

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW090519\
 Data File : VW012644.D
 Acq On : 05 Sep 2019 16:45
 Operator : SY/VA
 Sample : K4639-04RE
 Misc : 5.06G/5ML/MSVOA W/SOIL
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 MSVOA_W
 ClientSampleId :

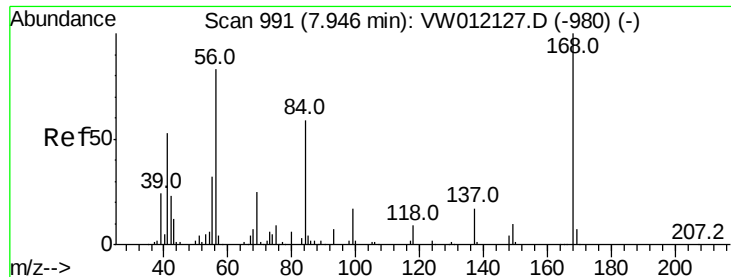
Quant Time: Sep 05 17:11:09 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\82W082319S.M
 Quant Title : SW846 8260
 QLast Update : Mon Aug 26 07:18:31 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.95	168	163606	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.84	114	272219	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.63	117	146466	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.56	152	27288	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	8.30	65	118616	60.99	ug/l	0.00
Spiked Amount			Recovery	=	121.98%	
35) Dibromofluoromethane	7.88	113	88461	54.44	ug/l	0.00
Spiked Amount			Recovery	=	108.88%	
50) Toluene-d8	10.32	98	269331	40.88	ug/l	0.00
Spiked Amount			Recovery	=	81.76%	
62) 4-Bromofluorobenzene	12.62	95	51548	22.20	ug/l	0.00
Spiked Amount			Recovery	=	44.40%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
11) Tert butyl alcohol	5.21	59	2018	17.242	ug/l #	78
16) Acetone	4.14	43	68266	137.314	ug/l	96
17) Carbon Disulfide	4.37	76	34217	6.899	ug/l	97
20) Methylene Chloride	4.91	84	8140	4.331	ug/l	89
25) 2-Butanone	7.18	43	25850	38.264	ug/l	95
31) Cyclohexane	7.94	56	7461	2.130	ug/l #	41
36) 1,1-Dichloropropene	7.94	75	13990	4.973	ug/l #	54
37) Ethyl Acetate	7.18	43	25850	16.769	ug/l #	73
38) Carbon Tetrachloride	7.95	117	16641	6.835	ug/l #	16
51) 4-Methyl-2-Pentanone	10.21	43	14414	9.925	ug/l	99
52) Toluene	10.38	92	7186	1.557	ug/l	96
74) N-amyl acetate	12.25	43	5223	8.455	ug/l #	75
75) 1,1,2,2-Tetrachloroethane	12.65	83	2865	7.643	ug/l #	47
76) 1,2,3-Trichloropropane	12.62	75	27262	102.579	ug/l #	100
80) 1,3,5-Trimethylbenzene	12.94	105	2914	1.706	ug/l	88
81) trans-1,4-Dichloro-2-buten	12.62	75	27262	224.908	ug/l #	6
83) tert-Butylbenzene	13.44	119	3848	2.659	ug/l	69
84) 1,2,4-Trimethylbenzene	13.26	105	7266	4.234	ug/l	99
85) sec-Butylbenzene	13.38	105	4549	2.194	ug/l #	69
86) p-Isopropyltoluene	13.50	119	4915	2.654	ug/l	88
89) n-Butylbenzene	13.82	91	2238	1.215	ug/l #	61
90) Hexachloroethane	14.10	117	743	2.287	ug/l #	11
92) 1,2-Dibromo-3-Chloropropan	14.50	75	218	3.450	ug/l #	41
93) 1,2,4-Trichlorobenzene	15.15	180	607	1.157	ug/l #	1
95) Naphthalene	15.37	128	1593	5.735	ug/l #	78
96) 1,2,3-Trichlorobenzene	15.58	180	560	1.224	ug/l #	72

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.00 min

Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

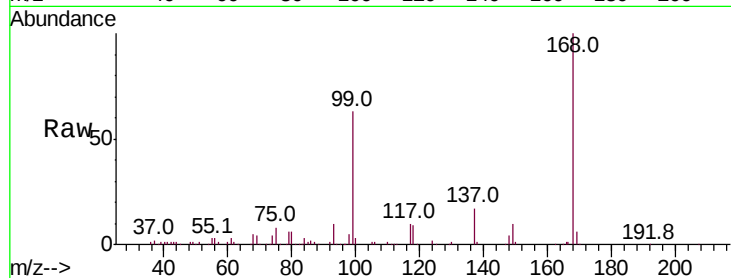
Instrument :
MSVOA_W
ClientSampled :

Tot Ion:168 Resp: 163606

Ion Ratio Lower Upper

168 100

99 62.7 49.2 73.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

80000

60000

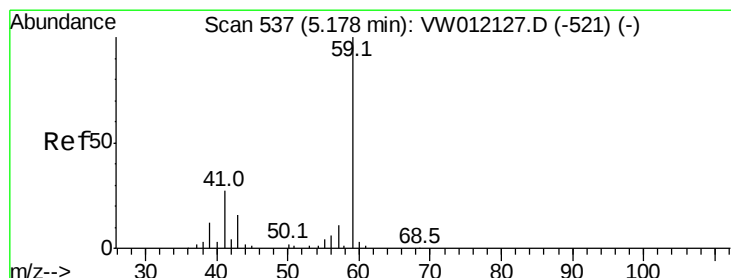
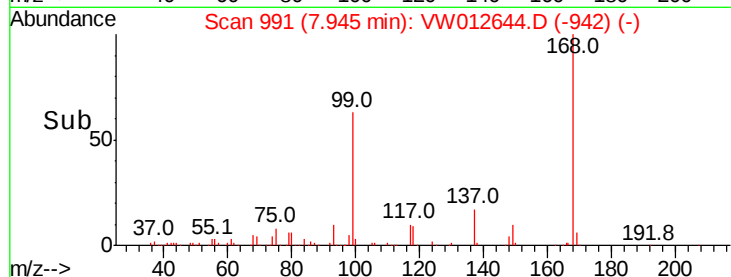
40000

20000

0

7.90 8.00 8.10

Time-->



#11

Tert butyl alcohol

Concen: 17.242 ug/l

RT: 5.21 min Scan# 542

Delta R.T. 0.03 min

Lab File: VW012644.D

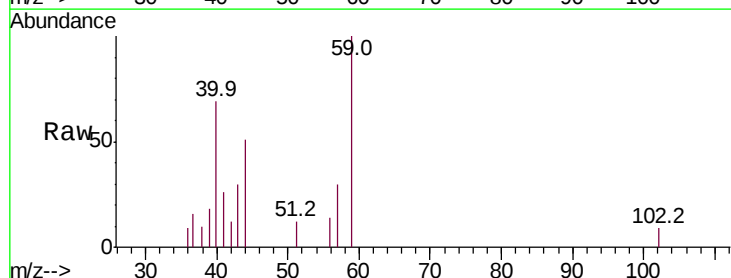
Acq: 05 Sep 2019 16:45

Tgt Ion: 59 Resp: 2018

Ion Ratio Lower Upper

59 100

57 19.6 9.0 13.4#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW

5.21

600

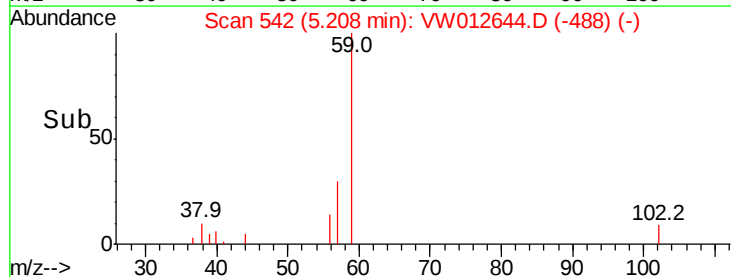
400

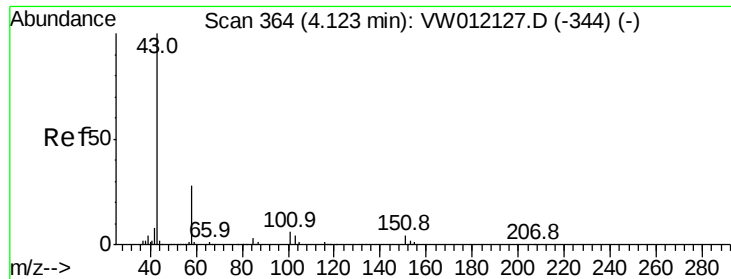
200

0

5.10 5.15 5.20 5.25 5.30

Time-->





#16

Acetone

Concen: 137.314 ug/l

RT: 4.14 min Scan# 366

Delta R.T. 0.01 min

Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

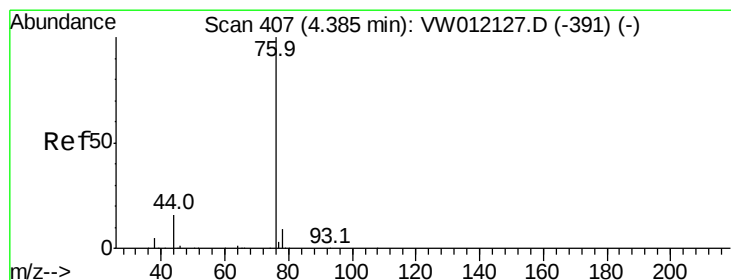
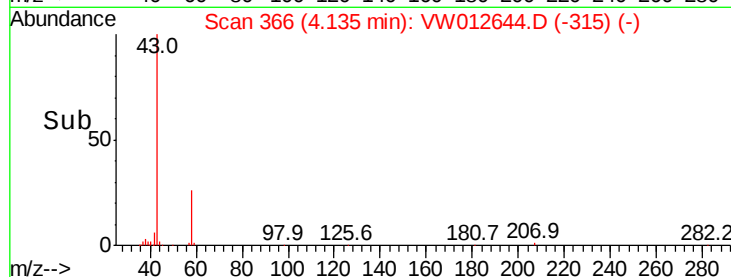
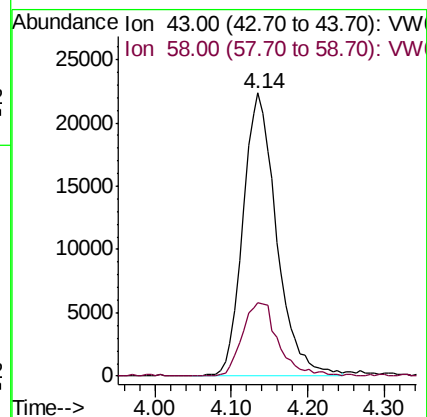
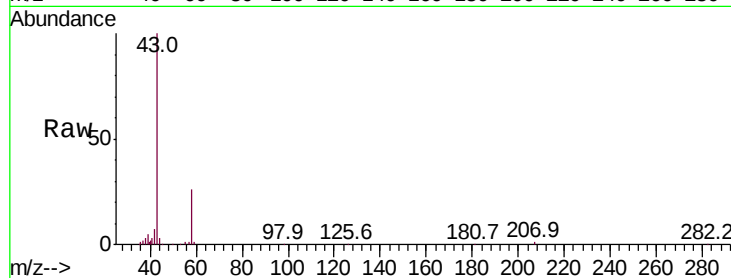
Instrument :
MSVOA_W
ClientSampleId :

