

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD010720\
 Data File : VD064792.D
 Acq On : 07 Jan 2020 14:50
 Operator : VA/SY
 Sample : L1039-05
 Misc : 6.76G/5.00ml/MSVOA D/SOIL
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :

Quant Time: Jan 08 07:37:28 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D122419S.M
 Quant Title : SW846 8260
 QLast Update : Tue Dec 24 13:19:06 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.98	168	211302	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.87	114	349851	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.65	117	215316	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.58	152	48038	50.00	ug/l	0.00

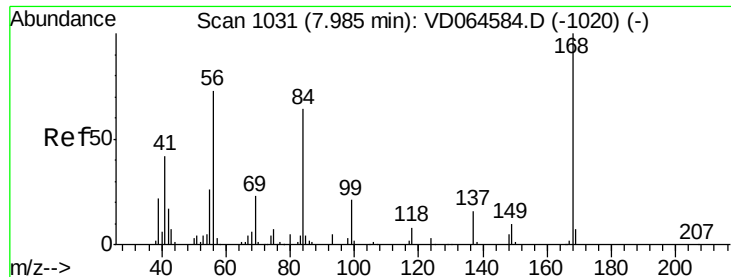
System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.33	65	114736	61.58	ug/l	0.00
Spiked Amount	50.000		Recovery	=	123.16%	
35) Dibromofluoromethane	7.91	113	120192	56.00	ug/l	0.00
Spiked Amount	50.000		Recovery	=	112.00%	
50) Toluene-d8	10.34	98	331046	40.27	ug/l	0.00
Spiked Amount	50.000		Recovery	=	80.54%	
62) 4-Bromofluorobenzene	12.64	95	64569	24.84	ug/l	0.00
Spiked Amount	50.000		Recovery	=	49.68%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.99	85	2696	1.642	ug/l	79
11) Tert butyl alcohol	5.24	59	167	1.564	ug/l #	70
16) Acetone	4.16	43	13669	35.181	ug/l #	80
17) Carbon Disulfide	4.41	76	7074	1.177	ug/l	98
20) Methylene Chloride	4.96	84	12794	2.025	ug/l #	93
25) 2-Butanone	7.21	43	2768	5.405	ug/l #	84
29) Tetrahydrofuran	7.57	42	591	1.856	ug/l #	69
31) Cyclohexane	7.97	56	6276	1.807	ug/l #	40
38) Carbon Tetrachloride	7.98	117	20723	5.772	ug/l #	15
51) 4-Methyl-2-Pentanone	10.24	43	1397	1.073	ug/l #	70
59) 2-Hexanone	10.99	43	939	1.063	ug/l #	52
74) N-amyl acetate	12.28	43	741	1.010	ug/l #	48
76) 1,2,3-Trichloropropane	12.64	75	33947	89.490	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.64	75	33947	187.166	ug/l #	10
84) 1,2,4-Trimethylbenzene	13.27	105	3273	1.165	ug/l	98
88) 1,4-Dichlorobenzene	13.61	146	1642	1.039	ug/l #	40
89) n-Butylbenzene	13.86	91	3056	1.057	ug/l	96
90) Hexachloroethane	14.12	117	775	1.264	ug/l	85
92) 1,2-Dibromo-3-Chloropropan	14.51	75	134	1.533	ug/l #	30
93) 1,2,4-Trichlorobenzene	15.17	180	3714	3.679	ug/l #	21
94) Hexachlorobutadiene	15.28	225	865	1.362	ug/l	84
95) Naphthalene	15.41	128	8749	5.478	ug/l #	86
96) 1,2,3-Trichlorobenzene	15.73	180	3381	3.923	ug/l	63

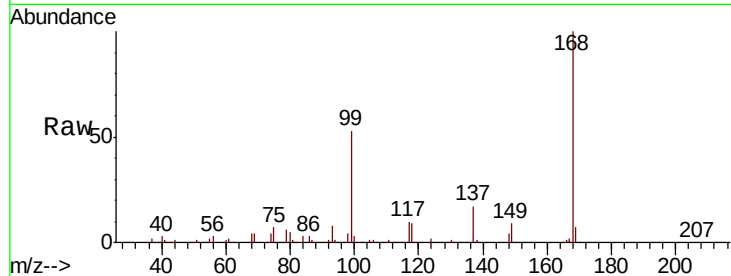
(#) = qualifier out of range (m) = manual integration (+) = signals summed



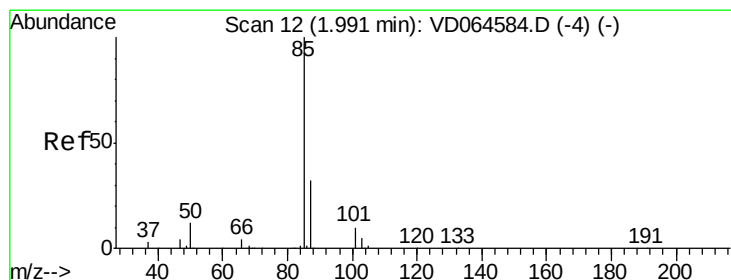
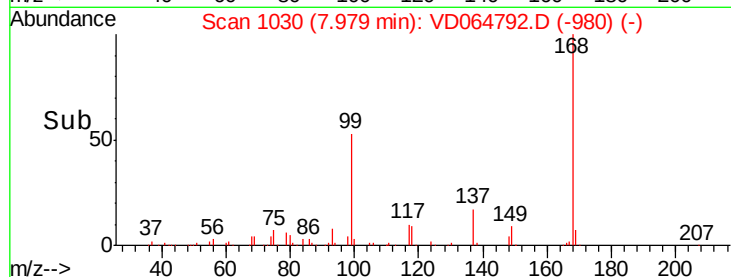
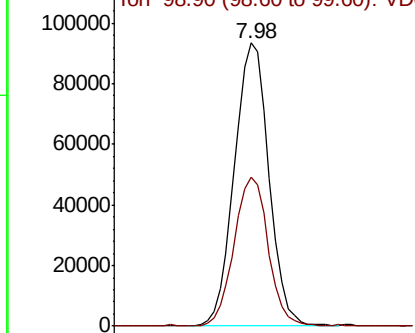
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.98 min Scan# 1030
Delta R.T. -0.01 min
Lab File: VD064792.D
Acq: 07 Jan 2020 14:50

Instrument :
MSVOA_D
ClientSampleId :

Tot Ion:168 Resp: 211302
Ion Ratio Lower Upper
168 100
99 52.6 41.8 62.6

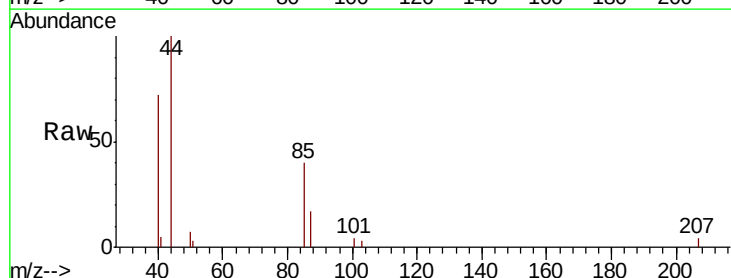


Abundance Ion 167.90 (167.60 to 168.60): V
Ion 98.90 (98.60 to 99.60): VDC

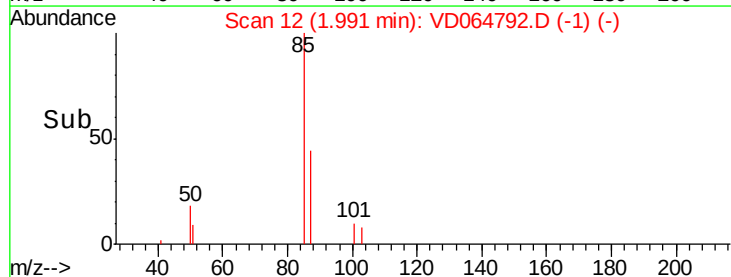
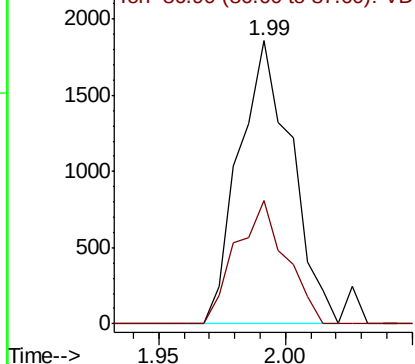


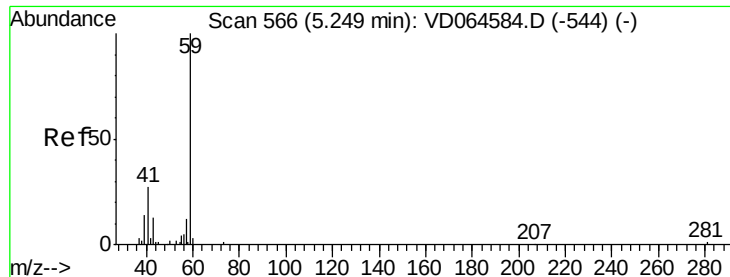
#2
Dichlorodifluoromethane
Concen: 1.642 ug/l
RT: 1.99 min Scan# 12
Delta R.T. 0.00 min
Lab File: VD064792.D
Acq: 07 Jan 2020 14:50

Tgt Ion: 85 Resp: 2696
Ion Ratio Lower Upper
85 100
87 43.8 16.1 48.2



Abundance Ion 84.90 (84.60 to 85.60): VDC
Ion 86.90 (86.60 to 87.60): VDC



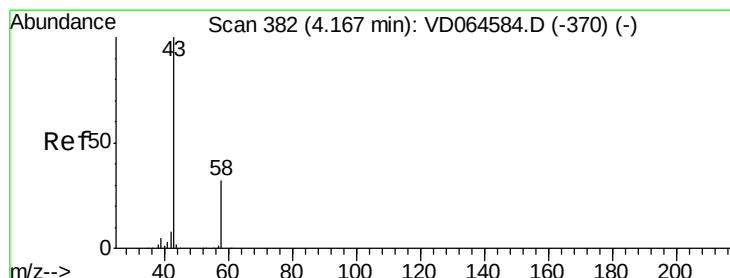
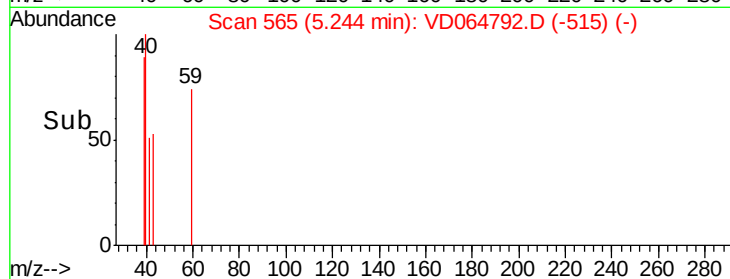
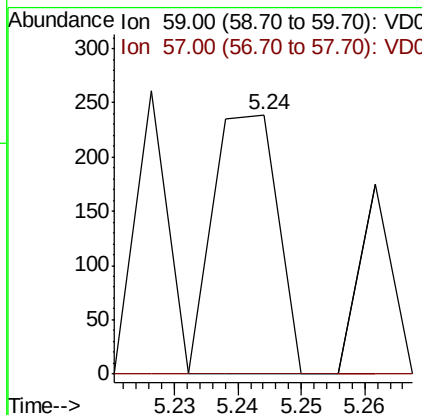
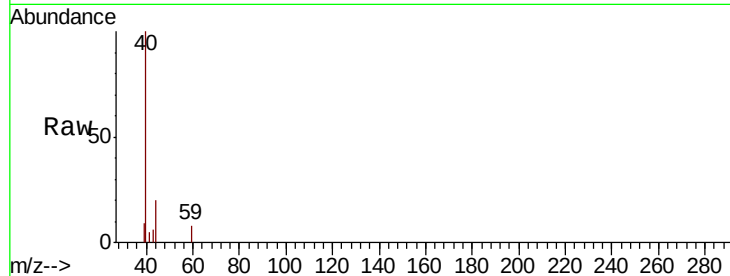


