

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX102418\  
 Data File : VX005542.D  
 Acq On : 24 Oct 2018 15:39  
 Operator : JC/MD  
 Sample : J5655-09  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 12 Sample Multiplier: 1

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

Quant Time: Oct 25 05:50:05 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      | 5.66  | 168  | 193964   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 287451   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 256728   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 121744   | 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   | 121380   | 51.26 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.52% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 94868    | 48.74 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.48%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 346214   | 49.50 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.00%  |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 113257   | 42.88 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 85.76%  |          |

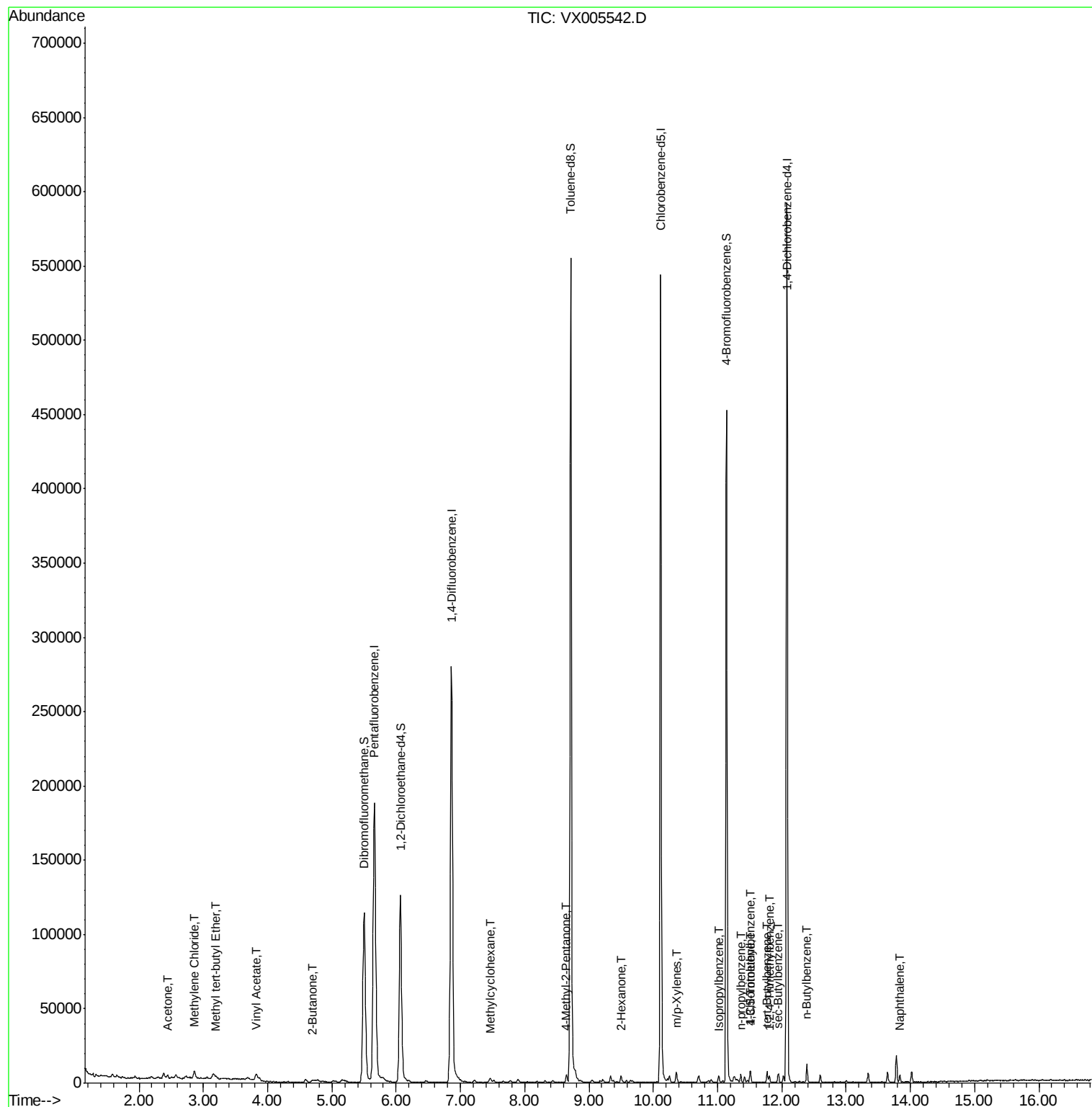
| Target Compounds            | R.T.  | QIon | Response | Conc  | Units  | Qvalue |
|-----------------------------|-------|------|----------|-------|--------|--------|
| 16) Acetone                 | 2.44  | 43   | 2341     | 1.871 | ug/l   | 100    |
| 19) Methyl tert-butyl Ether | 3.20  | 73   | 1626     | 0.250 | ug/l # | 73     |
| 20) Methylene Chloride      | 2.85  | 84   | 2070     | 0.988 | ug/l   | 97     |
| 23) Vinyl Acetate           | 3.82  | 43   | 8099     | 1.296 | ug/l # | 92     |
| 25) 2-Butanone              | 4.70  | 43   | 2434     | 1.278 | ug/l # | 89     |
| 39) Methylcyclohexane       | 7.46  | 83   | 1111     | 0.361 | ug/l # | 85     |
| 51) 4-Methyl-2-Pentanone    | 8.65  | 43   | 3322     | 0.927 | ug/l   | 92     |
| 59) 2-Hexanone              | 9.50  | 43   | 2716     | 0.961 | ug/l   | 85     |
| 68) m/p-Xylenes             | 10.36 | 106  | 1654     | 0.474 | ug/l   | 94     |
| 73) Isopropylbenzene        | 11.02 | 105  | 2023     | 0.272 | ug/l   | 98     |
| 78) n-propylbenzene         | 11.36 | 91   | 2758     | 0.324 | ug/l   | 97     |
| 80) 1,3,5-Trimethylbenzene  | 11.51 | 105  | 1963     | 0.308 | ug/l   | 98     |
| 82) 4-Chlorotoluene         | 11.51 | 91   | 1945     | 0.313 | ug/l   | 100    |
| 83) tert-Butylbenzene       | 11.77 | 119  | 2279     | 0.359 | ug/l   | 92     |
| 84) 1,2,4-Trimethylbenzene  | 11.80 | 105  | 1761     | 0.273 | ug/l   | 99     |
| 85) sec-Butylbenzene        | 11.94 | 105  | 3061     | 0.404 | ug/l   | 95     |
| 89) n-Butylbenzene          | 12.38 | 91   | 3260     | 0.533 | ug/l   | 96     |
| 95) Naphthalene             | 13.83 | 128  | 2790     | 0.336 | ug/l # | 97     |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX102418\  
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Sample : J5655-09  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 12 Sample Multiplier: 1

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

Quant Time: Oct 25 05:50:05 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

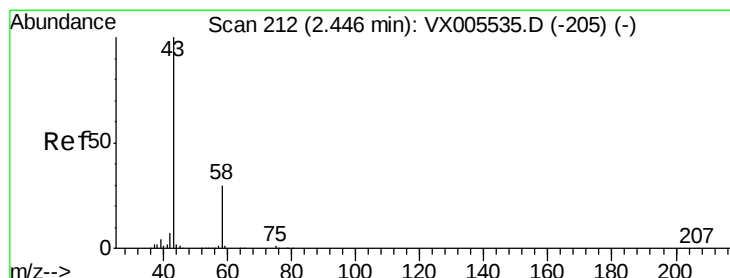
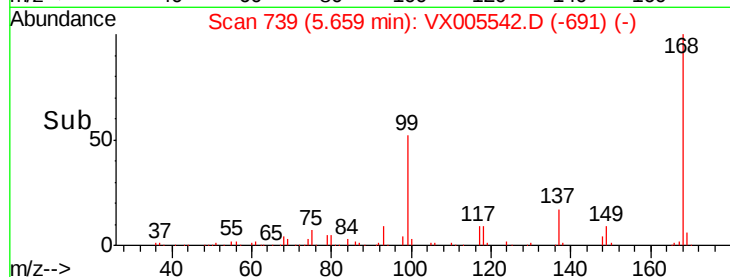
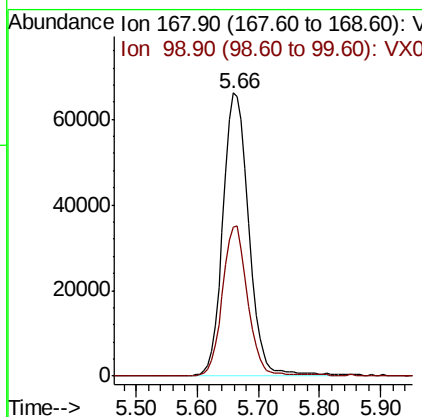
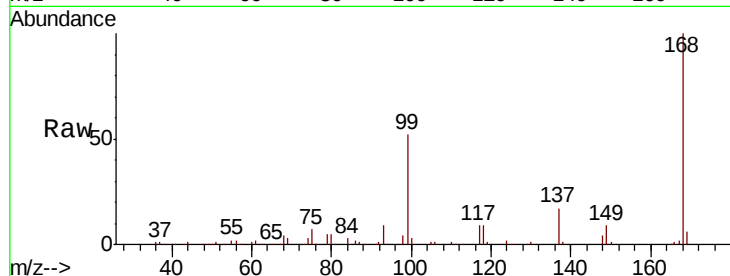




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. -0.01 min  
Lab File: VX005542.D  
Acq: 24 Oct 2018 15:39

