

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX021919\  
 Data File : VX007608.D  
 Acq On : 19 Feb 2019 12:57  
 Operator : JC/SP  
 Sample : K1518-10  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 CABLE-BRIDGE-FOUNDATION-D-5

Quant Time: Feb 20 04:02:47 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X020119W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Feb 02 01:32:36 2019  
 Response via : Initial Calibration

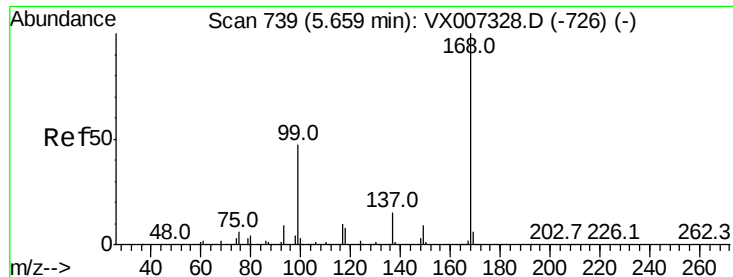
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 431245   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 699770   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 689907   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 320813   | 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   | 249858   | 54.59 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 109.18% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 229742   | 50.46 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.92% |          |
| 50) Toluene-d8              | 8.71  | 98   | 879830   | 52.08 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.16% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 303197   | 49.16 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.32%  |          |

| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.20  | 85   | 153      | 0.206     | ug/l # | 43     |
| 5) Bromomethane                | 1.65  | 94   | 603      | Below Cal | #      | 61     |
| 8) Diethyl Ether               | 2.19  | 74   | 1127     | 0.402     | ug/l   | 94     |
| 11) Tert butyl alcohol         | 3.08  | 59   | 1695     | 1.789     | ug/l # | 71     |
| 13) Acrolein                   | 2.29  | 56   | 638      | 1.436     | ug/l # | 53     |
| 16) Acetone                    | 2.45  | 43   | 20990    | 10.011    | ug/l   | 92     |
| 17) Carbon Disulfide           | 2.57  | 76   | 1371     | 2.243     | ug/l # | 31     |
| 18) Methyl Acetate             | 2.78  | 43   | 10926    | 2.569     | ug/l   | 97     |
| 20) Methylene Chloride         | 2.86  | 84   | 14980    | 3.129     | ug/l # | 93     |
| 25) 2-Butanone                 | 4.70  | 43   | 6564     | 2.200     | ug/l # | 72     |
| 29) Tetrahydrofuran            | 5.16  | 42   | 2320     | 1.236     | ug/l # | 80     |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 27894    | 4.443     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 39596    | 6.500     | ug/l # | 18     |
| 43) Isopropyl Acetate          | 6.46  | 43   | 21083    | 2.152     | ug/l   | 98     |
| 48) Methyl methacrylate        | 7.68  | 41   | 11031    | 2.251     | ug/l # | 13     |
| 49) 1,4-Dioxane                | 7.74  | 88   | 111      | 7.868     | ug/l # | 25     |
| 51) 4-Methyl-2-Pentanone       | 8.62  | 43   | 95720    | 14.842    | ug/l # | 51     |
| 54) cis-1,3-Dichloropropene    | 8.62  | 75   | 47681    | 7.072     | ug/l # | 63     |
| 57) 1,3-Dichloropropane        | 9.54  | 76   | 8657     | 1.094     | ug/l # | 46     |
| 59) 2-Hexanone                 | 9.54  | 43   | 106118   | 21.145    | ug/l # | 53     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 144125   | 23.096    | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 144125   | 69.579    | ug/l # | 9      |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.01 min

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MSVOA\_X

ClientSampleId :

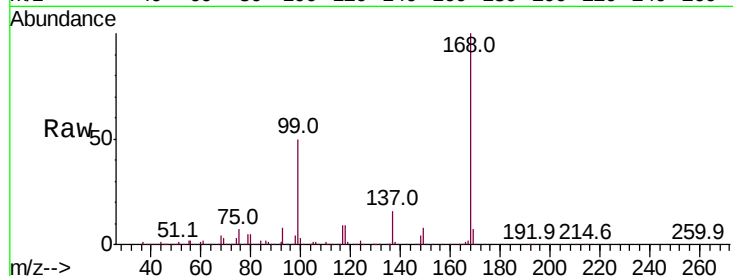
CABLE-BRIDGE-FOUNDATION-D-5

Tot Ion:168 Resp: 431245

Ion Ratio Lower Upper

168 100

99 50.3 37.9 56.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

150000

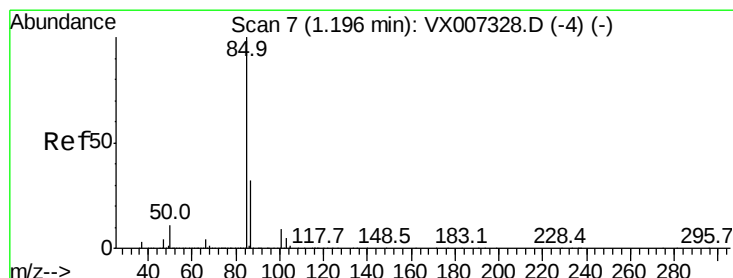
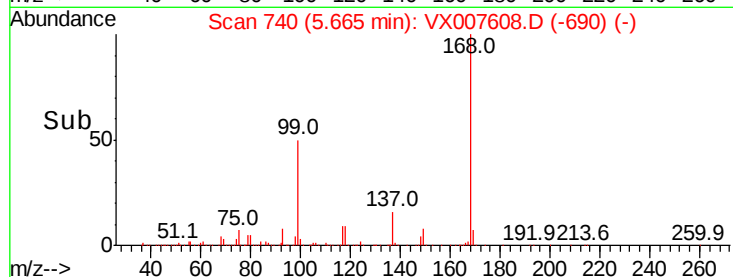
100000

50000

0

5.50 5.60 5.70 5.80

Time-->



#2

Dichlorodifluoromethane

Concen: 0.206 ug/l

RT: 1.20 min Scan# 7

Delta R.T. 0.00 min

Lab File: VX007608.D

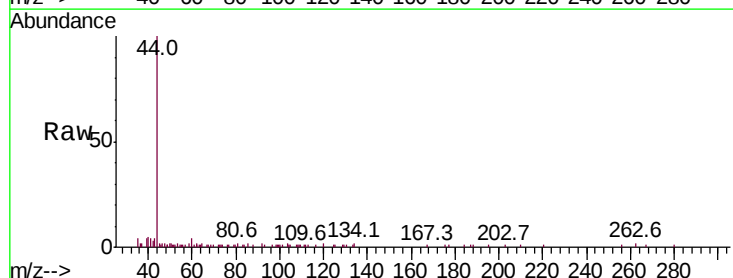
Acq: 19 Feb 2019 12:57

Tgt Ion: 85 Resp: 153

Ion Ratio Lower Upper

85 100

87 0.0 15.8 47.4#



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

250

200

150

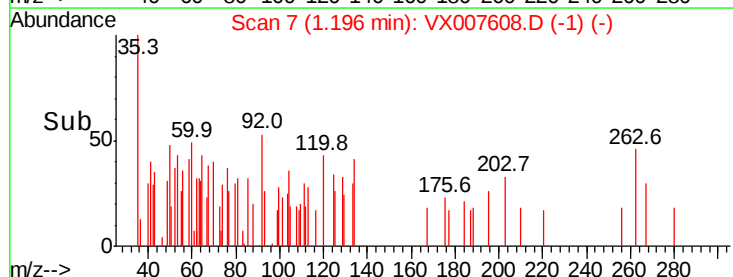
100

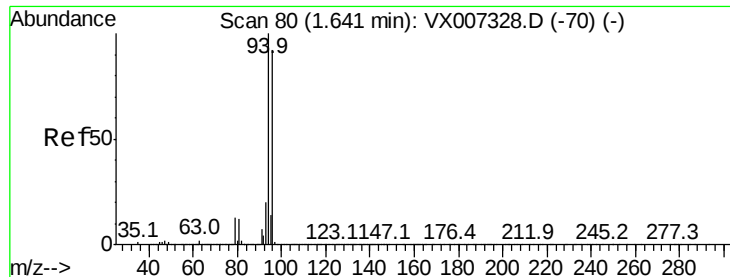
50

0

1.18 1.19 1.20 1.21 1.22

Time-->





#5

Bromomethane

Concen: Below Cal

RT: 1.65 min Scan# 81

Delta R.T. 0.01 min

Lab File: VX007608.D

Acq: 19 Feb 2019 12:57

Instrument :

MSVOA\_X

ClientSampleId :

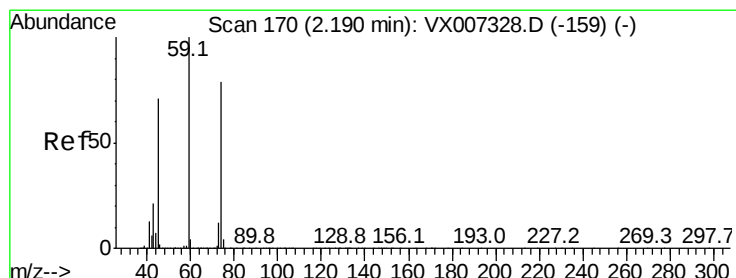
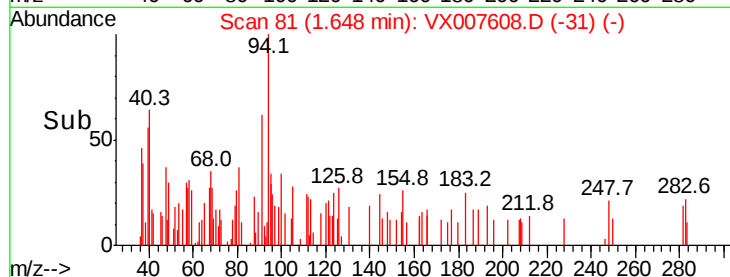
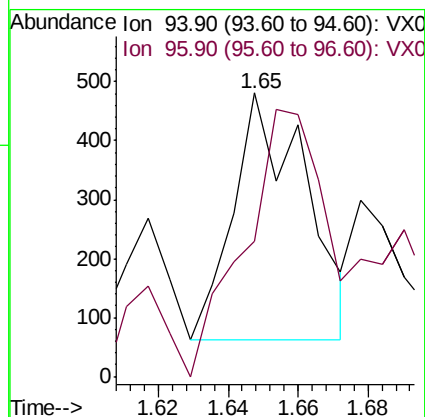
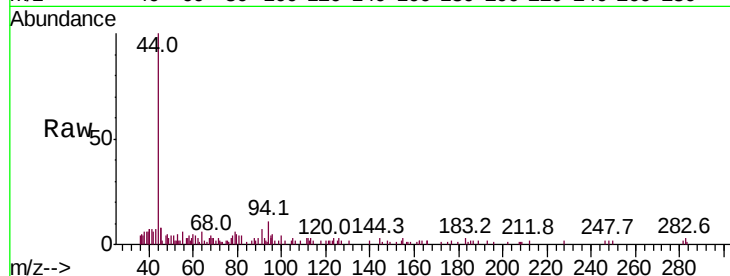
CABLE-BRIDGE-FOUNDATION-D-5

