

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN122018\
 Data File : VN053063.D
 Acq On : 20 Dec 2018 18:08
 Operator : MD\SY
 Sample : PB115868ZHE#03
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 22 Sample Multiplier: 28

Instrument :
 MSVOA_N
 ClientSampleId :
 PB115868ZHE#03

Quant Time: Dec 21 00:19:37 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N121818W.M
 Quant Title : SW846 8260
 QLast Update : Tue Dec 18 13:03:37 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.67	168	1345880	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	2077270	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	1907443	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	778272	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	8.03	65	671992	49.20	ug/l	0.00
Spiked Amount			Recovery	=	98.40%	
35) Dibromofluoromethane	7.59	113	528254	55.67	ug/l	0.00
Spiked Amount			Recovery	=	111.34%	
50) Toluene-d8	10.09	98	2556898	50.19	ug/l	0.00
Spiked Amount			Recovery	=	100.38%	
62) 4-Bromofluorobenzene	12.40	95	870773	48.69	ug/l	0.00
Spiked Amount			Recovery	=	97.38%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
8) Diethyl Ether	3.42	74	2409	0.307	ug/l	69
16) Acetone	3.82	43	43896	16.392	ug/l	92
18) Methyl Acetate	4.34	43	4267	1.336	ug/l #	81
20) Methylene Chloride	4.56	84	43129	2.952	ug/l	96
25) 2-Butanone	6.84	43	3137	0.698	ug/l	95
29) Tetrahydrofuran	7.22	42	1738	0.518	ug/l #	53
31) Cyclohexane	7.66	56	20974	Below Cal	#	1
36) 1,1-Dichloropropene	7.67	75	86872	4.357	ug/l #	49
38) Carbon Tetrachloride	7.67	117	115591	6.325	ug/l #	16
43) Isopropyl Acetate	8.17	43	74858	2.483	ug/l #	84
48) Methyl methacrylate	9.18	41	23480	2.174	ug/l #	21
49) 1,4-Dioxane	9.27	88	459	3.360	ug/l #	1
51) 4-Methyl-2-Pentanone	10.02	43	28019	2.599	ug/l #	35
54) cis-1,3-Dichloropropene	9.90	75	188417	8.161	ug/l #	59
57) 1,3-Dichloropropane	10.76	76	33846	1.539	ug/l #	42
59) 2-Hexanone	10.76	43	445225	61.049	ug/l #	51
71) Bromoform	12.40	173	5327	0.501	ug/l #	1
74) N-amyl acetate	11.88	43	58532	3.462	ug/l #	52
76) 1,2,3-Trichloropropane	12.40	75	403650	30.810	ug/l #	100
80) 1,3,5-Trimethylbenzene	12.73	105	12234	0.246	ug/l	97
81) trans-1,4-Dichloro-2-buten	12.40	75	403650	99.303	ug/l #	12
93) 1,2,4-Trichlorobenzene	14.91	180	300	0.617	ug/l #	76
95) Naphthalene	15.14	128	1438	1.193	ug/l #	76
96) 1,2,3-Trichlorobenzene	15.32	180	130	0.518	ug/l #	51

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.00 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

Instrument :

MSVOA_N

ClientSampleId :

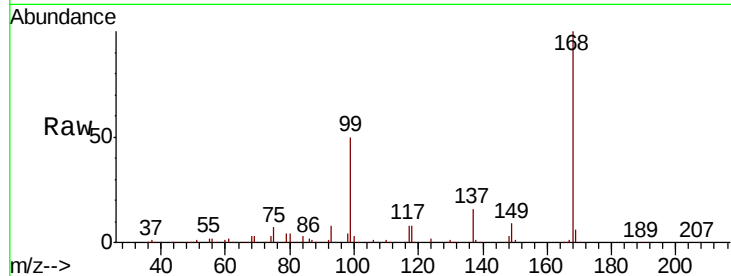
PB115868ZHE#03

Tot Ion:168 Resp: 1345880

Ion Ratio Lower Upper

168 100

99 49.7 40.2 60.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.67

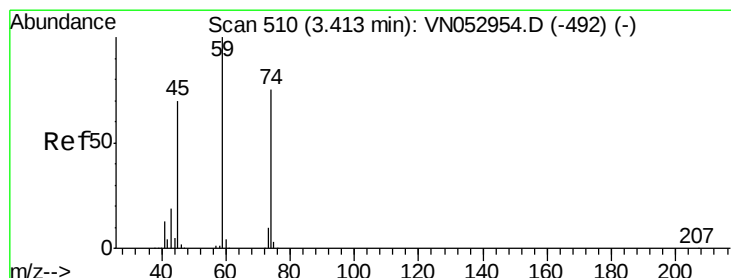
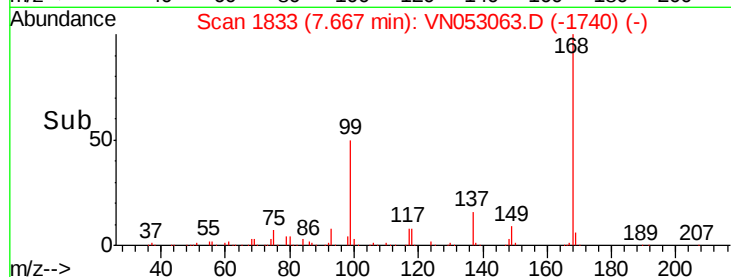
600000

400000

200000

0

Time--> 7.50 7.60 7.70 7.80



#8

Diethyl Ether

Concen: 0.307 ug/l

RT: 3.42 min Scan# 513

Delta R.T. 0.01 min

Lab File: VN053063.D

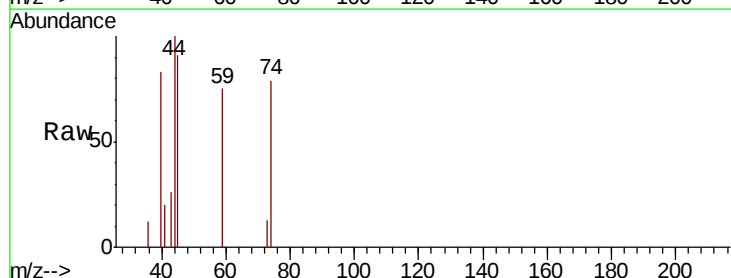
Acq: 20 Dec 2018 18:08

Tgt Ion: 74 Resp: 2409

Ion Ratio Lower Upper

74 100

45 129.7 49.4 148.0



Abundance Ion 74.00 (73.70 to 74.70): VN

Ion 45.00 (44.70 to 45.70): VN

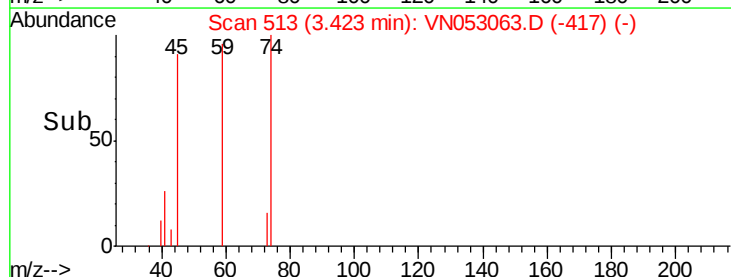
1500

1000

500

0

Time--> 3.35 3.40 3.45





#16

Acetone

Concen: 16.392 ug/l

RT: 3.82 min Scan# 636

Delta R.T. 0.01 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

Instrument :

MSVOA_N

ClientSampleId :

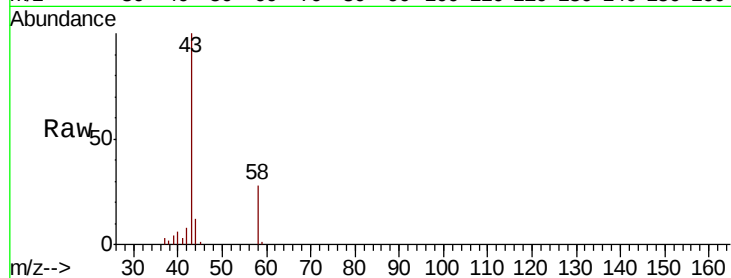
PB115868ZHE#03

Tot Ion: 43 Resp: 43896

Ion Ratio Lower Upper

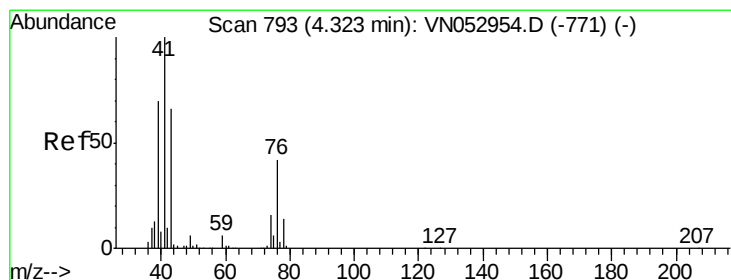
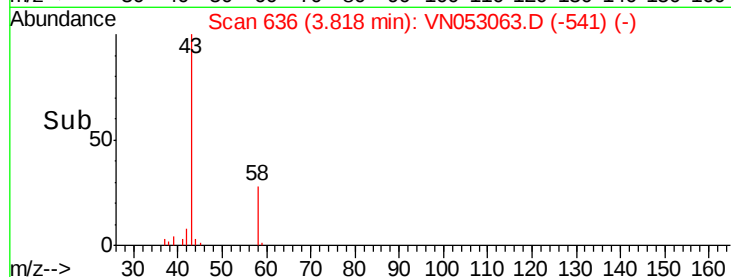
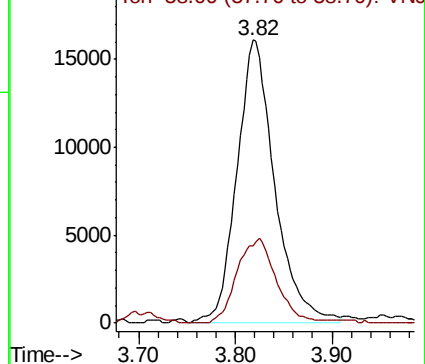
43 100

58 27.5 25.4 38.0



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#18

Methyl Acetate

Concen: 1.336 ug/l

RT: 4.34 min Scan# 798

Delta R.T. 0.02 min

Lab File: VN053063.D

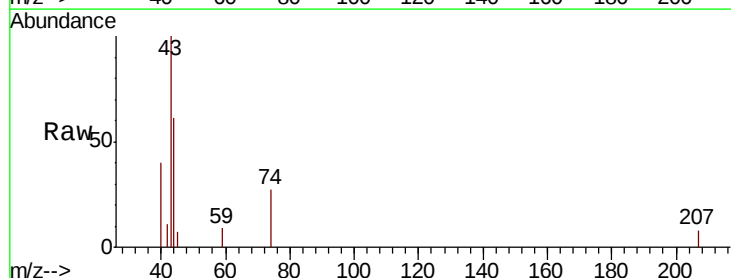
Acq: 20 Dec 2018 18:08

Tgt Ion: 43 Resp: 4267

Ion Ratio Lower Upper

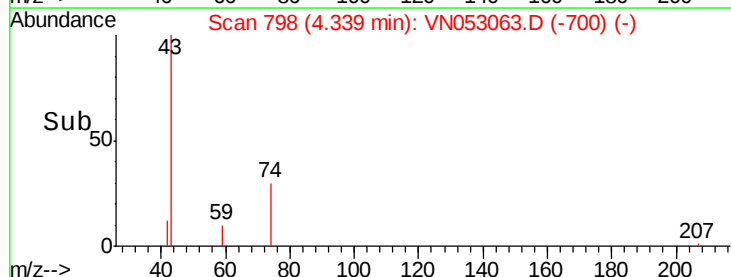
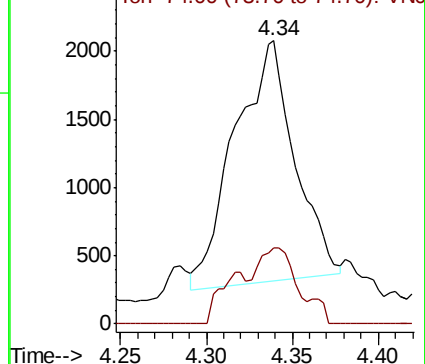
43 100

