.4#

55 11.4 19.6 29.4#

61 13.4 18.6 28.0#



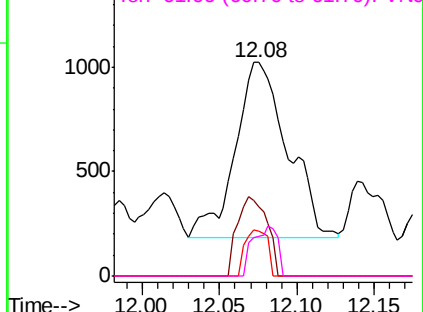
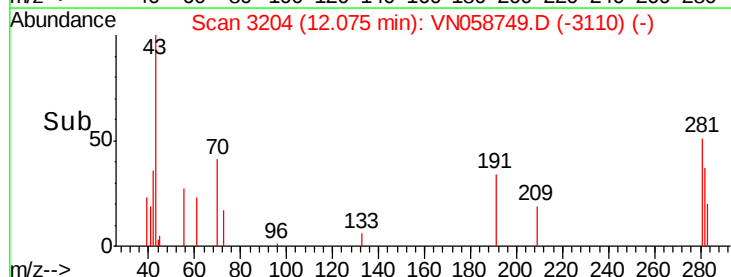
Abundance

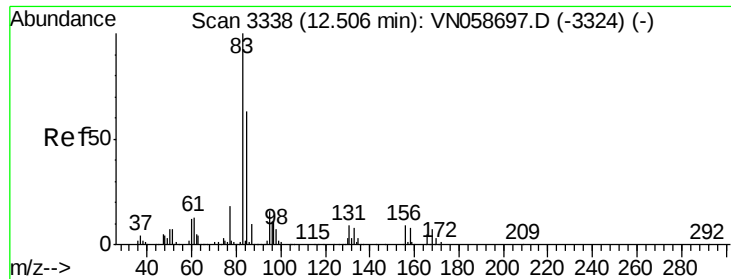
Ion 43.00 (42.70 to 43.70): VNO

Ion 70.00 (69.70 to 70.70): VNO

Ion 55.00 (54.70 to 55.70): VNO

Ion 61.00 (60.70 to 61.70): VNO





#75

1,1,2,2-Tetrachloroethane

Concen: 0.265 ug/l

RT: 12.51 min Scan# 3339

Delta R.T. 0.00 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

ClientSampleId :

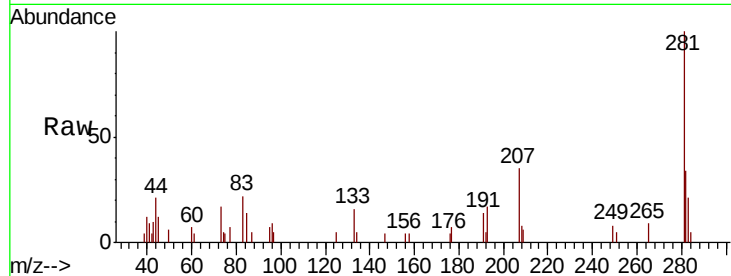
Tot Ion: 83 Resp: 1483

Ion Ratio Lower Upper

83 100

131 0.0 4.8 14.4#

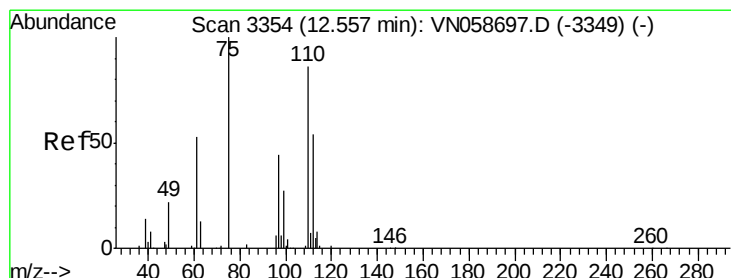
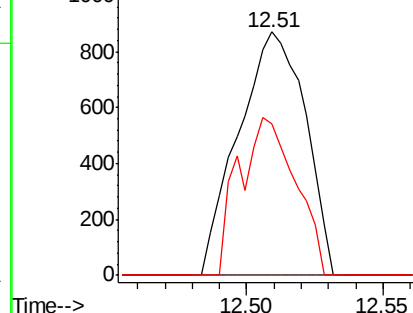
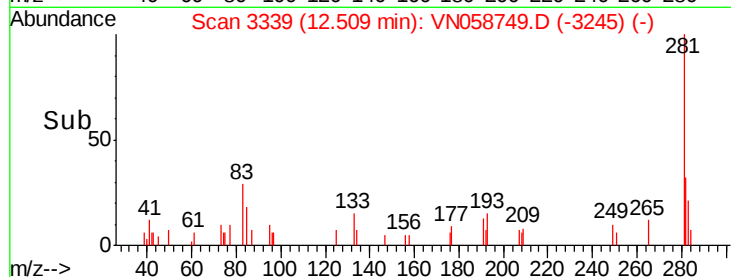
85 54.9 31.9 95.5



