

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX051920\  
 Data File : VX016344.D  
 Acq On : 19 May 2020 18:49  
 Operator : JC/SP  
 Sample : L2663-09 50X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 1364

Quant Time: May 20 03:50:21 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X050420W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed May 06 06:43:32 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.63  | 168  | 250572   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.83  | 114  | 414354   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 410442   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 199087   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.03   | 65  | 146709   | 44.49 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 88.98%  |      |
| 35) Dibromofluoromethane  | 5.46   | 113 | 119638   | 45.57 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.14%  |      |
| 50) Toluene-d8            | 8.70   | 98  | 513509   | 50.77 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.54% |      |
| 62) 4-Bromofluorobenzene  | 11.12  | 95  | 204882   | 53.26 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.52% |      |

## Target Compounds

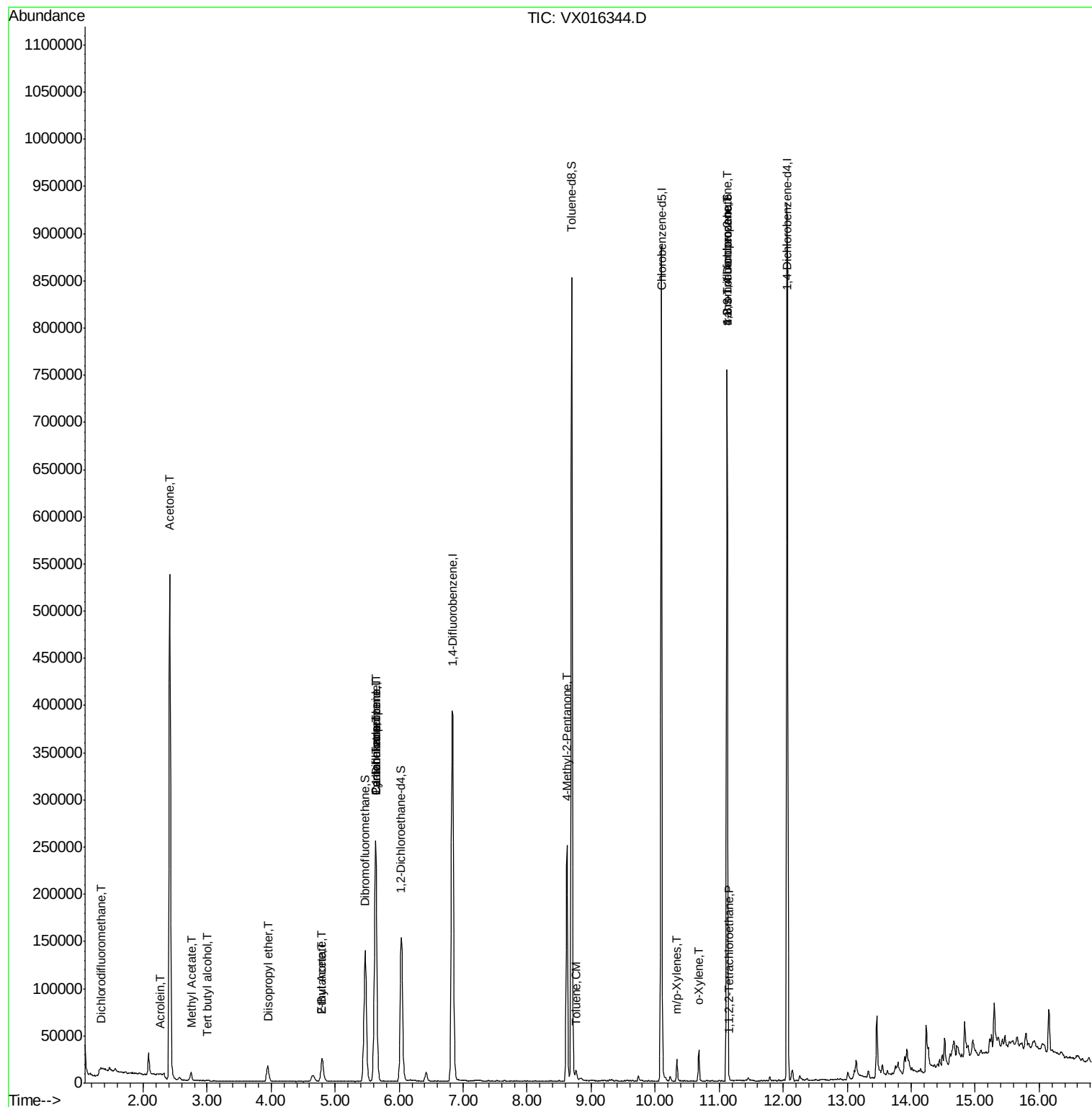
|                                |       |     |        |           |        | Qvalue |
|--------------------------------|-------|-----|--------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.34  | 85  | 573    | 0.216     | ug/l   | 96     |
| 11) Tert butyl alcohol         | 3.01  | 59  | 939    | 1.126     | ug/l # | 65     |
| 13) Acrolein                   | 2.26  | 56  | 303    | 0.581     | ug/l # | 1      |
| 16) Acetone                    | 2.42  | 43  | 539654 | 366.809   | ug/l   | 95     |
| 17) Carbon Disulfide           | 2.55  | 76  | 864    | Below Cal | #      | 65     |
| 18) Methyl Acetate             | 2.75  | 43  | 12218  | 3.378     | ug/l   | 94     |
| 22) Diisopropyl ether          | 3.95  | 45  | 17114  | 1.899     | ug/l # | 26     |
| 25) 2-Butanone                 | 4.79  | 43  | 41496  | 17.504    | ug/l # | 48     |
| 31) Cyclohexane                | 5.64  | 56  | 5008   | 1.093     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.63  | 75  | 18143  | 4.448     | ug/l # | 49     |
| 37) Ethyl Acetate              | 4.79  | 43  | 41717  | 8.825     | ug/l # | 96     |
| 38) Carbon Tetrachloride       | 5.63  | 117 | 23747  | 5.728     | ug/l # | 13     |
| 51) 4-Methyl-2-Pentanone       | 8.62  | 43  | 142107 | 30.788    | ug/l   | 97     |
| 52) Toluene                    | 8.76  | 92  | 2705   | 0.364     | ug/l   | 99     |
| 68) m/p-Xylenes                | 10.34 | 106 | 5326   | 0.927     | ug/l   | 97     |
| 69) o-Xylene                   | 10.68 | 106 | 6640   | 1.202     | ug/l   | 91     |
| 75) 1,1,2,2-Tetrachloroethane  | 11.16 | 83  | 19     | 2.056     | ug/l # | 26     |
| 76) 1,2,3-Trichloropropane     | 11.12 | 75  | 98310  | 21.761    | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 11.12 | 75  | 98310  | 51.858    | ug/l # | 13     |

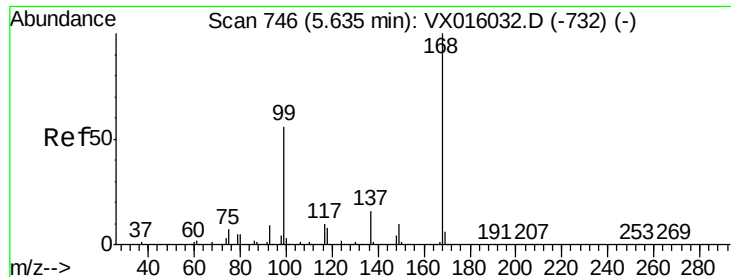
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X050420W.M  
Quant Title : SW846 8260  
QLast Update : Wed May 06 06:43:32 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.63 min Scan# 746

Delta R.T. -0.00 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

Instrument :

MSVOA\_X

ClientSampled :

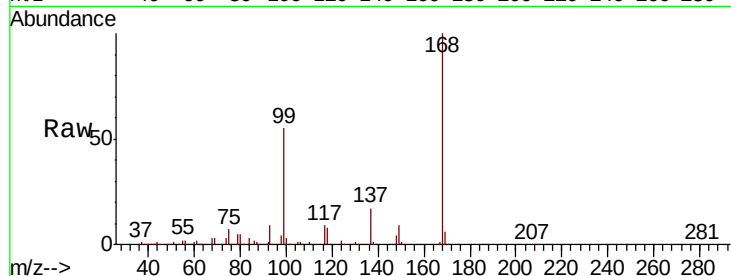
1364

Tot Ion:168 Resp: 250572

Ion Ratio Lower Upper

168 100

99 54.9 45.0 67.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.63

100000

80000

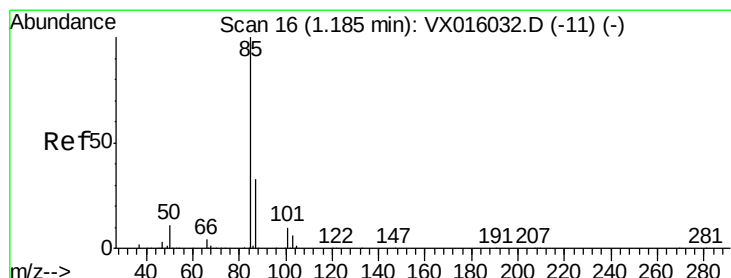
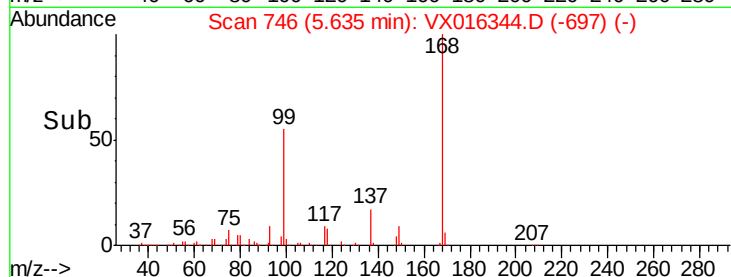
60000

