

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX100418\  
 Data File : VX005035.D  
 Acq On : 04 Oct 2018 22:43  
 Operator : JC/MD  
 Sample : J5207-08  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 71 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SA-TW506-2731

Quant Time: Oct 05 03:25:17 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X092618W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 03 04:00:03 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 214357   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 359634   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 351449   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 197461   | 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   | 167722   | 54.77 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 109.54% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 141750   | 46.51 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.02%  |          |
| 50) Toluene-d8              | 8.72  | 98   | 520550   | 51.37 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.74% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 187588   | 51.39 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.78% |          |

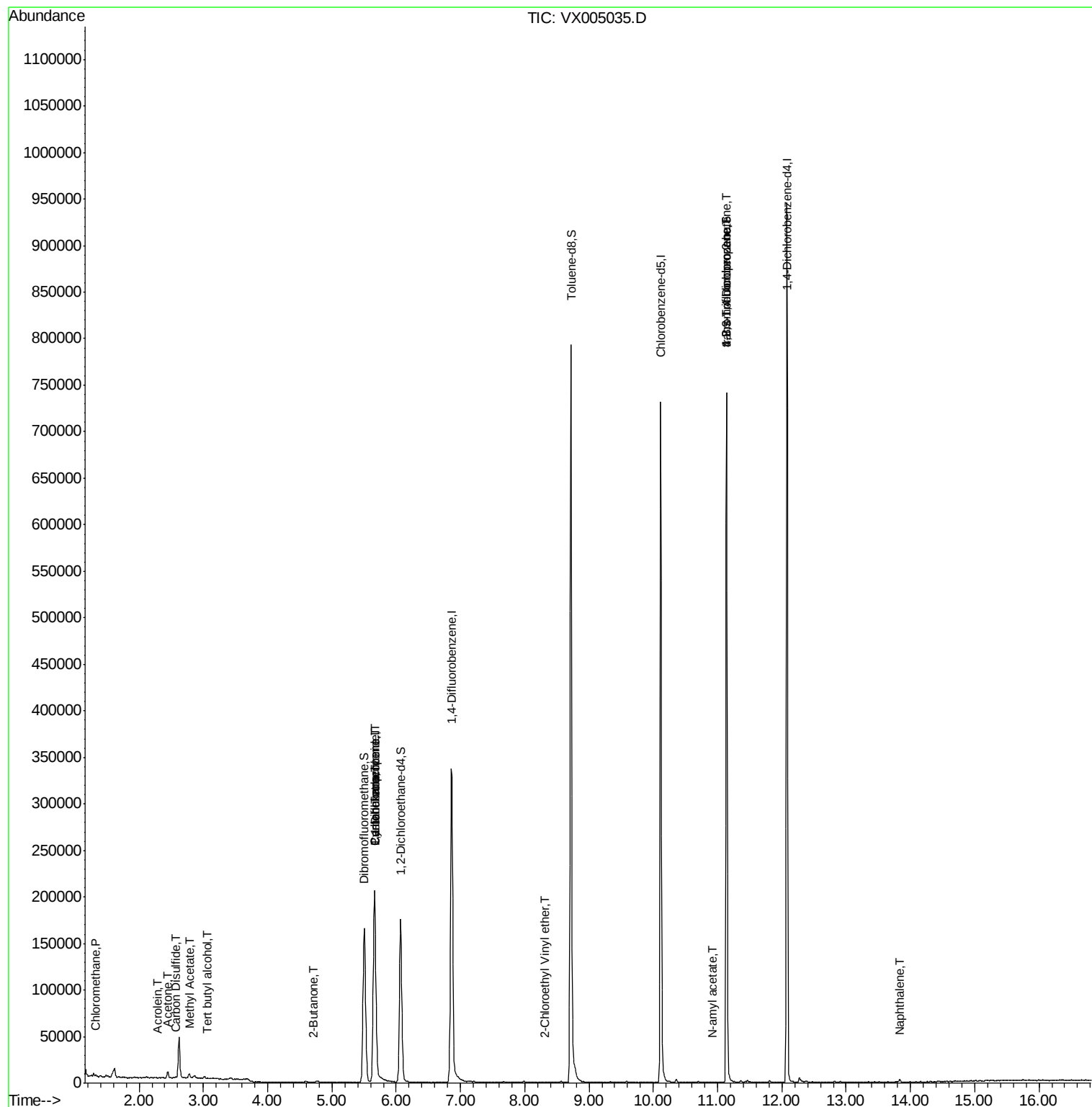
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 1020     | 0.288     | ug/l # | 88     |
| 6) Chloroethane                | 1.72  | 64   | 122      | Below Cal | #      | 45     |
| 11) Tert butyl alcohol         | 3.07  | 59   | 340      | 0.397     | ug/l # | 87     |
| 13) Acrolein                   | 2.29  | 56   | 157      | 0.258     | ug/l # | 76     |
| 16) Acetone                    | 2.45  | 43   | 7458     | 4.172     | ug/l   | 92     |
| 17) Carbon Disulfide           | 2.57  | 76   | 1926     | 0.276     | ug/l # | 82     |
| 18) Methyl Acetate             | 2.78  | 43   | 5869     | 1.296     | ug/l   | 93     |
| 20) Methylene Chloride         | 2.86  | 84   | 1168     | Below Cal | #      | 78     |
| 25) 2-Butanone                 | 4.71  | 43   | 927      | 0.352     | ug/l # | 83     |
| 31) Cyclohexane                | 5.67  | 56   | 4109     | 1.055     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 14953    | 3.596     | ug/l # | 47     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 19468    | 4.454     | ug/l # | 17     |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 19       | 14.249    | ug/l # | 49     |
| 74) N-amyl acetate             | 10.92 | 43   | 51       | 1.755     | ug/l # | 24     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 92094    | 20.808    | ug/l # | 35     |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 297      | Below Cal |        | 94     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 92094    | 56.484    | ug/l # | 10     |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 1032     | Below Cal |        | 93     |
| 95) Naphthalene                | 13.84 | 128  | 1696     | 0.821     | ug/l   | 96     |

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

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Quant Time: Oct 05 03:25:17 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X092618W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 03 04:00:03 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.01 min

Lab File: VX005035.D

Acq: 04 Oct 2018 22:43

Instrument :

MSVOA\_X

ClientSampleId :

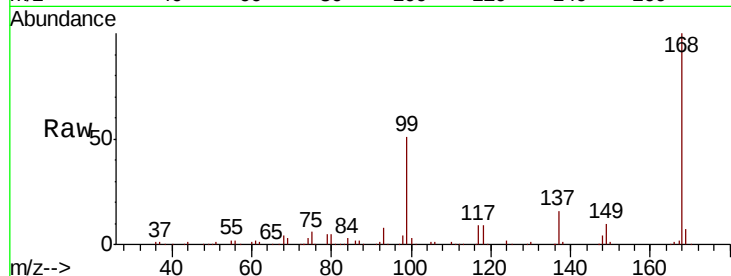
SA-TW506-2731

Tot Ion:168 Resp: 214357

Ion Ratio Lower Upper

168 100

99 50.4 39.3 58.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

80000

60000

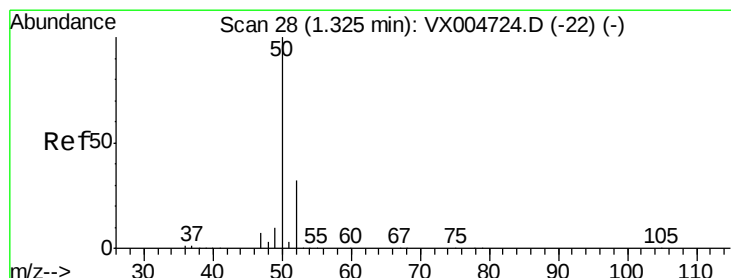
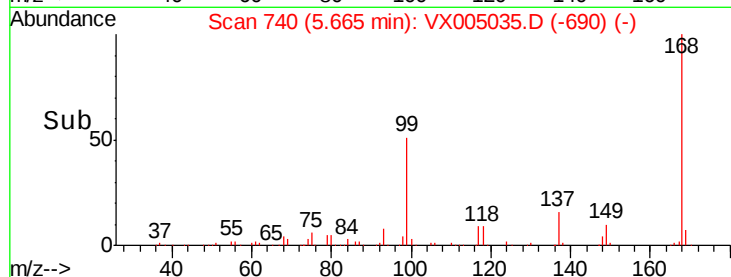
40000

