

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX102418\  
 Data File : VX005543.D  
 Acq On : 24 Oct 2018 16:06  
 Operator : JC/MD  
 Sample : J5655-08  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 S37-EB-2018-1

Quant Time: Oct 25 04:54:06 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X102418W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 24 13:13:34 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 235724   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 328411   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 288711   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 134533   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.06  | 65   | 138247   | 48.04 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.08% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 107467   | 48.33 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.66% |          |
| 50) Toluene-d8              | 8.71  | 98   | 385497   | 48.25 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.50% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 126414   | 41.89 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 83.78% |          |

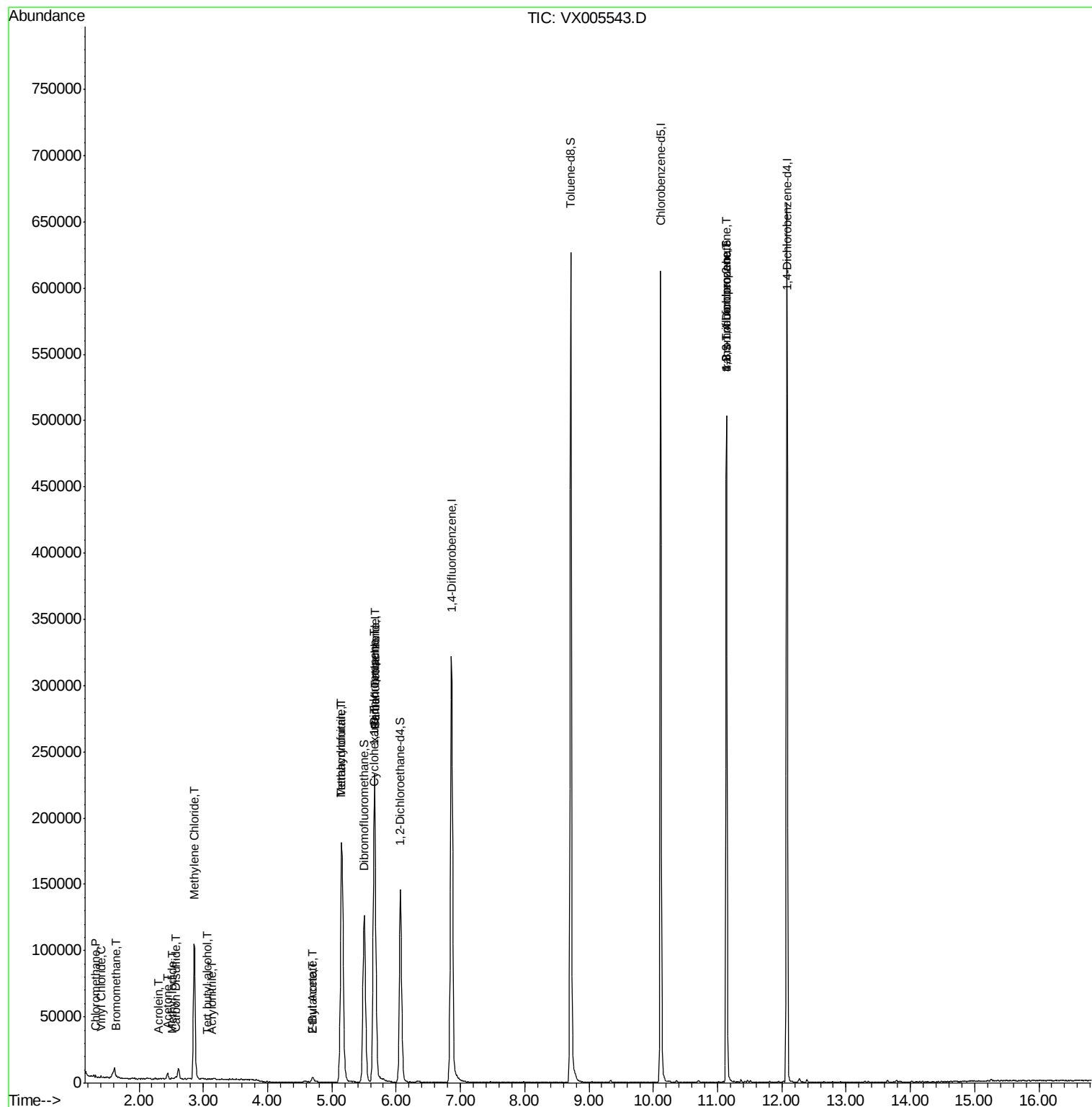
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 1272     | 0.429     | ug/l   | 100    |
| 4) Vinyl Chloride              | 1.41  | 62   | 729      | 0.250     | ug/l # | 84     |
| 5) Bromomethane                | 1.64  | 94   | 568      | 0.313     | ug/l   | 87     |
| 10) Methyl Iodide              | 2.52  | 142  | 313      | 2.847     | ug/l # | 82     |
| 11) Tert butyl alcohol         | 3.07  | 59   | 386      | 0.499     | ug/l # | 67     |
| 13) Acrolein                   | 2.29  | 56   | 106      | 0.268     | ug/l # | 1      |
| 15) Acrylonitrile              | 3.14  | 53   | 388      | 0.223     | ug/l # | 63     |
| 16) Acetone                    | 2.45  | 43   | 4805     | 3.160     | ug/l   | 94     |
| 17) Carbon Disulfide           | 2.57  | 76   | 1889     | 0.280     | ug/l # | 82     |
| 18) Methyl Acetate             | 2.77  | 43   | 339      | Below Cal | #      | 87     |
| 20) Methylene Chloride         | 2.86  | 84   | 46319    | 18.189    | ug/l   | 97     |
| 25) 2-Butanone                 | 4.70  | 43   | 6449     | 2.785     | ug/l   | 99     |
| 29) Tetrahydrofuran            | 5.15  | 42   | 169482   | 112.477   | ug/l   | 92     |
| 31) Cyclohexane                | 5.65  | 56   | 4324     | 1.115     | ug/l # | 17     |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 15664    | 4.915     | ug/l # | 49     |
| 37) Ethyl Acetate              | 4.70  | 43   | 6449     | 1.586     | ug/l # | 68     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 20542    | 6.120     | ug/l # | 16     |
| 41) Methacrylonitrile          | 5.15  | 41   | 97799    | 43.170    | ug/l # | 44     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 64604    | 23.576    | ug/l # | 37     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 64604    | 74.057    | ug/l # | 10     |

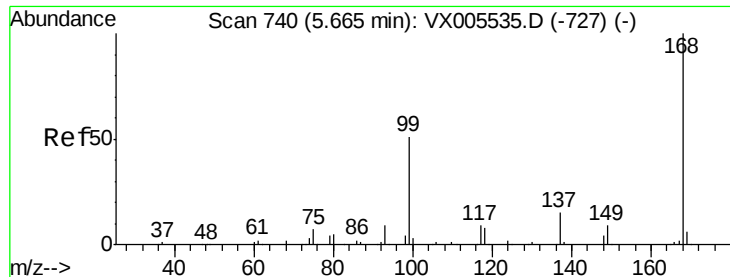
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX102418\  
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Instrument :  
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ClientSampleId :  
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Quant Time: Oct 25 04:54:06 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X102418W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 24 13:13:34 2018  
Response via : Initial Calibration

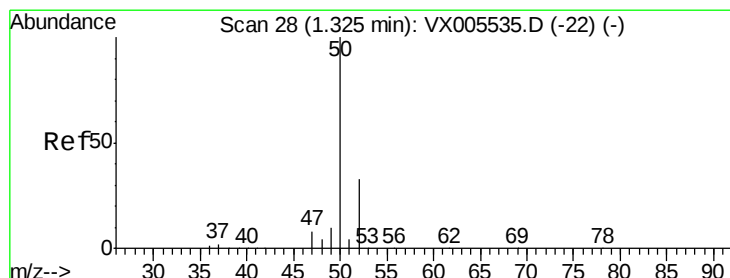
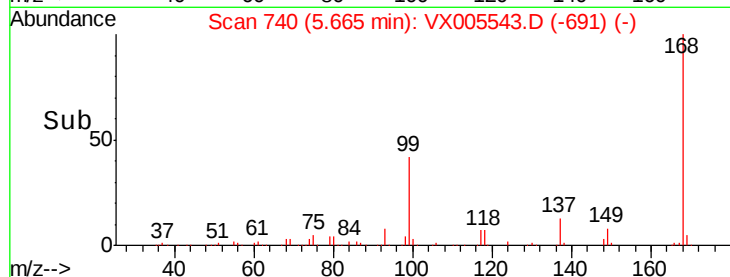
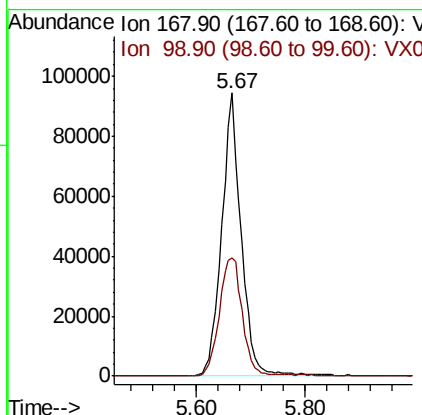
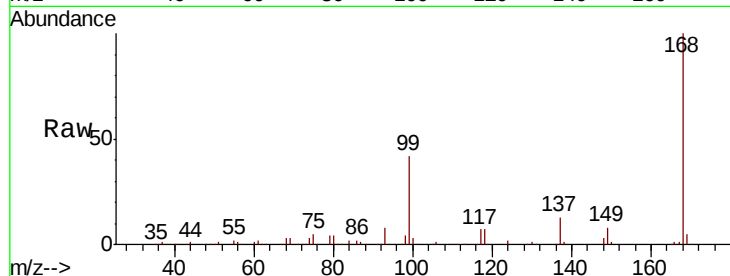




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 5.67 min Scan# 740  
Delta R.T. -0.00 min  
Lab File: VX005543.D  
Acq: 24 Oct 2018 16:06

