

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX042020\  
 Data File : VX015778.D  
 Acq On : 20 Apr 2020 19:59  
 Operator : JC/SP  
 Sample : L2342-20  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Apr 21 08:00:56 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X032720W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Mar 27 09:35:51 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.64  | 168  | 1089175  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.84  | 114  | 1710791  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 1645478  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.06 | 152  | 916251   | 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   | 653773   | 42.56 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 85.12%  |          |
| 35) Dibromofluoromethane    | 5.47  | 113  | 528858   | 48.36 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.72%  |          |
| 50) Toluene-d8              | 8.70  | 98   | 2026145  | 50.32 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.64% |          |
| 62) 4-Bromofluorobenzene    | 11.12 | 95   | 860258   | 52.57 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.14% |          |

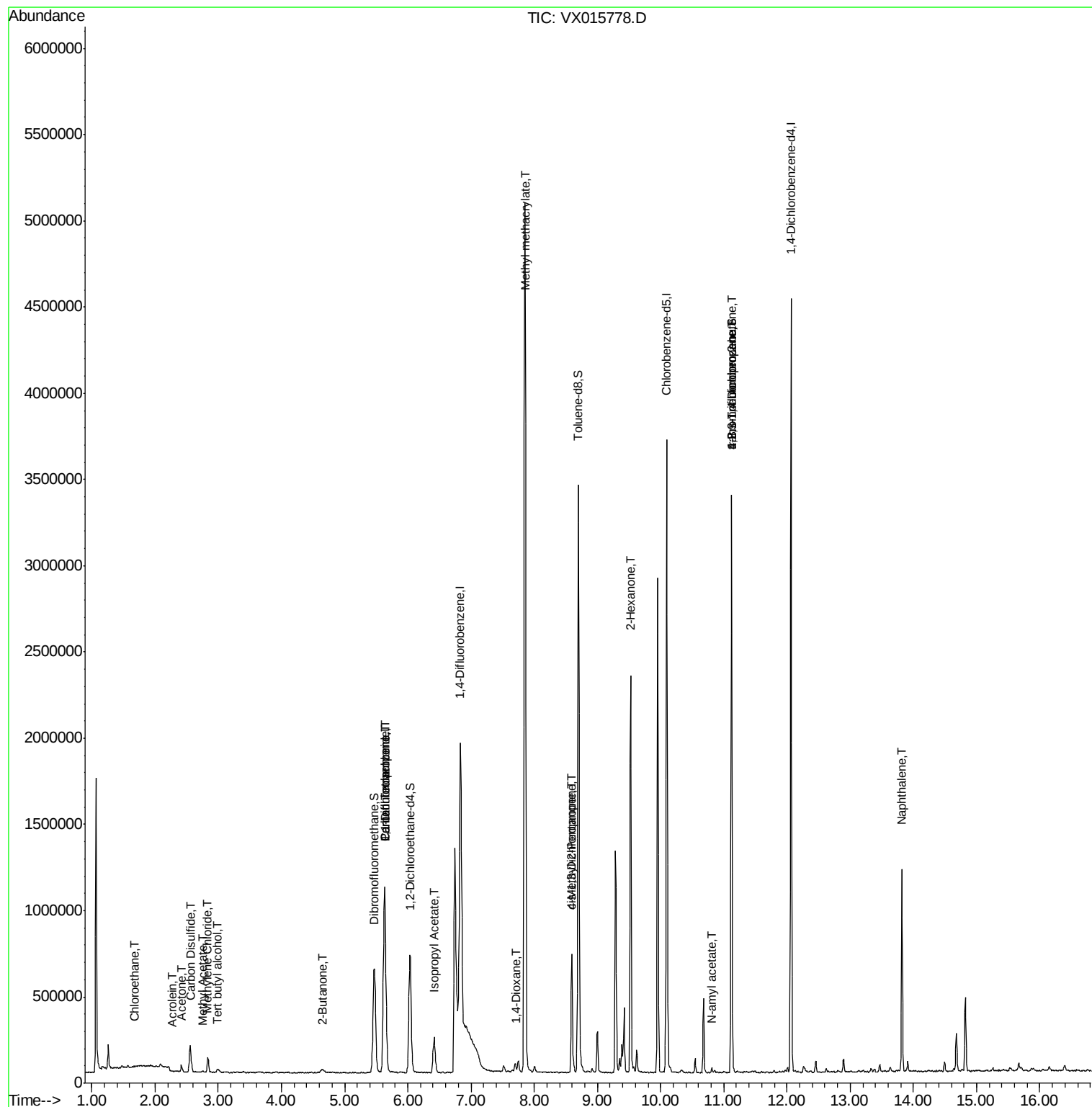
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.65  | 94   | 522      | Below Cal | #      | 70     |
| 6) Chloroethane                | 1.67  | 64   | 3282     | 0.472     | ug/l # | 43     |
| 11) Tert butyl alcohol         | 3.00  | 59   | 16169    | 4.397     | ug/l   | 99     |
| 13) Acrolein                   | 2.28  | 56   | 876      | 0.418     | ug/l # | 14     |
| 16) Acetone                    | 2.42  | 43   | 48055    | 7.281     | ug/l   | 98     |
| 17) Carbon Disulfide           | 2.55  | 76   | 187252   | 5.969     | ug/l   | 99     |
| 18) Methyl Acetate             | 2.75  | 43   | 11379    | 0.676     | ug/l # | 69     |
| 20) Methylene Chloride         | 2.83  | 84   | 38323    | 3.109     | ug/l   | 89     |
| 25) 2-Butanone                 | 4.65  | 43   | 9091     | 0.857     | ug/l # | 77     |
| 36) 1,1-Dichloropropene        | 5.63  | 75   | 76968    | 4.883     | ug/l # | 53     |
| 38) Carbon Tetrachloride       | 5.63  | 117  | 98124    | 5.747     | ug/l # | 15     |
| 43) Isopropyl Acetate          | 6.42  | 43   | 297452   | 8.585     | ug/l   | 98     |
| 48) Methyl methacrylate        | 7.85  | 41   | 439376   | 25.388    | ug/l # | 49     |
| 49) 1,4-Dioxane                | 7.72  | 88   | 543      | 1.682     | ug/l # | 20     |
| 51) 4-Methyl-2-Pentanone       | 8.59  | 43   | 267670   | 13.632    | ug/l # | 48     |
| 54) cis-1,3-Dichloropropene    | 8.59  | 75   | 106202   | 5.035     | ug/l # | 51     |
| 59) 2-Hexanone                 | 9.53  | 43   | 284604   | 19.198    | ug/l # | 53     |
| 74) N-amyl acetate             | 10.81 | 43   | 15854    | 0.475     | ug/l # | 62     |
| 76) 1,2,3-Trichloropropane     | 11.12 | 75   | 428715   | 22.753    | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 11.12 | 75   | 428715   | 54.595    | ug/l # | 10     |
| 95) Naphthalene                | 13.82 | 128  | 697754   | 10.308    | ug/l   | 100    |

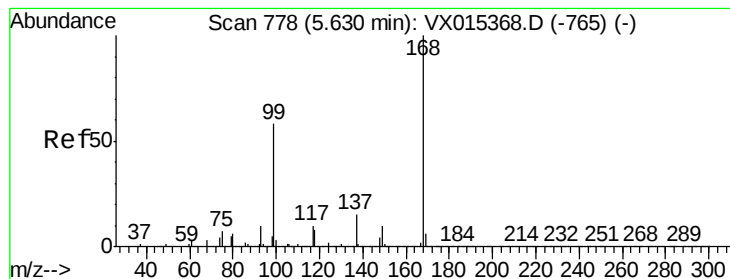
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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ALS Vial : 23 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :

Quant Time: Apr 21 08:00:56 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X032720W.M  
Quant Title : SW846 8260  
QLast Update : Fri Mar 27 09:35:51 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.64 min Scan# 779

Delta R.T. 0.01 min

Lab File: VX015778.D

Acq: 20 Apr 2020 19:59

Instrument :

MSVOA\_X

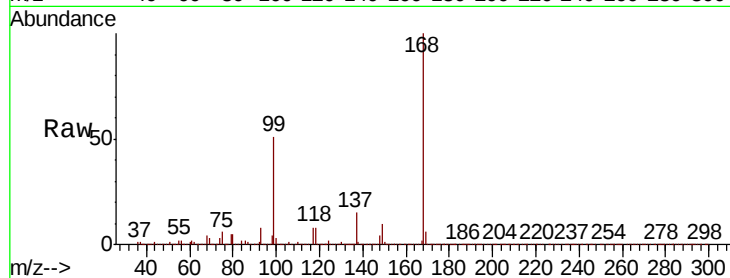
ClientSampleId :

Tot Ion:168 Resp: 1089175

Ion Ratio Lower Upper

168 100

99 51.0 46.4 69.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.64

400000

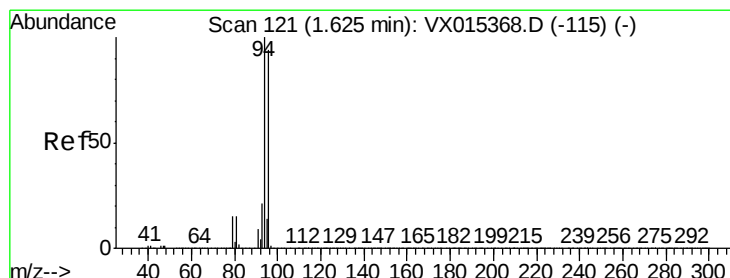
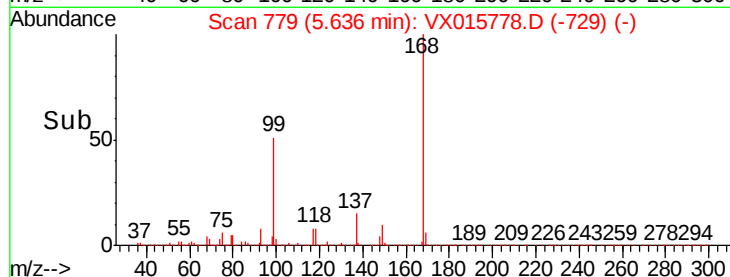
300000

