

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW060619\  
 Data File : VW010713.D  
 Acq On : 06 Jun 2019 16:45  
 Operator : SY/VA  
 Sample : K3218-04RE  
 Misc : 4.13G/5ML/MSVOA W/SOIL  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 RBR-200027

Quant Time: Jun 07 07:39:47 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W060419S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 05 03:21:19 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 209218   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 359767   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 316742   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 140843   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.31  | 65   | 144253   | 58.50 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 117.00% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 105910   | 54.24 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 108.48% |          |
| 50) Toluene-d8              | 10.32 | 98   | 475842   | 55.57 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 111.14% |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 165396   | 53.08 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 106.16% |          |

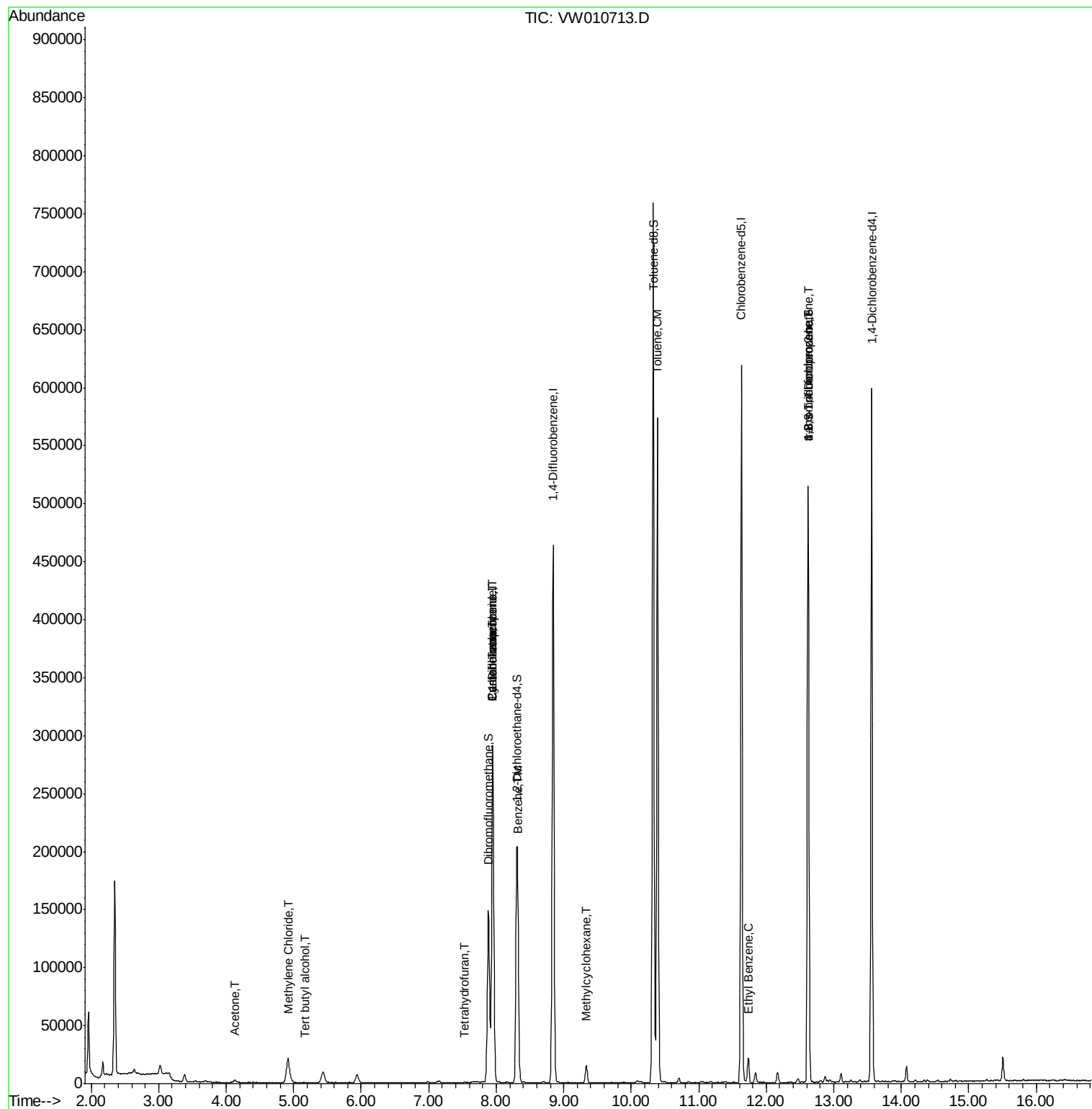
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 11) Tert butyl alcohol         | 5.17  | 59   | 224      | 1.115   | ug/l # | 72     |
| 16) Acetone                    | 4.13  | 43   | 3575     | 5.410   | ug/l # | 83     |
| 20) Methylene Chloride         | 4.92  | 84   | 13948    | 6.017   | ug/l   | 96     |
| 29) Tetrahydrofuran            | 7.53  | 42   | 682      | 1.183   | ug/l # | 48     |
| 31) Cyclohexane                | 7.95  | 56   | 8264     | 1.661   | ug/l # | 26     |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 18126    | 4.922   | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 21400    | 6.732   | ug/l # | 17     |
| 39) Methylcyclohexane          | 9.34  | 83   | 5343     | 1.141   | ug/l   | 97     |
| 40) Benzene                    | 8.32  | 78   | 45323    | 4.511   | ug/l   | 99     |
| 52) Toluene                    | 10.39 | 92   | 230787   | 37.336  | ug/l   | 99     |
| 67) Ethyl Benzene              | 11.73 | 91   | 14473    | 1.209   | ug/l   | 97     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 89472    | 60.493  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 89472    | 139.033 | ug/l # | 5      |

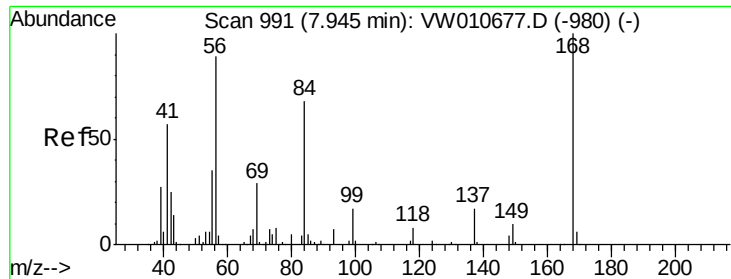
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW060619\  
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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W060419S.M  
Quant Title : SW846 8260  
QLast Update : Wed Jun 05 03:21:19 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 992

Delta R.T. 0.01 min

Lab File: VW010713.D

Acq: 06 Jun 2019 16:45

Instrument :

MSVOA\_W

ClientSampled :

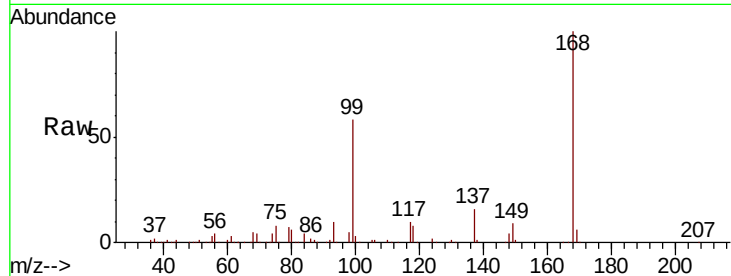
RBR-200027

Tot Ion:168 Resp: 209218

Ion Ratio Lower Upper

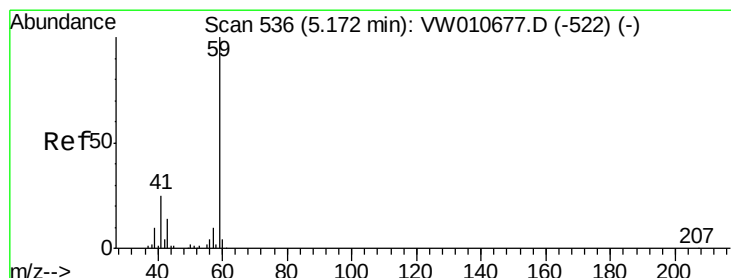
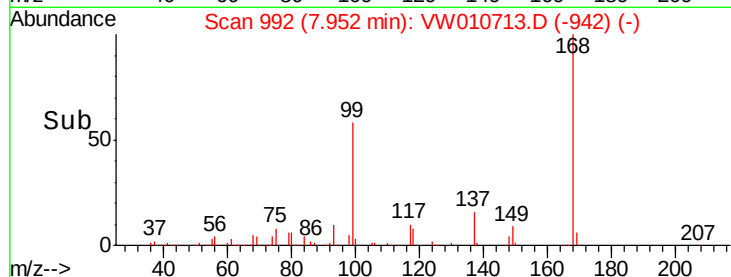
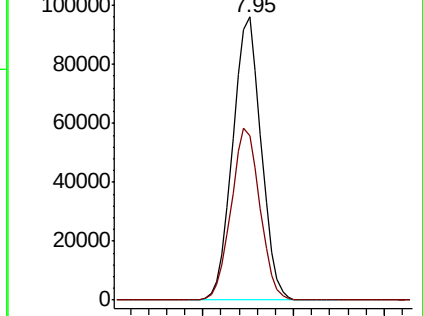
168 100

