

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX060518\  
 Data File : VX002327.D  
 Acq On : 06 Jun 2018 01:44  
 Operator : JC/MD  
 Sample : J3308-01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 35 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Jun 06 04:38:57 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X060418W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jun 05 03:22:35 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 236275   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 344003   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 322737   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 185455   | 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   | 167044   | 49.40 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.80% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 120705   | 44.62 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 89.24% |          |
| 50) Toluene-d8              | 8.72  | 98   | 496311   | 47.86 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.72% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 178519   | 44.65 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 89.30% |          |

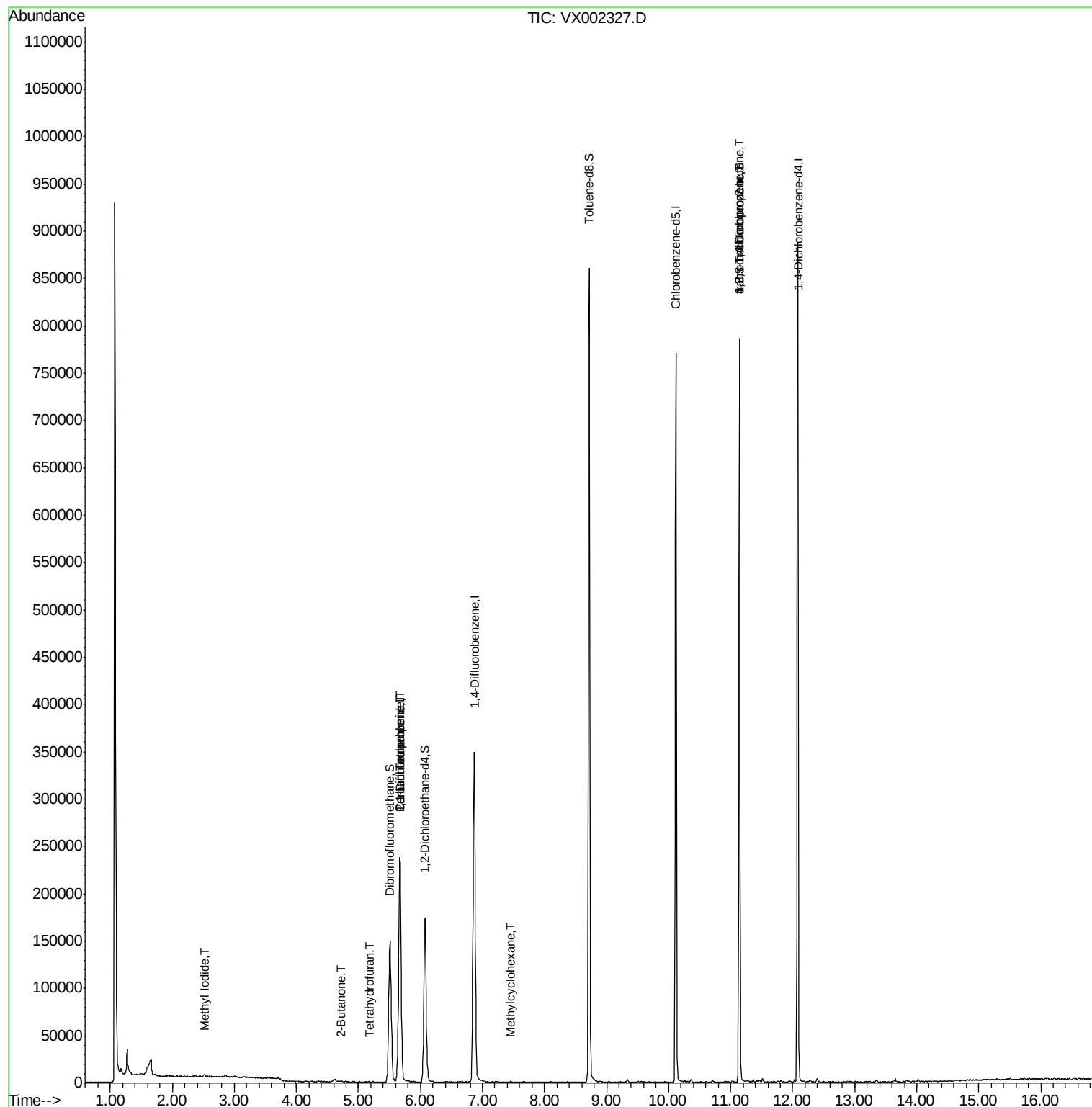
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 3) Chloromethane               | 1.32  | 50   | 493      | Below Cal | #     | 81     |
| 5) Bromomethane                | 1.64  | 94   | 1888     | Below Cal | #     | 65     |
| 8) Diethyl Ether               | 2.44  | 74   | 70       | Below Cal |       | 65     |
| 10) Methyl Iodide              | 2.53  | 142  | 1966     | 0.55      | ug/l  | 97     |
| 11) Tert butyl alcohol         | 3.09  | 59   | 452      | Below Cal | #     | 1      |
| 13) Acrolein                   | 2.29  | 56   | 98       | Below Cal | #     | 1      |
| 15) Acrylonitrile              | 3.17  | 53   | 308      | Below Cal | #     | 35     |
| 16) Acetone                    | 2.45  | 43   | 1100     | Below Cal | #     | 78     |
| 18) Methyl Acetate             | 2.77  | 43   | 410      | Below Cal | #     | 73     |
| 19) Methyl tert-butyl Ether    | 3.21  | 73   | 407      | Below Cal | #     | 71     |
| 20) Methylene Chloride         | 2.86  | 84   | 728      | Below Cal | #     | 67     |
| 22) Diisopropyl ether          | 3.87  | 45   | 220      | Below Cal | #     | 74     |
| 25) 2-Butanone                 | 4.71  | 43   | 501      | 0.22      | ug/l  | 98     |
| 28) Bromochloromethane         | 5.02  | 49   | 172      | Below Cal | #     | 13     |
| 29) Tetrahydrofuran            | 5.18  | 42   | 379      | 0.25      | ug/l  | 40     |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 16811    | 4.65      | ug/l  | 50     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 21812    | 5.77      | ug/l  | 15     |
| 39) Methylcyclohexane          | 7.45  | 83   | 116      | 0.29      | ug/l  | 28     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 96585    | 23.73     | ug/l  | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 96585    | 83.20     | ug/l  | 6      |

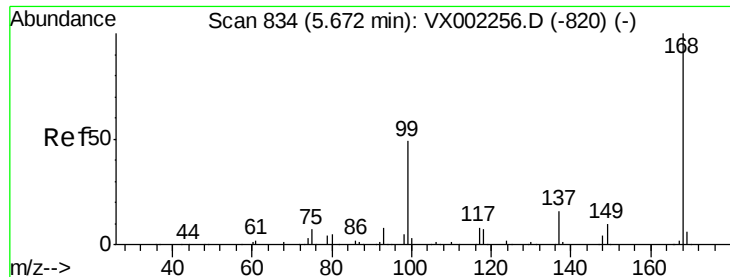
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX060518\  
Data File : VX002327.D  
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Operator : JC/MD  
Sample : J3308-01  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 35 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :

Quant Time: Jun 06 04:38:57 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X060418W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jun 05 03:22:35 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.01 min

Lab File: VX002327.D

Acq: 06 Jun 2018 01:44

Instrument :

MSVOA\_X

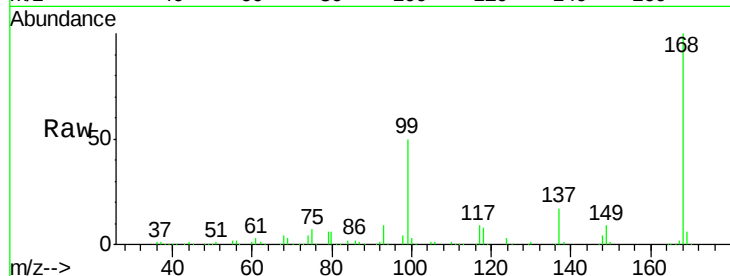
ClientSampled :

Tot Ion:168 Resp: 236275

Ion Ratio Lower Upper

168 100

99 50.3 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

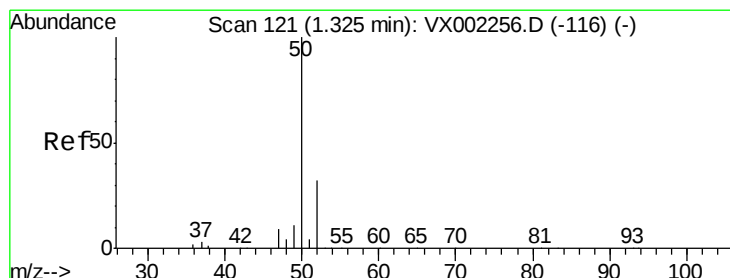
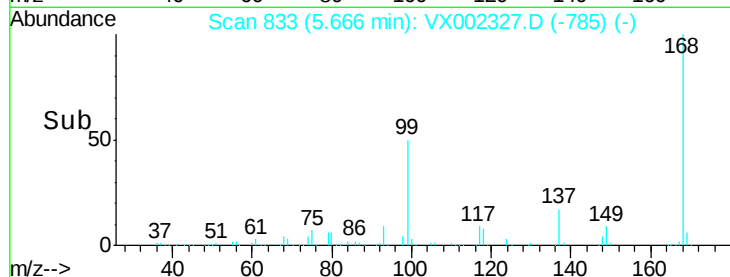
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: Below Cal

