

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN071319\
 Data File : VN056687.D
 Acq On : 12 Jul 2019 14:02
 Operator : JC/SP
 Sample : K3591-09
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT3-2019

Manual Integrations
 APPROVED

MMDadoda
 7/16/2019 9:59:38 AM

Quant Time: Jul 13 00:29:49 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N071319W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jul 12 23:58:13 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.19	128	53104	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.58	114	287305	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.41	117	240489	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	8.03	65	110453	30.71	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	102.37%
60) 4-Bromofluorobenzene	12.40	95	97394	26.46	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	88.20%
63) Toluene-d8	10.09	98	345191	31.41	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	104.70%

Target Compounds

					Ovalue
2) Dichlorodifluoromethane	1.85	85	5542	1.837 ug/l	97
3) Chloromethane	2.06	50	9655	2.392 ug/l	99
4) Vinyl Chloride	2.19	62	9334	2.351 ug/l	100
5) Bromomethane	2.55	94	6430	2.570 ug/l	83
6) Chloroethane	2.70	64	5478	2.415 ug/l #	86
7) Trichlorofluoromethane	3.01	101	12079	2.373 ug/l	93
8) Diethyl Ether	3.41	74	5203	2.499 ug/l	93
9) 1,1,2-Trichlorotrifluoroet	3.75	101	7649	2.409 ug/l	98
10) 1,1-Dichloroethene	3.73	96	7549	2.410 ug/l	92
11) Methyl Iodide	3.95	142	7686	1.847 ug/l	93
12) Methyl Acetate	4.33	43	15107	3.603 ug/l	95
13) Acrolein	3.61	56	4655	15.748 ug/l	99
14) Acrylonitrile	5.00	53	21843	11.827 ug/l #	62
15) Acetone	3.83	58	6780m	10.635 ug/l	
16) Carbon Disulfide	4.05	76	18325	2.218 ug/l	96
17) Allyl chloride	4.32	41	12861	2.347 ug/l	98
18) Methylene Chloride	4.56	84	9449m	2.570 ug/l	
19) trans-1,2-Dichloroethene	5.04	96	8167m	2.436 ug/l	
20) Diisopropyl ether	5.95	45	26317	2.411 ug/l #	89
21) 1,1-Dichloroethane	5.85	63	15860	2.543 ug/l	97
22) cis-1,2-Dichloroethene	6.83	96	9777	2.494 ug/l #	87
23) tert-Butyl Alcohol	4.79	59	8341	12.947 ug/l #	62
24) Methyl tert-Butyl Ether	5.04	73	23743m	2.377 ug/l	
25) Chloroform	7.37	83	16203	2.666 ug/l	98
26) Cyclohexane	7.65	56	13659	2.356 ug/l #	94
29) 1,1-Dichloropropene	7.79	75	10532	2.306 ug/l	99
30) 2-Butanone	6.84	43	29550	11.176 ug/l #	76
31) 2,2-Dichloropropane	6.82	77	10144	2.295 ug/l	96
32) 1,1,1-Trichloroethane	7.57	97	11668	2.397 ug/l #	85
33) Carbon Tetrachloride	7.77	117	9203	2.197 ug/l	88
34) Benzene	8.04	78	35776	2.550 ug/l #	37
35) Methacrylonitrile	7.18	41	3523m	1.744 ug/l	
36) 1,2-Dichloroethane	8.13	62	11746	2.606 ug/l #	87
37) Trichloroethene	8.84	130	9196	2.413 ug/l	96
38) Methylcyclohexane	9.08	83	13316	2.308 ug/l	97
39) 1,2-Dichloropropane	9.12	63	9461	2.512 ug/l	97
40) Dibromomethane	9.21	93	5914	2.465 ug/l	100

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

41) Bromodichloromethane	9.40	83	10046	2.272	ug/l	96
42) Vinyl Acetate	5.90	43	93391	10.612	ug/l	98
43) Ethyl Acetate	6.93	43	10322	2.160	ug/l #	78
44) Isopropyl Acetate	8.17	43	17323	2.324	ug/l	97
45) 1,4-Dioxane	9.20	88	4030	53.451	ug/l	98
46) Methyl methacrylate	9.20	41	8527	2.382	ug/l	94
47) n-amyl Acetate	12.07	43	10924	1.792	ug/l	99
48) t-1,3-Dichloropropene	10.38	75	9742	2.003	ug/l	89
49) cis-1,3-Dichloropropene	9.84	75	11339	2.067	ug/l	93
50) 1,1,2-Trichloroethane	10.56	97	9001	2.575	ug/l	89
51) Ethyl methacrylate	10.43	69	11402	2.121	ug/l	96
52) 1,3-Dichloropropane	10.71	76	14863	2.541	ug/l	100
53) Dibromochloromethane	10.90	129	7516	2.128	ug/l	96
54) 1,2-Dibromoethane	11.00	107	8811	2.426	ug/l	95
55) 2-Chloroethyl vinyl ether	9.70	63	26577	10.223	ug/l	98
56) Bromoform	12.12	173	5382	2.058	ug/l #	90
58) 4-Methyl-2-Pentanone	9.99	43	59819	13.216	ug/l	97
59) 2-Hexanone	10.75	43	40223	11.707	ug/l	98
61) Tetrachloroethene	10.63	164	9728	2.815	ug/l	94
62) Toluene	10.15	91	37636	2.664	ug/l	98
64) Chlorobenzene	11.43	112	22066	2.561	ug/l	99
65) 1,1,1,2-Tetrachloroethane	11.51	131	7781	2.464	ug/l	99
66) Ethyl Benzene	11.51	91	36877	2.415	ug/l	99
67) m/p-Xylenes	11.62	106	26450	4.590	ug/l	100
68) o-Xylene	11.95	106	13886	2.471	ug/l	93
69) Styrene	11.96	104	19420	2.085	ug/l	96
70) Isopropylbenzene	12.25	105	34677	2.354	ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.50	83	12730	2.662	ug/l	95
72) 1,2,3-Trichloropropane	12.55	75	11188m	2.738	ug/l	
73) Bromobenzene	12.53	156	8692	2.258	ug/l	95
74) n-propylbenzene	12.59	91	36201	2.178	ug/l	99
75) 2-Chlorotoluene	12.67	91	23785	2.376	ug/l	97
76) 1,3,5-Trimethylbenzene	12.73	105	27797	2.212	ug/l	97
77) t-1,4-Dichloro-2-butene	12.30	75	2272	1.672	ug/l	80
78) 4-Chlorotoluene	12.77	91	19175	1.975	ug/l	100
79) tert-butylbenzene	12.99	119	25276	2.365	ug/l	97
80) 1,2,4-Trimethylbenzene	13.04	105	27221	2.184	ug/l	95
81) sec-Butylbenzene	13.17	105	30359	2.146	ug/l	99
82) p-Isopropyltoluene	13.29	119	27178	2.112	ug/l	99
83) 1,3-Dichlorobenzene	13.28	146	11875	1.851	ug/l	95
84) 1,4-Dichlorobenzene	13.36	146	10827	1.760	ug/l	95
85) n-Butylbenzene	13.61	91	17648	1.663	ug/l	98
86) Hexachloroethane	13.87	117	4047	2.005	ug/l	98
87) 1,2-Dichlorobenzene	13.65	146	13539	2.100	ug/l	99
88) 1,2-Dibromo-3-Chloropropan	14.27	75	1729	2.096	ug/l	86
89) 1,2,4-Trichlorobenzene	14.91	180	4455	1.285	ug/l	92
90) Hexachlorobutadiene	15.01	225	5287	2.345	ug/l	96
91) Naphthalene	15.13	128	10722	1.149	ug/l	97
92) 1,2,3-Trichlorobenzene	15.31	180	5570	1.532	ug/l	97

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MDL-MDL-WATER-03-QT3-2019

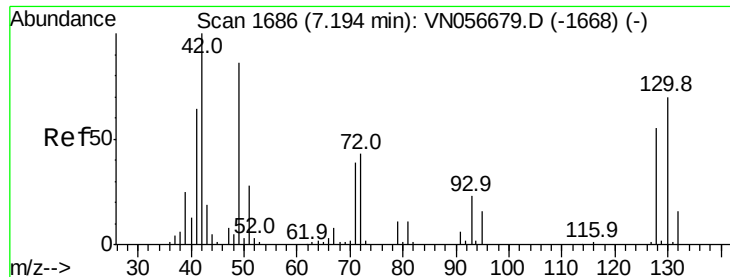
Manual Integrations
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(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 7.19 min Scan# 1686

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

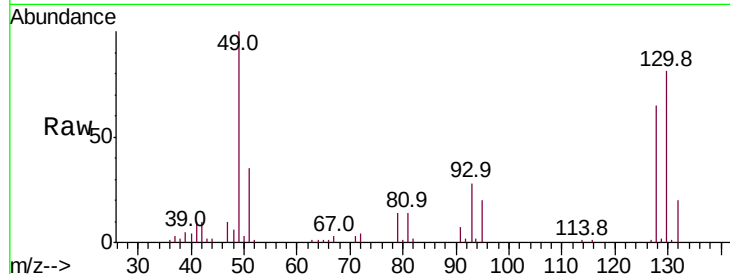
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

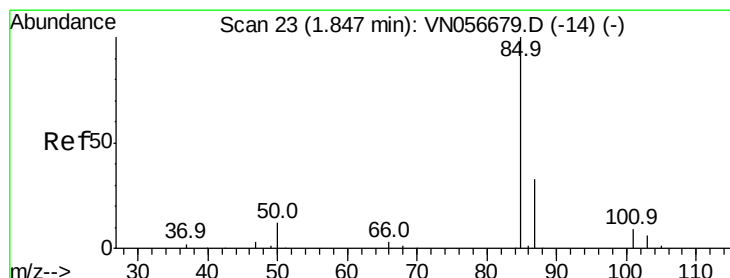
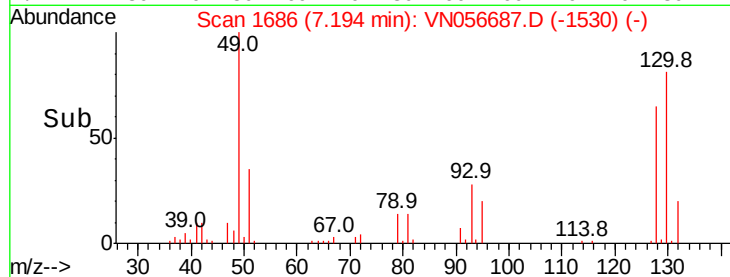
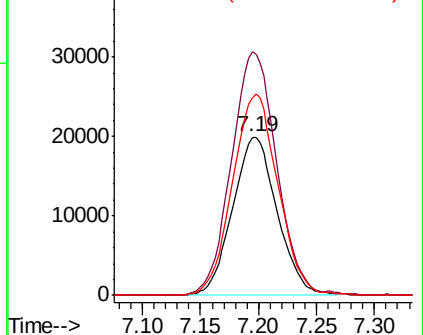
Tot Ion:	128	Resp:	53104
Ion	Ratio	Lower	Upper
128	100		
49	155.9	0.0	390.5
130	130.4	0.0	316.5

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Abundance Ion 128.00 (127.70 to 128.70): V
Ion 49.00 (48.70 to 49.70): VN
Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 1.837 ug/l

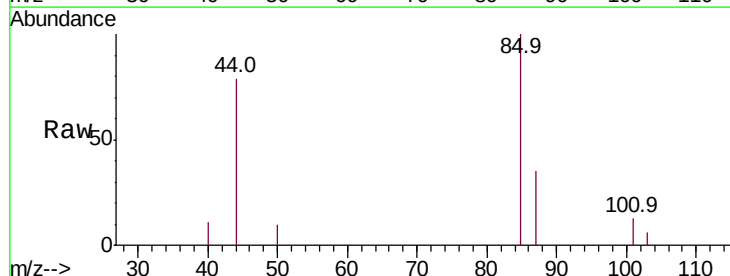
RT: 1.85 min Scan# 23

Delta R.T. 0.00 min

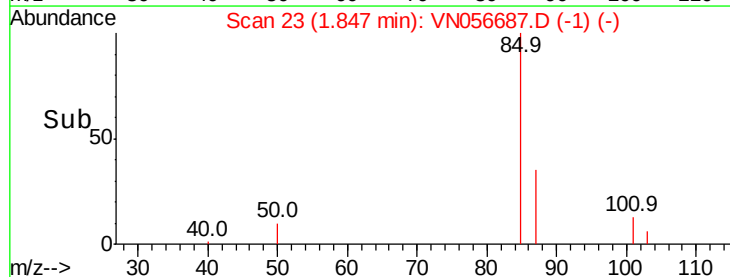
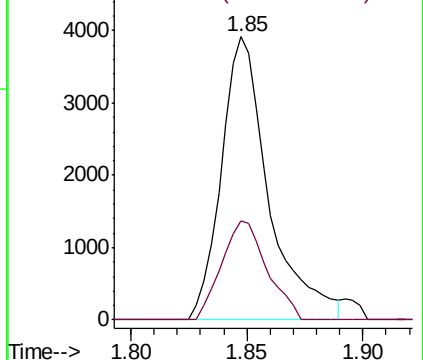
Lab File: VN056687.D

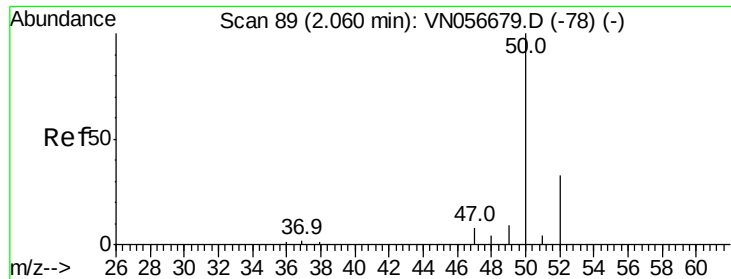
Acq: 12 Jul 2019 14:02

Tgt Ion:	85	Resp:	5542
Ion	Ratio	Lower	Upper
85	100		
87	35.1	16.8	50.3



Abundance Ion 85.00 (84.70 to 85.70): VN
Ion 87.00 (86.70 to 87.70): VN





#3

Chloromethane

Concen: 2.392 ug/l

RT: 2.06 min Scan# 90

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Tot Ion: 50 Resp: 9655

Ion Ratio Lower Upper

50 100

52 33.5 26.5 39.7

Instrument :

MSVOA_N

ClientSampleId :

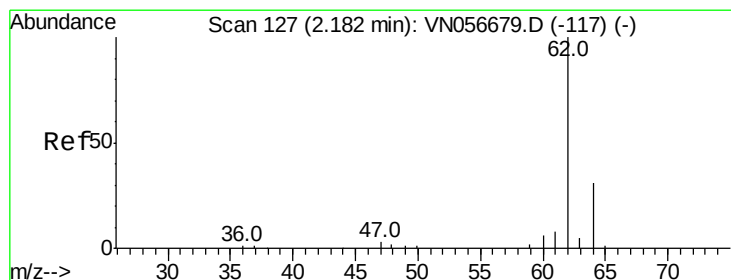
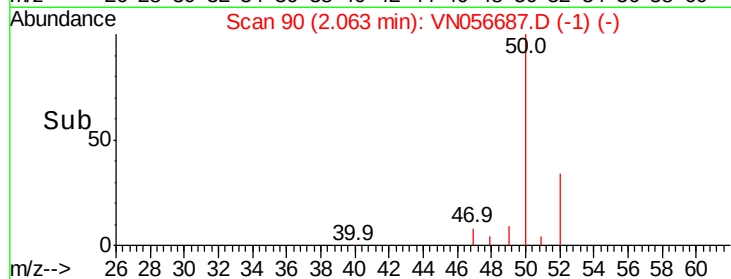
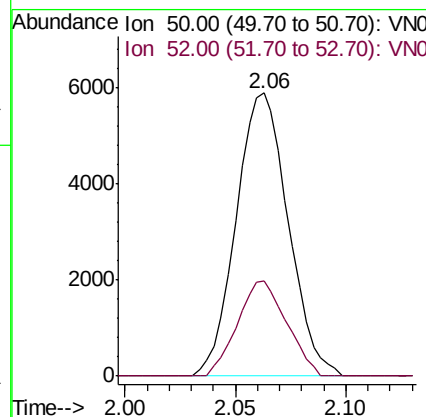
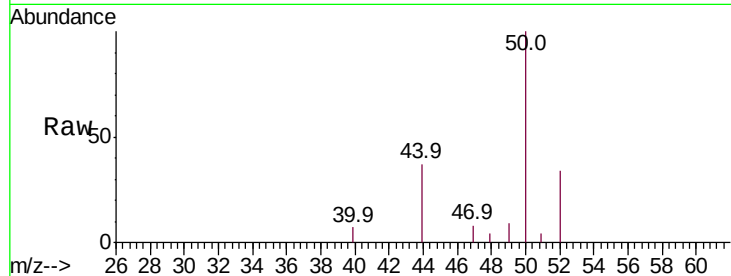
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#4

Vinyl Chloride

Concen: 2.351 ug/l

RT: 2.19 min Scan# 128

Delta R.T. 0.00 min

Lab File: VN056687.D

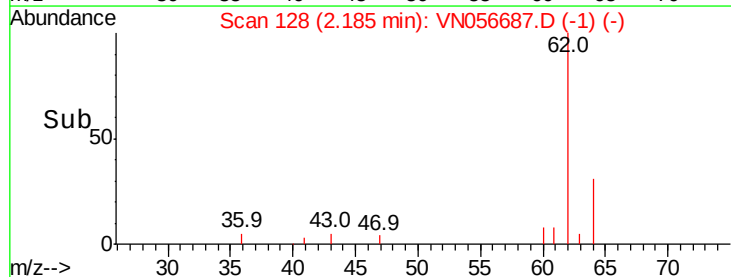
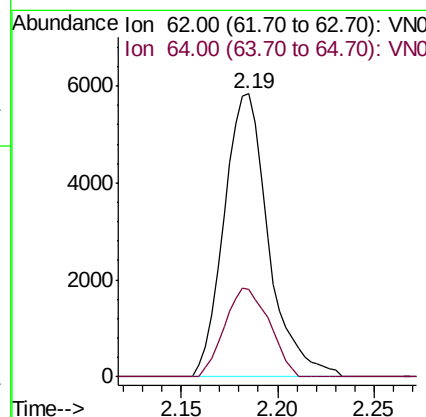
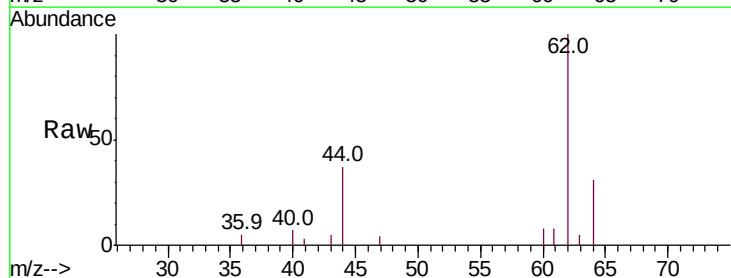
Acq: 12 Jul 2019 14:02

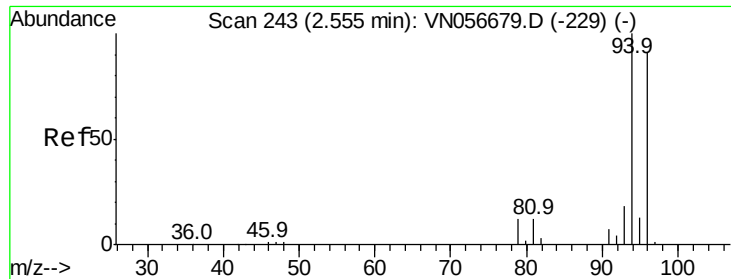
Tgt Ion: 62 Resp: 9334

Ion Ratio Lower Upper

62 100

64 31.1 25.0 37.4





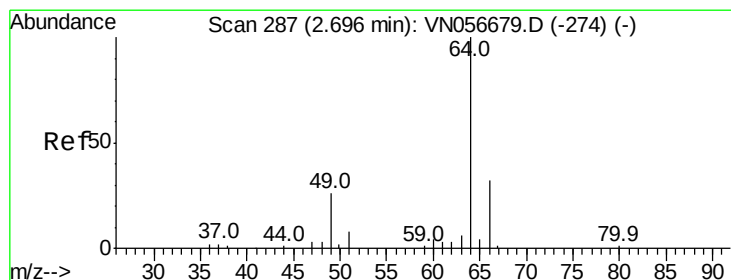
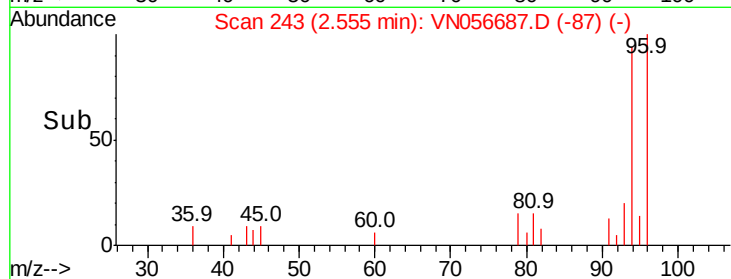
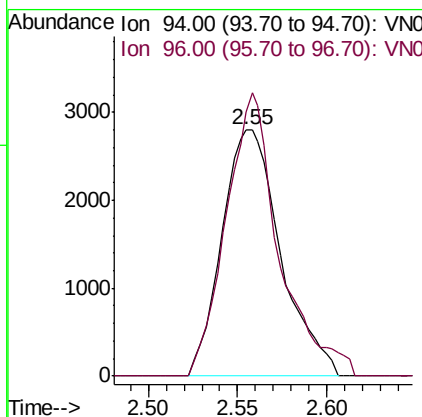
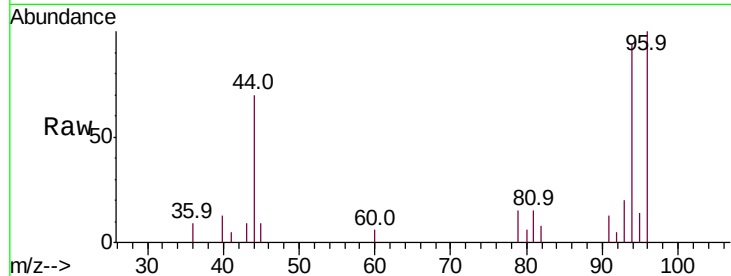
#5
Bromomethane
Concen: 2.570 ug/l
RT: 2.55 min Scan# 243
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT3-2019

Tot Ion: 94 Resp: 6430
Ion Ratio Lower Upper
94 100
96 106.8 72.8 109.2

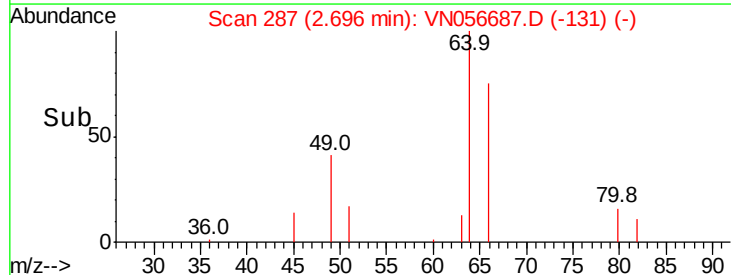
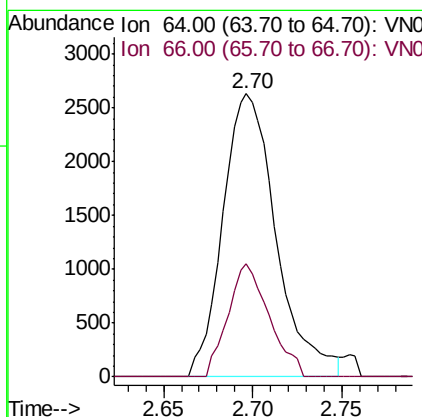
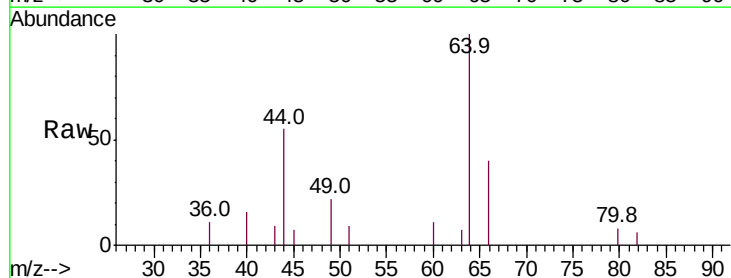
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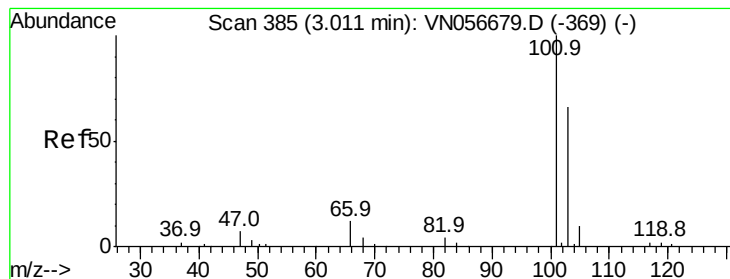
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#6
Chloroethane
Concen: 2.415 ug/l
RT: 2.70 min Scan# 287
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Tgt Ion: 64 Resp: 5478
Ion Ratio Lower Upper
64 100
66 40.2 25.7 38.5#





#7

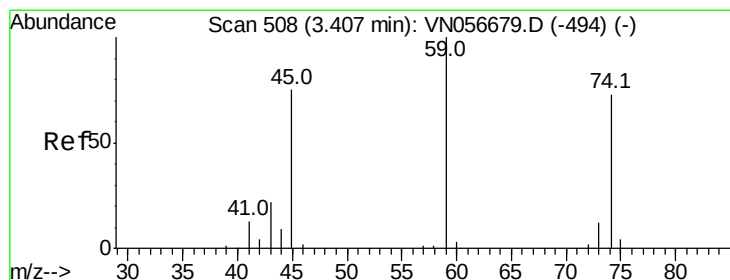
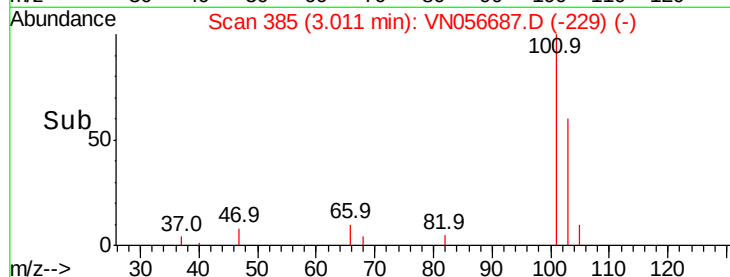
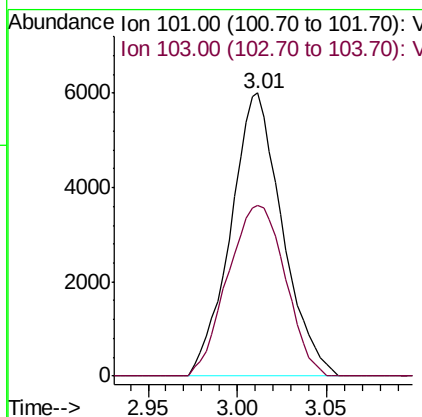
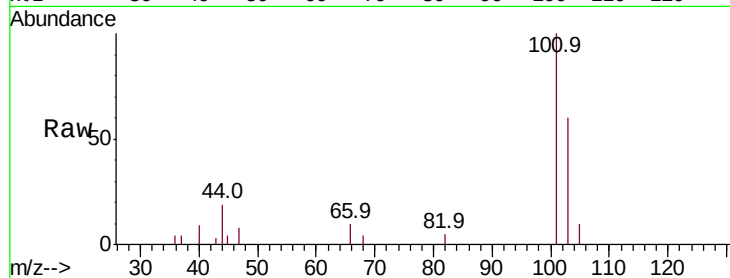
Trichlorofluoromethane
Concen: 2.373 ug/l
RT: 3.01 min Scan# 385
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Instrument :
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MDL-MDL-WATER-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
101	100		
103	60.5	52.8	79.2

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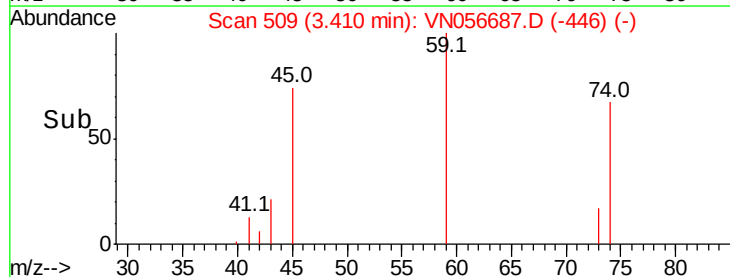
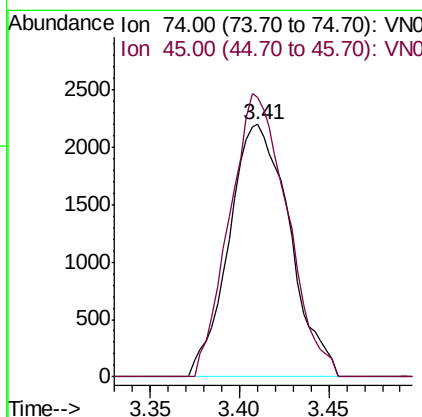
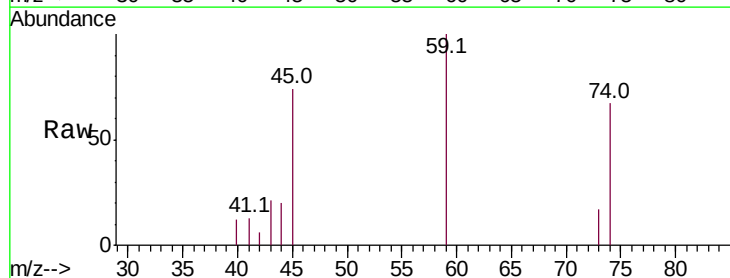
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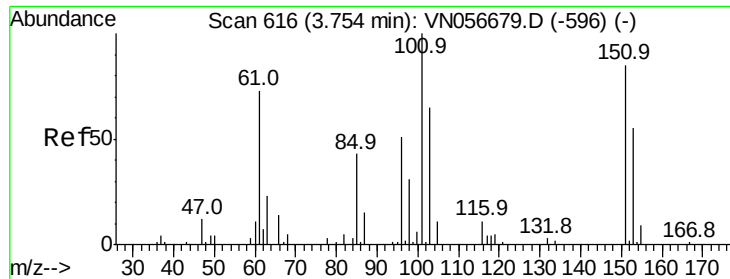


#8

Diethyl Ether
Concen: 2.499 ug/l
RT: 3.41 min Scan# 509
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Tgt Ion	Ratio	Lower	Upper
74	100		
45	107.1	19.9	179.5





#9

1,1,2-Trichlorotrifluoroethane

Concen: 2.409 ug/l

RT: 3.75 min Scan# 615

Delta R.T. -0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

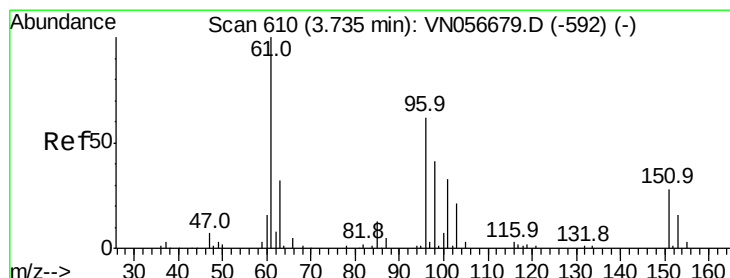
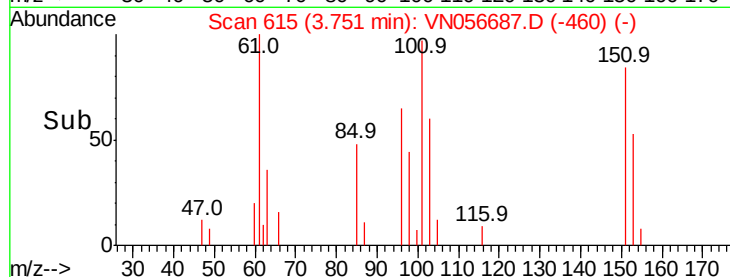
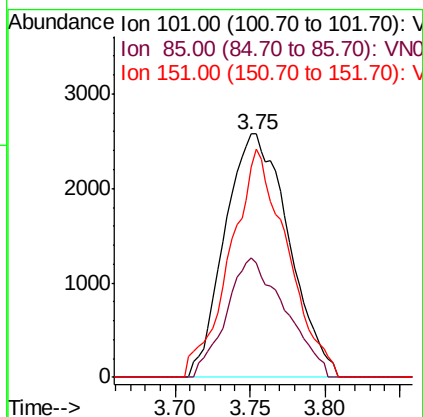
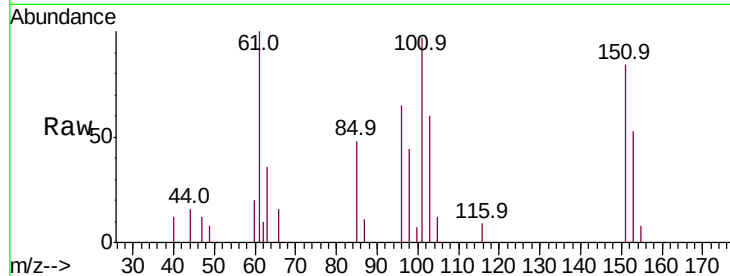
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:	101	Resp:	7649
Ion Ratio	Lower	Upper	
101	100		
85	45.3	0.0	84.2
151	84.2	0.0	167.6