#11

Tert butyl alcohol
 Concen: 1.564 ug/l
 RT: 5.24 min Scan# 565
 Delta R.T. -0.01 min
 Lab File: VD064792.D
 Acq: 07 Jan 2020 14:50

Instrument :
 MSVOA_D
 ClientSampleId :

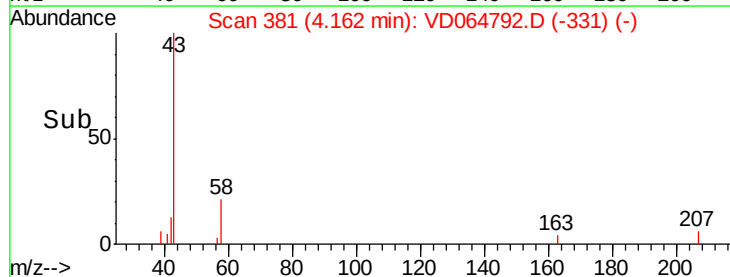
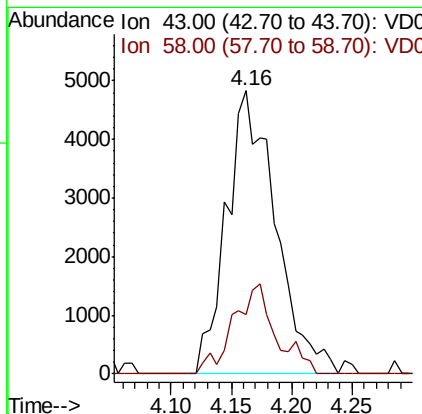
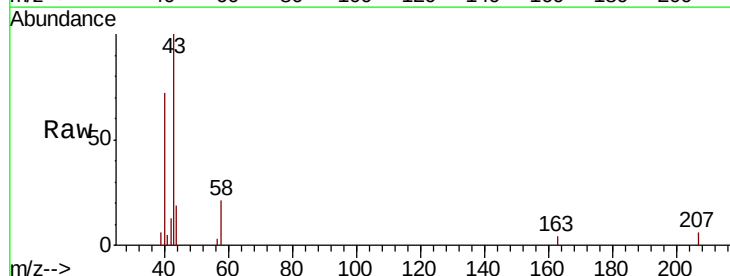
Tot Ion: 59 Resp: 167
 Ion Ratio Lower Upper
 59 100
 57 0.0 9.3 13.9#

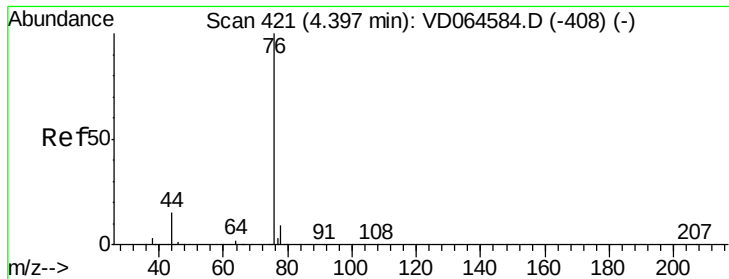


#16

Acetone
 Concen: 35.181 ug/l
 RT: 4.16 min Scan# 381
 Delta R.T. -0.01 min
 Lab File: VD064792.D
 Acq: 07 Jan 2020 14:50

Tgt Ion: 43 Resp: 13669
 Ion Ratio Lower Upper
 43 100
 58 21.0 25.8 38.6#

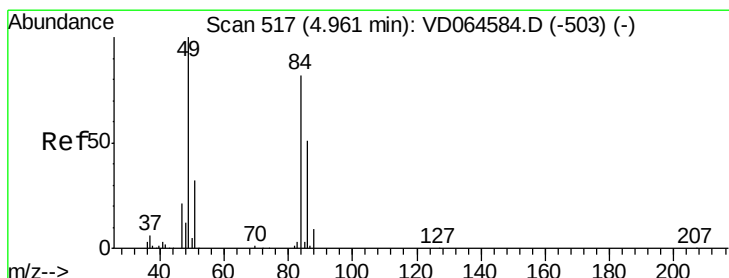
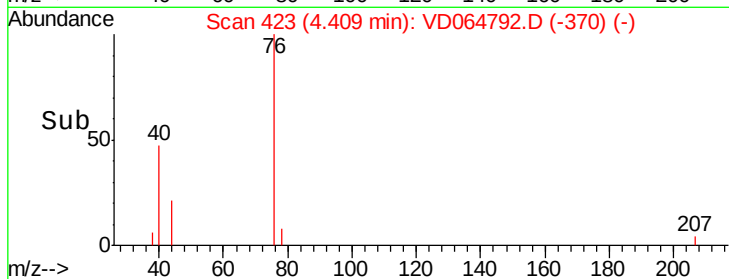
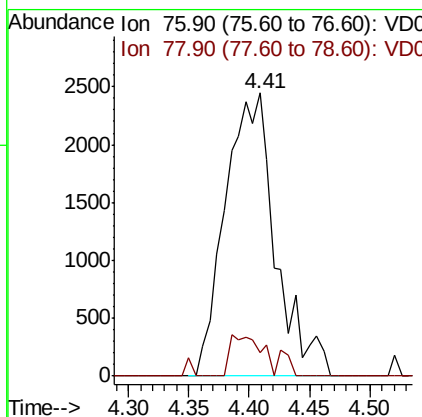
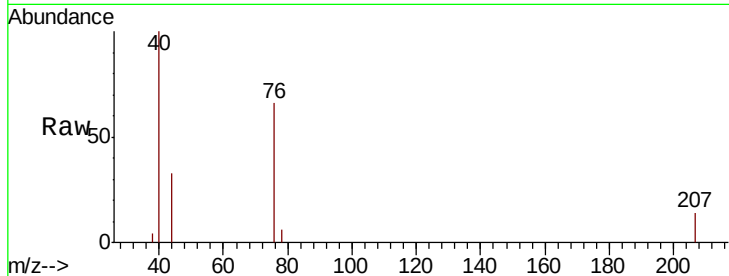




#17
Carbon Disulfide
Concen: 1.177 ug/l
RT: 4.41 min Scan# 423
Delta R.T. 0.01 min
Lab File: VD064792.D
Acq: 07 Jan 2020 14:50

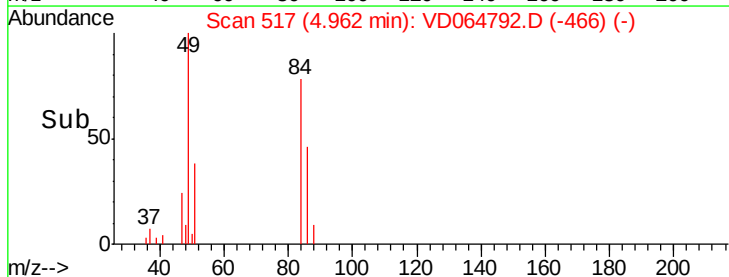
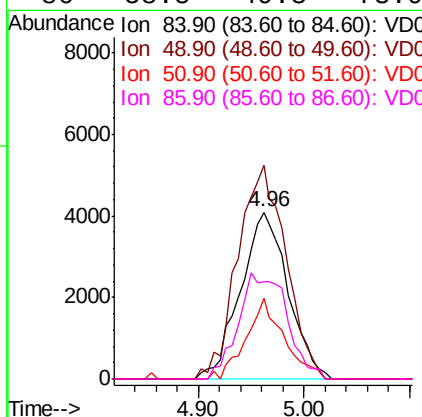
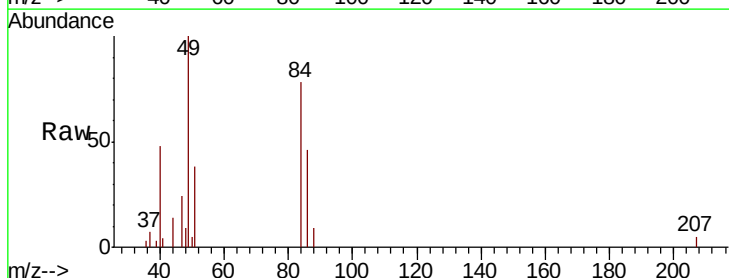
Instrument :
MSVOA_D
ClientSampled :

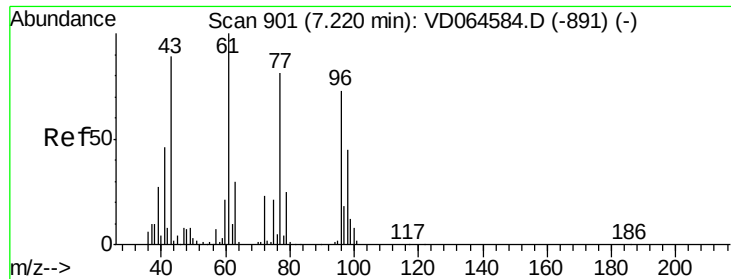
Tot Ion: 76 Resp: 7074
Ion Ratio Lower Upper
76 100
78 8.4 7.3 10.9



#20
Methylene Chloride
Concen: 2.025 ug/l
RT: 4.96 min Scan# 517
Delta R.T. 0.00 min
Lab File: VD064792.D
Acq: 07 Jan 2020 14:50

Tgt Ion: 84 Resp: 12794
Ion Ratio Lower Upper
84 100
49 128.2 97.2 145.8
51 48.7 31.4 47.0#
86 58.5 49.3 73.9





#25

2-Butanone

Concen: 5.405 ug/l

RT: 7.21 min Scan# 900

Delta R.T. -0.01 min

Lab File: VD064792.D

Acq: 07 Jan 2020 14:50

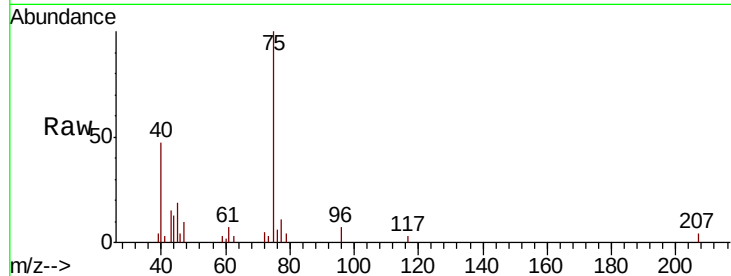
Instrument :
MSVOA_D
ClientSampled :