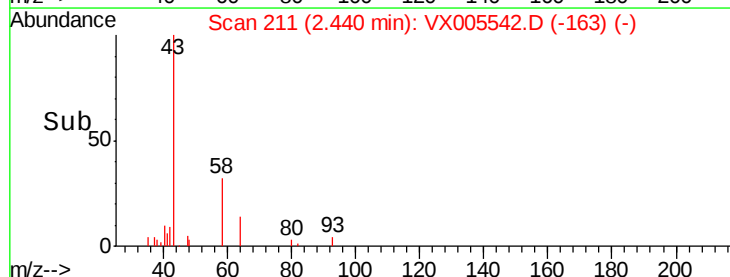
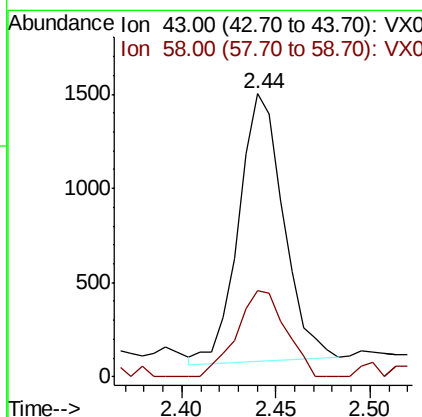
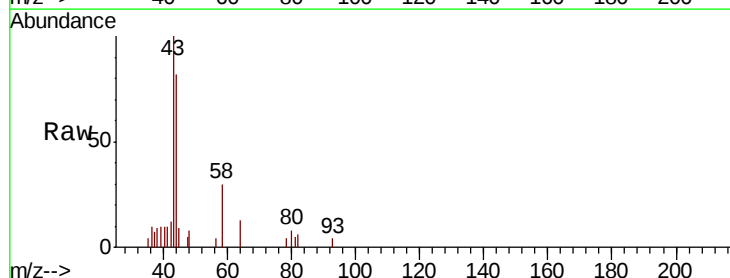
Instrument :  
MSVOA\_X  
ClientSampleId :  
S37-TB-2018-1

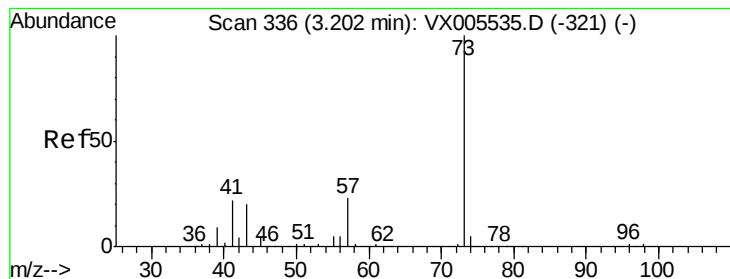
Tot Ion:168 Resp: 193964  
Ion Ratio Lower Upper  
168 100  
99 52.5 39.9 59.9



#16  
Acetone  
Concen: 1.871 ug/l  
RT: 2.44 min Scan# 211  
Delta R.T. -0.01 min  
Lab File: VX005542.D  
Acq: 24 Oct 2018 15:39

Tgt Ion: 43 Resp: 2341  
Ion Ratio Lower Upper  
43 100  
58 32.6 26.2 39.4



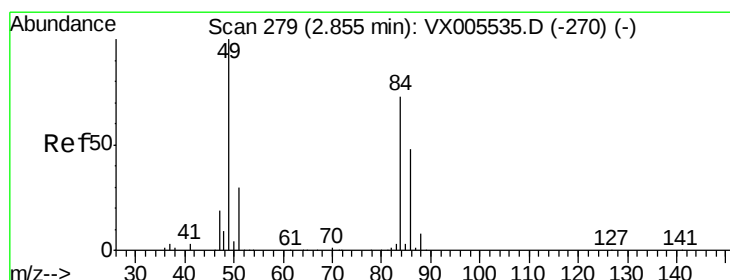
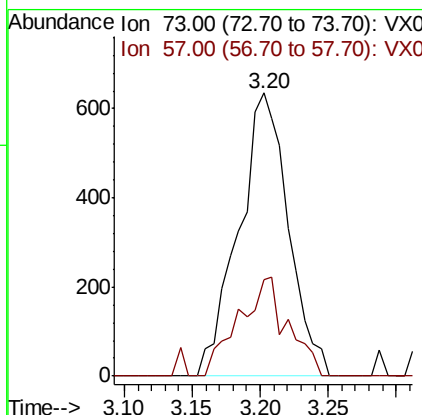
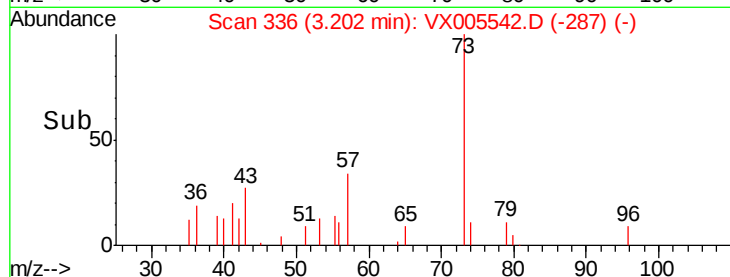
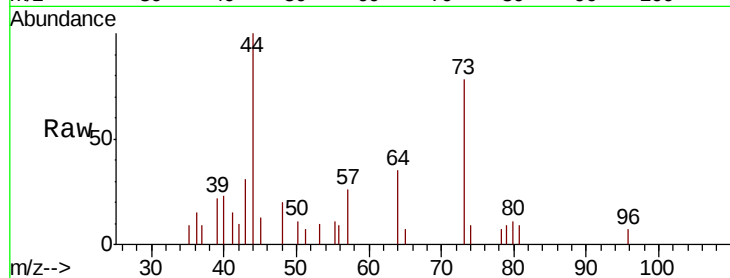


#19

Methyl tert-butyl Ether  
 Concen: 0.250 ug/l  
 RT: 3.20 min Scan# 336  
 Delta R.T. -0.00 min  
 Lab File: VX005542.D  
 Acq: 24 Oct 2018 15:39

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

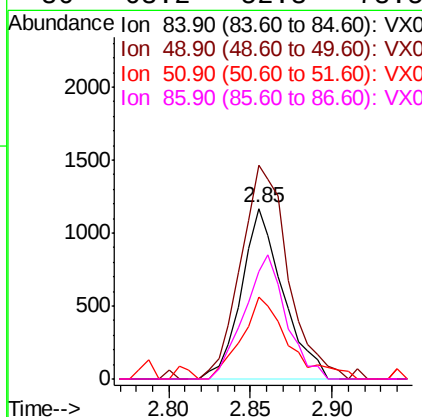
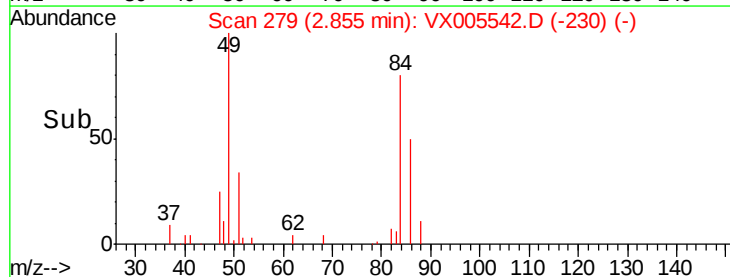
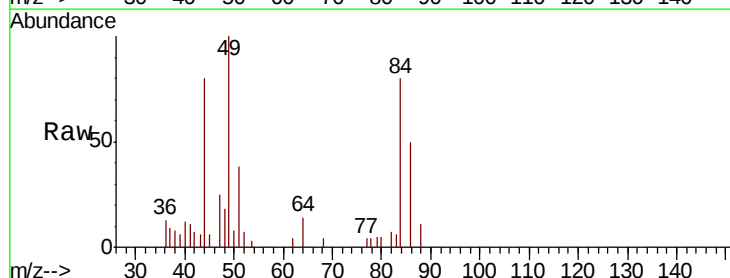
Tot Ion: 73 Resp: 1626  
 Ion Ratio Lower Upper  
 73 100  
 57 34.0 17.1 25.7#

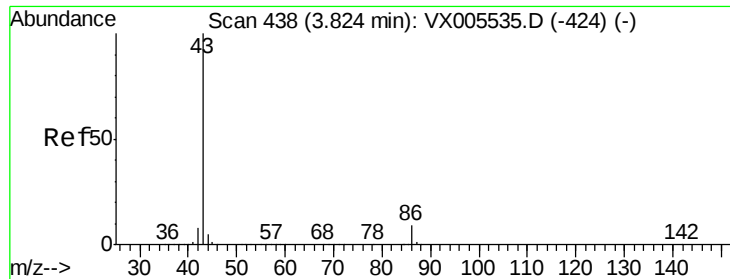


#20

Methylene Chloride  
 Concen: 0.988 ug/l  
 RT: 2.85 min Scan# 279  
 Delta R.T. -0.00 min  
 Lab File: VX005542.D  
 Acq: 24 Oct 2018 15:39

Tgt Ion: 84 Resp: 2070  
 Ion Ratio Lower Upper  
 84 100  
 49 125.4 101.2 151.8  
 51 42.8 29.5 44.3  
 86 63.2 52.3 78.5





#23

Vinyl Acetate

Concen: 1.296 ug/l

RT: 3.82 min Scan# 437

Delta R.T. -0.01 min

Lab File: VX005542.D

Acq: 24 Oct 2018 15:39

Instrument :

MSVOA\_X

ClientSampleId :

