

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW051520\  
 Data File : VW015433.D  
 Acq On : 15 May 2020 14:50  
 Operator : SY/VA  
 Sample : L2679-02  
 Misc : 9.24G/5ML/MSVOA W/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: May 16 02:50:43 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W050620S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 05 18:41:17 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 187232   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 313697   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 278352   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.55 | 152  | 131236   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 112790   | 54.80 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 109.60% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 96146    | 53.40 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.80% |      |
| 50) Toluene-d8            | 10.32  | 98  | 387118   | 51.95 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.90% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 140762   | 51.16 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.32% |      |

## Target Compounds

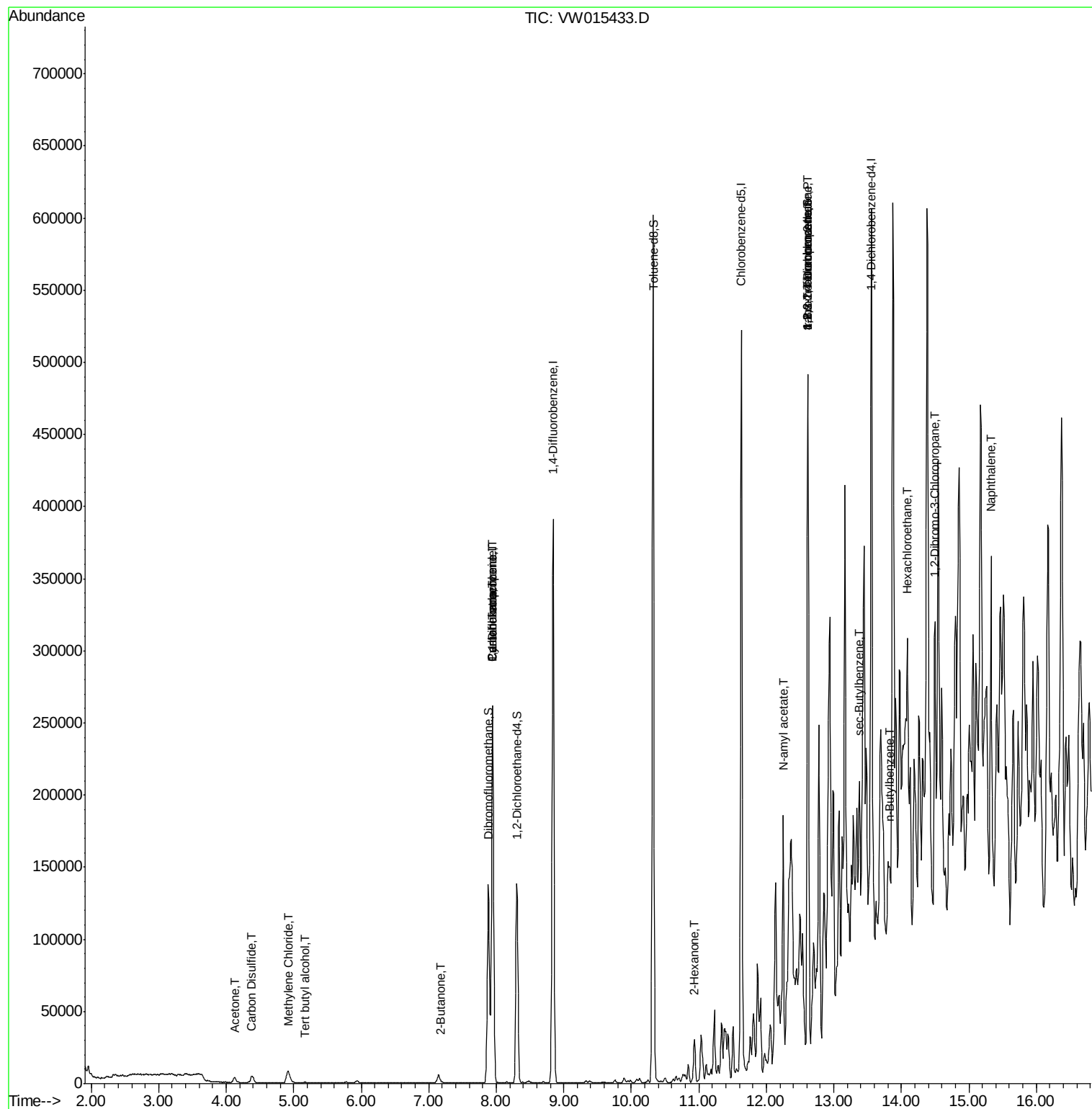
|                                |       |     |       |         |        | Qvalue |
|--------------------------------|-------|-----|-------|---------|--------|--------|
| 11) Tert butyl alcohol         | 5.17  | 59  | 923   | 7.777   | ug/l # | 77     |
| 16) Acetone                    | 4.12  | 43  | 6548  | 20.480  | ug/l   | 98     |
| 17) Carbon Disulfide           | 4.38  | 76  | 10092 | 1.819   | ug/l # | 94     |
| 20) Methylene Chloride         | 4.92  | 84  | 7018  | 3.364   | ug/l   | 96     |
| 25) 2-Butanone                 | 7.18  | 43  | 1643  | 3.297   | ug/l # | 82     |
| 31) Cyclohexane                | 7.95  | 56  | 4893  | 1.297   | ug/l # | 16     |
| 36) 1,1-Dichloropropene        | 7.95  | 75  | 16387 | 5.317   | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 7.95  | 117 | 19728 | 6.847   | ug/l # | 17     |
| 59) 2-Hexanone                 | 10.93 | 43  | 11944 | 14.976  | ug/l # | 30     |
| 74) N-amyl acetate             | 12.25 | 43  | 35301 | 15.242  | ug/l # | 65     |
| 75) 1,1,2,2-Tetrachloroethane  | 12.62 | 83  | 2401  | 1.567   | ug/l   | 67     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75  | 74285 | 68.808  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75  | 74285 | 136.102 | ug/l # | 10     |
| 85) sec-Butylbenzene           | 13.38 | 105 | 31189 | 3.143   | ug/l   | 90     |
| 89) n-Butylbenzene             | 13.82 | 91  | 9152  | 1.033   | ug/l # | 62     |
| 90) Hexachloroethane           | 14.10 | 117 | 4029  | 2.416   | ug/l # | 14     |
| 92) 1,2-Dibromo-3-Chloropropan | 14.50 | 75  | 979   | 3.659   | ug/l # | 6      |
| 95) Naphthalene                | 15.33 | 128 | 6053  | 1.404   | ug/l # | 1      |

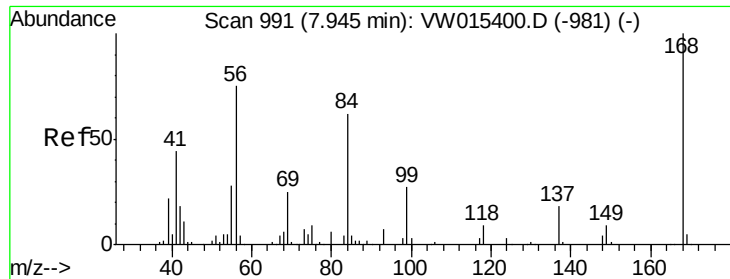
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW051520\  
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Sample : L2679-02  
Misc : 9.24G/5ML/MSVOA W/SOIL  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :

Quant Time: May 16 02:50:43 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W050620S.M  
Quant Title : SW846 8260  
QLast Update : Tue May 05 18:41:17 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.00 min

Lab File: VW015433.D

Acq: 15 May 2020 14:50

Instrument :

MSVOA\_W

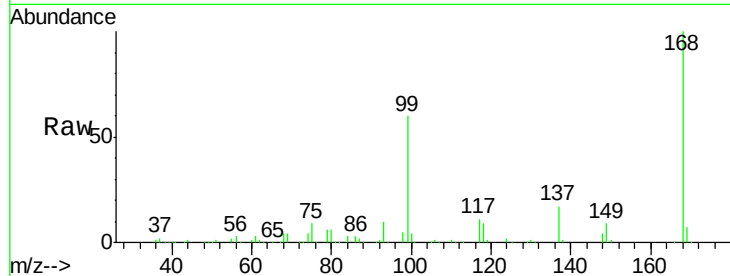
ClientSampleId :

Tot Ion:168 Resp: 187232

Ion Ratio Lower Upper

168 100

99 60.1 50.3 75.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

80000

60000

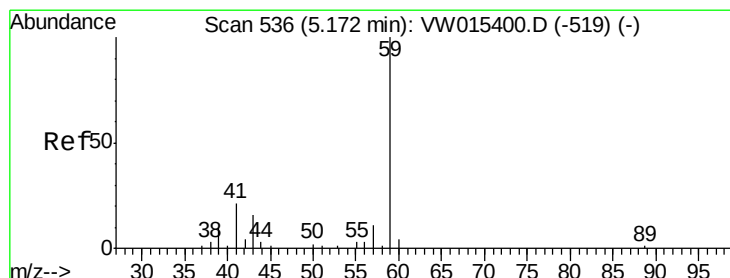
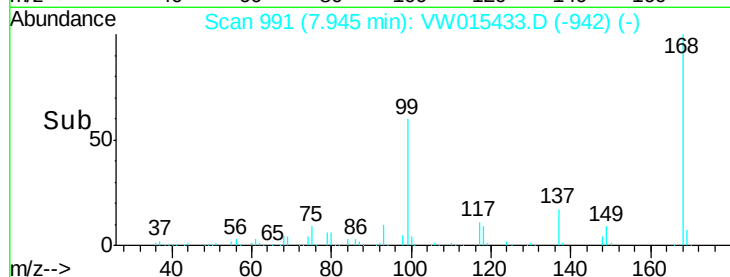
40000

