

Data File : VX011311.D  
Acq On : 02 Aug 2019 17:40  
Operator : JC/SP  
Sample : K4119-03  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
Z3-0678

Quant Time: Aug 03 05:45:27 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X080119W.M  
Quant Title : SW846 8260  
QLast Update : Fri Aug 02 01:55:00 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 142789   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 228826   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 217874   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 99686    | 50.00 | ug/l  | 0.00     |

System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 76002    | 52.85 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.70% |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 73609    | 49.27 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.54%  |      |
| 50) Toluene-d8            | 8.71   | 98  | 281069   | 49.84 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.68%  |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 94046    | 46.71 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 93.42%  |      |

Target Compounds

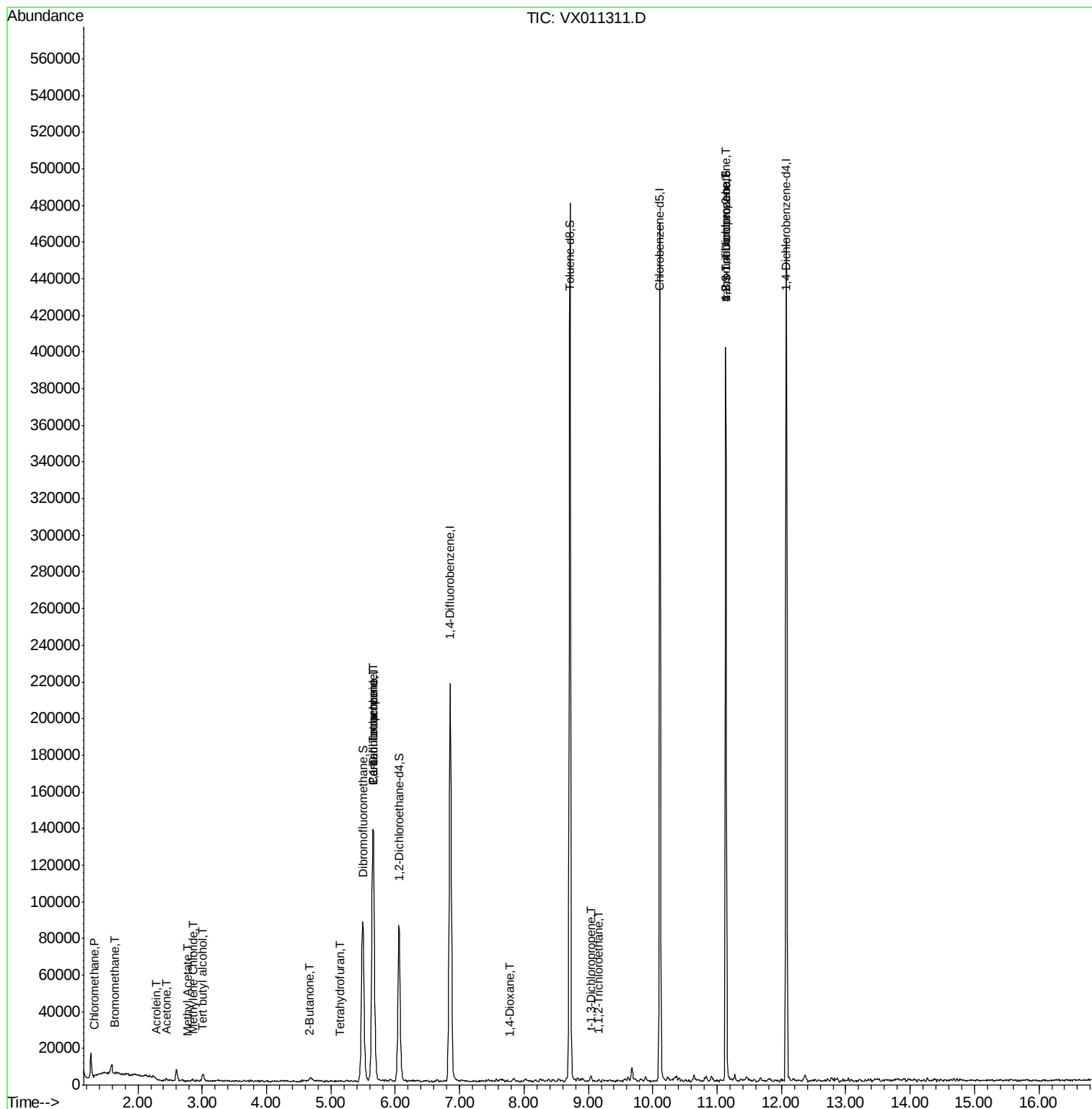
|                                |       |     |       |           |        | Qvalue |
|--------------------------------|-------|-----|-------|-----------|--------|--------|
| 3) Chloromethane               | 1.32  | 50  | 502   | 0.405     | ug/l # | 75     |
| 5) Bromomethane                | 1.65  | 94  | 611   | 0.629     | ug/l # | 67     |
| 6) Chloroethane                | 1.73  | 64  | 364   | Below Cal | #      | 50     |
| 11) Tert butyl alcohol         | 3.00  | 59  | 2098  | 7.339     | ug/l # | 80     |
| 13) Acrolein                   | 2.29  | 56  | 224   | 0.836     | ug/l # | 82     |
| 16) Acetone                    | 2.44  | 43  | 1790  | 2.615     | ug/l # | 85     |
| 18) Methyl Acetate             | 2.78  | 43  | 431   | 0.276     | ug/l # | 60     |
| 20) Methylene Chloride         | 2.86  | 84  | 380   | 0.254     | ug/l # | 64     |
| 25) 2-Butanone                 | 4.66  | 43  | 353   | 0.363     | ug/l # | 46     |
| 29) Tetrahydrofuran            | 5.13  | 42  | 366   | 0.613     | ug/l # | 56     |
| 36) 1,1-Dichloropropene        | 5.66  | 75  | 9253  | 4.631     | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 5.66  | 117 | 13019 | 6.477     | ug/l # | 14     |
| 49) 1,4-Dioxane                | 7.78  | 88  | 27    | 0.618     | ug/l # | 1      |
| 53) t-1,3-Dichloropropene      | 9.05  | 75  | 39    | 2.855     | ug/l # | 1      |
| 55) 1,1,2-Trichloroethane      | 9.16  | 97  | 354   | 0.218     | ug/l # | 16     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75  | 46821 | 25.791    | ug/l # | 36     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75  | 46821 | 67.160    | ug/l # | 10     |

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

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Quant Time: Aug 03 05:45:27 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X080119W.M  
Quant Title : SW846 8260  
QLast Update : Fri Aug 02 01:55:00 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.66 min Scan# 739

Delta R.T. 0.01 min

Lab File: VX011311.D

Acq: 02 Aug 2019 17:40

Instrument :

MSVOA\_X

ClientSampleId :

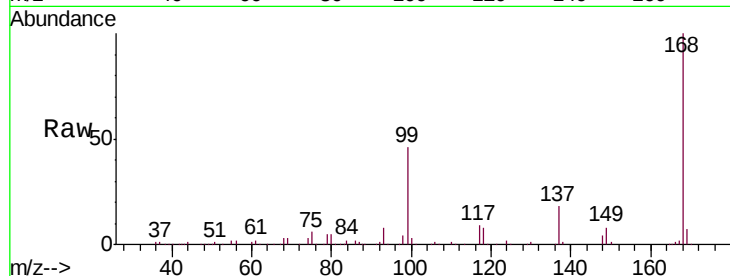
Z3-0678

Tgt Ion:168 Resp: 142789

Ion Ratio Lower Upper

168 100

99 45.4 38.5 57.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.66

60000

50000

40000

30000

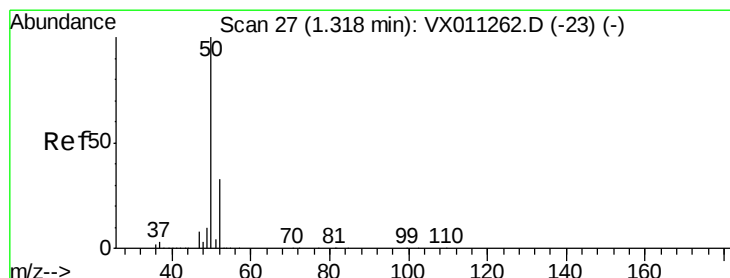
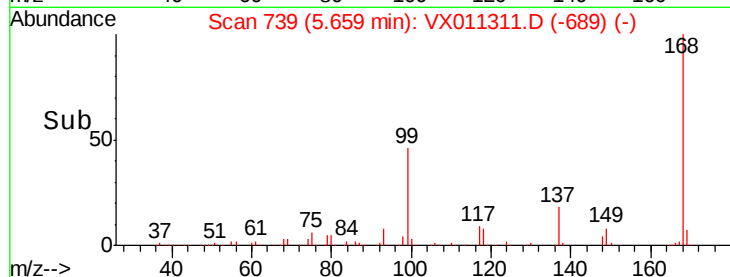
20000

