

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN102720\
 Data File : VN064326.D
 Acq On : 27 Oct 2020 15:17
 Operator : JC/MD
 Sample : L4214-09 .5PPB MDL
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2020

Manual Integrations
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 10/28/2020 12:35:58 PM

Quant Time: Oct 28 05:42:41 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N102720W.M
 Quant Title : SW846 8260
 QLast Update : Wed Oct 28 05:08:53 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.62	168	260950	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.55	114	440920	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.38	117	387266	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.32	152	161517	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	7.99	65	178232	42.50	ug/l	0.00
Spiked Amount	50.000		Recovery	=	85.00%	
35) Dibromofluoromethane	7.55	113	117137	39.84	ug/l	0.00
Spiked Amount	50.000		Recovery	=	79.68%	
50) Toluene-d8	10.06	98	424745	39.05	ug/l	0.00
Spiked Amount	50.000		Recovery	=	78.10%	
62) 4-Bromofluorobenzene	12.38	95	156833	36.98	ug/l	0.00
Spiked Amount	50.000		Recovery	=	73.96%	
Target Compounds						
					Qvalue	
3) Chloromethane	2.04	50	722	0.223	ug/l #	37
5) Bromomethane	2.54	94	765	0.377	ug/l	92
10) Methyl Iodide	3.91	142	711m	0.202	ug/l	
13) Acrolein	3.57	56	238	1.689	ug/l #	10
15) Acrylonitrile	4.93	53	345	0.264	ug/l #	65
16) Acetone	3.79	43	2273	1.487	ug/l #	80
17) Carbon Disulfide	4.01	76	2520	0.342	ug/l #	75
18) Methyl Acetate	4.30	43	1182m	0.375	ug/l	
20) Methylene Chloride	4.51	84	960	0.323	ug/l #	77
23) Vinyl Acetate	5.86	43	5337m	0.634	ug/l	
25) 2-Butanone	6.80	43	1932m	0.918	ug/l	
29) Tetrahydrofuran	7.17	42	1151m	0.842	ug/l	
31) Cyclohexane	7.63	56	7726	1.587	ug/l #	19
42) 1,2-Dichloroethane	8.07	62	1374m	0.257	ug/l	
51) 4-Methyl-2-Pentanone	9.96	43	2785	0.624	ug/l #	83
58) 2-Chloroethyl Vinyl ether	9.67	63	6088	2.389	ug/l	99
59) 2-Hexanone	10.72	43	2006	0.610	ug/l	96
64) Tetrachloroethene	10.60	164	1028	0.323	ug/l #	44
68) m/p-Xylenes	11.59	106	1480m	0.274	ug/l	
76) 1,2,3-Trichloropropane	12.52	75	968m	0.250	ug/l	
77) Bromobenzene	12.50	156	629	0.212	ug/l	74
88) 1,4-Dichlorobenzene	13.33	146	1429	0.271	ug/l #	71

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

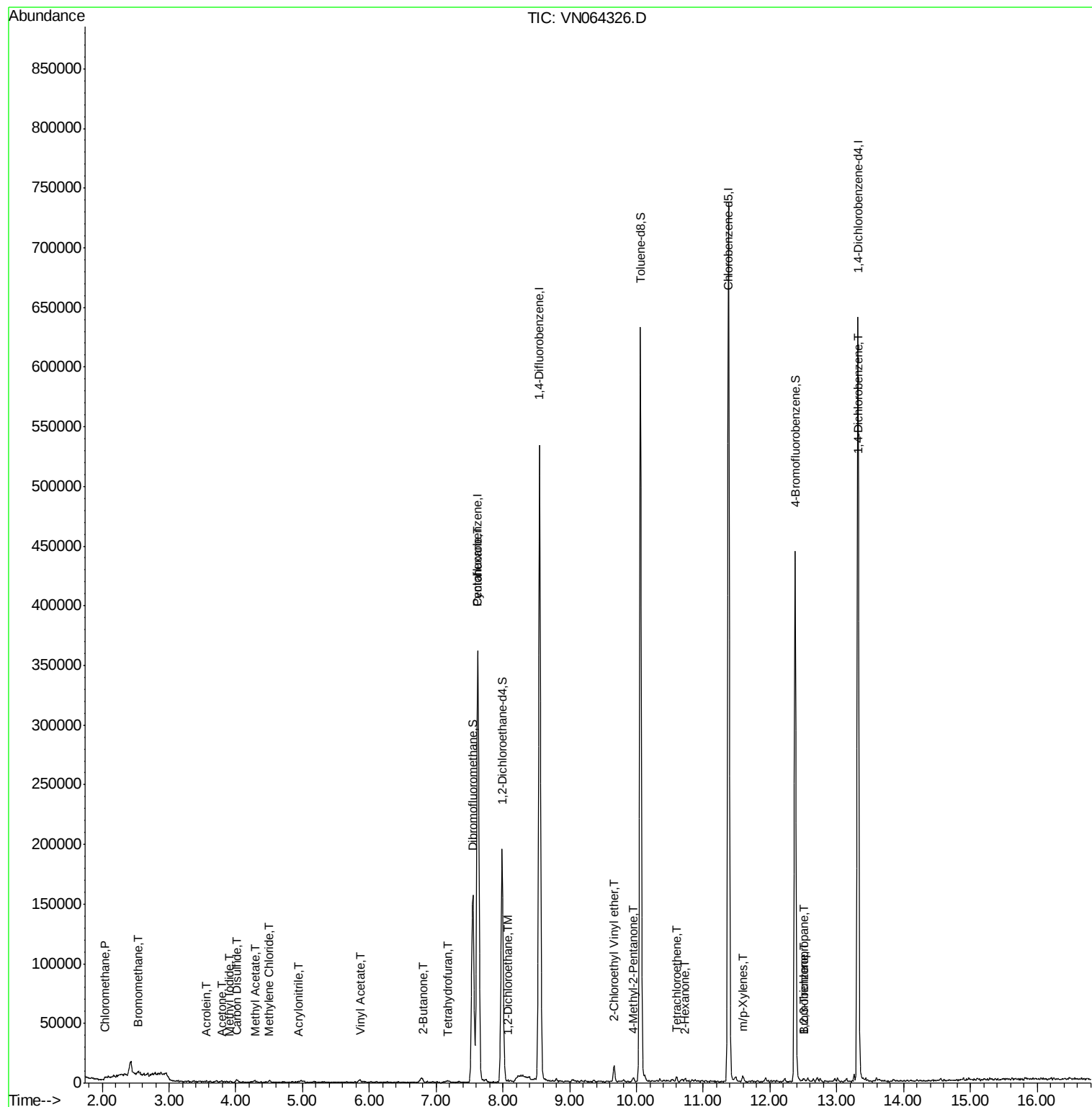
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN102720\
Data File : VN064326.D
Acq On : 27 Oct 2020 15:17
Operator : JC/MD
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Misc : 5.00mL/MSVOA N/WATER
ALS Vial : 13 Sample Multiplier: 1

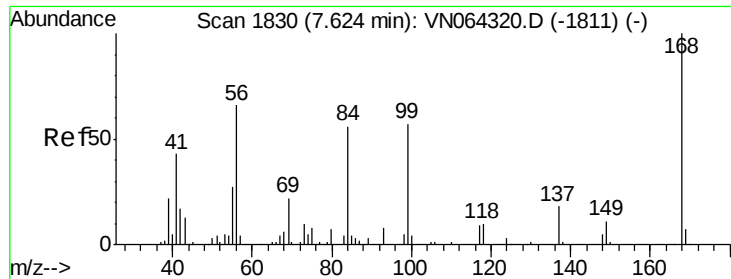
Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2020

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Quant Time: Oct 28 05:42:41 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_N\METHODS\82N102720W.M
Quant Title : SW846 8260
QLast Update : Wed Oct 28 05:08:53 2020
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.62 min Scan# 1830

Delta R.T. -0.00 min

Lab File: VN064326.D

Acq: 27 Oct 2020 15:17

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT4-2020

Tot Ion:168 Resp: 260950

Ion Ratio Lower Upper

168 100

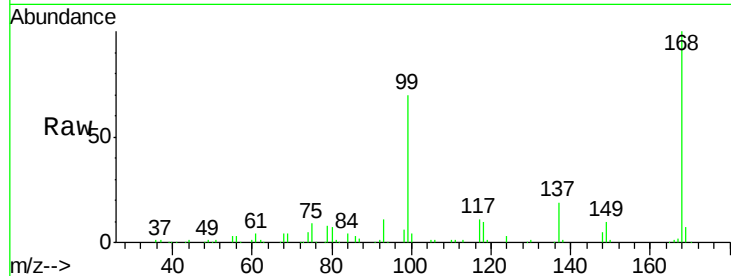
99 70.1 52.7 79.1

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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.62

120000

100000

80000

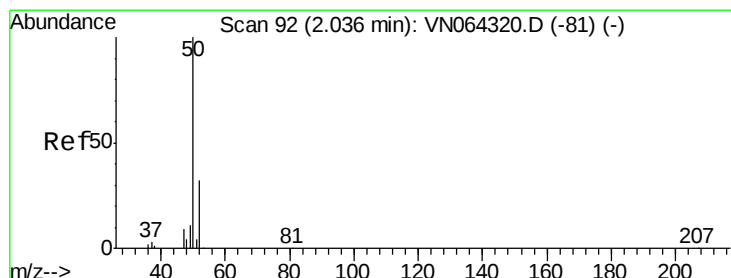
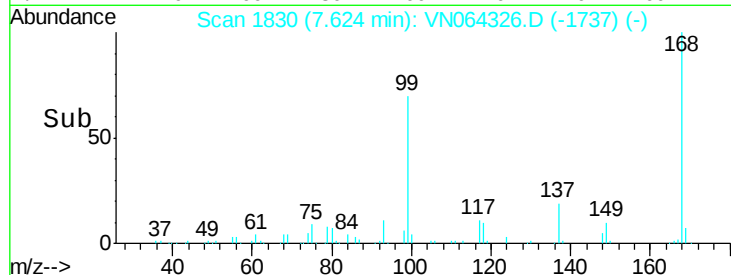
60000

