

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN101319\
 Data File : VN058706.D
 Acq On : 11 Oct 2019 16:20
 Operator : JC/SP
 Sample : K5111-09 1PPB L00
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT4-2019

Manual Integrations
 APPROVED

MMDadoda
 10/16/2019 12:48:37 AM

Quant Time: Oct 12 00:39:30 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N101319W.M
 Quant Title : SW846 8260
 QLast Update : Sat Oct 12 00:00:30 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.65	168	418322	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.57	114	691990	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	623590	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	268044	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.01	65	314887	53.77	ug/l	0.00
Spiked Amount	50.000		Recovery	=	107.54%	
35) Dibromofluoromethane	7.57	113	220030	51.48	ug/l	0.00
Spiked Amount	50.000		Recovery	=	102.96%	
50) Toluene-d8	10.09	98	842706	49.30	ug/l	0.00
Spiked Amount	50.000		Recovery	=	98.60%	
62) 4-Bromofluorobenzene	12.40	95	292728	45.24	ug/l	0.00
Spiked Amount	50.000		Recovery	=	90.48%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.83	85	5744	1.103	ug/l	98
3) Chloromethane	2.04	50	7662	1.237	ug/l	90
4) Vinyl Chloride	2.17	62	6891	1.117	ug/l	100
5) Bromomethane	2.55	94	4766	1.270	ug/l	98
6) Chloroethane	2.69	64	4415	1.160	ug/l	96
7) Trichlorofluoromethane	3.00	101	8873	1.202	ug/l	95
8) Diethyl Ether	3.39	74	3010	1.103	ug/l	86
9) 1,1,2-Trichlorotrifluoroet	3.74	101	4215	1.001	ug/l #	81
10) Methyl Iodide	3.93	142	6038	1.051	ug/l	98
11) Tert butyl alcohol	4.77	59	5957	6.281	ug/l #	82
12) 1,1-Dichloroethene	3.72	96	4798	1.194	ug/l	87
13) Acrolein	3.58	56	3958	5.189	ug/l	100
14) Allyl chloride	4.30	41	10116m	1.248	ug/l	
15) Acrylonitrile	4.97	53	12615	5.274	ug/l	99
16) Acetone	3.80	43	13850	5.712	ug/l	95
17) Carbon Disulfide	4.03	76	15448	1.203	ug/l	95
18) Methyl Acetate	4.31	43	7733	1.257	ug/l #	79
19) Methyl tert-butyl Ether	5.03	73	16020	1.117	ug/l	98
20) Methylene Chloride	4.54	84	6607	1.304	ug/l	89
21) trans-1,2-Dichloroethene	5.01	96	5123	1.140	ug/l #	91
22) Diisopropyl ether	5.93	45	16701	1.059	ug/l #	94
23) Vinyl Acetate	5.88	43	67599	5.315	ug/l	97
24) 1,1-Dichloroethane	5.82	63	9829	1.095	ug/l #	96
25) 2-Butanone	6.82	43	18407	5.253	ug/l	93
26) 2,2-Dichloropropane	6.81	77	11042	1.347	ug/l	87
27) cis-1,2-Dichloroethene	6.81	96	6127	1.169	ug/l	86
28) Bromochloromethane	7.18	49	3339	1.069	ug/l #	91
29) Tetrahydrofuran	7.20	42	12235	5.403	ug/l #	61
30) Chloroform	7.36	83	10937	1.213	ug/l	98
31) Cyclohexane	7.64	56	17853	2.078	ug/l #	39
32) 1,1,1-Trichloroethane	7.55	97	8704	1.131	ug/l #	53
36) 1,1-Dichloropropene	7.78	75	7474	1.068	ug/l	96
37) Ethyl Acetate	6.91	43	8215	1.161	ug/l #	86
38) Carbon Tetrachloride	7.75	117	7393	1.084	ug/l	90

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	9.07	83	8632	1.063	ug/l	93
40) Benzene	8.02	78	22868	1.138	ug/l	93
41) Methacrylonitrile	7.15	41	2890m	0.873	ug/l	
42) 1,2-Dichloroethane	8.11	62	8975	1.163	ug/l	90
43) Isopropyl Acetate	8.15	43	11658	0.967	ug/l #	93
44) Trichloroethene	8.83	130	5754	1.153	ug/l	80
45) 1,2-Dichloropropane	9.11	63	5441	1.011	ug/l #	88
46) Dibromomethane	9.20	93	3952	1.159	ug/l	91
47) Bromodichloromethane	9.39	83	7732	1.113	ug/l	89
48) Methyl methacrylate	9.19	41	5858	1.072	ug/l #	85
49) 1,4-Dioxane	9.18	88	1759	20.809	ug/l #	78
51) 4-Methyl-2-Pentanone	9.98	43	34180	5.049	ug/l	99
52) Toluene	10.15	92	13078	1.064	ug/l	100
53) t-1,3-Dichloropropene	10.38	75	8027	1.008	ug/l #	69
54) cis-1,3-Dichloropropene	9.84	75	8859	1.048	ug/l	99
55) 1,1,2-Trichloroethane	10.56	97	6082	1.209	ug/l #	85
56) Ethyl methacrylate	10.43	69	6835	0.930	ug/l	87
57) 1,3-Dichloropropane	10.70	76	8841	1.031	ug/l	96
58) 2-Chloroethyl Vinyl ether	9.69	63	14430	4.075	ug/l	99
59) 2-Hexanone	10.75	43	24792	4.739	ug/l	99
60) Dibromochloromethane	10.90	129	5132	0.989	ug/l	97
61) 1,2-Dibromoethane	11.00	107	5410	1.074	ug/l	96
64) Tetrachloroethene	10.63	164	5203	1.192	ug/l	92
65) Chlorobenzene	11.43	112	14090	1.113	ug/l	95
66) 1,1,1,2-Tetrachloroethane	11.51	131	4895	1.045	ug/l #	66
67) Ethyl Benzene	11.51	91	23513	1.042	ug/l	99
68) m/p-Xylenes	11.62	106	16931	1.999	ug/l	94
69) o-Xylene	11.95	106	8003	0.976	ug/l	95
70) Styrene	11.97	104	11935	0.888	ug/l	96
71) Bromoform	12.13	173	3477	1.013	ug/l #	69
73) Isopropylbenzene	12.25	105	21501	1.108	ug/l	99
74) N-amyl acetate	12.07	43	8088	0.928	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.51	83	7984	1.248	ug/l	96
76) 1,2,3-Trichloropropane	12.56	75	8228m	1.399	ug/l	
77) Bromobenzene	12.53	156	5915	1.253	ug/l	92
78) n-propylbenzene	12.60	91	24211	1.070	ug/l	99
79) 2-Chlorotoluene	12.68	91	14917	1.062	ug/l	94
80) 1,3,5-Trimethylbenzene	12.74	105	18436	1.112	ug/l	99
81) trans-1,4-Dichloro-2-buten	12.31	75	2709m	1.234	ug/l	
82) 4-Chlorotoluene	12.78	91	15961	1.108	ug/l	98
83) tert-Butylbenzene	13.00	119	16699	1.176	ug/l	96
84) 1,2,4-Trimethylbenzene	13.05	105	16556	1.006	ug/l	97
85) sec-Butylbenzene	13.18	105	19498	1.042	ug/l	96
86) p-Isopropyltoluene	13.30	119	17829	1.049	ug/l	98
87) 1,3-Dichlorobenzene	13.29	146	9444	1.085	ug/l	98
88) 1,4-Dichlorobenzene	13.37	146	10046m	1.135	ug/l	
89) n-Butylbenzene	13.62	91	16068	1.022	ug/l	95
90) Hexachloroethane	13.88	117	3170	1.042	ug/l	90
91) 1,2-Dichlorobenzene	13.66	146	9828	1.158	ug/l	98
92) 1,2-Dibromo-3-Chloropropan	14.27	75	1986	1.329	ug/l	76

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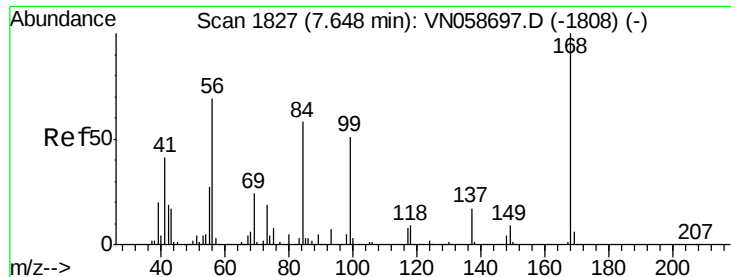
Manual Integrations
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	14.92	180	5303	1.024	ug/l	98
94) Hexachlorobutadiene	15.02	225	3173	1.164	ug/l	95
95) Naphthalene	15.13	128	15279	1.027	ug/l	98
96) 1,2,3-Trichlorobenzene	15.30	180	5406	1.070	ug/l	93

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.65 min Scan# 1827

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion:168 Resp: 418322

Ion Ratio Lower Upper

168 100

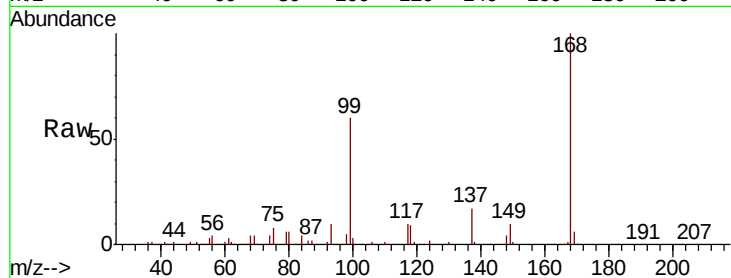
99 60.0 47.5 71.3

Manual Integrations

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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.65

200000

150000

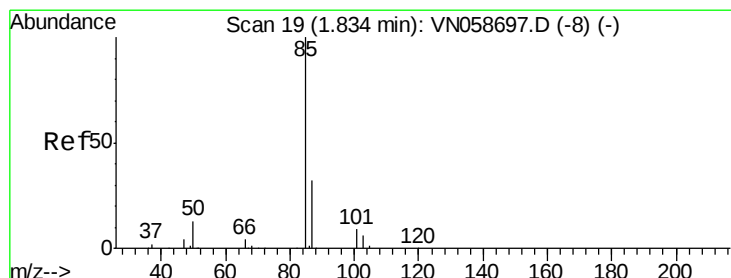
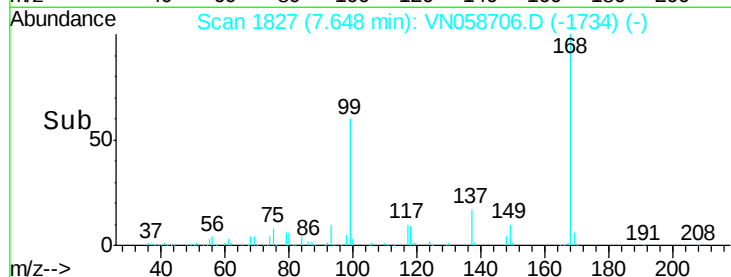
100000

50000

0

7.55 7.60 7.65 7.70 7.75

Time-->



#2

Dichlorodifluoromethane

Concen: 1.103 ug/l

RT: 1.83 min Scan# 19

Delta R.T. 0.00 min

Lab File: VN058706.D

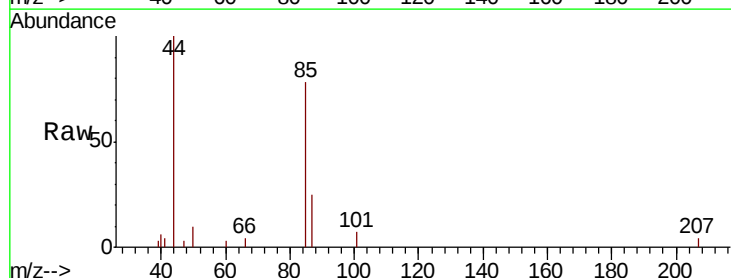
Acq: 11 Oct 2019 16:20

Tgt Ion: 85 Resp: 5744

Ion Ratio Lower Upper

85 100

87 31.6 16.2 48.6



Abundance Ion 84.90 (84.60 to 85.60): VNO

Ion 86.90 (86.60 to 87.60): VNO

1.83

5000

4000

3000

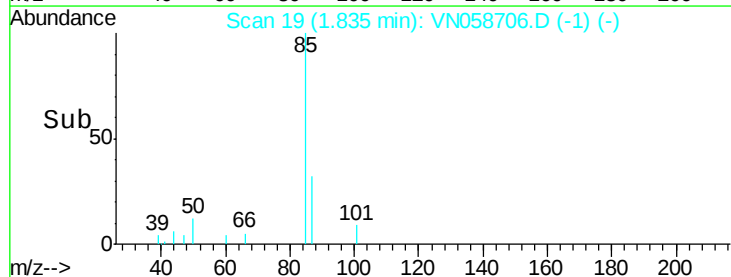
2000

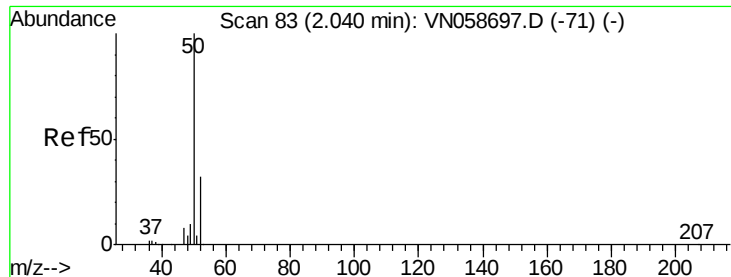
1000

0

1.80 1.85 1.90

Time-->





#3

Chloromethane

Concen: 1.237 ug/l

RT: 2.04 min Scan# 83

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Tot Ion: 50 Resp: 7662

Ion Ratio Lower Upper

50 100

52 26.7 25.8 38.6

Instrument :

MSVOA_N

ClientSampleId :

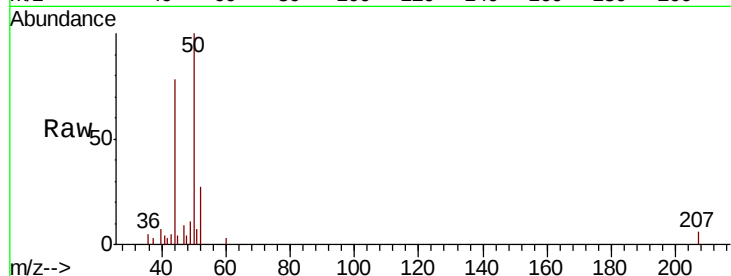
MDL-MDL-WATER-03-QT4-2019

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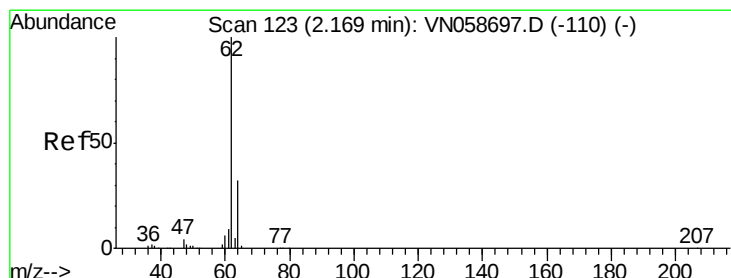
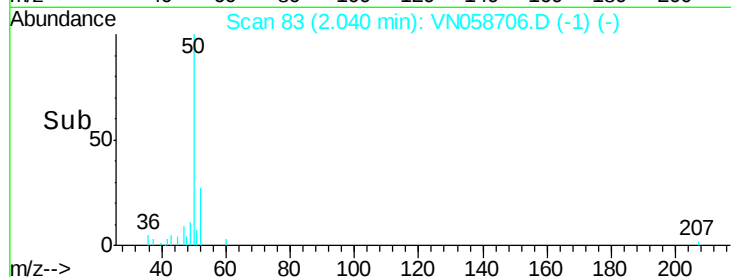
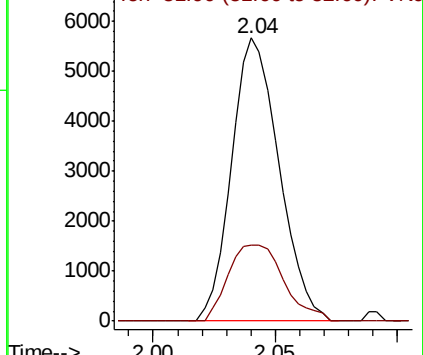
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Abundance Ion 49.90 (49.60 to 50.60): VNO

Ion 51.90 (51.60 to 52.60): VNO



#4

Vinyl Chloride

Concen: 1.117 ug/l

RT: 2.17 min Scan# 124

Delta R.T. 0.00 min

Lab File: VN058706.D

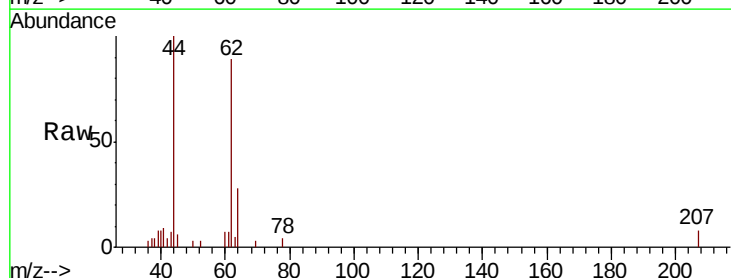
Acq: 11 Oct 2019 16:20

Tgt Ion: 62 Resp: 6891

Ion Ratio Lower Upper

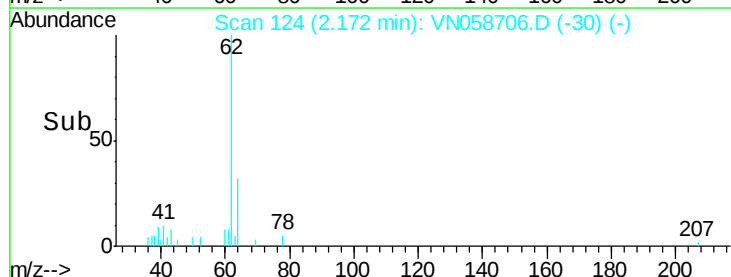
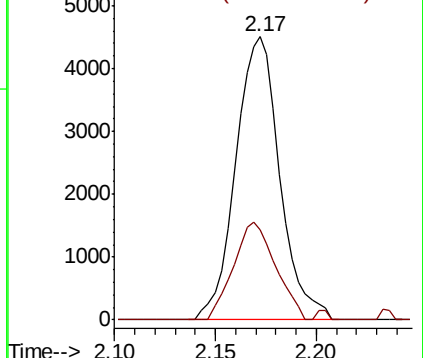
62 100

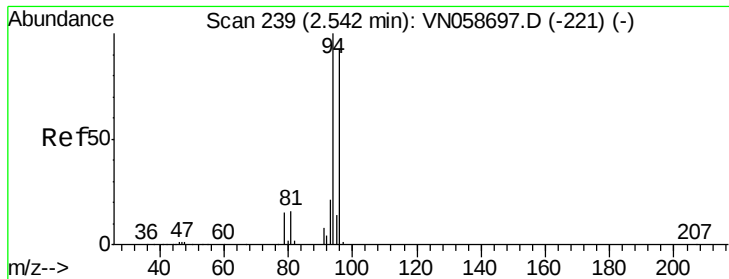
64 31.8 25.3 37.9



Abundance Ion 61.90 (61.60 to 62.60): VNO

Ion 63.90 (63.60 to 64.60): VNO





#5

Bromomethane

Concen: 1.270 ug/l

RT: 2.55 min Scan# 242

Delta R.T. 0.01 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion: 94 Resp: 4766

Ion Ratio Lower Upper

94 100

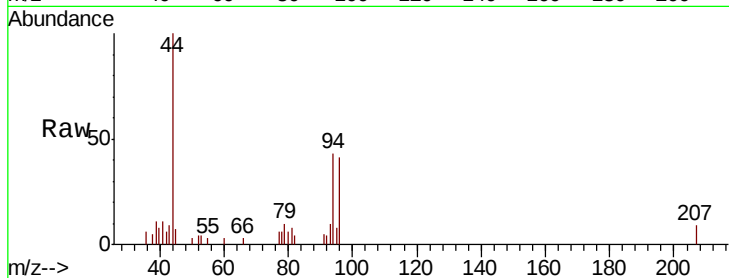
96 95.4 74.5 111.7

Manual Integrations

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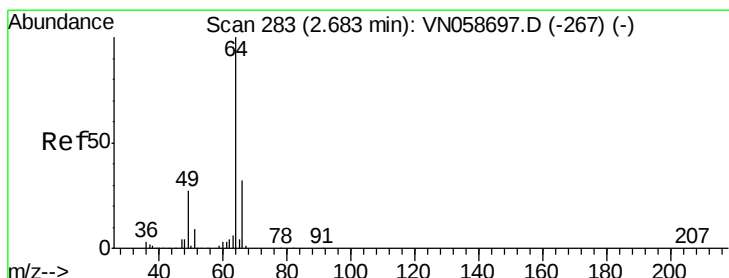
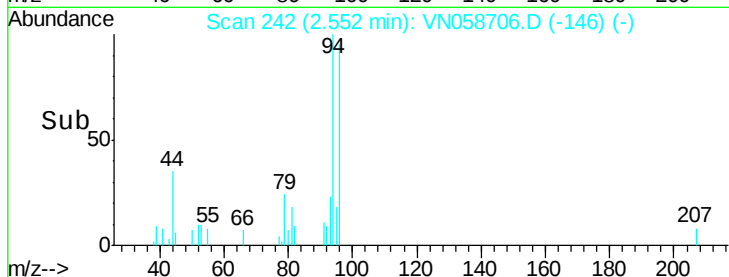
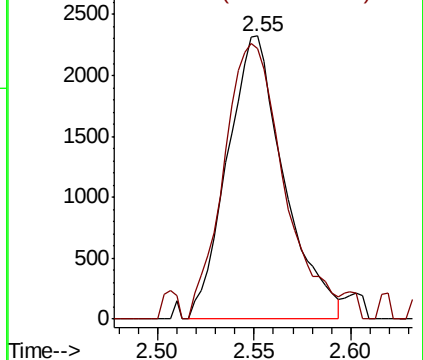
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Abundance Ion 93.90 (93.60 to 94.60): VN0

Ion 95.90 (95.60 to 96.60): VN0



#6

Chloroethane

Concen: 1.160 ug/l

RT: 2.69 min Scan# 286

Delta R.T. 0.01 min

Lab File: VN058706.D

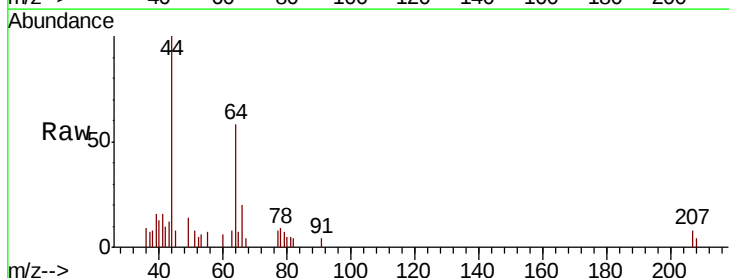
Acq: 11 Oct 2019 16:20

Tgt Ion: 64 Resp: 4415

Ion Ratio Lower Upper

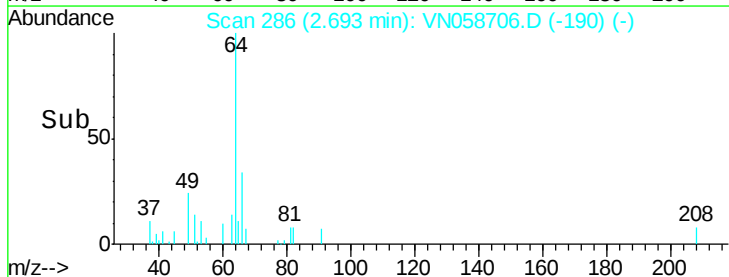
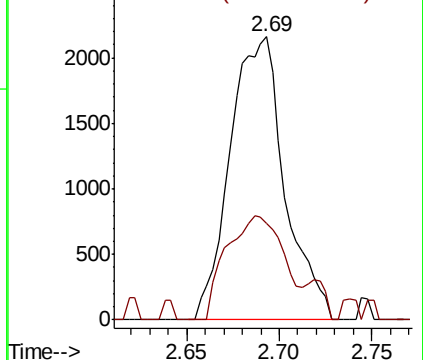
64 100

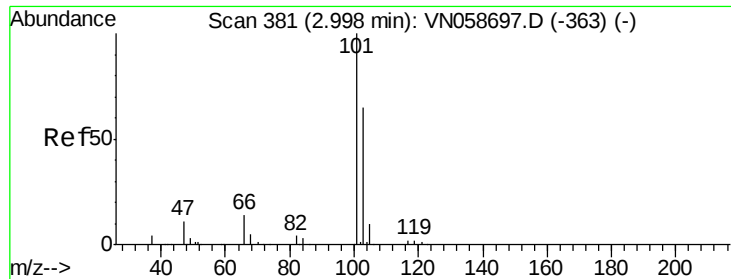
66 34.1 25.4 38.2



Abundance Ion 63.90 (63.60 to 64.60): VN0

Ion 65.90 (65.60 to 66.60): VN0





#7

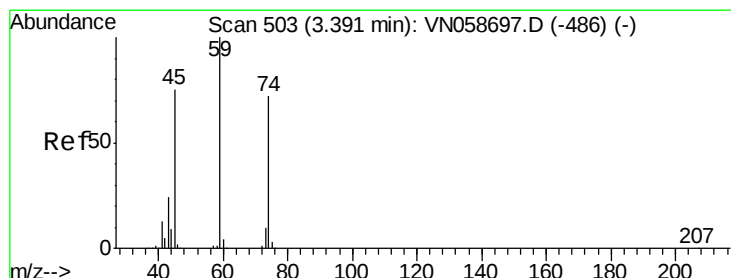
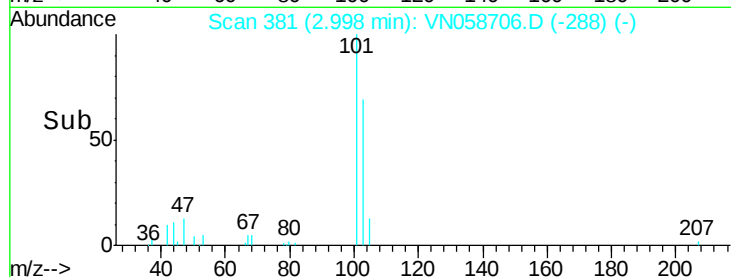
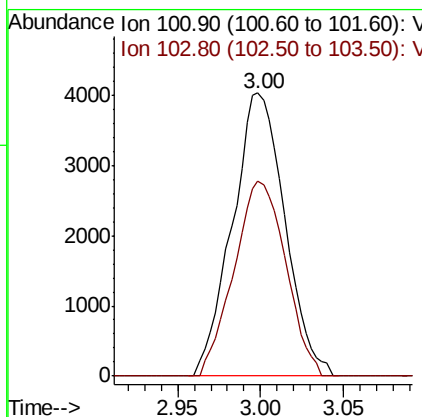
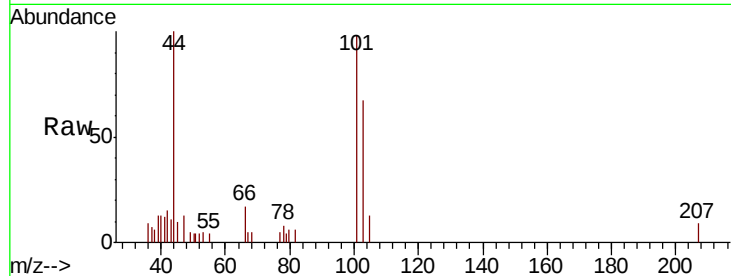
Trichlorofluoromethane
Concen: 1.202 ug/l
RT: 3.00 min Scan# 381
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

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Tot Ion	Ratio	Lower	Upper
101	100		
103	69.0	51.8	77.6

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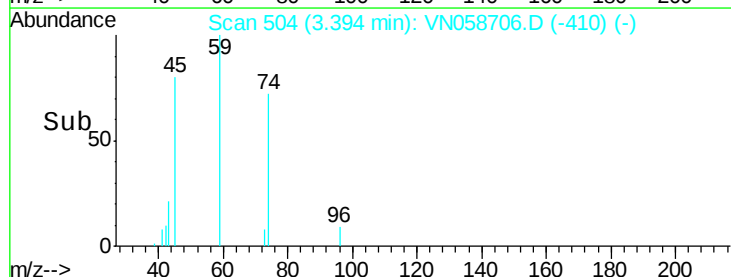
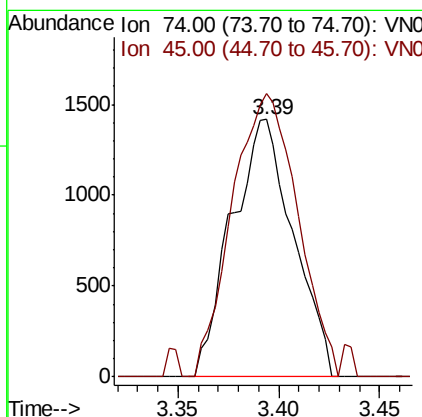
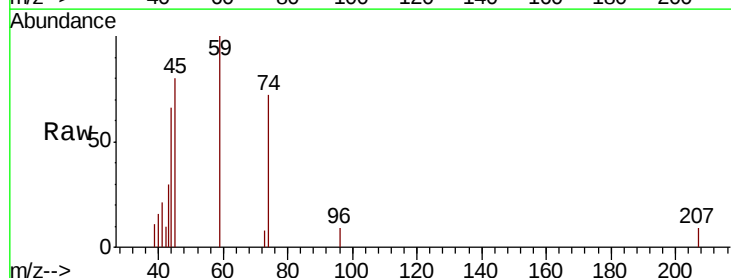
MMDadoda
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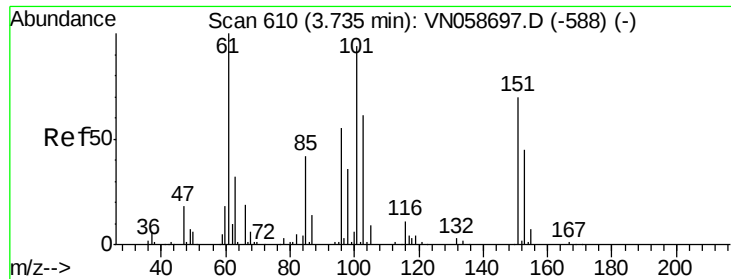


#8

Diethyl Ether
Concen: 1.103 ug/l
RT: 3.39 min Scan# 504
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
74	100		
45	117.3	51.3	154.0





#9

1,1,2-Trichlorotrifluoroethane

Concen: 1.001 ug/l

RT: 3.74 min Scan# 611

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

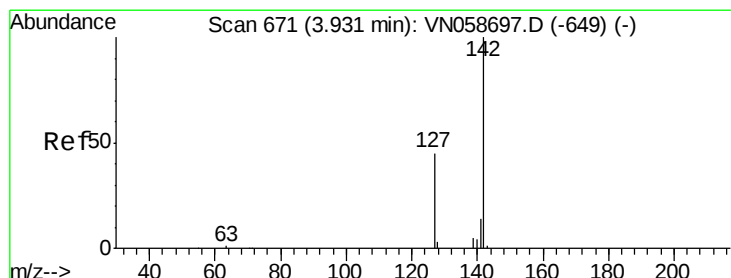
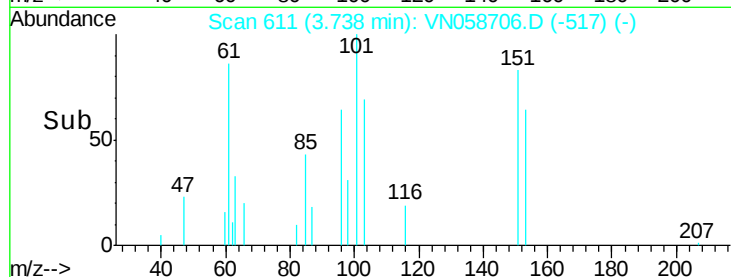
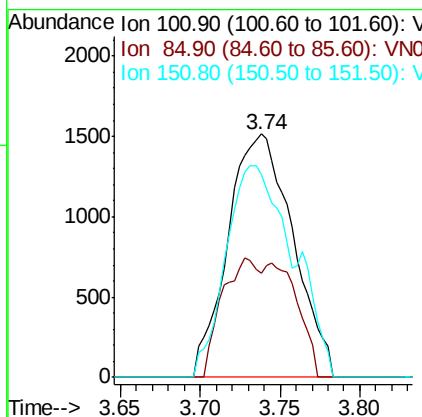
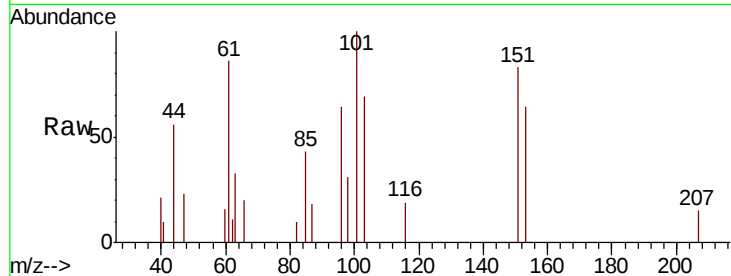
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion:	101	Resp:	4215
Ion Ratio	Lower	Upper	
101	100		
85	28.6	37.0	55.6#
151	90.2	61.8	92.6

Manual Integrations
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10/16/2019 12:48:37 AM