Tot Ion: 43 Resp: 68266

Ion Ratio Lower Upper

43 100

58 26.0 22.4 33.6



#17

Carbon Disulfide

Concen: 6.899 ug/l

RT: 4.37 min Scan# 405

Delta R.T. -0.01 min

Lab File: VW012644.D

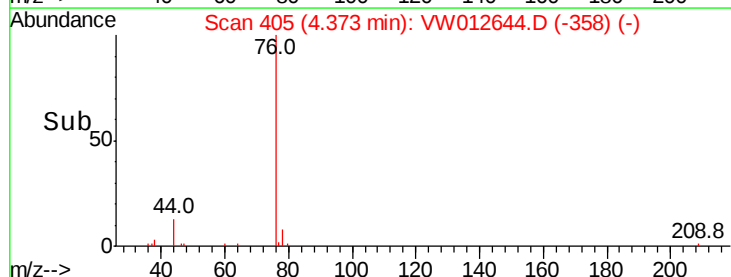
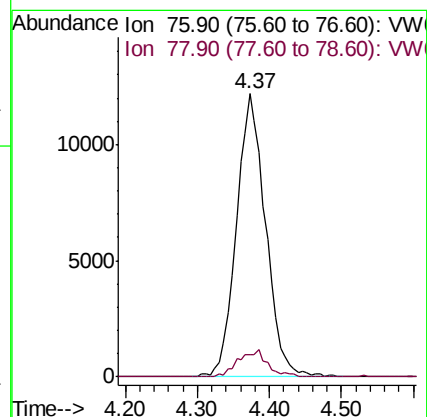
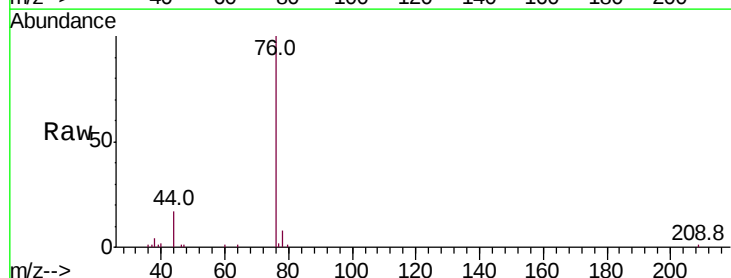
Acq: 05 Sep 2019 16:45

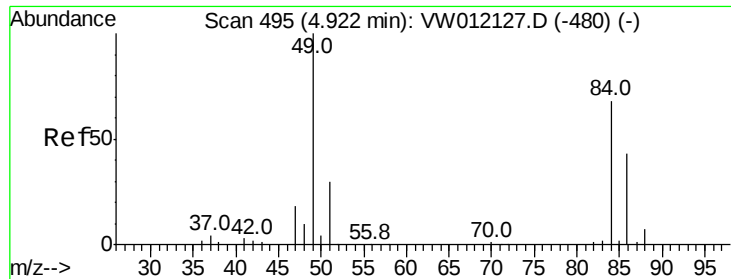
Tgt Ion: 76 Resp: 34217

Ion Ratio Lower Upper

76 100

78 8.0 7.3 10.9

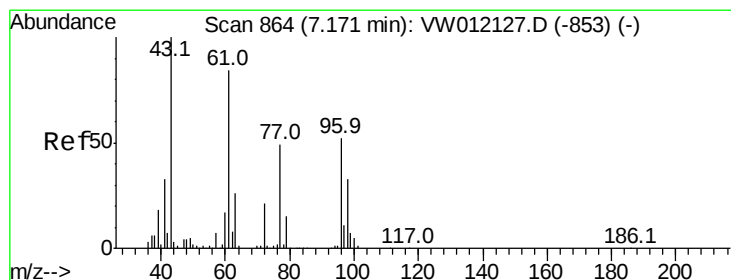
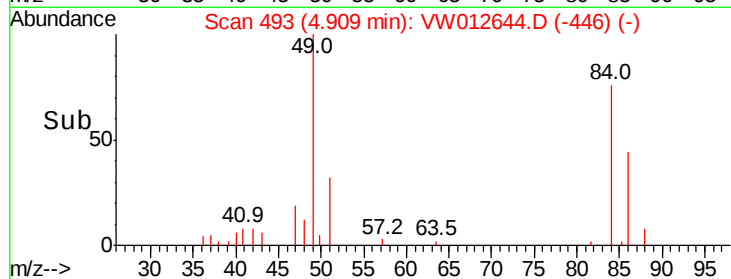
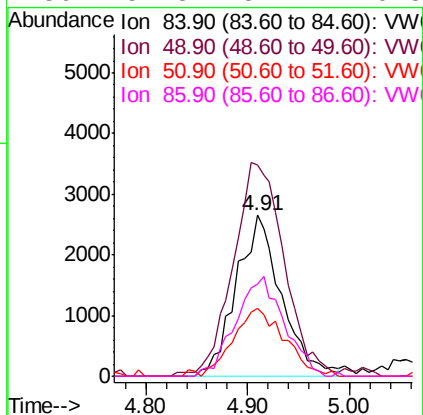
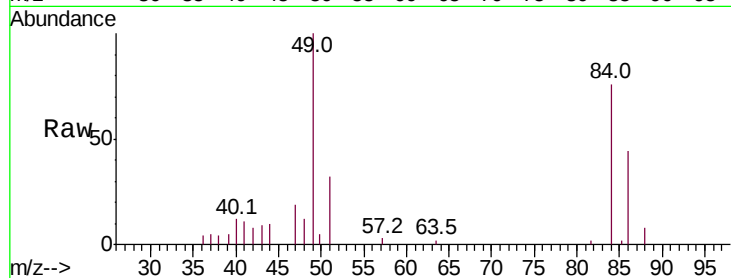




#20
Methvlene Chloride
Concen: 4.331 ug/l
RT: 4.91 min Scan# 493
Delta R.T. -0.01 min
Lab File: VW012644.D
Acq: 05 Sep 2019 16:45

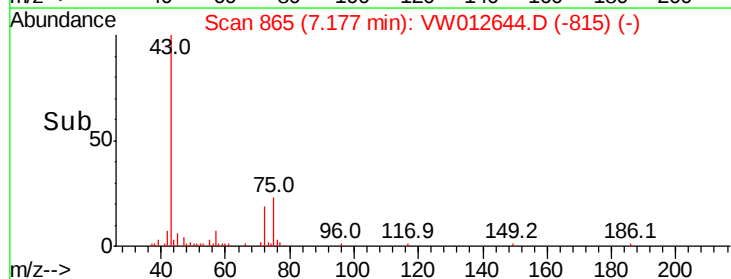
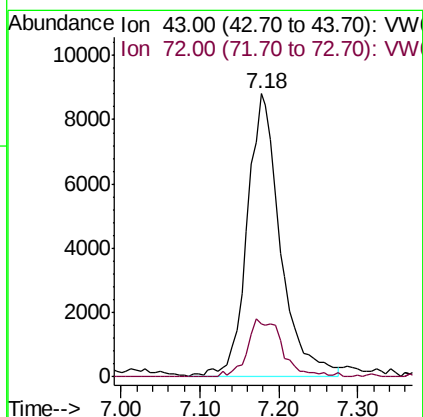
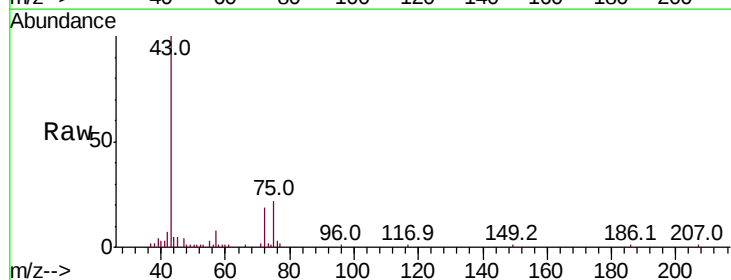
Instrument :
MSVOA_W
ClientSampled :

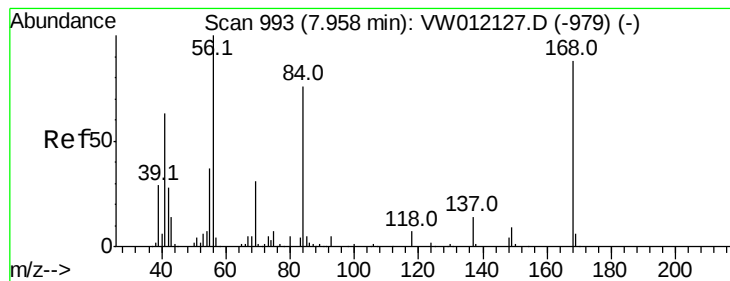
Tot Ion: 84 Resp: 8140
Ion Ratio Lower Upper
84 100
49 128.9 117.8 176.8
51 41.9 35.6 53.4
86 57.3 51.2 76.8



#25
2-Butanone
Concen: 38.264 ug/l
RT: 7.18 min Scan# 865
Delta R.T. 0.01 min
Lab File: VW012644.D
Acq: 05 Sep 2019 16:45

Tgt Ion: 43 Resp: 25850
Ion Ratio Lower Upper
43 100
72 18.5 16.6 24.8





#31

Cyclohexane

Concen: 2.130 ug/l

RT: 7.94 min Scan# 990

Delta R.T. -0.02 min

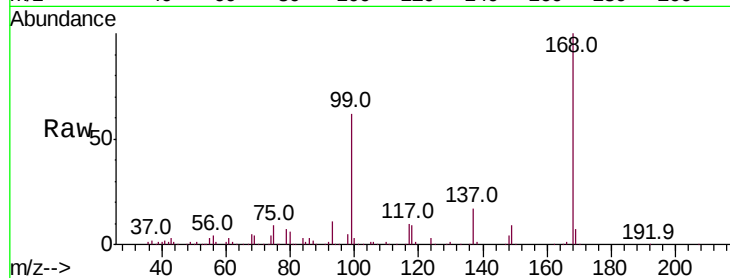
Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

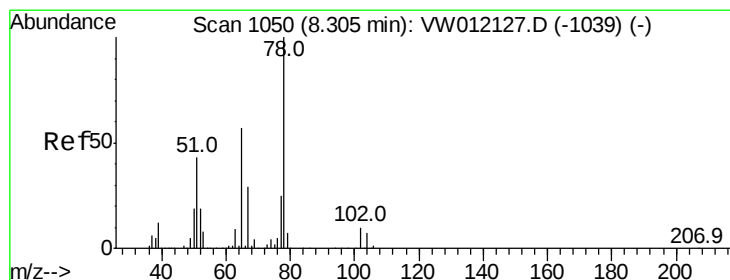
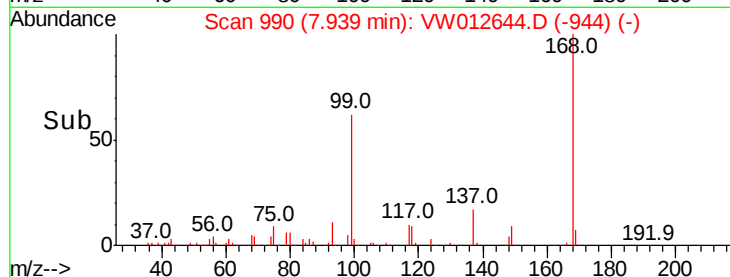
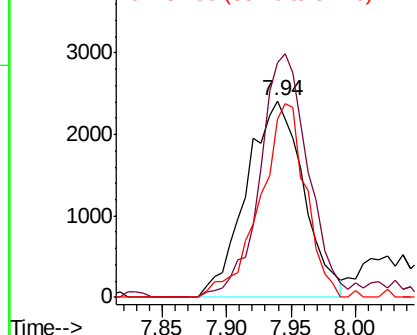
Instrument :
MSVOA_W
ClientSampleId :

Tot Ion: 56 Resp: 7461

Ion	Ratio	Lower	Upper
56	100		
69	119.3	24.9	37.3#
84	90.8	60.6	90.8



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: 60.989 ug/l

RT: 8.30 min Scan# 1050

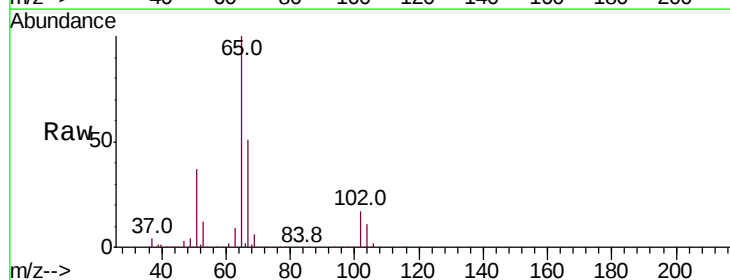
Delta R.T. -0.00 min

Lab File: VW012644.D

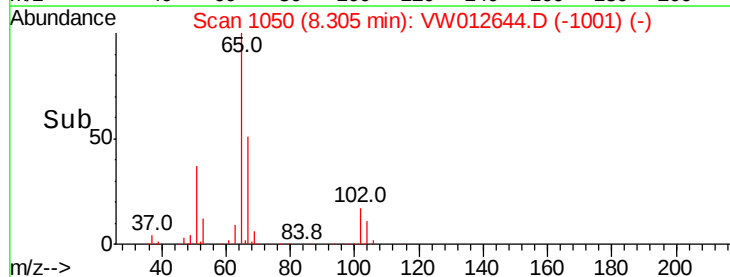
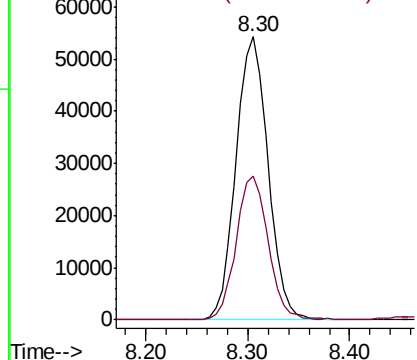
Acq: 05 Sep 2019 16:45