200000

100000

0

Time-->



#5

Bromomethane

Concen: Below Cal

RT: 1.65 min Scan# 125

Delta R.T. 0.02 min

Lab File: VX015778.D

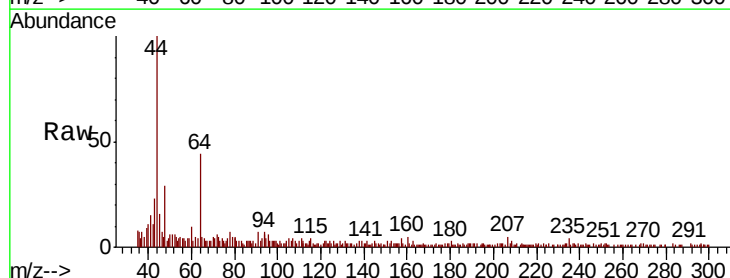
Acq: 20 Apr 2020 19:59

Tgt Ion: 94 Resp: 522

Ion Ratio Lower Upper

94 100

96 64.5 74.8 112.2#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

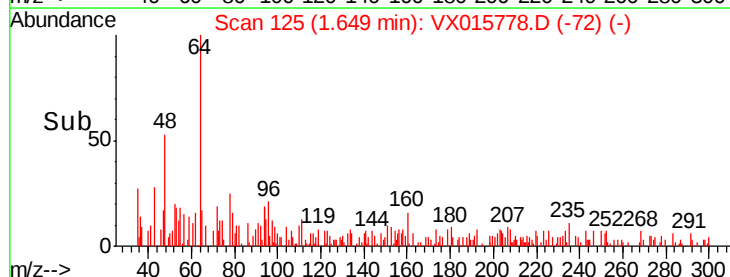
1500

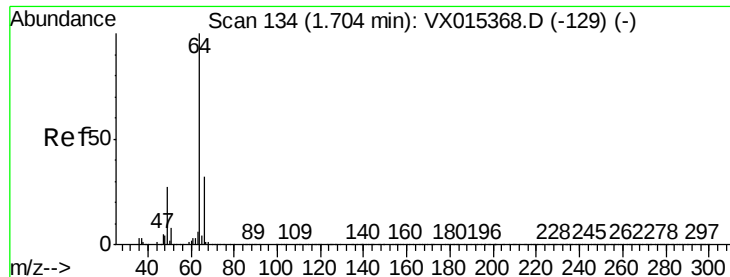
1000

500

0

Time-->





#6

Chloroethane

Concen: 0.472 ug/l

RT: 1.67 min Scan# 128

Delta R.T. -0.04 min

Lab File: VX015778.D

Acq: 20 Apr 2020 19:59

Instrument :

MSVOA\_X

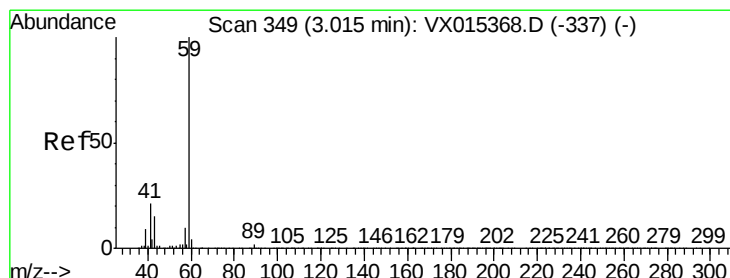
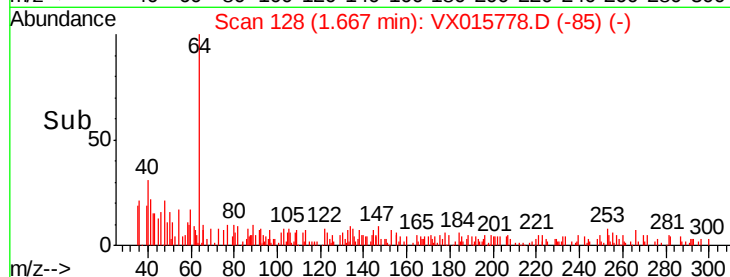
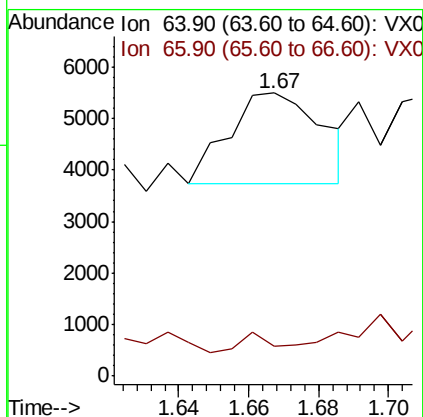
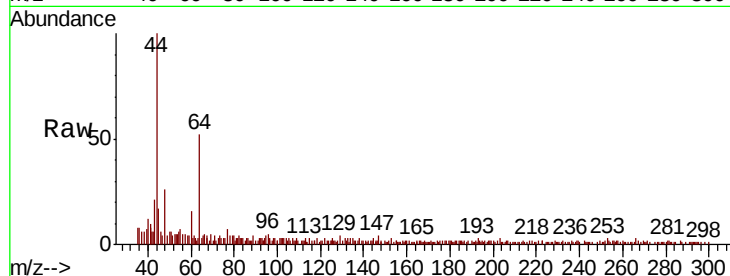
ClientSampleId :

Tot Ion: 64 Resp: 3282

Ion Ratio Lower Upper

64 100

66 0.0 25.4 38.2#



#11

Tert butyl alcohol

Concen: 4.397 ug/l

RT: 3.00 min Scan# 346

Delta R.T. -0.02 min

Lab File: VX015778.D

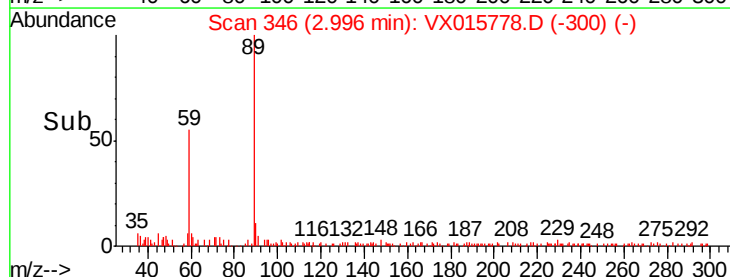
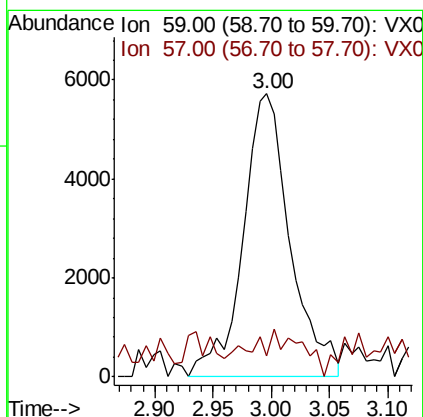
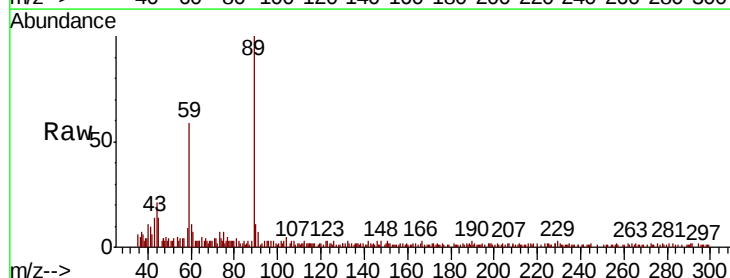
Acq: 20 Apr 2020 19:59

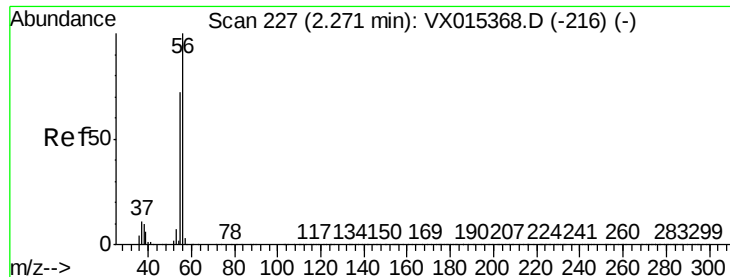
Tgt Ion: 59 Resp: 16169

Ion Ratio Lower Upper

59 100

57 10.6 8.1 12.1

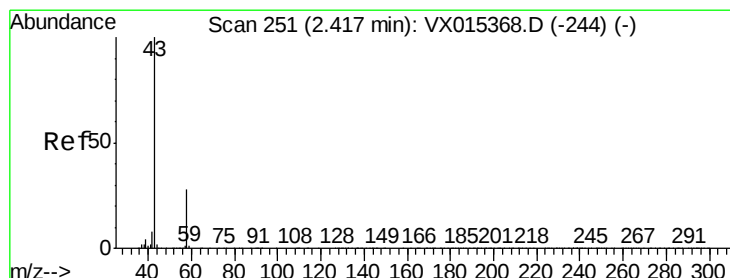
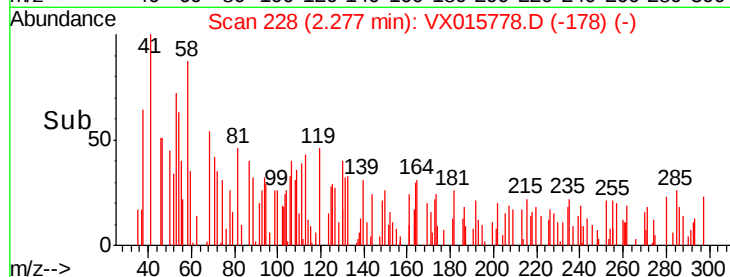
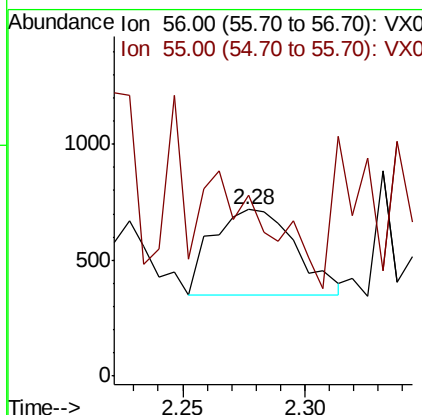
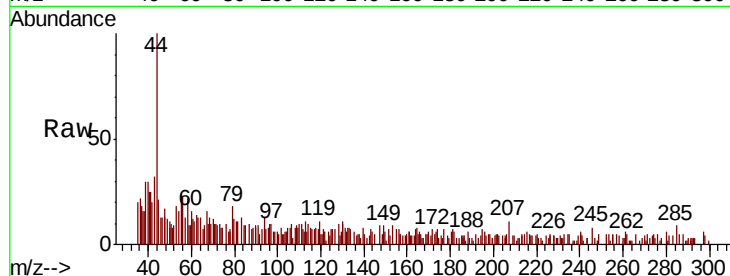




#13  
Acrolein  
Concen: 0.418 ug/l  
RT: 2.28 min Scan# 228  
Delta R.T. 0.01 min  
Lab File: VX015778.D  
Acq: 20 Apr 2020 19:59

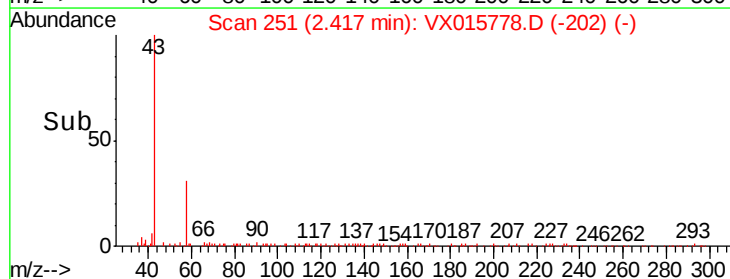
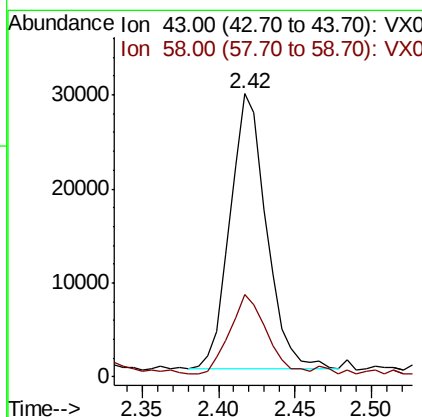
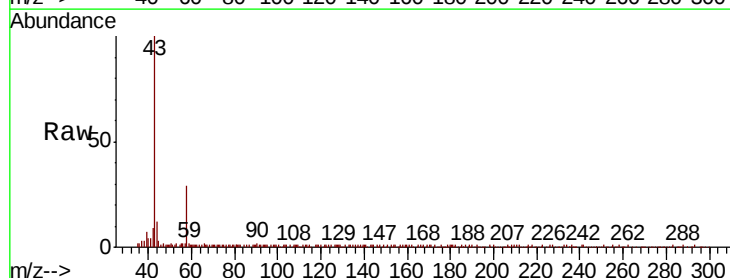
Instrument :  
MSVOA\_X  
ClientSampled :