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7/16/2019 9:59:38 AM



#10

1,1-Dichloroethene

Concen: 2.410 ug/l

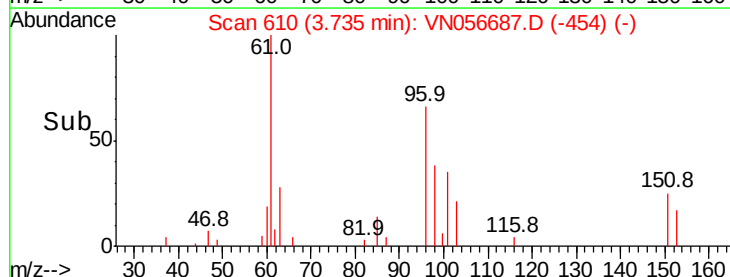
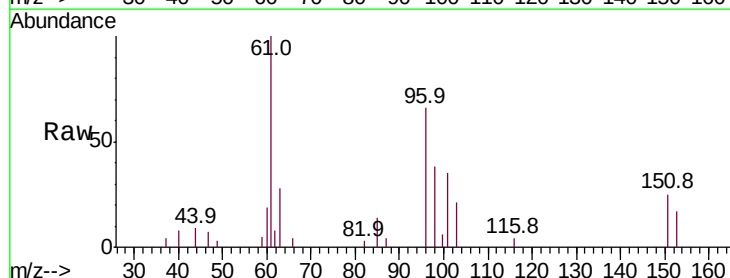
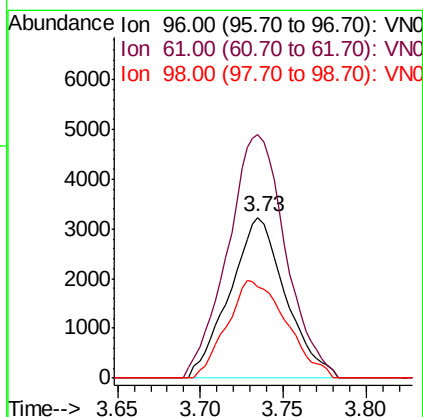
RT: 3.73 min Scan# 610

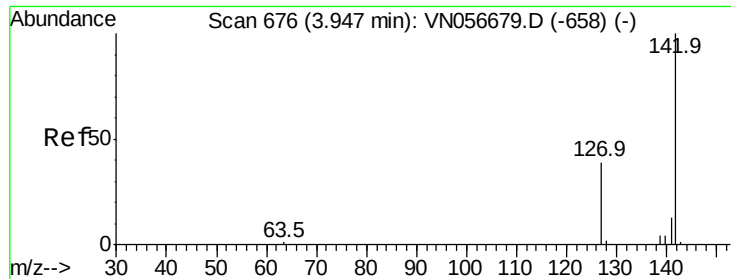
Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Tgt Ion:	96	Resp:	7549
Ion Ratio	Lower	Upper	
96	100		
61	151.7	129.0	193.4
98	57.1	52.5	78.7





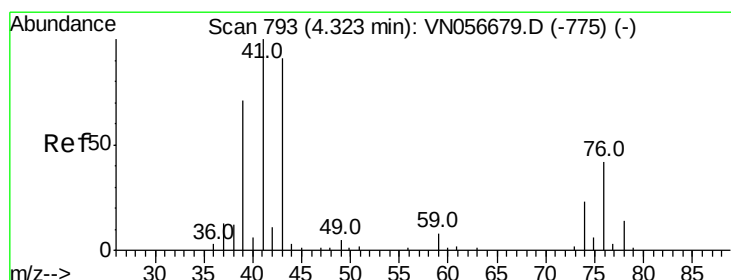
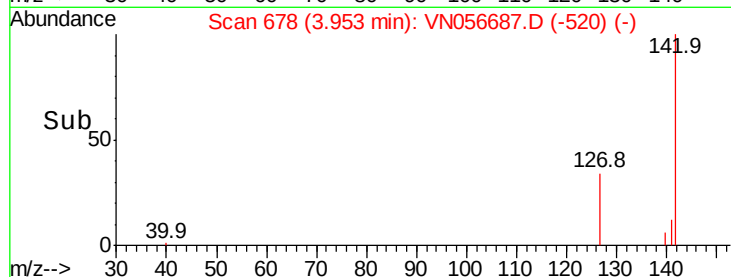
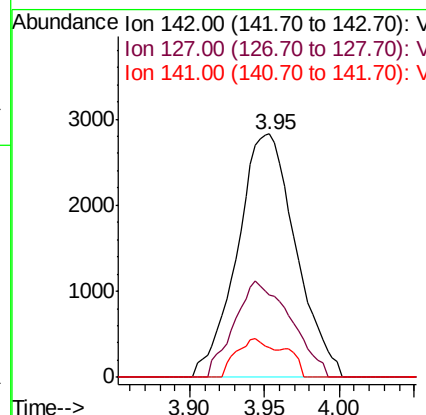
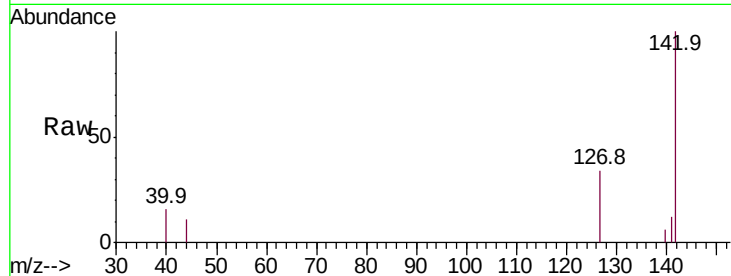
#11
Methvl Iodide
Concen: 1.847 ug/l
RT: 3.95 min Scan# 678
Delta R.T. 0.01 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
142	100		
127	34.1	19.5	58.5
141	12.0	6.8	20.3

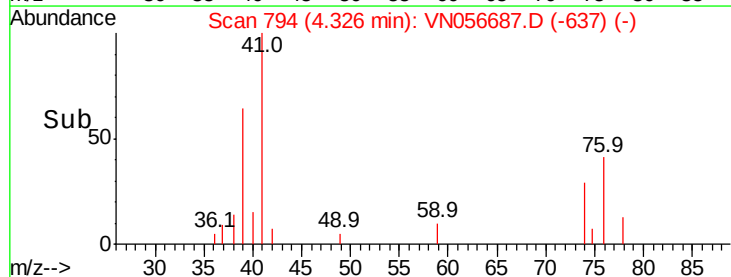
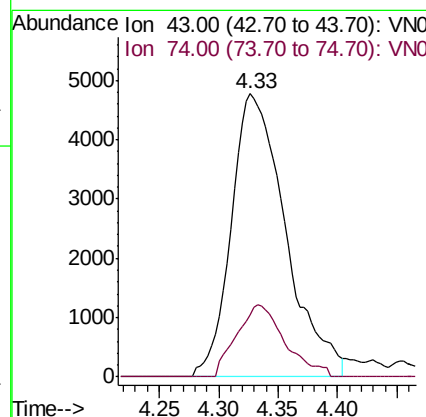
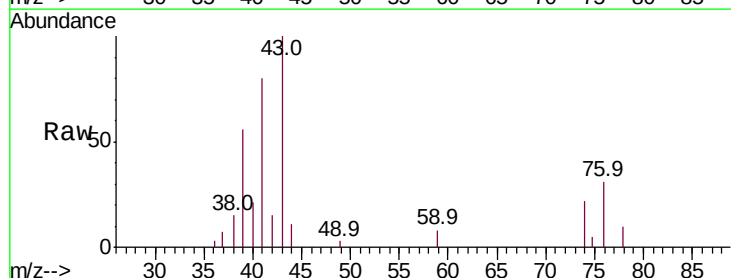
Manual Integrations
APPROVED

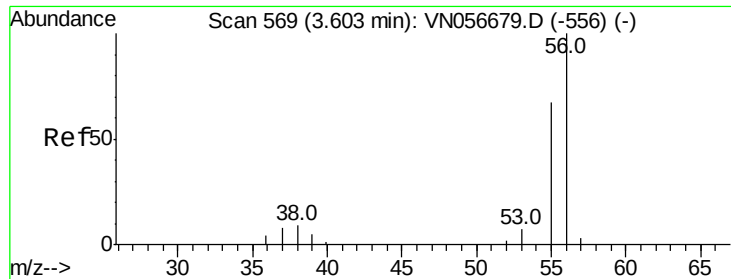
MMDadoda
7/16/2019 9:59:38 AM



#12
Methyl Acetate
Concen: 3.603 ug/l
RT: 4.33 min Scan# 794
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Tgt Ion	Ratio	Lower	Upper
43	100		
74	22.8	20.2	30.4





#13

Acrolein

Concen: 15.748 ug/l

RT: 3.61 min Scan# 570

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 56 Resp: 4655

Ion Ratio Lower Upper

56 100

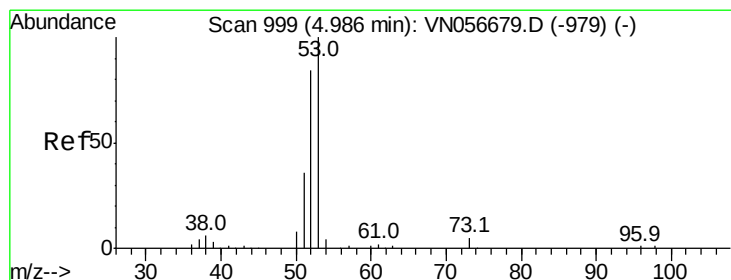
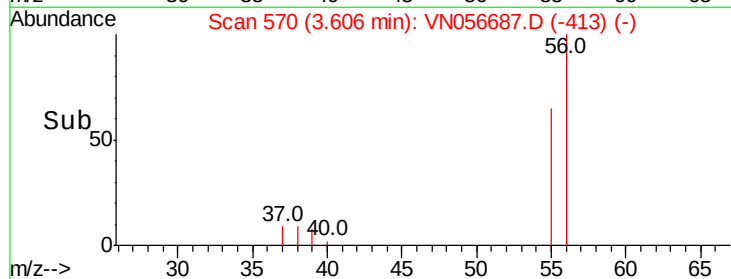
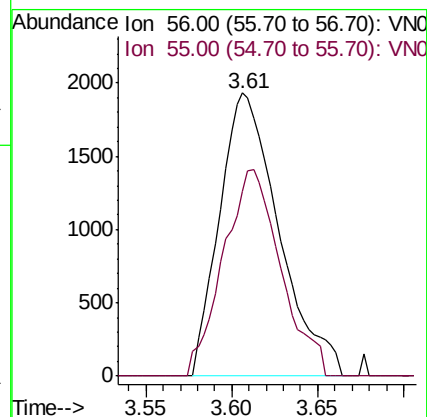
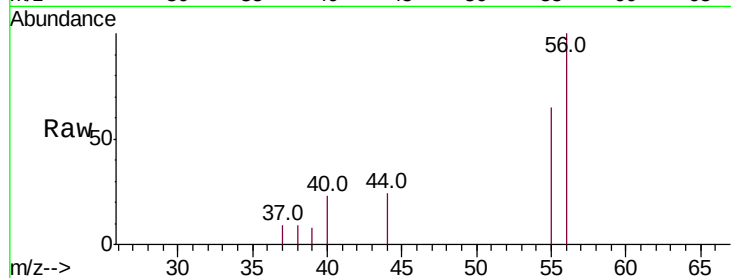
55 70.4 56.9 85.3

Manual Integrations

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#14

Acrylonitrile

Concen: 11.827 ug/l

RT: 5.00 min Scan# 1003

Delta R.T. 0.01 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

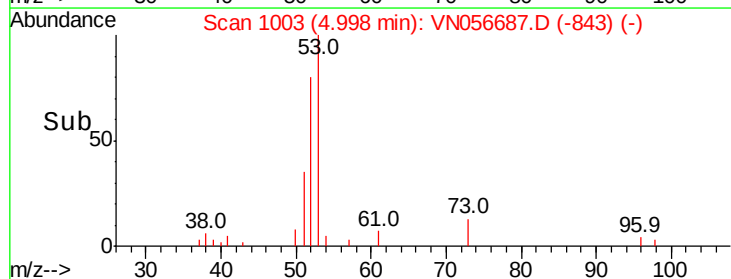
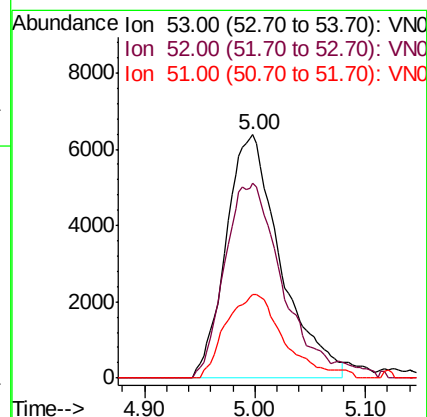
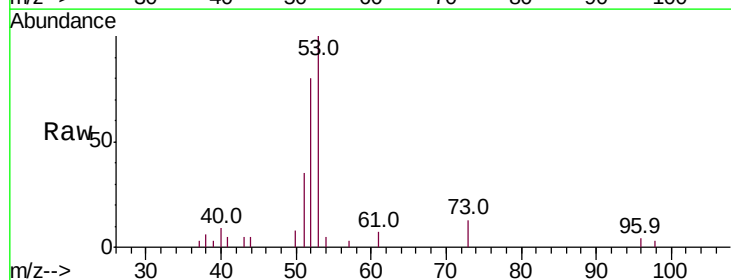
Tgt Ion: 53 Resp: 21843

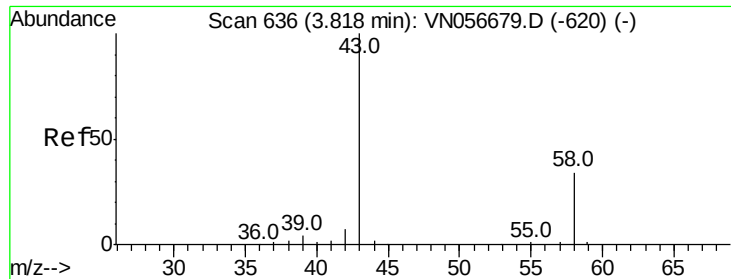
Ion Ratio Lower Upper

53 100

52 33.9 41.3 123.7#

51 35.9 17.7 53.1





#15

Acetone

Concen: 10.635 ug/l m

RT: 3.83 min Scan# 639

Delta R.T. 0.01 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Tot Ion: 58 Resp: 6780

Ion Ratio Lower Upper

58 100

43 290.6 233.9 350.9

Instrument :

MSVOA_N

ClientSampleId :

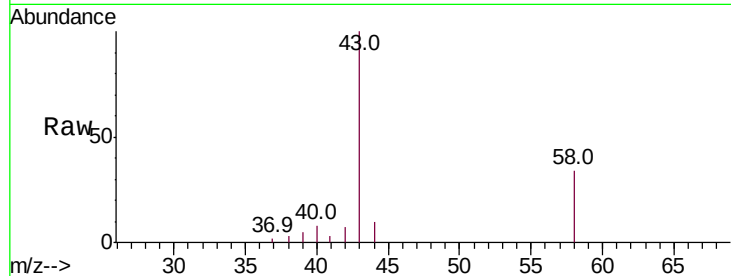
MDL-MDL-WATER-03-QT3-2019

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Abundance Ion 58.00 (57.70 to 58.70): VN0

Ion 43.00 (42.70 to 43.70): VN0

8000

6000

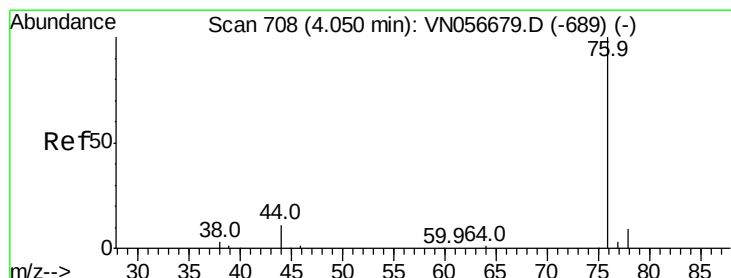
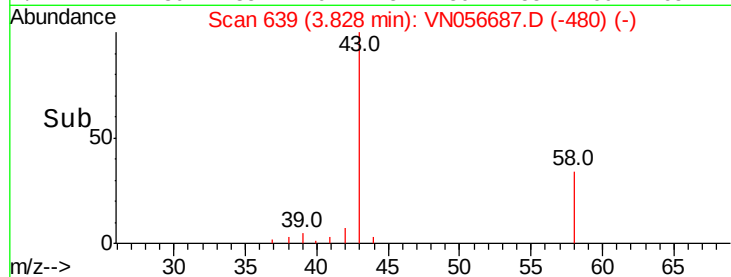
4000

2000

0

Time-->

3.70 3.80 3.90 4.00



#16

Carbon Disulfide

Concen: 2.218 ug/l

RT: 4.05 min Scan# 709

Delta R.T. 0.00 min

Lab File: VN056687.D

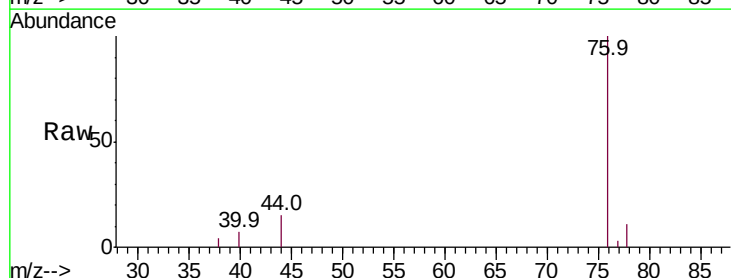
Acq: 12 Jul 2019 14:02

Tgt Ion: 76 Resp: 18325

Ion Ratio Lower Upper

76 100

78 10.7 7.4 11.0



Abundance Ion 76.00 (75.70 to 76.70): VN0

Ion 78.00 (77.70 to 78.70): VN0

8000

6000

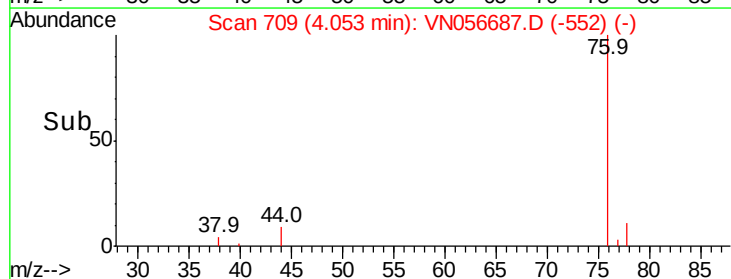
4000

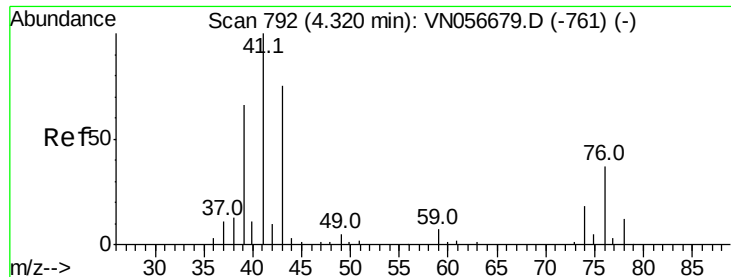
2000

0

Time-->

3.95 4.00 4.05 4.10





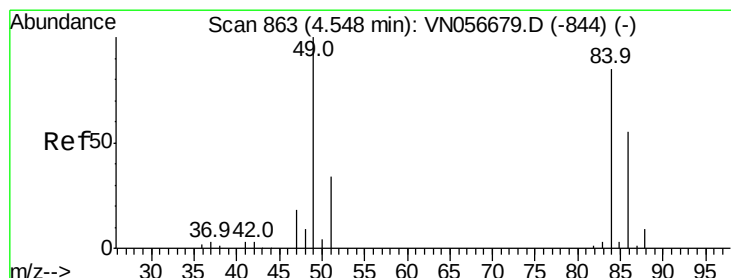
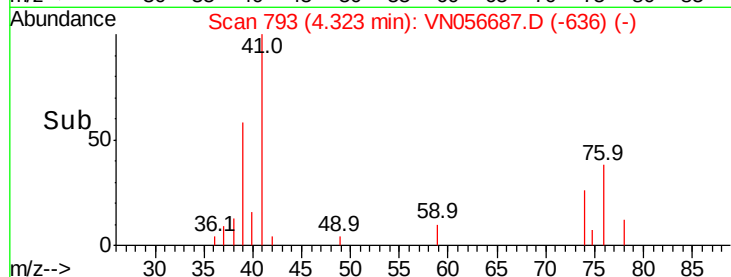
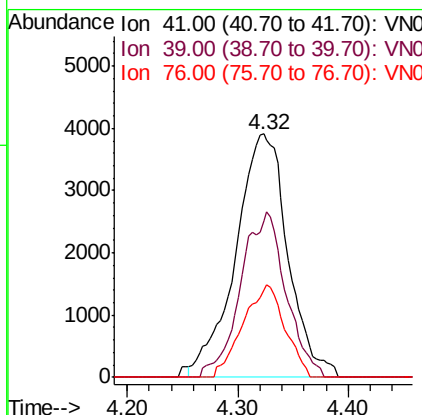
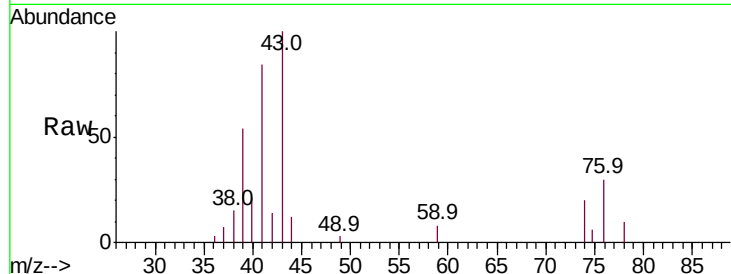
#17
Allvl chloride
Concen: 2.347 ug/l
RT: 4.32 min Scan# 793
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT3-2019

Tot Ion:	41	Resp:	12861
Ion Ratio	Lower	Upper	
41	100		
39	64.3	32.8	98.4
76	35.9	18.5	55.5

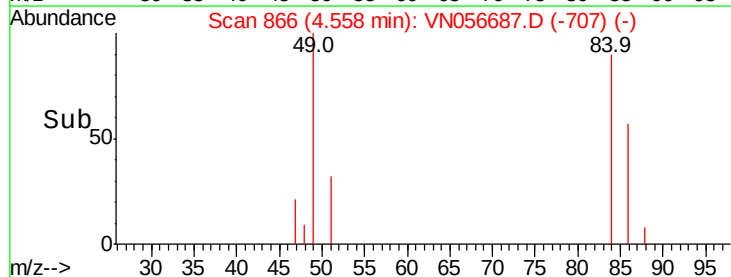
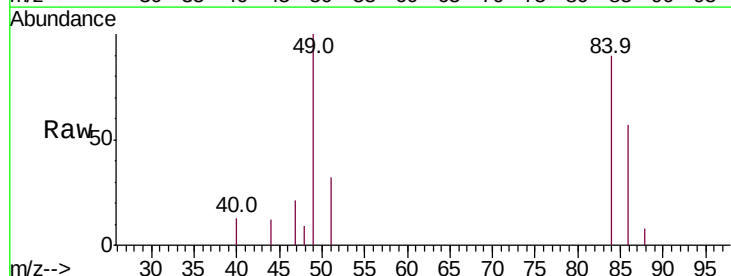
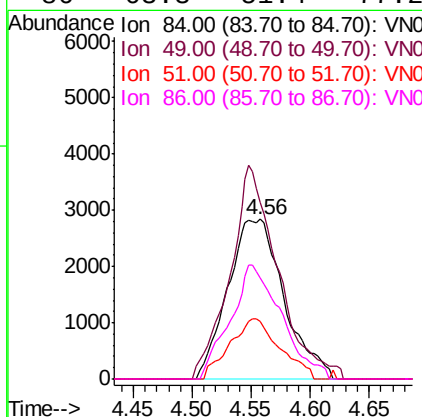
Manual Integrations
APPROVED

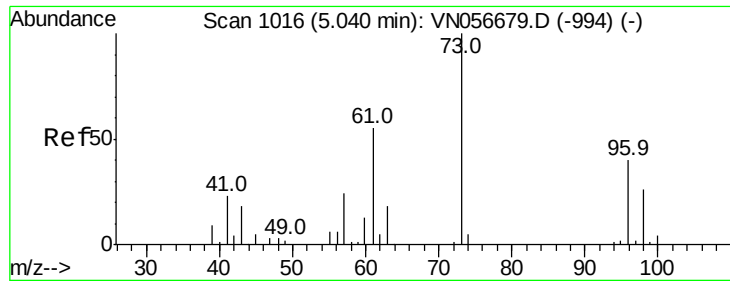
MMDadoda
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#18
Methylene Chloride
Concen: 2.570 ug/l m
RT: 4.56 min Scan# 866
Delta R.T. 0.01 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Tgt Ion:	84	Resp:	9449
Ion Ratio	Lower	Upper	
84	100		
49	110.7	93.9	140.9
51	35.8	31.7	47.5
86	63.3	51.4	77.2





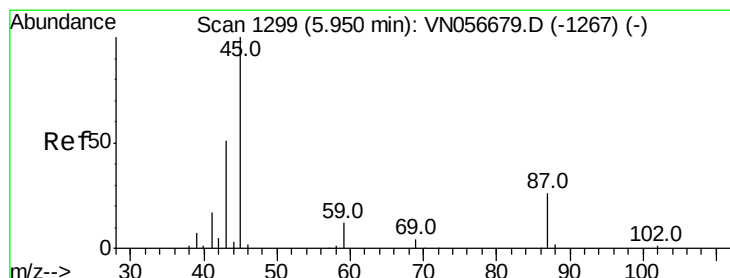
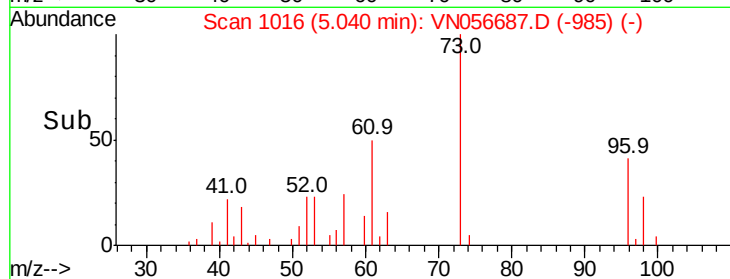
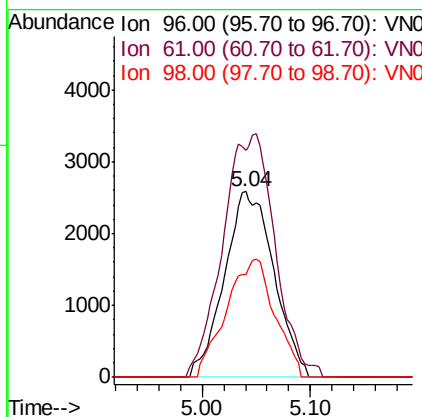
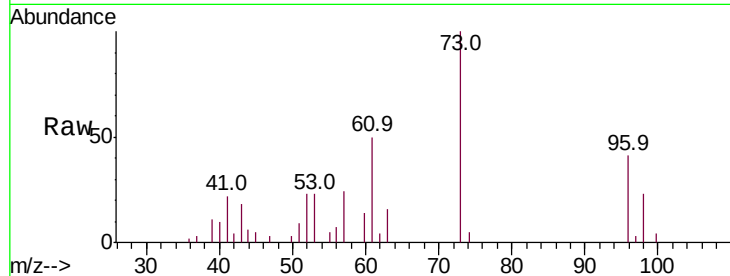
#19
trans-1,2-Dichloroethene
Concen: 2.436 ug/l m
RT: 5.04 min Scan# 1016
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
96	100		
61	122.5	109.6	164.4
98	55.8	51.4	77.2

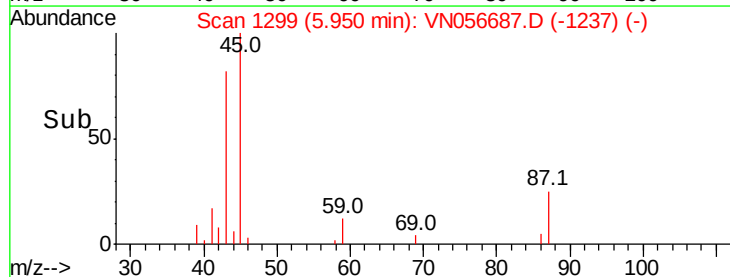
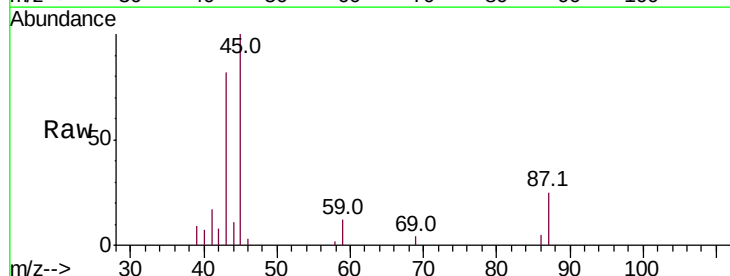
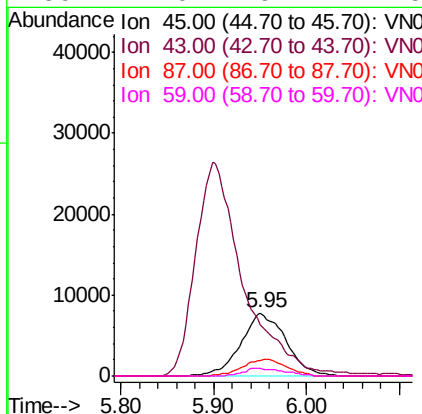
Manual Integrations
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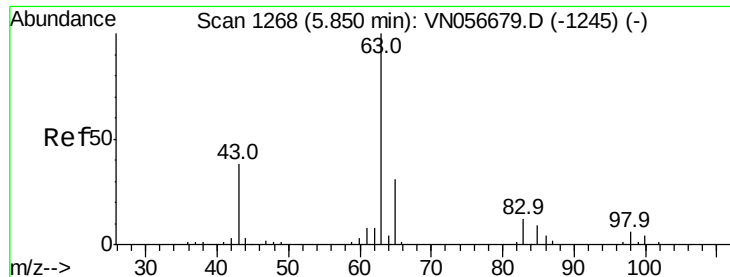
MMDadoda
7/16/2019 9:59:38 AM



#20
Diisopropyl ether
Concen: 2.411 ug/l
RT: 5.95 min Scan# 1299
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Tgt Ion	Ratio	Lower	Upper
45	100		
43	76.1	50.3	75.5#
87	25.5	21.4	32.0
59	12.0	9.7	14.5





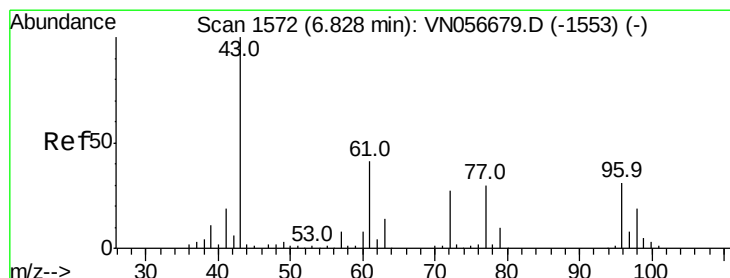
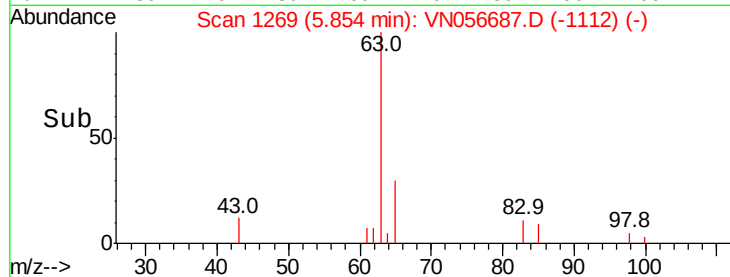
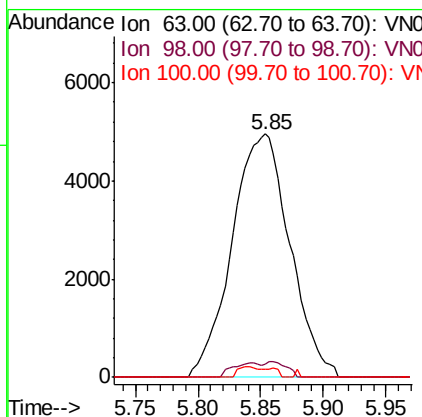
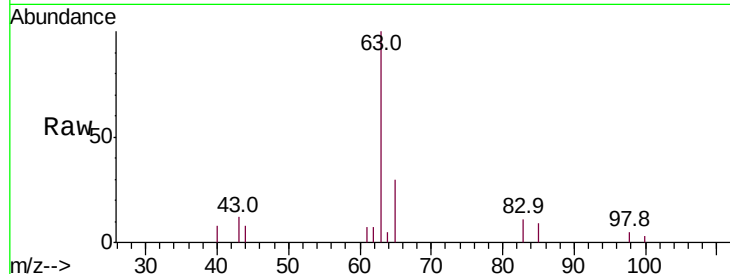
#21
 1,1-Dichloroethane
 Concen: 2.543 ug/l
 RT: 5.85 min Scan# 1269
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT3-2019