RT: 1.32 min Scan# 121

Delta R.T. 0.00 min

Lab File: VX002327.D

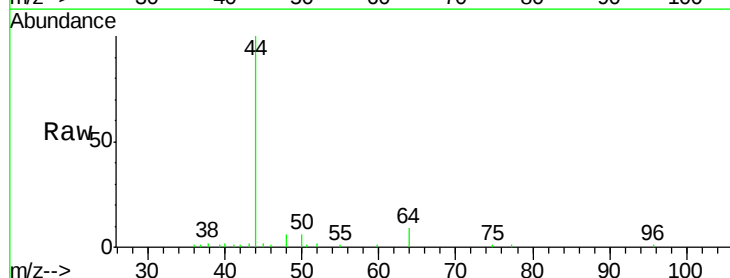
Acq: 06 Jun 2018 01:44

Tgt Ion: 50 Resp: 493

Ion Ratio Lower Upper

50 100

52 42.5 25.7 38.5#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

500

400

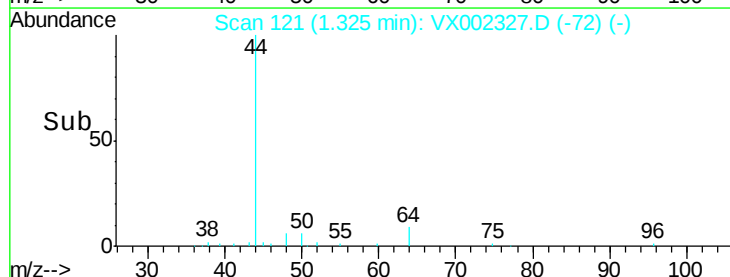
300

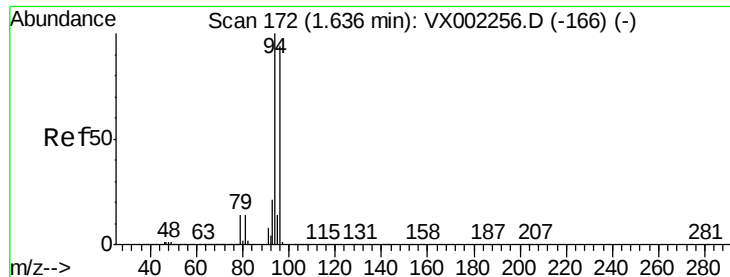
200

100

0

Time--> 1.30 1.32 1.34 1.36





#5

Bromomethane

Concen: Below Cal

RT: 1.64 min Scan# 173

Delta R.T. 0.01 min

Lab File: VX002327.D

Acq: 06 Jun 2018 01:44

Instrument :

MSVOA\_X

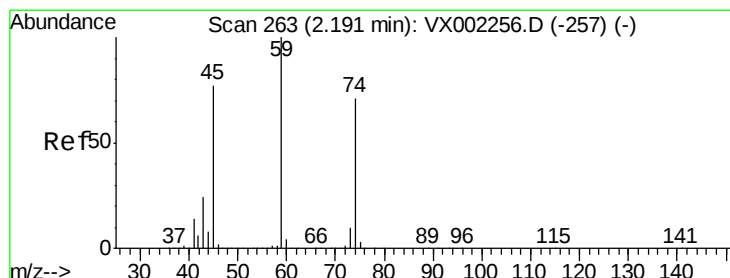
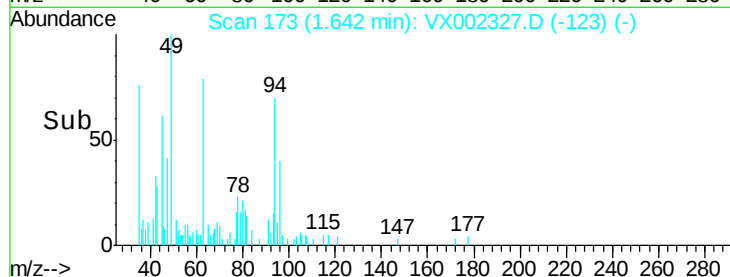
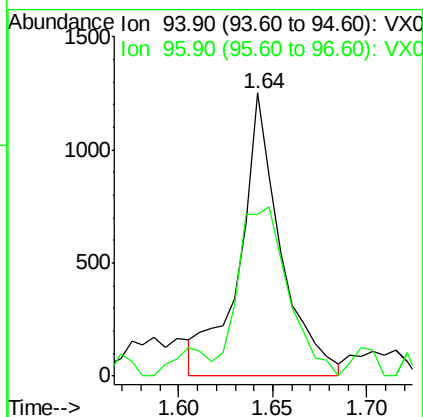
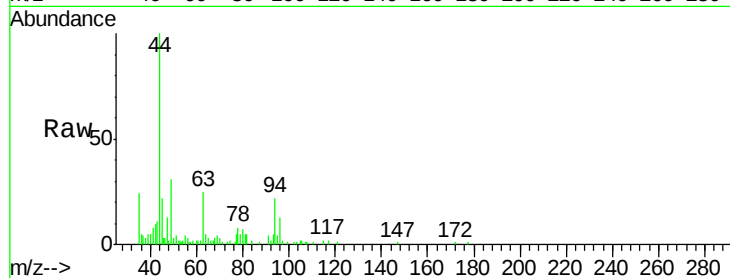
ClientSampled :

Tot Ion: 94 Resp: 1888

Ion Ratio Lower Upper

94 100

96 59.5 74.9 112.3#



#8

Diethyl Ether

Concen: Below Cal

RT: 2.44 min Scan# 304

Delta R.T. 0.25 min

Lab File: VX002327.D

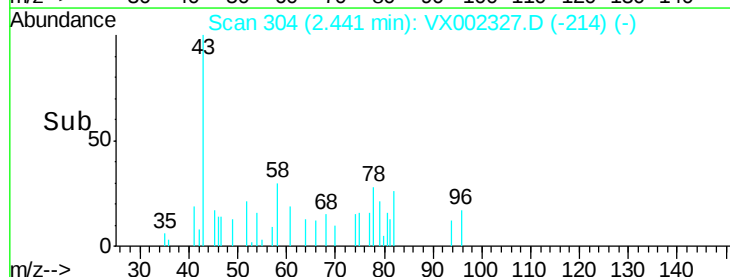
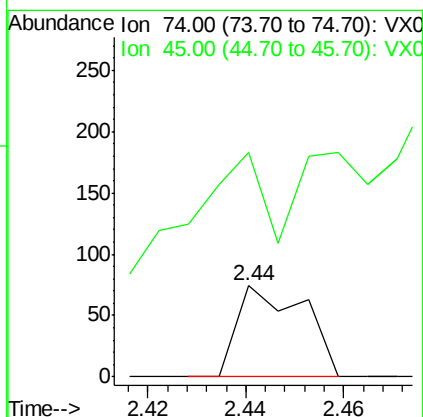
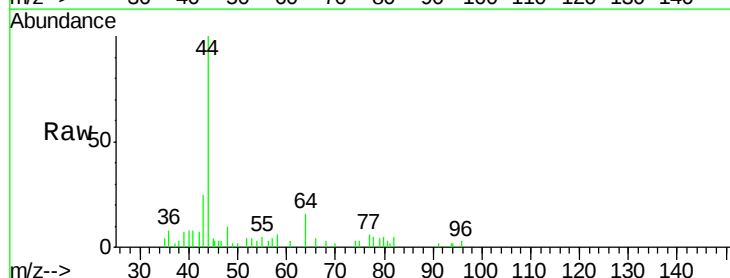
Acq: 06 Jun 2018 01:44

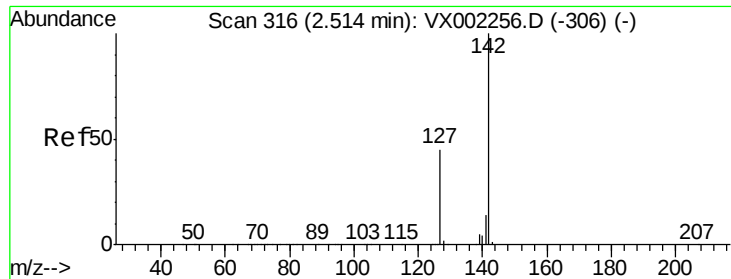
Tgt Ion: 74 Resp: 70

Ion Ratio Lower Upper

74 100

45 142.9 53.1 159.4

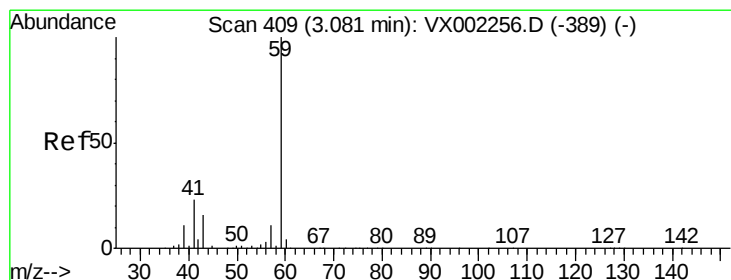
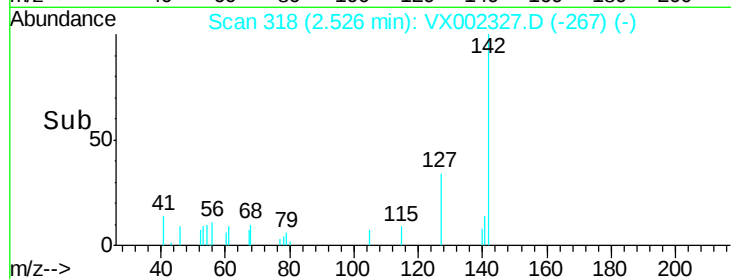
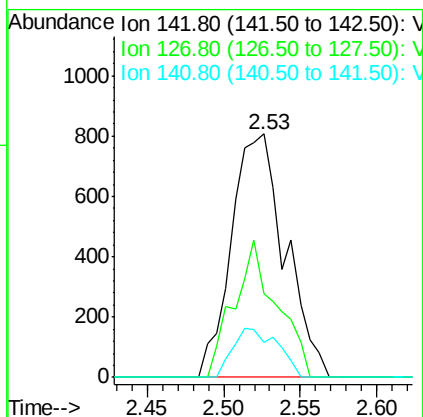
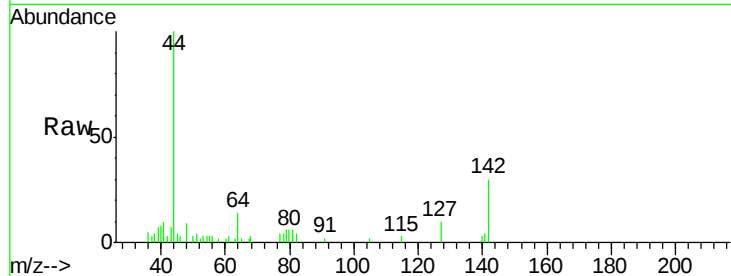




#10  
Methyl Iodide  
Concen: 0.55 ug/l  
RT: 2.53 min Scan# 318  
Delta R.T. 0.01 min  
Lab File: VX002327.D  
Acq: 06 Jun 2018 01:44

