

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX042120\  
 Data File : VX015797.D  
 Acq On : 21 Apr 2020 16:16  
 Operator : JC/SP  
 Sample : L2327-12  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 TP-4-S

Quant Time: Apr 22 04:19:22 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X032720W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Mar 27 09:35:51 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.64  | 168  | 1064796  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.84  | 114  | 1631053  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 1600234  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.06 | 152  | 882631   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.04  | 65   | 612219   | 40.77 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 81.54%  |          |
| 35) Dibromofluoromethane    | 5.47  | 113  | 503446   | 48.29 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.58%  |          |
| 50) Toluene-d8              | 8.70  | 98   | 1974490  | 51.44 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.88% |          |
| 62) 4-Bromofluorobenzene    | 11.12 | 95   | 815331   | 52.26 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.52% |          |

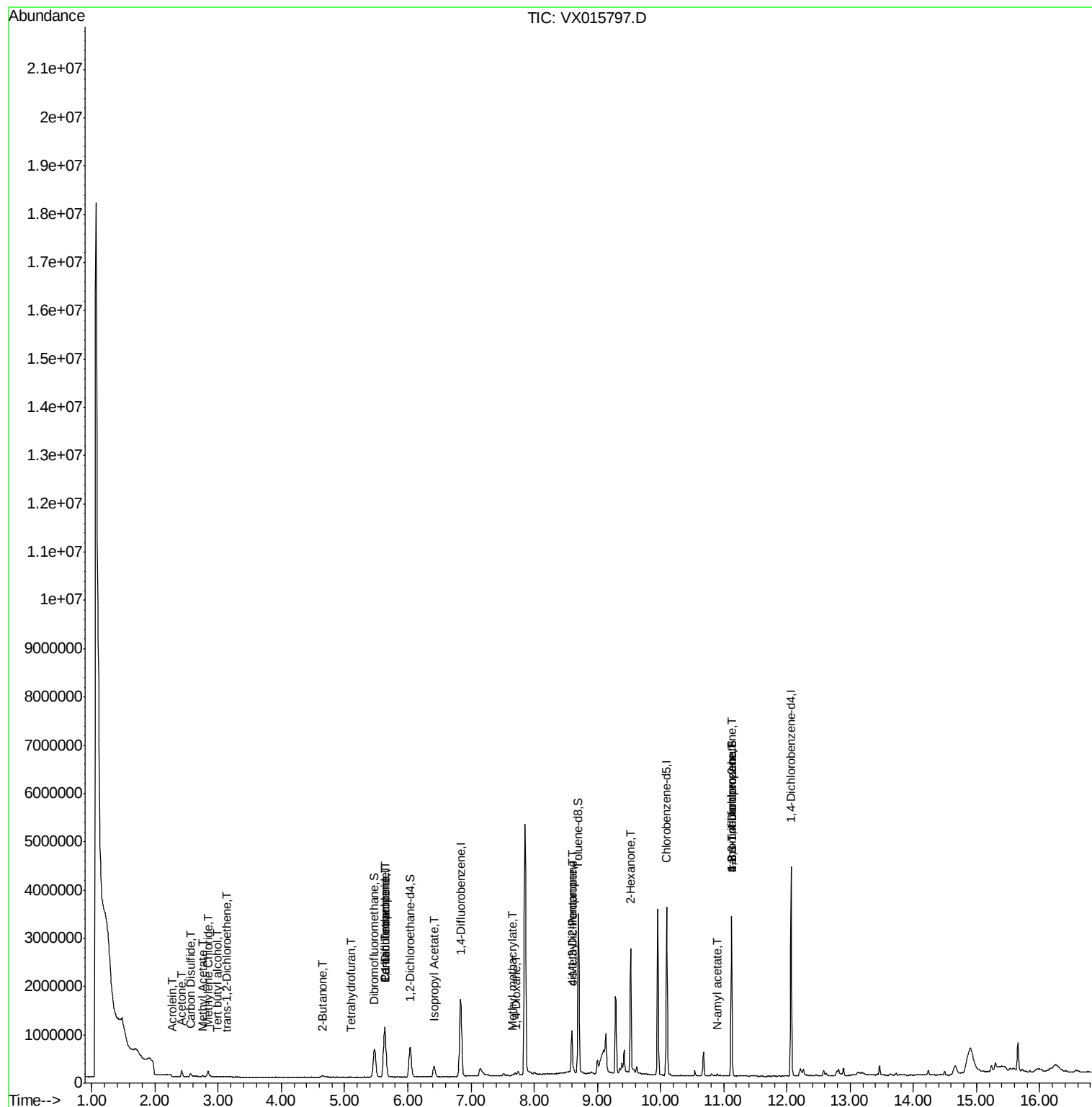
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.62  | 94   | 381      | Below Cal | #      | 56     |
| 11) Tert butyl alcohol         | 2.98  | 59   | 3621     | 1.007     | ug/l # | 63     |
| 13) Acrolein                   | 2.28  | 56   | 1764     | 0.861     | ug/l   | 90     |
| 16) Acetone                    | 2.42  | 43   | 169408   | 26.257    | ug/l   | 97     |
| 17) Carbon Disulfide           | 2.56  | 76   | 86226    | 2.812     | ug/l   | 97     |
| 18) Methyl Acetate             | 2.75  | 43   | 31765    | 1.929     | ug/l   | 92     |
| 20) Methylene Chloride         | 2.84  | 84   | 51742    | 4.293     | ug/l   | 90     |
| 21) trans-1,2-Dichloroethene   | 3.13  | 96   | 2357     | 0.211     | ug/l # | 3      |
| 25) 2-Butanone                 | 4.65  | 43   | 31537    | 3.039     | ug/l   | 97     |
| 29) Tetrahydrofuran            | 5.09  | 42   | 4309     | 0.646     | ug/l # | 81     |
| 36) 1,1-Dichloropropene        | 5.63  | 75   | 71298    | 4.744     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.64  | 117  | 93250    | 5.729     | ug/l # | 16     |
| 43) Isopropyl Acetate          | 6.42  | 43   | 337670   | 10.222    | ug/l   | 98     |
| 48) Methyl methacrylate        | 7.65  | 41   | 21421    | 1.298     | ug/l # | 19     |
| 49) 1,4-Dioxane                | 7.72  | 88   | 5887     | 19.126    | ug/l # | 58     |
| 51) 4-Methyl-2-Pentanone       | 8.60  | 43   | 434361   | 23.203    | ug/l # | 45     |
| 54) cis-1,3-Dichloropropene    | 8.60  | 75   | 136055   | 6.765     | ug/l # | 50     |
| 59) 2-Hexanone                 | 9.53  | 43   | 301252   | 21.315    | ug/l # | 53     |
| 74) N-amyl acetate             | 10.90 | 43   | 18668    | 0.580     | ug/l # | 79     |
| 76) 1,2,3-Trichloropropane     | 11.12 | 75   | 409351   | 22.553    | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 11.12 | 75   | 409351   | 54.115    | ug/l # | 10     |

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

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X032720W.M  
Quant Title : SW846 8260  
QLast Update : Fri Mar 27 09:35:51 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.64 min Scan# 779

Delta R.T. 0.01 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

Instrument :

MSVOA\_X

ClientSampleId :

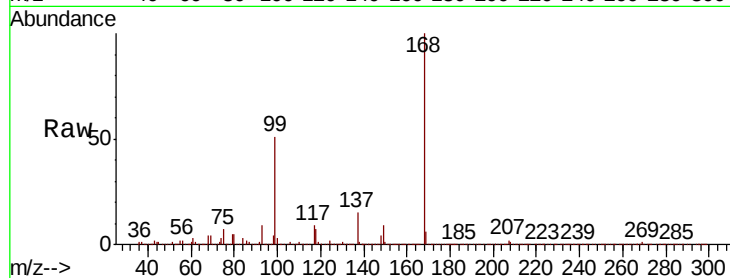
TP-4-S

Tot Ion:168 Resp: 1064796

Ion Ratio Lower Upper

168 100

99 51.1 46.4 69.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.64

400000

300000

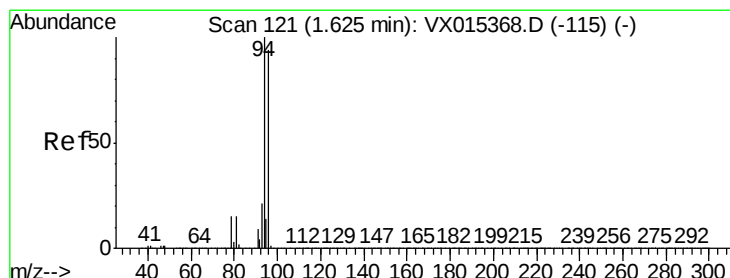
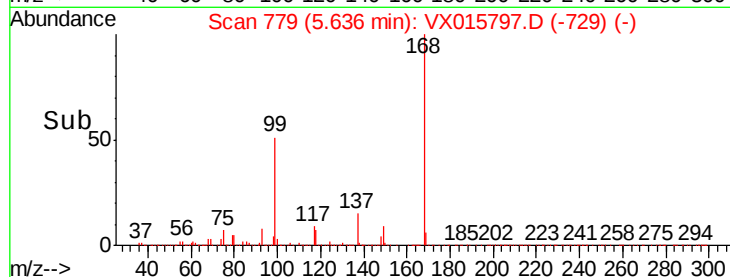
200000

