

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX010620\  
 Data File : VX014438.D  
 Acq On : 06 Jan 2020 19:25  
 Operator : JC/SP  
 Sample : K6476-02ME  
 Misc : 5.08g/5mL/100uL/5.00mL/MSVOA\_X/MEOH  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Jan 07 04:43:49 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121319W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 17 03:01:07 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 534102   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 802679   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 709002   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 344719   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.05  | 65   | 281210   | 46.46 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.92% |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 230484   | 47.24 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.48% |          |
| 50) Toluene-d8              | 8.71  | 98   | 949674   | 49.99 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.98% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 330748   | 47.63 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.26% |          |

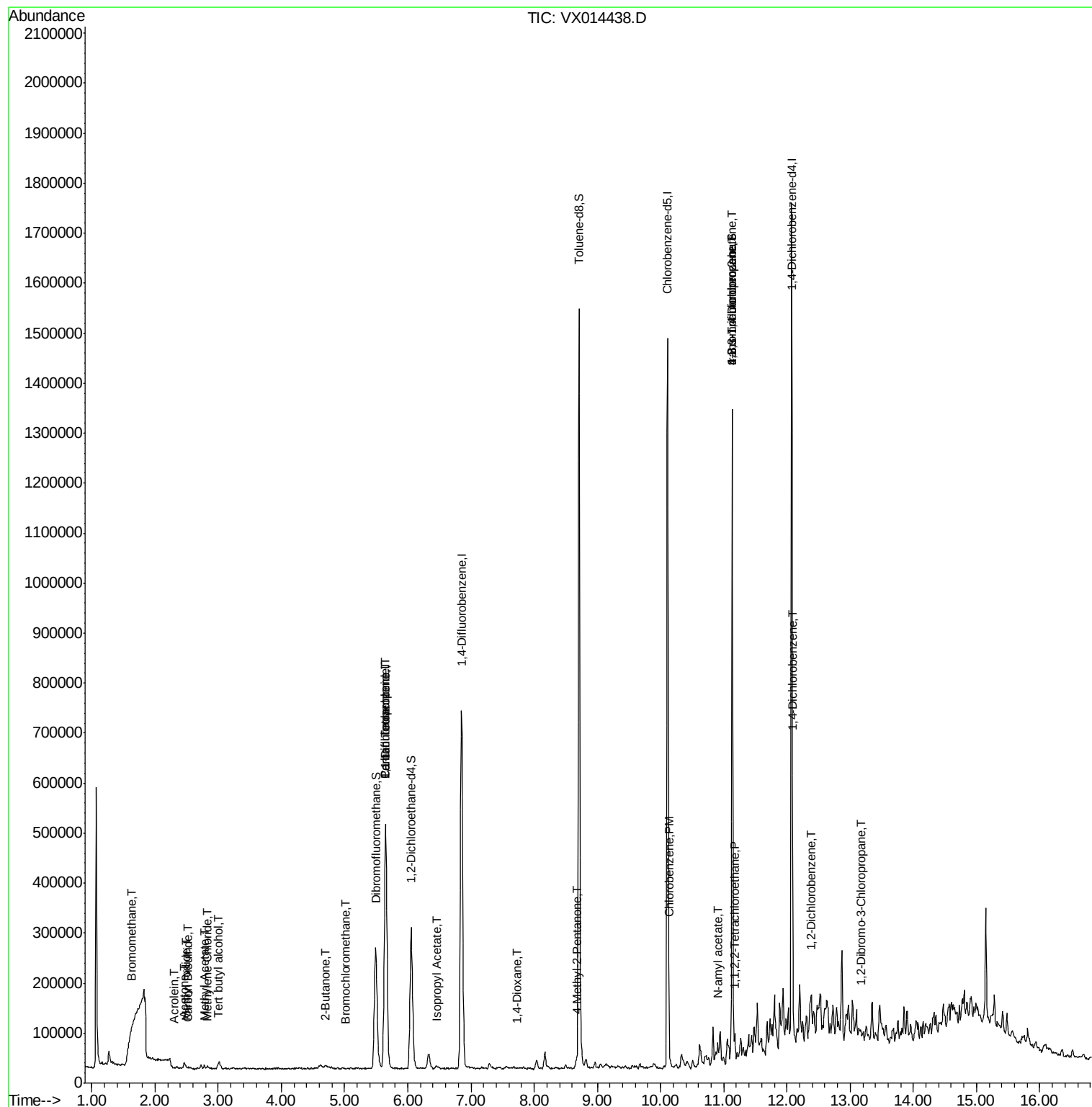
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 5) Bromomethane                | 1.63  | 94   | 1717     | 0.358  | ug/l   | 99     |
| 10) Methyl Iodide              | 2.48  | 142  | 2156     | 2.928  | ug/l # | 72     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 11172    | 8.541  | ug/l # | 78     |
| 13) Acrolein                   | 2.30  | 56   | 282      | 0.377  | ug/l # | 1      |
| 16) Acetone                    | 2.46  | 43   | 16847    | 4.287  | ug/l   | 96     |
| 17) Carbon Disulfide           | 2.53  | 76   | 3935     | 1.022  | ug/l # | 88     |
| 18) Methyl Acetate             | 2.78  | 43   | 9319     | 1.197  | ug/l   | 94     |
| 20) Methylene Chloride         | 2.84  | 84   | 3490     | 0.564  | ug/l # | 79     |
| 25) 2-Butanone                 | 4.69  | 43   | 13600    | 2.807  | ug/l   | 100    |
| 28) Bromochloromethane         | 5.01  | 49   | 251      | 0.517  | ug/l # | 6      |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 34976    | 4.749  | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 5.65  | 117  | 44760    | 6.671  | ug/l # | 16     |
| 43) Isopropyl Acetate          | 6.46  | 43   | 3073     | 0.228  | ug/l # | 69     |
| 49) 1,4-Dioxane                | 7.74  | 88   | 191      | 1.424  | ug/l # | 1      |
| 51) 4-Methyl-2-Pentanone       | 8.67  | 43   | 5000     | 0.592  | ug/l   | 97     |
| 65) Chlorobenzene              | 10.14 | 112  | 11966    | 0.794  | ug/l   | 96     |
| 74) N-amyl acetate             | 10.90 | 43   | 3274     | 0.288  | ug/l # | 1      |
| 75) 1,1,2,2-Tetrachloroethane  | 11.18 | 83   | 2406     | 0.286  | ug/l   | 81     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 160788   | 21.485 | ug/l # | 39     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 160788   | 60.641 | ug/l # | 12     |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 4609     | 0.387  | ug/l # | 1      |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 4818     | 0.409  | ug/l # | 81     |
| 92) 1,2-Dibromo-3-Chloropropan | 13.17 | 75   | 430      | 0.231  | ug/l   | 58     |

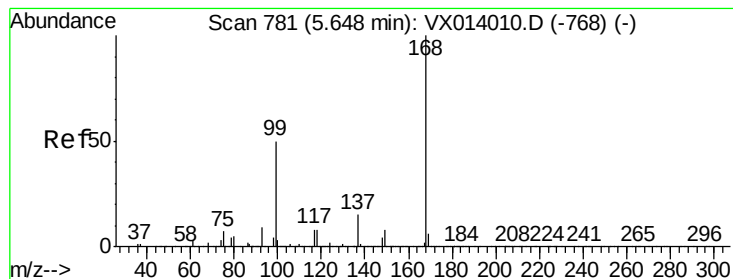
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX010620\  
Data File : VX014438.D  
Acq On : 06 Jan 2020 19:25  
Operator : JC/SP  
Sample : K6476-02ME  
Misc : 5.08µL/5mL/100µL/5.00mL/MSVOA\_X/MEOH  
ALS Vial : 23 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampled :

Quant Time: Jan 07 04:43:49 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X121319W.M  
Quant Title : SW846 8260  
QLast Update : Tue Dec 17 03:01:07 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 781

Delta R.T. 0.00 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

Instrument :

MSVOA\_X

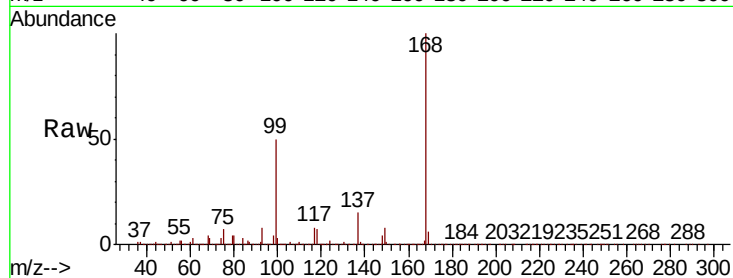
ClientSampleId :

Tot Ion:168 Resp: 534102

Ion Ratio Lower Upper

168 100

99 50.4 40.3 60.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

200000

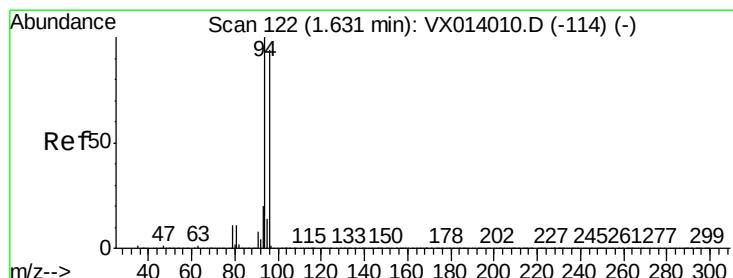
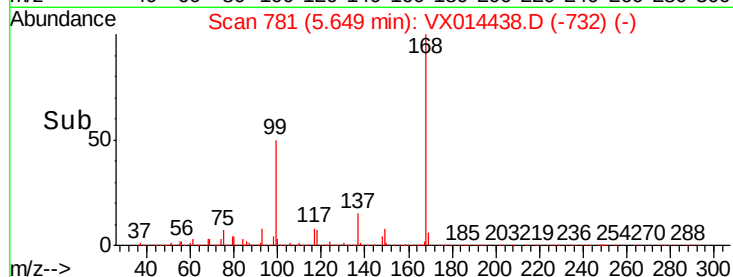
150000

100000

50000

0

Time-->



#5

Bromomethane

Concen: 0.358 ug/l

RT: 1.63 min Scan# 122

Delta R.T. 0.00 min

Lab File: VX014438.D

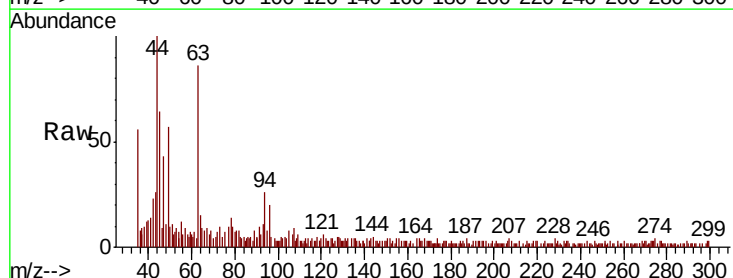
Acq: 06 Jan 2020 19:25

Tgt Ion: 94 Resp: 1717

Ion Ratio Lower Upper

94 100

96 92.8 75.2 112.8



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.63

2000

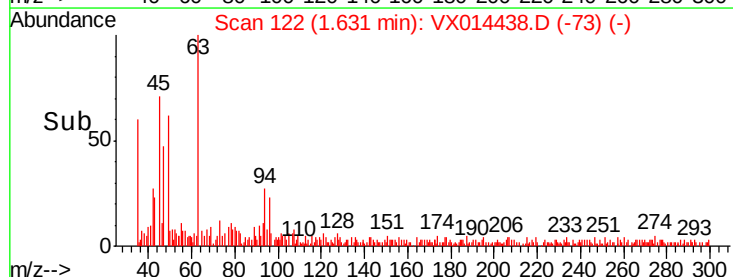
1500

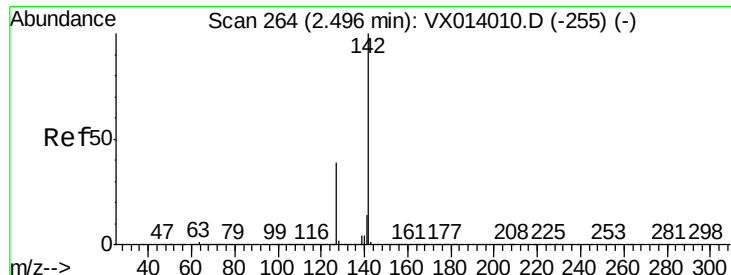
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Time-->