Abundance Ion 82.90 (82.60 to 83.60): VN0

Ion 130.80 (130.50 to 131.50): V

Ion 84.90 (84.60 to 85.60): VN0



#76

1,2,3-Trichloropropane

Concen: 29.692 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. -0.15 min

Lab File: VN058749.D

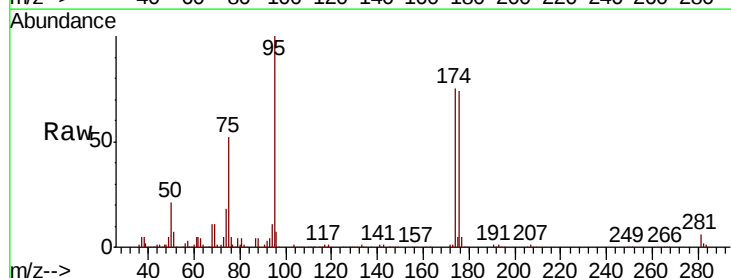
Acq: 14 Oct 2019 15:04

Tgt Ion: 75 Resp: 152839

Ion Ratio Lower Upper

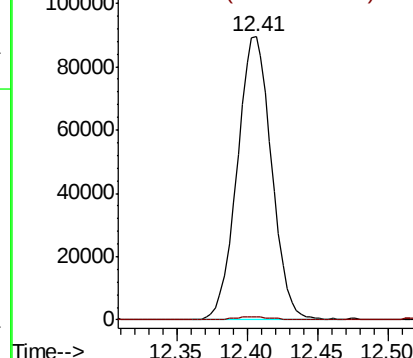
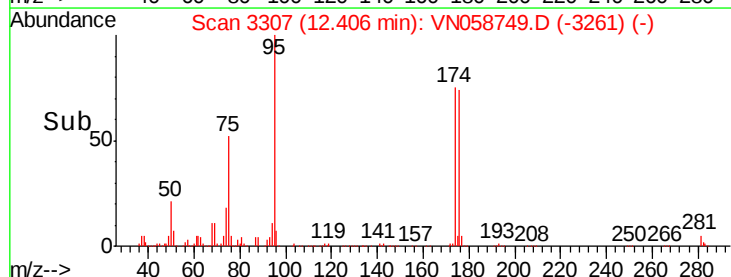
75 100

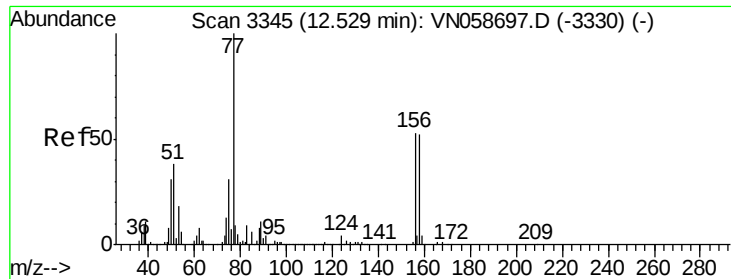
77 1.3 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0





#77

Bromobenzene

Concen: 0.226 ug/l

RT: 12.53 min Scan# 3345

Delta R.T. -0.00 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

ClientSampleId :

