

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD102419\
 Data File : VD064047.D
 Acq On : 24 Oct 2019 15:52
 Operator : VA/SY
 Sample : K5498-02RE
 Misc : 7.82G/5.00ml/MSVOA D/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 189-62-(1)RE

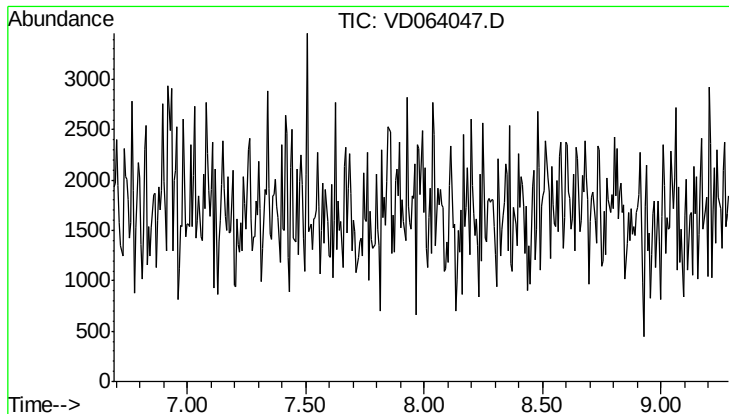
Quant Time: Oct 25 03:58:23 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D100219S.M
 Quant Title : SW846 8260
 QLast Update : Sat Oct 05 03:51:17 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	0.00	168	0	0.00	ug/l	-7.99
34) 1,4-Difluorobenzene	8.84	114	88	50.00	ug/l	-0.02
63) Chlorobenzene-d5	11.65	117	77	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	0.00	152	0	0.00	ug/l	-13.57

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.25	65	56	0.00	ug/l	-0.08
Spiked Amount	50.000		Recovery	=	0.00%	
35) Dibromofluoromethane	7.64	113	55	102.27	ug/l	-0.28
Spiked Amount	50.000		Recovery	=	204.54%	
50) Toluene-d8	0.00	98	0	0.00	ug/l	
Spiked Amount	50.000		Recovery	=	0.00%	
62) 4-Bromofluorobenzene	0.00	95	0	0.00	ug/l	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
36) 1,1-Dichloropropene	8.13	75	60	74.571	ug/l #	41
37) Ethyl Acetate	7.23	43	71	234.804	ug/l #	68
38) Carbon Tetrachloride	8.04	117	60	73.793	ug/l #	15
39) Methylcyclohexane	9.35	83	61	61.659	ug/l #	18
40) Benzene	8.18	78	63	27.323	ug/l #	52
41) Methacrylonitrile	7.50	41	69	369.883	ug/l #	19
42) 1,2-Dichloroethane	8.37	62	70	104.951	ug/l #	73
43) Isopropyl Acetate	8.47	43	143	211.924	ug/l #	49
45) 1,2-Dichloropropane	9.44	63	115	203.767	ug/l #	41
46) Dibromomethane	9.51	93	65	202.231	ug/l #	3
48) Methyl methacrylate	9.43	41	73	225.793	ug/l #	1
49) 1,4-Dioxane	9.33	88	56	12764.104	ug/l #	1
51) 4-Methyl-2-Pentanone	10.40	43	149	425.774	ug/l	93
52) Toluene	10.10	92	60	37.906	ug/l #	1
53) t-1,3-Dichloropropene	10.77	75	113	139.936	ug/l #	46
54) cis-1,3-Dichloropropene	9.98	75	55	59.169	ug/l #	33
56) Ethyl methacrylate	10.76	69	77	133.982	ug/l #	1
57) 1,3-Dichloropropane	10.91	76	68	87.575	ug/l #	41
58) 2-Chloroethyl Vinyl ether	9.73	63	79	319.800	ug/l #	44
59) 2-Hexanone	10.95	43	70	276.522	ug/l #	32
61) 1,2-Dibromoethane	11.11	107	59	134.101	ug/l #	3
64) Tetrachloroethene	10.83	164	55	104.630	ug/l #	1
65) Chlorobenzene	11.79	112	63	40.740	ug/l #	43
66) 1,1,1,2-Tetrachloroethane	11.81	131	57	100.035	ug/l #	8
67) Ethyl Benzene	12.00	91	59	21.159	ug/l #	44
68) m/p-Xylenes	11.75	106	67	62.252	ug/l #	1
69) o-Xylene	12.00	106	58	56.280	ug/l #	32
70) Styrene	12.18	104	77	44.136	ug/l #	43

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



#1

Pentafluorobenzene

Concen: 0.000 ug/l

Expected RT: 7.99 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

Tot Ion: 168

Sig Exp Ratio

168 100

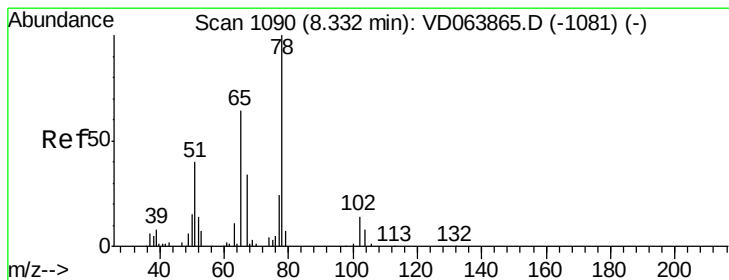
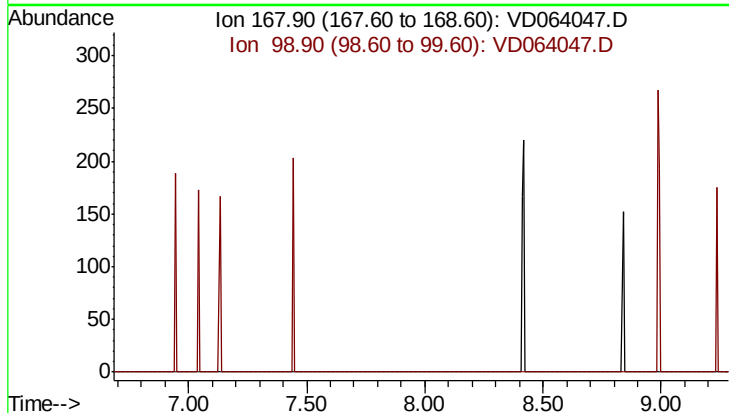
99 53.7

Instrument :

MSVOA_D

ClientSampleId :

189-62-(1)RE



#33

1,2-Dichloroethane-d4

Concen: 0.000 ug/l

RT: 8.25 min Scan# 1076

Delta R.T. -0.08 min

Lab File: VD064047.D

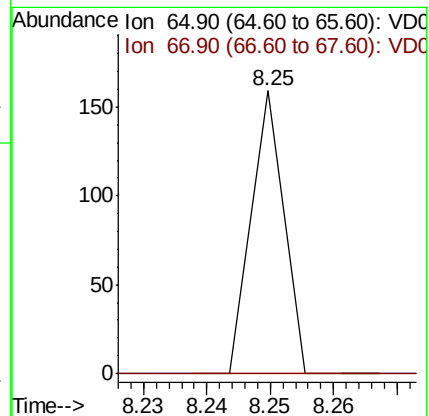
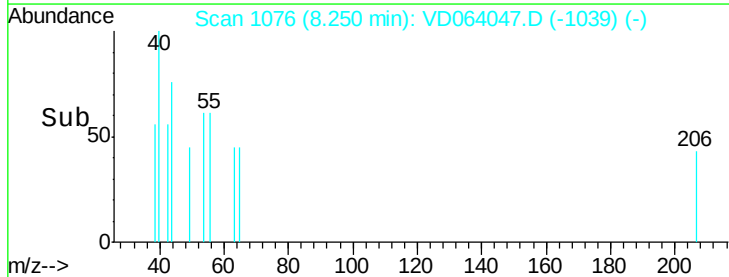
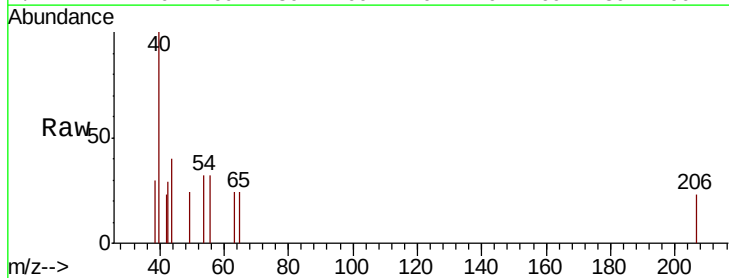
Acq: 24 Oct 2019 15:52

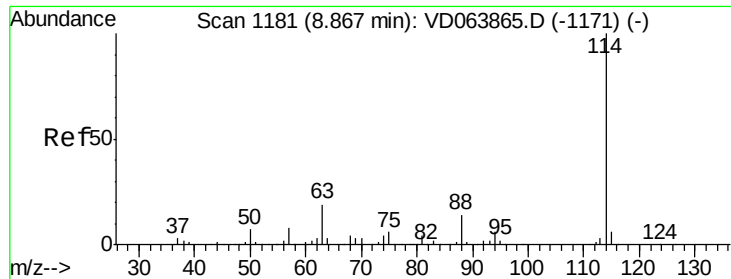
Tgt Ion: 65 Resp: 56

Ion Ratio Lower Upper

65 100

67 0.0 0.0 106.4

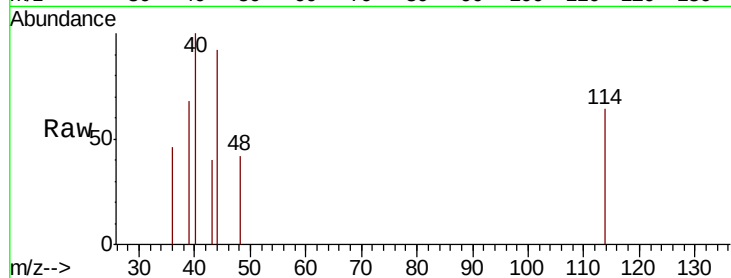




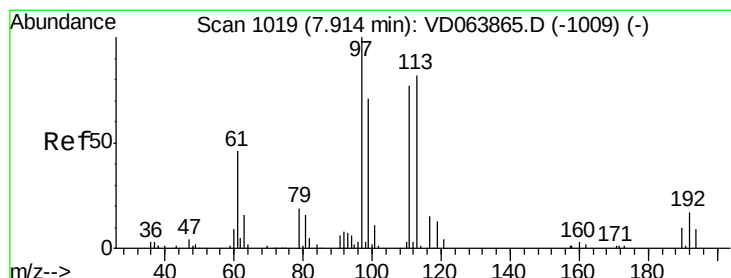
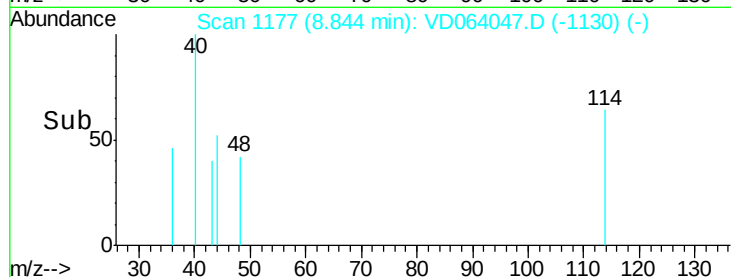
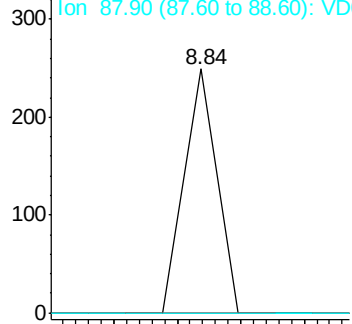
#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.84 min Scan# 1177
 Delta R.T. -0.02 min
 Lab File: VD064047.D
 Acq: 24 Oct 2019 15:52

Instrument :
 MSVOA_D
 ClientSampleId :
 189-62-(1)RE

Tot Ion	Ratio	Lower	Upper
114	100		
63	0.0	0.0	38.4
88	0.0	0.0	27.4

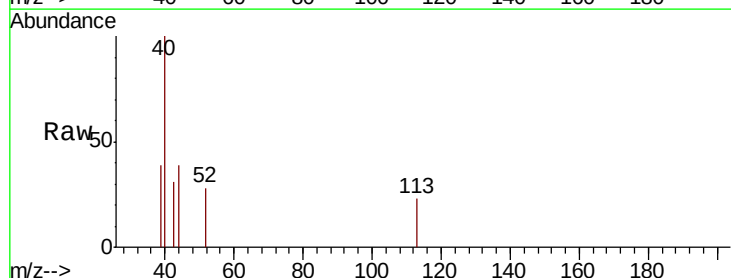


Abundance Ion 113.90 (113.60 to 114.60): V

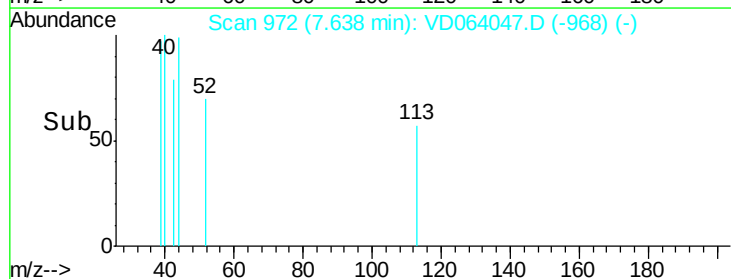
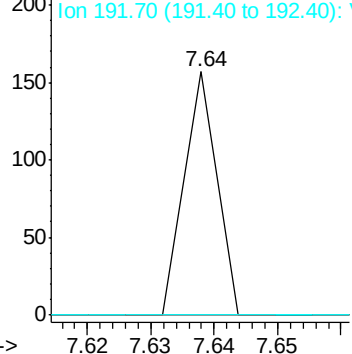