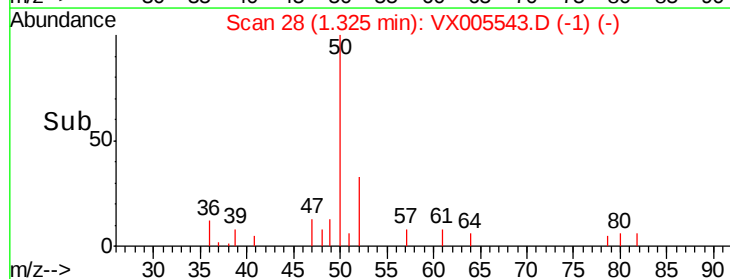
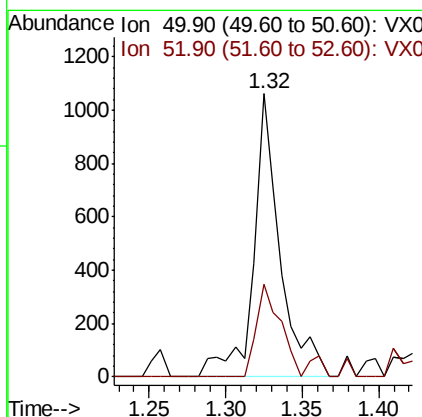
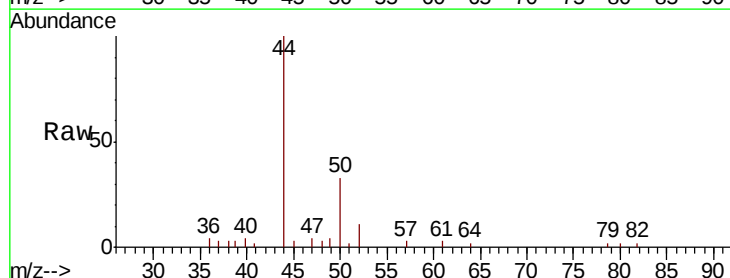
Instrument :  
MSVOA\_X  
ClientSampled :  
S37-EB-2018-1

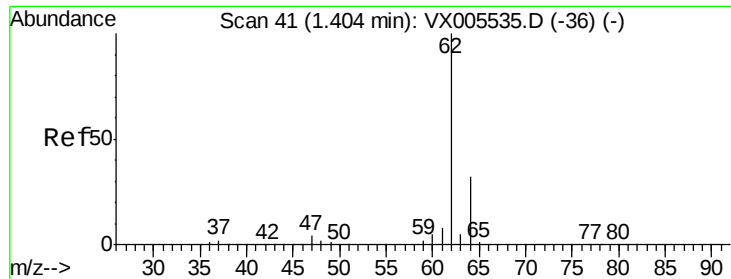
Tot Ion:168 Resp: 235724  
Ion Ratio Lower Upper  
168 100  
99 42.0 39.9 59.9



#3  
Chloromethane  
Concen: 0.429 ug/l  
RT: 1.32 min Scan# 28  
Delta R.T. -0.00 min  
Lab File: VX005543.D  
Acq: 24 Oct 2018 16:06

Tgt Ion: 50 Resp: 1272  
Ion Ratio Lower Upper  
50 100  
52 32.5 26.2 39.2





#4

Vinyl Chloride

Concen: 0.250 ug/l

RT: 1.41 min Scan# 42

Delta R.T. 0.01 min

Lab File: VX005543.D

Acq: 24 Oct 2018 16:06

Instrument :

MSVOA\_X

ClientSampled :

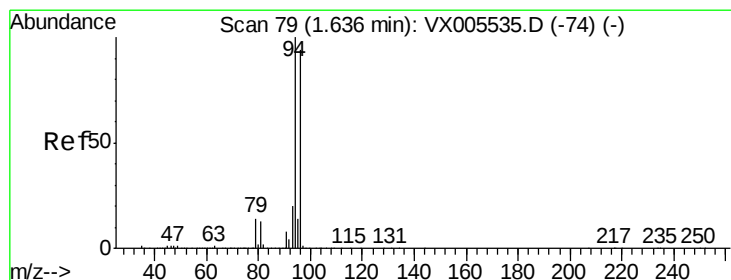
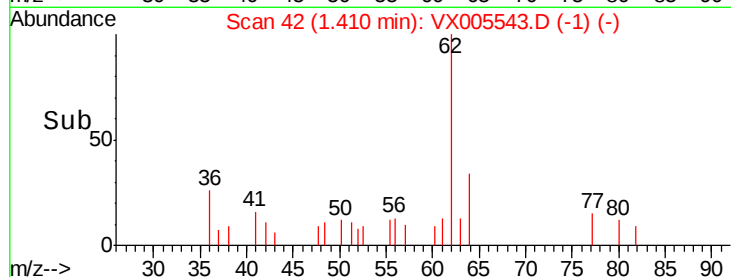
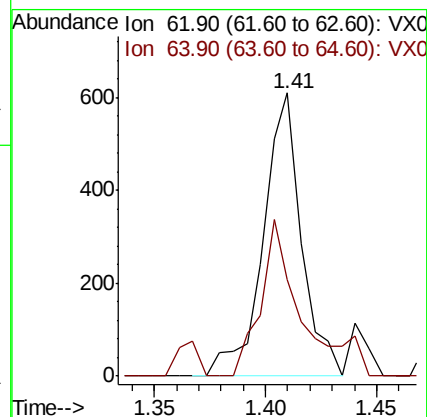
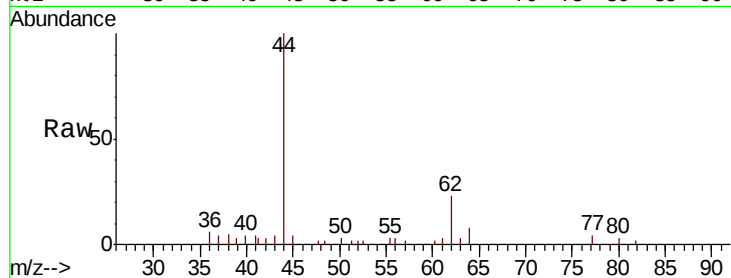
S37-EB-2018-1

Tot Ion: 62 Resp: 729

Ion Ratio Lower Upper

62 100

64 23.3 25.8 38.8#



#5

Bromomethane

Concen: 0.313 ug/l

RT: 1.64 min Scan# 80

Delta R.T. 0.01 min

Lab File: VX005543.D

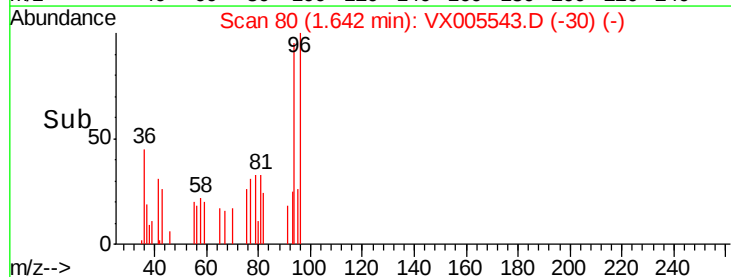
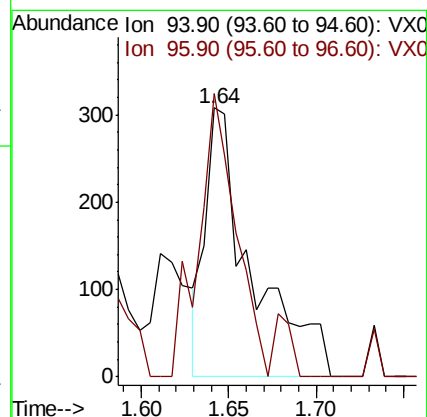
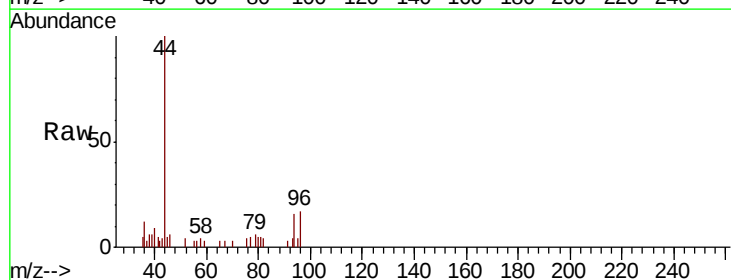
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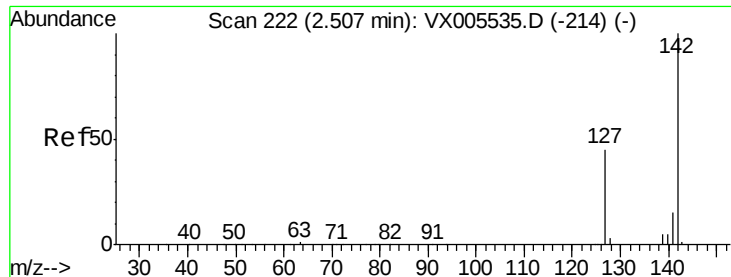
Tgt Ion: 94 Resp: 568

Ion Ratio Lower Upper

94 100

96 105.2 74.5 111.7

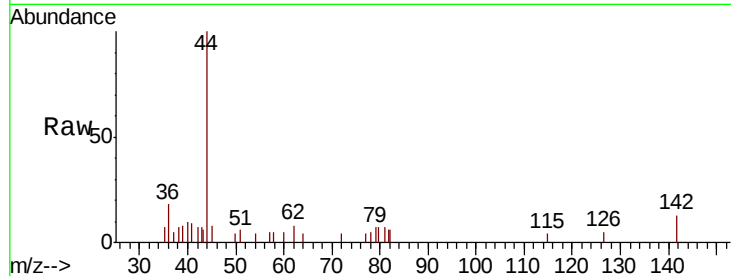




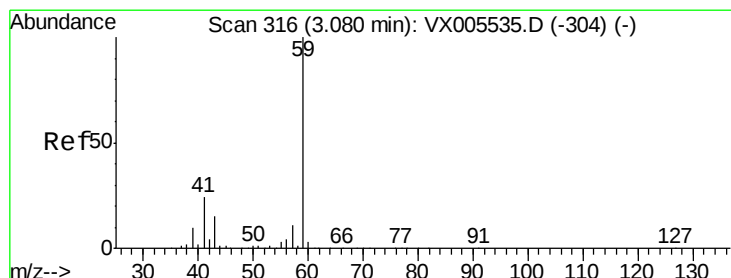
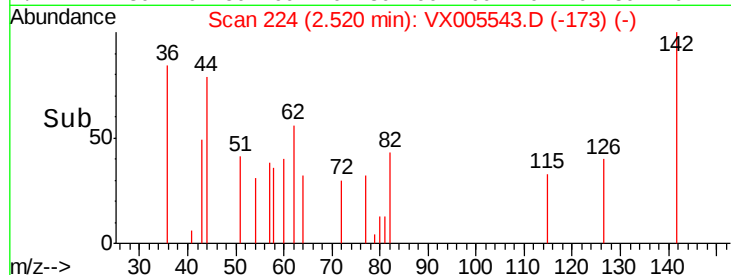
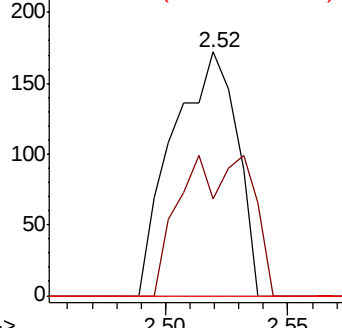
#10  
Methyl Iodide  
Concen: 2.847 ug/l  
RT: 2.52 min Scan# 224  
Delta R.T. 0.01 min  
Lab File: VX005543.D  
Acq: 24 Oct 2018 16:06

Instrument :  
MSVOA\_X  
ClientSampled :  
S37-EB-2018-1

Tot Ion:142 Resp: 313  
Ion Ratio Lower Upper  
142 100  
127 34.5 33.8 50.6  
141 0.0 11.4 17.0#