Tot Ion: 94 Resp: 603

Ion Ratio Lower Upper

94 100

96 54.8 73.9 110.9#



#8

Diethyl Ether

Concen: 0.402 ug/l

RT: 2.19 min Scan# 170

Delta R.T. 0.00 min

Lab File: VX007608.D

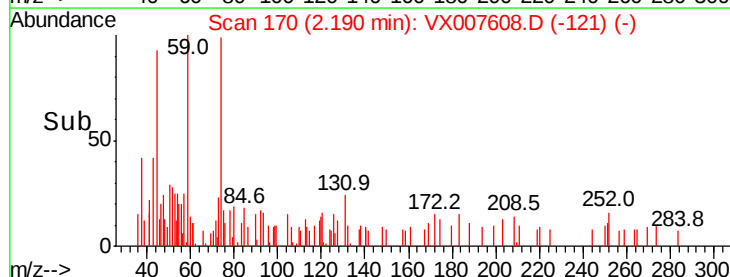
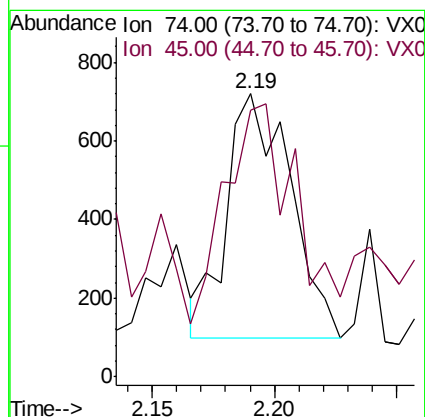
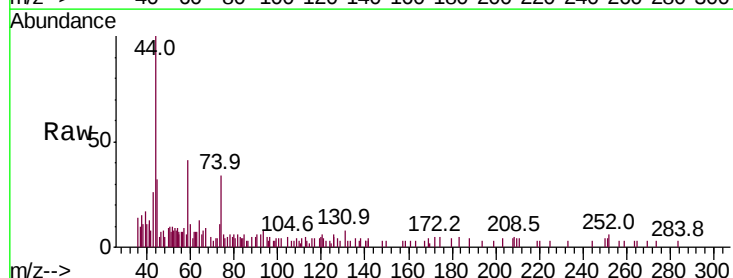
Acq: 19 Feb 2019 12:57

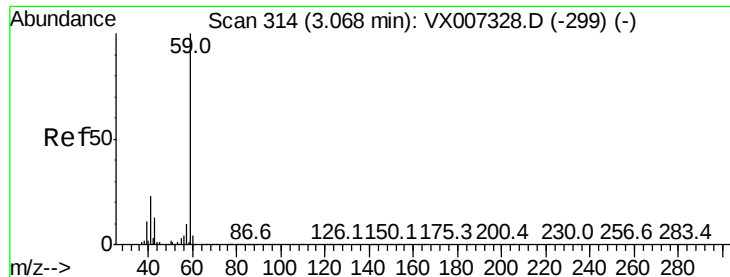
Tgt Ion: 74 Resp: 1127

Ion Ratio Lower Upper

74 100

45 96.6 45.7 137.1



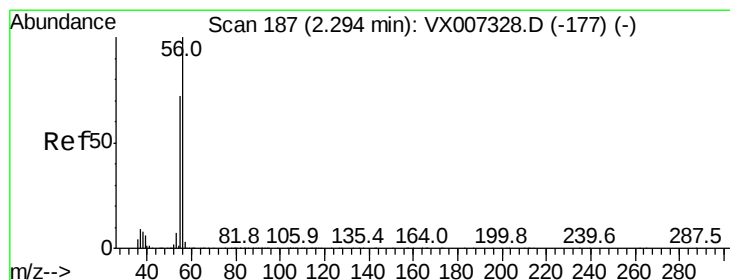
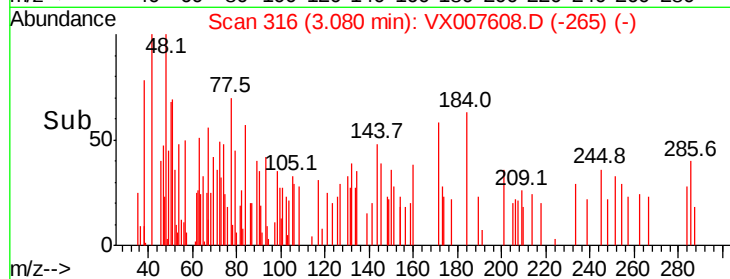
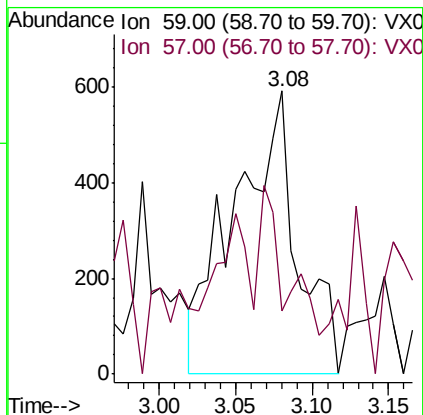
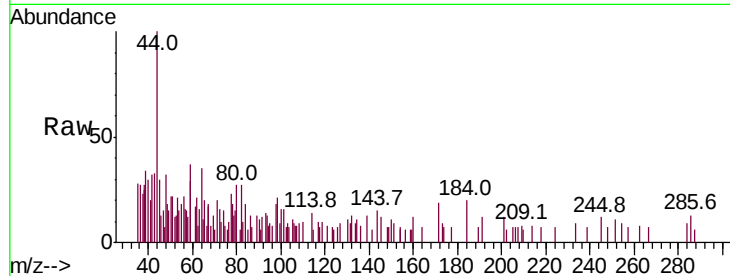


#11

Tert butyl alcohol  
 Concen: 1.789 ug/l  
 RT: 3.08 min Scan# 316  
 Delta R.T. 0.01 min  
 Lab File: VX007608.D  
 Acq: 19 Feb 2019 12:57

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 CABLE-BRIDGE-FOUNDATION-D-5

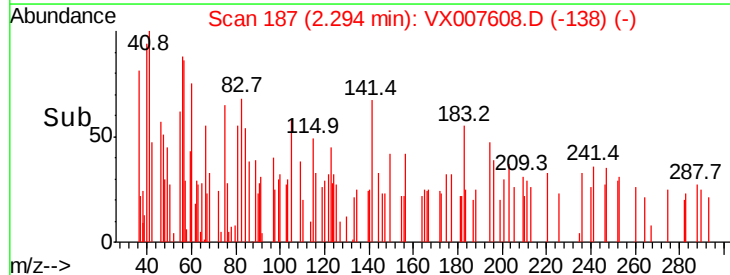
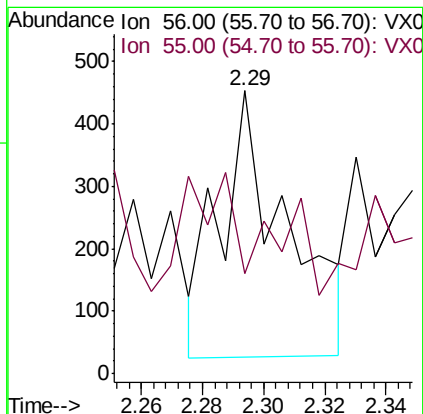
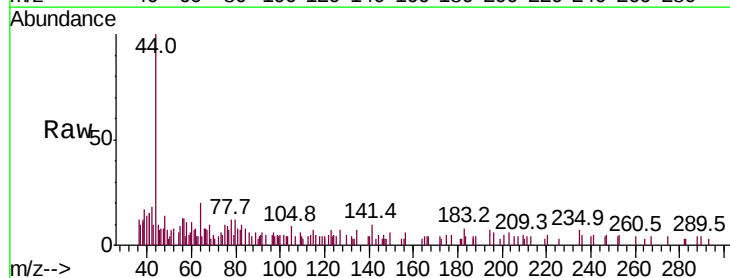
Tot Ion: 59 Resp: 1695  
 Ion Ratio Lower Upper  
 59 100  
 57 20.9 8.1 12.1#

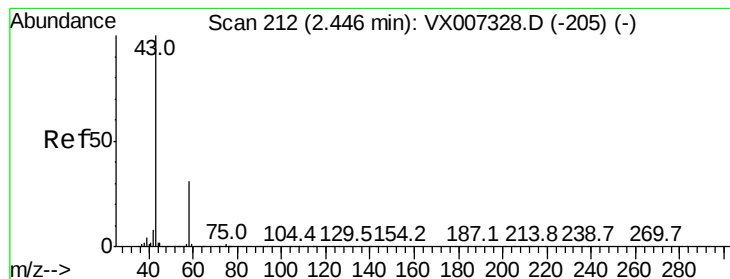


#13

Acrolein  
 Concen: 1.436 ug/l  
 RT: 2.29 min Scan# 187  
 Delta R.T. 0.00 min  
 Lab File: VX007608.D  
 Acq: 19 Feb 2019 12:57

Tgt Ion: 56 Resp: 638  
 Ion Ratio Lower Upper  
 56 100  
 55 32.0 56.9 85.3#





#16

Acetone

Concen: 10.011 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX007608.D

Acq: 19 Feb 2019 12:57

Instrument :

MSVOA\_X

ClientSampleId :

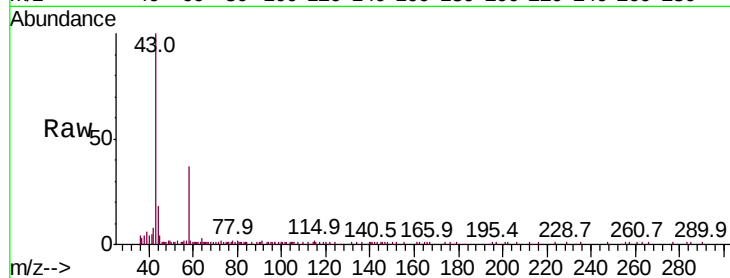
CABLE-BRIDGE-FOUNDATION-D-5

Tot Ion: 43 Resp: 20990

Ion Ratio Lower Upper

43 100

58 35.5 24.9 37.3



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

2.45

12000

10000

8000

6000

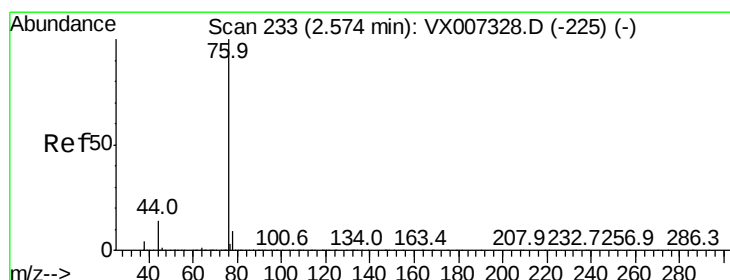
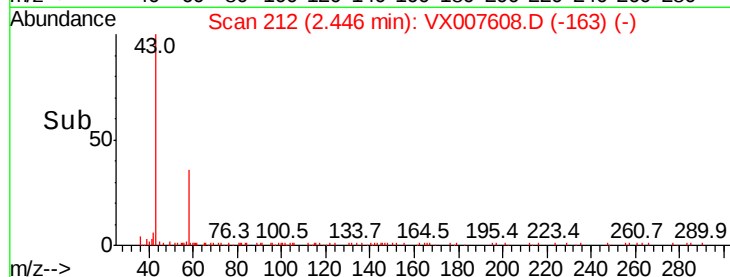
4000