40000

20000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 0.216 ug/l

RT: 1.34 min Scan# 42

Delta R.T. 0.16 min

Lab File: VX016344.D

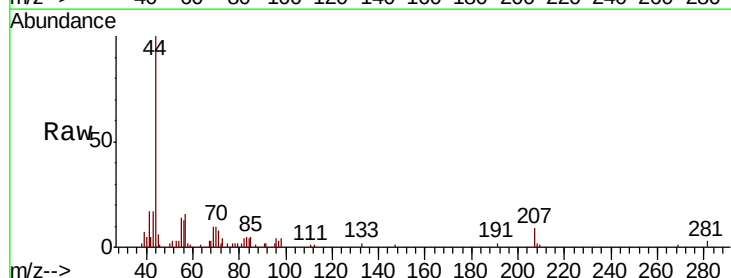
Acq: 19 May 2020 18:49

Tgt Ion: 85 Resp: 573

Ion Ratio Lower Upper

85 100

87 30.6 16.4 49.1



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

1.34

250

200

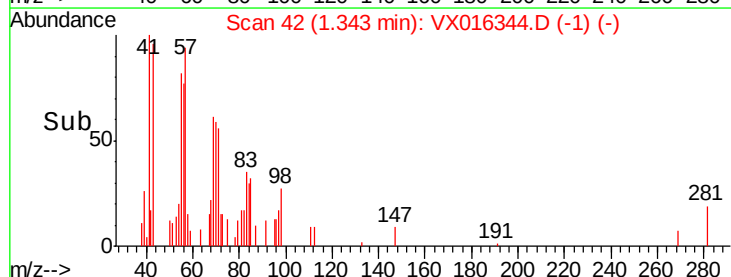
150

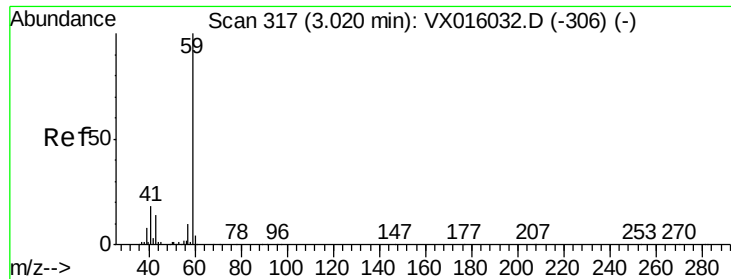
100

50

0

Time-->

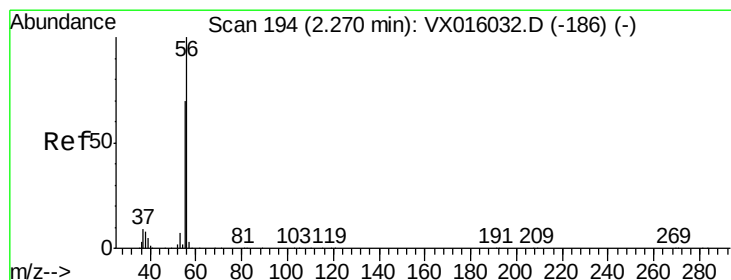
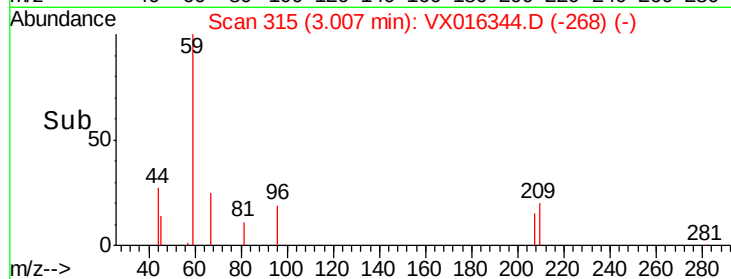
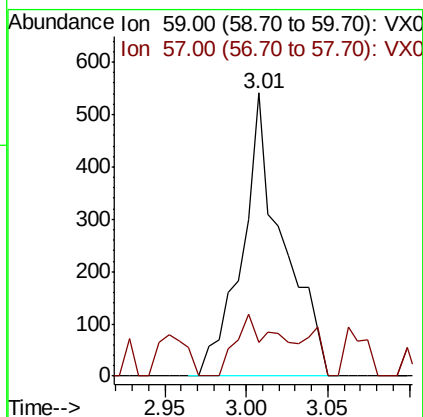
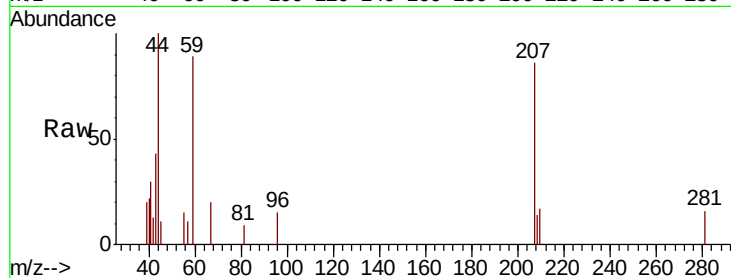




#11  
Tert butyl alcohol  
Concen: 1.126 ug/l  
RT: 3.01 min Scan# 315  
Delta R.T. -0.01 min  
Lab File: VX016344.D  
Acq: 19 May 2020 18:49

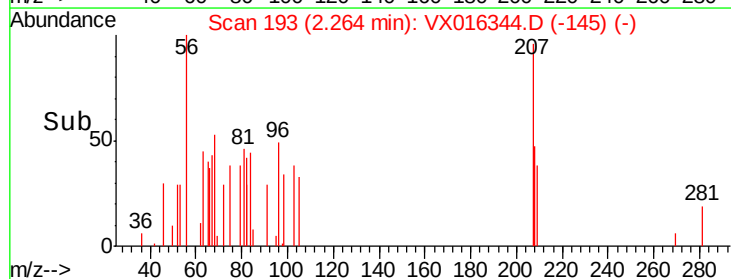
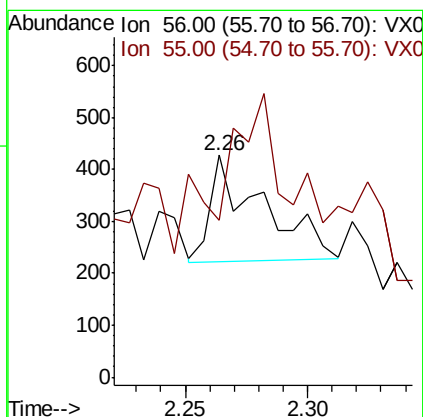
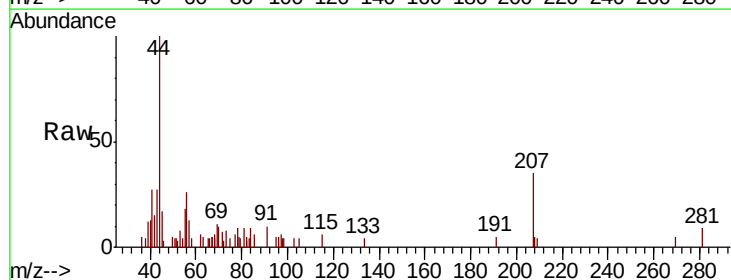
Instrument :  
MSVOA\_X  
ClientSampleId :  
1364

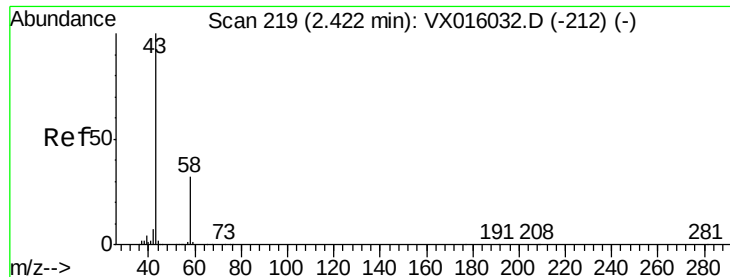
Tot Ion: 59 Resp: 939  
Ion Ratio Lower Upper  
59 100  
57 23.3 8.2 12.4#



#13  
Acrolein  
Concen: 0.581 ug/l  
RT: 2.26 min Scan# 193  
Delta R.T. -0.01 min  
Lab File: VX016344.D  
Acq: 19 May 2020 18:49

Tgt Ion: 56 Resp: 303  
Ion Ratio Lower Upper  
56 100  
55 154.8 56.5 84.7#





#16

Acetone

Concen: 366.809 ug/l

RT: 2.42 min Scan# 218

Delta R.T. -0.01 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

Instrument :

MSVOA\_X

ClientSampleId :

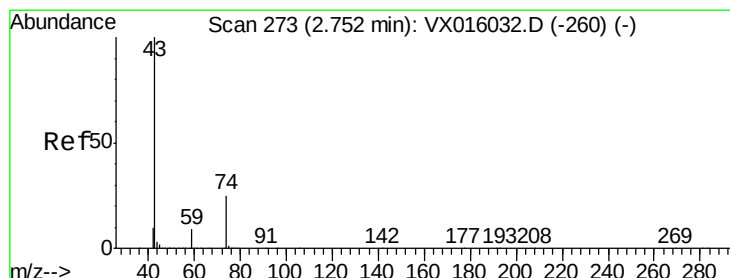
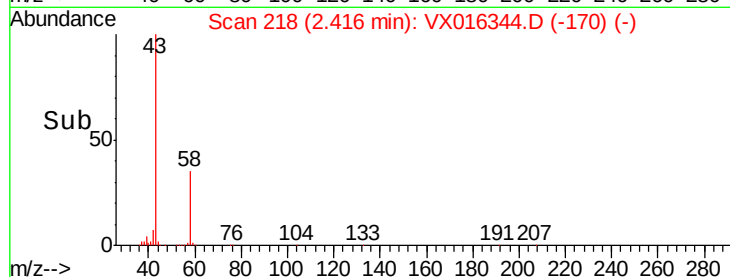
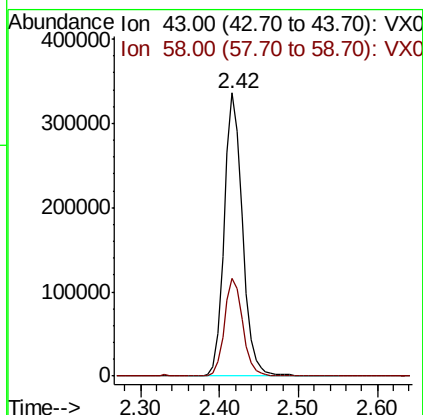
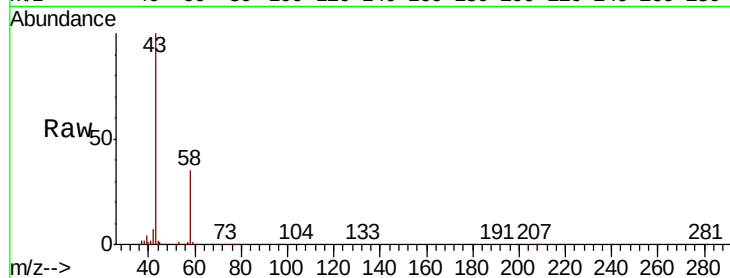
1364

