

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD081219\
 Data File : VD063486.D
 Acq On : 12 Aug 2019 14:38
 Operator : JC/SY
 Sample : K4244-03
 Misc : 6.05µl/5ml/MSVOA D/SOIL
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 BERGEN-SP-2

Quant Time: Aug 13 07:45:07 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D080919S.M
 Quant Title : SW846 8260
 QLast Update : Sat Aug 10 06:42:47 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.04	168	36478	50.00	ug/l	-0.03
34) 1,4-Difluorobenzene	8.21	114	74349	50.00	ug/l	-0.03
63) Chlorobenzene-d5	12.36	117	49532	50.00	ug/l	-0.02
72) 1,4-Dichlorobenzene-d4	14.52	152	25576	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	74191	190.27	ug/l	-0.02
Spiked Amount				50.000		
			Recovery	=	380.54%	
35) Dibromofluoromethane	6.92	113	52042	83.11	ug/l	-0.02
Spiked Amount				50.000		
			Recovery	=	166.22%	
50) Toluene-d8	10.40	98	26605	19.33	ug/l	-0.02
Spiked Amount				50.000		
			Recovery	=	38.66%	
62) 4-Bromofluorobenzene	13.55	95	26125	41.87	ug/l	0.00
Spiked Amount				50.000		
			Recovery	=	83.74%	

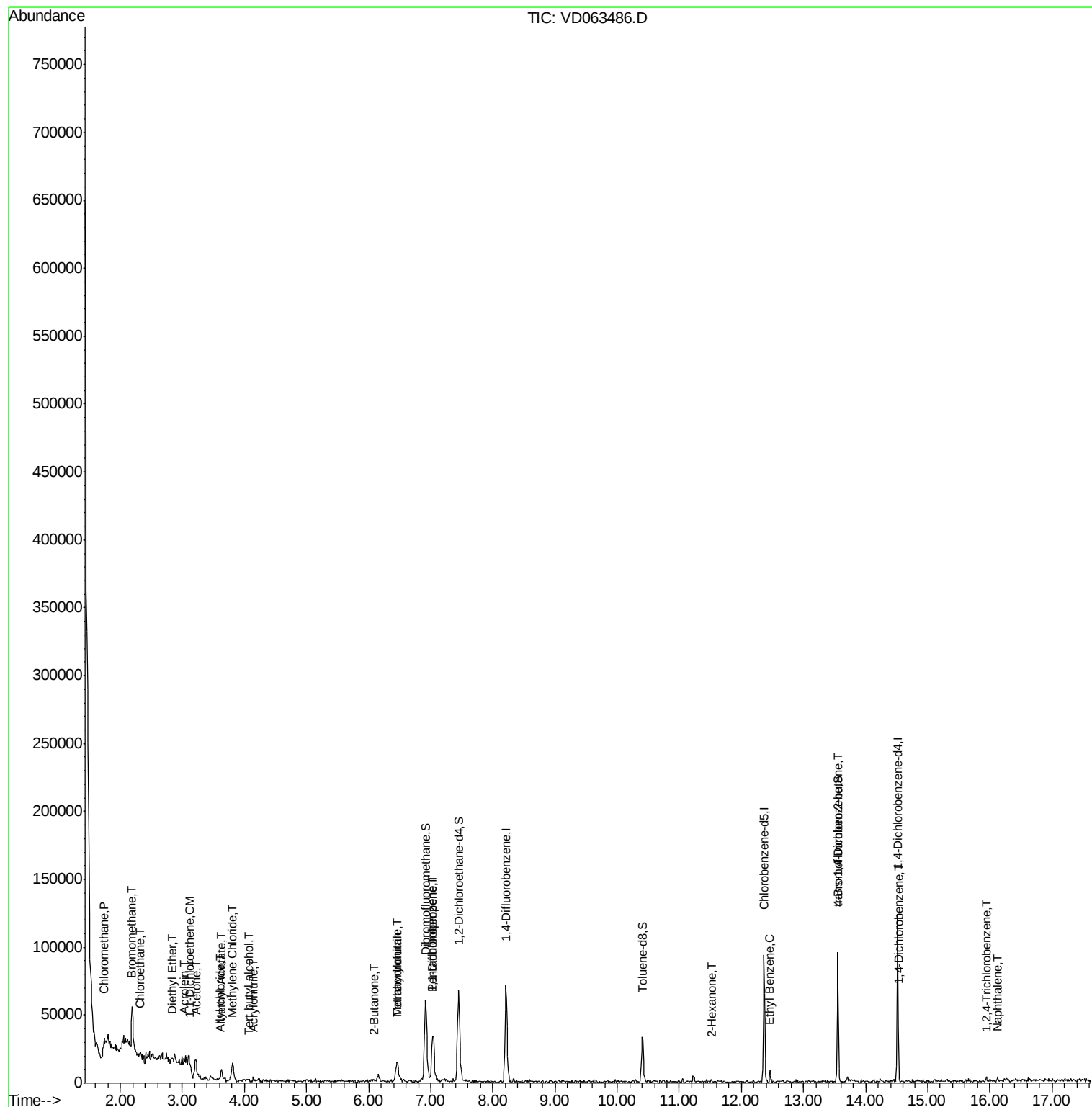
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	1.74	50	401	1.163	ug/l #	41
5) Bromomethane	2.17	94	2045	12.662	ug/l #	11
6) Chloroethane	2.31	64	202	1.290	ug/l #	1
8) Diethyl Ether	2.85	74	481	5.074	ug/l	99
11) Tert butyl alcohol	4.07	59	512	30.164	ug/l #	71
12) 1,1-Dichloroethene	3.13	96	844	2.863	ug/l #	1
13) Acrolein	3.02	56	370	22.145	ug/l #	18
14) Allyl chloride	3.60	41	1226	2.767	ug/l #	8
15) Acrylonitrile	4.14	53	216	4.804	ug/l #	6
16) Acetone	3.21	43	24588	310.206	ug/l	98
18) Methyl Acetate	3.63	43	9236	61.518	ug/l	92
20) Methylene Chloride	3.81	84	7971	23.256	ug/l #	85
25) 2-Butanone	6.08	43	1334	17.041	ug/l #	58
29) Tetrahydrofuran	6.46	42	12288	336.860	ug/l #	90
36) 1,1-Dichloropropene	7.03	75	2432	3.700	ug/l #	71
41) Methacrylonitrile	6.46	41	8346	24.068	ug/l #	74
59) 2-Hexanone	11.53	43	201	1.094	ug/l #	30
67) Ethyl Benzene	12.46	91	1877	1.163	ug/l #	46
81) trans-1,4-Dichloro-2-buten	13.55	75	11083	140.482	ug/l #	1
88) 1,4-Dichlorobenzene	14.54	146	1212	1.571	ug/l #	72
93) 1,2,4-Trichlorobenzene	15.94	180	797	1.587	ug/l #	10
95) Naphthalene	16.12	128	1745	2.293	ug/l #	48

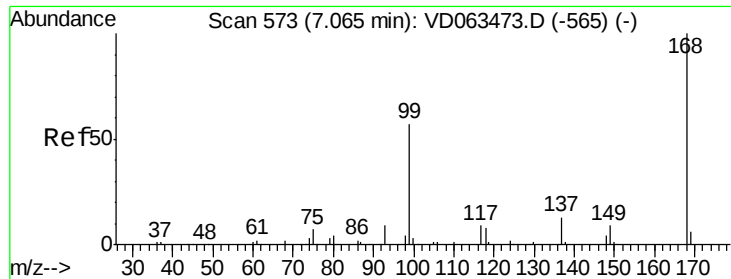
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD081219\
Data File : VD063486.D
Acq On : 12 Aug 2019 14:38
Operator : JC/SY
Sample : K4244-03
Misc : 6.05g/5ml/MSVOA D/SOIL
ALS Vial : 19 Sample Multiplier: 1

Instrument :
MSVOA_D
ClientSampleId :
BERGEN-SP-2

Quant Time: Aug 13 07:45:07 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_D\METHOD\82D080919S.M
Quant Title : SW846 8260
QLast Update : Sat Aug 10 06:42:47 2019
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.04 min Scan# 570

Delta R.T. -0.03 min

Lab File: VD063486.D

Acq: 12 Aug 2019 14:38

Instrument :

MSVOA_D

ClientSampleId :

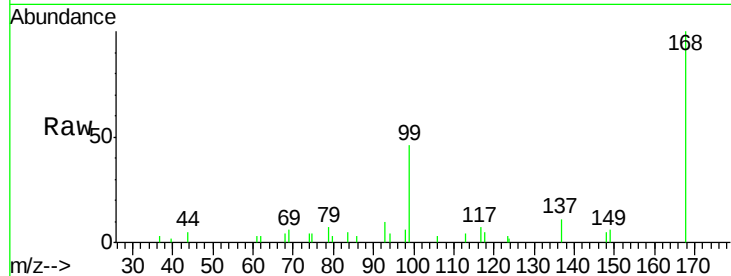
BERGEN-SP-2

Tot Ion:168 Resp: 36478

Ion Ratio Lower Upper

168 100

99 46.4 46.7 70.1#



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.04

15000

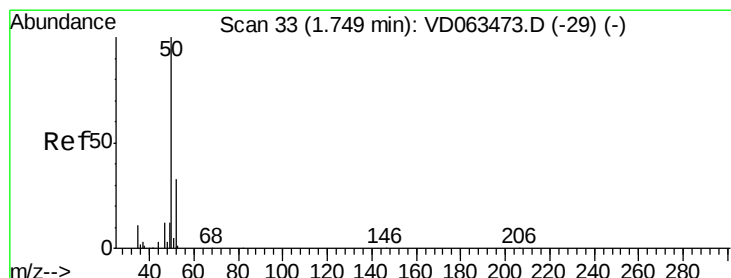
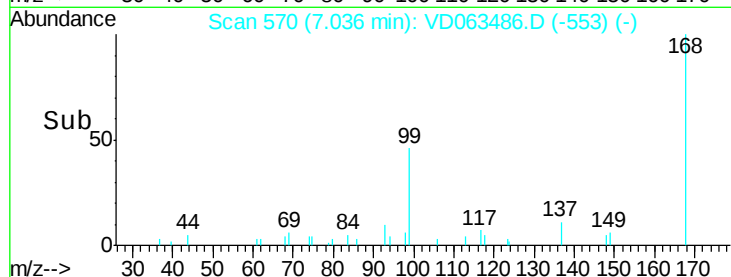
10000

5000

0

Time-->

7.00 7.10



#3

Chloromethane

Concen: 1.163 ug/l

RT: 1.74 min Scan# 32

Delta R.T. -0.01 min

Lab File: VD063486.D

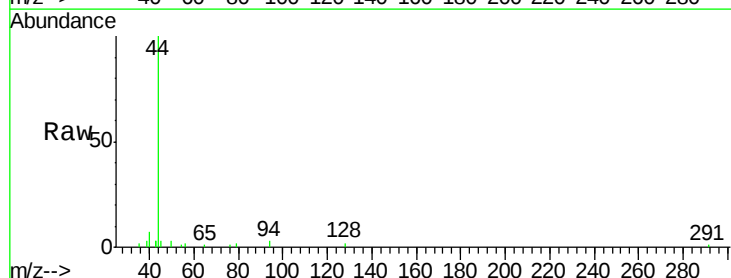
Acq: 12 Aug 2019 14:38

Tgt Ion: 50 Resp: 401

Ion Ratio Lower Upper

50 100

52 0.0 26.6 40.0#



Abundance Ion 49.90 (49.60 to 50.60): VDC

Ion 51.90 (51.60 to 52.60): VDC

1.74

800

600

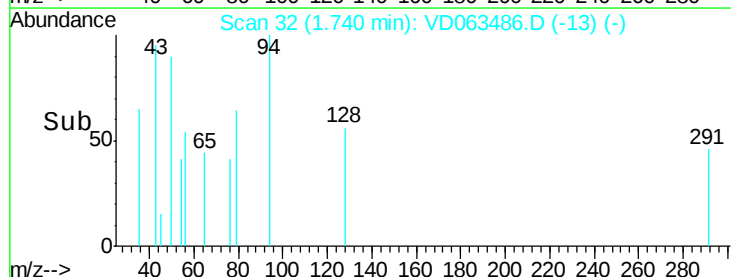
400

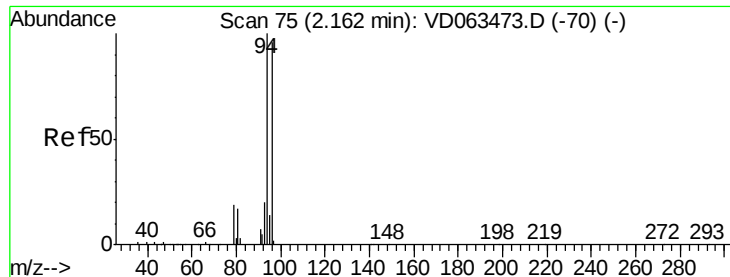
200

0

Time-->

1.72 1.74 1.76





#5

Bromomethane

Concen: 12.662 ug/l

RT: 2.17 min Scan# 76

Delta R.T. 0.01 min

Lab File: VD063486.D

Acq: 12 Aug 2019 14:38

Instrument :