100000

0

Time-->

5.50 5.60 5.70 5.80



#5

Bromomethane

Concen: Below Cal

RT: 1.62 min Scan# 121

Delta R.T. 0.00 min

Lab File: VX015797.D

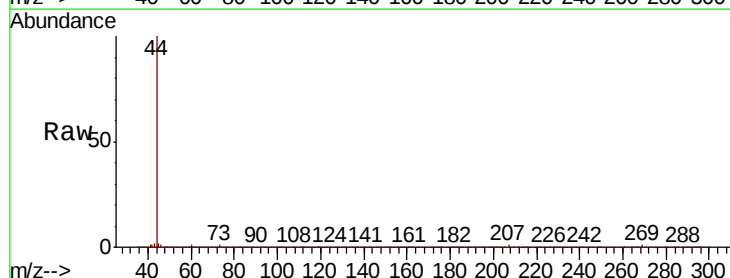
Acq: 21 Apr 2020 16:16

Tgt Ion: 94 Resp: 381

Ion Ratio Lower Upper

94 100

96 50.9 74.8 112.2#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1500

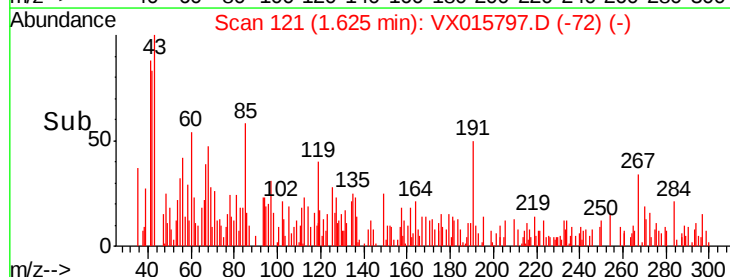
1000

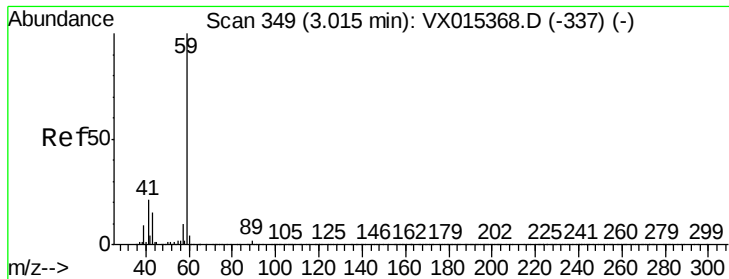
500

0

Time-->

1.60 1.62 1.64

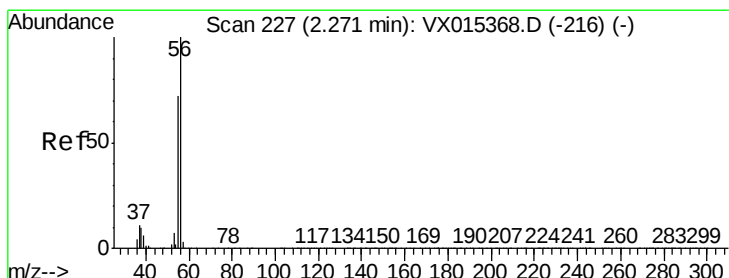
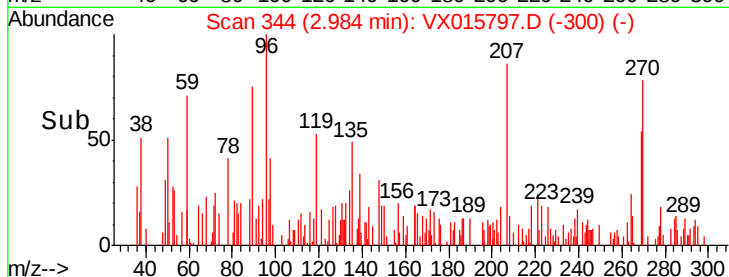
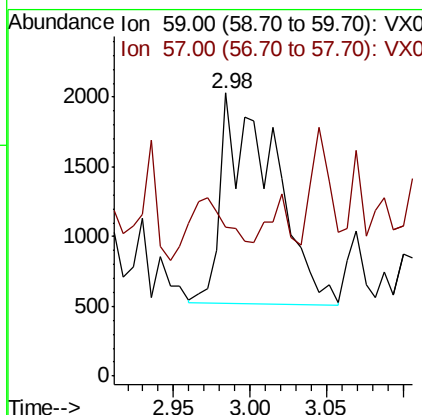
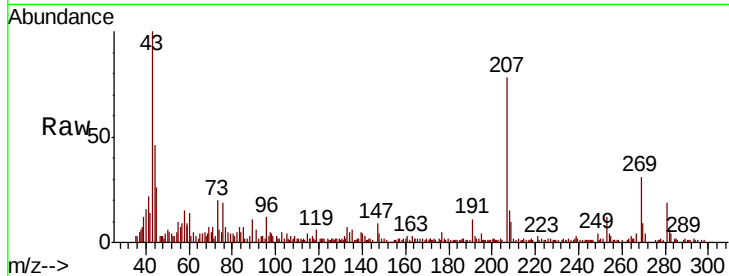




#11  
Tert butyl alcohol  
Concen: 1.007 ug/l  
RT: 2.98 min Scan# 344  
Delta R.T. -0.03 min  
Lab File: VX015797.D  
Acq: 21 Apr 2020 16:16

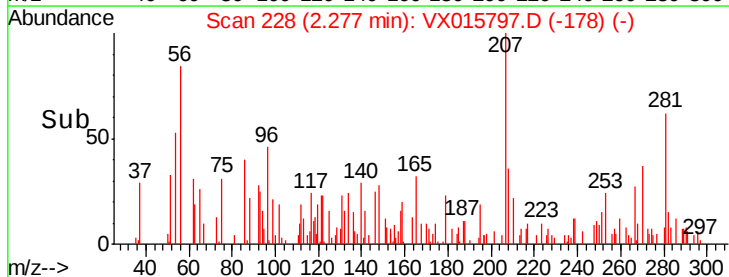
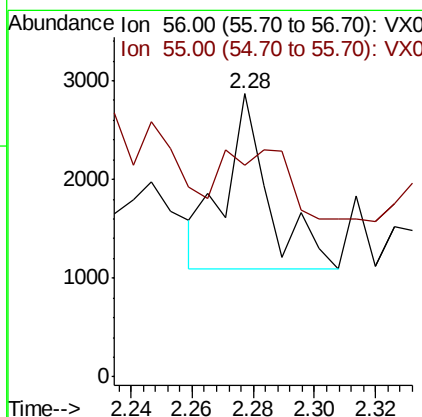
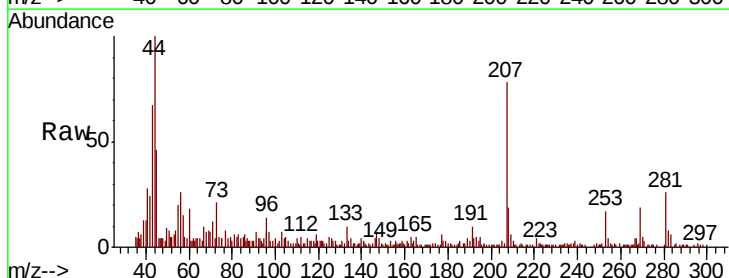
Instrument :  
MSVOA\_X  
ClientSampleId :  
TP-4-S

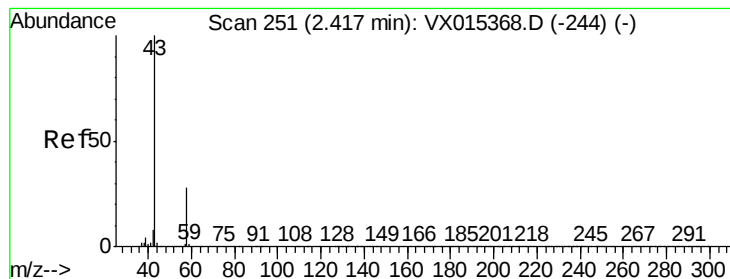
Tot Ion: 59 Resp: 3621  
Ion Ratio Lower Upper  
59 100  
57 23.7 8.1 12.1#



#13  
Acrolein  
Concen: 0.861 ug/l  
RT: 2.28 min Scan# 228  
Delta R.T. 0.01 min  
Lab File: VX015797.D  
Acq: 21 Apr 2020 16:16

Tgt Ion: 56 Resp: 1764  
Ion Ratio Lower Upper  
56 100  
55 63.3 57.0 85.4





#16

Acetone

Concen: 26.257 ug/l

RT: 2.42 min Scan# 252

Delta R.T. 0.01 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

Instrument :

MSVOA\_X

ClientSampleId :

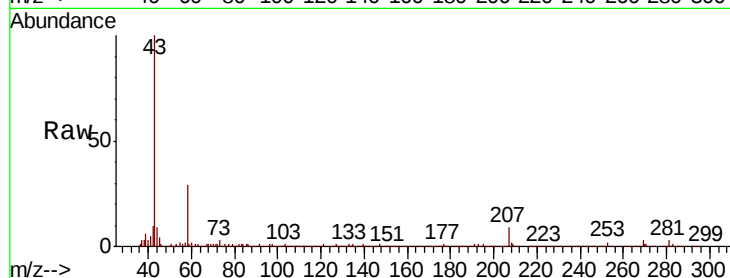
TP-4-S

Tot Ion: 43 Resp: 169408

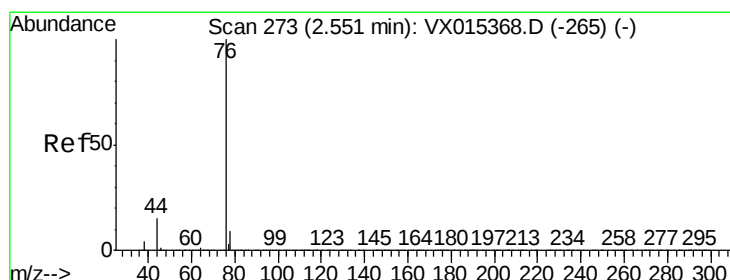
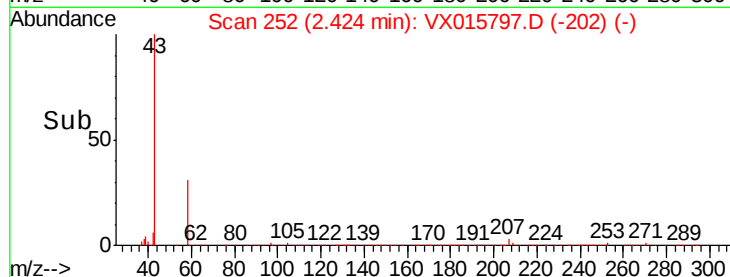
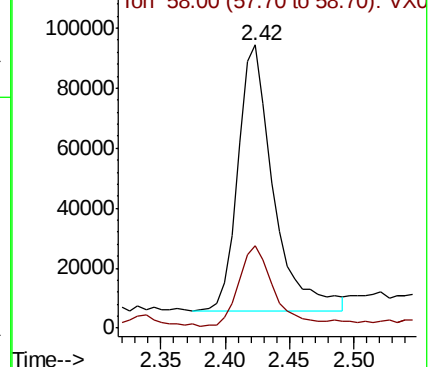
Ion Ratio Lower Upper

43 100

58 29.2 22.1 33.1



Abundance Ion 43.00 (42.70 to 43.70): VX0



#17

Carbon Disulfide

Concen: 2.812 ug/l

RT: 2.56 min Scan# 274

Delta R.T. 0.01 min

Lab File: VX015797.D

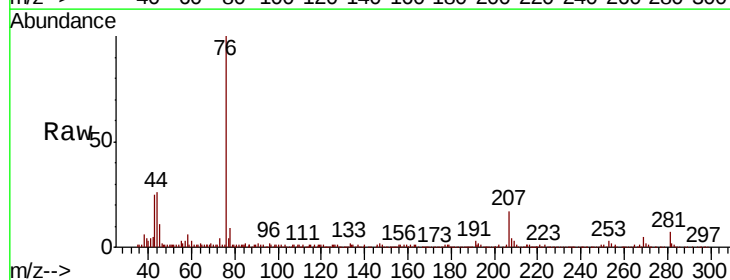
Acq: 21 Apr 2020 16:16

Tgt Ion: 76 Resp: 86226

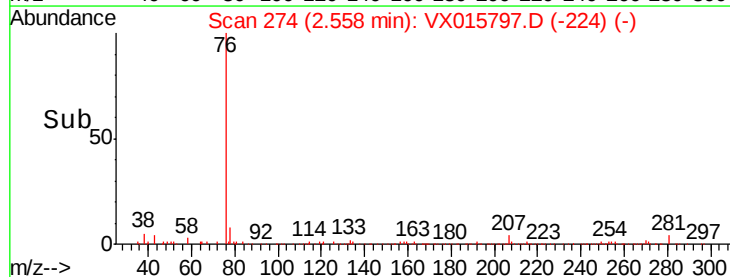
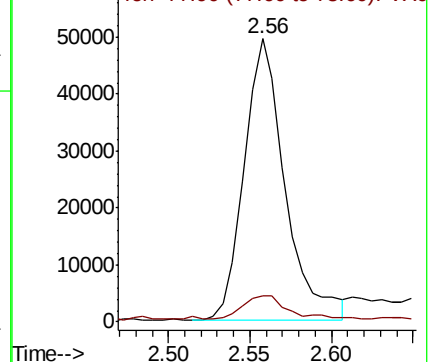
Ion Ratio Lower Upper