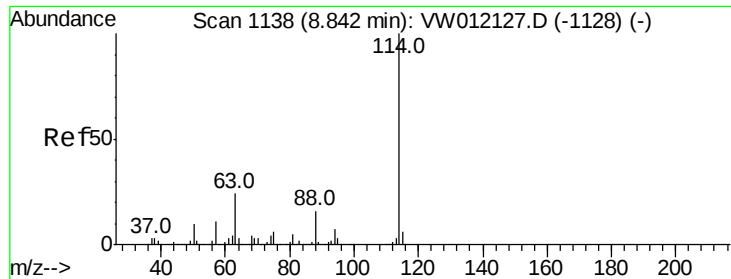
Tgt Ion: 65 Resp: 118616

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

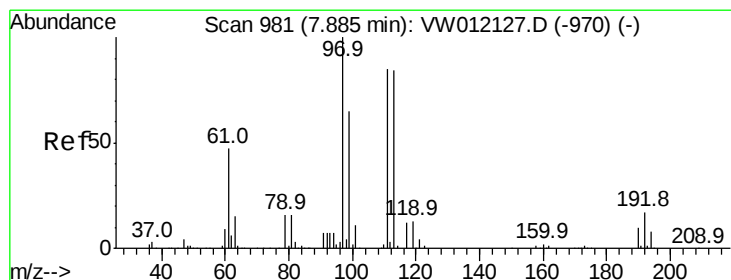
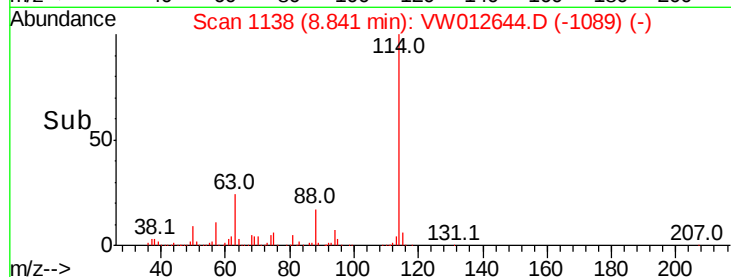
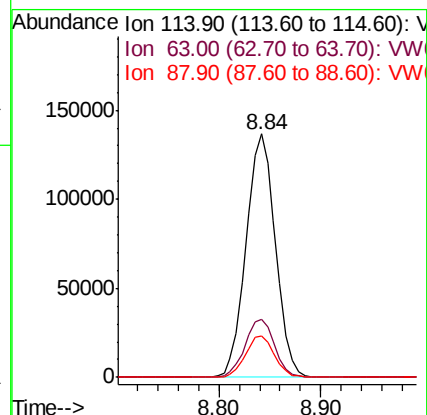
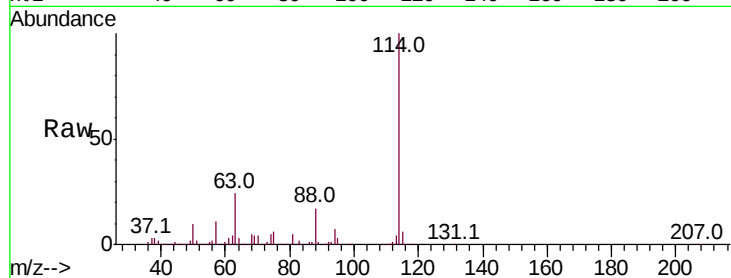




#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.84 min Scan# 1138
 Delta R.T. -0.00 min
 Lab File: VW012644.D
 Acq: 05 Sep 2019 16:45

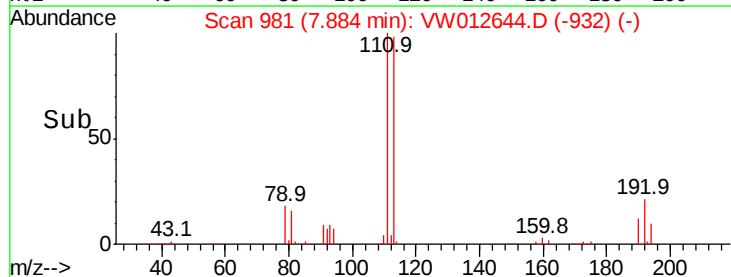
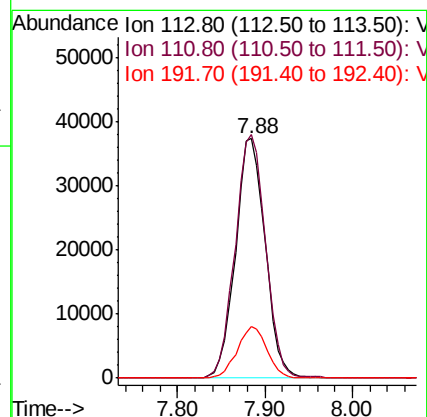
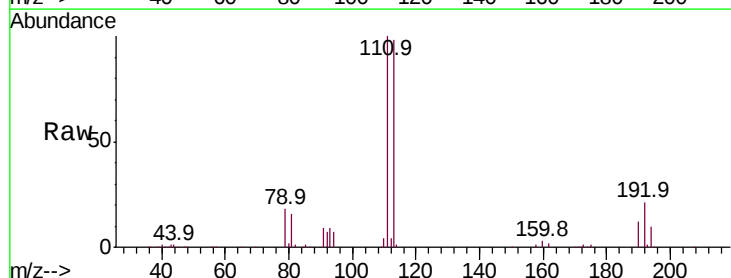
Instrument :
 MSVOA_W
 ClientSampleId :

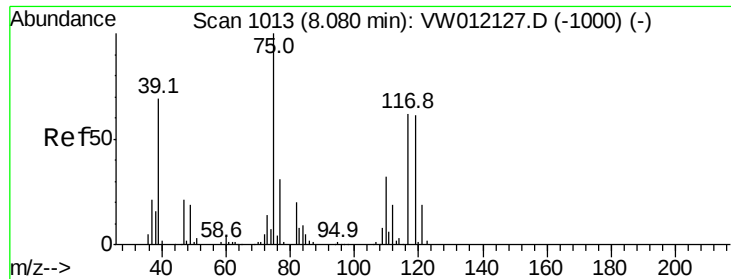
Tot Ion	Ratio	Lower	Upper
114	100		
63	23.9	0.0	48.6
88	16.9	0.0	32.2



#35
 Dibromofluoromethane
 Concen: 54.441 ug/l
 RT: 7.88 min Scan# 981
 Delta R.T. -0.00 min
 Lab File: VW012644.D
 Acq: 05 Sep 2019 16:45

Tgt Ion	Ratio	Lower	Upper
113	100		
111	104.4	82.7	124.1
192	21.6	16.2	24.2





#36

1,1-Dichloropropene

Concen: 4.973 ug/l

RT: 7.94 min Scan# 990

Delta R.T. -0.14 min

Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

Instrument :

MSVOA_W

ClientSampleId :

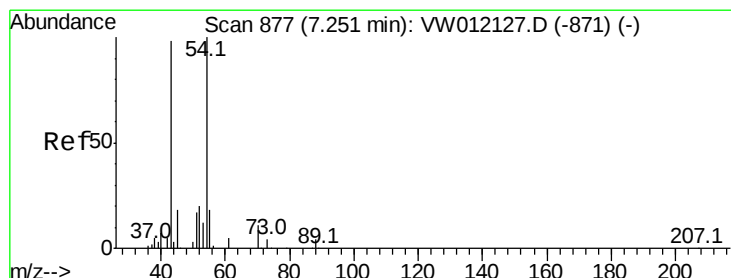
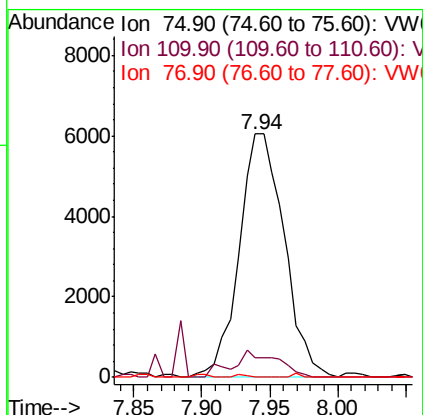
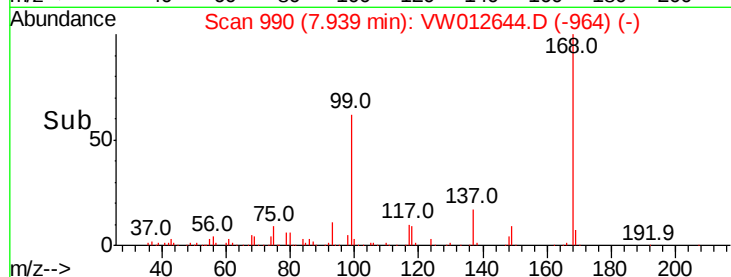
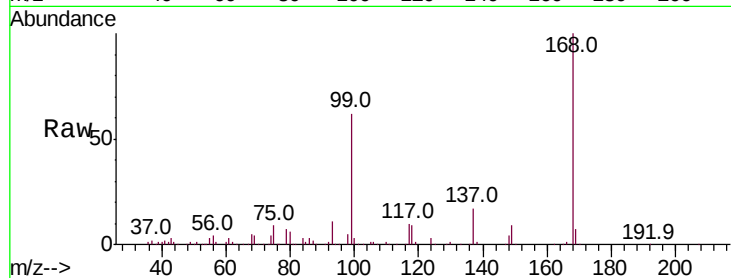
Tot Ion: 75 Resp: 13990

Ion Ratio Lower Upper

75 100

110 11.0 15.6 46.8#

77 0.4 24.6 36.8#



#37

Ethyl Acetate

Concen: 16.769 ug/l

RT: 7.18 min Scan# 865

Delta R.T. -0.07 min

Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

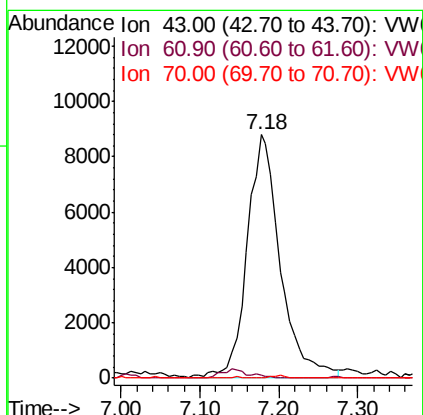
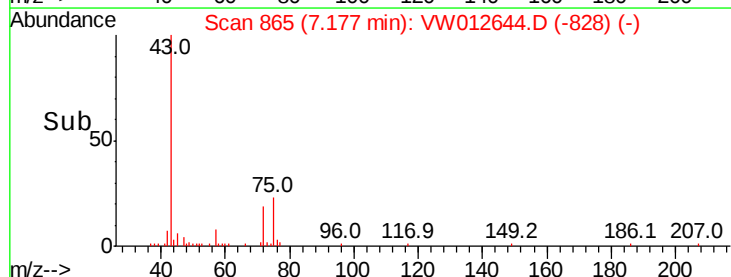
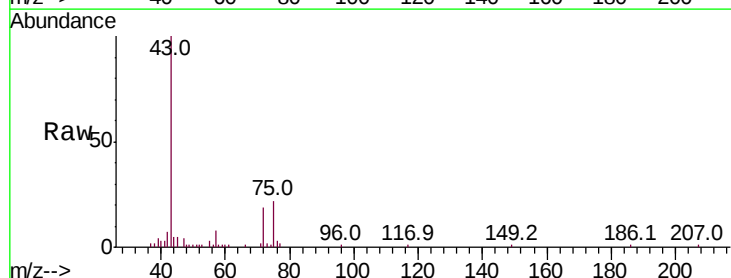
Tgt Ion: 43 Resp: 25850