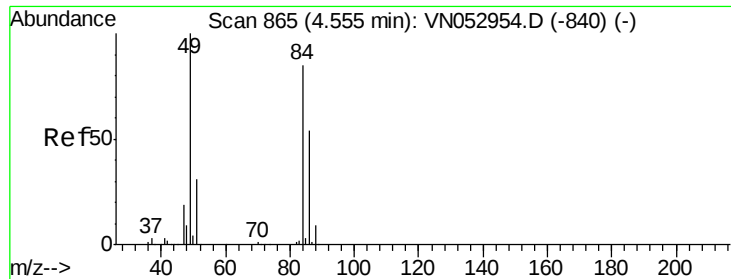
74 14.6 19.2 28.8#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 74.00 (73.70 to 74.70): VN0

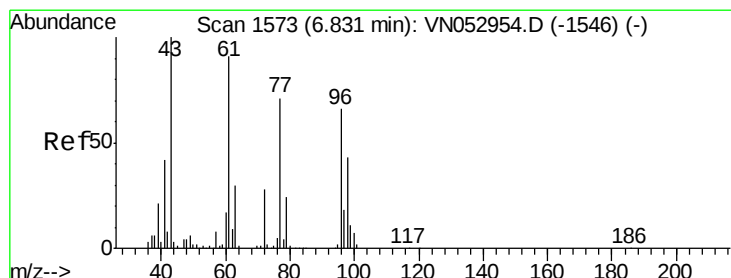
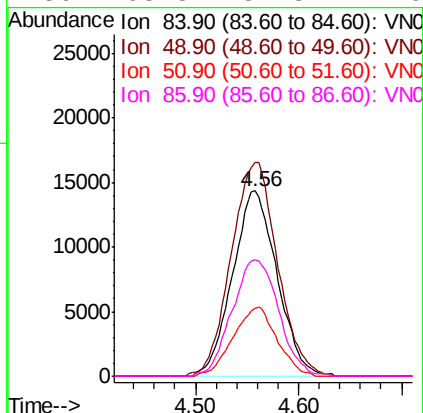
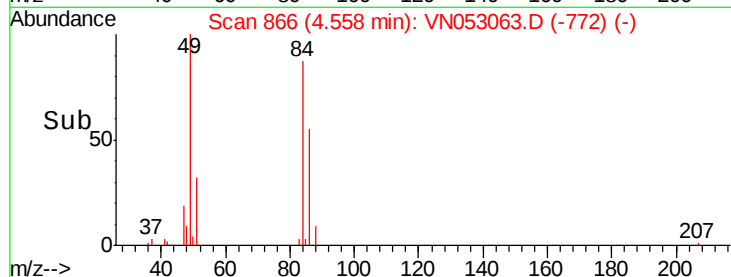
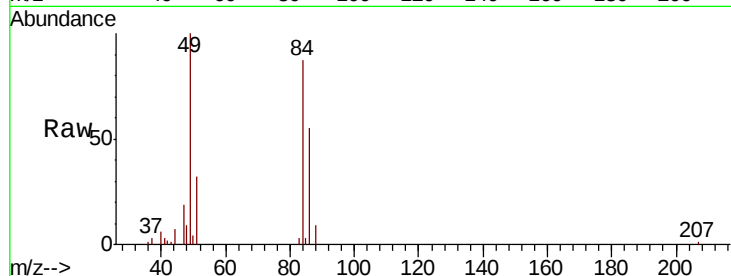




#20
Methvlene Chloride
Concen: 2.952 ug/l
RT: 4.56 min Scan# 866
Delta R.T. 0.00 min
Lab File: VN053063.D
Acq: 20 Dec 2018 18:08

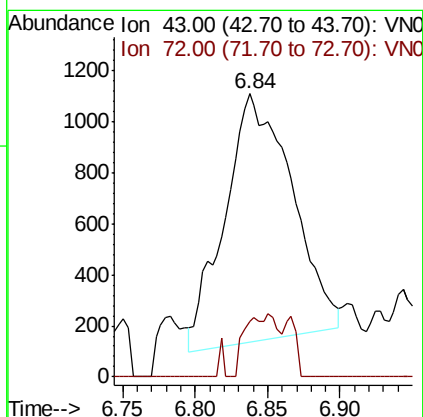
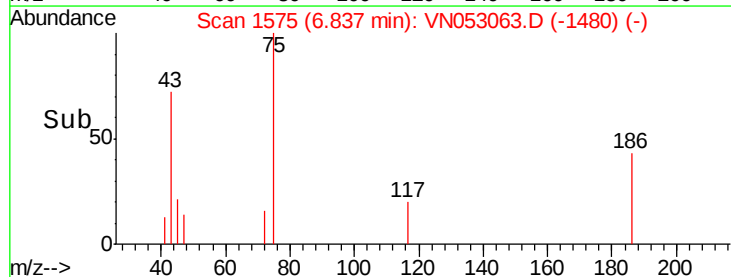
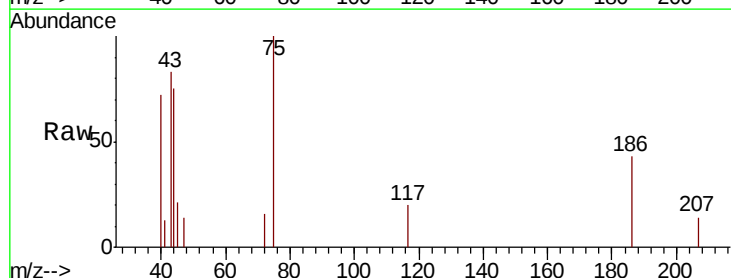
Instrument :
MSVOA_N
ClientSampleId :
PB115868ZHE#03

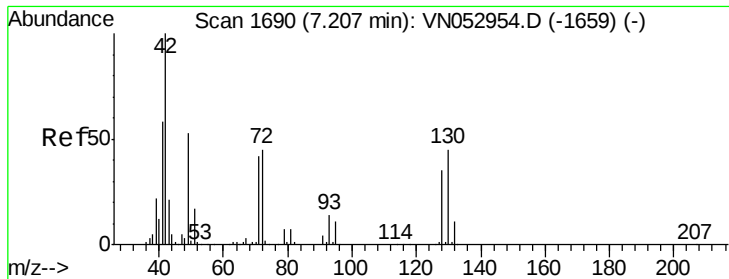
Tot Ion: 84 Resp: 43129
Ion Ratio Lower Upper
84 100
49 115.2 96.8 145.2
51 36.6 29.9 44.9
86 63.3 51.8 77.6



#25
2-Butanone
Concen: 0.698 ug/l
RT: 6.84 min Scan# 1575
Delta R.T. 0.01 min
Lab File: VN053063.D
Acq: 20 Dec 2018 18:08

Tgt Ion: 43 Resp: 3137
Ion Ratio Lower Upper
43 100
72 23.7 21.0 31.6





#29

Tetrahydrofuran

Concen: 0.518 ug/l

RT: 7.22 min Scan# 1695

Delta R.T. 0.02 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

Instrument :

MSVOA_N

ClientSampleId :

PB115868ZHE#03

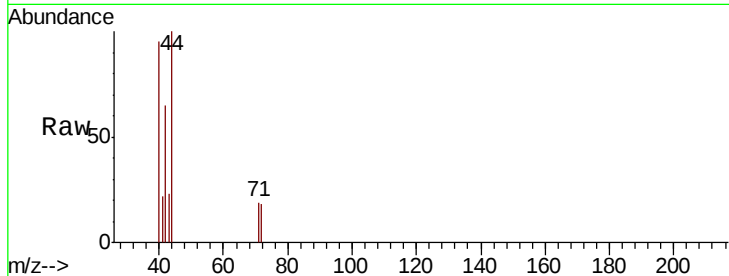
Tot Ion: 42 Resp: 1738

Ion Ratio Lower Upper

42 100

72 10.6 34.7 52.1#

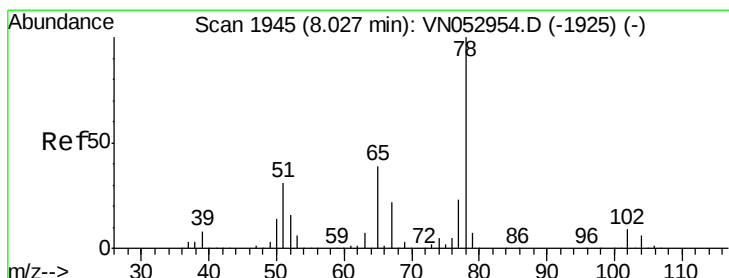
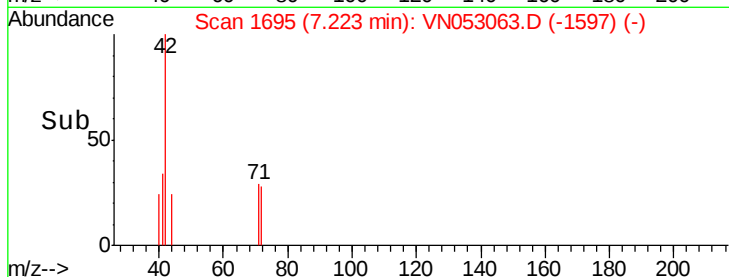
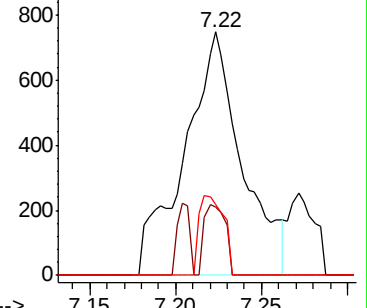
71 14.0 32.3 48.5#



Abundance Ion 42.00 (41.70 to 42.70): VN052954.D (-1659) (-)

Ion 72.00 (71.70 to 72.70): VN052954.D (-1659) (-)

Ion 71.00 (70.70 to 71.70): VN052954.D (-1659) (-)