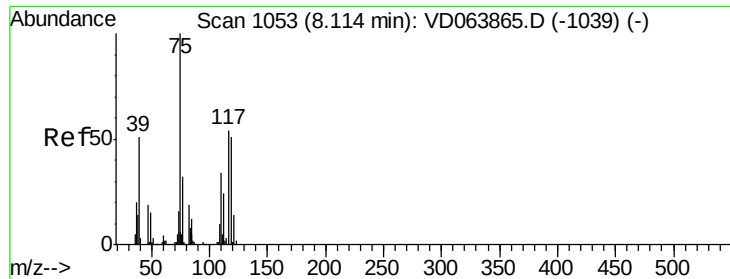
#35
 Dibromofluoromethane
 Concen: 102.269 ug/l
 RT: 7.64 min Scan# 972
 Delta R.T. -0.28 min
 Lab File: VD064047.D
 Acq: 24 Oct 2019 15:52

Tgt Ion	Ratio	Lower	Upper
113	100		
111	0.0	82.6	123.8#
192	0.0	17.1	25.7#



Abundance Ion 112.80 (112.50 to 113.50): V





#36

1,1-Dichloropropene

Concen: 74.571 ug/l

RT: 8.13 min Scan# 1055

Delta R.T. 0.01 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

Instrument :

MSVOA_D

ClientSampleId :

189-62-(1)RE

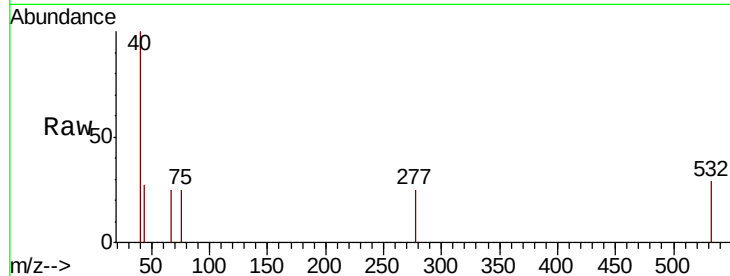
Tot Ion: 75 Resp: 60

Ion Ratio Lower Upper

75 100

110 0.0 17.4 52.3#

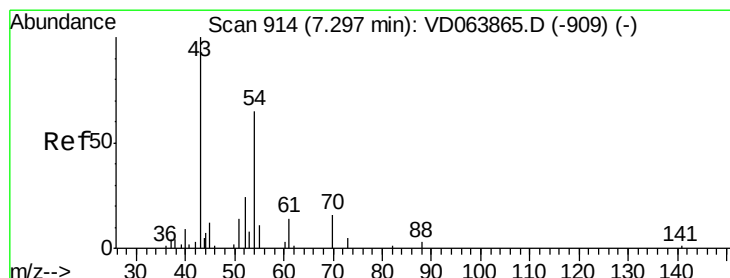
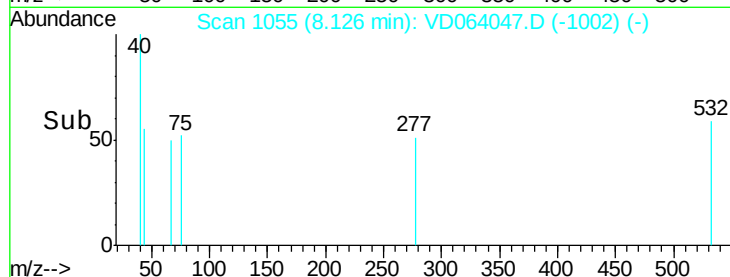
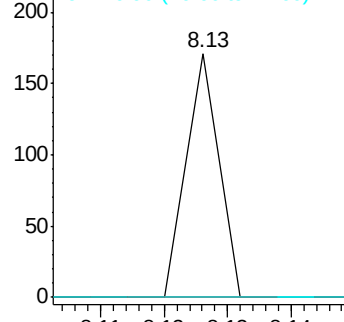
77 0.0 25.4 38.0#



Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 109.90 (109.60 to 110.60): VDC

Ion 76.90 (76.60 to 77.60): VDC



#37

Ethyl Acetate

Concen: 234.804 ug/l

RT: 7.23 min Scan# 903

Delta R.T. -0.06 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

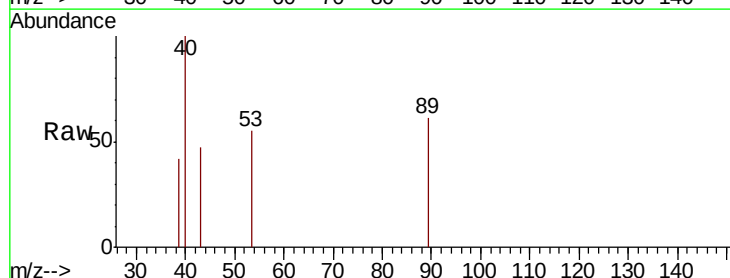
Tgt Ion: 43 Resp: 71

Ion Ratio Lower Upper

43 100

61 0.0 11.5 17.3#

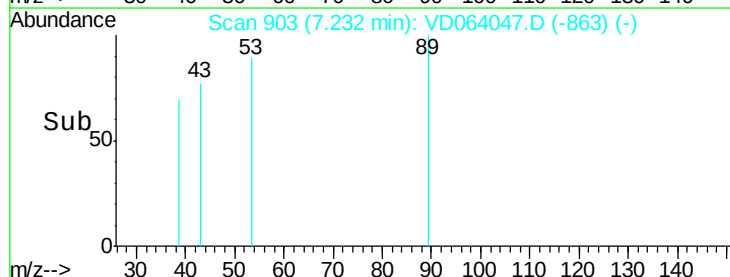
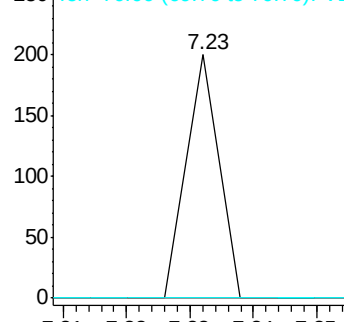
70 0.0 8.2 12.4#

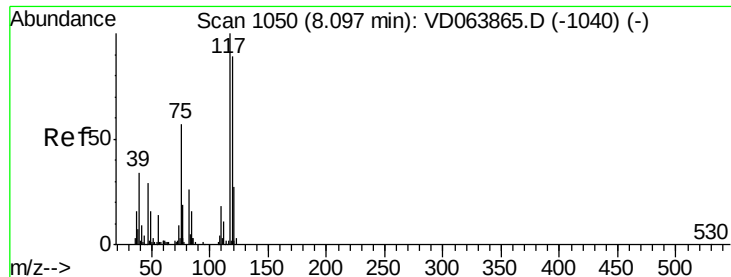


Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 60.90 (60.60 to 61.60): VDC

Ion 70.00 (69.70 to 70.70): VDC





#38

Carbon Tetrachloride

Concen: 73.793 ug/l

RT: 8.04 min Scan# 1040

Delta R.T. -0.06 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

Instrument :

MSVOA_D

ClientSampleId :

189-62-(1)RE

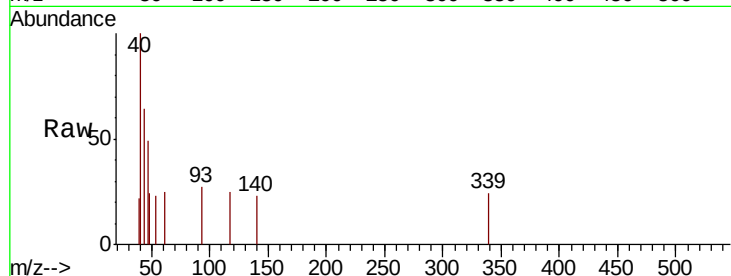
Tot Ion:117 Resp: 60

Ion Ratio Lower Upper

117 100

119 0.0 70.8 106.2#

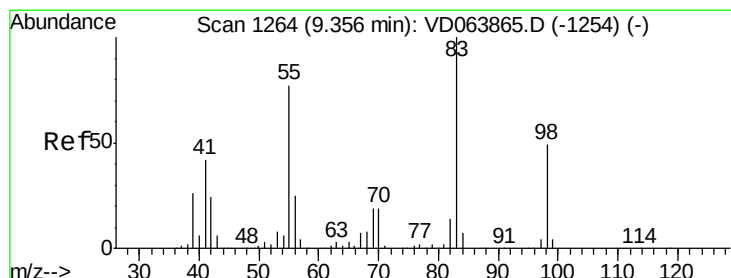
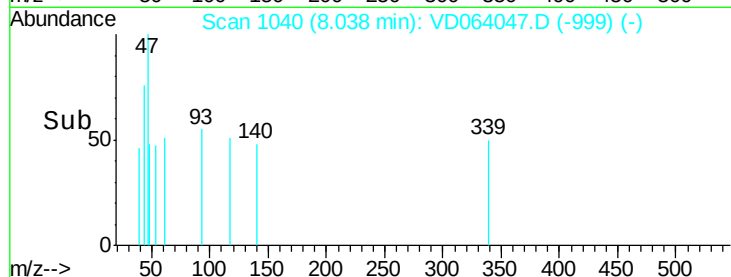
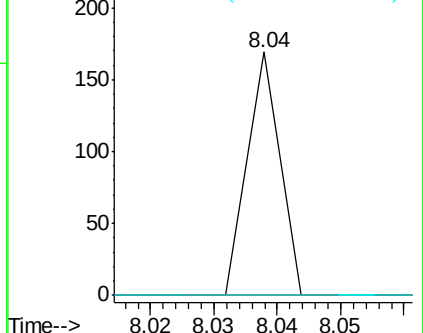
121 0.0 21.4 32.0#



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: 61.659 ug/l

RT: 9.35 min Scan# 1263

Delta R.T. -0.01 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

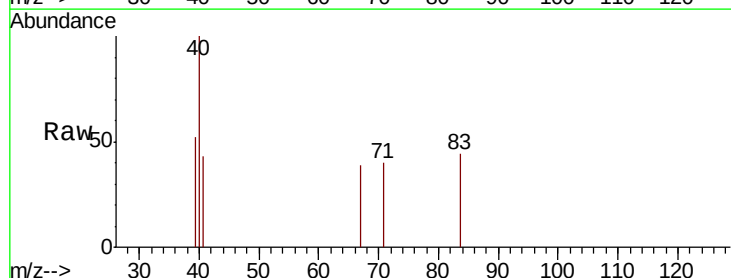
Tgt Ion: 83 Resp: 61

Ion Ratio Lower Upper

83 100

55 0.0 61.3 91.9#

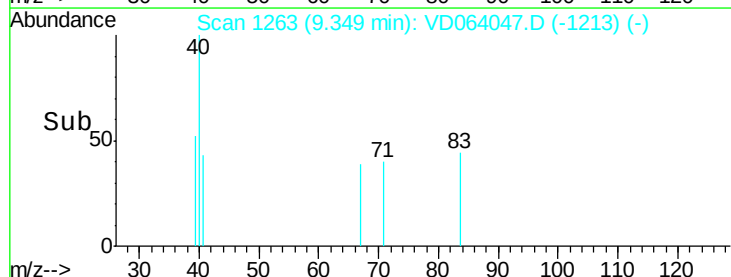
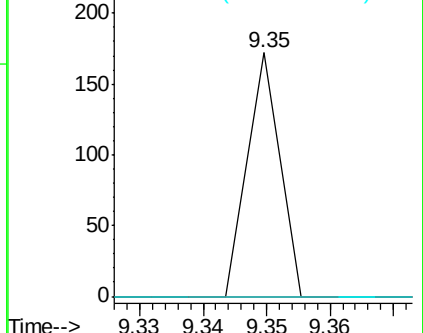
98 0.0 39.3 58.9#