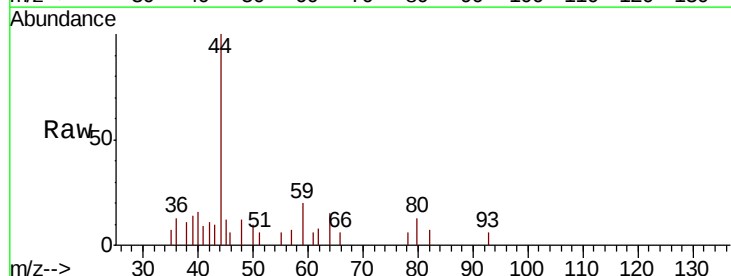


Abundance Ion 141.80 (141.50 to 142.50): V  
Ion 126.80 (126.50 to 127.50): V  
Ion 140.80 (140.50 to 141.50): V

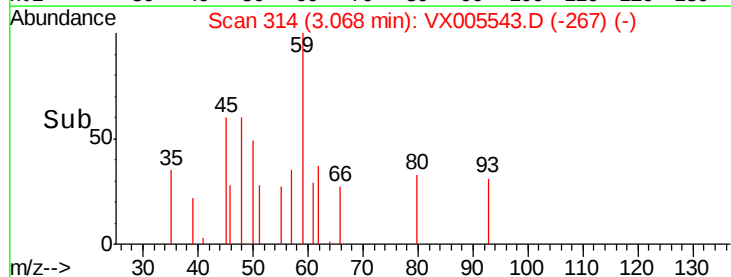
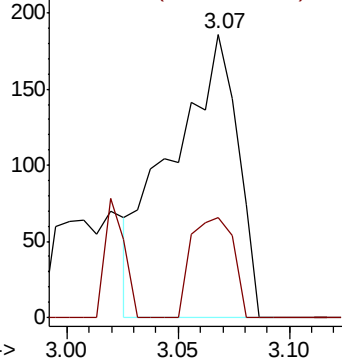


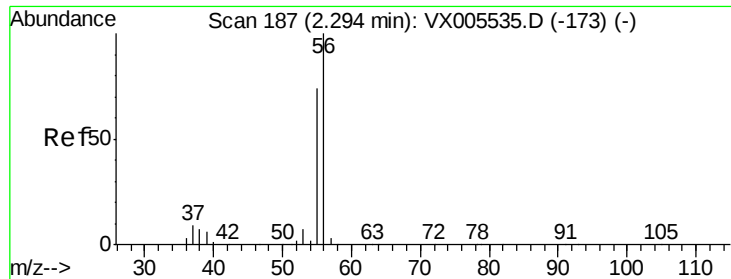
#11  
Tert butyl alcohol  
Concen: 0.499 ug/l  
RT: 3.07 min Scan# 314  
Delta R.T. -0.01 min  
Lab File: VX005543.D  
Acq: 24 Oct 2018 16:06

Tgt Ion: 59 Resp: 386  
Ion Ratio Lower Upper  
59 100  
57 22.5 8.2 12.4#



Abundance Ion 59.00 (58.70 to 59.70): VX0  
Ion 57.00 (56.70 to 57.70): VX0

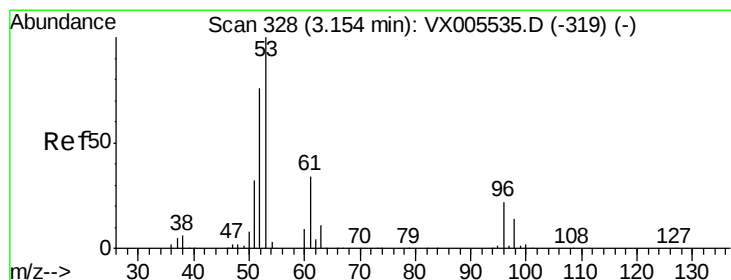
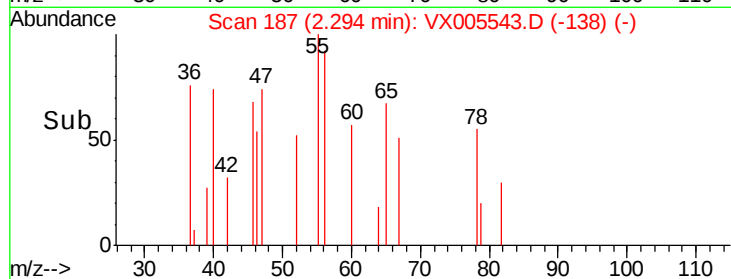
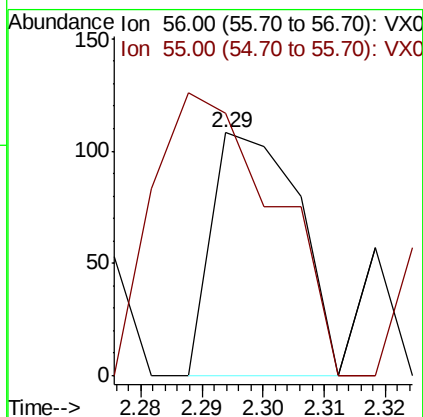
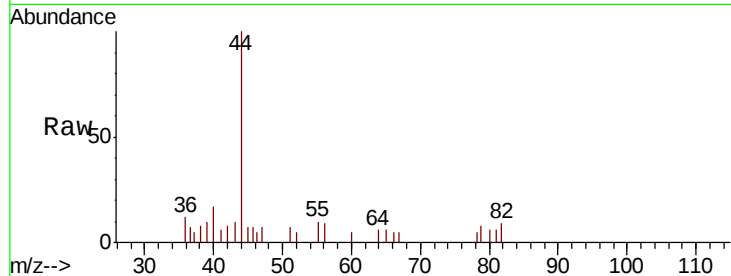




#13  
Acrolein  
Concen: 0.268 ug/l  
RT: 2.29 min Scan# 187  
Delta R.T. -0.00 min  
Lab File: VX005543.D  
Acq: 24 Oct 2018 16:06

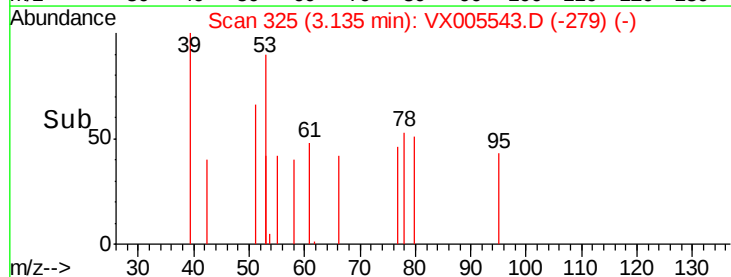
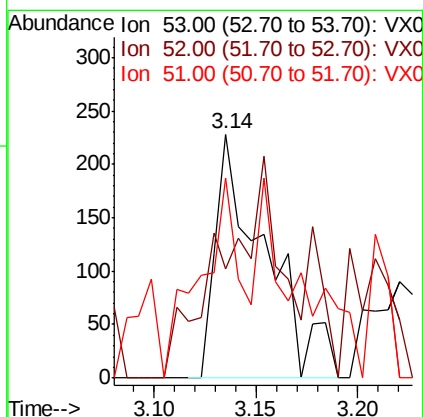
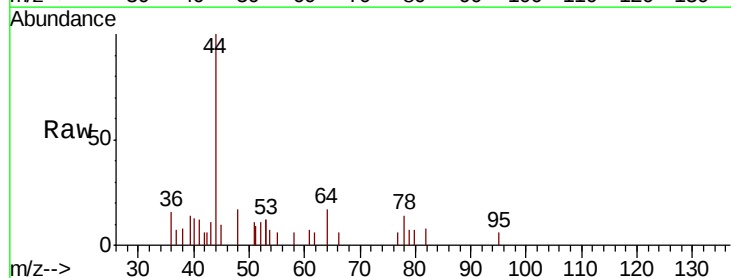
Instrument :  
MSVOA\_X  
ClientSampled :  
S37-EB-2018-1

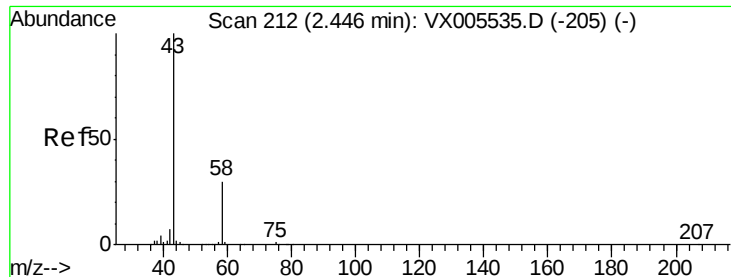
Tot Ion: 56 Resp: 106  
Ion Ratio Lower Upper  
56 100  
55 164.2 54.7 82.1#



#15  
Acrylonitrile  
Concen: 0.223 ug/l  
RT: 3.14 min Scan# 325  
Delta R.T. -0.02 min  
Lab File: VX005543.D  
Acq: 24 Oct 2018 16:06

Tgt Ion: 53 Resp: 388  
Ion Ratio Lower Upper  
53 100  
52 104.9 65.2 97.8#  
51 0.0 28.2 42.2#





#16

Acetone

Concen: 3.160 ug/l

RT: 2.45 min Scan# 212

Delta R.T. -0.00 min

Lab File: VX005543.D

Acq: 24 Oct 2018 16:06

Instrument :

MSVOA\_X

ClientSampleId :

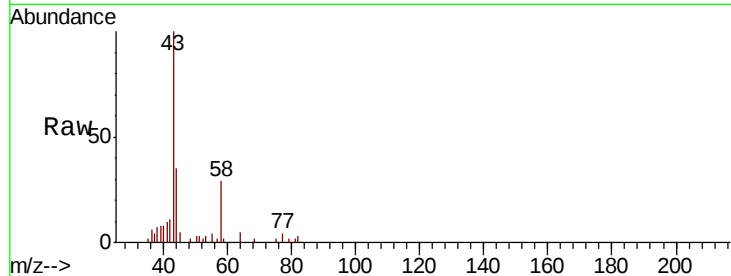
S37-EB-2018-1

Tot Ion: 43 Resp: 4805

Ion Ratio Lower Upper

43 100

58 29.5 26.2 39.4



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

2.45

2500

2000

1500

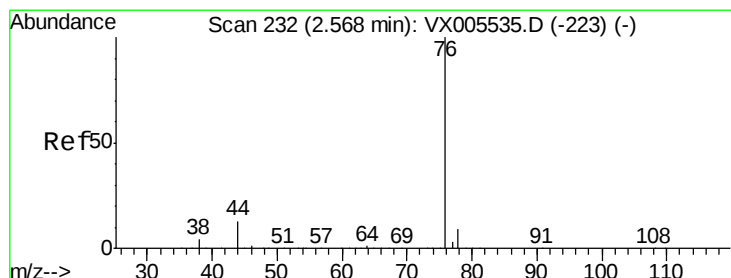
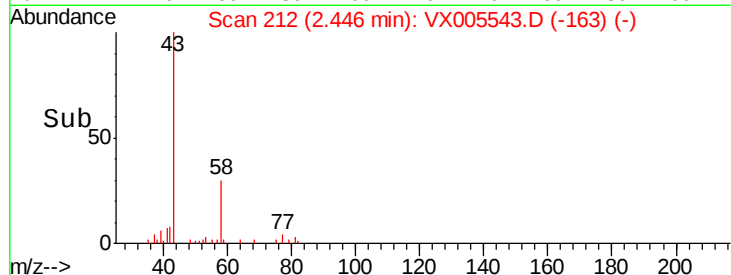
1000