40000

20000

0

Time--> 7.50 7.60 7.70



#3

Chloromethane

Concen: 0.223 ug/l

RT: 2.04 min Scan# 94

Delta R.T. 0.01 min

Lab File: VN064326.D

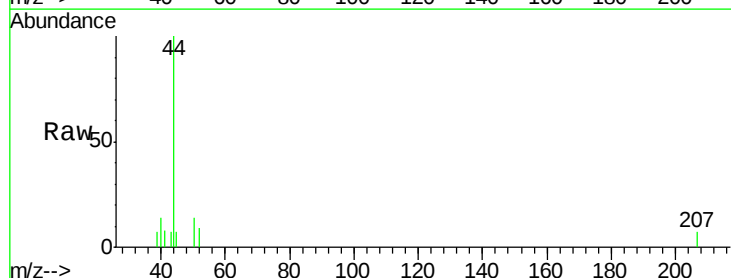
Acq: 27 Oct 2020 15:17

Tgt Ion: 50 Resp: 722

Ion Ratio Lower Upper

50 100

52 67.2 25.6 38.4#



Abundance Ion 49.90 (49.60 to 50.60): VN

Ion 51.90 (51.60 to 52.60): VN

2.04

500

400

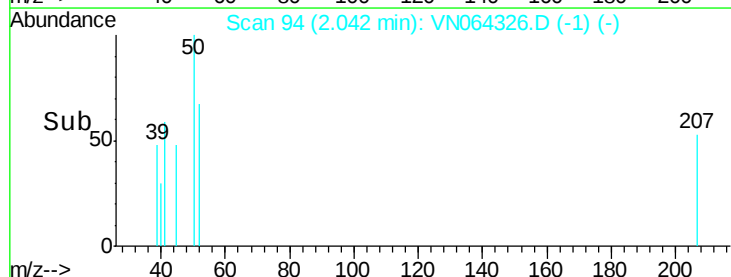
300

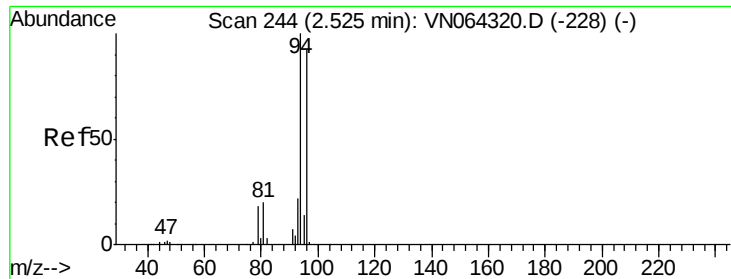
200

100

0

Time--> 2.00 2.02 2.04 2.06 2.08





#5

Bromomethane

Concen: 0.377 ug/l

RT: 2.54 min Scan# 249

Delta R.T. 0.02 min

Lab File: VN064326.D

Acq: 27 Oct 2020 15:17

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT4-2020

Tot Ion: 94 Resp: 765

Ion Ratio Lower Upper

94 100

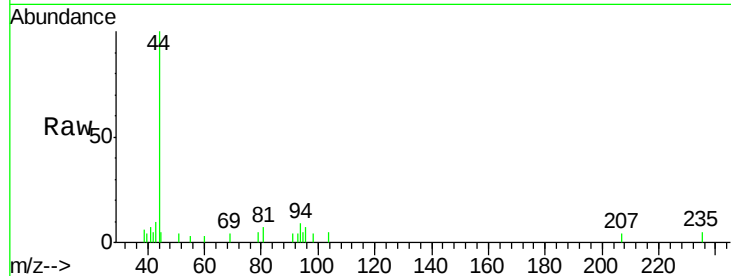
96 83.9 73.6 110.4

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Abundance Ion 93.90 (93.60 to 94.60): VN0

Ion 95.90 (95.60 to 96.60): VN0

2.54

400

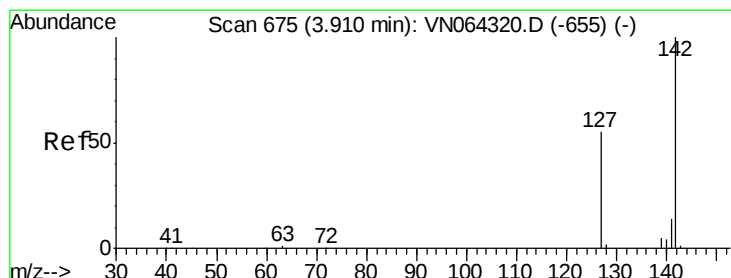
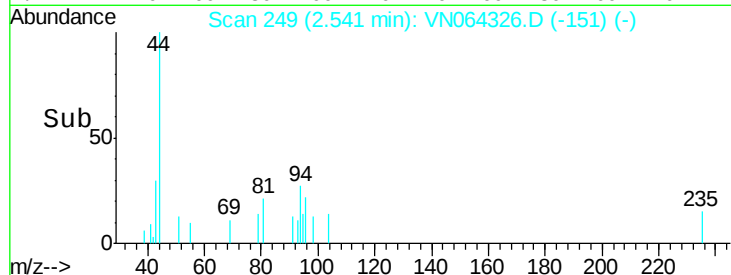
300

200

100

0

Time-->



#10

Methyl Iodide

Concen: 0.202 ug/l m

RT: 3.91 min Scan# 676

Delta R.T. 0.00 min

Lab File: VN064326.D

Acq: 27 Oct 2020 15:17

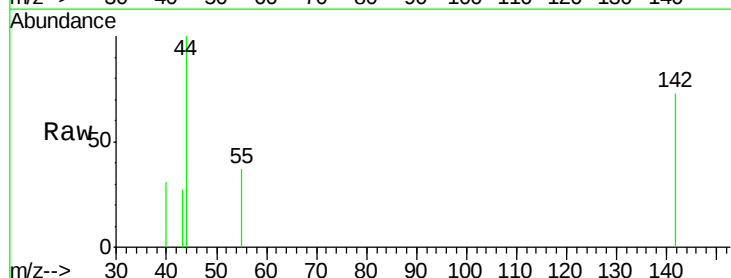
Tgt Ion: 142 Resp: 711

Ion Ratio Lower Upper

142 100

127 8.9 43.3 64.9#

141 0.0 11.5 17.3#



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

500

400

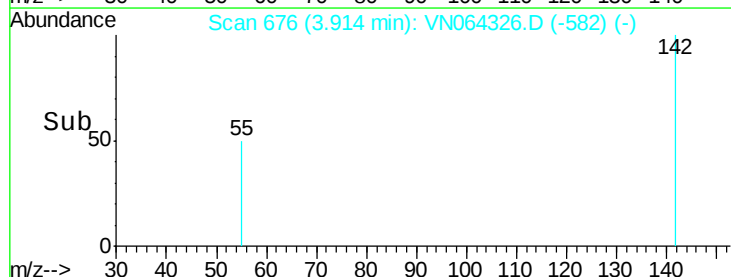
300

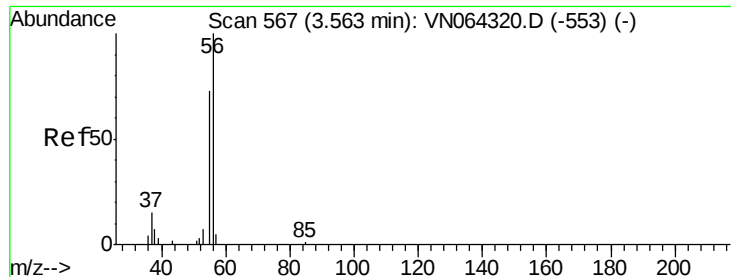
200

100

0

Time-->





#13

Acrolein

Concen: 1.689 ug/l

RT: 3.57 min Scan# 568

Delta R.T. 0.00 min

Lab File: VN064326.D

Acq: 27 Oct 2020 15:17

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT4-2020

Tot Ion: 56 Resp: 238

Ion Ratio Lower Upper

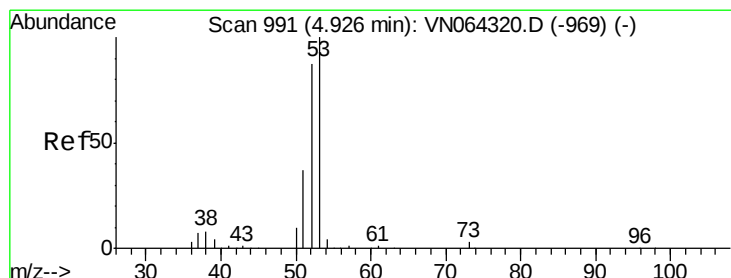
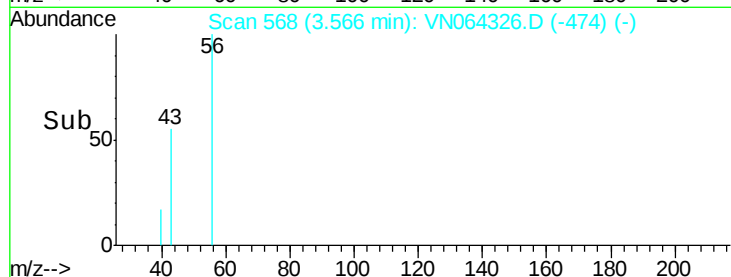
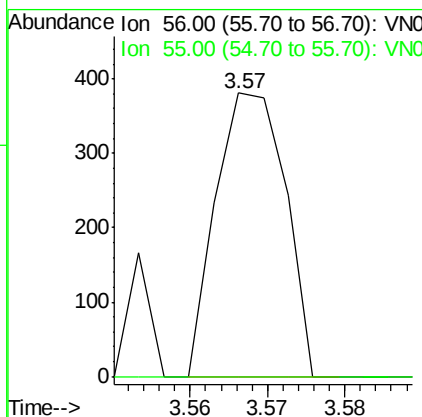
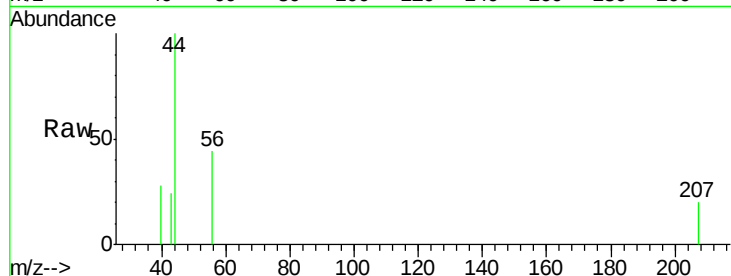
56 100

55 0.0 62.6 94.0#

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#15

Acrylonitrile

Concen: 0.264 ug/l

RT: 4.93 min Scan# 993

Delta R.T. 0.01 min

Lab File: VN064326.D

Acq: 27 Oct 2020 15:17

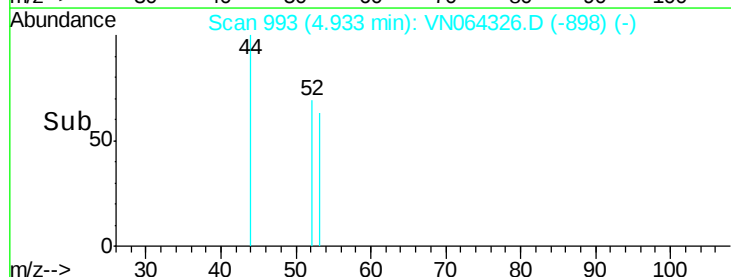
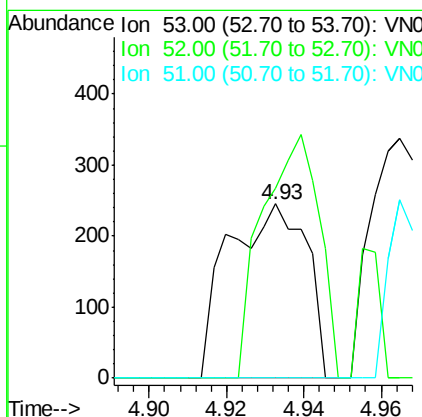
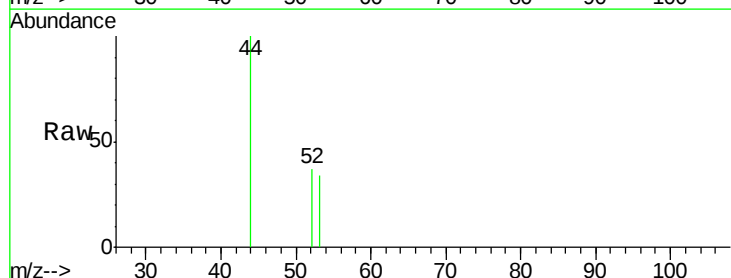
Tgt Ion: 53 Resp: 345

