

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN101519\
 Data File : VN058774.D
 Acq On : 15 Oct 2019 12:14
 Operator : JC/SP
 Sample : K5111-09 0.5PPB MDL
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 6 Sample Multiplier: 1

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

Manual Integrations
 APPROVED

MMDadoda
 10/18/2019 12:42:32 AM

Quant Time: Oct 16 04:31:49 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	351833	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.57	114	578130	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	518173	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	209831	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.01	65	257611	52.30	ug/l	0.00
Spiked Amount	50.000		Recovery	=	104.60%	
35) Dibromofluoromethane	7.57	113	180910	50.66	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.32%	
50) Toluene-d8	10.08	98	664889	46.56	ug/l	0.00
Spiked Amount	50.000		Recovery	=	93.12%	
62) 4-Bromofluorobenzene	12.40	95	225633	41.74	ug/l	0.00
Spiked Amount	50.000		Recovery	=	83.48%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.83	85	2170	0.495	ug/l	99
3) Chloromethane	2.04	50	2874	0.552	ug/l	95
4) Vinyl Chloride	2.17	62	2551	0.492	ug/l	96
5) Bromomethane	2.56	94	2021m	0.640	ug/l	
6) Chloroethane	2.69	64	1743	0.545	ug/l #	79
7) Trichlorofluoromethane	3.00	101	3041	0.490	ug/l	97
8) Diethyl Ether	3.39	74	934	0.407	ug/l #	28
9) 1,1,2-Trichlorotrifluoroet	3.73	101	1813m	0.512	ug/l	
10) Methyl Iodide	3.93	142	1885	0.390	ug/l #	82
11) Tert butyl alcohol	4.76	59	2414m	3.026	ug/l	
12) 1,1-Dichloroethene	3.72	96	1787m	0.529	ug/l	
13) Acrolein	3.59	56	1700	2.650	ug/l #	61
14) Allyl chloride	4.29	41	3728	0.547	ug/l #	72
15) Acrylonitrile	4.97	53	4915m	2.443	ug/l	
16) Acetone	3.80	43	6368	3.123	ug/l	89
17) Carbon Disulfide	4.03	76	6712	0.621	ug/l #	89
18) Methyl Acetate	4.31	43	3499	0.676	ug/l #	89
19) Methyl tert-butyl Ether	5.02	73	5928	0.491	ug/l	99
20) Methylene Chloride	4.52	84	2834	0.665	ug/l #	82
21) trans-1,2-Dichloroethene	5.01	96	2006m	0.531	ug/l	
22) Diisopropyl ether	5.93	45	5671m	0.428	ug/l	
23) Vinyl Acetate	5.88	43	23843	2.229	ug/l	99
24) 1,1-Dichloroethane	5.81	63	3942m	0.522	ug/l	
25) 2-Butanone	6.82	43	7480	2.538	ug/l #	89
26) 2,2-Dichloropropane	6.81	77	4335	0.629	ug/l #	68
27) cis-1,2-Dichloroethene	6.80	96	2276m	0.516	ug/l	
28) Bromochloromethane	7.18	49	1569	0.597	ug/l #	76
29) Tetrahydrofuran	7.19	42	4448	2.335	ug/l #	71
30) Chloroform	7.36	83	4616	0.608	ug/l	98
31) Cyclohexane	7.64	56	11520	1.595	ug/l #	19
32) 1,1,1-Trichloroethane	7.56	97	3333	0.515	ug/l #	37
36) 1,1-Dichloropropene	7.77	75	2855	0.488	ug/l #	85
37) Ethyl Acetate	6.92	43	2535	0.429	ug/l #	72
38) Carbon Tetrachloride	7.76	117	2636m	0.463	ug/l	

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

39) Methylcyclohexane	9.07	83	2744	0.405	ug/l #	82
40) Benzene	8.02	78	8309	0.495	ug/l	93
41) Methacrylonitrile	7.14	41	981m	0.355	ug/l	
42) 1,2-Dichloroethane	8.11	62	3677	0.570	ug/l #	78
43) Isopropyl Acetate	8.15	43	4200	0.417	ug/l #	88
44) Trichloroethene	8.82	130	2356	0.565	ug/l	79
45) 1,2-Dichloropropane	9.11	63	2212	0.492	ug/l	97
46) Dibromomethane	9.20	93	1480	0.519	ug/l	91
47) Bromodichloromethane	9.39	83	2719	0.469	ug/l #	92
48) Methyl methacrylate	9.19	41	2249	0.493	ug/l #	85
49) 1,4-Dioxane	9.19	88	630	8.921	ug/l #	59
51) 4-Methyl-2-Pentanone	9.98	43	12930	2.286	ug/l	98
52) Toluene	10.15	92	5370	0.523	ug/l	98
53) t-1,3-Dichloropropene	10.38	75	4450	0.669	ug/l #	40
54) cis-1,3-Dichloropropene	9.83	75	3517	0.498	ug/l	92
55) 1,1,2-Trichloroethane	10.55	97	2268	0.540	ug/l	89
56) Ethyl methacrylate	10.42	69	2415	0.393	ug/l #	77
57) 1,3-Dichloropropane	10.71	76	3272	0.457	ug/l #	86
58) 2-Chloroethyl Vinyl ether	9.69	63	6139	2.075	ug/l	94
59) 2-Hexanone	10.75	43	9881	2.261	ug/l	93
60) Dibromochloromethane	10.90	129	1777	0.410	ug/l	100
61) 1,2-Dibromoethane	11.00	107	2047	0.486	ug/l	92
64) Tetrachloroethene	10.63	164	2189	0.604	ug/l	91
65) Chlorobenzene	11.43	112	5170	0.491	ug/l	96
66) 1,1,1,2-Tetrachloroethane	11.51	131	1996	0.513	ug/l #	54
67) Ethyl Benzene	11.51	91	8806	0.469	ug/l	99
68) m/p-Xylenes	11.62	106	6109	0.868	ug/l	99
69) o-Xylene	11.95	106	2821	0.414	ug/l	100
70) Styrene	11.97	104	4135	0.370	ug/l	92
71) Bromoform	12.13	173	1227	0.430	ug/l #	78
73) Isopropylbenzene	12.25	105	7579	0.499	ug/l	95
74) N-amyl acetate	12.07	43	2715	0.398	ug/l	95
75) 1,1,2,2-Tetrachloroethane	12.51	83	2989	0.597	ug/l #	93
76) 1,2,3-Trichloropropane	12.56	75	3615m	0.785	ug/l	
77) Bromobenzene	12.53	156	2154	0.583	ug/l	84
78) n-propylbenzene	12.59	91	9500	0.536	ug/l	98
79) 2-Chlorotoluene	12.68	91	5685	0.517	ug/l	95
80) 1,3,5-Trimethylbenzene	12.74	105	6187	0.477	ug/l	97
81) trans-1,4-Dichloro-2-buten	12.31	75	1352m	0.787	ug/l	
82) 4-Chlorotoluene	12.78	91	5707	0.506	ug/l	99
83) tert-Butylbenzene	13.00	119	5595	0.503	ug/l	98
84) 1,2,4-Trimethylbenzene	13.04	105	5662	0.440	ug/l	87
85) sec-Butylbenzene	13.18	105	6609	0.451	ug/l	87
86) p-Isopropyltoluene	13.29	119	5805	0.436	ug/l	94
87) 1,3-Dichlorobenzene	13.29	146	3458	0.507	ug/l	92
88) 1,4-Dichlorobenzene	13.37	146	3971m	0.573	ug/l	
89) n-Butylbenzene	13.62	91	5197	0.422	ug/l	98
90) Hexachloroethane	13.88	117	1351	0.567	ug/l	81
91) 1,2-Dichlorobenzene	13.66	146	3292	0.496	ug/l	93
92) 1,2-Dibromo-3-Chloropropan	14.27	75	897	0.767	ug/l #	52

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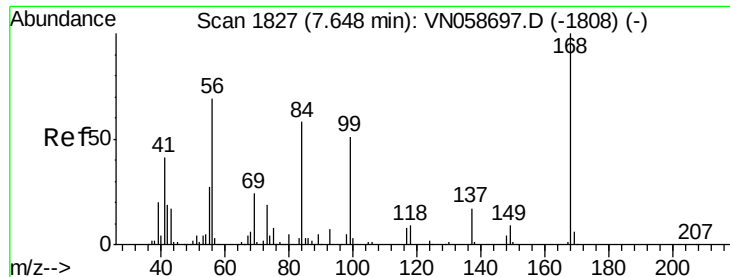
Manual Integrations
APPROVED

MMDadoda
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	14.92	180	1846	0.455	ug/l	85
94) Hexachlorobutadiene	15.01	225	1172	0.549	ug/l	95
95) Naphthalene	15.13	128	5590	0.480	ug/l	97
96) 1,2,3-Trichlorobenzene	15.30	180	1909	0.482	ug/l #	86

(#) = 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: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion:168 Resp: 351833

Ion Ratio Lower Upper

168 100

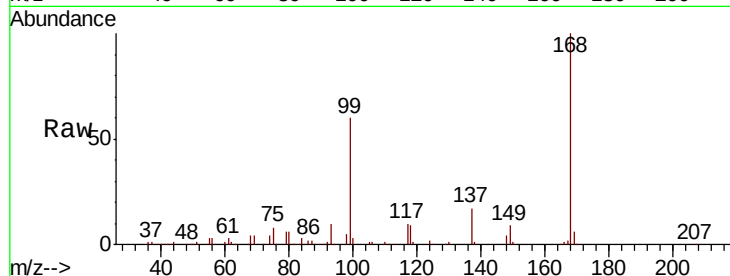
99 60.2 47.5 71.3

Manual Integrations

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10/18/2019 12:42:32 AM



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.65

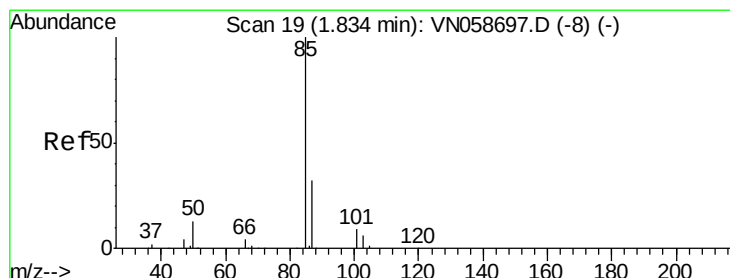
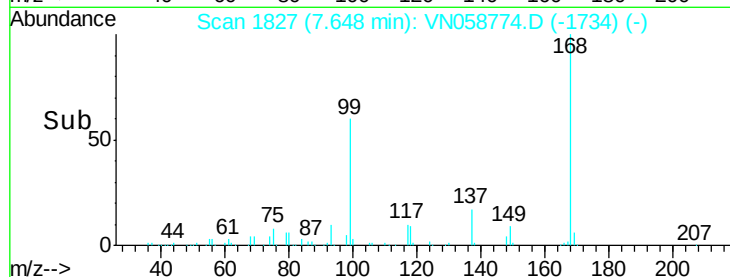
150000

100000

50000

0

Time--> 7.50 7.60 7.70 7.80



#2

Dichlorodifluoromethane

Concen: 0.495 ug/l

RT: 1.83 min Scan# 19

Delta R.T. -0.00 min

Lab File: VN058774.D

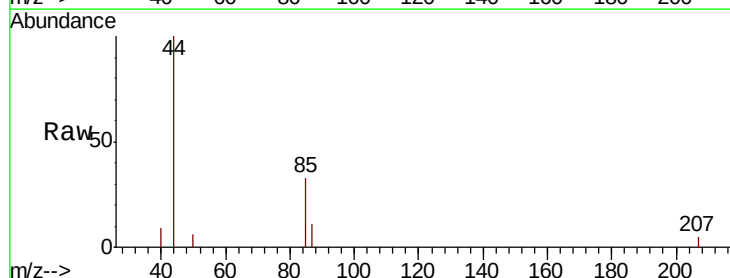
Acq: 15 Oct 2019 12:14

Tgt Ion: 85 Resp: 2170

Ion Ratio Lower Upper

85 100

87 32.1 16.2 48.6



Abundance Ion 84.90 (84.60 to 85.60): VNO

Ion 86.90 (86.60 to 87.60): VNO

1.83

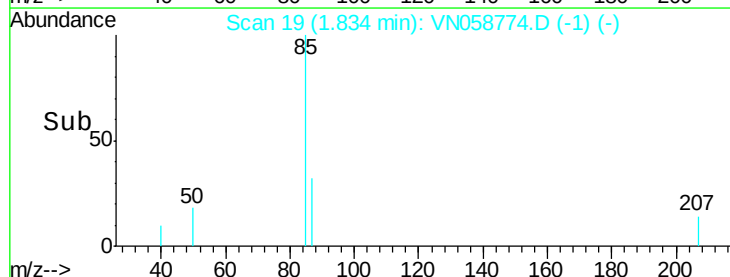
1500

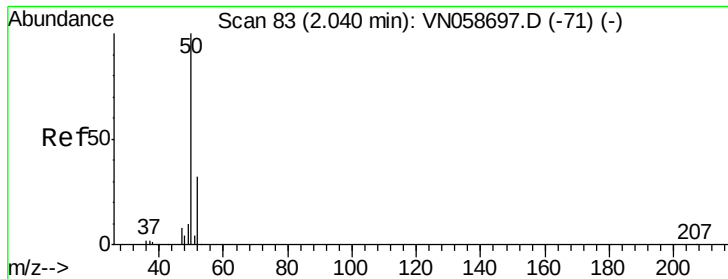
1000

500

0

Time--> 1.80 1.85





#3

Chloromethane

Concen: 0.552 ug/l

RT: 2.04 min Scan# 84

Delta R.T. 0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion: 50 Resp: 2874

Ion Ratio Lower Upper

50 100

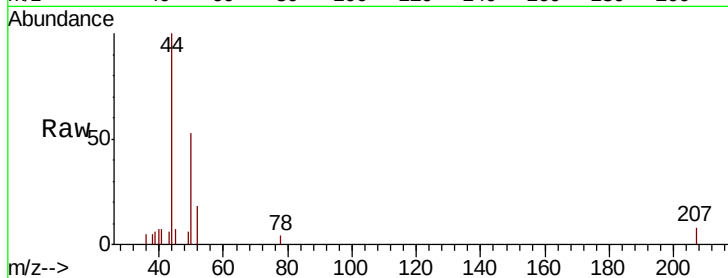
52 34.7 25.8 38.6

Manual Integrations

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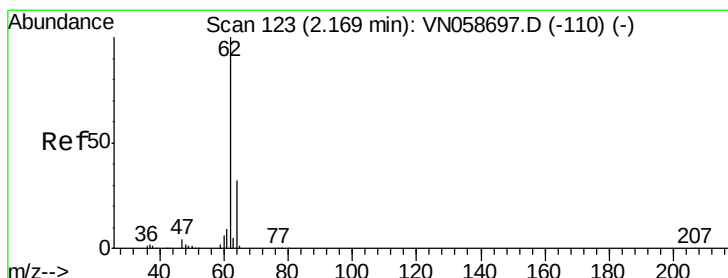
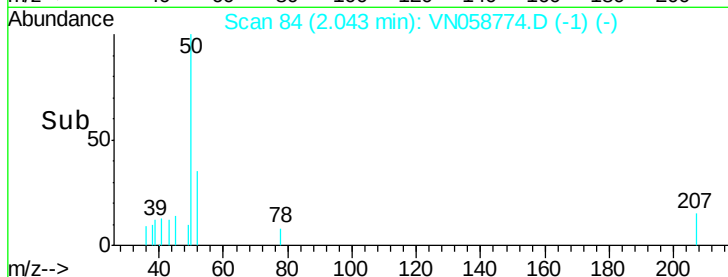
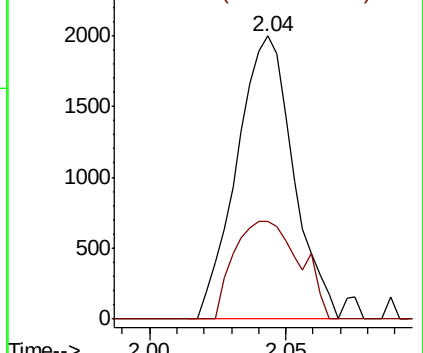
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Abundance Ion 49.90 (49.60 to 50.60): VNO