20000

0

7.90 8.00 8.10

Time-->



#11

Tert butyl alcohol

Concen: 7.777 ug/l

RT: 5.17 min Scan# 536

Delta R.T. -0.00 min

Lab File: VW015433.D

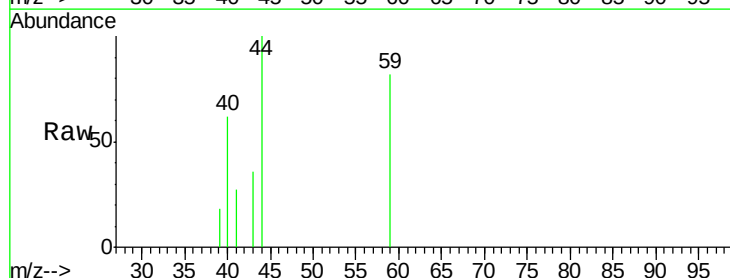
Acq: 15 May 2020 14:50

Tgt Ion: 59 Resp: 923

Ion Ratio Lower Upper

59 100

57 2.2 8.6 13.0#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW

5.17

250

200

150

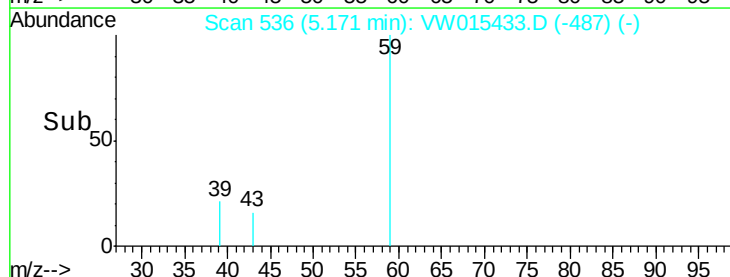
100

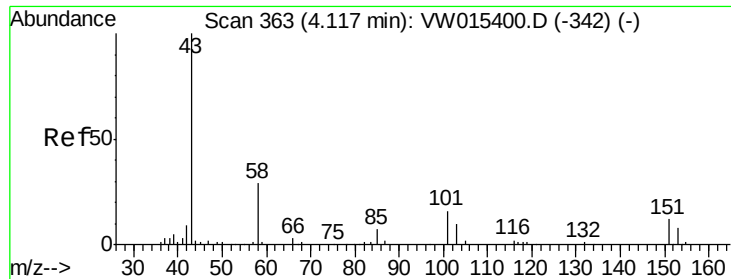
50

0

5.05 5.10 5.15 5.20 5.25

Time-->





#16

Acetone

Concen: 20.480 ug/l

RT: 4.12 min Scan# 364

Delta R.T. 0.01 min

Lab File: VW015433.D

Acq: 15 May 2020 14:50

Instrument :

MSVOA\_W

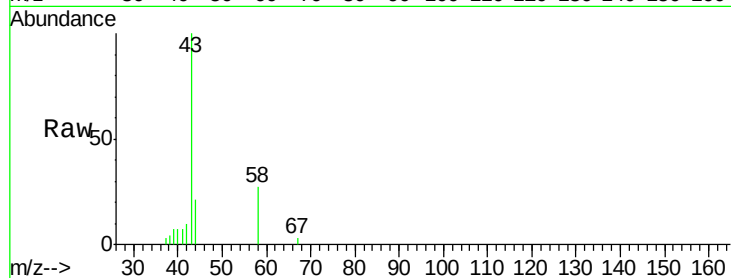
ClientSampleId :

Tot Ion: 43 Resp: 6548

Ion Ratio Lower Upper

43 100

58 27.9 23.4 35.0



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW

4.12

2500

2000

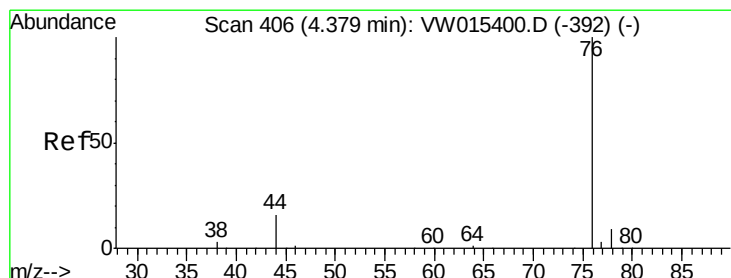
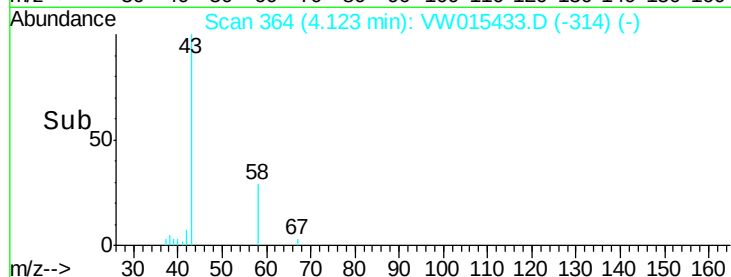
1500

1000

500

0

Time-->



#17

Carbon Disulfide

Concen: 1.819 ug/l

RT: 4.38 min Scan# 407

Delta R.T. 0.01 min

Lab File: VW015433.D

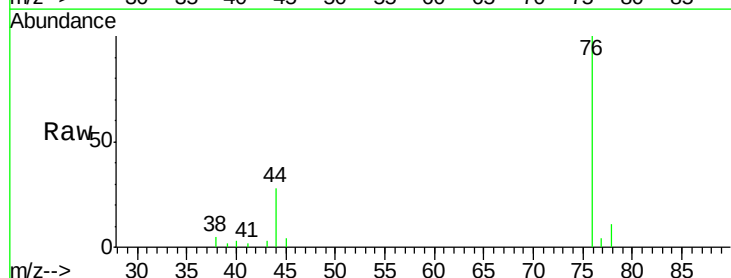
Acq: 15 May 2020 14:50

Tgt Ion: 76 Resp: 10092

Ion Ratio Lower Upper

76 100

78 11.1 7.3 10.9#



Abundance Ion 75.90 (75.60 to 76.60): VW

Ion 77.90 (77.60 to 78.60): VW

4.38

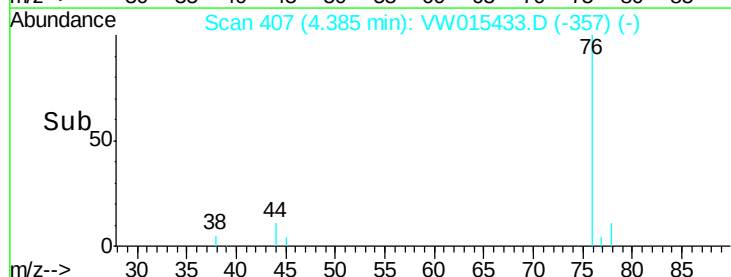
3000

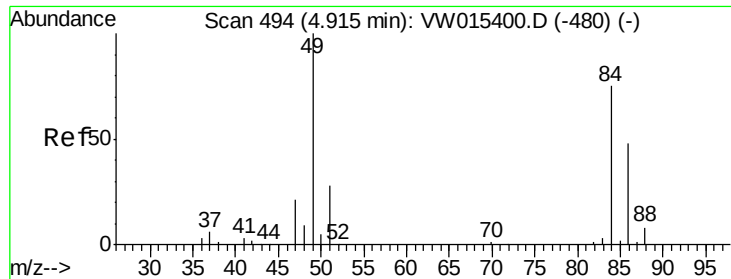
2000

1000

0

Time-->

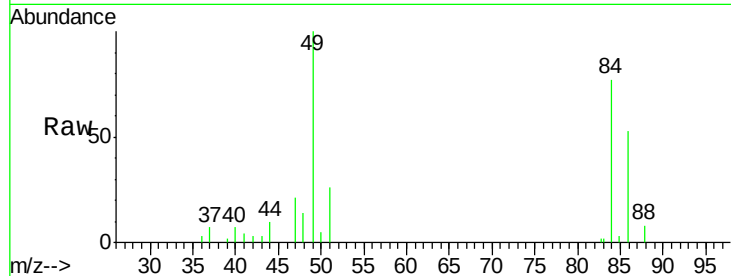




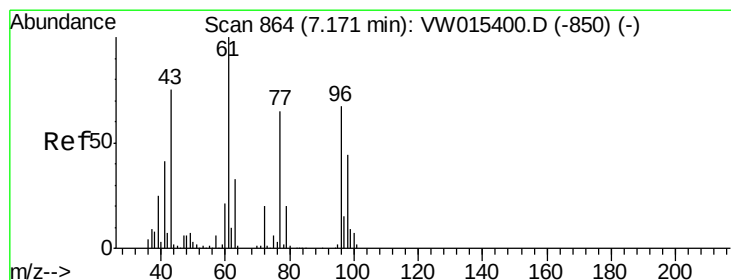
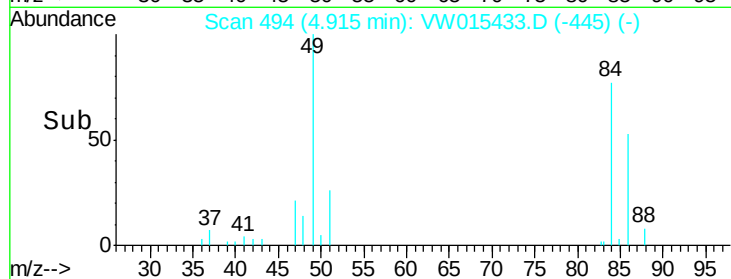
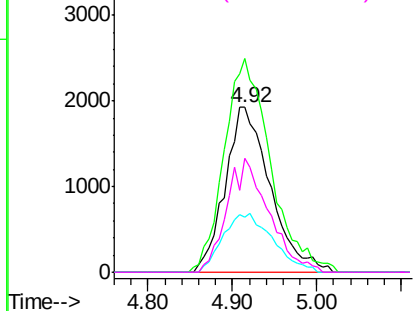
#20  
Methylene Chloride  
Concen: 3.364 ug/l  
RT: 4.92 min Scan# 494  
Delta R.T. -0.00 min  
Lab File: VW015433.D  
Acq: 15 May 2020 14:50

Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion: 84 Resp: 7018  
Ion Ratio Lower Upper  
84 100  
49 129.6 106.4 159.6  
51 33.5 30.2 45.2  
86 69.1 51.6 77.4