MSVOA_D

ClientSampleId :

BERGEN-SP-2

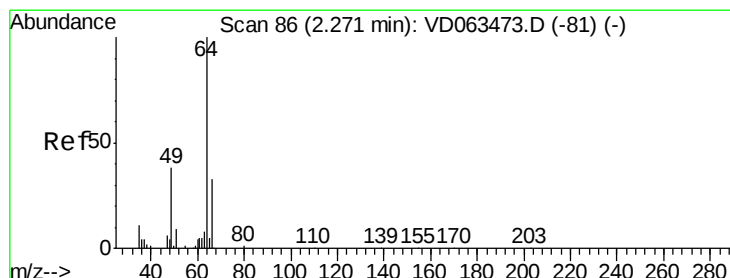
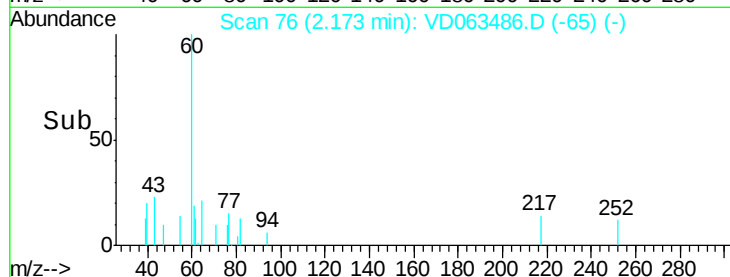
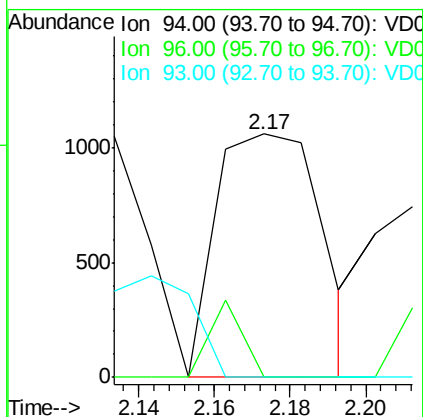
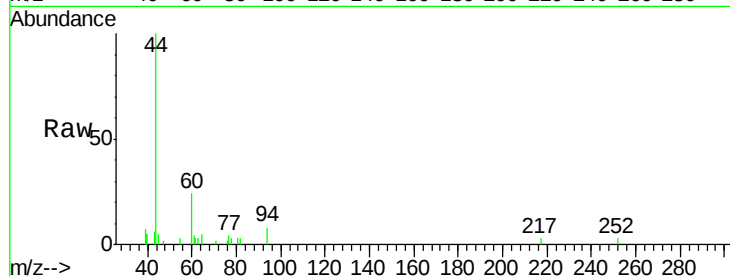
Tot Ion: 94 Resp: 2045

Ion Ratio Lower Upper

94 100

96 0.0 76.5 114.7#

93 0.0 15.8 23.8#



#6

Chloroethane

Concen: 1.290 ug/l

RT: 2.31 min Scan# 90

Delta R.T. 0.04 min

Lab File: VD063486.D

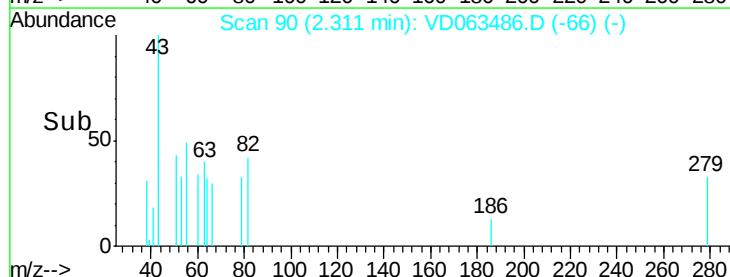
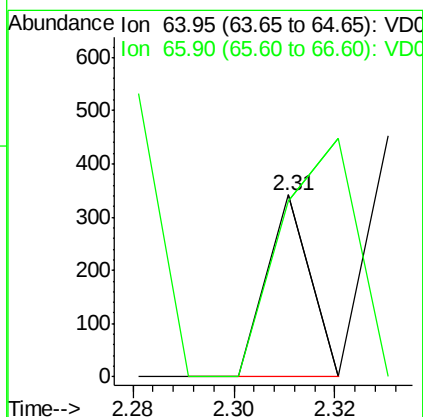
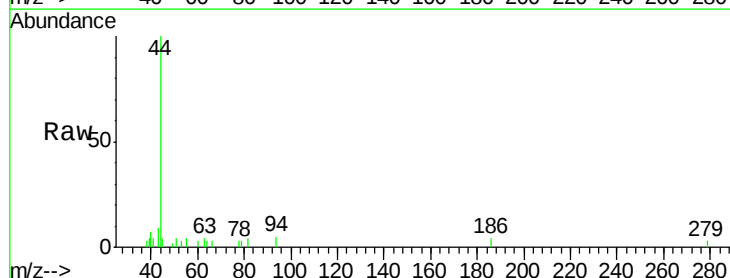
Acq: 12 Aug 2019 14:38

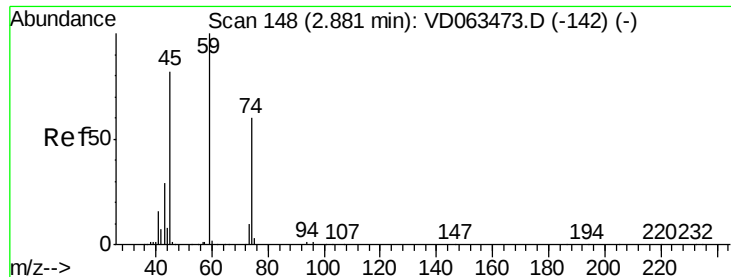
Tgt Ion: 64 Resp: 202

Ion Ratio Lower Upper

64 100

66 96.5 26.3 39.5#





#8

Diethyl Ether

Concen: 5.074 ug/l

RT: 2.85 min Scan# 145

Delta R.T. -0.03 min

Lab File: VD063486.D

Acq: 12 Aug 2019 14:38

Instrument :

MSVOA_D

ClientSampleId :

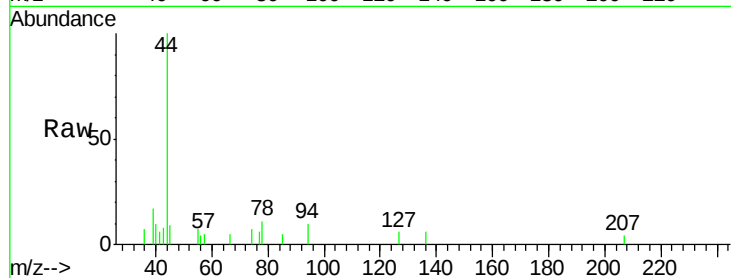
BERGEN-SP-2

Tot Ion: 74 Resp: 481

Ion Ratio Lower Upper

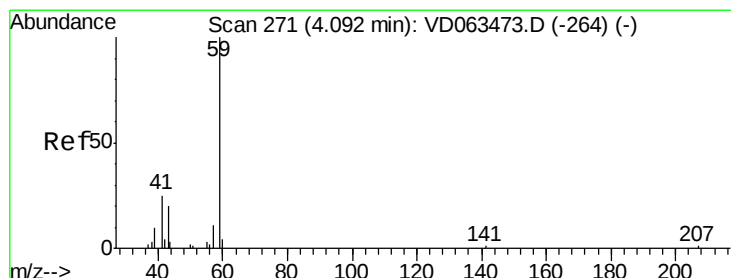
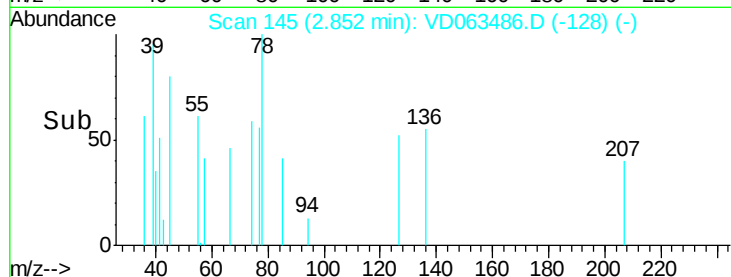
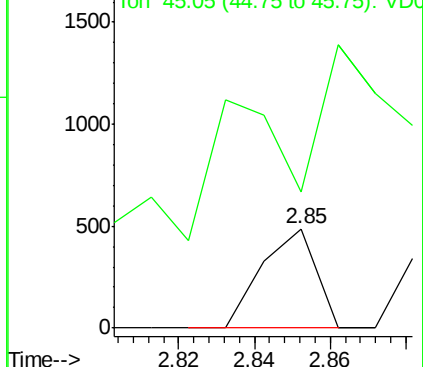
74 100

45 136.3 68.5 205.5



Abundance Ion 74.00 (73.70 to 74.70): VDC

Ion 45.05 (44.75 to 45.75): VDC



#11

Tert butyl alcohol

Concen: 30.164 ug/l

RT: 4.07 min Scan# 269

Delta R.T. -0.02 min

Lab File: VD063486.D

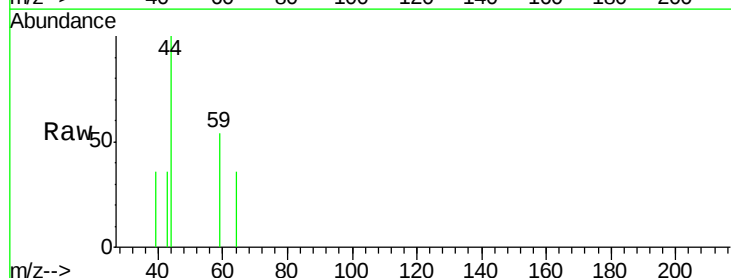
Acq: 12 Aug 2019 14:38

Tgt Ion: 59 Resp: 512

Ion Ratio Lower Upper

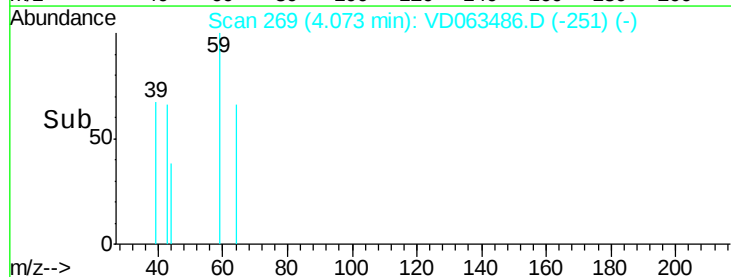
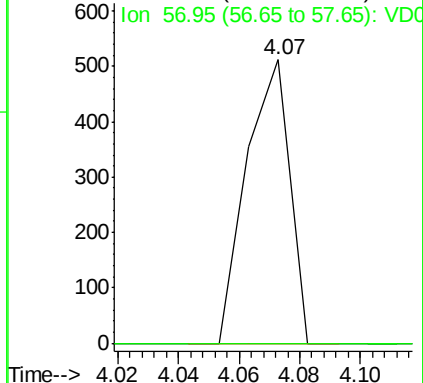
59 100

