

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX080520\  
 Data File : VX017794.D  
 Acq On : 05 Aug 2020 13:46  
 Operator : JC/SP  
 Sample : L3570-02  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 OUTFALL001-200804

Quant Time: Aug 06 02:33:58 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X072320W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jul 24 05:48:09 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.64  | 168  | 541082   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.84  | 114  | 805105   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 771015   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.06 | 152  | 356900   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.04  | 65   | 358389   | 51.56 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.12% |          |
| 35) Dibromofluoromethane    | 5.48  | 113  | 273383   | 50.77 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.54% |          |
| 50) Toluene-d8              | 8.70  | 98   | 980682   | 50.49 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.98% |          |
| 62) 4-Bromofluorobenzene    | 11.12 | 95   | 347024   | 44.64 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 89.28%  |          |

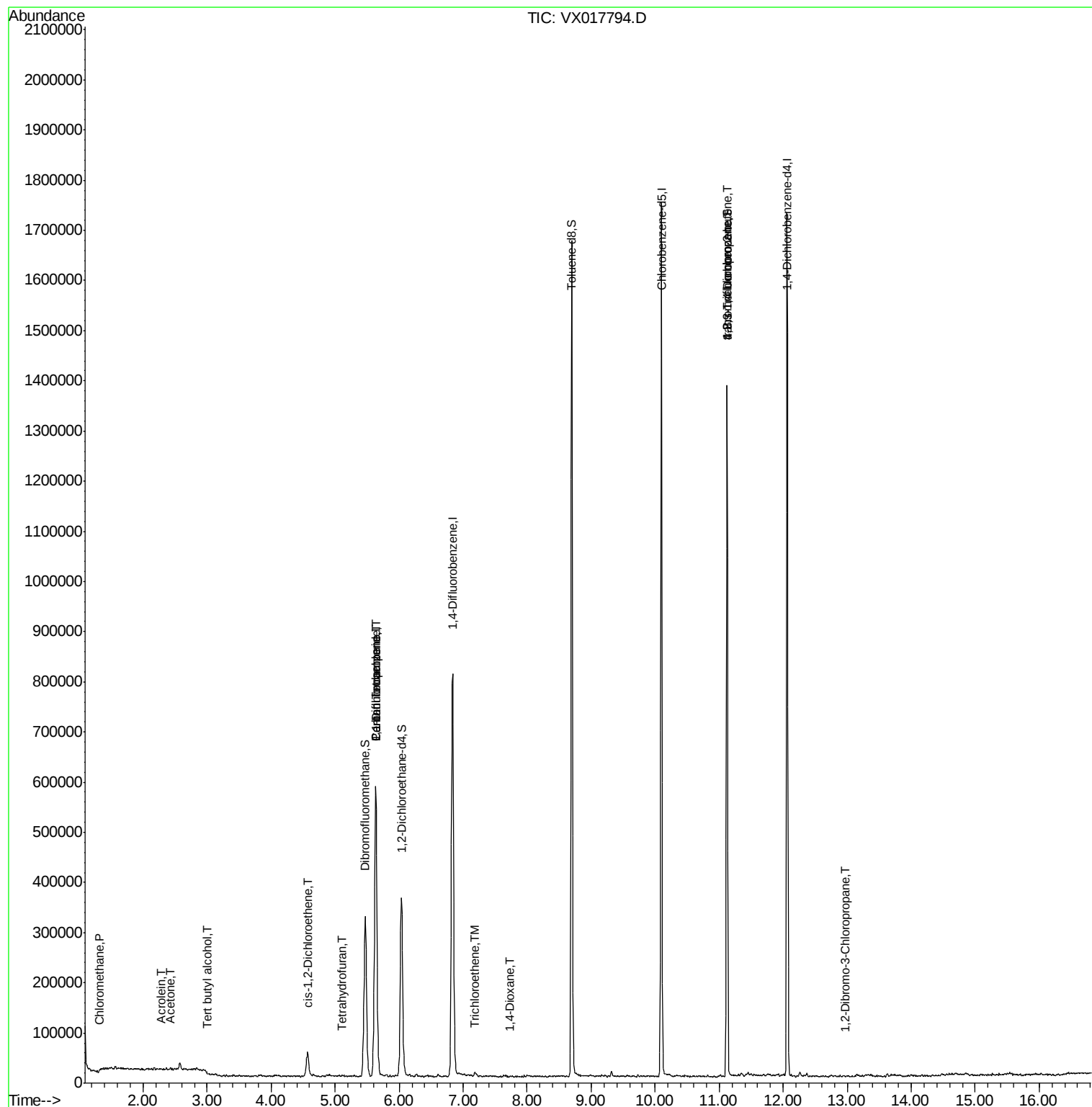
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.18  | 85   | 613      | Below Cal | #      | 69     |
| 3) Chloromethane               | 1.31  | 50   | 887      | 0.499     | ug/l # | 88     |
| 5) Bromomethane                | 1.64  | 94   | 839      | Below Cal |        | 82     |
| 6) Chloroethane                | 1.70  | 64   | 162      | Below Cal | #      | 1      |
| 8) Diethyl Ether               | 2.09  | 74   | 350      | Below Cal |        | 69     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 311      | 0.212     | ug/l # | 1      |
| 13) Acrolein                   | 2.28  | 56   | 992      | 5.021     | ug/l # | 65     |
| 16) Acetone                    | 2.42  | 43   | 4754     | 1.554     | ug/l # | 88     |
| 20) Methylene Chloride         | 2.84  | 84   | 1308     | Below Cal | #      | 76     |
| 27) cis-1,2-Dichloroethene     | 4.57  | 96   | 30677    | 4.717     | ug/l   | 85     |
| 29) Tetrahydrofuran            | 5.10  | 42   | 955      | 0.355     | ug/l # | 48     |
| 36) 1,1-Dichloropropene        | 5.64  | 75   | 39098    | 5.063     | ug/l # | 42     |
| 38) Carbon Tetrachloride       | 5.64  | 117  | 54783    | 5.842     | ug/l # | 17     |
| 44) Trichloroethene            | 7.19  | 130  | 3024     | 0.467     | ug/l   | 50     |
| 49) 1,4-Dioxane                | 7.73  | 88   | 272      | 2.053     | ug/l # | 32     |
| 76) 1,2,3-Trichloropropane     | 11.12 | 75   | 178069   | 24.255    | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 11.12 | 75   | 178069   | 61.117    | ug/l # | 11     |
| 92) 1,2-Dibromo-3-Chloropropan | 12.97 | 75   | 123      | 2.631     | ug/l # | 9      |

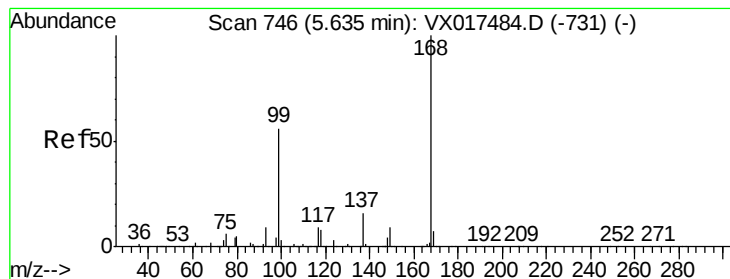
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX080520\  
Data File : VX017794.D  
Acq On : 05 Aug 2020 13:46  
Operator : JC/SP  
Sample : L3570-02  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
OUTFALL001-200804

Quant Time: Aug 06 02:33:58 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X072320W.M  
Quant Title : SW846 8260  
QLast Update : Fri Jul 24 05:48:09 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.64 min Scan# 746

Delta R.T. -0.00 min

Lab File: VX017794.D

Acq: 05 Aug 2020 13:46

Instrument :

MSVOA\_X

ClientSampleId :

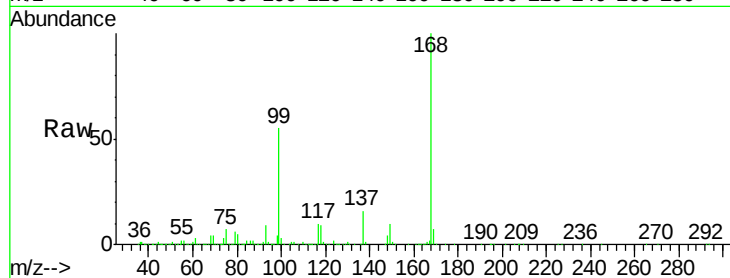
OUTFALL001-200804

Tot Ion:168 Resp: 541082

Ion Ratio Lower Upper

168 100

99 54.9 43.4 65.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.64

200000

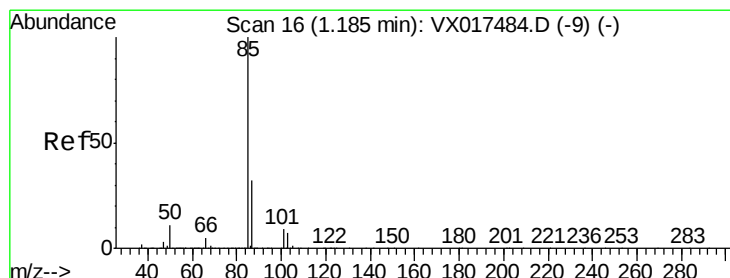
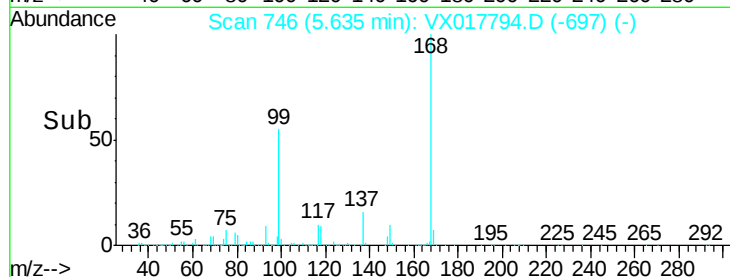
150000