Ion 51.90 (51.60 to 52.60): VNO



#4

Vinyl Chloride

Concen: 0.492 ug/l

RT: 2.17 min Scan# 122

Delta R.T. -0.00 min

Lab File: VN058774.D

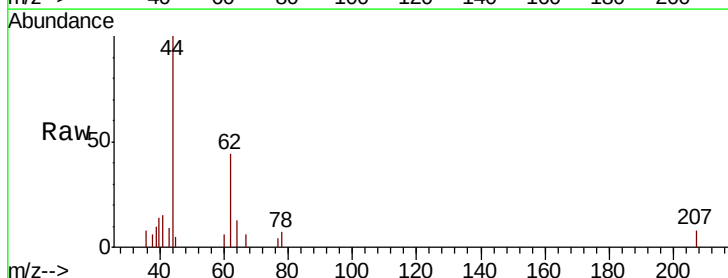
Acq: 15 Oct 2019 12:14

Tgt Ion: 62 Resp: 2551

Ion Ratio Lower Upper

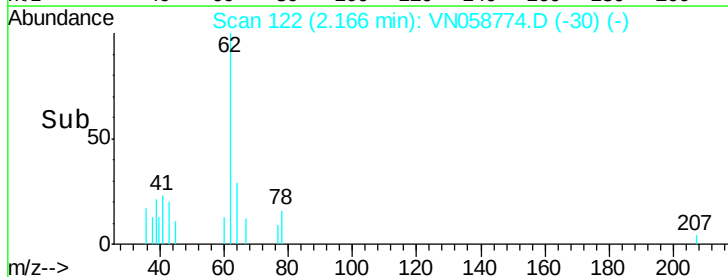
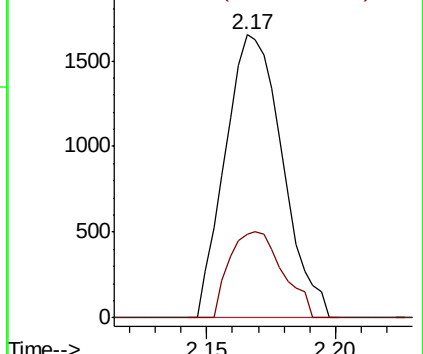
62 100

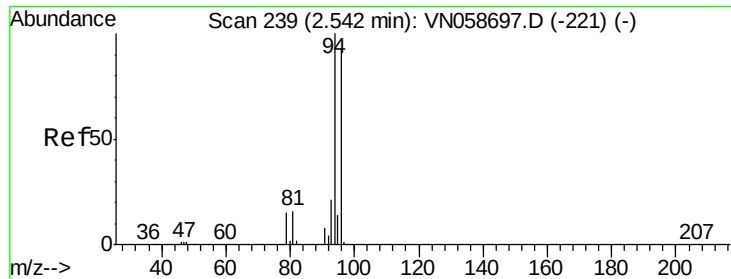
64 29.4 25.3 37.9



Abundance Ion 61.90 (61.60 to 62.60): VNO

Ion 63.90 (63.60 to 64.60): VNO





#5

Bromomethane

Concen: 0.640 ug/l m

RT: 2.56 min Scan# 245

Delta R.T. 0.02 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion: 94 Resp: 2021

Ion Ratio Lower Upper

94 100

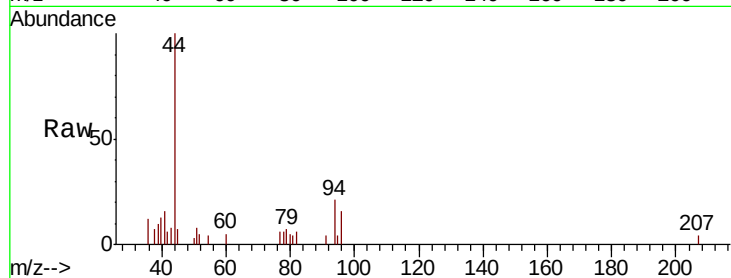
96 78.0 74.5 111.7

Manual Integrations

APPROVED

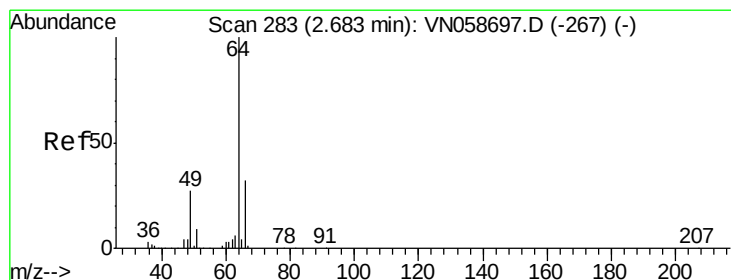
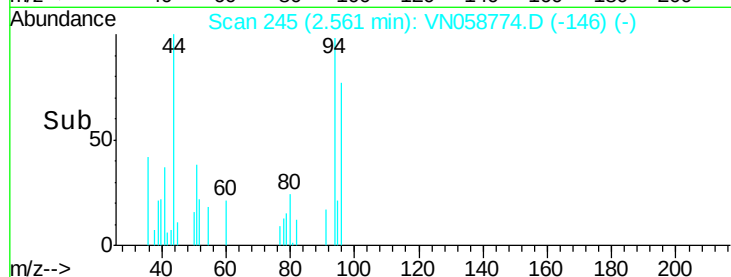
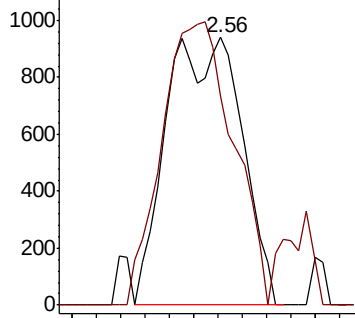
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Abundance Ion 93.90 (93.60 to 94.60): VN0

Ion 95.90 (95.60 to 96.60): VN0



#6

Chloroethane

Concen: 0.545 ug/l

RT: 2.69 min Scan# 285

Delta R.T. 0.01 min

Lab File: VN058774.D

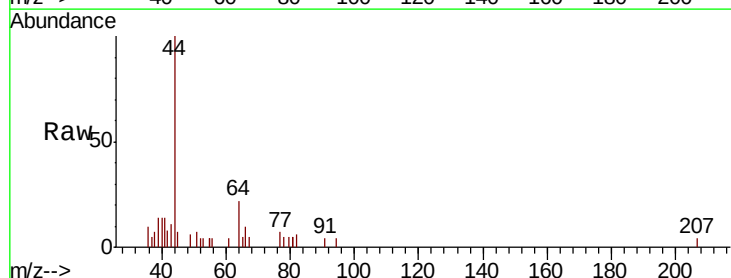
Acq: 15 Oct 2019 12:14

Tgt Ion: 64 Resp: 1743

Ion Ratio Lower Upper

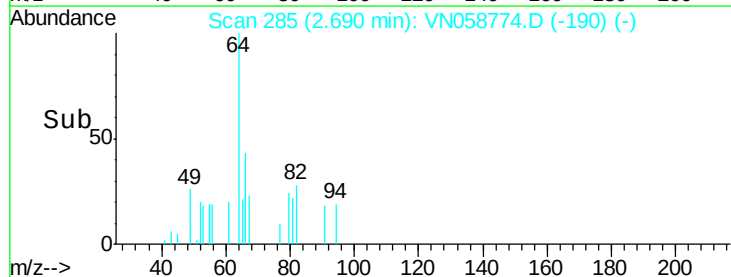
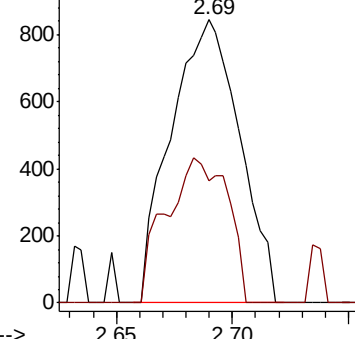
64 100

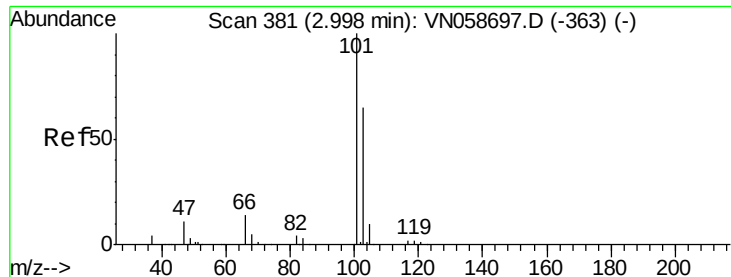
66 43.4 25.4 38.2#



Abundance Ion 63.90 (63.60 to 64.60): VN0

Ion 65.90 (65.60 to 66.60): VN0





#7

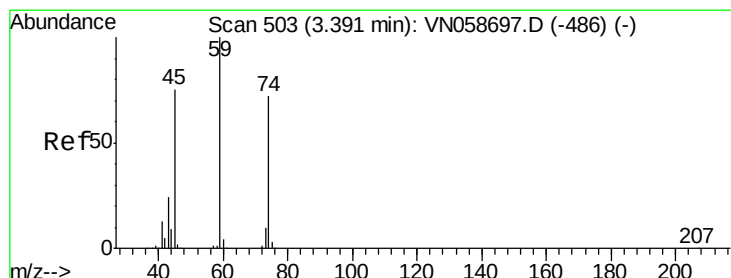
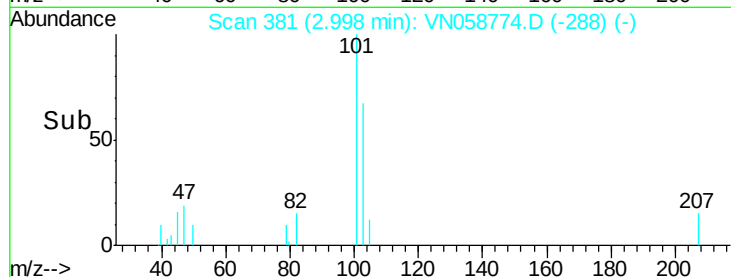
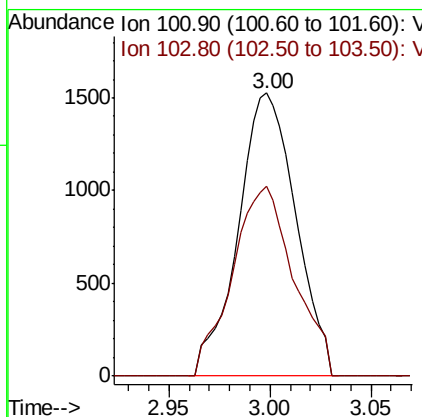
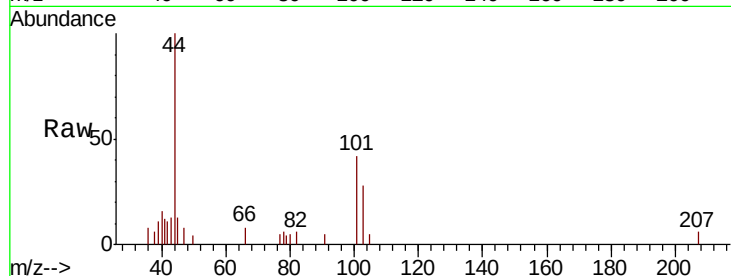
Trichlorofluoromethane
Concen: 0.490 ug/l
RT: 3.00 min Scan# 381
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

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

Tot Ion	Ratio	Lower	Upper
101	100		
103	67.3	51.8	77.6

Manual Integrations
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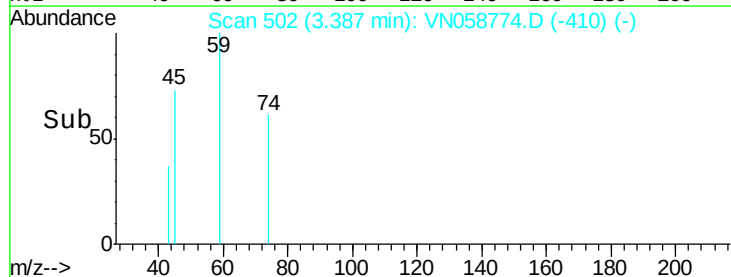
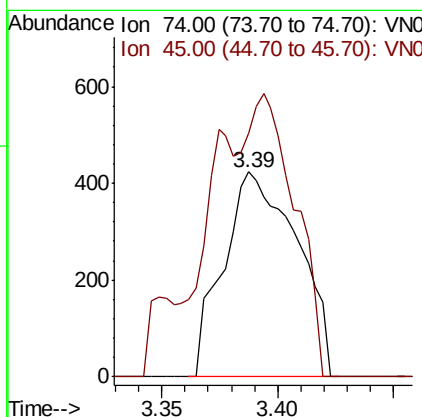
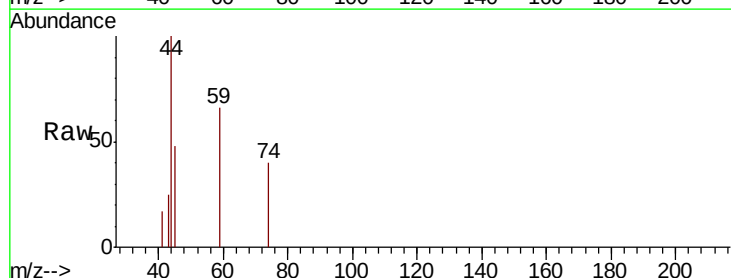
MMDadoda
10/18/2019 12:42:32 AM

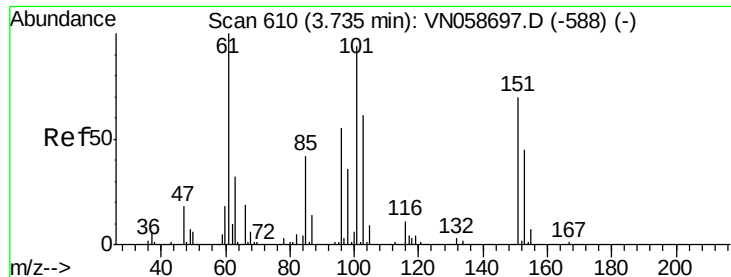


#8

Diethyl Ether
Concen: 0.407 ug/l
RT: 3.39 min Scan# 502
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

Tgt Ion	Ratio	Lower	Upper
74	100		
45	29.4	51.3	154.0#





#9

1,1,2-Trichlorotrifluoroethane

Concen: 0.512 ug/l m

RT: 3.73 min Scan# 609

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

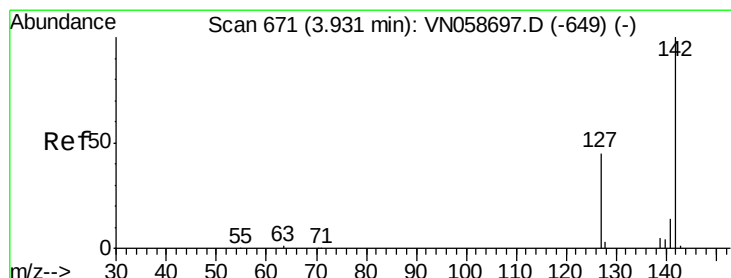
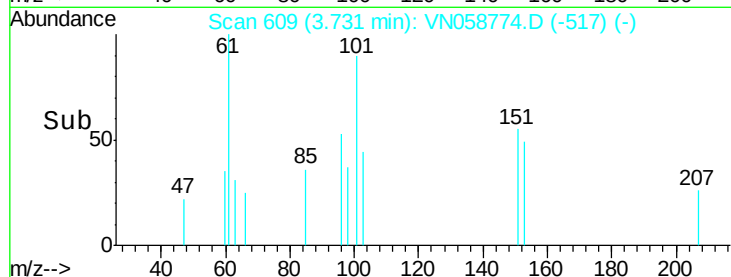
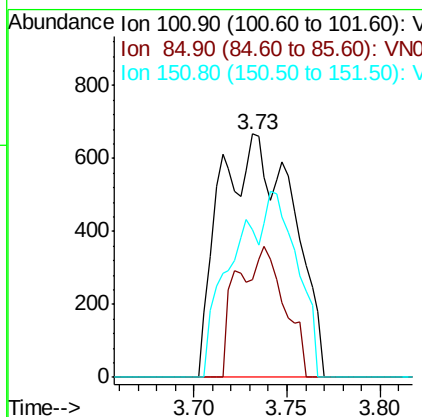
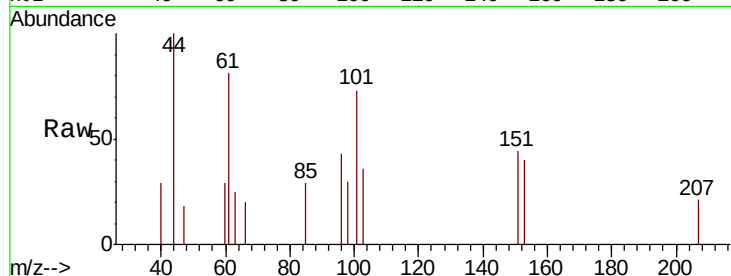
ClientSampleId :

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

Tot Ion:	101	Resp:	1813
Ion Ratio	Lower	Upper	
101	100		
85	11.5	37.0	55.6#
151	31.1	61.8	92.6#