#10

Methyl Iodide

Concen: 1.051 ug/l

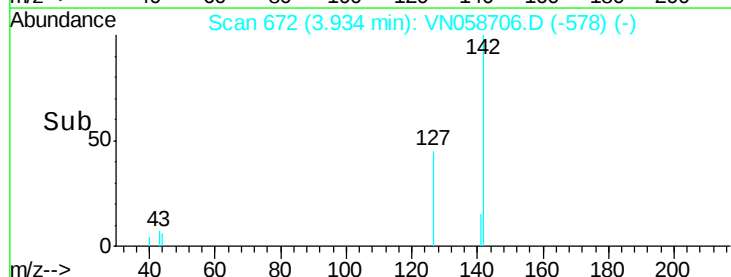
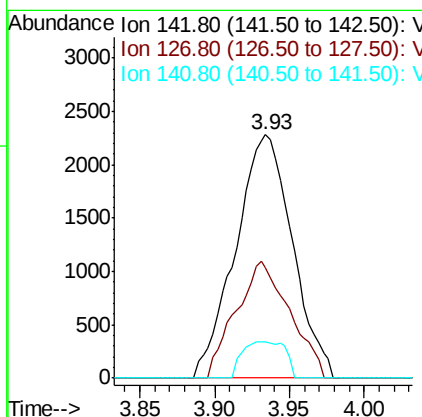
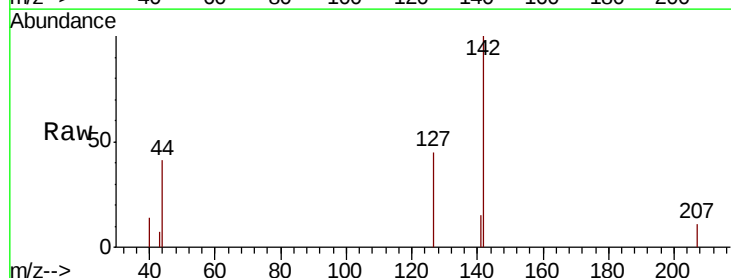
RT: 3.93 min Scan# 672

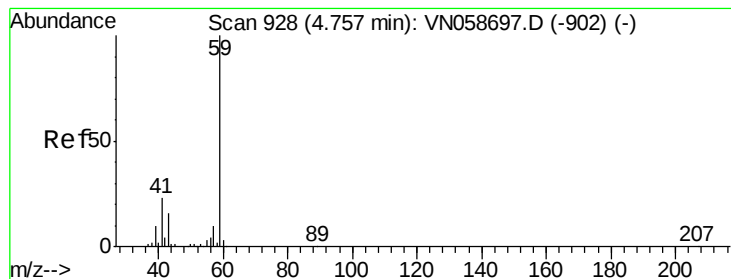
Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Tgt Ion:	142	Resp:	6038
Ion Ratio	Lower	Upper	
142	100		
127	45.2	36.4	54.6
141	11.2	11.1	16.7





#11

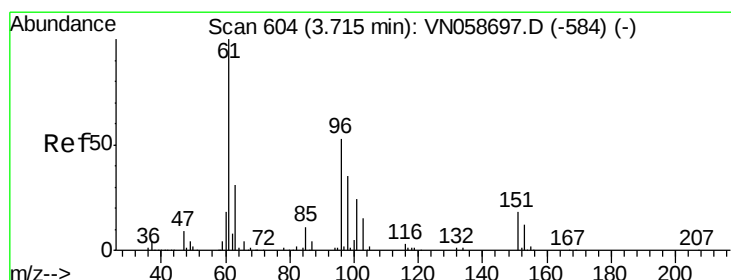
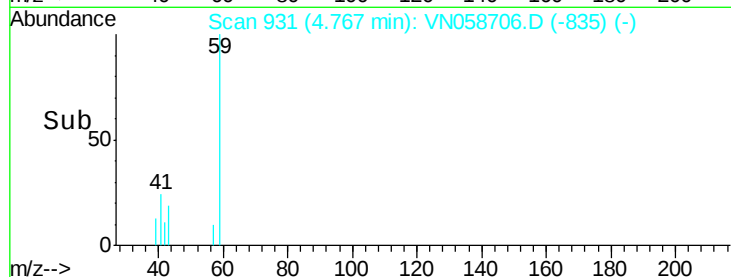
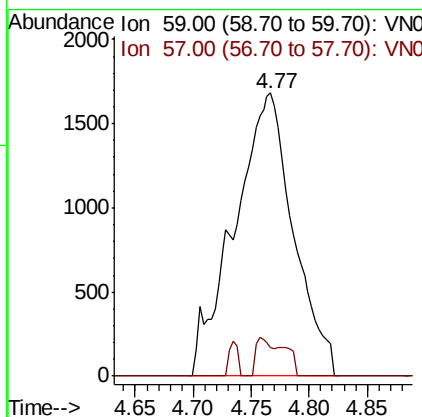
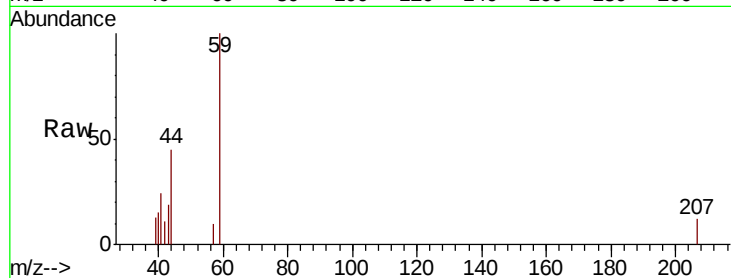
Tert butyl alcohol
Concen: 6.281 ug/l
RT: 4.77 min Scan# 931
Delta R.T. 0.01 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
59	100		
57	3.8	8.4	12.6#

Manual Integrations
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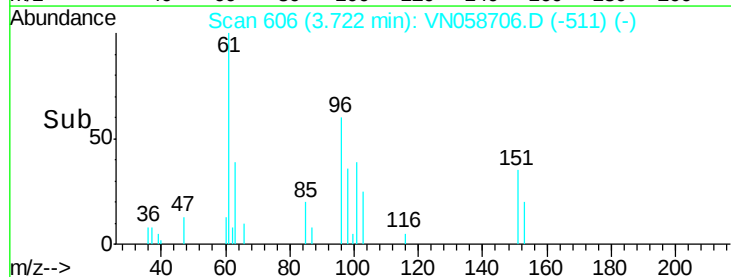
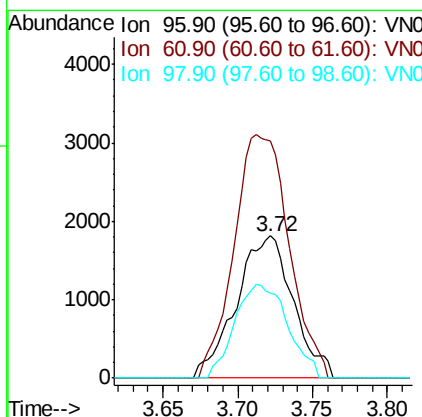
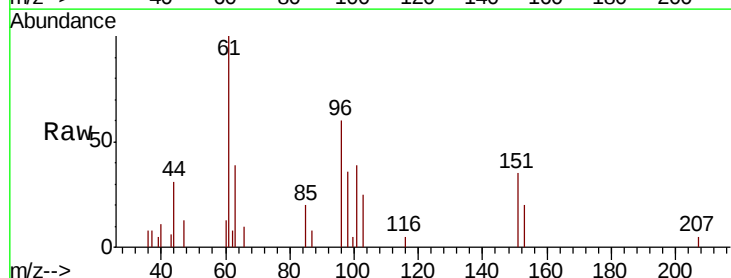
MMDadoda
10/16/2019 12:48:37 AM

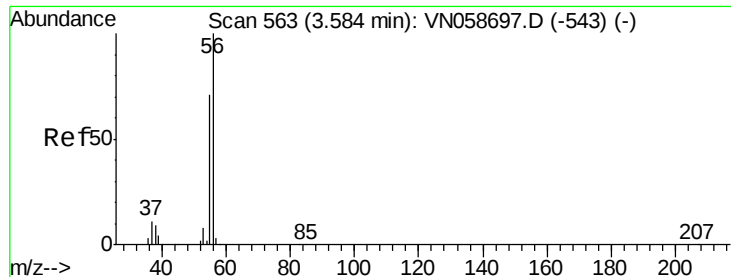


#12

1,1-Dichloroethene
Concen: 1.194 ug/l
RT: 3.72 min Scan# 606
Delta R.T. 0.01 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
96	100		
61	166.9	151.3	226.9
98	59.9	52.6	78.8





#13

Acrolein

Concen: 5.189 ug/l

RT: 3.58 min Scan# 562

Delta R.T. -0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion: 56 Resp: 3958

Ion Ratio Lower Upper

56 100

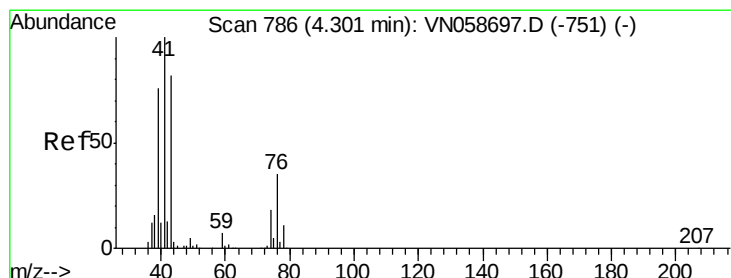
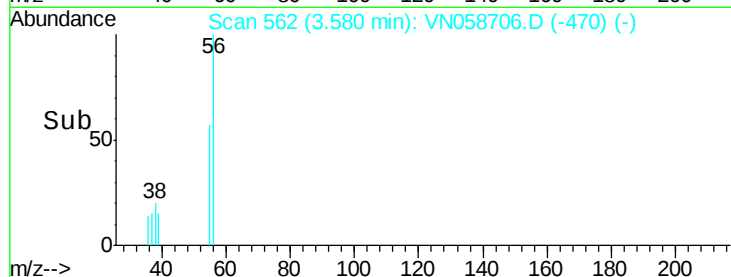
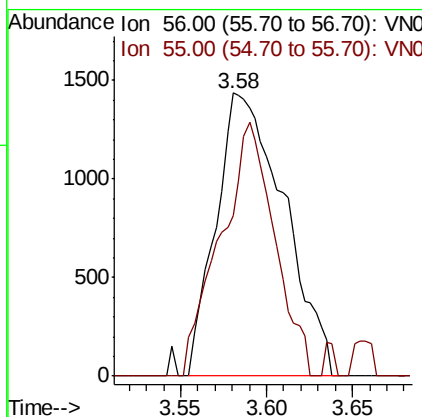
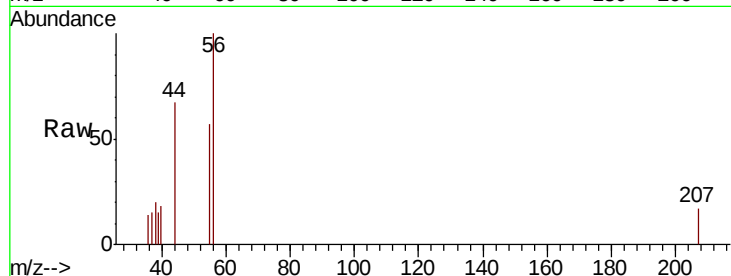
55 71.1 56.7 85.1

Manual Integrations

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MMDadoda

10/16/2019 12:48:37 AM



#14

Allyl chloride

Concen: 1.248 ug/l m

RT: 4.30 min Scan# 786

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

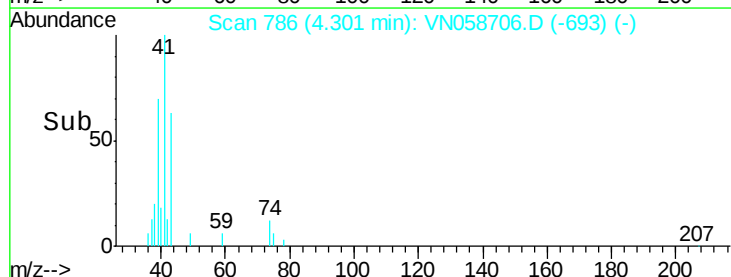
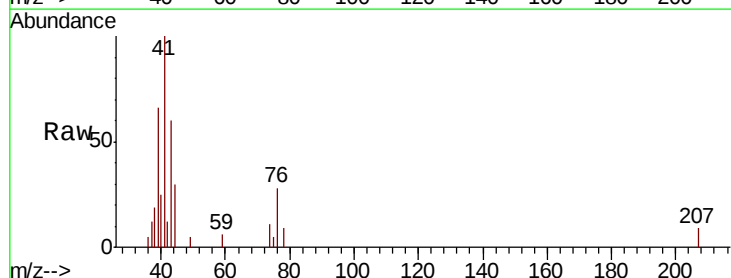
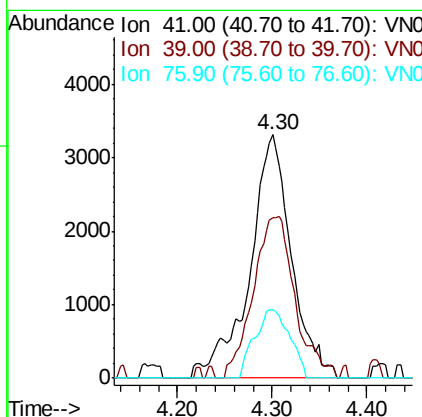
Tgt Ion: 41 Resp: 10116

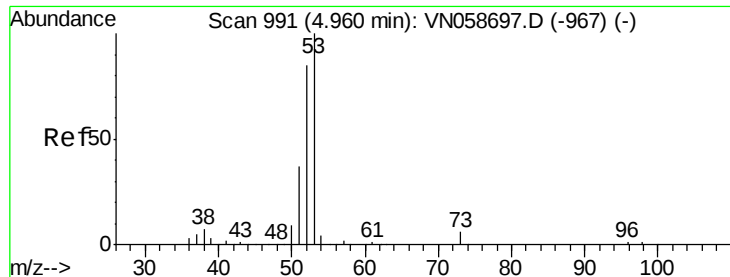
Ion Ratio Lower Upper

41 100

39 66.4 57.2 85.8

76 23.6 25.0 37.6#





#15

Acrylonitrile

Concen: 5.274 ug/l

RT: 4.97 min Scan# 993

Delta R.T. 0.01 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

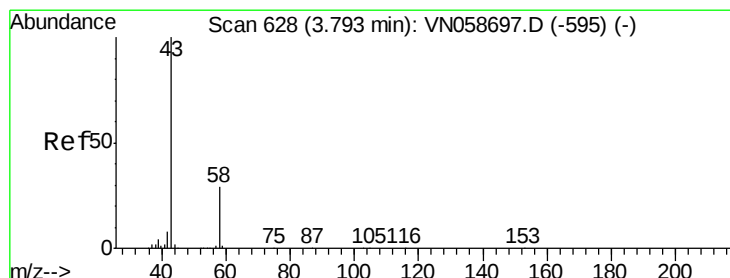
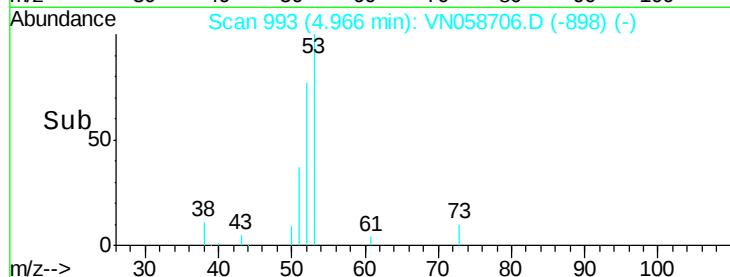
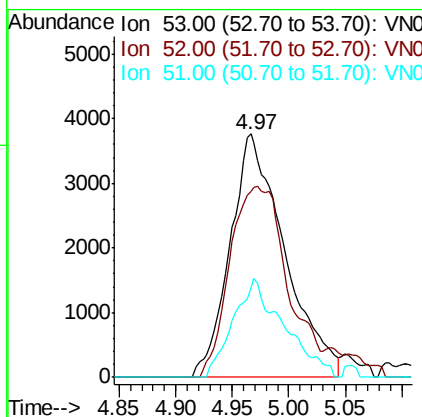
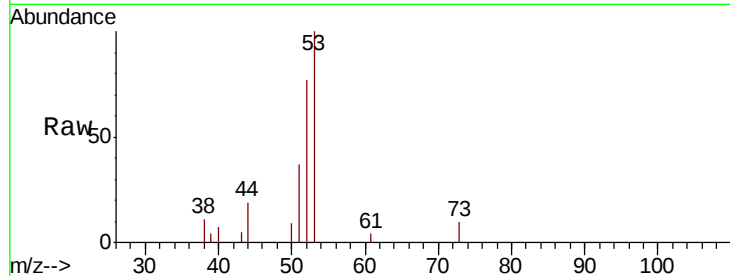
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion:	53	Resp:	12615
Ion	Ratio	Lower	Upper
53	100		
52	82.9	66.2	99.2
51	37.7	29.4	44.2

Manual Integrations
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10/16/2019 12:48:37 AM



#16

Acetone

Concen: 5.712 ug/l

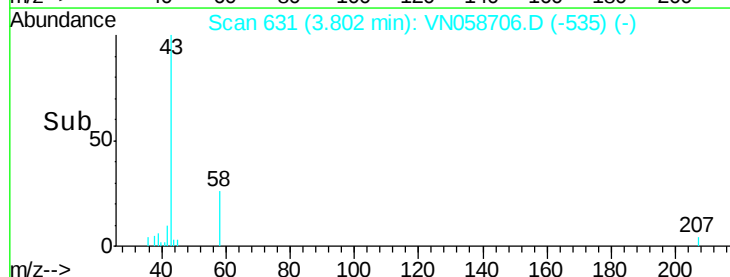
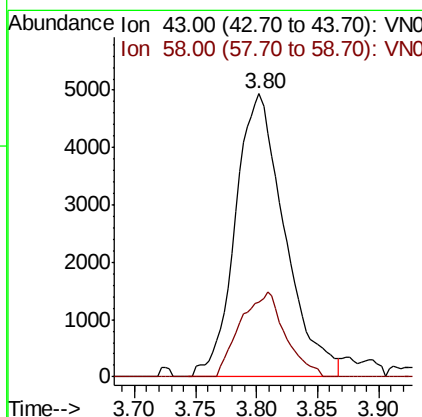
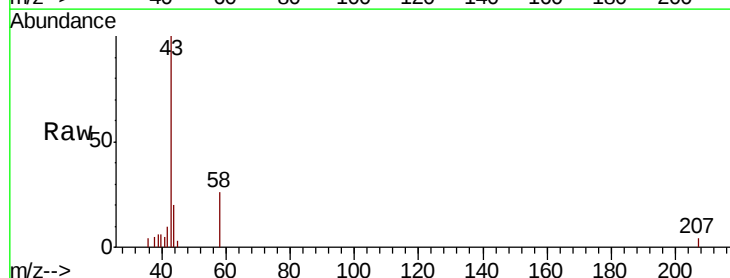
RT: 3.80 min Scan# 631

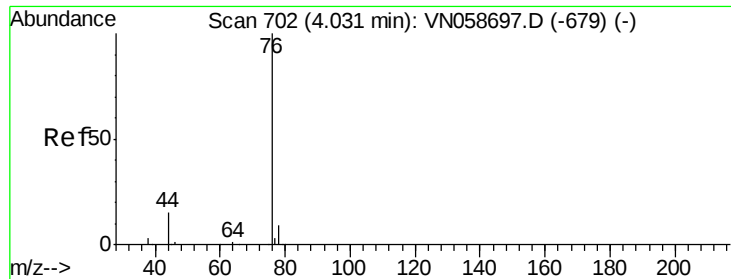
Delta R.T. 0.01 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Tgt Ion:	43	Resp:	13850
Ion	Ratio	Lower	Upper
43	100		
58	26.2	23.3	34.9





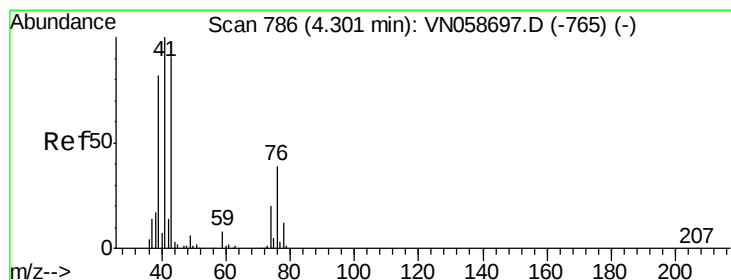
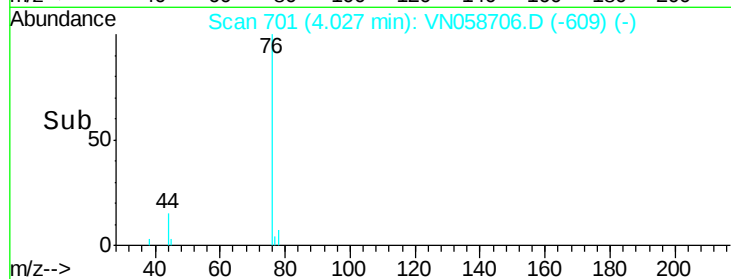
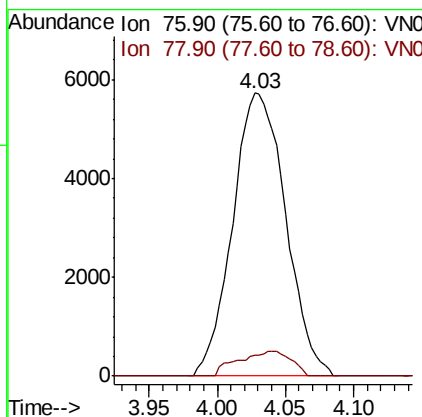
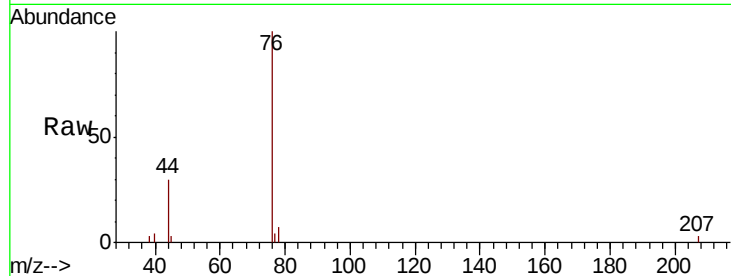
#17
Carbon Disulfide
Concen: 1.203 ug/l
RT: 4.03 min Scan# 701
Delta R.T. -0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion: 76 Resp: 15448
Ion Ratio Lower Upper
76 100
78 7.2 7.1 10.7

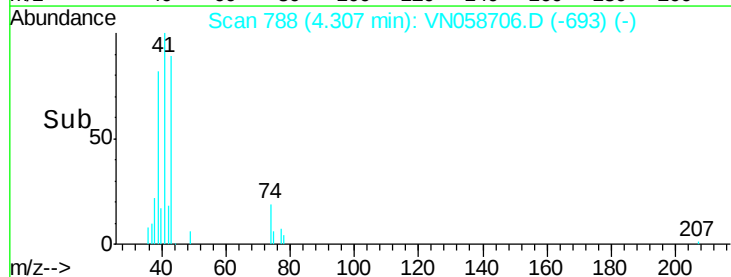
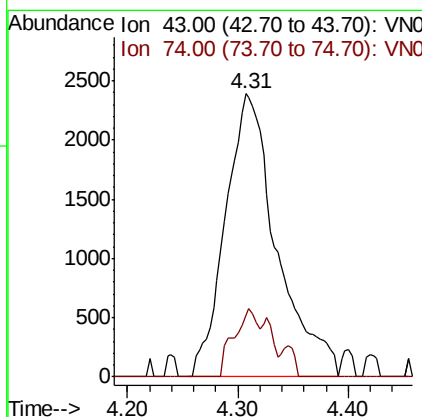
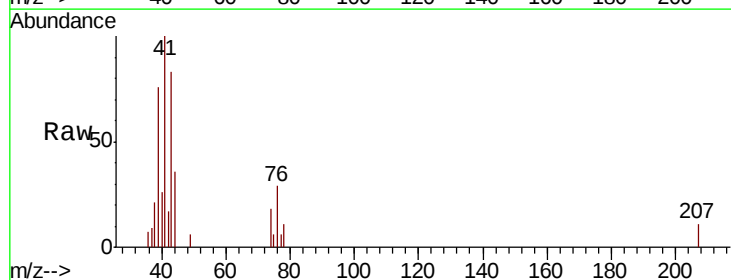
Manual Integrations
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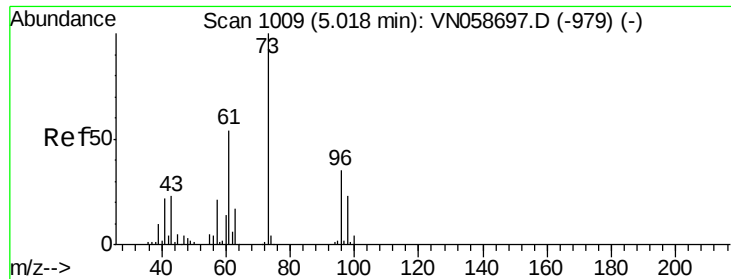
MMDadoda
10/16/2019 12:48:37 AM



#18
Methyl Acetate
Concen: 1.257 ug/l
RT: 4.31 min Scan# 788
Delta R.T. 0.01 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion: 43 Resp: 7733
Ion Ratio Lower Upper
43 100
74 11.4 17.2 25.8#





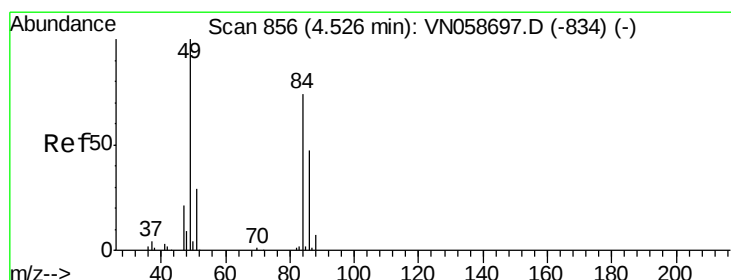
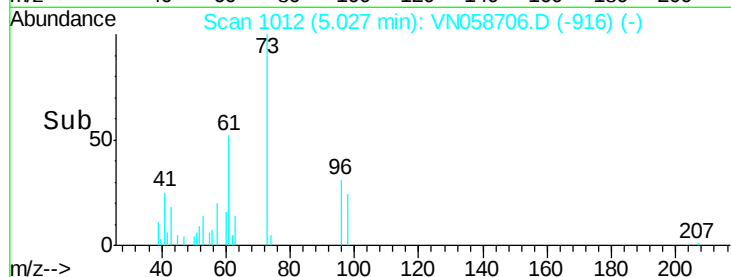
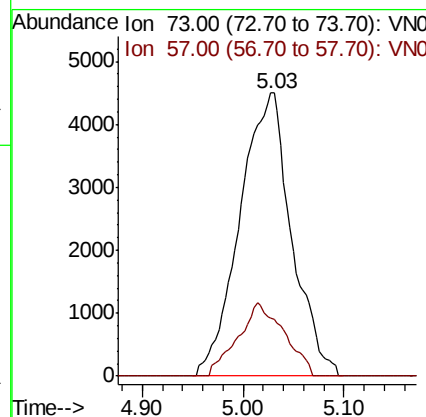
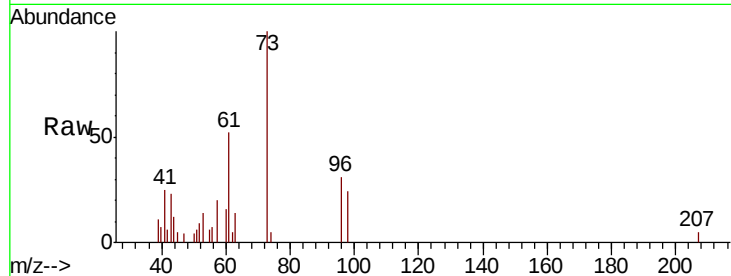
#19
Methvl tert-butvl Ether
Concen: 1.117 ug/l
RT: 5.03 min Scan# 1012
Delta R.T. 0.01 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion: 73 Resp: 16020
Ion Ratio Lower Upper
73 100
57 20.3 17.0 25.6

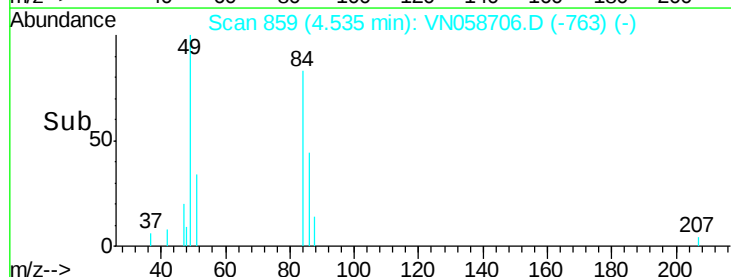
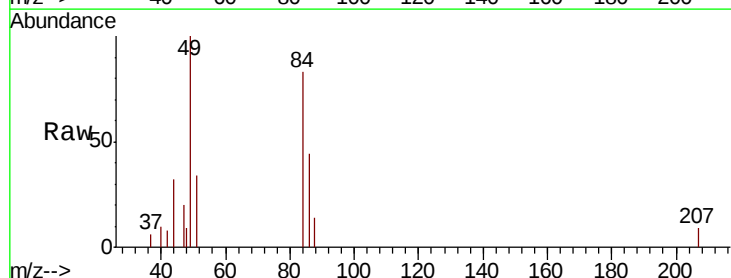
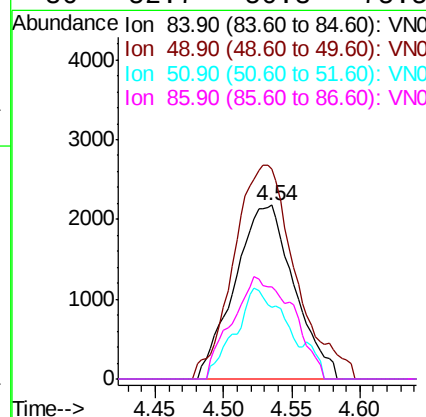
Manual Integrations
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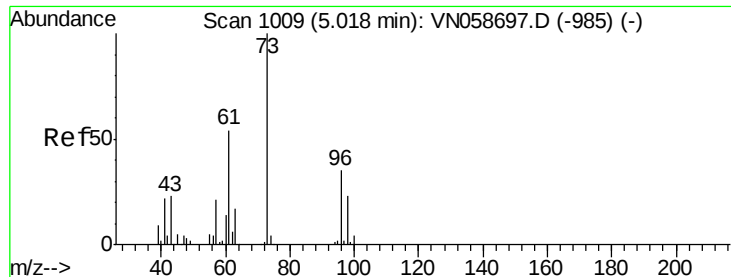
MMDadoda
10/16/2019 12:48:37 AM



#20
Methylene Chloride
Concen: 1.304 ug/l
RT: 4.54 min Scan# 859
Delta R.T. 0.01 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion: 84 Resp: 6607
Ion Ratio Lower Upper
84 100
49 120.5 107.6 161.4
51 41.1 31.4 47.0
86 52.7 50.3 75.5





#21

trans-1,2-Dichloroethene

Concen: 1.140 ug/l

RT: 5.01 min Scan# 1008

Delta R.T. -0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

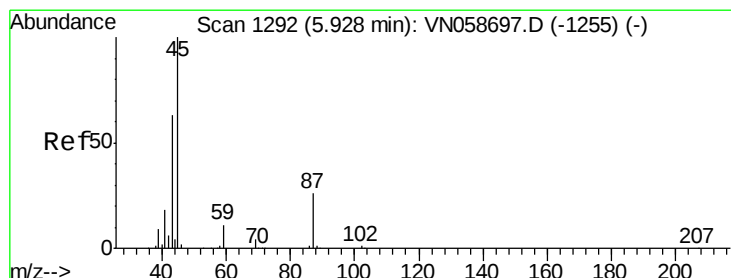
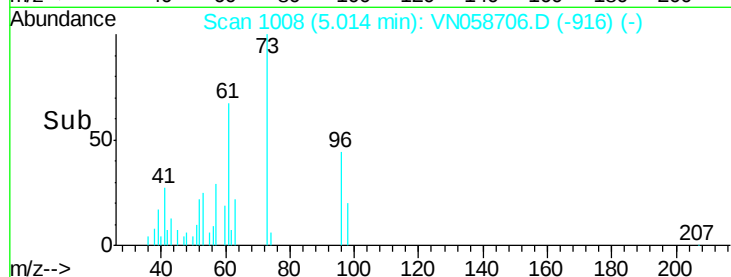
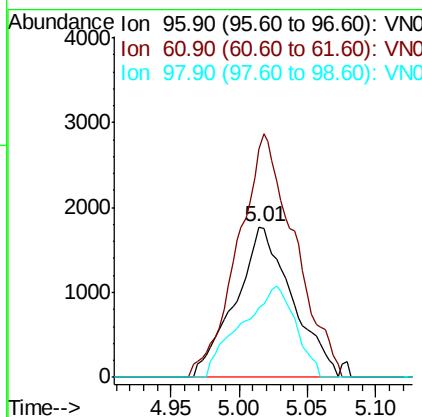
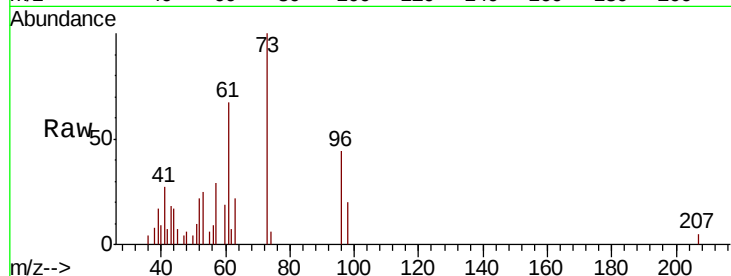
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion:	96	Resp:	5123
Ion	Ratio	Lower	Upper
96	100		
61	151.6	123.6	185.4
98	46.1	52.1	78.1#

Manual Integrations
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MMDadoda
10/16/2019 12:48:37 AM



#22

Diisopropyl ether

Concen: 1.059 ug/l

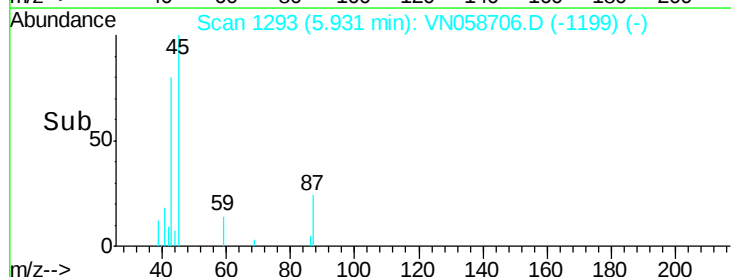
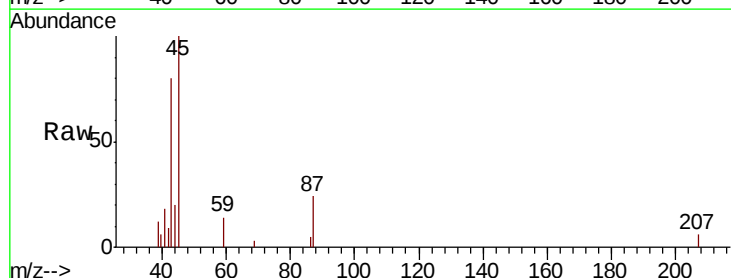
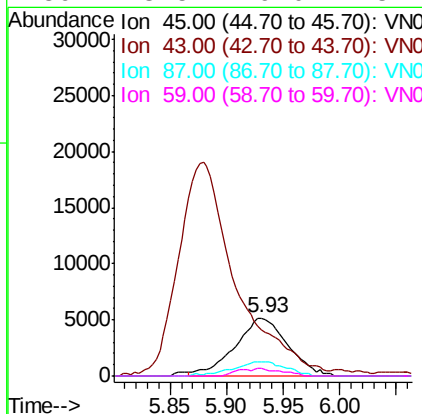
RT: 5.93 min Scan# 1293