10000

0

Time-->

5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: 0.405 ug/l

RT: 1.32 min Scan# 27

Delta R.T. -0.00 min

Lab File: VX011311.D

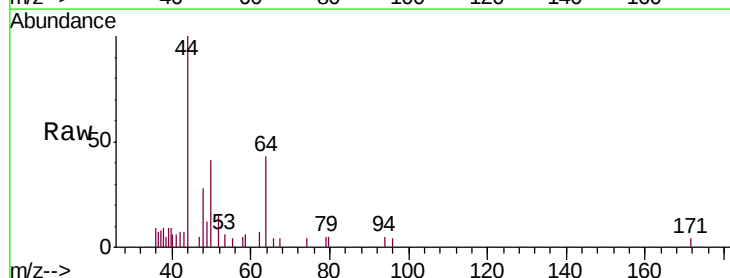
Acq: 02 Aug 2019 17:40

Tgt Ion: 50 Resp: 502

Ion Ratio Lower Upper

50 100

52 18.9 26.4 39.6#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

600

500

400

300

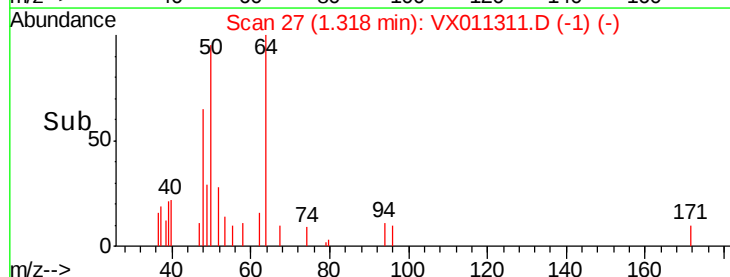
200

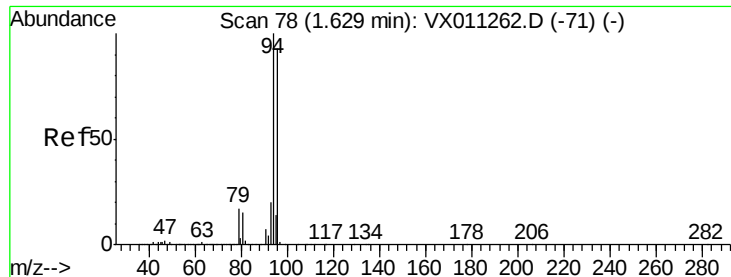
100

0

Time-->

1.28 1.30 1.32 1.34 1.36





#5

Bromomethane

Concen: 0.629 ug/l

RT: 1.65 min Scan# 81

Delta R.T. 0.02 min

Lab File: VX011311.D

Acq: 02 Aug 2019 17:40

Instrument :

MSVOA\_X

ClientSampled :

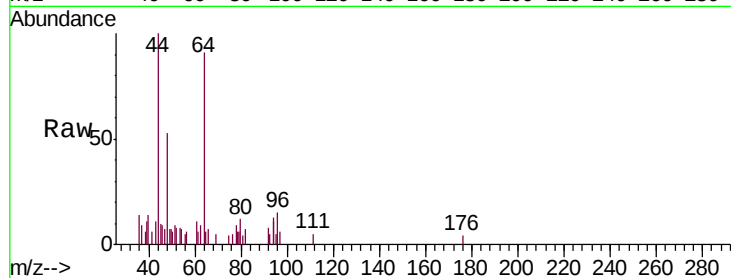
Z3-0678

Tgt Ion: 94 Resp: 611

Ion Ratio Lower Upper

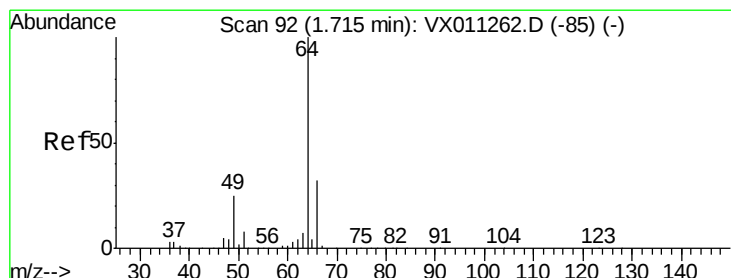
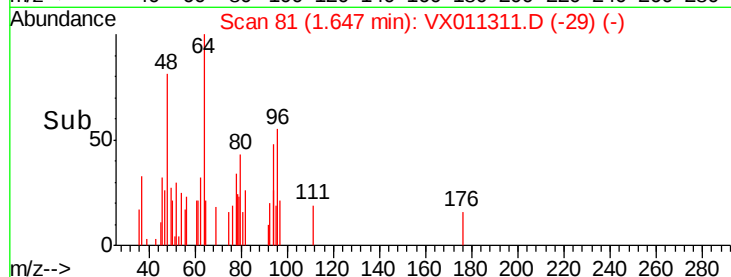
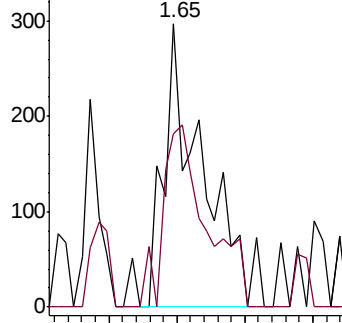
94 100

96 61.3 74.6 112.0#



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# 95

Delta R.T. 0.02 min

Lab File: VX011311.D

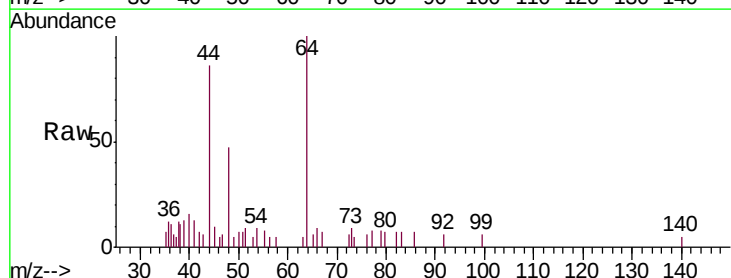
Acq: 02 Aug 2019 17:40

Tgt Ion: 64 Resp: 364

Ion Ratio Lower Upper

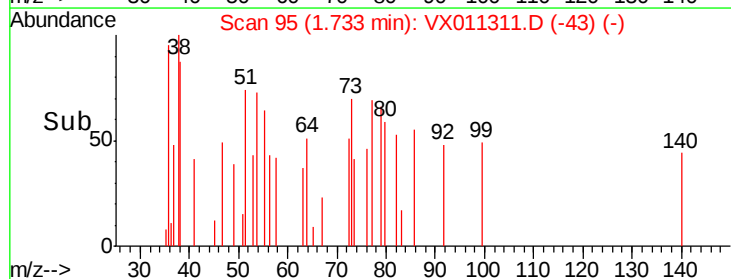
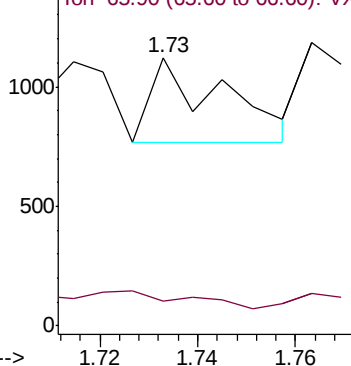
64 100

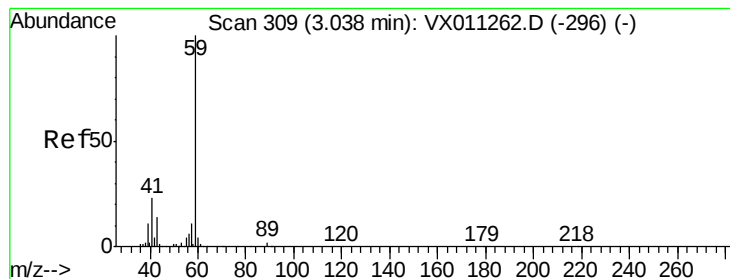
66 3.7 25.1 37.7#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0



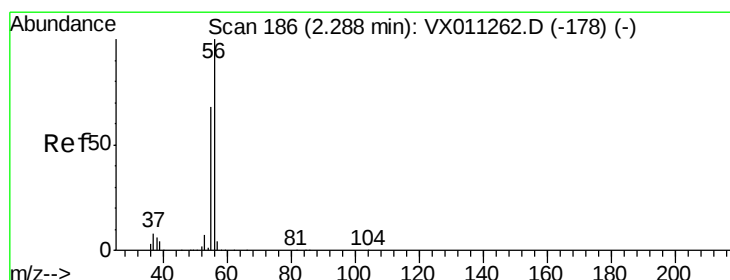
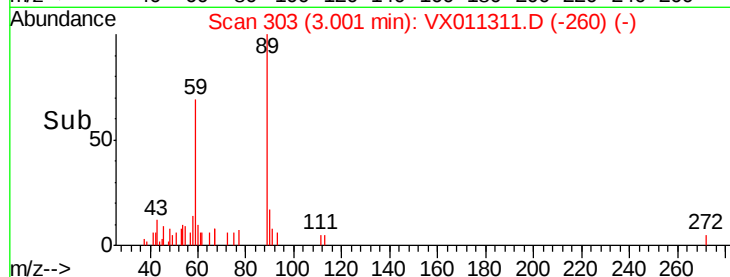
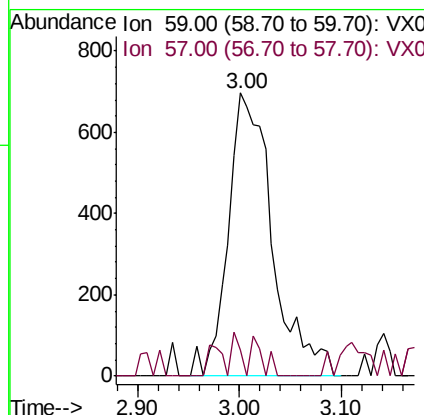
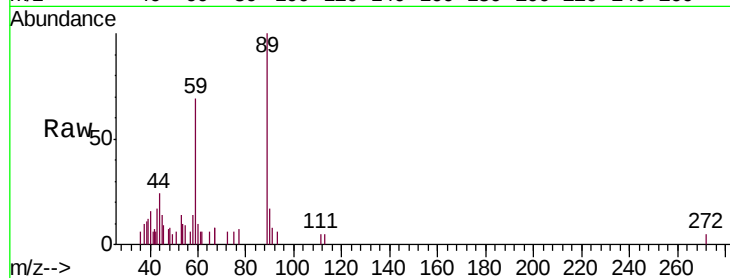