100000

50000

0

Time-->



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.18 min Scan# 15

Delta R.T. -0.01 min

Lab File: VX017794.D

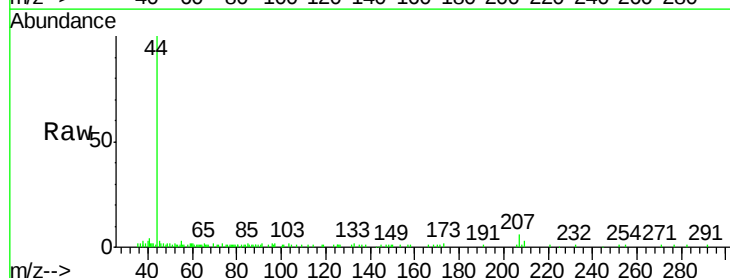
Acq: 05 Aug 2020 13:46

Tgt Ion: 85 Resp: 613

Ion Ratio Lower Upper

85 100

87 49.4 16.1 48.3#



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

1.18

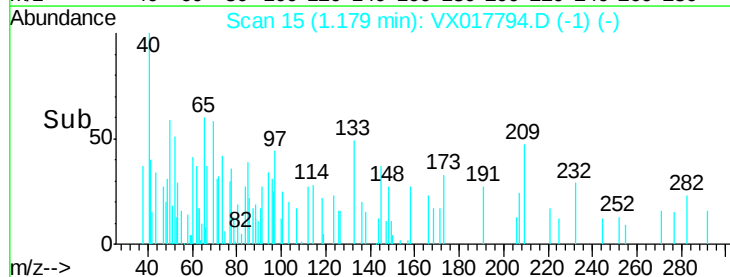
300

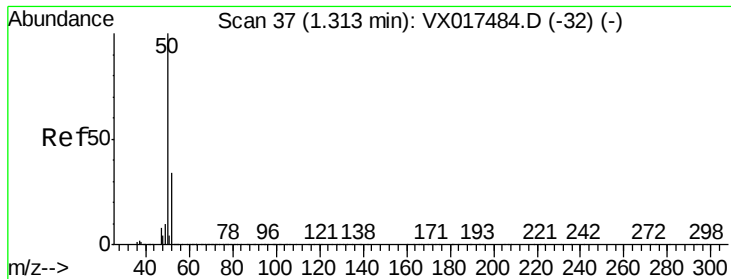
200

100

0

Time-->





#3

Chloromethane

Concen: 0.499 ug/l

RT: 1.31 min Scan# 37

Delta R.T. 0.00 min

Lab File: VX017794.D

Acq: 05 Aug 2020 13:46

Instrument :

MSVOA\_X

ClientSampleId :

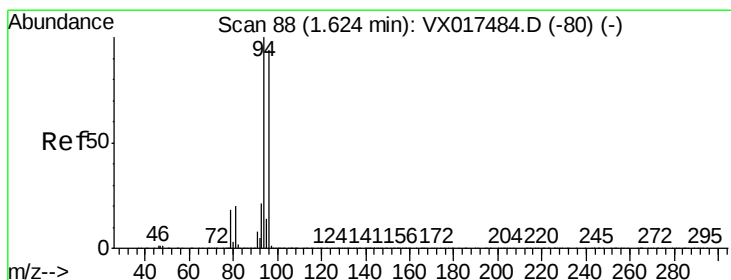
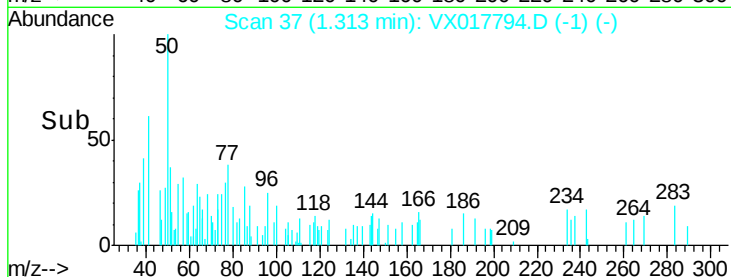
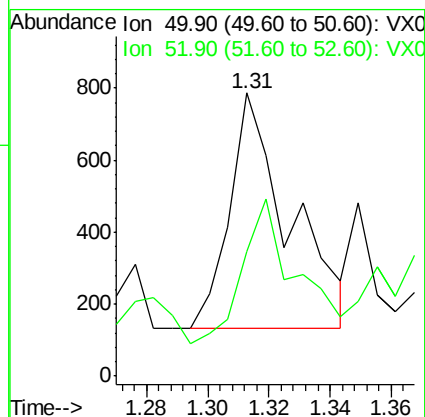
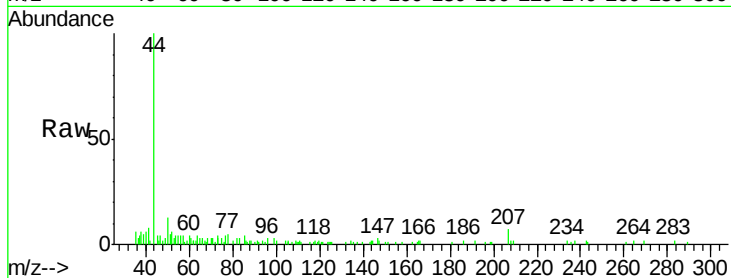
OUTFALL001-200804

Tot Ion: 50 Resp: 887

Ion Ratio Lower Upper

50 100

52 39.2 25.9 38.9#



#5

Bromomethane

Concen: Below Cal

RT: 1.64 min Scan# 91

Delta R.T. 0.02 min

Lab File: VX017794.D

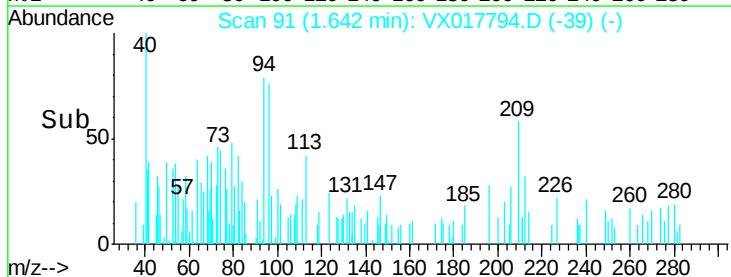
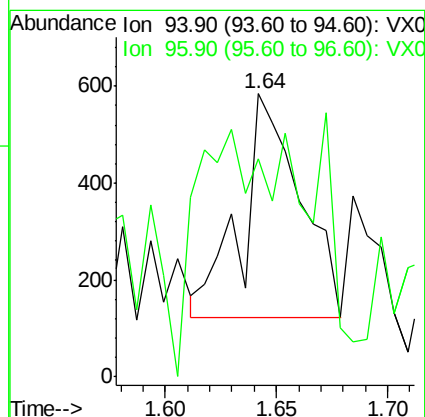
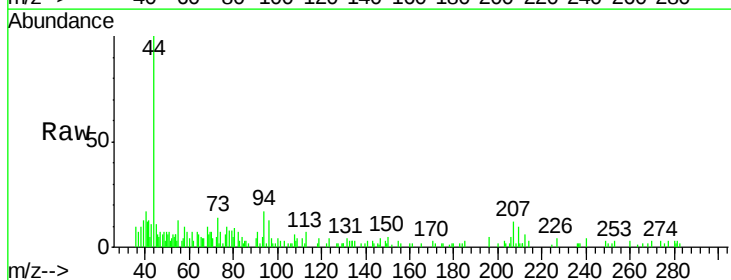
Acq: 05 Aug 2020 13:46

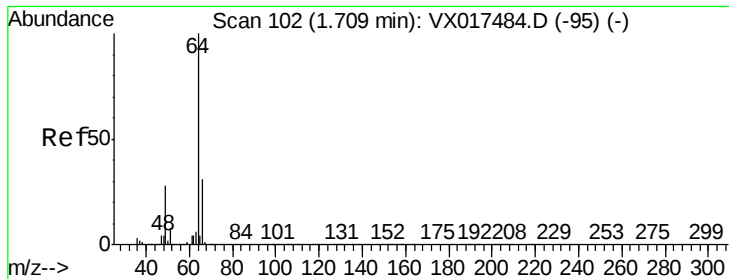
Tgt Ion: 94 Resp: 839

Ion Ratio Lower Upper

94 100

96 75.5 74.1 111.1





#6

Chloroethane

Concen: Below Cal

RT: 1.70 min Scan# 101

Delta R.T. -0.01 min

Lab File: VX017794.D

Acq: 05 Aug 2020 13:46

Instrument :

MSVOA\_X

ClientSampleId :

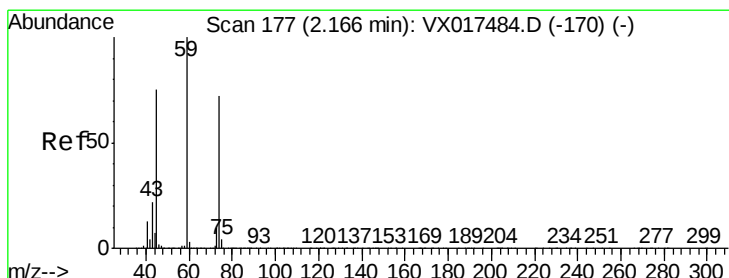
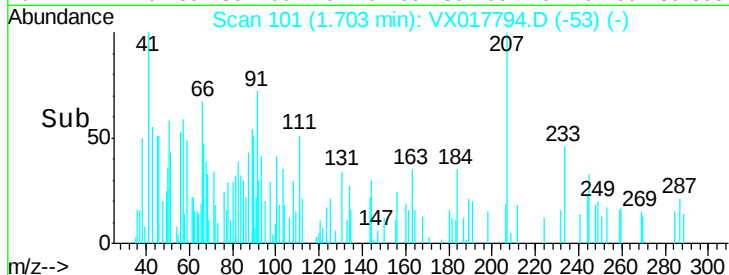
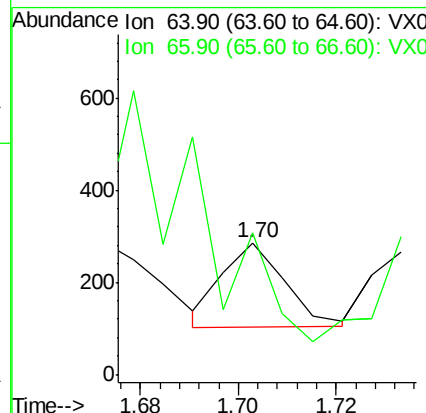
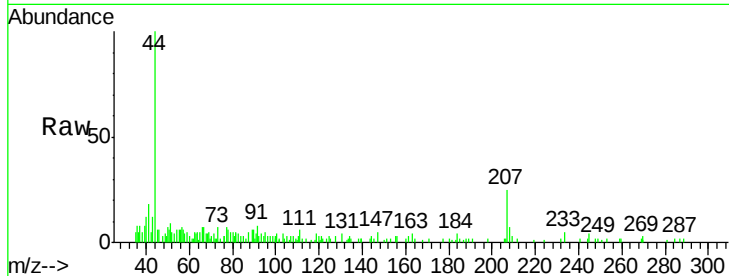
OUTFALL001-200804

