

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN101519\
 Data File : VN058776.D
 Acq On : 15 Oct 2019 12:58
 Operator : JC/SP
 Sample : K5111-09 0.5PPB MDL
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 8 Sample Multiplier: 1

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

Manual Integrations
 APPROVED

MMDadoda
 10/18/2019 12:42:36 AM

Quant Time: Oct 16 04:52:19 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	408444	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.57	114	671527	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	602630	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	247379	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	8.01	65	331598	57.99	ug/l	0.00
Spiked Amount			Recovery	=	115.98%	
35) Dibromofluoromethane	7.57	113	236342	56.98	ug/l	0.00
Spiked Amount			Recovery	=	113.96%	
50) Toluene-d8	10.08	98	876372	52.84	ug/l	0.00
Spiked Amount			Recovery	=	105.68%	
62) 4-Bromofluorobenzene	12.40	95	292525	46.59	ug/l	0.00
Spiked Amount			Recovery	=	93.18%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.83	85	2602	0.512	ug/l	91
3) Chloromethane	2.04	50	3979	0.658	ug/l	93
4) Vinyl Chloride	2.17	62	3363	0.558	ug/l	97
5) Bromomethane	2.54	94	2689	0.734	ug/l	92
6) Chloroethane	2.68	64	2469	0.664	ug/l #	74
7) Trichlorofluoromethane	3.00	101	4265	0.592	ug/l	97
8) Diethyl Ether	3.39	74	1544	0.580	ug/l	87
9) 1,1,2-Trichlorotrifluoroet	3.73	101	2223	0.541	ug/l	98
10) Methyl Iodide	3.93	142	2809	0.501	ug/l #	92
11) Tert butyl alcohol	4.76	59	2572	2.777	ug/l #	72
12) 1,1-Dichloroethene	3.72	96	2258	0.576	ug/l #	66
13) Acrolein	3.59	56	2035	2.732	ug/l #	76
14) Allyl chloride	4.30	41	4848m	0.612	ug/l	
15) Acrylonitrile	4.97	53	6432	2.754	ug/l #	64
16) Acetone	3.80	43	7779	3.286	ug/l	99
17) Carbon Disulfide	4.03	76	8141	0.649	ug/l	98
18) Methyl Acetate	4.31	43	5112	0.851	ug/l #	73
19) Methyl tert-butyl Ether	5.01	73	7486m	0.534	ug/l	
20) Methylene Chloride	4.53	84	3473	0.702	ug/l	90
21) trans-1,2-Dichloroethene	5.01	96	2565	0.585	ug/l	85
22) Diisopropyl ether	5.92	45	8391m	0.545	ug/l	
23) Vinyl Acetate	5.88	43	30841	2.483	ug/l	97
24) 1,1-Dichloroethane	5.82	63	5092m	0.581	ug/l	
25) 2-Butanone	6.82	43	10770	3.148	ug/l	98
26) 2,2-Dichloropropane	6.80	77	5103	0.638	ug/l #	71
27) cis-1,2-Dichloroethene	6.81	96	3086	0.603	ug/l	80
28) Bromochloromethane	7.18	49	1766m	0.579	ug/l	
29) Tetrahydrofuran	7.19	42	5734	2.593	ug/l #	72
30) Chloroform	7.36	83	5720	0.649	ug/l	100
31) Cyclohexane	7.64	56	13338	1.590	ug/l #	28
32) 1,1,1-Trichloroethane	7.55	97	4106	0.547	ug/l #	49
36) 1,1-Dichloropropene	7.79	75	3614	0.532	ug/l	94
37) Ethyl Acetate	6.91	43	4655	0.678	ug/l #	75
38) Carbon Tetrachloride	7.75	117	4035	0.610	ug/l	88

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	9.07	83	4165	0.529	ug/l	85
40) Benzene	8.02	78	10917	0.560	ug/l #	87
41) Methacrylonitrile	7.16	41	1570m	0.488	ug/l	
42) 1,2-Dichloroethane	8.11	62	5132	0.685	ug/l	83
43) Isopropyl Acetate	8.15	43	6244	0.534	ug/l #	87
44) Trichloroethene	8.82	130	2554	0.527	ug/l	96
45) 1,2-Dichloropropane	9.10	63	2665m	0.511	ug/l	
46) Dibromomethane	9.20	93	1850	0.559	ug/l	95
47) Bromodichloromethane	9.39	83	3599	0.534	ug/l	93
48) Methyl methacrylate	9.19	41	2895	0.546	ug/l	89
49) 1,4-Dioxane	9.19	88	990	12.069	ug/l #	82
51) 4-Methyl-2-Pentanone	9.98	43	16361	2.490	ug/l	98
52) Toluene	10.15	92	6478	0.543	ug/l	97
53) t-1,3-Dichloropropene	10.38	75	4895	0.633	ug/l #	66
54) cis-1,3-Dichloropropene	9.83	75	4356	0.531	ug/l	93
55) 1,1,2-Trichloroethane	10.55	97	2926	0.599	ug/l	89
56) Ethyl methacrylate	10.43	69	3125	0.438	ug/l	86
57) 1,3-Dichloropropane	10.71	76	4306	0.518	ug/l #	82
58) 2-Chloroethyl Vinyl ether	9.69	63	8381	2.439	ug/l	97
59) 2-Hexanone	10.75	43	12353	2.433	ug/l	96
60) Dibromochloromethane	10.90	129	2383	0.473	ug/l	93
61) 1,2-Dibromoethane	11.01	107	2615	0.535	ug/l	95
64) Tetrachloroethene	10.63	164	2477	0.587	ug/l	93
65) Chlorobenzene	11.43	112	6612	0.540	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.50	131	2451	0.542	ug/l #	51
67) Ethyl Benzene	11.51	91	11046	0.506	ug/l	92
68) m/p-Xylenes	11.62	106	8333	1.018	ug/l	92
69) o-Xylene	11.95	106	3969	0.501	ug/l	95
70) Styrene	11.96	104	5779	0.445	ug/l	99
71) Bromoform	12.13	173	1695	0.511	ug/l #	90
73) Isopropylbenzene	12.25	105	9673	0.540	ug/l	97
74) N-amyl acetate	12.07	43	3914	0.486	ug/l	95
75) 1,1,2,2-Tetrachloroethane	12.50	83	3571	0.605	ug/l #	91
76) 1,2,3-Trichloropropane	12.56	75	4153m	0.765	ug/l	
77) Bromobenzene	12.53	156	2865	0.657	ug/l	94
78) n-propylbenzene	12.60	91	12186	0.584	ug/l	97
79) 2-Chlorotoluene	12.68	91	7739	0.597	ug/l	96
80) 1,3,5-Trimethylbenzene	12.74	105	8535	0.558	ug/l	97
81) trans-1,4-Dichloro-2-buten	12.30	75	1194m	0.589	ug/l	
82) 4-Chlorotoluene	12.78	91	7430	0.559	ug/l	97
83) tert-Butylbenzene	13.00	119	7073	0.540	ug/l	91
84) 1,2,4-Trimethylbenzene	13.04	105	8000	0.527	ug/l	98
85) sec-Butylbenzene	13.18	105	8804	0.510	ug/l	96
86) p-Isopropyltoluene	13.29	119	7413	0.472	ug/l	97
87) 1,3-Dichlorobenzene	13.29	146	4548	0.566	ug/l	97
88) 1,4-Dichlorobenzene	13.37	146	4919m	0.602	ug/l	
89) n-Butylbenzene	13.62	91	7291	0.502	ug/l	96
90) Hexachloroethane	13.88	117	1641	0.584	ug/l	89
91) 1,2-Dichlorobenzene	13.66	146	4731	0.604	ug/l	98
92) 1,2-Dibromo-3-Chloropropan	14.28	75	951	0.690	ug/l #	64

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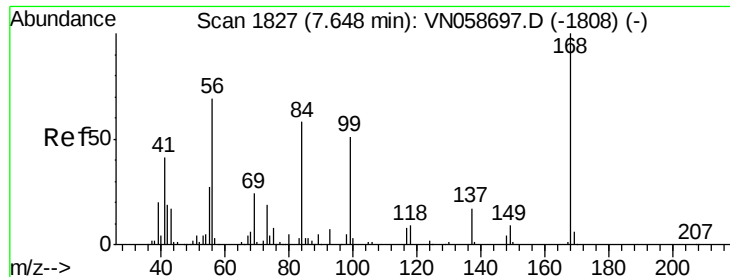
Manual Integrations
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MMDadoda
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	14.92	180	2538	0.531	ug/l	89
94) Hexachlorobutadiene	15.02	225	1540	0.612	ug/l	95
95) Naphthalene	15.13	128	7052	0.514	ug/l	99
96) 1,2,3-Trichlorobenzene	15.30	180	2496	0.535	ug/l	91

(#) = 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: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion:168 Resp: 408444

Ion Ratio Lower Upper

168 100

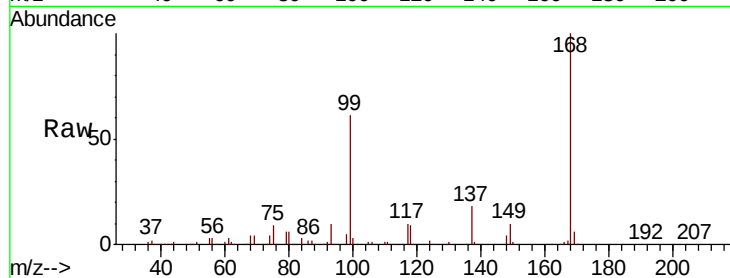
99 60.5 47.5 71.3

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10/18/2019 12:42:36 AM



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNC

200000

150000

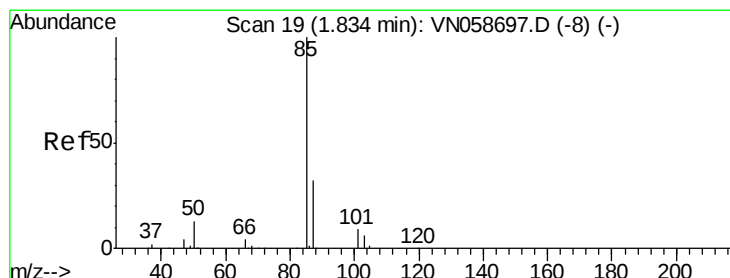
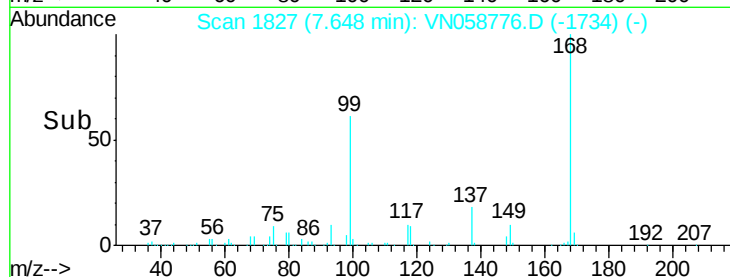
100000

50000

0

7.60 7.65 7.70 7.80

Time-->



#2

Dichlorodifluoromethane

Concen: 0.512 ug/l

RT: 1.83 min Scan# 19

Delta R.T. -0.00 min

Lab File: VN058776.D

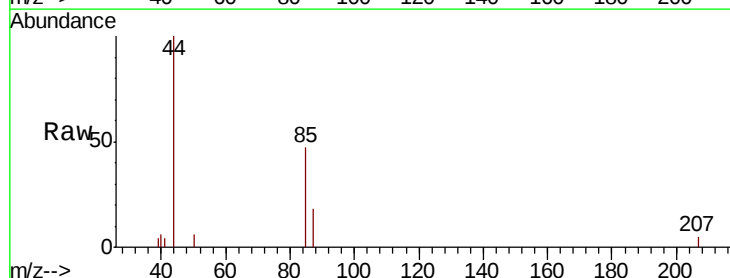
Acq: 15 Oct 2019 12:58

Tgt Ion: 85 Resp: 2602

Ion Ratio Lower Upper

85 100

87 37.6 16.2 48.6



Abundance Ion 84.90 (84.60 to 85.60): VNC

Ion 86.90 (86.60 to 87.60): VNC

2000

1500

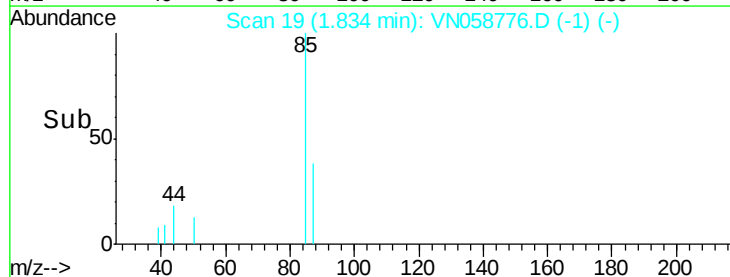
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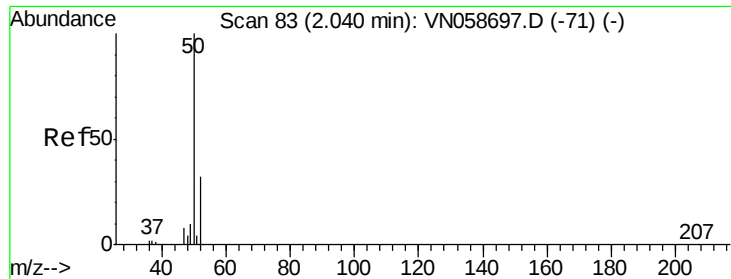
500

0

1.80 1.83 1.85

Time-->





#3

Chloromethane

Concen: 0.658 ug/l

RT: 2.04 min Scan# 83

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion: 50 Resp: 3979

Ion Ratio Lower Upper

50 100

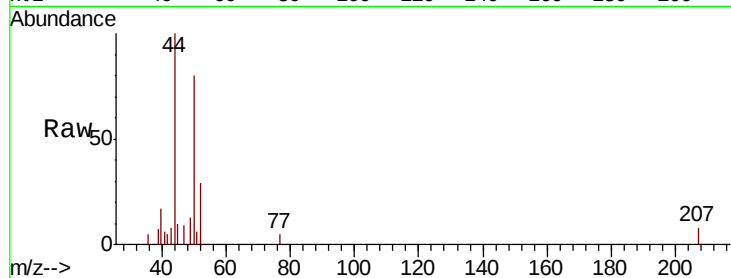
52 35.9 25.8 38.6

Manual Integrations

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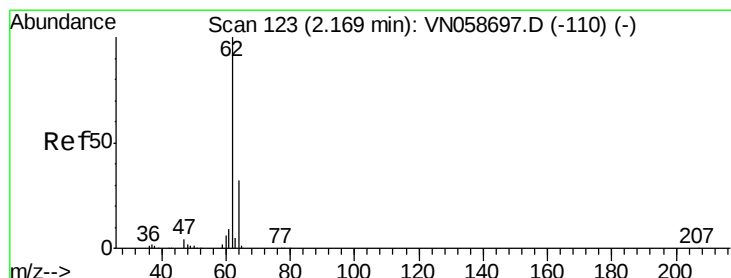
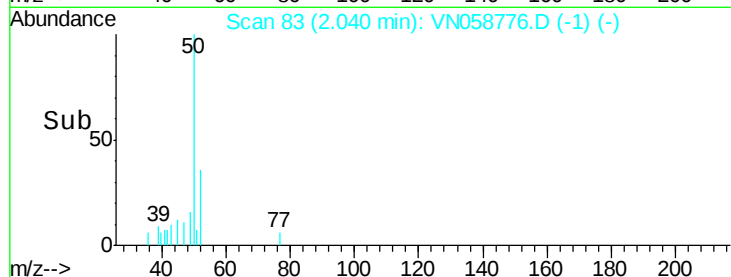
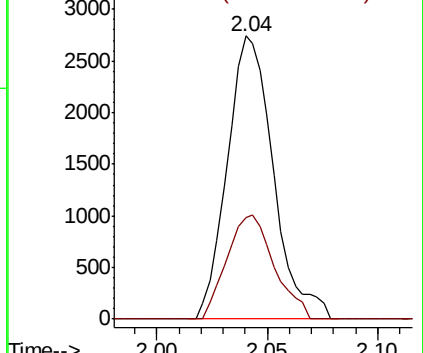
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Abundance Ion 49.90 (49.60 to 50.60): VNO

Ion 51.90 (51.60 to 52.60): VNO



#4

Vinyl Chloride

Concen: 0.558 ug/l

RT: 2.17 min Scan# 123

Delta R.T. -0.00 min

Lab File: VN058776.D

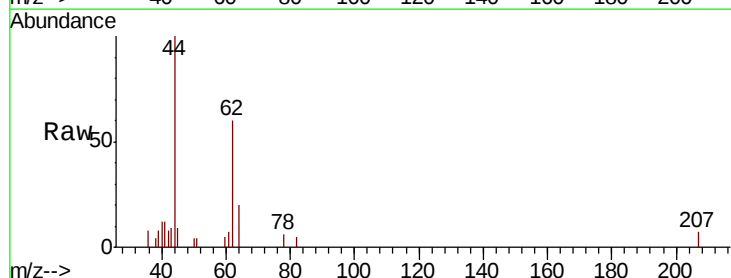
Acq: 15 Oct 2019 12:58

Tgt Ion: 62 Resp: 3363

Ion Ratio Lower Upper

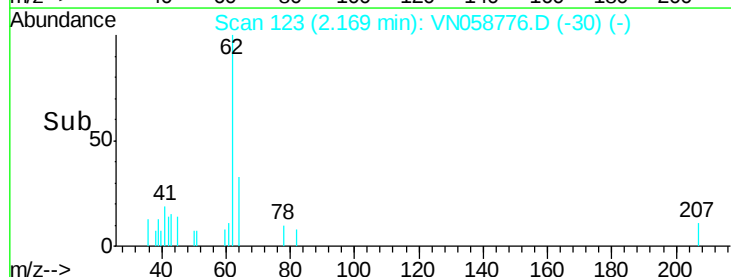
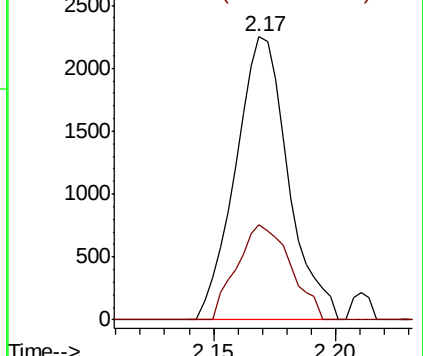
62 100

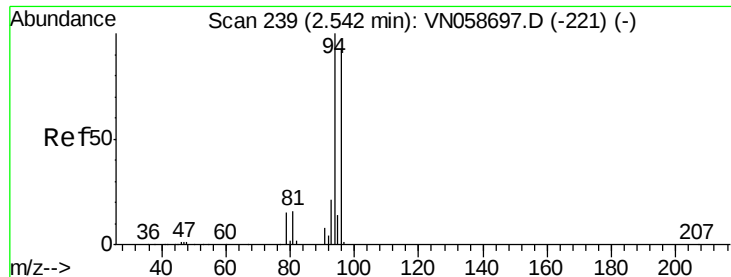
64 33.4 25.3 37.9



Abundance Ion 61.90 (61.60 to 62.60): VNO

Ion 63.90 (63.60 to 64.60): VNO





#5

Bromomethane

Concen: 0.734 ug/l

RT: 2.54 min Scan# 240

Delta R.T. 0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

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MDL-MDL-WATER-03-QT4-2019DL

Tot Ion: 94 Resp: 2689

Ion Ratio Lower Upper

94 100

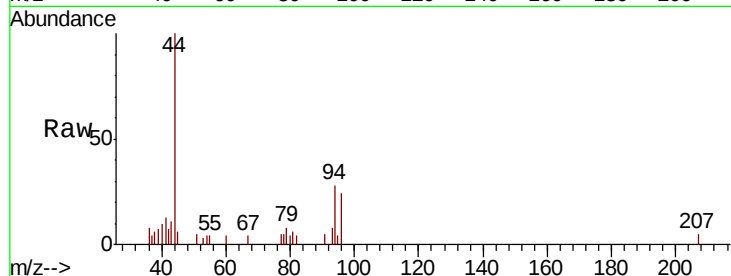
96 85.6 74.5 111.7

Manual Integrations

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Abundance Ion 93.90 (93.60 to 94.60): VNC

Ion 95.90 (95.60 to 96.60): VNC

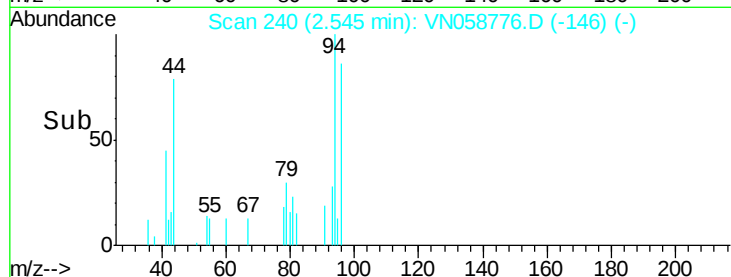
1500

1000

500

0

Time-->



Abundance Ion 93.90 (93.60 to 94.60): VNC

Ion 95.90 (95.60 to 96.60): VNC

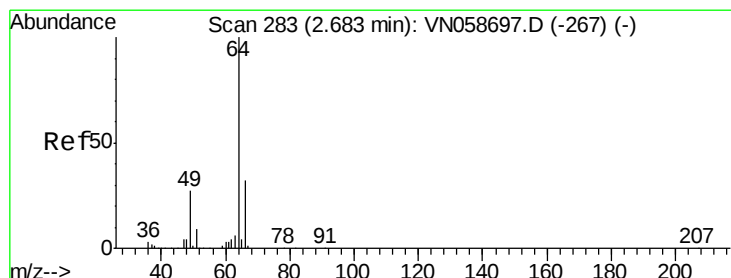
1500

1000

500

0

Time-->



#6

Chloroethane

Concen: 0.664 ug/l

RT: 2.68 min Scan# 283

Delta R.T. -0.00 min

Lab File: VN058776.D

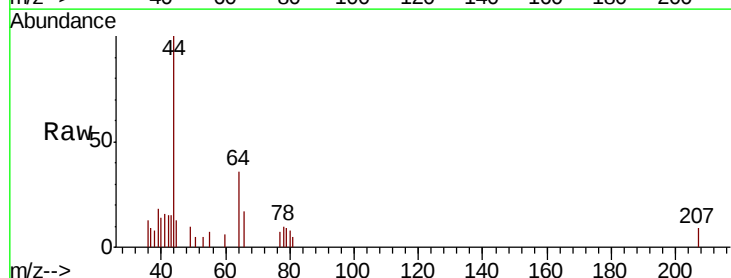
Acq: 15 Oct 2019 12:58

Tgt Ion: 64 Resp: 2469

Ion Ratio Lower Upper

64 100

66 46.2 25.4 38.2#



Abundance Ion 63.90 (63.60 to 64.60): VNC

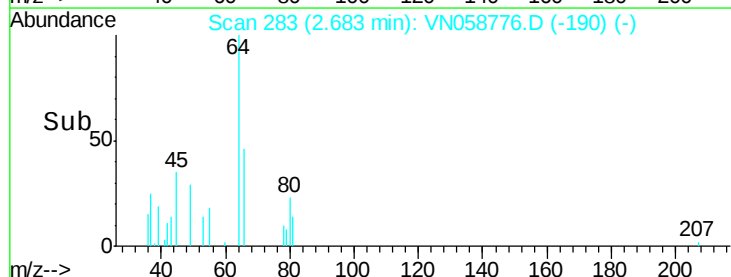
Ion 65.90 (65.60 to 66.60): VNC

1000

500

0

Time-->



Abundance Ion 63.90 (63.60 to 64.60): VNC

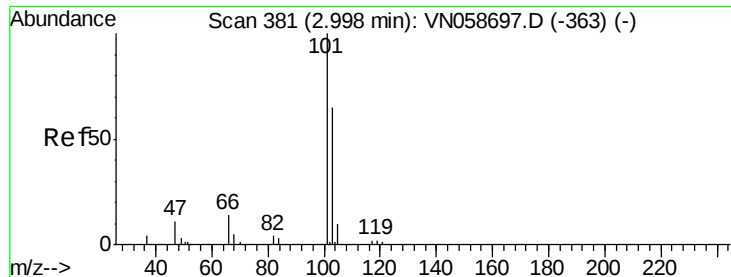
Ion 65.90 (65.60 to 66.60): VNC

1000

500

0

Time-->



#7

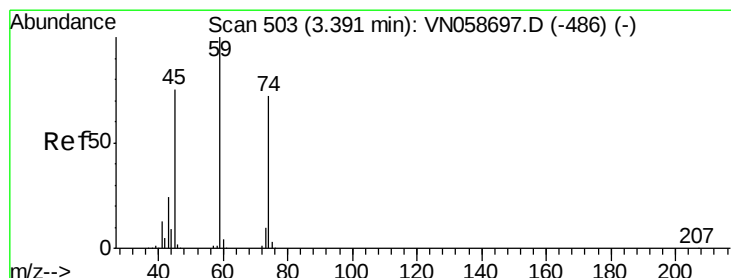
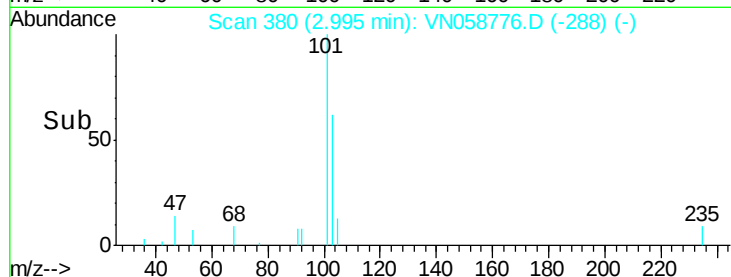
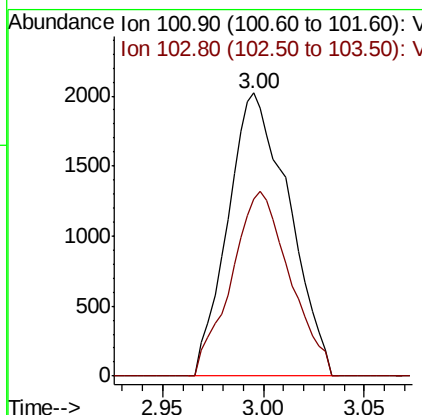
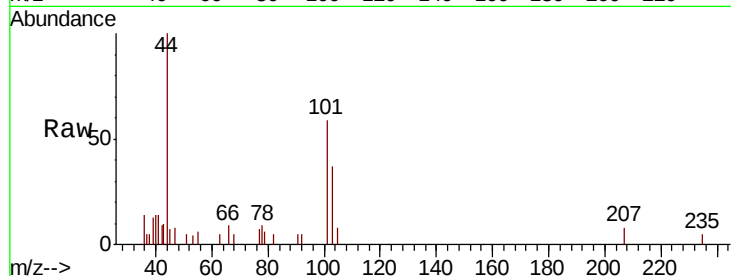
Trichlorofluoromethane
 Concen: 0.592 ug/l
 RT: 3.00 min Scan# 380
 Delta R.T. -0.00 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

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Tot Ion	Ratio	Lower	Upper
101	100		
103	62.4	51.8	77.6

Manual Integrations
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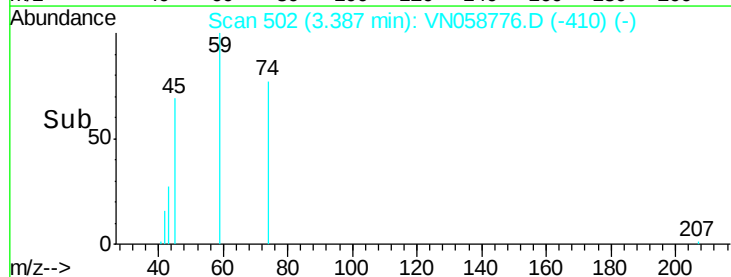
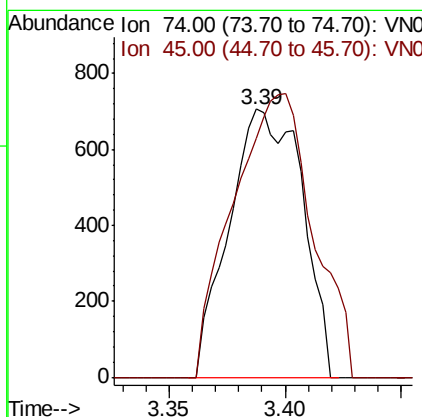
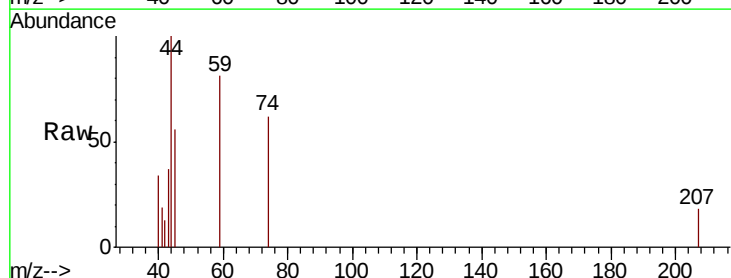
MMDadoda
 10/18/2019 12:42:36 AM

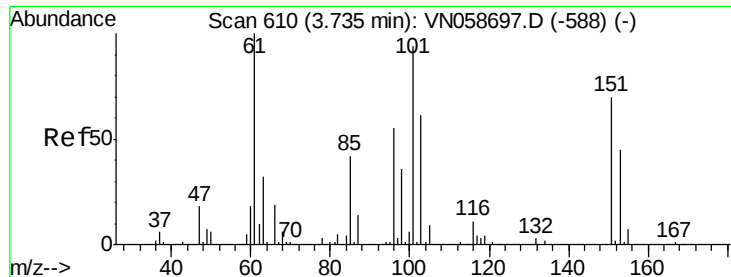


#8

Diethyl Ether
 Concen: 0.580 ug/l
 RT: 3.39 min Scan# 502
 Delta R.T. -0.00 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Lower	Upper
74	100		
45	116.1	51.3	154.0





#9

1,1,2-Trichlorotrifluoroethane

Concen: 0.541 ug/l

RT: 3.73 min Scan# 609

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

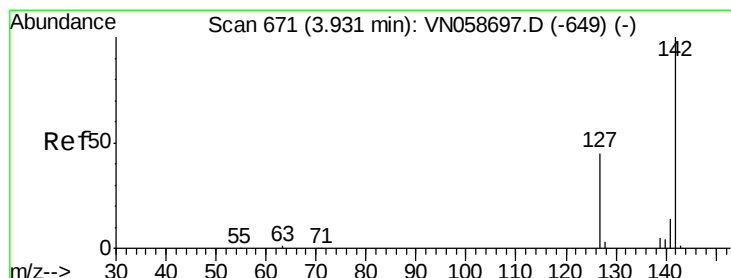
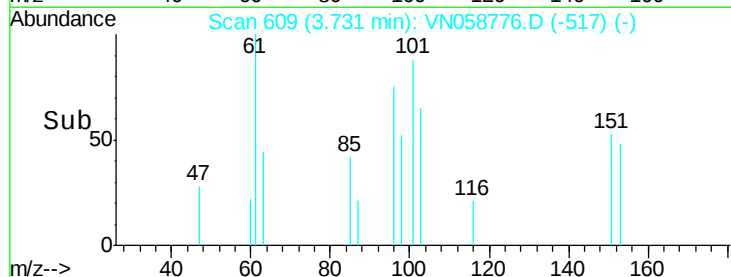
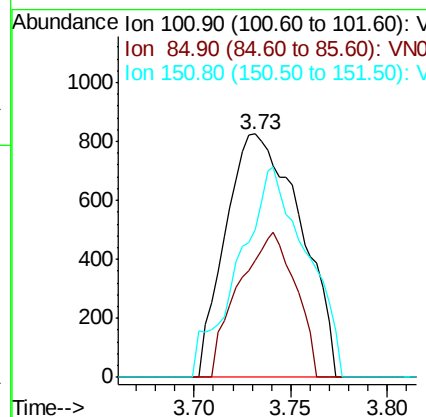
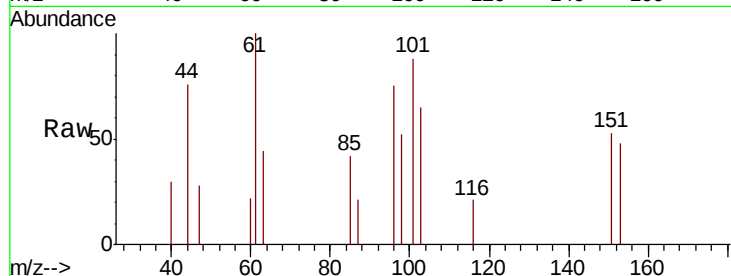
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion:	101	Resp:	2223
Ion Ratio	Lower	Upper	
101	100		
85	45.3	37.0	55.6
151	78.6	61.8	92.6

Manual Integrations
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10/18/2019 12:42:36 AM