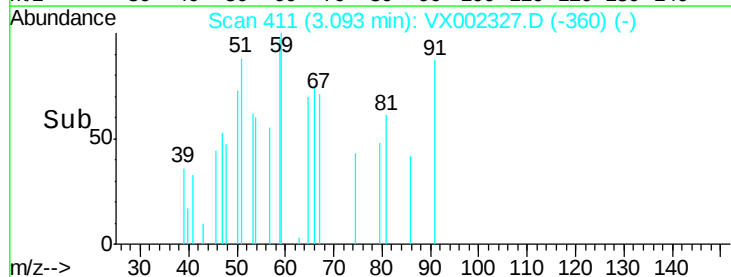
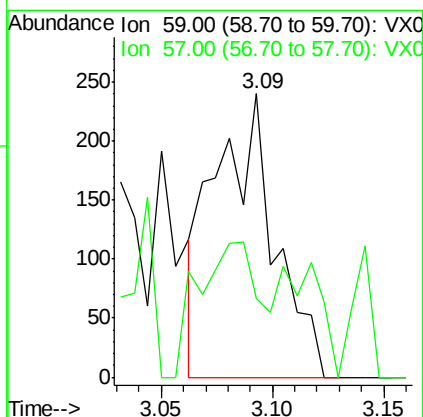
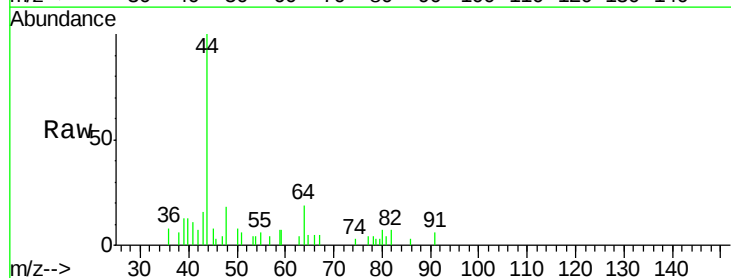
Instrument :  
MSVOA\_X  
ClientSampled :

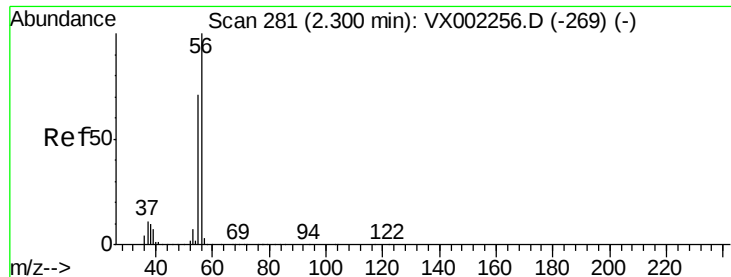
Tot Ion:142 Resp: 1966  
Ion Ratio Lower Upper  
142 100  
127 44.7 36.6 55.0  
141 16.7 11.3 16.9



#11  
Tert butyl alcohol  
Concen: Below Cal  
RT: 3.09 min Scan# 411  
Delta R.T. 0.01 min  
Lab File: VX002327.D  
Acq: 06 Jun 2018 01:44

Tgt Ion: 59 Resp: 452  
Ion Ratio Lower Upper  
59 100  
57 48.7 8.2 12.2#





#13

Acrolein

Concen: Below Cal

RT: 2.29 min Scan# 279

Delta R.T. -0.01 min

Lab File: VX002327.D

Acq: 06 Jun 2018 01:44

Instrument :

MSVOA\_X

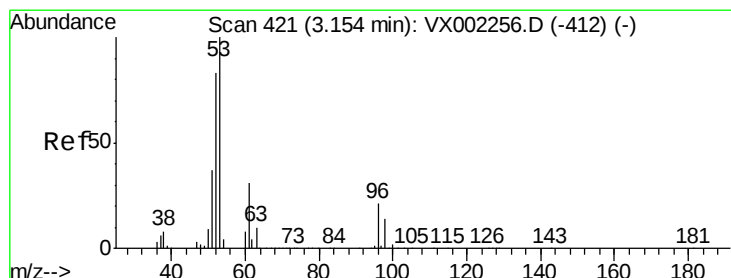
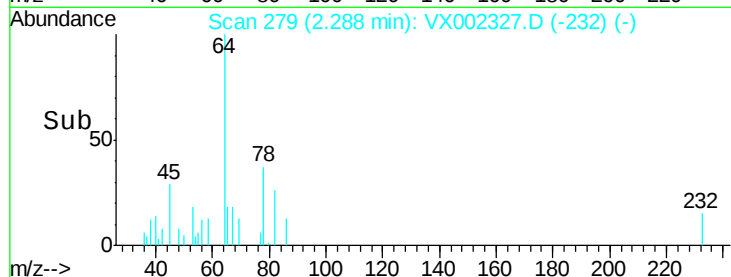
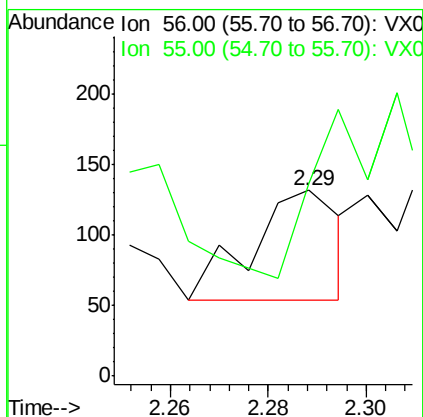
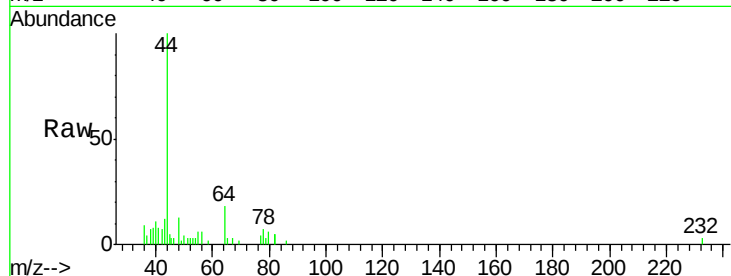
ClientSampled :

Tot Ion: 56 Resp: 98

Ion Ratio Lower Upper

56 100

55 192.9 57.0 85.4#



#15

Acrylonitrile

Concen: Below Cal

RT: 3.17 min Scan# 423

Delta R.T. 0.01 min

Lab File: VX002327.D

Acq: 06 Jun 2018 01:44

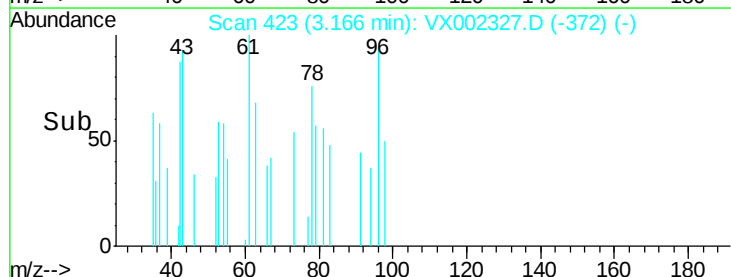
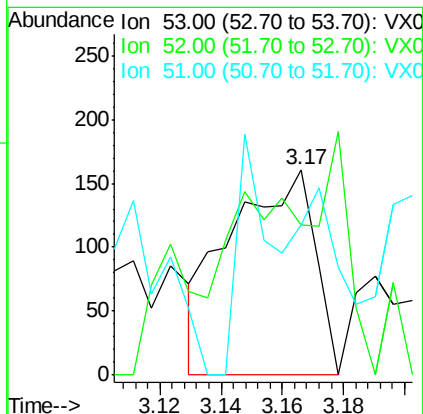
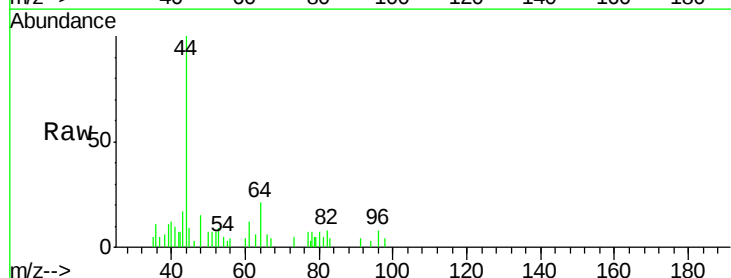
Tgt Ion: 53 Resp: 308

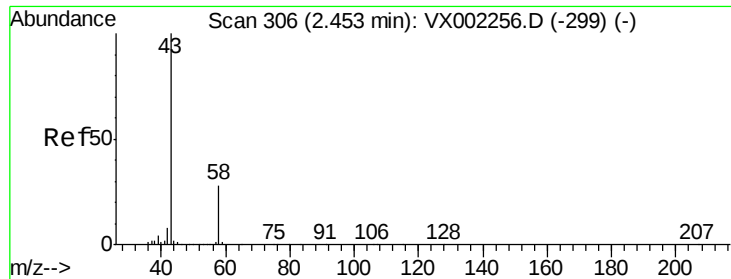
Ion Ratio Lower Upper

53 100

52 0.0 66.7 100.1#

51 35.7 29.9 44.9

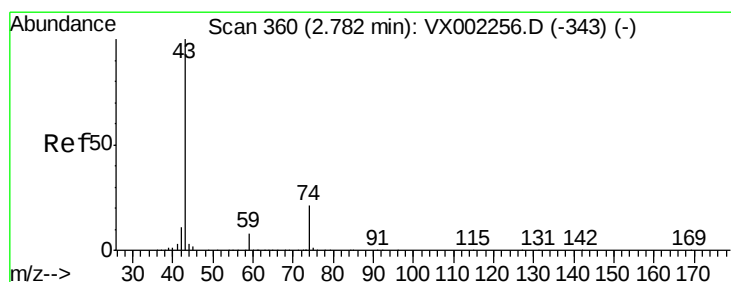
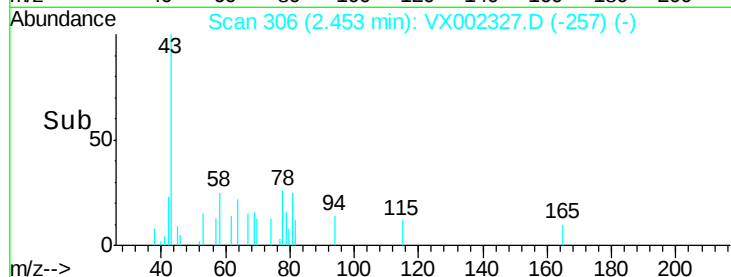
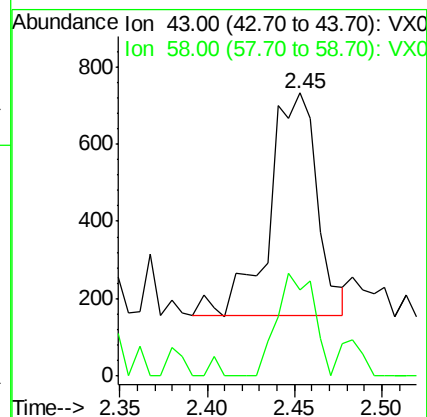
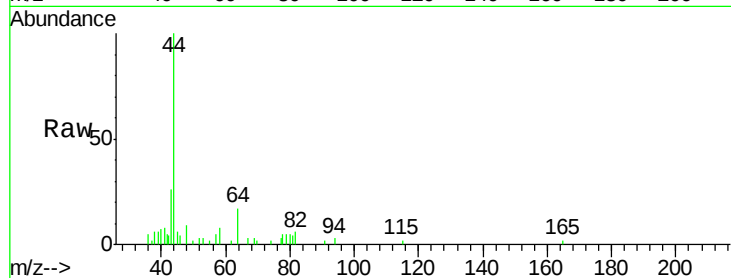