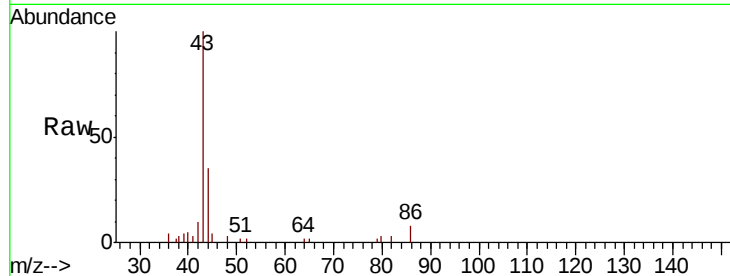
S37-TB-2018-1

Tot Ion: 43 Resp: 8099

Ion Ratio Lower Upper

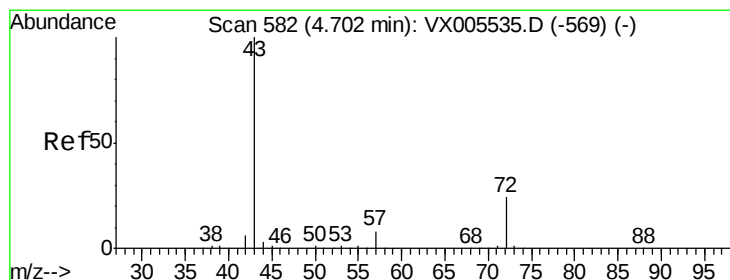
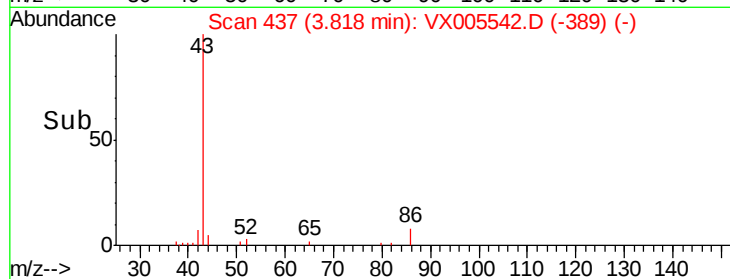
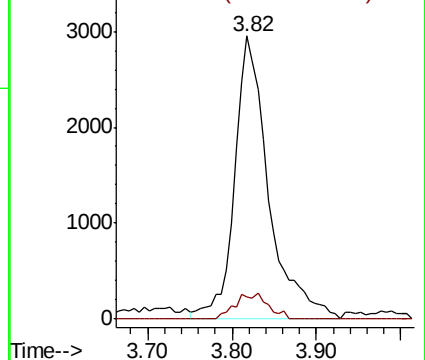
43 100

86 7.9 8.9 13.3#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 86.00 (85.70 to 86.70): VX0



#25

2-Butanone

Concen: 1.278 ug/l

RT: 4.70 min Scan# 581

Delta R.T. -0.01 min

Lab File: VX005542.D

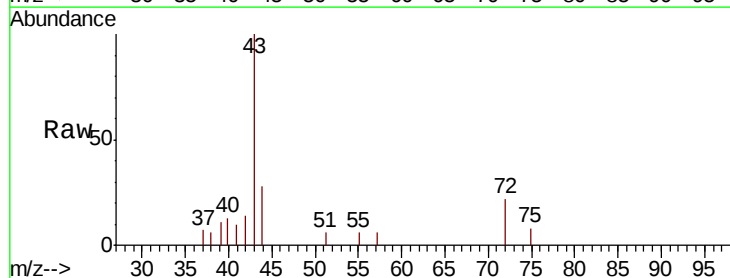
Acq: 24 Oct 2018 15:39

Tgt Ion: 43 Resp: 2434

Ion Ratio Lower Upper

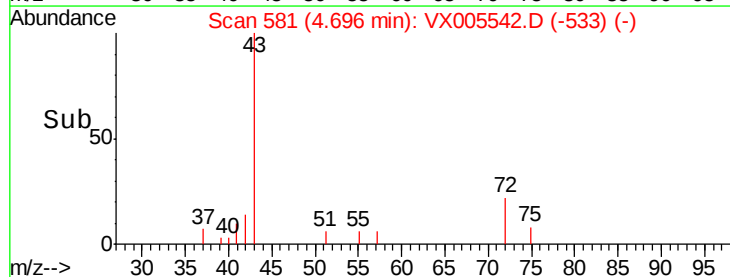
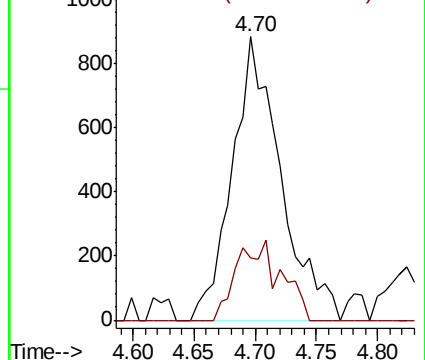
43 100

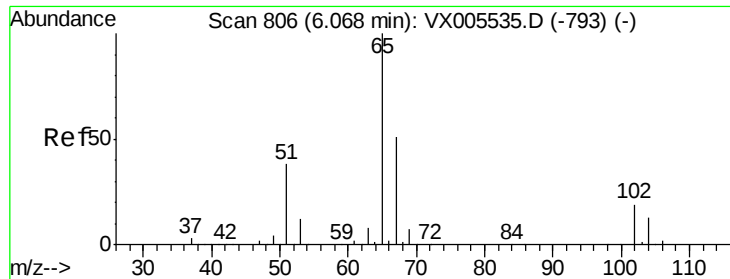
72 21.9 22.0 33.0#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0





#33

1,2-Dichloroethane-d4

Concen: 51.265 ug/l

RT: 6.06 min Scan# 805

Delta R.T. -0.01 min

Lab File: VX005542.D

Acq: 24 Oct 2018 15:39

Instrument :

MSVOA\_X

ClientSampleId :

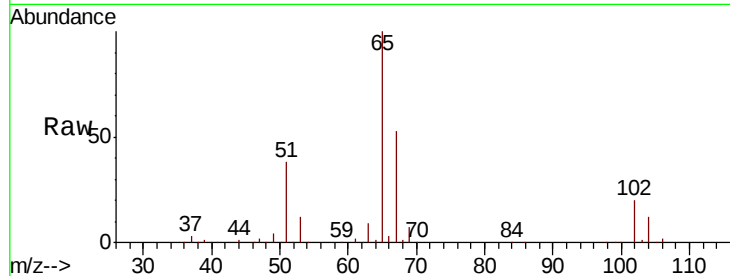
S37-TB-2018-1

Tot Ion: 65 Resp: 121380

Ion Ratio Lower Upper

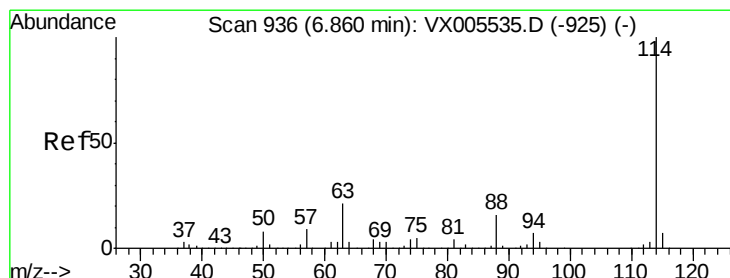
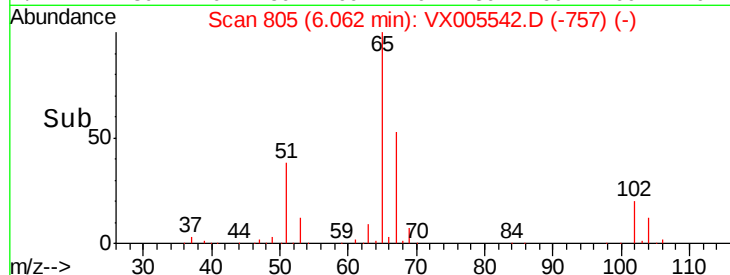
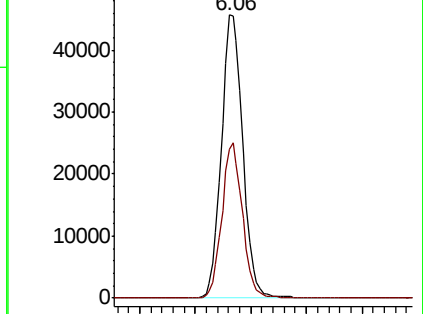
65 100

67 52.5 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: VX005542.D

Acq: 24 Oct 2018 15:39

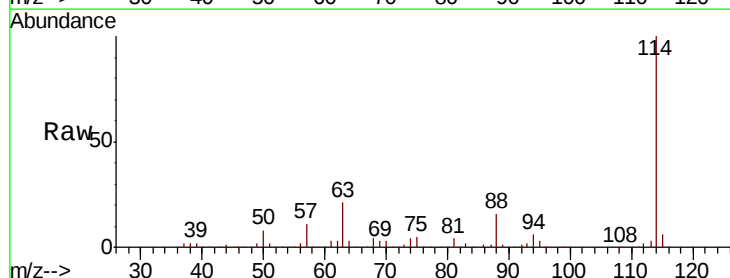
Tgt Ion: 114 Resp: 287451

Ion Ratio Lower Upper

114 100

63 20.6 0.0 39.0

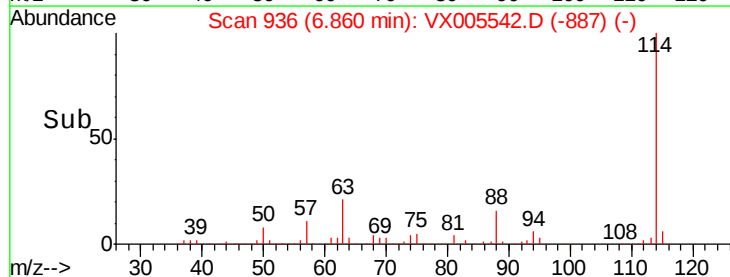
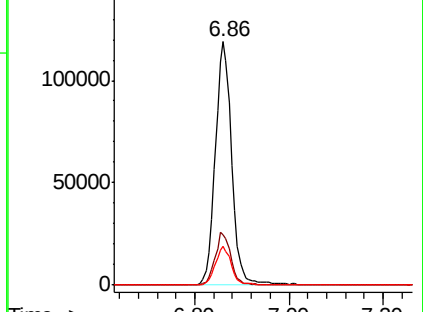
88 16.0 0.0 30.4