#10

Methyl Iodide

Concen: 0.501 ug/l

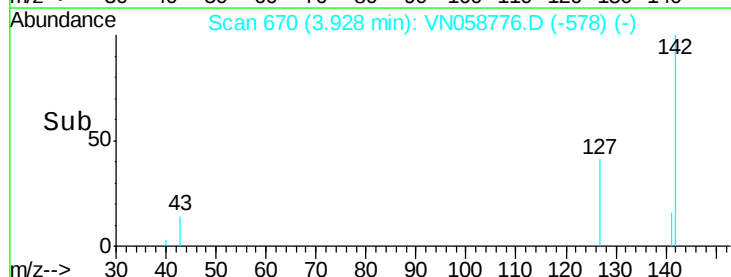
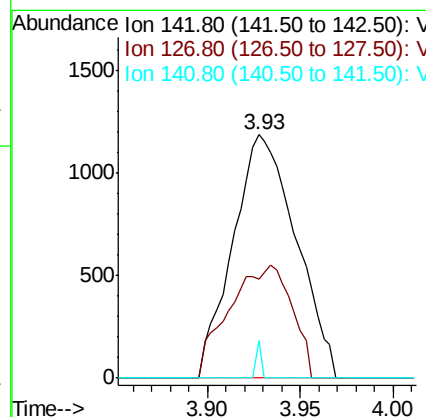
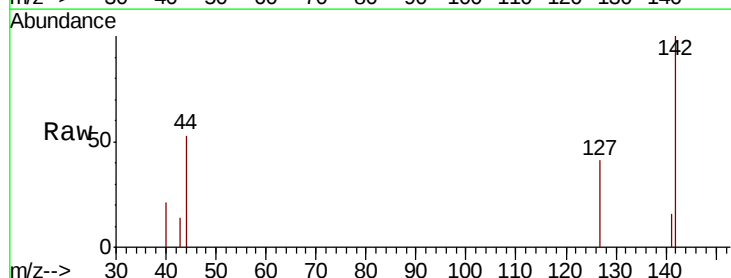
RT: 3.93 min Scan# 670

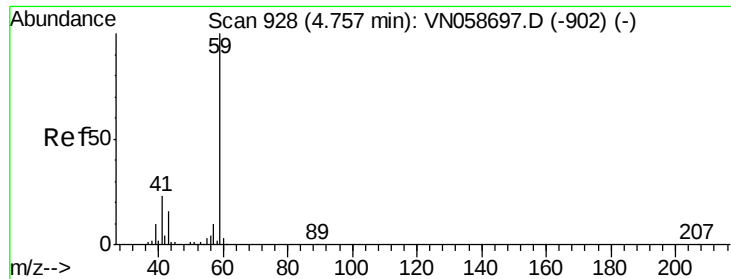
Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Tgt Ion:	142	Resp:	2809
Ion Ratio	Lower	Upper	
142	100		
127	46.2	36.4	54.6
141	1.3	11.1	16.7#





#11

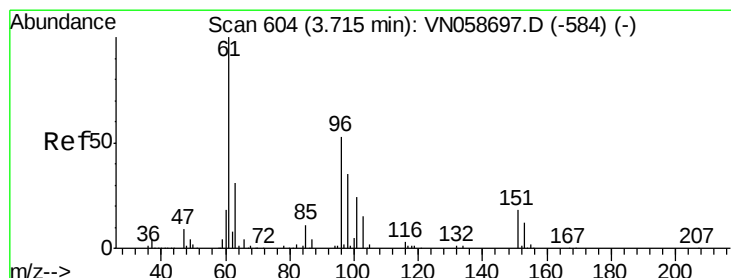
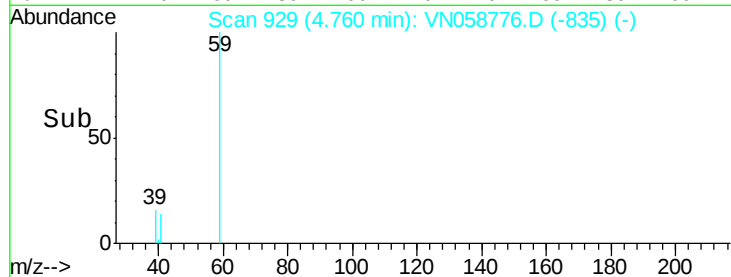
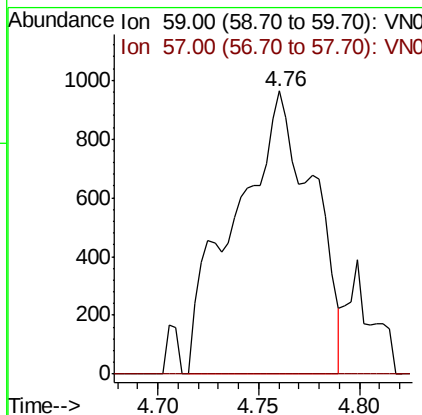
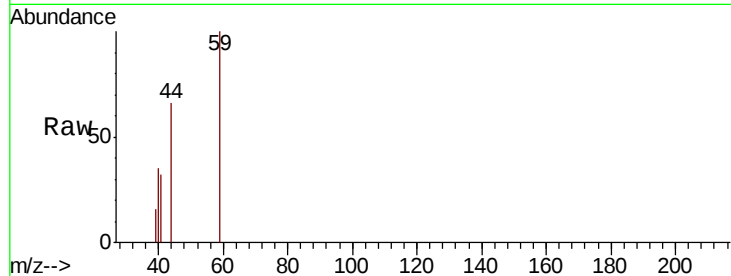
Tert butyl alcohol
Concen: 2.777 ug/l
RT: 4.76 min Scan# 929
Delta R.T. 0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion: 59 Resp: 2572
Ion Ratio Lower Upper
59 100
57 0.0 8.4 12.6#

Manual Integrations
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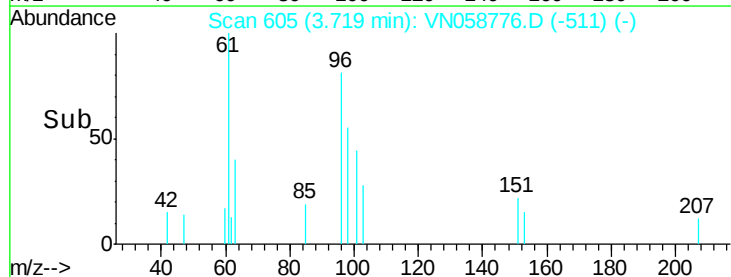
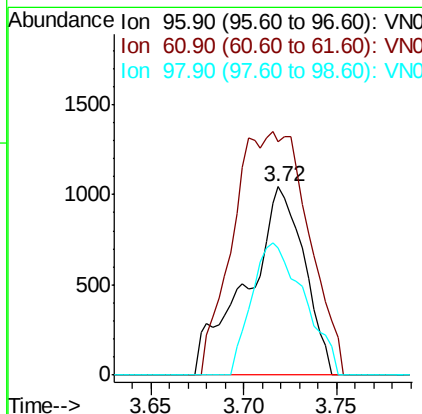
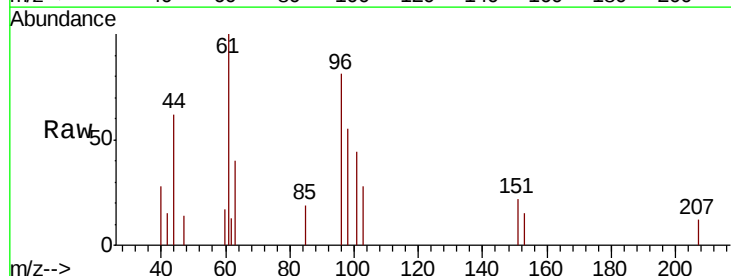
MMDadoda
10/18/2019 12:42:36 AM

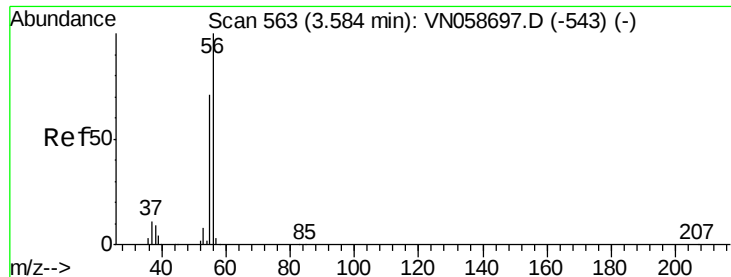


#12

1,1-Dichloroethene
Concen: 0.576 ug/l
RT: 3.72 min Scan# 605
Delta R.T. 0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion: 96 Resp: 2258
Ion Ratio Lower Upper
96 100
61 123.4 151.3 226.9#
98 67.6 52.6 78.8





#13

Acrolein

Concen: 2.732 ug/l

RT: 3.59 min Scan# 564

Delta R.T. 0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion: 56 Resp: 2035

Ion Ratio Lower Upper

56 100

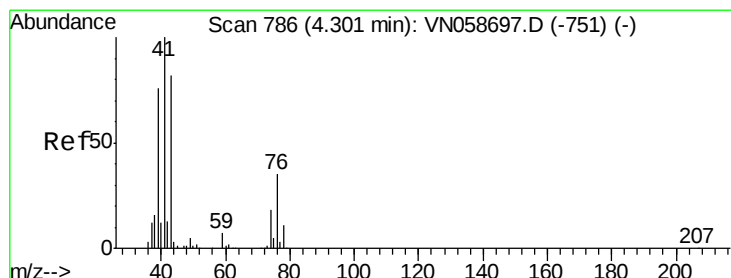
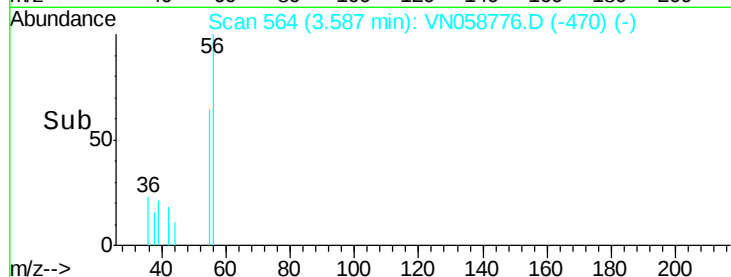
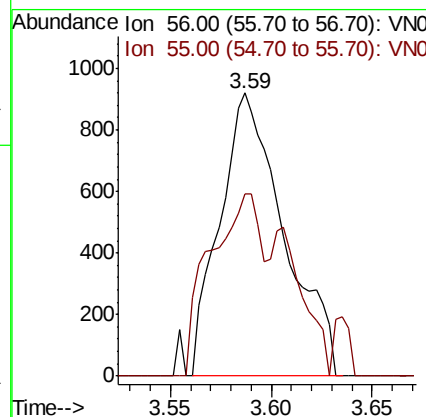
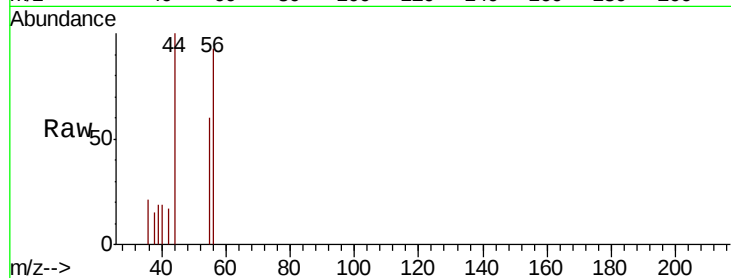
55 50.8 56.7 85.1#

Manual Integrations

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MMDadoda

10/18/2019 12:42:36 AM



#14

Allyl chloride

Concen: 0.612 ug/l m

RT: 4.30 min Scan# 785

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

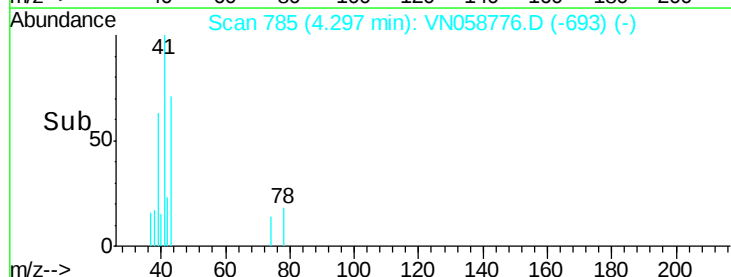
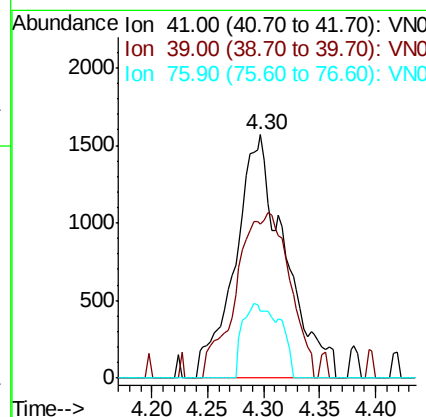
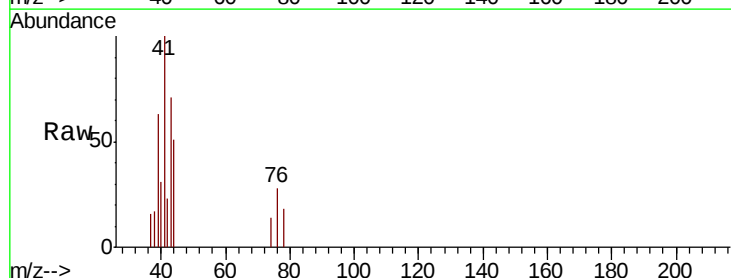
Tgt Ion: 41 Resp: 4848

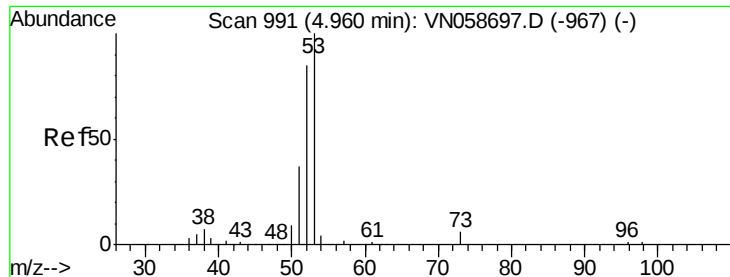
Ion Ratio Lower Upper

41 100

39 73.0 57.2 85.8

76 22.6 25.0 37.6#





#15

Acrylonitrile

Concen: 2.754 ug/l

RT: 4.97 min Scan# 993

Delta R.T. 0.01 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

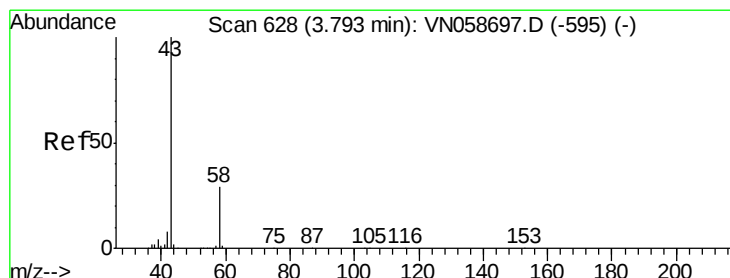
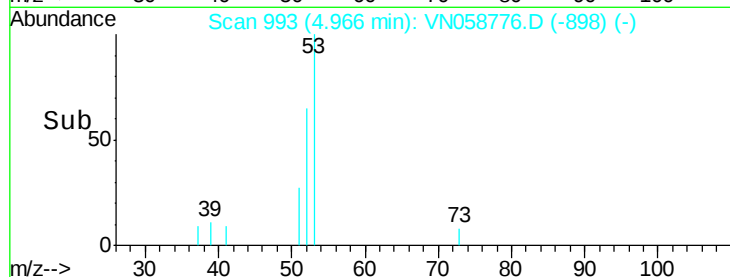
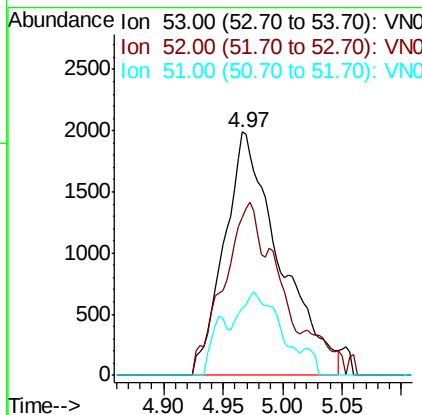
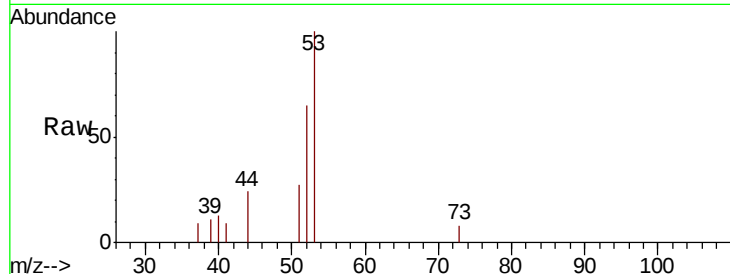
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion:	53	Resp:	6432
Ion Ratio	Lower	Upper	
53	100		
52	48.1	66.2	99.2#
51	18.6	29.4	44.2#

Manual Integrations
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#16

Acetone

Concen: 3.286 ug/l

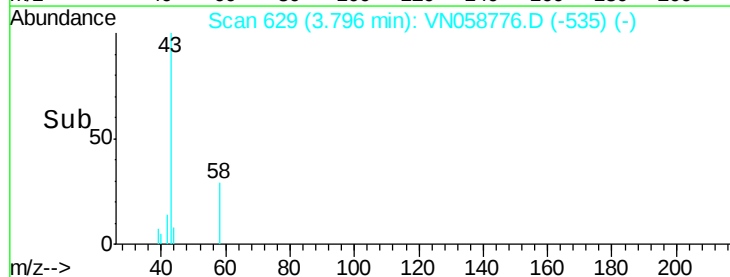
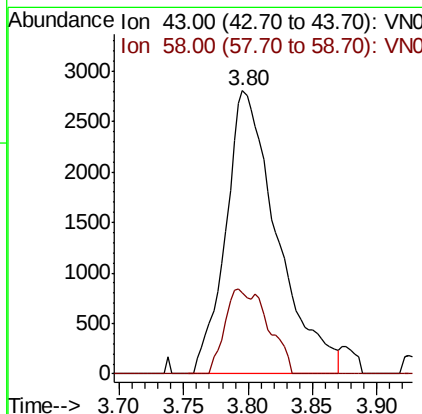
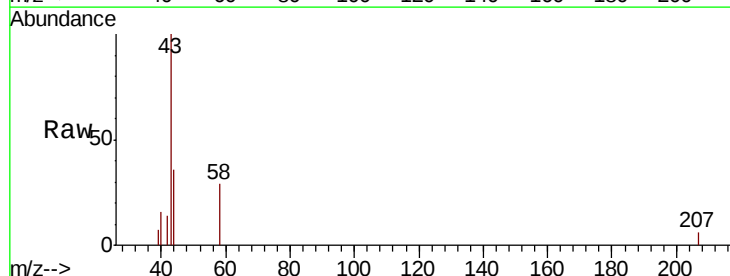
RT: 3.80 min Scan# 629

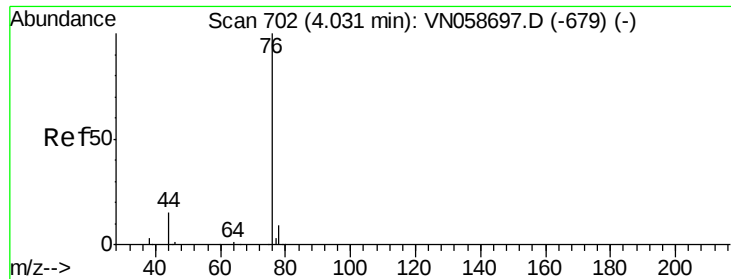
Delta R.T. 0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Tgt Ion:	43	Resp:	7779
Ion Ratio	Lower	Upper	
43	100		
58	28.7	23.3	34.9





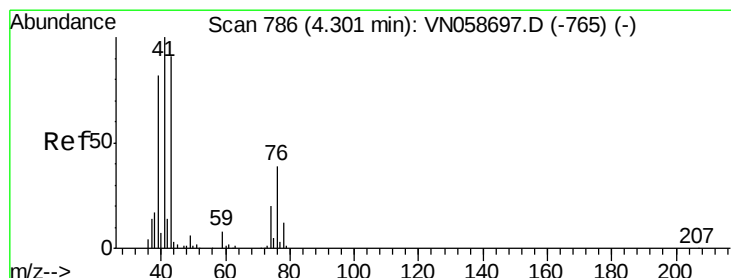
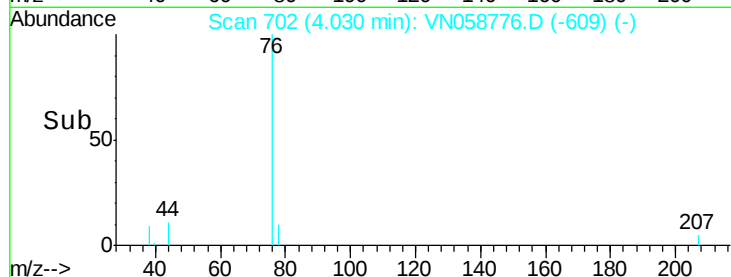
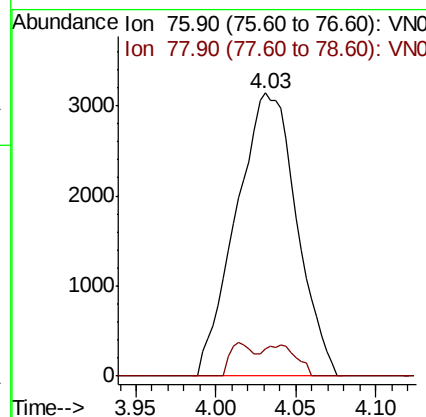
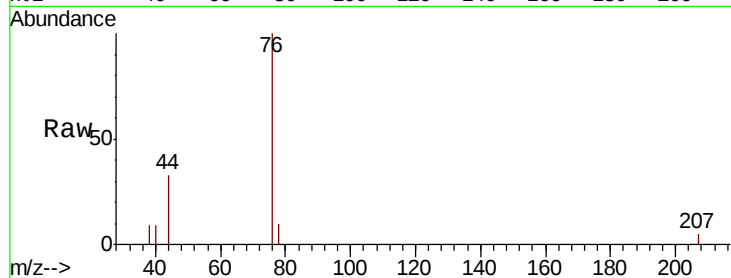
#17
Carbon Disulfide
Concen: 0.649 ug/l
RT: 4.03 min Scan# 702
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion: 76 Resp: 8141
Ion Ratio Lower Upper
76 100
78 9.7 7.1 10.7

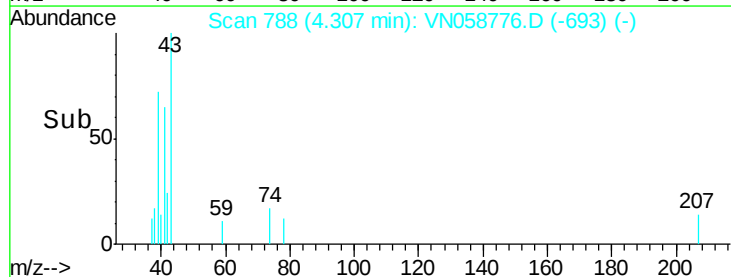
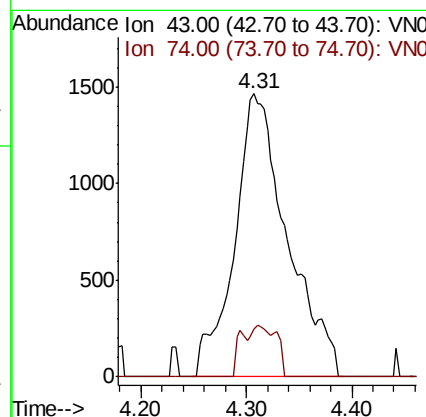
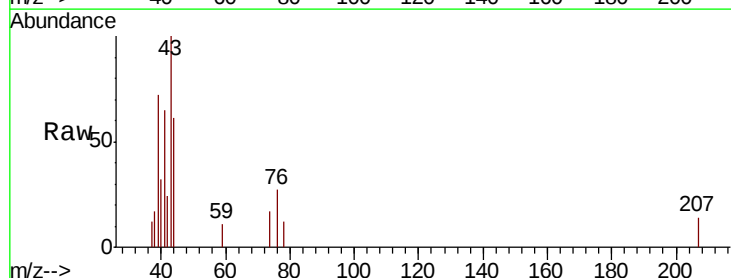
Manual Integrations
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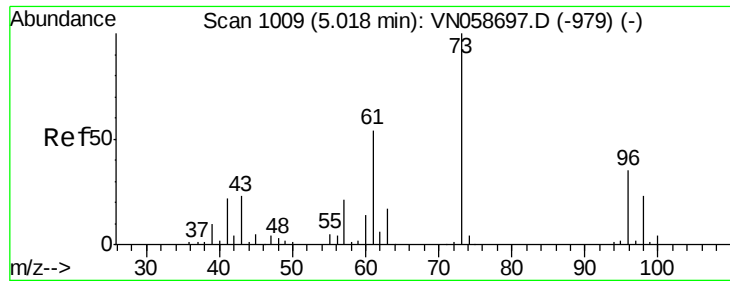
MMDadoda
10/18/2019 12:42:36 AM



#18
Methyl Acetate
Concen: 0.851 ug/l
RT: 4.31 min Scan# 788
Delta R.T. 0.01 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion: 43 Resp: 5112
Ion Ratio Lower Upper
43 100
74 8.7 17.2 25.8#





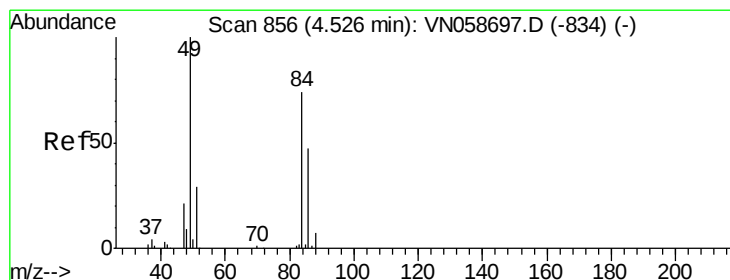
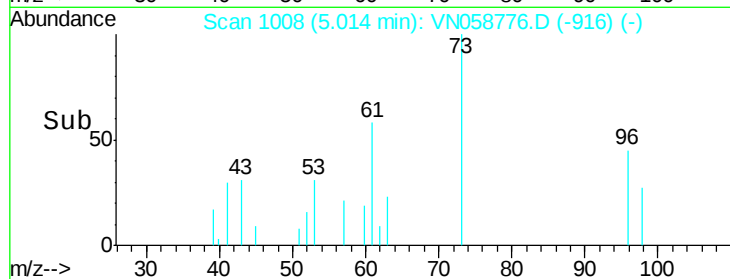
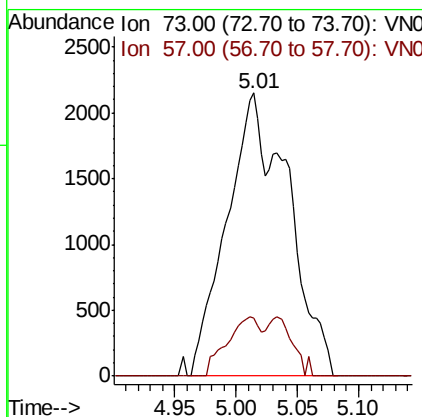
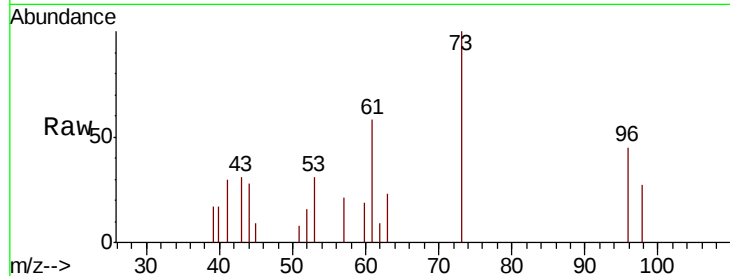
#19
Methvl tert-butvl Ether
Concen: 0.534 ug/l m
RT: 5.01 min Scan# 1008
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion: 73 Resp: 7486
Ion Ratio Lower Upper
73 100
57 20.7 17.0 25.6

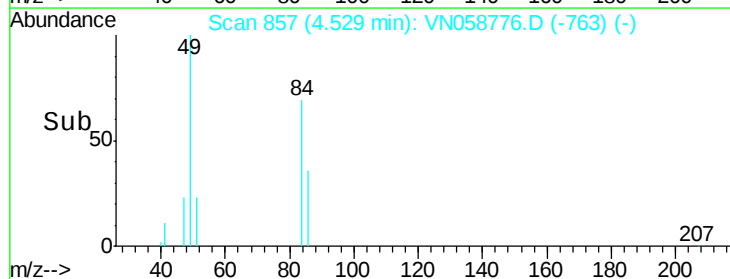
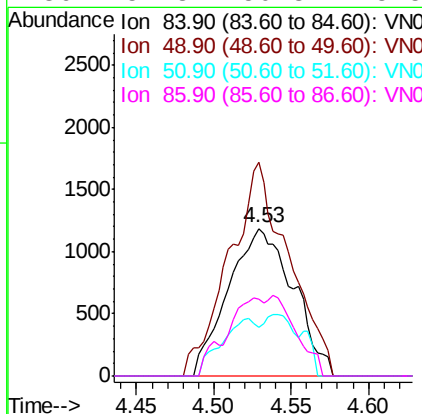
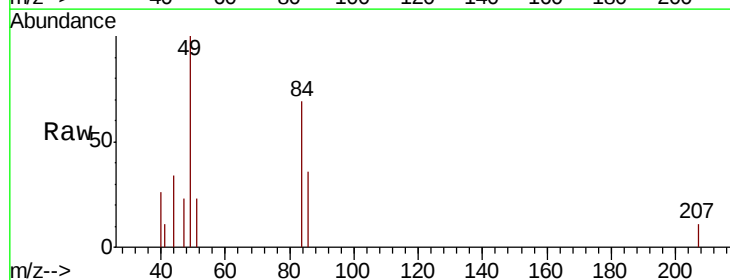
Manual Integrations
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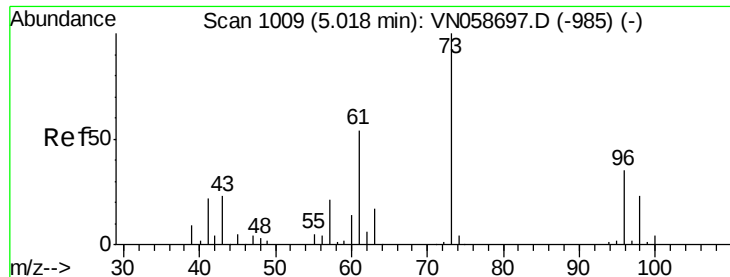
MMDadoda
10/18/2019 12:42:36 AM



#20
Methylene Chloride
Concen: 0.702 ug/l
RT: 4.53 min Scan# 857
Delta R.T. 0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion: 84 Resp: 3473
Ion Ratio Lower Upper
84 100
49 144.6 107.6 161.4
51 32.8 31.4 47.0
86 52.3 50.3 75.5





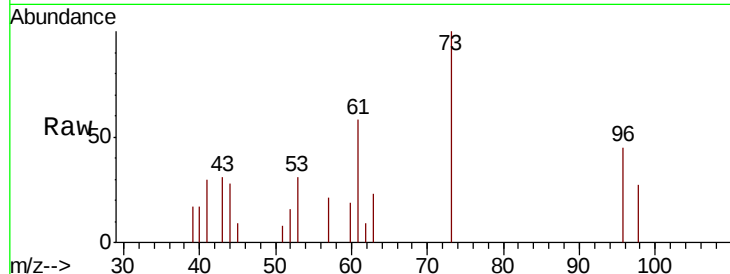
#21
trans-1,2-Dichloroethene
Concen: 0.585 ug/l
RT: 5.01 min Scan# 1008
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion	Ratio	Lower	Upper
96	100		
61	129.9	123.6	185.4
98	59.6	52.1	78.1

Manual Integrations
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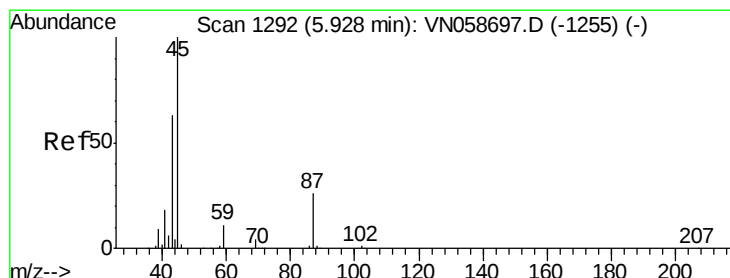
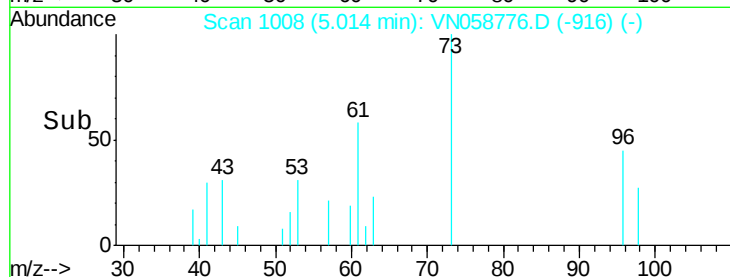
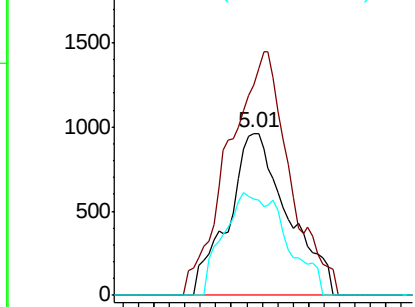


Abundance

Ion 95.90 (95.60 to 96.60): VNC

Ion 60.90 (60.60 to 61.60): VNC

Ion 97.90 (97.60 to 98.60): VNC



#22
Diisopropyl ether
Concen: 0.545 ug/l m
RT: 5.92 min Scan# 1289
Delta R.T. -0.01 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Lower	Upper
45	100		
43	142.7	50.6	75.8#
87	27.9	21.1	31.7
59	8.5	9.0	13.4#