99 58.2 47.7 71.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#11

Tert butyl alcohol

Concen: 1.115 ug/l

RT: 5.17 min Scan# 535

Delta R.T. -0.01 min

Lab File: VW010713.D

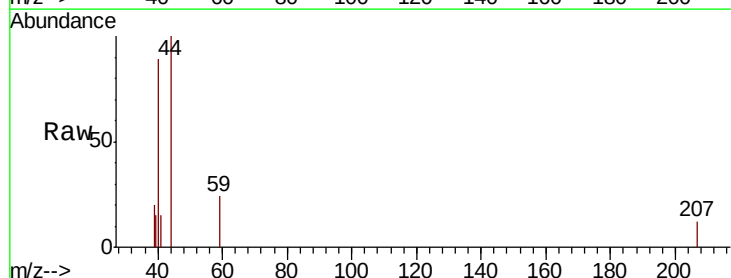
Acq: 06 Jun 2019 16:45

Tgt Ion: 59 Resp: 224

Ion Ratio Lower Upper

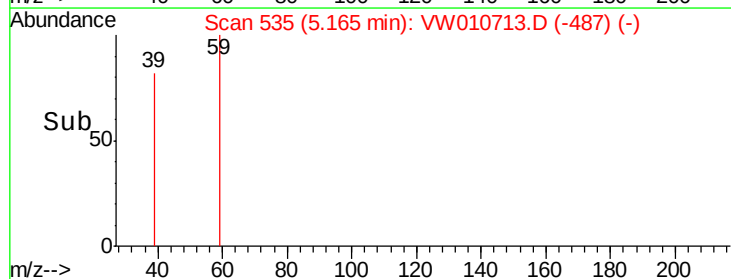
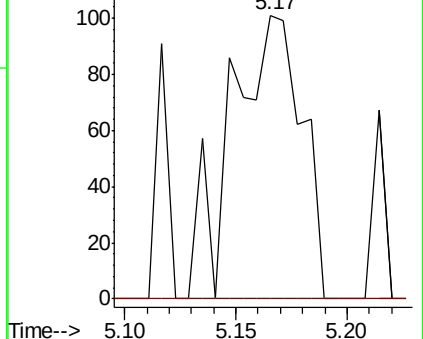
59 100

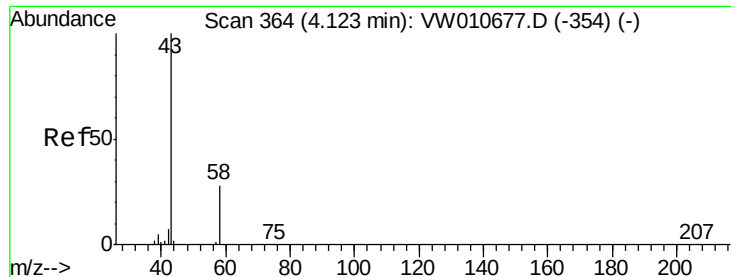
57 0.0 8.6 12.8#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW





#16

Acetone

Concen: 5.410 ug/l

RT: 4.13 min Scan# 365

Delta R.T. 0.01 min

Lab File: VW010713.D

Acq: 06 Jun 2019 16:45

Instrument :

MSVOA\_W

ClientSampleId :

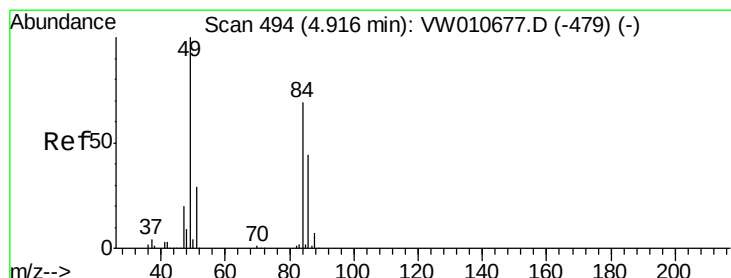
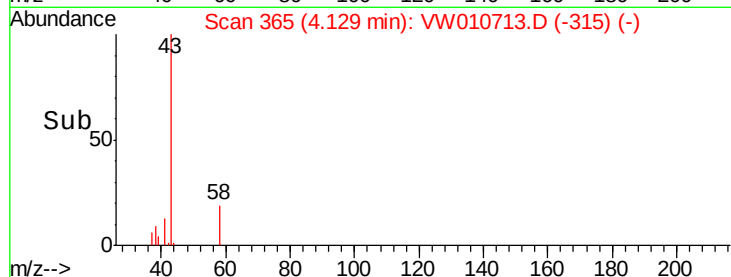
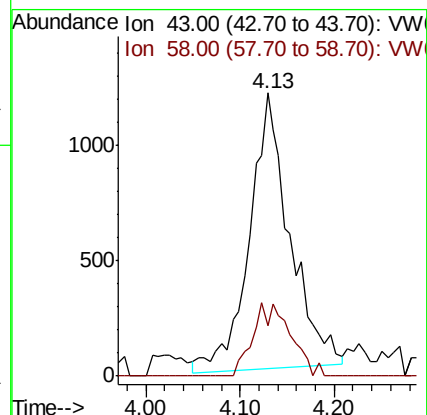
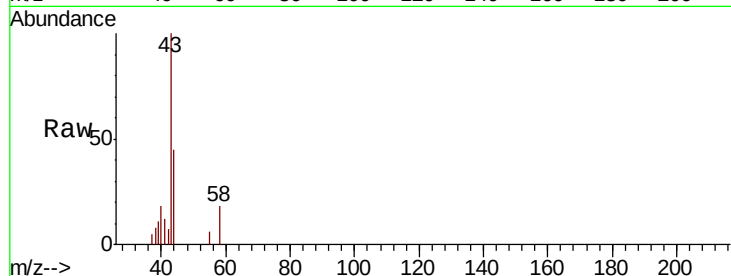
RBR-200027

Tot Ion: 43 Resp: 3575

Ion Ratio Lower Upper

43 100

58 18.9 22.1 33.1#



#20

Methylene Chloride

Concen: 6.017 ug/l

RT: 4.92 min Scan# 495

Delta R.T. 0.01 min

Lab File: VW010713.D

Acq: 06 Jun 2019 16:45

Tgt Ion: 84 Resp: 13948

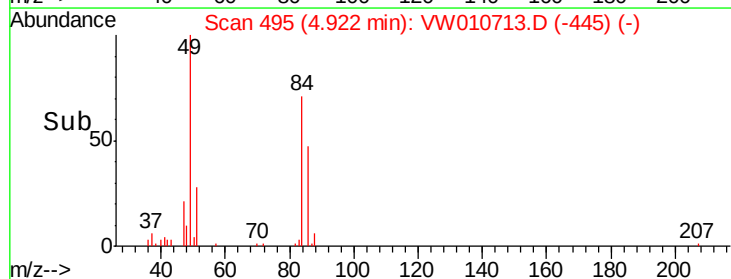
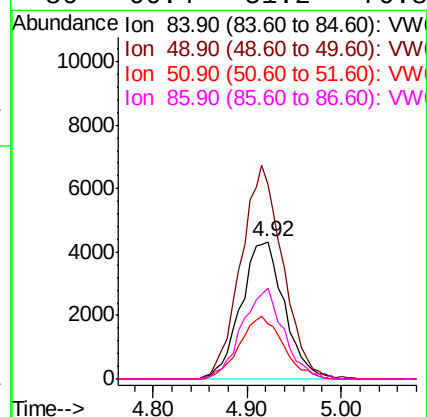
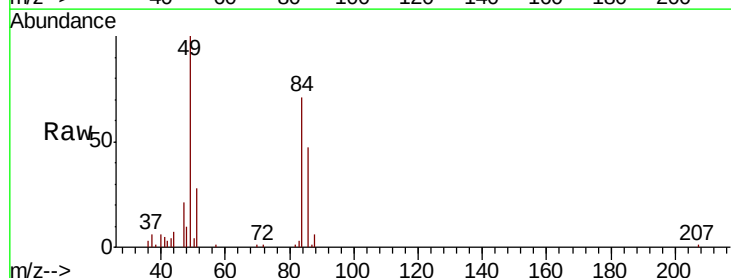
Ion Ratio Lower Upper