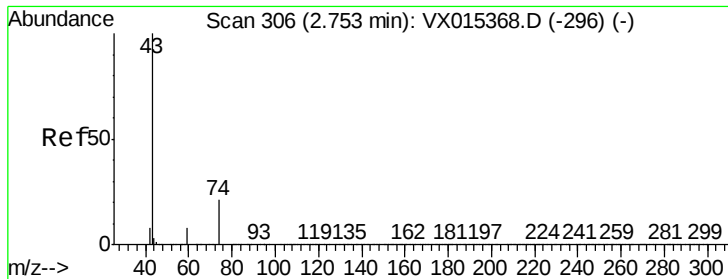
76 100

78 7.9 7.1 10.7



Abundance Ion 75.90 (75.60 to 76.60): VX0

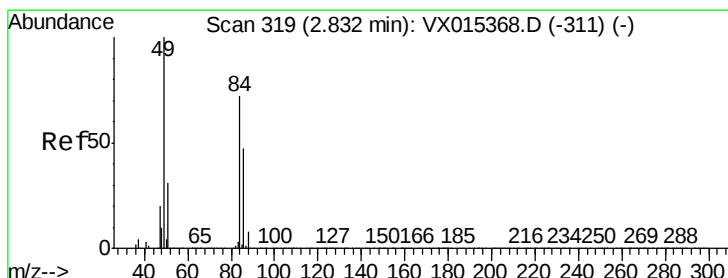
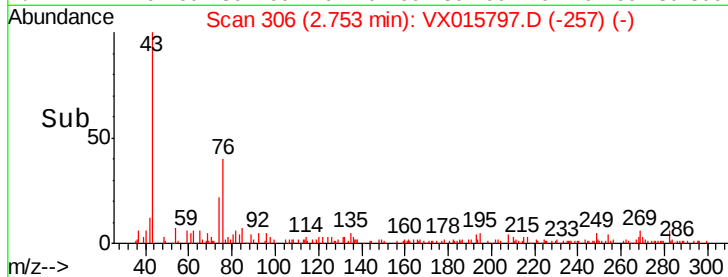
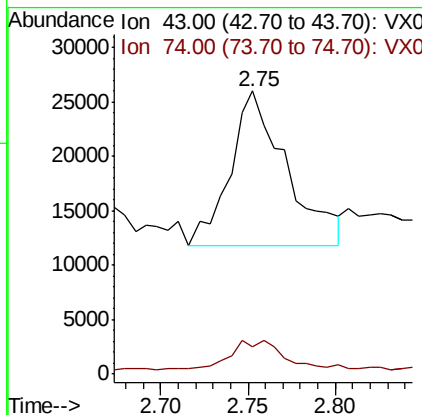
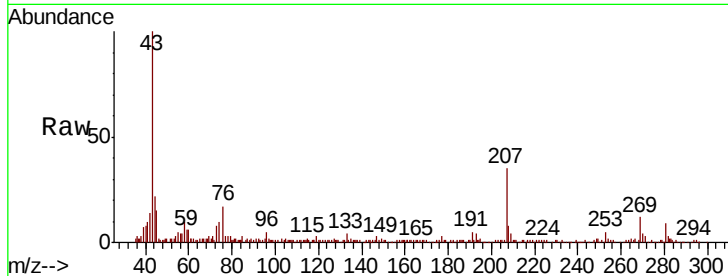




#18  
Methyl Acetate  
Concen: 1.929 ug/l  
RT: 2.75 min Scan# 306  
Delta R.T. 0.00 min  
Lab File: VX015797.D  
Acq: 21 Apr 2020 16:16

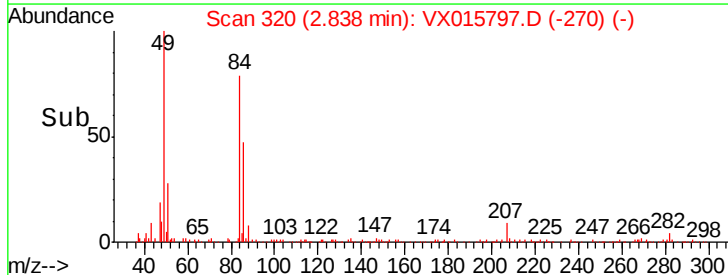
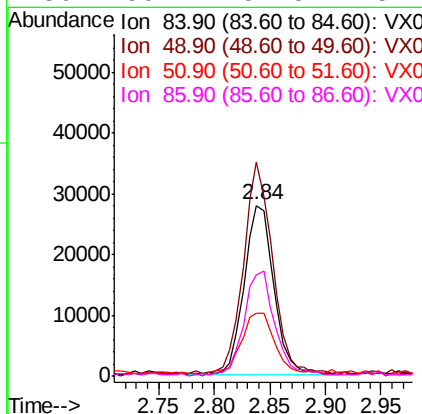
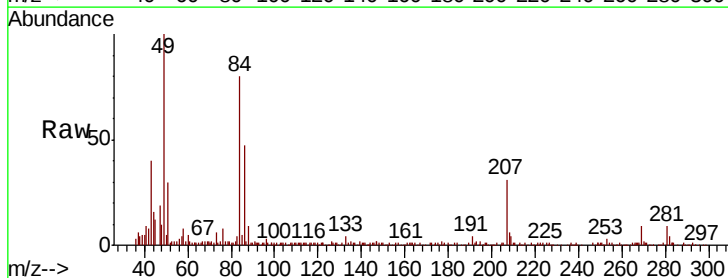
Instrument :  
MSVOA\_X  
ClientSampleId :  
TP-4-S

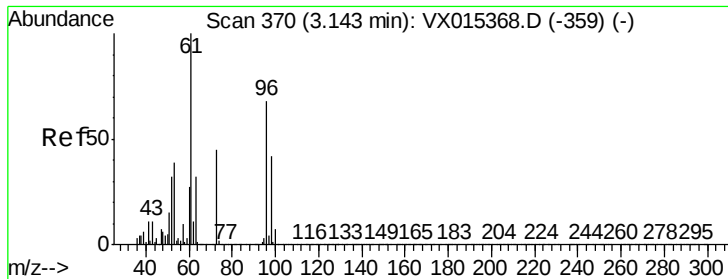
Tot Ion: 43 Resp: 31765  
Ion Ratio Lower Upper  
43 100  
74 16.8 16.5 24.7



#20  
Methylene Chloride  
Concen: 4.293 ug/l  
RT: 2.84 min Scan# 320  
Delta R.T. 0.01 min  
Lab File: VX015797.D  
Acq: 21 Apr 2020 16:16

Tgt Ion: 84 Resp: 51742  
Ion Ratio Lower Upper  
84 100  
49 125.2 111.3 166.9  
51 36.2 34.0 51.0  
86 59.7 52.5 78.7





#21

trans-1,2-Dichloroethene

Concen: 0.211 ug/l

RT: 3.13 min Scan# 368

Delta R.T. -0.01 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

Instrument :

MSVOA\_X

ClientSampleId :

TP-4-S

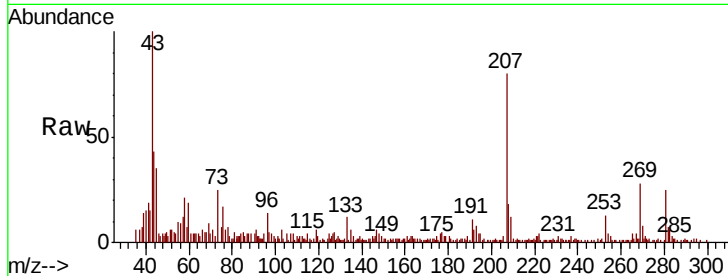
Tot Ion: 96 Resp: 2357

Ion Ratio Lower Upper

96 100

61 5.6 116.9 175.3#

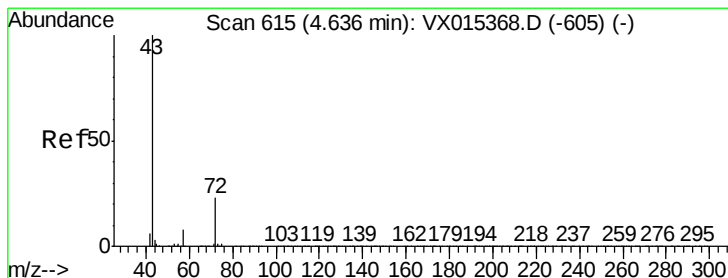
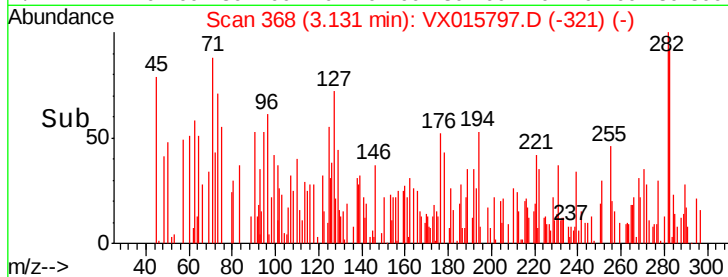
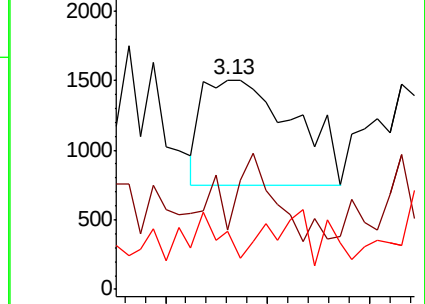
98 16.4 48.6 73.0#