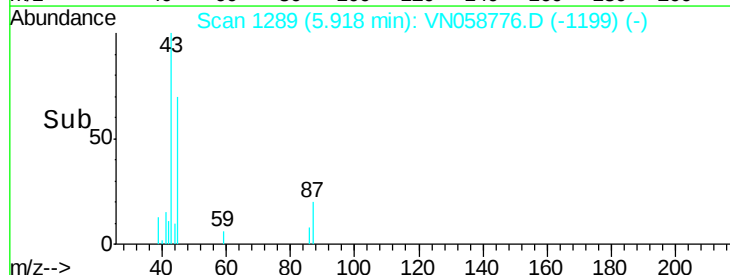
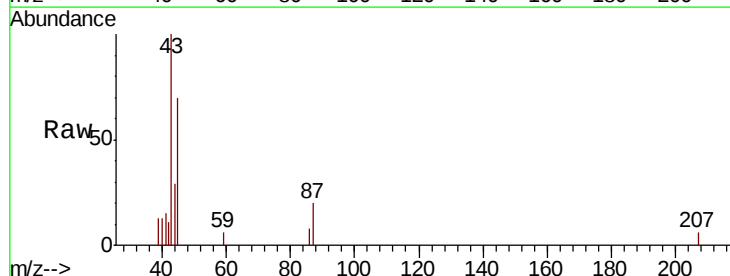
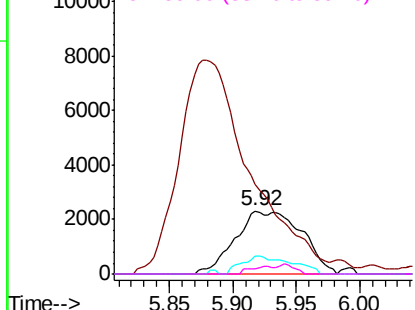
Abundance

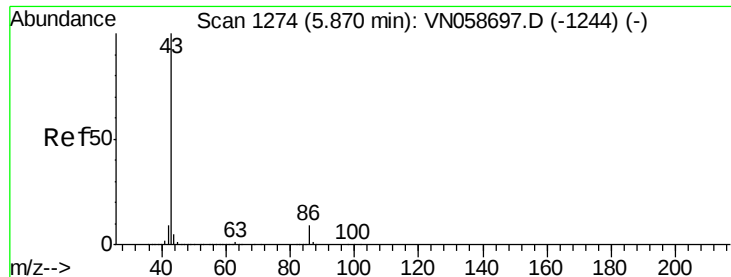
Ion 45.00 (44.70 to 45.70): VNC

Ion 43.00 (42.70 to 43.70): VNC

Ion 87.00 (86.70 to 87.70): VNC

Ion 59.00 (58.70 to 59.70): VNC





#23

Vinyl Acetate

Concen: 2.483 ug/l

RT: 5.88 min Scan# 1277

Delta R.T. 0.01 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion: 43 Resp: 30841

Ion Ratio Lower Upper

43 100

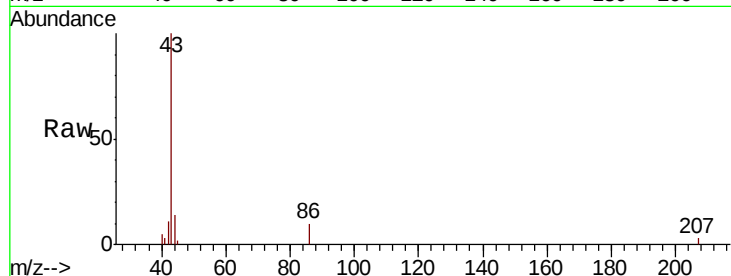
86 10.2 7.4 11.0

Manual Integrations

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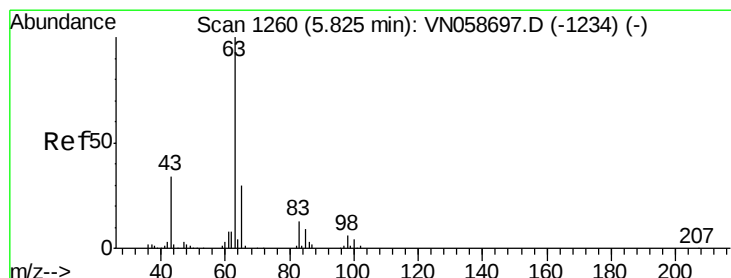
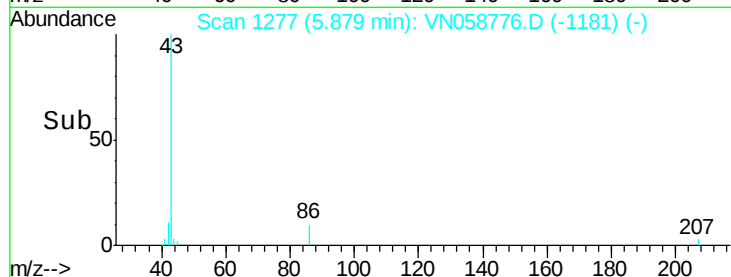
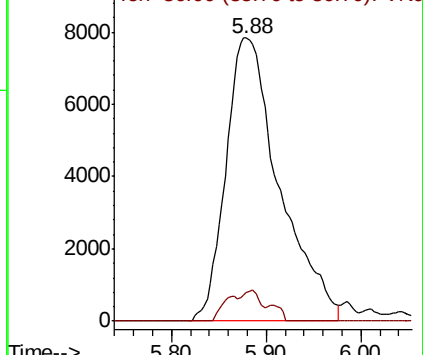
MMDadoda

10/18/2019 12:42:36 AM



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 86.00 (85.70 to 86.70): VN0



#24

1,1-Dichloroethane

Concen: 0.581 ug/l m

RT: 5.82 min Scan# 1258

Delta R.T. -0.01 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

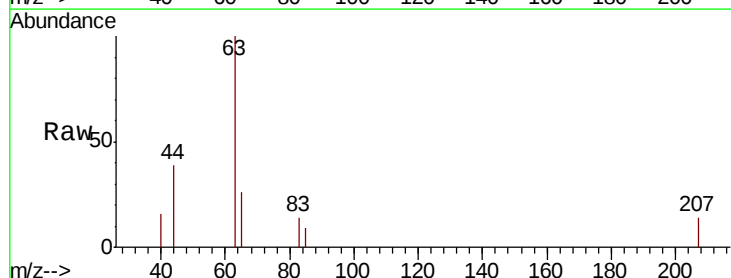
Tgt Ion: 63 Resp: 5092

Ion Ratio Lower Upper

63 100

98 0.0 2.9 8.6#

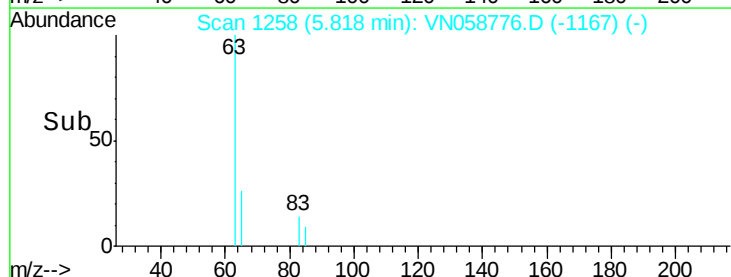
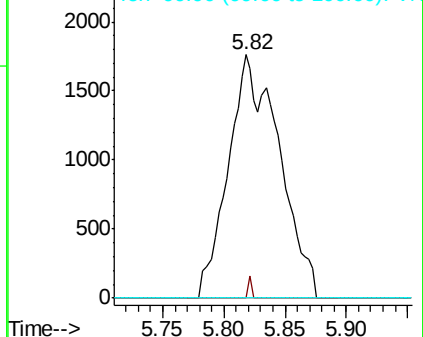
100 0.0 1.8 5.5#

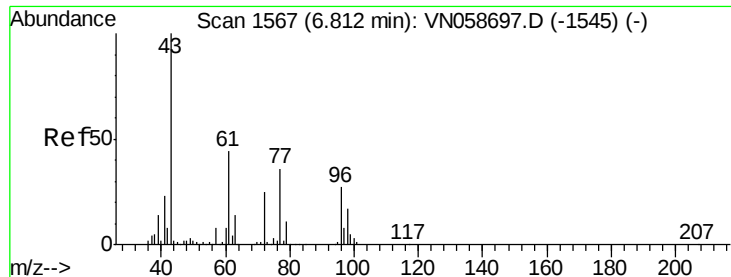


Abundance Ion 62.90 (62.60 to 63.60): VN0

Ion 97.90 (97.60 to 98.60): VN0

Ion 99.90 (99.60 to 100.60): VN0





#25

2-Butanone

Concen: 3.148 ug/l

RT: 6.82 min Scan# 1571

Delta R.T. 0.01 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion: 43 Resp: 10770

Ion Ratio Lower Upper

43 100

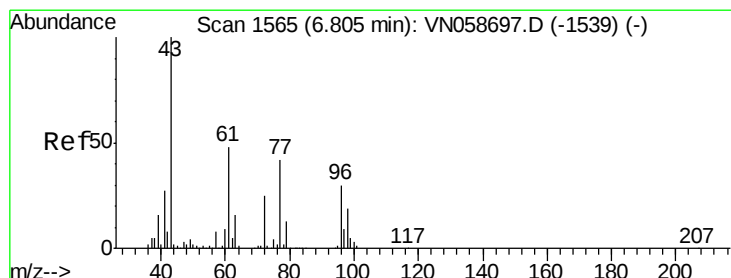
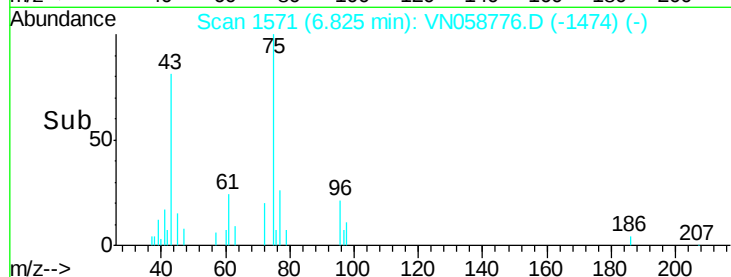
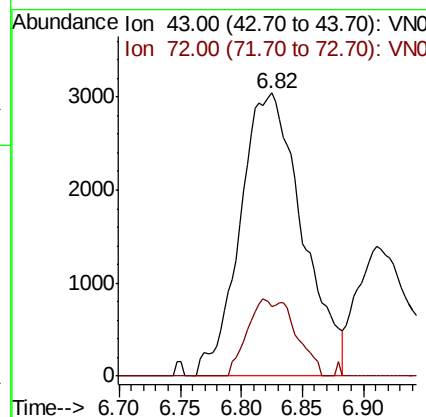
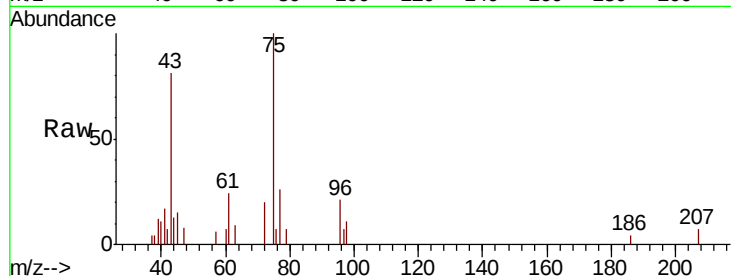
72 24.4 20.2 30.2

Manual Integrations

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MMDadoda

10/18/2019 12:42:36 AM



#26

2,2-Dichloropropane

Concen: 0.638 ug/l

RT: 6.80 min Scan# 1563

Delta R.T. -0.01 min

Lab File: VN058776.D

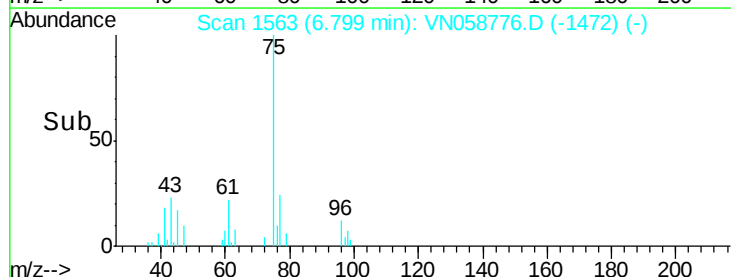
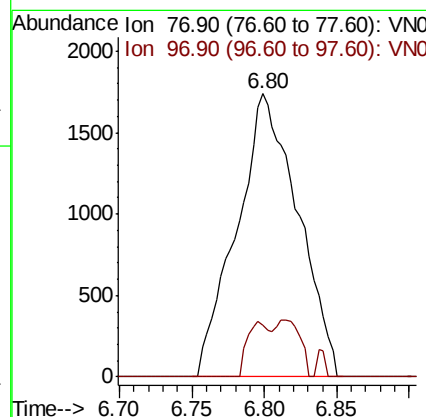
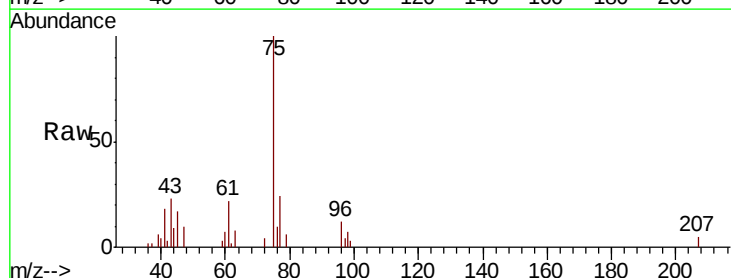
Acq: 15 Oct 2019 12:58

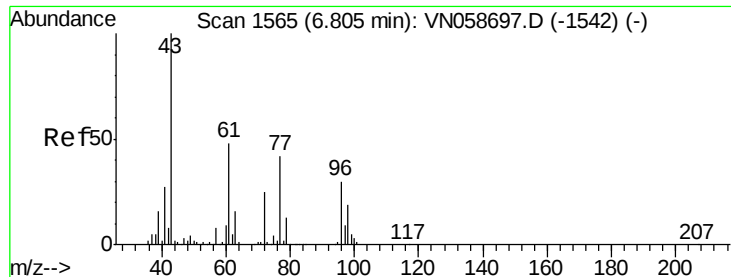
Tgt Ion: 77 Resp: 5103

Ion Ratio Lower Upper

77 100

97 7.4 10.7 31.9#





#27

cis-1,2-Dichloroethene

Concen: 0.603 ug/l

RT: 6.81 min Scan# 1566

Delta R.T. 0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

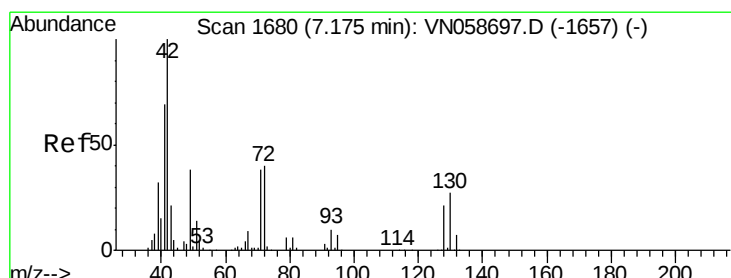
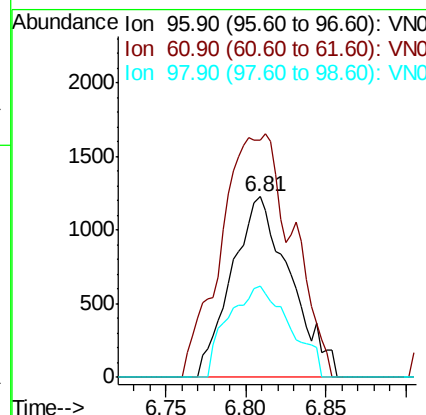
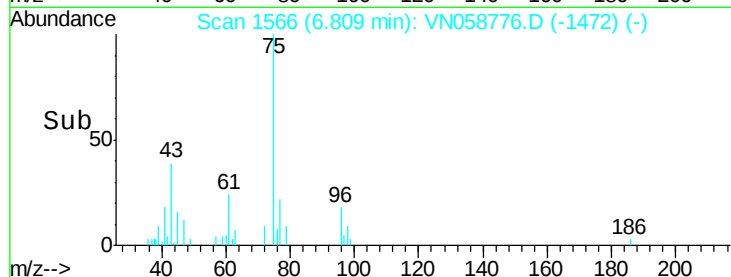
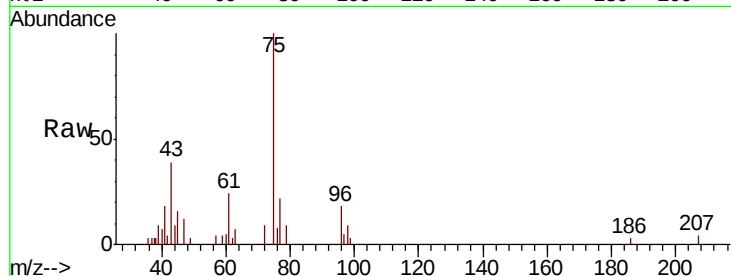
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion:	96	Resp:	3086
Ion	Ratio	Lower	Upper
96	100		
61	133.3	0.0	324.8
98	52.8	0.0	129.2

Manual Integrations
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10/18/2019 12:42:36 AM



#28

Bromochloromethane

Concen: 0.579 ug/l m

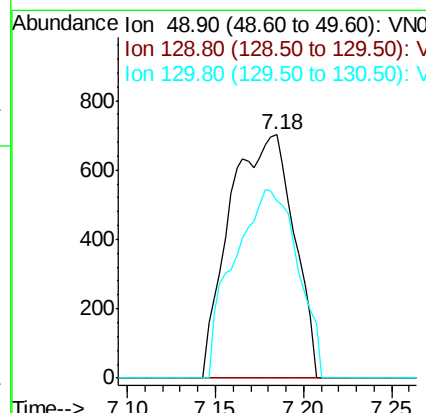
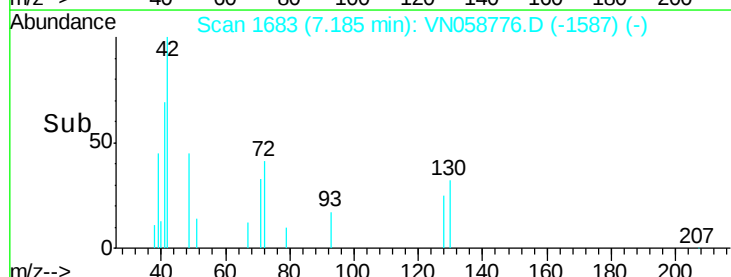
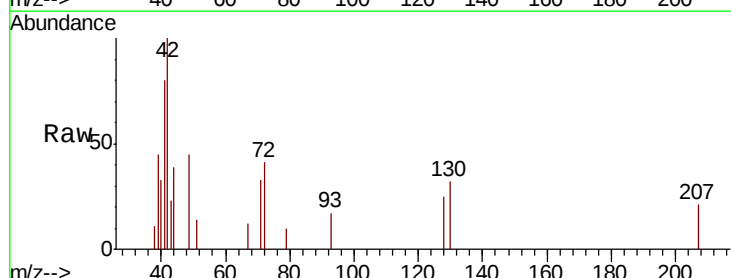
RT: 7.18 min Scan# 1683

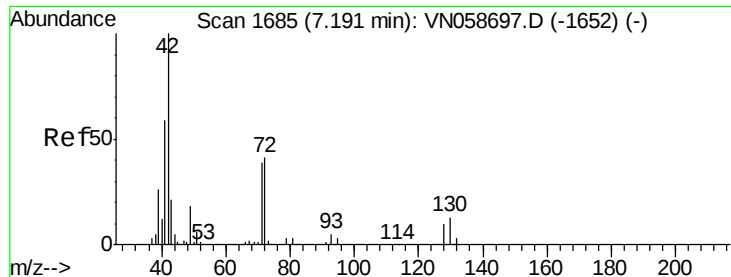
Delta R.T. 0.01 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Tgt Ion:	49	Resp:	1766
Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	3.6
130	77.2	55.0	82.4





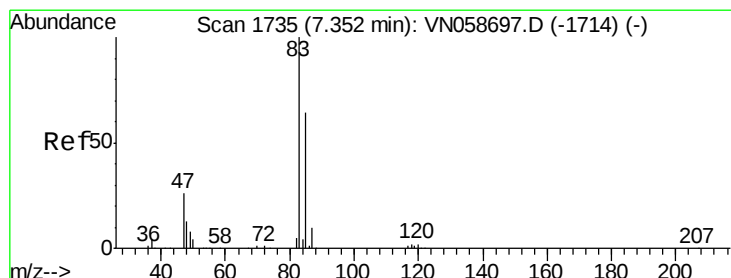
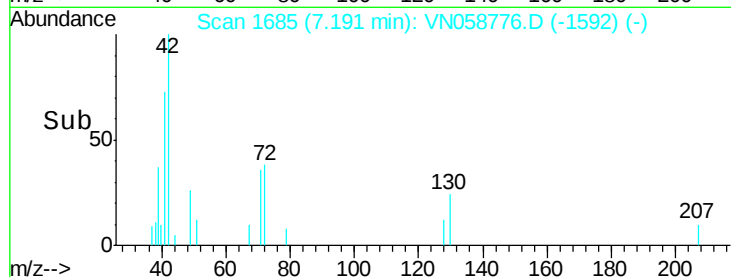
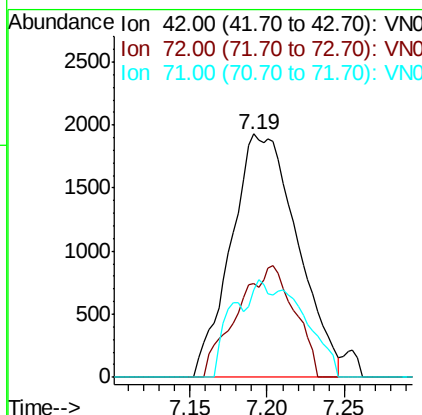
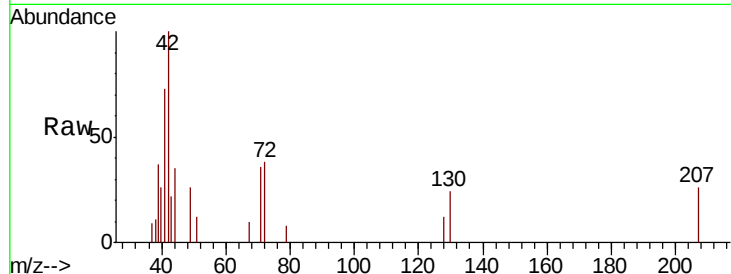
#29
Tetrahydrofuran
Concen: 2.593 ug/l
RT: 7.19 min Scan# 1685
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion	Ratio	Lower	Upper
42	100		
72	39.8	32.8	49.2
71	5.0	31.1	46.7#

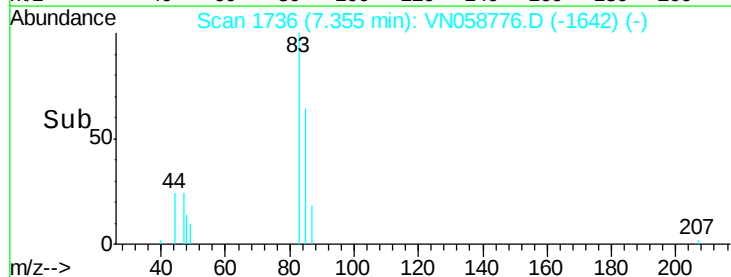
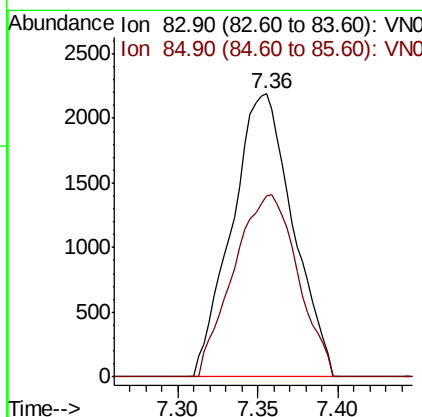
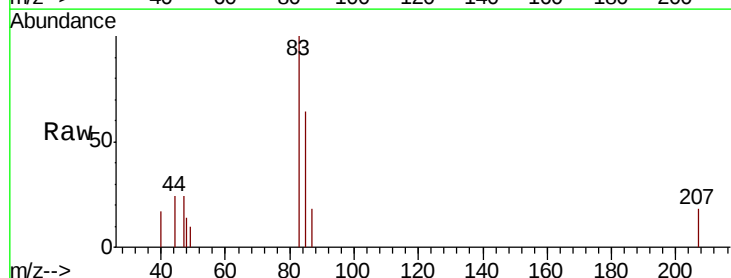
Manual Integrations
APPROVED

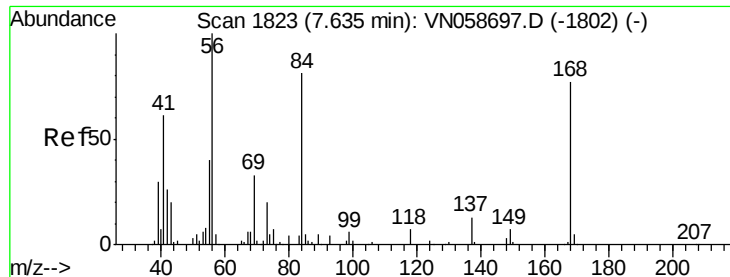
MMDadoda
10/18/2019 12:42:36 AM



#30
Chloroform
Concen: 0.649 ug/l
RT: 7.36 min Scan# 1736
Delta R.T. 0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Lower	Upper
83	100		
85	64.1	51.0	76.6





#31

Cyclohexane

Concen: 1.590 ug/l

RT: 7.64 min Scan# 1826

Delta R.T. 0.01 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

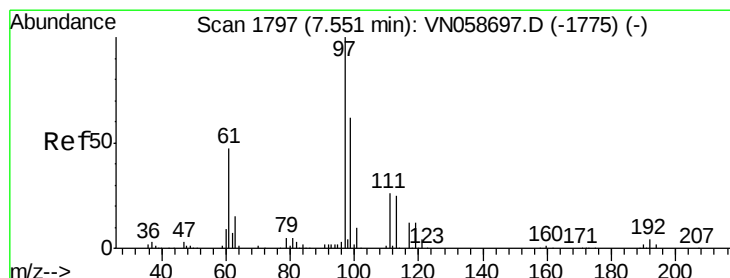
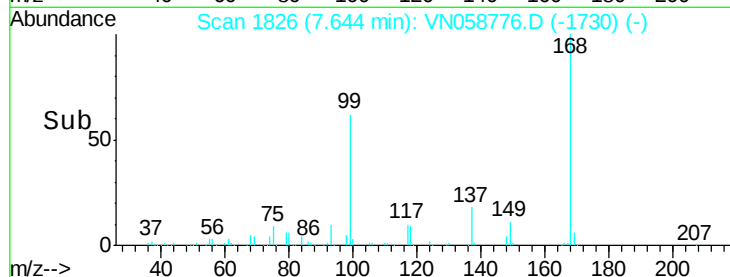
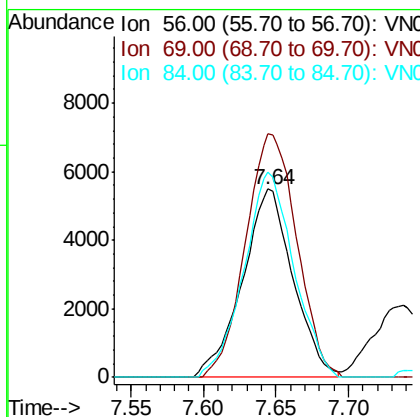
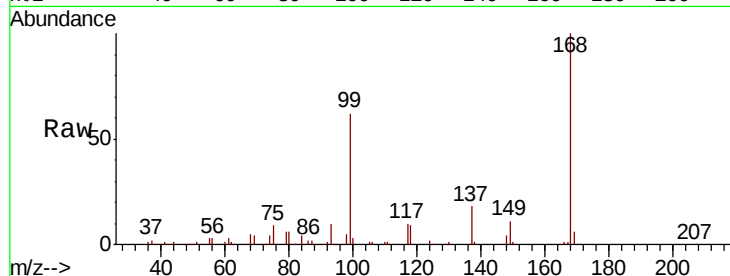
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion:	56	Resp:	13338
Ion Ratio	Lower	Upper	
56	100		
69	129.5	26.2	39.4#
84	108.9	64.9	97.3#

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#32

1,1,1-Trichloroethane

Concen: 0.547 ug/l

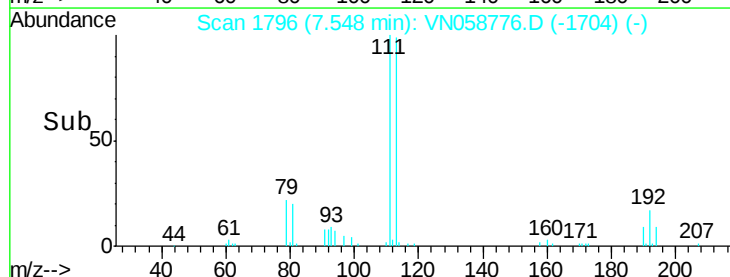
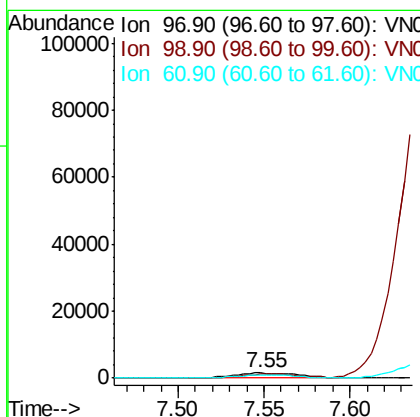
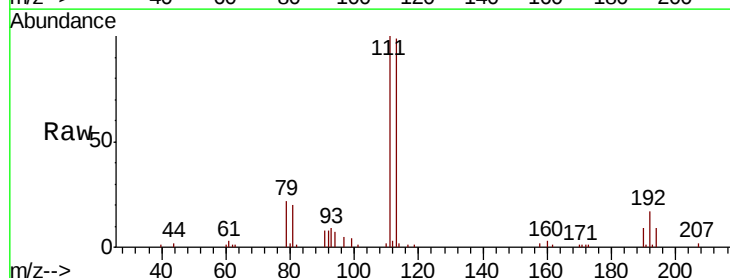
RT: 7.55 min Scan# 1796

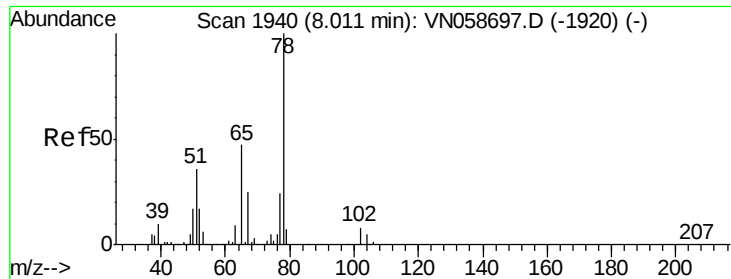
Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Tgt Ion:	97	Resp:	4106
Ion Ratio	Lower	Upper	
97	100		
99	0.0	50.8	76.2#
61	54.7	38.1	57.1





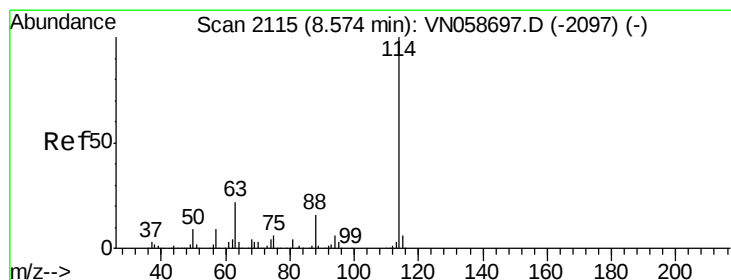
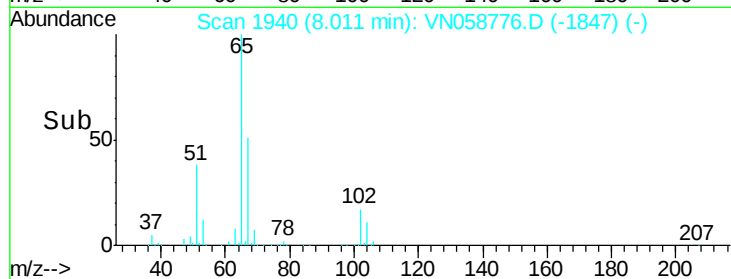
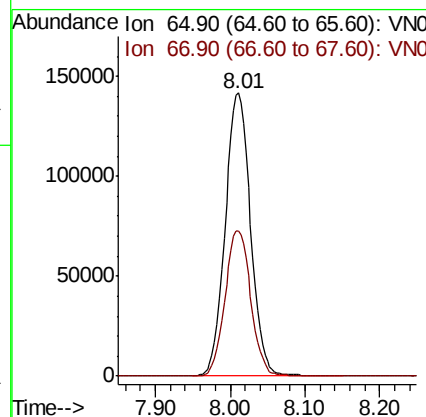
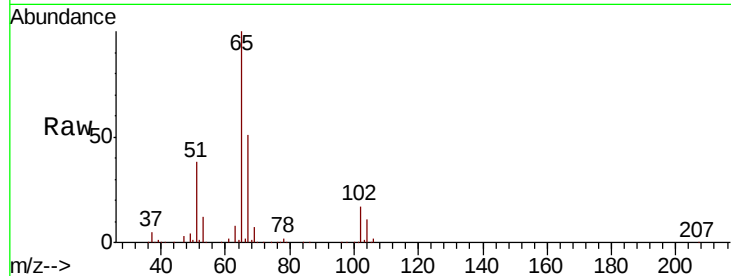
#33
 1,2-Dichloroethane-d4
 Concen: 57.990 ug/l
 RT: 8.01 min Scan# 1940
 Delta R.T. -0.00 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