Tot Ion: 43 Resp: 2768

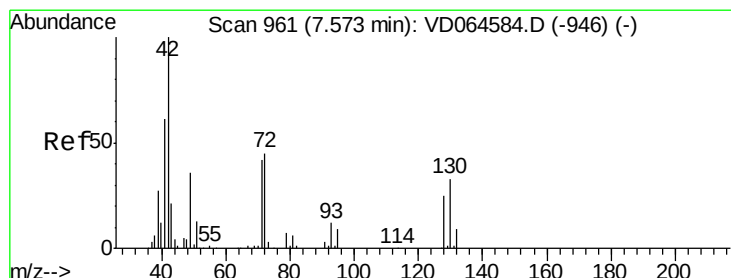
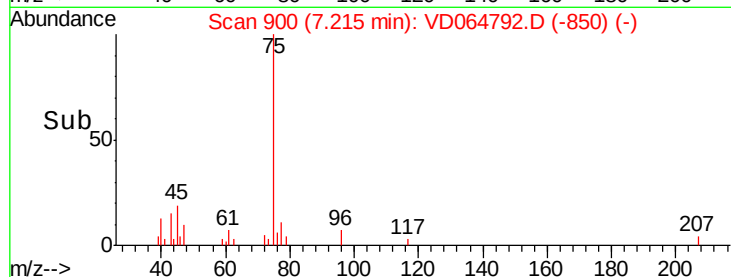
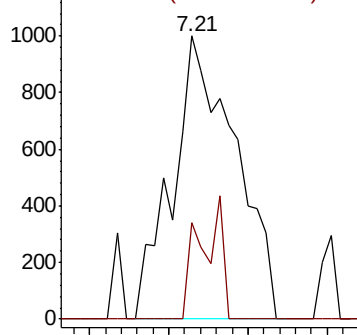
Ion Ratio Lower Upper

43 100

72 33.9 20.7 31.1#



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



#29

Tetrahydrofuran

Concen: 1.856 ug/l

RT: 7.57 min Scan# 960

Delta R.T. -0.01 min

Lab File: VD064792.D

Acq: 07 Jan 2020 14:50

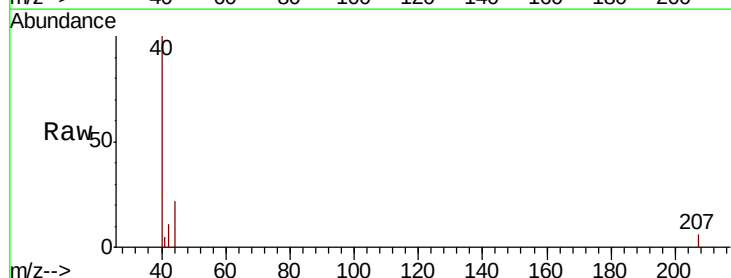
Tgt Ion: 42 Resp: 591

Ion Ratio Lower Upper

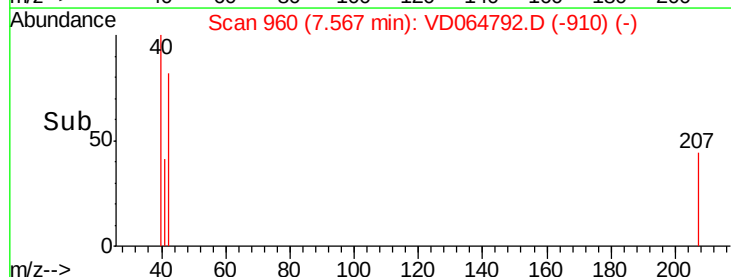
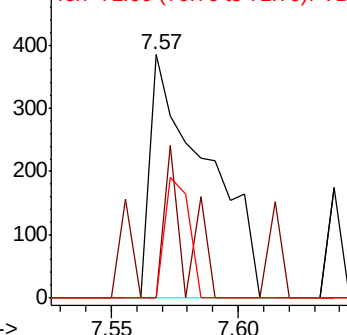
42 100

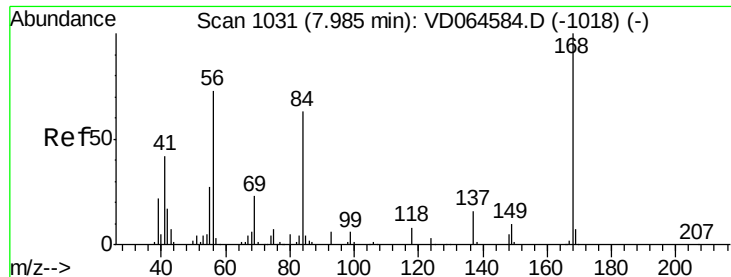
72 24.0 35.0 52.4#

71 21.2 32.9 49.3#



Abundance Ion 42.00 (41.70 to 42.70): VDC
Ion 72.00 (71.70 to 72.70): VDC
Ion 71.00 (70.70 to 71.70): VDC

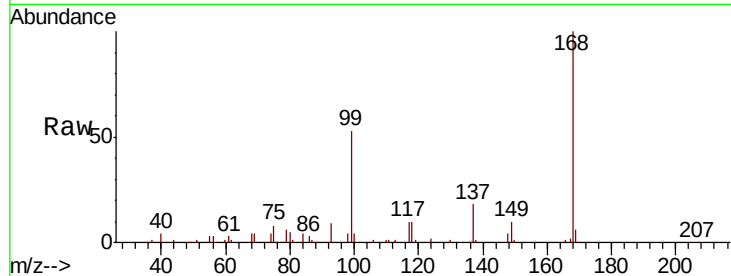




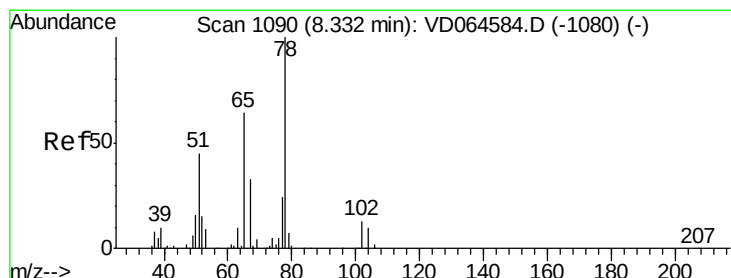
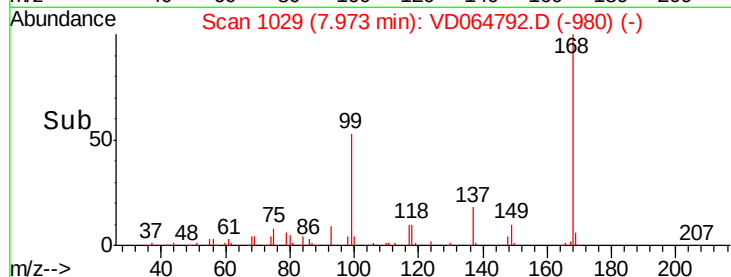
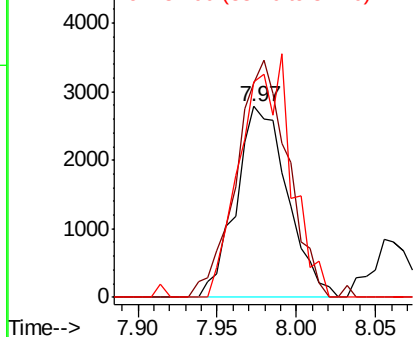
#31
Cyclohexane
Concen: 1.807 ug/l
RT: 7.97 min Scan# 1029
Delta R.T. -0.01 min
Lab File: VD064792.D
Acq: 07 Jan 2020 14:50

Instrument :
MSVOA_D
ClientSampled :

Tot Ion: 56 Resp: 6276
Ion Ratio Lower Upper
56 100
69 112.2 24.7 37.1#
84 113.0 69.4 104.2#

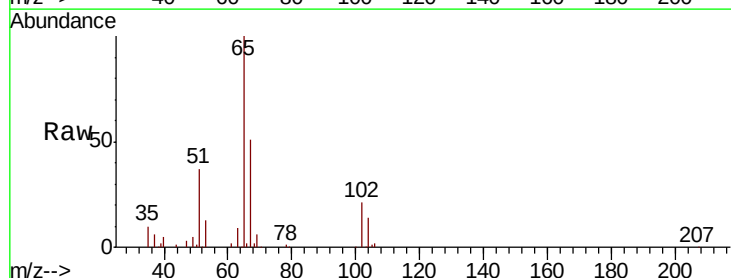


Abundance Ion 56.00 (55.70 to 56.70): VDC
Ion 69.00 (68.70 to 69.70): VDC
Ion 84.00 (83.70 to 84.70): VDC

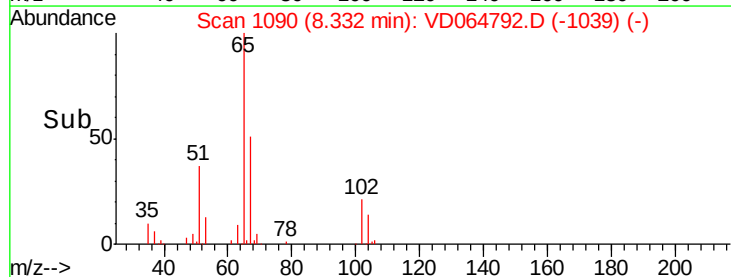
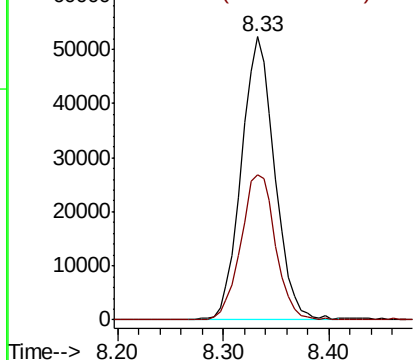


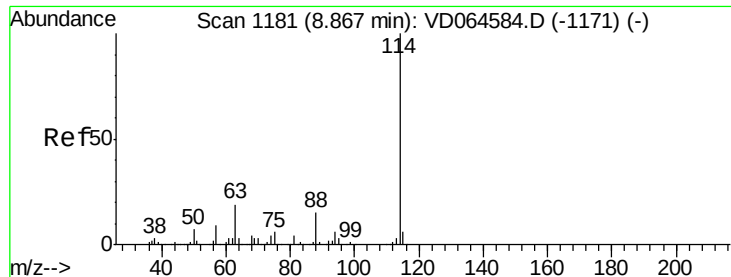
#33
1,2-Dichloroethane-d4
Concen: 61.579 ug/l
RT: 8.33 min Scan# 1090
Delta R.T. 0.00 min
Lab File: VD064792.D
Acq: 07 Jan 2020 14:50

