

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD032819\
 Data File : VD061406.D
 Acq On : 28 Mar 2019 22:18
 Operator : VA/AP
 Sample : K2111-09
 Misc : 6.46g/5ml/MSVOA D/SOIL
 ALS Vial : 20 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 S5(23)

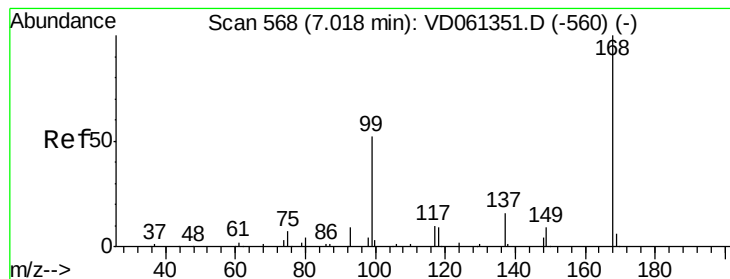
Quant Time: Mar 29 01:14:33 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D032719S.M
 Quant Title : SW846 8260
 QLast Update : Thu Mar 28 09:22:37 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.04	168	504973	50.00	ug/l	0.02
34) 1,4-Difluorobenzene	8.21	114	862344	50.00	ug/l	0.02
63) Chlorobenzene-d5	12.36	117	680461	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	14.51	152	311317	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	7.45	65	240375	55.72	ug/l	0.01
Spiked Amount			Recovery	=	111.44%	
35) Dibromofluoromethane	6.91	113	400193	60.73	ug/l	0.01
Spiked Amount			Recovery	=	121.46%	
50) Toluene-d8	10.40	98	866395	54.82	ug/l	0.01
Spiked Amount			Recovery	=	109.64%	
62) 4-Bromofluorobenzene	13.55	95	341484	56.34	ug/l	0.00
Spiked Amount			Recovery	=	112.68%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
11) Tert butyl alcohol	3.99	59	3972	14.785	ug/l #	76
16) Acetone	3.22	43	32182	29.021	ug/l	92
18) Methyl Acetate	3.63	43	3022	1.296	ug/l #	55
20) Methylene Chloride	3.82	84	52036	6.714	ug/l	93
25) 2-Butanone	6.06	43	2837	2.034	ug/l #	54
26) 2,2-Dichloropropane	6.14	77	18352	2.455	ug/l #	50
29) Tetrahydrofuran	6.45	42	1113	1.646	ug/l #	30
30) Chloroform	6.66	83	79302	8.163	ug/l	95
31) Cyclohexane	7.04	56	9569	1.288	ug/l #	1
36) 1,1-Dichloropropene	7.03	75	38479	5.113	ug/l #	44
37) Ethyl Acetate	6.14	43	14649	4.551	ug/l #	1
38) Carbon Tetrachloride	7.04	117	50052	5.787	ug/l #	12
51) 4-Methyl-2-Pentanone	10.29	43	2893	1.015	ug/l #	80
74) N-amyl acetate	13.21	43	13798	2.286	ug/l #	64
81) trans-1,4-Dichloro-2-buten	13.55	75	125785	91.737	ug/l #	19

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.04 min Scan# 571

Delta R.T. 0.02 min

Lab File: VD061406.D

Acq: 28 Mar 2019 22:18

Instrument :

MSVOA_D

ClientSampleId :

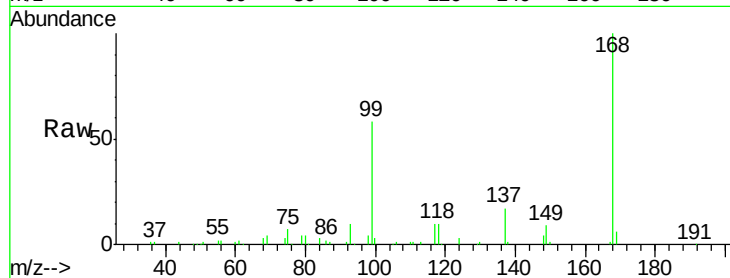
S5(23)

Tot Ion:168 Resp: 504973

Ion Ratio Lower Upper

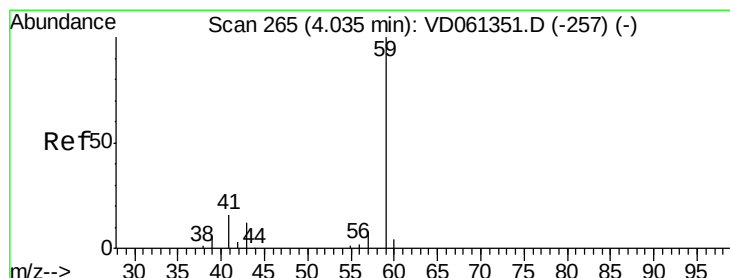
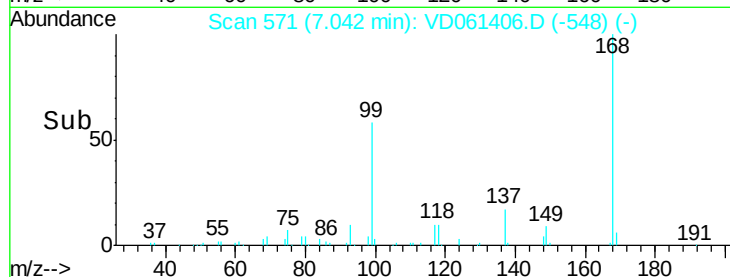
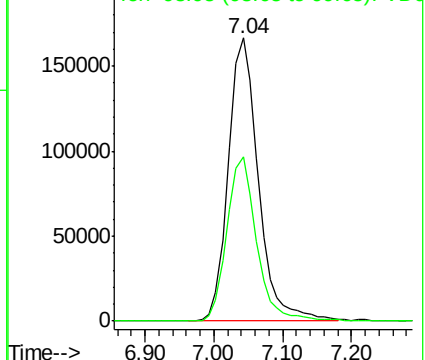
168 100

99 58.0 43.1 64.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#11

Tert butyl alcohol

Concen: 14.785 ug/l

RT: 3.99 min Scan# 261

Delta R.T. -0.04 min

Lab File: VD061406.D

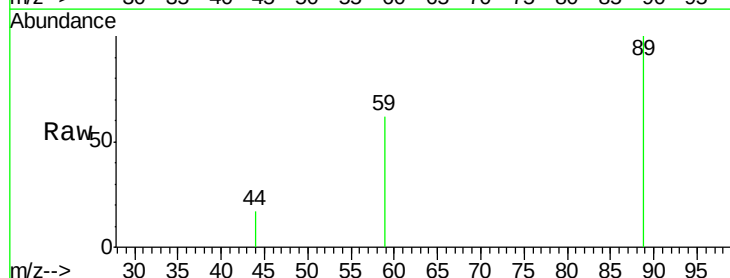
Acq: 28 Mar 2019 22:18

Tgt Ion: 59 Resp: 3972

Ion Ratio Lower Upper

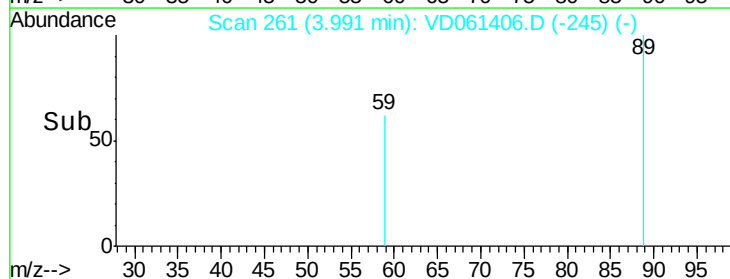
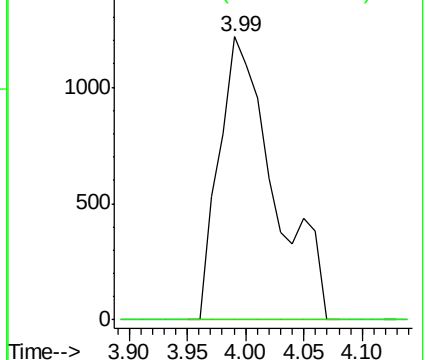
59 100

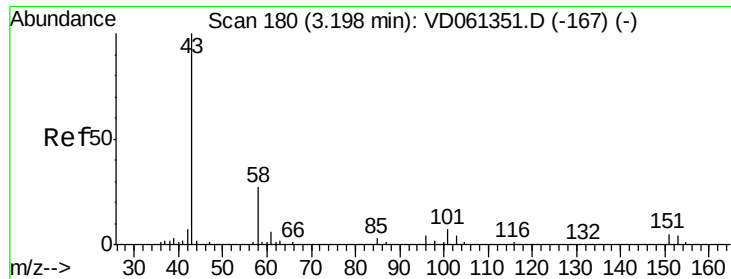
57 0.0 6.7 10.1#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC





#16

Acetone

Concen: 29.021 ug/l

RT: 3.22 min Scan# 183

Delta R.T. 0.02 min

Lab File: VD061406.D

Acq: 28 Mar 2019 22:18

Instrument :

MSVOA_D

ClientSampleId :

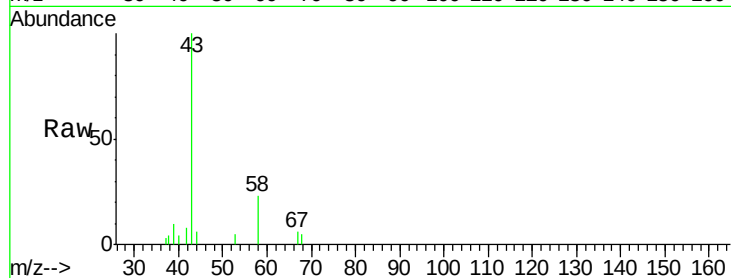
S5(23)

Tot Ion: 43 Resp: 32182

Ion Ratio Lower Upper

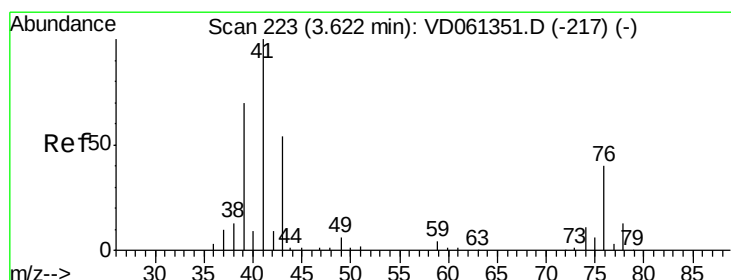
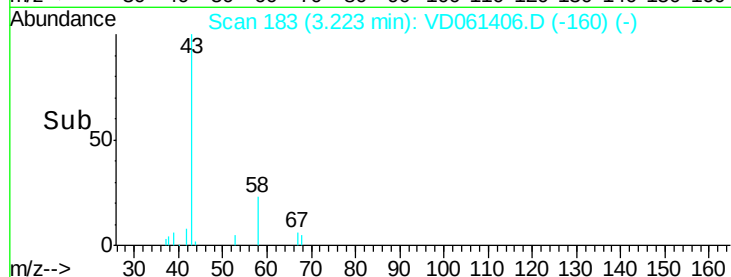
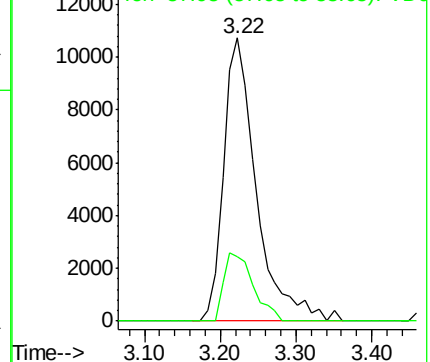
43 100

58 22.9 21.5 32.3



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC



#18

Methyl Acetate

Concen: 1.296 ug/l

RT: 3.63 min Scan# 224

Delta R.T. 0.00 min

Lab File: VD061406.D

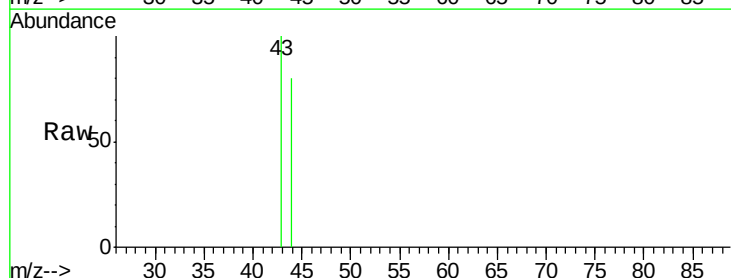
Acq: 28 Mar 2019 22:18

Tgt Ion: 43 Resp: 3022

Ion Ratio Lower Upper

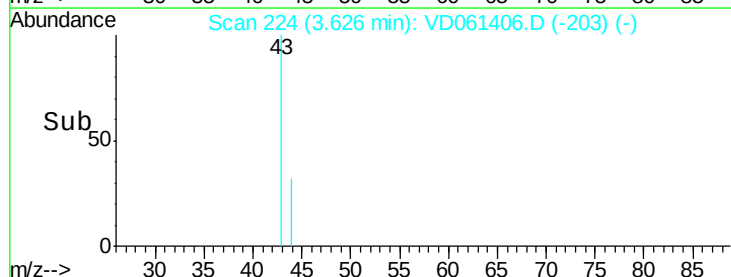
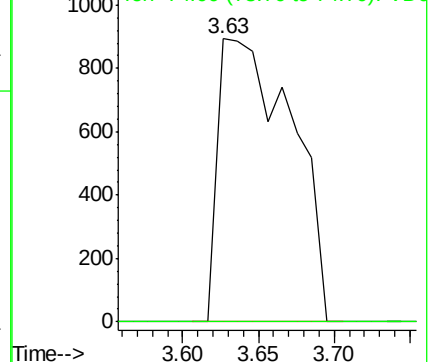
43 100

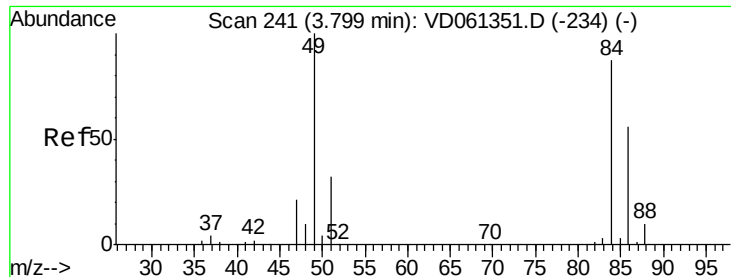
74 0.0 16.7 25.1#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 74.00 (73.70 to 74.70): VDC

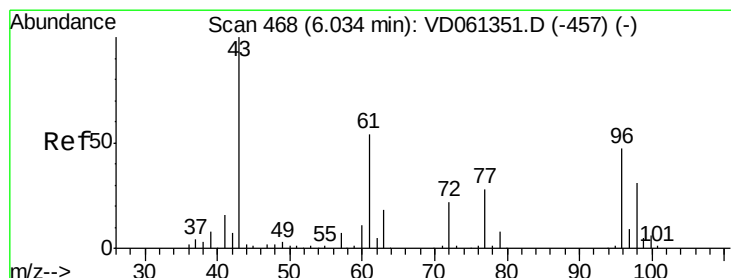
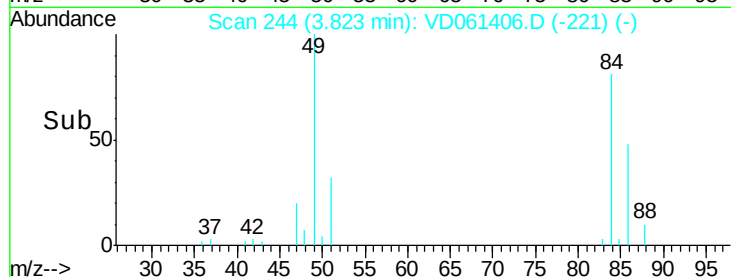
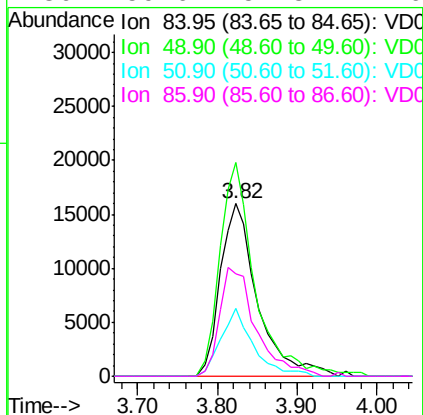
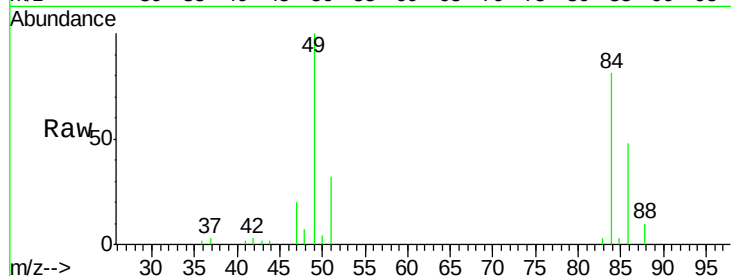




#20
Methylene Chloride
Concen: 6.714 ug/l
RT: 3.82 min Scan# 244
Delta R.T. 0.02 min
Lab File: VD061406.D
Acq: 28 Mar 2019 22:18