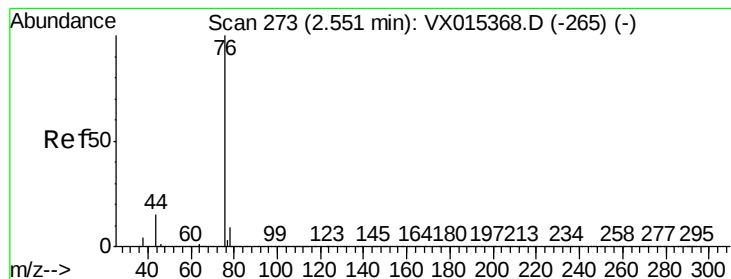
Tot Ion: 56 Resp: 876  
Ion Ratio Lower Upper  
56 100  
55 0.0 57.0 85.4#



#16  
Acetone  
Concen: 7.281 ug/l  
RT: 2.42 min Scan# 251  
Delta R.T. -0.00 min  
Lab File: VX015778.D  
Acq: 20 Apr 2020 19:59

Tgt Ion: 43 Resp: 48055  
Ion Ratio Lower Upper  
43 100  
58 28.9 22.1 33.1





#17

Carbon Disulfide

Concen: 5.969 ug/l

RT: 2.55 min Scan# 273

Delta R.T. -0.00 min

Lab File: VX015778.D

Acq: 20 Apr 2020 19:59

Instrument :

MSVOA\_X

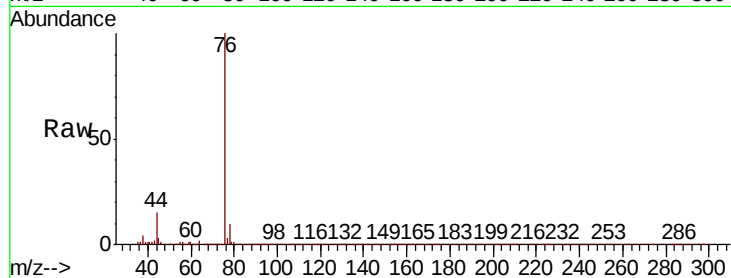
ClientSampleId :

Tot Ion: 76 Resp: 187252

Ion Ratio Lower Upper

76 100

78 9.4 7.1 10.7



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

2.55

120000

100000

80000

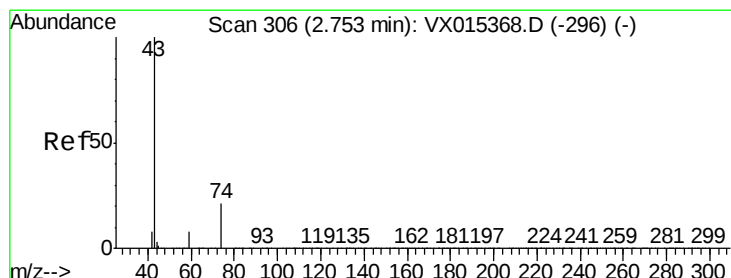
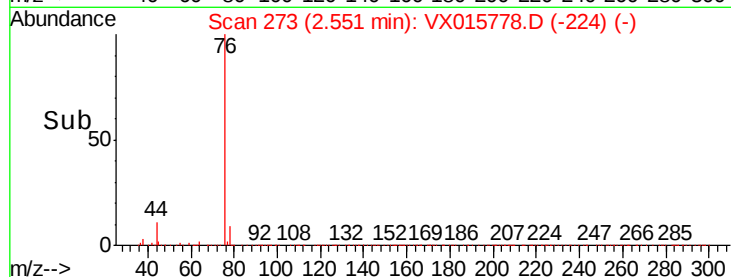
60000

40000

20000

0

Time-->



#18

Methyl Acetate

Concen: 0.676 ug/l

RT: 2.75 min Scan# 306

Delta R.T. -0.00 min

Lab File: VX015778.D

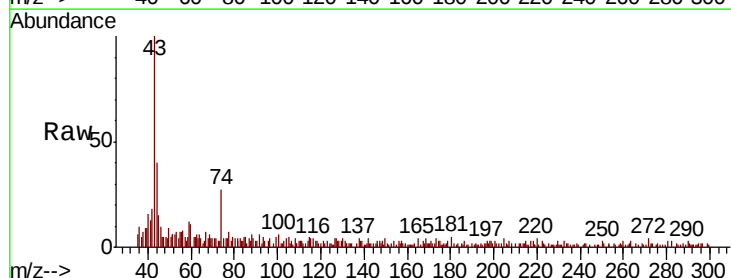
Acq: 20 Apr 2020 19:59

Tgt Ion: 43 Resp: 11379

Ion Ratio Lower Upper

43 100

74 34.9 16.5 24.7#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 74.00 (73.70 to 74.70): VX0

2.75

8000

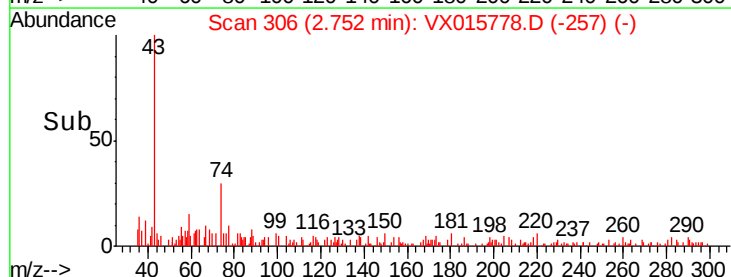
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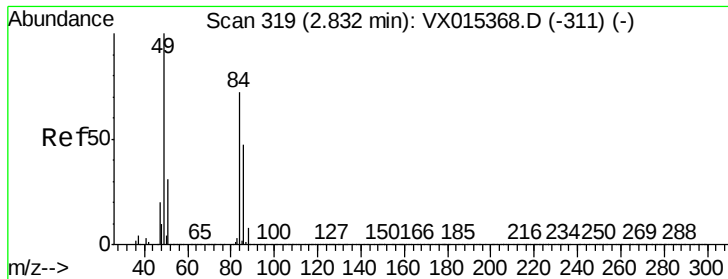
4000

2000

0

Time-->

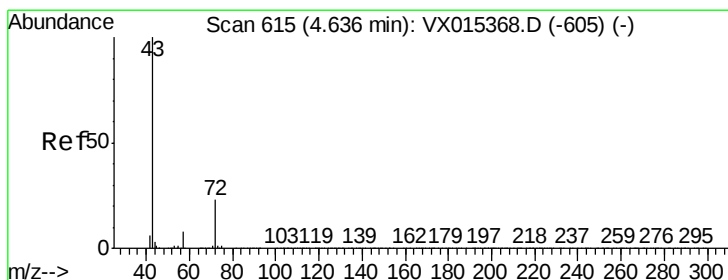
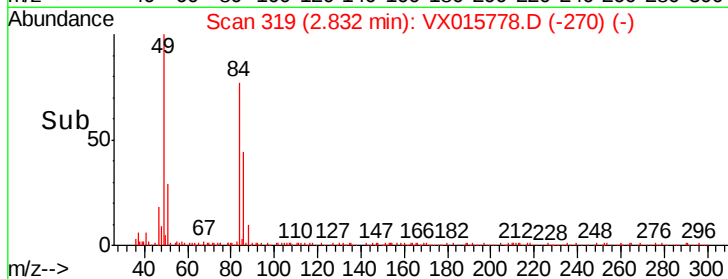
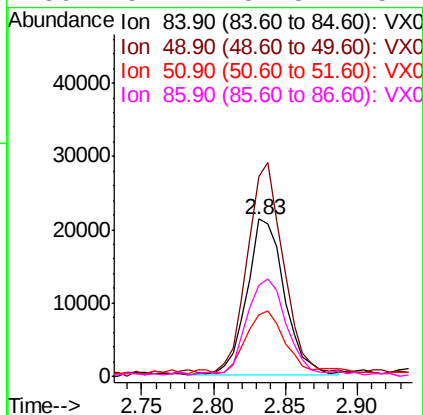
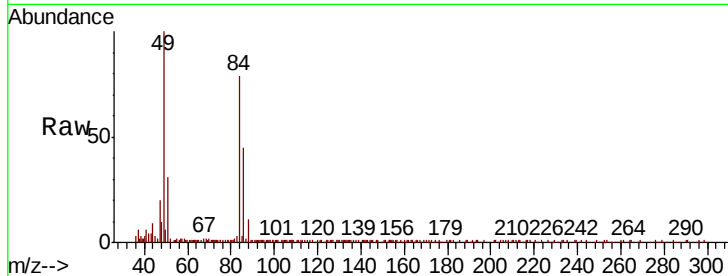




#20  
Methvlene Chloride  
Concen: 3.109 ug/l  
RT: 2.83 min Scan# 319  
Delta R.T. -0.00 min  
Lab File: VX015778.D  
Acq: 20 Apr 2020 19:59

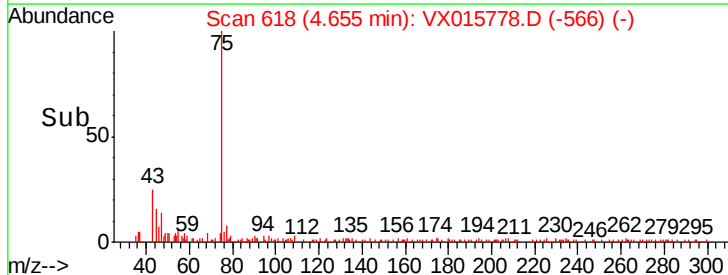
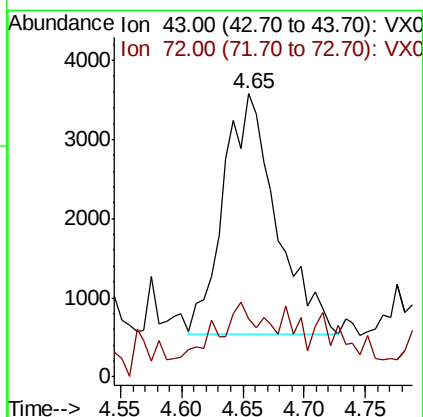
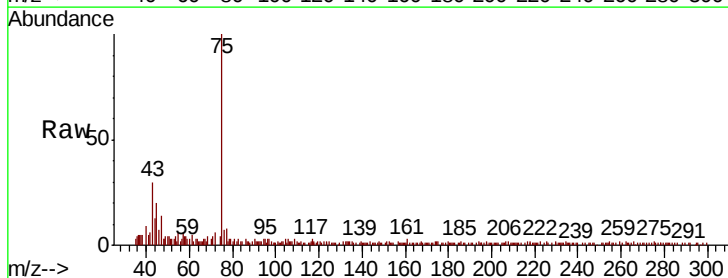
Instrument :  
MSVOA\_X  
ClientSampleId :