#11

Tert butyl alcohol  
 Concen: 7.339 ug/l  
 RT: 3.00 min Scan# 303  
 Delta R.T. -0.04 min  
 Lab File: VX011311.D  
 Acq: 02 Aug 2019 17:40

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 Z3-0678

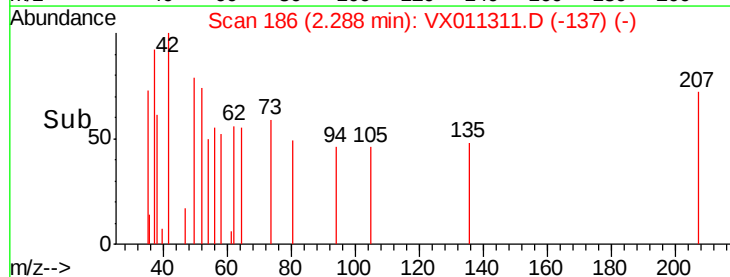
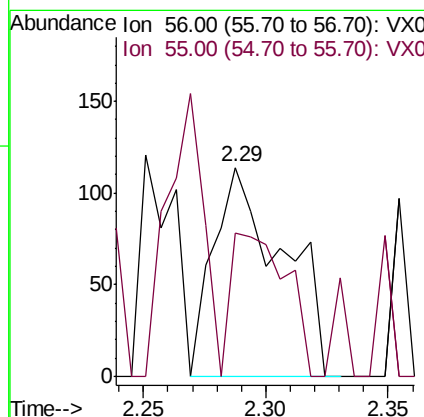
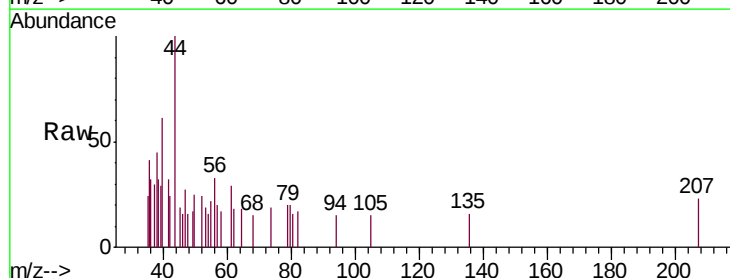
Tgt Ion: 59 Resp: 2098  
 Ion Ratio Lower Upper  
 59 100  
 57 3.0 8.3 12.5#

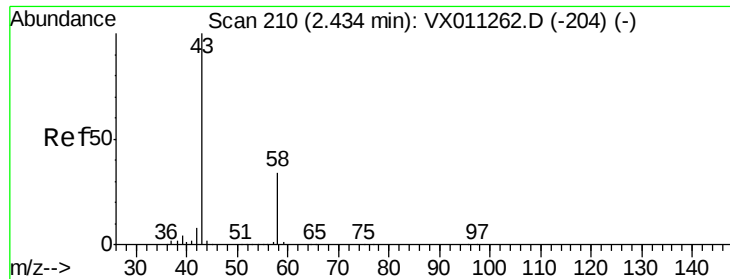


#13

Acrolein  
 Concen: 0.836 ug/l  
 RT: 2.29 min Scan# 186  
 Delta R.T. 0.00 min  
 Lab File: VX011311.D  
 Acq: 02 Aug 2019 17:40

Tgt Ion: 56 Resp: 224  
 Ion Ratio Lower Upper  
 56 100  
 55 54.9 56.0 84.0#





#16

Acetone

Concen: 2.615 ug/l

RT: 2.44 min Scan# 211

Delta R.T. 0.01 min

Lab File: VX011311.D

Acq: 02 Aug 2019 17:40

Instrument :

MSVOA\_X

ClientSampled :

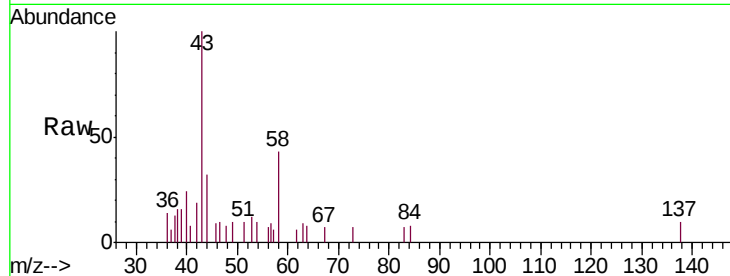
Z3-0678

Tgt Ion: 43 Resp: 1790

Ion Ratio Lower Upper

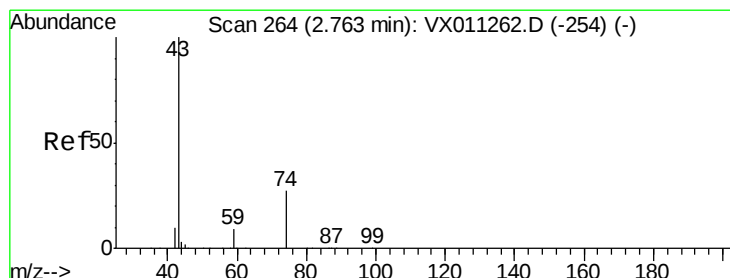
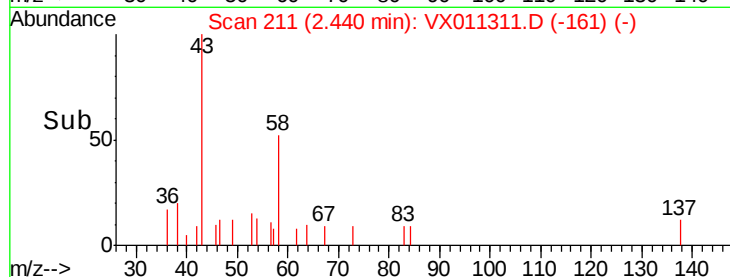
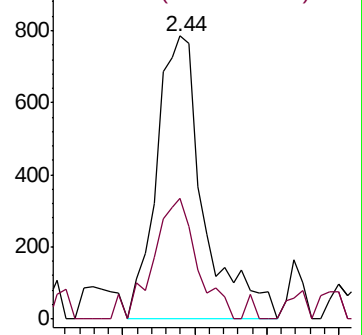
43 100

58 42.7 27.4 41.0#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#18

Methyl Acetate

Concen: 0.276 ug/l

RT: 2.78 min Scan# 266

Delta R.T. 0.01 min

Lab File: VX011311.D

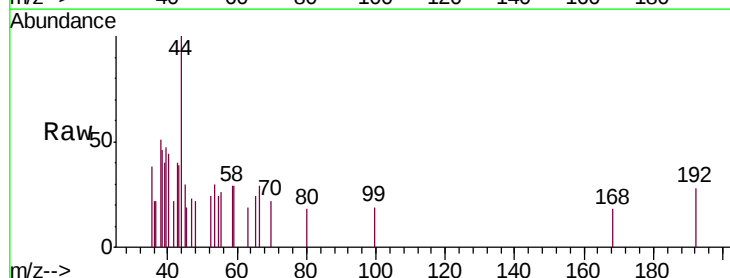
Acq: 02 Aug 2019 17:40

Tgt Ion: 43 Resp: 431

Ion Ratio Lower Upper

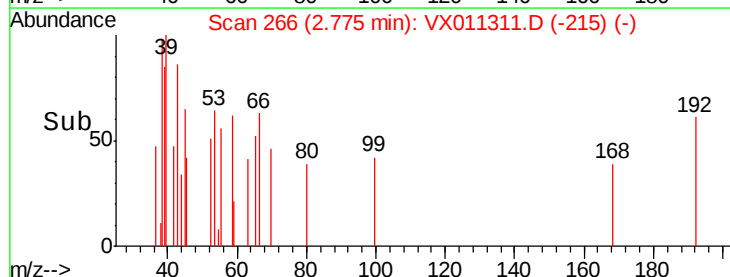
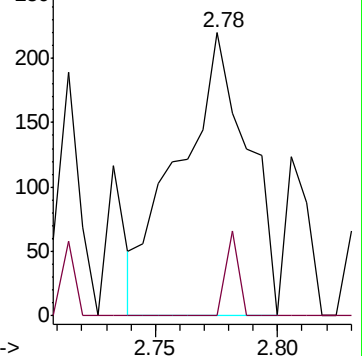
43 100

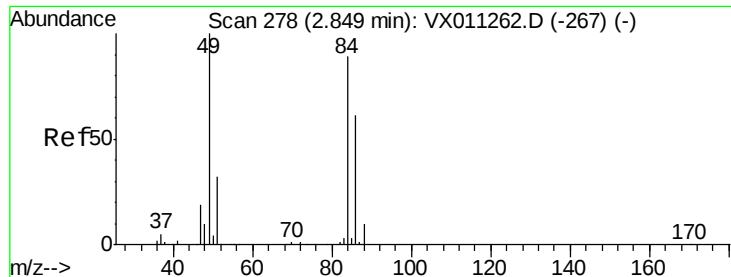
74 5.6 21.0 31.6#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 74.00 (73.70 to 74.70): VX0

