

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX121918\  
 Data File : VX006642.D  
 Acq On : 19 Dec 2018 17:38  
 Operator : JC/MD  
 Sample : J6484-18  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 978-TB121818

Quant Time: Dec 20 04:03:22 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121818W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Dec 19 15:20:58 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 596565   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 950160   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 847782   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 378358   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.07  | 65   | 333036   | 51.80 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.60% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 287564   | 47.86 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.72%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 1113306  | 49.15 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.30%  |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 386362   | 46.57 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.14%  |          |

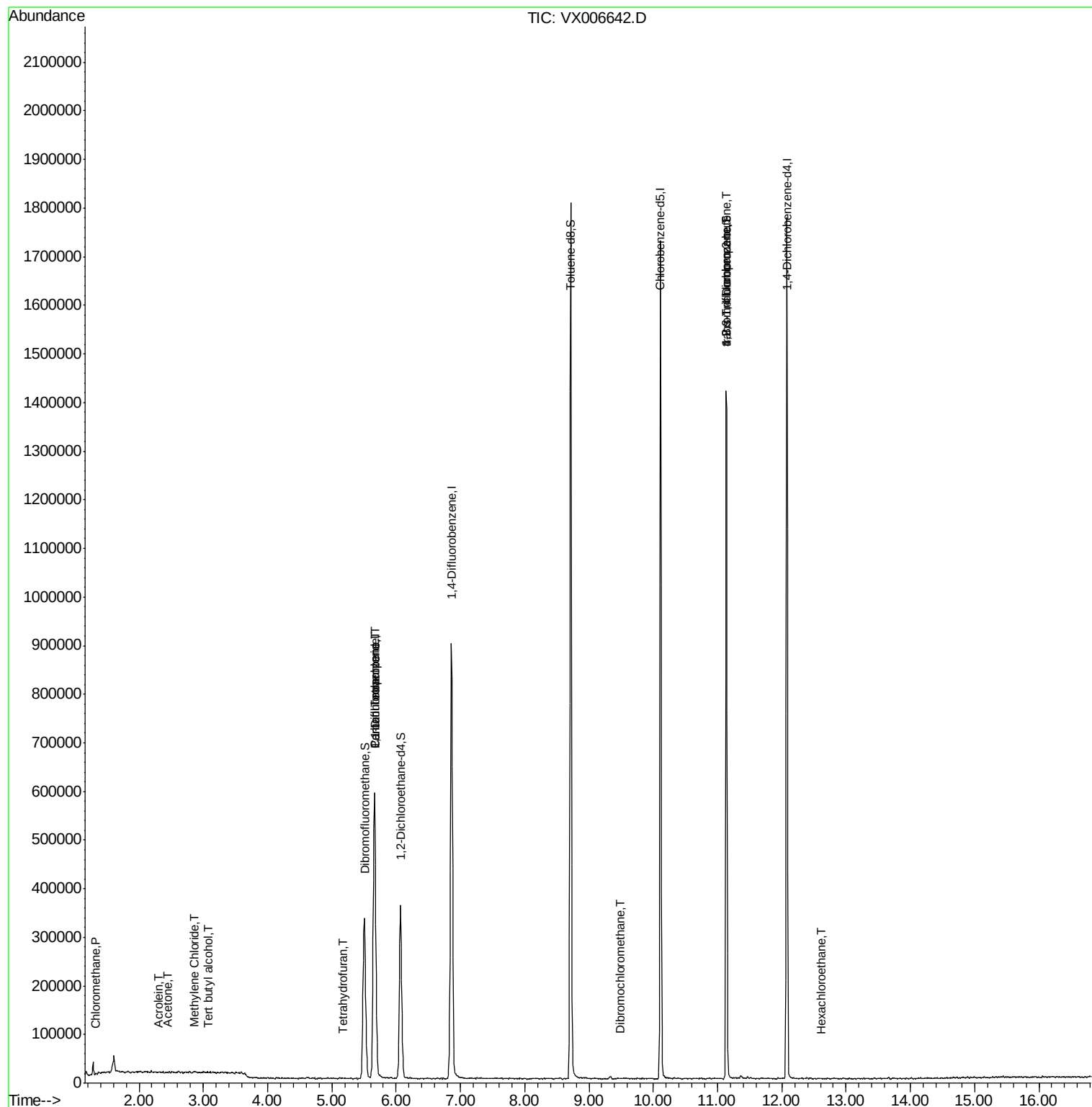
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.33  | 50   | 1183     | 0.201     | ug/l   | 90     |
| 5) Bromomethane                | 1.65  | 94   | 457      | Below Cal | #      | 29     |
| 11) Tert butyl alcohol         | 3.07  | 59   | 805      | 0.561     | ug/l # | 72     |
| 13) Acrolein                   | 2.30  | 56   | 219      | 0.226     | ug/l # | 13     |
| 16) Acetone                    | 2.45  | 43   | 2944     | 0.997     | ug/l   | 98     |
| 20) Methylene Chloride         | 2.86  | 84   | 1518     | 0.249     | ug/l # | 79     |
| 28) Bromochloromethane         | 5.01  | 49   | 255      | Below Cal | #      | 21     |
| 29) Tetrahydrofuran            | 5.17  | 42   | 641      | 0.234     | ug/l # | 88     |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 40398    | 5.133     | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 56609    | 7.402     | ug/l # | 16     |
| 49) 1,4-Dioxane                | 7.78  | 88   | 168      | Below Cal | #      | 1      |
| 60) Dibromochloromethane       | 9.49  | 129  | 97       | 2.338     | ug/l   | 66     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 184511   | 26.241    | ug/l # | 40     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 184511   | 77.331    | ug/l # | 10     |
| 90) Hexachloroethane           | 12.61 | 117  | 61       | 3.309     | ug/l   | 57     |

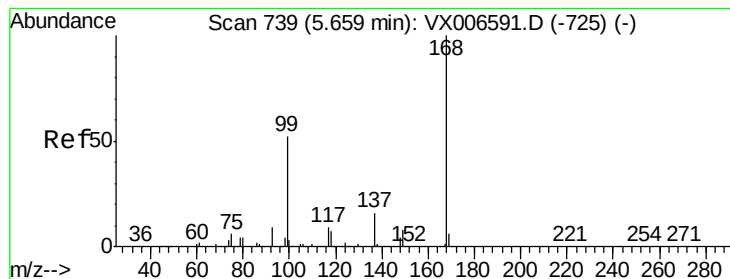
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
MSVOA\_X  
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978-TB121818

Quant Time: Dec 20 04:03:22 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X121818W.M  
Quant Title : SW846 8260  
QLast Update : Wed Dec 19 15:20:58 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.01 min

Lab File: VX006642.D

Acq: 19 Dec 2018 17:38

Instrument :

MSVOA\_X

ClientSampleId :

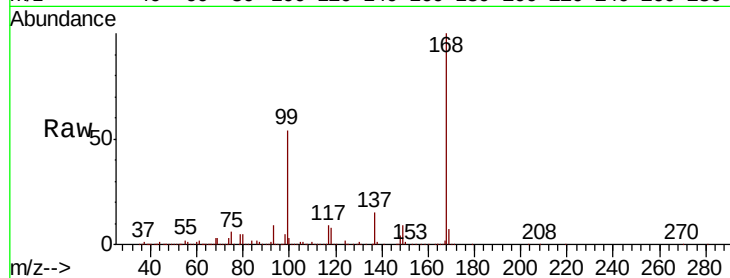
978-TB121818

Tot Ion:168 Resp: 596565

Ion Ratio Lower Upper

168 100

99 54.1 41.8 62.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

200000

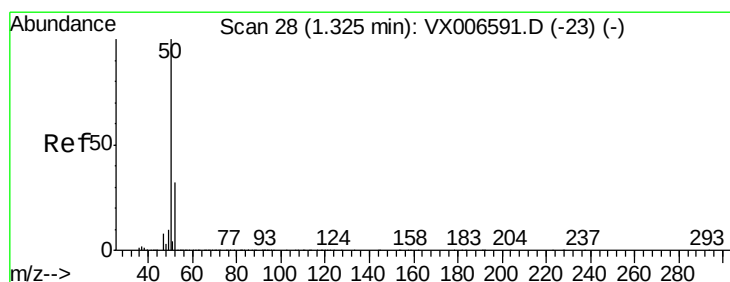
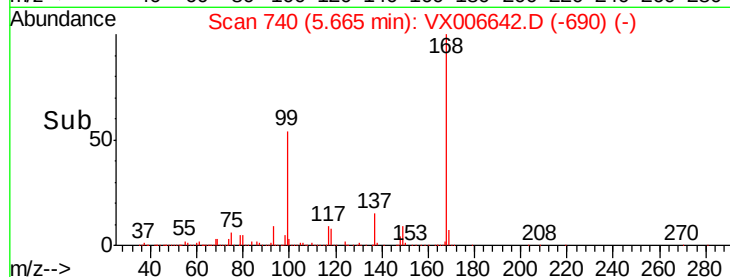
150000