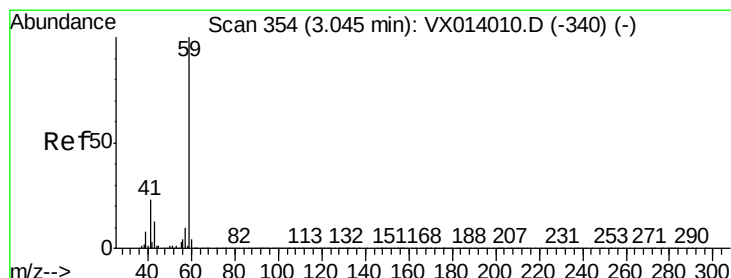
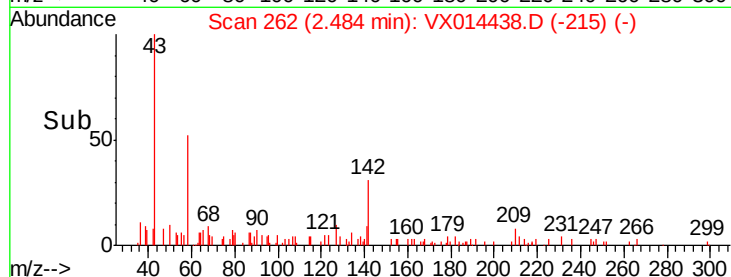
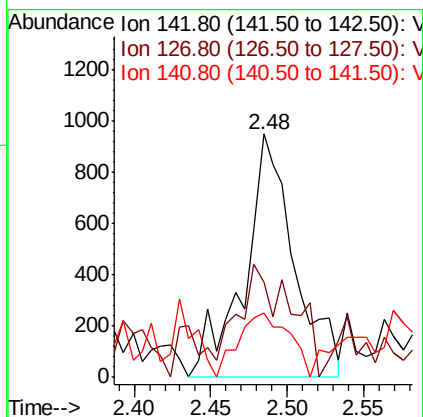
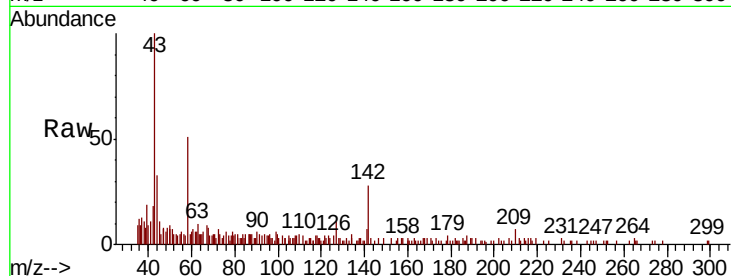




#10  
Methvl Iodide  
Concen: 2.928 ug/l  
RT: 2.48 min Scan# 262  
Delta R.T. -0.01 min  
Lab File: VX014438.D  
Acq: 06 Jan 2020 19:25

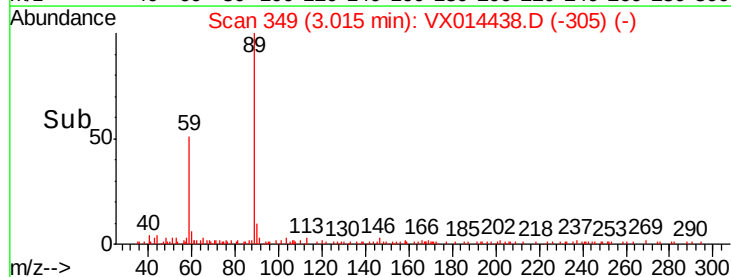
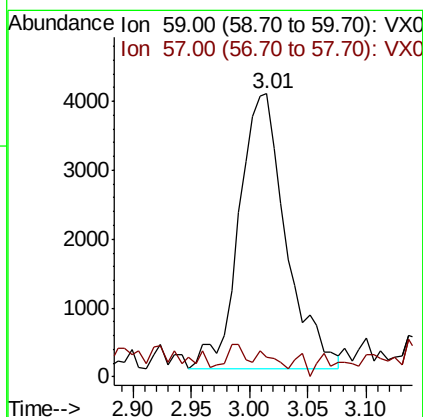
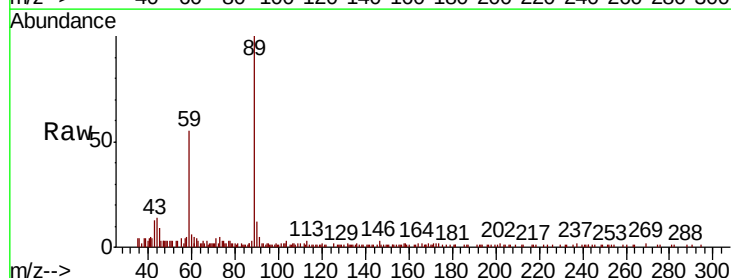
Instrument :  
MSVOA\_X  
ClientSampleId :

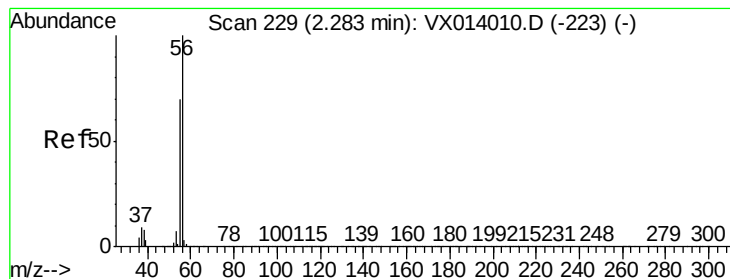
Tot Ion:142 Resp: 2156  
Ion Ratio Lower Upper  
142 100  
127 22.4 31.6 47.4#  
141 26.5 11.6 17.4#



#11  
Tert butyl alcohol  
Concen: 8.541 ug/l  
RT: 3.01 min Scan# 349  
Delta R.T. -0.03 min  
Lab File: VX014438.D  
Acq: 06 Jan 2020 19:25

Tgt Ion: 59 Resp: 11172  
Ion Ratio Lower Upper  
59 100  
57 2.1 8.4 12.6#





#13

Acrolein

Concen: 0.377 ug/l

RT: 2.30 min Scan# 232

Delta R.T. 0.02 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

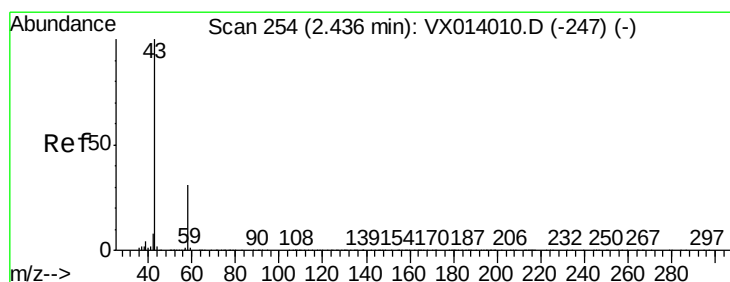
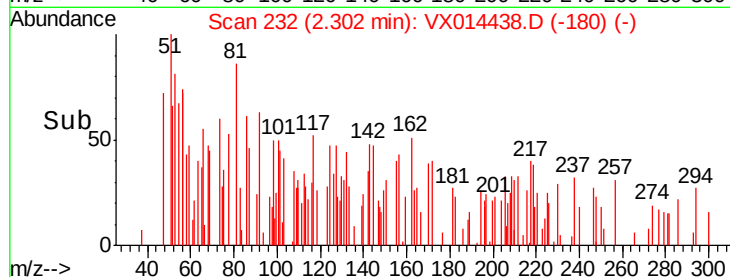
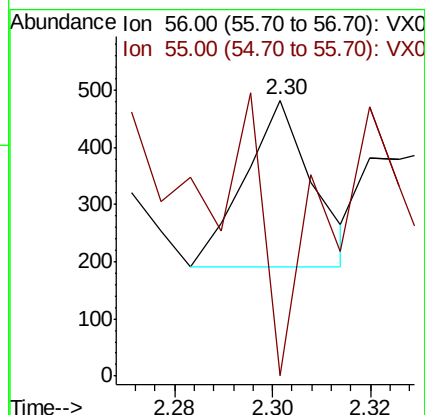
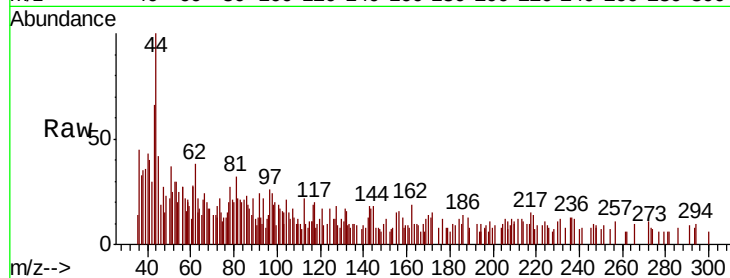
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion: 56 Resp: 282

Ion Ratio Lower Upper

56 100

55 241.5 56.9 85.3#



#16

Acetone

Concen: 4.287 ug/l

RT: 2.46 min Scan# 258

Delta R.T. 0.02 min

Lab File: VX014438.D

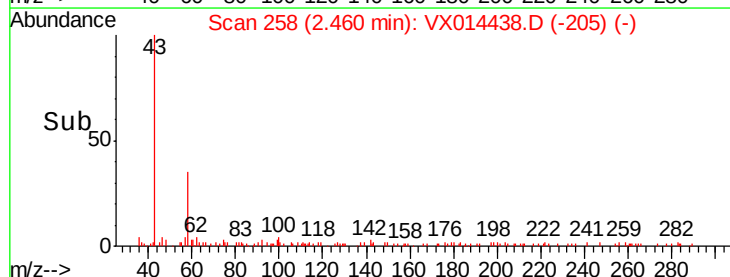
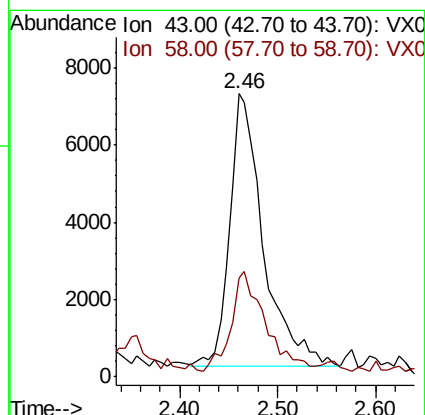
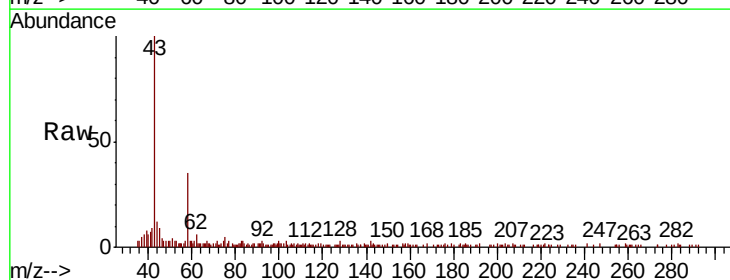
Acq: 06 Jan 2020 19:25

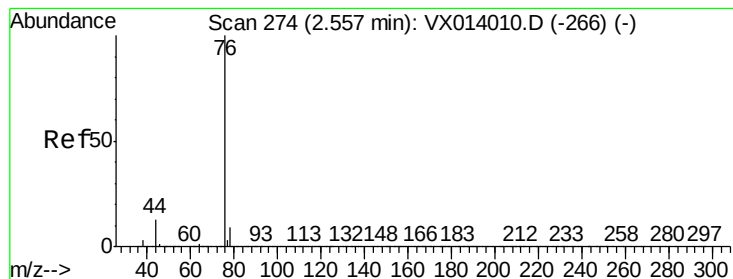
Tgt Ion: 43 Resp: 16847

Ion Ratio Lower Upper

43 100

58 33.1 24.9 37.3





#17

Carbon Disulfide

Concen: 1.022 ug/l

RT: 2.53 min Scan# 270

Delta R.T. -0.02 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

Instrument :