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

Tot Ion	Ratio	Resp	Lower	Upper
65	100			
67	52.2	0.0	103.8	

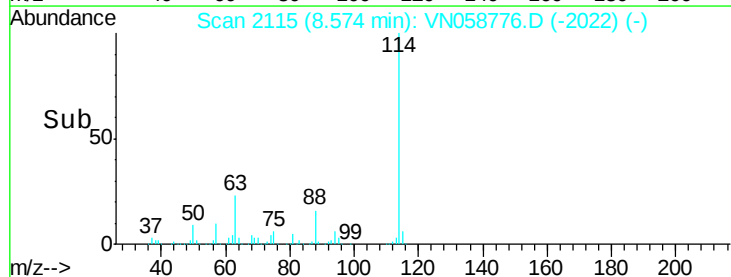
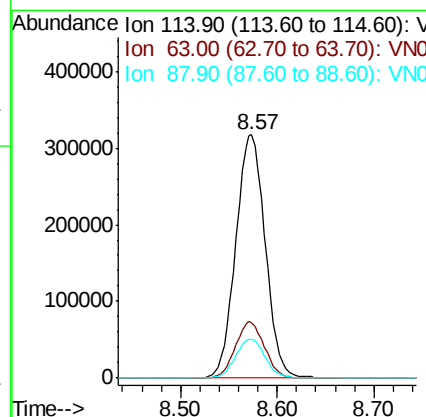
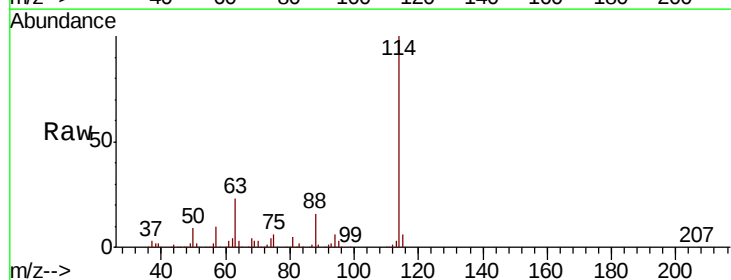
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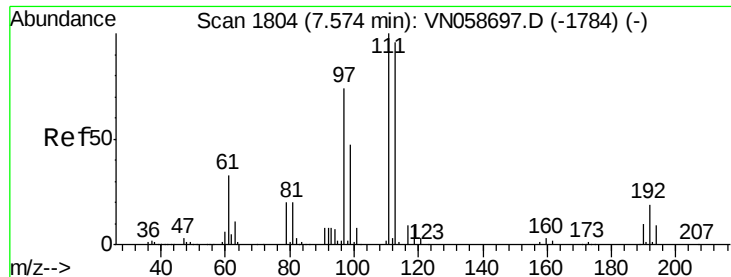
MMDadoda
 10/18/2019 12:42:36 AM



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.57 min Scan# 2115
 Delta R.T. -0.00 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Resp	Lower	Upper
114	100			
63	22.9	0.0	43.8	
88	16.0	0.0	32.0	





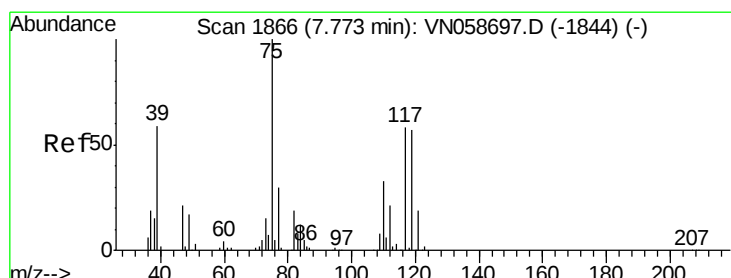
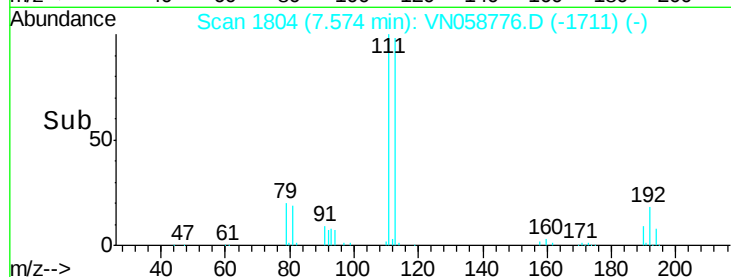
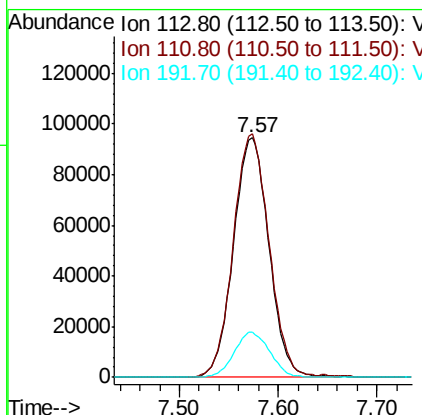
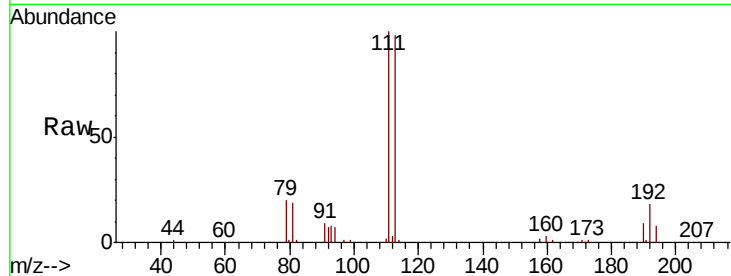
#35
 Dibromofluoromethane
 Concen: 56.979 ug/l
 RT: 7.57 min Scan# 1804
 Delta R.T. -0.00 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

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

Tot Ion	Ratio	Resp	Lower	Upper
113	100			
111	102.3	82.3	123.5	
192	19.0	15.0	22.6	

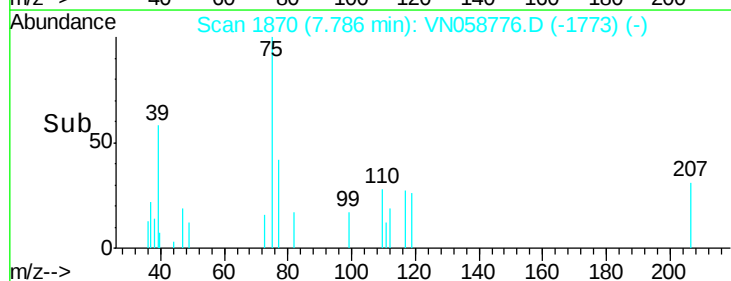
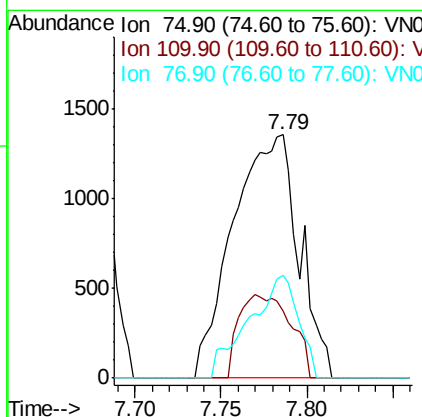
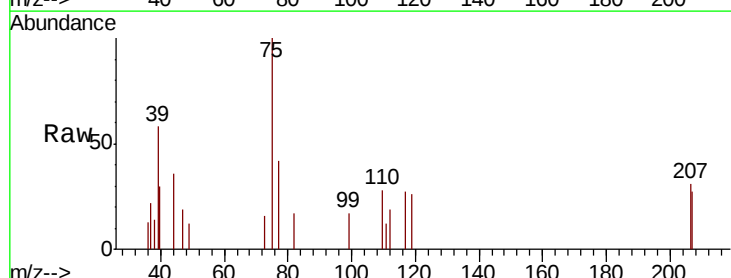
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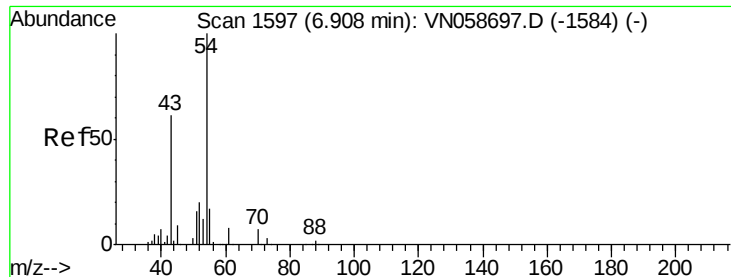
MMDadoda
 10/18/2019 12:42:36 AM



#36
 1,1-Dichloropropene
 Concen: 0.532 ug/l
 RT: 7.79 min Scan# 1870
 Delta R.T. 0.01 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Resp	Lower	Upper
75	100			
110	27.1	16.6	49.8	
77	31.5	24.6	37.0	





#37

Ethyl Acetate

Concen: 0.678 ug/l

RT: 6.91 min Scan# 1598

Delta R.T. 0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

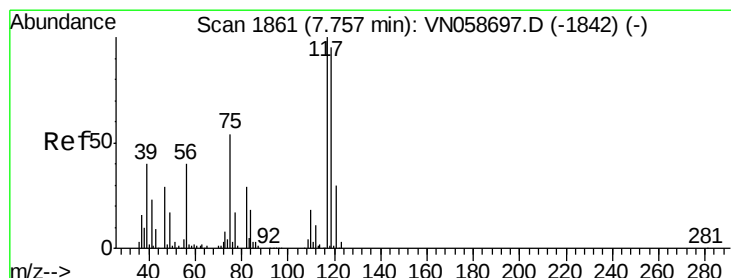
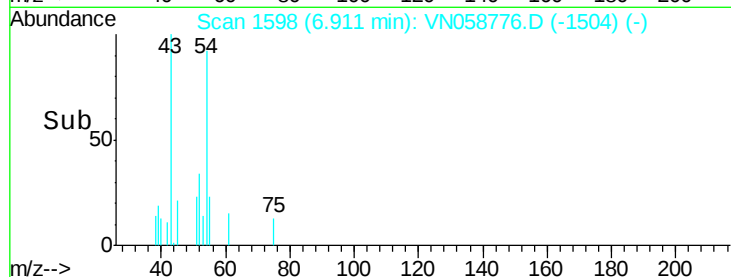
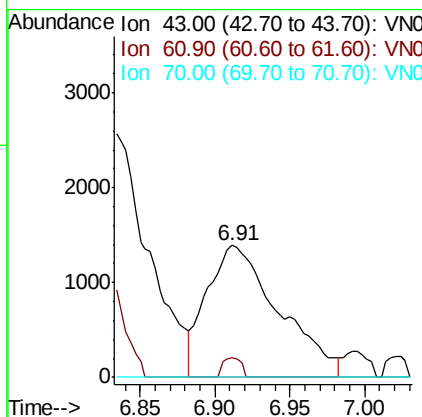
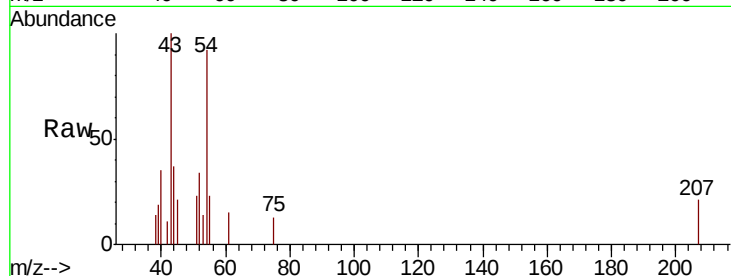
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion:	43	Resp:	4655
Ion	Ratio	Lower	Upper
43	100		
61	3.8	11.3	16.9#
70	0.0	7.2	10.8#

Manual Integrations
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10/18/2019 12:42:36 AM



#38

Carbon Tetrachloride

Concen: 0.610 ug/l

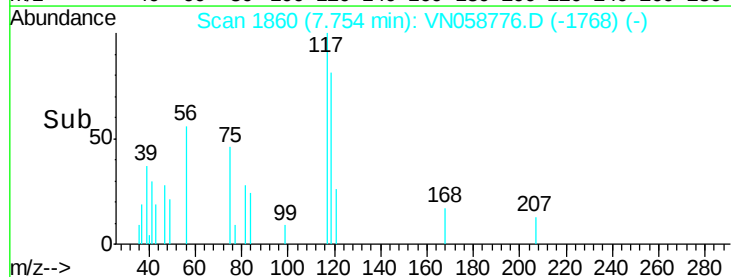
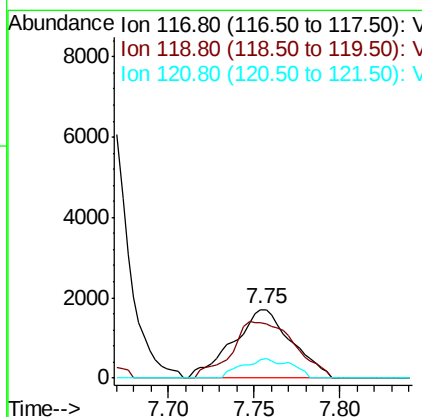
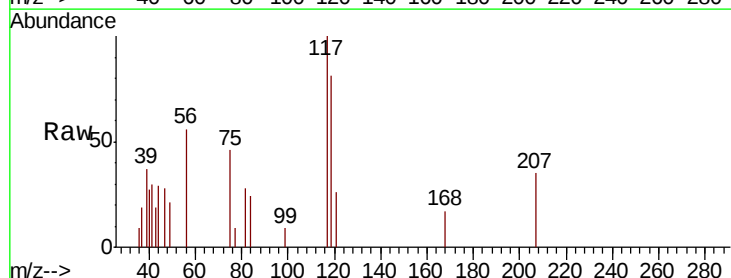
RT: 7.75 min Scan# 1860

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Tgt Ion:	117	Resp:	4035
Ion	Ratio	Lower	Upper
117	100		
119	81.0	75.7	113.5
121	26.4	23.9	35.9





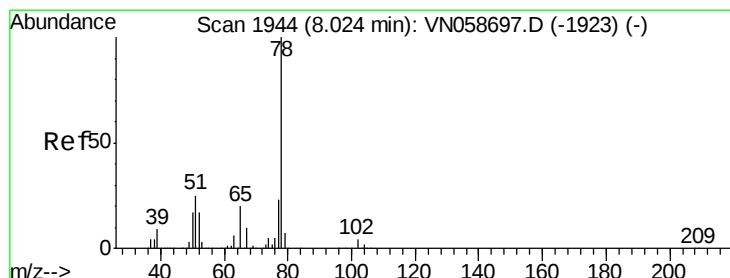
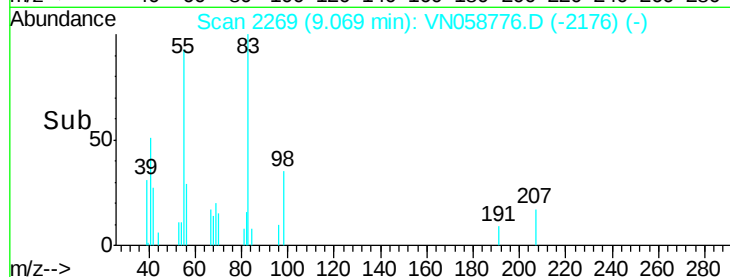
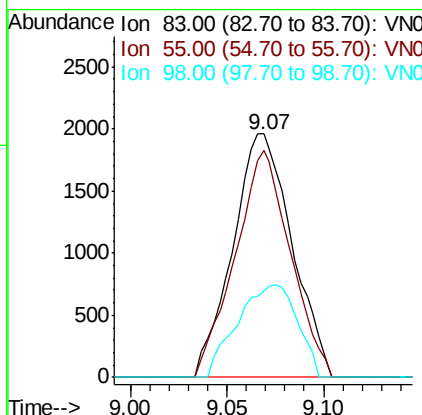
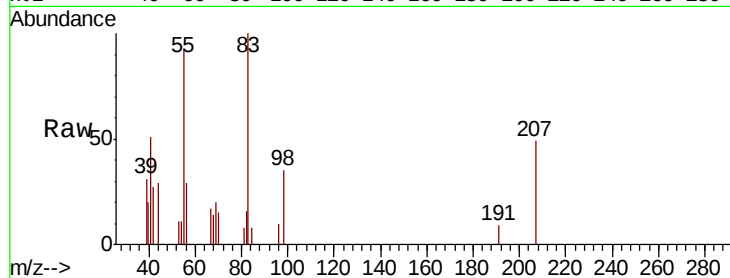
#39
Methvlcvclohexane
Concen: 0.529 ug/l
RT: 9.07 min Scan# 2269
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion	Ratio	Lower	Upper
83	100		
55	93.4	63.4	95.0
98	35.4	35.1	52.7

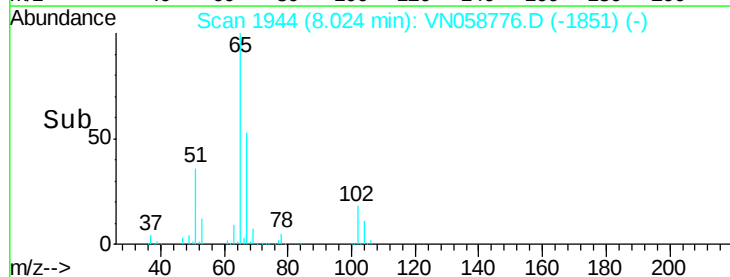
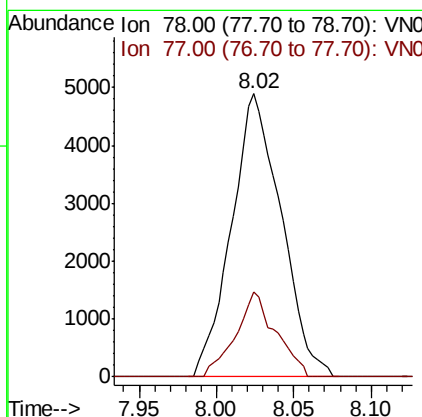
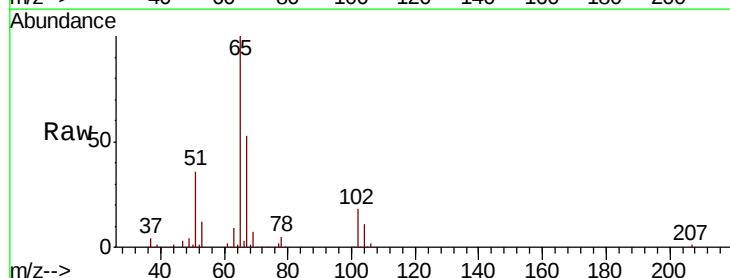
Manual Integrations
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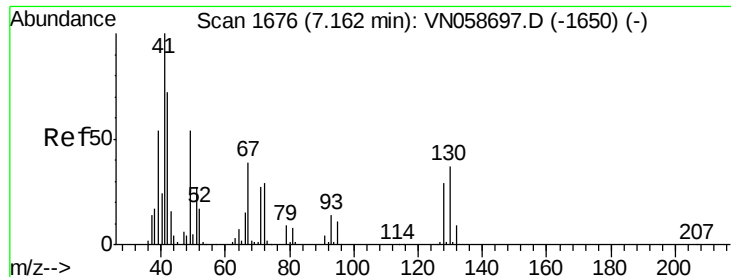
MMDadoda
10/18/2019 12:42:36 AM



#40
Benzene
Concen: 0.560 ug/l
RT: 8.02 min Scan# 1944
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Lower	Upper
78	100		
77	30.0	18.8	28.2





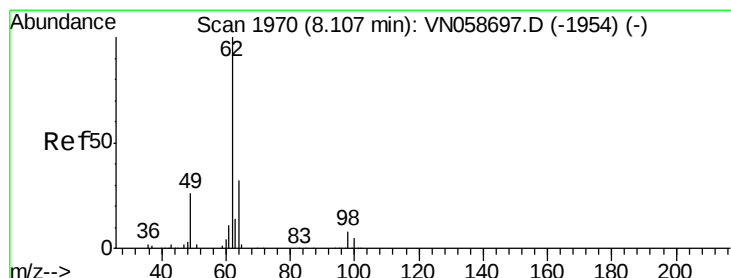
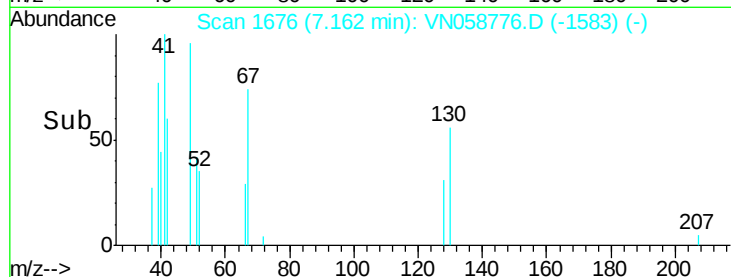
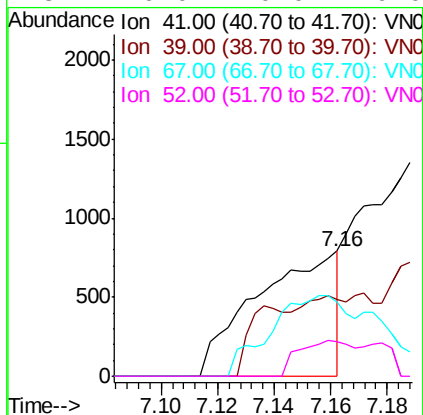
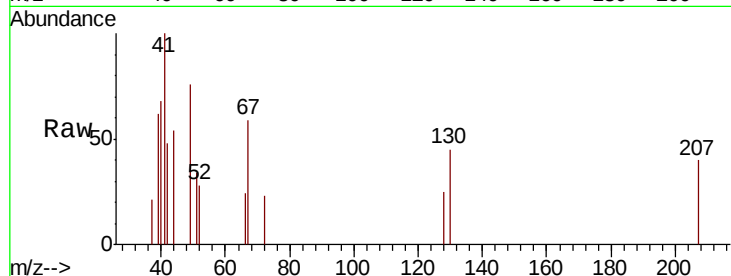
#41
Methacrylonitrile
Concen: 0.488 ug/l m
RT: 7.16 min Scan# 1676
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion	Ratio	Lower	Upper
41	100		
39	23.0	115.4	173.2#
67	0.0	0.0	0.0
52	0.0	0.0	0.0

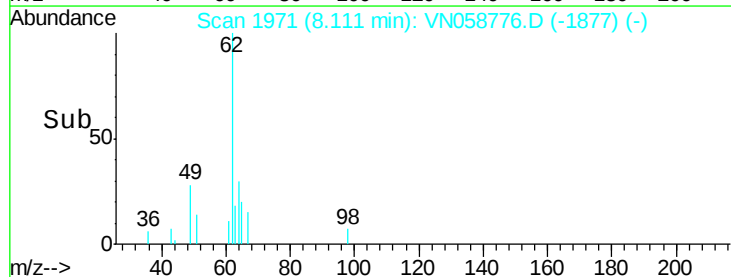
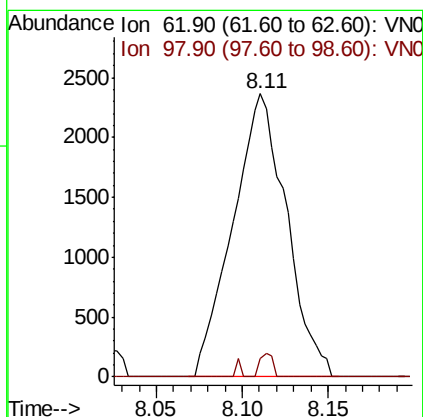
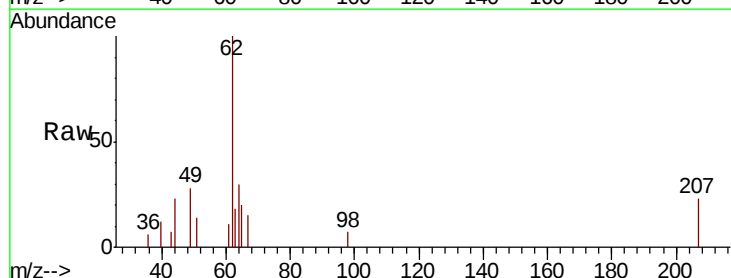
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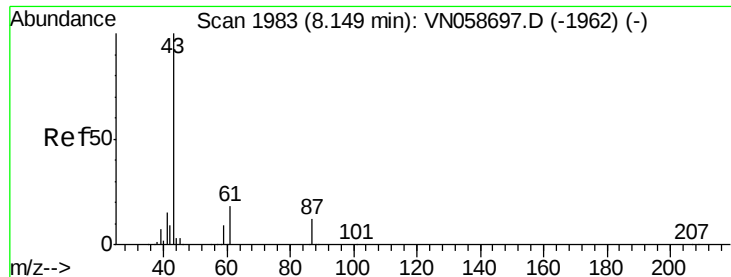
MMDadoda
10/18/2019 12:42:36 AM



#42
1,2-Dichloroethane
Concen: 0.685 ug/l
RT: 8.11 min Scan# 1971
Delta R.T. 0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Lower	Upper
62	100		
98	2.0	0.0	15.8





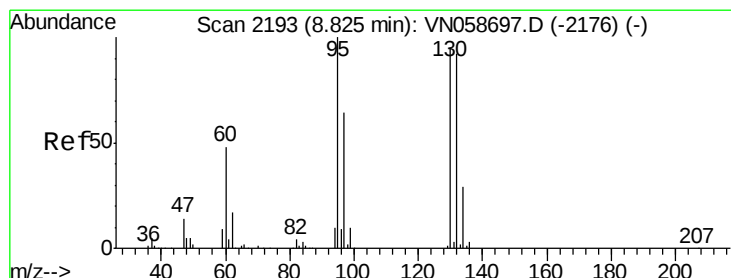
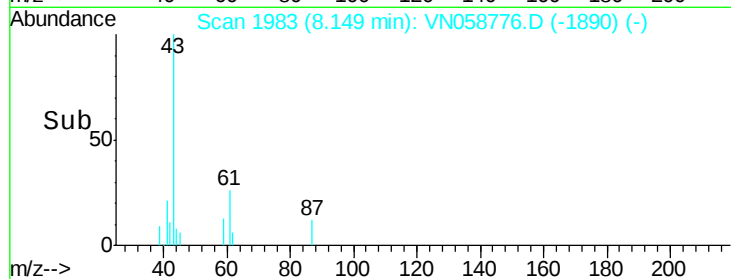
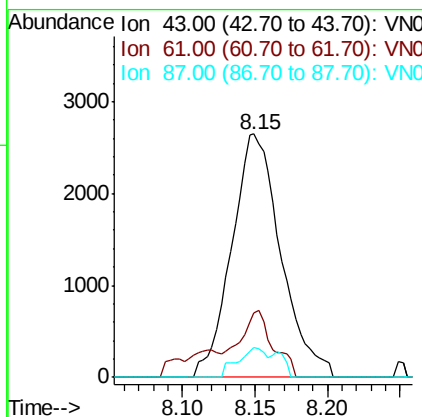
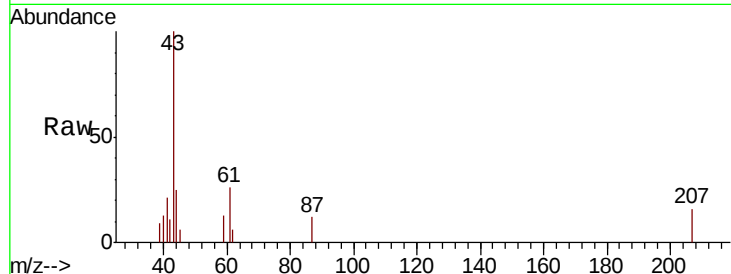
#43
Isopropyl Acetate
Concen: 0.534 ug/l
RT: 8.15 min Scan# 1983
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion	Ratio	Lower	Upper
43	100		
61	19.0	20.3	30.5#
87	7.0	9.8	14.6#

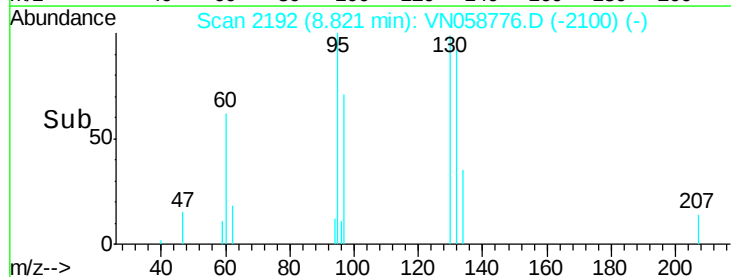
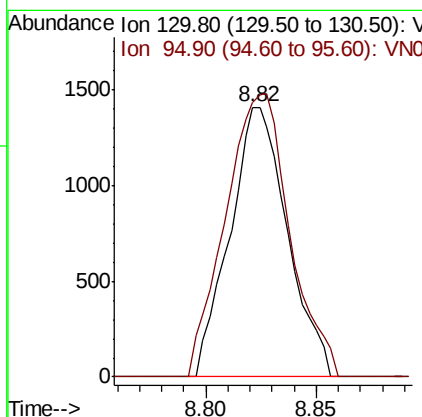
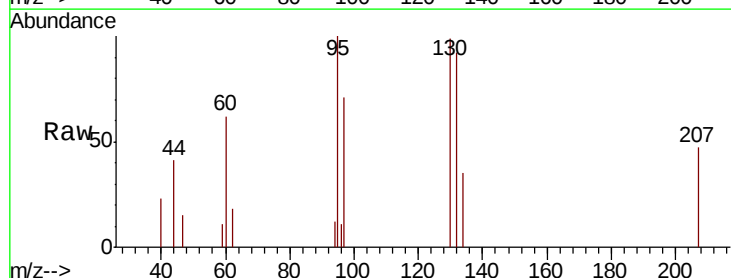
Manual Integrations
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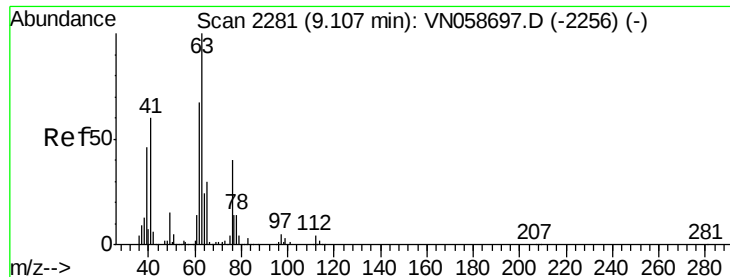
MMDadoda
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#44
Trichloroethene
Concen: 0.527 ug/l
RT: 8.82 min Scan# 2192
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Lower	Upper
130	100		
95	101.5	0.0	211.2





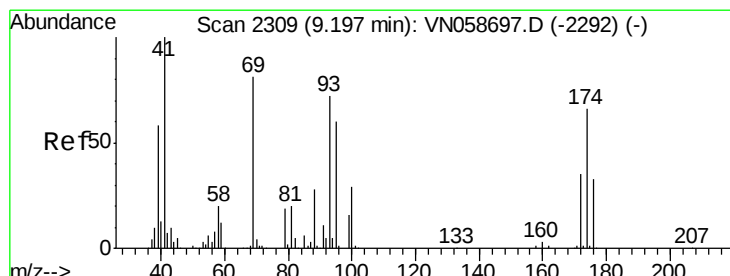
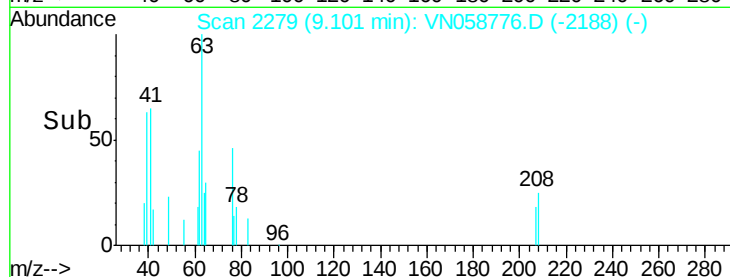
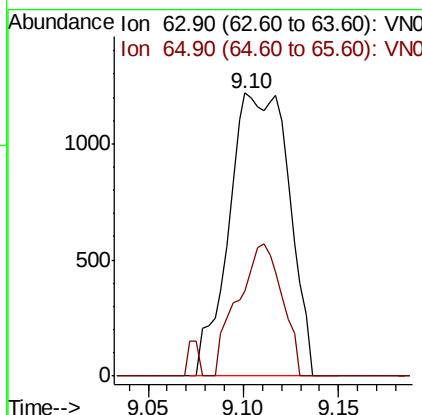
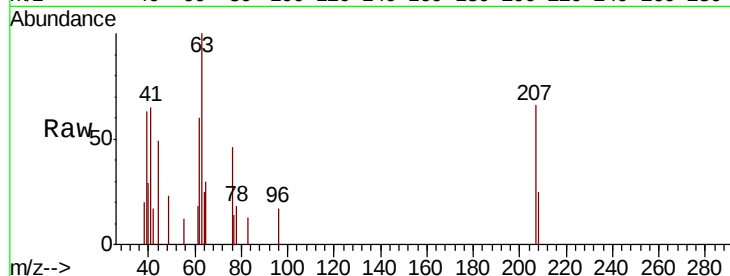
#45
 1,2-Dichloropropane
 Concen: 0.511 ug/l m
 RT: 9.10 min Scan# 2279
 Delta R.T. -0.01 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

