

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX121120\  
 Data File : VX019893.D  
 Acq On : 11 Dec 2020 22:26  
 Operator : JC/MD  
 Sample : L4996-18  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 30 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE134D2-20201208

Quant Time: Dec 12 00:07:19 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X120420W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Dec 04 15:32:53 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.63  | 168  | 316361   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.83  | 114  | 531845   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.09 | 117  | 485708   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.06 | 152  | 212955   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds |        | R.T.  | QIon     | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   |        | 6.03  | 65       | 199530   | 47.99 | ug/l   | 0.00     |
| Spiked Amount               | 50.000 | Range | 61 - 141 | Recovery | =     | 95.98% |          |
| 35) Dibromofluoromethane    |        | 5.46  | 113      | 161506   | 46.99 | ug/l   | 0.00     |
| Spiked Amount               | 50.000 | Range | 69 - 133 | Recovery | =     | 93.98% |          |
| 50) Toluene-d8              |        | 8.70  | 98       | 644805   | 49.14 | ug/l   | 0.00     |
| Spiked Amount               | 50.000 | Range | 65 - 126 | Recovery | =     | 98.28% |          |
| 62) 4-Bromofluorobenzene    |        | 11.12 | 95       | 227380   | 45.53 | ug/l   | 0.00     |
| Spiked Amount               | 50.000 | Range | 58 - 135 | Recovery | =     | 91.06% |          |

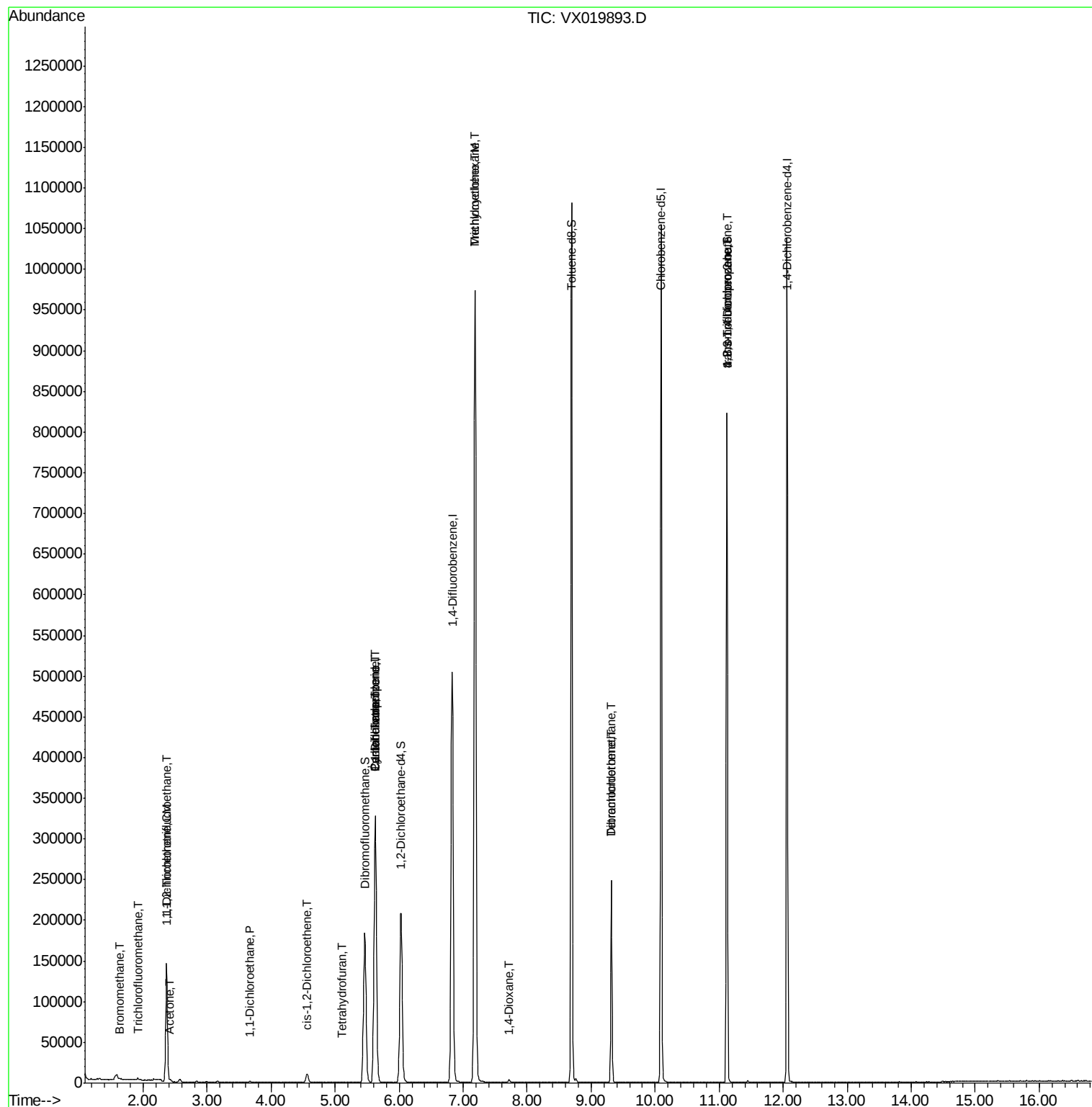
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.63  | 94   | 592      | 0.496     | ug/l   | 96     |
| 7) Trichlorofluoromethane      | 1.92  | 101  | 1082     | 0.216     | ug/l   | 88     |
| 9) 1,1,2-Trichlorotrifluoroet  | 2.37  | 101  | 58780    | 20.502    | ug/l   | 99     |
| 11) Tert butyl alcohol         | 3.00  | 59   | 700      | Below Cal | #      | 73     |
| 12) 1,1-Dichloroethene         | 2.36  | 96   | 1534     | 0.529     | ug/l   | 92     |
| 16) Acetone                    | 2.42  | 43   | 1532     | 0.980     | ug/l # | 83     |
| 20) Methylene Chloride         | 2.83  | 84   | 525      | Below Cal | #      | 83     |
| 24) 1,1-Dichloroethane         | 3.67  | 63   | 1314     | 0.220     | ug/l # | 79     |
| 27) cis-1,2-Dichloroethene     | 4.56  | 96   | 6783     | 1.715     | ug/l   | 98     |
| 29) Tetrahydrofuran            | 5.11  | 42   | 330      | 0.213     | ug/l # | 27     |
| 31) Cyclohexane                | 5.63  | 56   | 5704     | 1.103     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.62  | 75   | 24104    | 5.015     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 5.63  | 117  | 31334    | 6.658     | ug/l # | 16     |
| 39) Methylcyclohexane          | 7.19  | 83   | 4611     | 0.817     | ug/l # | 1      |
| 44) Trichloroethene            | 7.19  | 130  | 385071   | 99.970    | ug/l   | 99     |
| 49) 1,4-Dioxane                | 7.71  | 88   | 2118     | 22.535    | ug/l # | 78     |
| 60) Dibromochloromethane       | 9.32  | 129  | 45054    | 11.985    | ug/l # | 11     |
| 64) Tetrachloroethene          | 9.32  | 164  | 48459    | 14.877    | ug/l   | 98     |
| 76) 1,2,3-Trichloropropane     | 11.12 | 75   | 109691   | 22.966    | ug/l # | 39     |
| 81) trans-1,4-Dichloro-2-buten | 11.12 | 75   | 109691   | 66.391    | ug/l # | 12     |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_X\DATA\VX121120\  
Data File : VX019893.D  
Acq On : 11 Dec 2020 22:26  
Operator : JC/MD  
Sample : L4996-18  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 30 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
RE134D2-20201208

Quant Time: Dec 12 00:07:19 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X120420W.M  
Quant Title : SW846 8260  
QLast Update : Fri Dec 04 15:32:53 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.63 min Scan# 745

Delta R.T. 0.01 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

Instrument :

MSVOA\_X

ClientSampleId :

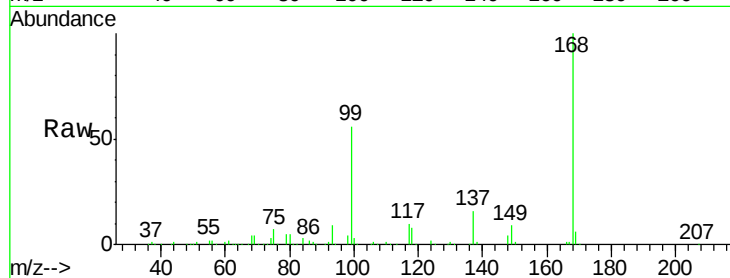
RE134D2-20201208

Tgt Ion:168 Resp: 316361

Ion Ratio Lower Upper

168 100

99 55.7 45.8 68.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.63

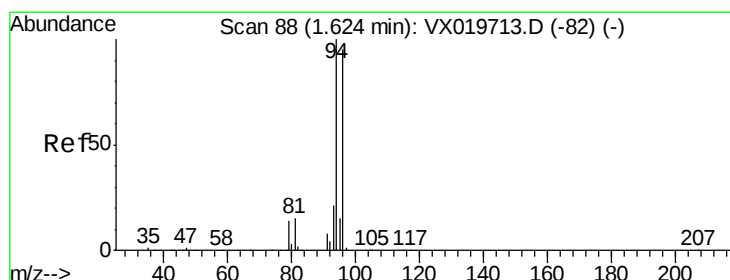
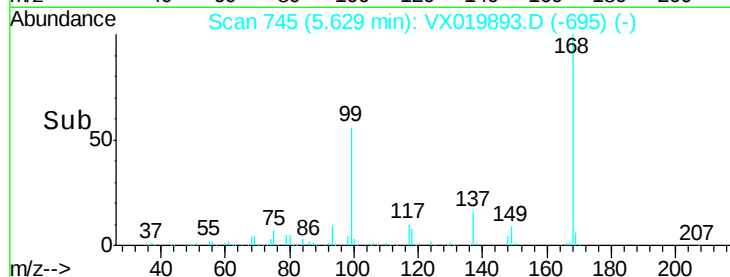
100000