Tot Ion	63	Resp	15860
Ion	Ratio	Lower	Upper
63	100		
98	5.4	3.3	9.8
100	3.1	2.1	6.3

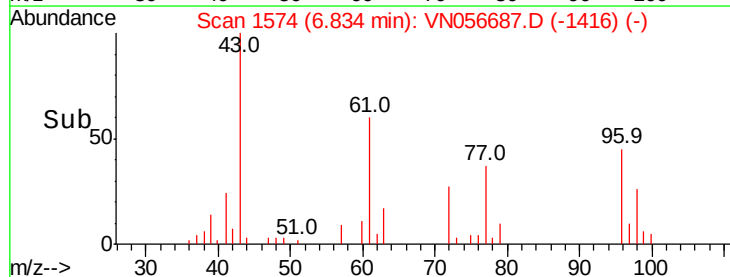
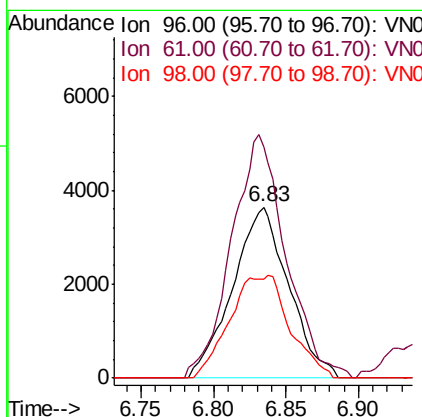
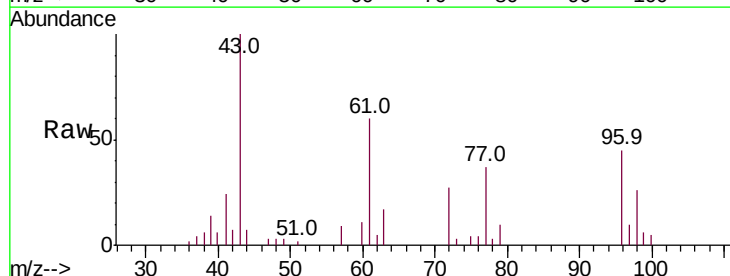
Manual Integrations
 APPROVED

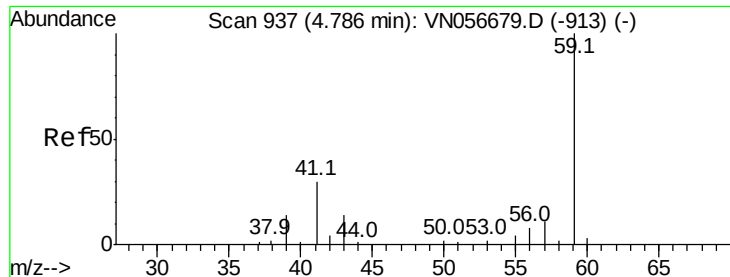
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 7/16/2019 9:59:38 AM



#22
 cis-1,2-Dichloroethene
 Concen: 2.494 ug/l
 RT: 6.83 min Scan# 1574
 Delta R.T. 0.01 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Tgt Ion	96	Resp	9777
Ion	Ratio	Lower	Upper
96	100		
61	138.9	112.1	168.1
98	33.4	52.2	78.2#





#23

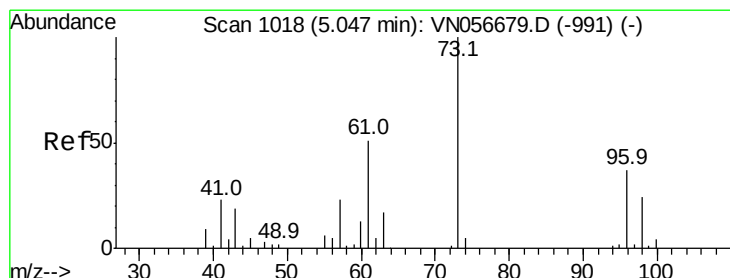
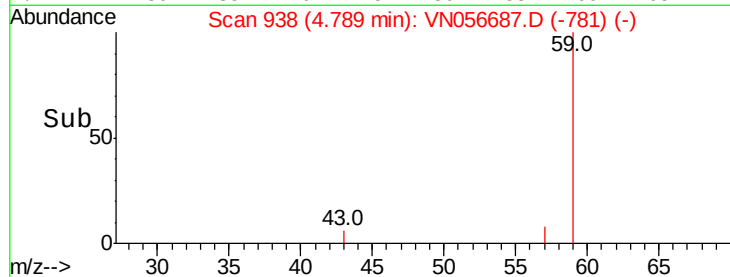
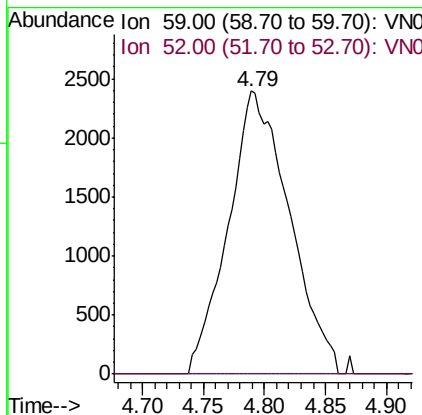
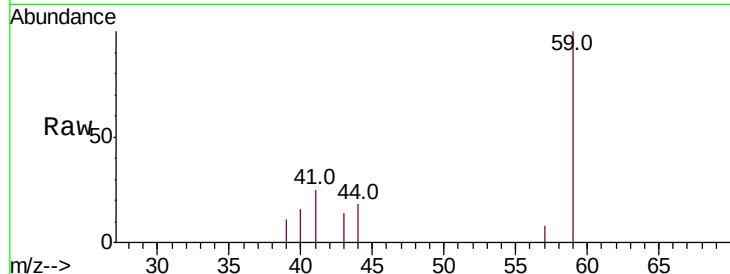
tert-Butyl Alcohol
 Concen: 12.947 ug/l
 RT: 4.79 min Scan# 938
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT3-2019

Tot Ion: 59 Resp: 8341
 Ion Ratio Lower Upper
 59 100
 52 88.6 0.1 0.1#

Manual Integrations
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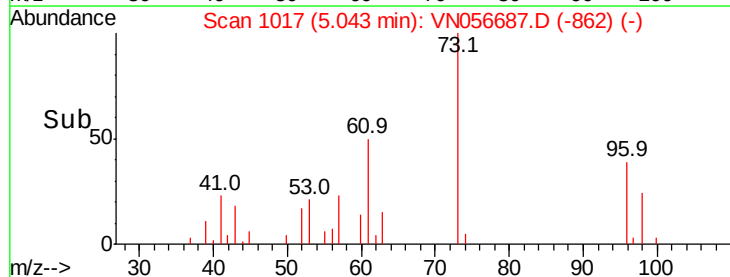
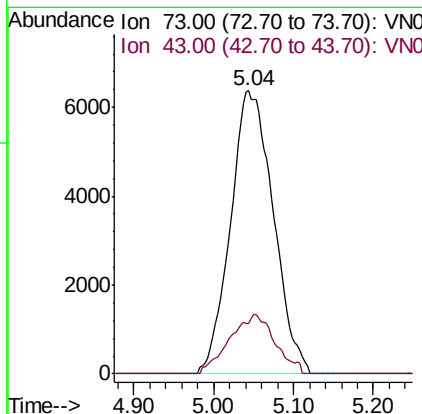
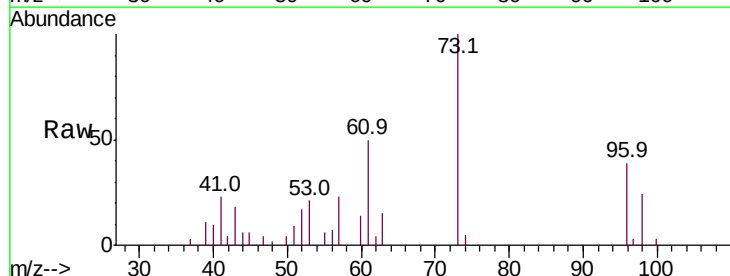
MMDadoda
 7/16/2019 9:59:38 AM

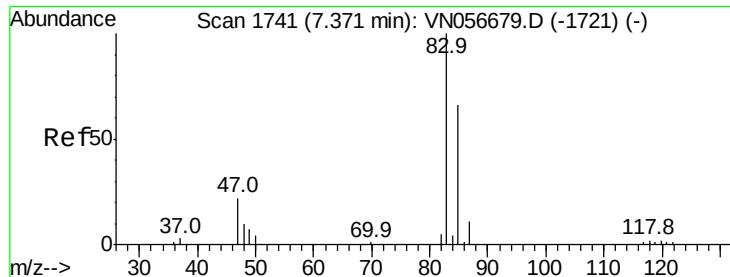


#24

Methyl tert-Butyl Ether
 Concen: 2.377 ug/l m
 RT: 5.04 min Scan# 1017
 Delta R.T. -0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Tgt Ion: 73 Resp: 23743
 Ion Ratio Lower Upper
 73 100
 43 9.3 15.1 22.7#





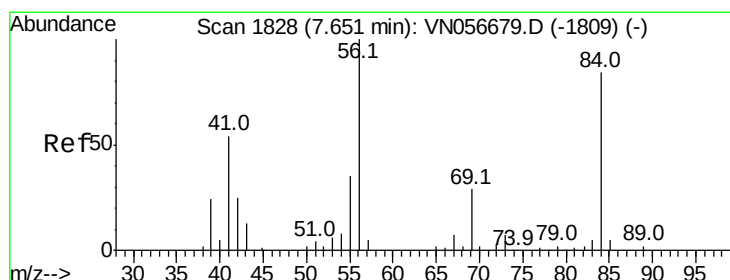
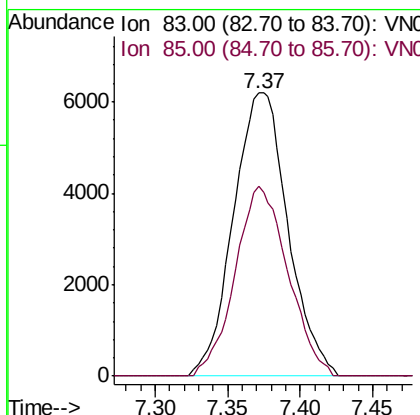
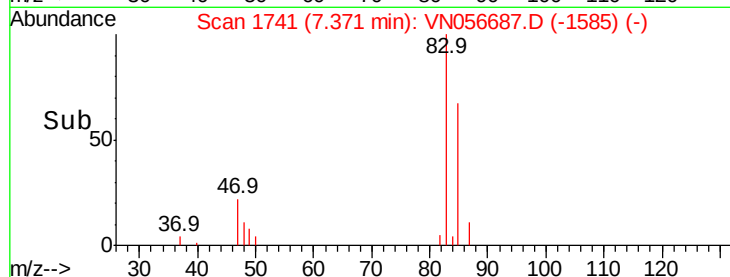
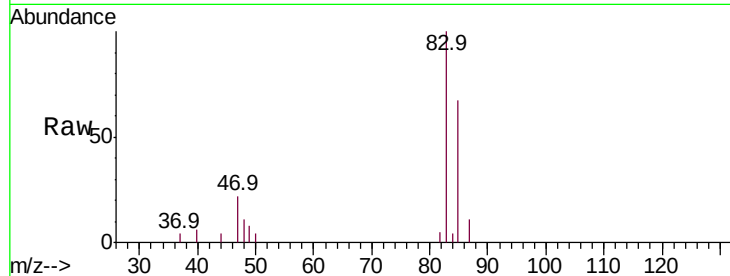
#25
Chloroform
Concen: 2.666 ug/l
RT: 7.37 min Scan# 1741
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT3-2019

Tot Ion: 83 Resp: 16203
Ion Ratio Lower Upper
83 100
85 67.2 52.6 79.0

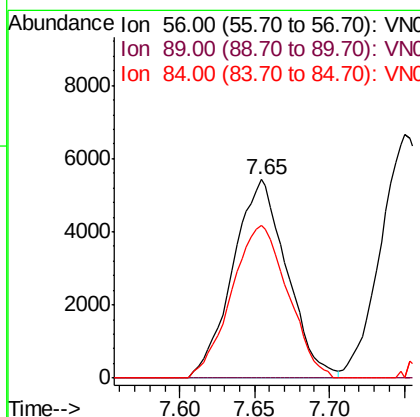
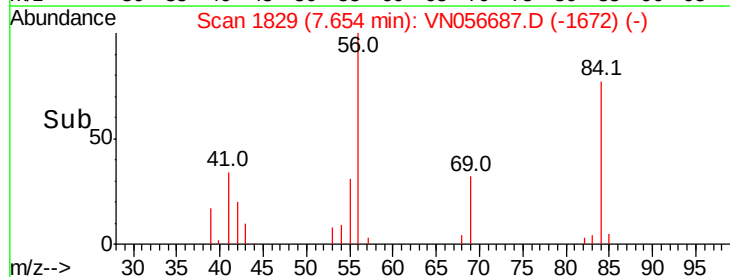
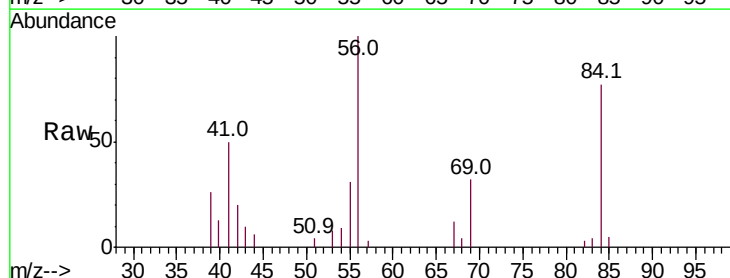
Manual Integrations
APPROVED

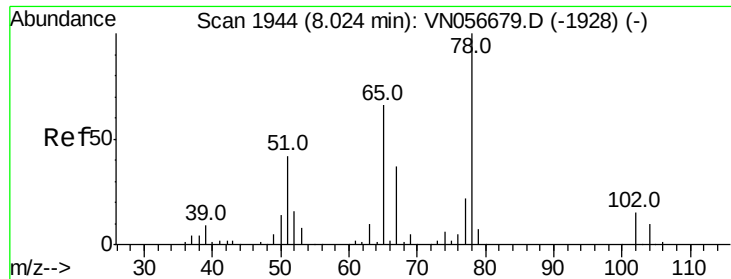
MMDadoda
7/16/2019 9:59:38 AM



#26
Cyclohexane
Concen: 2.356 ug/l
RT: 7.65 min Scan# 1829
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Tgt Ion: 56 Resp: 13659
Ion Ratio Lower Upper
56 100
89 0.0 1.4 2.2#
84 80.0 68.2 102.4





#27

1,2-Dichloroethane-d4

Concen: 30.706 ug/l

RT: 8.03 min Scan# 1945

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 65 Resp: 110453

Ion Ratio Lower Upper

65 100

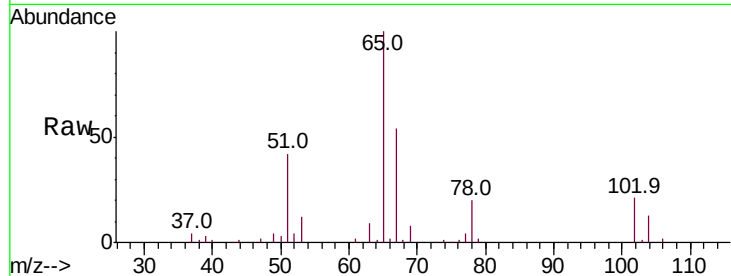
67 54.3 43.4 65.0

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7/16/2019 9:59:38 AM



Abundance Ion 65.00 (64.70 to 65.70): VN056687.D (-1928) (-)

Ion 67.00 (66.70 to 67.70): VN056687.D (-1928) (-)

8.03

50000

40000

30000

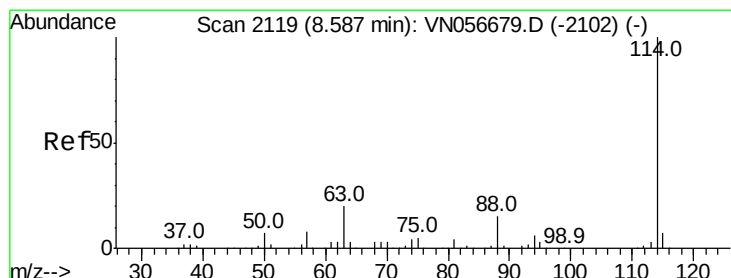
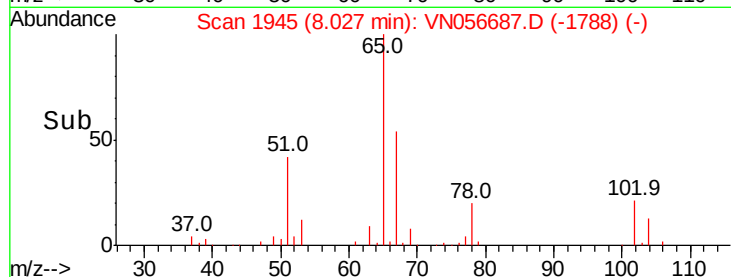
20000

10000

0

7.95 8.00 8.05 8.10

Time-->



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 8.58 min Scan# 2118

Delta R.T. -0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

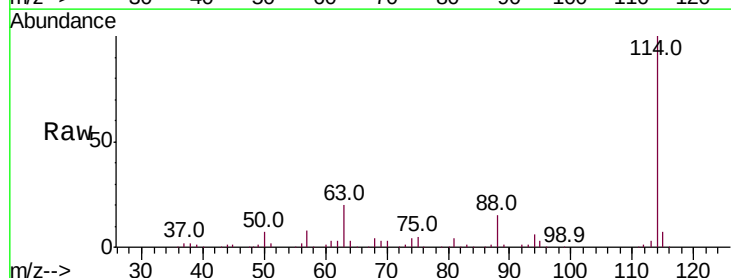
Tgt Ion: 114 Resp: 287305

Ion Ratio Lower Upper

114 100

63 20.0 16.2 24.2

88 15.1 12.3 18.5



Abundance Ion 114.00 (113.70 to 114.70): VN056687.D (-1963) (-)

Ion 63.00 (62.70 to 63.70): VN056687.D (-1963) (-)

Ion 88.00 (87.70 to 88.70): VN056687.D (-1963) (-)

8.58

150000

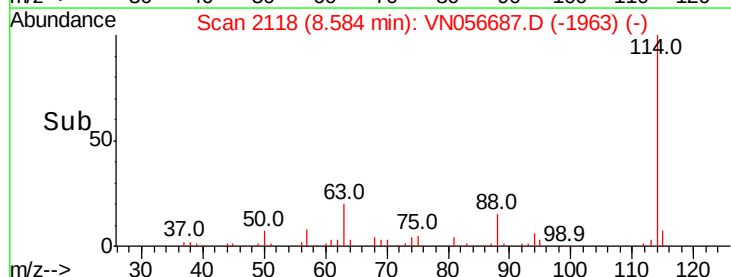
100000

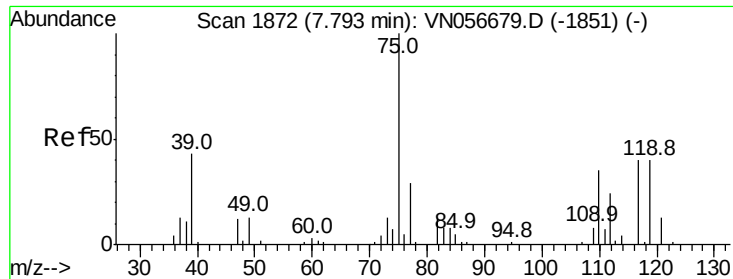
50000

0

8.50 8.60 8.70

Time-->





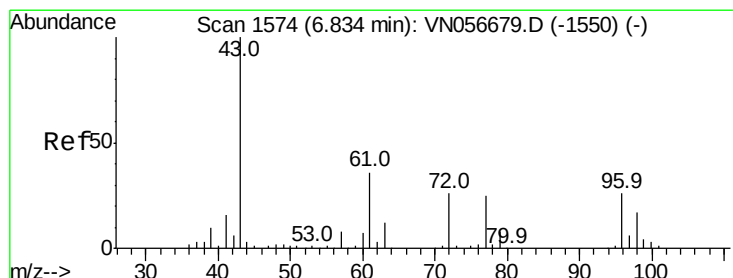
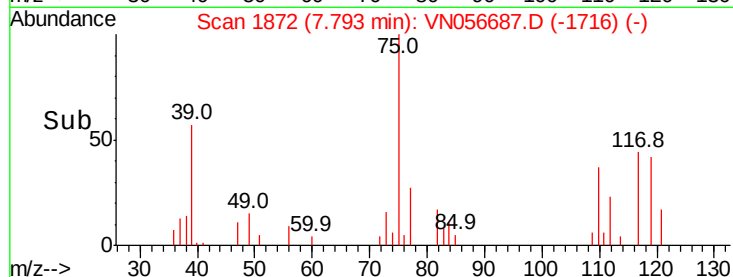
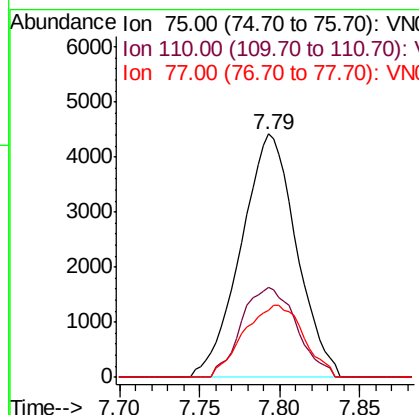
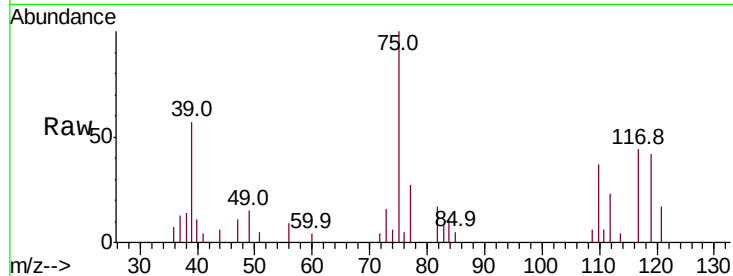
#29
 1,1-Dichloropropene
 Concen: 2.306 ug/l
 RT: 7.79 min Scan# 1872
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT3-2019

Tot Ion	Ratio	Resp	Lower	Upper
75	100			
110	36.8	0.0	72.4	
77	31.9	0.0	62.2	

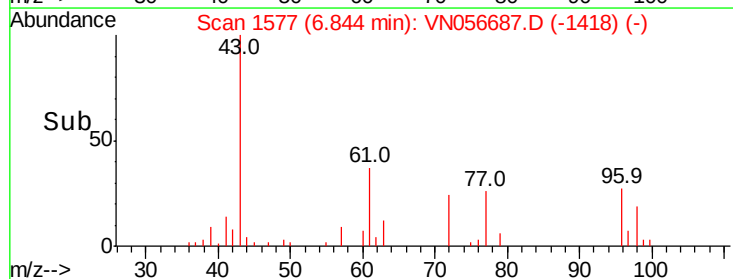
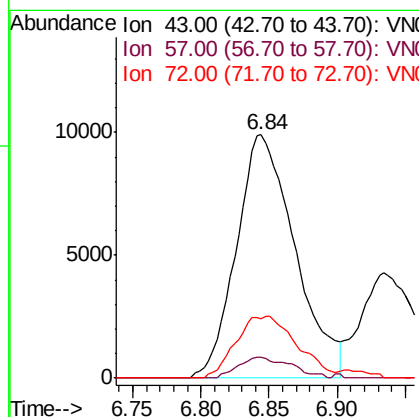
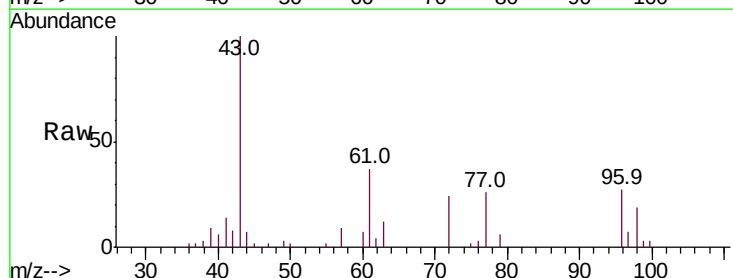
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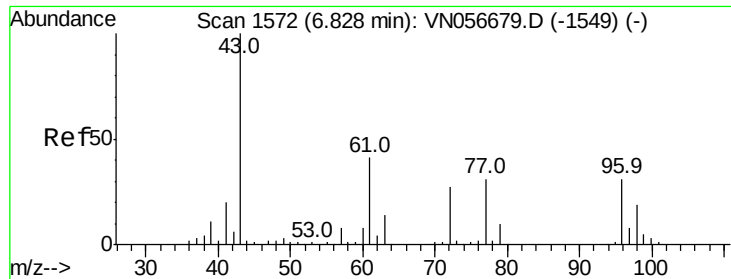
MMDadoda
 7/16/2019 9:59:38 AM



#30
 2-Butanone
 Concen: 11.176 ug/l
 RT: 6.84 min Scan# 1577
 Delta R.T. 0.01 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Tgt Ion	Ratio	Resp	Lower	Upper
43	100			
57	4.9	6.6	10.0#	
72	11.7	21.3	31.9#	





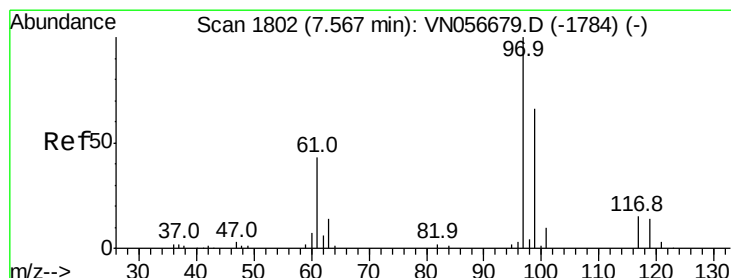
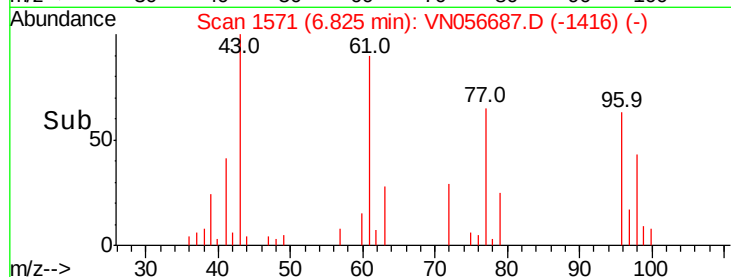
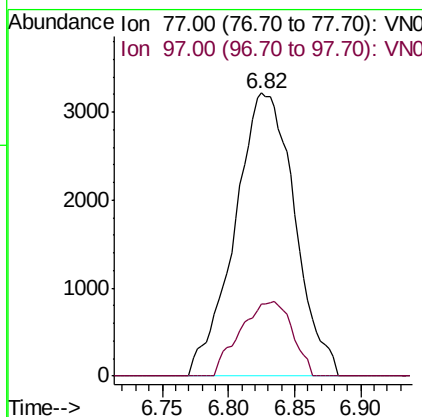
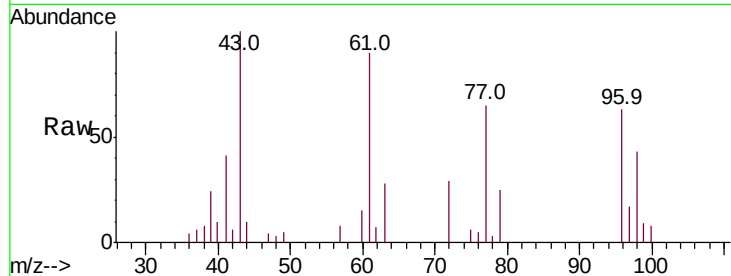
#31
 2,2-Dichloropropane
 Concen: 2.295 ug/l
 RT: 6.82 min Scan# 1571
 Delta R.T. -0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT3-2019

Tot Ion: 77 Resp: 10144
 Ion Ratio Lower Upper
 77 100
 97 22.8 19.7 29.5

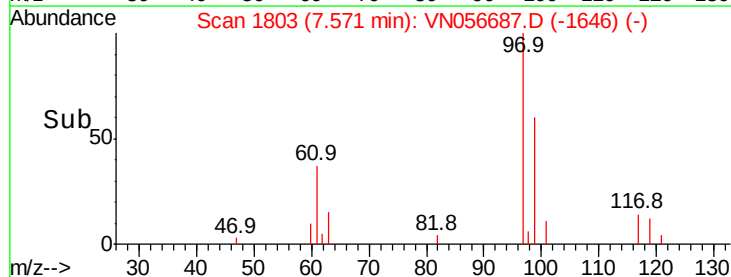
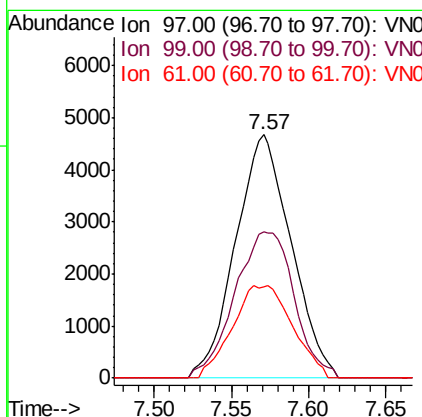
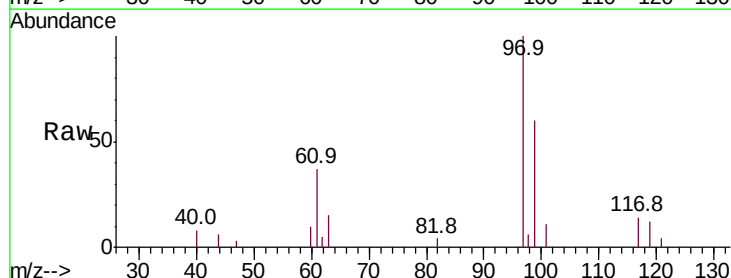
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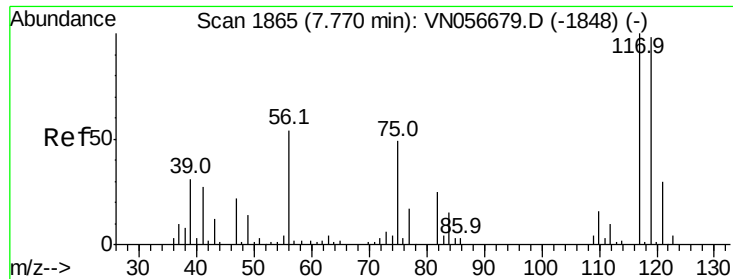
MMDadoda
 7/16/2019 9:59:38 AM



#32
 1,1,1-Trichloroethane
 Concen: 2.397 ug/l
 RT: 7.57 min Scan# 1803
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Tgt Ion: 97 Resp: 11668
 Ion Ratio Lower Upper
 97 100
 99 64.1 52.0 78.0
 61 19.4 34.4 51.6#