Tgt Ion: 65 Resp: 114736
Ion Ratio Lower Upper
65 100
67 52.9 0.0 106.2



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

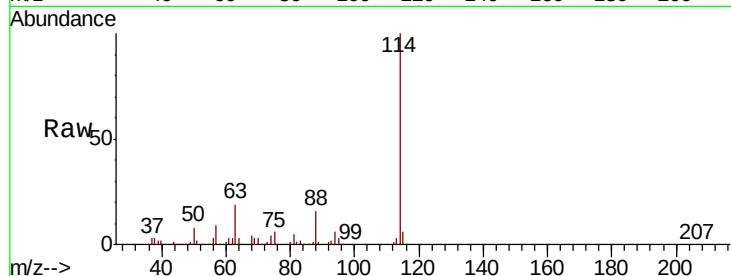




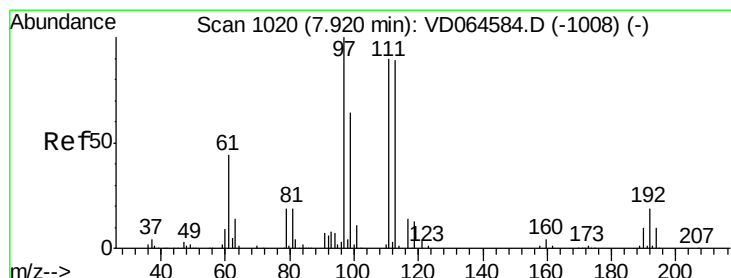
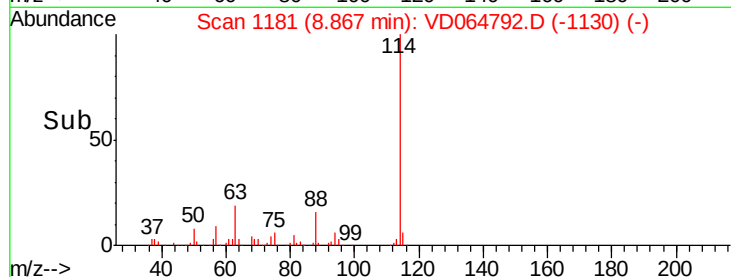
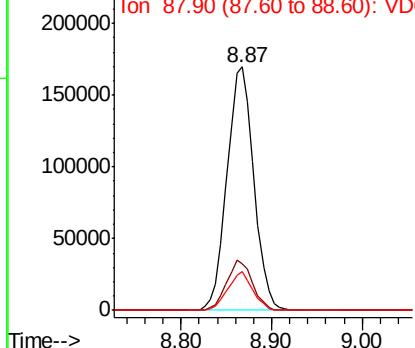
#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.87 min Scan# 1181
 Delta R.T. 0.00 min
 Lab File: VD064792.D
 Acq: 07 Jan 2020 14:50

Instrument :
 MSVOA_D
 ClientSampleId :

Tot Ion	Ratio	Lower	Upper
114	100		
63	19.3	0.0	38.0
88	15.7	0.0	29.2

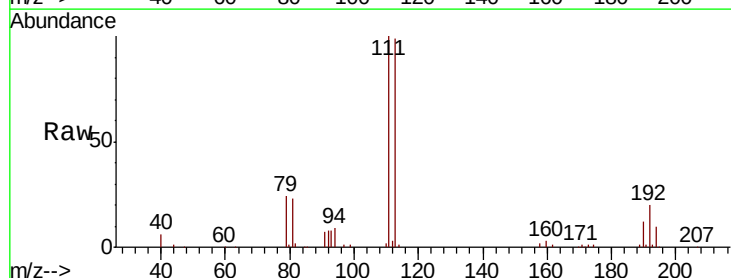


Abundance Ion 113.90 (113.60 to 114.60): V
 Ion 63.00 (62.70 to 63.70): V
 Ion 87.90 (87.60 to 88.60): V

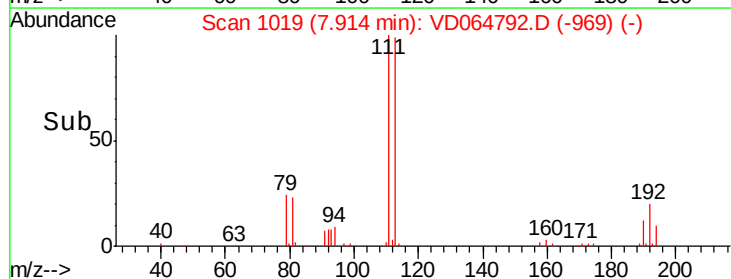
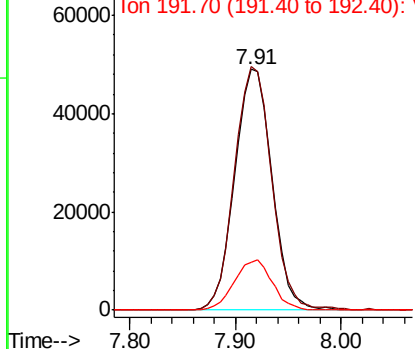


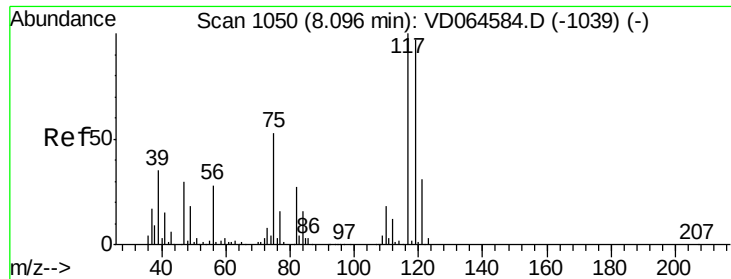
#35
 Dibromofluoromethane
 Concen: 55.997 ug/l
 RT: 7.91 min Scan# 1019
 Delta R.T. -0.01 min
 Lab File: VD064792.D
 Acq: 07 Jan 2020 14:50

Tgt Ion	Ratio	Lower	Upper
113	100		
111	101.3	80.6	121.0
192	21.3	17.9	26.9



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

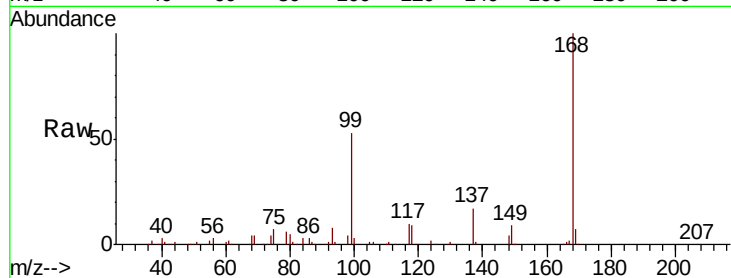




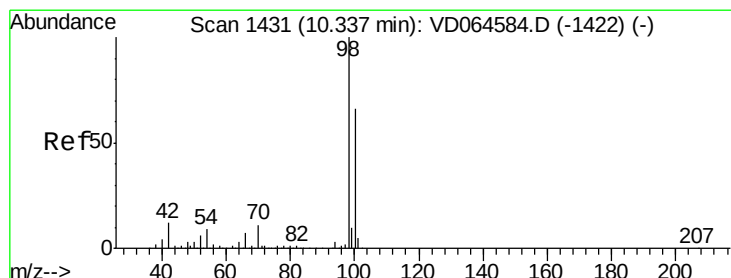
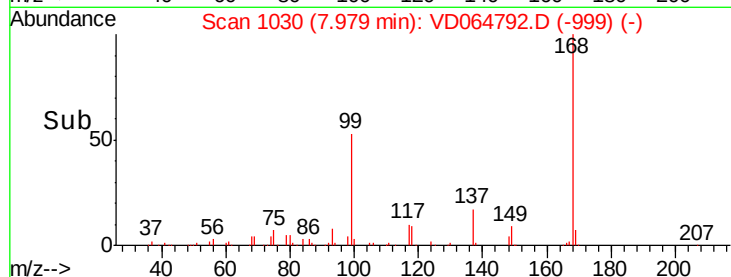
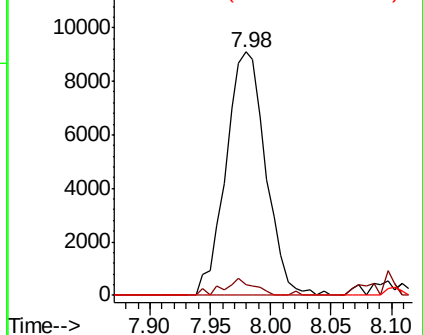
#38
Carbon Tetrachloride
Concen: 5.772 ug/l
RT: 7.98 min Scan# 1030
Delta R.T. -0.12 min
Lab File: VD064792.D
Acq: 07 Jan 2020 14:50

Instrument :
MSVOA_D
ClientSampleId :

Tot Ion:117 Resp: 20723
Ion Ratio Lower Upper
117 100
119 4.6 77.3 115.9#
121 0.0 25.0 37.6#

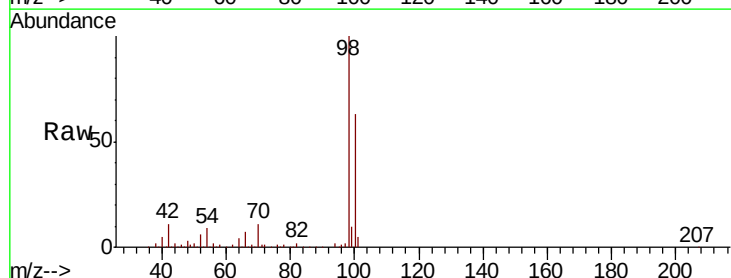


Abundance Ion 116.80 (116.50 to 117.50): V
Ion 118.80 (118.50 to 119.50): V
Ion 120.80 (120.50 to 121.50): V

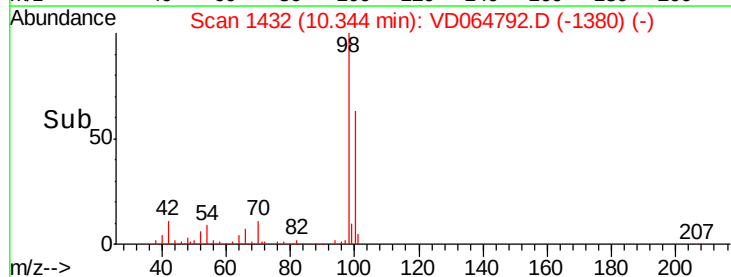
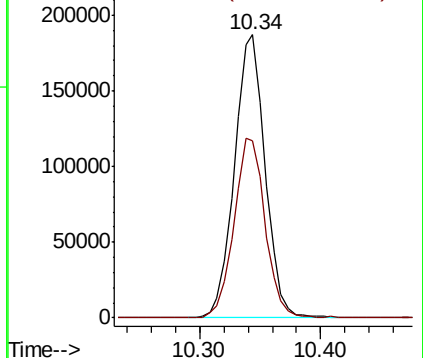


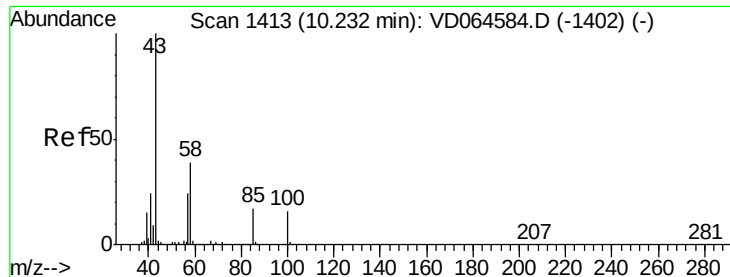
#50
Toluene-d8
Concen: 40.271 ug/l
RT: 10.34 min Scan# 1432
Delta R.T. 0.01 min
Lab File: VD064792.D
Acq: 07 Jan 2020 14:50