50000

0

Time-->

5.50 5.60 5.70 5.80



#5

Bromomethane

Concen: 0.496 ug/l

RT: 1.63 min Scan# 89

Delta R.T. 0.01 min

Lab File: VX019893.D

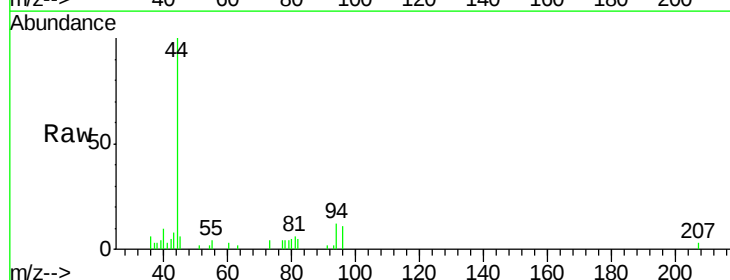
Acq: 11 Dec 2020 22:26

Tgt Ion: 94 Resp: 592

Ion Ratio Lower Upper

94 100

96 92.1 76.4 114.6



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.63

300

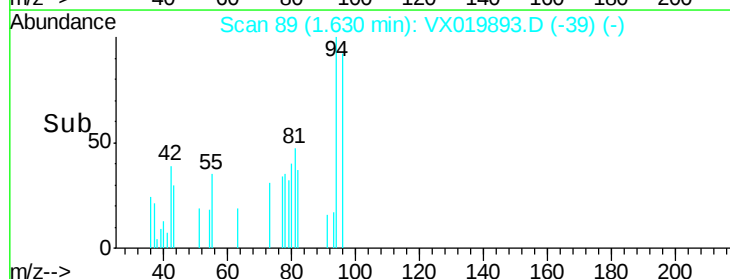
200

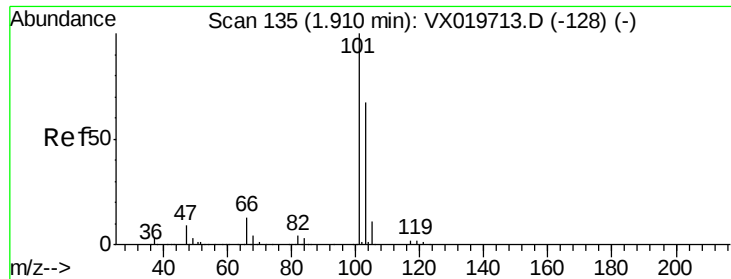
100

0

Time-->

1.60 1.65 1.70



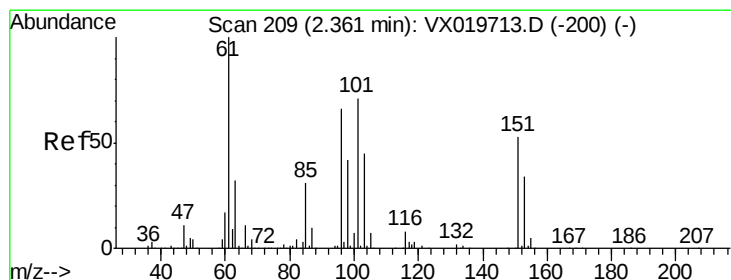
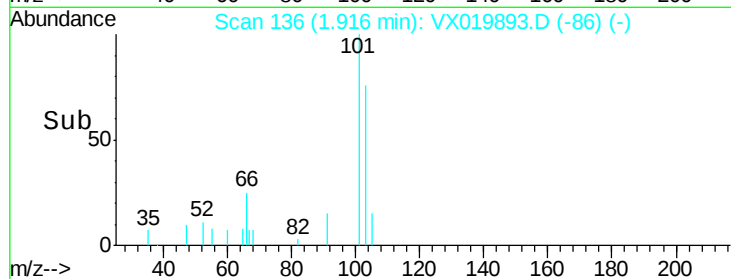
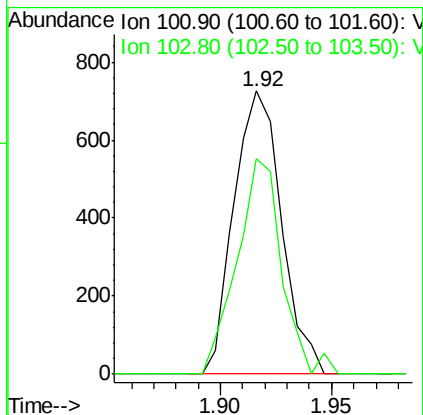
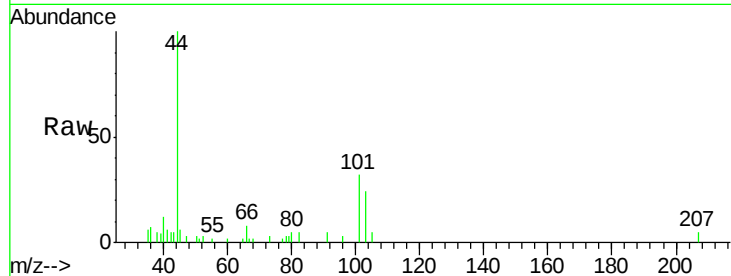


#7

Trichlorofluoromethane  
 Concen: 0.216 ug/l  
 RT: 1.92 min Scan# 136  
 Delta R.T. 0.01 min  
 Lab File: VX019893.D  
 Acq: 11 Dec 2020 22:26

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE134D2-20201208

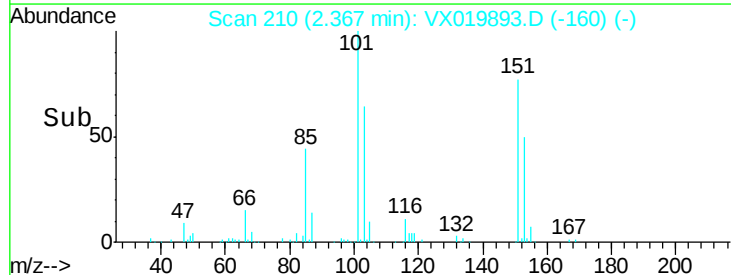
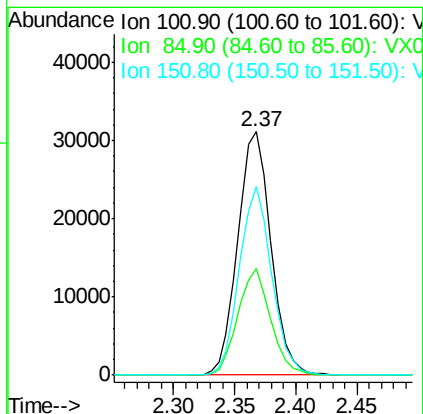
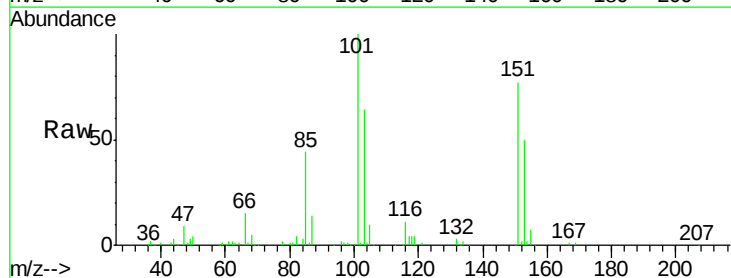
Tgt Ion:101 Resp: 1082  
 Ion Ratio Lower Upper  
 101 100  
 103 76.2 53.2 79.8

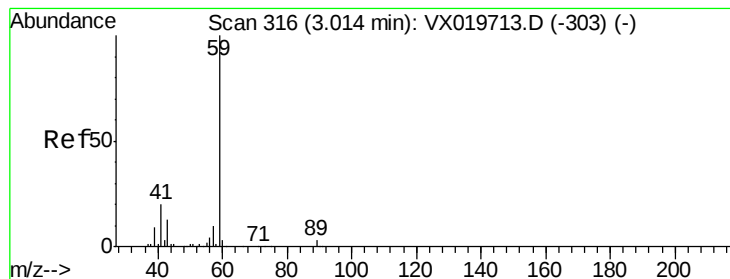


#9

1,1,2-Trichlorotrifluoroethane  
 Concen: 20.502 ug/l  
 RT: 2.37 min Scan# 210  
 Delta R.T. 0.01 min  
 Lab File: VX019893.D  
 Acq: 11 Dec 2020 22:26

Tgt Ion:101 Resp: 58780  
 Ion Ratio Lower Upper  
 101 100  
 85 42.9 34.9 52.3  
 151 75.6 61.4 92.2



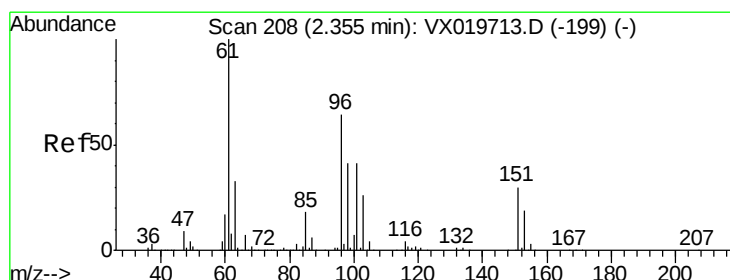
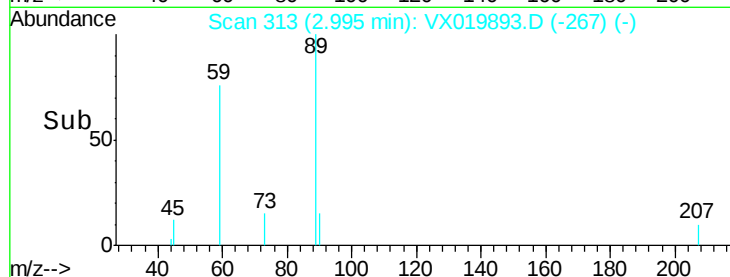
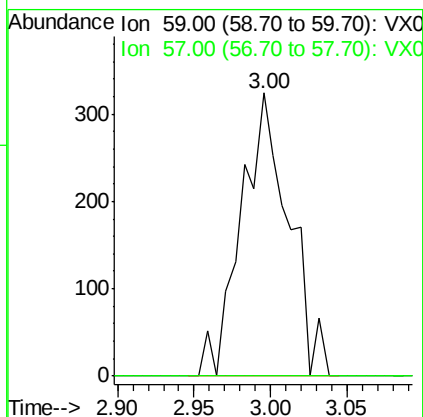
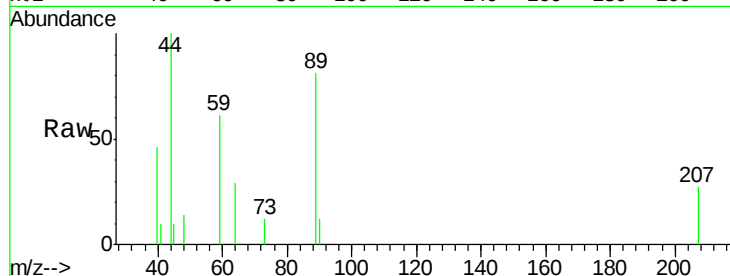