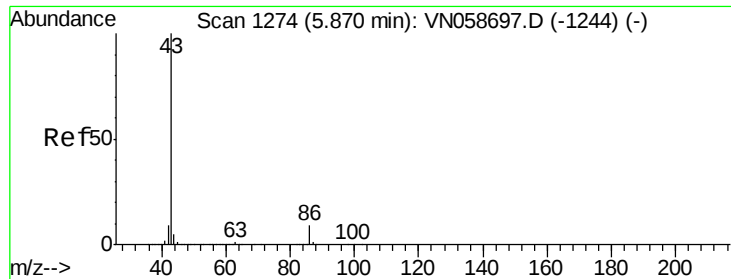
Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Tgt Ion:	45	Resp:	16701
Ion	Ratio	Lower	Upper
45	100		
43	68.5	50.6	75.8
87	24.5	21.1	31.7
59	13.5	9.0	13.4#





#23

Vinyl Acetate

Concen: 5.315 ug/l

RT: 5.88 min Scan# 1277

Delta R.T. 0.01 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion: 43 Resp: 67599

Ion Ratio Lower Upper

43 100

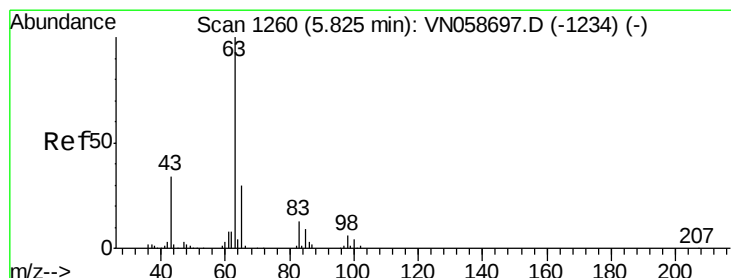
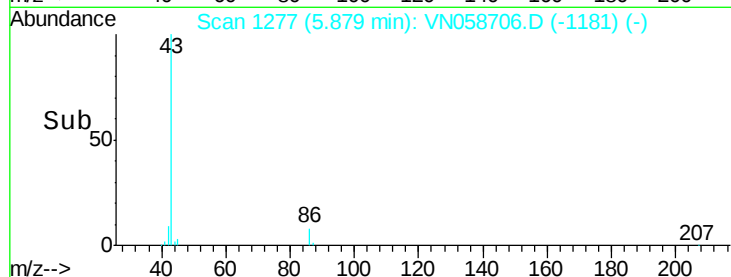
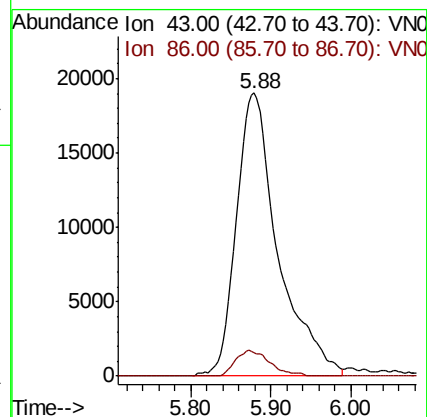
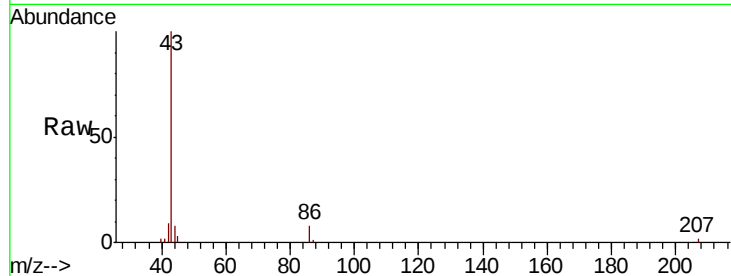
86 8.2 7.4 11.0

Manual Integrations

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MMDadoda

10/16/2019 12:48:37 AM



#24

1,1-Dichloroethane

Concen: 1.095 ug/l

RT: 5.82 min Scan# 1260

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

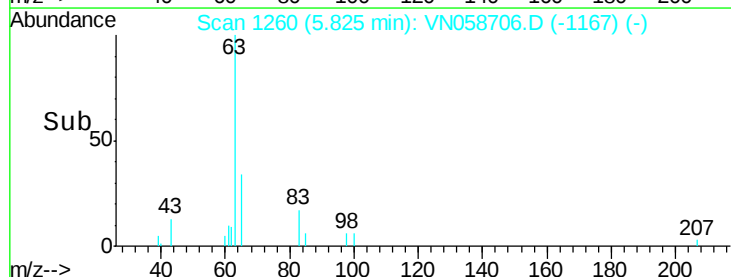
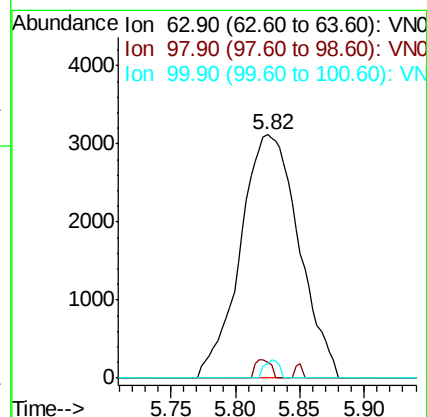
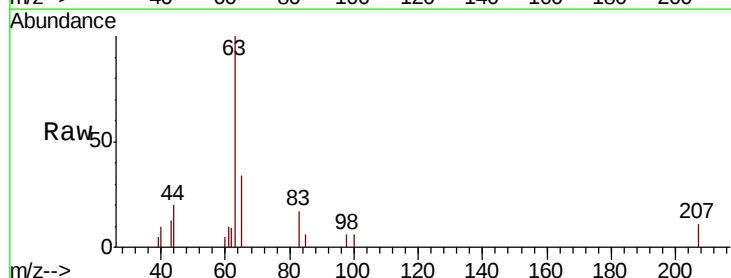
Tgt Ion: 63 Resp: 9829

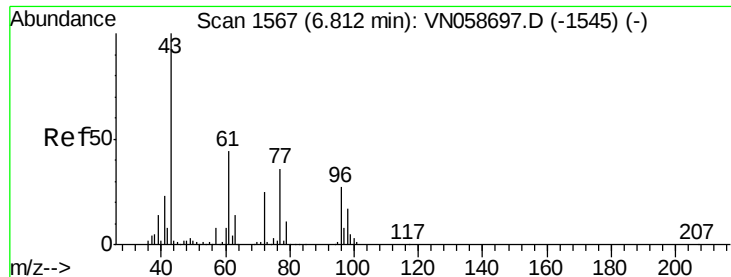
Ion Ratio Lower Upper

63 100

98 6.3 2.9 8.6

100 6.2 1.8 5.5#





#25

2-Butanone

Concen: 5.253 ug/l

RT: 6.82 min Scan# 1569

Delta R.T. 0.01 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion: 43 Resp: 18407

Ion Ratio Lower Upper

43 100

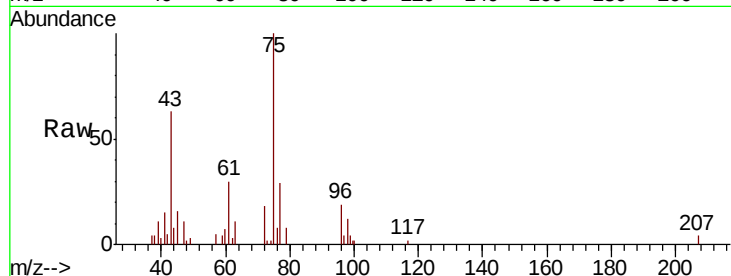
72 28.5 20.2 30.2

Manual Integrations

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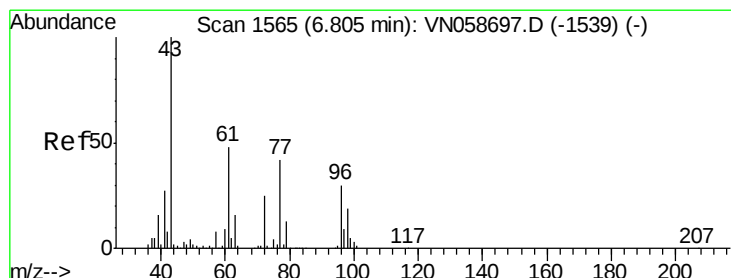
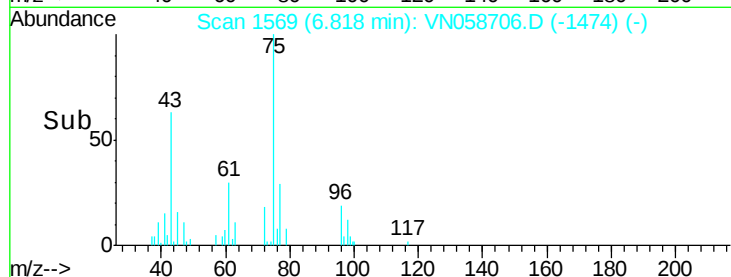
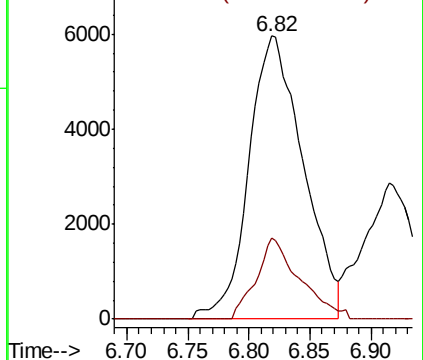
MMDadoda

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Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 72.00 (71.70 to 72.70): VN0



#26

2,2-Dichloropropane

Concen: 1.347 ug/l

RT: 6.81 min Scan# 1567

Delta R.T. 0.01 min

Lab File: VN058706.D

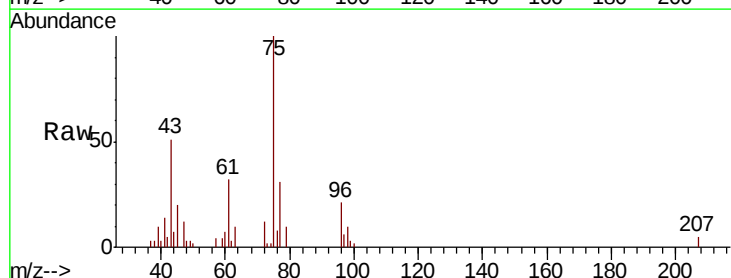
Acq: 11 Oct 2019 16:20

Tgt Ion: 77 Resp: 11042

Ion Ratio Lower Upper

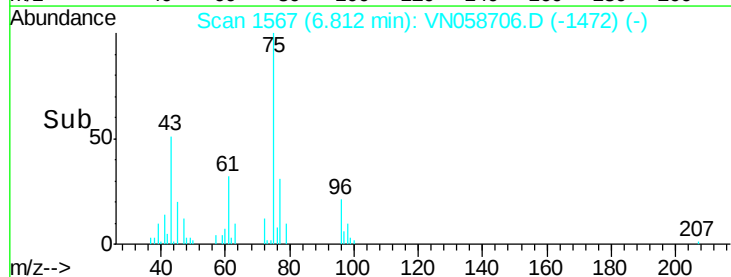
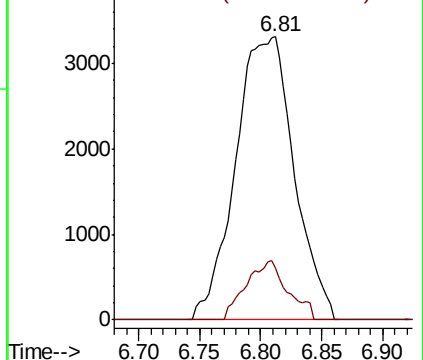
77 100

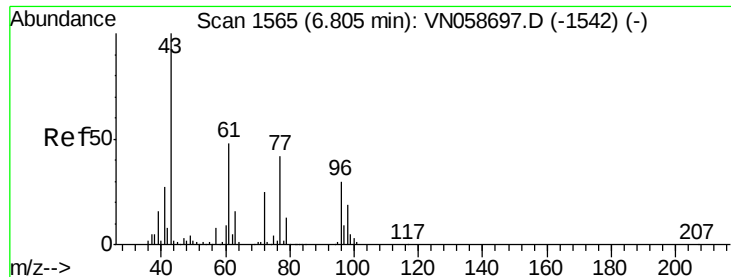
97 15.0 10.7 31.9



Abundance Ion 76.90 (76.60 to 77.60): VN0

Ion 96.90 (96.60 to 97.60): VN0





#27

cis-1,2-Dichloroethene

Concen: 1.169 ug/l

RT: 6.81 min Scan# 1567

Delta R.T. 0.01 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

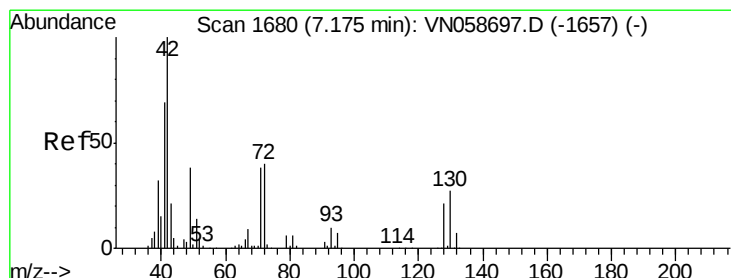
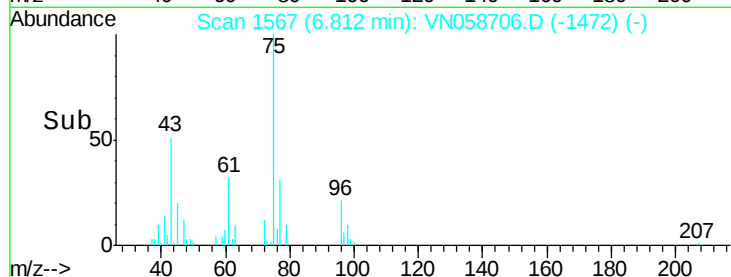
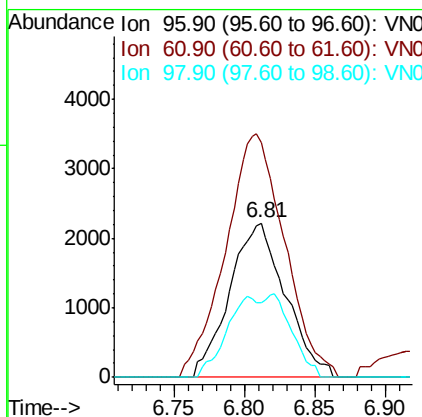
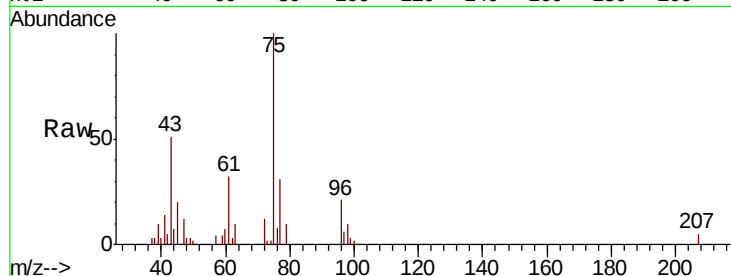
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion:	96	Resp:	6127
Ion	Ratio	Lower	Upper
96	100		
61	166.8	0.0	324.8
98	32.3	0.0	129.2

Manual Integrations
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#28

Bromochloromethane

Concen: 1.069 ug/l

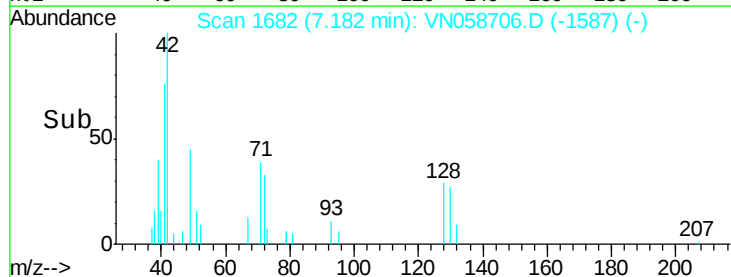
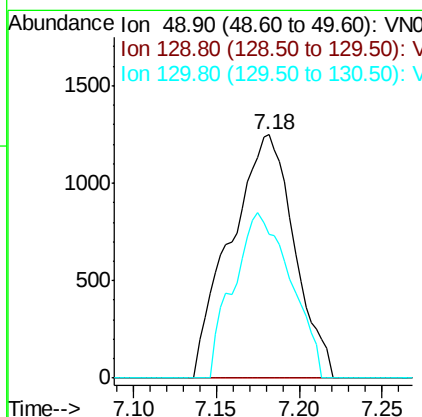
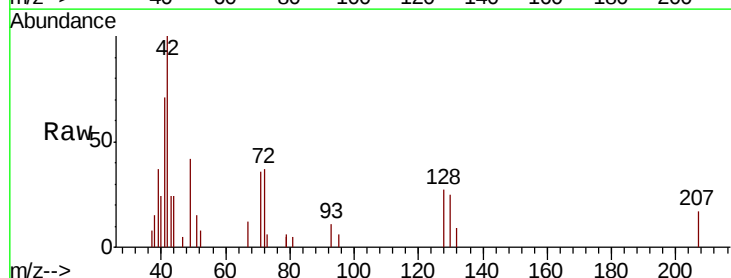
RT: 7.18 min Scan# 1682

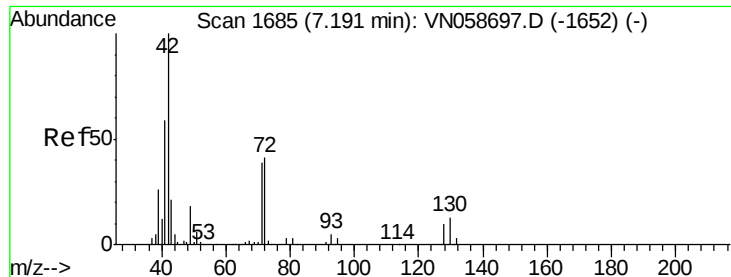
Delta R.T. 0.01 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Tgt Ion:	49	Resp:	3339
Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	3.6
130	60.9	55.0	82.4





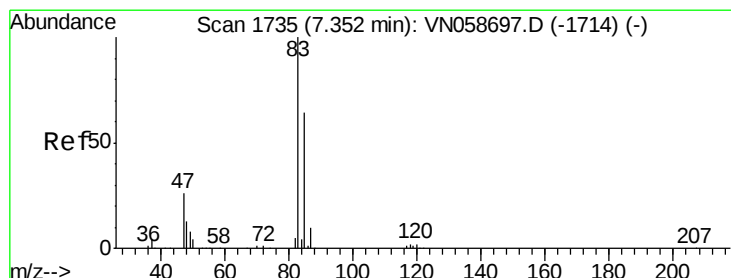
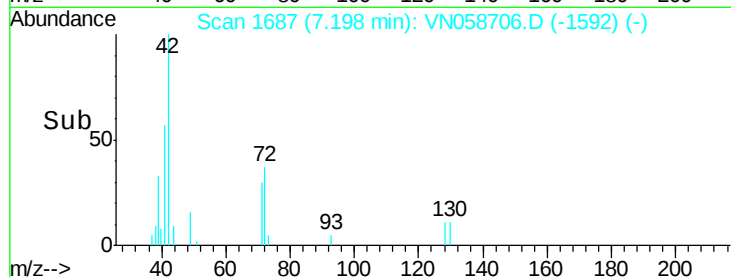
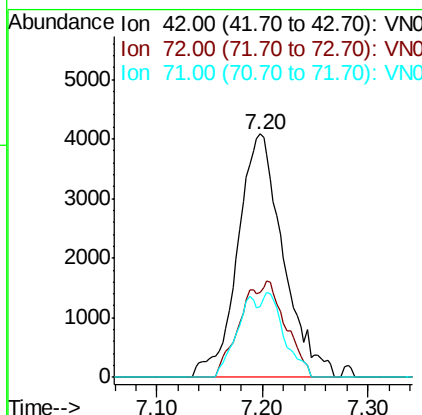
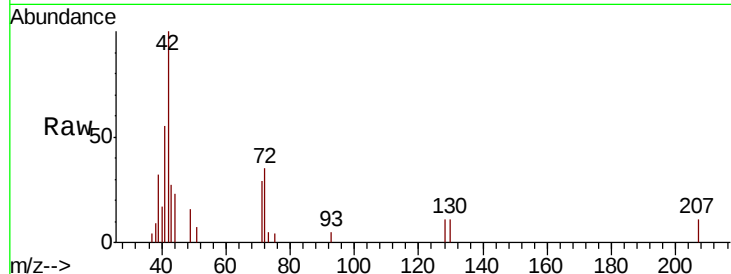
#29
Tetrahydrofuran
Concen: 5.403 ug/l
RT: 7.20 min Scan# 1687
Delta R.T. 0.01 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
42	100		
72	16.4	32.8	49.2#
71	15.1	31.1	46.7#

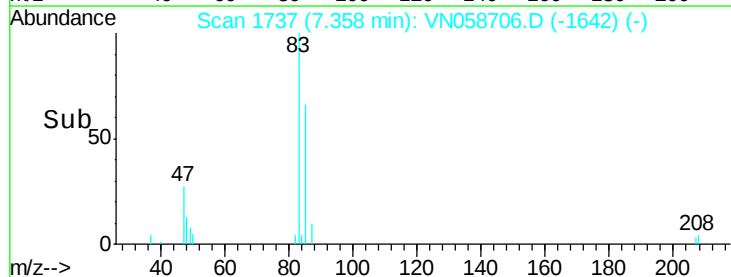
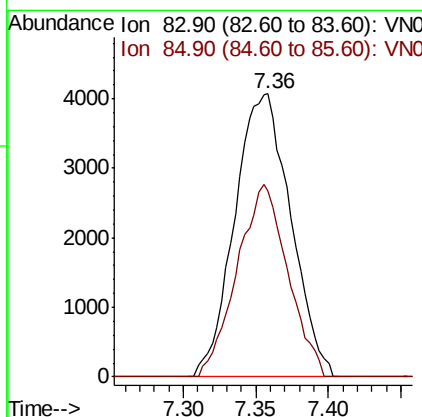
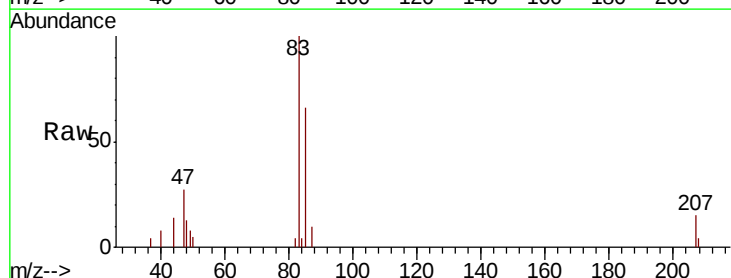
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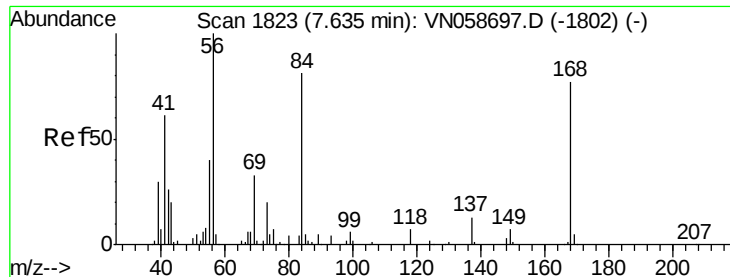
MMDadoda
10/16/2019 12:48:37 AM



#30
Chloroform
Concen: 1.213 ug/l
RT: 7.36 min Scan# 1737
Delta R.T. 0.01 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
83	100		
85	65.6	51.0	76.6





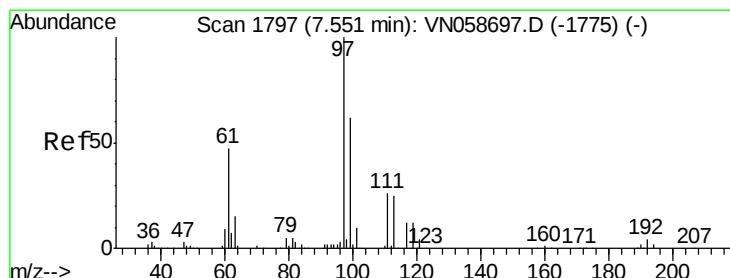
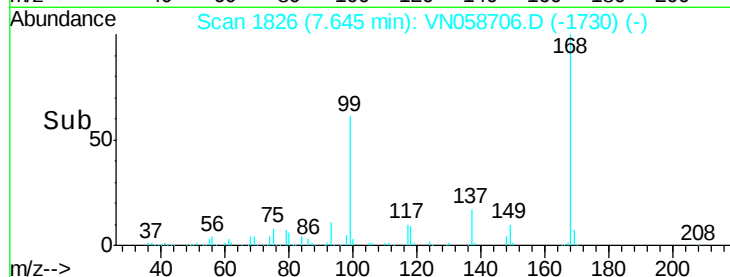
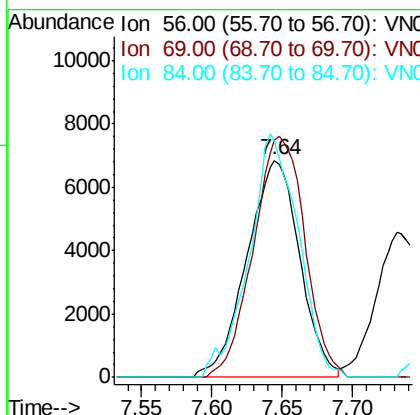
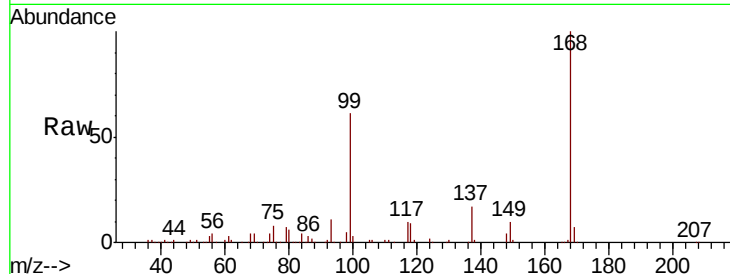
#31
Cyclohexane
Concen: 2.078 ug/l
RT: 7.64 min Scan# 1826
Delta R.T. 0.01 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
56	100		
69	109.4	26.2	39.4#
84	108.7	64.9	97.3#

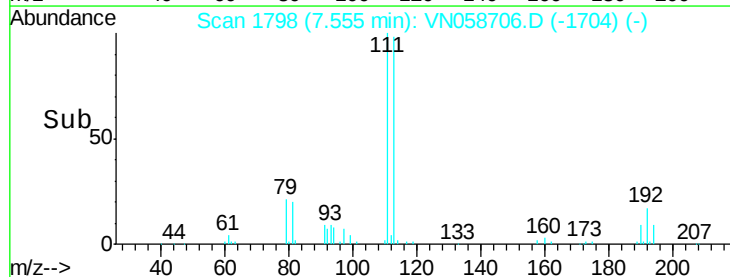
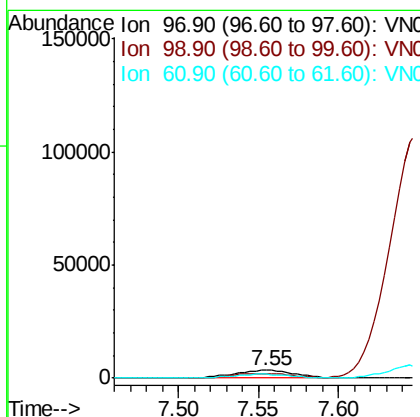
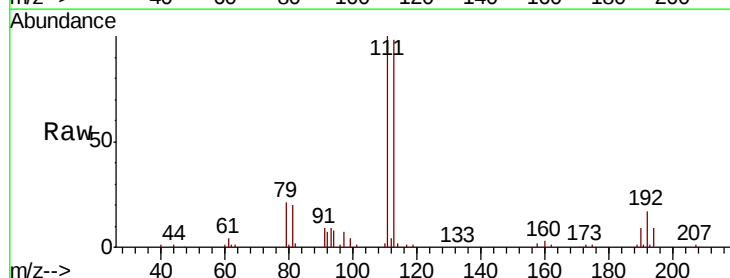
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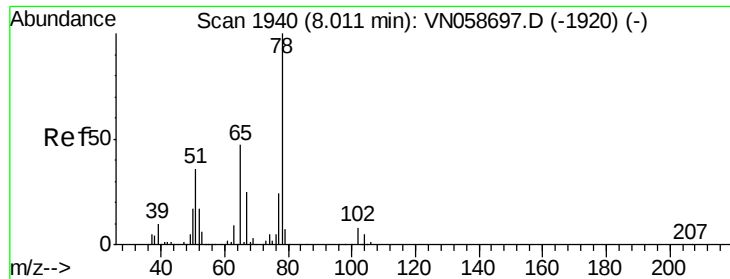
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#32
1,1,1-Trichloroethane
Concen: 1.131 ug/l
RT: 7.55 min Scan# 1798
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
97	100		
99	0.0	50.8	76.2#
61	48.5	38.1	57.1





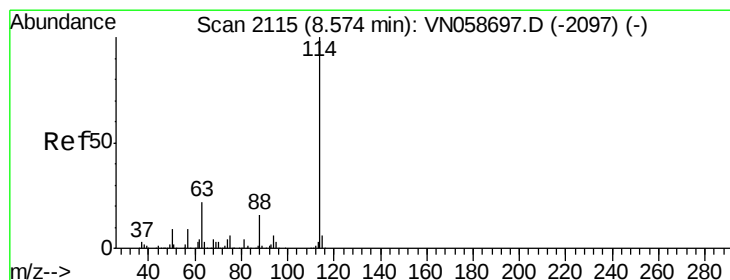
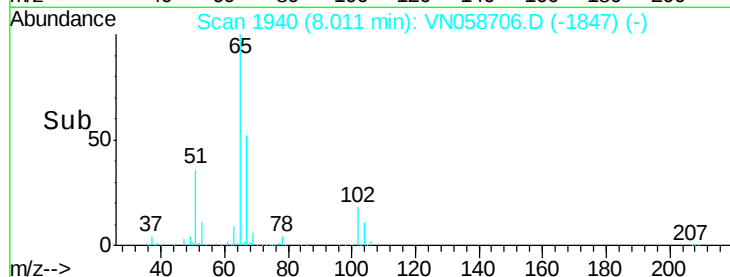
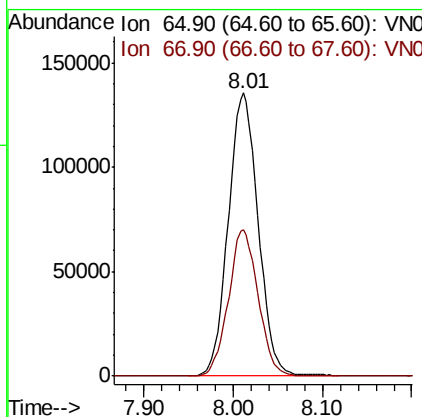
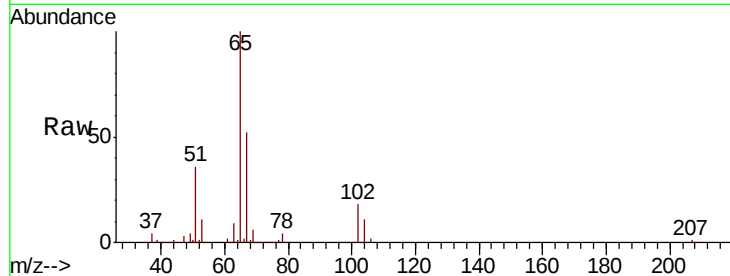
#33
 1,2-Dichloroethane-d4
 Concen: 53.768 ug/l
 RT: 8.01 min Scan# 1940
 Delta R.T. 0.00 min
 Lab File: VN058706.D
 Acq: 11 Oct 2019 16:20

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Resp	Lower	Upper
65	100			
67	51.2	0.0	103.8	

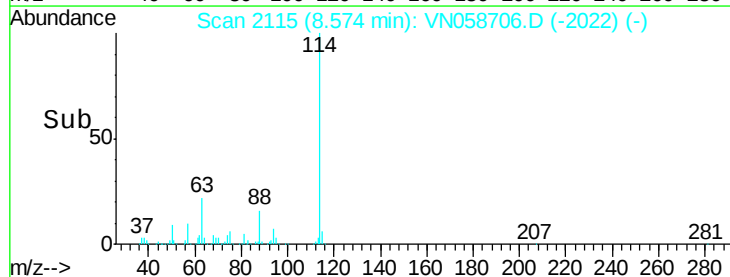
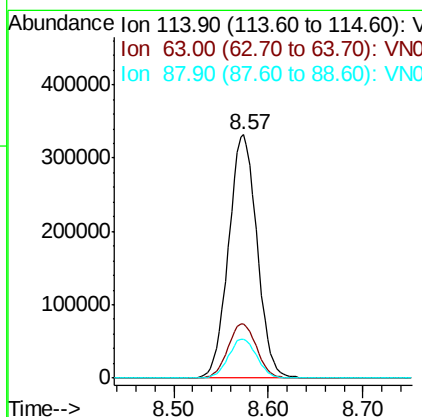
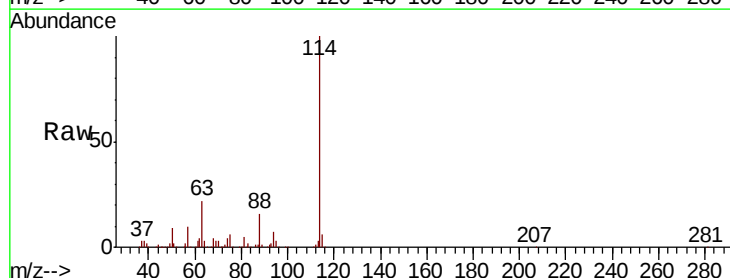
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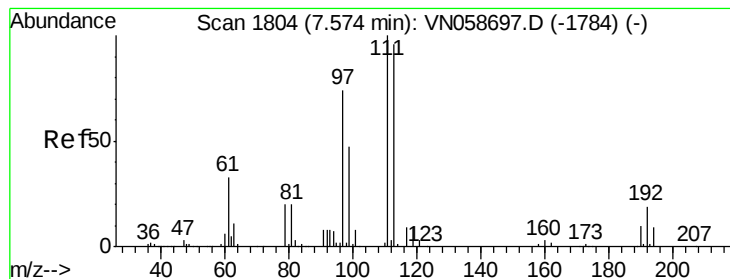
MMDadoda
 10/16/2019 12:48:37 AM