Abundance Ion 95.90 (95.60 to 96.60): VX0

Ion 60.90 (60.60 to 61.60): VX0

Ion 97.90 (97.60 to 98.60): VX0



#25

2-Butanone

Concen: 3.039 ug/l

RT: 4.65 min Scan# 617

Delta R.T. 0.01 min

Lab File: VX015797.D

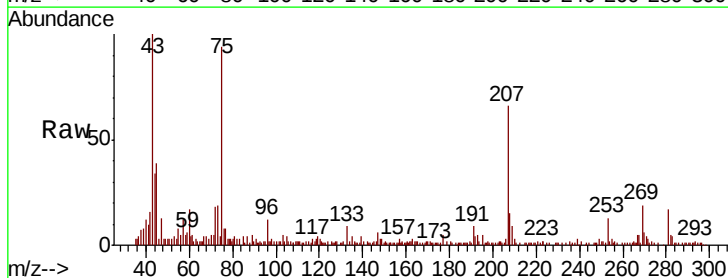
Acq: 21 Apr 2020 16:16

Tgt Ion: 43 Resp: 31537

Ion Ratio Lower Upper

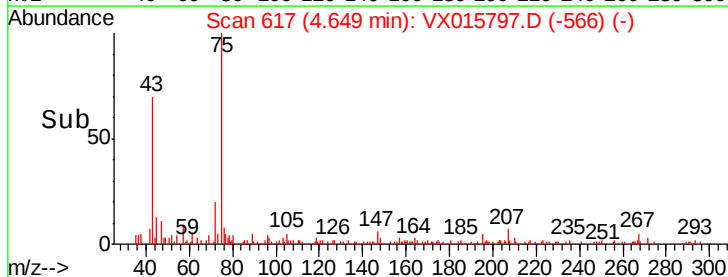
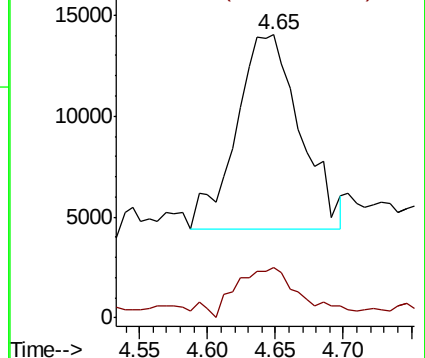
43 100

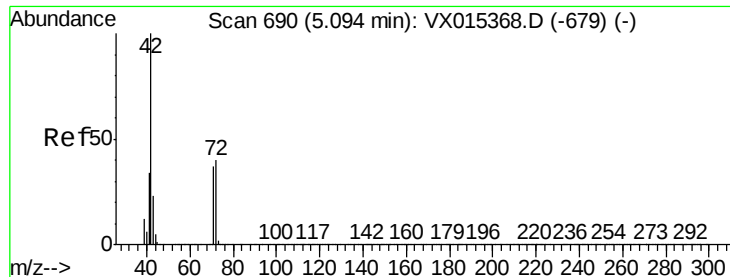
72 22.4 19.0 28.4



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0





#29

Tetrahydrofuran

Concen: 0.646 ug/l

RT: 5.09 min Scan# 690

Delta R.T. 0.00 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

Instrument :

MSVOA\_X

ClientSampled :

TP-4-S

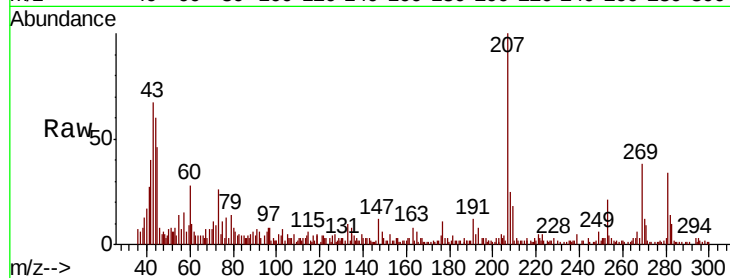
Tot Ion: 42 Resp: 4309

Ion Ratio Lower Upper

42 100

72 36.1 31.7 47.5

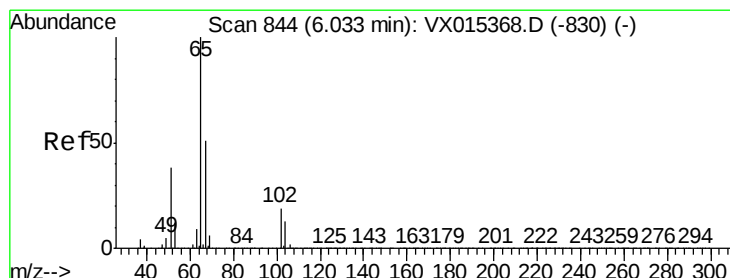
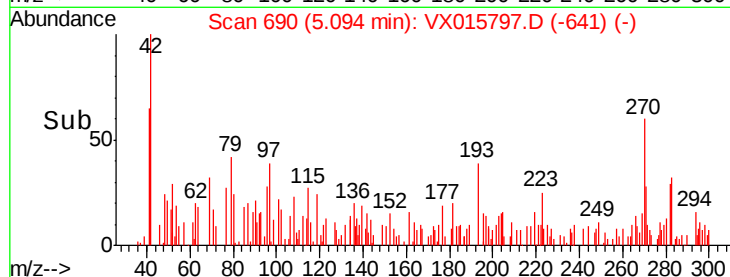
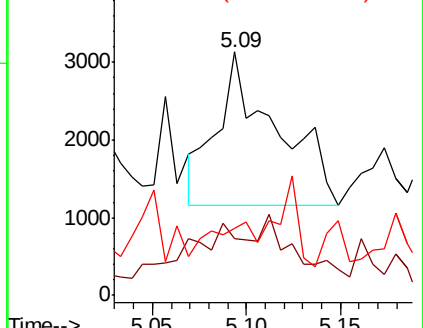
71 17.7 29.6 44.4#



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



#33

1,2-Dichloroethane-d4

Concen: 40.766 ug/l

RT: 6.04 min Scan# 845

Delta R.T. 0.01 min

Lab File: VX015797.D

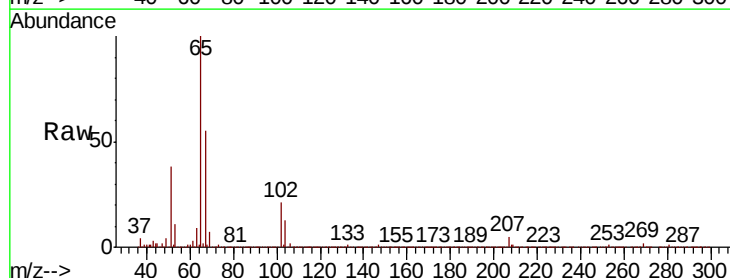
Acq: 21 Apr 2020 16:16

Tgt Ion: 65 Resp: 612219

Ion Ratio Lower Upper

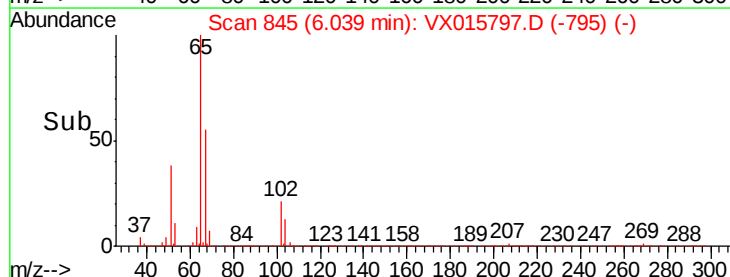
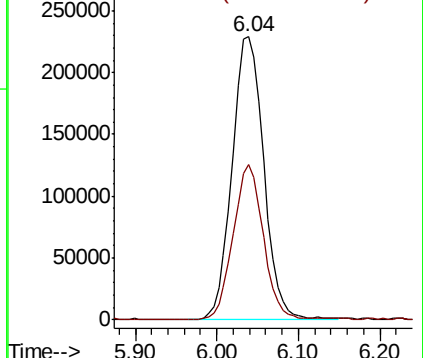
65 100

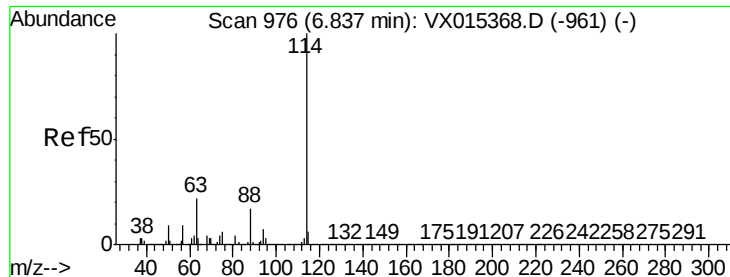
67 52.2 0.0 102.6



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.84 min Scan# 976

Delta R.T. 0.00 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

Instrument :

MSVOA\_X

ClientSampleId :

TP-4-S

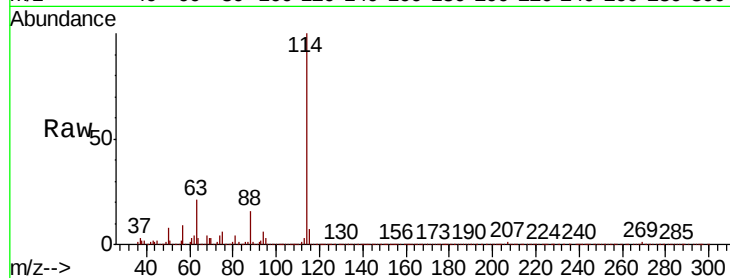
Tot Ion:114 Resp: 1631053

Ion Ratio Lower Upper

114 100

63 20.8 0.0 44.2

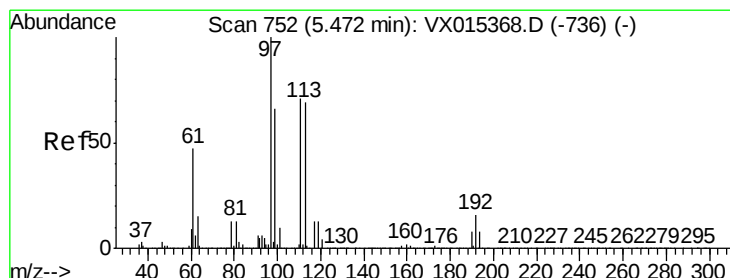
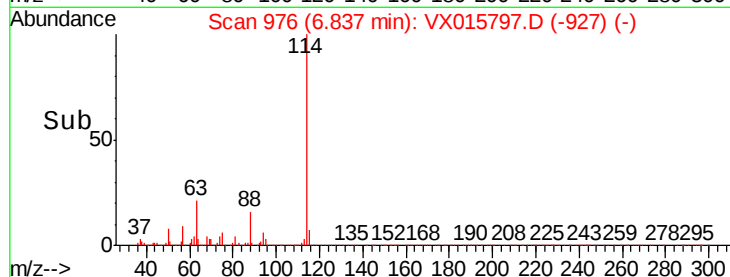
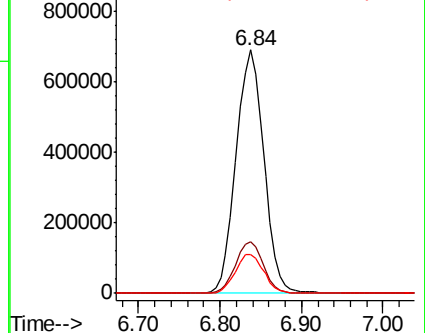
88 15.8 0.0 33.8