Tgt Ion: 98 Resp: 331046
Ion Ratio Lower Upper
98 100
100 64.6 51.7 77.5



Abundance Ion 98.00 (97.70 to 98.70): VDC
Ion 100.00 (99.70 to 100.70): VD

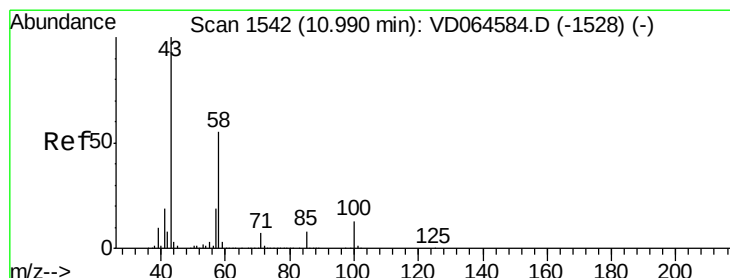
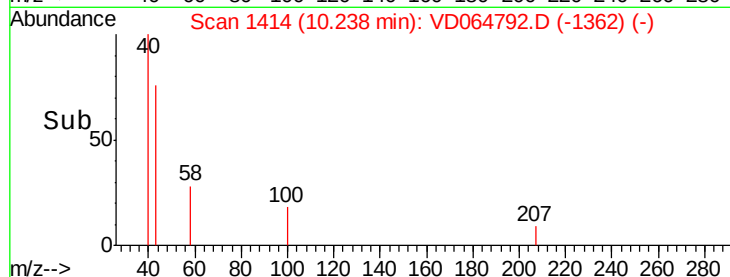
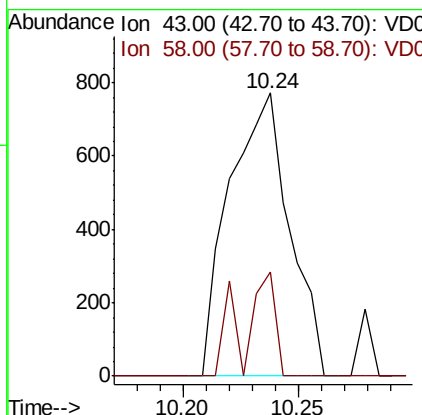
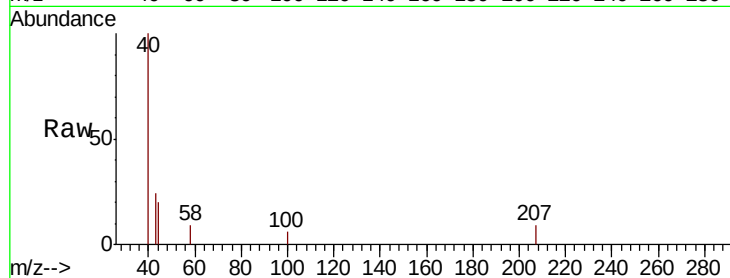




#51
4-Methyl-2-Pentanone
Concen: 1.073 ug/l
RT: 10.24 min Scan# 1414
Delta R.T. 0.01 min
Lab File: VD064792.D
Acq: 07 Jan 2020 14:50

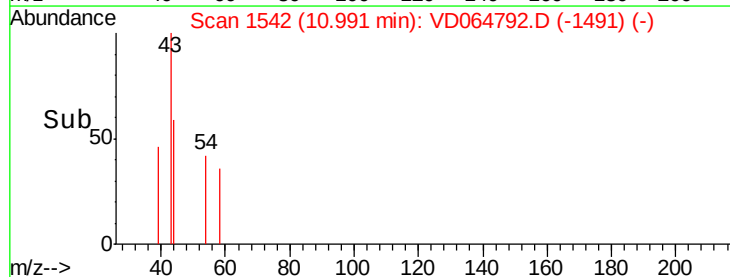
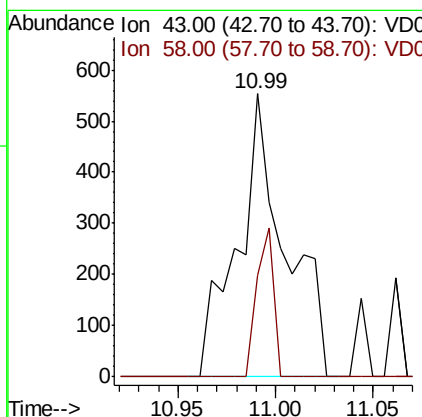
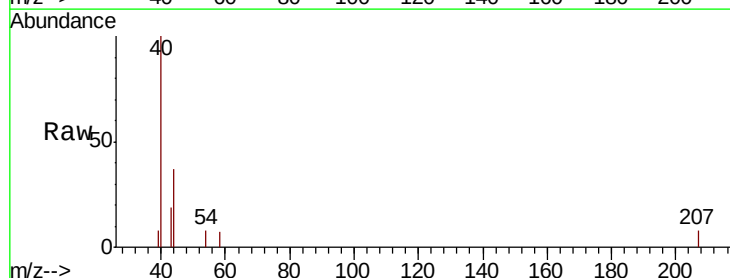
Instrument :
MSVOA_D
ClientSampled :

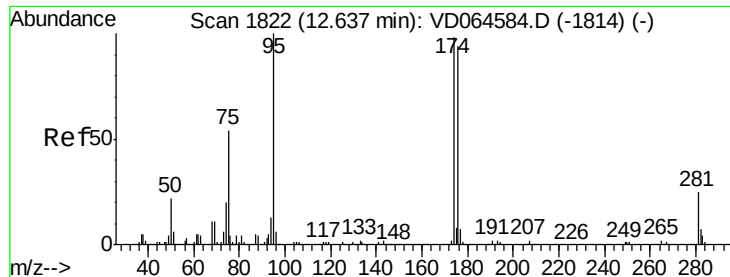
Tot Ion: 43 Resp: 1397
Ion Ratio Lower Upper
43 100
58 19.4 30.2 45.2#



#59
2-Hexanone
Concen: 1.063 ug/l
RT: 10.99 min Scan# 1542
Delta R.T. 0.00 min
Lab File: VD064792.D
Acq: 07 Jan 2020 14:50

Tgt Ion: 43 Resp: 939
Ion Ratio Lower Upper
43 100
58 18.4 26.4 79.0#





#62

4-Bromofluorobenzene

Concen: 24.840 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.00 min

Lab File: VD064792.D

Acq: 07 Jan 2020 14:50

Instrument :

MSVOA_D

ClientSampleId :

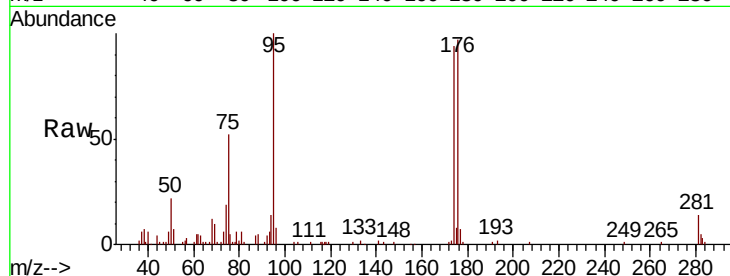
Tot Ion: 95 Resp: 64569

Ion Ratio Lower Upper

95 100

174 97.8 0.0 193.2

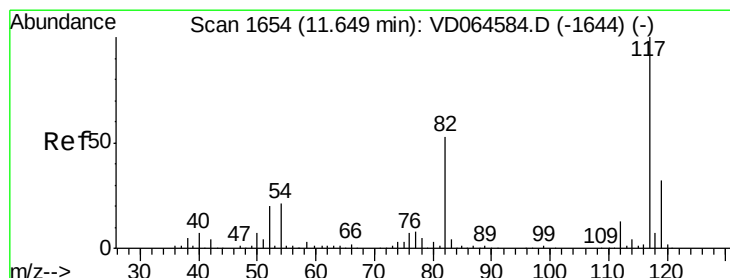
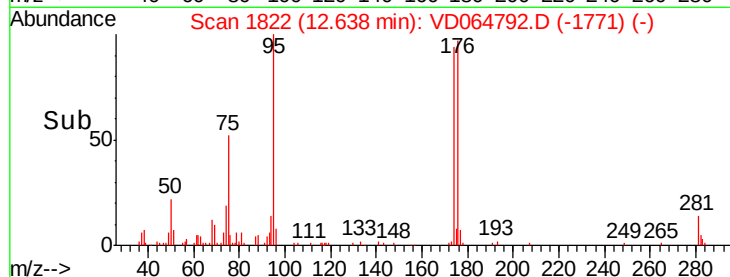
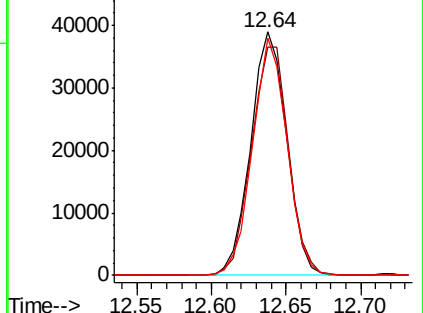
176 93.8 0.0 184.2



Abundance Ion 94.90 (94.60 to 95.60): V

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.65 min Scan# 1654

Delta R.T. 0.00 min

Lab File: VD064792.D

Acq: 07 Jan 2020 14:50

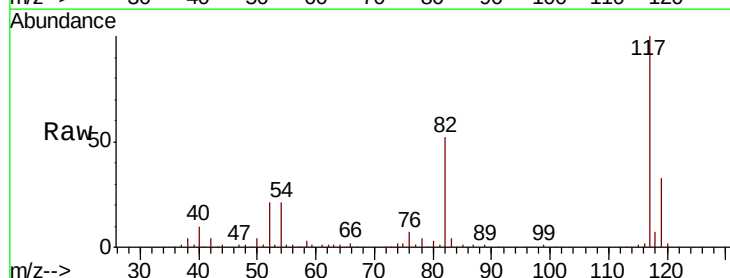
Tgt Ion: 117 Resp: 215316

Ion Ratio Lower Upper

117 100

82 51.7 42.2 63.4

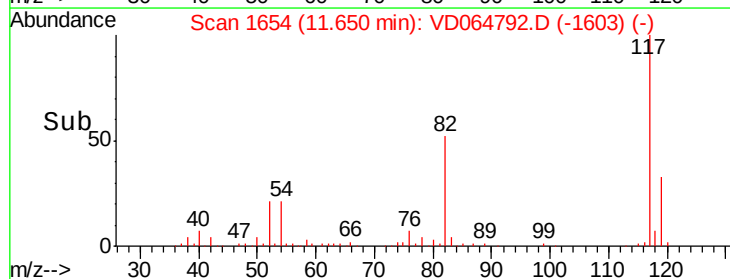
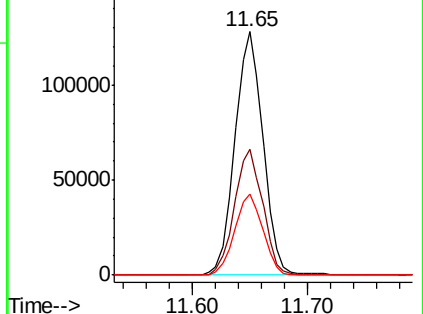
119 33.1 26.0 39.0

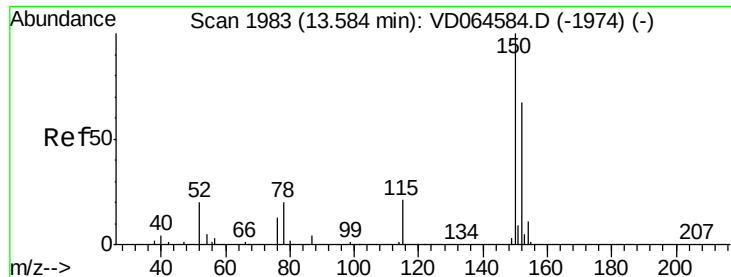


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): V

Ion 118.90 (118.60 to 119.60): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.58 min Scan# 1983

Delta R.T. 0.00 min

Lab File: VD064792.D

Acq: 07 Jan 2020 14:50

Instrument :

MSVOA_D

ClientSampleId :