20000

0

5.60 5.70 5.80

Time-->



#3

Chloromethane

Concen: 0.288 ug/l

RT: 1.32 min Scan# 28

Delta R.T. 0.00 min

Lab File: VX005035.D

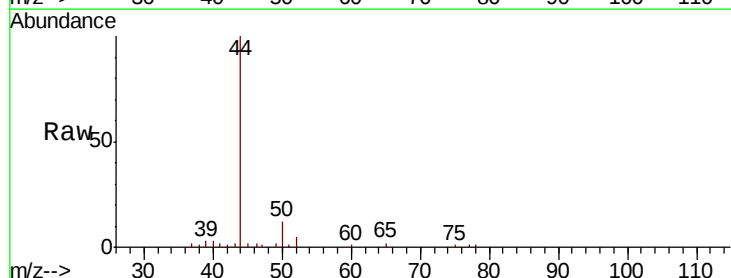
Acq: 04 Oct 2018 22:43

Tgt Ion: 50 Resp: 1020

Ion Ratio Lower Upper

50 100

52 38.7 25.8 38.6#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

800

600

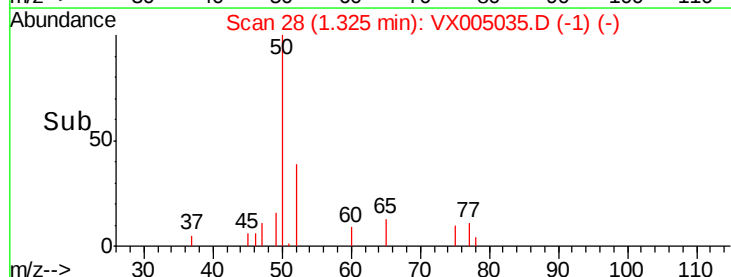
400

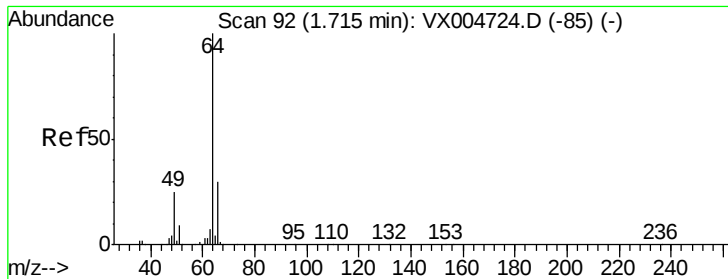
200

0

1.25 1.30 1.35 1.40

Time-->





#6

Chloroethane

Concen: Below Cal

RT: 1.72 min Scan# 93

Delta R.T. 0.01 min

Lab File: VX005035.D

Acq: 04 Oct 2018 22:43

Instrument :

MSVOA\_X

ClientSampleId :

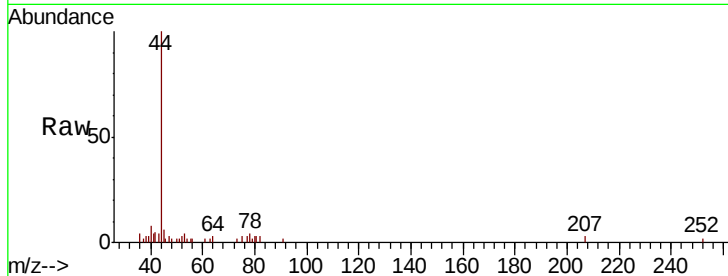
SA-TW506-2731

Tot Ion: 64 Resp: 122

Ion Ratio Lower Upper

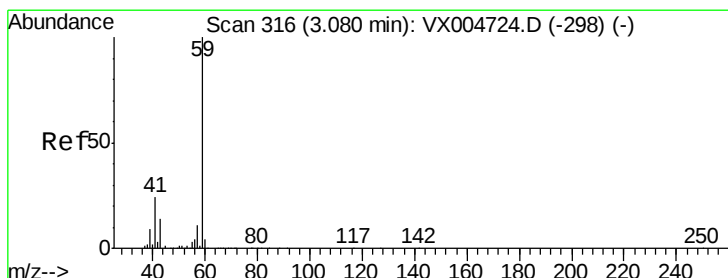
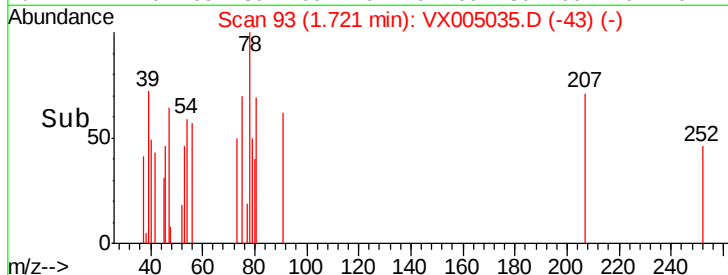
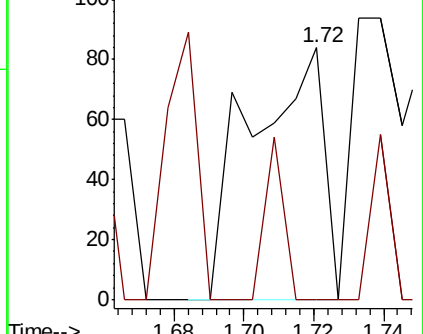
64 100

66 0.0 23.8 35.6#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0



#11

Tert butyl alcohol

Concen: 0.397 ug/l

RT: 3.07 min Scan# 314

Delta R.T. -0.01 min

Lab File: VX005035.D

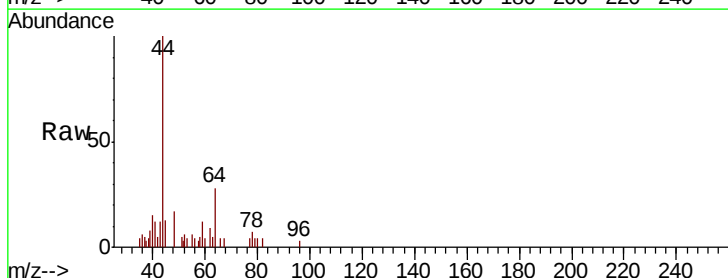
Acq: 04 Oct 2018 22:43

Tgt Ion: 59 Resp: 340

Ion Ratio Lower Upper

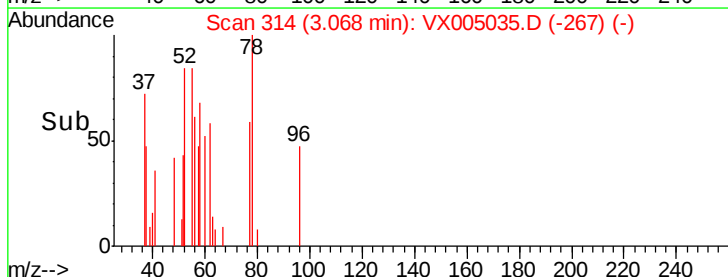
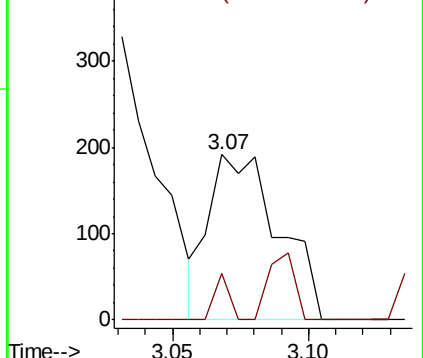
59 100

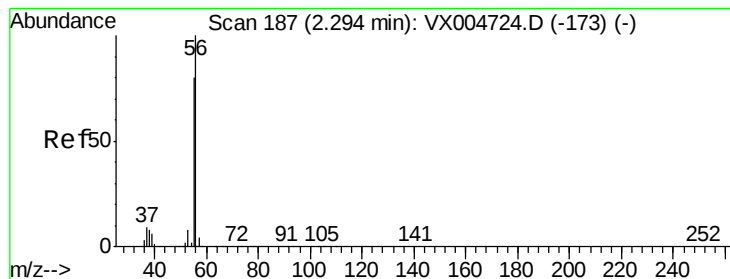
57 5.9 8.6 12.8#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0





#13

Acrolein

Concen: 0.258 ug/l

RT: 2.29 min Scan# 187

Delta R.T. -0.00 min

Lab File: VX005035.D

Acq: 04 Oct 2018 22:43

Instrument :

MSVOA\_X

ClientSampleId :

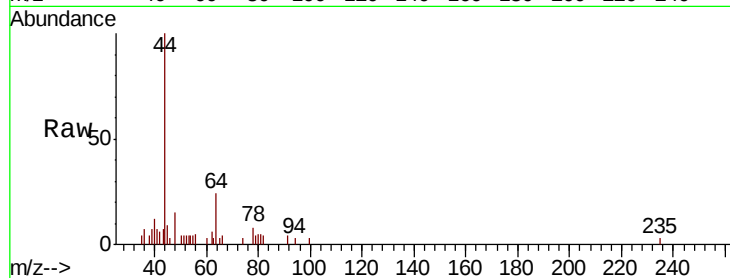
SA-TW506-2731

Tot Ion: 56 Resp: 157

Ion Ratio Lower Upper

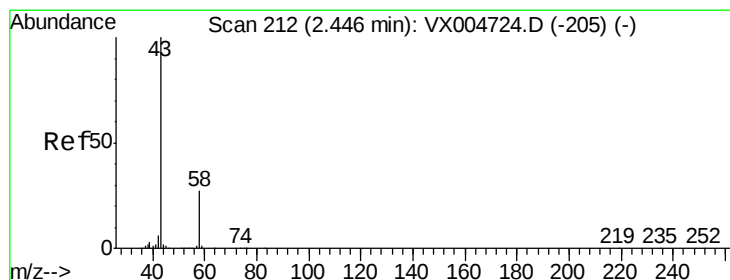
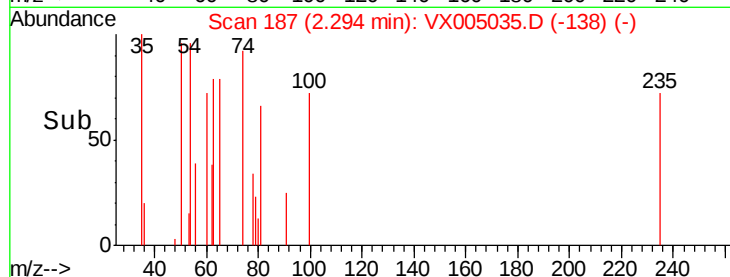
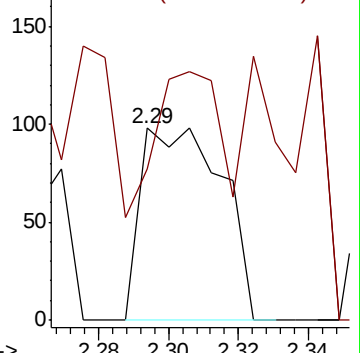
56 100