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: 48.287 ug/l

RT: 5.47 min Scan# 752

Delta R.T. 0.00 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

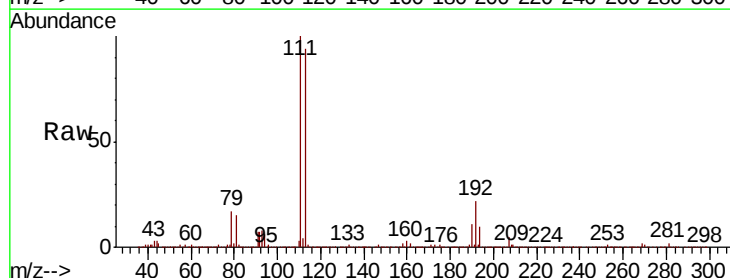
Tgt Ion:113 Resp: 503446

Ion Ratio Lower Upper

113 100

111 99.7 81.5 122.3

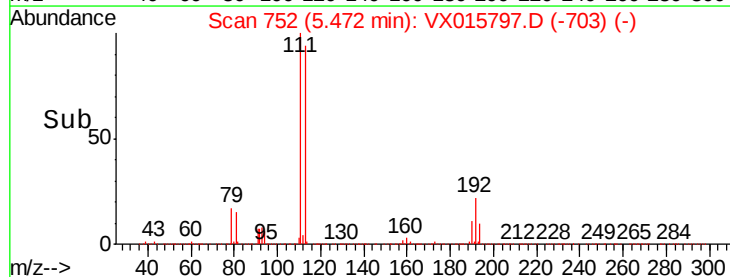
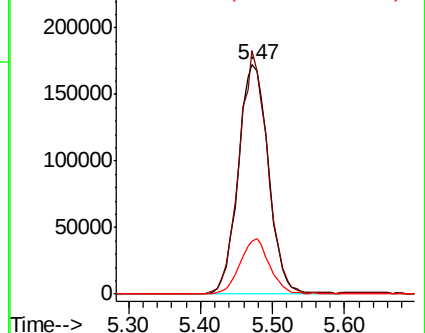
192 23.0 17.8 26.6

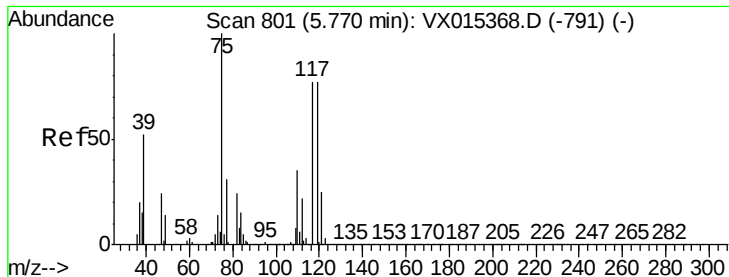


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 4.744 ug/l

RT: 5.63 min Scan# 778

Delta R.T. -0.14 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

Instrument :

MSVOA\_X

ClientSampleId :

TP-4-S

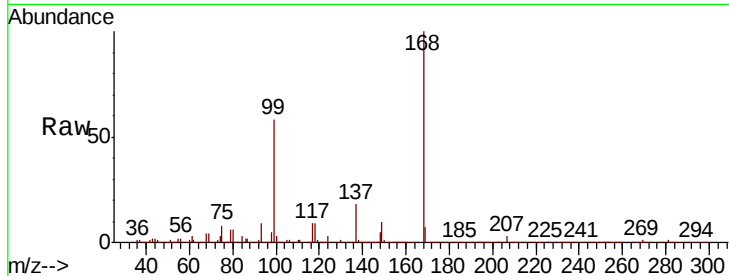
Tot Ion: 75 Resp: 71298

Ion Ratio Lower Upper

75 100

110 9.0 17.1 51.3#

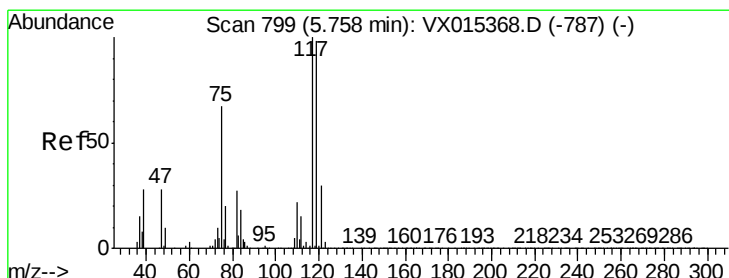
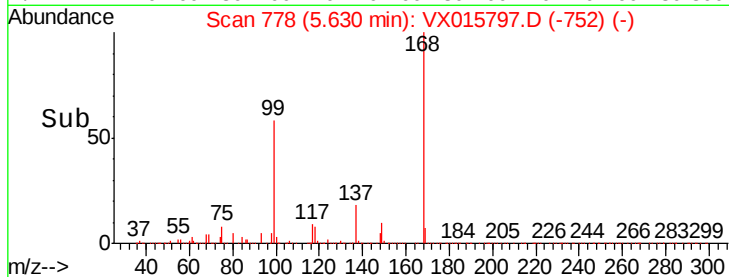
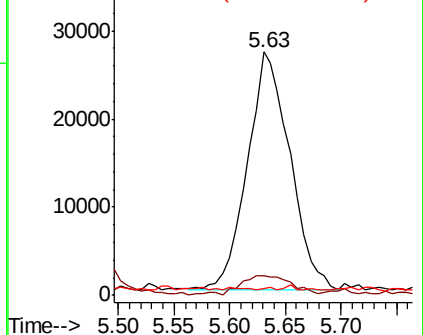
77 0.7 24.6 36.8#



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: 5.729 ug/l

RT: 5.64 min Scan# 779

Delta R.T. -0.12 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

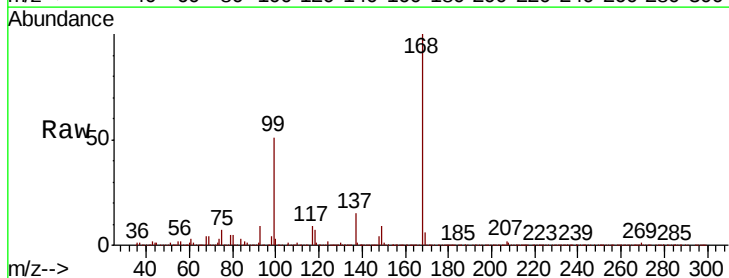
Tgt Ion:117 Resp: 93250

Ion Ratio Lower Upper

117 100

119 5.4 78.0 117.0#

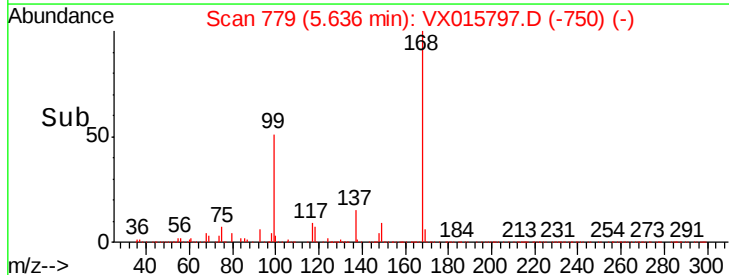
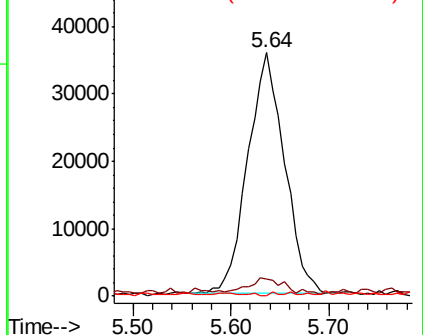
121 0.0 23.8 35.8#

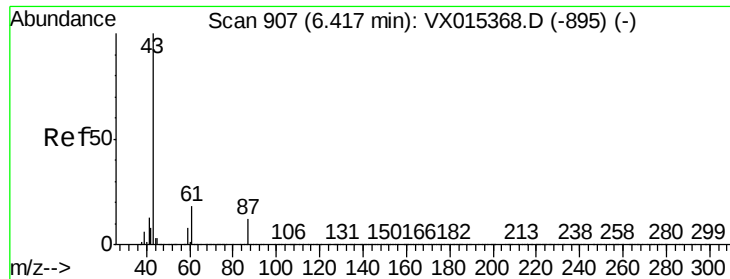


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V





#43

Isopropyl Acetate

Concen: 10.222 ug/l

RT: 6.42 min Scan# 907

Delta R.T. 0.00 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

Instrument :

MSVOA\_X

ClientSampleId :

TP-4-S

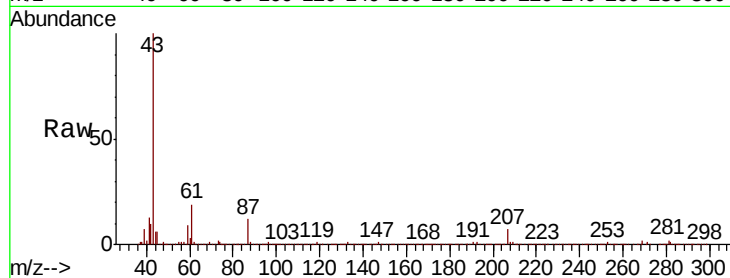
Tot Ion: 43 Resp: 337670

Ion Ratio Lower Upper

43 100

61 19.5 14.8 22.2

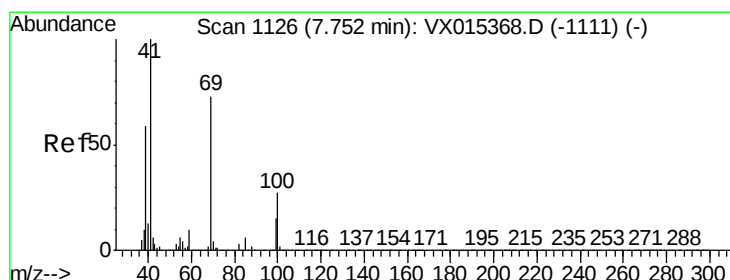
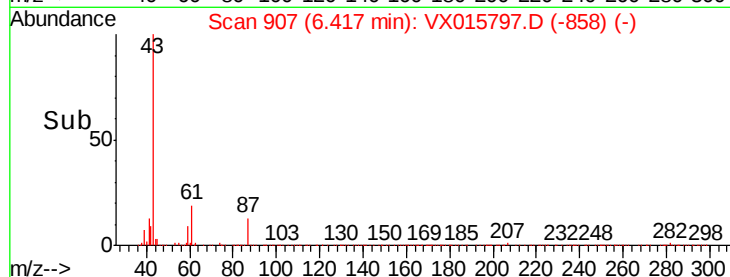
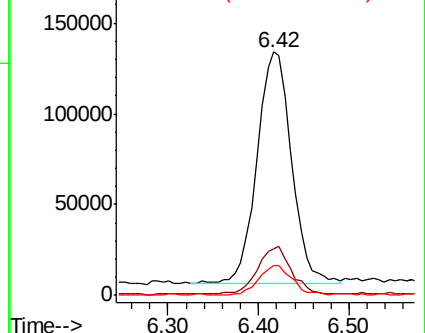
87 12.6 9.4 14.0