500

0

2.35 2.40 2.45 2.50

Time-->



#17

Carbon Disulfide

Concen: 0.280 ug/l

RT: 2.57 min Scan# 233

Delta R.T. 0.01 min

Lab File: VX005543.D

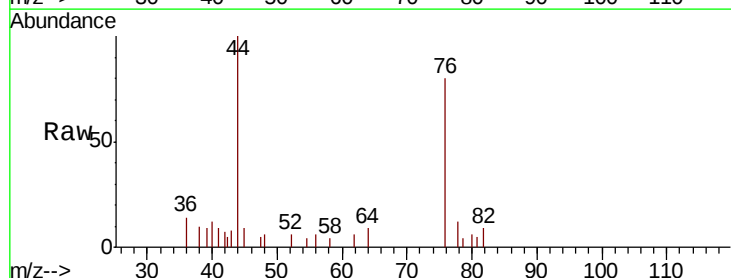
Acq: 24 Oct 2018 16:06

Tgt Ion: 76 Resp: 1889

Ion Ratio Lower Upper

76 100

78 15.2 7.0 10.6#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

2.57

1200

1000

800

600

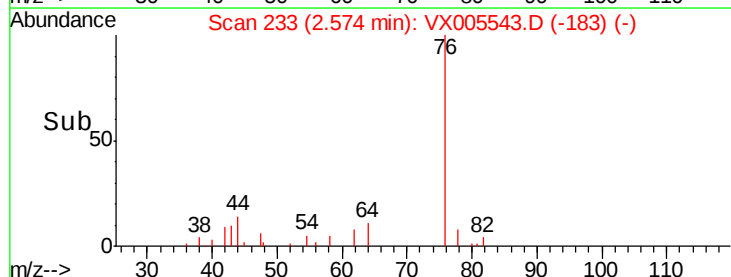
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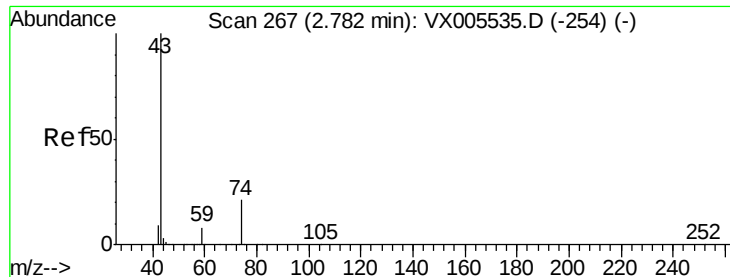
200

0

2.50 2.55 2.60

Time-->





#18

Methyl Acetate

Concen: Below Cal

RT: 2.77 min Scan# 265

Delta R.T. -0.01 min

Lab File: VX005543.D

Acq: 24 Oct 2018 16:06

Instrument :

MSVOA\_X

ClientSampleId :

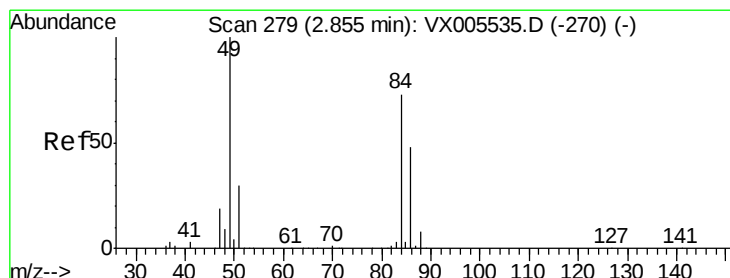
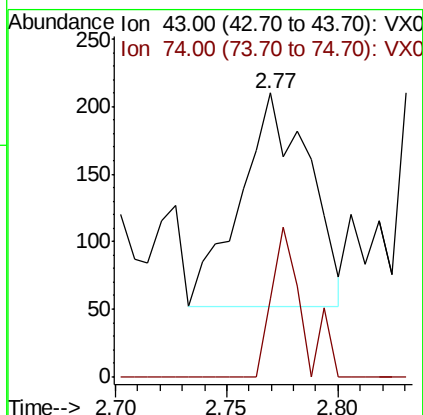
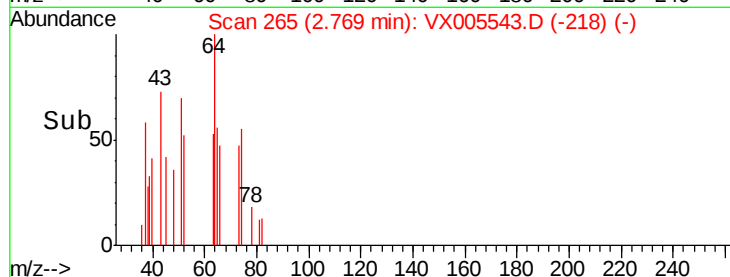
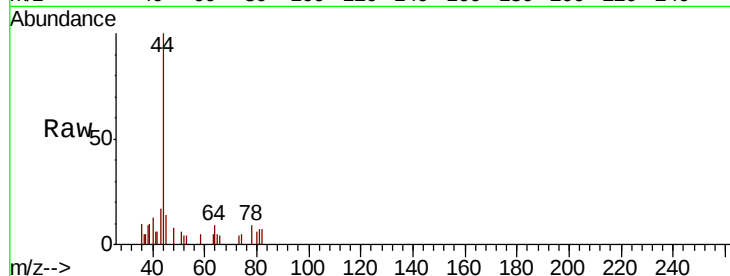
S37-EB-2018-1

Tot Ion: 43 Resp: 339

Ion Ratio Lower Upper

43 100

74 31.0 19.4 29.2#



#20

Methylene Chloride

Concen: 18.189 ug/l

RT: 2.86 min Scan# 280

Delta R.T. 0.01 min

Lab File: VX005543.D

Acq: 24 Oct 2018 16:06

Tgt Ion: 84 Resp: 46319

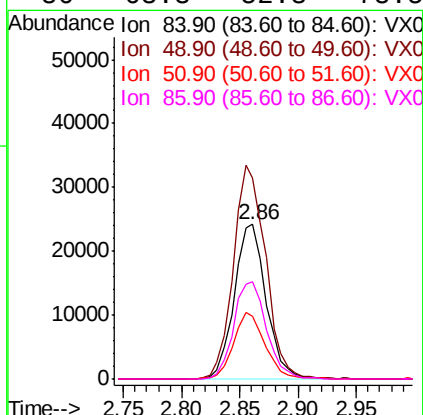
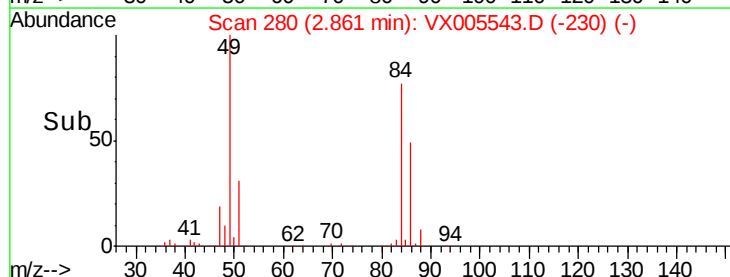
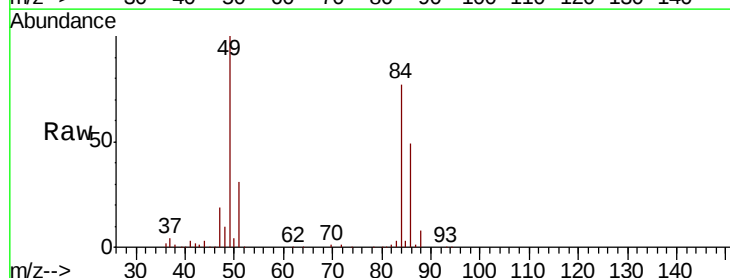
Ion Ratio Lower Upper

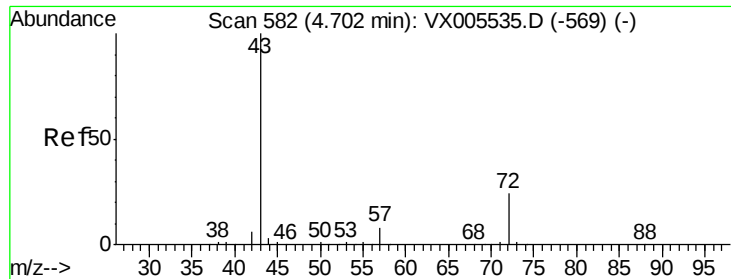
84 100

49 129.8 101.2 151.8

51 40.5 29.5 44.3

86 63.3 52.3 78.5





#25

2-Butanone

Concen: 2.785 ug/l

RT: 4.70 min Scan# 582

Delta R.T. -0.00 min

Lab File: VX005543.D

Acq: 24 Oct 2018 16:06

Instrument :

MSVOA\_X

ClientSampleId :