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#10

Methyl Iodide

Concen: 0.390 ug/l

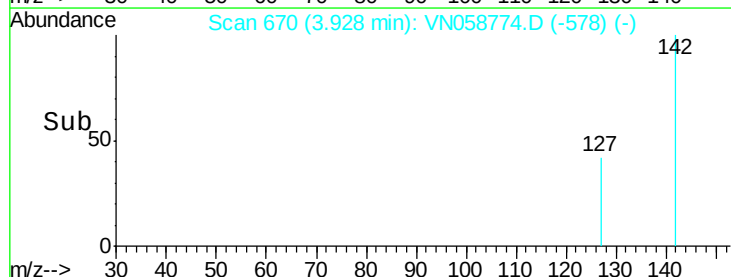
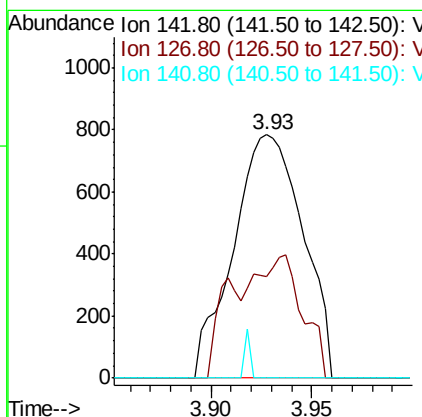
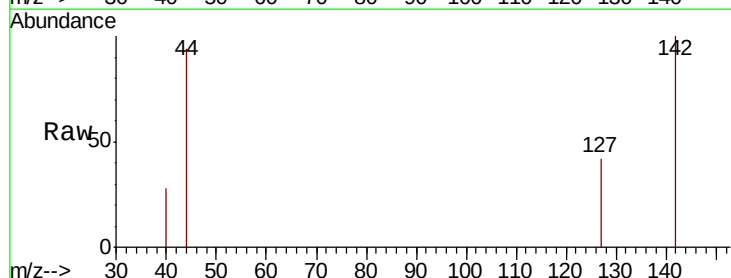
RT: 3.93 min Scan# 670

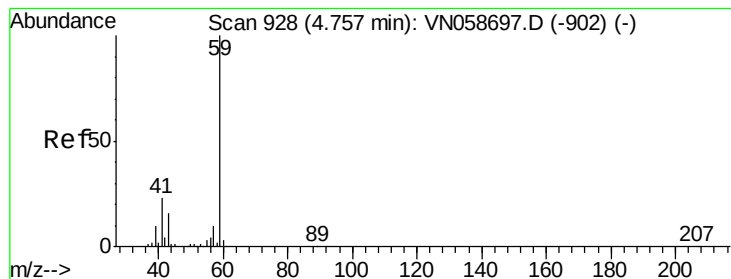
Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Tgt Ion:	142	Resp:	1885
Ion Ratio	Lower	Upper	
142	100		
127	35.8	36.4	54.6#
141	1.6	11.1	16.7#





#11

Tert butyl alcohol

Concen: 3.026 ug/l m

RT: 4.76 min Scan# 929

Delta R.T. 0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion: 59 Resp: 2414

Ion Ratio Lower Upper

59 100

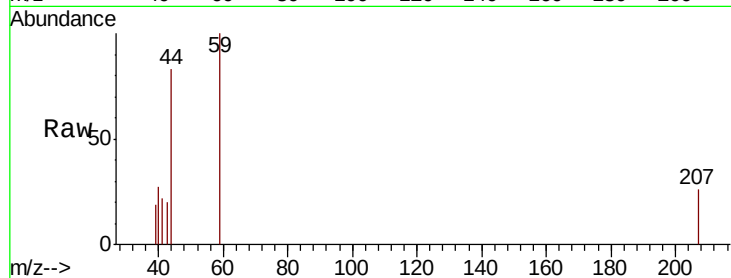
57 0.0 8.4 12.6#

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Abundance Ion 59.00 (58.70 to 59.70): VN0

Ion 57.00 (56.70 to 57.70): VN0

4.76

800

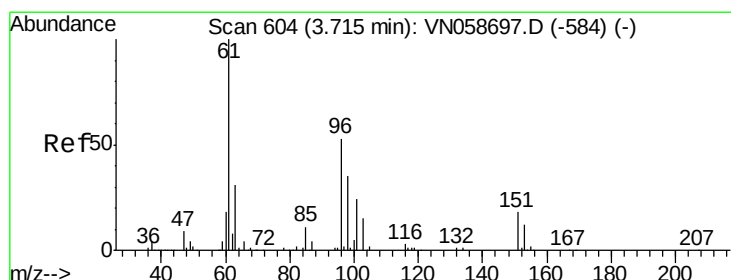
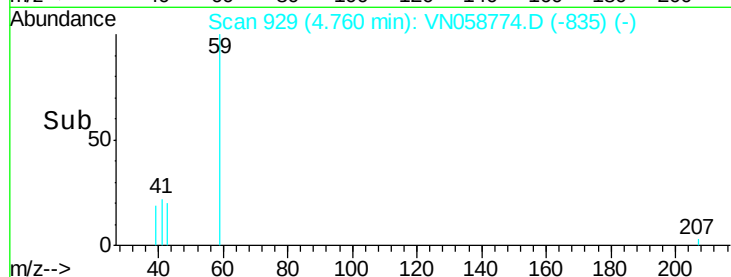
600

400

200

0

Time-->



#12

1,1-Dichloroethene

Concen: 0.529 ug/l m

RT: 3.72 min Scan# 604

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

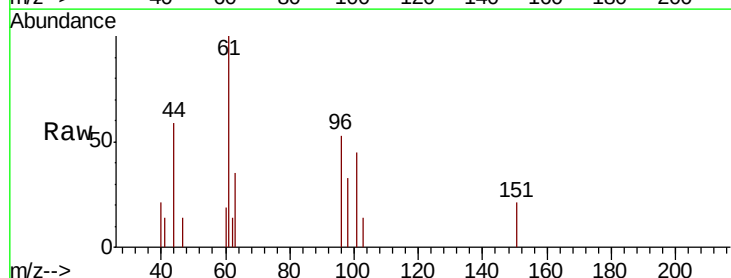
Tgt Ion: 96 Resp: 1787

Ion Ratio Lower Upper

96 100

61 187.4 151.3 226.9

98 61.3 52.6 78.8



Abundance Ion 95.90 (95.60 to 96.60): VN0

Ion 60.90 (60.60 to 61.60): VN0

Ion 97.90 (97.60 to 98.60): VN0

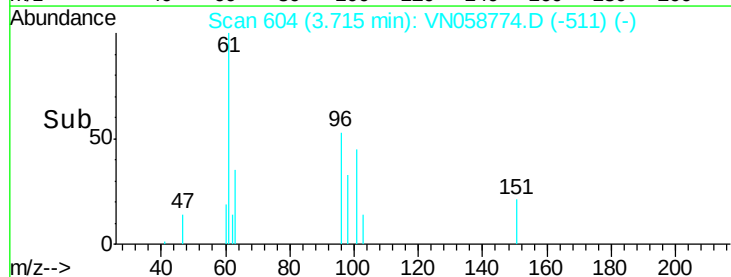
1500

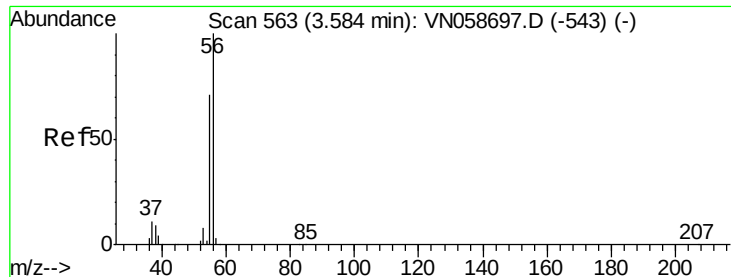
1000

500

0

Time-->





#13

Acrolein

Concen: 2.650 ug/l

RT: 3.59 min Scan# 566

Delta R.T. 0.01 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion: 56 Resp: 1700

Ion Ratio Lower Upper

56 100

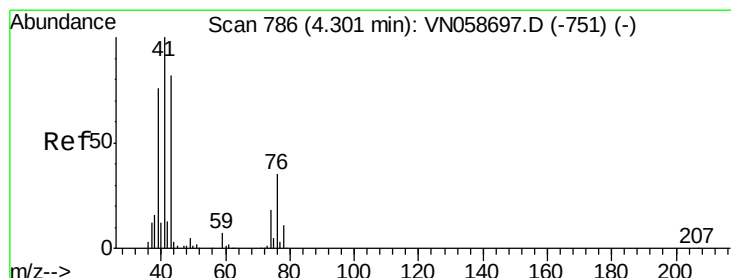
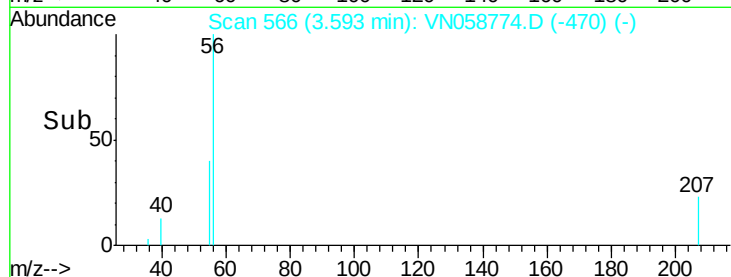
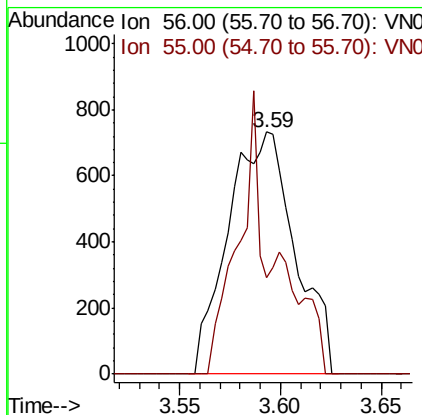
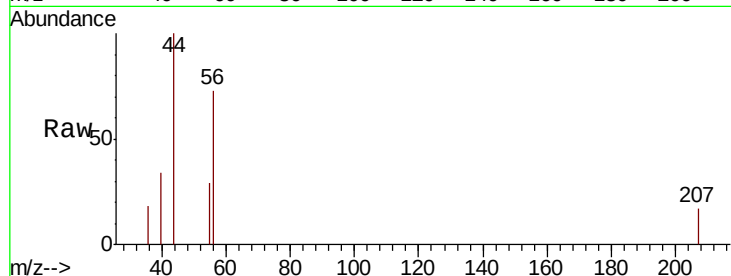
55 38.9 56.7 85.1#

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#14

Allyl chloride

Concen: 0.547 ug/l

RT: 4.29 min Scan# 784

Delta R.T. -0.01 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

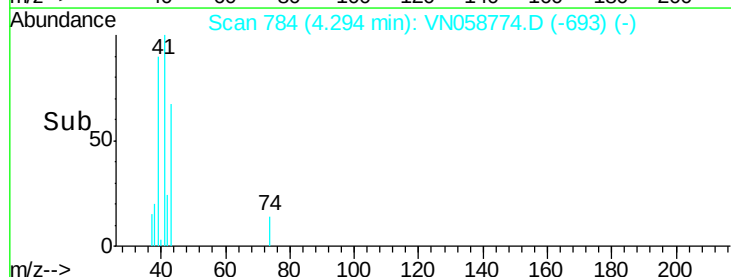
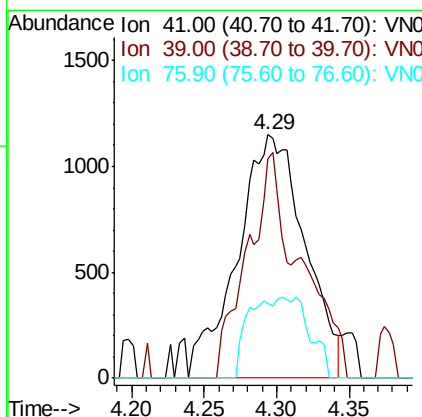
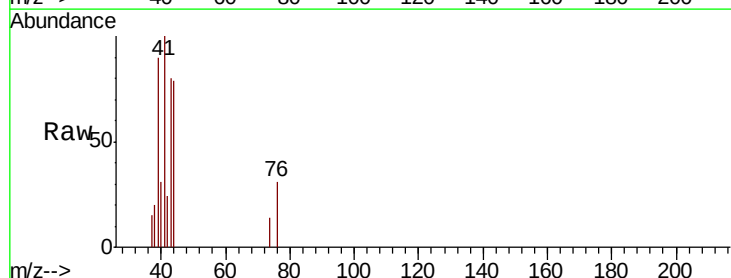
Tgt Ion: 41 Resp: 3728

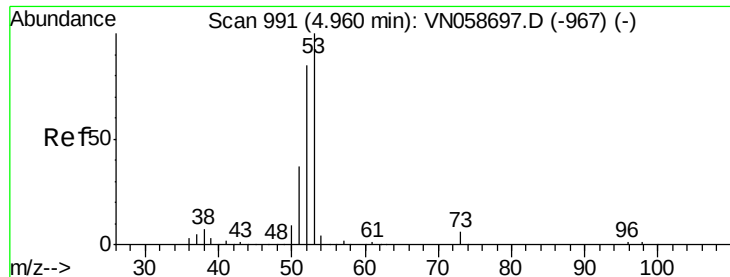
Ion Ratio Lower Upper

41 100

39 50.5 57.2 85.8#

76 13.0 25.0 37.6#





#15

Acrylonitrile

Concen: 2.443 ug/l m

RT: 4.97 min Scan# 995

Delta R.T. 0.01 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

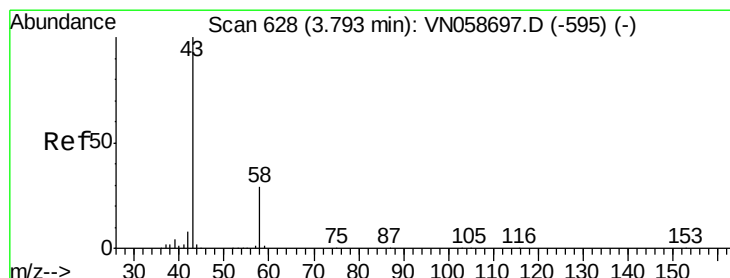
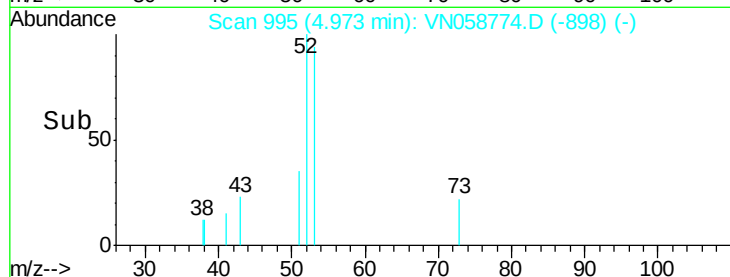
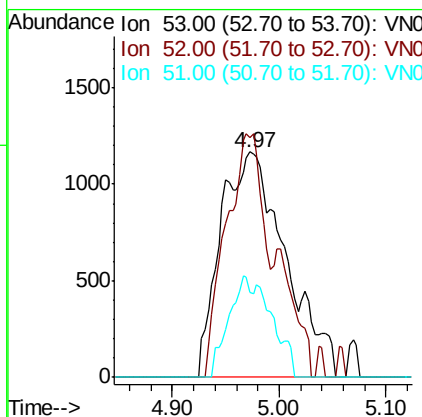
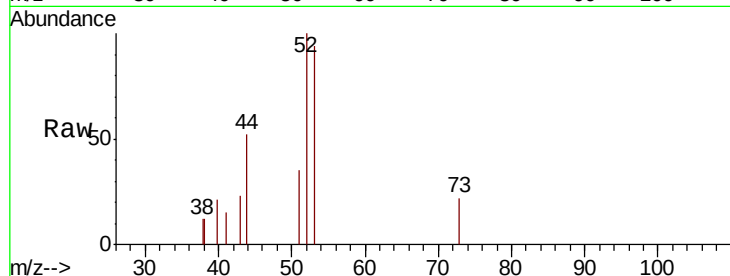
ClientSampleId :

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

Tot Ion:	53	Resp:	4915
Ion	Ratio	Lower	Upper
53	100		
52	0.0	66.2	99.2#
51	0.0	29.4	44.2#