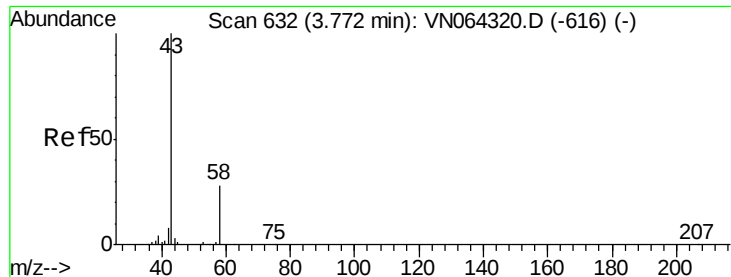
Ion Ratio Lower Upper

53 100

52 101.7 65.9 98.9#

51 0.0 30.4 45.6#





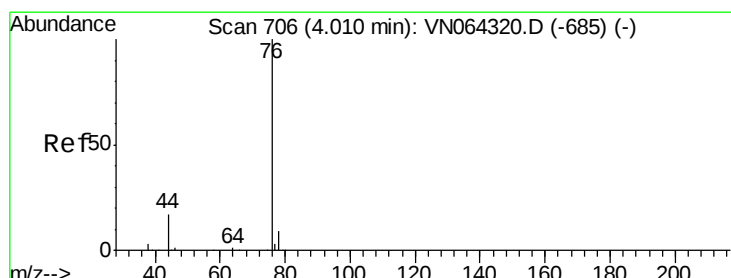
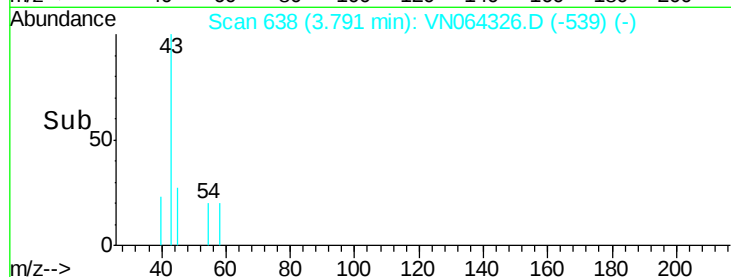
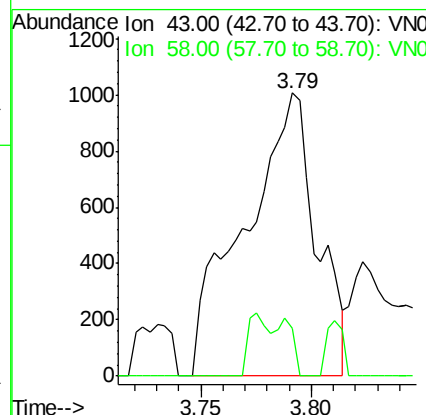
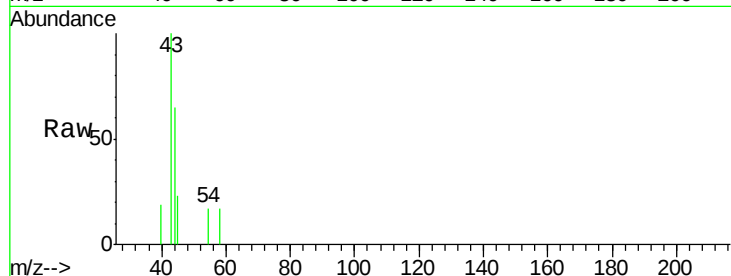
#16
Acetone
Concen: 1.487 ug/l
RT: 3.79 min Scan# 638
Delta R.T. 0.02 min
Lab File: VN064326.D
Acq: 27 Oct 2020 15:17

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2020

Tot Ion: 43 Resp: 2273
Ion Ratio Lower Upper
43 100
58 16.9 22.1 33.1#

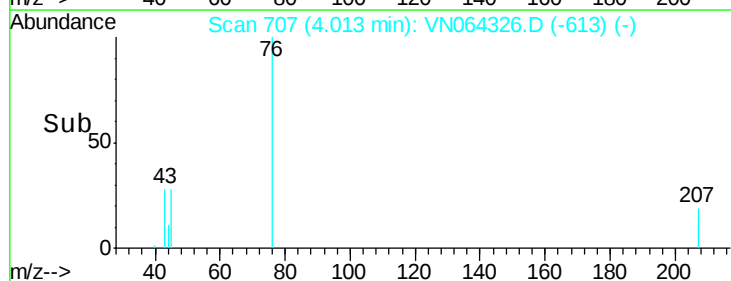
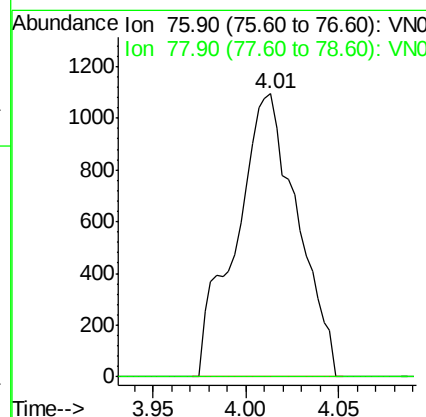
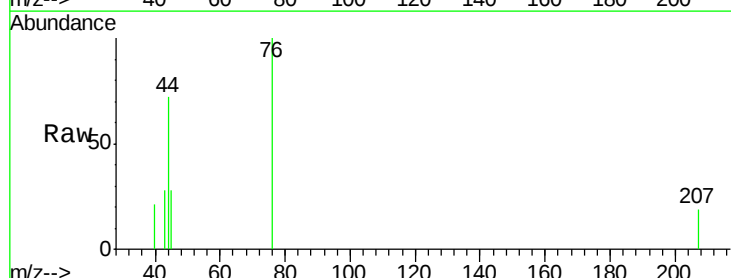
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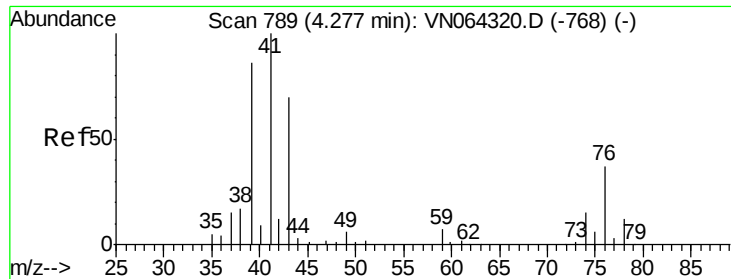
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#17
Carbon Disulfide
Concen: 0.342 ug/l
RT: 4.01 min Scan# 707
Delta R.T. 0.00 min
Lab File: VN064326.D
Acq: 27 Oct 2020 15:17

Tgt Ion: 76 Resp: 2520
Ion Ratio Lower Upper
76 100
78 0.0 7.3 10.9#





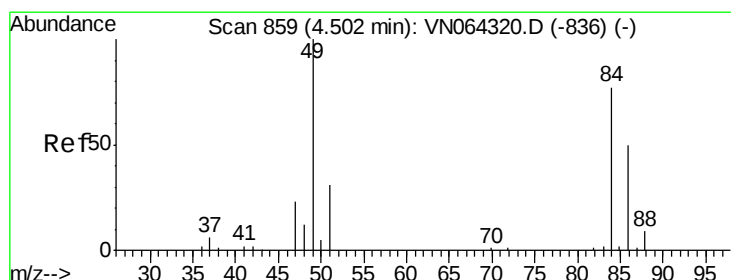
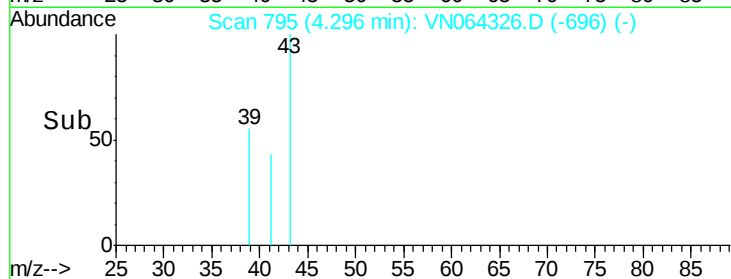
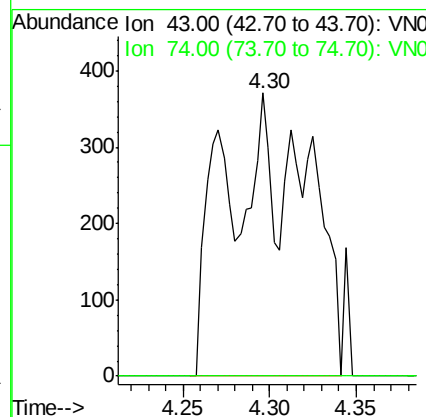
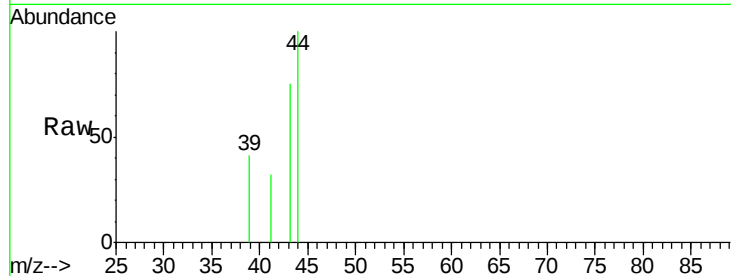
#18
Methyl Acetate
Concen: 0.375 ug/l m
RT: 4.30 min Scan# 795
Delta R.T. 0.02 min
Lab File: VN064326.D
Acq: 27 Oct 2020 15:17

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2020

Tot Ion: 43 Resp: 1182
Ion Ratio Lower Upper
43 100
74 0.0 16.7 25.1#

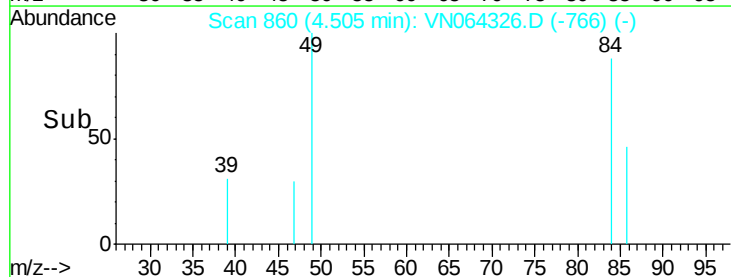
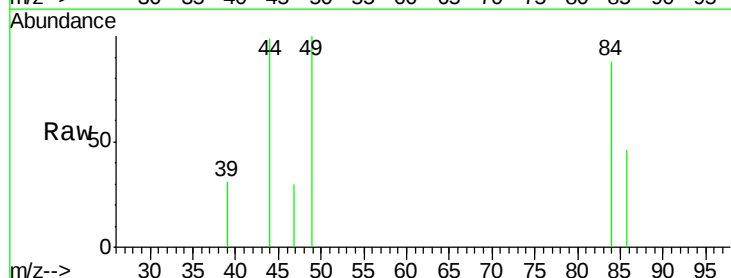
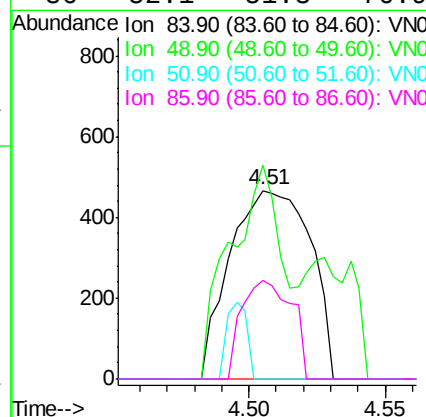
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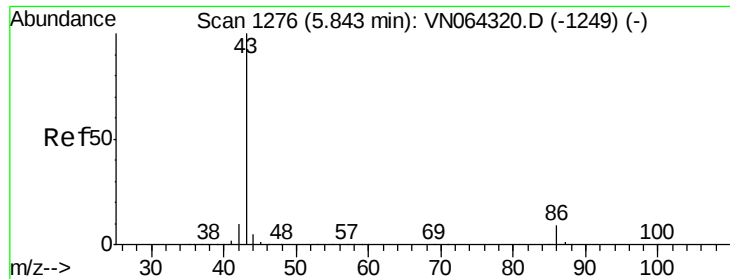
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#20
Methylene Chloride
Concen: 0.323 ug/l
RT: 4.51 min Scan# 860
Delta R.T. 0.00 min
Lab File: VN064326.D
Acq: 27 Oct 2020 15:17