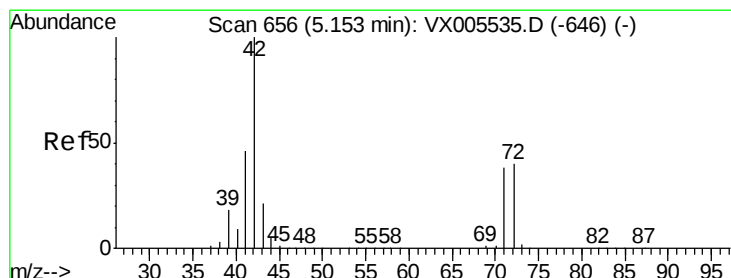
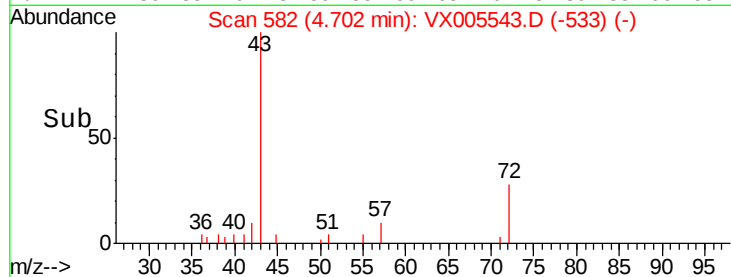
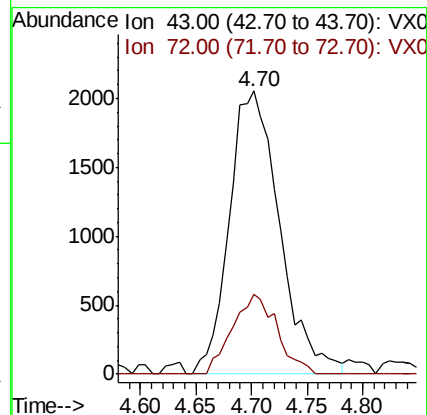
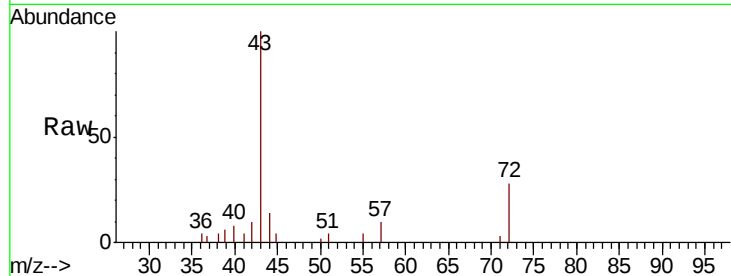
S37-EB-2018-1

Tot Ion: 43 Resp: 6449

Ion Ratio Lower Upper

43 100

72 28.3 22.0 33.0



#29

Tetrahydrofuran

Concen: 112.477 ug/l

RT: 5.15 min Scan# 656

Delta R.T. -0.00 min

Lab File: VX005543.D

Acq: 24 Oct 2018 16:06

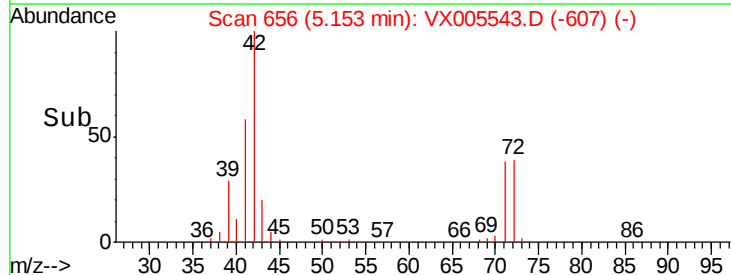
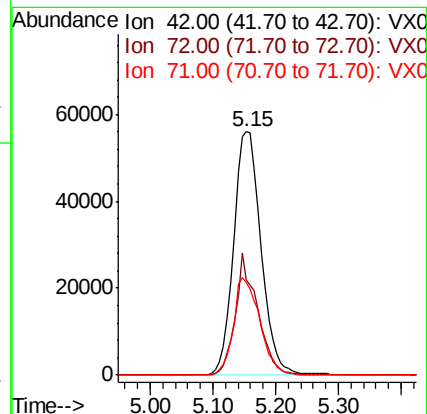
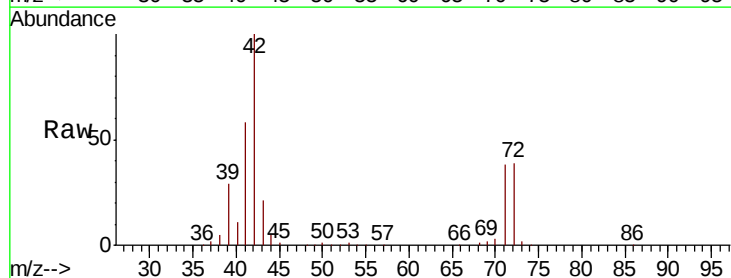
Tgt Ion: 42 Resp: 169482

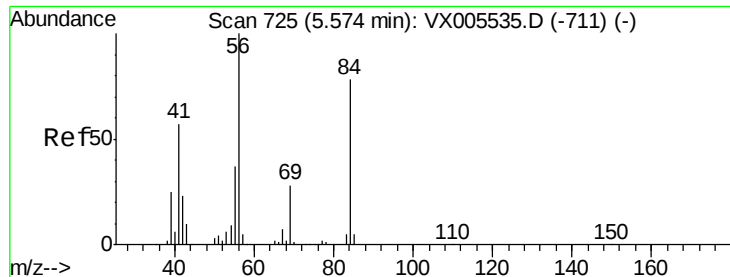
Ion Ratio Lower Upper

42 100

72 40.5 37.4 56.0

71 38.4 34.5 51.7

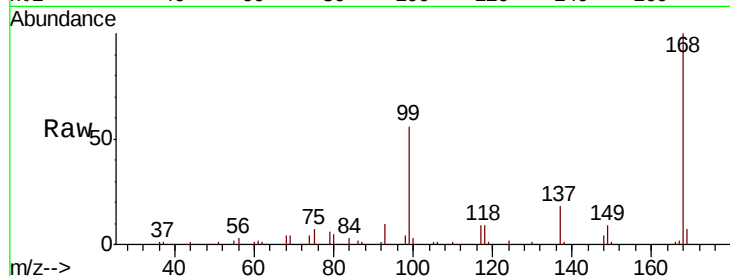




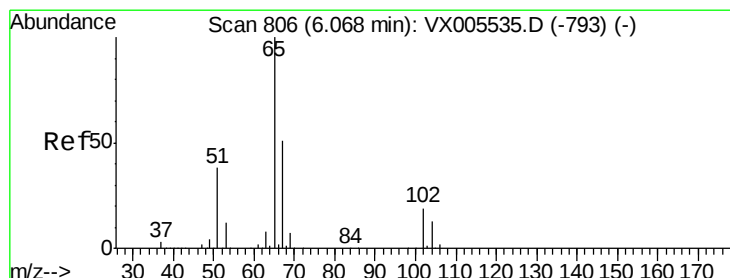
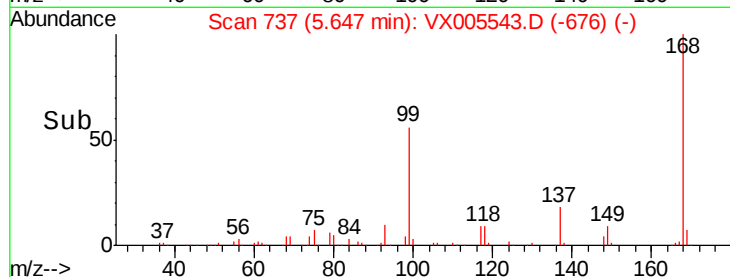
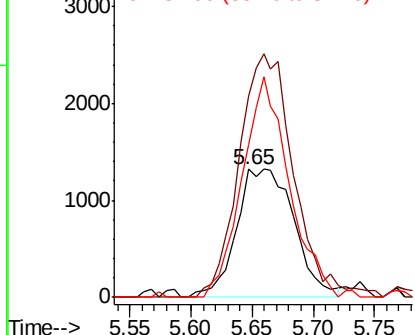
#31  
Cyclohexane  
Concen: 1.115 ug/l  
RT: 5.65 min Scan# 737  
Delta R.T. 0.07 min  
Lab File: VX005543.D  
Acq: 24 Oct 2018 16:06

Instrument :  
MSVOA\_X  
ClientSampleId :  
S37-EB-2018-1

Tot Ion: 56 Resp: 4324  
Ion Ratio Lower Upper  
56 100  
69 157.5 25.4 38.2#  
84 119.6 71.4 107.2#

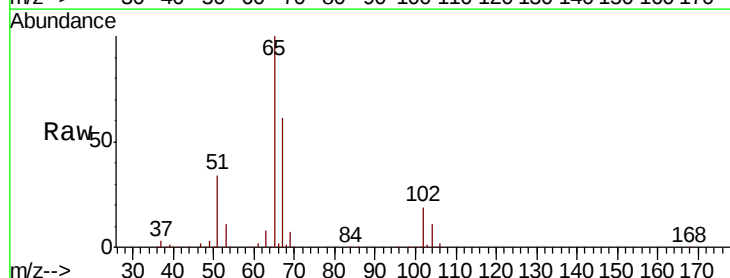


Abundance Ion 56.00 (55.70 to 56.70): VX0  
Ion 69.00 (68.70 to 69.70): VX0  
Ion 84.00 (83.70 to 84.70): VX0

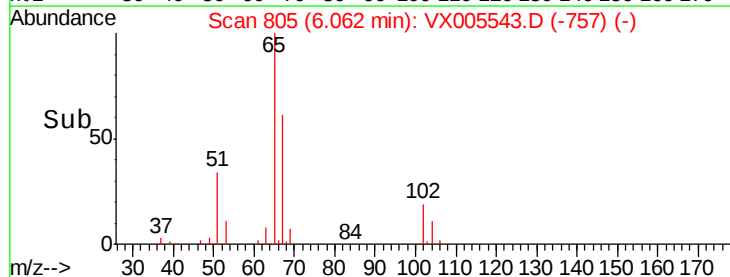
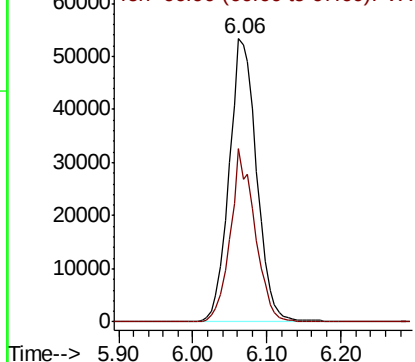


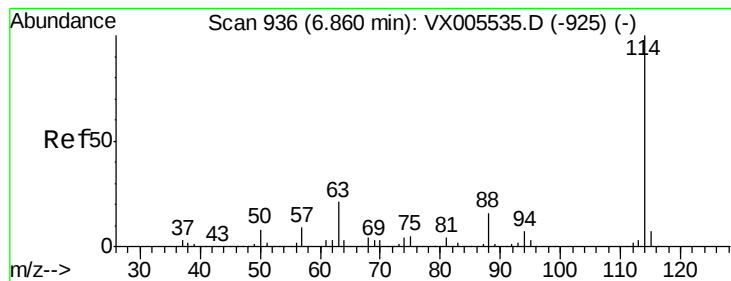
#33  
1,2-Dichloroethane-d4  
Concen: 48.045 ug/l  
RT: 6.06 min Scan# 805  
Delta R.T. -0.01 min  
Lab File: VX005543.D  
Acq: 24 Oct 2018 16:06

Tgt Ion: 65 Resp: 138247  
Ion Ratio Lower Upper  
65 100  
67 54.7 0.0 106.8



Abundance Ion 64.90 (64.60 to 65.60): VX0  
Ion 66.90 (66.60 to 67.60): VX0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.86 min Scan# 936

Delta R.T. -0.00 min

Lab File: VX005543.D

Acq: 24 Oct 2018 16:06

Instrument :

MSVOA\_X

ClientSampleId :

