

Data File : VD059852.D
Acq On : 21 Aug 2018 13:32
Operator : JC/SY
Sample : J4511-02RE
Misc : 5.02g/5ml/MSVOA_D/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_D
ClientSampleId :
RA-081418-FL-024RE

Quant Time: Aug 22 01:09:35 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D082018S.M
Quant Title : SW846 8260
QLast Update : Tue Aug 21 04:40:12 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.61	168	63785	50.00	ug/l	0.02
34) 1,4-Difluorobenzene	6.65	114	100543	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.66	117	95915	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.88	152	53036	50.00	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.97	65	43400	85.01	ug/l	0.00
Spiked Amount	50.000		Recovery	=	170.02%	
35) Dibromofluoromethane	5.51	113	39711	53.40	ug/l	0.00
Spiked Amount	50.000		Recovery	=	106.80%	
50) Toluene-d8	8.67	98	100173	49.95	ug/l	0.00
Spiked Amount	50.000		Recovery	=	99.90%	
62) 4-Bromofluorobenzene	11.91	95	45079	58.58	ug/l	0.00
Spiked Amount	50.000		Recovery	=	117.16%	

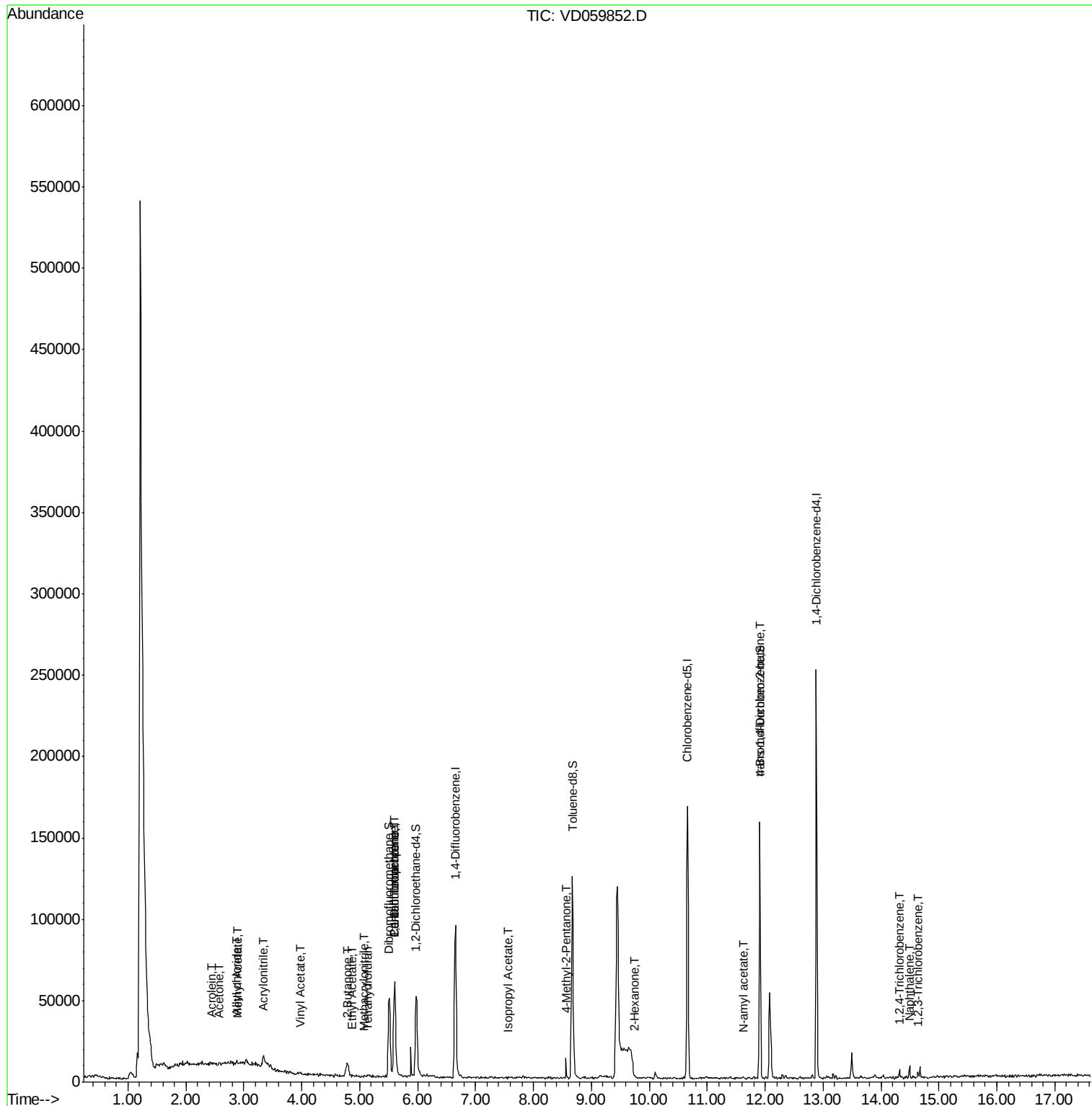
Target Compounds			Qvalue			
13) Acrolein	2.45	56	928	48.884	ug/l #	43
14) Allyl chloride	2.87	41	536	1.073	ug/l #	75
15) Acrylonitrile	3.33	53	831	9.514	ug/l #	17
16) Acetone	2.57	43	809	9.455	ug/l #	56
18) Methyl Acetate	2.89	43	740	2.217	ug/l #	65
20) Methylene Chloride	3.04	84	713	Below Cal	#	78
23) Vinyl Acetate	3.98	43	2598	1.896	ug/l #	83
25) 2-Butanone	4.79	43	3401	13.150	ug/l #	63
29) Tetrahydrofuran	5.14	42	584	4.460	ug/l #	42
31) Cyclohexane	5.60	56	1096	Below Cal	#	1
36) 1,1-Dichloropropene	5.60	75	4281	5.021	ug/l #	40
37) Ethyl Acetate	4.88	43	1402	2.218	ug/l #	71
38) Carbon Tetrachloride	5.60	117	4685	5.505	ug/l #	12
41) Methacrylonitrile	5.08	41	900	2.779	ug/l #	58
43) Isopropyl Acetate	7.58	43	952	1.089	ug/l #	49
51) 4-Methyl-2-Pentanone	8.57	43	1009	1.726	ug/l #	41
59) 2-Hexanone	9.75	43	1863	4.312	ug/l #	30
67) Ethyl Benzene	10.84	91	193	Below Cal	#	43
74) N-amyl acetate	11.62	43	1827	1.129	ug/l #	54
80) 1,3,5-Trimethylbenzene	12.29	105	227	Below Cal	#	30
81) trans-1,4-Dichloro-2-buten	11.91	75	18545	67.611	ug/l #	10
82) 4-Chlorotoluene	12.30	91	1630	Below Cal		90
89) n-Butylbenzene	13.18	91	731	Below Cal	#	80
91) 1,2-Dichlorobenzene	13.17	146	900	Below Cal		81
93) 1,2,4-Trichlorobenzene	14.32	180	2066	1.701	ug/l	83
95) Naphthalene	14.50	128	4676	2.357	ug/l #	93
96) 1,2,3-Trichlorobenzene	14.63	180	1309	1.230	ug/l	94

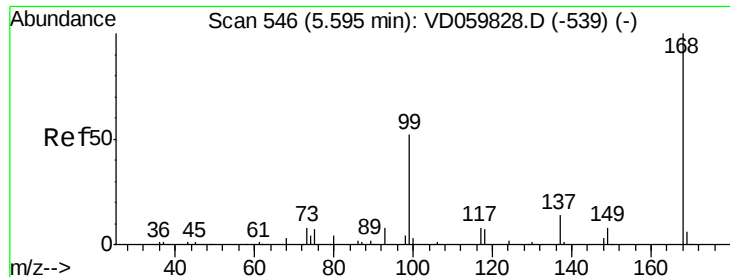
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260
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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.61 min Scan# 547

Delta R.T. 0.02 min

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Instrument :

MSVOA_D

ClientSampleId :

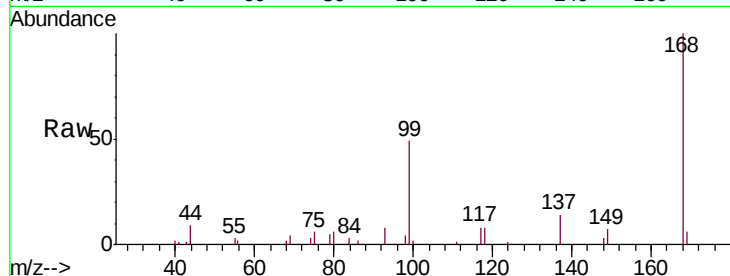
RA-081418-FL-024RE

Tgt Ion:168 Resp: 63785

Ion Ratio Lower Upper

168 100

99 48.8 43.6 65.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

5.61

25000

20000

15000

10000

5000

0

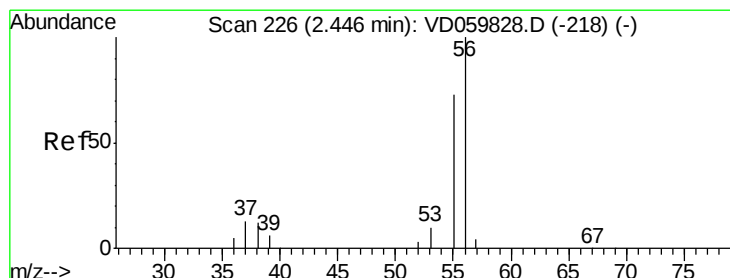
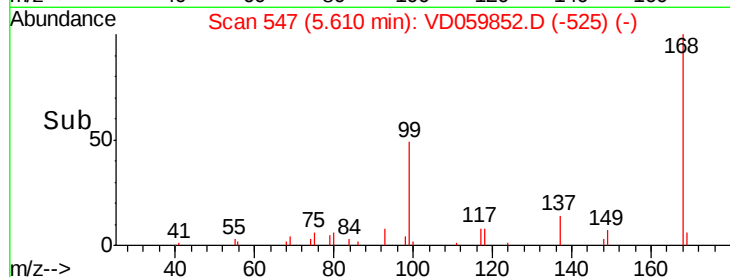
Time-->

5.50

5.60

5.70

5.80



#13

Acrolein

Concen: 48.884 ug/l

RT: 2.45 min Scan# 226

Delta R.T. 0.01 min

Lab File: VD059852.D

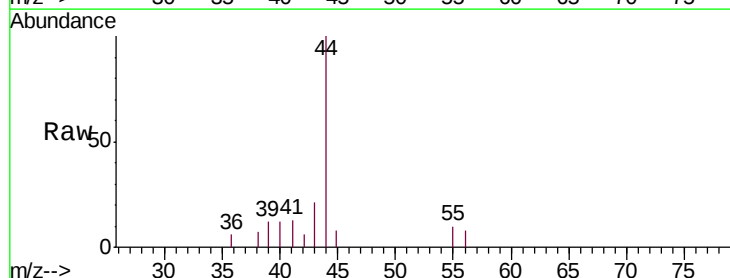
Acq: 21 Aug 2018 13:32

Tgt Ion: 56 Resp: 928

Ion Ratio Lower Upper

56 100

55 124.4 60.4 90.6#



Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 55.00 (54.70 to 55.70): VDC

