

Data File : VX013893.D  
Acq On : 10 Dec 2019 13:16  
Operator : JC/SP  
Sample : K6184-06DL 5X  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
RE134D4-20191202DL

Quant Time: Dec 11 02:23:19 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X112619W.M  
Quant Title : SW846 8260  
QLast Update : Tue Nov 26 15:53:00 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 591654   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 910729   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 810618   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 344569   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |        |      |
|-----------------------------|--------|-----|----------|-------|--------|------|
| System Monitoring Compounds |        |     |          |       |        |      |
| 33) 1,2-Dichloroethane-d4   | 6.06   | 65  | 330078   | 48.06 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 96.12% |      |
| 35) Dibromofluoromethane    | 5.49   | 113 | 272510   | 48.40 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 96.80% |      |
| 50) Toluene-d8              | 8.71   | 98  | 1076727  | 49.08 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 98.16% |      |
| 62) 4-Bromofluorobenzene    | 11.14  | 95  | 356232   | 45.03 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 90.06% |      |

| Target Compounds               |       |     |        |        |        | Qvalue |
|--------------------------------|-------|-----|--------|--------|--------|--------|
| 5) Bromomethane                | 1.64  | 94  | 2178   | 0.390  | ug/l # | 77     |
| 6) Chloroethane                | 1.68  | 64  | 1039   | 0.220  | ug/l # | 74     |
| 9) 1,1,2-Trichlorotrifluoroet  | 2.37  | 101 | 4660   | 0.826  | ug/l   | 92     |
| 10) Methyl Iodide              | 2.51  | 142 | 3144   | 0.461  | ug/l # | 73     |
| 11) Tert butyl alcohol         | 3.06  | 59  | 591    | 0.349  | ug/l # | 1      |
| 13) Acrolein                   | 2.30  | 56  | 492    | 6.427  | ug/l # | 73     |
| 15) Acrylonitrile              | 3.12  | 53  | 1260   | 0.360  | ug/l # | 82     |
| 16) Acetone                    | 2.43  | 43  | 11035  | 3.254  | ug/l   | 99     |
| 17) Carbon Disulfide           | 2.56  | 76  | 3924   | 0.244  | ug/l # | 79     |
| 20) Methylene Chloride         | 2.84  | 84  | 3717   | 0.571  | ug/l # | 81     |
| 29) Tetrahydrofuran            | 4.97  | 42  | 738    | 0.238  | ug/l   | 93     |
| 36) 1,1-Dichloropropene        | 5.64  | 75  | 40150  | 4.857  | ug/l # | 52     |
| 38) Carbon Tetrachloride       | 5.65  | 117 | 53291  | 6.991  | ug/l # | 16     |
| 44) Trichloroethene            | 7.20  | 130 | 5172   | 0.748  | ug/l   | 67     |
| 49) 1,4-Dioxane                | 7.87  | 88  | 620    | 3.734  | ug/l   | 96     |
| 64) Tetrachloroethene          | 9.32  | 164 | 1291   | 0.214  | ug/l # | 48     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75  | 173817 | 22.428 | ug/l # | 40     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75  | 173817 | 61.359 | ug/l # | 11     |
| 93) 1,2,4-Trichlorobenzene     | 13.64 | 180 | 1981   | 0.253  | ug/l   | 93     |

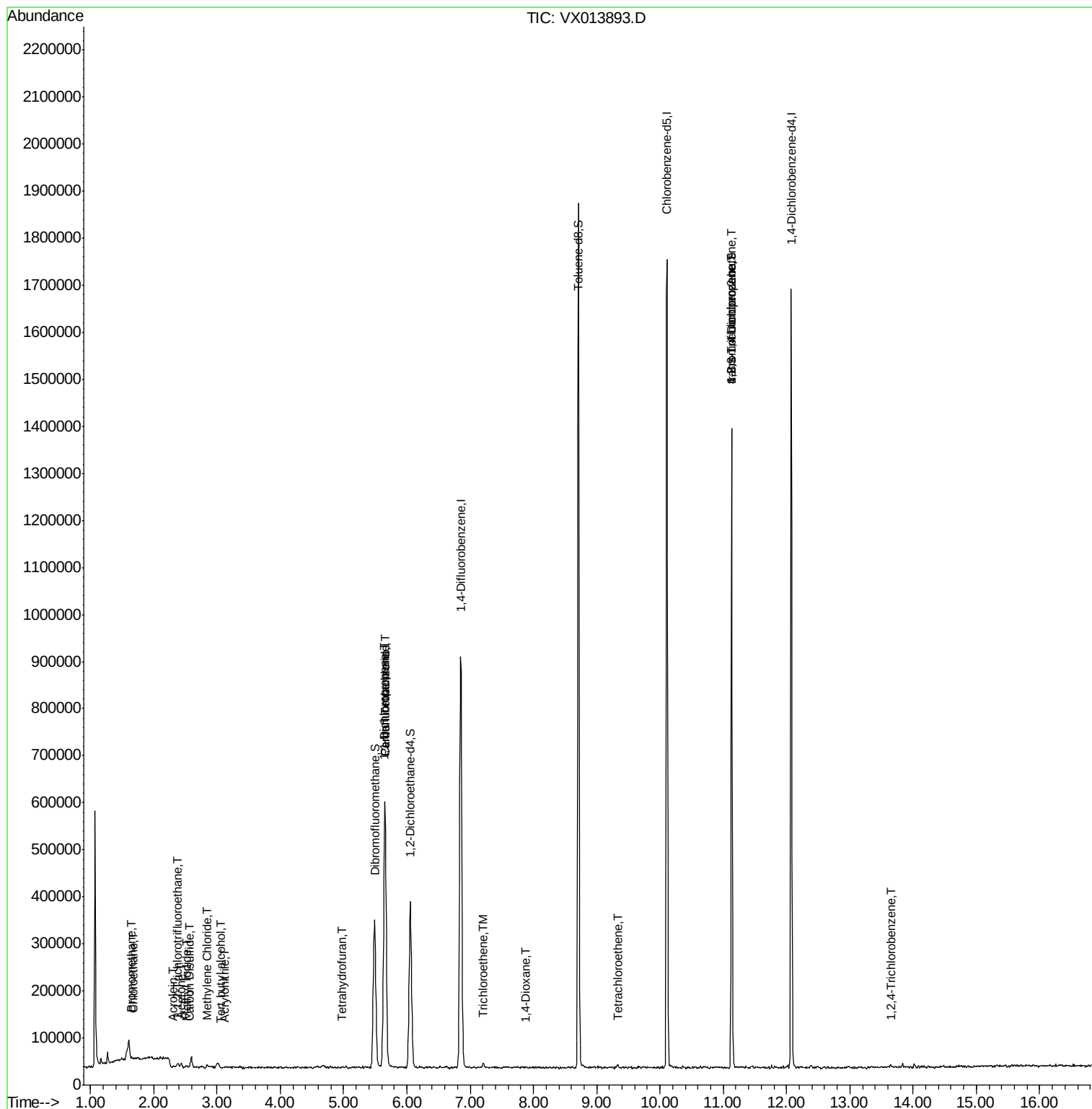
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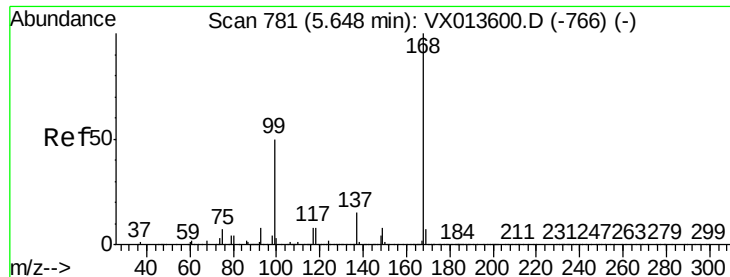
Data File : VX013893.D

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MSVOA\_X  
**ClientSampleId :**  
RE134D4-20191202DL

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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X112619W.M  
Quant Title : SW846 8260  
QLast Update : Tue Nov 26 15:53:00 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 782

Delta R.T. 0.01 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

Instrument :

MSVOA\_X

ClientSampleId :

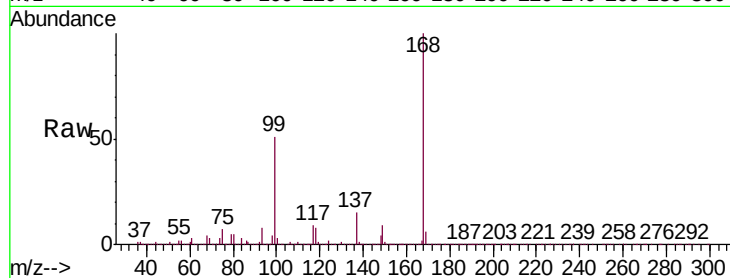
RE134D4-20191202DL

Tgt Ion:168 Resp: 591654

Ion Ratio Lower Upper

168 100

99 51.1 39.8 59.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

200000

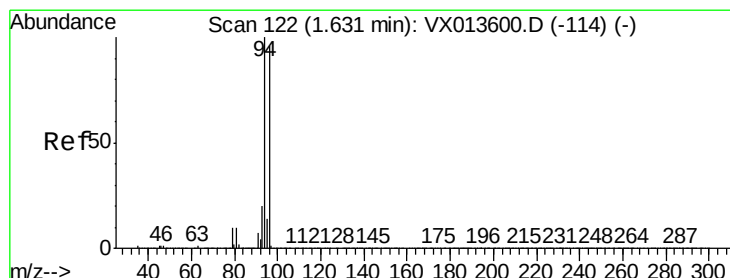
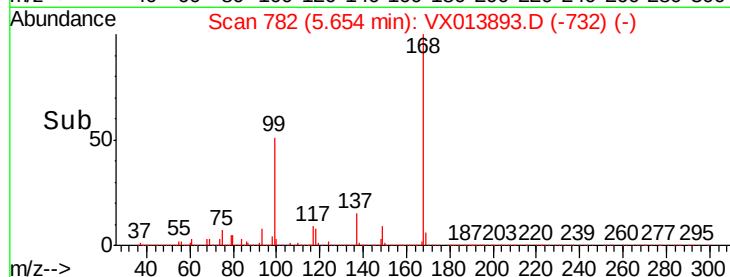
150000