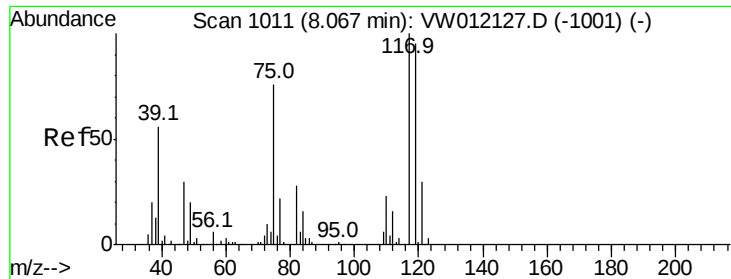
Ion Ratio Lower Upper

43 100

61 0.0 9.2 13.8#

70 0.0 6.9 10.3#

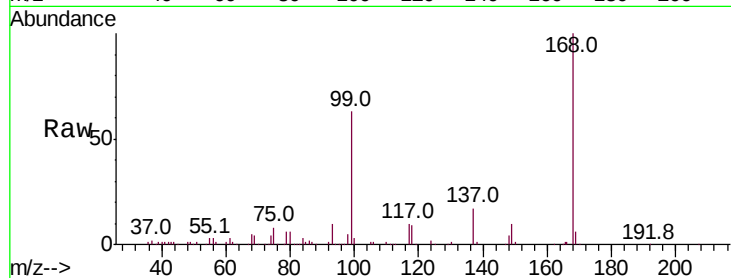




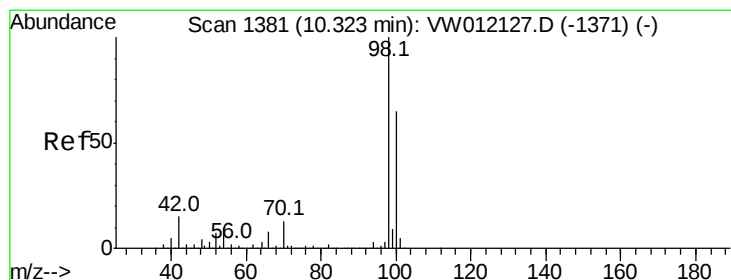
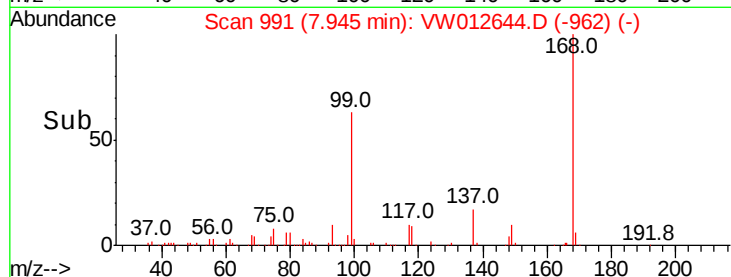
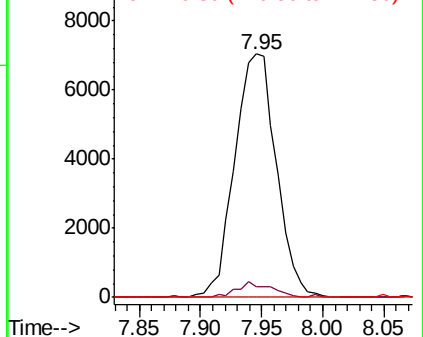
#38
Carbon Tetrachloride
Concen: 6.835 ug/l
RT: 7.95 min Scan# 991
Delta R.T. -0.12 min
Lab File: VW012644.D
Acq: 05 Sep 2019 16:45

Instrument :
MSVOA_W
ClientSampled :

Tot Ion:117 Resp: 16641
Ion Ratio Lower Upper
117 100
119 4.2 76.2 114.2#
121 0.0 23.8 35.8#

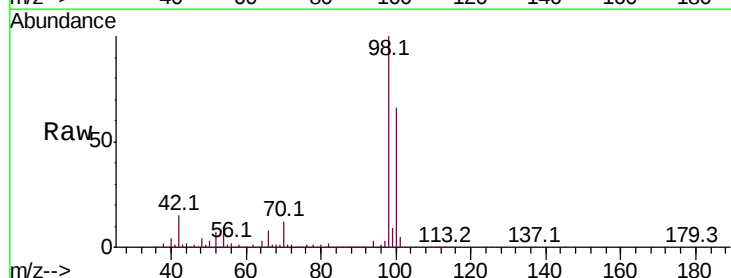


Abundance Ion 116.80 (116.50 to 117.50): V
Ion 118.80 (118.50 to 119.50): V
Ion 120.80 (120.50 to 121.50): V

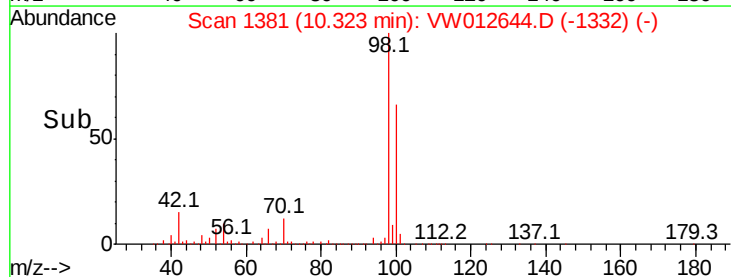
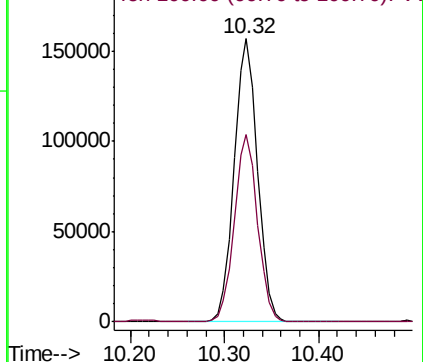


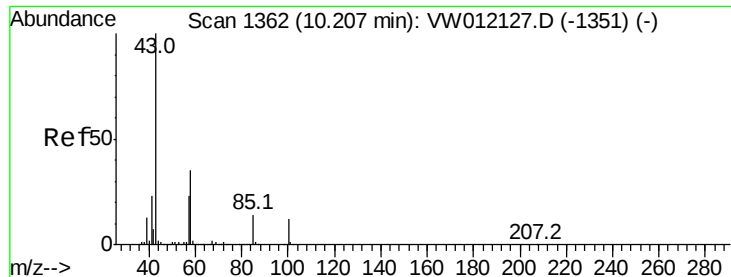
#50
Toluene-d8
Concen: 40.879 ug/l
RT: 10.32 min Scan# 1381
Delta R.T. -0.00 min
Lab File: VW012644.D
Acq: 05 Sep 2019 16:45

Tgt Ion: 98 Resp: 269331
Ion Ratio Lower Upper
98 100
100 65.6 52.4 78.6



Abundance Ion 98.00 (97.70 to 98.70): VW
Ion 100.00 (99.70 to 100.70): V





#51

4-Methyl-2-Pentanone

Concen: 9.925 ug/l

RT: 10.21 min Scan# 1363

Delta R.T. 0.01 min

Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

Instrument :

MSVOA_W

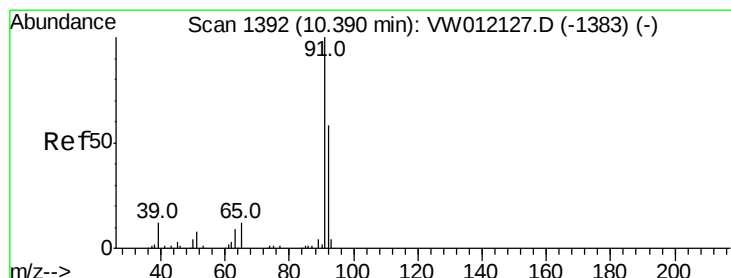
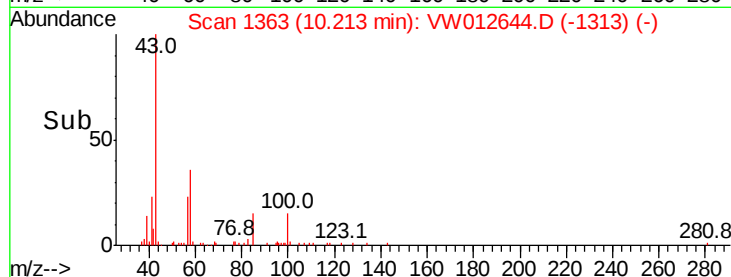
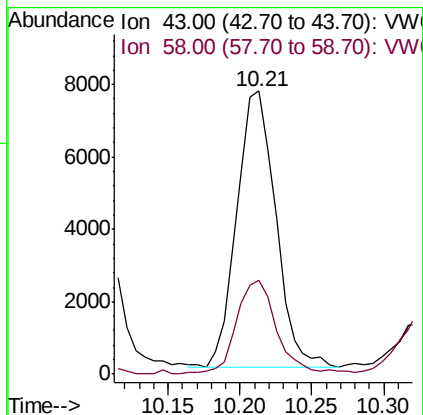
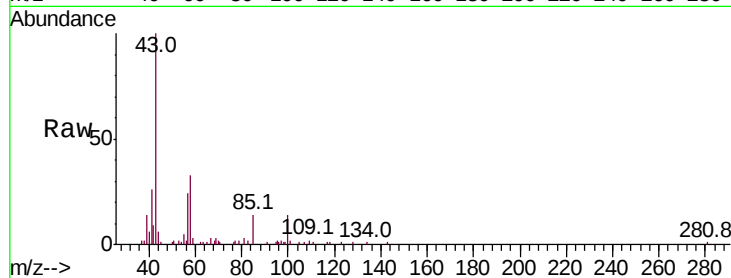
ClientSampleId :

Tot Ion: 43 Resp: 14414

Ion Ratio Lower Upper

43 100

58 34.5 28.2 42.2



#52

Toluene

Concen: 1.557 ug/l

RT: 10.38 min Scan# 1391

Delta R.T. -0.01 min

Lab File: VW012644.D

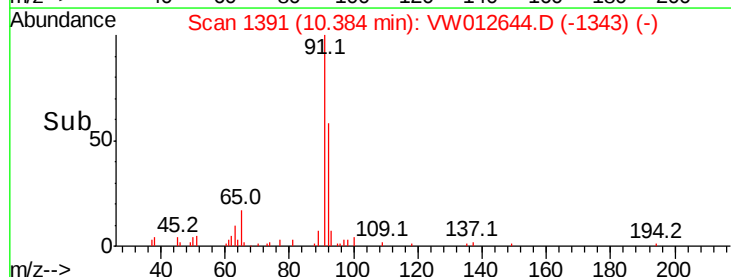
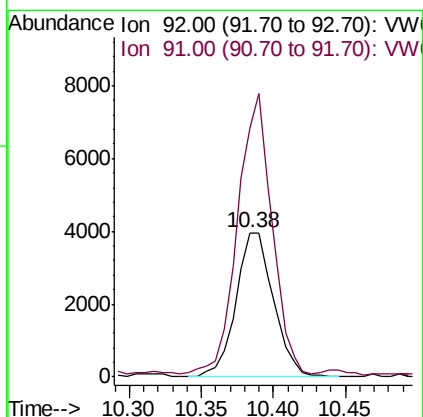
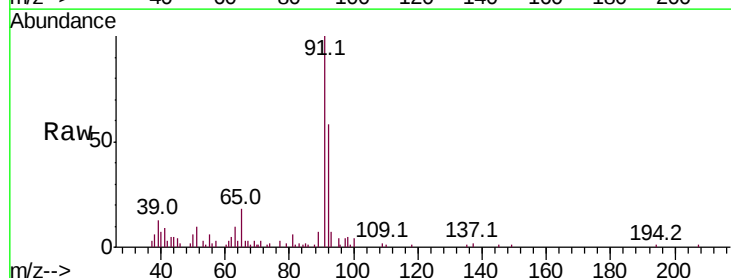
Acq: 05 Sep 2019 16:45

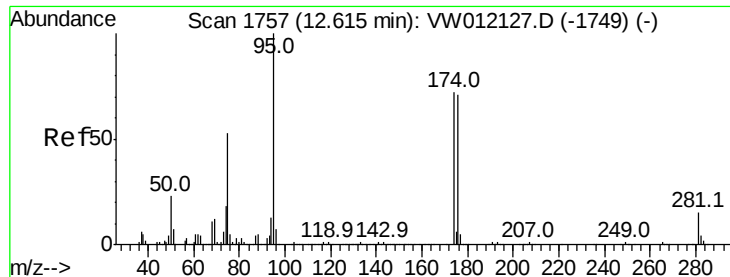
Tgt Ion: 92 Resp: 7186

Ion Ratio Lower Upper

92 100

91 176.5 136.6 204.8





#62

4-Bromofluorobenzene

Concen: 22.196 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.01 min

Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

Instrument :