Tgt Ion: 84 Resp: 960
Ion Ratio Lower Upper
84 100
49 113.5 103.6 155.4
51 0.0 31.8 47.8#
86 52.1 51.3 76.9





#23

Vinyl Acetate

Concen: 0.634 ug/l m

RT: 5.86 min Scan# 1281

Delta R.T. 0.02 min

Lab File: VN064326.D

Acq: 27 Oct 2020 15:17

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT4-2020

Tot Ion: 43 Resp: 5337

Ion Ratio Lower Upper

43 100

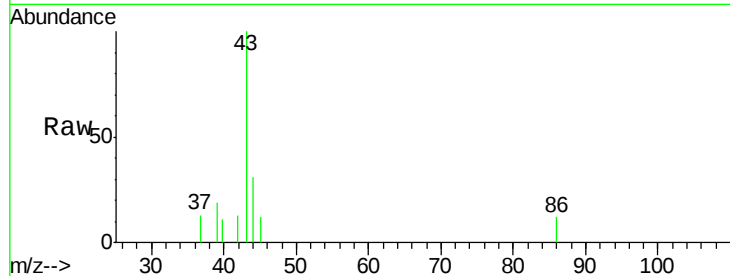
86 12.0 7.3 10.9#

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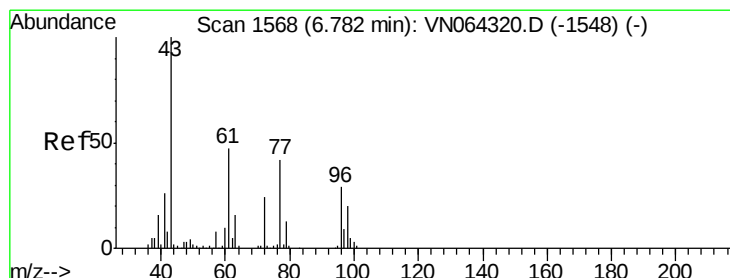
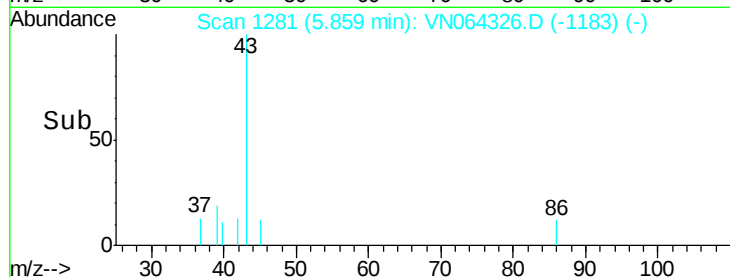
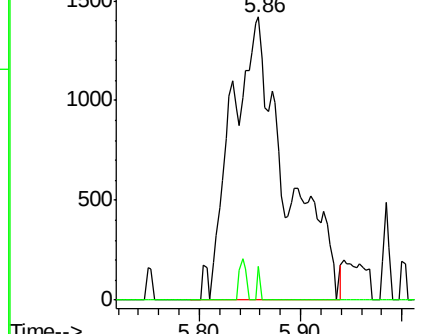
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Abundance Ion 43.00 (42.70 to 43.70): VN064326.D (-1281) (-)

Ion 86.00 (85.70 to 86.70): VN064326.D (-1281) (-)



#25

2-Butanone

Concen: 0.918 ug/l m

RT: 6.80 min Scan# 1574

Delta R.T. 0.02 min

Lab File: VN064326.D

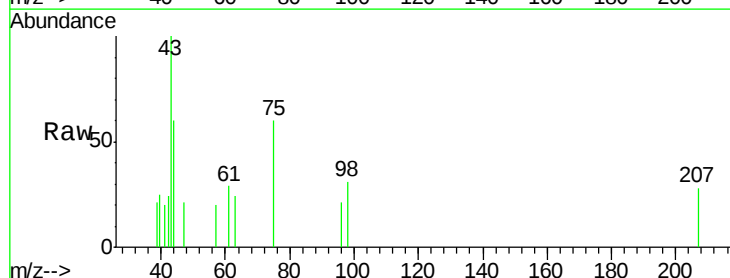
Acq: 27 Oct 2020 15:17

Tgt Ion: 43 Resp: 1932

Ion Ratio Lower Upper

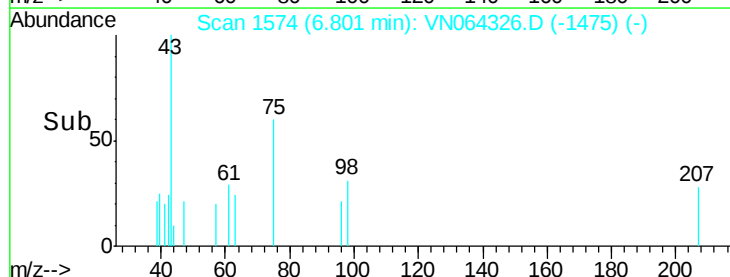
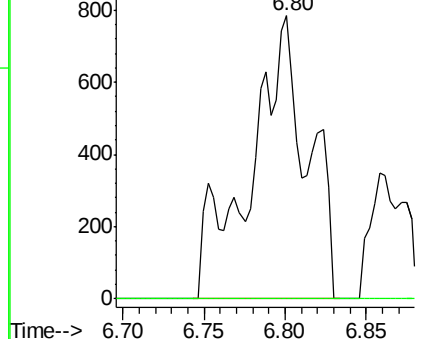
43 100

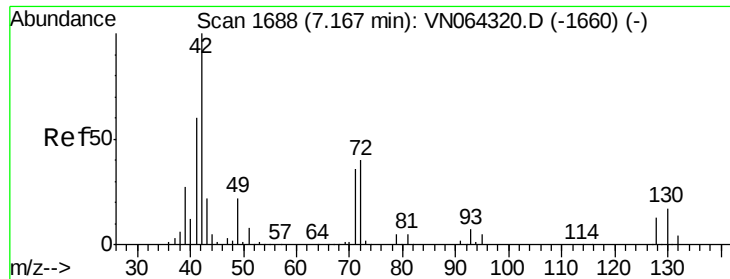
72 0.0 18.8 28.2#



Abundance Ion 43.00 (42.70 to 43.70): VN064326.D (-1574) (-)

Ion 72.00 (71.70 to 72.70): VN064326.D (-1574) (-)





#29

Tetrahydrofuran

Concen: 0.842 ug/l m

RT: 7.17 min Scan# 1689

Delta R.T. 0.00 min

Lab File: VN064326.D

Acq: 27 Oct 2020 15:17

Instrument :

MSVOA_N

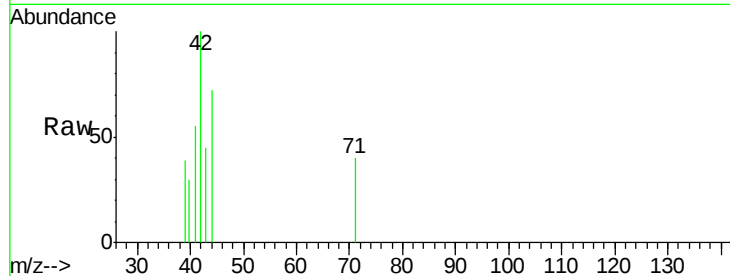
ClientSampleId :

MDL-WATER-03-QT4-2020

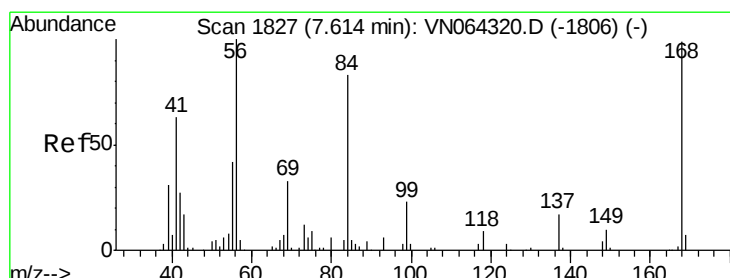
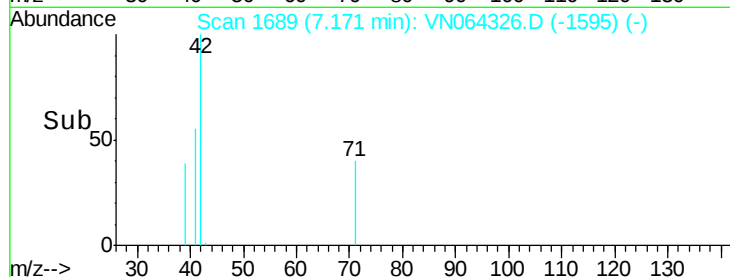
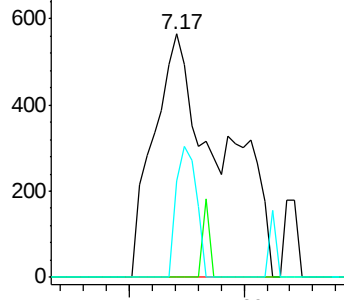
Tot Ion:	42	Resp:	1151
Ion Ratio	Lower	Upper	
42	100		
72	0.0	31.6	47.4#
71	16.2	29.4	44.0#

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Abundance Ion 42.00 (41.70 to 42.70): VN064320.D (-1660) (-)



#31

Cyclohexane

Concen: 1.587 ug/l

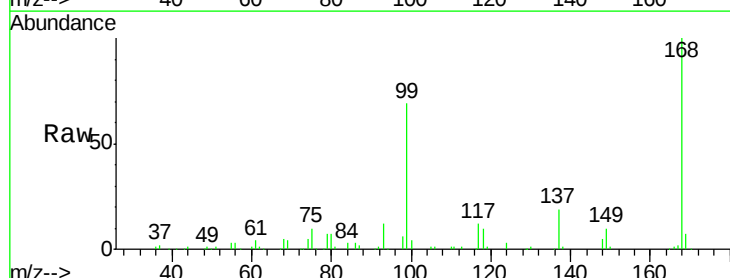
RT: 7.63 min Scan# 1831

Delta R.T. 0.01 min

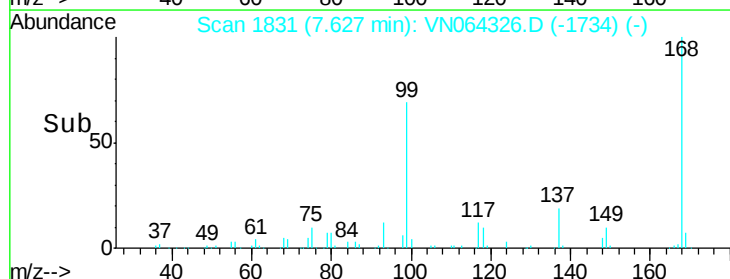
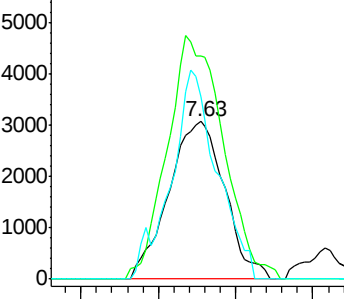
Lab File: VN064326.D