S37-EB-2018-1

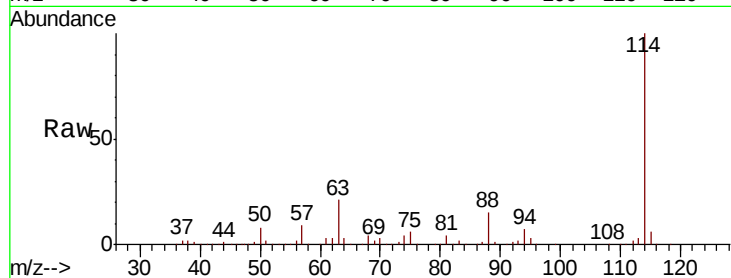
Tot Ion:114 Resp: 328411

Ion Ratio Lower Upper

114 100

63 21.1 0.0 39.0

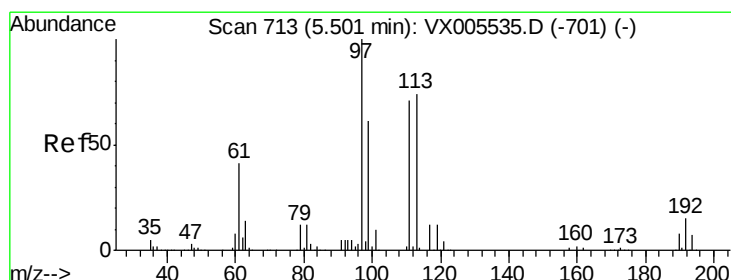
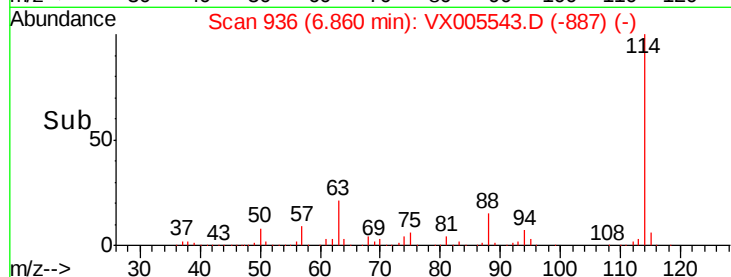
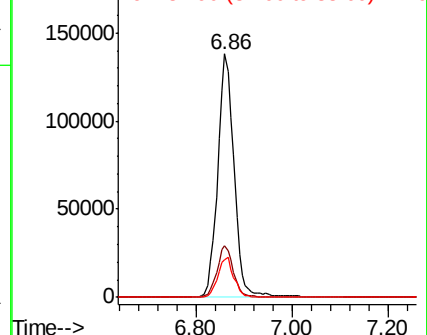
88 15.5 0.0 30.4



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: 48.328 ug/l

RT: 5.50 min Scan# 713

Delta R.T. -0.00 min

Lab File: VX005543.D

Acq: 24 Oct 2018 16:06

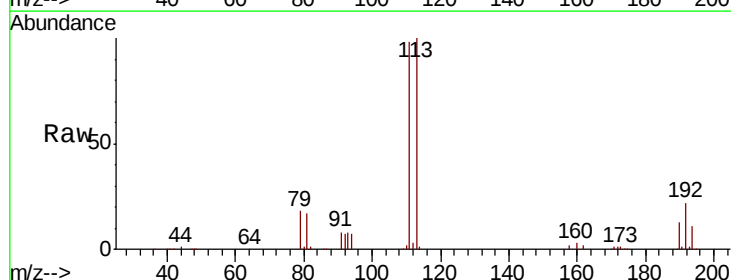
Tgt Ion:113 Resp: 107467

Ion Ratio Lower Upper

113 100

111 102.4 82.4 123.6

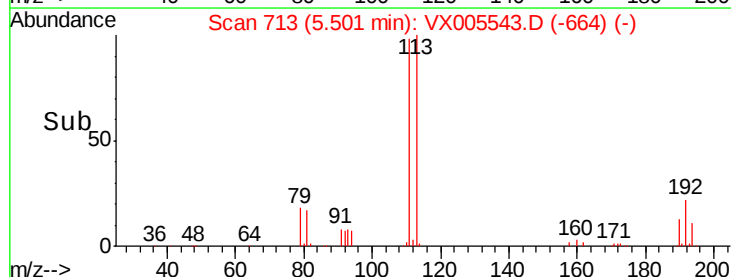
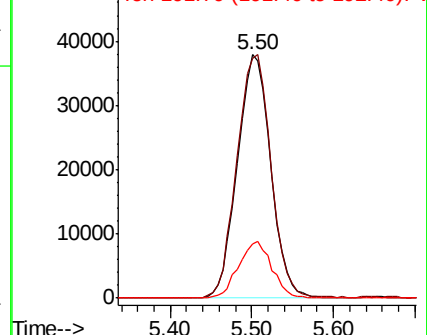
192 23.1 19.4 29.2

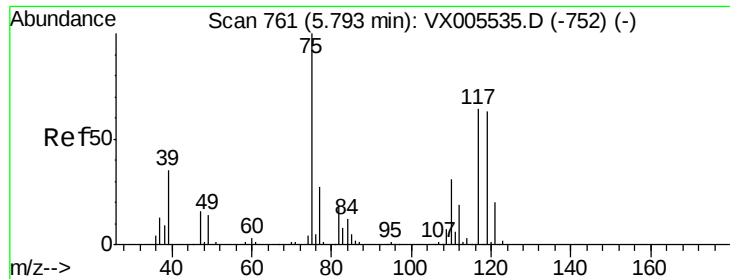


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 4.915 ug/l

RT: 5.65 min Scan# 738

Delta R.T. -0.14 min

Lab File: VX005543.D

Acq: 24 Oct 2018 16:06

Instrument :

MSVOA\_X

ClientSampleId :

S37-EB-2018-1

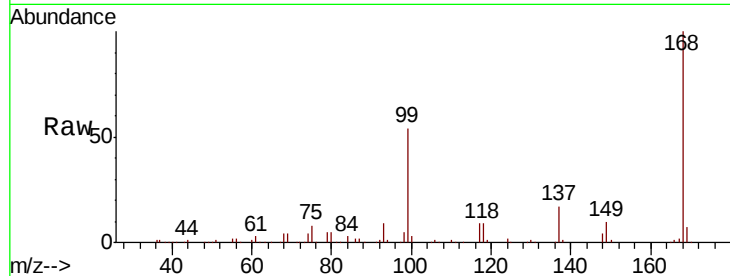
Tot Ion: 75 Resp: 15664

Ion Ratio Lower Upper

75 100

110 8.4 18.0 54.0#

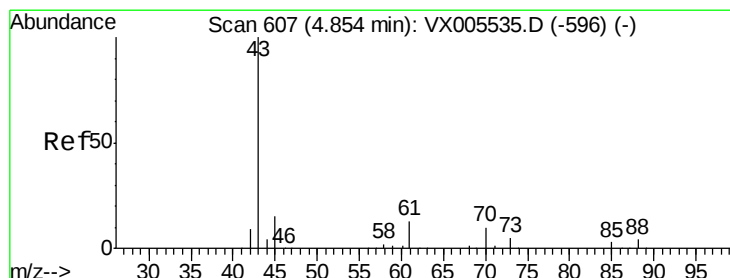
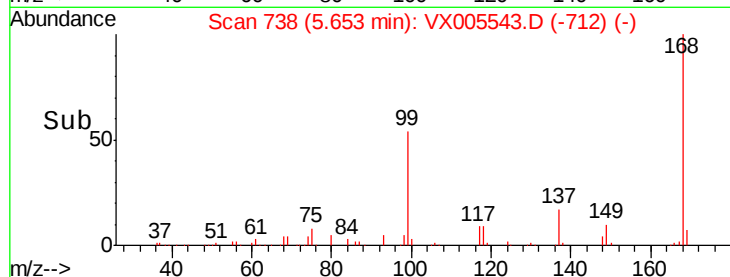
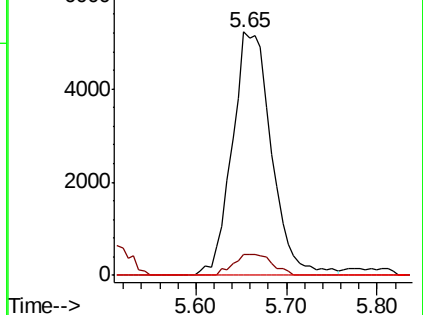
77 0.0 24.6 36.8#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): VX0

Ion 76.90 (76.60 to 77.60): VX0



#37

Ethyl Acetate

Concen: 1.586 ug/l

RT: 4.70 min Scan# 582

Delta R.T. -0.15 min

Lab File: VX005543.D

Acq: 24 Oct 2018 16:06

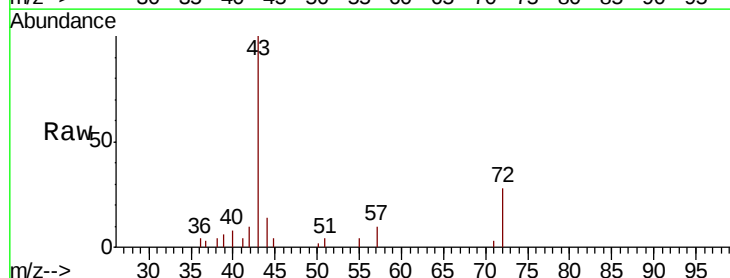
Tgt Ion: 43 Resp: 6449

Ion Ratio Lower Upper

43 100

61 0.4 11.5 17.3#

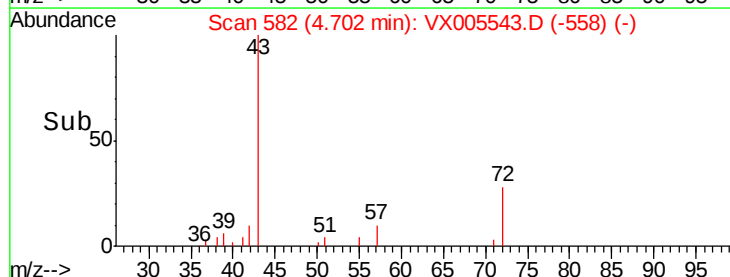
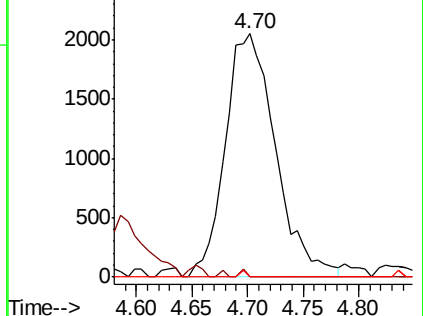
70 0.0 9.0 13.6#