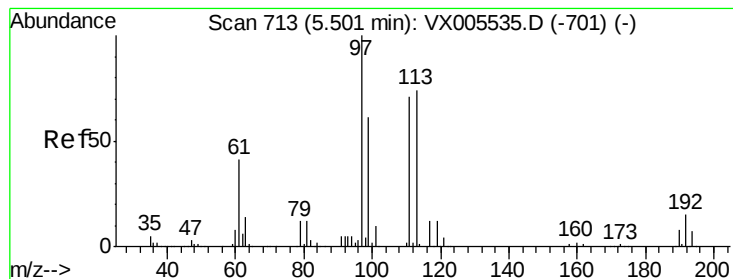


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 48.741 ug/l

RT: 5.50 min Scan# 713

Delta R.T. -0.00 min

Lab File: VX005542.D

Acq: 24 Oct 2018 15:39

Instrument :

MSVOA\_X

ClientSampleId :

S37-TB-2018-1

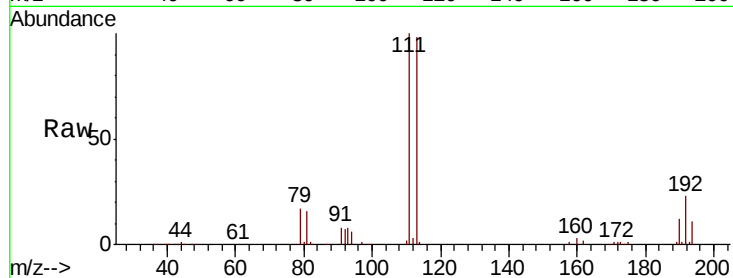
Tot Ion:113 Resp: 94868

Ion Ratio Lower Upper

113 100

111 102.2 82.4 123.6

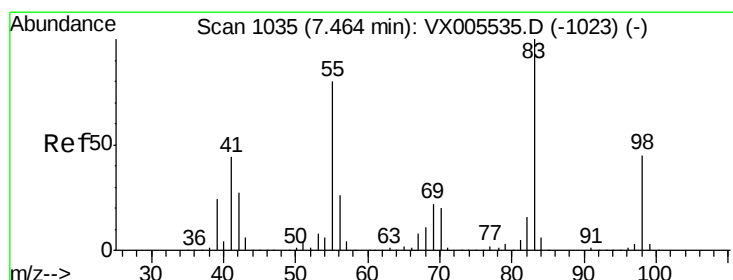
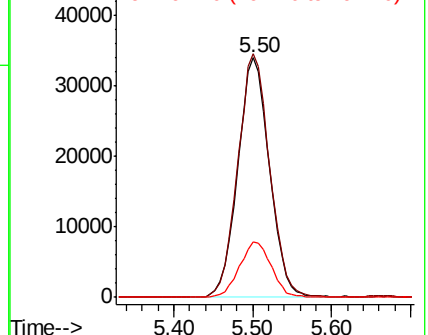
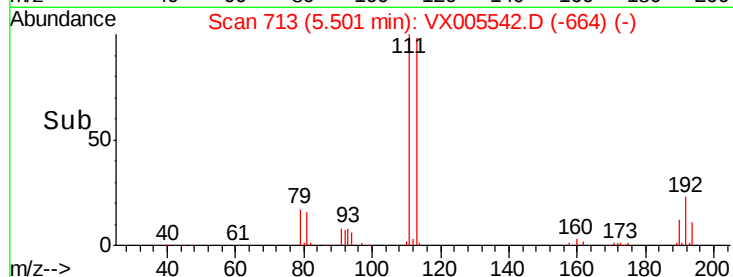
192 23.2 19.4 29.2



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



#39

Methylcyclohexane

Concen: 0.361 ug/l

RT: 7.46 min Scan# 1035

Delta R.T. 0.00 min

Lab File: VX005542.D

Acq: 24 Oct 2018 15:39

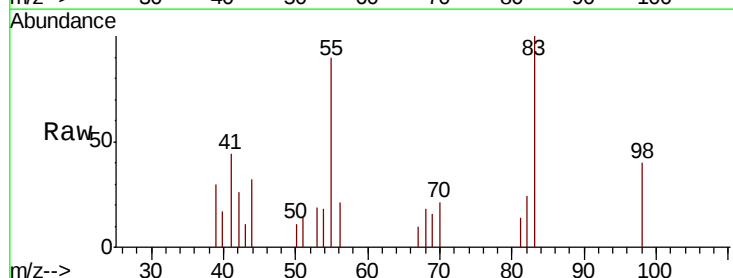
Tgt Ion: 83 Resp: 1111

Ion Ratio Lower Upper

83 100

55 89.6 61.0 91.4

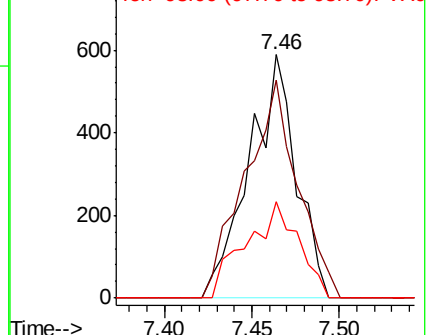
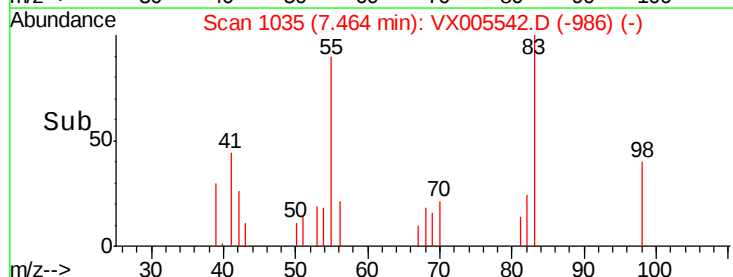
98 39.6 39.6 59.4#

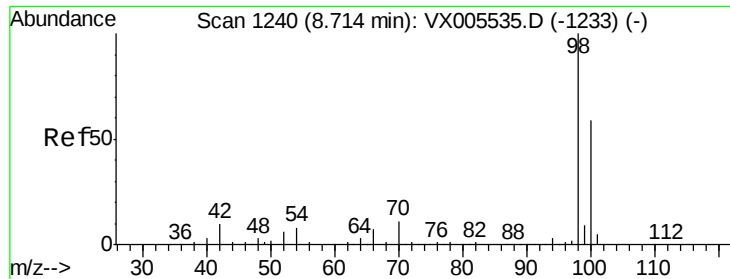


Abundance Ion 83.00 (82.70 to 83.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 98.00 (97.70 to 98.70): VX0





#50

Toluene-d8

Concen: 49.503 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. -0.00 min

Lab File: VX005542.D

Acq: 24 Oct 2018 15:39

Instrument :

MSVOA\_X

ClientSampleId :

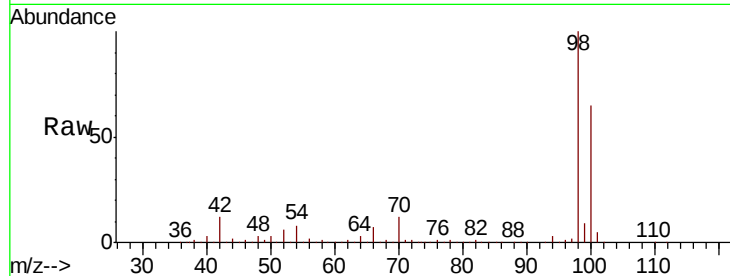
S37-TB-2018-1

Tot Ion: 98 Resp: 346214

Ion Ratio Lower Upper

98 100

100 62.8 52.9 79.3



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0

8.71

250000

200000

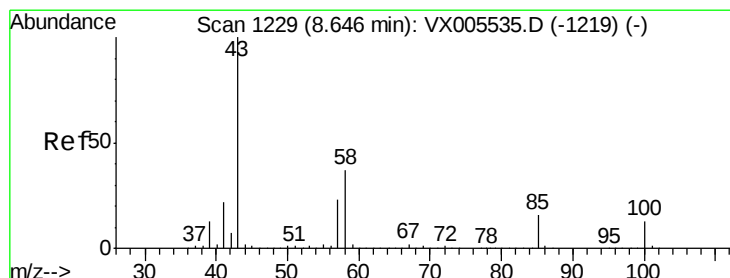
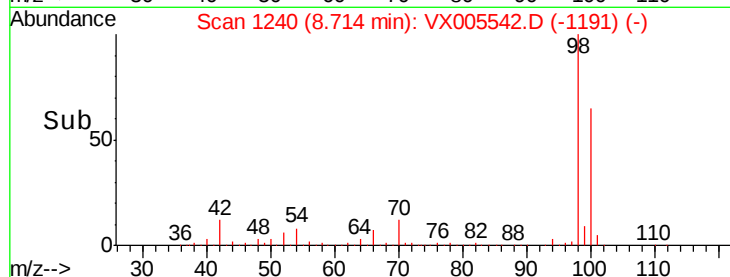
150000