100000

50000

0

Time-->



#5

Bromomethane

Concen: 0.390 ug/l

RT: 1.64 min Scan# 124

Delta R.T. 0.01 min

Lab File: VX013893.D

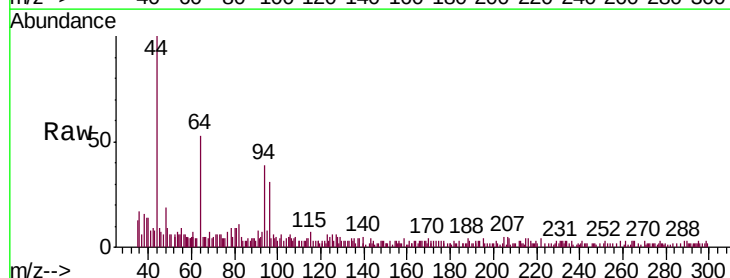
Acq: 10 Dec 2019 13:16

Tgt Ion: 94 Resp: 2178

Ion Ratio Lower Upper

94 100

96 73.9 77.0 115.4#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.64

2000

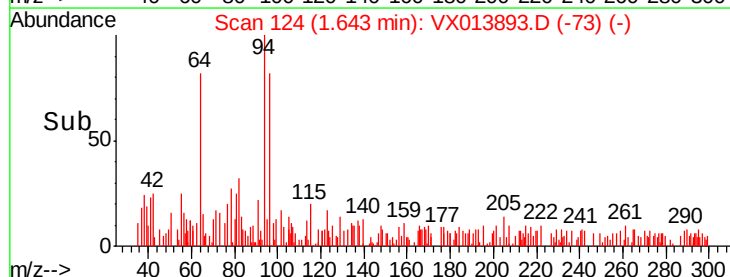
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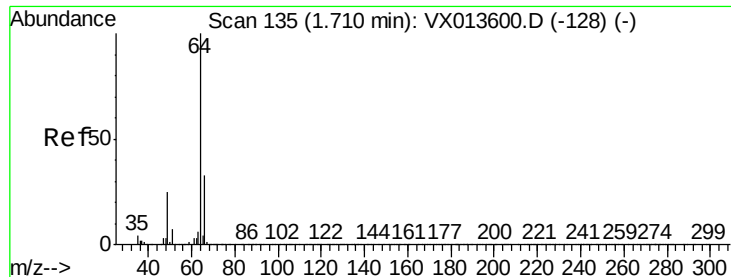
1000

500

0

Time-->





#6

Chloroethane

Concen: 0.220 ug/l

RT: 1.68 min Scan# 130

Delta R.T. -0.03 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

Instrument :

MSVOA\_X

ClientSampleId :

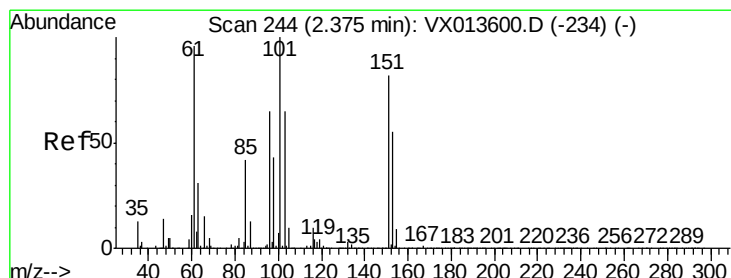
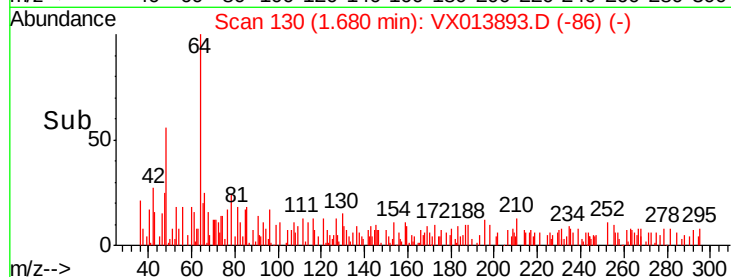
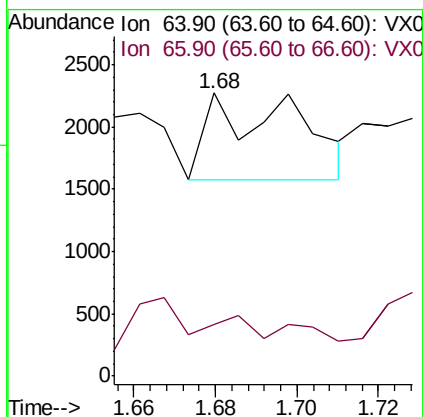
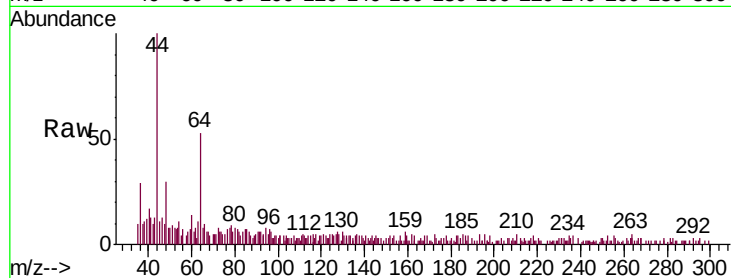
RE134D4-20191202DL

Tgt Ion: 64 Resp: 1039

Ion Ratio Lower Upper

64 100

66 18.7 26.7 40.1#



#9

1,1,2-Trichlorotrifluoroethane

Concen: 0.826 ug/l

RT: 2.37 min Scan# 244

Delta R.T. -0.00 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

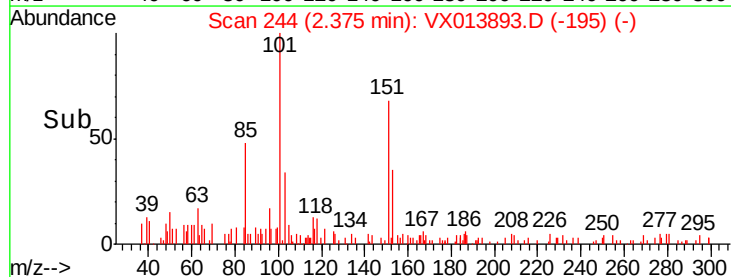
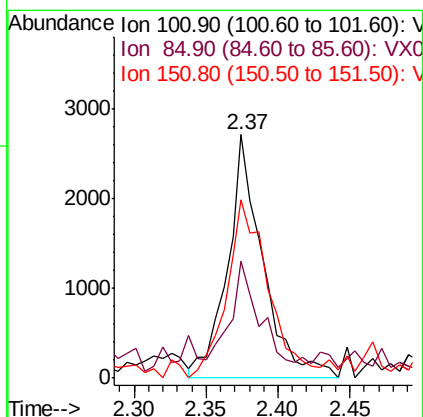
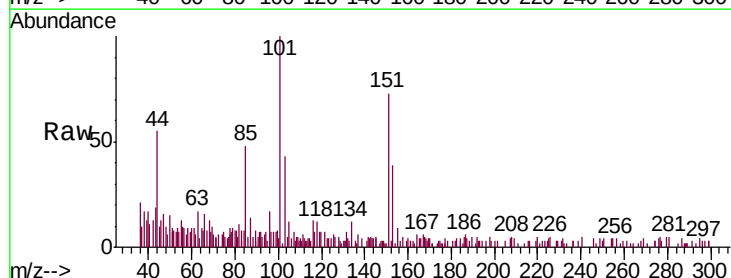
Tgt Ion: 101 Resp: 4660

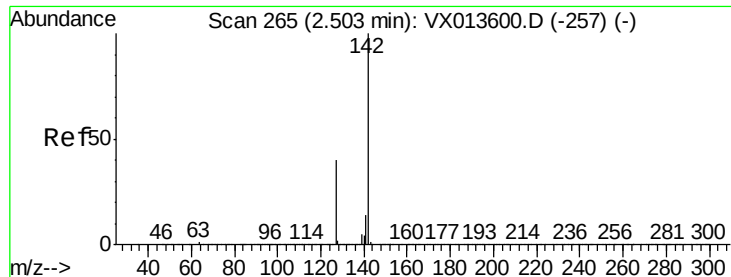
Ion Ratio Lower Upper

101 100

85 36.2 33.9 50.9

151 86.1 64.2 96.2

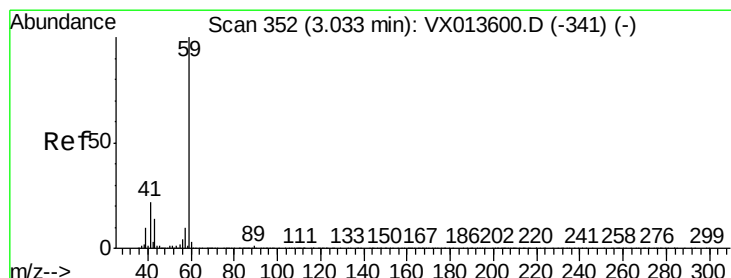
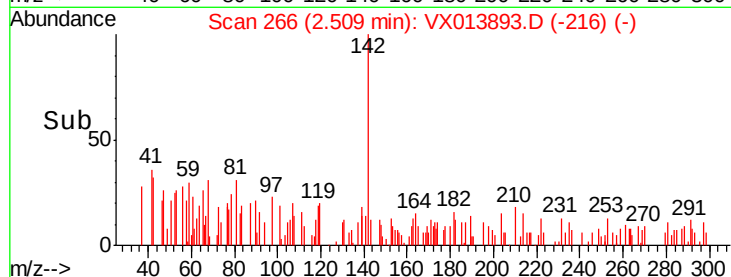
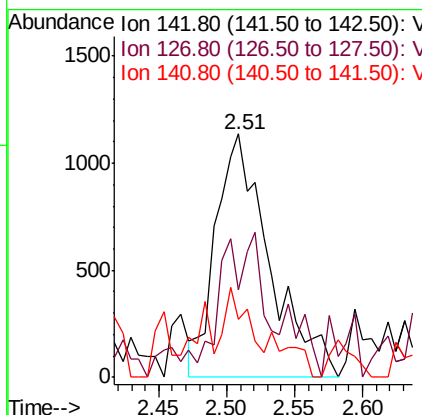
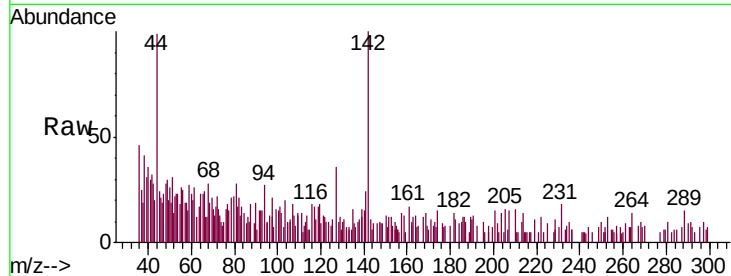




