

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN071318\
 Data File : VN049791.D
 Acq On : 13 Jul 2018 12:40
 Operator : MD\SY
 Sample : J3762-09 MDL 0.2ppb
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT3-2018

Manual Integrations
 APPROVED

MMDadoda
 7/16/2018 11:25:23 AM

Quant Time: Jul 16 03:58:43 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N071218W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 12 15:51:38 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.67	168	1102201	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	1759071	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	1509826	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	580923	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.03	65	736294	57.43	ug/l	0.00
Spiked Amount	50.000		Recovery	=	114.86%	
35) Dibromofluoromethane	7.59	113	698656	52.69	ug/l	0.00
Spiked Amount	50.000		Recovery	=	105.38%	
50) Toluene-d8	10.09	98	2098402	46.23	ug/l	0.00
Spiked Amount	50.000		Recovery	=	92.46%	
62) 4-Bromofluorobenzene	12.40	95	629709	38.85	ug/l	0.00
Spiked Amount	50.000		Recovery	=	77.70%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.85	85	2752	Below Cal		92
3) Chloromethane	2.06	50	5153	Below Cal		93
4) Vinyl Chloride	2.18	62	3946	Below Cal		96
5) Bromomethane	2.57	94	6130	Below Cal		97
7) Trichlorofluoromethane	3.02	101	5167	0.25 ug/l		95
8) Diethyl Ether	3.42	74	2074	0.28 ug/l		76
9) 1,1,2-Trichlorotrifluoroet	3.77	101	3173m	0.23 ug/l		
12) 1,1-Dichloroethene	3.73	96	2864	0.24 ug/l #		90
15) Acrylonitrile	5.02	53	4627m	1.08 ug/l		
16) Acetone	3.83	43	5713	Below Cal		91
17) Carbon Disulfide	4.06	76	11683	Below Cal		99
18) Methyl Acetate	4.34	43	11722	0.36 ug/l		92
20) Methylene Chloride	4.55	84	6207	Below Cal	#	94
21) trans-1,2-Dichloroethene	5.05	96	3387	0.26 ug/l #		81
23) Vinyl Acetate	5.91	43	17845	0.67 ug/l #		93
25) 2-Butanone	6.85	43	5426	1.09 ug/l #		88
26) 2,2-Dichloropropane	6.82	77	5123m	0.25 ug/l		
27) cis-1,2-Dichloroethene	6.84	96	3271	0.22 ug/l #		15
29) Tetrahydrofuran	7.23	42	3811	1.21 ug/l #		89
30) Chloroform	7.38	83	5420	0.21 ug/l		96
31) Cyclohexane	7.67	56	23380	0.92 ug/l #		1
32) 1,1,1-Trichloroethane	7.57	97	4754m	0.22 ug/l		
36) 1,1-Dichloropropene	7.79	75	4898	0.24 ug/l #		65
38) Carbon Tetrachloride	7.67	117	98050	4.63 ug/l #		16
42) 1,2-Dichloroethane	8.13	62	4251	0.21 ug/l		92
44) Trichloroethene	8.83	130	3521	0.22 ug/l		66
45) 1,2-Dichloropropane	9.12	63	3291	0.20 ug/l		92
46) Dibromomethane	9.21	93	2097	0.22 ug/l #		77
48) Methyl methacrylate	9.20	41	2292	0.21 ug/l		86
51) 4-Methyl-2-Pentanone	9.99	43	8825	0.75 ug/l		92
52) Toluene	10.16	92	7819	0.22 ug/l		92
53) t-1,3-Dichloropropene	10.39	75	4319	0.21 ug/l		90
55) 1,1,2-Trichloroethane	10.56	97	4834	Below Cal	#	66
58) 2-Chloroethyl Vinyl ether	9.70	63	5603	0.71 ug/l #		75

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

59) 2-Hexanone	10.76	43	6344	0.81	ug/l	99
64) Tetrachloroethene	10.63	164	3288	0.24	ug/l #	88
65) Chlorobenzene	11.44	112	8322	0.21	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.52	131	3284	0.22	ug/l #	65
68) m/p-Xylenes	11.62	106	8308	0.34	ug/l	84
75) 1,1,2,2-Tetrachloroethane	12.50	83	3024	Below	Cal #	96
76) 1,2,3-Trichloropropane	12.56	75	2195m	0.21	ug/l	
77) Bromobenzene	12.53	156	3355	0.26	ug/l	85
79) 2-Chlorotoluene	12.68	91	7328	0.22	ug/l	95
82) 4-Chlorotoluene	12.77	91	6638	0.20	ug/l	97
83) tert-Butylbenzene	12.99	119	6907	0.20	ug/l	95
87) 1,3-Dichlorobenzene	13.29	146	4531	0.20	ug/l	93
88) 1,4-Dichlorobenzene	13.37	146	6115m	0.28	ug/l	
90) Hexachloroethane	13.88	117	2225	Below	Cal	86
91) 1,2-Dichlorobenzene	13.65	146	4786	0.22	ug/l	93
92) 1,2-Dibromo-3-Chloropropan	14.28	75	574	Below	Cal #	10
93) 1,2,4-Trichlorobenzene	14.91	180	2124	3.06	ug/l	92
94) Hexachlorobutadiene	15.02	225	2026	Below	Cal	76
95) Naphthalene	15.13	128	4062	4.17	ug/l #	92

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

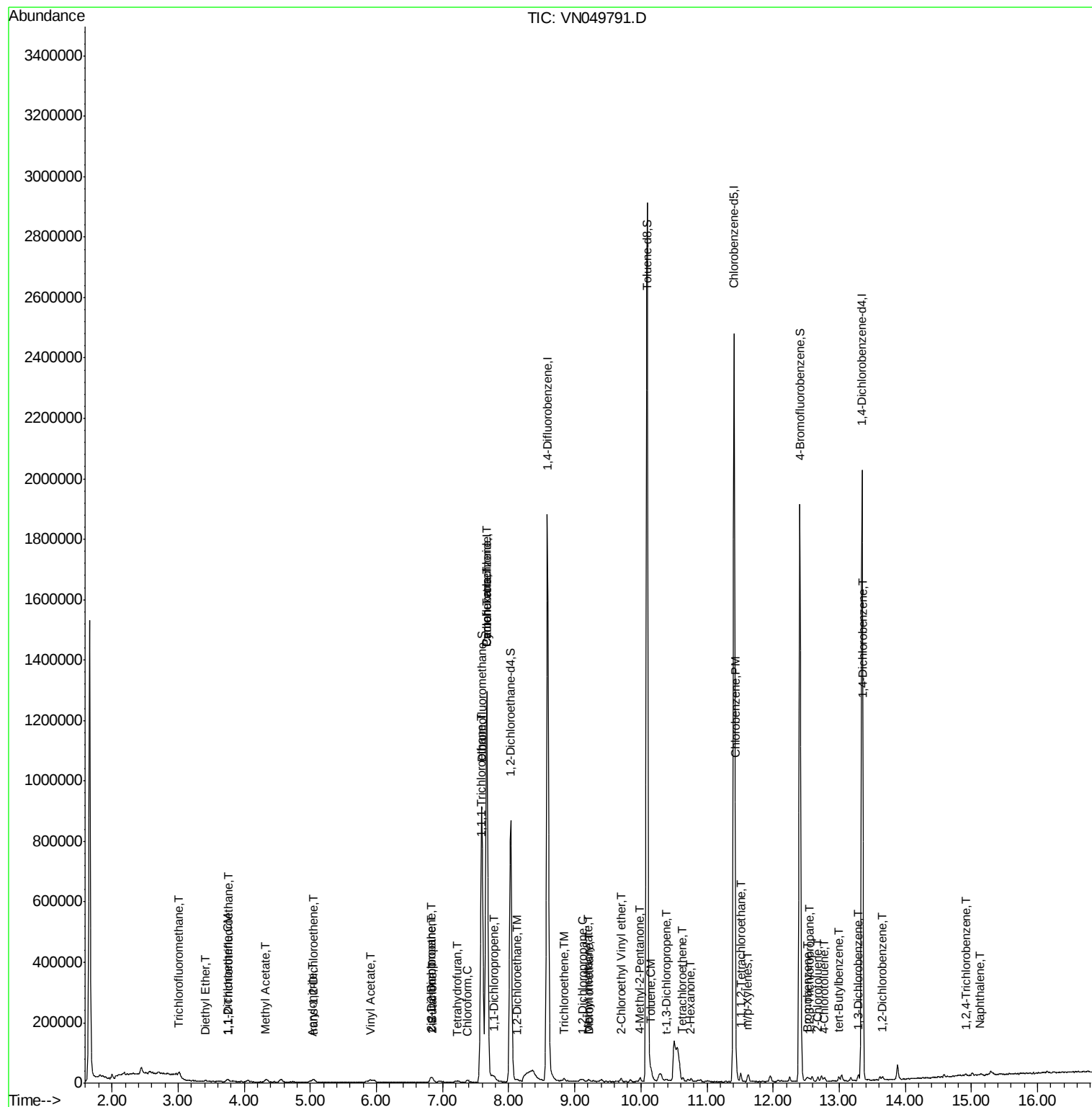
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Operator : MD\SY
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Misc : 5.00mL/MSVOA N/WATER
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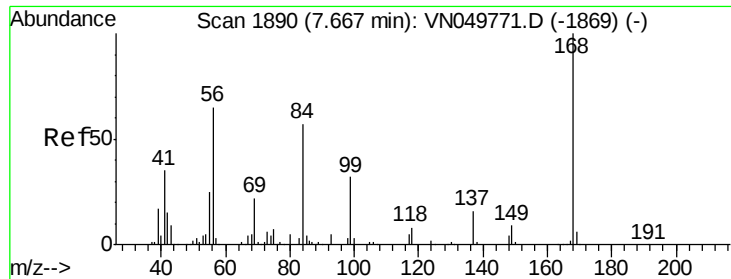
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#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 7.67 min Scan# 1891

Delta R.T. 0.00 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT3-2018

Tot Ion:168 Resp: 1102201

Ion Ratio Lower Upper

168 100

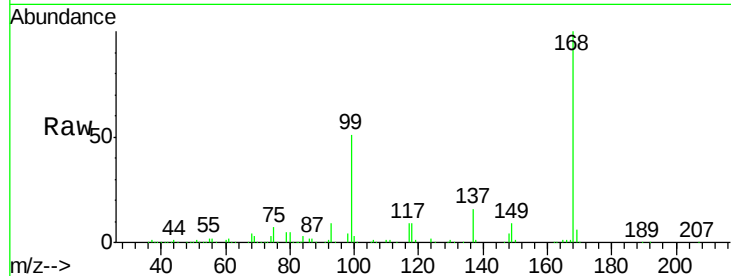
99 50.6 40.6 61.0

Manual Integrations

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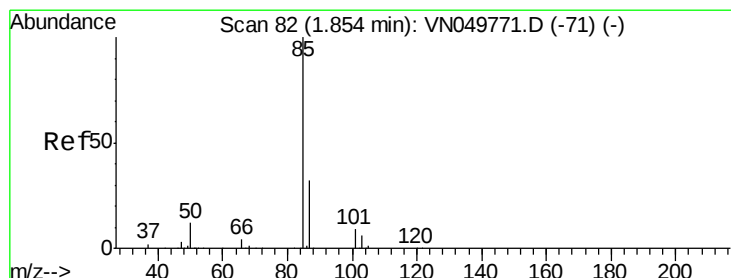
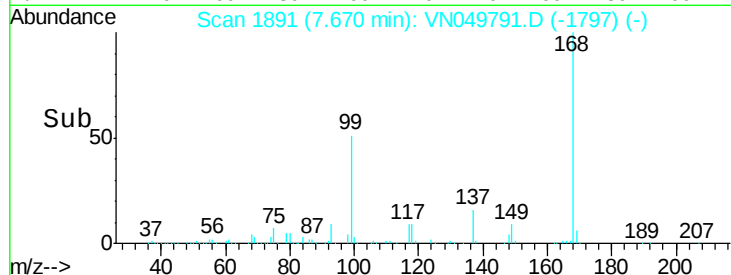
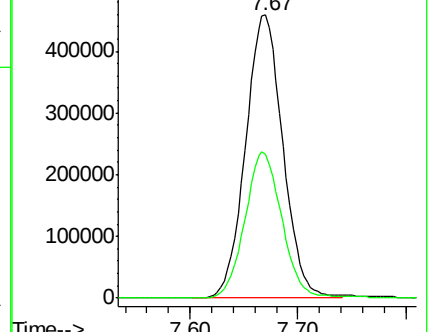
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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.85 min Scan# 82

Delta R.T. 0.00 min

Lab File: VN049791.D

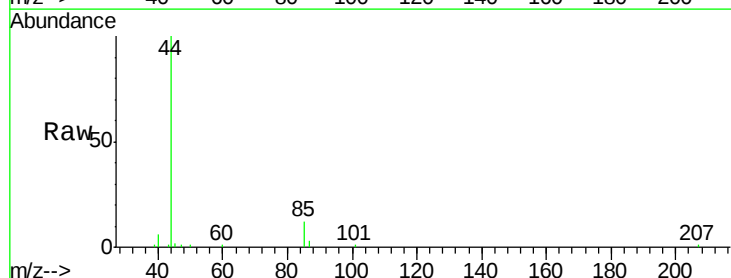
Acq: 13 Jul 2018 12:40

Tgt Ion: 85 Resp: 2752

Ion Ratio Lower Upper

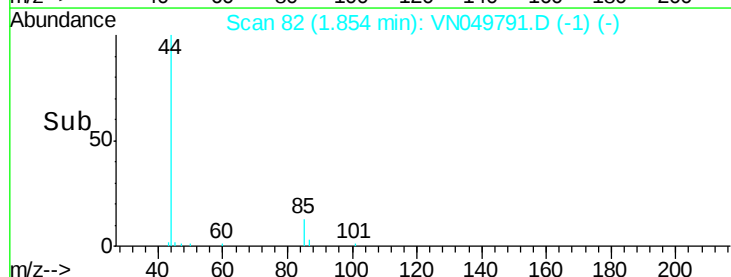
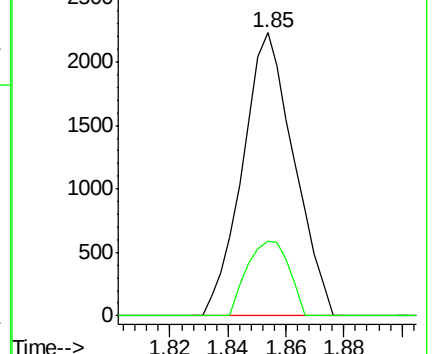
85 100

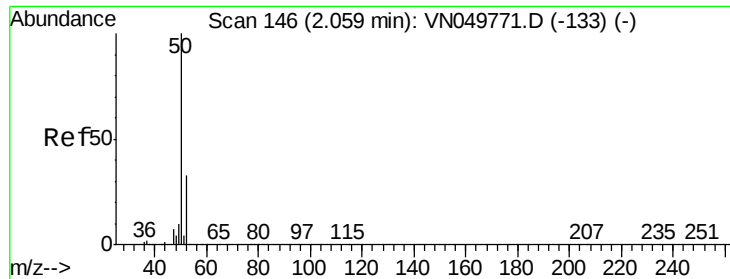
87 26.3 15.4 46.1



Abundance Ion 84.90 (84.60 to 85.60): VNO

Ion 86.90 (86.60 to 87.60): VNO





#3

Chloromethane

Concen: Below Cal

RT: 2.06 min Scan# 147

Delta R.T. 0.00 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT3-2018

Tot Ion: 50 Resp: 5153

Ion Ratio Lower Upper

50 100

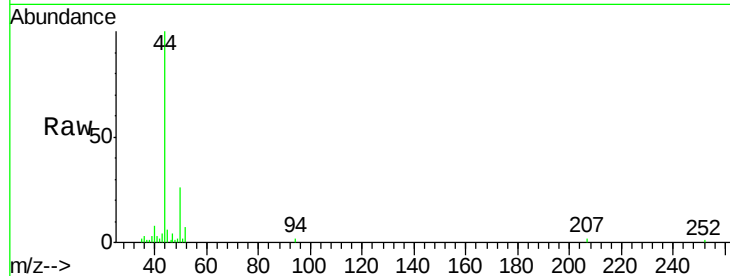
52 28.5 26.1 39.1

Manual Integrations

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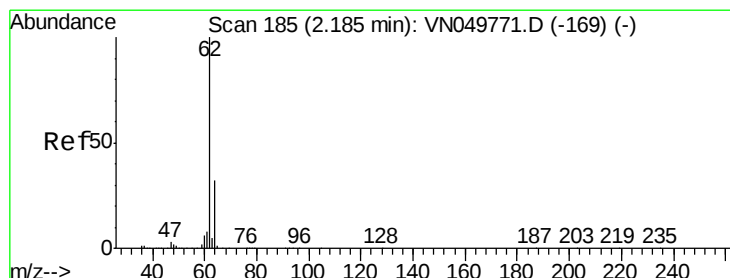
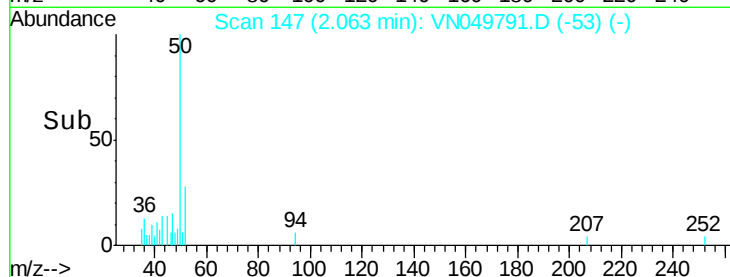
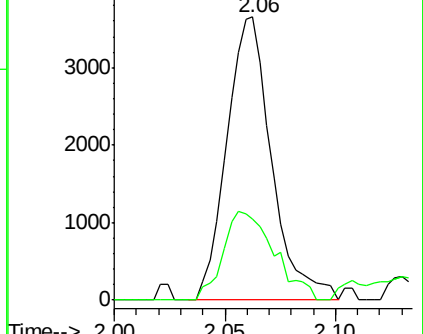
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Abundance Ion 49.90 (49.60 to 50.60): VN0

Ion 51.90 (51.60 to 52.60): VN0



#4

Vinyl Chloride

Concen: Below Cal

RT: 2.18 min Scan# 184

Delta R.T. -0.00 min

Lab File: VN049791.D

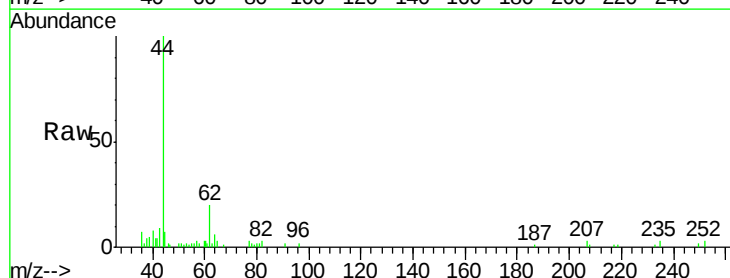
Acq: 13 Jul 2018 12:40

Tgt Ion: 62 Resp: 3946

Ion Ratio Lower Upper

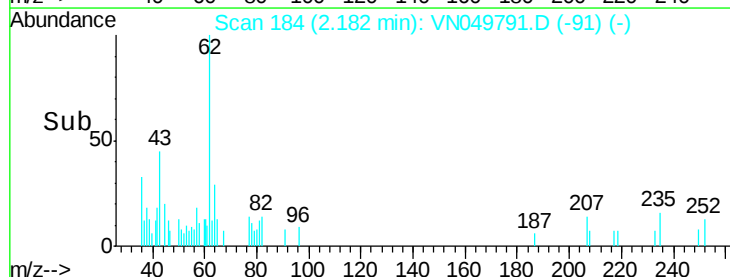
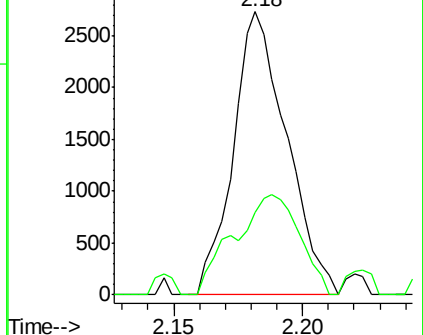
62 100

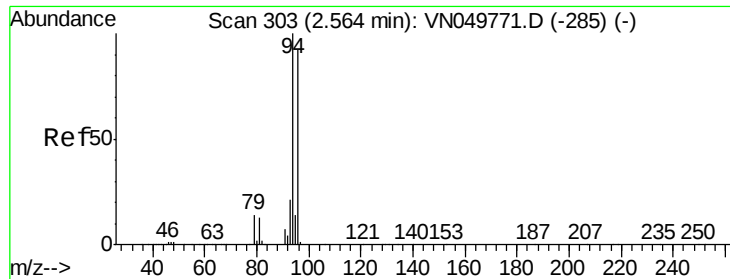
64 29.3 25.4 38.0



Abundance Ion 61.90 (61.60 to 62.60): VN0

Ion 63.90 (63.60 to 64.60): VN0





#5

Bromomethane

Concen: Below Cal

RT: 2.57 min Scan# 306

Delta R.T. 0.01 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT3-2018

Tot Ion: 94 Resp: 6130

Ion Ratio Lower Upper

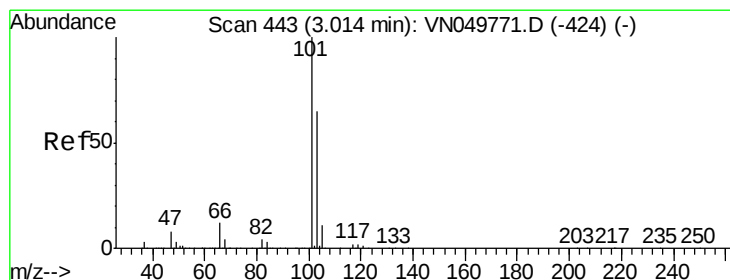
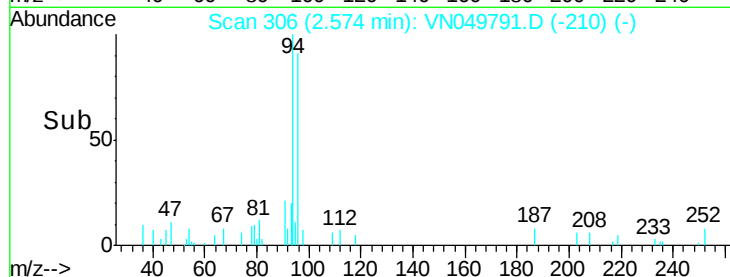
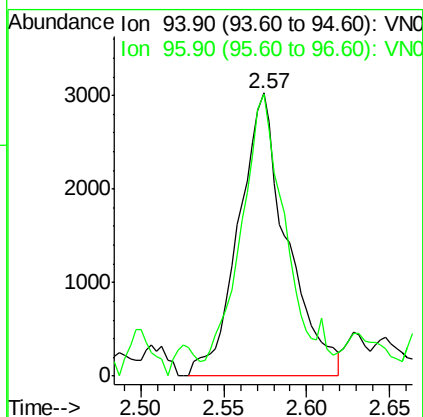
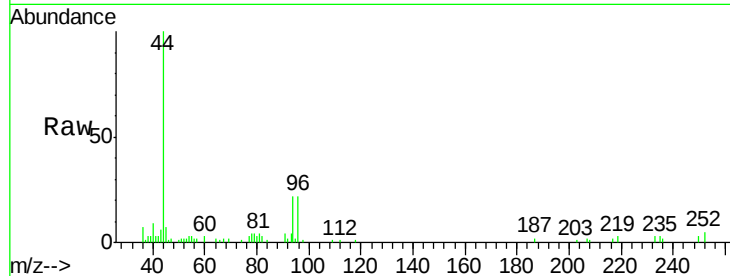
94 100