MSVOA_W

ClientSampleId :

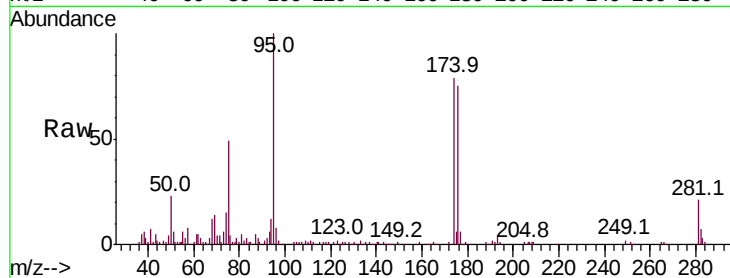
Tot Ion: 95 Resp: 51548

Ion Ratio Lower Upper

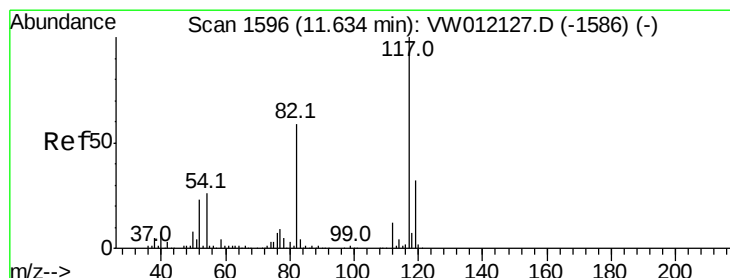
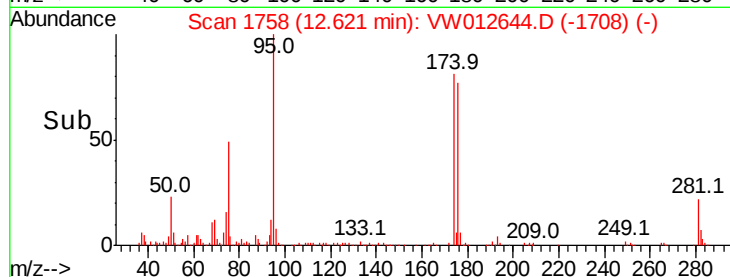
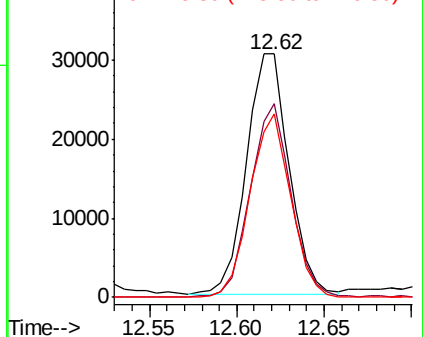
95 100

174 76.8 0.0 150.8

176 72.9 0.0 148.6



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: VW012644.D

Acq: 05 Sep 2019 16:45

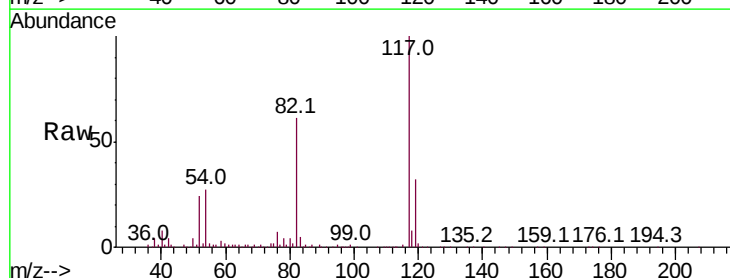
Tgt Ion: 117 Resp: 146466

Ion Ratio Lower Upper

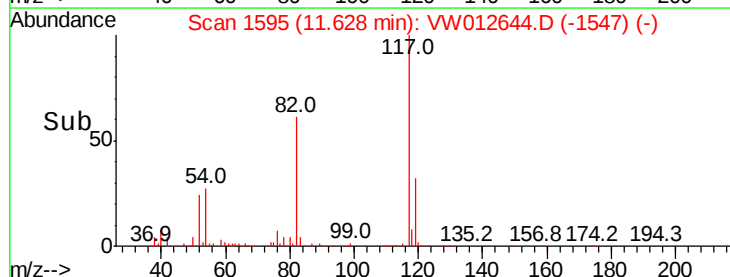
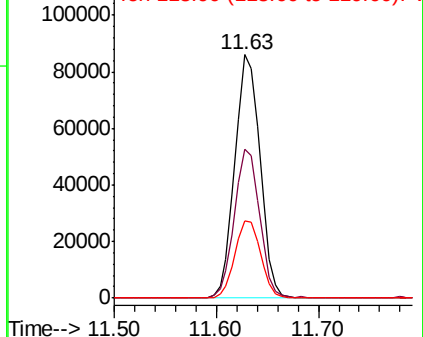
117 100

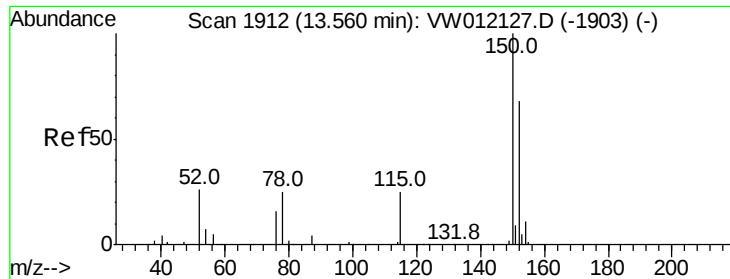
82 61.1 47.4 71.2

119 31.8 25.4 38.2



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

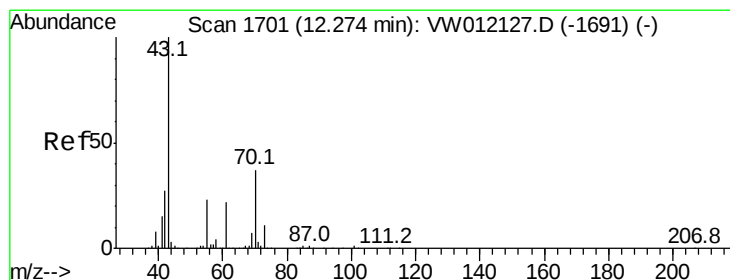
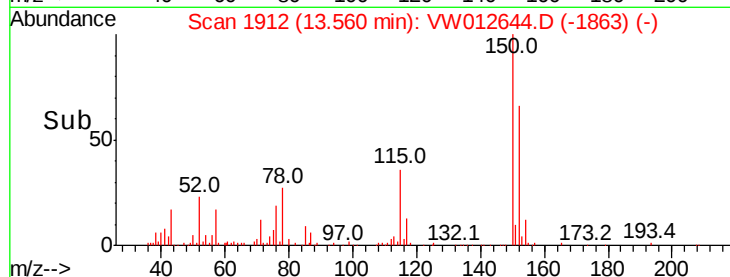
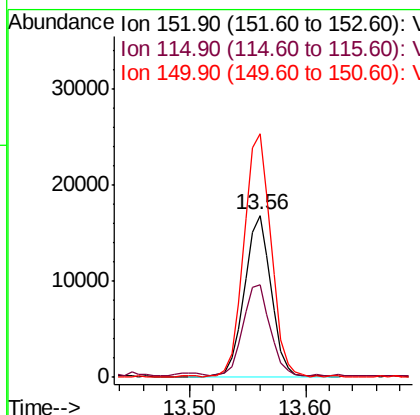
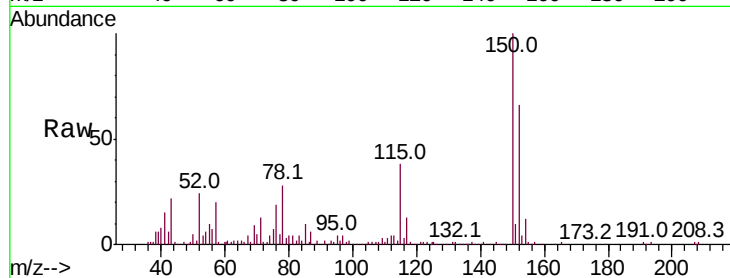




#72
 1,4-Dichlorobenzene-d4
 Concen: 50.000 ug/l
 RT: 13.56 min Scan# 1912
 Delta R.T. -0.00 min
 Lab File: VW012644.D
 Acq: 05 Sep 2019 16:45

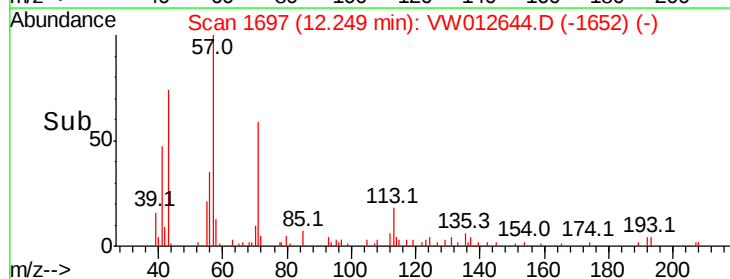
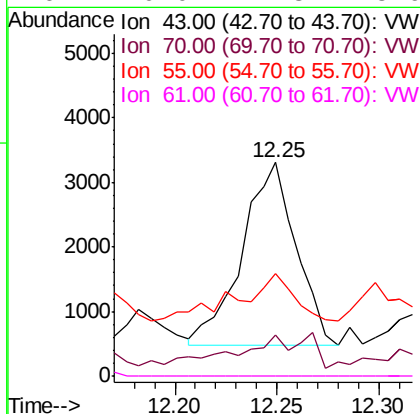
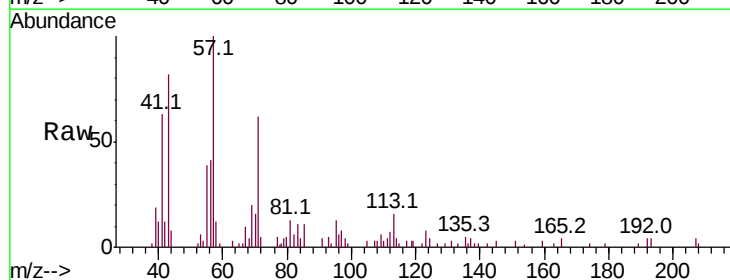
Instrument :
 MSVOA_W
 ClientSampleId :

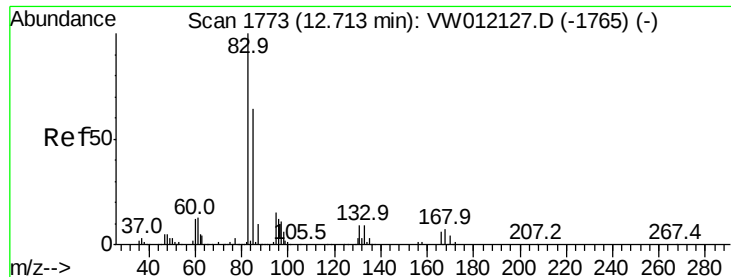
Tot Ion:152 Resp: 27288
 Ion Ratio Lower Upper
 152 100
 115 56.0 30.1 90.3
 150 150.3 0.0 345.8



#74
 N-ethyl acetate
 Concen: 8.455 ug/l
 RT: 12.25 min Scan# 1697
 Delta R.T. -0.02 min
 Lab File: VW012644.D
 Acq: 05 Sep 2019 16:45

Tgt Ion: 43 Resp: 5223
 Ion Ratio Lower Upper
 43 100
 70 23.2 28.6 43.0#
 55 27.1 17.8 26.6#
 61 0.0 17.3 25.9#





#75

1,1,2,2-Tetrachloroethane

Concen: 7.643 ug/l

RT: 12.65 min Scan# 1762

Delta R.T. -0.07 min

Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

Instrument :

MSVOA_W

ClientSampled :