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.57 min Scan# 2115
 Delta R.T. 0.00 min
 Lab File: VN058706.D
 Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Resp	Lower	Upper
114	100			
63	22.2	0.0	43.8	
88	16.2	0.0	32.0	





#35

Dibromofluoromethane

Concen: 51.478 ug/l

RT: 7.57 min Scan# 1804

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

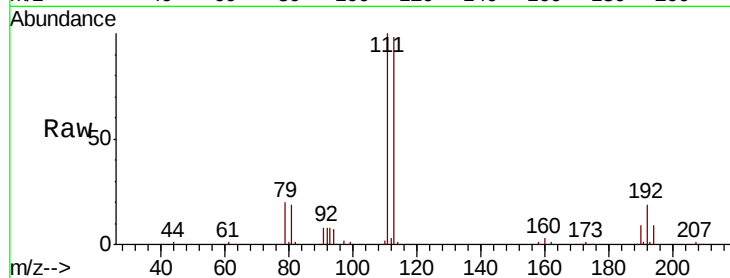
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

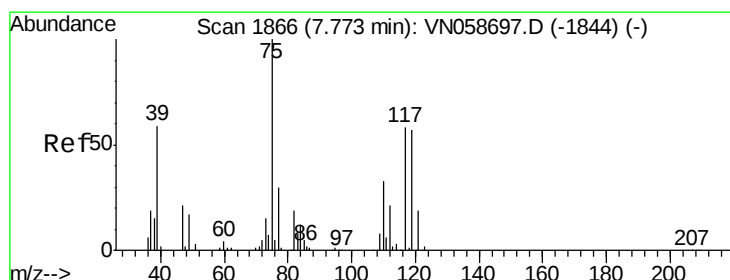
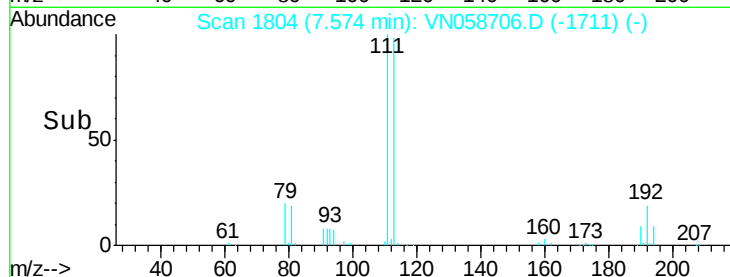
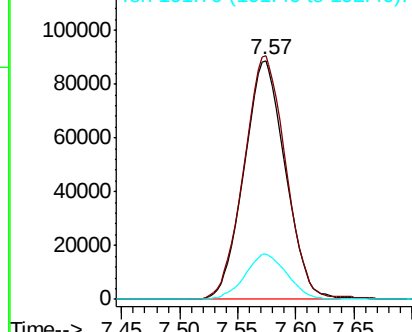
Tot Ion:	113	Resp:	220030
Ion Ratio	Lower	Upper	
113	100		
111	103.6	82.3	123.5
192	19.2	15.0	22.6

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Abundance Ion 112.80 (112.50 to 113.50): V
Ion 110.80 (110.50 to 111.50): V
Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 1.068 ug/l

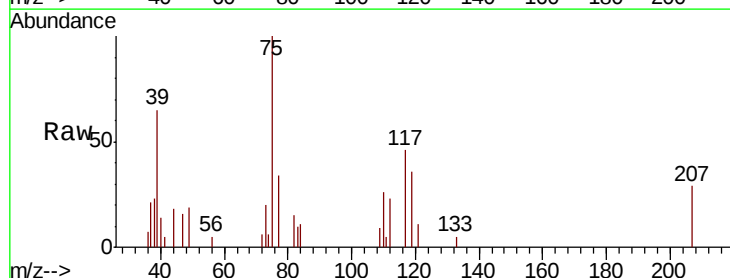
RT: 7.78 min Scan# 1868

Delta R.T. 0.01 min

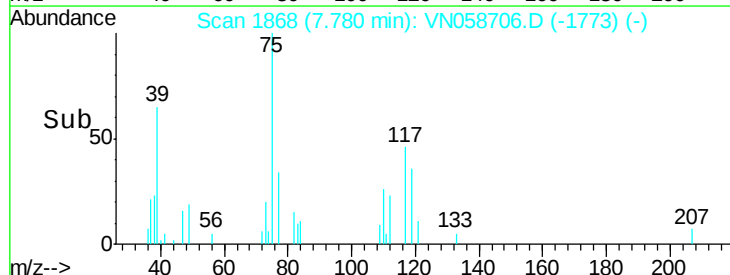
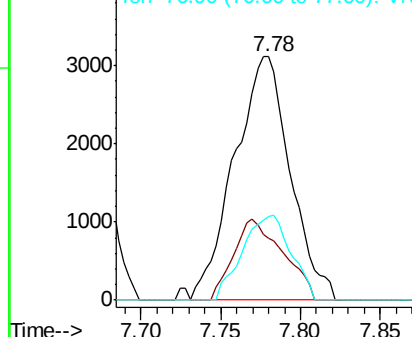
Lab File: VN058706.D

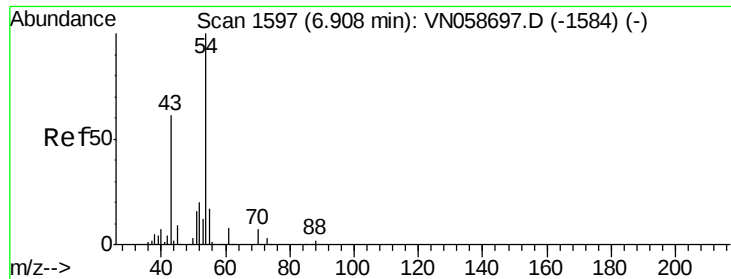
Acq: 11 Oct 2019 16:20

Tgt Ion:	75	Resp:	7474
Ion Ratio	Lower	Upper	
75	100		
110	29.3	16.6	49.8
77	30.1	24.6	37.0



Abundance Ion 74.90 (74.60 to 75.60): V
Ion 109.90 (109.60 to 110.60): V
Ion 76.90 (76.60 to 77.60): V





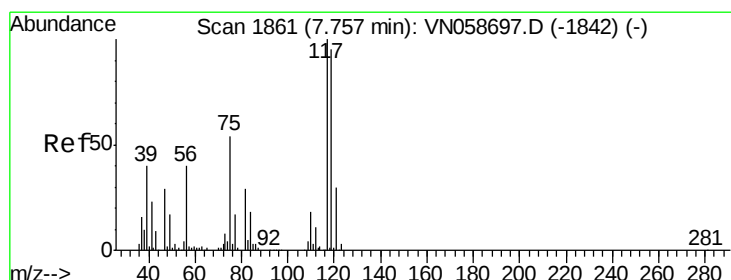
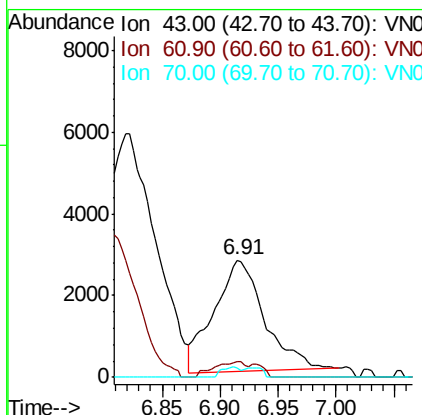
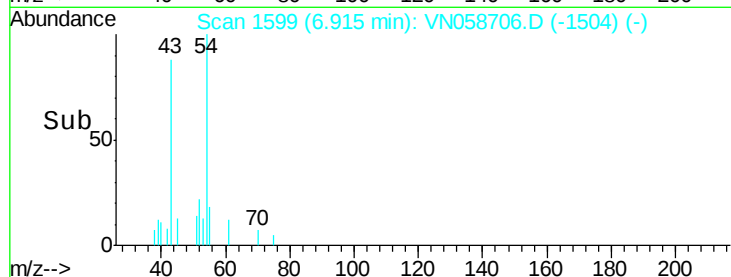
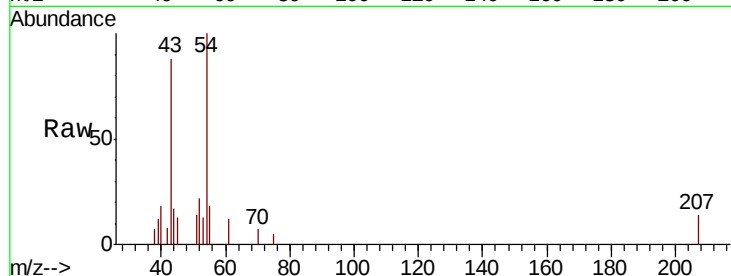
#37
Ethyl Acetate
Concen: 1.161 ug/l
RT: 6.91 min Scan# 1599
Delta R.T. 0.01 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
43	100		
61	9.1	11.3	16.9#
70	3.4	7.2	10.8#

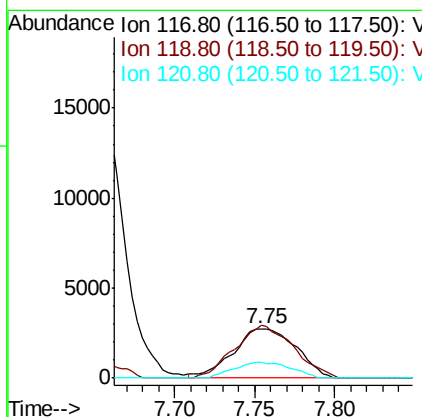
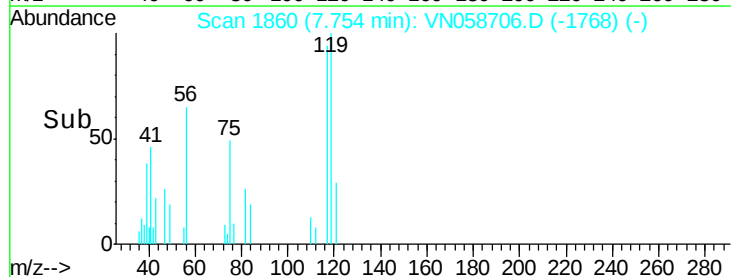
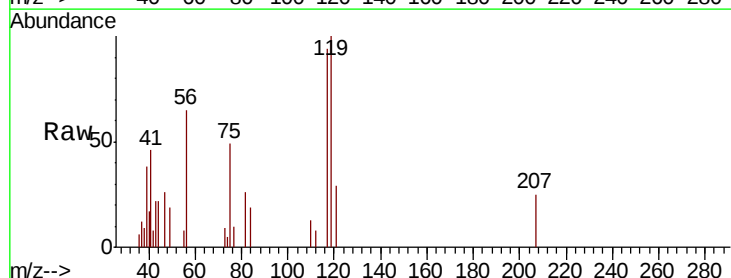
Manual Integrations
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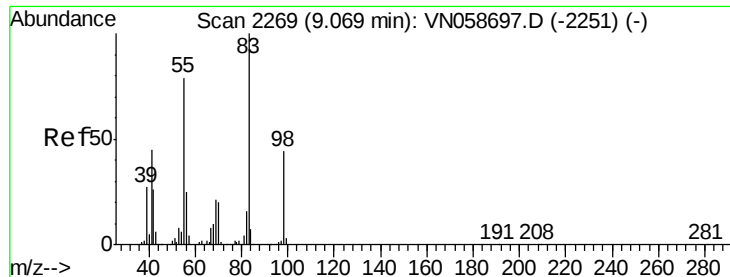
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#38
Carbon Tetrachloride
Concen: 1.084 ug/l
RT: 7.75 min Scan# 1860
Delta R.T. -0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
117	100		
119	106.9	75.7	113.5
121	31.1	23.9	35.9





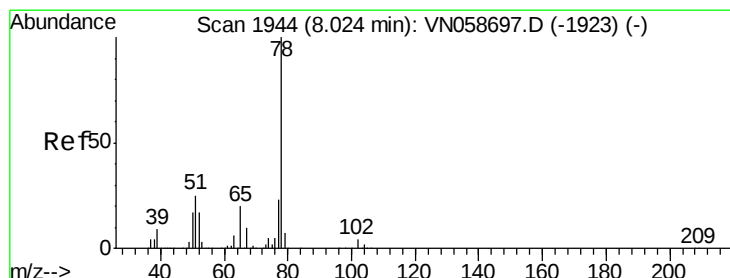
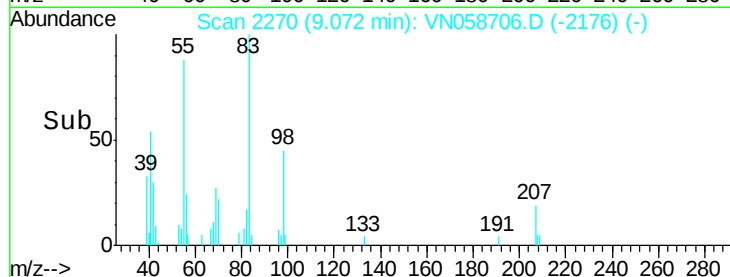
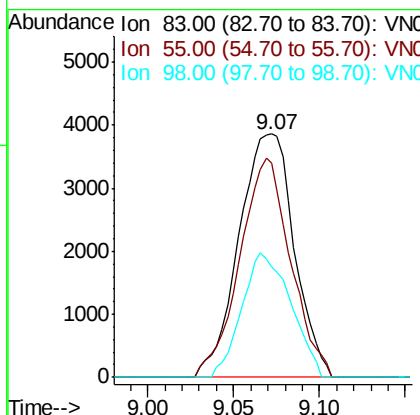
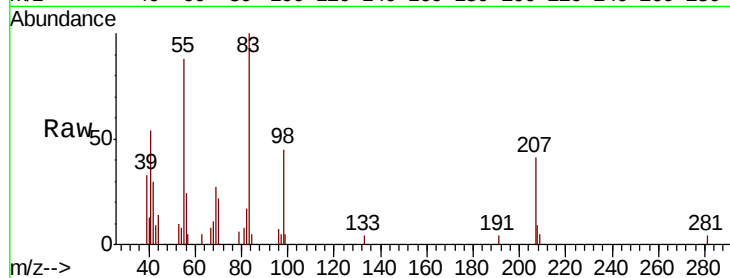
#39
Methvlcvclohexane
Concen: 1.063 ug/l
RT: 9.07 min Scan# 2270
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
83	100		
55	87.8	63.4	95.0
98	45.1	35.1	52.7

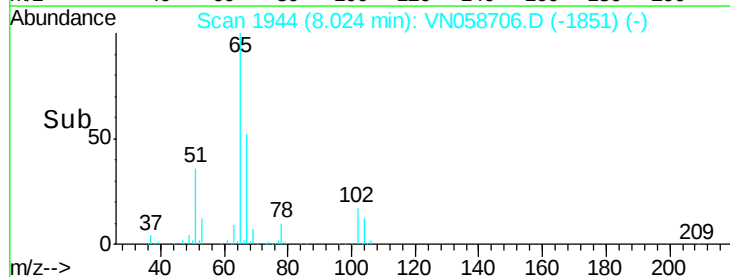
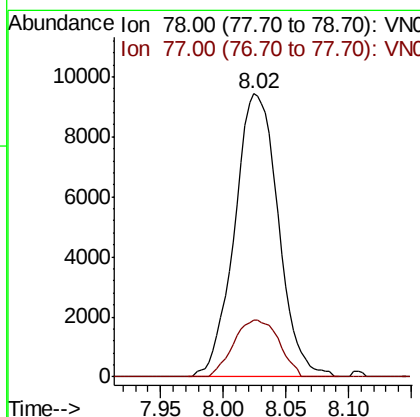
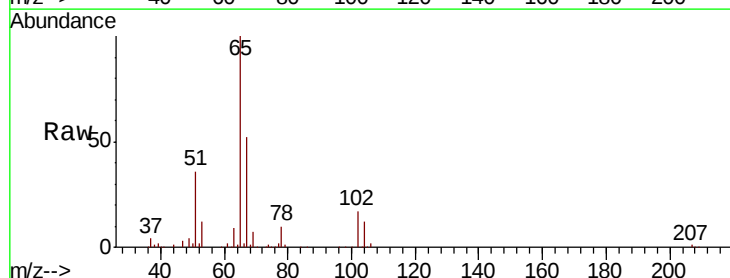
Manual Integrations
APPROVED

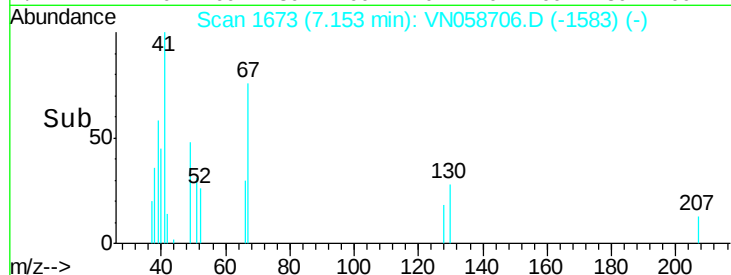
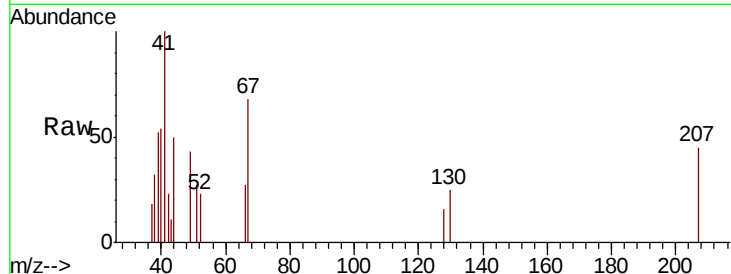
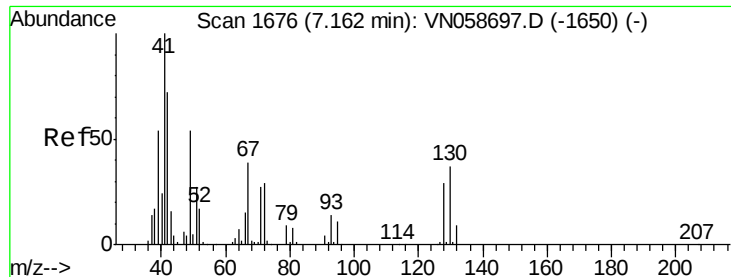
MMDadoda
10/16/2019 12:48:37 AM



#40
Benzene
Concen: 1.138 ug/l
RT: 8.02 min Scan# 1944
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
78	100		
77	19.9	18.8	28.2





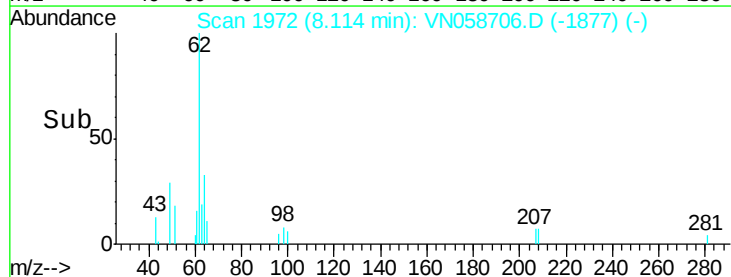
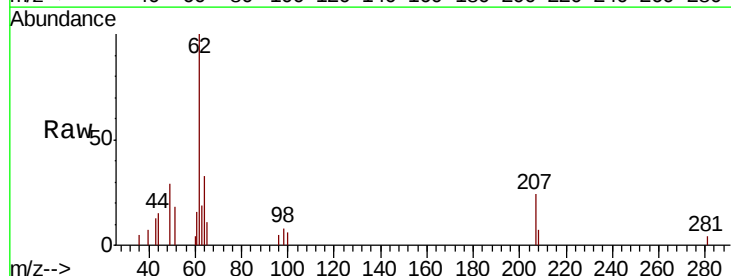
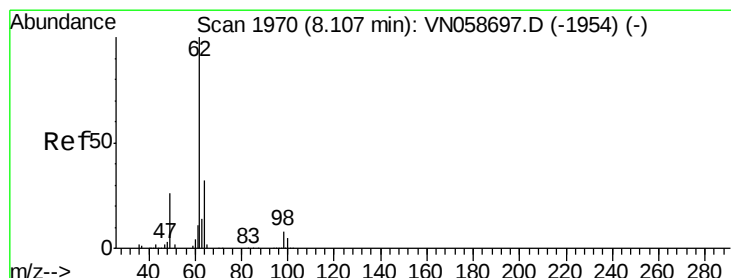
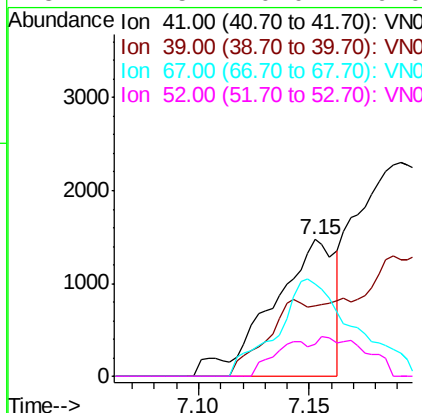
#41
Methacrylonitrile
Concen: 0.873 ug/l m
RT: 7.15 min Scan# 1673
Delta R.T. -0.01 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tot Ion	Ratio	Lower	Upper
41	100		
39	0.0	115.4	173.2#
67	87.5	0.0	0.0#
52	21.5	0.0	0.0#

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

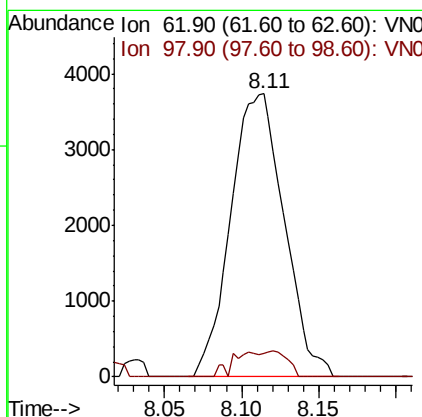
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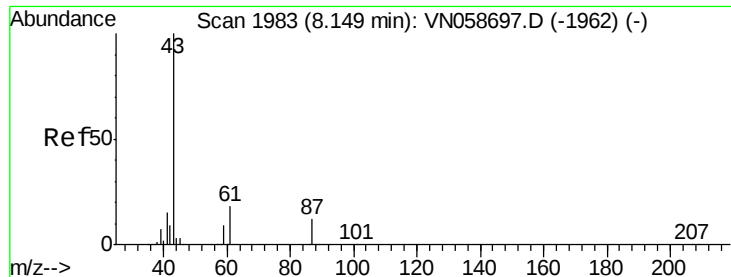
MMDadoda
10/16/2019 12:48:37 AM



#42
1,2-Dichloroethane
Concen: 1.163 ug/l
RT: 8.11 min Scan# 1972
Delta R.T. 0.01 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
62	100		
98	4.5	0.0	15.8





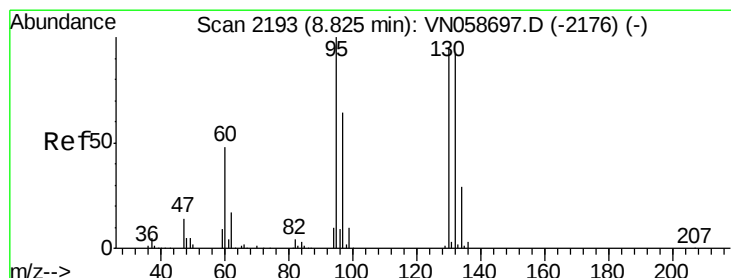
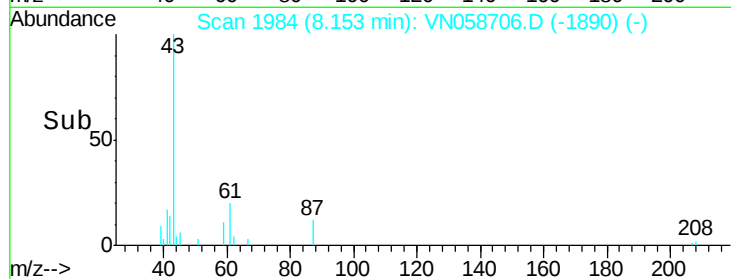
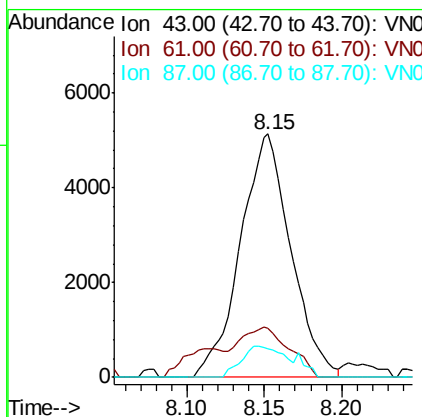
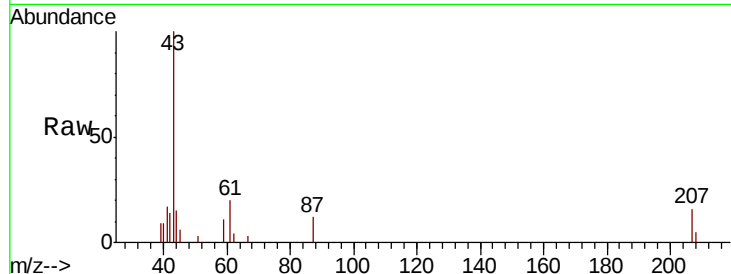
#43
Isopropyl Acetate
Concen: 0.967 ug/l
RT: 8.15 min Scan# 1984
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
43	100		
61	20.2	20.3	30.5#
87	12.6	9.8	14.6

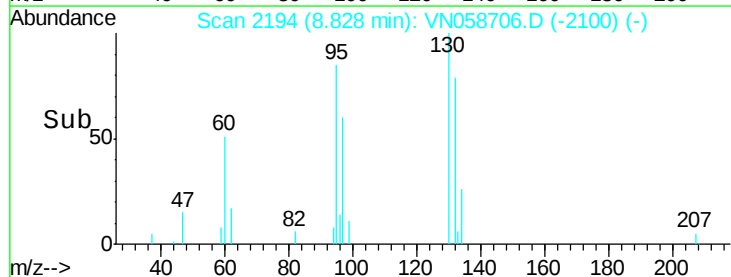
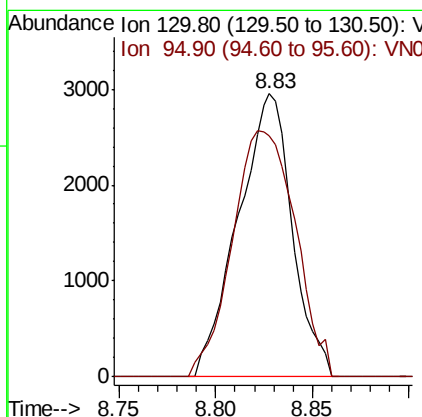
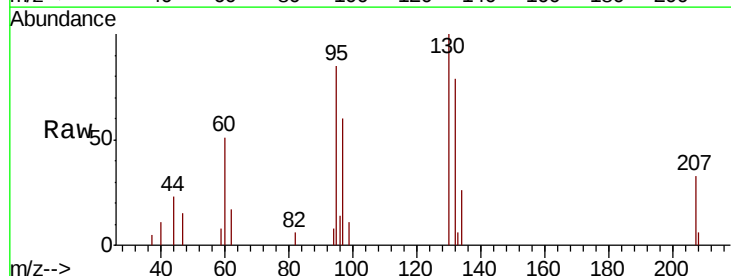
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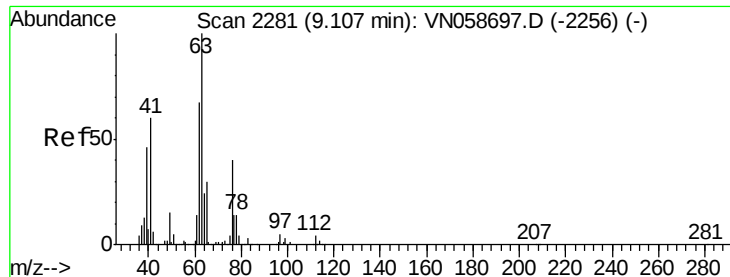
MMDadoda
10/16/2019 12:48:37 AM



#44
Trichloroethene
Concen: 1.153 ug/l
RT: 8.83 min Scan# 2194
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
130	100		
95	85.2	0.0	211.2





#45

1,2-Dichloropropane

Concen: 1.011 ug/l

RT: 9.11 min Scan# 2281

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion: 63 Resp: 5441

Ion Ratio Lower Upper

63 100

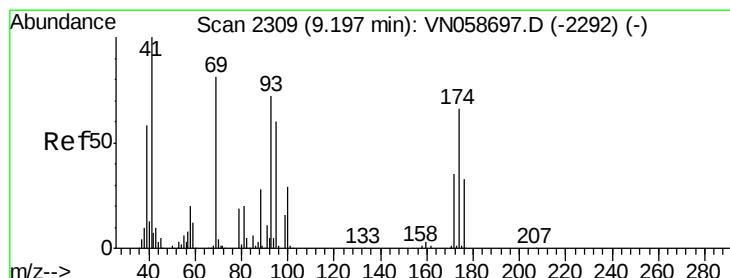
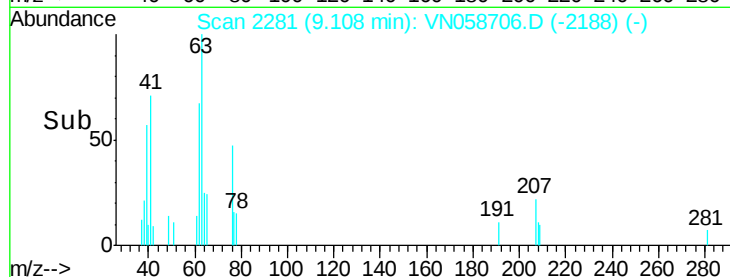
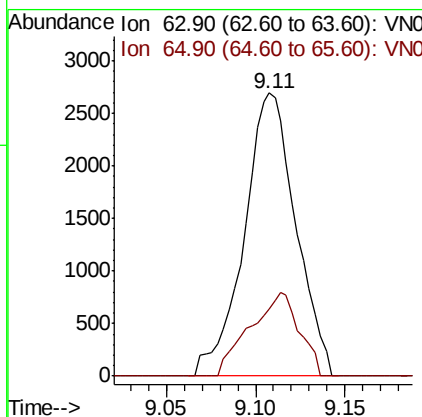
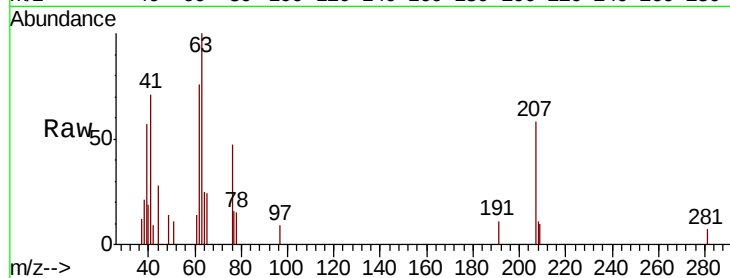
65 23.8 24.1 36.1#

Manual Integrations

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#46

Dibromomethane

Concen: 1.159 ug/l

RT: 9.20 min Scan# 2311

Delta R.T. 0.01 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

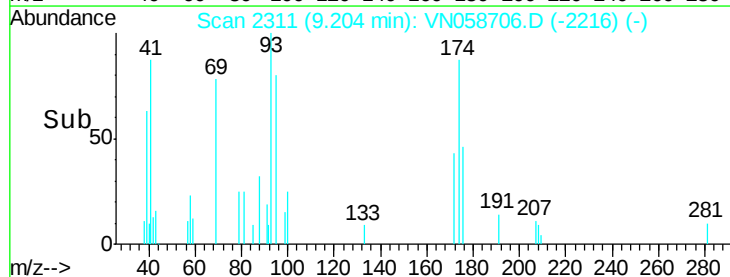
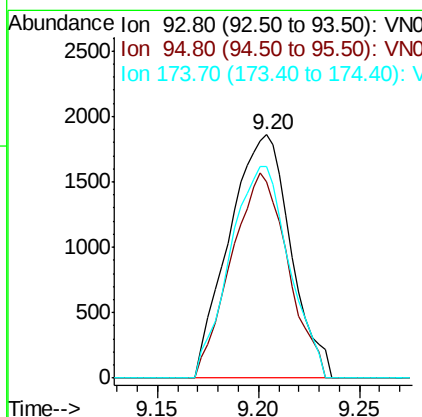
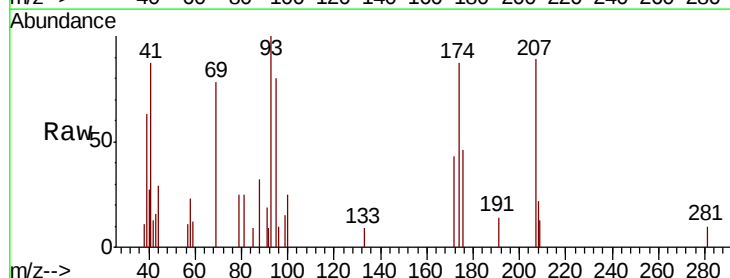
Tgt Ion: 93 Resp: 3952

