

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN100418\
 Data File : VN051665.D
 Acq On : 4 Oct 2018 14:31
 Operator : MD\SY
 Sample : VN1004WBL01
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 10 Sample Multiplier: 28

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Oct 05 06:43:39 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N100418W.M
 Quant Title : SW846 8260
 QLast Update : Fri Oct 05 02:22:33 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.67	168	725236	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	1065040	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	907752	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	320055	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	449310	46.90	ug/l	0.00
Spiked Amount			Recovery	=	93.80%	
35) Dibromofluoromethane	7.59	113	410405	49.84	ug/l	0.00
Spiked Amount			Recovery	=	99.68%	
50) Toluene-d8	10.09	98	1502124	48.90	ug/l	0.00
Spiked Amount			Recovery	=	97.80%	
62) 4-Bromofluorobenzene	12.40	95	413302	38.01	ug/l	0.00
Spiked Amount			Recovery	=	76.02%	

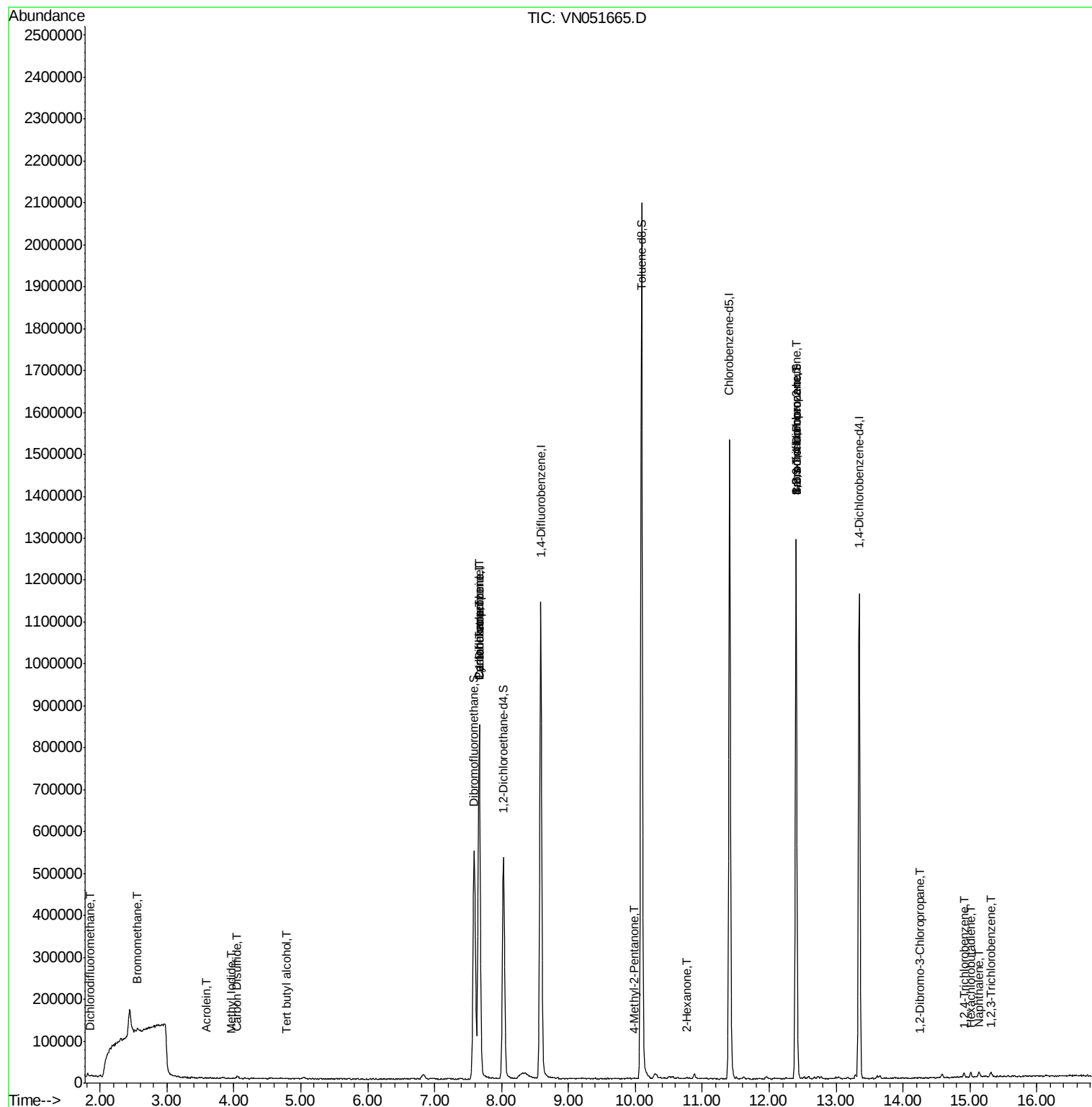
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.85	85	176	1.168	ug/l #	42
5) Bromomethane	2.56	94	2358	0.235	ug/l	96
7) Trichlorofluoromethane	3.00	101	399	Below Cal	#	69
10) Methyl Iodide	3.96	142	241	2.362	ug/l #	41
11) Tert butyl alcohol	4.78	59	184	0.283	ug/l #	1
13) Acrolein	3.60	56	194	0.477	ug/l #	1
16) Acetone	3.81	43	749	Below Cal	#	44
17) Carbon Disulfide	4.05	76	7837	0.382	ug/l	99
31) Cyclohexane	7.66	56	14351	1.103	ug/l #	25
36) 1,1-Dichloropropene	7.67	75	50159	4.506	ug/l #	49
38) Carbon Tetrachloride	7.67	117	66782	4.999	ug/l #	15
41) Methacrylonitrile	7.19	41	452	Below Cal	#	40
51) 4-Methyl-2-Pentanone	9.99	43	1845	0.301	ug/l	96
59) 2-Hexanone	10.75	43	1510	0.362	ug/l	86
71) Bromoform	12.40	173	3264	0.487	ug/l #	1
74) N-amyl acetate	12.08	43	1170	Below Cal	#	55
75) 1,1,2,2-Tetrachloroethane	12.51	83	1012	Below Cal	#	63
76) 1,2,3-Trichloropropane	12.40	75	224938	57.150	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.40	75	224938	129.190	ug/l #	14
92) 1,2-Dibromo-3-Chloropropan	14.26	75	270	0.282	ug/l #	42
93) 1,2,4-Trichlorobenzene	14.91	180	2694	0.524	ug/l	98
94) Hexachlorobutadiene	15.01	225	1695	0.486	ug/l	93
95) Naphthalene	15.13	128	9289	0.837	ug/l #	94
96) 1,2,3-Trichlorobenzene	15.31	180	3120	0.616	ug/l	95

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

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QLast Update : Fri Oct 05 02:22:33 2018
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. 0.00 min

Lab File: VN051665.D

Acq: 4 Oct 2018 14:31

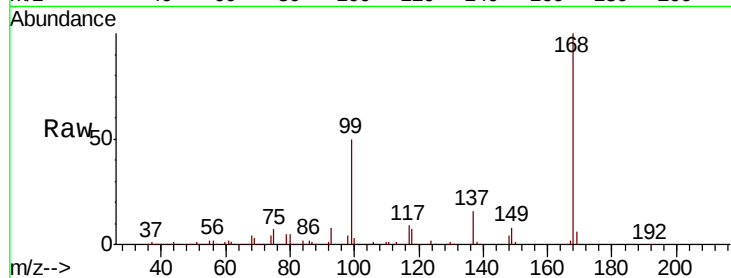
Instrument :
MSVOA_N
ClientSampled :

Tot Ion:168 Resp: 725236

Ion Ratio Lower Upper

168 100

99 49.9 40.4 60.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.67

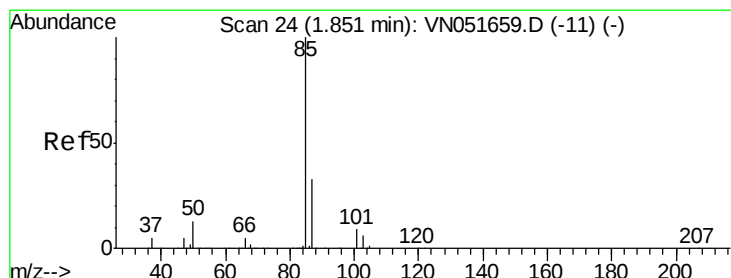
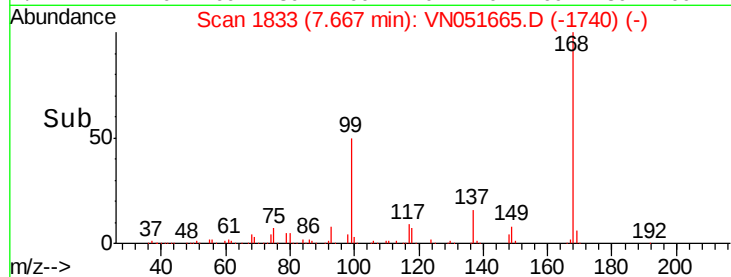
300000

200000

100000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 1.168 ug/l

RT: 1.85 min Scan# 23

Delta R.T. -0.00 min

Lab File: VN051665.D

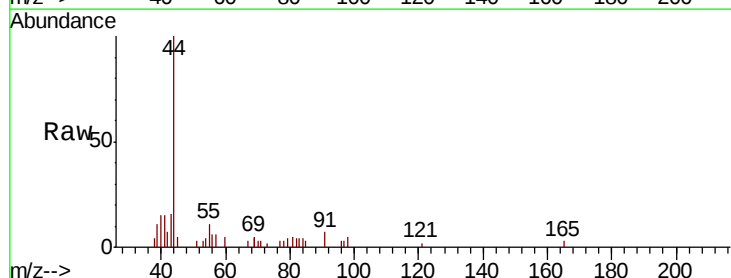
Acq: 4 Oct 2018 14:31

Tgt Ion: 85 Resp: 176

Ion Ratio Lower Upper

85 100

87 0.0 16.4 49.4#



Abundance Ion 84.90 (84.60 to 85.60): VNO

Ion 86.90 (86.60 to 87.60): VNO

1.85

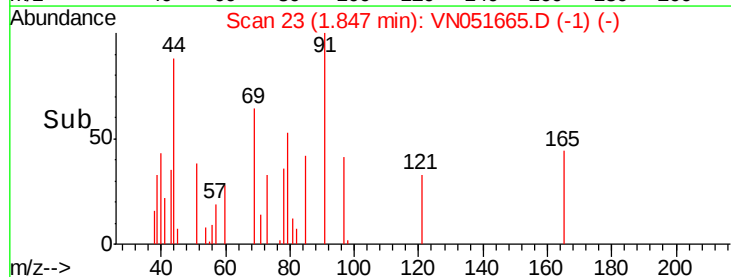
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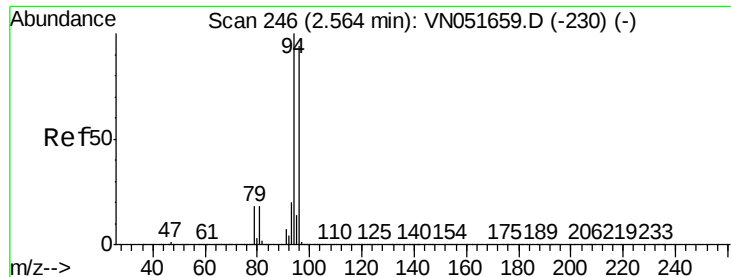
200