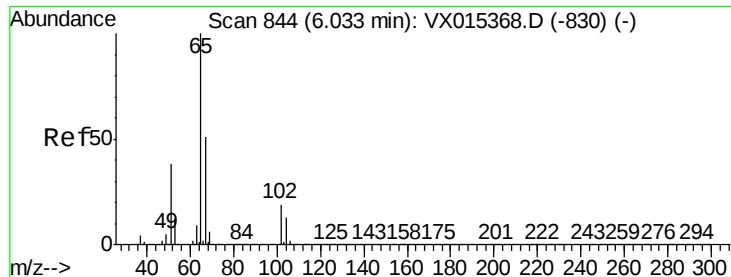
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 38323 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 124.4 | 111.3 | 166.9 |
| 51       | 37.5  | 34.0  | 51.0  |
| 86       | 57.4  | 52.5  | 78.7  |



#25  
2-Butanone  
Concen: 0.857 ug/l  
RT: 4.65 min Scan# 618  
Delta R.T. 0.02 min  
Lab File: VX015778.D  
Acq: 20 Apr 2020 19:59

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 9091  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 12.6  | 19.0  | 28.4# |





#33

1,2-Dichloroethane-d4

Concen: 42.559 ug/l

RT: 6.04 min Scan# 845

Delta R.T. 0.01 min

Lab File: VX015778.D

Acq: 20 Apr 2020 19:59

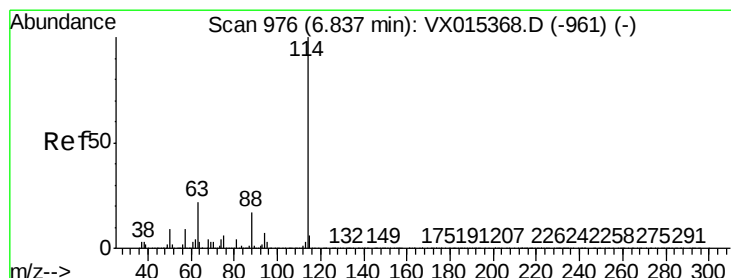
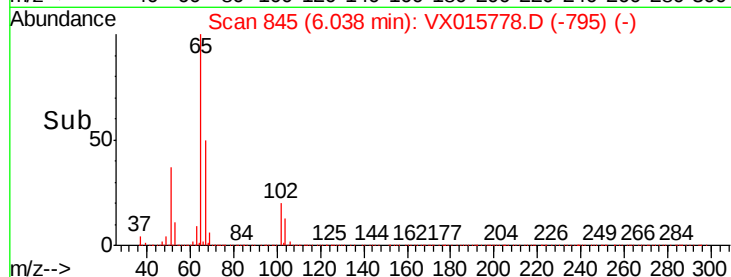
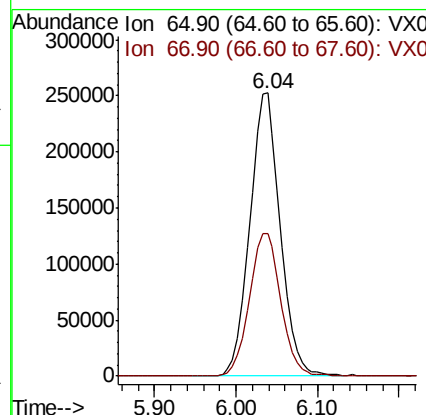
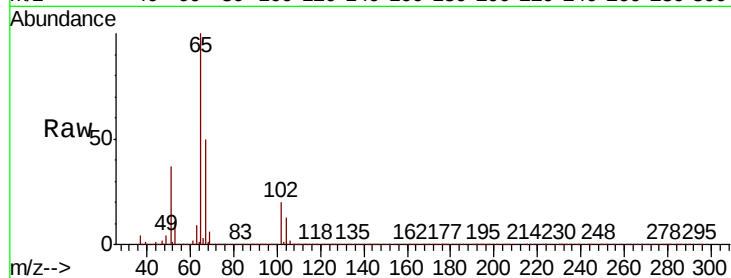
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion: 65 Resp: 653773

Ion Ratio Lower Upper

65 100

67 51.8 0.0 102.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.84 min Scan# 976

Delta R.T. -0.00 min

Lab File: VX015778.D

Acq: 20 Apr 2020 19:59

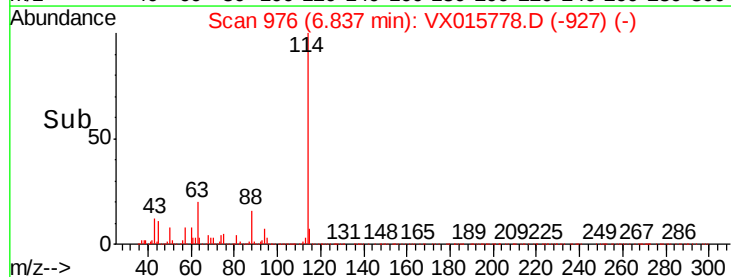
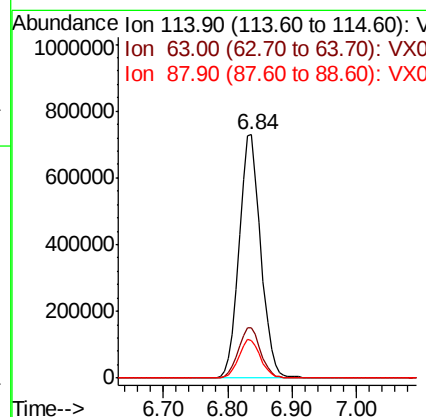
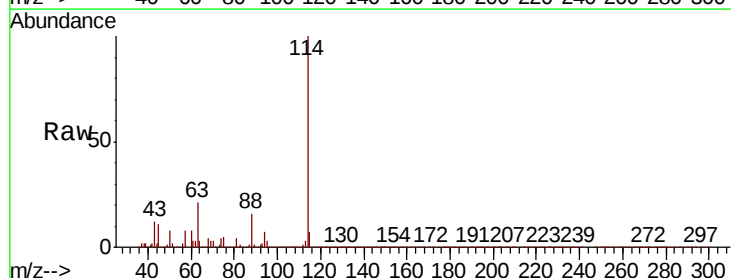
Tgt Ion: 114 Resp: 1710791

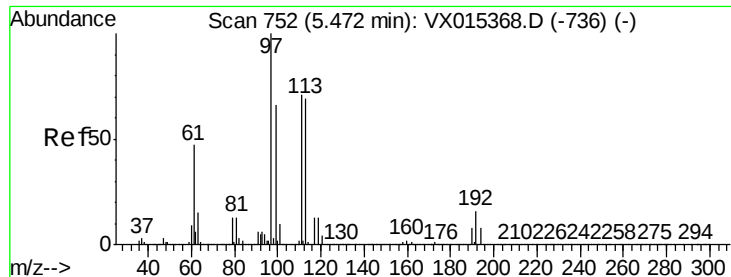
Ion Ratio Lower Upper

114 100

63 20.5 0.0 44.2

88 15.6 0.0 33.8

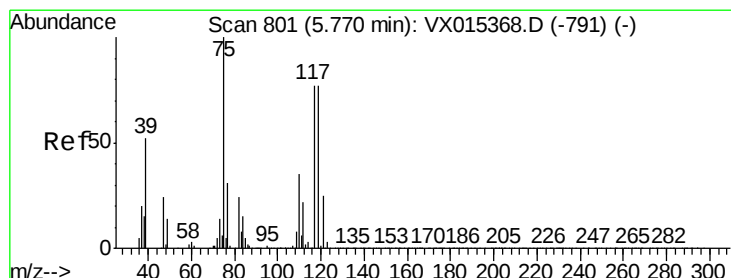
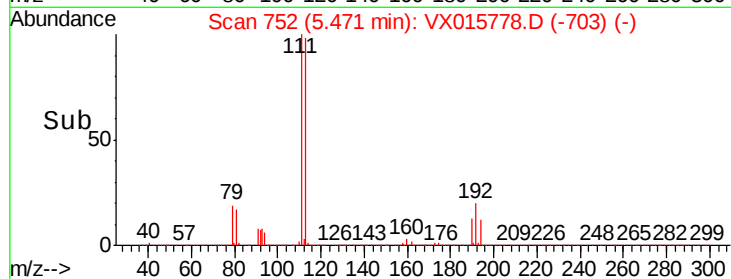
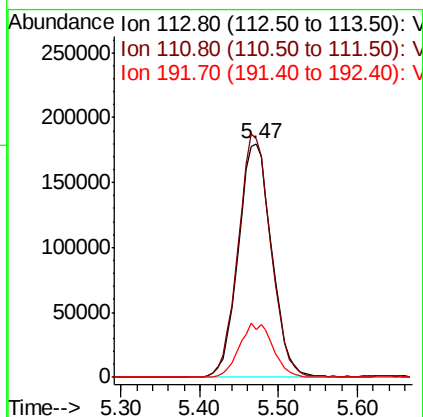
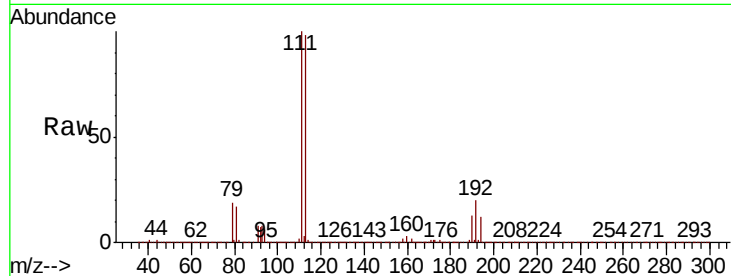




#35  
 Dibromofluoromethane  
 Concen: 48.360 ug/l  
 RT: 5.47 min Scan# 752  
 Delta R.T. -0.00 min  
 Lab File: VX015778.D  
 Acq: 20 Apr 2020 19:59