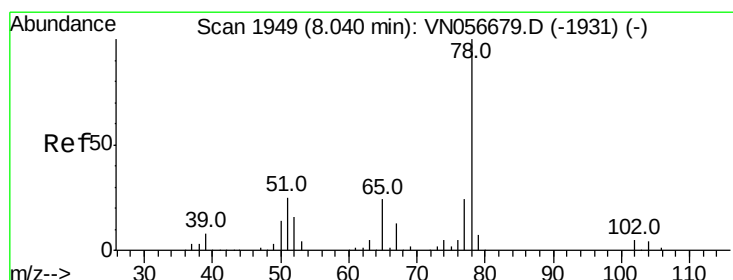
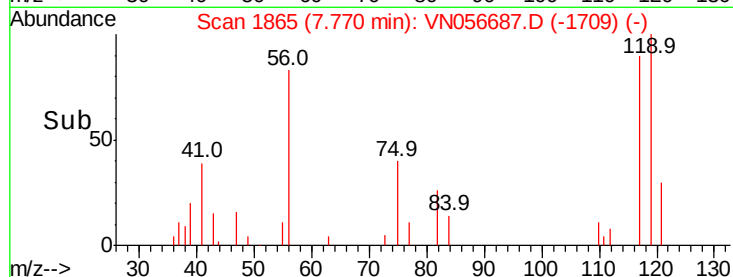
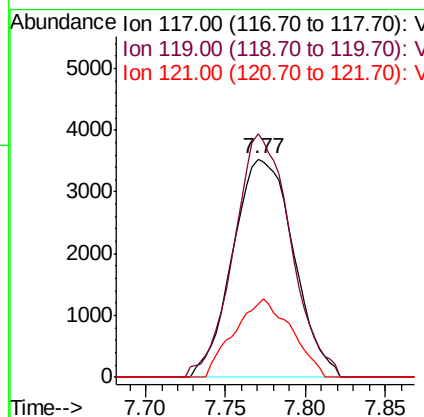
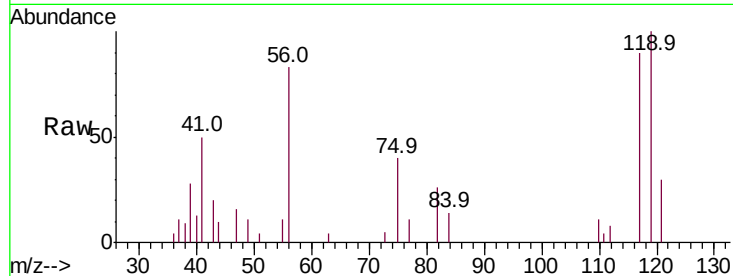
#33
Carbon Tetrachloride
Concen: 2.197 ug/l
RT: 7.77 min Scan# 1865
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT3-2019

Tot Ion:117 Resp: 9203
Ion Ratio Lower Upper
117 100
119 111.5 78.7 118.1
121 33.5 24.0 36.0

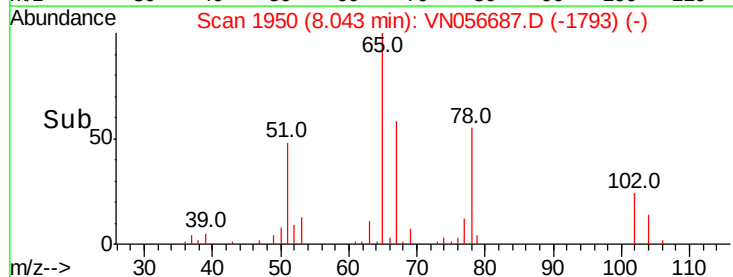
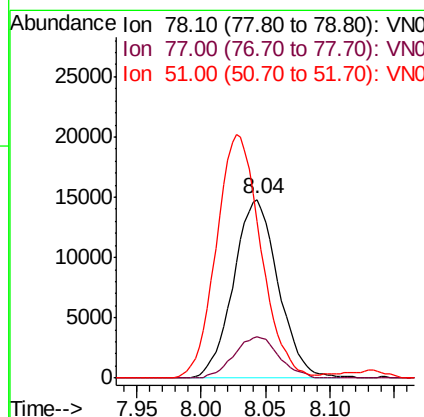
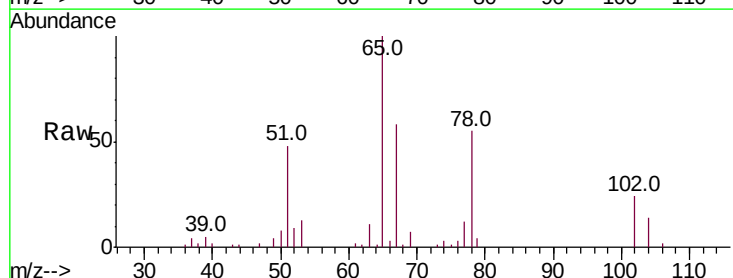
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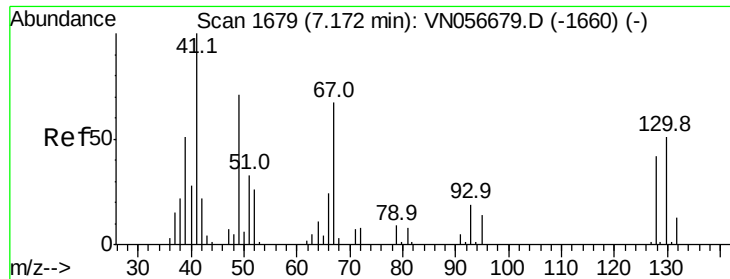
MMDadoda
7/16/2019 9:59:38 AM



#34
Benzene
Concen: 2.550 ug/l
RT: 8.04 min Scan# 1950
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Tgt Ion: 78 Resp: 35776
Ion Ratio Lower Upper
78 100
77 22.9 19.0 28.4
51 85.2 19.7 29.5#





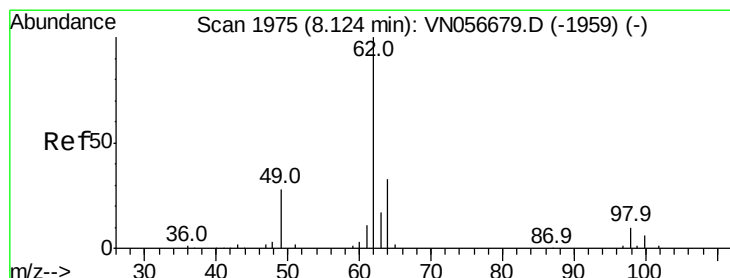
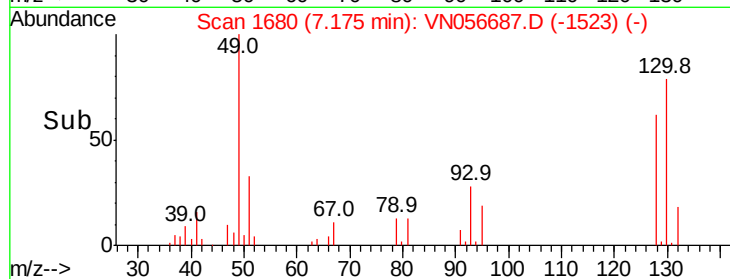
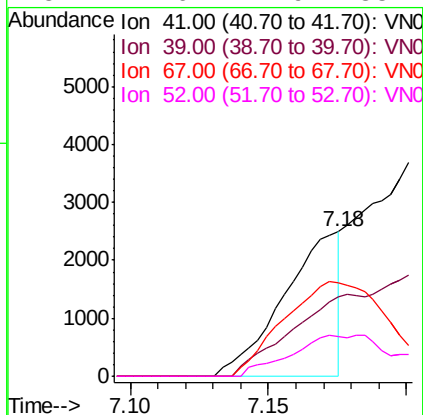
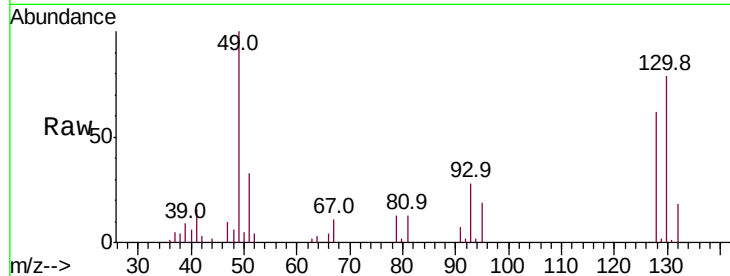
#35
Methacrylonitrile
Concen: 1.744 ug/l m
RT: 7.18 min Scan# 1680
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT3-2019

Tot Ion: 41 Resp: 3523
Ion Ratio Lower Upper
41 100
39 55.0 25.4 76.2
67 64.7 33.6 100.8
52 27.6 12.9 38.7

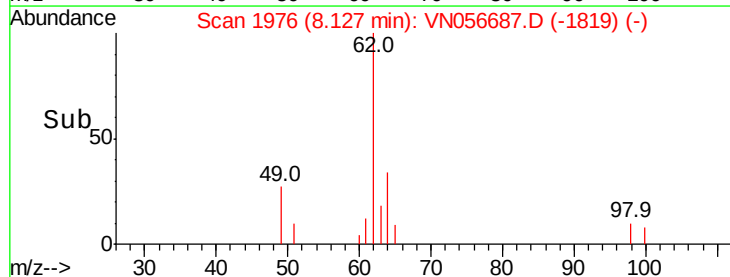
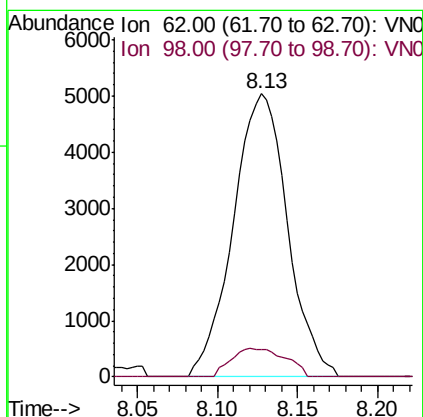
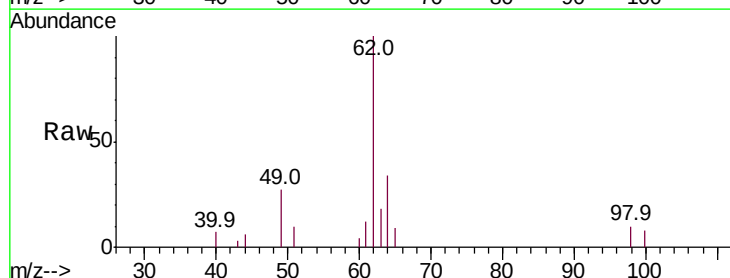
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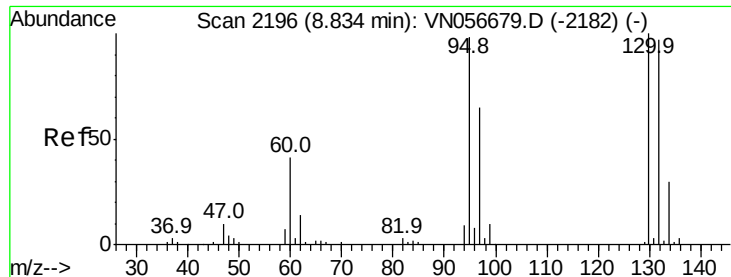
MMDadoda
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#36
1,2-Dichloroethane
Concen: 2.606 ug/l
RT: 8.13 min Scan# 1976
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Tgt Ion: 62 Resp: 11746
Ion Ratio Lower Upper
62 100
98 4.9 7.7 11.5#





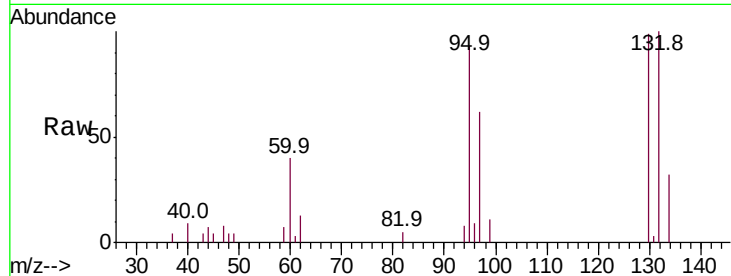
#37
 Trichloroethene
 Concen: 2.413 ug/l
 RT: 8.84 min Scan# 2197
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT3-2019

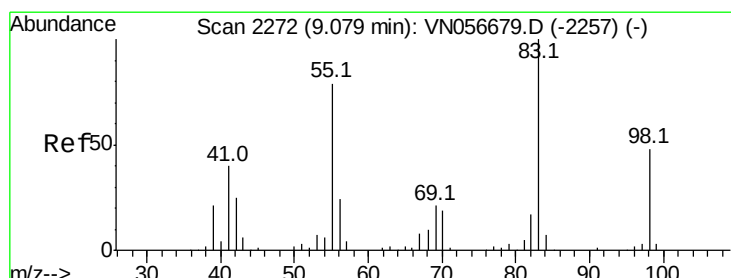
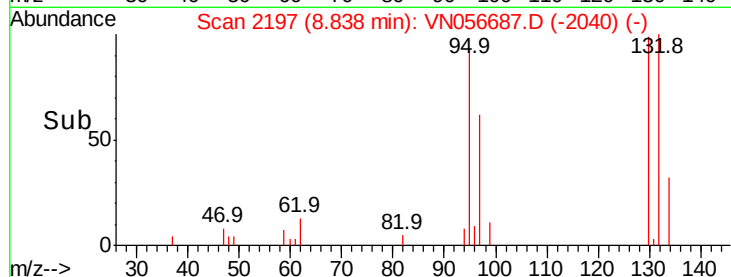
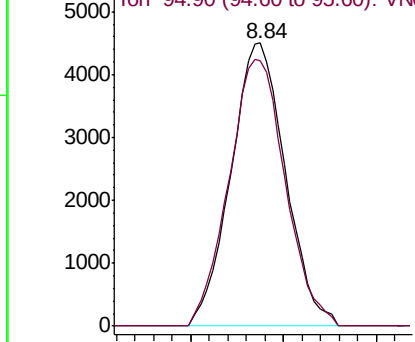
Tot Ion:130 Resp: 9196
 Ion Ratio Lower Upper
 130 100
 95 93.9 78.4 117.6

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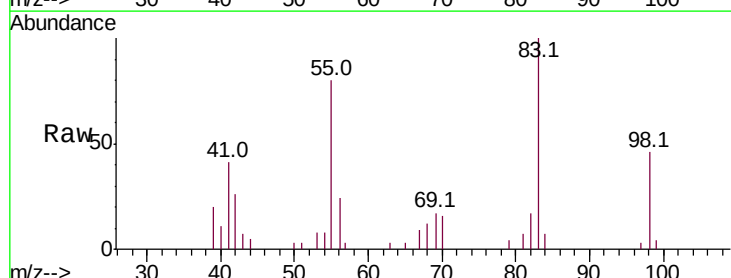


Abundance Ion 129.90 (129.60 to 130.60): V
 Ion 94.90 (94.60 to 95.60): VN

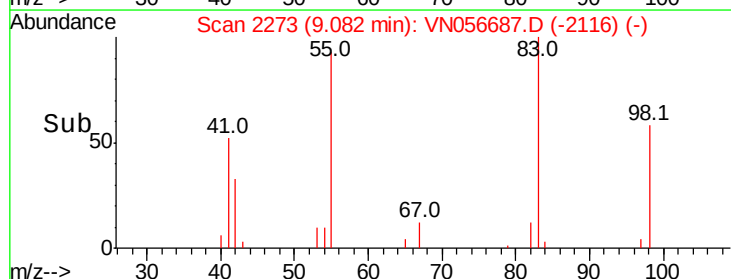
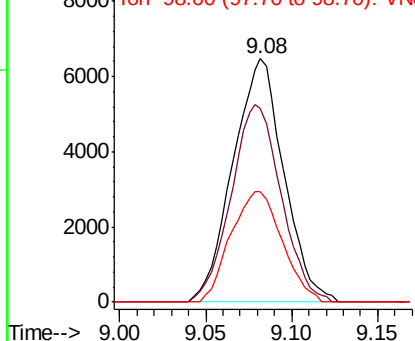


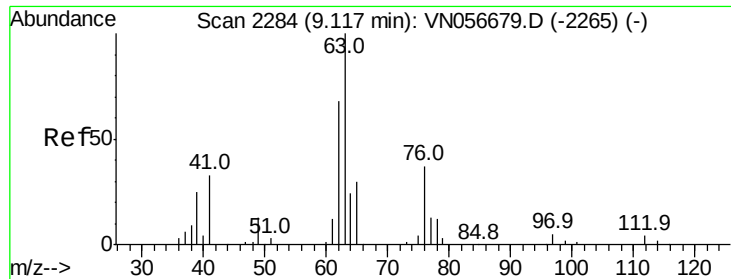
#38
 Methylcyclohexane
 Concen: 2.308 ug/l
 RT: 9.08 min Scan# 2273
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Tgt Ion: 83 Resp: 13316
 Ion Ratio Lower Upper
 83 100
 55 79.6 38.4 115.2
 98 45.7 23.3 69.9



Abundance Ion 83.00 (82.70 to 83.70): VN
 Ion 55.00 (54.70 to 55.70): VN
 Ion 98.00 (97.70 to 98.70): VN





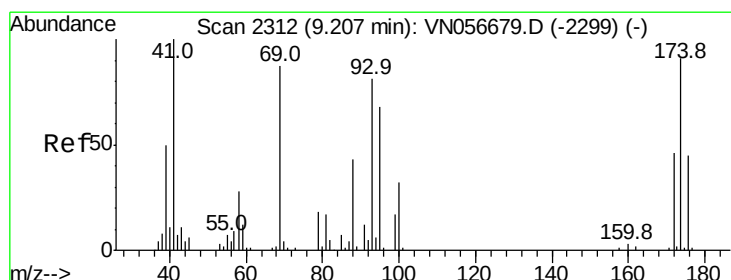
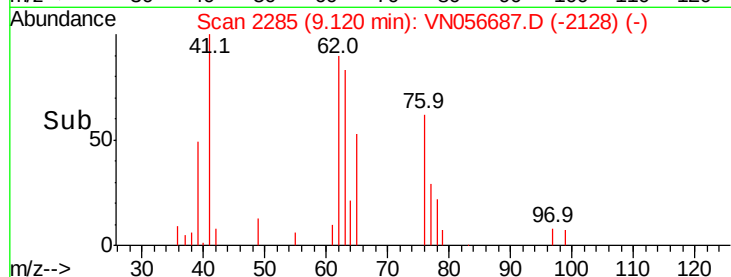
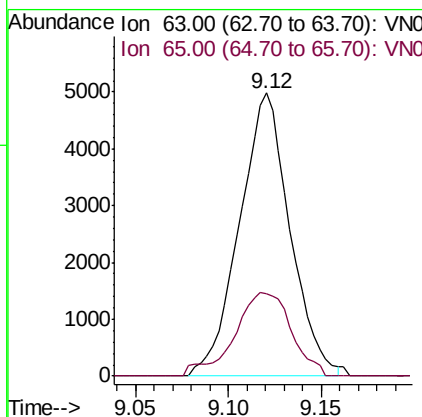
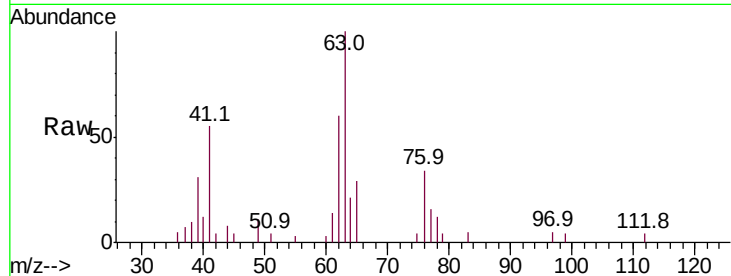
#39
 1,2-Dichloropropane
 Concen: 2.512 ug/l
 RT: 9.12 min Scan# 2285
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT3-2019

Tot Ion: 63 Resp: 9461
 Ion Ratio Lower Upper
 63 100
 65 29.1 24.6 36.8

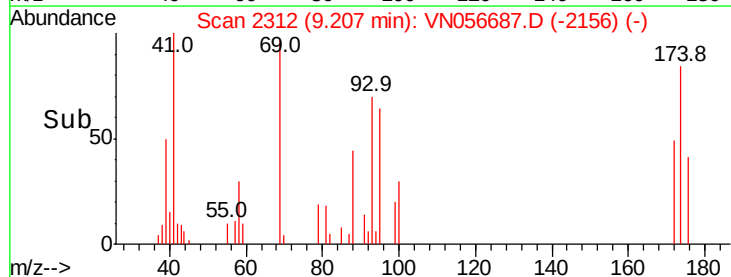
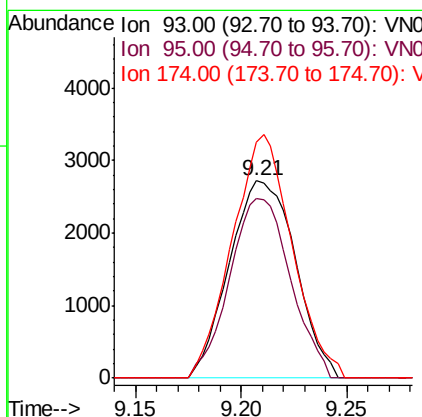
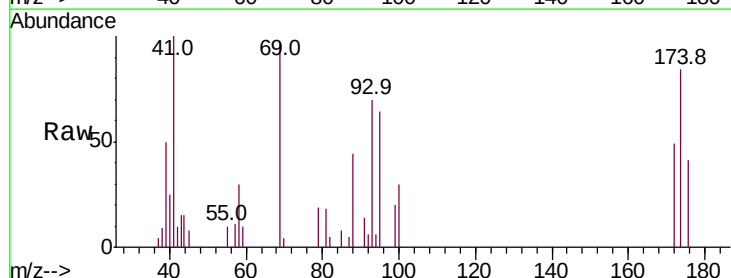
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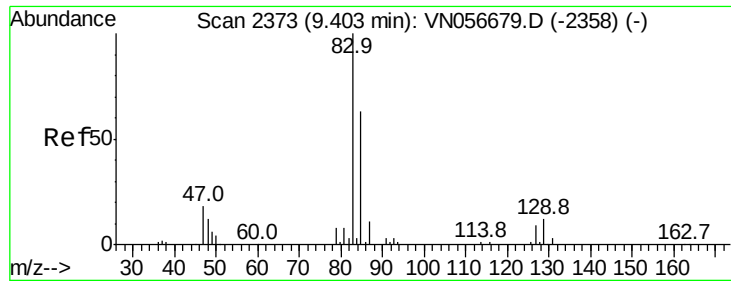
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#40
 Dibromomethane
 Concen: 2.465 ug/l
 RT: 9.21 min Scan# 2312
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Tgt Ion: 93 Resp: 5914
 Ion Ratio Lower Upper
 93 100
 95 83.9 0.0 167.0
 174 112.2 0.0 224.2





#41

Bromodichloromethane

Concen: 2.272 ug/l

RT: 9.40 min Scan# 2373

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

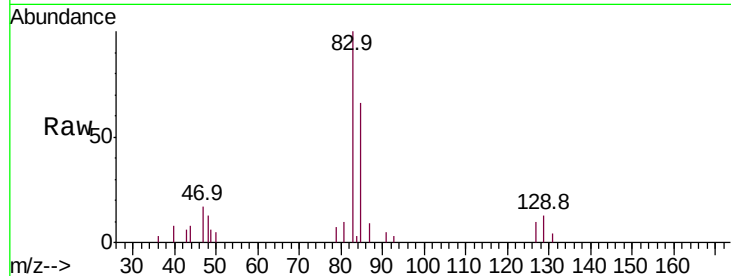
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

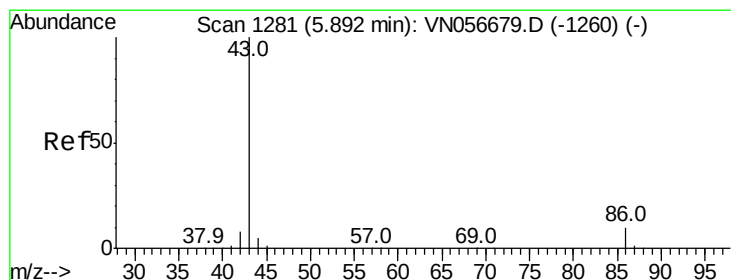
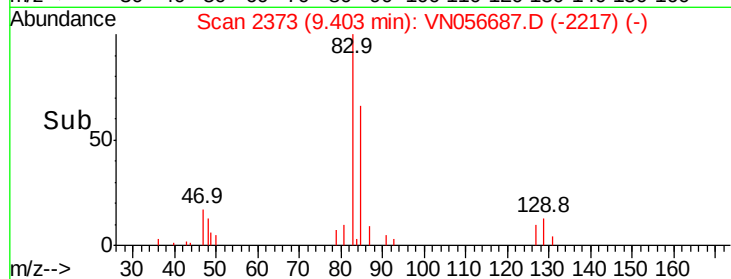
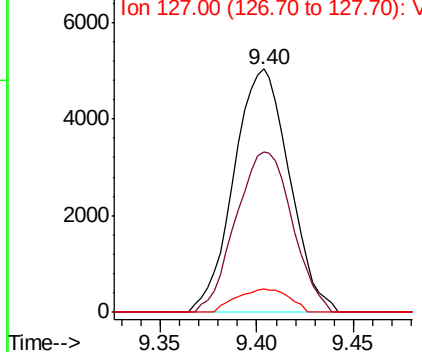
Tot Ion:	83	Resp:	10046
Ion	Ratio	Lower	Upper
83	100		
85	66.0	50.1	75.1
127	9.6	7.0	10.4

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Abundance Ion 83.00 (82.70 to 83.70): VN056687.D (-2217) (-)



#42

Vinyl Acetate

Concen: 10.612 ug/l

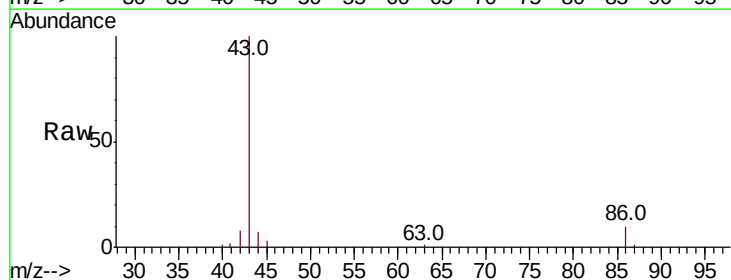
RT: 5.90 min Scan# 1283

Delta R.T. 0.01 min

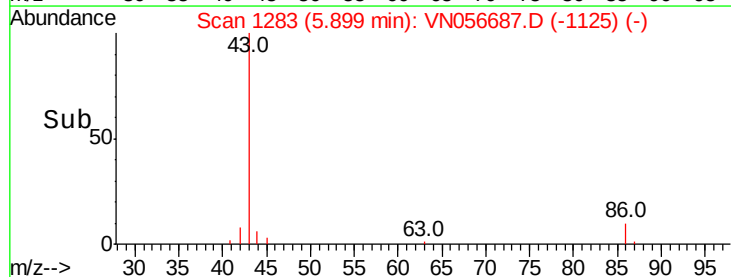
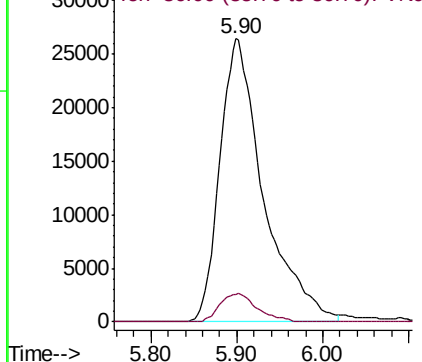
Lab File: VN056687.D

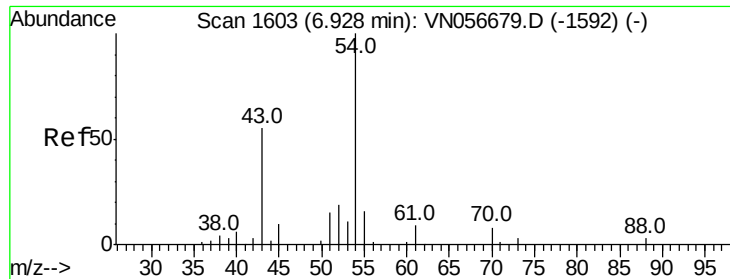
Acq: 12 Jul 2019 14:02

Tgt Ion:	43	Resp:	93391
Ion	Ratio	Lower	Upper
43	100		
86	8.5	7.4	11.2



Abundance Ion 43.00 (42.70 to 43.70): VN056687.D (-1125) (-)





#43

Ethyl Acetate

Concen: 2.160 ug/l

RT: 6.93 min Scan# 1605

Delta R.T. 0.01 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 43 Resp: 10322

Ion Ratio Lower Upper

43 100

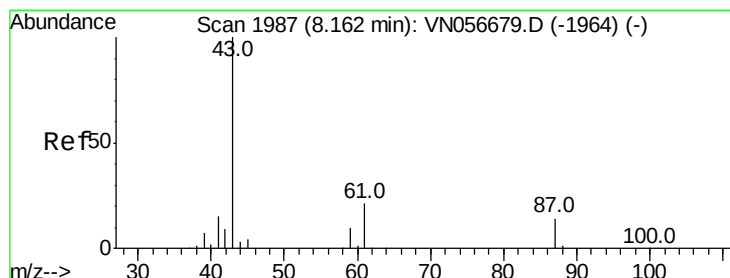
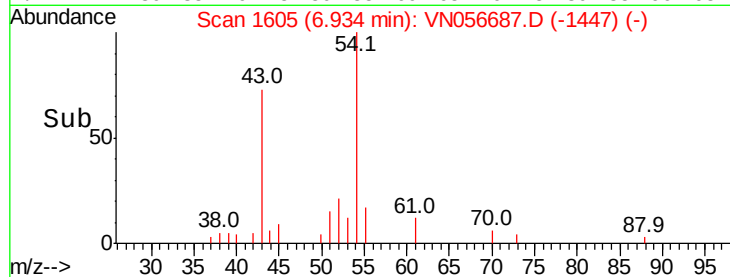
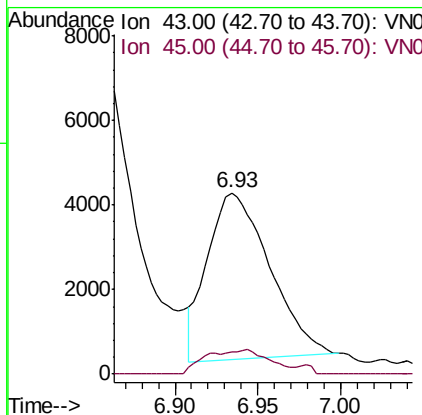
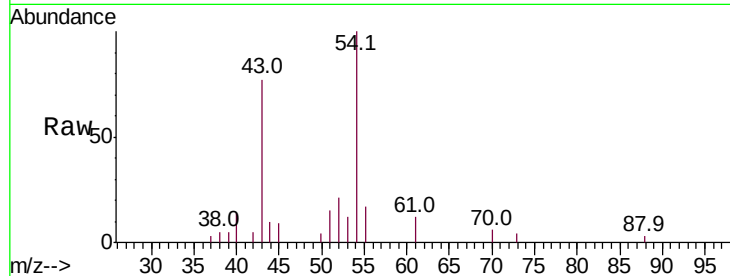
45 4.9 11.2 16.8#

Manual Integrations

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7/16/2019 9:59:38 AM



#44

Isopropyl Acetate

Concen: 2.324 ug/l

RT: 8.17 min Scan# 1988

Delta R.T. 0.00 min

Lab File: VN056687.D

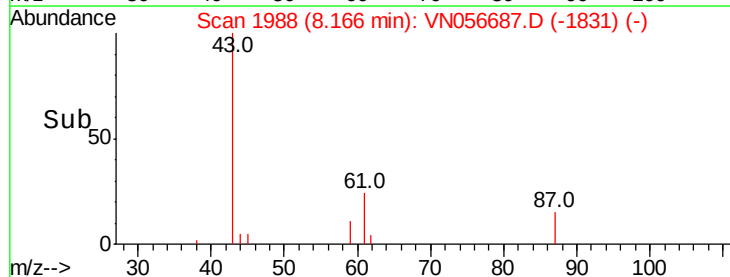
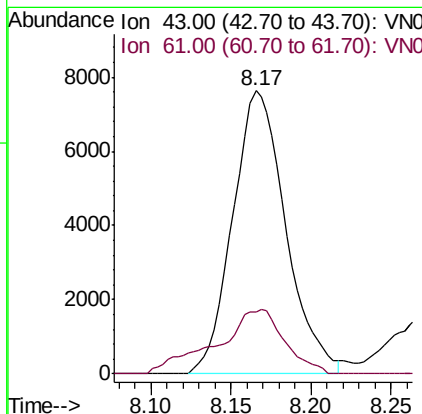
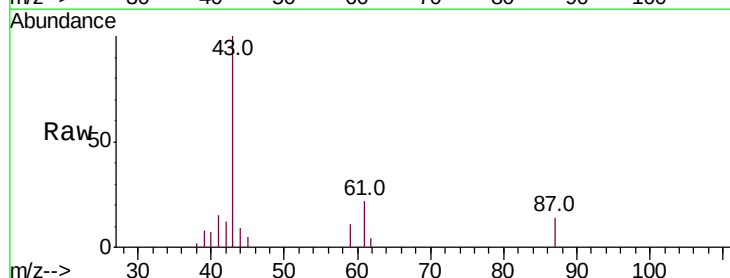
Acq: 12 Jul 2019 14:02