100

0

Time-->





#5

Bromomethane

Concen: 0.235 ug/l

RT: 2.56 min Scan# 246

Delta R.T. 0.00 min

Lab File: VN051665.D

Acq: 4 Oct 2018 14:31

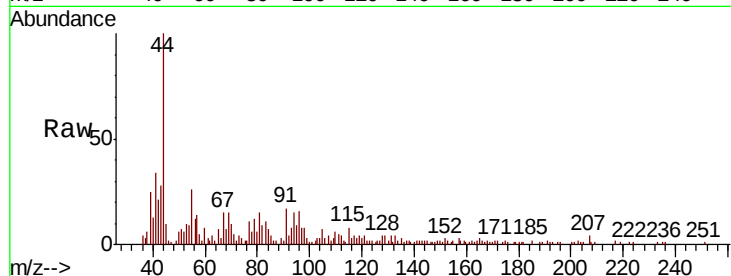
Instrument :
MSVOA_N
ClientSampled :

Tot Ion: 94 Resp: 2358

Ion Ratio Lower Upper

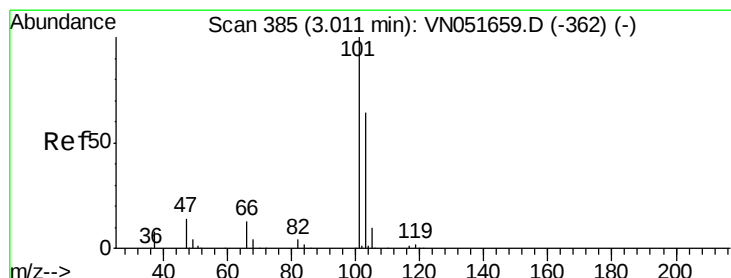
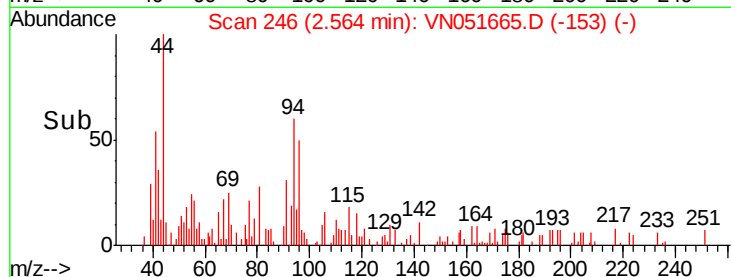
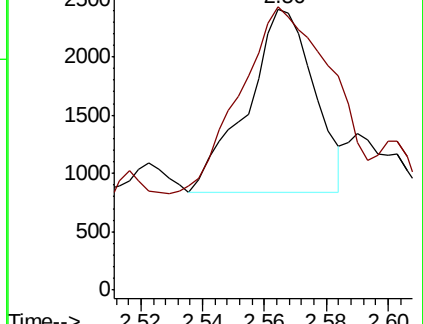
94 100

96 98.0 75.2 112.8



Abundance Ion 93.90 (93.60 to 94.60): VN051659.D (-230) (-)

Ion 95.90 (95.60 to 96.60): VN051659.D (-230) (-)



#7

Trichlorofluoromethane

Concen: Below Cal

RT: 3.00 min Scan# 383

Delta R.T. -0.01 min

Lab File: VN051665.D

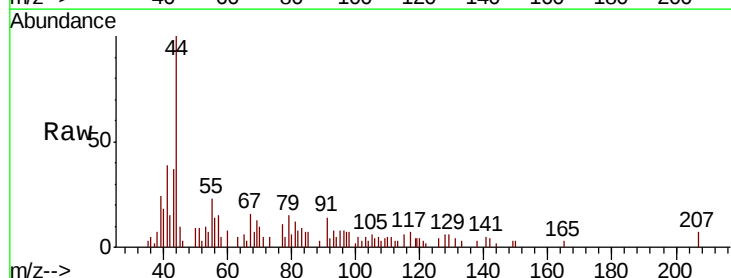
Acq: 4 Oct 2018 14:31

Tgt Ion: 101 Resp: 399

Ion Ratio Lower Upper

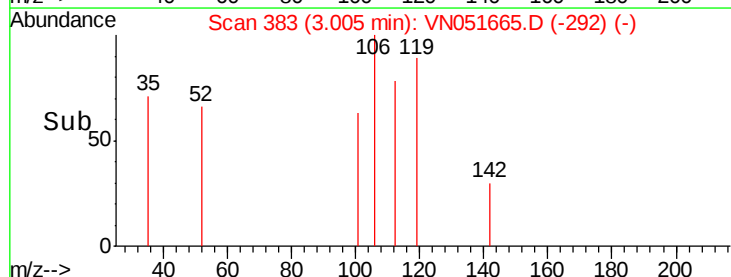
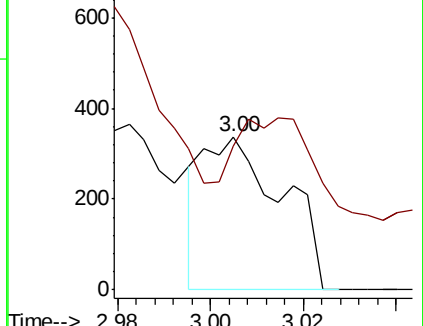
101 100

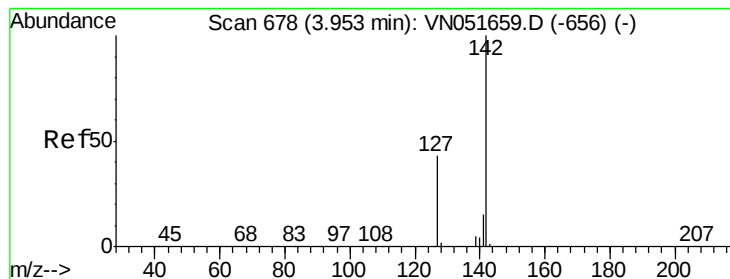
103 39.6 51.1 76.7#



Abundance Ion 100.90 (100.60 to 101.60): VN051659.D (-362) (-)

Ion 102.80 (102.50 to 103.50): VN051659.D (-362) (-)





#10

Methyl Iodide

Concen: 2.362 ug/l

RT: 3.96 min Scan# 679

Delta R.T. 0.00 min

Lab File: VN051665.D

Acq: 4 Oct 2018 14:31

Instrument :
MSVOA_N
ClientSampled :

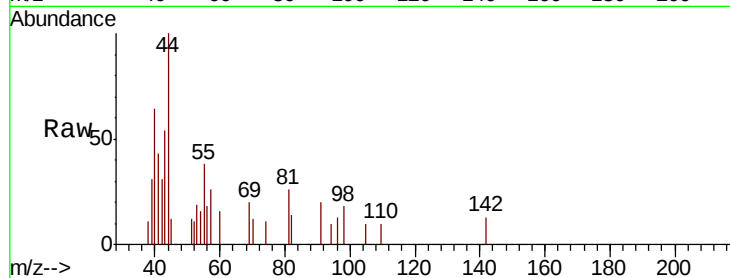
Tot Ion:142 Resp: 241

Ion Ratio Lower Upper

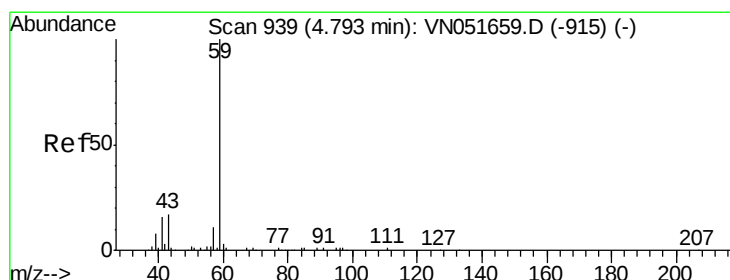
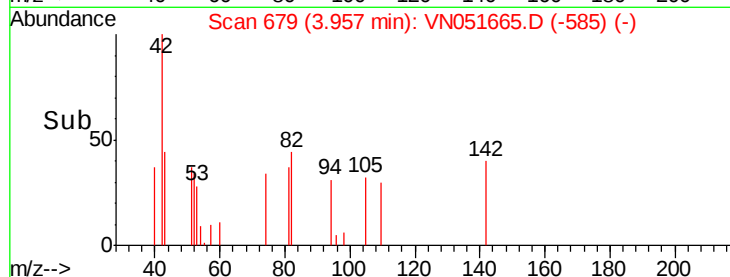
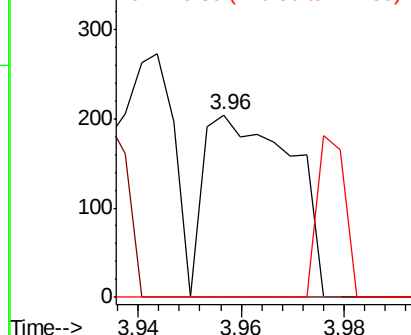
142 100

127 0.0 34.7 52.1#

141 27.8 11.4 17.2#



Abundance Ion 141.80 (141.50 to 142.50): V
Ion 126.80 (126.50 to 127.50): V
Ion 140.80 (140.50 to 141.50): V



#11

Tert butyl alcohol

Concen: 0.283 ug/l

RT: 4.78 min Scan# 936

Delta R.T. -0.01 min

Lab File: VN051665.D

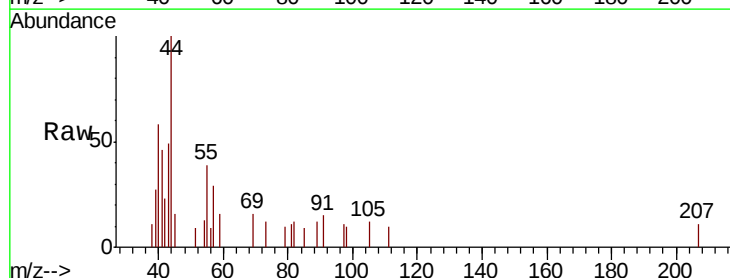
Acq: 4 Oct 2018 14:31

Tgt Ion: 59 Resp: 184

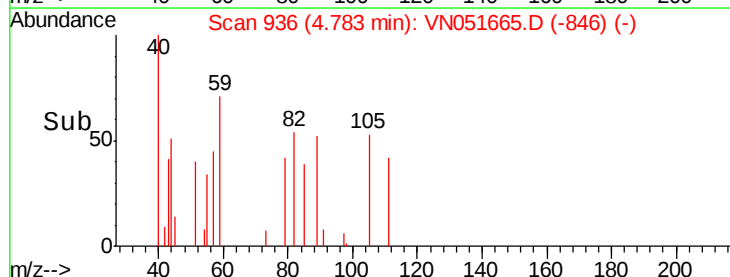
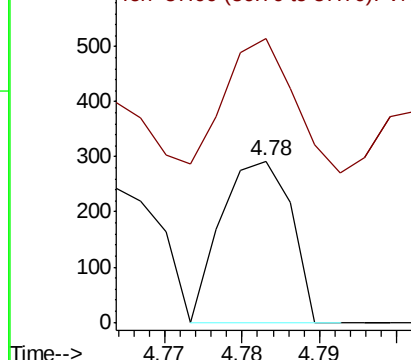
Ion Ratio Lower Upper

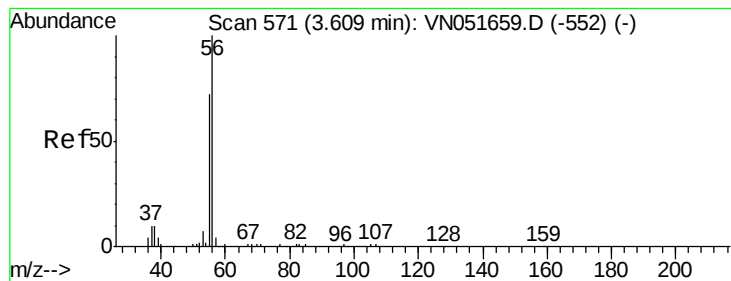
59 100

57 82.6 8.1 12.1#



Abundance Ion 59.00 (58.70 to 59.70): V
Ion 57.00 (56.70 to 57.70): V





#13

Acrolein

Concen: 0.477 ug/l

RT: 3.60 min Scan# 568

Delta R.T. -0.01 min

Lab File: VN051665.D

Acq: 4 Oct 2018 14:31

Instrument :

