

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN052920\
 Data File : VN061560.D
 Acq On : 29 May 2020 12:28
 Operator : JC/MD
 Sample : L2182-09 .2PPB MDL
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT2-2020DL

Manual Integrations
 APPROVED

MMDadoda
 6/1/2020 12:29:56 PM

Quant Time: May 30 07:22:21 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N052820W.M
 Quant Title : SW846 8260
 QLast Update : Fri May 29 02:14:10 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.63	168	315150	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.55	114	560815	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.38	117	501726	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.32	152	208581	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	7.99	65	195191	51.98	ug/l	0.00
Spiked Amount	50.000		Recovery	=	103.96%	
35) Dibromofluoromethane	7.55	113	153669	54.02	ug/l	0.00
Spiked Amount	50.000		Recovery	=	108.04%	
50) Toluene-d8	10.06	98	623703	47.31	ug/l	0.00
Spiked Amount	50.000		Recovery	=	94.62%	
62) 4-Bromofluorobenzene	12.38	95	204643	42.55	ug/l	0.00
Spiked Amount	50.000		Recovery	=	85.10%	

Target Compounds

						Qvalue
3) Chloromethane	2.03	50	1482	0.386	ug/l	99
4) Vinyl Chloride	2.16	62	1078	0.205	ug/l #	88
6) Chloroethane	2.68	64	860	0.254	ug/l #	62
9) 1,1,2-Trichlorotrifluoroet	3.71	101	639m	0.212	ug/l	
12) 1,1-Dichloroethene	3.69	96	756	0.235	ug/l #	84
14) Allyl chloride	4.29	41	1269m	0.301	ug/l	
15) Acrylonitrile	4.96	53	1550m	1.112	ug/l	
16) Acetone	3.79	43	3064	2.307	ug/l	96
17) Carbon Disulfide	4.01	76	3489	0.492	ug/l #	74
18) Methyl Acetate	4.29	43	1165	0.343	ug/l #	46
19) Methyl tert-butyl Ether	5.00	73	2338m	0.213	ug/l	
20) Methylene Chloride	4.51	84	1013	0.220	ug/l #	67
21) trans-1,2-Dichloroethene	4.99	96	788m	0.217	ug/l	
23) Vinyl Acetate	5.85	43	5733	0.775	ug/l	100
24) 1,1-Dichloroethane	5.80	63	1182	0.201	ug/l #	81
25) 2-Butanone	6.79	43	2491m	1.400	ug/l	
26) 2,2-Dichloropropane	6.77	77	1269	0.236	ug/l #	51
27) cis-1,2-Dichloroethene	6.79	96	1059	0.258	ug/l	83
29) Tetrahydrofuran	7.17	42	1859	1.584	ug/l #	77
36) 1,1-Dichloropropene	7.75	75	1146	0.231	ug/l #	73
37) Ethyl Acetate	6.88	43	1078m	0.270	ug/l	
40) Benzene	8.00	78	3104	0.203	ug/l #	89
41) Methacrylonitrile	7.11	41	409m	0.223	ug/l	
42) 1,2-Dichloroethane	8.08	62	1522	0.297	ug/l #	72
46) Dibromomethane	9.18	93	615m	0.220	ug/l	
49) 1,4-Dioxane	9.17	88	342	6.821	ug/l #	75
51) 4-Methyl-2-Pentanone	9.95	43	3974	0.980	ug/l	91
57) 1,3-Dichloropropane	10.68	76	1353	0.212	ug/l #	50
58) 2-Chloroethyl Vinyl ether	9.67	63	2005	0.843	ug/l	96
59) 2-Hexanone	10.72	43	3449	1.185	ug/l	84
64) Tetrachloroethene	10.60	164	993	0.210	ug/l #	90
65) Chlorobenzene	11.41	112	2694	0.258	ug/l	90
67) Ethyl Benzene	11.48	91	3973	0.220	ug/l	94
68) m/p-Xylenes	11.60	106	3051	0.427	ug/l	97

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Instrument :
 MSVOA_N
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 MDL-WATER-03-QT2-2020DL

Manual Integrations
 APPROVED

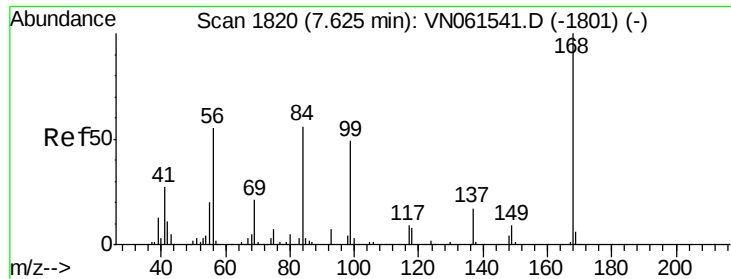
MMDadoda
 6/1/2020 12:29:56 PM

Quant Time: May 30 07:22:21 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N052820W.M
 Quant Title : SW846 8260
 QLast Update : Fri May 29 02:14:10 2020
 Response via : Initial Calibration

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

70) Styrene	11.94	104	2252	0.200	ug/l #	91
73) Isopropylbenzene	12.22	105	3594	0.236	ug/l	98
74) N-amyl acetate	12.05	43	1538	0.321	ug/l #	85
75) 1,1,2,2-Tetrachloroethane	12.49	83	1038	0.243	ug/l #	75
76) 1,2,3-Trichloropropane	12.53	75	1453m	0.383	ug/l	
77) Bromobenzene	12.50	156	1166	0.300	ug/l	90
78) n-propylbenzene	12.57	91	5492	0.323	ug/l	96
79) 2-Chlorotoluene	12.65	91	2503	0.247	ug/l	94
80) 1,3,5-Trimethylbenzene	12.71	105	3149	0.247	ug/l	93
82) 4-Chlorotoluene	12.75	91	3605	0.338	ug/l	92
83) tert-Butylbenzene	12.97	119	2656	0.236	ug/l	98
84) 1,2,4-Trimethylbenzene	13.02	105	3644	0.288	ug/l	97
85) sec-Butylbenzene	13.15	105	4080	0.282	ug/l	95
86) p-Isopropyltoluene	13.26	119	3488	0.261	ug/l	98
87) 1,3-Dichlorobenzene	13.26	146	2739	0.398	ug/l	99
88) 1,4-Dichlorobenzene	13.34	146	3152m	0.450	ug/l	
89) n-Butylbenzene	13.59	91	4807	0.430	ug/l	89
91) 1,2-Dichlorobenzene	13.63	146	2382	0.362	ug/l	97
92) 1,2-Dibromo-3-Chloropropan	14.24	75	266	0.306	ug/l	78
93) 1,2,4-Trichlorobenzene	14.89	180	3302	0.859	ug/l	97
94) Hexachlorobutadiene	14.98	225	971	0.592	ug/l	98
95) Naphthalene	15.11	128	12250	1.046	ug/l	99
96) 1,2,3-Trichlorobenzene	15.29	180	3419	0.904	ug/l	94

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.63 min Scan# 1820

Delta R.T. -0.00 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT2-2020DL

Tot Ion:168 Resp: 315150

Ion Ratio Lower Upper

168 100

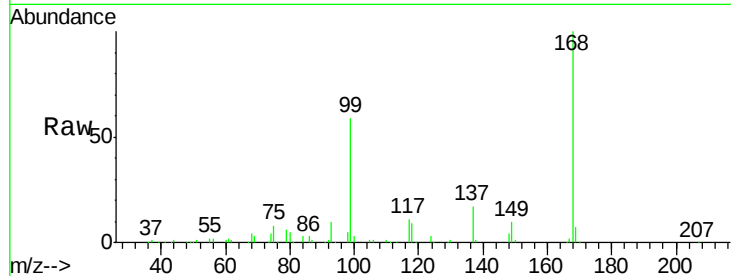
99 59.1 45.0 67.4

Manual Integrations

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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.63

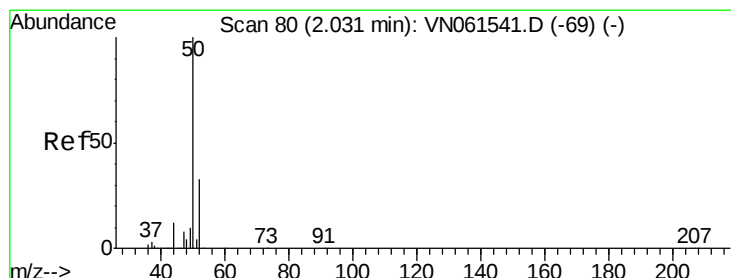
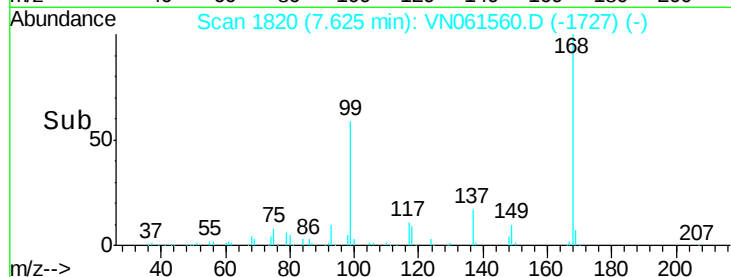
150000

100000

50000

0

Time--> 7.50 7.60 7.70



#3

Chloromethane

Concen: 0.386 ug/l

RT: 2.03 min Scan# 81

Delta R.T. 0.00 min

Lab File: VN061560.D

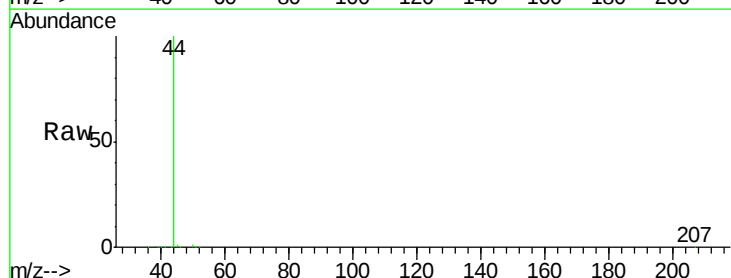
Acq: 29 May 2020 12:28

Tgt Ion: 50 Resp: 1482

Ion Ratio Lower Upper

50 100

52 33.8 26.7 40.1



Abundance Ion 49.90 (49.60 to 50.60): VNO

Ion 51.90 (51.60 to 52.60): VNO

2.03

1200

1000

800

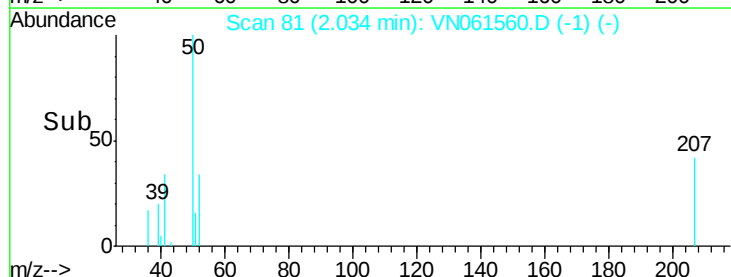
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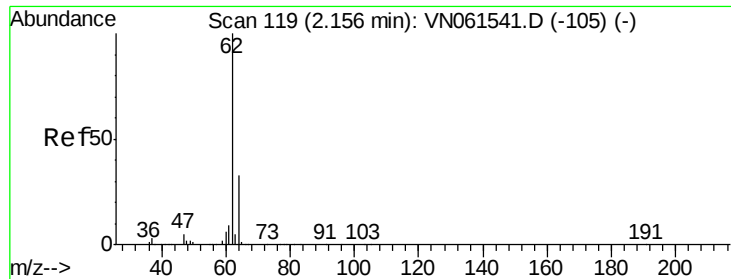
400

200

0

Time--> 2.00 2.02 2.04 2.06





#4

Vinyl Chloride

Concen: 0.205 ug/l

RT: 2.16 min Scan# 121

Delta R.T. 0.01 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT2-2020DL

Tot Ion: 62 Resp: 1078

Ion Ratio Lower Upper

62 100

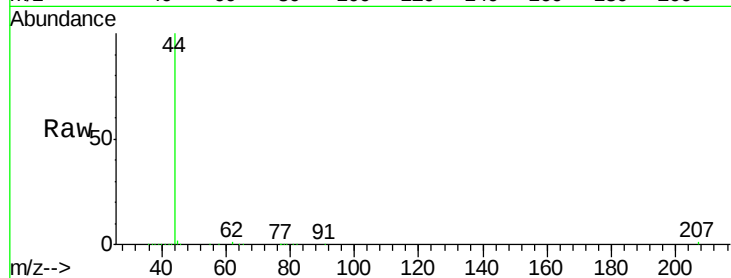
64 25.8 26.2 39.2#

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Abundance Ion 61.90 (61.60 to 62.60): VNO

Ion 63.90 (63.60 to 64.60): VNO

2.16

800

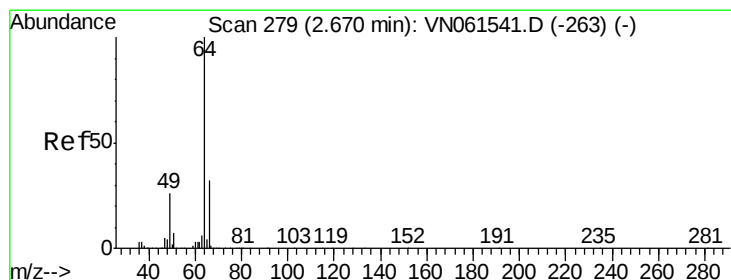
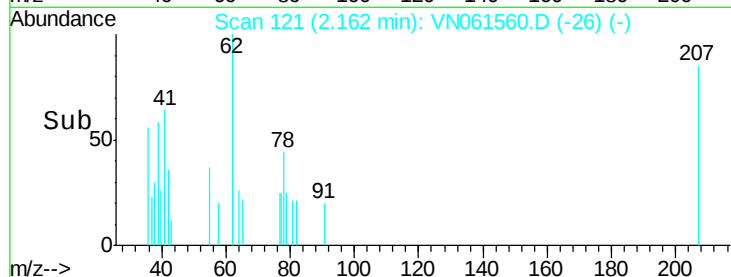
600

400

200

0

Time--> 2.12 2.14 2.16 2.18 2.20



#6

Chloroethane

Concen: 0.254 ug/l

RT: 2.68 min Scan# 281

Delta R.T. 0.01 min

Lab File: VN061560.D

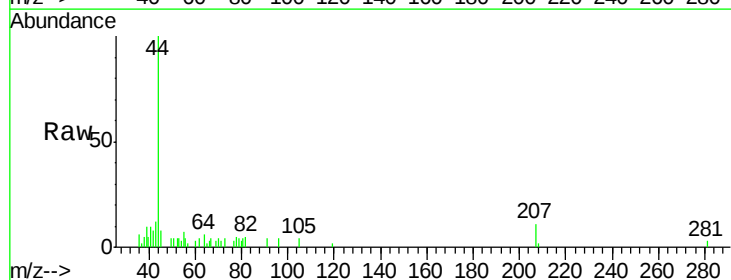
Acq: 29 May 2020 12:28

Tgt Ion: 64 Resp: 860

Ion Ratio Lower Upper

64 100

66 53.3 25.6 38.4#



Abundance Ion 63.90 (63.60 to 64.60): VNO

Ion 65.90 (65.60 to 66.60): VNO

2.68

400

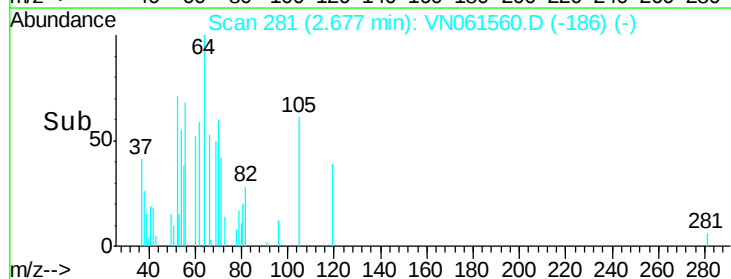
300

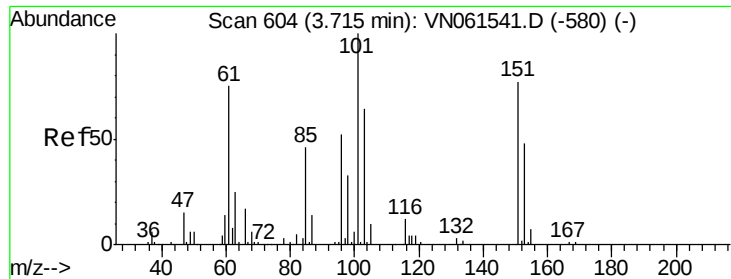
200

100

0

Time--> 2.65 2.70





#9

1,1,2-Trichlorotrifluoroethane

Concen: 0.212 ug/l m

RT: 3.71 min Scan# 601

Delta R.T. -0.01 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Instrument :

MSVOA_N

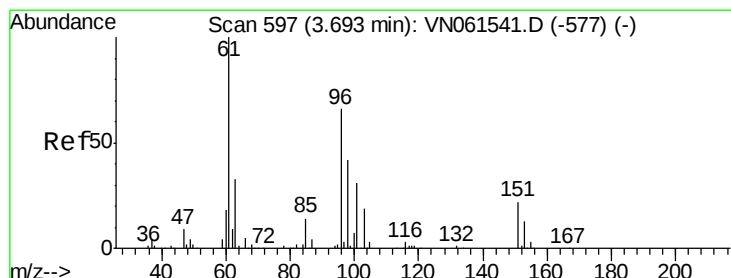
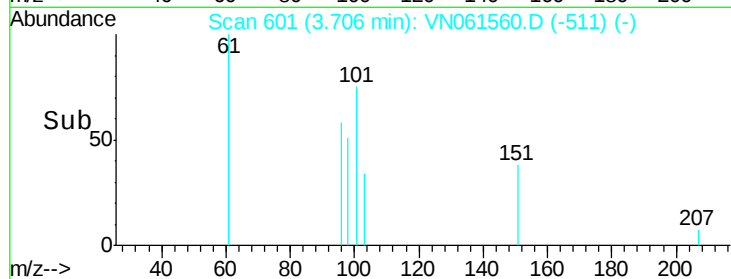
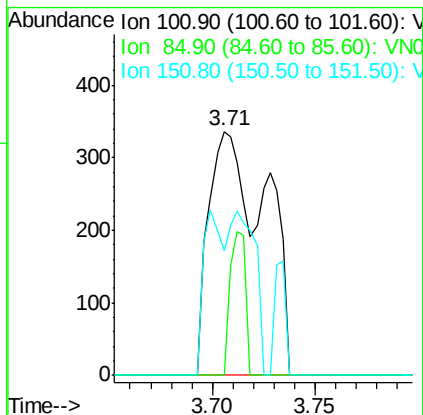
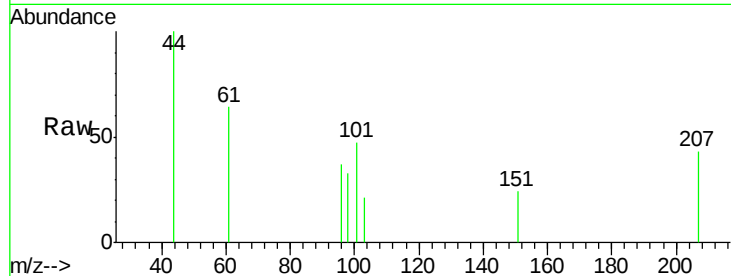
ClientSampled :

MDL-WATER-03-QT2-2020DL

Tot Ion:	101	Resp:	639
Ion	Ratio	Lower	Upper
101	100		
85	16.4	35.2	52.8#
151	23.6	61.0	91.6#

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#12

1,1-Dichloroethene

Concen: 0.235 ug/l

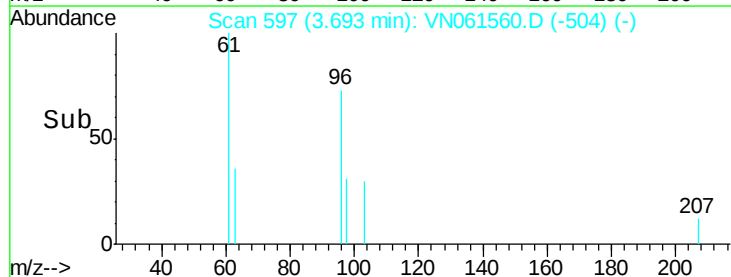
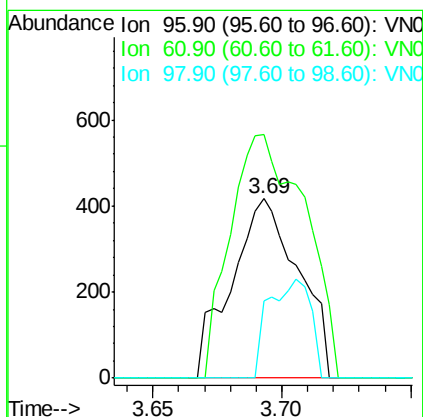
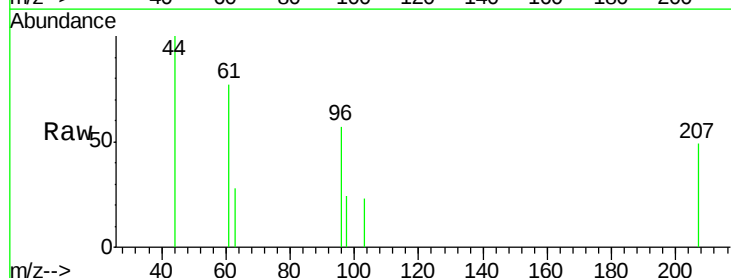
RT: 3.69 min Scan# 597

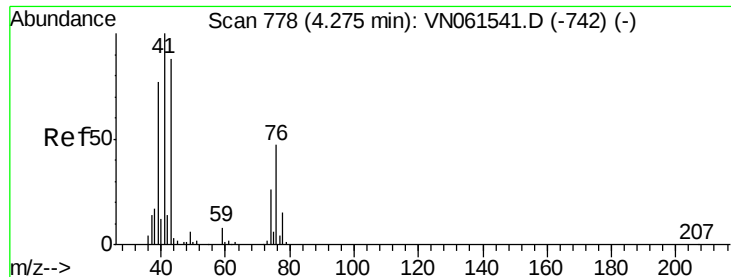
Delta R.T. -0.00 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Tgt Ion:	96	Resp:	756
Ion	Ratio	Lower	Upper
96	100		
61	136.1	120.5	180.7
98	42.8	50.8	76.2#





#14

Allvl chloride

Concen: 0.301 ug/l m

RT: 4.29 min Scan# 782

Delta R.T. 0.01 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Instrument :