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

Tot Ion	Ratio	Lower	Upper
63	100		
65	29.9	24.1	36.1

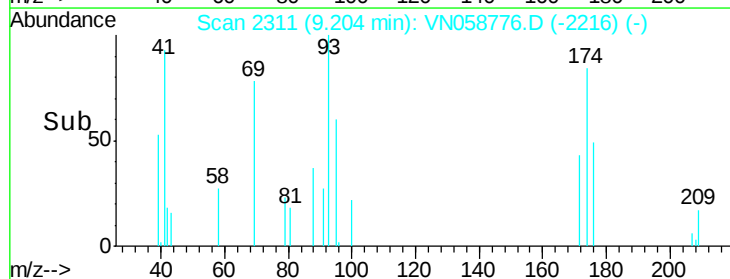
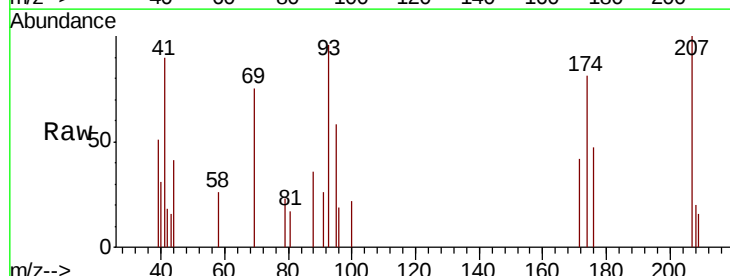
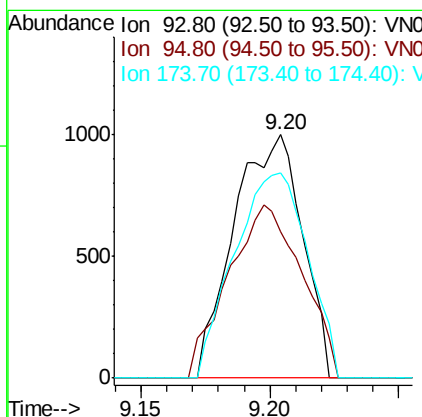
Manual Integrations
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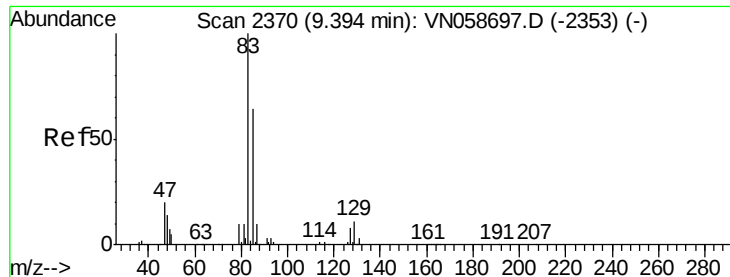
MMDadoda
 10/18/2019 12:42:36 AM



#46
 Dibromomethane
 Concen: 0.559 ug/l
 RT: 9.20 min Scan# 2311
 Delta R.T. 0.01 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Lower	Upper
93	100		
95	76.8	66.6	100.0
174	90.4	75.2	112.8





#47

Bromodichloromethane

Concen: 0.534 ug/l

RT: 9.39 min Scan# 2369

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

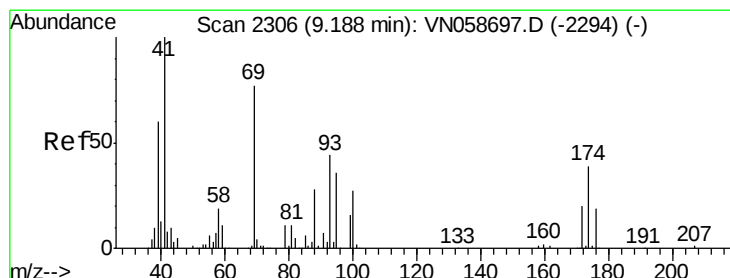
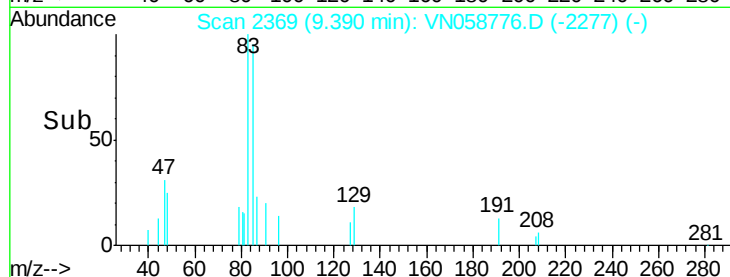
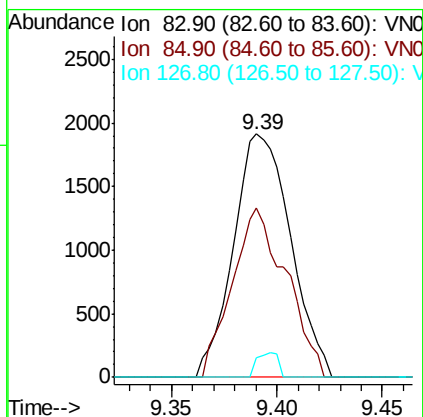
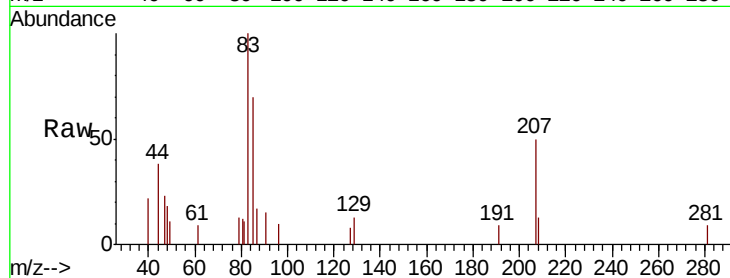
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion:	83	Resp:	3599
Ion	Ratio	Lower	Upper
83	100		
85	69.7	50.9	76.3
127	8.2	6.3	9.5

Manual Integrations
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#48

Methyl methacrylate

Concen: 0.546 ug/l

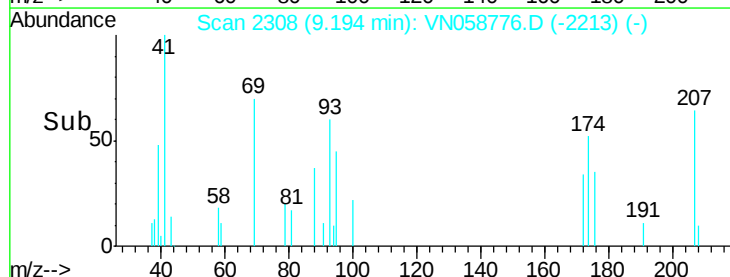
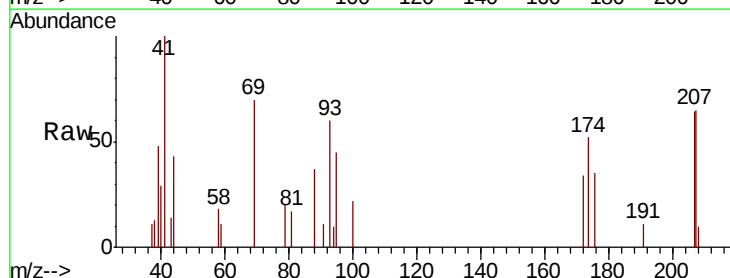
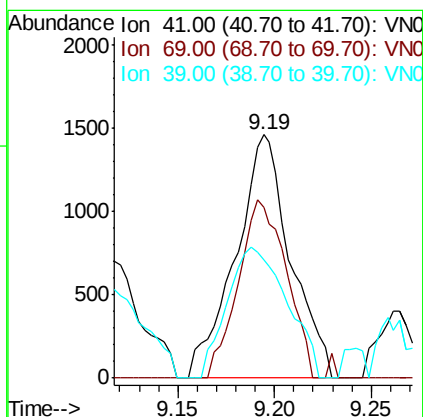
RT: 9.19 min Scan# 2308

Delta R.T. 0.01 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Tgt Ion:	41	Resp:	2895
Ion	Ratio	Lower	Upper
41	100		
69	63.9	63.4	95.2
39	58.3	48.9	73.3





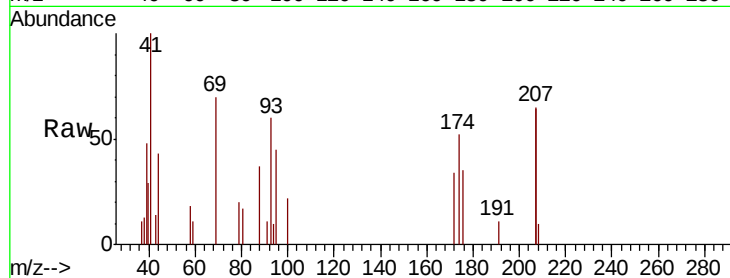
#49
1,4-Dioxane
Concen: 12.069 ug/l
RT: 9.19 min Scan# 2308
Delta R.T. 0.01 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion	Ratio	Lower	Upper
88	100		
43	32.1	28.6	43.0
58	52.0	57.2	85.8

Manual Integrations
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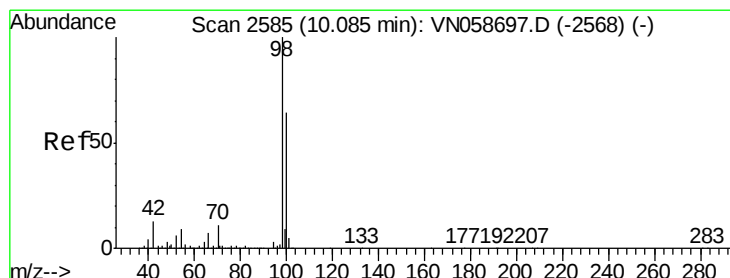
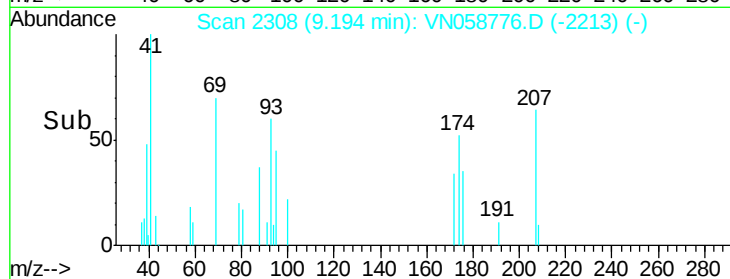
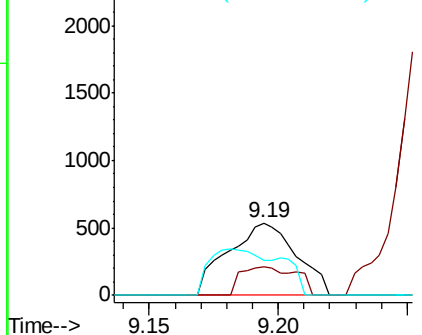


Abundance

Ion 88.00 (87.70 to 88.70): VN058776.D (-2291) (-)

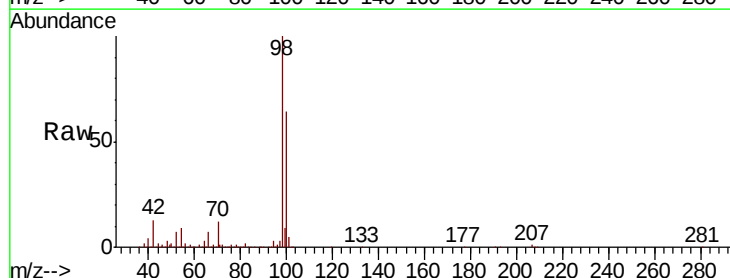
Ion 43.00 (42.70 to 43.70): VN058776.D (-2291) (-)

Ion 58.00 (57.70 to 58.70): VN058776.D (-2291) (-)



#50
Toluene-d8
Concen: 52.835 ug/l
RT: 10.08 min Scan# 2585
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

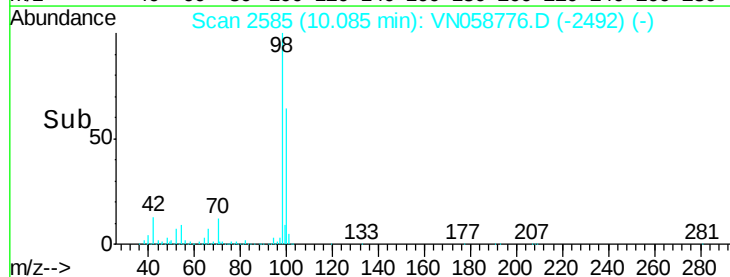
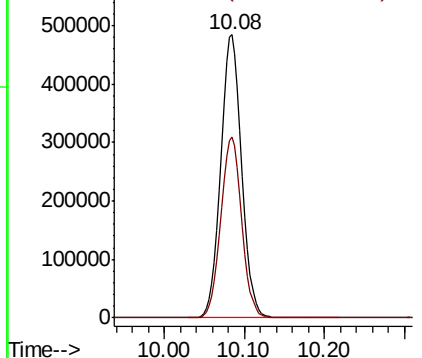
Tgt Ion	Ratio	Lower	Upper
98	100		
100	63.7	51.1	76.7

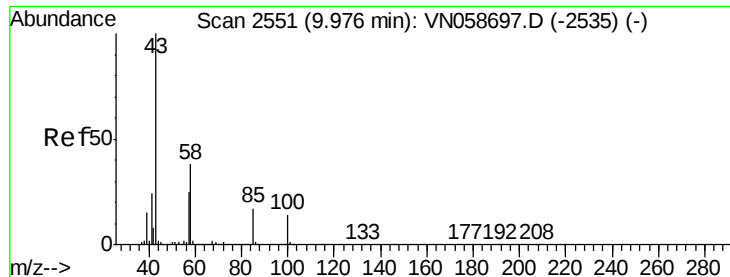


Abundance

Ion 98.00 (97.70 to 98.70): VN058776.D (-2568) (-)

Ion 100.00 (99.70 to 100.70): VN058776.D (-2568) (-)





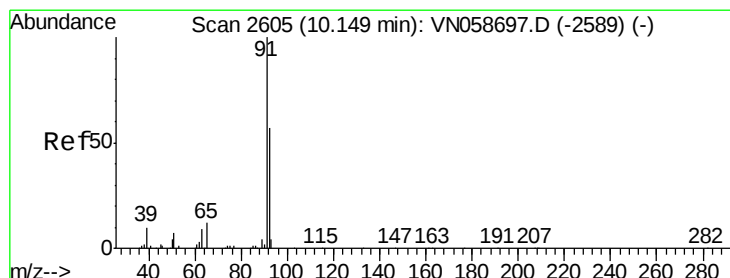
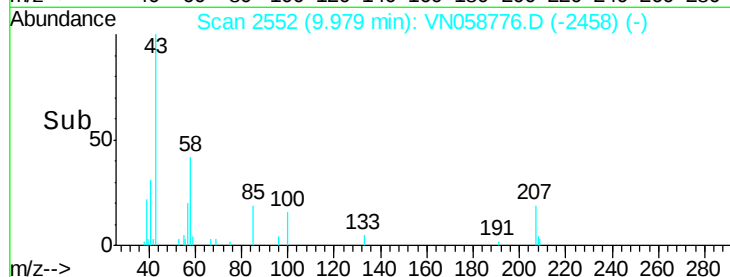
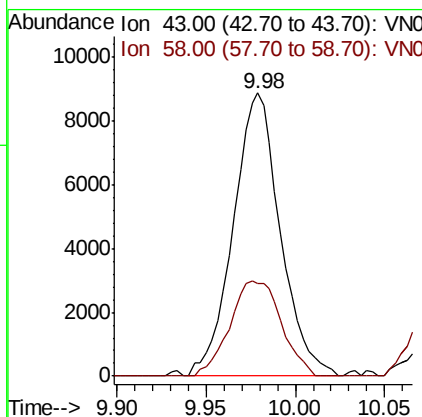
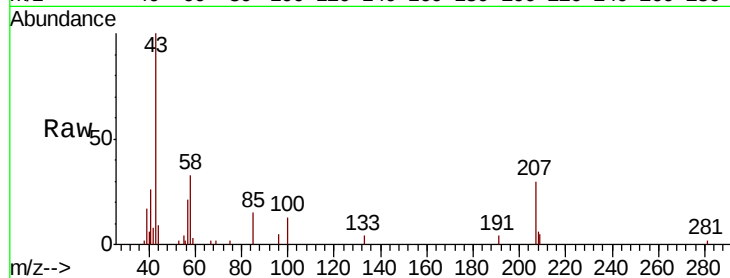
#51
4-Methyl-2-Pentanone
Concen: 2.490 ug/l
RT: 9.98 min Scan# 2552
Delta R.T. 0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion	43	Resp	16361
Ion	Ratio	Lower	Upper
43	100		
58	36.7	30.3	45.5

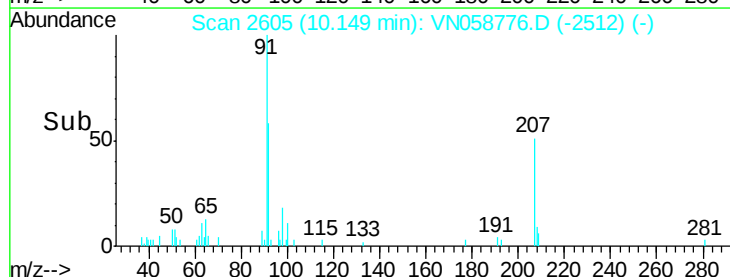
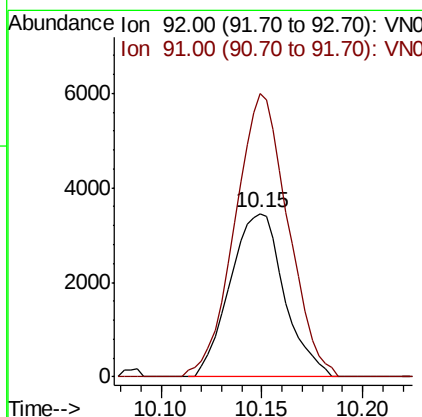
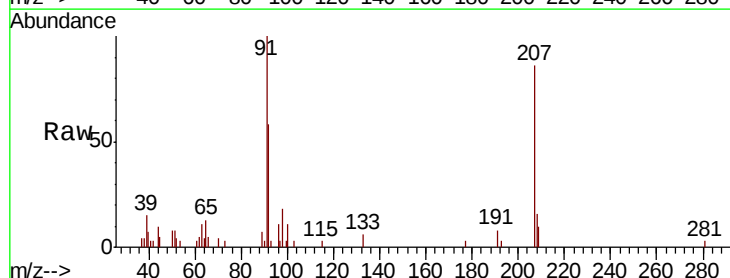
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#52
Toluene
Concen: 0.543 ug/l
RT: 10.15 min Scan# 2605
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion	92	Resp	6478
Ion	Ratio	Lower	Upper
92	100		
91	170.3	139.1	208.7





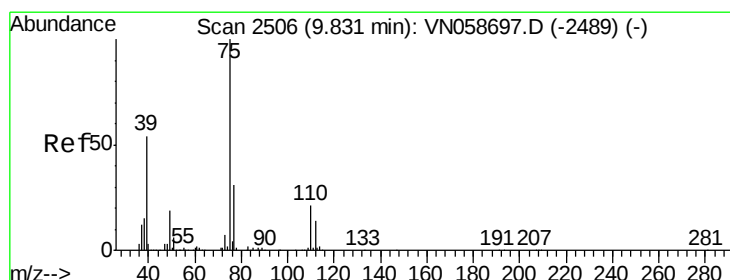
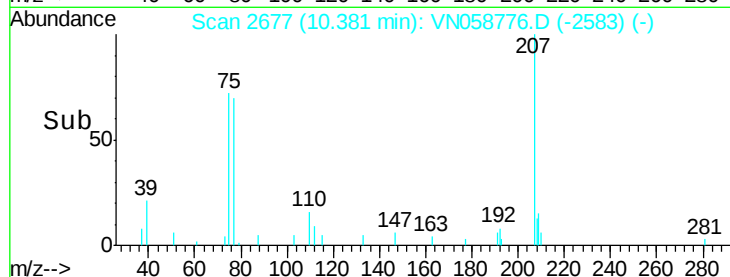
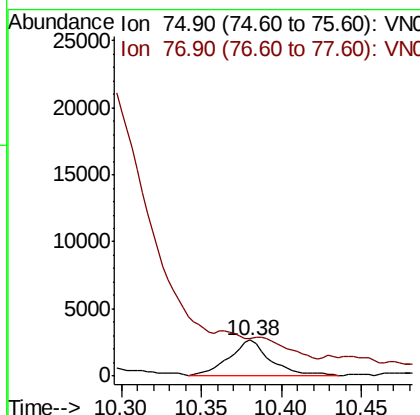
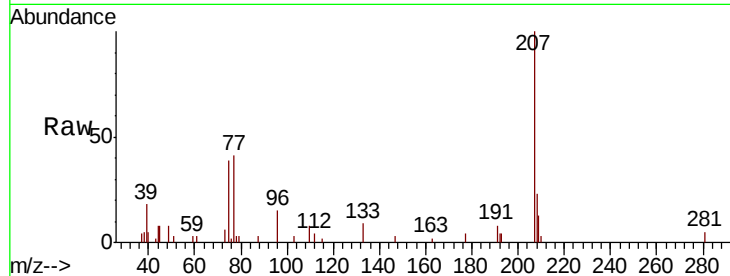
#53
 t-1,3-Dichloropropene
 Concen: 0.633 ug/l
 RT: 10.38 min Scan# 2677
 Delta R.T. 0.00 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

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

Tot Ion: 75 Resp: 4895
 Ion Ratio Lower Upper
 75 100
 77 52.2 26.2 39.4#

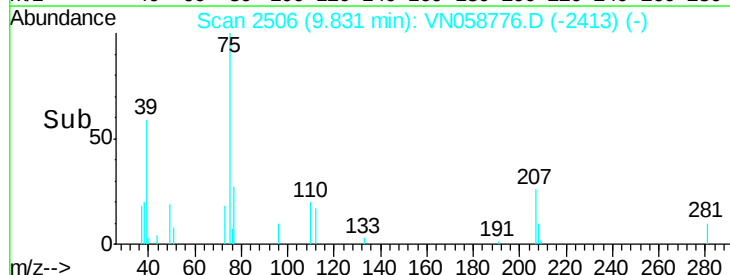
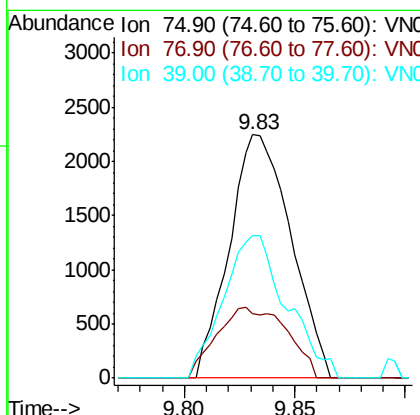
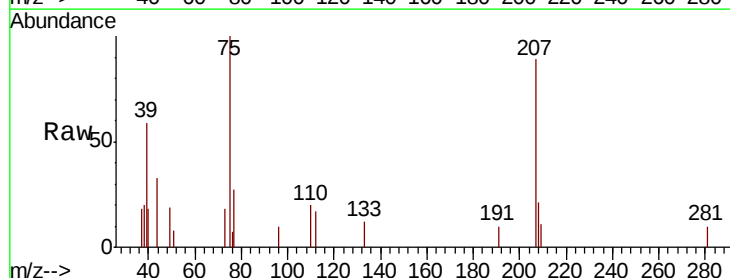
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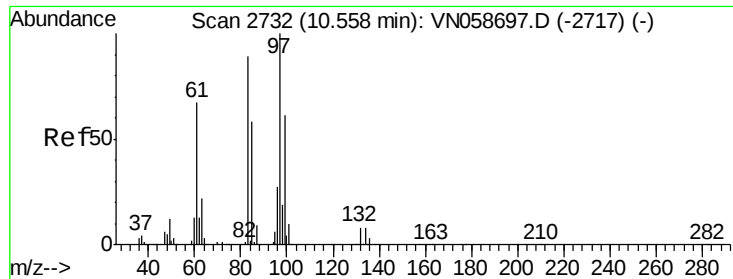
MMDadoda
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#54
 cis-1,3-Dichloropropene
 Concen: 0.531 ug/l
 RT: 9.83 min Scan# 2506
 Delta R.T. -0.00 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

Tgt Ion: 75 Resp: 4356
 Ion Ratio Lower Upper
 75 100
 77 26.7 24.4 36.6
 39 58.5 43.1 64.7





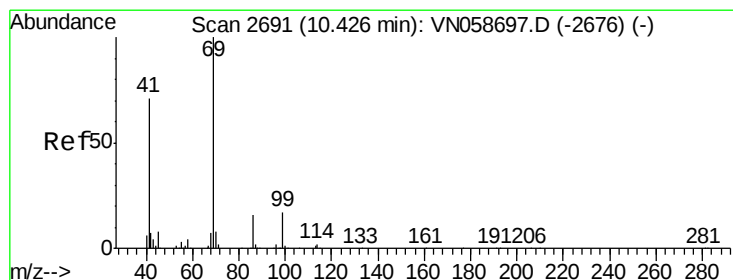
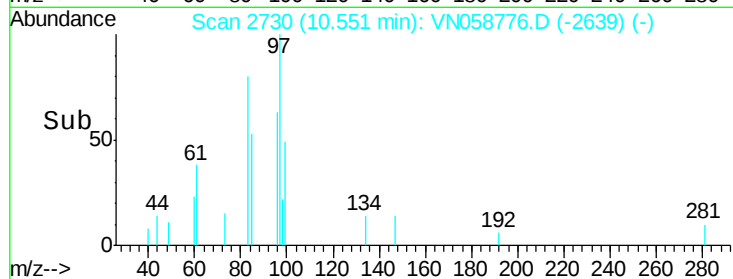
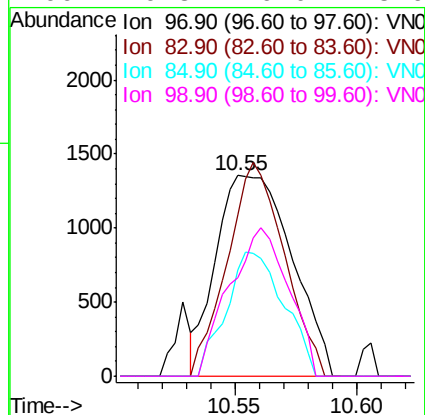
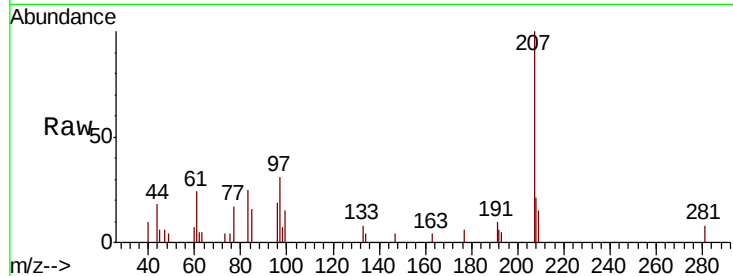
#55
 1,1,2-Trichloroethane
 Concen: 0.599 ug/l
 RT: 10.55 min Scan# 2730
 Delta R.T. -0.01 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

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

Tot Ion:	97	Resp:	2926
Ion	Ratio	Lower	Upper
97	100		
83	80.4	71.2	106.8
85	52.9	46.7	70.1
99	49.3	49.0	73.6

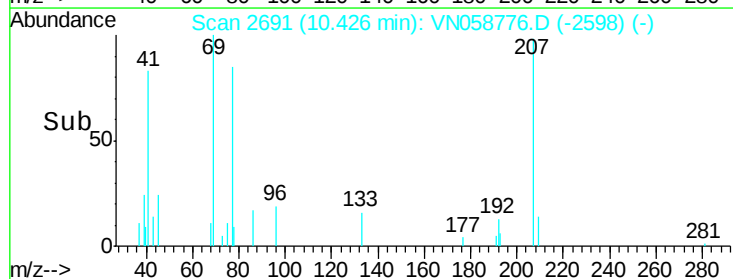
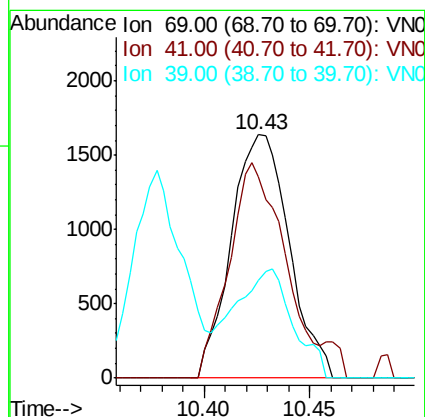
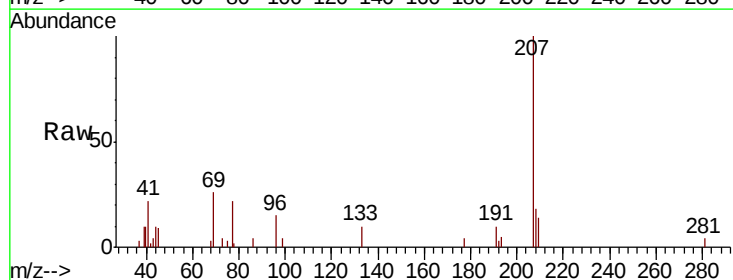
Manual Integrations
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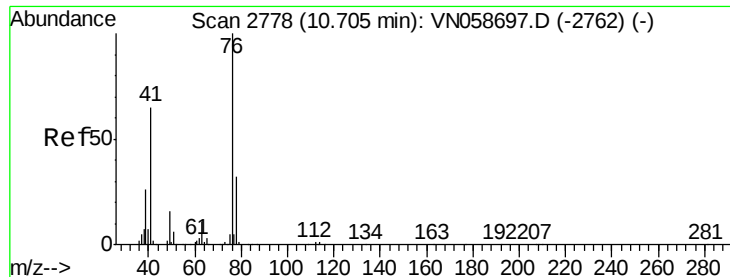
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#56
 Ethyl methacrylate
 Concen: 0.438 ug/l
 RT: 10.43 min Scan# 2691
 Delta R.T. -0.00 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

Tgt Ion:	69	Resp:	3125
Ion	Ratio	Lower	Upper
69	100		
41	84.8	56.8	85.2
39	45.7	32.5	48.7





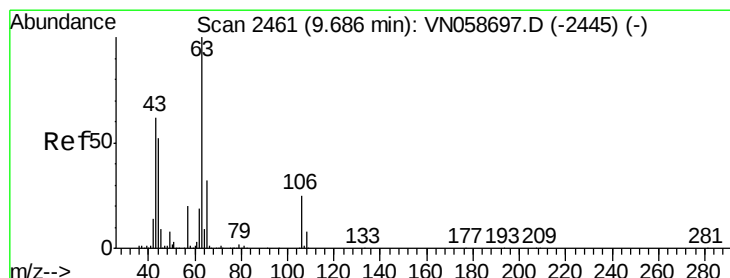
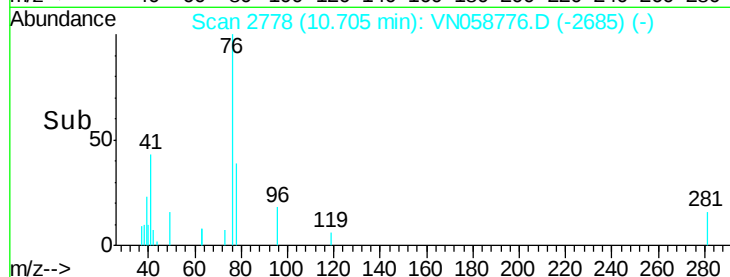
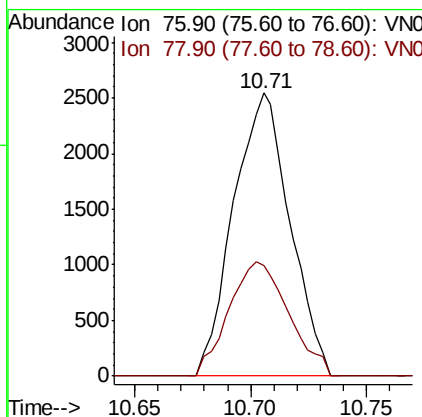
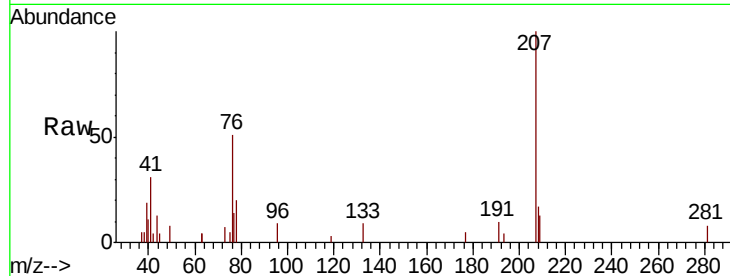
#57
 1,3-Dichloropropane
 Concen: 0.518 ug/l
 RT: 10.71 min Scan# 2778
 Delta R.T. -0.00 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