2.45

800

600

400

200

0

Time-->

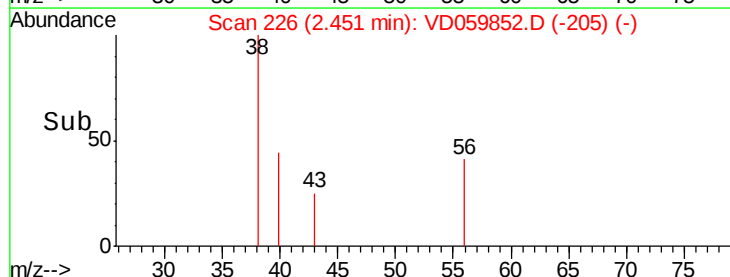
2.40

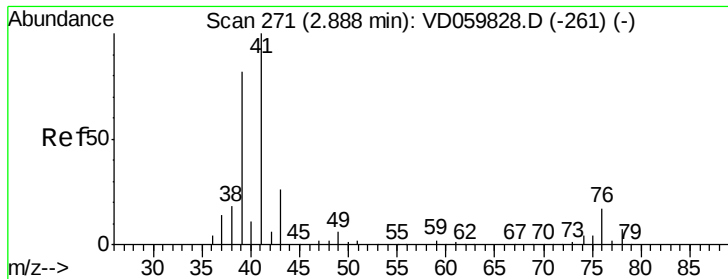
2.42

2.44

2.46

2.48

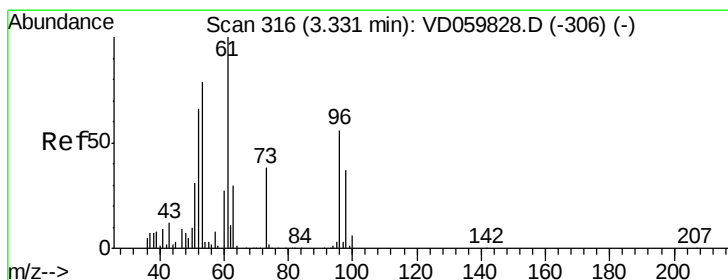
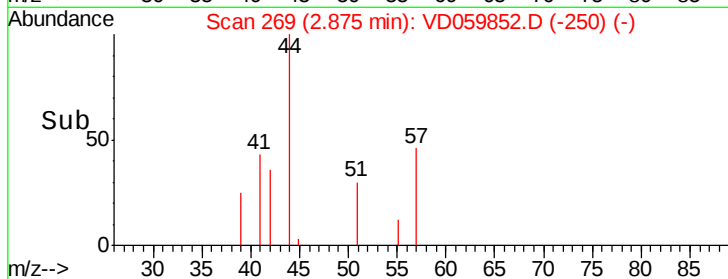
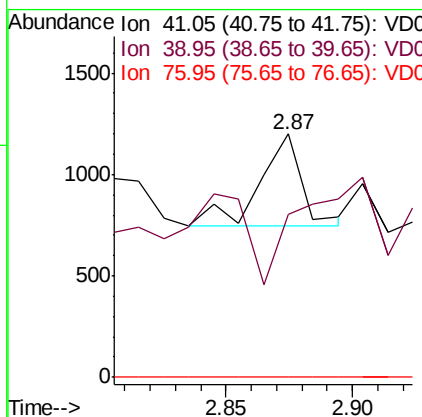
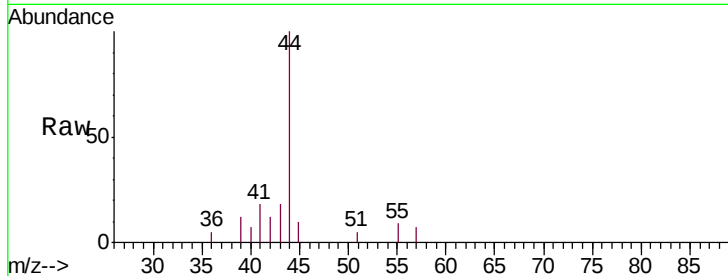




#14
 Allyl chloride
 Concen: 1.073 ug/l
 RT: 2.87 min Scan# 269
 Delta R.T. -0.01 min
 Lab File: VD059852.D
 Acq: 21 Aug 2018 13:32

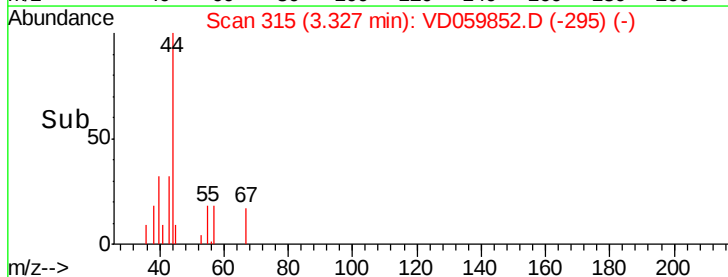
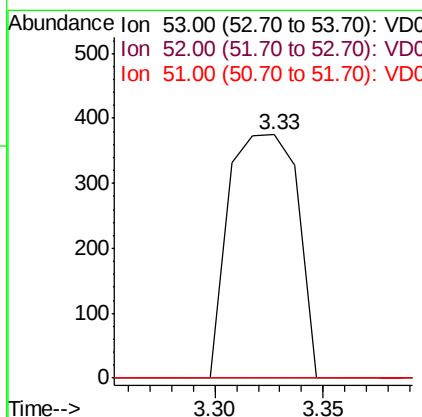
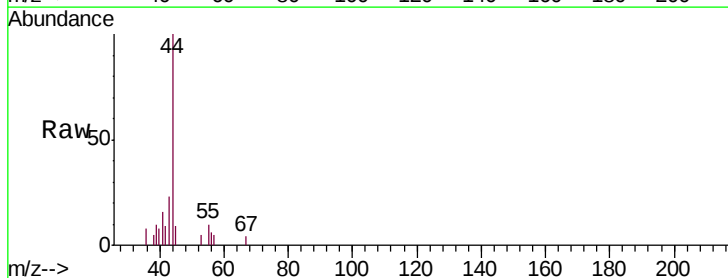
Instrument :
 MSVOA_D
 ClientSampleId :
 RA-081418-FL-024RE

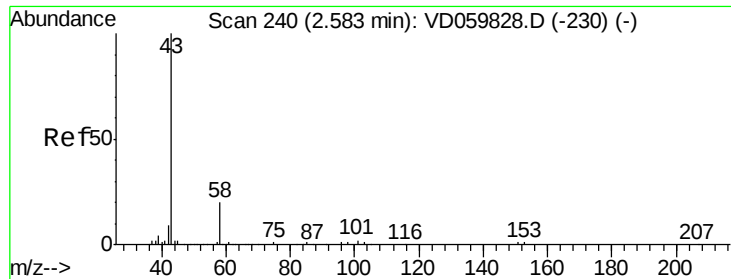
Tgt Ion: 41 Resp: 536
 Ion Ratio Lower Upper
 41 100
 39 67.0 65.9 98.9
 76 0.0 19.9 29.9#



#15
 Acrylonitrile
 Concen: 9.514 ug/l
 RT: 3.33 min Scan# 315
 Delta R.T. -0.00 min
 Lab File: VD059852.D
 Acq: 21 Aug 2018 13:32

Tgt Ion: 53 Resp: 831
 Ion Ratio Lower Upper
 53 100
 52 0.0 66.8 100.2#
 51 0.0 31.6 47.4#





#16

Acetone

Concen: 9.455 ug/l

RT: 2.57 min Scan# 238

Delta R.T. -0.01 min

Lab File: VD059852.D

Acq: 21 Aug 2018 13:32

Instrument :

MSVOA_D

ClientSampleId :

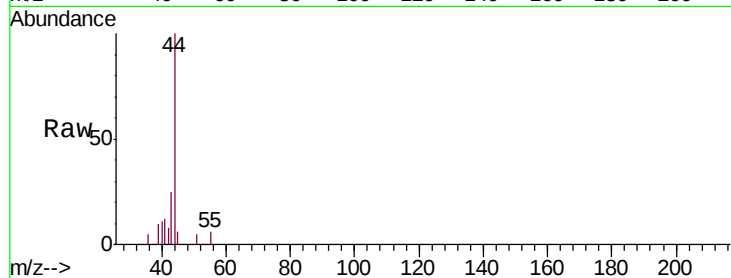
RA-081418-FL-024RE

Tgt Ion: 43 Resp: 809

Ion Ratio Lower Upper

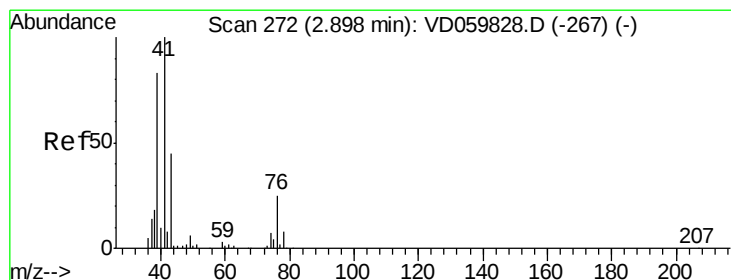
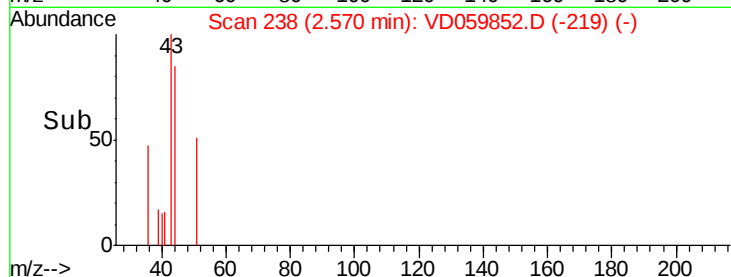
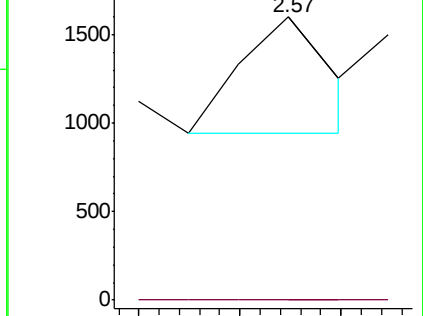
43 100

58 0.0 16.2 24.2#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC



#18

Methyl Acetate

Concen: 2.217 ug/l

RT: 2.89 min Scan# 271

Delta R.T. -0.00 min

Lab File: VD059852.D

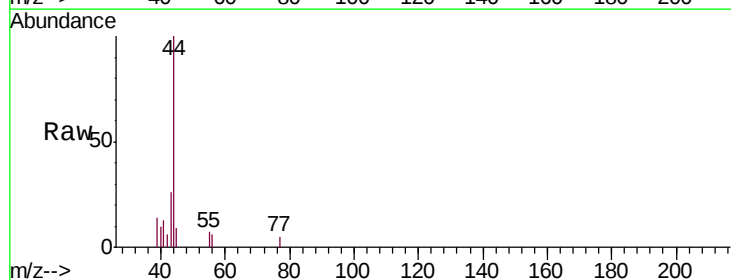
Acq: 21 Aug 2018 13:32

Tgt Ion: 43 Resp: 740

Ion Ratio Lower Upper

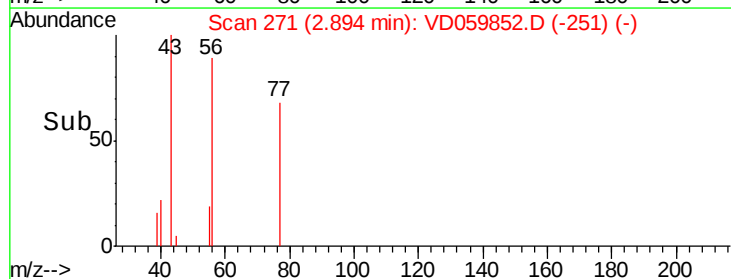
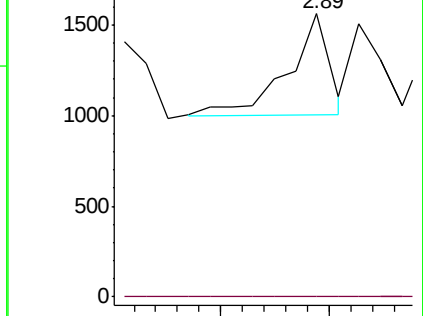
43 100