MSVOA_N

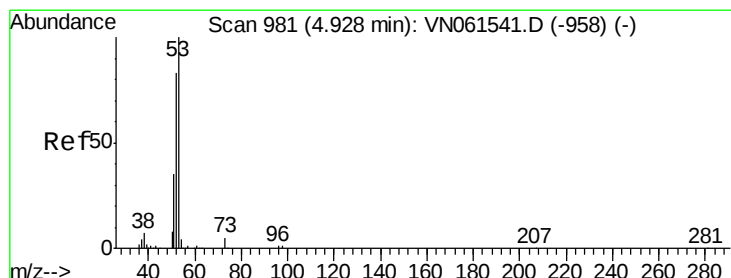
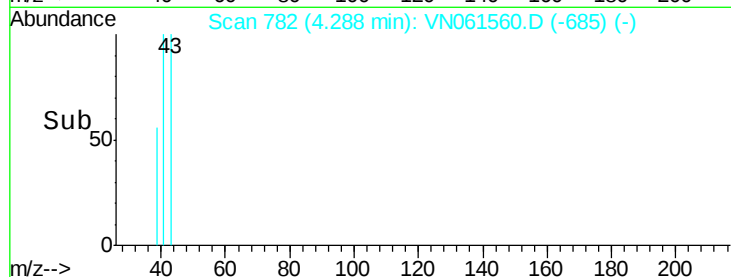
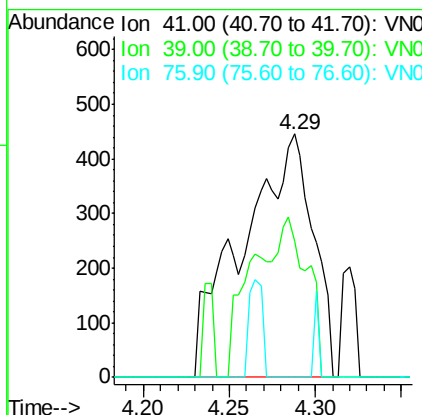
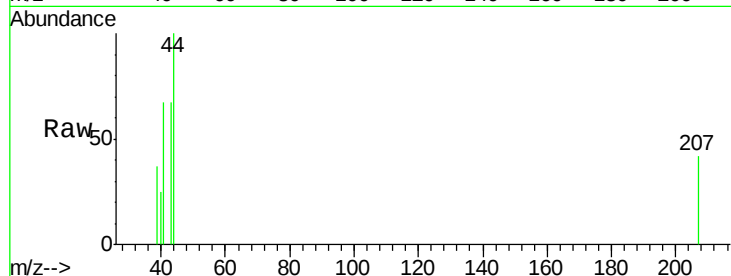
ClientSampleId :

MDL-WATER-03-QT2-2020DL

Tot Ion:	41	Resp:	1269
Ion	Ratio	Lower	Upper
41	100		
39	20.5	58.6	88.0#
76	0.0	34.2	51.4#

Manual Integrations
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#15

Acrylonitrile

Concen: 1.112 ug/l m

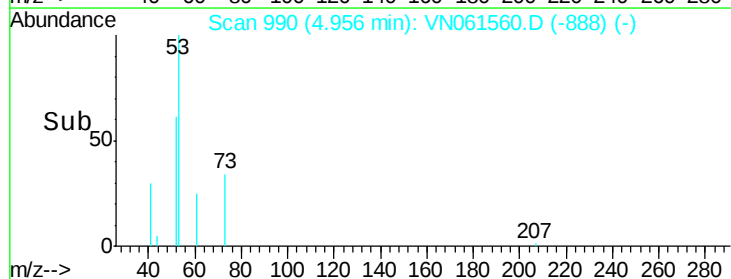
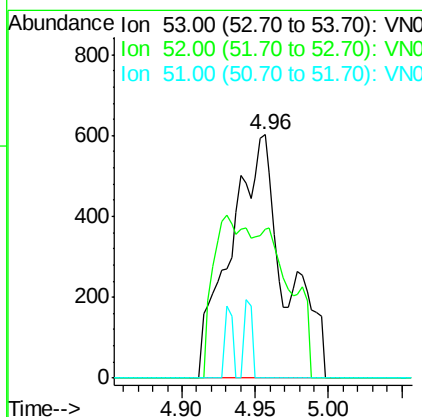
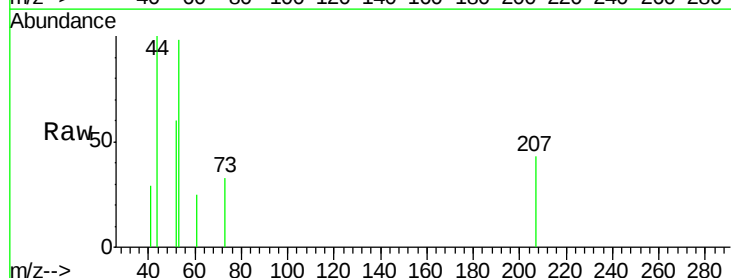
RT: 4.96 min Scan# 990

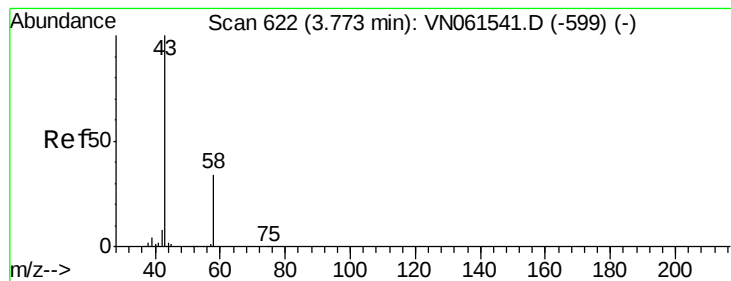
Delta R.T. 0.03 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Tgt Ion:	53	Resp:	1550
Ion	Ratio	Lower	Upper
53	100		
52	0.0	65.4	98.2#
51	4.6	29.0	43.6#





#16

Acetone

Concen: 2.307 ug/l

RT: 3.79 min Scan# 626

Delta R.T. 0.01 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT2-2020DL

Tot Ion: 43 Resp: 3064

Ion Ratio Lower Upper

43 100

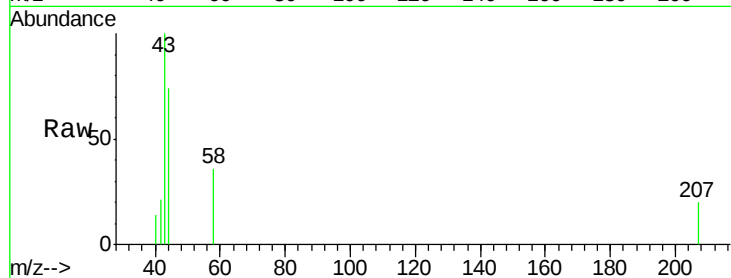
58 36.0 27.2 40.8

Manual Integrations

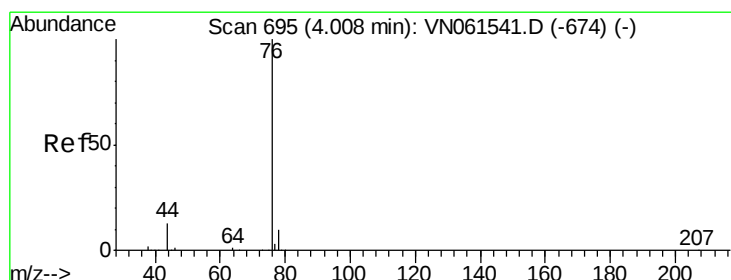
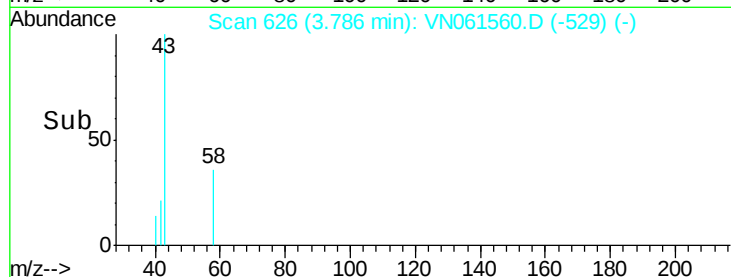
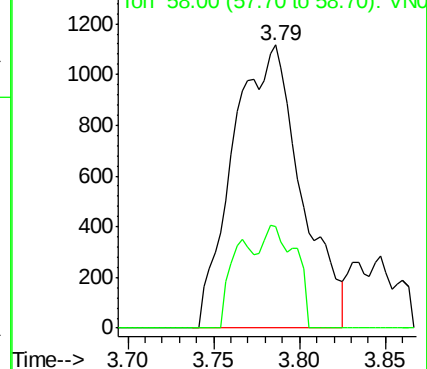
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Abundance Ion 43.00 (42.70 to 43.70): VN061541.D (-599) (-)



#17

Carbon Disulfide

Concen: 0.492 ug/l

RT: 4.01 min Scan# 695

Delta R.T. -0.00 min

Lab File: VN061560.D

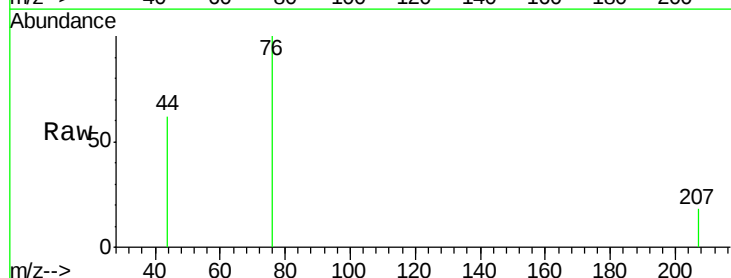
Acq: 29 May 2020 12:28

Tgt Ion: 76 Resp: 3489

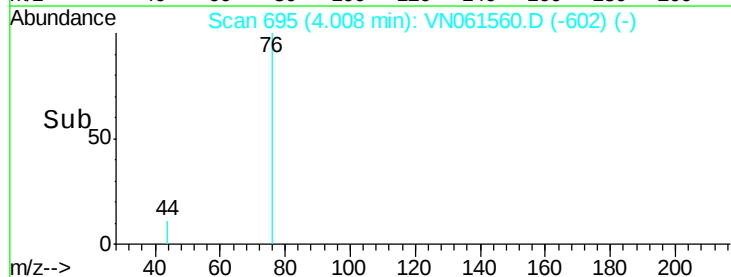
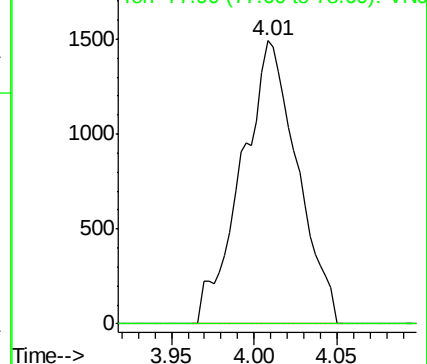
Ion Ratio Lower Upper

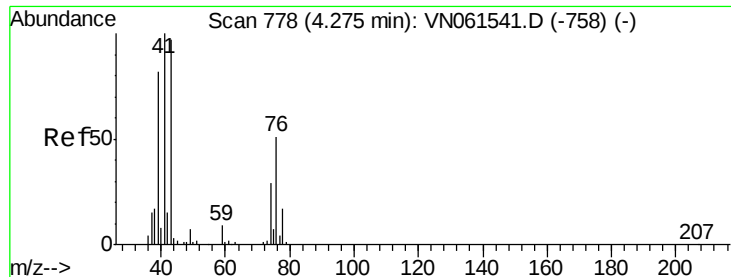
76 100

78 0.0 7.8 11.6#



Abundance Ion 75.90 (75.60 to 76.60): VN061541.D (-674) (-)





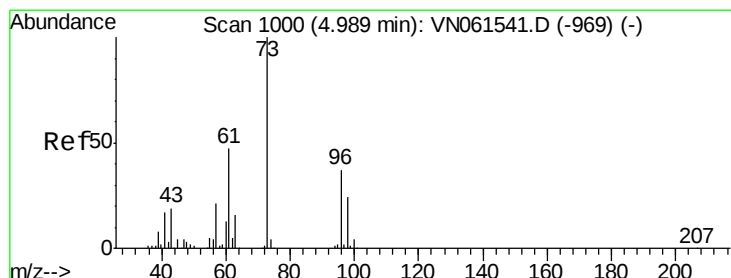
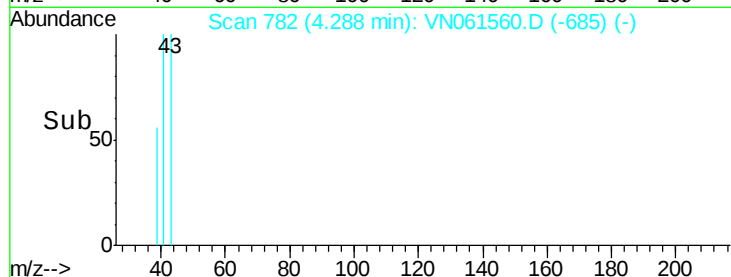
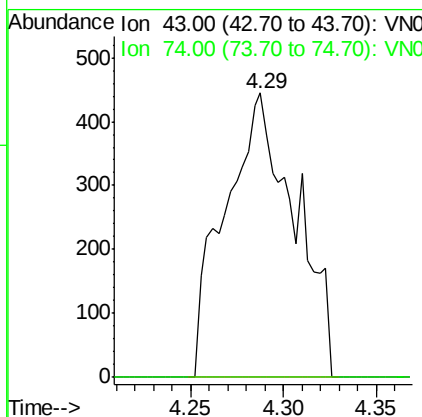
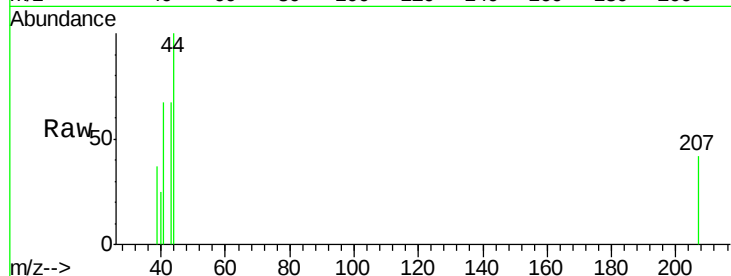
#18
Methyl Acetate
Concen: 0.343 ug/l
RT: 4.29 min Scan# 782
Delta R.T. 0.01 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT2-2020DL

Tot Ion: 43 Resp: 1165
Ion Ratio Lower Upper
43 100
74 0.0 23.2 34.8#

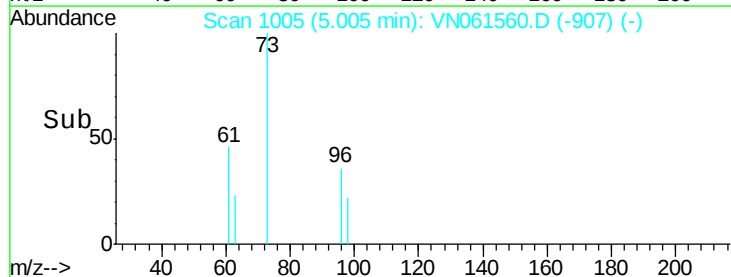
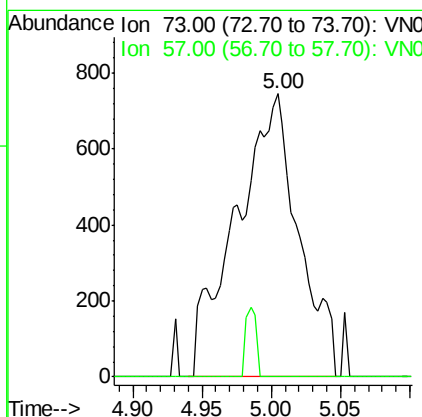
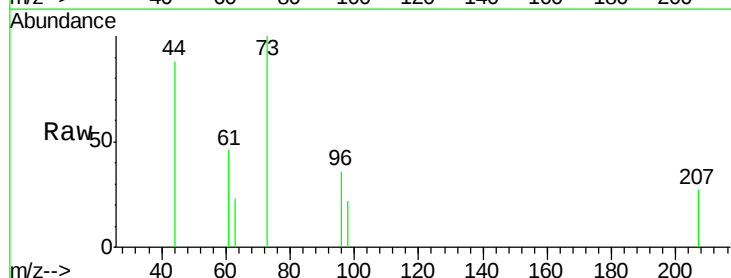
Manual Integrations
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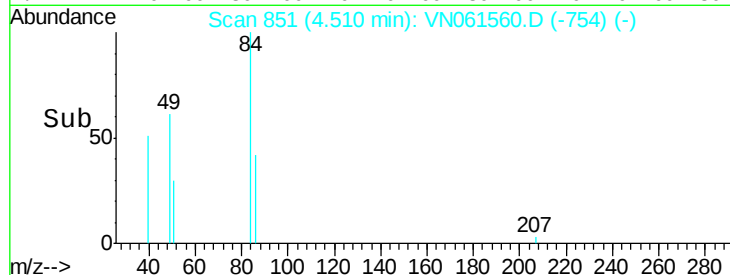
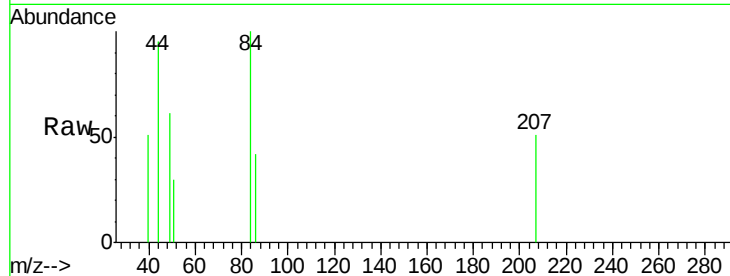
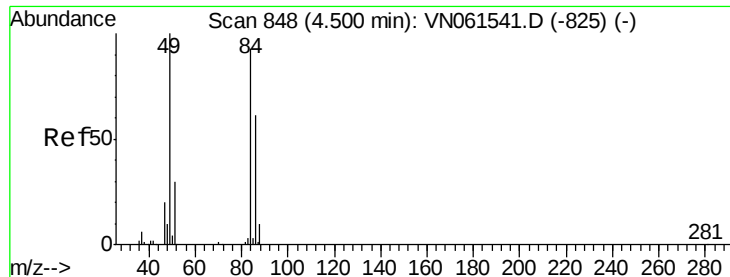
MMDadoda
6/1/2020 12:29:56 PM



#19
Methyl tert-butyl Ether
Concen: 0.213 ug/l m
RT: 5.00 min Scan# 1005
Delta R.T. 0.02 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Tgt Ion: 73 Resp: 2338
Ion Ratio Lower Upper
73 100
57 0.0 16.4 24.6#





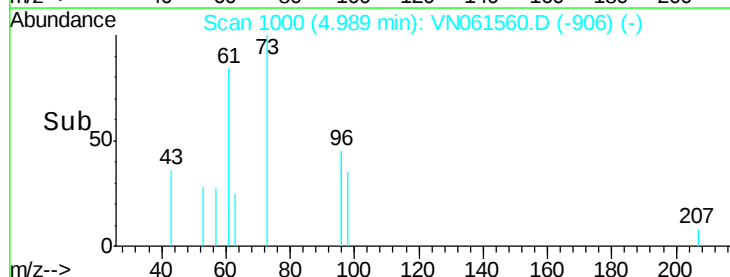
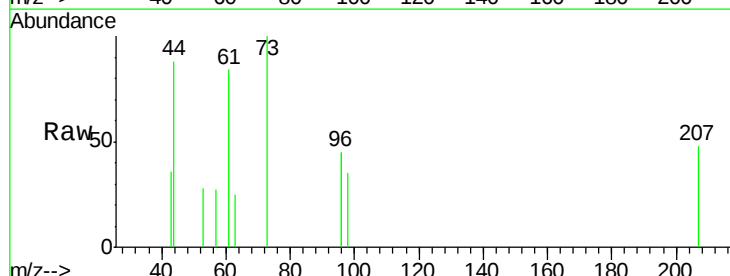
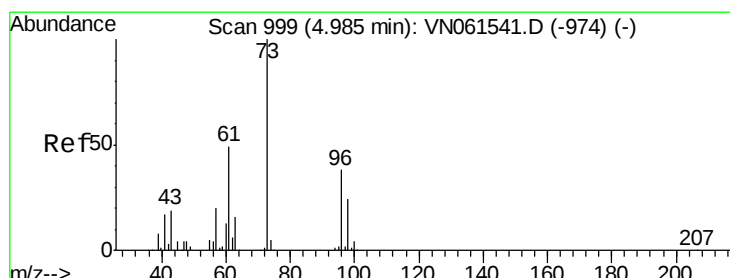
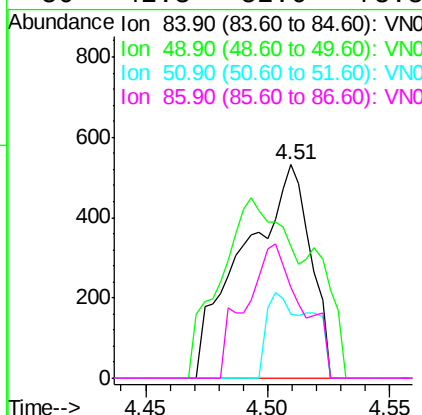
#20
Methvlene Chloride
Concen: 0.220 ug/l
RT: 4.51 min Scan# 851
Delta R.T. 0.01 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Tot Ion:	84	Resp:	1013
Ion	Ratio	Lower	Upper
84	100		
49	61.5	85.8	128.8#
51	30.1	26.2	39.2
86	42.3	52.6	78.8#

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT2-2020DL

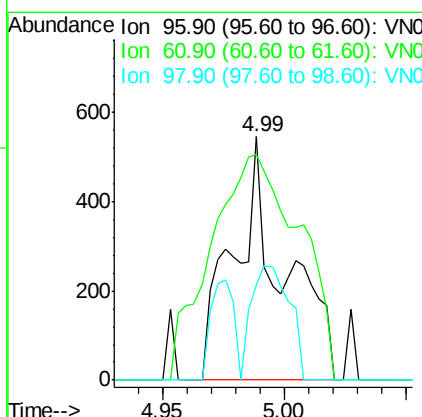
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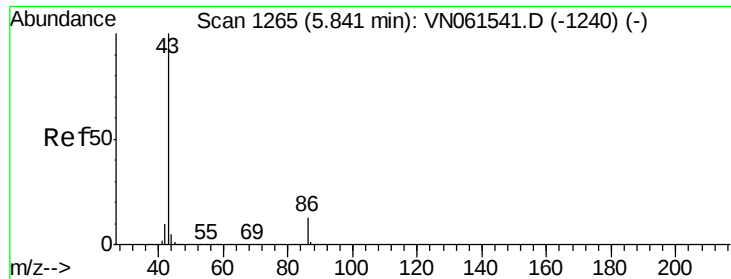
MMDadoda
6/1/2020 12:29:56 PM



#21
trans-1,2-Dichloroethene
Concen: 0.217 ug/l m
RT: 4.99 min Scan# 1000
Delta R.T. 0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Tgt Ion:	96	Resp:	788
Ion	Ratio	Lower	Upper
96	100		
61	184.7	101.4	152.0#
98	78.1	50.6	76.0#





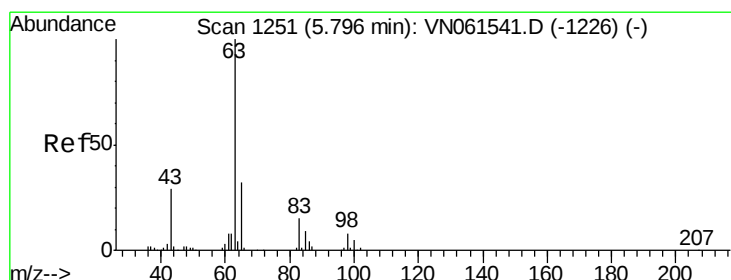
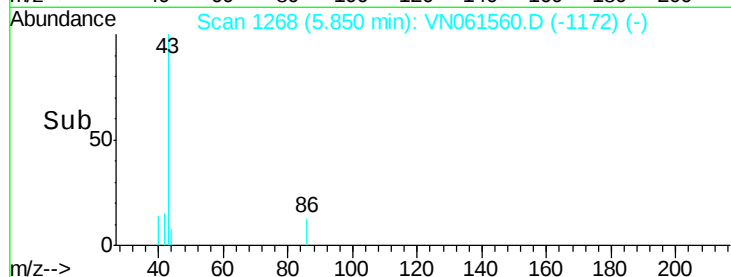
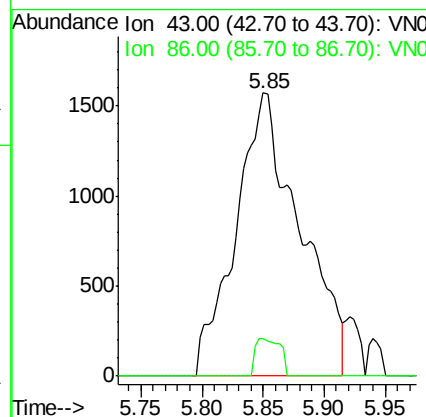
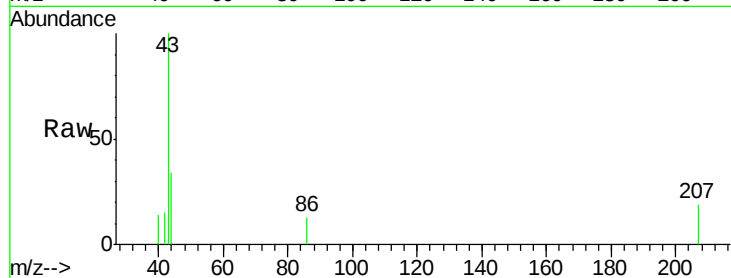
#23
 Vinyl Acetate
 Concen: 0.775 ug/l
 RT: 5.85 min Scan# 1268
 Delta R.T. 0.01 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT2-2020DL