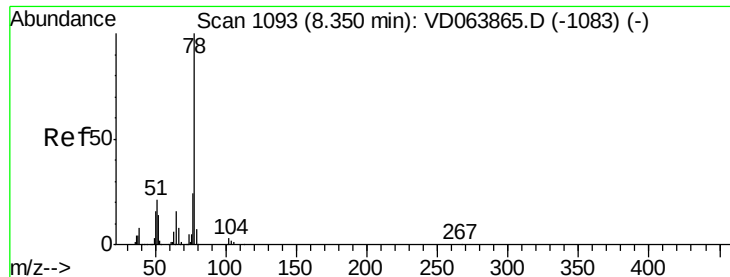


Abundance Ion 83.00 (82.70 to 83.70): V

Ion 55.00 (54.70 to 55.70): V

Ion 98.00 (97.70 to 98.70): V





#40

Benzene

Concen: 27.323 ug/l

RT: 8.18 min Scan# 1065

Delta R.T. -0.16 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

Instrument :

MSVOA_D

ClientSampleId :

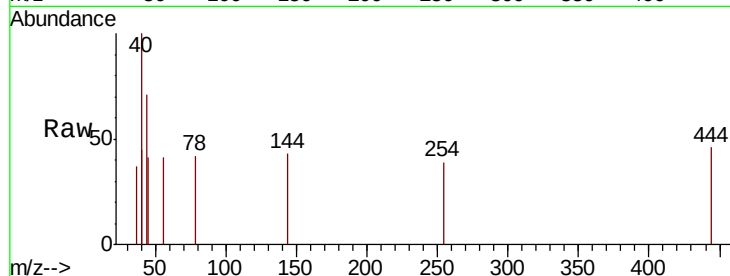
189-62-(1)RE

Tot Ion: 78 Resp: 63

Ion Ratio Lower Upper

78 100

77 0.0 19.0 28.6#



Abundance Ion 78.00 (77.70 to 78.70): VDC

Ion 77.00 (76.70 to 77.70): VDC

8.18

200

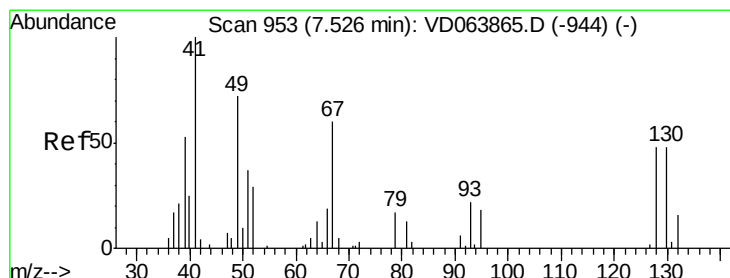
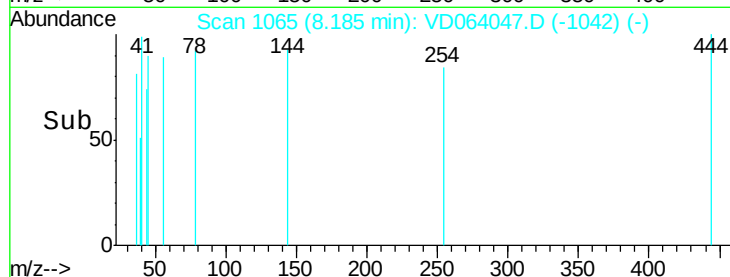
150

100

50

0

Time-->



#41

Methacrylonitrile

Concen: 369.883 ug/l

RT: 7.50 min Scan# 949

Delta R.T. -0.02 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

Tgt Ion: 41 Resp: 69

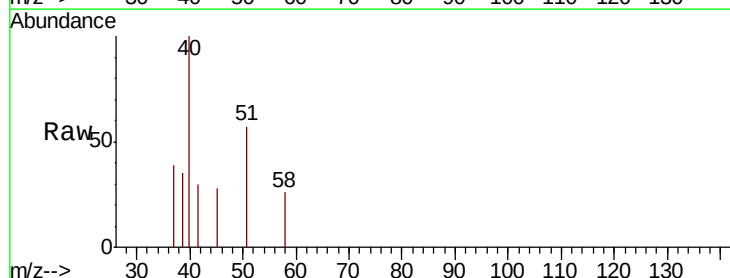
Ion Ratio Lower Upper

41 100

39 118.8 52.6 78.8#

67 0.0 74.2 111.2#

52 0.0 34.0 51.0#



Abundance Ion 41.00 (40.70 to 41.70): VDC

Ion 39.00 (38.70 to 39.70): VDC

Ion 67.00 (66.70 to 67.70): VDC

Ion 52.00 (51.70 to 52.70): VDC

400

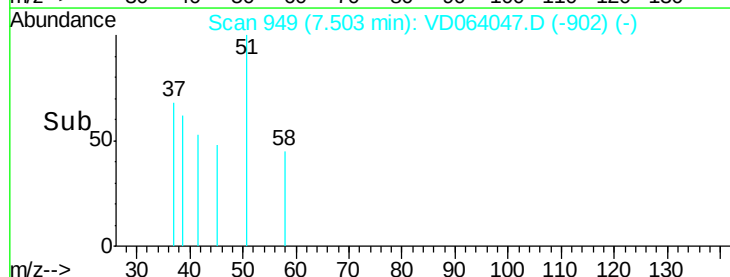
300

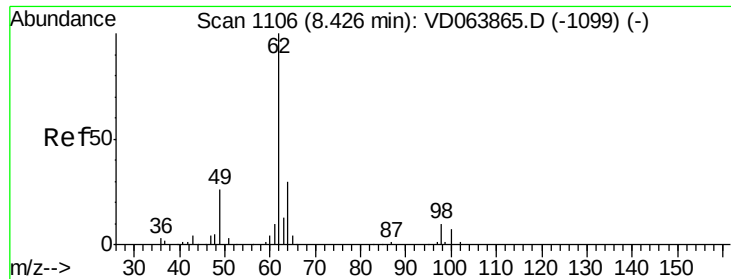
200

100

0

Time-->

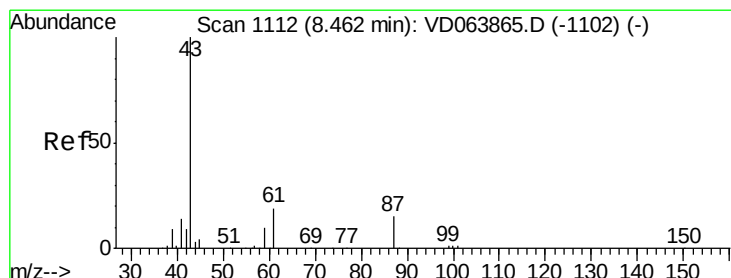
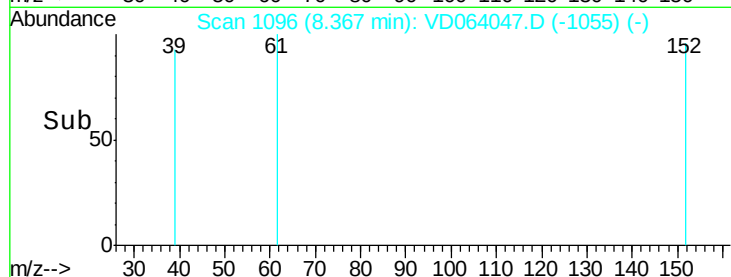
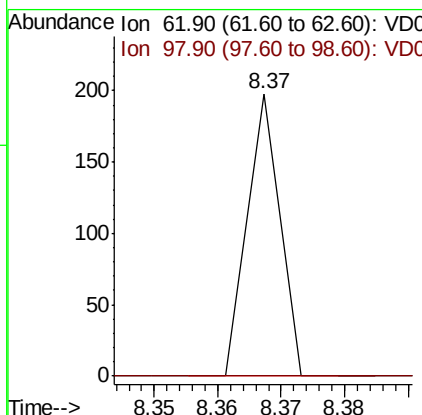
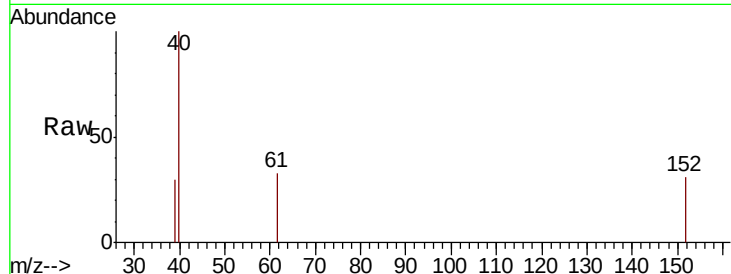




#42
 1,2-Dichloroethane
 Concen: 104.951 ug/l
 RT: 8.37 min Scan# 1096
 Delta R.T. -0.06 min
 Lab File: VD064047.D
 Acq: 24 Oct 2019 15:52

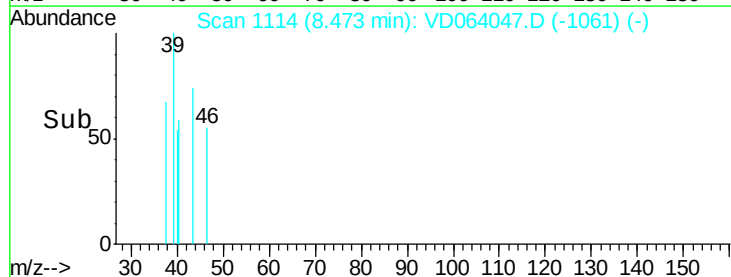
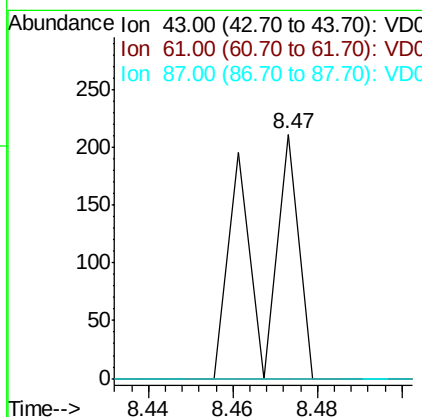
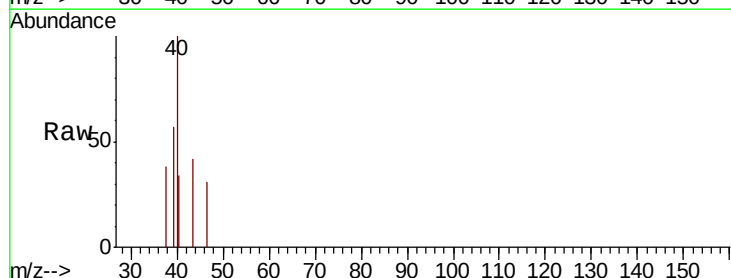
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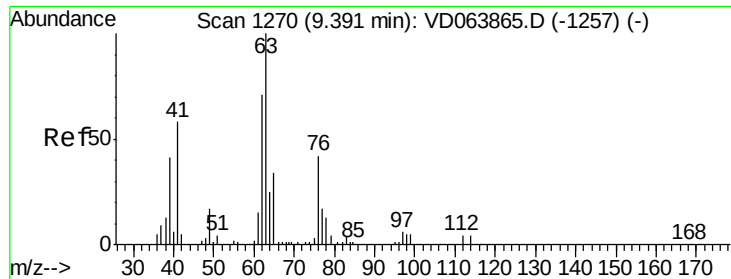
Tot Ion: 62 Resp: 70
 Ion Ratio Lower Upper
 62 100
 98 0.0 0.0 20.0



#43
 Isopropyl Acetate
 Concen: 211.924 ug/l
 RT: 8.47 min Scan# 1114
 Delta R.T. 0.01 min
 Lab File: VD064047.D
 Acq: 24 Oct 2019 15:52

Tgt Ion: 43 Resp: 143
 Ion Ratio Lower Upper
 43 100
 61 0.0 25.7 38.5#
 87 0.0 11.6 17.4#

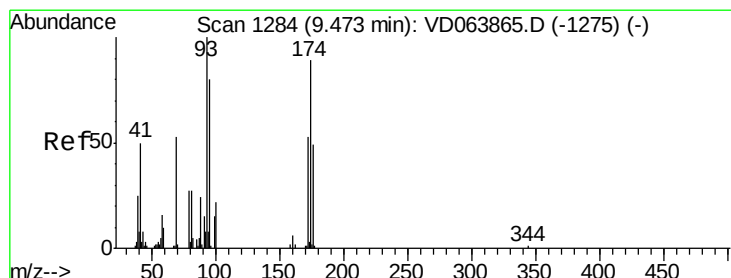
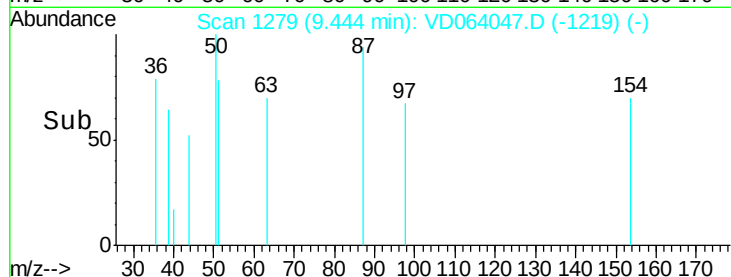
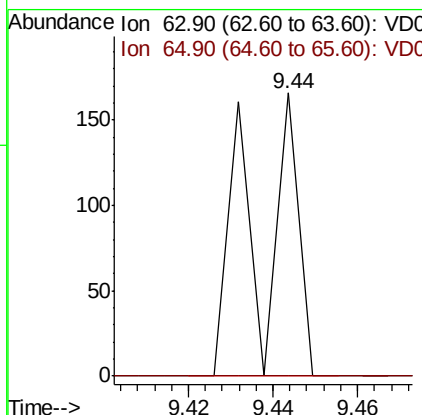
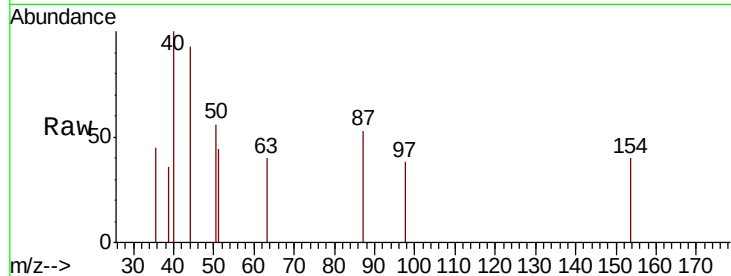