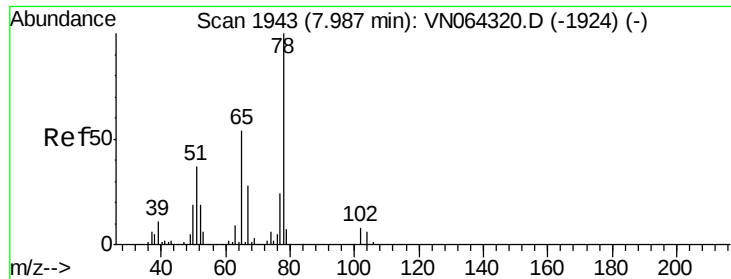
Acq: 27 Oct 2020 15:17

Tgt Ion:	56	Resp:	7726
Ion Ratio	Lower	Upper	
56	100		
69	141.8	25.8	38.8#
84	115.8	66.3	99.5#



Abundance Ion 56.00 (55.70 to 56.70): VN064320.D (-1806) (-)





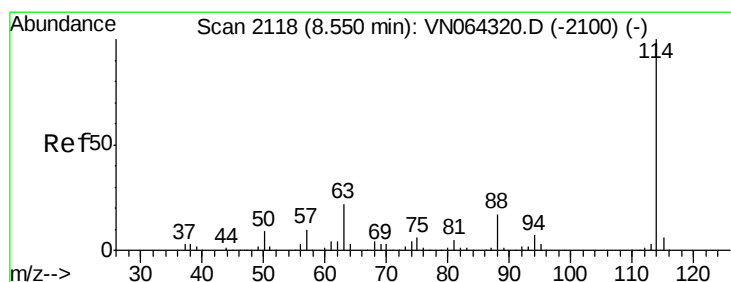
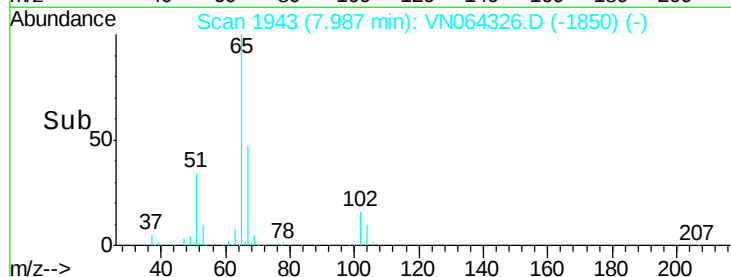
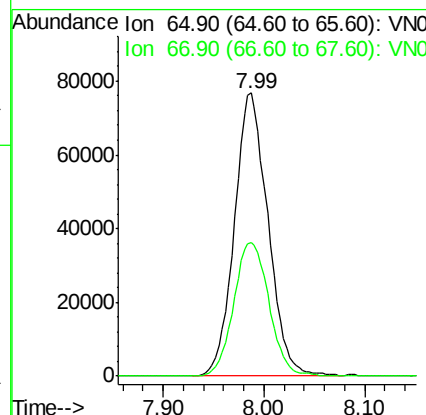
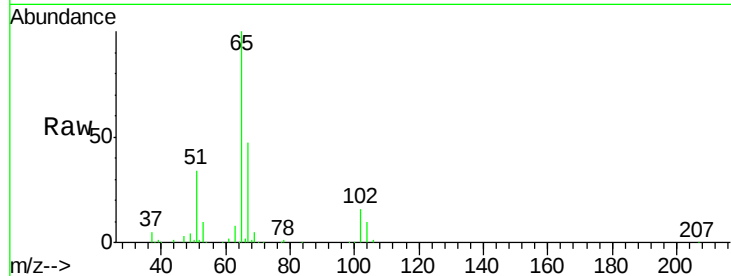
#33
 1,2-Dichloroethane-d4
 Concen: 42.503 ug/l
 RT: 7.99 min Scan# 1943
 Delta R.T. -0.00 min
 Lab File: VN064326.D
 Acq: 27 Oct 2020 15:17

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT4-2020

Tot Ion	Ratio	Resp	Lower	Upper
65	100	178232		
67	49.4	0.0	99.2	

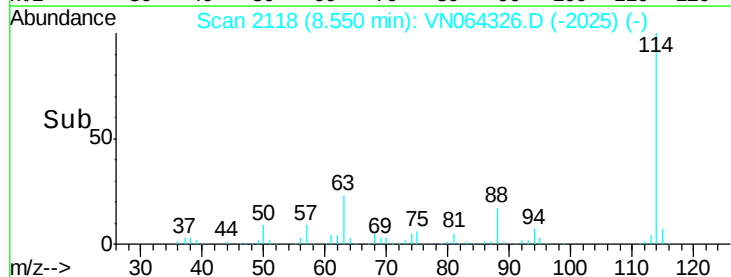
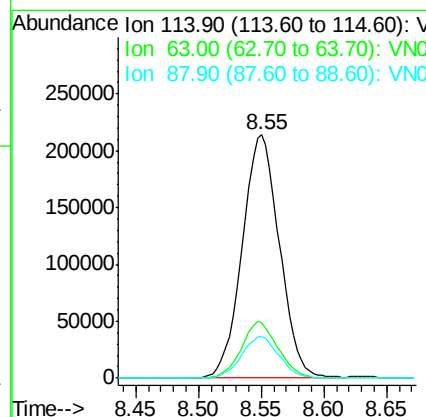
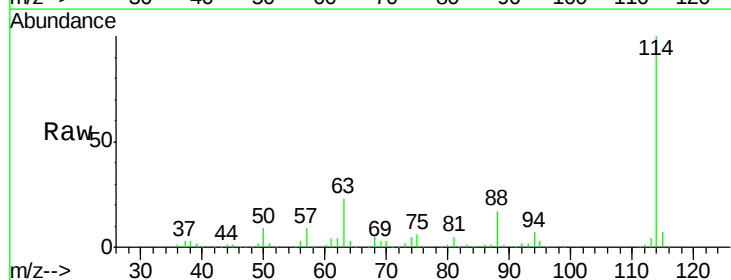
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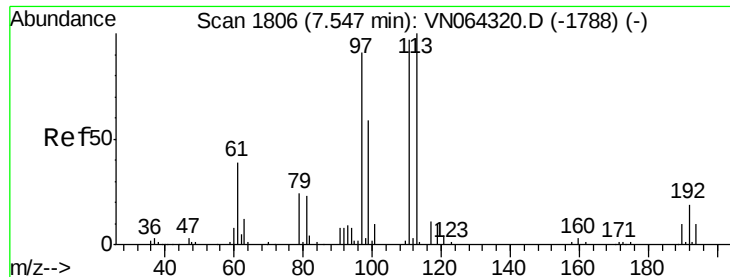
MMDadoda
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#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.55 min Scan# 2118
 Delta R.T. -0.00 min
 Lab File: VN064326.D
 Acq: 27 Oct 2020 15:17

Tgt Ion	Ratio	Resp	Lower	Upper
114	100	440920		
63	22.7	0.0	44.6	
88	17.1	0.0	33.4	





#35

Dibromofluoromethane

Concen: 39.837 ug/l

RT: 7.55 min Scan# 1807

Delta R.T. 0.00 min

Lab File: VN064326.D

Acq: 27 Oct 2020 15:17

Instrument :

MSVOA_N

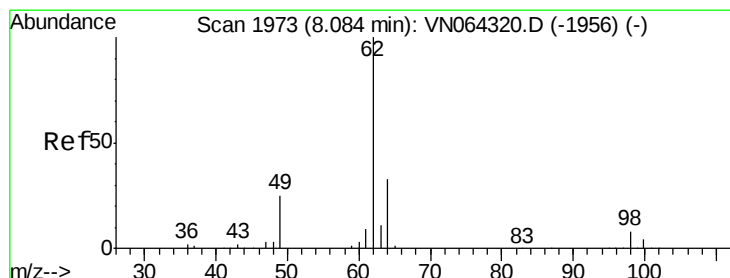
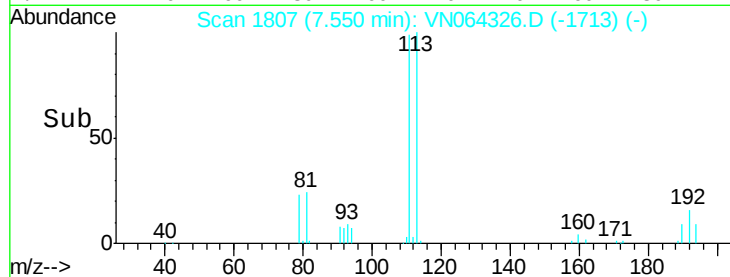
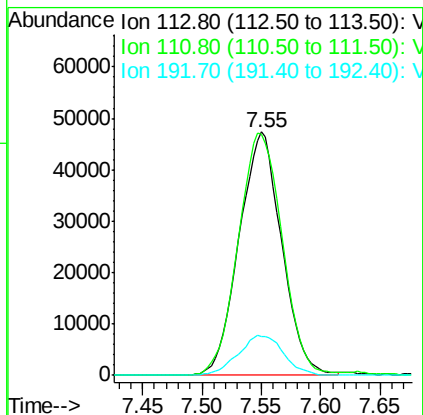
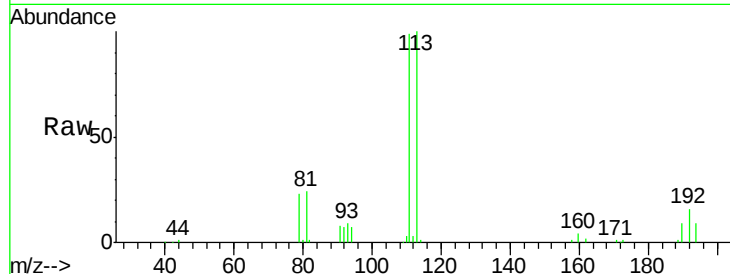
ClientSampleId :

MDL-WATER-03-QT4-2020

Tot Ion:	113	Resp:	117137
Ion Ratio	Lower	Upper	
113	100		
111	103.0	81.5	122.3
192	17.4	15.0	22.4

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#42

1,2-Dichloroethane

Concen: 0.257 ug/l m

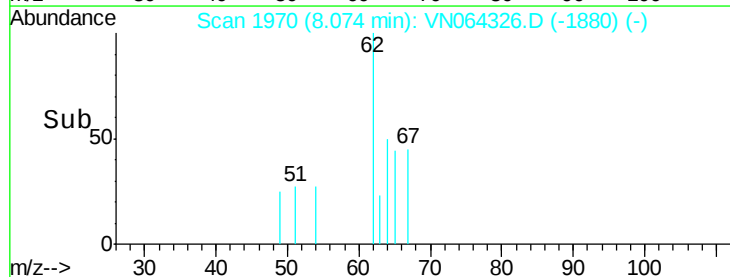
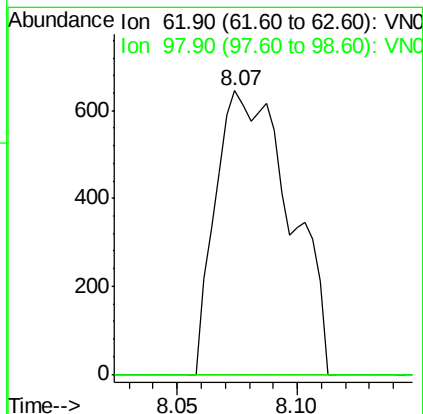
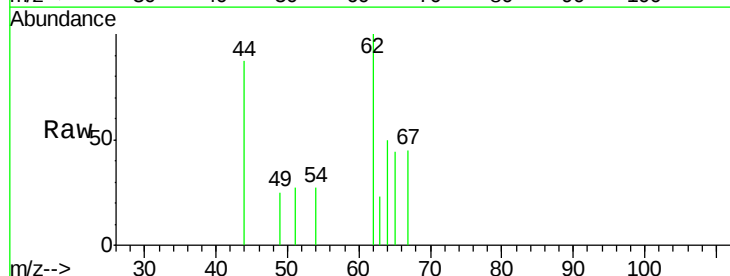
RT: 8.07 min Scan# 1970