Tot Ion	43	Resp	5733
Ion Ratio	Lower	Upper	
43	100		
86	13.4	10.6	16.0

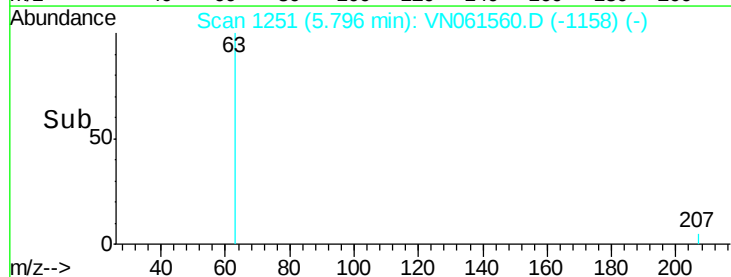
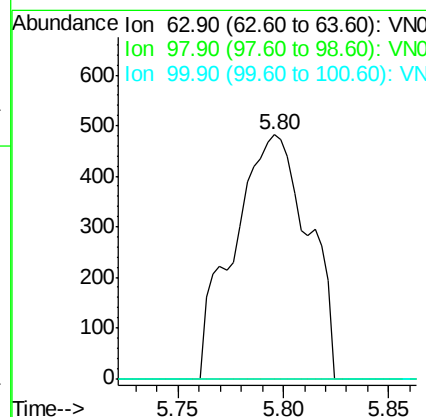
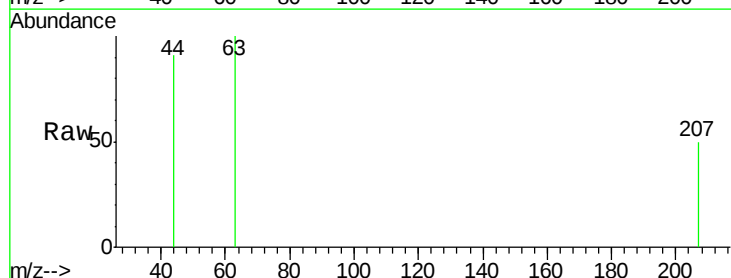
Manual Integrations
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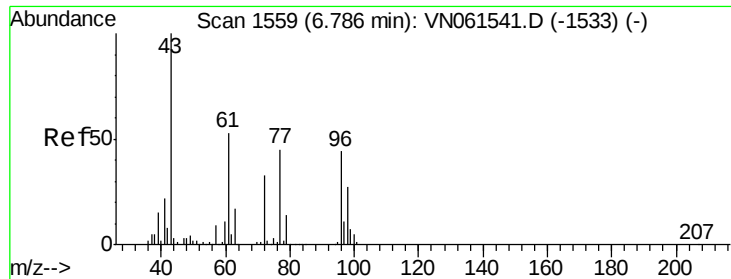
MMDadoda
 6/1/2020 12:29:56 PM



#24
 1,1-Dichloroethane
 Concen: 0.201 ug/l
 RT: 5.80 min Scan# 1251
 Delta R.T. -0.00 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Tgt Ion	63	Resp	1182
Ion Ratio	Lower	Upper	
63	100		
98	0.0	3.8	11.4#
100	0.0	2.5	7.6#





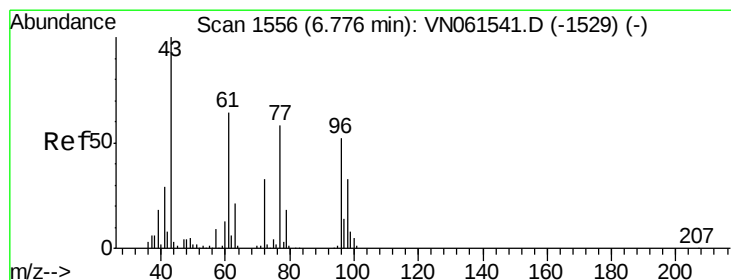
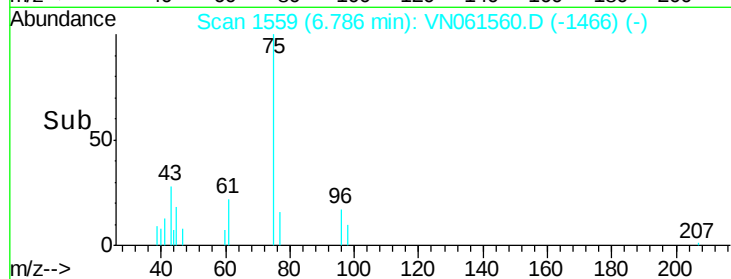
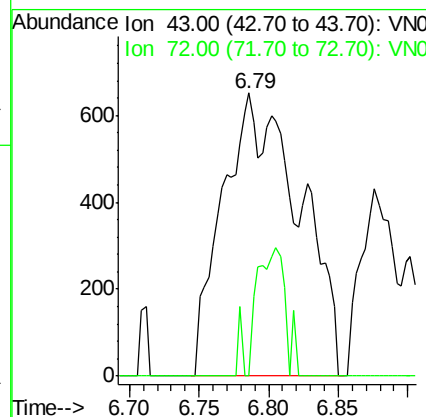
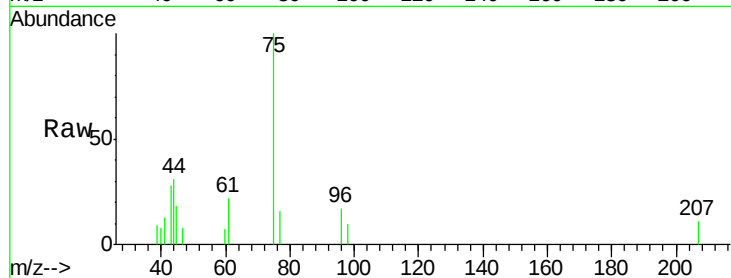
#25
2-Butanone
Concen: 1.400 ug/l m
RT: 6.79 min Scan# 1559
Delta R.T. -0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT2-2020DL

Tot Ion	Ratio	Lower	Upper
43	100		
72	0.0	26.0	39.0#

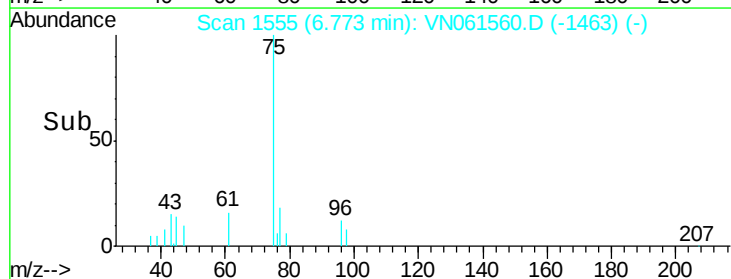
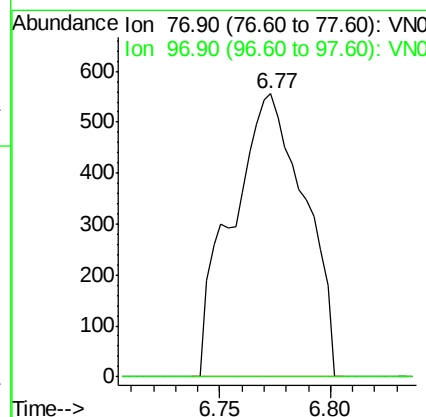
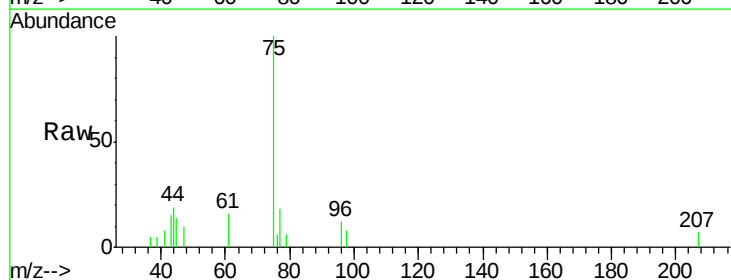
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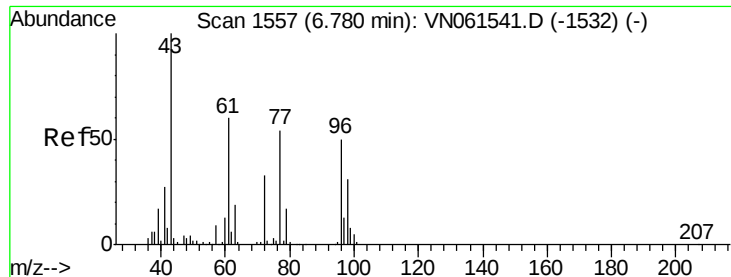
MMDadoda
6/1/2020 12:29:56 PM



#26
2,2-Dichloropropane
Concen: 0.236 ug/l
RT: 6.77 min Scan# 1555
Delta R.T. -0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Tgt Ion	Ratio	Lower	Upper
77	100		
97	0.0	12.0	36.0#





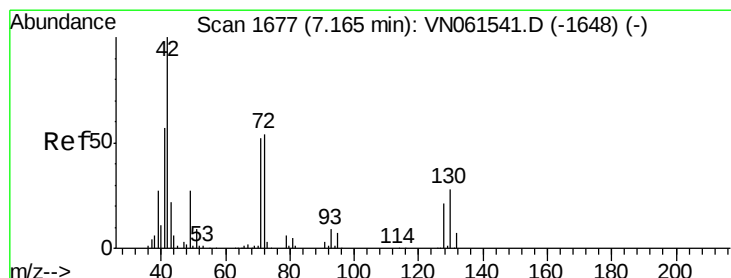
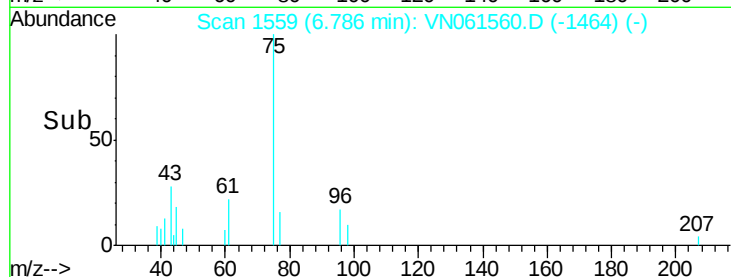
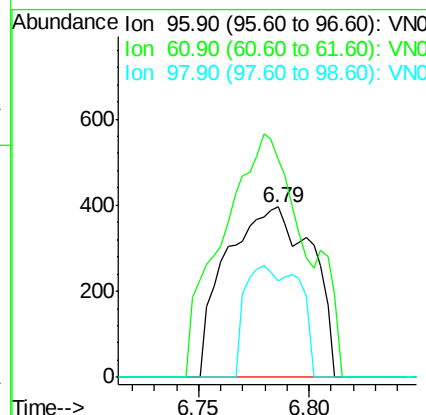
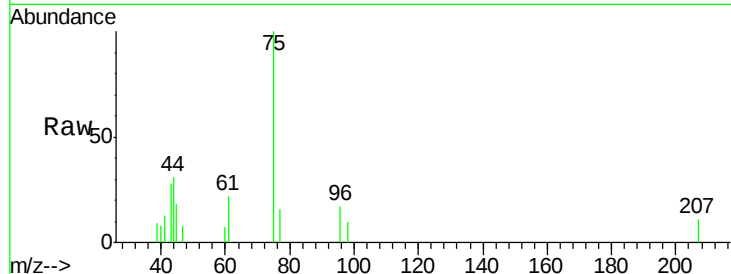
#27
 cis-1,2-Dichloroethene
 Concen: 0.258 ug/l
 RT: 6.79 min Scan# 1559
 Delta R.T. 0.01 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT2-2020DL

Tot Ion	Ratio	Resp	Lower	Upper
96	100			
61	125.1	0.0	252.2	
98	25.7	0.0	129.2	

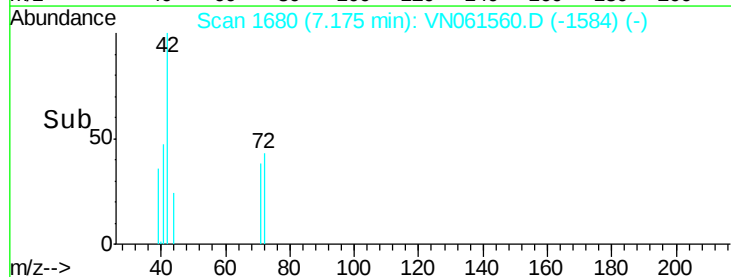
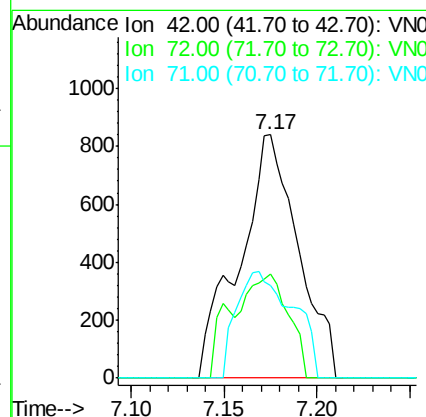
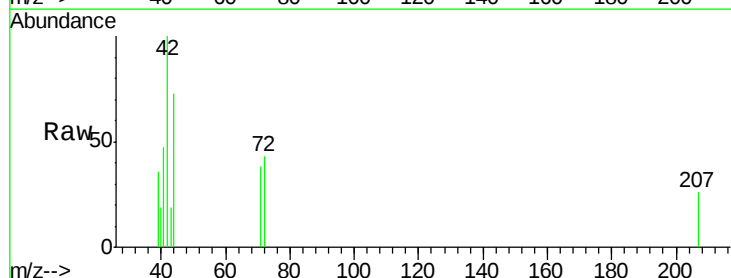
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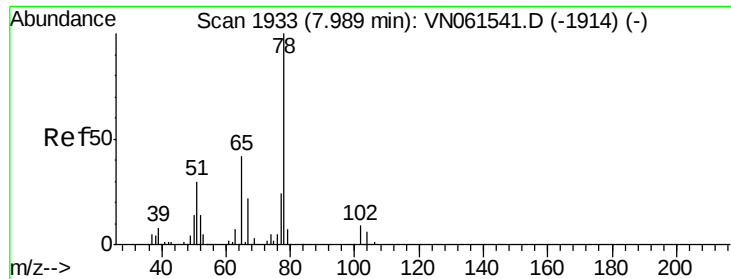
MMDadoda
 6/1/2020 12:29:56 PM



#29
 Tetrahydrofuran
 Concen: 1.584 ug/l
 RT: 7.17 min Scan# 1680
 Delta R.T. 0.01 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Tgt Ion	Ratio	Resp	Lower	Upper
42	100			
72	31.3	43.6	65.4#	
71	42.0	41.2	61.8	





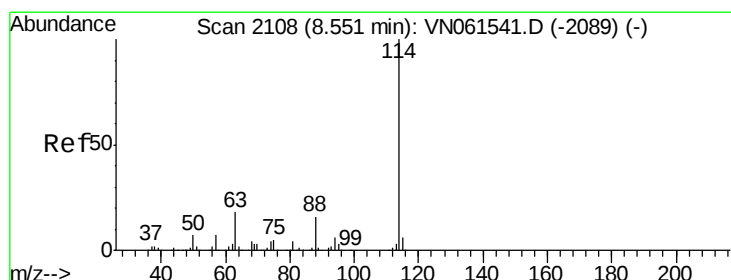
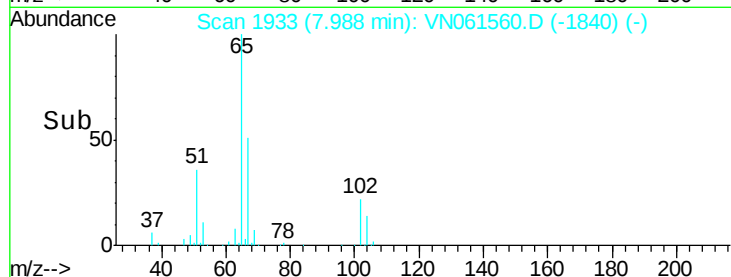
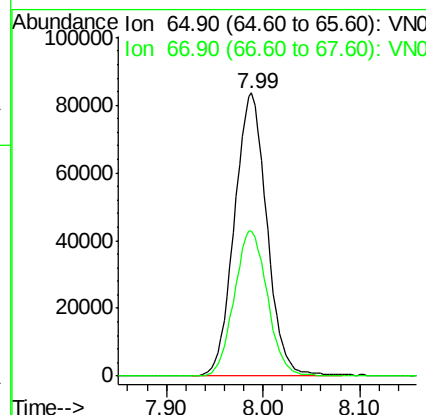
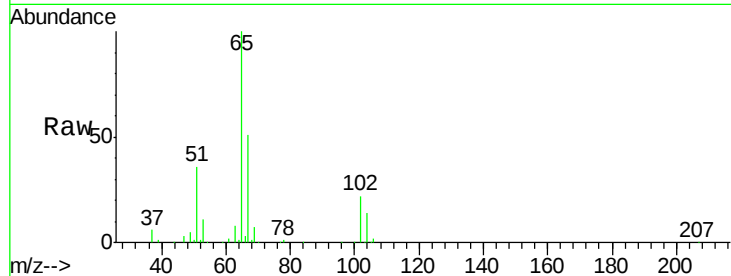
#33
 1,2-Dichloroethane-d4
 Concen: 51.984 ug/l
 RT: 7.99 min Scan# 1933
 Delta R.T. -0.00 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT2-2020DL

Tot Ion	Ratio	Resp	Lower	Upper
65	100	195191		
67	52.4	0.0	104.8	

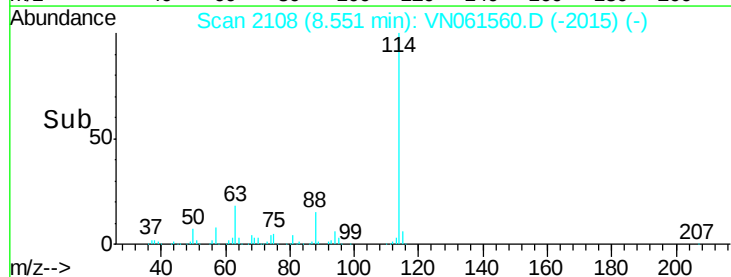
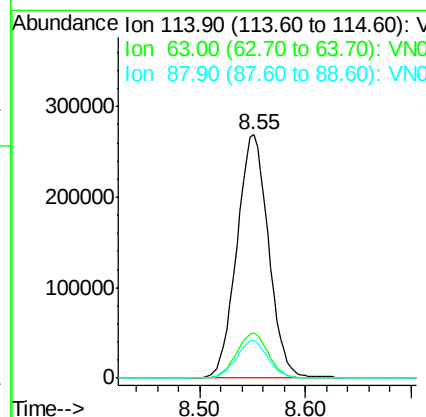
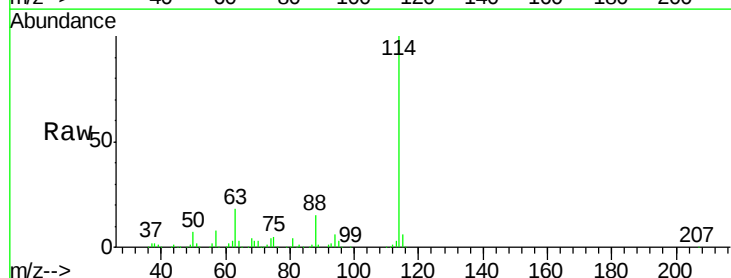
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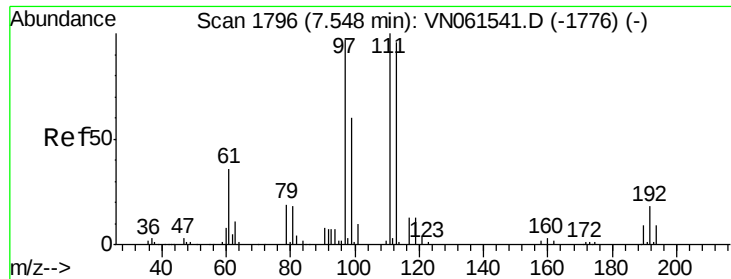
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 6/1/2020 12:29:56 PM



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.55 min Scan# 2108
 Delta R.T. -0.00 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Tgt Ion	Ratio	Resp	Lower	Upper
114	100	560815		
63	18.5	0.0	35.8	
88	15.2	0.0	31.0	





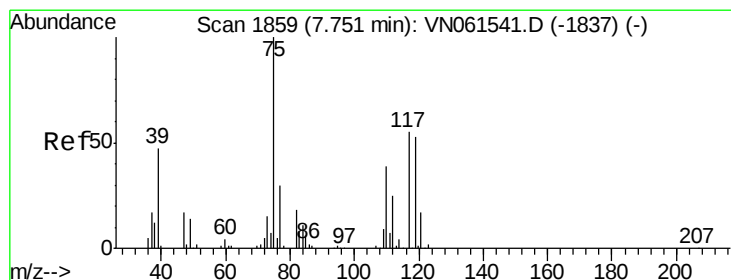
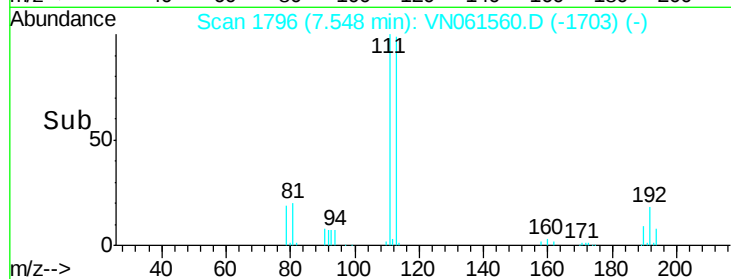
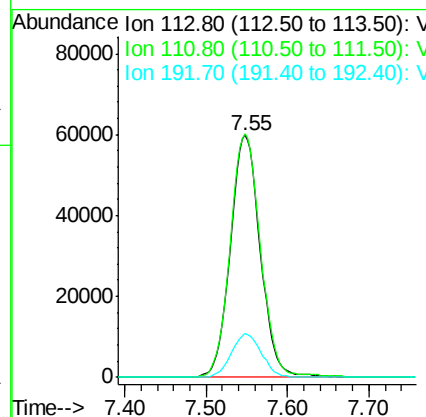
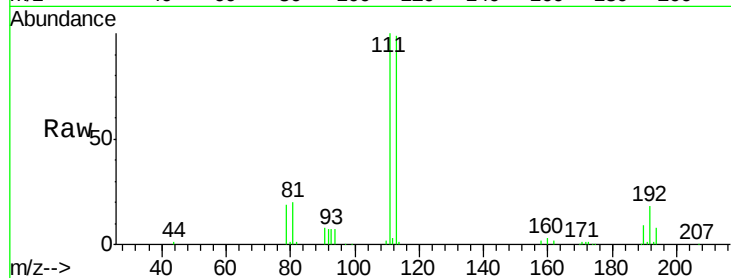
#35
 Dibromofluoromethane
 Concen: 54.015 ug/l
 RT: 7.55 min Scan# 1796
 Delta R.T. -0.00 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT2-2020DL