55 58.6 63.4 95.2#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0



#16

Acetone

Concen: 4.172 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX005035.D

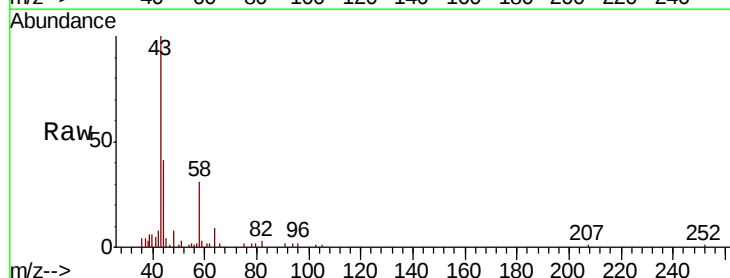
Acq: 04 Oct 2018 22:43

Tgt Ion: 43 Resp: 7458

Ion Ratio Lower Upper

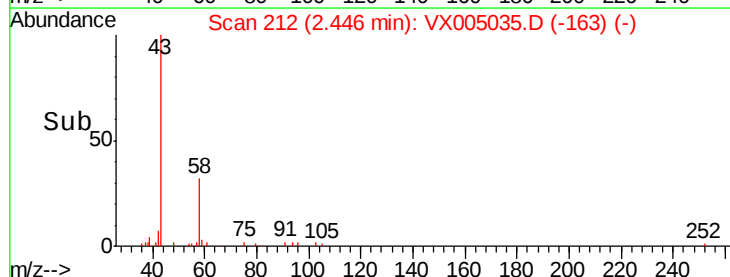
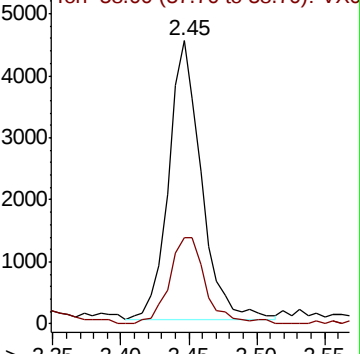
43 100

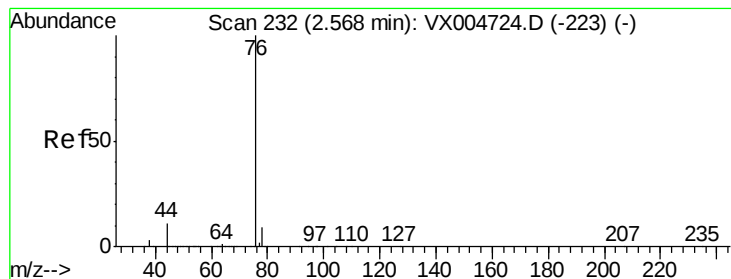
58 31.2 21.8 32.6



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#17

Carbon Disulfide

Concen: 0.276 ug/l

RT: 2.57 min Scan# 232

Delta R.T. 0.00 min

Lab File: VX005035.D

Acq: 04 Oct 2018 22:43

Instrument :

MSVOA\_X

ClientSampleId :

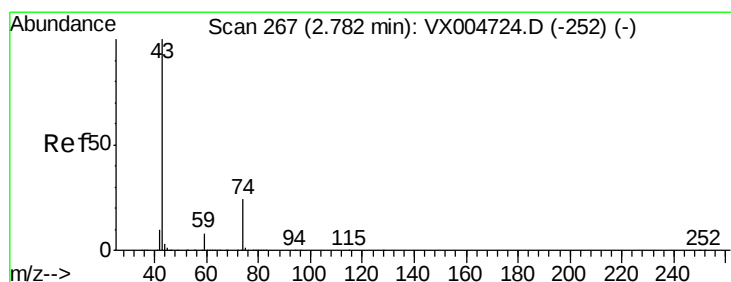
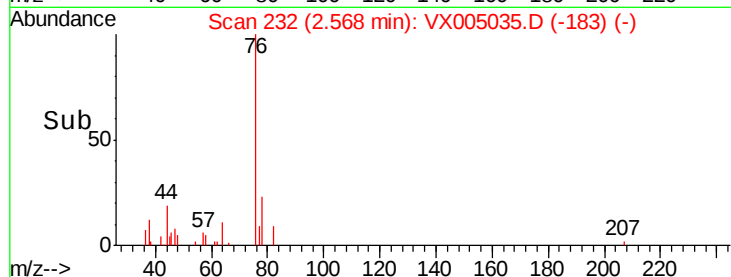
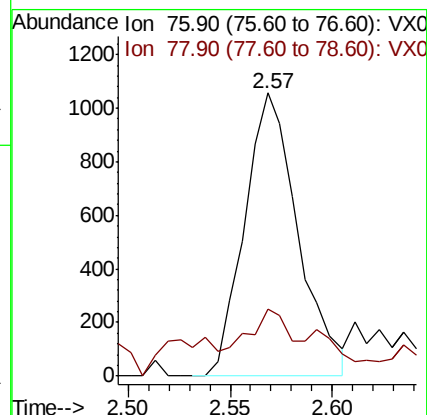
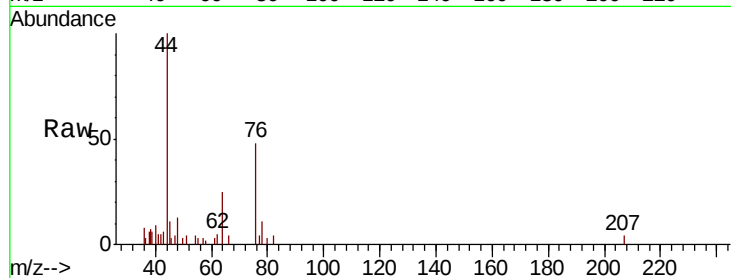
SA-TW506-2731

Tot Ion: 76 Resp: 1926

Ion Ratio Lower Upper

76 100

78 15.4 7.0 10.6#



#18

Methyl Acetate

Concen: 1.296 ug/l

RT: 2.78 min Scan# 267

Delta R.T. -0.00 min

Lab File: VX005035.D

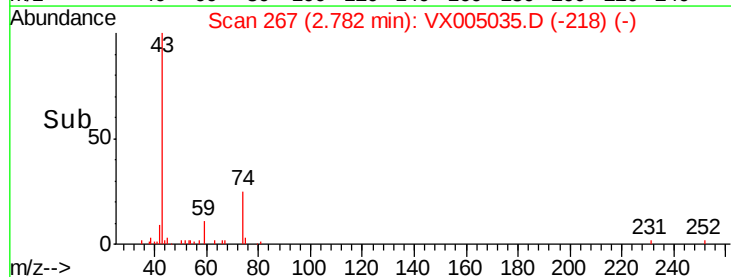
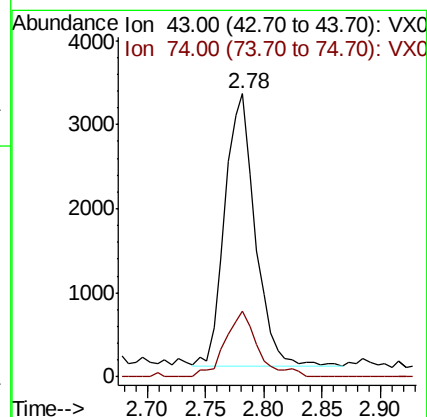
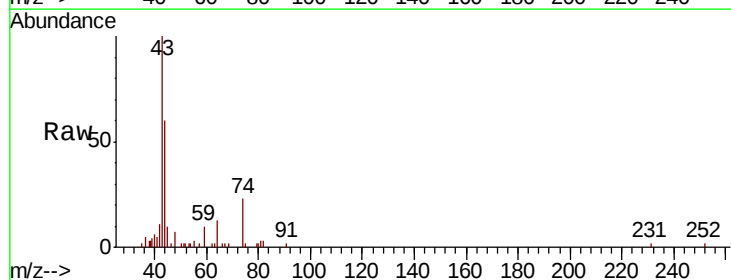
Acq: 04 Oct 2018 22:43

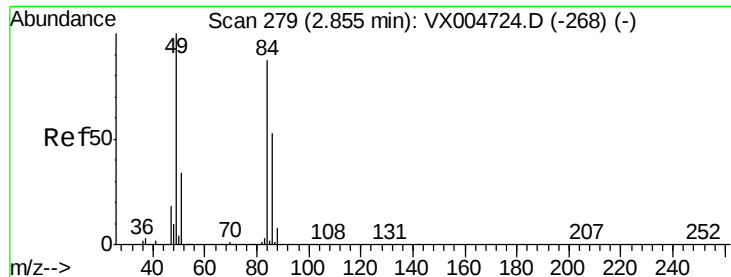
Tgt Ion: 43 Resp: 5869

Ion Ratio Lower Upper

43 100

74 25.8 17.8 26.8





#20

Methvlene Chloride

Concen: Below Cal

RT: 2.86 min Scan# 280

Delta R.T. 0.01 min

Lab File: VX005035.D

Acq: 04 Oct 2018 22:43

Instrument :