#16  
Acetone  
Concen: Below Cal  
RT: 2.45 min Scan# 306  
Delta R.T. 0.00 min  
Lab File: VX002327.D  
Acq: 06 Jun 2018 01:44

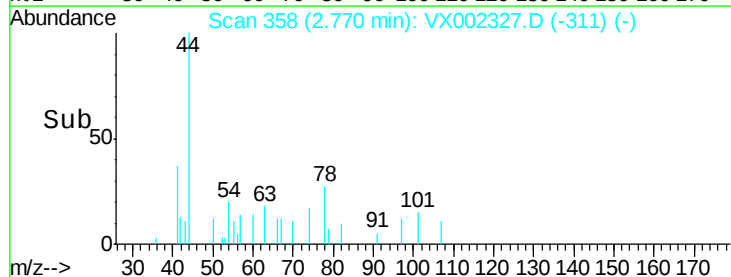
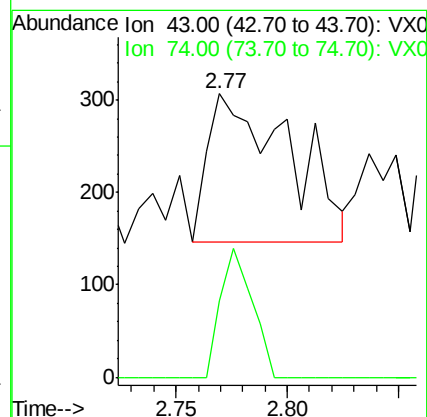
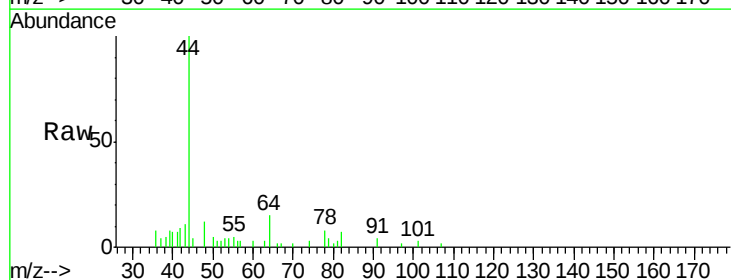
Instrument :  
MSVOA\_X  
ClientSampleId :

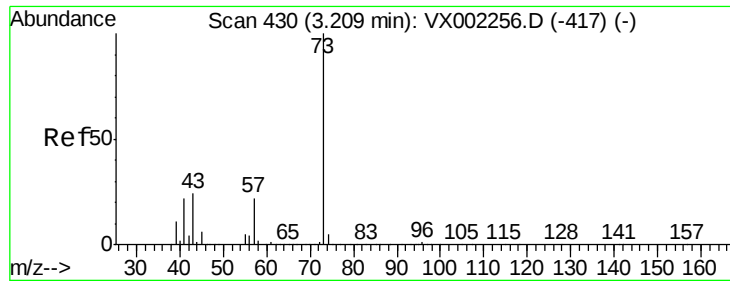
Tot Ion: 43 Resp: 1100  
Ion Ratio Lower Upper  
43 100  
58 39.0 22.1 33.1#



#18  
Methyl Acetate  
Concen: Below Cal  
RT: 2.77 min Scan# 358  
Delta R.T. -0.01 min  
Lab File: VX002327.D  
Acq: 06 Jun 2018 01:44

Tgt Ion: 43 Resp: 410  
Ion Ratio Lower Upper  
43 100  
74 33.7 16.7 25.1#



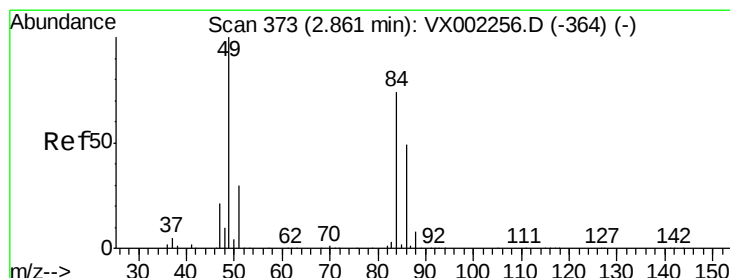
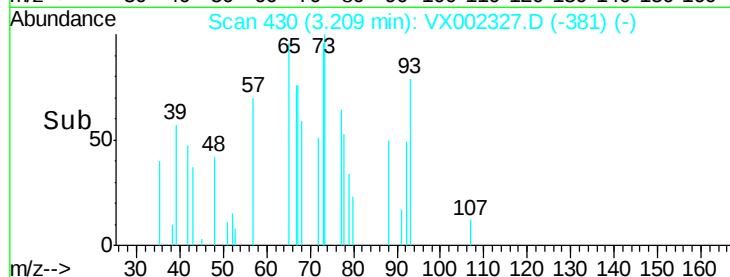
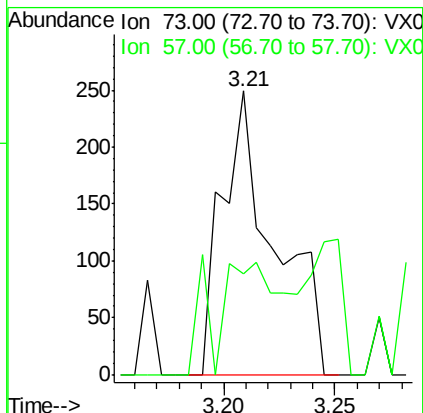
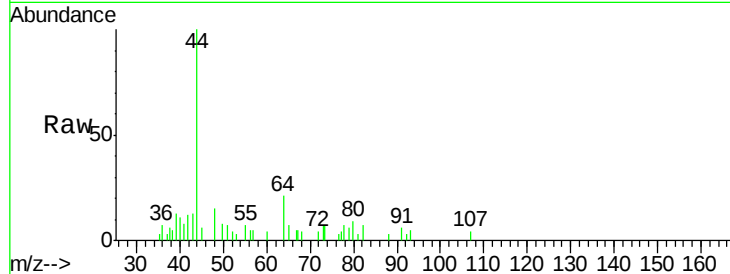


#19

Methyl tert-butyl Ether  
Concen: Below Cal  
RT: 3.21 min Scan# 430  
Delta R.T. 0.00 min  
Lab File: VX002327.D  
Acq: 06 Jun 2018 01:44

Instrument :  
MSVOA\_X  
ClientSampled :

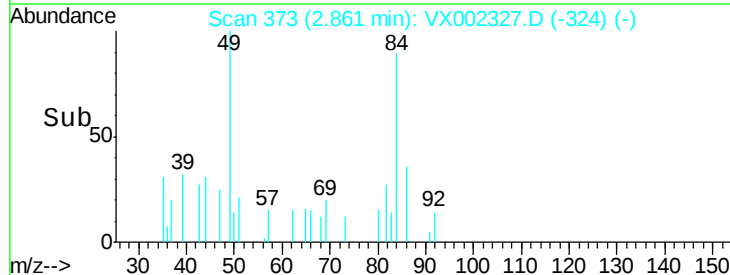
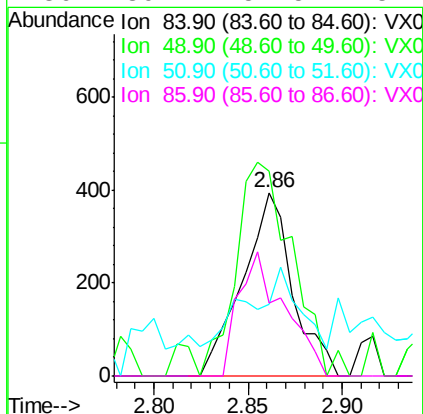
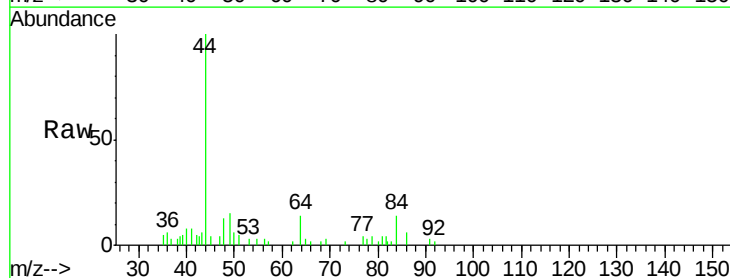
Tot Ion: 73 Resp: 407  
Ion Ratio Lower Upper  
73 100  
57 35.7 17.7 26.5#

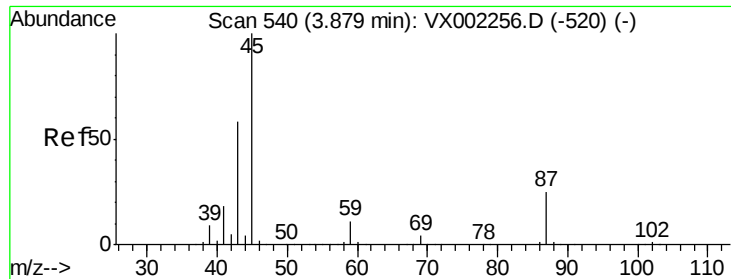


#20

Methylene Chloride  
Concen: Below Cal  
RT: 2.86 min Scan# 373  
Delta R.T. 0.00 min  
Lab File: VX002327.D  
Acq: 06 Jun 2018 01:44

Tgt Ion: 84 Resp: 728  
Ion Ratio Lower Upper  
84 100  
49 97.7 107.8 161.6#  
51 17.0 32.8 49.2#  
86 39.7 52.5 78.7#