#10  
Methyl Iodide  
Concen: 0.461 ug/l  
RT: 2.51 min Scan# 266  
Delta R.T. 0.01 min  
Lab File: VX013893.D  
Acq: 10 Dec 2019 13:16

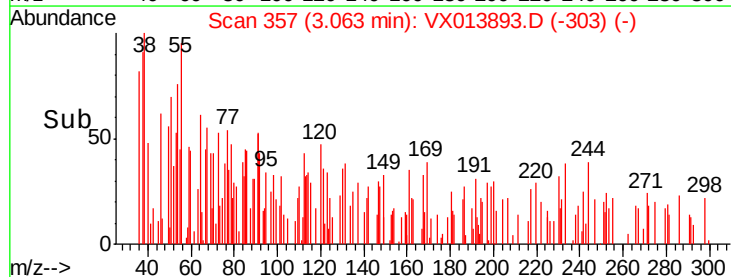
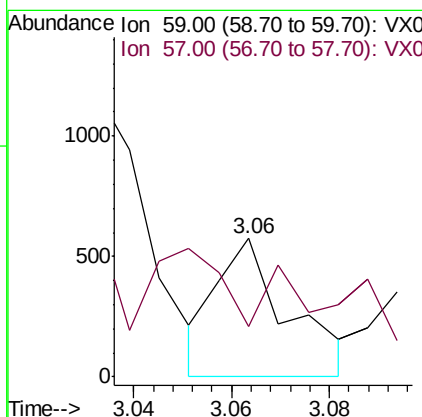
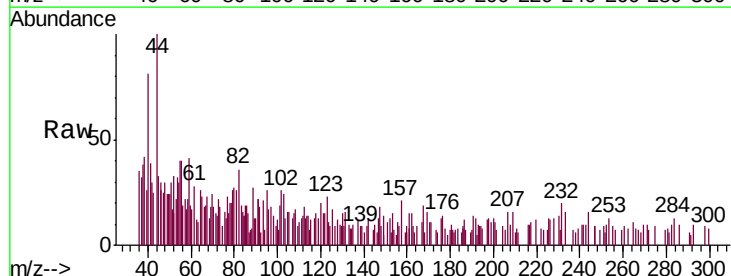
Instrument :  
MSVOA\_X  
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RE134D4-20191202DL

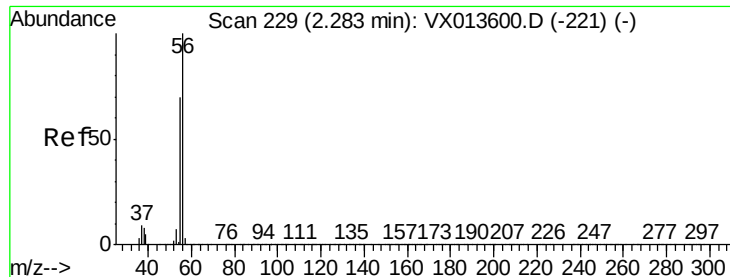
Tgt Ion: 142 Resp: 3144  
Ion Ratio Lower Upper  
142 100  
127 18.5 31.0 46.4#  
141 9.7 11.6 17.4#



#11  
Tert butyl alcohol  
Concen: 0.349 ug/l  
RT: 3.06 min Scan# 357  
Delta R.T. 0.03 min  
Lab File: VX013893.D  
Acq: 10 Dec 2019 13:16

Tgt Ion: 59 Resp: 591  
Ion Ratio Lower Upper  
59 100  
57 58.9 7.8 11.6#





#13

Acrolein

Concen: 6.427 ug/l

RT: 2.30 min Scan# 231

Delta R.T. 0.01 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

Instrument :

MSVOA\_X

ClientSampleId :

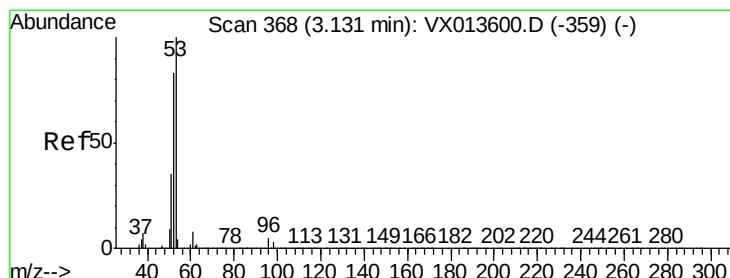
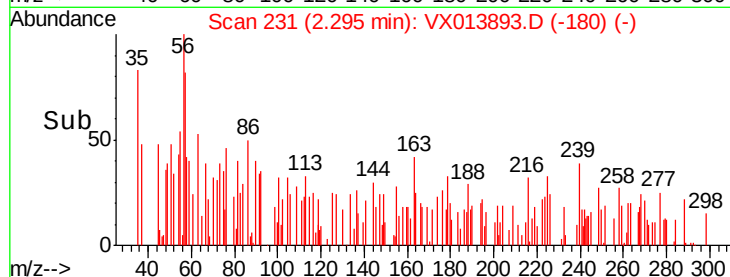
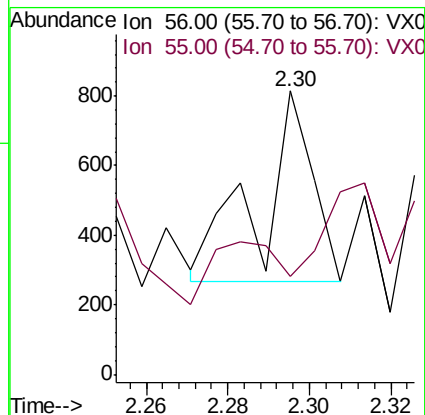
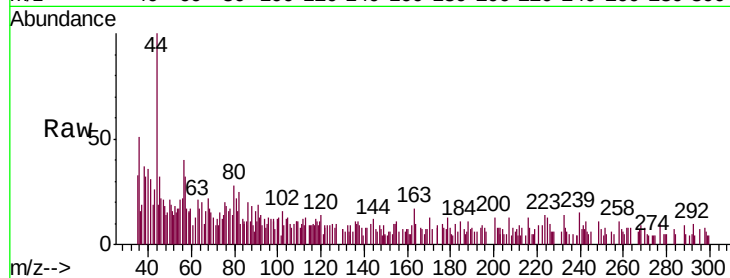
RE134D4-20191202DL

Tgt Ion: 56 Resp: 492

Ion Ratio Lower Upper

56 100

55 47.8 56.2 84.4#



#15

Acrylonitrile

Concen: 0.360 ug/l

RT: 3.12 min Scan# 367

Delta R.T. -0.01 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

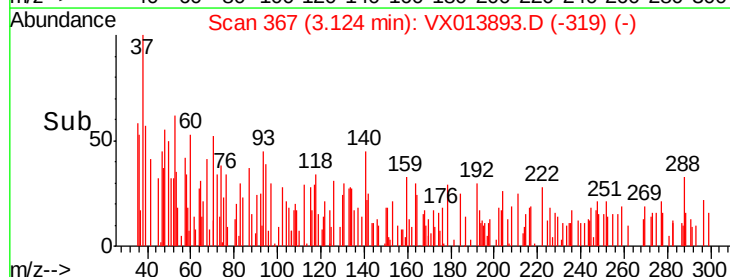
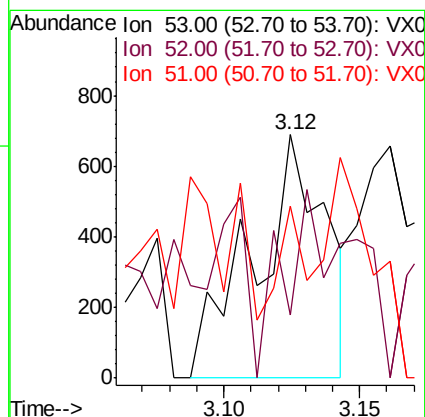
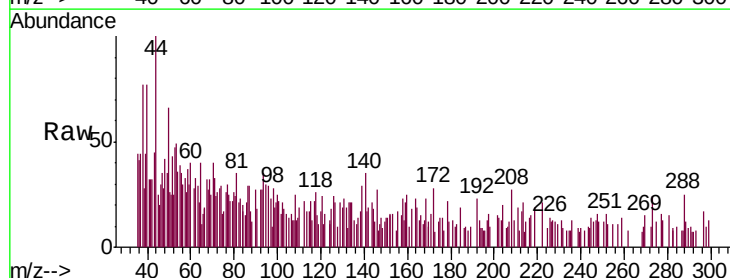
Tgt Ion: 53 Resp: 1260