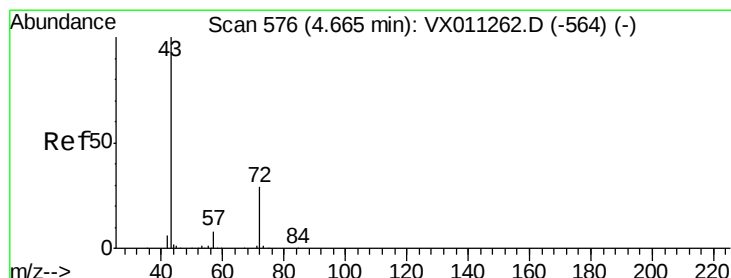
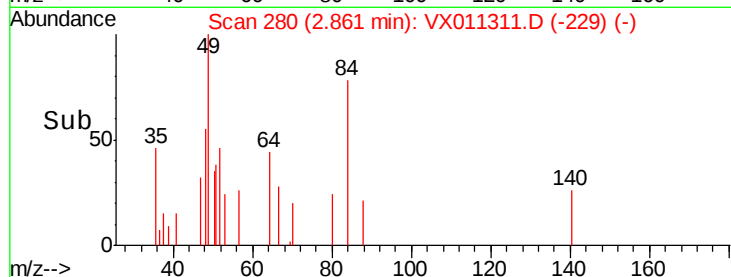
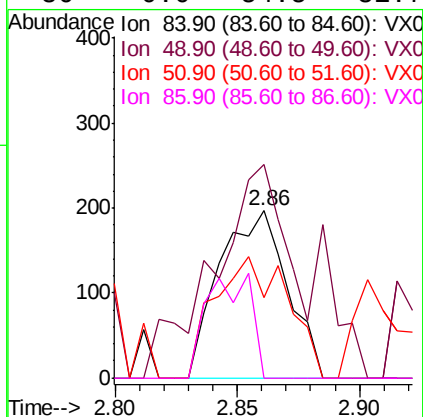
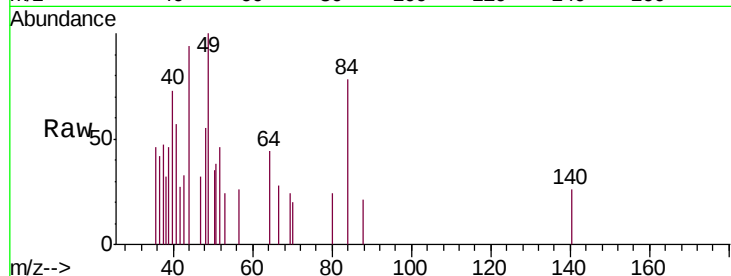




#20  
Methylene Chloride  
Concen: 0.254 ug/l  
RT: 2.86 min Scan# 280  
Delta R.T. 0.01 min  
Lab File: VX011311.D  
Acq: 02 Aug 2019 17:40

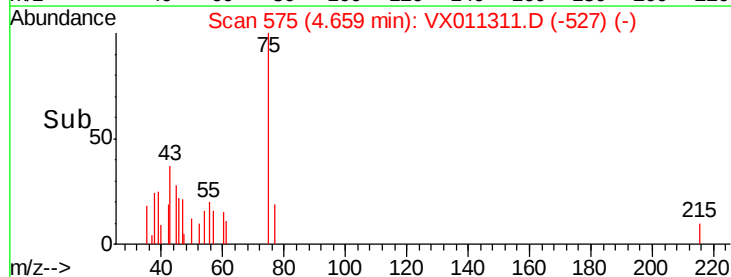
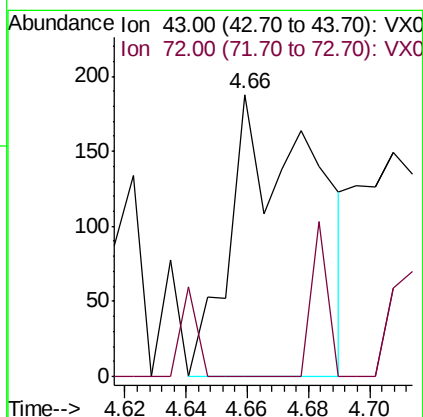
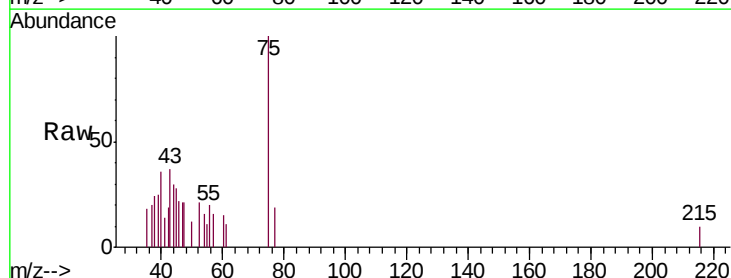
Instrument :  
MSVOA\_X  
ClientSampleId :  
Z3-0678

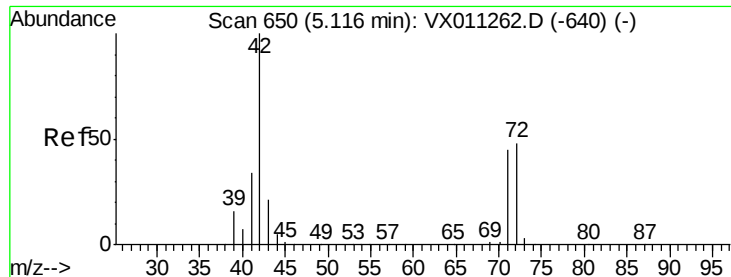
Tgt Ion: 84 Resp: 380  
Ion Ratio Lower Upper  
84 100  
49 100.5 89.3 133.9  
51 48.2 28.3 42.5#  
86 0.0 54.5 81.7#



#25  
2-Butanone  
Concen: 0.363 ug/l  
RT: 4.66 min Scan# 575  
Delta R.T. -0.01 min  
Lab File: VX011311.D  
Acq: 02 Aug 2019 17:40

Tgt Ion: 43 Resp: 353  
Ion Ratio Lower Upper  
43 100  
72 0.0 23.2 34.8#





#29

Tetrahydrofuran

Concen: 0.613 ug/l

RT: 5.13 min Scan# 652

Delta R.T. 0.01 min

Lab File: VX011311.D

Acq: 02 Aug 2019 17:40

Instrument :

MSVOA\_X

ClientSampled :

Z3-0678

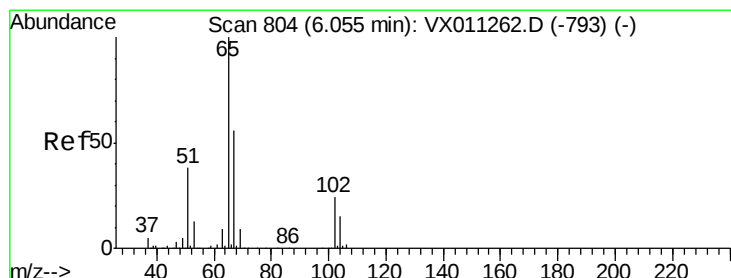
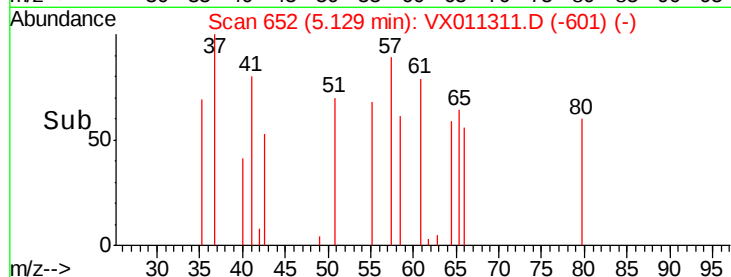
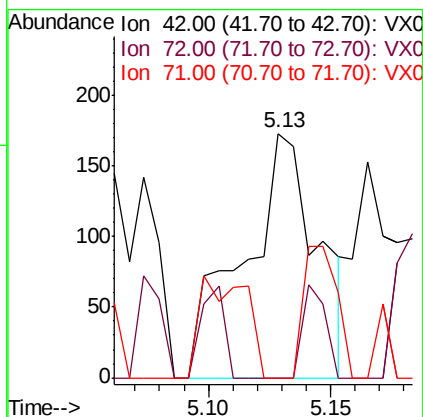
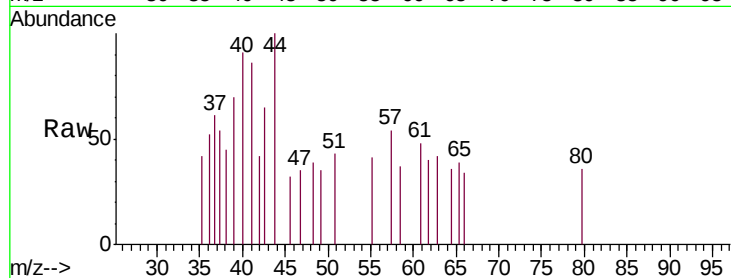
Tgt Ion: 42 Resp: 366