#45
 1,2-Dichloropropane
 Concen: 203.767 ug/l
 RT: 9.44 min Scan# 1279
 Delta R.T. 0.05 min
 Lab File: VD064047.D
 Acq: 24 Oct 2019 15:52

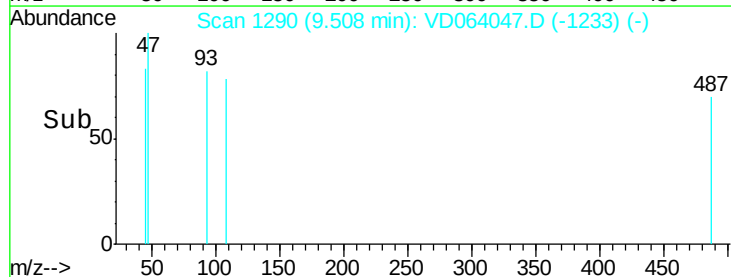
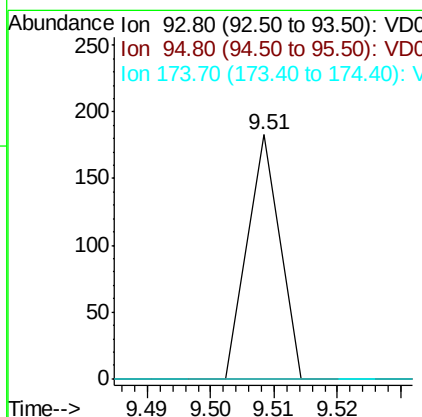
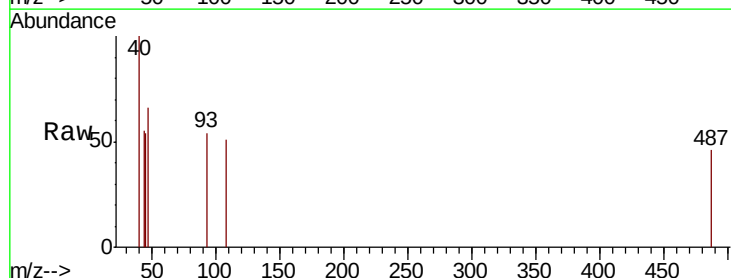
Instrument :
 MSVOA_D
 ClientSampleId :
 189-62-(1)RE

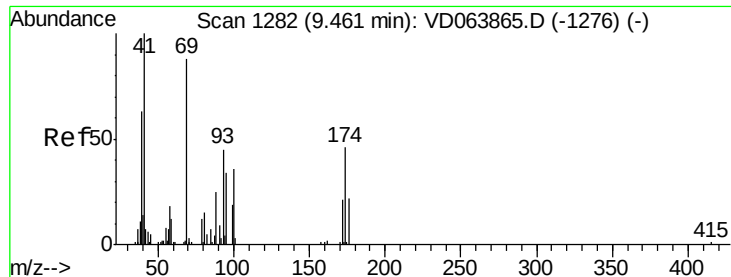
Tot Ion: 63 Resp: 115
 Ion Ratio Lower Upper
 63 100
 65 0.0 27.3 40.9#



#46
 Dibromomethane
 Concen: 202.231 ug/l
 RT: 9.51 min Scan# 1290
 Delta R.T. 0.04 min
 Lab File: VD064047.D
 Acq: 24 Oct 2019 15:52

Tgt Ion: 93 Resp: 65
 Ion Ratio Lower Upper
 93 100
 95 0.0 66.0 99.0#
 174 0.0 83.4 125.0#





#48

Methyl methacrylate

Concen: 225.793 ug/l

RT: 9.43 min Scan# 1277

Delta R.T. -0.03 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

Instrument :

MSVOA_D

ClientSampleId :

189-62-(1)RE

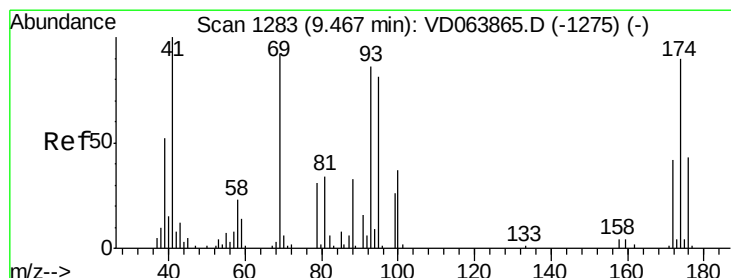
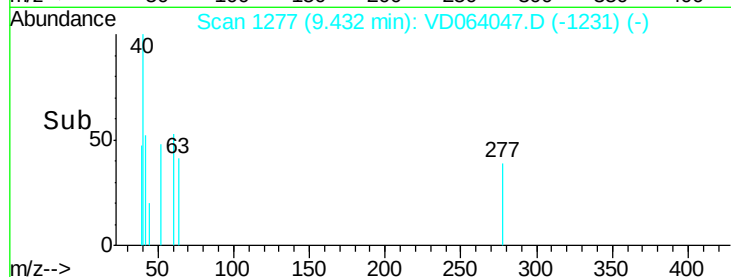
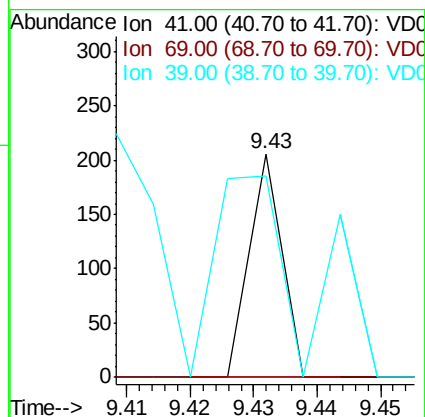
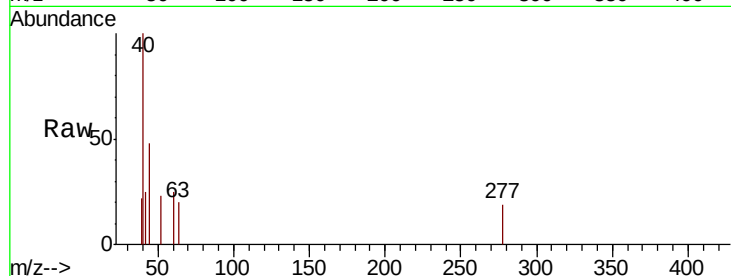
Tot Ion: 41 Resp: 73

Ion Ratio Lower Upper

41 100

69 0.0 75.1 112.7#

39 250.7 50.2 75.2#



#49

1,4-Dioxane

Concen: 12764.104 ug/l

RT: 9.33 min Scan# 1259

Delta R.T. -0.14 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

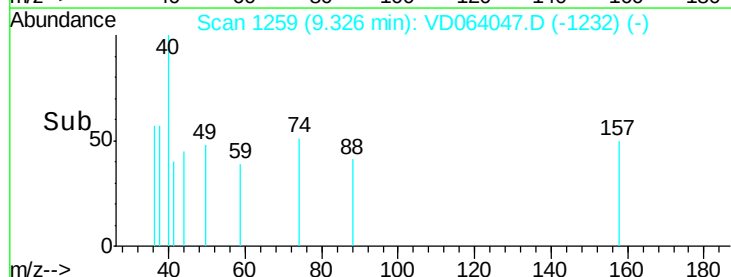
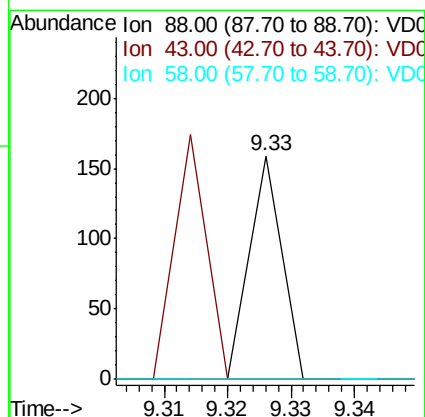
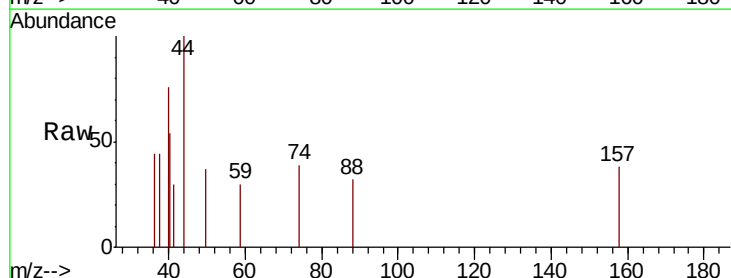
Tgt Ion: 88 Resp: 56

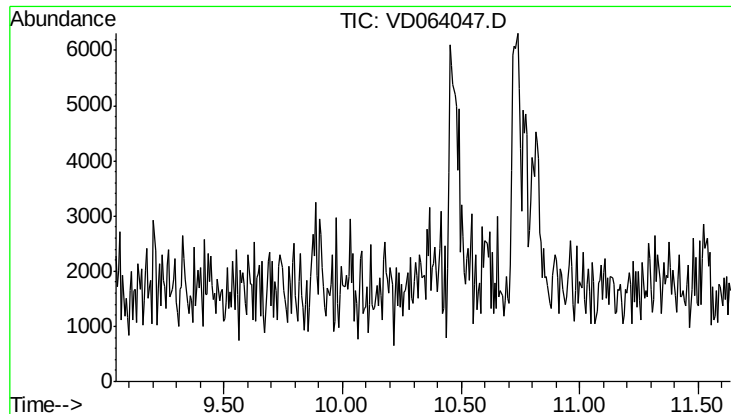
Ion Ratio Lower Upper

88 100

43 108.9 27.6 41.4#

58 0.0 54.1 81.1#



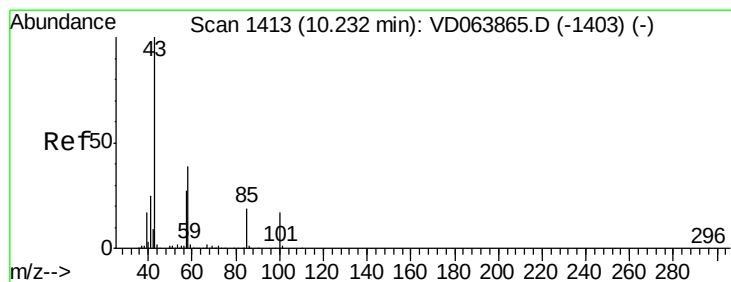
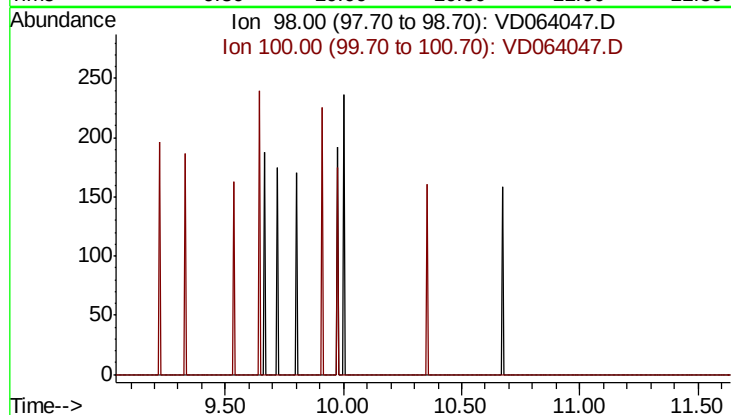