Tot Ion	Ratio	Resp	Lower	Upper
113	100			
111	101.6	83.4	125.0	
192	17.9	15.4	23.2	

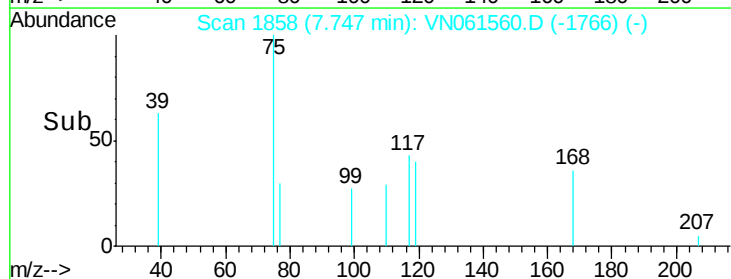
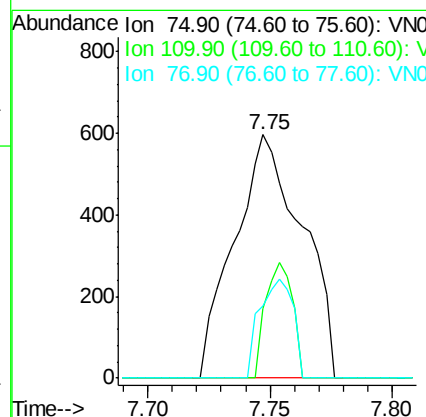
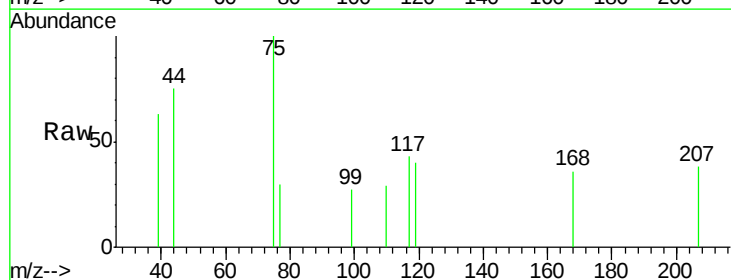
Manual Integrations
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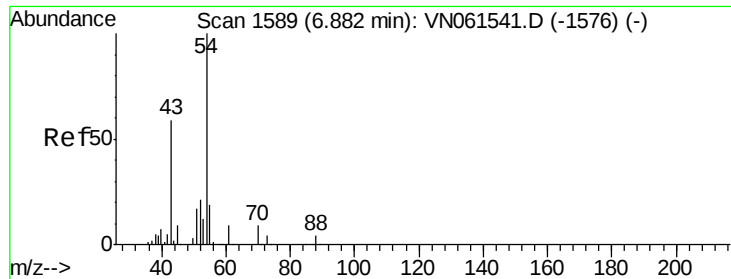
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#36
 1,1-Dichloropropene
 Concen: 0.231 ug/l
 RT: 7.75 min Scan# 1858
 Delta R.T. -0.00 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Tgt Ion	Ratio	Resp	Lower	Upper
75	100			
110	18.7	19.5	58.5#	
77	19.9	24.7	37.1#	





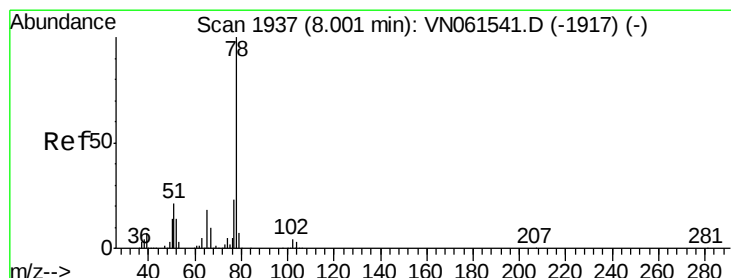
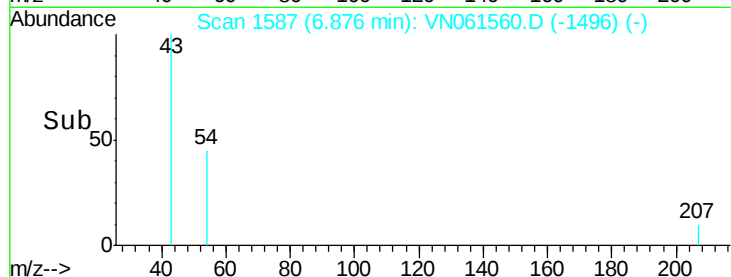
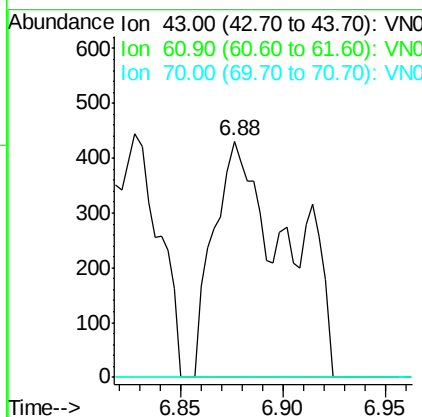
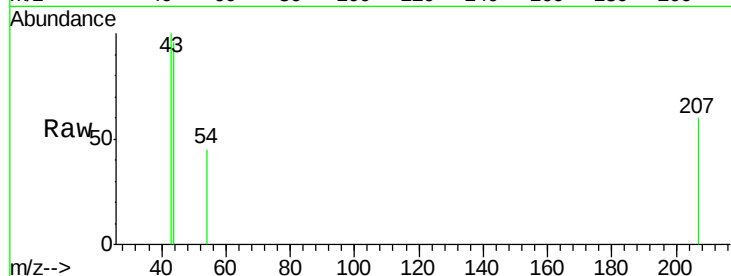
#37
Ethyl Acetate
Concen: 0.270 ug/l m
RT: 6.88 min Scan# 1587
Delta R.T. -0.01 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT2-2020DL

Tot Ion	Ratio	Lower	Upper
43	100		
61	0.0	12.2	18.4#
70	0.0	9.4	14.2#

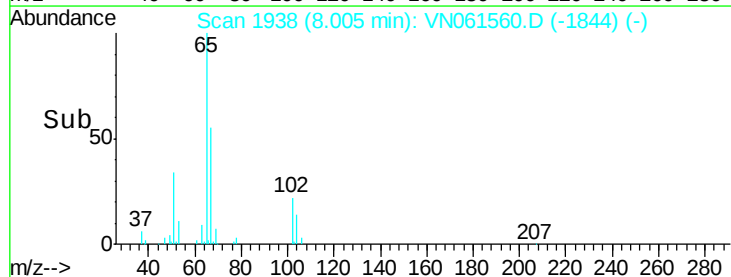
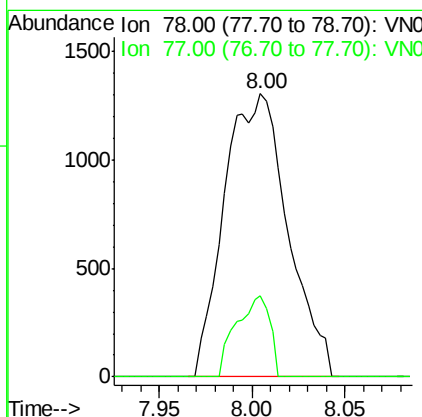
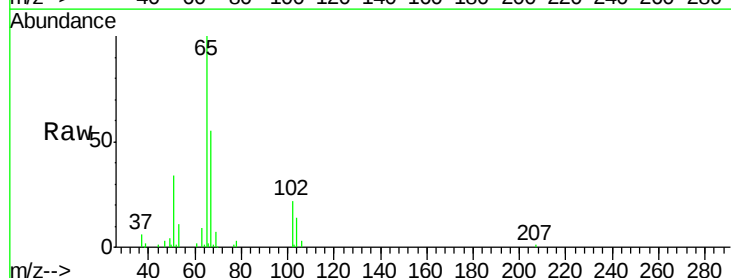
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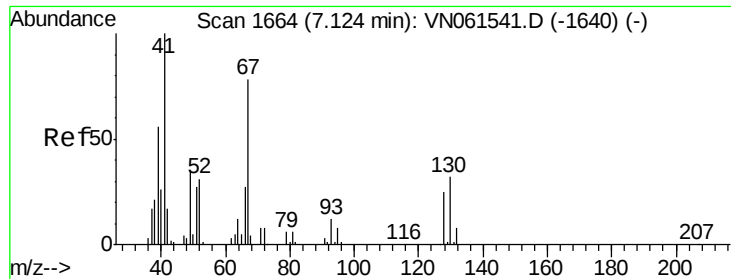
MMDadoda
6/1/2020 12:29:56 PM



#40
Benzene
Concen: 0.203 ug/l
RT: 8.00 min Scan# 1938
Delta R.T. 0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Tgt Ion	Ratio	Lower	Upper
78	100		
77	28.5	18.6	28.0#





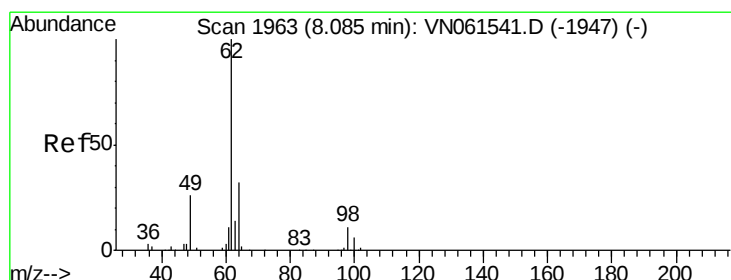
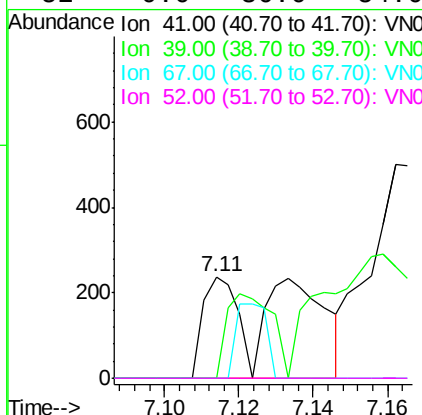
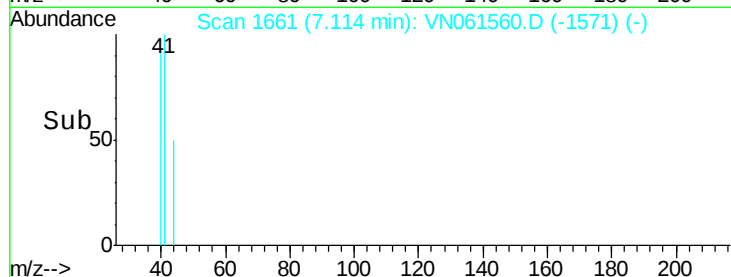
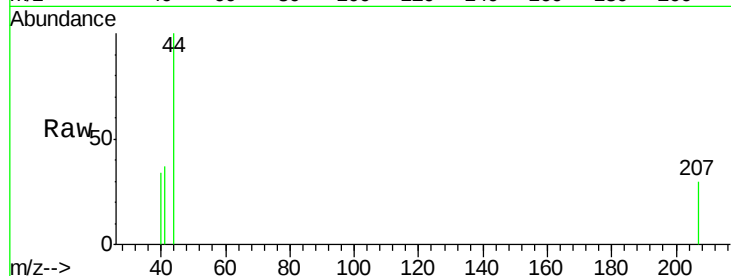
#41
Methacrylonitrile
Concen: 0.223 ug/l m
RT: 7.11 min Scan# 1661
Delta R.T. -0.01 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT2-2020DL

Tot Ion:	41	Resp:	409
Ion	Ratio	Lower	Upper
41	100		
39	40.8	53.8	80.6#
67	24.2	91.1	136.7#
52	0.0	36.0	54.0#

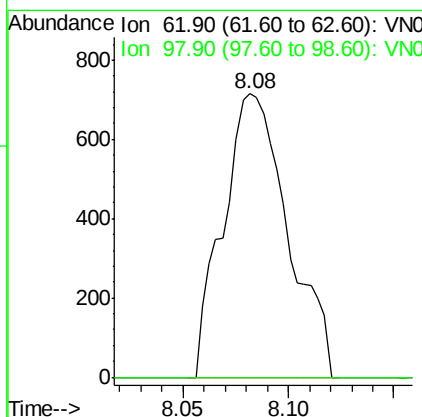
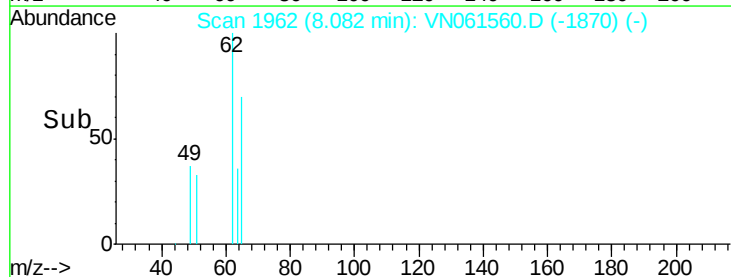
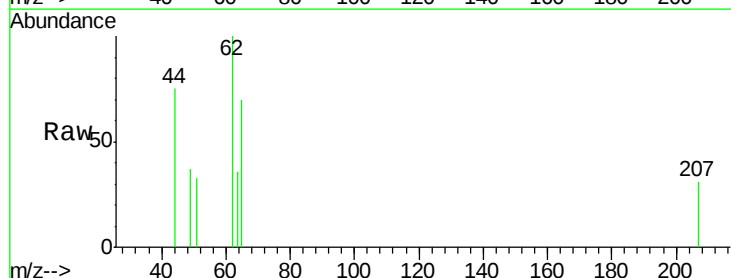
Manual Integrations
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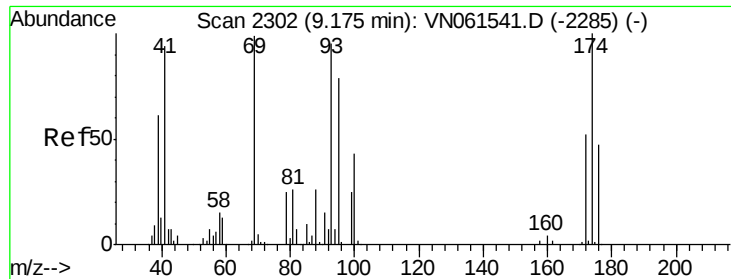
MMDadoda
6/1/2020 12:29:56 PM



#42
1,2-Dichloroethane
Concen: 0.297 ug/l
RT: 8.08 min Scan# 1962
Delta R.T. -0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Tgt Ion:	62	Resp:	1522
Ion	Ratio	Lower	Upper
62	100		
98	0.0	0.0	21.4





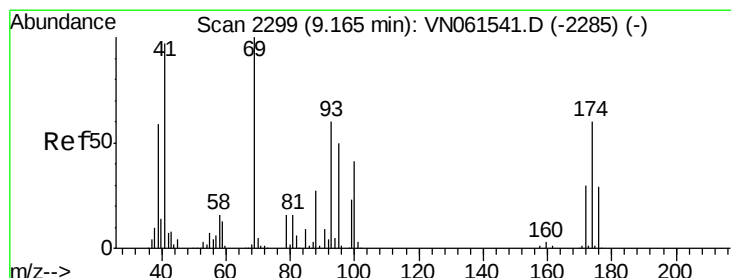
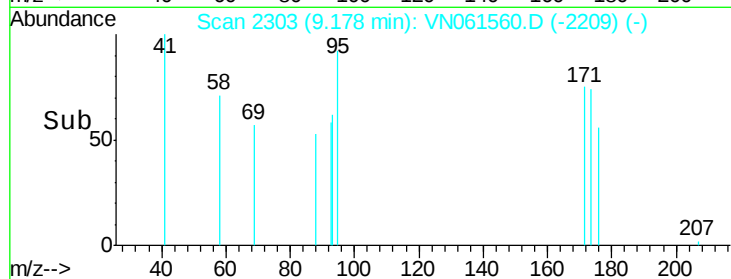
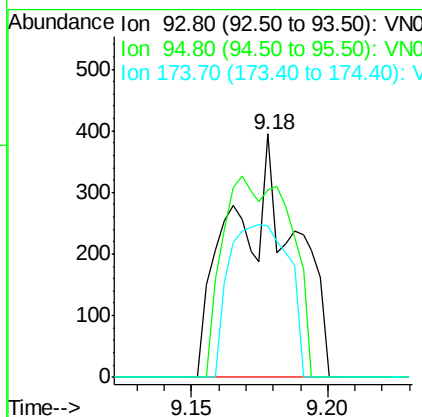
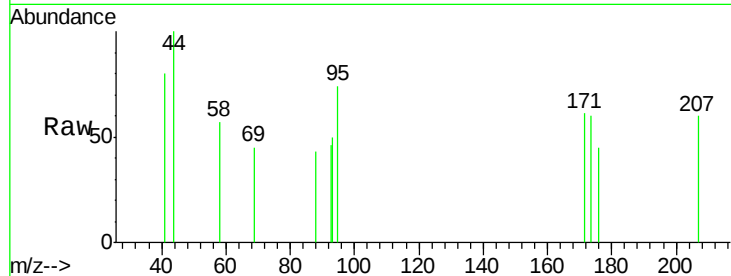
#46
Dibromomethane
Concen: 0.220 ug/l m
RT: 9.18 min Scan# 2303
Delta R.T. 0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT2-2020DL

Tot Ion	Ratio	Lower	Upper
93	100		
95	0.0	66.0	99.0#
174	61.1	82.5	123.7#

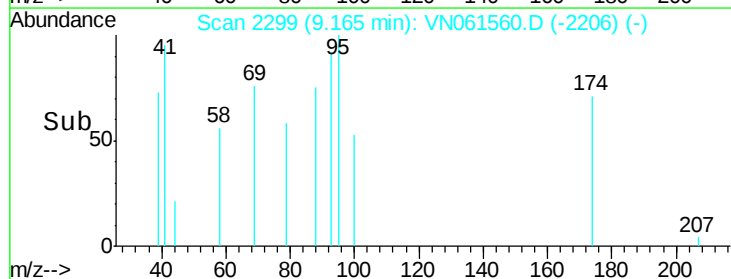
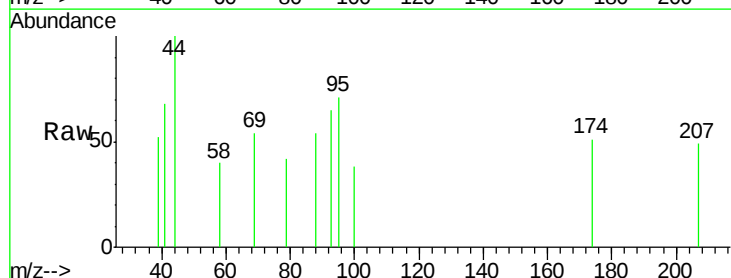
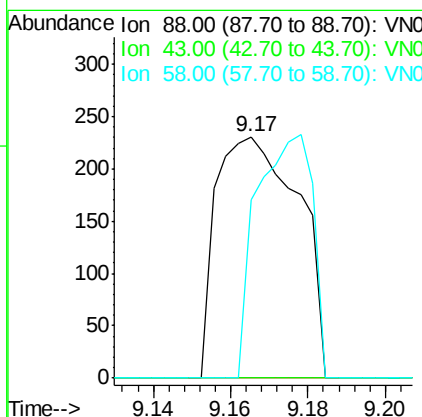
Manual Integrations
APPROVED

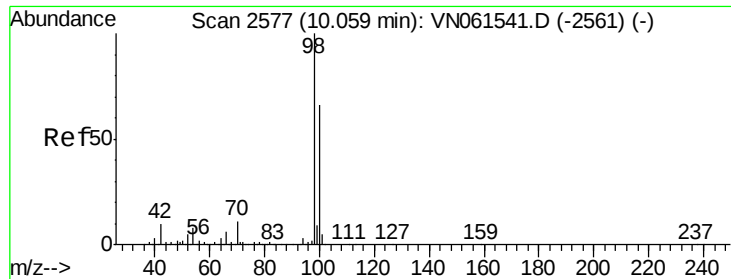
MMDadoda
6/1/2020 12:29:56 PM



#49
1,4-Dioxane
Concen: 6.821 ug/l
RT: 9.17 min Scan# 2299
Delta R.T. -0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Tgt Ion	Ratio	Lower	Upper
88	100		
43	0.0	23.1	34.7#
58	68.4	48.3	72.5





#50

Toluene-d8

Concen: 47.309 ug/l

RT: 10.06 min Scan# 2577

Delta R.T. -0.00 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT2-2020DL

Tot Ion: 98 Resp: 623703

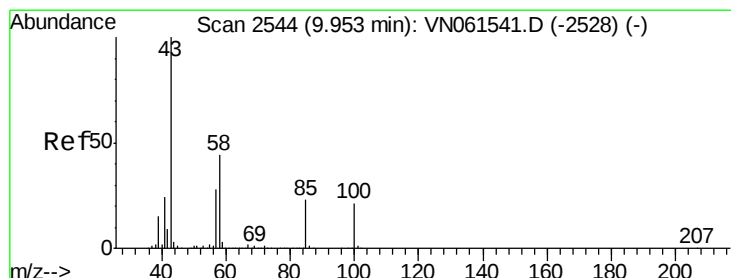
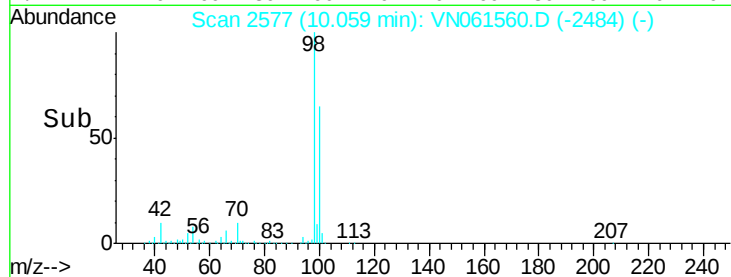
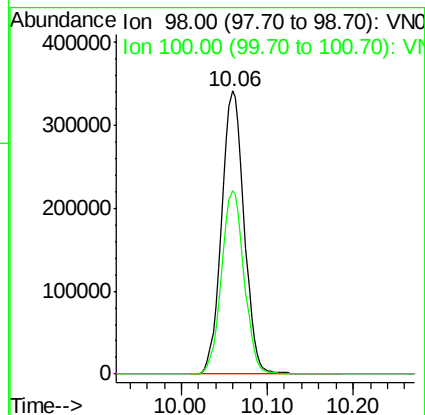
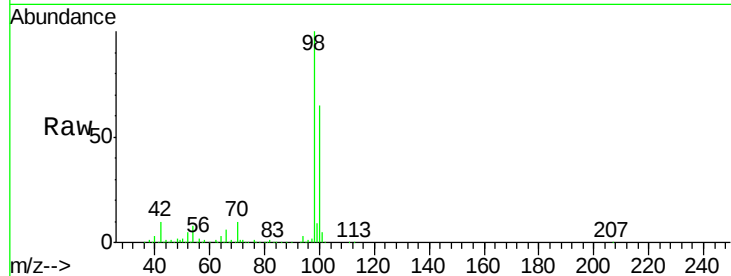
Ion Ratio Lower Upper