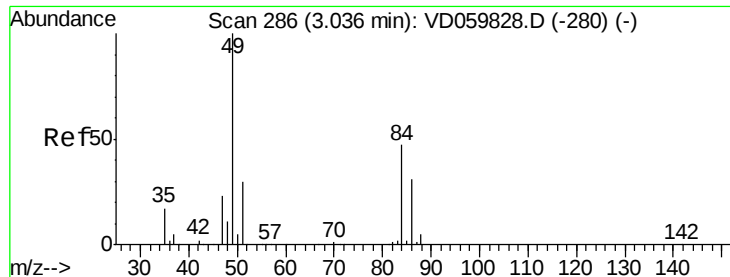
74 0.0 11.4 17.0#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 74.00 (73.70 to 74.70): VDC





#20

Methylene Chloride

Concen: Below Cal

RT: 3.04 min Scan# 286

Delta R.T. 0.01 min

Lab File: VD059852.D

Acq: 21 Aug 2018 13:32

Instrument :

MSVOA_D

ClientSampleId :

RA-081418-FL-024RE

Tgt Ion: 84 Resp: 713

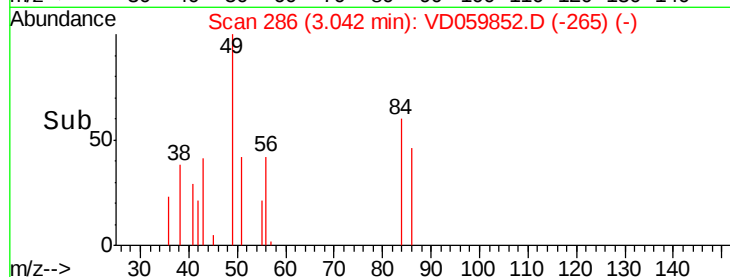
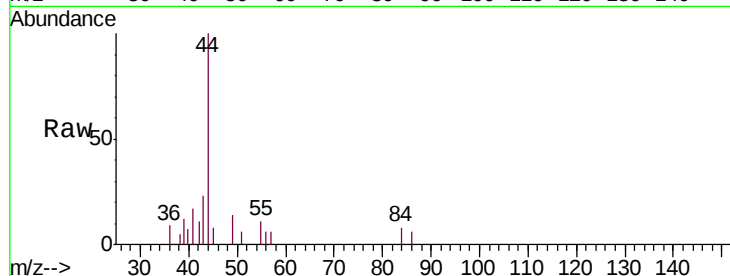
Ion Ratio Lower Upper

84 100

49 166.0 170.4 255.6#

51 69.6 51.4 77.0

86 76.4 52.4 78.6

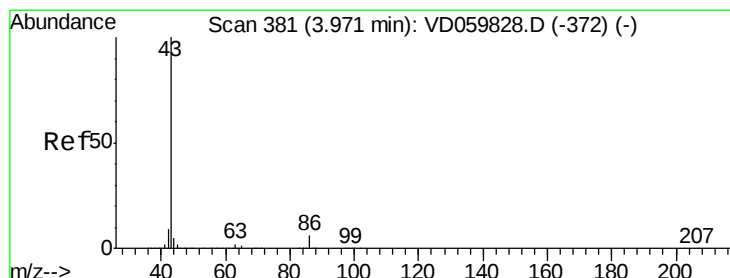
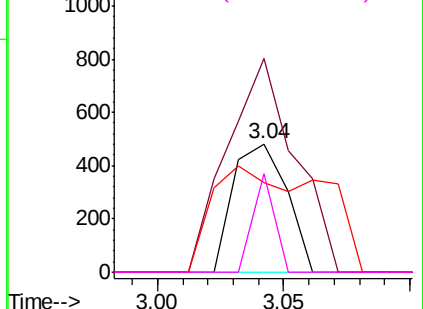


Abundance Ion 83.95 (83.65 to 84.65): VDC

Ion 48.90 (48.60 to 49.60): VDC

Ion 50.90 (50.60 to 51.60): VDC

Ion 85.90 (85.60 to 86.60): VDC



#23

Vinyl Acetate

Concen: 1.896 ug/l

RT: 3.98 min Scan# 381

Delta R.T. 0.01 min

Lab File: VD059852.D

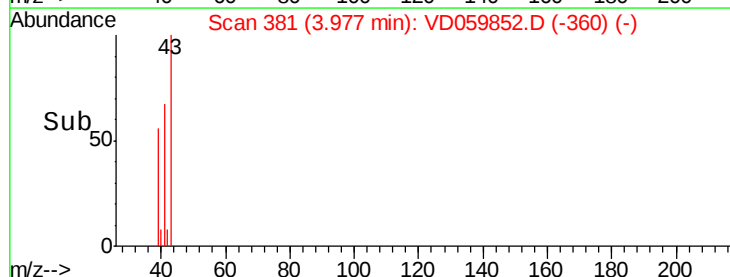
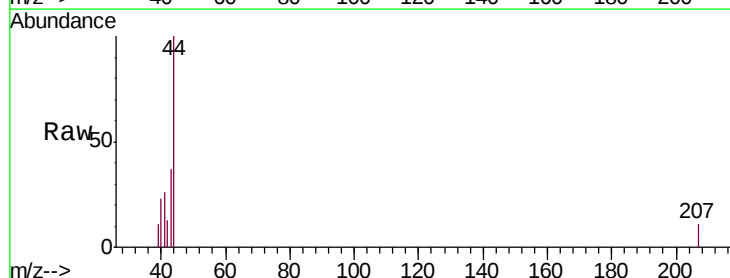
Acq: 21 Aug 2018 13:32

Tgt Ion: 43 Resp: 2598

Ion Ratio Lower Upper

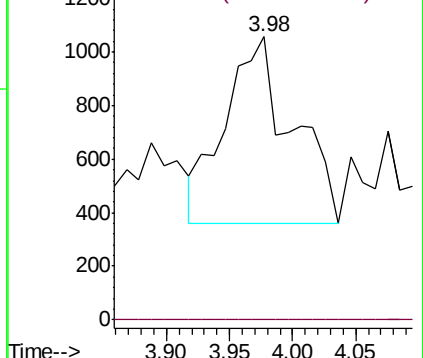
43 100

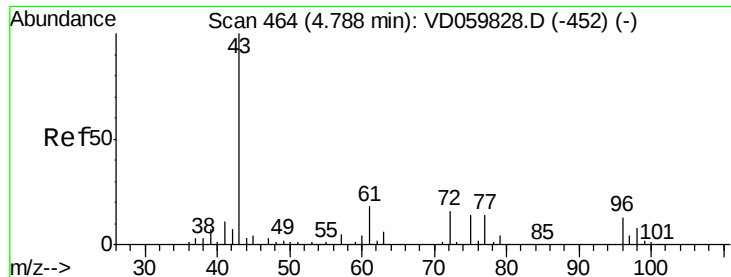
86 0.0 4.6 7.0#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 86.00 (85.70 to 86.70): VDC





#25

2-Butanone

Concen: 13.150 ug/l

RT: 4.79 min Scan# 464

Delta R.T. 0.01 min

Lab File: VD059852.D

Acq: 21 Aug 2018 13:32

Instrument :

MSVOA_D

ClientSampleId :

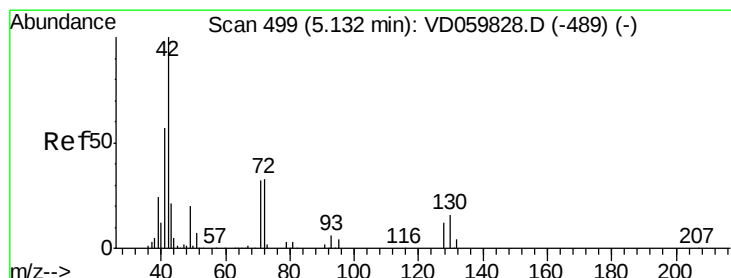
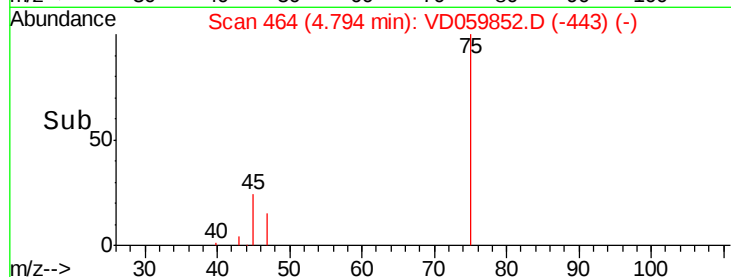
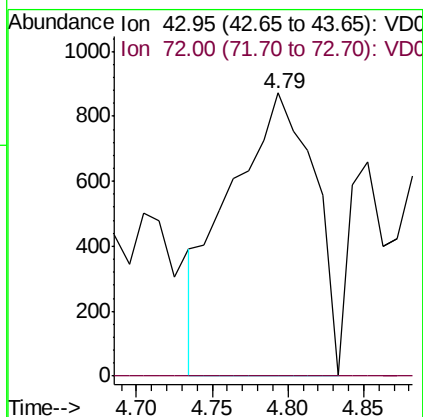
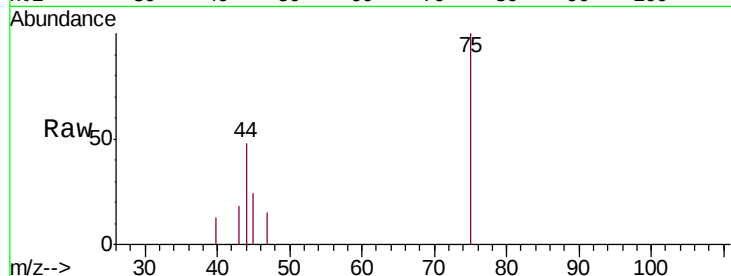
RA-081418-FL-024RE

Tgt Ion: 43 Resp: 3401

Ion Ratio Lower Upper

43 100

72 0.0 12.4 18.6#



#29

Tetrahydrofuran

Concen: 4.460 ug/l

RT: 5.14 min Scan# 499

Delta R.T. 0.01 min

Lab File: VD059852.D

Acq: 21 Aug 2018 13:32

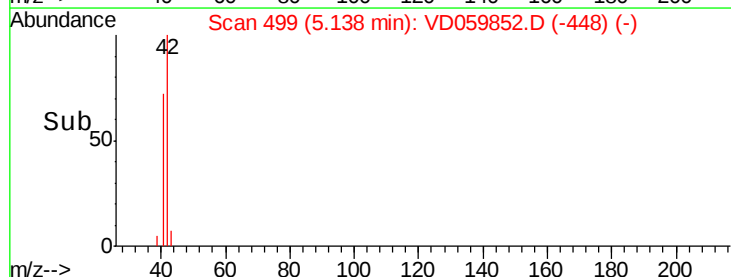
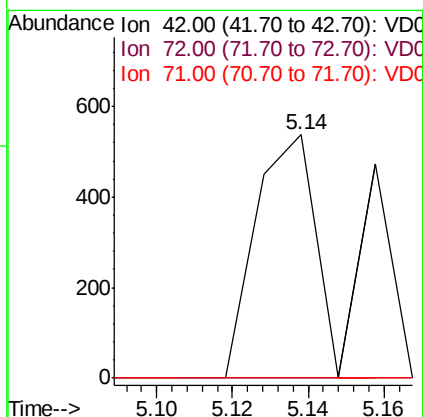
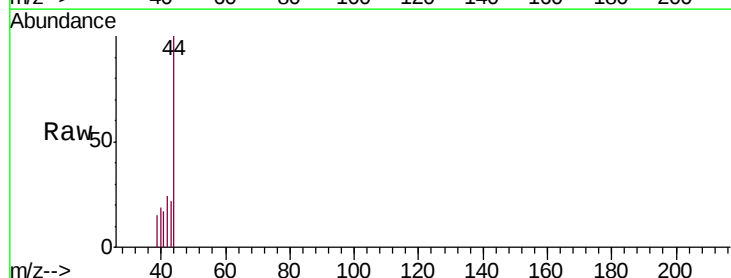
Tgt Ion: 42 Resp: 584