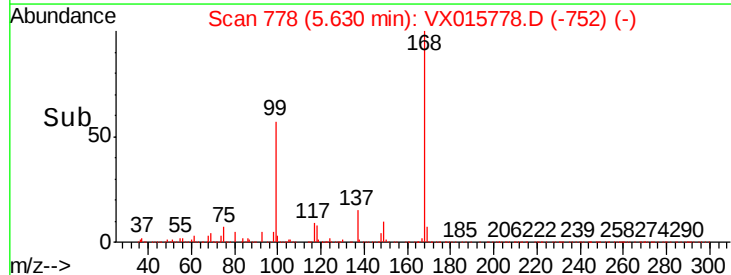
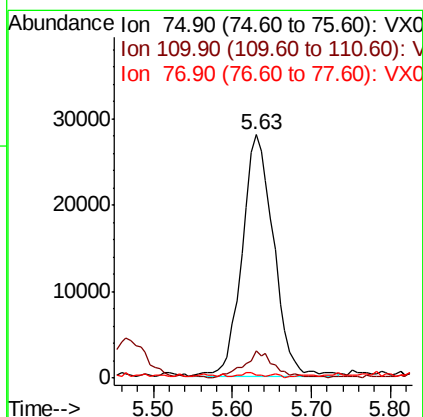
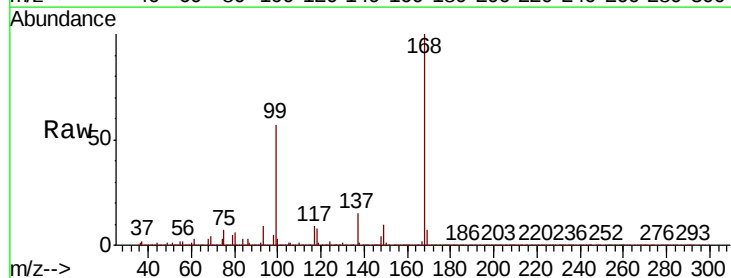
Instrument :  
 MSVOA\_X  
 ClientSampleId :

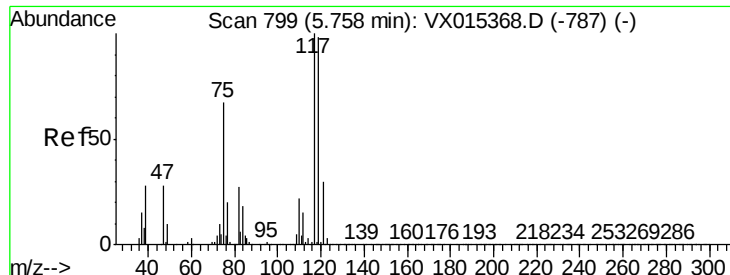
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.1 | 81.5  | 122.3 |
| 192     | 23.3  | 17.8  | 26.6  |



#36  
 1,1-Dichloropropene  
 Concen: 4.883 ug/l  
 RT: 5.63 min Scan# 778  
 Delta R.T. -0.14 min  
 Lab File: VX015778.D  
 Acq: 20 Apr 2020 19:59

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 10.9  | 17.1  | 51.3# |
| 77      | 0.8   | 24.6  | 36.8# |





#38

Carbon Tetrachloride

Concen: 5.747 ug/l

RT: 5.63 min Scan# 778

Delta R.T. -0.13 min

Lab File: VX015778.D

Acq: 20 Apr 2020 19:59

Instrument :

MSVOA\_X

ClientSampleId :

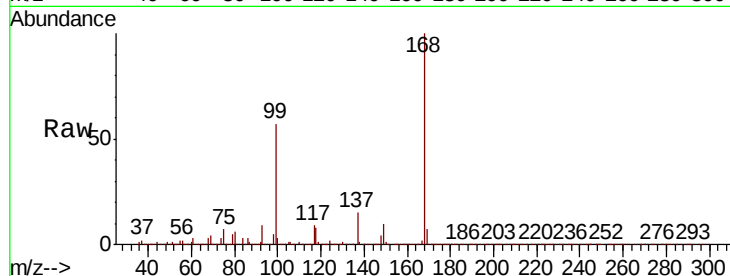
Tot Ion:117 Resp: 98124

Ion Ratio Lower Upper

117 100

119 5.0 78.0 117.0#

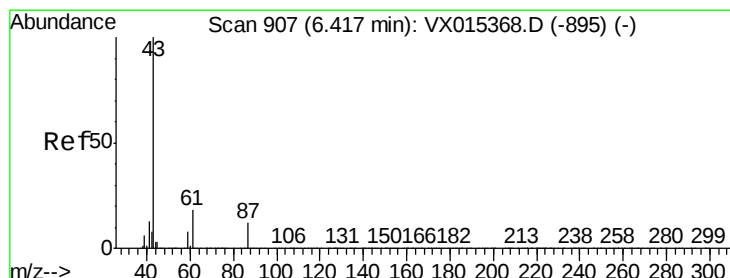
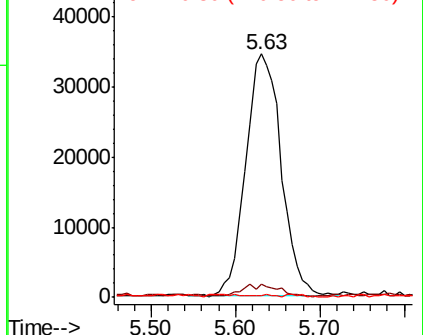
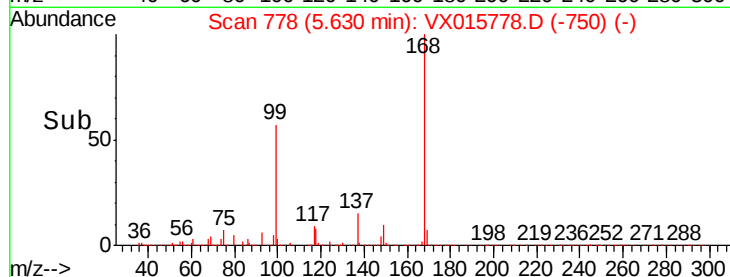
121 0.5 23.8 35.8#



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



#43

Isopropyl Acetate

Concen: 8.585 ug/l

RT: 6.42 min Scan# 907

Delta R.T. -0.00 min

Lab File: VX015778.D

Acq: 20 Apr 2020 19:59

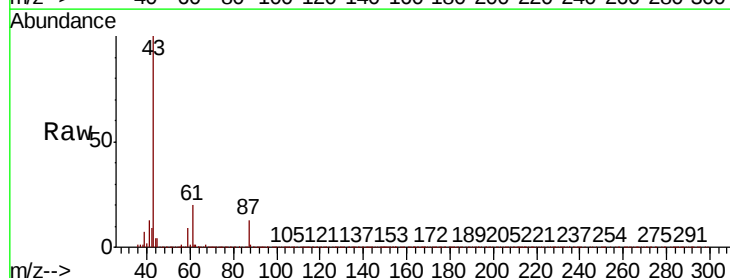
Tgt Ion: 43 Resp: 297452

Ion Ratio Lower Upper

43 100

61 19.5 14.8 22.2

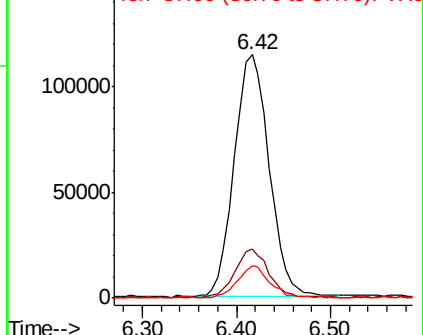
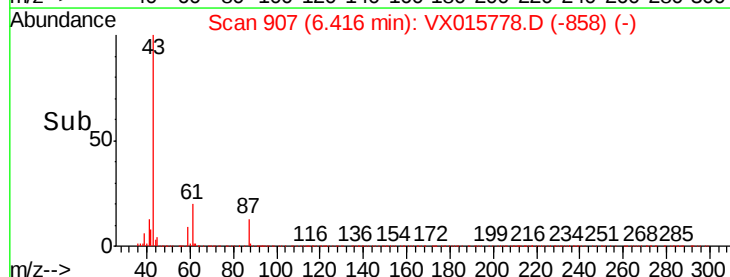
87 11.8 9.4 14.0

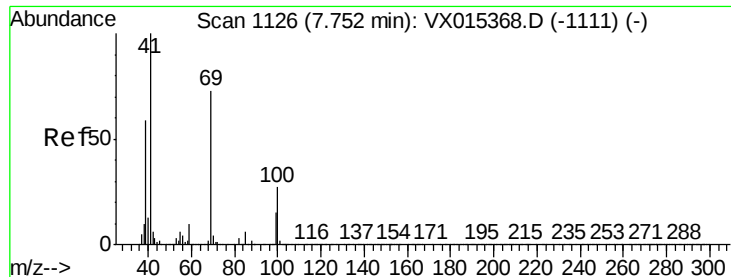


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0

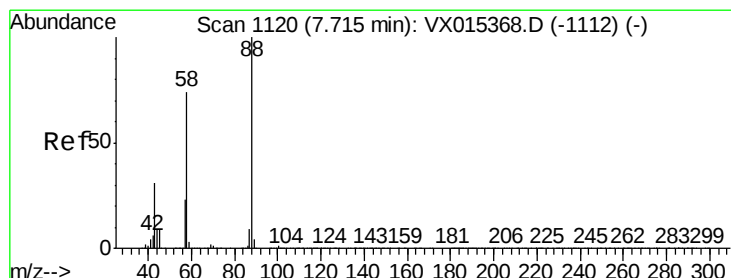
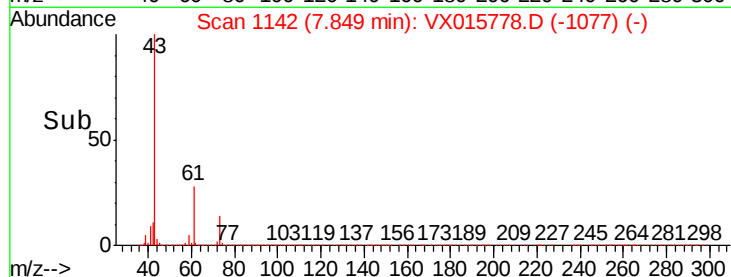
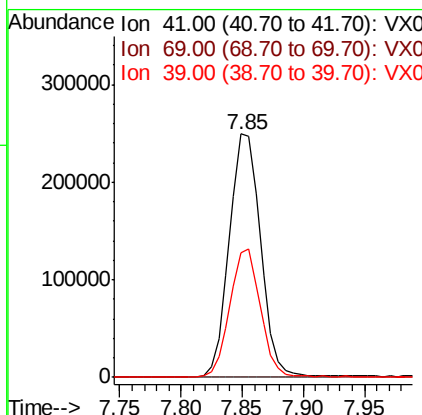
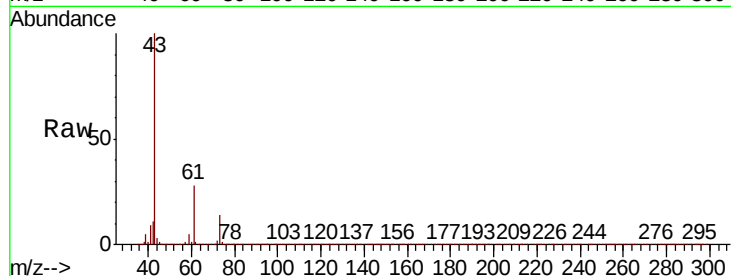




#48  
Methvl methacrylate  
Concen: 25.388 ug/l  
RT: 7.85 min Scan# 1142  
Delta R.T. 0.10 min  
Lab File: VX015778.D  
Acq: 20 Apr 2020 19:59