#33

1,2-Dichloroethane-d4

Concen: N.D. ug/l

RT: 8.03 min Scan# 1945

Delta R.T. -0.00 min

Lab File: VN053063.D

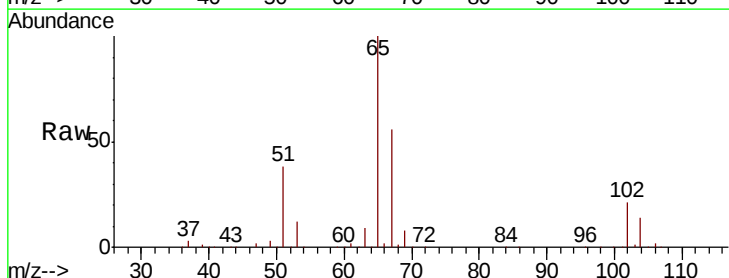
Acq: 20 Dec 2018 18:08

Tgt Ion: 65 Resp: 671992

Ion Ratio Lower Upper

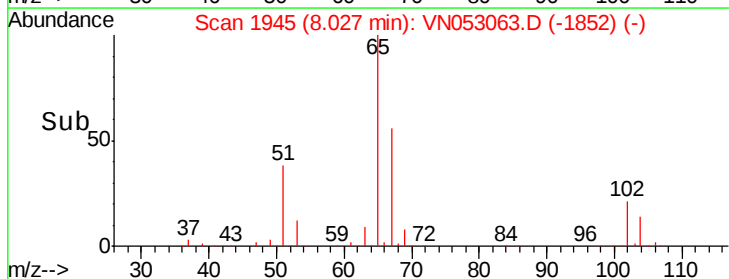
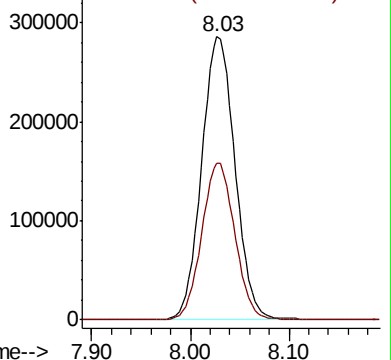
65 100

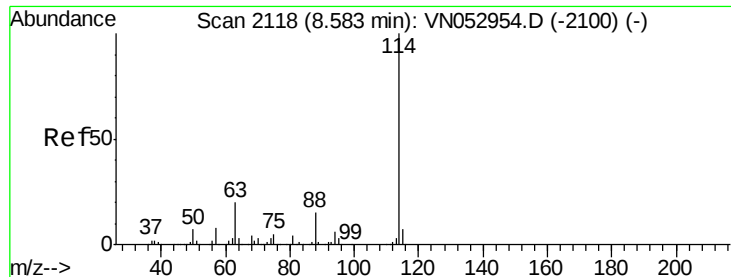
67 55.0 0.0 110.4



Abundance Ion 64.90 (64.60 to 65.60): VN052954.D (-1925) (-)

Ion 66.90 (66.60 to 67.60): VN052954.D (-1925) (-)





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.59 min Scan# 2119

Delta R.T. 0.00 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

Instrument :

MSVOA_N

ClientSampleId :

PB115868ZHE#03

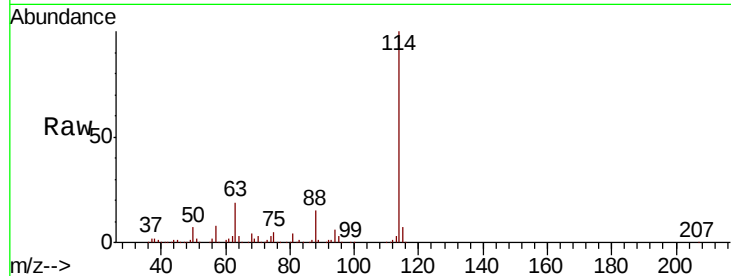
Tot Ion:114 Resp: 2077270

Ion Ratio Lower Upper

114 100

63 19.5 0.0 39.8

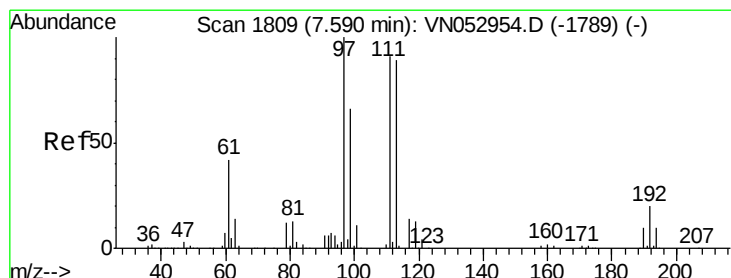
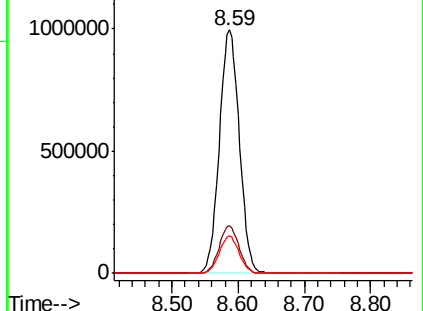
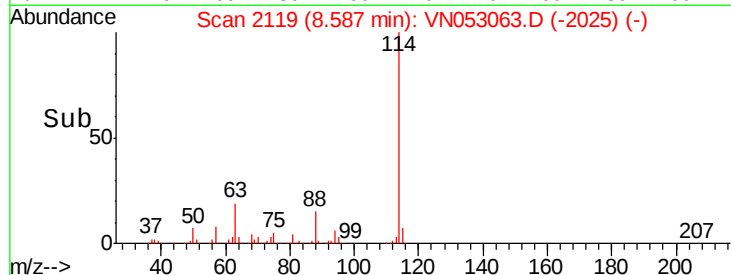
88 15.3 0.0 31.0



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VN

Ion 87.90 (87.60 to 88.60): VN



#35

Dibromofluoromethane

Concen: 50.000 ug/l

RT: 7.59 min Scan# 1810

Delta R.T. 0.00 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

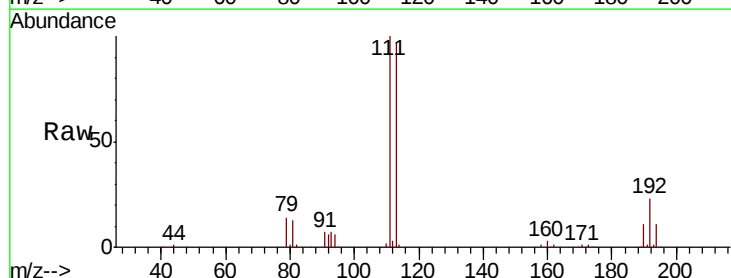
Tgt Ion:113 Resp: 528254

Ion Ratio Lower Upper

113 100

111 103.3 83.0 124.4

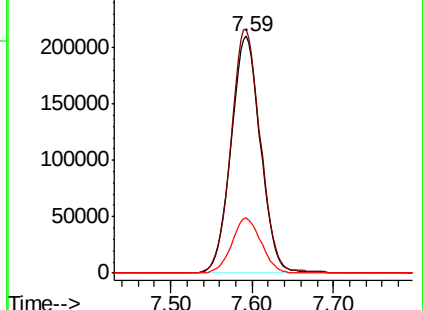
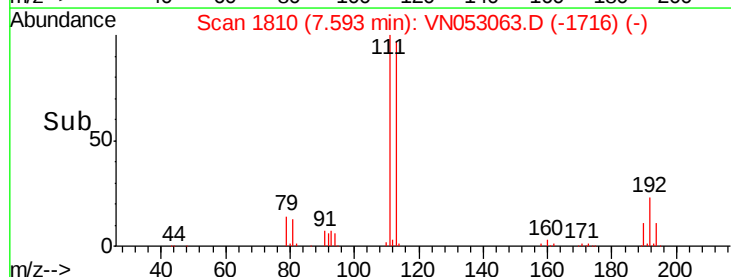
192 23.1 17.5 26.3

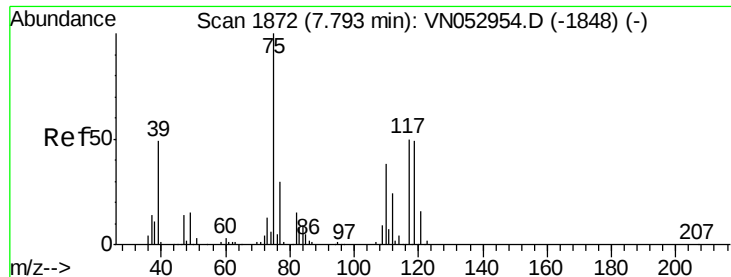


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

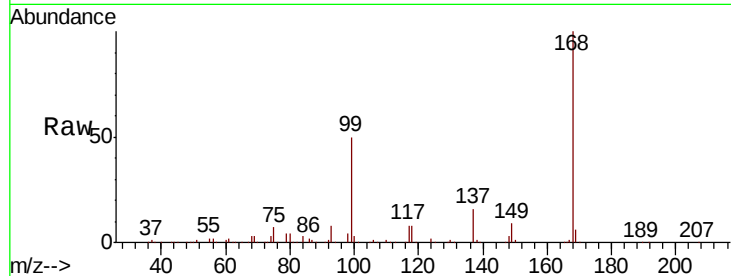




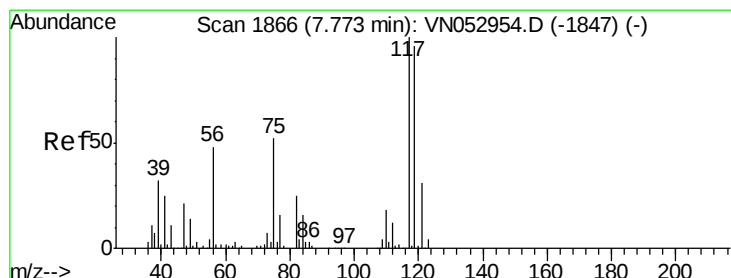
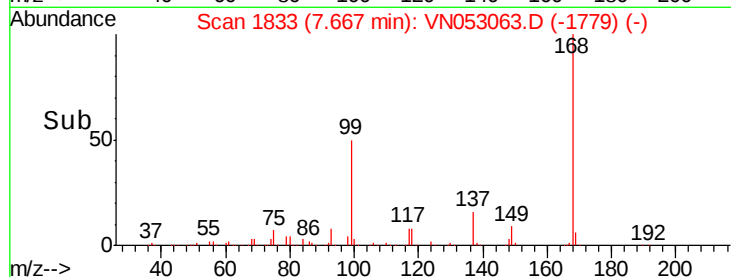
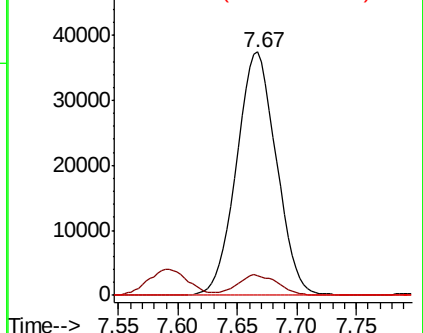
#36
 1,1-Dichloropropene
 Concen: 4.357 ug/l
 RT: 7.67 min Scan# 1833
 Delta R.T. -0.13 min
 Lab File: VN053063.D
 Acq: 20 Dec 2018 18:08