2000

0

Time-->

2.35 2.40 2.45 2.50 2.55



#17

Carbon Disulfide

Concen: 2.243 ug/l

RT: 2.57 min Scan# 233

Delta R.T. 0.00 min

Lab File: VX007608.D

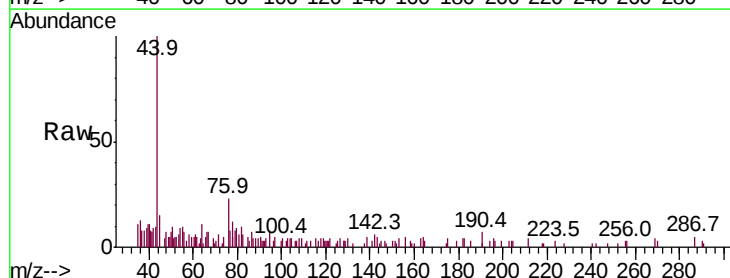
Acq: 19 Feb 2019 12:57

Tgt Ion: 76 Resp: 1371

Ion Ratio Lower Upper

76 100

78 33.6 7.1 10.7#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

2.57

600

500

400

300

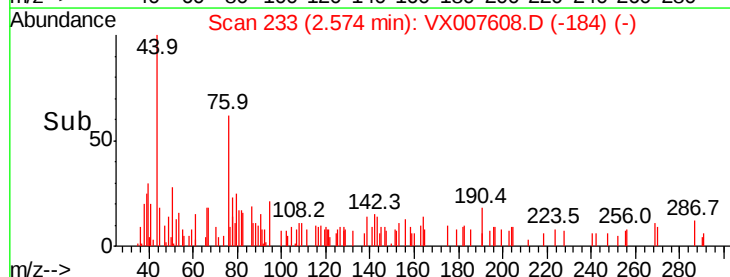
200

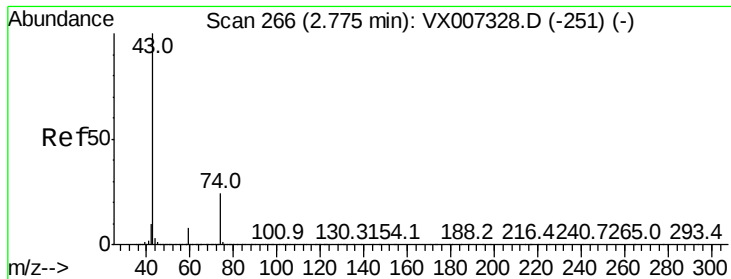
100

0

Time-->

2.50 2.55 2.60 2.65

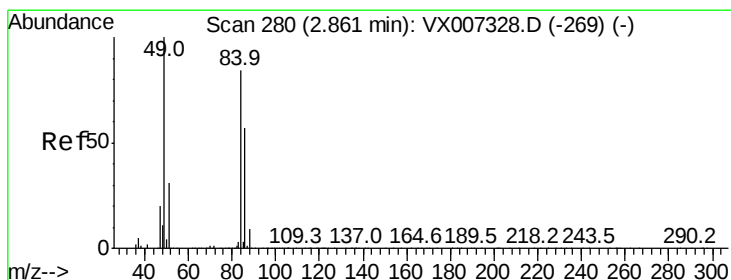
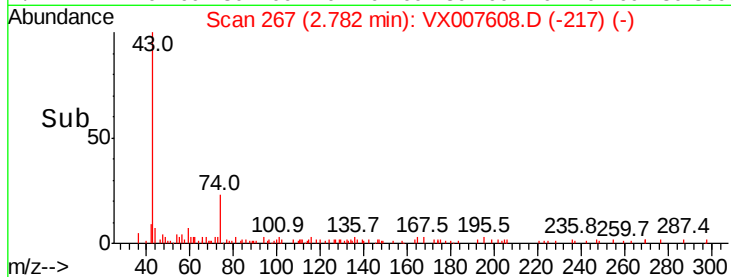
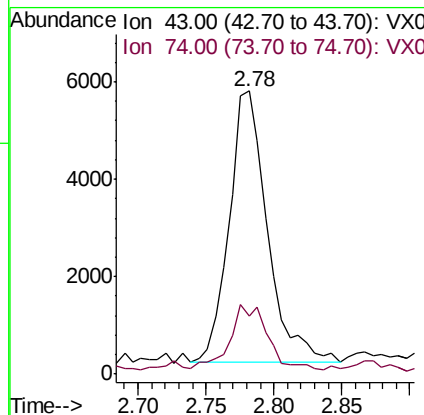
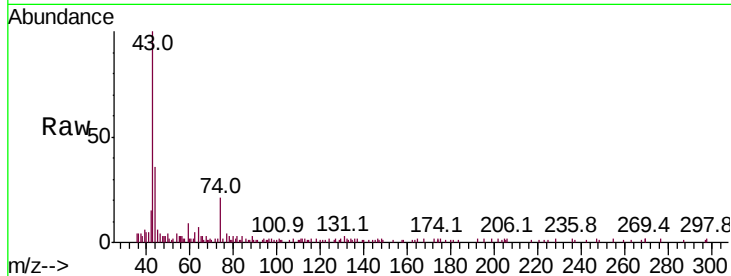




#18  
Methyl Acetate  
Concen: 2.569 ug/l  
RT: 2.78 min Scan# 267  
Delta R.T. 0.01 min  
Lab File: VX007608.D  
Acq: 19 Feb 2019 12:57

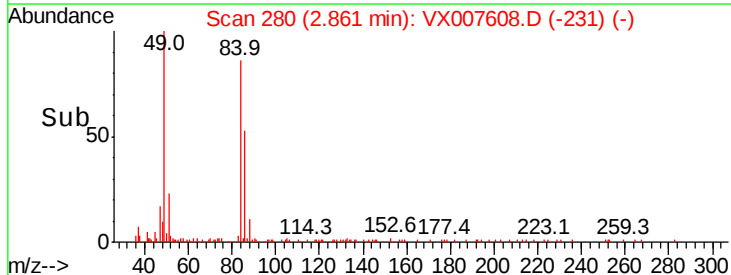
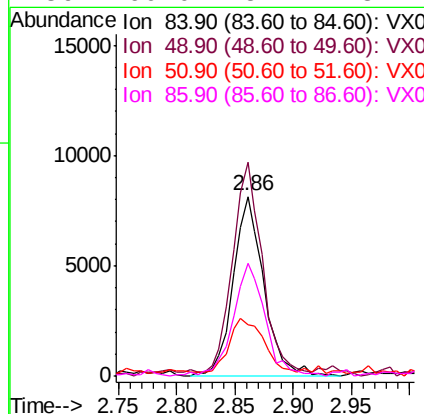
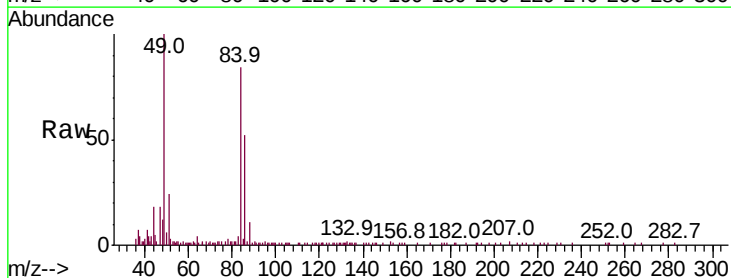
Instrument :  
MSVOA\_X  
ClientSampleId :  
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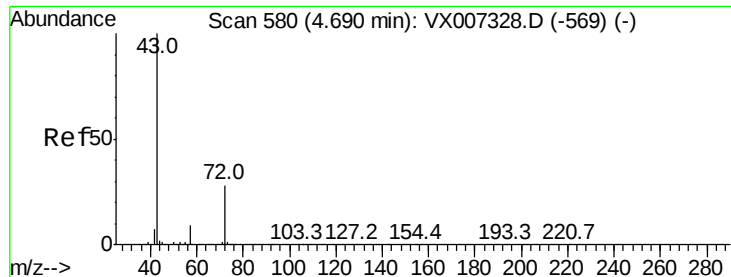
Tot Ion: 43 Resp: 10926  
Ion Ratio Lower Upper  
43 100  
74 26.0 19.4 29.2



#20  
Methylene Chloride  
Concen: 3.129 ug/l  
RT: 2.86 min Scan# 280  
Delta R.T. 0.00 min  
Lab File: VX007608.D  
Acq: 19 Feb 2019 12:57

Tgt Ion: 84 Resp: 14980  
Ion Ratio Lower Upper  
84 100  
49 115.3 94.8 142.2  
51 26.5 29.8 44.8#  
86 60.0 54.1 81.1





#25

2-Butanone

Concen: 2.200 ug/l

RT: 4.70 min Scan# 581

Delta R.T. 0.01 min

Lab File: VX007608.D

Acq: 19 Feb 2019 12:57

Instrument :

MSVOA\_X

ClientSampleId :