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

Tot Ion: 76 Resp: 4306
 Ion Ratio Lower Upper
 76 100
 78 42.7 25.9 38.9#

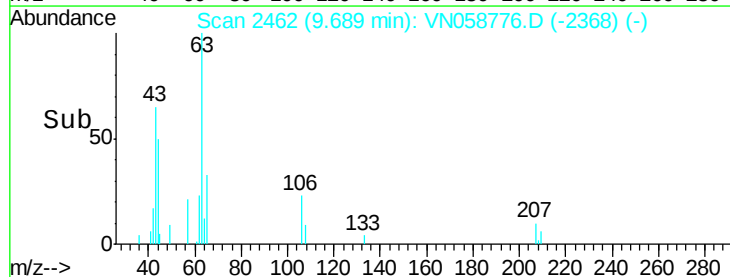
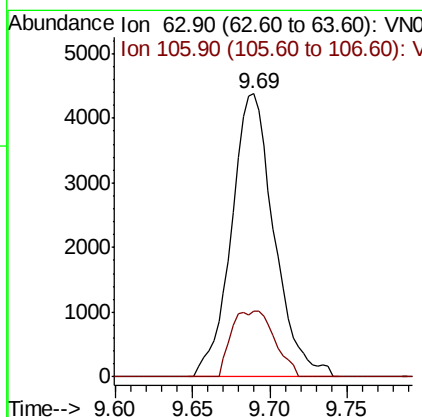
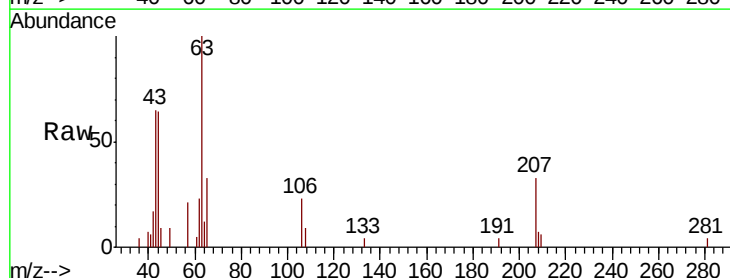
Manual Integrations
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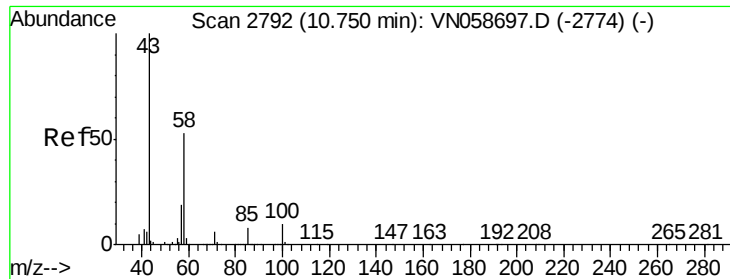
MMDadoda
 10/18/2019 12:42:36 AM



#58
 2-Chloroethyl Vinyl ether
 Concen: 2.439 ug/l
 RT: 9.69 min Scan# 2462
 Delta R.T. 0.00 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

Tgt Ion: 63 Resp: 8381
 Ion Ratio Lower Upper
 63 100
 106 23.4 20.0 30.0





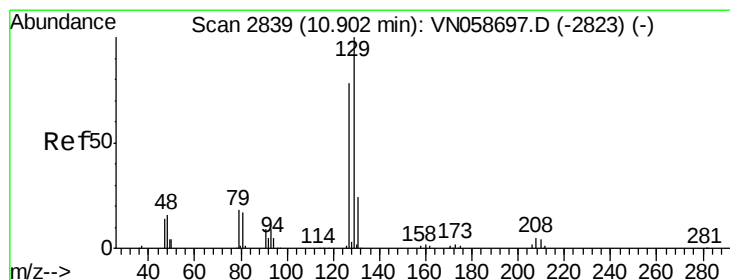
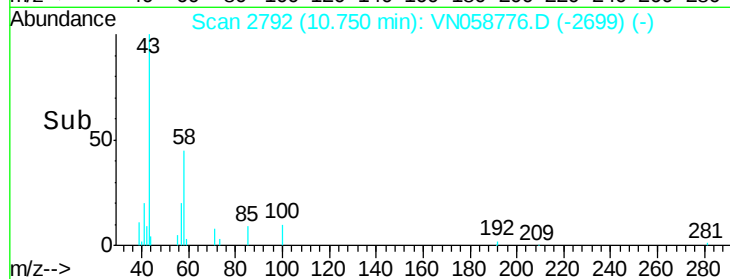
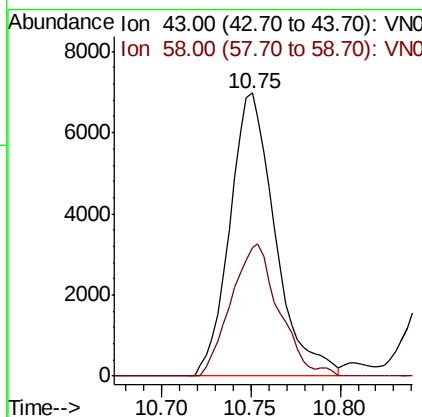
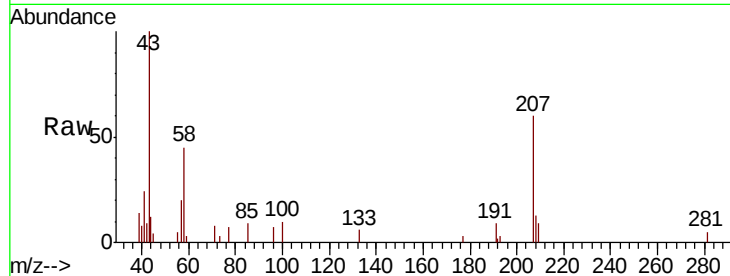
#59
2-Hexanone
Concen: 2.433 ug/l
RT: 10.75 min Scan# 2792
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion: 43 Resp: 12353
Ion Ratio Lower Upper
43 100
58 49.4 26.1 78.3

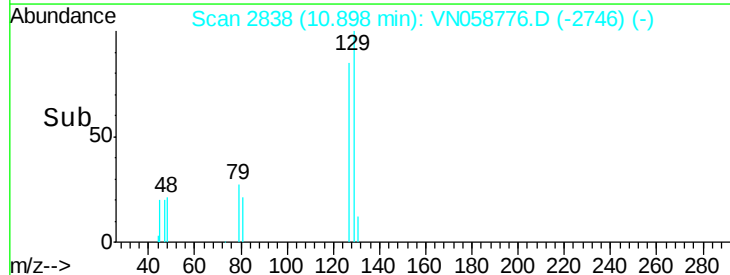
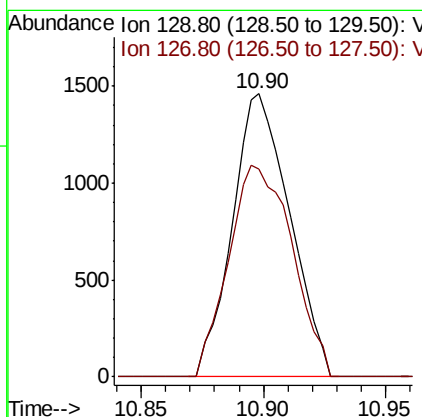
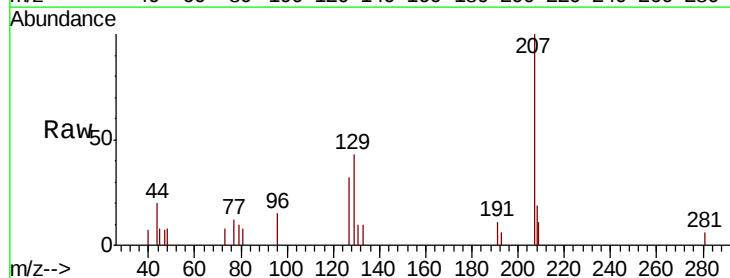
Manual Integrations
APPROVED

MMDadoda
10/18/2019 12:42:36 AM



#60
Dibromochloromethane
Concen: 0.473 ug/l
RT: 10.90 min Scan# 2838
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion: 129 Resp: 2383
Ion Ratio Lower Upper
129 100
127 82.9 38.5 115.3





#61

1,2-Dibromoethane

Concen: 0.535 ug/l

RT: 11.01 min Scan# 2872

Delta R.T. 0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion: 107 Resp: 2615

Ion Ratio Lower Upper

107 100

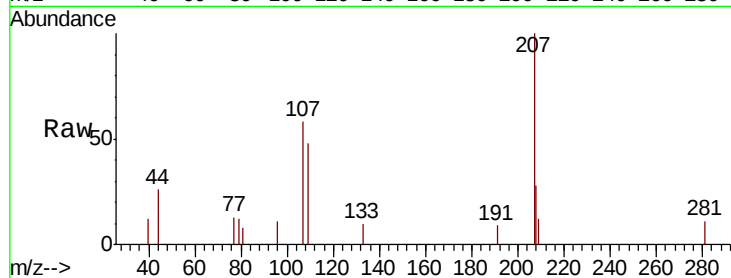
109 89.6 75.4 113.0

Manual Integrations

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Abundance Ion 106.90 (106.60 to 107.60): V

Ion 108.80 (108.50 to 109.50): V

11.01

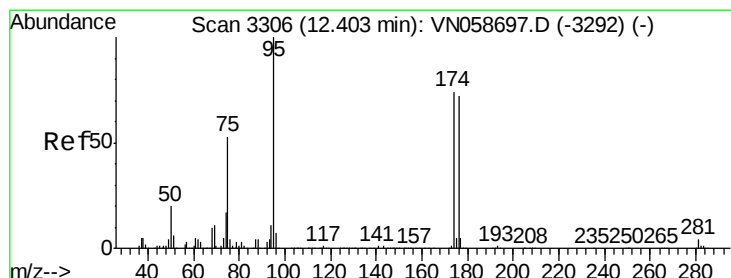
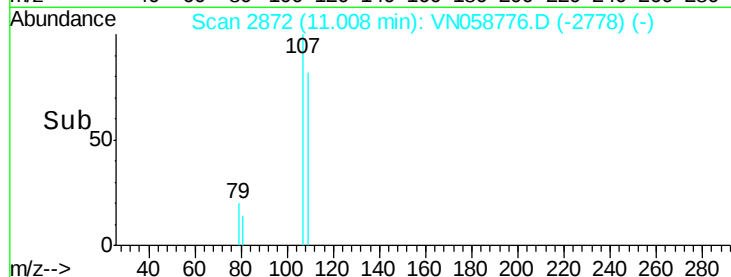
1500

1000

500

0

Time-->



#62

4-Bromofluorobenzene

Concen: 46.591 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

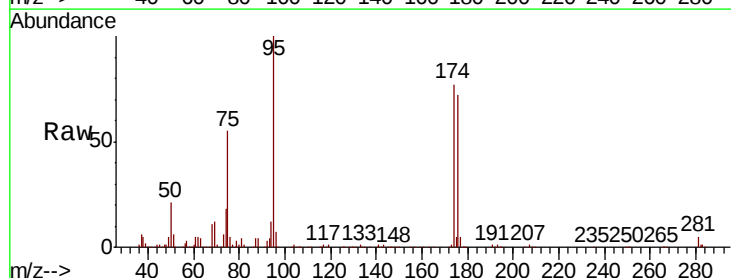
Tgt Ion: 95 Resp: 292525

Ion Ratio Lower Upper

95 100

174 77.2 0.0 150.4

176 74.2 0.0 146.8



Abundance Ion 94.90 (94.60 to 95.60): V

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

12.40

200000

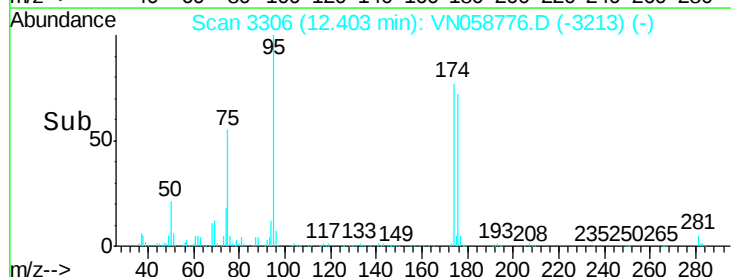
150000

100000

50000

0

Time-->





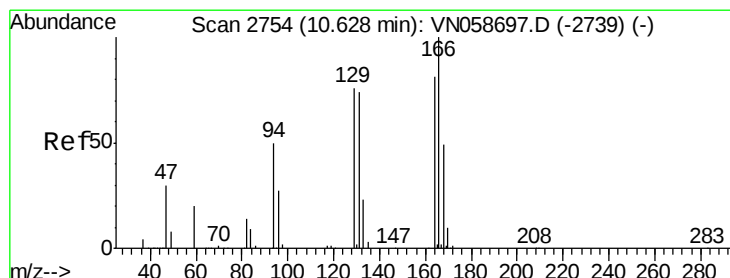
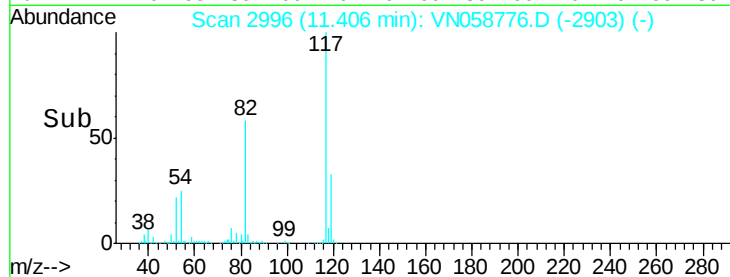
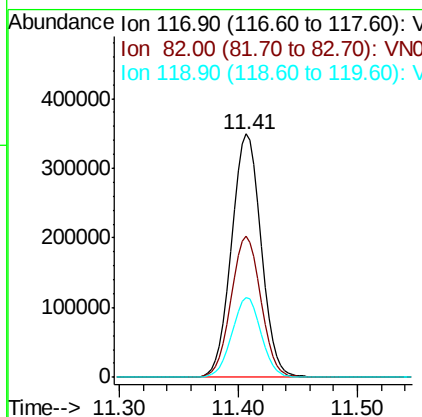
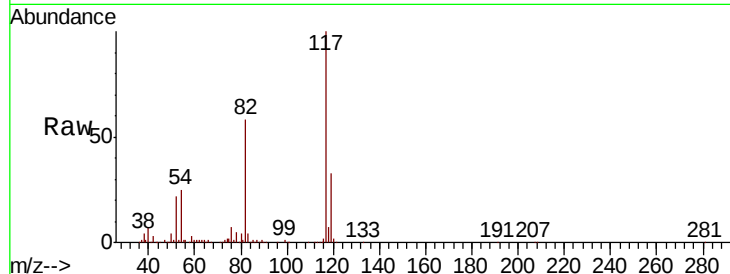
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion	Ratio	Resp	Lower	Upper
117	100	602630		
82	57.9		47.0	70.4
119	33.0		25.4	38.2

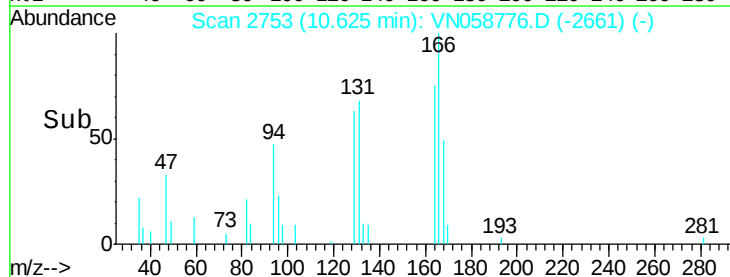
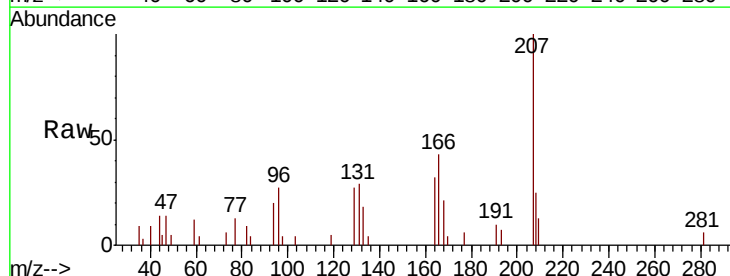
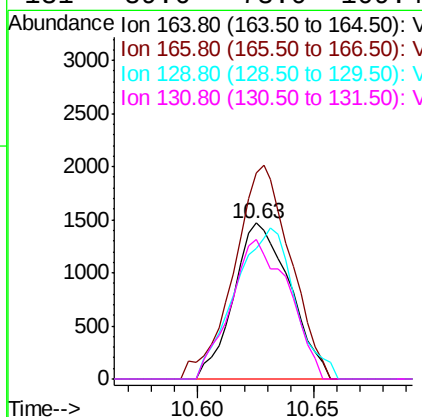
Manual Integrations
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#64
Tetrachloroethene
Concen: 0.587 ug/l
RT: 10.63 min Scan# 2753
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Resp	Lower	Upper
164	100	2477		
166	132.5		99.3	148.9
129	84.1		75.2	112.8
131	89.6		73.0	109.4





#65

Chlorobenzene

Concen: 0.540 ug/l

RT: 11.43 min Scan# 3004

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion:112 Resp: 6612

Ion Ratio Lower Upper

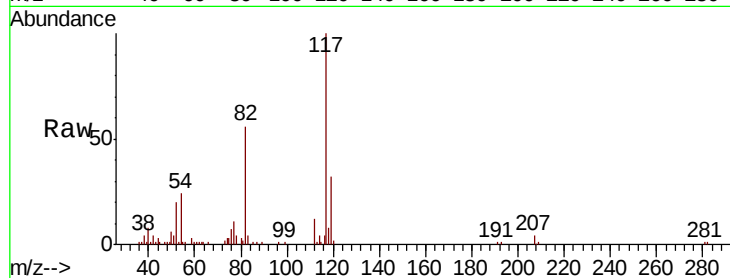
112 100

114 31.9 25.2 37.8

Manual Integrations
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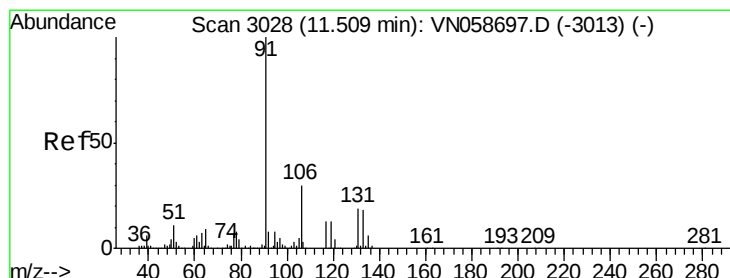
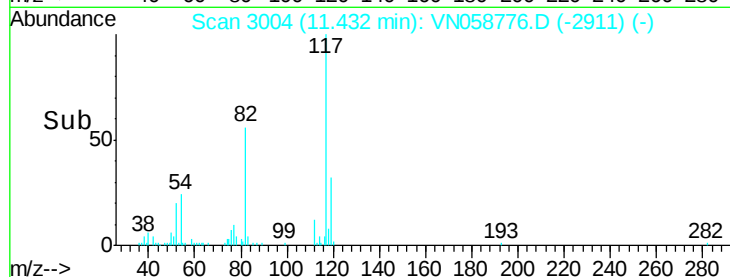
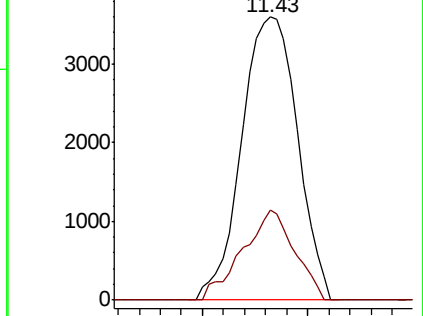
MMDadoda

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Abundance Ion 111.90 (111.60 to 112.60): V

Ion 113.90 (113.60 to 114.60): V



#66

1,1,1,2-Tetrachloroethane

Concen: 0.542 ug/l

RT: 11.50 min Scan# 3026

Delta R.T. -0.01 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

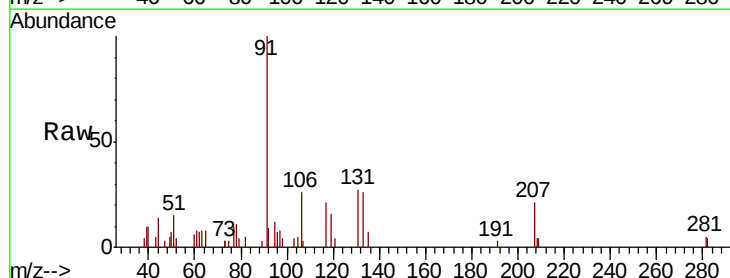
Tgt Ion:131 Resp: 2451

Ion Ratio Lower Upper

131 100

133 120.0 47.6 142.9

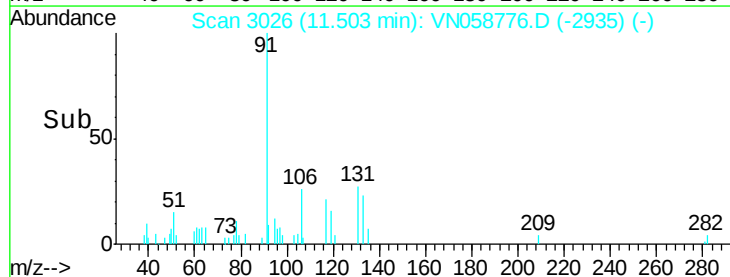
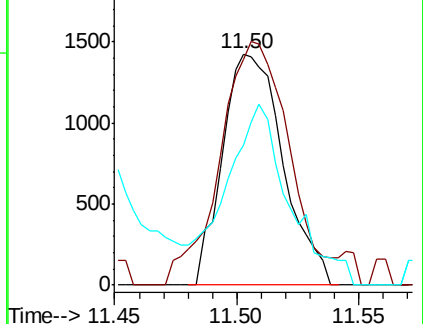
119 0.0 33.0 98.9#



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





#67

Ethyl Benzene

Concen: 0.506 ug/l

RT: 11.51 min Scan# 3028

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion: 91 Resp: 11046

Ion Ratio Lower Upper

91 100

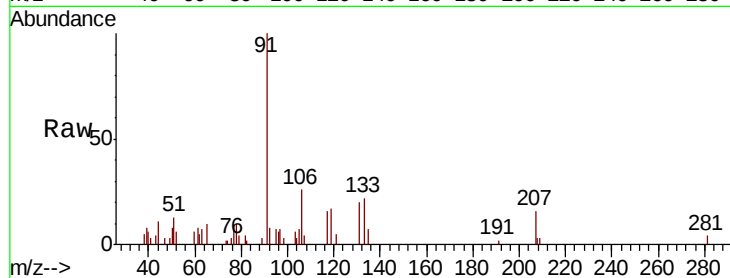
106 25.8 24.1 36.1

Manual Integrations

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Abundance Ion 91.00 (90.70 to 91.70): VN058697.D (-3013) (-)

Ion 106.00 (105.70 to 106.70): VN058697.D (-3013) (-)

11.51

6000

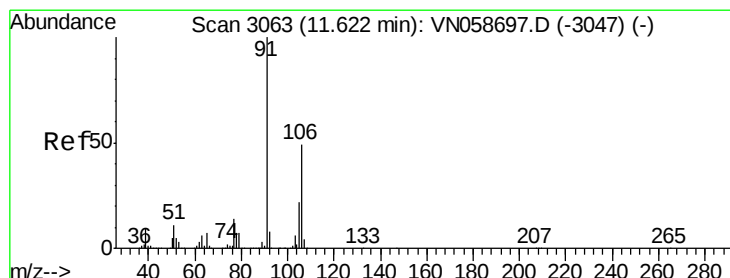
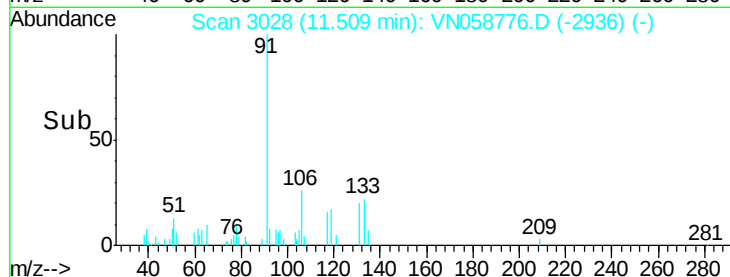
4000

2000

0

11.45 11.50 11.55

Time-->



#68

m/p-Xylenes

Concen: 1.018 ug/l

RT: 11.62 min Scan# 3063

Delta R.T. -0.00 min

Lab File: VN058776.D

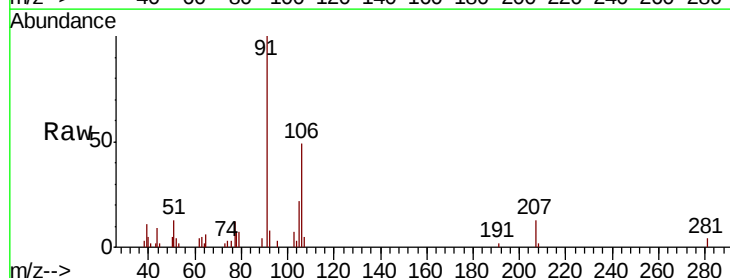
Acq: 15 Oct 2019 12:58

Tgt Ion: 106 Resp: 8333

Ion Ratio Lower Upper

106 100

91 195.1 165.7 248.5



Abundance Ion 106.00 (105.70 to 106.70): VN058697.D (-3047) (-)

Ion 91.00 (90.70 to 91.70): VN058697.D (-3047) (-)

11.62

10000

8000

6000

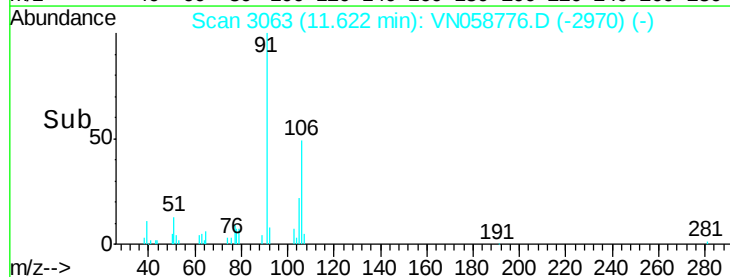
4000

2000

0

11.55 11.60 11.65

Time-->





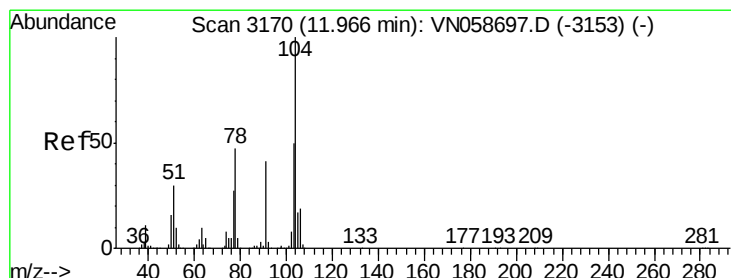
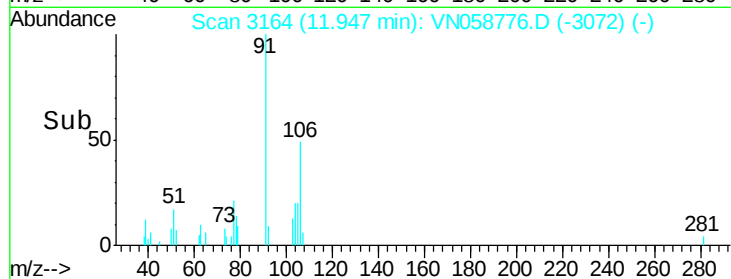
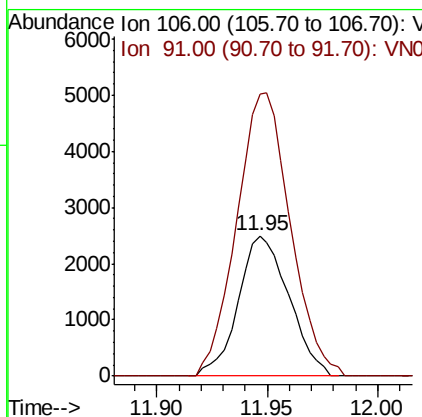
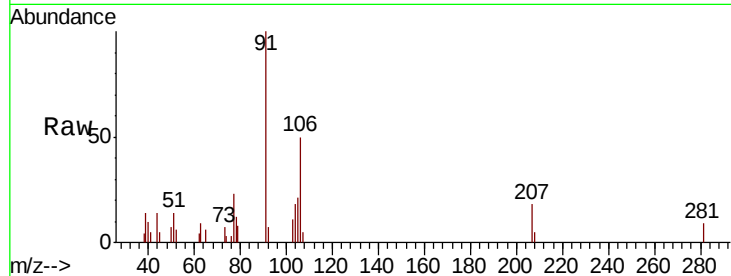
#69
o-Xylene
Concen: 0.501 ug/l
RT: 11.95 min Scan# 3164
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion	Ratio	Lower	Upper
106	100		
91	213.9	110.9	332.9

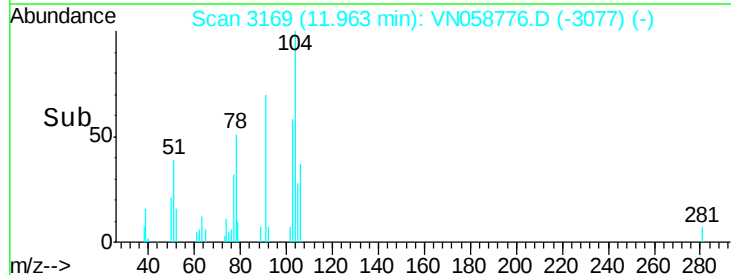
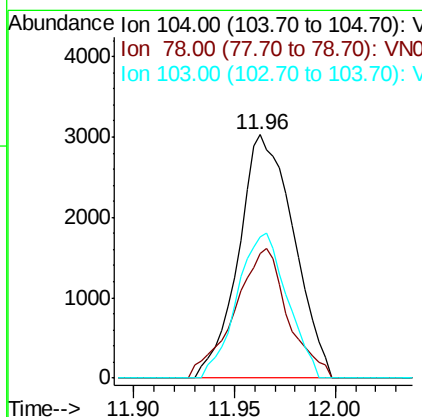
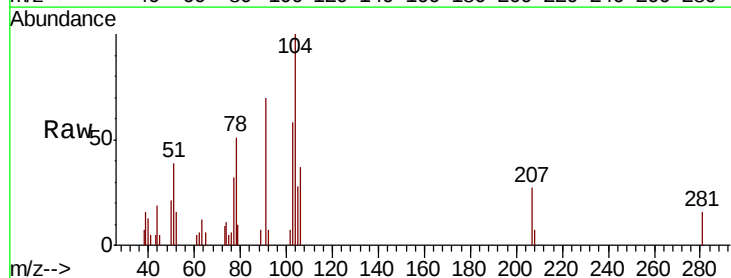
Manual Integrations
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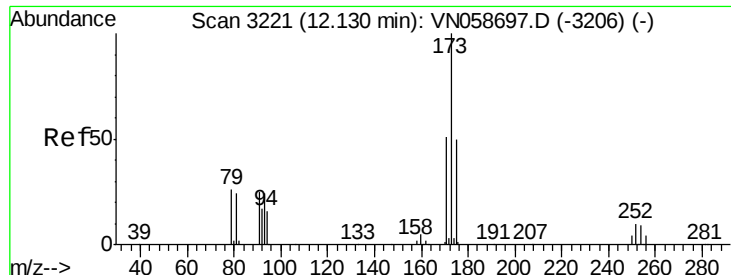
MMDadoda
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#70
Styrene
Concen: 0.445 ug/l
RT: 11.96 min Scan# 3169
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Lower	Upper
104	100		
78	51.4	42.2	63.2
103	54.1	43.7	65.5





#71

Bromoform

Concen: 0.511 ug/l

RT: 12.13 min Scan# 3220

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

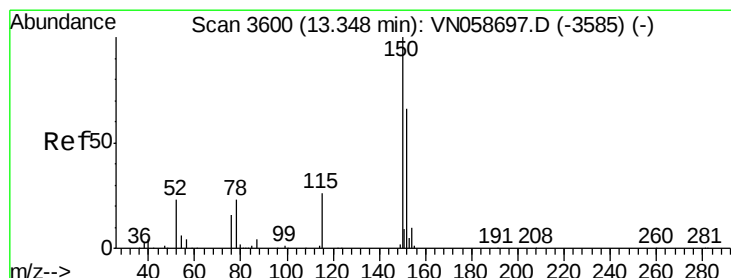
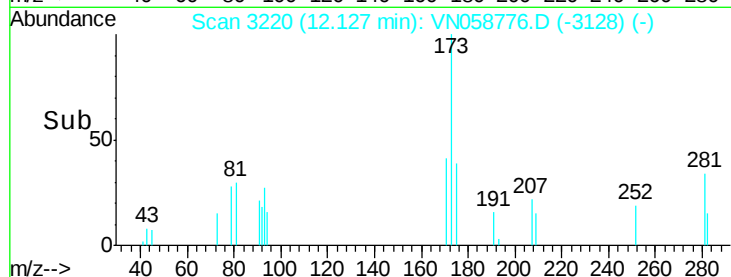
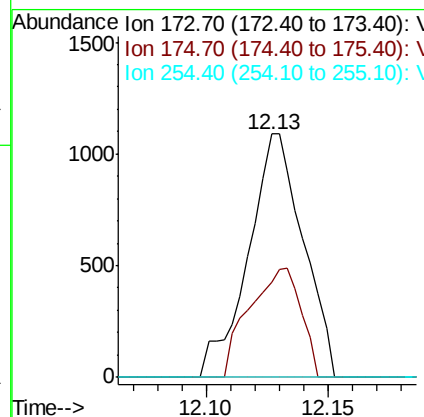
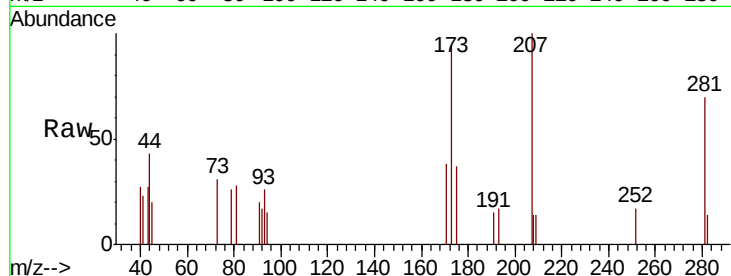
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
173	100		
175	42.5	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