MSVOA\_X

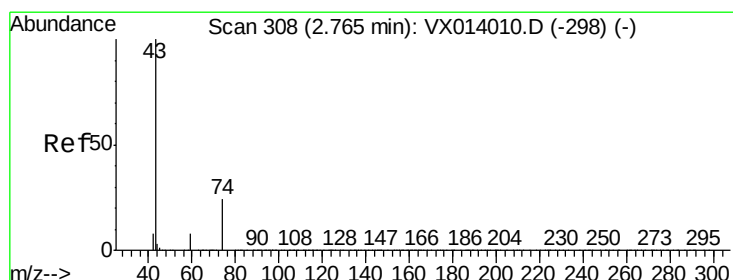
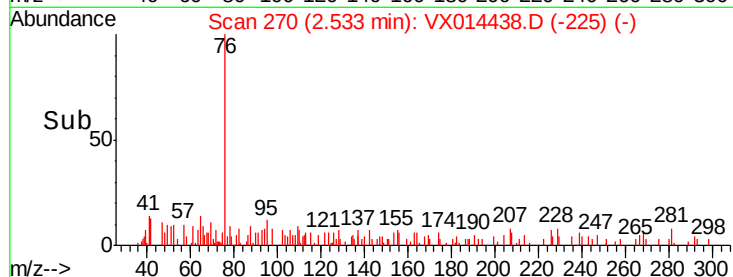
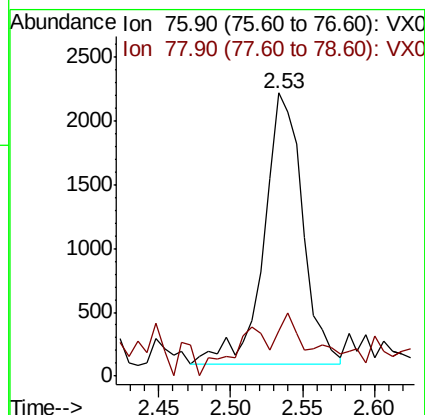
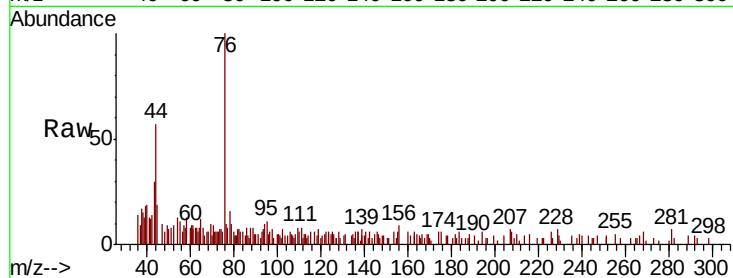
ClientSampleId :

Tot Ion: 76 Resp: 3935

Ion Ratio Lower Upper

76 100

78 4.8 7.2 10.8#



#18

Methyl Acetate

Concen: 1.197 ug/l

RT: 2.78 min Scan# 310

Delta R.T. 0.01 min

Lab File: VX014438.D

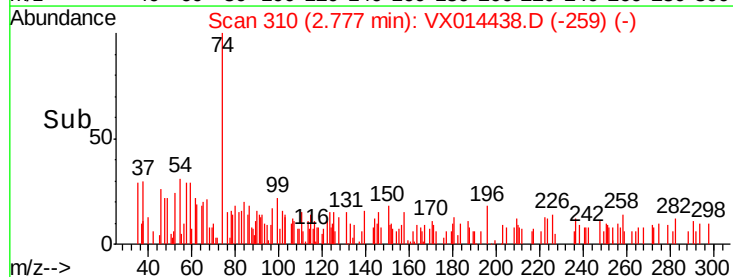
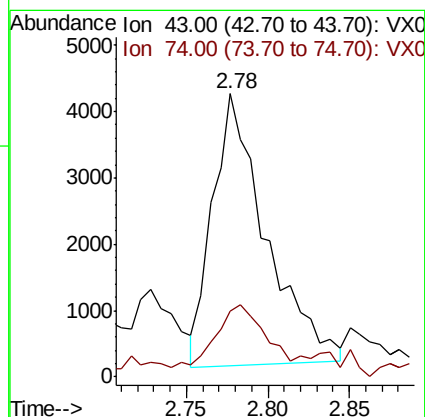
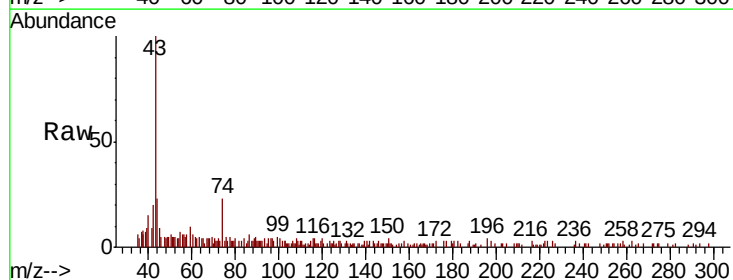
Acq: 06 Jan 2020 19:25

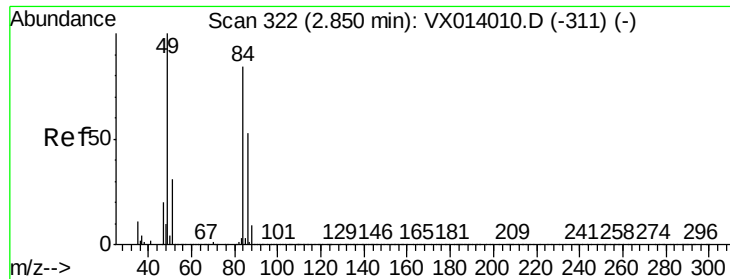
Tgt Ion: 43 Resp: 9319

Ion Ratio Lower Upper

43 100

74 21.6 19.5 29.3

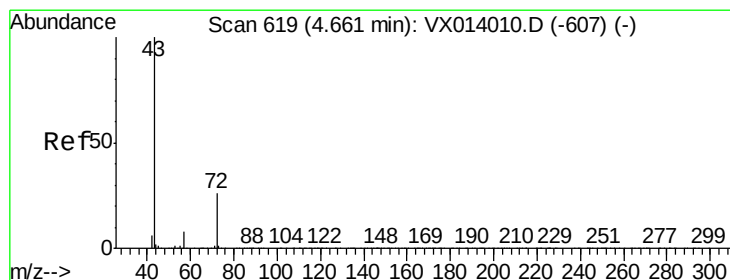
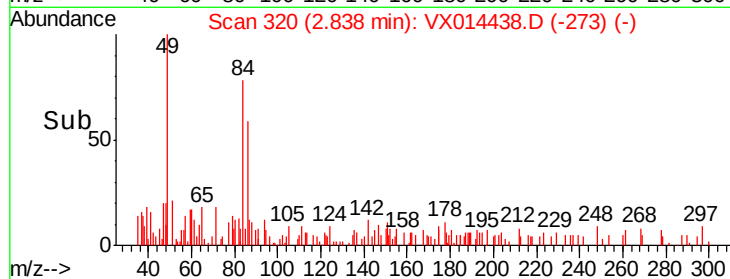
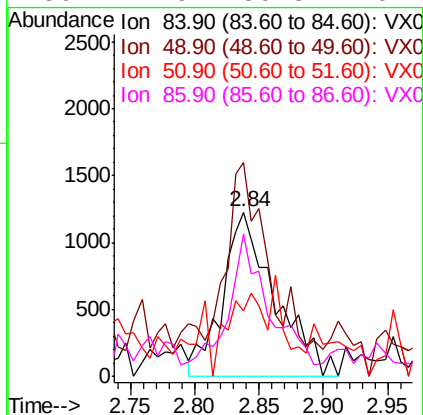
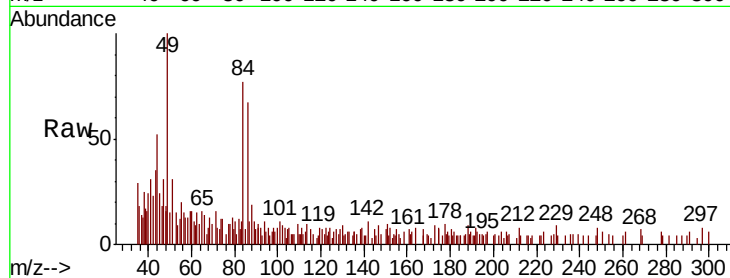




#20  
Methvlene Chloride  
Concen: 0.564 ug/l  
RT: 2.84 min Scan# 320  
Delta R.T. -0.01 min  
Lab File: VX014438.D  
Acq: 06 Jan 2020 19:25

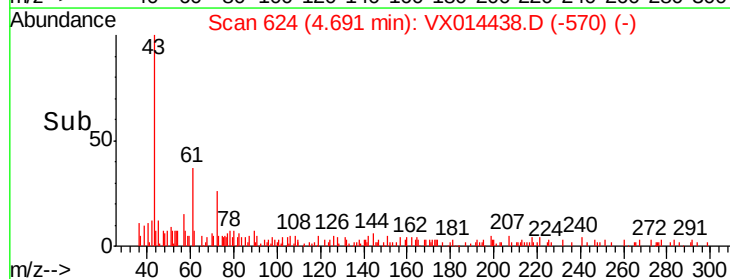
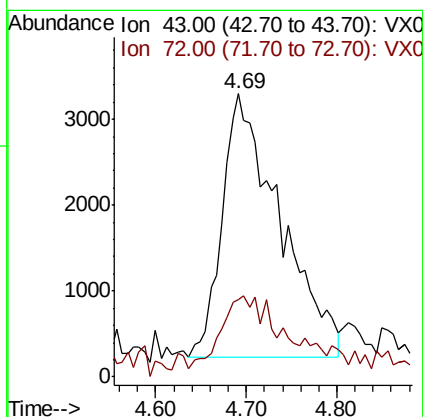
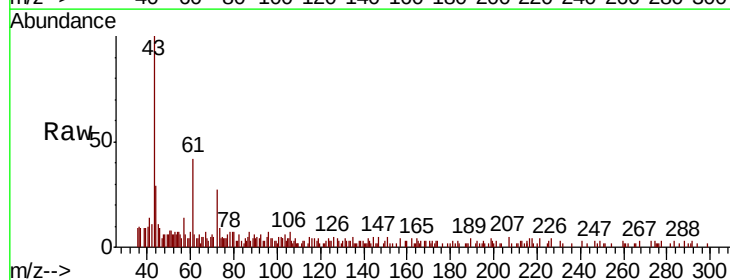
Instrument :  
MSVOA\_X  
ClientSampleId :

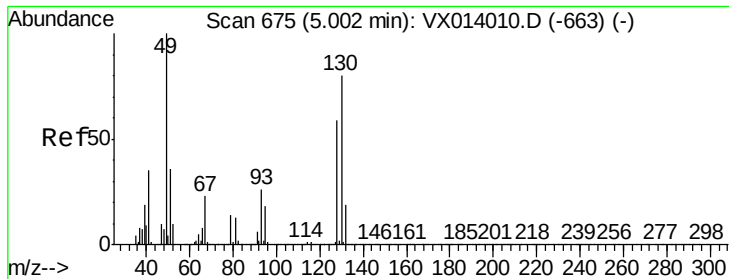
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 3490  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 97.7  | 95.8  | 143.6 |
| 51       | 20.4  | 29.8  | 44.8# |
| 86       | 77.9  | 50.8  | 76.2# |



#25  
2-Butanone  
Concen: 2.807 ug/l  
RT: 4.69 min Scan# 624  
Delta R.T. 0.03 min  
Lab File: VX014438.D  
Acq: 06 Jan 2020 19:25