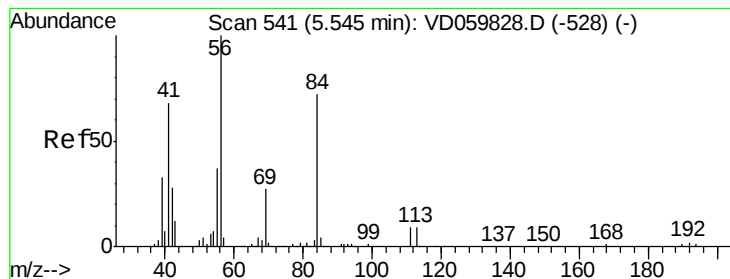
Ion Ratio Lower Upper

42 100

72 0.0 25.8 38.6#

71 0.0 25.7 38.5#





#31

Cyclohexane

Concen: Below Cal

RT: 5.60 min Scan# 546

Delta R.T. 0.06 min

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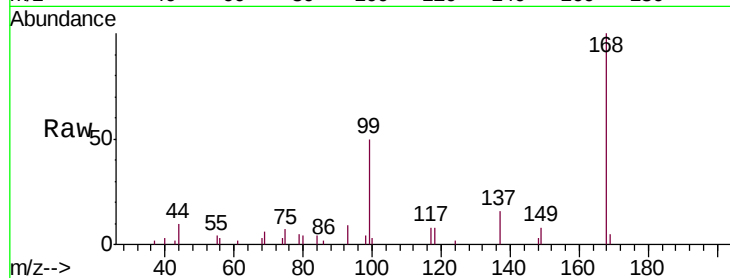
Tgt Ion: 56 Resp: 1096

Ion Ratio Lower Upper

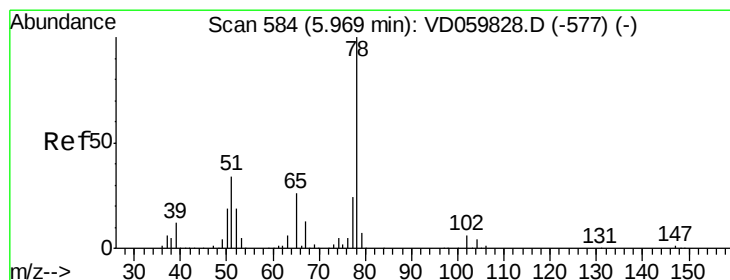
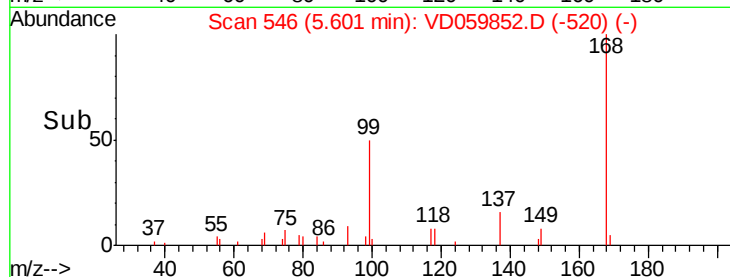
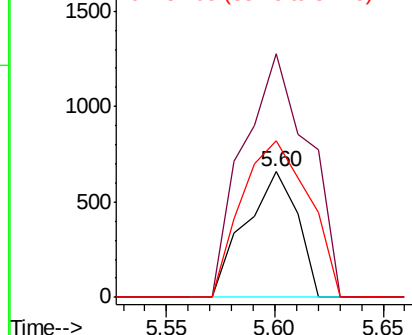
56 100

69 193.9 21.7 32.5#

84 124.6 57.8 86.6#



Abundance Ion 55.95 (55.65 to 56.65): VDC
Ion 69.00 (68.70 to 69.70): VDC
Ion 84.05 (83.75 to 84.75): VDC



#33

1,2-Dichloroethane-d4

Concen: N.D. ug/l

RT: 5.97 min Scan# 584

Delta R.T. 0.01 min

Lab File: VD059852.D

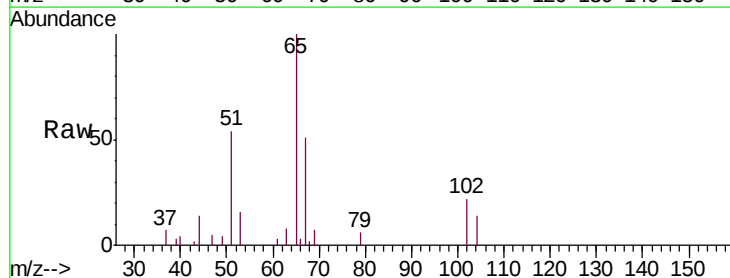
Acq: 21 Aug 2018 13:32

Tgt Ion: 65 Resp: 43400

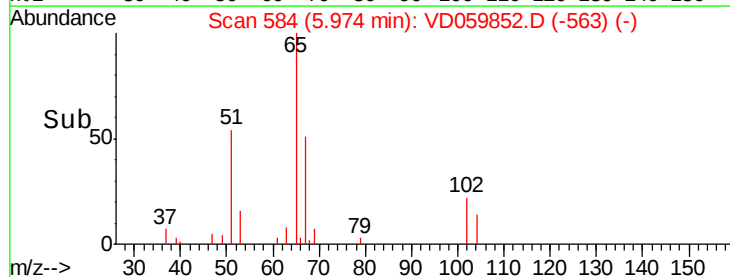
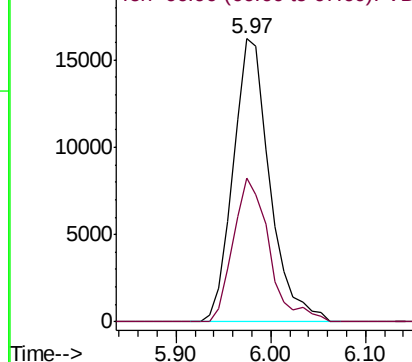
Ion Ratio Lower Upper

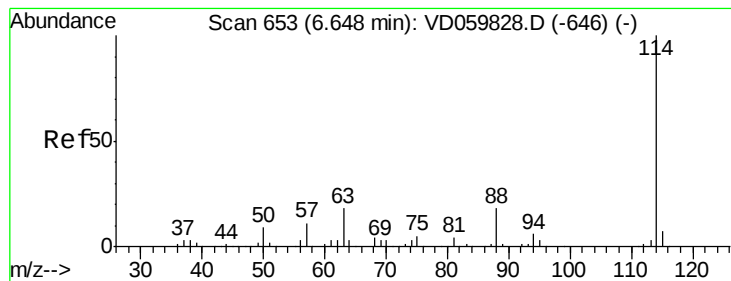
65 100

67 50.8 0.0 102.4



Abundance Ion 64.95 (64.65 to 65.65): VDC
Ion 66.90 (66.60 to 67.60): VDC





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.65 min Scan# 653

Delta R.T. 0.01 min

Lab File: VD059852.D

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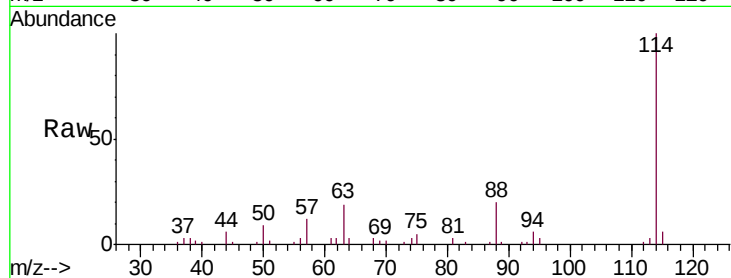
Tgt Ion:114 Resp: 100543

Ion Ratio Lower Upper

114 100

63 18.7 0.0 37.0

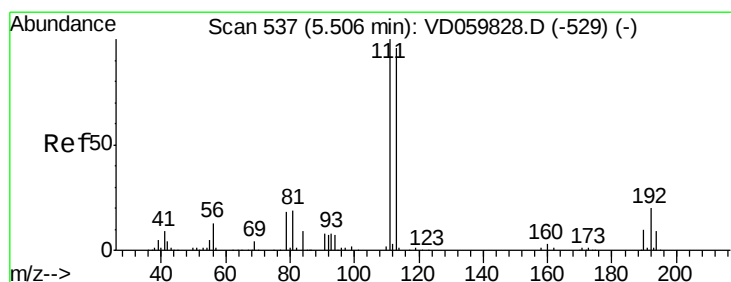
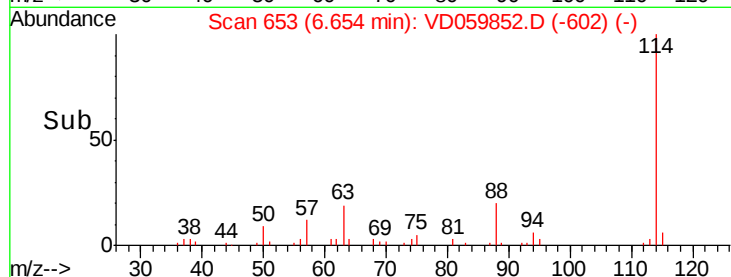
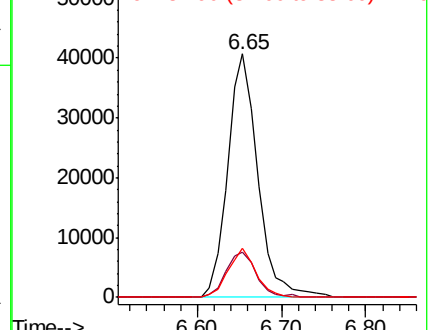
88 20.3 0.0 37.0



Abundance Ion 114.00 (113.70 to 114.70): V

Ion 62.95 (62.65 to 63.65): V

Ion 87.90 (87.60 to 88.60): V



#35

Dibromofluoromethane

Concen: 50.000 ug/l

RT: 5.51 min Scan# 537

Delta R.T. 0.01 min

Lab File: VD059852.D

Acq: 21 Aug 2018 13:32

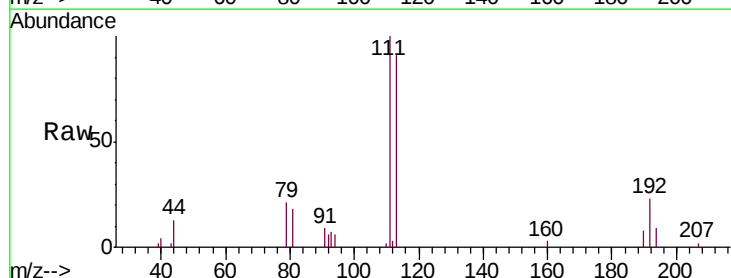
Tgt Ion:113 Resp: 39711

Ion Ratio Lower Upper

113 100

111 110.3 83.3 124.9

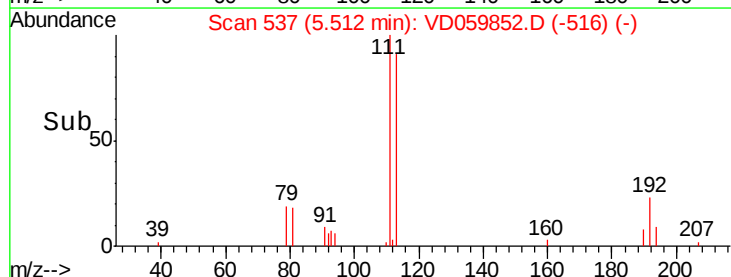
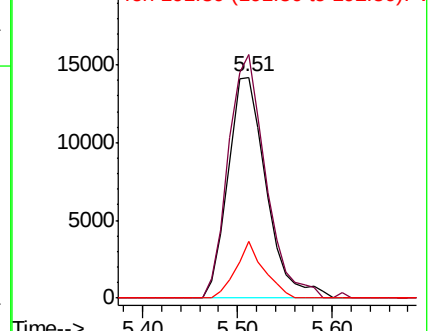
192 25.5 16.8 25.2#