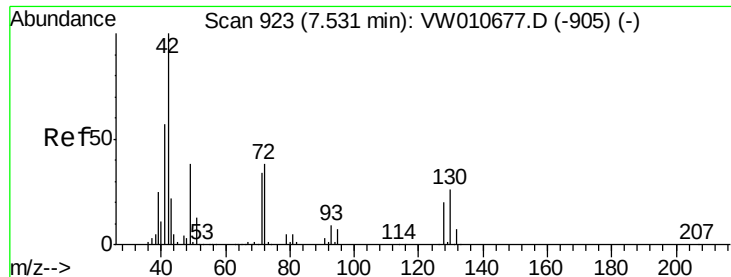
84 100

49 141.5 116.7 175.1

51 40.1 34.2 51.2

86 66.4 51.2 76.8

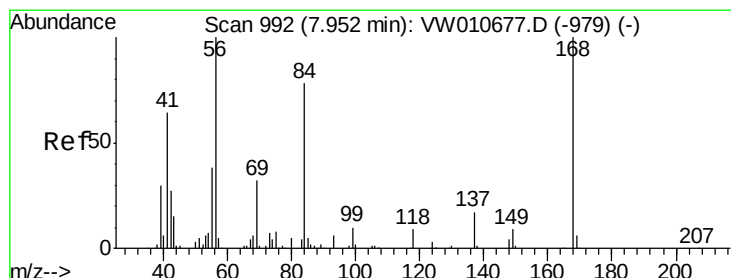
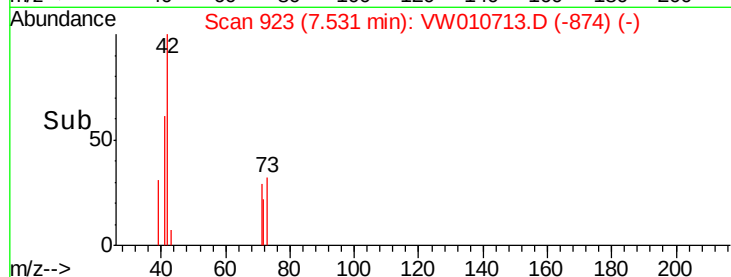
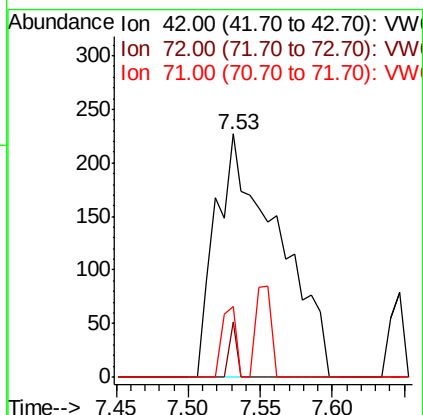
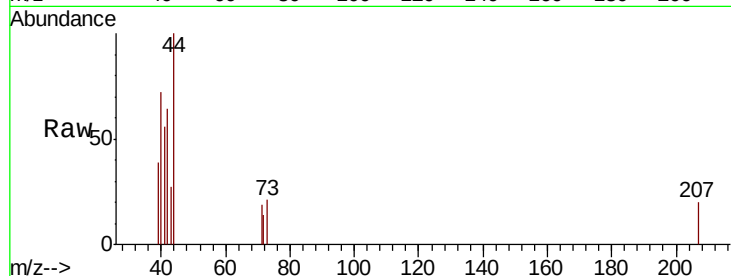




#29  
Tetrahydrofuran  
Concen: 1.183 ug/l  
RT: 7.53 min Scan# 923  
Delta R.T. -0.00 min  
Lab File: VW010713.D  
Acq: 06 Jun 2019 16:45

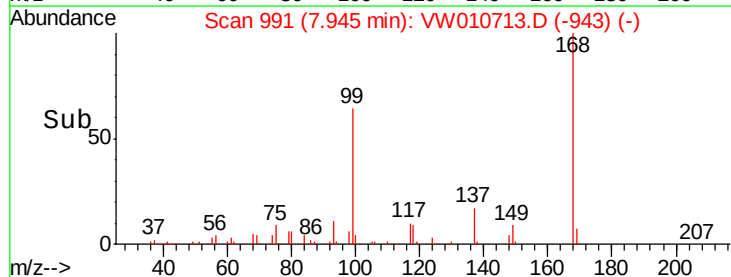
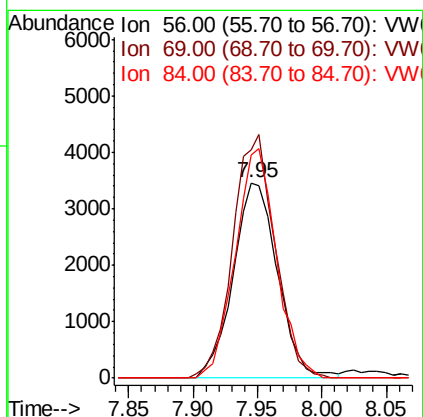
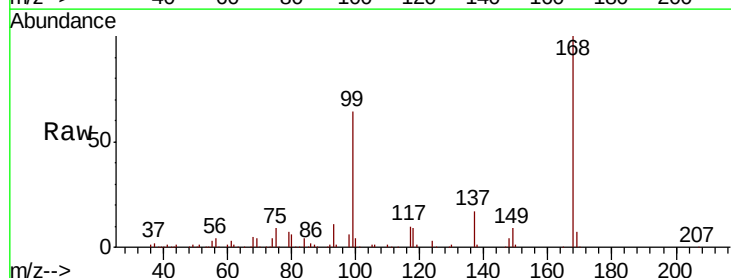
Instrument :  
MSVOA\_W  
ClientSampleId :  
RBR-200027

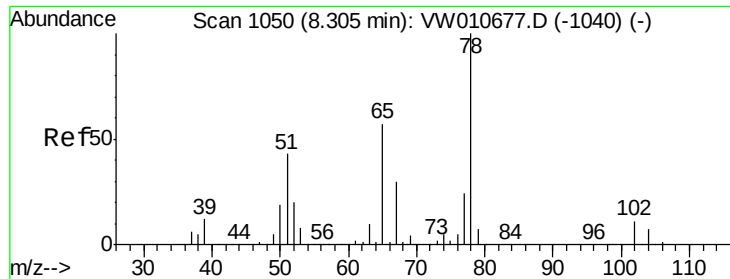
Tot Ion: 42 Resp: 682  
Ion Ratio Lower Upper  
42 100  
72 2.8 28.7 43.1#  
71 6.7 26.6 39.8#



#31  
Cyclohexane  
Concen: 1.661 ug/l  
RT: 7.95 min Scan# 991  
Delta R.T. -0.01 min  
Lab File: VW010713.D  
Acq: 06 Jun 2019 16:45

Tgt Ion: 56 Resp: 8264  
Ion Ratio Lower Upper  
56 100  
69 116.8 25.2 37.8#  
84 113.9 62.2 93.2#





#33

1,2-Dichloroethane-d4

Concen: 58.497 ug/l

RT: 8.31 min Scan# 1050

Delta R.T. -0.00 min

Lab File: VW010713.D

Acq: 06 Jun 2019 16:45

Instrument :

MSVOA\_W

ClientSampleId :