MSVOA_N

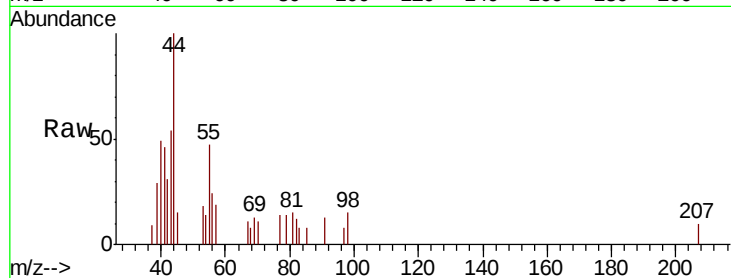
ClientSampled :

Tot Ion: 56 Resp: 194

Ion Ratio Lower Upper

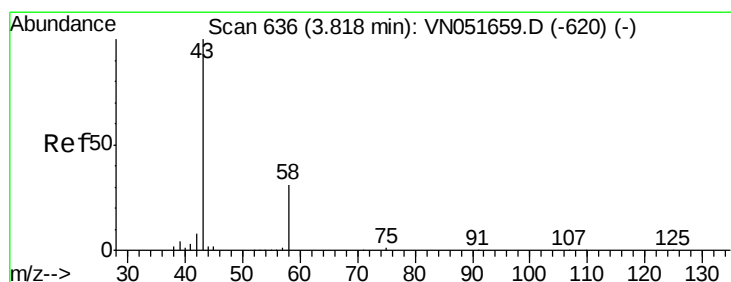
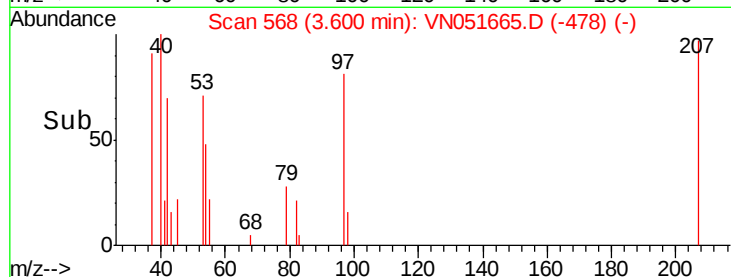
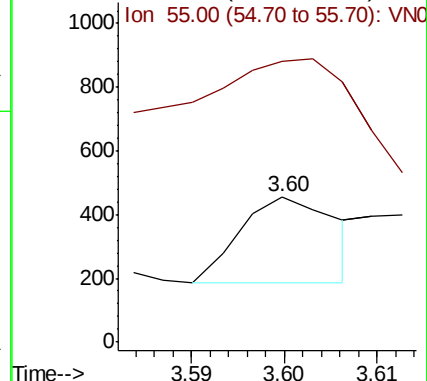
56 100

55 231.4 57.5 86.3#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 55.00 (54.70 to 55.70): VN0



#16

Acetone

Concen: Below Cal

RT: 3.81 min Scan# 633

Delta R.T. -0.01 min

Lab File: VN051665.D

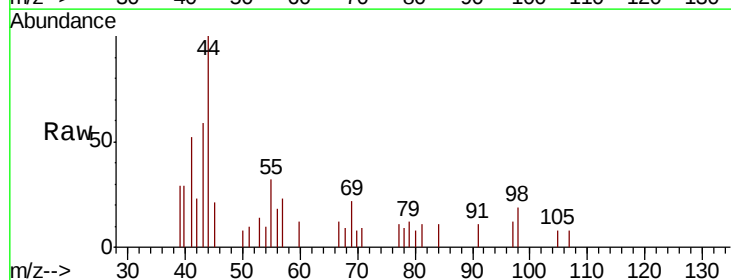
Acq: 4 Oct 2018 14:31

Tgt Ion: 43 Resp: 749

Ion Ratio Lower Upper

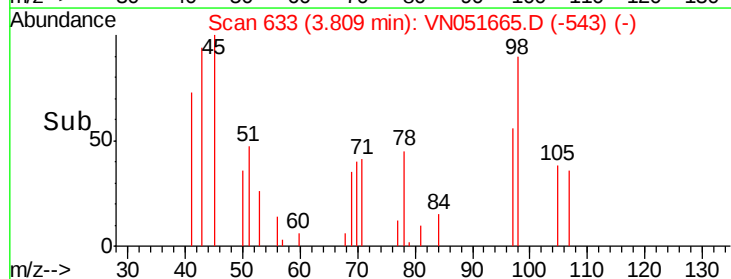
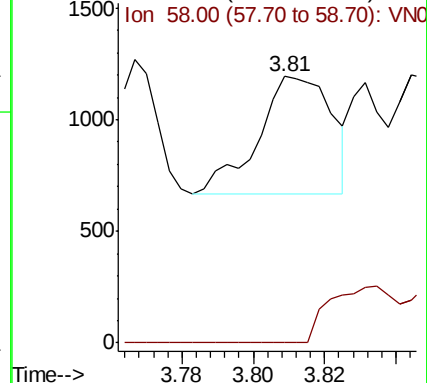
43 100

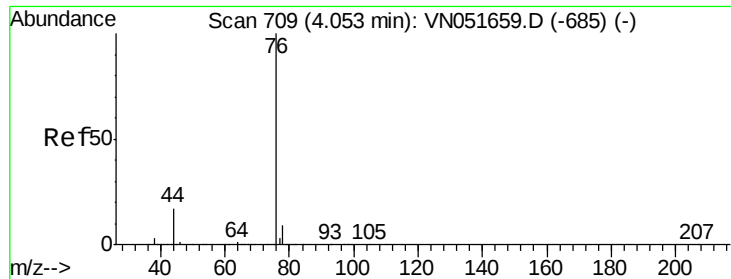
58 0.0 24.3 36.5#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

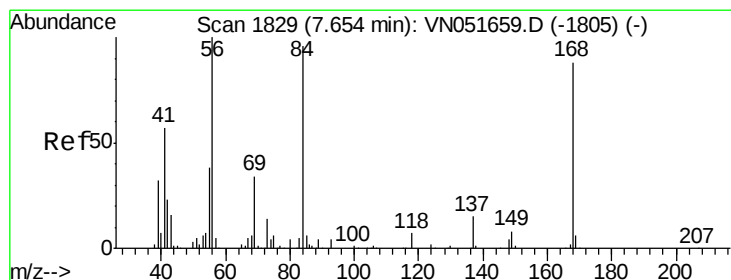
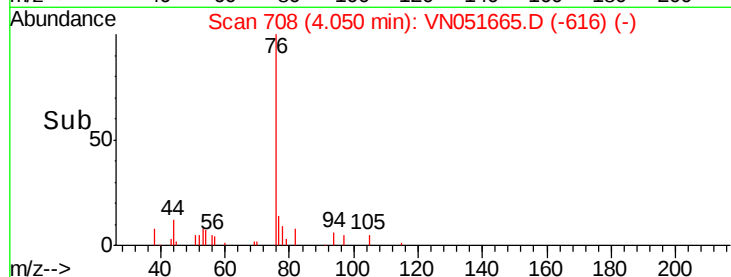
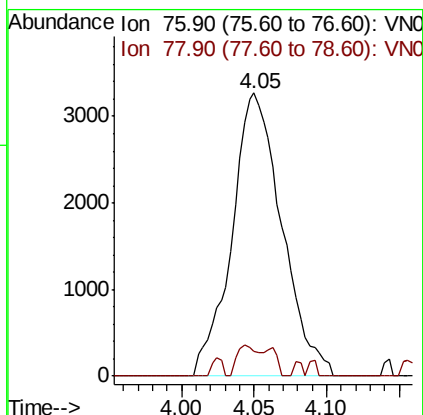
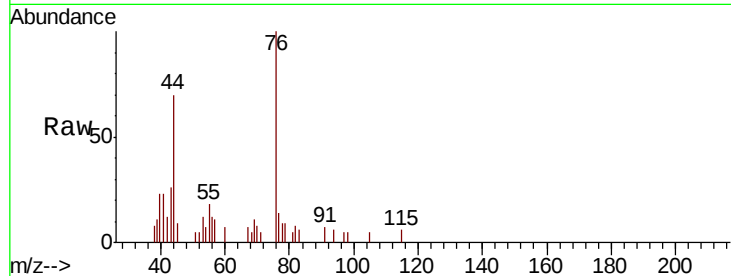




#17
Carbon Disulfide
Concen: 0.382 ug/l
RT: 4.05 min Scan# 708
Delta R.T. -0.00 min
Lab File: VN051665.D
Acq: 4 Oct 2018 14:31

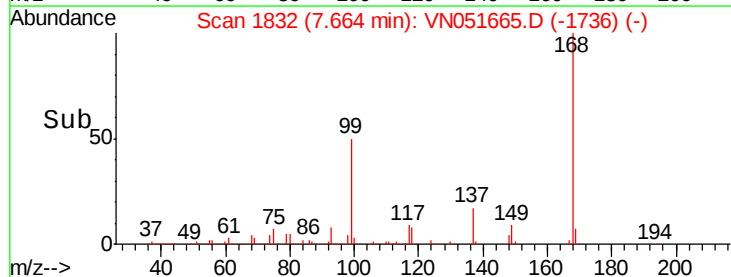
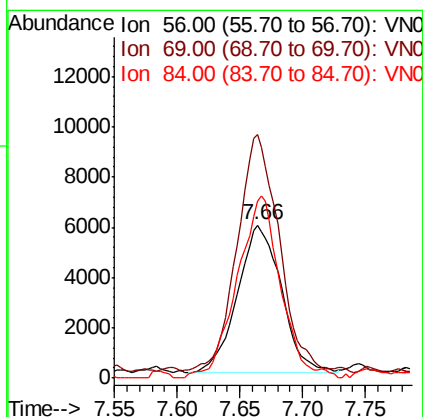
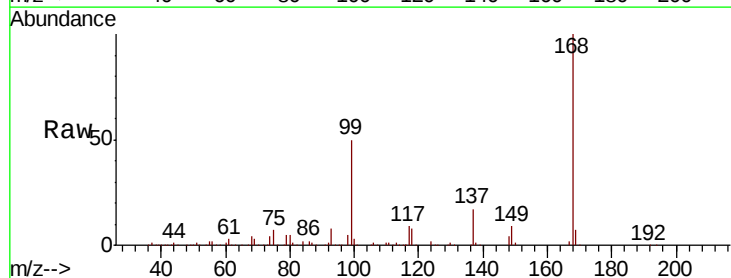
Instrument :
MSVOA_N
ClientSampled :

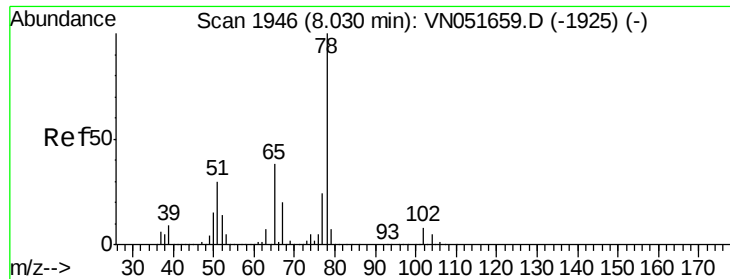
Tot Ion: 76 Resp: 7837
Ion Ratio Lower Upper
76 100
78 8.7 7.2 10.8



#31
Cyclohexane
Concen: 1.103 ug/l
RT: 7.66 min Scan# 1832
Delta R.T. 0.01 min
Lab File: VN051665.D
Acq: 4 Oct 2018 14:31