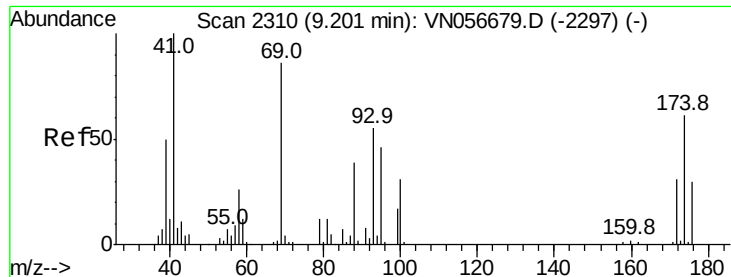
Tgt Ion: 43 Resp: 17323

Ion Ratio Lower Upper

43 100

61 26.7 22.6 33.8





#45

1,4-Dioxane

Concen: 53.451 ug/l

RT: 9.20 min Scan# 2310

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

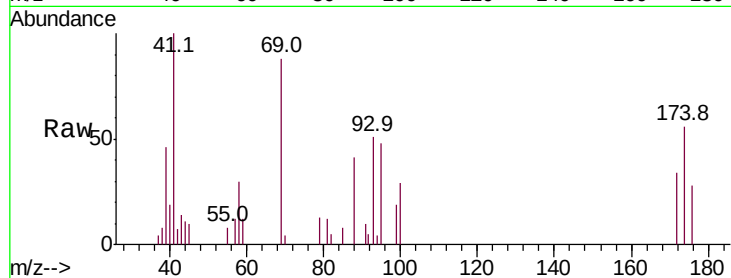
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:	88	Resp:	4030
Ion	Ratio	Lower	Upper
88	100		
43	32.7	23.0	34.6
58	68.1	54.6	81.8

Manual Integrations
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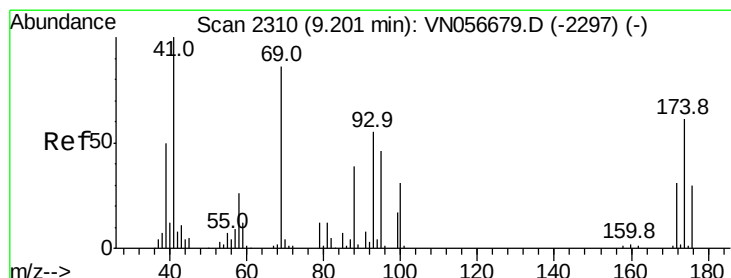
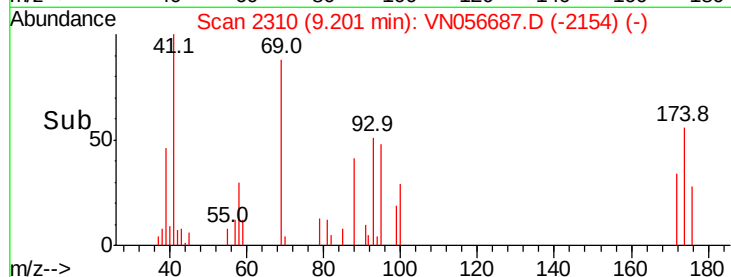
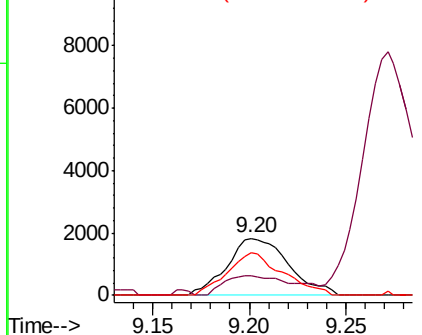


Abundance

Ion 88.00 (87.70 to 88.70): VN0

Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#46

Methyl methacrylate

Concen: 2.382 ug/l

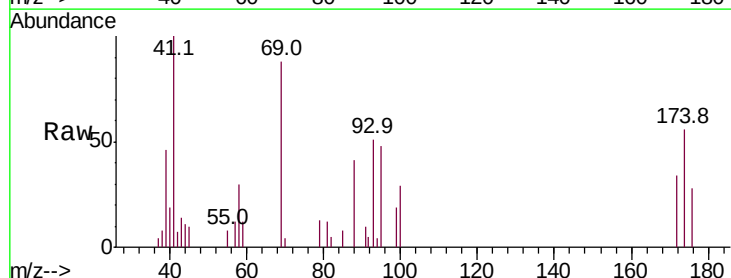
RT: 9.20 min Scan# 2310

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Tgt Ion:	41	Resp:	8527
Ion	Ratio	Lower	Upper
41	100		
69	91.9	43.0	129.0
39	47.5	25.1	75.4

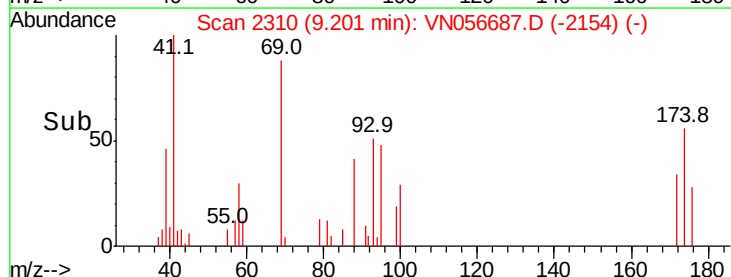
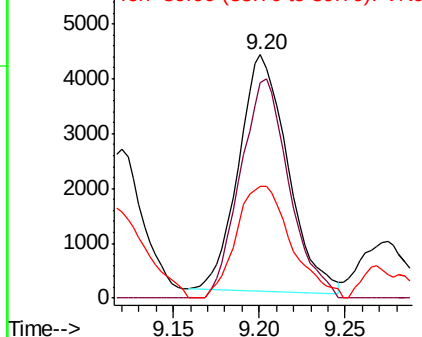


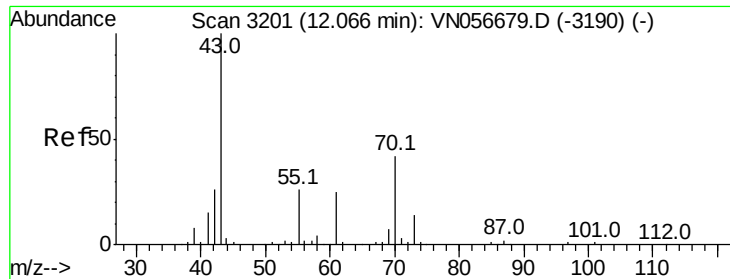
Abundance

Ion 41.00 (40.70 to 41.70): VN0

Ion 69.00 (68.70 to 69.70): VN0

Ion 39.00 (38.70 to 39.70): VN0





#47

n-amvl Acetate

Concen: 1.792 ug/l

RT: 12.07 min Scan# 3202

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 43 Resp: 10924

Ion Ratio Lower Upper

43 100

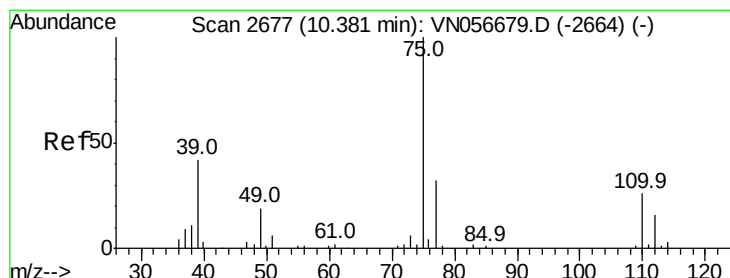
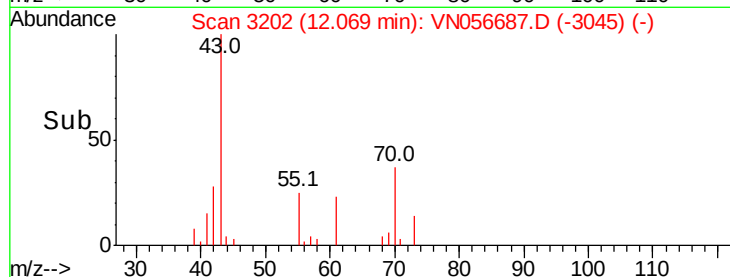
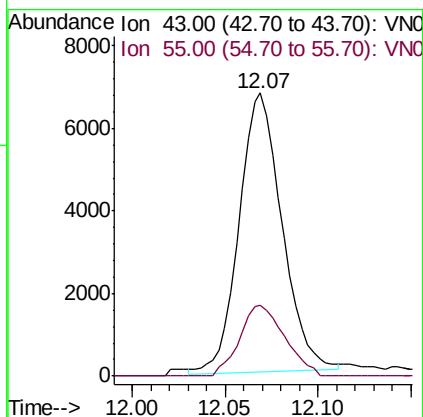
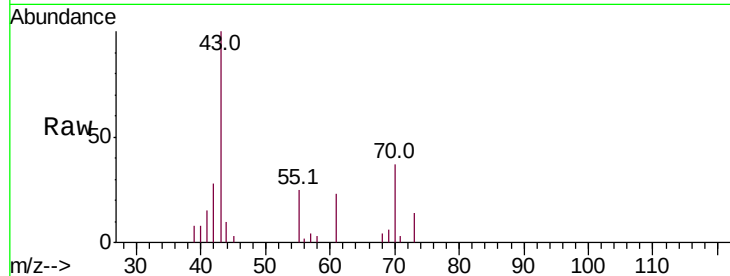
55 26.4 20.7 31.1

Manual Integrations

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#48

t-1,3-Dichloropropene

Concen: 2.003 ug/l

RT: 10.38 min Scan# 2677

Delta R.T. 0.00 min

Lab File: VN056687.D

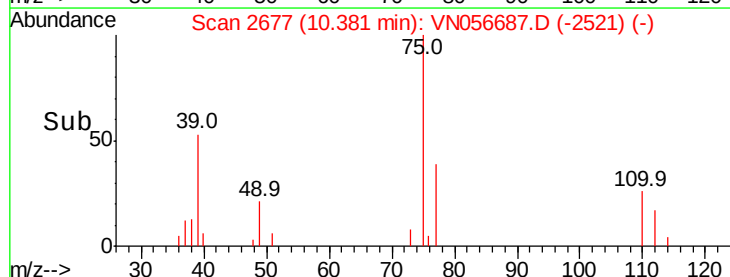
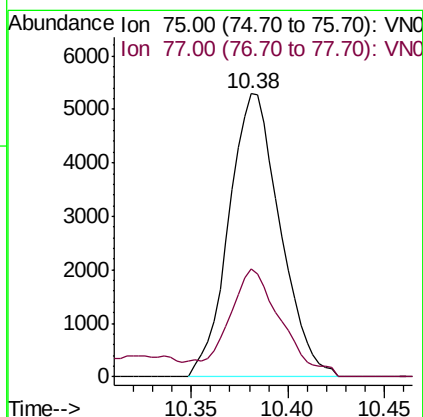
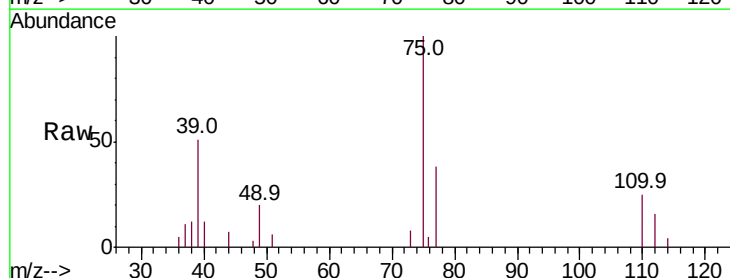
Acq: 12 Jul 2019 14:02

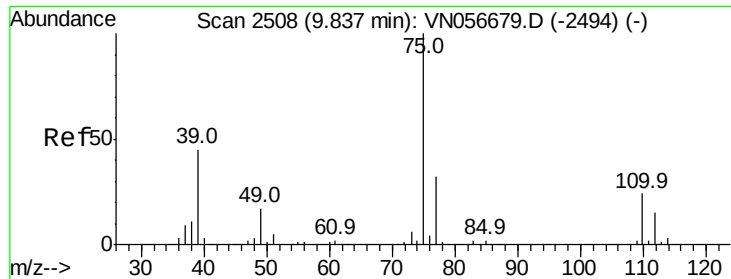
Tgt Ion: 75 Resp: 9742

Ion Ratio Lower Upper

75 100

77 38.0 25.7 38.5





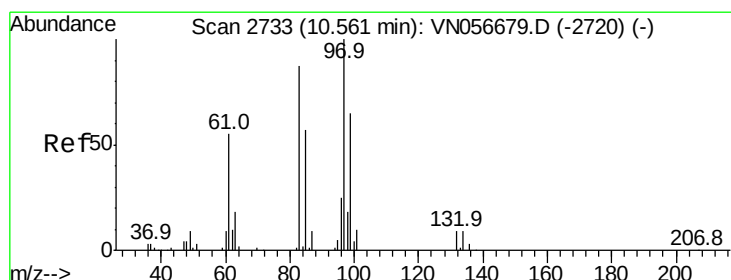
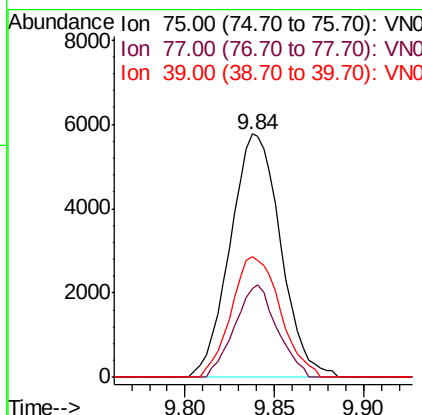
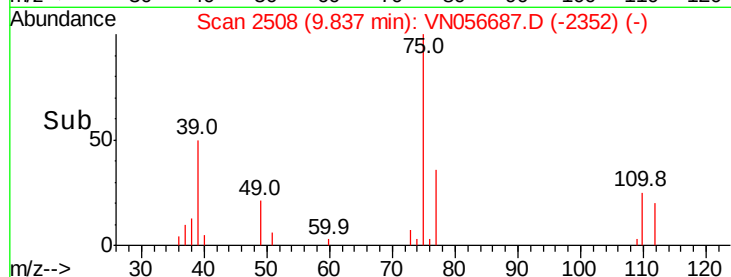
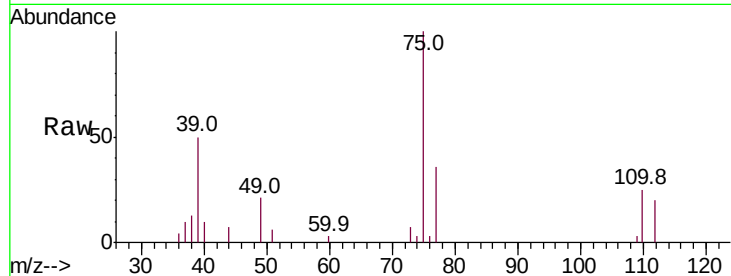
#49
 cis-1,3-Dichloropropene
 Concen: 2.067 ug/l
 RT: 9.84 min Scan# 2508
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT3-2019

Tot Ion:	75	Resp:	11339
Ion Ratio	Lower	Upper	
75	100		
77	36.4	26.0	39.0
39	49.6	36.2	54.4

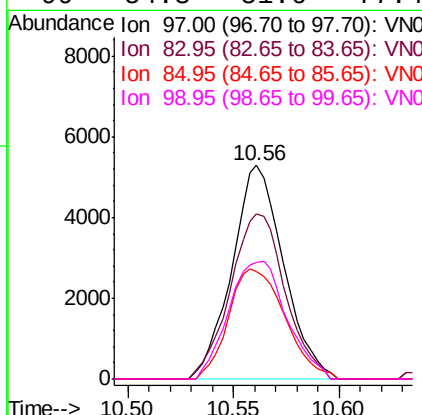
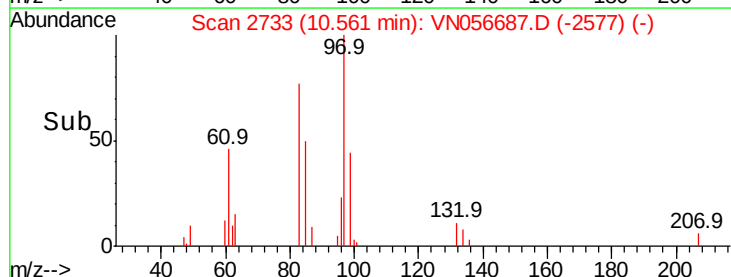
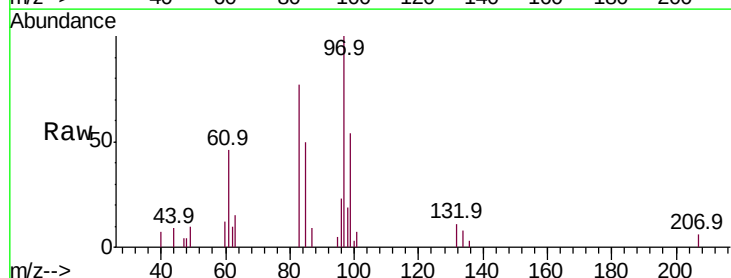
Manual Integrations
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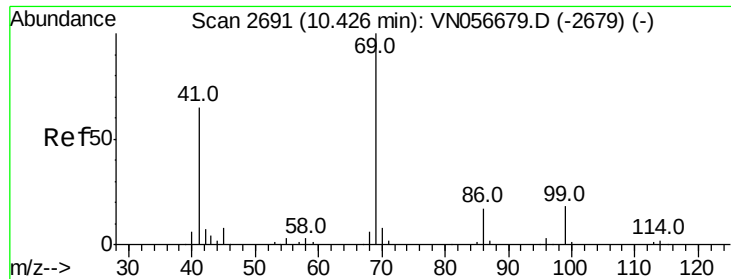
MMDadoda
 7/16/2019 9:59:38 AM



#50
 1,1,2-Trichloroethane
 Concen: 2.575 ug/l
 RT: 10.56 min Scan# 2733
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Tgt Ion:	97	Resp:	9001
Ion Ratio	Lower	Upper	
97	100		
83	77.2	69.2	103.8
85	50.2	45.3	67.9
99	54.3	51.6	77.4





#51

Ethyl methacrylate

Concen: 2.121 ug/l

RT: 10.43 min Scan# 2692

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

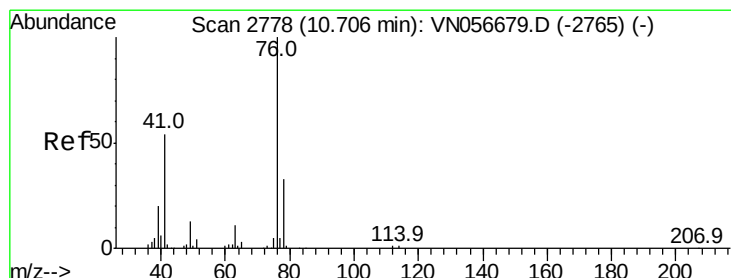
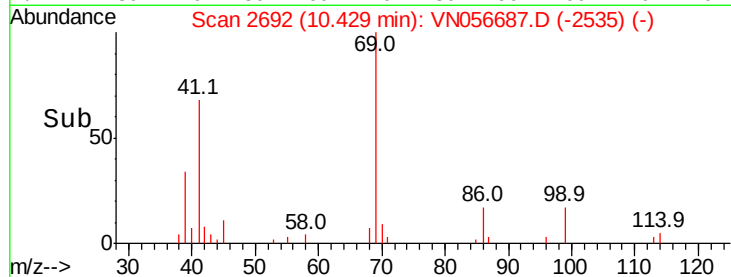
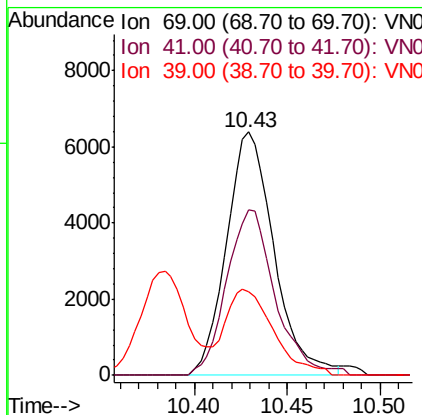
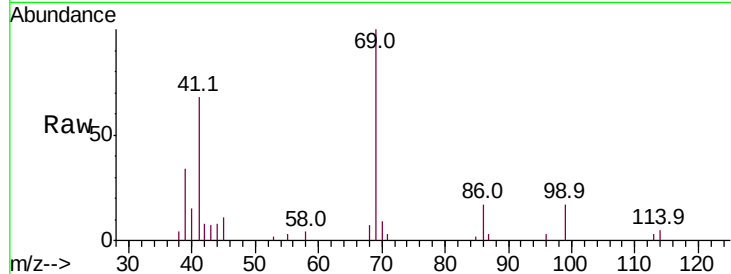
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:	69	Resp:	11402
Ion Ratio	Lower	Upper	
69	100		
41	67.9	32.8	98.3
39	34.4	15.4	46.2

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#52

1,3-Dichloropropane

Concen: 2.541 ug/l

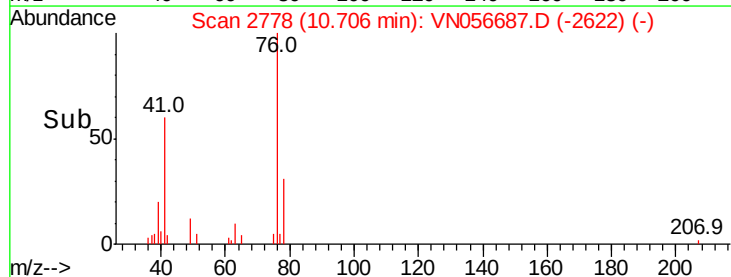
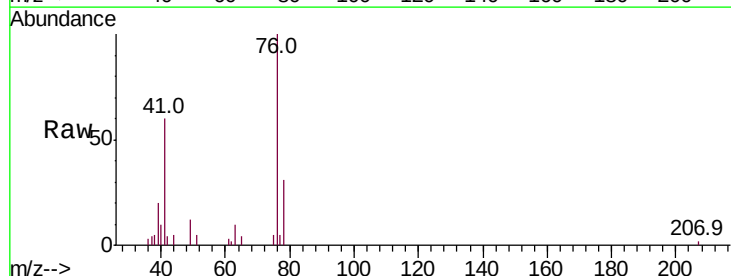
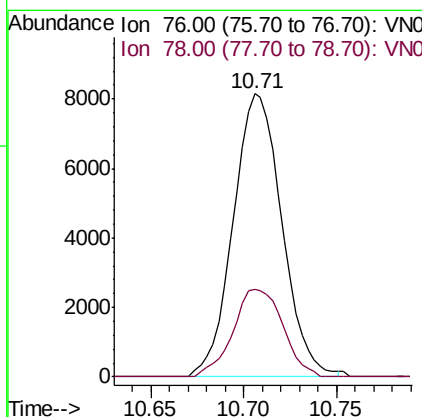
RT: 10.71 min Scan# 2778

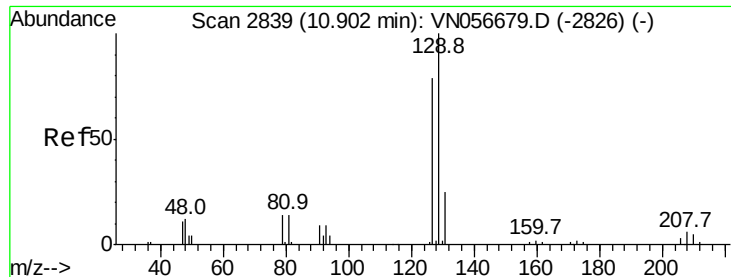
Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Tgt Ion:	76	Resp:	14863
Ion Ratio	Lower	Upper	
76	100		
78	31.7	0.0	63.6





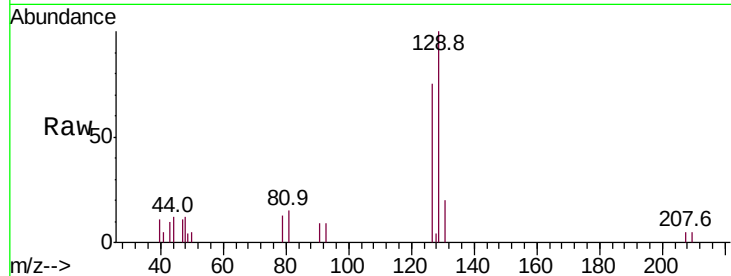
#53
Dibromochloromethane
Concen: 2.128 ug/l
RT: 10.90 min Scan# 2839
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT3-2019

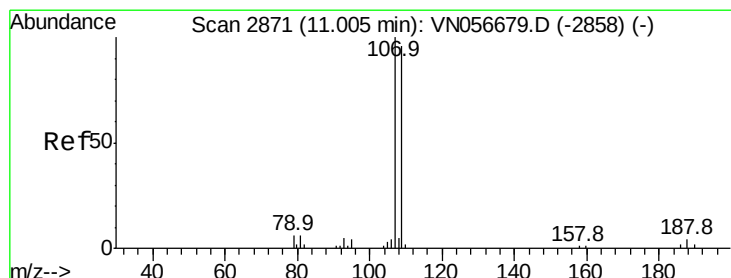
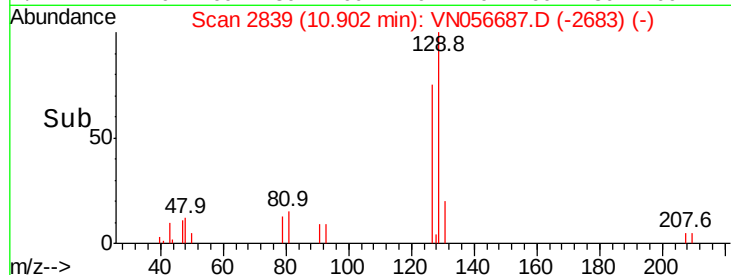
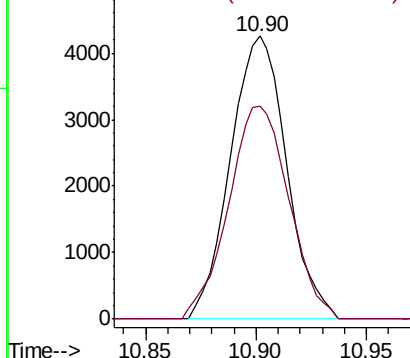
Tot Ion:129 Resp: 7516
Ion Ratio Lower Upper
129 100
127 80.9 38.7 116.1

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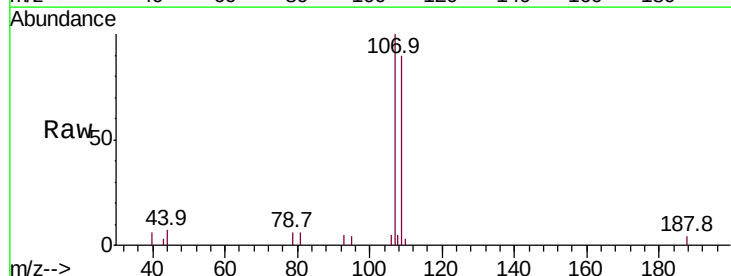


Abundance Ion 129.00 (128.70 to 129.70): V
Ion 127.00 (126.70 to 127.70): V

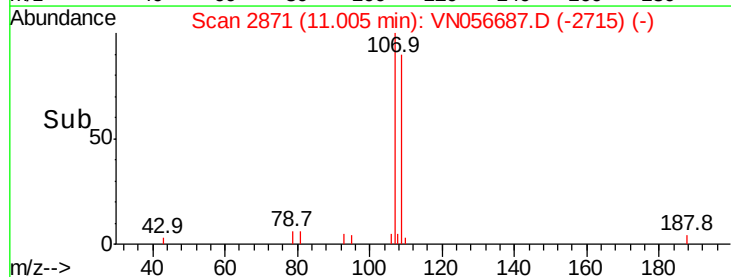
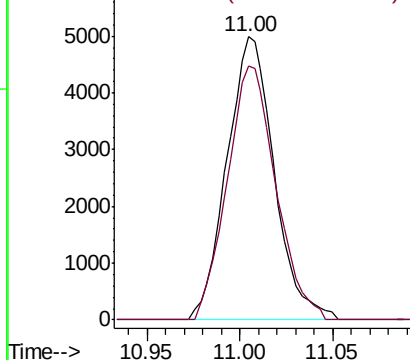


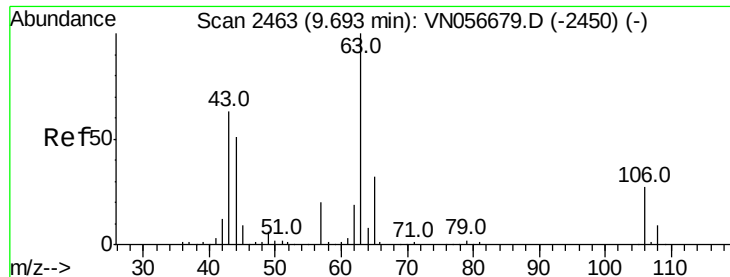
#54
1,2-Dibromoethane
Concen: 2.426 ug/l
RT: 11.00 min Scan# 2871
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Tgt Ion:107 Resp: 8811
Ion Ratio Lower Upper
107 100
109 92.3 77.9 116.9



Abundance Ion 107.00 (106.70 to 107.70): V
Ion 109.00 (108.70 to 109.70): V





#55

2-Chloroethyl vinyl ether

Concen: 10.223 ug/l

RT: 9.70 min Scan# 2464

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

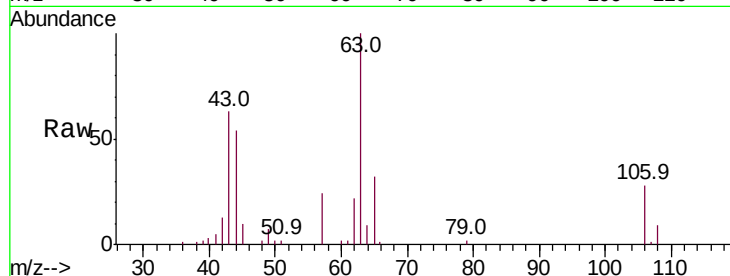
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:	63	Resp:	26577
Ion	Ratio	Lower	Upper
63	100		
65	32.0	25.2	37.8
106	25.8	21.6	32.4

Manual Integrations
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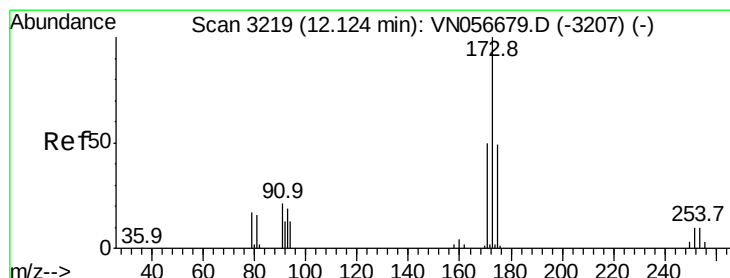
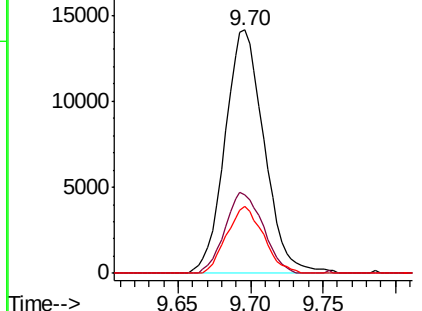
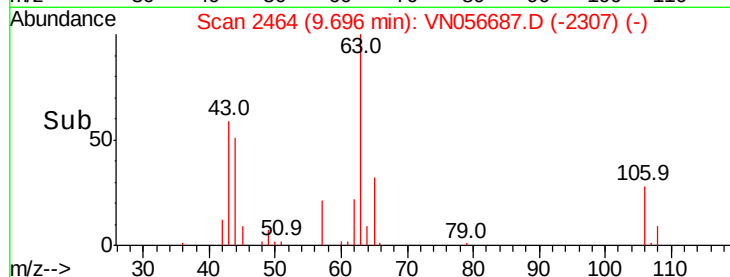


Abundance Ion 63.00 (62.70 to 63.70): VN056679.D (-2450) (-)

Ion 65.00 (64.70 to 65.70): VN056679.D (-2450) (-)

Ion 106.00 (105.70 to 106.70): VN056679.D (-2450) (-)

Time-->



#56

Bromoform

Concen: 2.058 ug/l

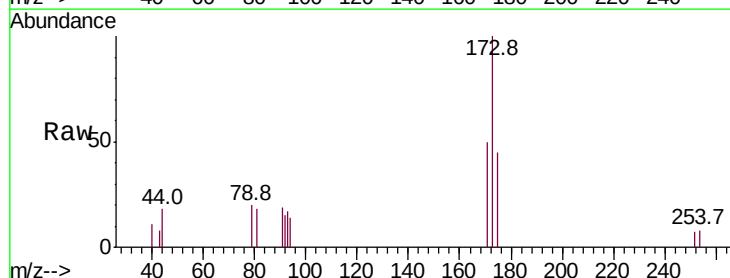
RT: 12.12 min Scan# 3219

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Tgt Ion:	173	Resp:	5382
Ion	Ratio	Lower	Upper
173	100		
175	43.6	39.7	59.5
254	3.7	7.8	11.8#