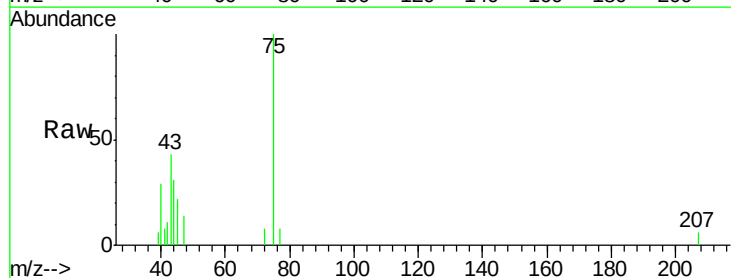


Abundance Ion 83.90 (83.60 to 84.60): VW  
Ion 48.90 (48.60 to 49.60): VW  
Ion 50.90 (50.60 to 51.60): VW  
Ion 85.90 (85.60 to 86.60): VW

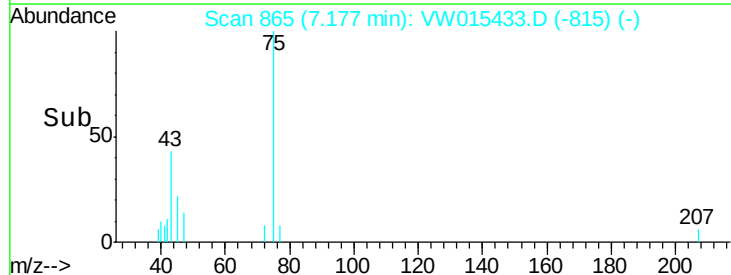
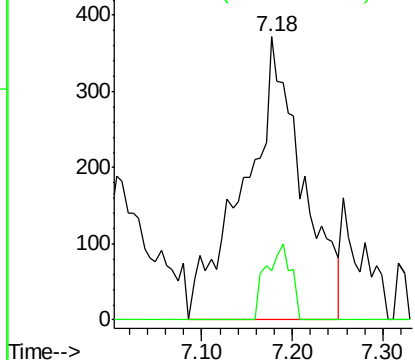


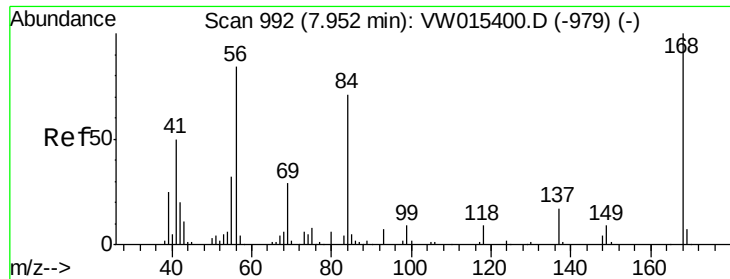
#25  
2-Butanone  
Concen: 3.297 ug/l  
RT: 7.18 min Scan# 865  
Delta R.T. 0.01 min  
Lab File: VW015433.D  
Acq: 15 May 2020 14:50

Tgt Ion: 43 Resp: 1643  
Ion Ratio Lower Upper  
43 100  
72 17.5 21.4 32.0#



Abundance Ion 43.00 (42.70 to 43.70): VW  
Ion 72.00 (71.70 to 72.70): VW

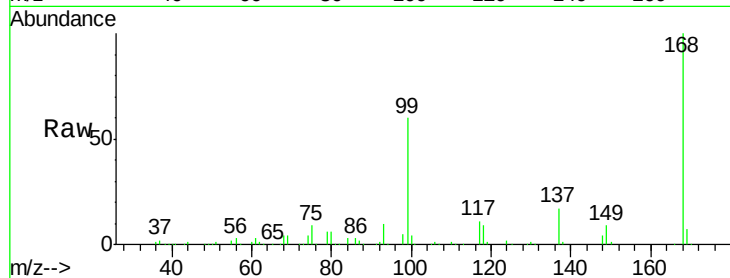




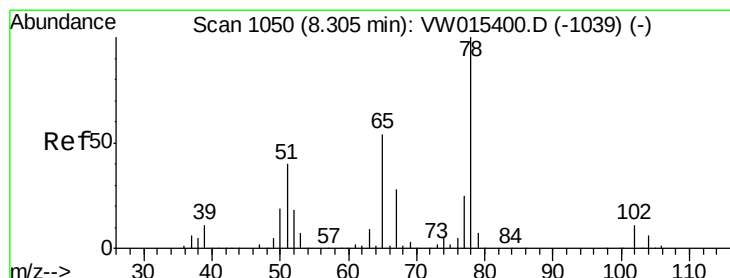
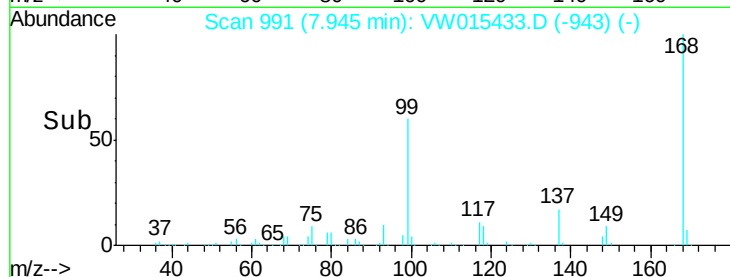
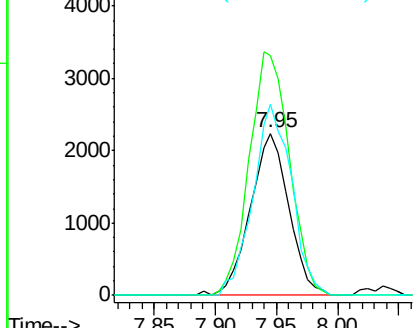
#31  
Cyclohexane  
Concen: 1.297 ug/l  
RT: 7.95 min Scan# 991  
Delta R.T. -0.01 min  
Lab File: VW015433.D  
Acq: 15 May 2020 14:50

Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion: 56 Resp: 4893  
Ion Ratio Lower Upper  
56 100  
69 148.4 27.2 40.8#  
84 118.1 67.7 101.5#

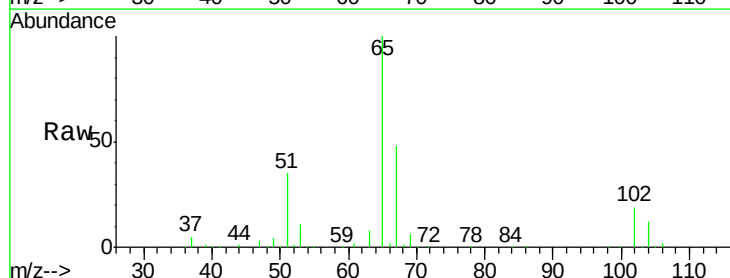


Abundance Ion 56.00 (55.70 to 56.70): VW  
Ion 69.00 (68.70 to 69.70): VW  
Ion 84.00 (83.70 to 84.70): VW

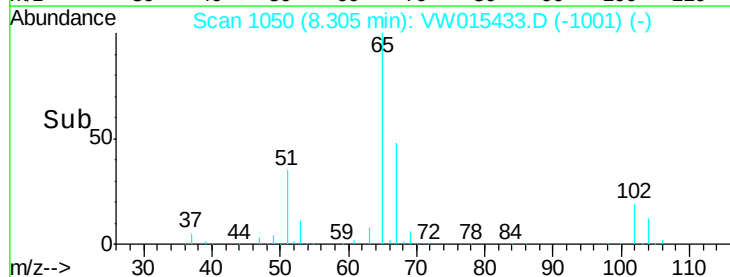
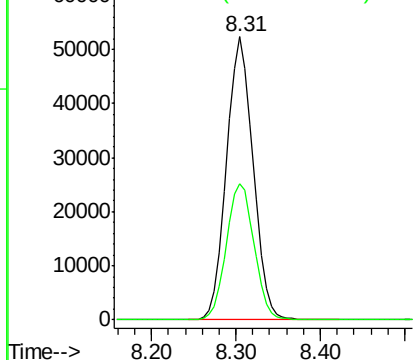


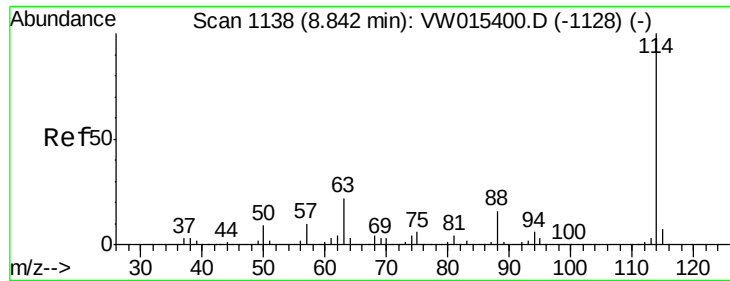
#33  
1,2-Dichloroethane-d4  
Concen: 54.801 ug/l  
RT: 8.31 min Scan# 1050  
Delta R.T. -0.00 min  
Lab File: VW015433.D  
Acq: 15 May 2020 14:50

Tgt Ion: 65 Resp: 112790  
Ion Ratio Lower Upper  
65 100  
67 50.0 0.0 102.8



Abundance Ion 64.90 (64.60 to 65.60): VW  
Ion 66.90 (66.60 to 67.60): VW





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.84 min Scan# 1138

Delta R.T. -0.00 min

Lab File: VW015433.D

Acq: 15 May 2020 14:50

Instrument :

MSVOA\_W

ClientSampleId :