96 91.4 75.7 113.5

Manual Integrations
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#7

Trichlorofluoromethane

Concen: 0.25 ug/l

RT: 3.02 min Scan# 444

Delta R.T. 0.00 min

Lab File: VN049791.D

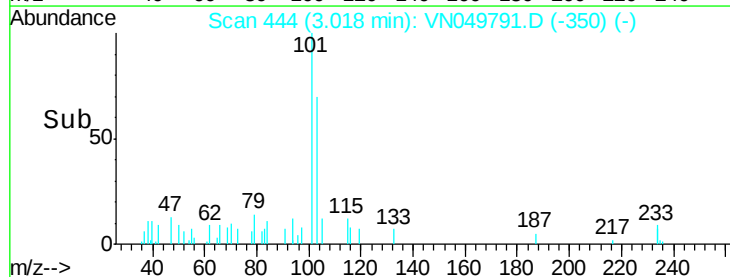
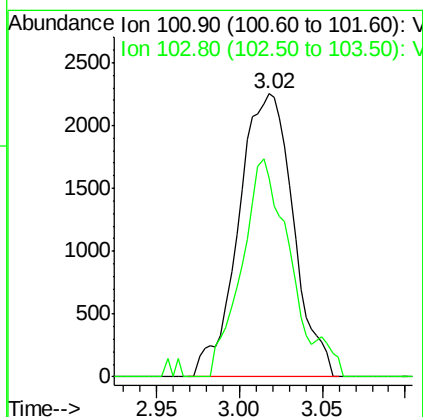
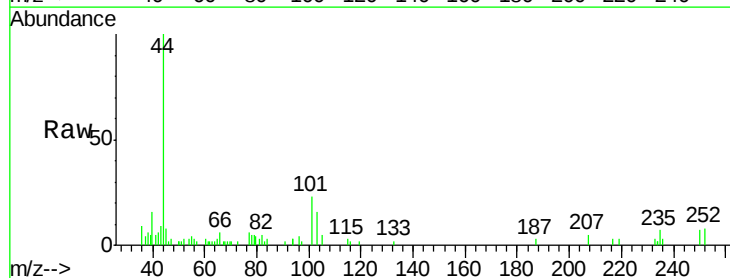
Acq: 13 Jul 2018 12:40

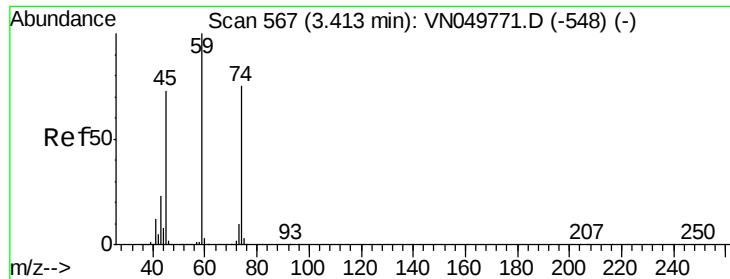
Tgt Ion: 101 Resp: 5167

Ion Ratio Lower Upper

101 100

103 70.2 52.8 79.2





#8

Diethyl Ether

Concen: 0.28 ug/l

RT: 3.42 min Scan# 568

Delta R.T. 0.00 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT3-2018

Tot Ion: 74 Resp: 2074

Ion Ratio Lower Upper

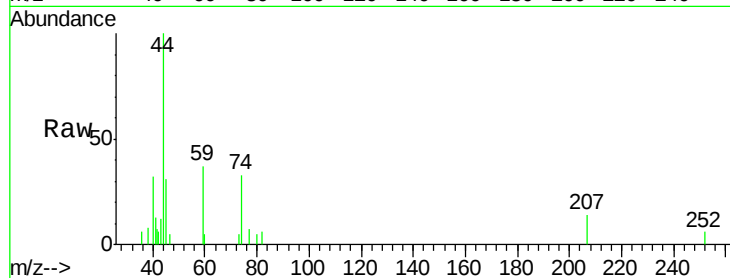
74 100

45 73.5 48.4 145.2

Manual Integrations
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7/16/2018 11:25:23 AM



Abundance Ion 74.00 (73.70 to 74.70): VN049791.D (-548) (-)

Ion 45.00 (44.70 to 45.70): VN049791.D (-548) (-)

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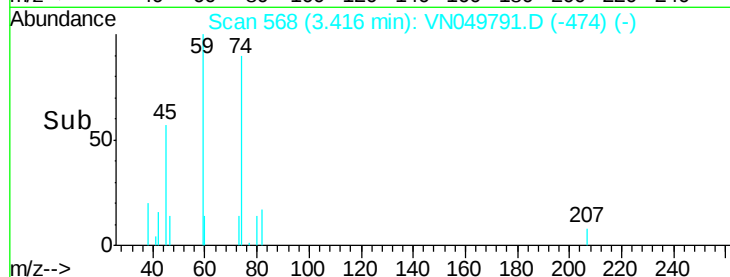
3.42

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#9

1,1,2-Trichlorotrifluoroethane

Concen: 0.23 ug/l m

RT: 3.77 min Scan# 677

Delta R.T. 0.01 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

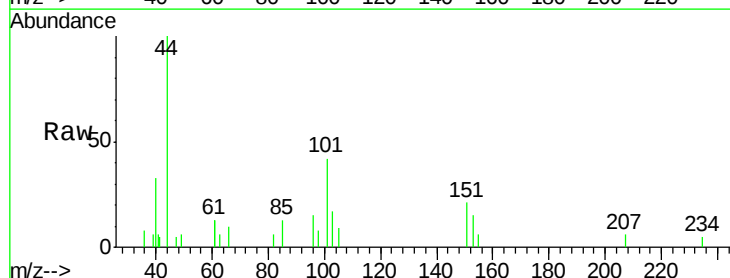
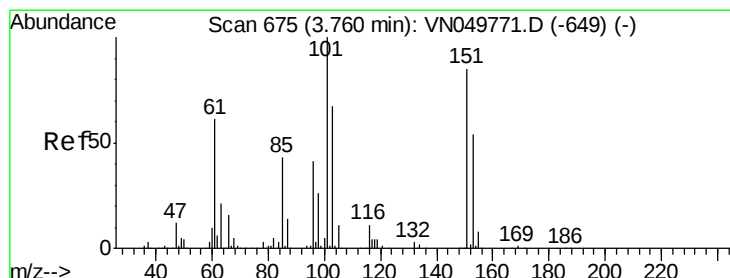
Tgt Ion: 101 Resp: 3173

Ion Ratio Lower Upper

101 100

85 16.8 34.4 51.6#

151 41.6 66.2 99.4#



Abundance Ion 100.90 (100.60 to 101.60): VN049791.D (-582) (-)

Ion 84.90 (84.60 to 85.60): VN049791.D (-582) (-)

Ion 150.80 (150.50 to 151.50): VN049791.D (-582) (-)

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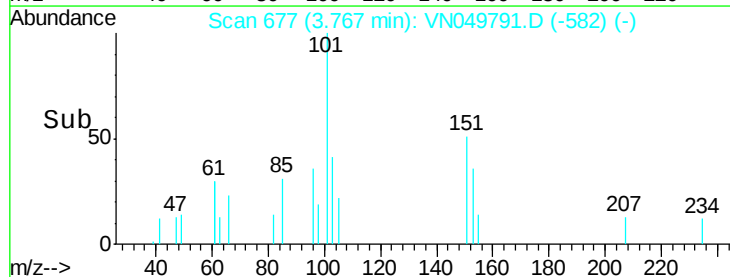
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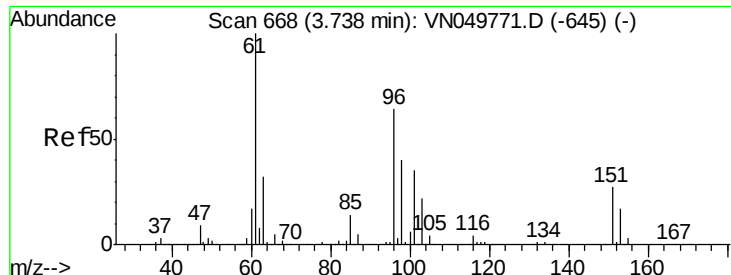
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Time-->



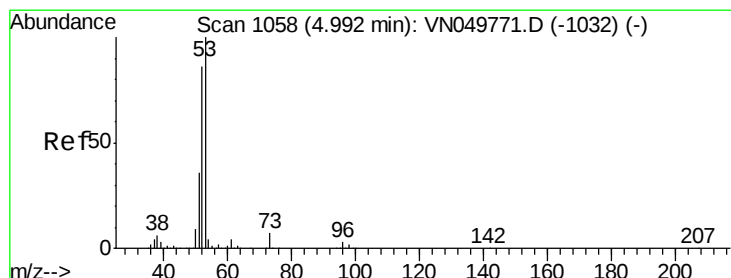
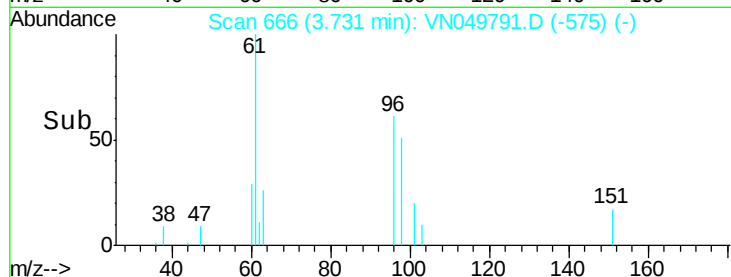
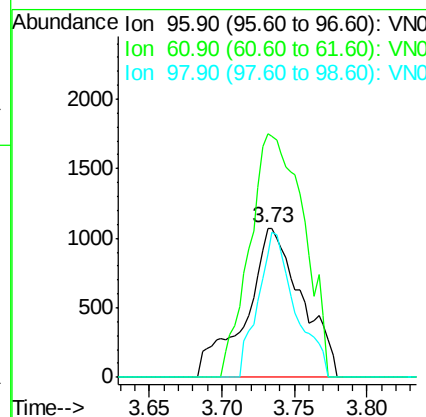
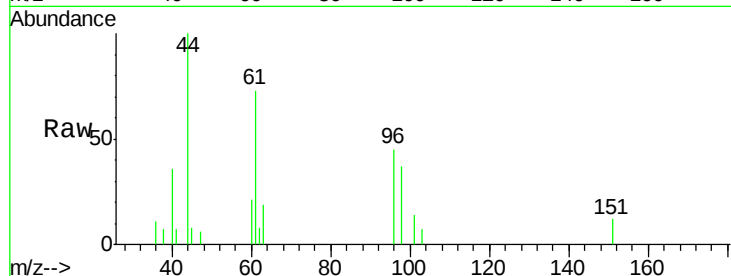
#12
 1,1-Dichloroethene
 Concen: 0.24 ug/l
 RT: 3.73 min Scan# 666
 Delta R.T. -0.01 min
 Lab File: VN049791.D
 Acq: 13 Jul 2018 12:40

Instrument :
 MSVOA_N
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 MDL-WATER-03-QT3-2018

Tot Ion	Ratio	Lower	Upper
96	100		
61	163.0	126.5	189.7
98	82.6	51.0	76.6#

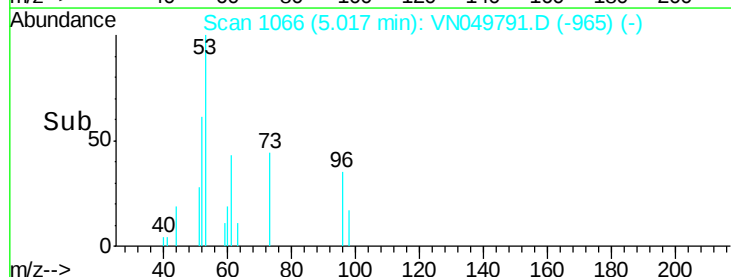
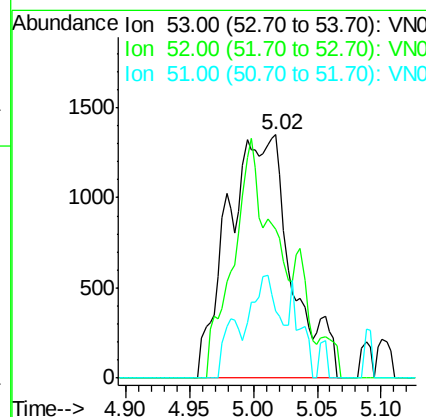
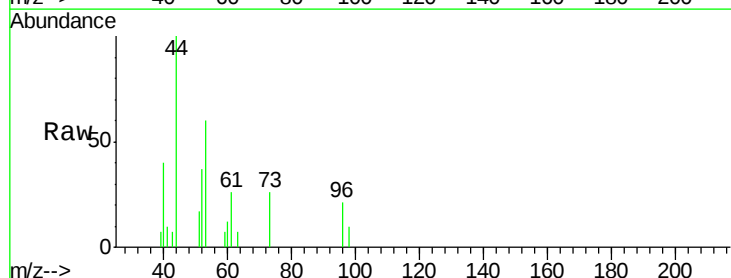
Manual Integrations
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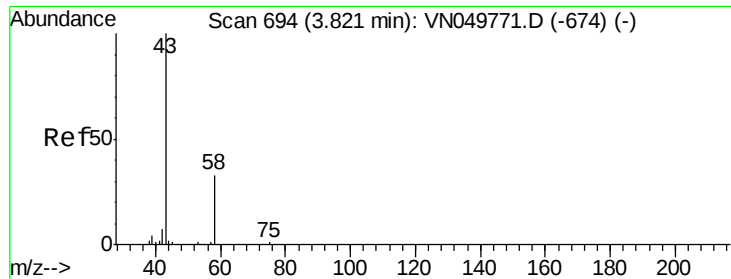
MMDadoda
 7/16/2018 11:25:23 AM



#15
 Acrylonitrile
 Concen: 1.08 ug/l m
 RT: 5.02 min Scan# 1066
 Delta R.T. 0.03 min
 Lab File: VN049791.D
 Acq: 13 Jul 2018 12:40

Tgt Ion	Ratio	Lower	Upper
53	100		
52	43.1	64.8	97.2#
51	17.5	28.9	43.3#





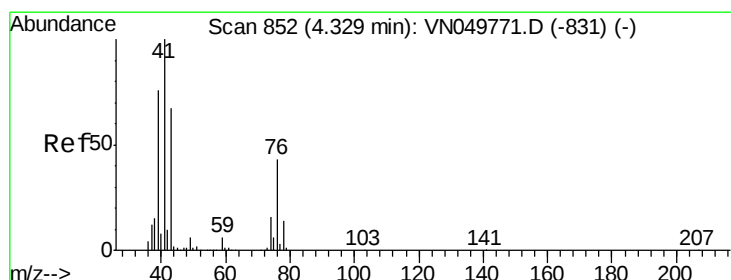
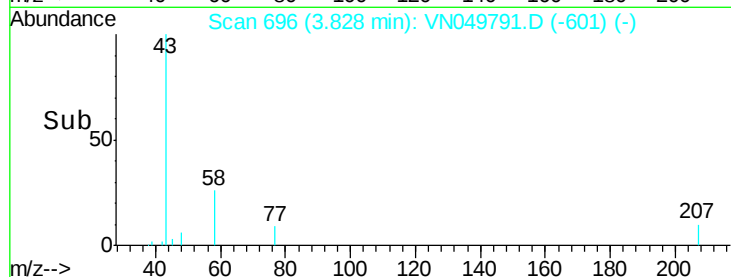
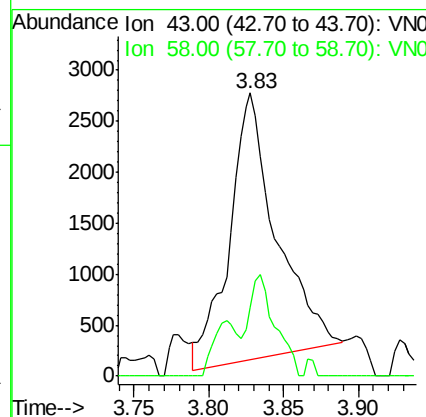
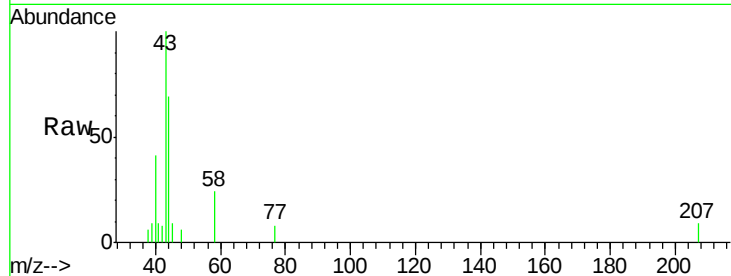
#16
Acetone
Concen: Below Cal
RT: 3.83 min Scan# 696
Delta R.T. 0.01 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT3-2018

Tot Ion: 43 Resp: 5713
Ion Ratio Lower Upper
43 100
58 27.2 25.9 38.9

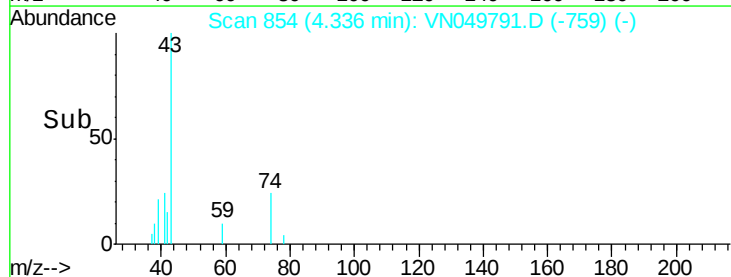
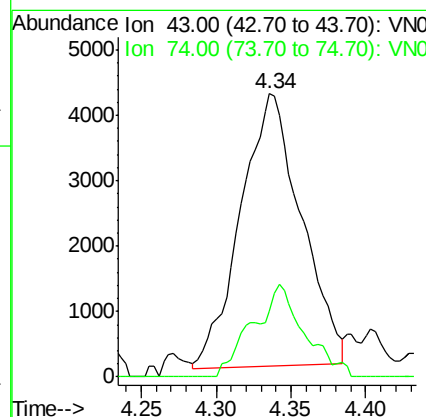
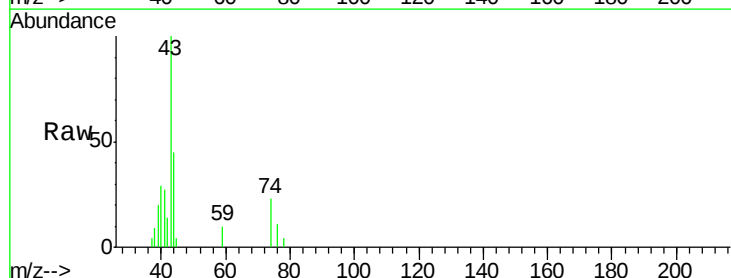
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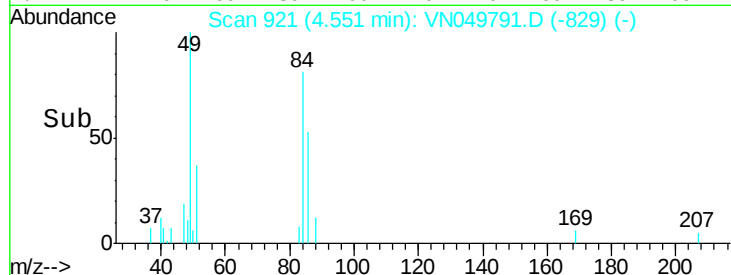
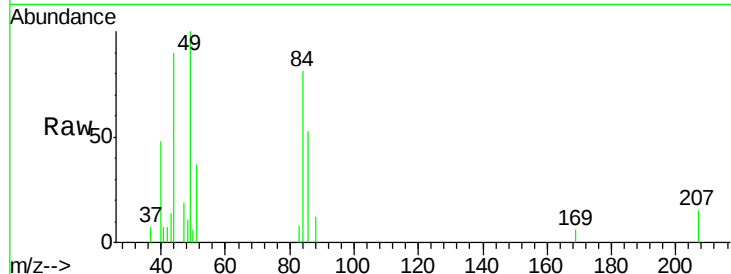
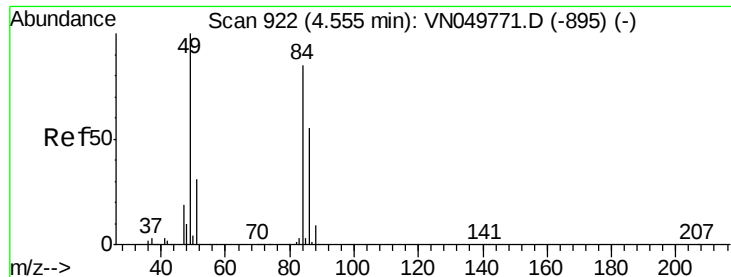
MMDadoda
7/16/2018 11:25:23 AM