#50
Toluene-d8
Concen: 0.000 ug/l
Expected RT: 10.34 min

Lab File: VD064047.D
Acq: 24 Oct 2019 15:52

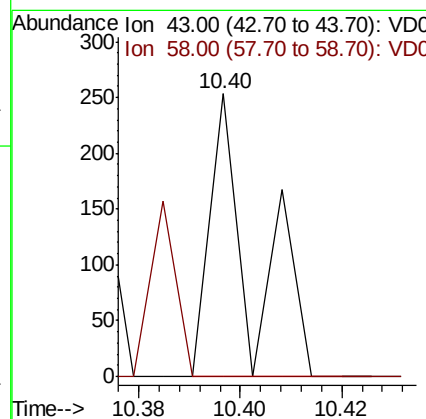
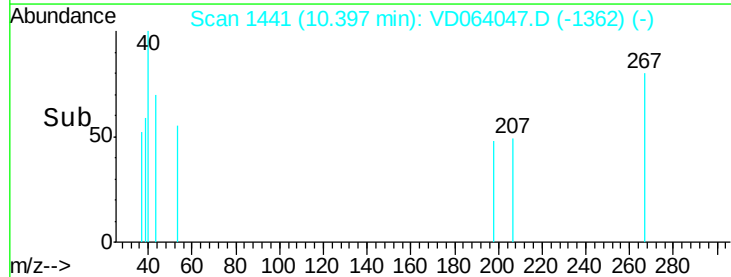
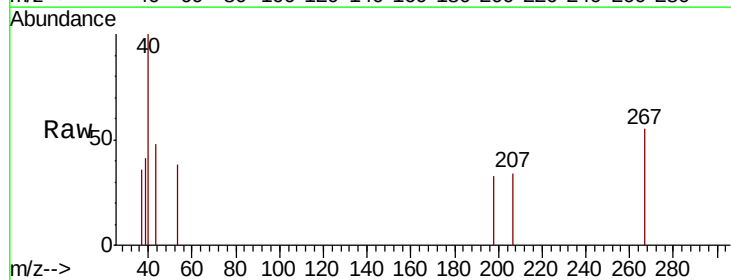
Instrument :
MSVOA_D
ClientSampleId :
189-62-(1)RE

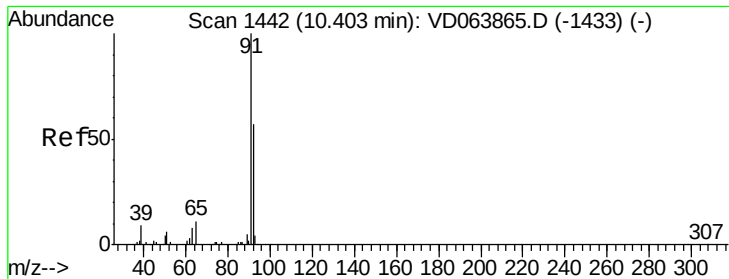
Tot Ion: 98
Sig Exp Ratio
98 100
100 65.1



#51
4-Methyl-2-Pentanone
Concen: 425.774 ug/l
RT: 10.40 min Scan# 1441
Delta R.T. 0.16 min
Lab File: VD064047.D
Acq: 24 Oct 2019 15:52

Tgt Ion: 43 Resp: 149
Ion Ratio Lower Upper
43 100
58 36.9 33.0 49.4





#52

Toluene

Concen: 37.906 ug/l

RT: 10.10 min Scan# 1390

Delta R.T. -0.31 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

Instrument :

MSVOA_D

ClientSampleId :

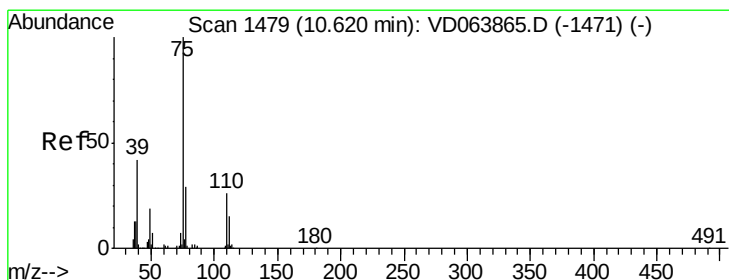
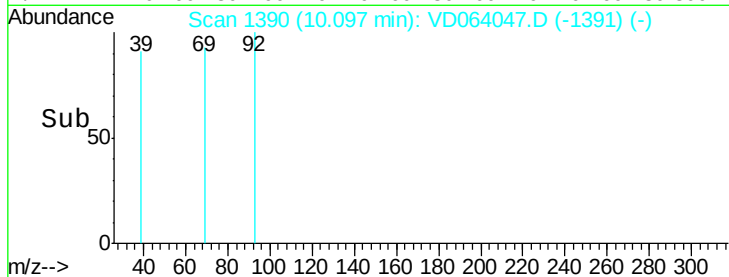
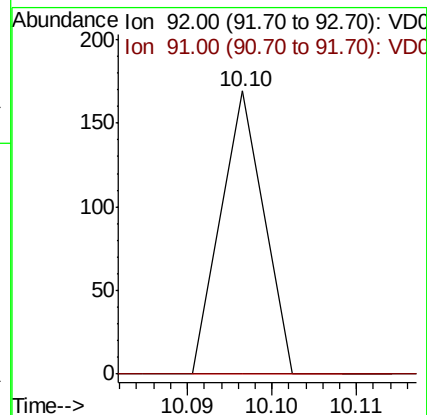
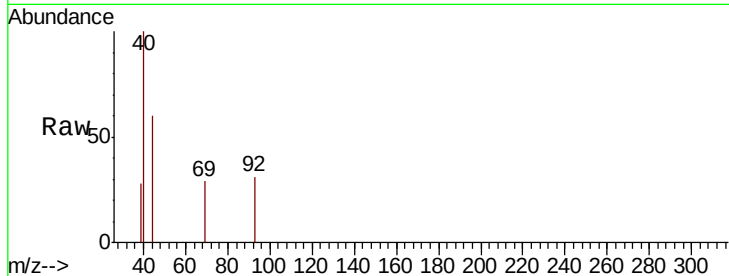
189-62-(1)RE

Tot Ion: 92 Resp: 60

Ion Ratio Lower Upper

92 100

91 0.0 139.5 209.3#



#53

t-1,3-Dichloropropene

Concen: 139.936 ug/l

RT: 10.77 min Scan# 1504

Delta R.T. 0.15 min

Lab File: VD064047.D

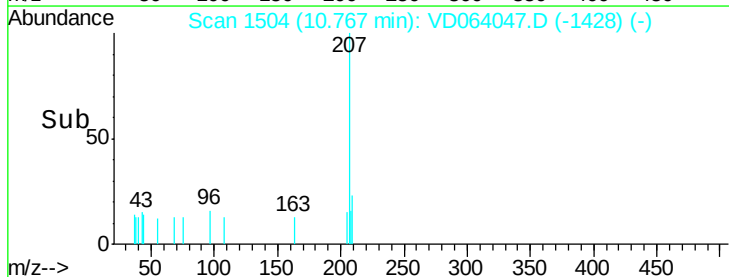
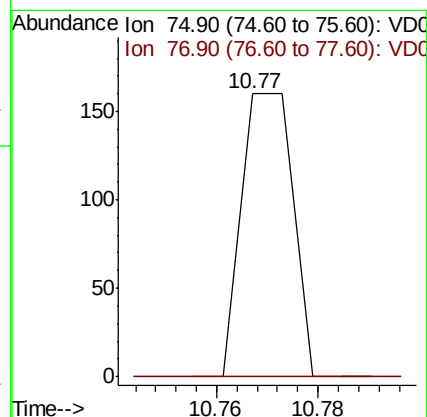
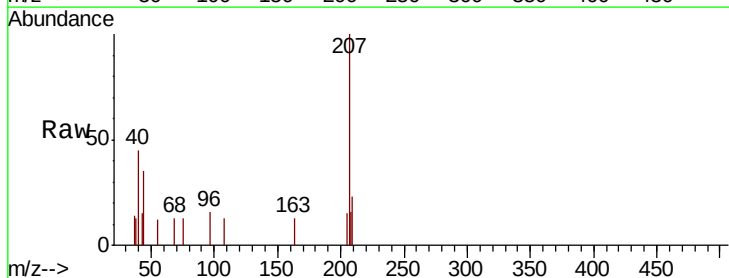
Acq: 24 Oct 2019 15:52

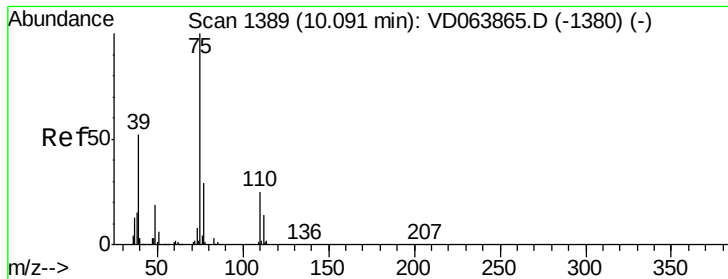
Tgt Ion: 75 Resp: 113

Ion Ratio Lower Upper

75 100

77 0.0 22.8 34.2#

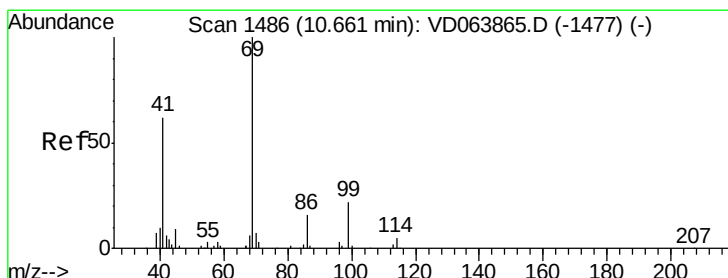
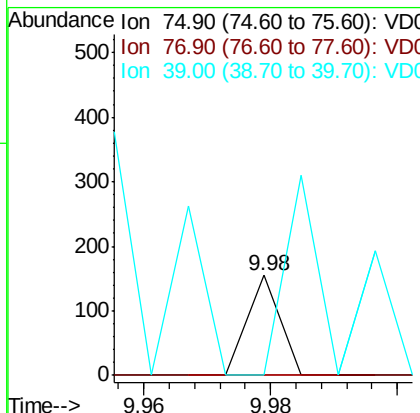
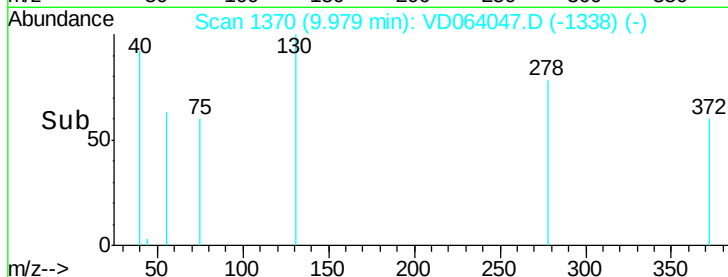
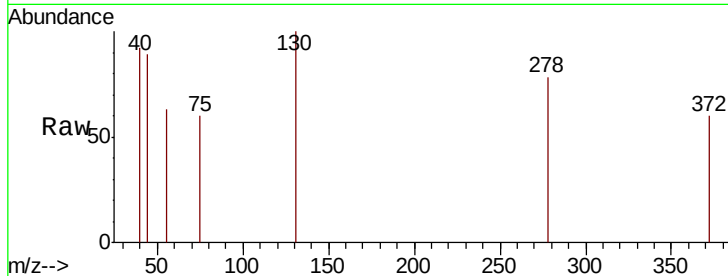




#54
 cis-1,3-Dichloropropene
 Concen: 59.169 ug/l
 RT: 9.98 min Scan# 1370
 Delta R.T. -0.11 min
 Lab File: VD064047.D
 Acq: 24 Oct 2019 15:52

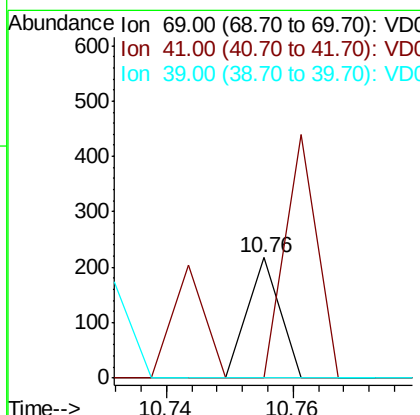
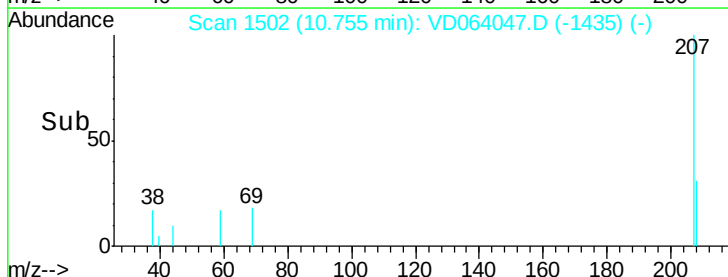
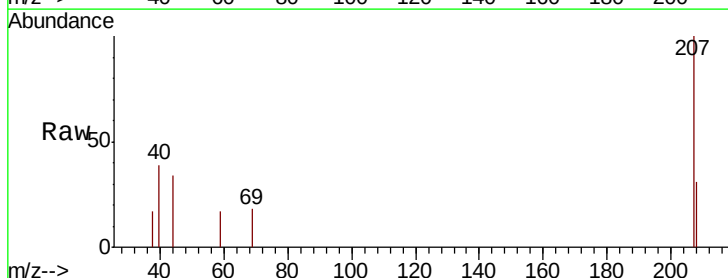
Instrument :
 MSVOA_D
 ClientSampleId :
 189-62-(1)RE