Ion Ratio Lower Upper

42 100

72 11.7 39.9 59.9#

71 24.6 36.9 55.3#



#33

1,2-Dichloroethane-d4

Concen: 52.854 ug/l

RT: 6.06 min Scan# 804

Delta R.T. -0.00 min

Lab File: VX011311.D

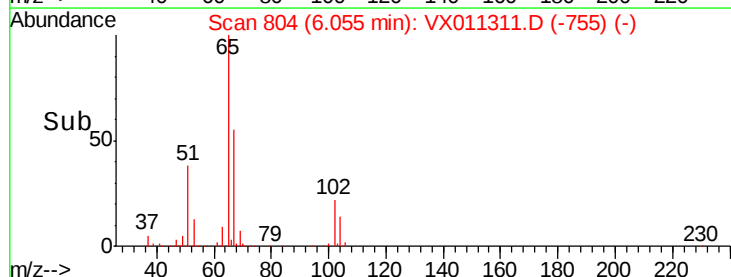
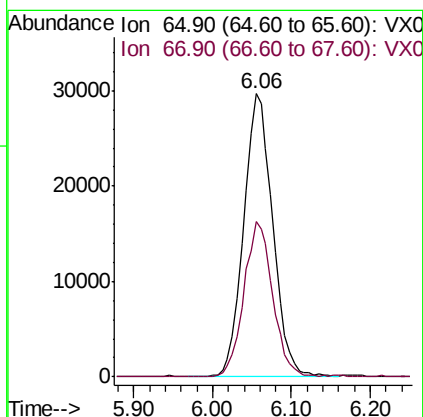
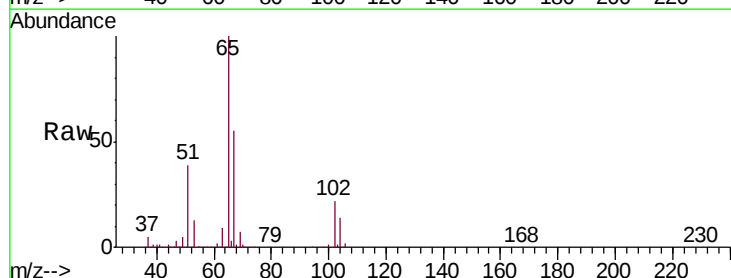
Acq: 02 Aug 2019 17:40

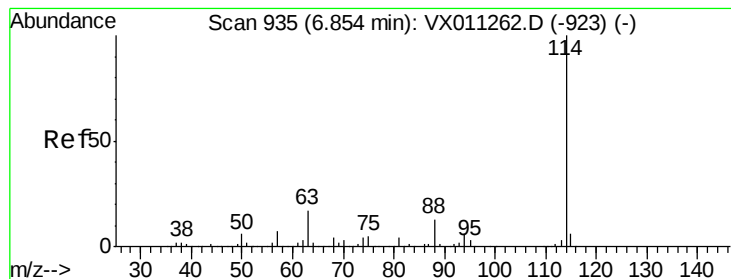
Tgt Ion: 65 Resp: 76002

Ion Ratio Lower Upper

65 100

67 54.3 0.0 110.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.85 min Scan# 935

Delta R.T. -0.00 min

Lab File: VX011311.D

Acq: 02 Aug 2019 17:40

Instrument :

MSVOA\_X

ClientSampleId :

Z3-0678

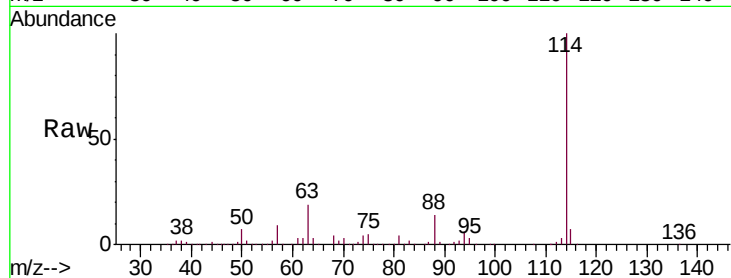
Tgt Ion:114 Resp: 228826

Ion Ratio Lower Upper

114 100

63 18.6 0.0 34.0

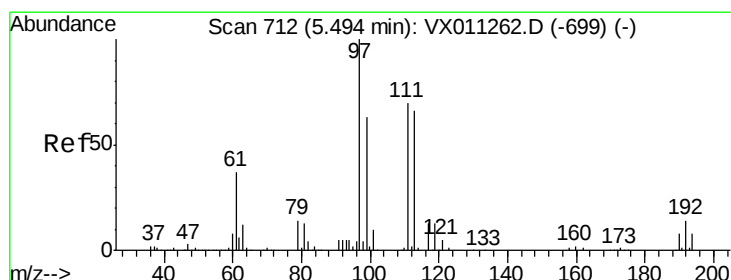
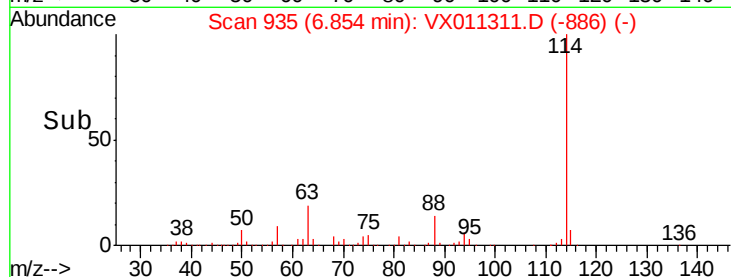
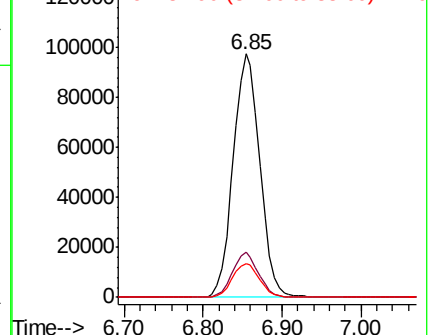
88 14.1 0.0 26.4



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: 49.271 ug/l

RT: 5.49 min Scan# 712

Delta R.T. -0.00 min

Lab File: VX011311.D

Acq: 02 Aug 2019 17:40

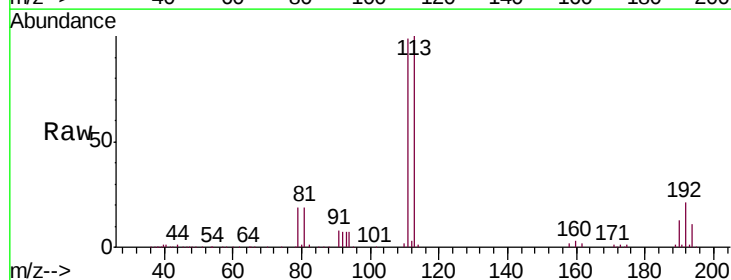
Tgt Ion:113 Resp: 73609

Ion Ratio Lower Upper

113 100

111 100.6 81.9 122.9

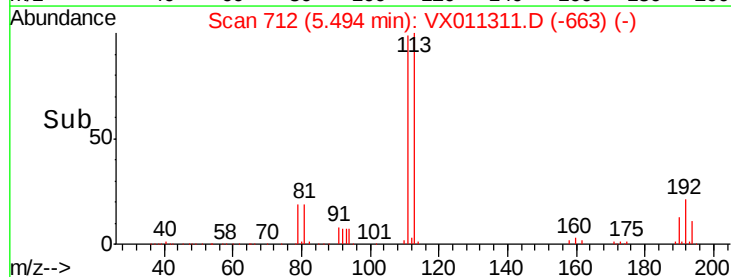
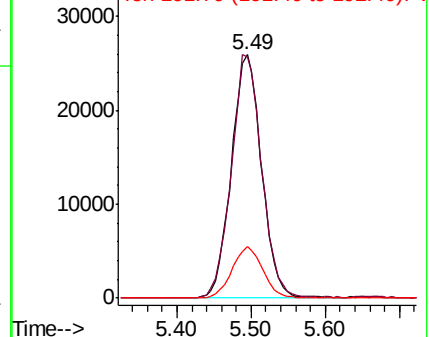
192 21.4 17.8 26.8

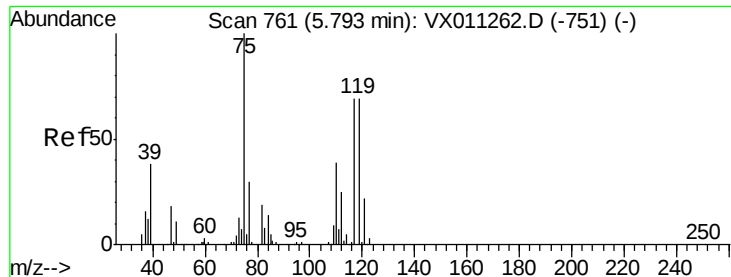


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

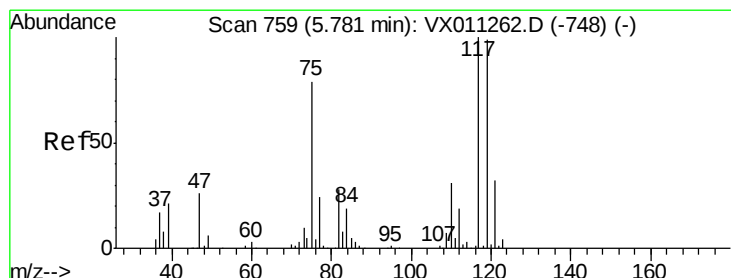
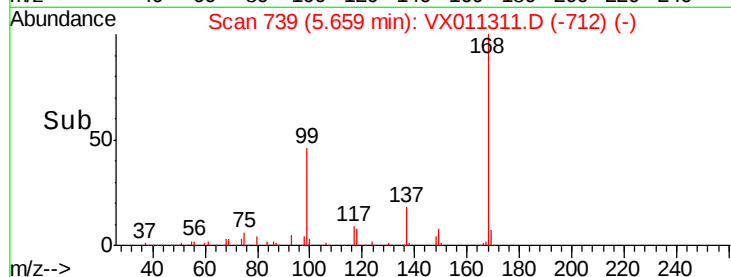
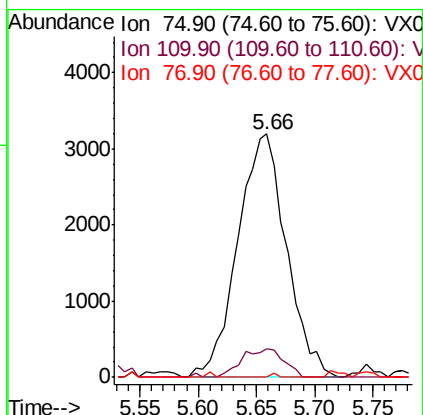
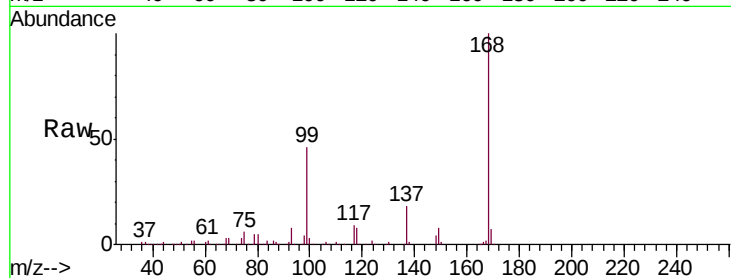