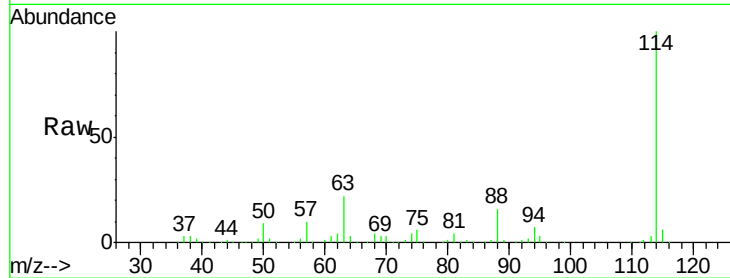
Tot Ion:114 Resp: 313697

Ion Ratio Lower Upper

114 100

63 22.4 0.0 43.4

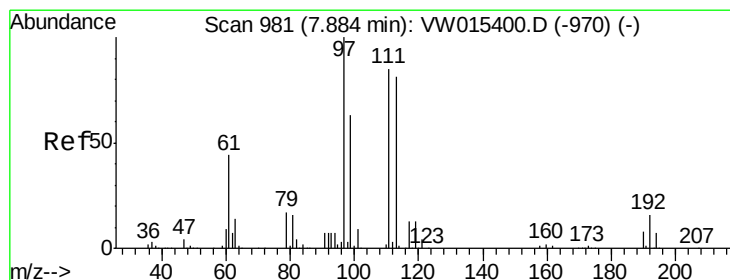
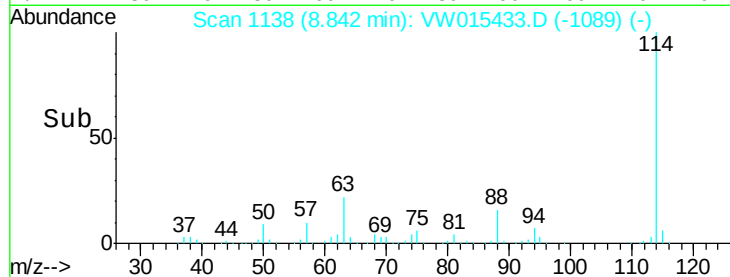
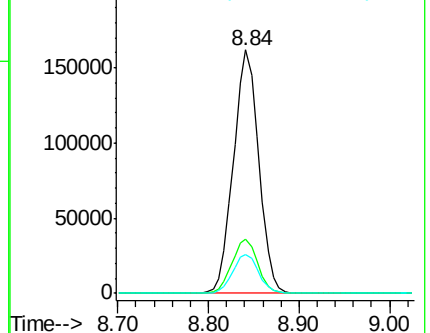
88 16.1 0.0 31.8



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VW

Ion 87.90 (87.60 to 88.60): VW



#35

Dibromofluoromethane

Concen: 53.400 ug/l

RT: 7.88 min Scan# 981

Delta R.T. -0.00 min

Lab File: VW015433.D

Acq: 15 May 2020 14:50

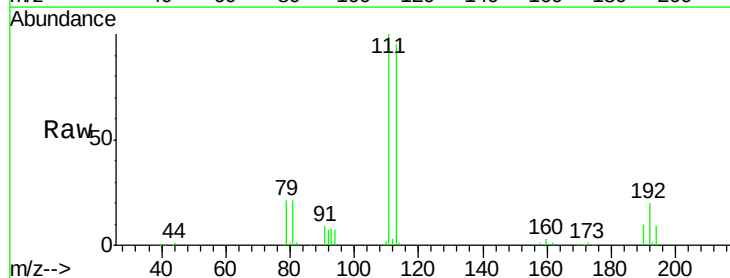
Tgt Ion:113 Resp: 96146

Ion Ratio Lower Upper

113 100

111 102.8 82.9 124.3

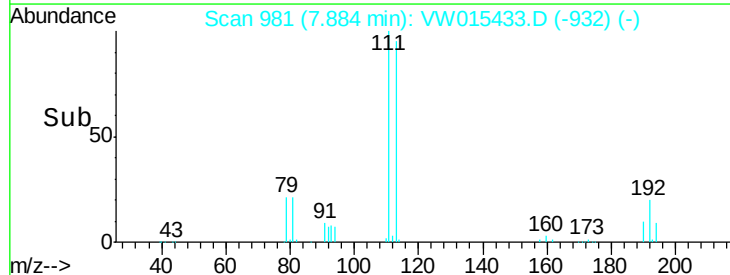
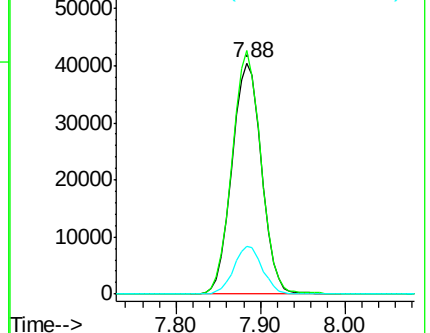
192 19.9 15.4 23.0

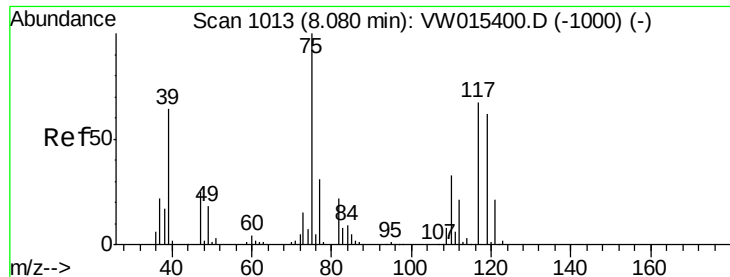


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

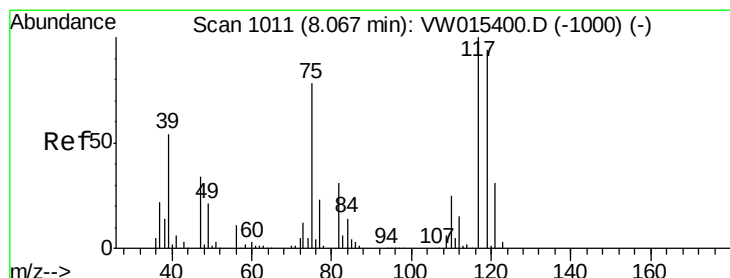
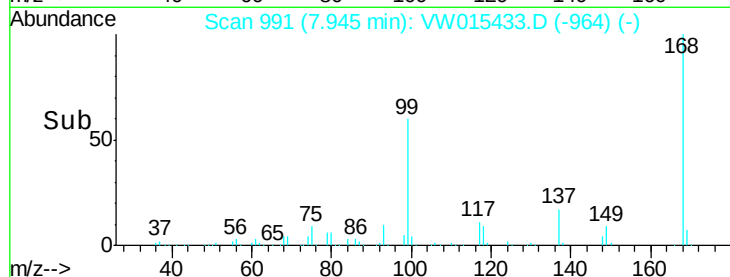
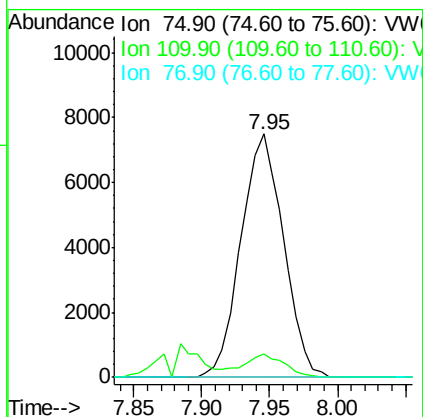
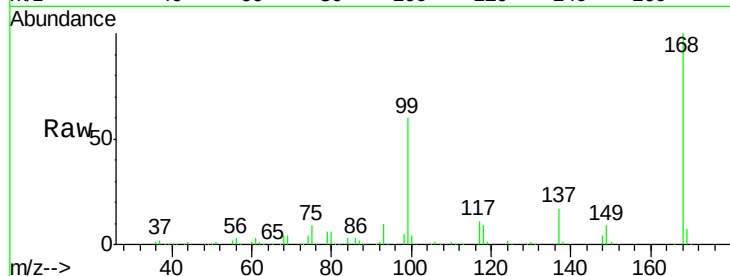




#36  
 1,1-Dichloropropene  
 Concen: 5.317 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.13 min  
 Lab File: VW015433.D  
 Acq: 15 May 2020 14:50

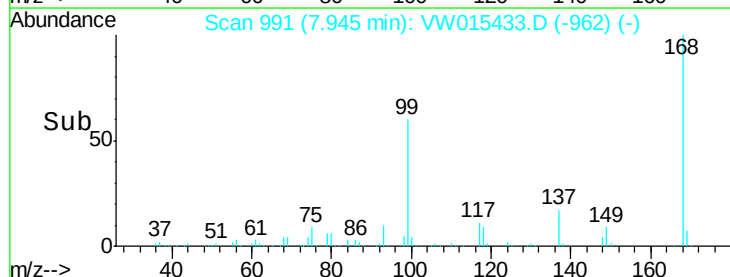
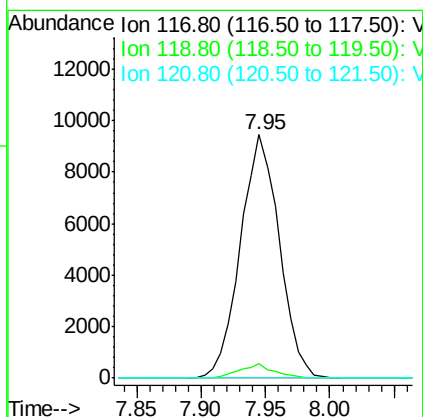
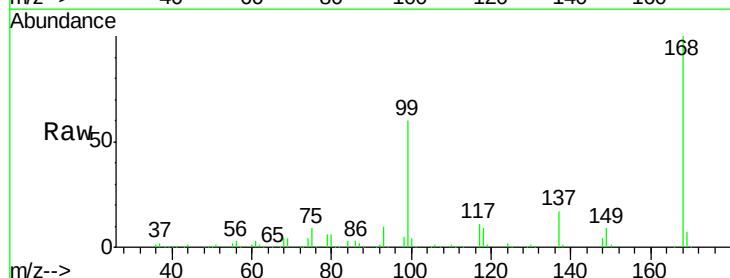
Instrument :  
 MSVOA\_W  
 ClientSampleId :

Tot Ion: 75 Resp: 16387  
 Ion Ratio Lower Upper  
 75 100  
 110 9.2 16.6 49.8#  
 77 0.0 24.5 36.7#

