

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX073120\  
 Data File : VX017721.D  
 Acq On : 31 Jul 2020 23:51  
 Operator : JC/SP  
 Sample : PB130661ZHE#17  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 37 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB130661ZHE#17

Quant Time: Aug 01 02:56:27 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  | 459674   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.84  | 114  | 776289   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 775017   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.06 | 152  | 430158   | 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   | 327714   | 55.50 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 111.00% |          |
| 35) Dibromofluoromethane    | 5.47  | 113  | 268427   | 51.70 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.40% |          |
| 50) Toluene-d8              | 8.70  | 98   | 944844   | 50.45 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.90% |          |
| 62) 4-Bromofluorobenzene    | 11.12 | 95   | 427702   | 57.06 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 114.12% |          |

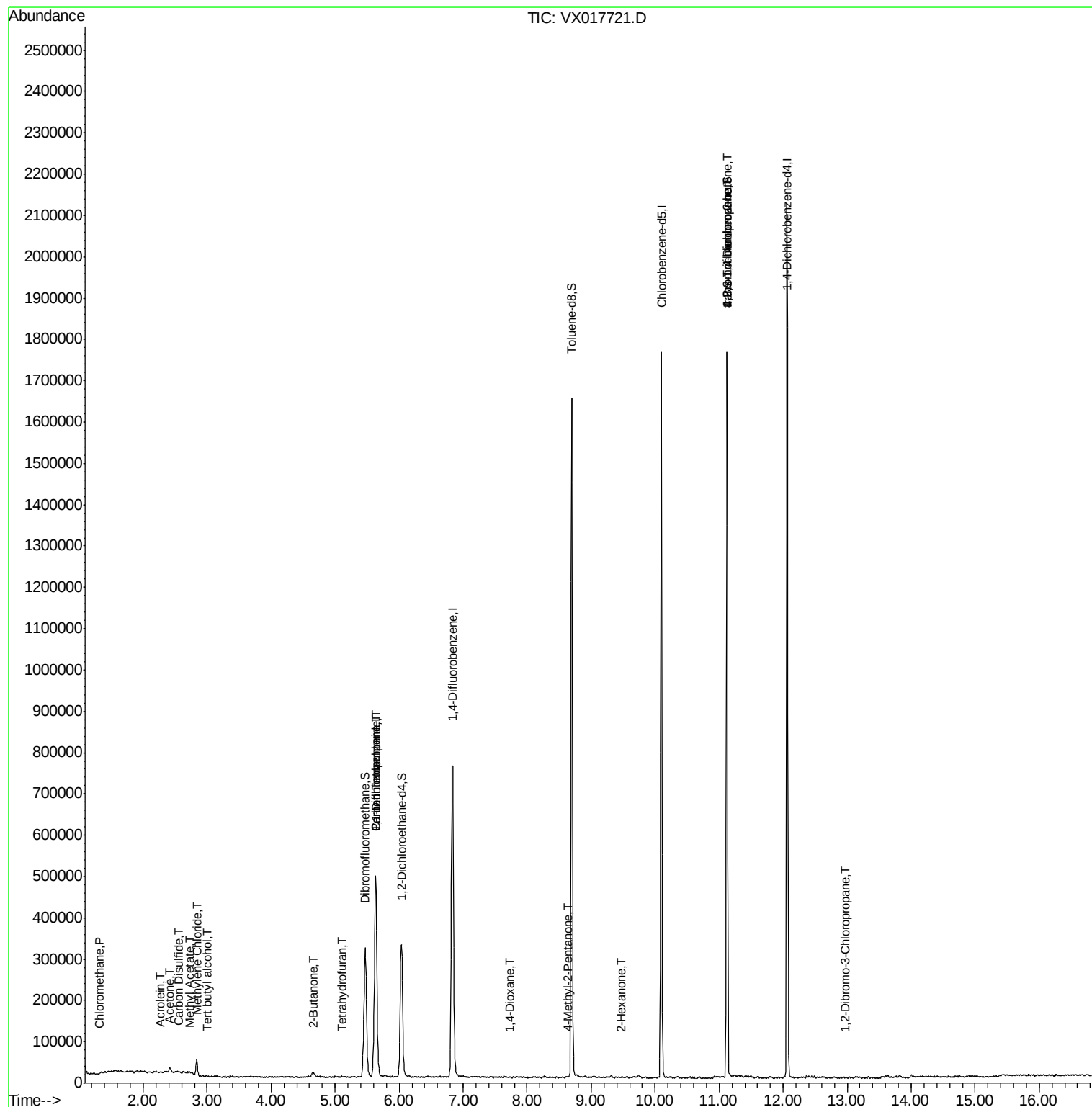
| Target Compounds               | R.T.  | QIon | Response | Conc        | Units | Qvalue |
|--------------------------------|-------|------|----------|-------------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.18  | 85   | 550      | Below Cal   |       | 75     |
| 3) Chloromethane               | 1.31  | 50   | 806      | 0.508 ug/l  |       | 100    |
| 5) Bromomethane                | 1.60  | 94   | 239      | Below Cal   | #     | 3      |
| 6) Chloroethane                | 1.73  | 64   | 193      | Below Cal   | #     | 76     |
| 8) Diethyl Ether               | 2.17  | 74   | 425      | Below Cal   |       | 80     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 1828     | 1.469 ug/l  | #     | 88     |
| 13) Acrolein                   | 2.28  | 56   | 463      | 4.628 ug/l  | #     | 29     |
| 16) Acetone                    | 2.42  | 43   | 12360    | 4.756 ug/l  |       | 91     |
| 17) Carbon Disulfide           | 2.56  | 76   | 2888     | 0.200 ug/l  | #     | 54     |
| 18) Methyl Acetate             | 2.74  | 43   | 2164     | 0.354 ug/l  | #     | 69     |
| 20) Methylene Chloride         | 2.84  | 84   | 19616    | 2.795 ug/l  |       | 97     |
| 25) 2-Butanone                 | 4.67  | 43   | 4768     | 1.291 ug/l  | #     | 72     |
| 29) Tetrahydrofuran            | 5.10  | 42   | 2826     | 1.236 ug/l  |       | 93     |
| 36) 1,1-Dichloropropene        | 5.63  | 75   | 34925    | 4.691 ug/l  | #     | 51     |
| 38) Carbon Tetrachloride       | 5.64  | 117  | 47025    | 5.201 ug/l  | #     | 17     |
| 49) 1,4-Dioxane                | 7.73  | 88   | 90       | 0.705 ug/l  | #     | 1      |
| 51) 4-Methyl-2-Pentanone       | 8.62  | 43   | 2977     | 0.371 ug/l  |       | 88     |
| 59) 2-Hexanone                 | 9.48  | 43   | 1216     | 0.201 ug/l  |       | 83     |
| 76) 1,2,3-Trichloropropane     | 11.12 | 75   | 225395   | 25.473 ug/l | #     | 35     |
| 81) trans-1,4-Dichloro-2-buten | 11.12 | 75   | 225395   | 64.185 ug/l | #     | 11     |
| 92) 1,2-Dibromo-3-Chloropropan | 12.98 | 75   | 258      | 2.671 ug/l  | #     | 72     |

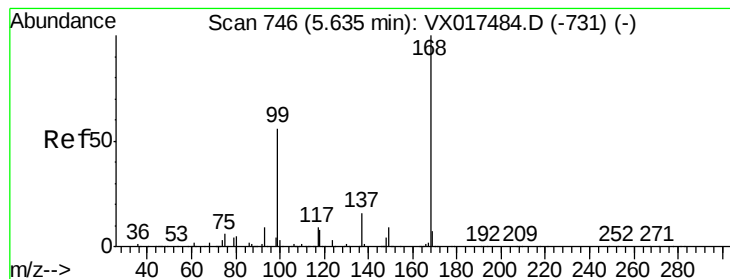
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX073120\  
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Quant Time: Aug 01 02:56:27 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: VX017721.D

Acq: 31 Jul 2020 23:51

Instrument :

MSVOA\_X

ClientSampleId :

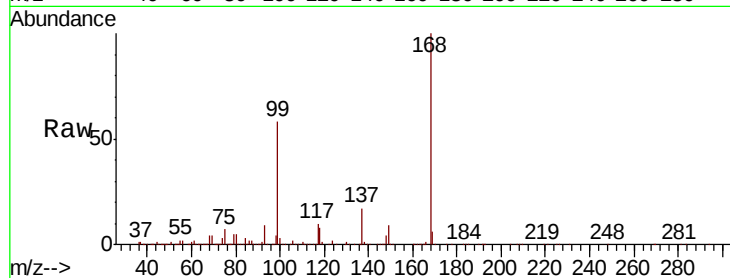
PB130661ZHE#17

Tot Ion:168 Resp: 459674

Ion Ratio Lower Upper

168 100

99 57.8 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

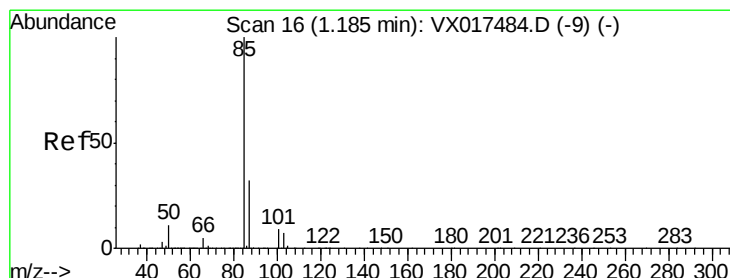
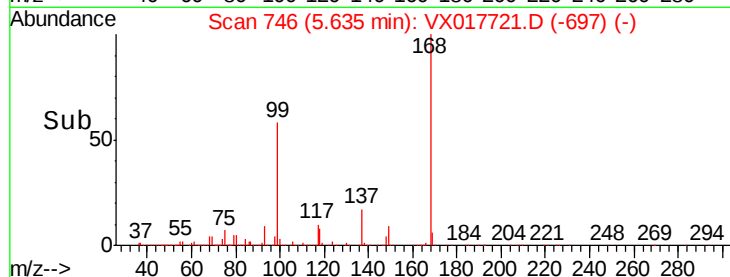
150000