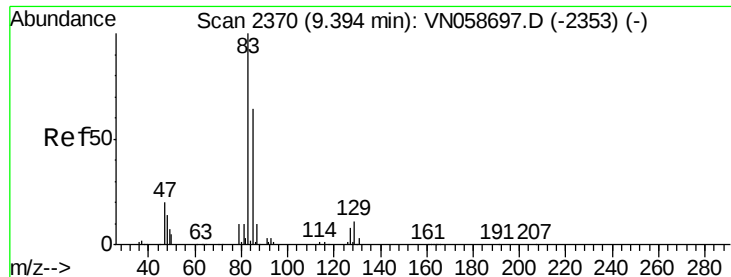
Ion Ratio Lower Upper

93 100

95 77.5 66.6 100.0

174 83.5 75.2 112.8





#47

Bromodichloromethane

Concen: 1.113 ug/l

RT: 9.39 min Scan# 2370

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

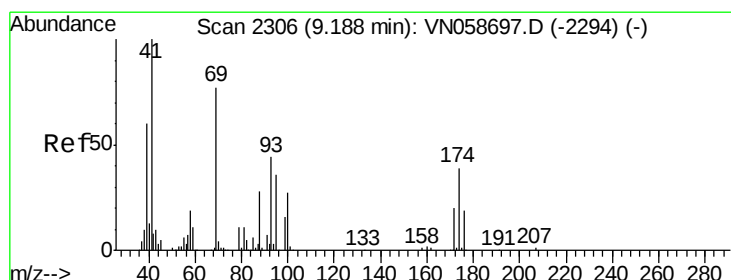
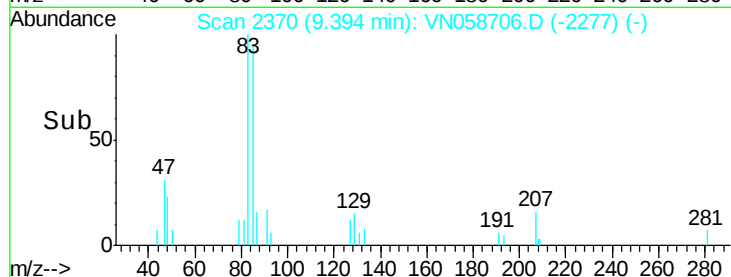
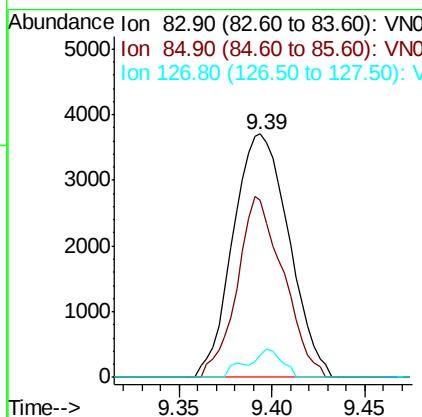
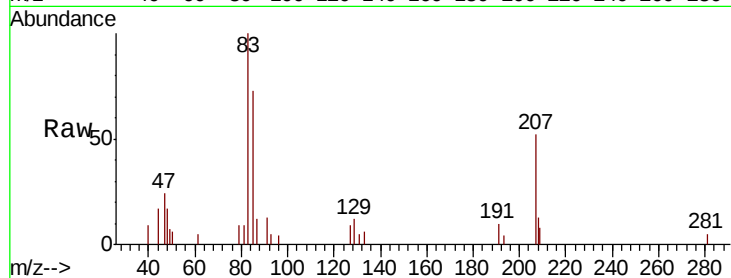
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion:	83	Resp:	7732
Ion	Ratio	Lower	Upper
83	100		
85	72.8	50.9	76.3
127	9.3	6.3	9.5

Manual Integrations
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#48

Methyl methacrylate

Concen: 1.072 ug/l

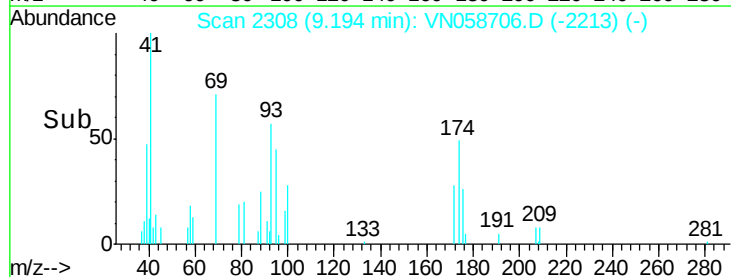
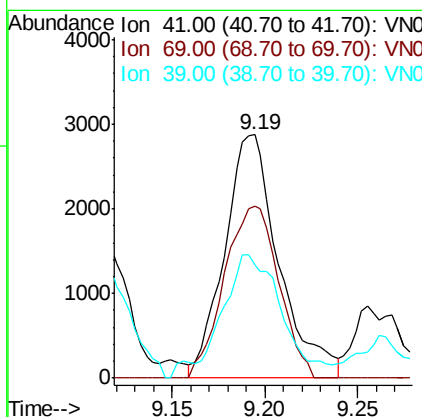
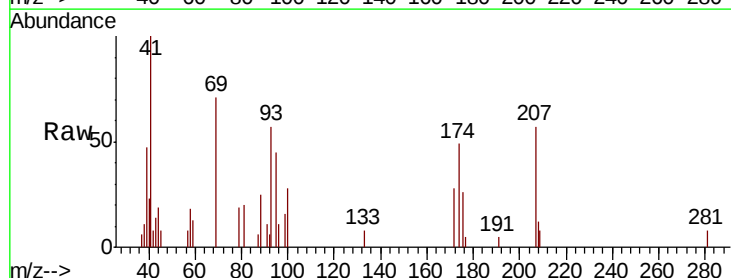
RT: 9.19 min Scan# 2308

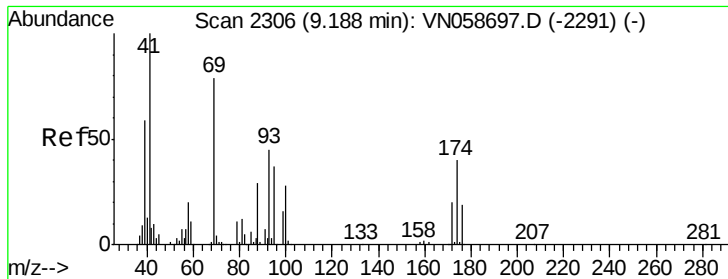
Delta R.T. 0.01 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Tgt Ion:	41	Resp:	5858
Ion	Ratio	Lower	Upper
41	100		
69	70.6	63.4	95.2
39	44.0	48.9	73.3#





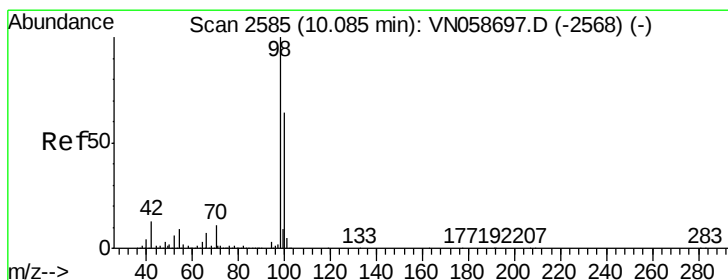
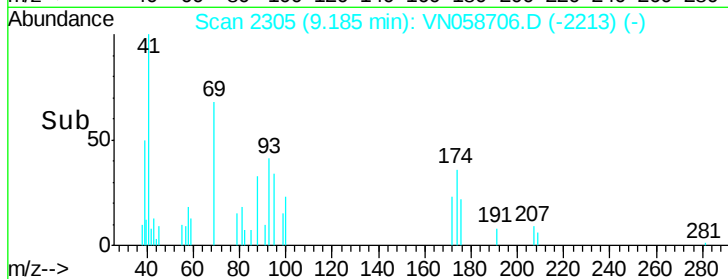
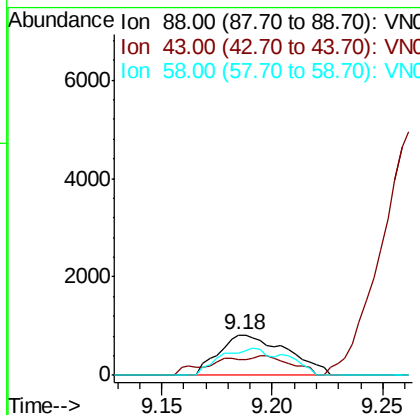
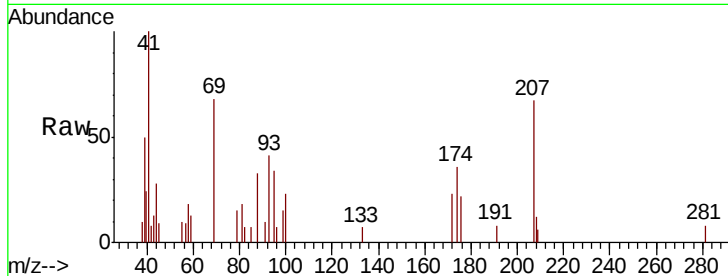
#49
1,4-Dioxane
Concen: 20.809 ug/l
RT: 9.18 min Scan# 2305
Delta R.T. -0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
88	100		
43	28.7	28.6	43.0
58	49.1	57.2	85.8#

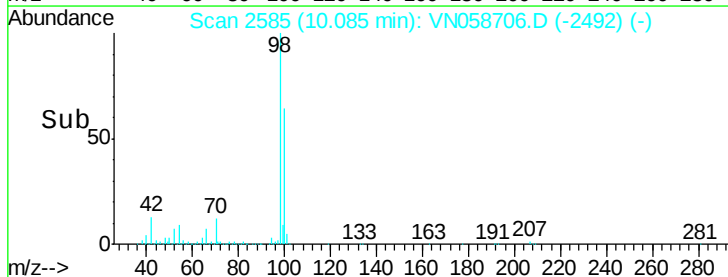
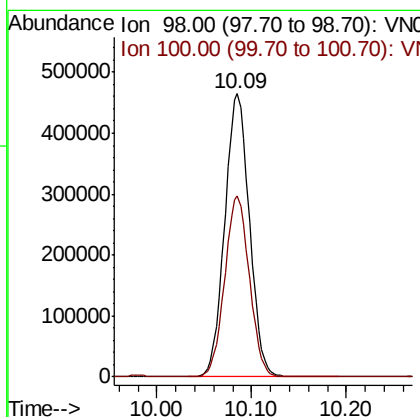
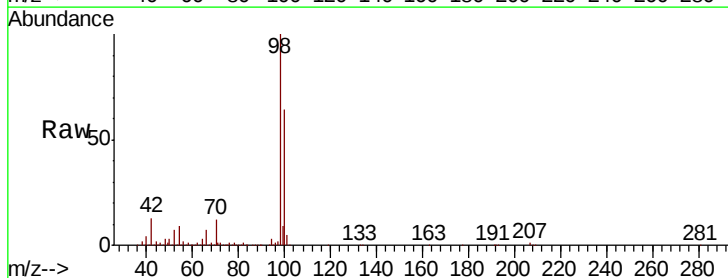
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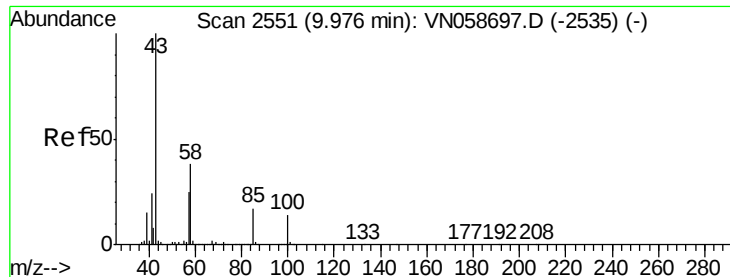
MMDadoda
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#50
Toluene-d8
Concen: 49.303 ug/l
RT: 10.09 min Scan# 2585
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
98	100		
100	63.8	51.1	76.7





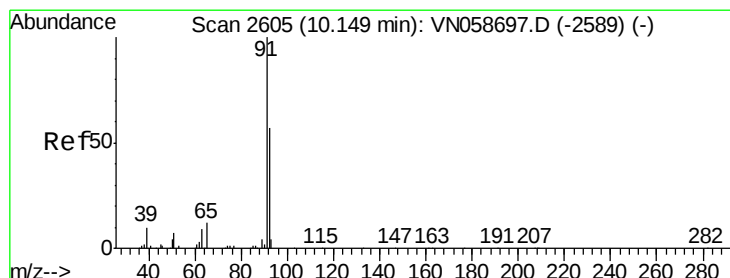
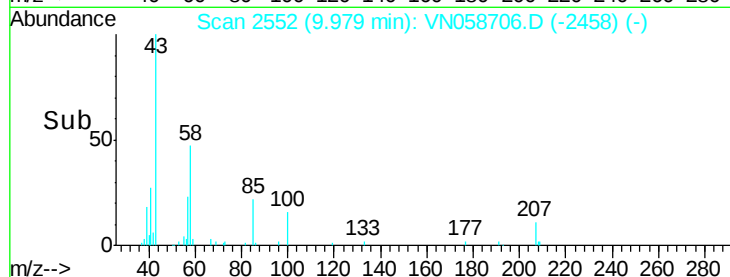
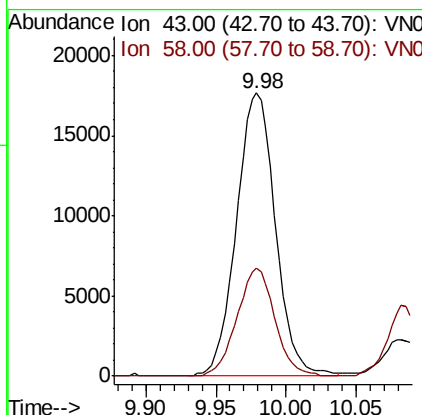
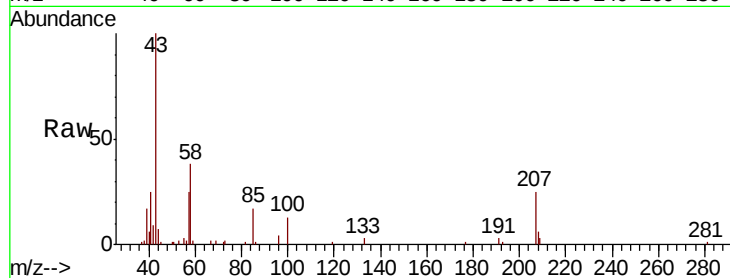
#51
4-Methyl-2-Pentanone
Concen: 5.049 ug/l
RT: 9.98 min Scan# 2552
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion	43	Resp	34180
Ion Ratio	43	100	
Lower	58	37.1	30.3
Upper			45.5

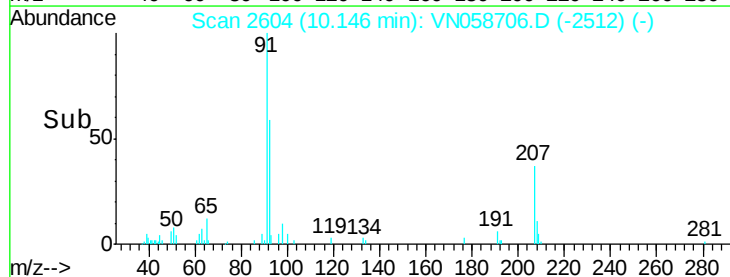
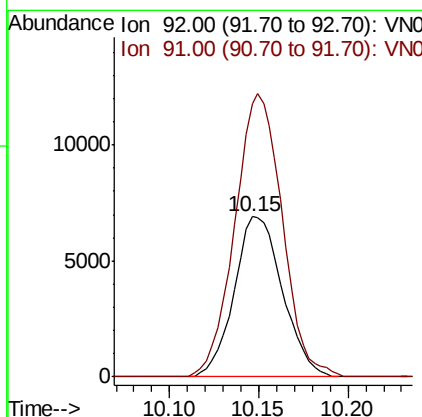
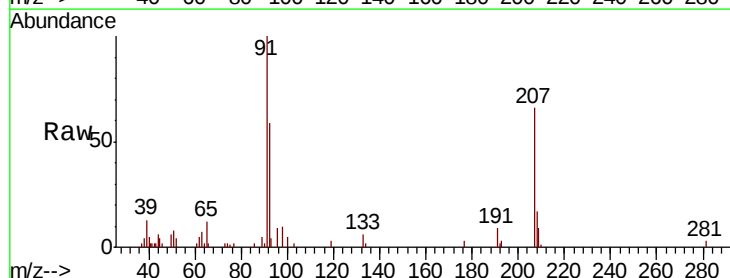
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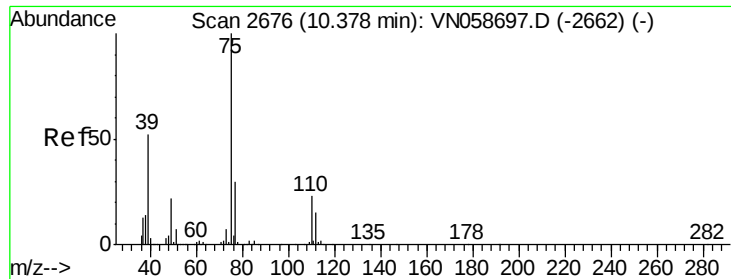
MMDadoda
10/16/2019 12:48:37 AM



#52
Toluene
Concen: 1.064 ug/l
RT: 10.15 min Scan# 2604
Delta R.T. -0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	92	Resp	13078
Ion Ratio	92	100	
Lower	91	173.3	139.1
Upper			208.7





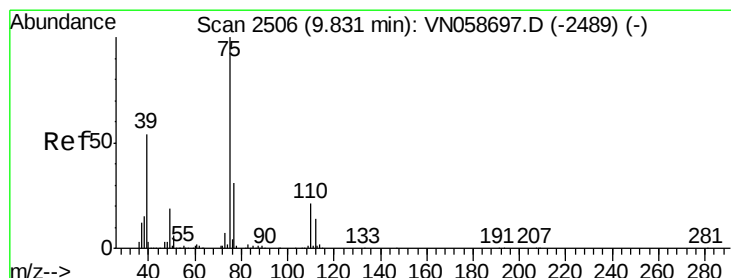
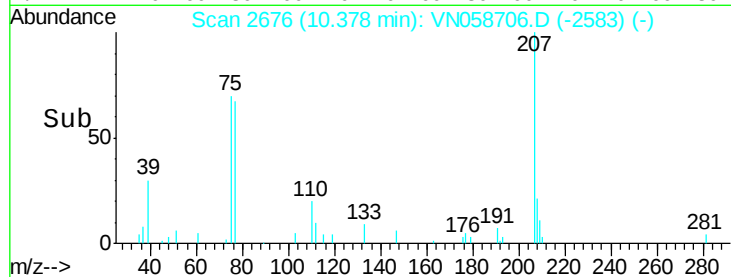
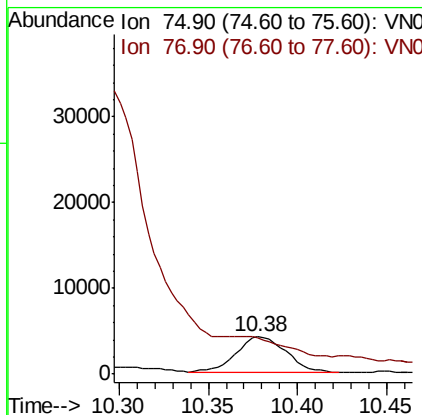
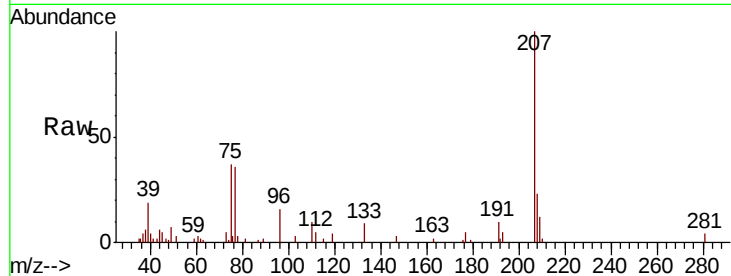
#53
 t-1,3-Dichloropropene
 Concen: 1.008 ug/l
 RT: 10.38 min Scan# 2676
 Delta R.T. 0.00 min
 Lab File: VN058706.D
 Acq: 11 Oct 2019 16:20

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT4-2019

Tot Ion: 75 Resp: 8027
 Ion Ratio Lower Upper
 75 100
 77 50.0 26.2 39.4#

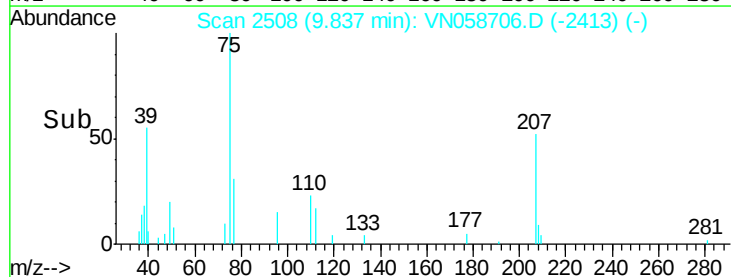
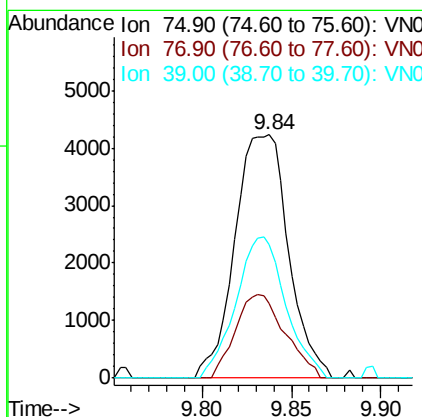
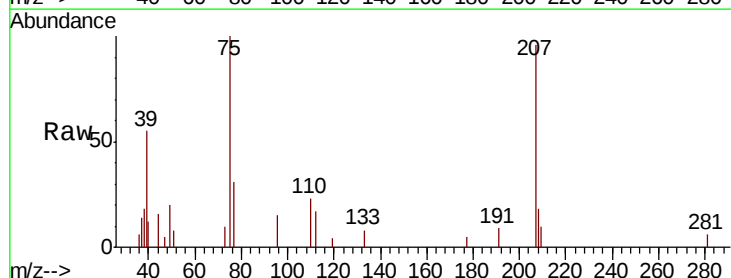
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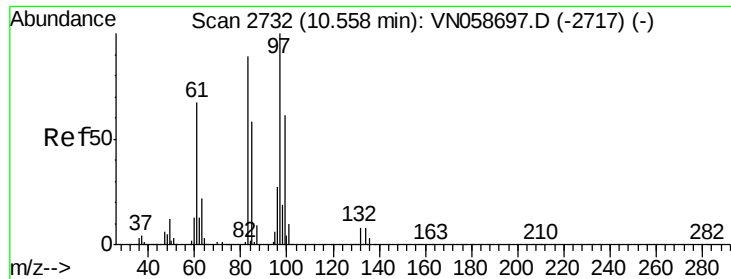
MMDadoda
 10/16/2019 12:48:37 AM



#54
 cis-1,3-Dichloropropene
 Concen: 1.048 ug/l
 RT: 9.84 min Scan# 2508
 Delta R.T. 0.01 min
 Lab File: VN058706.D
 Acq: 11 Oct 2019 16:20

Tgt Ion: 75 Resp: 8859
 Ion Ratio Lower Upper
 75 100
 77 30.9 24.4 36.6
 39 54.9 43.1 64.7





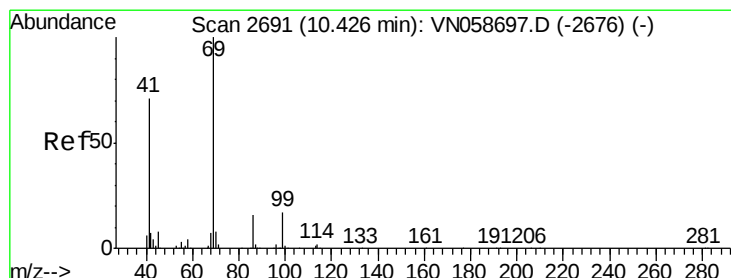
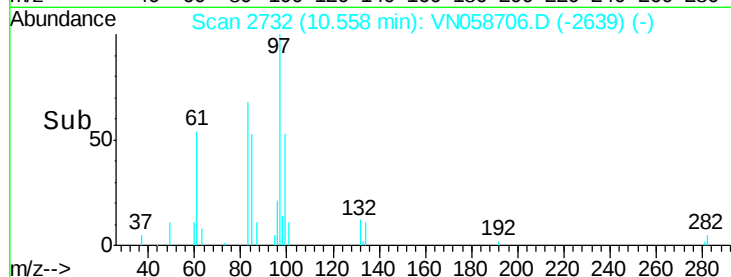
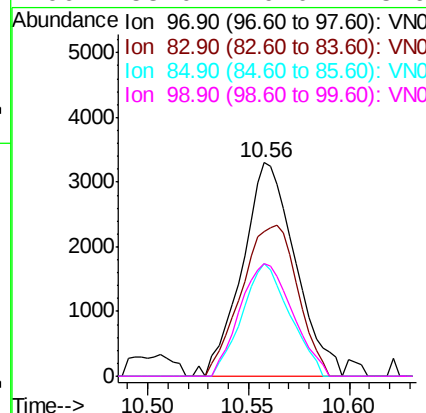
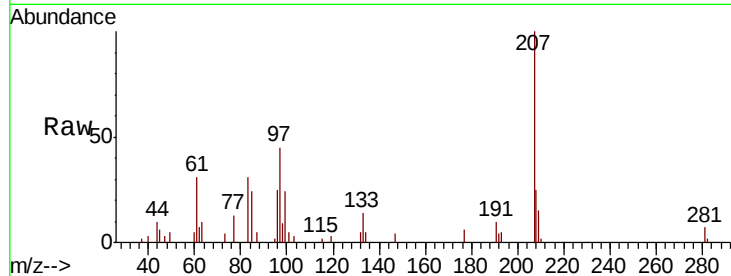
#55
 1,1,2-Trichloroethane
 Concen: 1.209 ug/l
 RT: 10.56 min Scan# 2732
 Delta R.T. 0.00 min
 Lab File: VN058706.D
 Acq: 11 Oct 2019 16:20

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
97	100		
83	67.8	71.2	106.8#
85	52.7	46.7	70.1
99	53.0	49.0	73.6

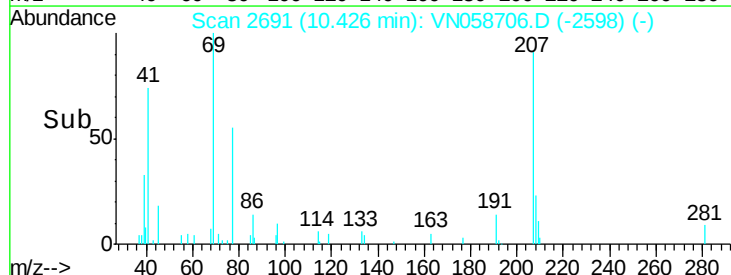
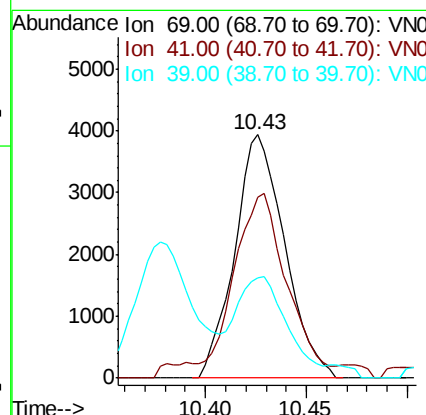
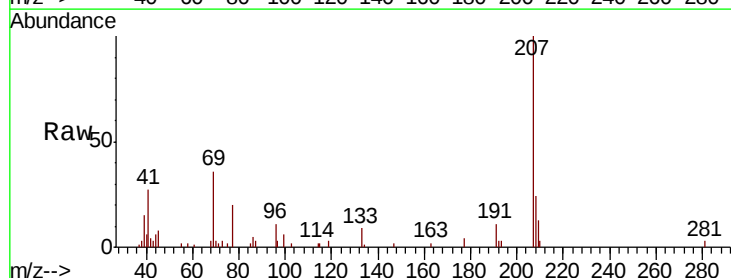
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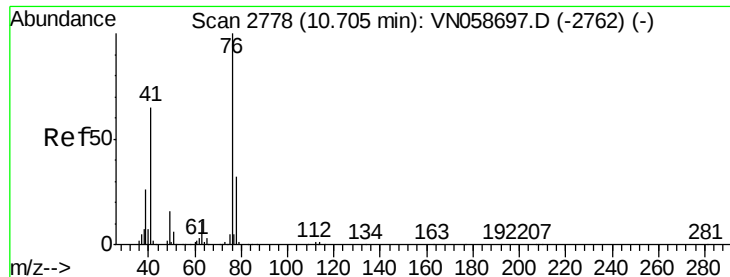
MMDadoda
 10/16/2019 12:48:37 AM



#56
 Ethyl methacrylate
 Concen: 0.930 ug/l
 RT: 10.43 min Scan# 2691
 Delta R.T. 0.00 min
 Lab File: VN058706.D
 Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
69	100		
41	84.9	56.8	85.2
39	36.6	32.5	48.7





#57

1,3-Dichloropropane

Concen: 1.031 ug/l

RT: 10.70 min Scan# 2777

Delta R.T. -0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion: 76 Resp: 8841

Ion Ratio Lower Upper

76 100

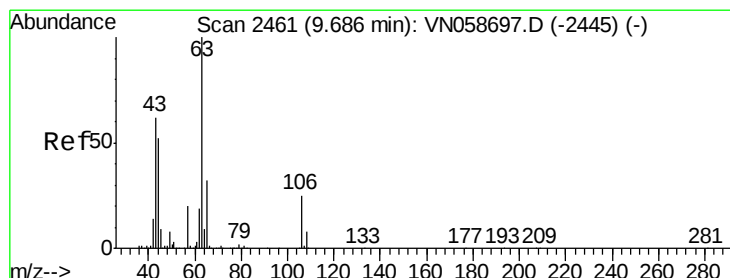
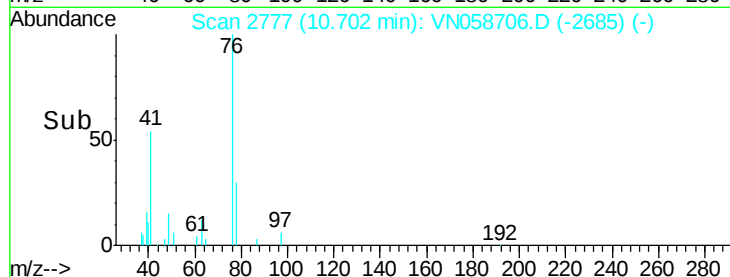
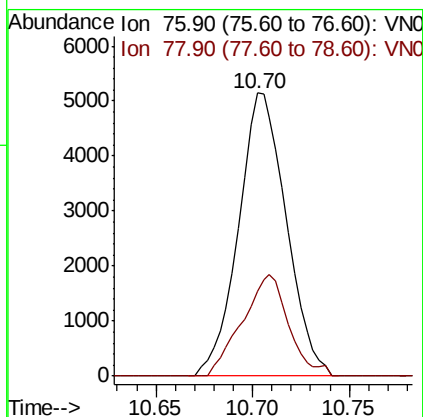
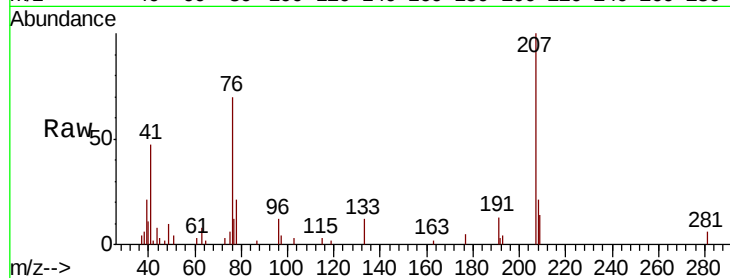
78 34.7 25.9 38.9

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#58

2-Chloroethyl Vinyl ether

Concen: 4.075 ug/l

RT: 9.69 min Scan# 2461

Delta R.T. 0.00 min

Lab File: VN058706.D

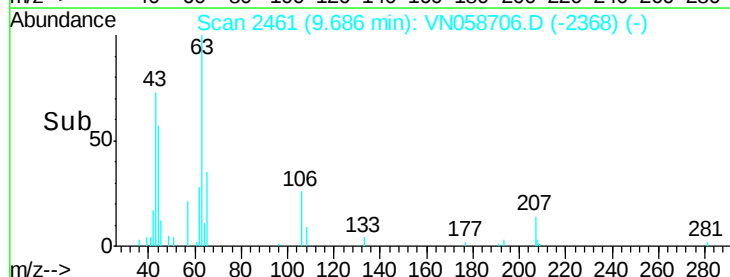
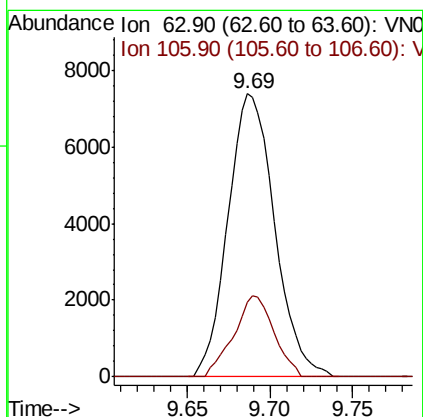
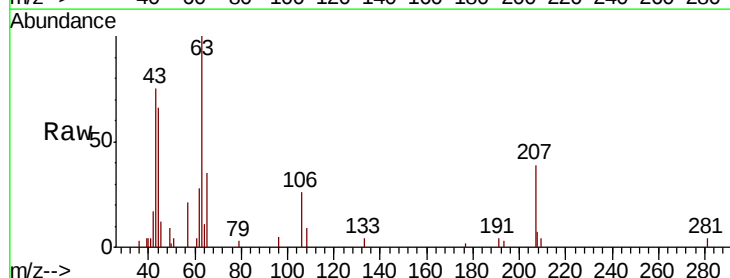
Acq: 11 Oct 2019 16:20