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#16

Acetone

Concen: 3.123 ug/l

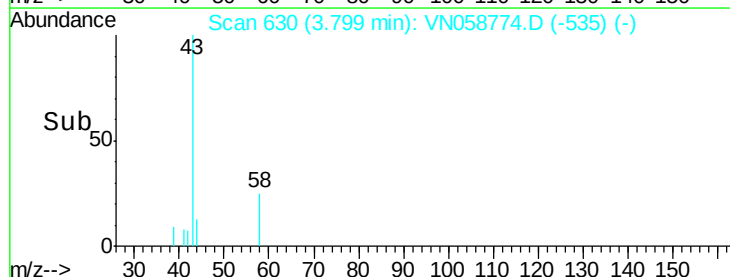
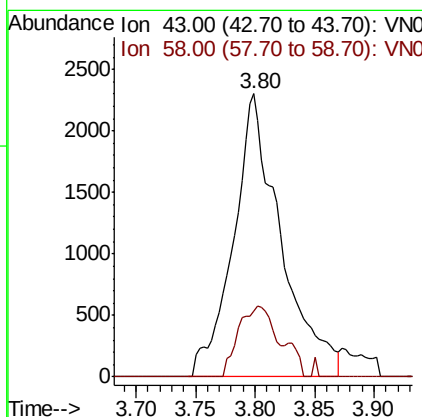
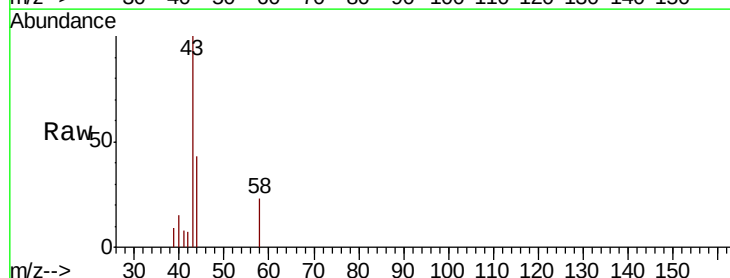
RT: 3.80 min Scan# 630

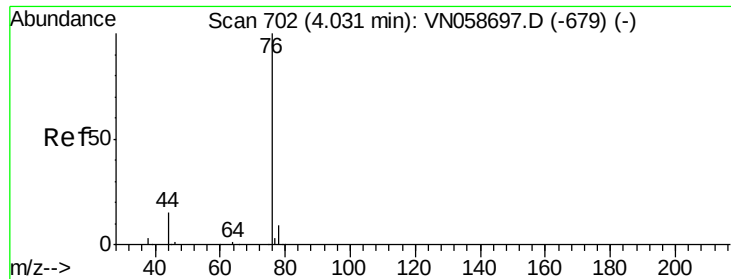
Delta R.T. 0.01 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Tgt Ion:	43	Resp:	6368
Ion	Ratio	Lower	Upper
43	100		
58	23.4	23.3	34.9





#17

Carbon Disulfide

Concen: 0.621 ug/l

RT: 4.03 min Scan# 701

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion: 76 Resp: 6712

Ion Ratio Lower Upper

76 100

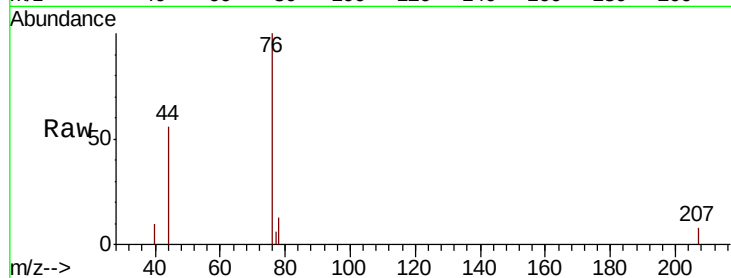
78 12.9 7.1 10.7#

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Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0

2500

2000

1500

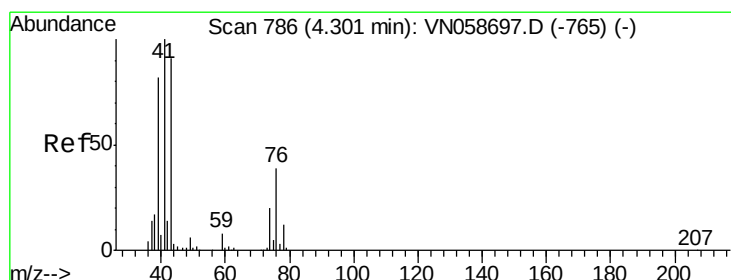
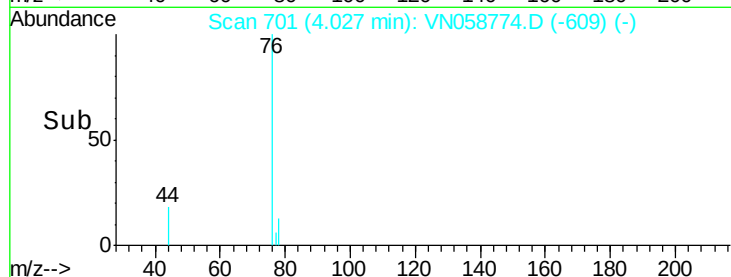
1000

500

0

3.95 4.00 4.05 4.10

Time-->



#18

Methyl Acetate

Concen: 0.676 ug/l

RT: 4.31 min Scan# 789

Delta R.T. 0.01 min

Lab File: VN058774.D

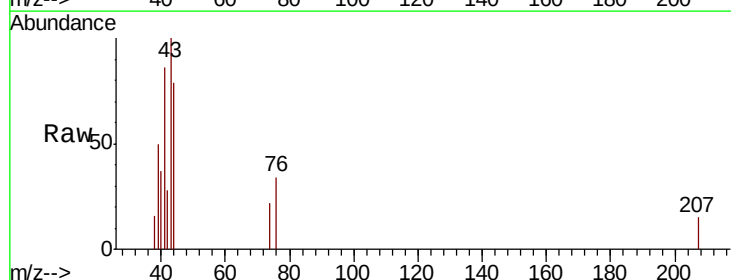
Acq: 15 Oct 2019 12:14

Tgt Ion: 43 Resp: 3499

Ion Ratio Lower Upper

43 100

74 16.1 17.2 25.8#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 74.00 (73.70 to 74.70): VN0

1200

1000

800

600

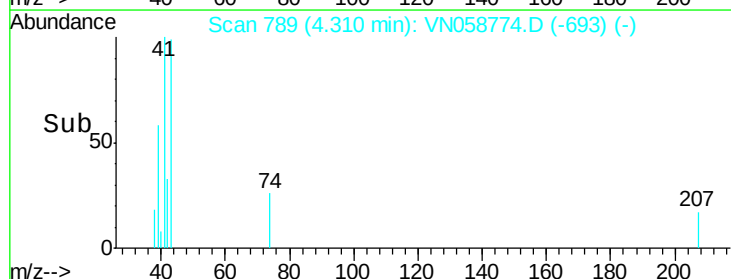
400

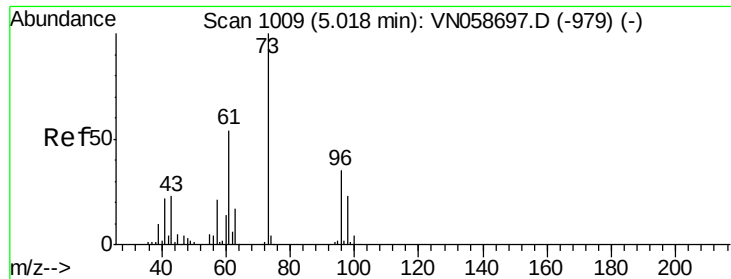
200

0

4.25 4.30 4.35

Time-->





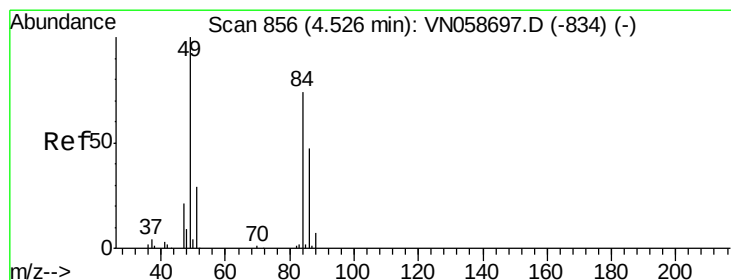
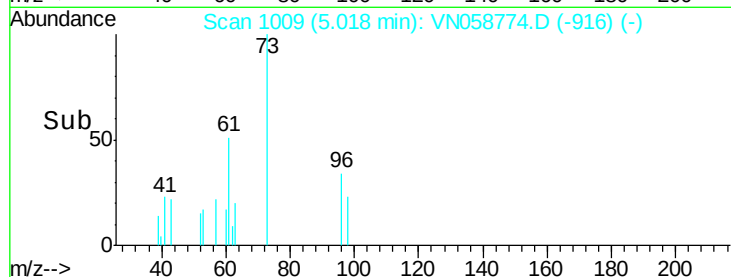
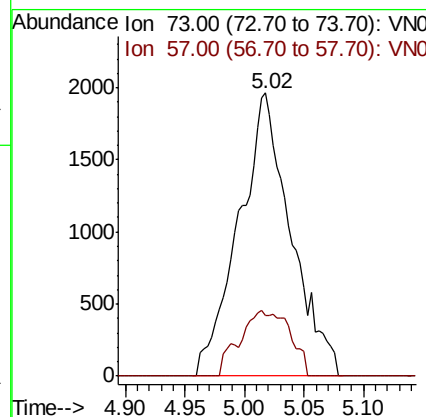
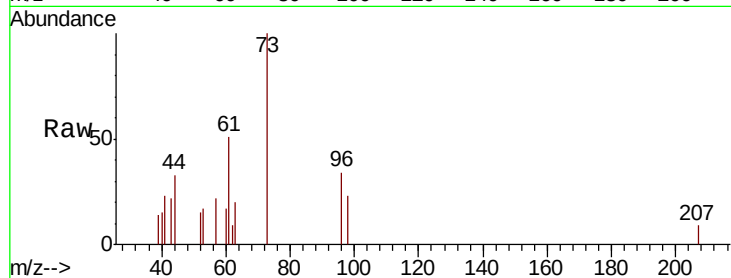
#19
Methyl tert-butyl Ether
Concen: 0.491 ug/l
RT: 5.02 min Scan# 1009
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

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

Tot Ion: 73 Resp: 5928
Ion Ratio Lower Upper
73 100
57 21.5 17.0 25.6

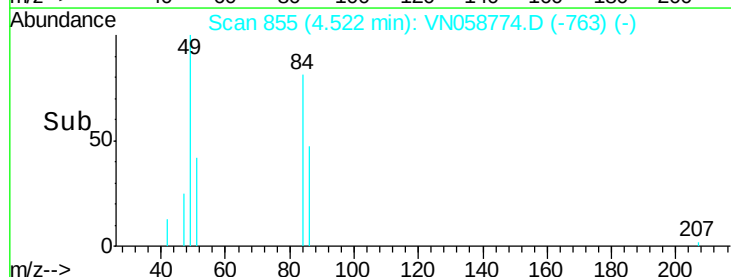
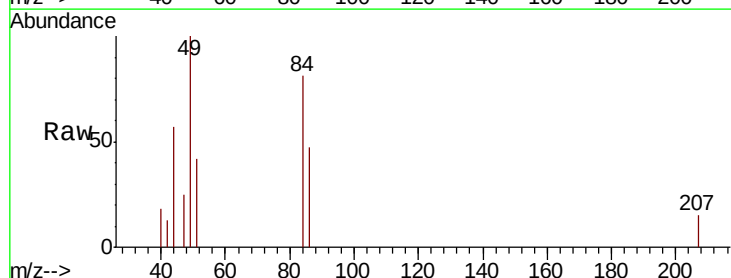
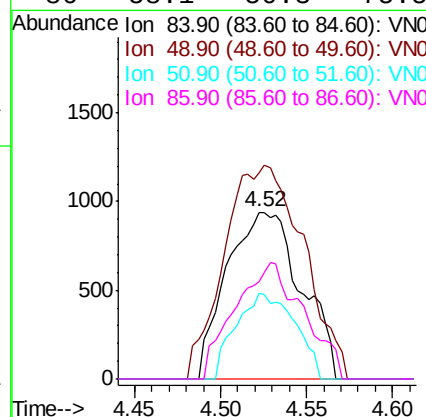
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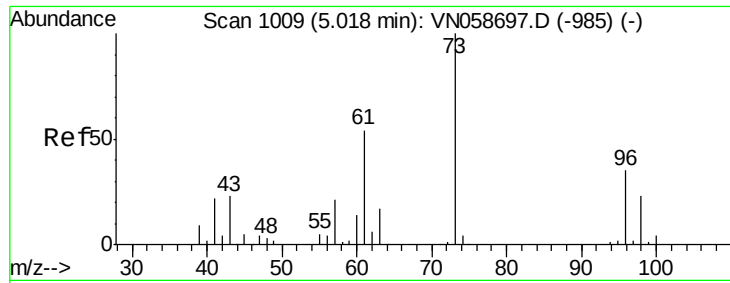
MMDadoda
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#20
Methylene Chloride
Concen: 0.665 ug/l
RT: 4.52 min Scan# 855
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

Tgt Ion: 84 Resp: 2834
Ion Ratio Lower Upper
84 100
49 107.6 107.6 161.4#
51 51.5 31.4 47.0#
86 58.1 50.3 75.5





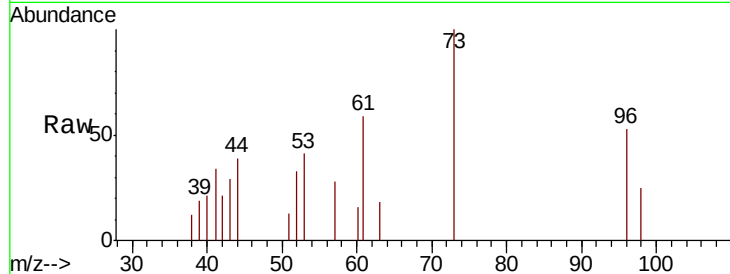
#21
trans-1,2-Dichloroethene
Concen: 0.531 ug/l m
RT: 5.01 min Scan# 1006
Delta R.T. -0.01 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

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

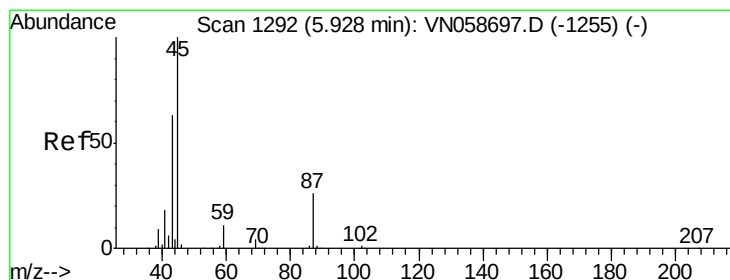
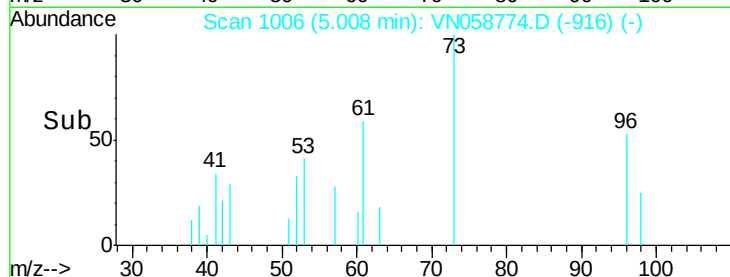
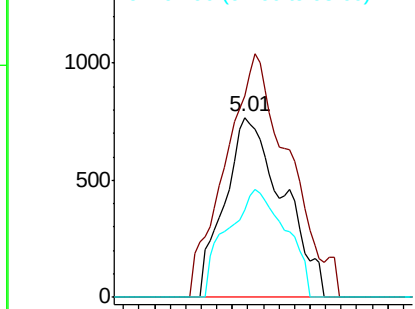
Tot Ion	Ratio	Lower	Upper
96	100		
61	112.0	123.6	185.4#
98	48.4	52.1	78.1#

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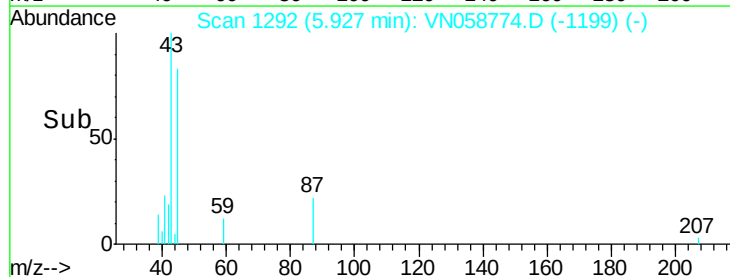
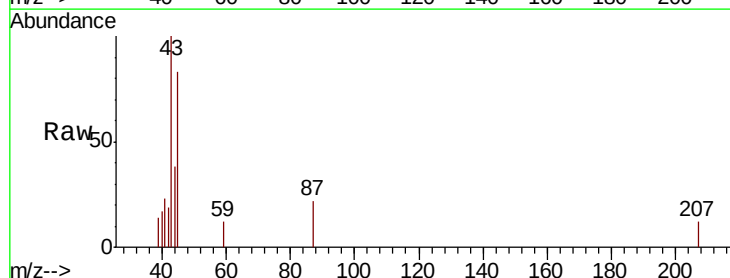
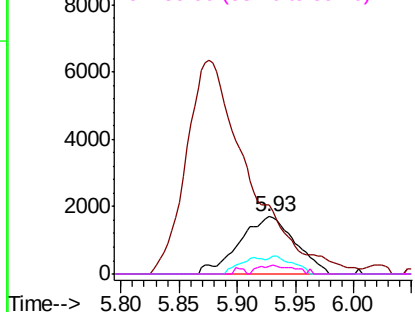
Abundance Ion 95.90 (95.60 to 96.60): VNO
Ion 60.90 (60.60 to 61.60): VNO
Ion 97.90 (97.60 to 98.60): VNO