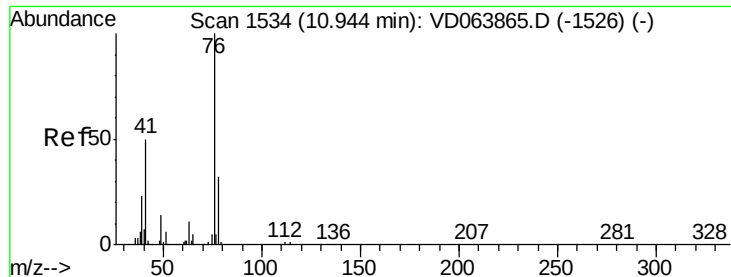
Tot Ion	Ratio	Lower	Upper
75	100		
77	0.0	23.2	34.8#
39	0.0	41.5	62.3#



#56
 Ethyl methacrylate
 Concen: 133.982 ug/l
 RT: 10.76 min Scan# 1502
 Delta R.T. 0.09 min
 Lab File: VD064047.D
 Acq: 24 Oct 2019 15:52

Tgt Ion	Ratio	Lower	Upper
69	100		
41	201.3	51.3	76.9#
39	0.0	28.0	42.0#





#57

1,3-Dichloropropane

Concen: 87.575 ug/l

RT: 10.91 min Scan# 1528

Delta R.T. -0.04 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

Instrument :

MSVOA_D

ClientSampleId :

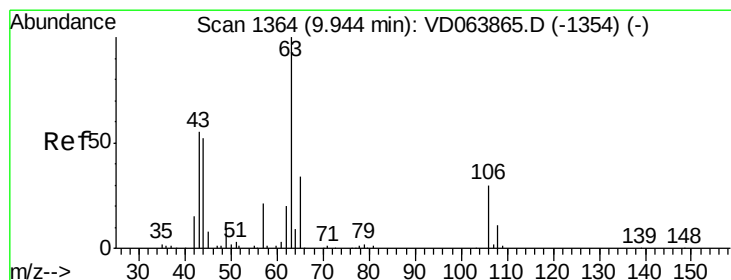
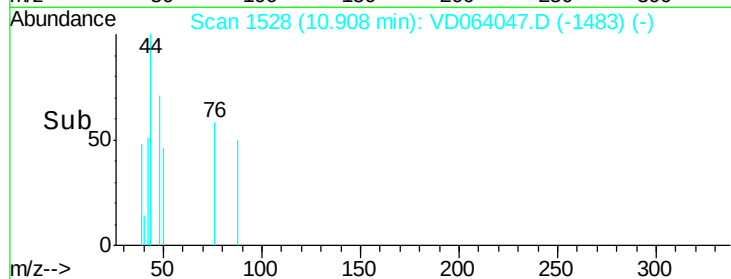
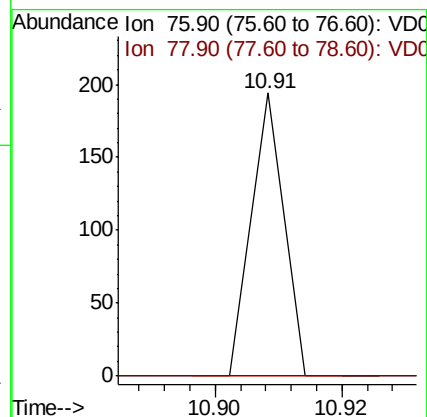
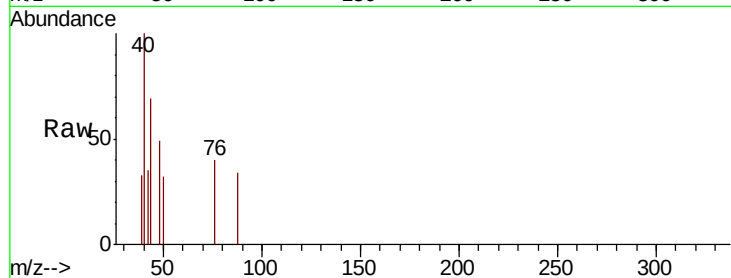
189-62-(1)RE

Tot Ion: 76 Resp: 68

Ion Ratio Lower Upper

76 100

78 0.0 26.6 40.0#



#58

2-Chloroethyl Vinyl ether

Concen: 319.800 ug/l

RT: 9.73 min Scan# 1328

Delta R.T. -0.21 min

Lab File: VD064047.D

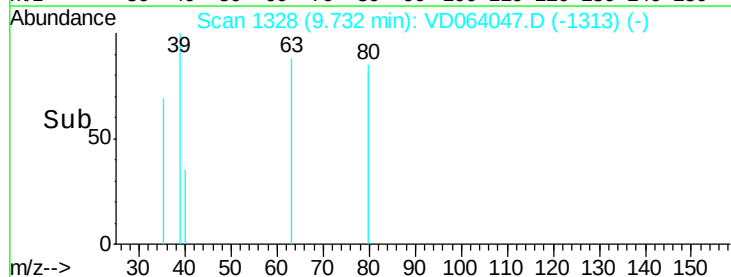
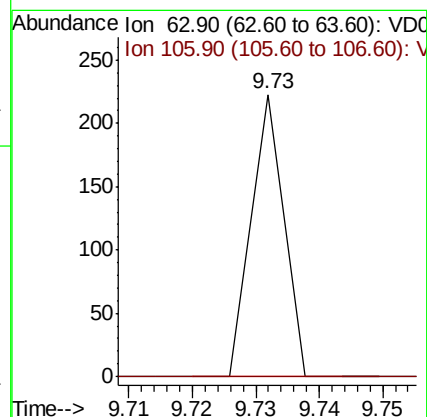
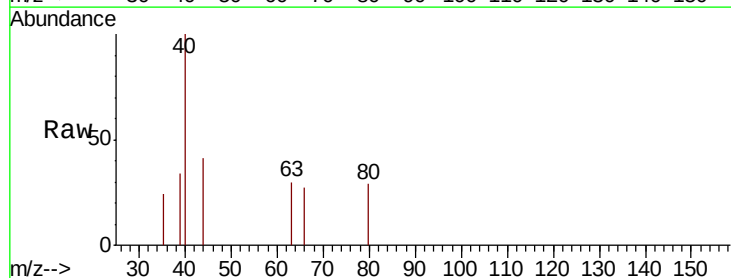
Acq: 24 Oct 2019 15:52

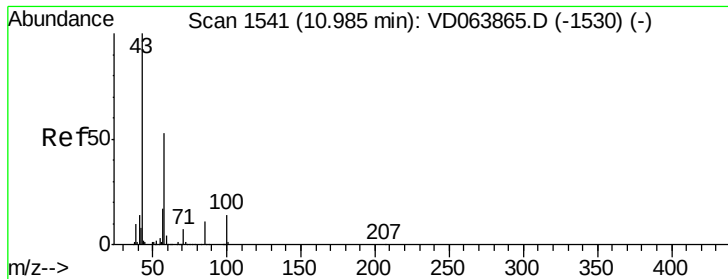
Tgt Ion: 63 Resp: 79

Ion Ratio Lower Upper

63 100

106 0.0 24.3 36.5#

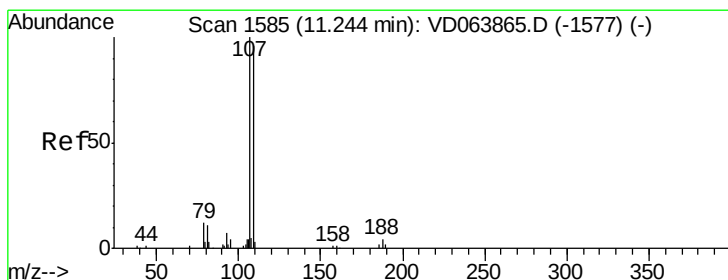
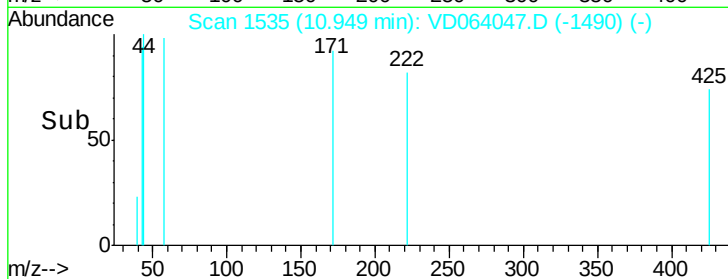
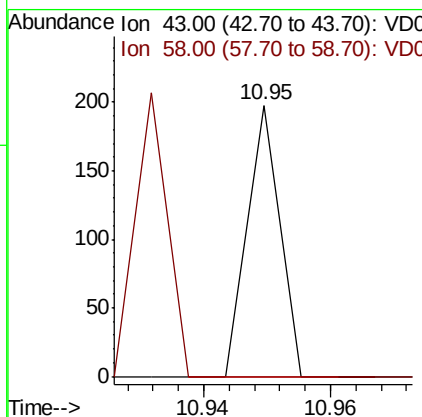
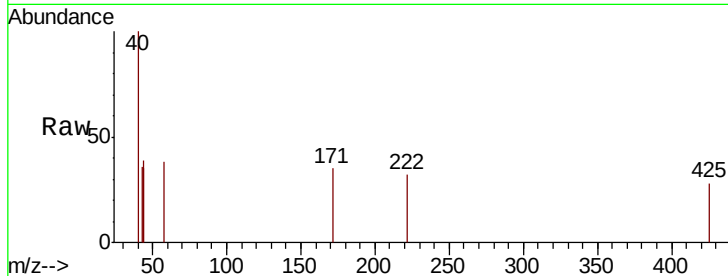




#59
2-Hexanone
Concen: 276.522 ug/l
RT: 10.95 min Scan# 1535
Delta R.T. -0.04 min
Lab File: VD064047.D
Acq: 24 Oct 2019 15:52

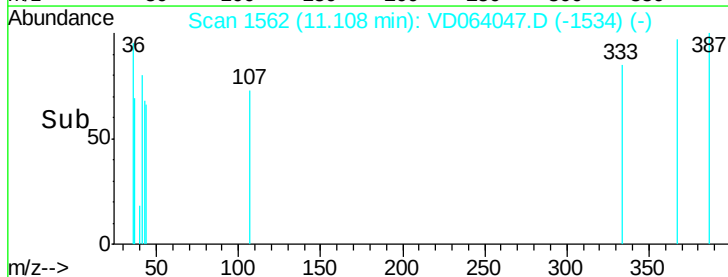
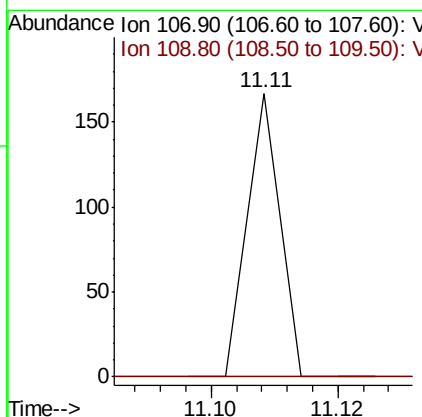
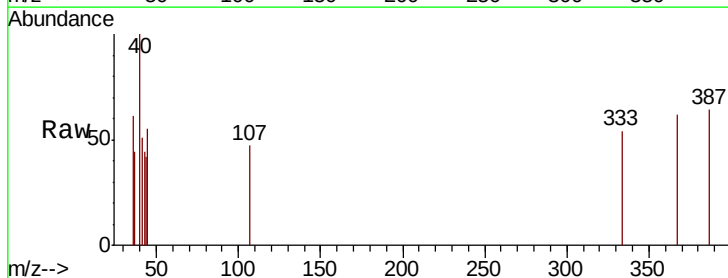
Instrument :
MSVOA_D
ClientSampleId :
189-62-(1)RE

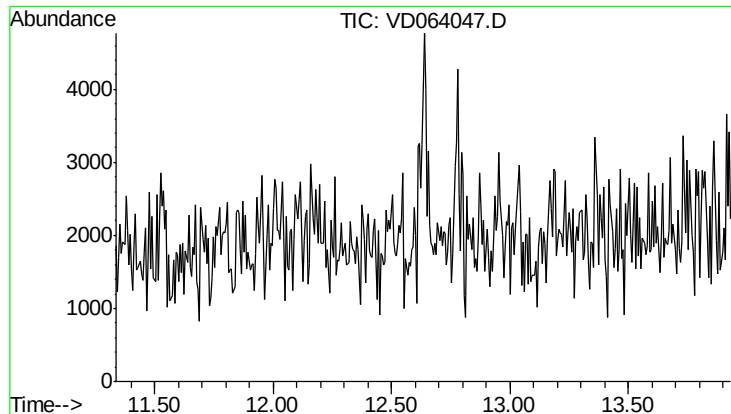
Tot Ion: 43 Resp: 70
Ion Ratio Lower Upper
43 100
58 104.3 27.7 83.0#