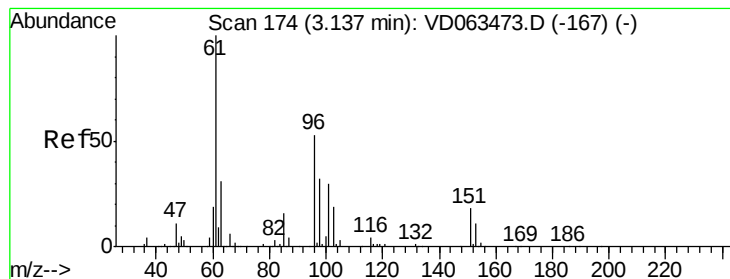
57 0.0 8.7 13.1#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC





#12

1,1-Dichloroethene

Concen: 2.863 ug/l

RT: 3.13 min Scan# 173

Delta R.T. -0.01 min

Lab File: VD063486.D

Acq: 12 Aug 2019 14:38

Instrument :

MSVOA_D

ClientSampleId :

BERGEN-SP-2

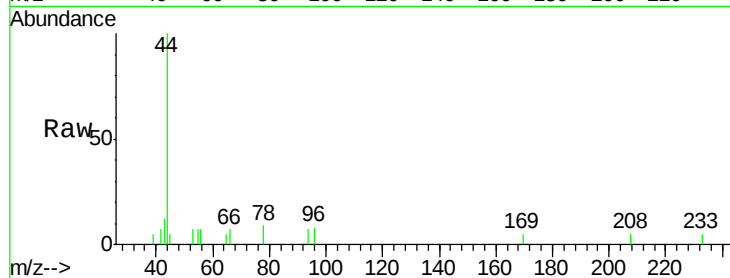
Tot Ion: 96 Resp: 844

Ion Ratio Lower Upper

96 100

61 0.0 151.7 227.5#

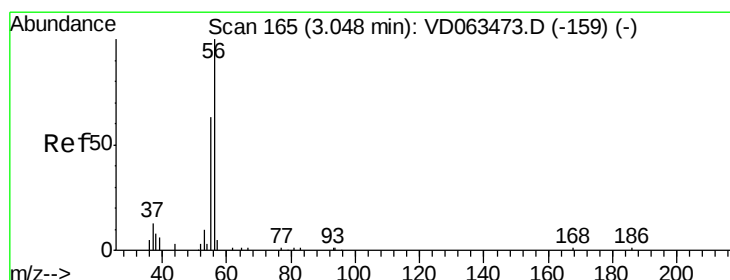
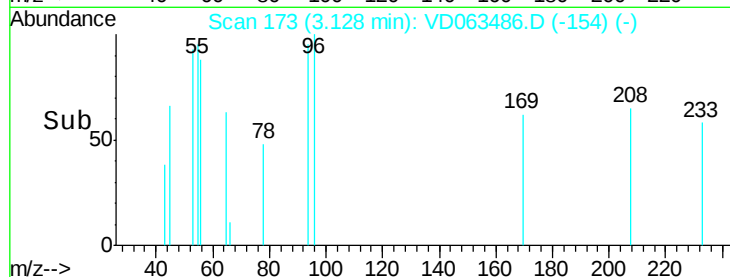
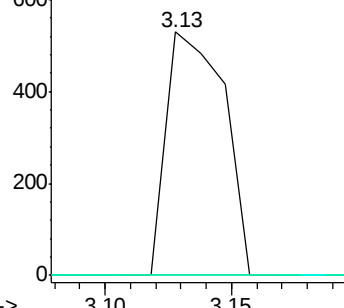
98 0.0 48.4 72.6#



Abundance Ion 95.90 (95.60 to 96.60): VDC

Ion 60.95 (60.65 to 61.65): VDC

Ion 97.85 (97.55 to 98.55): VDC



#13

Acrolein

Concen: 22.145 ug/l

RT: 3.02 min Scan# 162

Delta R.T. -0.03 min

Lab File: VD063486.D

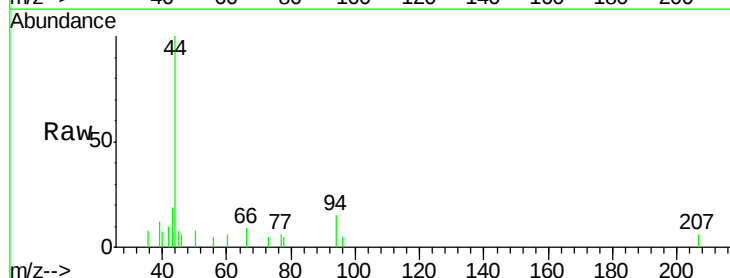
Acq: 12 Aug 2019 14:38

Tgt Ion: 56 Resp: 370

Ion Ratio Lower Upper

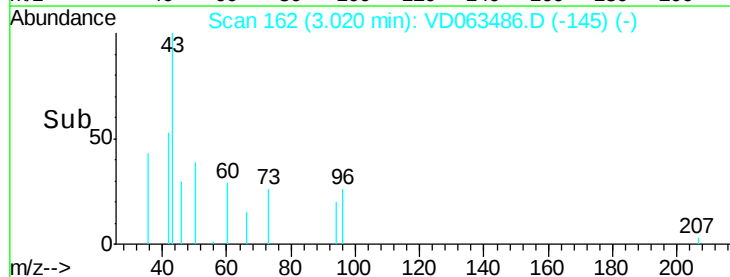
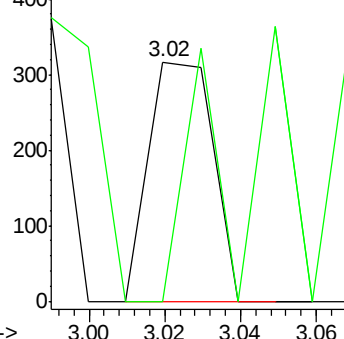
56 100

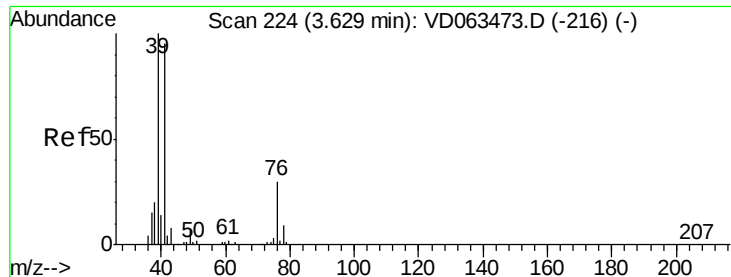
55 0.0 51.3 76.9#



Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 55.00 (54.70 to 55.70): VDC





#14

Allvl chloride

Concen: 2.767 ug/l

RT: 3.60 min Scan# 221

Delta R.T. -0.03 min

Lab File: VD063486.D

Acq: 12 Aug 2019 14:38

Instrument :

MSVOA_D

ClientSampleId :

BERGEN-SP-2

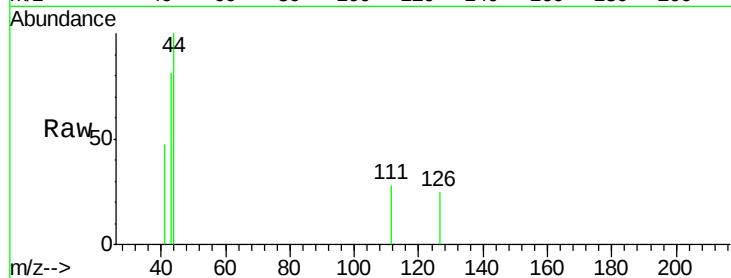
Tot Ion: 41 Resp: 1226

Ion Ratio Lower Upper

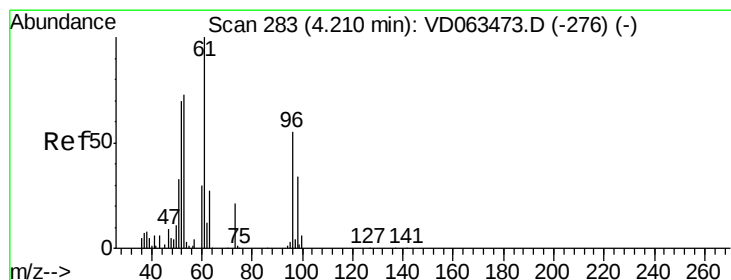
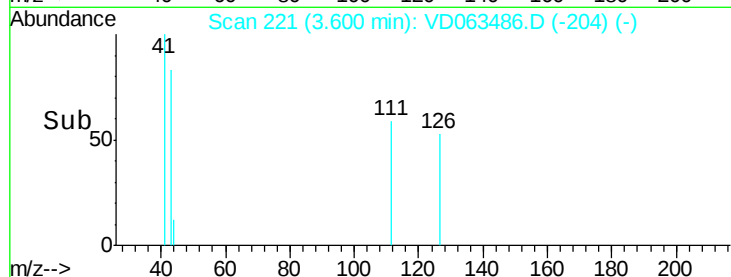
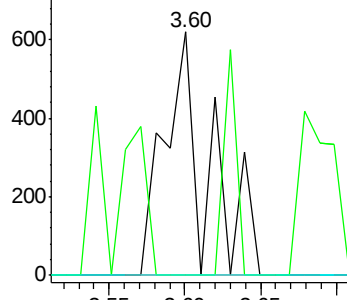
41 100

39 0.0 84.2 126.4#

76 0.0 26.0 39.0#



Abundance Ion 41.05 (40.75 to 41.75): VDC
Ion 38.95 (38.65 to 39.65): VDC
Ion 75.95 (75.65 to 76.65): VDC



#15

Acrylonitrile

Concen: 4.804 ug/l

RT: 4.14 min Scan# 276

Delta R.T. -0.07 min

Lab File: VD063486.D

Acq: 12 Aug 2019 14:38

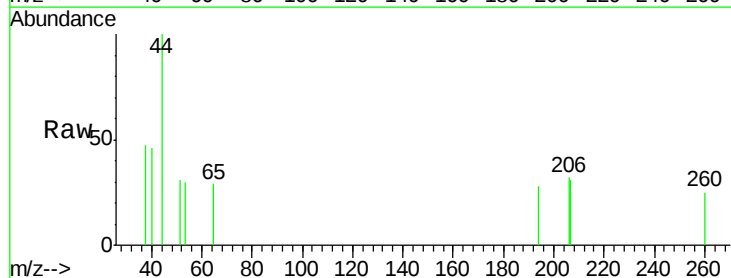
Tgt Ion: 53 Resp: 216

Ion Ratio Lower Upper

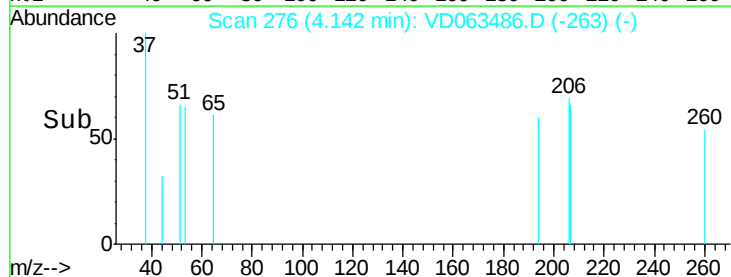
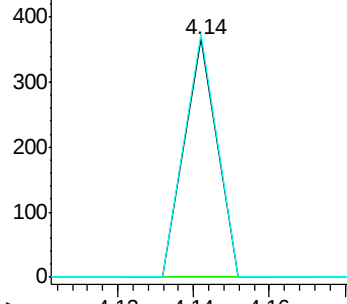
53 100