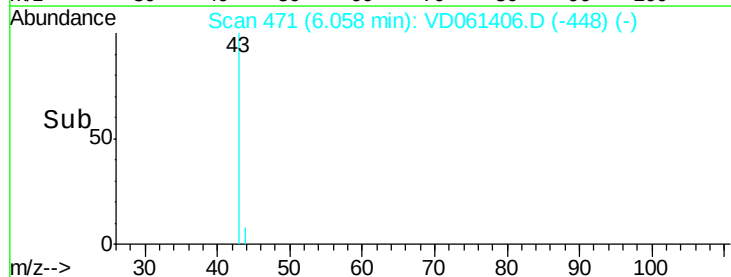
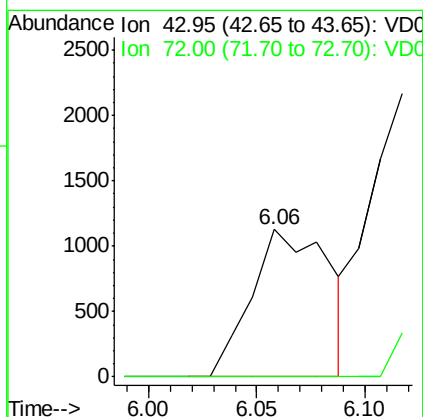
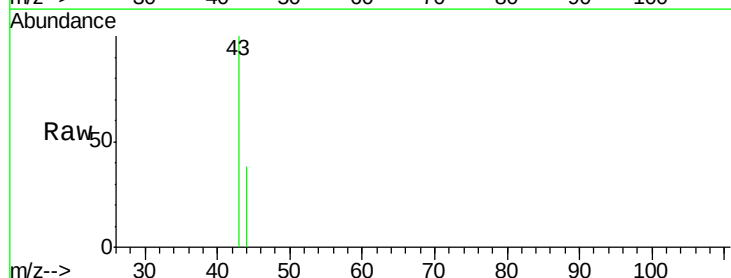
Instrument :
MSVOA_D
ClientSampleId :
S5(23)

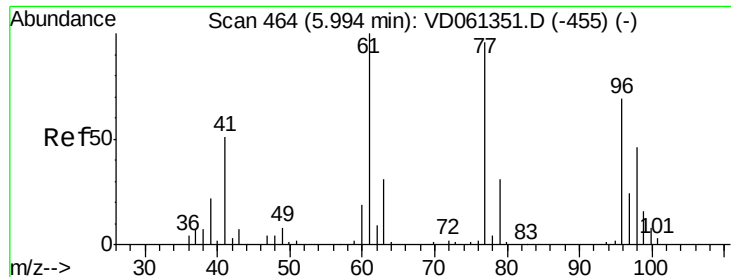
Tot Ion:	84	Resp:	52036
Ion	Ratio	Lower	Upper
84	100		
49	123.9	91.8	137.8
51	39.7	29.8	44.8
86	59.6	51.8	77.6



#25
2-Butanone
Concen: 2.034 ug/l
RT: 6.06 min Scan# 471
Delta R.T. 0.02 min
Lab File: VD061406.D
Acq: 28 Mar 2019 22:18

Tgt Ion:	43	Resp:	2837
Ion	Ratio	Lower	Upper
43	100		
72	0.0	17.2	25.8#





#26

2,2-Dichloropropane

Concen: 2.455 ug/l

RT: 6.14 min Scan# 479

Delta R.T. 0.14 min

Lab File: VD061406.D

Acq: 28 Mar 2019 22:18

Instrument :

MSVOA_D

ClientSampleId :

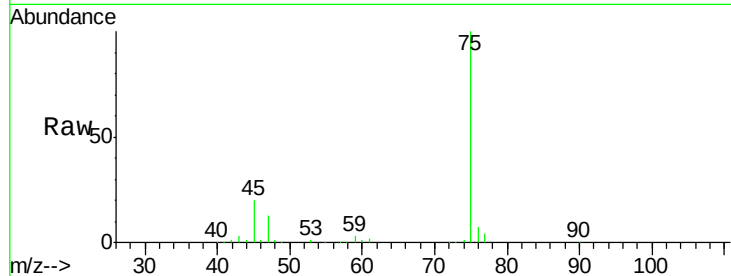
S5(23)

Tot Ion: 77 Resp: 18352

Ion Ratio Lower Upper

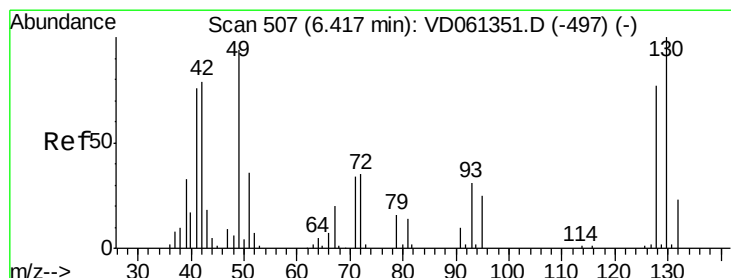
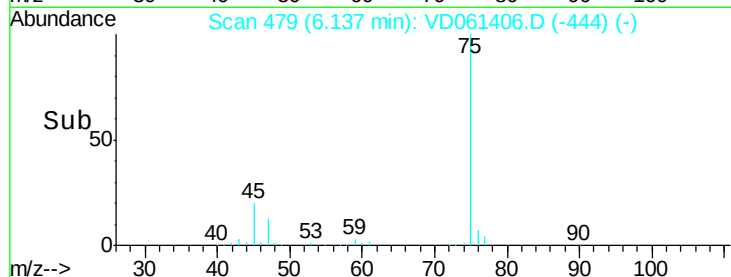
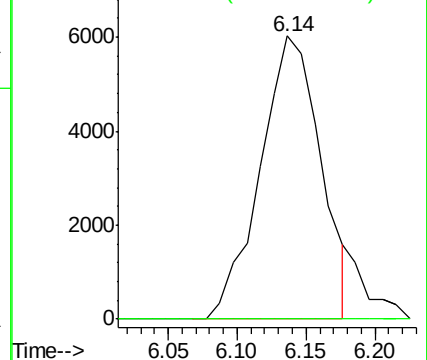
77 100

97 0.0 12.7 38.0#



Abundance Ion 76.95 (76.65 to 77.65): VDC

Ion 96.85 (96.55 to 97.55): VDC



#29

Tetrahydrofuran

Concen: 1.646 ug/l

RT: 6.45 min Scan# 511

Delta R.T. 0.03 min

Lab File: VD061406.D

Acq: 28 Mar 2019 22:18

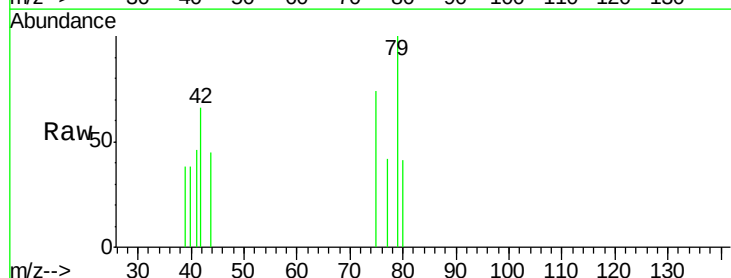
Tgt Ion: 42 Resp: 1113

Ion Ratio Lower Upper

42 100

72 0.0 37.4 56.0#

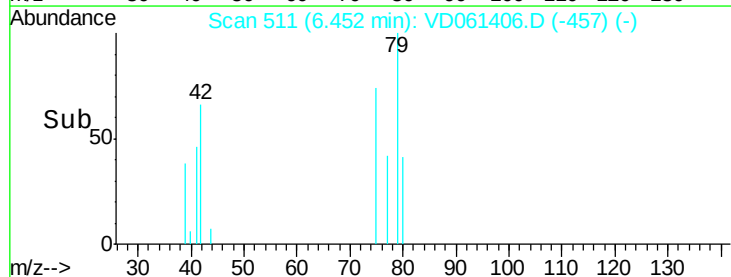
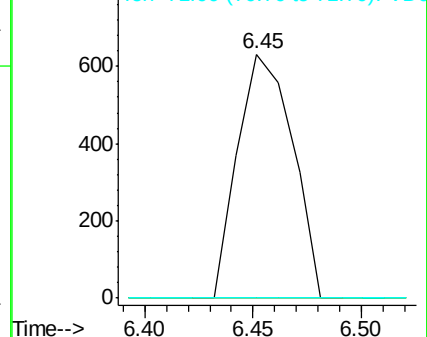
71 0.0 36.7 55.1#