Tgt Ion: 56 Resp: 14351
Ion Ratio Lower Upper
56 100
69 159.5 27.5 41.3#
84 119.6 76.7 115.1#

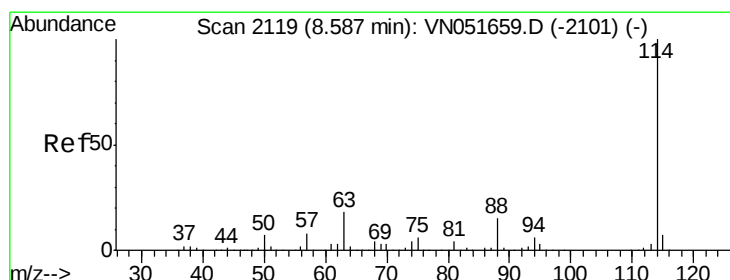
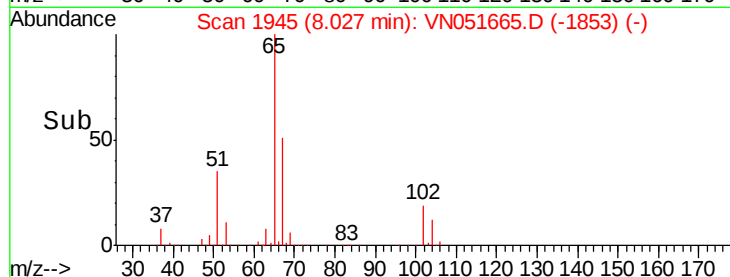
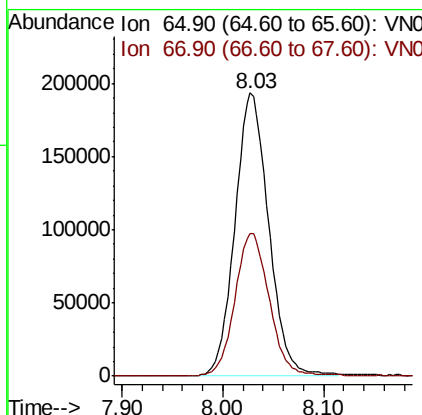
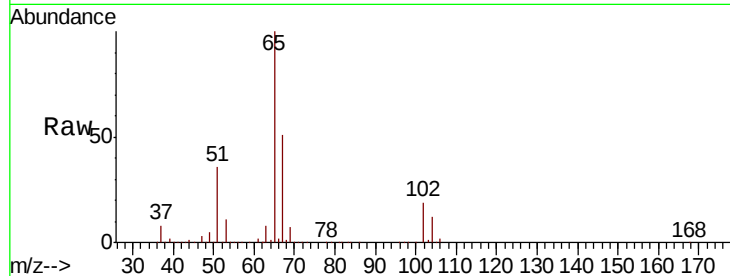




#33
 1,2-Dichloroethane-d4
 Concen: Below ug/l
 RT: 8.03 min Scan# 1945
 Delta R.T. -0.00 min
 Lab File: VN051665.D
 Acq: 4 Oct 2018 14:31

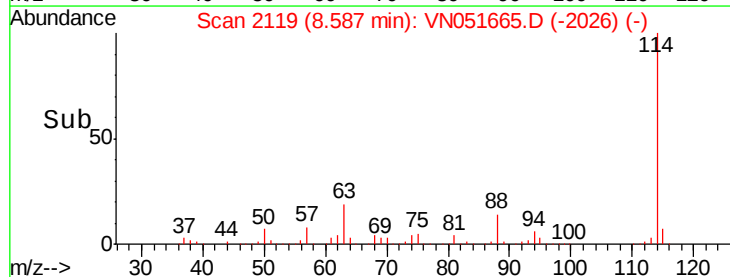
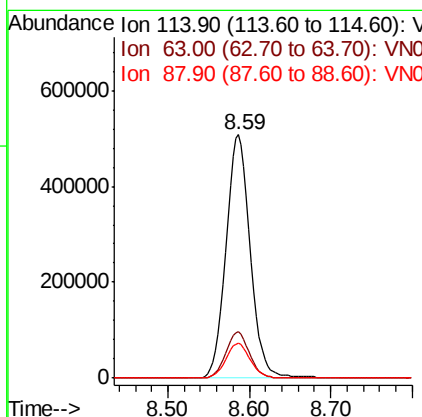
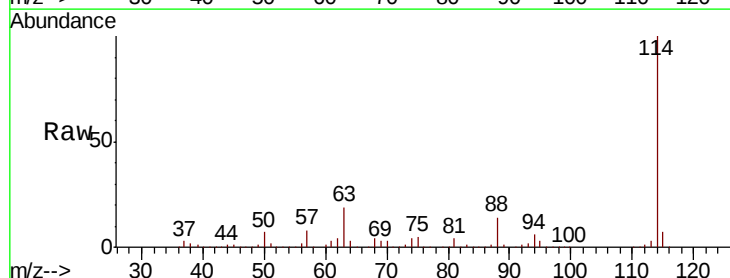
Instrument :
 MSVOA_N
 ClientSampleId :

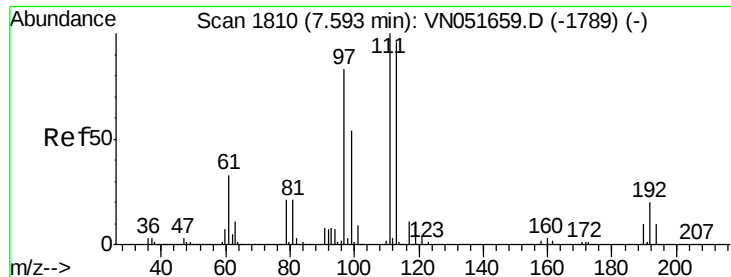
Tot Ion: 65 Resp: 449310
 Ion Ratio Lower Upper
 65 100
 67 51.0 0.0 103.6



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.59 min Scan# 2119
 Delta R.T. 0.00 min
 Lab File: VN051665.D
 Acq: 4 Oct 2018 14:31

Tgt Ion: 114 Resp: 1065040
 Ion Ratio Lower Upper
 114 100
 63 18.9 0.0 36.2
 88 14.2 0.0 30.2

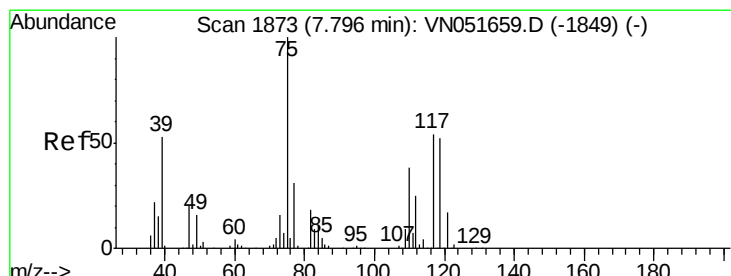
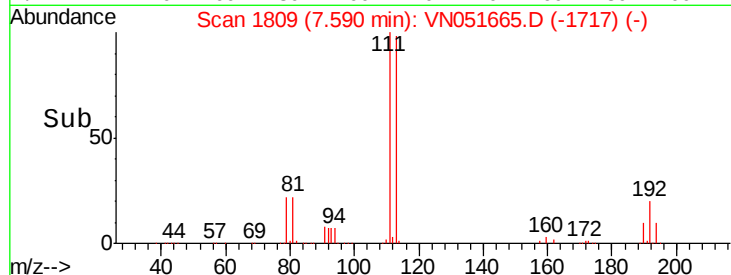
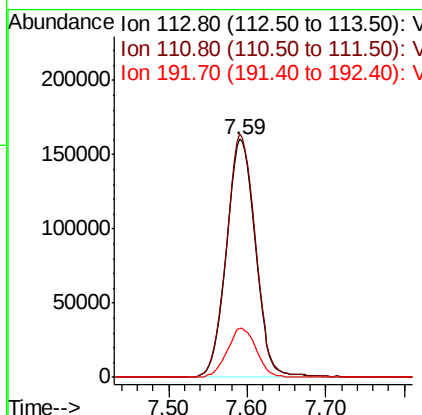
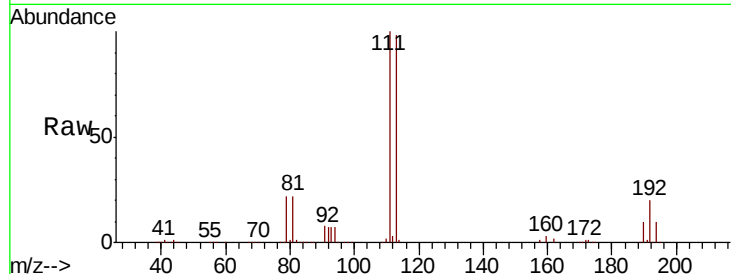




#35
Dibromofluoromethane
Concen: 50.000 ug/l
RT: 7.59 min Scan# 1809
Delta R.T. -0.00 min
Lab File: VN051665.D
Acq: 4 Oct 2018 14:31

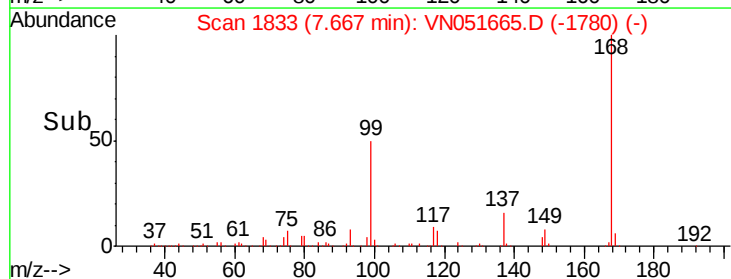
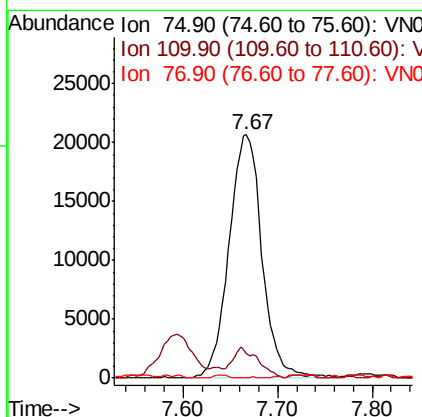
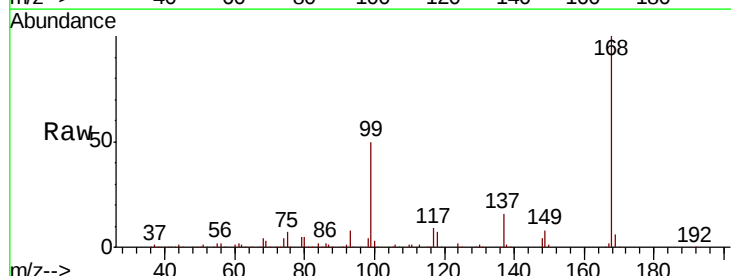
Instrument :
MSVOA_N
ClientSampleId :

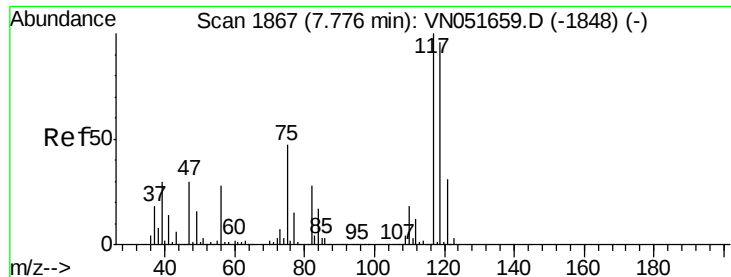
Tot Ion	Ratio	Lower	Upper
113	100		
111	101.9	81.8	122.8
192	20.7	16.5	24.7