100000

50000

0

Time-->



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.18 min Scan# 15

Delta R.T. -0.01 min

Lab File: VX017721.D

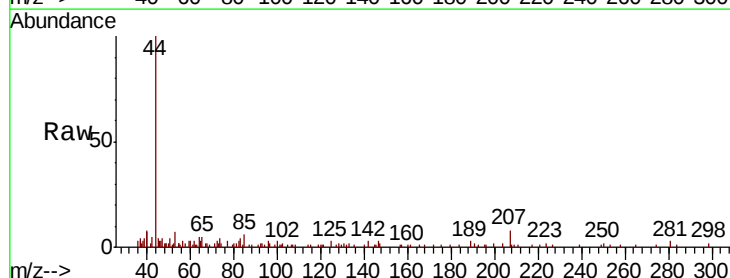
Acq: 31 Jul 2020 23:51

Tgt Ion: 85 Resp: 550

Ion Ratio Lower Upper

85 100

87 18.1 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

400

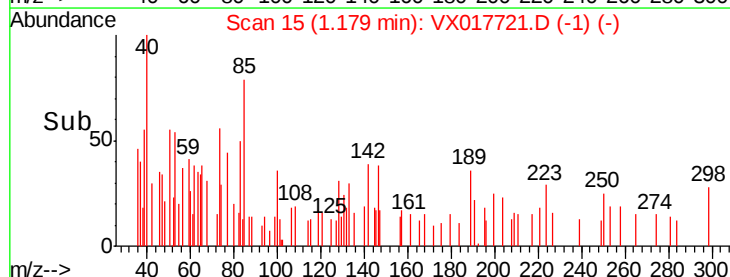
300

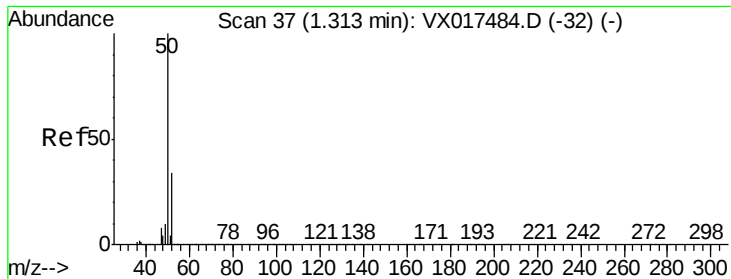
200

100

0

Time-->





#3

Chloromethane

Concen: 0.508 ug/l

RT: 1.31 min Scan# 37

Delta R.T. 0.00 min

Lab File: VX017721.D

Acq: 31 Jul 2020 23:51

Instrument :

MSVOA\_X

ClientSampleId :

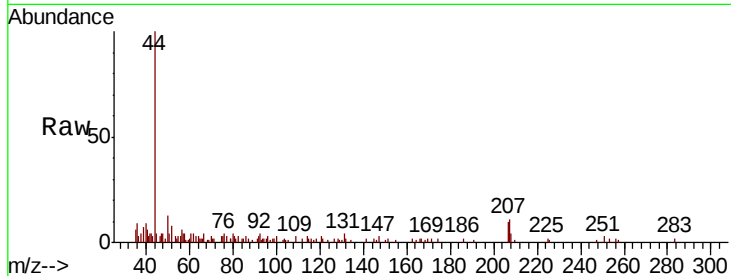
PB130661ZHE#17

Tot Ion: 50 Resp: 806

Ion Ratio Lower Upper

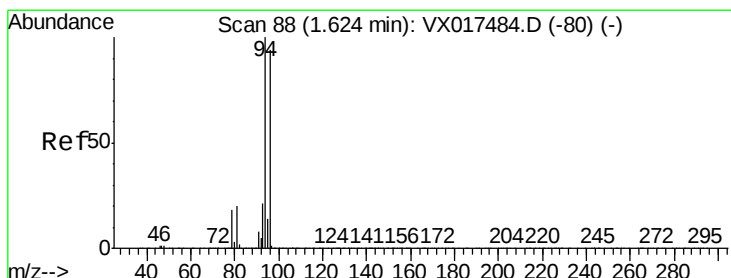
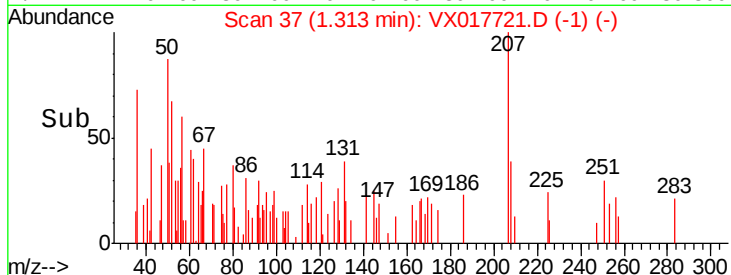
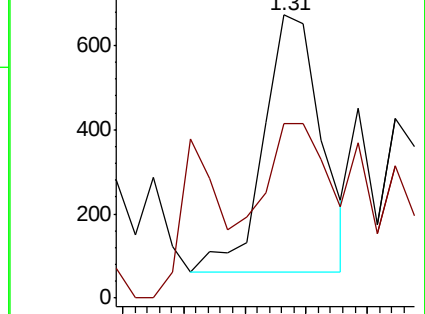
50 100

52 32.5 25.9 38.9



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0



#5

Bromomethane

Concen: Below Cal

RT: 1.60 min Scan# 84

Delta R.T. -0.02 min

Lab File: VX017721.D

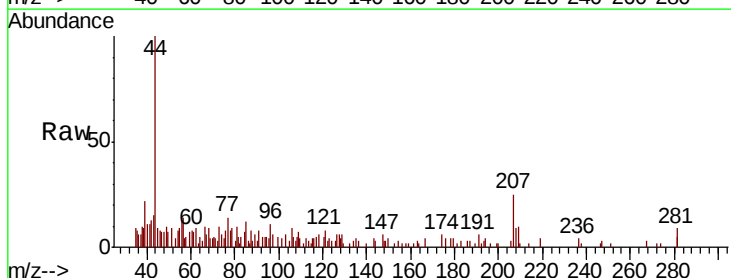
Acq: 31 Jul 2020 23:51

Tgt Ion: 94 Resp: 239

Ion Ratio Lower Upper

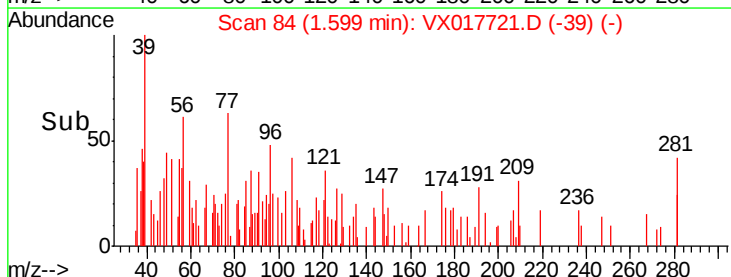
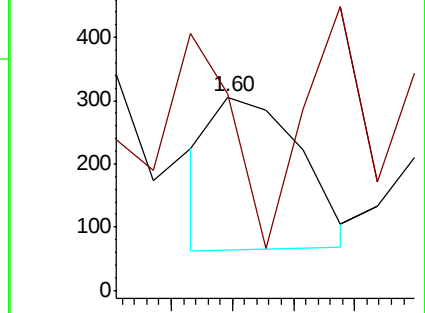
94 100

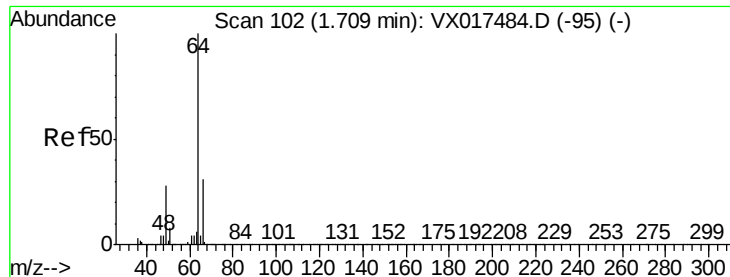
96 0.0 74.1 111.1#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0





#6

Chloroethane

Concen: Below Cal

RT: 1.73 min Scan# 105

Delta R.T. 0.02 min

Lab File: VX017721.D

Acq: 31 Jul 2020 23:51

Instrument :

MSVOA\_X

ClientSampleId :

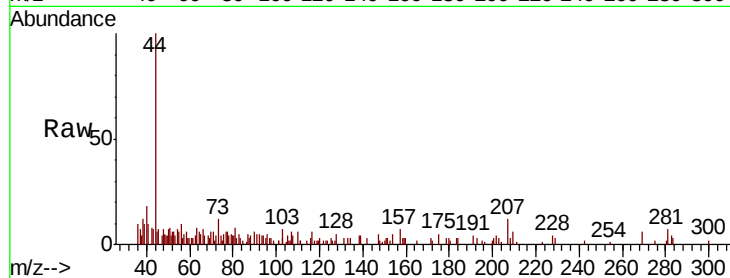
PB130661ZHE#17

Tot Ion: 64 Resp: 193

Ion Ratio Lower Upper

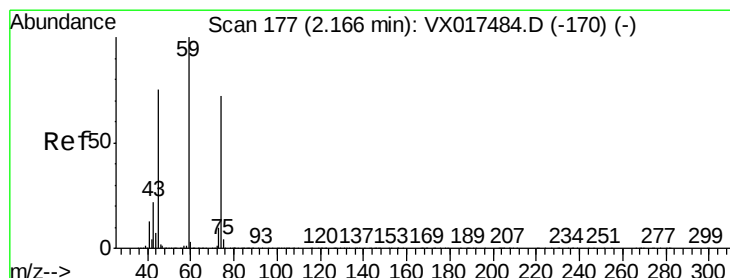
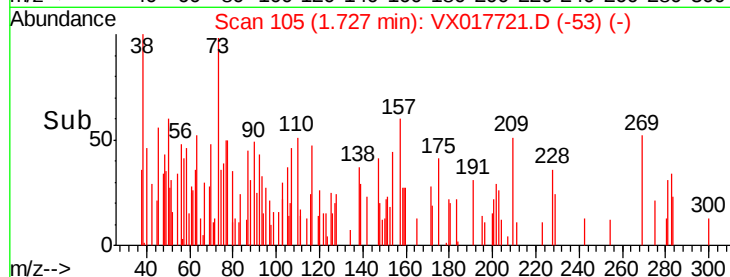
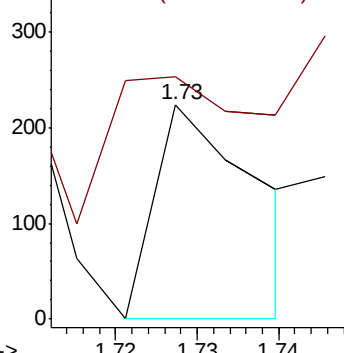
64 100

66 17.9 24.9 37.3#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0



#8

Diethyl Ether

Concen: Below Cal

RT: 2.17 min Scan# 177

Delta R.T. 0.00 min

Lab File: VX017721.D

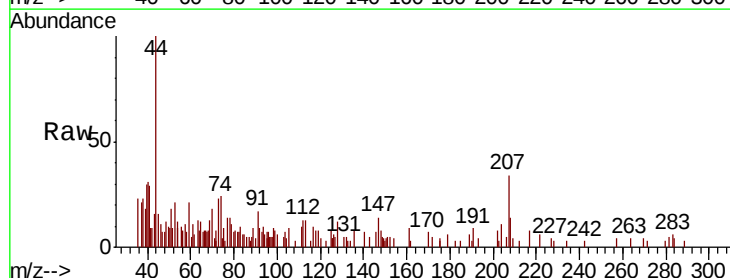
Acq: 31 Jul 2020 23:51

Tgt Ion: 74 Resp: 425

Ion Ratio Lower Upper

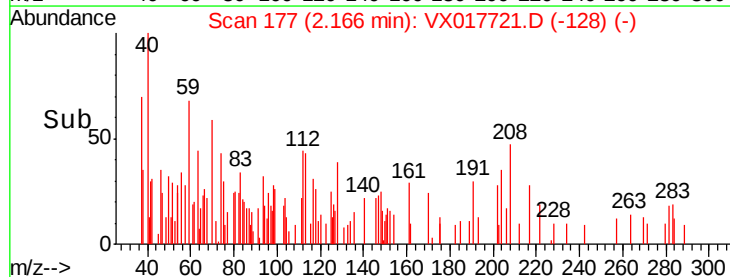
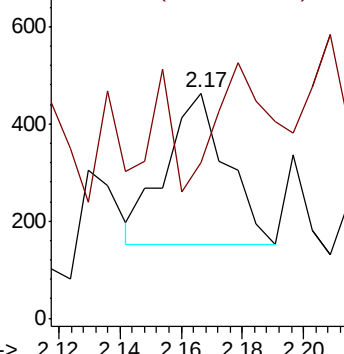
74 100