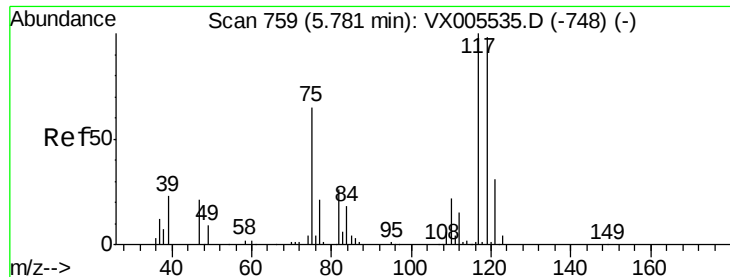


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 60.90 (60.60 to 61.60): VX0

Ion 70.00 (69.70 to 70.70): VX0

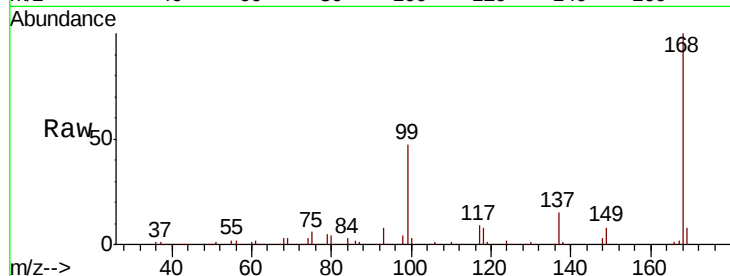




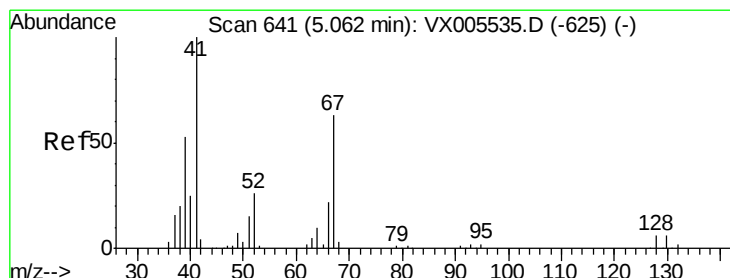
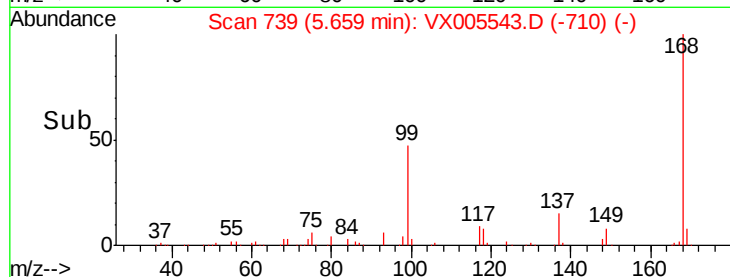
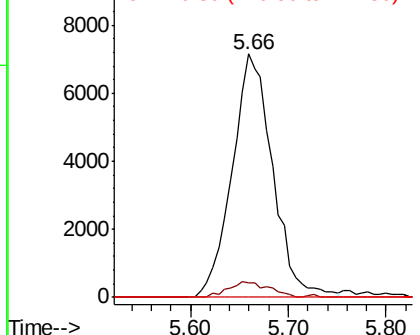
#38  
Carbon Tetrachloride  
Concen: 6.120 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. -0.12 min  
Lab File: VX005543.D  
Acq: 24 Oct 2018 16:06

Instrument :  
MSVOA\_X  
ClientSampleId :  
S37-EB-2018-1

Tot Ion:117 Resp: 20542  
Ion Ratio Lower Upper  
117 100  
119 6.0 78.8 118.2#  
121 0.0 24.9 37.3#

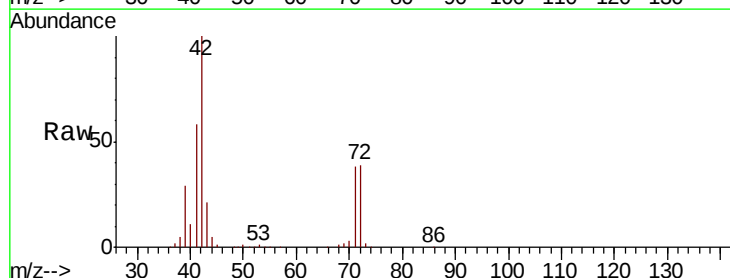


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

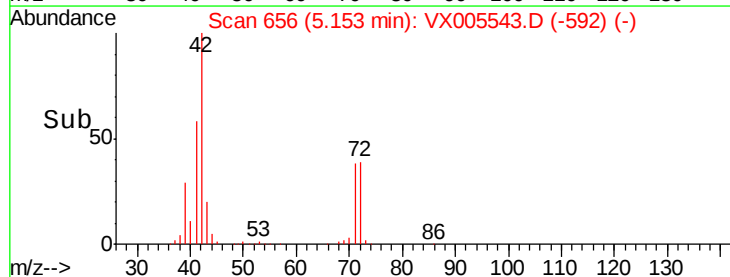
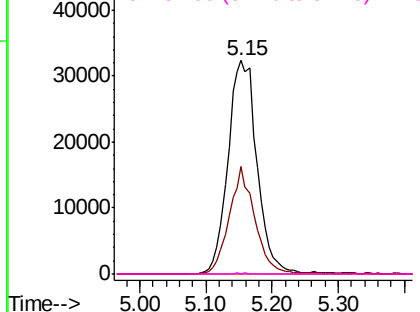


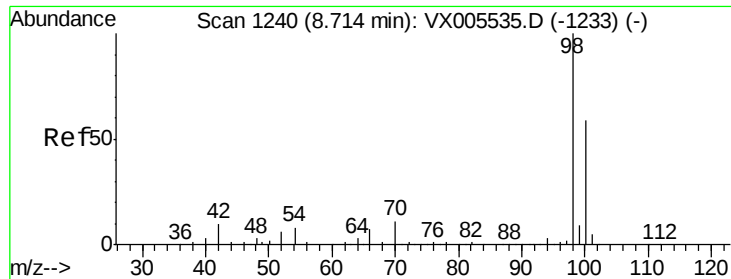
#41  
Methacrylonitrile  
Concen: 43.170 ug/l  
RT: 5.15 min Scan# 656  
Delta R.T. 0.09 min  
Lab File: VX005543.D  
Acq: 24 Oct 2018 16:06

Tgt Ion: 41 Resp: 97799  
Ion Ratio Lower Upper  
41 100  
39 44.3 42.4 63.6  
67 0.0 59.2 88.8#  
52 0.2 23.0 34.4#



Abundance Ion 41.00 (40.70 to 41.70): VX0  
Ion 39.00 (38.70 to 39.70): VX0  
Ion 67.00 (66.70 to 67.70): VX0  
Ion 52.00 (51.70 to 52.70): VX0





#50

Toluene-d8

Concen: 48.246 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. -0.00 min

Lab File: VX005543.D

Acq: 24 Oct 2018 16:06

Instrument :

MSVOA\_X

ClientSampleId :

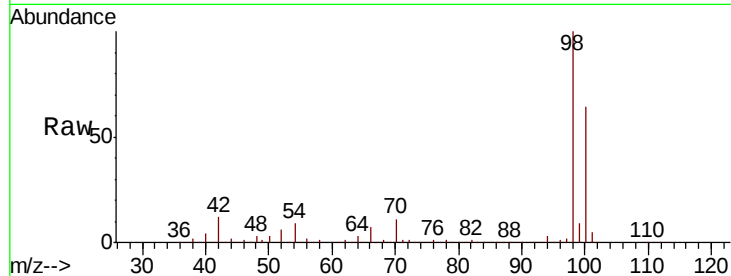
S37-EB-2018-1

Tot Ion: 98 Resp: 385497

Ion Ratio Lower Upper

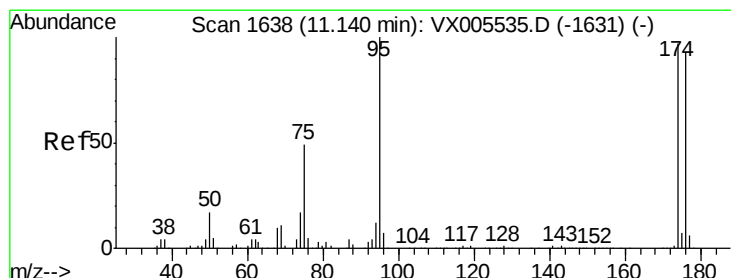
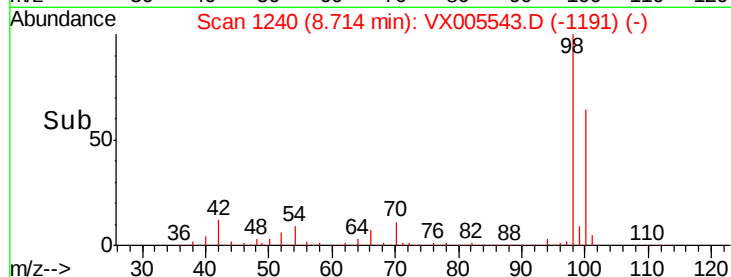
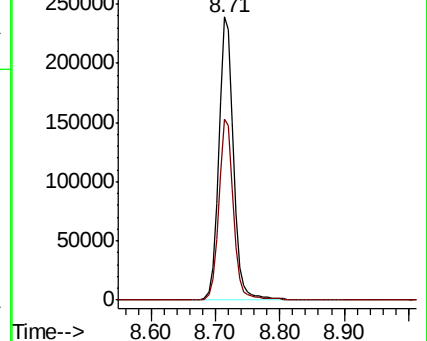
98 100

100 63.6 52.9 79.3



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V



#62

4-Bromofluorobenzene

Concen: 41.894 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.00 min

Lab File: VX005543.D

Acq: 24 Oct 2018 16:06

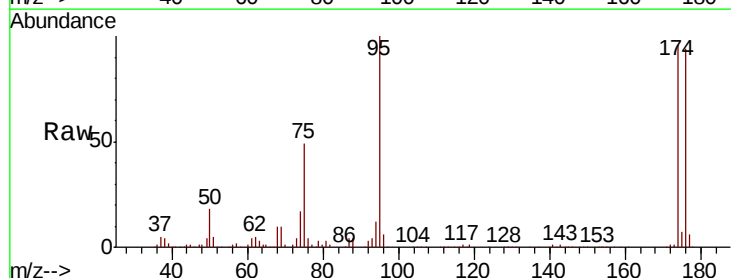
Tgt Ion: 95 Resp: 126414

Ion Ratio Lower Upper

95 100

174 93.3 0.0 185.2

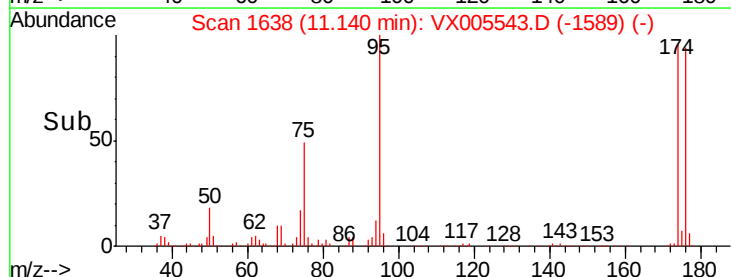
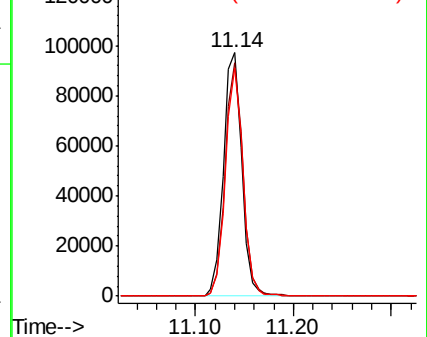
176 90.0 0.0 178.6