Tot Ion: 43 Resp: 539654

Ion Ratio Lower Upper

43 100

58 34.5 25.4 38.0



#18

Methyl Acetate

Concen: 3.378 ug/l

RT: 2.75 min Scan# 273

Delta R.T. -0.00 min

Lab File: VX016344.D

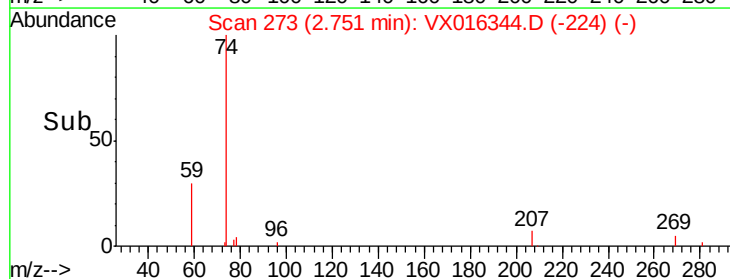
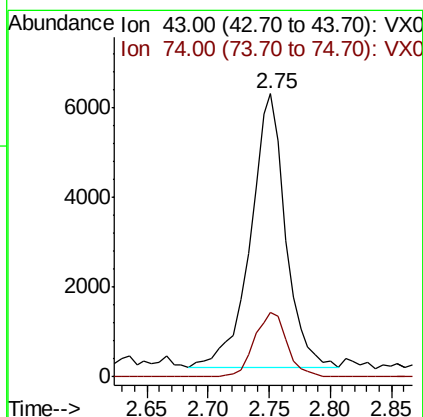
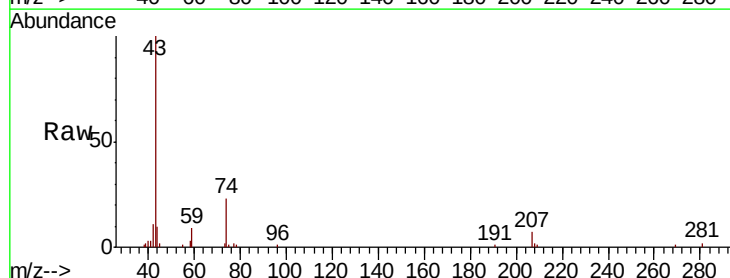
Acq: 19 May 2020 18:49

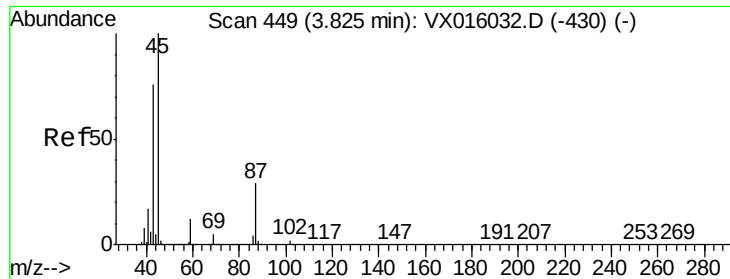
Tgt Ion: 43 Resp: 12218

Ion Ratio Lower Upper

43 100

74 22.0 20.2 30.2





#22

Diisopropyl ether

Concen: 1.899 ug/l

RT: 3.95 min Scan# 469

Delta R.T. 0.12 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

Instrument :

MSVOA\_X

ClientSampled :

1364

Tot Ion: 45 Resp: 17114

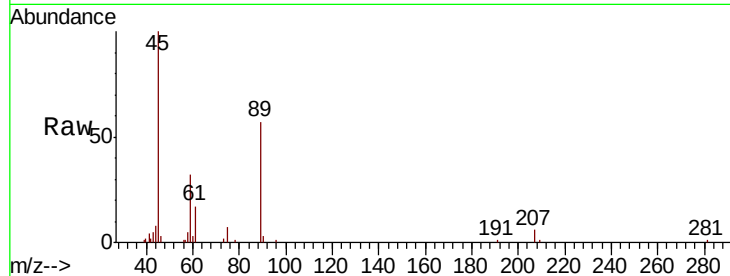
Ion Ratio Lower Upper

45 100

43 3.0 61.1 91.7#

87 0.0 23.0 34.6#

59 31.6 9.8 14.6#

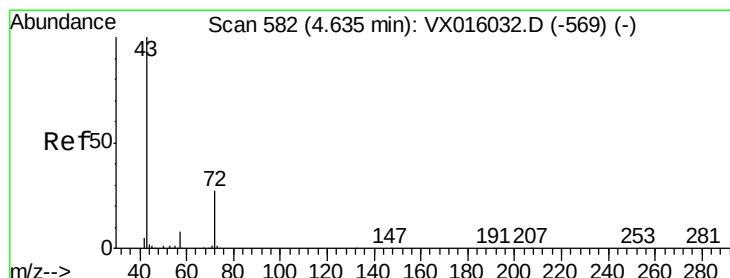
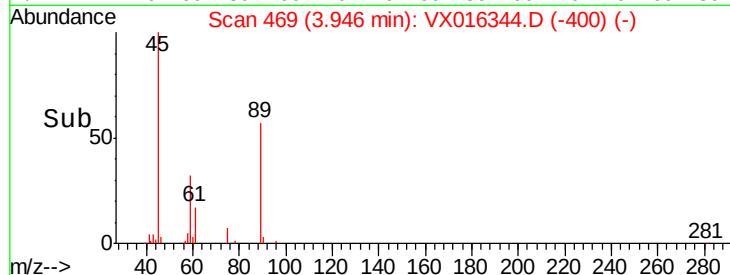
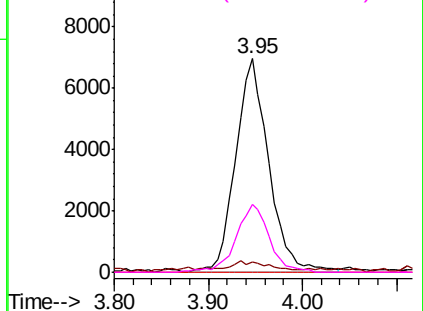


Abundance Ion 45.00 (44.70 to 45.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 87.00 (86.70 to 87.70): VX0

Ion 59.00 (58.70 to 59.70): VX0



#25

2-Butanone

Concen: 17.504 ug/l

RT: 4.79 min Scan# 608

Delta R.T. 0.16 min

Lab File: VX016344.D

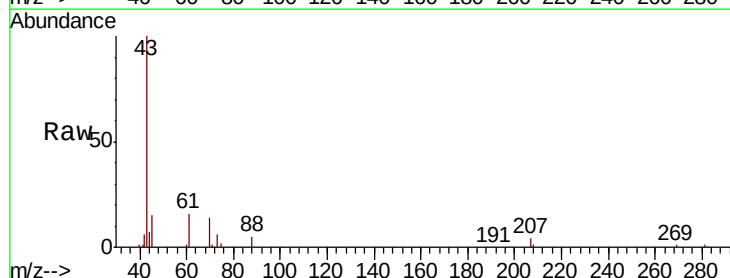
Acq: 19 May 2020 18:49

Tgt Ion: 43 Resp: 41496

Ion Ratio Lower Upper

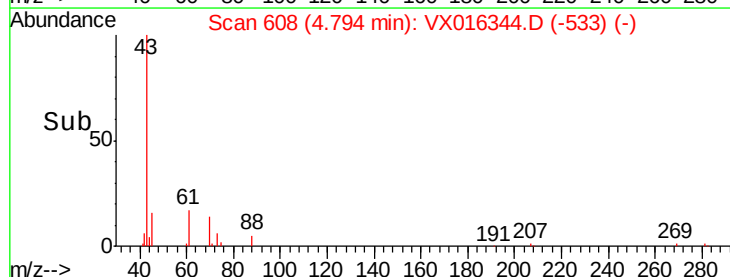
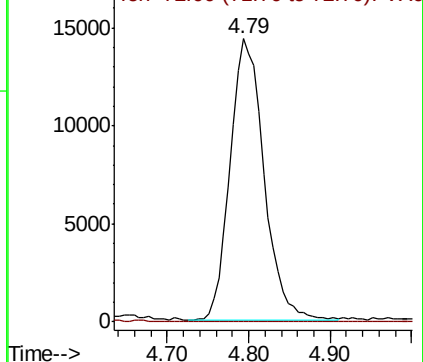
43 100

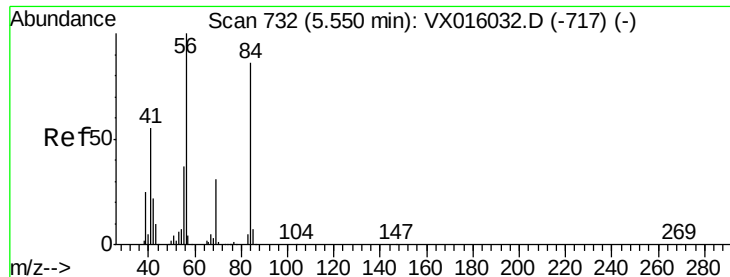
72 0.0 21.8 32.8#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