#18
Methyl Acetate
Concen: 0.36 ug/l
RT: 4.34 min Scan# 854
Delta R.T. 0.01 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Tgt Ion: 43 Resp: 11722
Ion Ratio Lower Upper
43 100
74 28.9 19.8 29.8





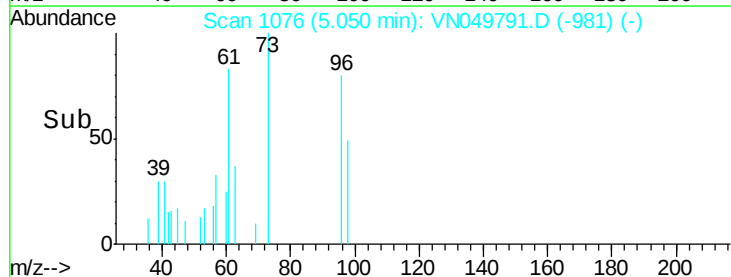
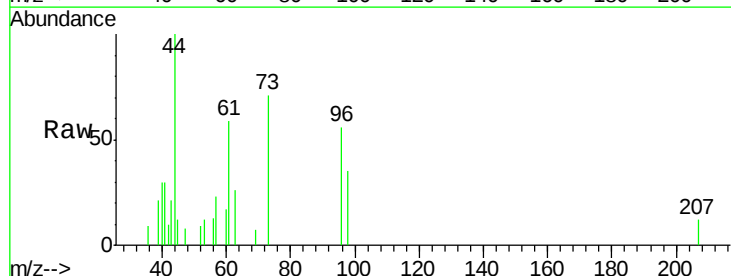
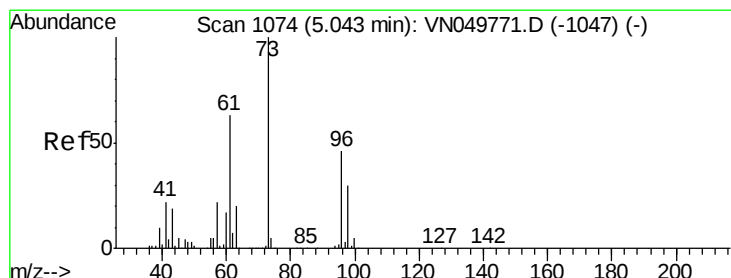
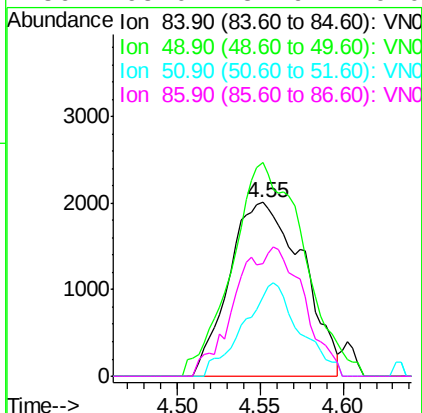
#20
Methvlene Chloride
Concen: Below Cal
RT: 4.55 min Scan# 921
Delta R.T. -0.00 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Tot Ion	Ratio	Lower	Upper
84	100		
49	113.2	95.4	143.2
51	45.9	28.4	42.6
86	65.0	52.6	79.0

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT3-2018

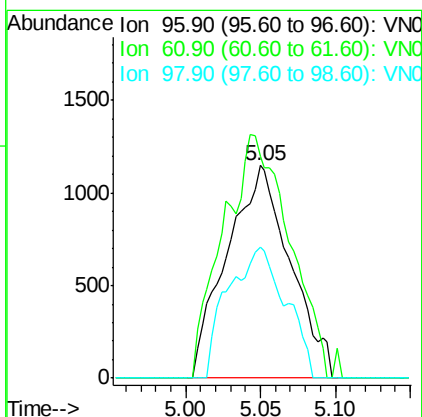
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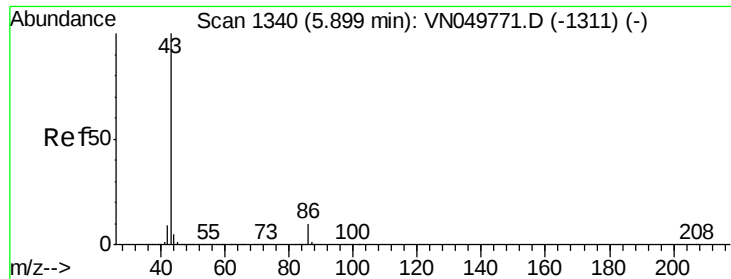
MMDadoda
7/16/2018 11:25:23 AM



#21
trans-1,2-Dichloroethene
Concen: 0.26 ug/l
RT: 5.05 min Scan# 1076
Delta R.T. 0.01 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Tgt Ion	Ratio	Lower	Upper
96	100		
61	104.2	109.0	163.6
98	61.6	51.1	76.7





#23

Vinyl Acetate

Concen: 0.67 ug/l

RT: 5.91 min Scan# 1343

Delta R.T. 0.01 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT3-2018

Tot Ion: 43 Resp: 17845

Ion Ratio Lower Upper

43 100

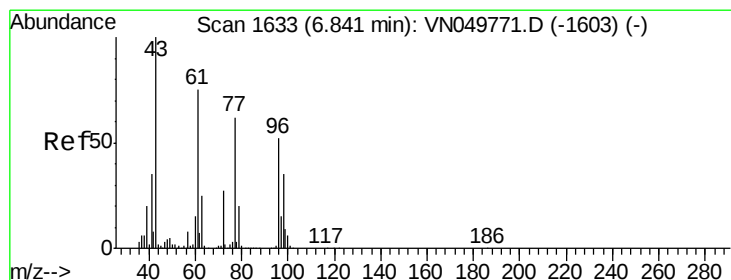
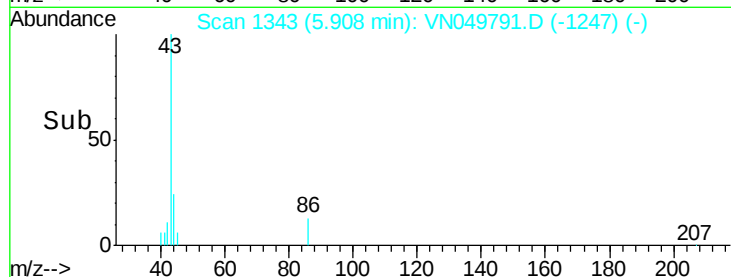
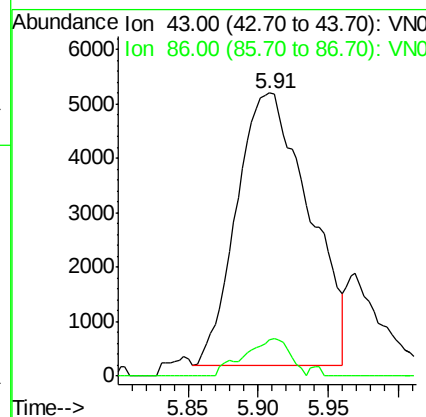
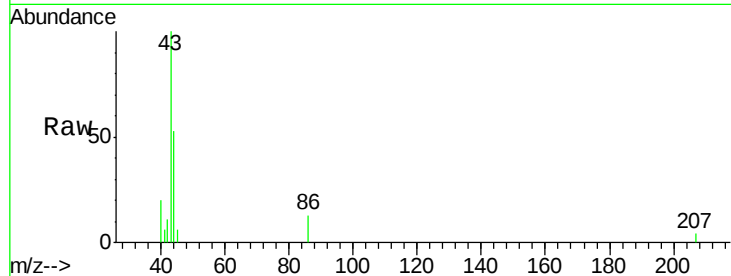
86 13.2 8.4 12.6#

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#25

2-Butanone

Concen: 1.09 ug/l

RT: 6.85 min Scan# 1637

Delta R.T. 0.01 min

Lab File: VN049791.D

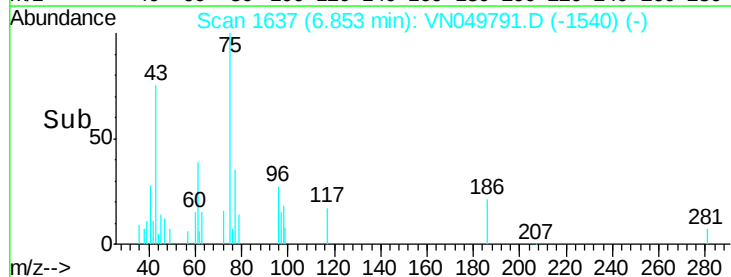
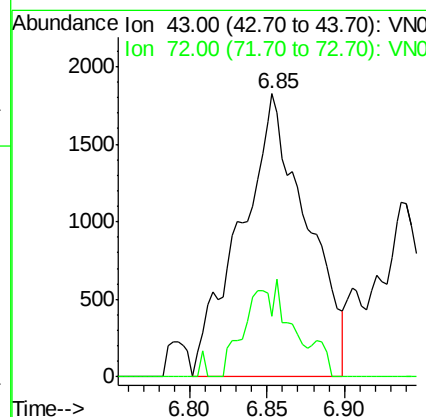
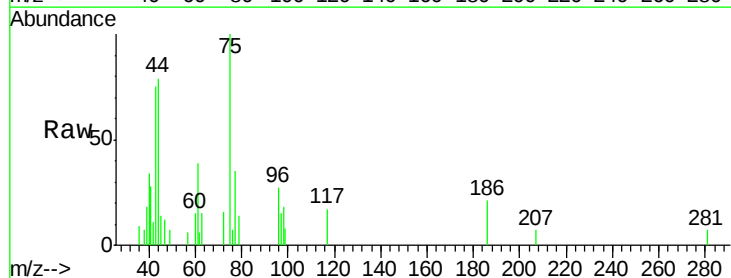
Acq: 13 Jul 2018 12:40

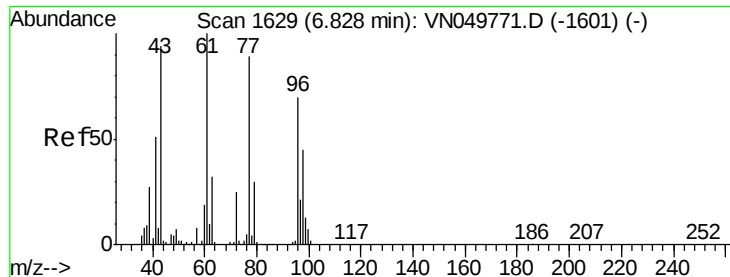
Tgt Ion: 43 Resp: 5426

Ion Ratio Lower Upper

43 100

72 21.5 22.1 33.1#





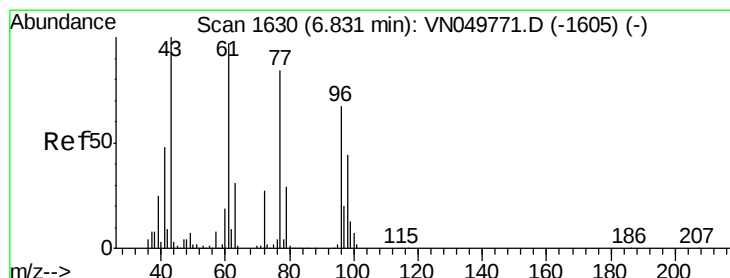
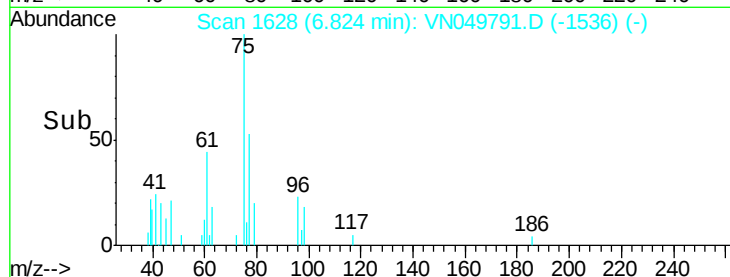
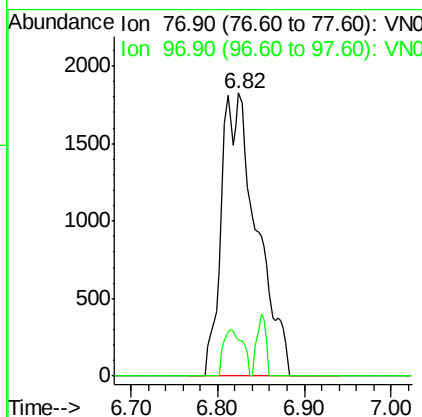
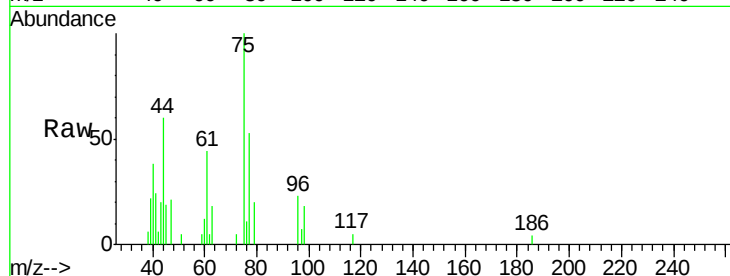
#26
 2,2-Dichloropropane
 Concen: 0.25 ug/l m
 RT: 6.82 min Scan# 1628
 Delta R.T. -0.00 min
 Lab File: VN049791.D
 Acq: 13 Jul 2018 12:40

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT3-2018

Tot Ion	Ratio	Lower	Upper
77	100		
97	8.8	11.9	35.5#

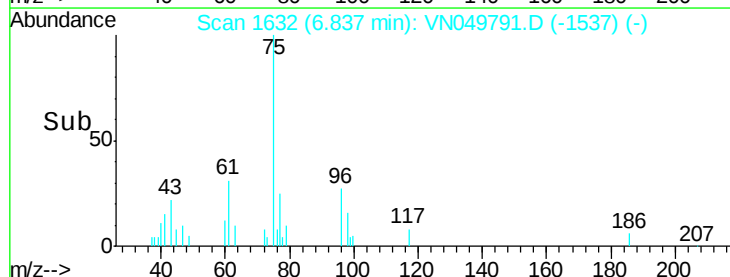
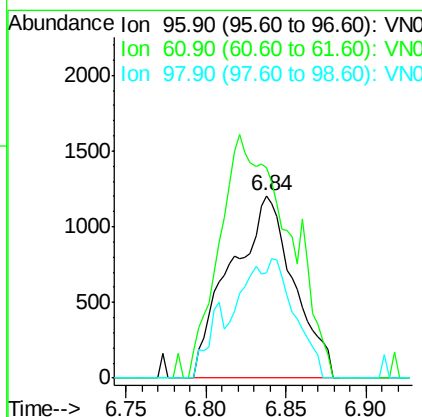
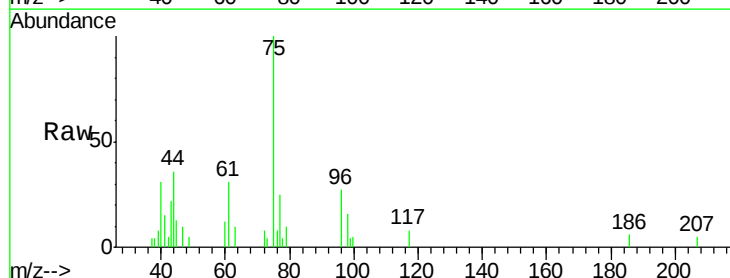
Manual Integrations
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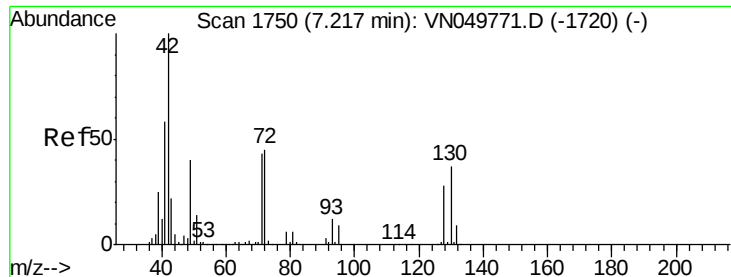
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#27
 cis-1,2-Dichloroethene
 Concen: 0.22 ug/l
 RT: 6.84 min Scan# 1632
 Delta R.T. 0.01 min
 Lab File: VN049791.D
 Acq: 13 Jul 2018 12:40

Tgt Ion	Ratio	Lower	Upper
96	100		
61	0.0	0.0	289.0
98	52.8	0.0	130.2





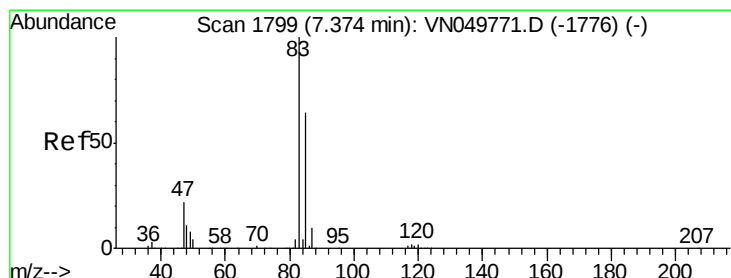
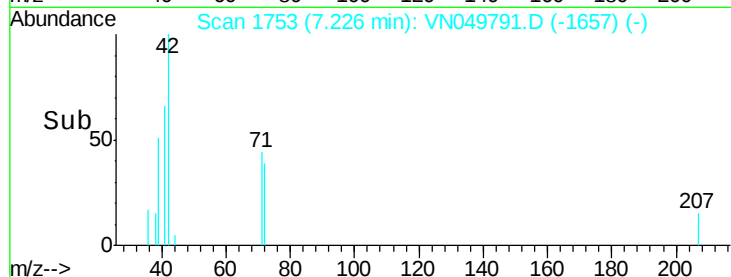
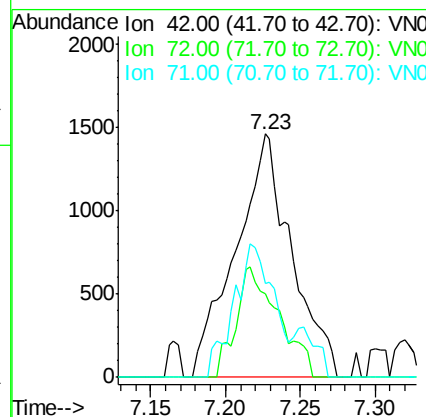
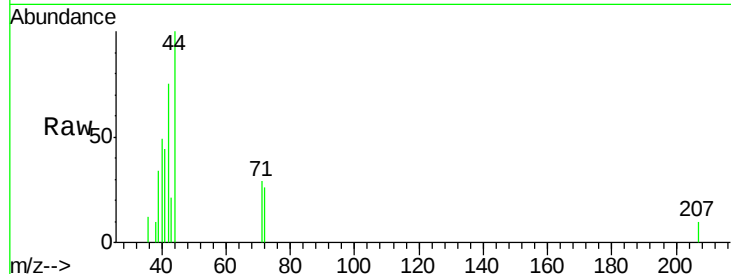
#29
Tetrahydrofuran
Concen: 1.21 ug/l
RT: 7.23 min Scan# 1753
Delta R.T. 0.01 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT3-2018

Tot Ion	Ratio	Lower	Upper
42	100		
72	34.5	35.6	53.4#
71	38.8	34.0	51.0

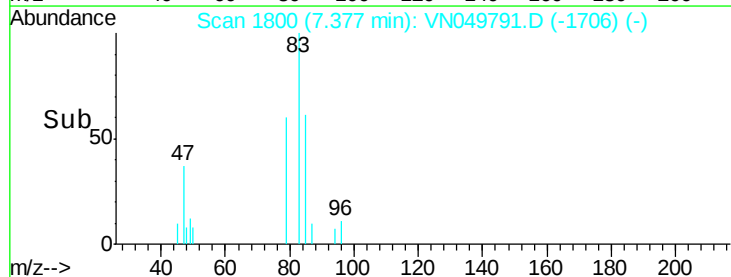
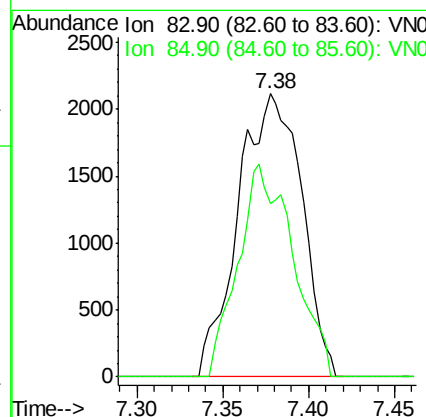
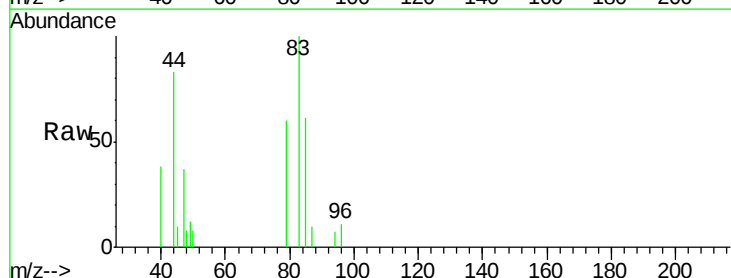
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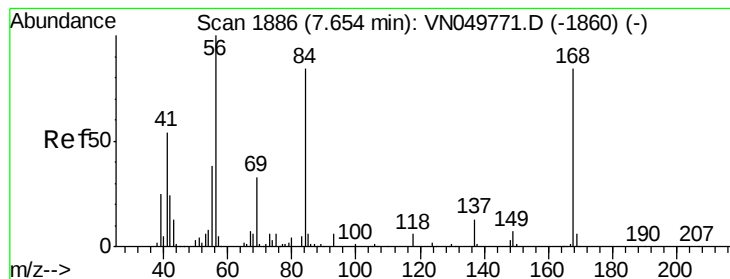
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#30
Chloroform
Concen: 0.21 ug/l
RT: 7.38 min Scan# 1800
Delta R.T. 0.00 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Tgt Ion	Ratio	Lower	Upper
83	100		
85	61.1	51.4	77.2