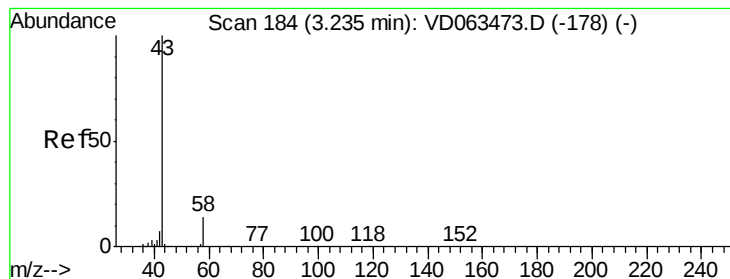
52 0.0 77.4 116.0#

51 102.2 36.7 55.1#



Abundance Ion 53.00 (52.70 to 53.70): VDC
Ion 52.00 (51.70 to 52.70): VDC
Ion 51.00 (50.70 to 51.70): VDC





#16

Acetone

Concen: 310.206 ug/l

RT: 3.21 min Scan# 181

Delta R.T. -0.03 min

Lab File: VD063486.D

Acq: 12 Aug 2019 14:38

Instrument :

MSVOA_D

ClientSampleId :

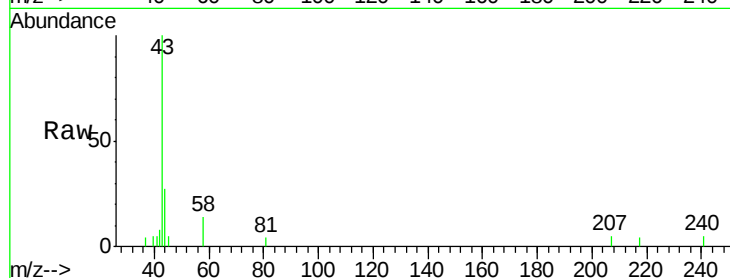
BERGEN-SP-2

Tot Ion: 43 Resp: 24588

Ion Ratio Lower Upper

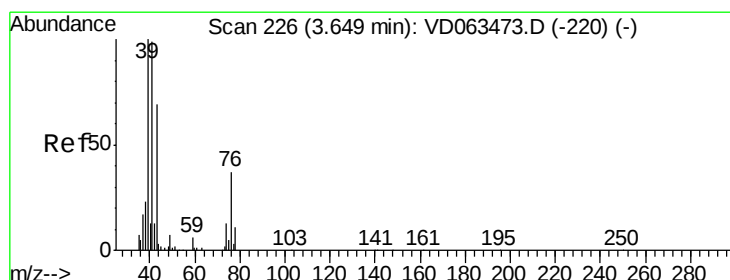
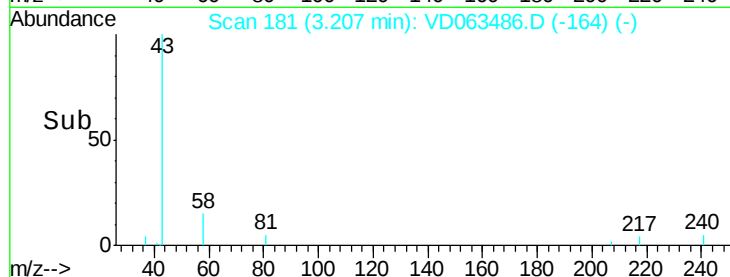
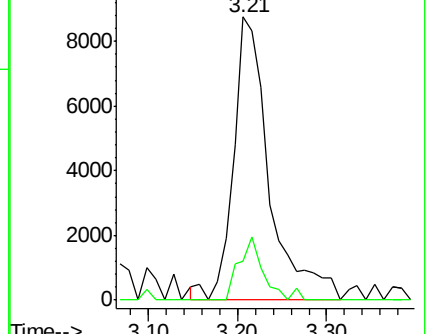
43 100

58 13.7 11.4 17.2



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC



#18

Methyl Acetate

Concen: 61.518 ug/l

RT: 3.63 min Scan# 224

Delta R.T. -0.02 min

Lab File: VD063486.D

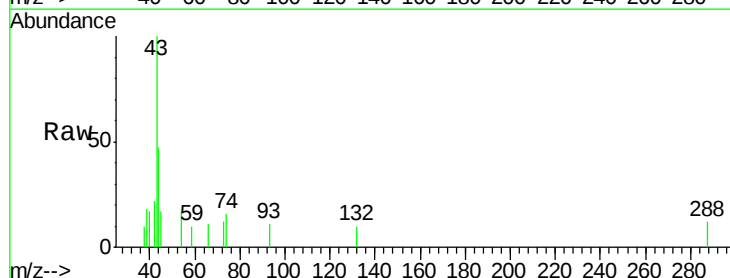
Acq: 12 Aug 2019 14:38

Tgt Ion: 43 Resp: 9236

Ion Ratio Lower Upper

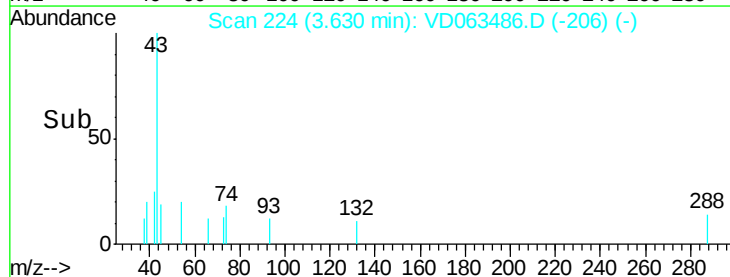
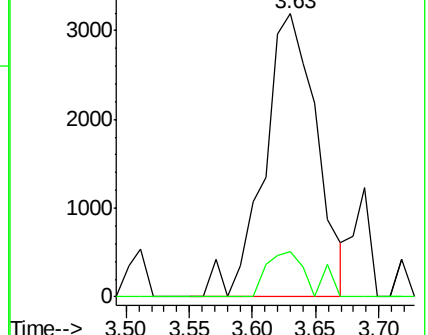
43 100

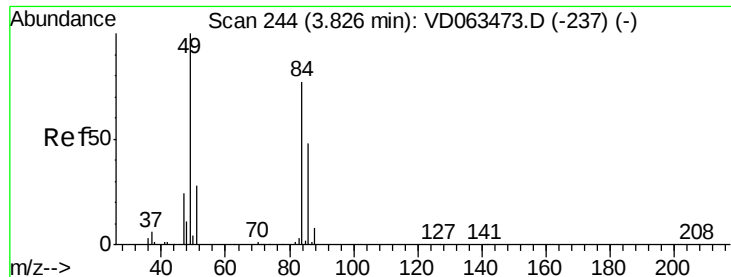
74 15.8 15.4 23.2



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 74.00 (73.70 to 74.70): VDC





#20

Methylene Chloride

Concen: 23.256 ug/l

RT: 3.81 min Scan# 242

Delta R.T. -0.02 min

Lab File: VD063486.D

Acq: 12 Aug 2019 14:38

Instrument :

MSVOA_D

ClientSampleId :

BERGEN-SP-2

Tot Ion: 84 Resp: 7971

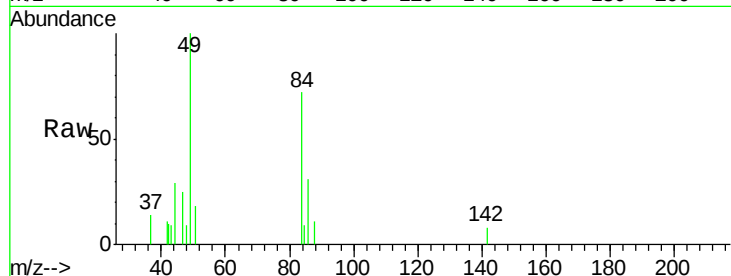
Ion Ratio Lower Upper

84 100

49 123.1 103.4 155.2

51 22.5 28.5 42.7#

86 38.5 49.4 74.2#

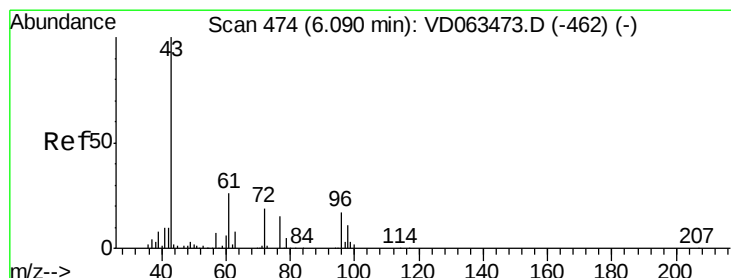
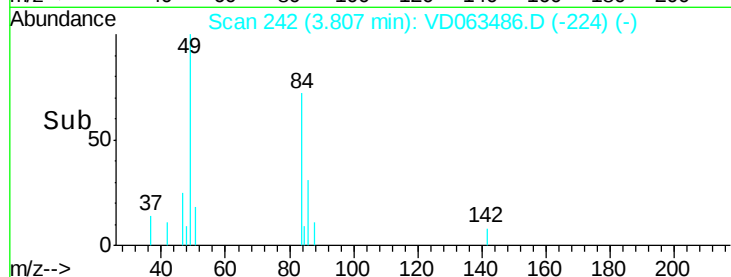
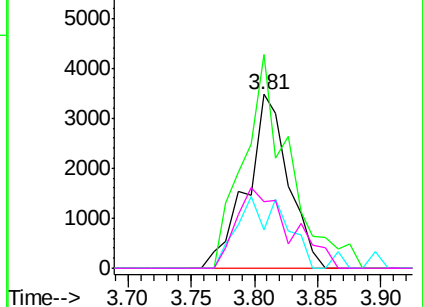


Abundance Ion 83.95 (83.65 to 84.65): VDC

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



#25

2-Butanone

Concen: 17.041 ug/l

RT: 6.08 min Scan# 473

Delta R.T. -0.01 min

Lab File: VD063486.D

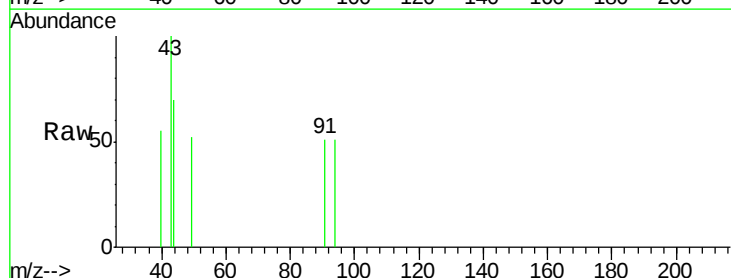
Acq: 12 Aug 2019 14:38

Tgt Ion: 43 Resp: 1334

Ion Ratio Lower Upper

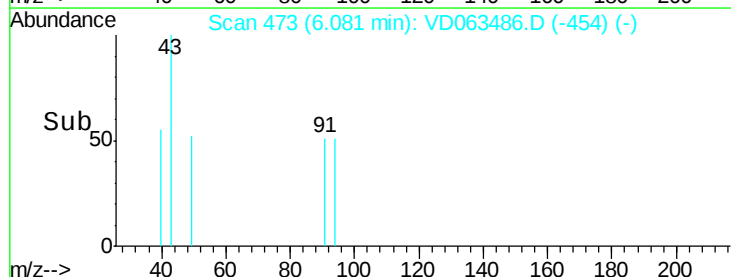
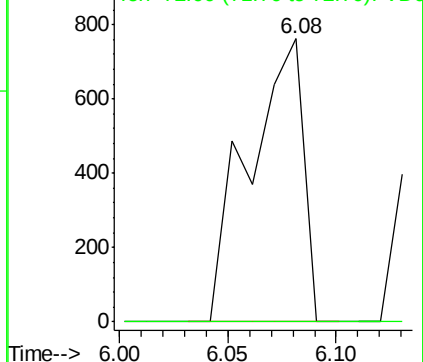
43 100