MSVOA\_X

ClientSampleId :

SA-TW506-2731

Tot Ion: 84 Resp: 1168

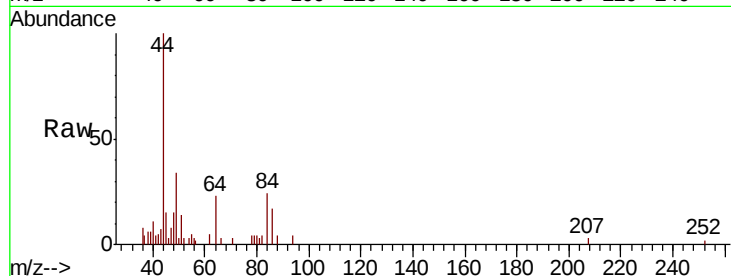
Ion Ratio Lower Upper

84 100

49 140.5 92.3 138.5#

51 60.3 31.8 47.6#

86 70.5 48.5 72.7

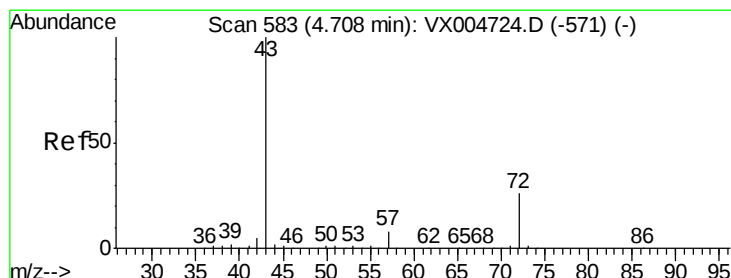
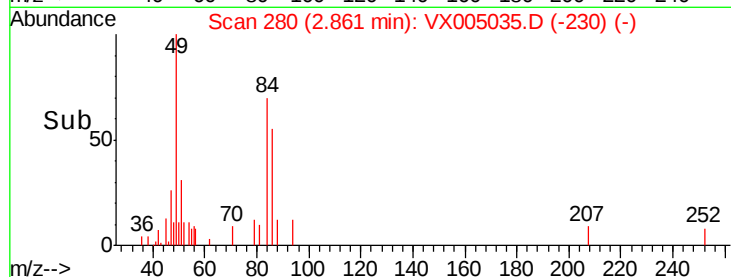
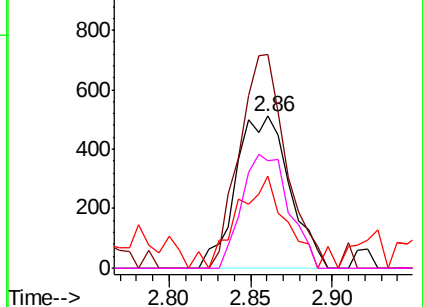


Abundance Ion 83.90 (83.60 to 84.60): VX0

Ion 48.90 (48.60 to 49.60): VX0

Ion 50.90 (50.60 to 51.60): VX0

Ion 85.90 (85.60 to 86.60): VX0



#25

2-Butanone

Concen: 0.352 ug/l

RT: 4.71 min Scan# 584

Delta R.T. 0.01 min

Lab File: VX005035.D

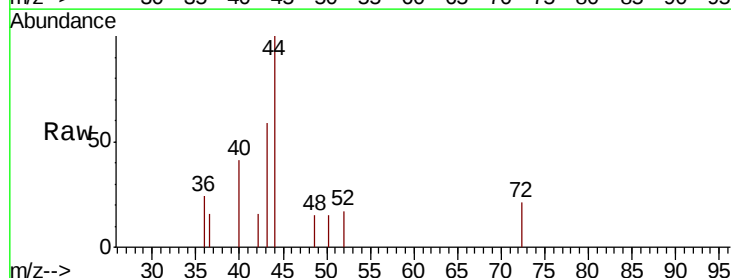
Acq: 04 Oct 2018 22:43

Tgt Ion: 43 Resp: 927

Ion Ratio Lower Upper

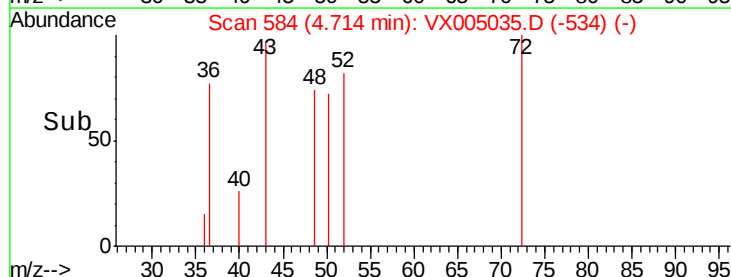
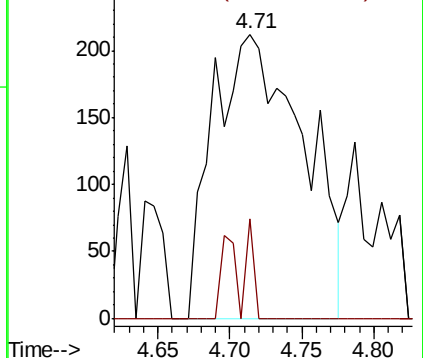
43 100

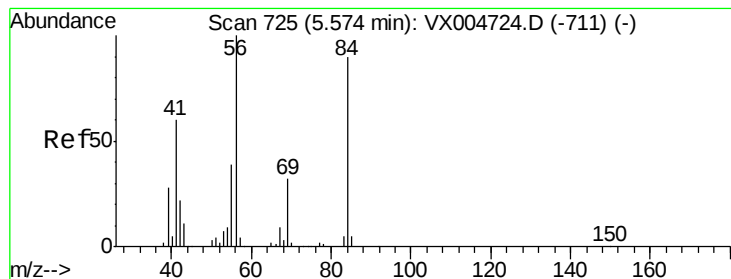
72 34.9 20.8 31.2#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0





#31

Cyclohexane

Concen: 1.055 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.09 min

Lab File: VX005035.D

Acq: 04 Oct 2018 22:43

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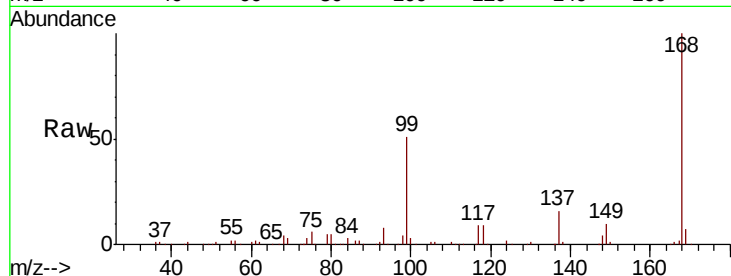
Tot Ion: 56 Resp: 4109

Ion Ratio Lower Upper

56 100

69 173.3 25.9 38.9#

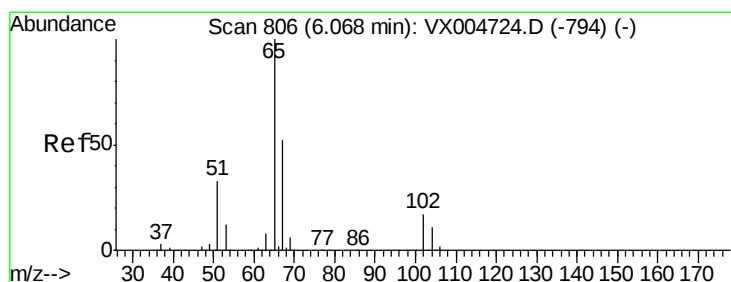
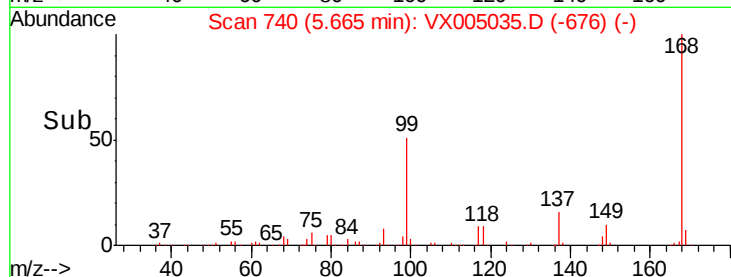
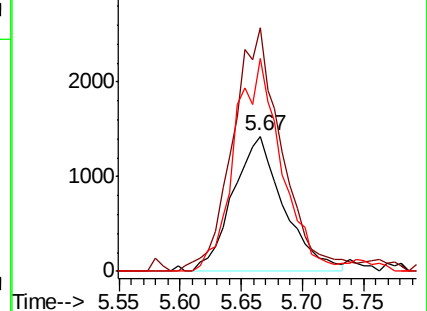
84 157.9 71.9 107.9#