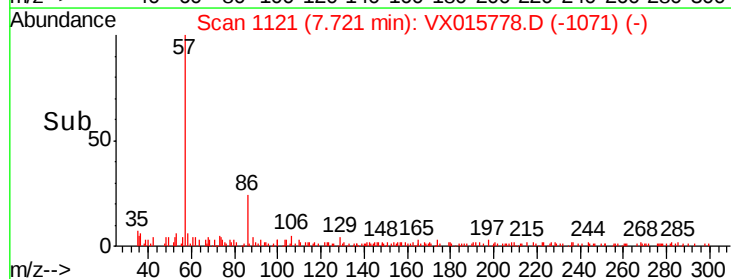
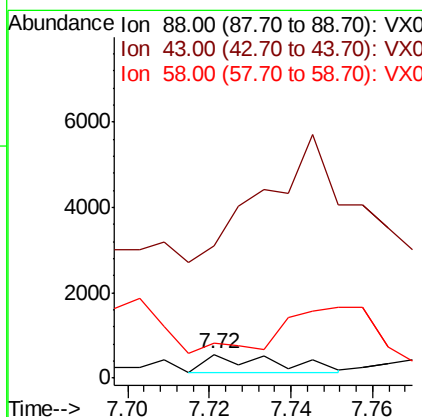
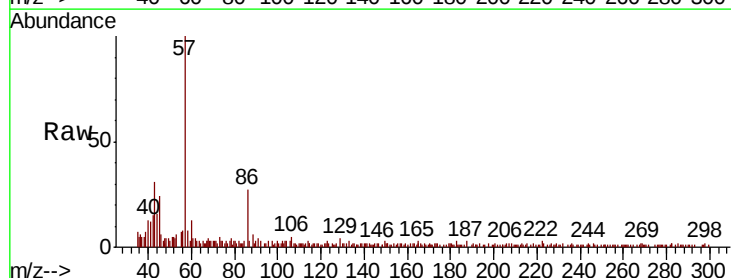
Instrument :  
MSVOA\_X  
ClientSampleId :

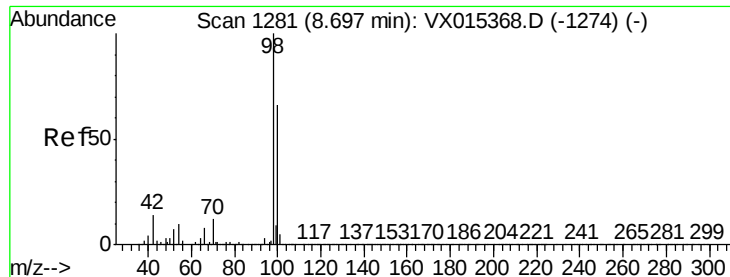
Tot Ion: 41 Resp: 439376  
Ion Ratio Lower Upper  
41 100  
69 0.3 56.7 85.1#  
39 52.1 46.5 69.7



#49  
1,4-Dioxane  
Concen: 1.682 ug/l  
RT: 7.72 min Scan# 1121  
Delta R.T. 0.01 min  
Lab File: VX015778.D  
Acq: 20 Apr 2020 19:59

Tgt Ion: 88 Resp: 543  
Ion Ratio Lower Upper  
88 100  
43 0.0 30.1 45.1#  
58 0.0 60.6 90.8#





#50

Toluene-d8

Concen: 50.323 ug/l

RT: 8.70 min Scan# 1281

Delta R.T. -0.00 min

Lab File: VX015778.D

Acq: 20 Apr 2020 19:59

Instrument :

MSVOA\_X

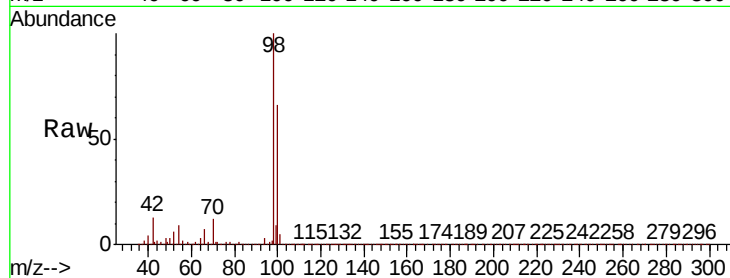
ClientSampled :

Tot Ion: 98 Resp: 2026145

Ion Ratio Lower Upper

98 100

100 66.5 53.5 80.3



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX

8.70

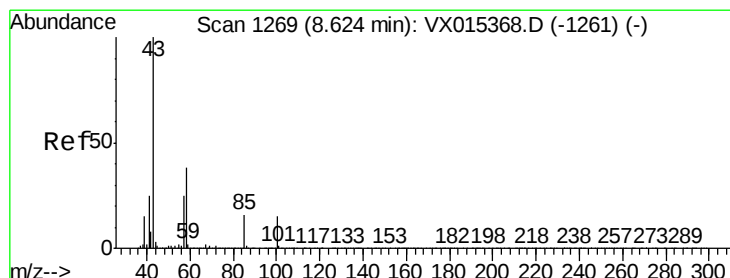
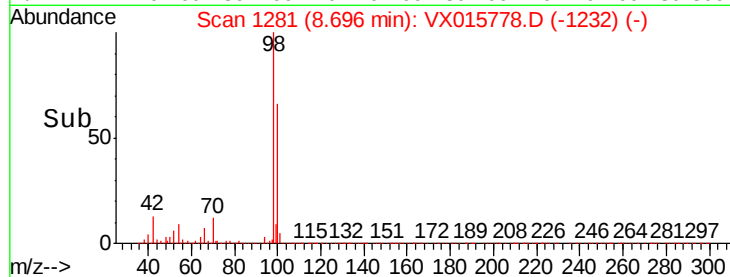
1500000

1000000

500000

0

Time-->



#51

4-Methyl-2-Pentanone

Concen: 13.632 ug/l

RT: 8.59 min Scan# 1264

Delta R.T. -0.03 min

Lab File: VX015778.D

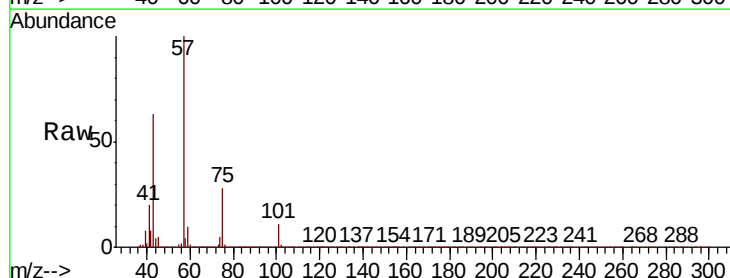
Acq: 20 Apr 2020 19:59

Tgt Ion: 43 Resp: 267670

Ion Ratio Lower Upper

43 100

58 6.2 29.7 44.5#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

8.59

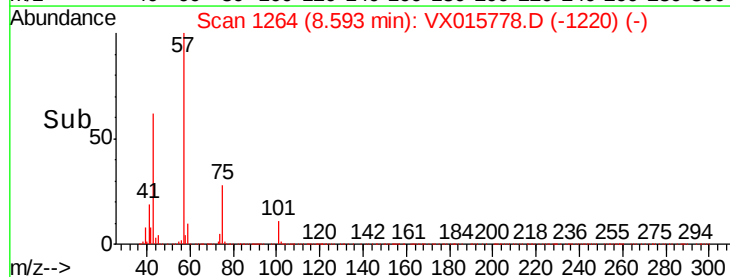
150000

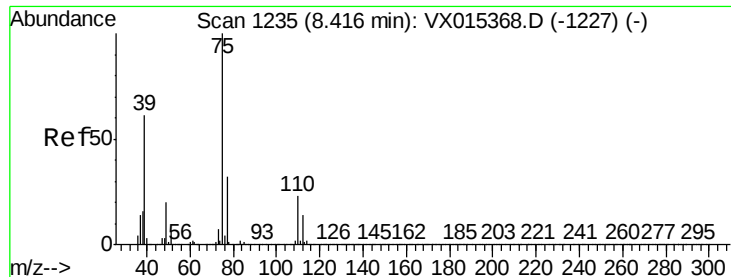
100000

50000

0

Time-->



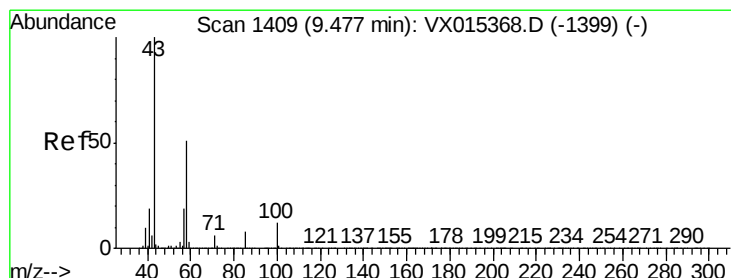
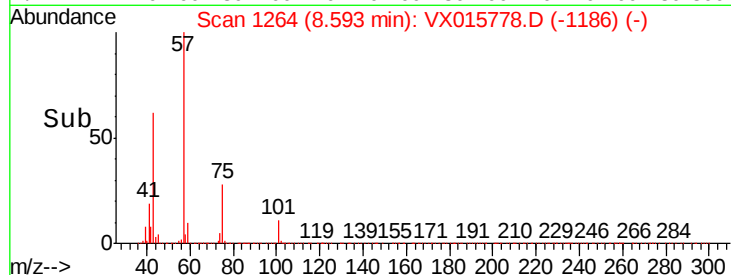
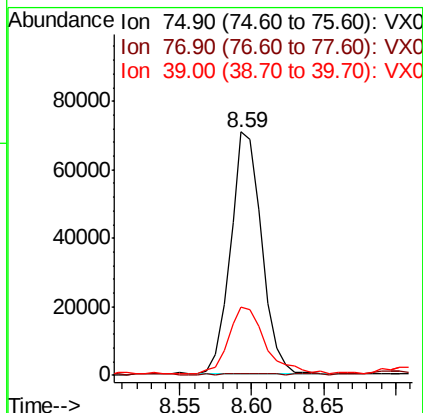
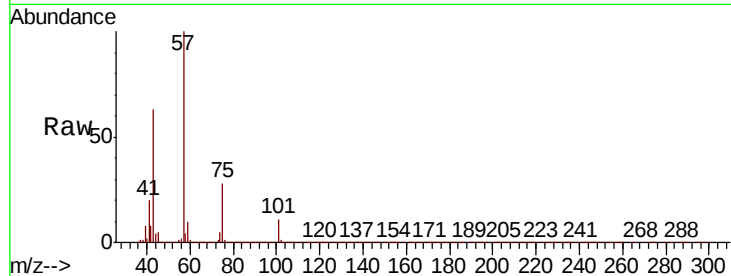


#54

cis-1,3-Dichloropropene  
 Concen: 5.035 ug/l  
 RT: 8.59 min Scan# 1264  
 Delta R.T. 0.18 min  
 Lab File: VX015778.D  
 Acq: 20 Apr 2020 19:59

Instrument :  
 MSVOA\_X  
 ClientSampleId :