100000

50000

0

Time-->



#51

4-Methyl-2-Pentanone

Concen: 0.927 ug/l

RT: 8.65 min Scan# 1229

Delta R.T. 0.00 min

Lab File: VX005542.D

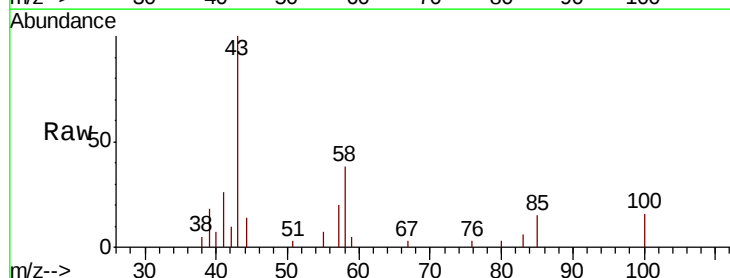
Acq: 24 Oct 2018 15:39

Tgt Ion: 43 Resp: 3322

Ion Ratio Lower Upper

43 100

58 36.2 33.1 49.7



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

8.65

2000

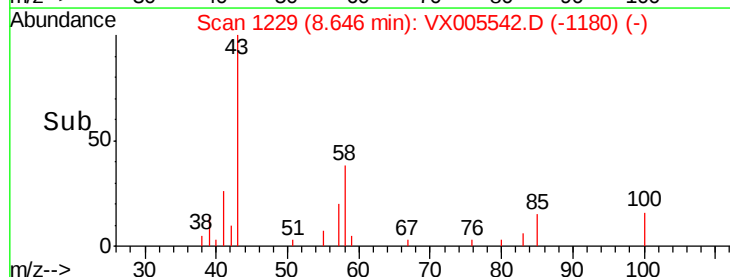
1500

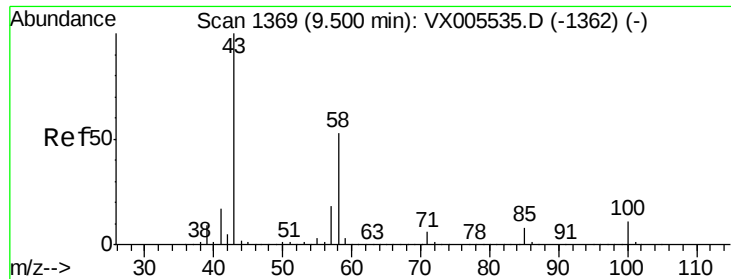
1000

500

0

Time-->

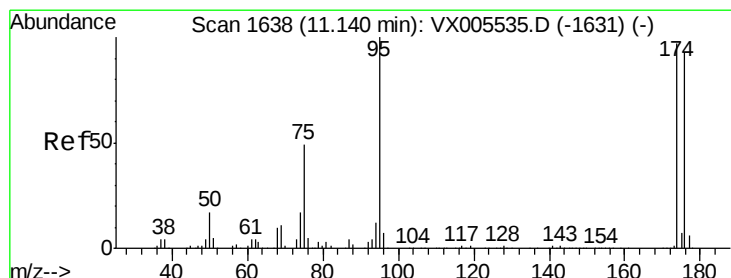
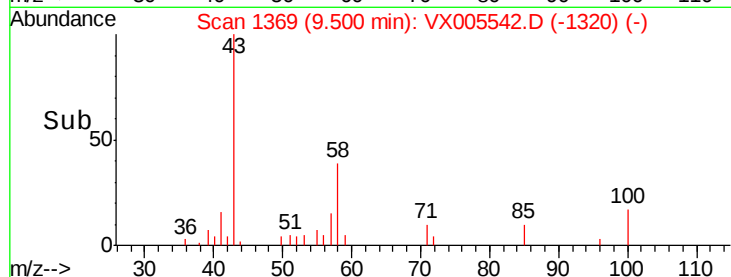
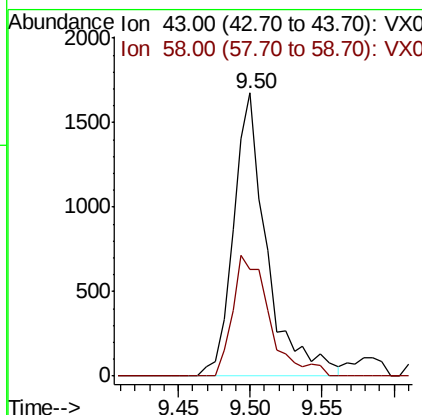
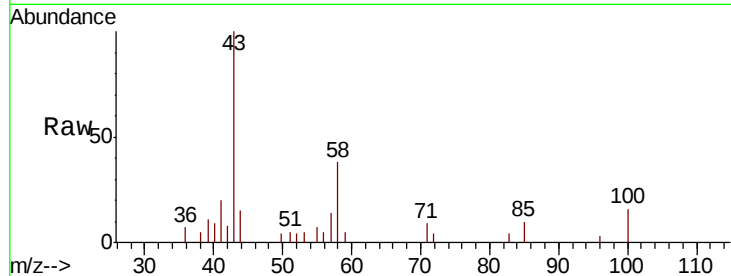




#59  
2-Hexanone  
Concen: 0.961 ug/l  
RT: 9.50 min Scan# 1369  
Delta R.T. -0.00 min  
Lab File: VX005542.D  
Acq: 24 Oct 2018 15:39

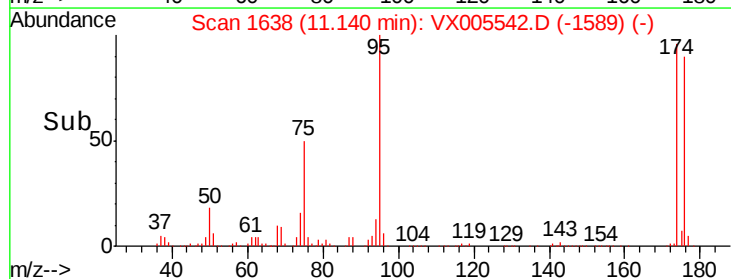
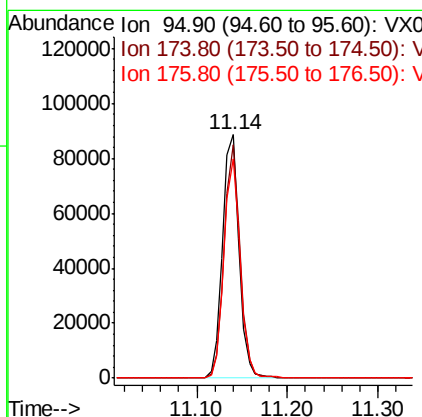
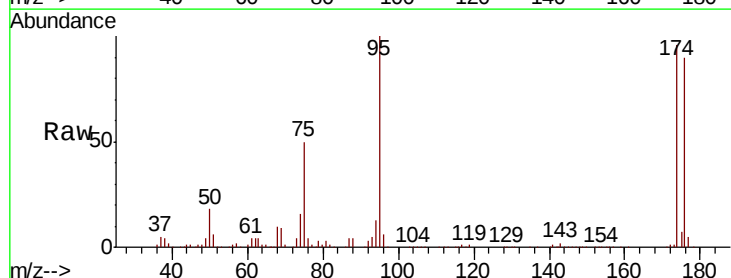
Instrument :  
MSVOA\_X  
ClientSampleId :  
S37-TB-2018-1

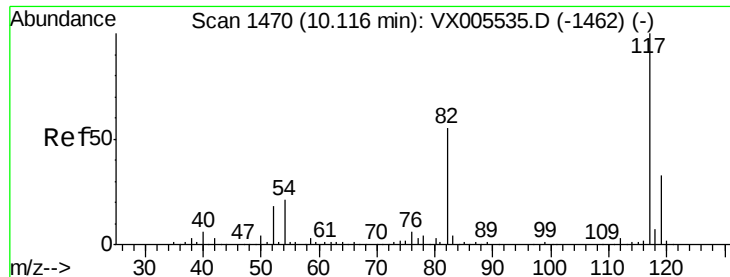
Tot Ion: 43 Resp: 2716  
Ion Ratio Lower Upper  
43 100  
58 46.6 29.0 87.0



#62  
4-Bromofluorobenzene  
Concen: 42.882 ug/l  
RT: 11.14 min Scan# 1638  
Delta R.T. -0.00 min  
Lab File: VX005542.D  
Acq: 24 Oct 2018 15:39

Tgt Ion: 95 Resp: 113257  
Ion Ratio Lower Upper  
95 100  
174 93.0 0.0 185.2  
176 88.7 0.0 178.6

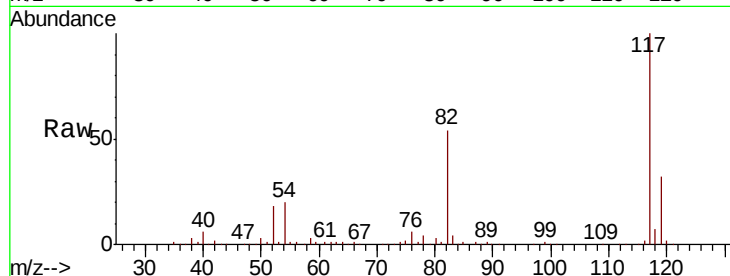




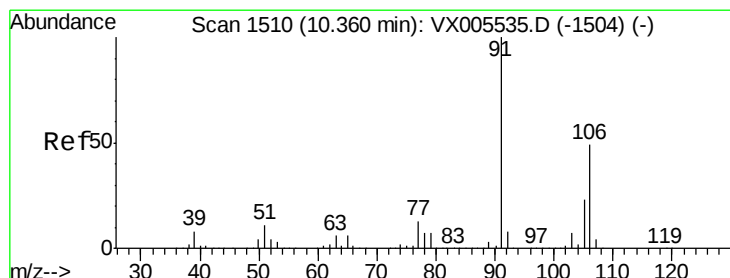
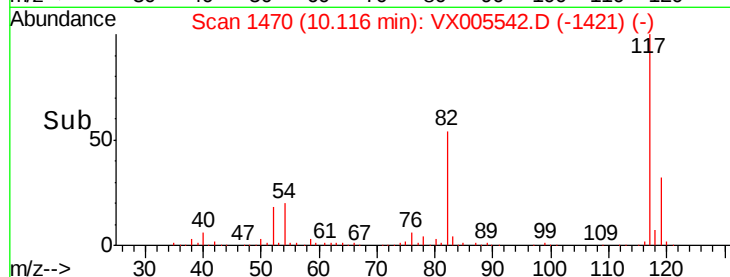
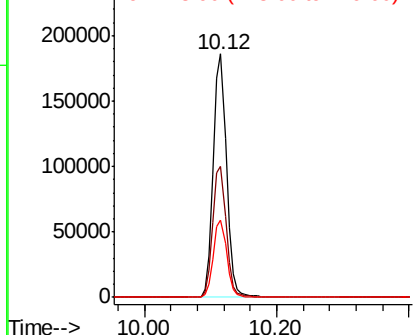
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. 0.00 min  
Lab File: VX005542.D  
Acq: 24 Oct 2018 15:39