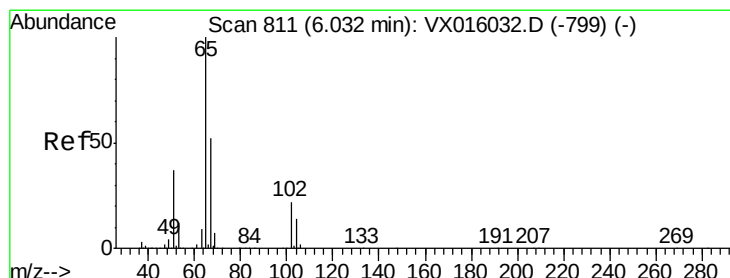
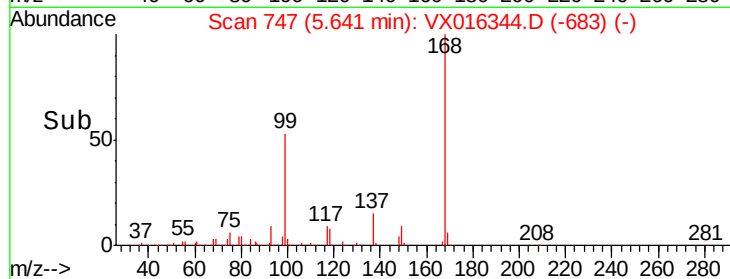
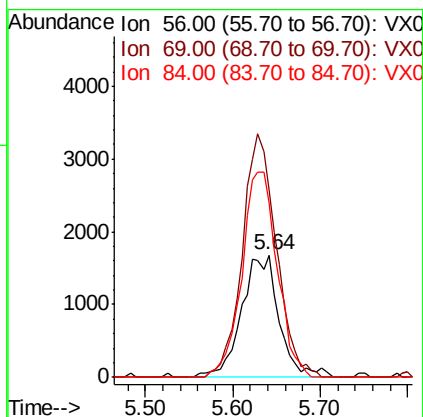
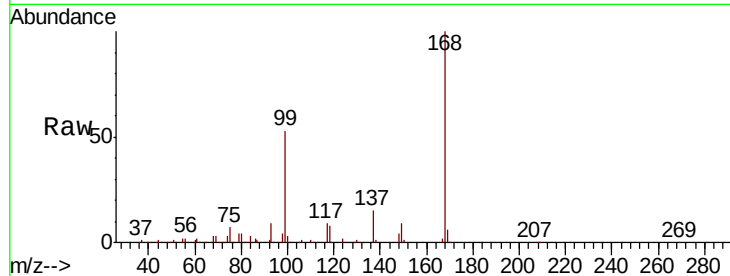




#31  
Cyclohexane  
Concen: 1.093 ug/l  
RT: 5.64 min Scan# 747  
Delta R.T. 0.09 min  
Lab File: VX016344.D  
Acq: 19 May 2020 18:49

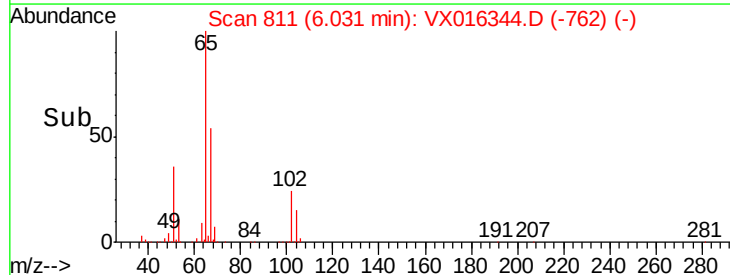
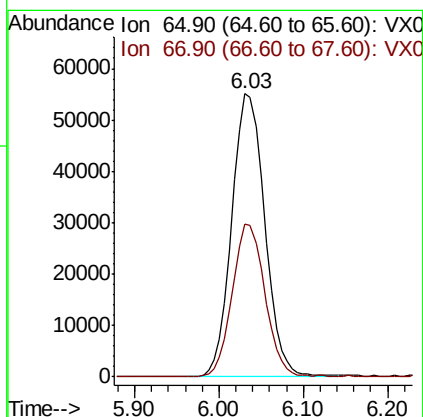
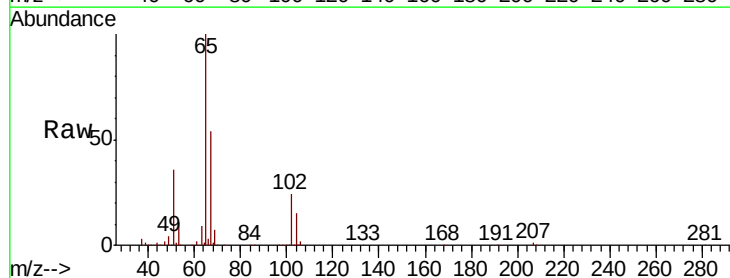
Instrument :  
MSVOA\_X  
ClientSampleId :  
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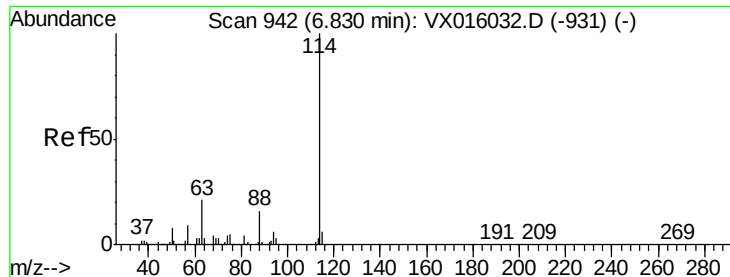
Tot Ion: 56 Resp: 5008  
Ion Ratio Lower Upper  
56 100  
69 152.9 25.0 37.6#  
84 142.8 69.0 103.6#



#33  
1,2-Dichloroethane-d4  
Concen: 44.494 ug/l  
RT: 6.03 min Scan# 811  
Delta R.T. -0.00 min  
Lab File: VX016344.D  
Acq: 19 May 2020 18:49

Tgt Ion: 65 Resp: 146709  
Ion Ratio Lower Upper  
65 100  
67 53.1 0.0 104.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.83 min Scan# 942

Delta R.T. -0.00 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

Instrument :

MSVOA\_X

ClientSampleId :

1364

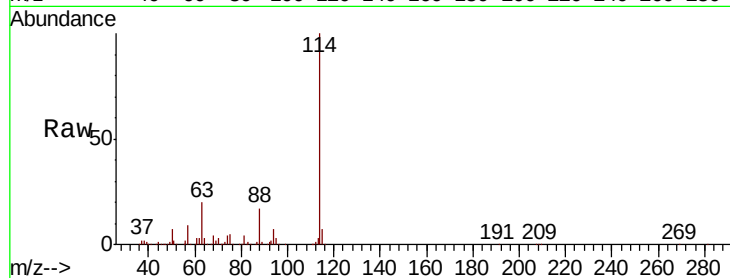
Tot Ion:114 Resp: 414354

Ion Ratio Lower Upper

114 100

63 20.4 0.0 42.8

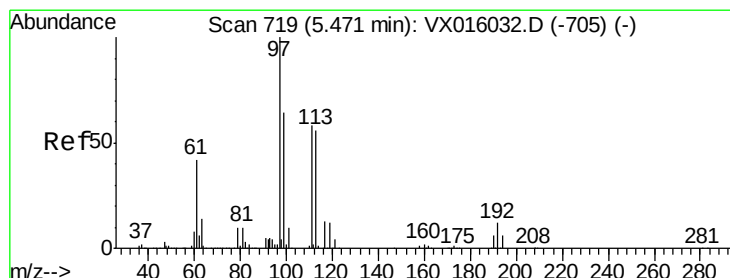
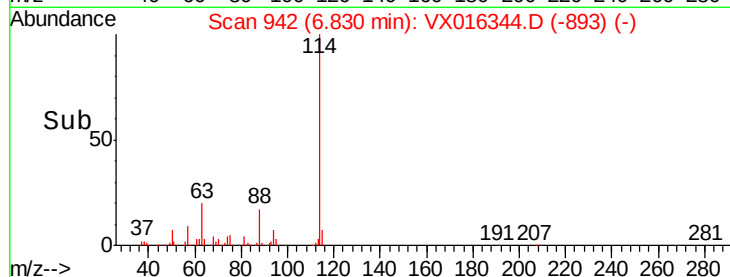
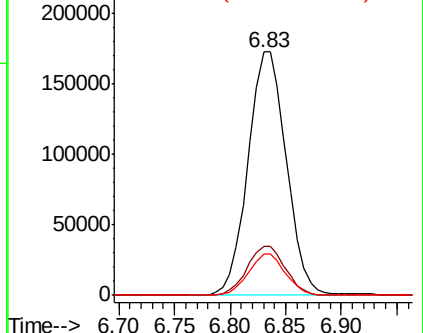
88 17.0 0.0 31.4