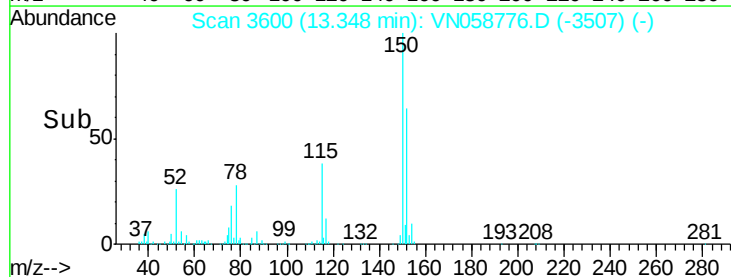
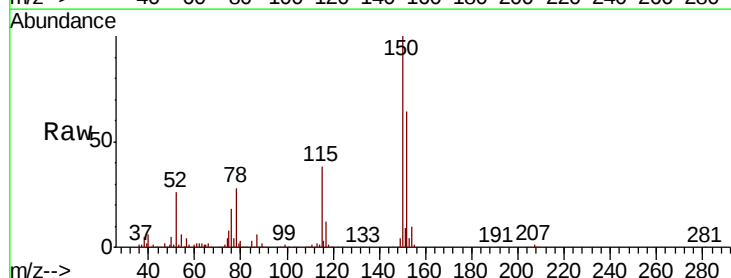
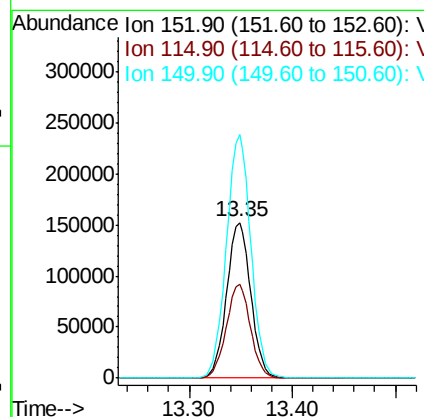
RT: 13.35 min Scan# 3600

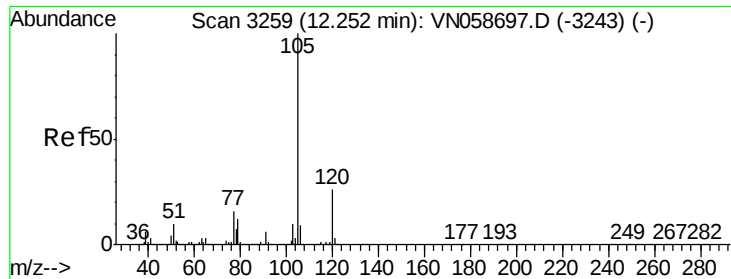
Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Lower	Upper
152	100		
115	60.0	30.4	91.2
150	158.4	0.0	345.4





#73

Isopropylbenzene

Concen: 0.540 ug/l

RT: 12.25 min Scan# 3258

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion:105 Resp: 9673

Ion Ratio Lower Upper

105 100

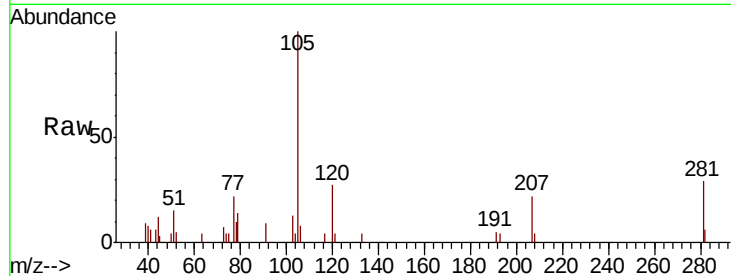
120 24.8 13.1 39.1

Manual Integrations

APPROVED

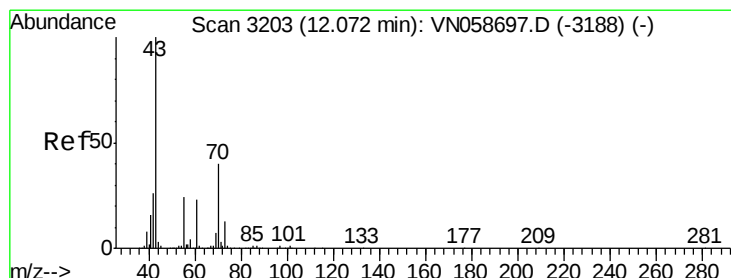
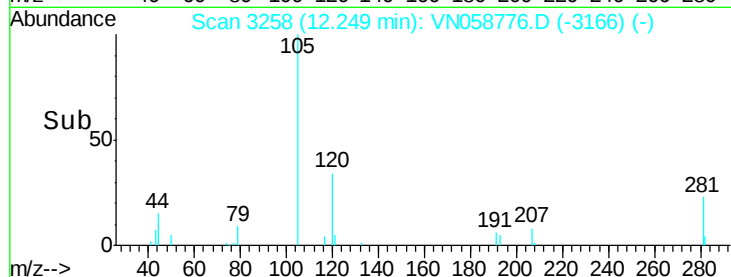
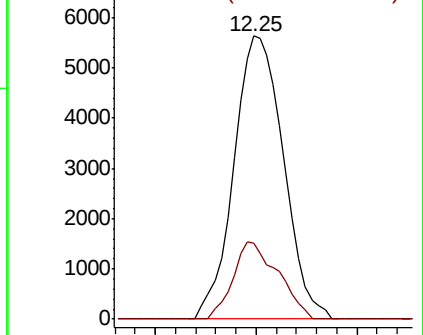
MMDadoda

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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: 0.486 ug/l

RT: 12.07 min Scan# 3203

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Tgt Ion: 43 Resp: 3914

Ion Ratio Lower Upper

43 100

70 36.7 32.2 48.4

55 26.0 19.6 29.4

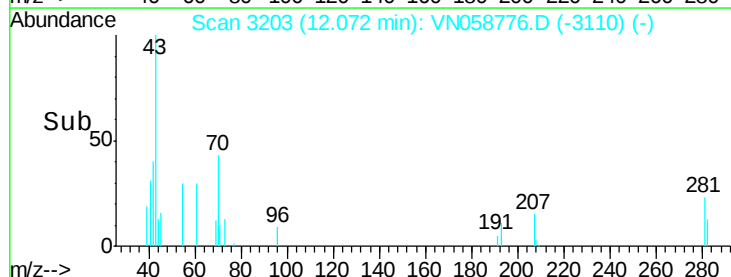
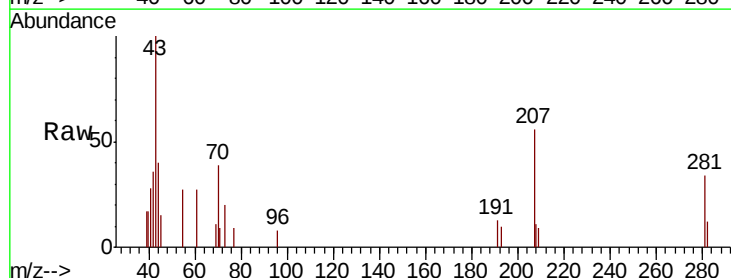
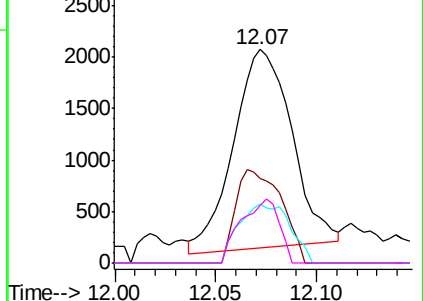
61 21.1 18.6 28.0

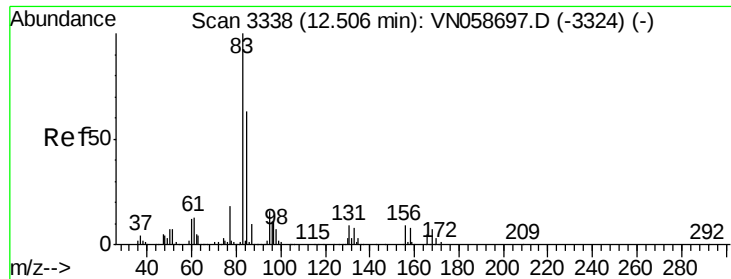
Abundance Ion 43.00 (42.70 to 43.70): V

Ion 70.00 (69.70 to 70.70): V

Ion 55.00 (54.70 to 55.70): V

Ion 61.00 (60.70 to 61.70): V





#75

1,1,2,2-Tetrachloroethane

Concen: 0.605 ug/l

RT: 12.50 min Scan# 3337

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

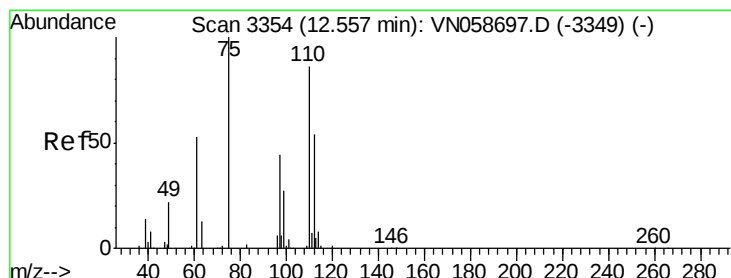
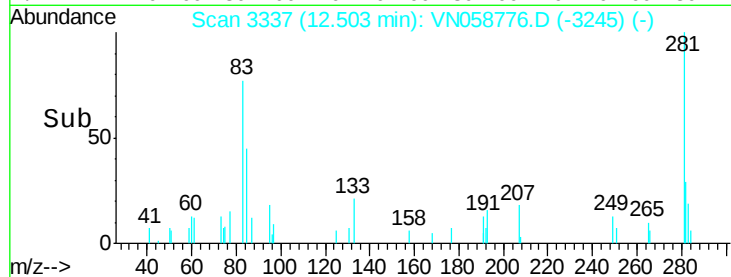
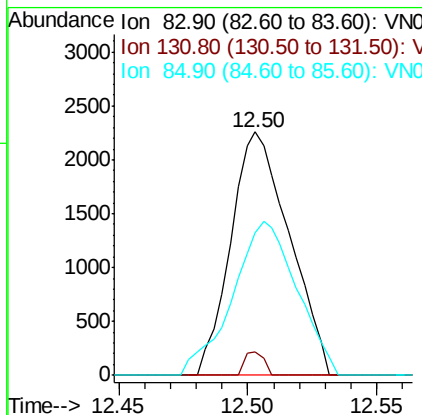
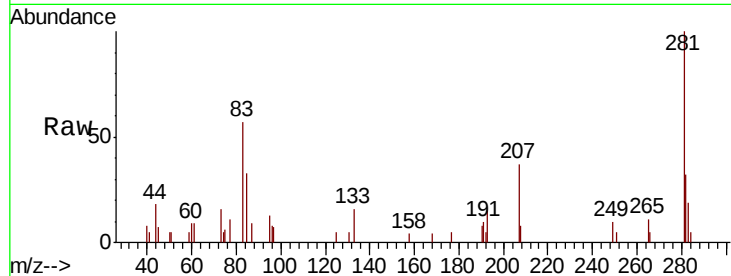
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion:	83	Resp:	3571
Ion Ratio	Lower	Upper	
83	100		
131	3.1	4.8	14.4#
85	69.7	31.9	95.5

Manual Integrations
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#76

1,2,3-Trichloropropane

Concen: 0.765 ug/l m

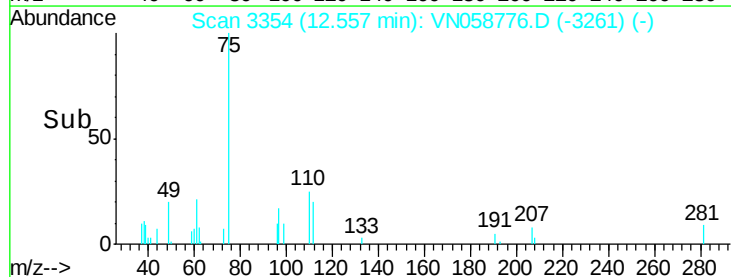
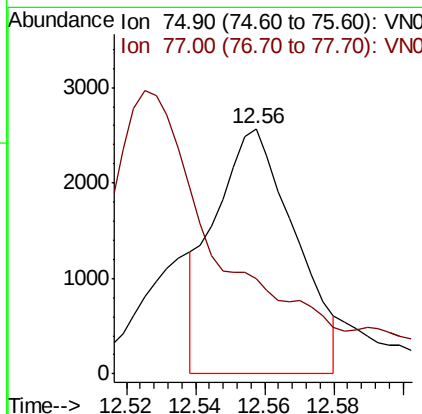
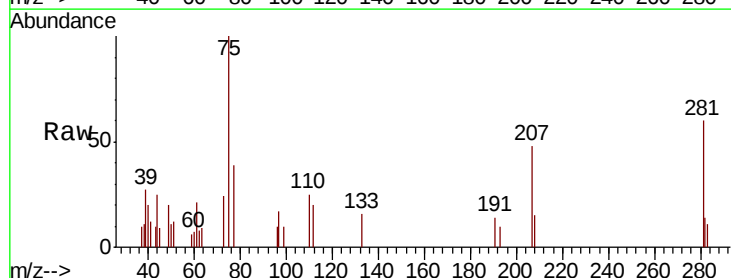
RT: 12.56 min Scan# 3354

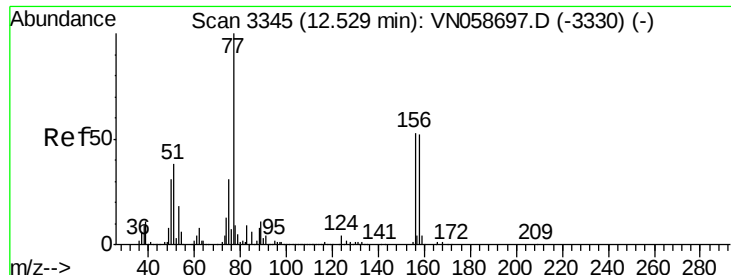
Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Tgt Ion:	75	Resp:	4153
Ion Ratio	Lower	Upper	
75	100		
77	0.0	0.0	0.0





#77

Bromobenzene

Concen: 0.657 ug/l

RT: 12.53 min Scan# 3345

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

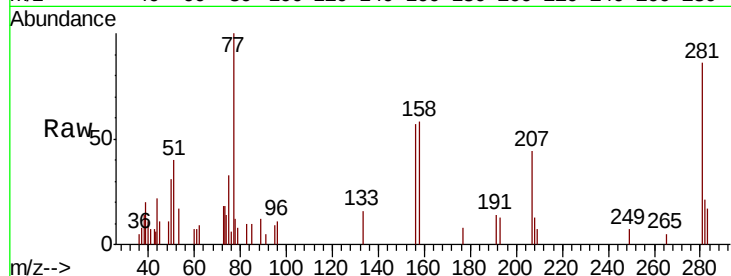
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion:	156	Resp:	2865
Ion Ratio	Lower	Upper	
156	100		
77	245.1	115.8	347.3
158	96.6	48.9	146.6

Manual Integrations
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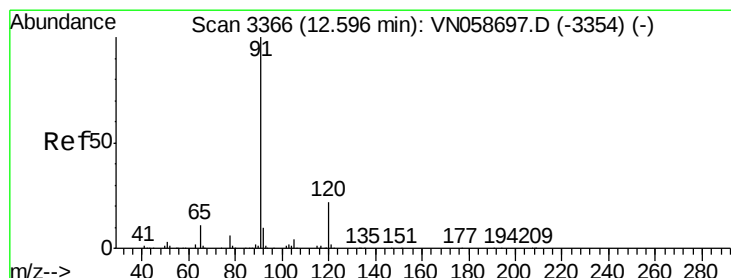
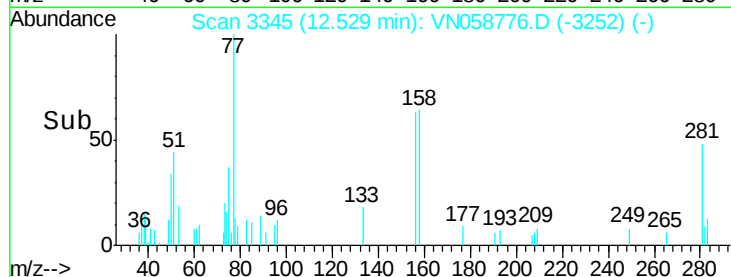
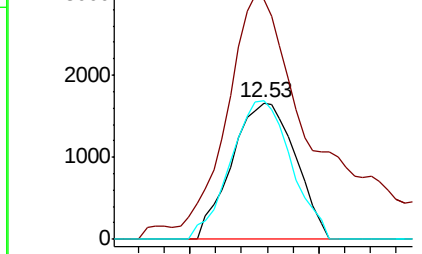
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Abundance Ion 155.80 (155.50 to 156.50): V

Ion 77.00 (76.70 to 77.70): VN

Ion 157.80 (157.50 to 158.50): V



#78

n-propylbenzene

Concen: 0.584 ug/l

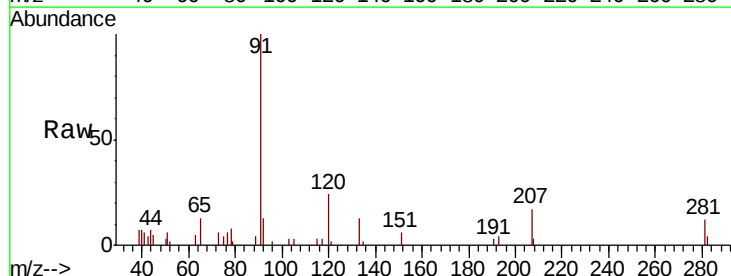
RT: 12.60 min Scan# 3366

Delta R.T. -0.00 min

Lab File: VN058776.D

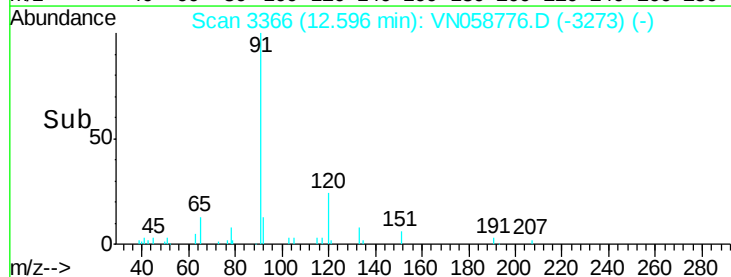
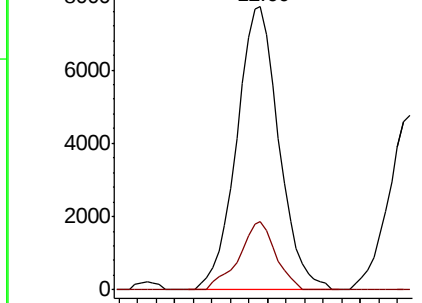
Acq: 15 Oct 2019 12:58

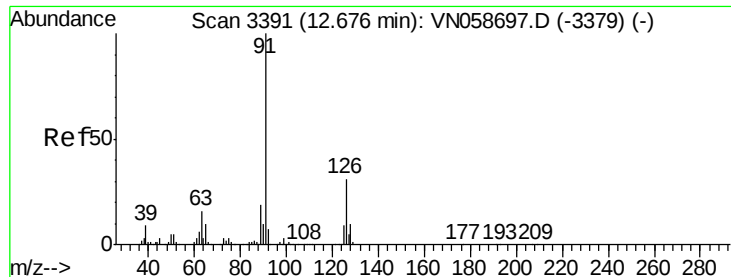
Tgt Ion:	91	Resp:	12186
Ion Ratio	Lower	Upper	
91	100		
120	20.7	11.1	33.3



Abundance Ion 91.00 (90.70 to 91.70): VN

Ion 120.00 (119.70 to 120.70): V





#79

2-Chlorotoluene

Concen: 0.597 ug/l

RT: 12.68 min Scan# 3391

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion: 91 Resp: 7739

Ion Ratio Lower Upper

91 100

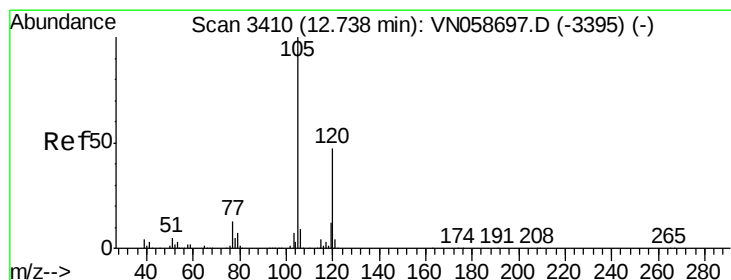
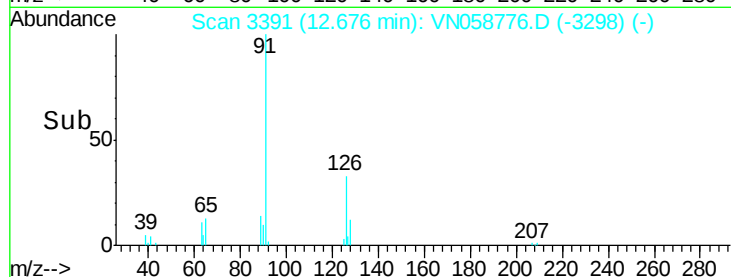
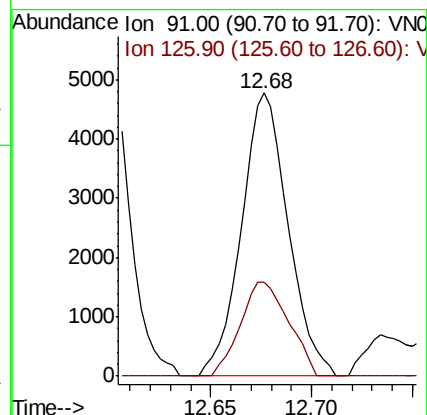
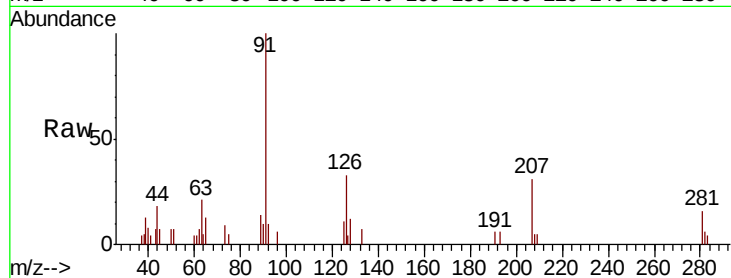
126 34.3 16.2 48.5

Manual Integrations

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#80

1,3,5-Trimethylbenzene

Concen: 0.558 ug/l

RT: 12.74 min Scan# 3410

Delta R.T. -0.00 min

Lab File: VN058776.D

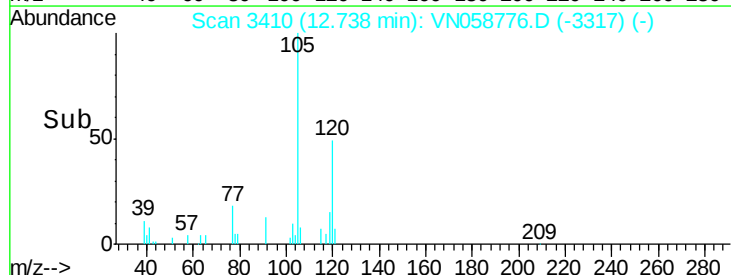
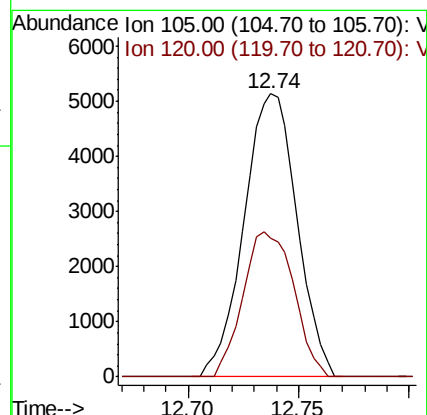
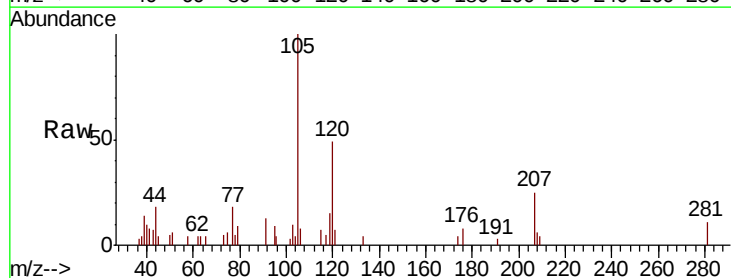
Acq: 15 Oct 2019 12:58

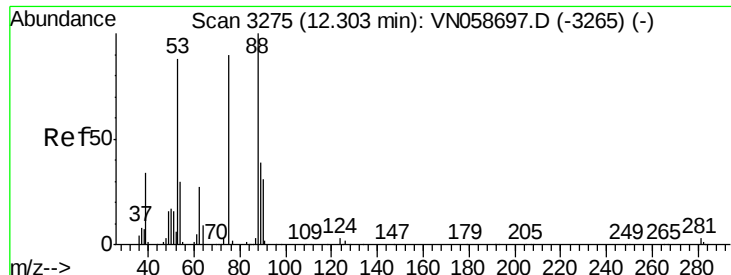
Tgt Ion: 105 Resp: 8535

Ion Ratio Lower Upper

105 100

120 49.1 23.4 70.2





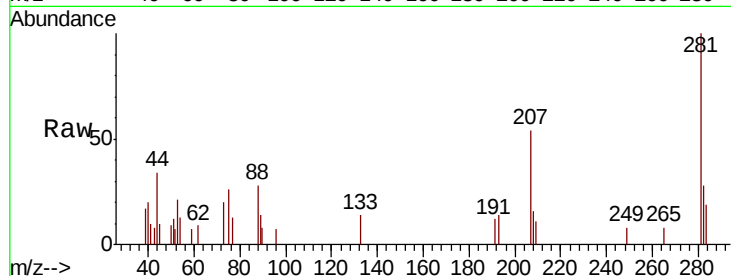
#81
trans-1,4-Dichloro-2-butene
Concen: 0.589 ug/l m
RT: 12.30 min Scan# 3273
Delta R.T. -0.01 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

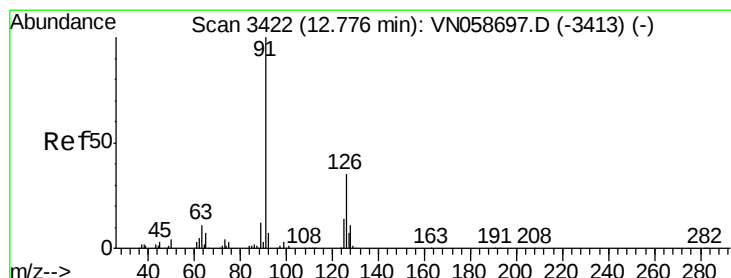
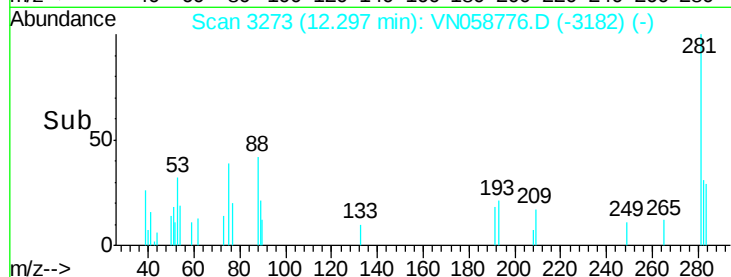
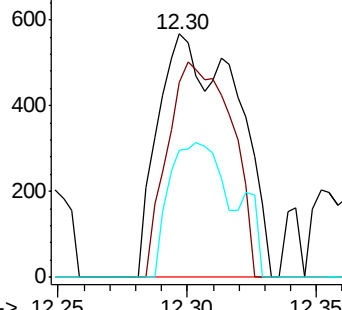
Tot Ion	Ratio	Lower	Upper
75	100		
53	0.0	78.4	117.6#
89	2.6	34.9	52.3#

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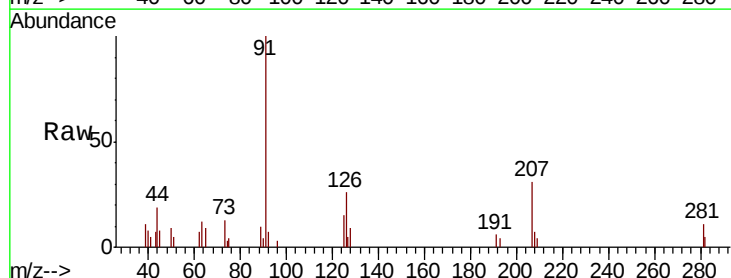


Abundance Ion 74.90 (74.60 to 75.60): VN0
Ion 53.00 (52.70 to 53.70): VN0
Ion 88.90 (88.60 to 89.60): VN0

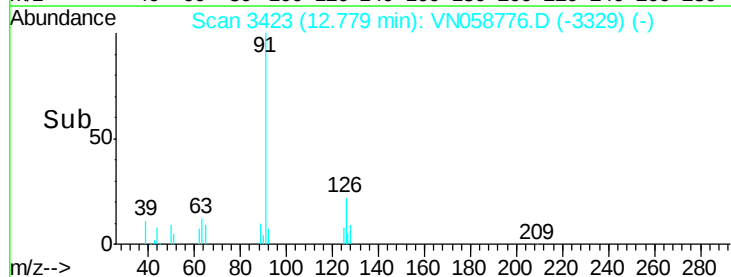
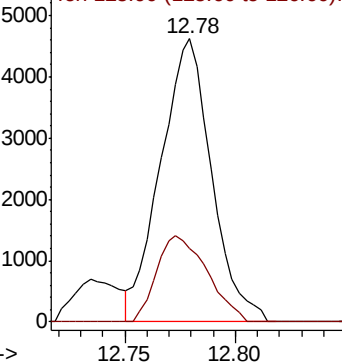


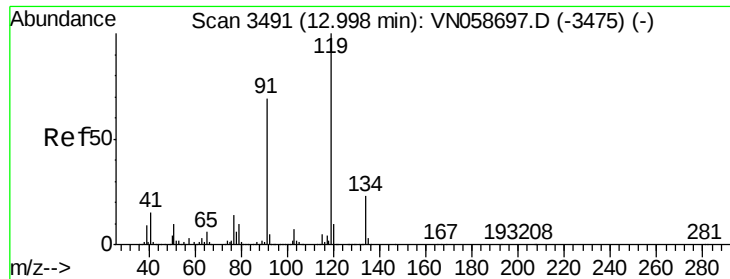
#82
4-Chlorotoluene
Concen: 0.559 ug/l
RT: 12.78 min Scan# 3423
Delta R.T. 0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Lower	Upper
91	100		
126	30.0	15.9	47.6



Abundance Ion 91.00 (90.70 to 91.70): VN0
Ion 125.90 (125.60 to 126.60): V





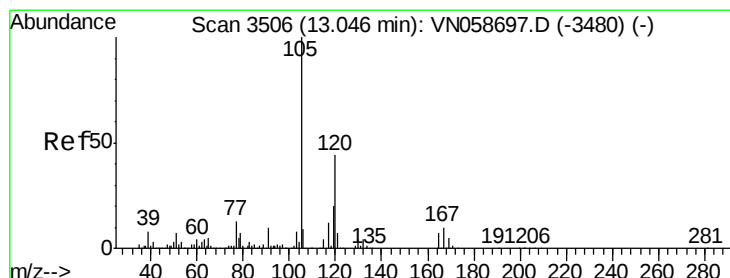
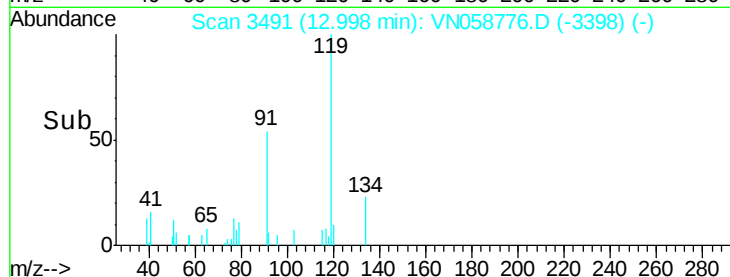
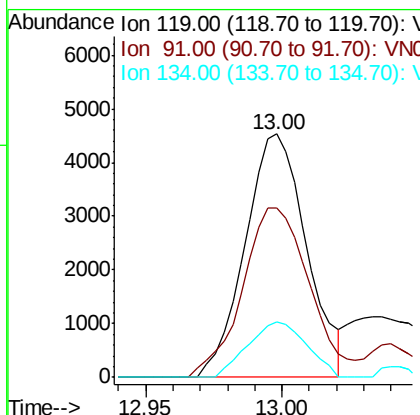
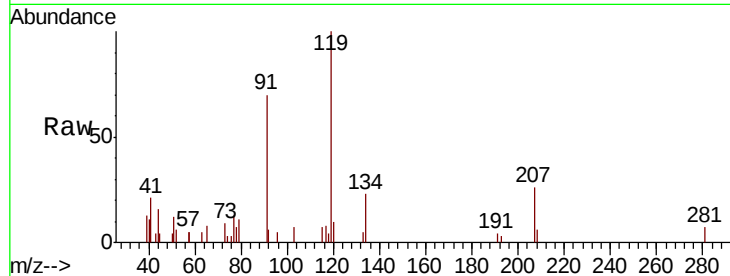
#83
tert-Butylbenzene
Concen: 0.540 ug/l
RT: 13.00 min Scan# 3491
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion	Ratio	Lower	Upper
119	100		
91	75.9	33.8	101.3
134	21.8	12.6	37.6