98 100

100 65.0 52.8 79.2

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6/1/2020 12:29:56 PM



#51

4-Methyl-2-Pentanone

Concen: 0.980 ug/l

RT: 9.95 min Scan# 2544

Delta R.T. -0.00 min

Lab File: VN061560.D

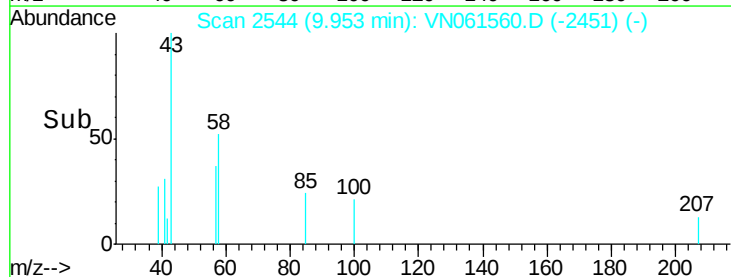
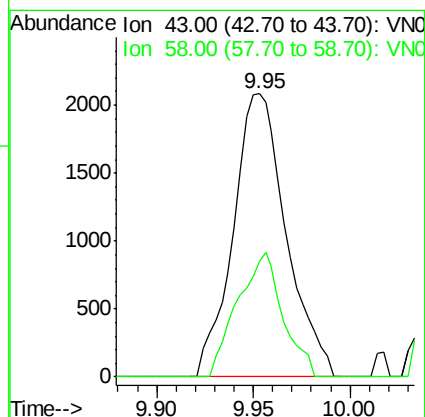
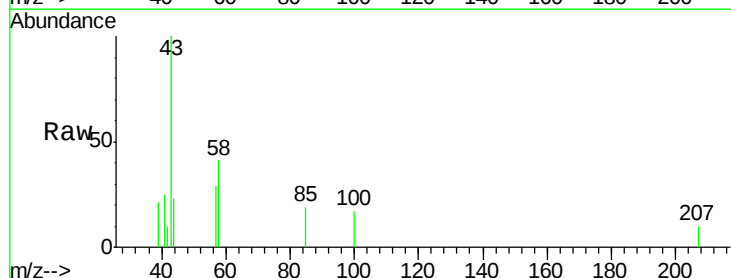
Acq: 29 May 2020 12:28

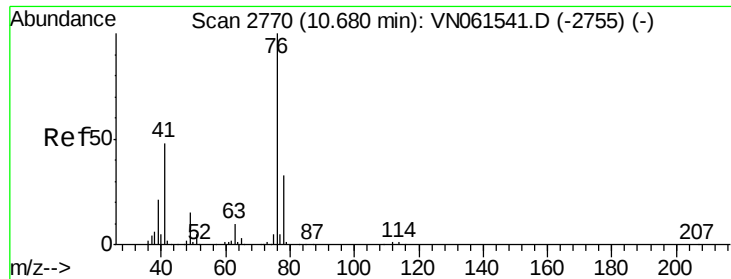
Tgt Ion: 43 Resp: 3974

Ion Ratio Lower Upper

43 100

58 37.8 35.0 52.6





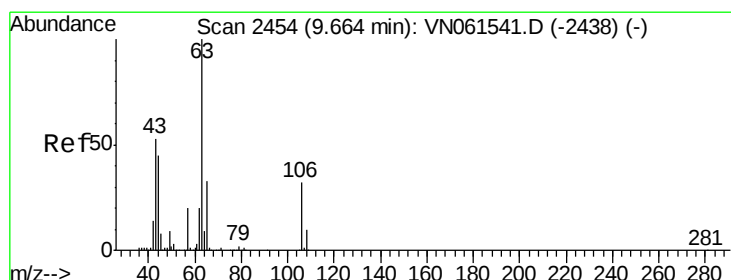
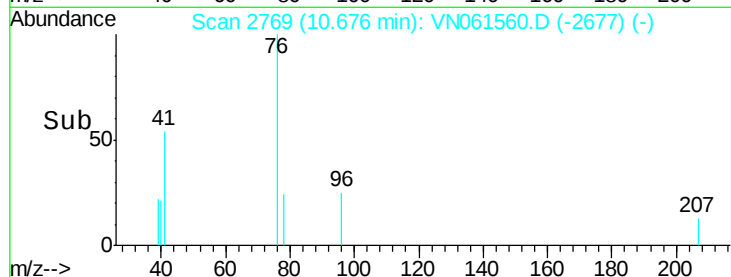
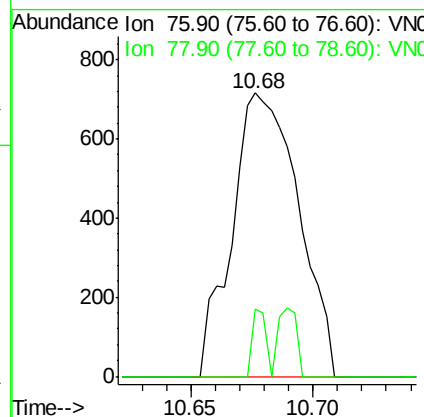
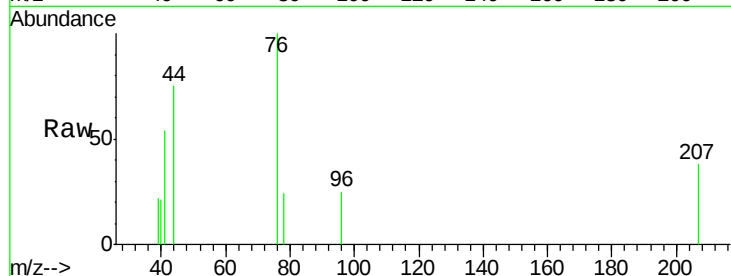
#57
 1,3-Dichloropropane
 Concen: 0.212 ug/l
 RT: 10.68 min Scan# 2769
 Delta R.T. -0.00 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT2-2020DL

Tot Ion	Ratio	Lower	Upper
76	100		
78	4.7	26.3	39.5#

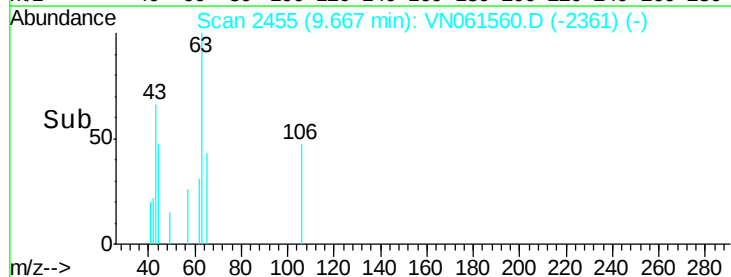
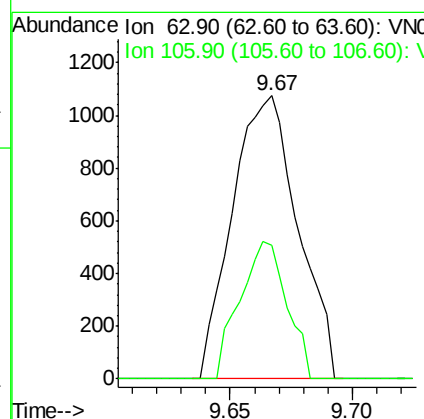
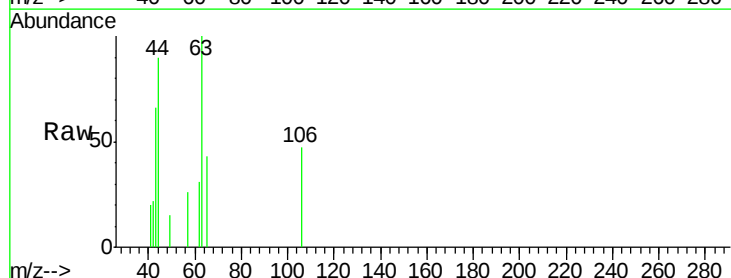
Manual Integrations
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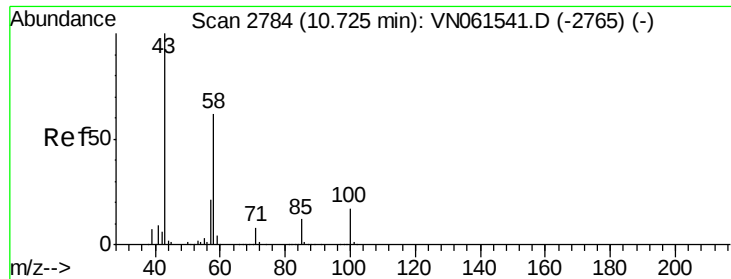
MMDadoda
 6/1/2020 12:29:56 PM



#58
 2-Chloroethyl Vinyl ether
 Concen: 0.843 ug/l
 RT: 9.67 min Scan# 2455
 Delta R.T. 0.00 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Tgt Ion	Ratio	Lower	Upper
63	100		
106	34.8	25.9	38.9





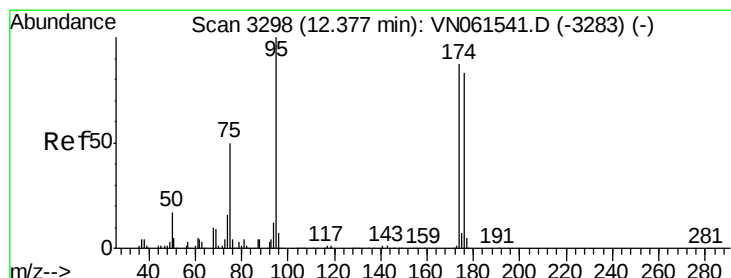
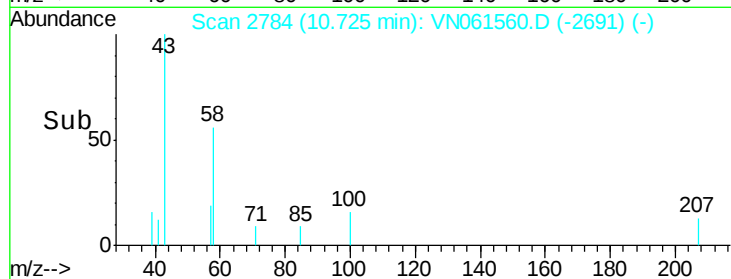
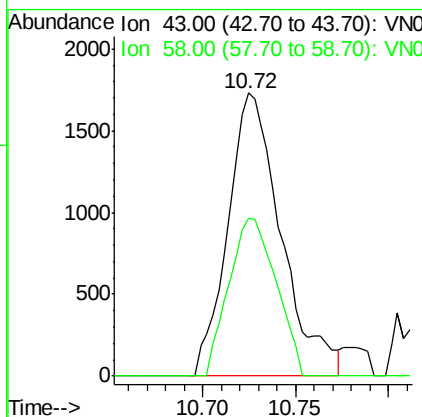
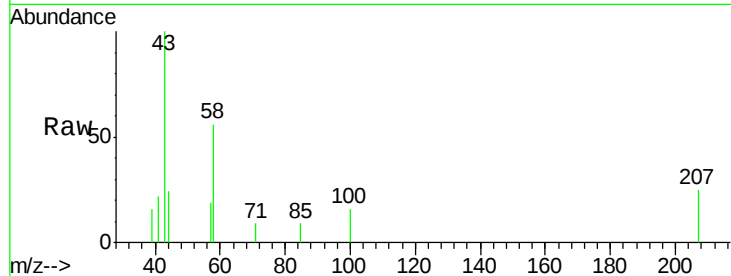
#59
2-Hexanone
Concen: 1.185 ug/l
RT: 10.72 min Scan# 2784
Delta R.T. -0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT2-2020DL

Tot Ion: 43 Resp: 3449
Ion Ratio Lower Upper
43 100
58 49.5 30.7 92.1

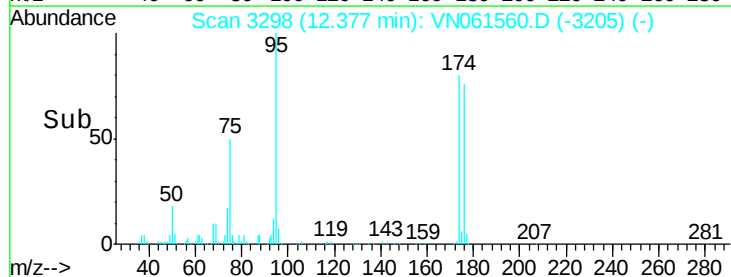
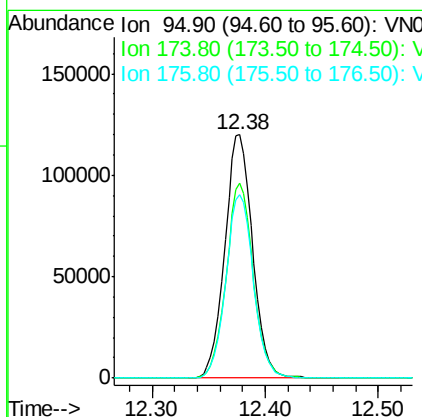
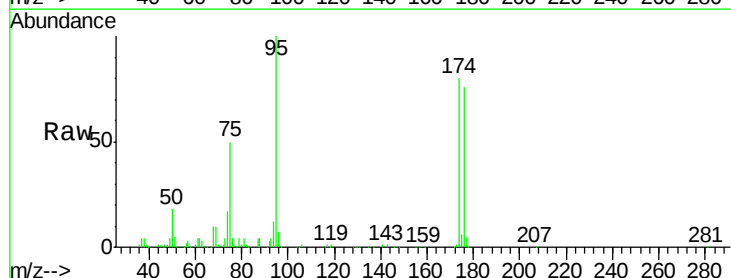
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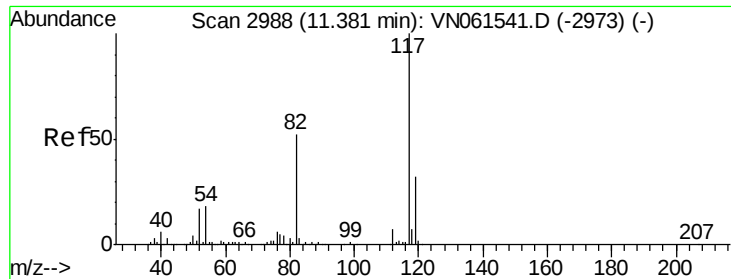
MMDadoda
6/1/2020 12:29:56 PM



#62
4-Bromofluorobenzene
Concen: 42.546 ug/l
RT: 12.38 min Scan# 3298
Delta R.T. -0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Tgt Ion: 95 Resp: 204643
Ion Ratio Lower Upper
95 100
174 77.9 0.0 172.8
176 74.9 0.0 164.8





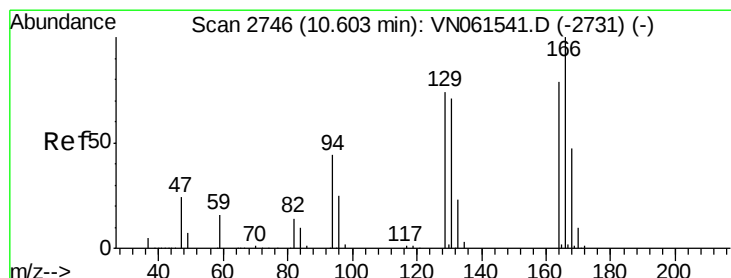
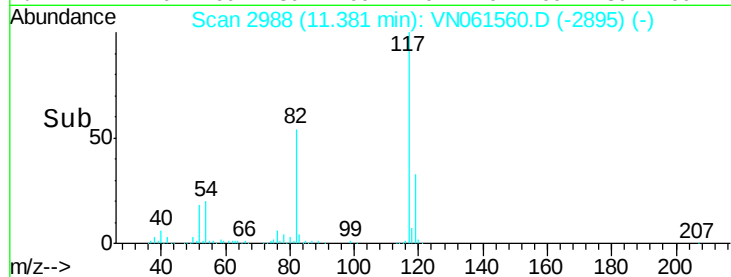
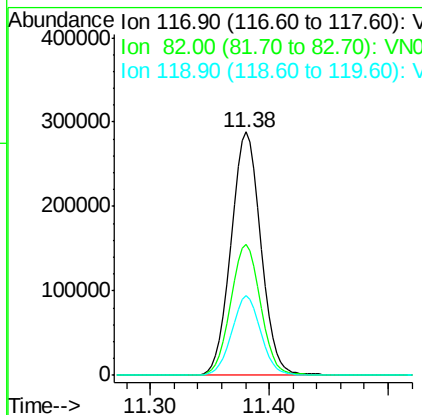
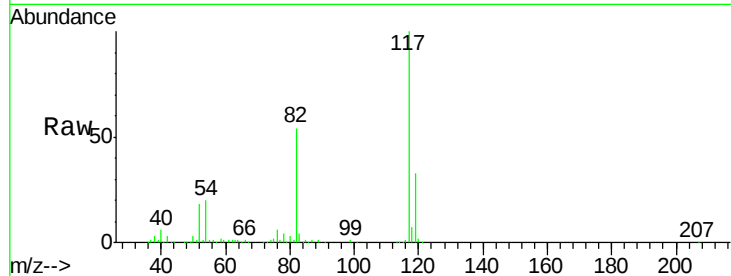
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.38 min Scan# 2988
Delta R.T. -0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT2-2020DL

Tot Ion	Ratio	Resp	Lower	Upper
117	100	501726		
82	53.9		41.5	62.3
119	32.8		25.6	38.4

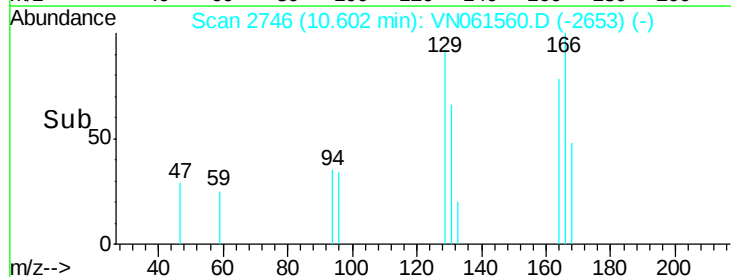
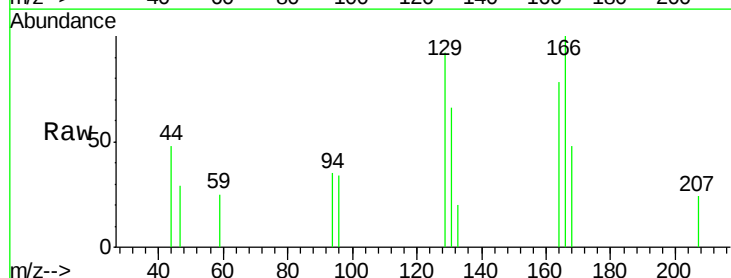
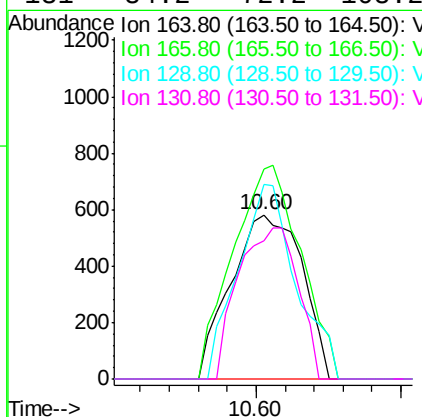
Manual Integrations
APPROVED

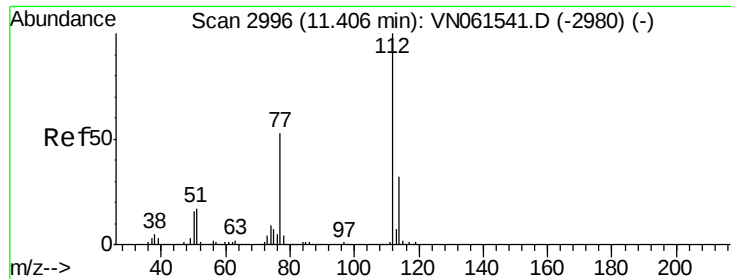
MMDadoda
6/1/2020 12:29:56 PM



#64
Tetrachloroethene
Concen: 0.210 ug/l
RT: 10.60 min Scan# 2746
Delta R.T. -0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Tgt Ion	Ratio	Resp	Lower	Upper
164	100	993		
166	128.1		101.5	152.3
129	118.4		74.9	112.3
131	84.2		72.2	108.2





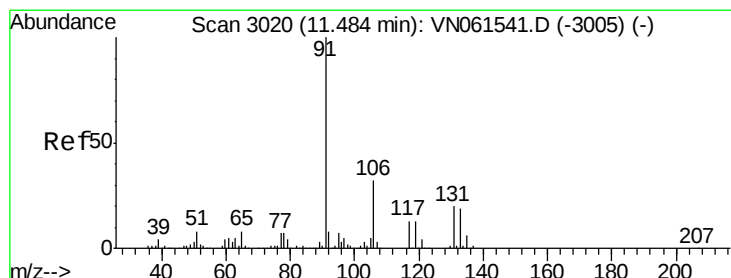
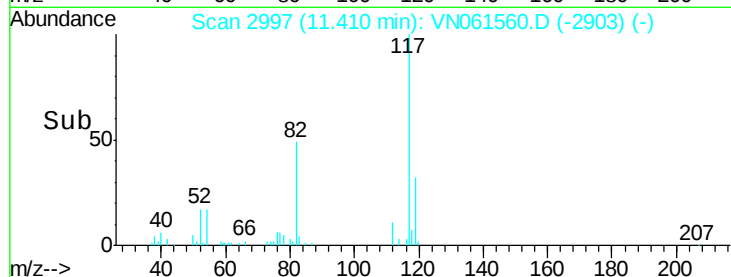
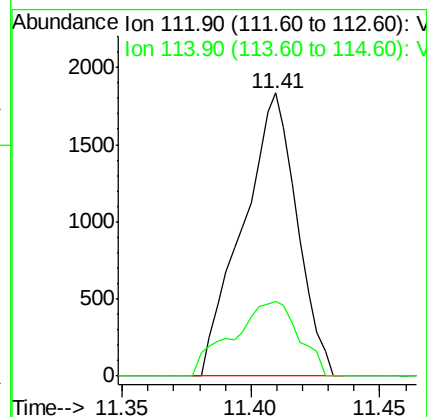
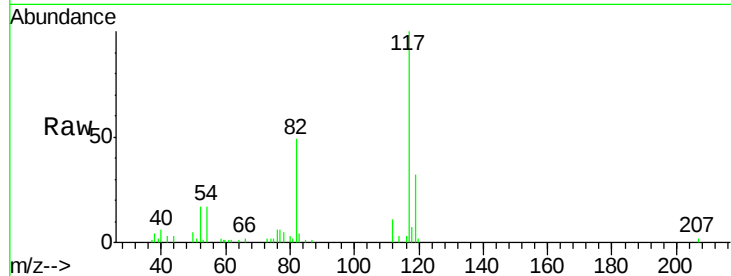
#65
Chlorobenzene
Concen: 0.258 ug/l
RT: 11.41 min Scan# 2997
Delta R.T. 0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT2-2020DL

Tot Ion:112 Resp: 2694
Ion Ratio Lower Upper
112 100
114 26.4 25.7 38.5

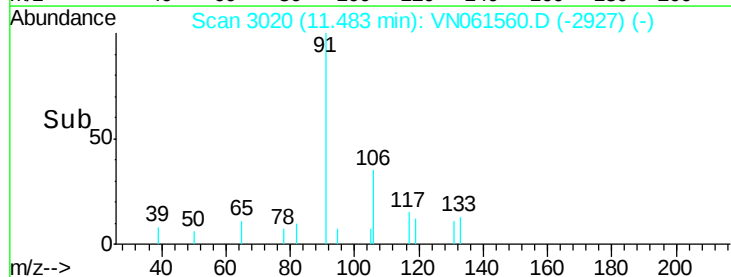
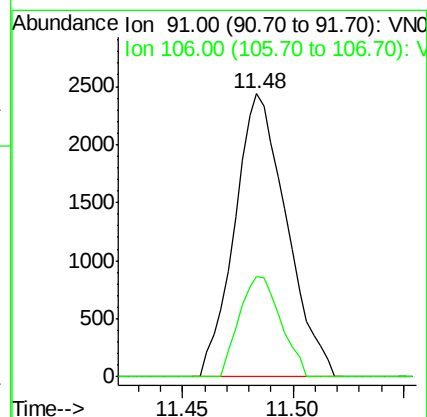
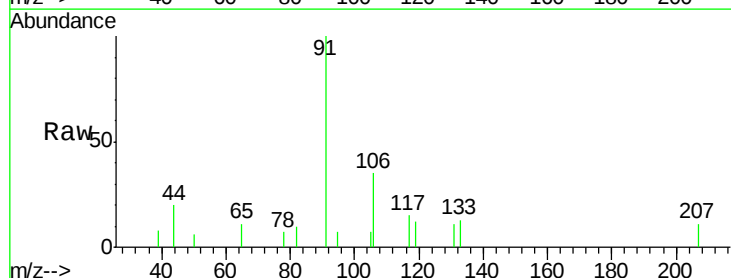
Manual Integrations
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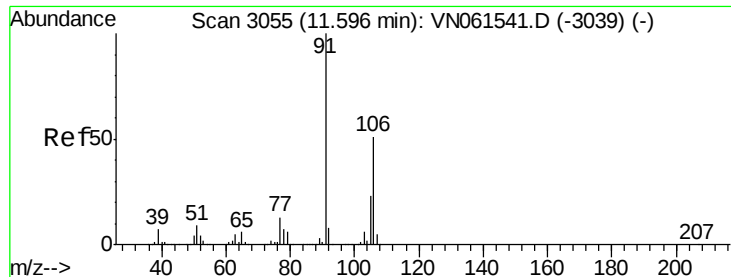
MMDadoda
6/1/2020 12:29:56 PM