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0



#48

Methyl methacrylate

Concen: 1.298 ug/l

RT: 7.65 min Scan# 1110

Delta R.T. -0.10 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

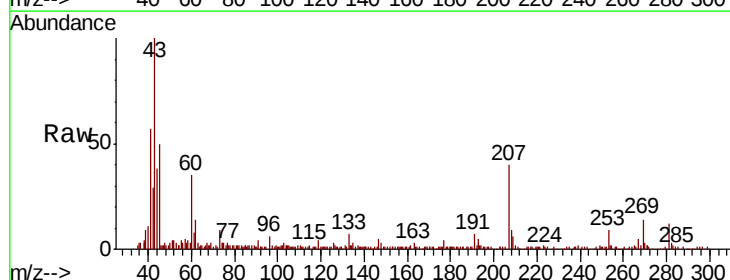
Tgt Ion: 41 Resp: 21421

Ion Ratio Lower Upper

41 100

69 2.0 56.7 85.1#

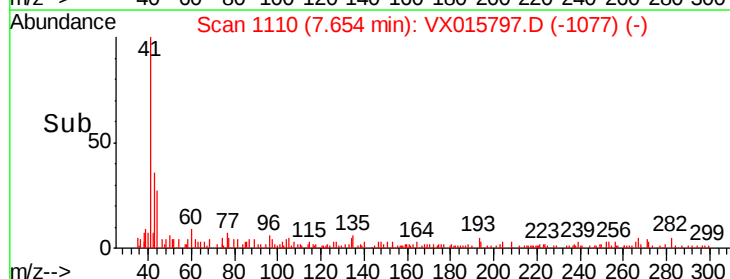
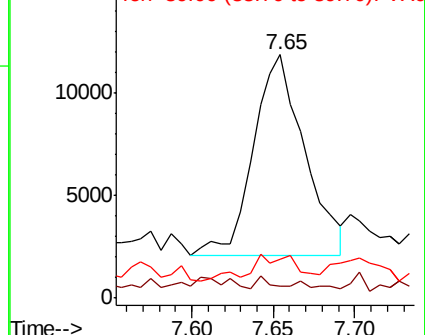
39 0.0 46.5 69.7#

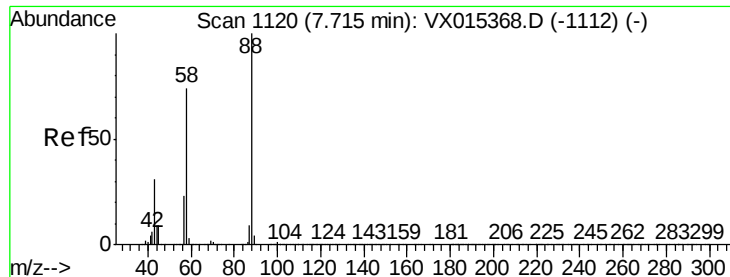


Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 39.00 (38.70 to 39.70): VX0

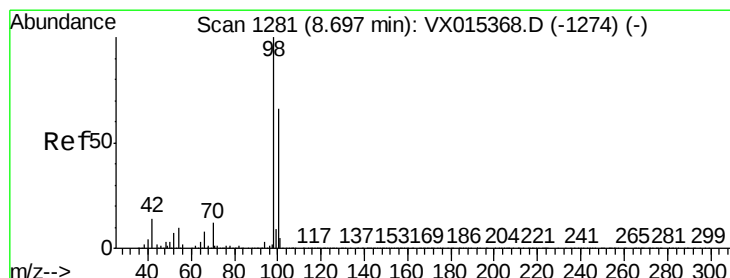
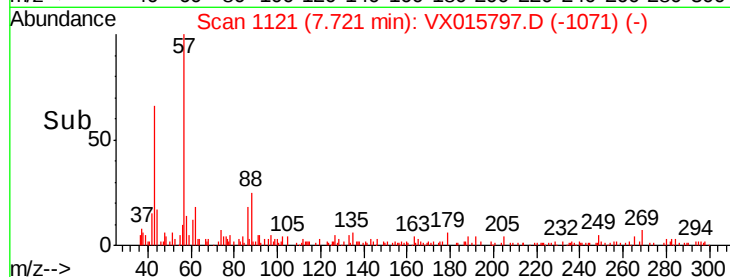
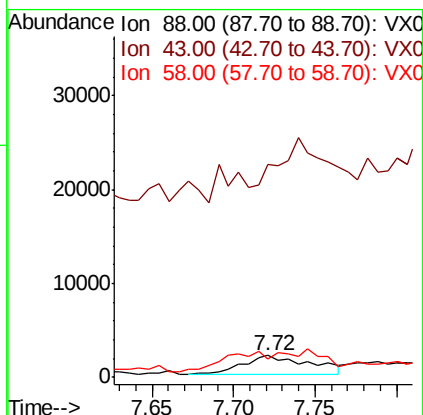
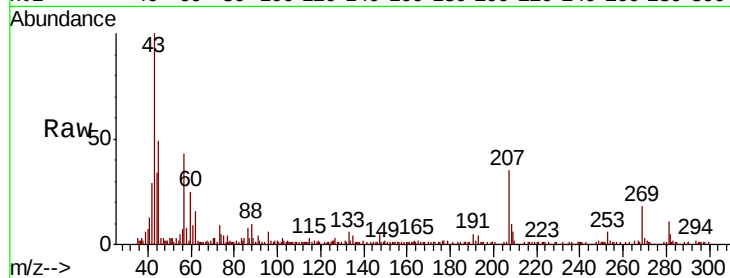




#49  
1,4-Dioxane  
Concen: 19.126 ug/l  
RT: 7.72 min Scan# 1121  
Delta R.T. 0.01 min  
Lab File: VX015797.D  
Acq: 21 Apr 2020 16:16

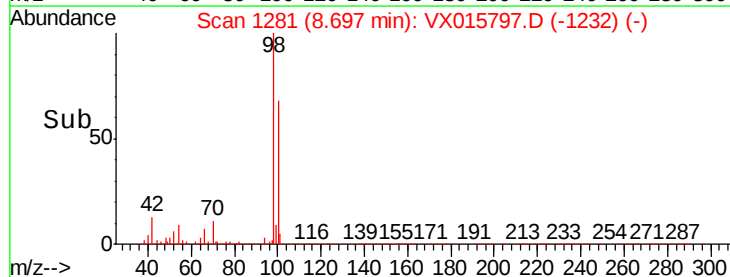
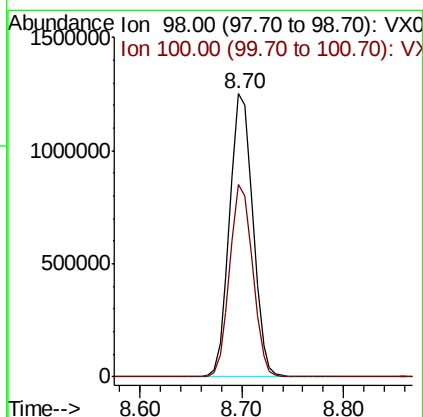
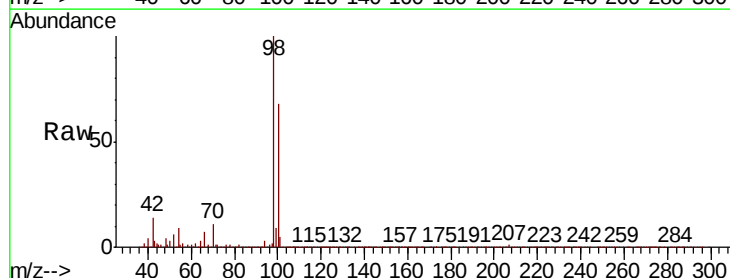
Instrument :  
MSVOA\_X  
ClientSampleId :  
TP-4-S

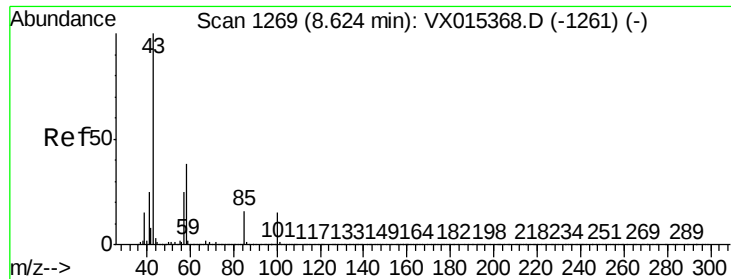
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 88      | 100   |       |       |
| 43      | 0.0   | 30.1  | 45.1# |
| 58      | 48.5  | 60.6  | 90.8# |



#50  
Toluene-d8  
Concen: 51.437 ug/l  
RT: 8.70 min Scan# 1281  
Delta R.T. 0.00 min  
Lab File: VX015797.D  
Acq: 21 Apr 2020 16:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 98      | 100   |       |       |
| 100     | 67.2  | 53.5  | 80.3  |





#51

4-Methyl-2-Pentanone

Concen: 23.203 ug/l

RT: 8.60 min Scan# 1265

Delta R.T. -0.02 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

Instrument :

MSVOA\_X

ClientSampled :

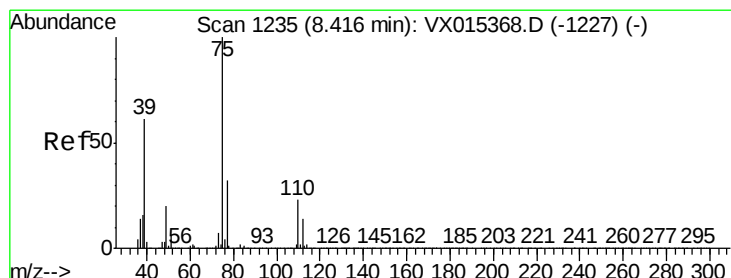
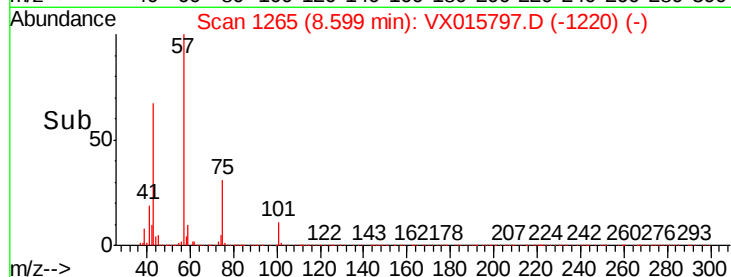
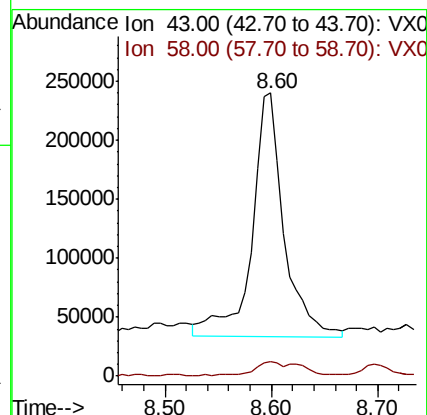
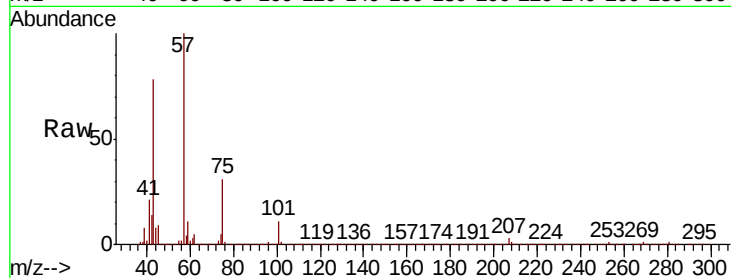
TP-4-S