#31

Cyclohexane

Concen: 0.92 ug/l

RT: 7.67 min Scan# 1890

Delta R.T. 0.01 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Instrument :

MSVOA_N

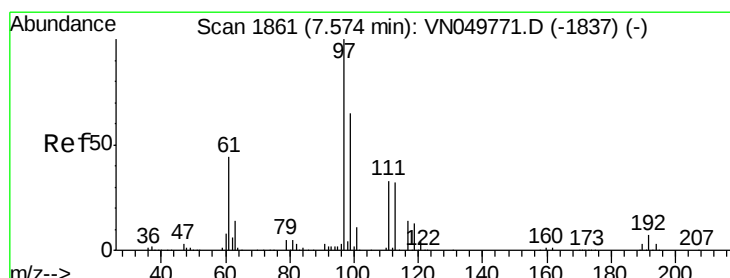
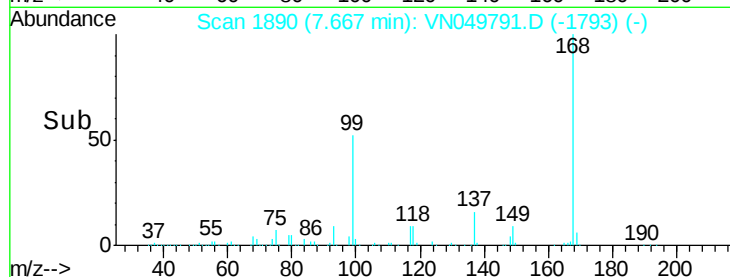
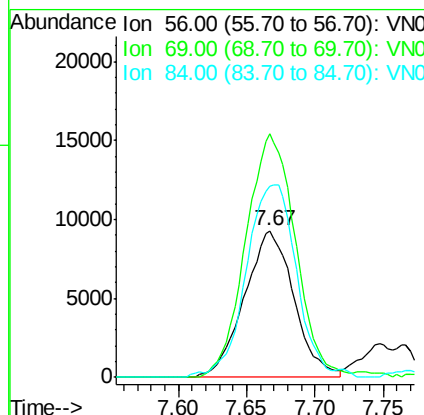
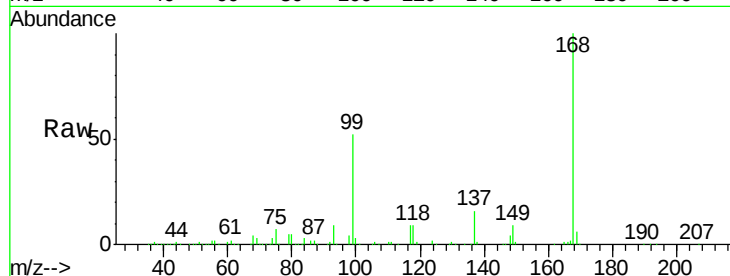
ClientSampleId :

MDL-WATER-03-QT3-2018

Tot Ion:	56	Resp:	23380
Ion Ratio	Lower	Upper	
56	100		
69	166.4	26.6	40.0#
84	128.9	69.0	103.6#

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#32

1,1,1-Trichloroethane

Concen: 0.22 ug/l m

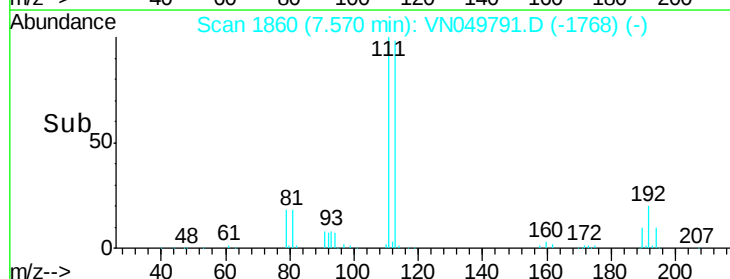
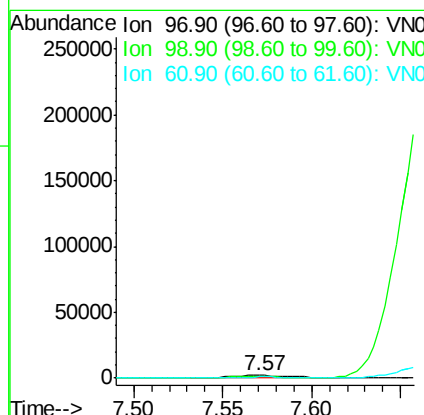
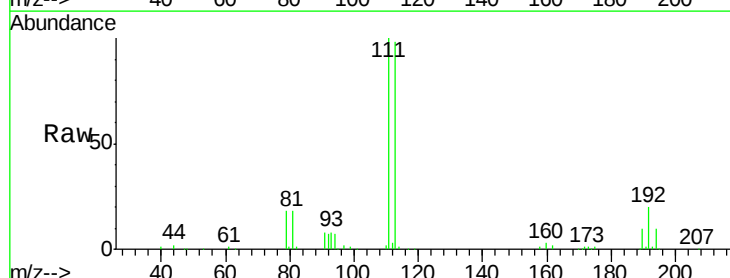
RT: 7.57 min Scan# 1860

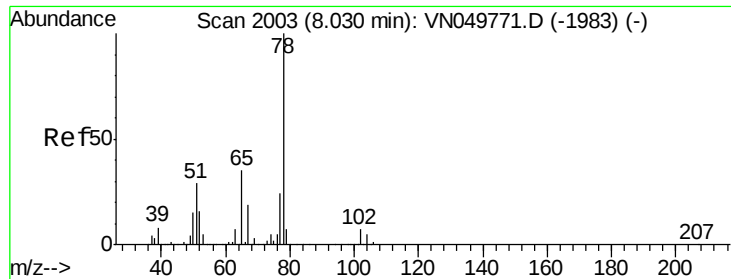
Delta R.T. -0.00 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Tgt Ion:	97	Resp:	4754
Ion Ratio	Lower	Upper	
97	100		
99	0.0	51.0	76.4#
61	32.2	35.5	53.3#





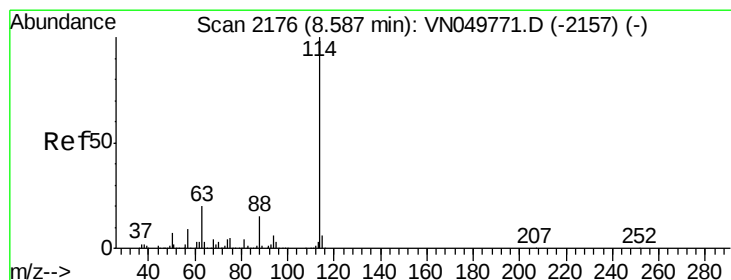
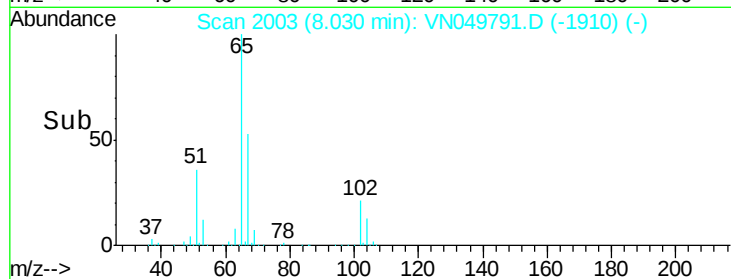
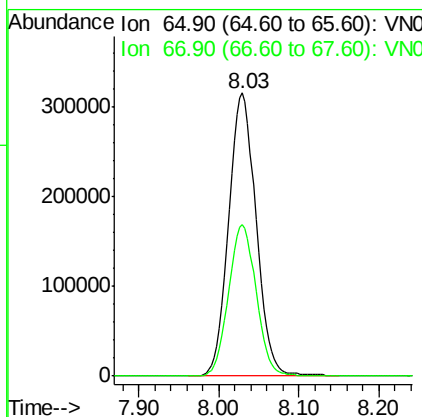
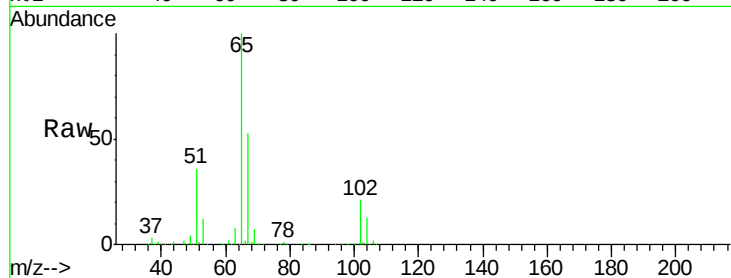
#33
 1,2-Dichloroethane-d4
 Concen: 57.43 ug/l
 RT: 8.03 min Scan# 2003
 Delta R.T. -0.00 min
 Lab File: VN049791.D
 Acq: 13 Jul 2018 12:40

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT3-2018

Tot Ion	Ratio	Resp	Lower	Upper
65	100			
67	53.7	0.0	107.2	

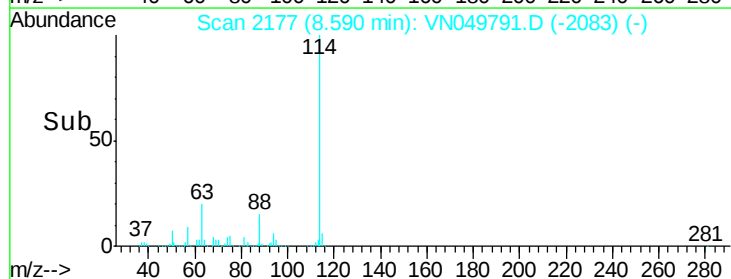
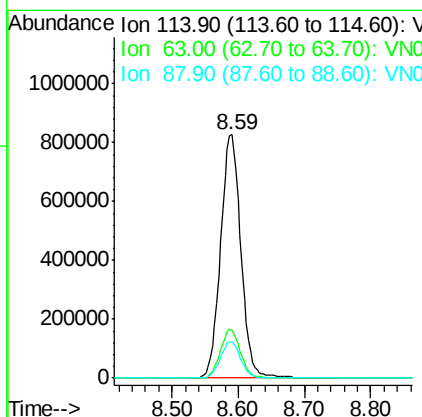
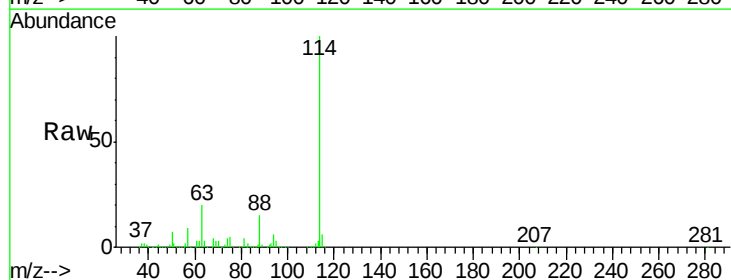
Manual Integrations
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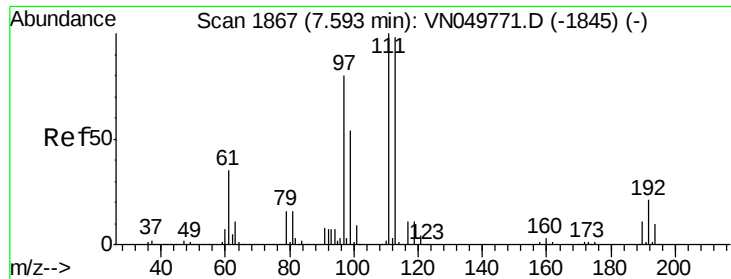
MMDadoda
 7/16/2018 11:25:23 AM



#34
 1,4-Difluorobenzene
 Concen: 50.00 ug/l
 RT: 8.59 min Scan# 2177
 Delta R.T. 0.00 min
 Lab File: VN049791.D
 Acq: 13 Jul 2018 12:40

Tgt Ion	Ratio	Resp	Lower	Upper
114	100			
63	19.8	0.0	39.8	
88	15.1	0.0	30.6	





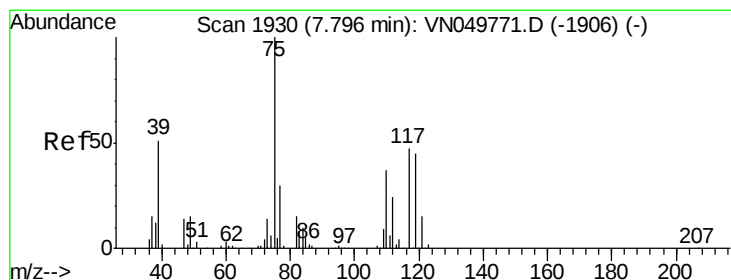
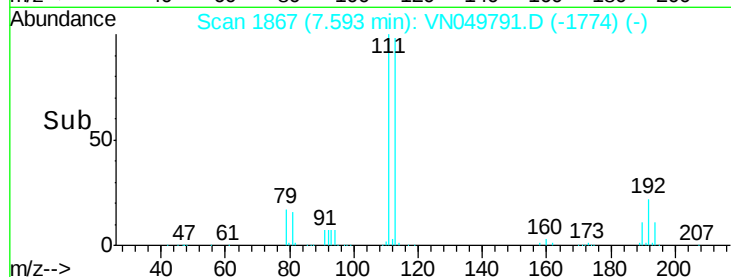
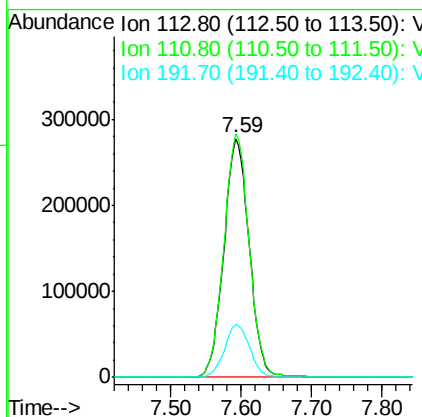
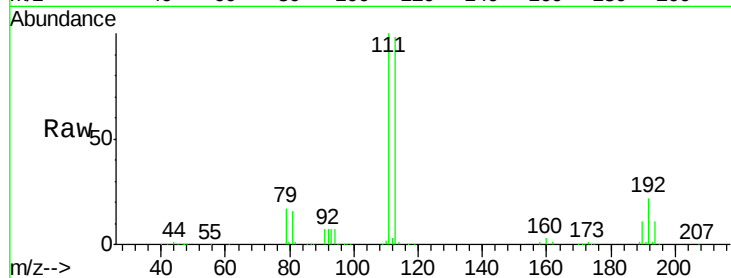
#35
Dibromofluoromethane
Concen: 52.69 ug/l
RT: 7.59 min Scan# 1867
Delta R.T. -0.00 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT3-2018

Tot Ion	Ratio	Resp	Lower	Upper
113	100	698656		
111	101.8	81.8	122.8	
192	21.9	17.8	26.6	

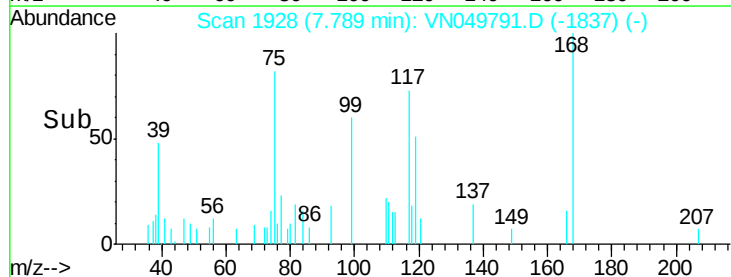
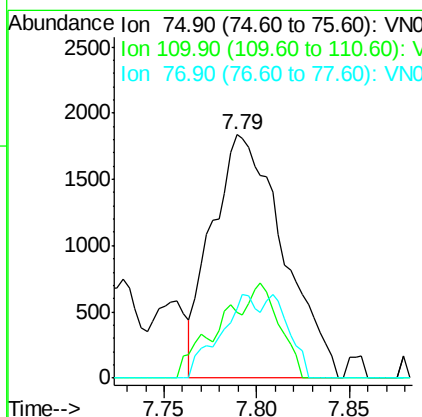
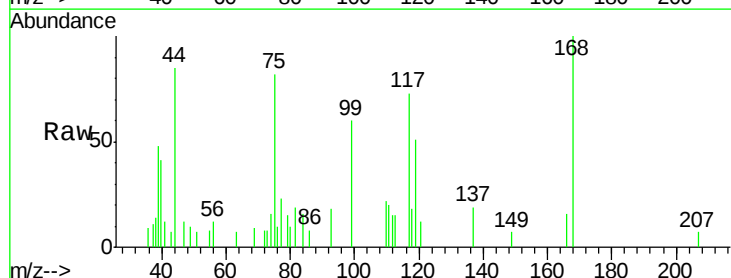
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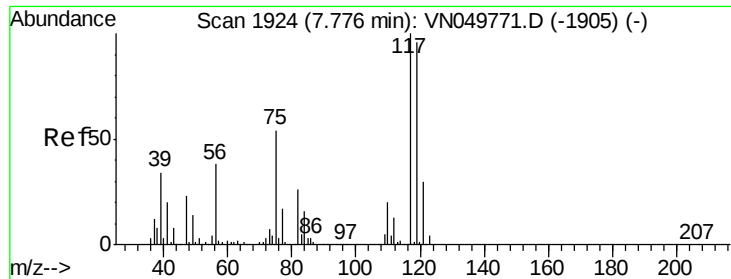
MMDadoda
7/16/2018 11:25:23 AM



#36
1,1-Dichloropropene
Concen: 0.24 ug/l
RT: 7.79 min Scan# 1928
Delta R.T. -0.01 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Tgt Ion	Ratio	Resp	Lower	Upper
75	100	4898		
110	9.4	18.1	54.4#	
77	18.8	24.9	37.3#	





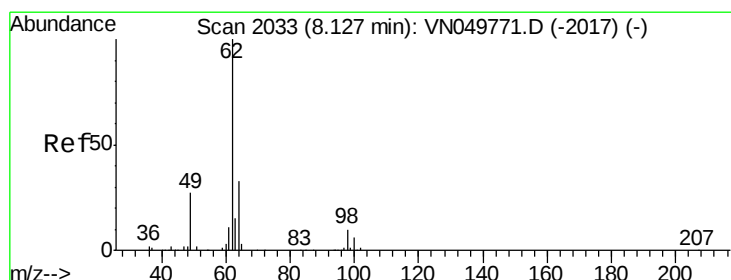
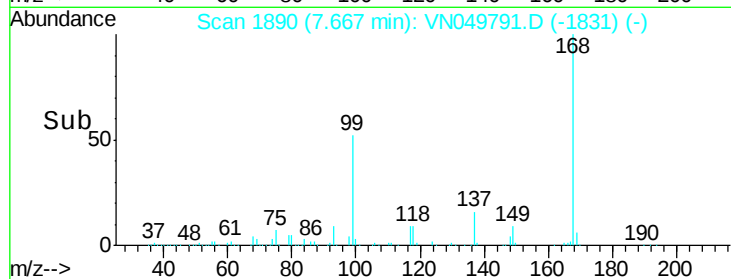
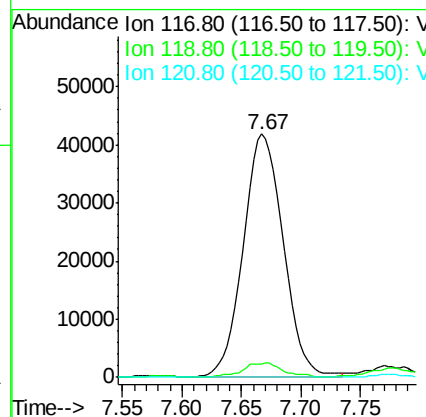
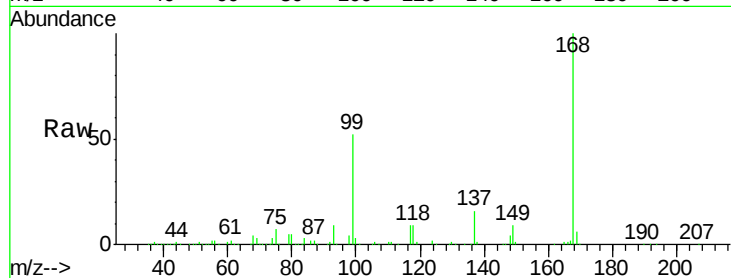
#38
Carbon Tetrachloride
Concen: 4.63 ug/l
RT: 7.67 min Scan# 1890
Delta R.T. -0.11 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT3-2018