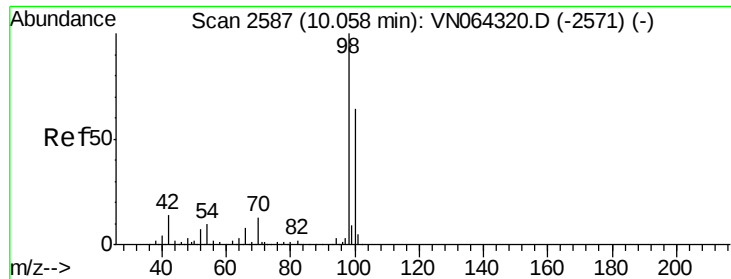
Delta R.T. -0.01 min

Lab File: VN064326.D

Acq: 27 Oct 2020 15:17

Tgt Ion:	62	Resp:	1374
Ion Ratio	Lower	Upper	
62	100		
98	0.0	0.0	14.2





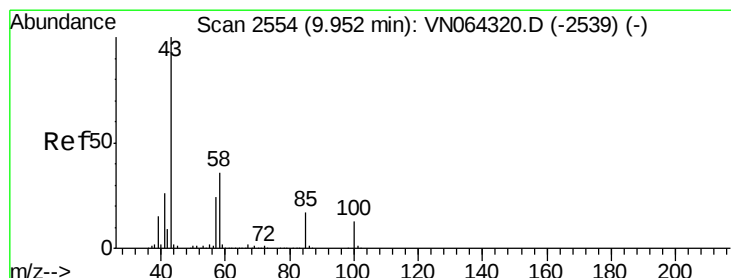
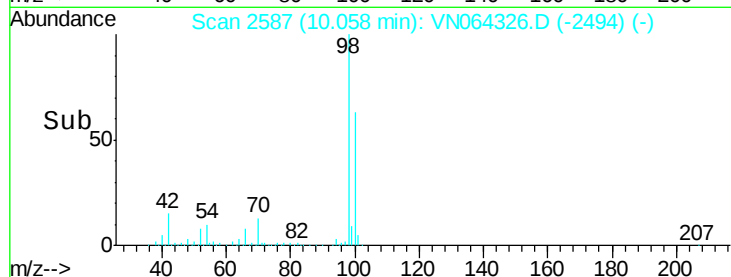
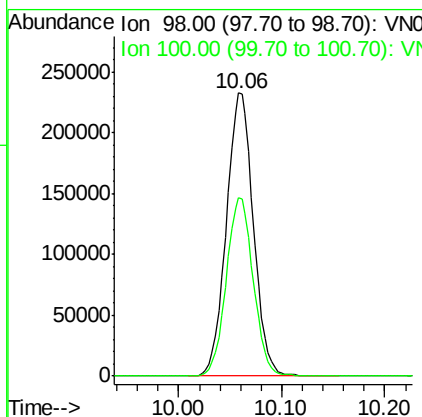
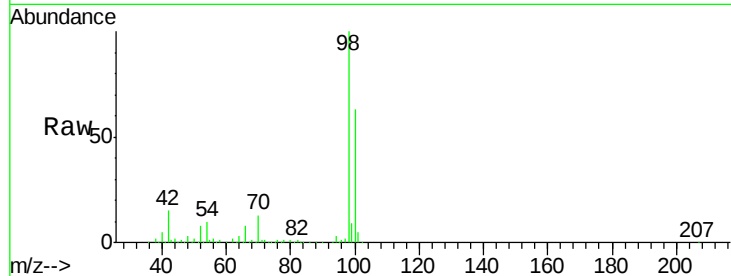
#50
Toluene-d8
Concen: 39.053 ug/l
RT: 10.06 min Scan# 2587
Delta R.T. -0.00 min
Lab File: VN064326.D
Acq: 27 Oct 2020 15:17

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2020

Tot Ion	Ratio	Lower	Upper
98	100		
100	63.1	50.9	76.3

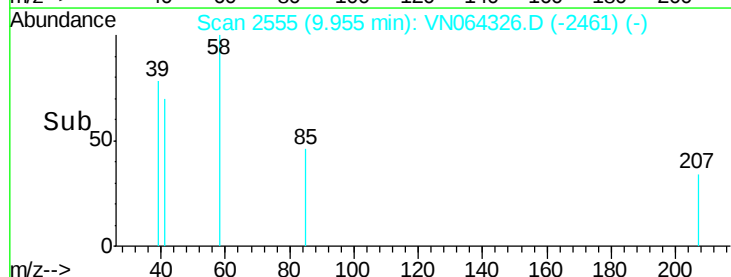
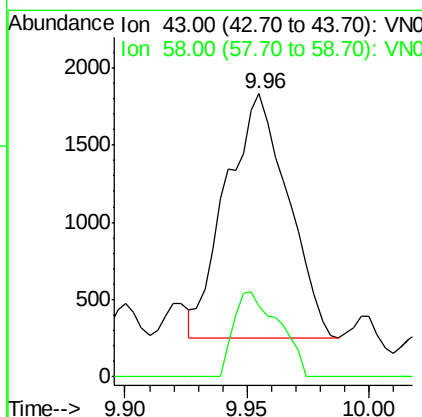
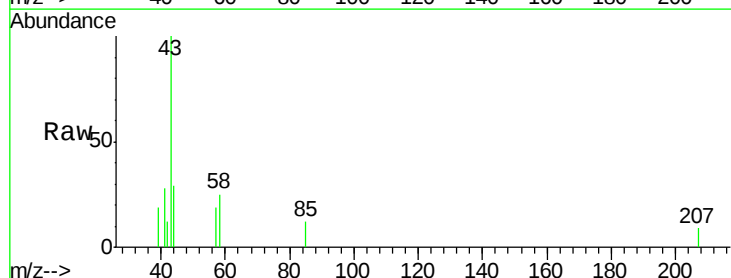
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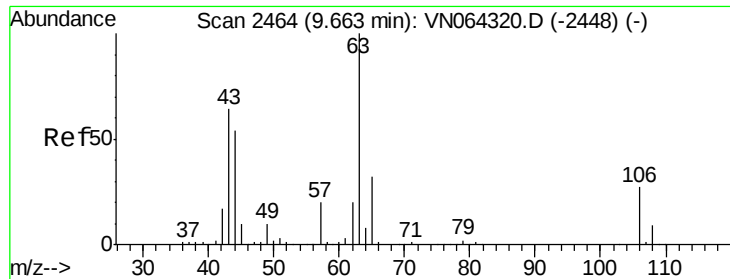
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#51
4-Methyl-2-Pentanone
Concen: 0.624 ug/l
RT: 9.96 min Scan# 2555
Delta R.T. 0.00 min
Lab File: VN064326.D
Acq: 27 Oct 2020 15:17

Tgt Ion	Ratio	Lower	Upper
43	100		
58	25.6	28.6	42.8#





#58

2-Chloroethyl Vinyl ether

Concen: 2.389 ug/l

RT: 9.67 min Scan# 2465

Delta R.T. 0.00 min

Lab File: VN064326.D

Acq: 27 Oct 2020 15:17

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT4-2020

Tot Ion: 63 Resp: 6088

Ion Ratio Lower Upper

63 100

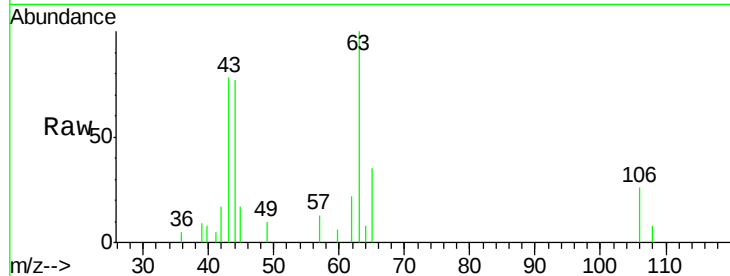
106 25.4 21.0 31.4

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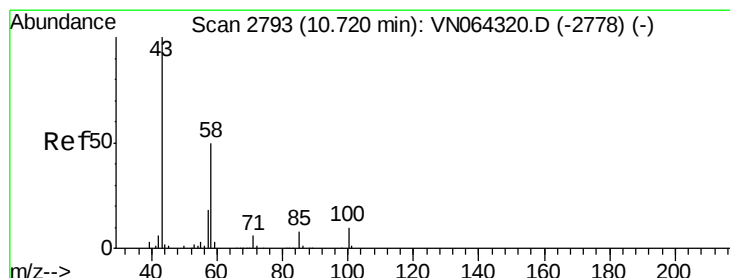
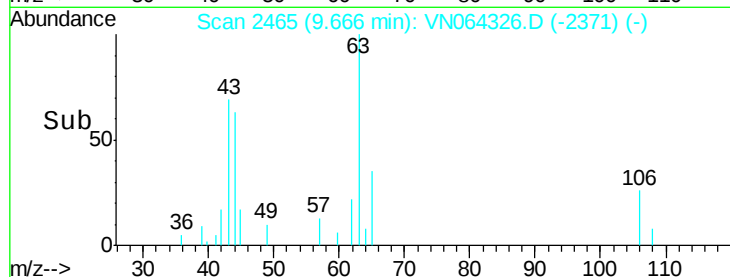
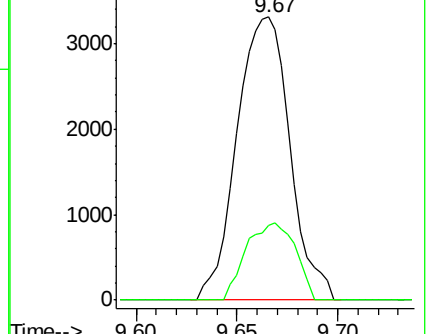
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Abundance Ion 62.90 (62.60 to 63.60): VN0