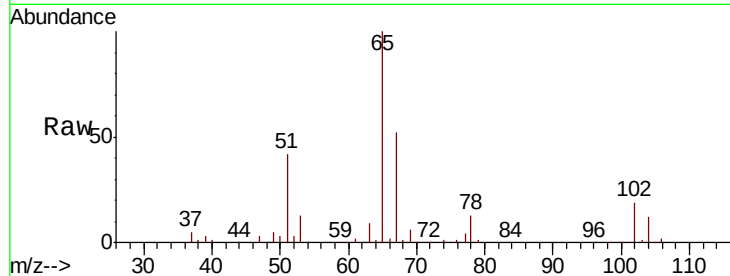
RBR-200027

Tot Ion: 65 Resp: 144253

Ion Ratio Lower Upper

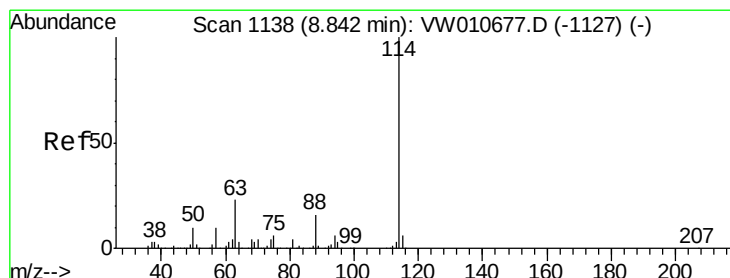
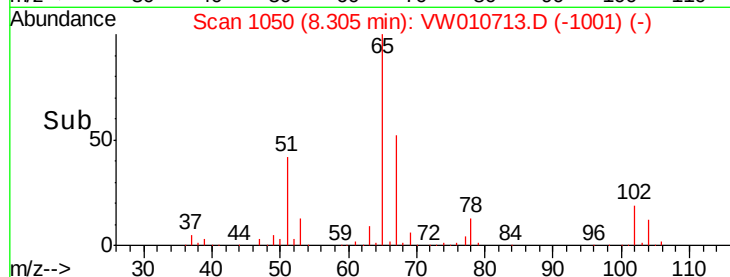
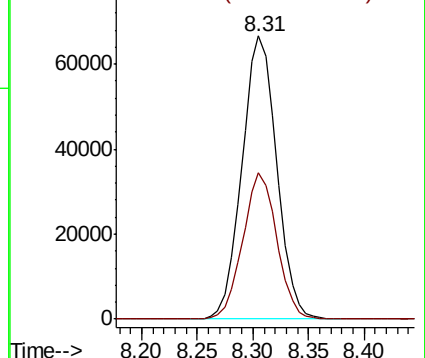
65 100

67 50.8 0.0 102.6



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: VW010713.D

Acq: 06 Jun 2019 16:45

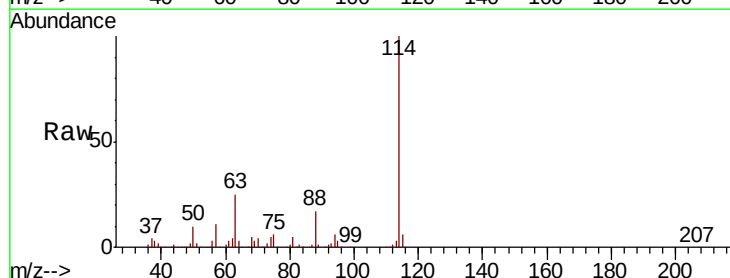
Tgt Ion: 114 Resp: 359767

Ion Ratio Lower Upper

114 100

63 24.6 0.0 46.4

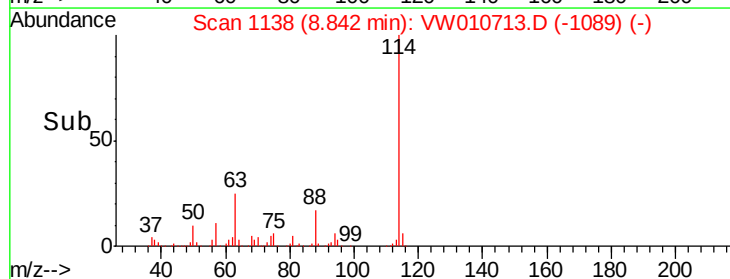
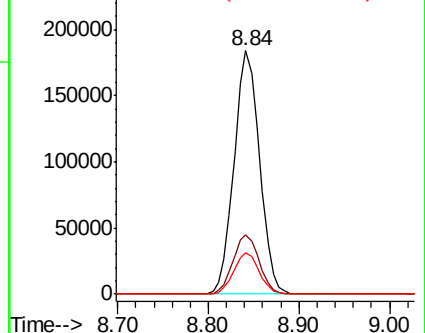
88 16.8 0.0 32.2

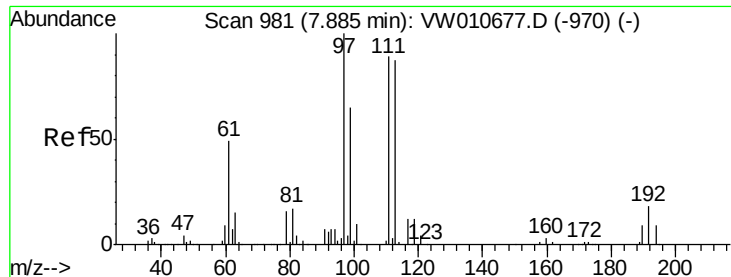


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VW

Ion 87.90 (87.60 to 88.60): VW

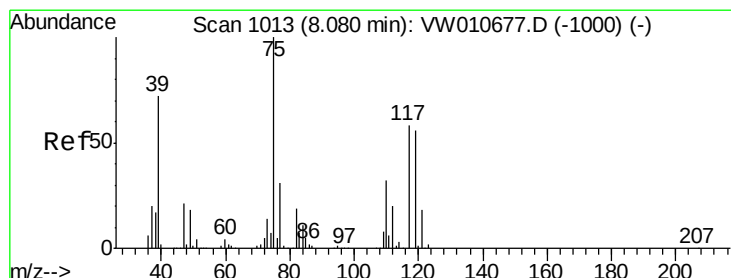
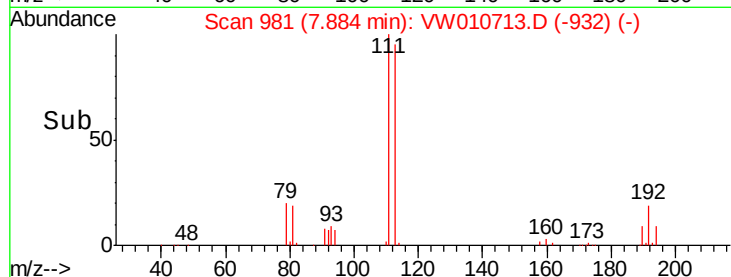
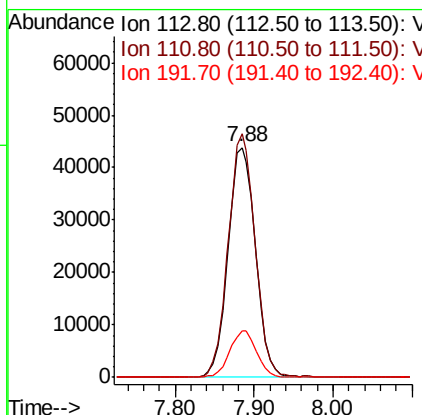
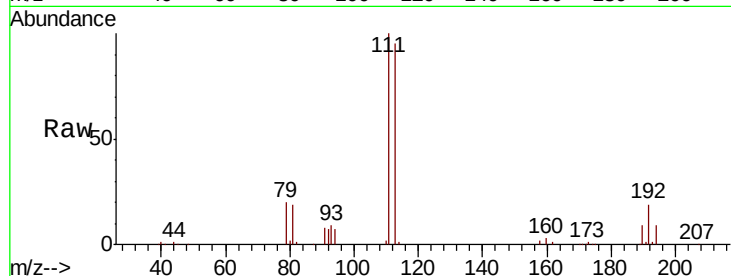




#35  
 Dibromofluoromethane  
 Concen: 54.237 ug/l  
 RT: 7.88 min Scan# 981  
 Delta R.T. -0.00 min  
 Lab File: VW010713.D  
 Acq: 06 Jun 2019 16:45