Instrument :
 MSVOA_N
 ClientSampleId :
 PB115868ZHE#03

Tot Ion	75	Resp	86872
Ion Ratio	Lower	Upper	
75	100		
110	8.6	18.2	54.6#
77	0.0	24.9	37.3#

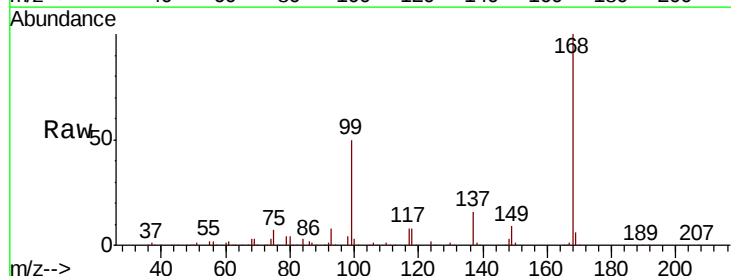


Abundance Ion 74.90 (74.60 to 75.60): VN0
 Ion 109.90 (109.60 to 110.60): V
 Ion 76.90 (76.60 to 77.60): VN0

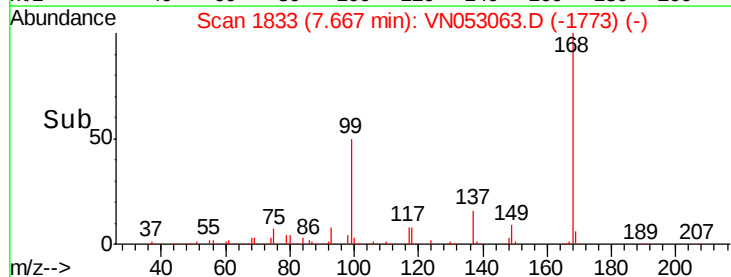
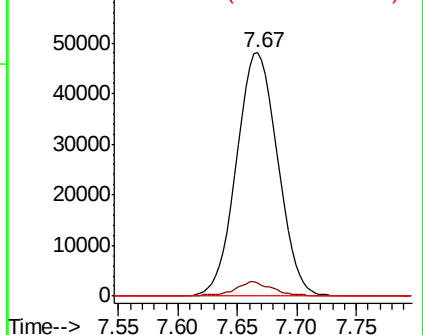


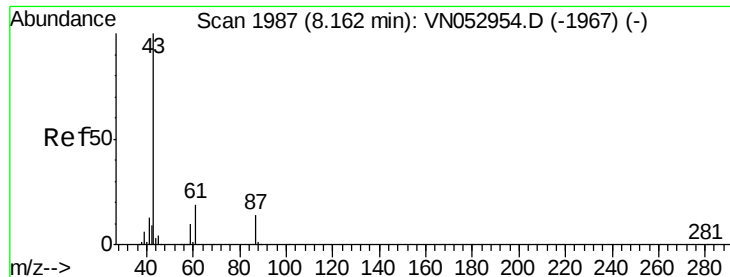
#38
 Carbon Tetrachloride
 Concen: 6.325 ug/l
 RT: 7.67 min Scan# 1833
 Delta R.T. -0.11 min
 Lab File: VN053063.D
 Acq: 20 Dec 2018 18:08

Tgt Ion	117	Resp	115591
Ion Ratio	Lower	Upper	
117	100		
119	5.2	77.1	115.7#
121	0.0	24.9	37.3#



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





#43

Isopropyl Acetate

Concen: 2.483 ug/l

RT: 8.17 min Scan# 1988

Delta R.T. 0.00 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

Instrument :

MSVOA_N

ClientSampleId :

PB115868ZHE#03

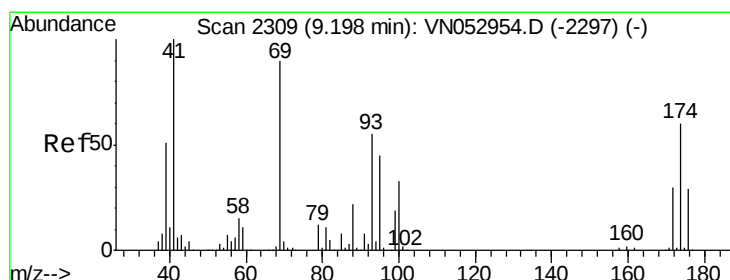
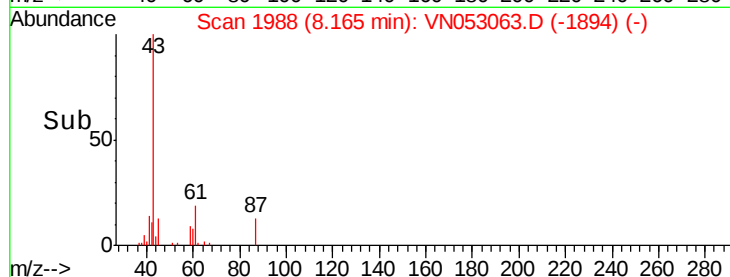
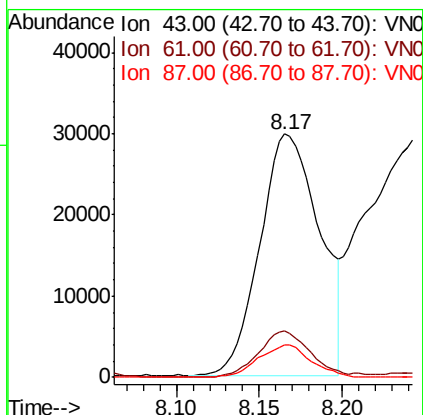
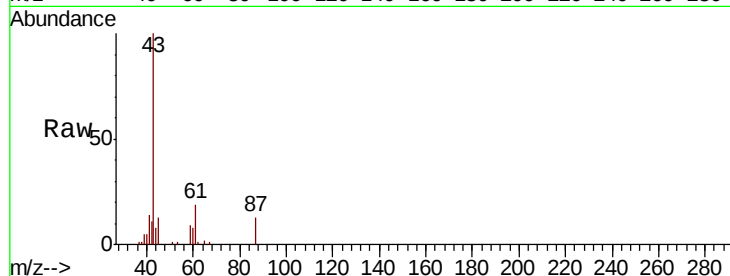
Tot Ion: 43 Resp: 74858

Ion Ratio Lower Upper

43 100

61 17.2 22.9 34.3#

87 11.6 10.6 15.8



#48

Methyl methacrylate

Concen: 2.174 ug/l

RT: 9.18 min Scan# 2303

Delta R.T. -0.02 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

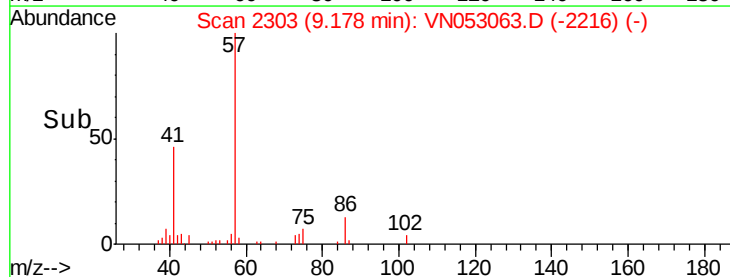
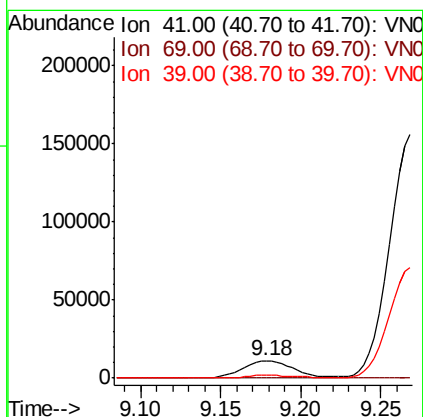
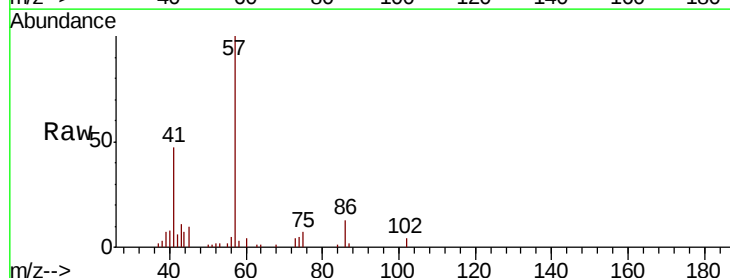
Tgt Ion: 41 Resp: 23480

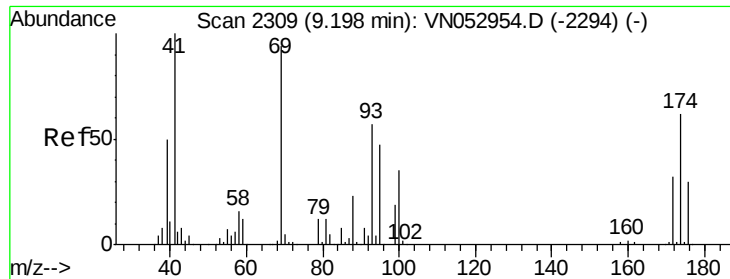
Ion Ratio Lower Upper

41 100

69 0.0 72.2 108.2#

39 17.0 41.9 62.9#





#49

1,4-Dioxane

Concen: 3.360 ug/l

RT: 9.27 min Scan# 2332

Delta R.T. 0.07 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

Instrument :

MSVOA_N

ClientSampleId :

PB115868ZHE#03

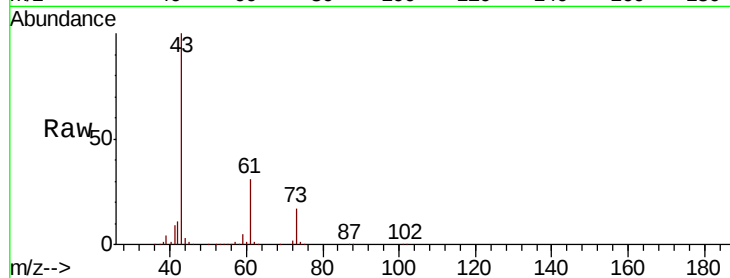
Tot Ion: 88 Resp: 459

Ion Ratio Lower Upper

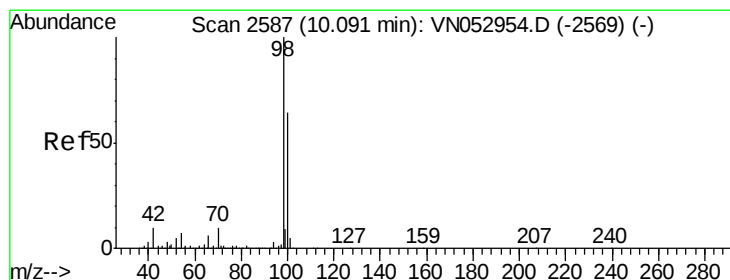
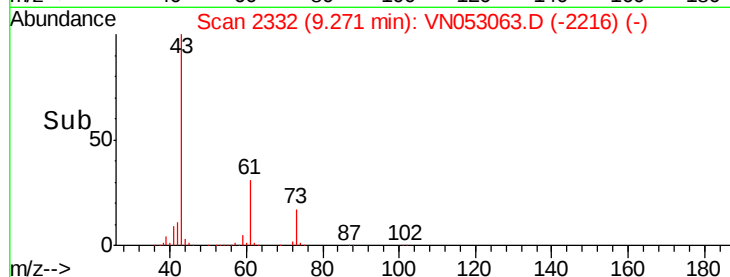
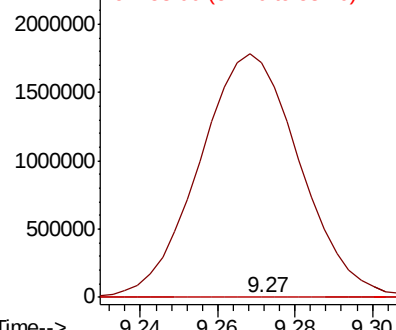
88 100