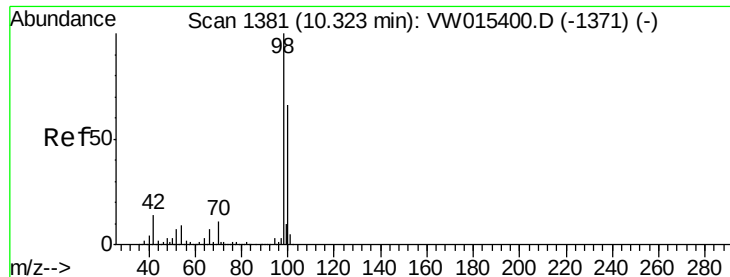


#38  
 Carbon Tetrachloride  
 Concen: 6.847 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.12 min  
 Lab File: VW015433.D  
 Acq: 15 May 2020 14:50

Tgt Ion: 117 Resp: 19728  
 Ion Ratio Lower Upper  
 117 100  
 119 5.7 75.4 113.0#  
 121 0.0 24.8 37.2#







#50

Toluene-d8

Concen: 51.955 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. -0.00 min

Lab File: VW015433.D

Acq: 15 May 2020 14:50

Instrument :

MSVOA\_W

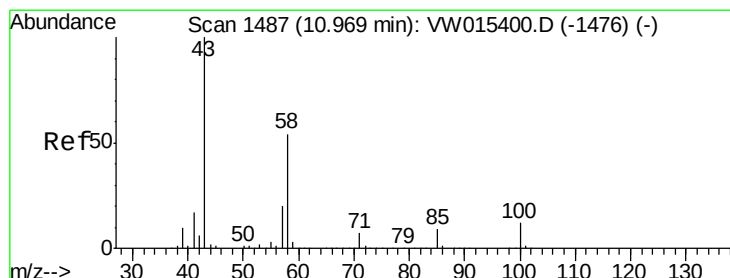
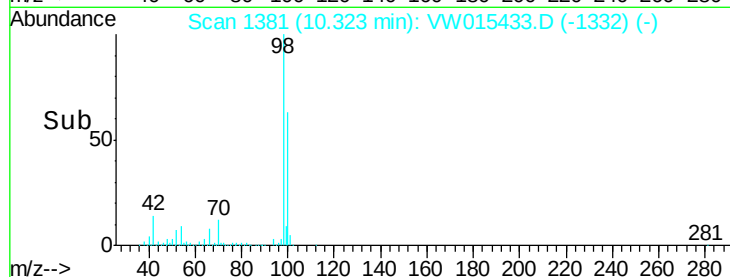
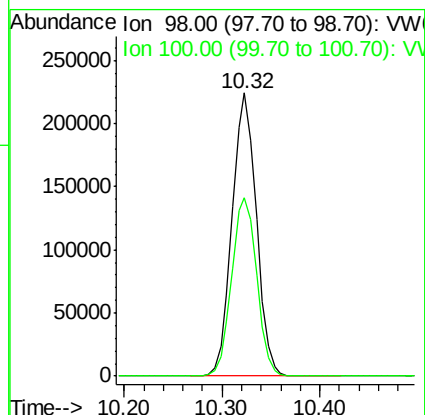
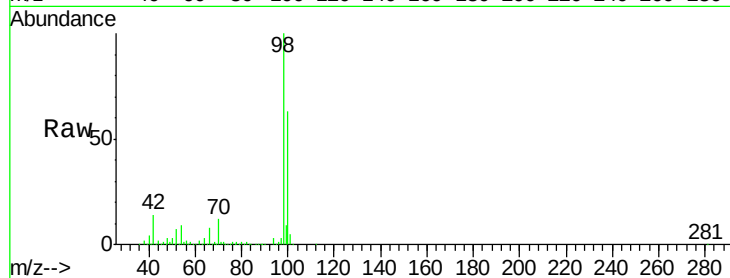
ClientSampled :

Tot Ion: 98 Resp: 387118

Ion Ratio Lower Upper

98 100

100 64.9 52.7 79.1



#59

2-Hexanone

Concen: 14.976 ug/l

RT: 10.93 min Scan# 1481

Delta R.T. -0.04 min

Lab File: VW015433.D

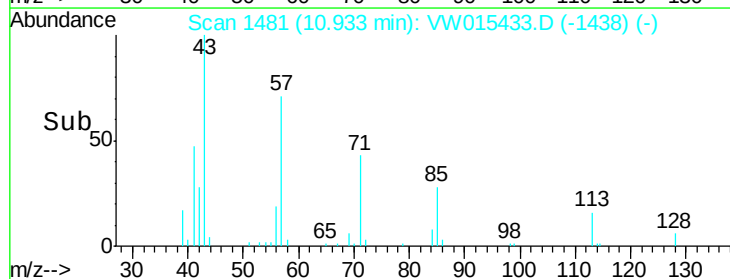
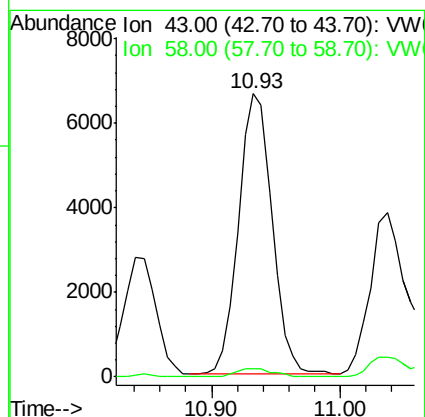
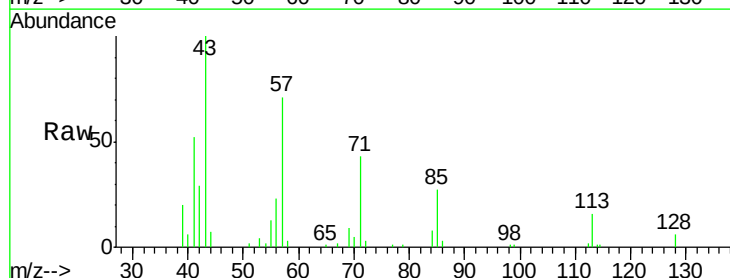
Acq: 15 May 2020 14:50

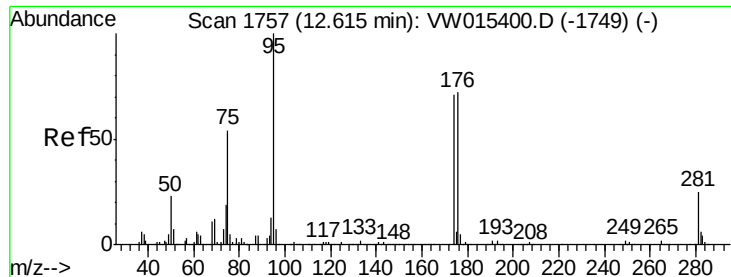
Tgt Ion: 43 Resp: 11944

Ion Ratio Lower Upper

43 100

58 3.3 26.7 80.0#





#62

4-Bromofluorobenzene

Concen: 51.161 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.00 min

Lab File: VW015433.D

Acq: 15 May 2020 14:50

Instrument :

MSVOA\_W

ClientSampleId :

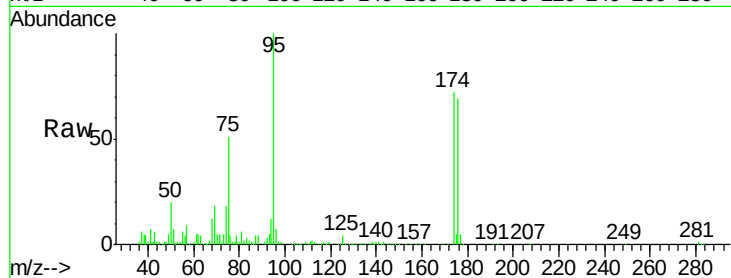
Tot Ion: 95 Resp: 140762

Ion Ratio Lower Upper

95 100

174 73.0 0.0 147.6

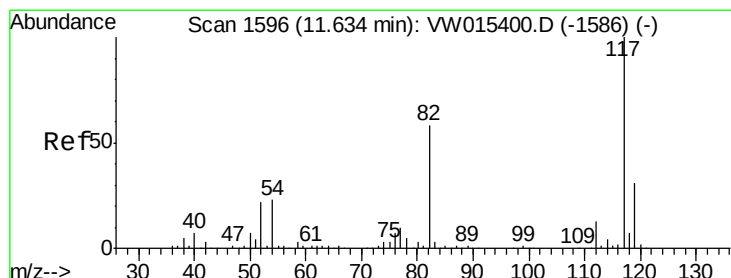
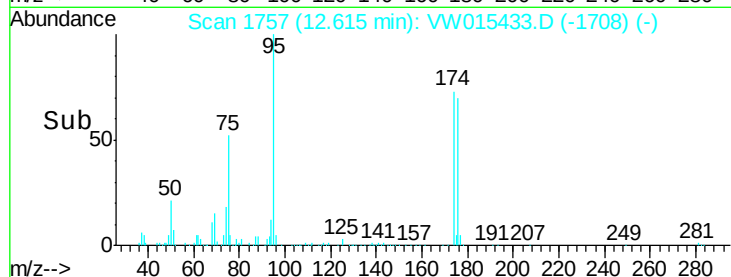
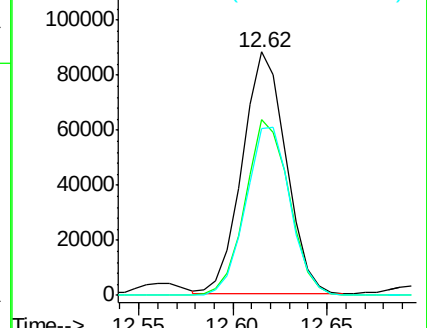
176 71.4 0.0 144.4