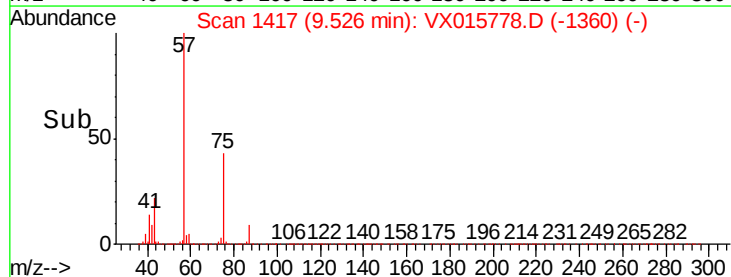
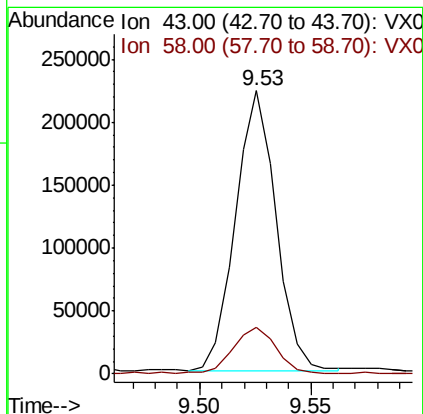
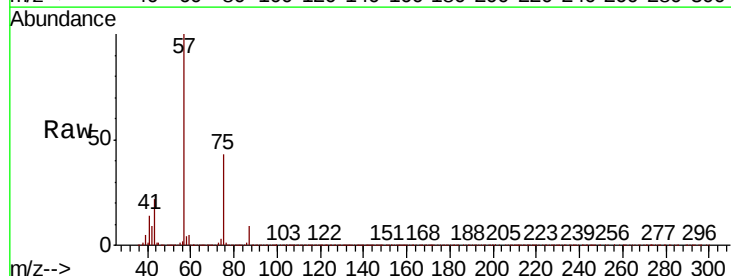
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 77      | 0.2   | 25.8  | 38.6# |
| 39      | 27.1  | 49.0  | 73.4# |

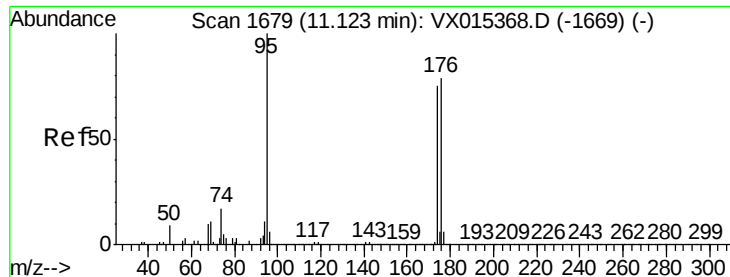


#59

2-Hexanone  
 Concen: 19.198 ug/l  
 RT: 9.53 min Scan# 1417  
 Delta R.T. 0.05 min  
 Lab File: VX015778.D  
 Acq: 20 Apr 2020 19:59

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 18.5  | 25.6  | 76.6# |





#62

4-Bromofluorobenzene

Concen: 52.574 ug/l

RT: 11.12 min Scan# 1679

Delta R.T. -0.00 min

Lab File: VX015778.D

Acq: 20 Apr 2020 19:59

Instrument :

MSVOA\_X

ClientSampled :

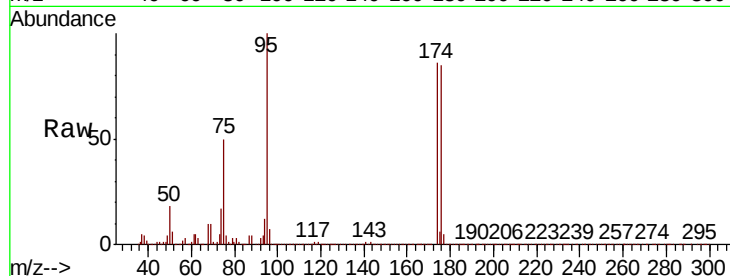
Tot Ion: 95 Resp: 860258

Ion Ratio Lower Upper

95 100

174 86.9 0.0 158.6

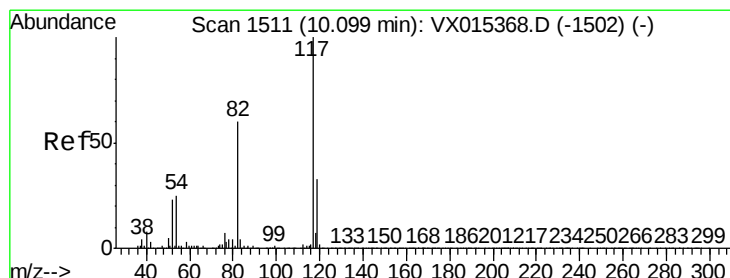
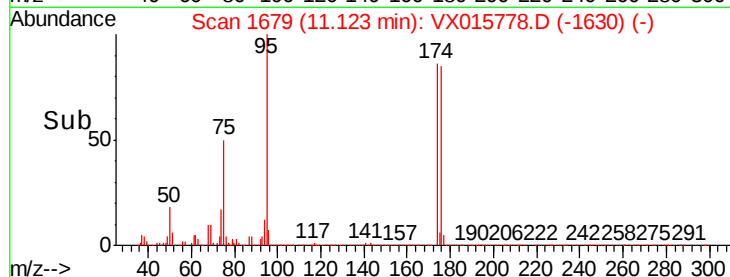
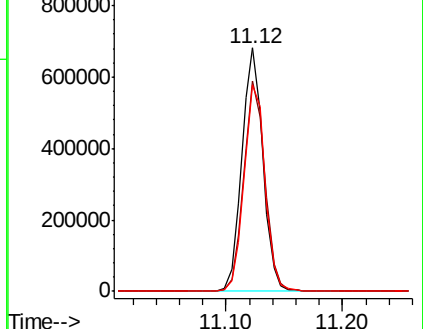
176 84.9 0.0 159.0



Abundance Ion 94.90 (94.60 to 95.60): VX015778.D (-1630) (-)

Ion 173.80 (173.50 to 174.50): VX015778.D (-1630) (-)

Ion 175.80 (175.50 to 176.50): VX015778.D (-1630) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.10 min Scan# 1511

Delta R.T. -0.00 min

Lab File: VX015778.D

Acq: 20 Apr 2020 19:59

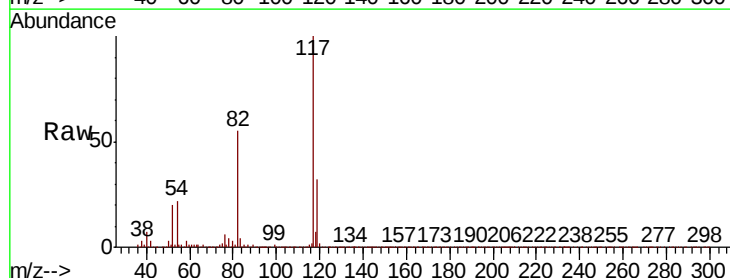
Tgt Ion: 117 Resp: 1645478

Ion Ratio Lower Upper

117 100

82 54.7 47.8 71.8

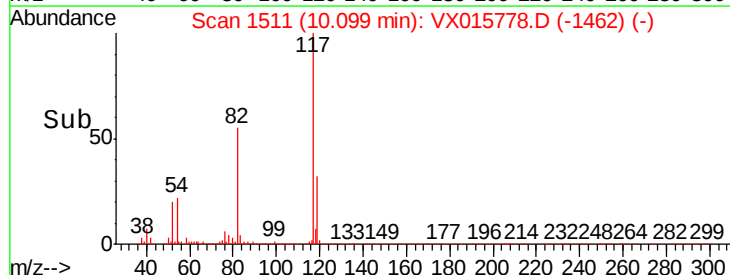
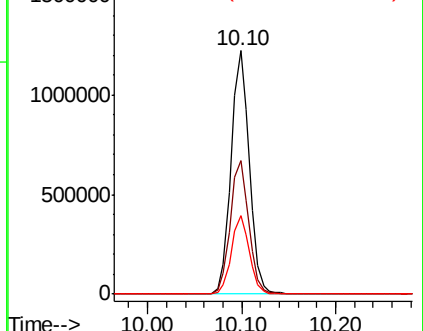
119 32.0 26.8 40.2

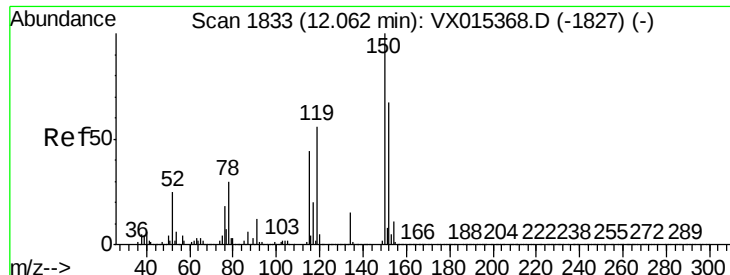


Abundance Ion 116.90 (116.60 to 117.60): VX015778.D (-1462) (-)

Ion 82.00 (81.70 to 82.70): VX015778.D (-1462) (-)

Ion 118.90 (118.60 to 119.60): VX015778.D (-1462) (-)





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.06 min Scan# 1833

Delta R.T. -0.00 min

Lab File: VX015778.D

Acq: 20 Apr 2020 19:59

Instrument :

MSVOA\_X

ClientSampleId :

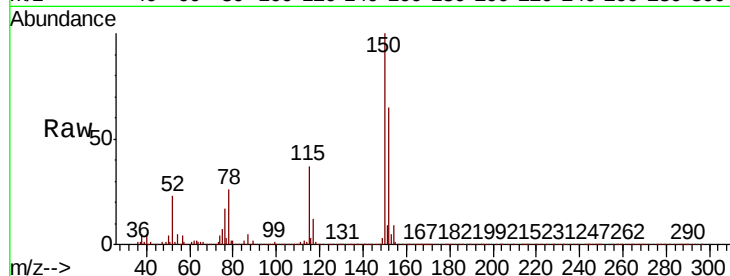
Tot Ion:152 Resp: 916251

Ion Ratio Lower Upper

152 100

115 57.5 39.0 116.9

150 158.7 0.0 340.8

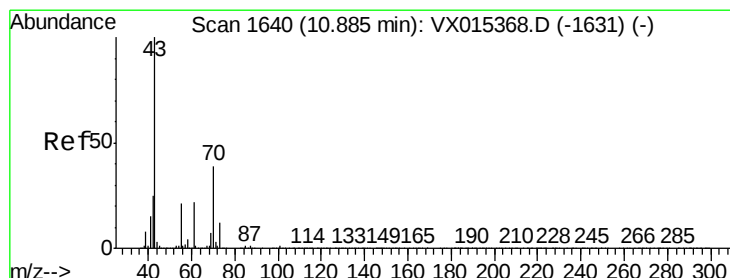
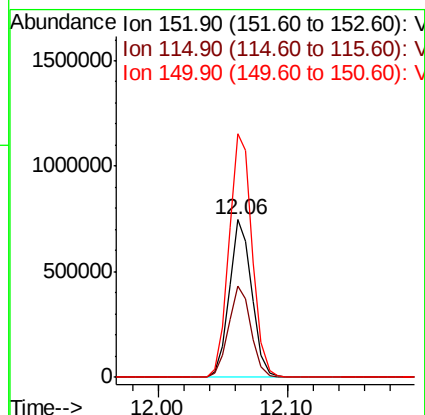
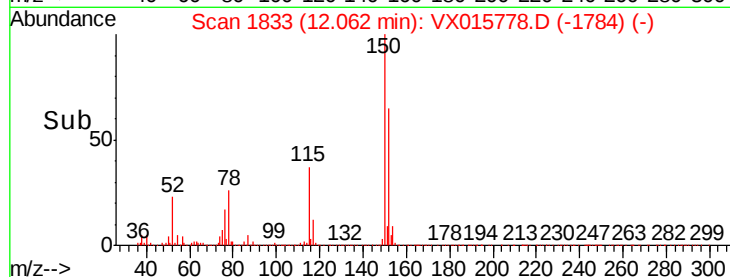