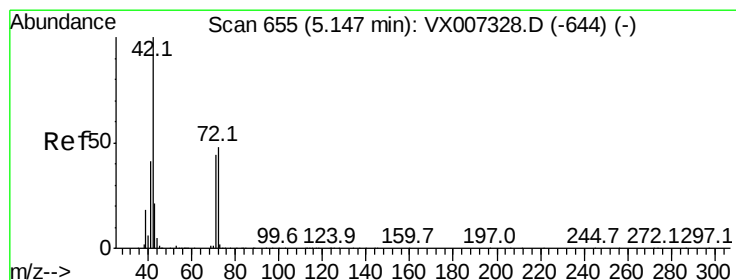
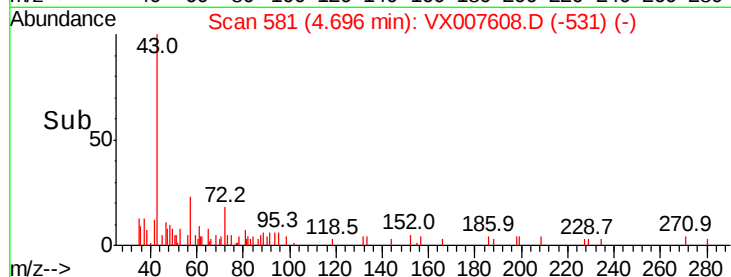
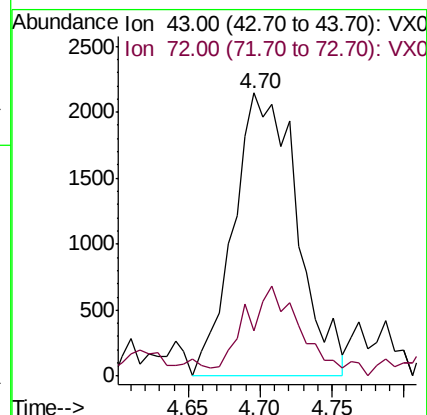
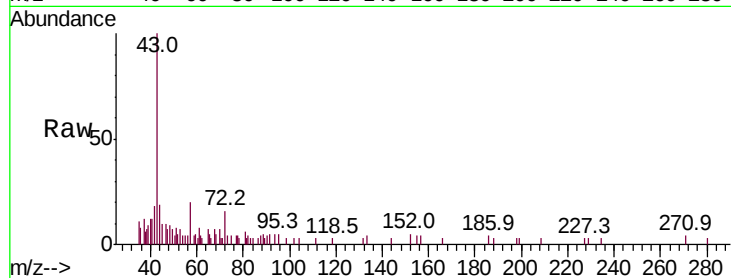
CABLE-BRIDGE-FOUNDATION-D-5

Tot Ion: 43 Resp: 6564

Ion Ratio Lower Upper

43 100

72 13.1 22.2 33.2#



#29

Tetrahydrofuran

Concen: 1.236 ug/l

RT: 5.16 min Scan# 657

Delta R.T. 0.01 min

Lab File: VX007608.D

Acq: 19 Feb 2019 12:57

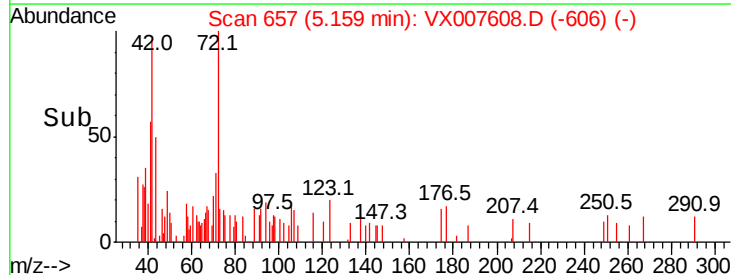
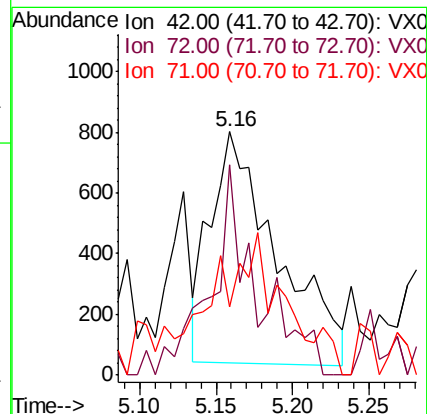
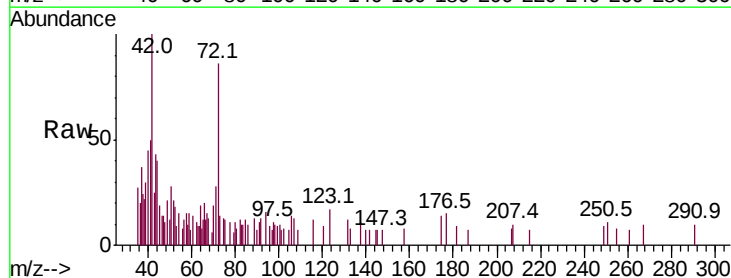
Tgt Ion: 42 Resp: 2320

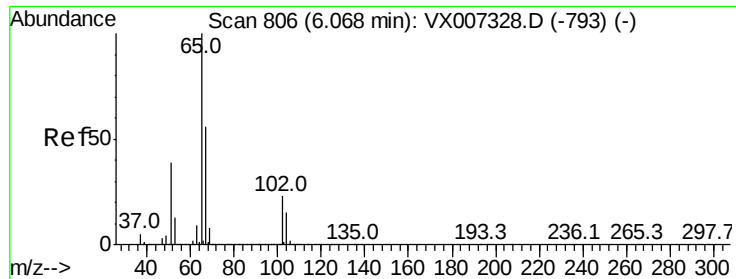
Ion Ratio Lower Upper

42 100

72 50.3 37.6 56.4

71 19.9 34.6 51.8#





#33

1,2-Dichloroethane-d4

Concen: 54.586 ug/l

RT: 6.07 min Scan# 807

Delta R.T. 0.01 min

Lab File: VX007608.D

Acq: 19 Feb 2019 12:57

Instrument :

MSVOA\_X

ClientSampleId :

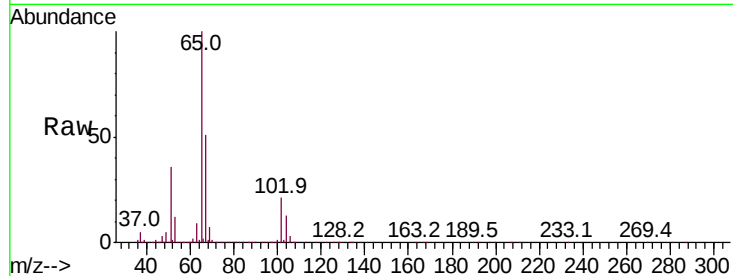
CABLE-BRIDGE-FOUNDATION-D-5

Tot Ion: 65 Resp: 249858

Ion Ratio Lower Upper

65 100

67 52.6 0.0 108.8



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0

6.07

100000

80000

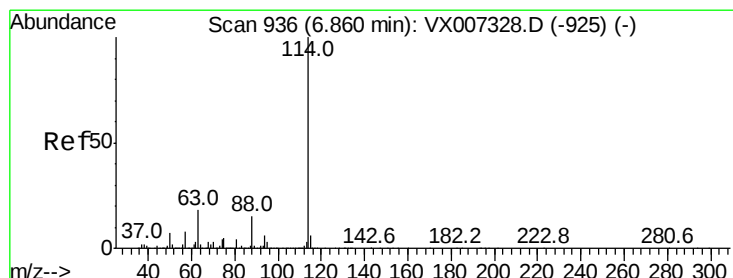
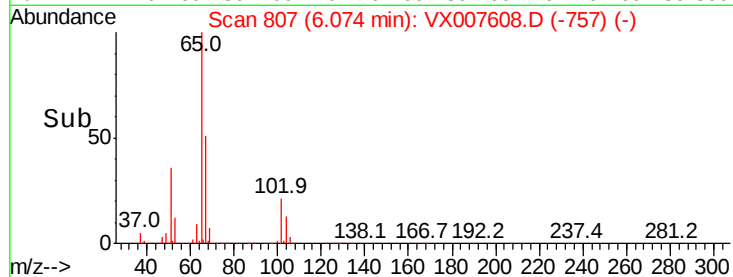
60000

40000

20000

0

Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.86 min Scan# 936

Delta R.T. -0.00 min

Lab File: VX007608.D

Acq: 19 Feb 2019 12:57

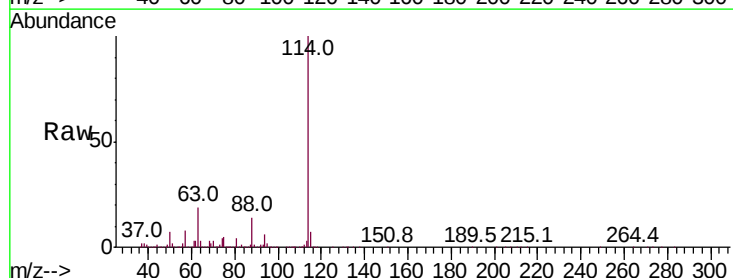
Tgt Ion:114 Resp: 699770

Ion Ratio Lower Upper

114 100

63 18.6 0.0 35.6

88 14.4 0.0 29.6



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

6.86

400000

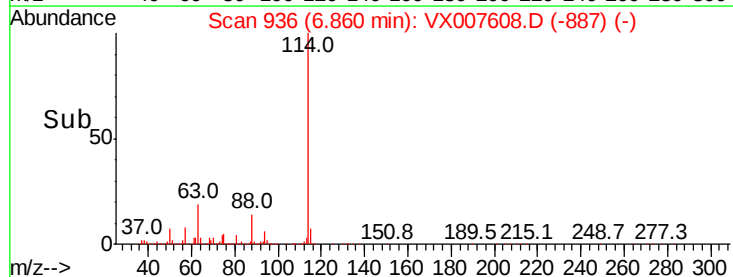
300000

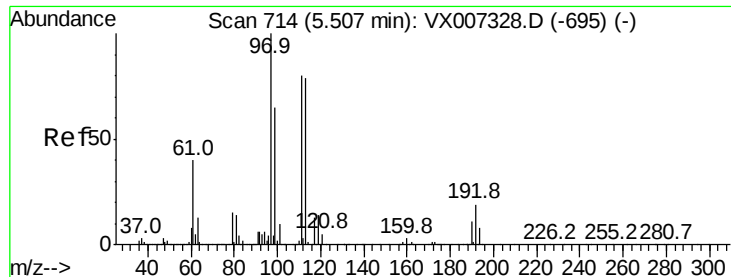
200000

100000

0

Time-->





#35

Dibromofluoromethane

Concen: 50.458 ug/l

RT: 5.50 min Scan# 713

Delta R.T. -0.01 min

Lab File: VX007608.D

Acq: 19 Feb 2019 12:57

Instrument :

MSVOA\_X

ClientSampleId :