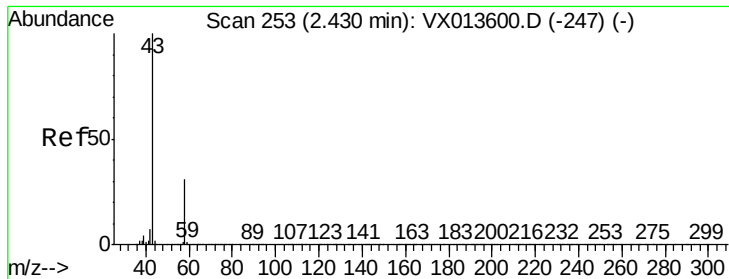
Ion Ratio Lower Upper

53 100

52 74.0 66.2 99.2

51 15.2 29.0 43.6#

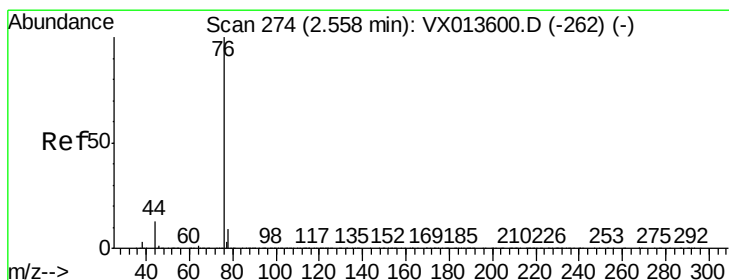
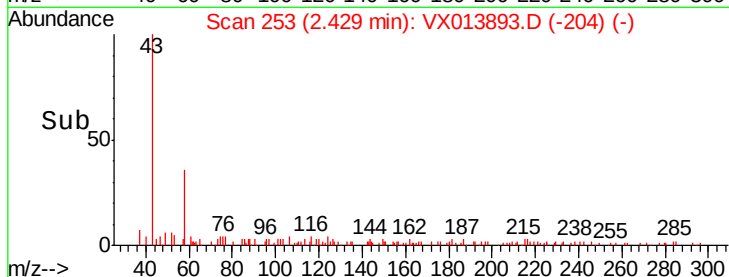
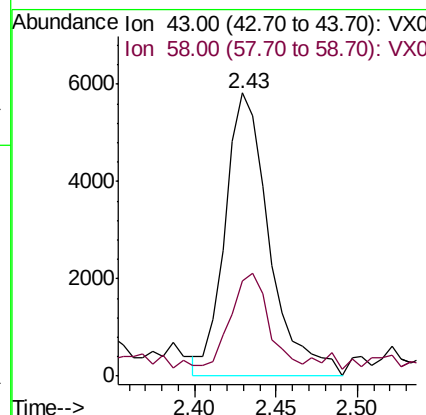
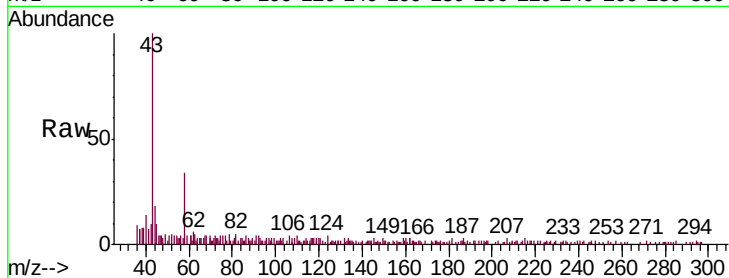




#16  
Acetone  
Concen: 3.254 ug/l  
RT: 2.43 min Scan# 253  
Delta R.T. -0.00 min  
Lab File: VX013893.D  
Acq: 10 Dec 2019 13:16

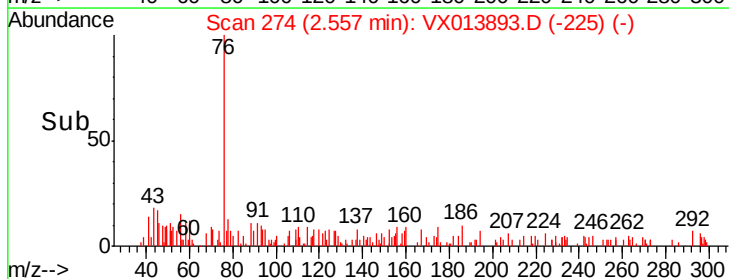
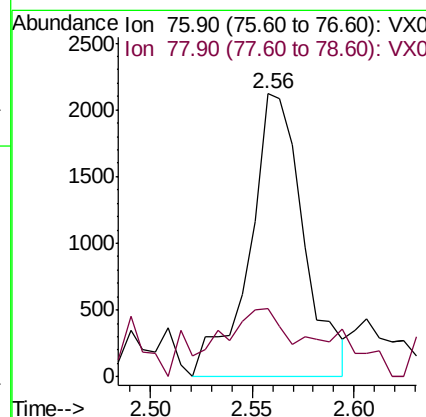
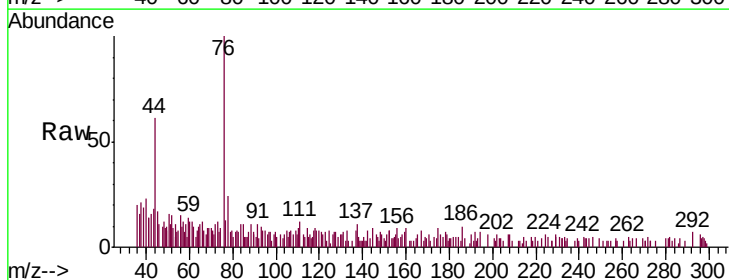
Instrument :  
MSVOA\_X  
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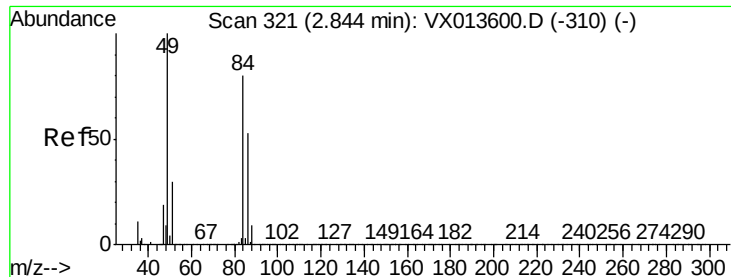
Tgt Ion: 43 Resp: 11035  
Ion Ratio Lower Upper  
43 100  
58 31.4 24.6 36.8



#17  
Carbon Disulfide  
Concen: 0.244 ug/l  
RT: 2.56 min Scan# 274  
Delta R.T. -0.00 min  
Lab File: VX013893.D  
Acq: 10 Dec 2019 13:16

Tgt Ion: 76 Resp: 3924  
Ion Ratio Lower Upper  
76 100  
78 16.4 7.2 10.8#

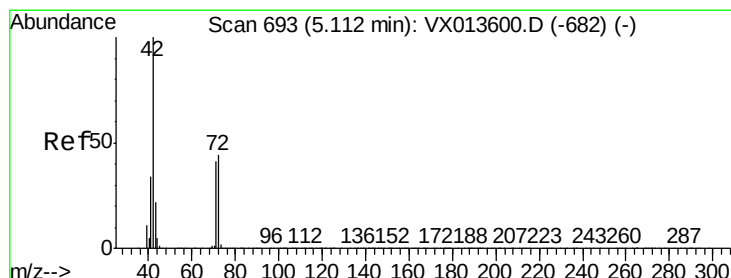
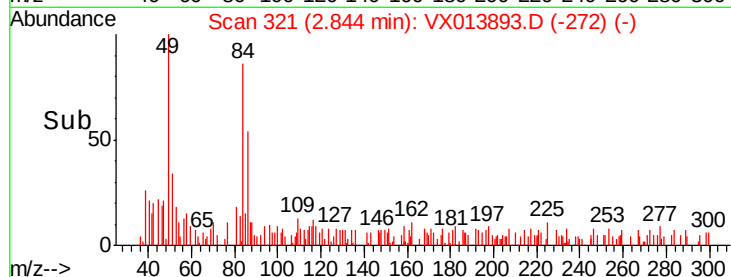
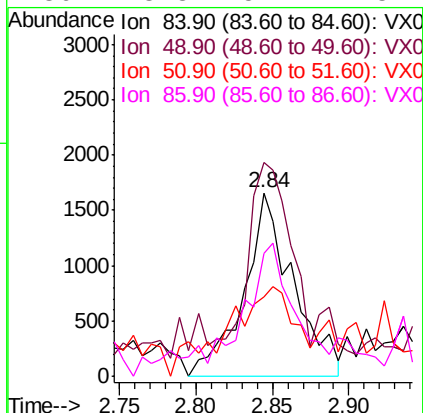
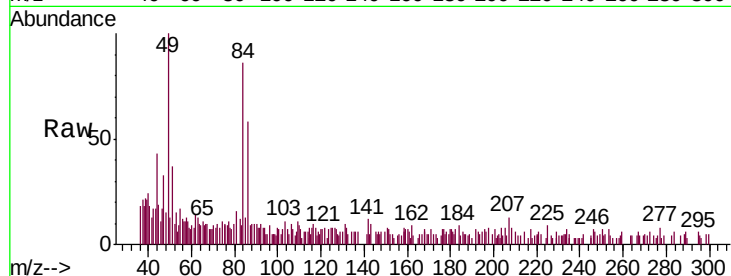




#20  
Methylene Chloride  
Concen: 0.571 ug/l  
RT: 2.84 min Scan# 321  
Delta R.T. -0.00 min  
Lab File: VX013893.D  
Acq: 10 Dec 2019 13:16

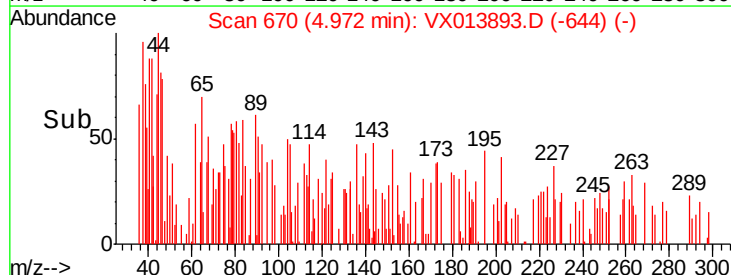
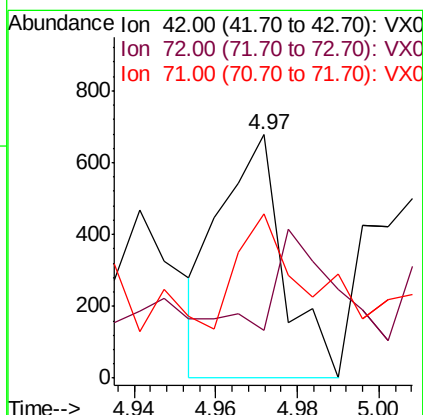
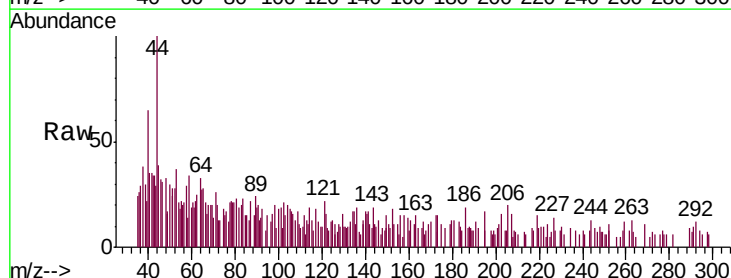
Instrument :  
MSVOA\_X  
ClientSampleId :  
RE134D4-20191202DL