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0



#35

Dibromofluoromethane

Concen: 45.574 ug/l

RT: 5.46 min Scan# 718

Delta R.T. -0.01 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

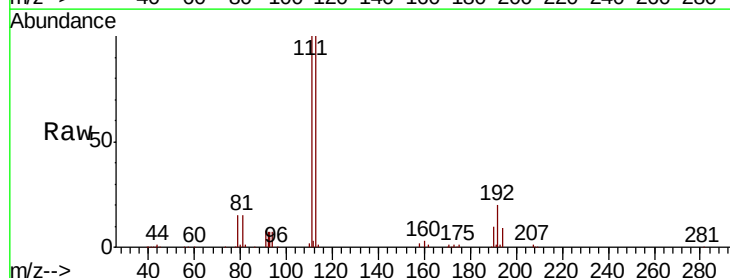
Tgt Ion:113 Resp: 119638

Ion Ratio Lower Upper

113 100

111 104.3 81.6 122.4

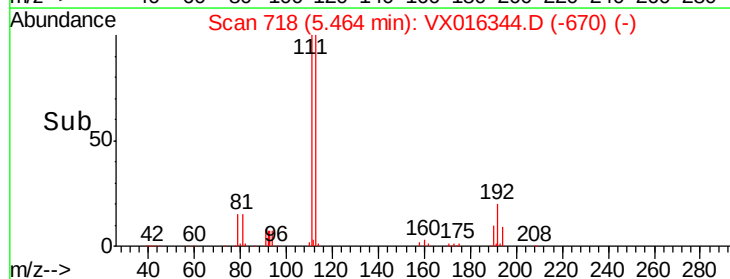
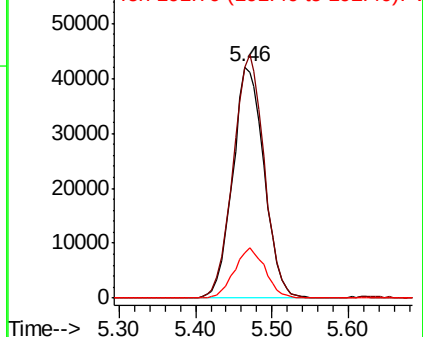
192 21.4 17.0 25.4



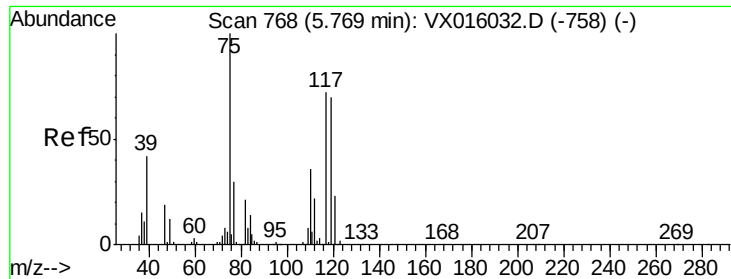
Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V







#36

1,1-Dichloropropene

Concen: 4.448 ug/l

RT: 5.63 min Scan# 745

Delta R.T. -0.14 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

Instrument :

MSVOA\_X

ClientSampleId :

1364

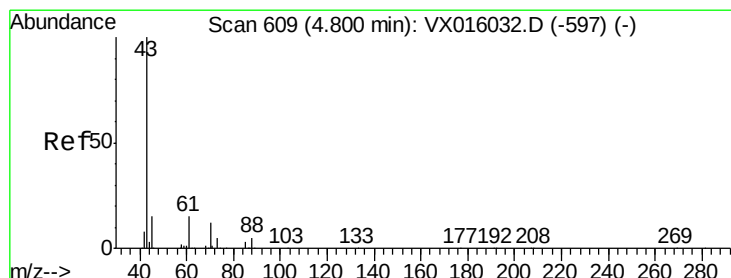
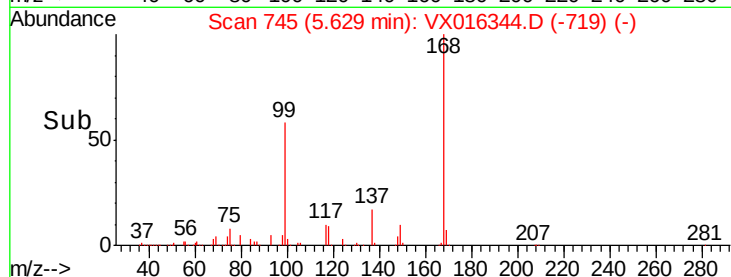
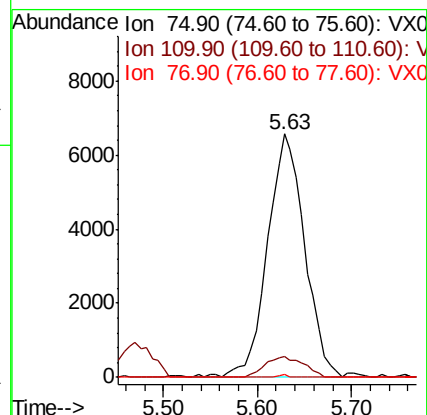
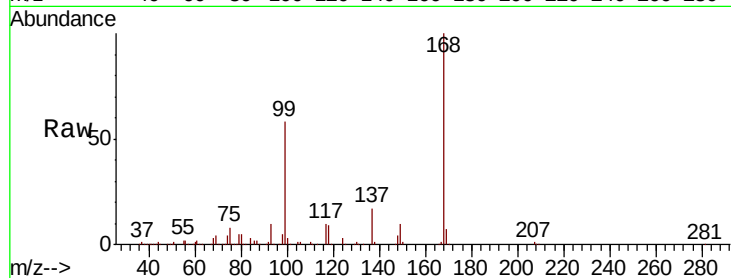
Tot Ion: 75 Resp: 18143

Ion Ratio Lower Upper

75 100

110 8.9 18.1 54.1#

77 0.3 25.0 37.6#



#37

Ethyl Acetate

Concen: 8.825 ug/l

RT: 4.79 min Scan# 608

Delta R.T. -0.01 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

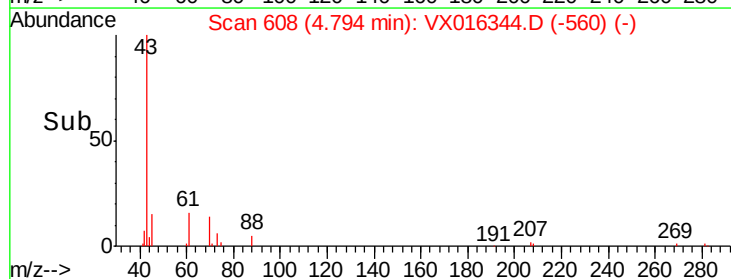
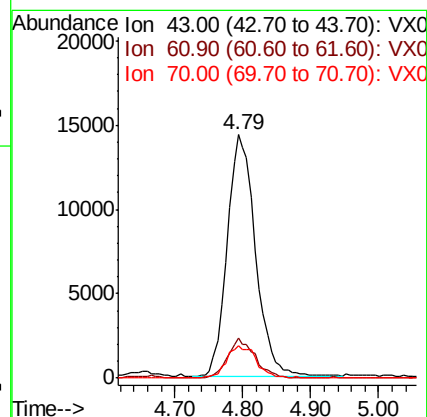
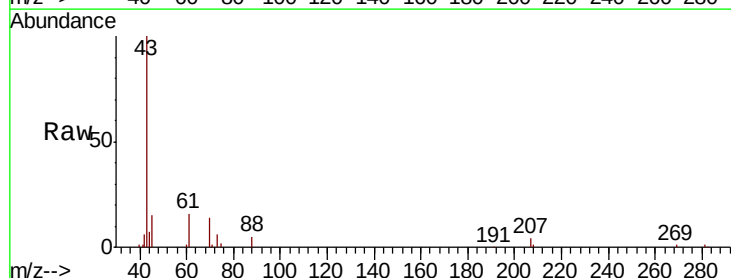
Tgt Ion: 43 Resp: 41717

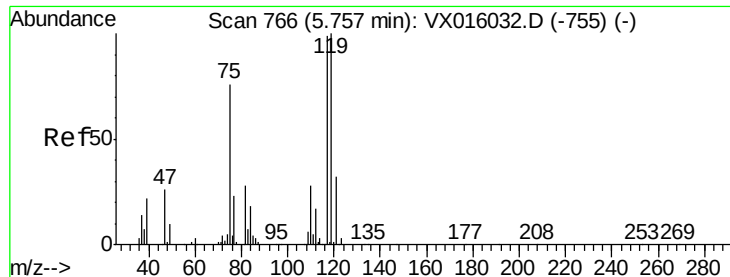
Ion Ratio Lower Upper

43 100

61 15.6 11.7 17.5

70 13.9 9.3 13.9#





#38

Carbon Tetrachloride

Concen: 5.728 ug/l

RT: 5.63 min Scan# 745

Delta R.T. -0.13 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

Instrument :

MSVOA\_X

ClientSampleId :

1364

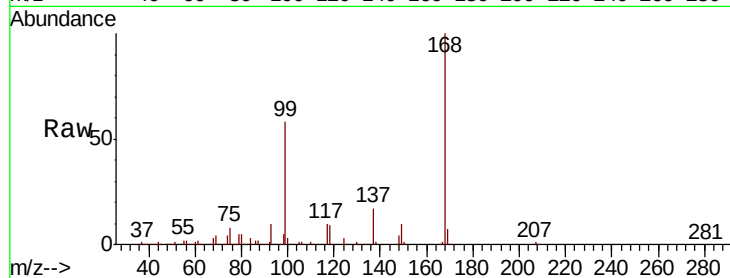
Tot Ion:117 Resp: 23747

Ion Ratio Lower Upper

117 100

119 4.1 80.3 120.5#

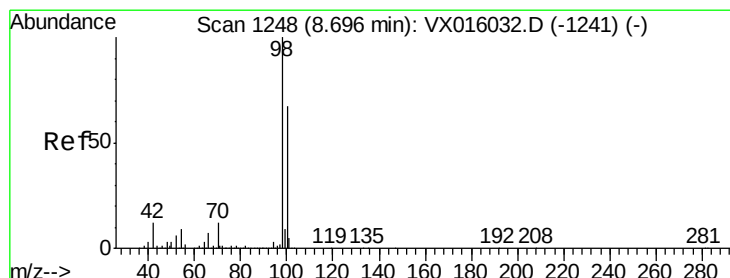
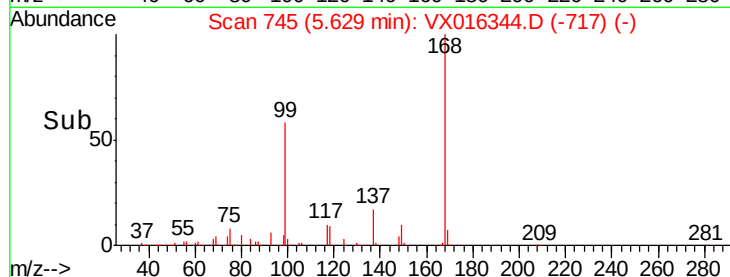
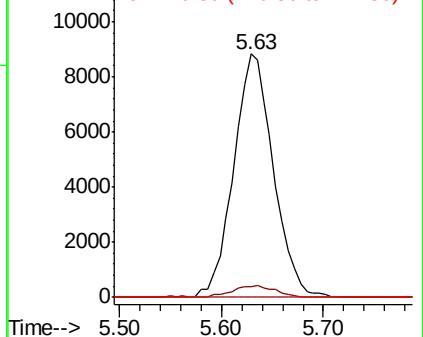
121 0.0 25.7 38.5#