100000

50000

0

Time--> 5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: 0.201 ug/l

RT: 1.33 min Scan# 29

Delta R.T. 0.01 min

Lab File: VX006642.D

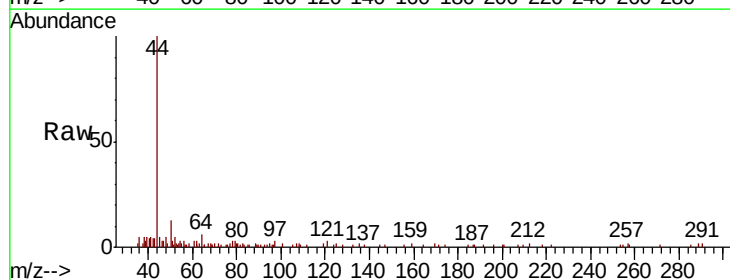
Acq: 19 Dec 2018 17:38

Tgt Ion: 50 Resp: 1183

Ion Ratio Lower Upper

50 100

52 37.1 25.4 38.2



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.33

800

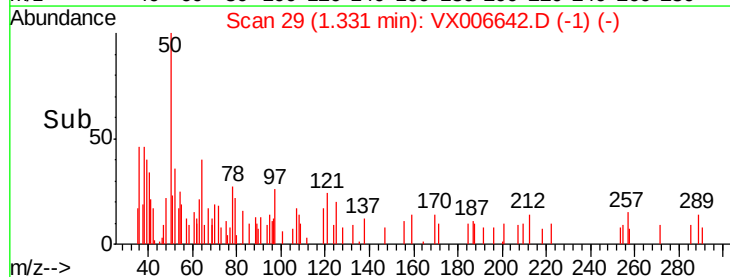
600

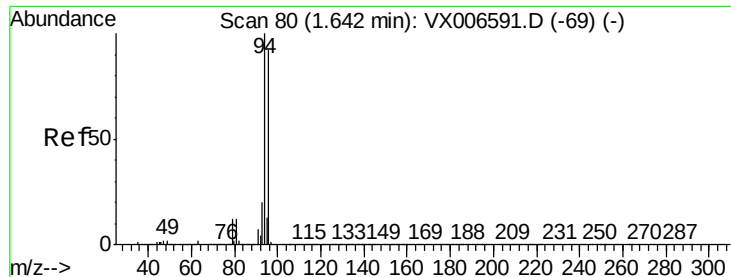
400

200

0

Time--> 1.30 1.35





#5

Bromomethane

Concen: Below Cal

RT: 1.65 min Scan# 82

Delta R.T. 0.01 min

Lab File: VX006642.D

Acq: 19 Dec 2018 17:38

Instrument :

MSVOA\_X

ClientSampleId :

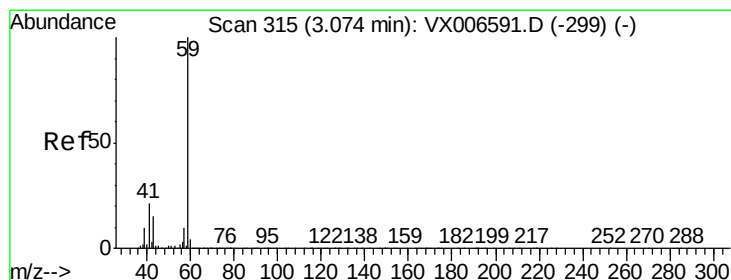
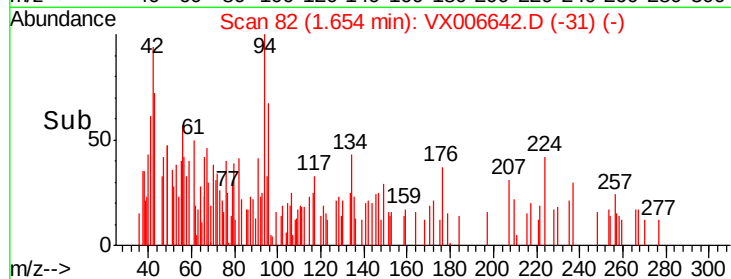
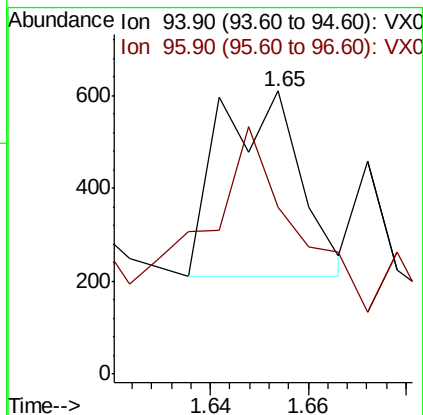
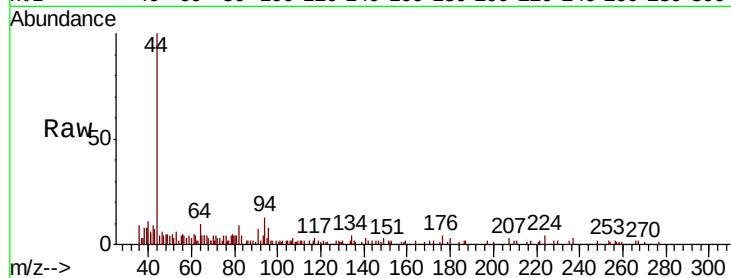
978-TB121818

Tot Ion: 94 Resp: 457

Ion Ratio Lower Upper

94 100

96 24.3 73.4 110.2#



#11

Tert butyl alcohol

Concen: 0.561 ug/l

RT: 3.07 min Scan# 315

Delta R.T. 0.00 min

Lab File: VX006642.D

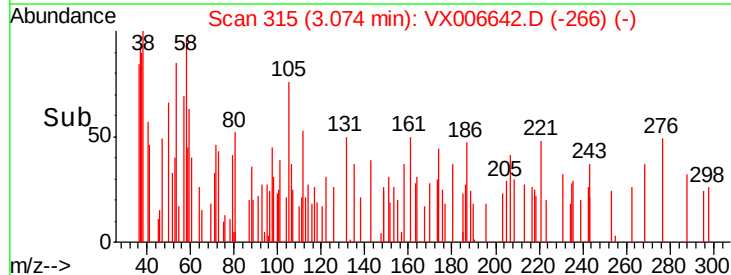
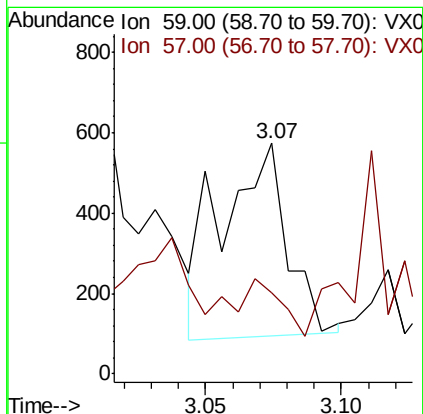
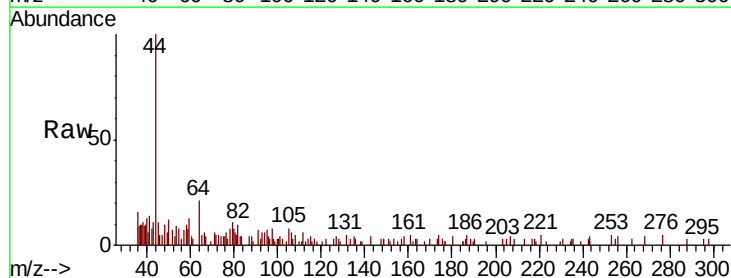
Acq: 19 Dec 2018 17:38

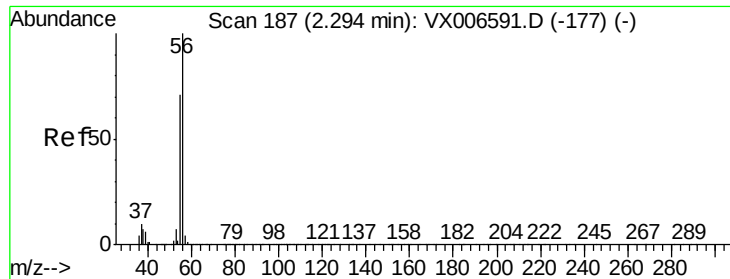
Tgt Ion: 59 Resp: 805

Ion Ratio Lower Upper

59 100

57 0.0 8.5 12.7#





#13

Acrolein

Concen: 0.226 ug/l

RT: 2.30 min Scan# 188

Delta R.T. 0.01 min

Lab File: VX006642.D

Acq: 19 Dec 2018 17:38

Instrument :