#67
Ethyl Benzene
Concen: 0.220 ug/l
RT: 11.48 min Scan# 3020
Delta R.T. -0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Tgt Ion: 91 Resp: 3973
Ion Ratio Lower Upper
91 100
106 35.5 25.6 38.4





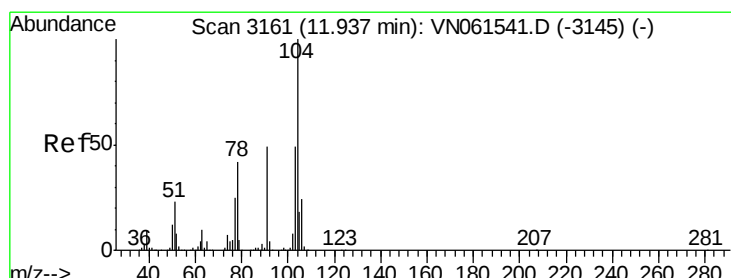
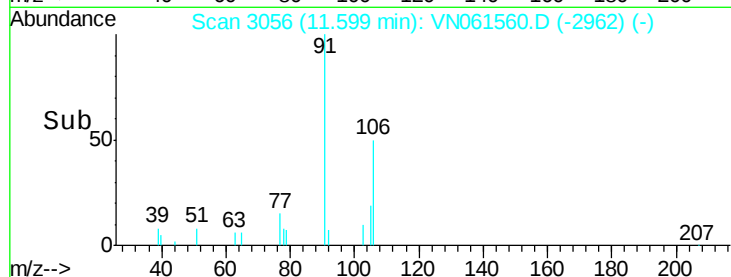
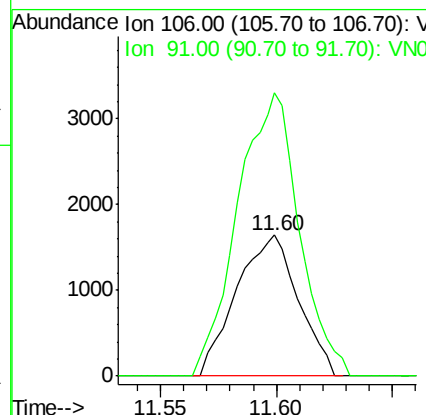
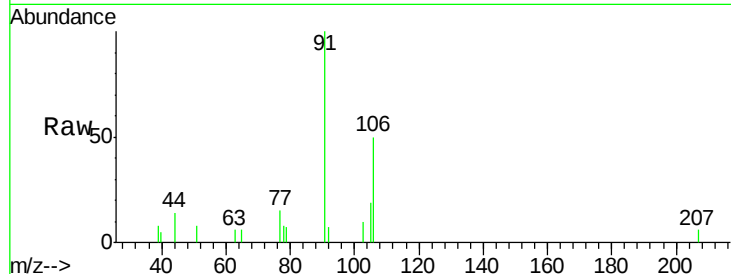
#68
m/p-Xvlenes
Concen: 0.427 ug/l
RT: 11.60 min Scan# 3056
Delta R.T. 0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT2-2020DL

Tot Ion	Ratio	Lower	Upper
106	100		
91	199.7	156.2	234.4

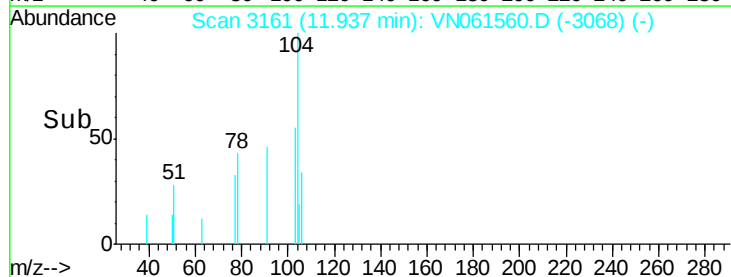
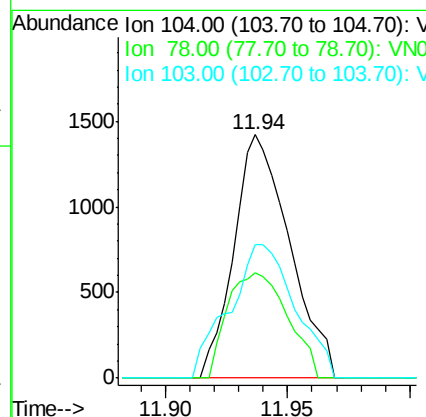
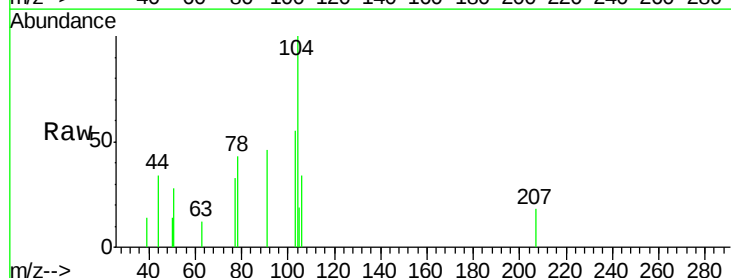
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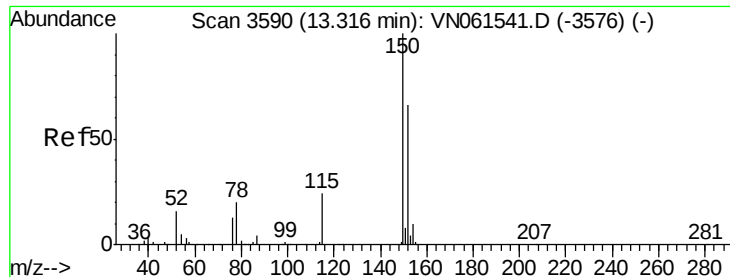
MMDadoda
6/1/2020 12:29:56 PM



#70
Styrene
Concen: 0.200 ug/l
RT: 11.94 min Scan# 3161
Delta R.T. -0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Tgt Ion	Ratio	Lower	Upper
104	100		
78	46.8	37.4	56.0
103	64.9	42.3	63.5#





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.32 min Scan# 3591

Delta R.T. 0.00 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Instrument :

MSVOA_N

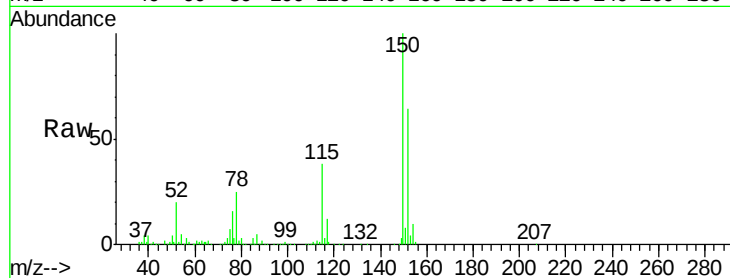
ClientSampleId :

MDL-WATER-03-QT2-2020DL

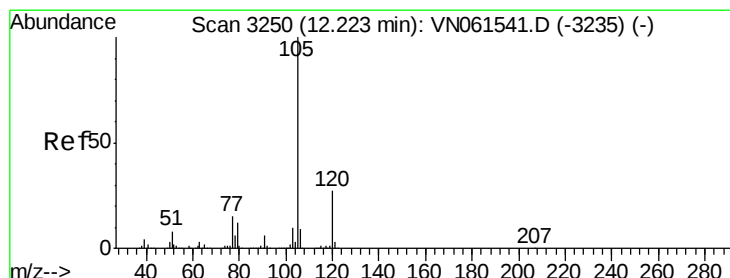
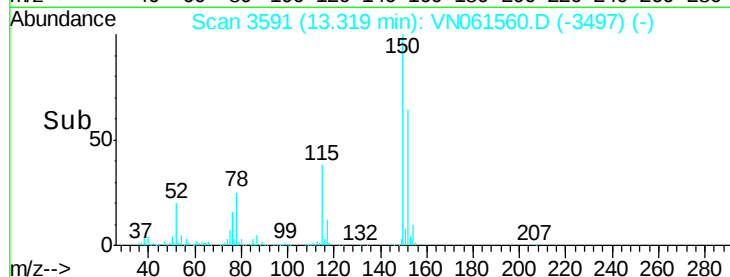
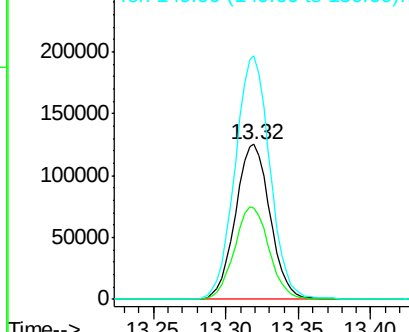
Tot Ion:	152	Resp:	208581
Ion Ratio	Lower	Upper	
152	100		
115	59.1	28.0	84.0
150	157.6	0.0	344.0

Manual Integrations
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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



#73

Isopropylbenzene

Concen: 0.236 ug/l

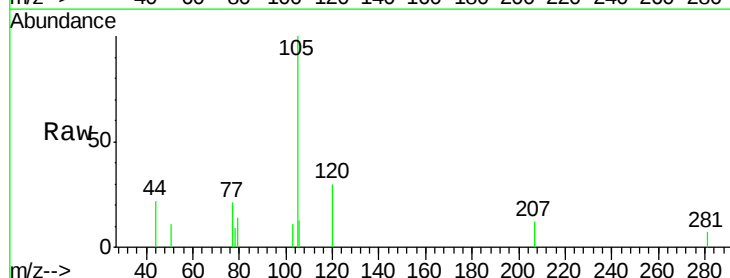
RT: 12.22 min Scan# 3250

Delta R.T. -0.00 min

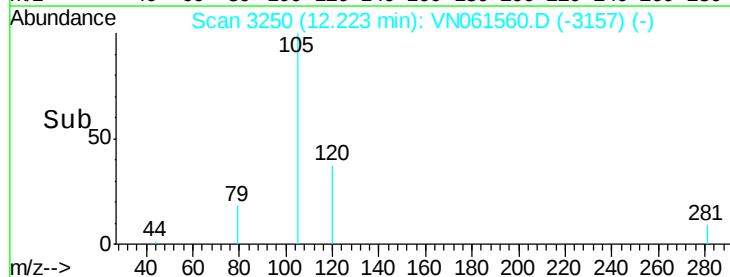
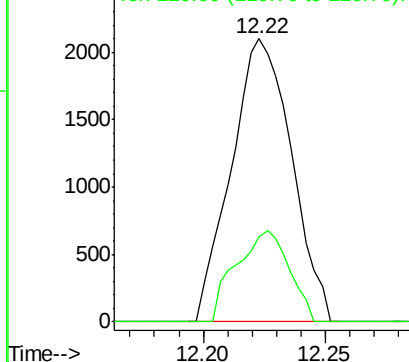
Lab File: VN061560.D

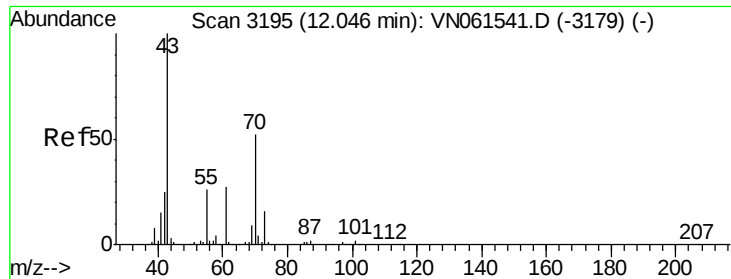
Acq: 29 May 2020 12:28

Tgt Ion:	105	Resp:	3594
Ion Ratio	Lower	Upper	
105	100		
120	28.5	13.8	41.3



Abundance Ion 105.00 (104.70 to 105.70): V
Ion 120.00 (119.70 to 120.70): V





#74

N-amvl acetate

Concen: 0.321 ug/l

RT: 12.05 min Scan# 3196

Delta R.T. 0.00 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT2-2020DL

Tot Ion: 43 Resp: 1538

Ion Ratio Lower Upper

43 100

70 37.8 40.5 60.7#

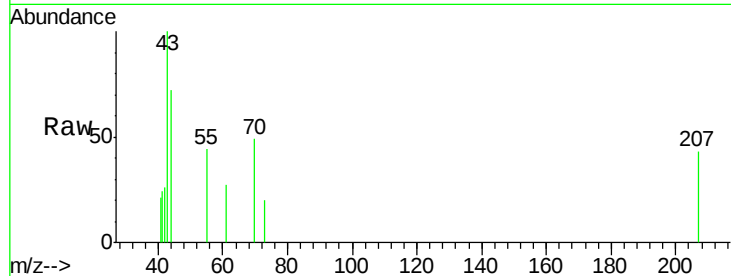
55 20.3 20.6 31.0#

61 20.5 21.8 32.6#

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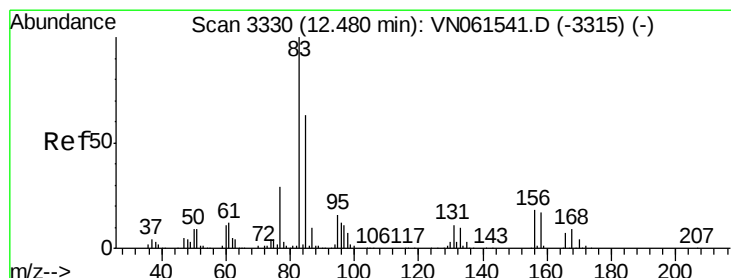
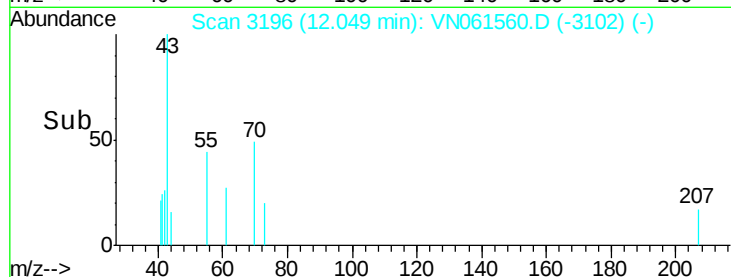
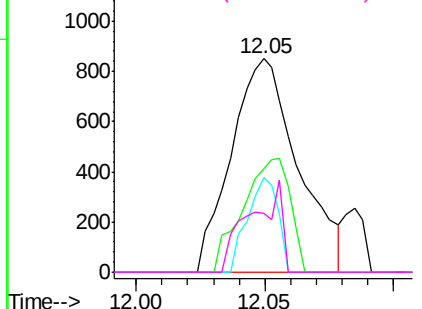


Abundance Ion 43.00 (42.70 to 43.70): VN061541.D (-3179) (-)

Ion 70.00 (69.70 to 70.70): VN061541.D (-3179) (-)

Ion 55.00 (54.70 to 55.70): VN061541.D (-3179) (-)

Ion 61.00 (60.70 to 61.70): VN061541.D (-3179) (-)



#75

1,1,2,2-Tetrachloroethane

Concen: 0.243 ug/l

RT: 12.49 min Scan# 3332

Delta R.T. 0.01 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

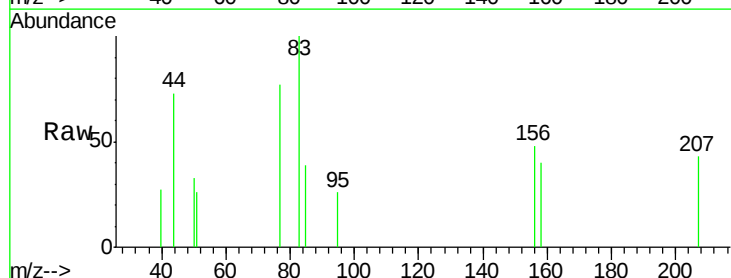
Tgt Ion: 83 Resp: 1038

Ion Ratio Lower Upper

83 100

131 0.0 5.5 16.5#

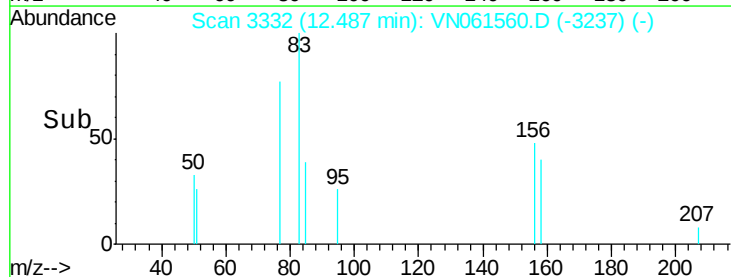
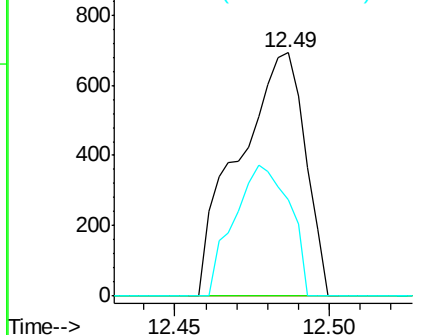
85 44.9 32.1 96.3

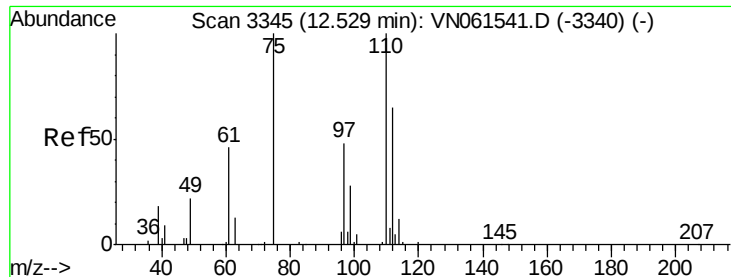


Abundance Ion 82.90 (82.60 to 83.60): VN061541.D (-3315) (-)

Ion 130.80 (130.50 to 131.50): VN061541.D (-3315) (-)

Ion 84.90 (84.60 to 85.60): VN061541.D (-3315) (-)





#76

1,2,3-Trichloropropane

Concen: 0.383 ug/l m

RT: 12.53 min Scan# 3346

Delta R.T. 0.00 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT2-2020DL

Tot Ion: 75 Resp: 1453

Ion Ratio Lower Upper

75 100

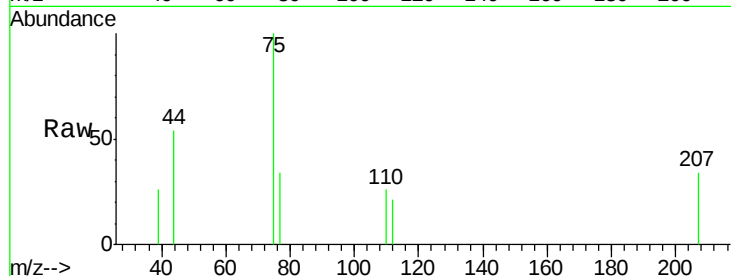
77 69.3 0.0 0.0#

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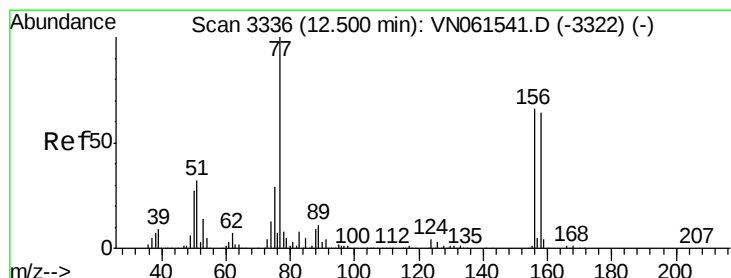
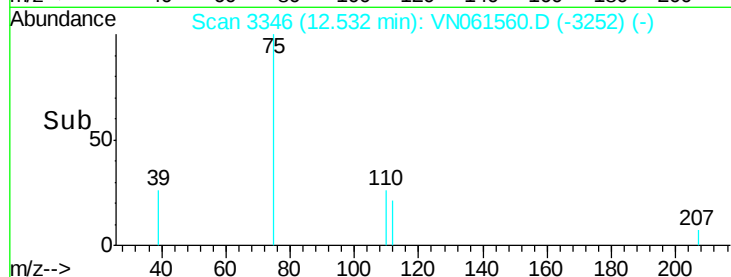
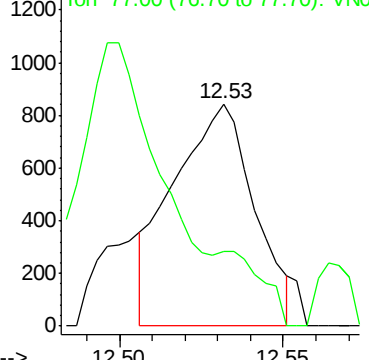
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Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0



#77

Bromobenzene

Concen: 0.300 ug/l

RT: 12.50 min Scan# 3335

Delta R.T. -0.00 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

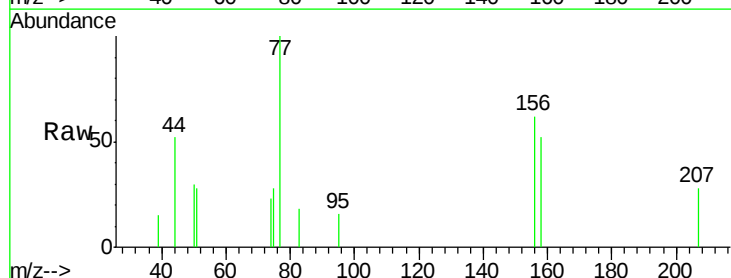
Tgt Ion: 156 Resp: 1166

Ion Ratio Lower Upper

156 100

77 164.7 90.9 272.7

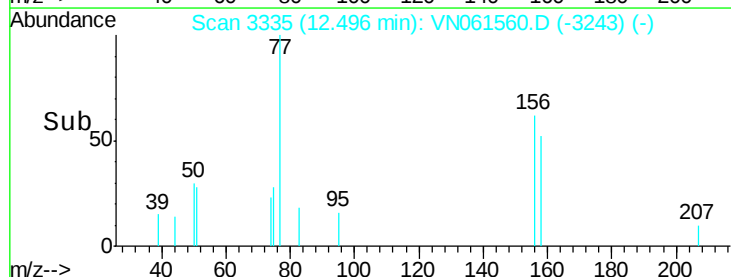
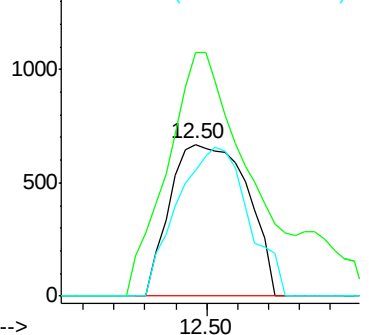
158 89.7 48.4 145.3