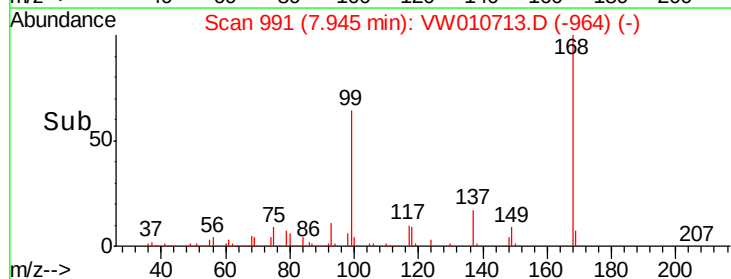
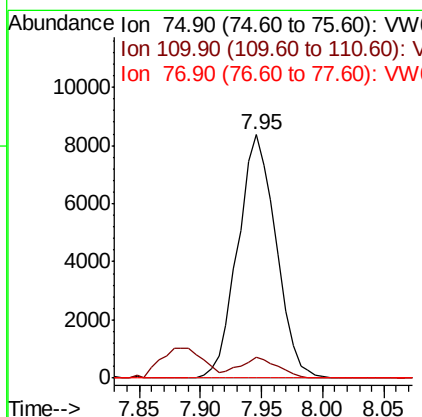
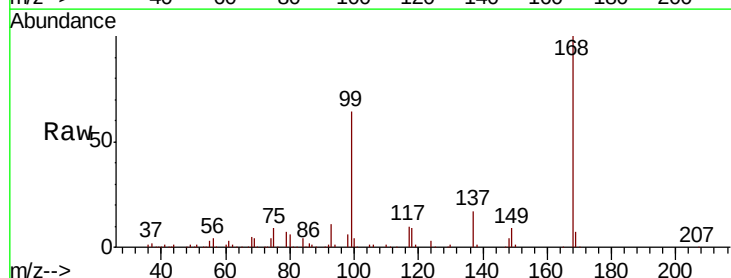
Instrument :  
 MSVOA\_W  
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 RBR-200027

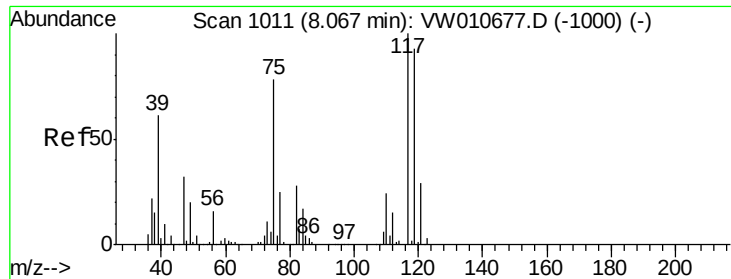
Tot Ion:113 Resp: 105910  
 Ion Ratio Lower Upper  
 113 100  
 111 103.7 82.6 123.8  
 192 19.8 16.4 24.6



#36  
 1,1-Dichloropropene  
 Concen: 4.922 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.13 min  
 Lab File: VW010713.D  
 Acq: 06 Jun 2019 16:45

Tgt Ion: 75 Resp: 18126  
 Ion Ratio Lower Upper  
 75 100  
 110 8.2 15.8 47.3#  
 77 0.0 24.7 37.1#





#38

Carbon Tetrachloride

Concen: 6.732 ug/l

RT: 7.95 min Scan# 992

Delta R.T. -0.12 min

Lab File: VW010713.D

Acq: 06 Jun 2019 16:45

Instrument :

MSVOA\_W

ClientSampled :

RBR-200027

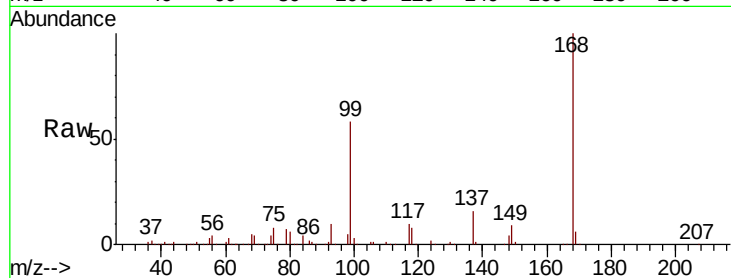
Tot Ion:117 Resp: 21400

Ion Ratio Lower Upper

117 100

119 4.7 74.2 111.4#

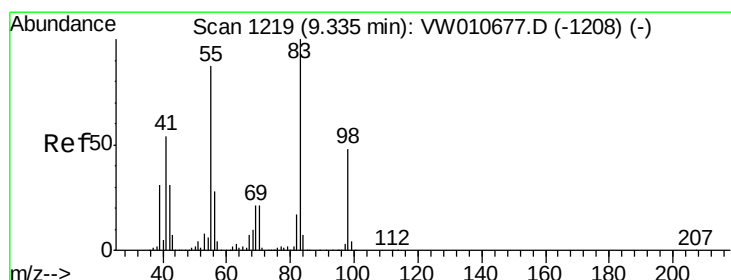
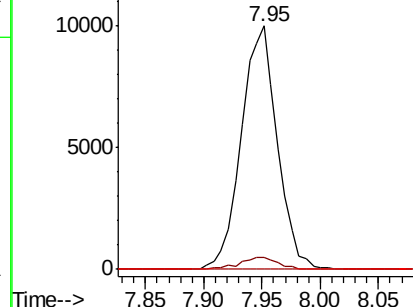
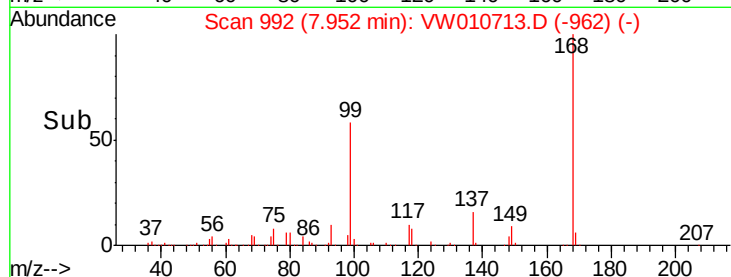
121 0.0 22.9 34.3#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#39

Methylcyclohexane

Concen: 1.141 ug/l

RT: 9.34 min Scan# 1219

Delta R.T. -0.00 min

Lab File: VW010713.D

Acq: 06 Jun 2019 16:45

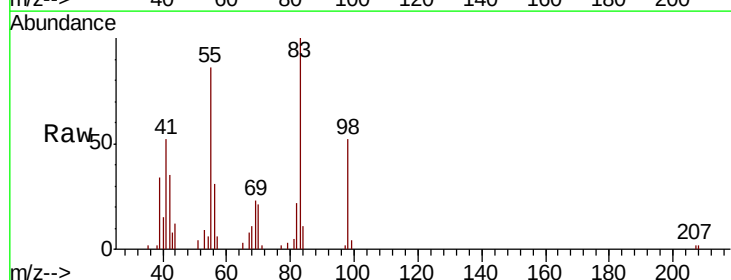
Tgt Ion: 83 Resp: 5343

Ion Ratio Lower Upper

83 100

55 86.3 70.0 105.0

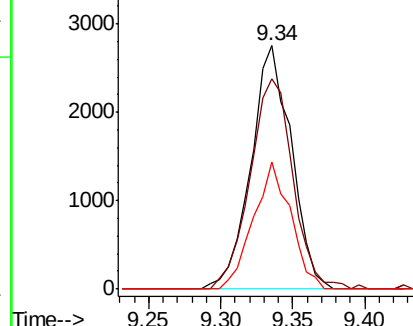
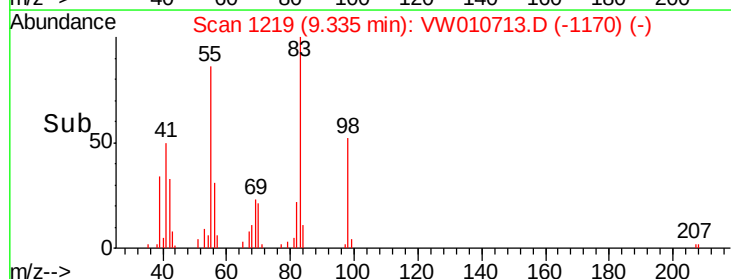
98 52.1 38.1 57.1



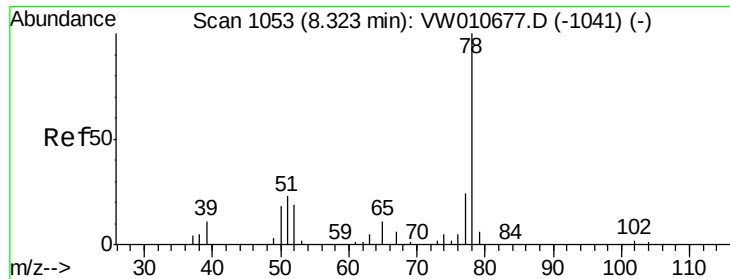
Abundance Ion 83.00 (82.70 to 83.70): VW