MSVOA\_X

ClientSampleId :

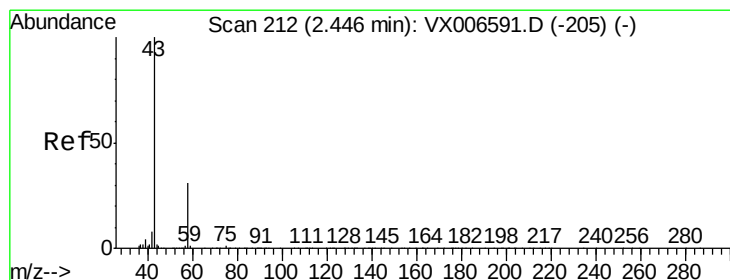
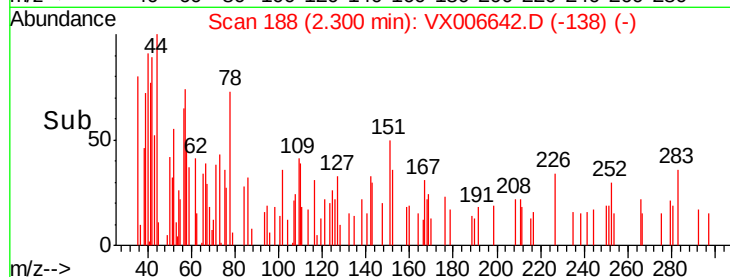
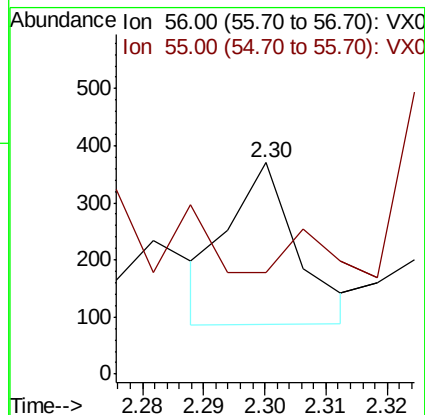
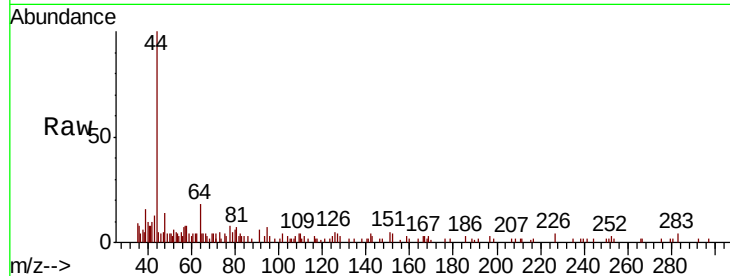
978-TB121818

Tot Ion: 56 Resp: 219

Ion Ratio Lower Upper

56 100

55 0.0 58.2 87.4#



#16

Acetone

Concen: 0.997 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX006642.D

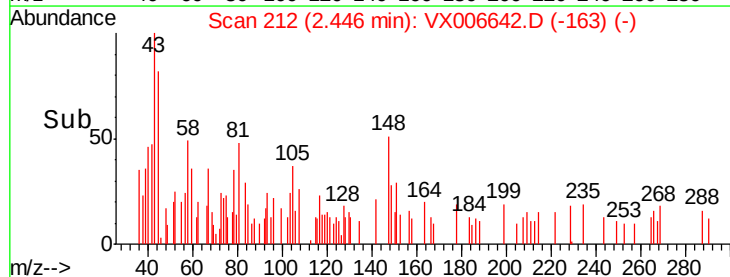
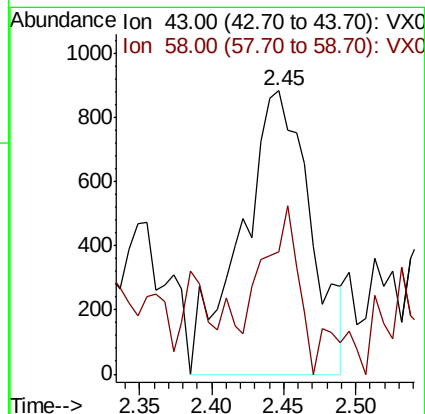
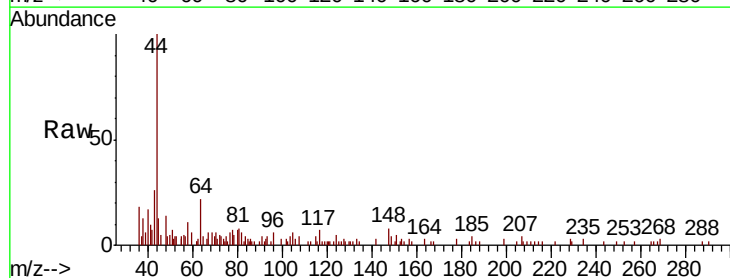
Acq: 19 Dec 2018 17:38

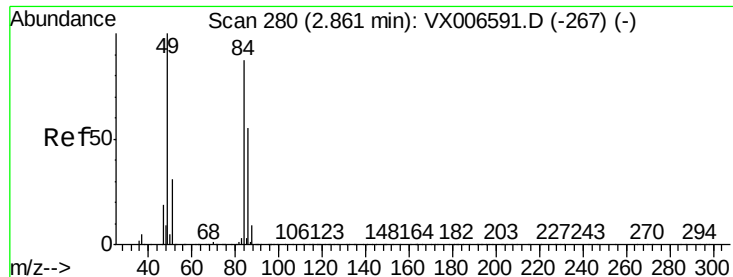
Tgt Ion: 43 Resp: 2944

Ion Ratio Lower Upper

43 100

58 32.2 25.0 37.6

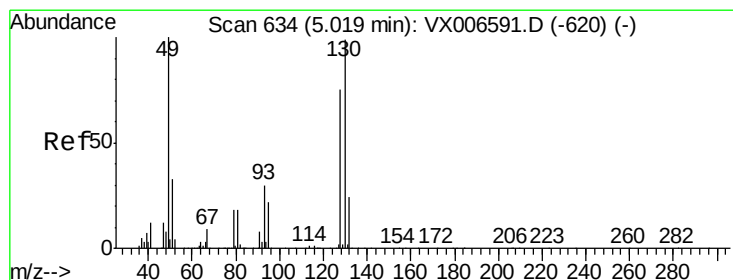
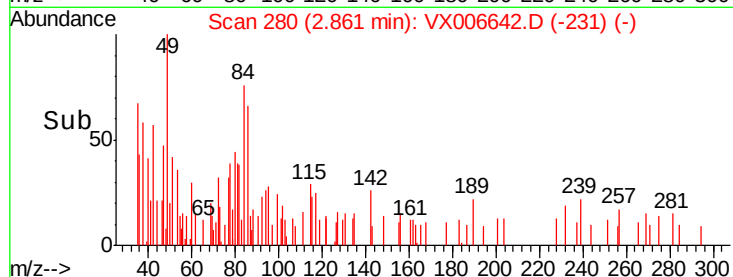
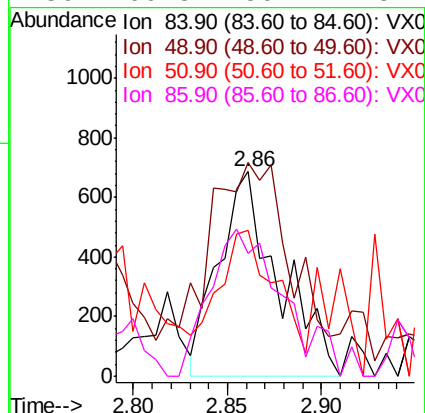
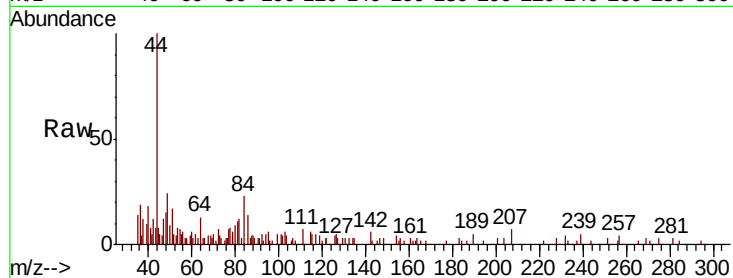




#20  
Methylene Chloride  
Concen: 0.249 ug/l  
RT: 2.86 min Scan# 280  
Delta R.T. 0.00 min  
Lab File: VX006642.D  
Acq: 19 Dec 2018 17:38