Tot Ion: 64 Resp: 162

Ion Ratio Lower Upper

64 100

66 111.8 24.9 37.3#



#8

Diethyl Ether

Concen: Below Cal

RT: 2.09 min Scan# 165

Delta R.T. -0.07 min

Lab File: VX017794.D

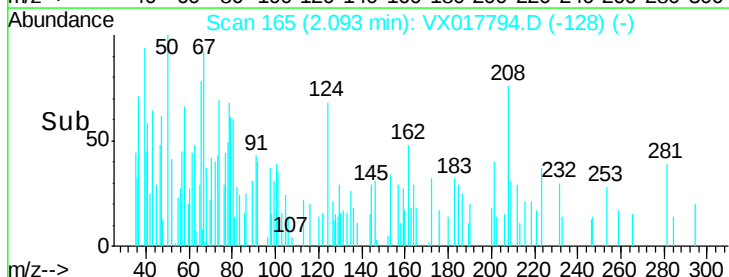
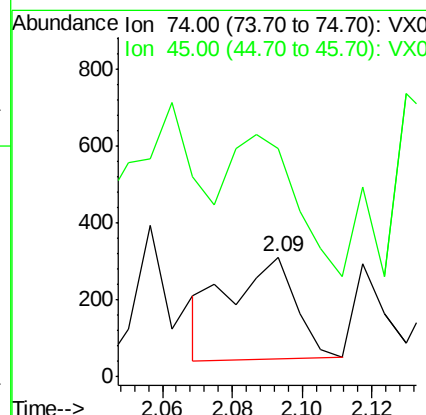
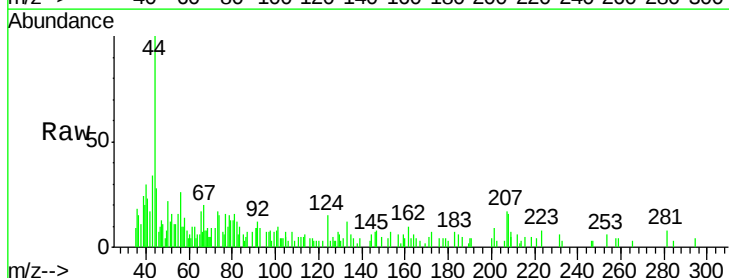
Acq: 05 Aug 2020 13:46

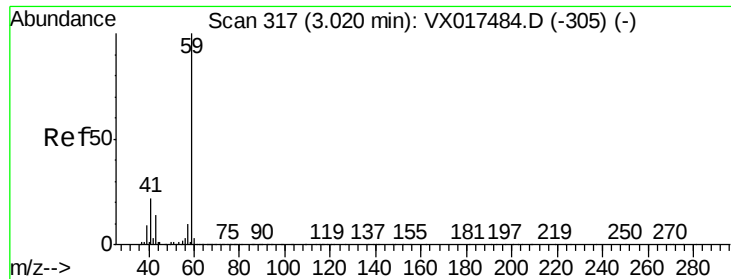
Tgt Ion: 74 Resp: 350

Ion Ratio Lower Upper

74 100

45 133.4 50.8 152.5

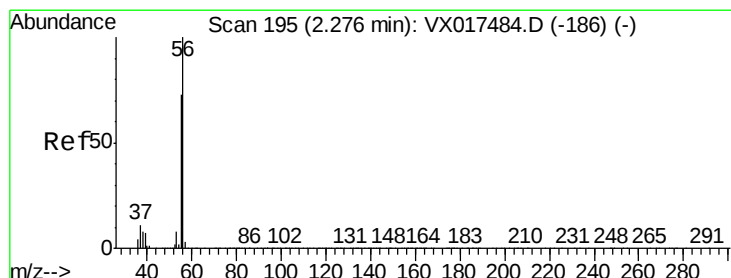
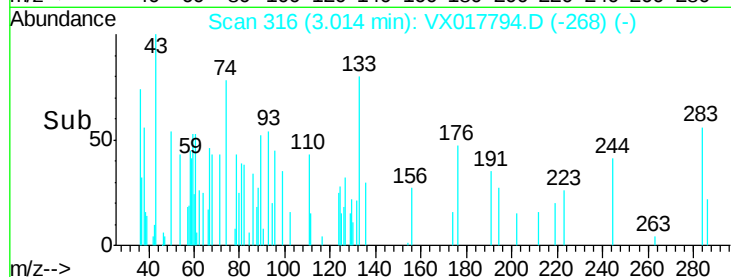
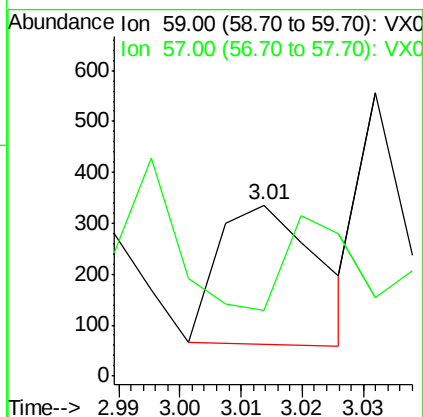
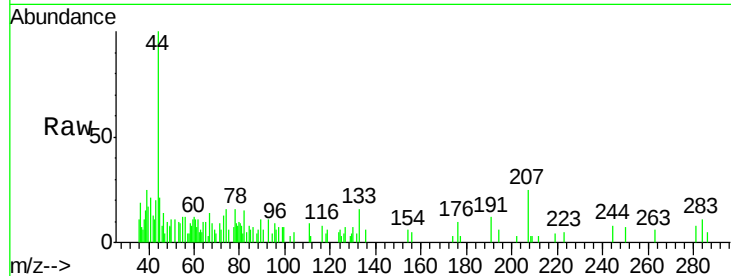




#11  
Tert butyl alcohol  
Concen: 0.212 ug/l  
RT: 3.01 min Scan# 316  
Delta R.T. -0.01 min  
Lab File: VX017794.D  
Acq: 05 Aug 2020 13:46

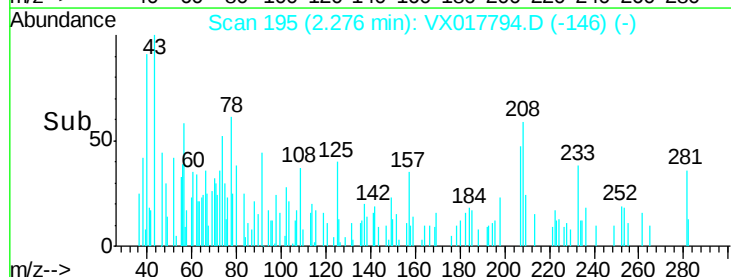
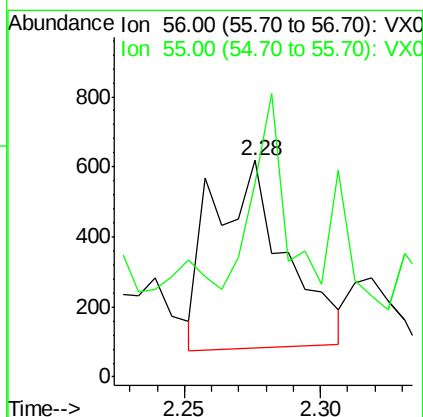
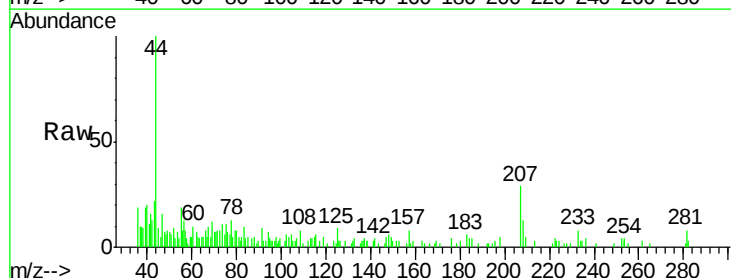
Instrument :  
MSVOA\_X  
ClientSampleId :  
OUTFALL001-200804

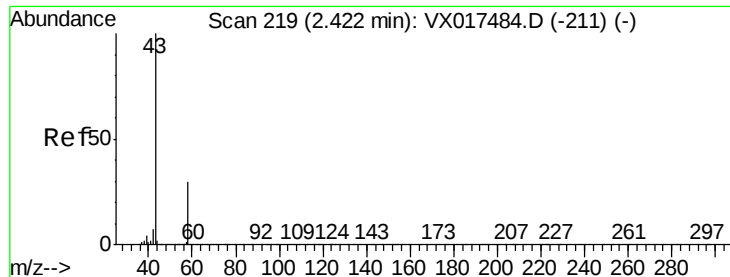
Tot Ion: 59 Resp: 311  
Ion Ratio Lower Upper  
59 100  
57 91.6 8.6 12.8#



#13  
Acrolein  
Concen: 5.021 ug/l  
RT: 2.28 min Scan# 195  
Delta R.T. -0.00 min  
Lab File: VX017794.D  
Acq: 05 Aug 2020 13:46