#11

Tert butyl alcohol  
Concen: Below Cal  
RT: 3.00 min Scan# 313  
Delta R.T. -0.02 min  
Lab File: VX019893.D  
Acq: 11 Dec 2020 22:26

Instrument :  
MSVOA\_X  
ClientSampleId :  
RE134D2-20201208

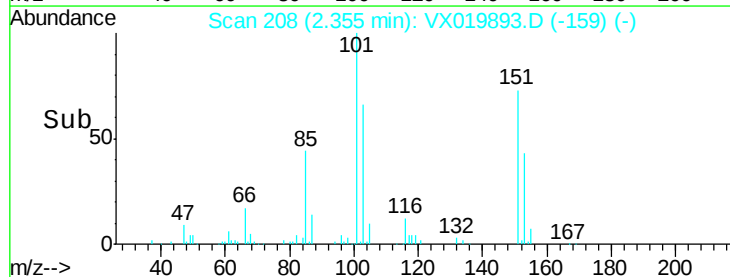
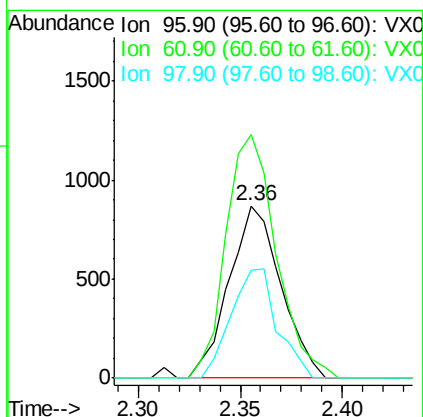
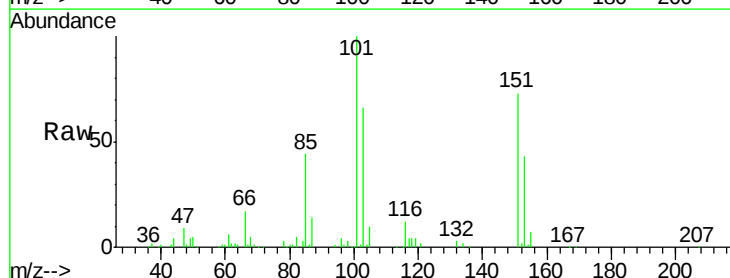
Tgt Ion: 59 Resp: 700  
Ion Ratio Lower Upper  
59 100  
57 0.0 7.8 11.8#

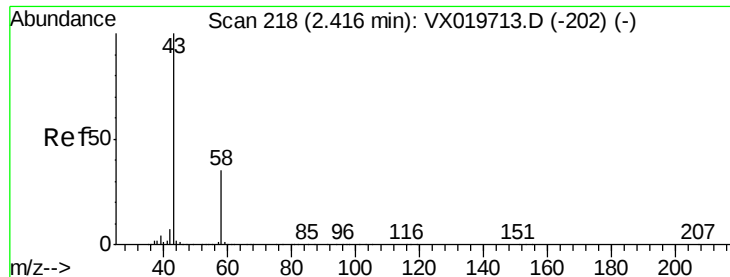


#12

1,1-Dichloroethene  
Concen: 0.529 ug/l  
RT: 2.36 min Scan# 208  
Delta R.T. 0.00 min  
Lab File: VX019893.D  
Acq: 11 Dec 2020 22:26

Tgt Ion: 96 Resp: 1534  
Ion Ratio Lower Upper  
96 100  
61 141.6 124.6 187.0  
98 62.9 50.6 76.0





#16

Acetone

Concen: 0.980 ug/l

RT: 2.42 min Scan# 218

Delta R.T. 0.00 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

Instrument :

MSVOA\_X

ClientSampleId :

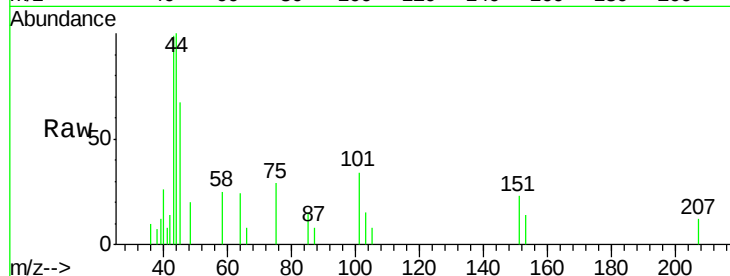
RE134D2-20201208

Tgt Ion: 43 Resp: 1532

Ion Ratio Lower Upper

43 100

58 25.0 27.8 41.8#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

2.42

800

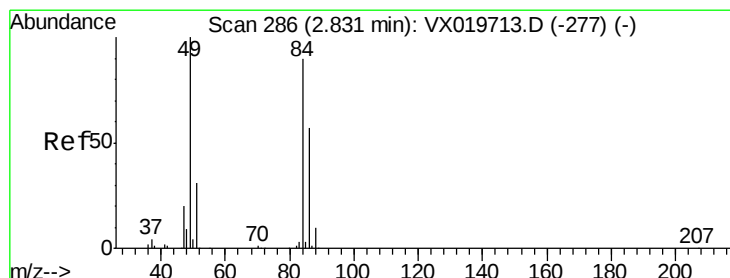
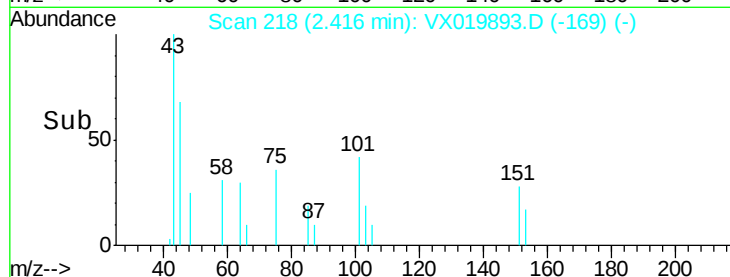
600

400

200

0

Time--> 2.35 2.40 2.45 2.50



#20

Methylene Chloride

Concen: Below Cal

RT: 2.83 min Scan# 286

Delta R.T. 0.00 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

Tgt Ion: 84 Resp: 525

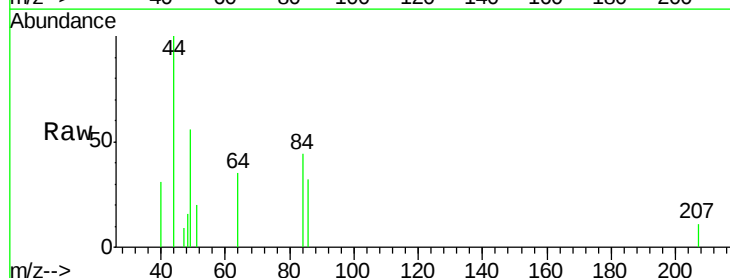
Ion Ratio Lower Upper

84 100

49 127.8 88.6 132.8

51 46.7 27.0 40.6#

86 74.5 50.3 75.5



Abundance Ion 83.90 (83.60 to 84.60): VX0

Ion 48.90 (48.60 to 49.60): VX0

Ion 50.90 (50.60 to 51.60): VX0

Ion 85.90 (85.60 to 86.60): VX0

500

400

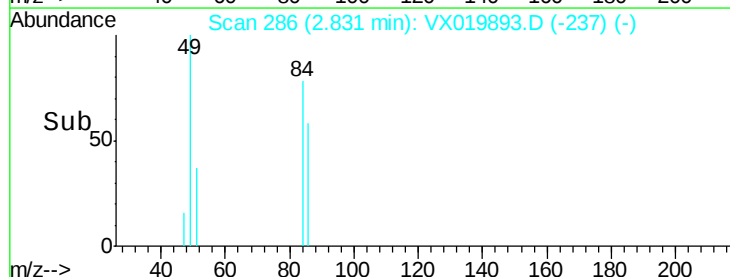
300

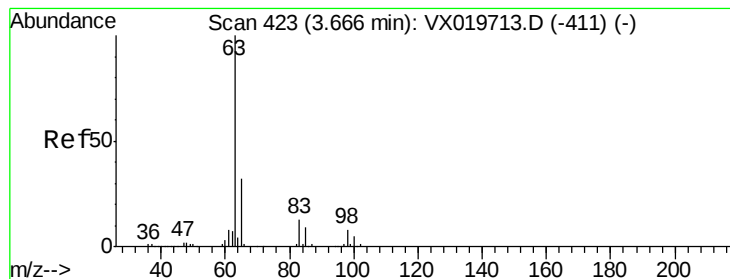
200

100

0

Time--> 2.80 2.85





#24

1,1-Dichloroethane

Concen: 0.220 ug/l

RT: 3.67 min Scan# 423

Delta R.T. -0.00 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

Instrument :

MSVOA\_X

ClientSampleId :

RE134D2-20201208

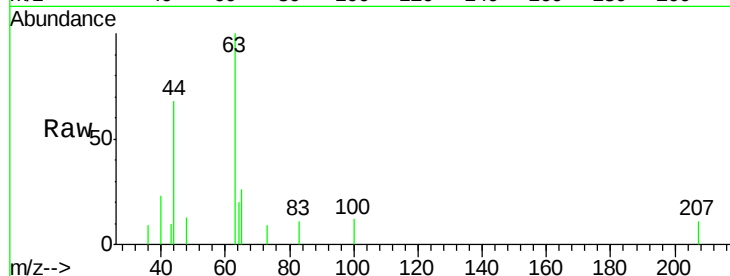
Tgt Ion: 63 Resp: 1314

Ion Ratio Lower Upper

63 100

98 0.0 3.8 11.2#

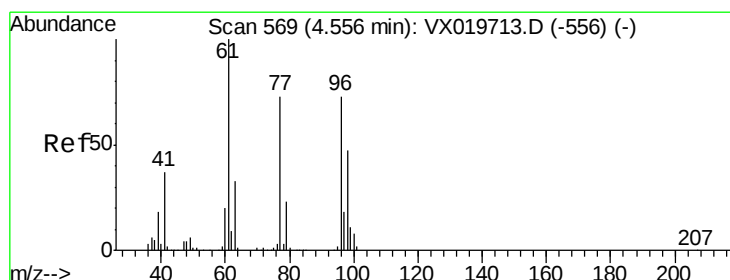
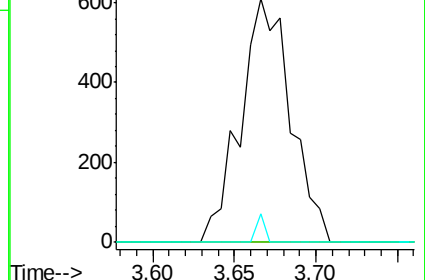
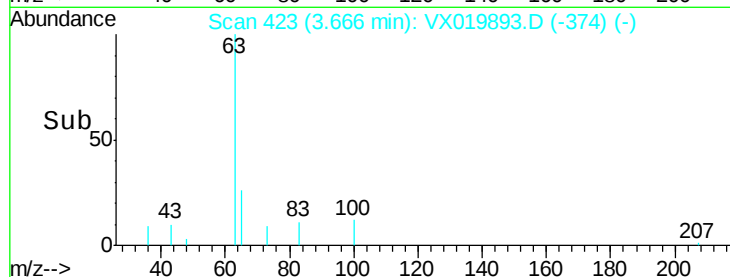
100 11.8 2.5 7.5#