#61
1,2-Dibromoethane
Concen: 134.101 ug/l
RT: 11.11 min Scan# 1562
Delta R.T. -0.14 min
Lab File: VD064047.D
Acq: 24 Oct 2019 15:52

Tgt Ion: 107 Resp: 59
Ion Ratio Lower Upper
107 100
109 0.0 75.2 112.8#





#62

4-Bromofluorobenzene

Concen: 0.000 ug/l

Expected RT: 12.63 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

Tot Ion: 95

Sig Exp Ratio

95 100

174 93.2

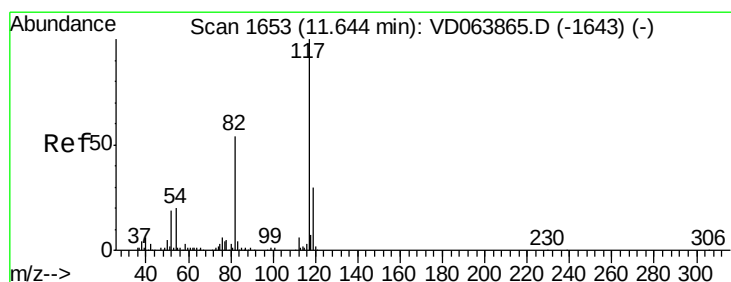
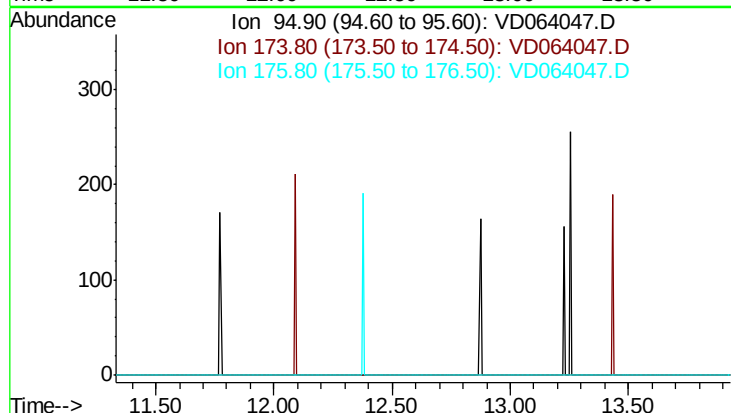
176 92.1

Instrument :

MSVOA_D

ClientSampleId :

189-62-(1)RE



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.65 min Scan# 1654

Delta R.T. 0.01 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

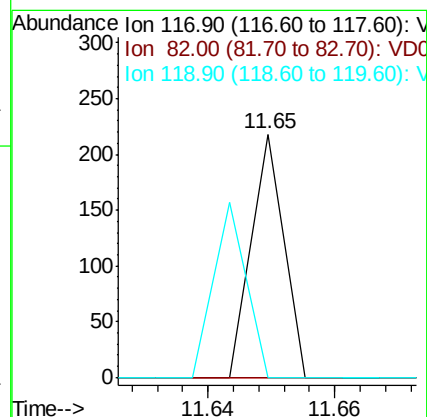
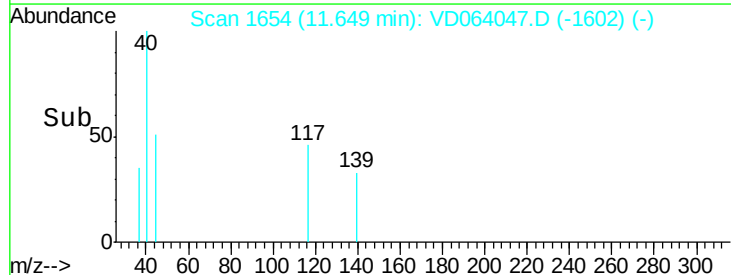
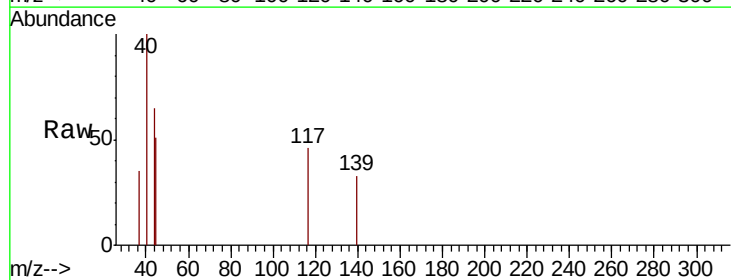
Tgt Ion:117 Resp: 77

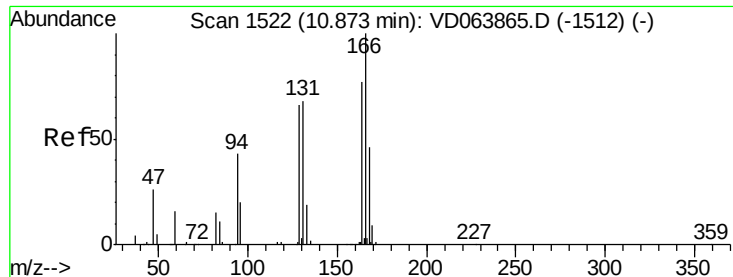
Ion Ratio Lower Upper

117 100

82 0.0 42.8 64.2#

119 0.0 24.4 36.6#





#64

Tetrachloroethene

Concen: 104.630 ug/l

RT: 10.83 min Scan# 1515

Delta R.T. -0.04 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

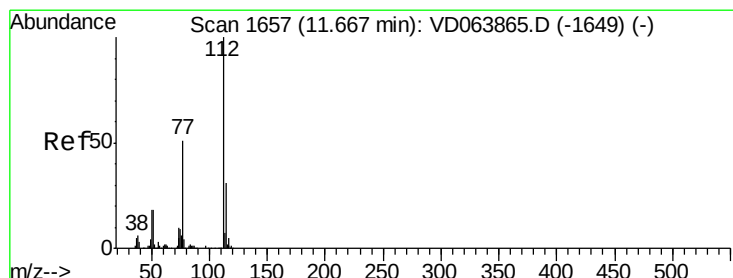
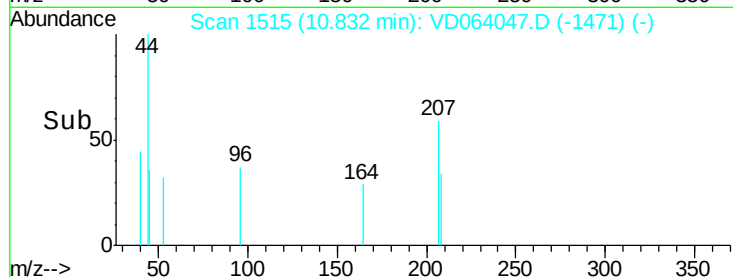
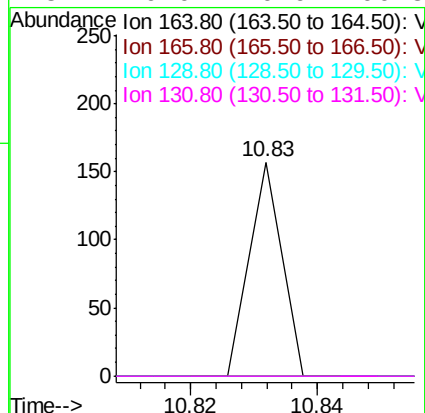
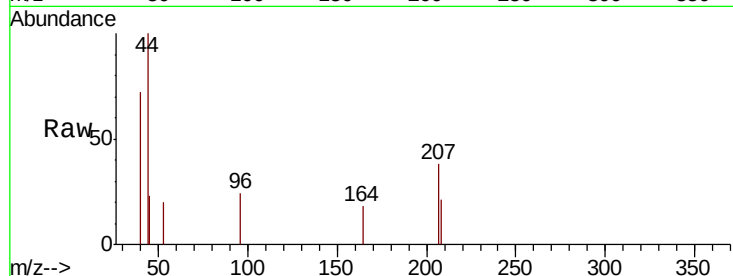
Instrument :

MSVOA_D

ClientSampleId :

189-62-(1)RE

Tot Ion:	164	Resp:	55
Ion	Ratio	Lower	Upper
164	100		
166	0.0	103.8	155.6#
129	0.0	68.9	103.3#
131	0.0	70.9	106.3#



#65

Chlorobenzene

Concen: 40.740 ug/l

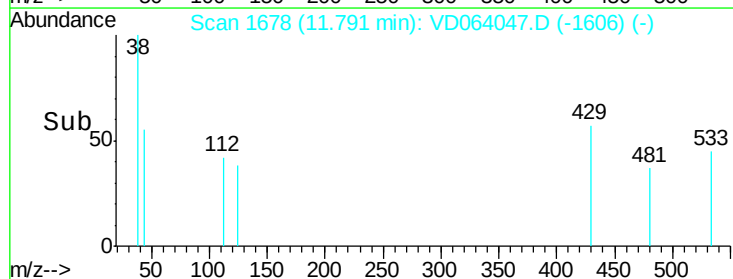
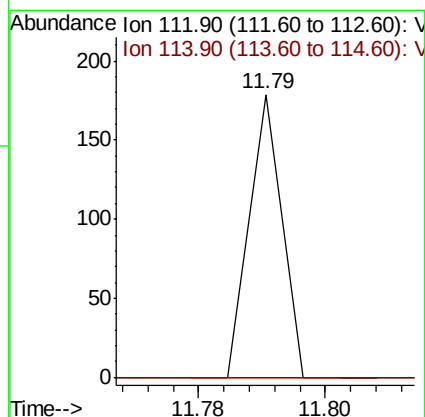
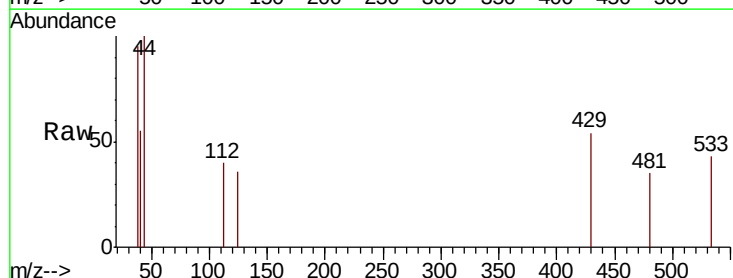
RT: 11.79 min Scan# 1678

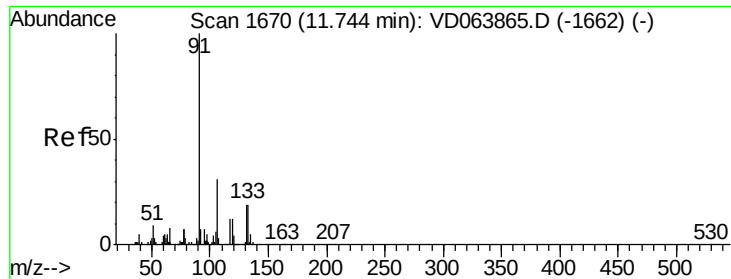
Delta R.T. 0.12 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

Tgt Ion:	112	Resp:	63
Ion	Ratio	Lower	Upper
112	100		
114	0.0	25.1	37.7#

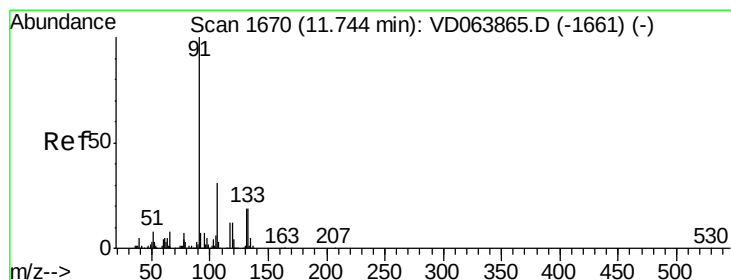
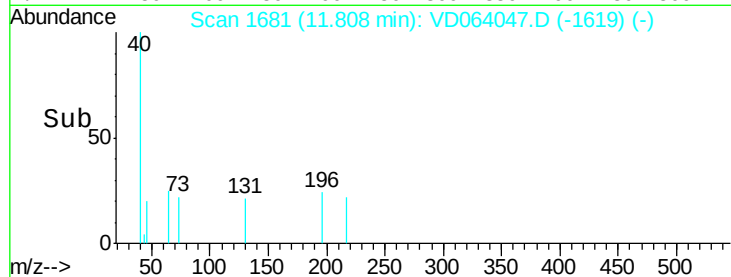
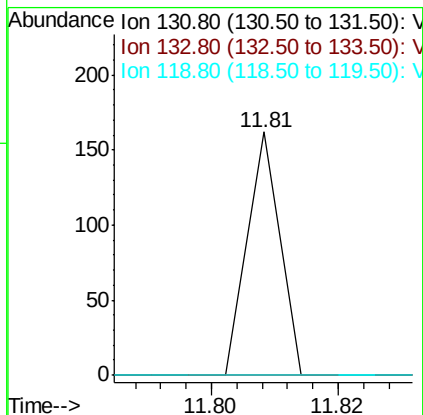
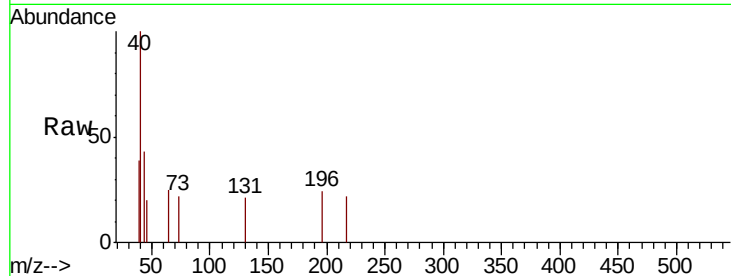