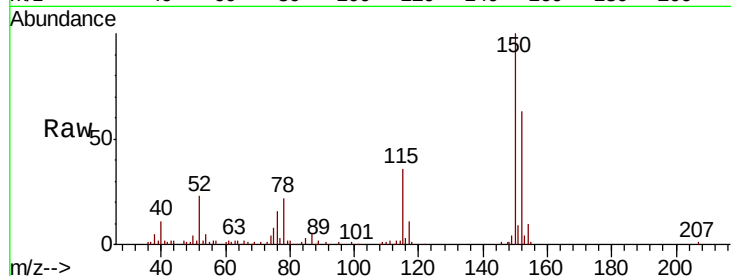
Tot Ion:152 Resp: 48038

Ion Ratio Lower Upper

152 100

115 57.2 27.8 83.4

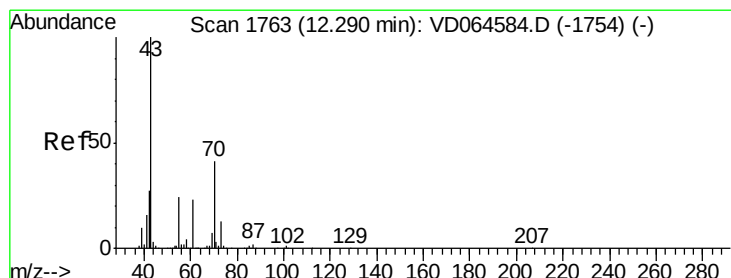
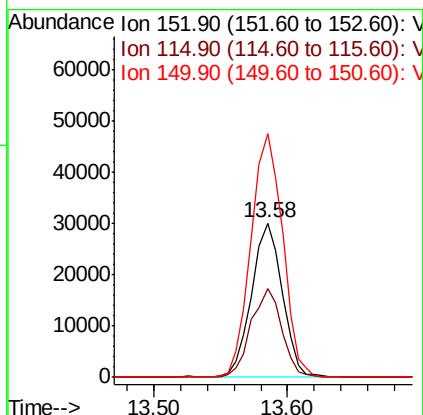
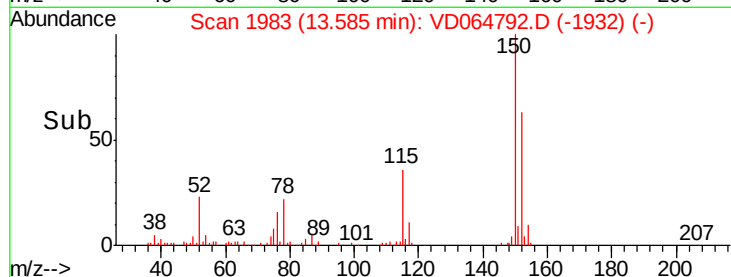
150 162.5 0.0 351.4



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: 1.010 ug/l

RT: 12.28 min Scan# 1762

Delta R.T. -0.01 min

Lab File: VD064792.D

Acq: 07 Jan 2020 14:50

Tgt Ion: 43 Resp: 741

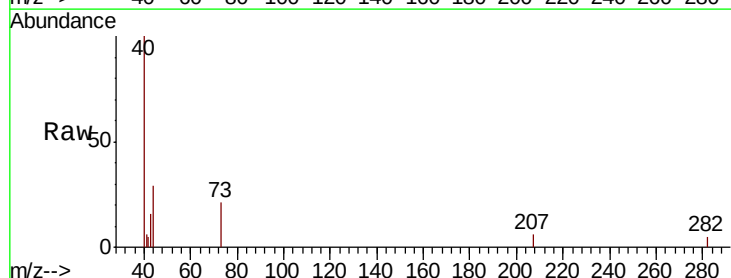
Ion Ratio Lower Upper

43 100

70 0.0 33.4 50.0#

55 8.5 19.4 29.0#

61 0.0 18.3 27.5#

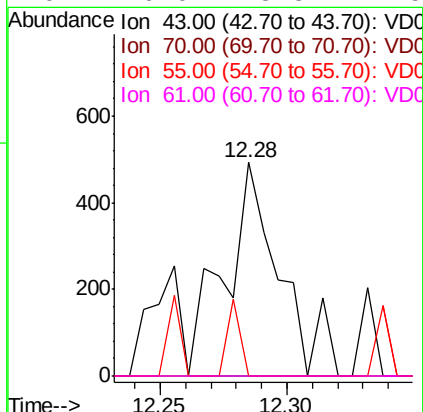
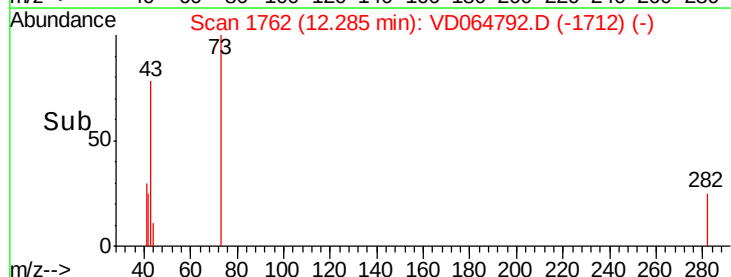


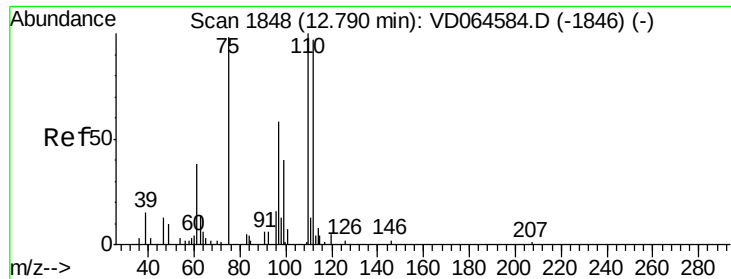
Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 70.00 (69.70 to 70.70): VDC

Ion 55.00 (54.70 to 55.70): VDC

Ion 61.00 (60.70 to 61.70): VDC

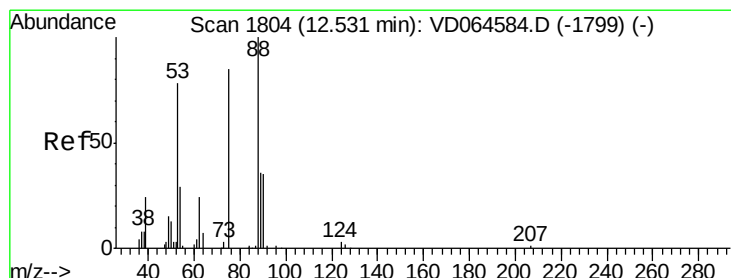
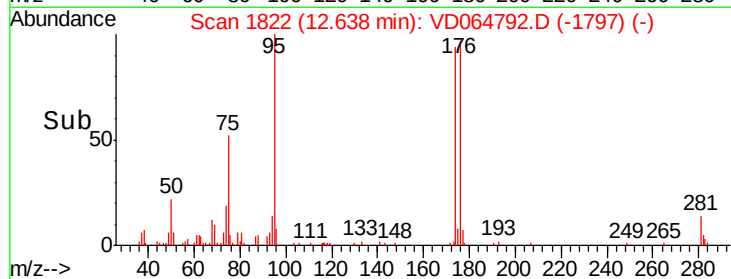
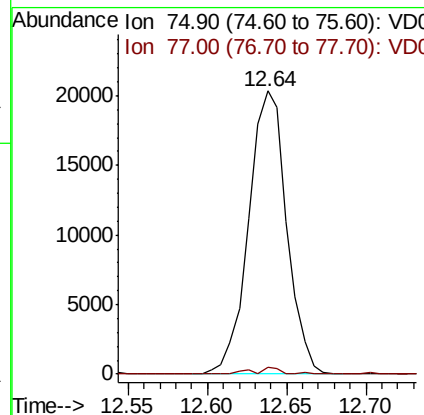
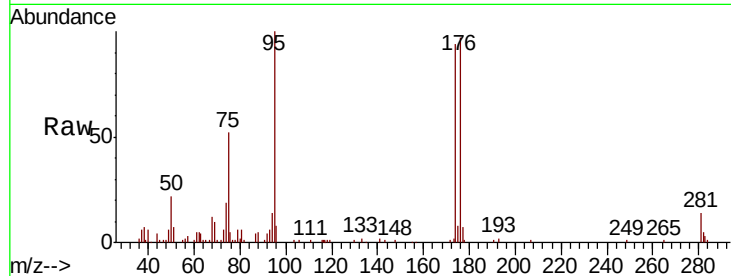




#76
 1,2,3-Trichloropropane
 Concen: 89.490 ug/l
 RT: 12.64 min Scan# 1822
 Delta R.T. -0.15 min
 Lab File: VD064792.D
 Acq: 07 Jan 2020 14:50

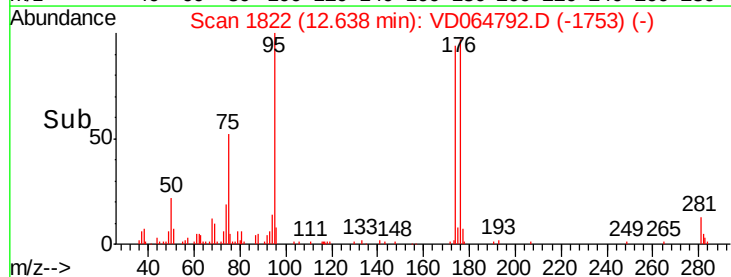
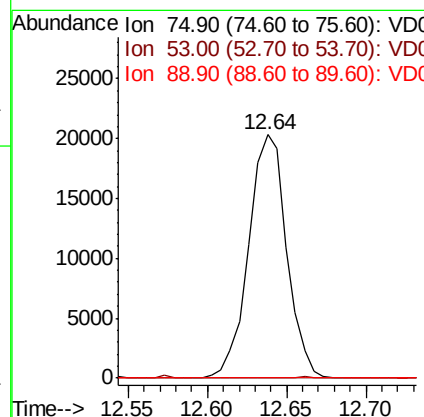
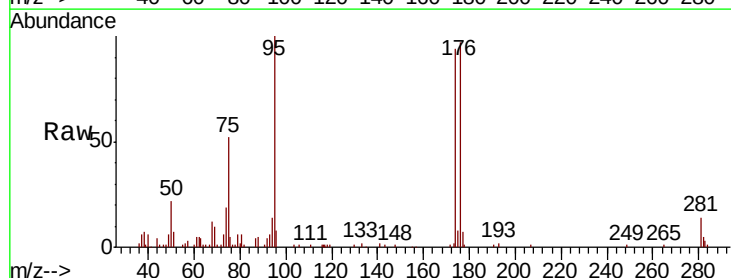
Instrument :
 MSVOA_D
 ClientSampleId :

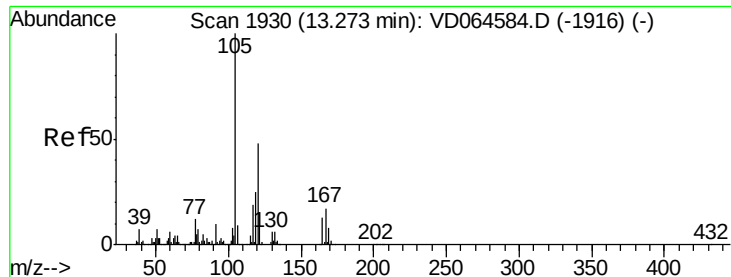
Tot Ion: 75 Resp: 33947
 Ion Ratio Lower Upper
 75 100
 77 1.5 0.0 0.0#



#81
 trans-1,4-Dichloro-2-butene
 Concen: 187.166 ug/l
 RT: 12.64 min Scan# 1822
 Delta R.T. 0.11 min
 Lab File: VD064792.D
 Acq: 07 Jan 2020 14:50