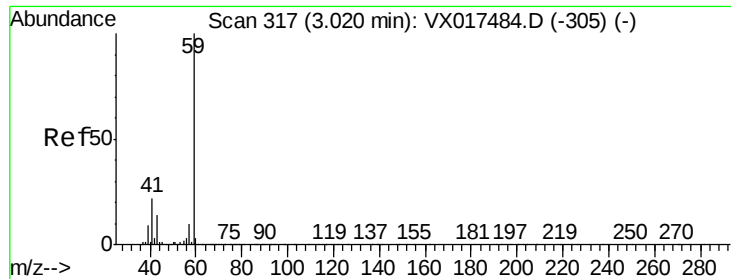
45 81.9 50.8 152.5



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0



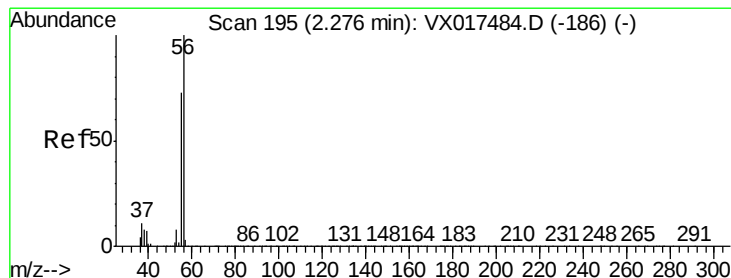
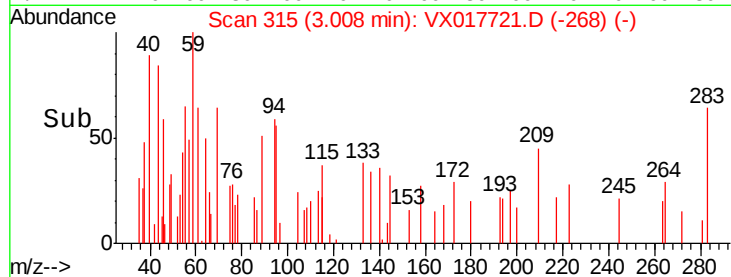
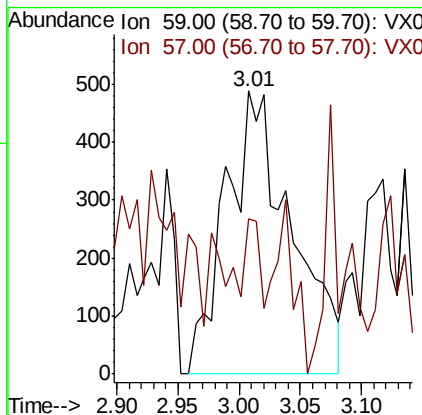
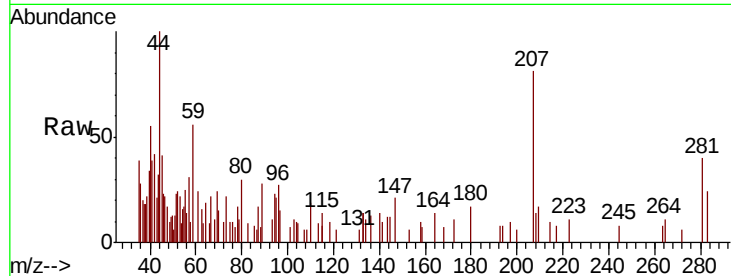


#11

Tert butyl alcohol  
Concen: 1.469 ug/l  
RT: 3.01 min Scan# 315  
Delta R.T. -0.01 min  
Lab File: VX017721.D  
Acq: 31 Jul 2020 23:51

Instrument :  
MSVOA\_X  
ClientSampleId :  
PB130661ZHE#17

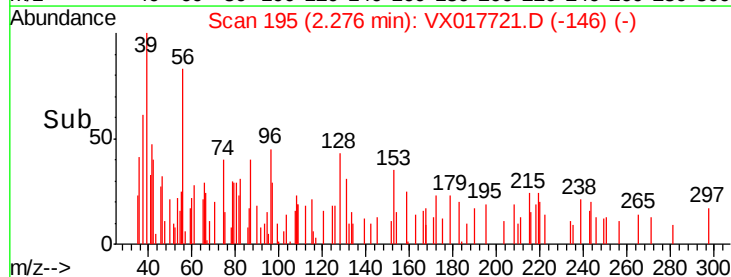
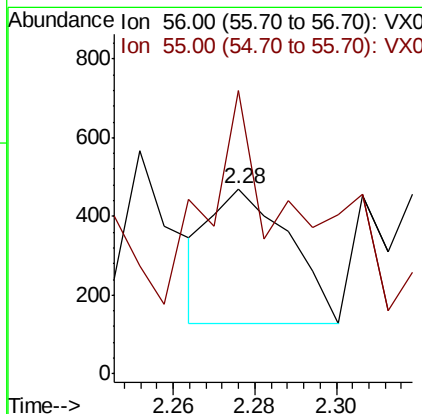
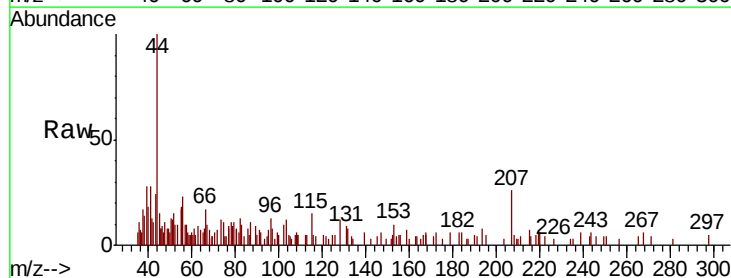
Tot Ion: 59 Resp: 1828  
Ion Ratio Lower Upper  
59 100  
57 6.1 8.6 12.8#

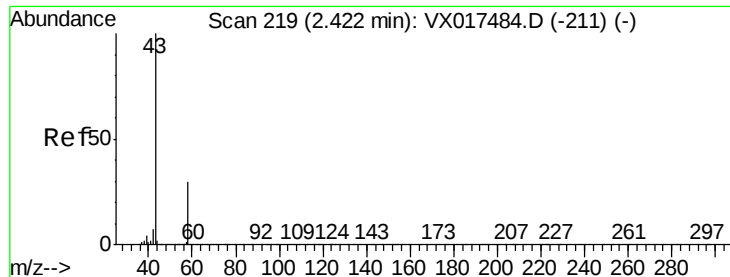


#13

Acrolein  
Concen: 4.628 ug/l  
RT: 2.28 min Scan# 195  
Delta R.T. 0.00 min  
Lab File: VX017721.D  
Acq: 31 Jul 2020 23:51

Tgt Ion: 56 Resp: 463  
Ion Ratio Lower Upper  
56 100  
55 130.9 57.4 86.2#





#16

Acetone

Concen: 4.756 ug/l

RT: 2.42 min Scan# 219

Delta R.T. -0.00 min

Lab File: VX017721.D

Acq: 31 Jul 2020 23:51

Instrument :

MSVOA\_X

ClientSampleId :

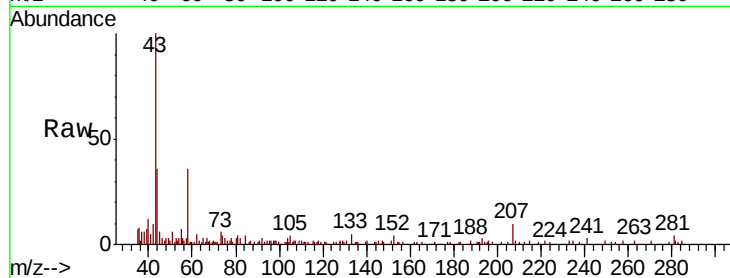
PB130661ZHE#17

Tot Ion: 43 Resp: 12360

Ion Ratio Lower Upper

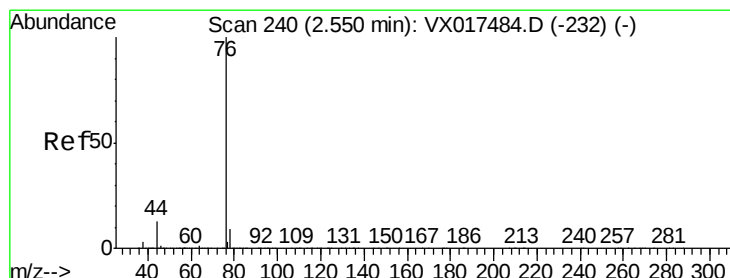
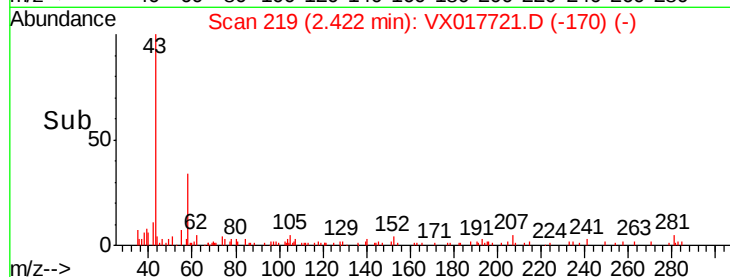
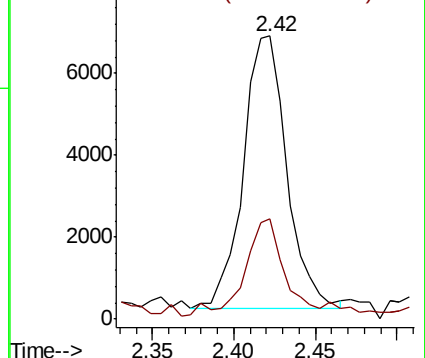
43 100