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

Tot Ion:117 Resp: 256728  
Ion Ratio Lower Upper  
117 100  
82 54.0 47.8 71.6  
119 31.8 29.3 43.9

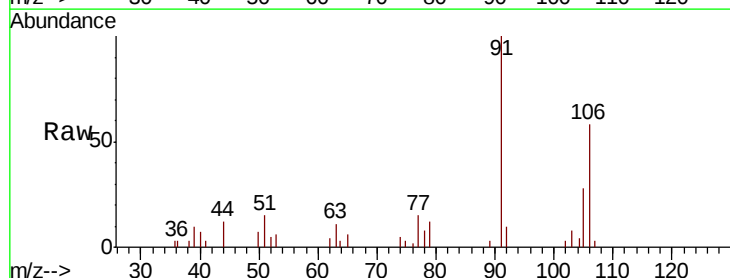


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

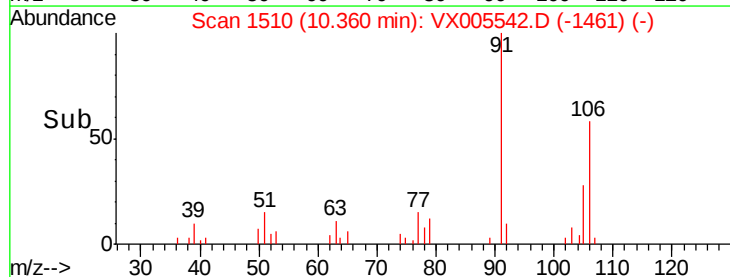
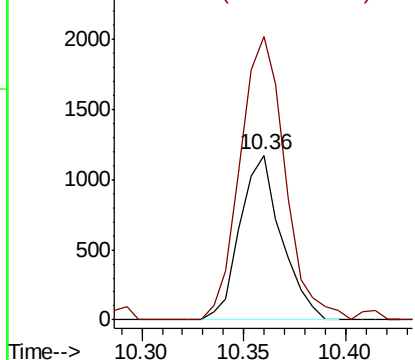


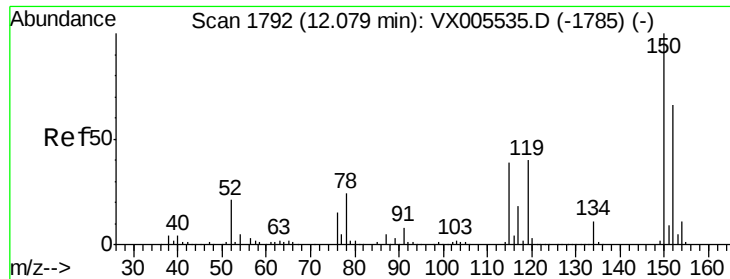
#68  
m/p-Xylenes  
Concen: 0.474 ug/l  
RT: 10.36 min Scan# 1510  
Delta R.T. -0.00 min  
Lab File: VX005542.D  
Acq: 24 Oct 2018 15:39

Tgt Ion:106 Resp: 1654  
Ion Ratio Lower Upper  
106 100  
91 187.2 157.1 235.7



Abundance Ion 106.00 (105.70 to 106.70): V  
Ion 91.00 (90.70 to 91.70): VX0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. -0.00 min

Lab File: VX005542.D

Acq: 24 Oct 2018 15:39

Instrument :

MSVOA\_X

ClientSampleId :

S37-TB-2018-1

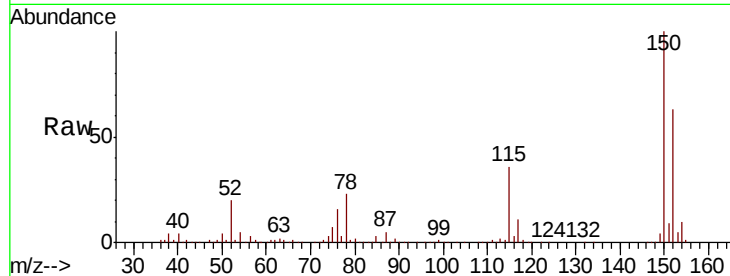
Tot Ion:152 Resp: 121744

Ion Ratio Lower Upper

152 100

115 56.9 39.0 117.0

150 157.7 0.0 351.0



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V

200000

150000

100000

50000

0

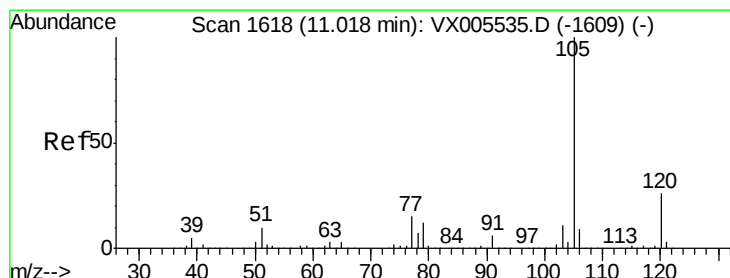
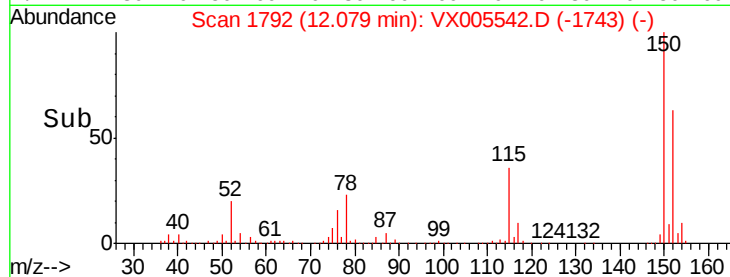
12.08

12.00

12.10

12.20

Time-->



#73

Isopropylbenzene

Concen: 0.272 ug/l

RT: 11.02 min Scan# 1618

Delta R.T. -0.00 min

Lab File: VX005542.D

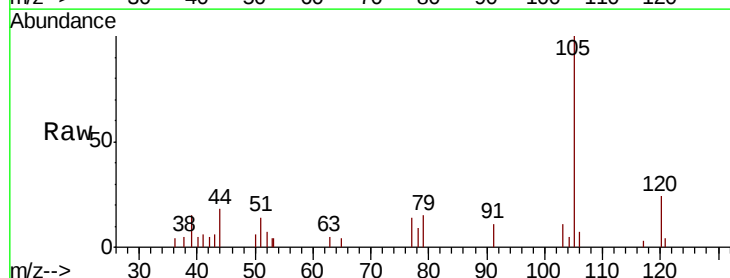
Acq: 24 Oct 2018 15:39

Tgt Ion:105 Resp: 2023

Ion Ratio Lower Upper

105 100

120 28.2 13.5 40.4



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

1500

1000

500

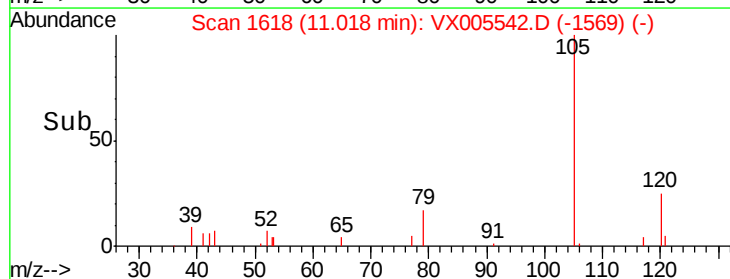
0

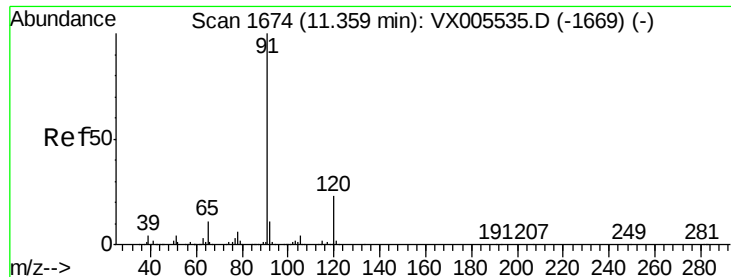
11.02

11.00

11.05

Time-->





#78

n-propylbenzene

Concen: 0.324 ug/l

RT: 11.36 min Scan# 1674

Delta R.T. -0.00 min

Lab File: VX005542.D

Acq: 24 Oct 2018 15:39

Instrument :

MSVOA\_X

ClientSampled :

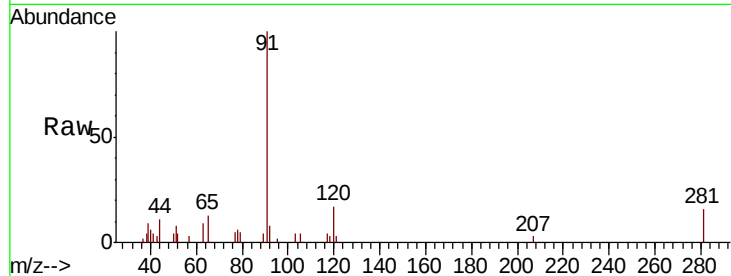
S37-TB-2018-1

Tot Ion: 91 Resp: 2758

Ion Ratio Lower Upper

91 100

120 22.2 11.9 35.9



Abundance Ion 91.00 (90.70 to 91.70): VX005535.D (-1669) (-)