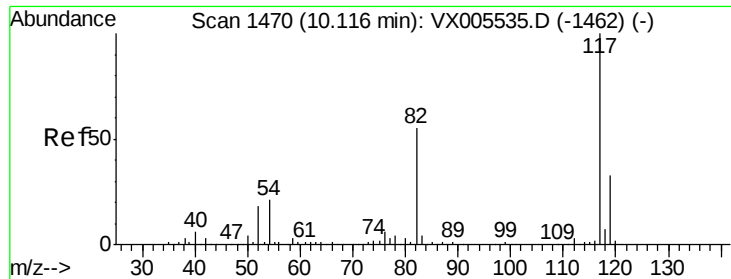


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

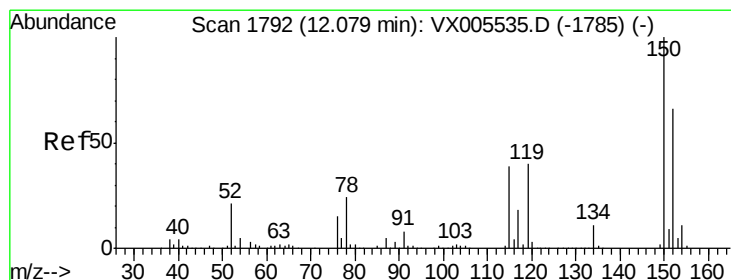
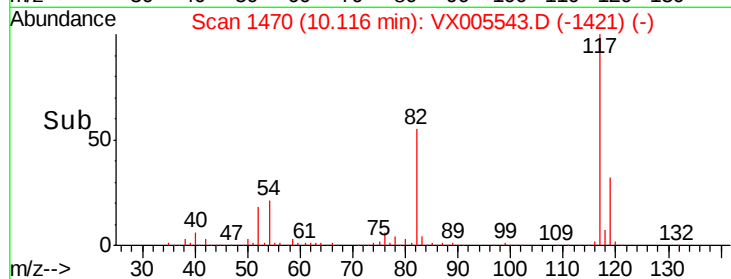
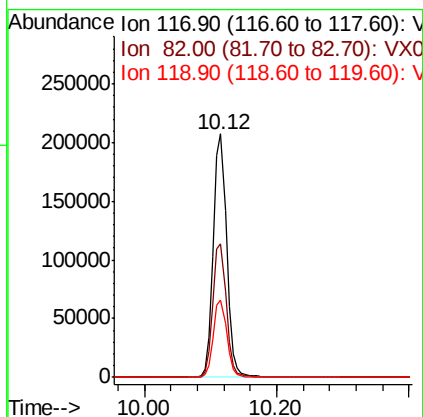
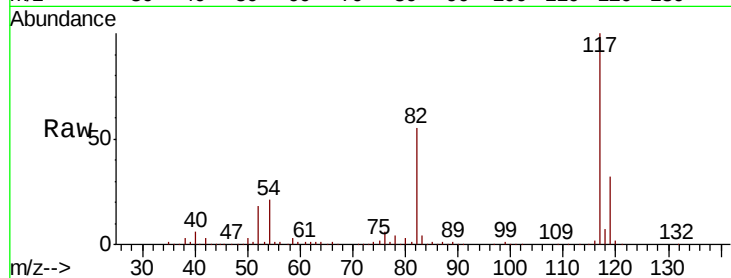




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. -0.00 min  
Lab File: VX005543.D  
Acq: 24 Oct 2018 16:06

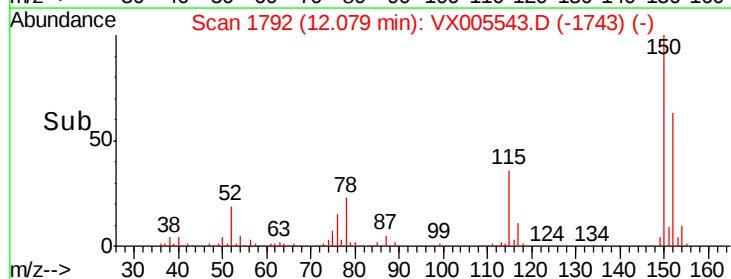
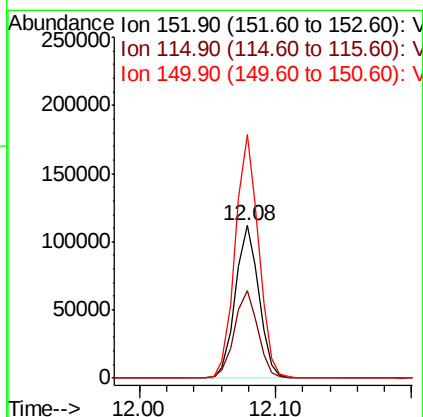
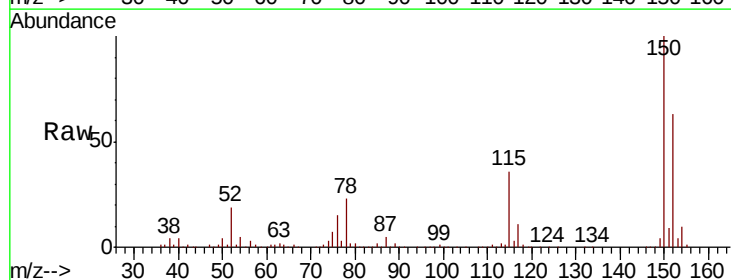
Instrument :  
MSVOA\_X  
ClientSampleId :  
S37-EB-2018-1

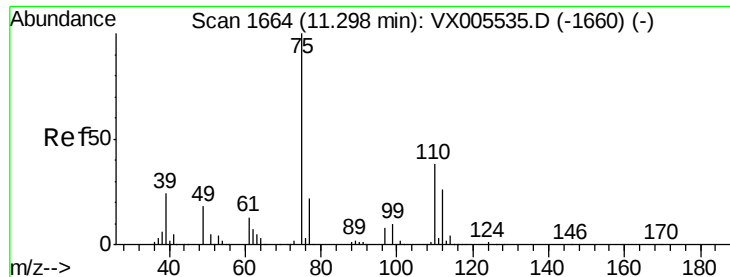
Tot Ion:117 Resp: 288711  
Ion Ratio Lower Upper  
117 100  
82 54.8 47.8 71.6  
119 31.9 29.3 43.9



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. -0.00 min  
Lab File: VX005543.D  
Acq: 24 Oct 2018 16:06

Tgt Ion:152 Resp: 134533  
Ion Ratio Lower Upper  
152 100  
115 57.0 39.0 117.0  
150 158.3 0.0 351.0





#76

1,2,3-Trichloropropane

Concen: 23.576 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX005543.D

Acq: 24 Oct 2018 16:06

Instrument :

MSVOA\_X

ClientSampled :

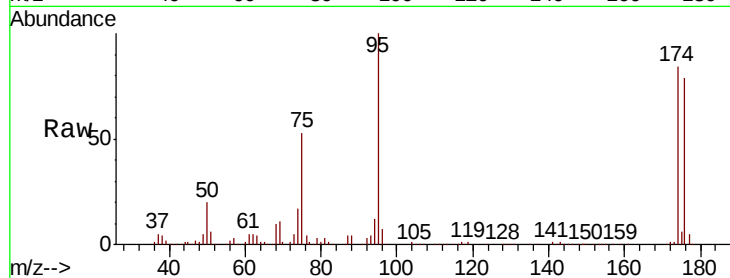
S37-EB-2018-1

Tot Ion: 75 Resp: 64604

Ion Ratio Lower Upper

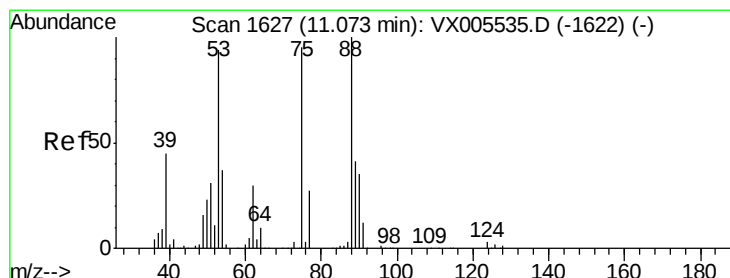
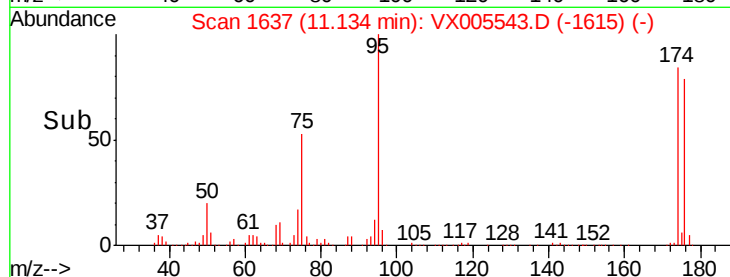
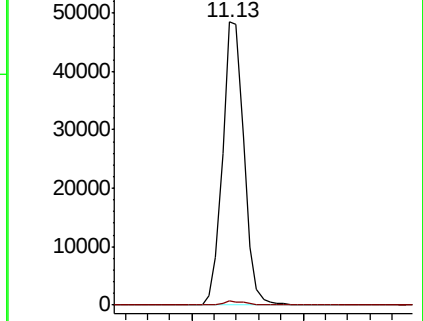
75 100

77 1.5 20.2 60.6#



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: 74.057 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX005543.D

Acq: 24 Oct 2018 16:06

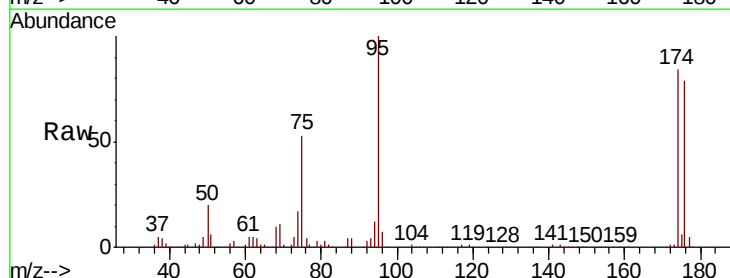
Tgt Ion: 75 Resp: 64604

Ion Ratio Lower Upper

75 100

53 0.3 80.1 120.1#

89 0.0 37.2 55.8#



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