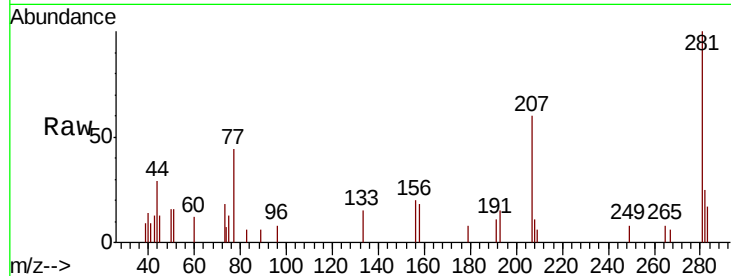
Tot Ion:156 Resp: 933

Ion Ratio Lower Upper

156 100

77 266.3 115.8 347.3

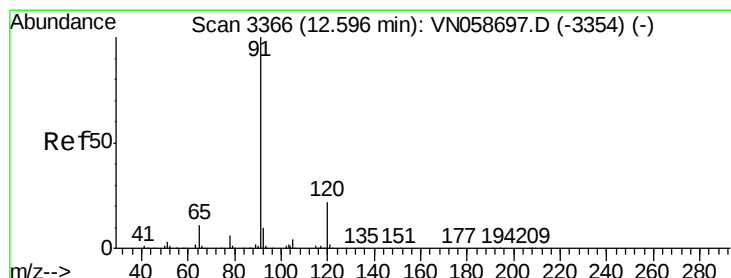
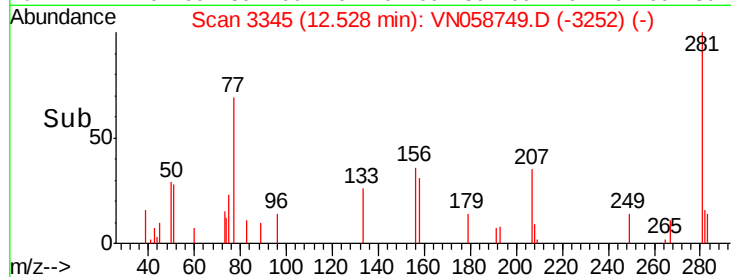
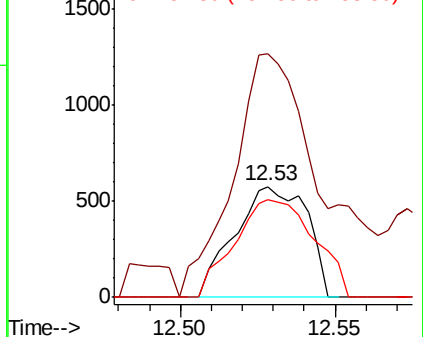
158 97.3 48.9 146.6



Abundance Ion 155.80 (155.50 to 156.50): V

Ion 77.00 (76.70 to 77.70): V

Ion 157.80 (157.50 to 158.50): V



#78

n-propylbenzene

Concen: 0.206 ug/l

RT: 12.59 min Scan# 3365

Delta R.T. -0.00 min

Lab File: VN058749.D

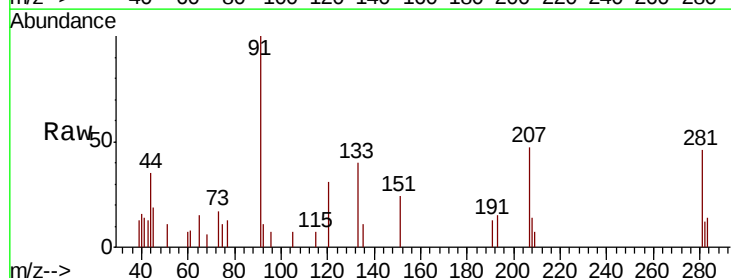
Acq: 14 Oct 2019 15:04

Tgt Ion: 91 Resp: 4083

Ion Ratio Lower Upper

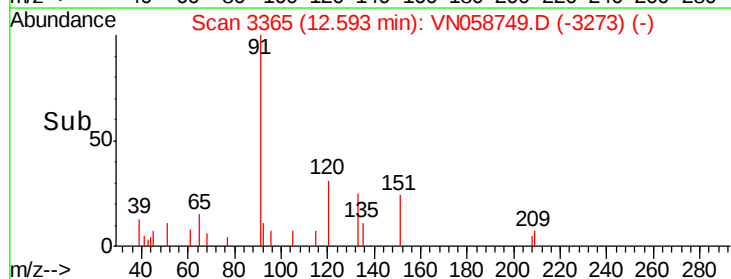
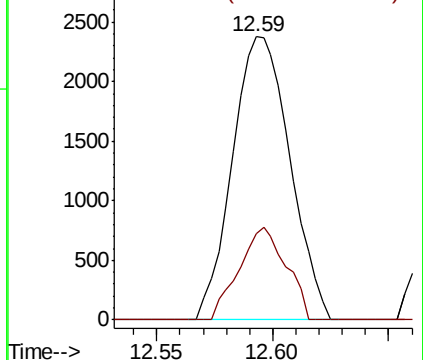
91 100