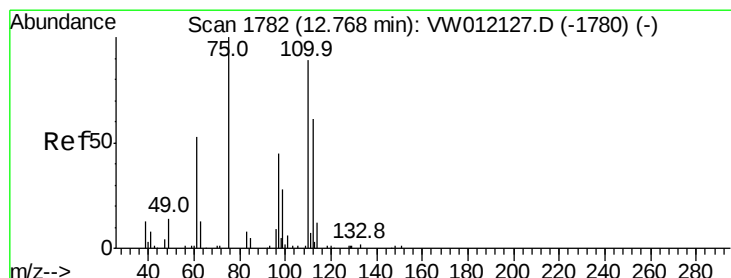
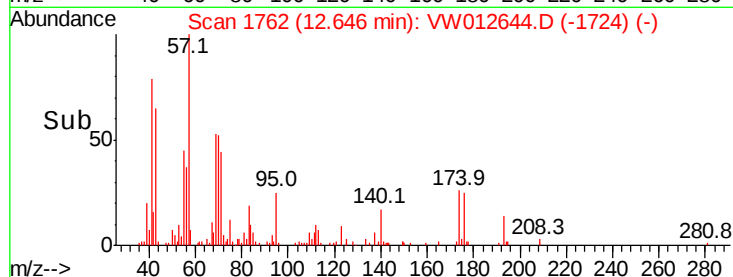
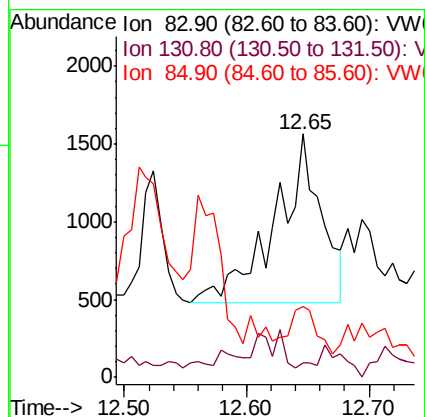
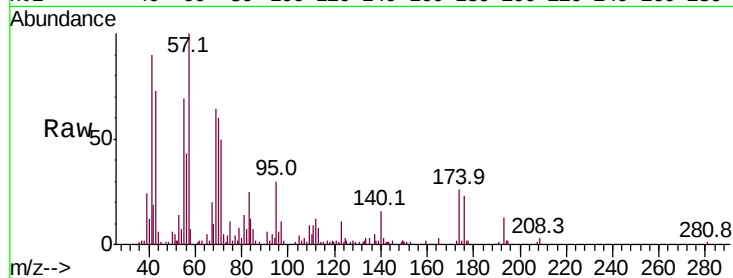
Tot Ion: 83 Resp: 2865

Ion Ratio Lower Upper

83 100

131 11.8 4.9 14.7

85 16.5 31.9 95.7#



#76

1,2,3-Trichloropropane

Concen: 102.579 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.15 min

Lab File: VW012644.D

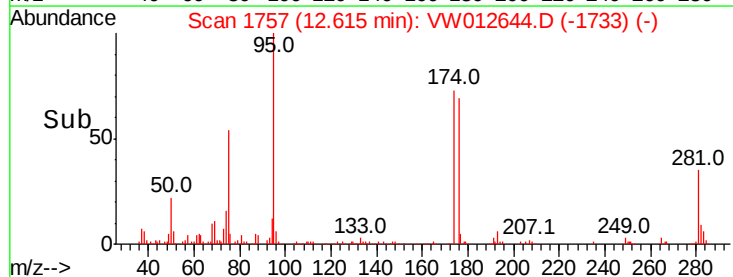
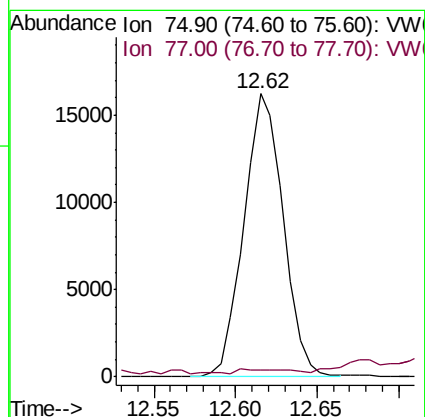
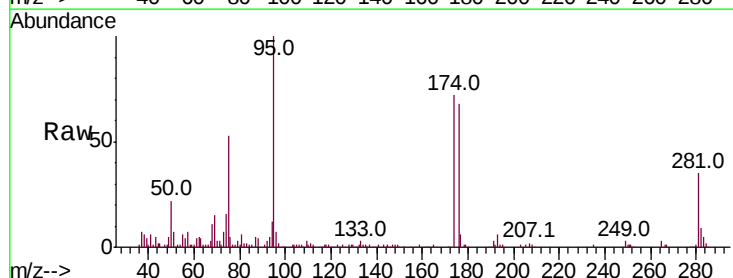
Acq: 05 Sep 2019 16:45

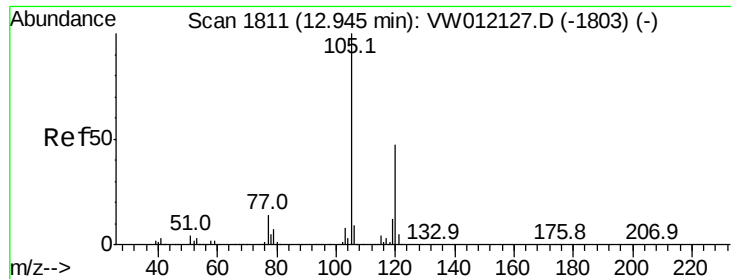
Tgt Ion: 75 Resp: 27262

Ion Ratio Lower Upper

75 100

77 0.0 0.0 0.0





#80

1,3,5-Trimethylbenzene

Concen: 1.706 ug/l

RT: 12.94 min Scan# 1811

Delta R.T. -0.00 min

Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

Instrument :

MSVOA_W

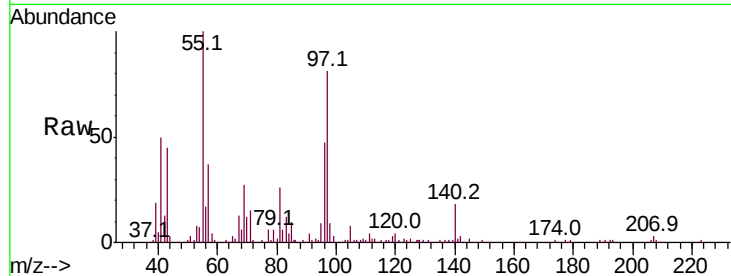
ClientSampleId :

Tot Ion:105 Resp: 2914

Ion Ratio Lower Upper

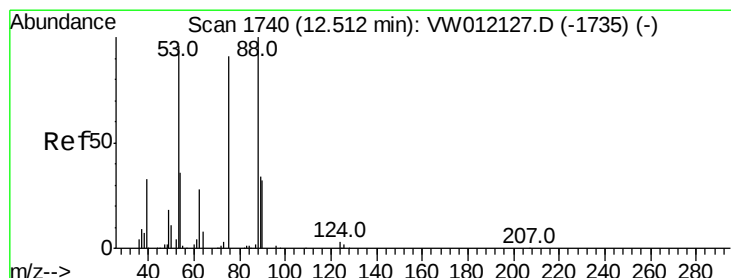
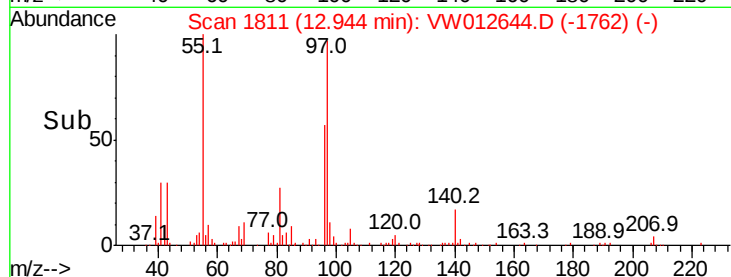
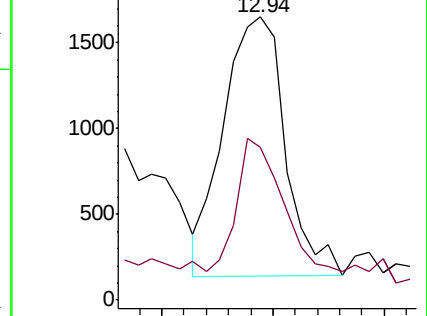
105 100

120 39.7 24.0 72.0



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#81

trans-1,4-Dichloro-2-butene

Concen: 224.908 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. 0.10 min

Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

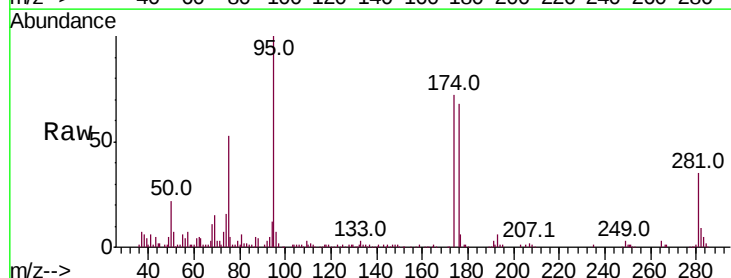
Tgt Ion: 75 Resp: 27262

Ion Ratio Lower Upper

75 100

53 0.0 89.4 134.0#

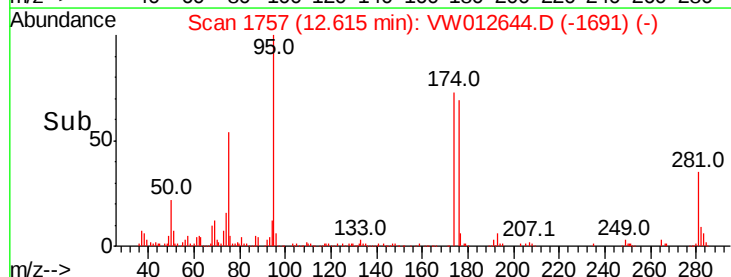
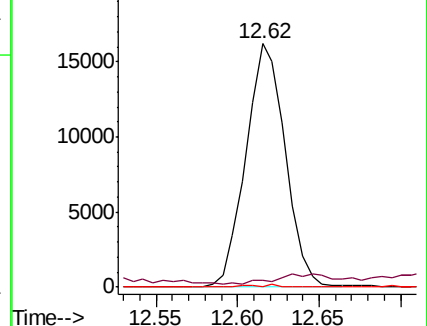
89 0.3 34.5 51.7#

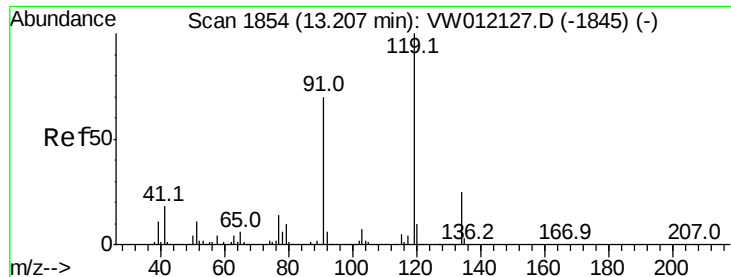


Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 53.00 (52.70 to 53.70): VW

Ion 88.90 (88.60 to 89.60): VW

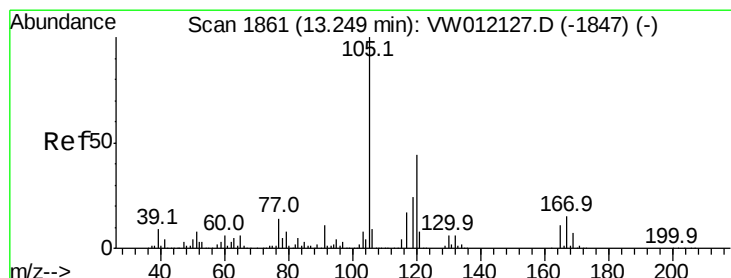
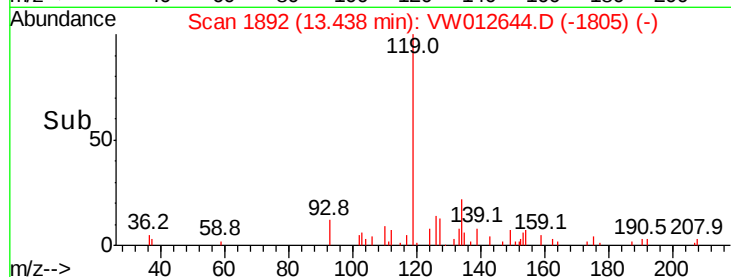
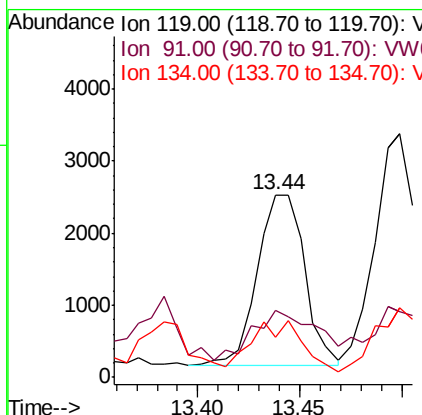
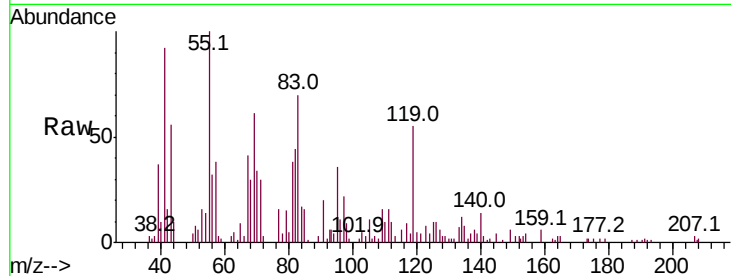