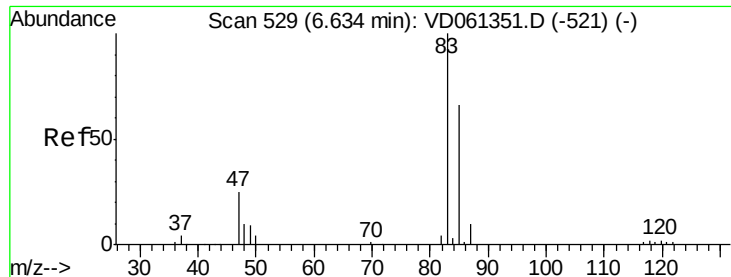


Abundance Ion 42.00 (41.70 to 42.70): VDC

Ion 72.00 (71.70 to 72.70): VDC

Ion 71.00 (70.70 to 71.70): VDC

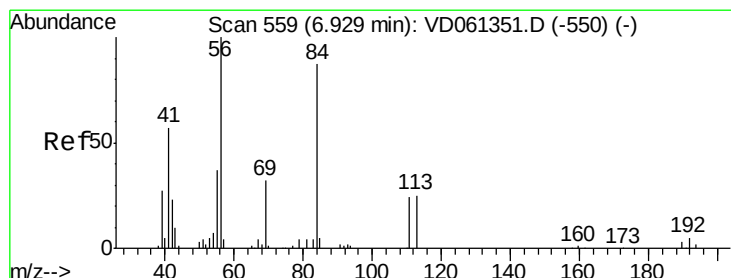
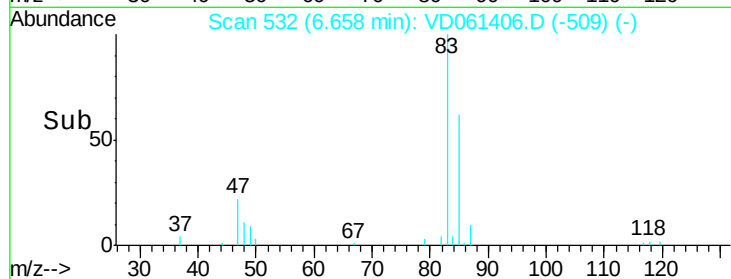
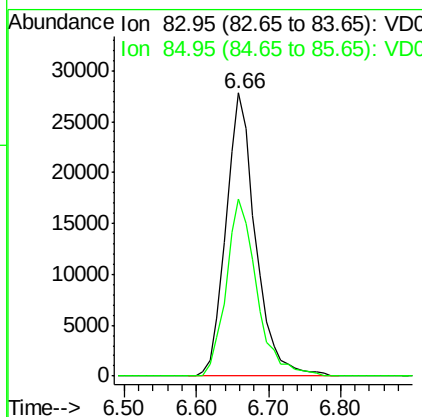
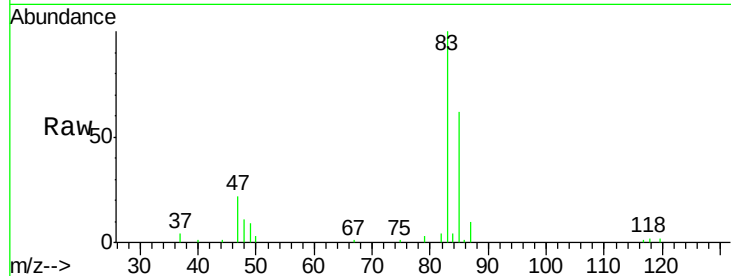




#30
Chloroform
Concen: 8.163 ug/l
RT: 6.66 min Scan# 532
Delta R.T. 0.02 min
Lab File: VD061406.D
Acq: 28 Mar 2019 22:18

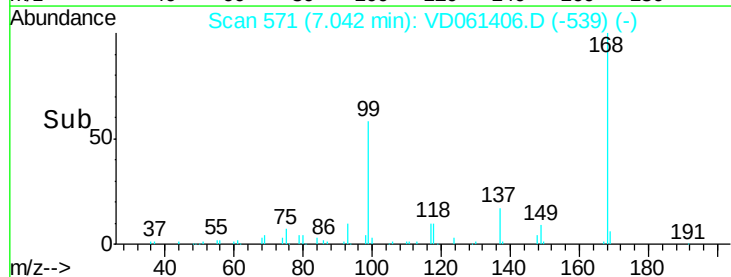
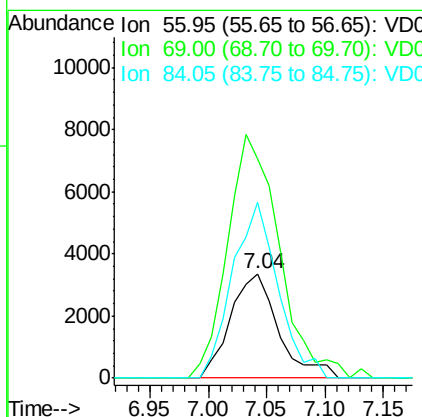
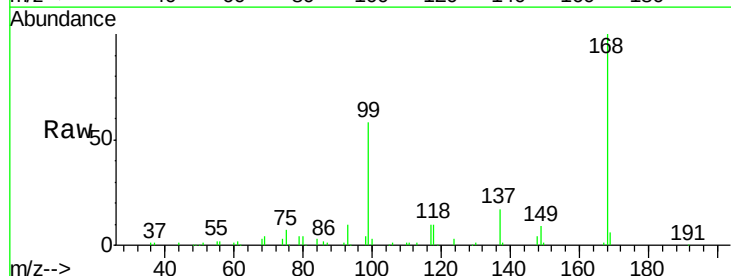
Instrument :
MSVOA_D
ClientSampleId :
S5(23)

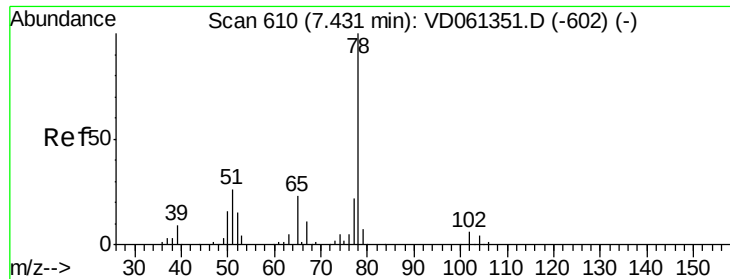
Tot Ion: 83 Resp: 79302
Ion Ratio Lower Upper
83 100
85 62.5 53.0 79.4



#31
Cyclohexane
Concen: 1.288 ug/l
RT: 7.04 min Scan# 571
Delta R.T. 0.11 min
Lab File: VD061406.D
Acq: 28 Mar 2019 22:18

Tgt Ion: 56 Resp: 9569
Ion Ratio Lower Upper
56 100
69 209.6 25.7 38.5#
84 167.6 70.6 105.8#

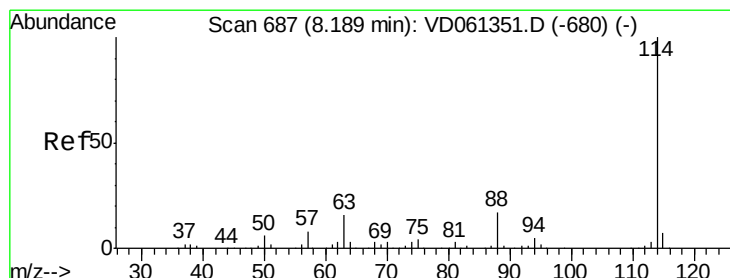
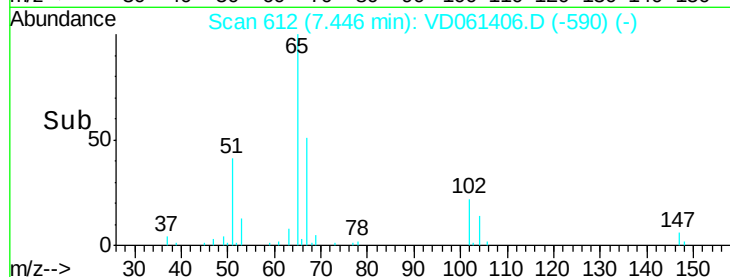
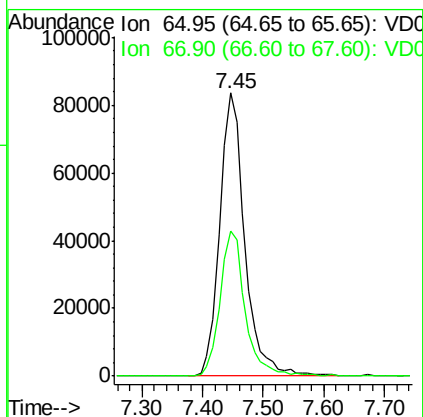
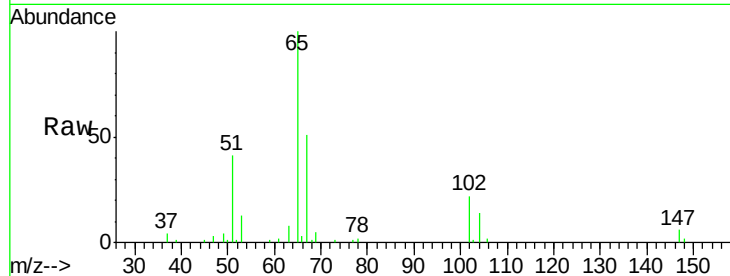