Abundance Ion 62.90 (62.60 to 63.60): VX0

Ion 97.90 (97.60 to 98.60): VX0

Ion 99.90 (99.60 to 100.60): VX0



#27

cis-1,2-Dichloroethene

Concen: 1.715 ug/l

RT: 4.56 min Scan# 570

Delta R.T. 0.01 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

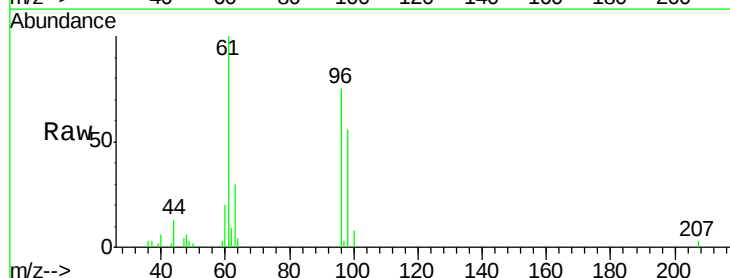
Tgt Ion: 96 Resp: 6783

Ion Ratio Lower Upper

96 100

61 140.5 0.0 285.6

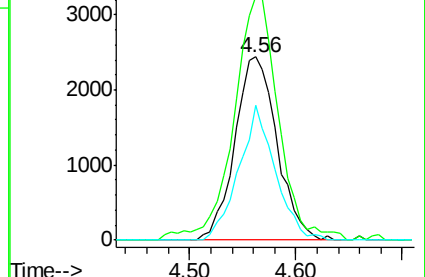
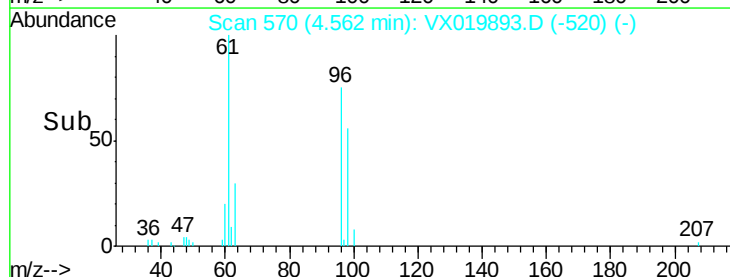
98 63.6 0.0 129.6

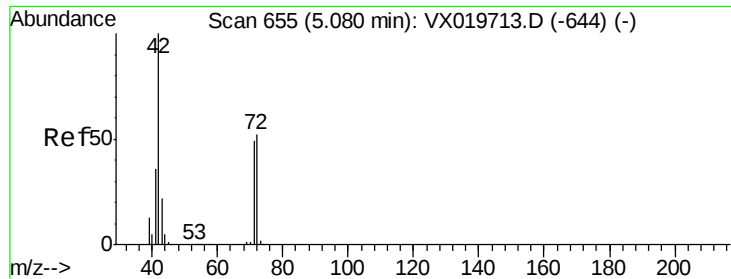


Abundance Ion 95.90 (95.60 to 96.60): VX0

Ion 60.90 (60.60 to 61.60): VX0

Ion 97.90 (97.60 to 98.60): VX0

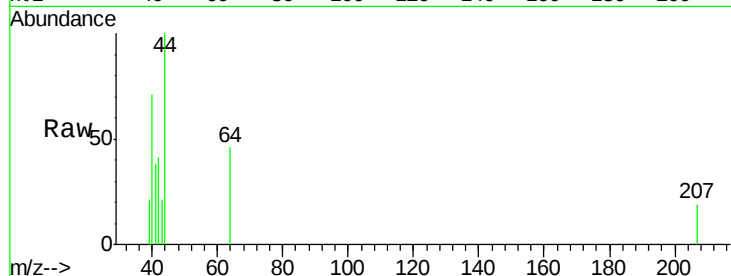




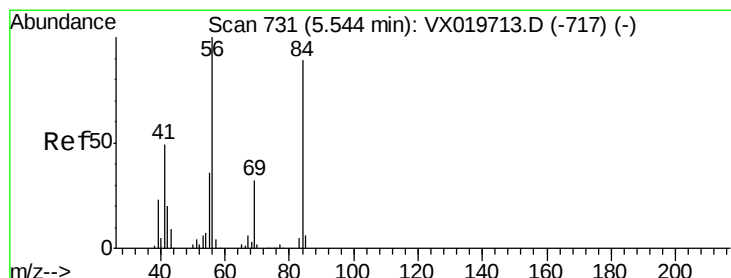
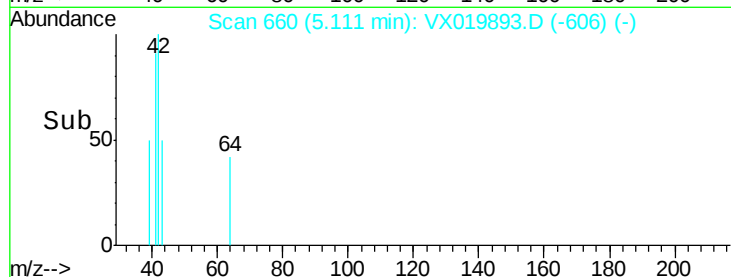
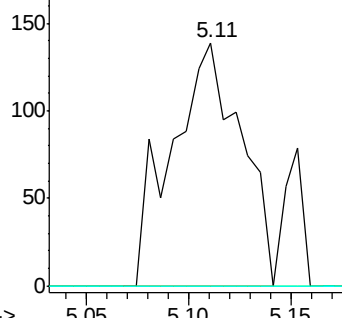
#29  
Tetrahydrofuran  
Concen: 0.213 ug/l  
RT: 5.11 min Scan# 660  
Delta R.T. 0.03 min  
Lab File: VX019893.D  
Acq: 11 Dec 2020 22:26

Instrument :  
MSVOA\_X  
ClientSampleId :  
RE134D2-20201208

Tgt Ion: 42 Resp: 330  
Ion Ratio Lower Upper  
42 100  
72 0.0 41.7 62.5#  
71 0.0 38.4 57.6#

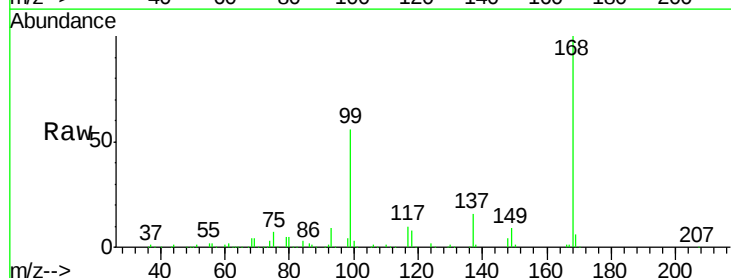


Abundance Ion 42.00 (41.70 to 42.70): VX0  
Ion 72.00 (71.70 to 72.70): VX0  
Ion 71.00 (70.70 to 71.70): VX0

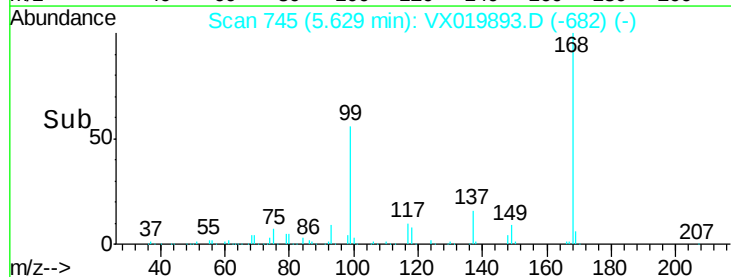
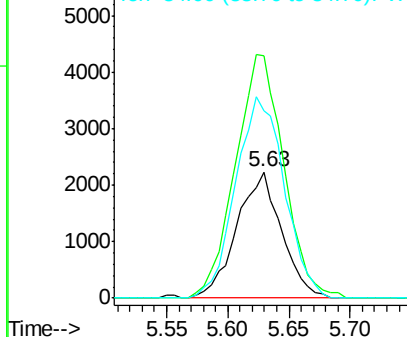


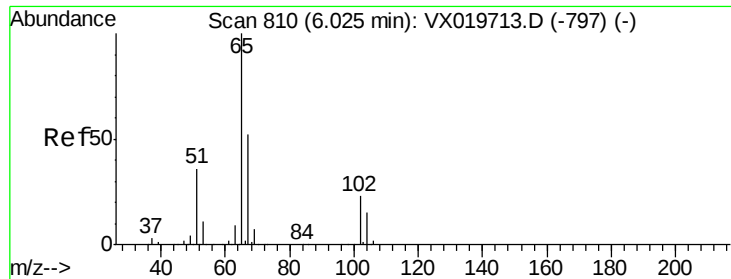
#31  
Cyclohexane  
Concen: 1.103 ug/l  
RT: 5.63 min Scan# 745  
Delta R.T. 0.09 min  
Lab File: VX019893.D  
Acq: 11 Dec 2020 22:26

Tgt Ion: 56 Resp: 5704  
Ion Ratio Lower Upper  
56 100  
69 191.5 25.3 37.9#  
84 148.1 71.4 107.0#



Abundance Ion 56.00 (55.70 to 56.70): VX0  
Ion 69.00 (68.70 to 69.70): VX0  
Ion 84.00 (83.70 to 84.70): VX0