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 3717  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 102.2 | 99.7  | 149.5 |
| 51       | 29.9  | 29.9  | 44.9  |
| 86       | 48.3  | 52.2  | 78.4# |

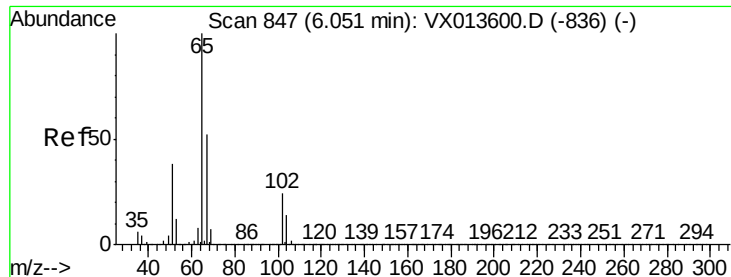


#29  
Tetrahydrofuran  
Concen: 0.238 ug/l  
RT: 4.97 min Scan# 670  
Delta R.T. -0.14 min  
Lab File: VX013893.D  
Acq: 10 Dec 2019 13:16

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 738   |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 42.4  | 36.3  | 54.5  |
| 71       | 47.2  | 33.2  | 49.8  |



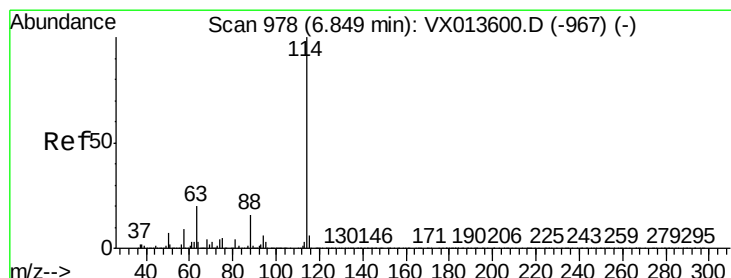
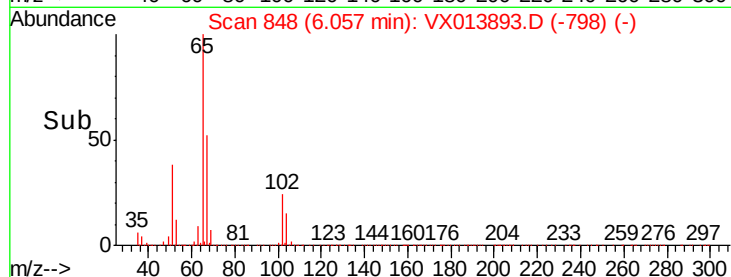
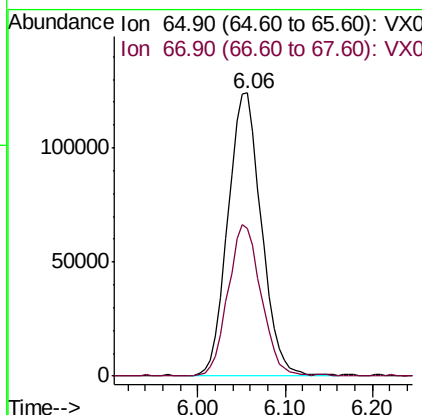
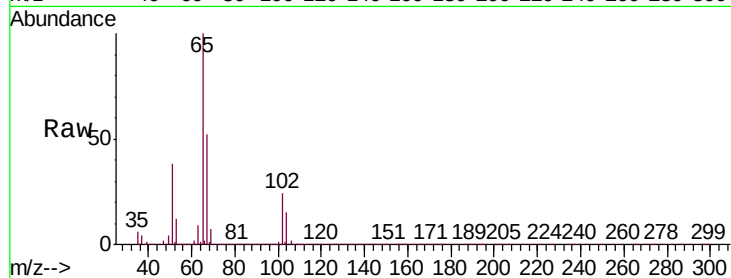




#33  
 1,2-Dichloroethane-d4  
 Concen: 48.062 ug/l  
 RT: 6.06 min Scan# 848  
 Delta R.T. 0.01 min  
 Lab File: VX013893.D  
 Acq: 10 Dec 2019 13:16

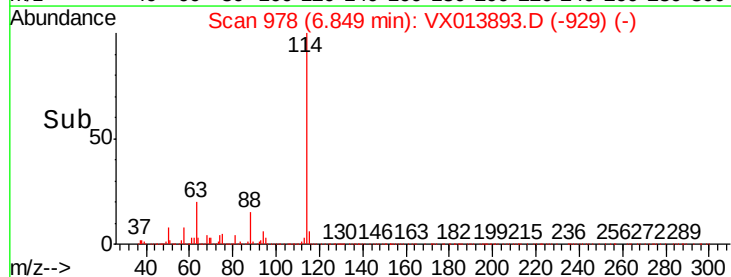
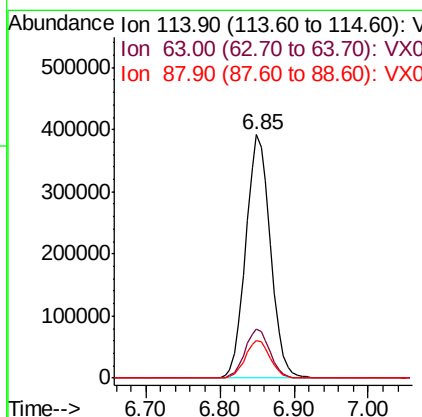
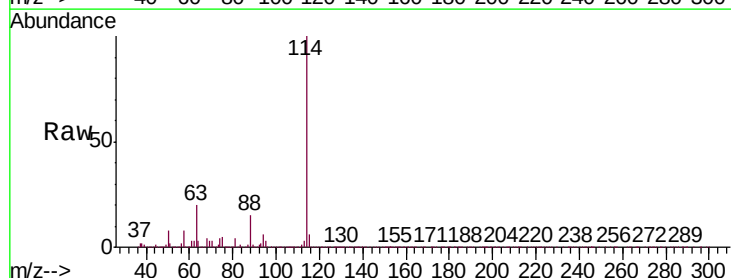
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE134D4-20191202DL

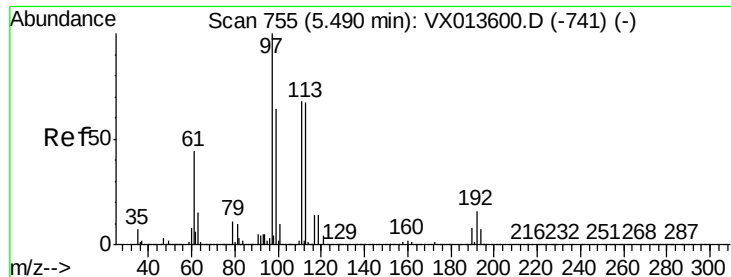
Tgt Ion: 65 Resp: 330078  
 Ion Ratio Lower Upper  
 65 100  
 67 52.7 0.0 104.4



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.85 min Scan# 978  
 Delta R.T. -0.00 min  
 Lab File: VX013893.D  
 Acq: 10 Dec 2019 13:16

Tgt Ion: 114 Resp: 910729  
 Ion Ratio Lower Upper  
 114 100  
 63 20.1 0.0 39.6  
 88 15.2 0.0 31.4





#35

Dibromofluoromethane

Concen: 48.401 ug/l

RT: 5.49 min Scan# 755

Delta R.T. -0.00 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

Instrument :

MSVOA\_X

ClientSampleId :

RE134D4-20191202DL

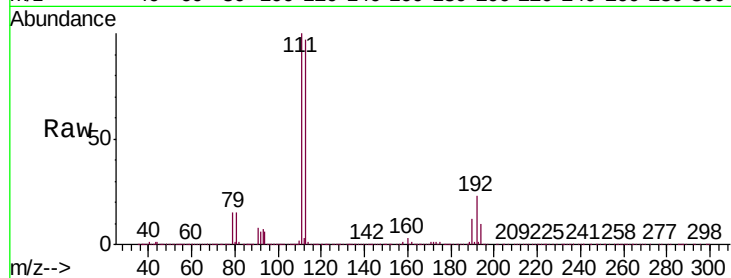
Tgt Ion: 113 Resp: 272510

Ion Ratio Lower Upper

113 100

111 102.8 83.6 125.4

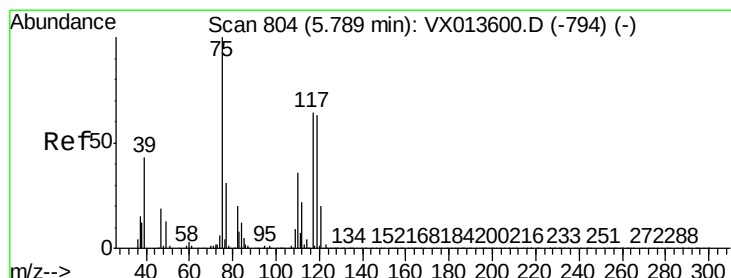
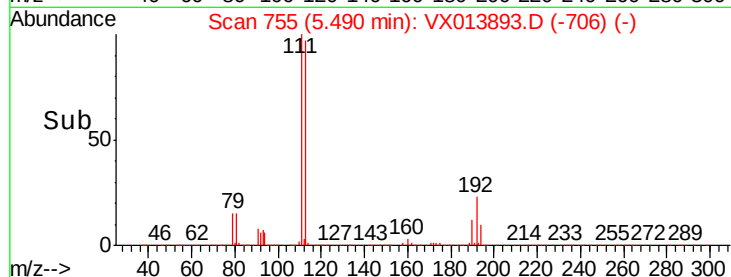
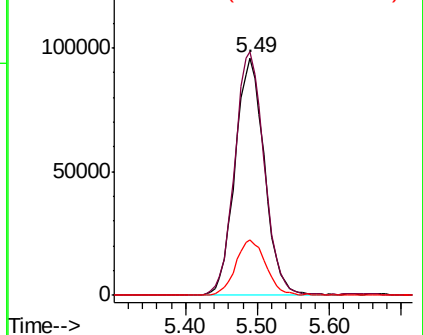
192 23.8 19.2 28.8