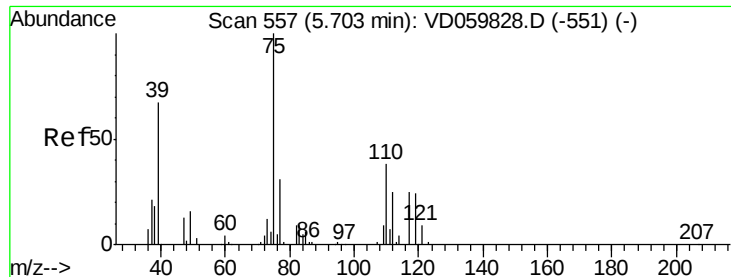


Abundance Ion 112.90 (112.60 to 113.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 191.80 (191.50 to 192.50): V





#36

1,1-Dichloropropene

Concen: 5.021 ug/l

RT: 5.60 min Scan# 546

Delta R.T. -0.10 min

Lab File: VD059852.D

Acq: 21 Aug 2018 13:32

Instrument :

MSVOA_D

ClientSampleId :

RA-081418-FL-024RE

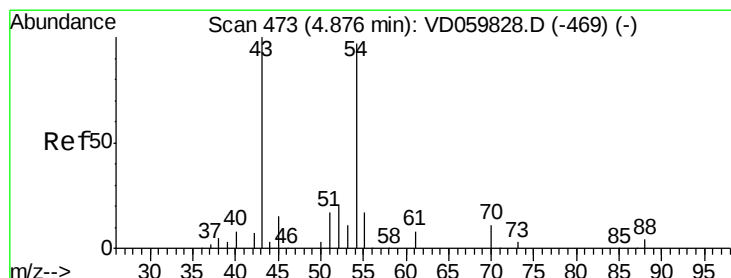
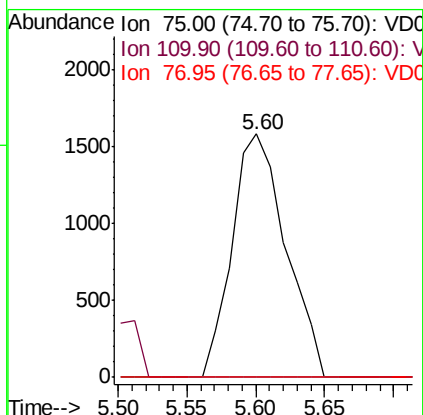
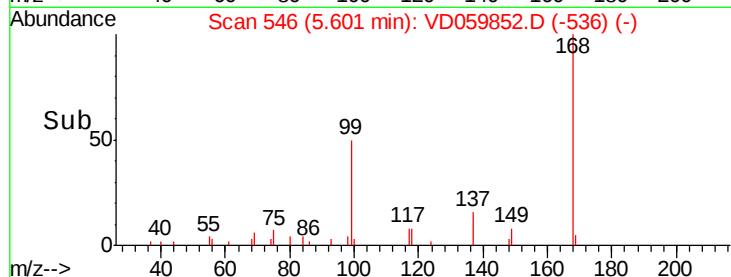
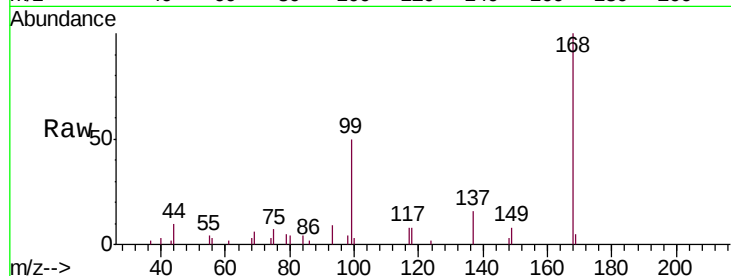
Tgt Ion: 75 Resp: 4281

Ion Ratio Lower Upper

75 100

110 0.0 18.8 56.4#

77 0.0 24.9 37.3#



#37

Ethyl Acetate

Concen: 2.218 ug/l

RT: 4.88 min Scan# 473

Delta R.T. 0.01 min

Lab File: VD059852.D

Acq: 21 Aug 2018 13:32

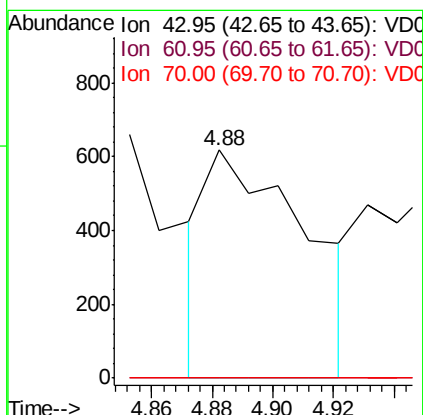
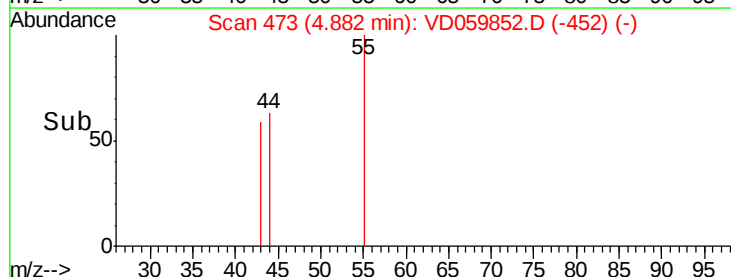
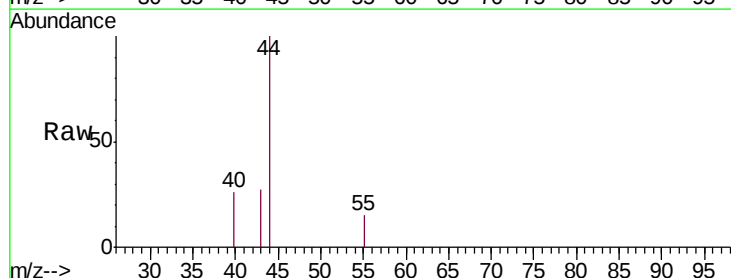
Tgt Ion: 43 Resp: 1402

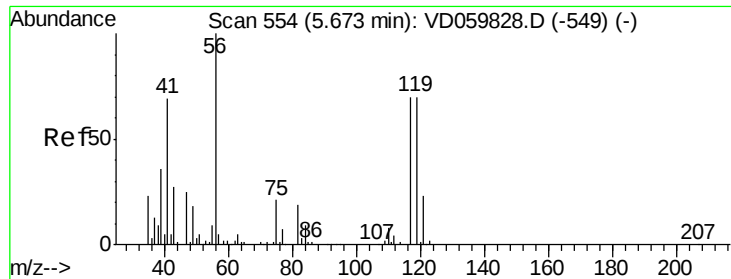
Ion Ratio Lower Upper

43 100

61 0.0 10.4 15.6#

70 0.0 6.2 9.2#

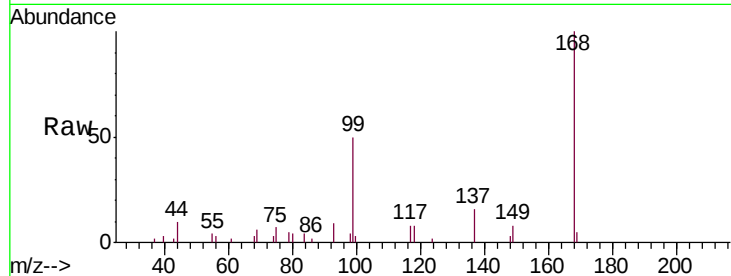




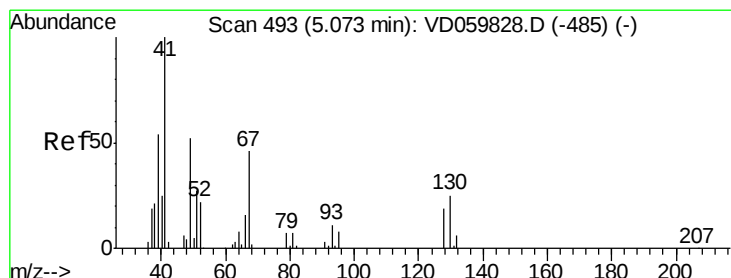
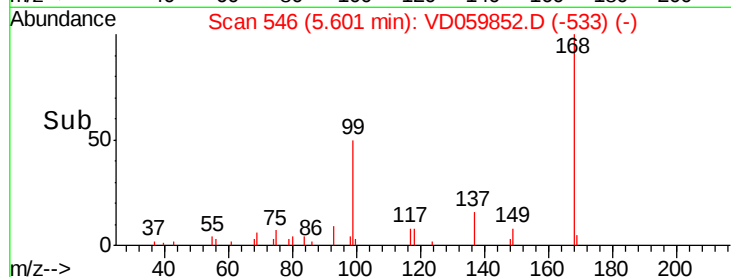
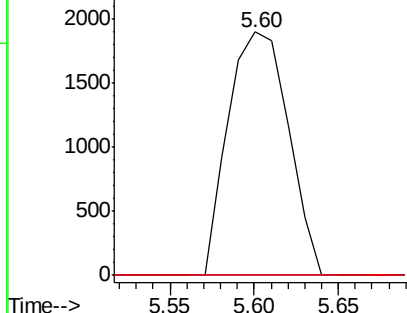
#38
Carbon Tetrachloride
Concen: 5.505 ug/l
RT: 5.60 min Scan# 546
Delta R.T. -0.07 min
Lab File: VD059852.D
Acq: 21 Aug 2018 13:32

Instrument :
MSVOA_D
ClientSampleId :
RA-081418-FL-024RE

Tgt Ion: 117 Resp: 4685
Ion Ratio Lower Upper
117 100
119 0.0 77.0 115.4#
121 0.0 24.7 37.1#

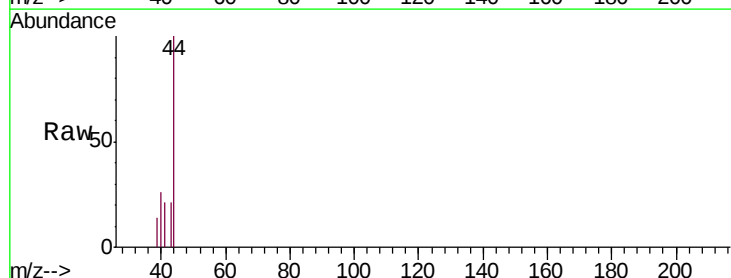


Abundance Ion 116.85 (116.55 to 117.55): V
Ion 118.85 (118.55 to 119.55): V
Ion 120.85 (120.55 to 121.55): V

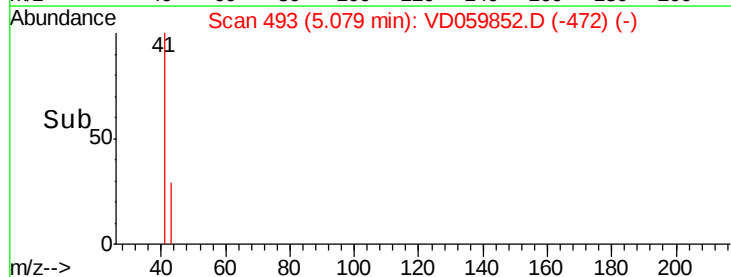
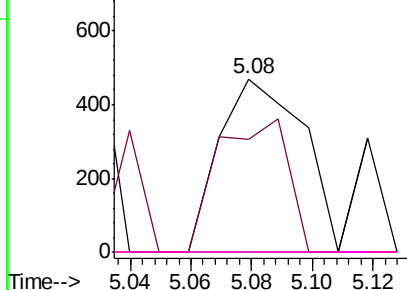