43 708075.4 26.6 40.0#

58 2744.7 58.4 87.6#



Abundance Ion 88.00 (87.70 to 88.70): VNO
Ion 43.00 (42.70 to 43.70): VNO
Ion 58.00 (57.70 to 58.70): VNO



#50

Toluene-d8

Concen: 3.360 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. -0.00 min

Lab File: VN053063.D

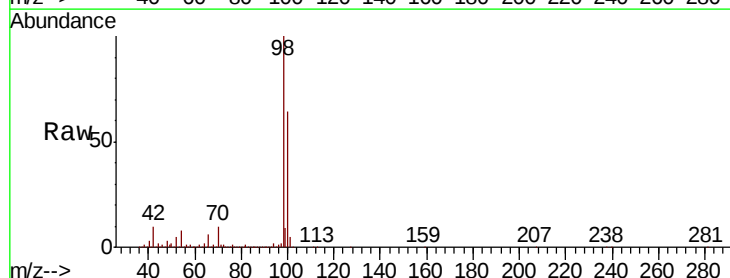
Acq: 20 Dec 2018 18:08

Tgt Ion: 98 Resp: 2556898

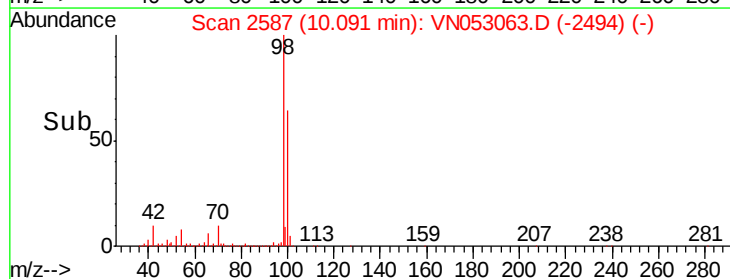
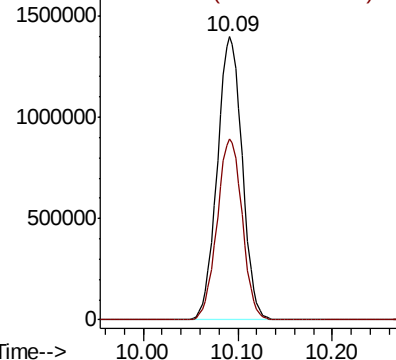
Ion Ratio Lower Upper

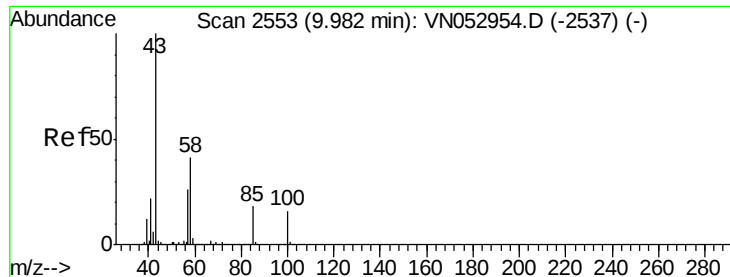
98 100

100 64.3 51.6 77.4



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





#51

4-Methyl-2-Pentanone

Concen: 2.599 ug/l

RT: 10.02 min Scan# 2566

Delta R.T. 0.04 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

Instrument :

MSVOA_N

ClientSampleId :

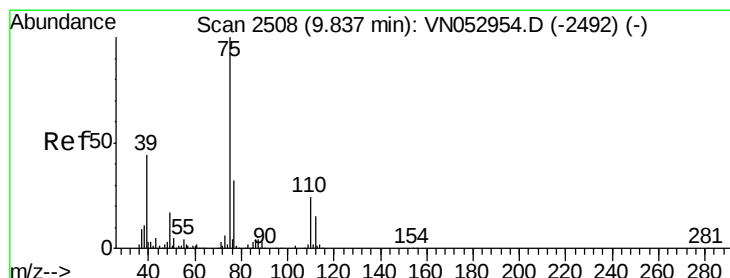
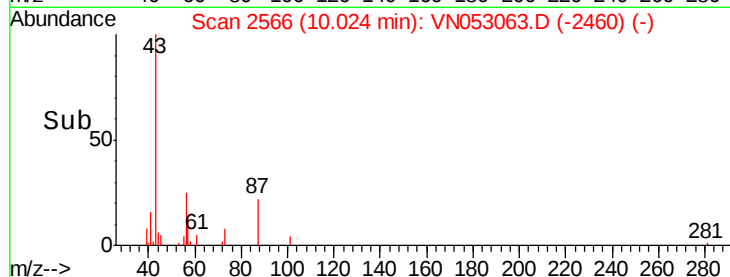
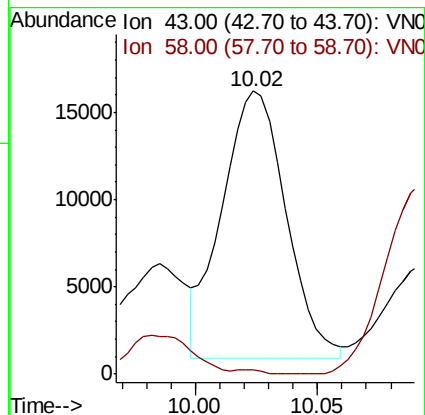
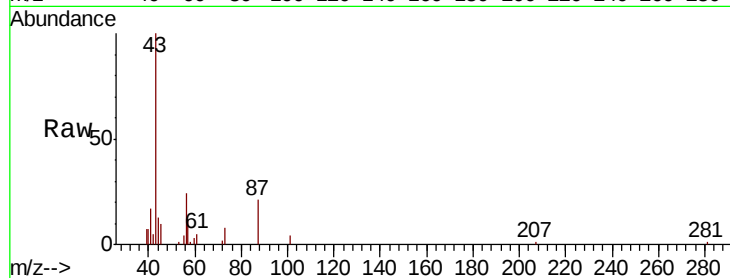
PB115868ZHE#03

Tot Ion: 43 Resp: 28019

Ion Ratio Lower Upper

43 100

58 0.0 32.2 48.4#



#54

cis-1,3-Dichloropropene

Concen: 8.161 ug/l

RT: 9.90 min Scan# 2529

Delta R.T. 0.07 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

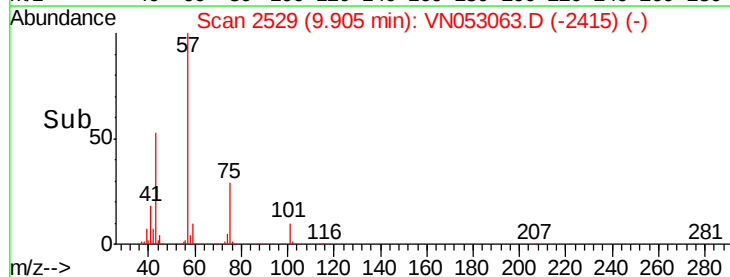
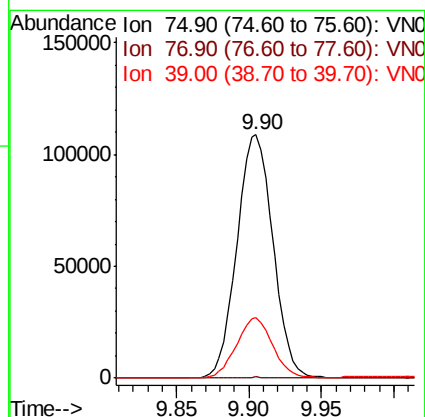
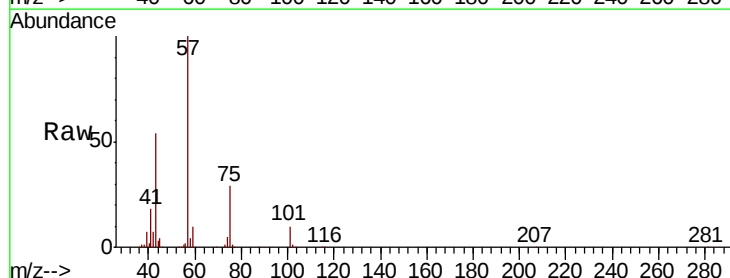
Tgt Ion: 75 Resp: 188417

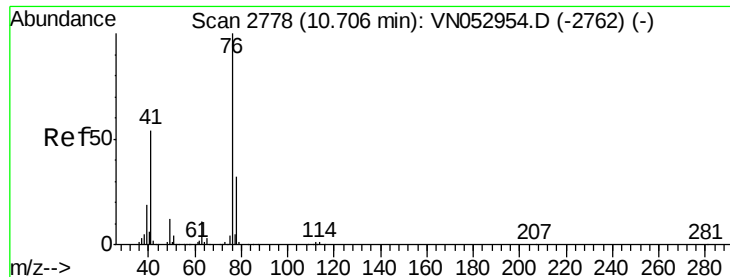
Ion Ratio Lower Upper

75 100

77 0.4 25.8 38.8#

39 24.7 34.8 52.2#

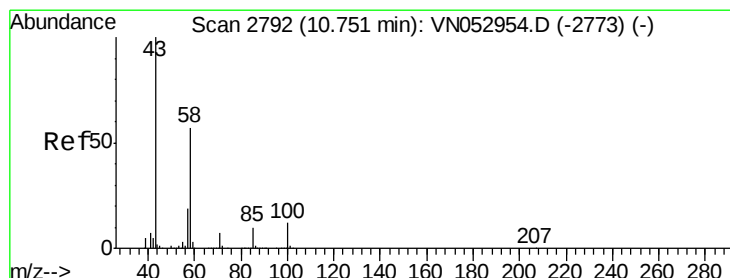
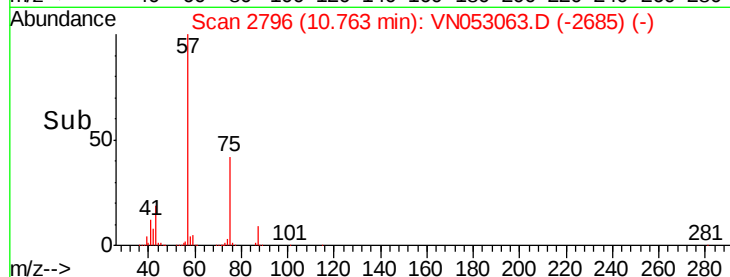
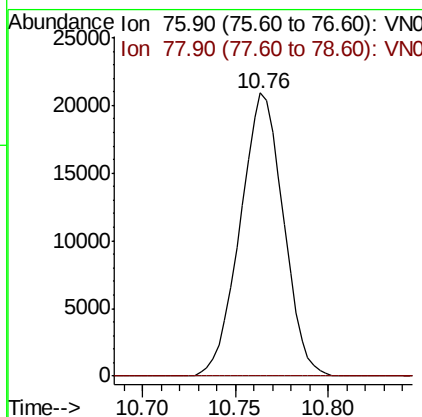
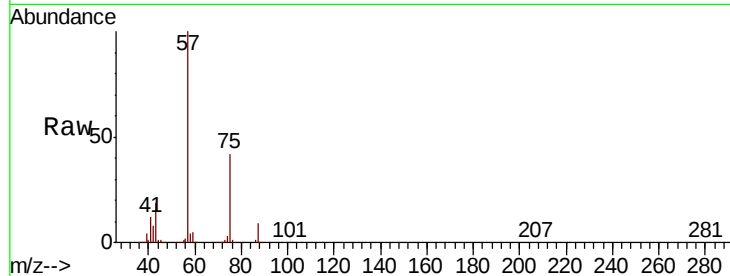