#83
tert-Butylbenzene
Concen: 2.659 ug/l
RT: 13.44 min Scan# 1892
Delta R.T. 0.23 min
Lab File: VW012644.D
Acq: 05 Sep 2019 16:45

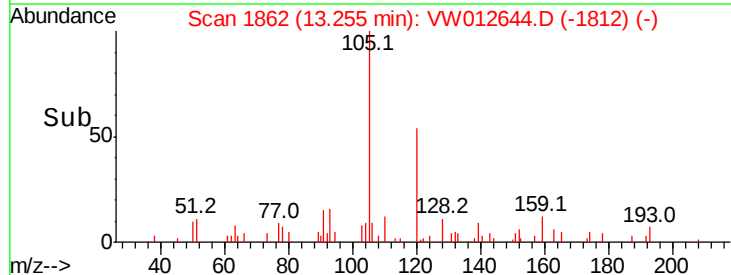
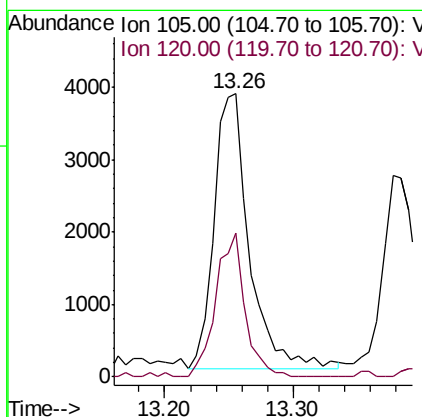
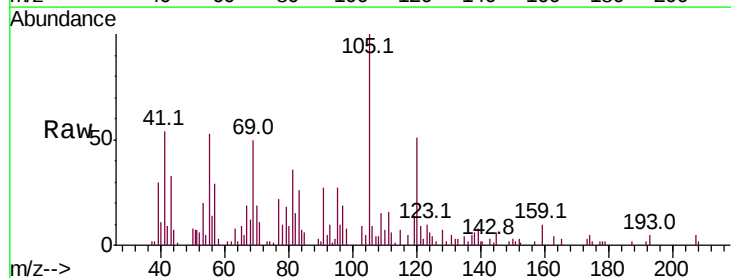
Instrument :
MSVOA_W
ClientSampled :

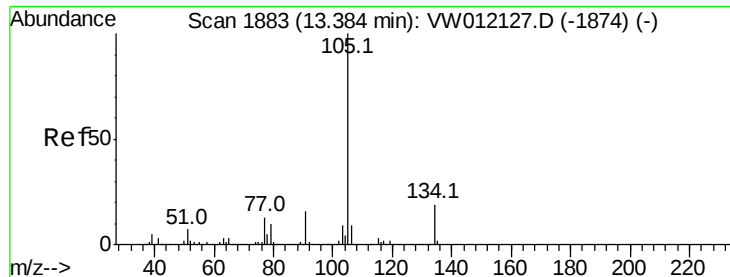
Tot Ion:119 Resp: 3848
Ion Ratio Lower Upper
119 100
91 37.7 34.8 104.3
134 32.4 13.3 39.8



#84
1,2,4-Trimethylbenzene
Concen: 4.234 ug/l
RT: 13.26 min Scan# 1862
Delta R.T. 0.01 min
Lab File: VW012644.D
Acq: 05 Sep 2019 16:45

Tgt Ion:105 Resp: 7266
Ion Ratio Lower Upper
105 100
120 43.5 21.9 65.7





#85

sec-Butylbenzene

Concen: 2.194 ug/l

RT: 13.38 min Scan# 1882

Delta R.T. -0.01 min

Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

Instrument :

MSVOA_W

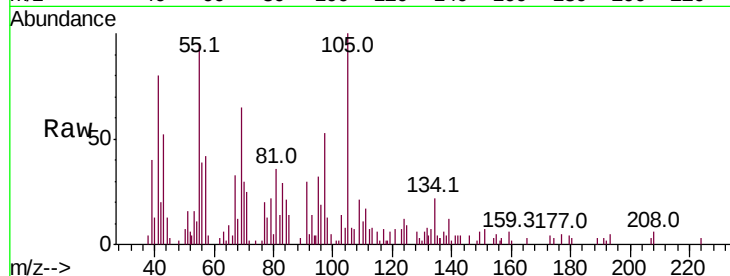
ClientSampleId :

Tot Ion:105 Resp: 4549

Ion Ratio Lower Upper

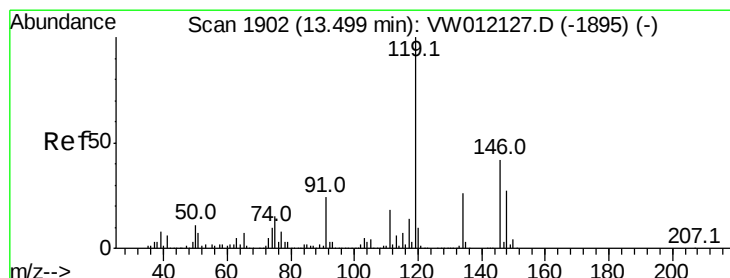
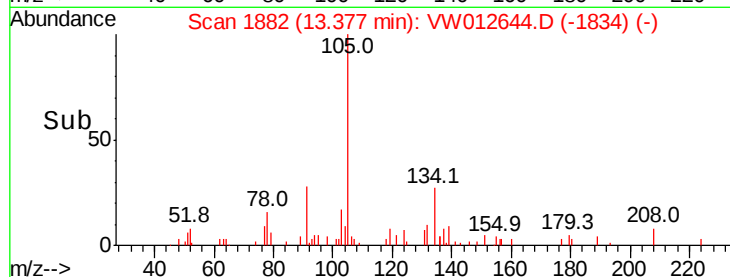
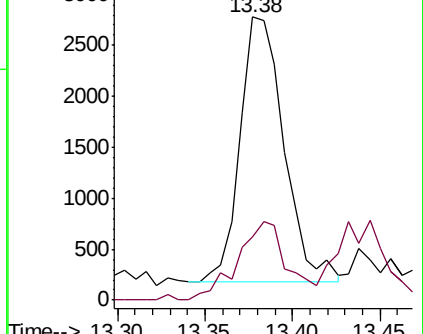
105 100

134 33.9 9.8 29.4#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V



#86

p-Isopropyltoluene

Concen: 2.654 ug/l

RT: 13.50 min Scan# 1902

Delta R.T. -0.00 min

Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

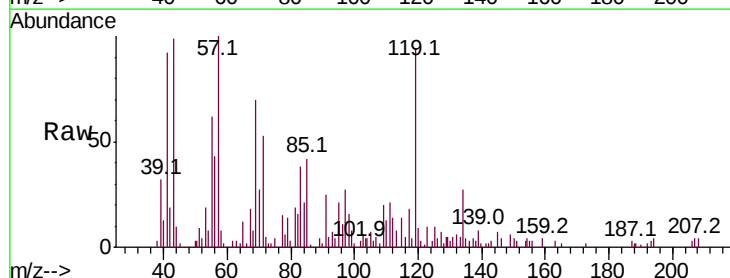
Tgt Ion:119 Resp: 4915

Ion Ratio Lower Upper

119 100

134 33.8 12.8 38.3

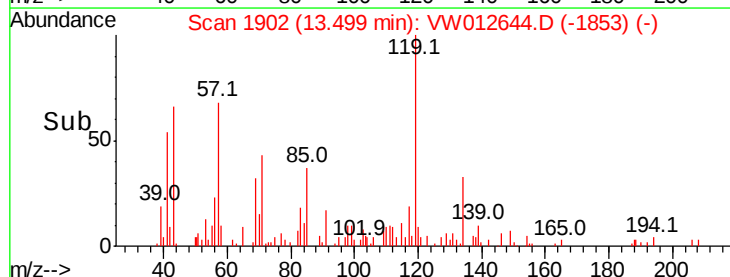
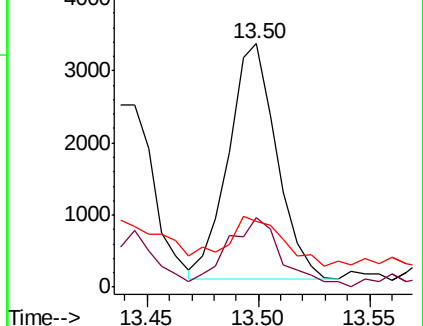
91 21.0 12.3 36.9

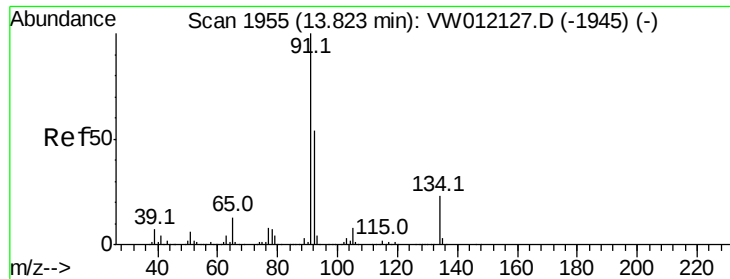


Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): V





#89

n-Butylbenzene

Concen: 1.215 ug/l

RT: 13.82 min Scan# 1955

Delta R.T. -0.00 min

Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

Instrument :

MSVOA_W

ClientSampled :

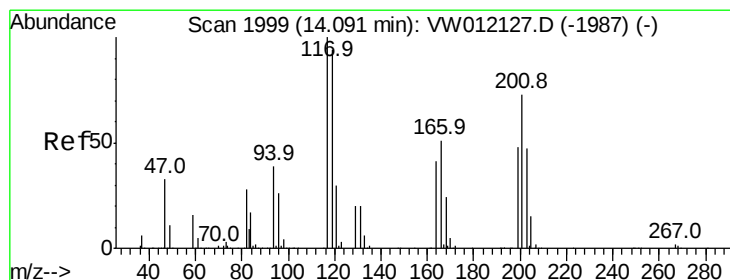
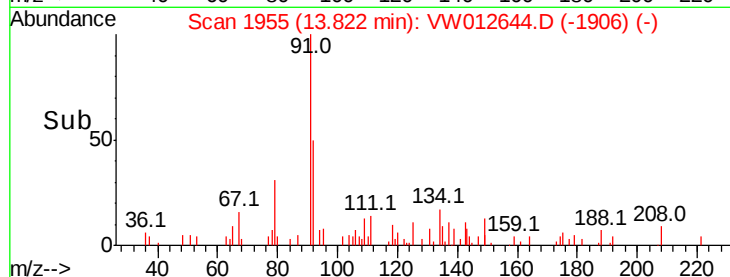
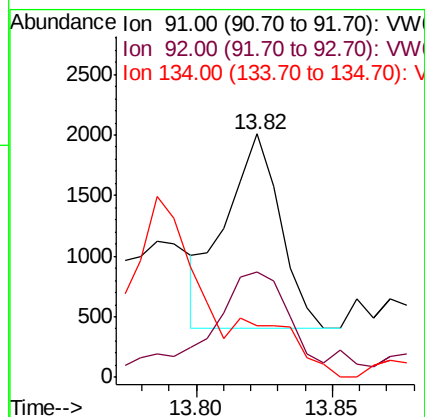
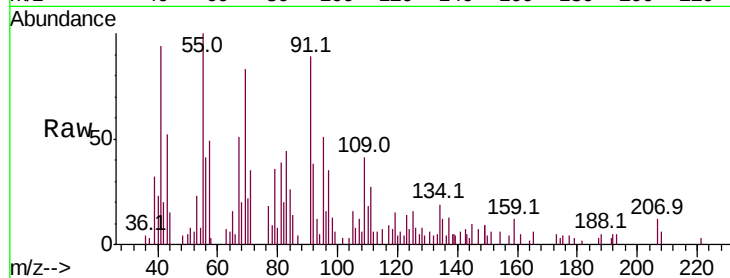
Tot Ion: 91 Resp: 2238