#33
 1,2-Dichloroethane-d4
 Concen: N.D. ug/l
 RT: 7.45 min Scan# 612
 Delta R.T. 0.01 min
 Lab File: VD061406.D
 Acq: 28 Mar 2019 22:18

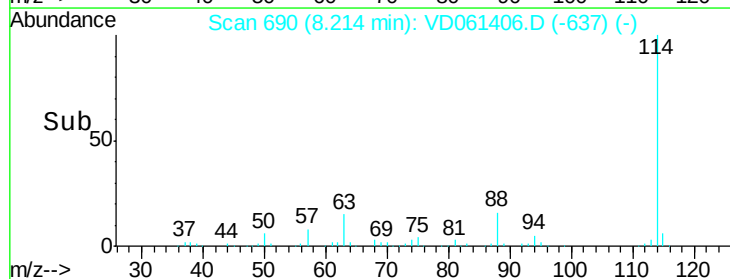
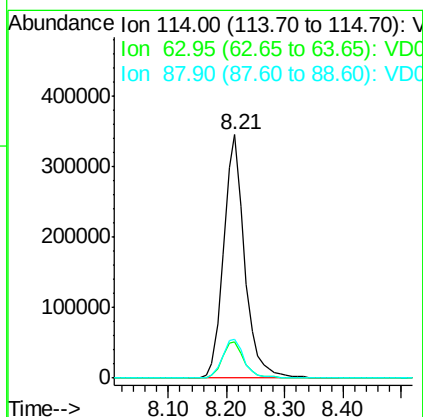
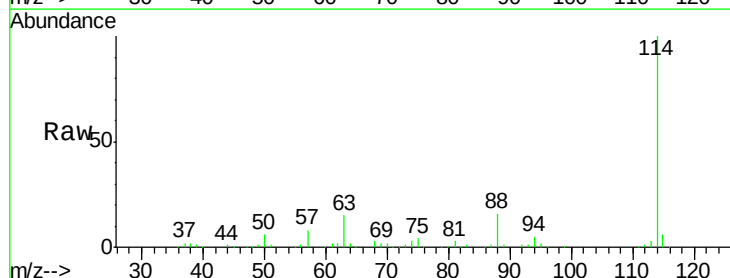
Instrument :
 MSVOA_D
 ClientSampleId :
 S5(23)

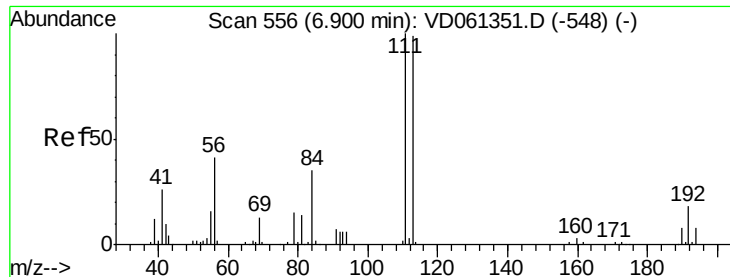
Tot Ion: 65 Resp: 240375
 Ion Ratio Lower Upper
 65 100
 67 51.3 0.0 99.8



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.21 min Scan# 690
 Delta R.T. 0.02 min
 Lab File: VD061406.D
 Acq: 28 Mar 2019 22:18

Tgt Ion: 114 Resp: 862344
 Ion Ratio Lower Upper
 114 100
 63 14.8 0.0 31.6
 88 16.0 0.0 33.4





#35

Dibromofluoromethane

Concen: 50.000 ug/l

RT: 6.91 min Scan# 558

Delta R.T. 0.01 min

Lab File: VD061406.D

Acq: 28 Mar 2019 22:18

Instrument :

MSVOA_D

ClientSampleId :

S5(23)

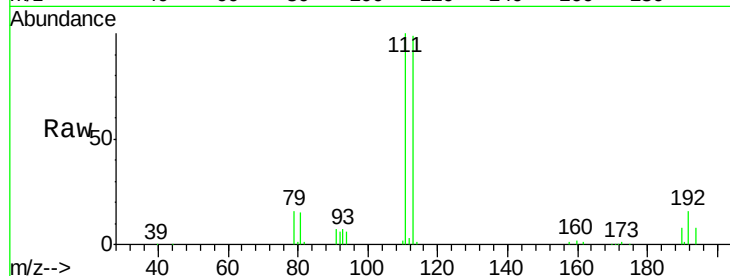
Tot Ion:113 Resp: 400193

Ion Ratio Lower Upper

113 100

111 101.1 81.0 121.6

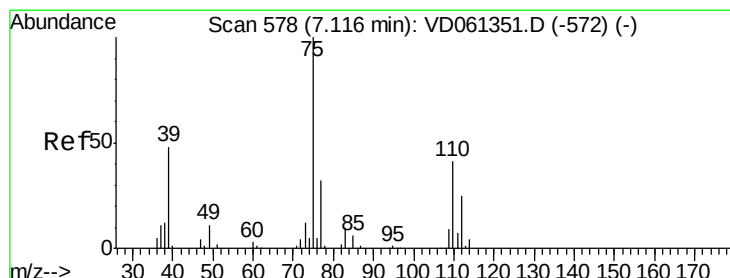
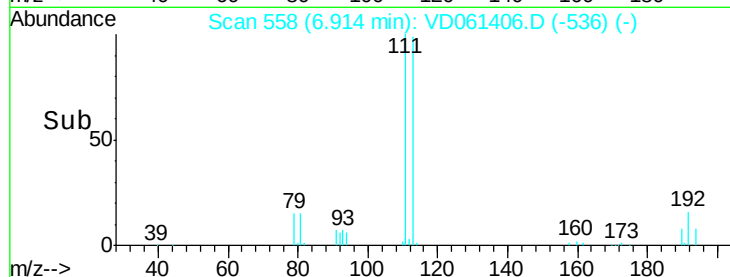
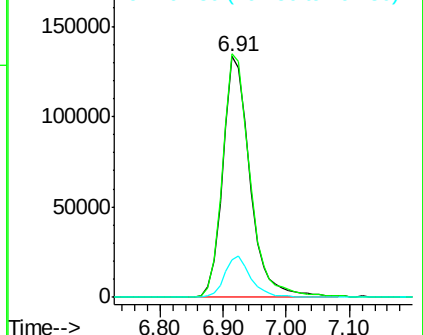
192 15.7 14.4 21.6



Abundance Ion 112.90 (112.60 to 113.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 191.80 (191.50 to 192.50): V



#36

1,1-Dichloropropene

Concen: 5.113 ug/l

RT: 7.03 min Scan# 570

Delta R.T. -0.08 min

Lab File: VD061406.D

Acq: 28 Mar 2019 22:18

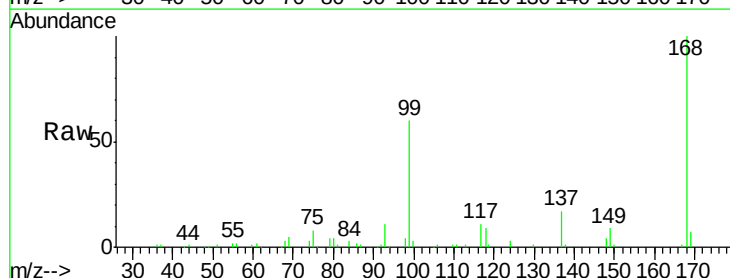
Tgt Ion: 75 Resp: 38479

Ion Ratio Lower Upper

75 100

110 5.9 20.4 61.3#

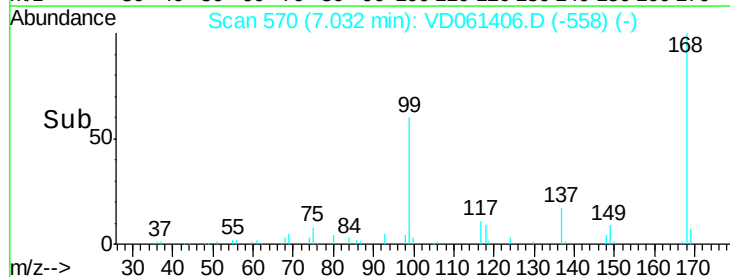
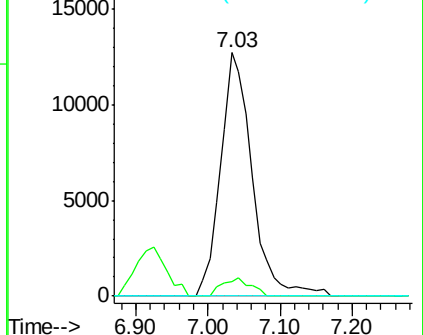
77 0.0 24.9 37.3#