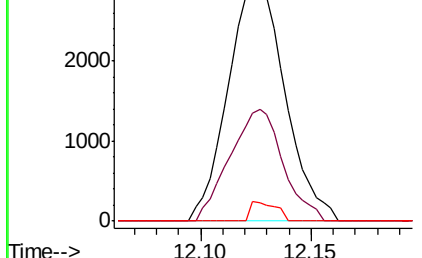
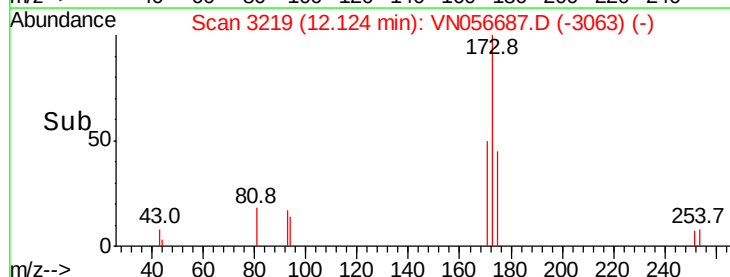


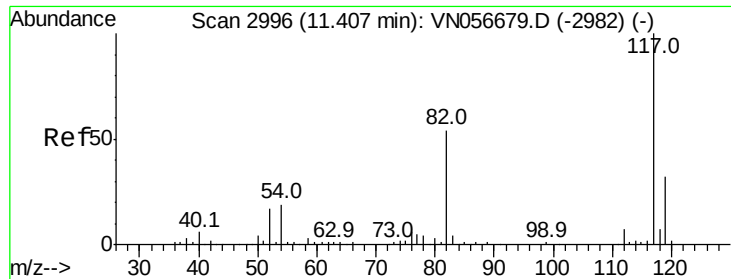
Abundance Ion 173.00 (172.70 to 173.70): VN056679.D (-3207) (-)

Ion 175.00 (174.70 to 175.70): VN056679.D (-3207) (-)

Ion 254.00 (253.70 to 254.70): VN056679.D (-3207) (-)

Time-->





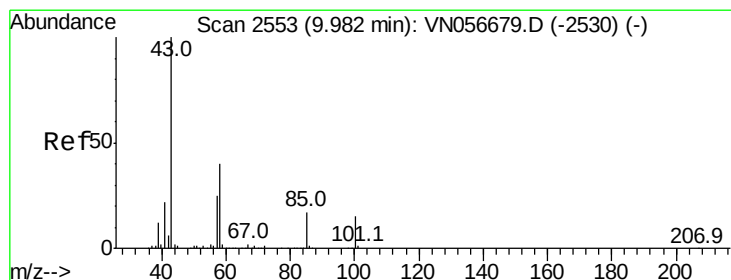
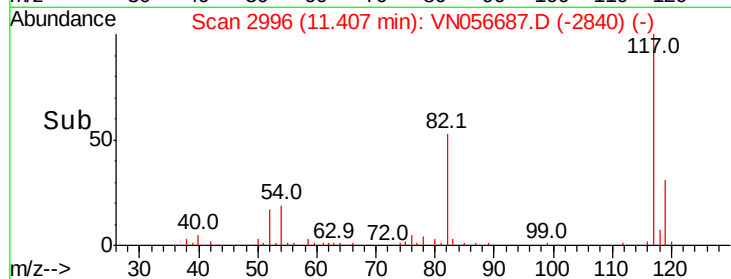
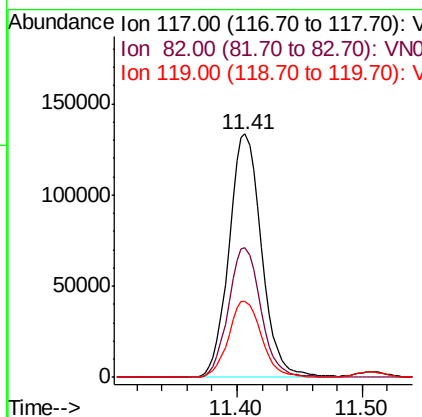
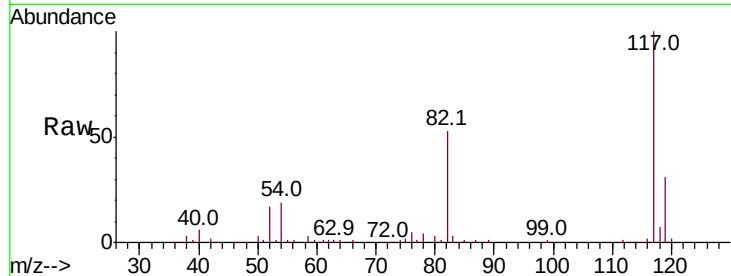
#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
117	100		
82	53.2	43.0	64.4
119	31.9	26.0	39.0

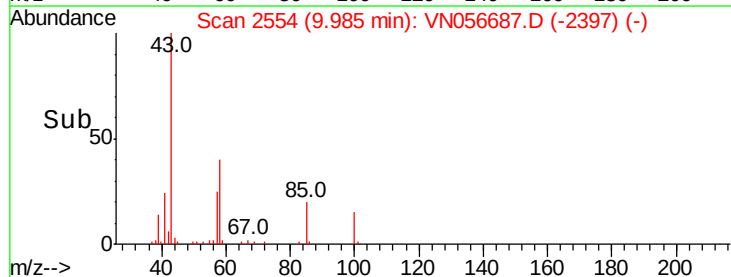
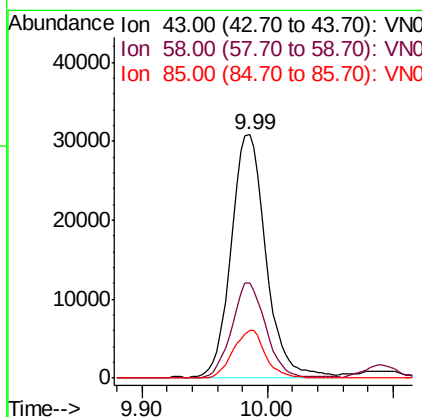
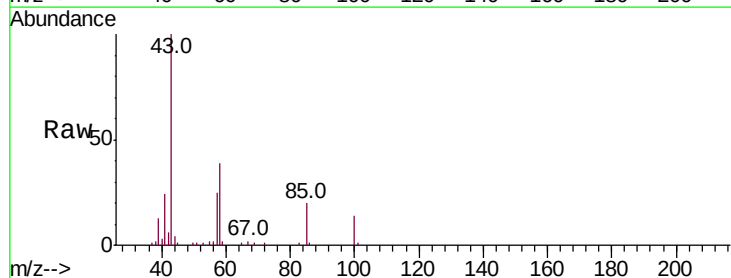
Manual Integrations
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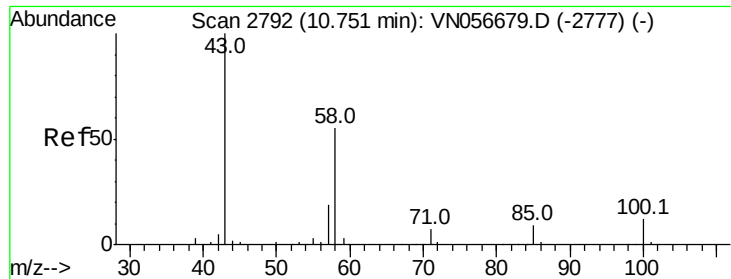
MMDadoda
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#58
4-Methyl-2-Pentanone
Concen: 13.216 ug/l
RT: 9.99 min Scan# 2554
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Tgt Ion	Ratio	Lower	Upper
43	100		
58	37.7	31.9	47.9
85	18.1	14.2	21.4





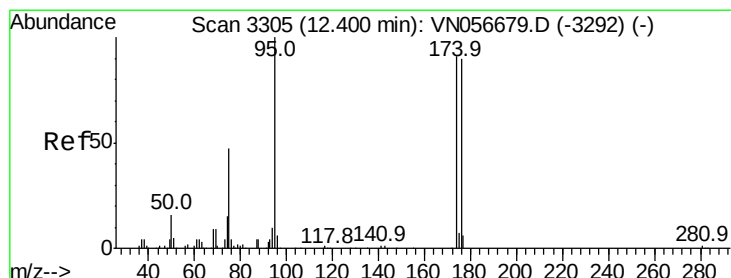
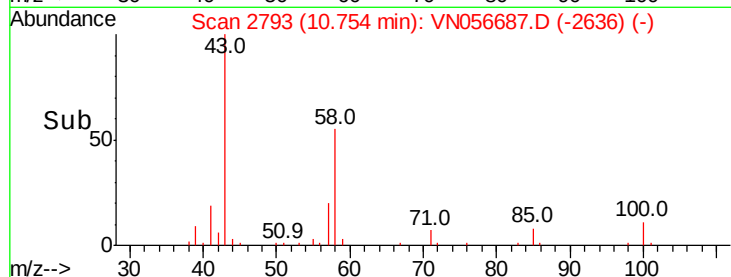
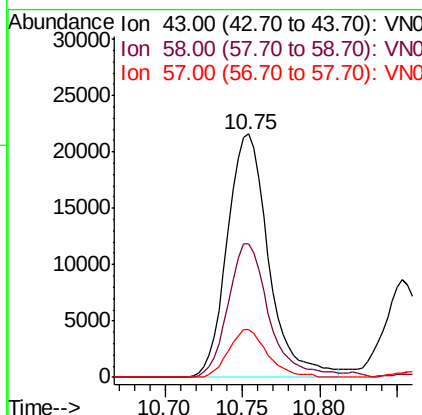
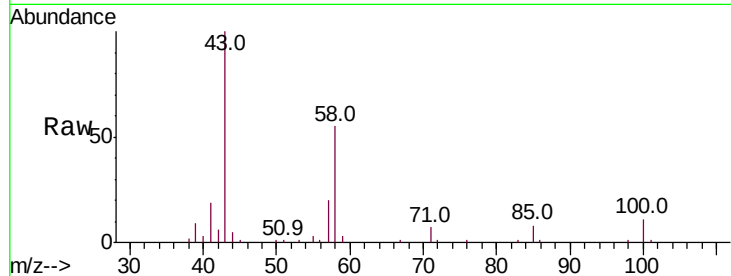
#59
2-Hexanone
Concen: 11.707 ug/l
RT: 10.75 min Scan# 2793
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
43	100		
58	54.0	44.4	66.6
57	17.8	15.2	22.8

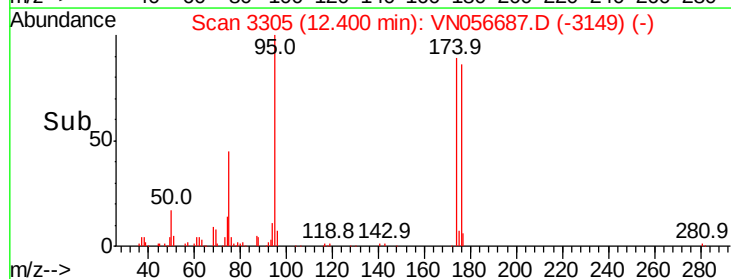
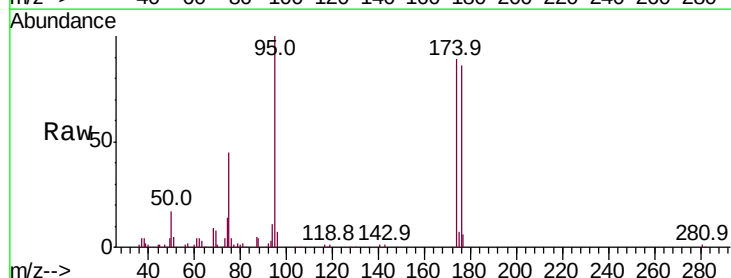
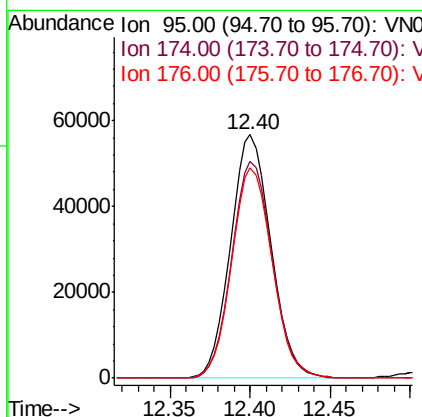
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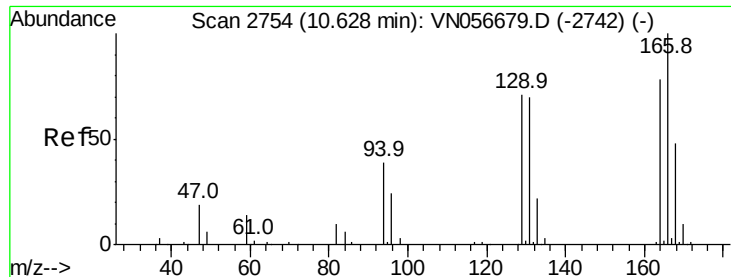
MMDadoda
7/16/2019 9:59:38 AM



#60
4-Bromofluorobenzene
Concen: 26.462 ug/l
RT: 12.40 min Scan# 3305
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Tgt Ion	Ratio	Lower	Upper
95	100		
174	89.4	72.6	108.8
176	86.7	71.0	106.6





#61

Tetrachloroethene

Concen: 2.815 ug/l

RT: 10.63 min Scan# 2754

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:164 Resp: 9728

Ion Ratio Lower Upper

164 100

166 123.9 102.3 153.5

129 93.1 72.6 108.8

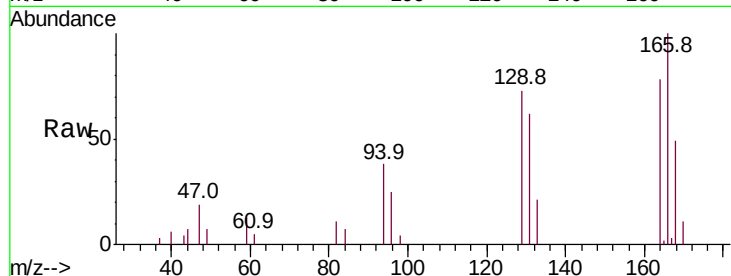
131 76.1 71.4 107.2

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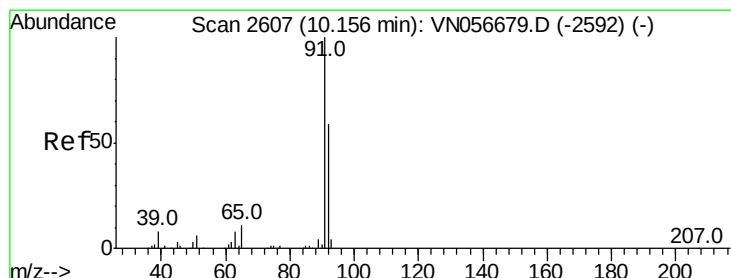
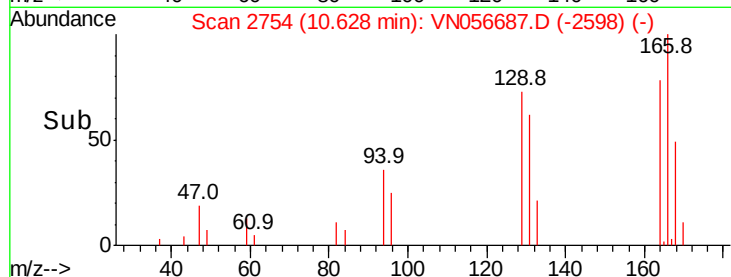
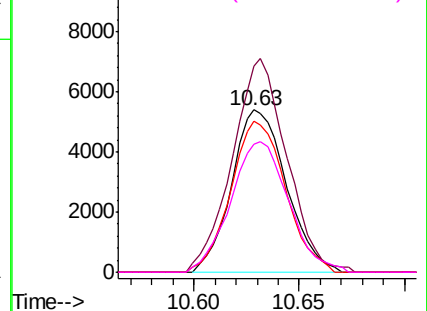


Abundance Ion 163.85 (163.55 to 164.55): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.90 (128.60 to 129.60): V

Ion 130.90 (130.60 to 131.60): V



#62

Toluene

Concen: 2.664 ug/l

RT: 10.15 min Scan# 2606

Delta R.T. -0.00 min

Lab File: VN056687.D

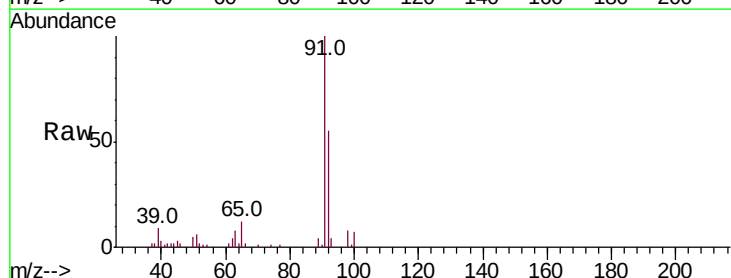
Acq: 12 Jul 2019 14:02

Tgt Ion: 91 Resp: 37636

Ion Ratio Lower Upper

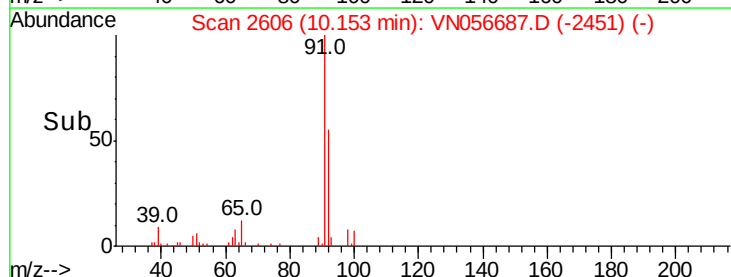
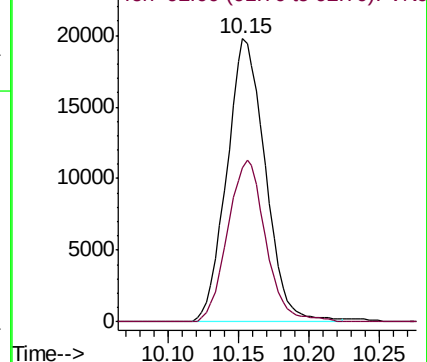
91 100

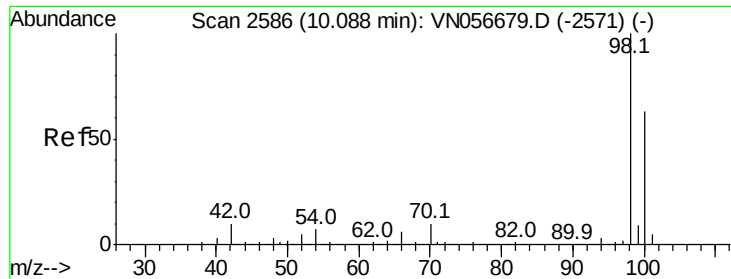
92 56.7 46.7 70.1



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 92.00 (91.70 to 92.70): VN0





#63

Toluene-d8

Concen: 31.415 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 98 Resp: 345191

Ion Ratio Lower Upper

98 100

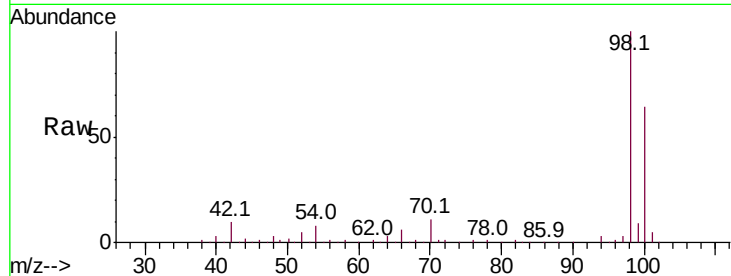
100 64.6 51.1 76.7

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Abundance Ion 98.00 (97.70 to 98.70): VN056687.D (-2571) (-)

Ion 100.00 (99.70 to 100.70): VN056687.D (-2571) (-)

10.09

200000

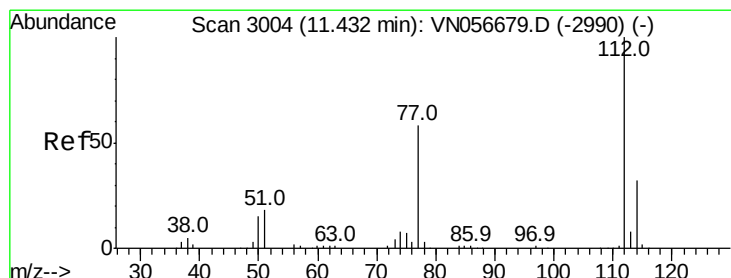
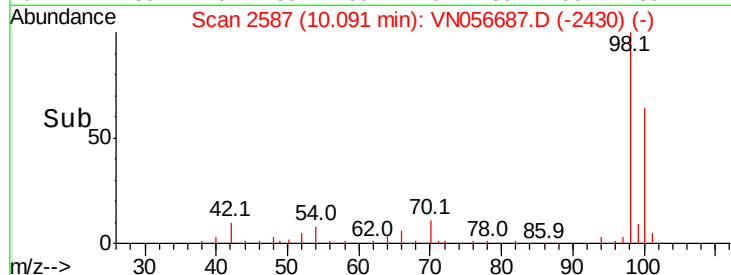
150000

100000

50000

0

Time-->



#64

Chlorobenzene

Concen: 2.561 ug/l

RT: 11.43 min Scan# 3004

Delta R.T. 0.00 min

Lab File: VN056687.D

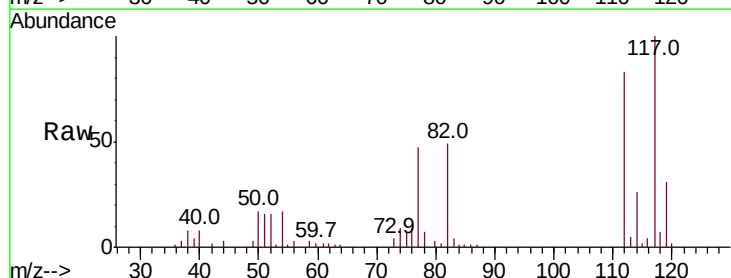
Acq: 12 Jul 2019 14:02

Tgt Ion: 112 Resp: 22066

Ion Ratio Lower Upper

112 100

114 31.9 25.3 37.9



Abundance Ion 112.00 (111.70 to 112.70): VN056687.D (-2848) (-)

Ion 114.00 (113.70 to 114.70): VN056687.D (-2848) (-)

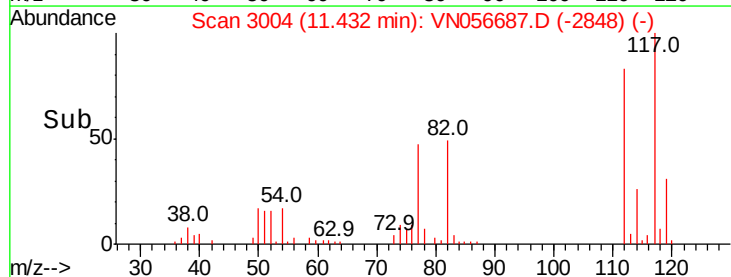
11.43

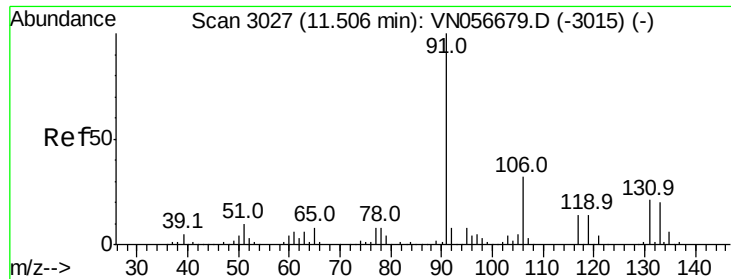
10000

5000

0

Time-->





#65

1,1,1,2-Tetrachloroethane

Concen: 2.464 ug/l

RT: 11.51 min Scan# 3027

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

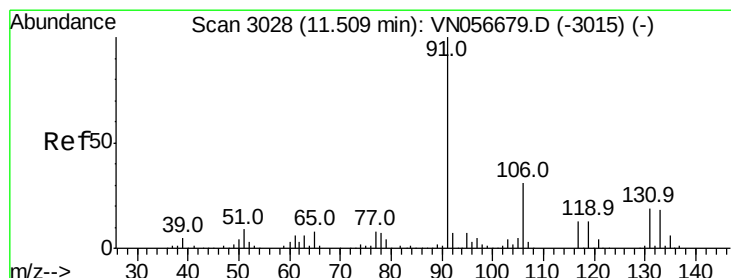
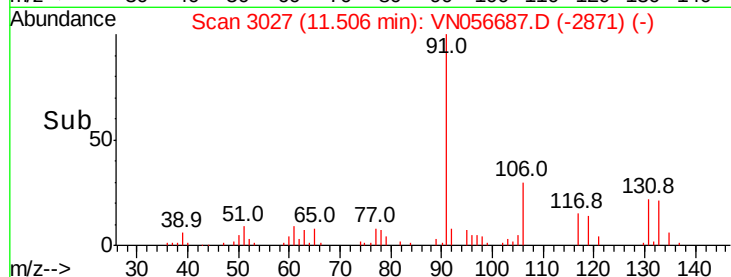
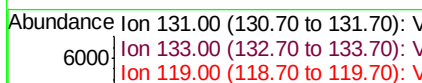
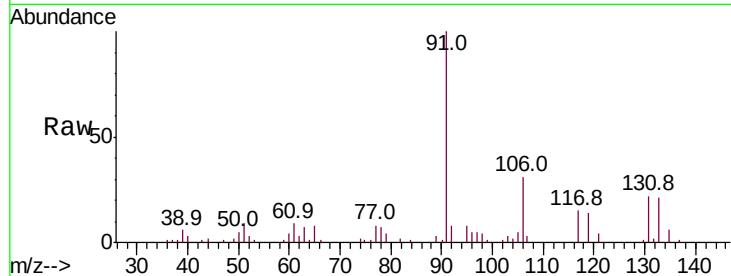
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:	131	Resp:	7781
Ion Ratio	Lower	Upper	
131	100		
133	93.6	0.0	191.4
119	66.4	0.0	133.4

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#66

Ethyl Benzene

Concen: 2.415 ug/l

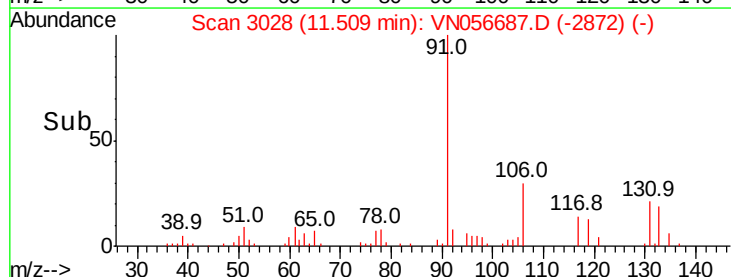
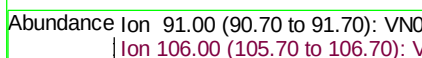
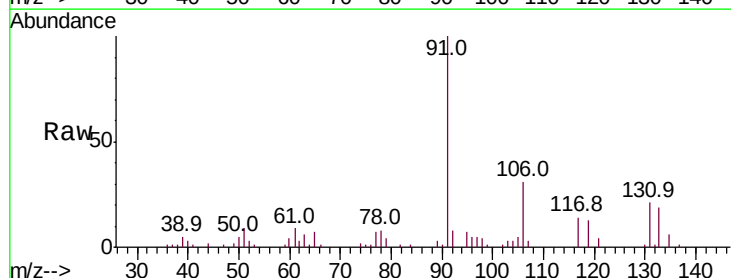
RT: 11.51 min Scan# 3028

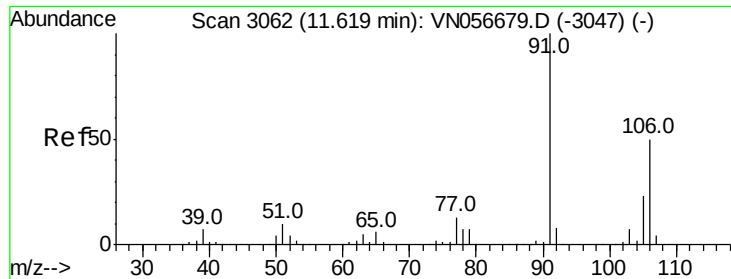
Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Tgt Ion:	91	Resp:	36877
Ion Ratio	Lower	Upper	
91	100		
106	30.8	25.1	37.7





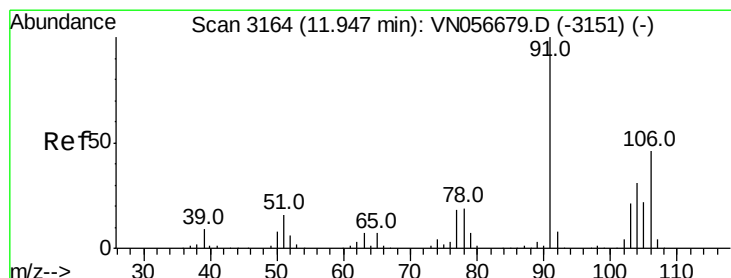
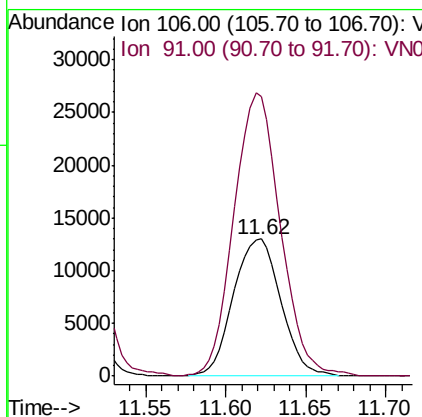
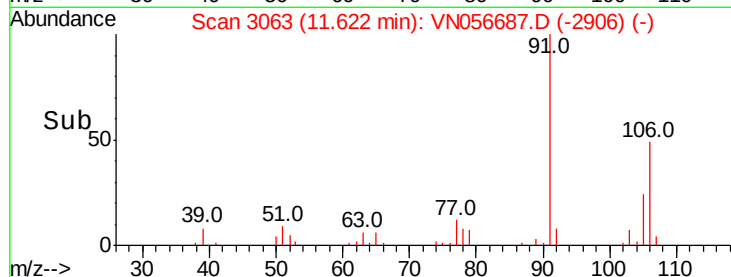
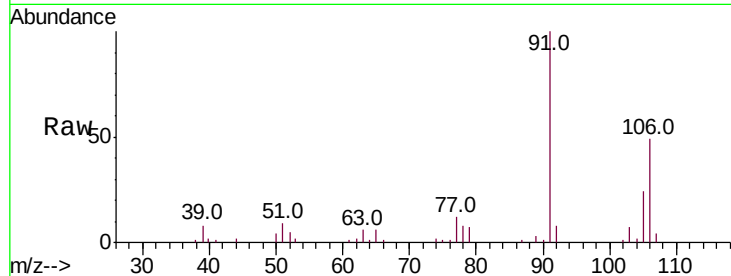
#67
m/p-Xylenes
Concen: 4.590 ug/l
RT: 11.62 min Scan# 3063
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT3-2019

Tot Ion:106 Resp: 26450
Ion Ratio Lower Upper
106 100
91 201.6 161.8 242.8

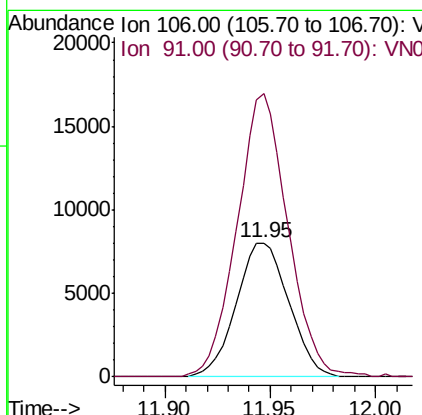
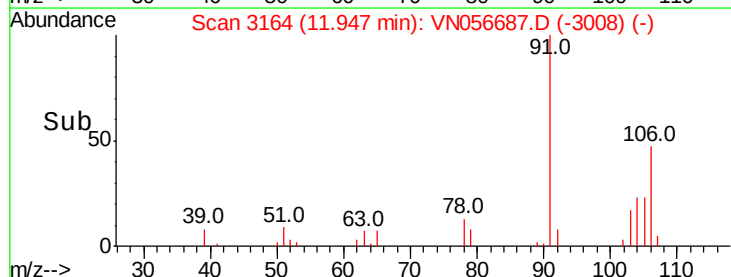
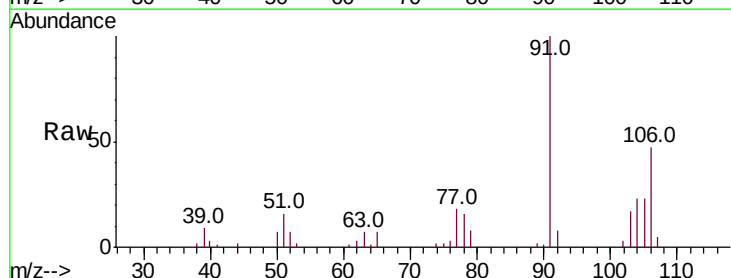
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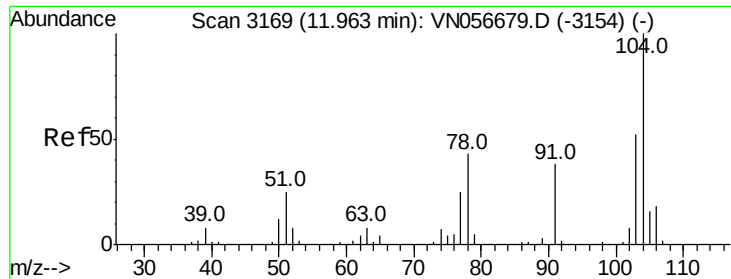
MMDadoda
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#68
o-Xylene
Concen: 2.471 ug/l
RT: 11.95 min Scan# 3164
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Tgt Ion:106 Resp: 13886
Ion Ratio Lower Upper
106 100
91 204.4 108.1 324.2