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: 54.774 ug/l

RT: 6.07 min Scan# 806

Delta R.T. 0.00 min

Lab File: VX005035.D

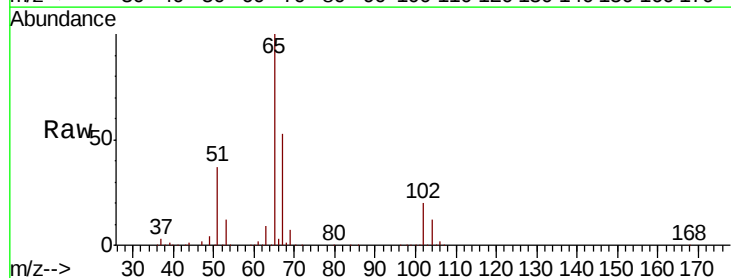
Acq: 04 Oct 2018 22:43

Tgt Ion: 65 Resp: 167722

Ion Ratio Lower Upper

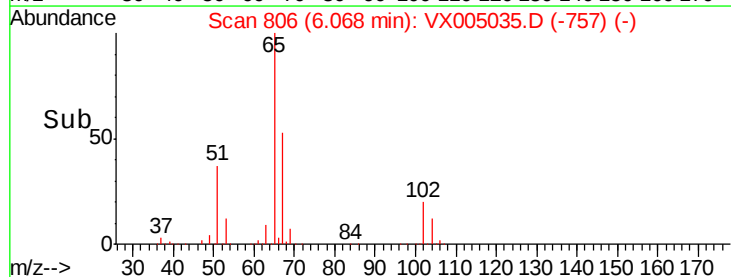
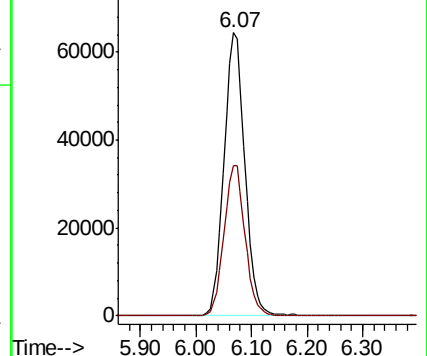
65 100

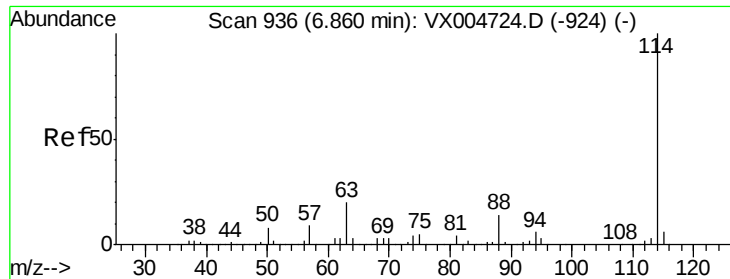
67 53.2 0.0 107.4



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0

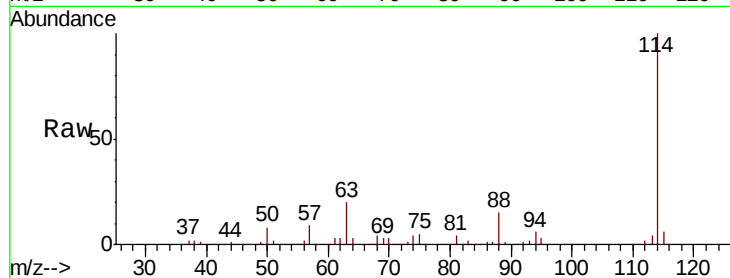




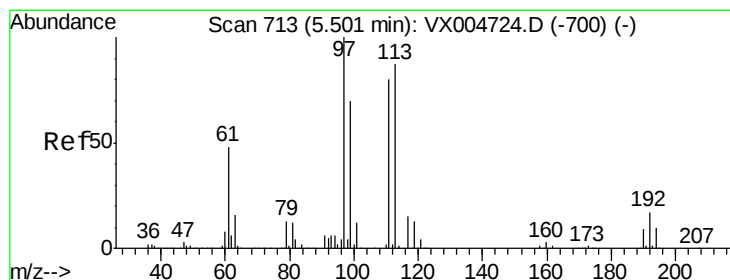
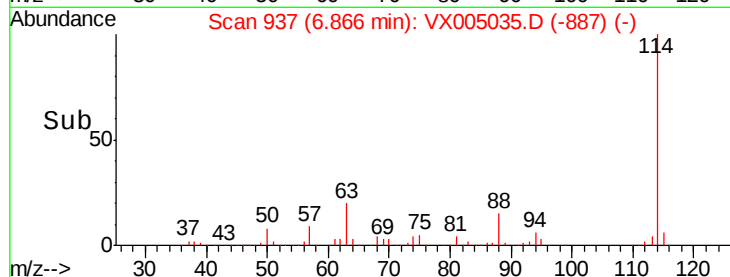
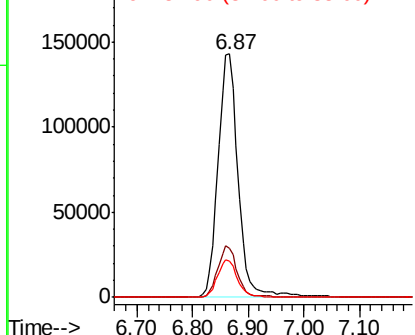
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.87 min Scan# 937  
 Delta R.T. 0.01 min  
 Lab File: VX005035.D  
 Acq: 04 Oct 2018 22:43

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SA-TW506-2731

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 20.2  | 0.0   | 39.8  |
| 88      | 15.0  | 0.0   | 27.0  |

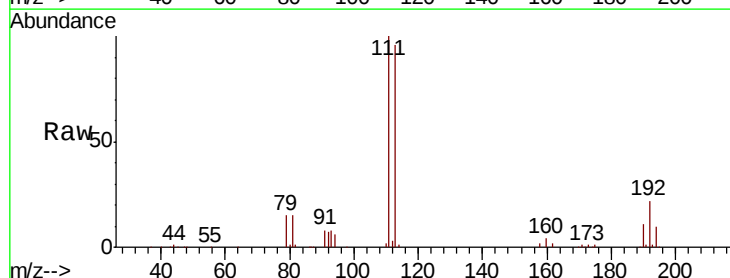


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VX0  
 Ion 87.90 (87.60 to 88.60): VX0

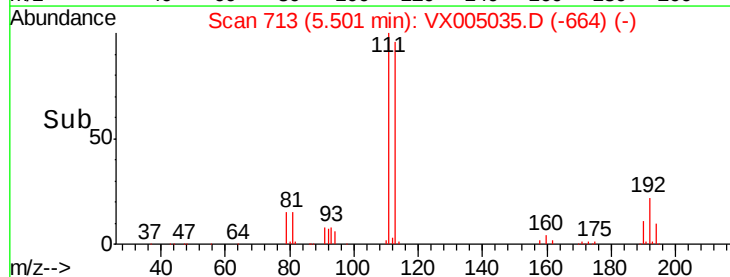
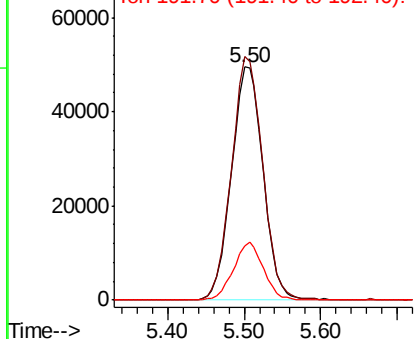


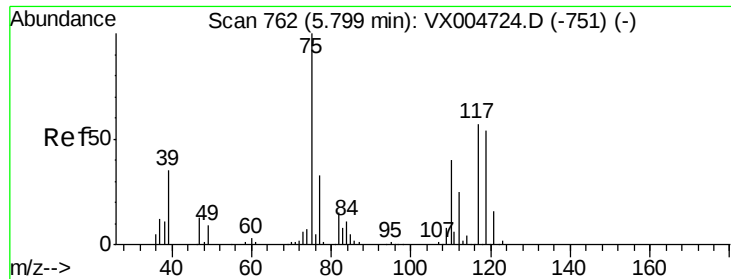
#35  
 Dibromofluoromethane  
 Concen: 46.507 ug/l  
 RT: 5.50 min Scan# 713  
 Delta R.T. 0.00 min  
 Lab File: VX005035.D  
 Acq: 04 Oct 2018 22:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.7 | 77.0  | 115.4 |
| 192     | 23.5  | 17.0  | 25.6  |



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: 3.596 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.14 min

Lab File: VX005035.D

Acq: 04 Oct 2018 22:43

Instrument :

MSVOA\_X

ClientSampleId :

SA-TW506-2731

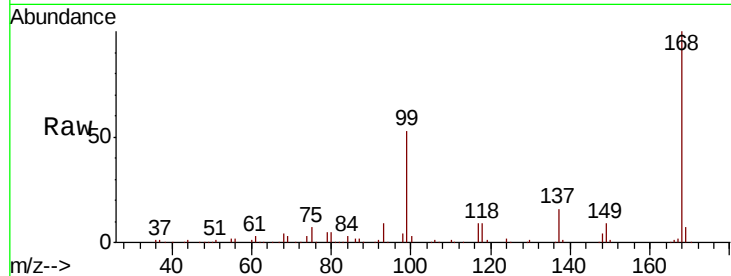
Tot Ion: 75 Resp: 14953

Ion Ratio Lower Upper

75 100

110 9.6 20.0 59.9#

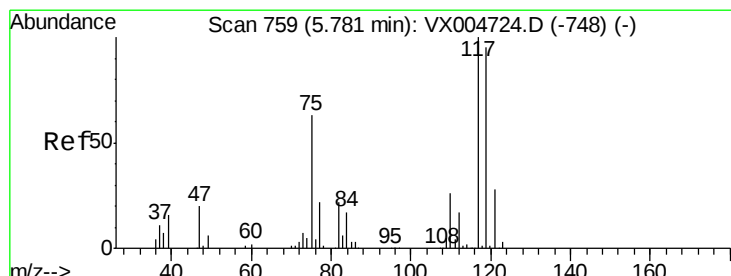
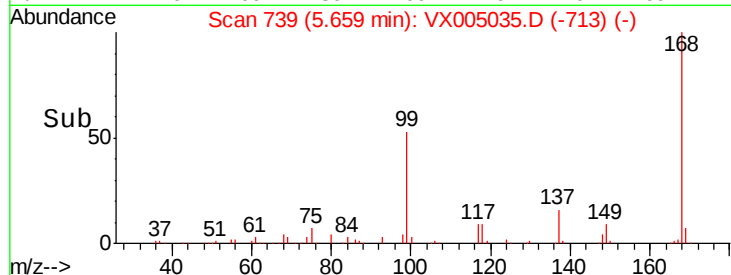
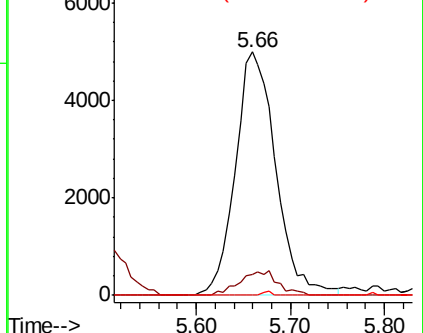
77 0.4 27.1 40.7#