Ion 120.00 (119.70 to 120.70): VX005535.D (-1669) (-)

11.36

2500

2000

1500

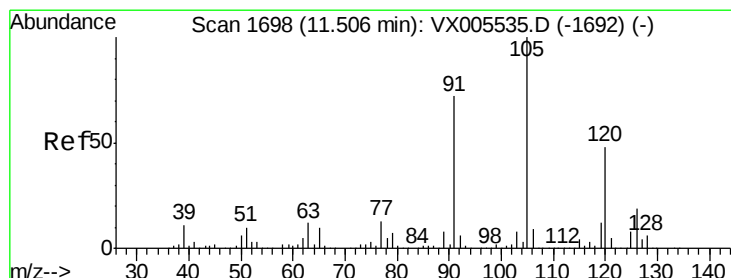
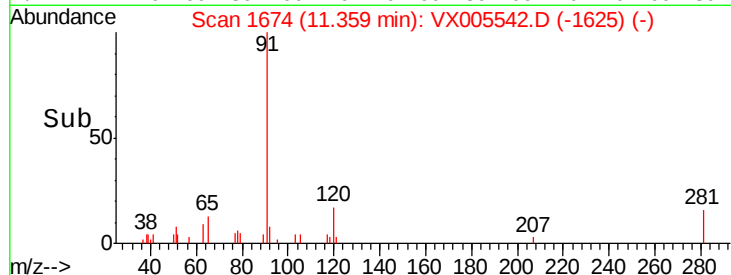
1000

500

0

Time-->

11.30 11.35 11.40



#80

1,3,5-Trimethylbenzene

Concen: 0.308 ug/l

RT: 11.51 min Scan# 1698

Delta R.T. -0.00 min

Lab File: VX005542.D

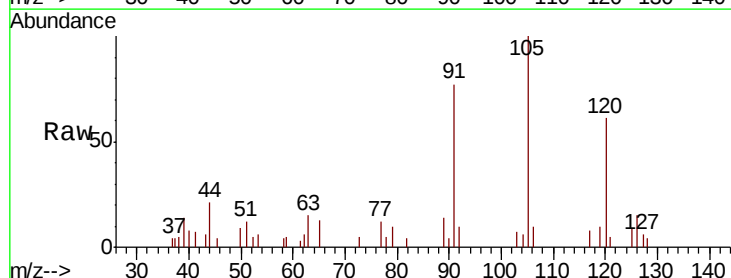
Acq: 24 Oct 2018 15:39

Tgt Ion: 105 Resp: 1963

Ion Ratio Lower Upper

105 100

120 49.6 25.6 76.8



Abundance Ion 105.00 (104.70 to 105.70): VX005535.D (-1692) (-)

Ion 120.00 (119.70 to 120.70): VX005535.D (-1692) (-)

11.51

1500

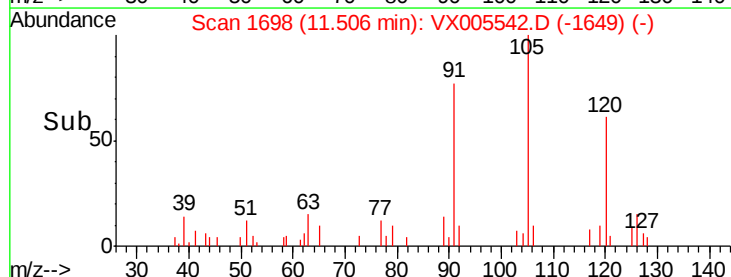
1000

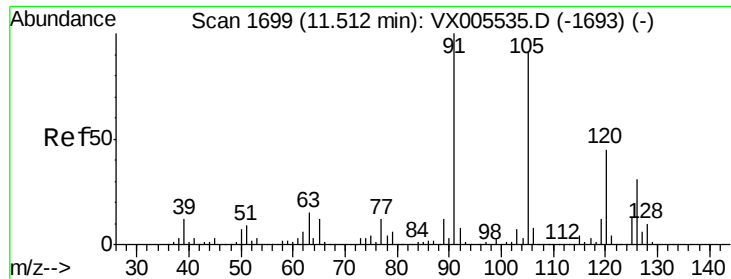
500

0

Time-->

11.45 11.50 11.55





#82

4-Chlorotoluene

Concen: 0.313 ug/l

RT: 11.51 min Scan# 1699

Delta R.T. -0.00 min

Lab File: VX005542.D

Acq: 24 Oct 2018 15:39

Instrument :

MSVOA\_X

ClientSampleId :

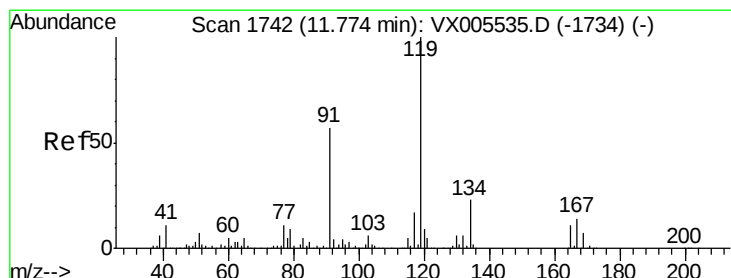
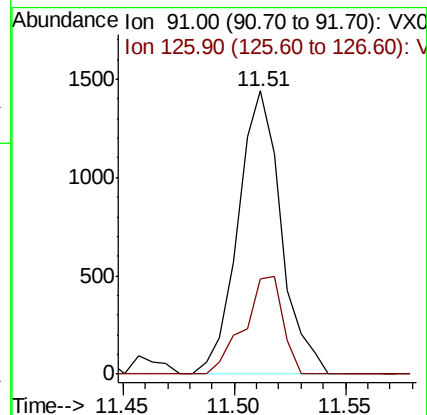
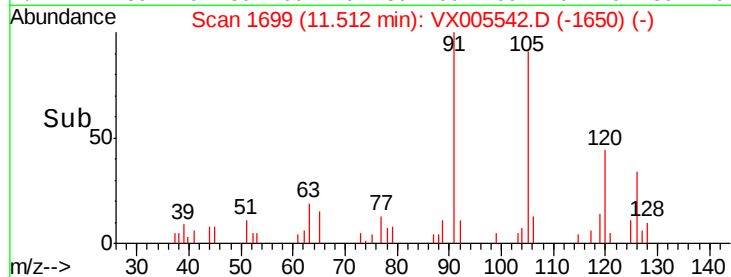
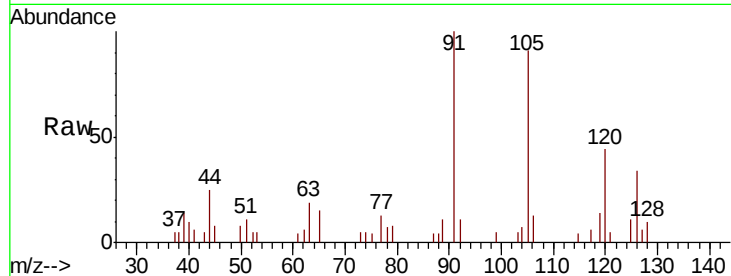
S37-TB-2018-1

Tot Ion: 91 Resp: 1945

Ion Ratio Lower Upper

91 100

126 31.0 15.5 46.5



#83

tert-Butylbenzene

Concen: 0.359 ug/l

RT: 11.77 min Scan# 1741

Delta R.T. -0.01 min

Lab File: VX005542.D

Acq: 24 Oct 2018 15:39

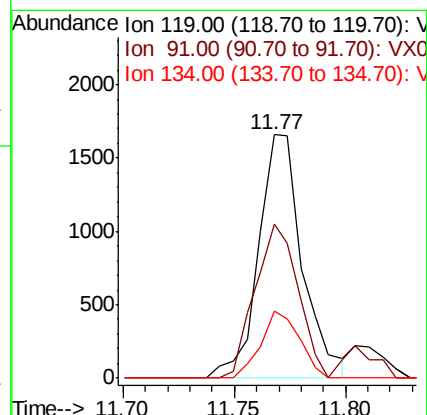
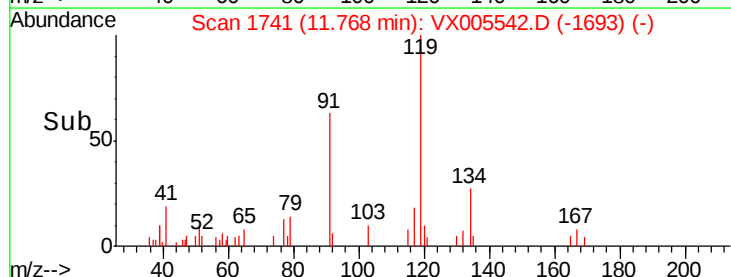
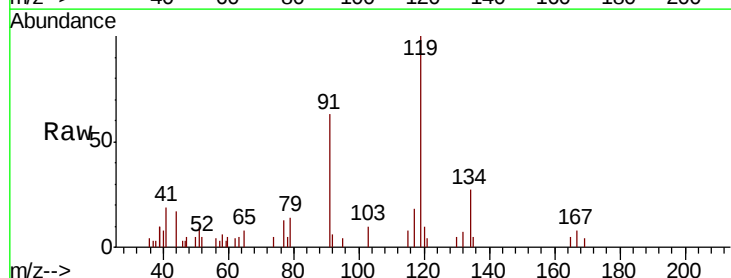
Tgt Ion: 119 Resp: 2279