Tot Ion	Ratio	Lower	Upper
117	100		
119	5.7	77.2	115.8#
121	0.0	25.0	37.6#

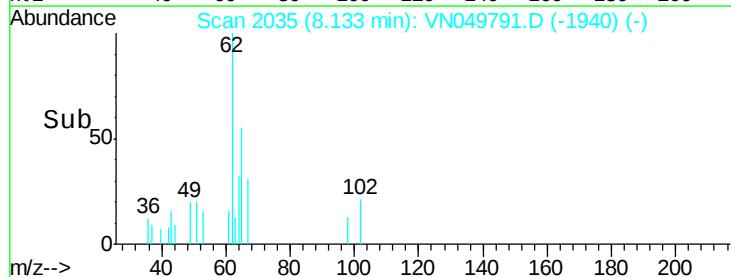
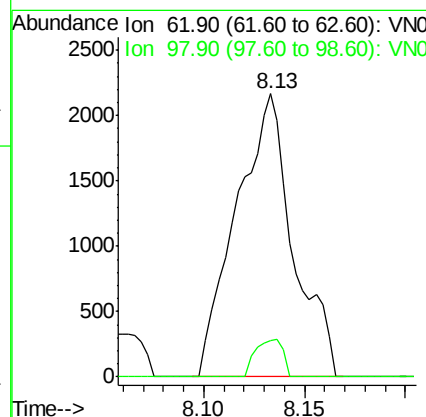
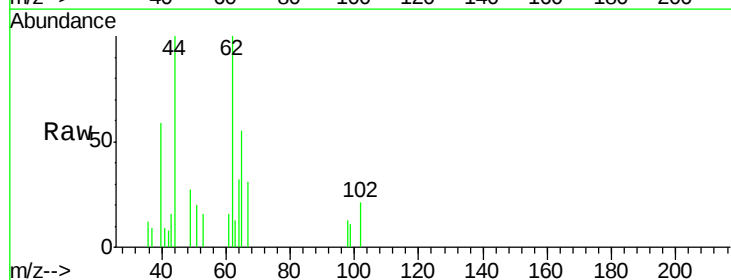
Manual Integrations
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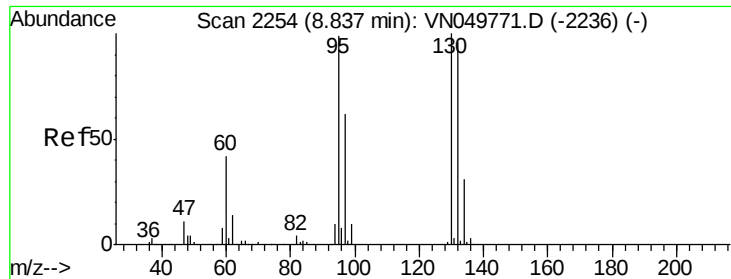
MMDadoda
7/16/2018 11:25:23 AM



#42
1,2-Dichloroethane
Concen: 0.21 ug/l
RT: 8.13 min Scan# 2035
Delta R.T. 0.01 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Tgt Ion	Ratio	Lower	Upper
62	100		
98	6.5	0.0	19.0





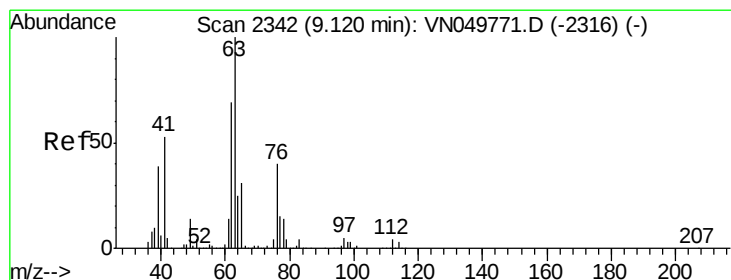
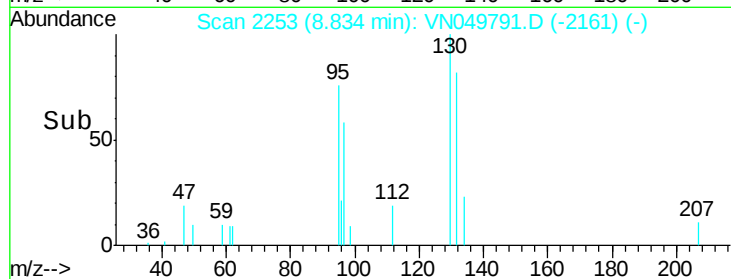
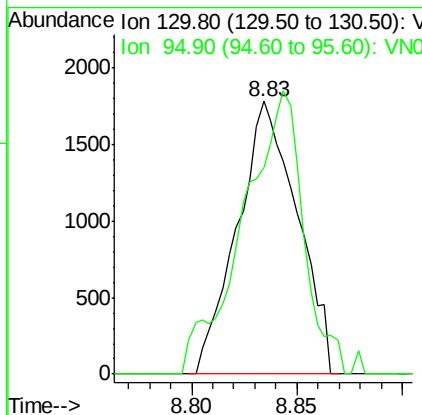
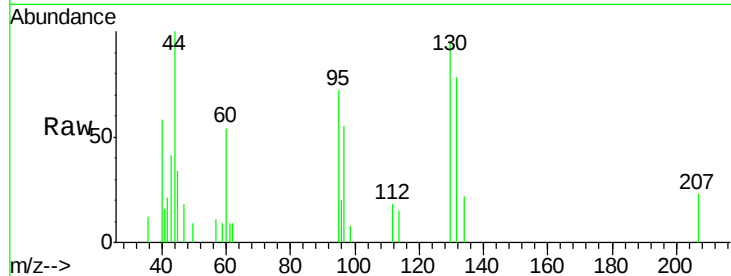
#44
 Trichloroethene
 Concen: 0.22 ug/l
 RT: 8.83 min Scan# 2253
 Delta R.T. -0.00 min
 Lab File: VN049791.D
 Acq: 13 Jul 2018 12:40

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT3-2018

Tot Ion:130 Resp: 3521
 Ion Ratio Lower Upper
 130 100
 95 63.4 0.0 192.8

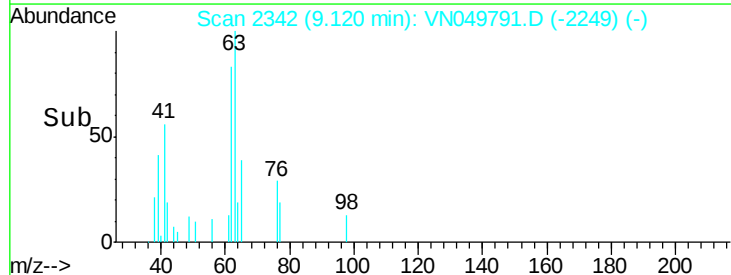
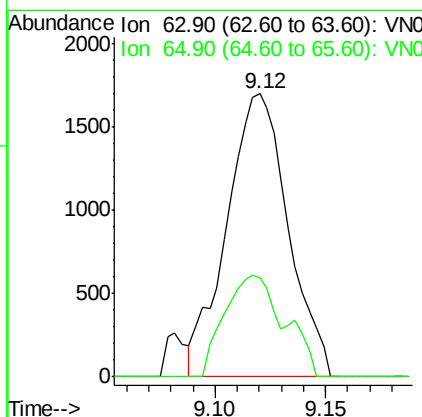
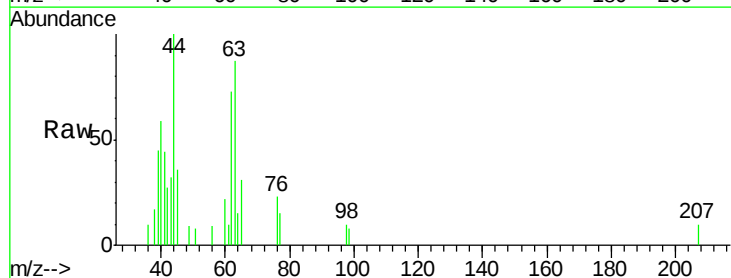
Manual Integrations
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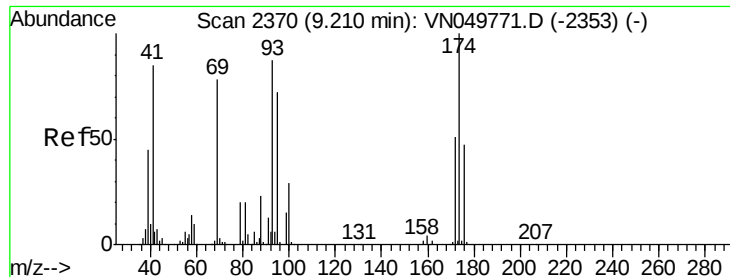
MMDadoda
 7/16/2018 11:25:23 AM



#45
 1,2-Dichloropropane
 Concen: 0.20 ug/l
 RT: 9.12 min Scan# 2342
 Delta R.T. -0.00 min
 Lab File: VN049791.D
 Acq: 13 Jul 2018 12:40

Tgt Ion: 63 Resp: 3291
 Ion Ratio Lower Upper
 63 100
 65 35.2 24.7 37.1





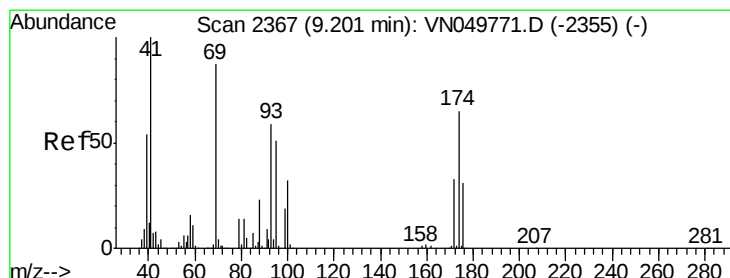
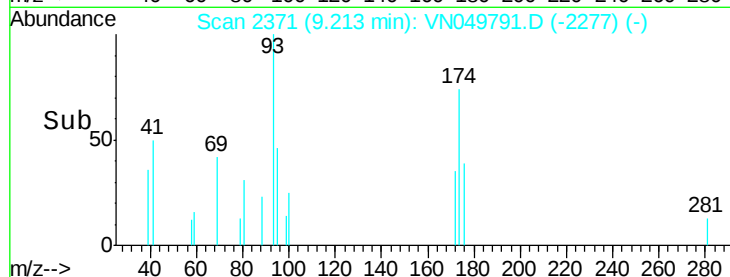
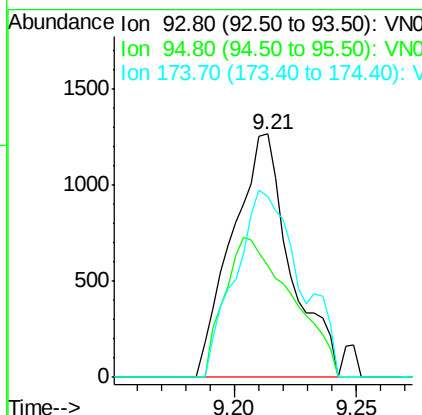
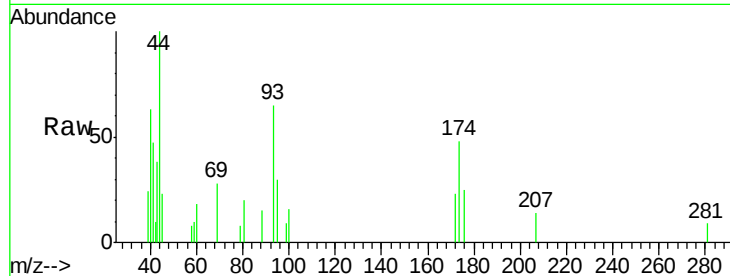
#46
Dibromomethane
Concen: 0.22 ug/l
RT: 9.21 min Scan# 2371
Delta R.T. 0.00 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT3-2018

Tot Ion: 93 Resp: 2097
Ion Ratio Lower Upper
93 100
95 66.1 67.9 101.9#
174 85.5 89.4 134.0#

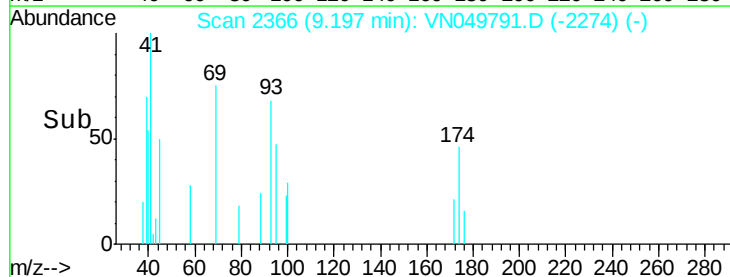
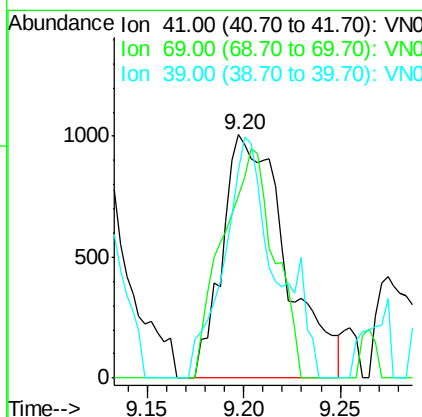
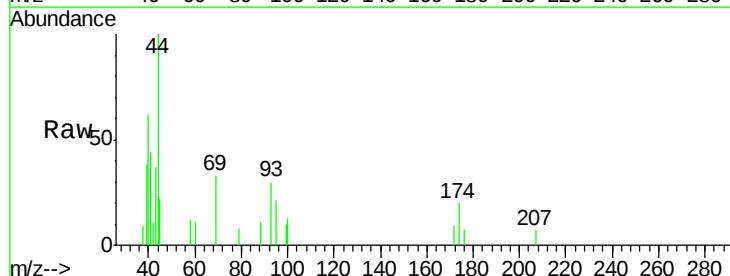
Manual Integrations
APPROVED

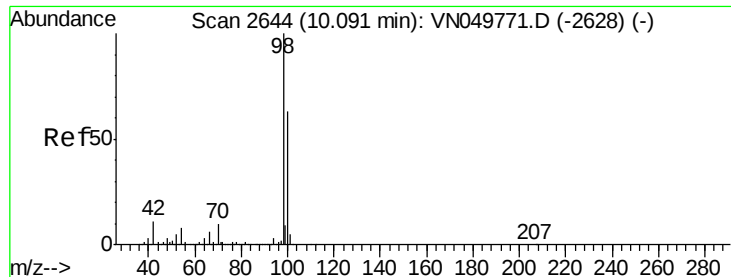
MMDadoda
7/16/2018 11:25:23 AM



#48
Methyl methacrylate
Concen: 0.21 ug/l
RT: 9.20 min Scan# 2366
Delta R.T. -0.00 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Tgt Ion: 41 Resp: 2292
Ion Ratio Lower Upper
41 100
69 77.1 71.5 107.3
39 66.9 44.7 67.1





#50

Toluene-d8

Concen: 46.23 ug/l

RT: 10.09 min Scan# 2644

Delta R.T. -0.00 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT3-2018

Tot Ion: 98 Resp: 2098402

Ion Ratio Lower Upper

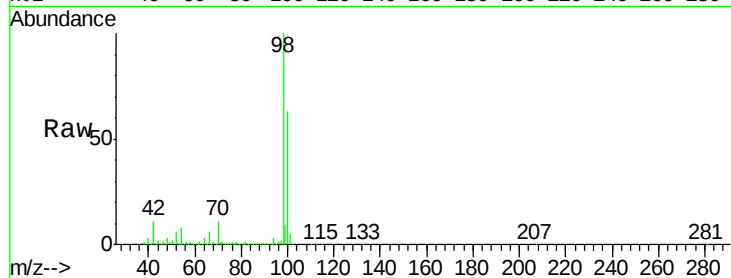
98 100

100 63.7 51.7 77.5

Manual Integrations
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Abundance Ion 98.00 (97.70 to 98.70): VN0

Ion 100.00 (99.70 to 100.70): VN

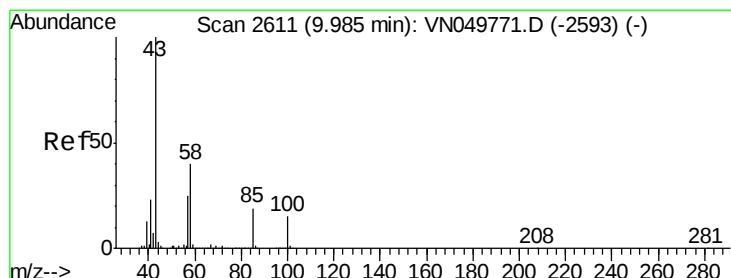
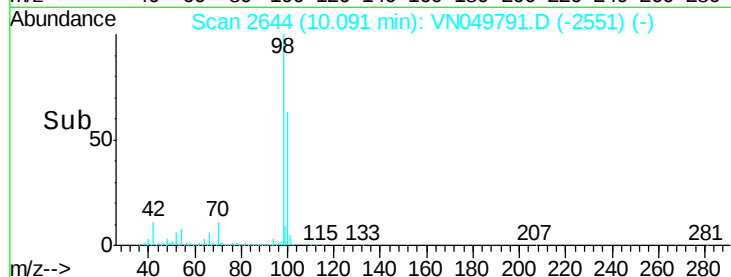
10.09

1000000

500000

0

Time-->



#51

4-Methyl-2-Pentanone

Concen: 0.75 ug/l

RT: 9.99 min Scan# 2611

Delta R.T. -0.00 min

Lab File: VN049791.D

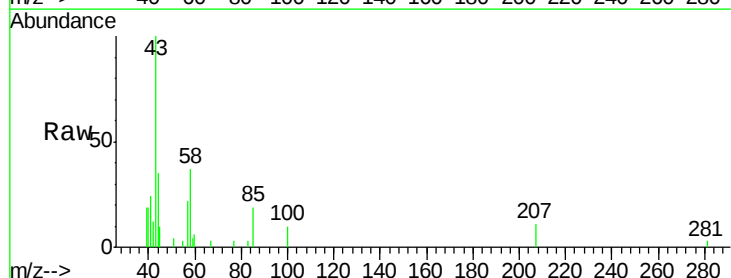
Acq: 13 Jul 2018 12:40

Tgt Ion: 43 Resp: 8825

Ion Ratio Lower Upper

43 100

58 35.2 31.8 47.8



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

10000

8000

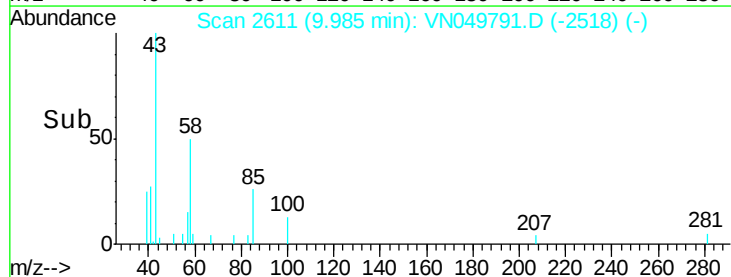
6000

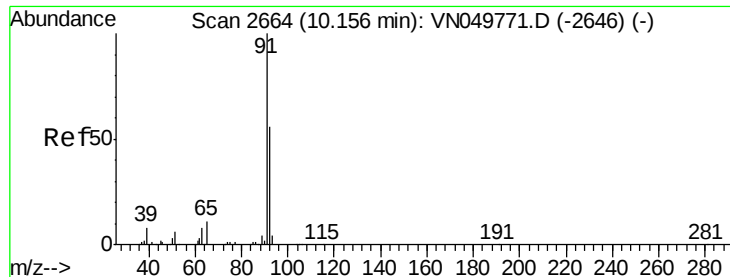
4000

2000

0

Time-->





#52

Toluene

Concen: 0.22 ug/l

RT: 10.16 min Scan# 2666

Delta R.T. 0.01 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT3-2018

Tot Ion: 92 Resp: 7819

Ion Ratio Lower Upper

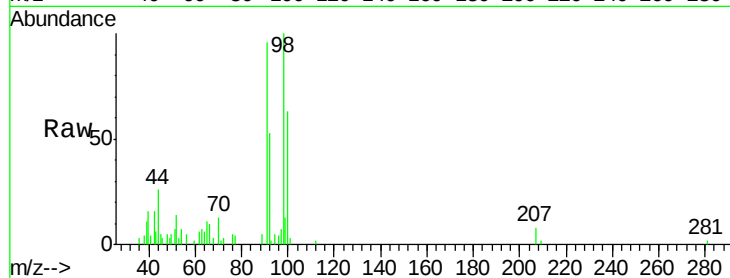
92 100

91 163.7 140.1 210.1

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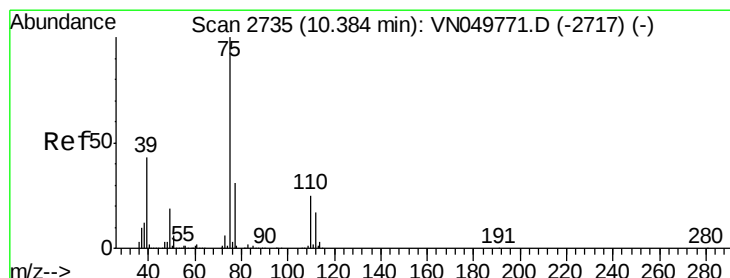
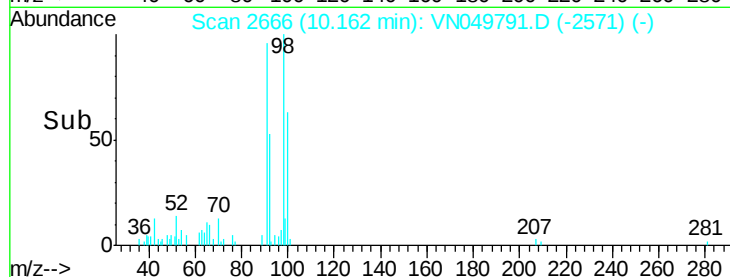
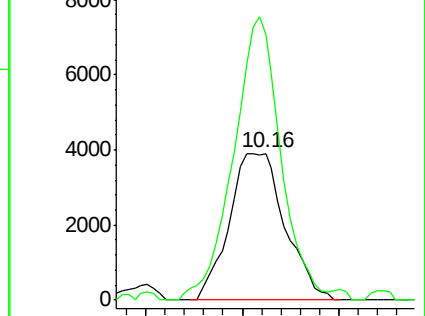
MMDadoda