#36  
 1,1-Dichloropropene  
 Concen: 4.631 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.13 min  
 Lab File: VX011311.D  
 Acq: 02 Aug 2019 17:40

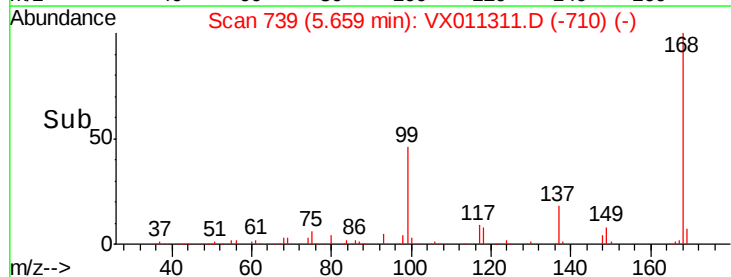
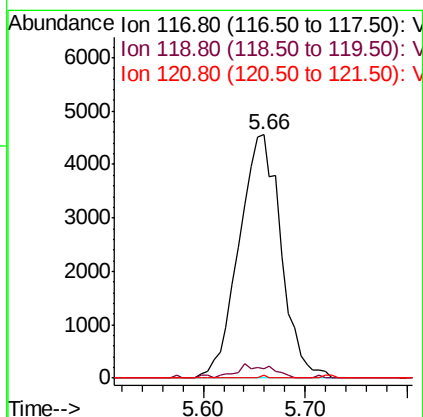
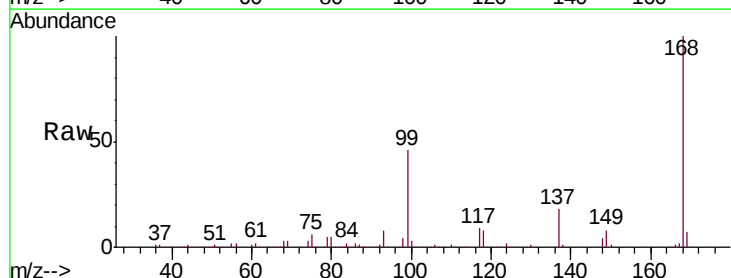
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 Z3-0678

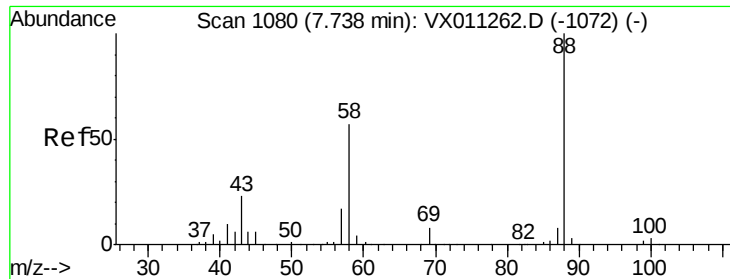
Tgt Ion: 75 Resp: 9253  
 Ion Ratio Lower Upper  
 75 100  
 110 10.2 20.0 59.9#  
 77 0.2 24.8 37.2#



#38  
 Carbon Tetrachloride  
 Concen: 6.477 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.12 min  
 Lab File: VX011311.D  
 Acq: 02 Aug 2019 17:40

Tgt Ion: 117 Resp: 13019  
 Ion Ratio Lower Upper  
 117 100  
 119 3.9 79.0 118.4#  
 121 1.2 25.9 38.9#

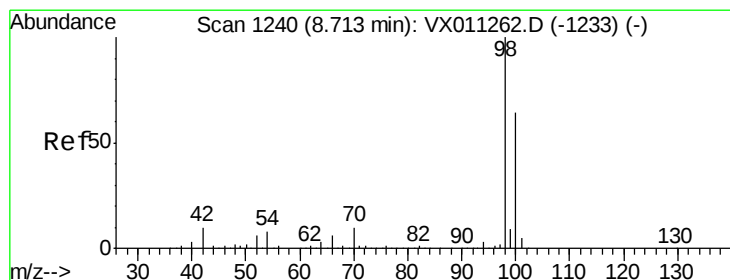
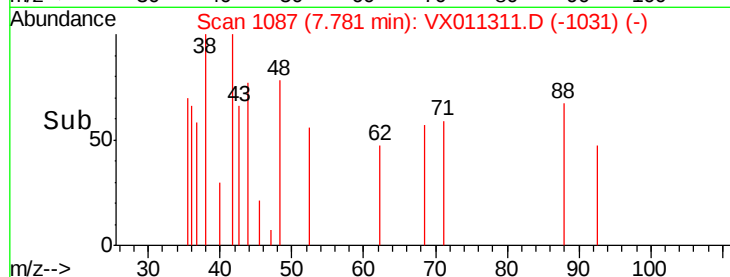
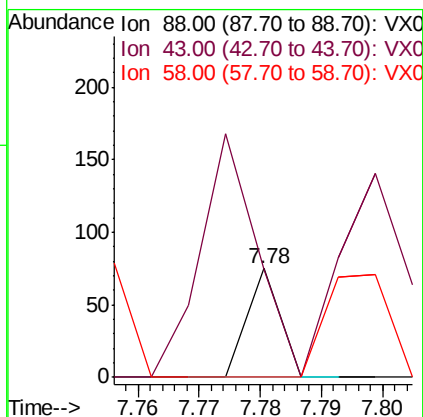
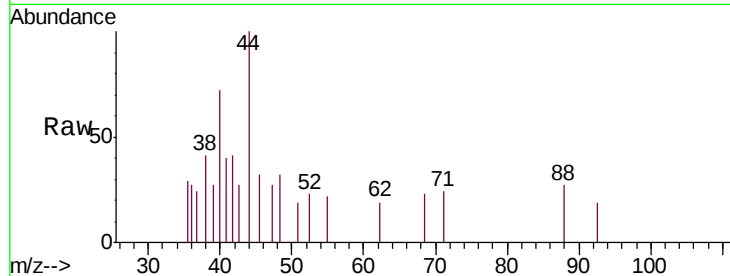




#49  
1,4-Dioxane  
Concen: 0.618 ug/l  
RT: 7.78 min Scan# 1087  
Delta R.T. 0.04 min  
Lab File: VX011311.D  
Acq: 02 Aug 2019 17:40

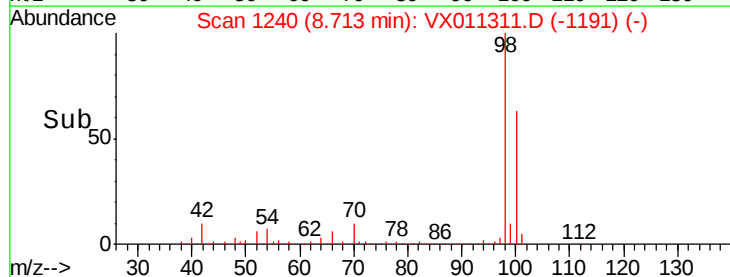
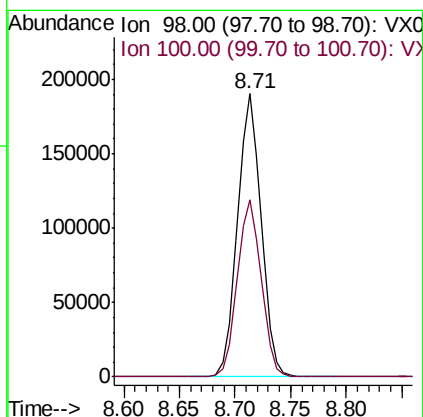
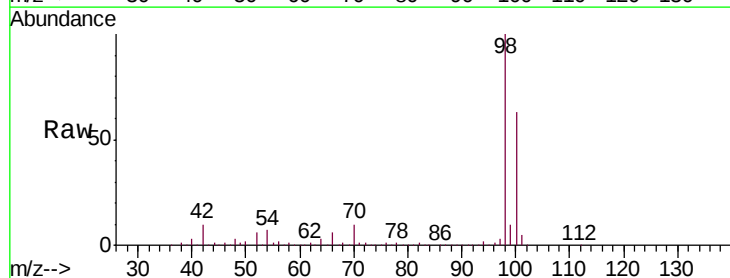
Instrument :  
MSVOA\_X  
ClientSampleId :  
Z3-0678