Ion 105.90 (105.60 to 106.60): V



#59

2-Hexanone

Concen: 0.610 ug/l

RT: 10.72 min Scan# 2794

Delta R.T. 0.00 min

Lab File: VN064326.D

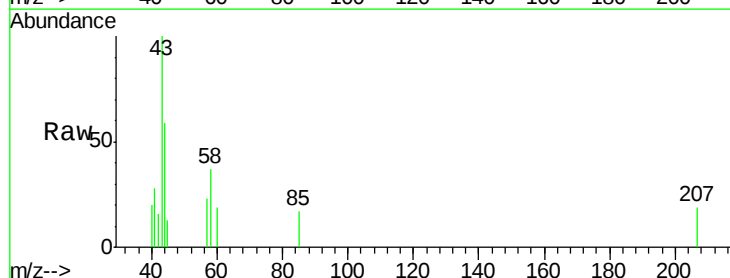
Acq: 27 Oct 2020 15:17

Tgt Ion: 43 Resp: 2006

Ion Ratio Lower Upper

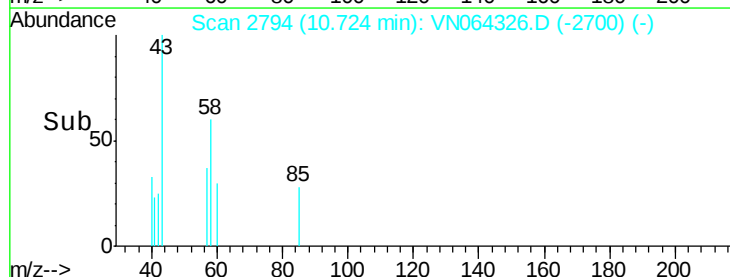
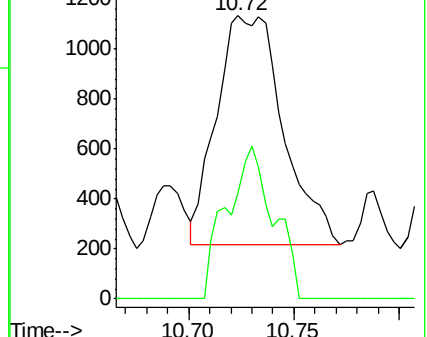
43 100

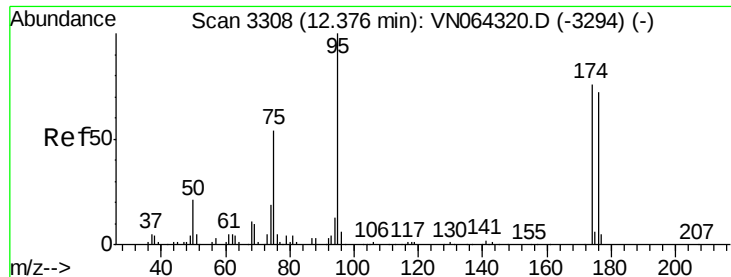
58 47.0 25.0 75.0



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0





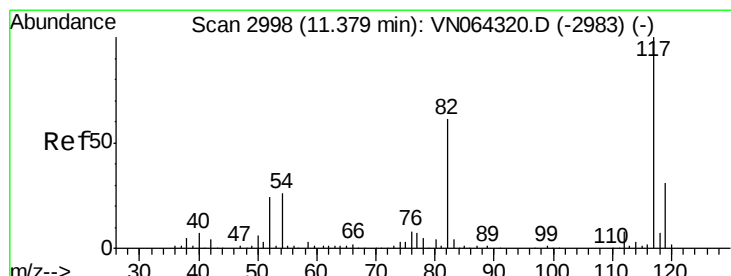
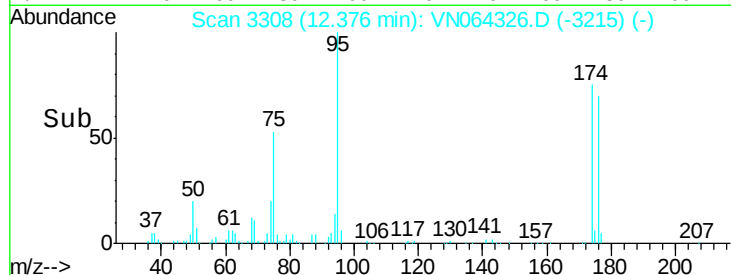
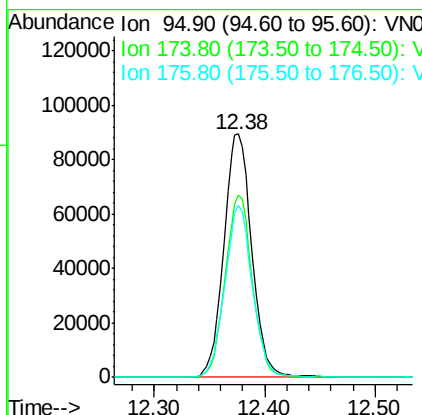
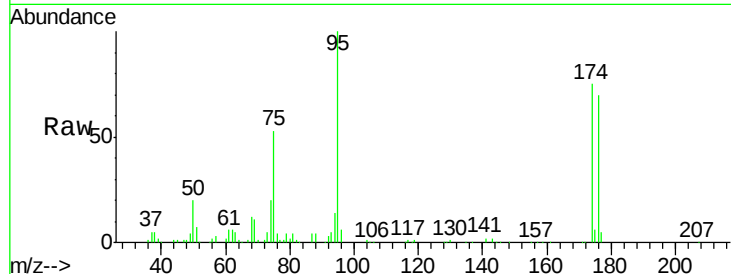
#62
4-Bromofluorobenzene
Concen: 36.984 ug/l
RT: 12.38 min Scan# 3308
Delta R.T. -0.00 min
Lab File: VN064326.D
Acq: 27 Oct 2020 15:17

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT4-2020

Tot Ion	Ratio	Resp	Lower	Upper
95	100	156833		
174	72.7	0.0	147.4	
176	69.8	0.0	143.6	

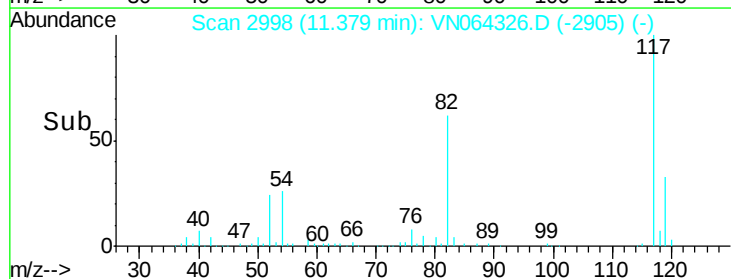
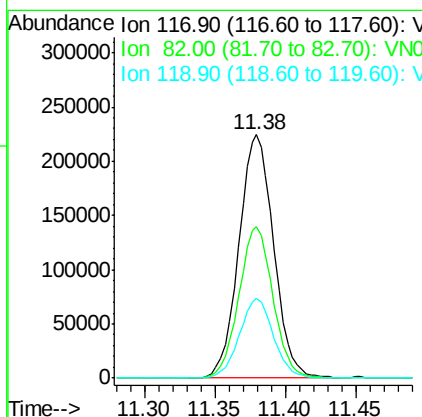
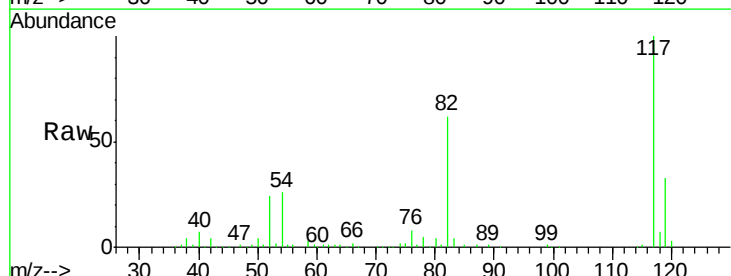
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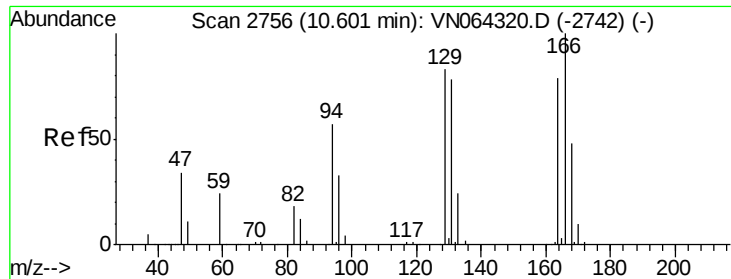
MMDadoda
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#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.38 min Scan# 2998
Delta R.T. -0.00 min
Lab File: VN064326.D
Acq: 27 Oct 2020 15:17

Tgt Ion	Ratio	Resp	Lower	Upper
117	100	387266		
82	62.4	48.8	73.2	
119	32.7	25.1	37.7	





#64

Tetrachloroethene

Concen: 0.323 ug/l

RT: 10.60 min Scan# 2757

Delta R.T. 0.00 min

Lab File: VN064326.D

Acq: 27 Oct 2020 15:17

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT4-2020

Tot Ion:164 Resp: 1028

Ion Ratio Lower Upper

164 100

166 67.8 100.7 151.1#

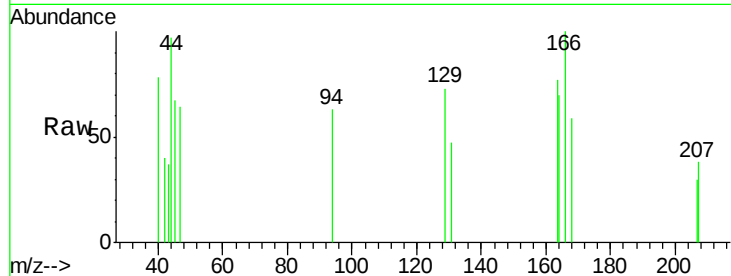
129 49.6 83.7 125.5#

131 31.9 78.2 117.2#

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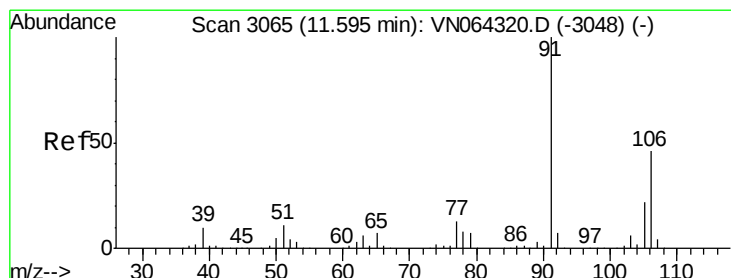
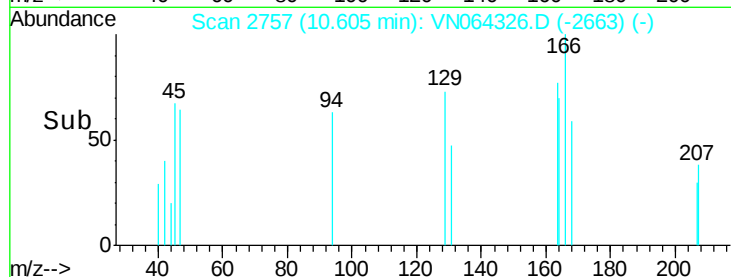
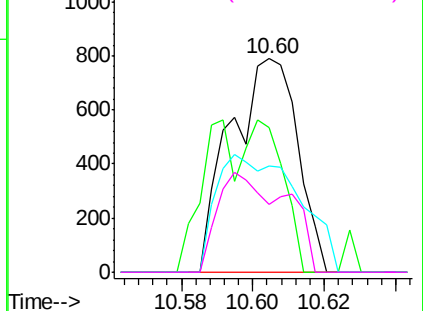


Abundance Ion 163.80 (163.50 to 164.50): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.80 (128.50 to 129.50): V