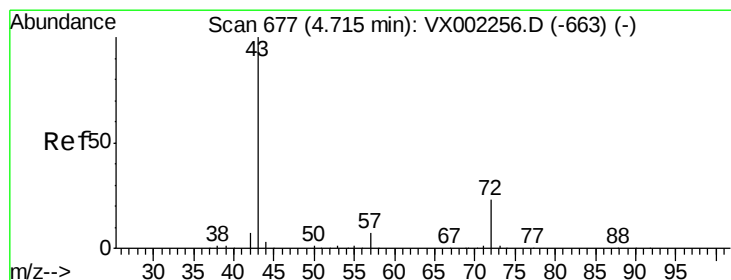
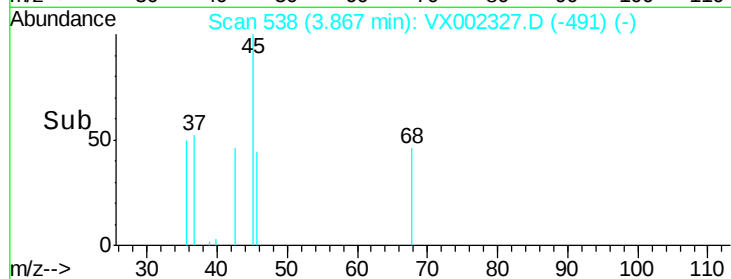
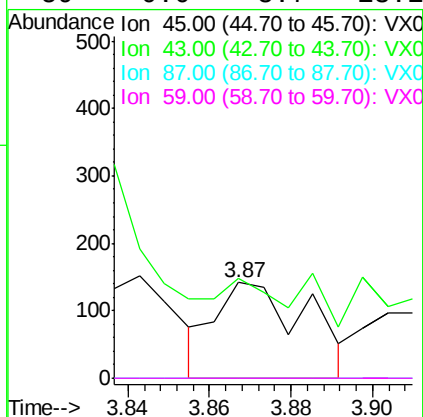
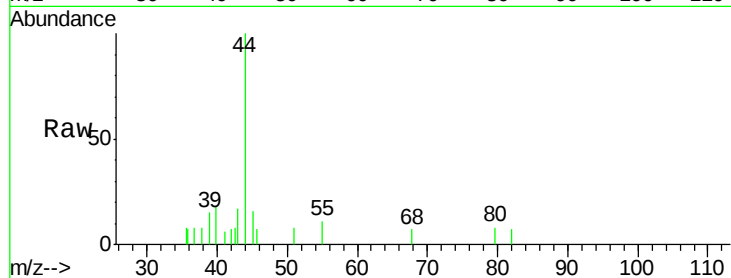




#22  
Diisopropyl ether  
Concen: Below Cal  
RT: 3.87 min Scan# 538  
Delta R.T. -0.01 min  
Lab File: VX002327.D  
Acq: 06 Jun 2018 01:44

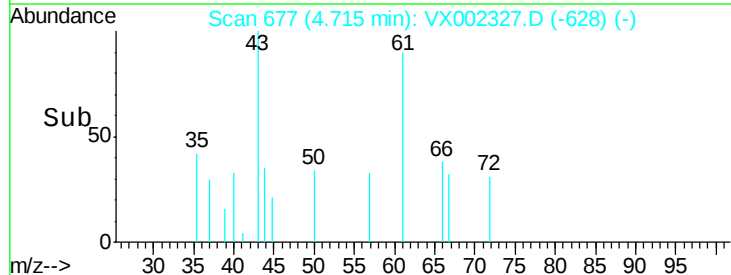
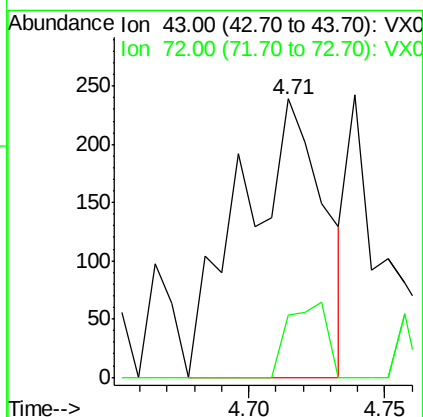
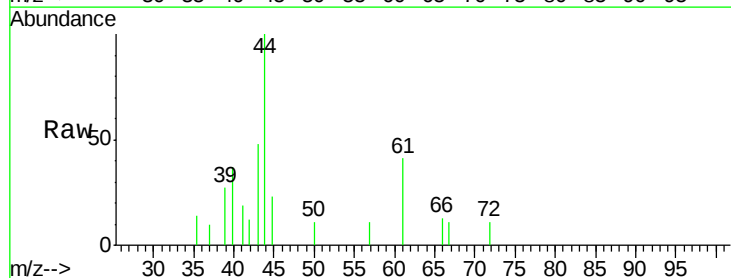
Instrument :  
MSVOA\_X  
ClientSampled :

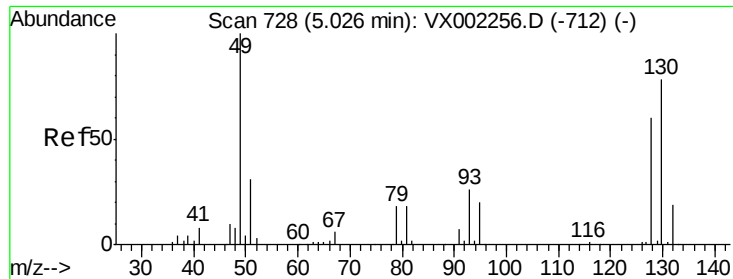
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 45    | Resp: | 220   |
| Ion      | Ratio | Lower | Upper |
| 45       | 100   |       |       |
| 43       | 47.1  | 46.8  | 70.2  |
| 87       | 0.0   | 20.2  | 30.4# |
| 59       | 0.0   | 8.7   | 13.1# |



#25  
2-Butanone  
Concen: 0.22 ug/l  
RT: 4.71 min Scan# 677  
Delta R.T. -0.00 min  
Lab File: VX002327.D  
Acq: 06 Jun 2018 01:44

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 501   |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 22.2  | 18.5  | 27.7  |





#28

Bromochloromethane

Concen: Below Cal

RT: 5.02 min Scan# 727

Delta R.T. -0.01 min

Lab File: VX002327.D

Acq: 06 Jun 2018 01:44

Instrument :

MSVOA\_X

ClientSampleId :

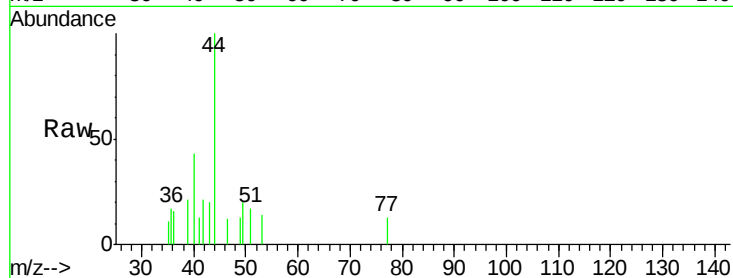
Tot Ion: 49 Resp: 172

Ion Ratio Lower Upper

49 100

129 0.0 0.0 4.2

130 0.0 61.2 91.8#

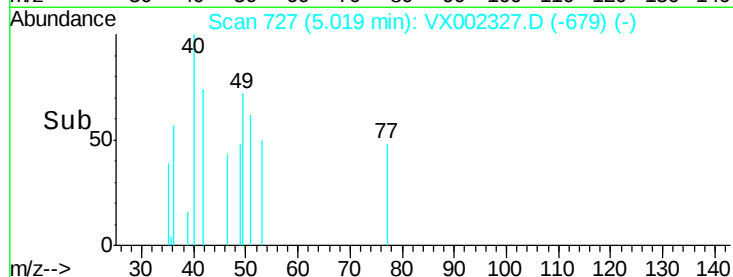


Abundance Ion 48.90 (48.60 to 49.60): VX0

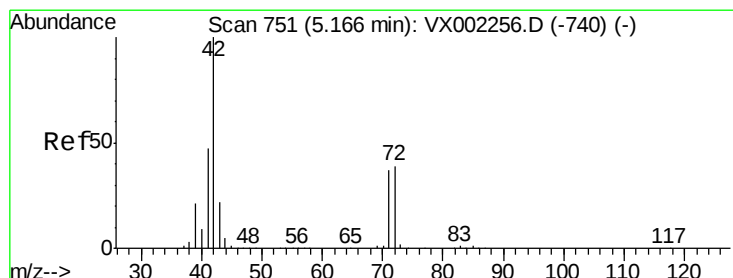
Ion 128.80 (128.50 to 129.50): V

Ion 129.80 (129.50 to 130.50): V

Time-->



Time-->



#29

Tetrahydrofuran

Concen: 0.25 ug/l

RT: 5.18 min Scan# 754

Delta R.T. 0.02 min

Lab File: VX002327.D

Acq: 06 Jun 2018 01:44

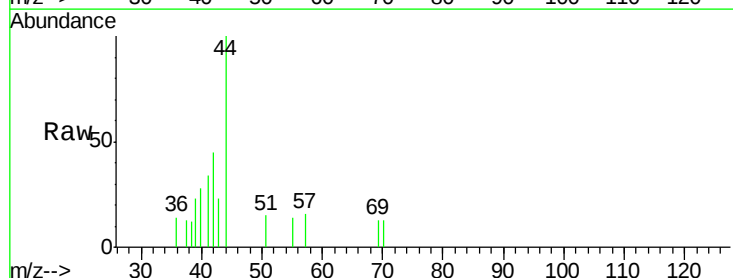
Tgt Ion: 42 Resp: 379

Ion Ratio Lower Upper

42 100

72 0.0 32.0 48.0#

71 5.0 30.1 45.1#

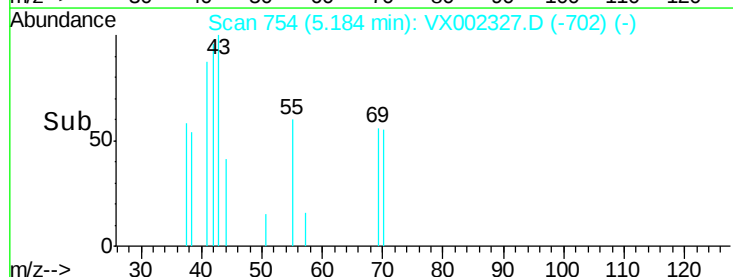


Abundance Ion 42.00 (41.70 to 42.70): VX0

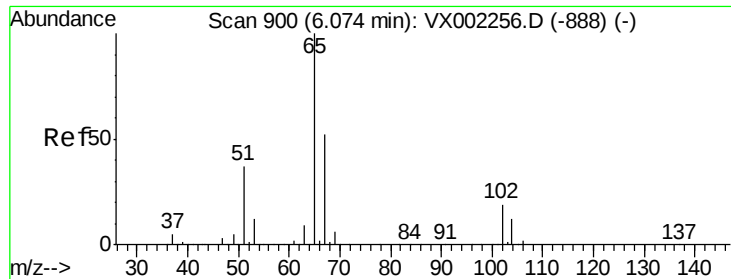
Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0

Time-->



Time-->



#33

1,2-Dichloroethane-d4

Concen: 49.40 ug/l

RT: 6.07 min Scan# 899

Delta R.T. -0.01 min

Lab File: VX002327.D

Acq: 06 Jun 2018 01:44

Instrument :