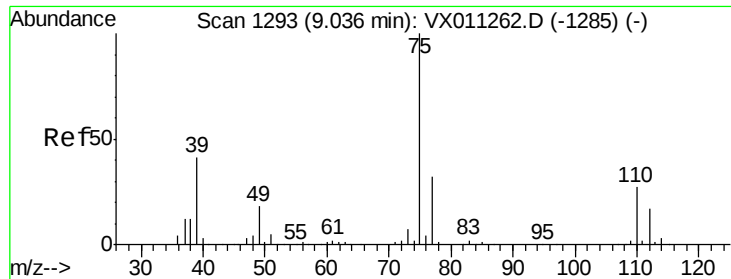
Tgt Ion: 88 Resp: 27  
Ion Ratio Lower Upper  
88 100  
43 396.3 22.2 33.2#  
58 0.0 47.8 71.8#



#50  
Toluene-d8  
Concen: 49.842 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. -0.00 min  
Lab File: VX011311.D  
Acq: 02 Aug 2019 17:40

Tgt Ion: 98 Resp: 281069  
Ion Ratio Lower Upper  
98 100  
100 63.1 51.7 77.5





#53

t-1,3-Dichloropropene

Concen: 2.855 ug/l

RT: 9.05 min Scan# 1295

Delta R.T. 0.01 min

Lab File: VX011311.D

Acq: 02 Aug 2019 17:40

Instrument :

MSVOA\_X

ClientSampled :

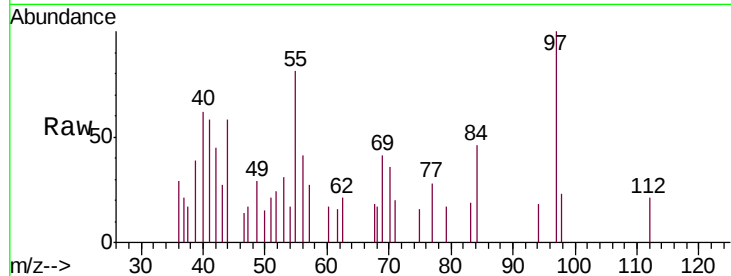
Z3-0678

Tgt Ion: 75 Resp: 39

Ion Ratio Lower Upper

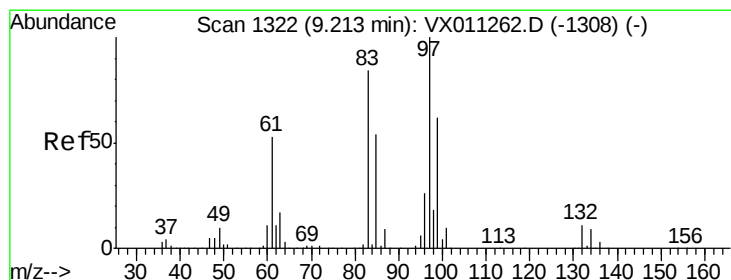
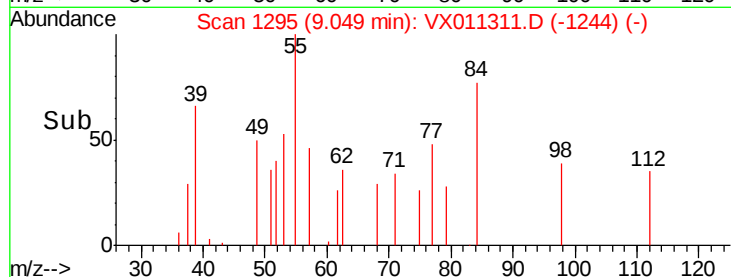
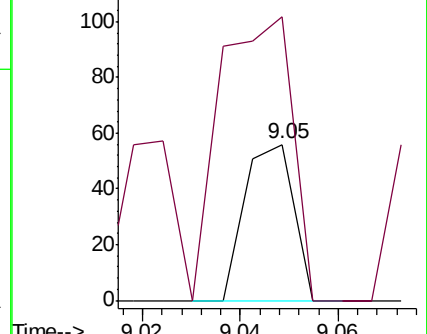
75 100

77 182.1 25.4 38.0#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 76.90 (76.60 to 77.60): VX0



#55

1,1,2-Trichloroethane

Concen: 0.218 ug/l

RT: 9.16 min Scan# 1314

Delta R.T. -0.05 min

Lab File: VX011311.D

Acq: 02 Aug 2019 17:40

Tgt Ion: 97 Resp: 354

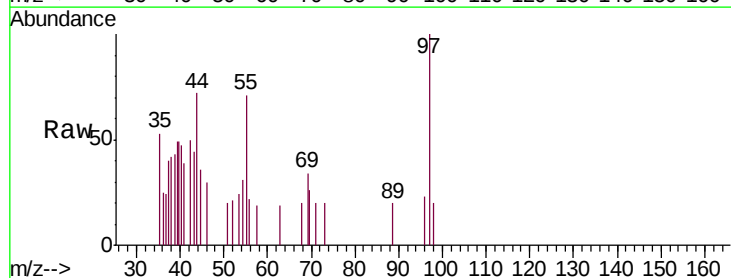
Ion Ratio Lower Upper

97 100

83 0.0 67.6 101.4#

85 0.0 43.4 65.0#

99 0.0 49.6 74.4#

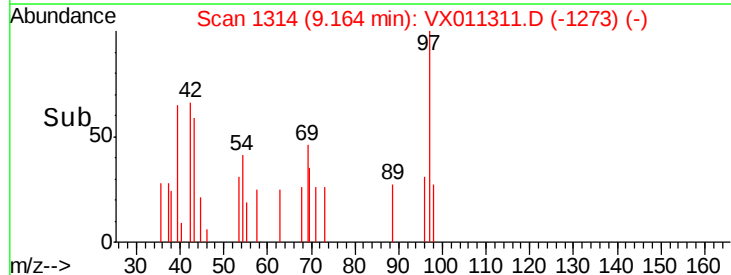
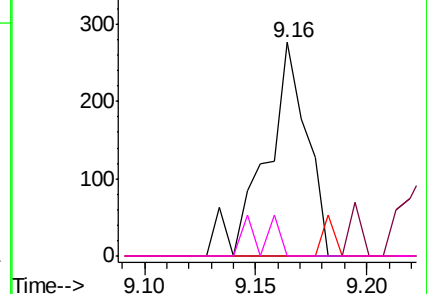


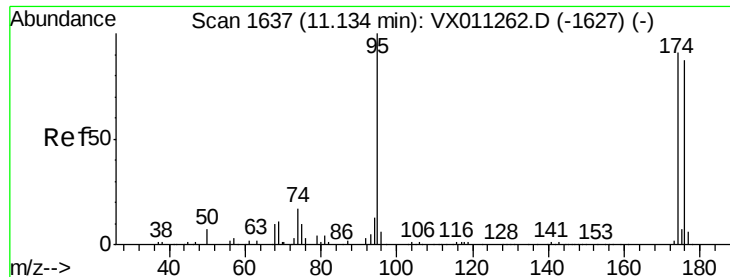
Abundance Ion 96.90 (96.60 to 97.60): VX0

Ion 82.90 (82.60 to 83.60): VX0

Ion 84.90 (84.60 to 85.60): VX0

Ion 98.90 (98.60 to 99.60): VX0

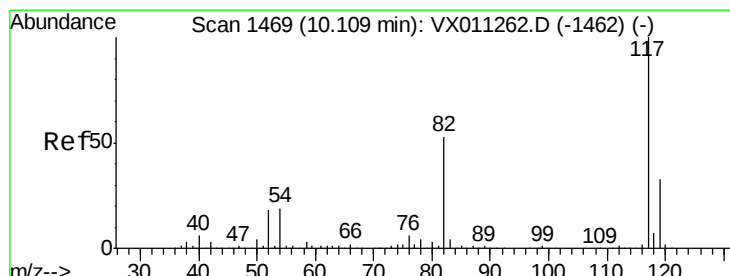
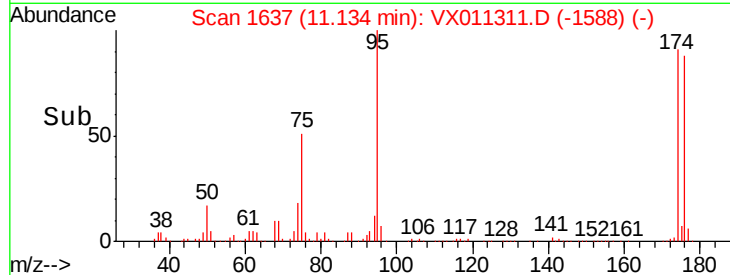
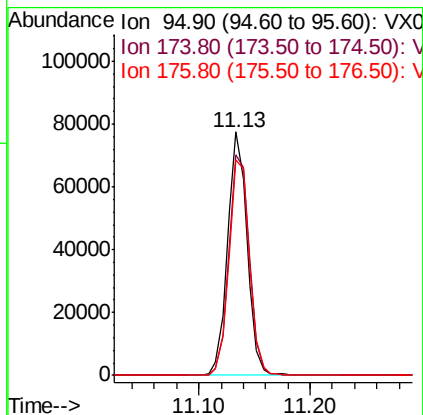
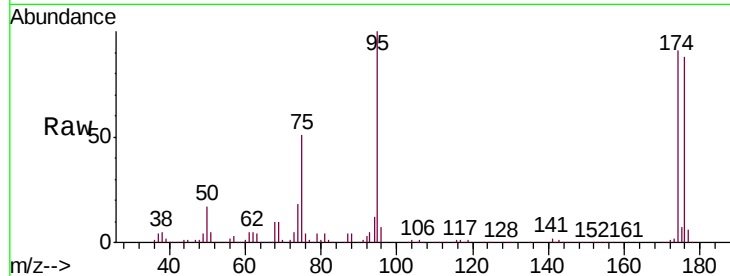