Ion 130.80 (130.50 to 131.50): V



#68

m/p-Xylenes

Concen: 0.274 ug/l m

RT: 11.59 min Scan# 3065

Delta R.T. -0.00 min

Lab File: VN064326.D

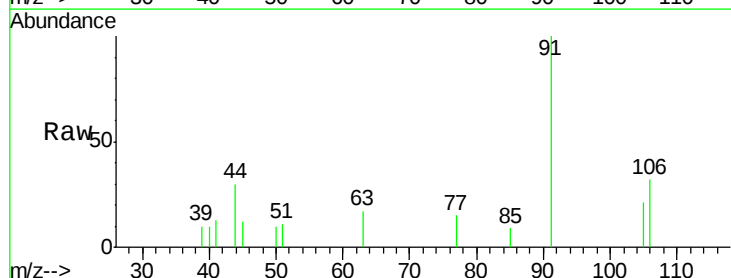
Acq: 27 Oct 2020 15:17

Tgt Ion:106 Resp: 1480

Ion Ratio Lower Upper

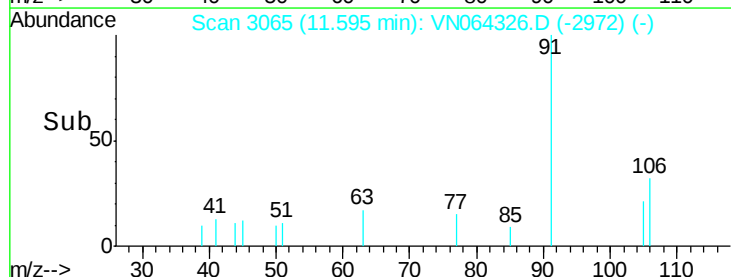
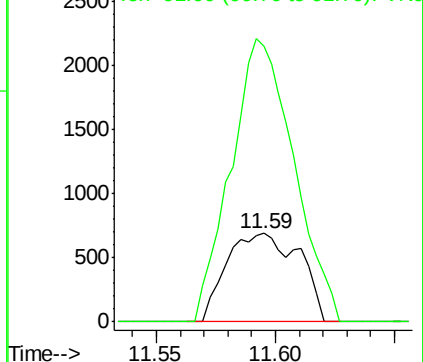
106 100

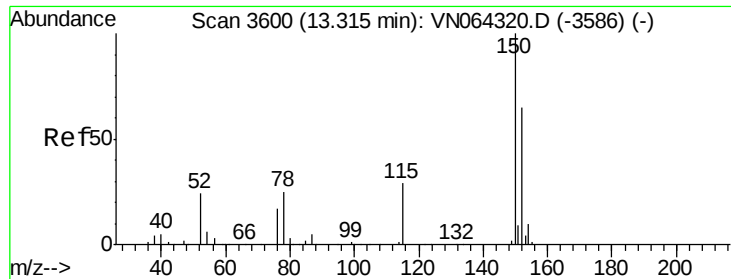
91 277.1 170.2 255.4#



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.32 min Scan# 3601

Delta R.T. 0.00 min

Lab File: VN064326.D

Acq: 27 Oct 2020 15:17

Instrument :

MSVOA_N

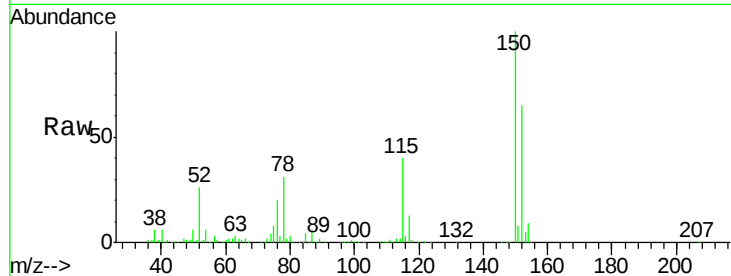
ClientSampleId :

MDL-WATER-03-QT4-2020

Tot Ion:	152	Resp:	161517
Ion Ratio	Lower	Upper	
152	100		
115	66.2	31.5	94.5
150	159.2	0.0	346.2

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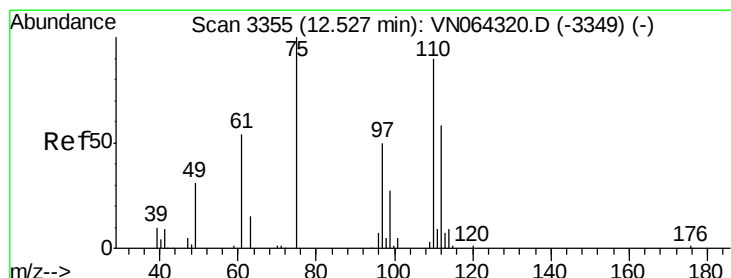
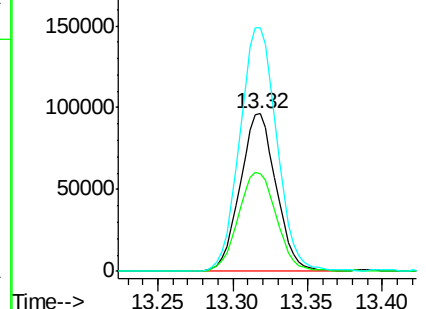
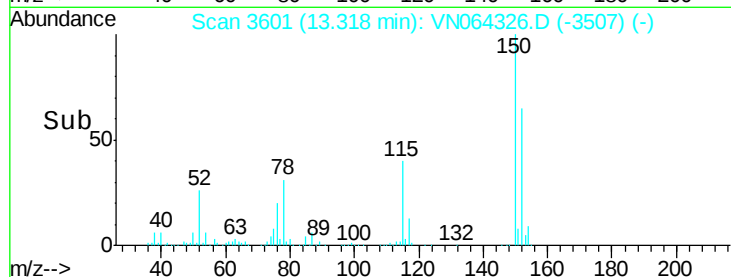
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Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 0.250 ug/l m

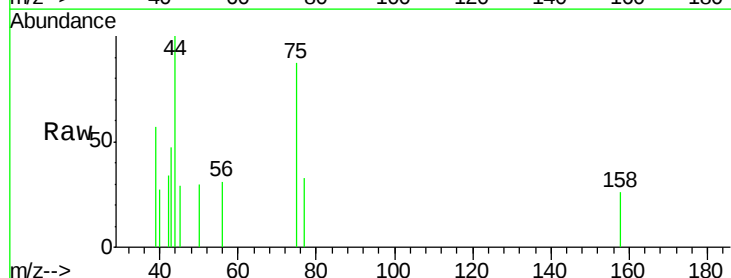
RT: 12.52 min Scan# 3353

Delta R.T. -0.01 min

Lab File: VN064326.D

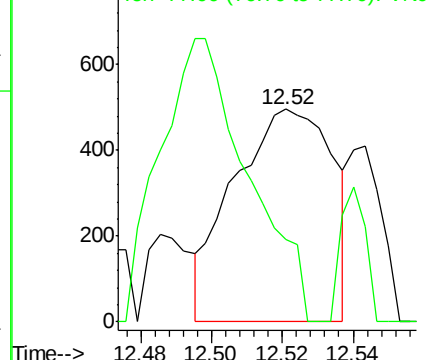
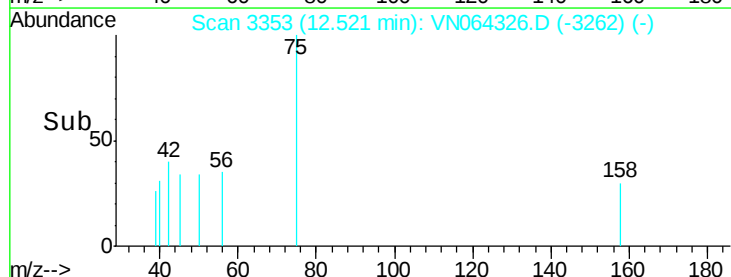
Acq: 27 Oct 2020 15:17

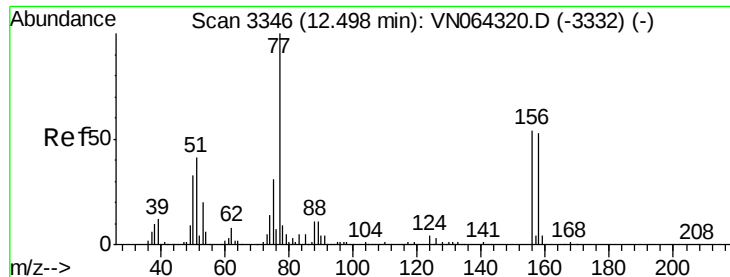
Tgt Ion:	75	Resp:	968
Ion Ratio	Lower	Upper	
75	100		
77	135.2	0.0	0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V





#77

Bromobenzene

Concen: 0.212 ug/l

RT: 12.50 min Scan# 3348

Delta R.T. 0.01 min

Lab File: VN064326.D

Acq: 27 Oct 2020 15:17

Instrument :

MSVOA_N

ClientSampleId :

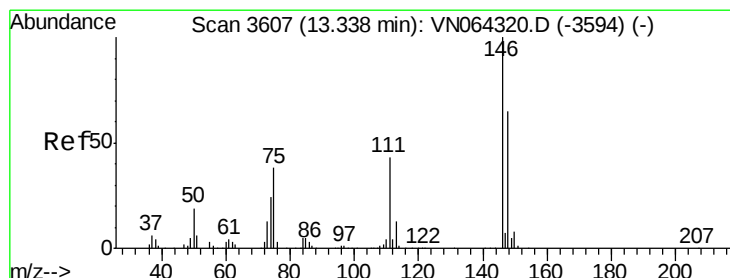
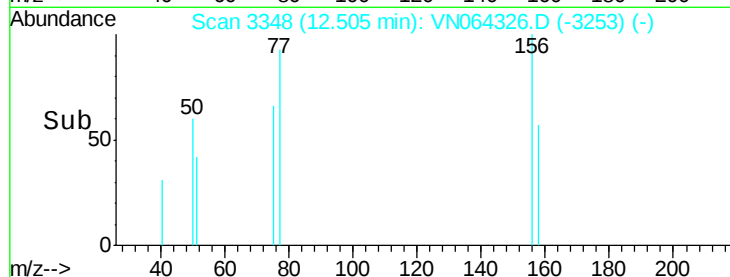
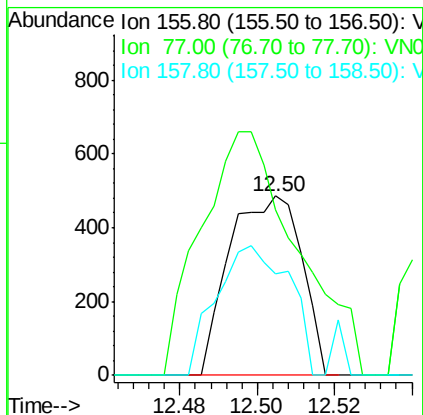
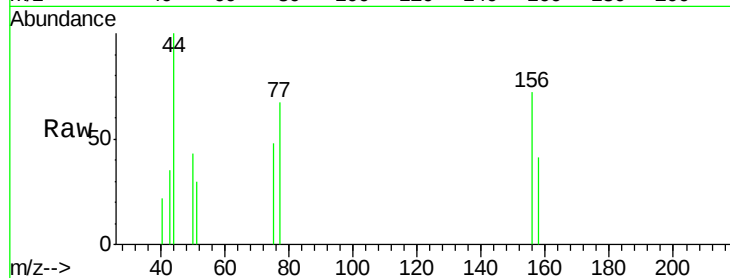
MDL-WATER-03-QT4-2020

Tot Ion:156 Resp: 629

Ion	Ratio	Lower	Upper
156	100		
77	181.2	111.9	335.7
158	72.7	49.0	147.0

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#88

1,4-Dichlorobenzene

Concen: 0.271 ug/l

RT: 13.33 min Scan# 3606

Delta R.T. -0.00 min

Lab File: VN064326.D

Acq: 27 Oct 2020 15:17

Tgt Ion:146 Resp: 1429

Ion	Ratio	Lower	Upper
146	100		
111	0.0	21.8	65.4#
148	65.6	31.8	95.3