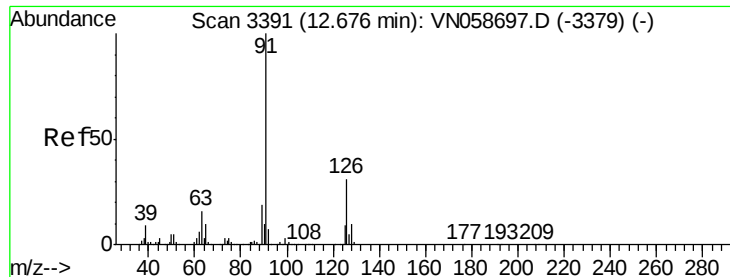
120 26.8 11.1 33.3



Abundance Ion 91.00 (90.70 to 91.70): V

Ion 120.00 (119.70 to 120.70): V

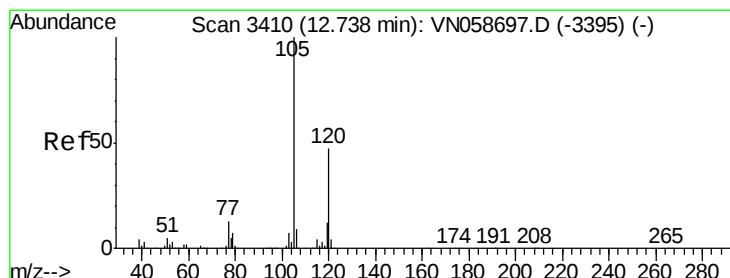
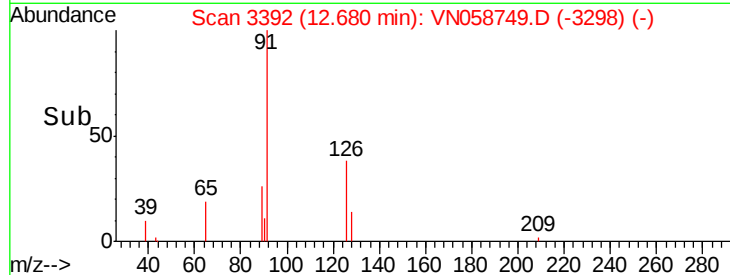
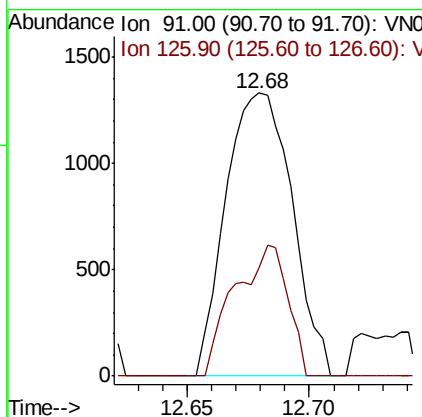
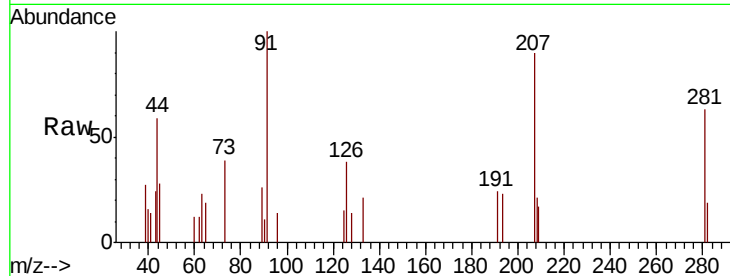




#79  
 2-Chlorotoluene  
 Concen: 0.205 ug/l  
 RT: 12.68 min Scan# 3392  
 Delta R.T. 0.00 min  
 Lab File: VN058749.D  
 Acq: 14 Oct 2019 15:04

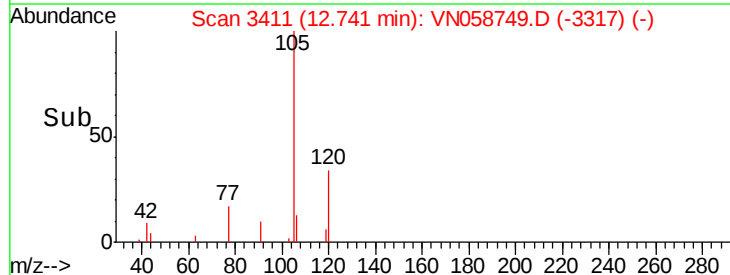
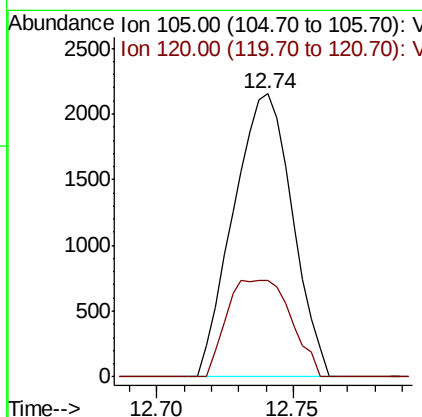
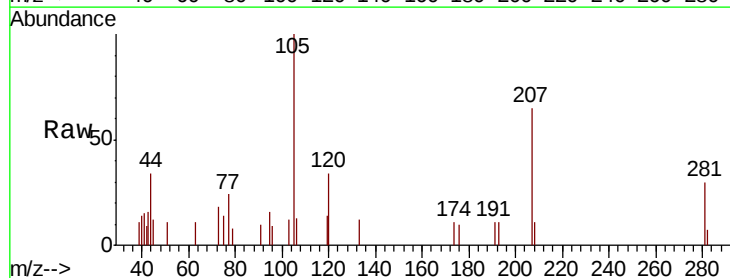
Instrument :  
 MSVOA\_N  
 ClientSampled :