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: 4.454 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX005035.D

Acq: 04 Oct 2018 22:43

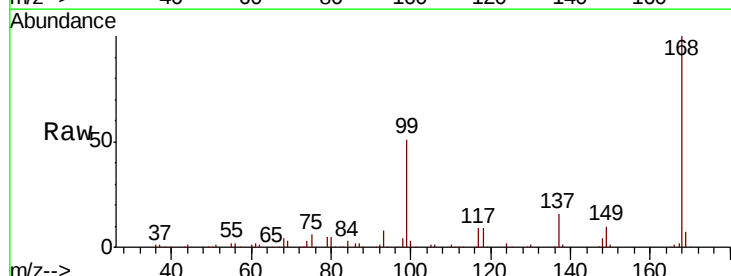
Tgt Ion: 117 Resp: 19468

Ion Ratio Lower Upper

117 100

119 5.1 75.2 112.8#

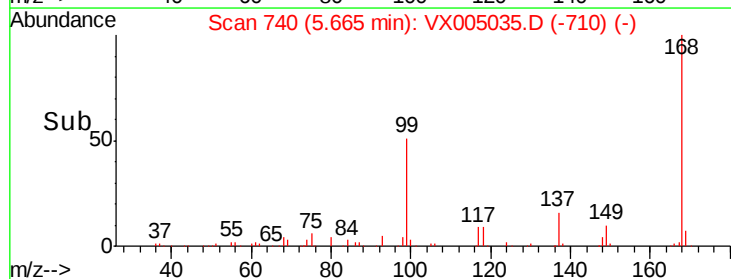
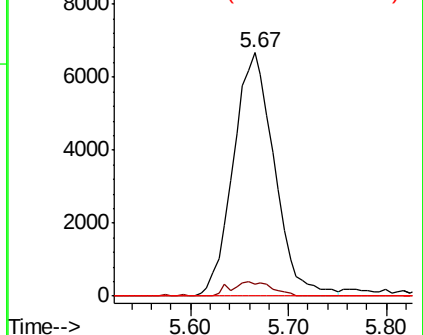
121 0.0 22.5 33.7#

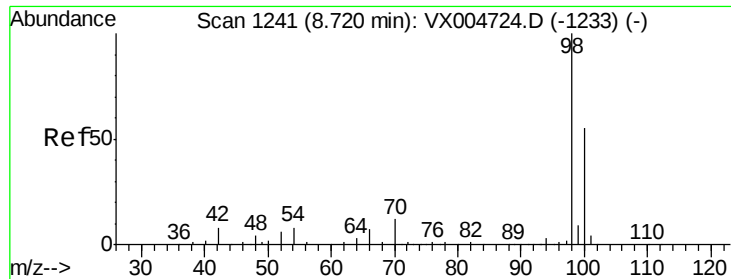


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V

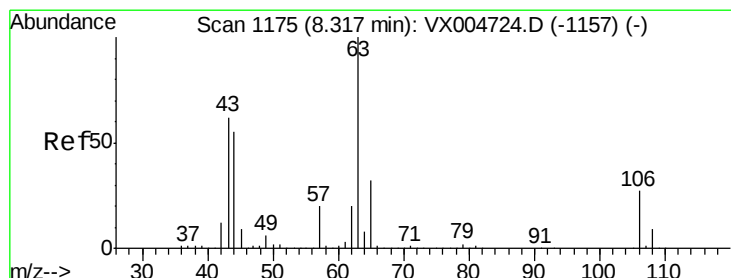
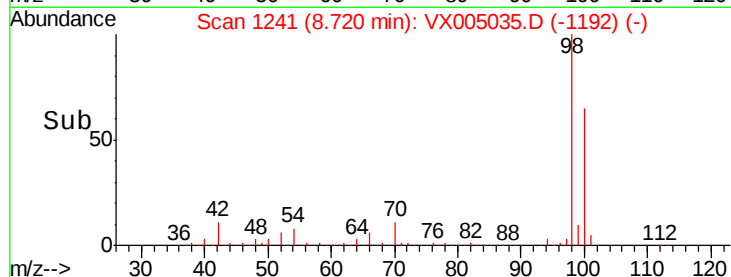
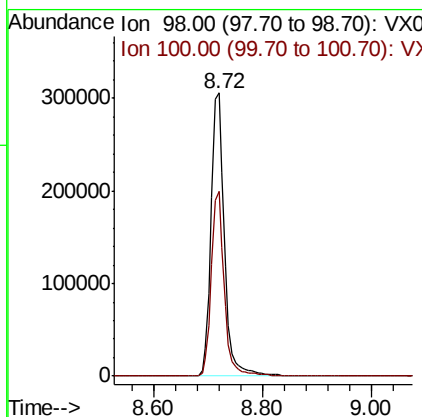
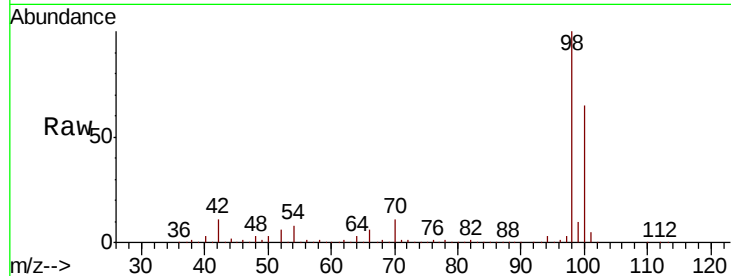




#50  
Toluene-d8  
Concen: 51.372 ug/l  
RT: 8.72 min Scan# 1241  
Delta R.T. 0.00 min  
Lab File: VX005035.D  
Acq: 04 Oct 2018 22:43

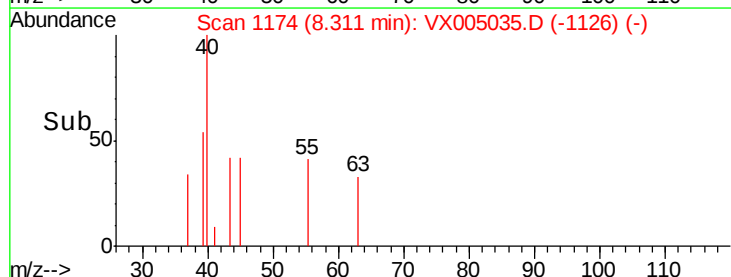
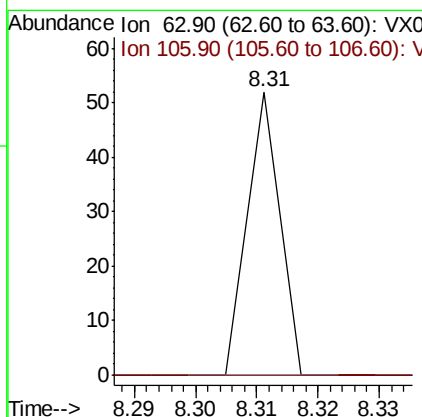
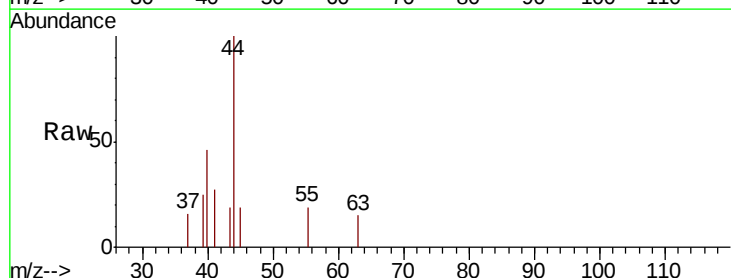
Instrument :  
MSVOA\_X  
ClientSampleId :  
SA-TW506-2731

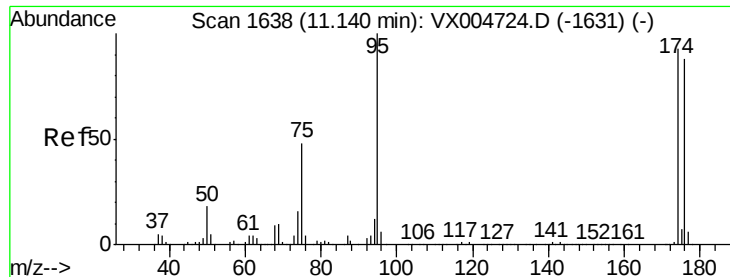
Tot Ion: 98 Resp: 520550  
Ion Ratio Lower Upper  
98 100  
100 63.4 51.9 77.9