Abundance Ion 94.90 (94.60 to 95.60): VW

Ion 173.80 (173.50 to 174.50): VW

Ion 175.80 (175.50 to 176.50): VW



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.63 min Scan# 1595

Delta R.T. -0.01 min

Lab File: VW015433.D

Acq: 15 May 2020 14:50

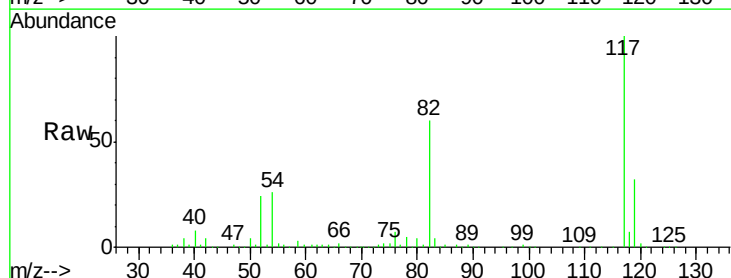
Tgt Ion: 117 Resp: 278352

Ion Ratio Lower Upper

117 100

82 60.0 46.4 69.6

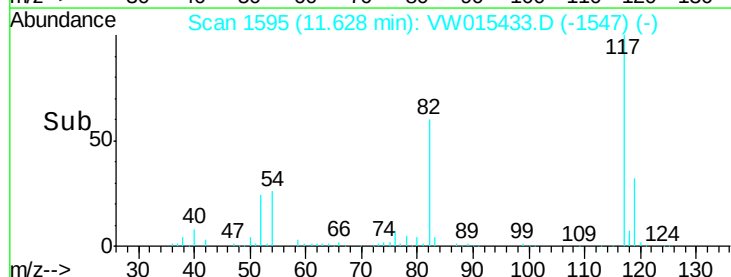
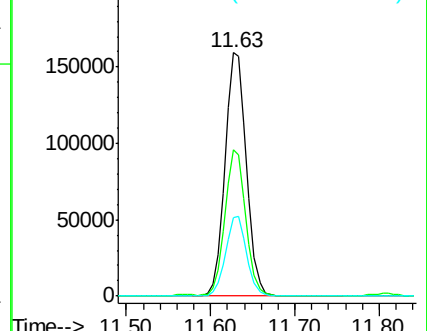
119 32.4 24.6 37.0

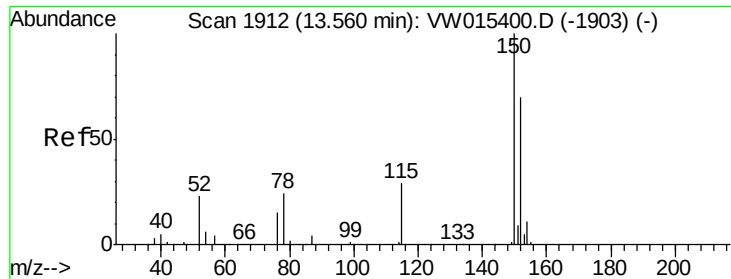


Abundance Ion 116.90 (116.60 to 117.60): VW

Ion 82.00 (81.70 to 82.70): VW

Ion 118.90 (118.60 to 119.60): VW



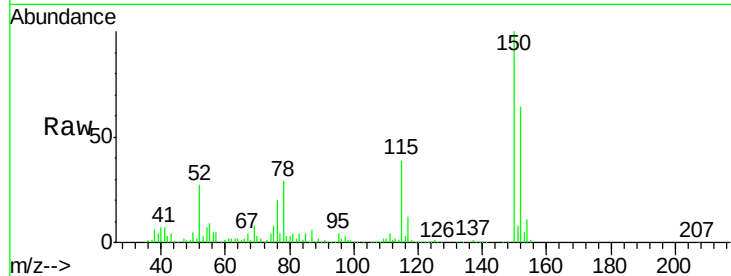


#72

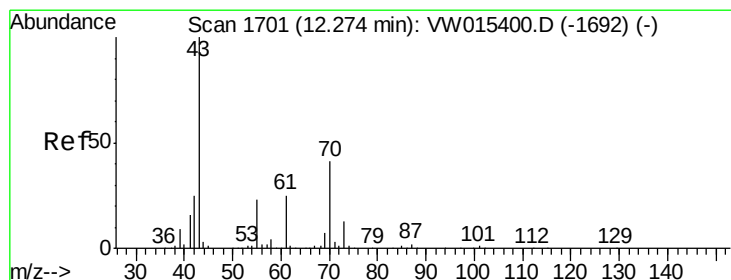
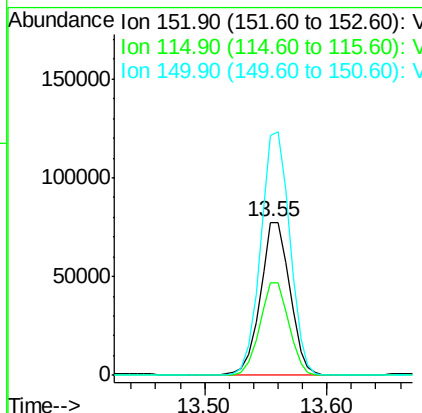
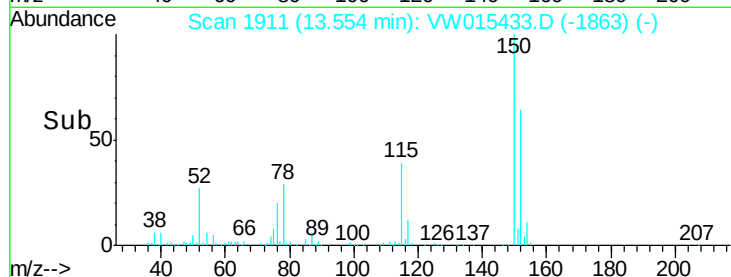
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.55 min Scan# 1911  
Delta R.T. -0.01 min  
Lab File: VW015433.D  
Acq: 15 May 2020 14:50

Instrument :  
MSVOA\_W  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 59.5  | 30.3  | 90.8  |
| 150     | 156.3 | 0.0   | 344.4 |



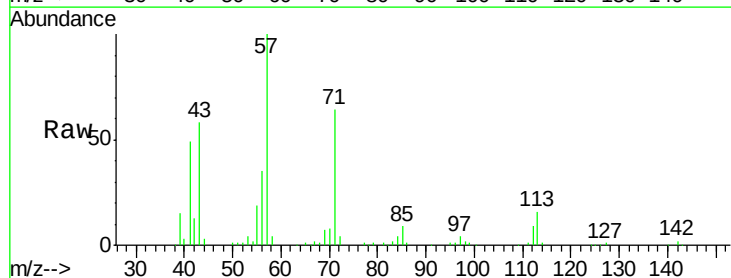
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



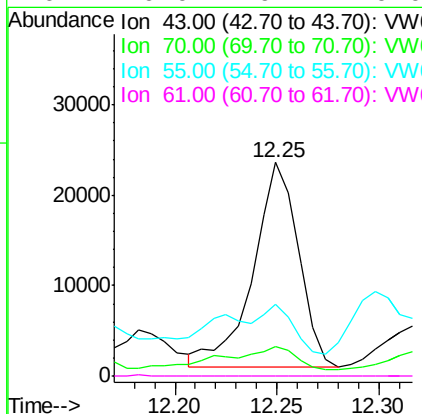
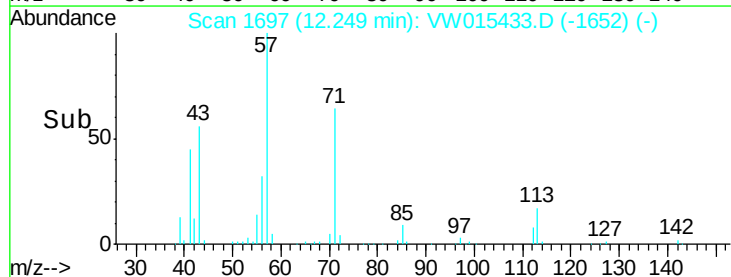
#74

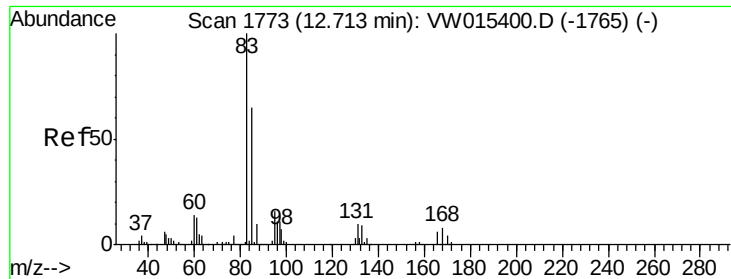
N-ethyl acetate  
Concen: 15.242 ug/l  
RT: 12.25 min Scan# 1697  
Delta R.T. -0.02 min  
Lab File: VW015433.D  
Acq: 15 May 2020 14:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 70      | 18.0  | 33.4  | 50.0# |
| 55      | 16.5  | 18.9  | 28.3# |
| 61      | 0.0   | 19.4  | 29.0# |



Abundance Ion 43.00 (42.70 to 43.70): VV  
Ion 70.00 (69.70 to 70.70): VV  
Ion 55.00 (54.70 to 55.70): VV  
Ion 61.00 (60.70 to 61.70): VV





#75

1,1,2,2-Tetrachloroethane

Concen: 1.567 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.10 min

Lab File: VW015433.D

Acq: 15 May 2020 14:50

Instrument :

MSVOA\_W

ClientSampleId :