MSVOA\_X

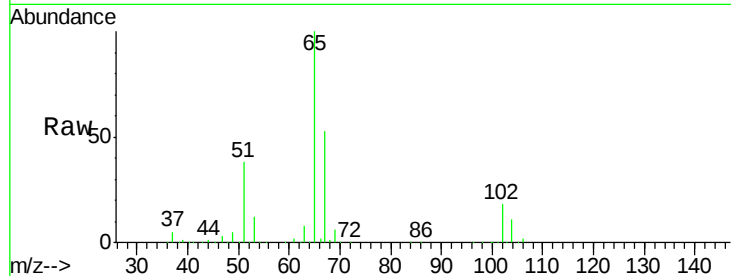
ClientSampleId :

Tot Ion: 65 Resp: 167044

Ion Ratio Lower Upper

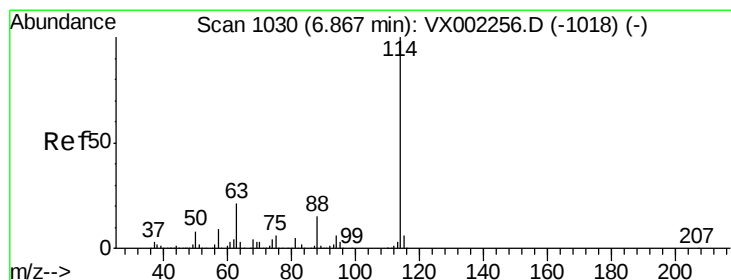
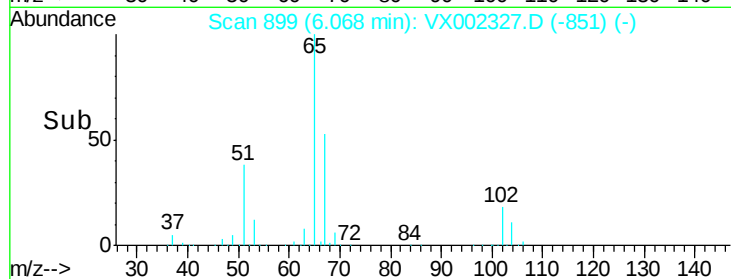
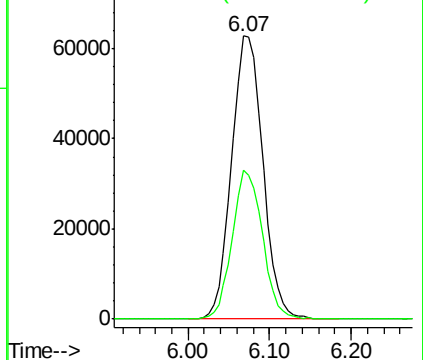
65 100

67 50.9 0.0 102.6



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0



#34

1,4-Difluorobenzene

Concen: 50.00 ug/l

RT: 6.87 min Scan# 1030

Delta R.T. -0.00 min

Lab File: VX002327.D

Acq: 06 Jun 2018 01:44

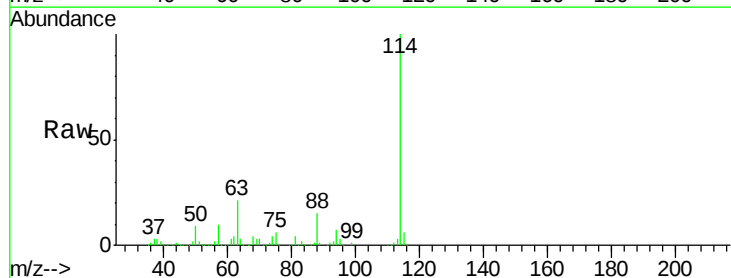
Tgt Ion: 114 Resp: 344003

Ion Ratio Lower Upper

114 100

63 20.6 0.0 41.4

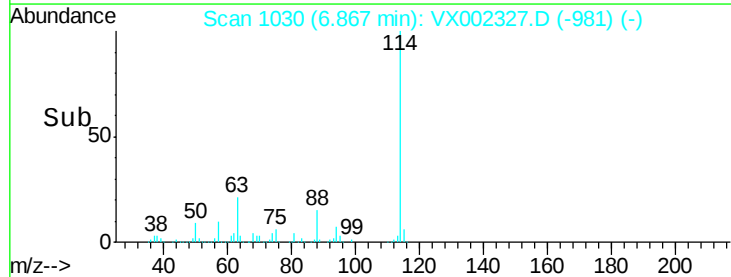
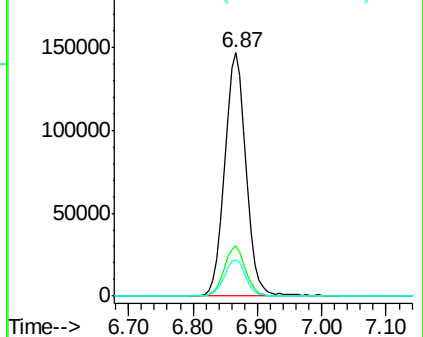
88 15.0 0.0 30.0

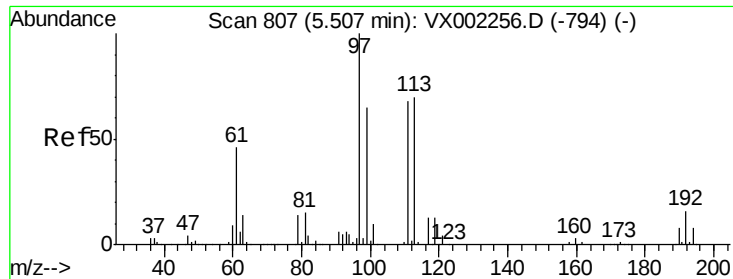


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0

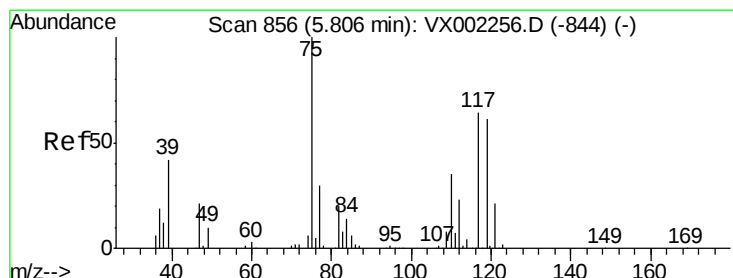
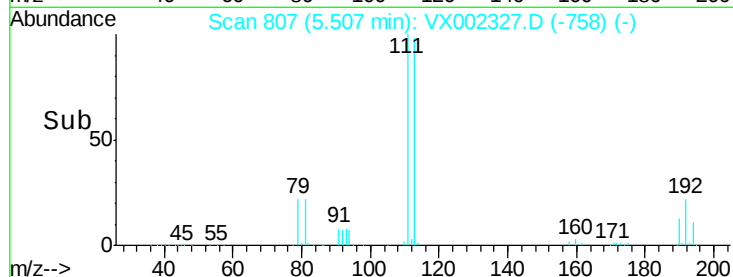
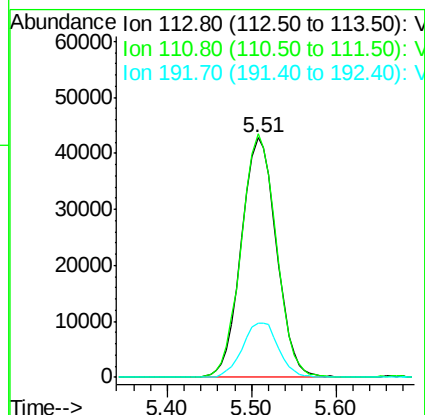
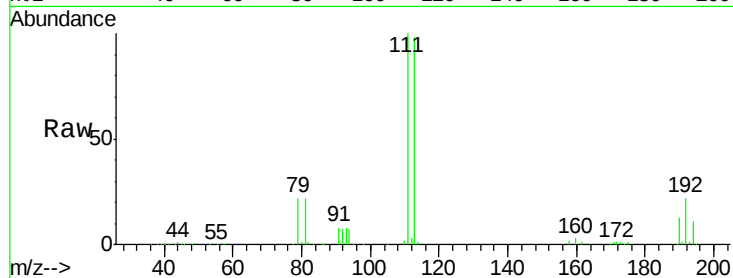




#35  
Dibromofluoromethane  
Concen: 44.62 ug/l  
RT: 5.51 min Scan# 807  
Delta R.T. -0.00 min  
Lab File: VX002327.D  
Acq: 06 Jun 2018 01:44

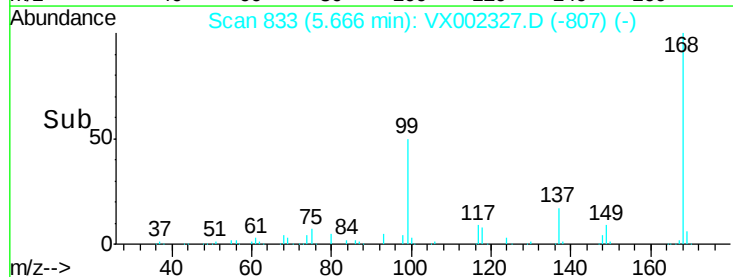
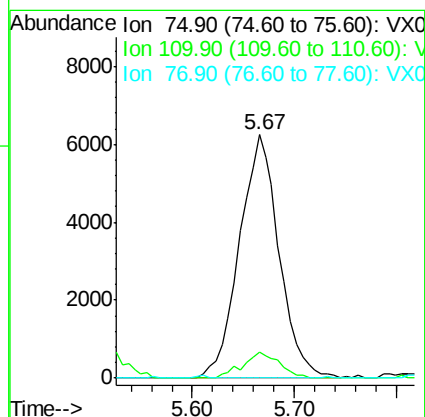
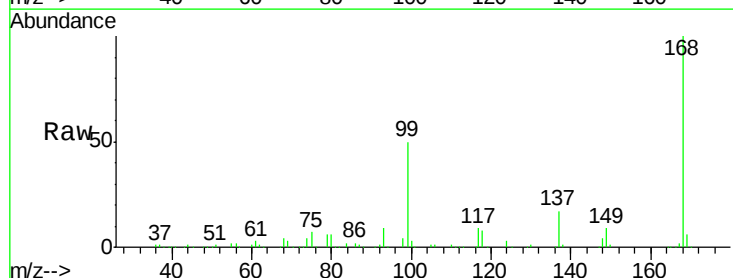
Instrument :  
MSVOA\_X  
ClientSampled :

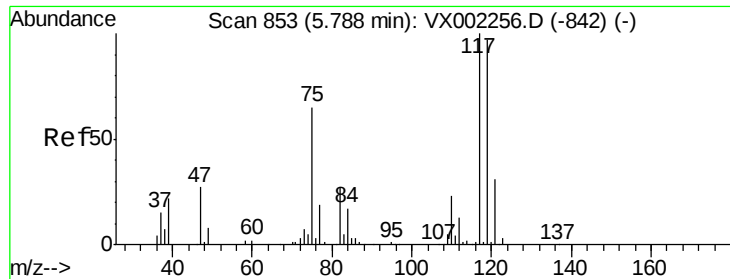
Tot Ion:113 Resp: 120705  
Ion Ratio Lower Upper  
113 100  
111 101.3 81.4 122.0  
192 23.4 19.1 28.7