58 35.3 24.2 36.4



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#17

Carbon Disulfide

Concen: 0.200 ug/l

RT: 2.56 min Scan# 241

Delta R.T. 0.01 min

Lab File: VX017721.D

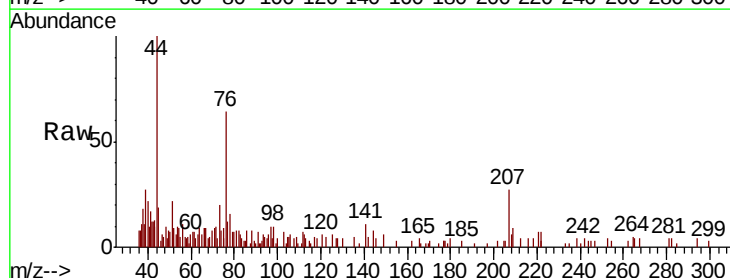
Acq: 31 Jul 2020 23:51

Tgt Ion: 76 Resp: 2888

Ion Ratio Lower Upper

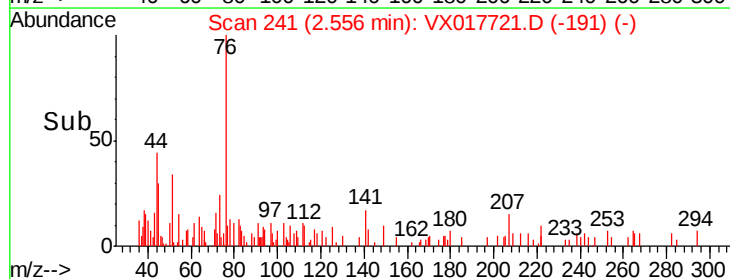
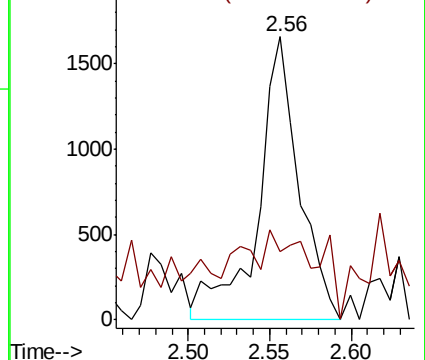
76 100

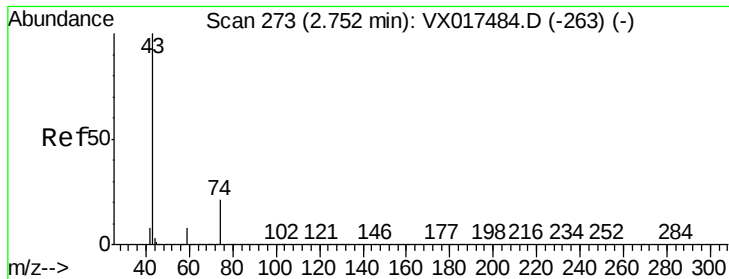
78 26.3 7.5 11.3#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

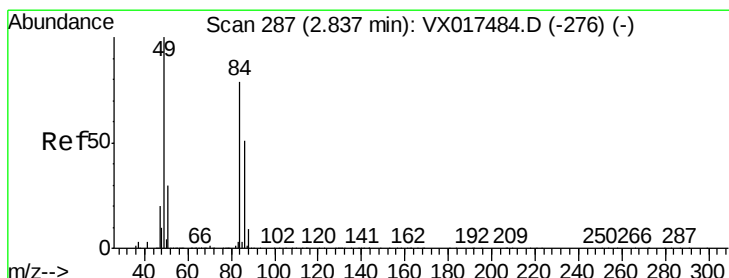
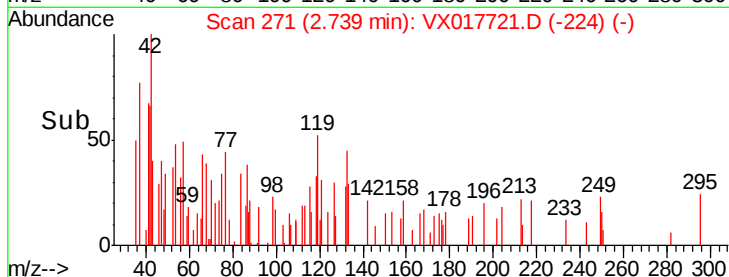
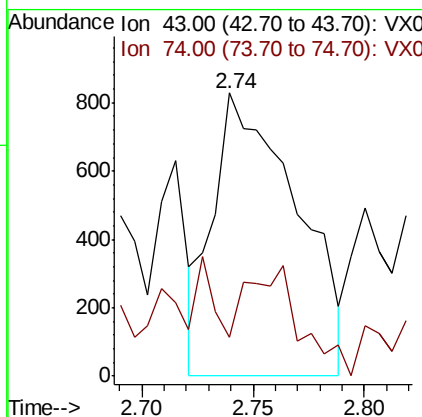
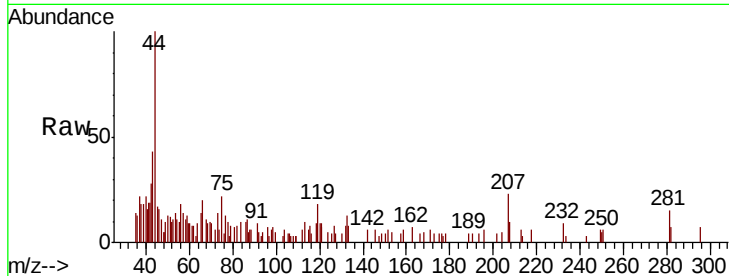




#18  
Methyl Acetate  
Concen: 0.354 ug/l  
RT: 2.74 min Scan# 271  
Delta R.T. -0.01 min  
Lab File: VX017721.D  
Acq: 31 Jul 2020 23:51

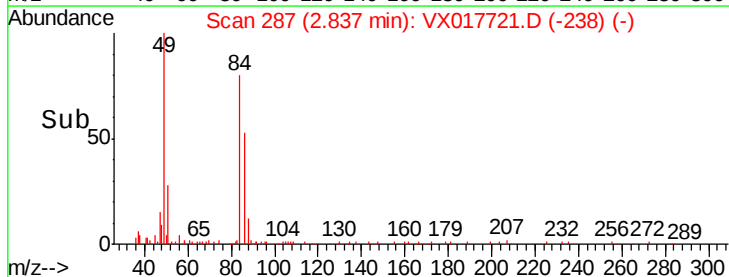
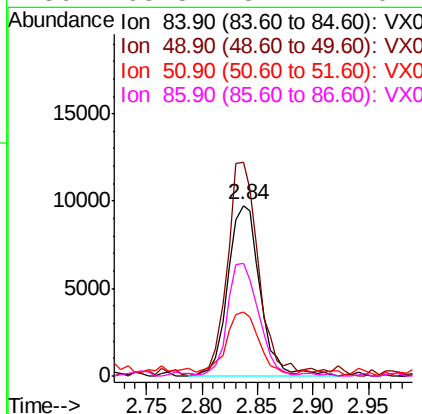
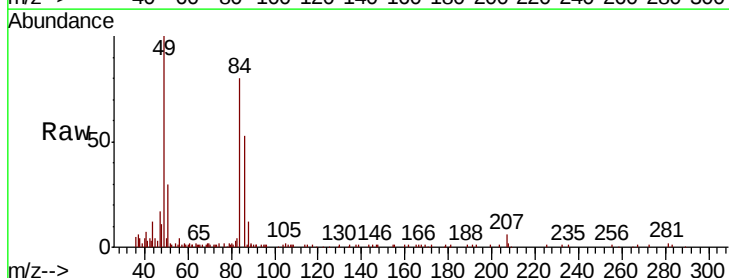
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB130661ZHE#17

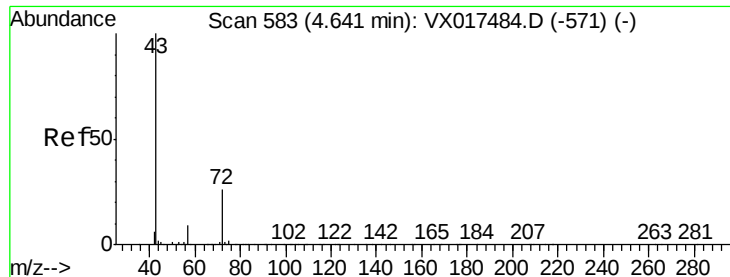
Tot Ion: 43 Resp: 2164  
Ion Ratio Lower Upper  
43 100  
74 6.9 17.5 26.3#



#20  
Methylene Chloride  
Concen: 2.795 ug/l  
RT: 2.84 min Scan# 287  
Delta R.T. 0.00 min  
Lab File: VX017721.D  
Acq: 31 Jul 2020 23:51

Tgt Ion: 84 Resp: 19616  
Ion Ratio Lower Upper  
84 100  
49 122.2 100.3 150.5  
51 34.4 30.5 45.7  
86 65.8 51.1 76.7





#25

2-Butanone

Concen: 1.291 ug/l

RT: 4.67 min Scan# 587

Delta R.T. 0.02 min

Lab File: VX017721.D

Acq: 31 Jul 2020 23:51

Instrument :

MSVOA\_X

ClientSampleId :

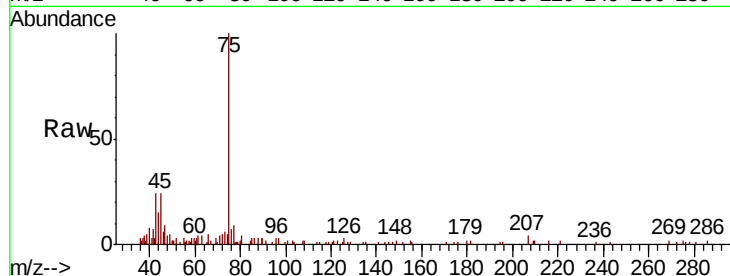
PB130661ZHE#17

Tot Ion: 43 Resp: 4768

Ion Ratio Lower Upper

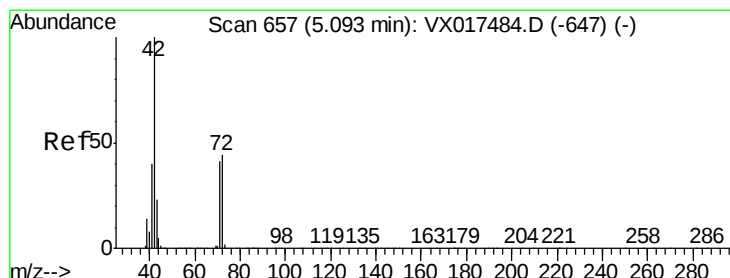
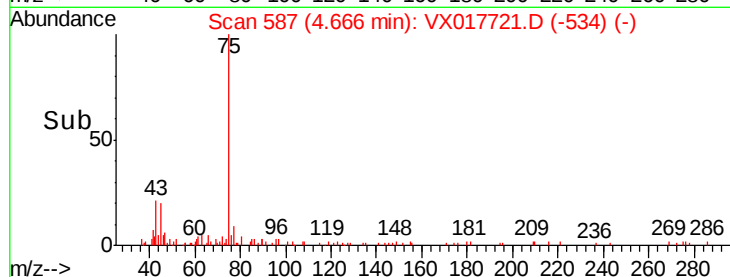
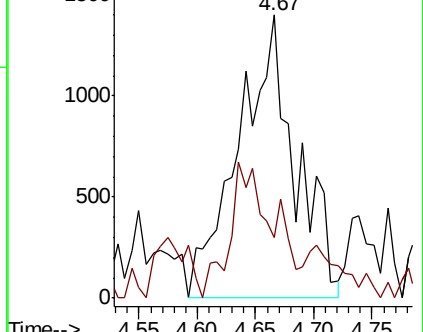
43 100