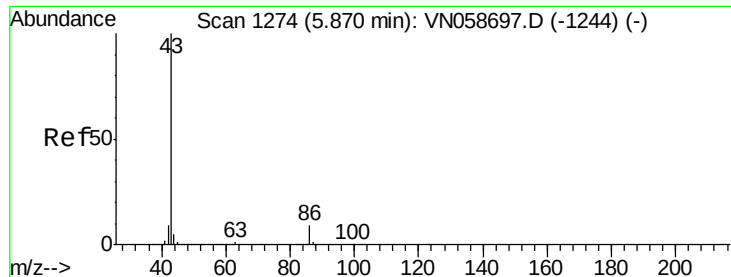


#22
Diisopropyl ether
Concen: 0.428 ug/l m
RT: 5.93 min Scan# 1292
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

Tgt Ion	Ratio	Lower	Upper
45	100		
43	120.6	50.6	75.8#
87	26.5	21.1	31.7
59	14.2	9.0	13.4#

Abundance Ion 45.00 (44.70 to 45.70): VNO
Ion 43.00 (42.70 to 43.70): VNO
Ion 87.00 (86.70 to 87.70): VNO
Ion 59.00 (58.70 to 59.70): VNO





#23

Vinyl Acetate

Concen: 2.229 ug/l

RT: 5.88 min Scan# 1276

Delta R.T. 0.01 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion: 43 Resp: 23843

Ion Ratio Lower Upper

43 100

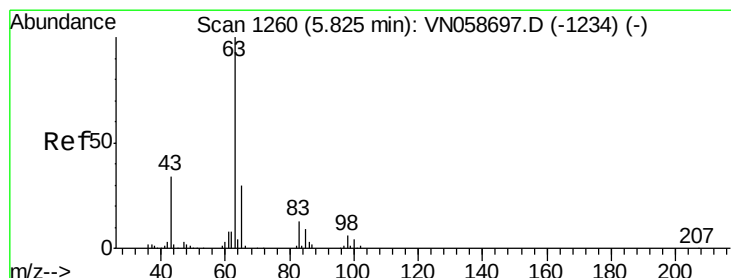
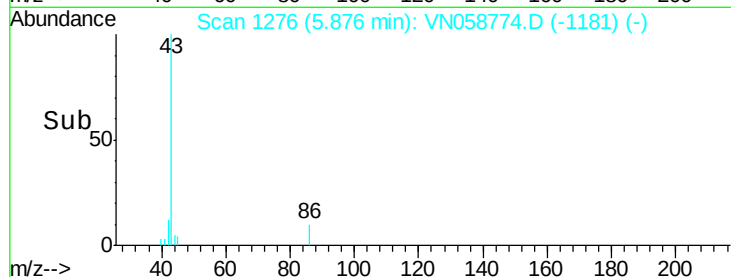
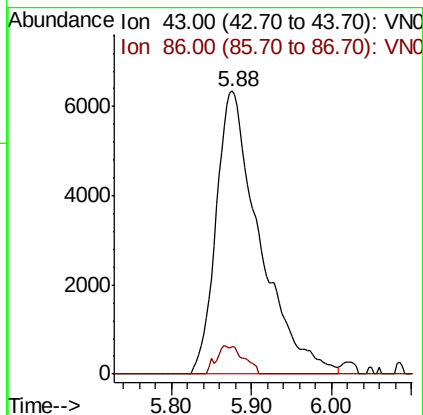
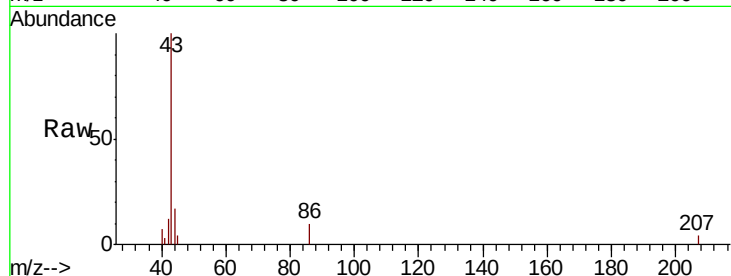
86 9.6 7.4 11.0

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#24

1,1-Dichloroethane

Concen: 0.522 ug/l m

RT: 5.81 min Scan# 1257

Delta R.T. -0.01 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

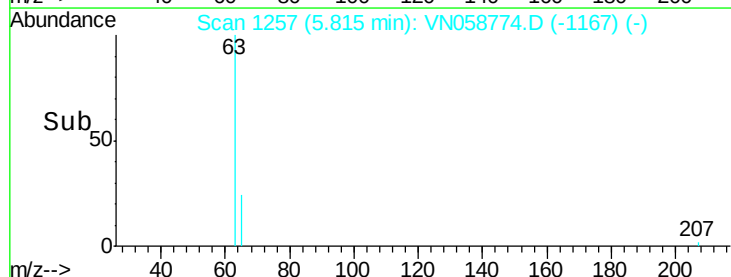
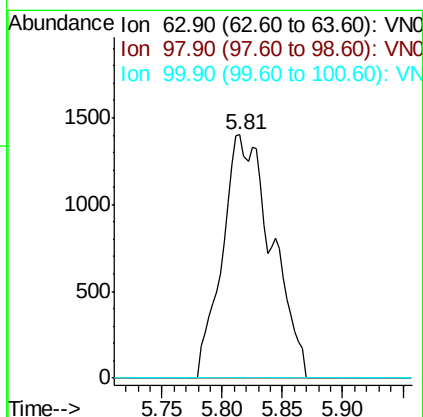
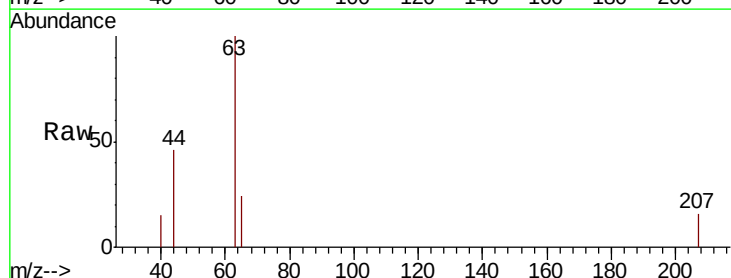
Tgt Ion: 63 Resp: 3942

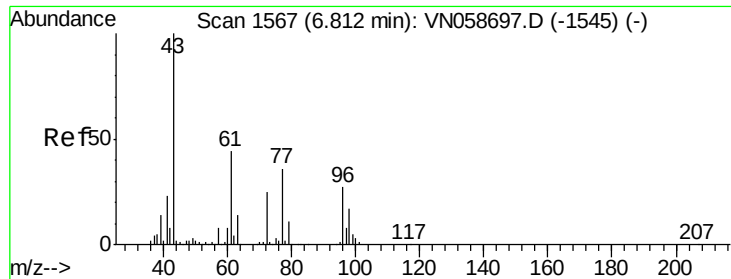
Ion Ratio Lower Upper

63 100

98 0.0 2.9 8.6#

100 0.0 1.8 5.5#





#25

2-Butanone

Concen: 2.538 ug/l

RT: 6.82 min Scan# 1570

Delta R.T. 0.01 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion: 43 Resp: 7480

Ion Ratio Lower Upper

43 100

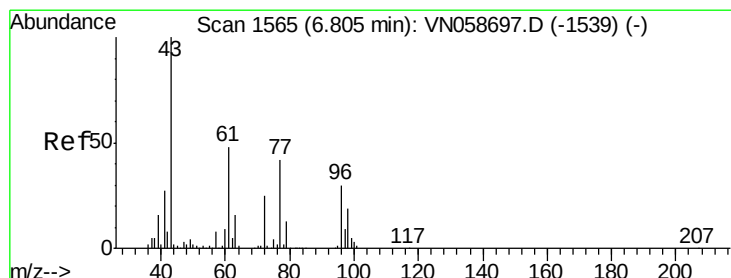
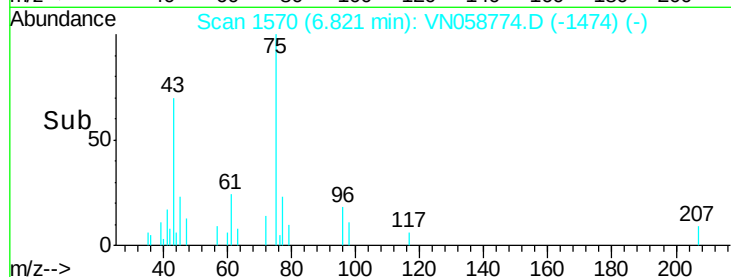
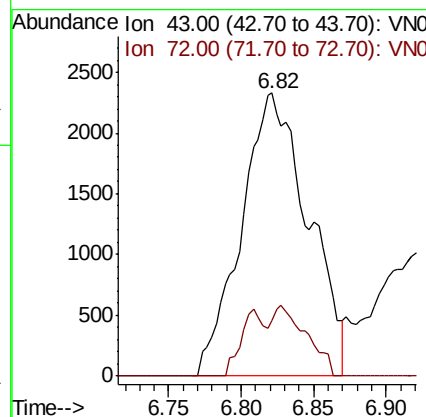
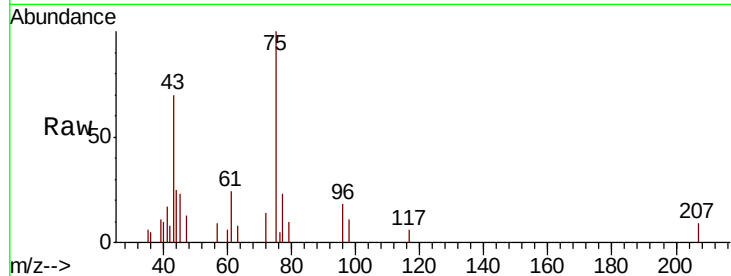
72 19.7 20.2 30.2#

Manual Integrations

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MMDadoda

10/18/2019 12:42:32 AM



#26

2,2-Dichloropropane

Concen: 0.629 ug/l

RT: 6.81 min Scan# 1565

Delta R.T. -0.00 min

Lab File: VN058774.D

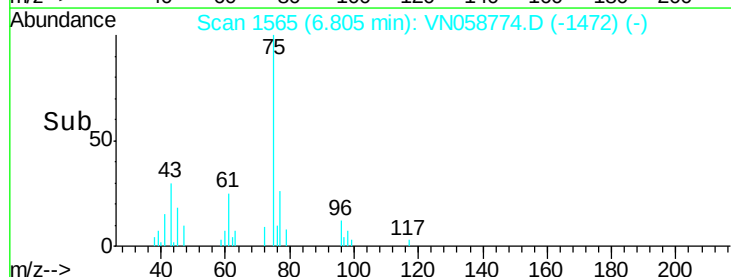
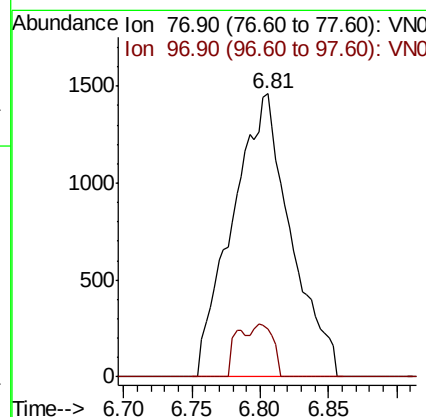
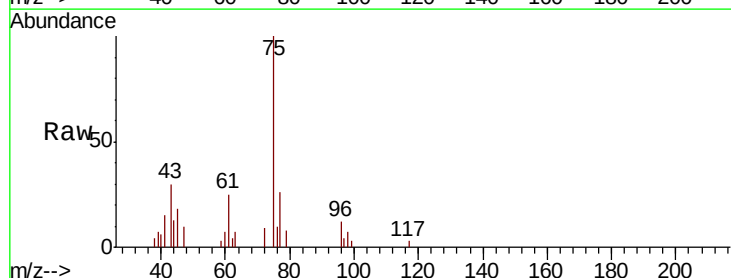
Acq: 15 Oct 2019 12:14

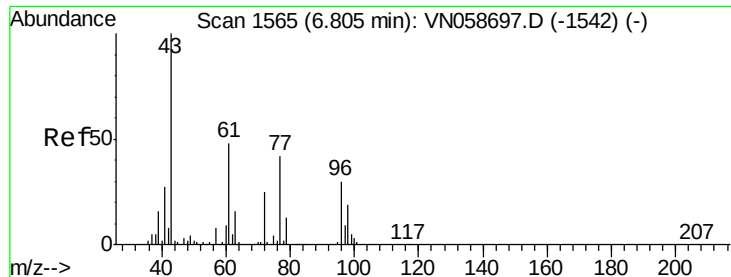
Tgt Ion: 77 Resp: 4335

Ion Ratio Lower Upper

77 100

97 6.3 10.7 31.9#





#27

cis-1,2-Dichloroethene

Concen: 0.516 ug/l m

RT: 6.80 min Scan# 1563

Delta R.T. -0.01 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

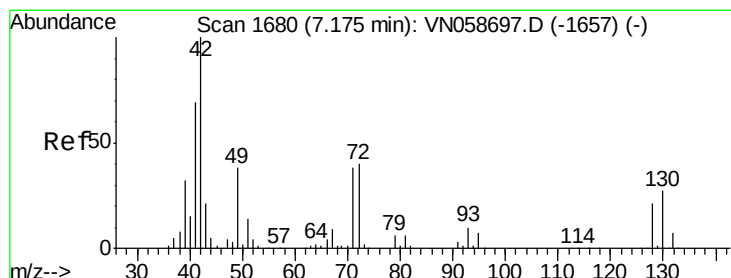
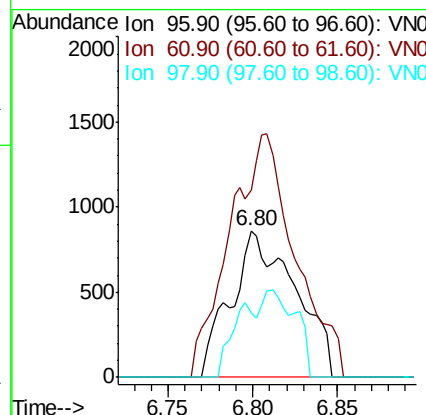
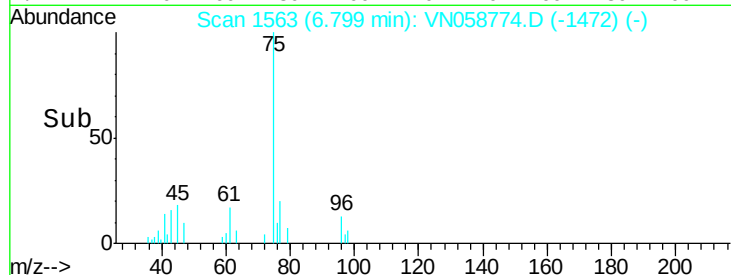
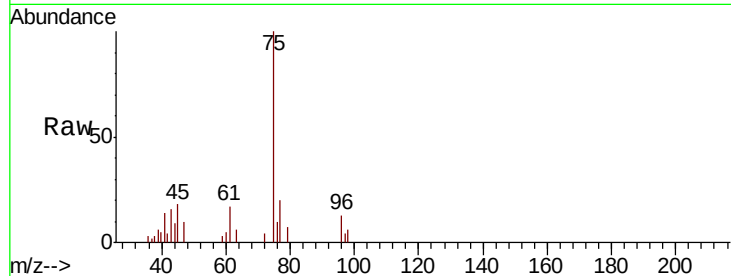
ClientSampleId :

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

Tot Ion:	96	Resp:	2276
Ion	Ratio	Lower	Upper
96	100		
61	0.0	0.0	324.8
98	19.1	0.0	129.2