Abundance

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



#74

N-amil acetate

Concen: 0.475 ug/l

RT: 10.81 min Scan# 1627

Delta R.T. -0.08 min

Lab File: VX015778.D

Acq: 20 Apr 2020 19:59

Tgt Ion: 43 Resp: 15854

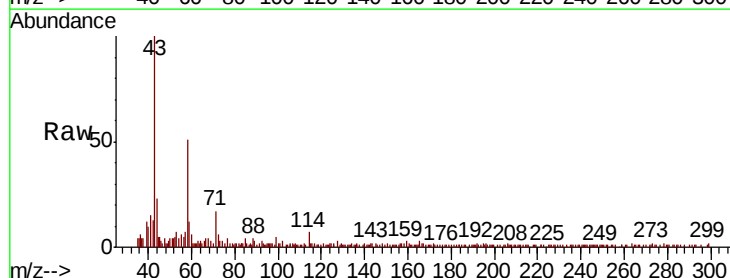
Ion Ratio Lower Upper

43 100

70 6.7 30.2 45.4#

55 19.3 16.8 25.2

61 0.0 18.2 27.2#



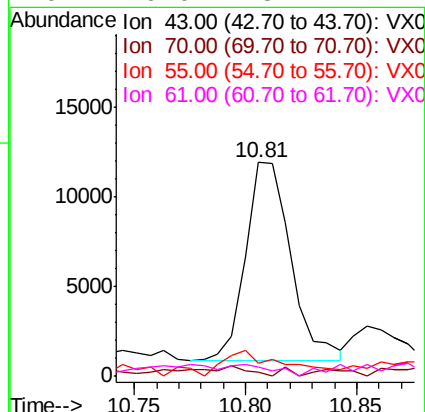
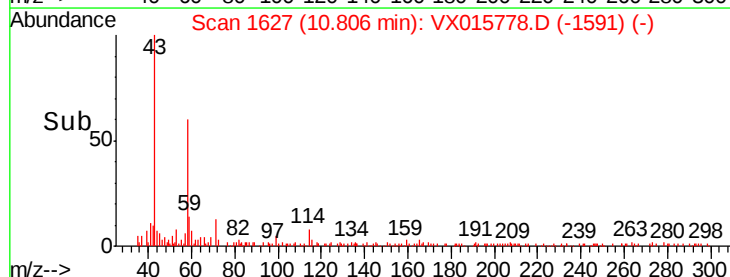
Abundance

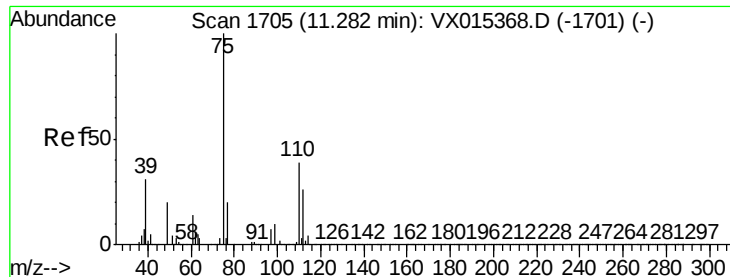
Ion 43.00 (42.70 to 43.70): VX0

Ion 70.00 (69.70 to 70.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 61.00 (60.70 to 61.70): VX0





#76

1,2,3-Trichloropropane

Concen: 22.753 ug/l

RT: 11.12 min Scan# 1679

Delta R.T. -0.16 min

Lab File: VX015778.D

Acq: 20 Apr 2020 19:59

Instrument :

MSVOA\_X

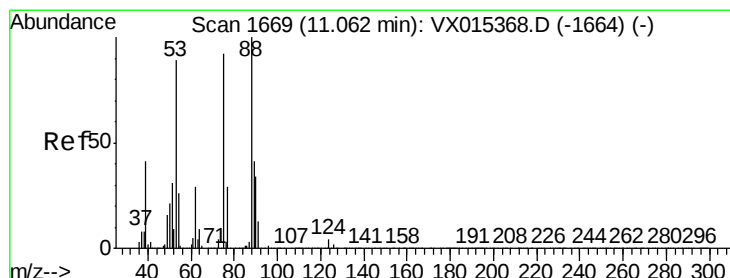
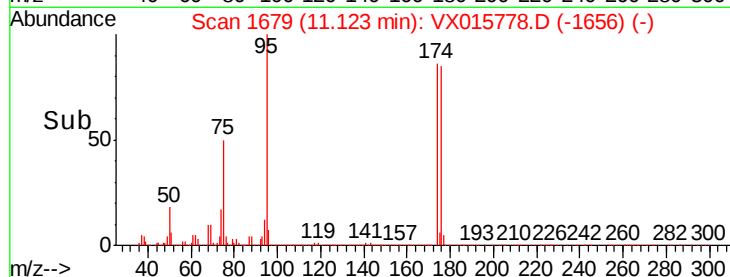
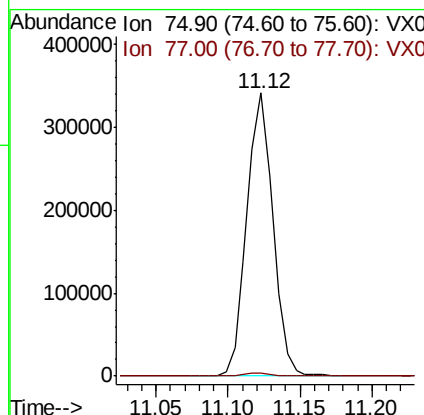
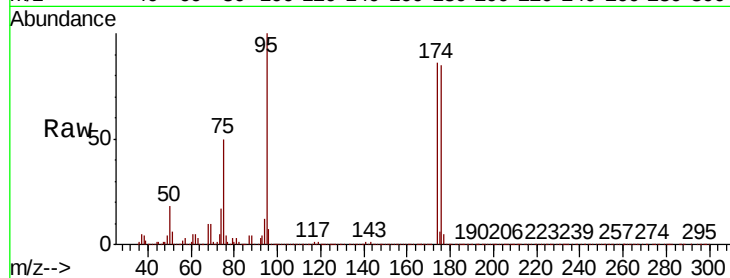
ClientSampleId :

Tot Ion: 75 Resp: 428715

Ion Ratio Lower Upper

75 100

77 1.2 21.2 63.6#



#81

trans-1,4-Dichloro-2-butene

Concen: 54.595 ug/l

RT: 11.12 min Scan# 1679

Delta R.T. 0.06 min

Lab File: VX015778.D

Acq: 20 Apr 2020 19:59

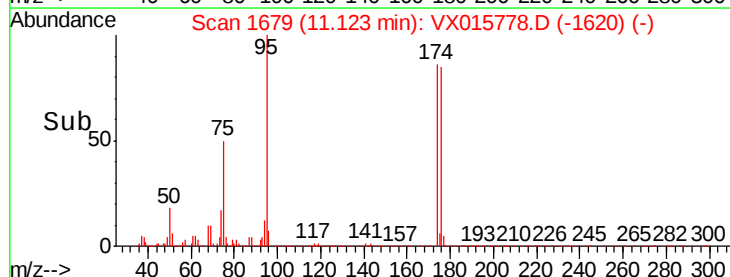
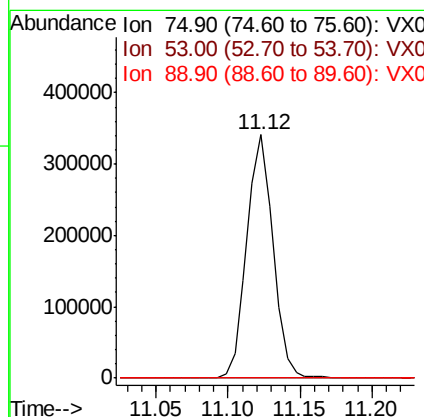
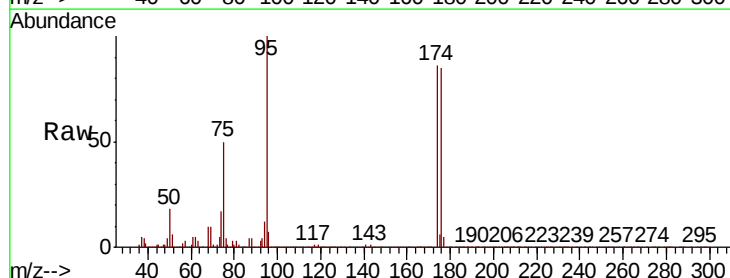
Tgt Ion: 75 Resp: 428715

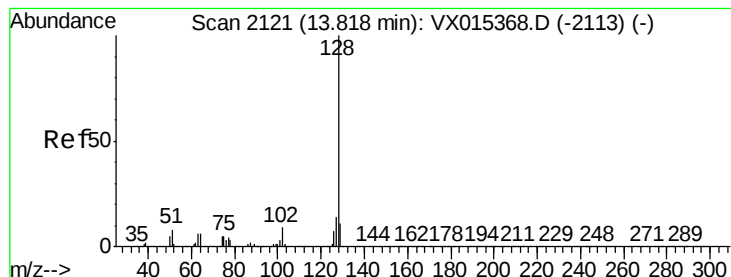
Ion Ratio Lower Upper

75 100

53 0.0 80.1 120.1#

89 0.0 36.1 54.1#

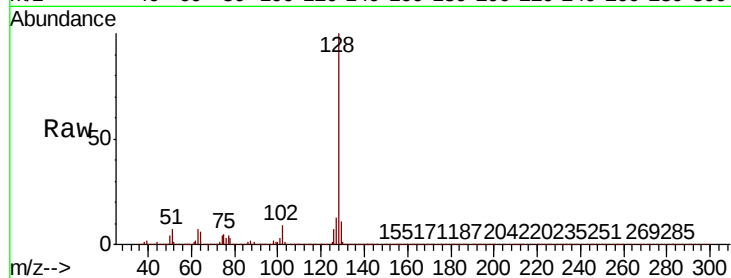




#95  
Naphthalene  
Concen: 10.308 ug/l  
RT: 13.82 min Scan# 2121  
Delta R.T. -0.00 min  
Lab File: VX015778.D  
Acq: 20 Apr 2020 19:59

Instrument :  
MSVOA\_X  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 13.0  | 10.6  | 15.8  |
| 129     | 10.8  | 8.8   | 13.2  |



Abundance

Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