#66
 1,1,1,2-Tetrachloroethane
 Concen: 100.035 ug/l
 RT: 11.81 min Scan# 1681
 Delta R.T. 0.06 min
 Lab File: VD064047.D
 Acq: 24 Oct 2019 15:52

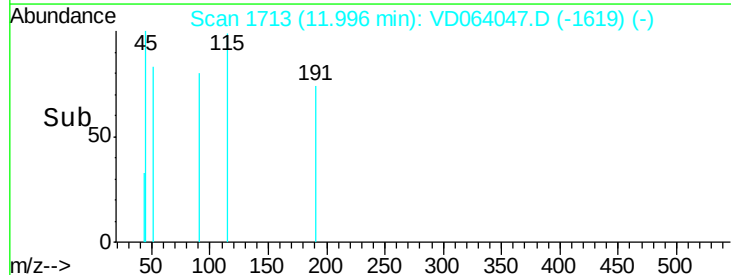
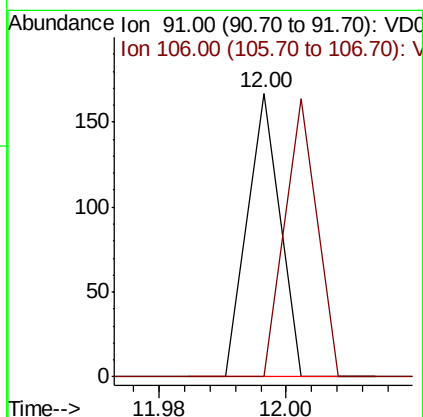
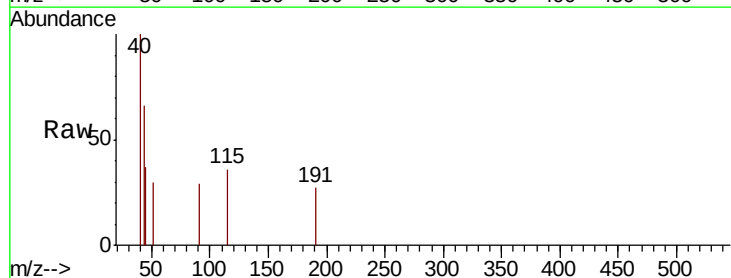
Instrument :
 MSVOA_D
 ClientSampleId :
 189-62-(1)RE

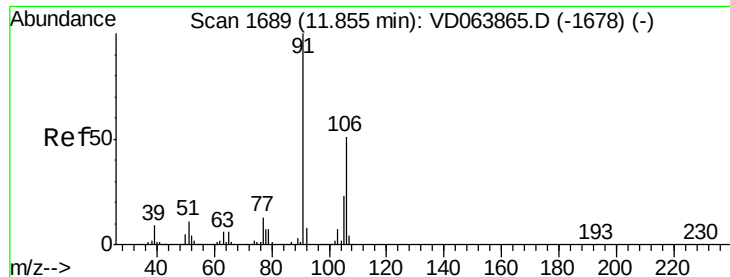
Tot Ion	Ratio	Lower	Upper
131	100		
133	0.0	48.9	146.7#
119	0.0	32.6	97.8#



#67
 Ethyl Benzene
 Concen: 21.159 ug/l
 RT: 12.00 min Scan# 1713
 Delta R.T. 0.25 min
 Lab File: VD064047.D
 Acq: 24 Oct 2019 15:52

Tgt Ion	Ratio	Lower	Upper
91	100		
106	0.0	24.6	37.0#

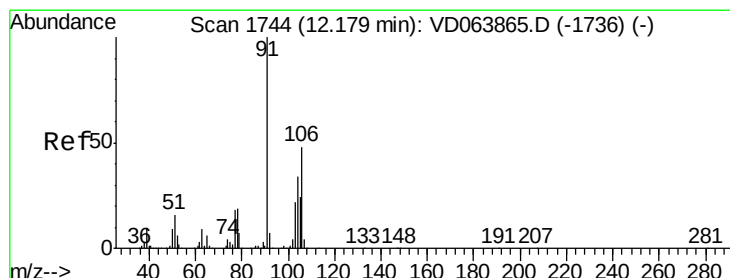
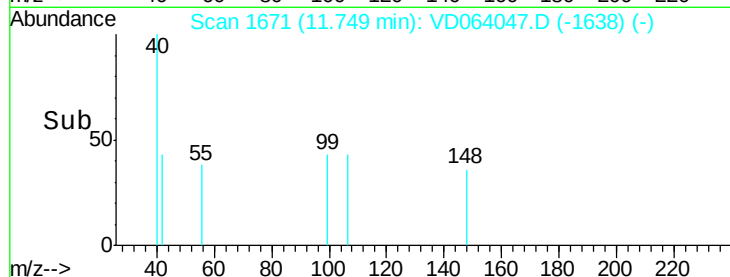
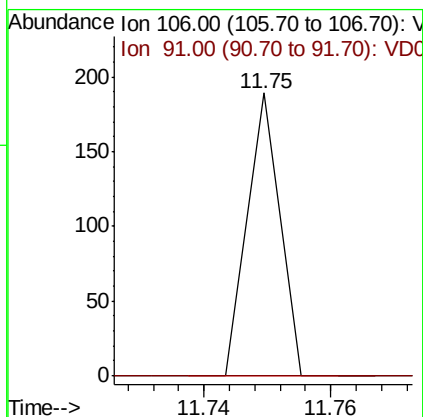
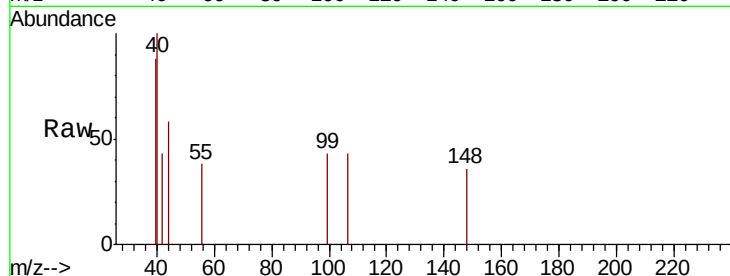




#68
m/p-Xylenes
Concen: 62.252 ug/l
RT: 11.75 min Scan# 1671
Delta R.T. -0.11 min
Lab File: VD064047.D
Acq: 24 Oct 2019 15:52

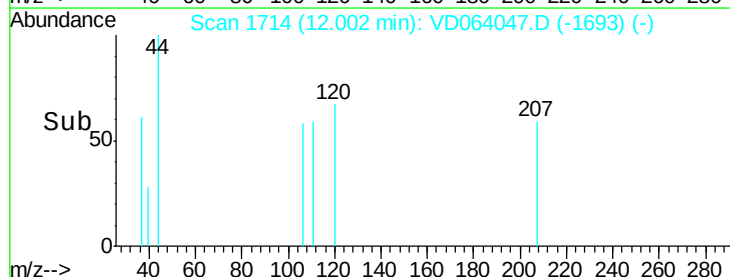
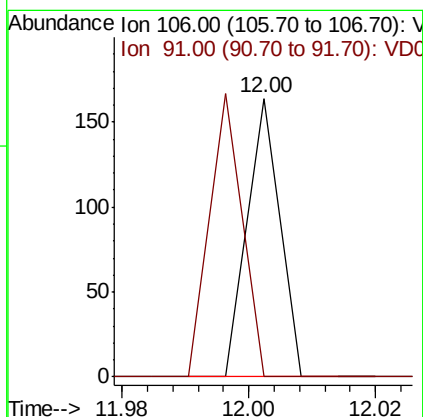
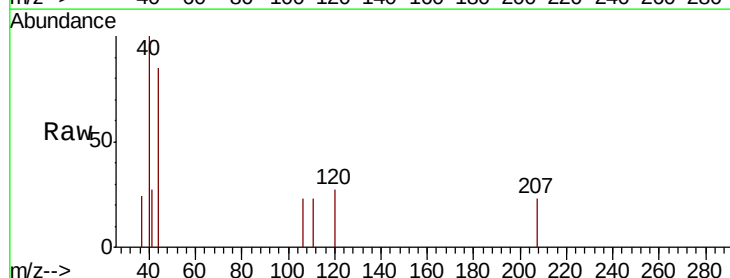
Instrument :
MSVOA_D
ClientSampleId :
189-62-(1)RE

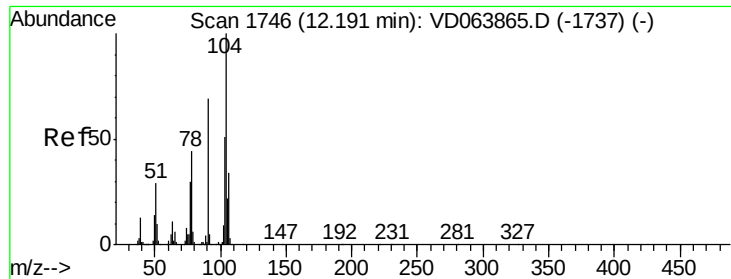
Tot Ion:106 Resp: 67
Ion Ratio Lower Upper
106 100
91 0.0 154.8 232.2#



#69
o-Xylene
Concen: 56.280 ug/l
RT: 12.00 min Scan# 1714
Delta R.T. -0.18 min
Lab File: VD064047.D
Acq: 24 Oct 2019 15:52

Tgt Ion:106 Resp: 58
Ion Ratio Lower Upper
106 100
91 101.7 103.9 311.7#





#70

Stvrene

Concen: 44.136 ug/l

RT: 12.18 min Scan# 1745

Delta R.T. -0.01 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

Instrument :

MSVOA_D

ClientSampleId :

189-62-(1)RE

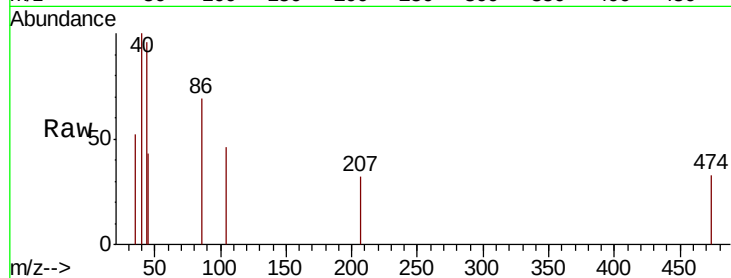
Tot Ion:104 Resp: 77

Ion Ratio Lower Upper

104 100

78 0.0 37.0 55.4#

103 88.3 44.2 66.4#



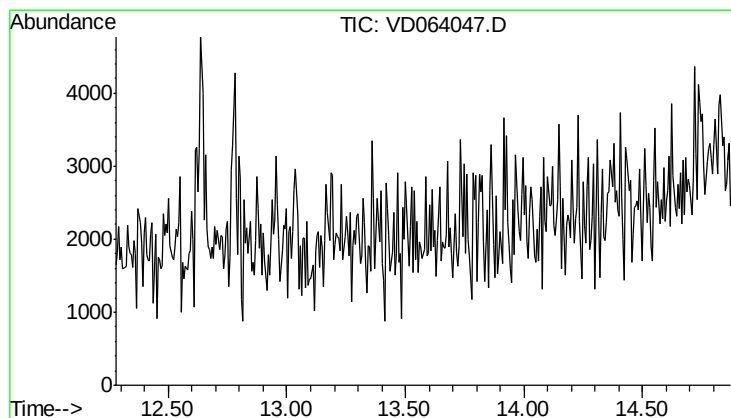
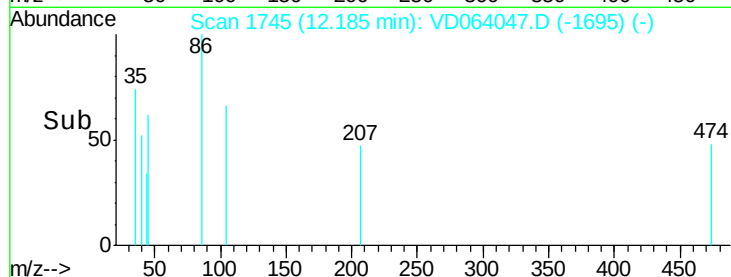
Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): V

Ion 103.00 (102.70 to 103.70): V

12.18

Time-->



#72

1,4-Dichlorobenzene-d4

Concen: 0.000 ug/l

Expected RT: 13.57 min

Lab File: VD064047.D

Acq: 24 Oct 2019 15:52

Tgt Ion: 152

Sig Exp Ratio

152 100

115 51.8

150 172.1