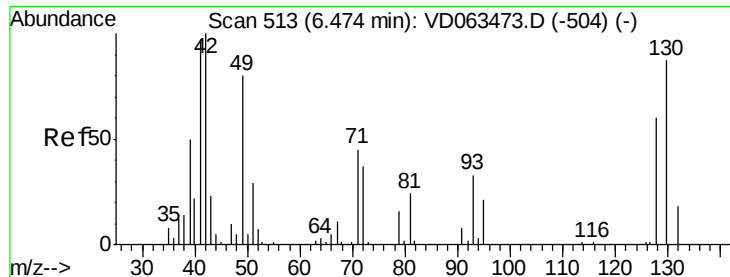
72 0.0 15.1 22.7#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 72.00 (71.70 to 72.70): VDC

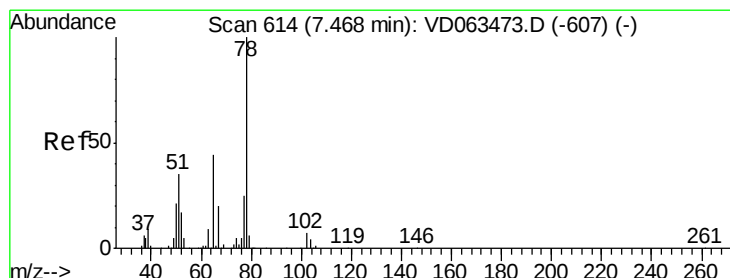
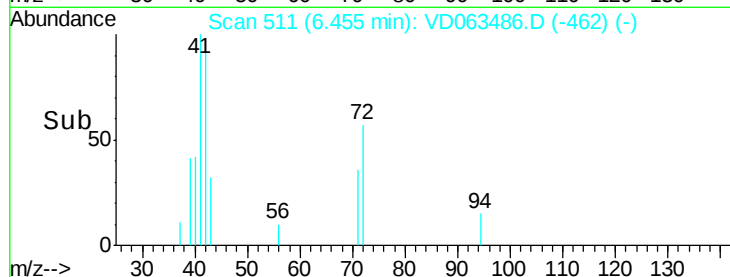
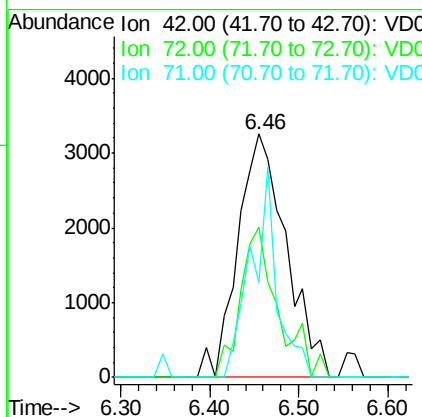
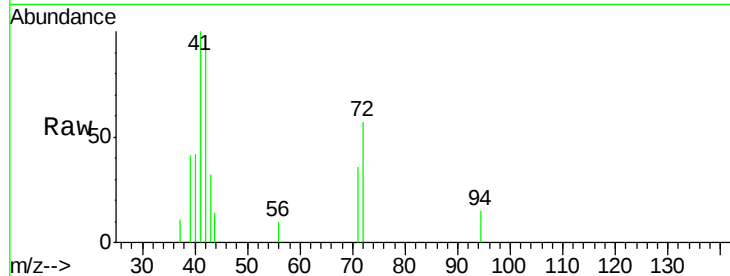




#29
Tetrahydrofuran
Concen: 336.860 ug/l
RT: 6.46 min Scan# 511
Delta R.T. -0.02 min
Lab File: VD063486.D
Acq: 12 Aug 2019 14:38

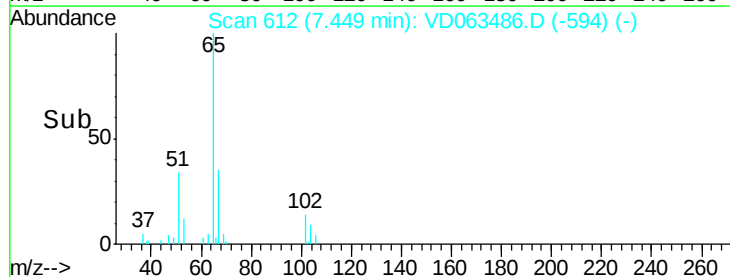
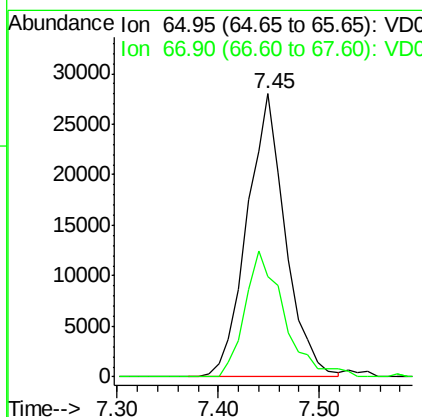
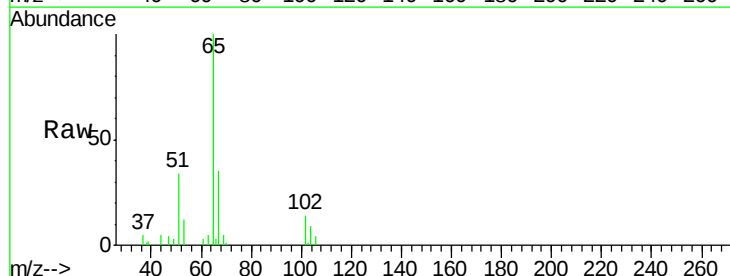
Instrument :
MSVOA_D
ClientSampleId :
BERGEN-SP-2

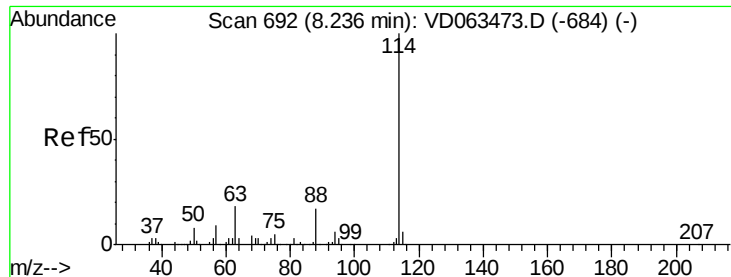
Tot Ion: 42 Resp: 12288
Ion Ratio Lower Upper
42 100
72 47.8 31.5 47.3#
71 46.1 33.8 50.8



#33
1,2-Dichloroethane-d4
Concen: 190.272 ug/l
RT: 7.45 min Scan# 612
Delta R.T. -0.02 min
Lab File: VD063486.D
Acq: 12 Aug 2019 14:38

Tgt Ion: 65 Resp: 74191
Ion Ratio Lower Upper
65 100
67 35.4 0.0 89.2





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.21 min Scan# 689

Delta R.T. -0.03 min

Lab File: VD063486.D

Acq: 12 Aug 2019 14:38

Instrument :

MSVOA_D

ClientSampleId :

BERGEN-SP-2

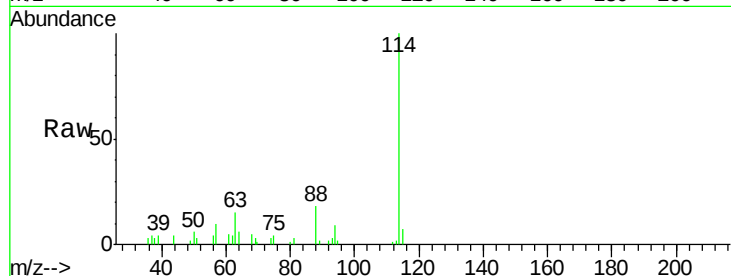
Tot Ion:114 Resp: 74349

Ion Ratio Lower Upper

114 100

63 15.1 0.0 36.2

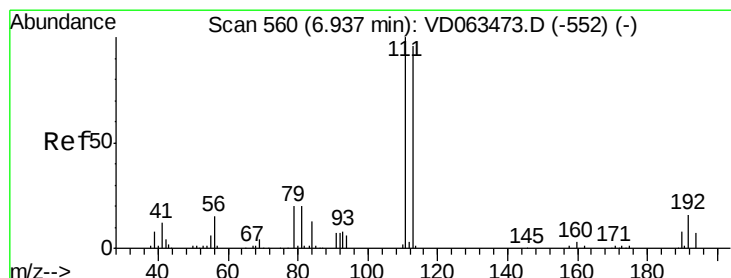
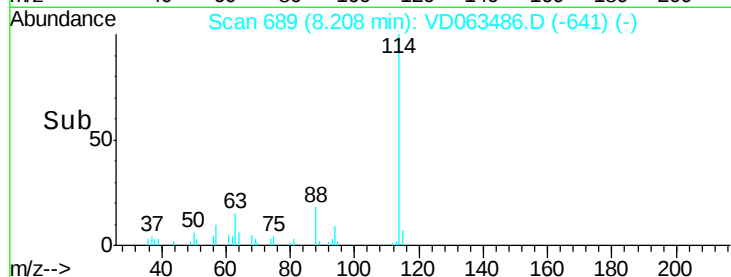
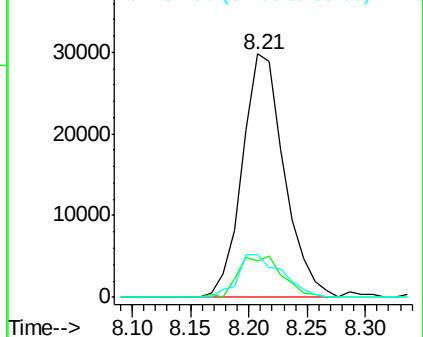
88 17.7 0.0 35.0



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: 83.111 ug/l

RT: 6.92 min Scan# 558

Delta R.T. -0.02 min

Lab File: VD063486.D

Acq: 12 Aug 2019 14:38

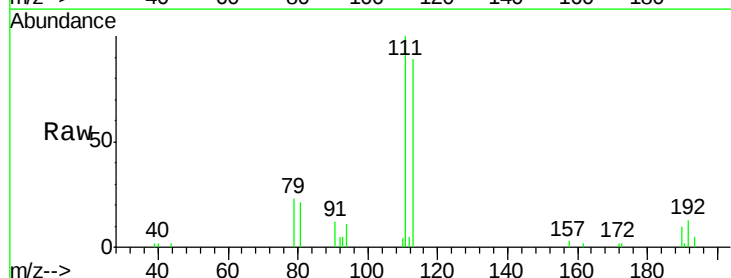
Tgt Ion:113 Resp: 52042

Ion Ratio Lower Upper

113 100

111 112.3 83.1 124.7

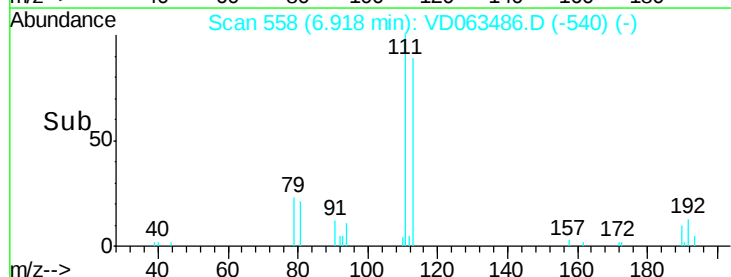
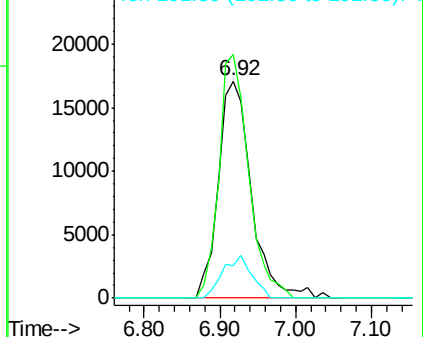
192 14.9 13.1 19.7