Ion 55.00 (54.70 to 55.70): VW

Ion 98.00 (97.70 to 98.70): VW







#40

Benzene

Concen: 4.511 ug/l

RT: 8.32 min Scan# 1053

Delta R.T. -0.00 min

Lab File: VW010713.D

Acq: 06 Jun 2019 16:45

Instrument :

MSVOA\_W

ClientSampleId :

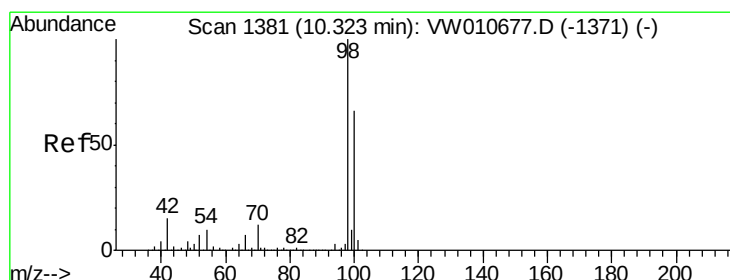
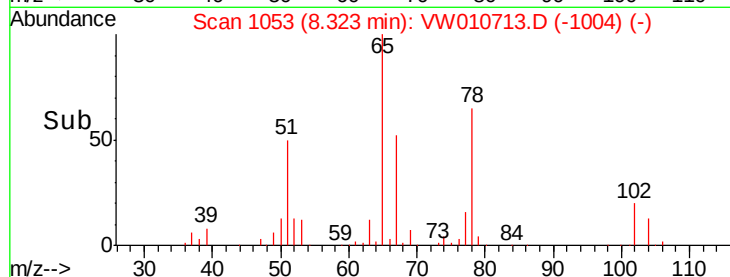
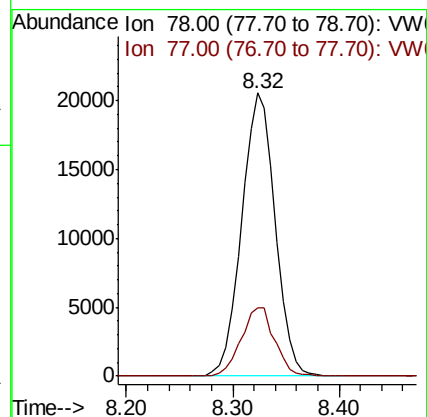
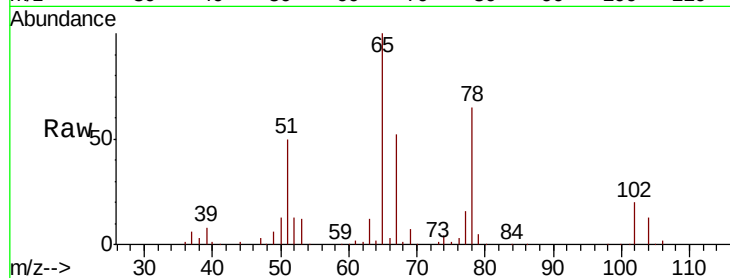
RBR-200027

Tot Ion: 78 Resp: 45323

Ion Ratio Lower Upper

78 100

77 24.2 19.1 28.7



#50

Toluene-d8

Concen: 55.570 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. -0.00 min

Lab File: VW010713.D

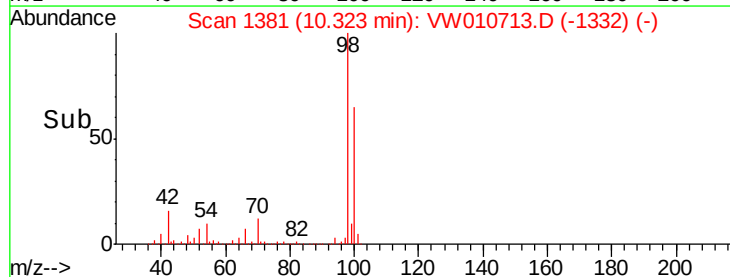
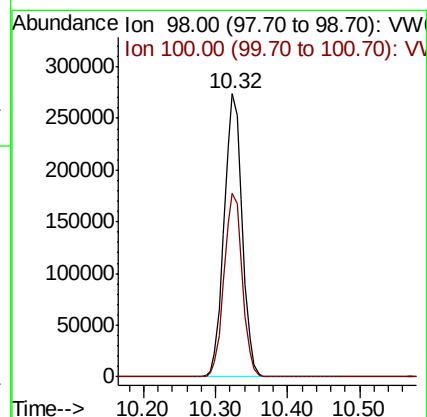
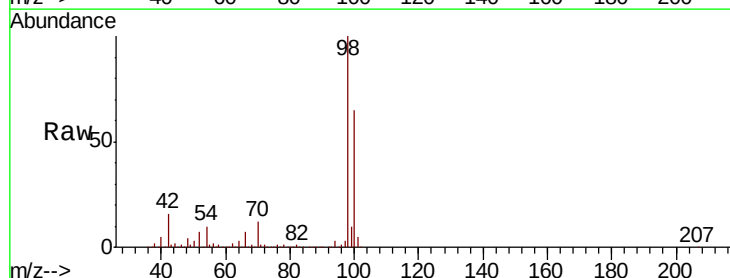
Acq: 06 Jun 2019 16:45

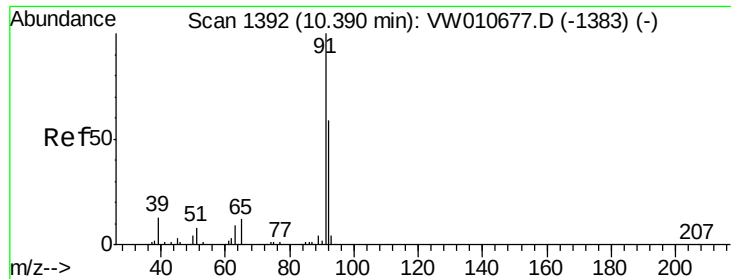
Tgt Ion: 98 Resp: 475842

Ion Ratio Lower Upper

98 100

100 65.4 53.0 79.6





#52

Toluene

Concen: 37.336 ug/l

RT: 10.39 min Scan# 1392

Delta R.T. -0.00 min

Lab File: VW010713.D

Acq: 06 Jun 2019 16:45

Instrument :

MSVOA\_W

ClientSampled :

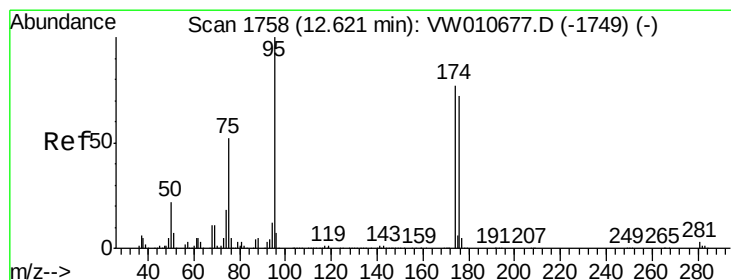
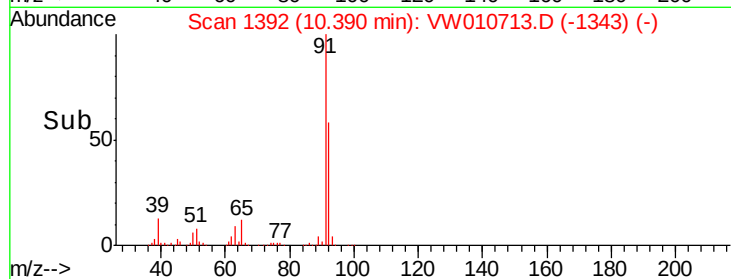
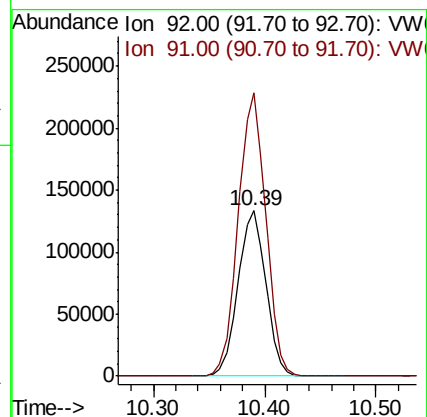
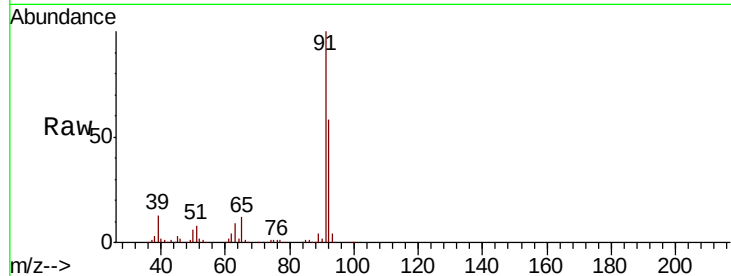
RBR-200027