#62  
4-Bromofluorobenzene  
Concen: 46.711 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. -0.00 min  
Lab File: VX011311.D  
Acq: 02 Aug 2019 17:40

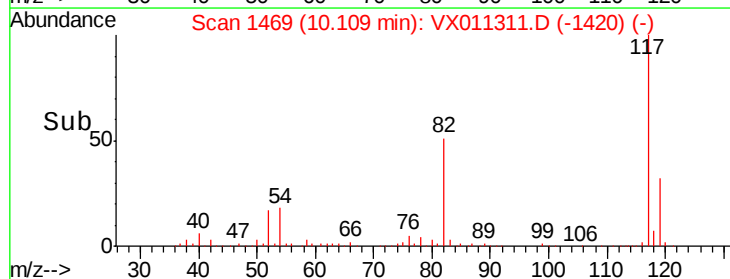
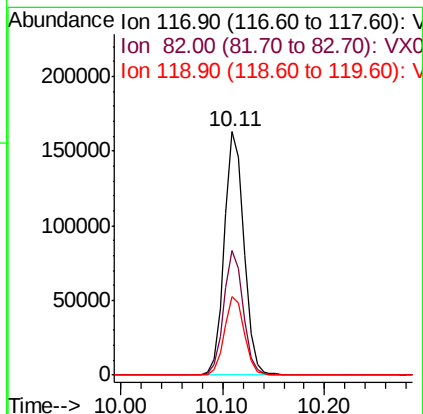
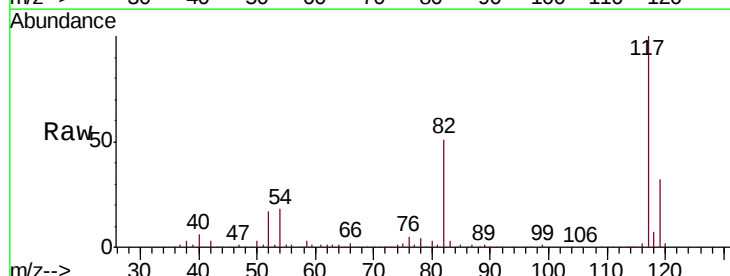
Instrument :  
MSVOA\_X  
ClientSampled :  
Z3-0678

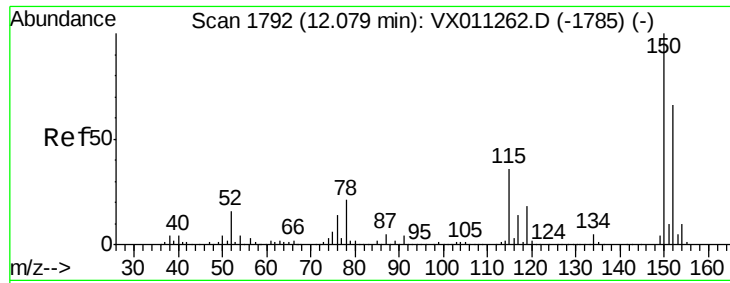
Tgt Ion: 95 Resp: 94046  
Ion Ratio Lower Upper  
95 100  
174 95.3 0.0 191.2  
176 92.5 0.0 184.8



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1469  
Delta R.T. -0.00 min  
Lab File: VX011311.D  
Acq: 02 Aug 2019 17:40

Tgt Ion: 117 Resp: 217874  
Ion Ratio Lower Upper  
117 100  
82 51.0 42.2 63.2  
119 32.2 26.6 39.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. -0.00 min

Lab File: VX011311.D

Acq: 02 Aug 2019 17:40

Instrument :

MSVOA\_X

ClientSampleId :

Z3-0678

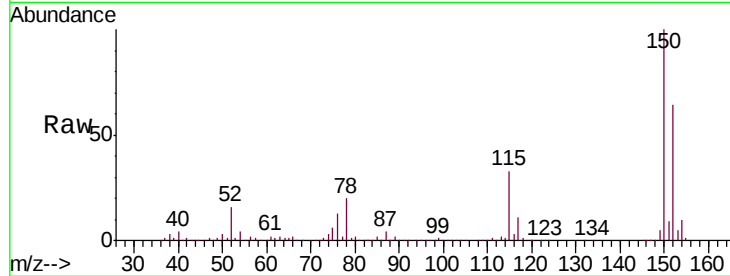
Tgt Ion:152 Resp: 99686

Ion Ratio Lower Upper

152 100

115 54.2 40.0 119.9

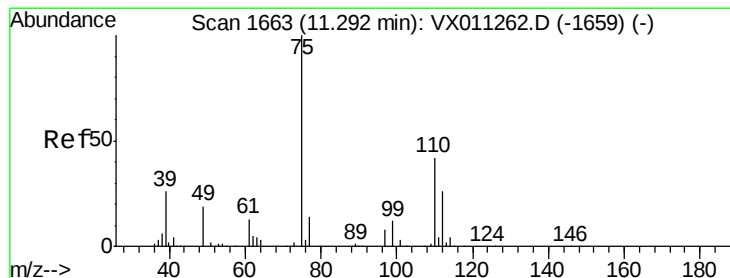
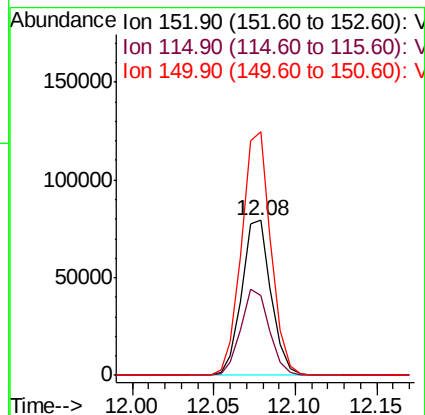
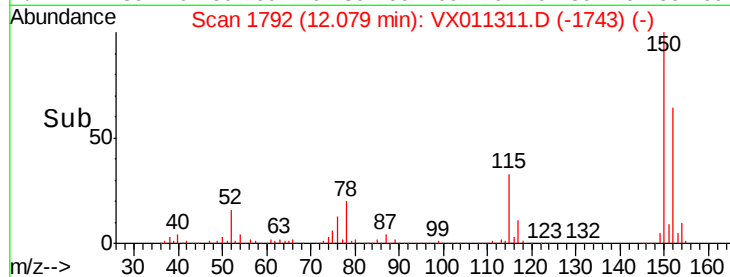
150 156.6 0.0 350.4



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 25.791 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX011311.D

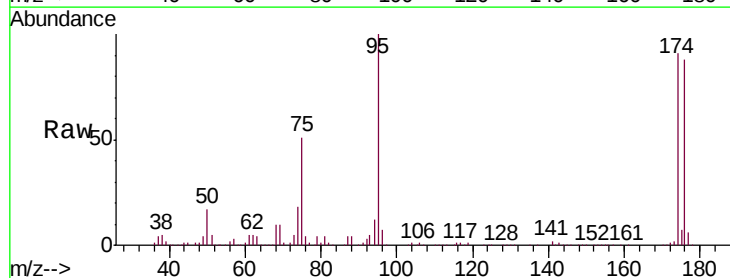
Acq: 02 Aug 2019 17:40

Tgt Ion: 75 Resp: 46821

Ion Ratio Lower Upper

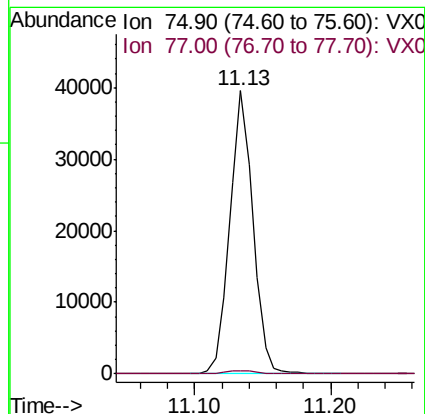
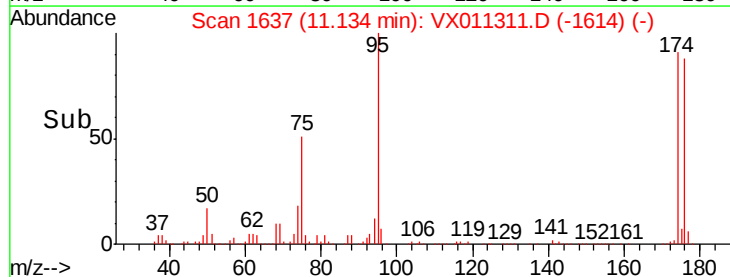
75 100

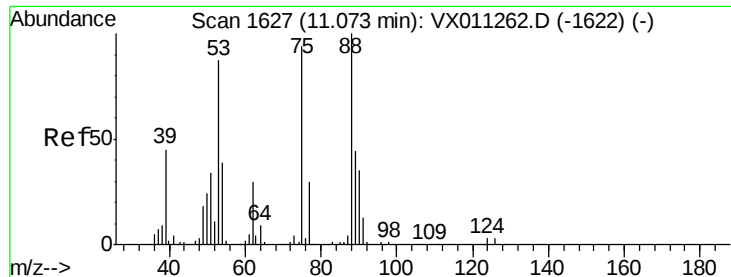
77 1.4 21.1 63.4#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#81

trans-1,4-Dichloro-2-butene

Concen: 67.160 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX011311.D

Acq: 02 Aug 2019 17:40

Instrument :

MSVOA\_X

ClientSampleId :

Z3-0678

Tgt Ion: 75 Resp: 46821

Ion Ratio Lower Upper

75 100

53 0.3 78.2 117.4#

89 0.0 37.9 56.9#