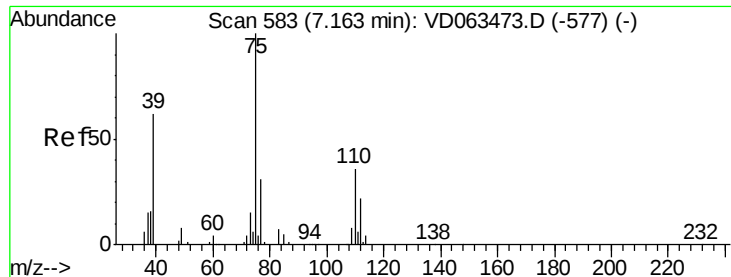


Abundance Ion 112.90 (112.60 to 113.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 191.80 (191.50 to 192.50): V

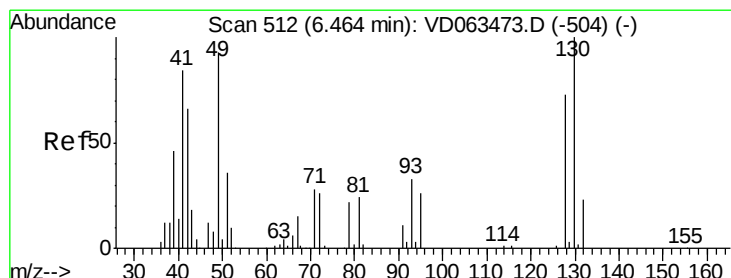
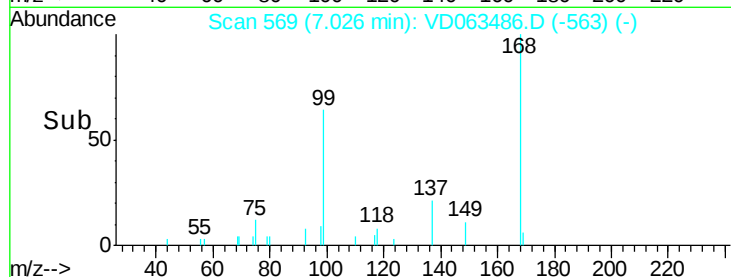
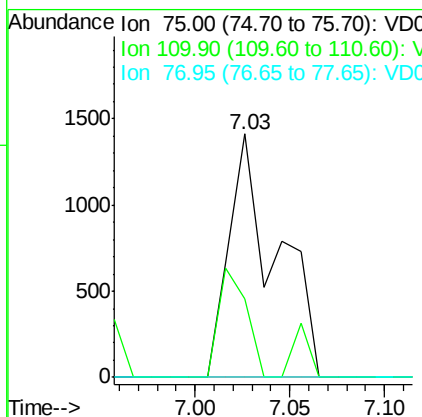
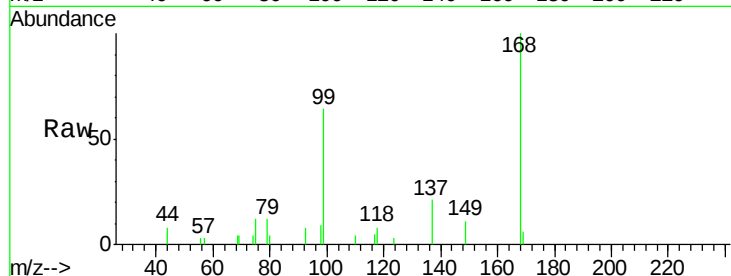




#36
 1,1-Dichloropropene
 Concen: 3.700 ug/l
 RT: 7.03 min Scan# 569
 Delta R.T. -0.14 min
 Lab File: VD063486.D
 Acq: 12 Aug 2019 14:38

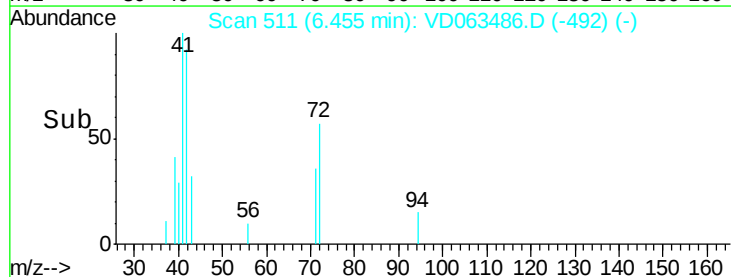
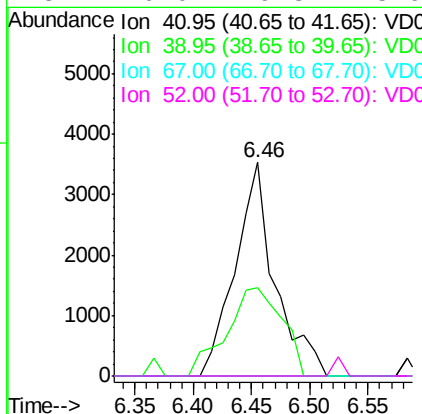
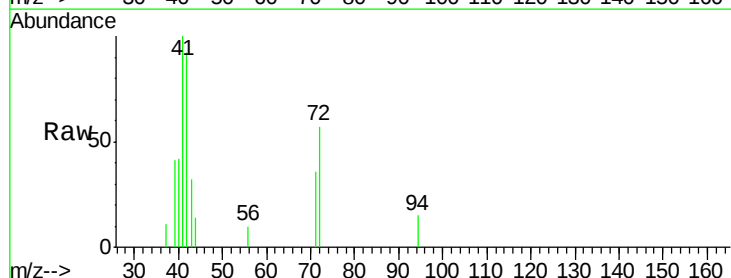
Instrument :
 MSVOA_D
 ClientSampleId :
 BERGEN-SP-2

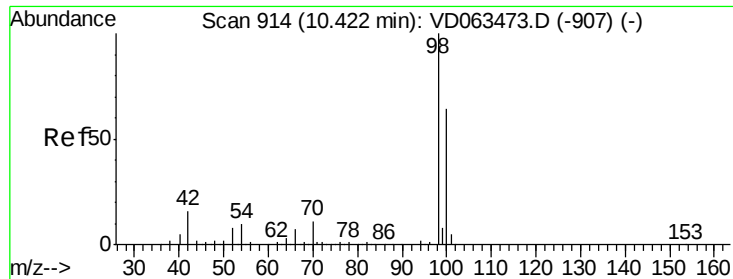
Tot Ion: 75 Resp: 2432
 Ion Ratio Lower Upper
 75 100
 110 32.1 17.6 52.8
 77 0.0 24.3 36.5#



#41
 Methacrylonitrile
 Concen: 24.068 ug/l
 RT: 6.46 min Scan# 511
 Delta R.T. -0.01 min
 Lab File: VD063486.D
 Acq: 12 Aug 2019 14:38

Tgt Ion: 41 Resp: 8346
 Ion Ratio Lower Upper
 41 100
 39 41.2 44.6 66.8#
 67 0.0 14.4 21.6#
 52 0.0 9.3 13.9#





#50

Toluene-d8

Concen: 19.326 ug/l

RT: 10.40 min Scan# 912

Delta R.T. -0.02 min

Lab File: VD063486.D

Acq: 12 Aug 2019 14:38

Instrument :

MSVOA_D

ClientSampleId :

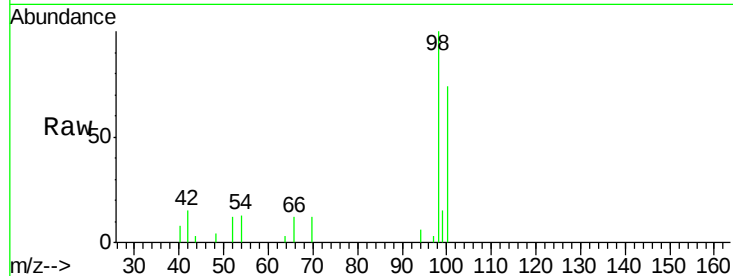
BERGEN-SP-2

Tot Ion: 98 Resp: 26605

Ion Ratio Lower Upper

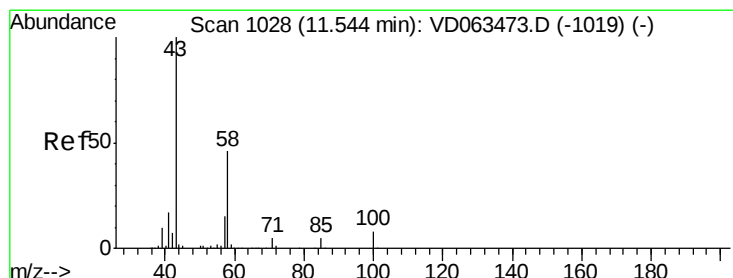
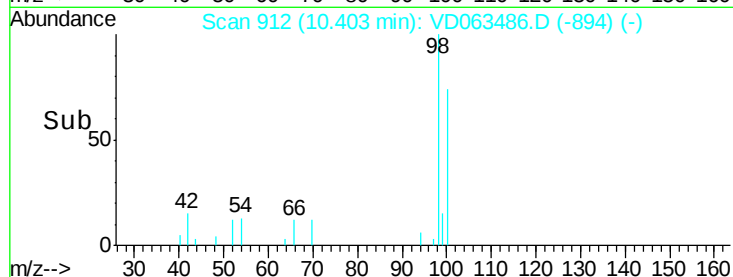
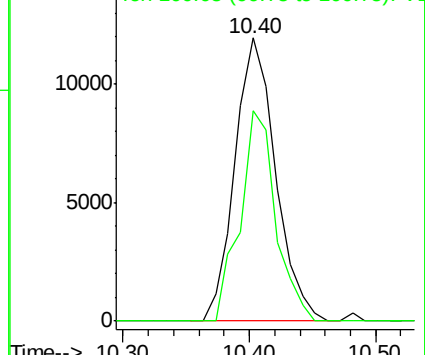
98 100

100 74.1 51.7 77.5



Abundance Ion 98.05 (97.75 to 98.75): VD063473.D (-907) (-)

Ion 100.05 (99.75 to 100.75): VD063473.D (-907) (-)



#59

2-Hexanone

Concen: 1.094 ug/l

RT: 11.53 min Scan# 1027

Delta R.T. -0.01 min

Lab File: VD063486.D

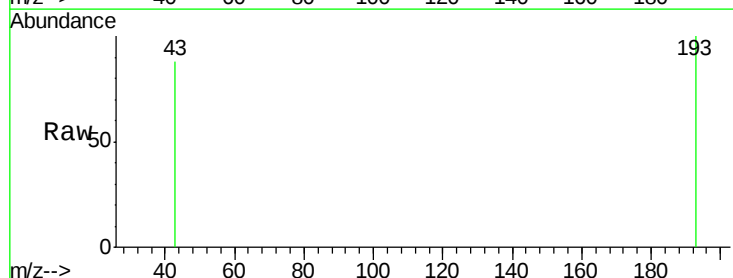
Acq: 12 Aug 2019 14:38

Tgt Ion: 43 Resp: 201

Ion Ratio Lower Upper

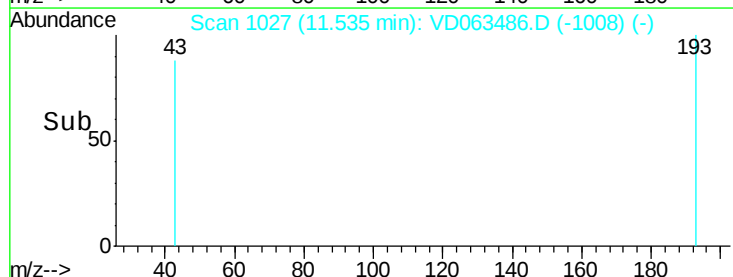
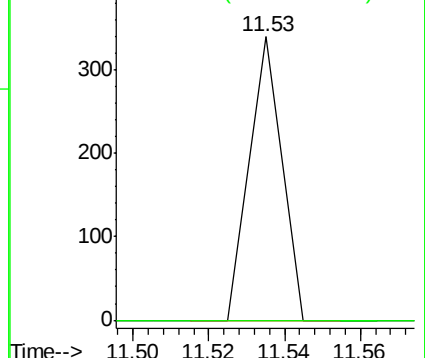
43 100