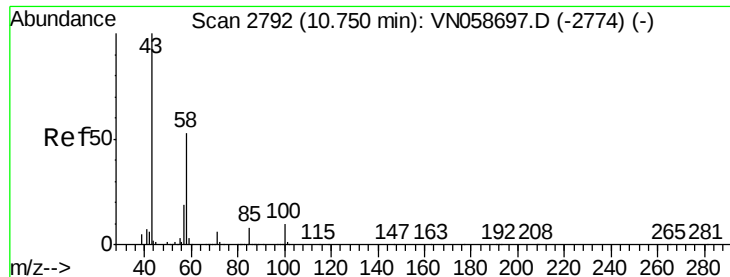
Tgt Ion: 63 Resp: 14430

Ion Ratio Lower Upper

63 100

106 24.6 20.0 30.0





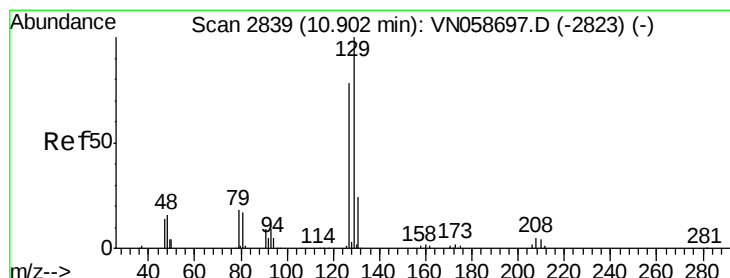
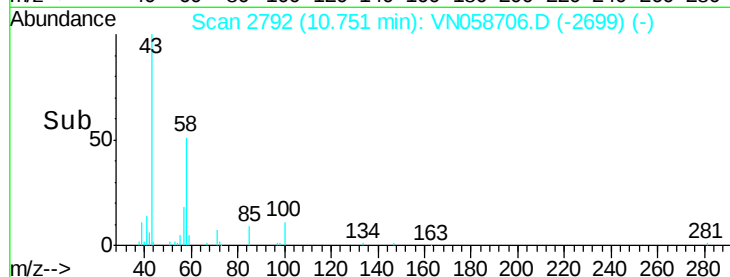
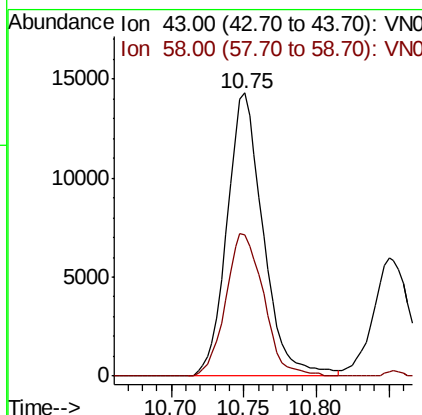
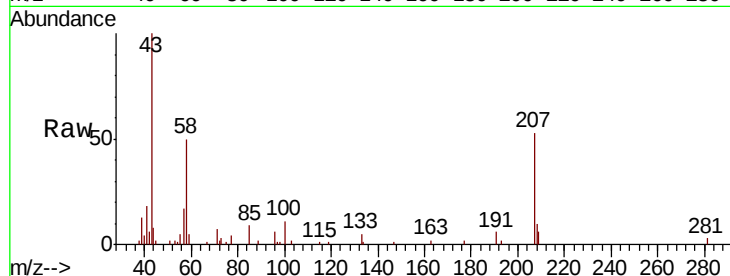
#59
2-Hexanone
Concen: 4.739 ug/l
RT: 10.75 min Scan# 2792
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion: 43 Resp: 24792
Ion Ratio Lower Upper
43 100
58 52.7 26.1 78.3

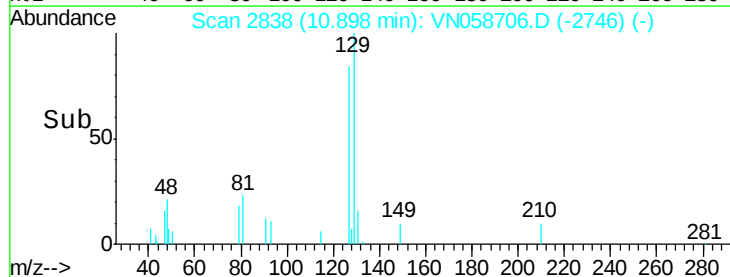
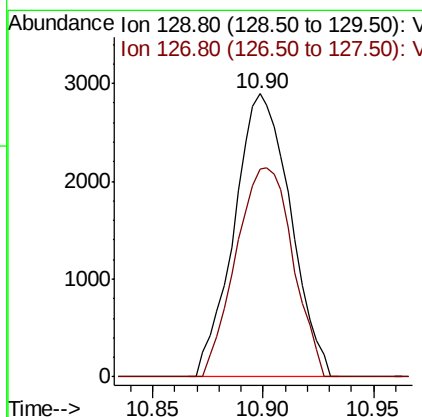
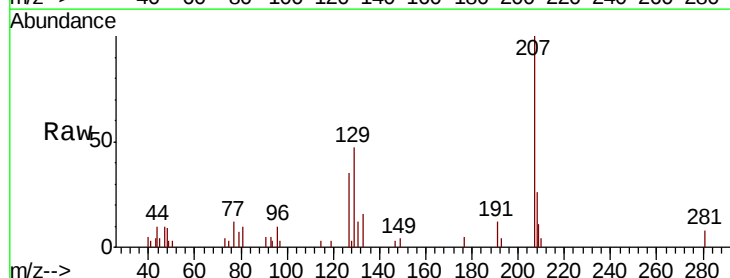
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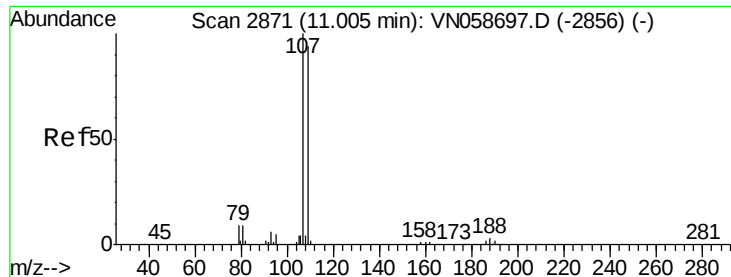
MMDadoda
10/16/2019 12:48:37 AM



#60
Dibromochloromethane
Concen: 0.989 ug/l
RT: 10.90 min Scan# 2838
Delta R.T. -0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion: 129 Resp: 5132
Ion Ratio Lower Upper
129 100
127 74.6 38.5 115.3





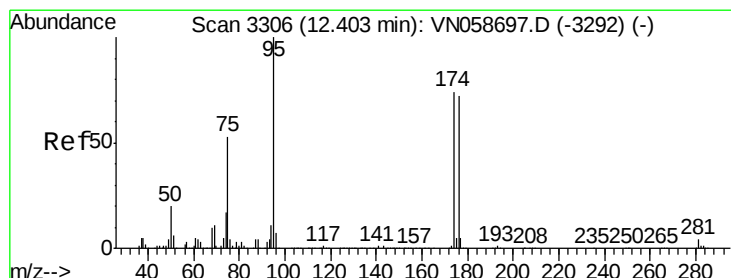
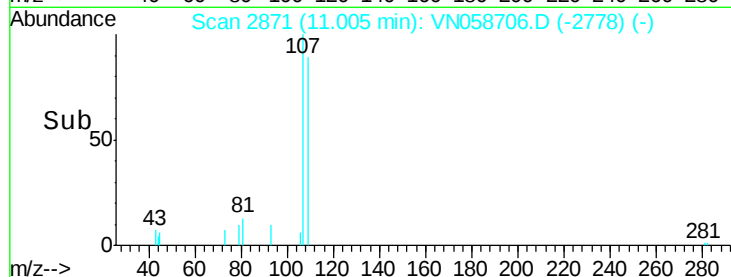
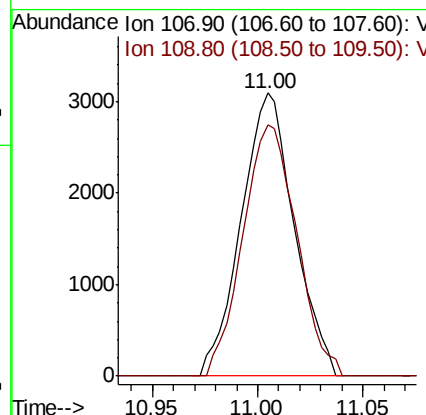
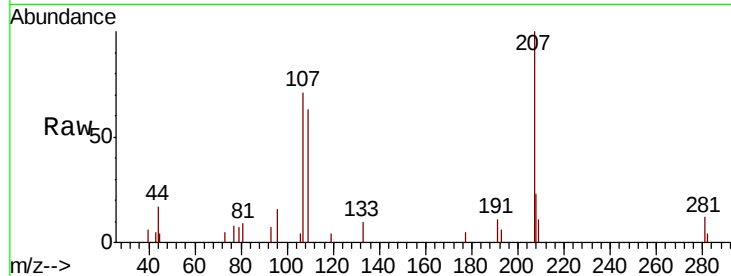
#61
1,2-Dibromoethane
Concen: 1.074 ug/l
RT: 11.00 min Scan# 2871
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion: 107 Resp: 5410
Ion Ratio Lower Upper
107 100
109 90.0 75.4 113.0

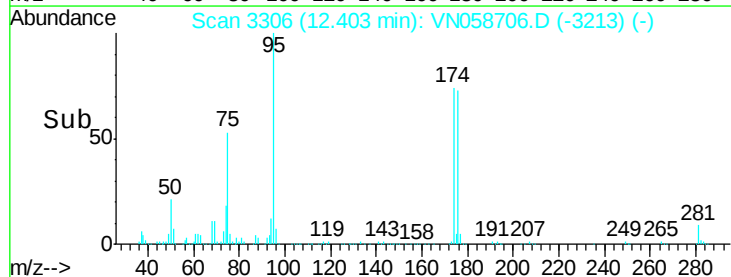
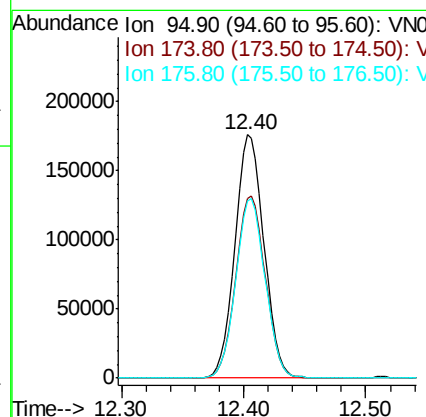
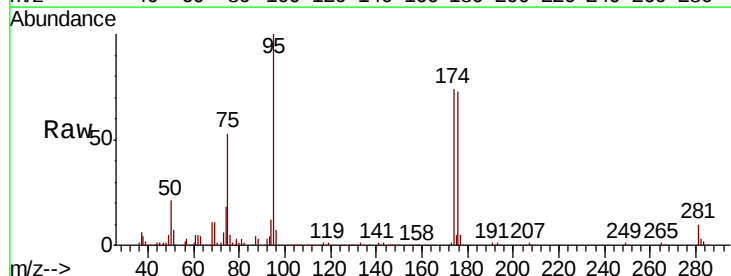
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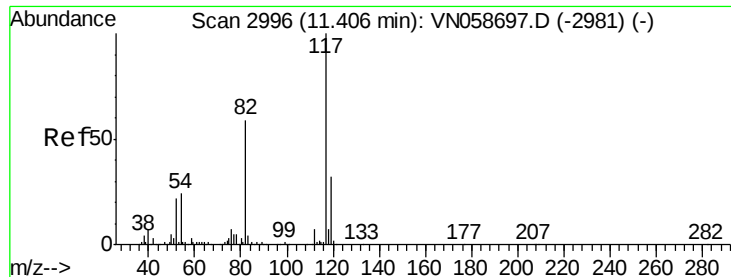
MMDadoda
10/16/2019 12:48:37 AM



#62
4-Bromofluorobenzene
Concen: 45.245 ug/l
RT: 12.40 min Scan# 3306
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion: 95 Resp: 292728
Ion Ratio Lower Upper
95 100
174 76.0 0.0 150.4
176 74.4 0.0 146.8





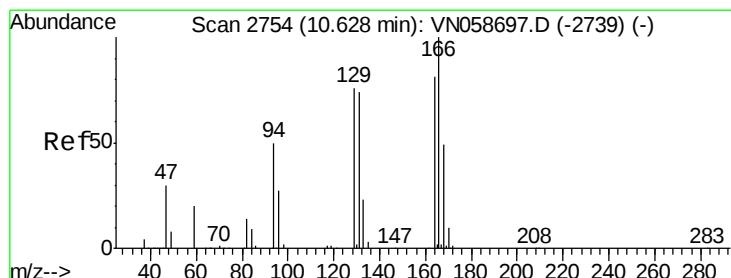
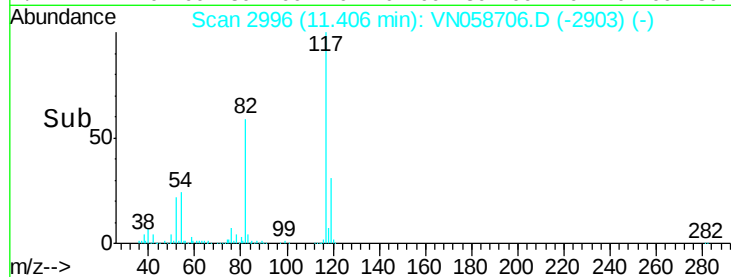
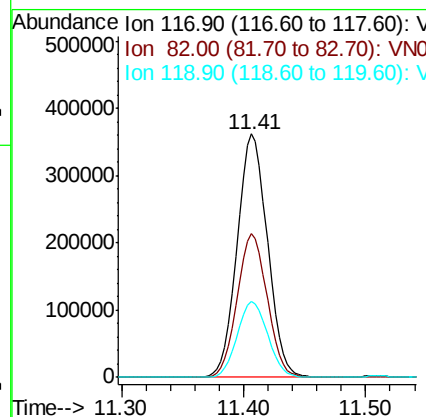
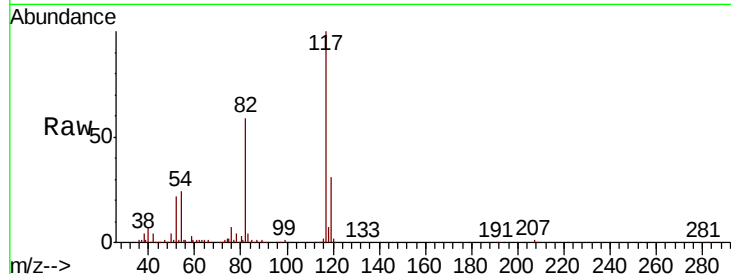
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Resp	Lower	Upper
117	100	623590		
82	58.9		47.0	70.4
119	31.0		25.4	38.2

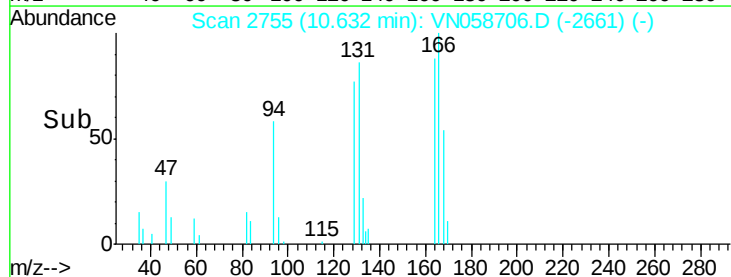
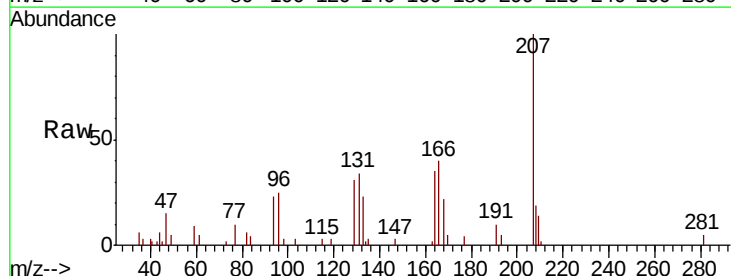
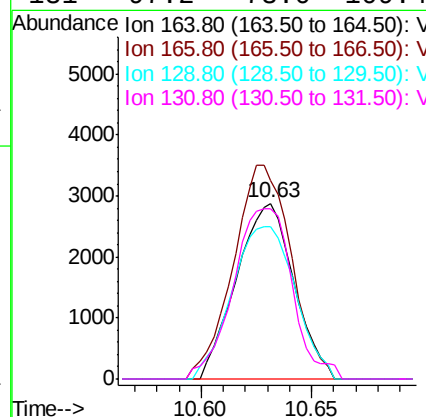
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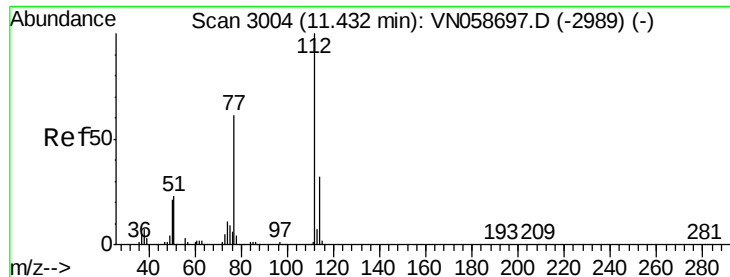
MMDadoda
10/16/2019 12:48:37 AM



#64
Tetrachloroethene
Concen: 1.192 ug/l
RT: 10.63 min Scan# 2755
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Resp	Lower	Upper
164	100	5203		
166	113.3		99.3	148.9
129	87.0		75.2	112.8
131	97.2		73.0	109.4





#65

Chlorobenzene

Concen: 1.113 ug/l

RT: 11.43 min Scan# 3004

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion:112 Resp: 14090

Ion Ratio Lower Upper

112 100

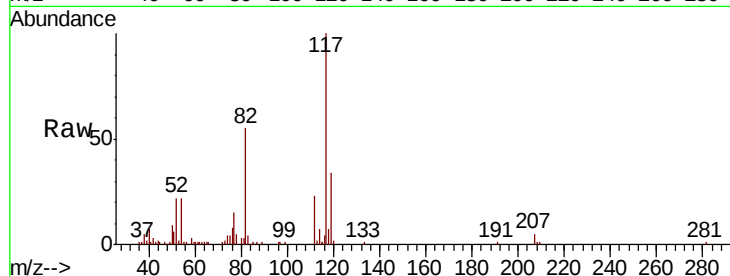
114 28.8 25.2 37.8

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Abundance Ion 111.90 (111.60 to 112.60): V

Ion 113.90 (113.60 to 114.60): V

11.43

8000

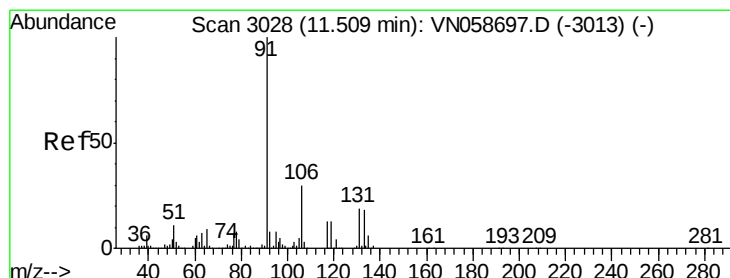
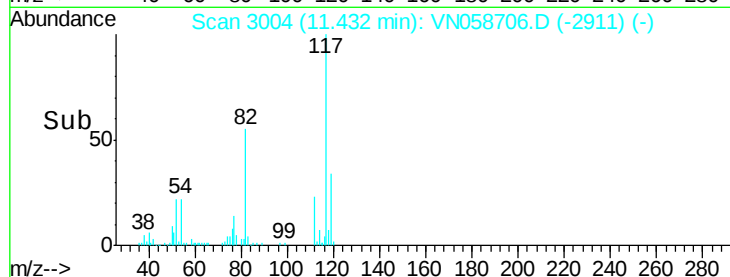
6000

4000

2000

0

Time--> 11.40 11.45 11.50



#66

1,1,1,2-Tetrachloroethane

Concen: 1.045 ug/l

RT: 11.51 min Scan# 3027

Delta R.T. -0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

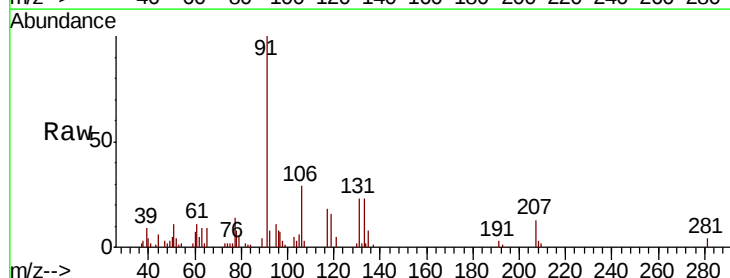
Tgt Ion:131 Resp: 4895

Ion Ratio Lower Upper

131 100

133 94.9 47.6 142.9

119 0.0 33.0 98.9#



Abundance Ion 130.80 (130.50 to 131.50): V

Ion 132.80 (132.50 to 133.50): V

Ion 118.80 (118.50 to 119.50): V

11.51

4000

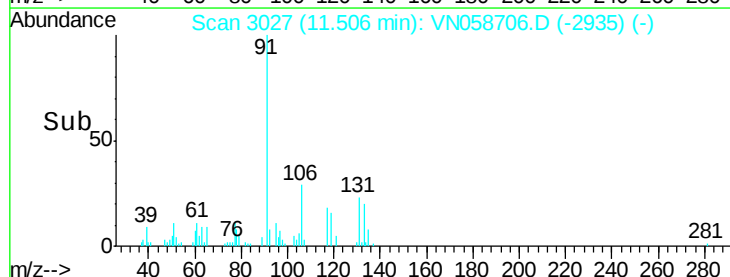
3000

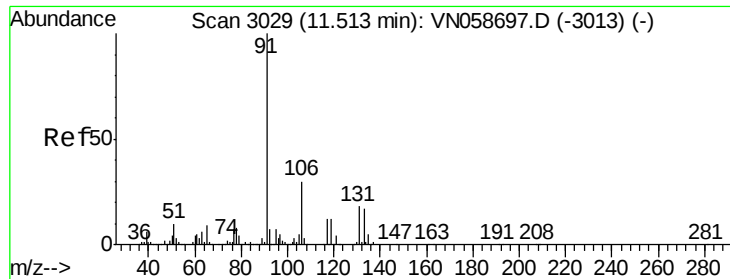
2000

1000

0

Time--> 11.45 11.50 11.55





#67

Ethyl Benzene

Concen: 1.042 ug/l

RT: 11.51 min Scan# 3029

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion: 91 Resp: 23513

Ion Ratio Lower Upper

91 100

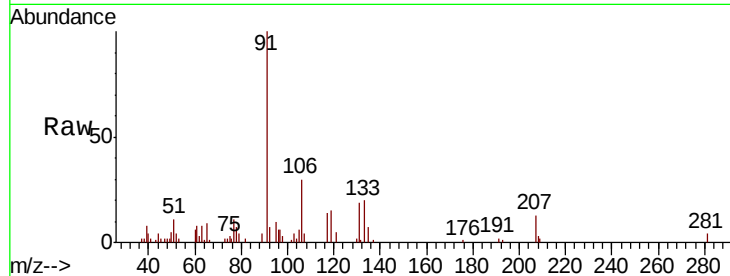
106 29.5 24.1 36.1

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Abundance Ion 91.00 (90.70 to 91.70): VN058706.D (-2936) (-)

Ion 106.00 (105.70 to 106.70): VN058706.D (-2936) (-)

11.51

15000

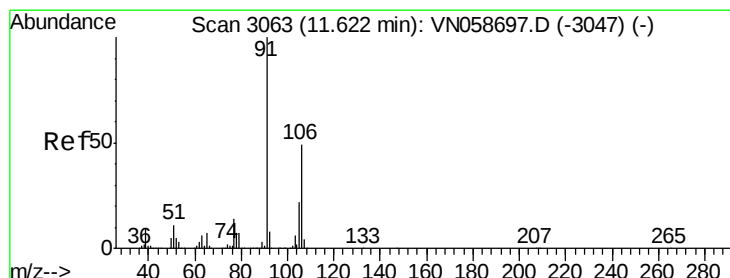
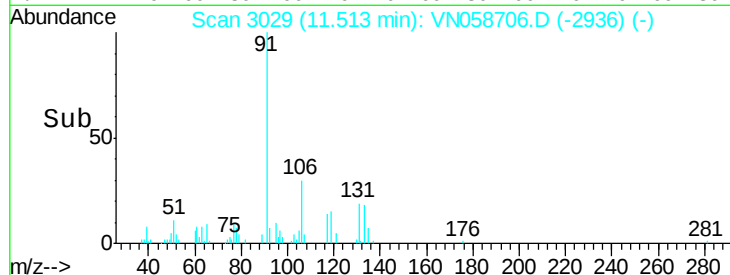
10000

5000

0

Time-->

11.45 11.50 11.55



#68

m/p-Xylenes

Concen: 1.999 ug/l

RT: 11.62 min Scan# 3063

Delta R.T. 0.00 min

Lab File: VN058706.D

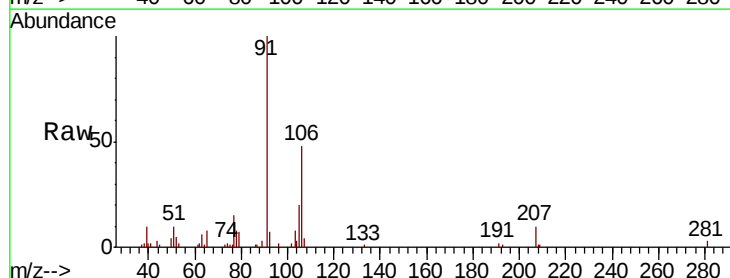
Acq: 11 Oct 2019 16:20

Tgt Ion: 106 Resp: 16931

Ion Ratio Lower Upper

106 100

91 216.2 165.7 248.5



Abundance Ion 106.00 (105.70 to 106.70): VN058706.D (-2970) (-)

Ion 91.00 (90.70 to 91.70): VN058706.D (-2970) (-)

11.62

20000

15000

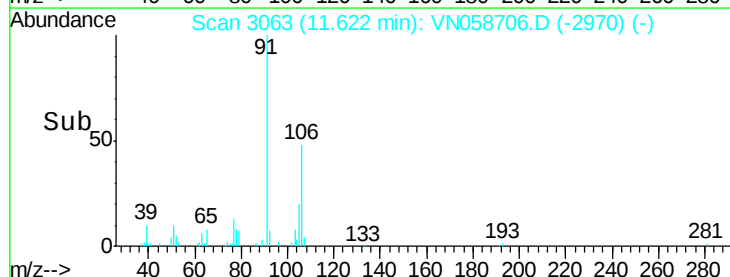
10000

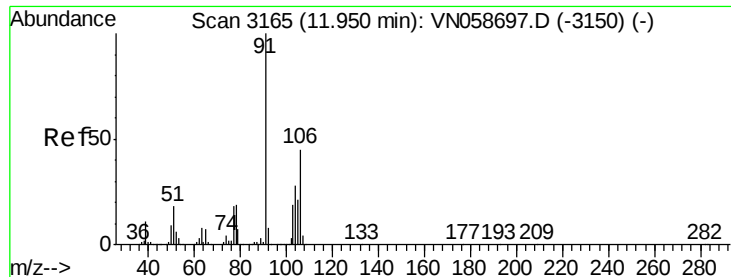
5000

0

Time-->

11.55 11.60 11.65





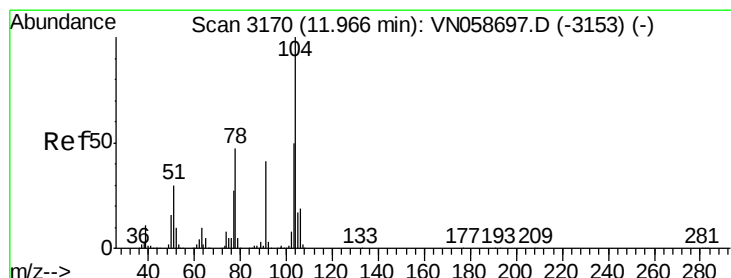
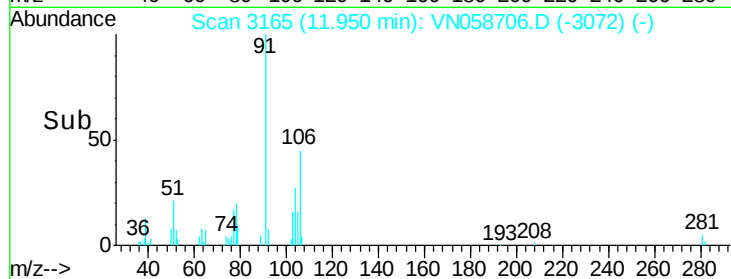
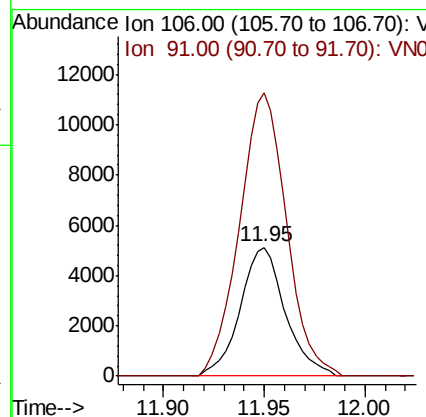
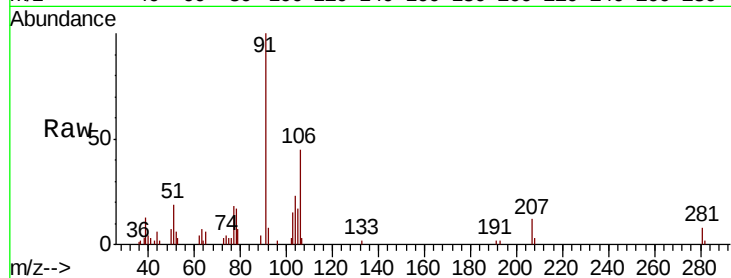
#69
o-Xylene
Concen: 0.976 ug/l
RT: 11.95 min Scan# 3165
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ion	Ratio	Resp	Lower	Upper
106	106	100	8003		
91	91	229.3		110.9	332.9

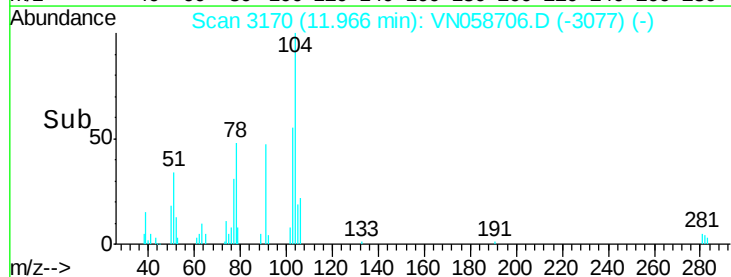
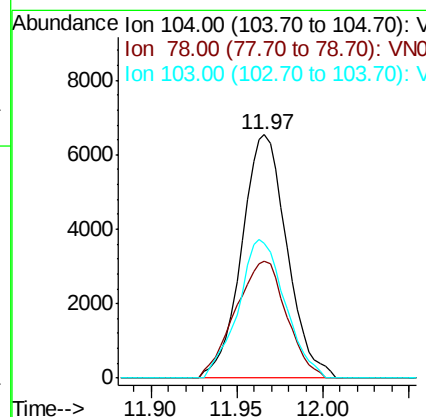
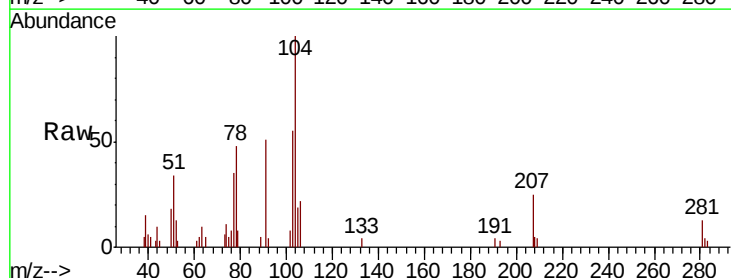
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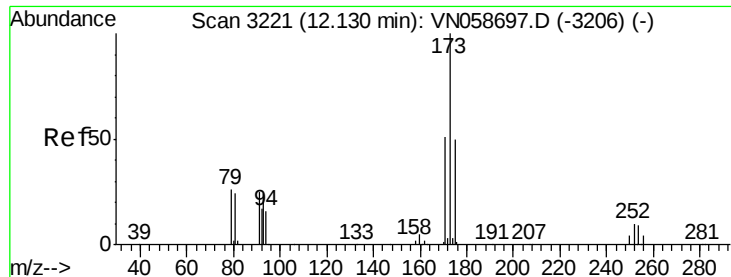
MMDadoda
10/16/2019 12:48:37 AM



#70
Styrene
Concen: 0.888 ug/l
RT: 11.97 min Scan# 3170
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
104	104	100	11935		
78	78	54.4		42.2	63.2
103	103	58.8		43.7	65.5





#71

Bromoform

Concen: 1.013 ug/l

RT: 12.13 min Scan# 3221

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

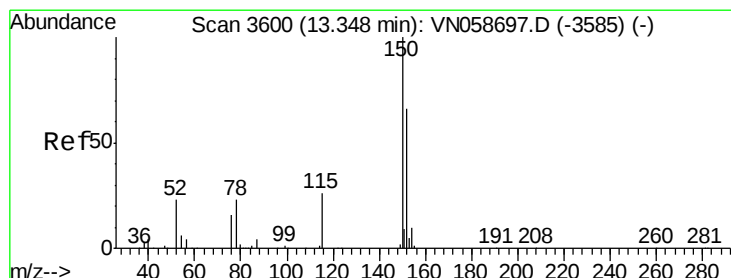
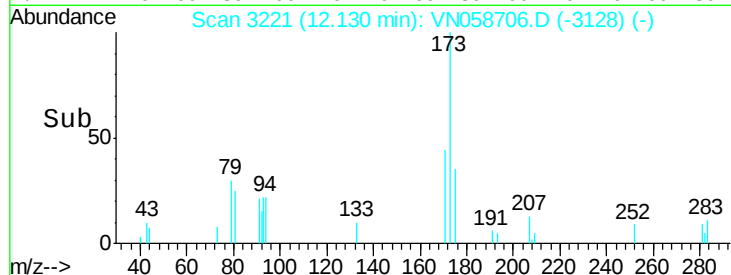
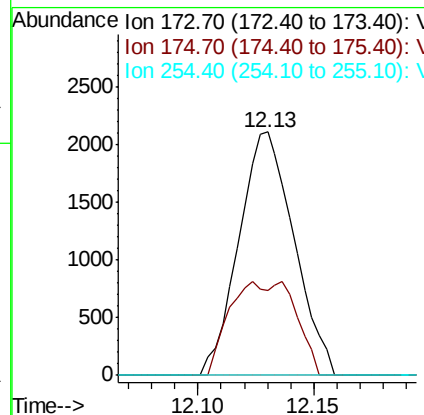
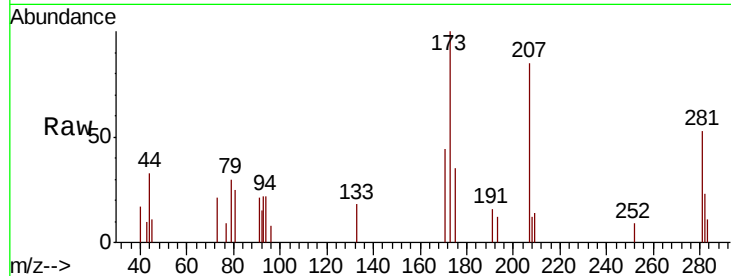
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
173	100		
175	27.7	24.6	73.8
254	0.0	0.1	0.1#