#36  
1,1-Dichloropropene  
Concen: 4.65 ug/l  
RT: 5.67 min Scan# 833  
Delta R.T. -0.14 min  
Lab File: VX002327.D  
Acq: 06 Jun 2018 01:44

Tgt Ion: 75 Resp: 16811  
Ion Ratio Lower Upper  
75 100  
110 9.9 18.1 54.4#  
77 0.0 24.3 36.5#

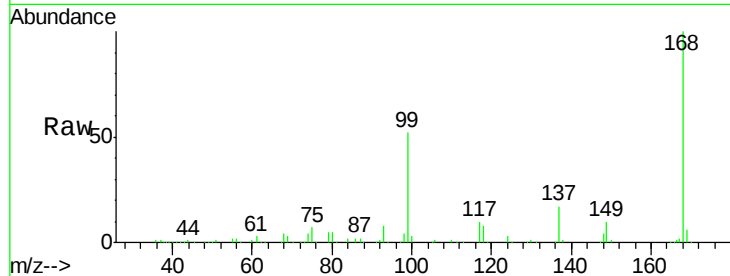




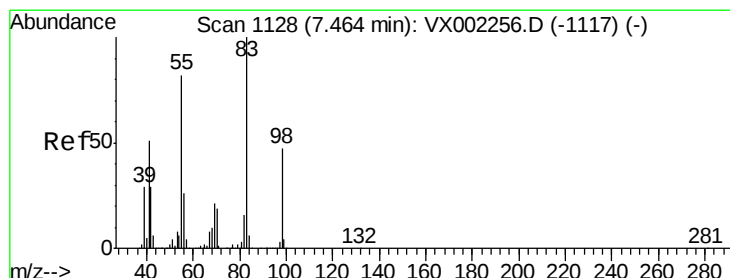
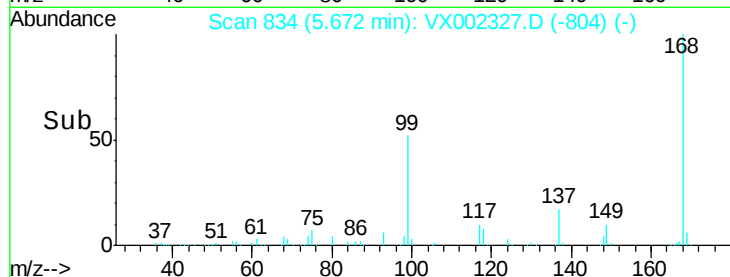
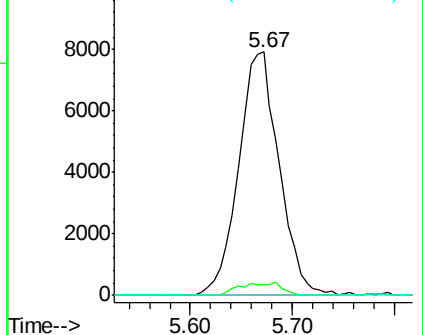
#38  
Carbon Tetrachloride  
Concen: 5.77 ug/l  
RT: 5.67 min Scan# 834  
Delta R.T. -0.12 min  
Lab File: VX002327.D  
Acq: 06 Jun 2018 01:44

Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion:117 Resp: 21812  
Ion Ratio Lower Upper  
117 100  
119 4.2 77.4 116.0#  
121 0.0 24.4 36.6#

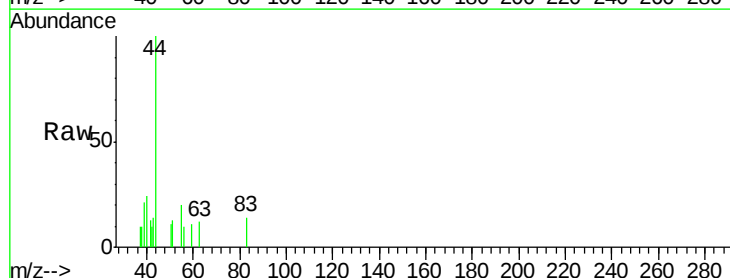


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

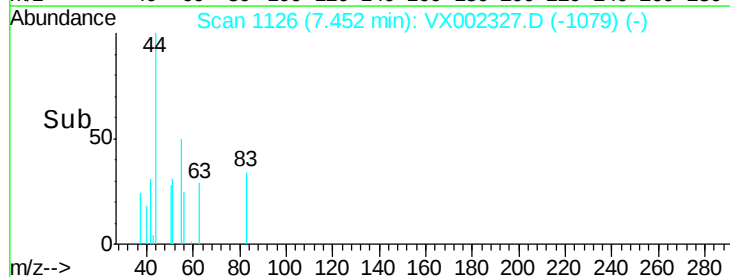
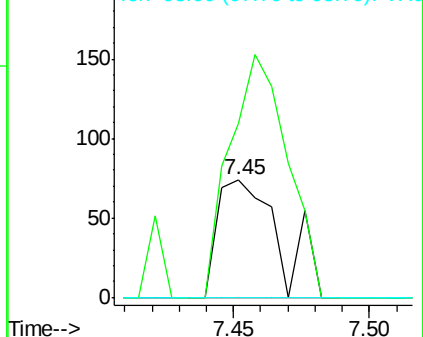


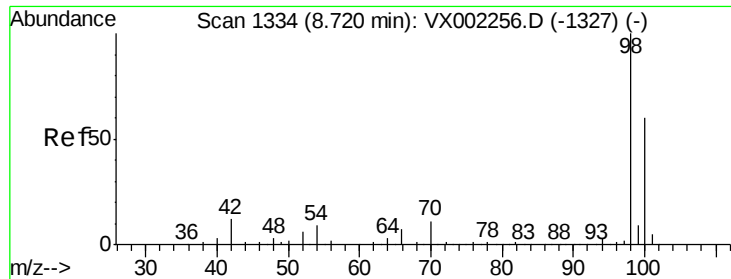
#39  
Methylcyclohexane  
Concen: 0.29 ug/l  
RT: 7.45 min Scan# 1126  
Delta R.T. -0.01 min  
Lab File: VX002327.D  
Acq: 06 Jun 2018 01:44

Tgt Ion: 83 Resp: 116  
Ion Ratio Lower Upper  
83 100  
55 147.3 65.4 98.0#  
98 0.0 37.4 56.0#



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: 47.86 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. -0.00 min

Lab File: VX002327.D

Acq: 06 Jun 2018 01:44

Instrument :

MSVOA\_X

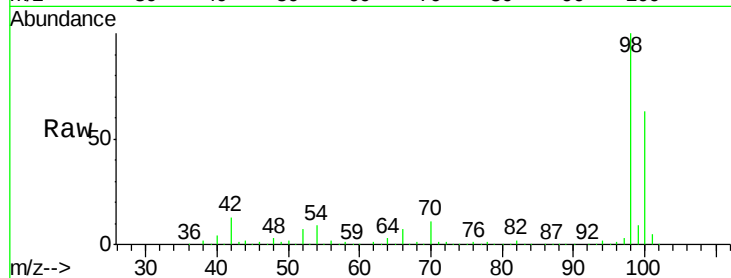
ClientSampleId :

Tot Ion: 98 Resp: 496311

Ion Ratio Lower Upper

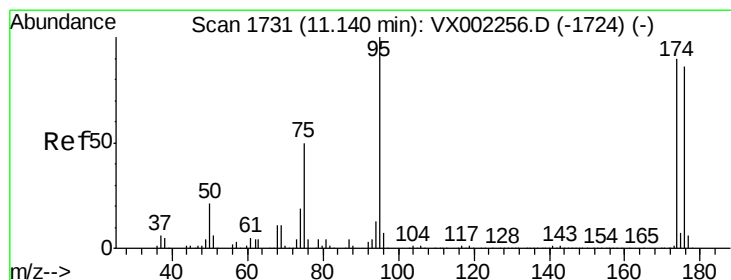
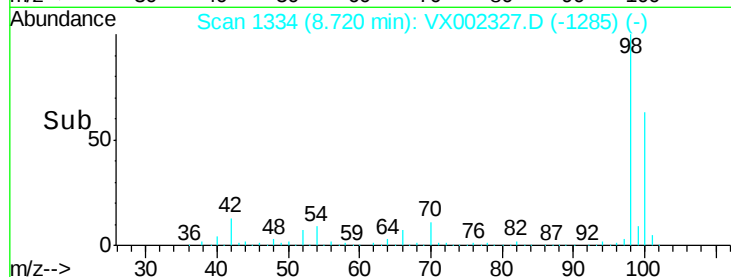
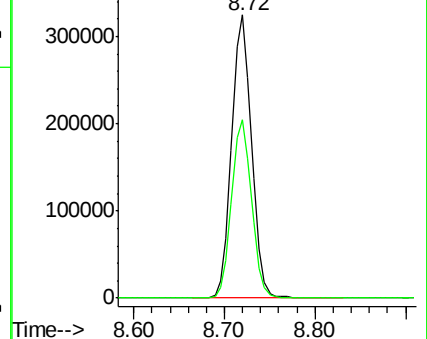
98 100

100 63.4 50.9 76.3



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX



#62

4-Bromofluorobenzene

Concen: 44.65 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.00 min

Lab File: VX002327.D

Acq: 06 Jun 2018 01:44

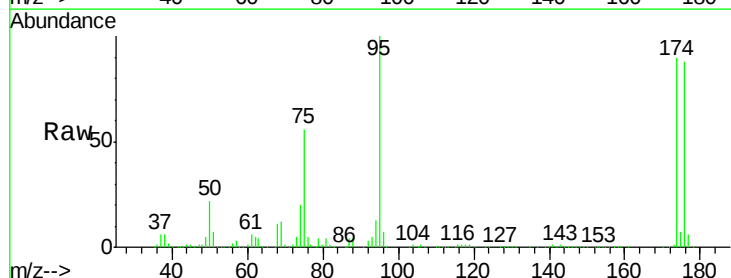
Tgt Ion: 95 Resp: 178519

Ion Ratio Lower Upper

95 100

174 94.3 0.0 187.4

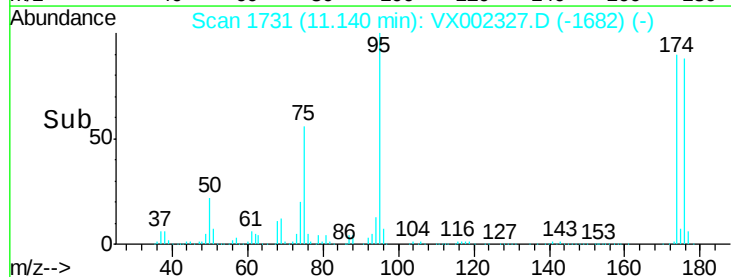
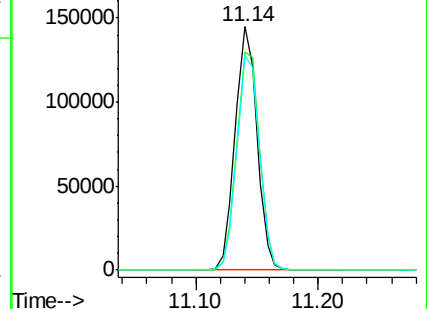
176 91.4 0.0 181.0