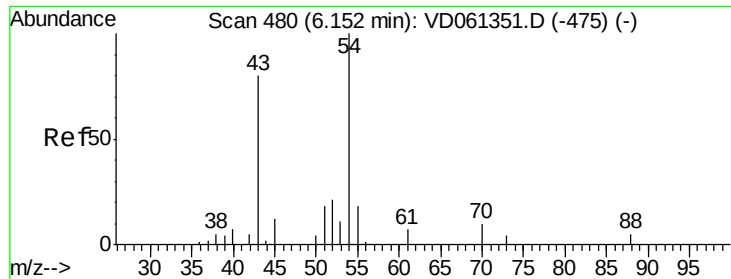


Abundance Ion 75.00 (74.70 to 75.70): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.95 (76.65 to 77.65): V





#37

Ethyl Acetate

Concen: 4.551 ug/l

RT: 6.14 min Scan# 479

Delta R.T. -0.01 min

Lab File: VD061406.D

Acq: 28 Mar 2019 22:18

Instrument :

MSVOA_D

ClientSampleId :

S5(23)

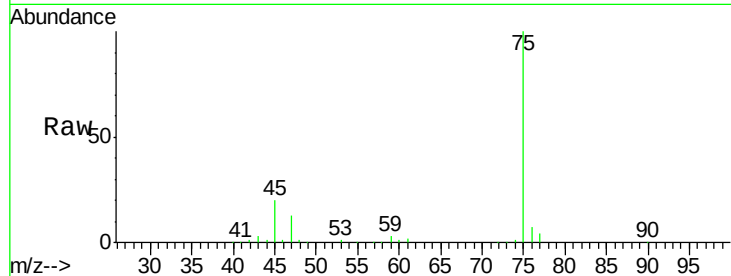
Tot Ion: 43 Resp: 14649

Ion Ratio Lower Upper

43 100

61 84.9 13.8 20.8#

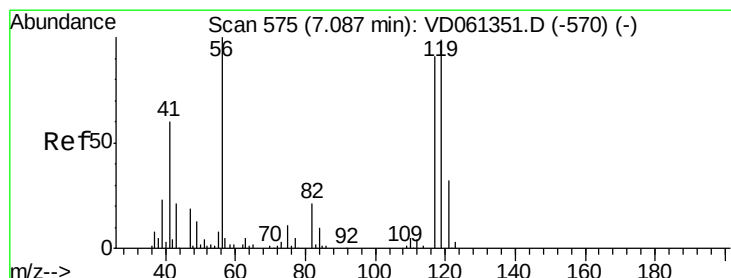
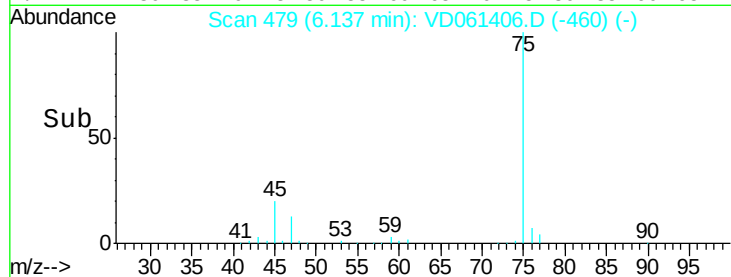
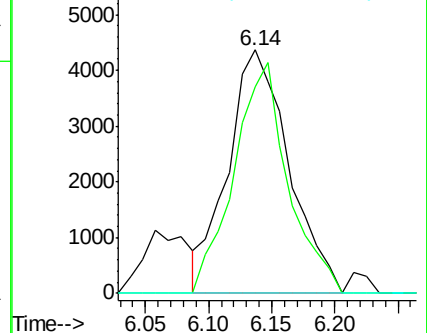
70 0.0 7.8 11.8#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 60.95 (60.65 to 61.65): VDC

Ion 70.00 (69.70 to 70.70): VDC



#38

Carbon Tetrachloride

Concen: 5.787 ug/l

RT: 7.04 min Scan# 571

Delta R.T. -0.04 min

Lab File: VD061406.D

Acq: 28 Mar 2019 22:18

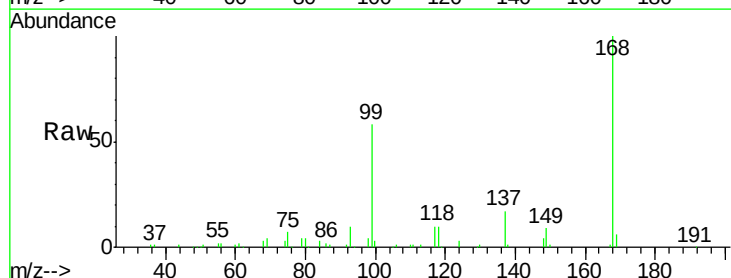
Tgt Ion: 117 Resp: 50052

Ion Ratio Lower Upper

117 100

119 2.9 80.1 120.1#

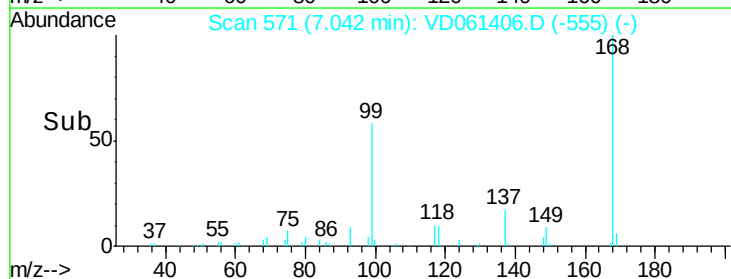
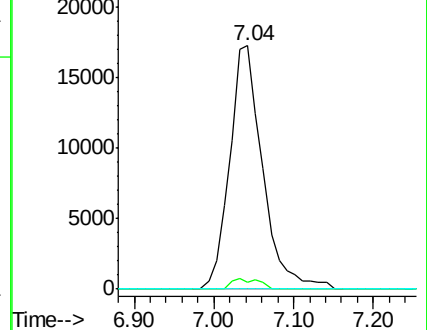
121 0.0 25.6 38.4#

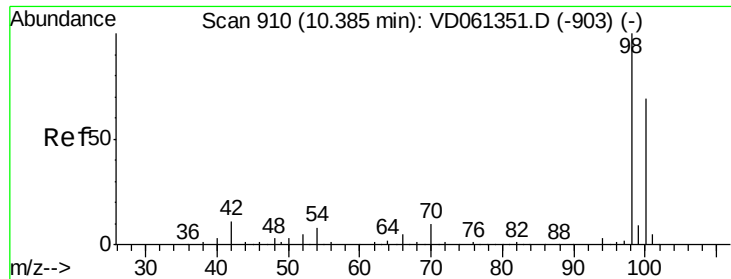


Abundance Ion 116.85 (116.55 to 117.55): V

Ion 118.85 (118.55 to 119.55): V

Ion 120.85 (120.55 to 121.55): V

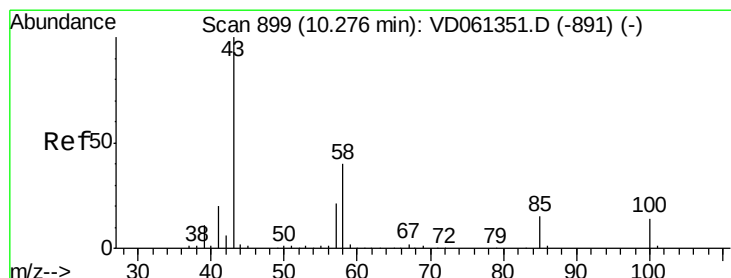
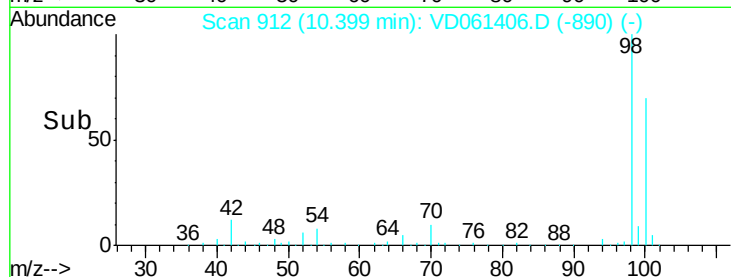
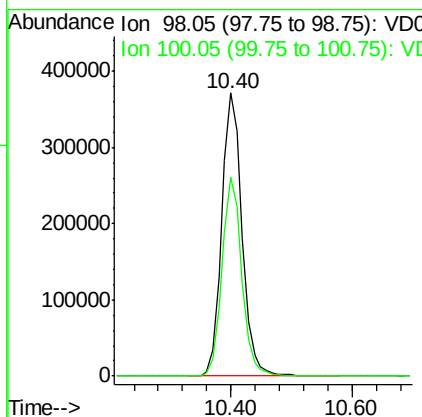
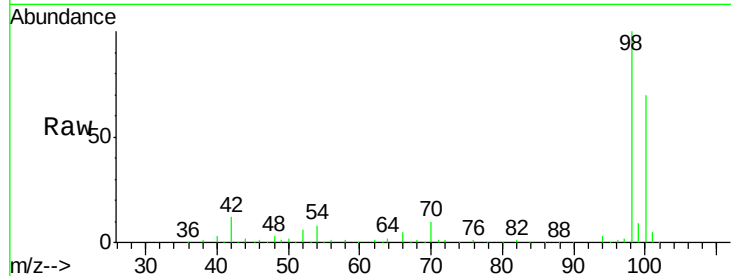