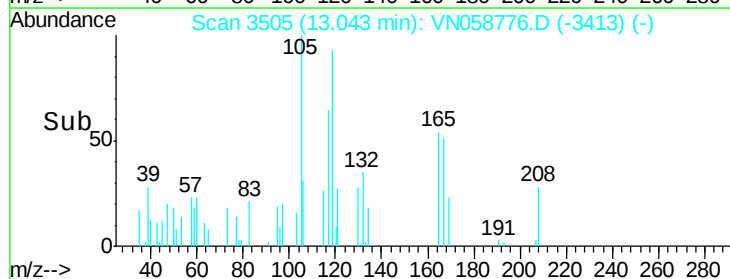
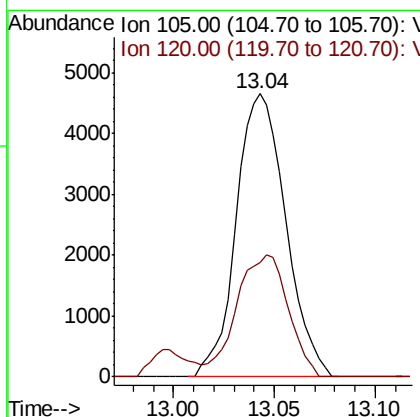
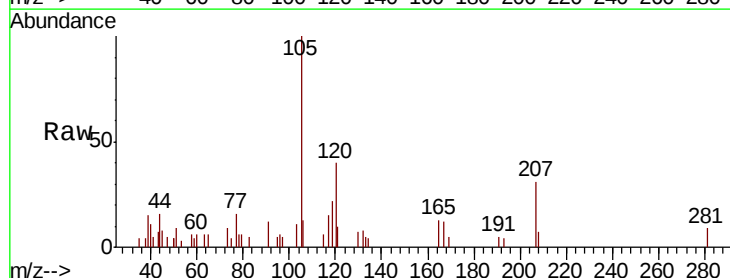
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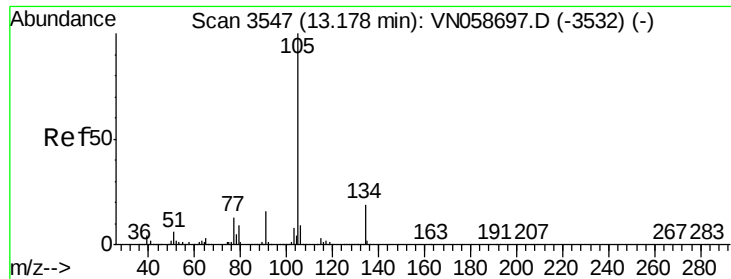
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#84
1,2,4-Trimethylbenzene
Concen: 0.527 ug/l
RT: 13.04 min Scan# 3506
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Lower	Upper
105	100		
120	44.9	21.9	65.7





#85

sec-Butylbenzene

Concen: 0.510 ug/l

RT: 13.18 min Scan# 3547

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion:105 Resp: 8804

Ion Ratio Lower Upper

105 100

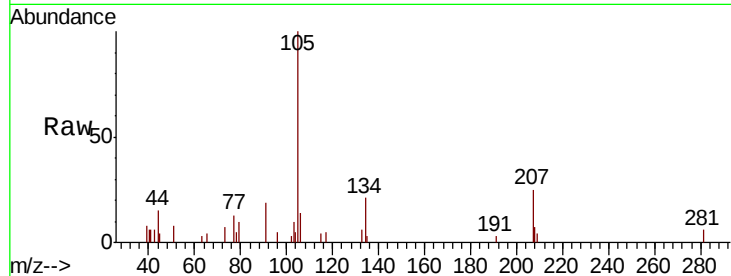
134 21.4 9.7 29.1

Manual Integrations

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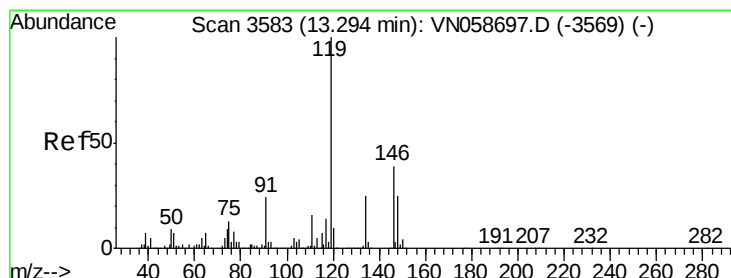
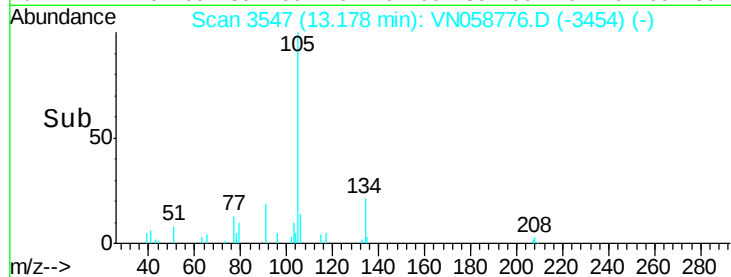
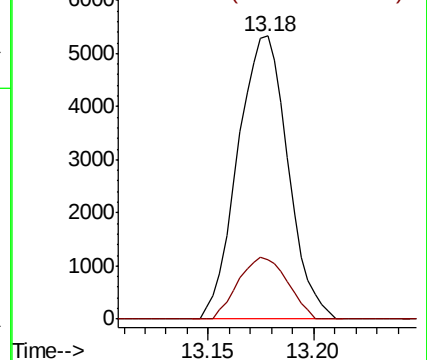
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Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V



#86

p-Isopropyltoluene

Concen: 0.472 ug/l

RT: 13.29 min Scan# 3583

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

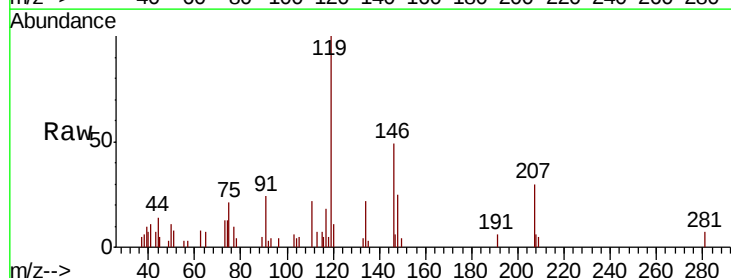
Tgt Ion:119 Resp: 7413

Ion Ratio Lower Upper

119 100

134 23.0 12.7 38.1

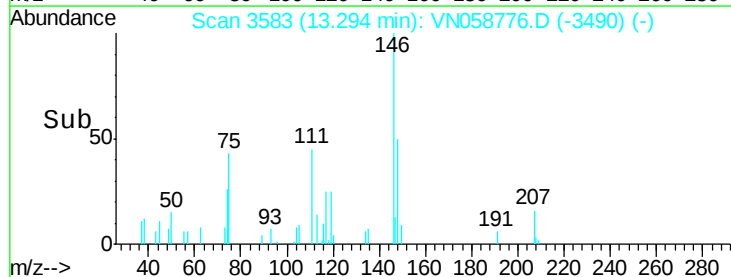
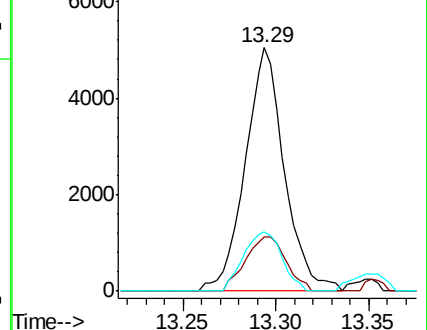
91 24.0 11.9 35.5

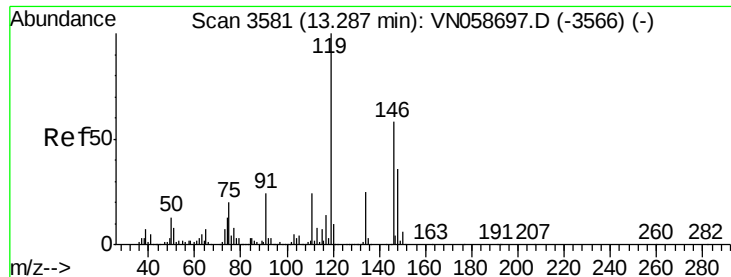


Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): V





#87

1,3-Dichlorobenzene

Concen: 0.566 ug/l

RT: 13.29 min Scan# 3582

Delta R.T. 0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

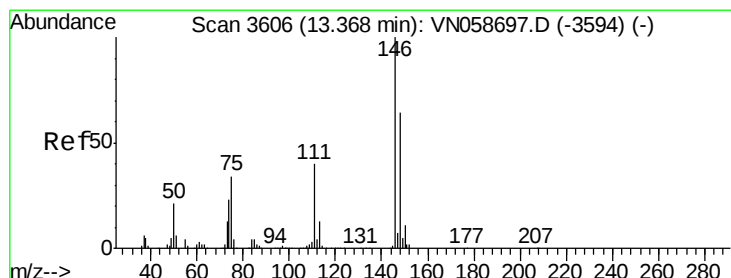
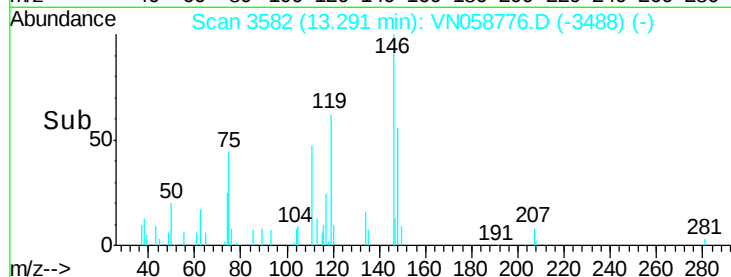
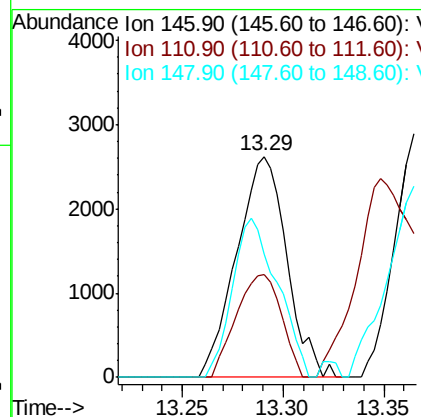
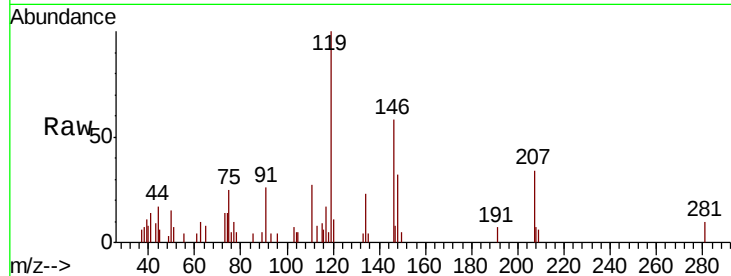
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion:	146	Resp:	4548
Ion	Ratio	Lower	Upper
146	100		
111	42.0	20.5	61.6
148	65.2	31.3	93.9

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#88

1,4-Dichlorobenzene

Concen: 0.602 ug/l m

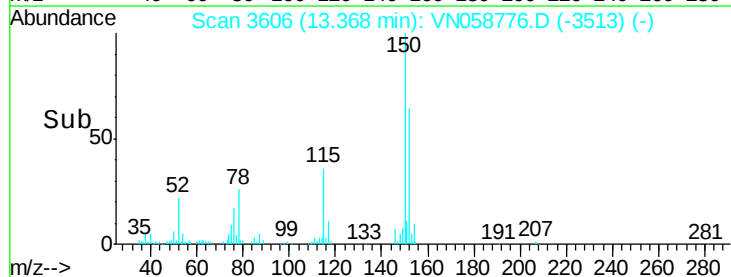
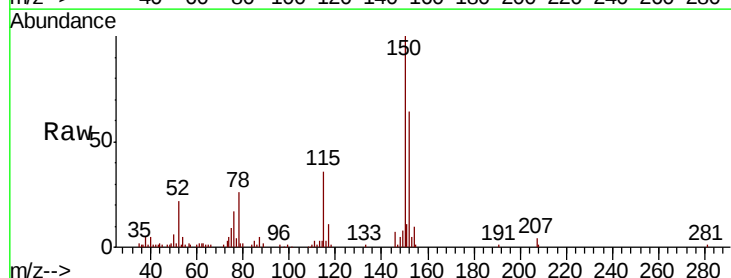
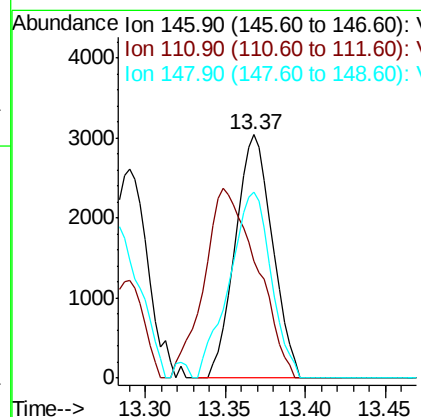
RT: 13.37 min Scan# 3606

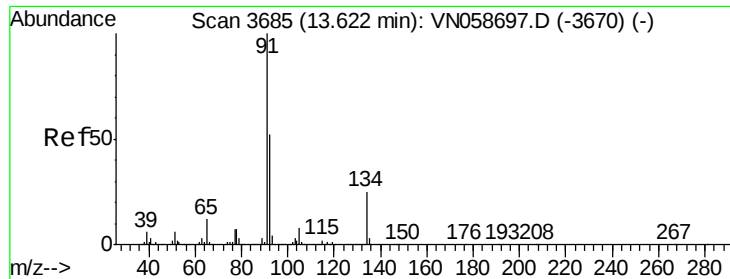
Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Tgt Ion:	146	Resp:	4919
Ion	Ratio	Lower	Upper
146	100		
111	38.9	20.1	60.2
148	60.3	31.9	95.7





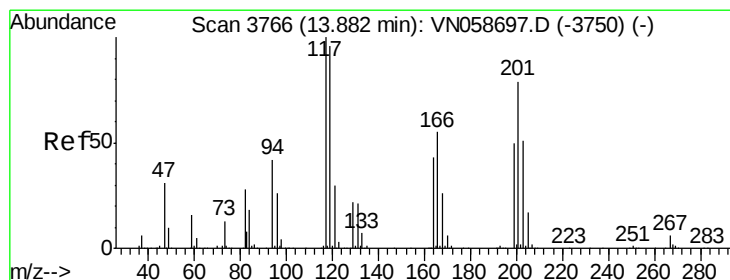
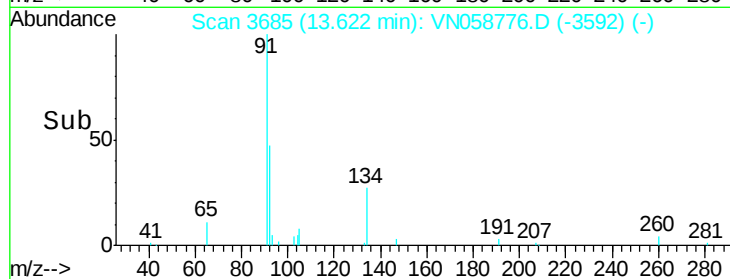
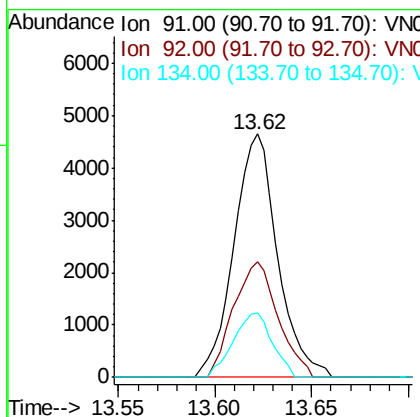
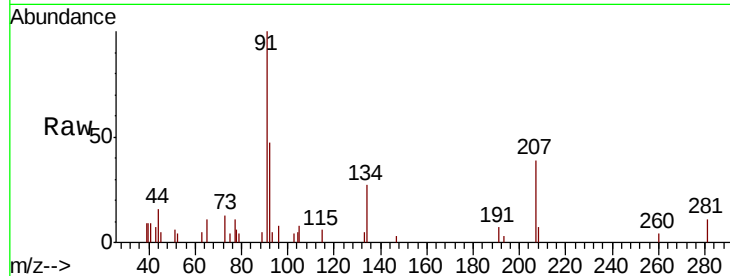
#89
n-Butylbenzene
Concen: 0.502 ug/l
RT: 13.62 min Scan# 3685
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

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

Tot Ion	Ion	Ratio	Lower	Upper
91	100			
92	48.1	26.0	78.0	
134	23.5	12.2	36.6	

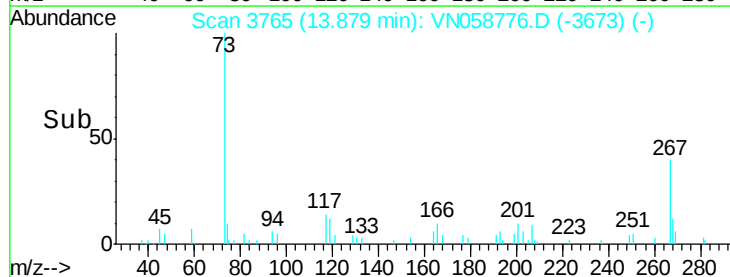
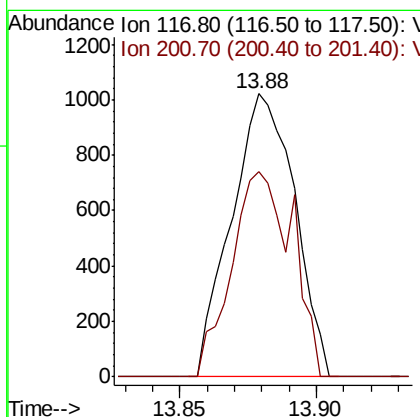
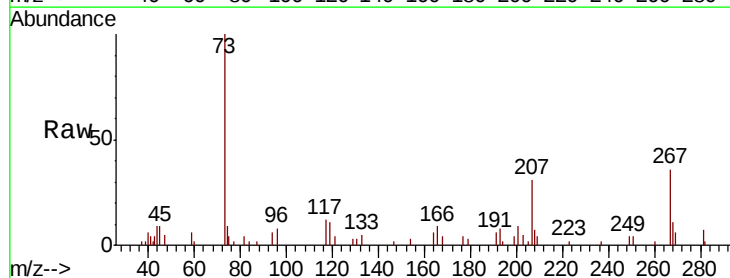
Manual Integrations
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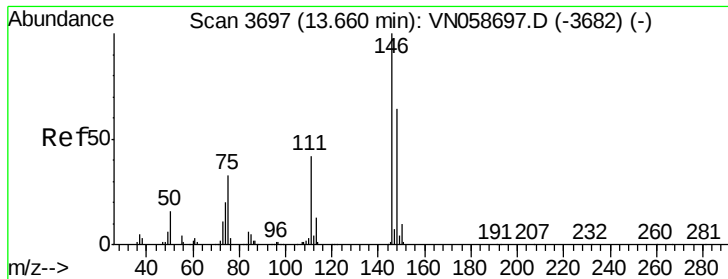
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#90
Hexachloroethane
Concen: 0.584 ug/l
RT: 13.88 min Scan# 3765
Delta R.T. -0.00 min
Lab File: VN058776.D
Acq: 15 Oct 2019 12:58

Tgt Ion	Ion	Ratio	Lower	Upper
117	100			
201	69.8	39.6	118.7	





#91

1,2-Dichlorobenzene

Concen: 0.604 ug/l

RT: 13.66 min Scan# 3697

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

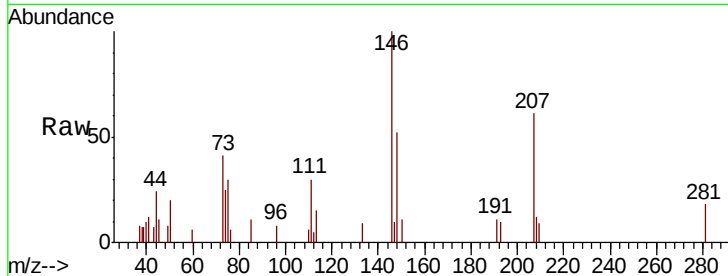
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

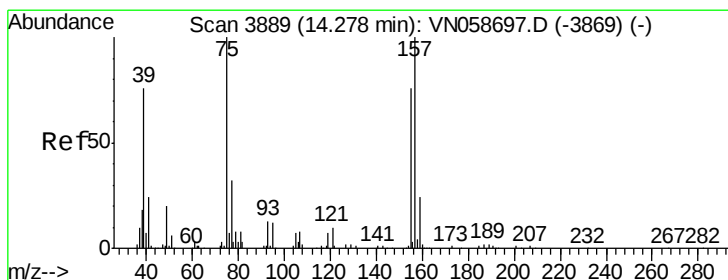
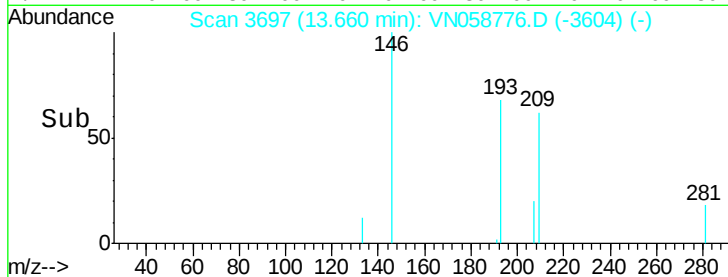
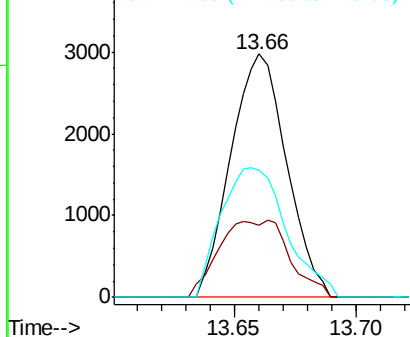
Tot Ion:	146	Resp:	4731
Ion Ratio	Lower	Upper	
146	100		
111	39.8	21.1	63.4
148	62.7	31.8	95.3

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Abundance Ion 145.90 (145.60 to 146.60): V
Ion 110.90 (110.60 to 111.60): V
Ion 147.90 (147.60 to 148.60): V



#92

1,2-Dibromo-3-Chloropropane

Concen: 0.690 ug/l

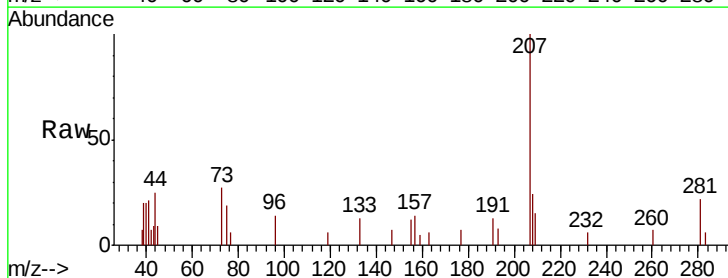
RT: 14.28 min Scan# 3889

Delta R.T. -0.00 min

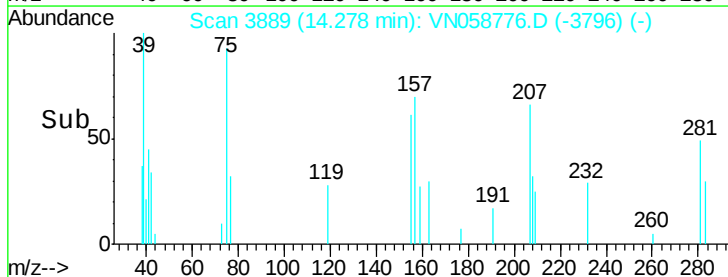
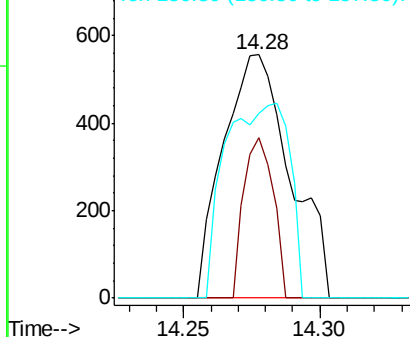
Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Tgt Ion:	75	Resp:	951
Ion Ratio	Lower	Upper	
75	100		
155	28.8	37.9	113.6#
157	76.6	49.4	148.2



Abundance Ion 74.90 (74.60 to 75.60): V
Ion 154.80 (154.50 to 155.50): V
Ion 156.80 (156.50 to 157.50): V





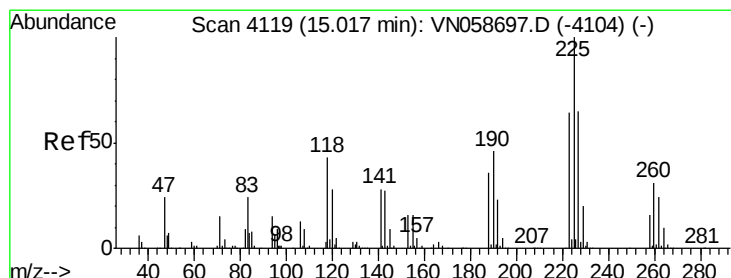
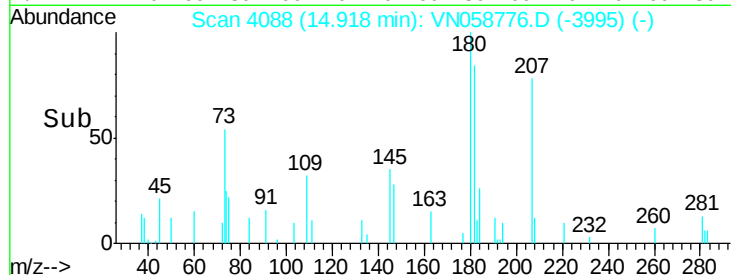
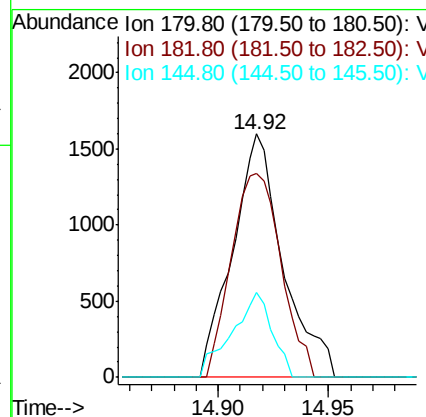
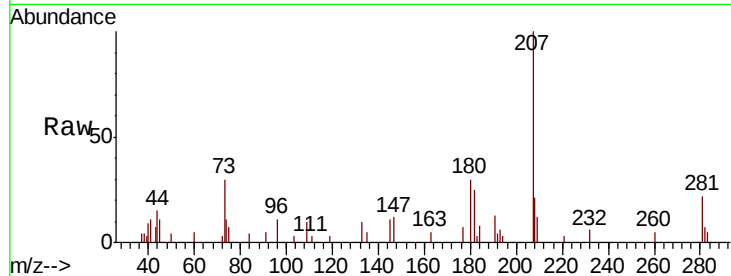
#93
 1,2,4-Trichlorobenzene
 Concen: 0.531 ug/l
 RT: 14.92 min Scan# 4088
 Delta R.T. -0.00 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

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

Tot Ion	Ratio	Lower	Upper
180	100		
182	82.6	47.4	142.2
145	27.7	15.4	46.2

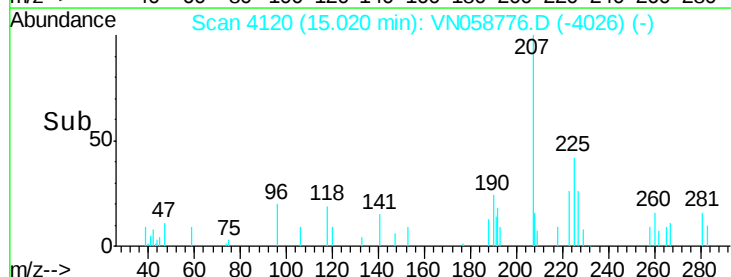
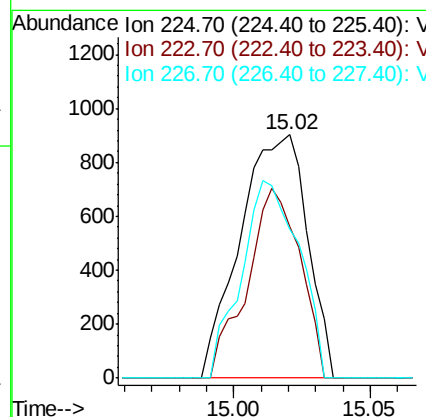
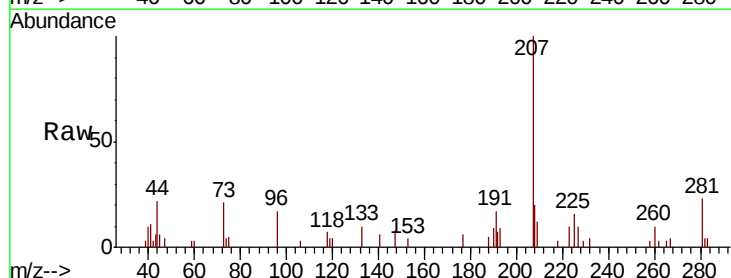
Manual Integrations
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#94
 Hexachlorobutadiene
 Concen: 0.612 ug/l
 RT: 15.02 min Scan# 4120
 Delta R.T. 0.00 min
 Lab File: VN058776.D
 Acq: 15 Oct 2019 12:58

Tgt Ion	Ratio	Lower	Upper
225	100		
223	61.5	32.3	96.8
227	69.8	32.4	97.0





#95

Naphthalene

Concen: 0.514 ug/l

RT: 15.13 min Scan# 4155

Delta R.T. -0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Instrument :

MSVOA_N

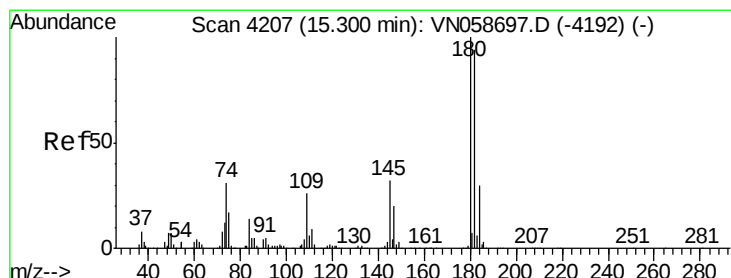
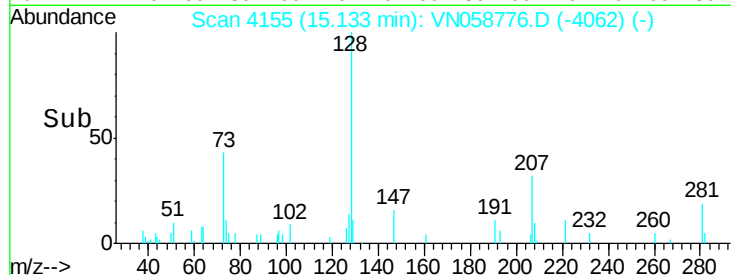
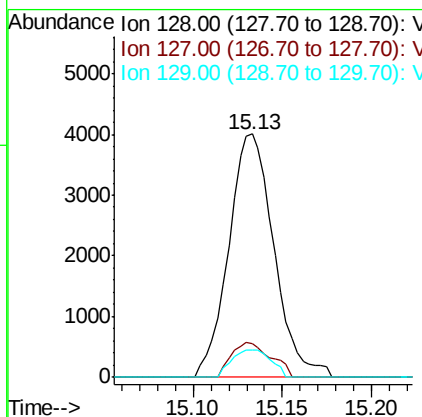
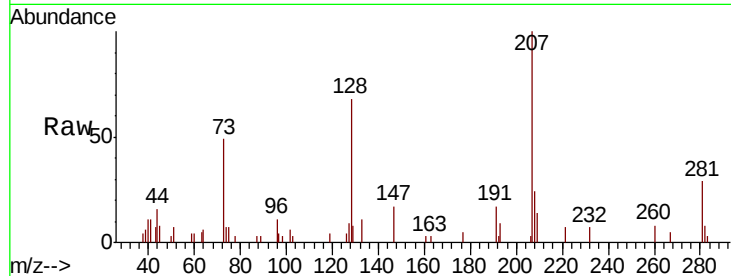
ClientSampleId :

MDL-MDL-WATER-03-QT4-2019DL

Tot Ion:	128	Resp:	7052
Ion Ratio	Lower	Upper	
128	100		
127	12.6	10.2	15.4
129	9.8	8.5	12.7

Manual Integrations
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#96

1,2,3-Trichlorobenzene

Concen: 0.535 ug/l

RT: 15.30 min Scan# 4208

Delta R.T. 0.00 min

Lab File: VN058776.D

Acq: 15 Oct 2019 12:58

Tgt Ion:	180	Resp:	2496
Ion Ratio	Lower	Upper	
180	100		
182	92.7	47.3	142.0
145	16.7	16.2	48.6