#58  
2-Chloroethyl Vinyl ether  
Concen: 14.249 ug/l  
RT: 8.31 min Scan# 1174  
Delta R.T. -0.01 min  
Lab File: VX005035.D  
Acq: 04 Oct 2018 22:43

Tgt Ion: 63 Resp: 19  
Ion Ratio Lower Upper  
63 100  
106 0.0 21.0 31.6#

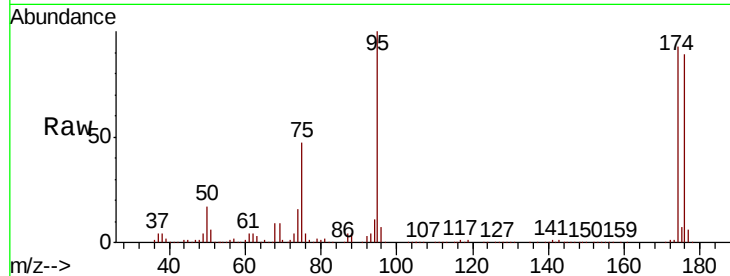




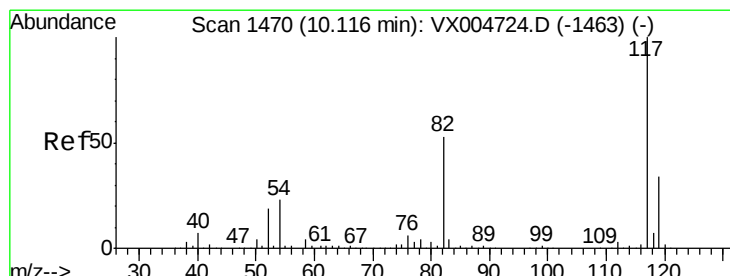
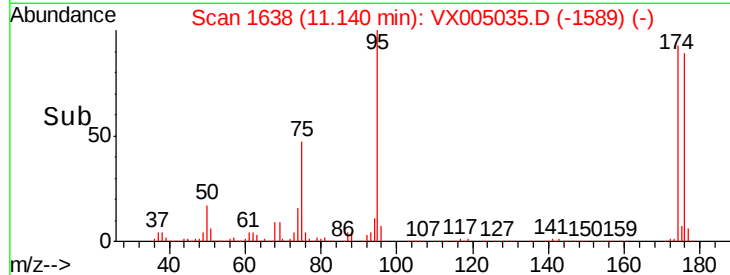
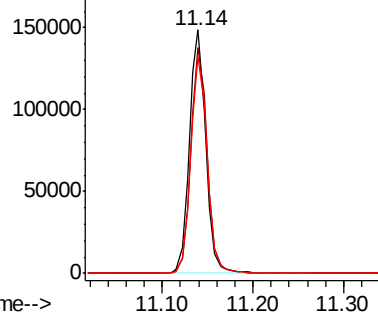
#62  
4-Bromofluorobenzene  
Concen: 51.388 ug/l  
RT: 11.14 min Scan# 1638  
Delta R.T. -0.00 min  
Lab File: VX005035.D  
Acq: 04 Oct 2018 22:43

Instrument :  
MSVOA\_X  
ClientSampleId :  
SA-TW506-2731

Tot Ion: 95 Resp: 187588  
Ion Ratio Lower Upper  
95 100  
174 92.5 0.0 185.0  
176 89.1 0.0 180.2

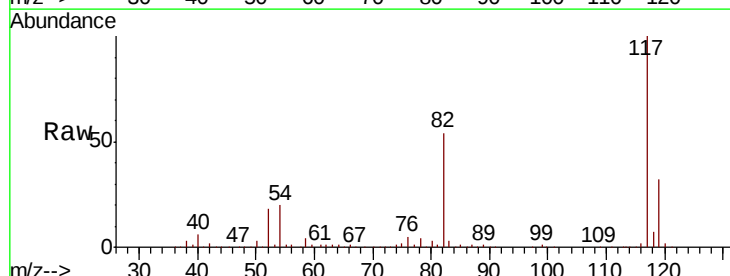


Abundance Ion 94.90 (94.60 to 95.60): VX0  
Ion 173.80 (173.50 to 174.50): V  
Ion 175.80 (175.50 to 176.50): V

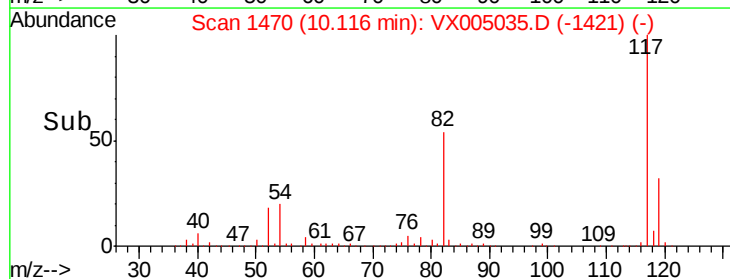
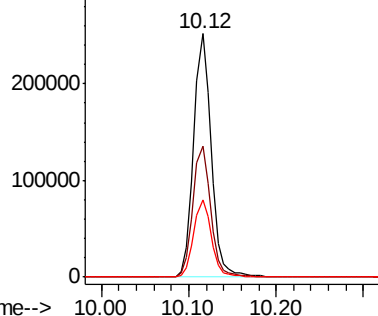


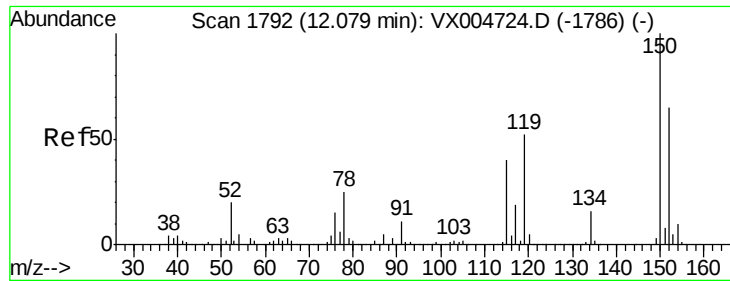
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. 0.00 min  
Lab File: VX005035.D  
Acq: 04 Oct 2018 22:43

Tgt Ion: 117 Resp: 351449  
Ion Ratio Lower Upper  
117 100  
82 53.8 42.2 63.4  
119 31.8 27.4 41.0



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





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. 0.00 min

Lab File: VX005035.D

Acq: 04 Oct 2018 22:43

Instrument :

MSVOA\_X

ClientSampleId :

SA-TW506-2731

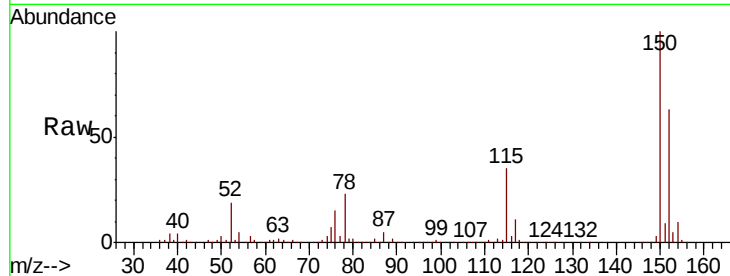
Tot Ion:152 Resp: 197461

Ion Ratio Lower Upper

152 100

115 55.2 40.2 120.6

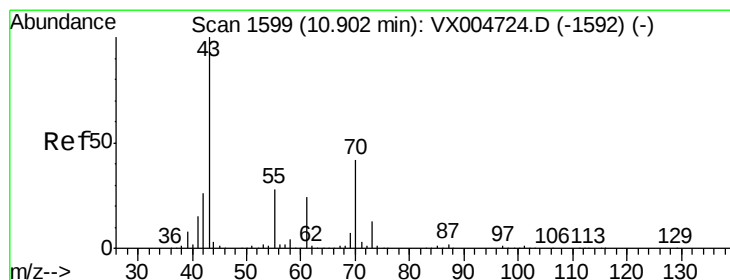
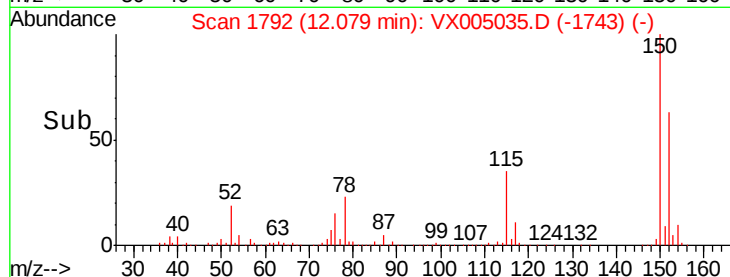
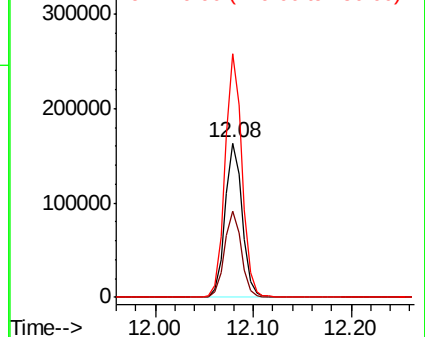
150 155.9 0.0 351.0