#57
 1,3-Dichloropropane
 Concen: 1.539 ug/l
 RT: 10.76 min Scan# 2796
 Delta R.T. 0.06 min
 Lab File: VN053063.D
 Acq: 20 Dec 2018 18:08

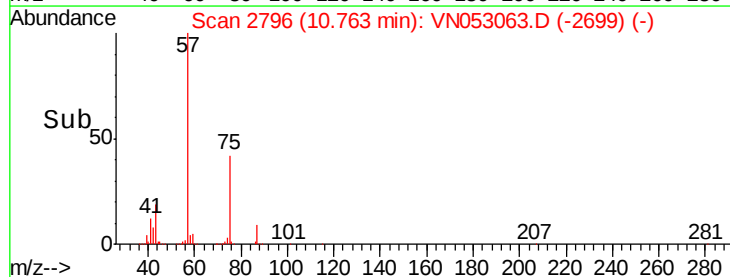
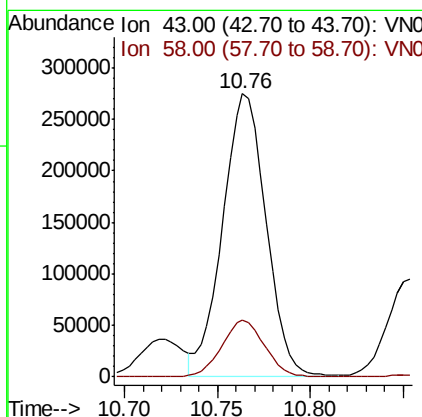
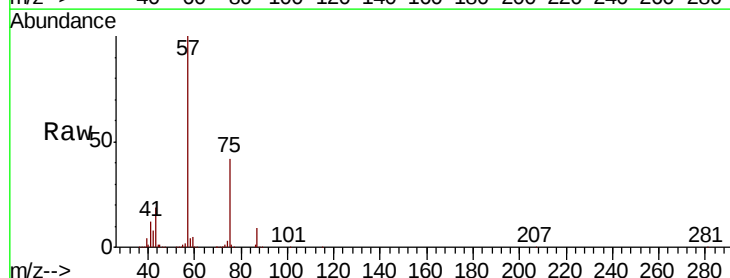
Instrument :
 MSVOA_N
 ClientSampleId :
 PB115868ZHE#03

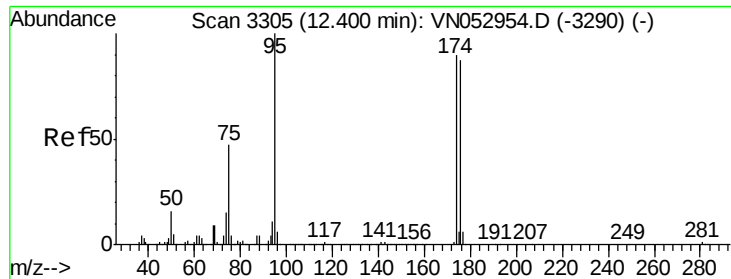
Tot Ion: 76 Resp: 33846
 Ion Ratio Lower Upper
 76 100
 78 0.0 25.8 38.8#



#59
 2-Hexanone
 Concen: 61.049 ug/l
 RT: 10.76 min Scan# 2796
 Delta R.T. 0.01 min
 Lab File: VN053063.D
 Acq: 20 Dec 2018 18:08

Tgt Ion: 43 Resp: 445225
 Ion Ratio Lower Upper
 43 100
 58 20.0 28.1 84.3#

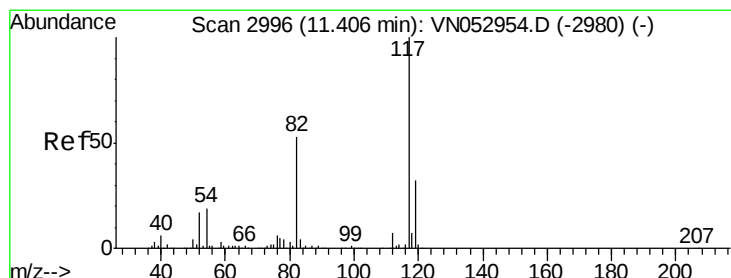
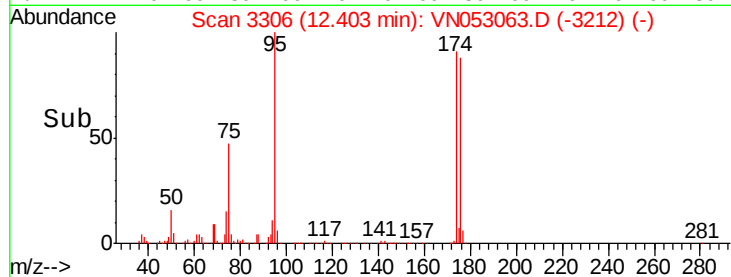
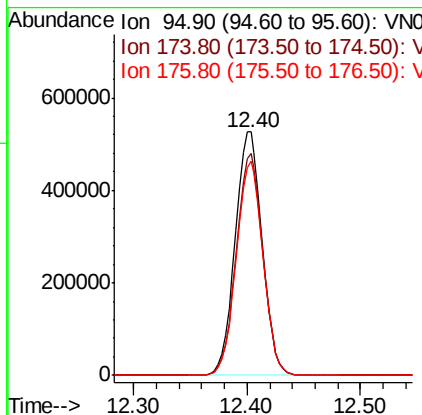
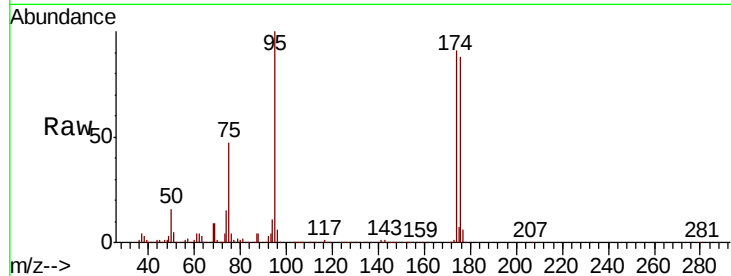




#62
4-Bromofluorobenzene
Concen: N.D. ug/l
RT: 12.40 min Scan# 3306
Delta R.T. 0.00 min
Lab File: VN053063.D
Acq: 20 Dec 2018 18:08

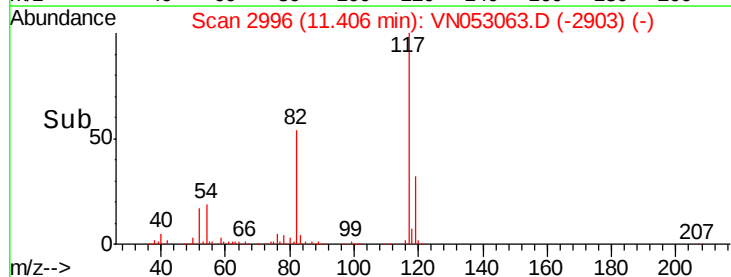
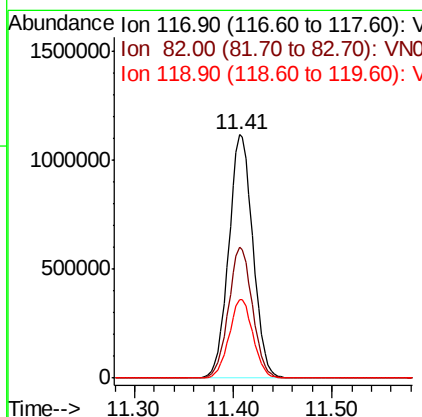
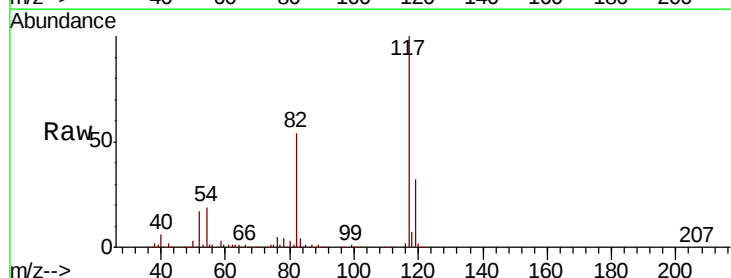
Instrument :
MSVOA_N
ClientSampleId :
PB115868ZHE#03

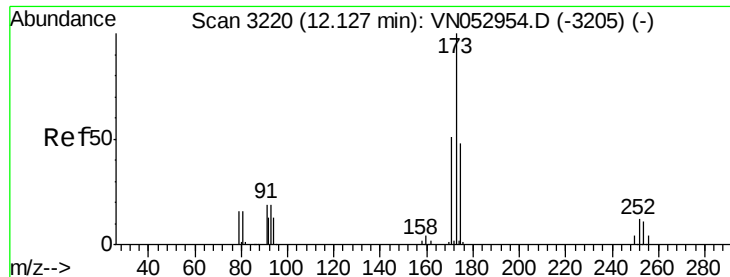
Tot Ion: 95 Resp: 870773
Ion Ratio Lower Upper
95 100
174 90.0 0.0 178.8
176 87.3 0.0 173.8



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. -0.00 min
Lab File: VN053063.D
Acq: 20 Dec 2018 18:08

Tgt Ion: 117 Resp: 1907443
Ion Ratio Lower Upper
117 100
82 53.7 42.8 64.2
119 32.3 25.5 38.3





#71

Bromoform

Concen: 0.501 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.27 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

Instrument :

MSVOA_N

ClientSampleId :