Tot Ion: 92 Resp: 230787

Ion Ratio Lower Upper

92 100

91 170.2 134.9 202.3



#62

4-Bromofluorobenzene

Concen: 53.080 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.00 min

Lab File: VW010713.D

Acq: 06 Jun 2019 16:45

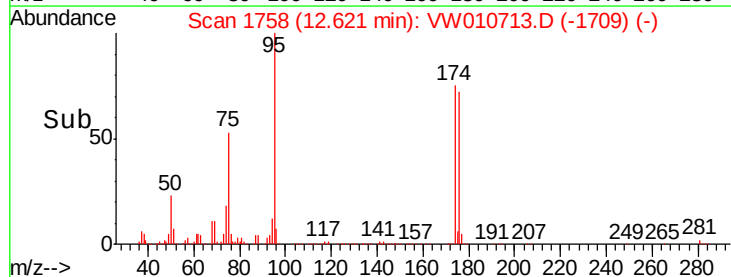
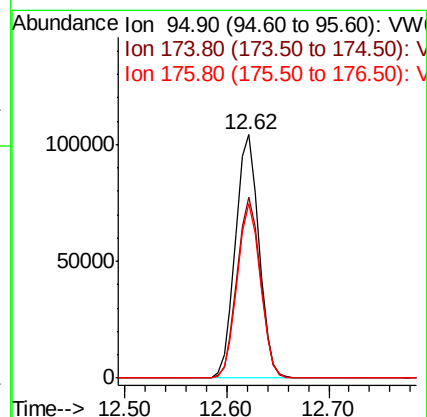
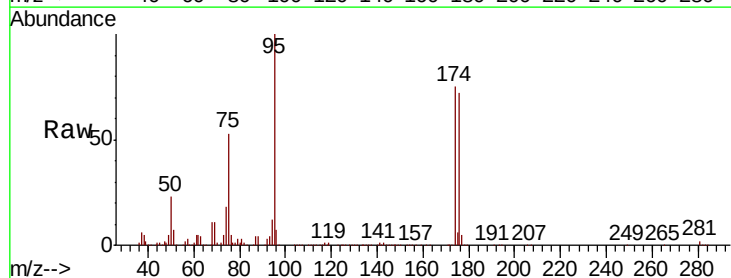
Tgt Ion: 95 Resp: 165396

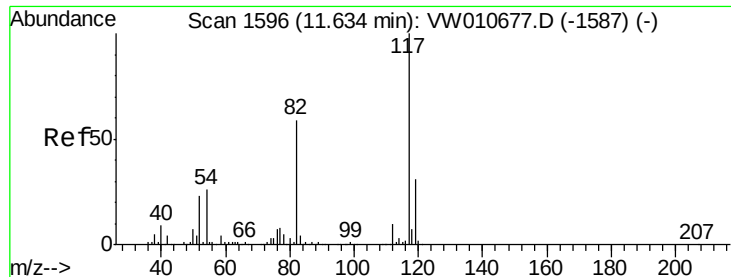
Ion Ratio Lower Upper

95 100

174 74.1 0.0 150.4

176 70.9 0.0 144.8

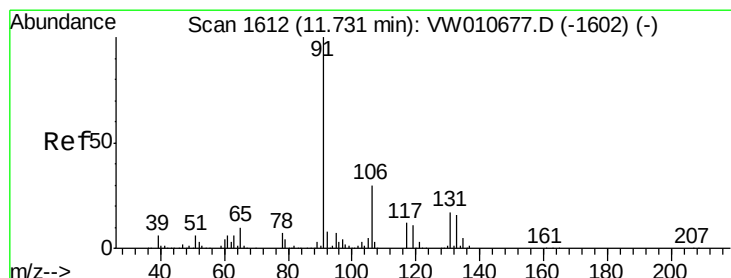
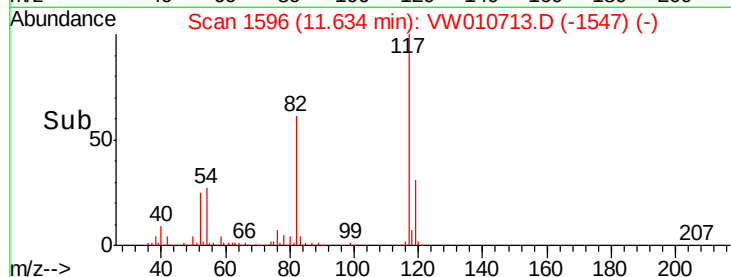
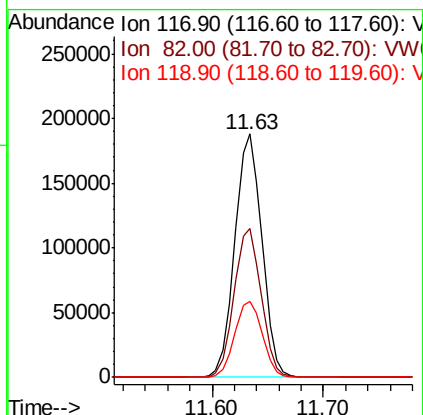
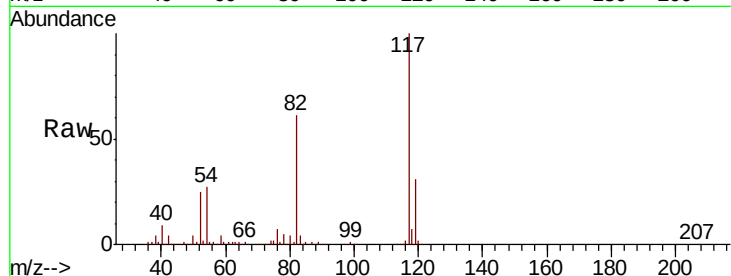




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1596  
Delta R.T. -0.00 min  
Lab File: VW010713.D  
Acq: 06 Jun 2019 16:45

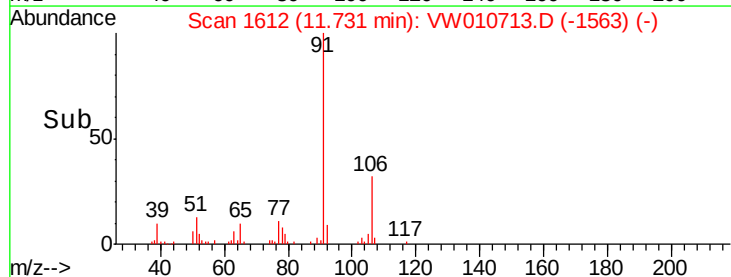
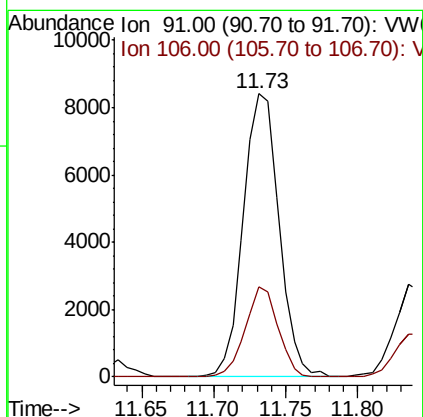
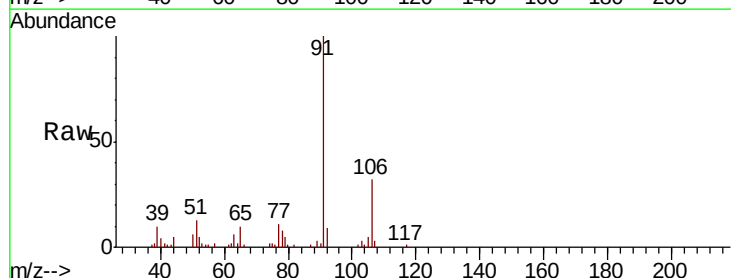
Instrument :  
MSVOA\_W  
ClientSampleId :  
RBR-200027