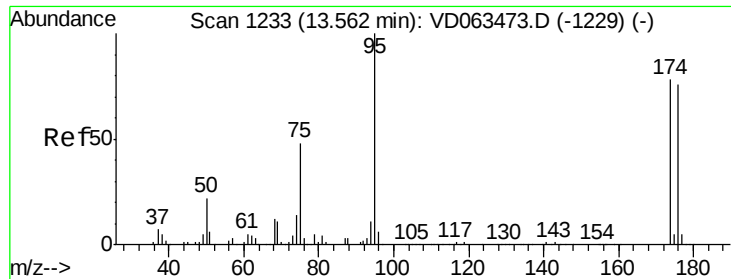
58 0.0 23.1 69.2#



Abundance Ion 42.95 (42.65 to 43.65): VD063473.D (-1019) (-)

Ion 57.95 (57.65 to 58.65): VD063473.D (-1019) (-)

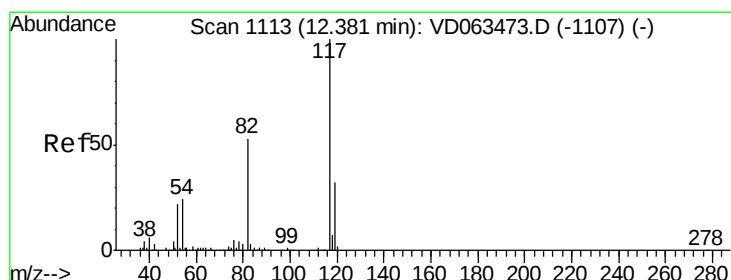
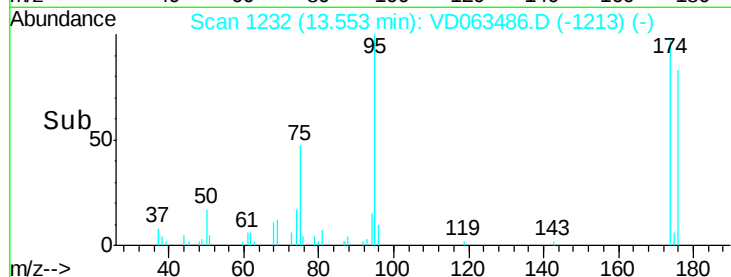
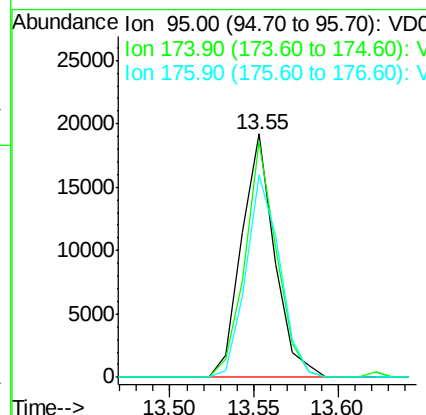
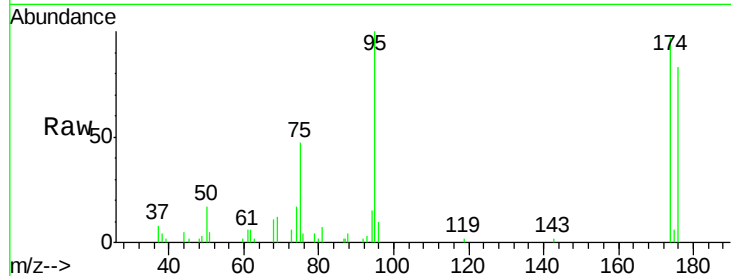




#62
4-Bromofluorobenzene
Concen: 41.869 ug/l
RT: 13.55 min Scan# 1232
Delta R.T. -0.01 min
Lab File: VD063486.D
Acq: 12 Aug 2019 14:38

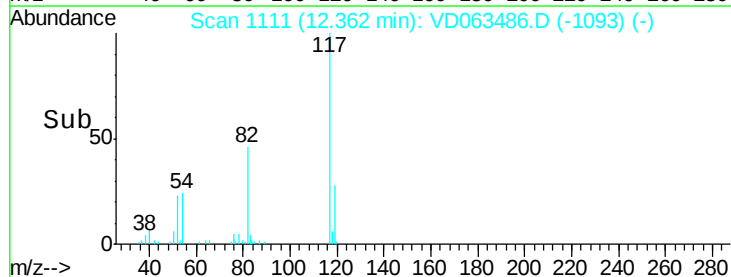
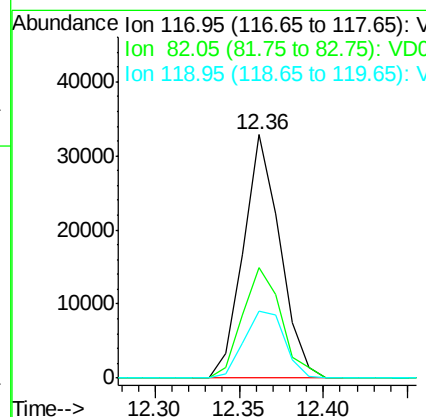
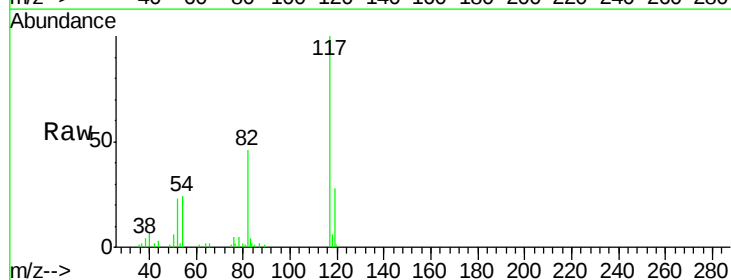
Instrument :
MSVOA_D
ClientSampleId :
BERGEN-SP-2

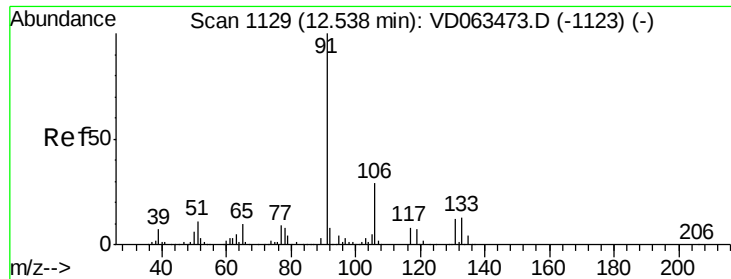
Tot Ion: 95 Resp: 26125
Ion Ratio Lower Upper
95 100
174 96.9 0.0 155.4
176 83.4 0.0 152.4



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 12.36 min Scan# 1111
Delta R.T. -0.02 min
Lab File: VD063486.D
Acq: 12 Aug 2019 14:38

Tgt Ion: 117 Resp: 49532
Ion Ratio Lower Upper
117 100
82 45.5 42.0 63.0
119 27.6 25.4 38.0

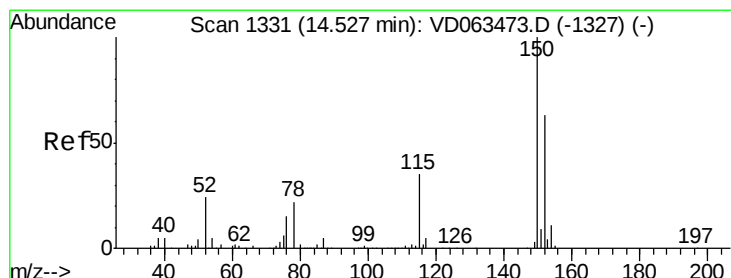
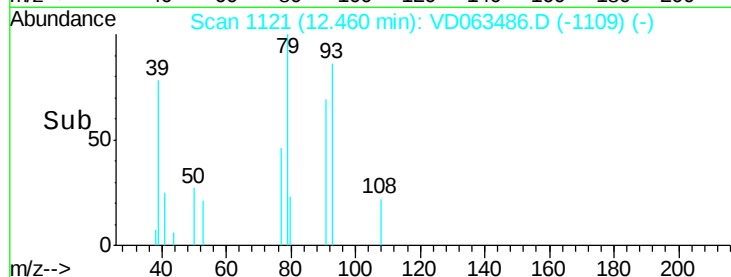
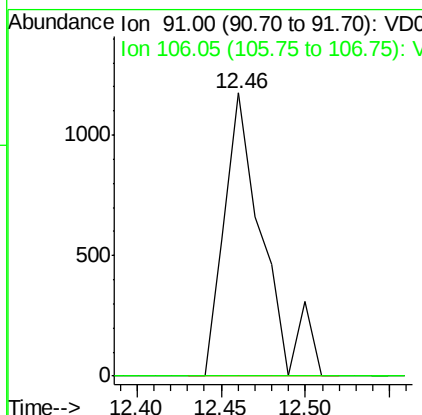
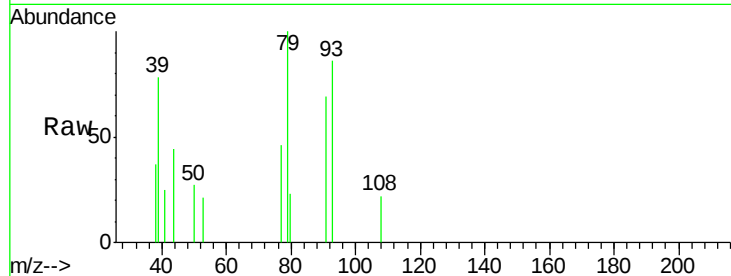




#67
Ethyl Benzene
Concen: 1.163 ug/l
RT: 12.46 min Scan# 1121
Delta R.T. -0.08 min
Lab File: VD063486.D
Acq: 12 Aug 2019 14:38

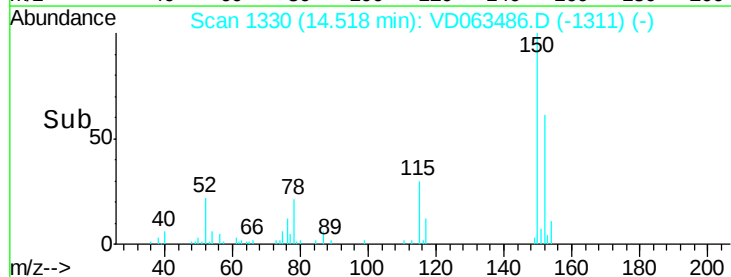
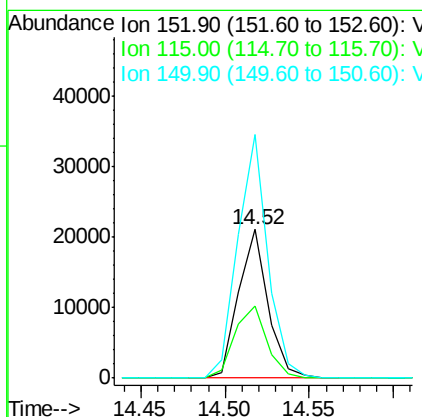
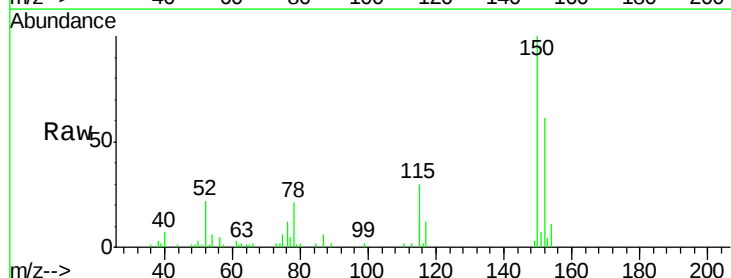
Instrument :
MSVOA_D
ClientSampleId :
BERGEN-SP-2