CABLE-BRIDGE-FOUNDATION-D-5

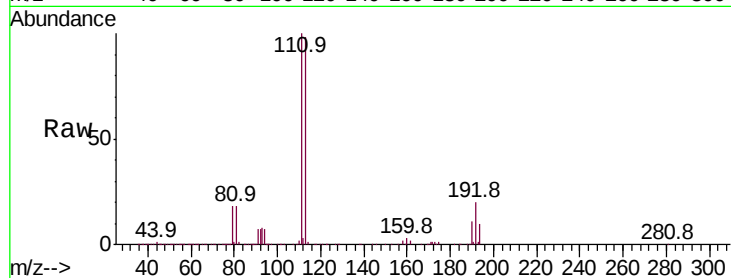
Tot Ion:113 Resp: 229742

Ion Ratio Lower Upper

113 100

111 103.6 81.8 122.8

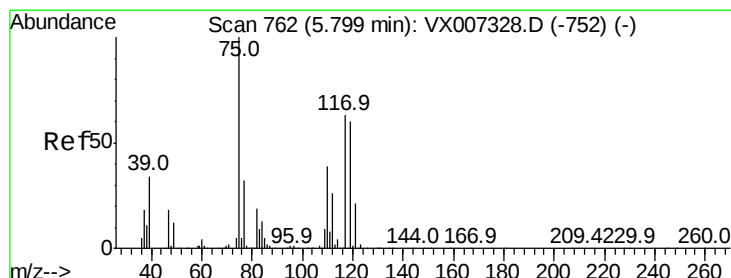
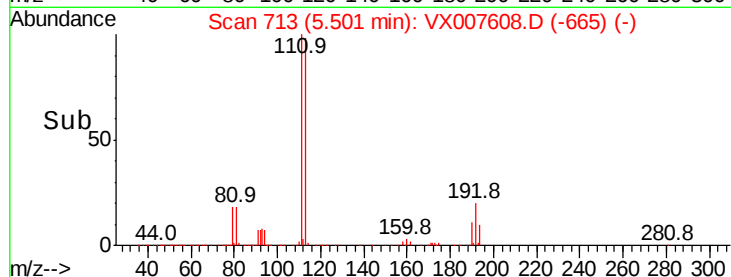
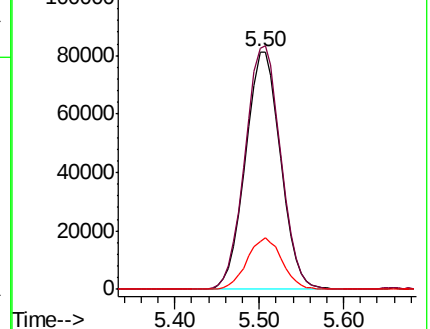
192 21.8 18.5 27.7



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: 4.443 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.13 min

Lab File: VX007608.D

Acq: 19 Feb 2019 12:57

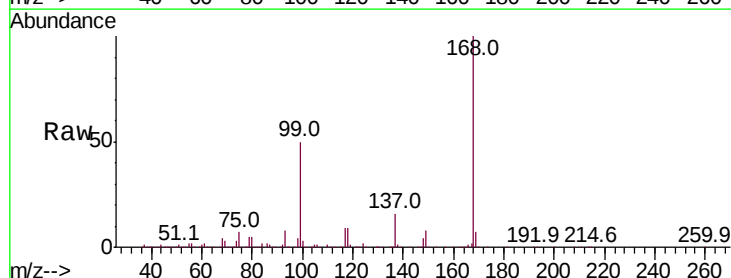
Tgt Ion: 75 Resp: 27894

Ion Ratio Lower Upper

75 100

110 11.4 20.0 59.9#

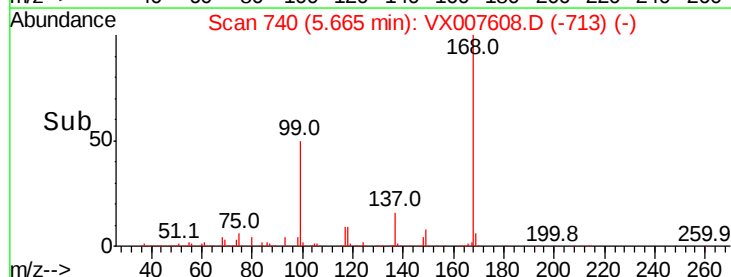
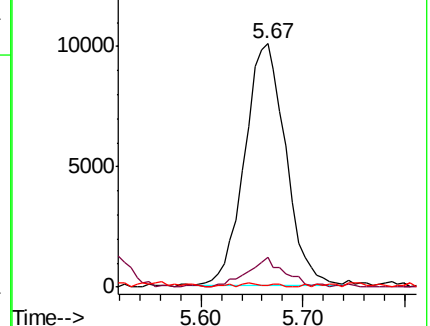
77 0.4 24.7 37.1#

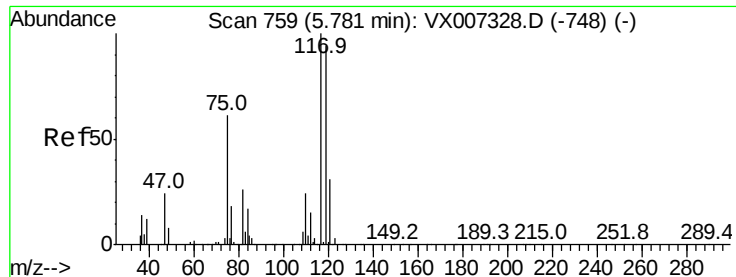


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 6.500 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.12 min

Lab File: VX007608.D

Acq: 19 Feb 2019 12:57

Instrument :

MSVOA\_X

ClientSampleId :

CABLE-BRIDGE-FOUNDATION-D-5

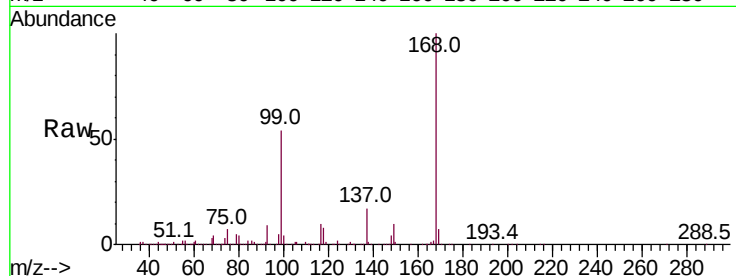
Tot Ion:117 Resp: 39596

Ion Ratio Lower Upper

117 100

119 6.8 75.3 112.9#

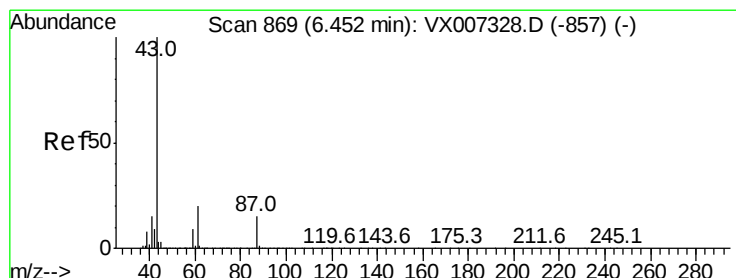
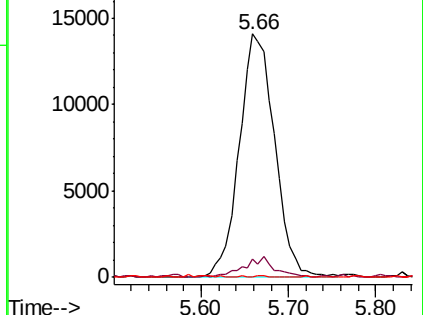
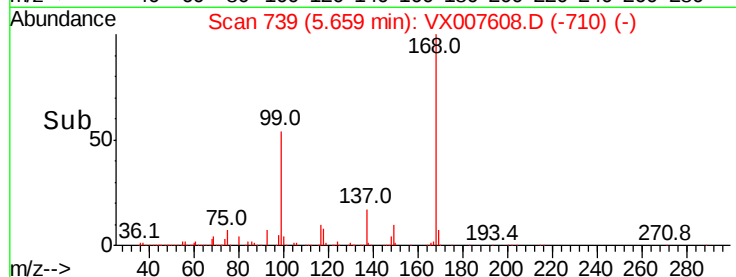
121 0.0 25.0 37.4#



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: 2.152 ug/l

RT: 6.46 min Scan# 871

Delta R.T. 0.01 min

Lab File: VX007608.D

Acq: 19 Feb 2019 12:57

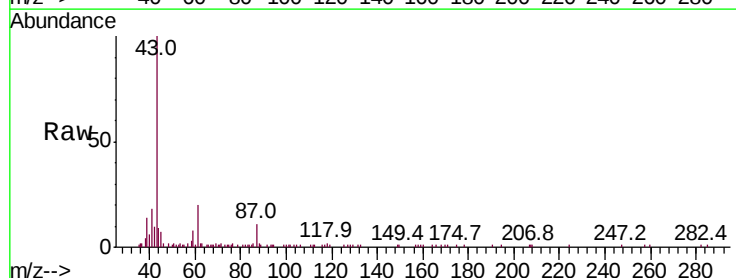
Tgt Ion: 43 Resp: 21083

Ion Ratio Lower Upper

43 100

61 21.9 16.1 24.1

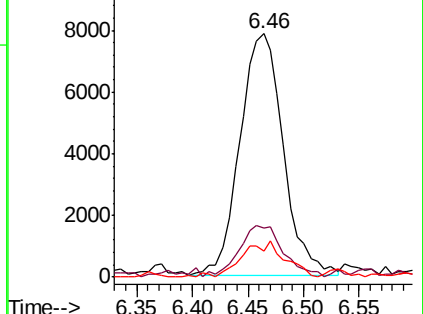
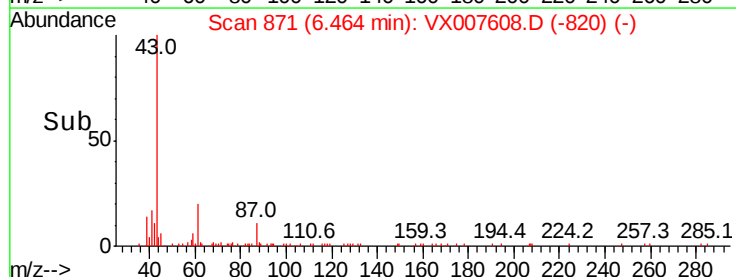
87 14.4 11.5 17.3