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#28

Bromochloromethane

Concen: 0.597 ug/l

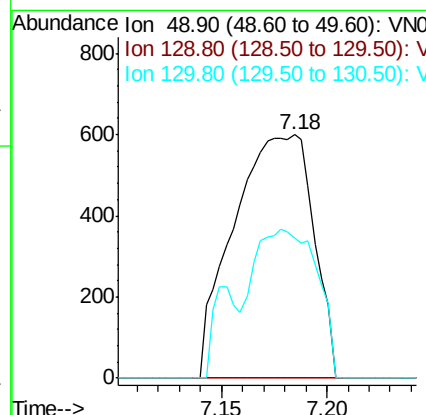
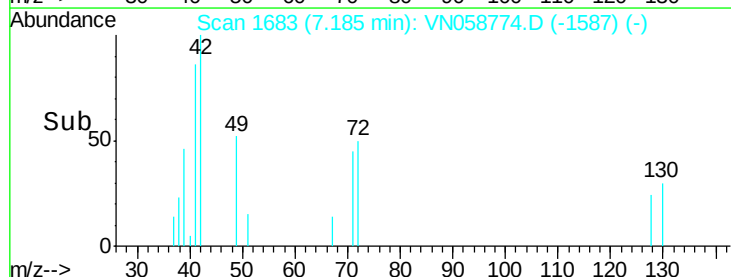
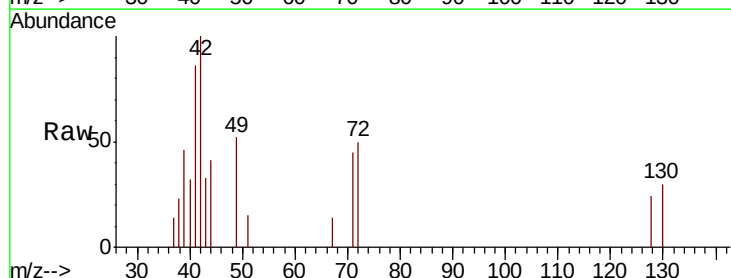
RT: 7.18 min Scan# 1683

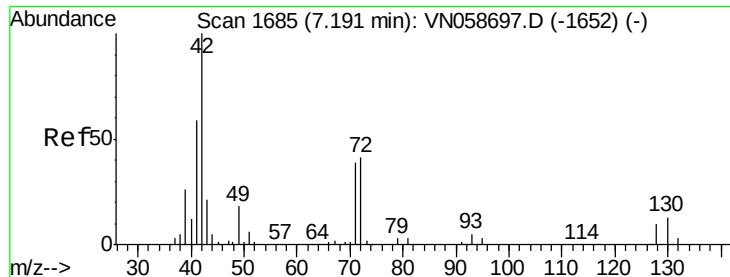
Delta R.T. 0.01 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Tgt Ion:	49	Resp:	1569
Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	3.6
130	48.7	55.0	82.4#





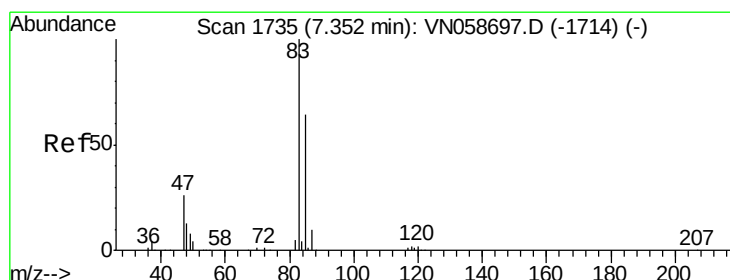
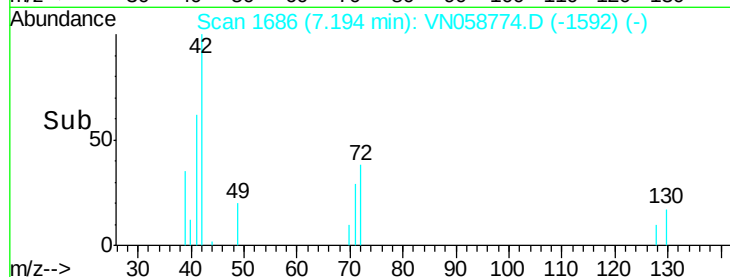
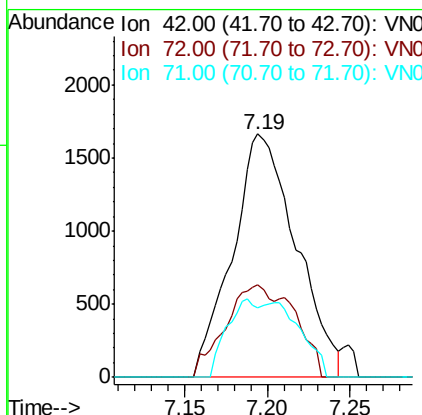
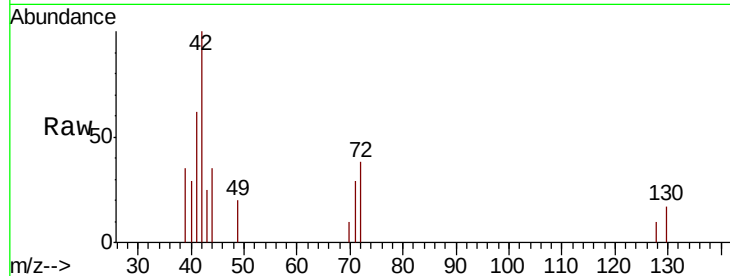
#29
Tetrahydrofuran
Concen: 2.335 ug/l
RT: 7.19 min Scan# 1686
Delta R.T. 0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

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

Tot Ion	Ratio	Lower	Upper
42	100		
72	27.8	32.8	49.2#
71	15.6	31.1	46.7#

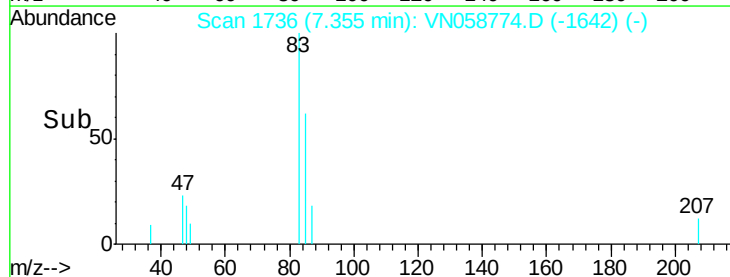
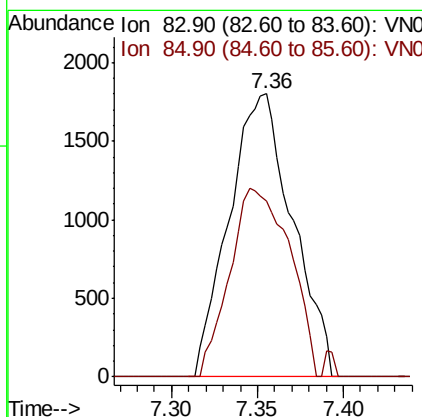
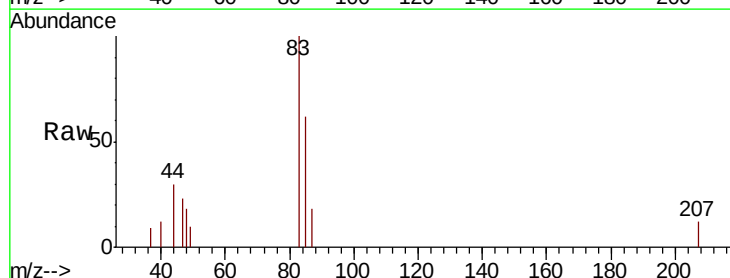
Manual Integrations
APPROVED

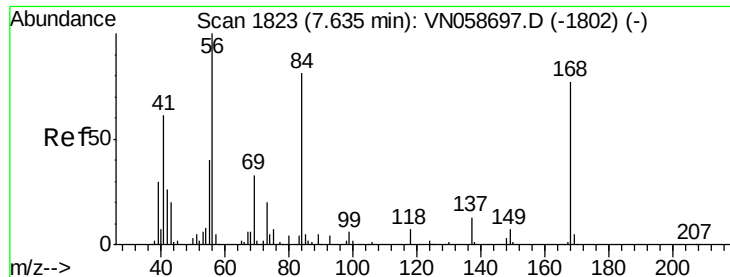
MMDadoda
10/18/2019 12:42:32 AM



#30
Chloroform
Concen: 0.608 ug/l
RT: 7.36 min Scan# 1736
Delta R.T. 0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

Tgt Ion	Ratio	Lower	Upper
83	100		
85	62.3	51.0	76.6





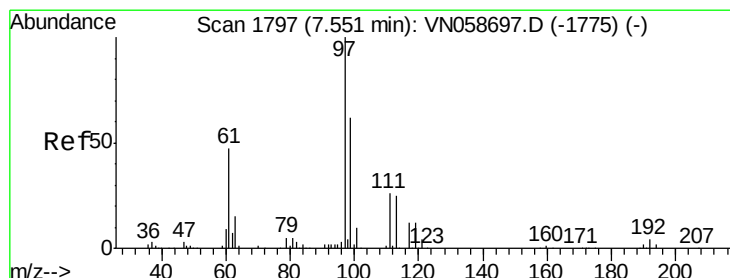
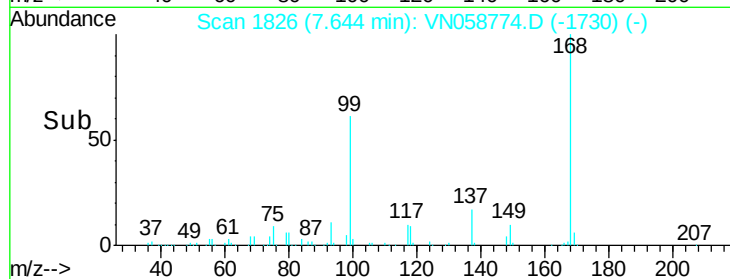
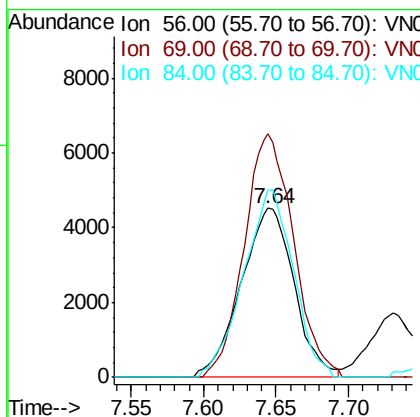
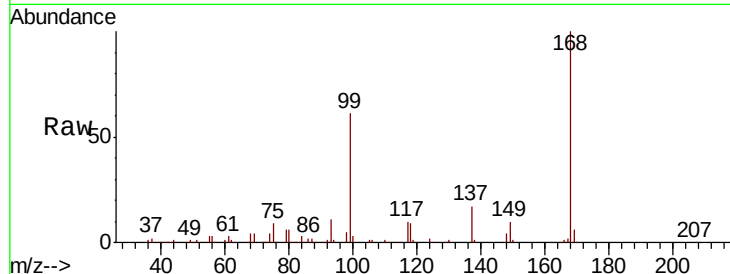
#31
Cyclohexane
Concen: 1.595 ug/l
RT: 7.64 min Scan# 1826
Delta R.T. 0.01 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

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

Tot Ion	Ratio	Lower	Upper
56	100		
69	143.8	26.2	39.4#
84	111.0	64.9	97.3#

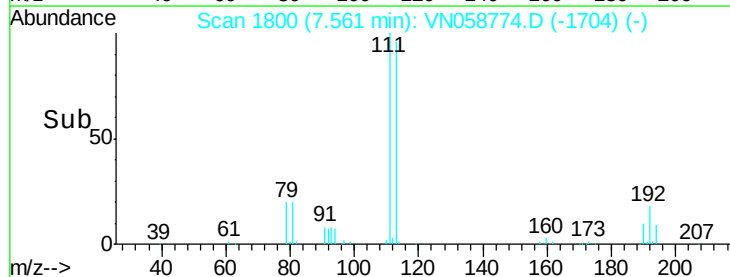
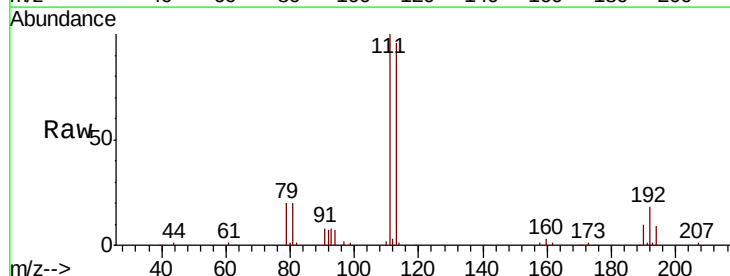
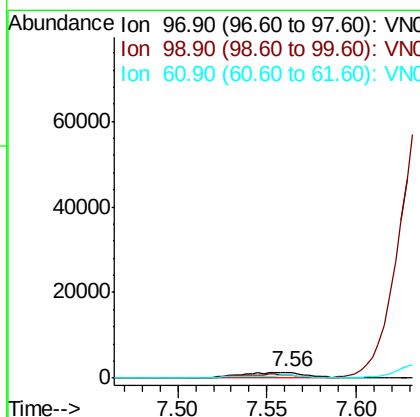
Manual Integrations
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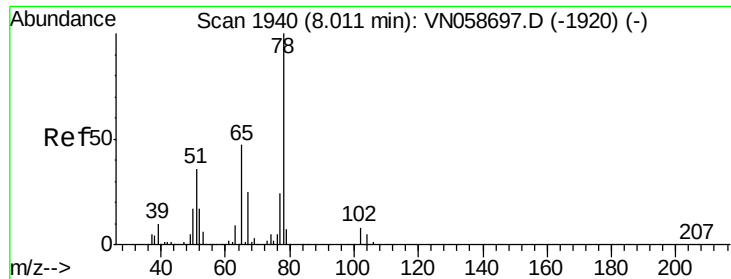
MMDadoda
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#32
1,1,1-Trichloroethane
Concen: 0.515 ug/l
RT: 7.56 min Scan# 1800
Delta R.T. 0.01 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

Tgt Ion	Ratio	Lower	Upper
97	100		
99	0.0	50.8	76.2#
61	21.2	38.1	57.1#





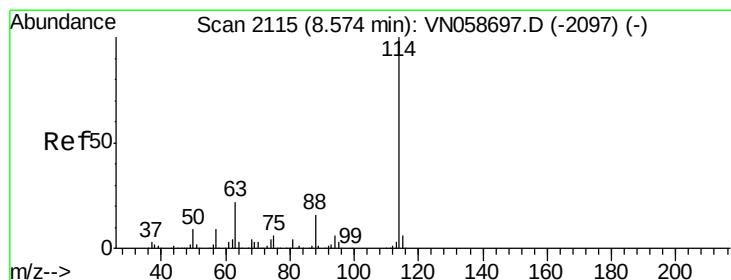
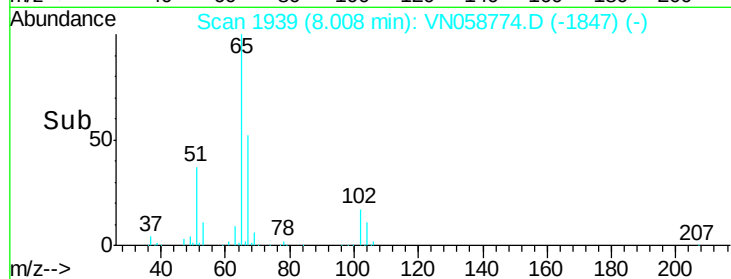
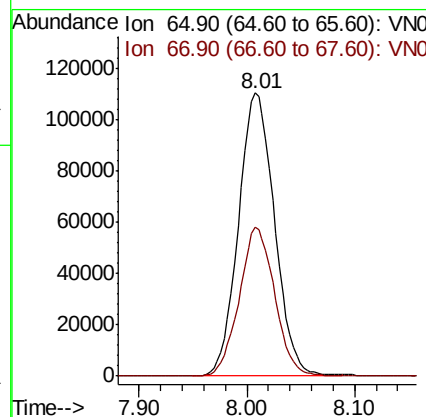
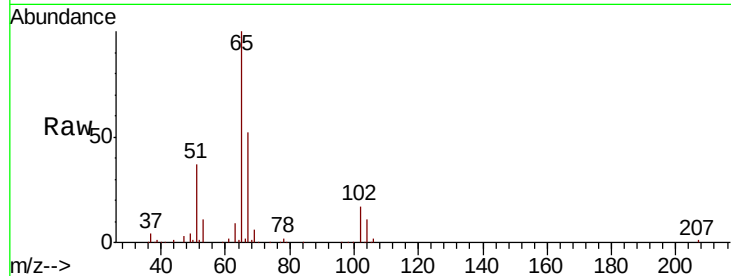
#33
 1,2-Dichloroethane-d4
 Concen: 52.300 ug/l
 RT: 8.01 min Scan# 1939
 Delta R.T. -0.00 min
 Lab File: VN058774.D
 Acq: 15 Oct 2019 12:14