PB115868ZHE#03

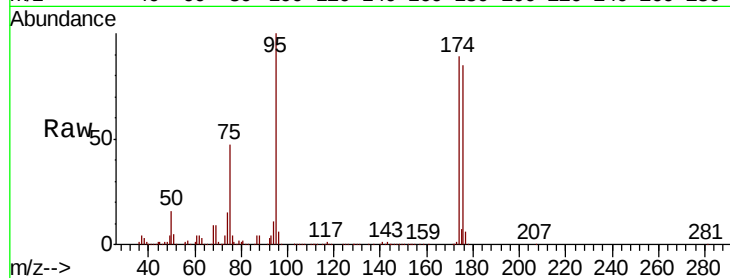
Tot Ion:173 Resp: 5327

Ion Ratio Lower Upper

173 100

175 942.8 24.3 72.9#

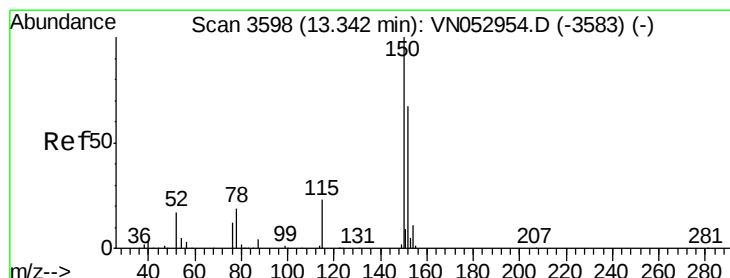
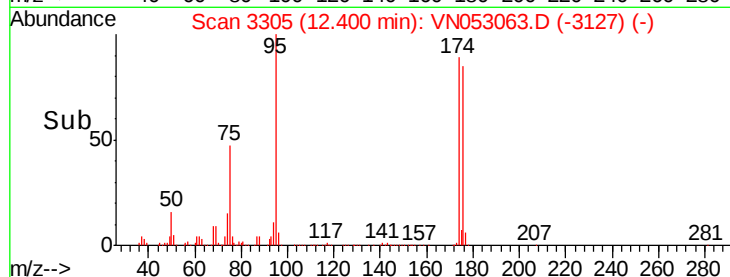
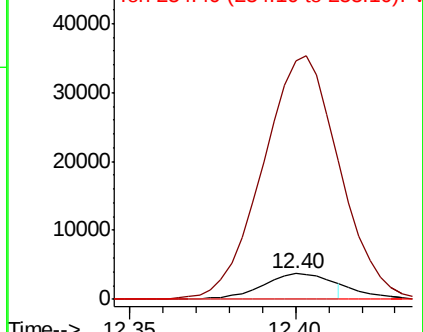
254 0.0 0.1 0.1#



Abundance Ion 172.70 (172.40 to 173.40): V

Ion 174.70 (174.40 to 175.40): V

Ion 254.40 (254.10 to 255.10): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3599

Delta R.T. 0.00 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

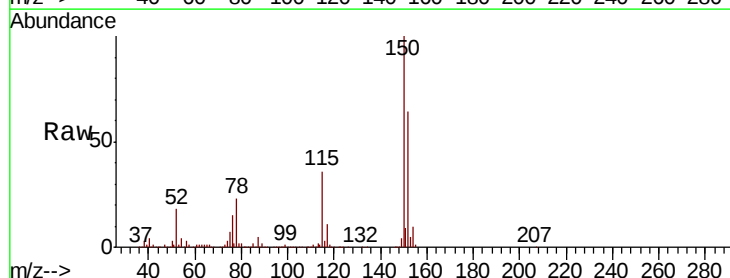
Tgt Ion:152 Resp: 778272

Ion Ratio Lower Upper

152 100

115 56.2 28.3 85.0

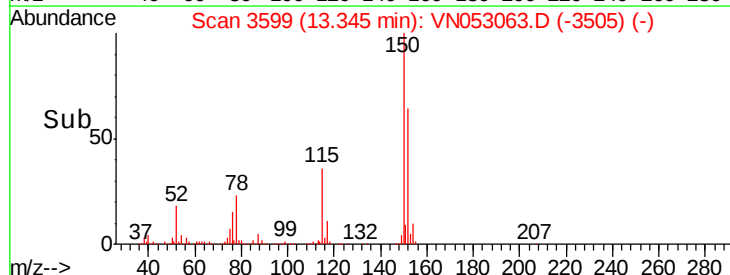
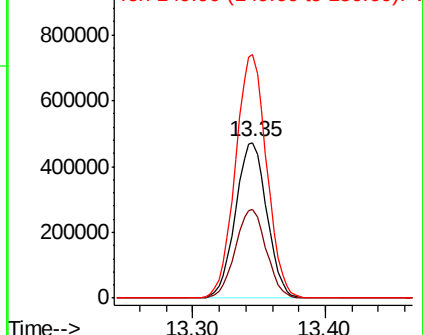
150 155.4 0.0 347.8

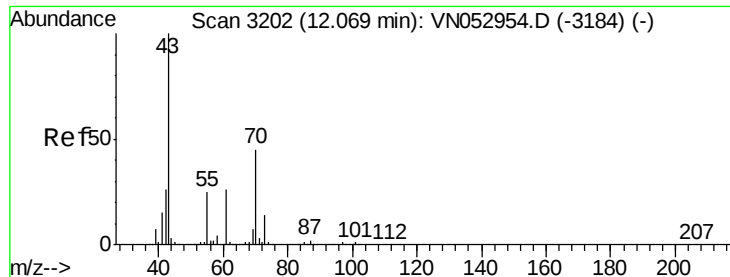


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-amvl acetate

Concen: 3.462 ug/l

RT: 11.88 min Scan# 3142

Delta R.T. -0.19 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

Instrument :

MSVOA_N

ClientSampleId :

PB115868ZHE#03

Tot Ion: 43 Resp: 58532

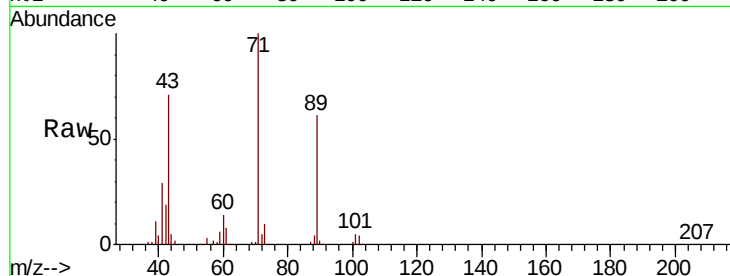
Ion Ratio Lower Upper

43 100

70 2.0 34.2 51.4#

55 4.5 20.3 30.5#

61 11.8 20.0 30.0#



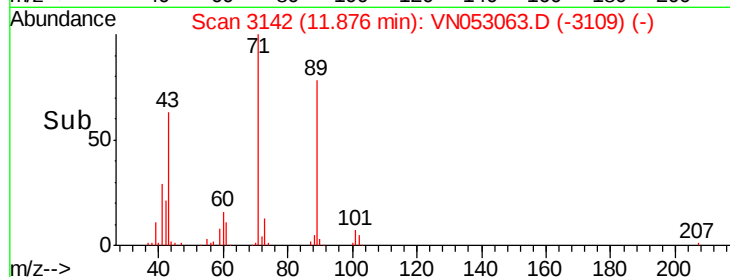
Abundance Ion 43.00 (42.70 to 43.70): VNO

Ion 70.00 (69.70 to 70.70): VNO

Ion 55.00 (54.70 to 55.70): VNO

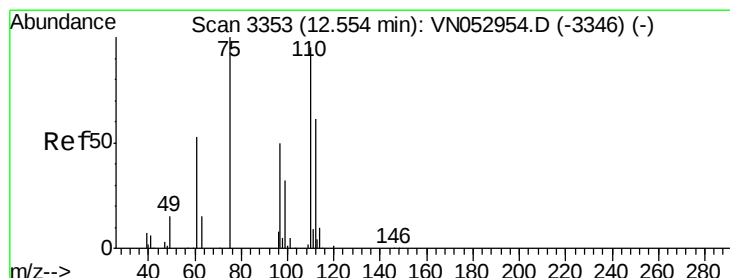
Ion 61.00 (60.70 to 61.70): VNO

Time-->



Abundance

Time-->



#76

1,2,3-Trichloropropane

Concen: 30.810 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN053063.D

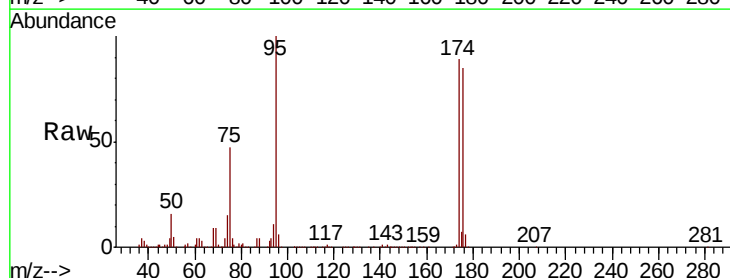
Acq: 20 Dec 2018 18:08

Tgt Ion: 75 Resp: 403650

Ion Ratio Lower Upper

75 100

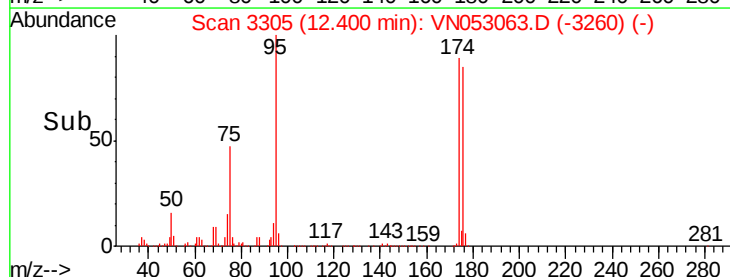
77 1.2 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VNO

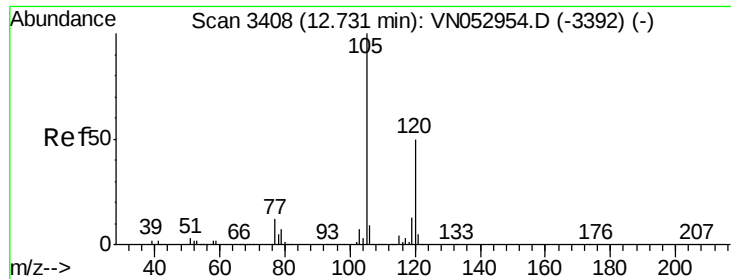
Ion 77.00 (76.70 to 77.70): VNO

Time-->



Abundance

Time-->



#80

1,3,5-Trimethylbenzene

Concen: 0.246 ug/l

RT: 12.73 min Scan# 3408

Delta R.T. -0.00 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

Instrument :

MSVOA_N

ClientSampleId :