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 13600 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 26.3  | 21.0  | 31.4  |





#28

Bromochloromethane

Concen: 0.517 ug/l

RT: 5.01 min Scan# 677

Delta R.T. 0.01 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

Instrument :

MSVOA\_X

ClientSampleId :

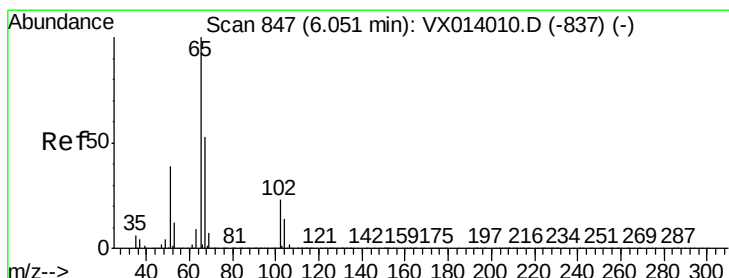
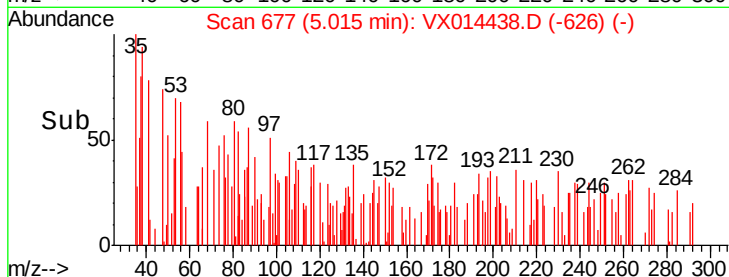
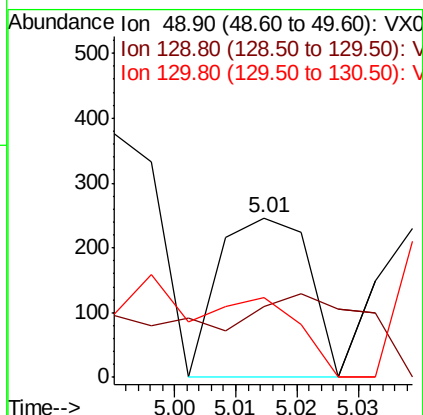
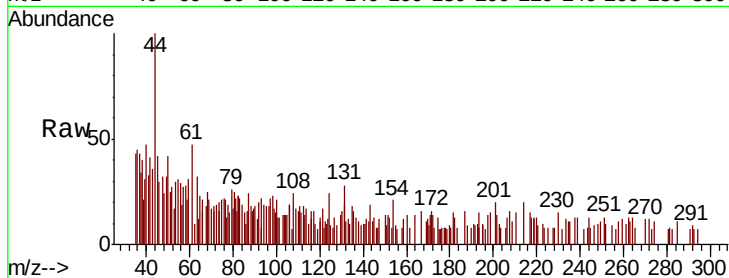
Tot Ion: 49 Resp: 251

Ion Ratio Lower Upper

49 100

129 64.5 0.0 5.0#

130 0.0 64.6 97.0#



#33

1,2-Dichloroethane-d4

Concen: 46.456 ug/l

RT: 6.05 min Scan# 847

Delta R.T. 0.00 min

Lab File: VX014438.D

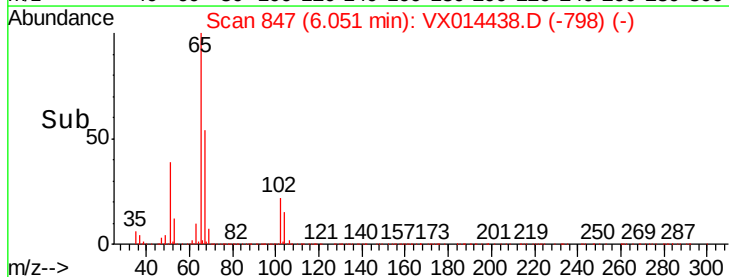
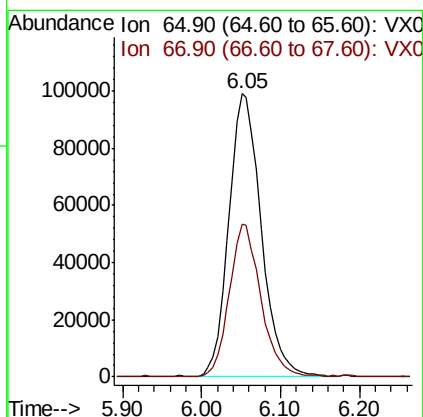
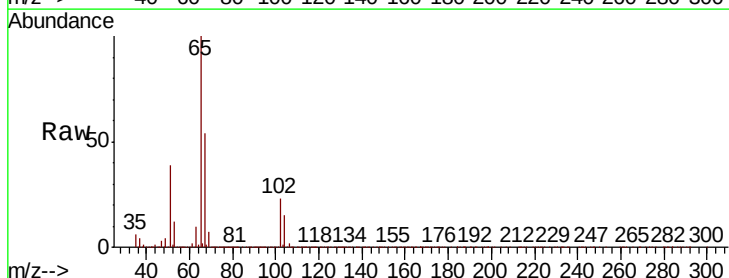
Acq: 06 Jan 2020 19:25

Tgt Ion: 65 Resp: 281210

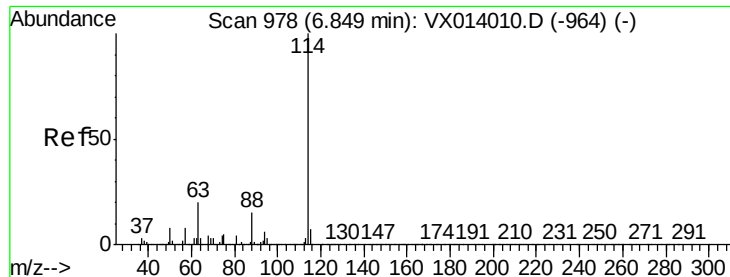
Ion Ratio Lower Upper

65 100

67 53.0 0.0 106.4



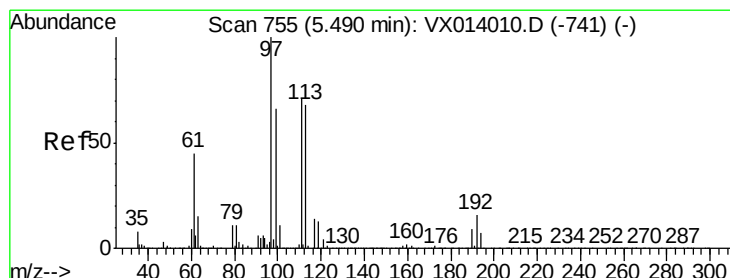
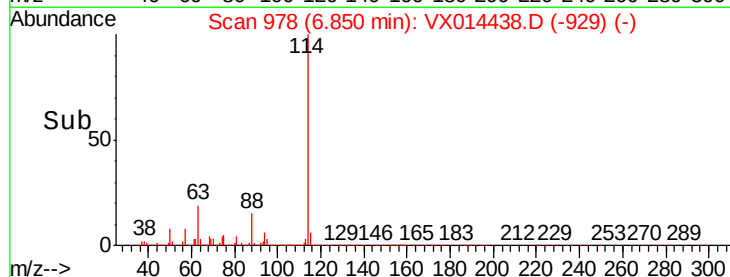
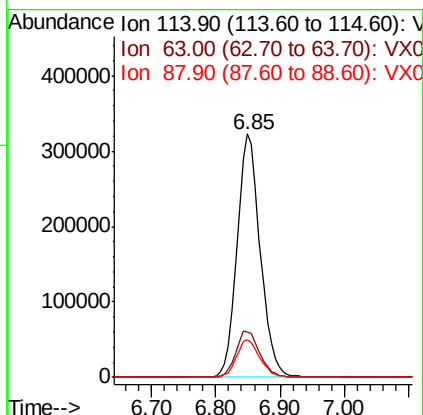
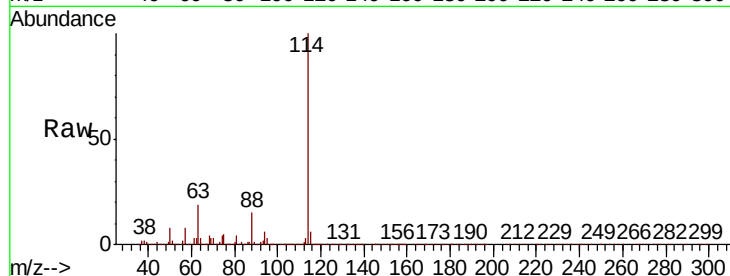




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.85 min Scan# 978  
 Delta R.T. 0.00 min  
 Lab File: VX014438.D  
 Acq: 06 Jan 2020 19:25

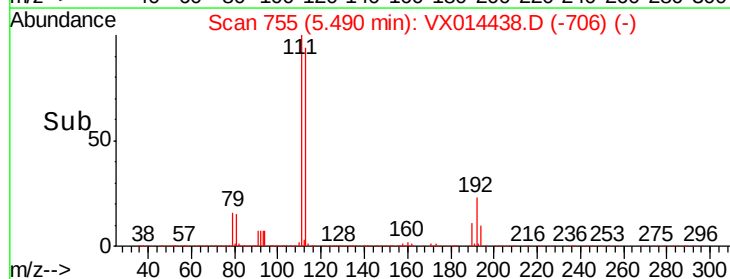
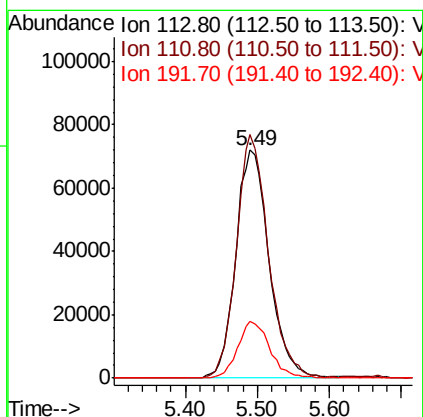
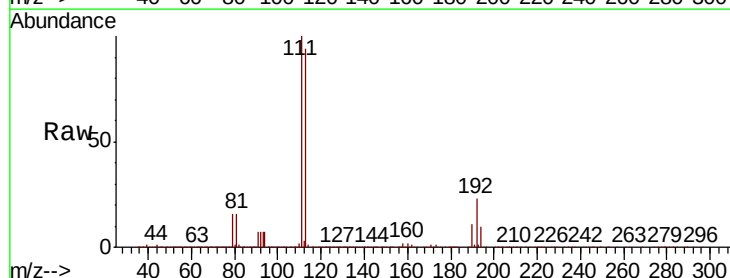
Instrument :  
 MSVOA\_X  
 ClientSampleId :

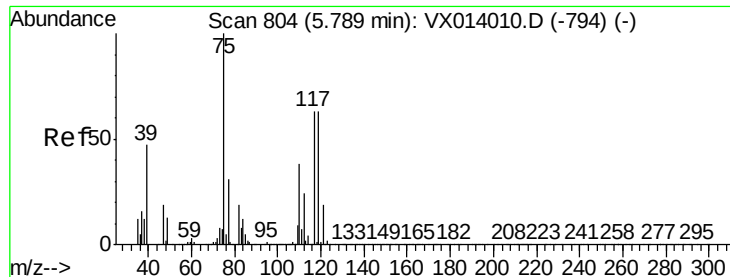
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 18.7  | 0.0   | 40.8  |
| 88      | 15.2  | 0.0   | 30.4  |



#35  
 Dibromofluoromethane  
 Concen: 47.236 ug/l  
 RT: 5.49 min Scan# 755  
 Delta R.T. 0.00 min  
 Lab File: VX014438.D  
 Acq: 06 Jan 2020 19:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.9 | 82.0  | 123.0 |
| 192     | 24.2  | 19.3  | 28.9  |





#36

1,1-Dichloropropene

Concen: 4.749 ug/l

RT: 5.65 min Scan# 781

Delta R.T. -0.14 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

Instrument :