7/16/2018 11:25:23 AM



Abundance Ion 92.00 (91.70 to 92.70): VN0

Ion 91.00 (90.70 to 91.70): VN0



#53

t-1,3-Dichloropropene

Concen: 0.21 ug/l

RT: 10.39 min Scan# 2736

Delta R.T. 0.00 min

Lab File: VN049791.D

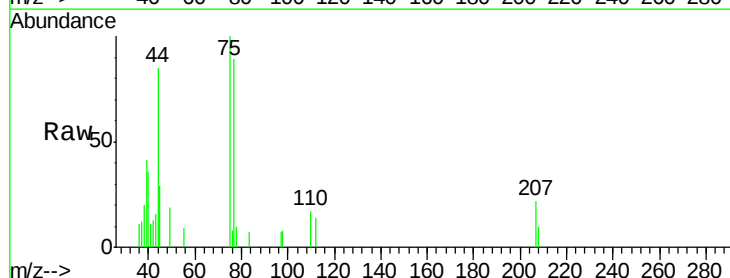
Acq: 13 Jul 2018 12:40

Tgt Ion: 75 Resp: 4319

Ion Ratio Lower Upper

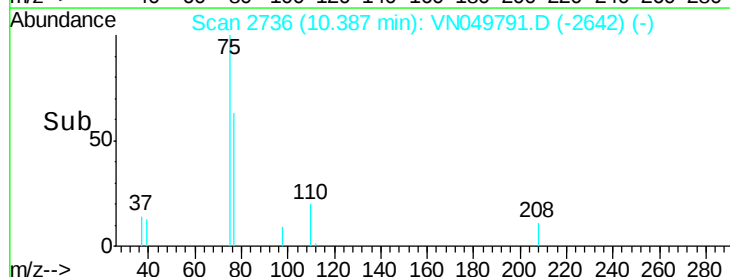
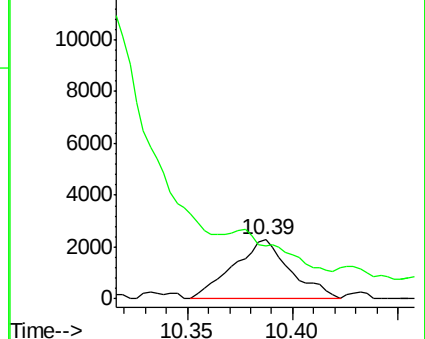
75 100

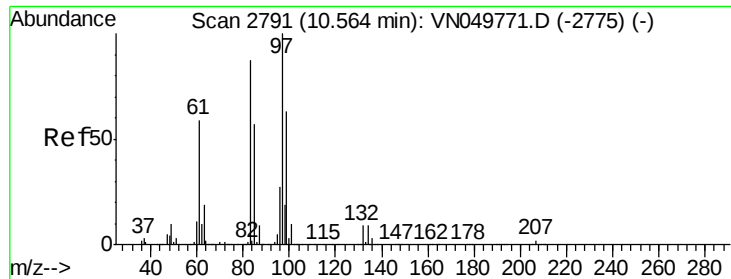
77 37.0 25.2 37.8



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 76.90 (76.60 to 77.60): VN0





#55

1,1,2-Trichloroethane

Concen: Below Cal

RT: 10.56 min Scan# 2790

Delta R.T. -0.00 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT3-2018

Tot Ion: 97 Resp: 4834

Ion Ratio Lower Upper

97 100

83 52.6 69.0 103.6#

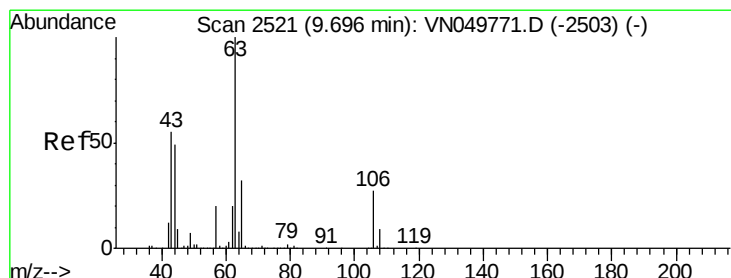
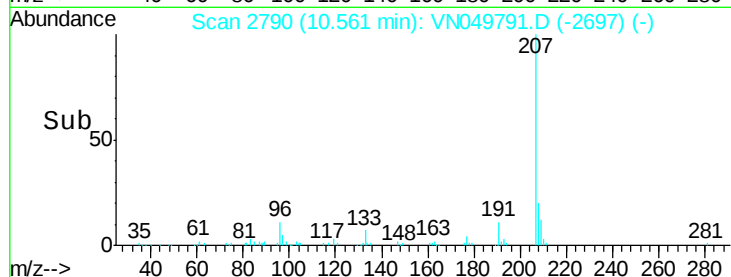
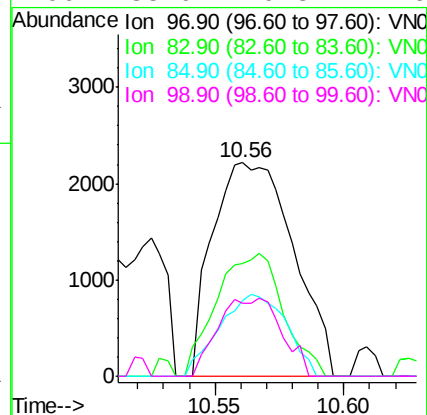
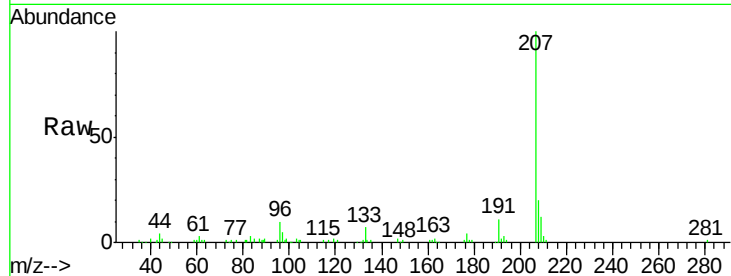
85 35.3 44.9 67.3#

99 33.9 49.8 74.6#

Manual Integrations
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#58

2-Chloroethyl Vinyl ether

Concen: 0.71 ug/l

RT: 9.70 min Scan# 2523

Delta R.T. 0.01 min

Lab File: VN049791.D

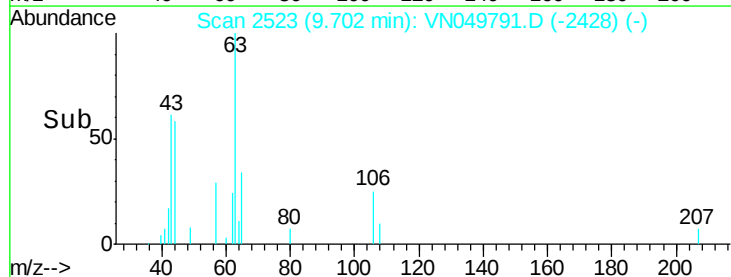
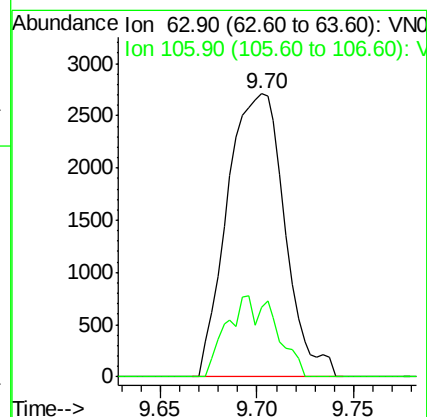
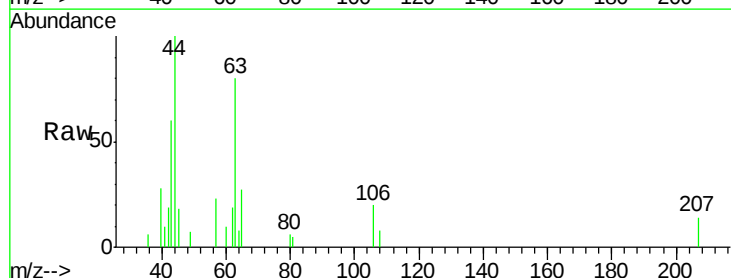
Acq: 13 Jul 2018 12:40

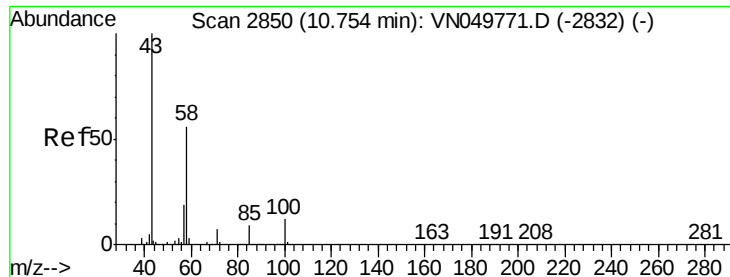
Tgt Ion: 63 Resp: 5603

Ion Ratio Lower Upper

63 100

106 14.2 21.8 32.8#





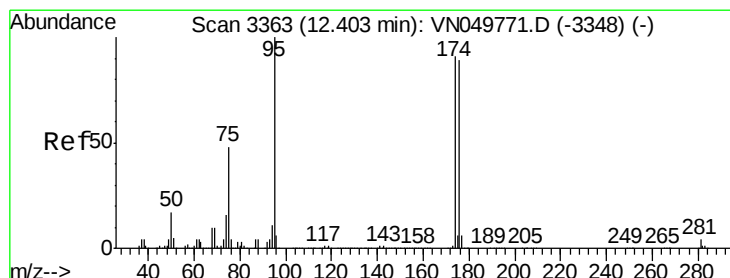
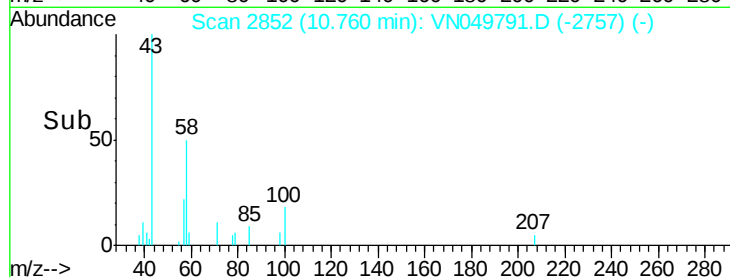
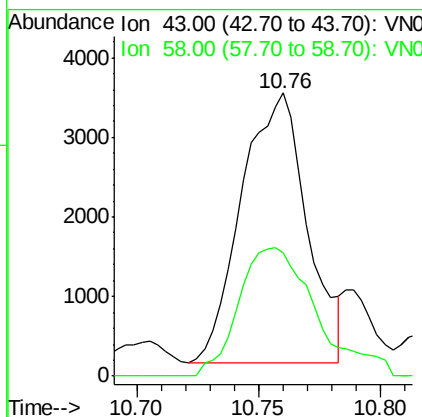
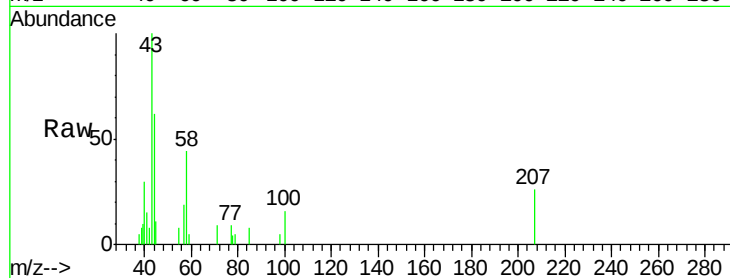
#59
2-Hexanone
Concen: 0.81 ug/l
RT: 10.76 min Scan# 2852
Delta R.T. 0.01 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT3-2018

Tot Ion: 43 Resp: 6344
Ion Ratio Lower Upper
43 100
58 56.1 27.8 83.4

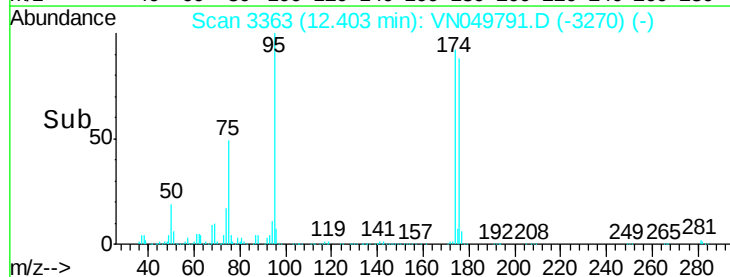
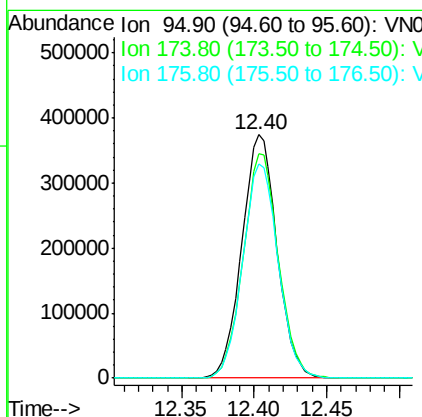
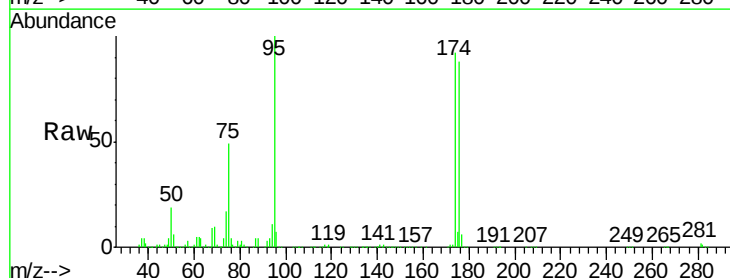
Manual Integrations
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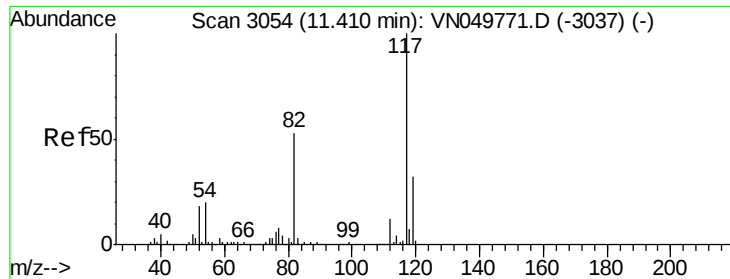
MMDadoda
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#62
4-Bromofluorobenzene
Concen: 38.85 ug/l
RT: 12.40 min Scan# 3363
Delta R.T. -0.00 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Tgt Ion: 95 Resp: 629709
Ion Ratio Lower Upper
95 100
174 92.5 0.0 179.6
176 88.7 0.0 174.0





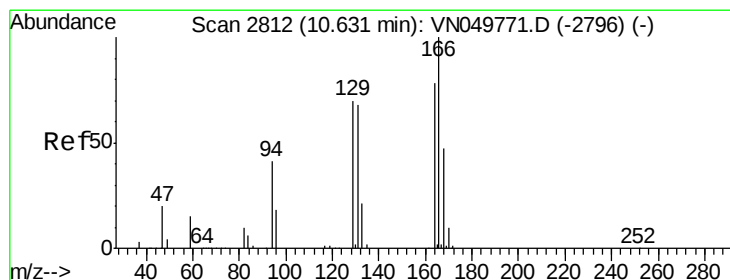
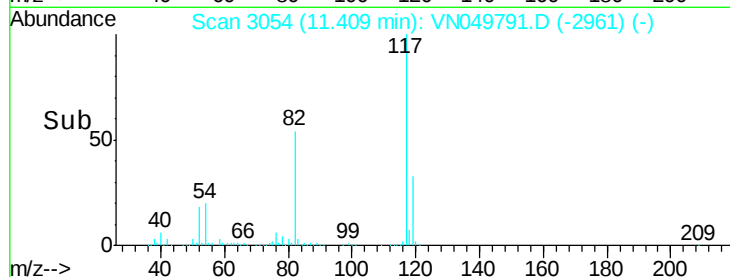
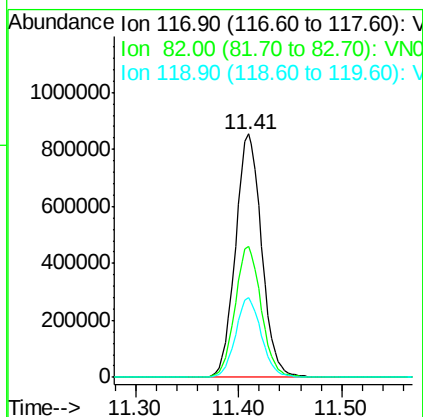
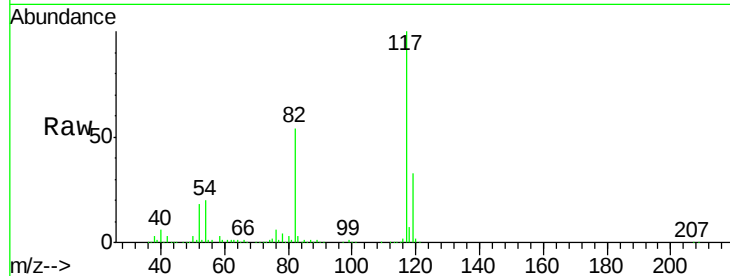
#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 11.41 min Scan# 3054
Delta R.T. -0.00 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT3-2018

Tot Ion:117 Resp: 1509826
Ion Ratio Lower Upper
117 100
82 54.1 41.9 62.9
119 32.7 25.4 38.2

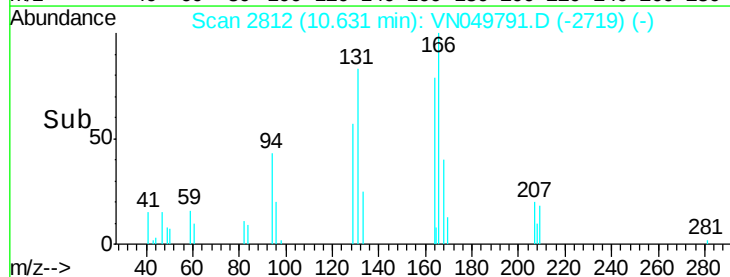
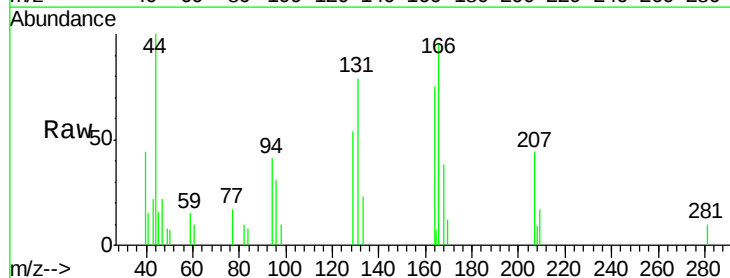
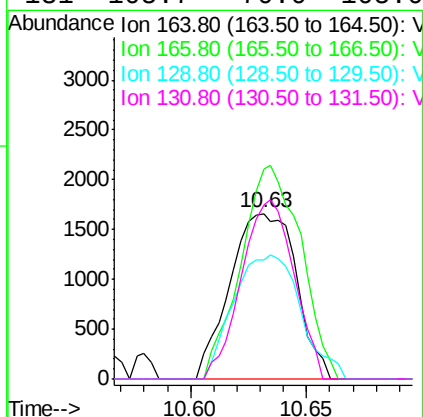
Manual Integrations
APPROVED

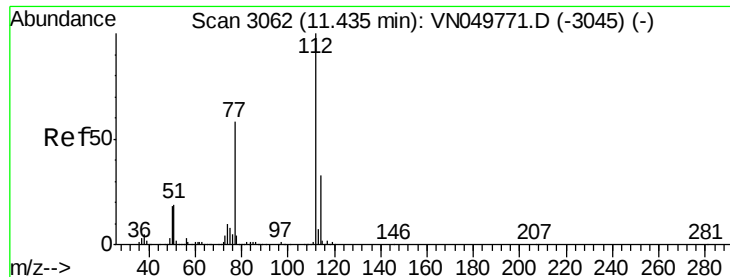
MMDadoda
7/16/2018 11:25:23 AM



#64
Tetrachloroethene
Concen: 0.24 ug/l
RT: 10.63 min Scan# 2812
Delta R.T. -0.00 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Tgt Ion:164 Resp: 3288
Ion Ratio Lower Upper
164 100
166 127.0 101.8 152.6
129 72.1 72.8 109.2#
131 105.7 70.0 105.0#





#65

Chlorobenzene

Concen: 0.21 ug/l

RT: 11.44 min Scan# 3062

Delta R.T. -0.00 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT3-2018

Tot Ion:112 Resp: 8322

Ion Ratio Lower Upper

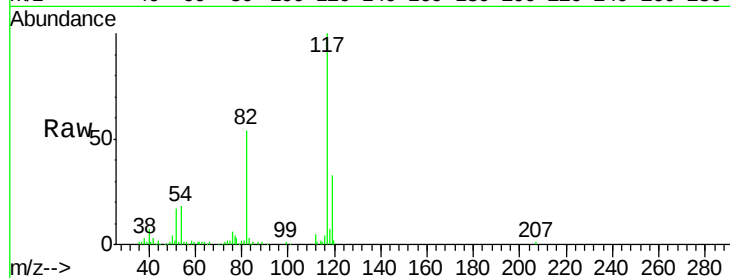
112 100

114 32.3 25.4 38.0

Manual Integrations
APPROVED

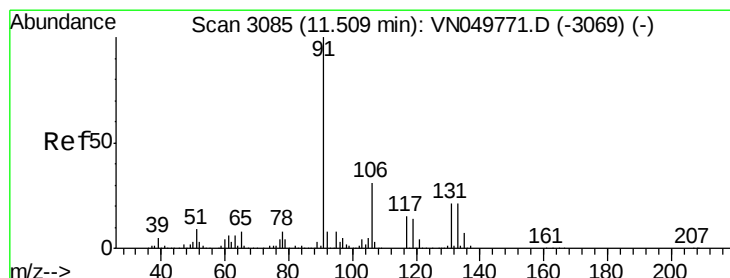
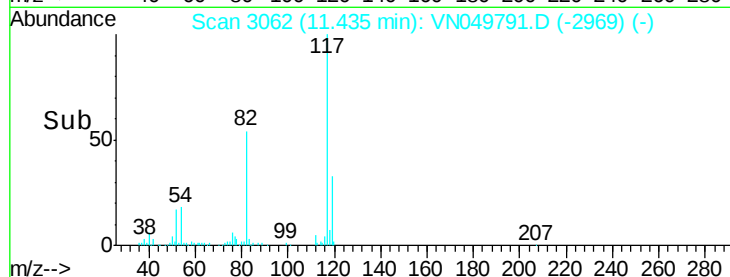
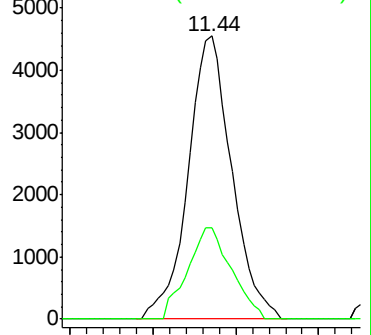
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Abundance Ion 111.90 (111.60 to 112.60): V