#36
1,1-Dichloropropene
Concen: 4.506 ug/l
RT: 7.67 min Scan# 1833
Delta R.T. -0.13 min
Lab File: VN051665.D
Acq: 4 Oct 2018 14:31

Tgt Ion	Ratio	Lower	Upper
75	100		
110	10.0	19.3	57.8#
77	0.1	24.7	37.1#

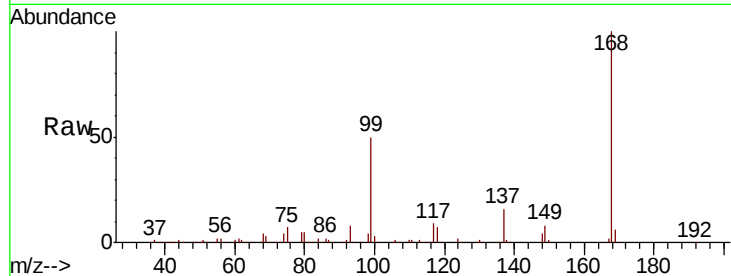




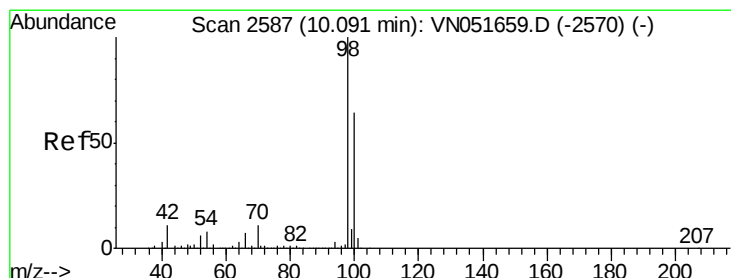
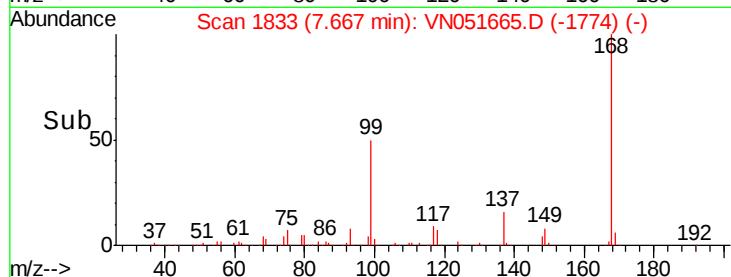
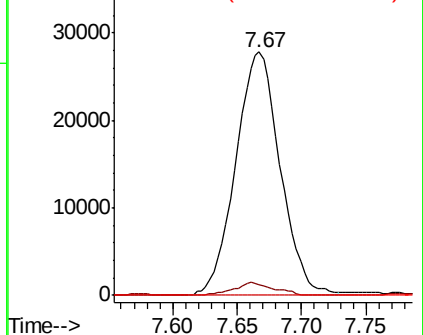
#38
Carbon Tetrachloride
Concen: 4.999 ug/l
RT: 7.67 min Scan# 1833
Delta R.T. -0.11 min
Lab File: VN051665.D
Acq: 4 Oct 2018 14:31

Instrument :
MSVOA_N
ClientSampleId :

Tot Ion:117 Resp: 66782
Ion Ratio Lower Upper
117 100
119 4.1 77.0 115.6#
121 0.0 25.0 37.6#

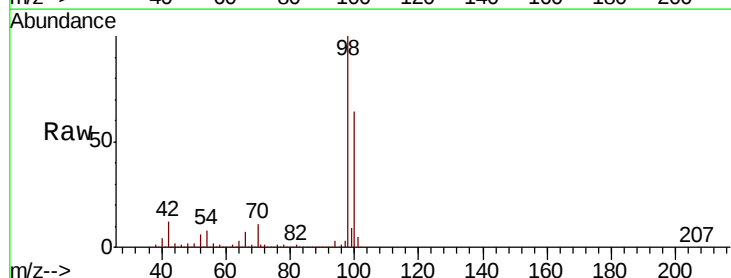


Abundance Ion 116.80 (116.50 to 117.50): V
Ion 118.80 (118.50 to 119.50): V
Ion 120.80 (120.50 to 121.50): V

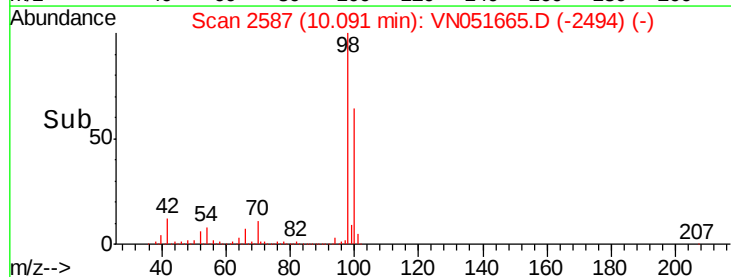
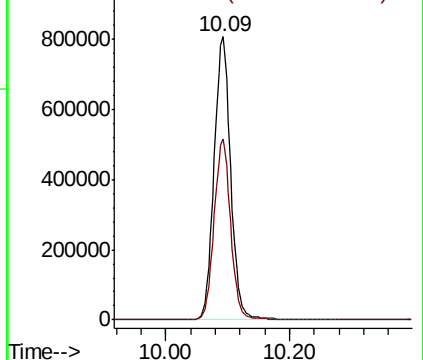


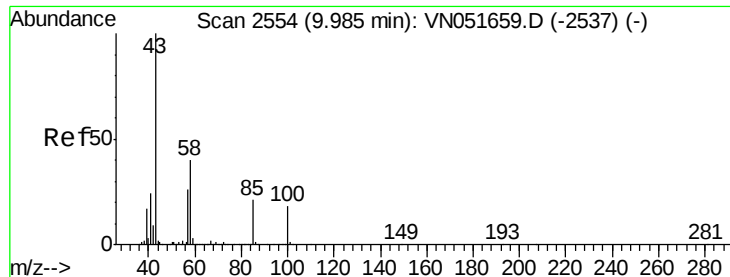
#50
Toluene-d8
Concen: N.D. ug/l
RT: 10.09 min Scan# 2587
Delta R.T. 0.00 min
Lab File: VN051665.D
Acq: 4 Oct 2018 14:31

Tgt Ion: 98 Resp: 1502124
Ion Ratio Lower Upper
98 100
100 63.6 51.5 77.3



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





#51

4-Methyl-2-Pentanone

Concen: 0.301 ug/l

RT: 9.99 min Scan# 2554

Delta R.T. 0.00 min

Lab File: VN051665.D

Acq: 4 Oct 2018 14:31

Instrument :

MSVOA_N

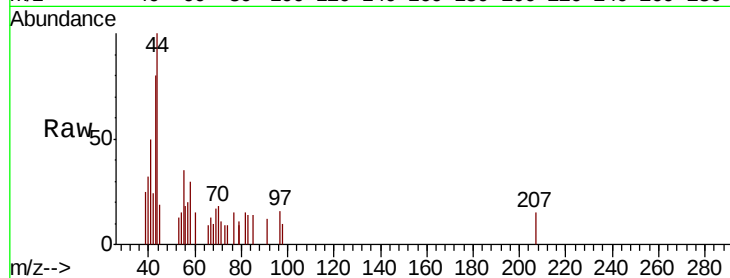
ClientSampleId :

Tot Ion: 43 Resp: 1845

Ion Ratio Lower Upper

43 100

58 42.6 32.2 48.2



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

1500

1000

500

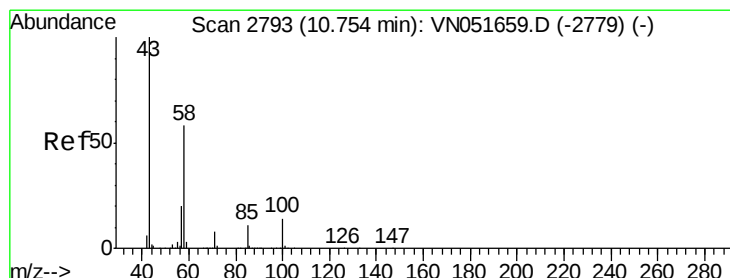
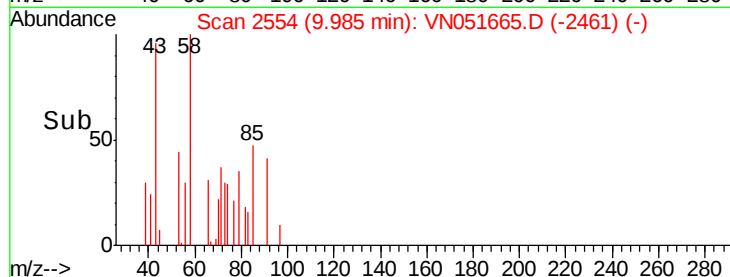
0