MSVOA\_X

ClientSampleId :

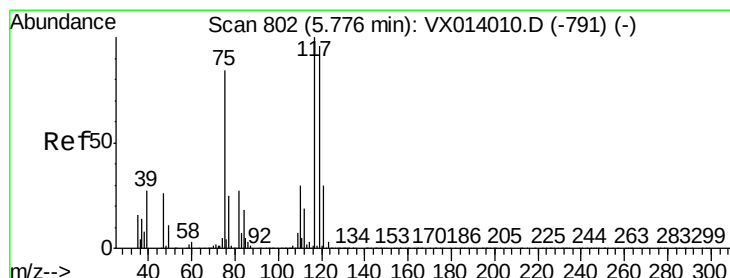
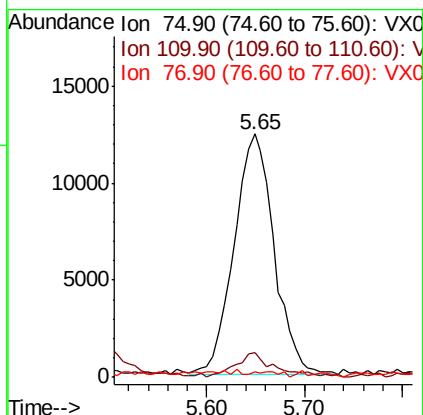
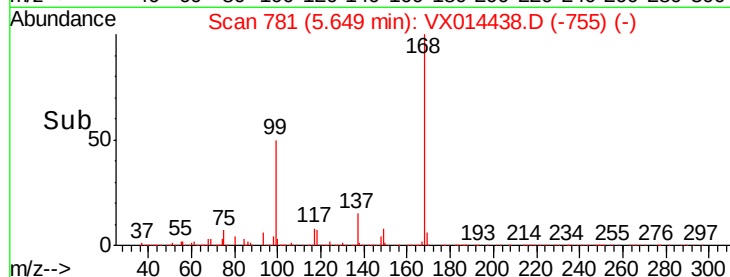
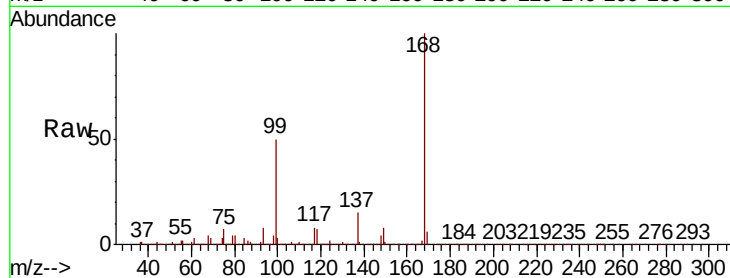
Tot Ion: 75 Resp: 34976

Ion Ratio Lower Upper

75 100

110 10.0 18.3 54.9#

77 0.0 24.8 37.2#



#38

Carbon Tetrachloride

Concen: 6.671 ug/l

RT: 5.65 min Scan# 782

Delta R.T. -0.12 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

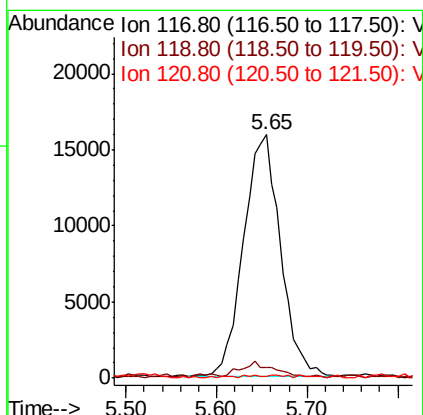
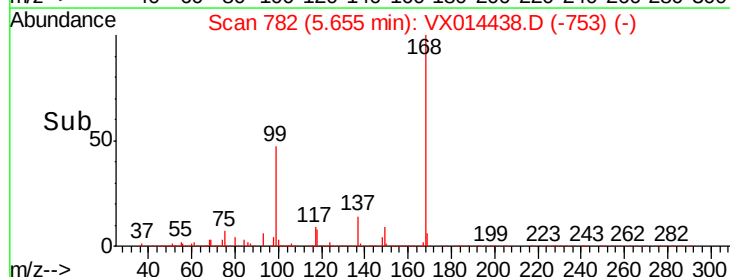
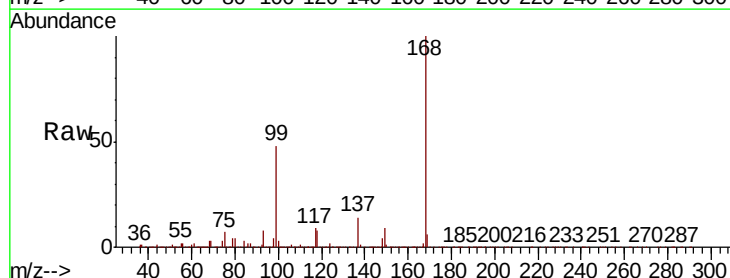
Tgt Ion: 117 Resp: 44760

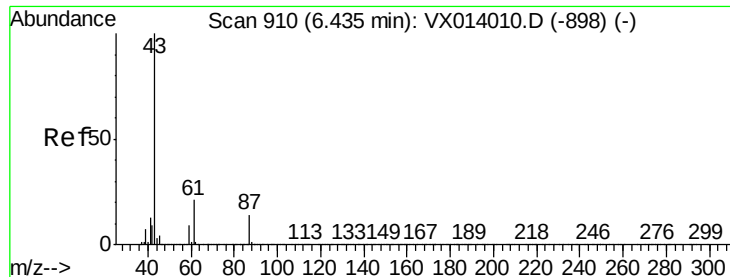
Ion Ratio Lower Upper

117 100

119 4.5 76.2 114.4#

121 0.8 23.6 35.4#





#43

Isopropyl Acetate

Concen: 0.228 ug/l

RT: 6.46 min Scan# 914

Delta R.T. 0.02 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

Instrument :

MSVOA\_X

ClientSampleId :

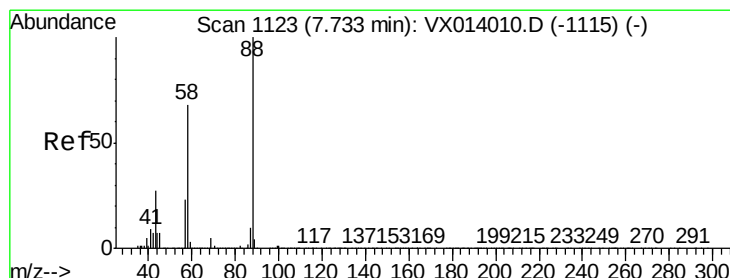
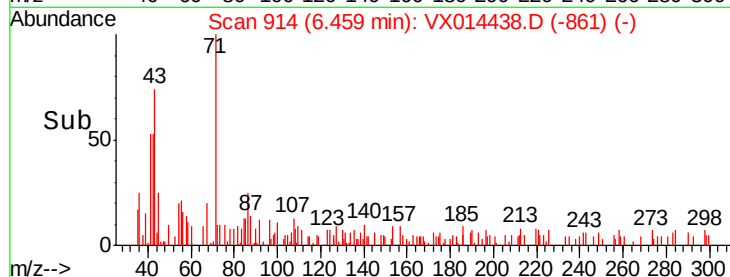
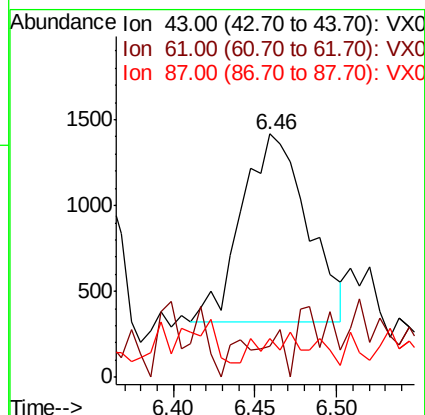
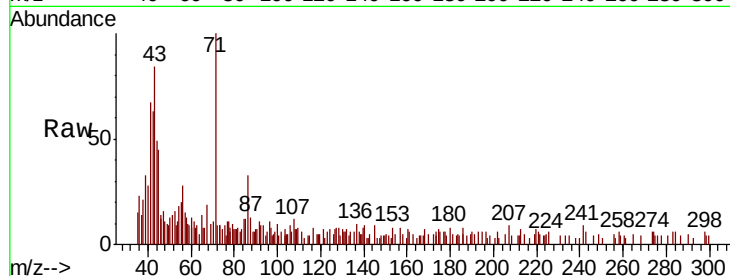
Tot Ion: 43 Resp: 3073

Ion Ratio Lower Upper

43 100

61 6.8 16.4 24.6#

87 0.0 10.7 16.1#



#49

1,4-Dioxane

Concen: 1.424 ug/l

RT: 7.74 min Scan# 1124

Delta R.T. 0.01 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

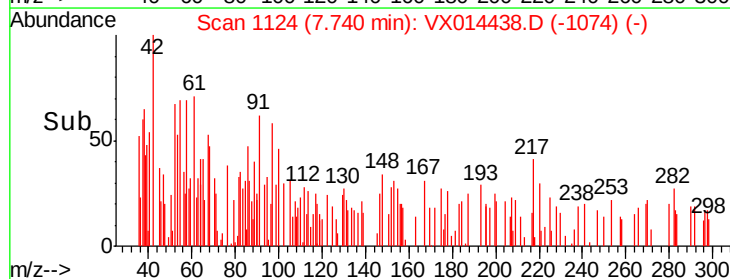
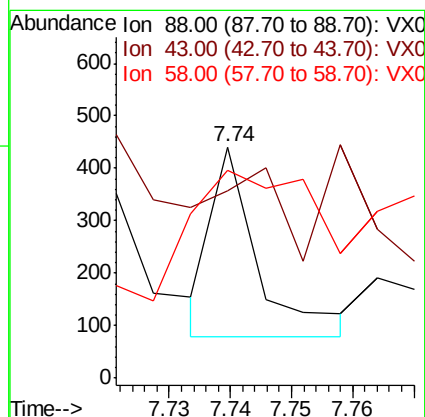
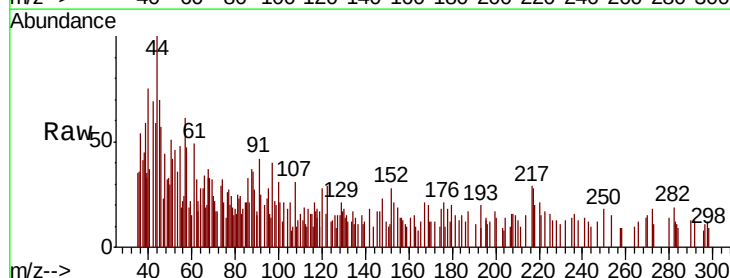
Tgt Ion: 88 Resp: 191

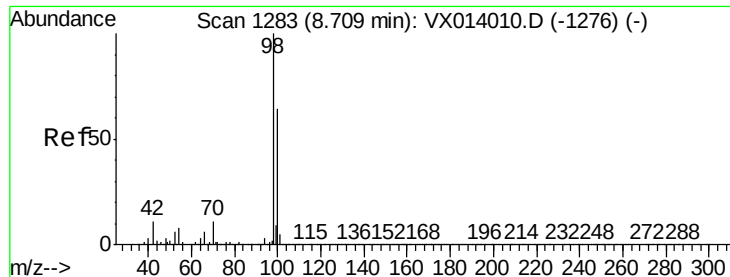
Ion Ratio Lower Upper

88 100

43 0.0 26.5 39.7#

58 181.2 56.8 85.2#





#50

Toluene-d8

Concen: 49.992 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. 0.00 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

Instrument :