Tgt Ion: 75 Resp: 33947
 Ion Ratio Lower Upper
 75 100
 53 0.0 78.8 118.2#
 89 0.0 38.3 57.5#





#84

1,2,4-Trimethylbenzene

Concen: 1.165 ug/l

RT: 13.27 min Scan# 1930

Delta R.T. 0.00 min

Lab File: VD064792.D

Acq: 07 Jan 2020 14:50

Instrument :

MSVOA_D

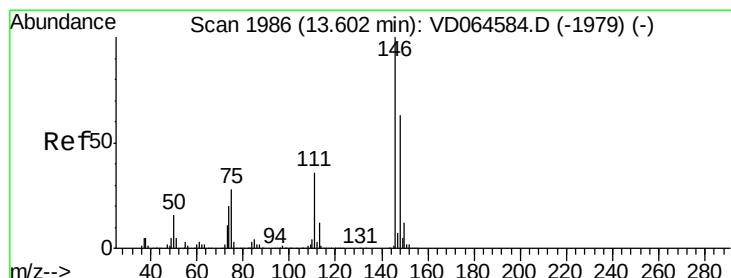
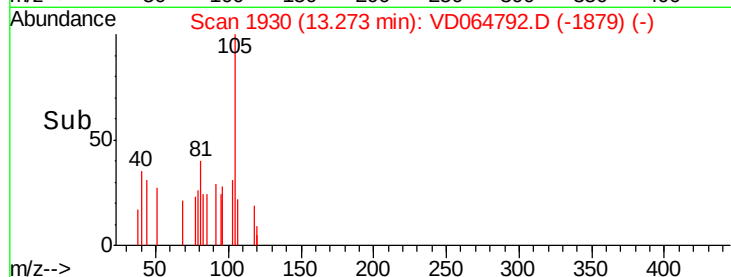
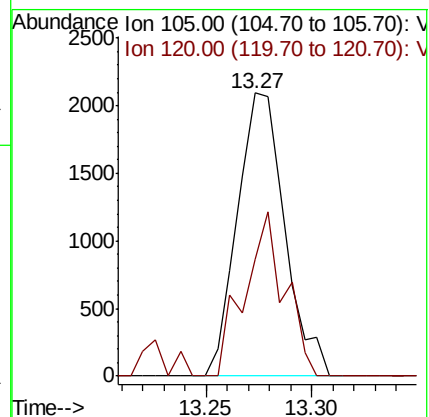
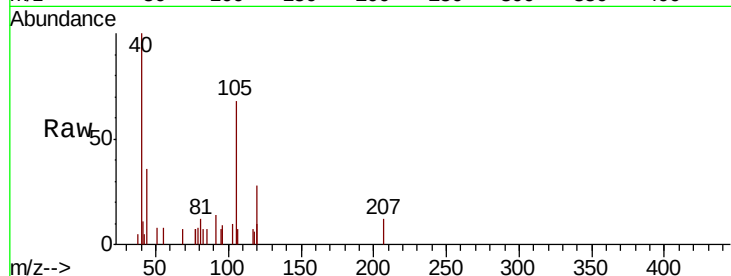
ClientSampleId :

Tot Ion:105 Resp: 3273

Ion Ratio Lower Upper

105 100

120 49.2 23.8 71.2



#88

1,4-Dichlorobenzene

Concen: 1.039 ug/l

RT: 13.61 min Scan# 1987

Delta R.T. 0.01 min

Lab File: VD064792.D

Acq: 07 Jan 2020 14:50

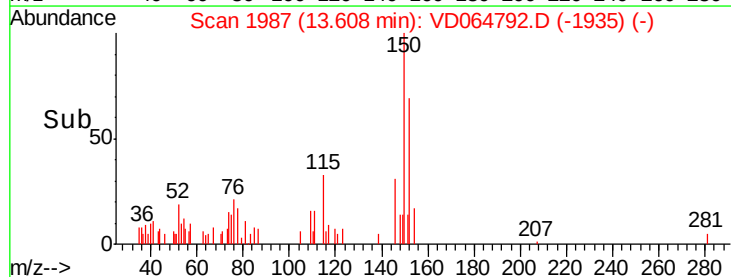
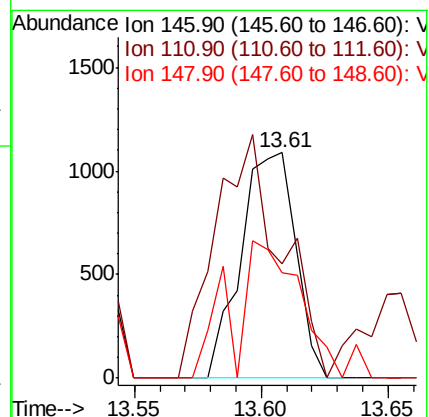
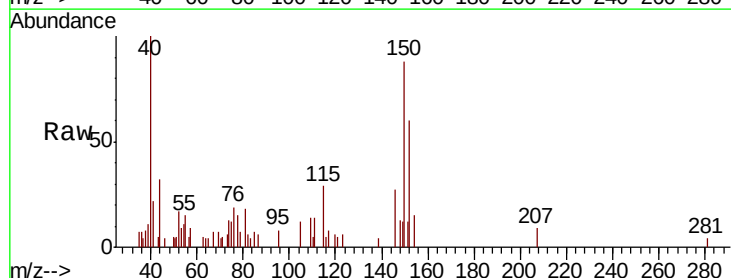
Tgt Ion:146 Resp: 1642

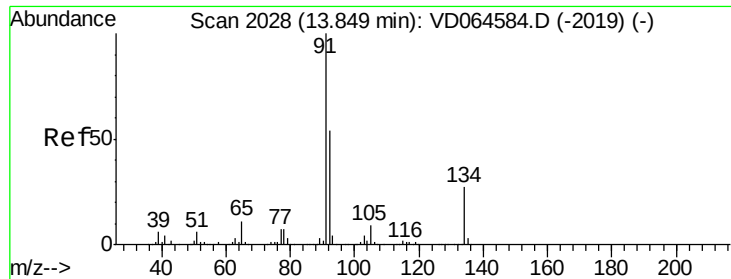
Ion Ratio Lower Upper

146 100

111 129.7 18.1 54.1#

148 61.0 32.3 96.9





#89

n-Butylbenzene

Concen: 1.057 ug/l

RT: 13.86 min Scan# 2029

Delta R.T. 0.01 min

Lab File: VD064792.D

Acq: 07 Jan 2020 14:50

Instrument :

MSVOA_D

ClientSampled :

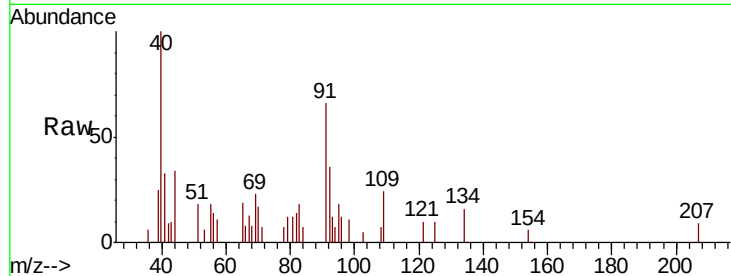
Tot Ion: 91 Resp: 3056

Ion Ratio Lower Upper

91 100

92 53.1 26.8 80.4

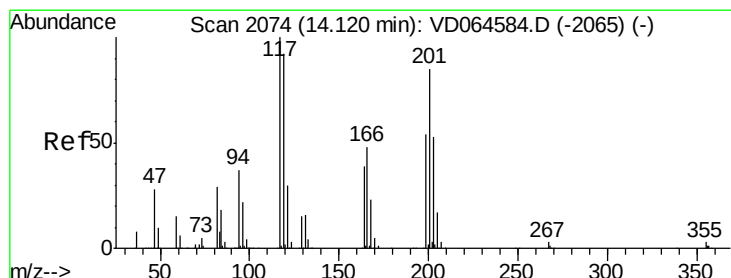
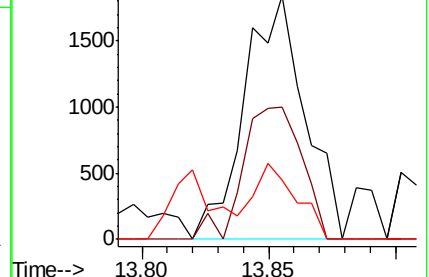
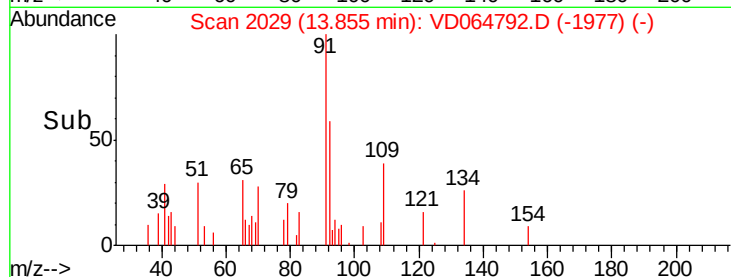
134 21.8 14.0 41.9



Abundance Ion 91.00 (90.70 to 91.70): V

Ion 92.00 (91.70 to 92.70): V

Ion 134.00 (133.70 to 134.70): V



#90

Hexachloroethane

Concen: 1.264 ug/l

RT: 14.12 min Scan# 2074

Delta R.T. 0.00 min

Lab File: VD064792.D

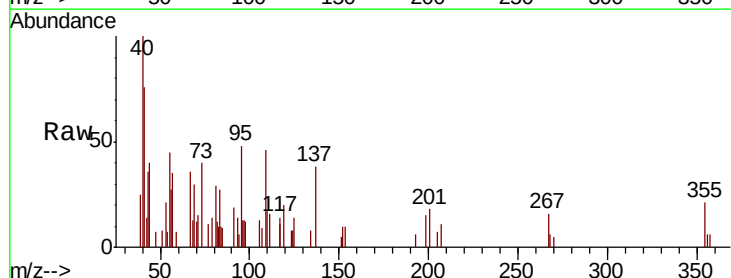
Acq: 07 Jan 2020 14:50

Tgt Ion: 117 Resp: 775

Ion Ratio Lower Upper

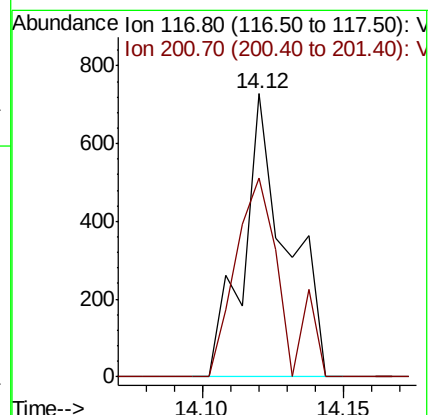
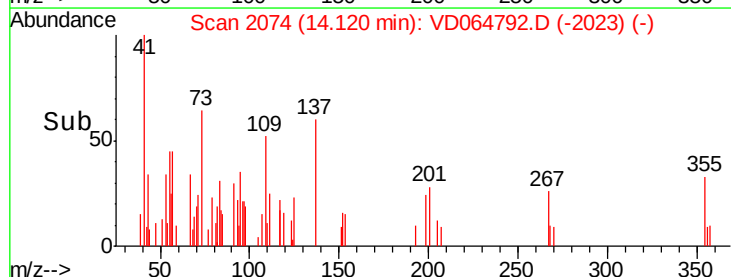
117 100