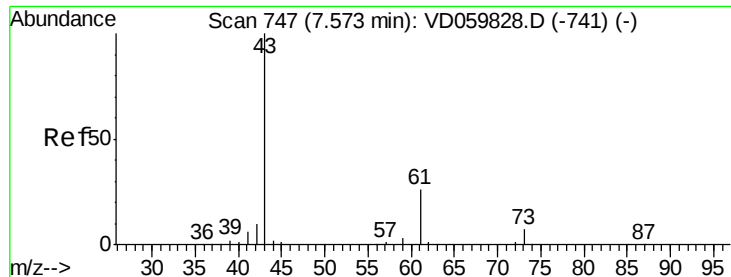
#41
Methacrylonitrile
Concen: 2.779 ug/l
RT: 5.08 min Scan# 493
Delta R.T. 0.01 min
Lab File: VD059852.D
Acq: 21 Aug 2018 13:32

Tgt Ion: 41 Resp: 900
Ion Ratio Lower Upper
41 100
39 64.9 43.0 64.6#
67 0.0 36.7 55.1#
52 0.0 18.0 27.0#



Abundance Ion 40.95 (40.65 to 41.65): VDC
Ion 38.95 (38.65 to 39.65): VDC
Ion 67.00 (66.70 to 67.70): VDC
Ion 52.00 (51.70 to 52.70): VDC





#43

Isopropyl Acetate

Concen: 1.089 ug/l

RT: 7.58 min Scan# 747

Delta R.T. 0.01 min

Lab File: VD059852.D

Acq: 21 Aug 2018 13:32

Instrument :

MSVOA_D

ClientSampleId :

RA-081418-FL-024RE

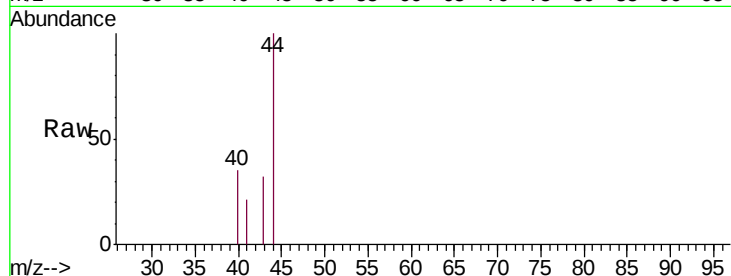
Tgt Ion: 43 Resp: 952

Ion Ratio Lower Upper

43 100

61 0.0 21.0 31.4#

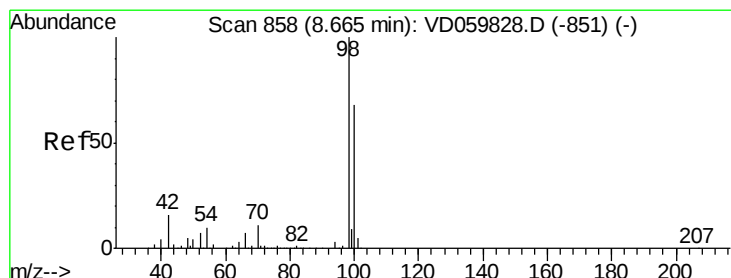
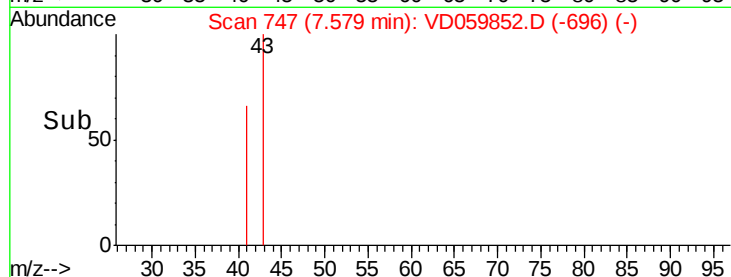
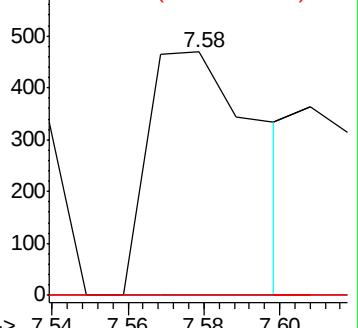
87 0.0 0.2 0.4#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 60.95 (60.65 to 61.65): VDC

Ion 87.00 (86.70 to 87.70): VDC



#50

Toluene-d8

Concen: N.D. ug/l

RT: 8.67 min Scan# 858

Delta R.T. 0.01 min

Lab File: VD059852.D

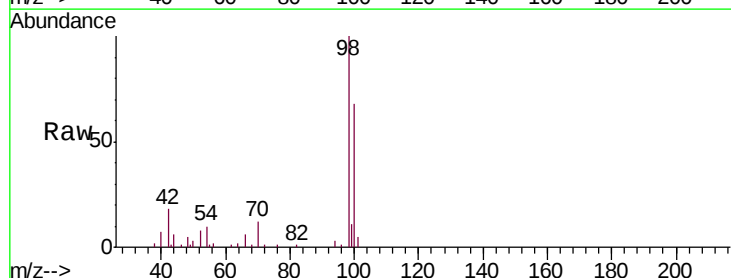
Acq: 21 Aug 2018 13:32

Tgt Ion: 98 Resp: 100173

Ion Ratio Lower Upper

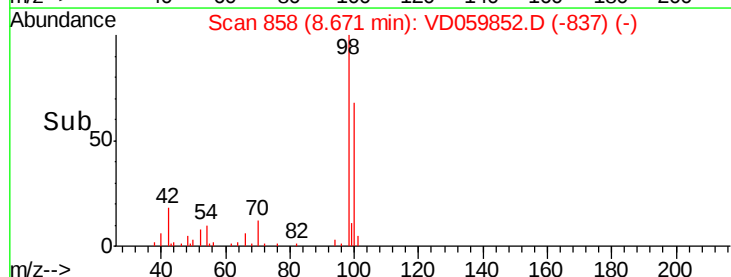
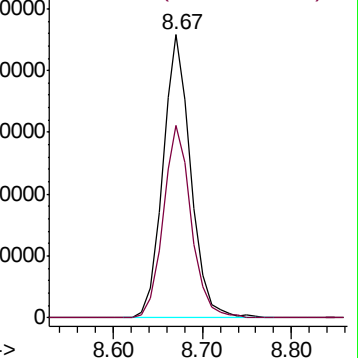
98 100

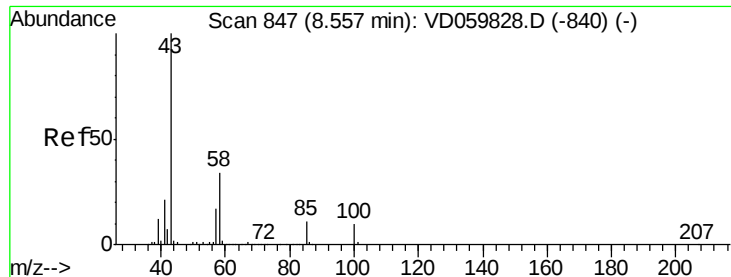
100 68.0 55.0 82.4



Abundance Ion 98.05 (97.75 to 98.75): VDC

Ion 100.05 (99.75 to 100.75): VDC

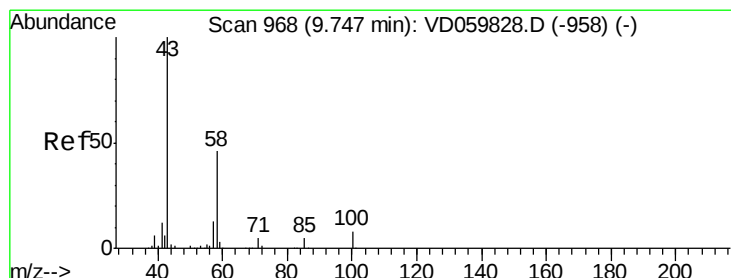
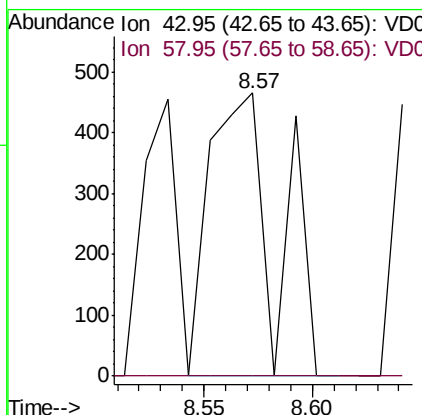
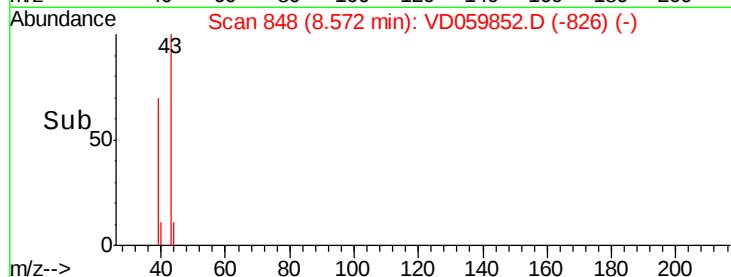
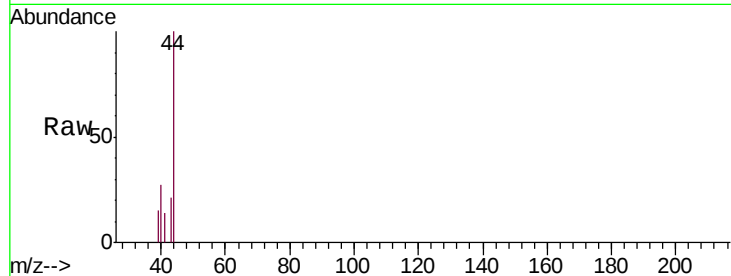




#51
 4-Methyl-2-Pentanone
 Concen: 1.726 ug/l
 RT: 8.57 min Scan# 848
 Delta R.T. 0.02 min
 Lab File: VD059852.D
 Acq: 21 Aug 2018 13:32

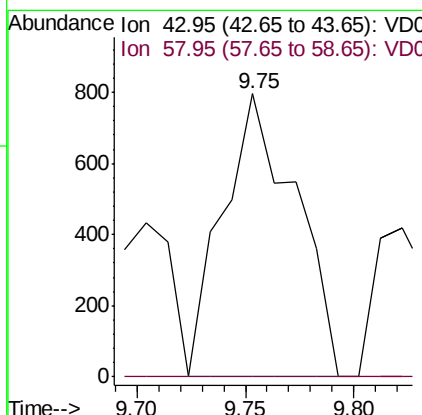
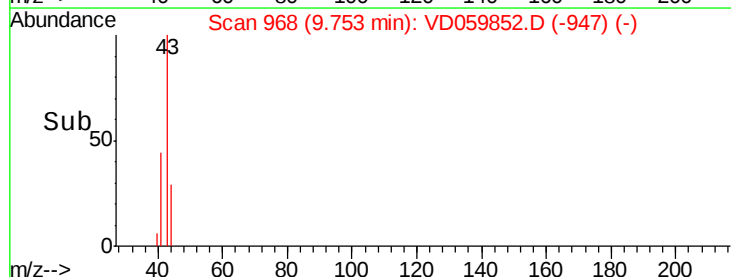
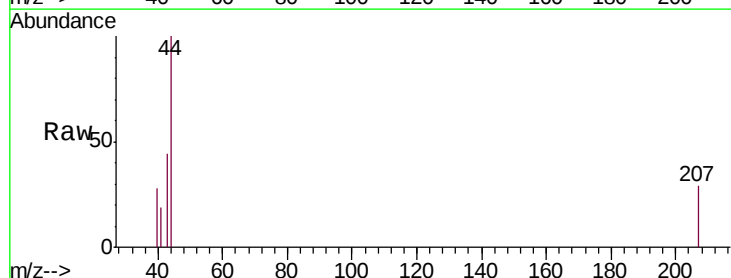
Instrument :
 MSVOA_D
 ClientSampleId :
 RA-081418-FL-024RE