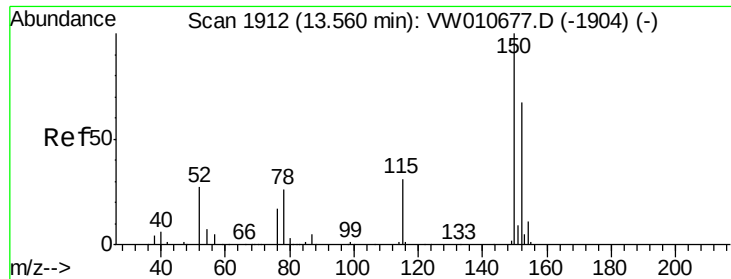
Tot Ion:117 Resp: 316742  
Ion Ratio Lower Upper  
117 100  
82 60.9 47.0 70.4  
119 31.4 25.1 37.7



#67  
Ethyl Benzene  
Concen: 1.209 ug/l  
RT: 11.73 min Scan# 1612  
Delta R.T. -0.00 min  
Lab File: VW010713.D  
Acq: 06 Jun 2019 16:45

Tgt Ion: 91 Resp: 14473  
Ion Ratio Lower Upper  
91 100  
106 31.7 24.2 36.4





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.56 min Scan# 1912

Delta R.T. -0.00 min

Lab File: VW010713.D

Acq: 06 Jun 2019 16:45

Instrument :

MSVOA\_W

ClientSampleId :

RBR-200027

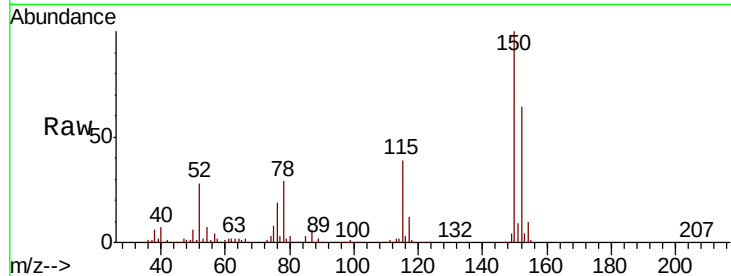
Tot Ion:152 Resp: 140843

Ion Ratio Lower Upper

152 100

115 60.9 29.8 89.3

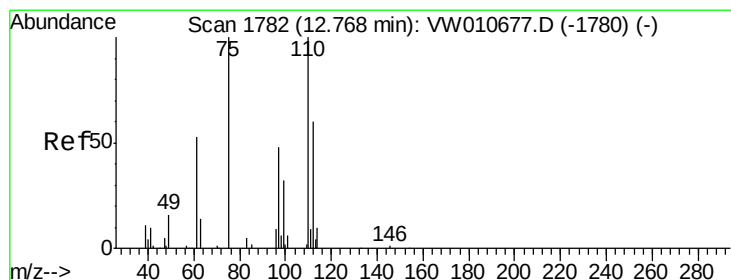
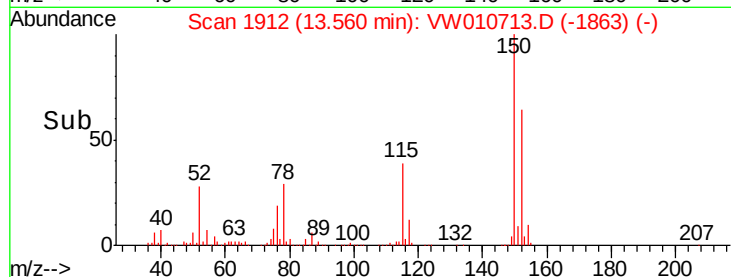
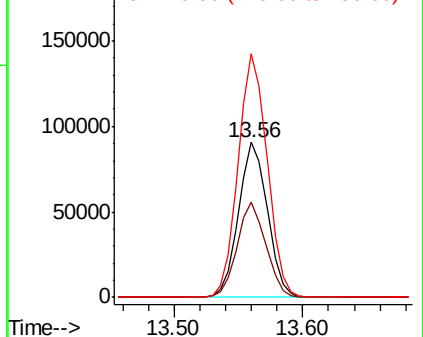
150 157.8 0.0 345.0



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 60.493 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.15 min

Lab File: VW010713.D

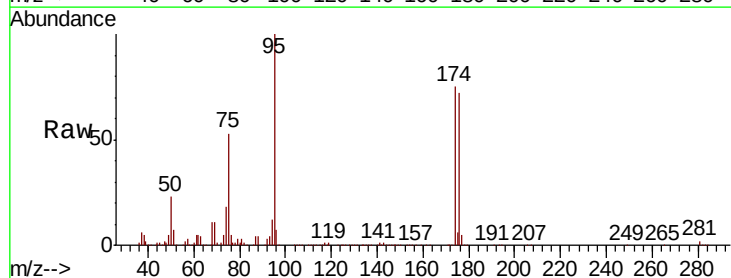
Acq: 06 Jun 2019 16:45

Tgt Ion: 75 Resp: 89472

Ion Ratio Lower Upper

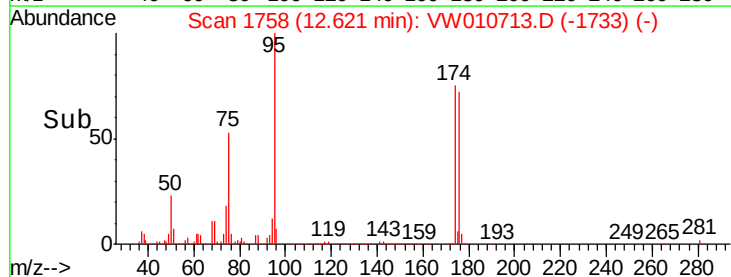
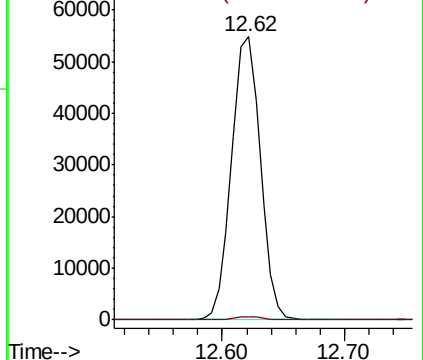
75 100

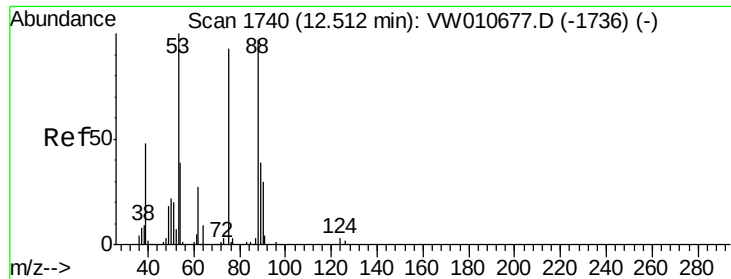
77 1.3 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 77.00 (76.70 to 77.70): VW





#81

trans-1,4-Dichloro-2-butene

Concen: 139.033 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.11 min

Lab File: VW010713.D

Acq: 06 Jun 2019 16:45

Instrument :

MSVOA\_W

ClientSampleId :

RBR-200027

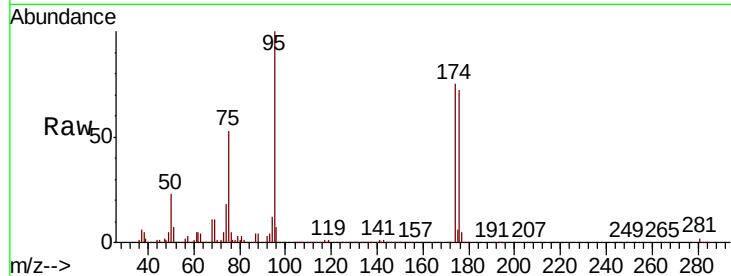
Tot Ion: 75 Resp: 89472

Ion Ratio Lower Upper

75 100

53 0.0 90.1 135.1#

89 0.0 34.6 52.0#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 53.00 (52.70 to 53.70): VW

Ion 88.90 (88.60 to 89.60): VW