#50
Toluene-d8
Concen: N.D. ug/l
RT: 10.40 min Scan# 912
Delta R.T. 0.01 min
Lab File: VD061406.D
Acq: 28 Mar 2019 22:18

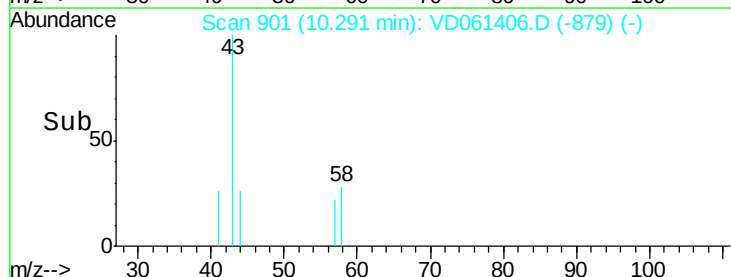
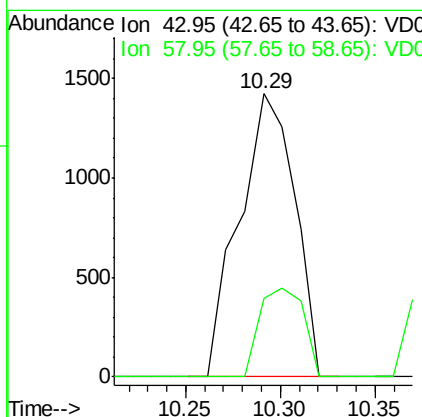
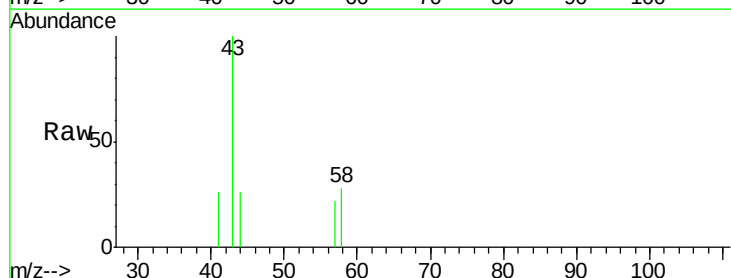
Instrument :
MSVOA_D
ClientSampleId :
S5(23)

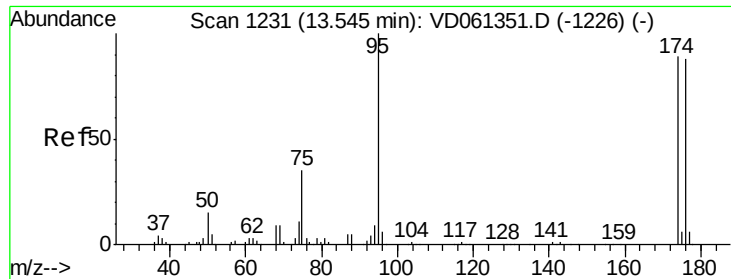
Tot Ion: 98 Resp: 866395
Ion Ratio Lower Upper
98 100
100 70.1 56.2 84.2



#51
4-Methyl-2-Pentanone
Concen: 1.015 ug/l
RT: 10.29 min Scan# 901
Delta R.T. 0.01 min
Lab File: VD061406.D
Acq: 28 Mar 2019 22:18

Tgt Ion: 43 Resp: 2893
Ion Ratio Lower Upper
43 100
58 27.5 31.8 47.8#

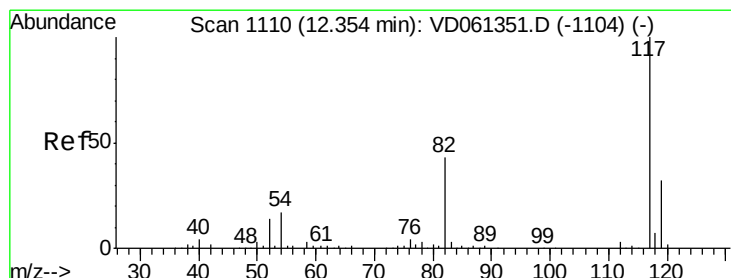
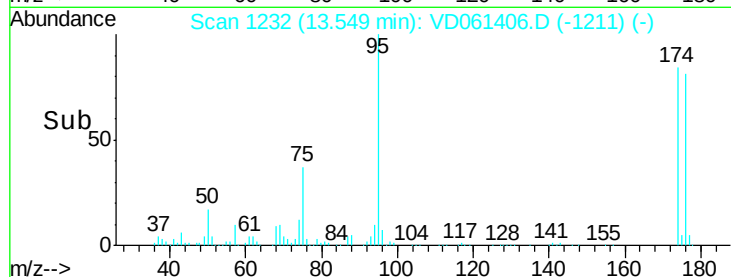
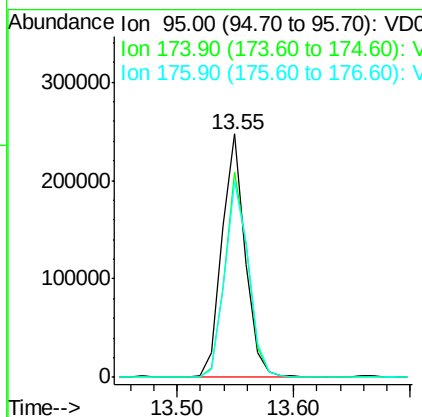
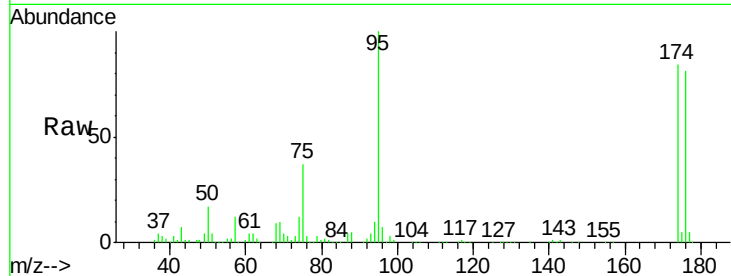




#62
4-Bromofluorobenzene
Concen: N.D. ug/l
RT: 13.55 min Scan# 1232
Delta R.T. 0.00 min
Lab File: VD061406.D
Acq: 28 Mar 2019 22:18

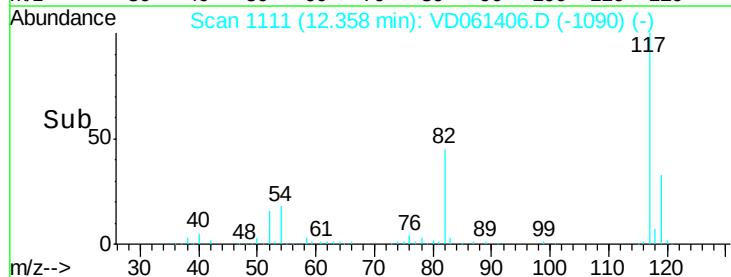
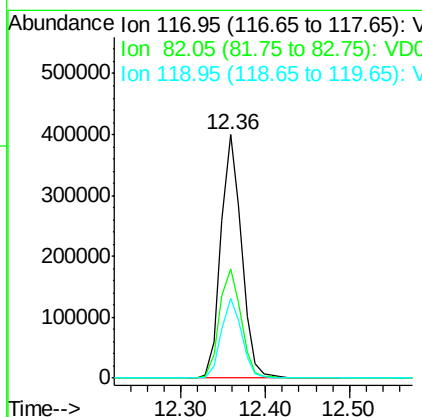
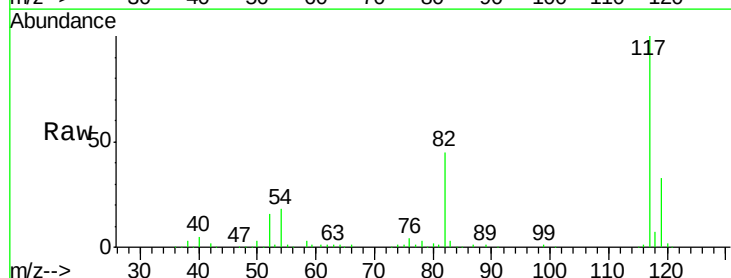
Instrument :
MSVOA_D
ClientSampleId :
S5(23)