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

Tot Ion	Ratio	Resp	Lower	Upper
65	100	257611		
67	51.7	0.0	103.8	

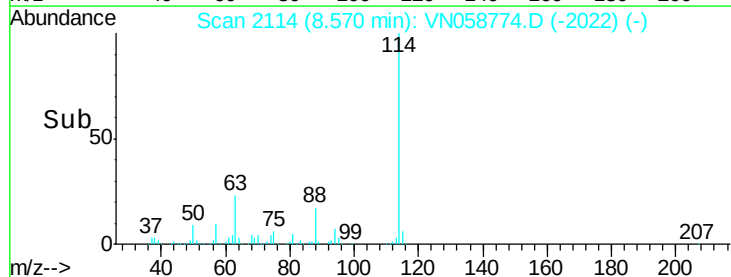
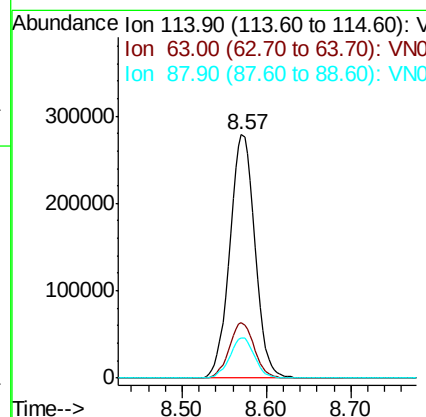
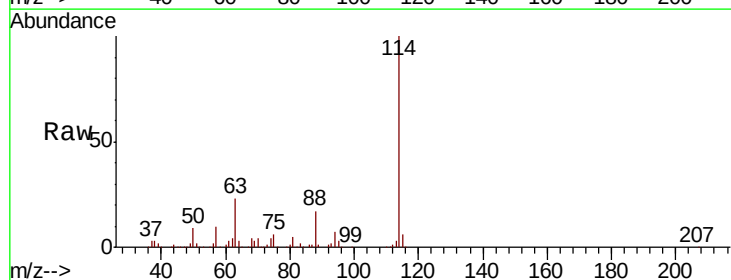
Manual Integrations
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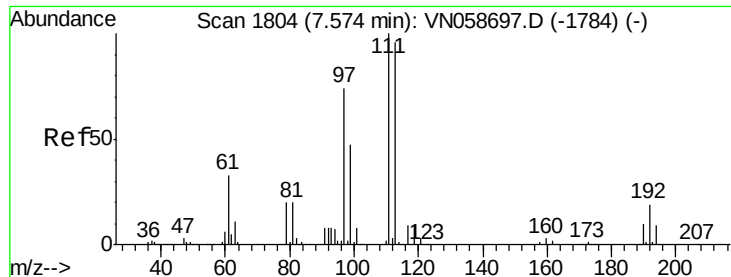
MMDadoda
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#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.57 min Scan# 2114
 Delta R.T. -0.00 min
 Lab File: VN058774.D
 Acq: 15 Oct 2019 12:14

Tgt Ion	Ratio	Resp	Lower	Upper
114	100	578130		
63	22.6	0.0	43.8	
88	16.6	0.0	32.0	





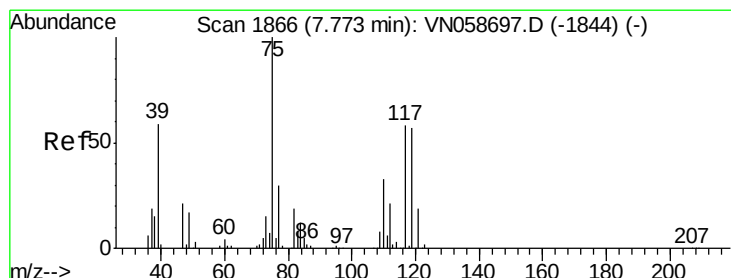
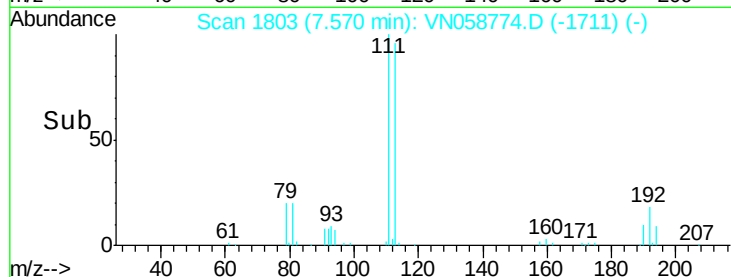
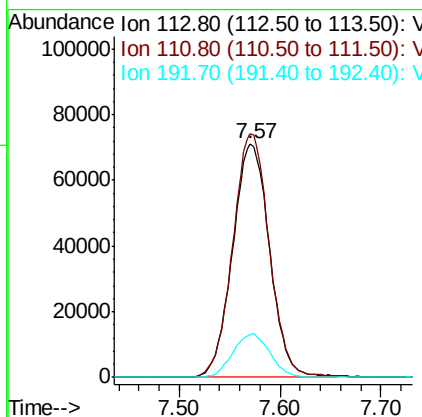
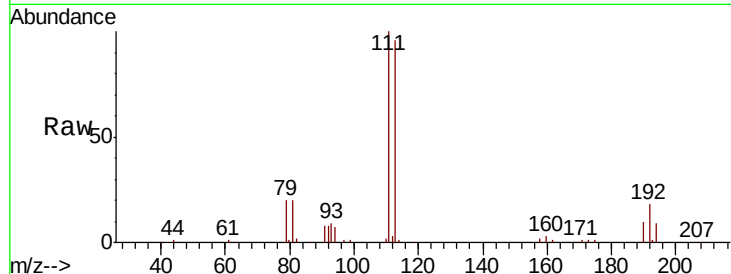
#35
Dibromofluoromethane
Concen: 50.661 ug/l
RT: 7.57 min Scan# 1803
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

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

Tot Ion	Ratio	Resp	Lower	Upper
113	100	180910		
111	103.1	82.3	123.5	
192	18.6	15.0	22.6	

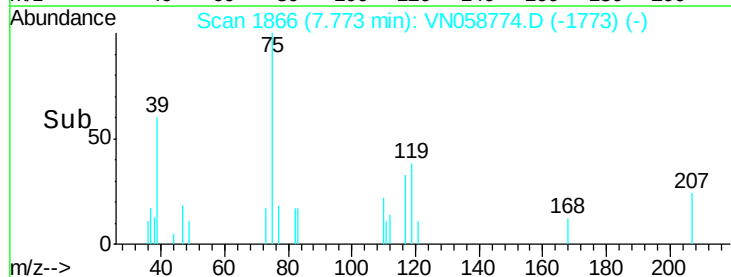
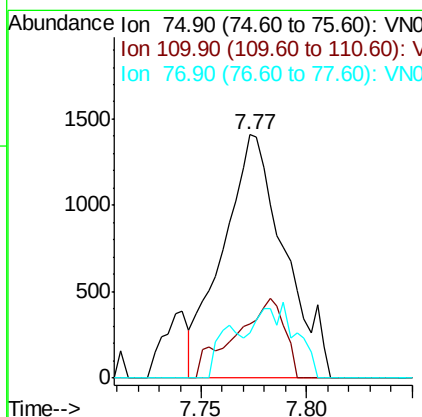
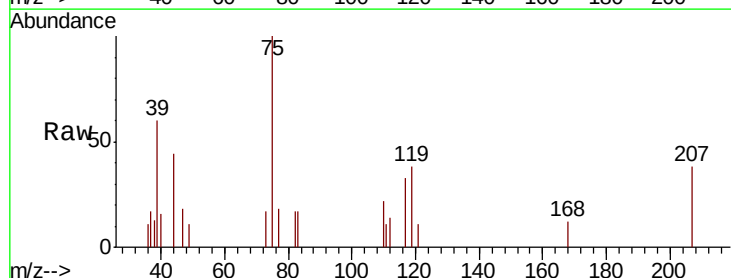
Manual Integrations
APPROVED

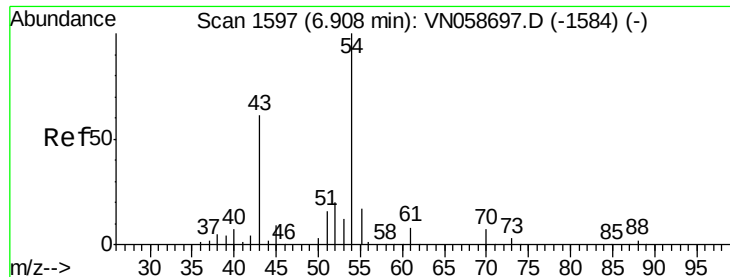
MMDadoda
10/18/2019 12:42:32 AM



#36
1,1-Dichloropropene
Concen: 0.488 ug/l
RT: 7.77 min Scan# 1866
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

Tgt Ion	Ratio	Resp	Lower	Upper
75	100	2855		
110	26.2	16.6	49.8	
77	20.5	24.6	37.0	





#37

Ethyl Acetate

Concen: 0.429 ug/l

RT: 6.92 min Scan# 1602

Delta R.T. 0.02 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

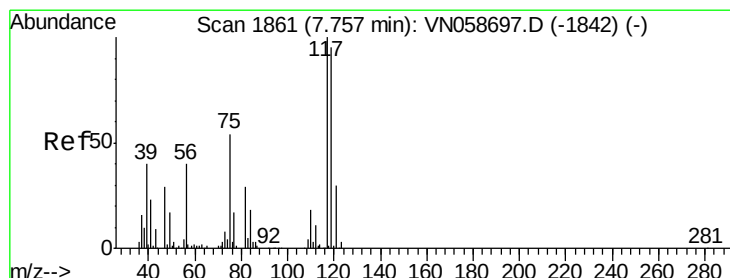
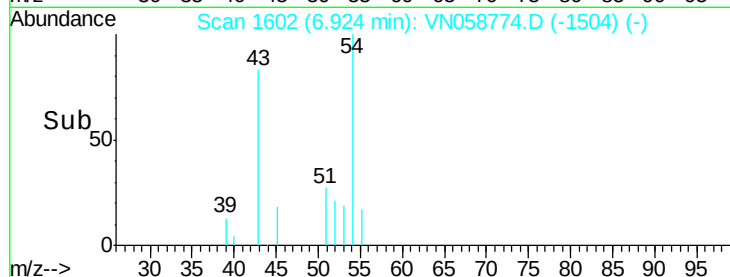
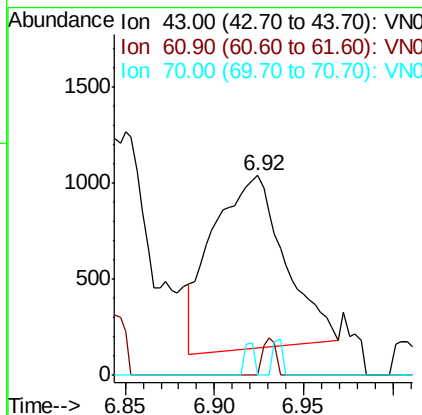
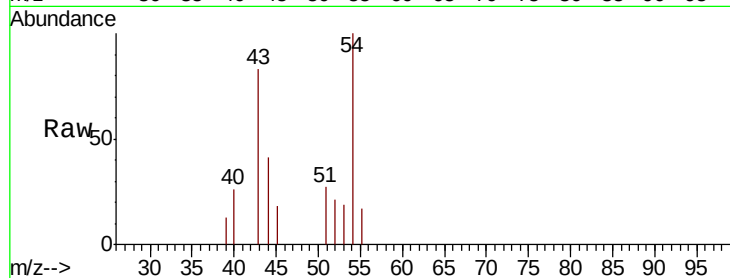
ClientSampleId :

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

Tot Ion:	43	Resp:	2535
Ion	Ratio	Lower	Upper
43	100		
61	0.0	11.3	16.9#
70	2.5	7.2	10.8#

Manual Integrations
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MMDadoda
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#38

Carbon Tetrachloride

Concen: 0.463 ug/l m

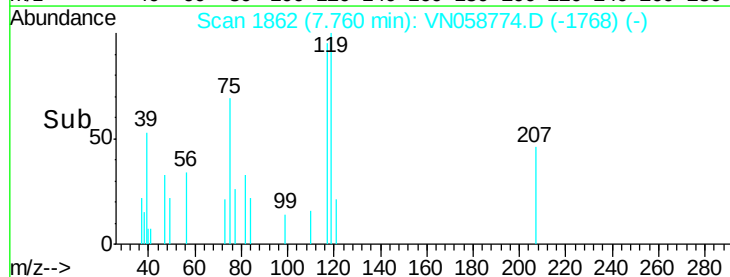
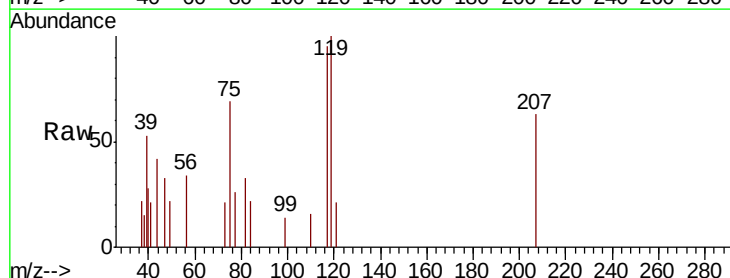
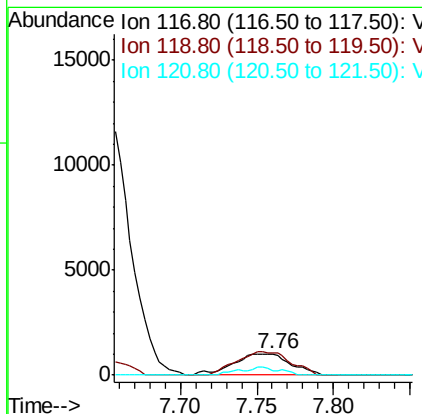
RT: 7.76 min Scan# 1862

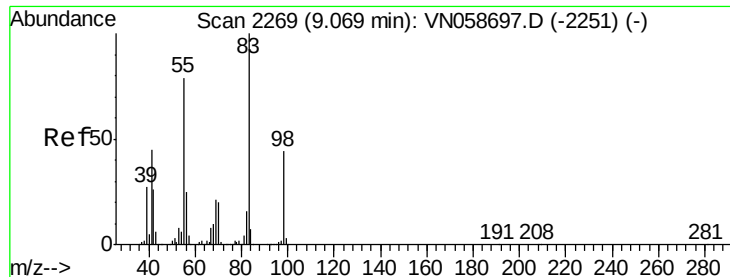
Delta R.T. 0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Tgt Ion:	117	Resp:	2636
Ion	Ratio	Lower	Upper
117	100		
119	105.0	75.7	113.5
121	22.5	23.9	35.9#





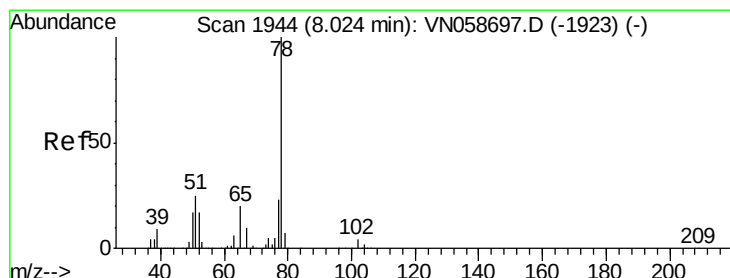
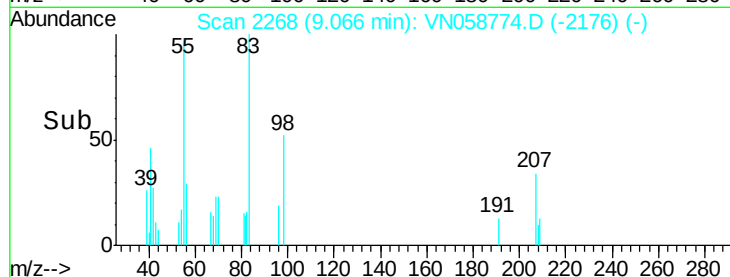
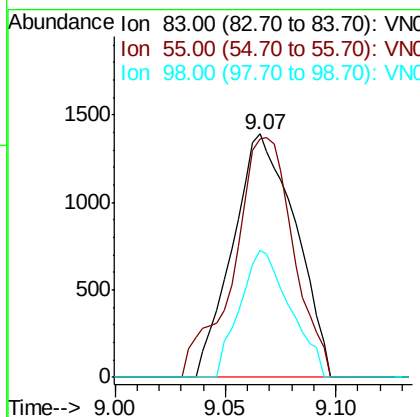
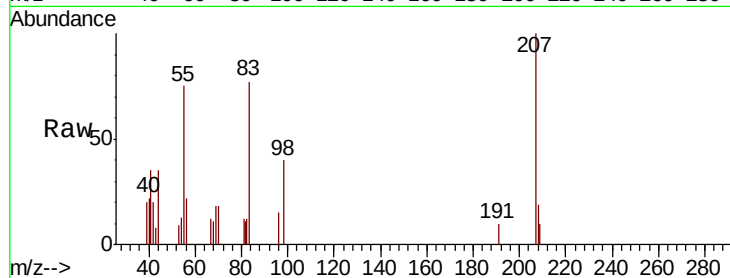
#39
Methylvclclohexane
Concen: 0.405 ug/l
RT: 9.07 min Scan# 2268
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