MSVOA\_X

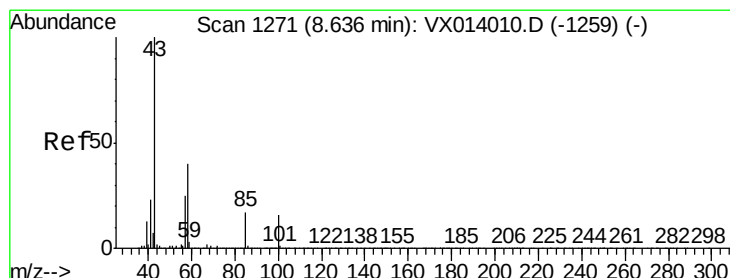
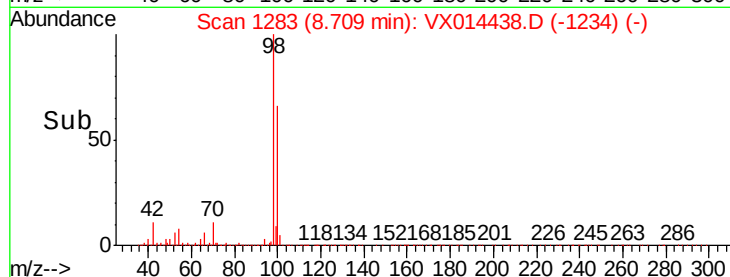
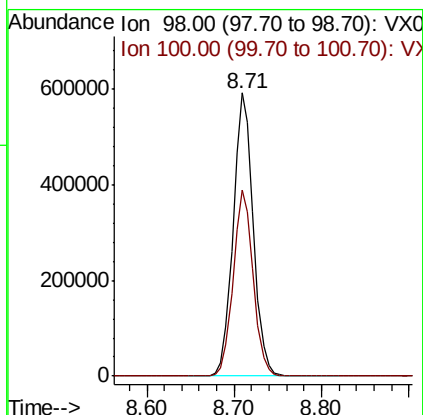
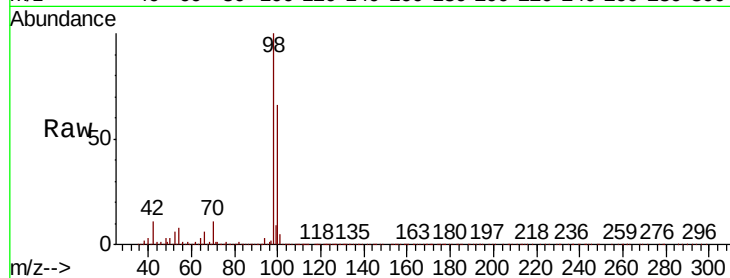
ClientSampleId :

Tot Ion: 98 Resp: 949674

Ion Ratio Lower Upper

98 100

100 65.3 52.9 79.3



#51

4-Methyl-2-Pentanone

Concen: 0.592 ug/l

RT: 8.67 min Scan# 1276

Delta R.T. 0.03 min

Lab File: VX014438.D

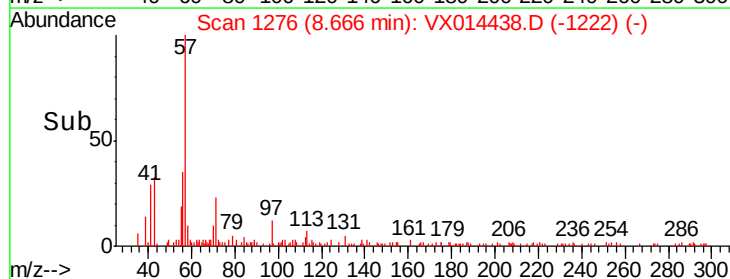
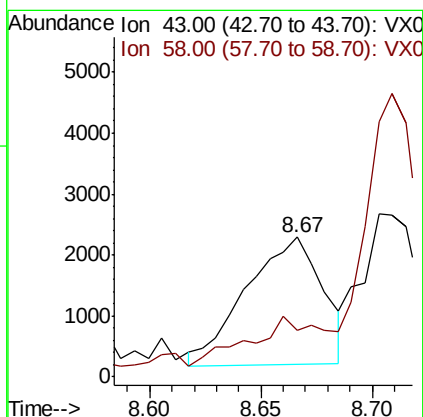
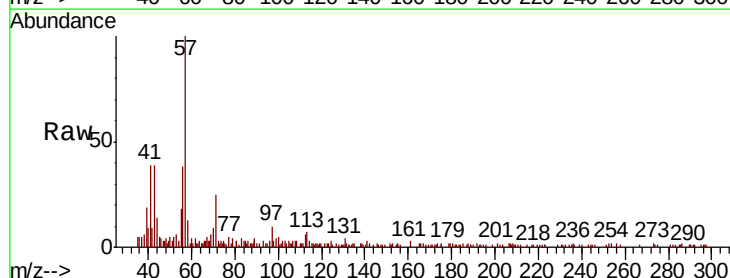
Acq: 06 Jan 2020 19:25

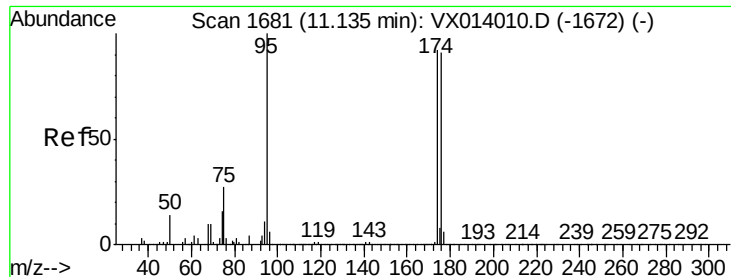
Tgt Ion: 43 Resp: 5000

Ion Ratio Lower Upper

43 100

58 42.1 32.2 48.2

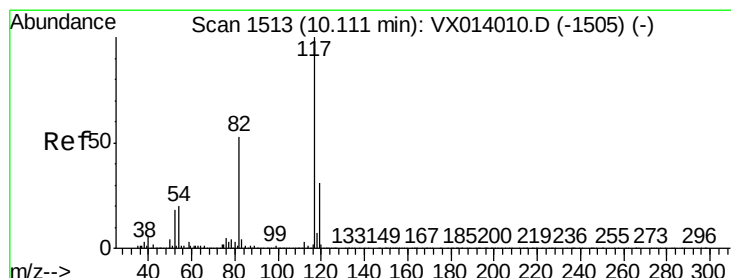
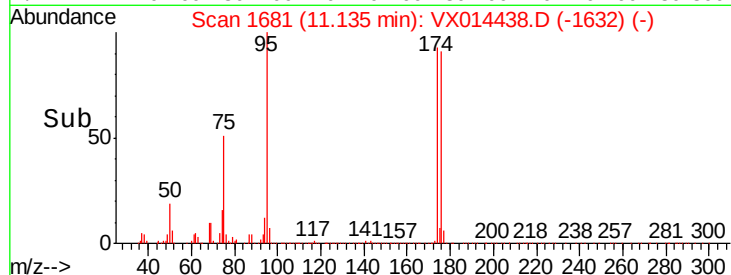
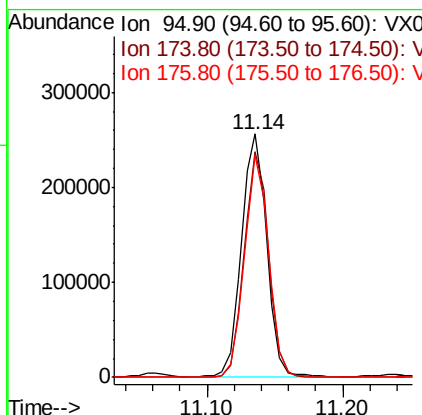
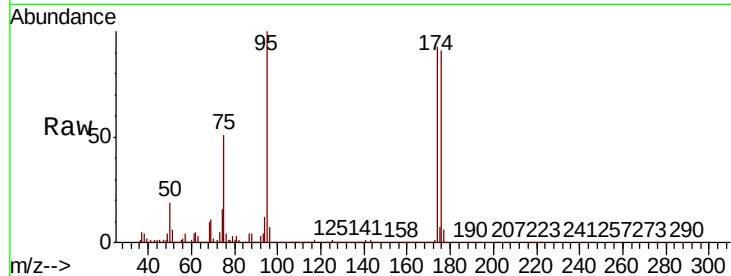




#62  
4-Bromofluorobenzene  
Concen: 47.630 ug/l  
RT: 11.14 min Scan# 1681  
Delta R.T. 0.00 min  
Lab File: VX014438.D  
Acq: 06 Jan 2020 19:25

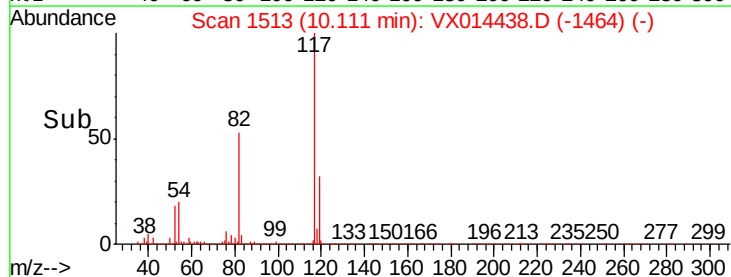
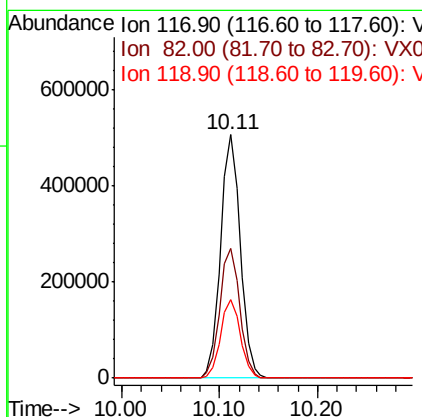
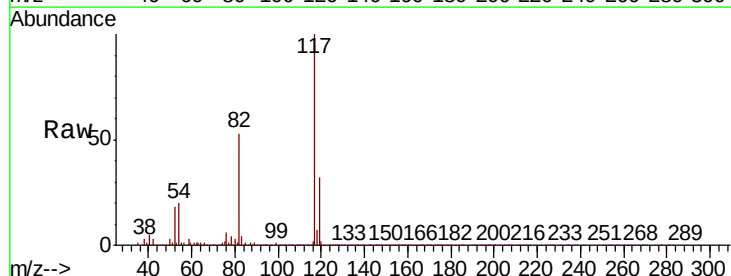
Instrument :  
MSVOA\_X  
ClientSampleId :

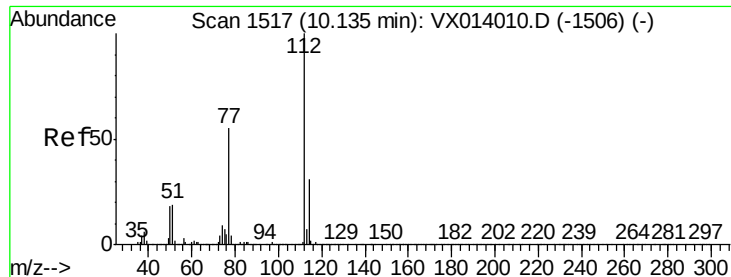
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 95      | 100   |       |       |
| 174     | 90.0  | 0.0   | 175.8 |
| 176     | 87.9  | 0.0   | 173.0 |



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. 0.00 min  
Lab File: VX014438.D  
Acq: 06 Jan 2020 19:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 53.2  | 42.2  | 63.4  |
| 119     | 32.3  | 25.1  | 37.7  |





#65

Chlorobenzene

Concen: 0.794 ug/l

RT: 10.14 min Scan# 1517

Delta R.T. 0.00 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

Instrument :