Tgt Ion: 56 Resp: 992  
Ion Ratio Lower Upper  
56 100  
55 42.9 57.4 86.2#

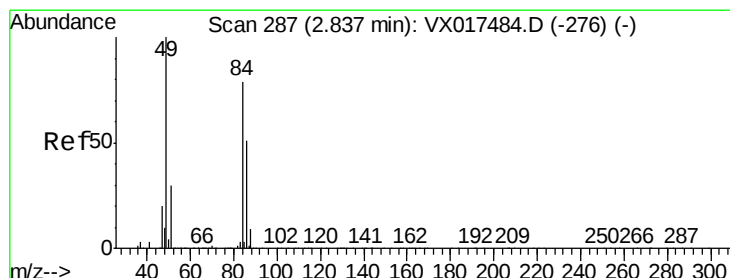
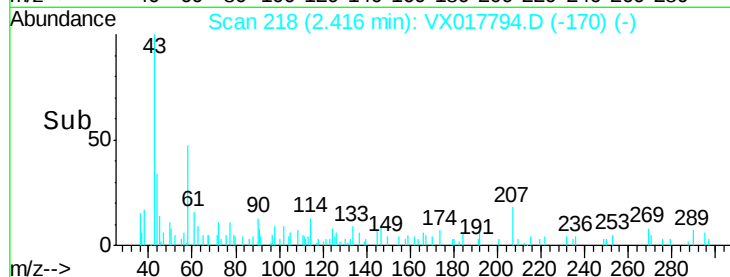
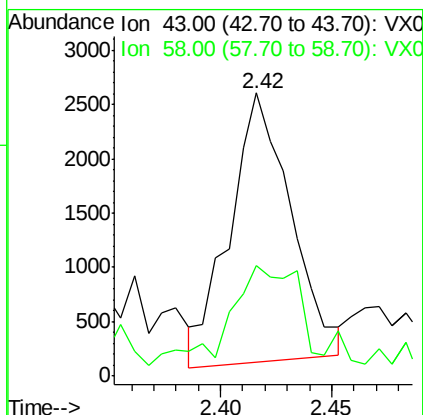
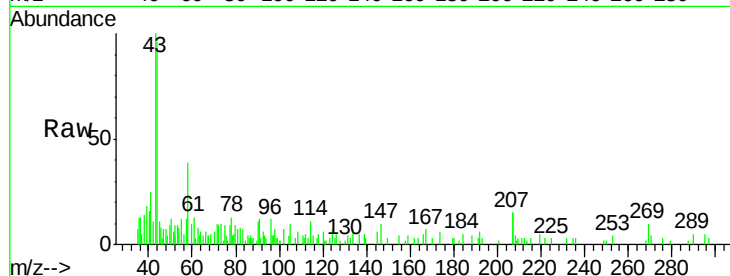




#16  
Acetone  
Concen: 1.554 ug/l  
RT: 2.42 min Scan# 218  
Delta R.T. -0.01 min  
Lab File: VX017794.D  
Acq: 05 Aug 2020 13:46

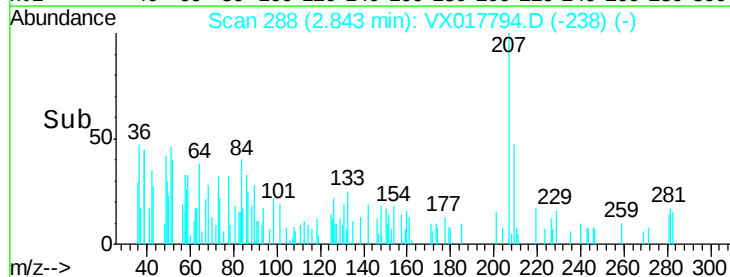
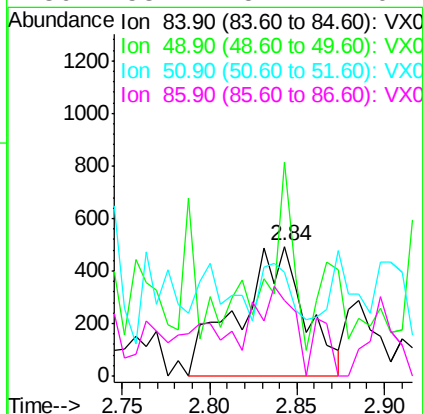
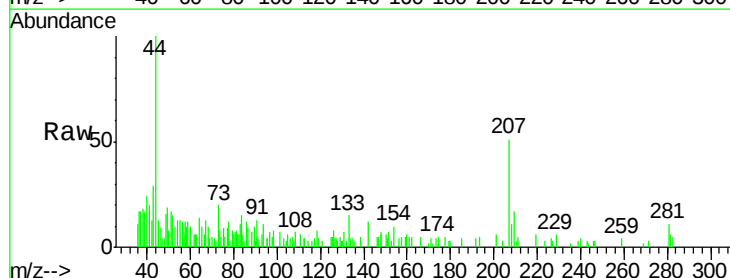
Instrument :  
MSVOA\_X  
ClientSampleId :  
OUTFALL001-200804

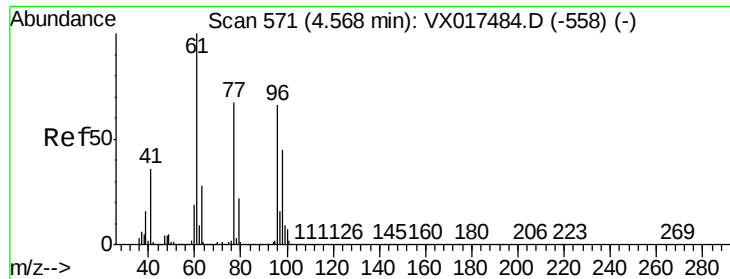
Tot Ion: 43 Resp: 4754  
Ion Ratio Lower Upper  
43 100  
58 36.8 24.2 36.4#



#20  
Methylene Chloride  
Concen: Below Cal  
RT: 2.84 min Scan# 288  
Delta R.T. 0.01 min  
Lab File: VX017794.D  
Acq: 05 Aug 2020 13:46

Tgt Ion: 84 Resp: 1308  
Ion Ratio Lower Upper  
84 100  
49 82.8 100.3 150.5#  
51 32.3 30.5 45.7  
86 58.4 51.1 76.7





#27

cis-1,2-Dichloroethene

Concen: 4.717 ug/l

RT: 4.57 min Scan# 571

Delta R.T. -0.00 min

Lab File: VX017794.D

Acq: 05 Aug 2020 13:46

Instrument :

MSVOA\_X

ClientSampleId :

OUTFALL001-200804

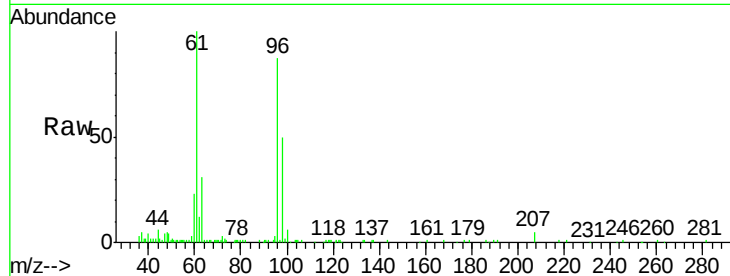
Tot Ion: 96 Resp: 30677

Ion Ratio Lower Upper

96 100

61 126.3 0.0 301.2

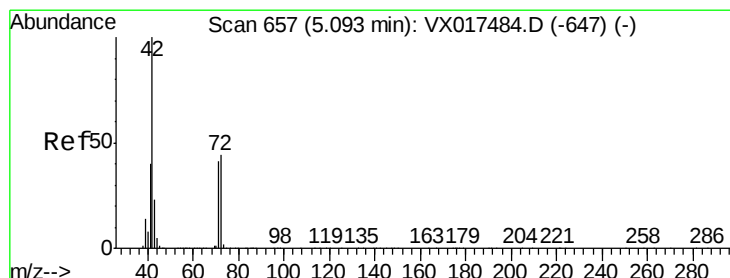
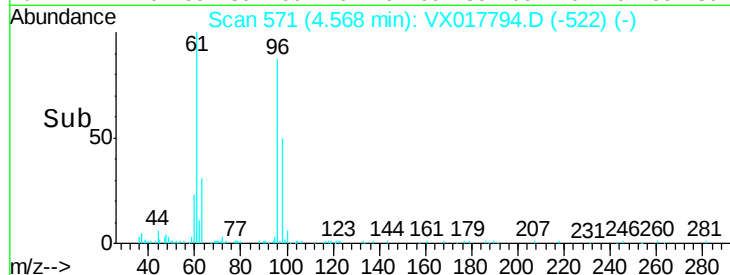
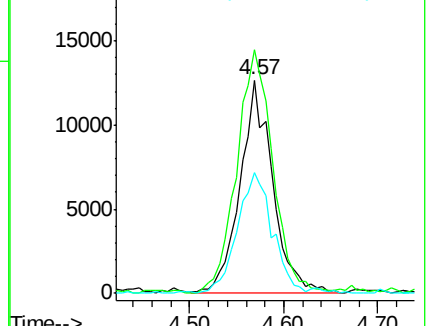
98 60.8 0.0 130.0



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: 0.355 ug/l

RT: 5.10 min Scan# 659

Delta R.T. 0.01 min

Lab File: VX017794.D

Acq: 05 Aug 2020 13:46

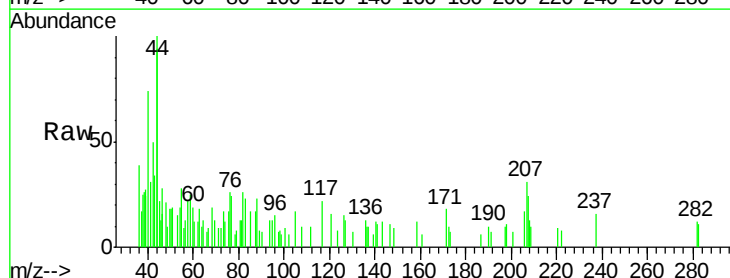
Tgt Ion: 42 Resp: 955

Ion Ratio Lower Upper

42 100

72 0.0 35.5 53.3#

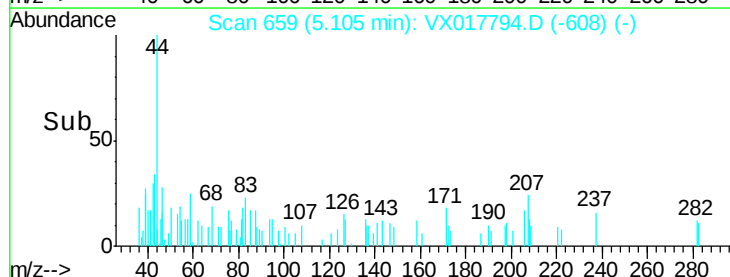
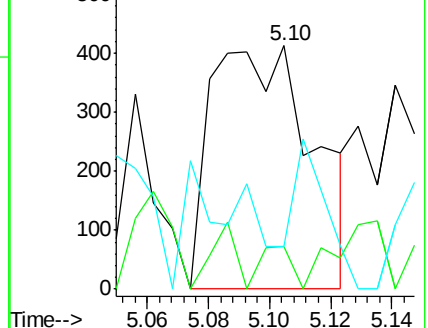
71 19.1 33.0 49.4#