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#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

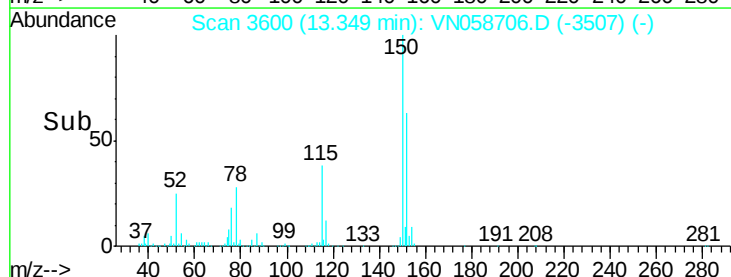
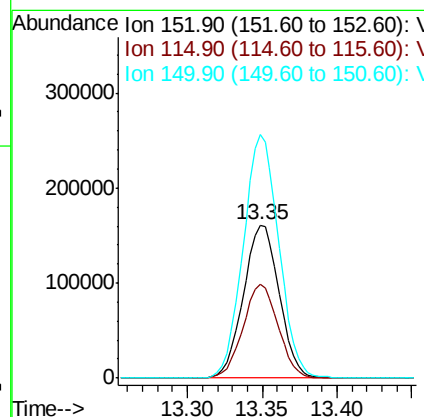
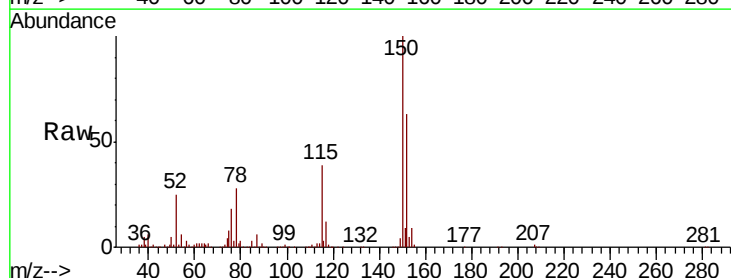
RT: 13.35 min Scan# 3600

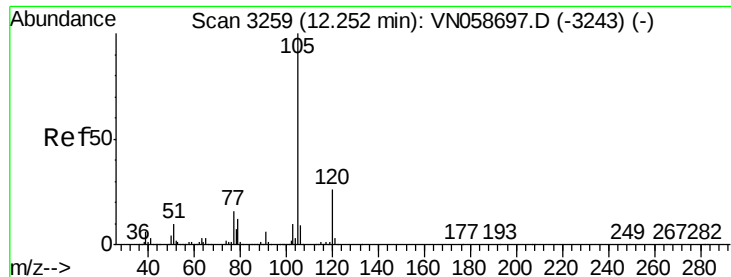
Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
152	100		
115	59.8	30.4	91.2
150	157.6	0.0	345.4





#73

Isopropylbenzene

Concen: 1.108 ug/l

RT: 12.25 min Scan# 3259

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion: 105 Resp: 21501

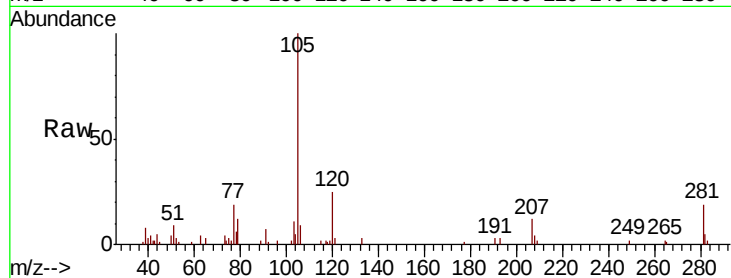
Ion Ratio Lower Upper

105 100

120 25.5 13.1 39.1

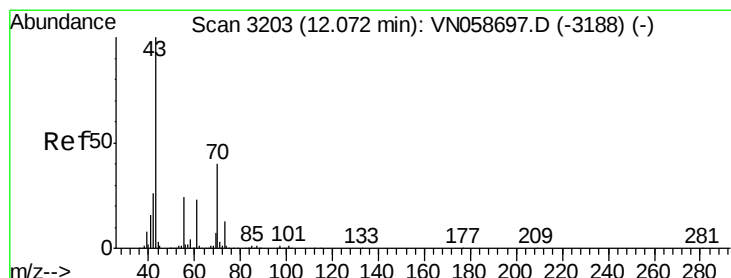
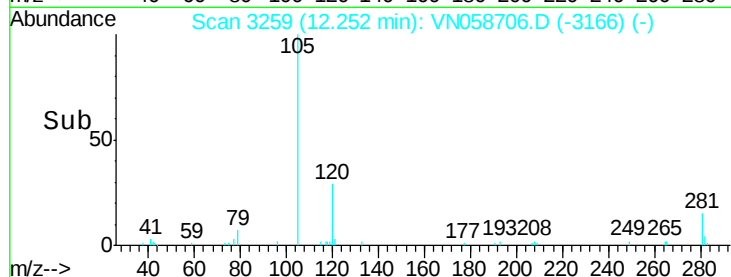
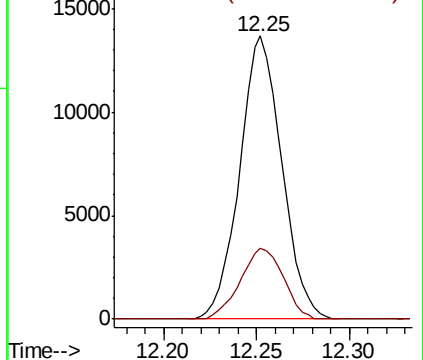
Manual Integrations
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Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#74

N-ethyl acetate

Concen: 0.928 ug/l

RT: 12.07 min Scan# 3203

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Tgt Ion: 43 Resp: 8088

Ion Ratio Lower Upper

43 100

70 41.7 32.2 48.4

55 25.3 19.6 29.4

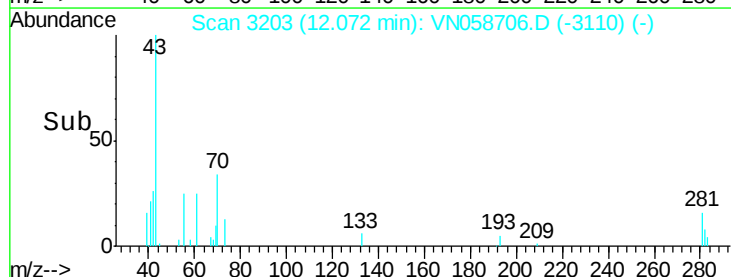
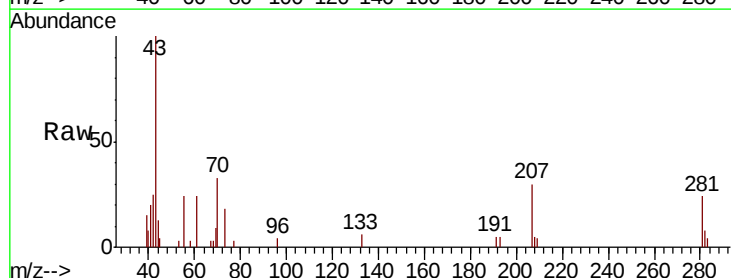
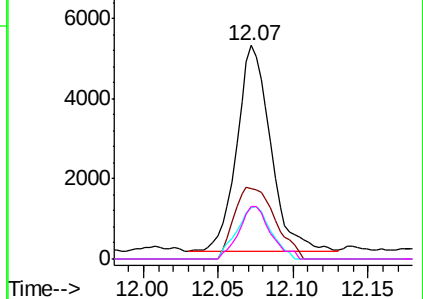
61 23.9 18.6 28.0

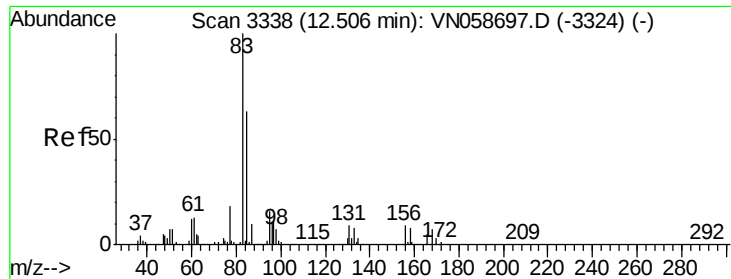
Abundance Ion 43.00 (42.70 to 43.70): VNC

Ion 70.00 (69.70 to 70.70): VNC

Ion 55.00 (54.70 to 55.70): VNC

Ion 61.00 (60.70 to 61.70): VNC





#75

1,1,2,2-Tetrachloroethane

Concen: 1.248 ug/l

RT: 12.51 min Scan# 3338

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

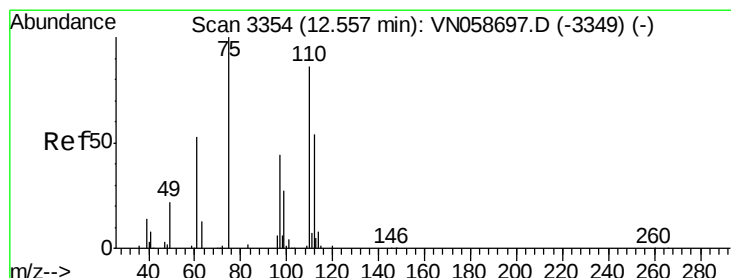
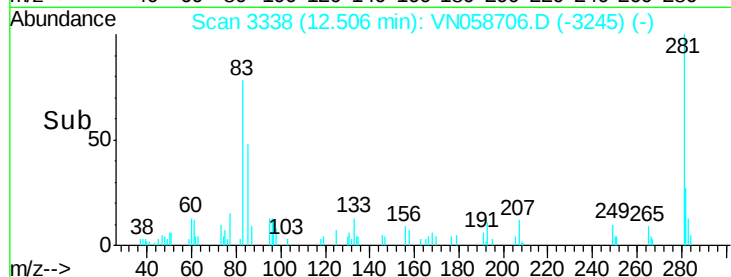
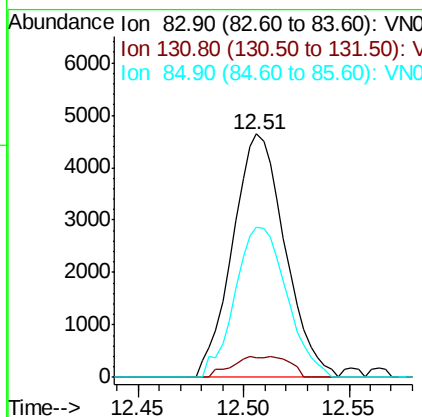
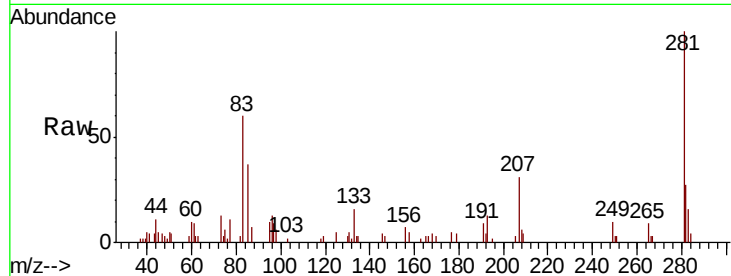
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion:	83	Resp:	7984
Ion Ratio	Lower	Upper	
83	100		
131	5.4	4.8	14.4
85	61.1	31.9	95.5

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#76

1,2,3-Trichloropropane

Concen: 1.399 ug/l m

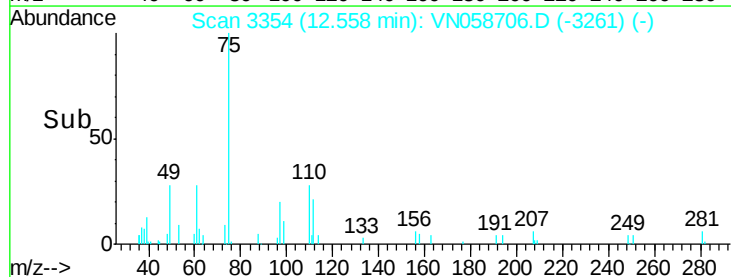
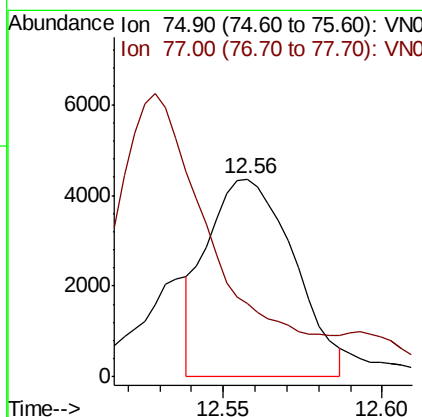
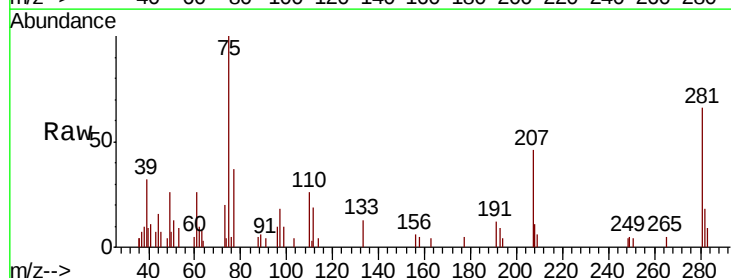
RT: 12.56 min Scan# 3354

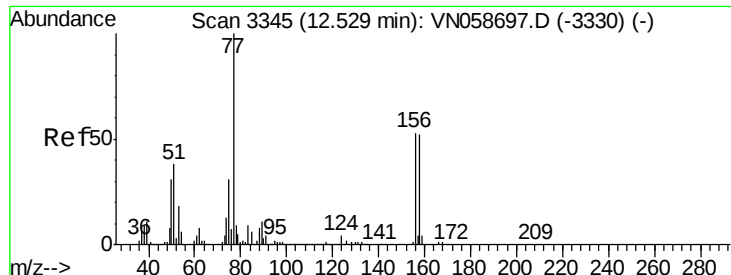
Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Tgt Ion:	75	Resp:	8228
Ion Ratio	Lower	Upper	
75	100		
77	0.0	0.0	0.0





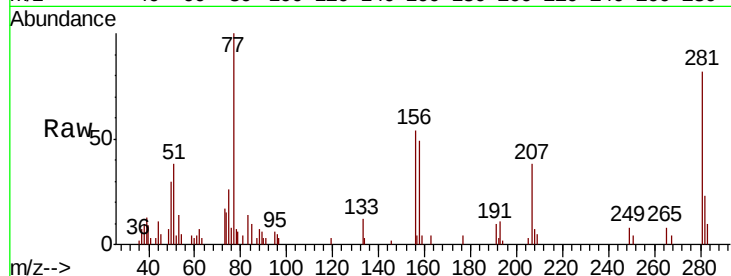
#77
Bromobenzene
Concen: 1.253 ug/l
RT: 12.53 min Scan# 3345
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

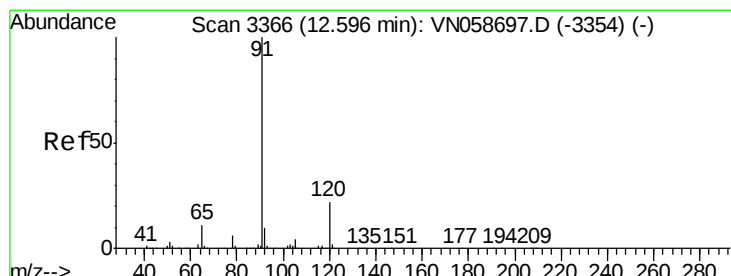
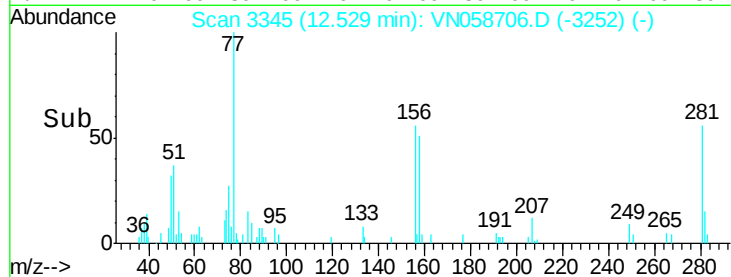
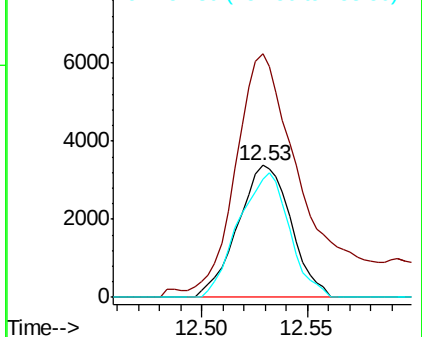
Tot Ion	Ratio	Lower	Upper
156	100		
77	218.3	115.8	347.3
158	90.2	48.9	146.6

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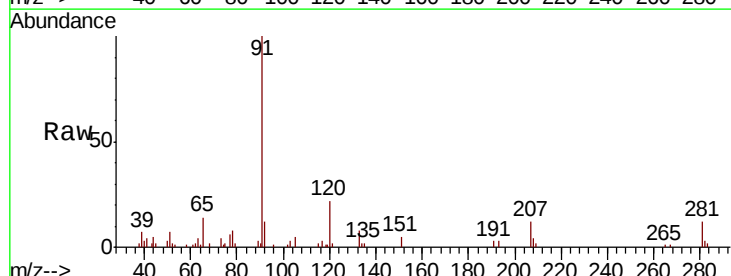


Abundance Ion 155.80 (155.50 to 156.50): V
Ion 77.00 (76.70 to 77.70): VN
Ion 157.80 (157.50 to 158.50): V

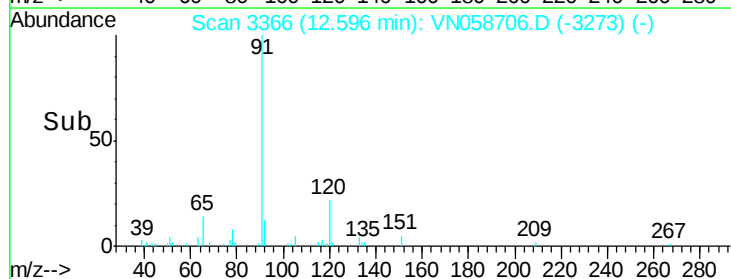
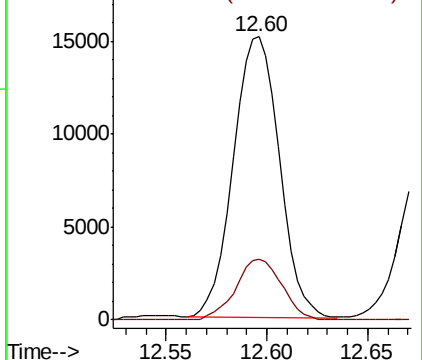


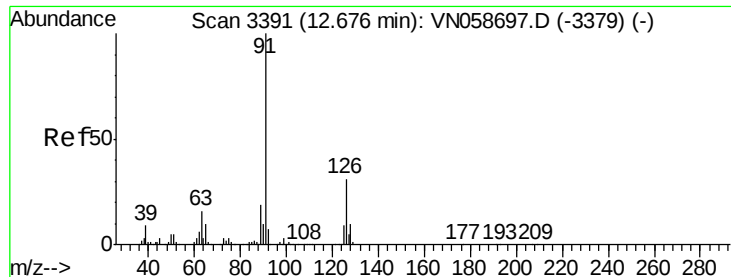
#78
n-propylbenzene
Concen: 1.070 ug/l
RT: 12.60 min Scan# 3366
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
91	100		
120	21.6	11.1	33.3



Abundance Ion 91.00 (90.70 to 91.70): VN
Ion 120.00 (119.70 to 120.70): V





#79

2-Chlorotoluene

Concen: 1.062 ug/l

RT: 12.68 min Scan# 3392

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion: 91 Resp: 14917

Ion Ratio Lower Upper

91 100

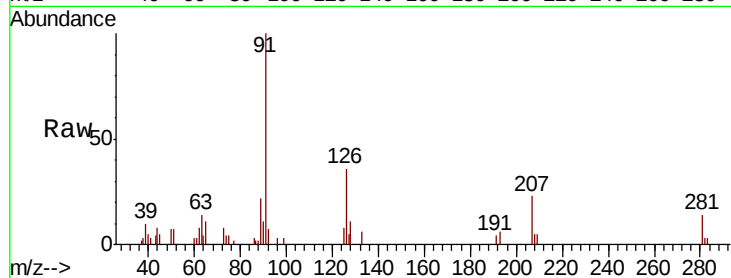
126 35.7 16.2 48.5

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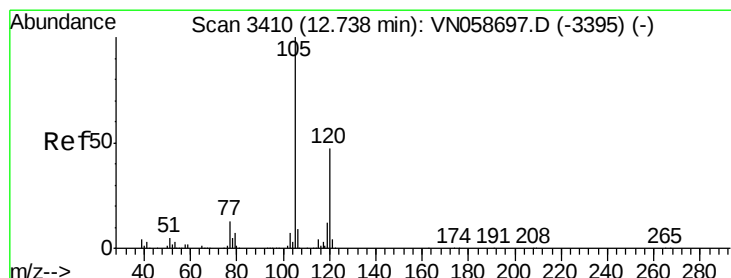
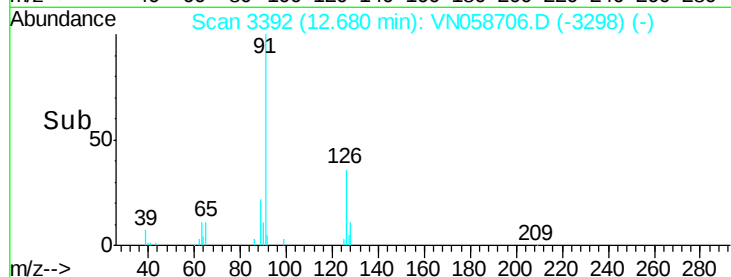
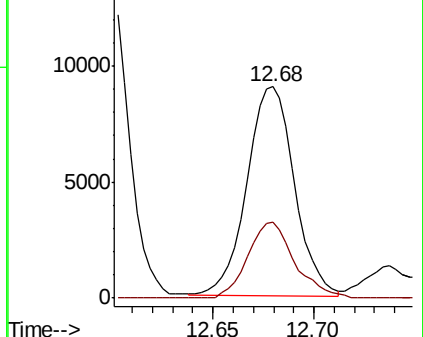
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Abundance Ion 91.00 (90.70 to 91.70): VN058706.D (-3298) (-)

Ion 125.90 (125.60 to 126.60): VN058706.D (-3298) (-)



#80

1,3,5-Trimethylbenzene

Concen: 1.112 ug/l

RT: 12.74 min Scan# 3410

Delta R.T. 0.00 min

Lab File: VN058706.D

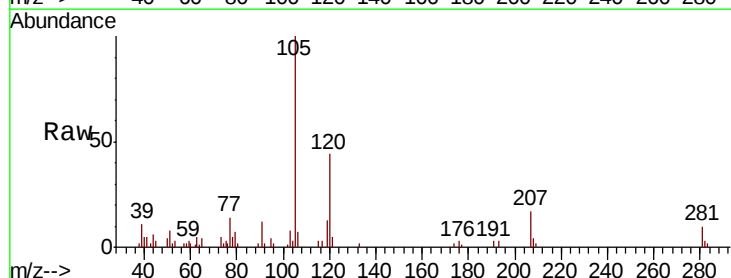
Acq: 11 Oct 2019 16:20

Tgt Ion: 105 Resp: 18436

Ion Ratio Lower Upper

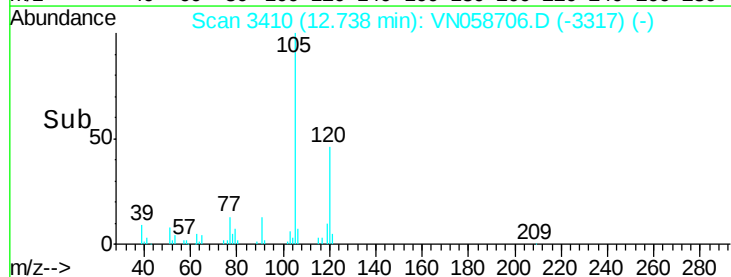
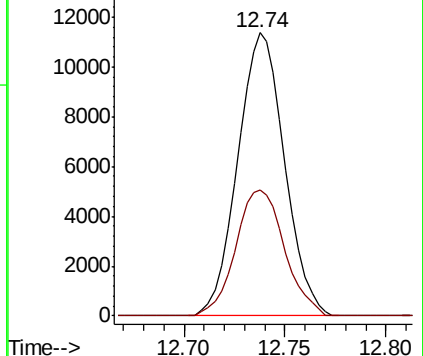
105 100

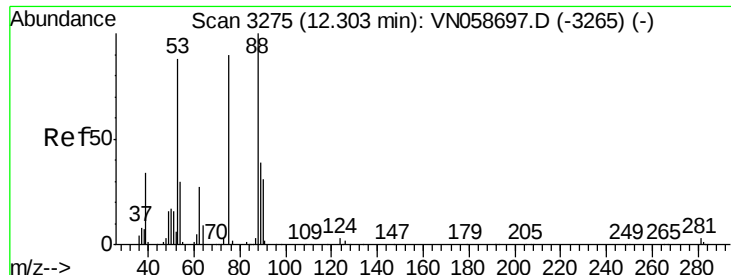
120 46.4 23.4 70.2



Abundance Ion 105.00 (104.70 to 105.70): VN058706.D (-3317) (-)

Ion 120.00 (119.70 to 120.70): VN058706.D (-3317) (-)





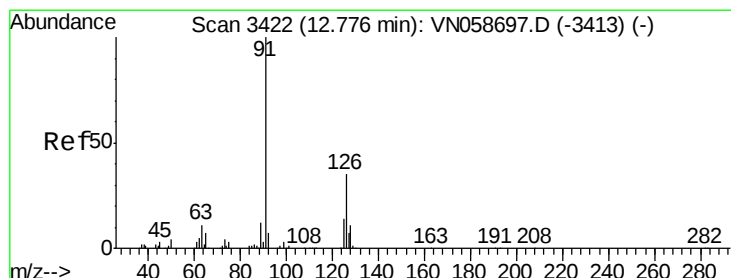
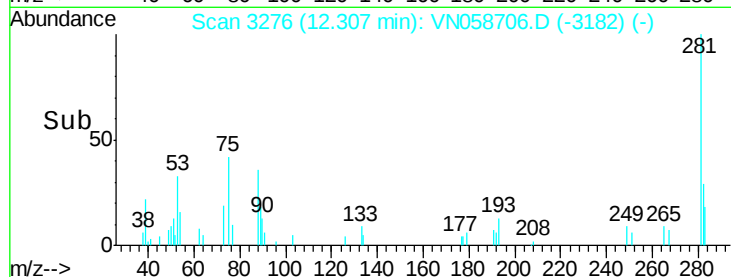
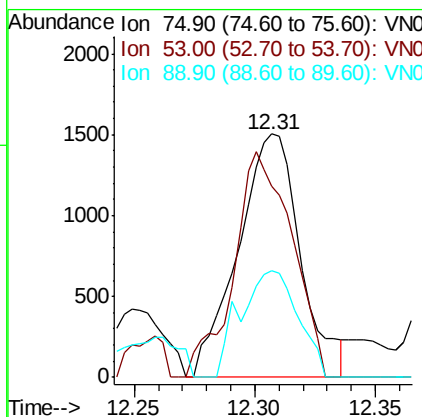
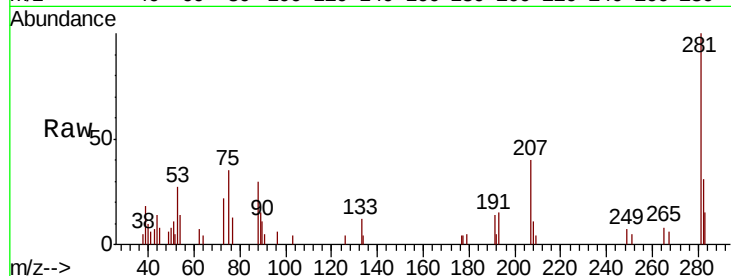
#81
trans-1,4-Dichloro-2-butene
Concen: 1.234 ug/l m
RT: 12.31 min Scan# 3276
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
75	100		
53	0.0	78.4	117.6#
89	2.6	34.9	52.3#

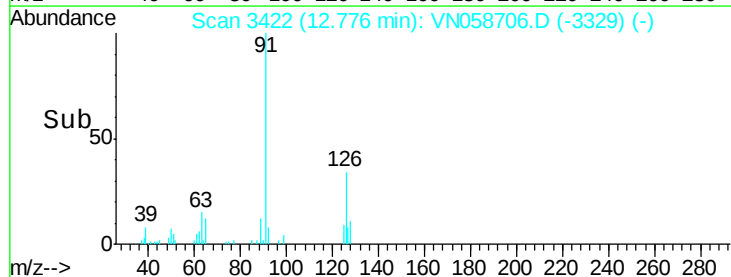
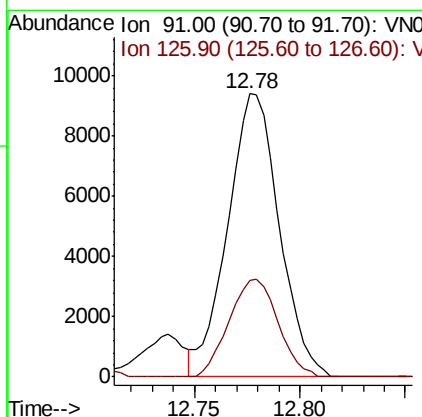
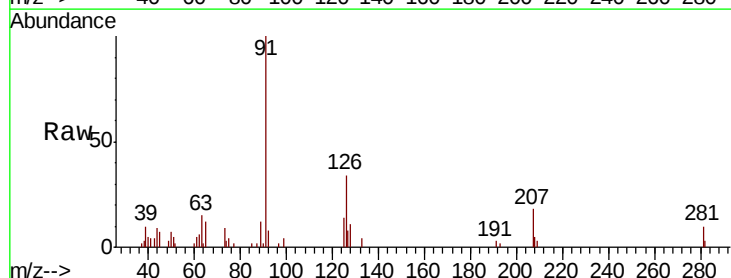
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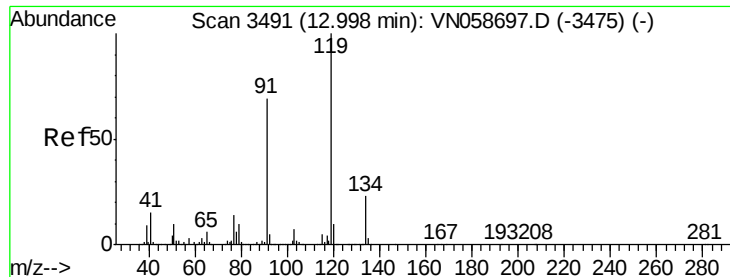
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#82
4-Chlorotoluene
Concen: 1.108 ug/l
RT: 12.78 min Scan# 3422
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
91	100		
126	32.8	15.9	47.6





#83

tert-Butylbenzene

Concen: 1.176 ug/l

RT: 13.00 min Scan# 3492

Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Instrument :

MSVOA_N

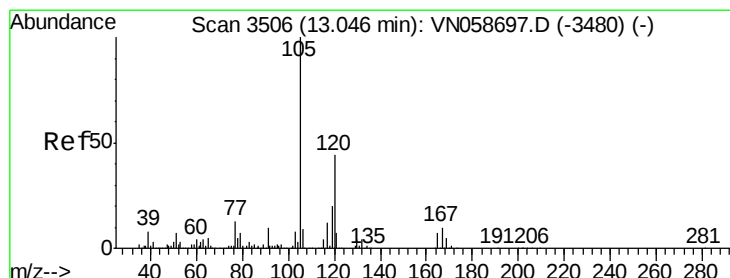
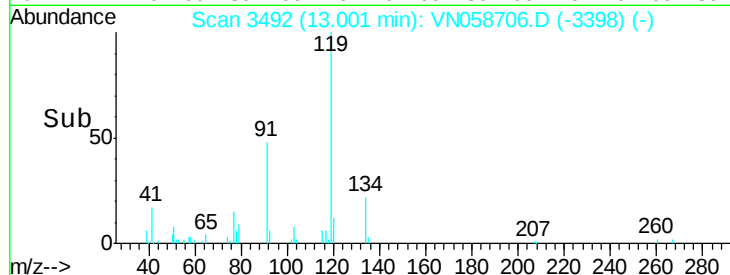
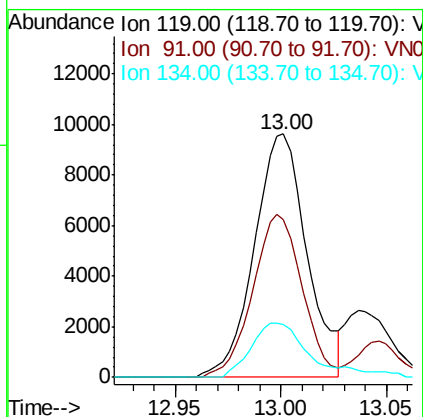
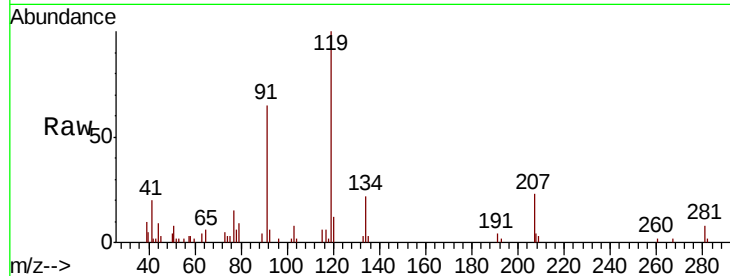
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019

Tot Ion:	119	Resp:	16699
Ion Ratio	Lower	Upper	
119	100		
91	63.0	33.8	101.3
134	25.2	12.6	37.6