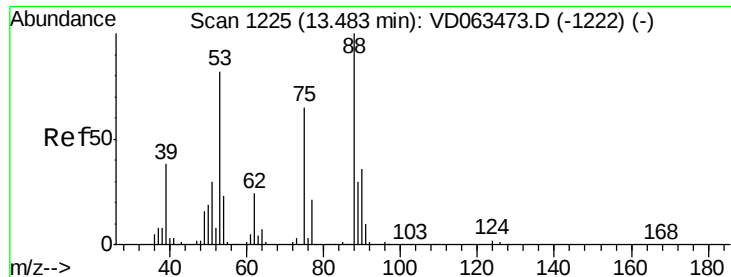
Tot Ion: 91 Resp: 1877
Ion Ratio Lower Upper
91 100
106 0.0 23.1 34.7#



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 14.52 min Scan# 1330
Delta R.T. -0.01 min
Lab File: VD063486.D
Acq: 12 Aug 2019 14:38

Tgt Ion: 152 Resp: 25576
Ion Ratio Lower Upper
152 100
115 48.8 30.9 92.7
150 164.0 0.0 318.6





#81

trans-1,4-Dichloro-2-butene

Concen: 140.482 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. 0.07 min

Lab File: VD063486.D

Acq: 12 Aug 2019 14:38

Instrument :

MSVOA_D

ClientSampleId :

BERGEN-SP-2

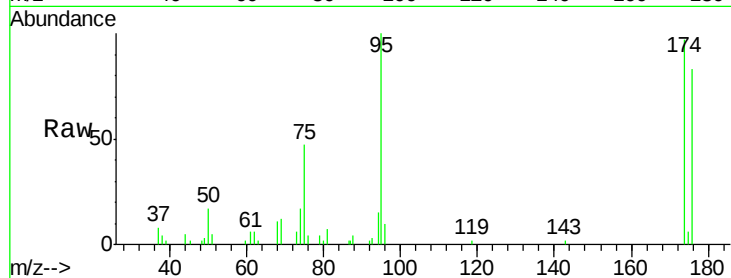
Tot Ion: 75 Resp: 11083

Ion Ratio Lower Upper

75 100

53 0.0 101.0 151.4#

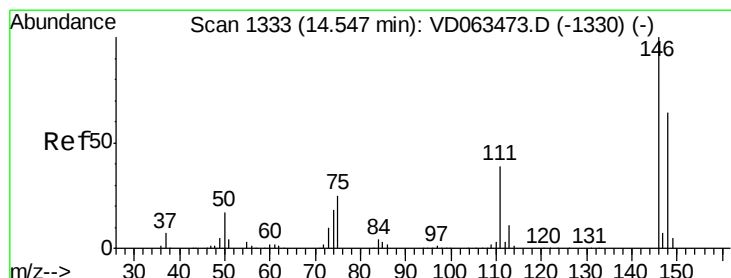
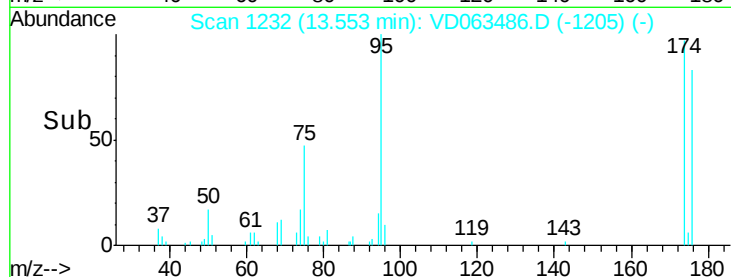
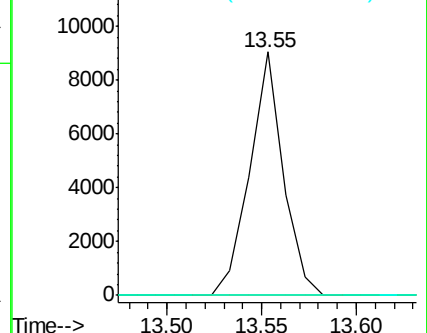
89 0.0 37.0 55.6#



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



#88

1,4-Dichlorobenzene

Concen: 1.571 ug/l

RT: 14.54 min Scan# 1332

Delta R.T. -0.01 min

Lab File: VD063486.D

Acq: 12 Aug 2019 14:38

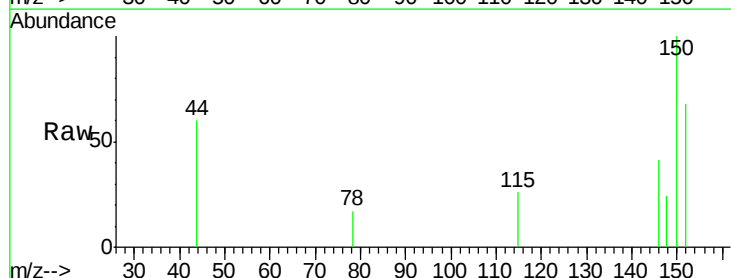
Tgt Ion: 146 Resp: 1212

Ion Ratio Lower Upper

146 100

111 0.0 19.7 59.0#

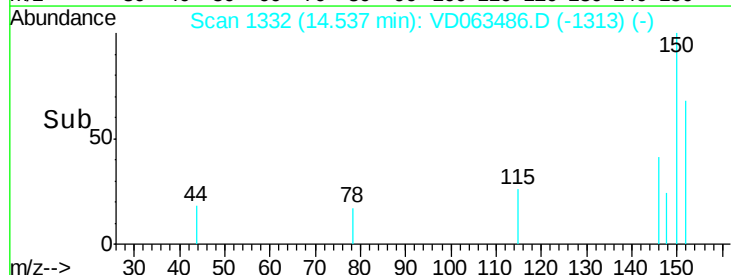
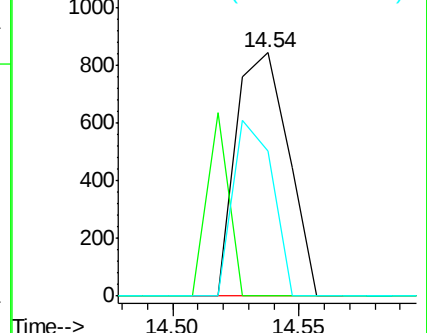
148 59.4 32.1 96.3

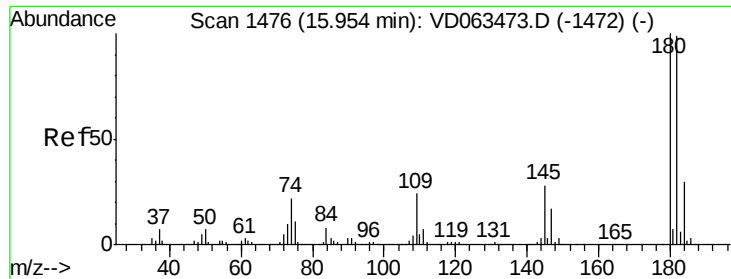


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 110.90 (110.60 to 111.60): V

Ion 147.90 (147.60 to 148.60): V

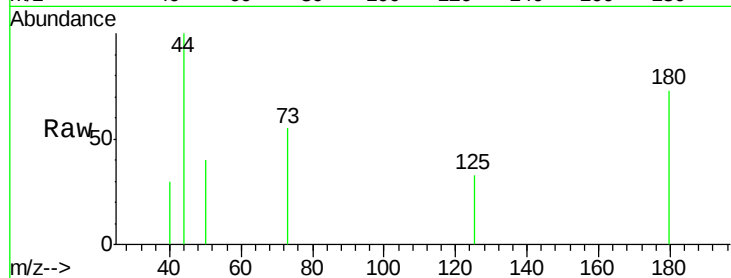




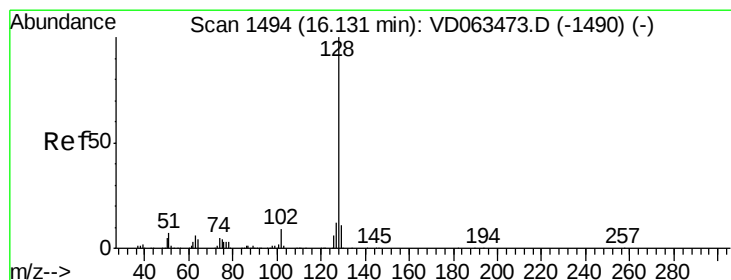
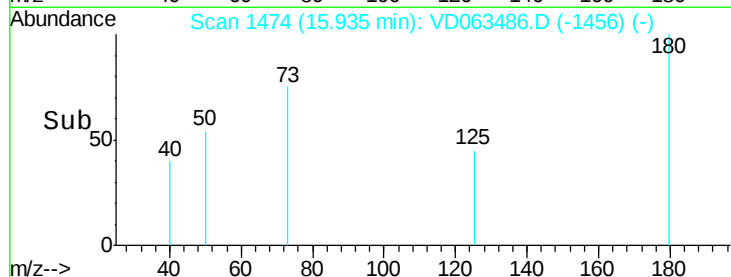
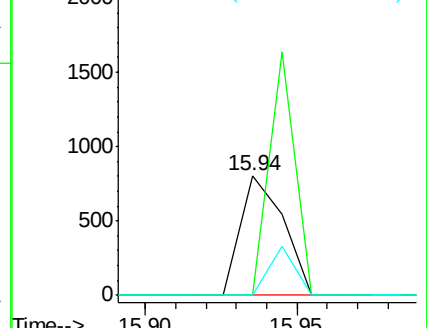
#93
 1,2,4-Trichlorobenzene
 Concen: 1.587 ug/l
 RT: 15.94 min Scan# 1474
 Delta R.T. -0.02 min
 Lab File: VD063486.D
 Acq: 12 Aug 2019 14:38

Instrument :
 MSVOA_D
 ClientSampleId :
 BERGEN-SP-2

Tot Ion:180 Resp: 797
 Ion Ratio Lower Upper
 180 100
 182 0.0 49.7 149.1#
 145 0.0 14.1 42.2#

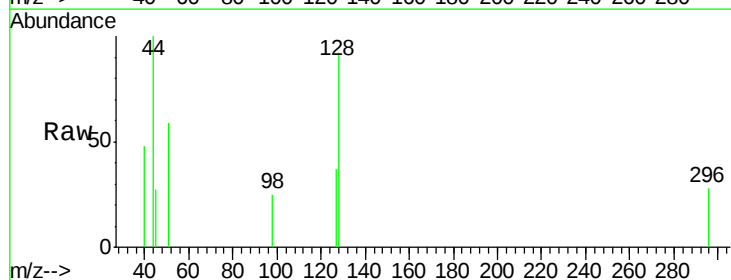


Abundance Ion 179.85 (179.55 to 180.55): V
 Ion 181.85 (181.55 to 182.55): V
 Ion 144.95 (144.65 to 145.65): V



#95
 Naphthalene
 Concen: 2.293 ug/l
 RT: 16.12 min Scan# 1493
 Delta R.T. -0.01 min
 Lab File: VD063486.D
 Acq: 12 Aug 2019 14:38

Tgt Ion:128 Resp: 1745
 Ion Ratio Lower Upper
 128 100
 127 40.4 9.4 14.0#
 129 0.0 8.5 12.7#



Abundance Ion 128.00 (127.70 to 128.70): V
 Ion 127.00 (126.70 to 127.70): V
 Ion 129.00 (128.70 to 129.70): V