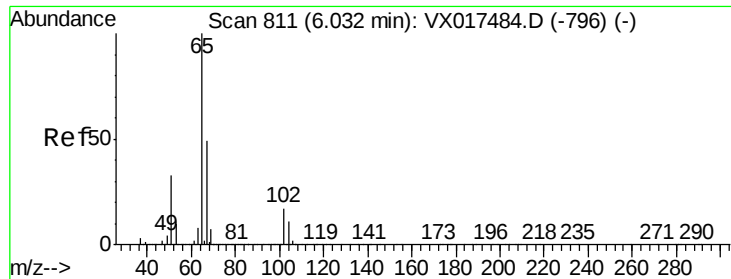


Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0





#33

1,2-Dichloroethane-d4

Concen: 51.564 ug/l

RT: 6.04 min Scan# 812

Delta R.T. 0.01 min

Lab File: VX017794.D

Acq: 05 Aug 2020 13:46

Instrument :

MSVOA\_X

ClientSampleId :

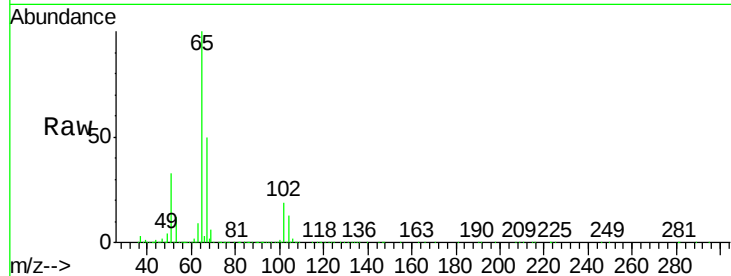
OUTFALL001-200804

Tot Ion: 65 Resp: 358389

Ion Ratio Lower Upper

65 100

67 50.1 0.0 102.8



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0

6.04

150000

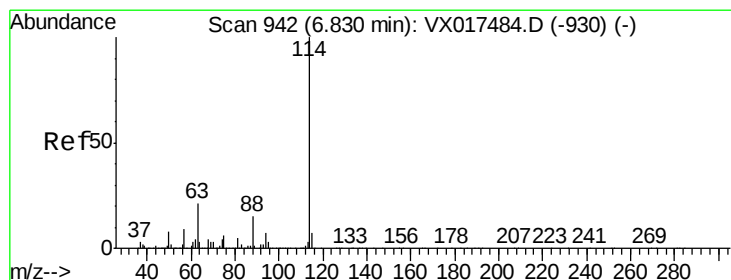
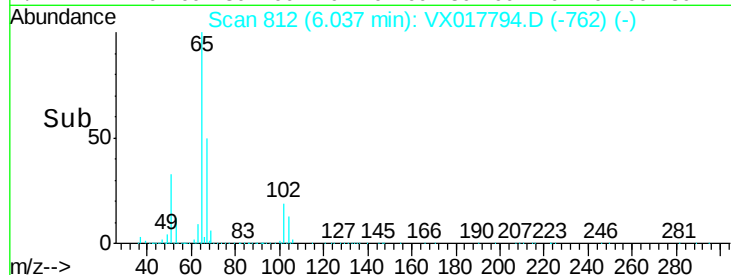
100000

50000

0

Time-->

5.90 6.00 6.10



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.84 min Scan# 943

Delta R.T. 0.01 min

Lab File: VX017794.D

Acq: 05 Aug 2020 13:46

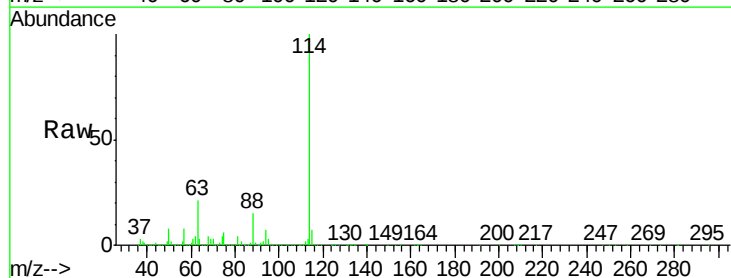
Tgt Ion: 114 Resp: 805105

Ion Ratio Lower Upper

114 100

63 20.8 0.0 40.6

88 15.1 0.0 33.4



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0

400000

300000

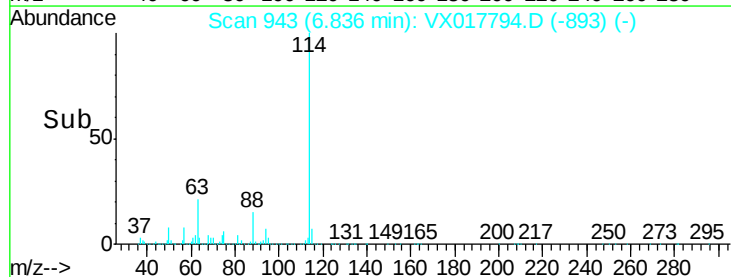
200000

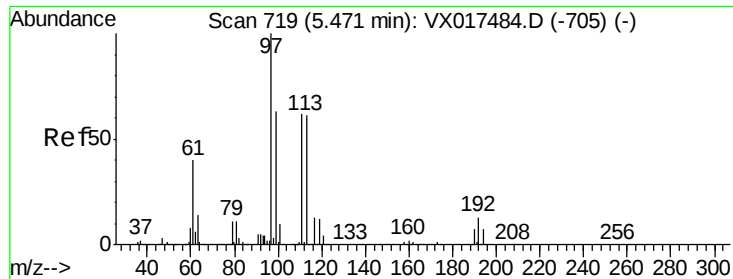
100000

0

Time-->

6.70 6.80 6.90

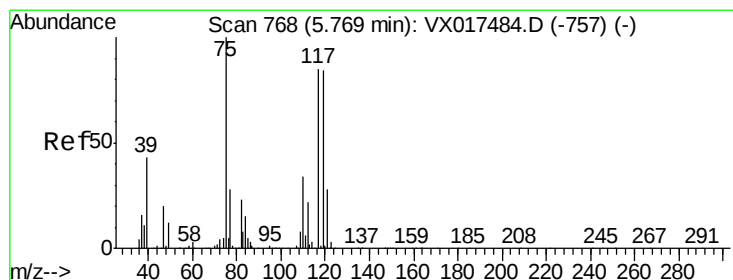
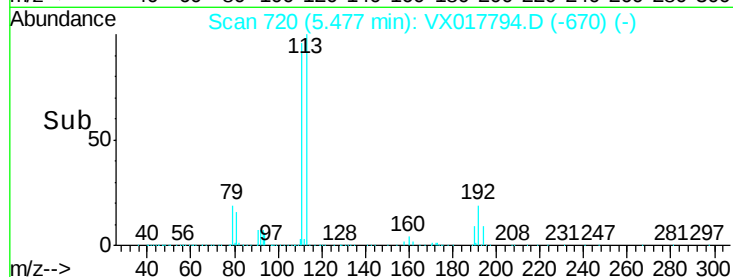
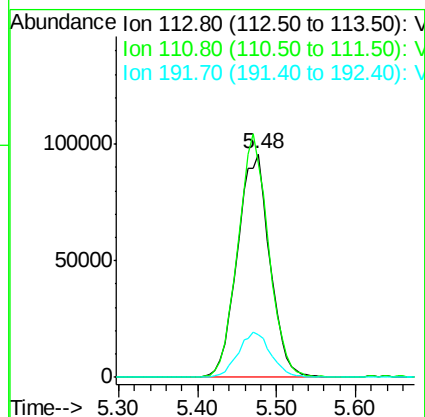
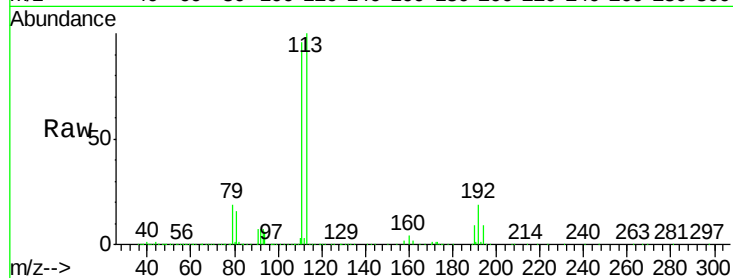




#35  
 Dibromofluoromethane  
 Concen: 50.771 ug/l  
 RT: 5.48 min Scan# 720  
 Delta R.T. 0.01 min  
 Lab File: VX017794.D  
 Acq: 05 Aug 2020 13:46