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: 50.768 ug/l

RT: 8.70 min Scan# 1248

Delta R.T. -0.00 min

Lab File: VX016344.D

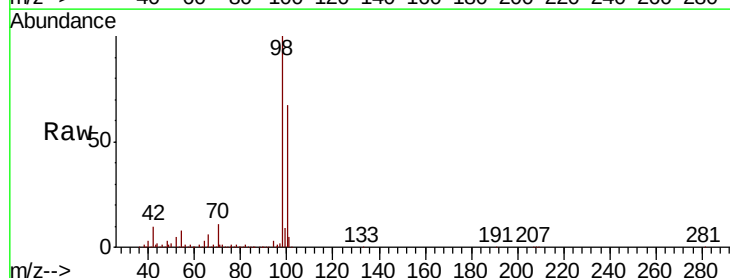
Acq: 19 May 2020 18:49

Tgt Ion: 98 Resp: 513509

Ion Ratio Lower Upper

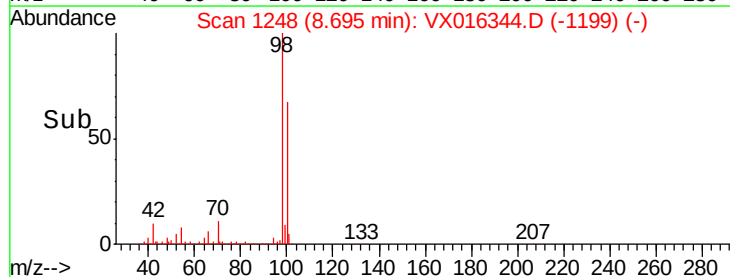
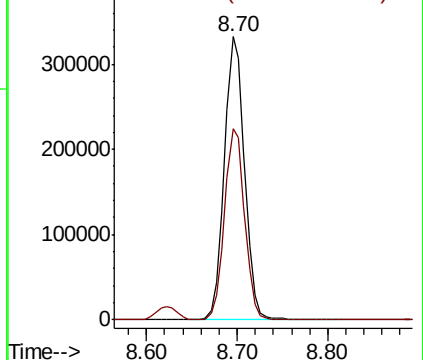
98 100

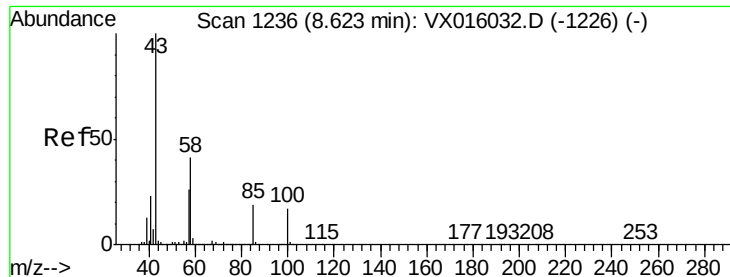
100 67.2 53.7 80.5



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V

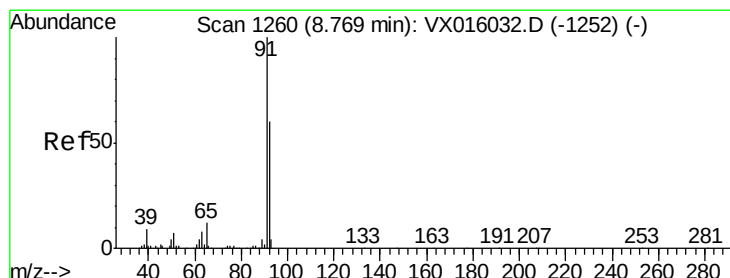
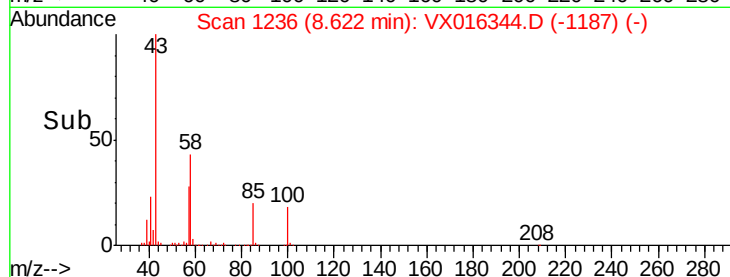
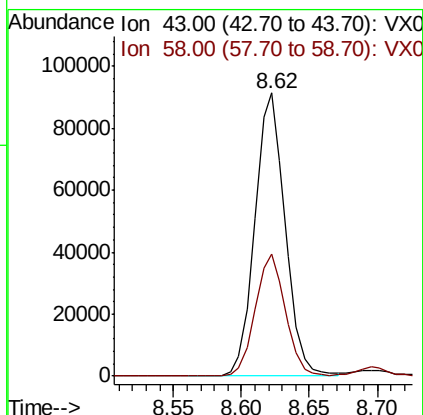
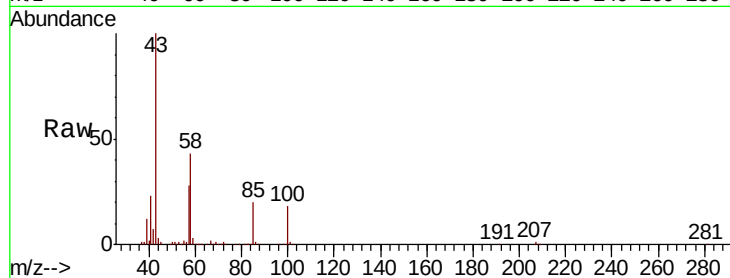




#51  
4-Methyl-2-Pentanone  
Concen: 30.788 ug/l  
RT: 8.62 min Scan# 1236  
Delta R.T. -0.00 min  
Lab File: VX016344.D  
Acq: 19 May 2020 18:49

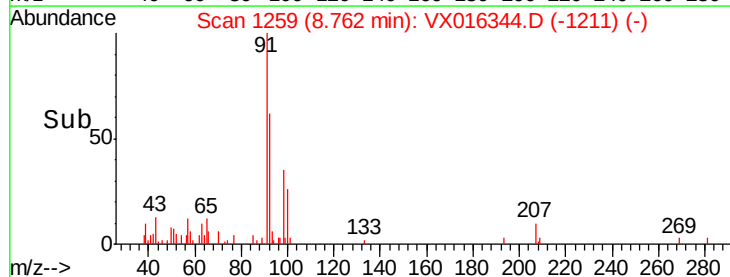
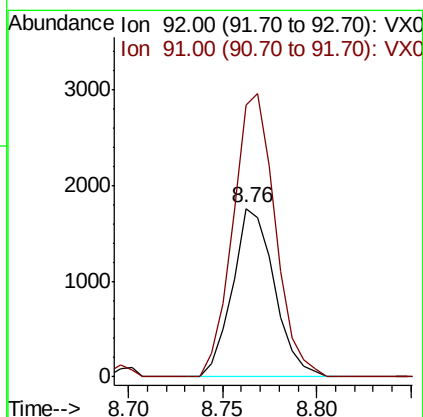
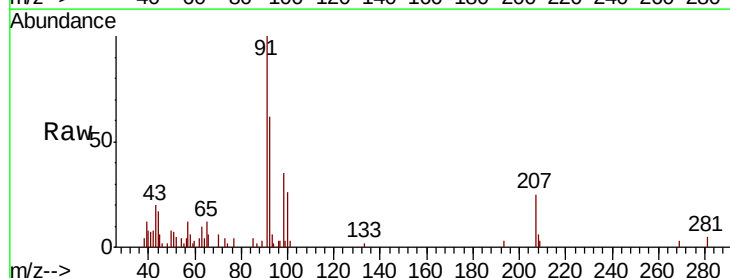
Instrument :  
MSVOA\_X  
ClientSampled :  
1364

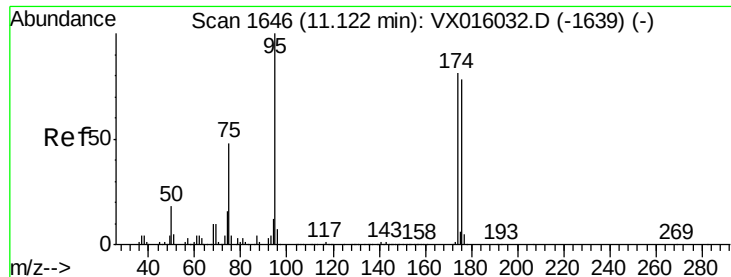
Tot Ion: 43 Resp: 142107  
Ion Ratio Lower Upper  
43 100  
58 43.1 33.0 49.4



#52  
Toluene  
Concen: 0.364 ug/l  
RT: 8.76 min Scan# 1259  
Delta R.T. -0.01 min  
Lab File: VX016344.D  
Acq: 19 May 2020 18:49

Tgt Ion: 92 Resp: 2705  
Ion Ratio Lower Upper  
92 100  
91 169.3 134.5 201.7





#62

4-Bromofluorobenzene

Concen: 53.255 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.00 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

Instrument :

MSVOA\_X

ClientSampled :