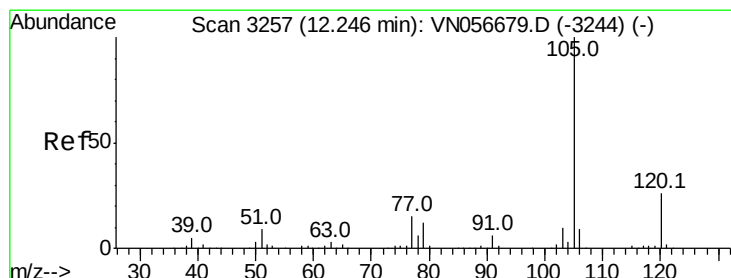
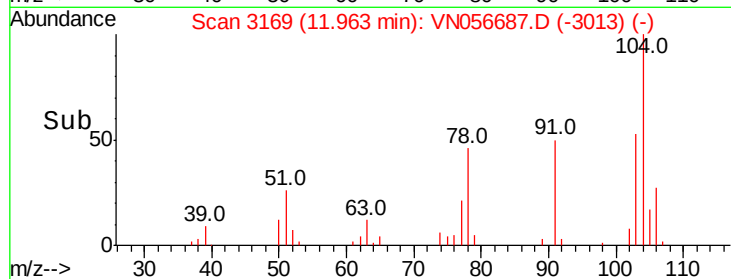
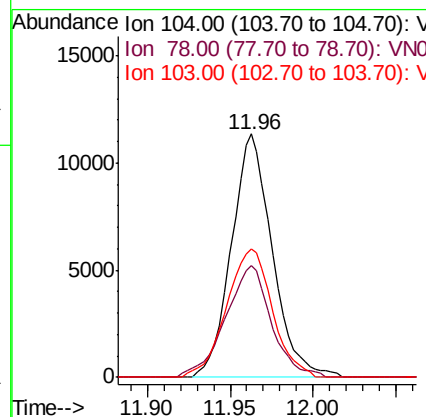
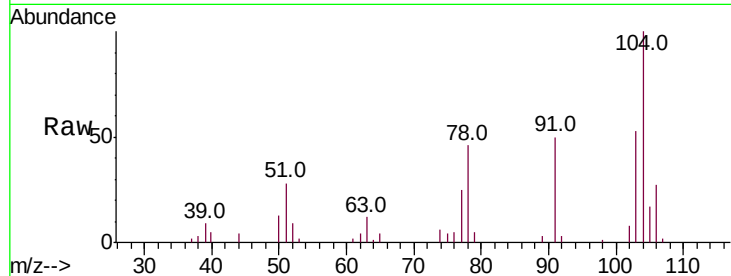
#69
Stvrene
Concen: 2.085 ug/l
RT: 11.96 min Scan# 3169
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
104	100		
78	51.4	38.7	58.1
103	59.0	45.0	67.4

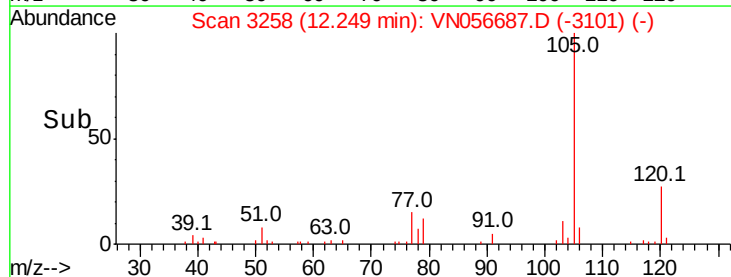
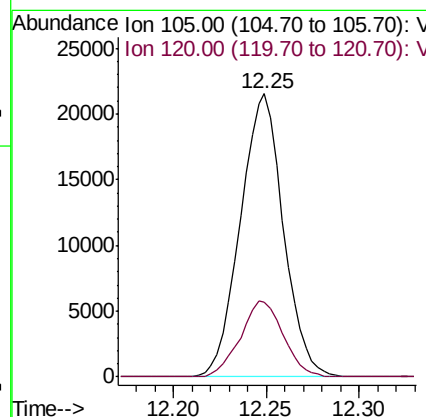
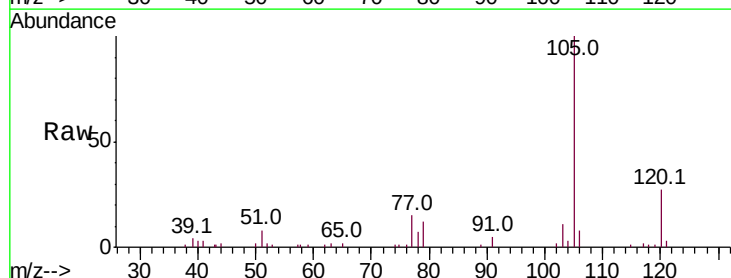
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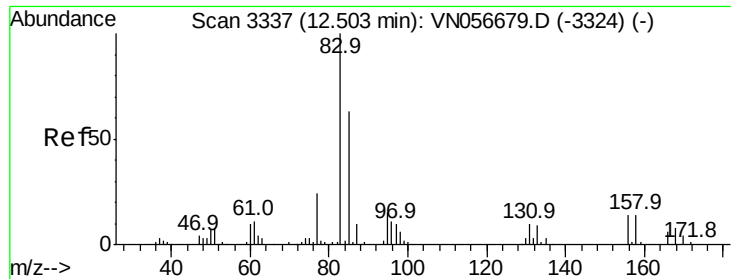
MMDadoda
7/16/2019 9:59:38 AM



#70
Isopropylbenzene
Concen: 2.354 ug/l
RT: 12.25 min Scan# 3258
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Tgt Ion	Ratio	Lower	Upper
105	100		
120	26.7	18.6	34.5





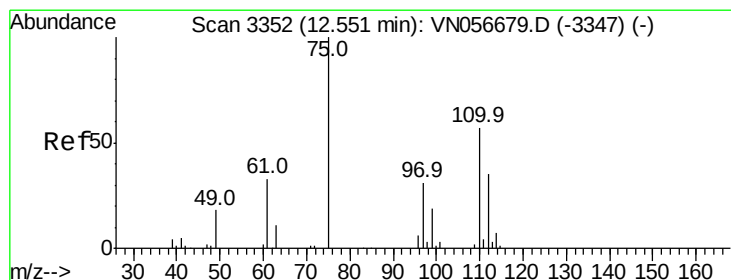
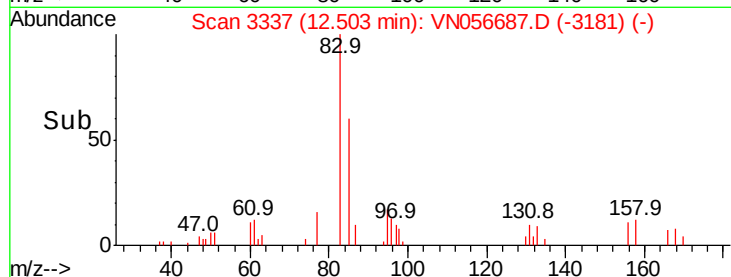
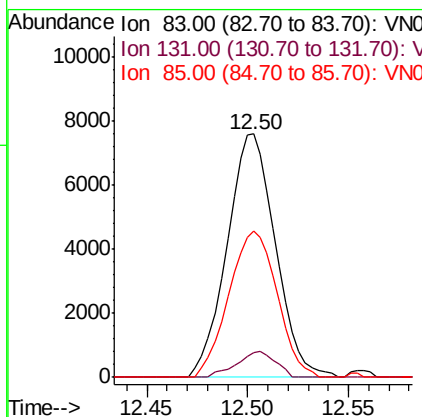
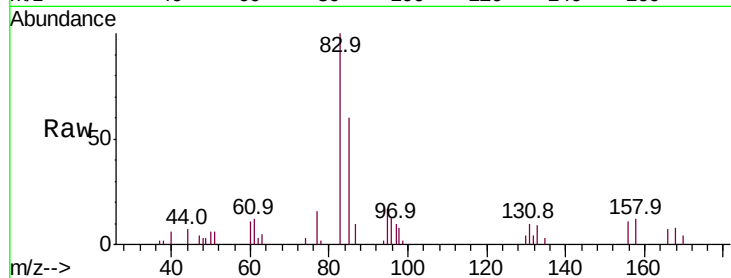
#71
 1,1,2,2-Tetrachloroethane
 Concen: 2.662 ug/l
 RT: 12.50 min Scan# 3337
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT3-2019

Tot Ion	83	Resp	12730
Ion Ratio	100	Lower	Upper
83	100		
131	8.6	5.1	15.3
85	60.2	31.9	95.7

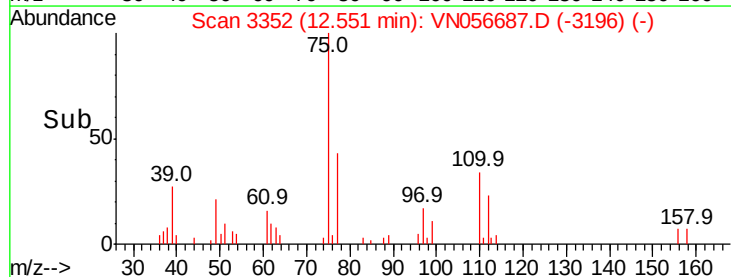
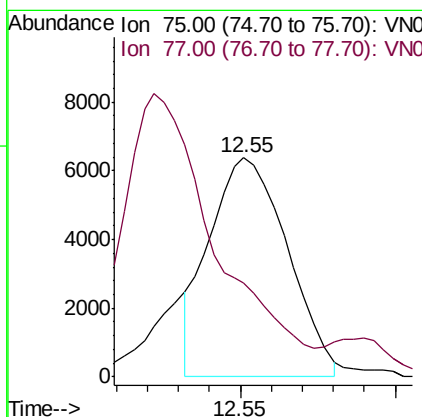
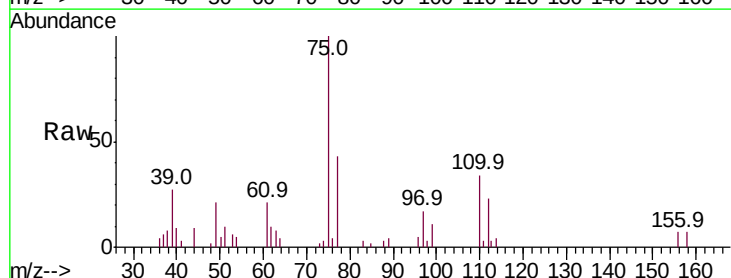
Manual Integrations
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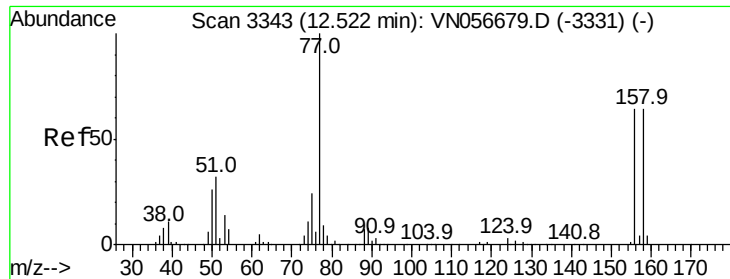
MMDadoda
 7/16/2019 9:59:38 AM



#72
 1,2,3-Trichloropropane
 Concen: 2.738 ug/l m
 RT: 12.55 min Scan# 3352
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Tgt Ion	75	Resp	11188
Ion Ratio	100	Lower	Upper
75	100		
77	156.6	0.0	352.2





#73

Bromobenzene

Concen: 2.258 ug/l

RT: 12.53 min Scan# 3344

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

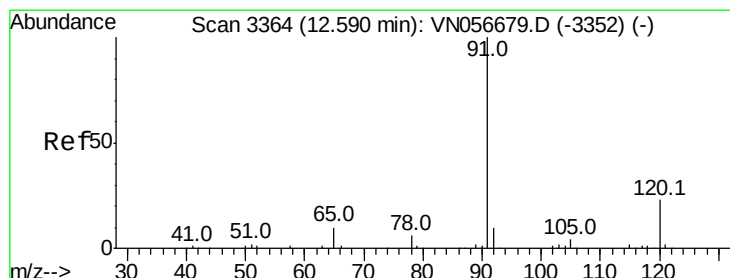
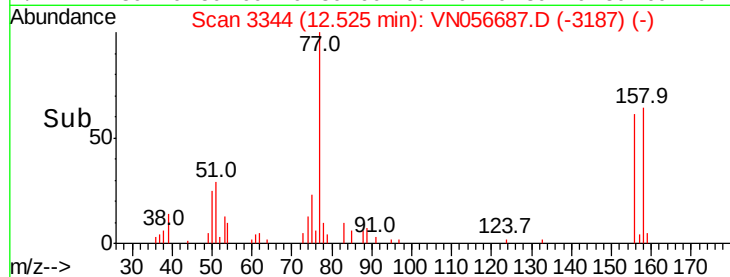
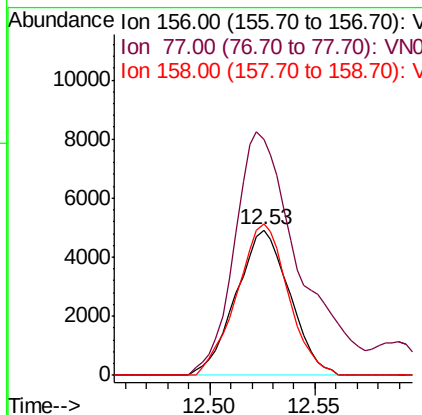
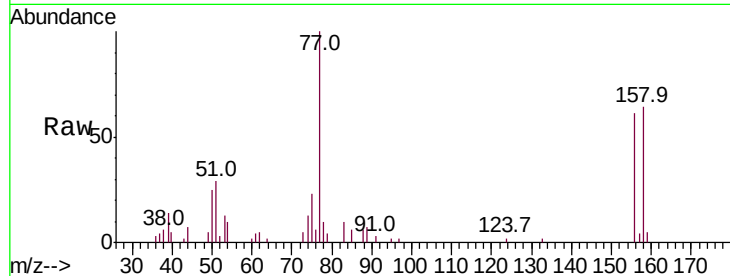
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:	156	Resp:	8692
Ion Ratio	Lower	Upper	
156	100		
77	201.5	0.0	381.8
158	99.9	0.0	195.8

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#74

n-propylbenzene

Concen: 2.178 ug/l

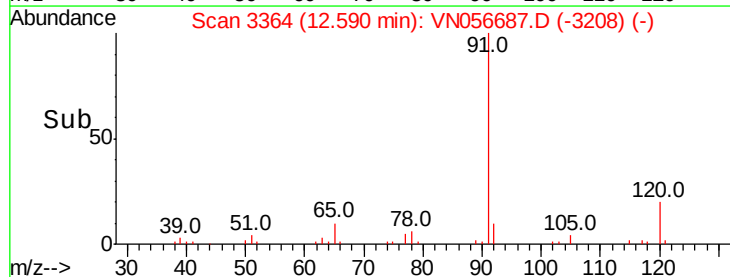
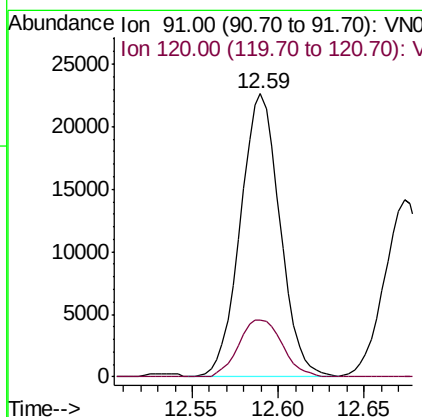
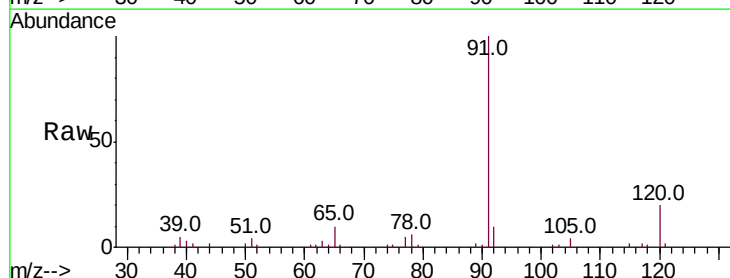
RT: 12.59 min Scan# 3364

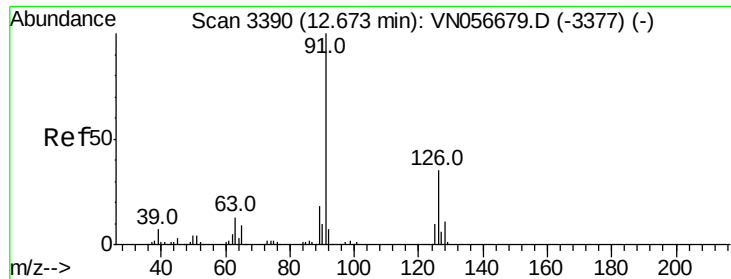
Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Tgt Ion:	91	Resp:	36201
Ion Ratio	Lower	Upper	
91	100		
120	22.2	0.0	45.6





#75

2-Chlorotoluene

Concen: 2.376 ug/l

RT: 12.67 min Scan# 3390

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 91 Resp: 23785

Ion Ratio Lower Upper

91 100

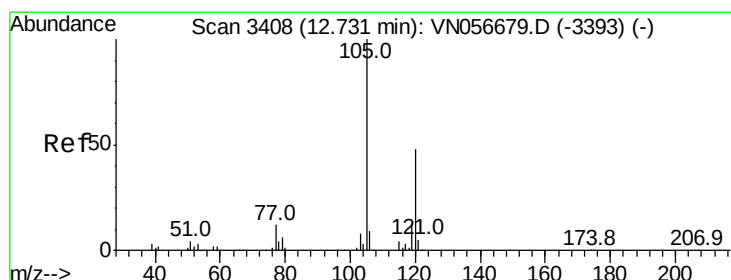
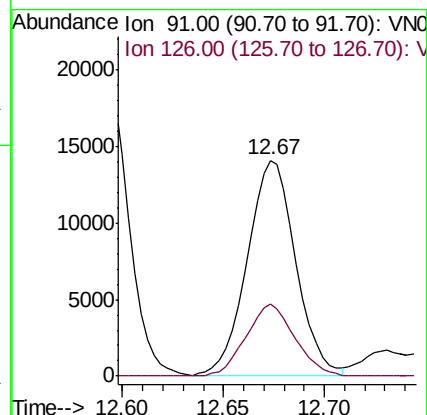
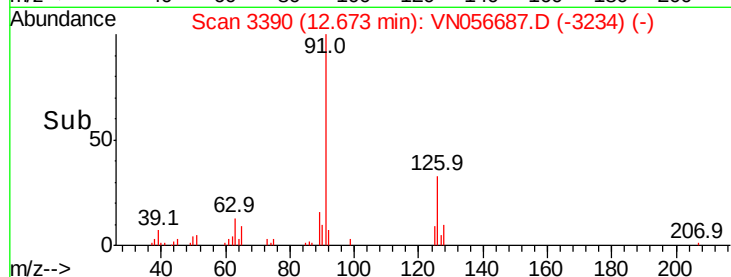
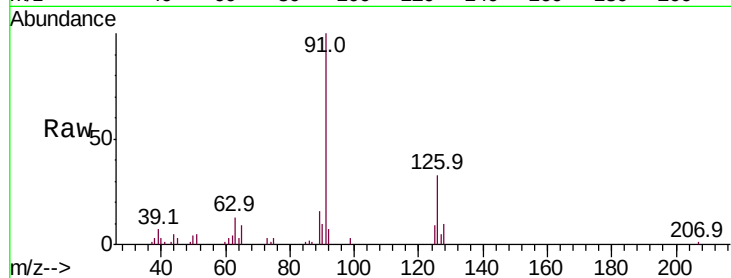
126 33.3 0.0 69.8

Manual Integrations

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MMDadoda

7/16/2019 9:59:38 AM



#76

1,3,5-Trimethylbenzene

Concen: 2.212 ug/l

RT: 12.73 min Scan# 3408

Delta R.T. 0.00 min

Lab File: VN056687.D

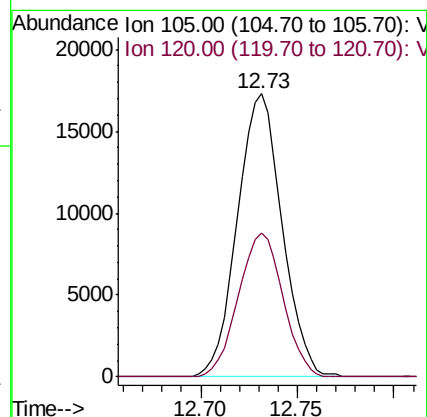
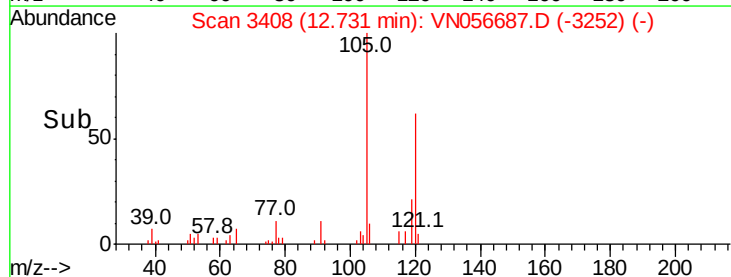
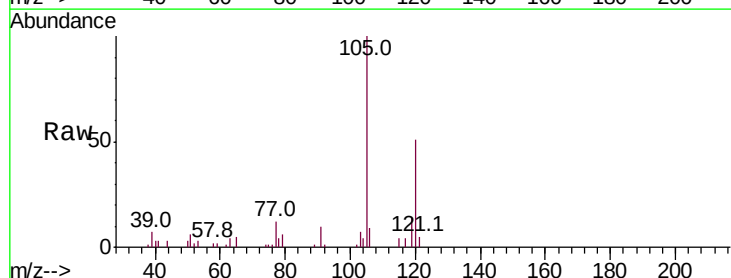
Acq: 12 Jul 2019 14:02

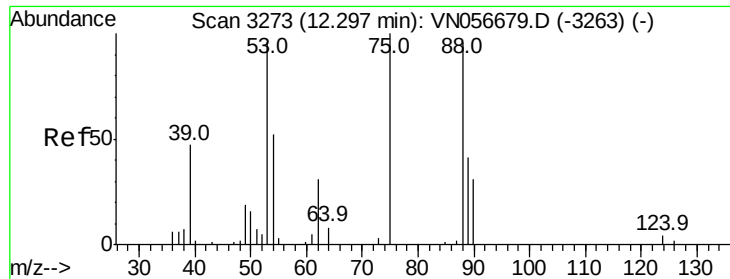
Tgt Ion: 105 Resp: 27797

Ion Ratio Lower Upper

105 100

120 50.6 0.0 97.6





#77

t-1,4-Dichloro-2-butene

Concen: 1.672 ug/l

RT: 12.30 min Scan# 3273

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

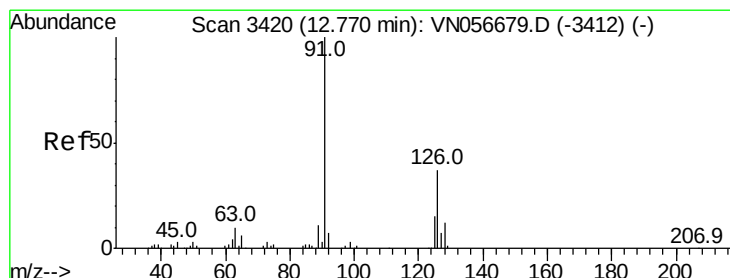
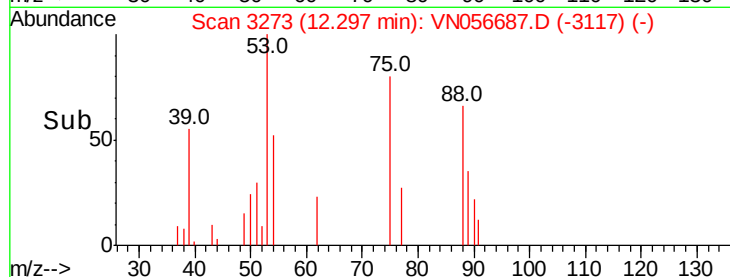
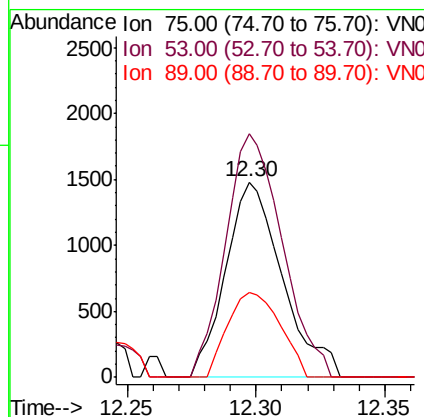
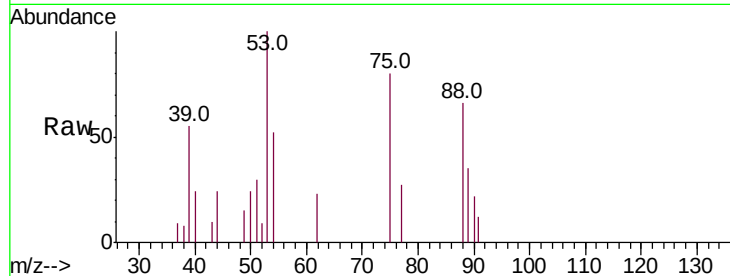
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:	75	Resp:	2272
Ion	Ratio	Lower	Upper
75	100		
53	124.5	48.6	145.8
89	43.2	21.3	64.0

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#78

4-Chlorotoluene

Concen: 1.975 ug/l

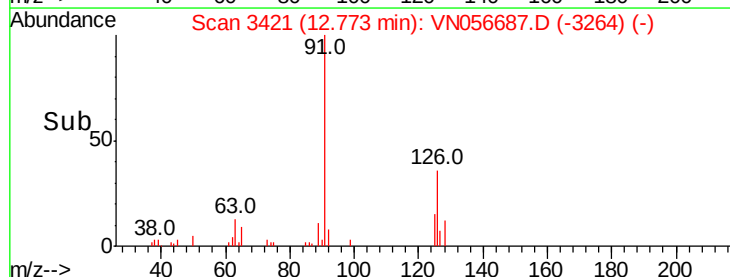
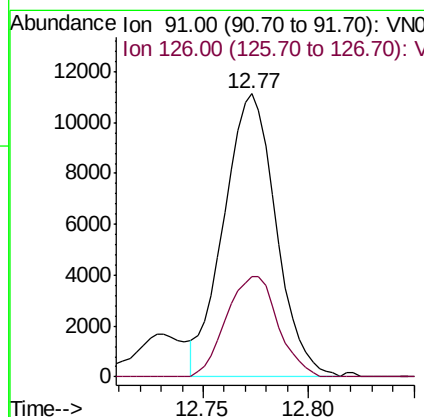
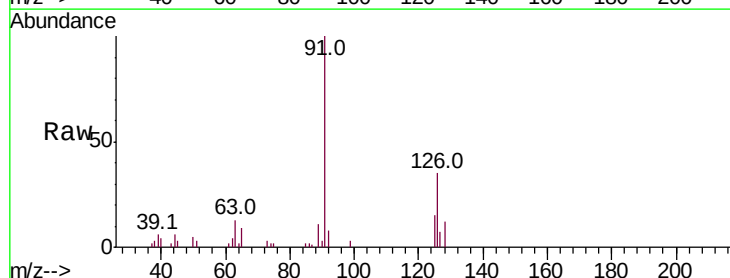
RT: 12.77 min Scan# 3421

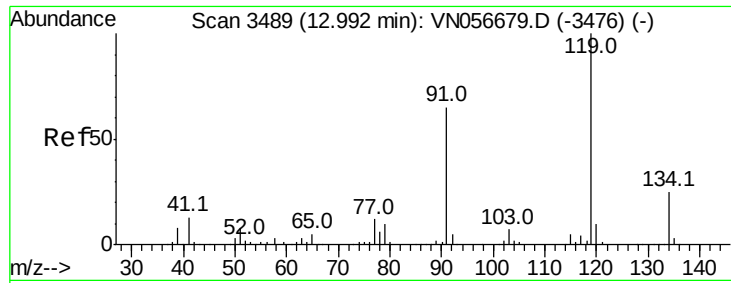
Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Tgt Ion:	91	Resp:	19175
Ion	Ratio	Lower	Upper
91	100		
126	34.9	0.0	69.4





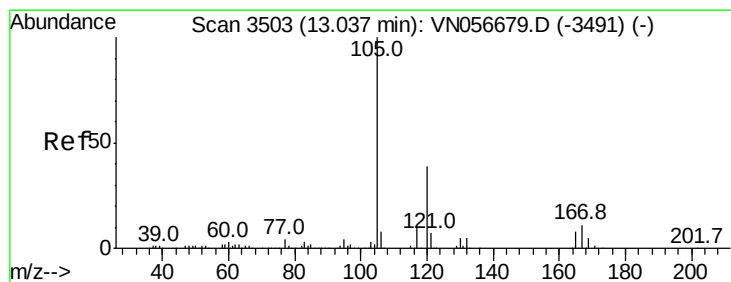
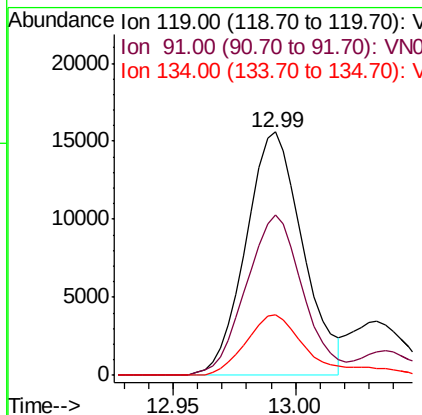
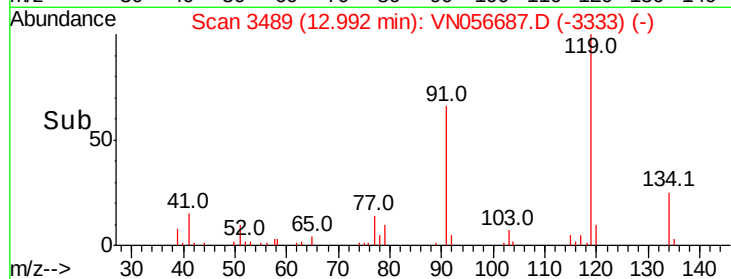
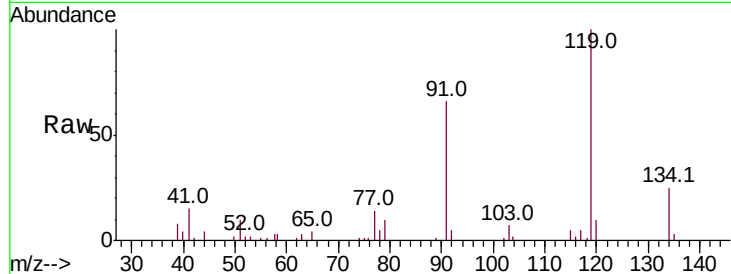
#79
tert-butylbenzene
Concen: 2.365 ug/l
RT: 12.99 min Scan# 3489
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT3-2019

Tot Ion	Ratio	Resp	Lower	Upper
119	100	25276		
91	65.8	0.0	125.4	
134	25.0	0.0	48.4	