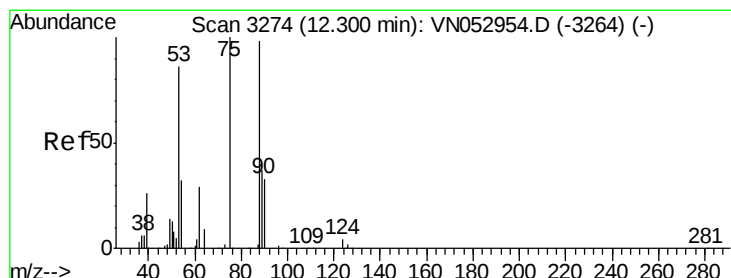
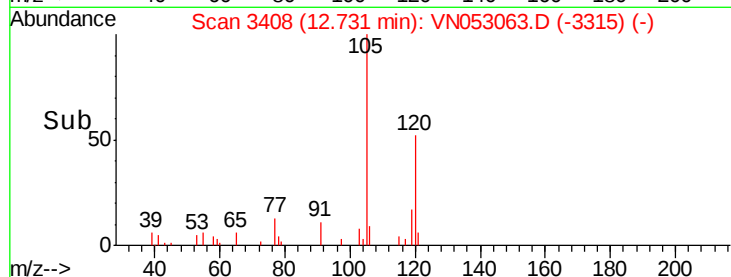
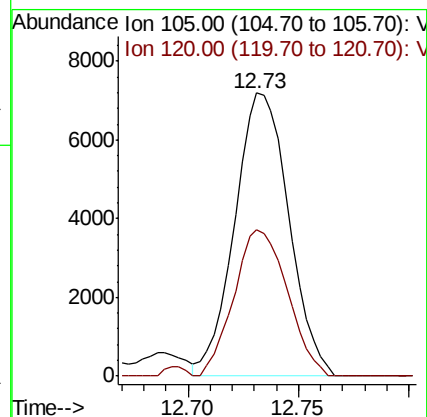
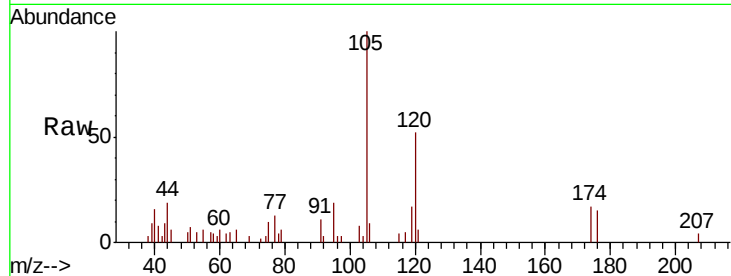
PB115868ZHE#03

Tot Ion:105 Resp: 12234

Ion Ratio Lower Upper

105 100

120 51.0 24.4 73.2



#81

trans-1,4-Dichloro-2-butene

Concen: 99.303 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN053063.D

Acq: 20 Dec 2018 18:08

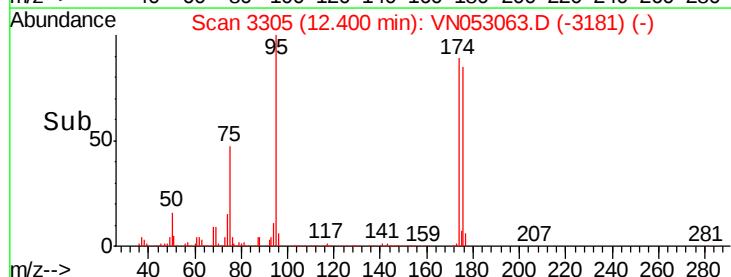
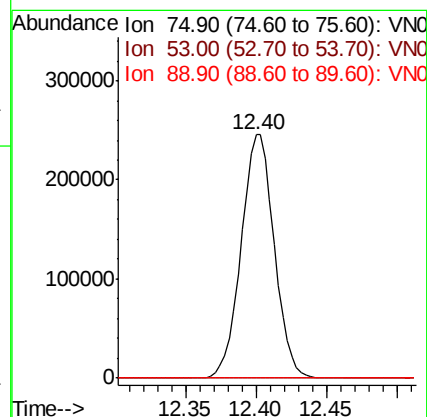
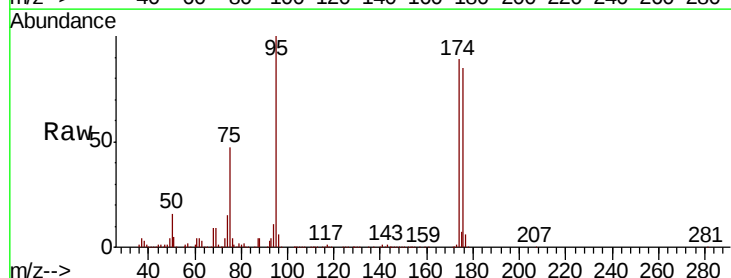
Tgt Ion: 75 Resp: 403650

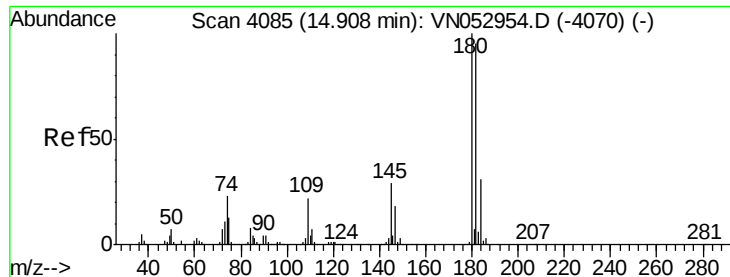
Ion Ratio Lower Upper

75 100

53 0.0 74.7 112.1#

89 0.0 36.1 54.1#

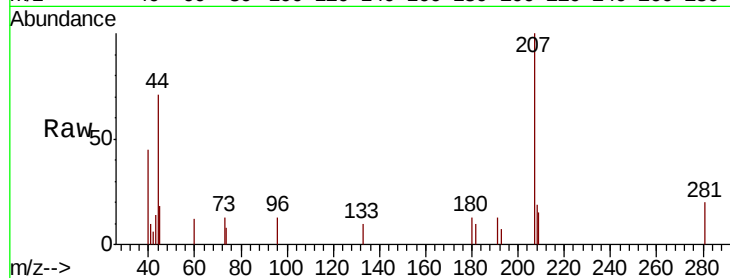




#93
 1,2,4-Trichlorobenzene
 Concen: 0.617 ug/l
 RT: 14.91 min Scan# 4085
 Delta R.T. 0.00 min
 Lab File: VN053063.D
 Acq: 20 Dec 2018 18:08

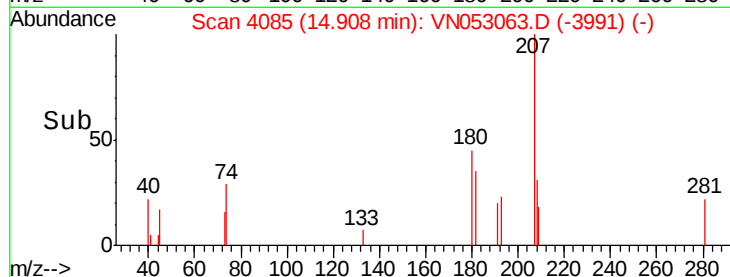
Instrument :
 MSVOA_N
 ClientSampleId :
 PB115868ZHE#03

Tot Ion:180 Resp: 300
 Ion Ratio Lower Upper
 180 100
 182 110.0 47.8 143.3
 145 0.0 14.2 42.6#

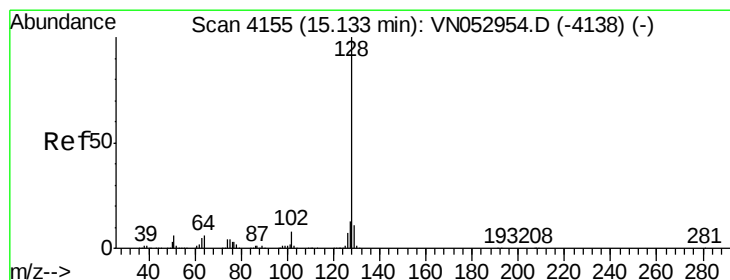


Abundance Ion 179.80 (179.50 to 180.50): V
 Ion 181.80 (181.50 to 182.50): V
 Ion 144.80 (144.50 to 145.50): V

14.91

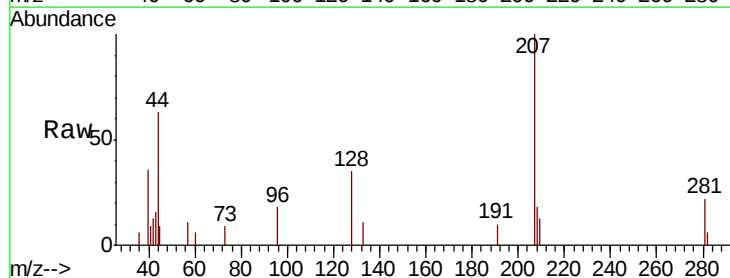


Time-->



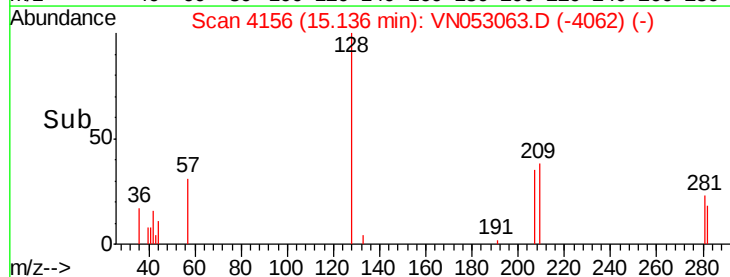
#95
 Naphthalene
 Concen: 1.193 ug/l
 RT: 15.14 min Scan# 4156
 Delta R.T. 0.00 min
 Lab File: VN053063.D
 Acq: 20 Dec 2018 18:08

Tgt Ion:128 Resp: 1438
 Ion Ratio Lower Upper
 128 100
 127 0.0 10.2 15.4#
 129 5.2 8.6 13.0#

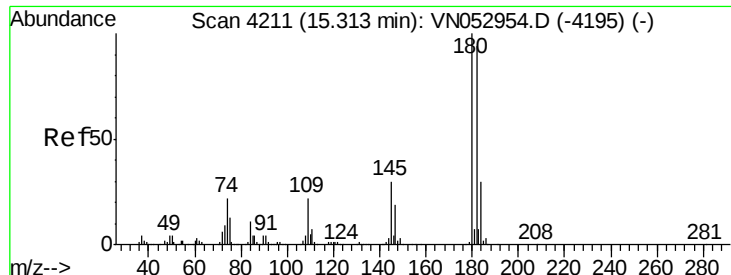


Abundance Ion 128.00 (127.70 to 128.70): V
 Ion 127.00 (126.70 to 127.70): V
 Ion 129.00 (128.70 to 129.70): V

15.14



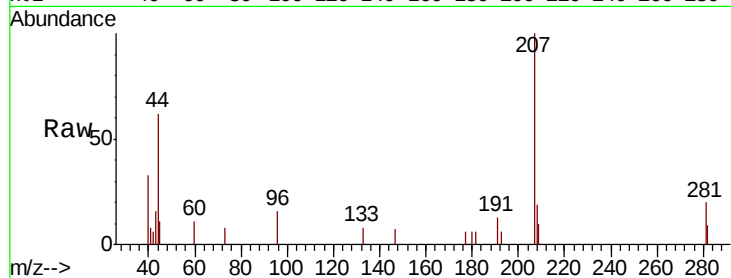
Time-->



#96
 1,2,3-Trichlorobenzene
 Concen: 0.518 ug/l
 RT: 15.32 min Scan# 4212
 Delta R.T. 0.00 min
 Lab File: VN053063.D
 Acq: 20 Dec 2018 18:08

Instrument :
 MSVOA_N
 ClientSampleId :
 PB115868ZHE#03

Tot Ion	Ratio	Lower	Upper
180	100		
182	46.2	47.9	143.7#
145	52.3	15.0	45.0#



Abundance

Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.90 (144.60 to 145.60): V