MSVOA\_X

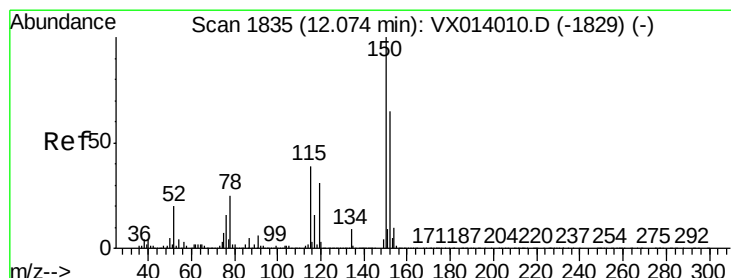
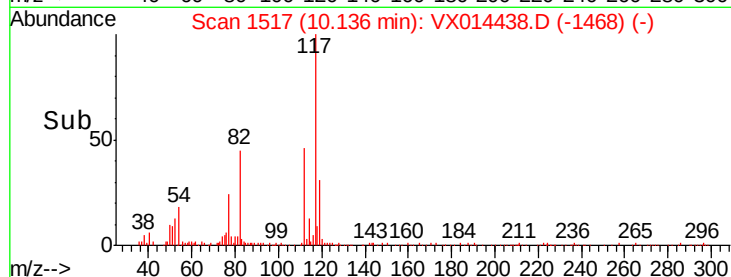
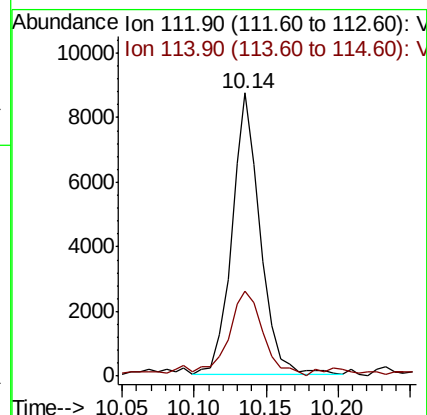
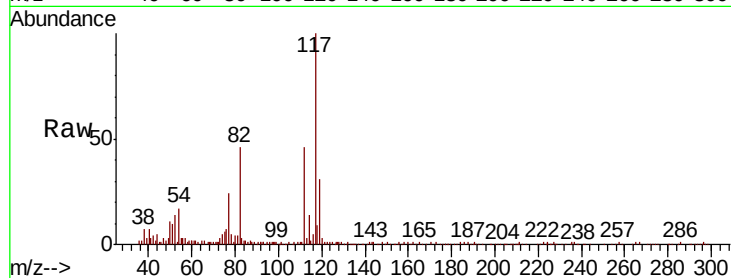
ClientSampleId :

Tot Ion:112 Resp: 11966

Ion Ratio Lower Upper

112 100

114 28.8 24.9 37.3



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.07 min Scan# 1835

Delta R.T. 0.00 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

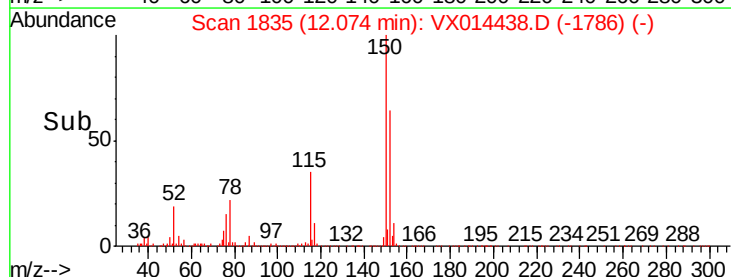
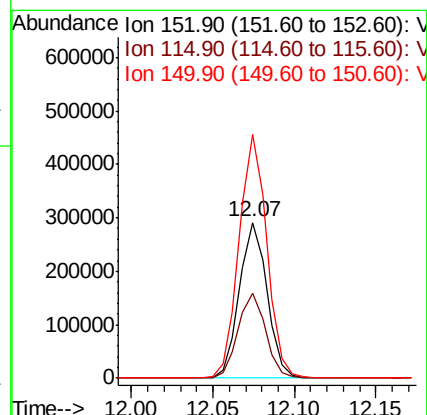
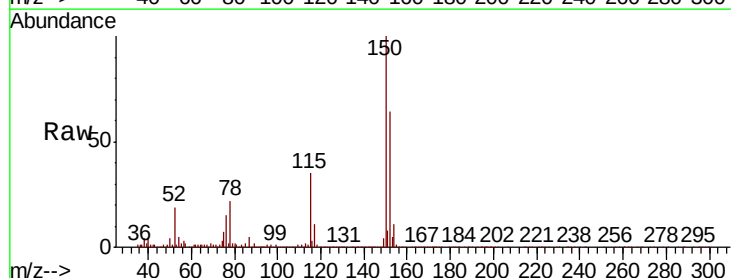
Tgt Ion:152 Resp: 344719

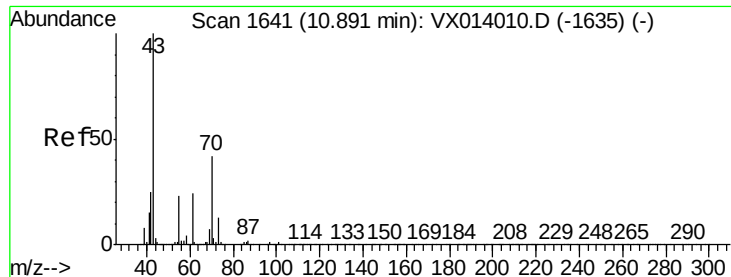
Ion Ratio Lower Upper

152 100

115 54.0 38.3 114.9

150 156.9 0.0 345.4





#74

N-amvl acetate

Concen: 0.288 ug/l

RT: 10.90 min Scan# 1642

Delta R.T. 0.01 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

Instrument :

MSVOA\_X

ClientSampleId :

Tot Ion: 43 Resp: 3274

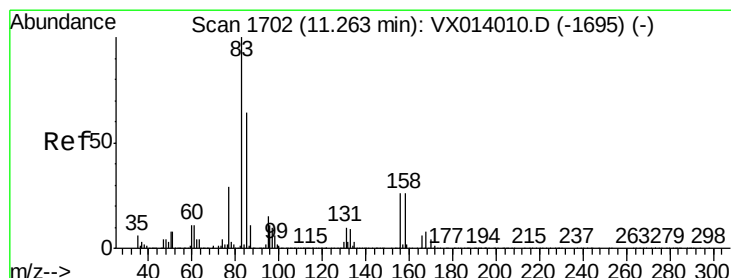
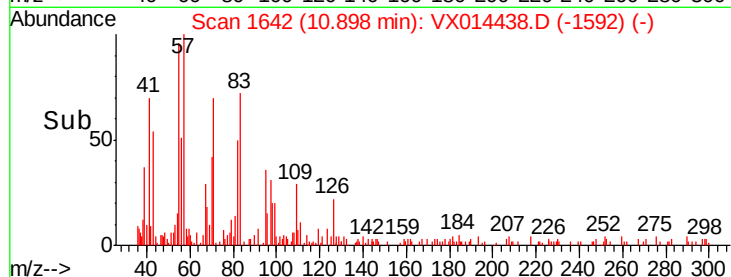
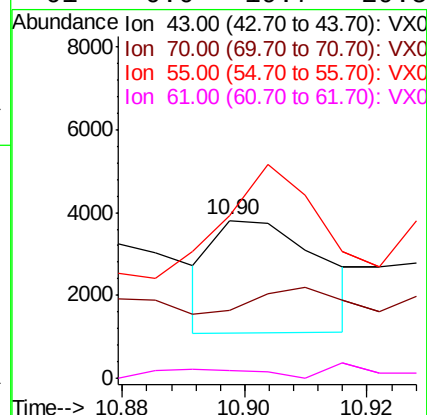
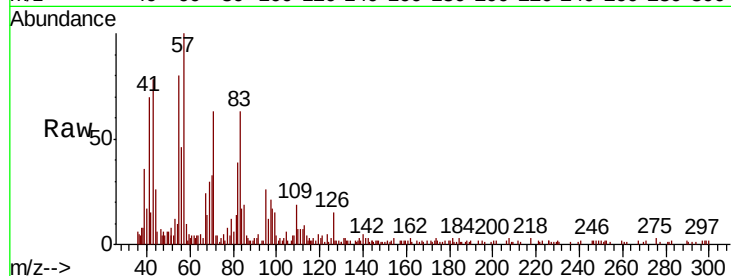
Ion Ratio Lower Upper

43 100

70 78.0 34.4 51.6#

55 191.8 19.1 28.7#

61 0.0 19.7 29.5#



#75

1,1,2,2-Tetrachloroethane

Concen: 0.286 ug/l

RT: 11.18 min Scan# 1688

Delta R.T. -0.09 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

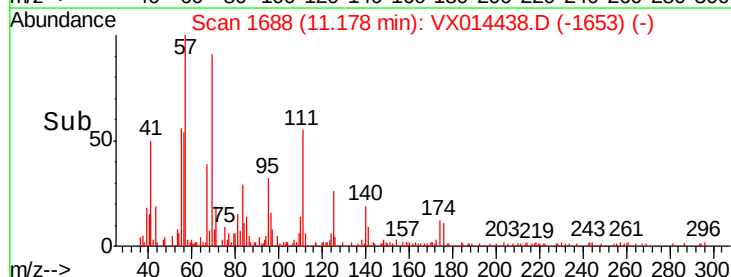
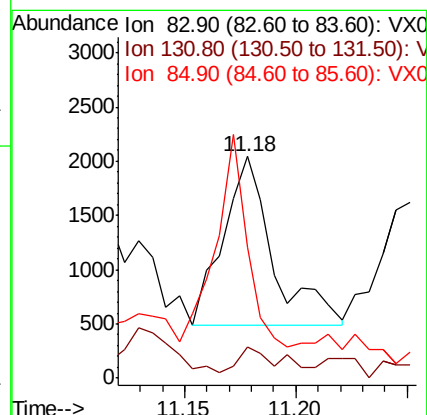
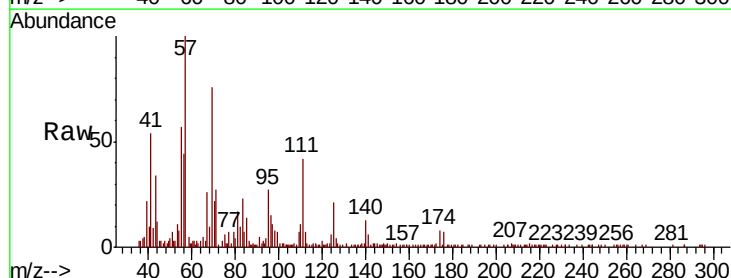
Tgt Ion: 83 Resp: 2406

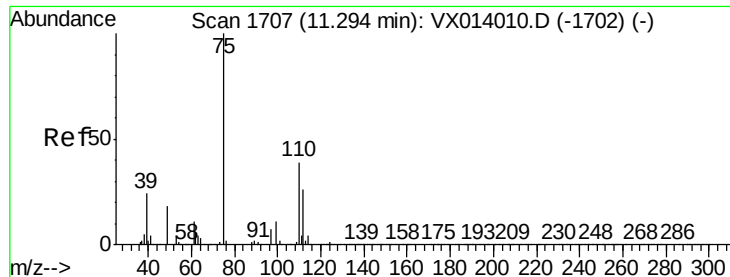
Ion Ratio Lower Upper

83 100

131 11.8 5.1 15.2

85 80.7 31.9 95.7

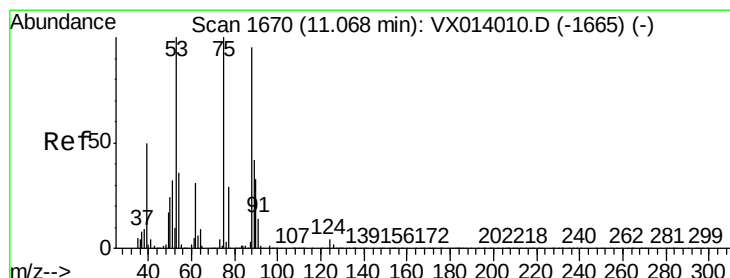
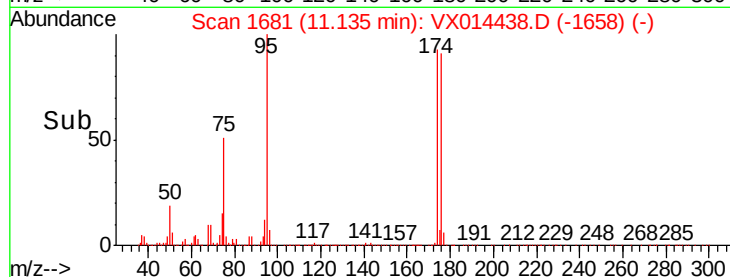
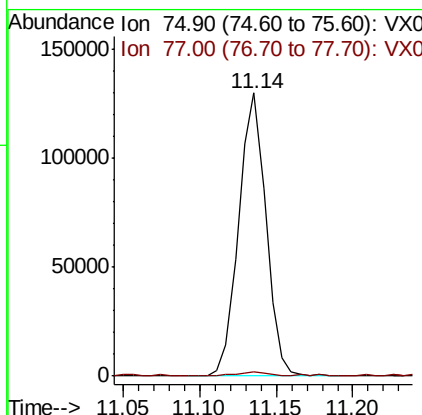
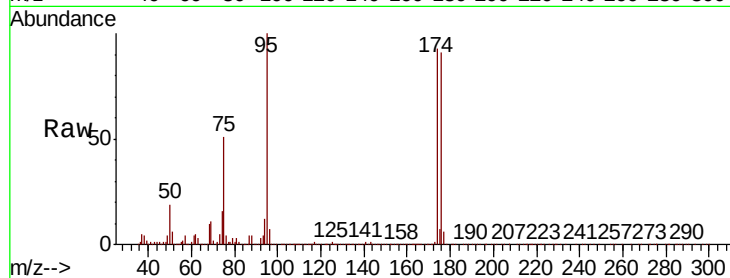