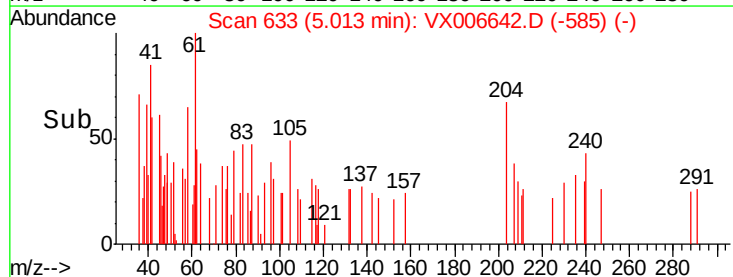
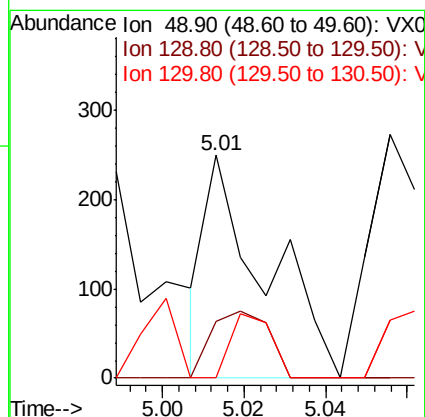
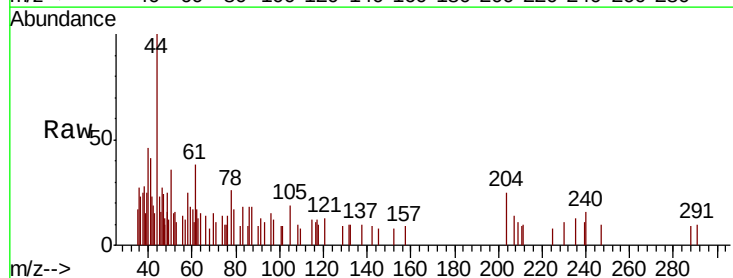
Instrument :  
MSVOA\_X  
ClientSampleId :  
978-TB121818

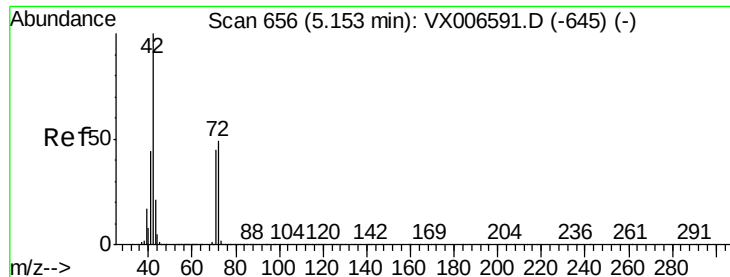
Tot Ion: 84 Resp: 1518  
Ion Ratio Lower Upper  
84 100  
49 83.7 91.8 137.6#  
51 51.3 28.5 42.7#  
86 60.3 50.2 75.2



#28  
Bromochloromethane  
Concen: Below Cal  
RT: 5.01 min Scan# 633  
Delta R.T. -0.01 min  
Lab File: VX006642.D  
Acq: 19 Dec 2018 17:38

Tgt Ion: 49 Resp: 255  
Ion Ratio Lower Upper  
49 100  
129 29.0 0.0 5.4#  
130 19.2 77.7 116.5#





#29

Tetrahydrofuran

Concen: 0.234 ug/l

RT: 5.17 min Scan# 658

Delta R.T. 0.01 min

Lab File: VX006642.D

Acq: 19 Dec 2018 17:38

Instrument :

MSVOA\_X

ClientSampleId :

978-TB121818

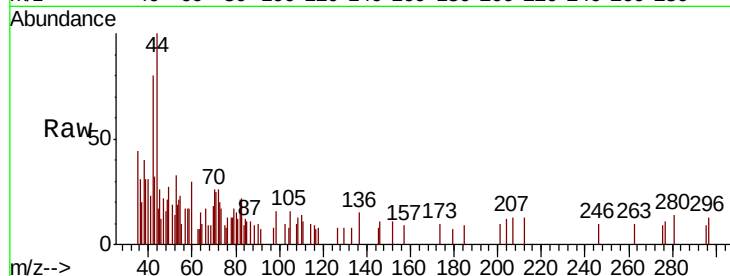
Tot Ion: 42 Resp: 641

Ion Ratio Lower Upper

42 100

72 43.1 38.9 58.3

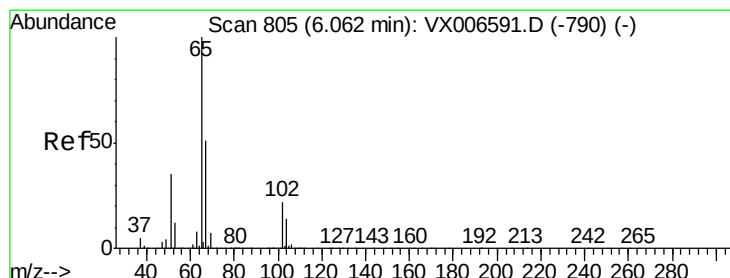
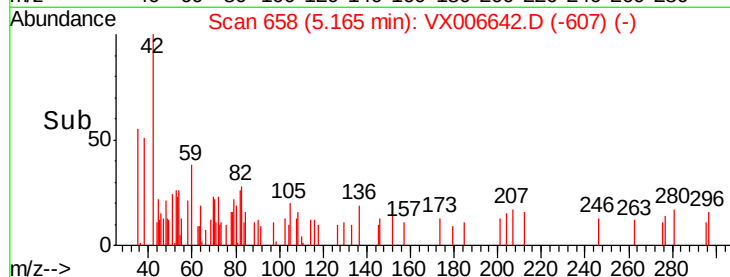
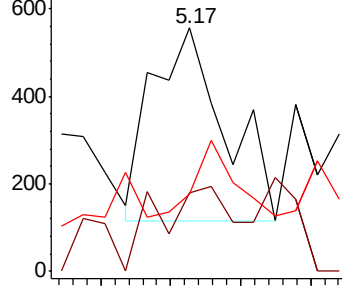
71 55.7 36.2 54.4#



Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0



#33

1,2-Dichloroethane-d4

Concen: 51.798 ug/l

RT: 6.07 min Scan# 806

Delta R.T. 0.01 min

Lab File: VX006642.D

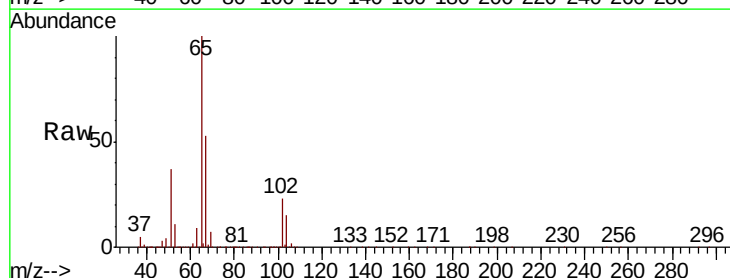
Acq: 19 Dec 2018 17:38

Tgt Ion: 65 Resp: 333036

Ion Ratio Lower Upper

65 100

67 53.2 0.0 105.0



Abundance Ion 64.90 (64.60 to 65.60): VX0

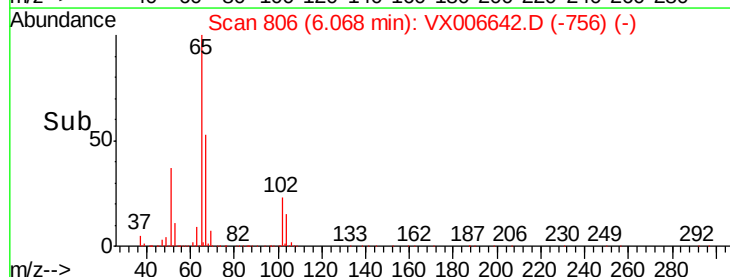
Ion 66.90 (66.60 to 67.60): VX0

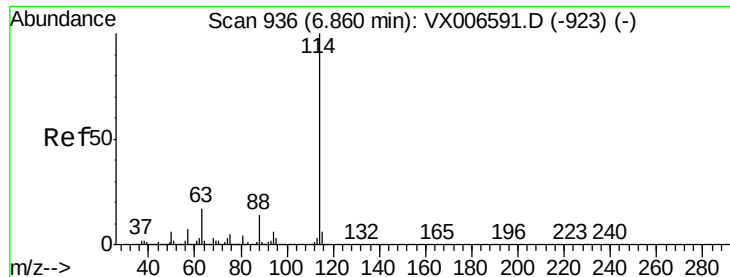
150000

100000

50000

0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.86 min Scan# 936

Delta R.T. 0.00 min

Lab File: VX006642.D

Acq: 19 Dec 2018 17:38

Instrument :