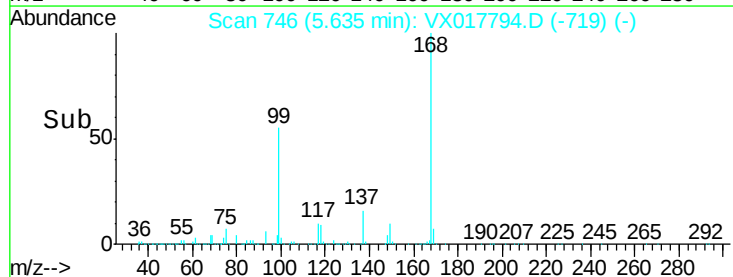
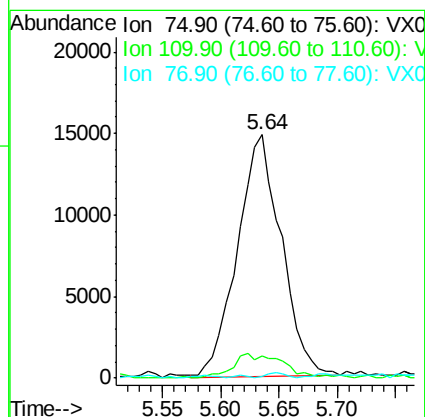
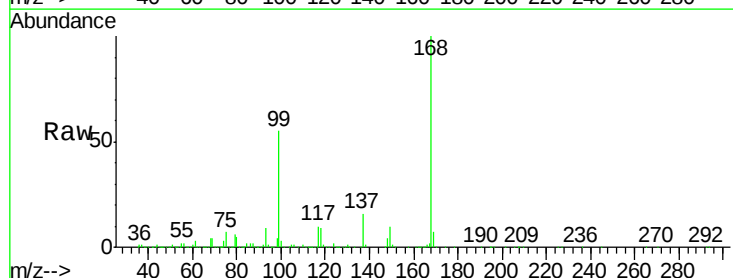
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 OUTFALL001-200804

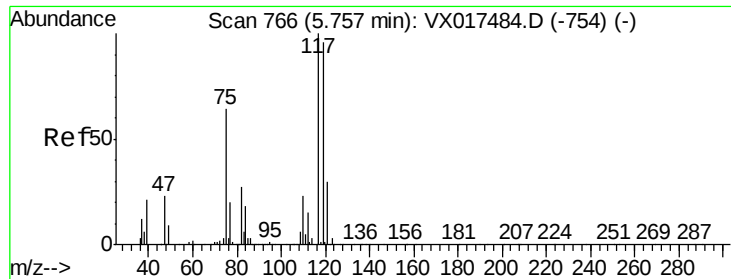
Tot Ion:113 Resp: 273383  
 Ion Ratio Lower Upper  
 113 100  
 111 103.3 80.7 121.1  
 192 20.3 16.9 25.3



#36  
 1,1-Dichloropropene  
 Concen: 5.063 ug/l  
 RT: 5.64 min Scan# 746  
 Delta R.T. -0.13 min  
 Lab File: VX017794.D  
 Acq: 05 Aug 2020 13:46

Tgt Ion: 75 Resp: 39098  
 Ion Ratio Lower Upper  
 75 100  
 110 0.0 18.1 54.3#  
 77 1.0 24.6 37.0#





#38

Carbon Tetrachloride

Concen: 5.842 ug/l

RT: 5.64 min Scan# 746

Delta R.T. -0.12 min

Lab File: VX017794.D

Acq: 05 Aug 2020 13:46

Instrument :

MSVOA\_X

ClientSampleId :

OUTFALL001-200804

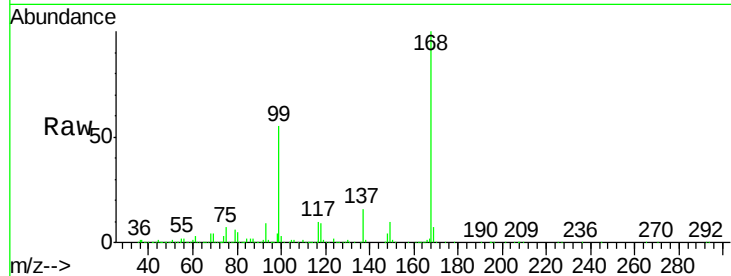
Tot Ion:117 Resp: 54783

Ion Ratio Lower Upper

117 100

119 5.5 75.4 113.0#

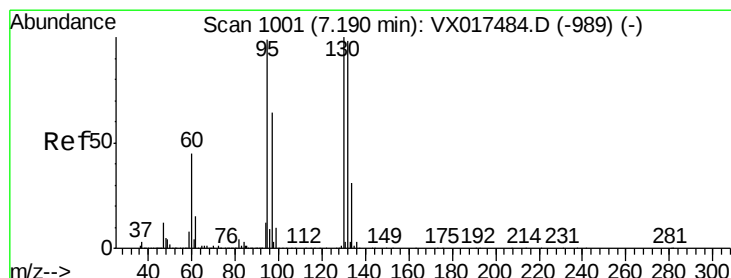
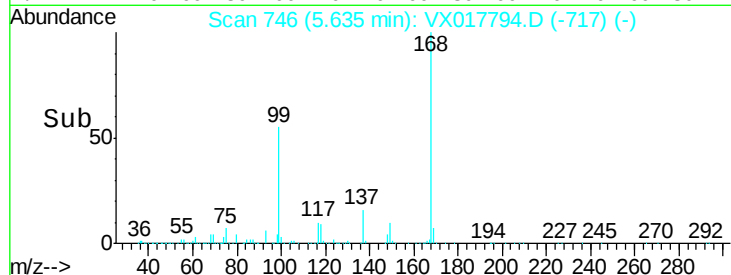
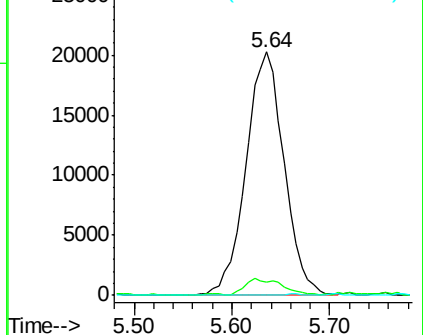
121 0.0 24.3 36.5#



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: 0.467 ug/l

RT: 7.19 min Scan# 1001

Delta R.T. -0.00 min

Lab File: VX017794.D

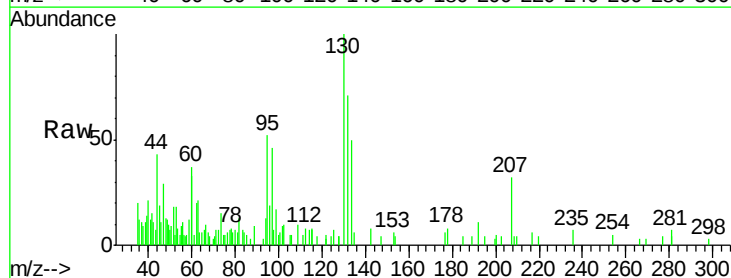
Acq: 05 Aug 2020 13:46

Tgt Ion:130 Resp: 3024

Ion Ratio Lower Upper

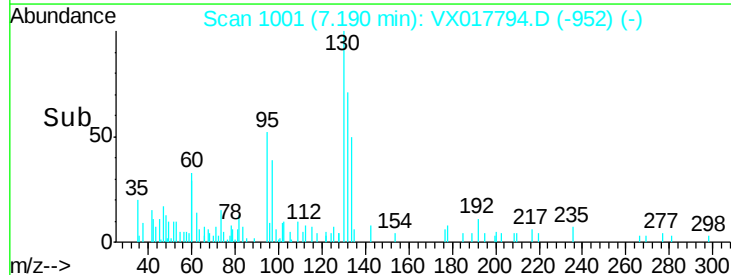
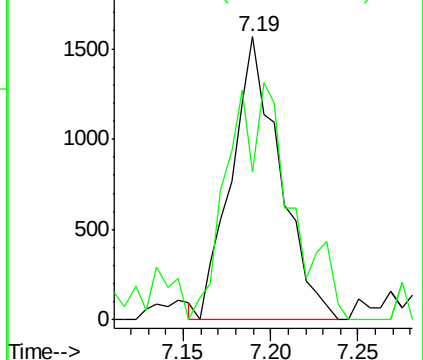
130 100

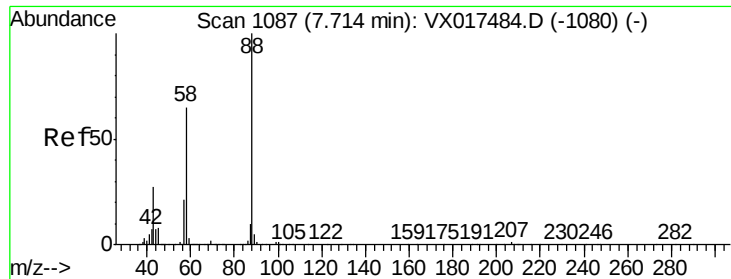
95 46.4 0.0 189.0



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0

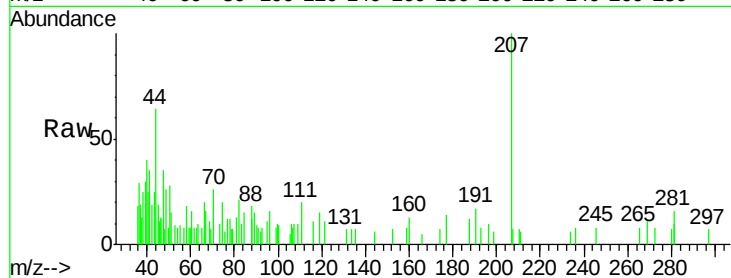




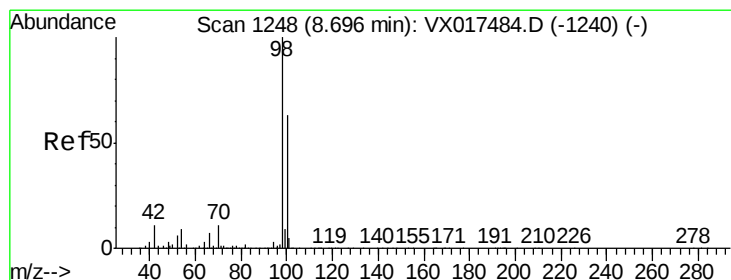
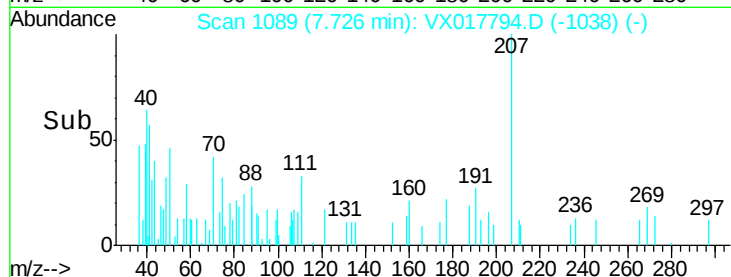
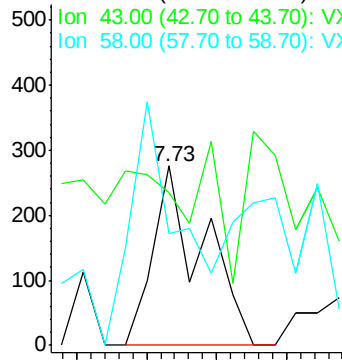
#49  
1,4-Dioxane  
Concen: 2.053 ug/l  
RT: 7.73 min Scan# 1089  
Delta R.T. 0.01 min  
Lab File: VX017794.D  
Acq: 05 Aug 2020 13:46