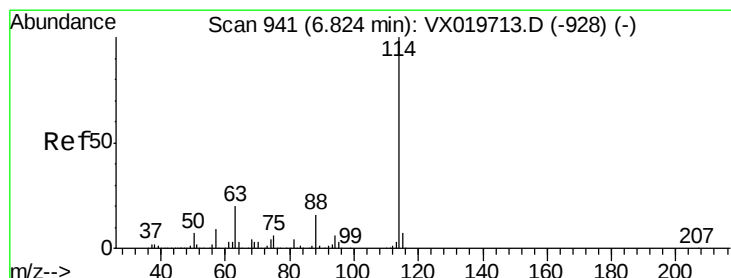
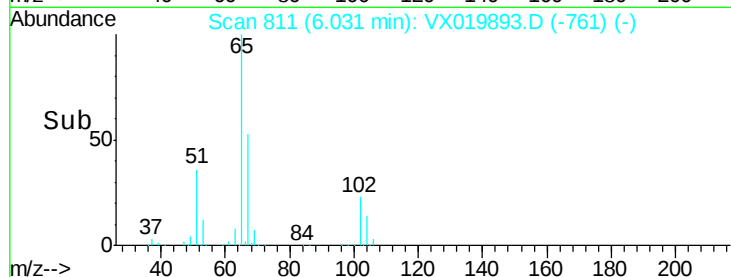
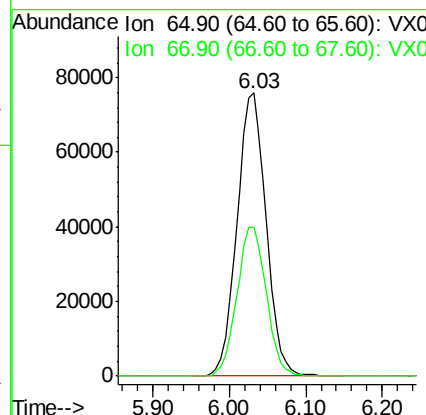
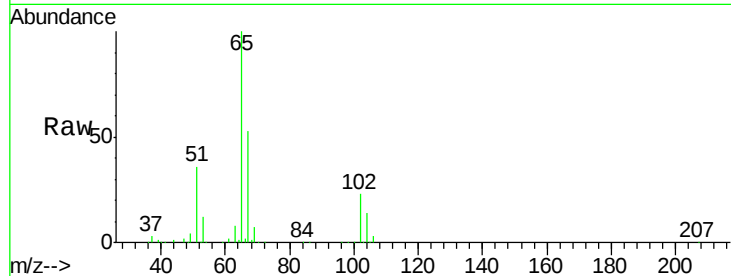




#33  
 1,2-Dichloroethane-d4  
 Concen: 47.988 ug/l  
 RT: 6.03 min Scan# 811  
 Delta R.T. 0.01 min  
 Lab File: VX019893.D  
 Acq: 11 Dec 2020 22:26

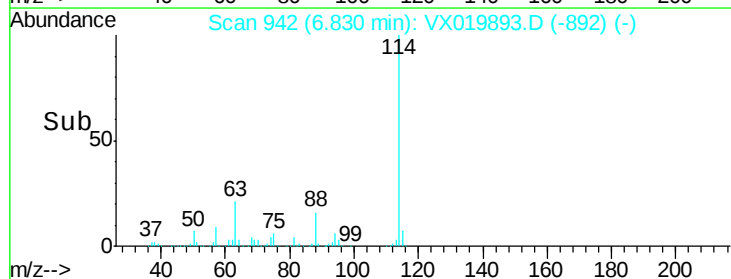
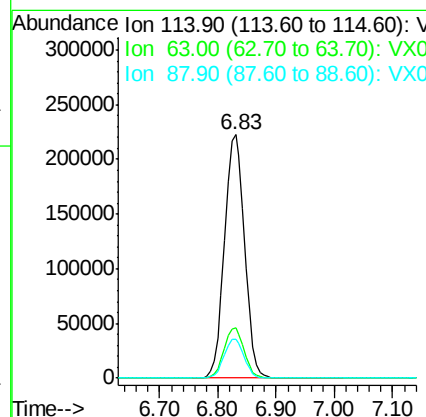
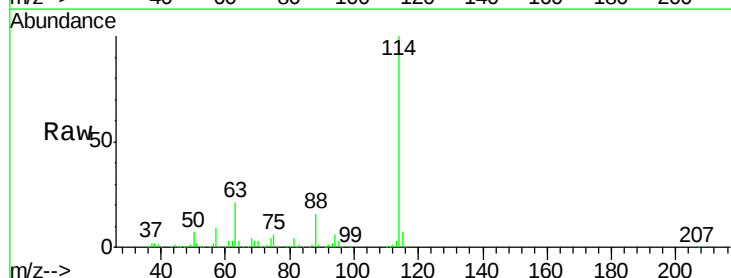
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE134D2-20201208

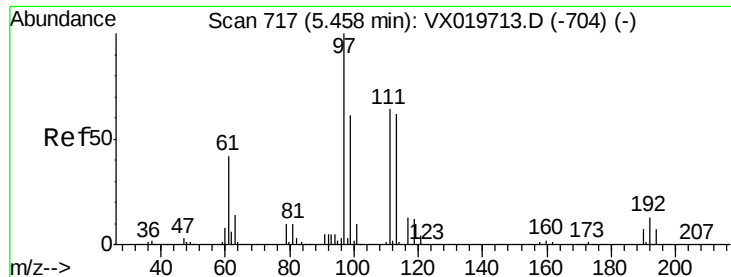
Tgt Ion: 65 Resp: 199530  
 Ion Ratio Lower Upper  
 65 100  
 67 53.3 0.0 105.4



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.83 min Scan# 942  
 Delta R.T. 0.01 min  
 Lab File: VX019893.D  
 Acq: 11 Dec 2020 22:26

Tgt Ion: 114 Resp: 531845  
 Ion Ratio Lower Upper  
 114 100  
 63 20.9 0.0 40.8  
 88 16.1 0.0 32.8

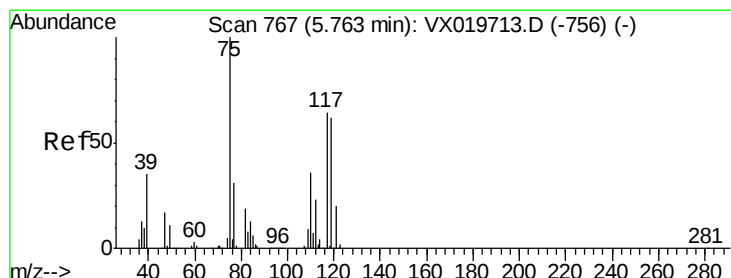
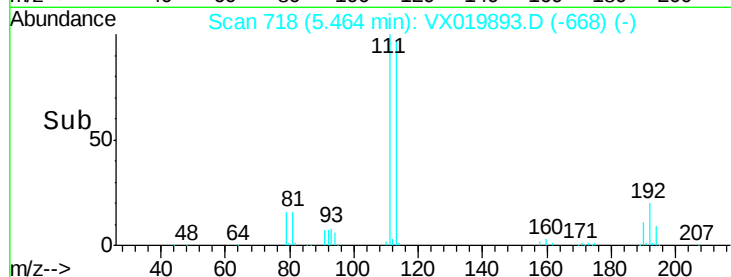
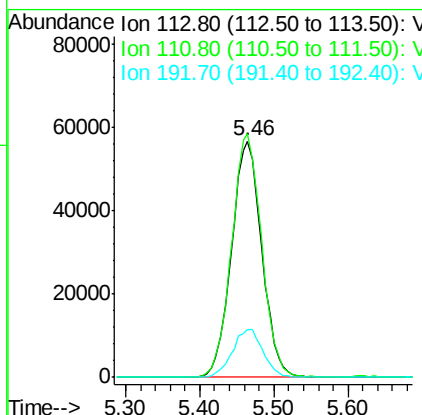
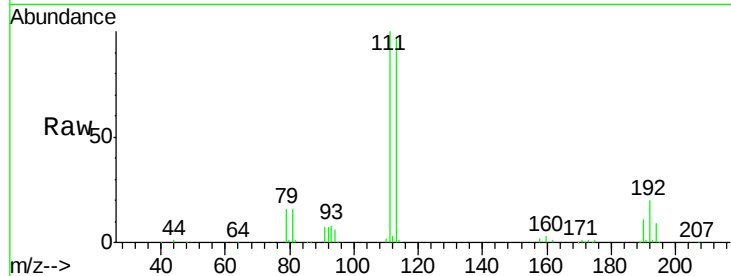




#35  
 Dibromofluoromethane  
 Concen: 46.987 ug/l  
 RT: 5.46 min Scan# 718  
 Delta R.T. 0.01 min  
 Lab File: VX019893.D  
 Acq: 11 Dec 2020 22:26

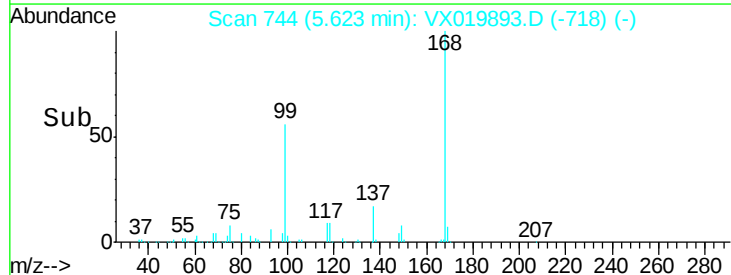
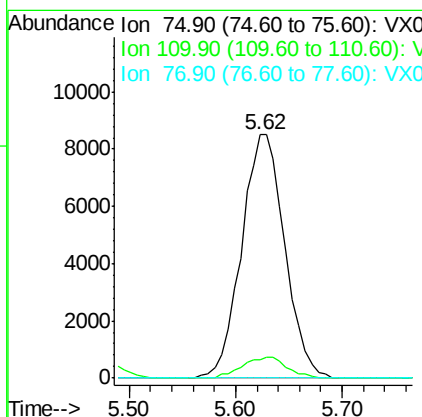
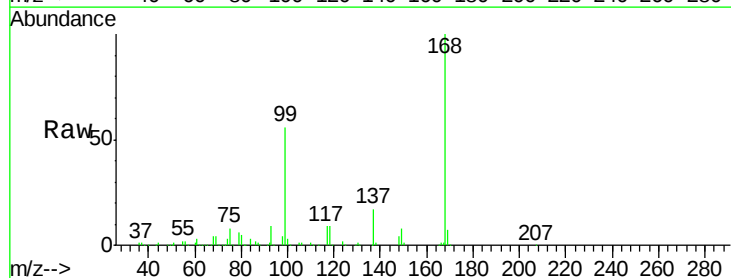
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE134D2-20201208

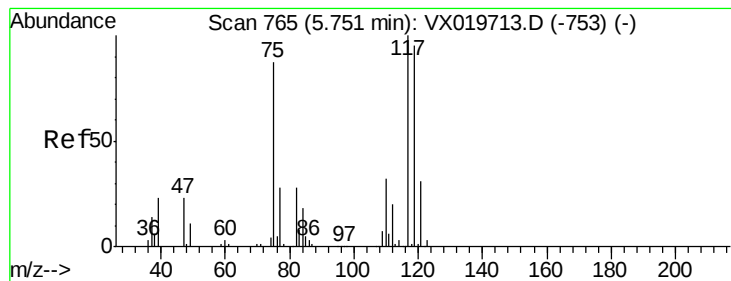
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.4 | 81.9  | 122.9 |
| 192     | 20.7  | 16.7  | 25.1  |