72 10.1 19.0 28.4#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0



#29

Tetrahydrofuran

Concen: 1.236 ug/l

RT: 5.10 min Scan# 659

Delta R.T. 0.01 min

Lab File: VX017721.D

Acq: 31 Jul 2020 23:51

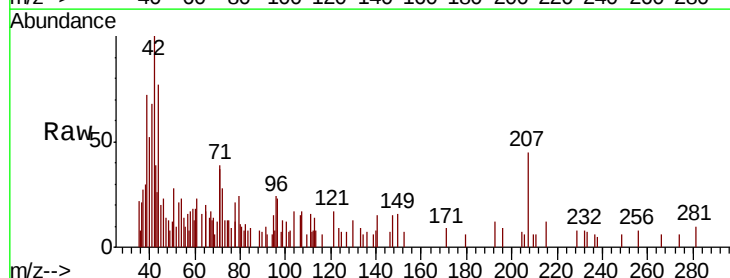
Tgt Ion: 42 Resp: 2826

Ion Ratio Lower Upper

42 100

72 42.5 35.5 53.3

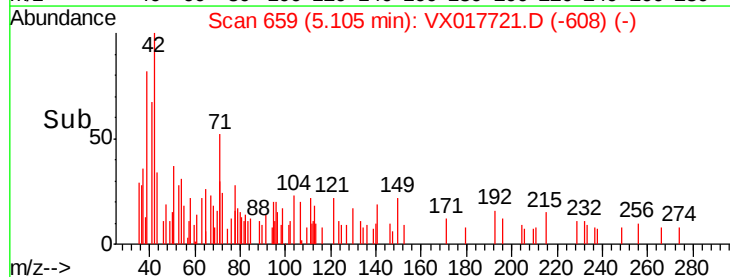
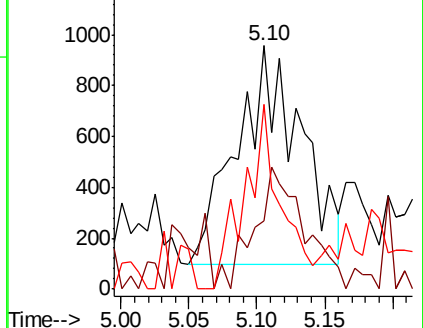
71 48.2 33.0 49.4

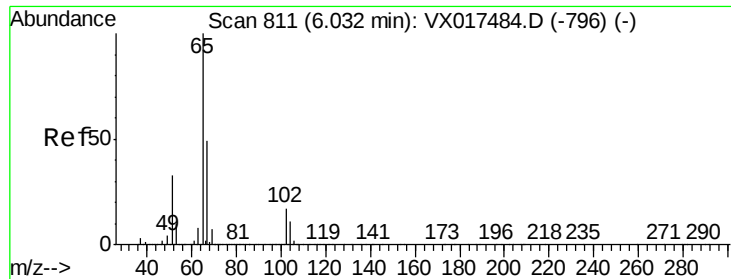


Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0





#33

1,2-Dichloroethane-d4

Concen: 55.500 ug/l

RT: 6.04 min Scan# 812

Delta R.T. 0.01 min

Lab File: VX017721.D

Acq: 31 Jul 2020 23:51

Instrument :

MSVOA\_X

ClientSampleId :

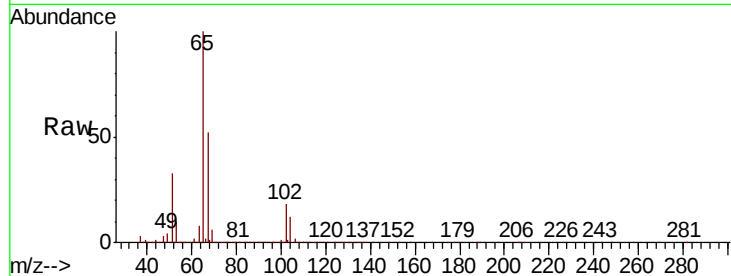
PB130661ZHE#17

Tot Ion: 65 Resp: 327714

Ion Ratio Lower Upper

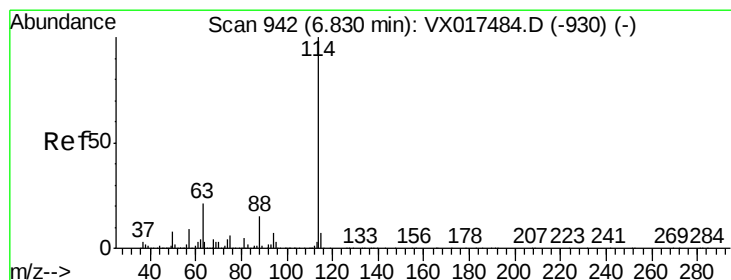
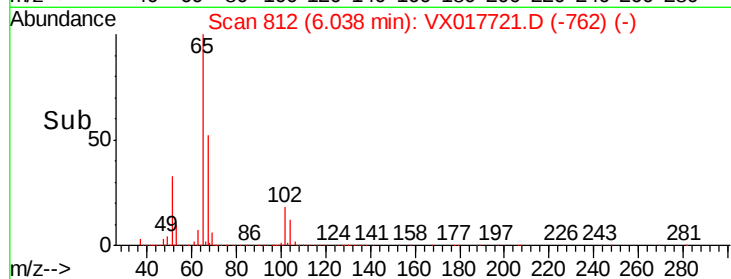
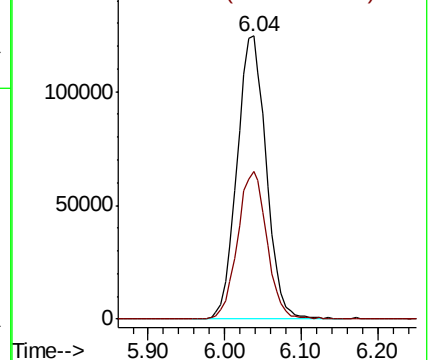
65 100

67 52.4 0.0 102.8



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.84 min Scan# 943

Delta R.T. 0.01 min

Lab File: VX017721.D

Acq: 31 Jul 2020 23:51

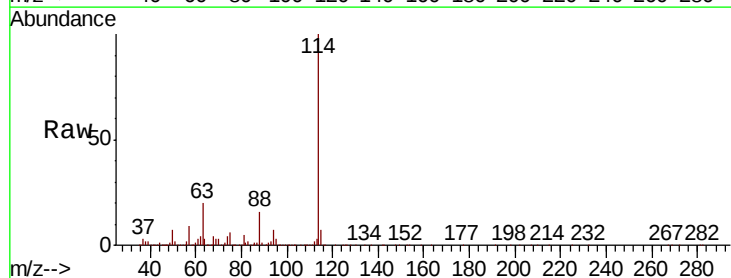
Tgt Ion: 114 Resp: 776289

Ion Ratio Lower Upper

114 100

63 20.3 0.0 40.6

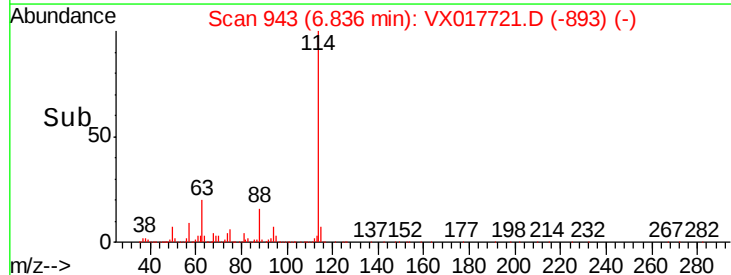
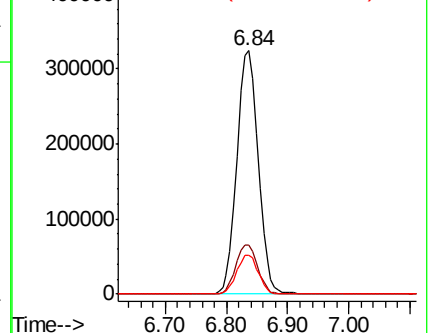
88 16.1 0.0 33.4

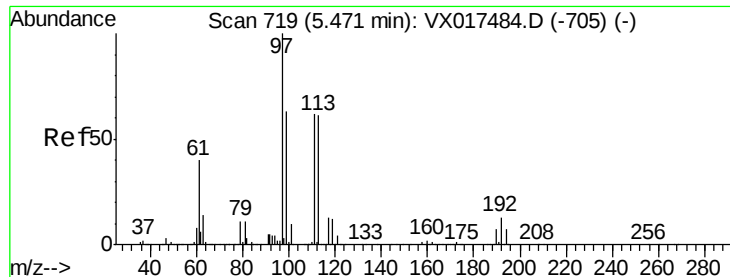


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0

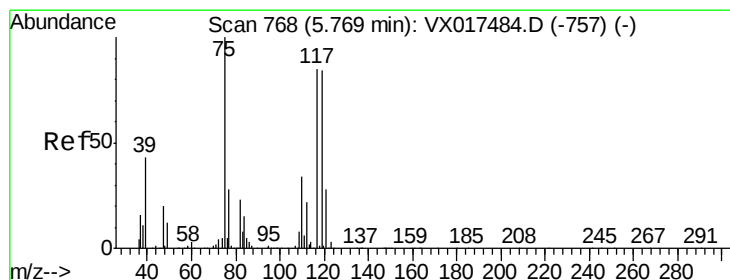
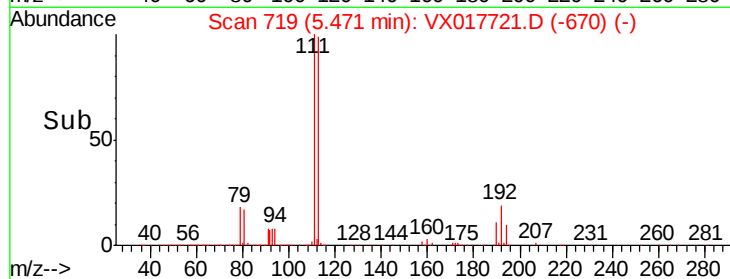
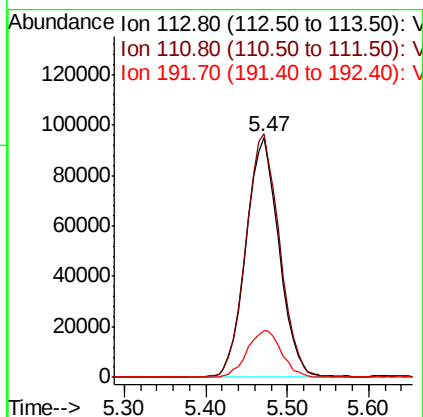
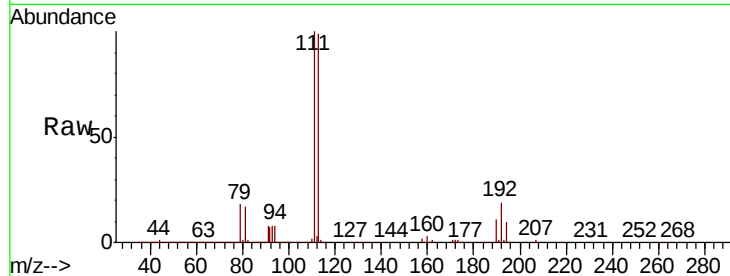