Instrument :  
MSVOA\_X  
ClientSampleId :  
OUTFALL001-200804

Tot Ion: 88 Resp: 272  
Ion Ratio Lower Upper  
88 100  
43 0.0 27.8 41.6#  
58 132.7 58.3 87.5#

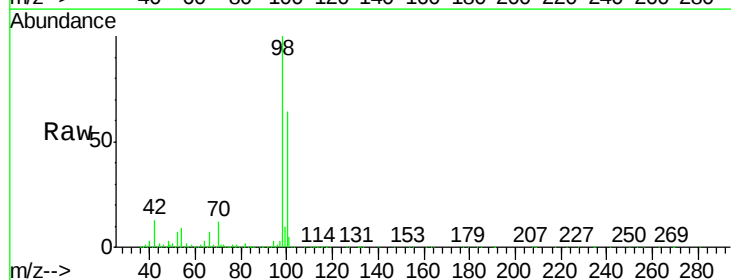


Abundance Ion 88.00 (87.70 to 88.70): VX0  
Ion 43.00 (42.70 to 43.70): VX0  
Ion 58.00 (57.70 to 58.70): VX0

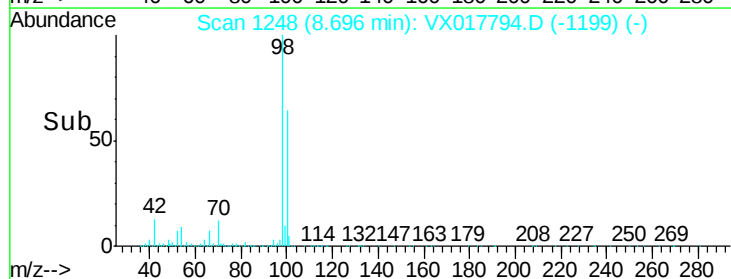
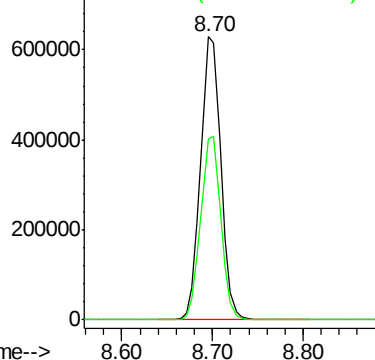


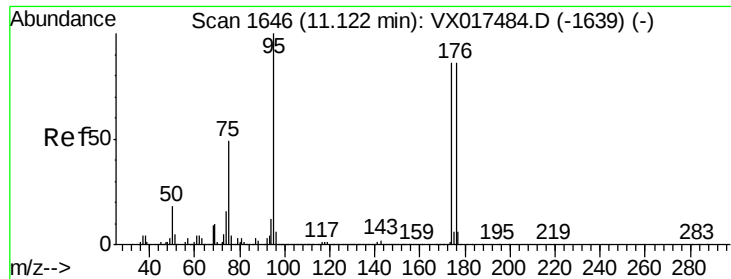
#50  
Toluene-d8  
Concen: 50.486 ug/l  
RT: 8.70 min Scan# 1248  
Delta R.T. -0.00 min  
Lab File: VX017794.D  
Acq: 05 Aug 2020 13:46

Tgt Ion: 98 Resp: 980682  
Ion Ratio Lower Upper  
98 100  
100 64.3 52.3 78.5



Abundance Ion 98.00 (97.70 to 98.70): VX0  
Ion 100.00 (99.70 to 100.70): VX0





#62

4-Bromofluorobenzene

Concen: 44.640 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.00 min

Lab File: VX017794.D

Acq: 05 Aug 2020 13:46

Instrument :

MSVOA\_X

ClientSampleId :

OUTFALL001-200804

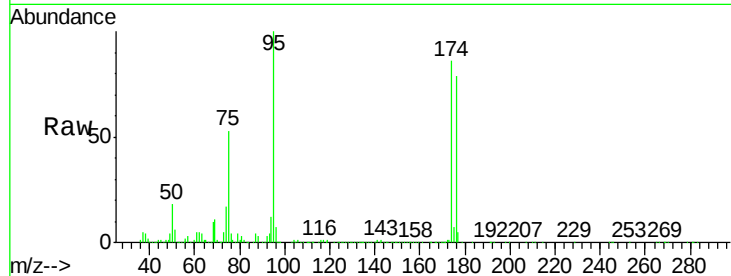
Tot Ion: 95 Resp: 347024

Ion Ratio Lower Upper

95 100

174 84.2 0.0 169.0

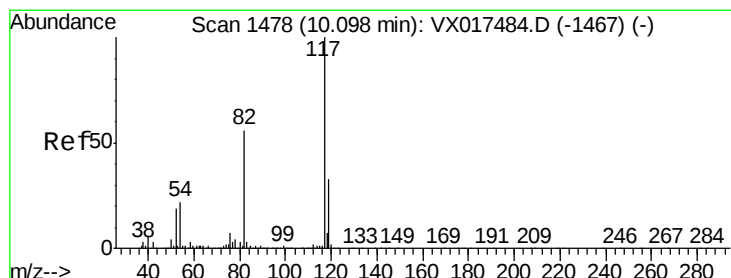
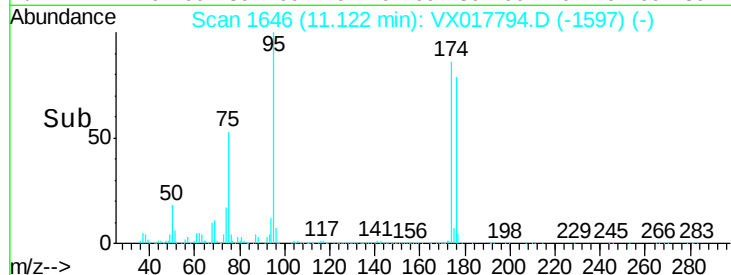
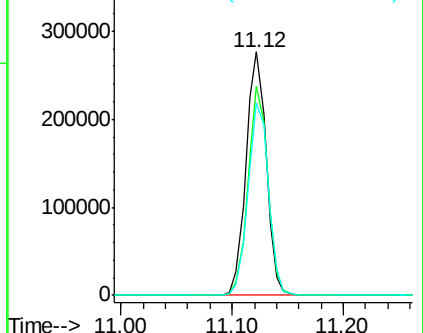
176 80.0 0.0 161.0



Abundance Ion 94.90 (94.60 to 95.60): VX017794.D (-1597) (-)

Ion 173.80 (173.50 to 174.50): VX017794.D (-1597) (-)

Ion 175.80 (175.50 to 176.50): VX017794.D (-1597) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.10 min Scan# 1478

Delta R.T. -0.00 min

Lab File: VX017794.D

Acq: 05 Aug 2020 13:46

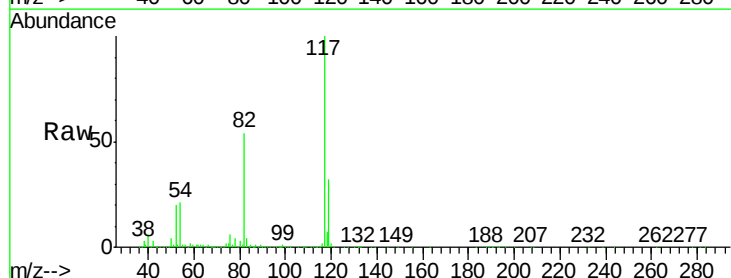
Tgt Ion: 117 Resp: 771015

Ion Ratio Lower Upper

117 100

82 53.7 44.0 66.0

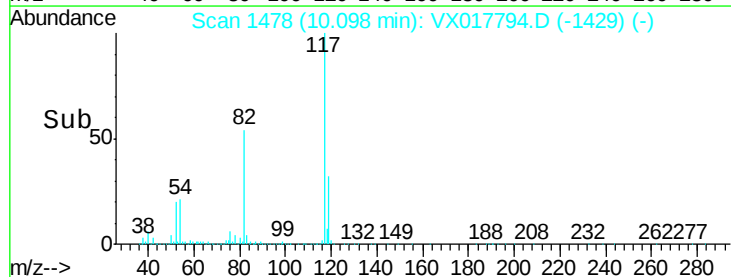
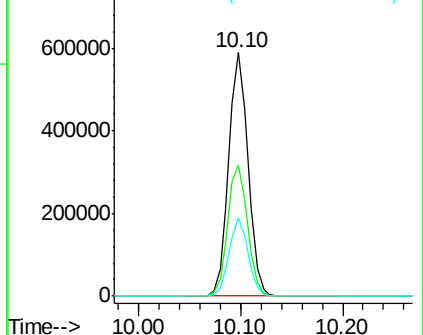
119 32.1 25.4 38.0

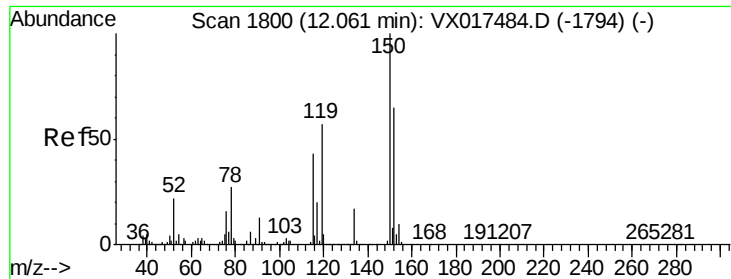


Abundance Ion 116.90 (116.60 to 117.60): VX017794.D (-1429) (-)