#36  
 1,1-Dichloropropene  
 Concen: 5.015 ug/l  
 RT: 5.62 min Scan# 744  
 Delta R.T. -0.14 min  
 Lab File: VX019893.D  
 Acq: 11 Dec 2020 22:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.9   | 18.1  | 54.4# |
| 77      | 0.0   | 25.3  | 37.9# |





#38

Carbon Tetrachloride

Concen: 6.658 ug/l

RT: 5.63 min Scan# 745

Delta R.T. -0.12 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

Instrument :

MSVOA\_X

ClientSampleId :

RE134D2-20201208

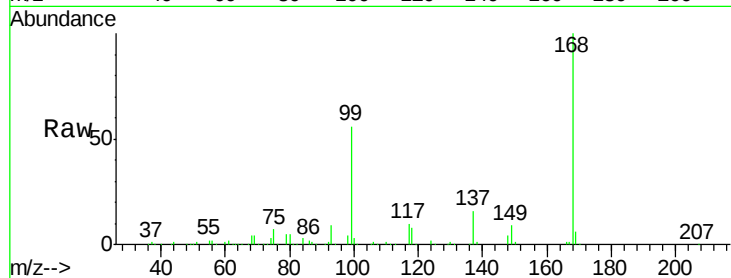
Tgt Ion: 117 Resp: 31334

Ion Ratio Lower Upper

117 100

119 4.4 76.2 114.2#

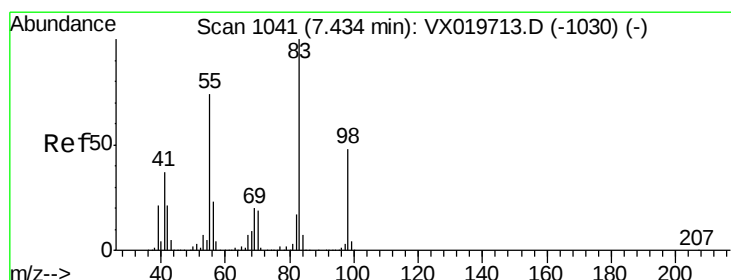
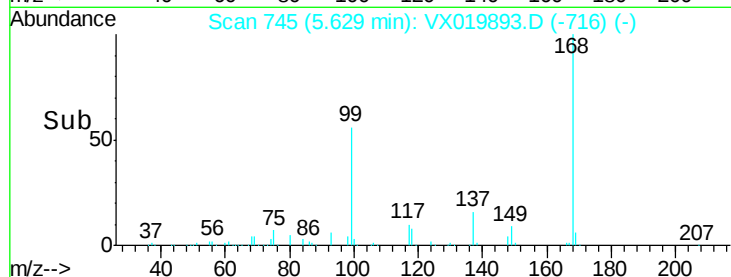
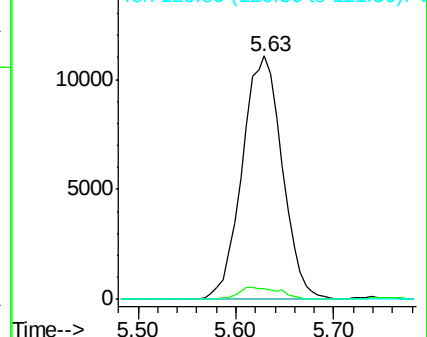
121 0.0 24.8 37.2#



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



#39

Methylcyclohexane

Concen: 0.817 ug/l

RT: 7.19 min Scan# 1001

Delta R.T. -0.24 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

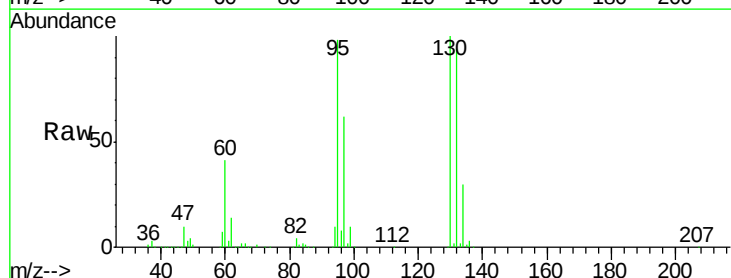
Tgt Ion: 83 Resp: 4611

Ion Ratio Lower Upper

83 100

55 0.0 58.9 88.3#

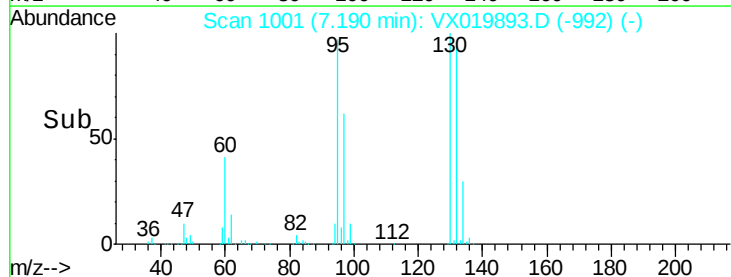
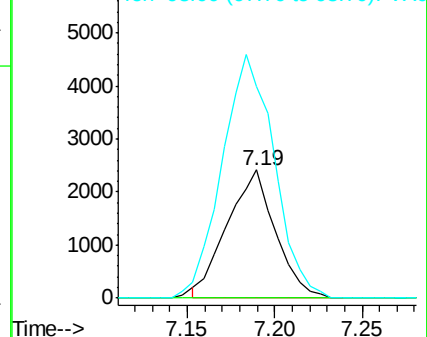
98 165.0 38.1 57.1#

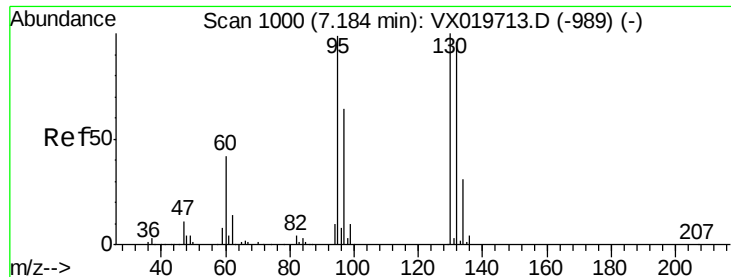


Abundance Ion 83.00 (82.70 to 83.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 98.00 (97.70 to 98.70): VX0





#44

Trichloroethene

Concen: 99.970 ug/l

RT: 7.19 min Scan# 1001

Delta R.T. 0.01 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

Instrument :

MSVOA\_X

ClientSampleId :

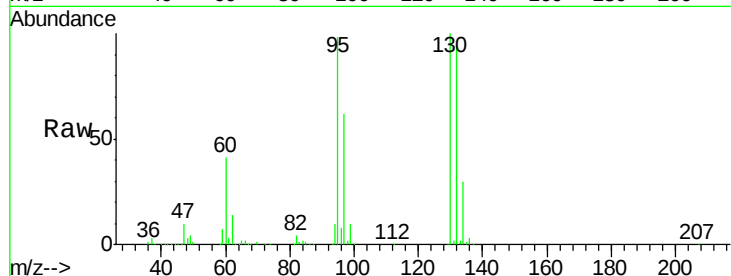
RE134D2-20201208

Tgt Ion:130 Resp: 385071

Ion Ratio Lower Upper

130 100

95 97.5 0.0 198.0



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0

7.19

200000

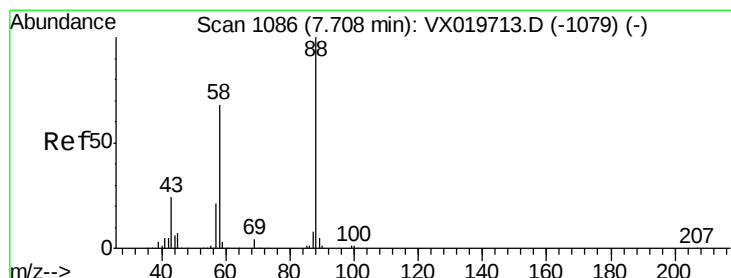
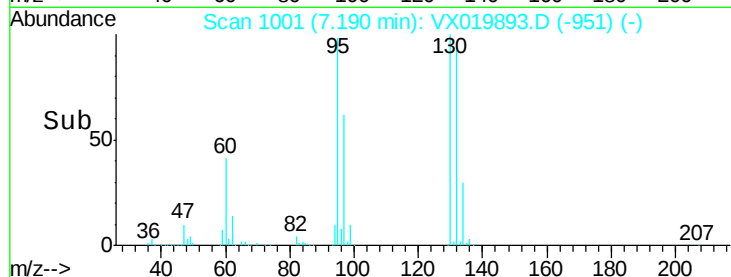
150000