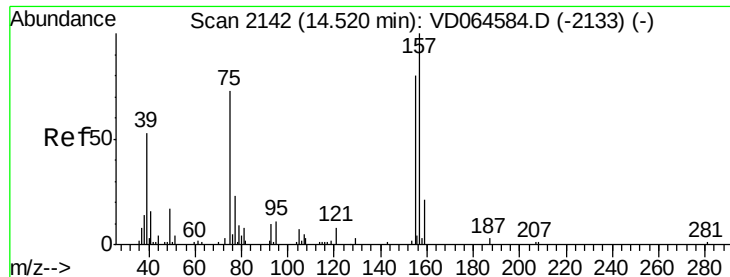
201 74.3 44.0 131.8



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 200.70 (200.40 to 201.40): V





#92

1,2-Dibromo-3-Chloropropane

Concen: 1.533 ug/l

RT: 14.51 min Scan# 2140

Delta R.T. -0.01 min

Lab File: VD064792.D

Acq: 07 Jan 2020 14:50

Instrument :

MSVOA_D

ClientSampled :

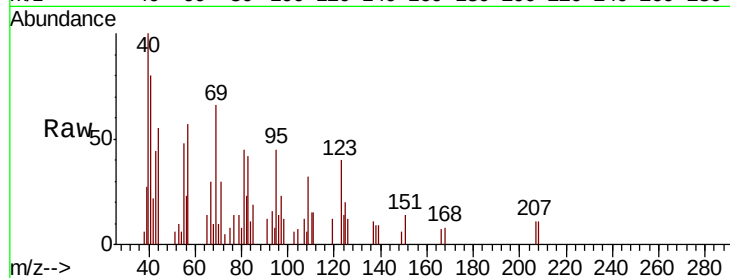
Tot Ion: 75 Resp: 134

Ion Ratio Lower Upper

75 100

155 82.1 48.0 144.0

157 0.0 64.1 192.3#



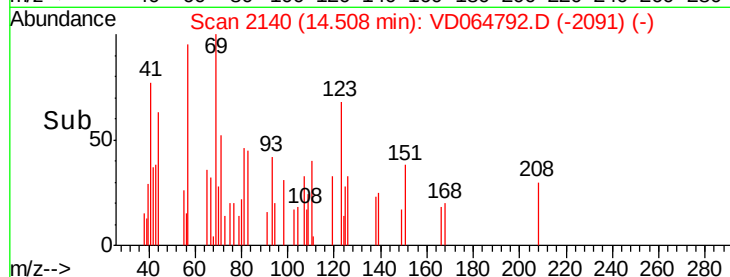
Abundance Ion 74.90 (74.60 to 75.60): V

Ion 154.80 (154.50 to 155.50): V

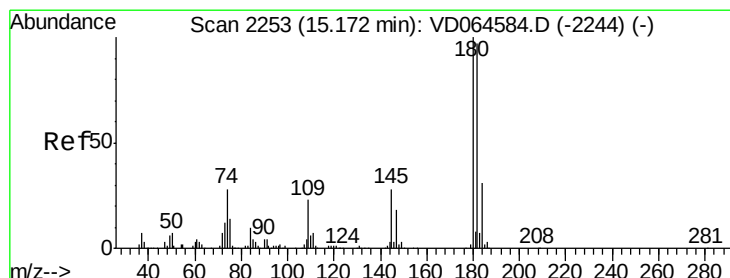
Ion 156.80 (156.50 to 157.50): V

14.51

14.48 14.50 14.52



Time-->



#93

1,2,4-Trichlorobenzene

Concen: 3.679 ug/l

RT: 15.17 min Scan# 2253

Delta R.T. 0.00 min

Lab File: VD064792.D

Acq: 07 Jan 2020 14:50

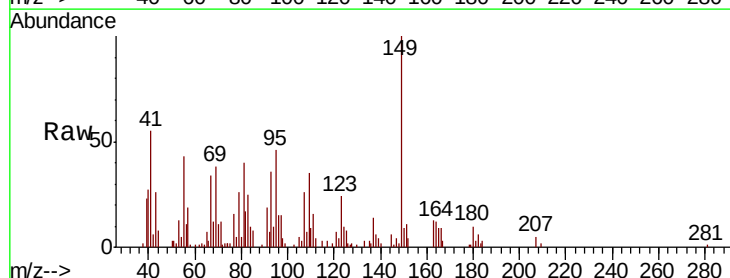
Tgt Ion: 180 Resp: 3714

Ion Ratio Lower Upper

180 100

182 34.9 48.0 144.2#

145 98.2 13.8 41.4#



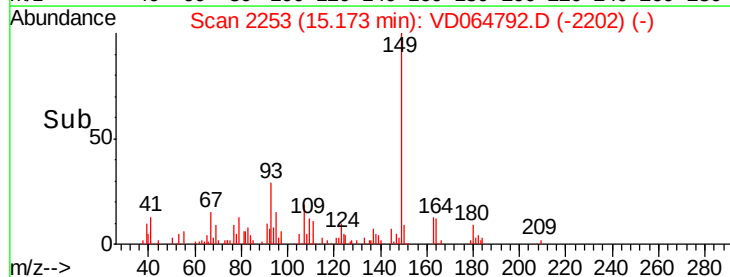
Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

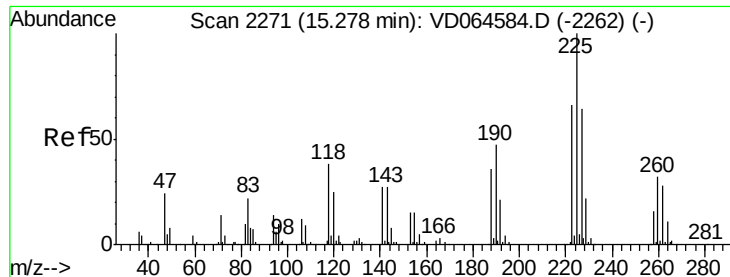
Ion 144.80 (144.50 to 145.50): V

15.17

15.10 15.15 15.20 15.25



Time-->



#94

Hexachlorobutadiene

Concen: 1.362 ug/l

RT: 15.28 min Scan# 2272

Delta R.T. 0.01 min

Lab File: VD064792.D

Acq: 07 Jan 2020 14:50

Instrument :

MSVOA_D

ClientSampleId :

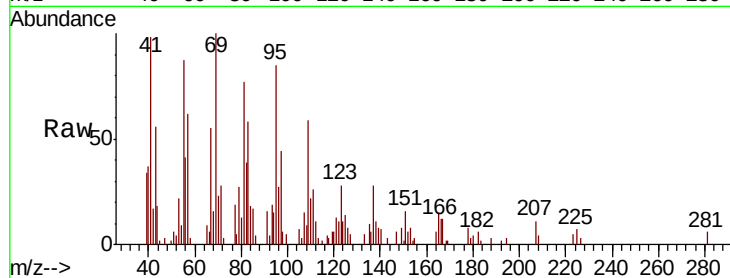
Tot Ion:225 Resp: 865

Ion Ratio Lower Upper

225 100

223 50.2 31.1 93.2

227 49.4 30.9 92.7

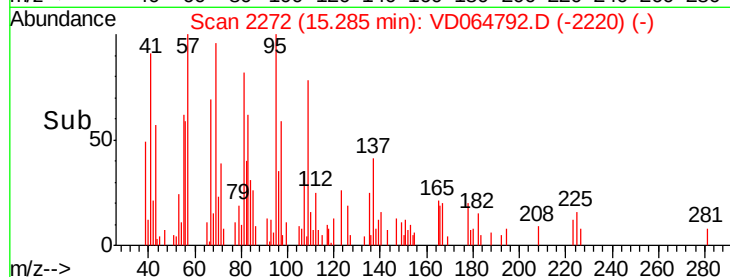


Abundance Ion 224.70 (224.40 to 225.40): V

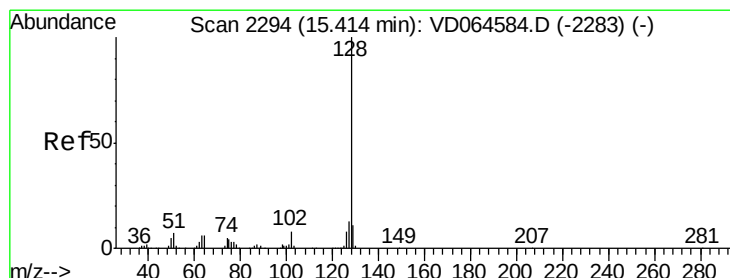
Ion 222.70 (222.40 to 223.40): V

Ion 226.70 (226.40 to 227.40): V

Time-->



Time-->



#95

Naphthalene

Concen: 5.478 ug/l

RT: 15.41 min Scan# 2294

Delta R.T. 0.00 min

Lab File: VD064792.D

Acq: 07 Jan 2020 14:50

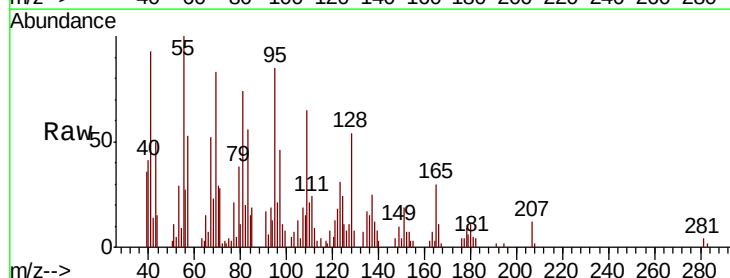
Tgt Ion:128 Resp: 8749

Ion Ratio Lower Upper

128 100

127 22.8 10.3 15.5#

129 10.4 8.5 12.7

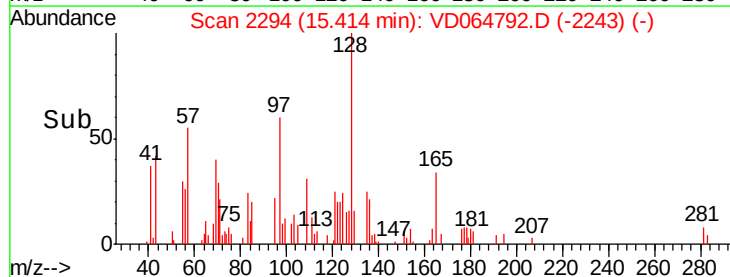


Abundance Ion 128.00 (127.70 to 128.70): V

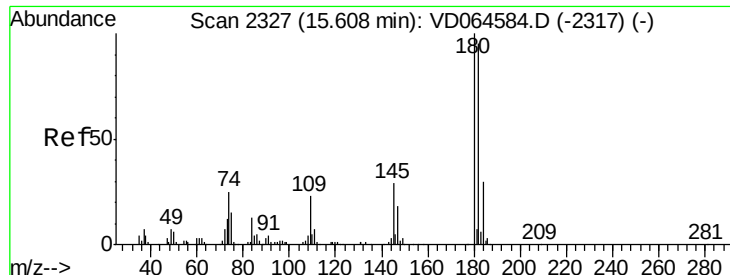
Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

Time-->



Time-->



#96
 1,2,3-Trichlorobenzene
 Concen: 3.923 ug/l
 RT: 15.73 min Scan# 2348
 Delta R.T. 0.12 min
 Lab File: VD064792.D
 Acq: 07 Jan 2020 14:50

Instrument :
 MSVOA_D
 ClientSampleId :

Tot Ion	Ratio	Lower	Upper
180	100		
182	48.6	47.9	143.7
145	29.8	14.9	44.7