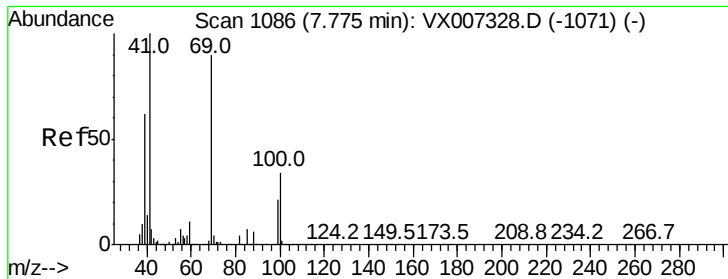


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0

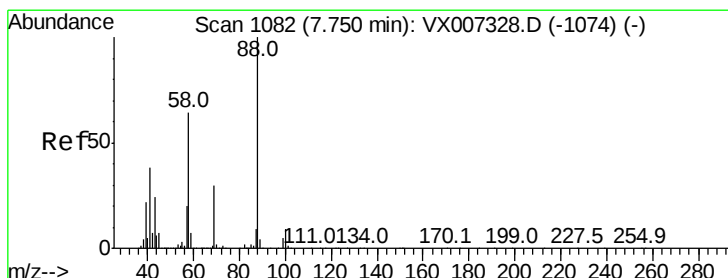
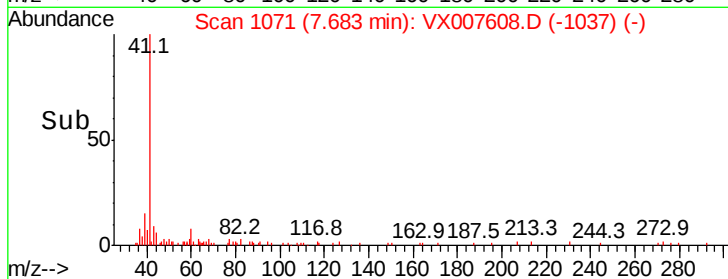
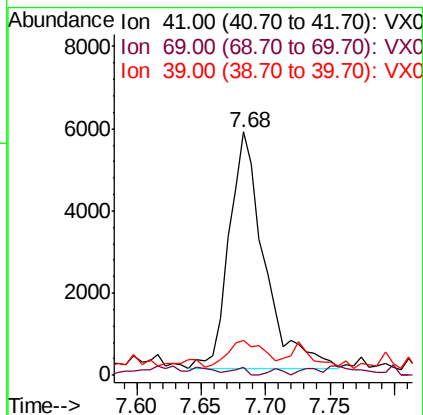
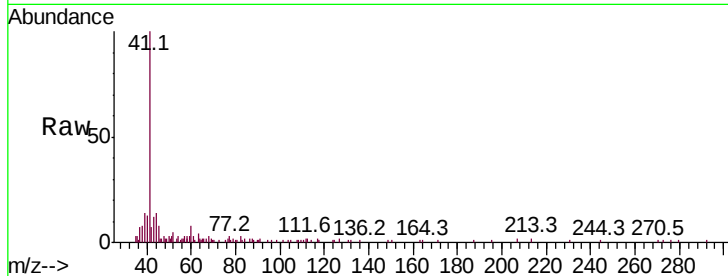




#48  
Methvl methacrylate  
Concen: 2.251 ug/l  
RT: 7.68 min Scan# 1071  
Delta R.T. -0.09 min  
Lab File: VX007608.D  
Acq: 19 Feb 2019 12:57

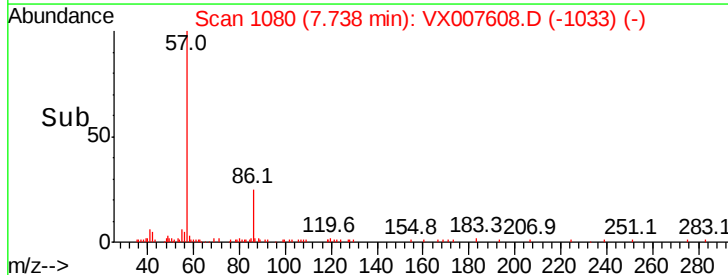
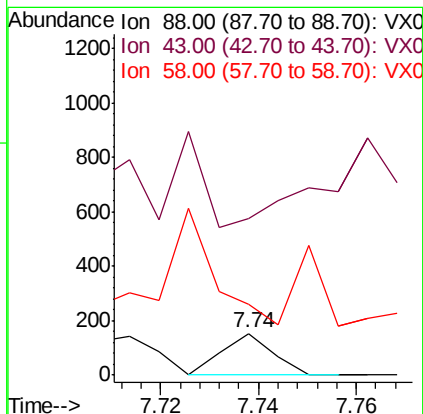
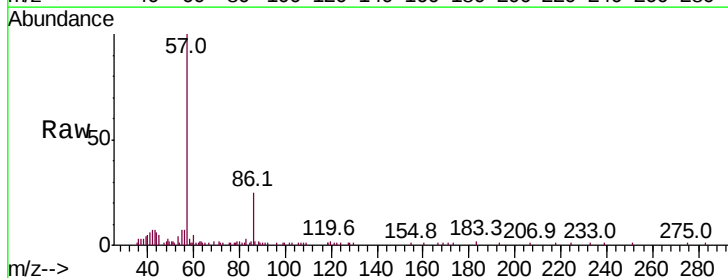
Instrument :  
MSVOA\_X  
ClientSampleId :  
CABLE-BRIDGE-FOUNDATION-D-5

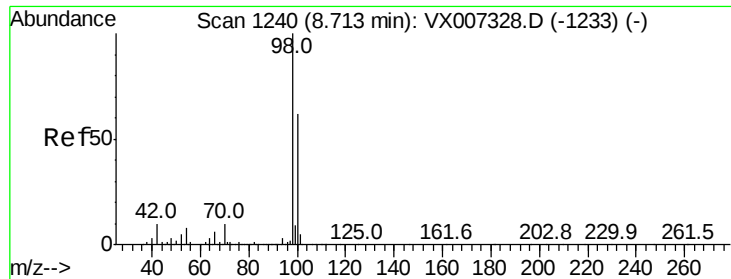
Tot Ion: 41 Resp: 11031  
Ion Ratio Lower Upper  
41 100  
69 1.5 70.2 105.4#  
39 0.0 47.4 71.0#



#49  
1,4-Dioxane  
Concen: 7.868 ug/l  
RT: 7.74 min Scan# 1080  
Delta R.T. -0.01 min  
Lab File: VX007608.D  
Acq: 19 Feb 2019 12:57

Tgt Ion: 88 Resp: 111  
Ion Ratio Lower Upper  
88 100  
43 0.0 24.2 36.4#  
58 0.0 53.0 79.4#





#50

Toluene-d8

Concen: 52.083 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.00 min

Lab File: VX007608.D

Acq: 19 Feb 2019 12:57

Instrument :

MSVOA\_X

ClientSampleId :

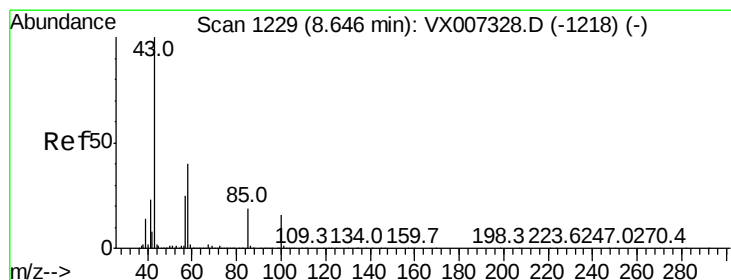
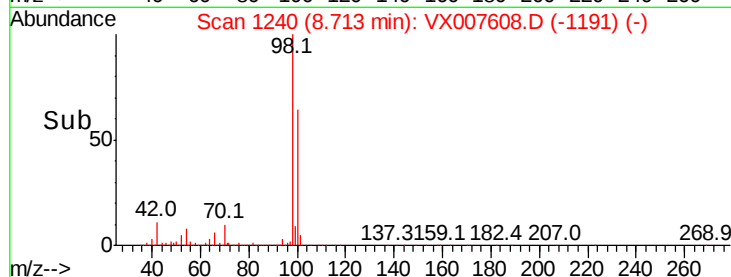
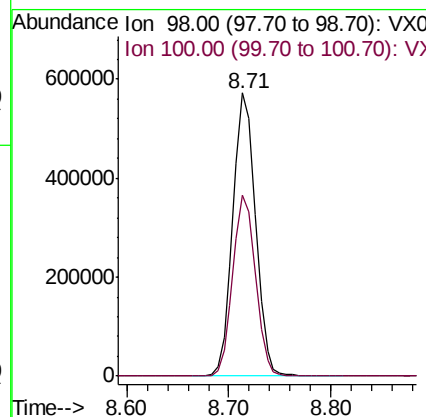
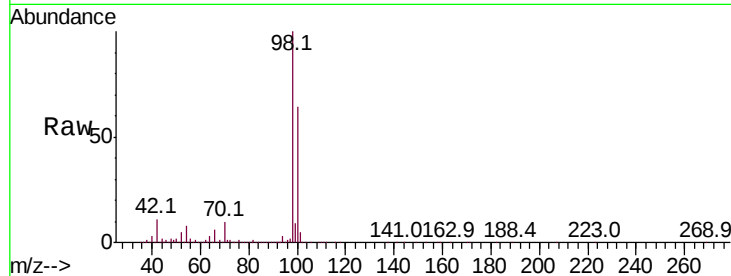
CABLE-BRIDGE-FOUNDATION-D-5

Tot Ion: 98 Resp: 879830

Ion Ratio Lower Upper

98 100

100 64.0 51.6 77.4



#51

4-Methyl-2-Pentanone

Concen: 14.842 ug/l

RT: 8.62 min Scan# 1224

Delta R.T. -0.03 min

Lab File: VX007608.D

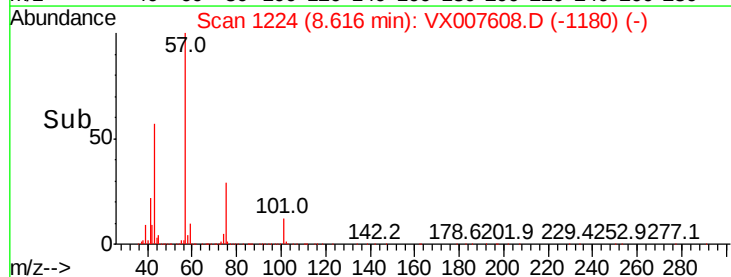
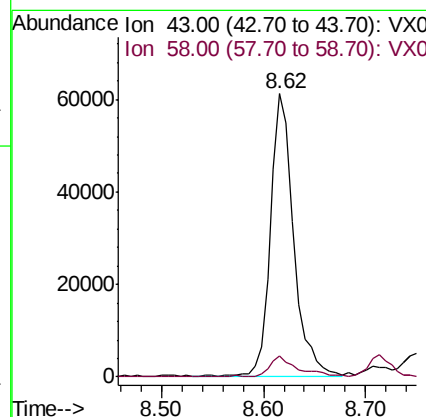
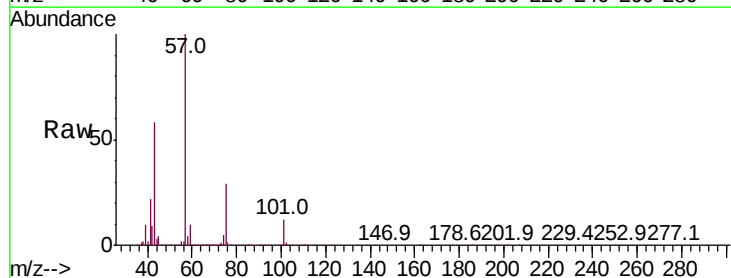
Acq: 19 Feb 2019 12:57

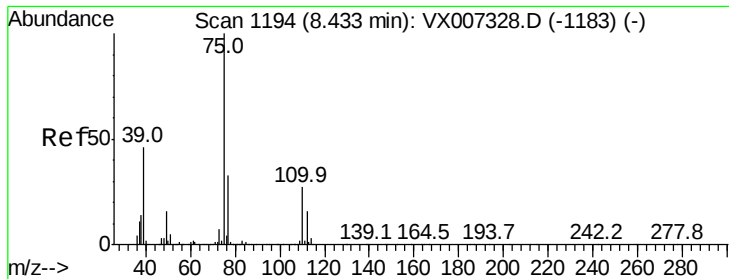
Tgt Ion: 43 Resp: 95720

Ion Ratio Lower Upper

43 100

58 9.2 31.2 46.8#





#54

cis-1,3-Dichloropropene

Concen: 7.072 ug/l

RT: 8.62 min Scan# 1224

Delta R.T. 0.18 min

Lab File: VX007608.D

Acq: 19 Feb 2019 12:57

Instrument :