MSVOA\_X

ClientSampleId :

978-TB121818

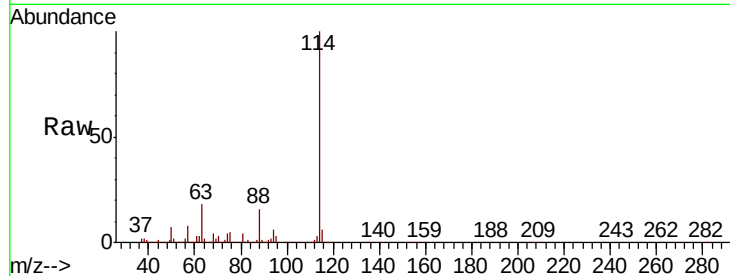
Tot Ion:114 Resp: 950160

Ion Ratio Lower Upper

114 100

63 17.8 0.0 34.8

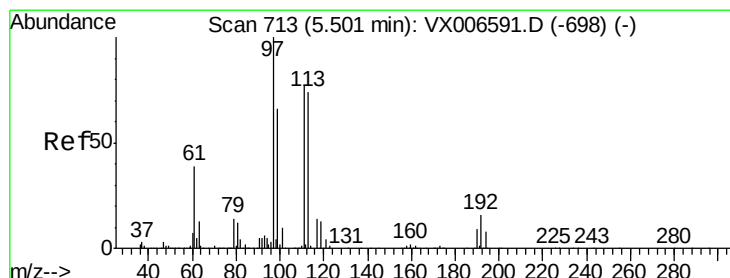
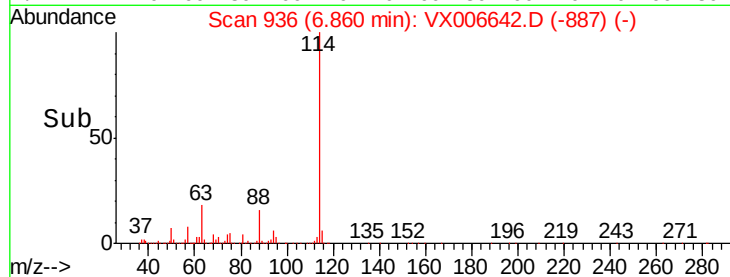
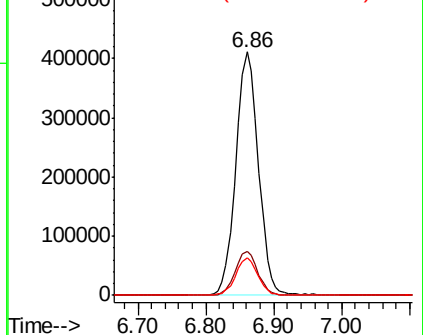
88 15.5 0.0 28.8



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: 47.858 ug/l

RT: 5.50 min Scan# 713

Delta R.T. 0.00 min

Lab File: VX006642.D

Acq: 19 Dec 2018 17:38

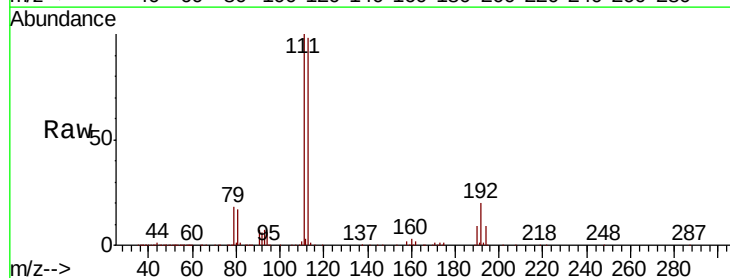
Tgt Ion:113 Resp: 287564

Ion Ratio Lower Upper

113 100

111 102.3 81.6 122.4

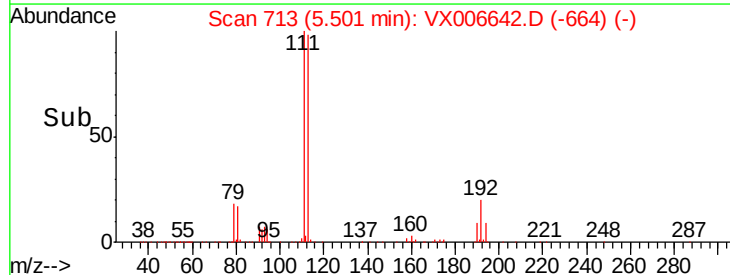
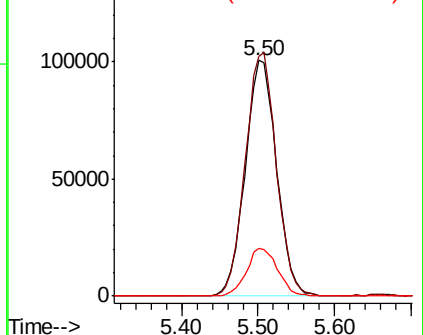
192 20.3 16.7 25.1



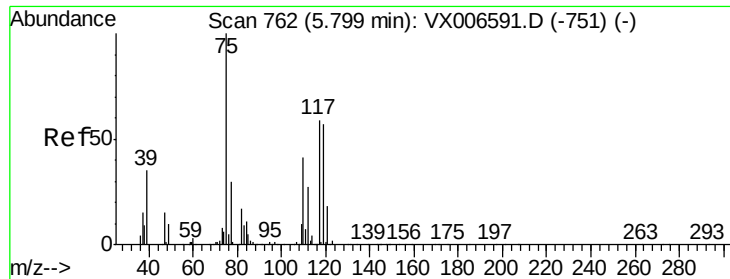
Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V







#36

1,1-Dichloropropene

Concen: 5.133 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.13 min

Lab File: VX006642.D

Acq: 19 Dec 2018 17:38

Instrument :

MSVOA\_X

ClientSampleId :

978-TB121818

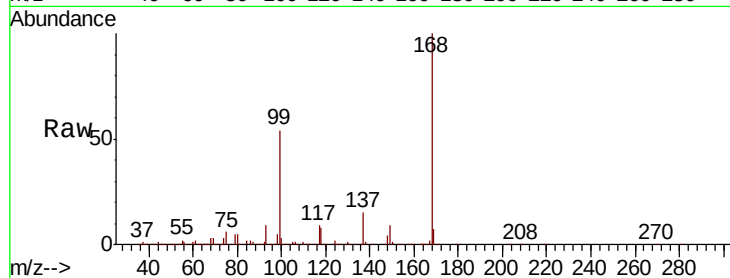
Tot Ion: 75 Resp: 40398

Ion Ratio Lower Upper

75 100

110 9.7 20.2 60.5#

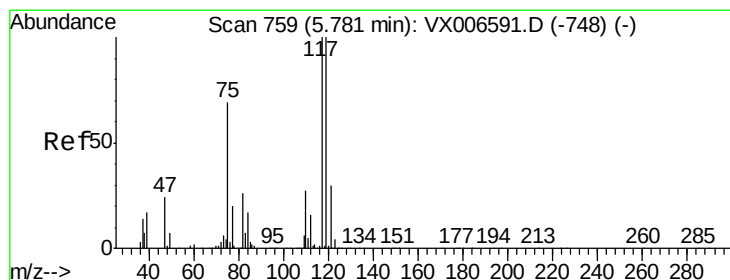
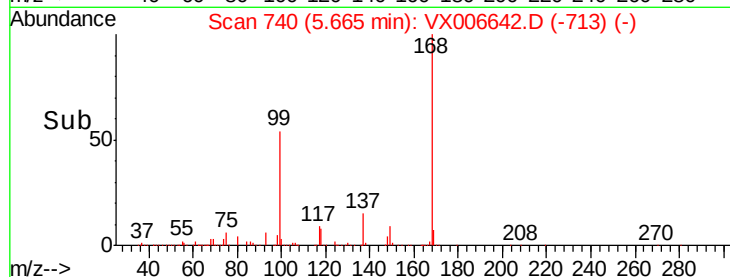
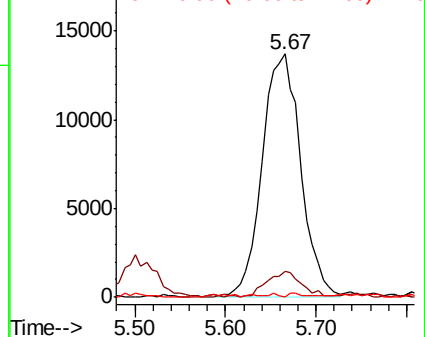
77 0.7 24.8 37.2#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0