Ion 113.90 (113.60 to 114.60): V



#66

1,1,1,2-Tetrachloroethane

Concen: 0.22 ug/l

RT: 11.52 min Scan# 3087

Delta R.T. 0.01 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

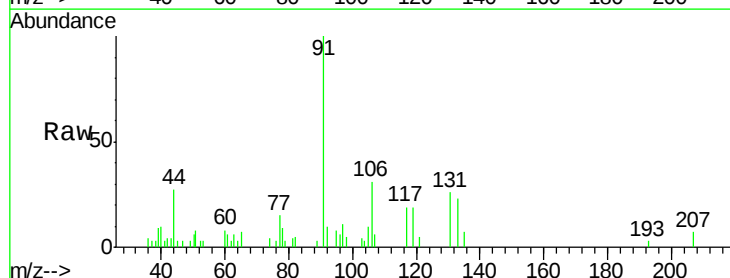
Tgt Ion:131 Resp: 3284

Ion Ratio Lower Upper

131 100

133 97.1 47.5 142.6

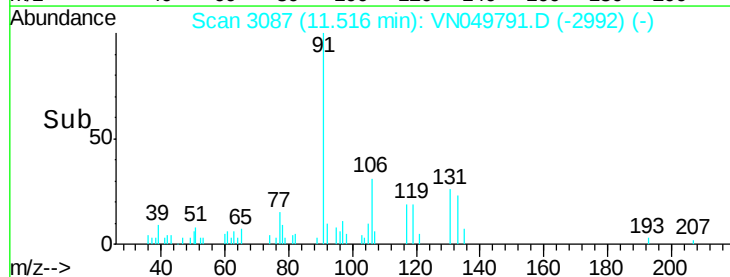
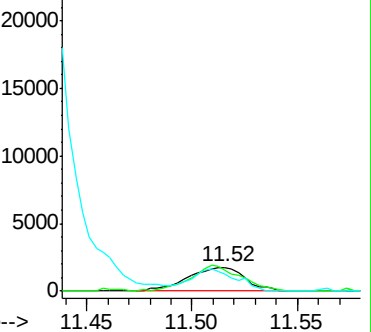
119 0.0 33.1 99.3#

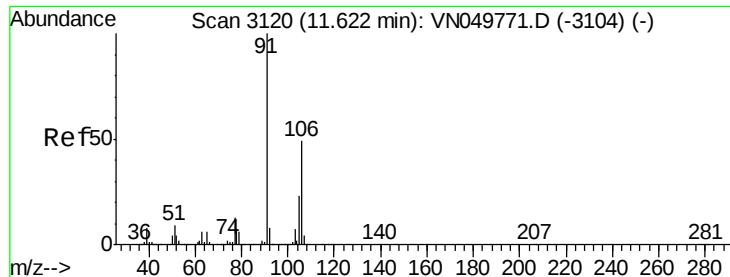


Abundance Ion 130.80 (130.50 to 131.50): V

Ion 132.80 (132.50 to 133.50): V

Ion 118.80 (118.50 to 119.50): V





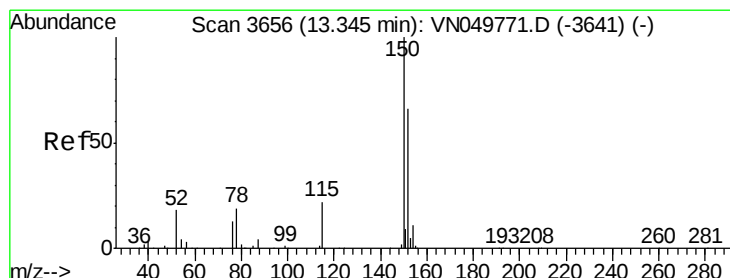
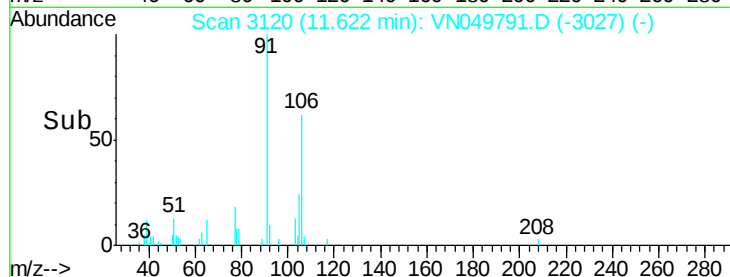
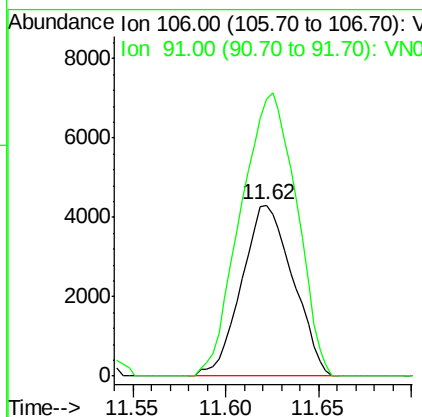
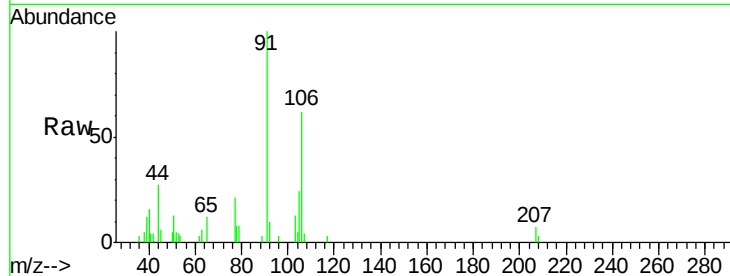
#68
m/p-Xvlenes
Concen: 0.34 ug/l
RT: 11.62 min Scan# 3120
Delta R.T. -0.00 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT3-2018

Tot Ion:106 Resp: 8308
Ion Ratio Lower Upper
106 100
91 179.6 163.4 245.2

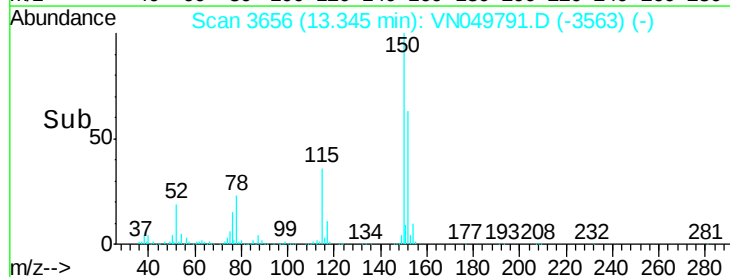
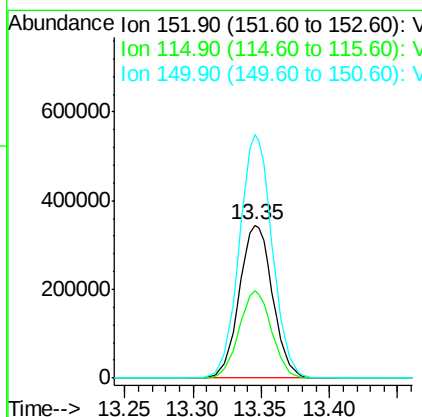
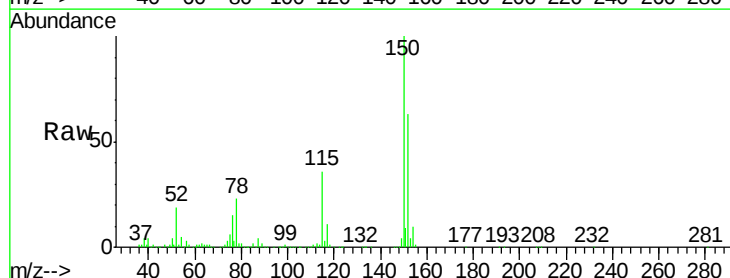
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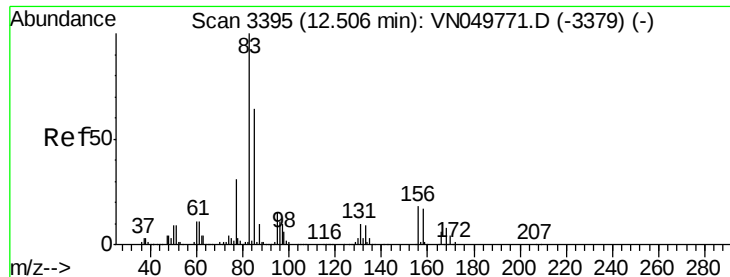
MMDadoda
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#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 13.35 min Scan# 3656
Delta R.T. -0.00 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Tgt Ion:152 Resp: 580923
Ion Ratio Lower Upper
152 100
115 55.8 28.1 84.2
150 157.3 0.0 347.6





#75

1,1,2,2-Tetrachloroethane

Concen: Below Cal

RT: 12.50 min Scan# 3394

Delta R.T. -0.00 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Instrument :

MSVOA_N

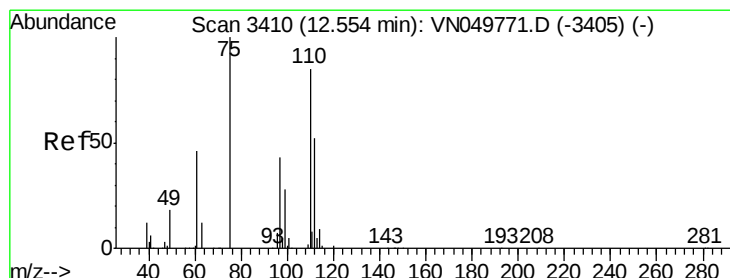
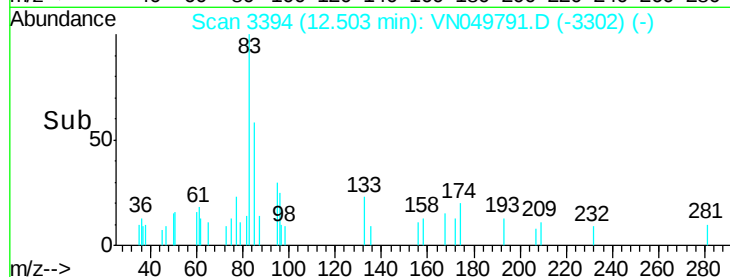
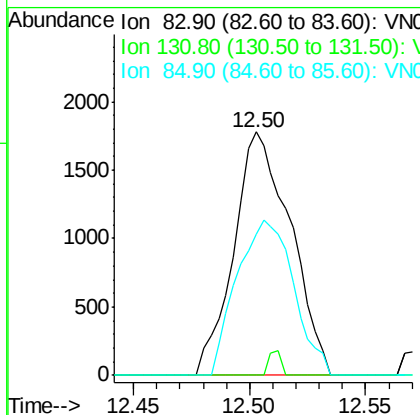
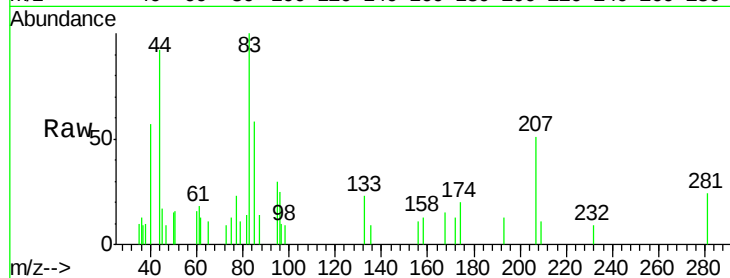
ClientSampleId :

MDL-WATER-03-QT3-2018

Tot Ion	83	Resp	3024
Ion Ratio	100	Lower	Upper
83	100		
131	2.2	5.2	15.6#
85	63.8	32.5	97.4

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#76

1,2,3-Trichloropropane

Concen: 0.21 ug/l m

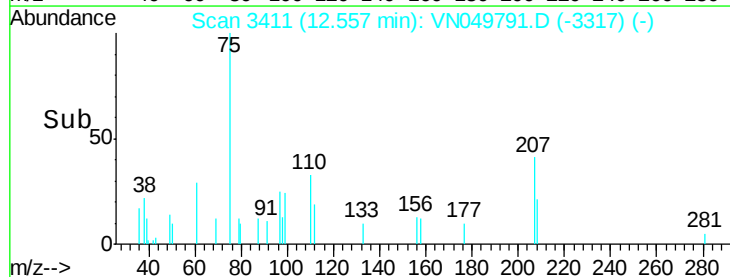
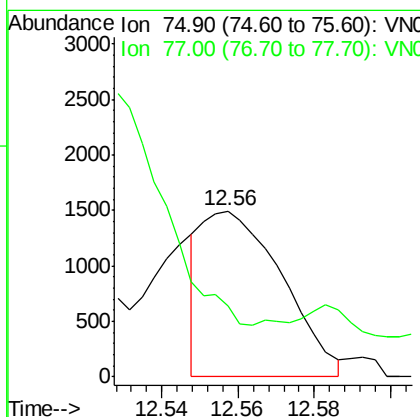
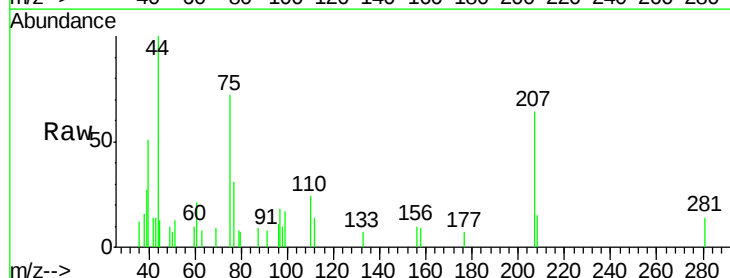
RT: 12.56 min Scan# 3411

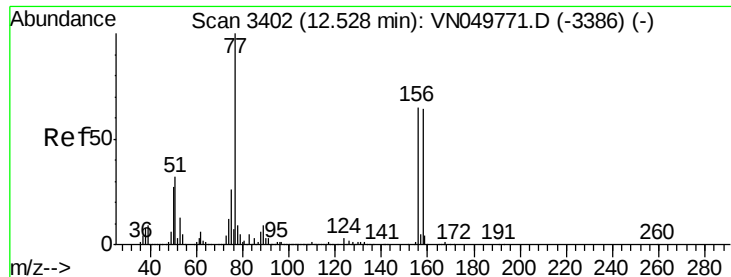
Delta R.T. 0.00 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Tgt Ion	75	Resp	2195
Ion Ratio	100	Lower	Upper
75	100		
77	209.1	0.0	0.0#





#77

Bromobenzene

Concen: 0.26 ug/l

RT: 12.53 min Scan# 3403

Delta R.T. 0.00 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Instrument :

MSVOA_N

ClientSampleId :

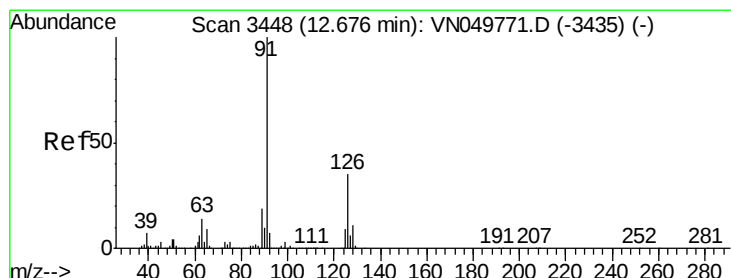
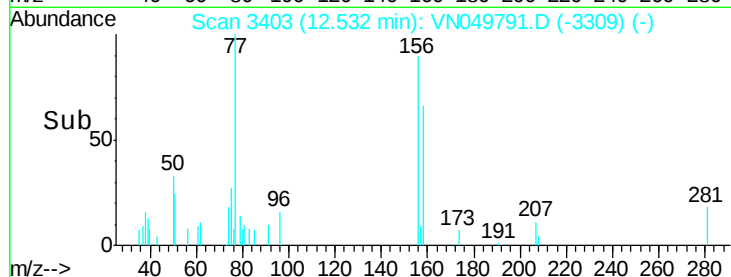
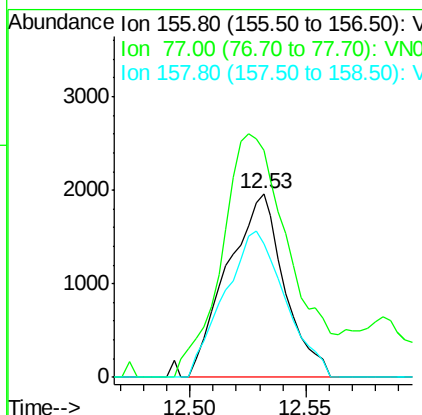
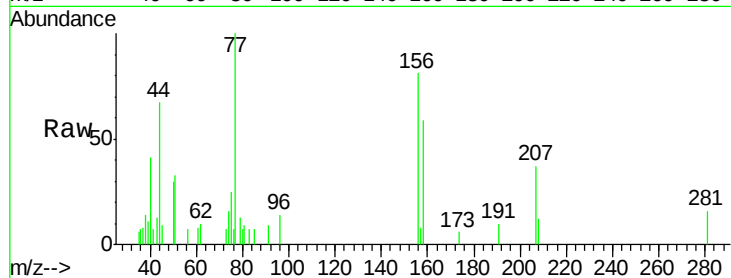
MDL-WATER-03-QT3-2018

Tot Ion:156 Resp: 3355

Ion	Ratio	Lower	Upper
156	100		
77	158.9	90.2	270.6
158	84.7	49.1	147.3

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#79

2-Chlorotoluene

Concen: 0.22 ug/l

RT: 12.68 min Scan# 3448

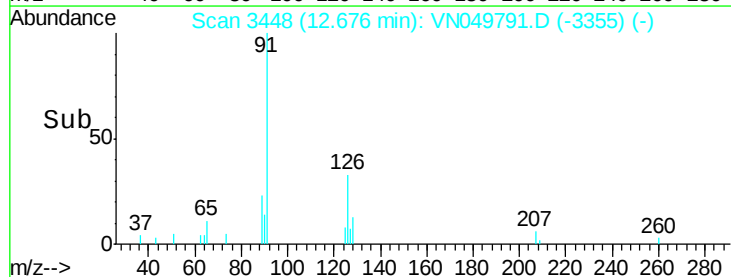
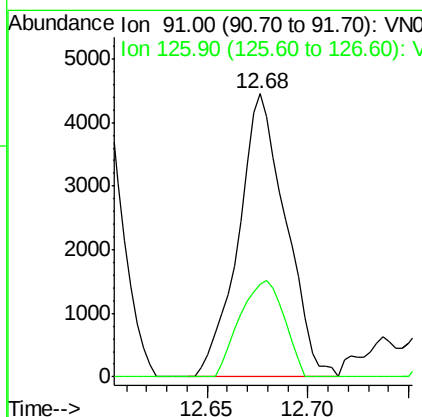
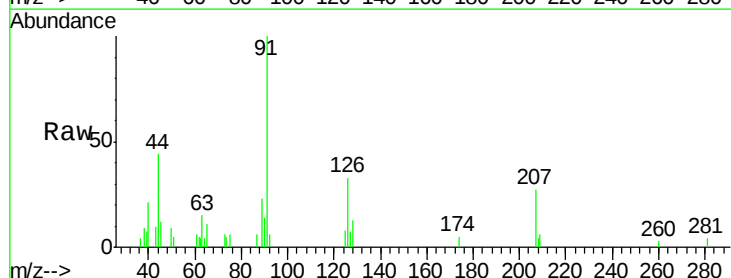
Delta R.T. -0.00 min

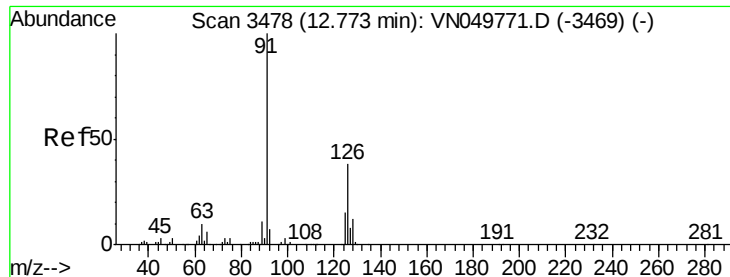
Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Tgt Ion: 91 Resp: 7328

Ion	Ratio	Lower	Upper
91	100		
126	32.0	17.5	52.5





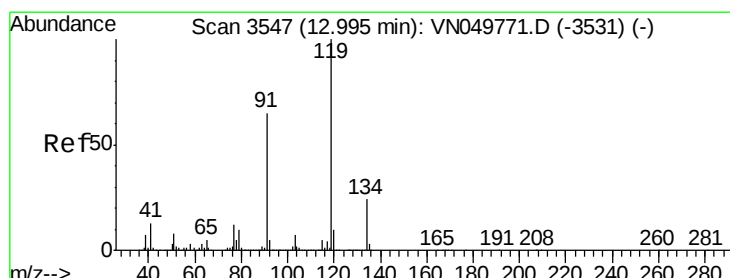
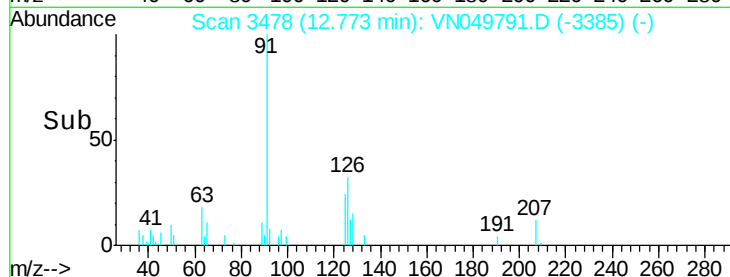
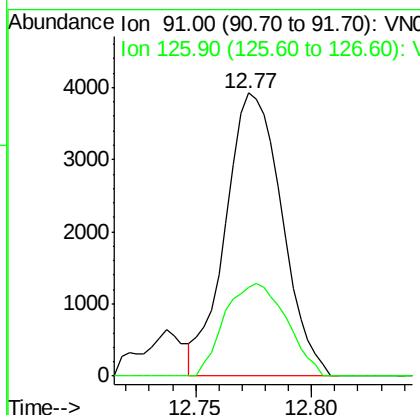
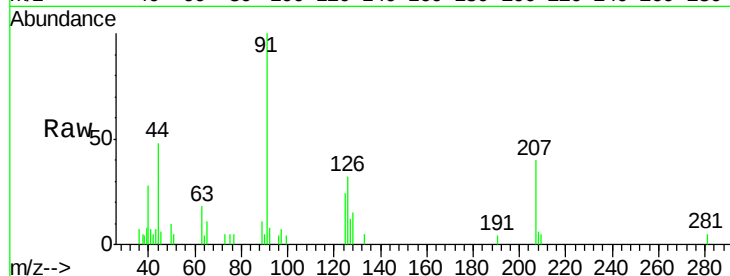
#82
4-Chlorotoluene
Concen: 0.20 ug/l
RT: 12.77 min Scan# 3478
Delta R.T. -0.00 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT3-2018