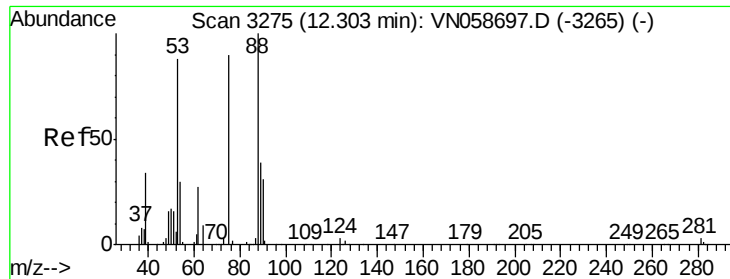
Tot Ion: 91 Resp: 2516  
 Ion Ratio Lower Upper  
 91 100  
 126 37.2 16.2 48.5



#80  
 1,3,5-Trimethylbenzene  
 Concen: 0.223 ug/l  
 RT: 12.74 min Scan# 3411  
 Delta R.T. 0.00 min  
 Lab File: VN058749.D  
 Acq: 14 Oct 2019 15:04

Tgt Ion: 105 Resp: 3230  
 Ion Ratio Lower Upper  
 105 100  
 120 37.2 23.4 70.2





#81

trans-1,4-Dichloro-2-butene

Concen: 79.536 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.10 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

ClientSampleId :

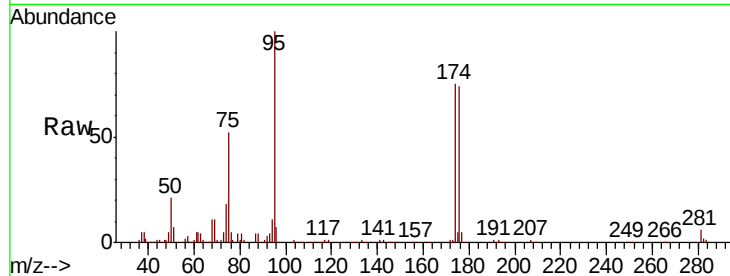
Tot Ion: 75 Resp: 152839

Ion Ratio Lower Upper

75 100

53 0.0 78.4 117.6#

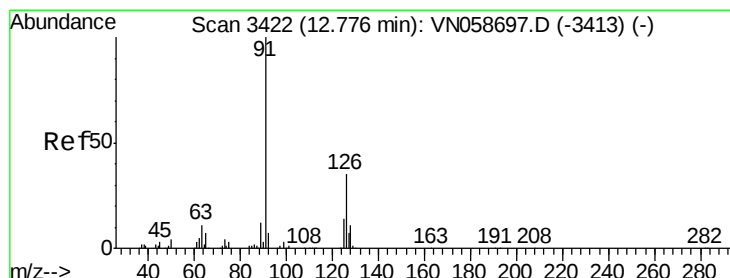
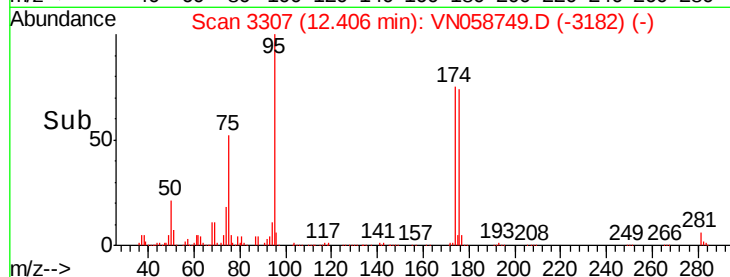
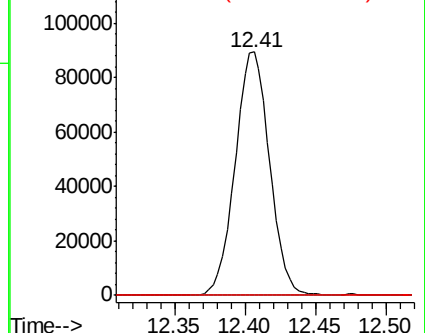
89 0.0 34.9 52.3#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0