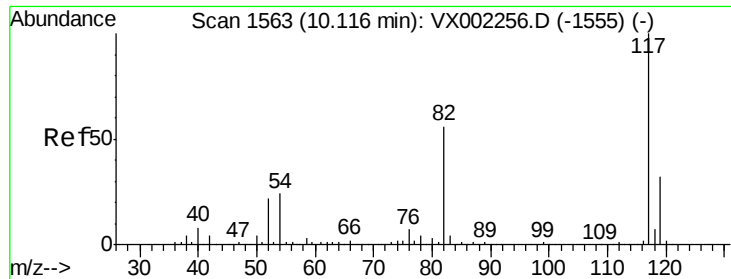


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

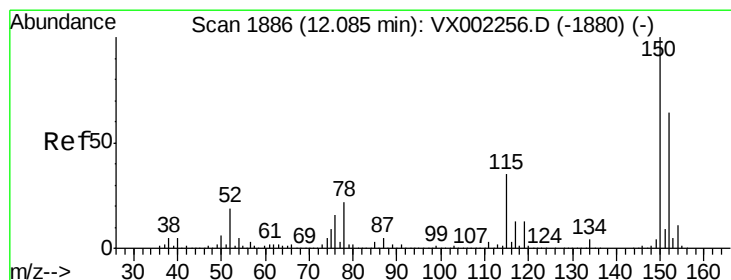
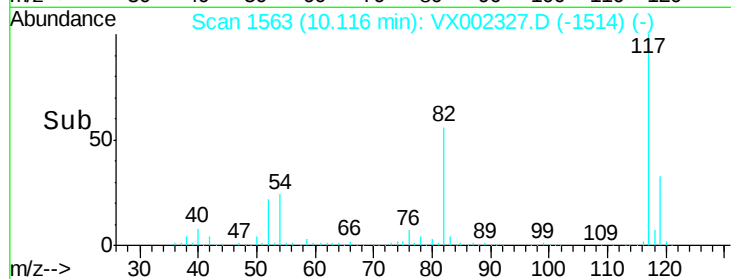
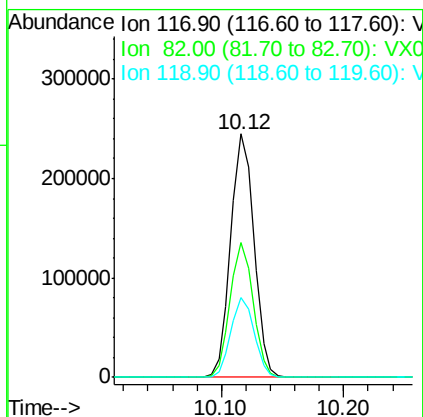
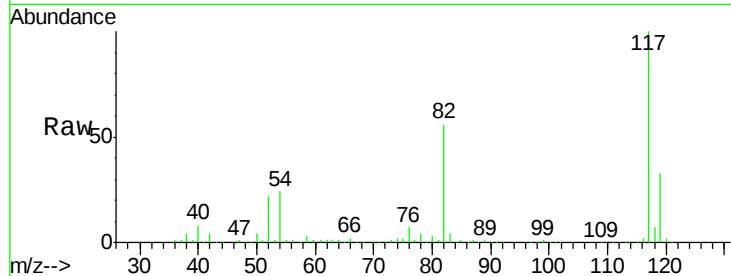




#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1563  
Delta R.T. -0.00 min  
Lab File: VX002327.D  
Acq: 06 Jun 2018 01:44

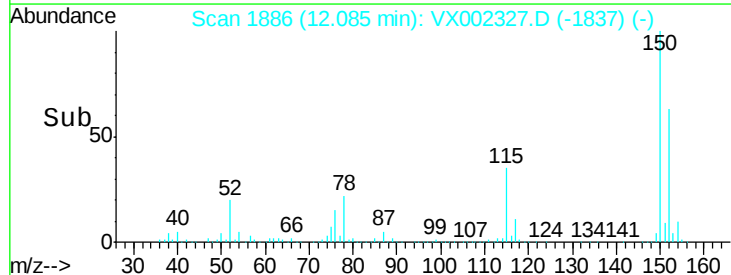
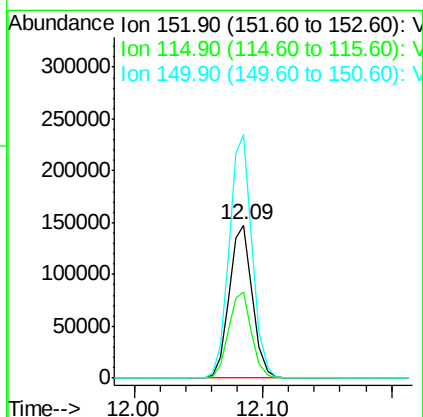
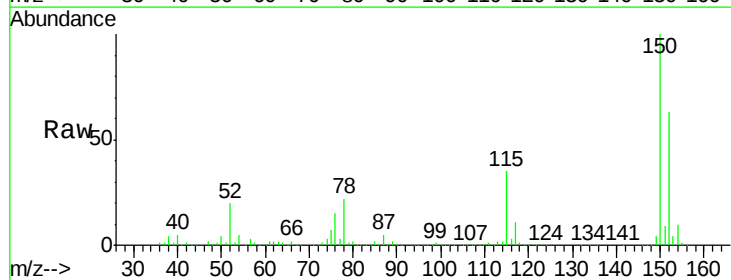
Instrument :  
MSVOA\_X  
ClientSampleId :

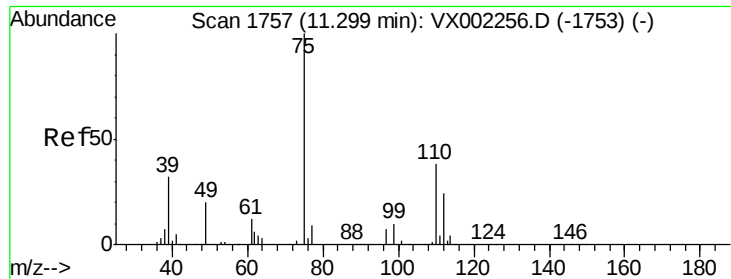
Tot Ion:117 Resp: 322737  
Ion Ratio Lower Upper  
117 100  
82 55.6 45.0 67.4  
119 32.9 25.8 38.6



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 12.09 min Scan# 1886  
Delta R.T. -0.00 min  
Lab File: VX002327.D  
Acq: 06 Jun 2018 01:44

Tgt Ion:152 Resp: 185455  
Ion Ratio Lower Upper  
152 100  
115 55.7 40.1 120.2  
150 157.4 0.0 347.2

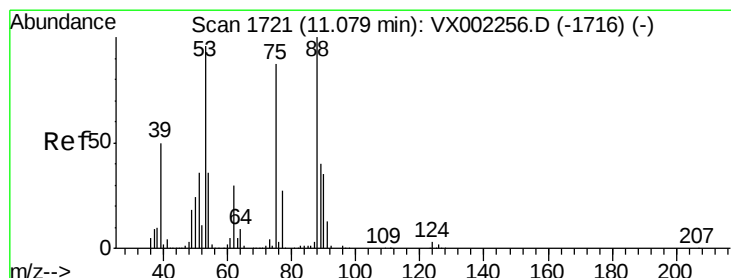
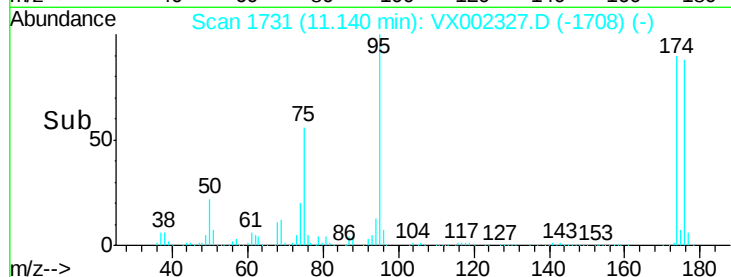
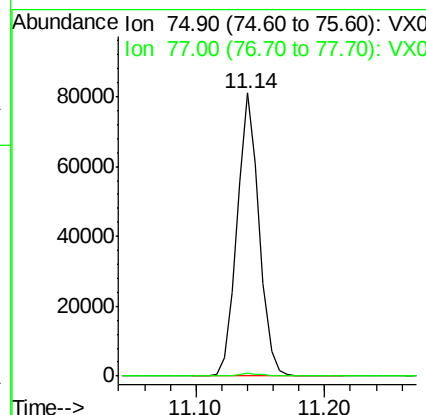
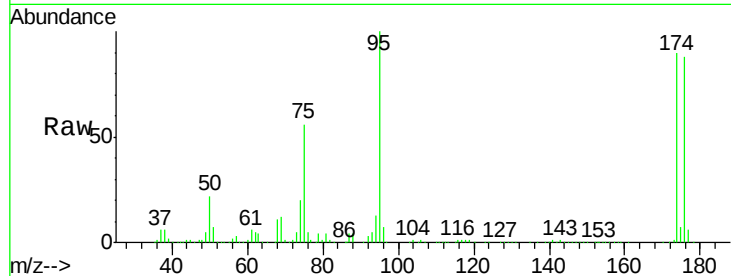




#76  
 1,2,3-Trichloropropane  
 Concen: 23.73 ug/l  
 RT: 11.14 min Scan# 1731  
 Delta R.T. -0.16 min  
 Lab File: VX002327.D  
 Acq: 06 Jun 2018 01:44

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Tot Ion: 75 Resp: 96585  
 Ion Ratio Lower Upper  
 75 100  
 77 1.2 22.8 68.3#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 83.20 ug/l  
 RT: 11.14 min Scan# 1731  
 Delta R.T. 0.06 min  
 Lab File: VX002327.D  
 Acq: 06 Jun 2018 01:44

Tgt Ion: 75 Resp: 96585  
 Ion Ratio Lower Upper  
 75 100  
 53 0.1 86.8 130.2#  
 89 0.0 38.2 57.2#