#38

Carbon Tetrachloride

Concen: 7.402 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.12 min

Lab File: VX006642.D

Acq: 19 Dec 2018 17:38

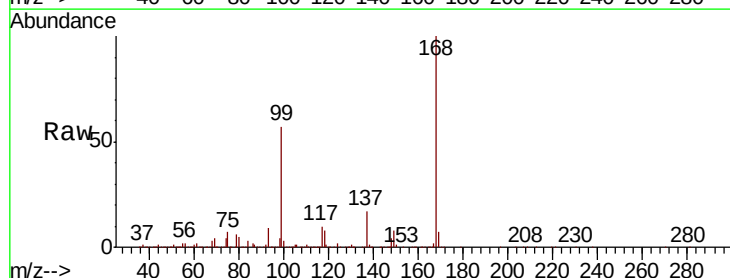
Tgt Ion: 117 Resp: 56609

Ion Ratio Lower Upper

117 100

119 6.9 79.4 119.2#

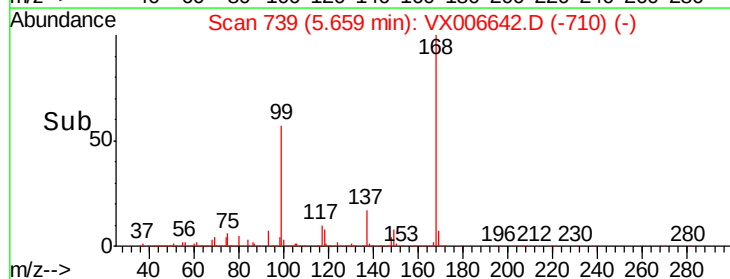
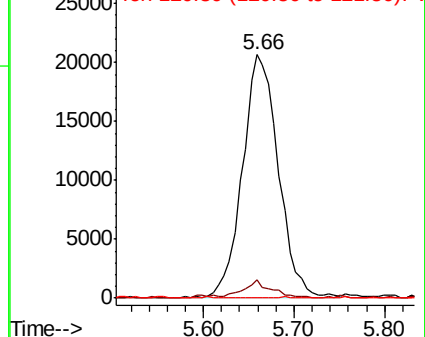
121 0.1 24.0 36.0#

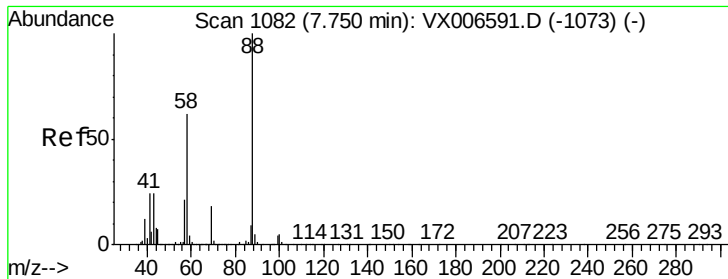


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V

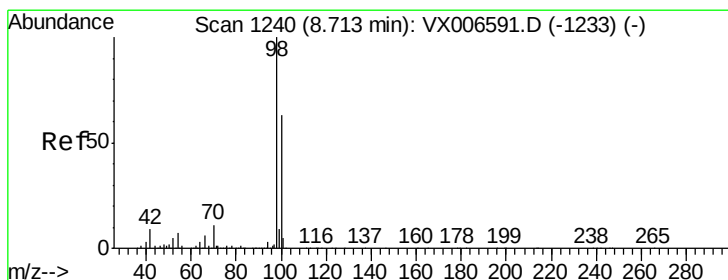
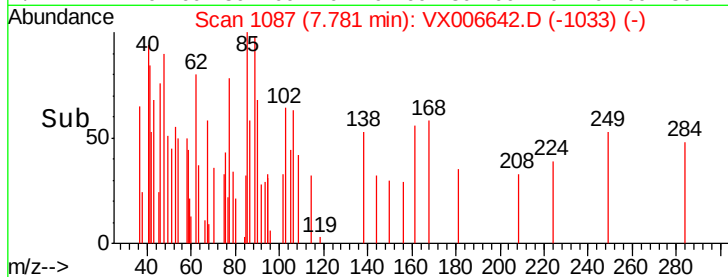
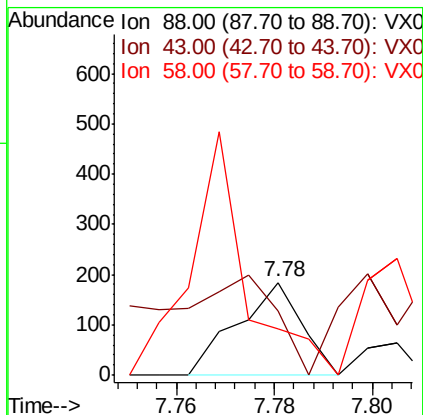
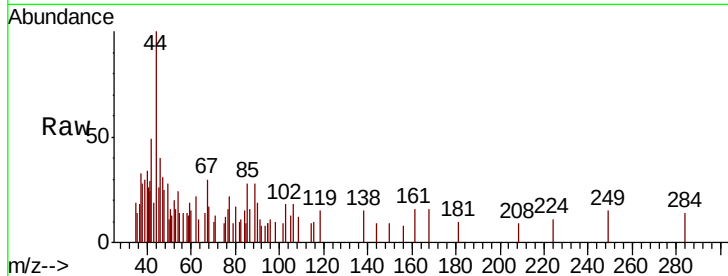




#49  
1,4-Dioxane  
Concen: Below Cal  
RT: 7.78 min Scan# 1087  
Delta R.T. 0.03 min  
Lab File: VX006642.D  
Acq: 19 Dec 2018 17:38

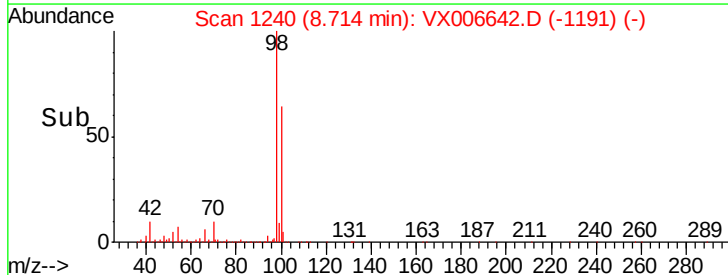
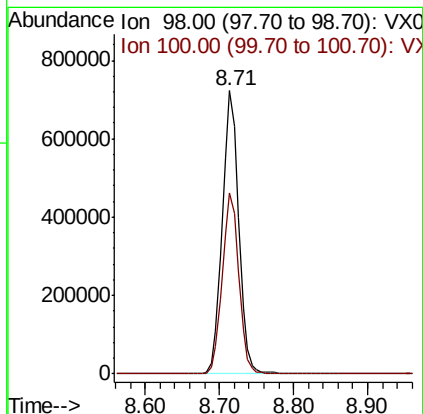
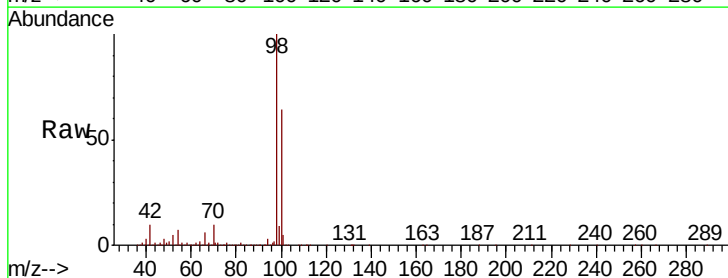
Instrument :  
MSVOA\_X  
ClientSampleId :  
978-TB121818

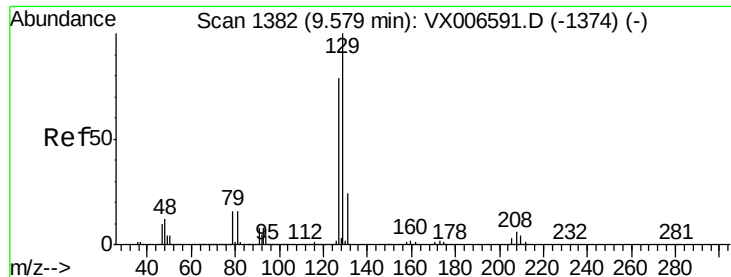
Tot Ion: 88 Resp: 168  
Ion Ratio Lower Upper  
88 100  
43 136.3 22.2 33.4#  
58 225.6 51.0 76.4#



#50  
Toluene-d8  
Concen: 49.147 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. 0.00 min  
Lab File: VX006642.D  
Acq: 19 Dec 2018 17:38

Tgt Ion: 98 Resp: 1113306  
Ion Ratio Lower Upper  
98 100  
100 64.7 52.0 78.0





#60

Dibromochloromethane

Concen: 2.338 ug/l

RT: 9.49 min Scan# 1367

Delta R.T. -0.09 min

Lab File: VX006642.D

Acq: 19 Dec 2018 17:38

Instrument :