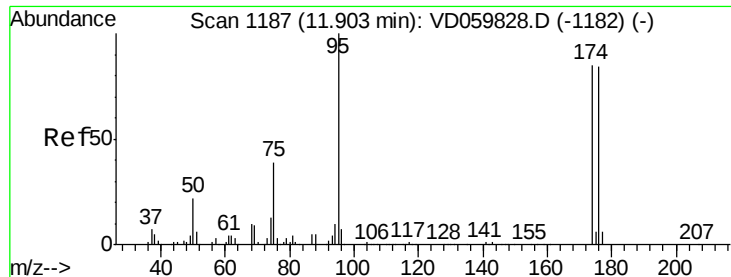
Tgt Ion: 43 Resp: 1009
 Ion Ratio Lower Upper
 43 100
 58 0.0 27.0 40.4#



#59
 2-Hexanone
 Concen: 4.312 ug/l
 RT: 9.75 min Scan# 968
 Delta R.T. 0.01 min
 Lab File: VD059852.D
 Acq: 21 Aug 2018 13:32

Tgt Ion: 43 Resp: 1863
 Ion Ratio Lower Upper
 43 100
 58 0.0 23.1 69.2#

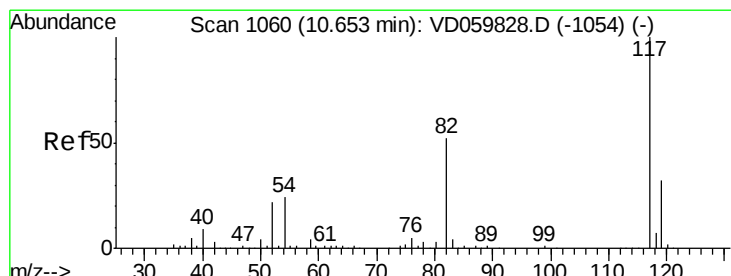
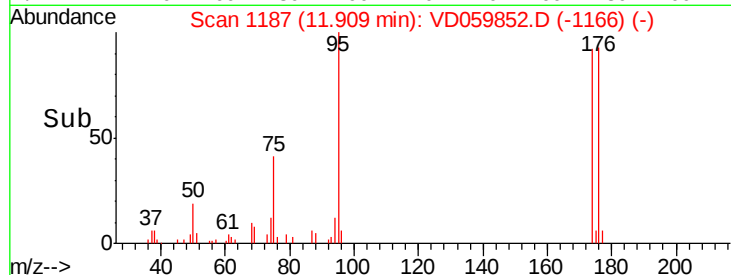
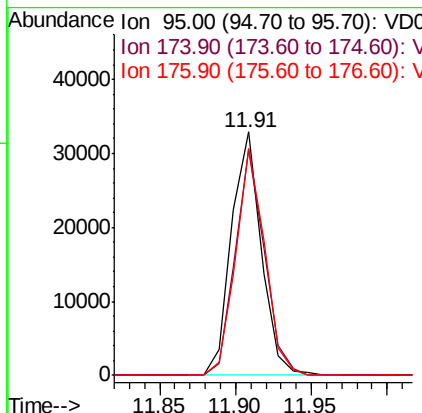
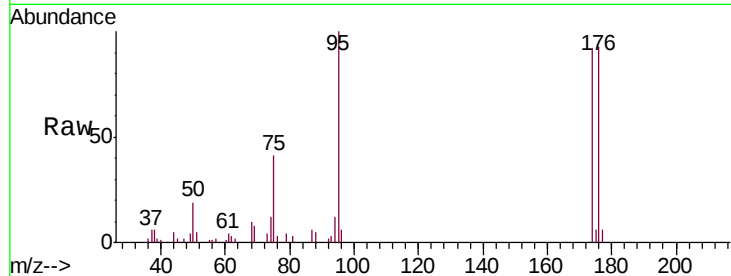




#62
4-Bromofluorobenzene
Concen: N.D. ug/l
RT: 11.91 min Scan# 1187
Delta R.T. 0.01 min
Lab File: VD059852.D
Acq: 21 Aug 2018 13:32

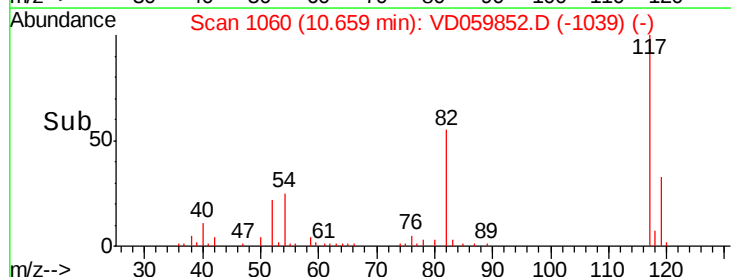
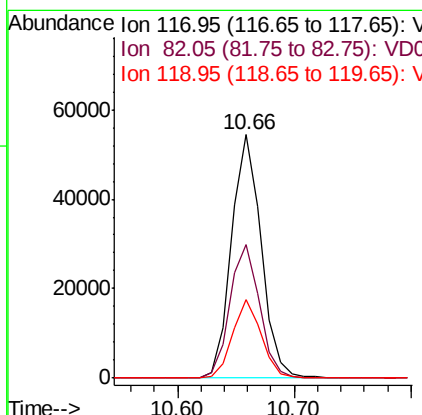
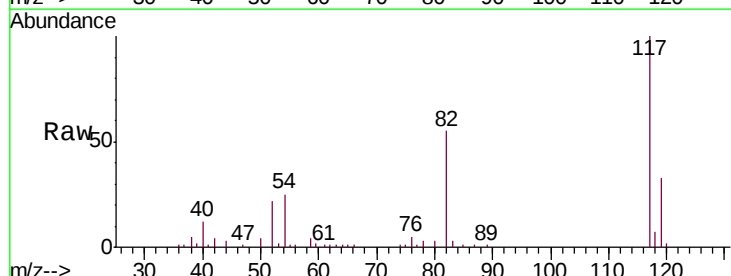
Instrument :
MSVOA_D
ClientSampleId :
RA-081418-FL-024RE

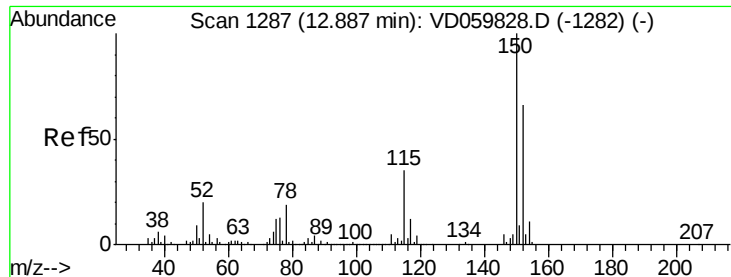
Tgt Ion: 95 Resp: 45079
Ion Ratio Lower Upper
95 100
174 92.5 0.0 169.2
176 93.0 0.0 168.0



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.66 min Scan# 1060
Delta R.T. 0.01 min
Lab File: VD059852.D
Acq: 21 Aug 2018 13:32

Tgt Ion: 117 Resp: 95915
Ion Ratio Lower Upper
117 100
82 54.8 41.6 62.4
119 32.5 25.6 38.4



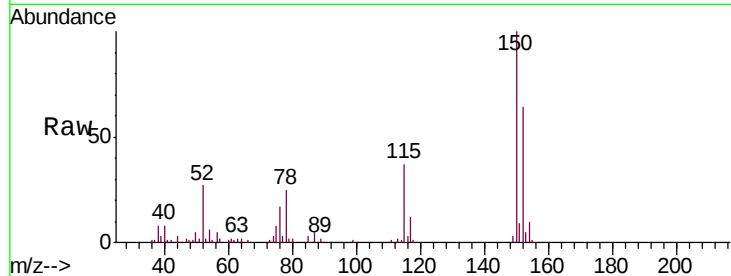


#72

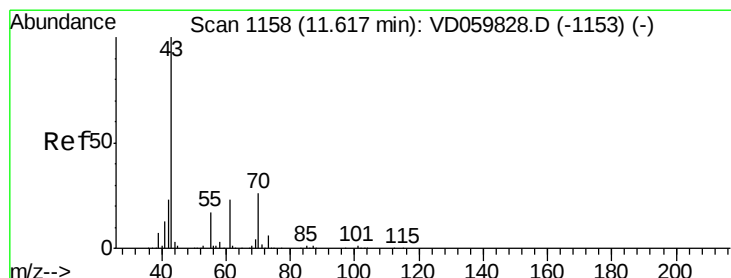
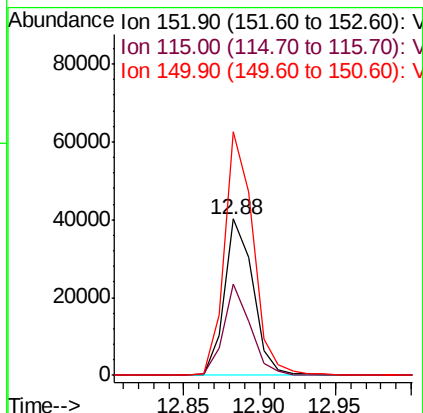
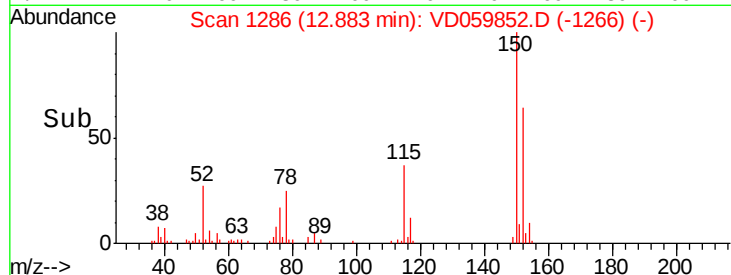
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.88 min Scan# 1286
Delta R.T. -0.00 min
Lab File: VD059852.D
Acq: 21 Aug 2018 13:32

Instrument :
MSVOA_D
ClientSampleId :
RA-081418-FL-024RE

Tgt Ion:152 Resp: 53036
Ion Ratio Lower Upper
152 100
115 58.2 26.9 80.6
150 156.1 0.0 306.8



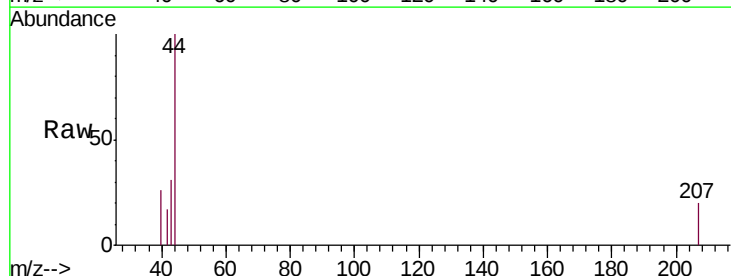
Abundance Ion 151.90 (151.60 to 152.60): V
Ion 115.00 (114.70 to 115.70): V
Ion 149.90 (149.60 to 150.60): V