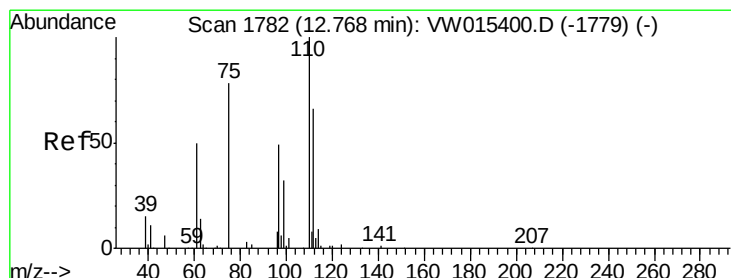
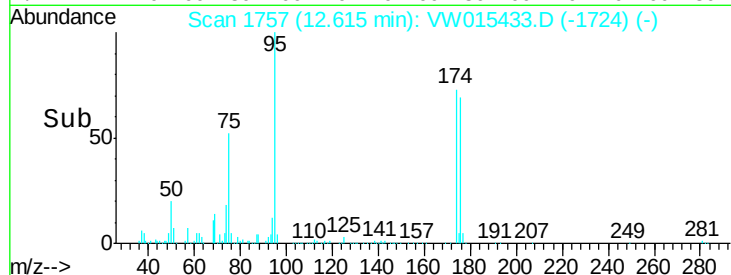
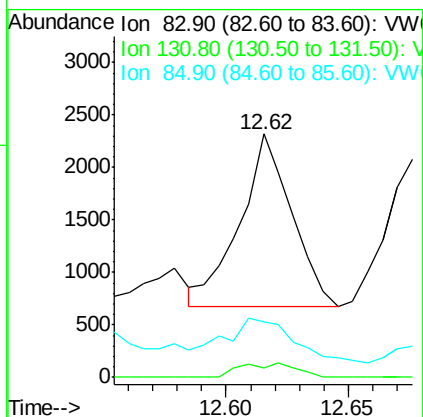
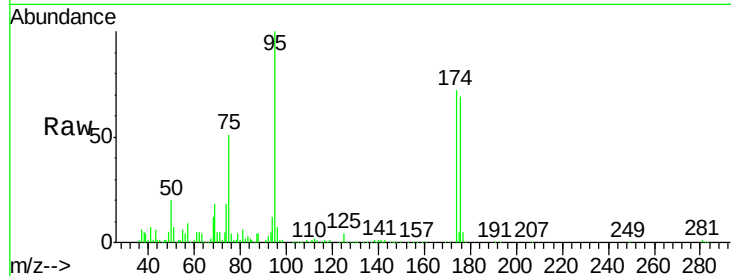
Tot Ion: 83 Resp: 2401

Ion Ratio Lower Upper

83 100

131 9.0 5.1 15.2

85 34.4 32.2 96.6



#76

1,2,3-Trichloropropane

Concen: 68.808 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.15 min

Lab File: VW015433.D

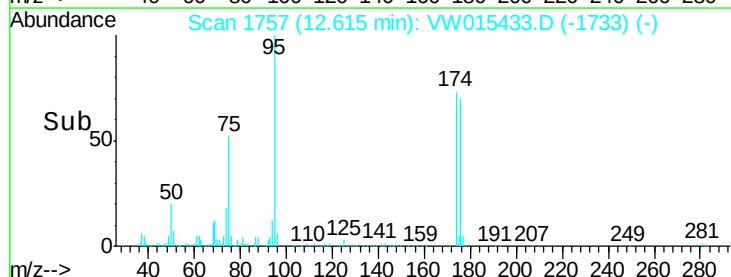
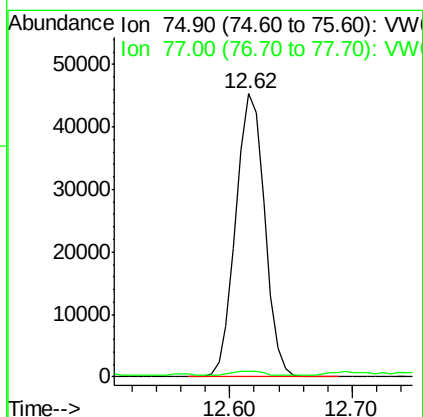
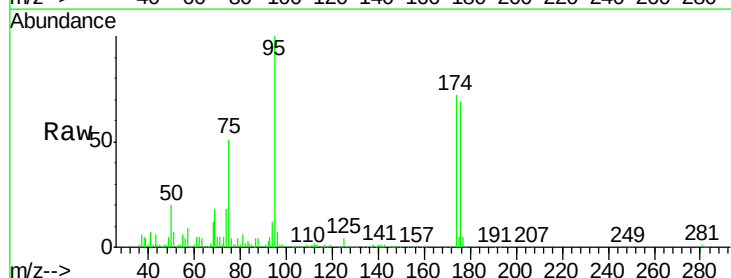
Acq: 15 May 2020 14:50

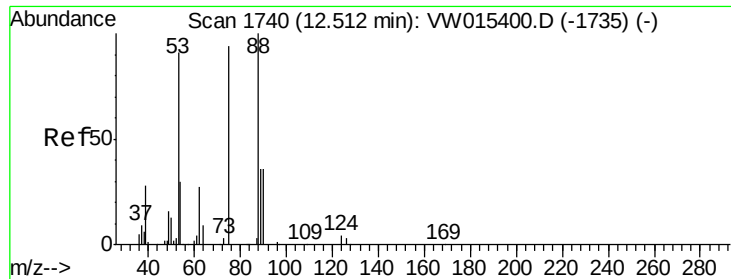
Tgt Ion: 75 Resp: 74285

Ion Ratio Lower Upper

75 100

77 1.8 0.0 0.0#





#81

trans-1,4-Dichloro-2-butene

Concen: 136.102 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. 0.10 min

Lab File: VW015433.D

Acq: 15 May 2020 14:50

Instrument :

MSVOA\_W

ClientSampleId :

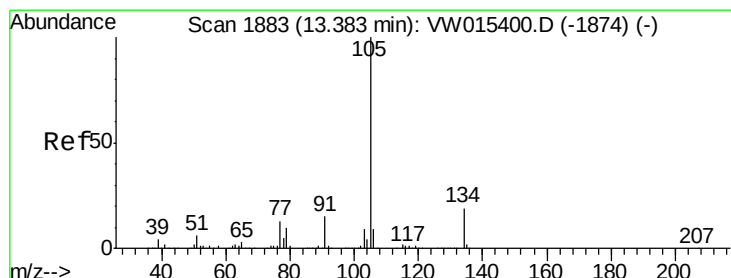
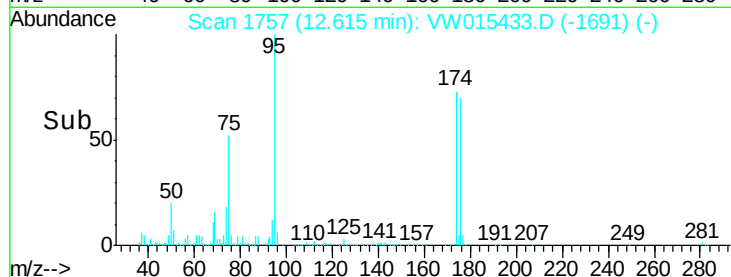
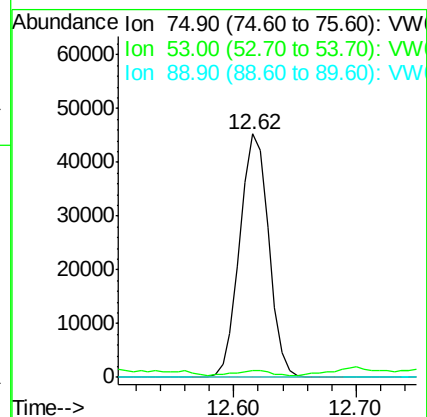
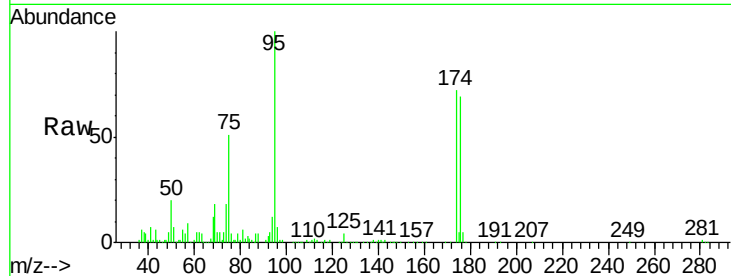
Tot Ion: 75 Resp: 74285

Ion Ratio Lower Upper

75 100

53 2.3 82.5 123.7#

89 0.0 35.8 53.8#



#85

sec-Butylbenzene

Concen: 3.143 ug/l

RT: 13.38 min Scan# 1883

Delta R.T. -0.00 min

Lab File: VW015433.D

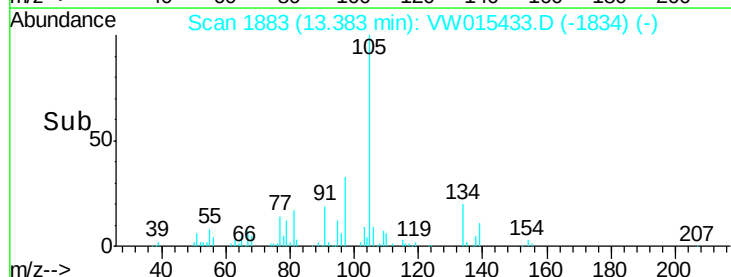
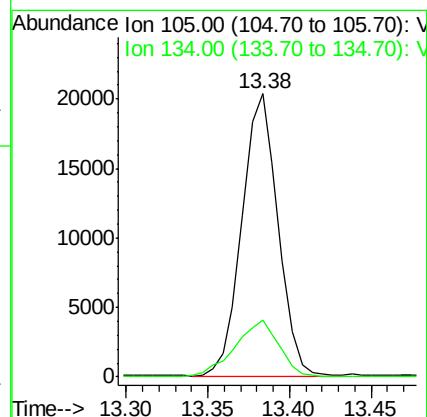
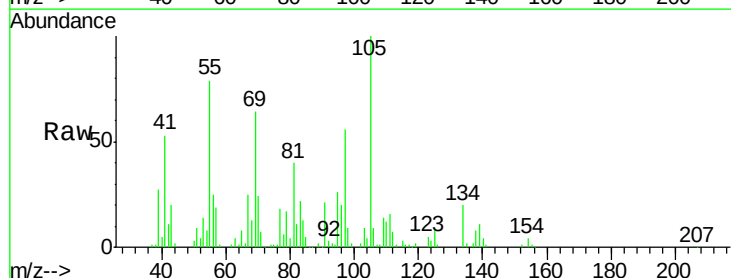
Acq: 15 May 2020 14:50

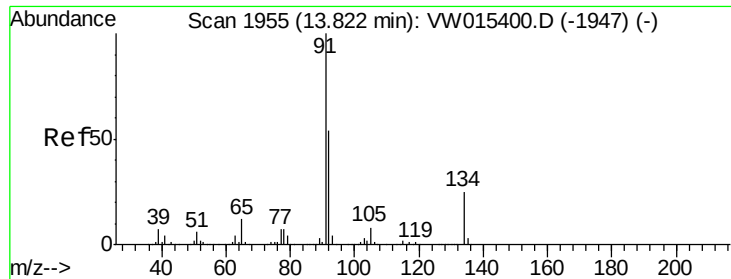
Tgt Ion: 105 Resp: 31189

Ion Ratio Lower Upper

105 100

134 24.4 9.8 29.5





#89

n-Butylbenzene

Concen: 1.033 ug/l

RT: 13.82 min Scan# 1954

Delta R.T. -0.01 min

Lab File: VW015433.D

Acq: 15 May 2020 14:50

Instrument :