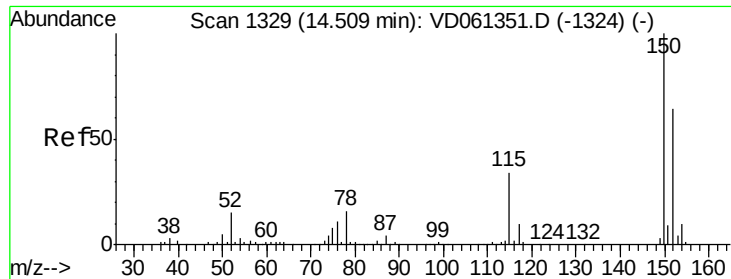
Tot Ion: 95 Resp: 341484
Ion Ratio Lower Upper
95 100
174 84.2 0.0 178.0
176 80.9 0.0 175.0



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 12.36 min Scan# 1111
Delta R.T. 0.00 min
Lab File: VD061406.D
Acq: 28 Mar 2019 22:18

Tgt Ion: 117 Resp: 680461
Ion Ratio Lower Upper
117 100
82 44.9 34.4 51.6
119 32.8 25.8 38.6

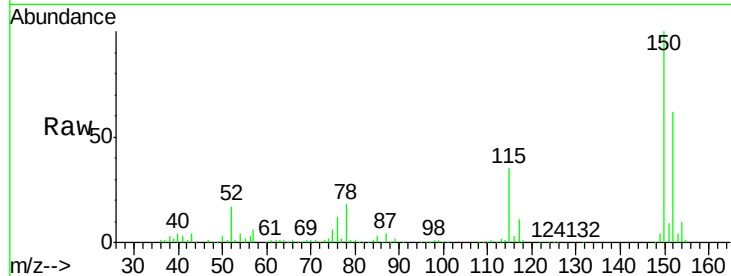




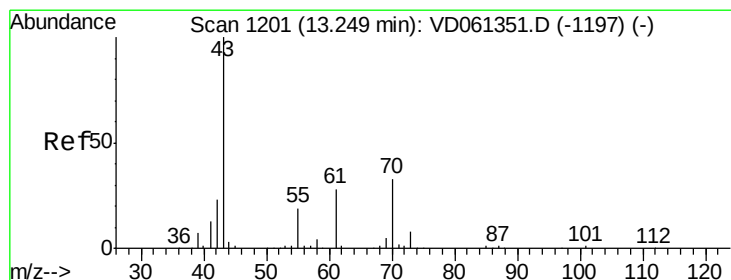
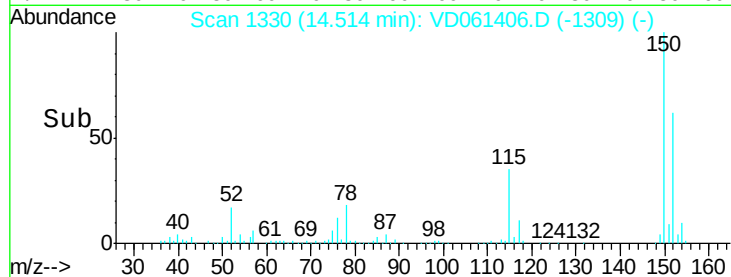
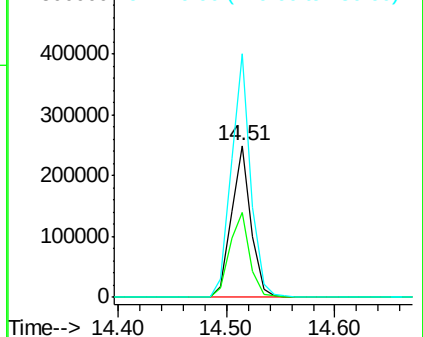
#72
 1,4-Dichlorobenzene-d4
 Concen: 50.000 ug/l
 RT: 14.51 min Scan# 1330
 Delta R.T. 0.00 min
 Lab File: VD061406.D
 Acq: 28 Mar 2019 22:18

Instrument :
 MSVOA_D
 ClientSampleId :
 S5(23)

Tot Ion:152 Resp: 311317
 Ion Ratio Lower Upper
 152 100
 115 56.0 26.9 80.6
 150 160.3 0.0 318.0

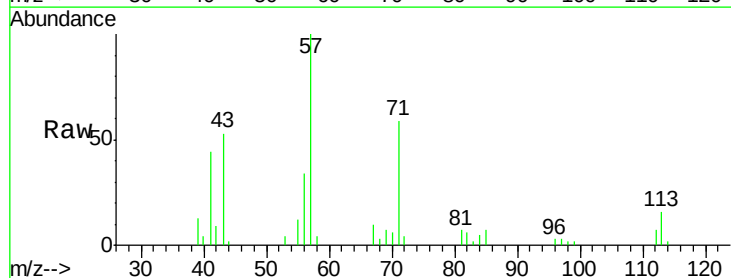


Abundance Ion 151.90 (151.60 to 152.60): V
 Ion 115.00 (114.70 to 115.70): V
 Ion 149.90 (149.60 to 150.60): V

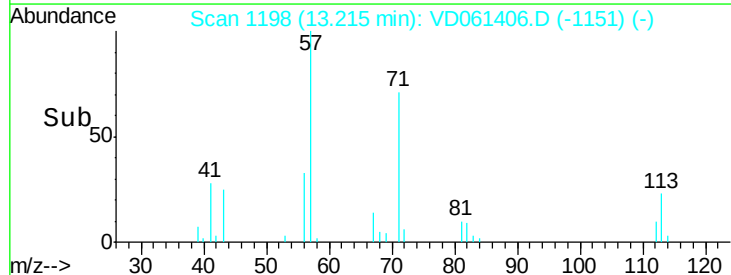
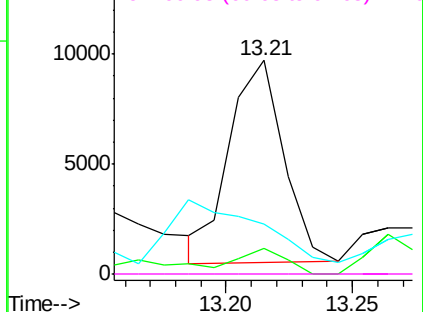


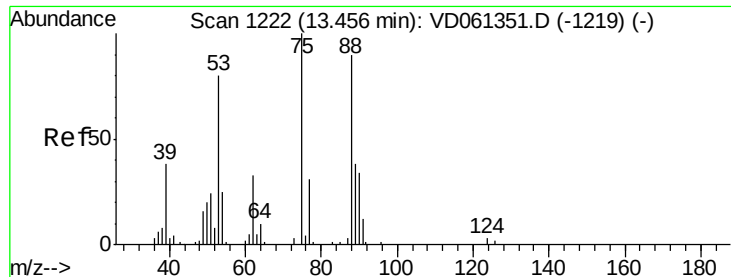
#74
 N-amil acetate
 Concen: 2.286 ug/l
 RT: 13.21 min Scan# 1198
 Delta R.T. -0.03 min
 Lab File: VD061406.D
 Acq: 28 Mar 2019 22:18

Tgt Ion: 43 Resp: 13798
 Ion Ratio Lower Upper
 43 100
 70 11.7 26.6 40.0#
 55 23.3 15.4 23.2#
 61 0.0 22.2 33.4#



Abundance Ion 42.95 (42.65 to 43.65): VDC
 Ion 70.00 (69.70 to 70.70): VDC
 Ion 55.00 (54.70 to 55.70): VDC
 Ion 60.95 (60.65 to 61.65): VDC





#81

trans-1,4-Dichloro-2-butene

Concen: 91.737 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. 0.09 min

Lab File: VD061406.D

Acq: 28 Mar 2019 22:18

Instrument :

MSVOA_D

ClientSampleId :

S5(23)

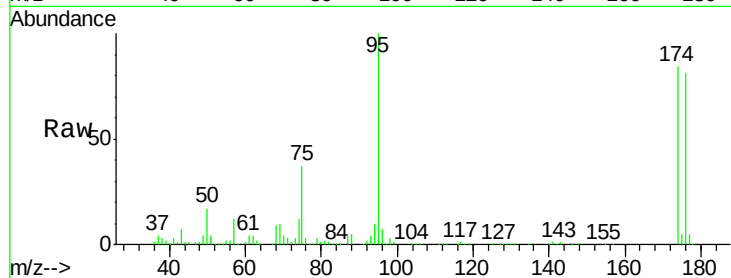
Tot Ion: 75 Resp: 125785

Ion Ratio Lower Upper

75 100

53 1.0 63.8 95.8#

89 0.0 30.5 45.7#



Abundance Ion 75.00 (74.70 to 75.70): VDC
Ion 53.00 (52.70 to 53.70): VDC
Ion 89.00 (88.70 to 89.70): VDC