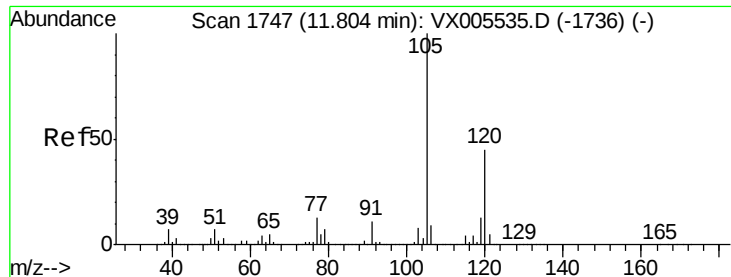
Ion Ratio Lower Upper

119 100

91 62.2 27.0 81.0

134 24.0 11.7 35.1

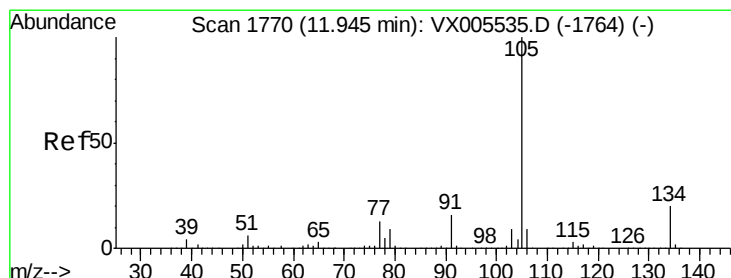
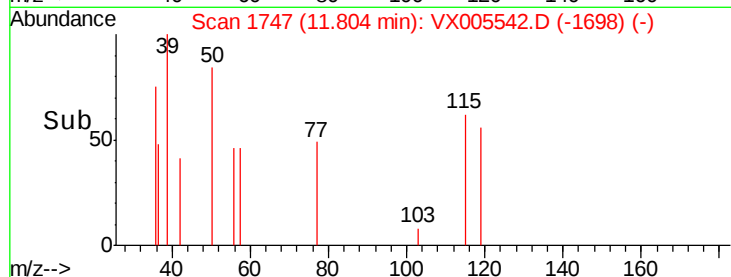
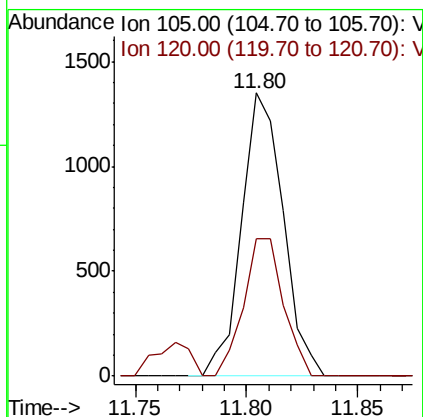
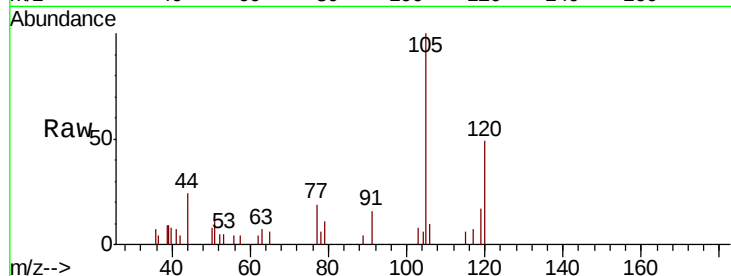




#84  
 1,2,4-Trimethylbenzene  
 Concen: 0.273 ug/l  
 RT: 11.80 min Scan# 1747  
 Delta R.T. 0.00 min  
 Lab File: VX005542.D  
 Acq: 24 Oct 2018 15:39

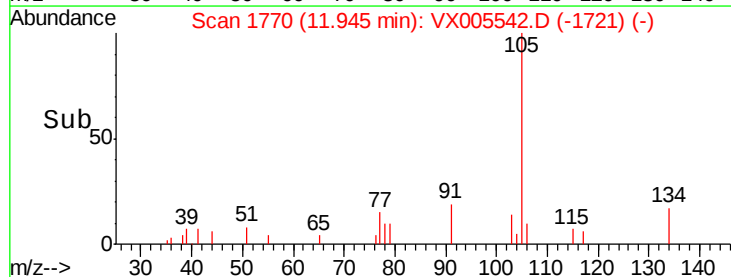
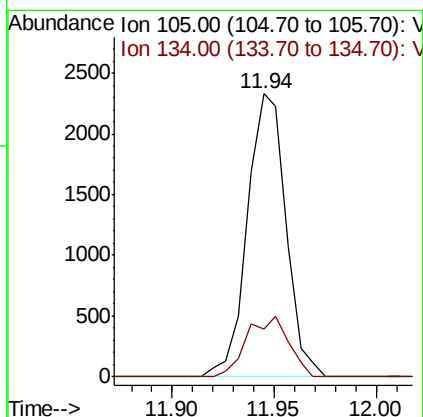
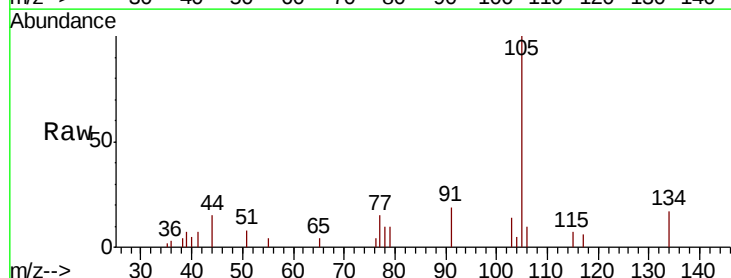
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 S37-TB-2018-1

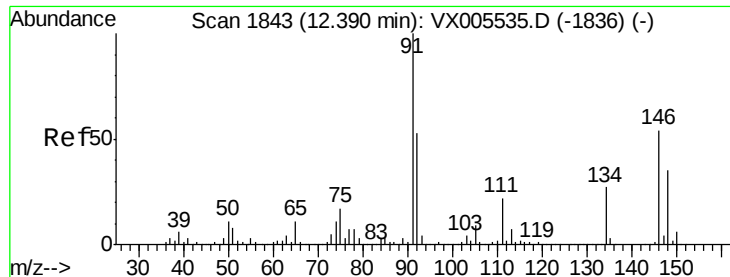
Tot Ion:105 Resp: 1761  
 Ion Ratio Lower Upper  
 105 100  
 120 46.8 23.2 69.6



#85  
 sec-Butylbenzene  
 Concen: 0.404 ug/l  
 RT: 11.94 min Scan# 1770  
 Delta R.T. -0.00 min  
 Lab File: VX005542.D  
 Acq: 24 Oct 2018 15:39

Tgt Ion:105 Resp: 3061  
 Ion Ratio Lower Upper  
 105 100  
 134 23.2 10.5 31.5

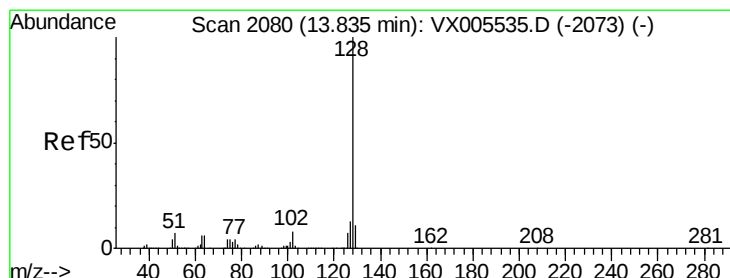
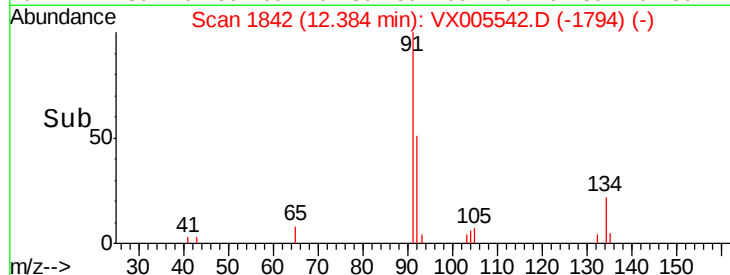
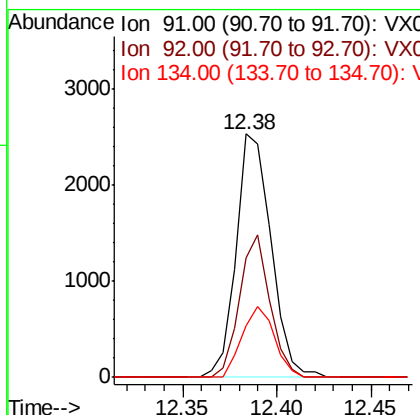
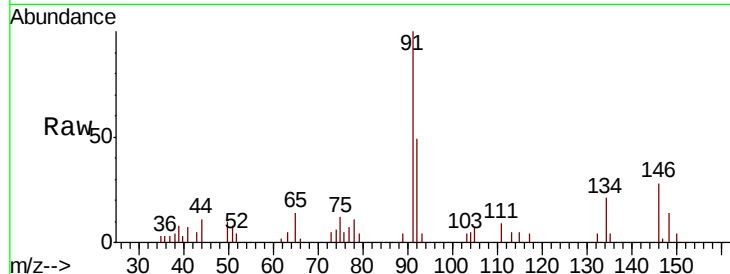




#89  
n-Butylbenzene  
Concen: 0.533 ug/l  
RT: 12.38 min Scan# 1842  
Delta R.T. -0.01 min  
Lab File: VX005542.D  
Acq: 24 Oct 2018 15:39

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

Tot Ion: 91 Resp: 3260  
Ion Ratio Lower Upper  
91 100  
92 50.7 27.3 81.9  
134 27.0 13.6 40.7



#95  
Naphthalene  
Concen: 0.336 ug/l  
RT: 13.83 min Scan# 2080  
Delta R.T. -0.00 min  
Lab File: VX005542.D  
Acq: 24 Oct 2018 15:39

Tgt Ion:128 Resp: 2790  
Ion Ratio Lower Upper  
128 100  
127 12.7 10.2 15.2  
129 13.4 8.6 12.8#