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 4.857 ug/l

RT: 5.64 min Scan# 780

Delta R.T. -0.15 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

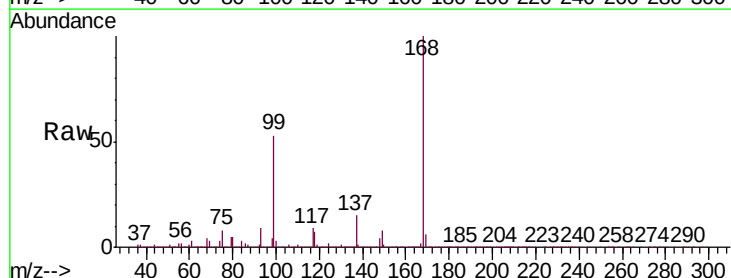
Tgt Ion: 75 Resp: 40150

Ion Ratio Lower Upper

75 100

110 10.8 18.1 54.1#

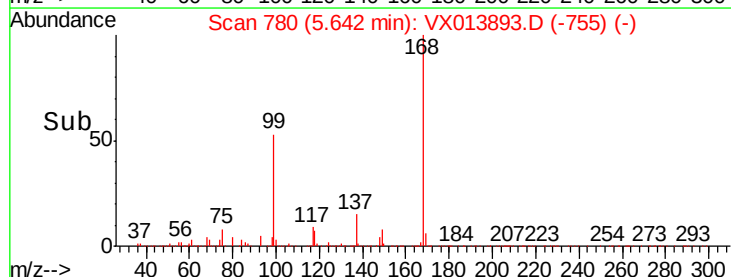
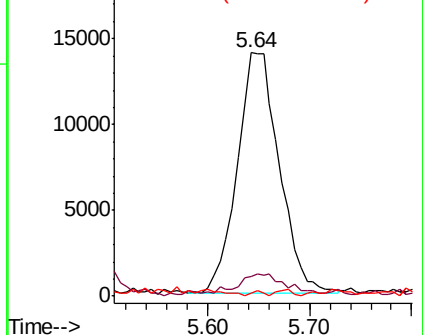
77 0.6 24.5 36.7#

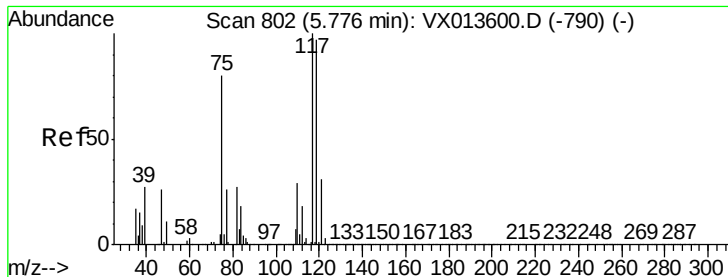


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 6.991 ug/l

RT: 5.65 min Scan# 782

Delta R.T. -0.12 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

Instrument :

MSVOA\_X

ClientSampleId :

RE134D4-20191202DL

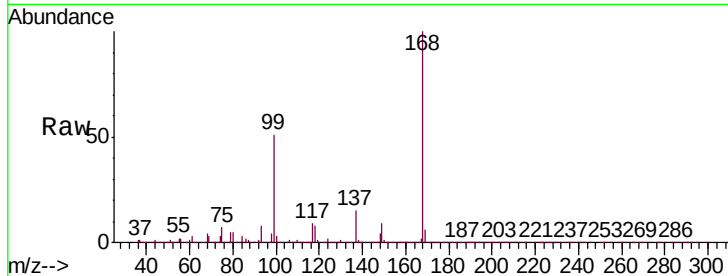
Tgt Ion:117 Resp: 53291

Ion Ratio Lower Upper

117 100

119 5.9 77.5 116.3#

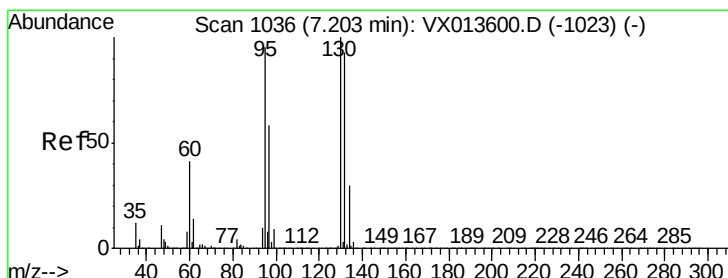
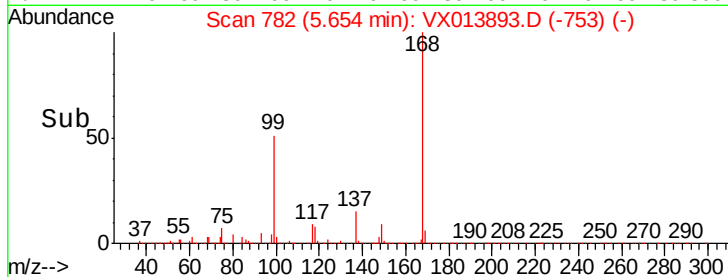
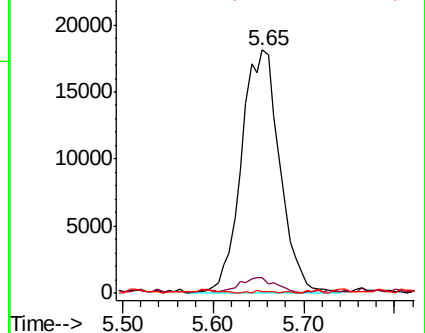
121 0.0 25.0 37.6#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#44

Trichloroethene

Concen: 0.748 ug/l

RT: 7.20 min Scan# 1036

Delta R.T. -0.00 min

Lab File: VX013893.D

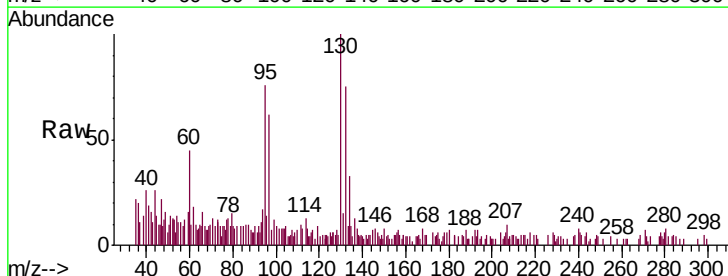
Acq: 10 Dec 2019 13:16

Tgt Ion:130 Resp: 5172

Ion Ratio Lower Upper

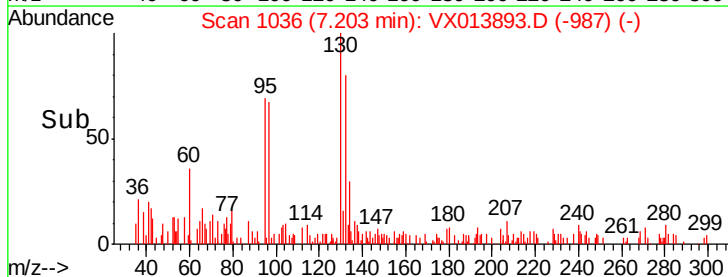
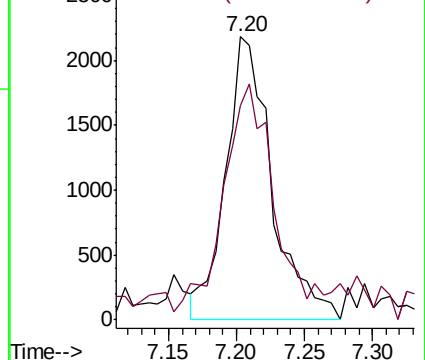
130 100

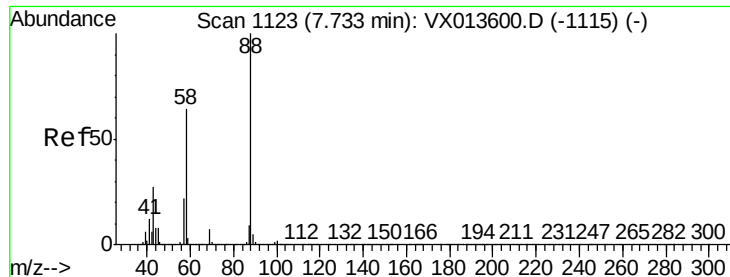
95 62.9 0.0 190.8



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0





#49

1,4-Dioxane

Concen: 3.734 ug/l

RT: 7.87 min Scan# 1146

Delta R.T. 0.14 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

Instrument :

MSVOA\_X

ClientSampleId :