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#84

1,2,4-Trimethylbenzene

Concen: 1.006 ug/l

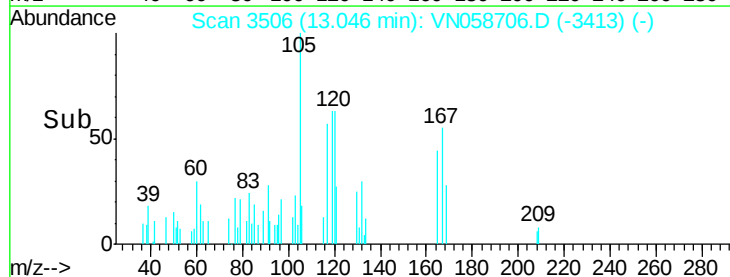
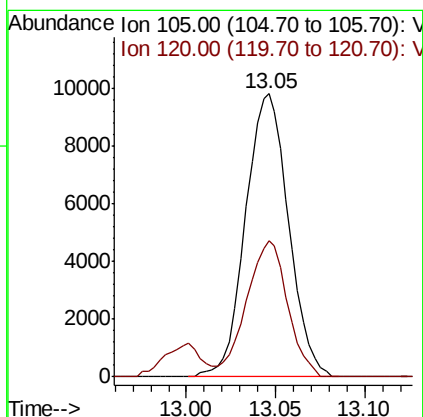
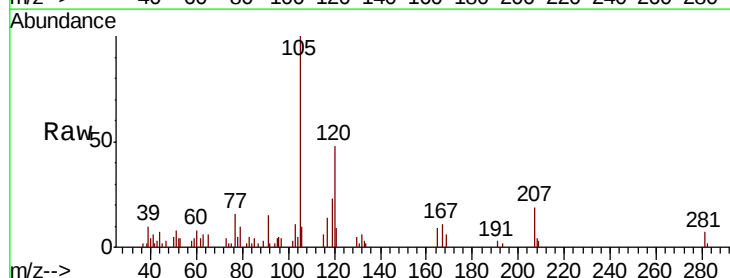
RT: 13.05 min Scan# 3506

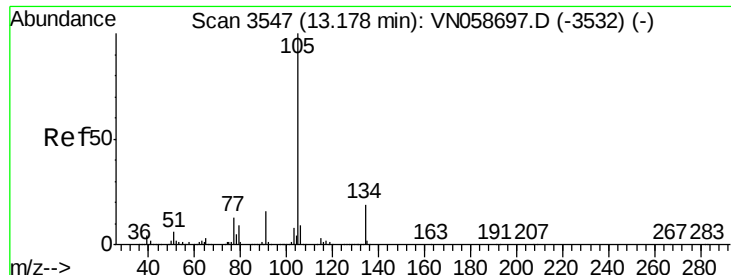
Delta R.T. 0.00 min

Lab File: VN058706.D

Acq: 11 Oct 2019 16:20

Tgt Ion:	105	Resp:	16556
Ion Ratio	Lower	Upper	
105	100		
120	45.6	21.9	65.7





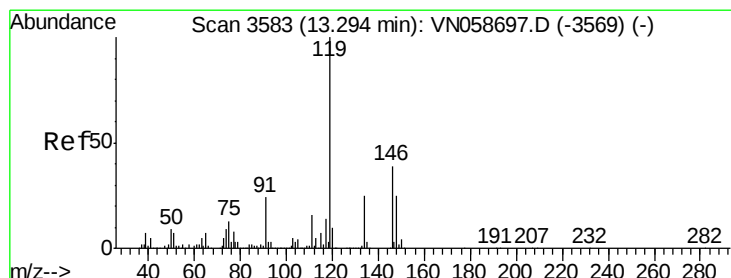
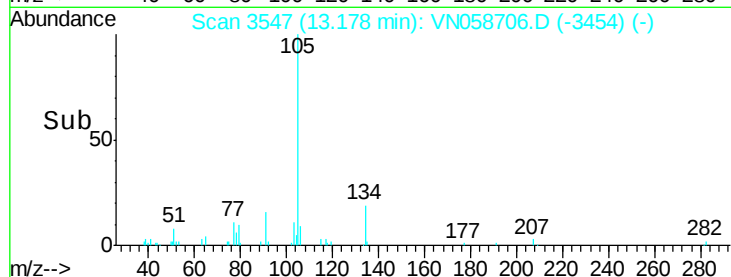
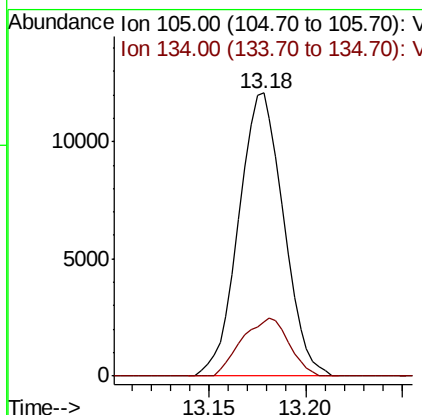
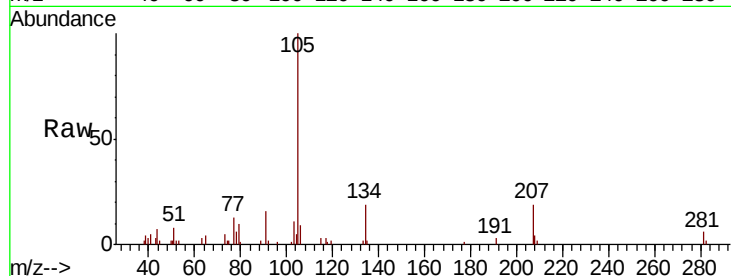
#85
 sec-Butylbenzene
 Concen: 1.042 ug/l
 RT: 13.18 min Scan# 3547
 Delta R.T. 0.00 min
 Lab File: VN058706.D
 Acq: 11 Oct 2019 16:20

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
105	100		
134	21.4	9.7	29.1

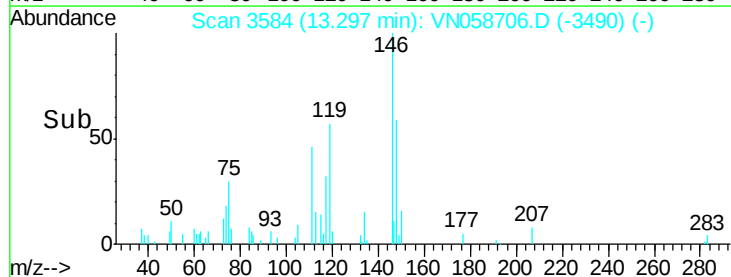
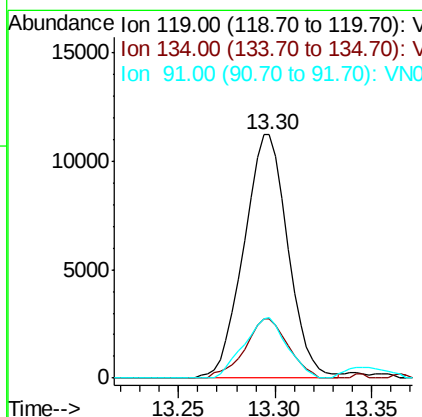
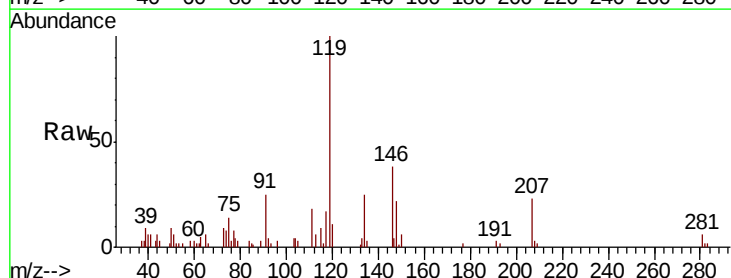
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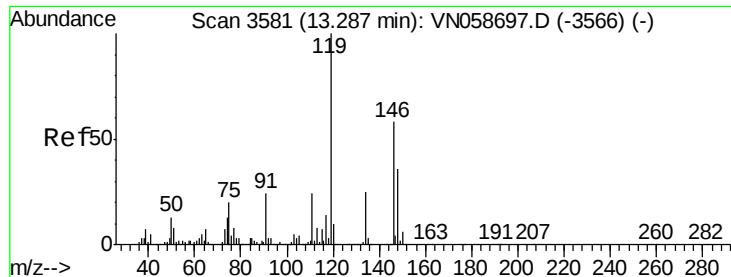
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#86
 p-Isopropyltoluene
 Concen: 1.049 ug/l
 RT: 13.30 min Scan# 3584
 Delta R.T. 0.00 min
 Lab File: VN058706.D
 Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
119	100		
134	23.8	12.7	38.1
91	24.2	11.9	35.5





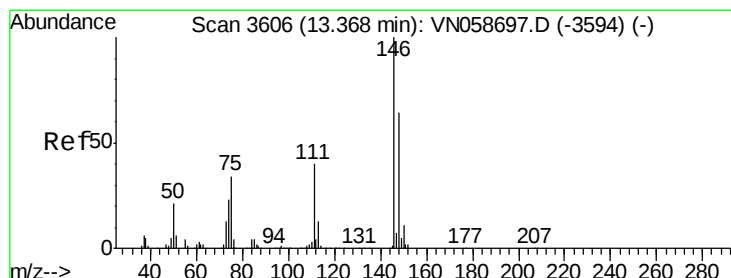
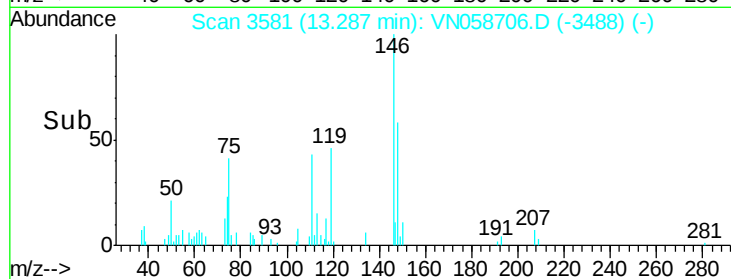
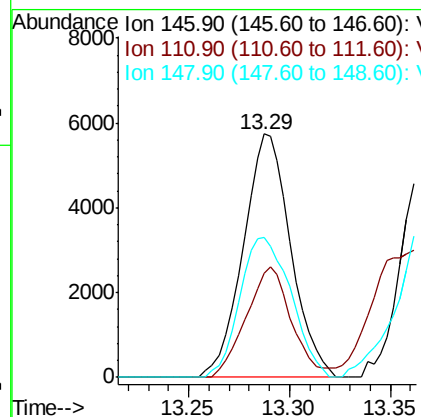
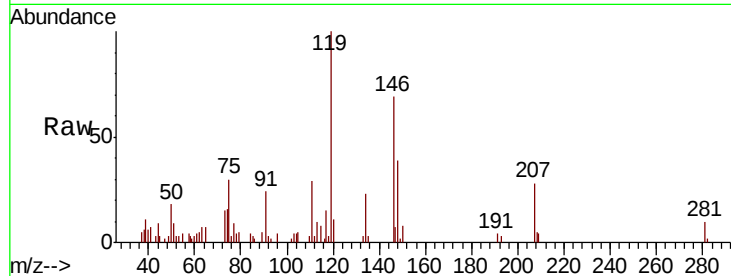
#87
 1,3-Dichlorobenzene
 Concen: 1.085 ug/l
 RT: 13.29 min Scan# 3581
 Delta R.T. 0.00 min
 Lab File: VN058706.D
 Acq: 11 Oct 2019 16:20

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
146	100		
111	42.9	20.5	61.6
148	62.0	31.3	93.9

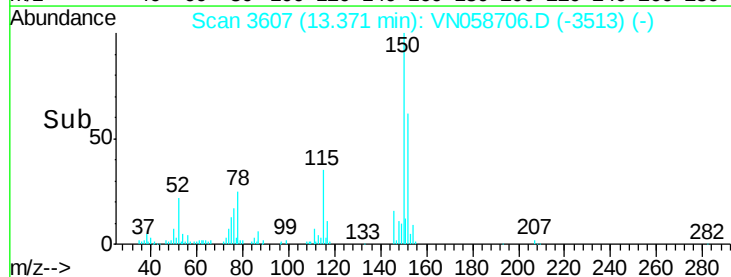
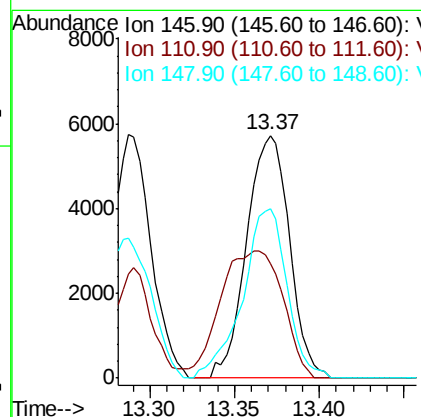
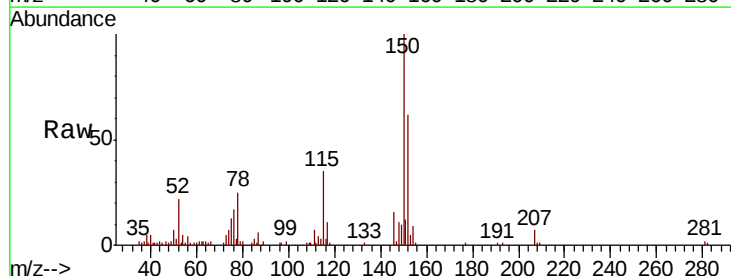
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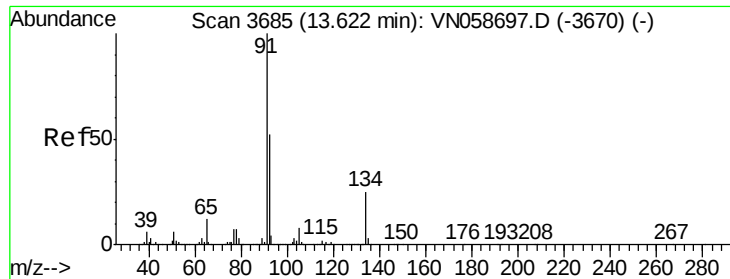
MMDadoda
 10/16/2019 12:48:37 AM



#88
 1,4-Dichlorobenzene
 Concen: 1.135 ug/l m
 RT: 13.37 min Scan# 3607
 Delta R.T. 0.00 min
 Lab File: VN058706.D
 Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
146	100		
111	40.4	20.1	60.2
148	58.3	31.9	95.7





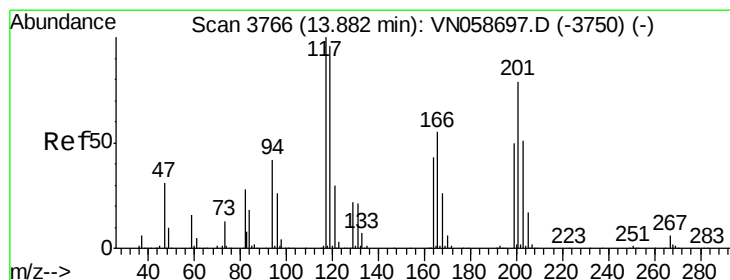
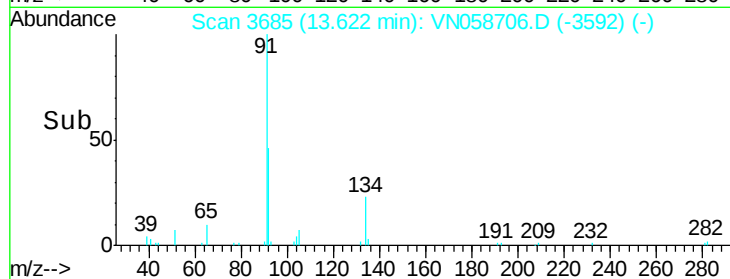
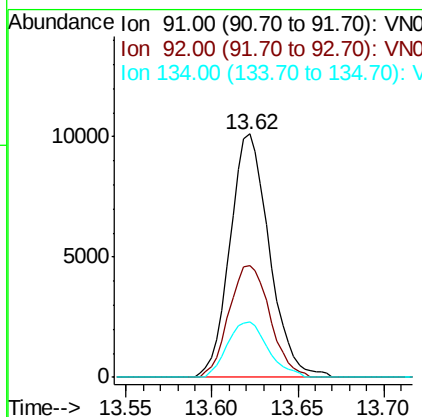
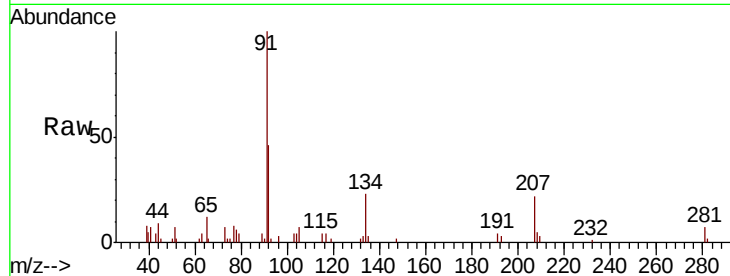
#89
n-Butylbenzene
Concen: 1.022 ug/l
RT: 13.62 min Scan# 3685
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
91	100		
92	47.8	26.0	78.0
134	23.5	12.2	36.6

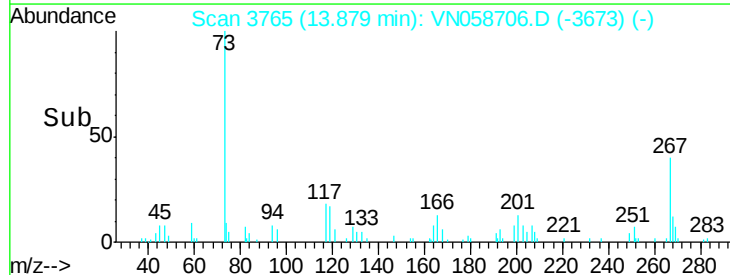
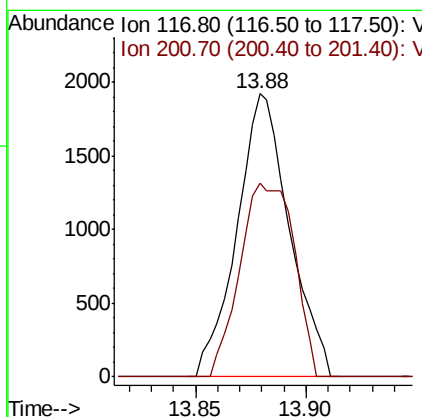
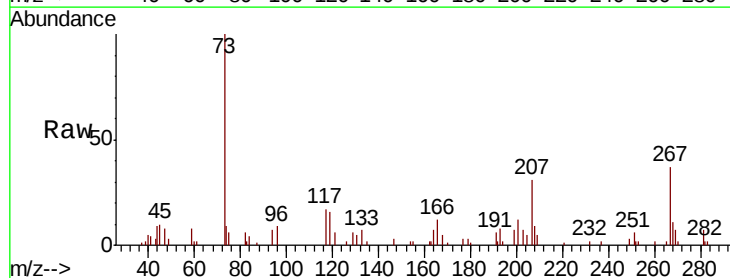
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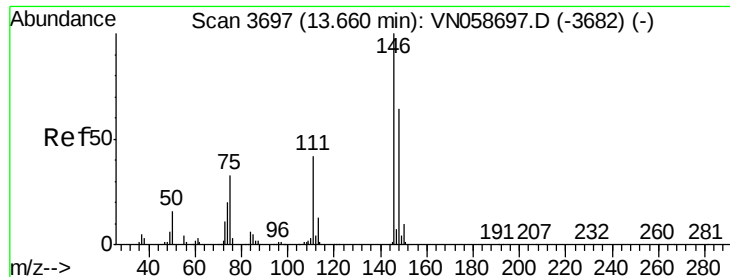
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#90
Hexachloroethane
Concen: 1.042 ug/l
RT: 13.88 min Scan# 3765
Delta R.T. -0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
117	100		
201	70.6	39.6	118.7





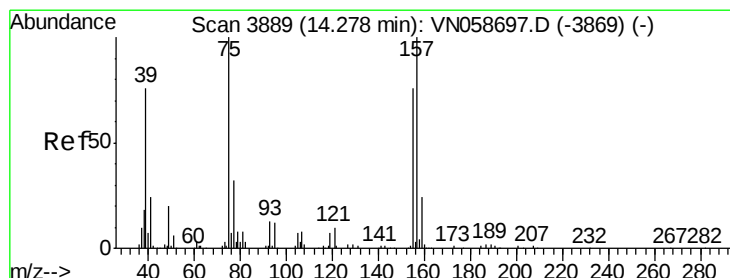
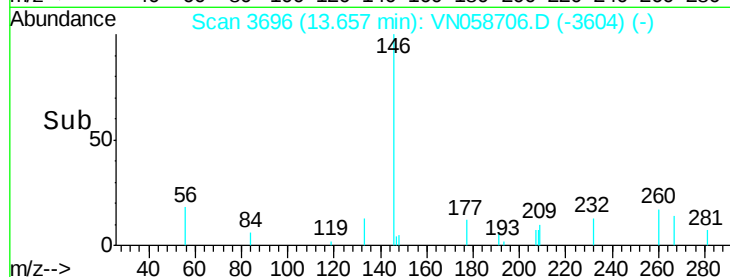
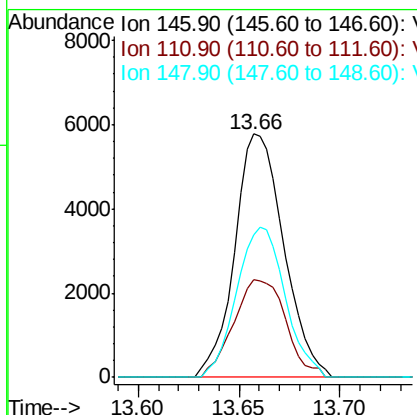
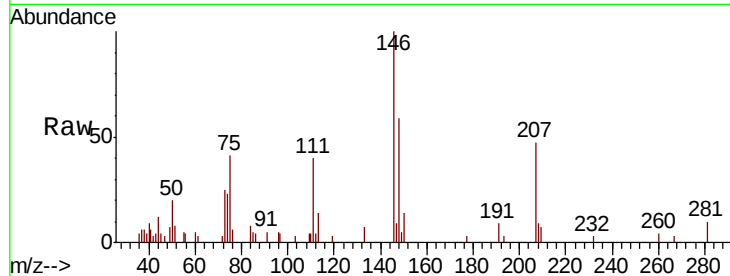
#91
 1,2-Dichlorobenzene
 Concen: 1.158 ug/l
 RT: 13.66 min Scan# 3696
 Delta R.T. -0.00 min
 Lab File: VN058706.D
 Acq: 11 Oct 2019 16:20

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
146	100		
111	42.6	21.1	63.4
148	61.0	31.8	95.3

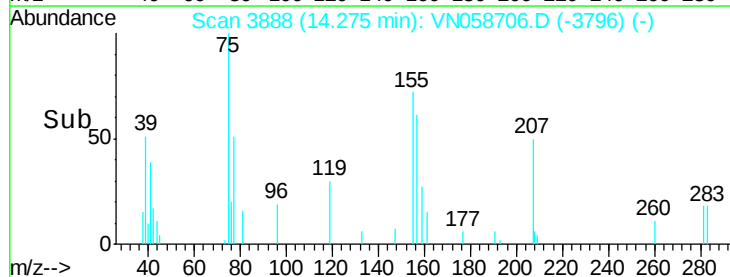
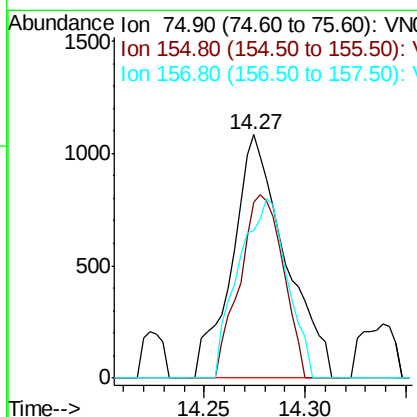
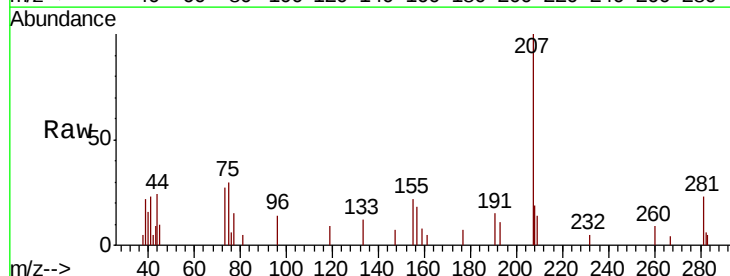
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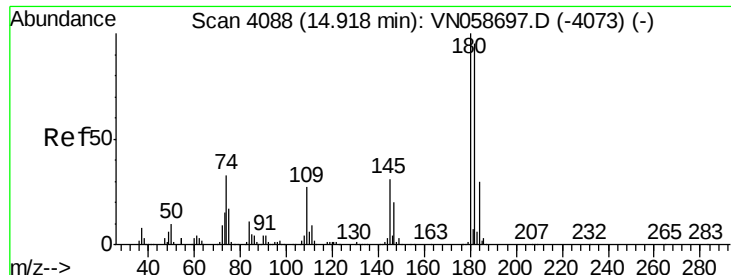
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#92
 1,2-Dibromo-3-Chloropropane
 Concen: 1.329 ug/l
 RT: 14.27 min Scan# 3888
 Delta R.T. -0.00 min
 Lab File: VN058706.D
 Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
75	100		
155	62.2	37.9	113.6
157	67.9	49.4	148.2





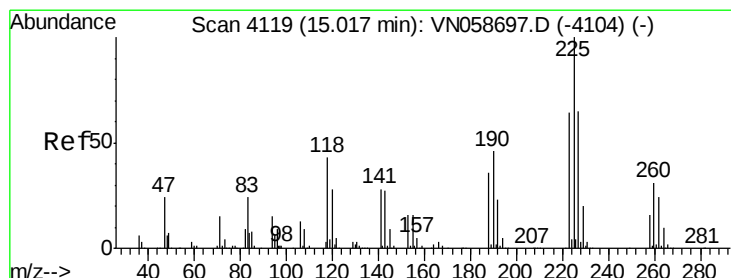
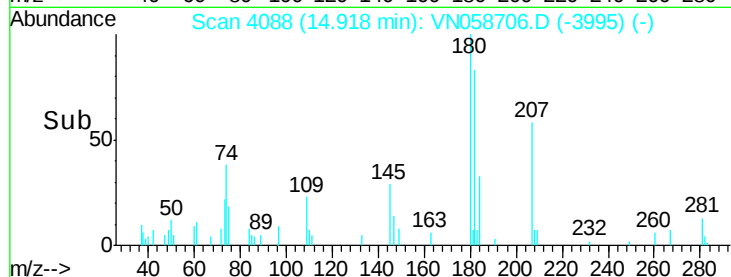
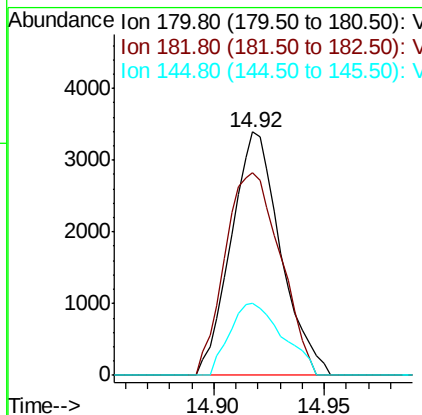
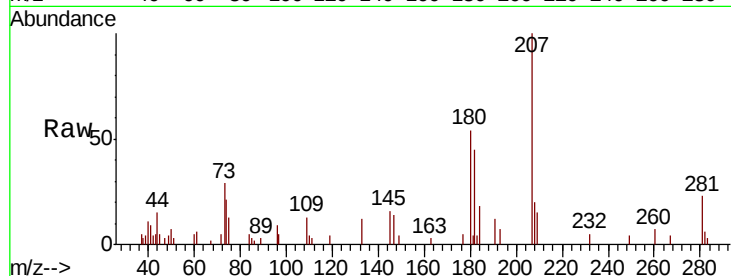
#93
 1,2,4-Trichlorobenzene
 Concen: 1.024 ug/l
 RT: 14.92 min Scan# 4088
 Delta R.T. 0.00 min
 Lab File: VN058706.D
 Acq: 11 Oct 2019 16:20

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
180	100		
182	93.0	47.4	142.2
145	31.5	15.4	46.2

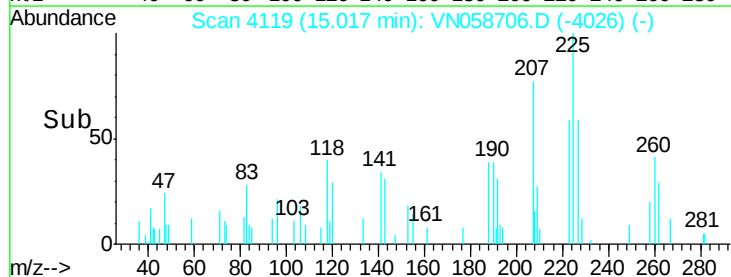
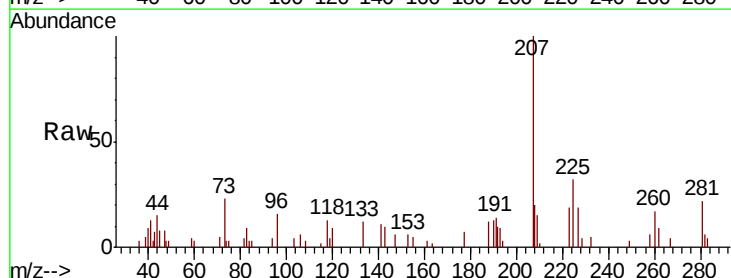
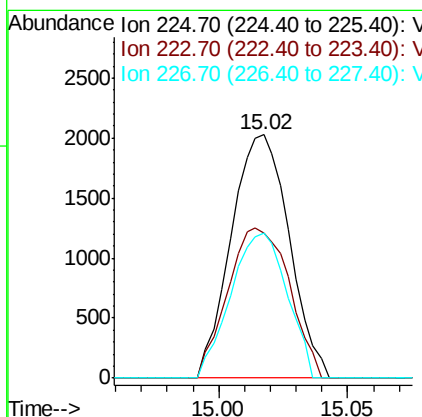
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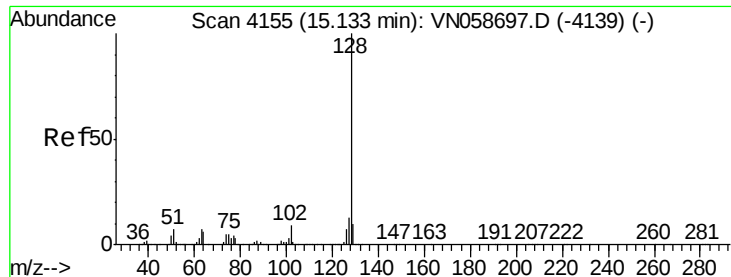
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#94
 Hexachlorobutadiene
 Concen: 1.164 ug/l
 RT: 15.02 min Scan# 4119
 Delta R.T. 0.00 min
 Lab File: VN058706.D
 Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
225	100		
223	65.4	32.3	96.8
227	57.6	32.4	97.0





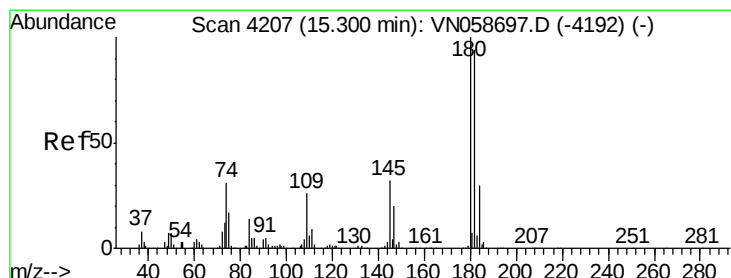
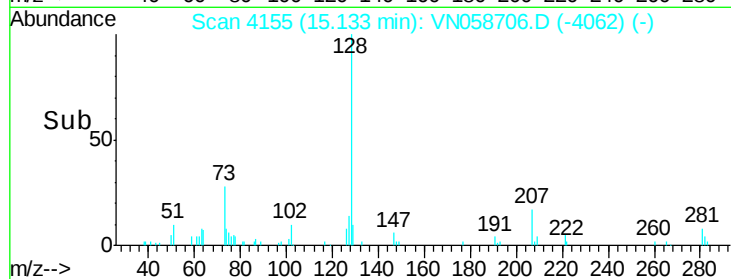
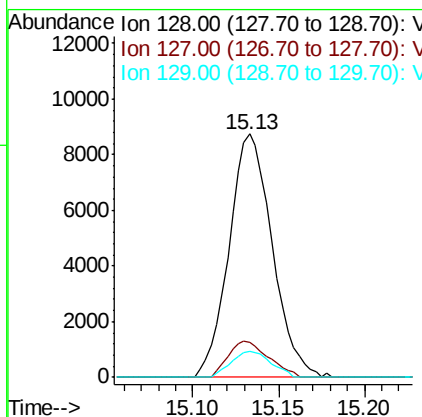
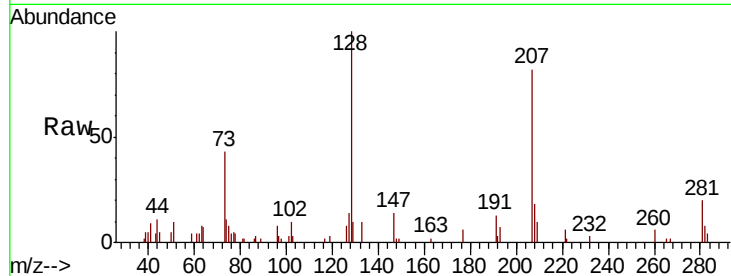
#95
Naphthalene
Concen: 1.027 ug/l
RT: 15.13 min Scan# 4155
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Instrument :
MSVOA_N
ClientSampleId :
MDL-MDL-WATER-03-QT4-2019

Tot Ion	Ratio	Lower	Upper
128	100		
127	13.9	10.2	15.4
129	9.9	8.5	12.7

Manual Integrations
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#96
1,2,3-Trichlorobenzene
Concen: 1.070 ug/l
RT: 15.30 min Scan# 4207
Delta R.T. 0.00 min
Lab File: VN058706.D
Acq: 11 Oct 2019 16:20

Tgt Ion	Ratio	Lower	Upper
180	100		
182	86.5	47.3	142.0
145	34.1	16.2	48.6