#35  
Dibromofluoromethane  
Concen: 51.701 ug/l  
RT: 5.47 min Scan# 719  
Delta R.T. -0.00 min  
Lab File: VX017721.D  
Acq: 31 Jul 2020 23:51

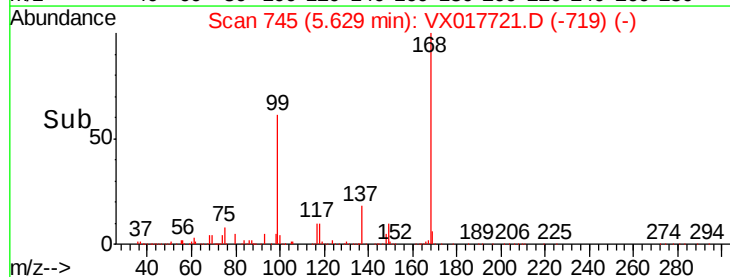
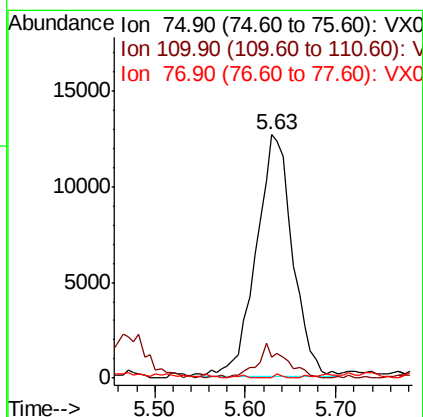
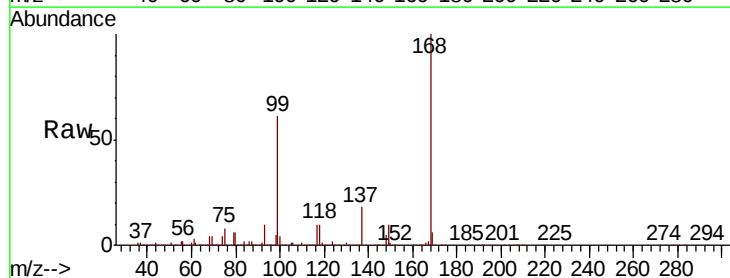
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB130661ZHE#17

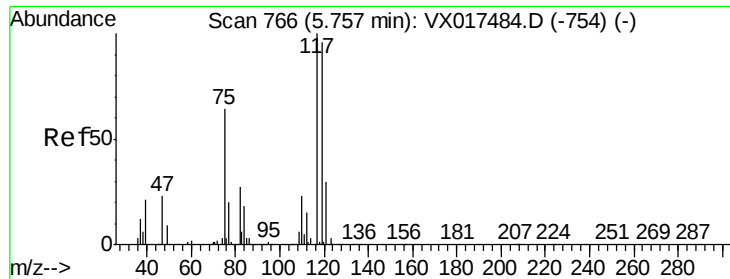
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 103.3 | 80.7  | 121.1 |
| 192     | 20.5  | 16.9  | 25.3  |



#36  
1,1-Dichloropropene  
Concen: 4.691 ug/l  
RT: 5.63 min Scan# 745  
Delta R.T. -0.14 min  
Lab File: VX017721.D  
Acq: 31 Jul 2020 23:51

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 11.0  | 18.1  | 54.3# |
| 77      | 0.4   | 24.6  | 37.0# |

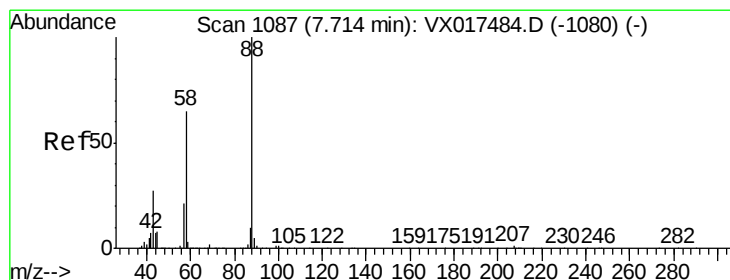
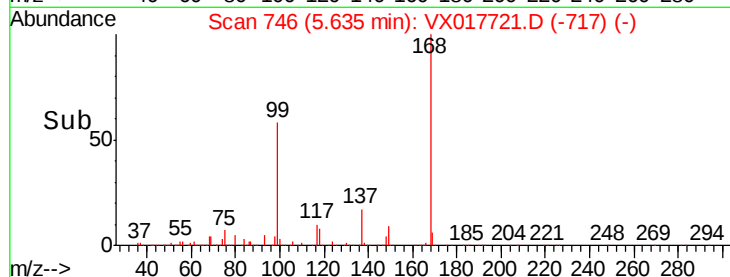
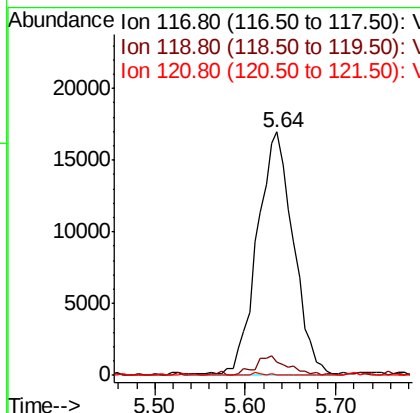
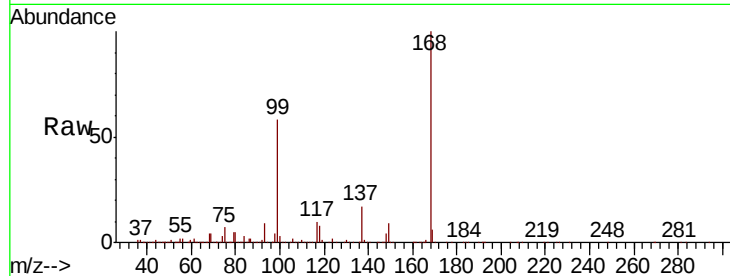




#38  
Carbon Tetrachloride  
Concen: 5.201 ug/l  
RT: 5.64 min Scan# 746  
Delta R.T. -0.12 min  
Lab File: VX017721.D  
Acq: 31 Jul 2020 23:51

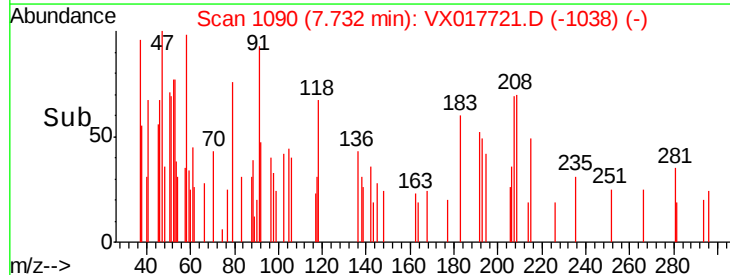
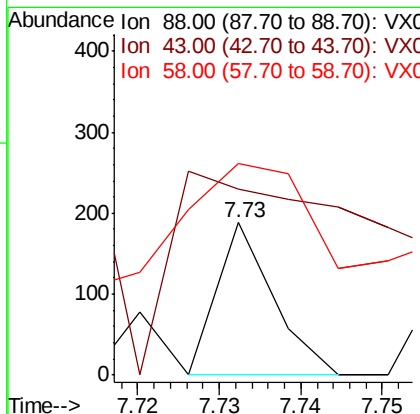
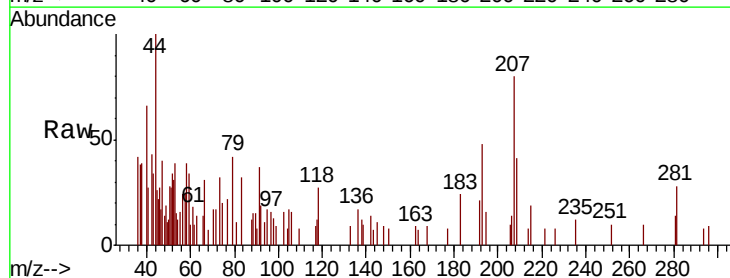
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB130661ZHE#17

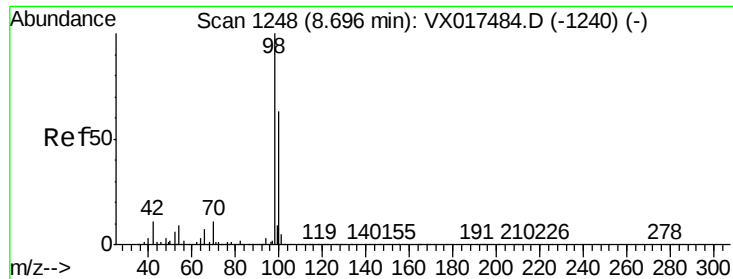
Tot Ion: 117 Resp: 47025  
Ion Ratio Lower Upper  
117 100  
119 5.4 75.4 113.0#  
121 0.0 24.3 36.5#



#49  
1,4-Dioxane  
Concen: 0.705 ug/l  
RT: 7.73 min Scan# 1090  
Delta R.T. 0.02 min  
Lab File: VX017721.D  
Acq: 31 Jul 2020 23:51

Tgt Ion: 88 Resp: 90  
Ion Ratio Lower Upper  
88 100  
43 573.3 27.8 41.6#  
58 614.4 58.3 87.5#

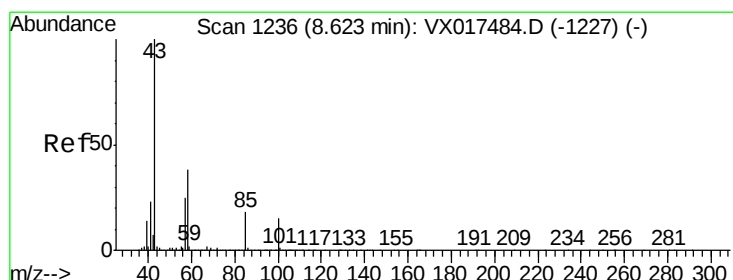
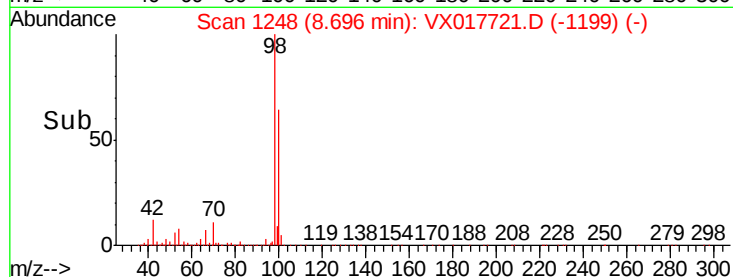
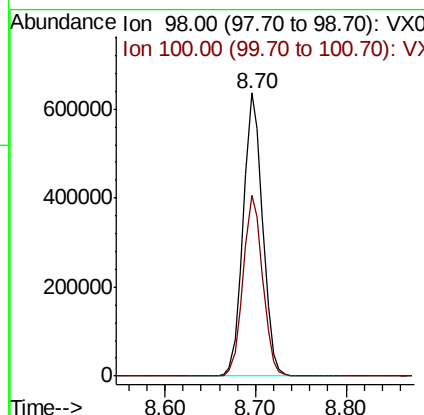
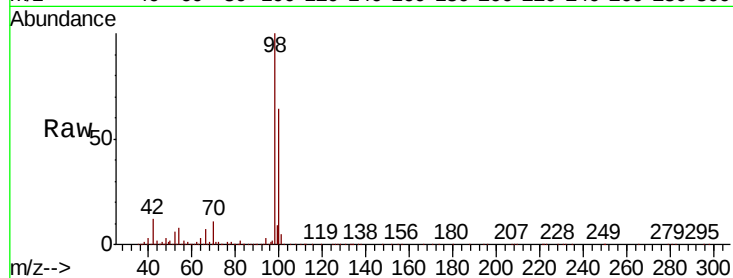