RE134D4-20191202DL

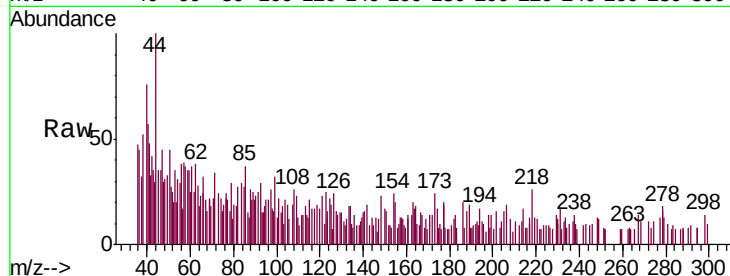
Tgt Ion: 88 Resp: 620

Ion Ratio Lower Upper

88 100

43 34.2 25.8 38.6

58 64.4 54.6 82.0



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

800

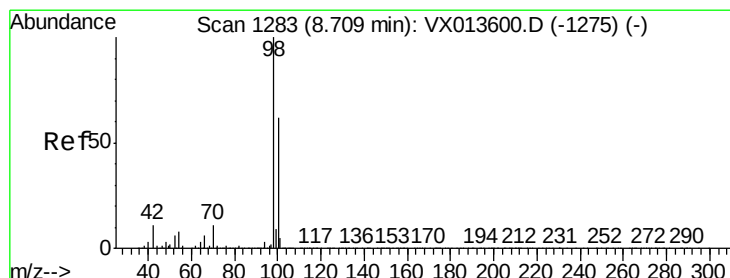
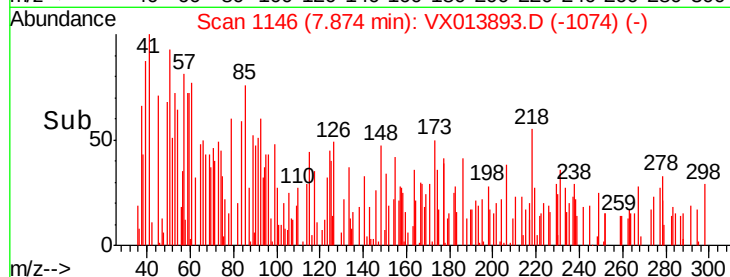
600

400

200

0

Time-->



#50

Toluene-d8

Concen: 49.085 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. -0.00 min

Lab File: VX013893.D

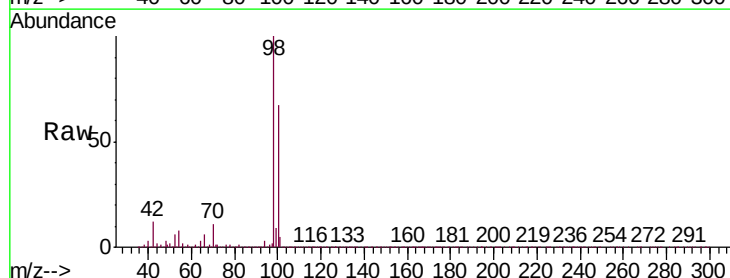
Acq: 10 Dec 2019 13:16

Tgt Ion: 98 Resp: 1076727

Ion Ratio Lower Upper

98 100

100 65.2 53.1 79.7



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V

800000

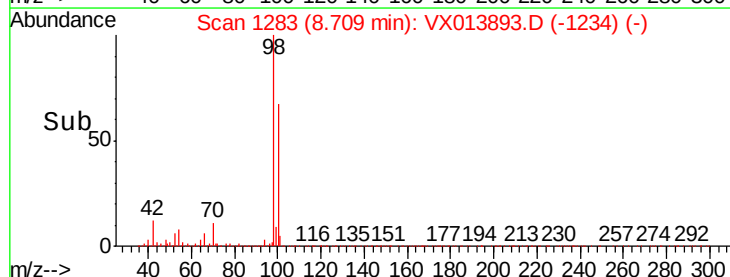
600000

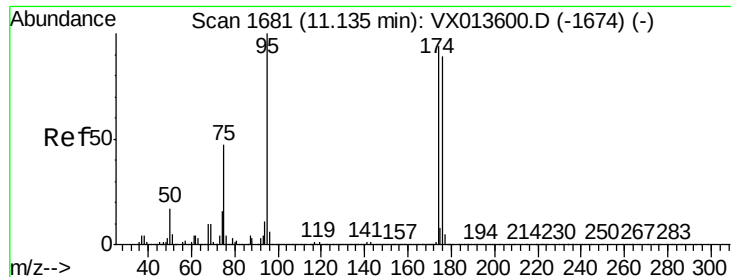
400000

200000

0

Time-->





#62

4-Bromofluorobenzene

Concen: 45.034 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. -0.00 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

Instrument :

MSVOA\_X

ClientSampleId :

RE134D4-20191202DL

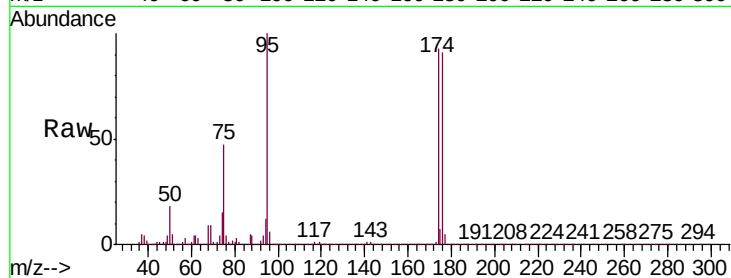
Tgt Ion: 95 Resp: 356232

Ion Ratio Lower Upper

95 100

174 88.8 0.0 180.0

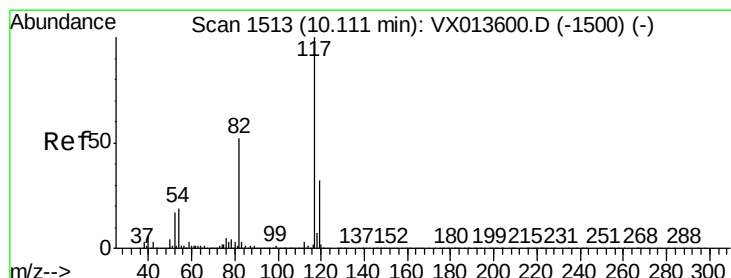
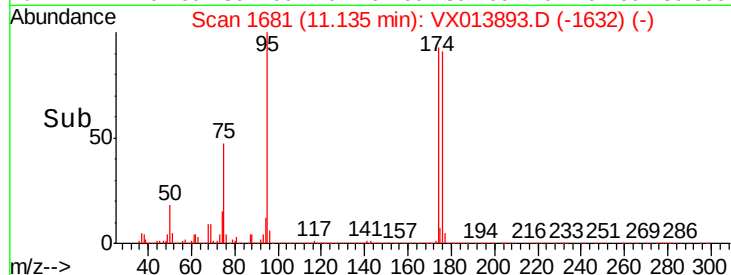
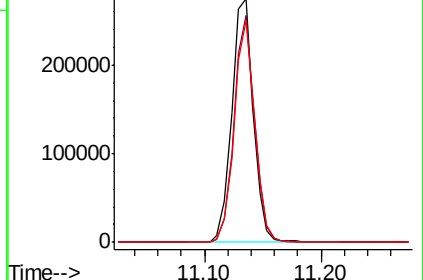
176 86.9 0.0 173.6



Abundance Ion 94.90 (94.60 to 95.60): VX013600.D (-1674) (-)

Ion 173.80 (173.50 to 174.50): VX013600.D (-1674) (-)

Ion 175.80 (175.50 to 176.50): VX013600.D (-1674) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1513

Delta R.T. -0.00 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

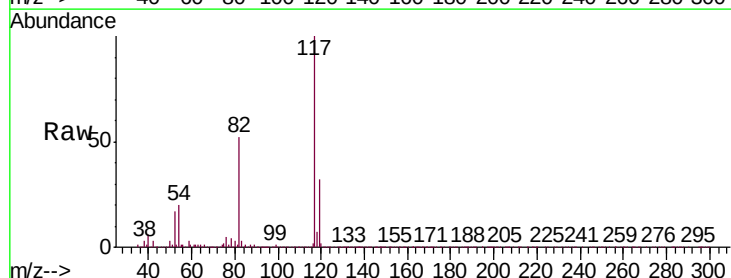
Tgt Ion: 117 Resp: 810618

Ion Ratio Lower Upper

117 100

82 51.9 41.8 62.8

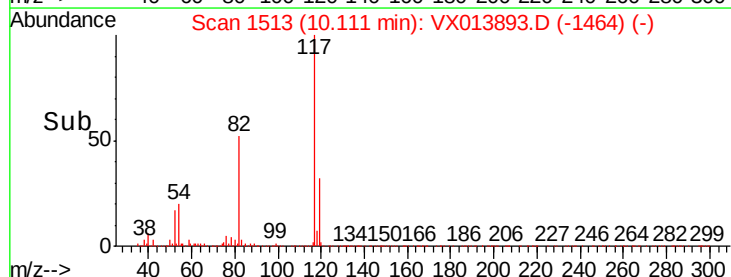
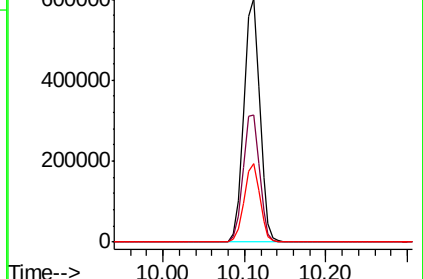
119 32.5 25.8 38.8

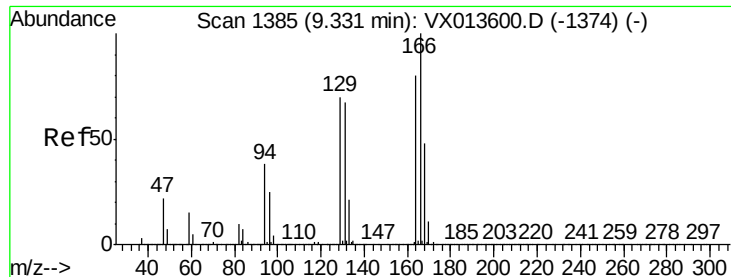


Abundance Ion 116.90 (116.60 to 117.60): VX013600.D (-1500) (-)

Ion 82.00 (81.70 to 82.70): VX013600.D (-1500) (-)

Ion 118.90 (118.60 to 119.60): VX013600.D (-1500) (-)





#64

Tetrachloroethene

Concen: 0.214 ug/l

RT: 9.32 min Scan# 1384

Delta R.T. -0.01 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

Instrument :

MSVOA\_X

ClientSampleId :