#82

4-Chlorotoluene

Concen: 0.212 ug/l

RT: 12.78 min Scan# 3422

Delta R.T. -0.00 min

Lab File: VN058749.D

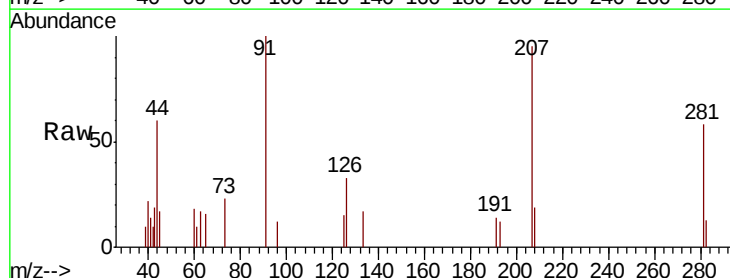
Acq: 14 Oct 2019 15:04

Tgt Ion: 91 Resp: 2677

Ion Ratio Lower Upper

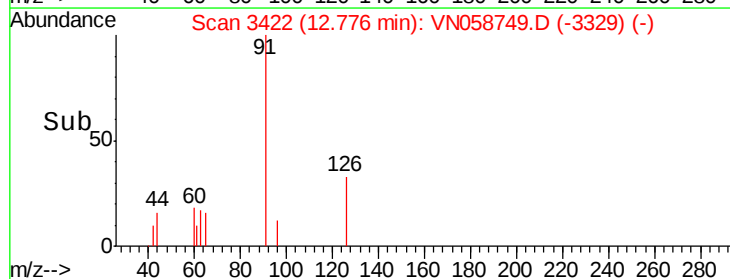
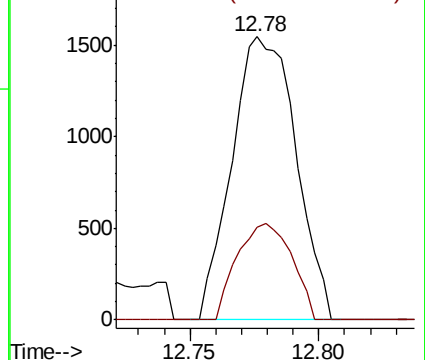
91 100

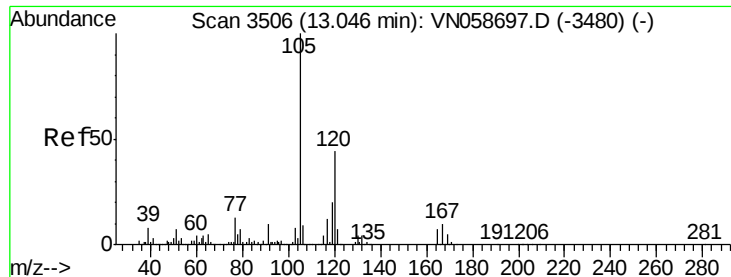
126 29.1 15.9 47.6



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 125.90 (125.60 to 126.60): V





#84

1,2,4-Trimethylbenzene

Concen: 0.205 ug/l

RT: 13.05 min Scan# 3506

Delta R.T. -0.00 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

Instrument :

MSVOA\_N

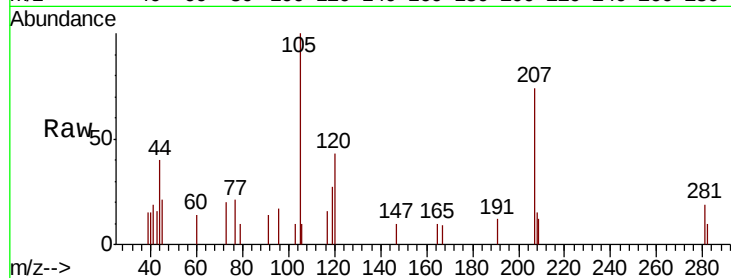
ClientSampled :

Tot Ion:105 Resp: 2959

Ion Ratio Lower Upper

105 100

120 35.5 21.9 65.7



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

13.05

2000

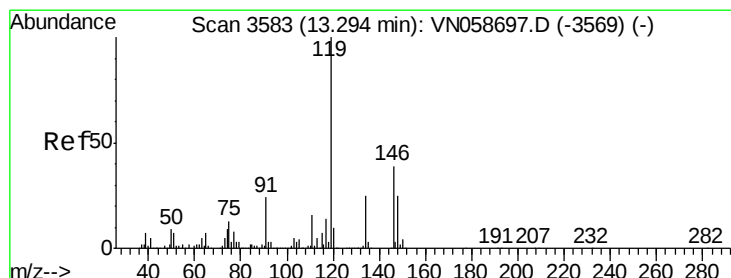
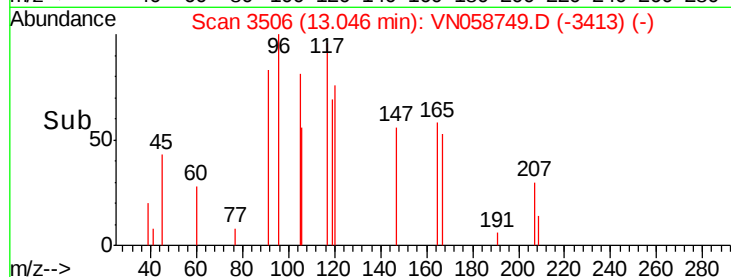
1500