1364

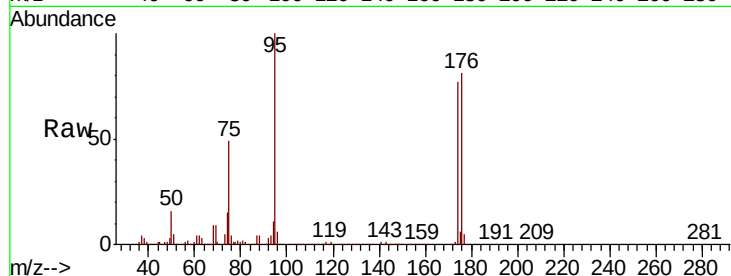
Tot Ion: 95 Resp: 204882

Ion Ratio Lower Upper

95 100

174 79.0 0.0 159.4

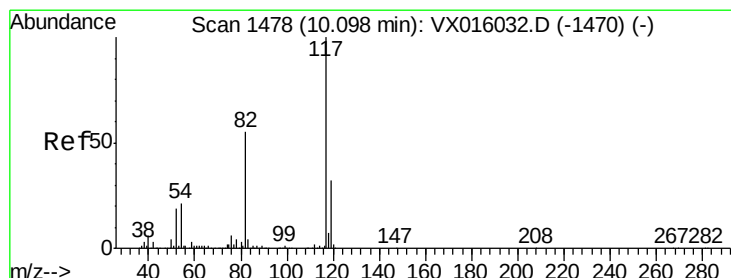
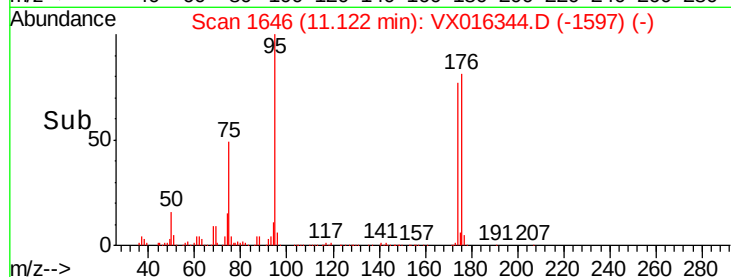
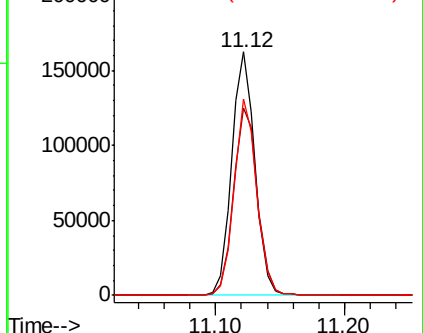
176 78.3 0.0 157.6



Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): VX0

Ion 175.80 (175.50 to 176.50): VX0



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.10 min Scan# 1478

Delta R.T. -0.00 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

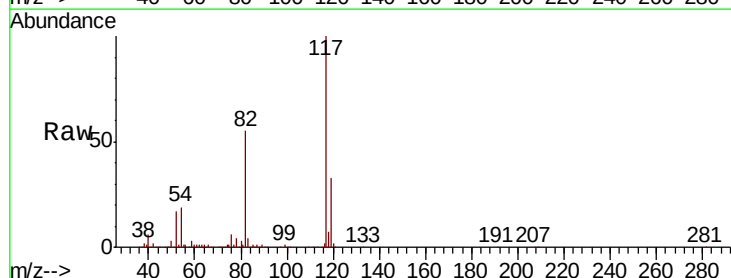
Tgt Ion: 117 Resp: 410442

Ion Ratio Lower Upper

117 100

82 55.2 44.4 66.6

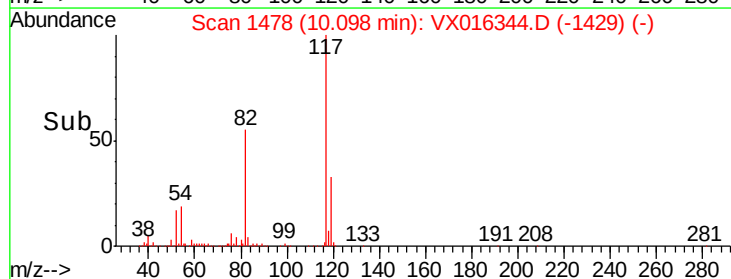
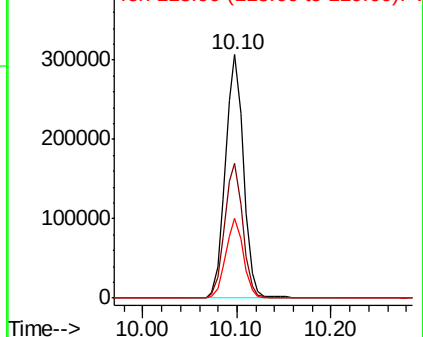
119 32.8 25.5 38.3

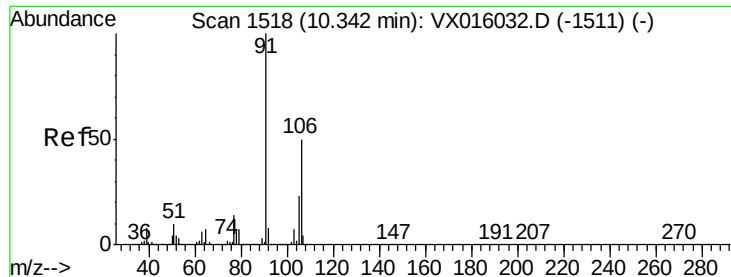


Abundance Ion 116.90 (116.60 to 117.60): VX0

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): VX0





#68

m/p-Xylenes

Concen: 0.927 ug/l

RT: 10.34 min Scan# 1518

Delta R.T. -0.00 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

Instrument :

MSVOA\_X

ClientSampled :

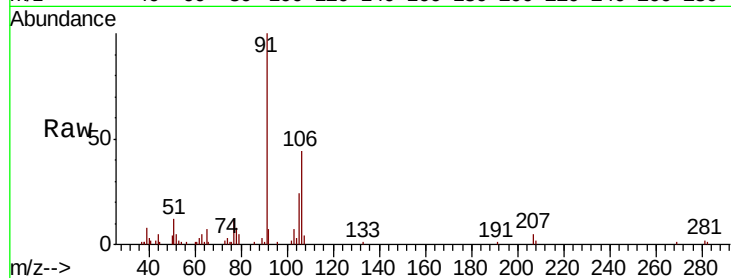
1364

Tot Ion:106 Resp: 5326

Ion Ratio Lower Upper

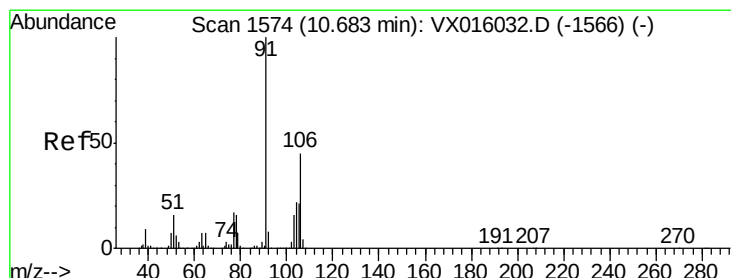
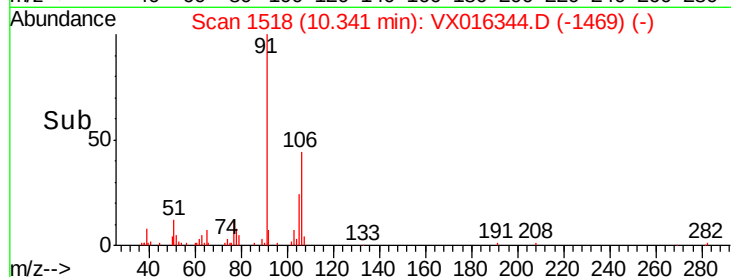
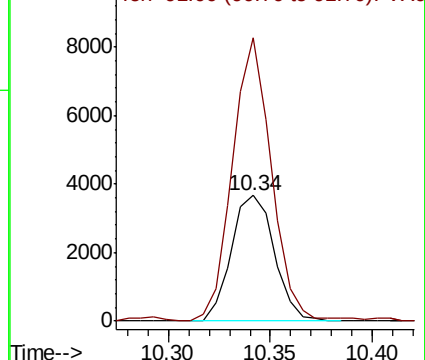
106 100

91 207.2 161.7 242.5



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VX0



#69

o-Xylene

Concen: 1.202 ug/l

RT: 10.68 min Scan# 1574

Delta R.T. -0.00 min

Lab File: VX016344.D

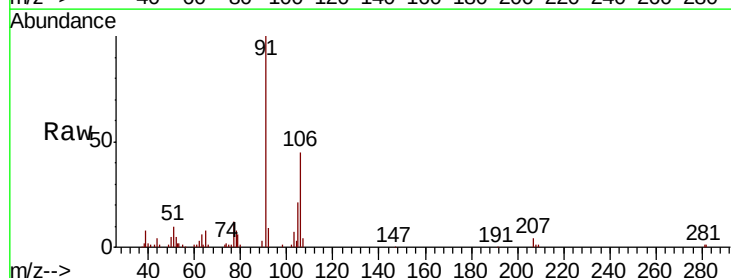
Acq: 19 May 2020 18:49

Tgt Ion:106 Resp: 6640

Ion Ratio Lower Upper

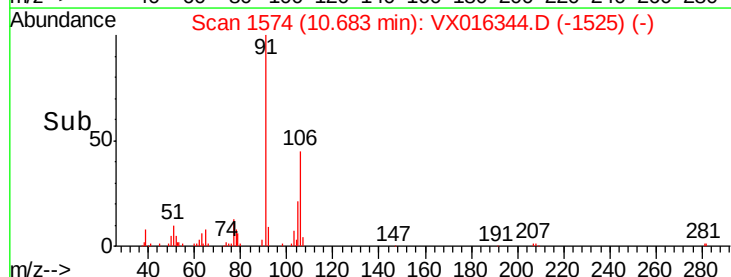
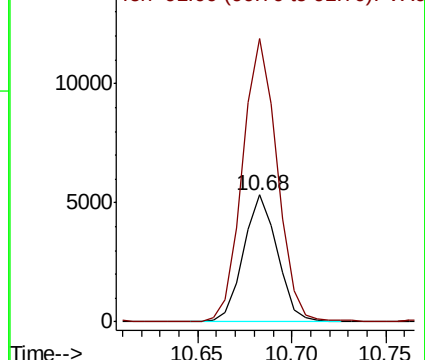
106 100