#76  
 1,2,3-Trichloropropane  
 Concen: 21.485 ug/l  
 RT: 11.14 min Scan# 1681  
 Delta R.T. -0.16 min  
 Lab File: VX014438.D  
 Acq: 06 Jan 2020 19:25

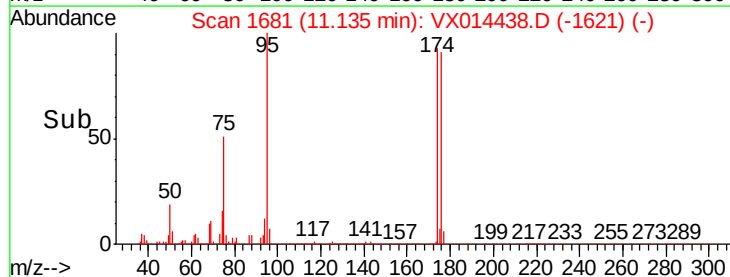
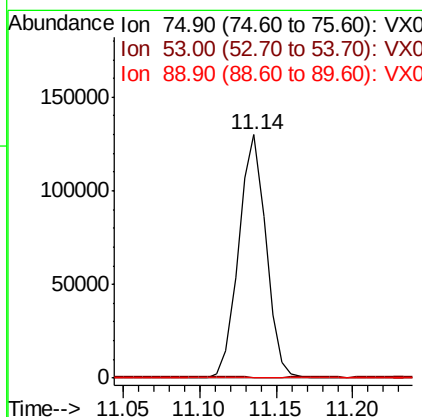
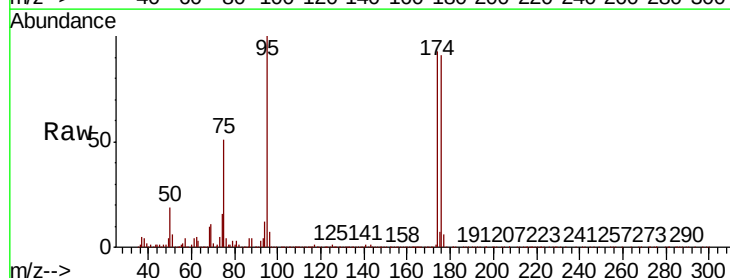
Instrument :  
 MSVOA\_X  
 ClientSampleId :

Tot Ion: 75 Resp: 160788  
 Ion Ratio Lower Upper  
 75 100  
 77 1.5 19.3 57.8#

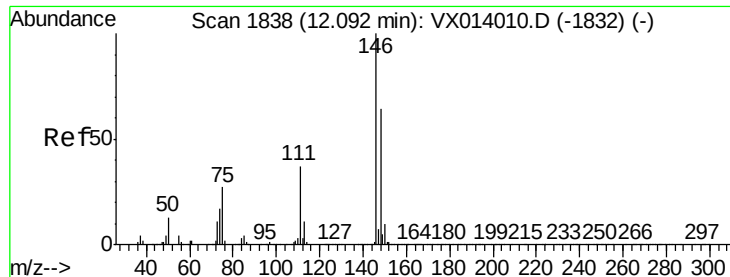


#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 60.641 ug/l  
 RT: 11.14 min Scan# 1681  
 Delta R.T. 0.07 min  
 Lab File: VX014438.D  
 Acq: 06 Jan 2020 19:25

Tgt Ion: 75 Resp: 160788  
 Ion Ratio Lower Upper  
 75 100  
 53 0.3 76.7 115.1#  
 89 0.2 34.6 51.8#







#88

1,4-Dichlorobenzene

Concen: 0.387 ug/l

RT: 12.09 min Scan# 1838

Delta R.T. 0.00 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

Instrument :

MSVOA\_X

ClientSampleId :

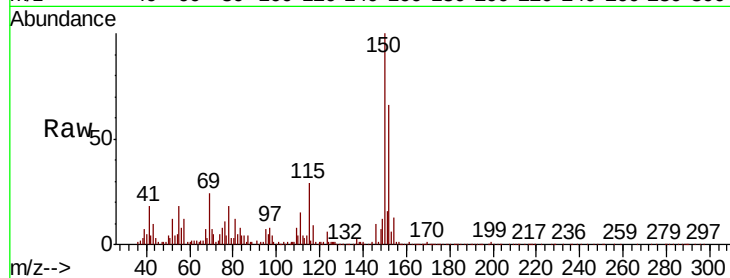
Tot Ion:146 Resp: 4609

Ion Ratio Lower Upper

146 100

111 227.6 18.7 56.1#

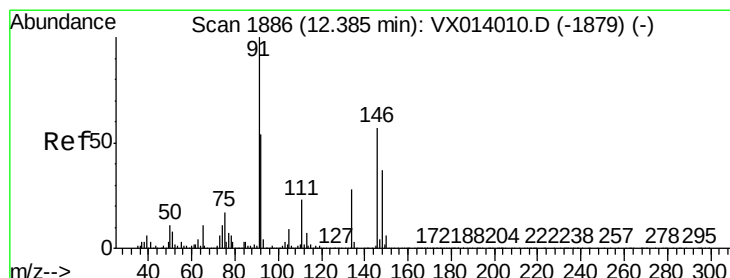
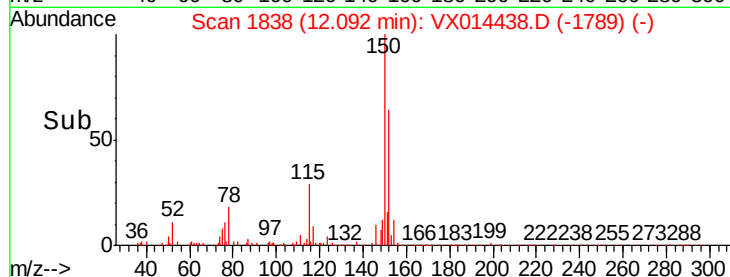
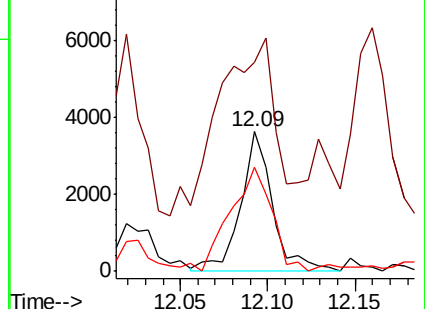
148 97.1 31.9 95.9#



Abundance Ion 145.90 (145.60 to 146.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 147.90 (147.60 to 148.60): V



#91

1,2-Dichlorobenzene

Concen: 0.409 ug/l

RT: 12.39 min Scan# 1886

Delta R.T. 0.00 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

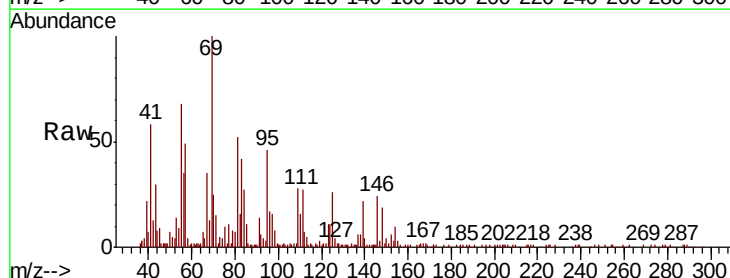
Tgt Ion:146 Resp: 4818

Ion Ratio Lower Upper

146 100

111 64.4 19.7 59.1#

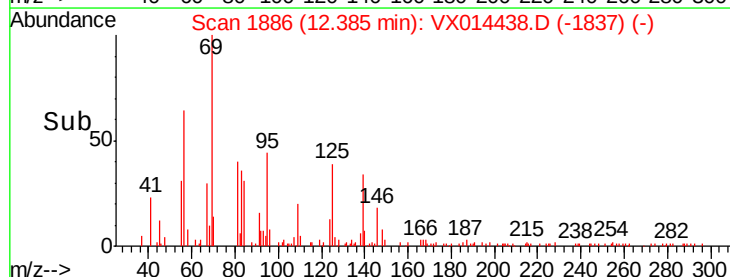
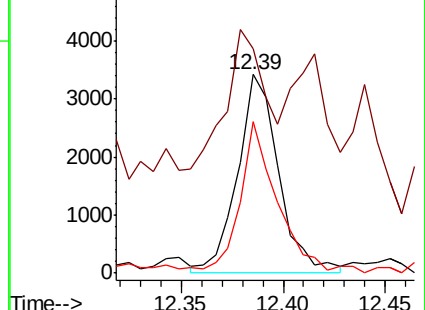
148 68.8 32.1 96.5

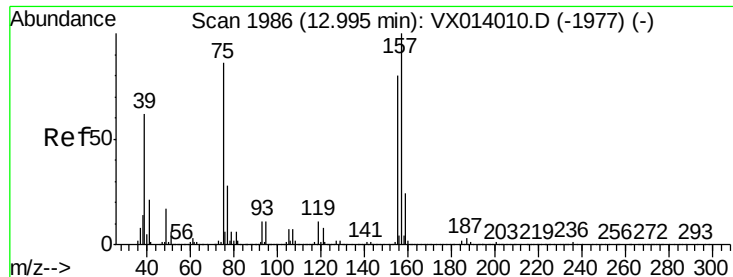


Abundance Ion 145.90 (145.60 to 146.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 147.90 (147.60 to 148.60): V





#92

1,2-Dibromo-3-Chloropropane

Concen: 0.231 ug/l

RT: 13.17 min Scan# 2014

Delta R.T. 0.17 min

Lab File: VX014438.D

Acq: 06 Jan 2020 19:25

Instrument :

MSVOA\_X

ClientSampleId :

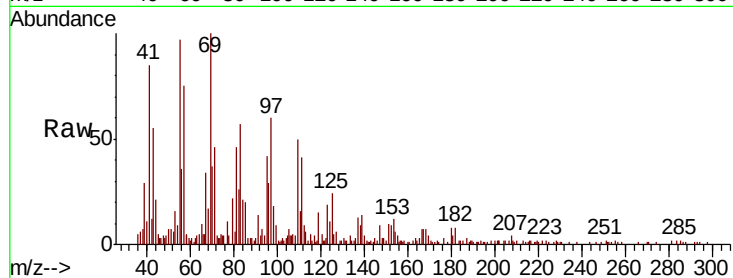
Tot Ion: 75 Resp: 430

Ion Ratio Lower Upper

75 100

155 57.9 46.9 140.6

157 70.5 60.8 182.4



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