MSVOA\_X

ClientSampleId :

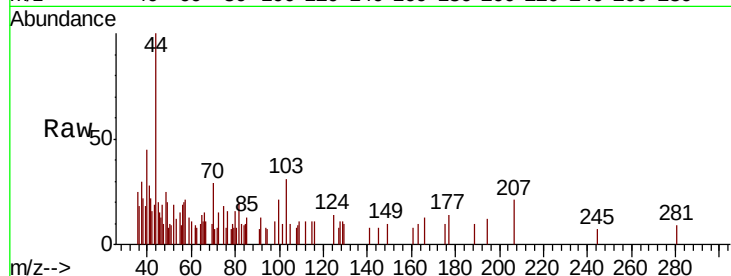
978-TB121818

Tot Ion:129 Resp: 97

Ion Ratio Lower Upper

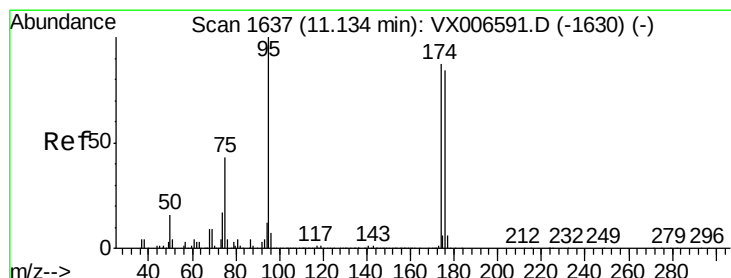
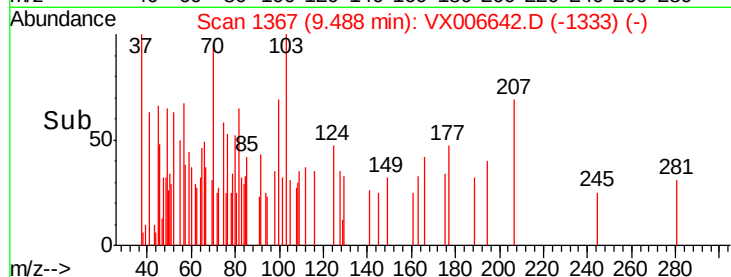
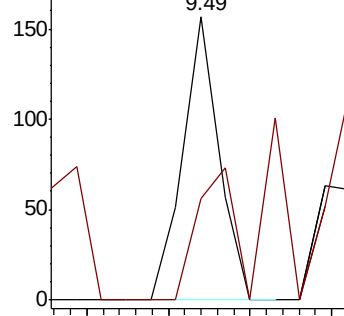
129 100

127 48.5 39.3 117.8



Abundance Ion 128.80 (128.50 to 129.50): V

Ion 126.80 (126.50 to 127.50): V



#62

4-Bromofluorobenzene

Concen: 46.570 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX006642.D

Acq: 19 Dec 2018 17:38

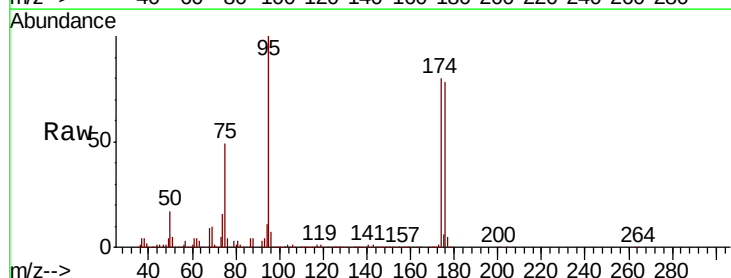
Tgt Ion: 95 Resp: 386362

Ion Ratio Lower Upper

95 100

174 85.0 0.0 182.2

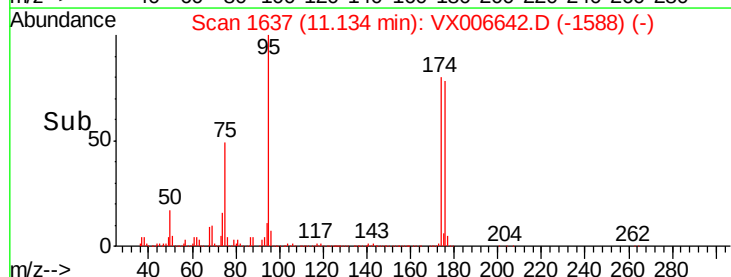
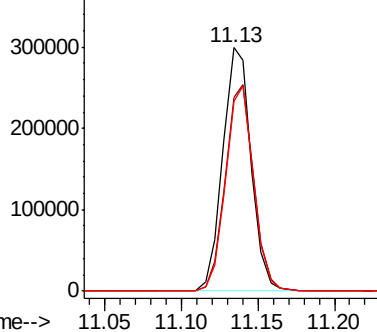
176 83.1 0.0 178.8

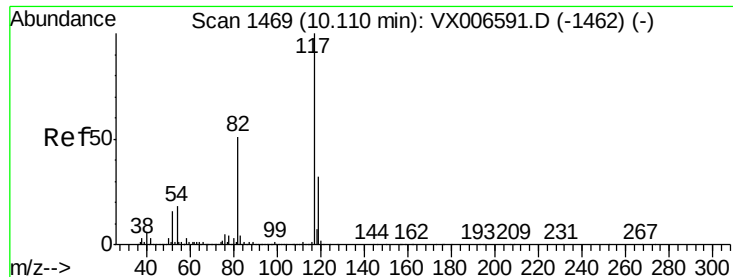


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

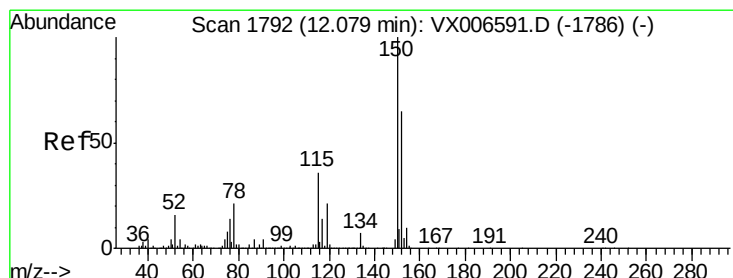
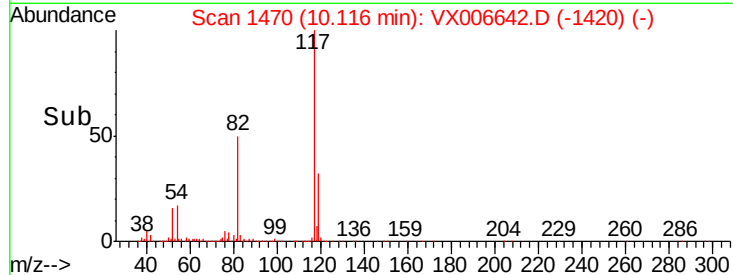
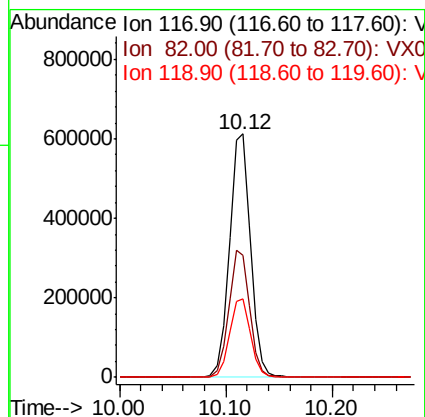
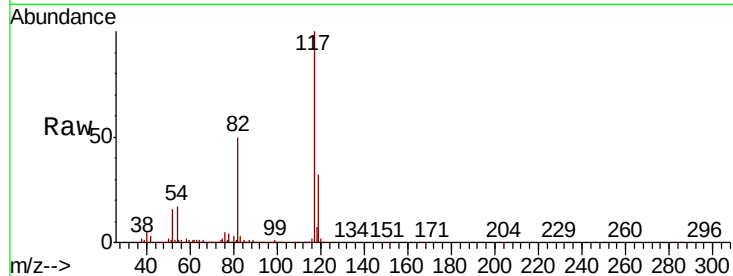




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. 0.01 min  
Lab File: VX006642.D  
Acq: 19 Dec 2018 17:38