Tot Ion: 43 Resp: 434361

Ion Ratio Lower Upper

43 100

58 4.1 29.7 44.5#



#54

cis-1,3-Dichloropropene

Concen: 6.765 ug/l

RT: 8.60 min Scan# 1265

Delta R.T. 0.18 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

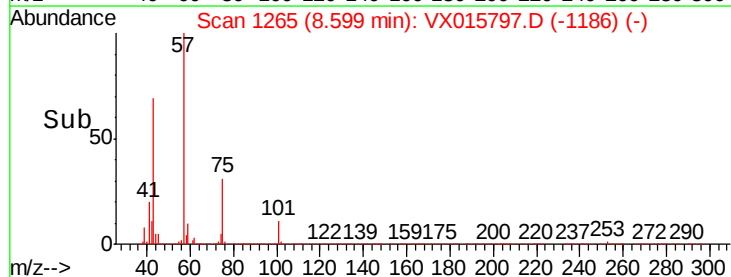
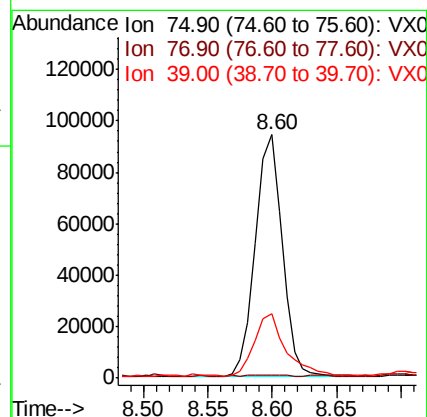
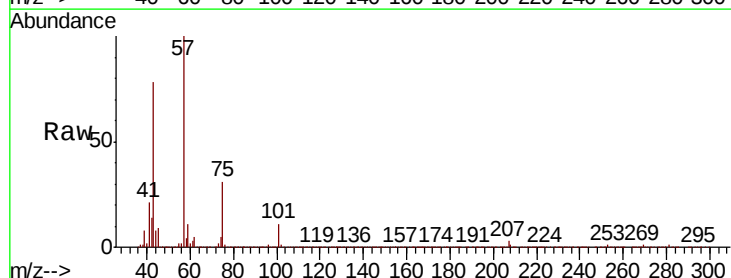
Tgt Ion: 75 Resp: 136055

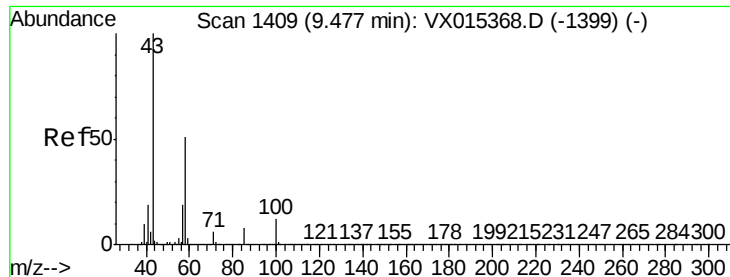
Ion Ratio Lower Upper

75 100

77 0.6 25.8 38.6#

39 25.2 49.0 73.4#

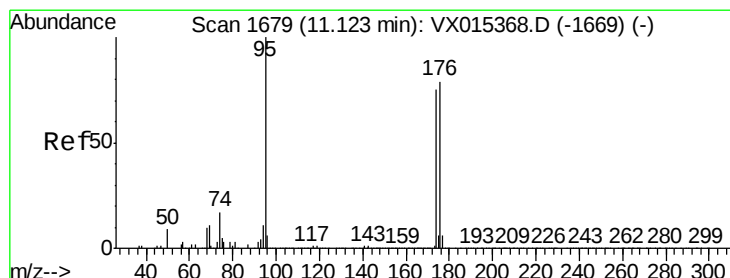
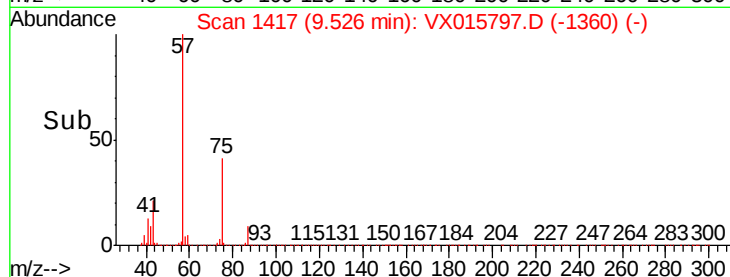
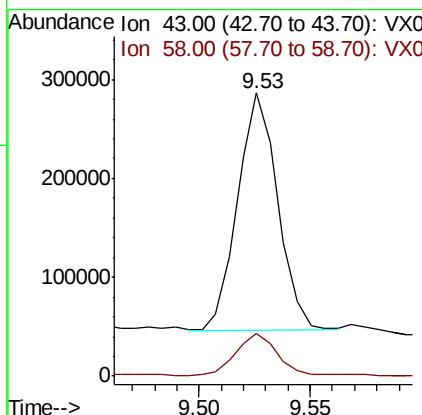
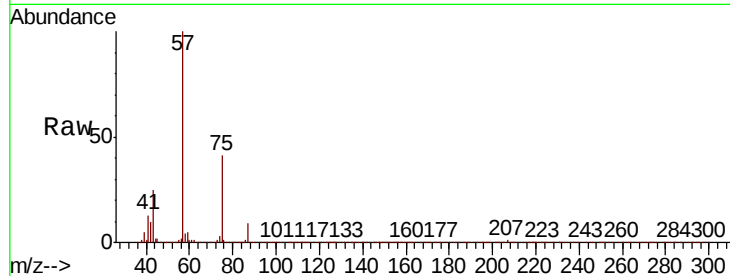




#59  
2-Hexanone  
Concen: 21.315 ug/l  
RT: 9.53 min Scan# 1417  
Delta R.T. 0.05 min  
Lab File: VX015797.D  
Acq: 21 Apr 2020 16:16

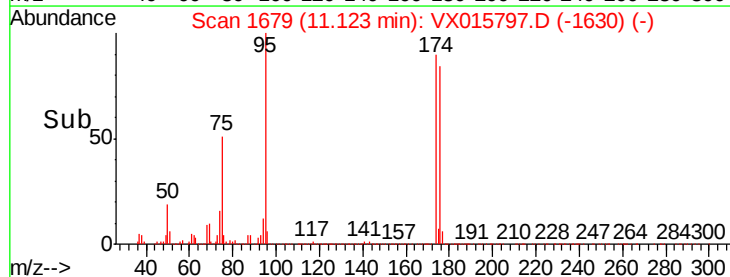
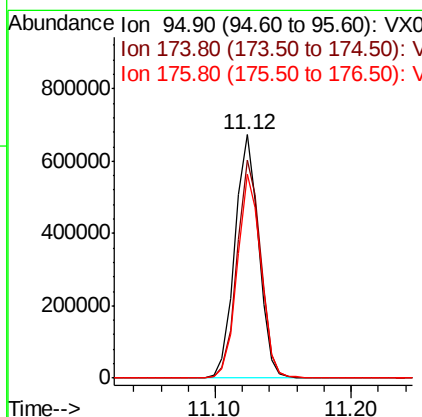
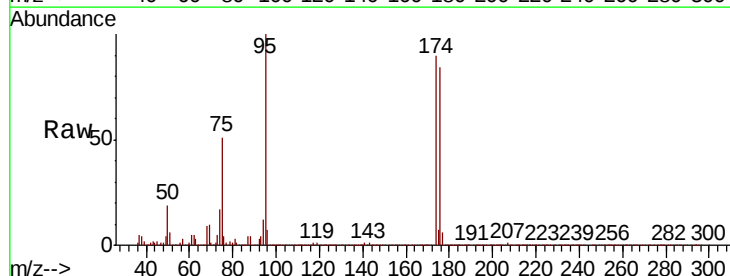
Instrument :  
MSVOA\_X  
ClientSampleId :  
TP-4-S

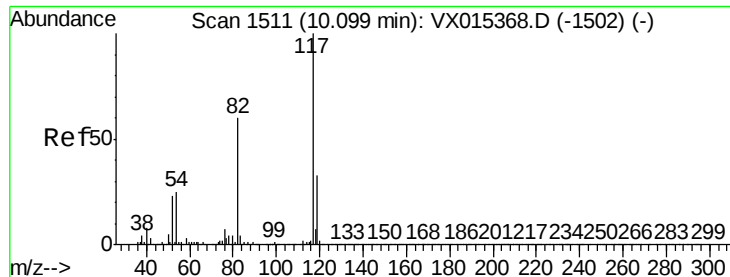
Tot Ion: 43 Resp: 301252  
Ion Ratio Lower Upper  
43 100  
58 18.6 25.6 76.6#



#62  
4-Bromofluorobenzene  
Concen: 52.264 ug/l  
RT: 11.12 min Scan# 1679  
Delta R.T. 0.00 min  
Lab File: VX015797.D  
Acq: 21 Apr 2020 16:16

Tgt Ion: 95 Resp: 815331  
Ion Ratio Lower Upper  
95 100  
174 89.8 0.0 158.6  
176 83.7 0.0 159.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.10 min Scan# 1511

Delta R.T. 0.00 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

Instrument :

MSVOA\_X

ClientSampleId :