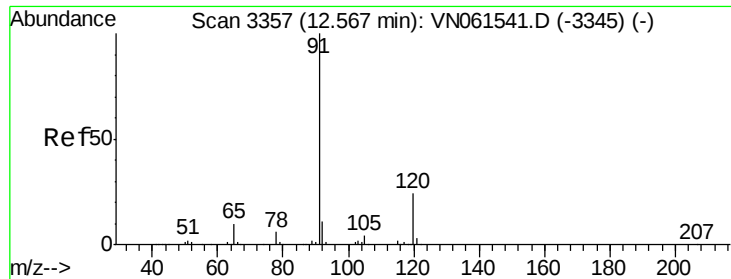


Abundance Ion 155.80 (155.50 to 156.50): V

Ion 77.00 (76.70 to 77.70): VN0

Ion 157.80 (157.50 to 158.50): V





#78

n-propylbenzene

Concen: 0.323 ug/l

RT: 12.57 min Scan# 3357

Delta R.T. -0.00 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT2-2020DL

Tot Ion: 91 Resp: 5492

Ion Ratio Lower Upper

91 100

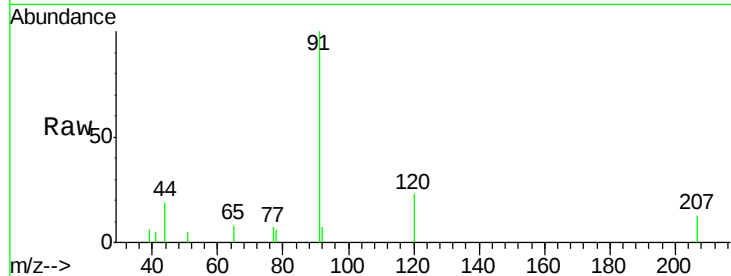
120 22.6 12.3 36.9

Manual Integrations

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Abundance Ion 91.00 (90.70 to 91.70): VN061541.D (-3345) (-)

Ion 120.00 (119.70 to 120.70): VN061541.D (-3345) (-)

12.57

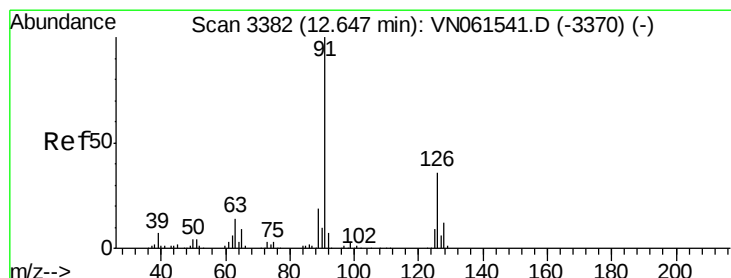
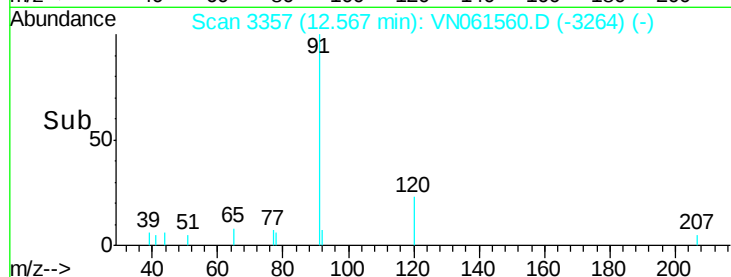
3000

2000

1000

0

Time--> 12.50 12.55 12.60



#79

2-Chlorotoluene

Concen: 0.247 ug/l

RT: 12.65 min Scan# 3382

Delta R.T. -0.00 min

Lab File: VN061560.D

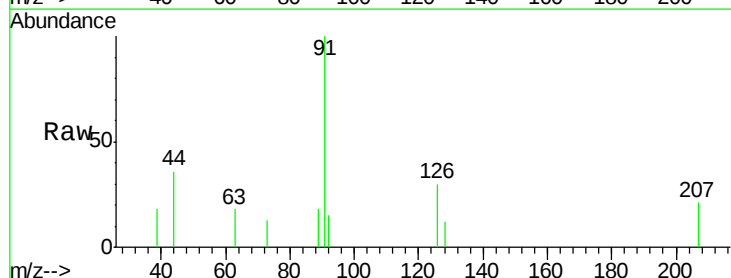
Acq: 29 May 2020 12:28

Tgt Ion: 91 Resp: 2503

Ion Ratio Lower Upper

91 100

126 32.1 17.9 53.7



Abundance Ion 91.00 (90.70 to 91.70): VN061541.D (-3370) (-)

Ion 125.90 (125.60 to 126.60): VN061541.D (-3370) (-)

12.65

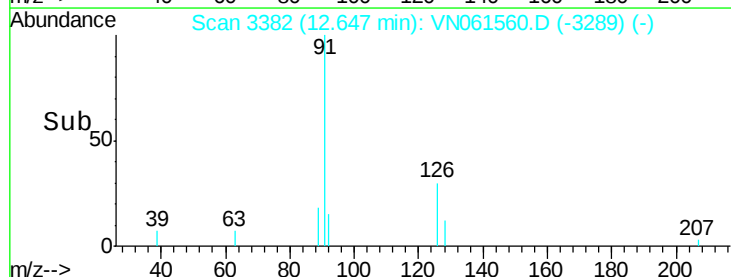
1500

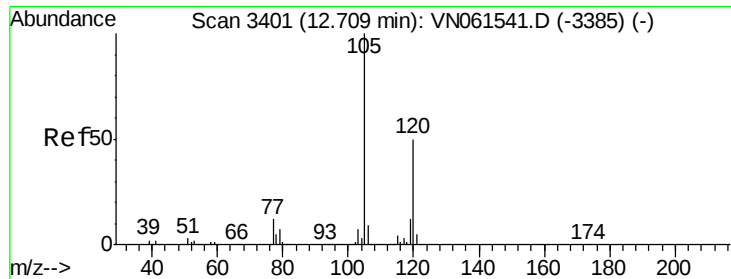
1000

500

0

Time--> 12.60 12.65





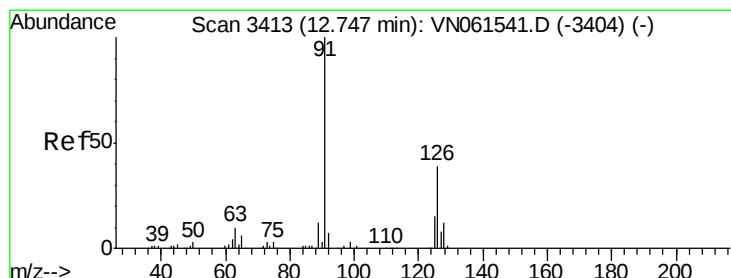
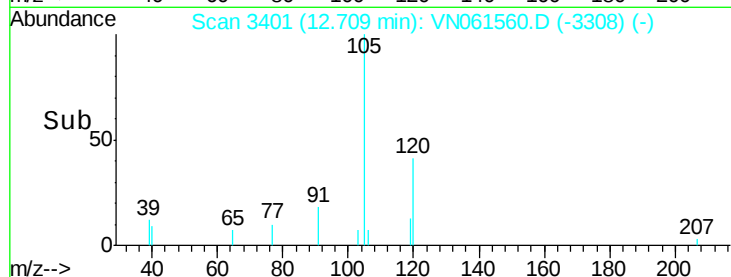
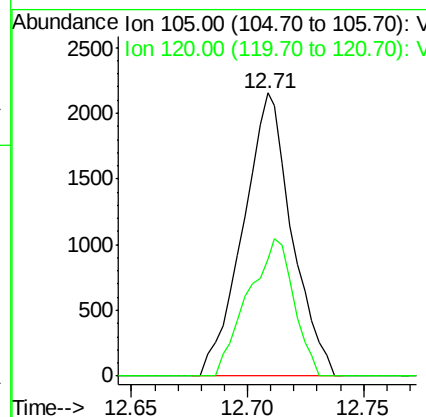
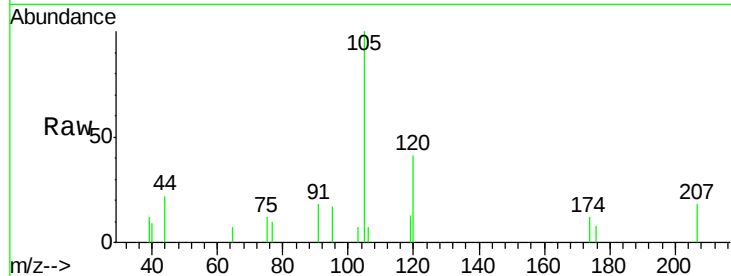
#80
 1,3,5-Trimethylbenzene
 Concen: 0.247 ug/l
 RT: 12.71 min Scan# 3401
 Delta R.T. -0.00 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT2-2020DL

Tot Ion:105 Resp: 3149
 Ion Ratio Lower Upper
 105 100
 120 45.4 25.1 75.2

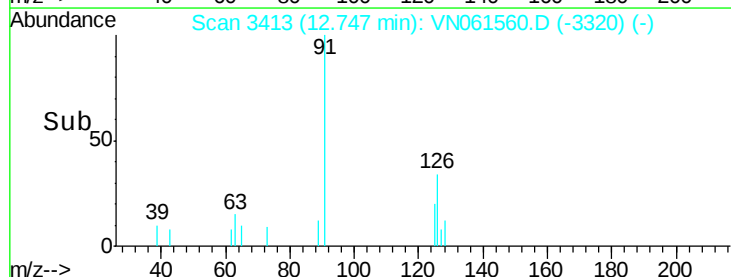
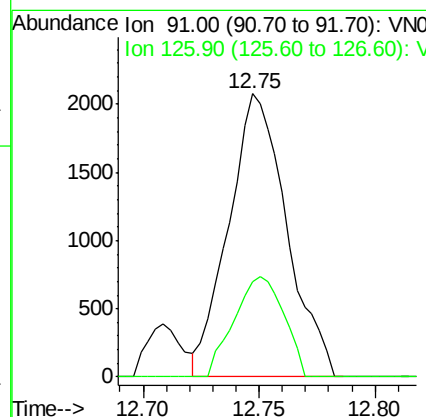
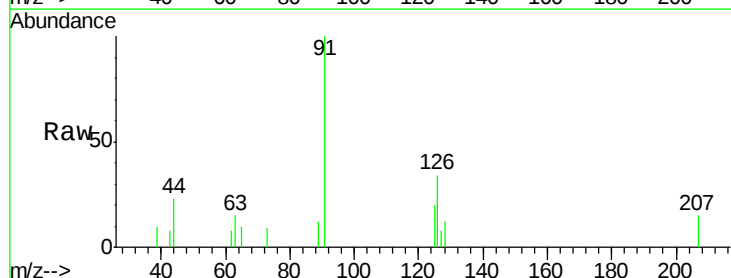
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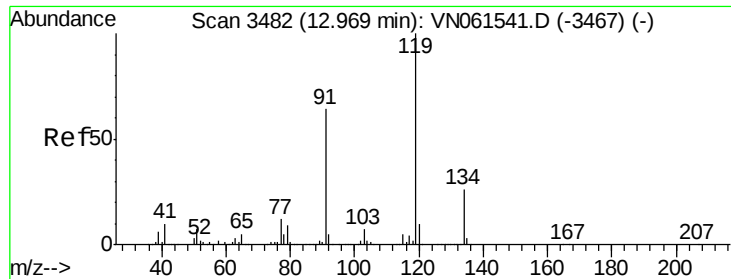
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#82
 4-Chlorotoluene
 Concen: 0.338 ug/l
 RT: 12.75 min Scan# 3413
 Delta R.T. -0.00 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Tgt Ion: 91 Resp: 3605
 Ion Ratio Lower Upper
 91 100
 126 30.4 17.5 52.6





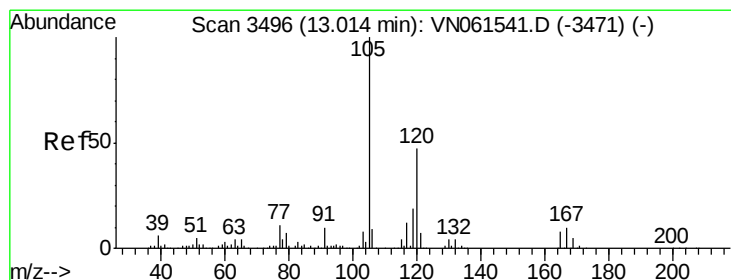
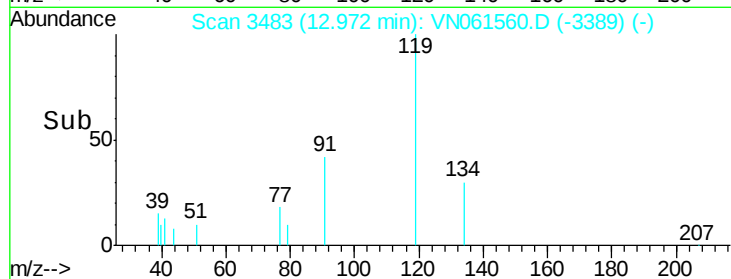
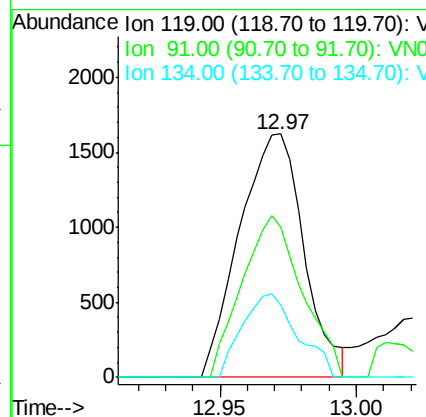
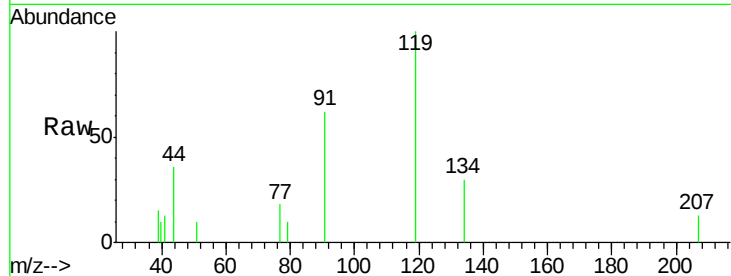
#83
 tert-Butylbenzene
 Concen: 0.236 ug/l
 RT: 12.97 min Scan# 3483
 Delta R.T. 0.00 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT2-2020DL

Tot Ion	Ratio	Lower	Upper
119	100		
91	62.1	31.3	93.8
134	29.4	13.5	40.4

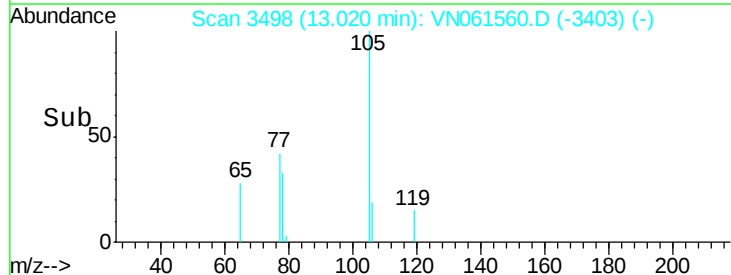
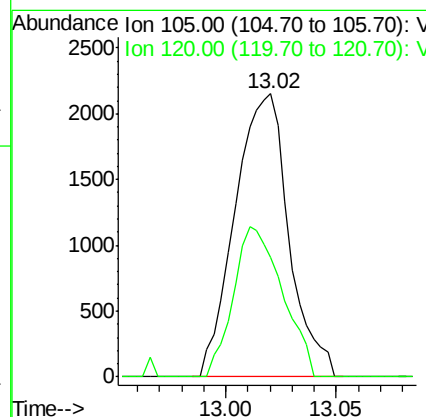
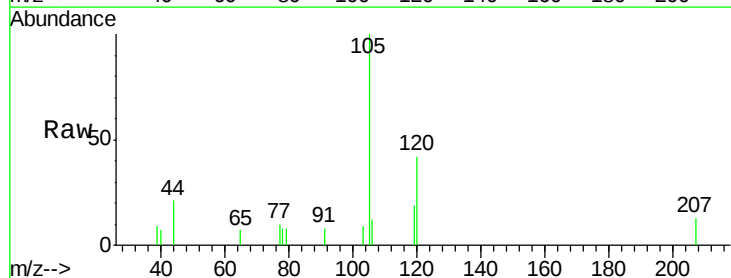
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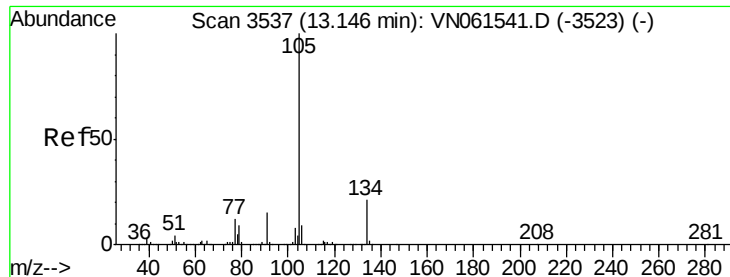
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#84
 1,2,4-Trimethylbenzene
 Concen: 0.288 ug/l
 RT: 13.02 min Scan# 3498
 Delta R.T. 0.01 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Tgt Ion	Ratio	Lower	Upper
105	100		
120	48.1	23.2	69.5





#85

sec-Butylbenzene

Concen: 0.282 ug/l

RT: 13.15 min Scan# 3537

Delta R.T. -0.00 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Instrument :

MSVOA_N

ClientSampleId :

MDL-WATER-03-QT2-2020DL

Tot Ion:105 Resp: 4080

Ion Ratio Lower Upper

105 100

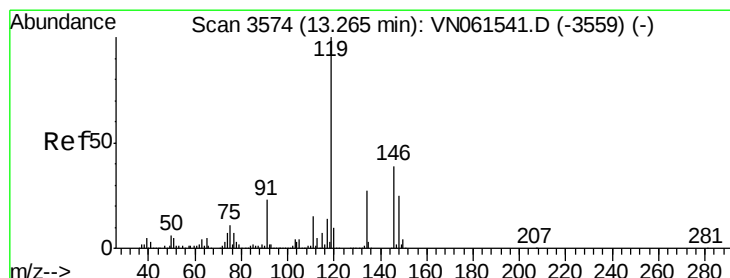
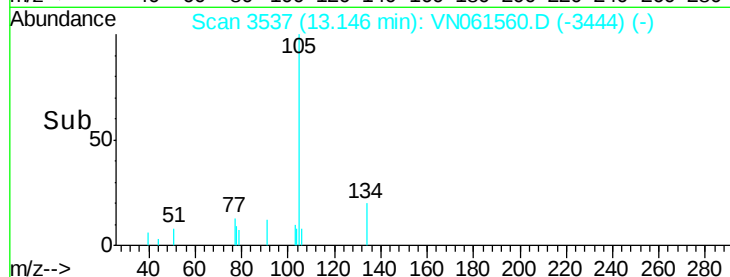
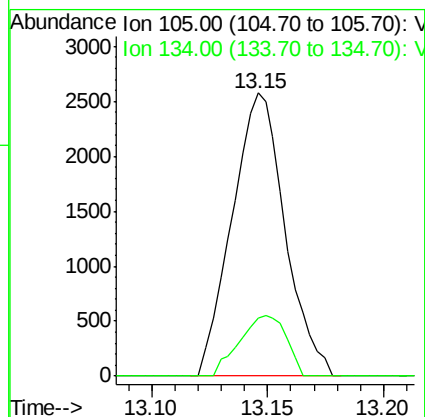
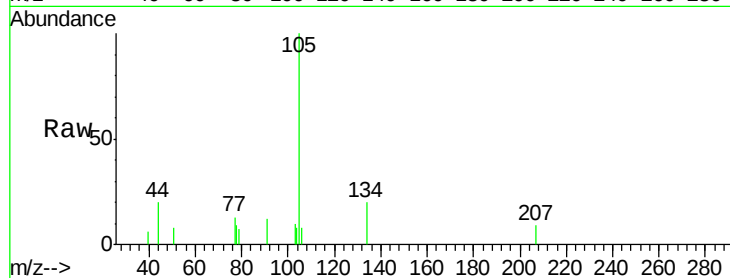
134 18.9 10.7 31.9

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#86

p-Isopropyltoluene

Concen: 0.261 ug/l

RT: 13.26 min Scan# 3574

Delta R.T. -0.00 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

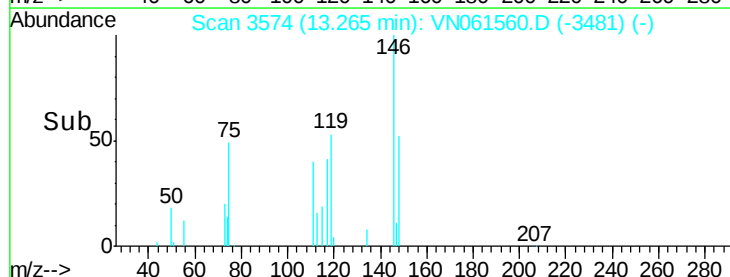
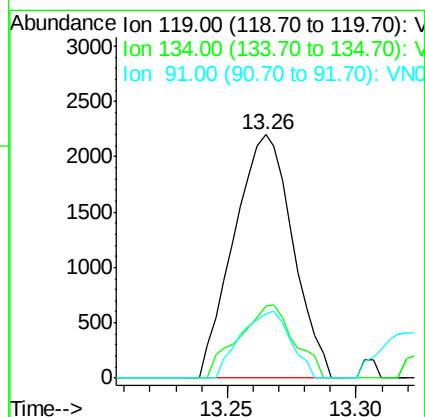
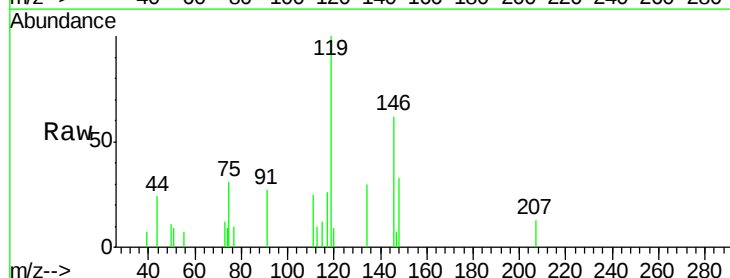
Tgt Ion:119 Resp: 3488