9.95

9.99

10.00

Time-->



#59

2-Hexanone

Concen: 0.362 ug/l

RT: 10.75 min Scan# 2793

Delta R.T. 0.00 min

Lab File: VN051665.D

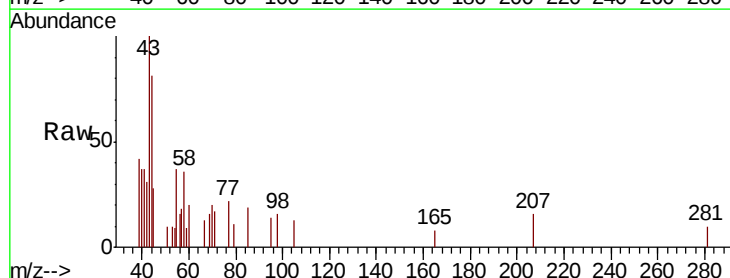
Acq: 4 Oct 2018 14:31

Tgt Ion: 43 Resp: 1510

Ion Ratio Lower Upper

43 100

58 68.1 28.8 86.4



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

2000

1500

1000

500

0

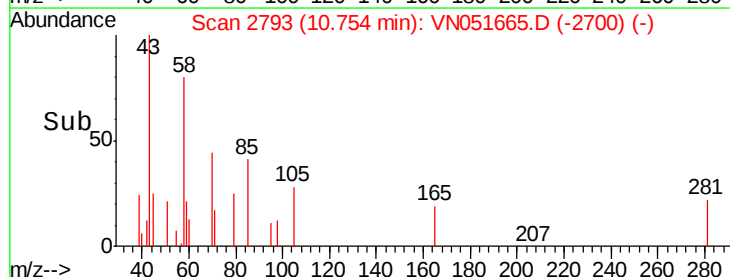
10.72

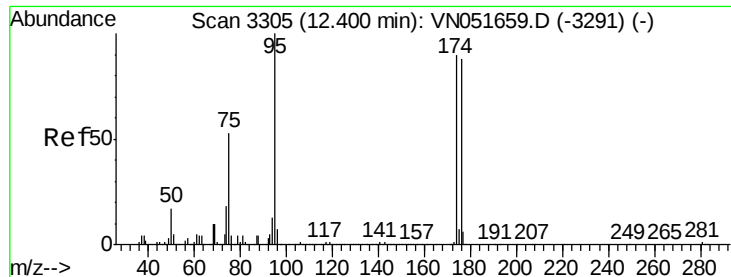
10.74

10.75

10.78

Time-->

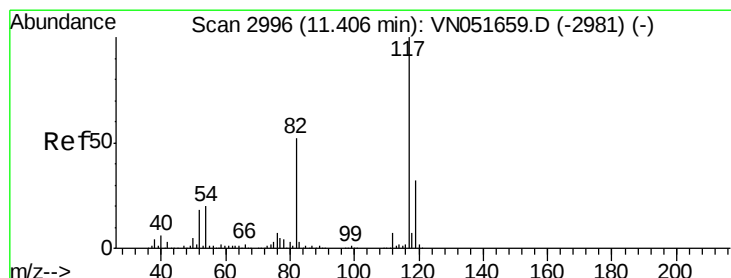
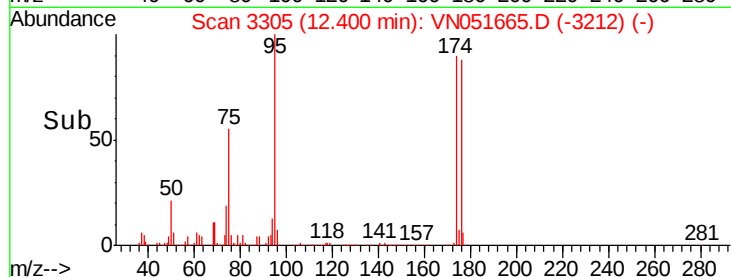
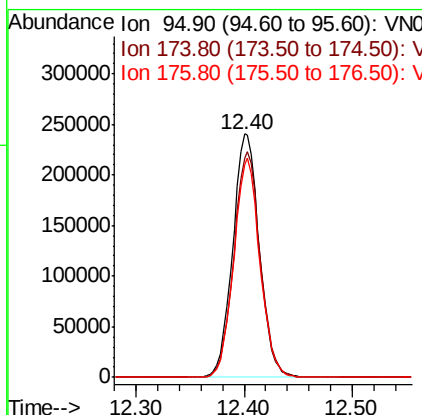
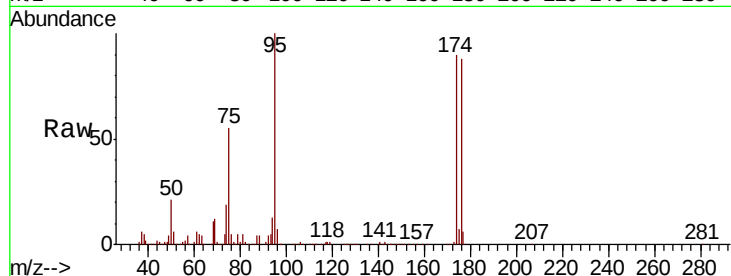




#62
4-Bromofluorobenzene
Concen: Below ug/l
RT: 12.40 min Scan# 3305
Delta R.T. 0.00 min
Lab File: VN051665.D
Acq: 4 Oct 2018 14:31

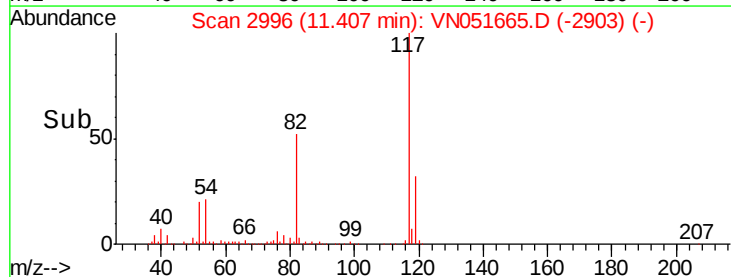
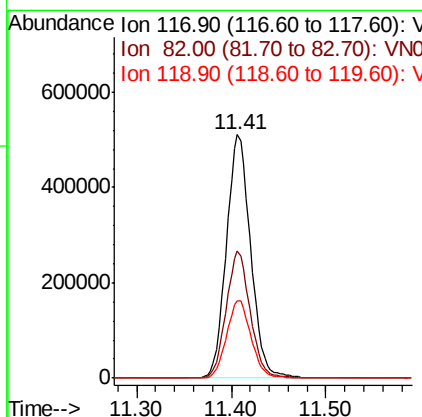
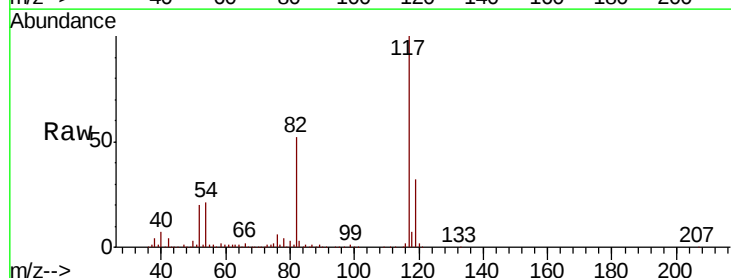
Instrument :
MSVOA_N
ClientSampleId :

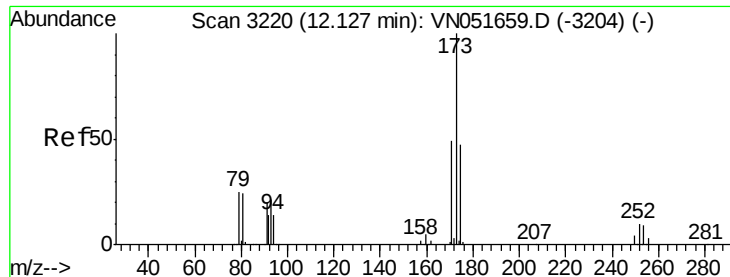
Tot Ion: 95 Resp: 413302
Ion Ratio Lower Upper
95 100
174 92.2 0.0 182.8
176 88.4 0.0 176.4



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. 0.00 min
Lab File: VN051665.D
Acq: 4 Oct 2018 14:31

Tgt Ion: 117 Resp: 907752
Ion Ratio Lower Upper
117 100
82 52.0 41.3 61.9
119 31.9 25.9 38.9





#71

Bromoform

Concen: 0.487 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.27 min

Lab File: VN051665.D

Acq: 4 Oct 2018 14:31

Instrument :

MSVOA_N

ClientSampleId :

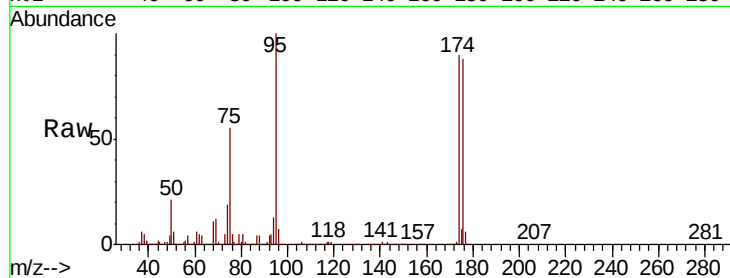
Tot Ion:173 Resp: 3264

Ion Ratio Lower Upper

173 100

175 754.5 24.0 72.0#

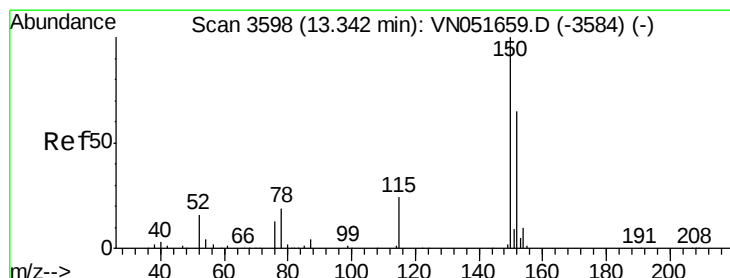
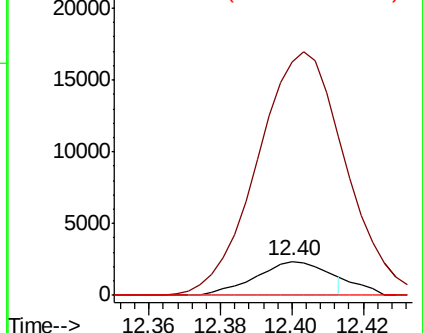
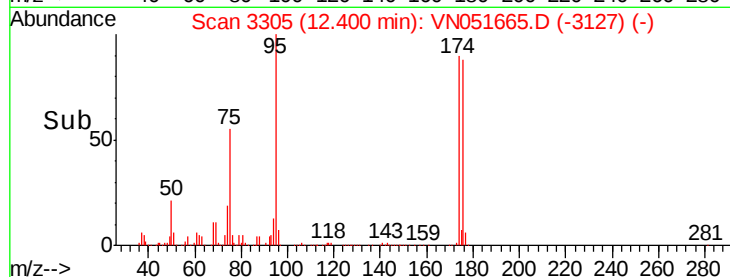
254 0.0 0.1 0.1#



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: VN051665.D

Acq: 4 Oct 2018 14:31

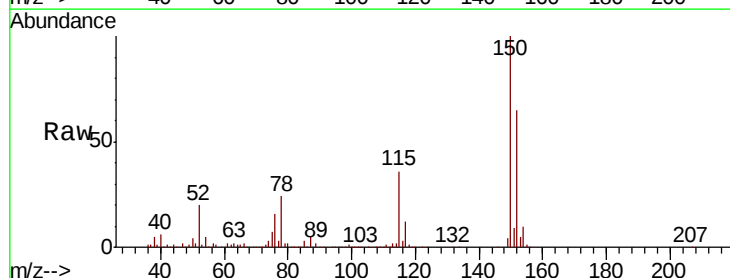
Tgt Ion:152 Resp: 320055

Ion Ratio Lower Upper

152 100

115 56.1 28.6 85.8

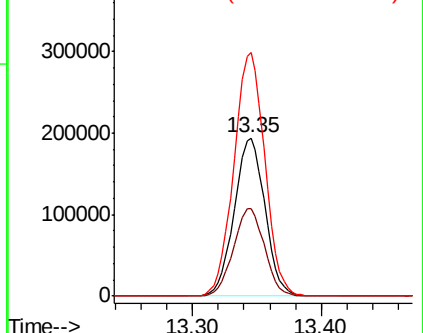
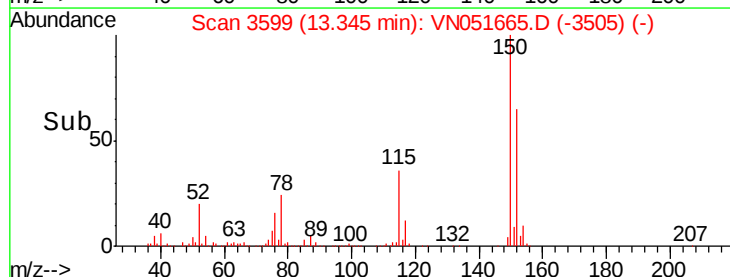
150 155.5 0.0 352.4

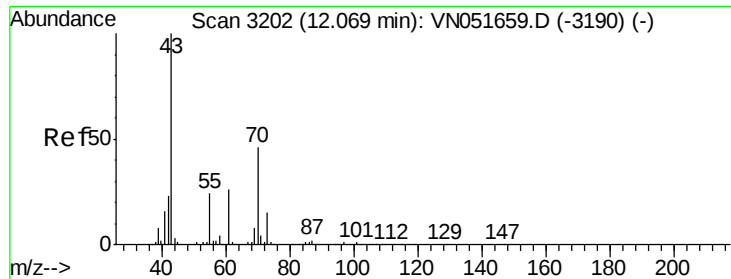


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-amvl acetate

Concen: Below Cal

RT: 12.08 min Scan# 3205

Delta R.T. 0.01 min

Lab File: VN051665.D

Acq: 4 Oct 2018 14:31

Instrument :

MSVOA_N

ClientSampleId :