TP-4-S

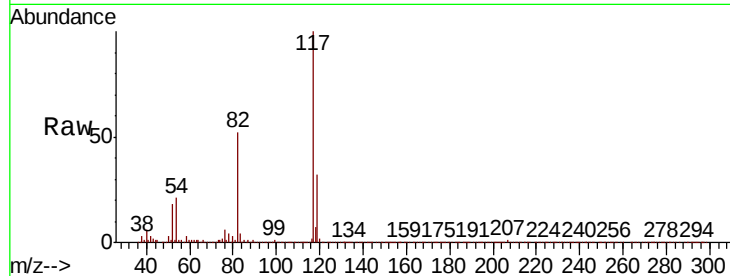
Tot Ion:117 Resp: 1600234

Ion Ratio Lower Upper

117 100

82 52.5 47.8 71.8

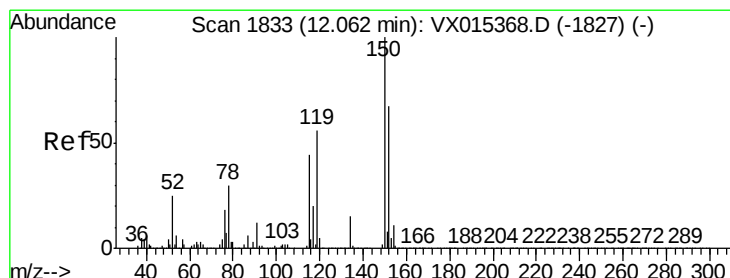
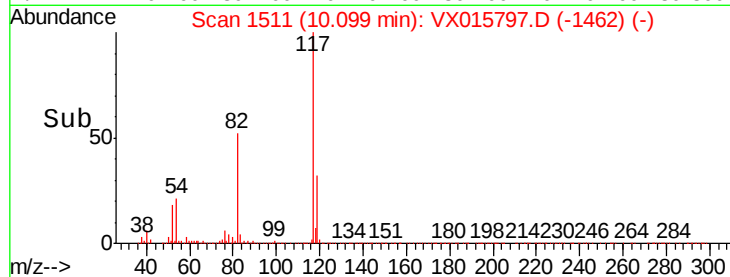
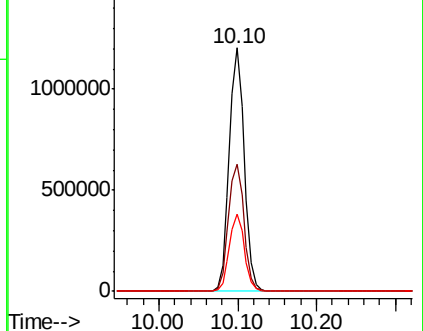
119 31.8 26.8 40.2



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: 12.06 min Scan# 1833

Delta R.T. 0.00 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

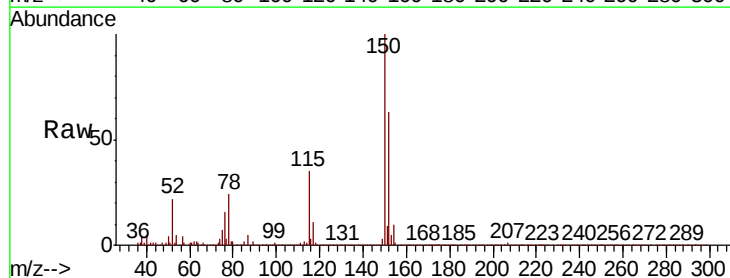
Tgt Ion:152 Resp: 882631

Ion Ratio Lower Upper

152 100

115 56.8 39.0 116.9

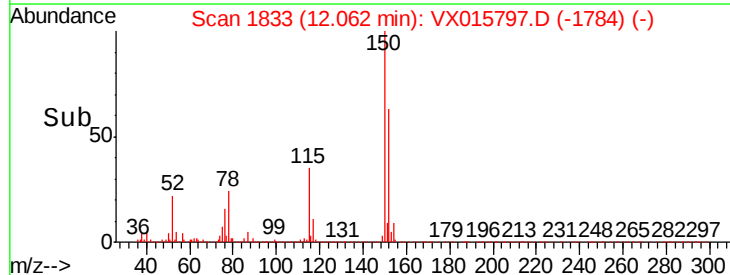
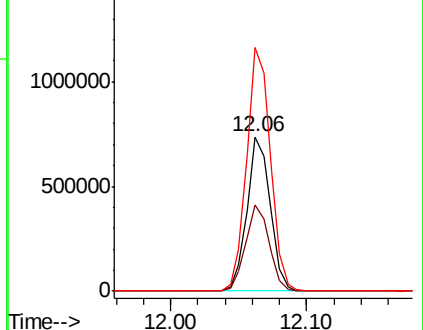
150 161.1 0.0 340.8

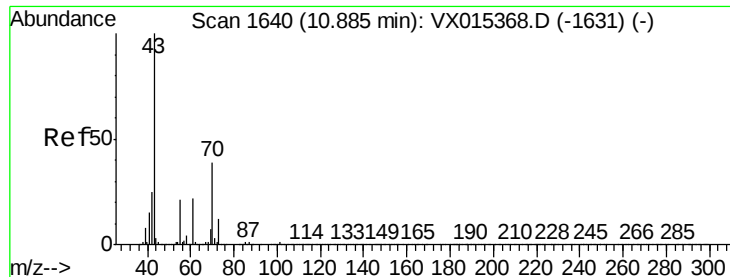


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-amvl acetate

Concen: 0.580 ug/l

RT: 10.90 min Scan# 1642

Delta R.T. 0.01 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

Instrument :

MSVOA\_X

ClientSampleId :

TP-4-S

Tot Ion: 43 Resp: 18668

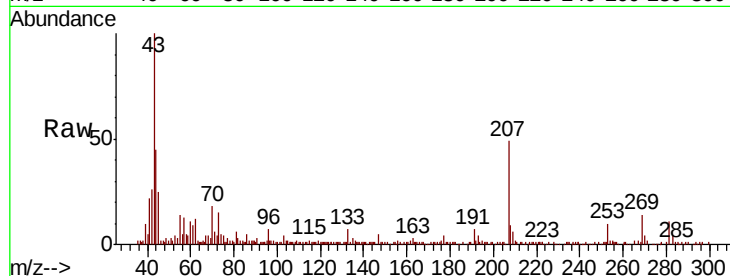
Ion Ratio Lower Upper

43 100

70 33.4 30.2 45.4

55 28.9 16.8 25.2#

61 0.0 18.2 27.2#

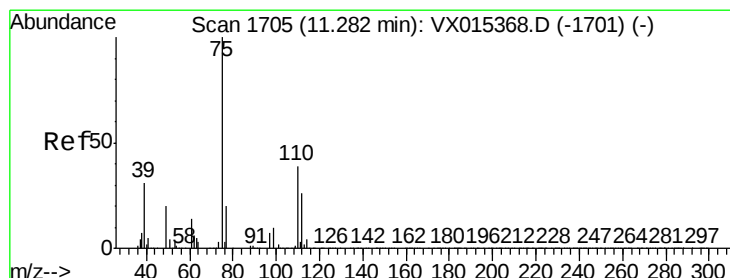
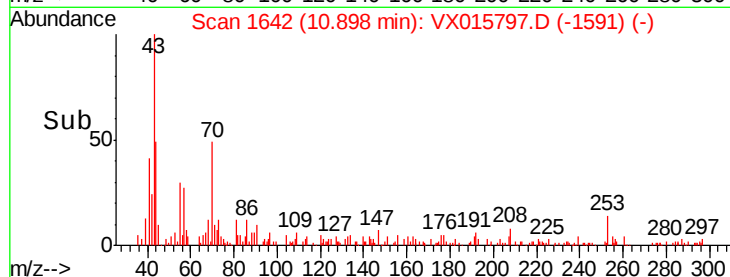
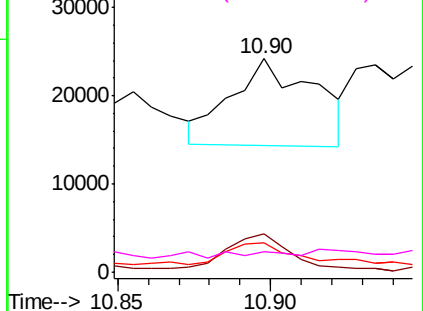


Abundance Ion 43.00 (42.70 to 43.70): VX0

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: 22.553 ug/l

RT: 11.12 min Scan# 1679

Delta R.T. -0.16 min

Lab File: VX015797.D

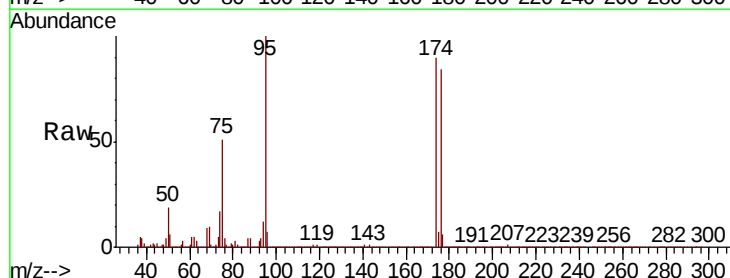
Acq: 21 Apr 2020 16:16

Tgt Ion: 75 Resp: 409351

Ion Ratio Lower Upper

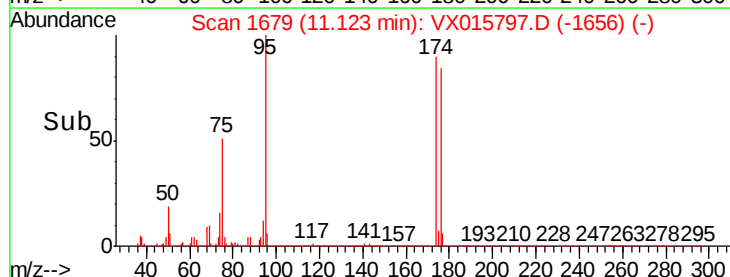
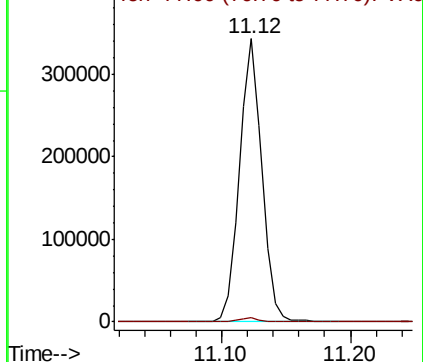
75 100

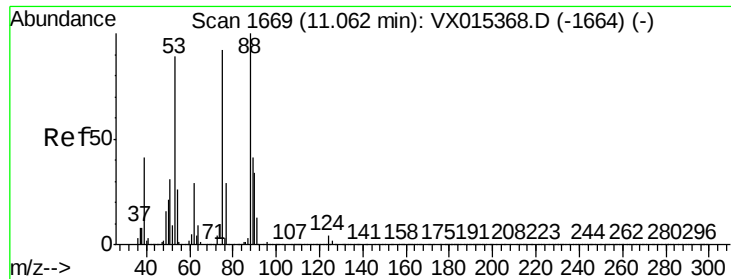
77 1.4 21.2 63.6#



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: 54.115 ug/l

RT: 11.12 min Scan# 1679

Delta R.T. 0.06 min

Lab File: VX015797.D

Acq: 21 Apr 2020 16:16

Instrument :

MSVOA\_X

ClientSampleId :

TP-4-S

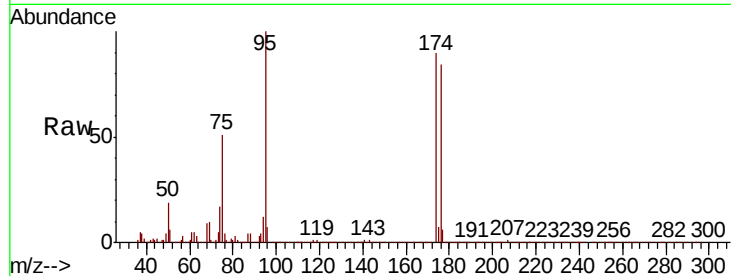
Tot Ion: 75 Resp: 409351

Ion Ratio Lower Upper

75 100

53 0.1 80.1 120.1#

89 0.2 36.1 54.1#



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