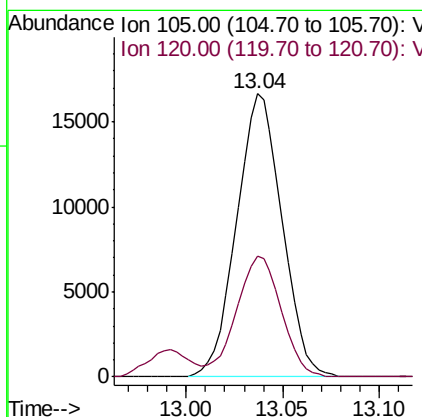
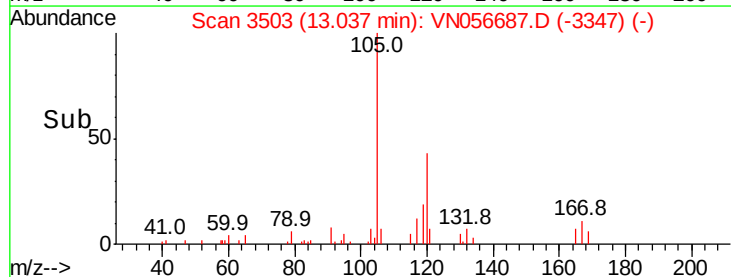
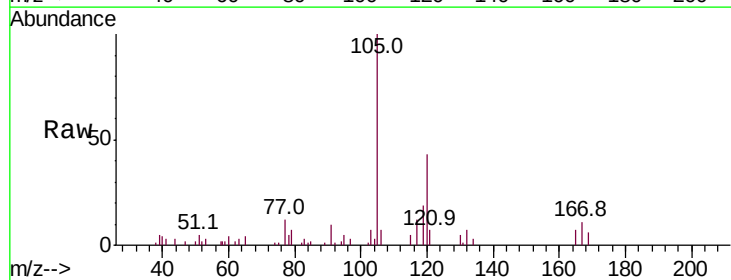
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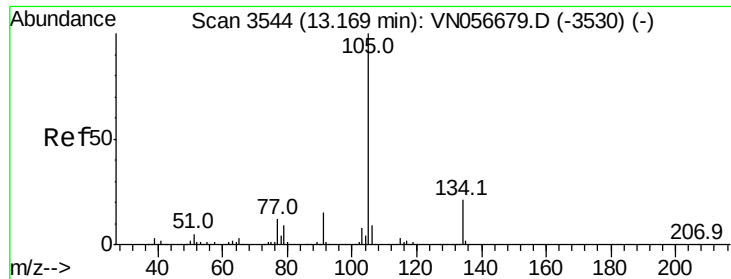
MMDadoda
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#80
1,2,4-Trimethylbenzene
Concen: 2.184 ug/l
RT: 13.04 min Scan# 3503
Delta R.T. 0.00 min
Lab File: VN056687.D
Acq: 12 Jul 2019 14:02

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	27221		
120	42.1	0.0	91.2	





#81

sec-Butylbenzene

Concen: 2.146 ug/l

RT: 13.17 min Scan# 3544

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:105 Resp: 30359

Ion Ratio Lower Upper

105 100

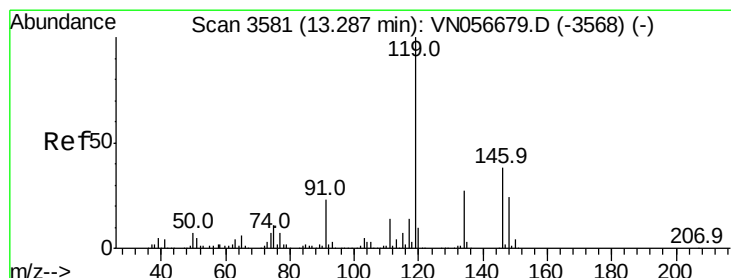
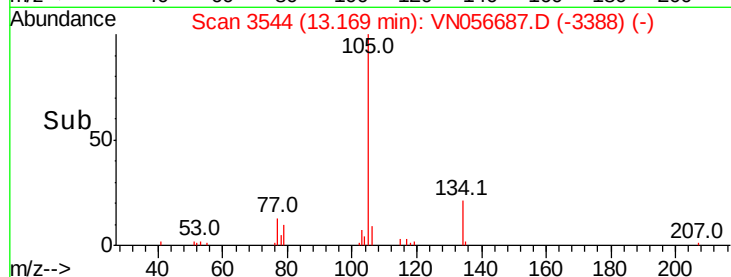
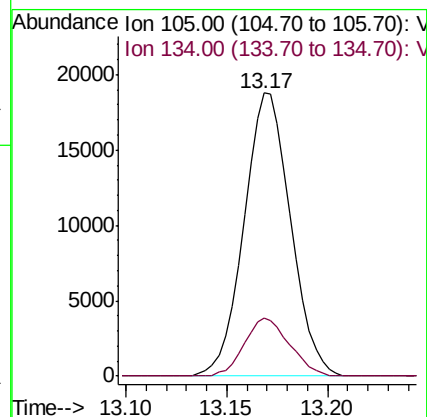
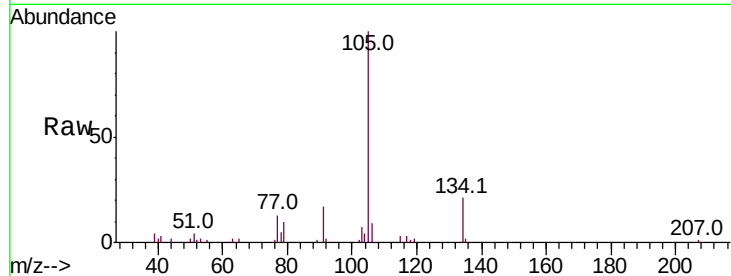
134 19.8 0.0 40.8

Manual Integrations

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#82

p-Isopropyltoluene

Concen: 2.112 ug/l

RT: 13.29 min Scan# 3581

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

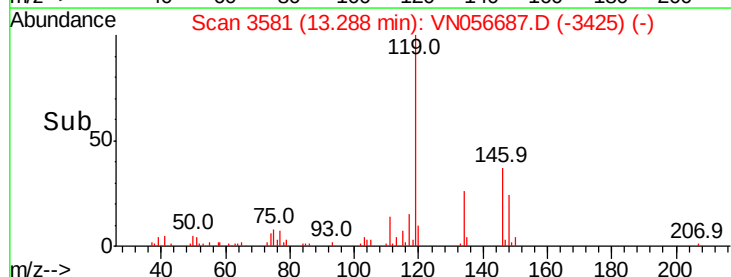
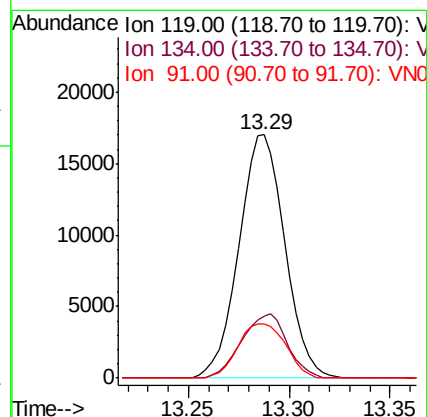
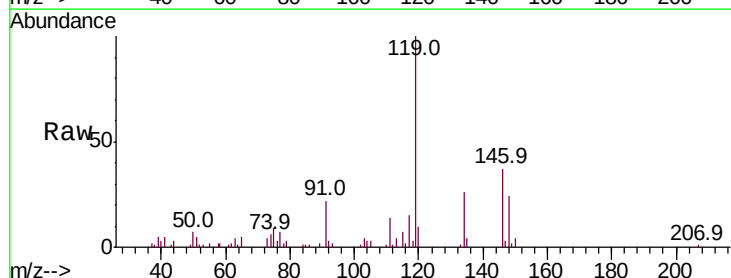
Tgt Ion:119 Resp: 27178

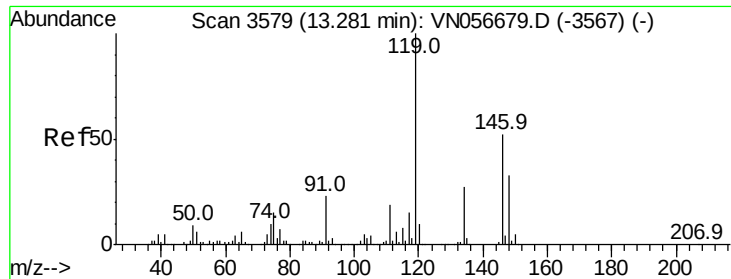
Ion Ratio Lower Upper

119 100

134 26.1 0.0 52.8

91 23.3 0.0 45.4





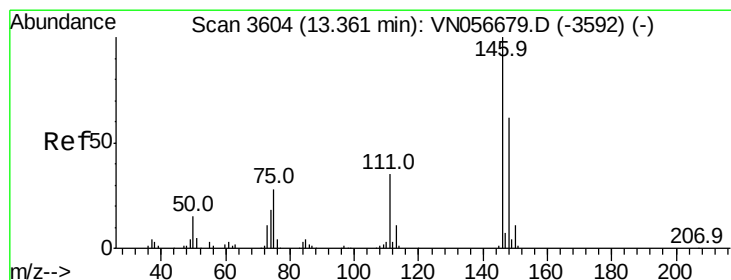
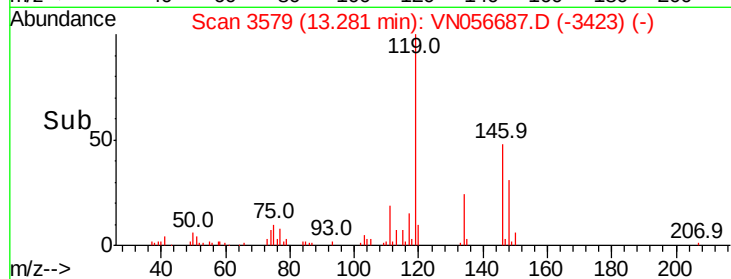
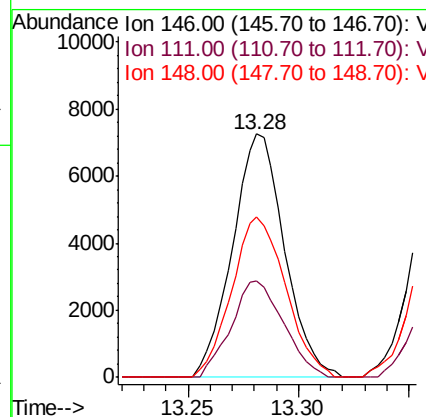
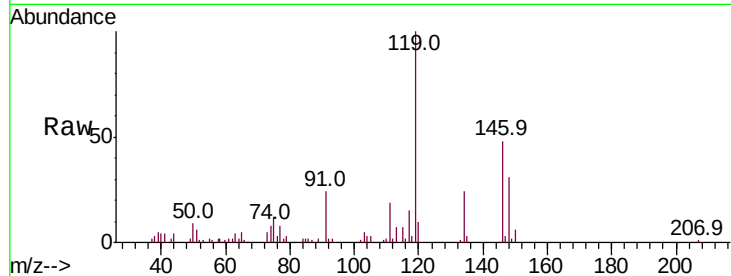
#83
 1,3-Dichlorobenzene
 Concen: 1.851 ug/l
 RT: 13.28 min Scan# 3579
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
146	100		
111	39.9	18.7	56.1
148	68.4	31.8	95.4

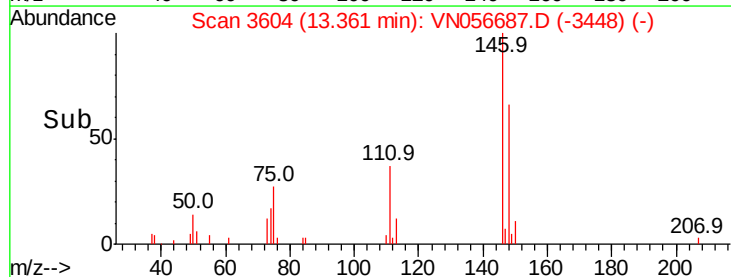
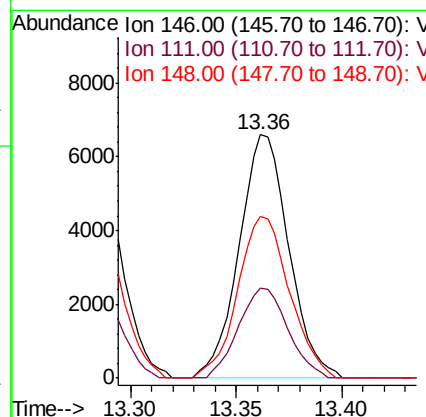
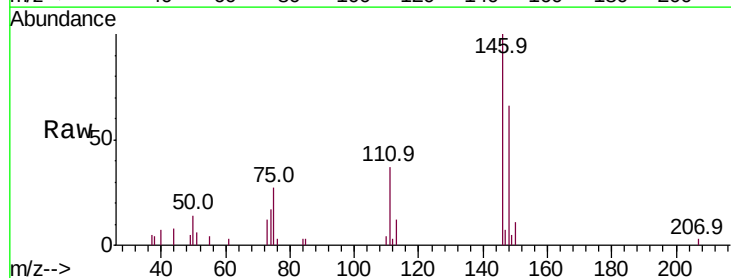
Manual Integrations
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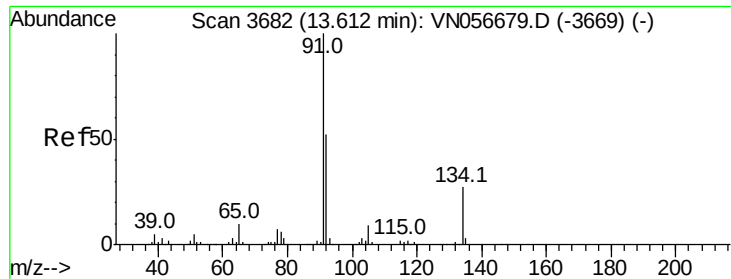
MMDadoda
 7/16/2019 9:59:38 AM



#84
 1,4-Dichlorobenzene
 Concen: 1.760 ug/l
 RT: 13.36 min Scan# 3604
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Tgt Ion	Ratio	Lower	Upper
146	100		
111	36.6	17.8	53.4
148	69.2	31.9	95.5





#85

n-Butylbenzene

Concen: 1.663 ug/l

RT: 13.61 min Scan# 3682

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

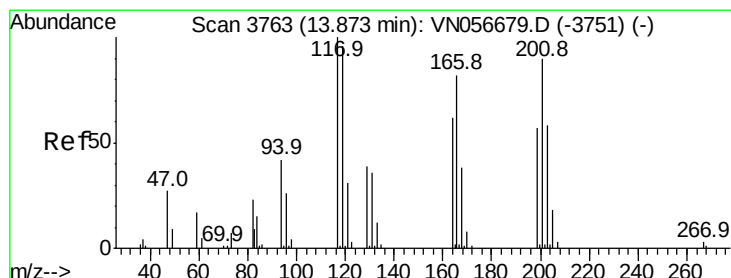
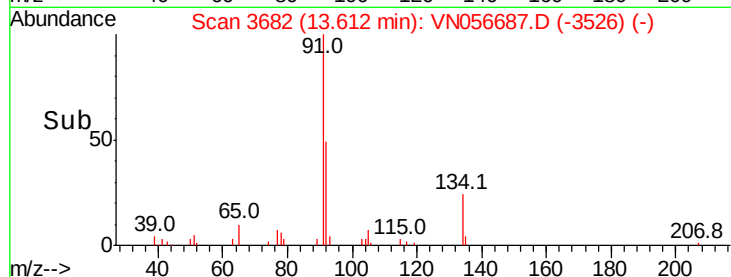
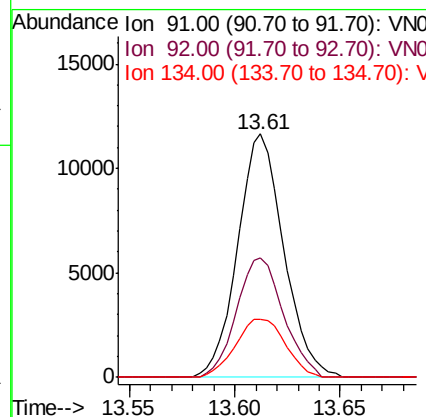
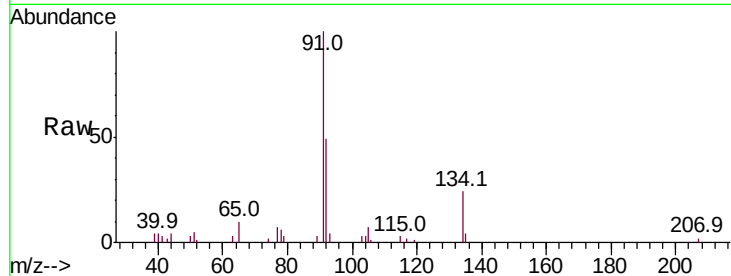
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:	91	Resp:	17648
Ion	Ratio	Lower	Upper
91	100		
92	49.9	0.0	104.0
134	25.9	0.0	53.2

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#86

Hexachloroethane

Concen: 2.005 ug/l

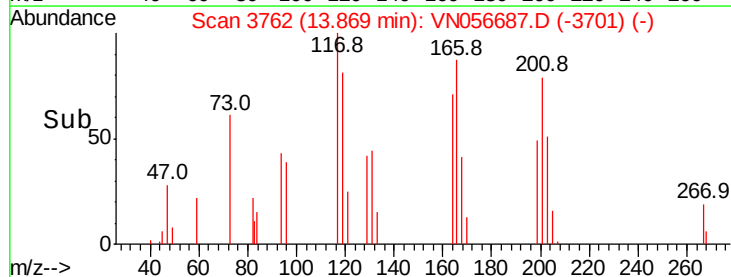
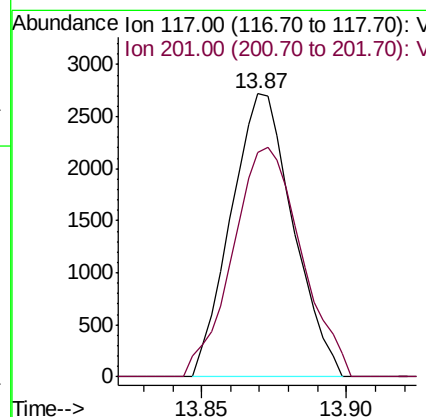
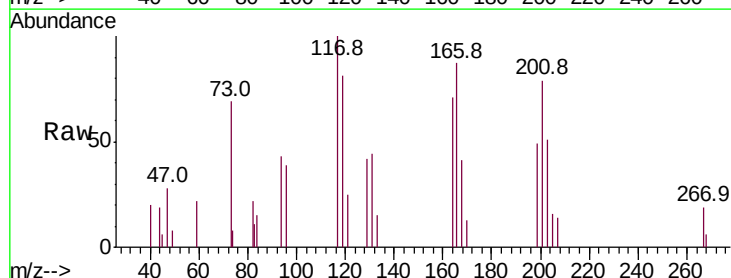
RT: 13.87 min Scan# 3762

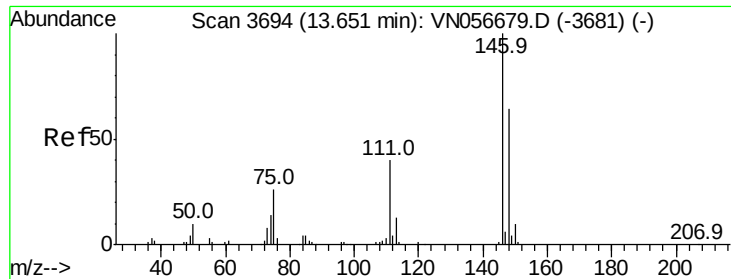
Delta R.T. -0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Tgt Ion:	117	Resp:	4047
Ion	Ratio	Lower	Upper
117	100		
201	89.5	45.6	136.7





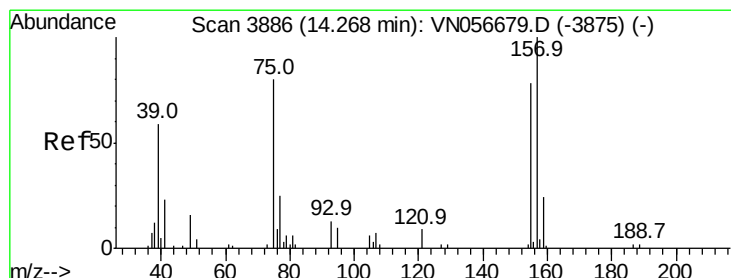
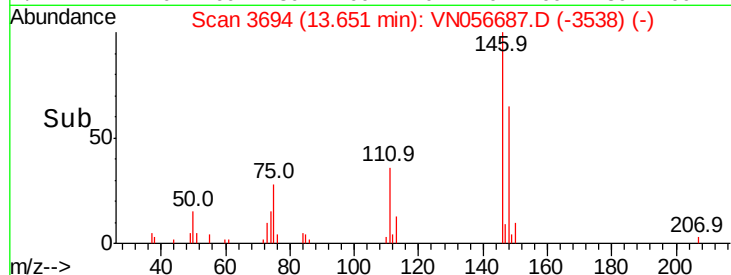
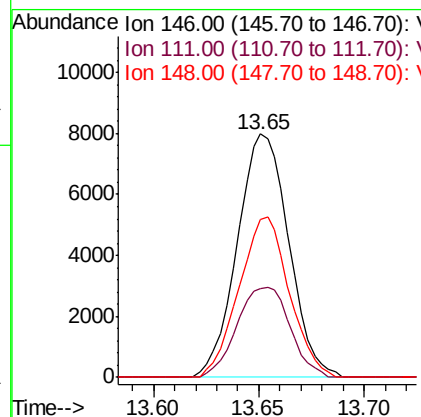
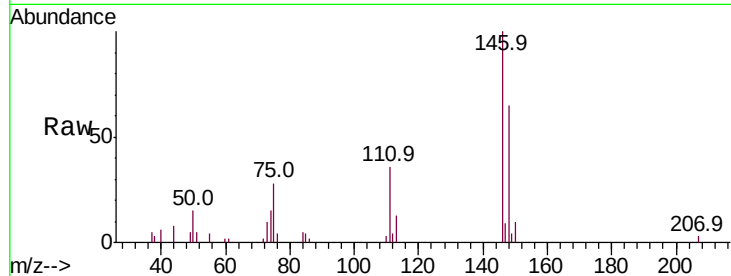
#87
 1,2-Dichlorobenzene
 Concen: 2.100 ug/l
 RT: 13.65 min Scan# 3694
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
146	100		
111	38.2	19.7	59.0
148	64.5	32.7	98.1

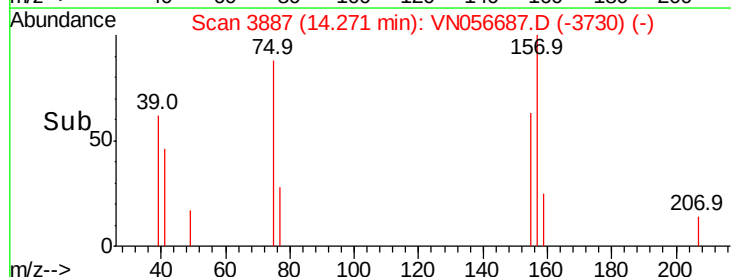
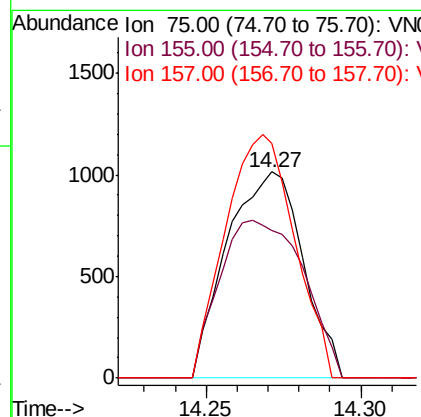
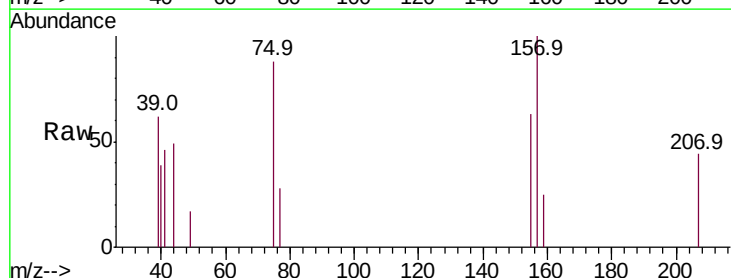
Manual Integrations
 APPROVED

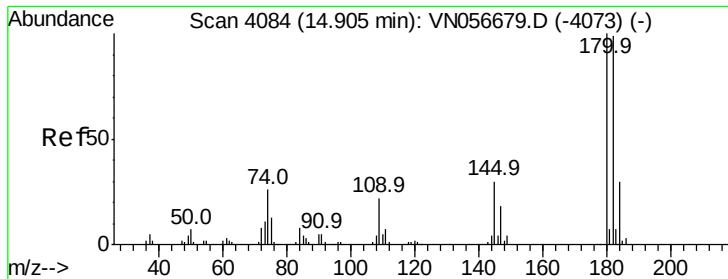
MMDadoda
 7/16/2019 9:59:38 AM



#88
 1,2-Dibromo-3-Chloropropane
 Concen: 2.096 ug/l
 RT: 14.27 min Scan# 3887
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Tgt Ion	Ratio	Lower	Upper
75	100		
155	85.2	78.6	117.8
157	108.0	99.3	148.9





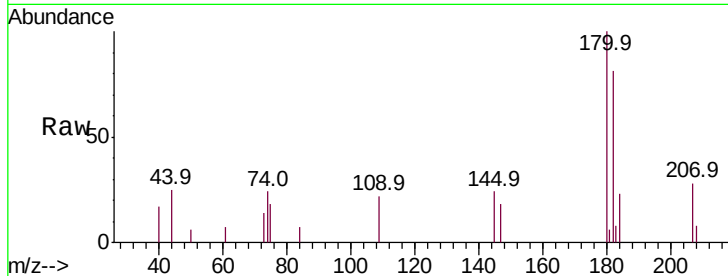
#89
 1,2,4-Trichlorobenzene
 Concen: 1.285 ug/l
 RT: 14.91 min Scan# 4085
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
180	100		
182	89.5	78.2	117.4
145	25.4	23.2	34.8

Manual Integrations
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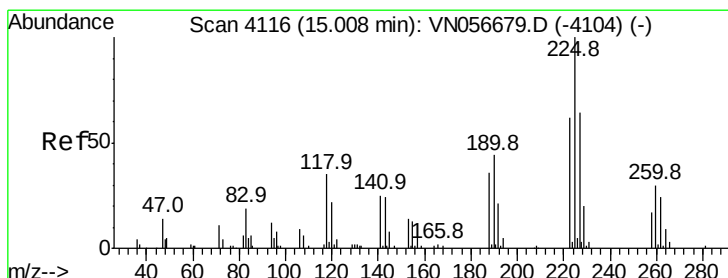
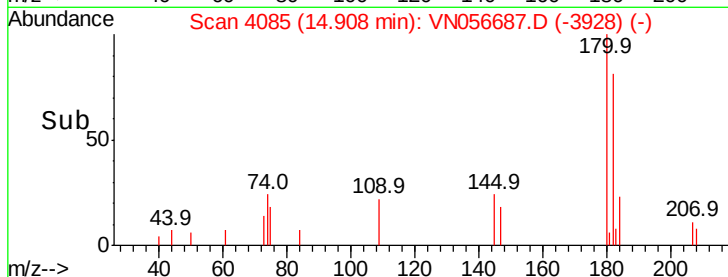
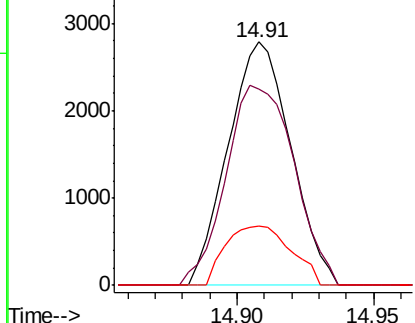


Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V



#90
 Hexachlorobutadiene
 Concen: 2.345 ug/l
 RT: 15.01 min Scan# 4116
 Delta R.T. 0.00 min
 Lab File: VN056687.D
 Acq: 12 Jul 2019 14:02

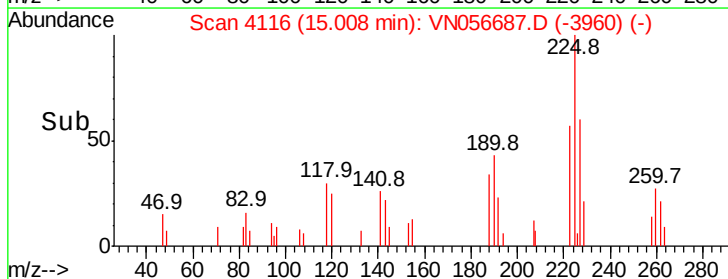
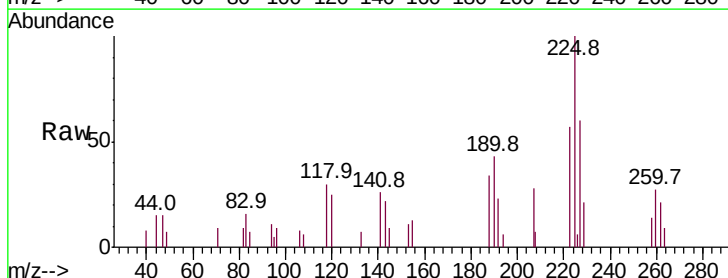
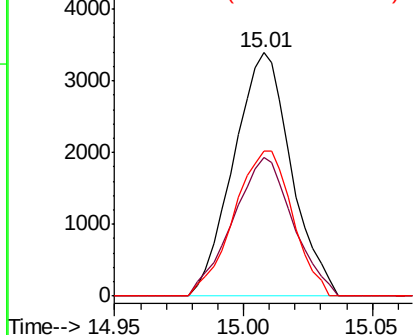
Tgt Ion	Ratio	Lower	Upper
225	100		
223	59.4	0.0	124.6
227	60.7	0.0	128.6

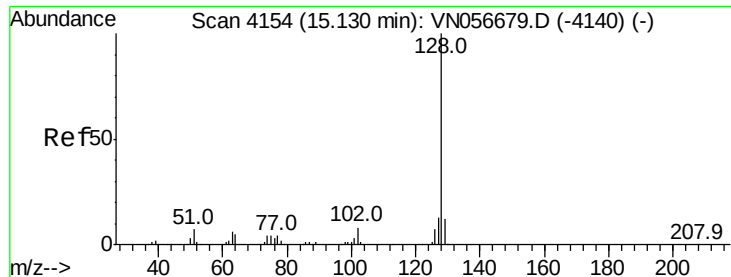
Abundance

Ion 225.00 (224.70 to 225.70): V

Ion 223.00 (222.70 to 223.70): V

Ion 227.00 (226.70 to 227.70): V





#91

Naphthalene

Concen: 1.149 ug/l

RT: 15.13 min Scan# 4155

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Instrument :

MSVOA_N

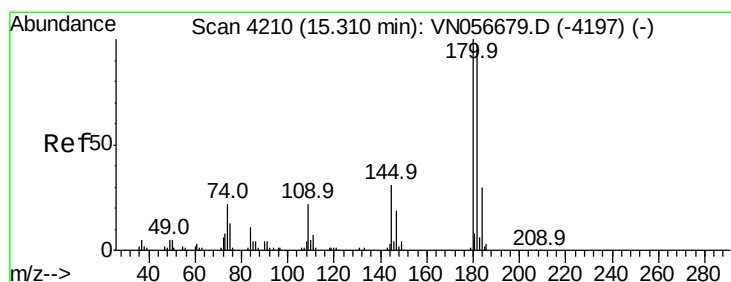
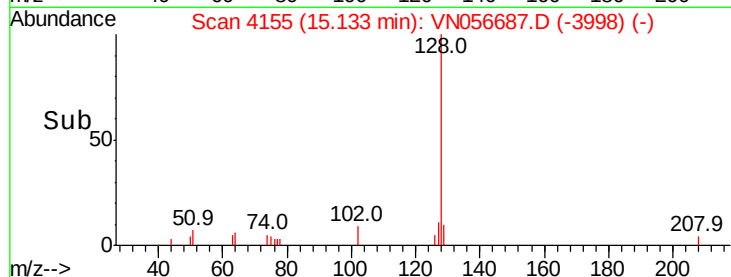
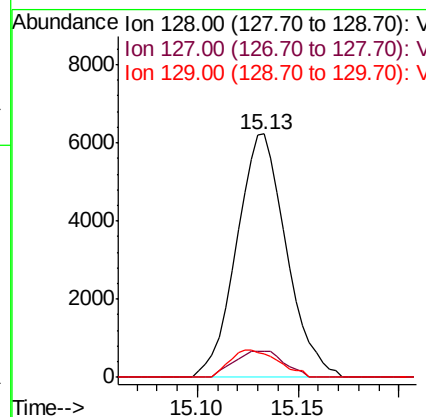
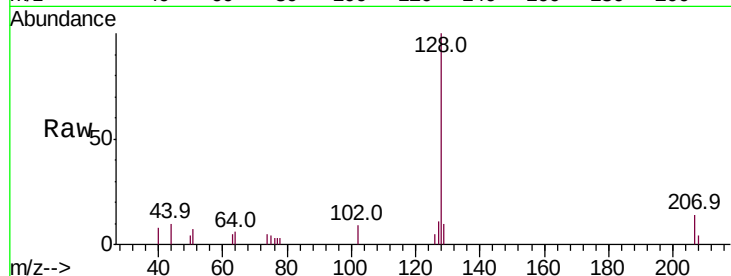
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:	128	Resp:	10722
Ion Ratio	Lower	Upper	
128	100		
127	10.9	10.4	15.6
129	11.0	8.8	13.2

Manual Integrations
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#92

1,2,3-Trichlorobenzene

Concen: 1.532 ug/l

RT: 15.31 min Scan# 4210

Delta R.T. 0.00 min

Lab File: VN056687.D

Acq: 12 Jul 2019 14:02

Tgt Ion:	180	Resp:	5570
Ion Ratio	Lower	Upper	
180	100		
182	93.3	0.0	192.4
145	29.0	0.0	60.4