Tot Ion: 91 Resp: 6638
Ion Ratio Lower Upper
91 100
126 35.9 17.2 51.6

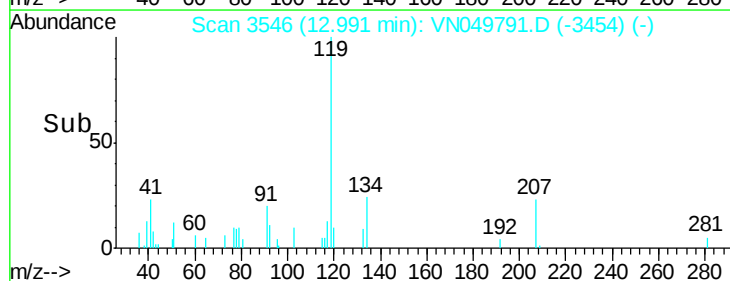
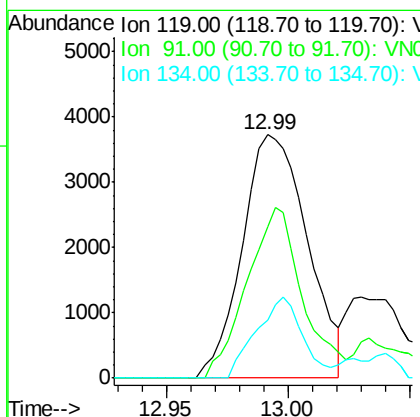
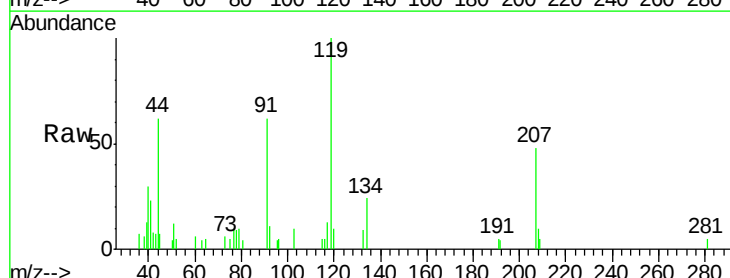
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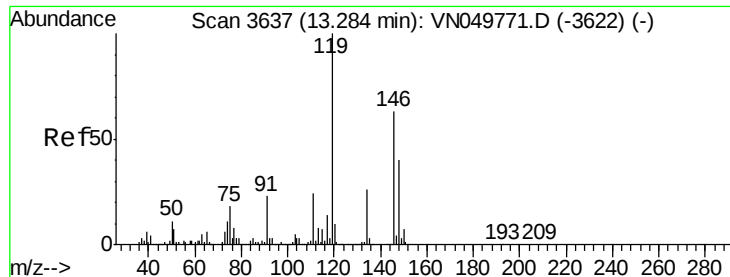
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#83
tert-Butylbenzene
Concen: 0.20 ug/l
RT: 12.99 min Scan# 3546
Delta R.T. -0.00 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Tgt Ion: 119 Resp: 6907
Ion Ratio Lower Upper
119 100
91 60.2 32.0 96.2
134 23.7 12.8 38.4





#87

1,3-Dichlorobenzene

Concen: 0.20 ug/l

RT: 13.29 min Scan# 3638

Delta R.T. 0.00 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

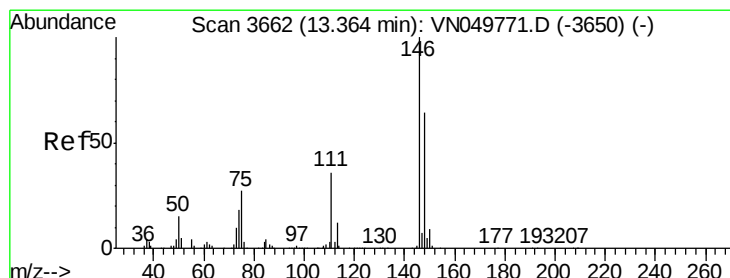
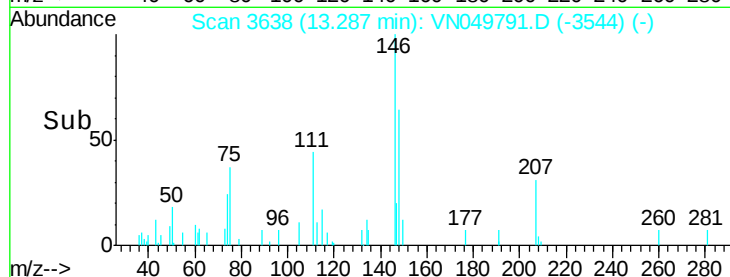
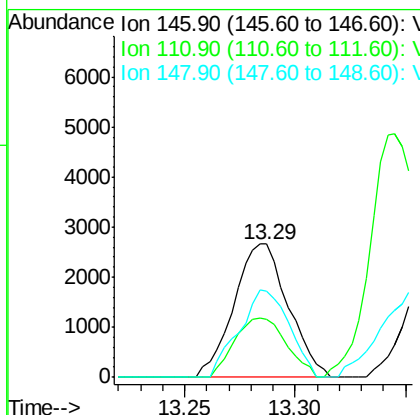
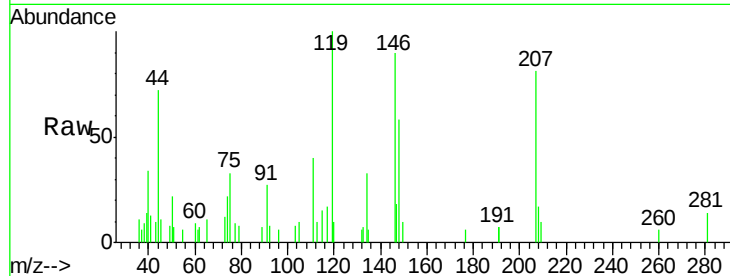
Instrument :
MSVOA_N

ClientSampleId :
MDL-WATER-03-QT3-2018

Tot Ion	Ratio	Lower	Upper
146	100		
111	42.9	19.0	57.0
148	60.3	32.5	97.5

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#88

1,4-Dichlorobenzene

Concen: 0.28 ug/l m

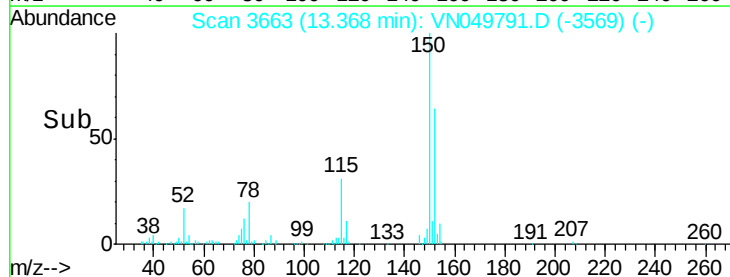
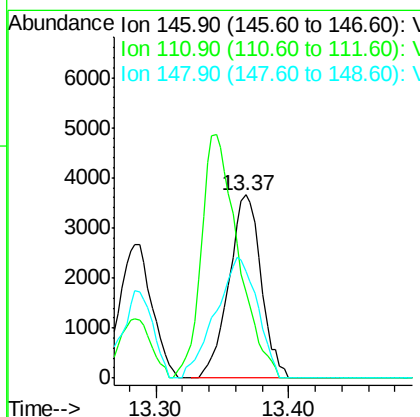
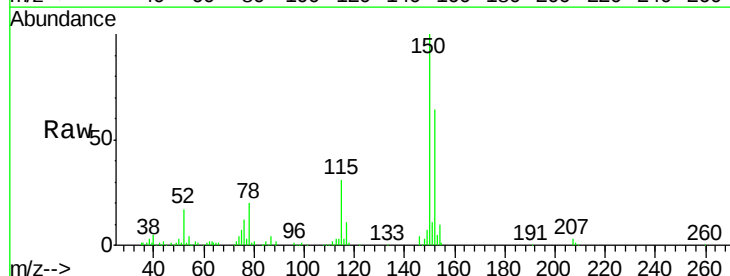
RT: 13.37 min Scan# 3663

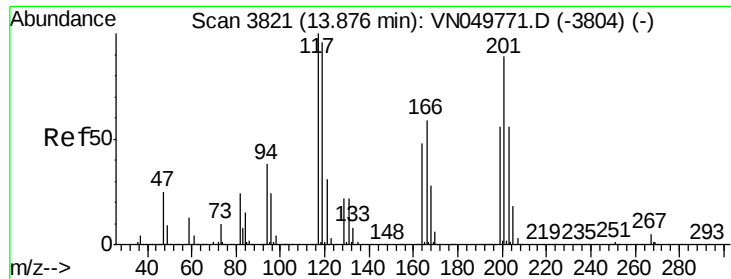
Delta R.T. 0.00 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Tgt Ion	Ratio	Lower	Upper
146	100		
111	31.8	18.9	56.5
148	44.7	32.1	96.3





#90

Hexachloroethane

Concen: Below Cal

RT: 13.88 min Scan# 3821

Delta R.T. 0.00 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT3-2018

Tot Ion:117 Resp: 2225

Ion Ratio Lower Upper

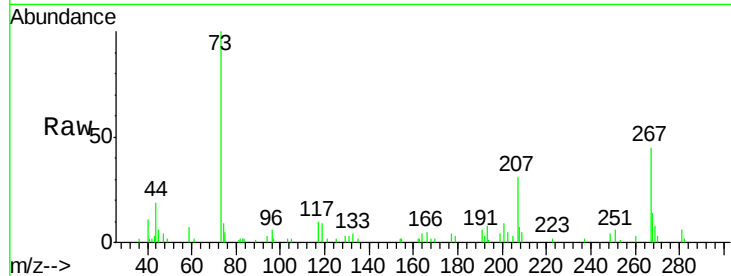
117 100

201 76.9 45.3 135.8

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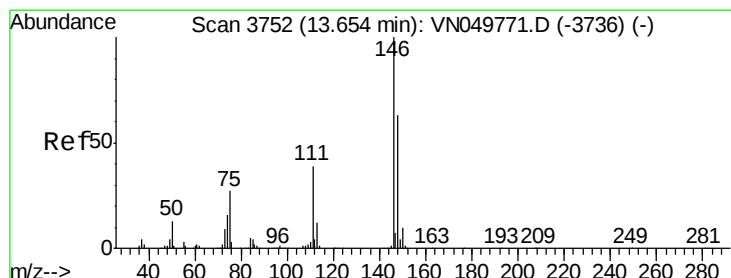
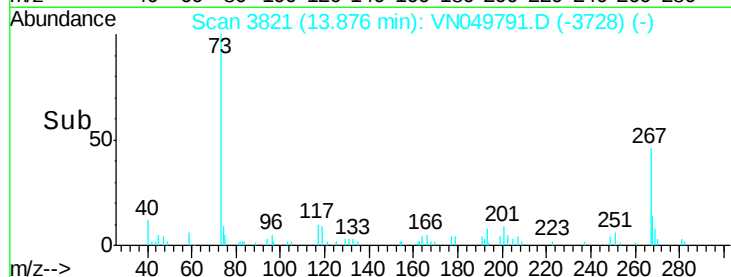
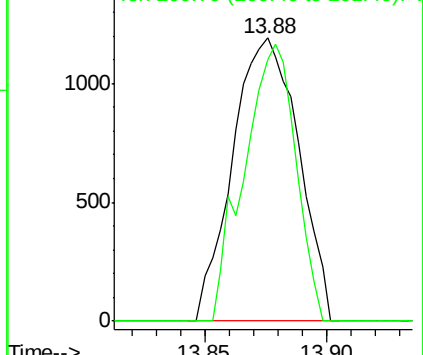
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Abundance Ion 116.80 (116.50 to 117.50): V

Ion 200.70 (200.40 to 201.40): V



#91

1,2-Dichlorobenzene

Concen: 0.22 ug/l

RT: 13.65 min Scan# 3752

Delta R.T. -0.00 min

Lab File: VN049791.D

Acq: 13 Jul 2018 12:40

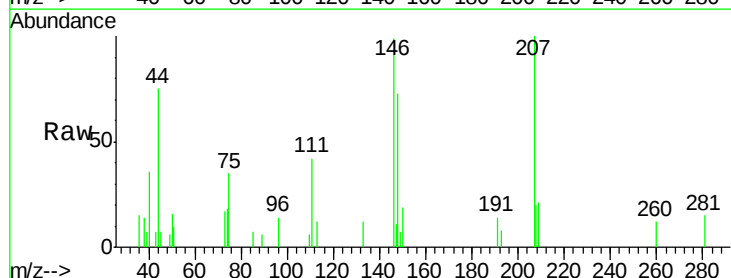
Tgt Ion:146 Resp: 4786

Ion Ratio Lower Upper

146 100

111 43.3 19.7 59.1

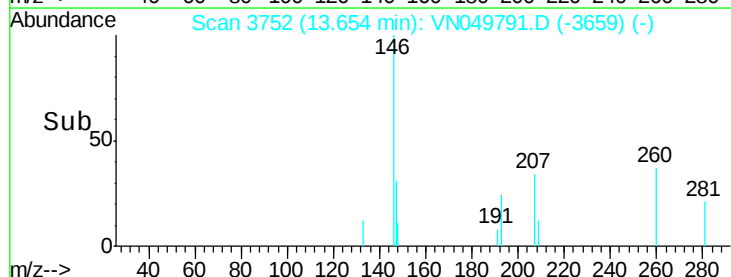
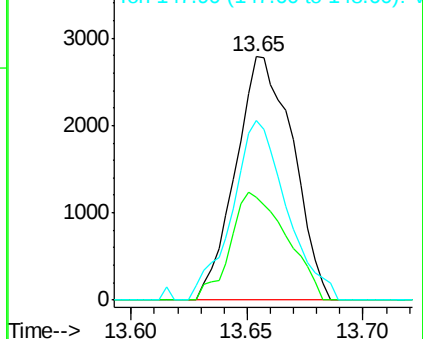
148 70.1 32.0 96.2

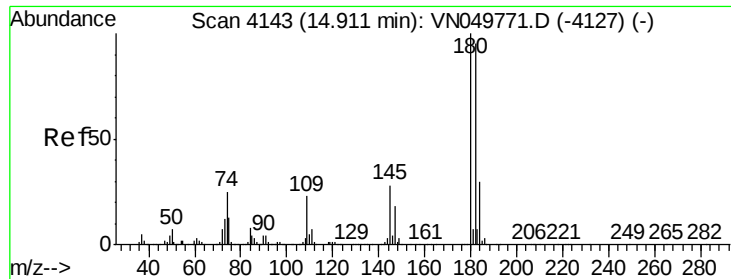


Abundance Ion 145.90 (145.60 to 146.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 147.90 (147.60 to 148.60): V





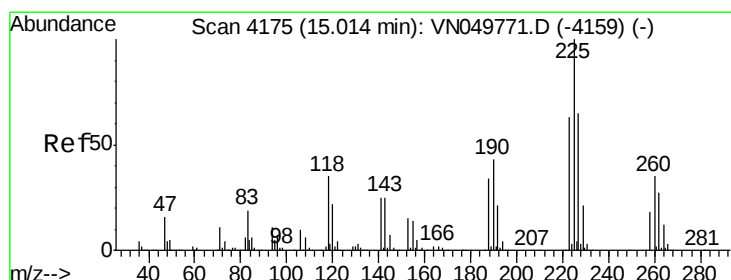
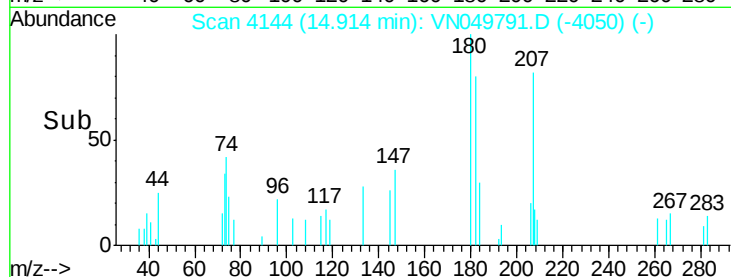
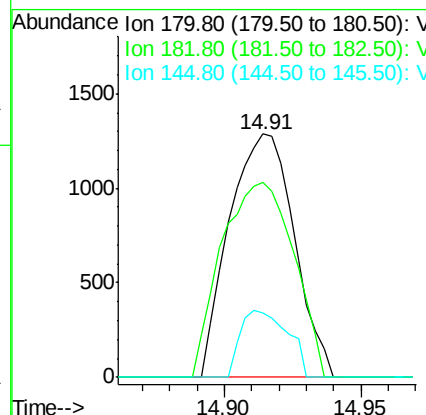
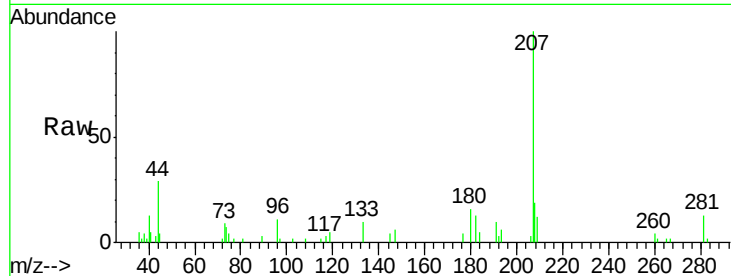
#93
 1,2,4-Trichlorobenzene
 Concen: 3.06 ug/l
 RT: 14.91 min Scan# 4144
 Delta R.T. 0.00 min
 Lab File: VN049791.D
 Acq: 13 Jul 2018 12:40

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT3-2018

Tot Ion	Ratio	Lower	Upper
180	100		
182	89.2	47.3	141.9
145	20.0	14.4	43.0

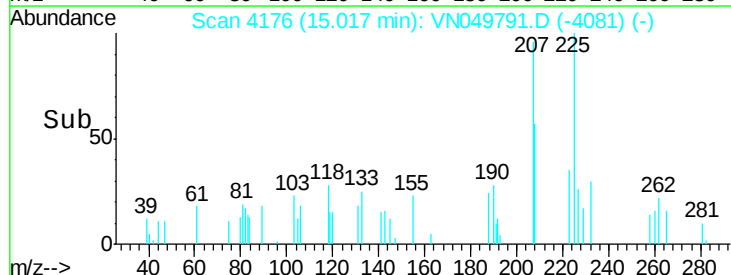
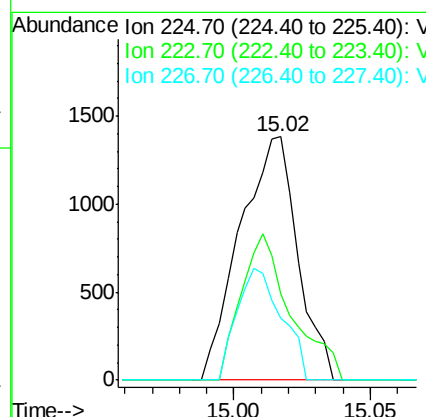
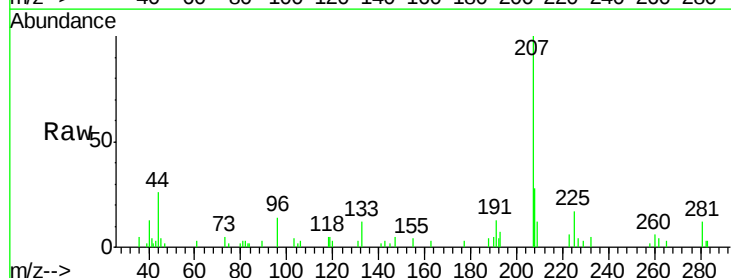
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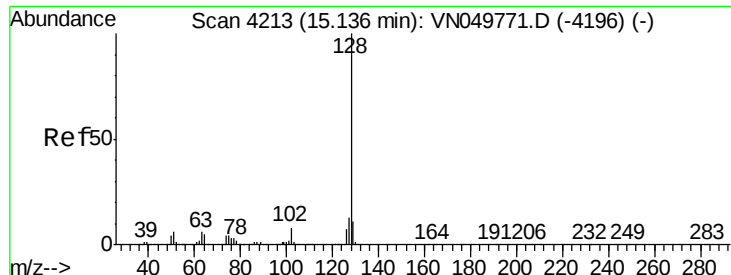
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#94
 Hexachlorobutadiene
 Concen: Below Cal
 RT: 15.02 min Scan# 4176
 Delta R.T. 0.00 min
 Lab File: VN049791.D
 Acq: 13 Jul 2018 12:40

Tgt Ion	Ratio	Lower	Upper
225	100		
223	52.1	30.9	92.7
227	35.8	31.8	95.4





#95
Naphthalene
Concen: 4.17 ug/l
RT: 15.13 min Scan# 4212
Delta R.T. -0.00 min
Lab File: VN049791.D
Acq: 13 Jul 2018 12:40

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT3-2018

Tot Ion	Ratio	Lower	Upper
128	100		
127	11.7	10.4	15.6
129	5.8	8.6	13.0

Manual Integrations
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