RE134D4-20191202DL

Tgt Ion:164 Resp: 1291

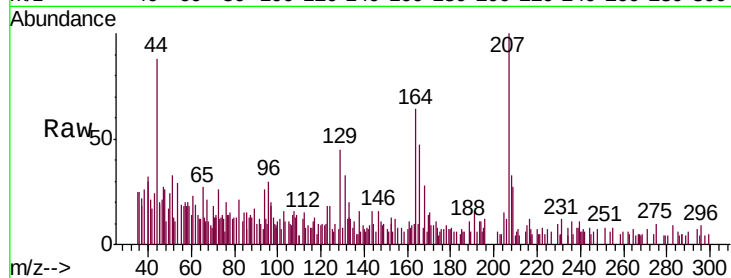
Ion Ratio Lower Upper

164 100

166 58.7 99.7 149.5#

129 55.3 70.1 105.1#

131 28.9 66.9 100.3#

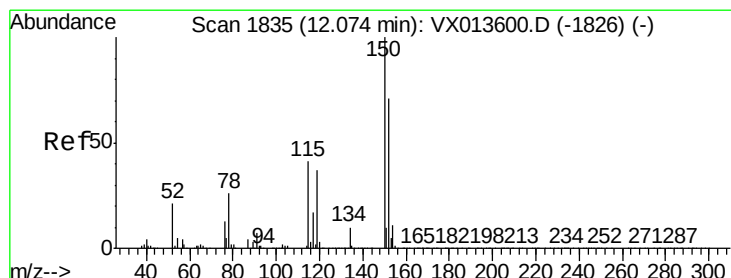
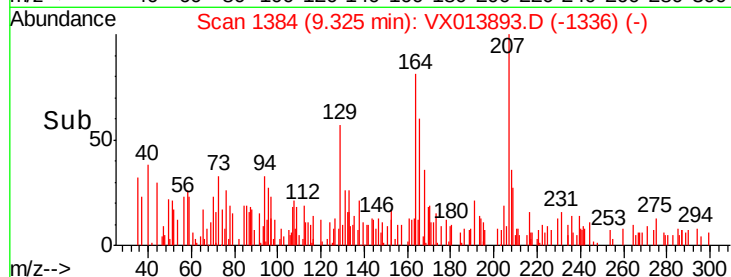
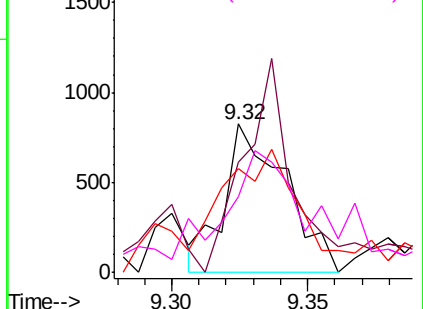


Abundance Ion 163.80 (163.50 to 164.50): V

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: 12.07 min Scan# 1835

Delta R.T. -0.00 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

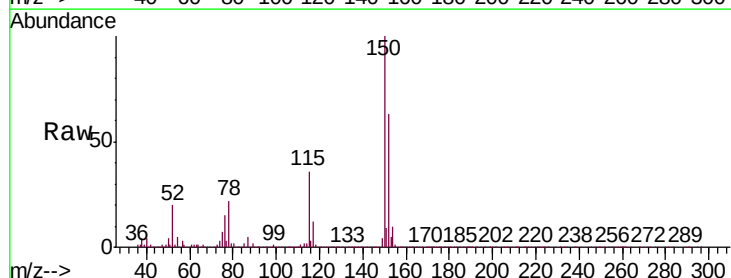
Tgt Ion:152 Resp: 344569

Ion Ratio Lower Upper

152 100

115 56.4 38.4 115.1

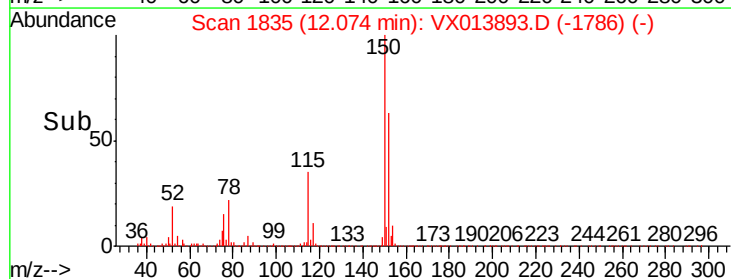
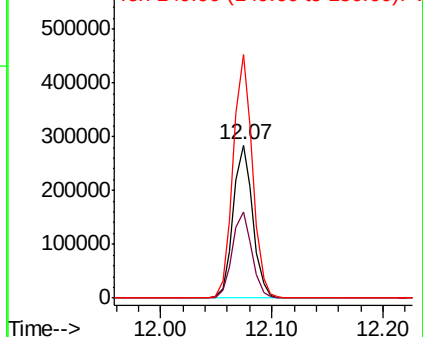
150 157.2 0.0 346.8

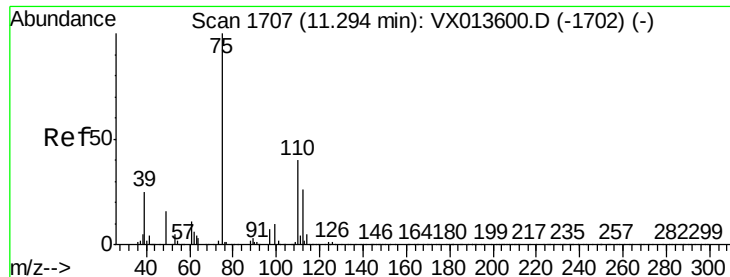


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 22.428 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. -0.16 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

Instrument :

MSVOA\_X

ClientSampleId :

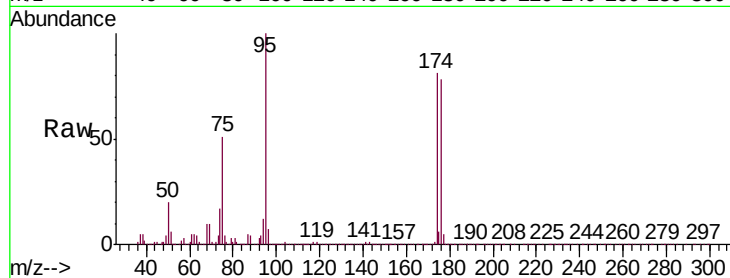
RE134D4-20191202DL

Tgt Ion: 75 Resp: 173817

Ion Ratio Lower Upper

75 100

77 1.8 19.1 57.5#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

11.13

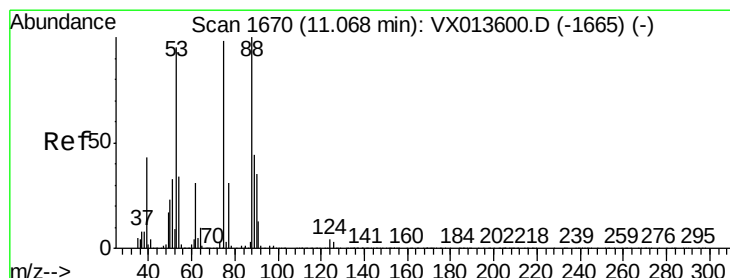
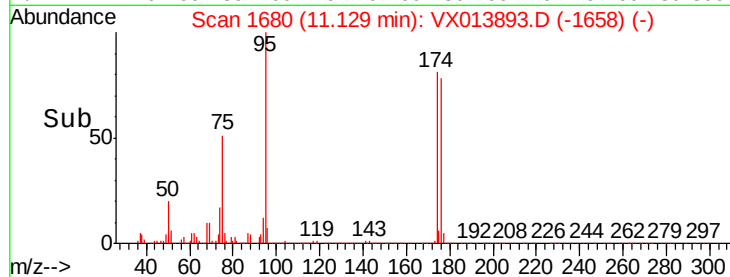
150000

100000

50000

0

Time-->



#81

trans-1,4-Dichloro-2-butene

Concen: 61.359 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. 0.06 min

Lab File: VX013893.D

Acq: 10 Dec 2019 13:16

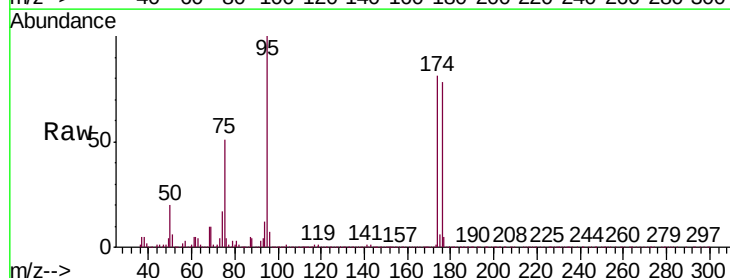
Tgt Ion: 75 Resp: 173817

Ion Ratio Lower Upper

75 100

53 0.2 78.2 117.2#

89 0.0 35.4 53.2#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0

11.13

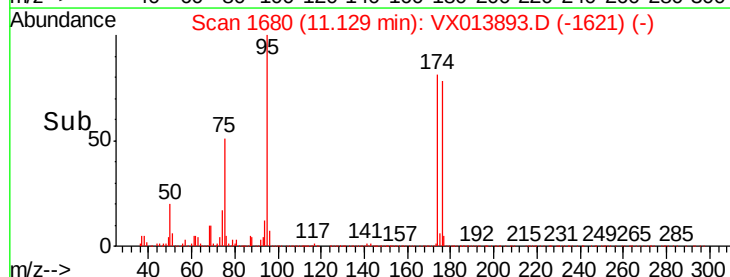
150000

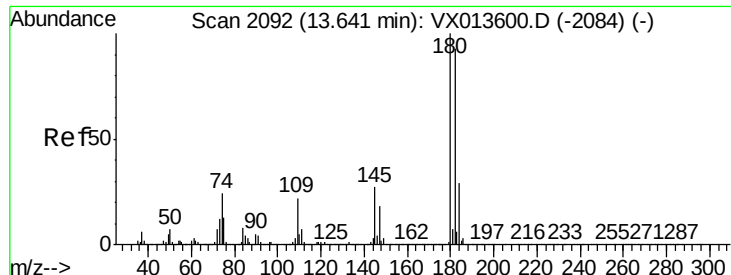
100000

50000

0

Time-->





#93  
 1,2,4-Trichlorobenzene  
 Concen: 0.253 ug/l  
 RT: 13.64 min Scan# 2092  
 Delta R.T. -0.00 min  
 Lab File: VX013893.D  
 Acq: 10 Dec 2019 13:16

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE134D4-20191202DL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 89.3  | 47.2  | 141.6 |
| 145     | 33.4  | 13.8  | 41.4  |