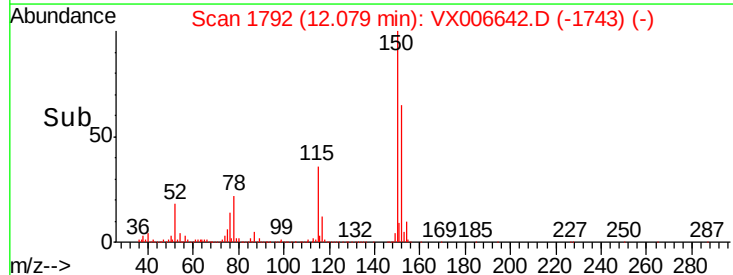
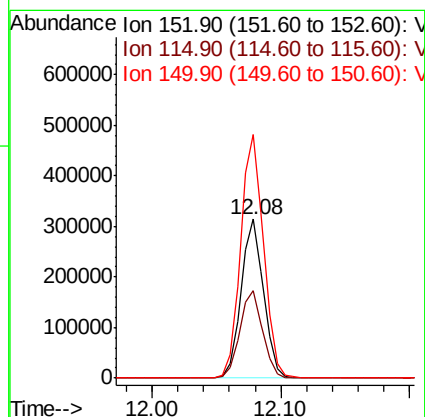
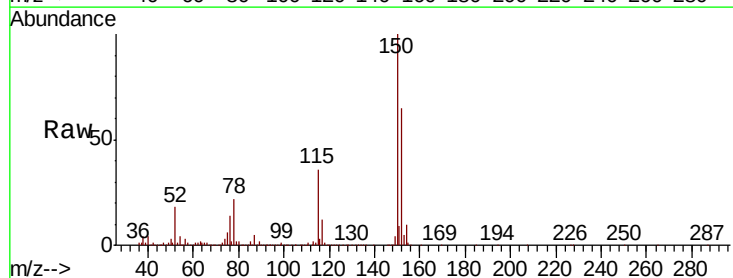
Instrument :  
MSVOA\_X  
ClientSampleId :  
978-TB121818

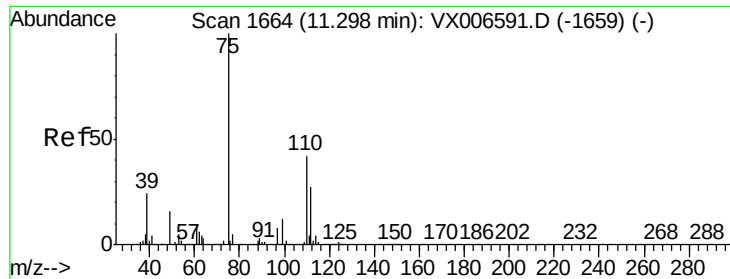
Tot Ion:117 Resp: 847782  
Ion Ratio Lower Upper  
117 100  
82 49.9 41.0 61.6  
119 32.0 25.4 38.0



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. 0.00 min  
Lab File: VX006642.D  
Acq: 19 Dec 2018 17:38

Tgt Ion:152 Resp: 378358  
Ion Ratio Lower Upper  
152 100  
115 56.3 39.1 117.2  
150 156.0 0.0 344.8





#76

1,2,3-Trichloropropane

Concen: 26.241 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX006642.D

Acq: 19 Dec 2018 17:38

Instrument :

MSVOA\_X

ClientSampleId :

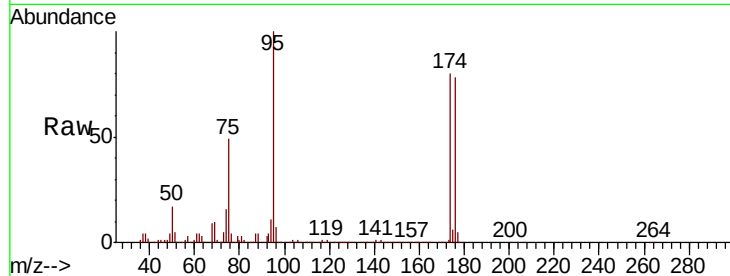
978-TB121818

Tot Ion: 75 Resp: 184511

Ion Ratio Lower Upper

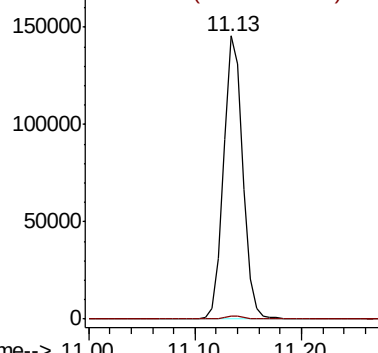
75 100

77 1.1 18.5 55.5#

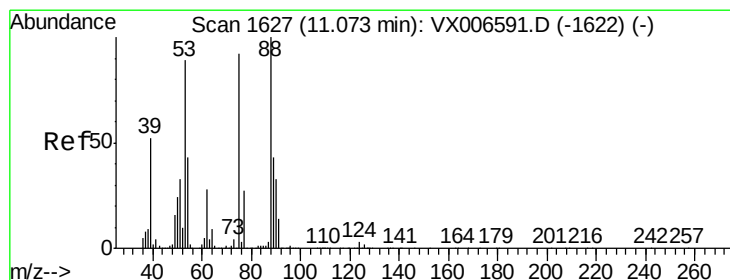
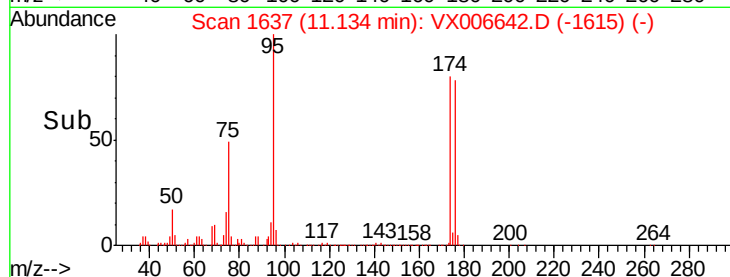


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0



Time--> 11.00 11.10 11.20



#81

trans-1,4-Dichloro-2-butene

Concen: 77.331 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX006642.D

Acq: 19 Dec 2018 17:38

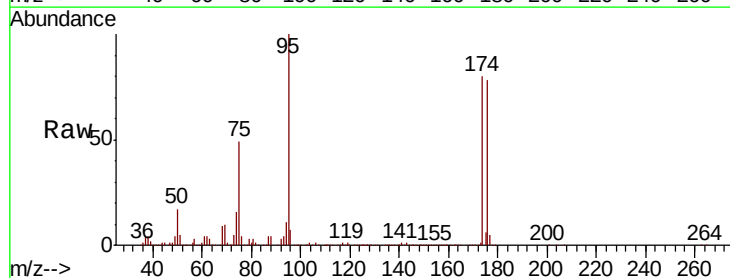
Tgt Ion: 75 Resp: 184511

Ion Ratio Lower Upper

75 100

53 0.2 79.7 119.5#

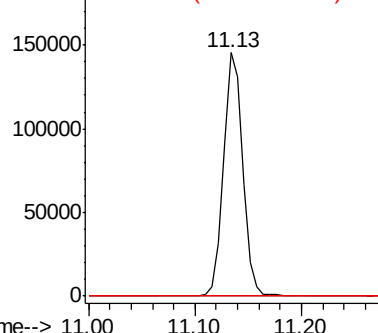
89 0.1 38.0 57.0#



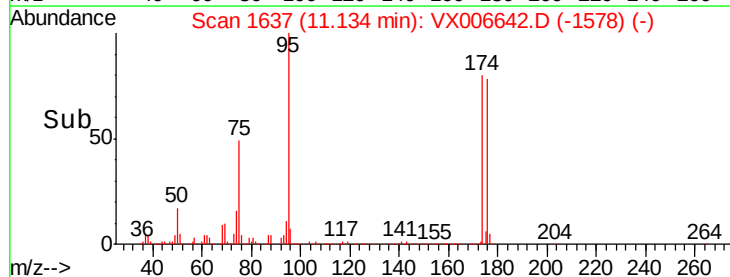
Abundance Ion 74.90 (74.60 to 75.60): VX0

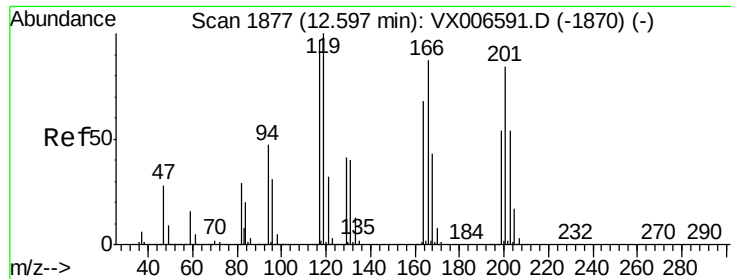
Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0



Time--> 11.00 11.10 11.20





#90

Hexachloroethane

Concen: 3.309 ug/l

RT: 12.61 min Scan# 1879

Delta R.T. 0.01 min

Lab File: VX006642.D

Acq: 19 Dec 2018 17:38

Instrument :

MSVOA\_X

ClientSampleId :

978-TB121818

Tot Ion:117 Resp: 61

Ion Ratio Lower Upper

117 100

201 45.9 42.9 128.7