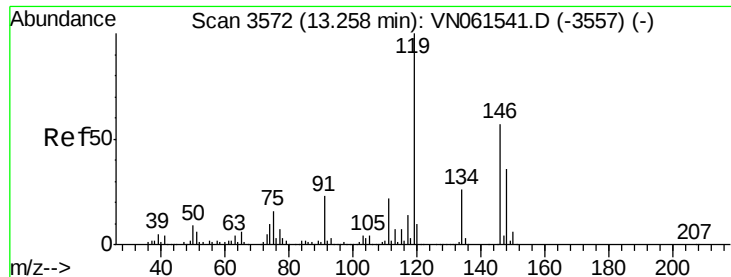
Ion Ratio Lower Upper

119 100

134 28.3 13.5 40.5

91 23.5 11.4 34.1





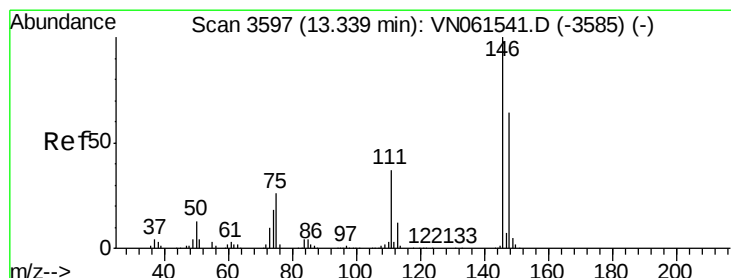
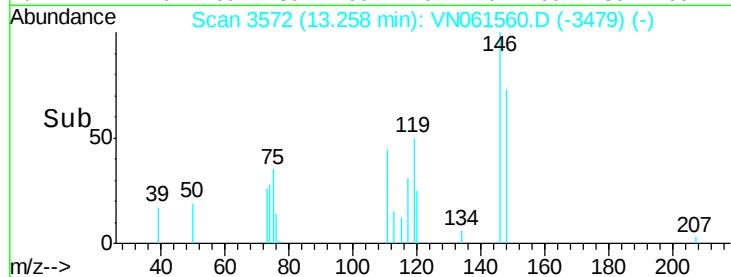
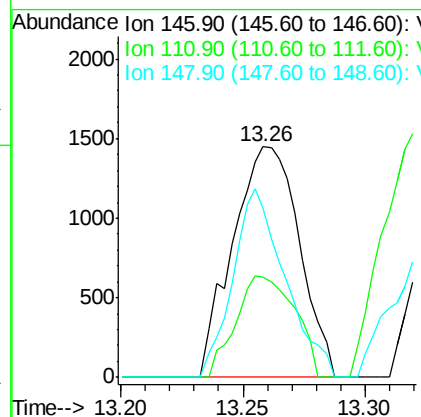
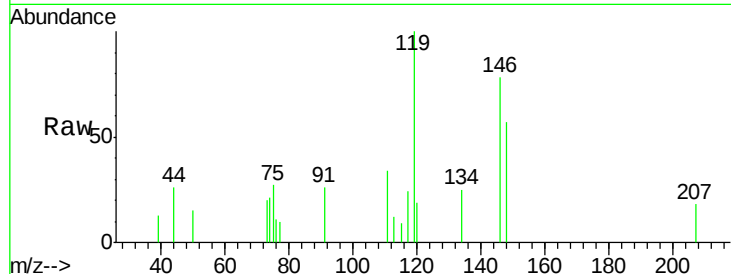
#87
 1,3-Dichlorobenzene
 Concen: 0.398 ug/l
 RT: 13.26 min Scan# 3572
 Delta R.T. -0.00 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT2-2020DL

Tot Ion	Ratio	Lower	Upper
146	100		
111	39.0	19.2	57.6
148	64.0	31.7	95.1

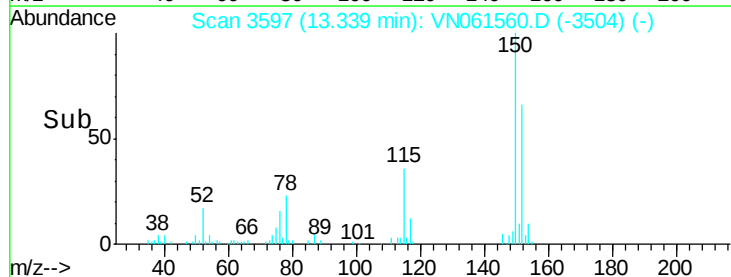
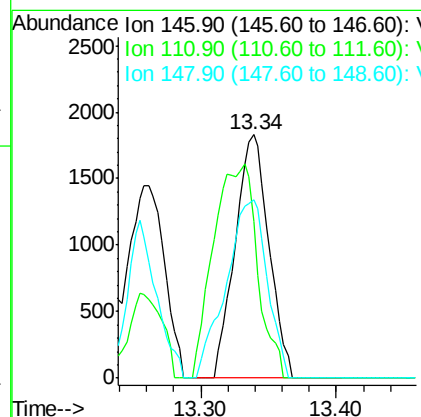
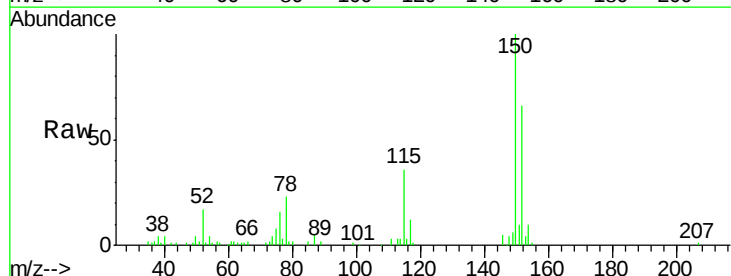
Manual Integrations
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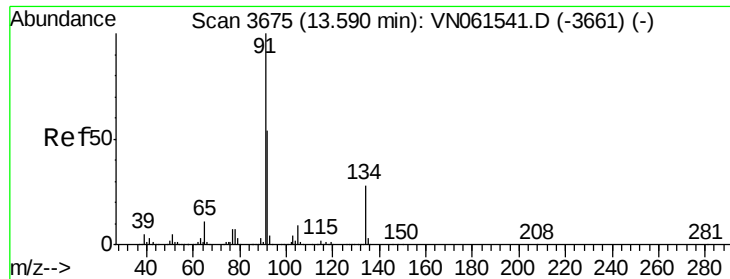
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#88
 1,4-Dichlorobenzene
 Concen: 0.450 ug/l m
 RT: 13.34 min Scan# 3597
 Delta R.T. -0.00 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Tgt Ion	Ratio	Lower	Upper
146	100		
111	33.9	18.9	56.9
148	55.6	31.8	95.3





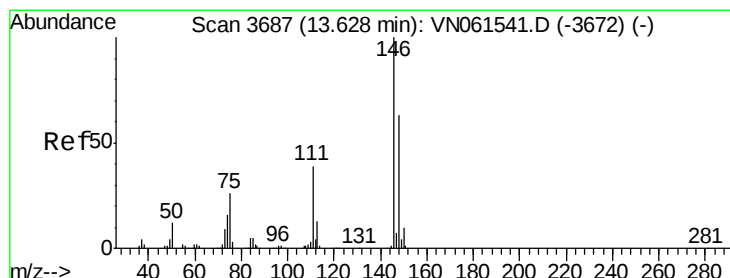
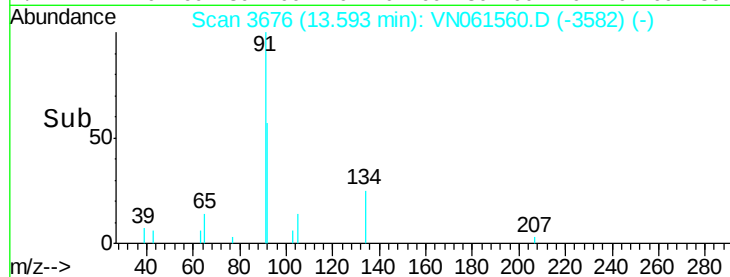
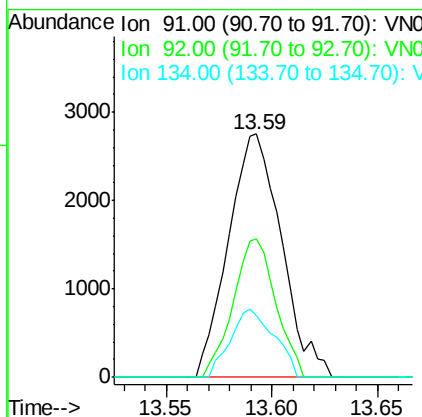
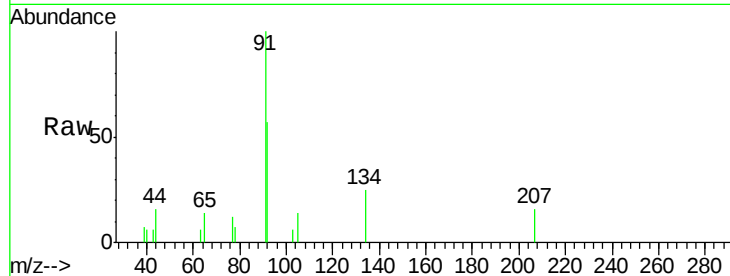
#89
n-Butylbenzene
Concen: 0.430 ug/l
RT: 13.59 min Scan# 3676
Delta R.T. 0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Instrument :
MSVOA_N
ClientSampleId :
MDL-WATER-03-QT2-2020DL

Tot Ion	Ratio	Lower	Upper
91	100		
92	45.5	27.2	81.6
134	23.0	14.0	42.0

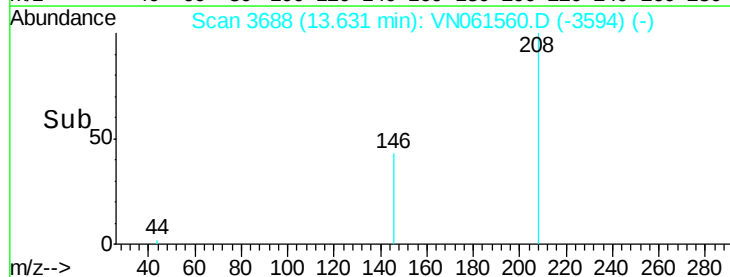
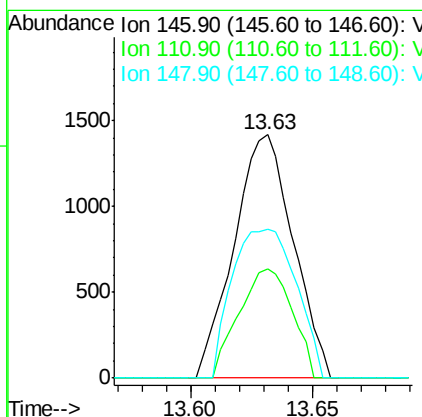
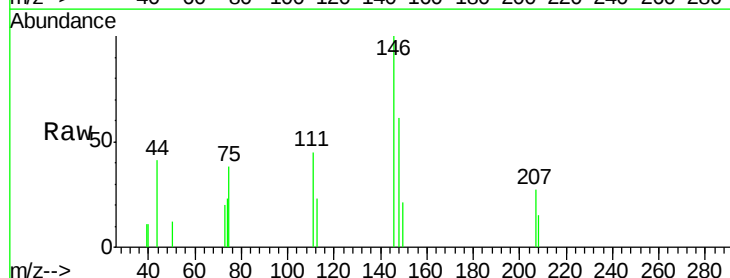
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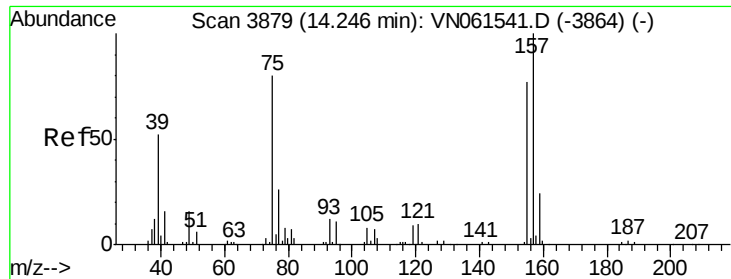
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#91
1,2-Dichlorobenzene
Concen: 0.362 ug/l
RT: 13.63 min Scan# 3688
Delta R.T. 0.00 min
Lab File: VN061560.D
Acq: 29 May 2020 12:28

Tgt Ion	Ratio	Lower	Upper
146	100		
111	40.7	20.1	60.2
148	66.8	31.9	95.5





#92

1,2-Dibromo-3-Chloropropane

Concen: 0.306 ug/l

RT: 14.24 min Scan# 3878

Delta R.T. -0.00 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Instrument :

MSVOA_N

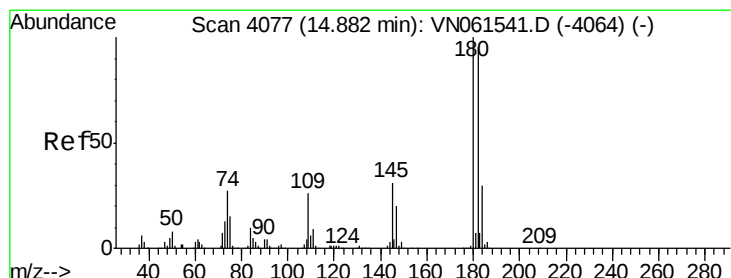
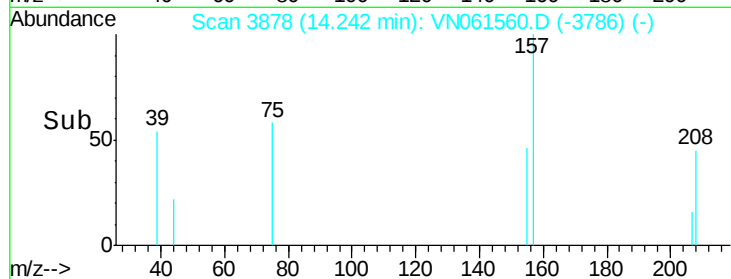
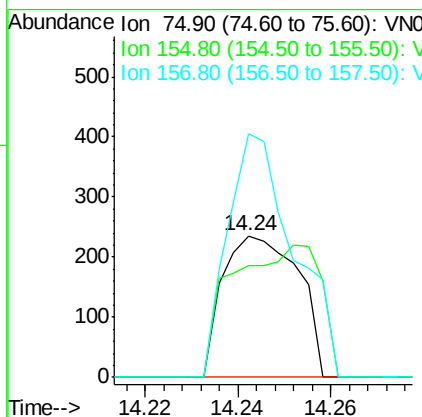
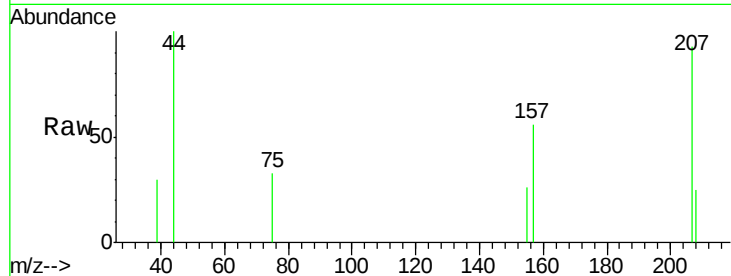
ClientSampleId :

MDL-WATER-03-QT2-2020DL

Tot Ion:	75	Resp:	266
Ion	Ratio	Lower	Upper
75	100		
155	108.6	47.1	141.4
157	150.8	60.3	180.8

Manual Integrations
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#93

1,2,4-Trichlorobenzene

Concen: 0.859 ug/l

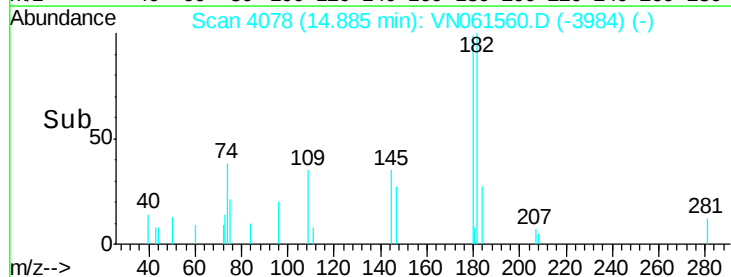
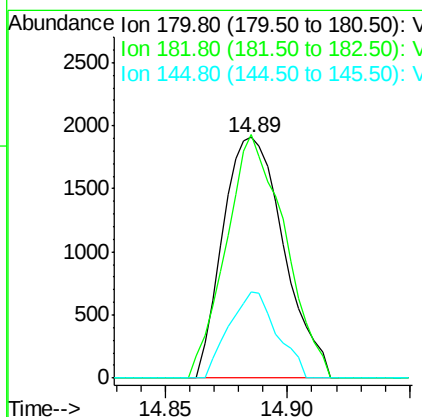
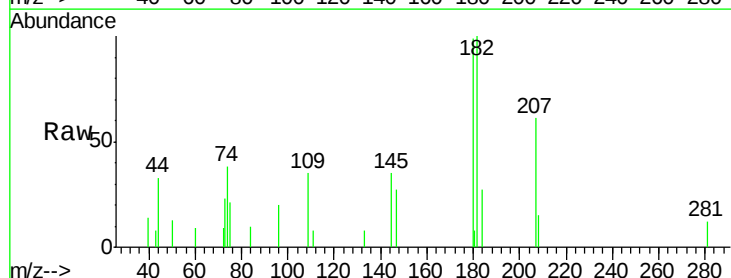
RT: 14.89 min Scan# 4078

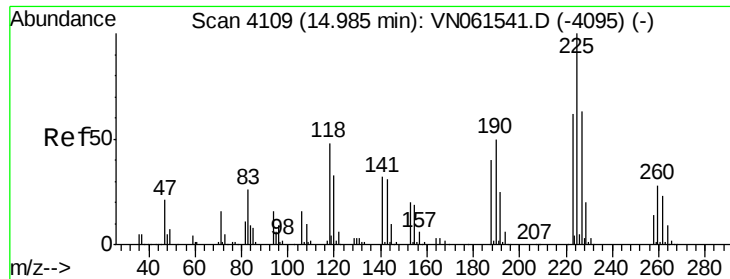
Delta R.T. 0.00 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Tgt Ion:	180	Resp:	3302
Ion	Ratio	Lower	Upper
180	100		
182	97.7	47.8	143.3
145	28.2	15.5	46.5





#94

Hexachlorobutadiene

Concen: 0.592 ug/l

RT: 14.98 min Scan# 4108

Delta R.T. -0.00 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Instrument :

MSVOA_N

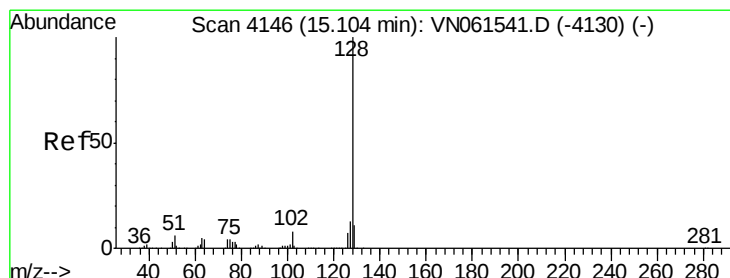
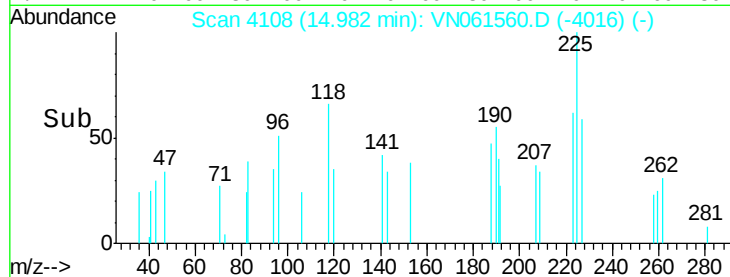
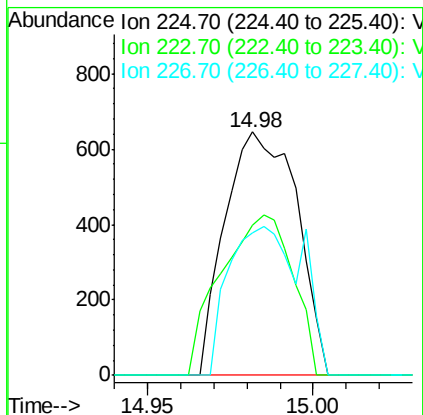
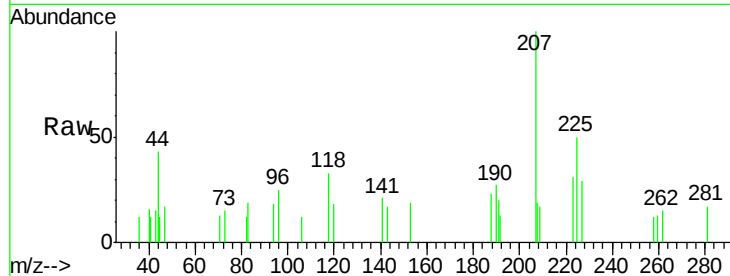
ClientSampleId :

MDL-WATER-03-QT2-2020DL

Tot Ion:	225	Resp:	971
Ion Ratio	Lower	Upper	
225	100		
223	66.2	31.9	95.5
227	62.6	31.9	95.9

Manual Integrations
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#95

Naphthalene

Concen: 1.046 ug/l

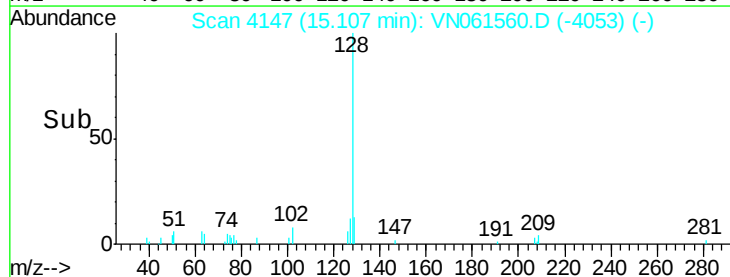
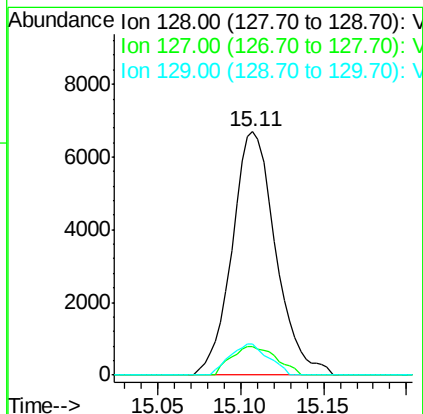
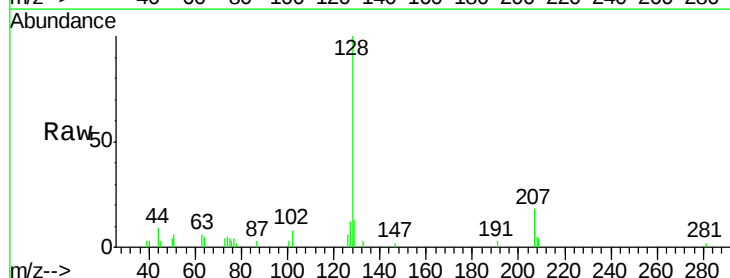
RT: 15.11 min Scan# 4147

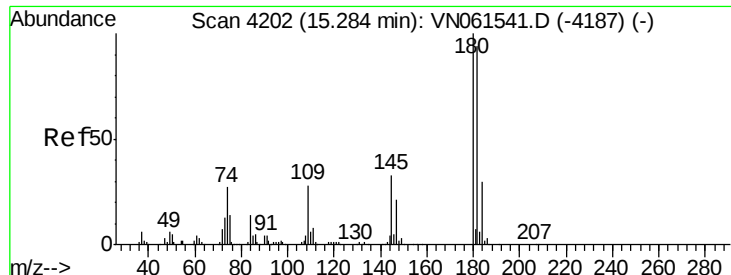
Delta R.T. 0.00 min

Lab File: VN061560.D

Acq: 29 May 2020 12:28

Tgt Ion:	128	Resp:	12250
Ion Ratio	Lower	Upper	
128	100		
127	12.1	10.0	15.0
129	11.3	8.5	12.7





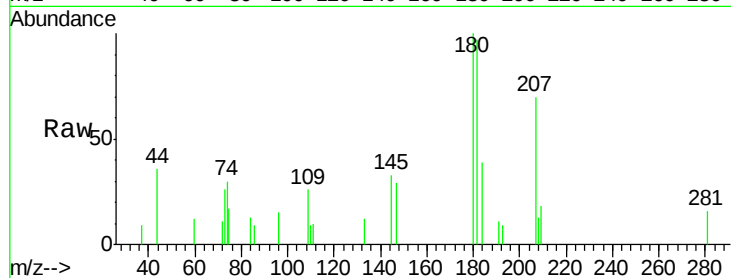
#96
 1,2,3-Trichlorobenzene
 Concen: 0.904 ug/l
 RT: 15.29 min Scan# 4203
 Delta R.T. 0.00 min
 Lab File: VN061560.D
 Acq: 29 May 2020 12:28

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-WATER-03-QT2-2020DL

Tot Ion:	180	Resp:	3419
Ion Ratio	Lower	Upper	
180	100		
182	99.3	47.1	141.3
145	28.8	16.3	48.9

Manual Integrations
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Abundance Ion 179.80 (179.50 to 180.50): V
 Ion 181.80 (181.50 to 182.50): V
 Ion 144.90 (144.60 to 145.60): V