MSVOA\_X

ClientSampleId :

CABLE-BRIDGE-FOUNDATION-D-5

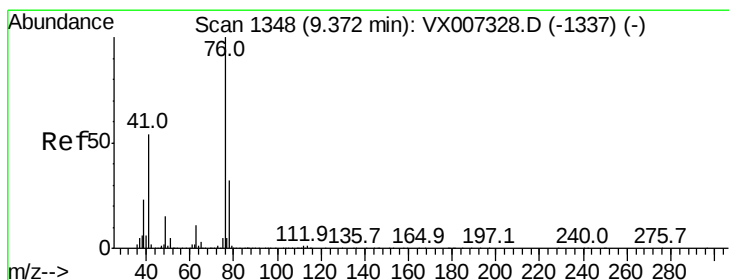
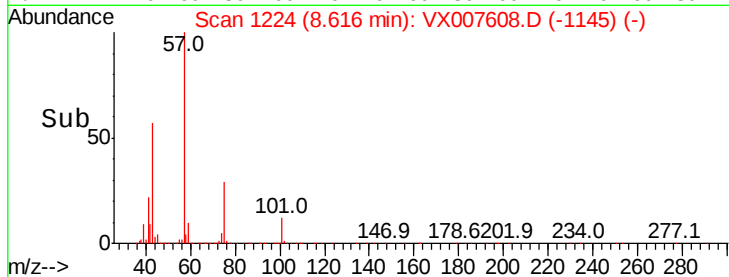
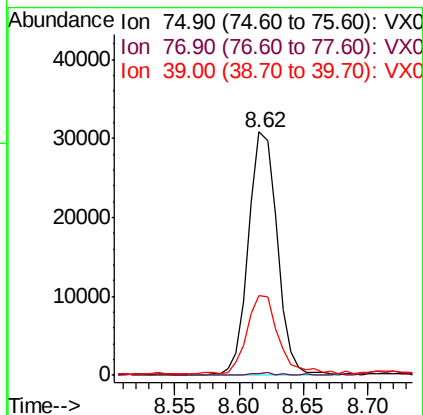
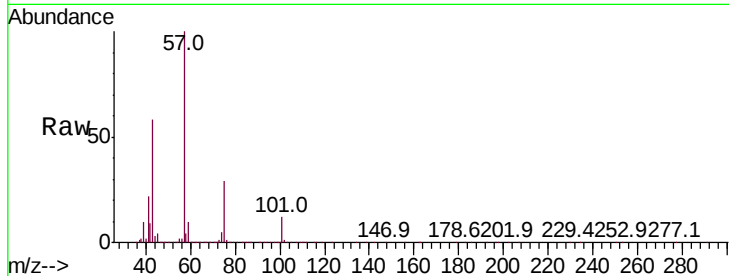
Tot Ion: 75 Resp: 47681

Ion Ratio Lower Upper

75 100

77 0.0 26.2 39.4#

39 32.2 37.1 55.7#



#57

1,3-Dichloropropane

Concen: 1.094 ug/l

RT: 9.54 min Scan# 1376

Delta R.T. 0.17 min

Lab File: VX007608.D

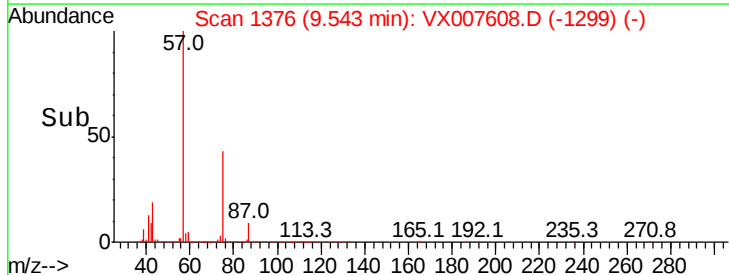
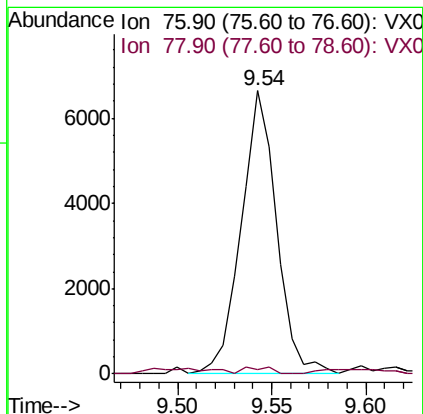
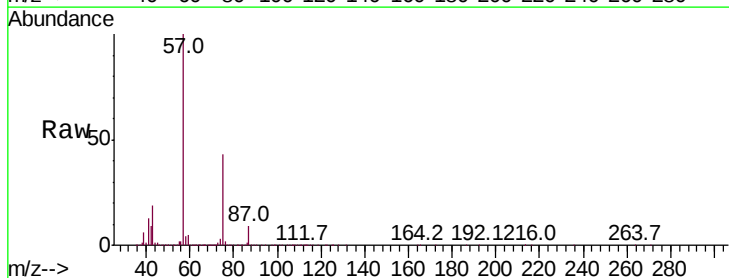
Acq: 19 Feb 2019 12:57

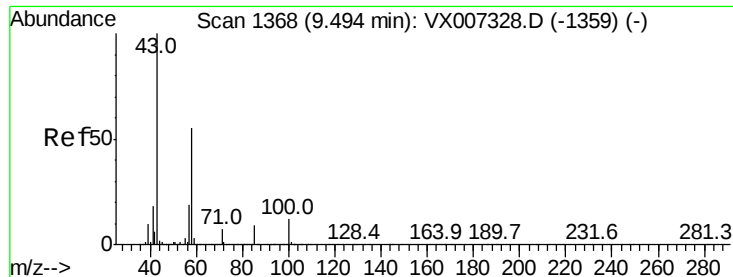
Tgt Ion: 76 Resp: 8657

Ion Ratio Lower Upper

76 100

78 1.9 25.8 38.8#

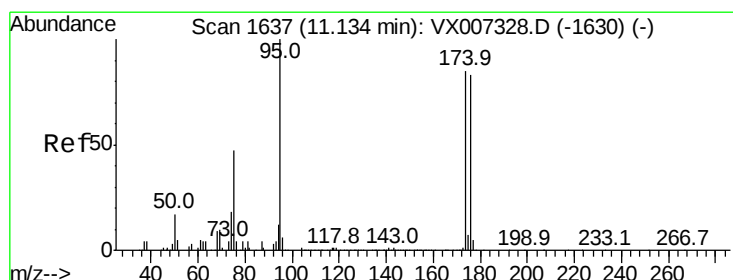
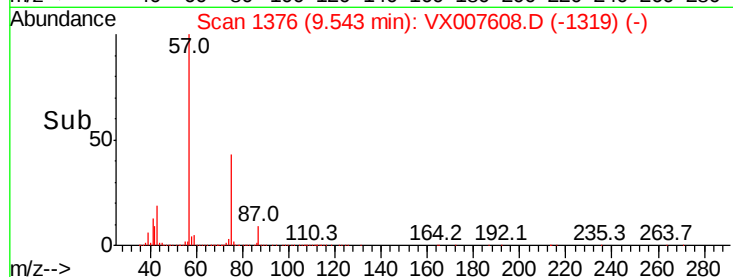
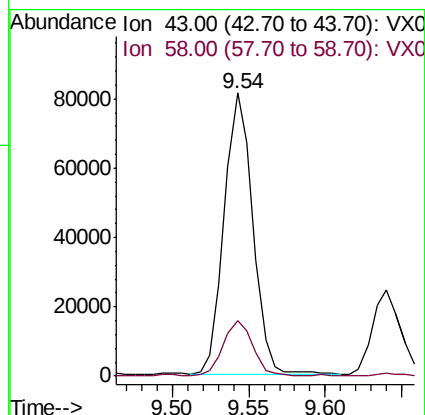
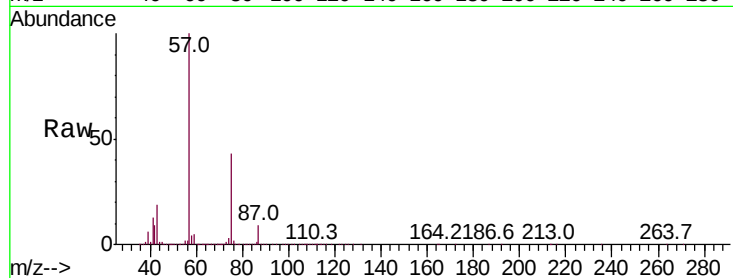




#59  
2-Hexanone  
Concen: 21.145 ug/l  
RT: 9.54 min Scan# 1376  
Delta R.T. 0.05 min  
Lab File: VX007608.D  
Acq: 19 Feb 2019 12:57

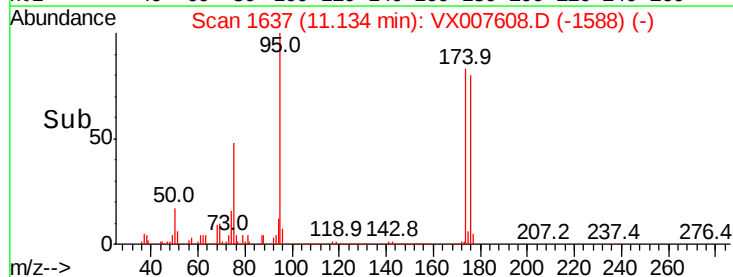
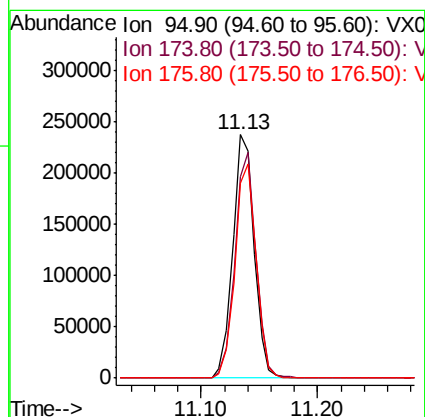
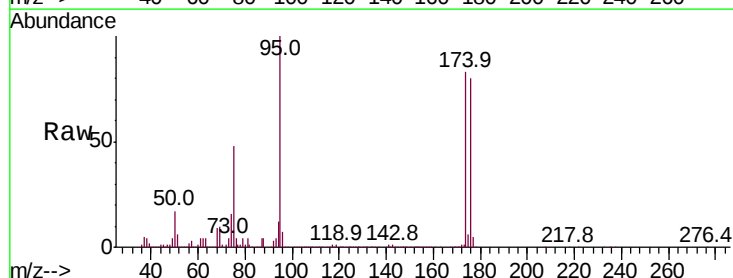
Instrument :  
MSVOA\_X  
ClientSampleId :  
CABLE-BRIDGE-FOUNDATION-D-5