100000

50000

0

Time-->



#49

1,4-Dioxane

Concen: 22.535 ug/l

RT: 7.71 min Scan# 1087

Delta R.T. 0.01 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

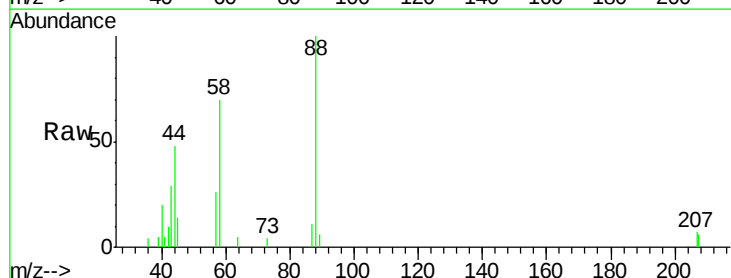
Tgt Ion: 88 Resp: 2118

Ion Ratio Lower Upper

88 100

43 52.6 23.2 34.8#

58 78.4 55.0 82.4



Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

7.71

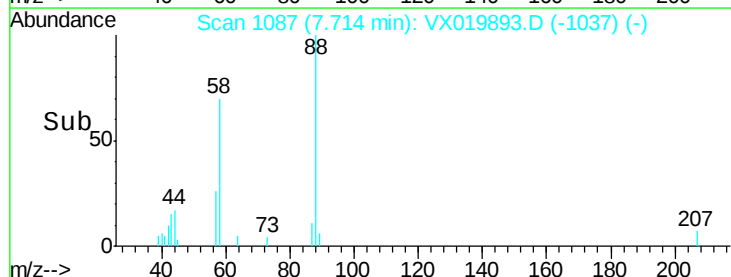
1500

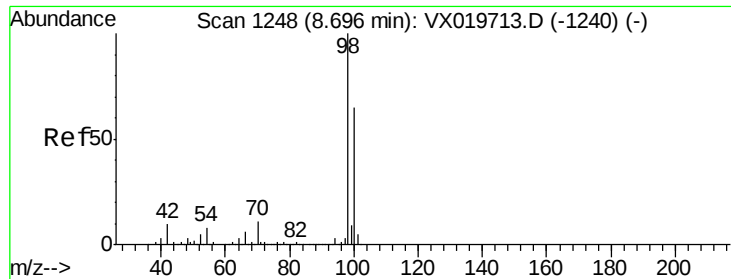
1000

500

0

Time-->

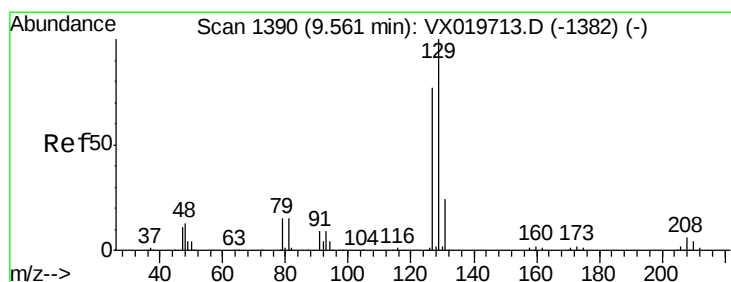
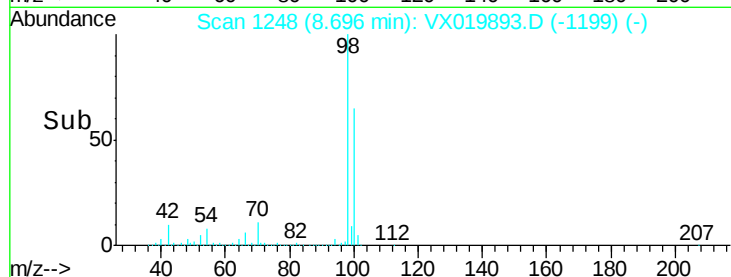
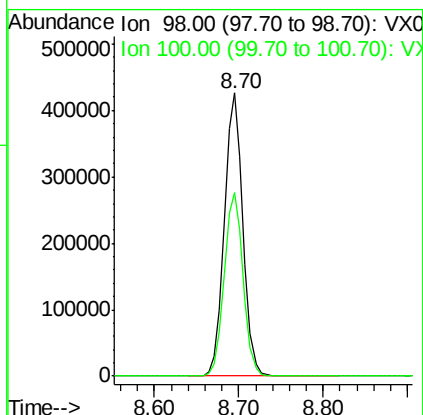
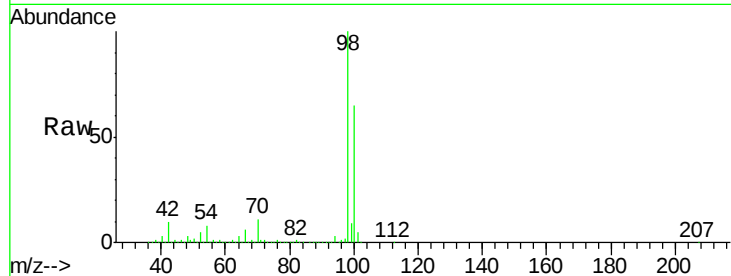




#50  
Toluene-d8  
Concen: 49.137 ug/l  
RT: 8.70 min Scan# 1248  
Delta R.T. -0.00 min  
Lab File: VX019893.D  
Acq: 11 Dec 2020 22:26

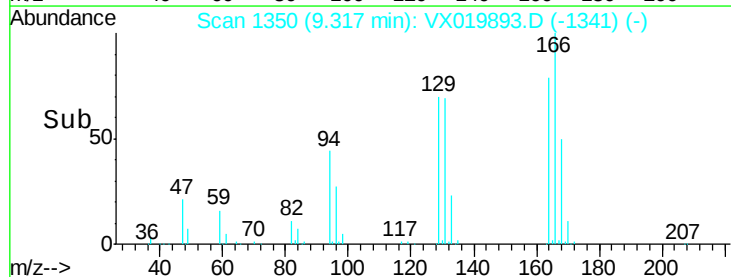
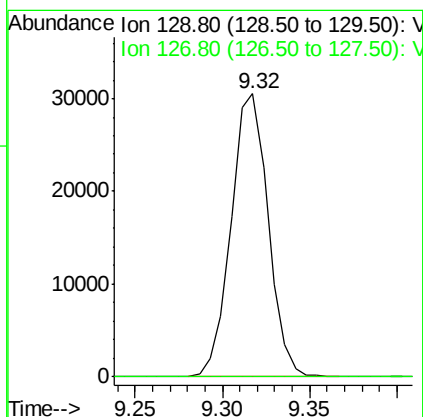
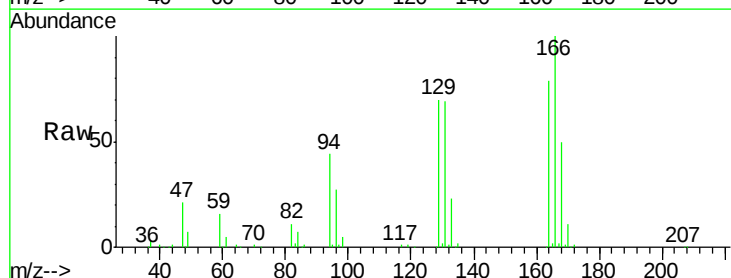
Instrument :  
MSVOA\_X  
ClientSampleId :  
RE134D2-20201208

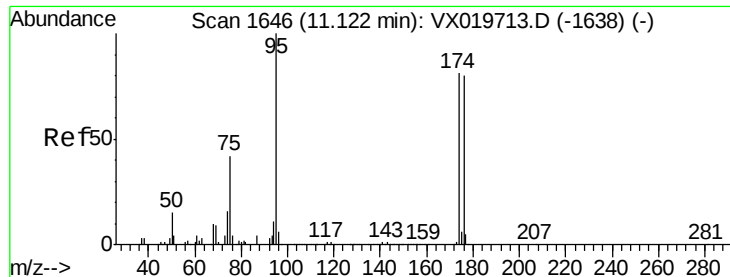
Tgt Ion: 98 Resp: 644805  
Ion Ratio Lower Upper  
98 100  
100 65.9 51.9 77.9



#60  
Dibromochloromethane  
Concen: 11.985 ug/l  
RT: 9.32 min Scan# 1350  
Delta R.T. -0.24 min  
Lab File: VX019893.D  
Acq: 11 Dec 2020 22:26

Tgt Ion: 129 Resp: 45054  
Ion Ratio Lower Upper  
129 100  
127 0.0 38.4 115.2#





#62

4-Bromofluorobenzene

Concen: 45.525 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. 0.00 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

Instrument :

MSVOA\_X

ClientSampleId :

RE134D2-20201208

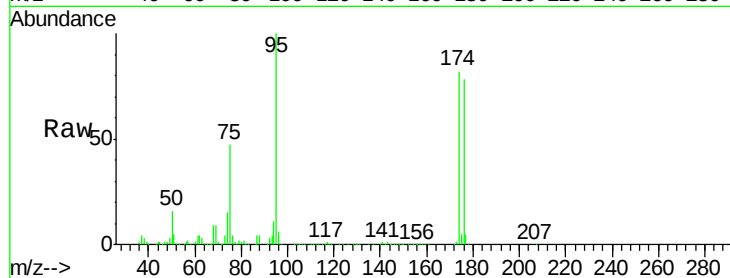
Tgt Ion: 95 Resp: 227380

Ion Ratio Lower Upper

95 100

174 77.9 0.0 154.6

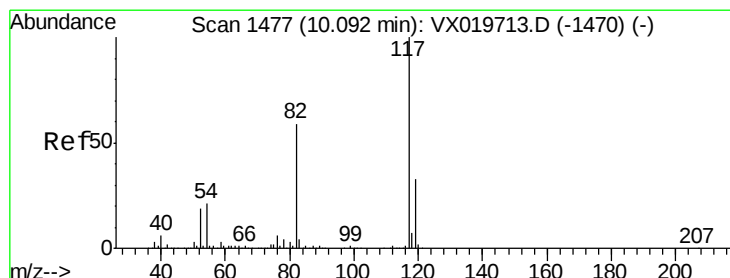
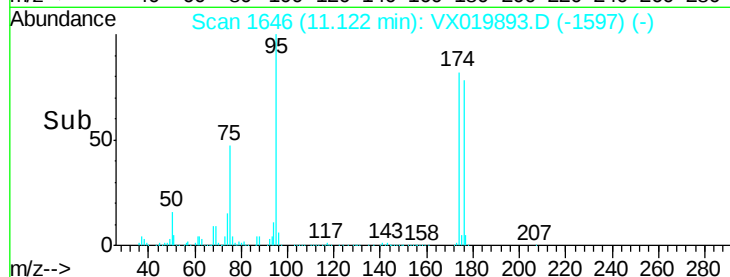
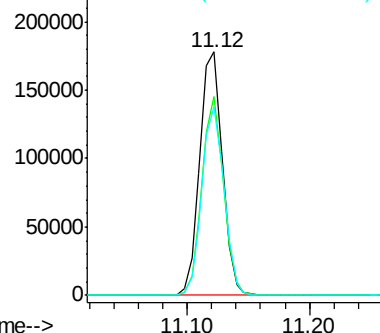
176 76.0 0.0 155.8



Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): VX0

Ion 175.80 (175.50 to 176.50): VX0



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.09 min Scan# 1477

Delta R.T. 0.00 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

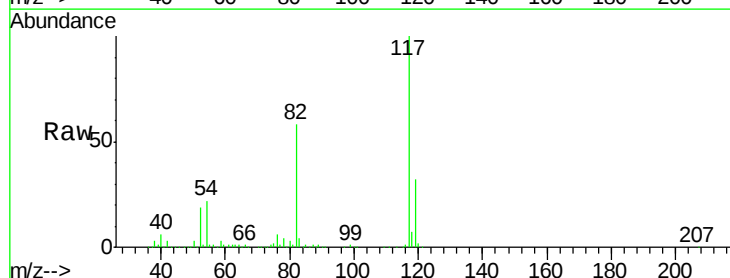
Tgt Ion: 117 Resp: 485708

Ion Ratio Lower Upper

117 100

82 57.9 47.4 71.2

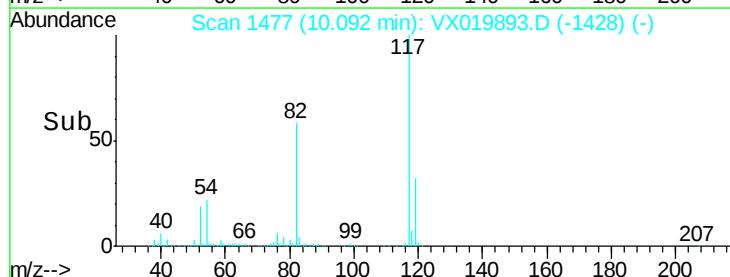
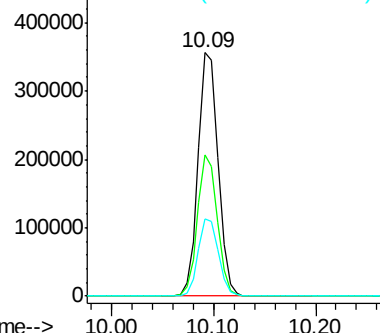
119 31.8 26.6 39.8

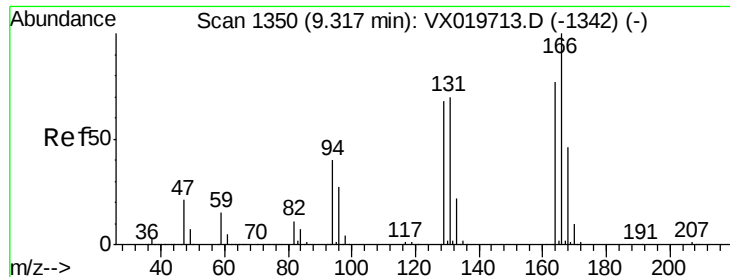


Abundance Ion 116.90 (116.60 to 117.60): VX0

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): VX0





#64

Tetrachloroethene

Concen: 14.877 ug/l

RT: 9.32 min Scan# 1350

Delta R.T. 0.00 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

Instrument :

MSVOA\_X

ClientSampleId :

RE134D2-20201208

Tgt Ion:164 Resp: 48459

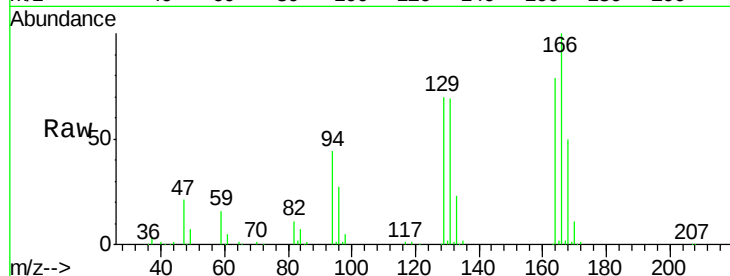
Ion Ratio Lower Upper

164 100

166 126.3 103.4 155.2

129 88.5 70.8 106.2

131 87.1 72.5 108.7

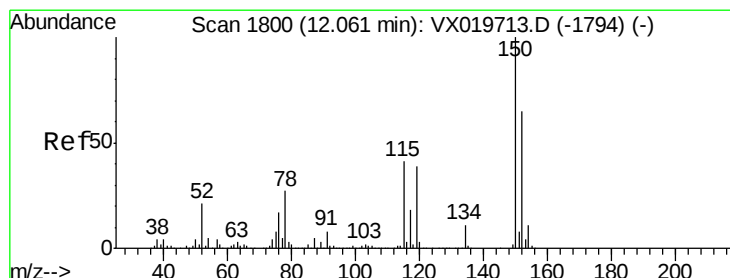
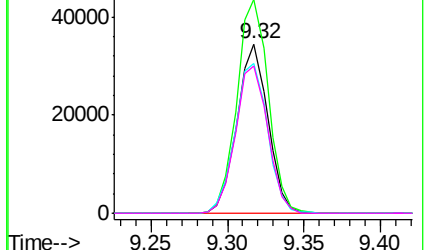
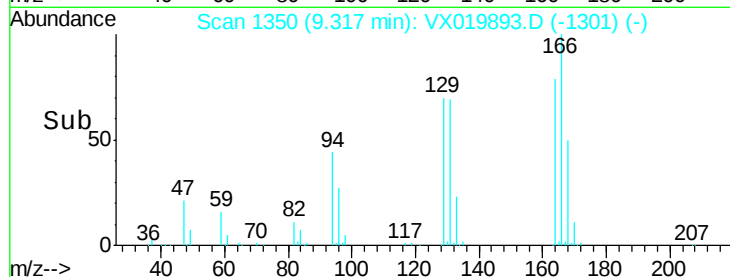


Abundance Ion 163.80 (163.50 to 164.50): V

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



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.06 min Scan# 1800

Delta R.T. -0.00 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

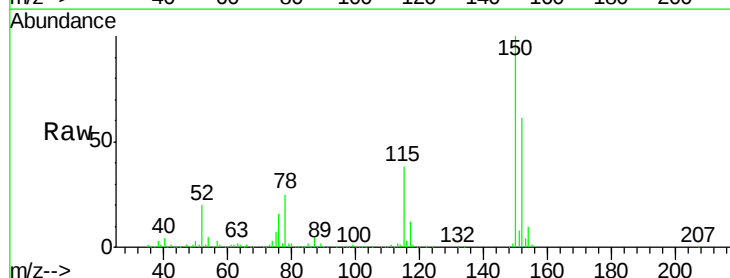
Tgt Ion:152 Resp: 212955

Ion Ratio Lower Upper

152 100

115 60.9 41.1 123.3

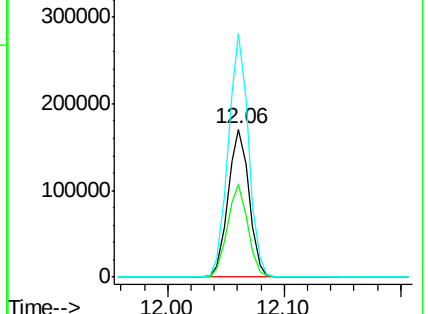
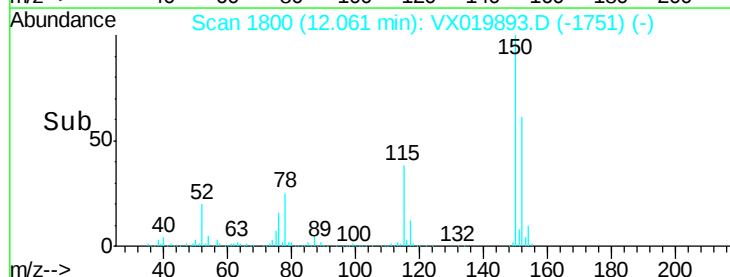
150 158.8 0.0 349.0

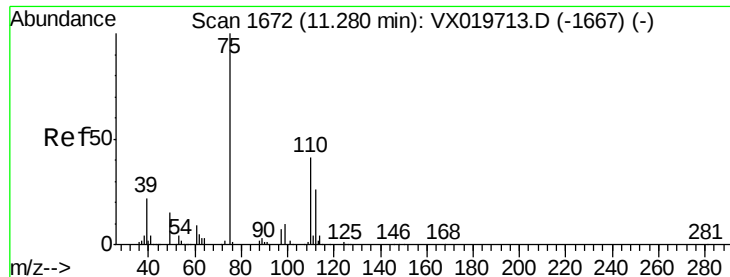


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 22.966 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.16 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

Instrument :

MSVOA\_X

ClientSampleId :

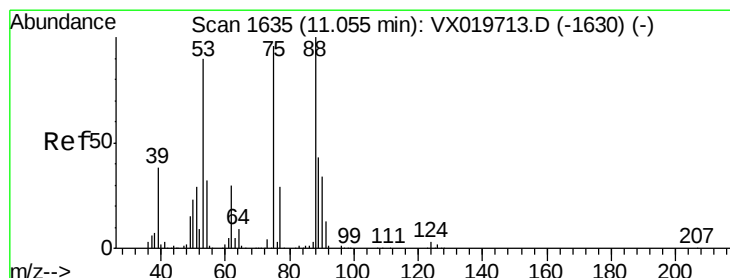
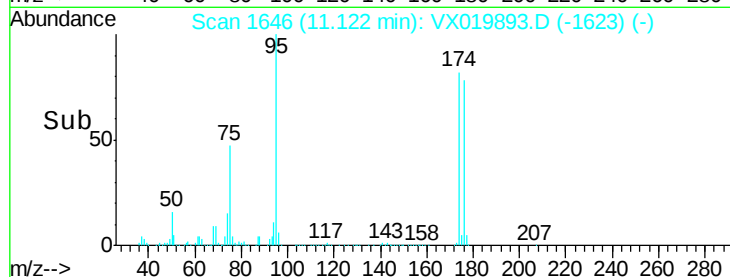
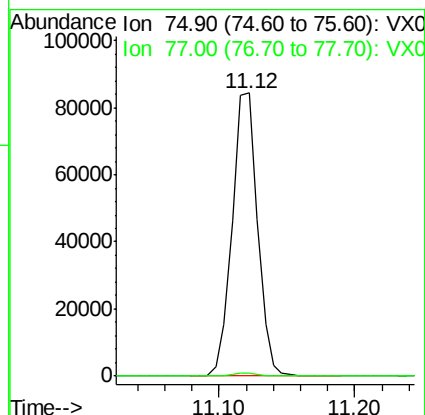
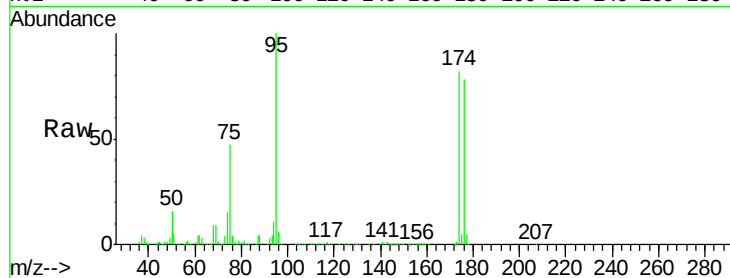
RE134D2-20201208

Tgt Ion: 75 Resp: 109691

Ion Ratio Lower Upper

75 100

77 1.2 19.1 57.5#



#81

trans-1,4-Dichloro-2-butene

Concen: 66.391 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. 0.07 min

Lab File: VX019893.D

Acq: 11 Dec 2020 22:26

Tgt Ion: 75 Resp: 109691

Ion Ratio Lower Upper

75 100

53 0.1 74.5 111.7#

89 0.0 37.9 56.9#