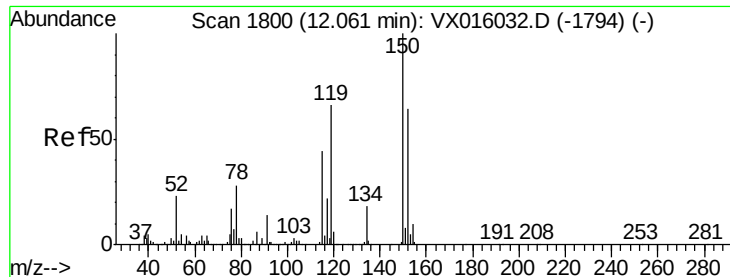
91 228.8 107.5 322.6



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VX0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.07 min Scan# 1801

Delta R.T. 0.01 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

Instrument :

MSVOA\_X

ClientSampleId :

1364

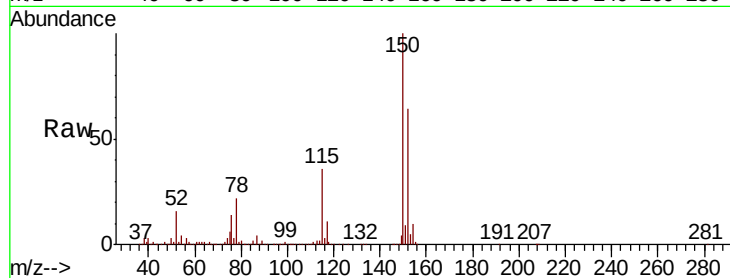
Tot Ion:152 Resp: 199087

Ion Ratio Lower Upper

152 100

115 59.1 41.3 124.1

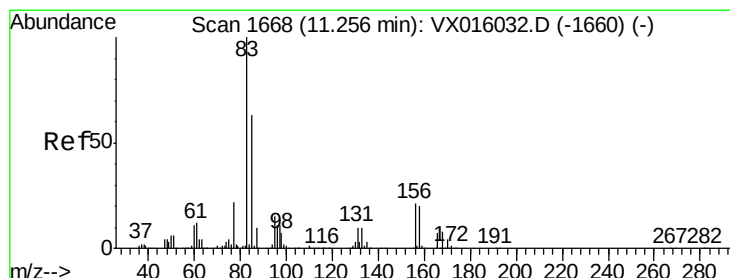
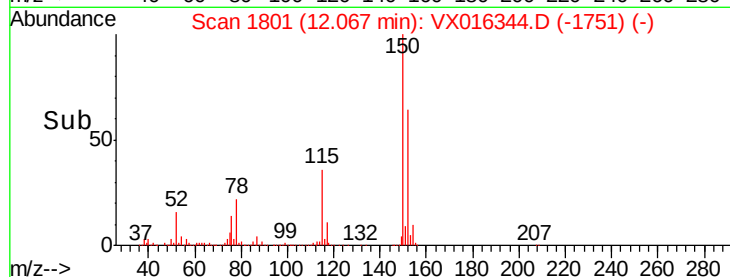
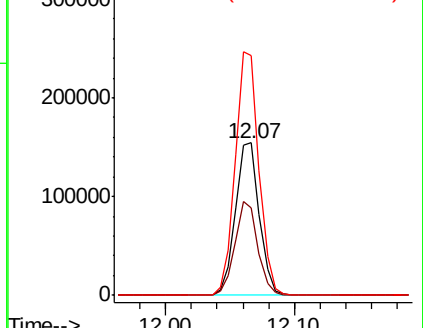
150 158.2 0.0 352.2



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



#75

1,1,2,2-Tetrachloroethane

Concen: 2.056 ug/l

RT: 11.16 min Scan# 1653

Delta R.T. -0.09 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

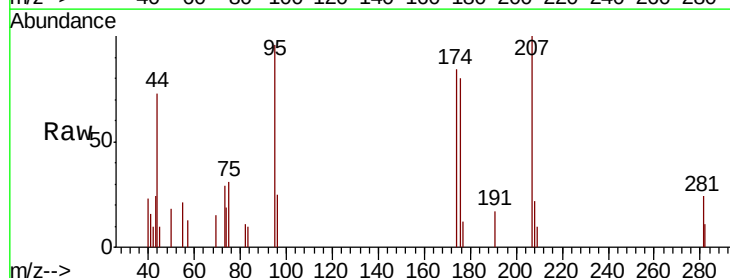
Tgt Ion: 83 Resp: 19

Ion Ratio Lower Upper

83 100

131 0.0 5.1 15.4#

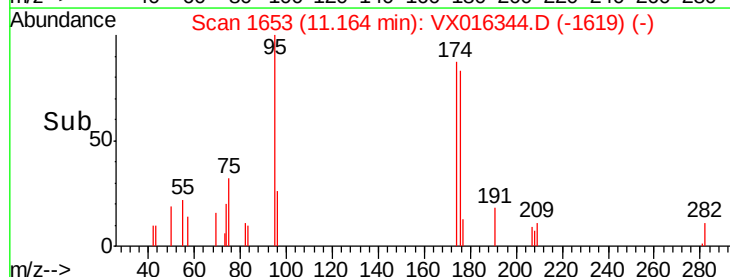
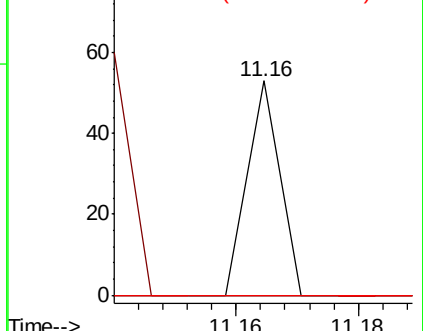
85 0.0 32.0 96.0#

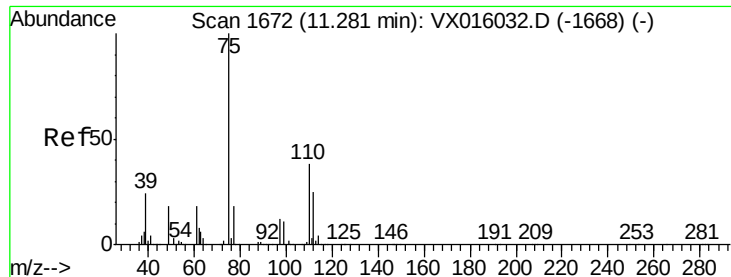


Abundance Ion 82.90 (82.60 to 83.60): VX0

Ion 130.80 (130.50 to 131.50): V

Ion 84.90 (84.60 to 85.60): VX0





#76

1,2,3-Trichloropropane

Concen: 21.761 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.16 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

Instrument :

MSVOA\_X

ClientSampled :

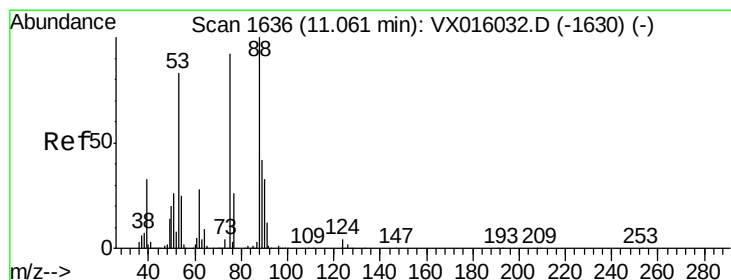
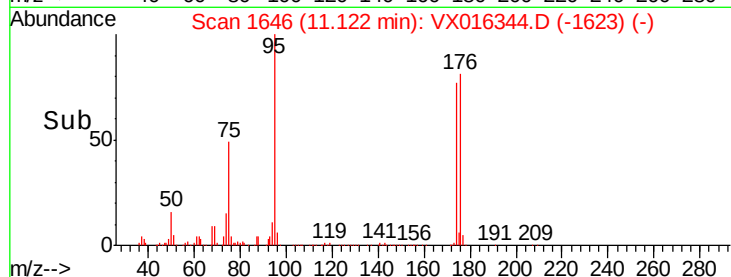
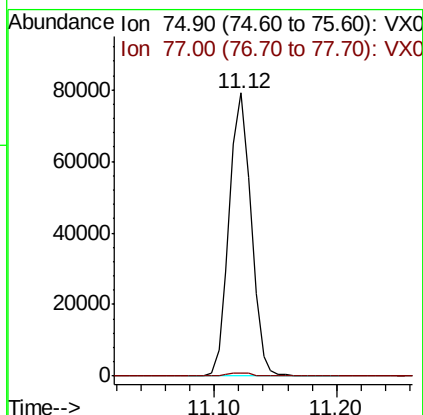
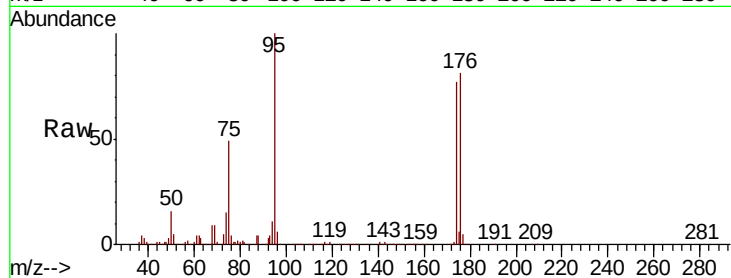
1364

Tot Ion: 75 Resp: 98310

Ion Ratio Lower Upper

75 100

77 1.3 21.2 63.6#



#81

trans-1,4-Dichloro-2-butene

Concen: 51.858 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. 0.06 min

Lab File: VX016344.D

Acq: 19 May 2020 18:49

Tgt Ion: 75 Resp: 98310

Ion Ratio Lower Upper

75 100

53 0.0 73.1 109.7#

89 0.0 36.7 55.1#