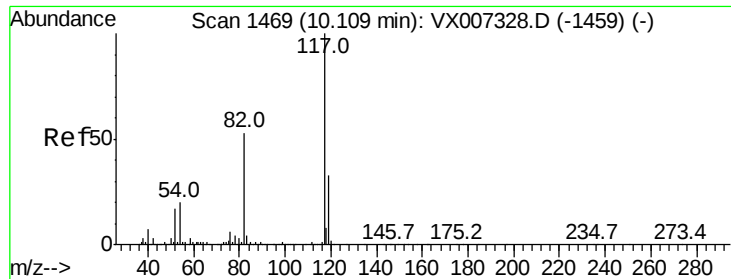
Tot Ion: 43 Resp: 106118  
Ion Ratio Lower Upper  
43 100  
58 20.3 27.1 81.3#



#62  
4-Bromofluorobenzene  
Concen: 49.159 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. 0.00 min  
Lab File: VX007608.D  
Acq: 19 Feb 2019 12:57

Tgt Ion: 95 Resp: 303197  
Ion Ratio Lower Upper  
95 100  
174 91.9 0.0 189.2  
176 88.1 0.0 186.2

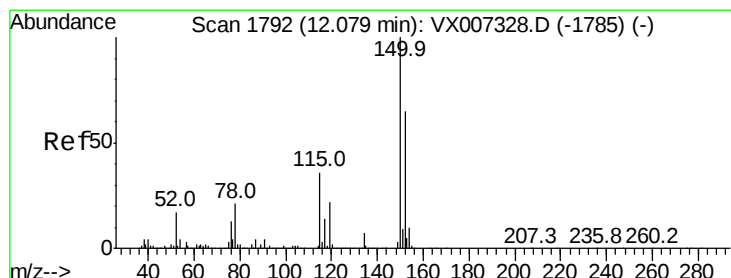
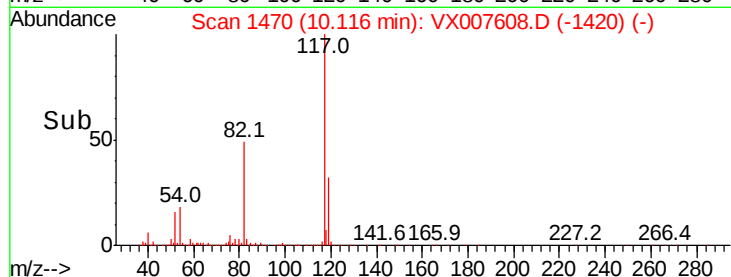
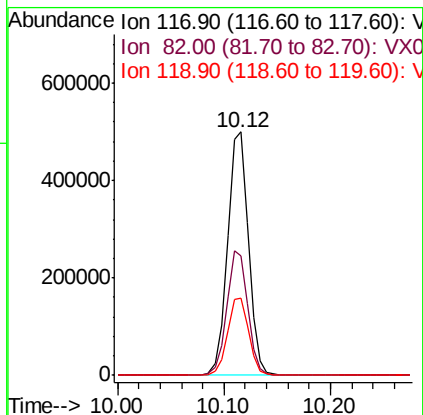
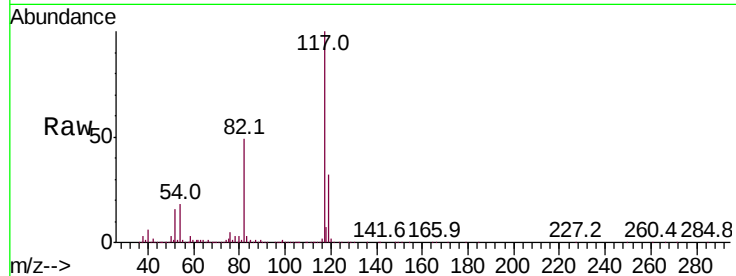




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. 0.01 min  
Lab File: VX007608.D  
Acq: 19 Feb 2019 12:57

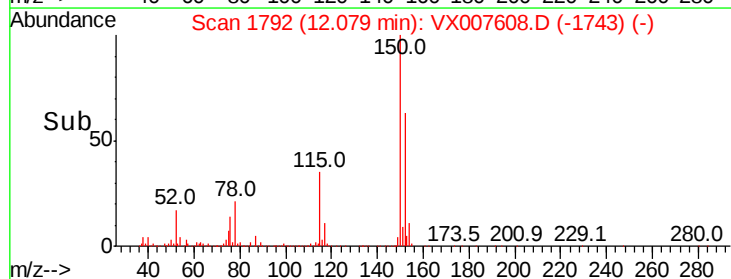
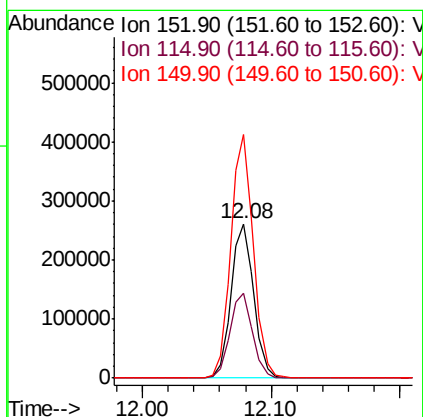
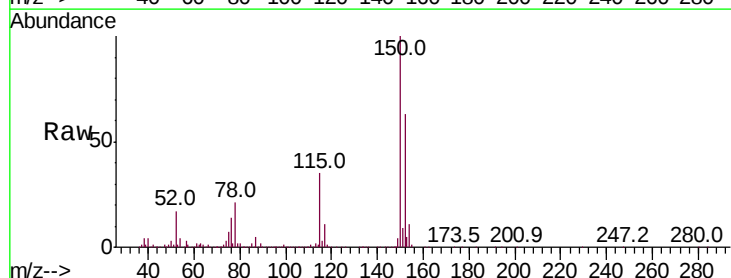
Instrument :  
MSVOA\_X  
ClientSampleId :  
CABLE-BRIDGE-FOUNDATION-D-5

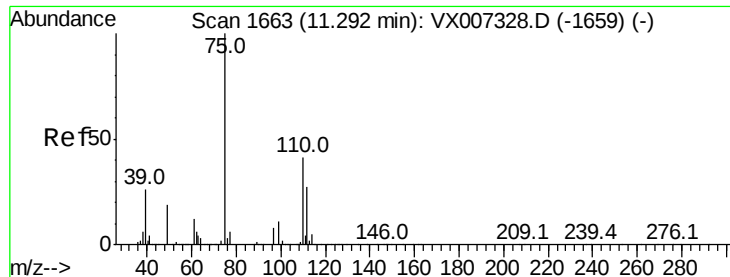
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 49.2  | 42.1  | 63.1  |
| 119     | 31.8  | 26.5  | 39.7  |



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. 0.00 min  
Lab File: VX007608.D  
Acq: 19 Feb 2019 12:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 54.9  | 38.0  | 114.0 |
| 150     | 156.8 | 0.0   | 346.4 |





#76

1,2,3-Trichloropropane

Concen: 23.096 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX007608.D

Acq: 19 Feb 2019 12:57

Instrument :

MSVOA\_X

ClientSampleId :

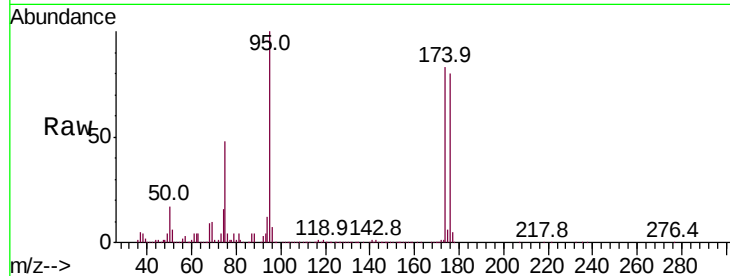
CABLE-BRIDGE-FOUNDATION-D-5

Tot Ion: 75 Resp: 144125

Ion Ratio Lower Upper

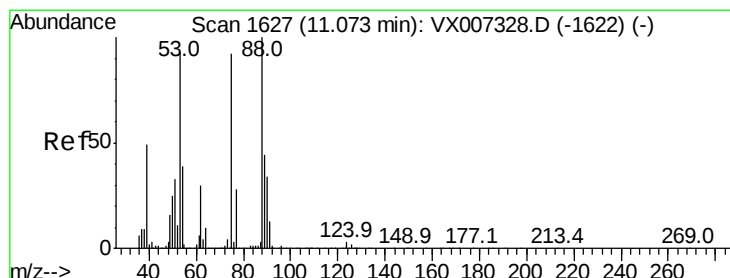
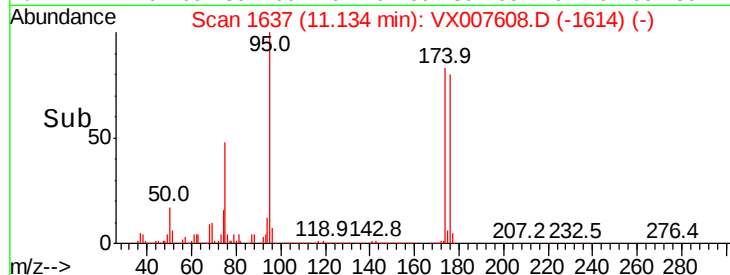
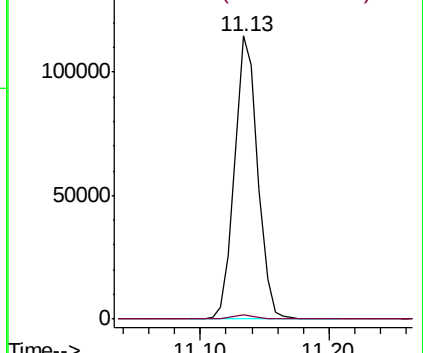
75 100

77 1.7 23.0 69.0#



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: 69.579 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX007608.D

Acq: 19 Feb 2019 12:57

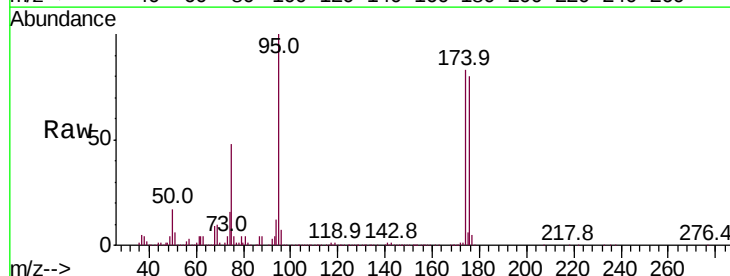
Tgt Ion: 75 Resp: 144125

Ion Ratio Lower Upper

75 100

53 0.2 81.0 121.6#

89 0.1 41.4 62.0#



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