#50  
Toluene-d8  
Concen: 50.447 ug/l  
RT: 8.70 min Scan# 1248  
Delta R.T. -0.00 min  
Lab File: VX017721.D  
Acq: 31 Jul 2020 23:51

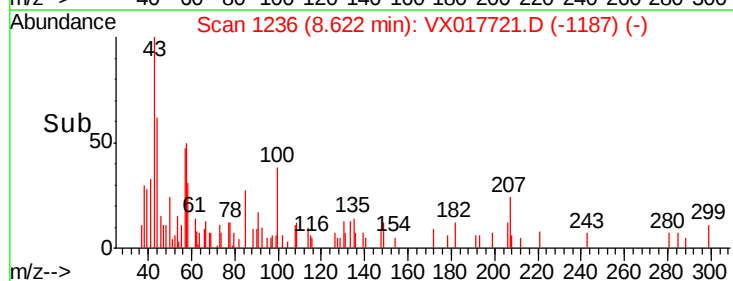
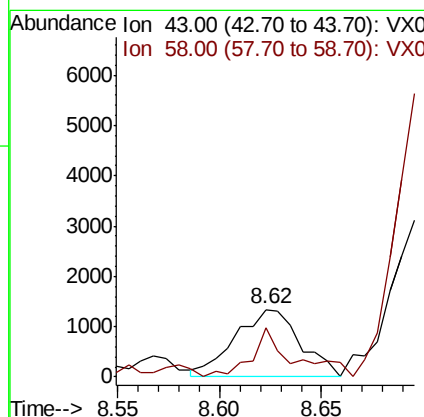
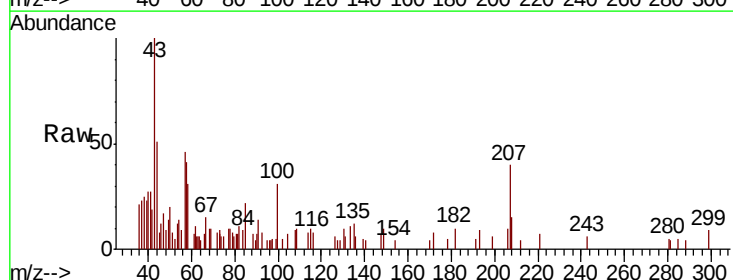
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB130661ZHE#17

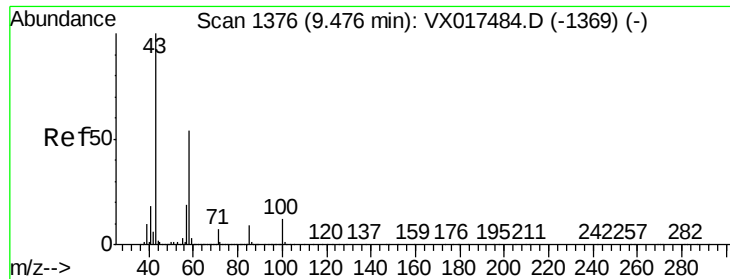
Tot Ion: 98 Resp: 944844  
Ion Ratio Lower Upper  
98 100  
100 64.2 52.3 78.5



#51  
4-Methyl-2-Pentanone  
Concen: 0.371 ug/l  
RT: 8.62 min Scan# 1236  
Delta R.T. -0.00 min  
Lab File: VX017721.D  
Acq: 31 Jul 2020 23:51

Tgt Ion: 43 Resp: 2977  
Ion Ratio Lower Upper  
43 100  
58 46.3 31.0 46.4

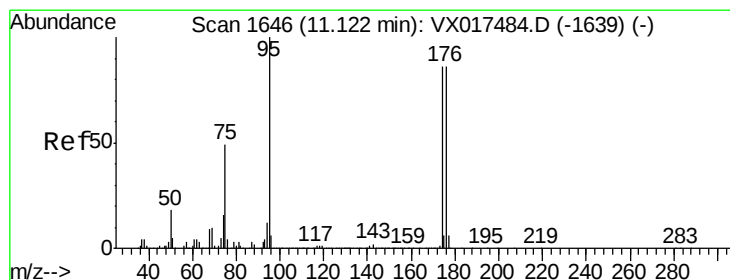
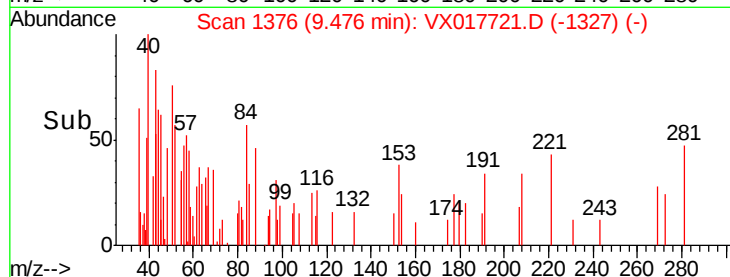
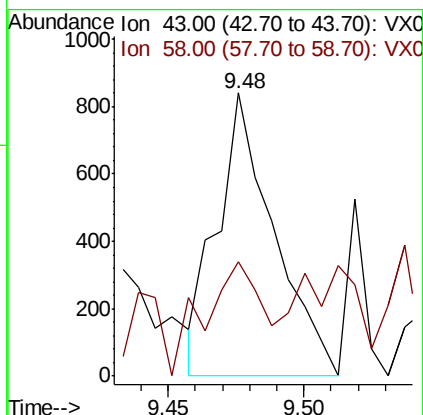
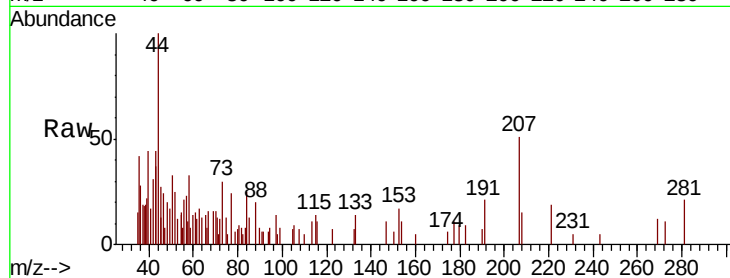




#59  
2-Hexanone  
Concen: 0.201 ug/l  
RT: 9.48 min Scan# 1376  
Delta R.T. -0.00 min  
Lab File: VX017721.D  
Acq: 31 Jul 2020 23:51

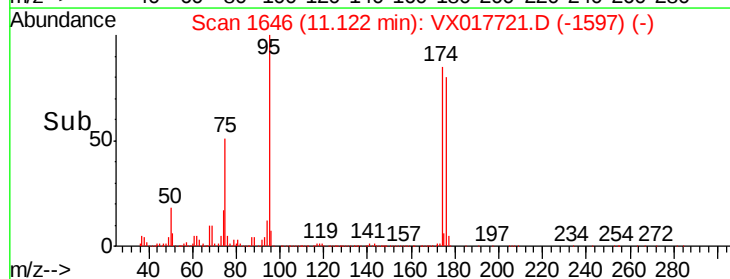
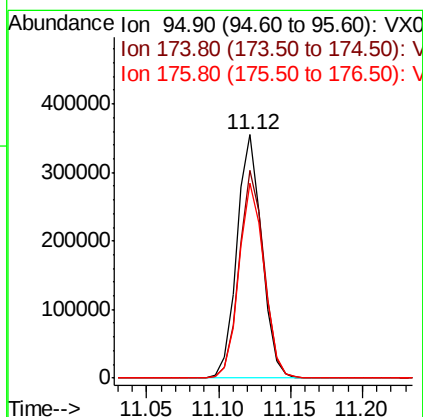
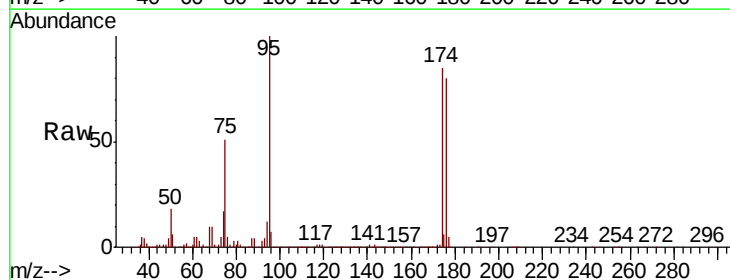
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB130661ZHE#17

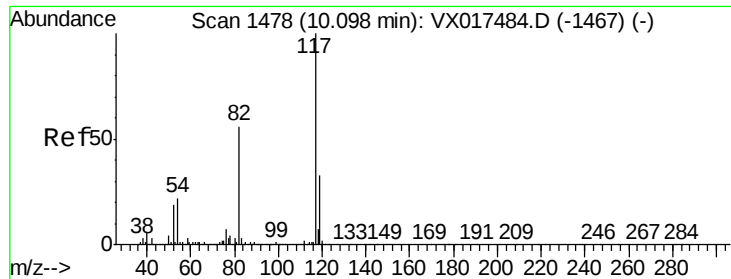
Tot Ion: 43 Resp: 1216  
Ion Ratio Lower Upper  
43 100  
58 41.1 26.6 79.8



#62  
4-Bromofluorobenzene  
Concen: 57.060 ug/l  
RT: 11.12 min Scan# 1646  
Delta R.T. -0.00 min  
Lab File: VX017721.D  
Acq: 31 Jul 2020 23:51

Tgt Ion: 95 Resp: 427702  
Ion Ratio Lower Upper  
95 100  
174 85.3 0.0 169.0  
176 81.3 0.0 161.0