Ion Ratio Lower Upper

91 100

92 78.7 27.1 81.2

134 0.0 12.2 36.4#



#90

Hexachloroethane

Concen: 2.287 ug/l

RT: 14.10 min Scan# 2000

Delta R.T. 0.01 min

Lab File: VW012644.D

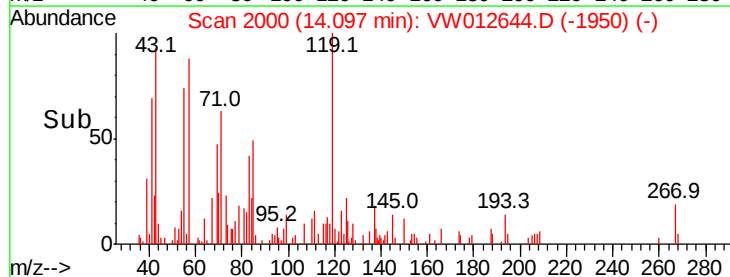
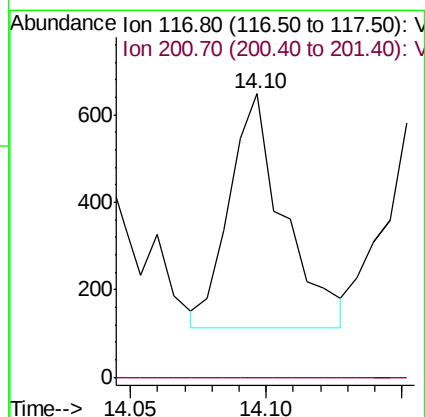
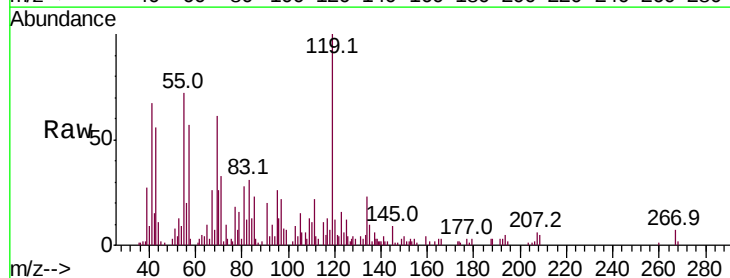
Acq: 05 Sep 2019 16:45

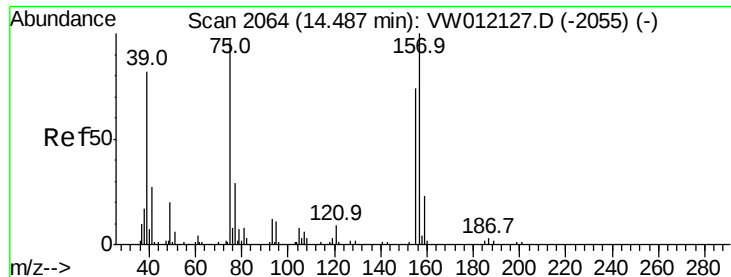
Tgt Ion: 117 Resp: 743

Ion Ratio Lower Upper

117 100

201 0.0 38.6 115.7#





#92

1,2-Dibromo-3-Chloropropane

Concen: 3.450 ug/l

RT: 14.50 min Scan# 2066

Delta R.T. 0.01 min

Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

Instrument :

MSVOA_W

ClientSampleId :

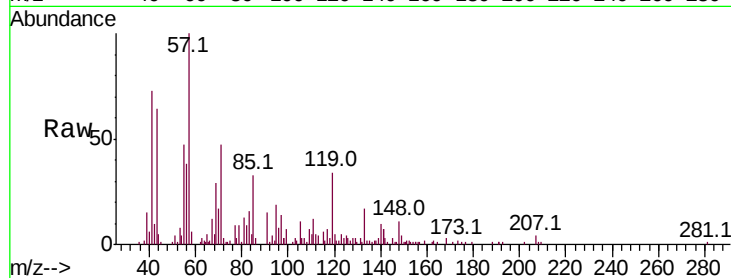
Tot Ion: 75 Resp: 218

Ion Ratio Lower Upper

75 100

155 72.0 37.5 112.3

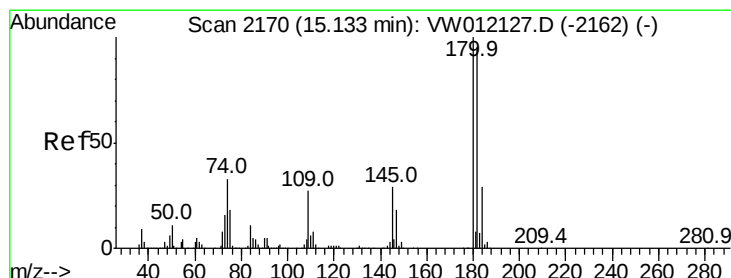
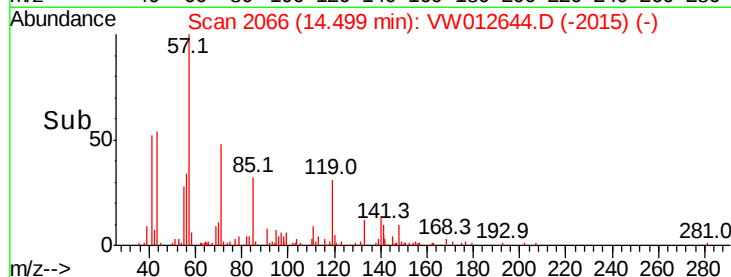
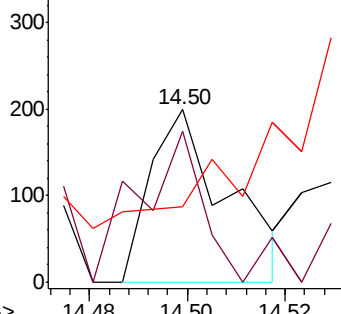
157 0.0 50.5 151.5#



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



#93

1,2,4-Trichlorobenzene

Concen: 1.157 ug/l

RT: 15.15 min Scan# 2172

Delta R.T. 0.01 min

Lab File: VW012644.D

Acq: 05 Sep 2019 16:45

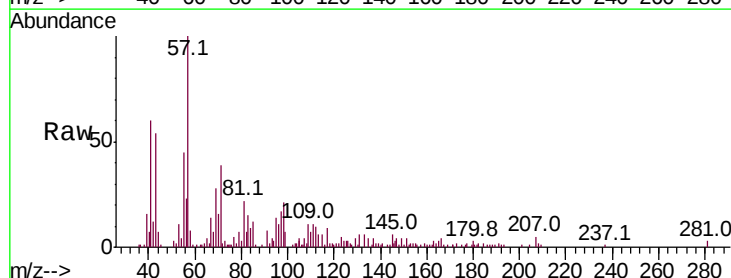
Tgt Ion: 180 Resp: 607

Ion Ratio Lower Upper

180 100

182 94.2 47.8 143.4

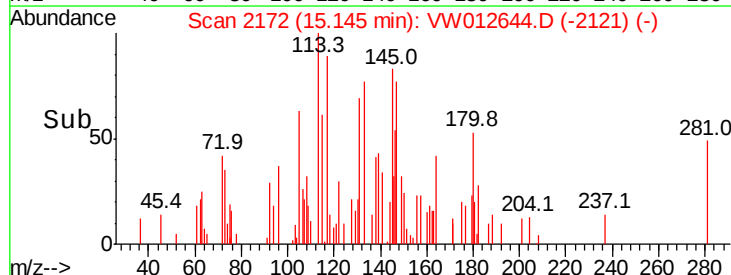
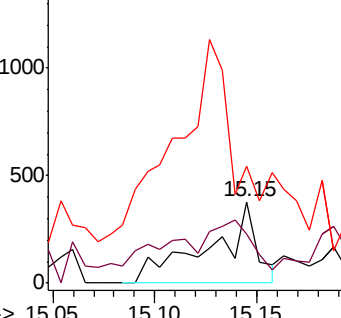
145 303.3 15.0 45.1#

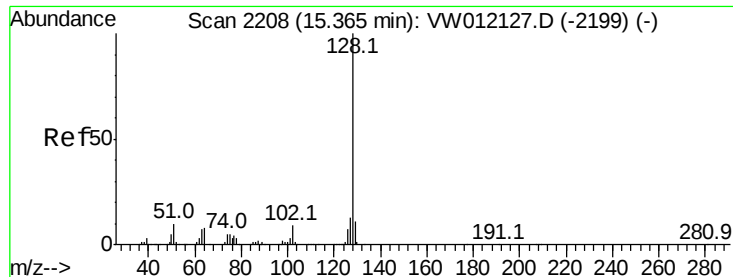


Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.80 (144.50 to 145.50): V

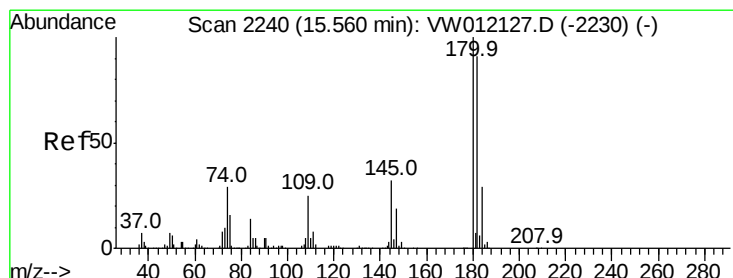
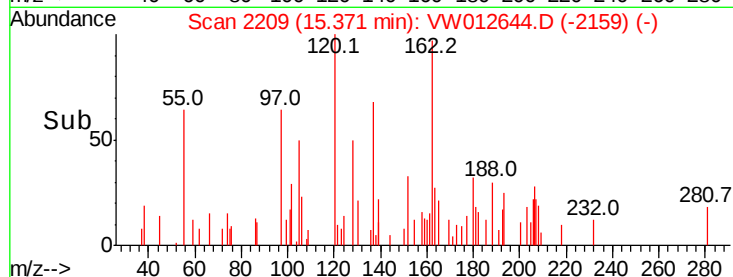
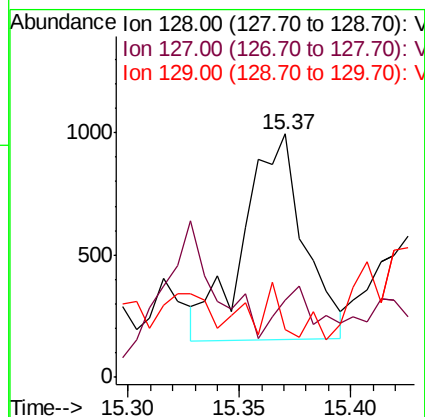
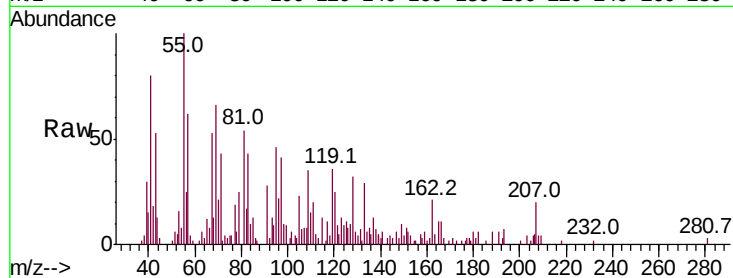




#95
Naphthalene
Concen: 5.735 ug/l
RT: 15.37 min Scan# 2209
Delta R.T. 0.01 min
Lab File: VW012644.D
Acq: 05 Sep 2019 16:45

Instrument :
MSVOA_W
ClientSampled :

Tot Ion:128 Resp: 1593
Ion Ratio Lower Upper
128 100
127 19.8 10.7 16.1#
129 0.0 8.7 13.1#



#96
1,2,3-Trichlorobenzene
Concen: 1.224 ug/l
RT: 15.58 min Scan# 2244
Delta R.T. 0.02 min
Lab File: VW012644.D
Acq: 05 Sep 2019 16:45

Tgt Ion:180 Resp: 560
Ion Ratio Lower Upper
180 100
182 77.1 47.1 141.3
145 0.0 16.2 48.5#