Tot Ion: 43 Resp: 1170

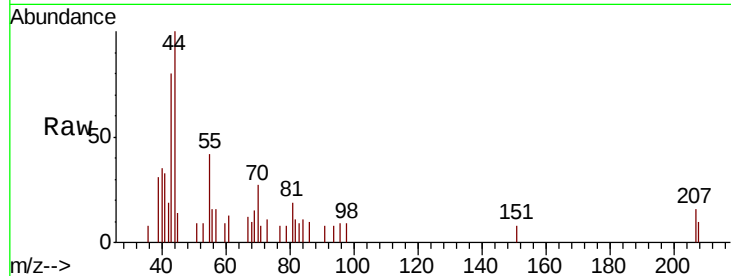
Ion Ratio Lower Upper

43 100

70 24.4 37.1 55.7#

55 69.5 19.1 28.7#

61 14.9 20.8 31.2#

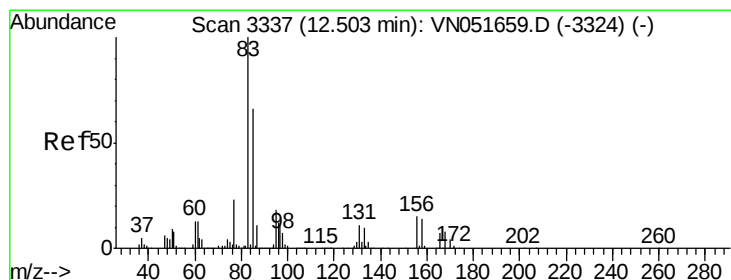
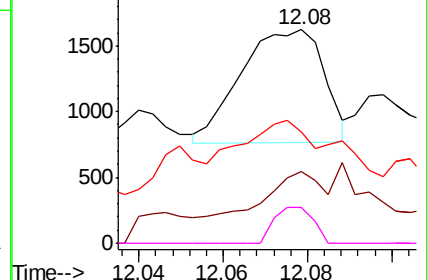
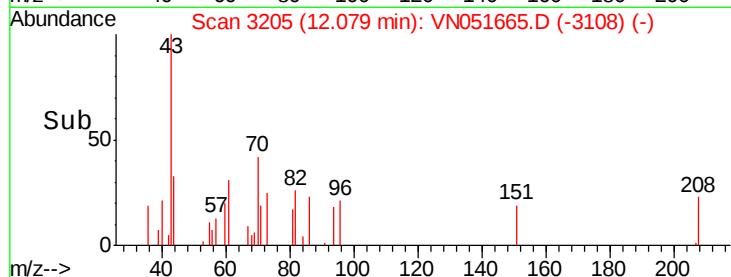


Abundance Ion 43.00 (42.70 to 43.70): VNO

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



#75

1,1,2,2-Tetrachloroethane

Concen: Below Cal

RT: 12.51 min Scan# 3340

Delta R.T. 0.01 min

Lab File: VN051665.D

Acq: 4 Oct 2018 14:31

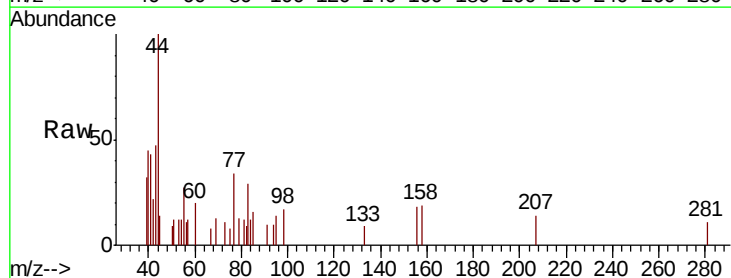
Tgt Ion: 83 Resp: 1012

Ion Ratio Lower Upper

83 100

131 0.0 5.7 17.1#

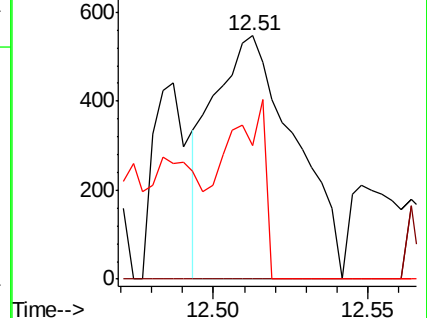
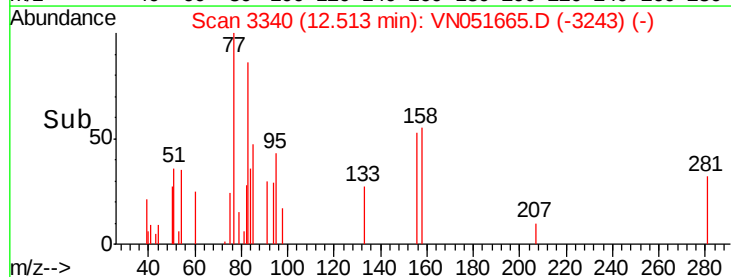
85 35.8 33.0 98.9

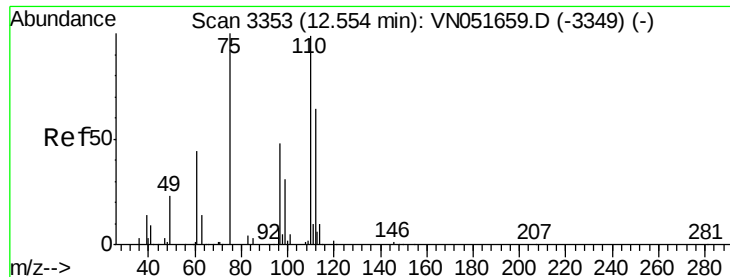


Abundance Ion 82.90 (82.60 to 83.60): VNO

Ion 130.80 (130.50 to 131.50): VNO

Ion 84.90 (84.60 to 85.60): VNO





#76

1,2,3-Trichloropropane

Concen: 57.150 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN051665.D

Acq: 4 Oct 2018 14:31

Instrument :

MSVOA_N

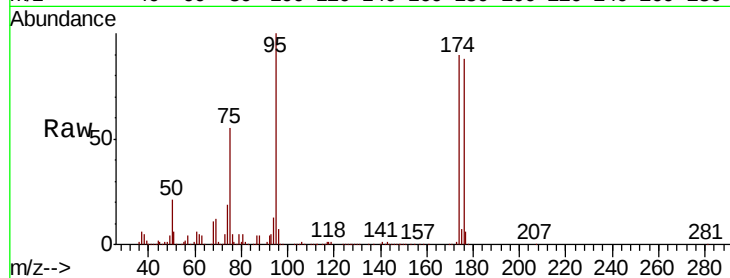
ClientSampled :

Tot Ion: 75 Resp: 224938

Ion Ratio Lower Upper

75 100

77 1.4 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0

150000

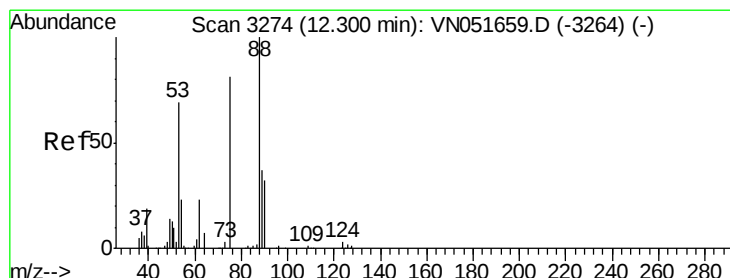
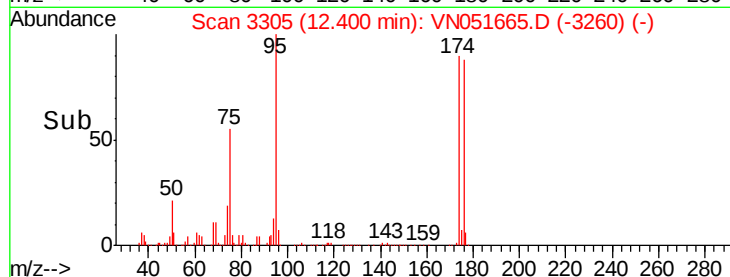
120000

100000

50000

0

Time--> 12.30 12.40 12.50



#81

trans-1,4-Dichloro-2-butene

Concen: 129.190 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN051665.D

Acq: 4 Oct 2018 14:31

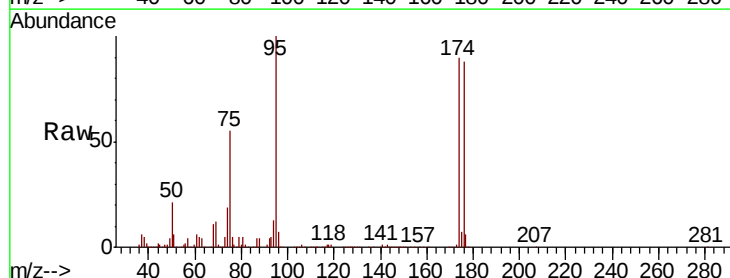
Tgt Ion: 75 Resp: 224938

Ion Ratio Lower Upper

75 100

53 0.1 68.6 102.8#

89 0.0 39.4 59.2#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0

150000

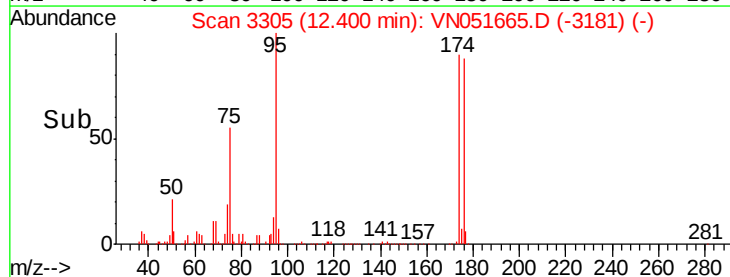
120000

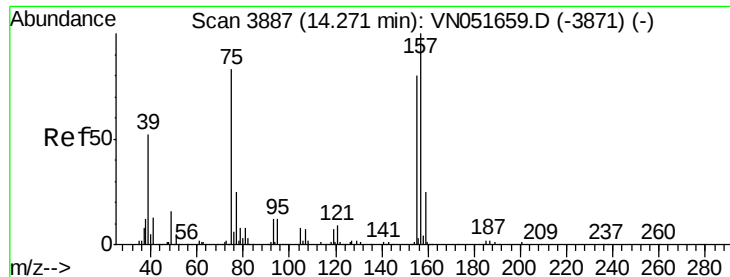
100000

50000

0

Time--> 12.30 12.40 12.50





#92

1,2-Dibromo-3-Chloropropane

Concen: 0.282 ug/l

RT: 14.26 min Scan# 3884

Delta R.T. -0.01 min

Lab File: VN051665.D

Acq: 4 Oct 2018 14:31

Instrument :

MSVOA_N

ClientSampleId :

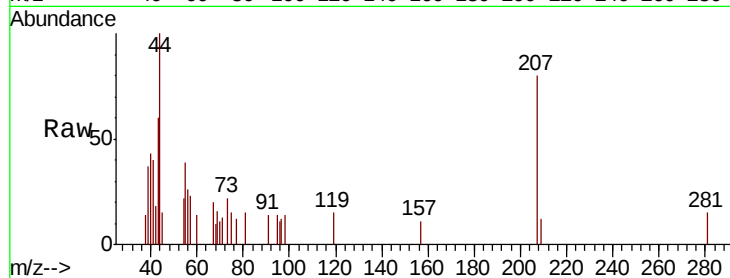
Tot Ion: 75 Resp: 270

Ion Ratio Lower Upper

75 100

155 0.0 47.6 142.9#

157 92.2 61.7 185.1

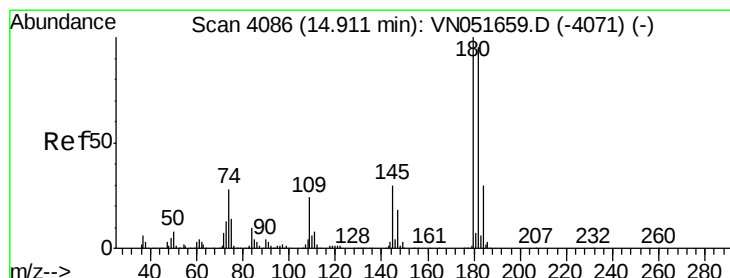
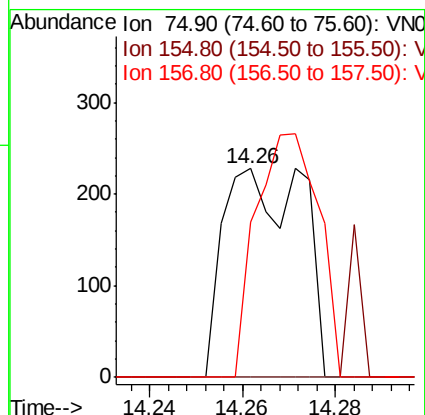
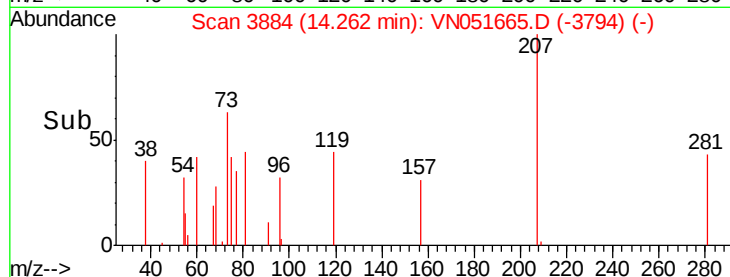