MSVOA\_W

ClientSampleId :

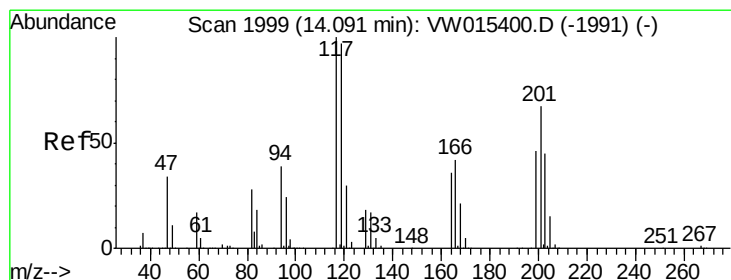
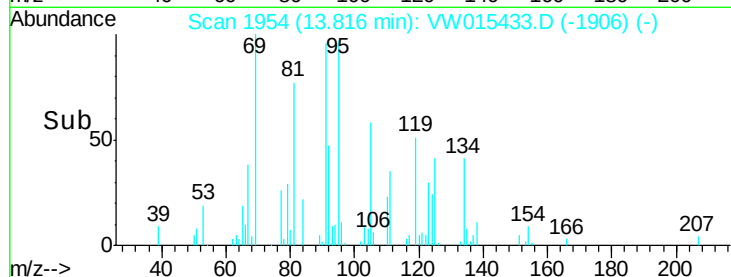
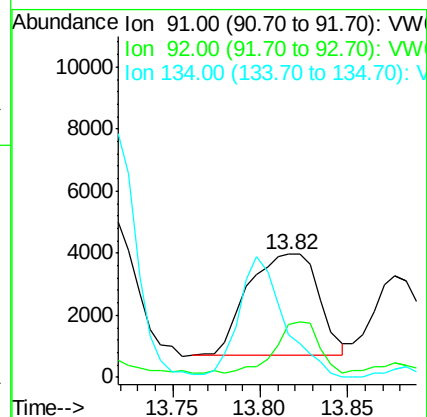
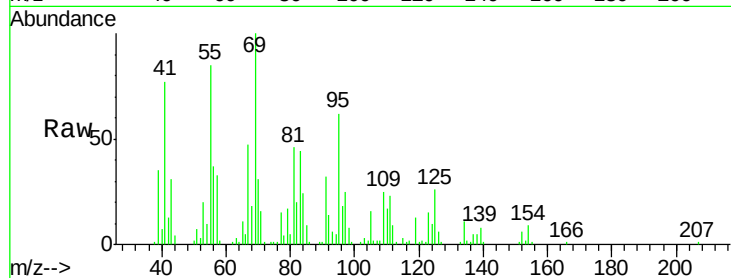
Tot Ion: 91 Resp: 9152

Ion Ratio Lower Upper

91 100

92 31.4 27.2 81.6

134 0.0 12.6 37.6#



#90

Hexachloroethane

Concen: 2.416 ug/l

RT: 14.10 min Scan# 2000

Delta R.T. 0.01 min

Lab File: VW015433.D

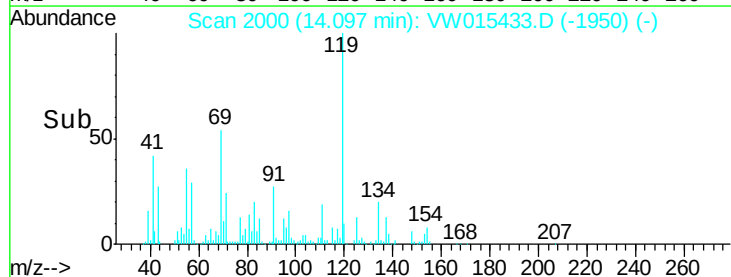
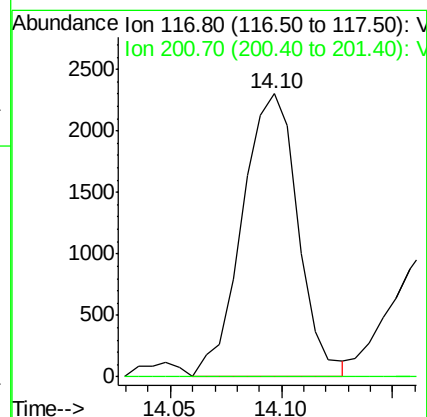
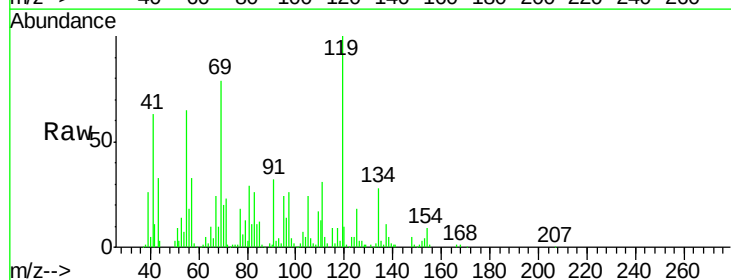
Acq: 15 May 2020 14:50

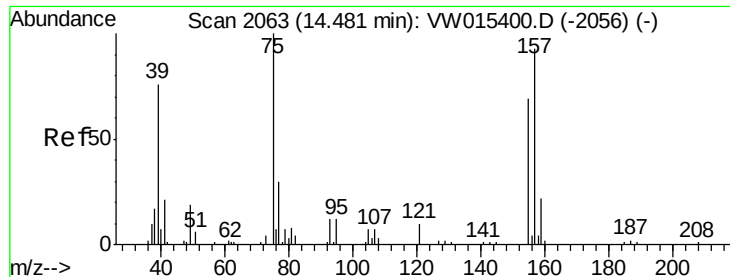
Tgt Ion: 117 Resp: 4029

Ion Ratio Lower Upper

117 100

201 0.0 35.9 107.8#





#92

1,2-Dibromo-3-Chloropropane

Concen: 3.659 ug/l

RT: 14.50 min Scan# 2066

Delta R.T. 0.02 min

Lab File: VW015433.D

Acq: 15 May 2020 14:50

Instrument :

MSVOA\_W

ClientSampled :

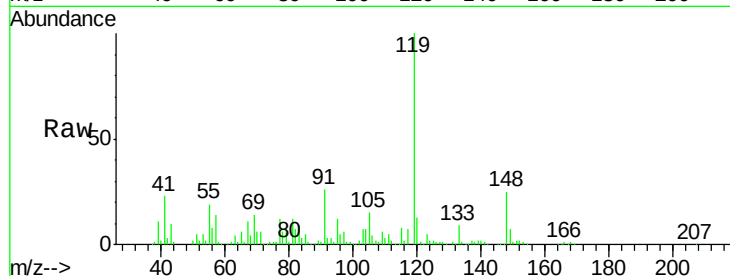
Tot Ion: 75 Resp: 979

Ion Ratio Lower Upper

75 100

155 0.0 38.7 116.1#

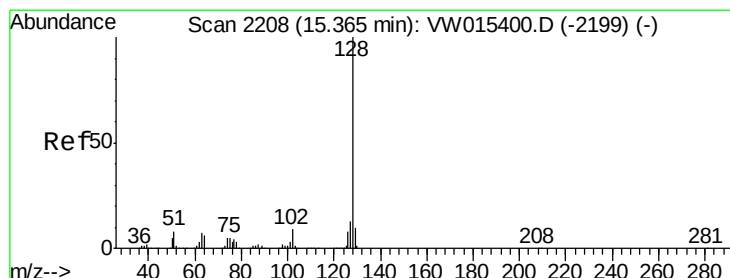
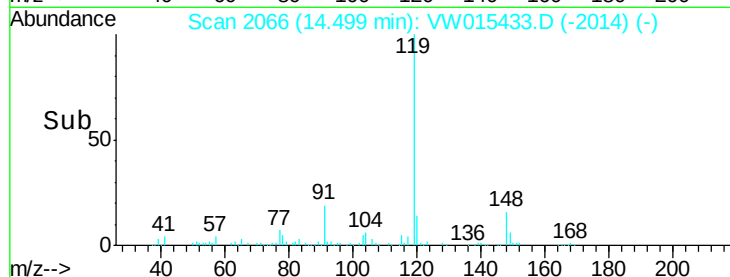
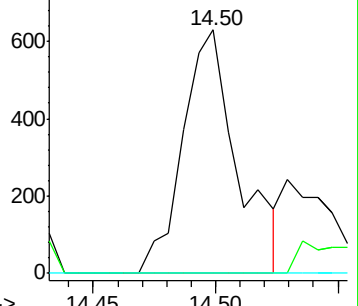
157 0.0 48.1 144.4#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V



#95

Naphthalene

Concen: 1.404 ug/l

RT: 15.33 min Scan# 2202

Delta R.T. -0.04 min

Lab File: VW015433.D

Acq: 15 May 2020 14:50

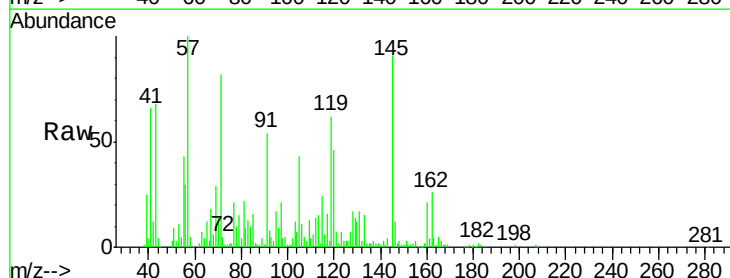
Tgt Ion: 128 Resp: 6053

Ion Ratio Lower Upper

128 100

127 44.5 10.5 15.7#

129 95.5 8.6 12.8#



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