Ion 82.00 (81.70 to 82.70): VX017794.D (-1429) (-)

Ion 118.90 (118.60 to 119.60): VX017794.D (-1429) (-)





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.06 min Scan# 1800

Delta R.T. -0.00 min

Lab File: VX017794.D

Acq: 05 Aug 2020 13:46

Instrument :

MSVOA\_X

ClientSampleId :

OUTFALL001-200804

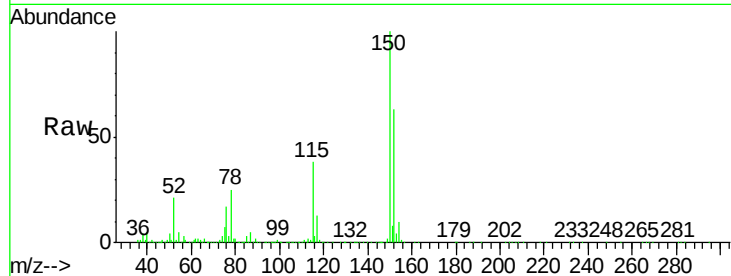
Tot Ion:152 Resp: 356900

Ion Ratio Lower Upper

152 100

115 58.2 65.5 196.6#

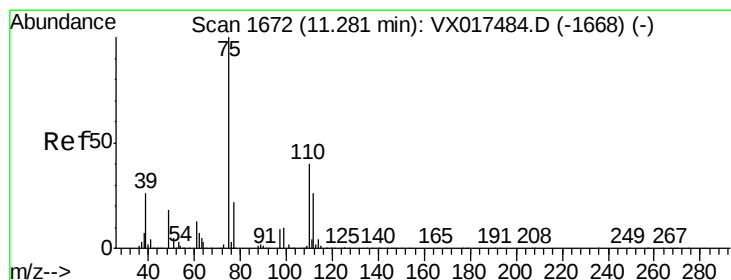
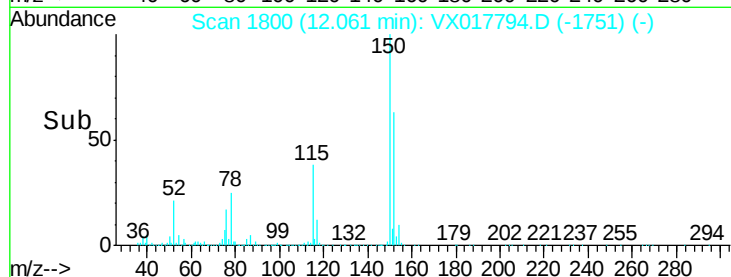
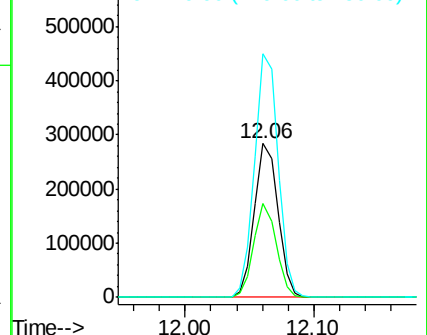
150 157.7 0.0 412.6



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: 24.255 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.16 min

Lab File: VX017794.D

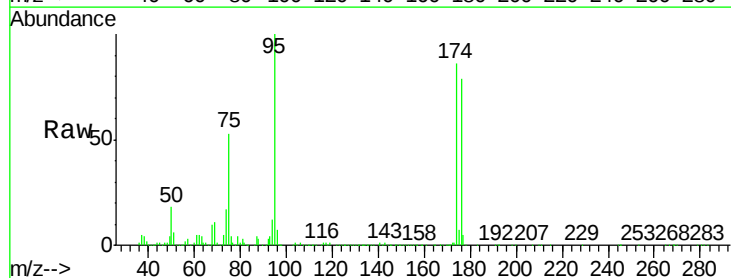
Acq: 05 Aug 2020 13:46

Tgt Ion: 75 Resp: 178069

Ion Ratio Lower Upper

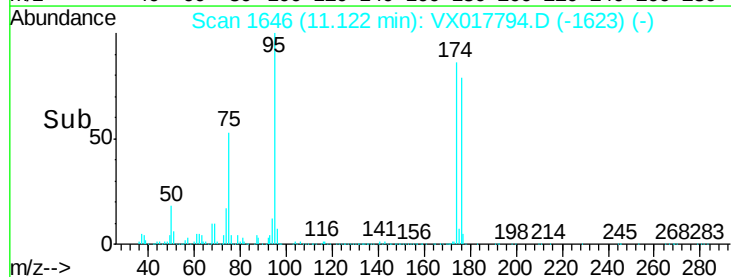
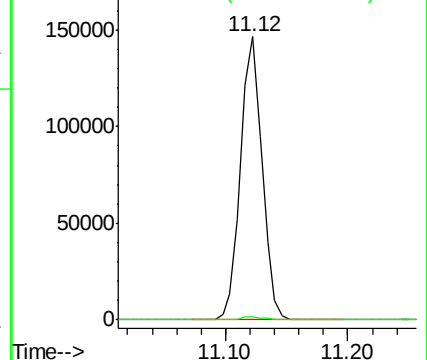
75 100

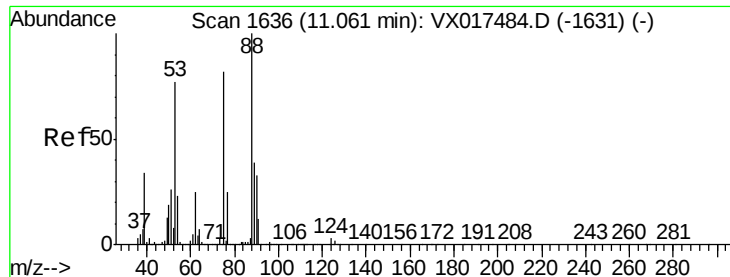
77 1.5 21.8 65.3#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#81

trans-1,4-Dichloro-2-butene

Concen: 61.117 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. 0.06 min

Lab File: VX017794.D

Acq: 05 Aug 2020 13:46

Instrument :

MSVOA\_X

ClientSampleId :

OUTFALL001-200804

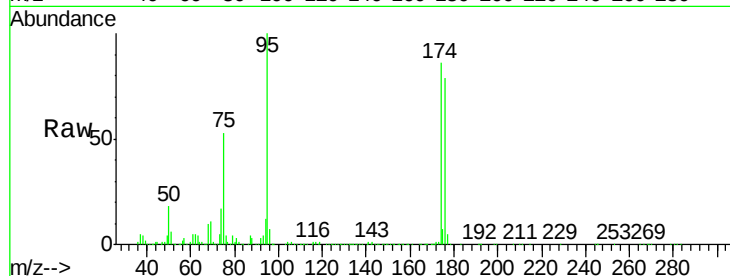
Tot Ion: 75 Resp: 178069

Ion Ratio Lower Upper

75 100

53 0.0 75.9 113.9#

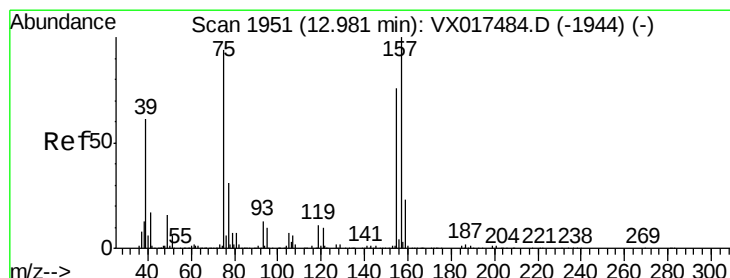
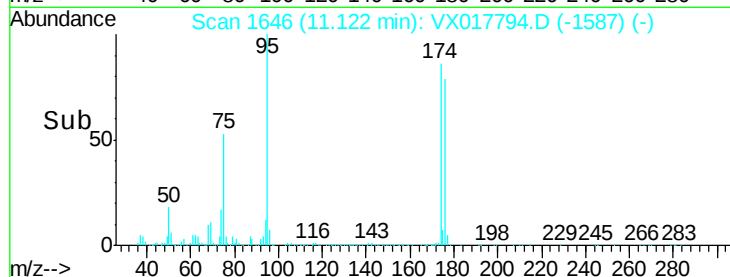
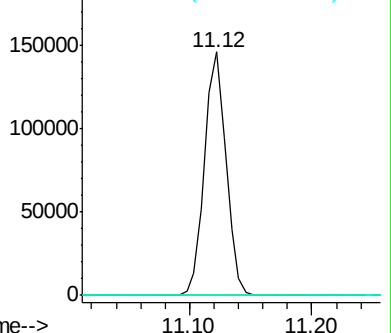
89 0.1 37.8 56.6#



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



#92

1,2-Dibromo-3-Chloropropane

Concen: 2.631 ug/l

RT: 12.97 min Scan# 1949

Delta R.T. -0.01 min

Lab File: VX017794.D

Acq: 05 Aug 2020 13:46

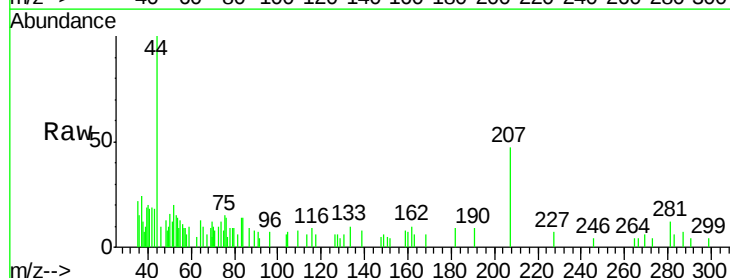
Tgt Ion: 75 Resp: 123

Ion Ratio Lower Upper

75 100

155 15.4 42.3 126.8#

157 0.0 54.3 162.9#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V