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



#74

N-ethyl acetate

Concen: 1.755 ug/l

RT: 10.92 min Scan# 1602

Delta R.T. 0.02 min

Lab File: VX005035.D

Acq: 04 Oct 2018 22:43

Tgt Ion: 43 Resp: 51

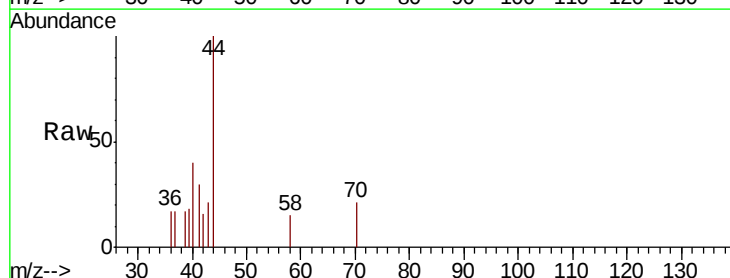
Ion Ratio Lower Upper

43 100

70 117.6 32.6 48.8#

55 41.2 21.6 32.4#

61 0.0 19.1 28.7#

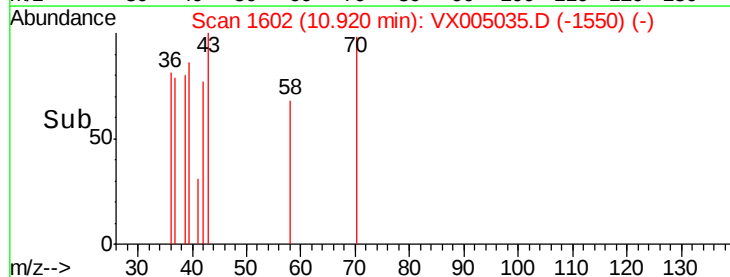
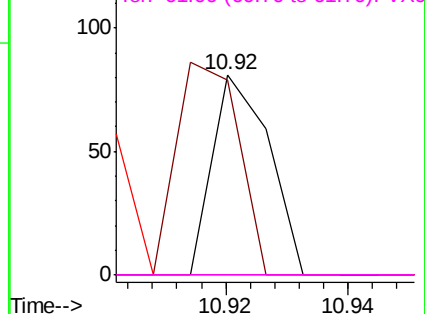


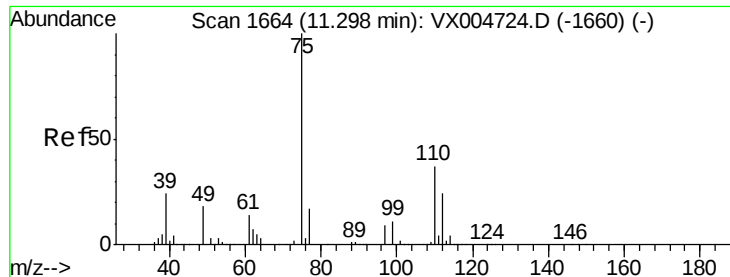
Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 70.00 (69.70 to 70.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

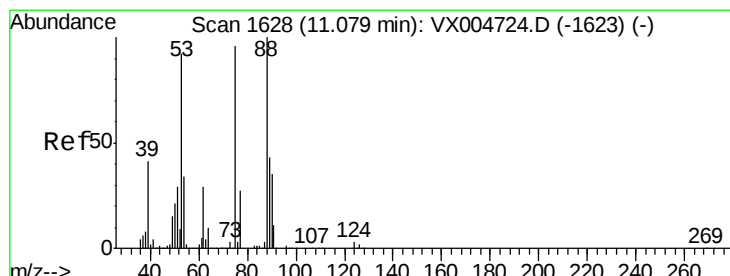
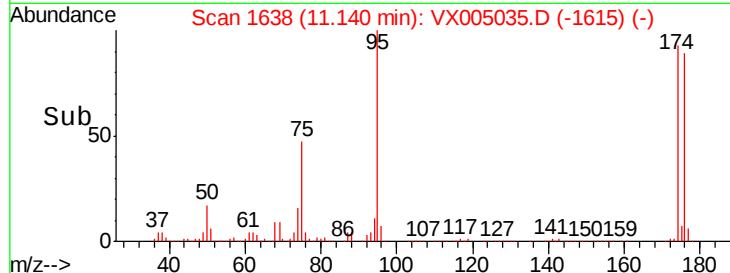
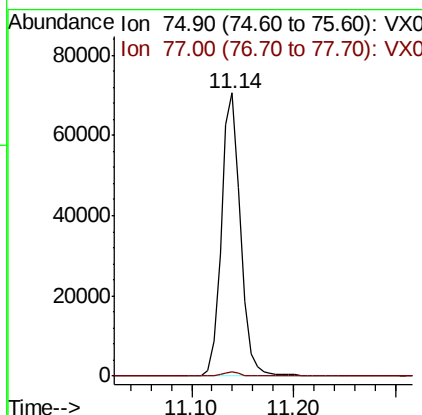
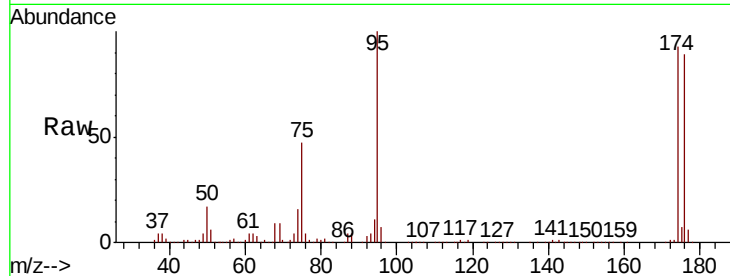




#76  
 1,2,3-Trichloropropane  
 Concen: 20.808 ug/l  
 RT: 11.14 min Scan# 1638  
 Delta R.T. -0.16 min  
 Lab File: VX005035.D  
 Acq: 04 Oct 2018 22:43

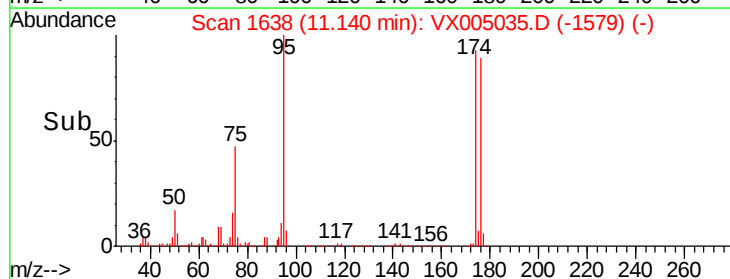
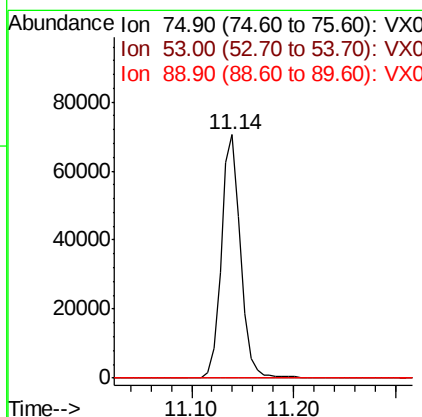
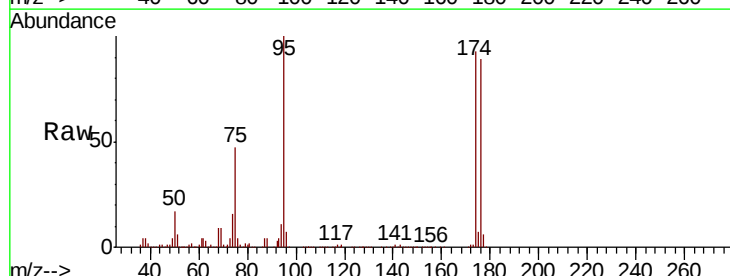
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SA-TW506-2731

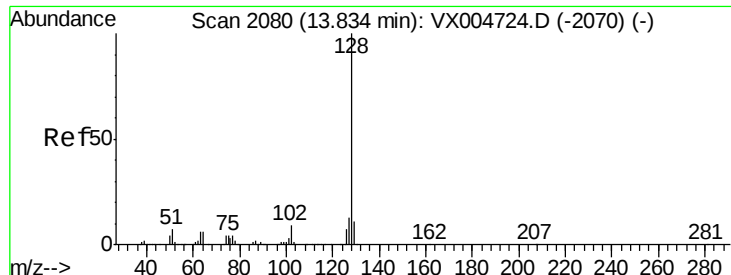
Tot Ion: 75 Resp: 92094  
 Ion Ratio Lower Upper  
 75 100  
 77 1.5 21.4 64.3#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 56.484 ug/l  
 RT: 11.14 min Scan# 1638  
 Delta R.T. 0.06 min  
 Lab File: VX005035.D  
 Acq: 04 Oct 2018 22:43

Tgt Ion: 75 Resp: 92094  
 Ion Ratio Lower Upper  
 75 100  
 53 0.3 80.2 120.4#  
 89 0.0 37.1 55.7#





#95  
Naphthalene  
Concen: 0.821 ug/l  
RT: 13.84 min Scan# 2081  
Delta R.T. 0.01 min  
Lab File: VX005035.D  
Acq: 04 Oct 2018 22:43

Instrument :  
MSVOA\_X  
ClientSampleId :  
SA-TW506-2731

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 14.4  | 10.4  | 15.6  |
| 129     | 12.5  | 8.7   | 13.1  |