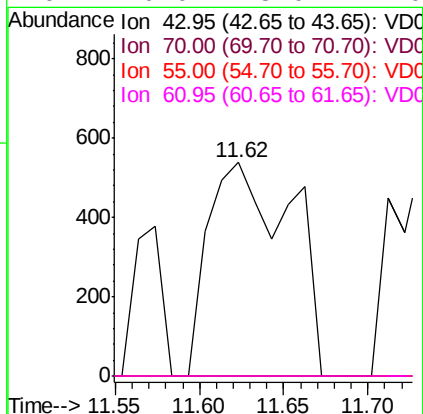
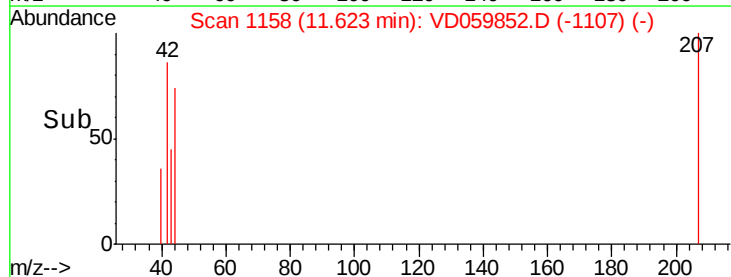
#74

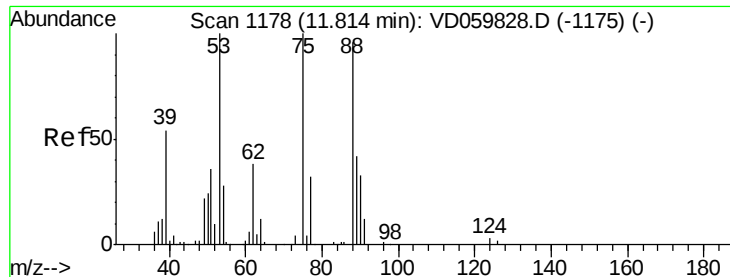
N-ethyl acetate
Concen: 1.129 ug/l
RT: 11.62 min Scan# 1158
Delta R.T. 0.01 min
Lab File: VD059852.D
Acq: 21 Aug 2018 13:32

Tgt Ion: 43 Resp: 1827
Ion Ratio Lower Upper
43 100
70 0.0 20.5 30.7#
55 0.0 13.7 20.5#
61 0.0 18.0 27.0#



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: 67.611 ug/l

RT: 11.91 min Scan# 1187

Delta R.T. 0.09 min

Lab File: VD059852.D

Acq: 21 Aug 2018 13:32

Instrument :

MSVOA_D

ClientSampleId :

RA-081418-FL-024RE

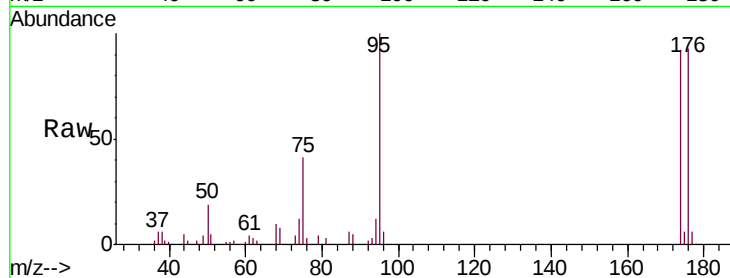
Tgt Ion: 75 Resp: 18545

Ion Ratio Lower Upper

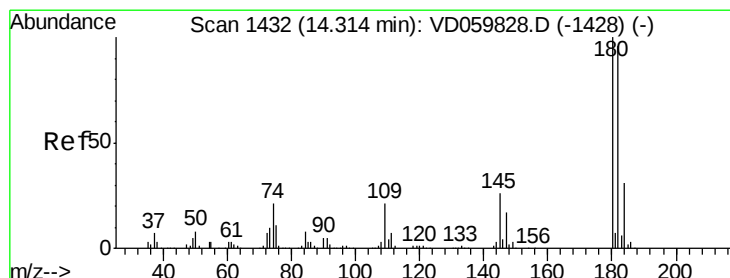
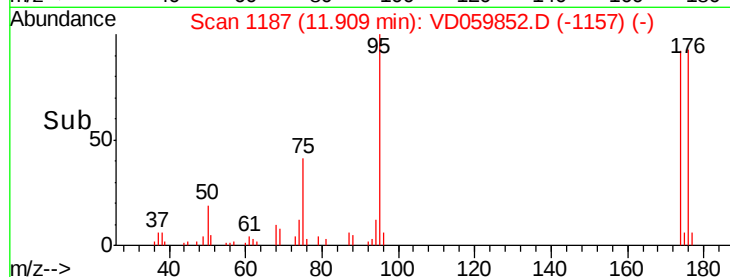
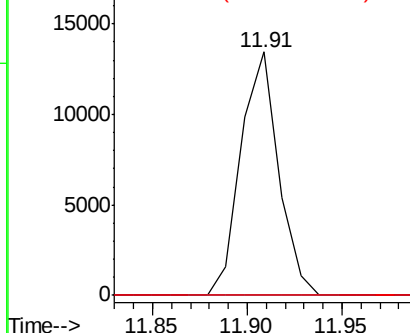
75 100

53 0.0 80.7 121.1#

89 0.0 33.9 50.9#



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



#93

1,2,4-Trichlorobenzene

Concen: 1.701 ug/l

RT: 14.32 min Scan# 1432

Delta R.T. 0.01 min

Lab File: VD059852.D

Acq: 21 Aug 2018 13:32

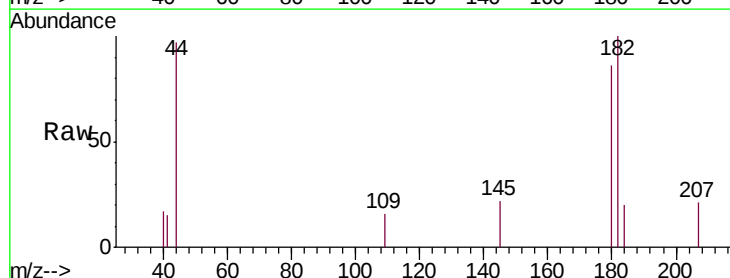
Tgt Ion: 180 Resp: 2066

Ion Ratio Lower Upper

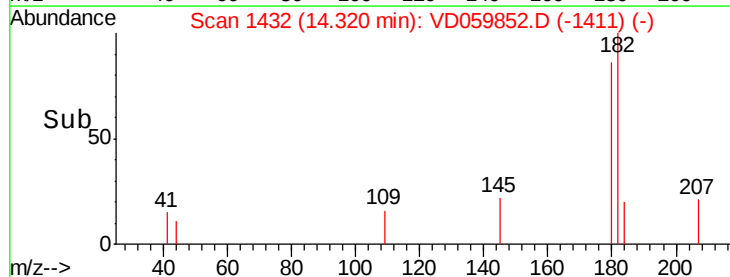
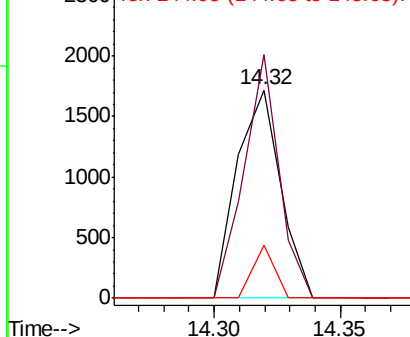
180 100

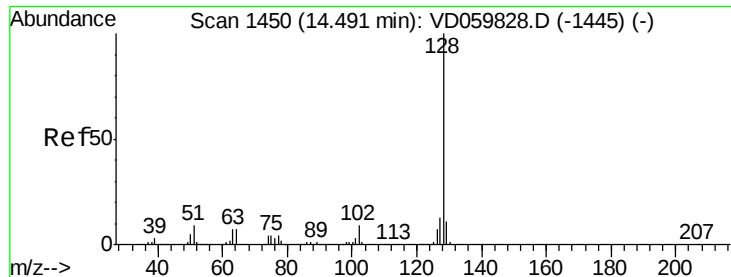
182 116.9 48.0 144.0

145 25.6 13.1 39.1



Abundance Ion 179.85 (179.55 to 180.55): V
Ion 181.85 (181.55 to 182.55): V
Ion 144.95 (144.65 to 145.65): V

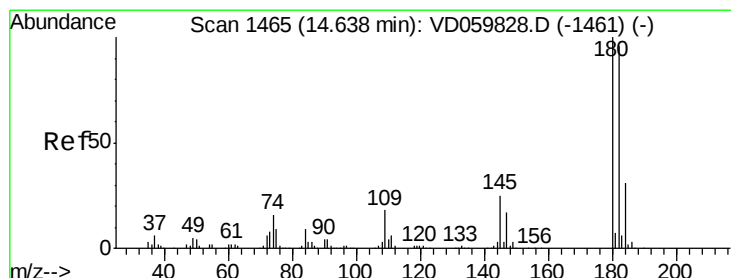
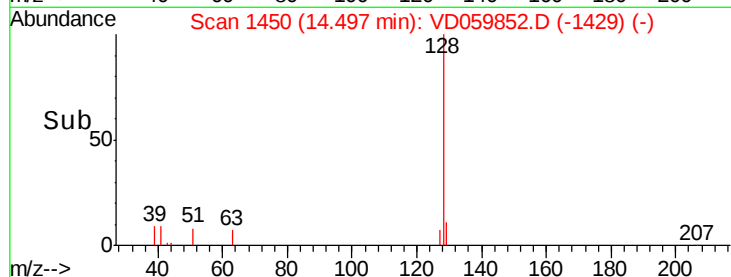
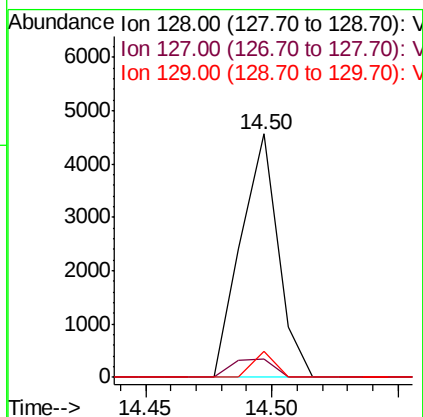
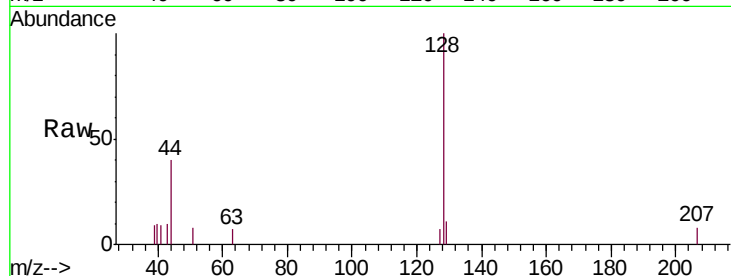




#95
Naphthalene
Concen: 2.357 ug/l
RT: 14.50 min Scan# 1450
Delta R.T. 0.01 min
Lab File: VD059852.D
Acq: 21 Aug 2018 13:32

Instrument :
MSVOA_D
ClientSampleId :
RA-081418-FL-024RE

Tgt Ion:128 Resp: 4676
Ion Ratio Lower Upper
128 100
127 7.5 10.1 15.1#
129 10.6 8.7 13.1



#96
1,2,3-Trichlorobenzene
Concen: 1.230 ug/l
RT: 14.63 min Scan# 1464
Delta R.T. -0.00 min
Lab File: VD059852.D
Acq: 21 Aug 2018 13:32

Tgt Ion:180 Resp: 1309
Ion Ratio Lower Upper
180 100
182 91.5 47.8 143.4
145 31.7 12.7 38.0