1000

500

0

Time-->



#86

p-Isopropyltoluene

Concen: 0.208 ug/l

RT: 13.29 min Scan# 3583

Delta R.T. -0.00 min

Lab File: VN058749.D

Acq: 14 Oct 2019 15:04

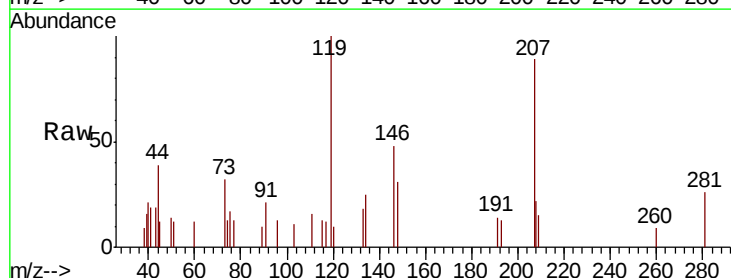
Tgt Ion:119 Resp: 3101

Ion Ratio Lower Upper

119 100

134 24.1 12.7 38.1

91 18.9 11.9 35.5



Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): V

2500

2000

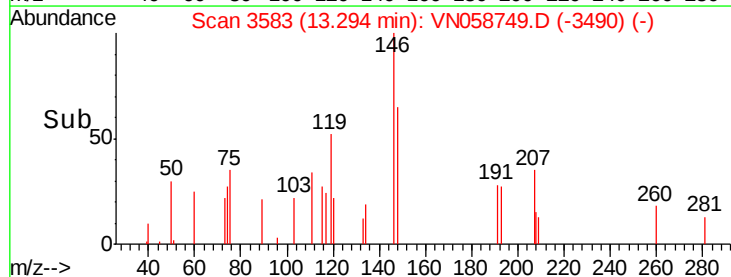
1500

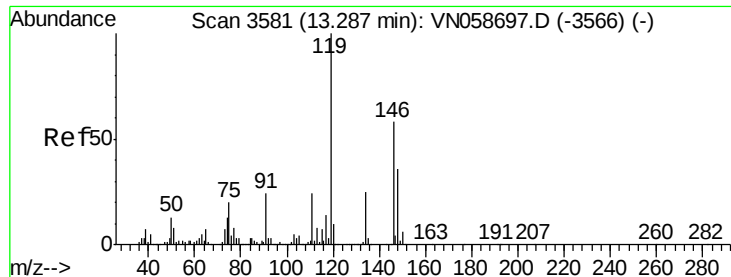
1000

500

0

Time-->

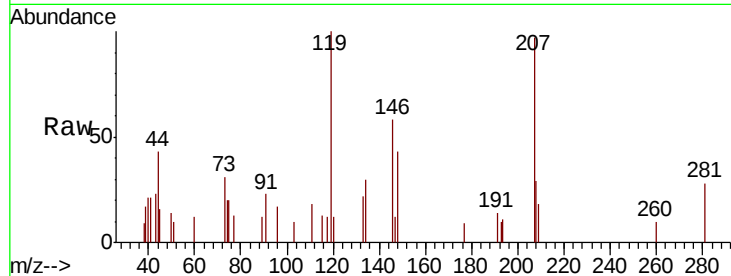




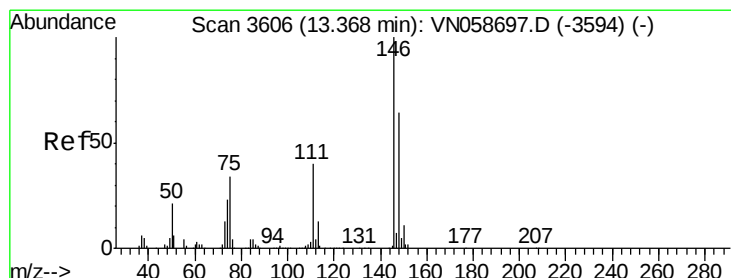
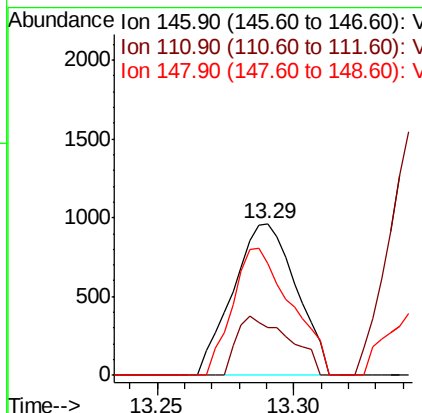
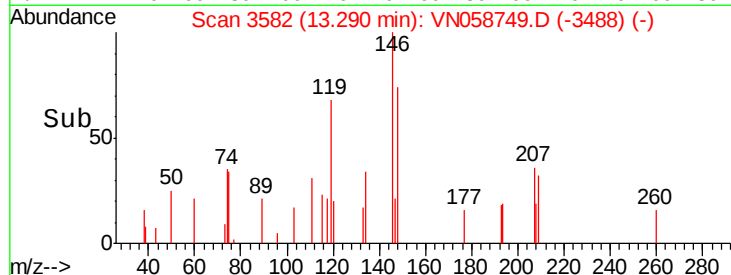
#87  
 1,3-Dichlorobenzene  
 Concen: 0.204 ug/l  
 RT: 13.29 min Scan# 3582  
 Delta R.T. 0.00 min  
 Lab File: VN058749.D  
 Acq: 14 Oct 2019 15:04