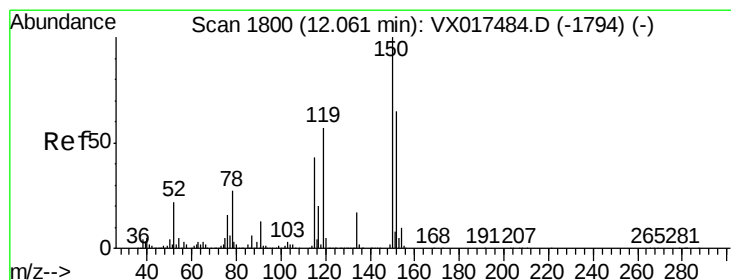
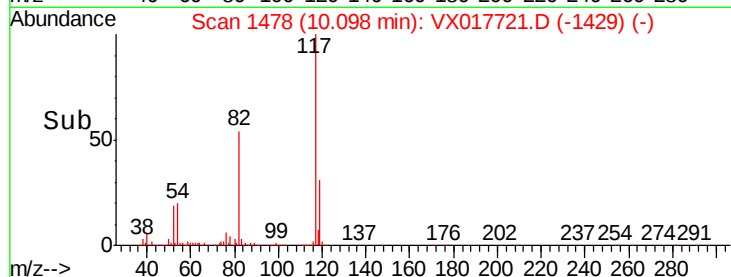
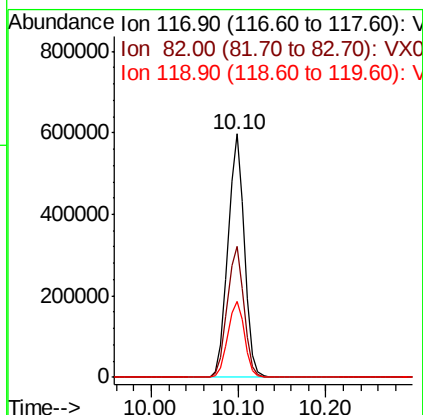
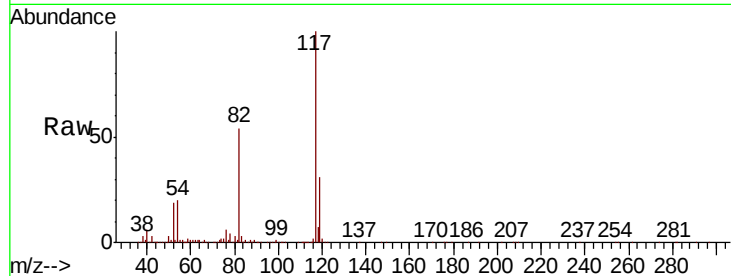




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.10 min Scan# 1478  
Delta R.T. -0.00 min  
Lab File: VX017721.D  
Acq: 31 Jul 2020 23:51

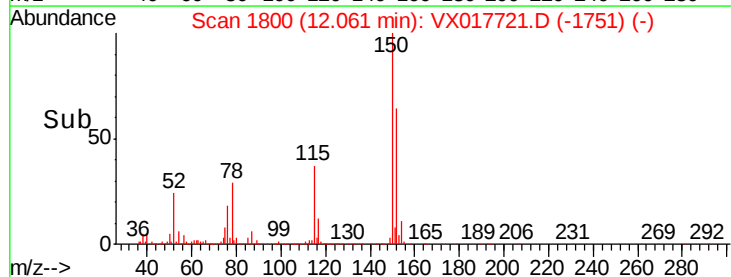
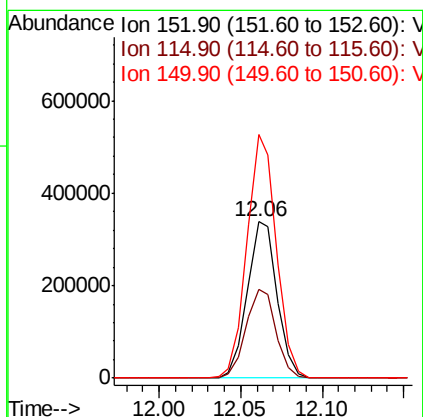
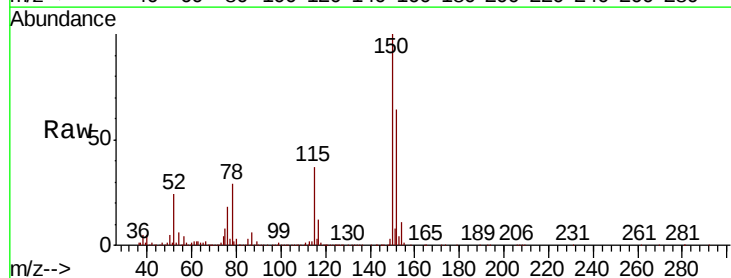
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB130661ZHE#17

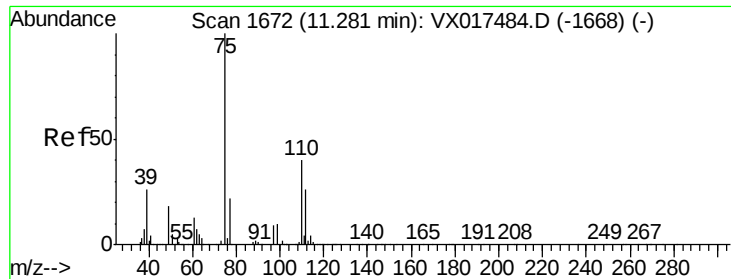
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 53.9  | 44.0  | 66.0  |
| 119     | 31.2  | 25.4  | 38.0  |



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.06 min Scan# 1800  
Delta R.T. -0.00 min  
Lab File: VX017721.D  
Acq: 31 Jul 2020 23:51

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 152     | 100   |       |        |
| 115     | 57.5  | 65.5  | 196.6# |
| 150     | 153.8 | 0.0   | 412.6  |





#76

1,2,3-Trichloropropane

Concen: 25.473 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.16 min

Lab File: VX017721.D

Acq: 31 Jul 2020 23:51

Instrument :

MSVOA\_X

ClientSampleId :

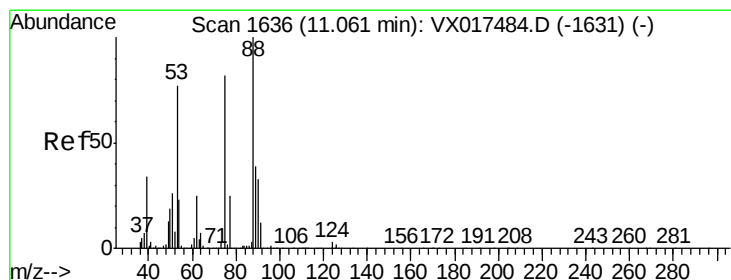
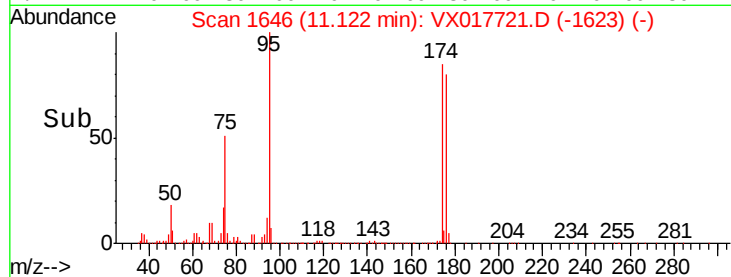
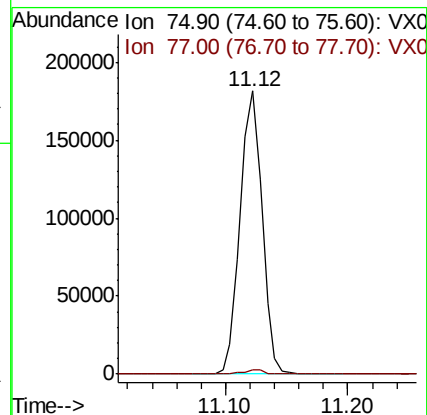
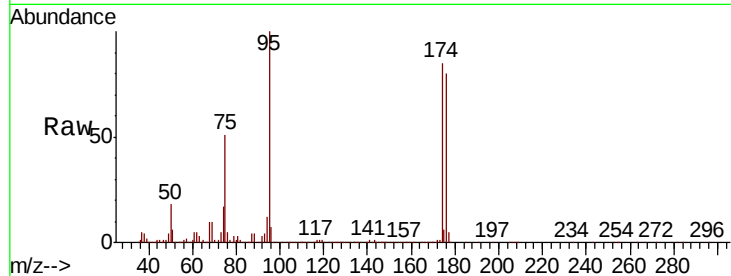
PB130661ZHE#17

Tot Ion: 75 Resp: 225395

Ion Ratio Lower Upper

75 100

77 1.6 21.8 65.3#



#81

trans-1,4-Dichloro-2-butene

Concen: 64.185 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. 0.06 min

Lab File: VX017721.D

Acq: 31 Jul 2020 23:51

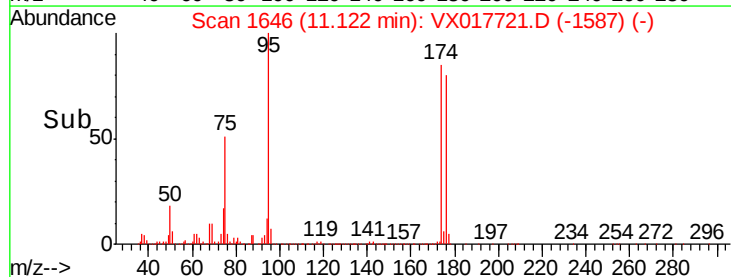
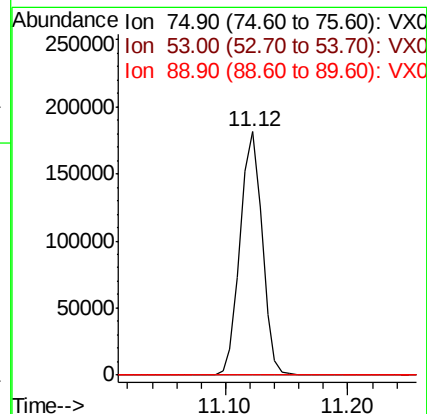
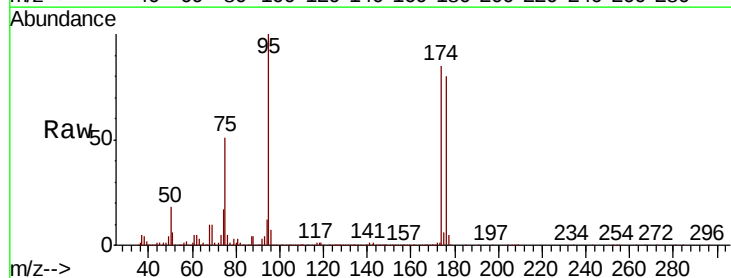
Tgt Ion: 75 Resp: 225395

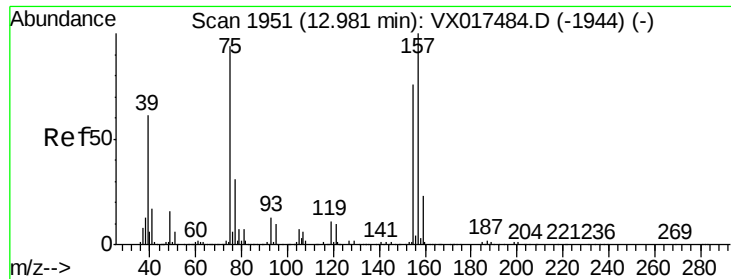
Ion Ratio Lower Upper

75 100

53 0.3 75.9 113.9#

89 0.0 37.8 56.6#





#92  
 1,2-Dibromo-3-Chloropropane  
 Concen: 2.671 ug/l  
 RT: 12.98 min Scan# 1951  
 Delta R.T. 0.00 min  
 Lab File: VX017721.D  
 Acq: 31 Jul 2020 23:51

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB130661ZHE#17

Tot Ion: 75 Resp: 258  
 Ion Ratio Lower Upper  
 75 100  
 155 37.6 42.3 126.8#  
 157 97.7 54.3 162.9