Abundance Ion 74.90 (74.60 to 75.60): VN051659.D (-3871) (-)

Ion 154.80 (154.50 to 155.50): VN051659.D (-3871) (-)

Ion 156.80 (156.50 to 157.50): VN051659.D (-3871) (-)

Time-->



#93

1,2,4-Trichlorobenzene

Concen: 0.524 ug/l

RT: 14.91 min Scan# 4086

Delta R.T. 0.00 min

Lab File: VN051665.D

Acq: 4 Oct 2018 14:31

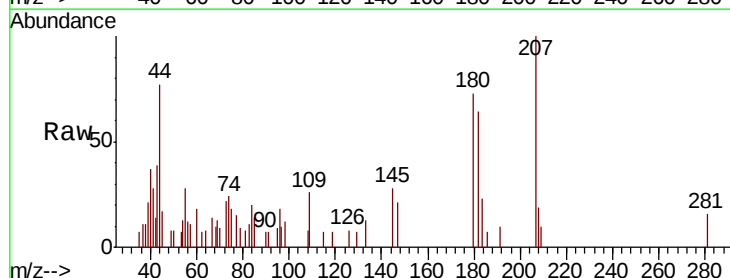
Tgt Ion: 180 Resp: 2694

Ion Ratio Lower Upper

180 100

182 94.1 47.7 143.1

145 33.4 15.3 45.9

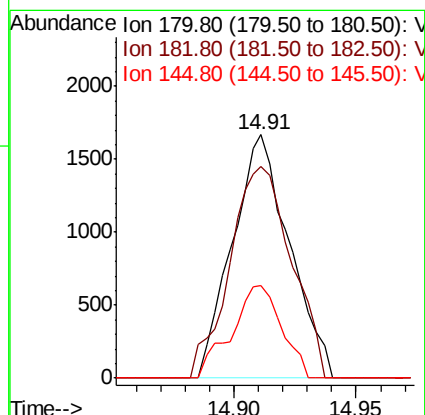
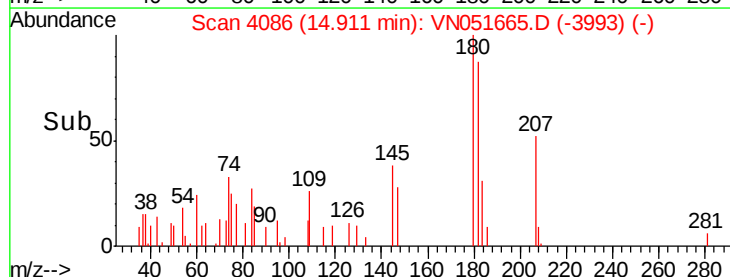


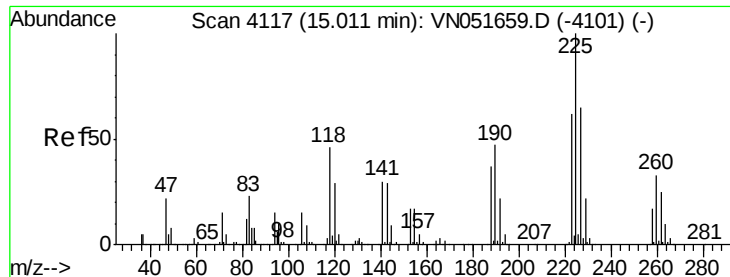
Abundance Ion 179.80 (179.50 to 180.50): VN051659.D (-4071) (-)

Ion 181.80 (181.50 to 182.50): VN051659.D (-4071) (-)

Ion 144.80 (144.50 to 145.50): VN051659.D (-4071) (-)

Time-->





#94

Hexachlorobutadiene

Concen: 0.486 ug/l

RT: 15.01 min Scan# 4116

Delta R.T. -0.00 min

Lab File: VN051665.D

Acq: 4 Oct 2018 14:31

Instrument :

MSVOA_N

ClientSampleId :

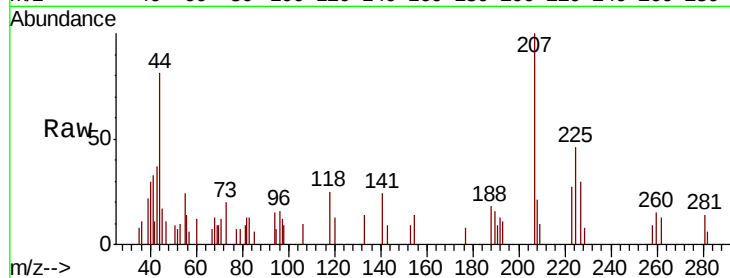
Tot Ion:225 Resp: 1695

Ion Ratio Lower Upper

225 100

223 56.0 31.9 95.5

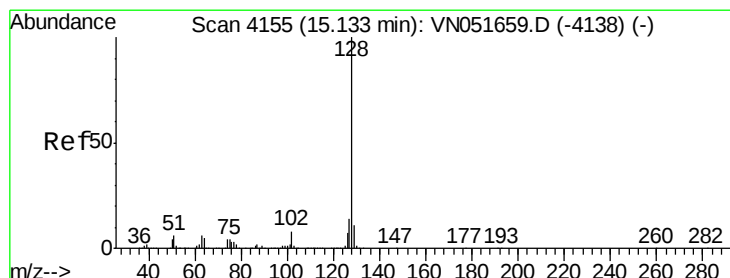
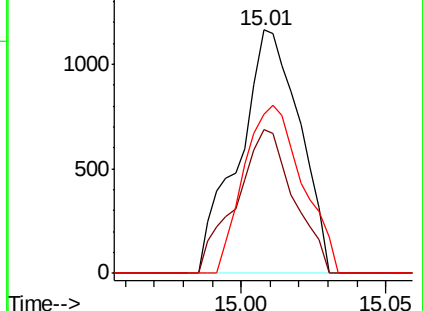
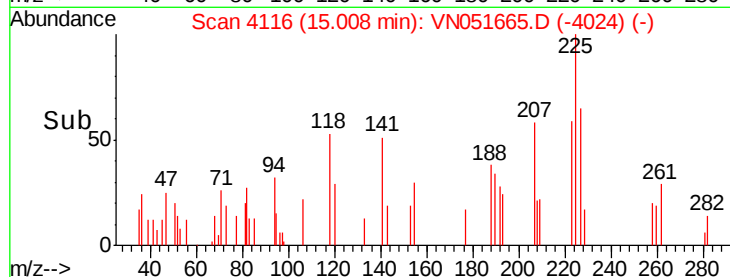
227 66.5 31.7 95.1



Abundance Ion 224.70 (224.40 to 225.40): V

Ion 222.70 (222.40 to 223.40): V

Ion 226.70 (226.40 to 227.40): V



#95

Naphthalene

Concen: 0.837 ug/l

RT: 15.13 min Scan# 4155

Delta R.T. 0.00 min

Lab File: VN051665.D

Acq: 4 Oct 2018 14:31

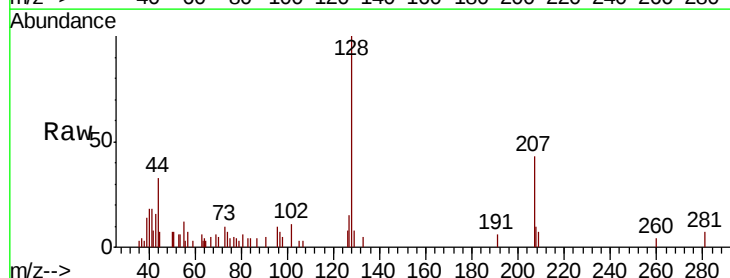
Tgt Ion:128 Resp: 9289

Ion Ratio Lower Upper

128 100

127 14.6 10.6 15.8

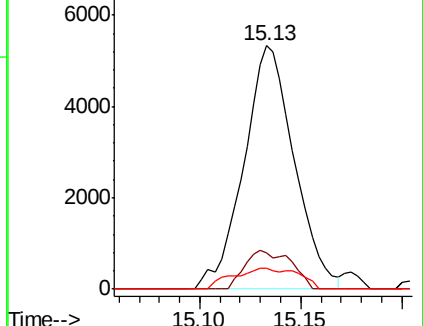
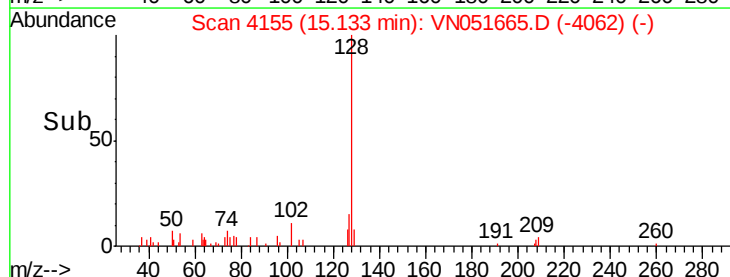
129 7.8 9.0 13.6#

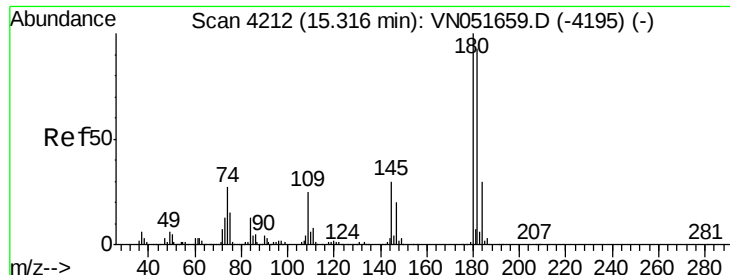


Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

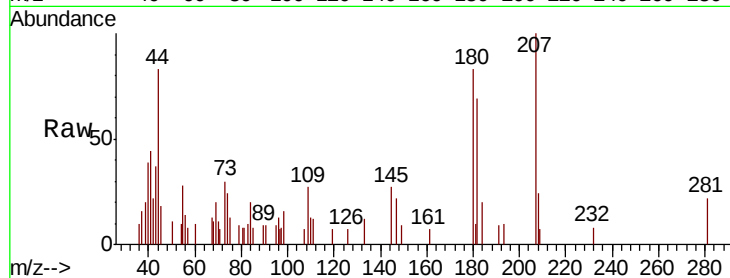




#96
 1,2,3-Trichlorobenzene
 Concen: 0.616 ug/l
 RT: 15.31 min Scan# 4211
 Delta R.T. -0.00 min
 Lab File: VN051665.D
 Acq: 4 Oct 2018 14:31

Instrument :
 MSVOA_N
 ClientSampleId :

Tot Ion	Ratio	Lower	Upper
180	100		
182	100.9	47.3	141.8
145	32.2	15.6	46.8



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