Instrument :  
 MSVOA\_N  
 ClientSampled :

Tot Ion:146 Resp: 1553  
 Ion Ratio Lower Upper  
 146 100  
 111 32.5 20.5 61.6  
 148 77.6 31.3 93.9

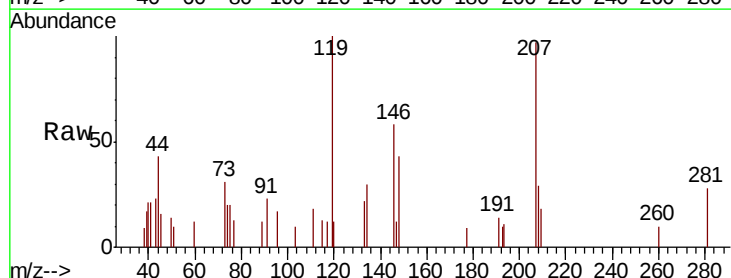


Abundance Ion 145.90 (145.60 to 146.60): V  
 Ion 110.90 (110.60 to 111.60): V  
 Ion 147.90 (147.60 to 148.60): V

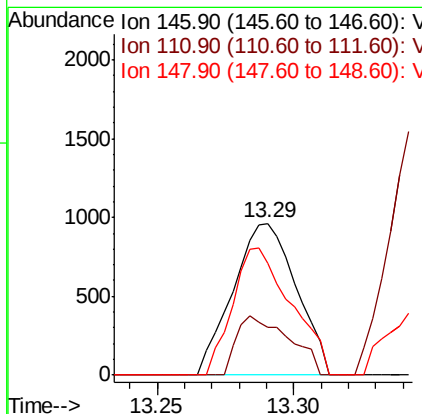
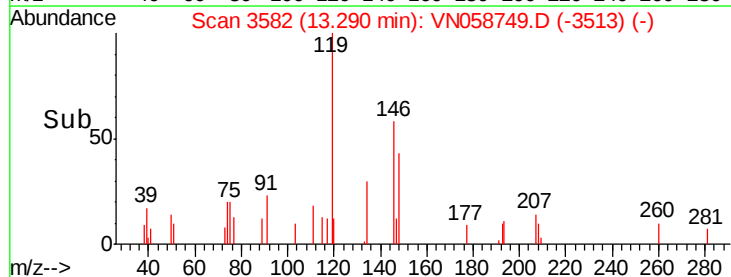


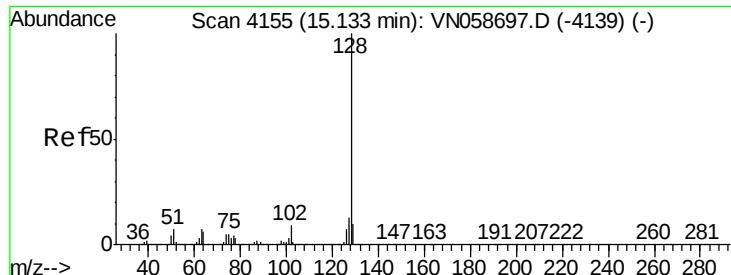
#88  
 1,4-Dichlorobenzene  
 Concen: 0.200 ug/l  
 RT: 13.29 min Scan# 3582  
 Delta R.T. -0.08 min  
 Lab File: VN058749.D  
 Acq: 14 Oct 2019 15:04

Tgt Ion:146 Resp: 1553  
 Ion Ratio Lower Upper  
 146 100  
 111 32.5 20.1 60.2  
 148 77.6 31.9 95.7



Abundance Ion 145.90 (145.60 to 146.60): V  
 Ion 110.90 (110.60 to 111.60): V  
 Ion 147.90 (147.60 to 148.60): V

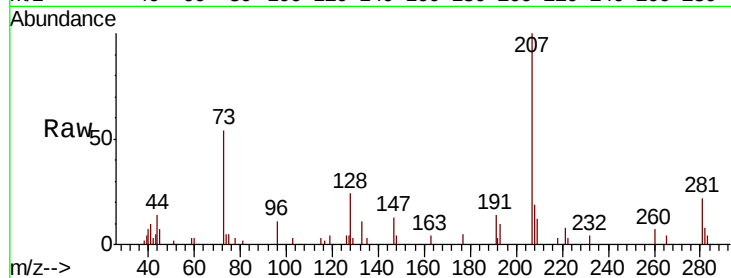




#95  
Naphthalene  
Concen: 0.208 ug/l  
RT: 15.13 min Scan# 4155  
Delta R.T. -0.00 min  
Lab File: VN058749.D  
Acq: 14 Oct 2019 15:04

Instrument :  
MSVOA\_N  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 6.1   | 10.2  | 15.4# |
| 129     | 9.4   | 8.5   | 12.7  |



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