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

Tot Ion	Ratio	Lower	Upper
83	100		
55	97.7	63.4	95.0#
98	52.2	35.1	52.7

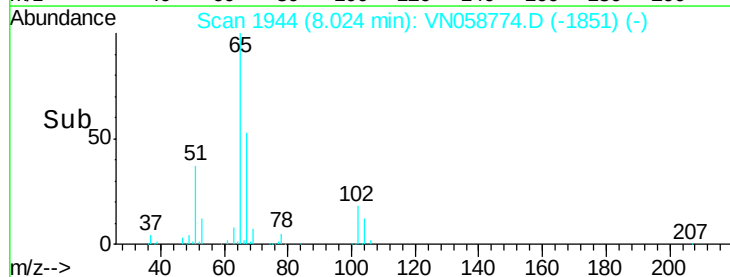
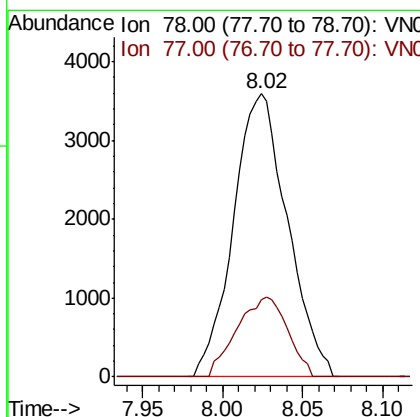
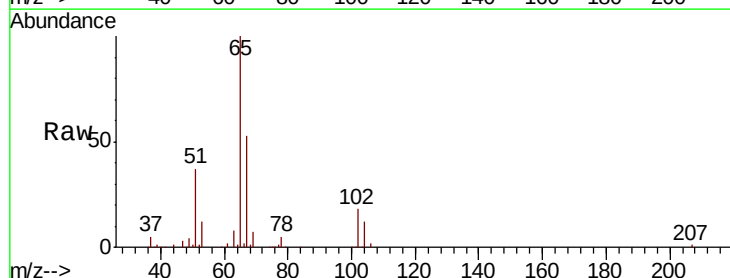
Manual Integrations
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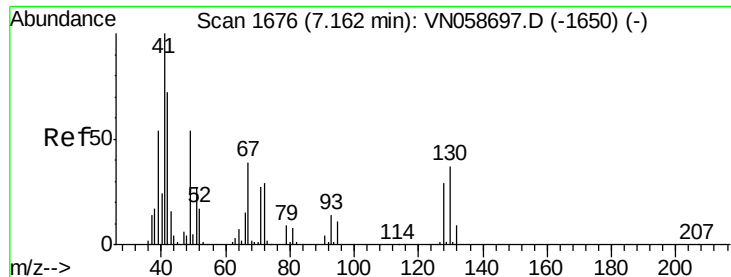
MMDadoda
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#40
Benzene
Concen: 0.495 ug/l
RT: 8.02 min Scan# 1944
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

Tgt Ion	Ratio	Lower	Upper
78	100		
77	27.1	18.8	28.2





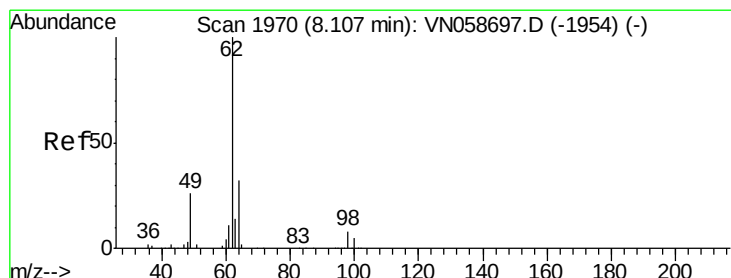
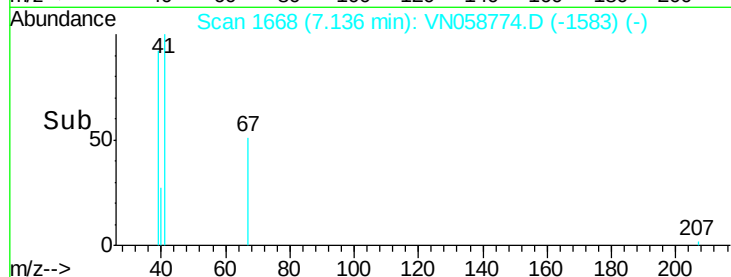
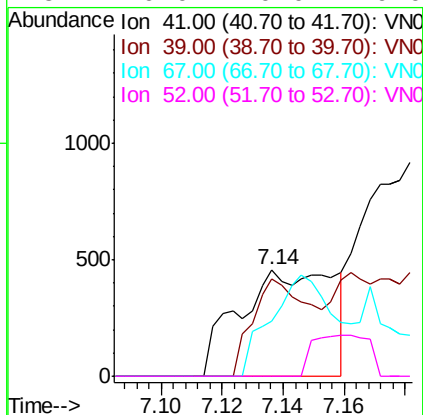
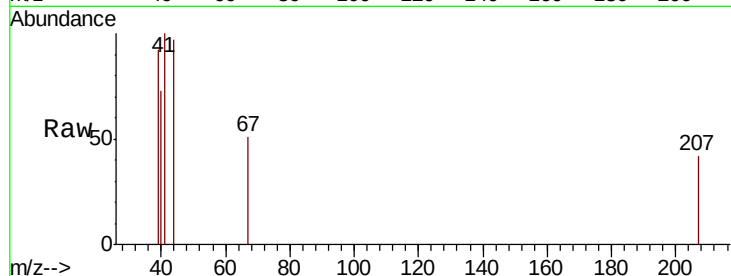
#41
Methacrylonitrile
Concen: 0.355 ug/l m
RT: 7.14 min Scan# 1668
Delta R.T. -0.03 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

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

Tot Ion:	41	Resp:	981
Ion	Ratio	Lower	Upper
41	100		
39	55.5	115.4	173.2#
67	63.7	0.0	0.0#
52	0.0	0.0	0.0

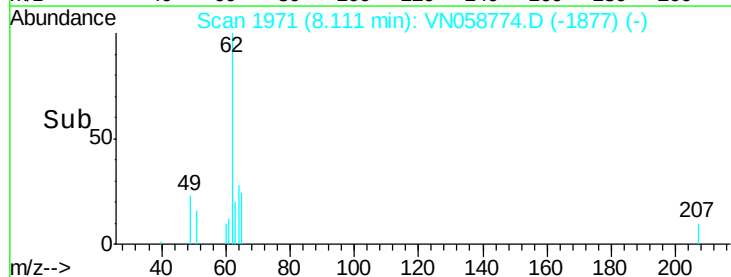
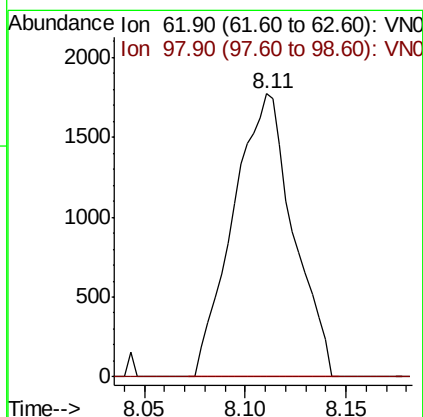
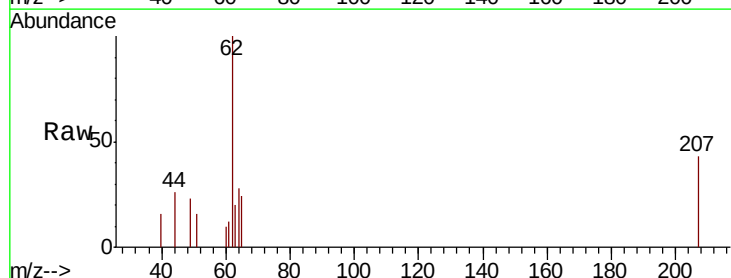
Manual Integrations
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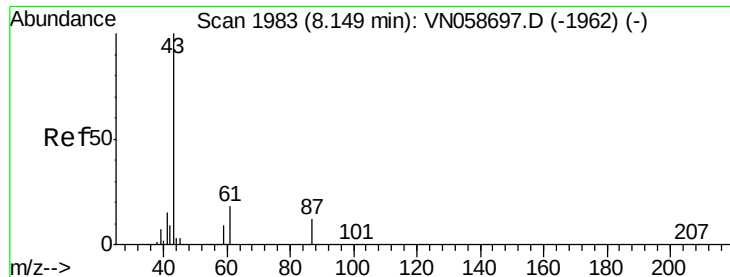
MMDadoda
10/18/2019 12:42:32 AM



#42
1,2-Dichloroethane
Concen: 0.570 ug/l
RT: 8.11 min Scan# 1971
Delta R.T. 0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

Tgt Ion:	62	Resp:	3677
Ion	Ratio	Lower	Upper
62	100		
98	0.0	0.0	15.8





#43

Isopropyl Acetate

Concen: 0.417 ug/l

RT: 8.15 min Scan# 1983

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

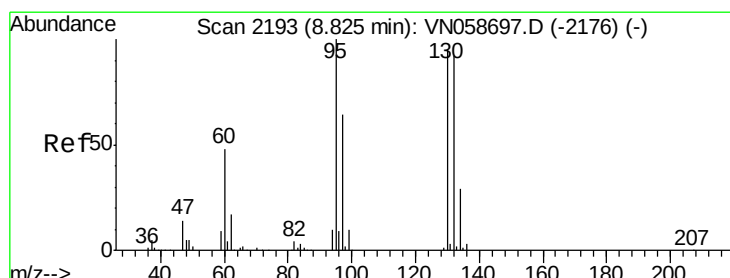
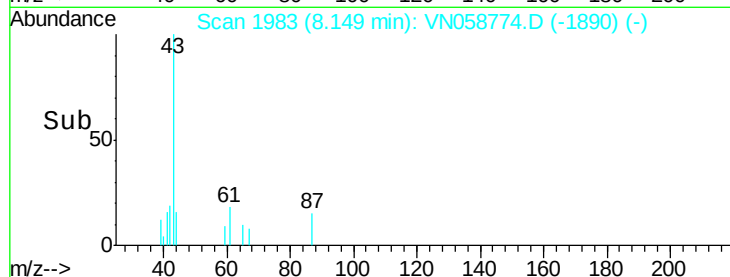
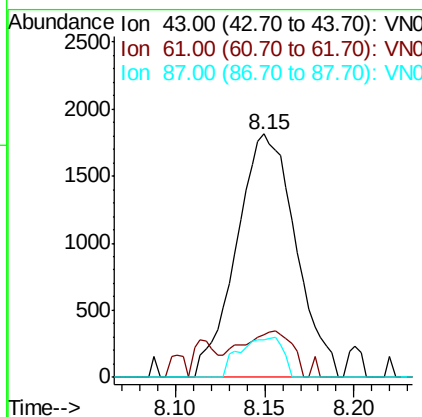
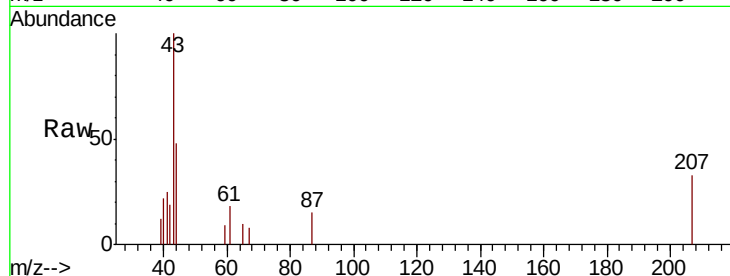
ClientSampleId :

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

Tot Ion:	43	Resp:	4200
Ion	Ratio	Lower	Upper
43	100		
61	16.3	20.3	30.5#
87	12.0	9.8	14.6

Manual Integrations
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MMDadoda
10/18/2019 12:42:32 AM



#44

Trichloroethene

Concen: 0.565 ug/l

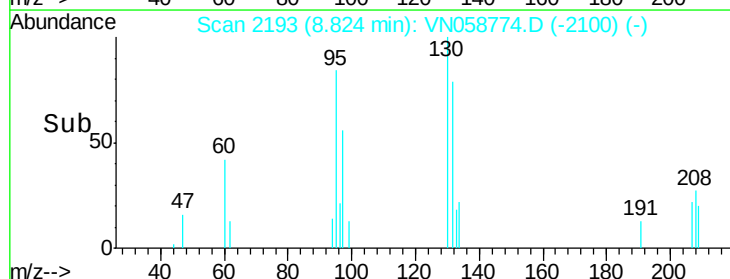
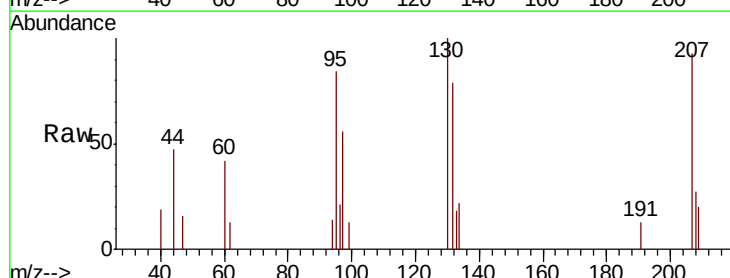
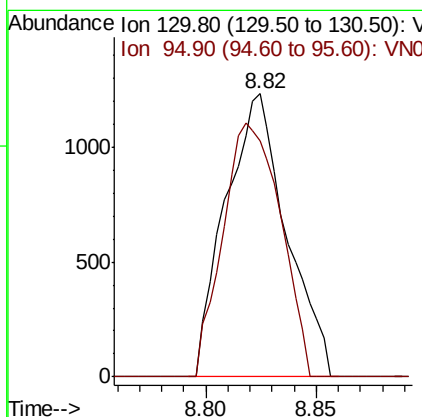
RT: 8.82 min Scan# 2193

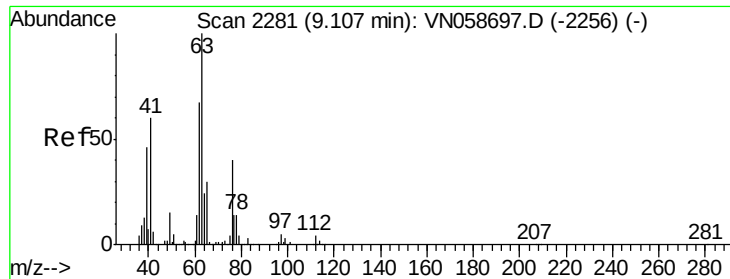
Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Tgt Ion:	130	Resp:	2356
Ion	Ratio	Lower	Upper
130	100		
95	83.5	0.0	211.2





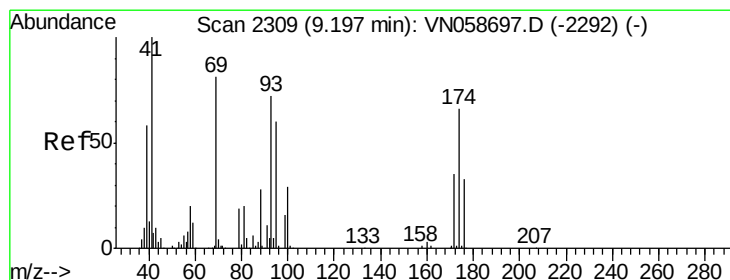
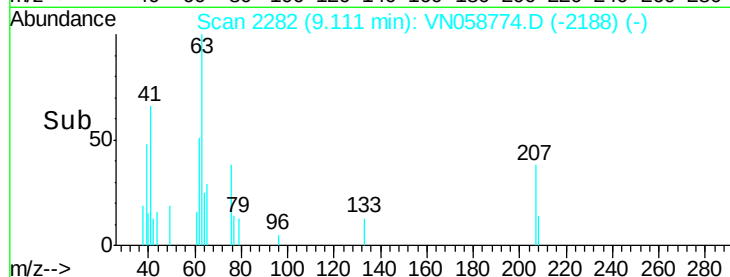
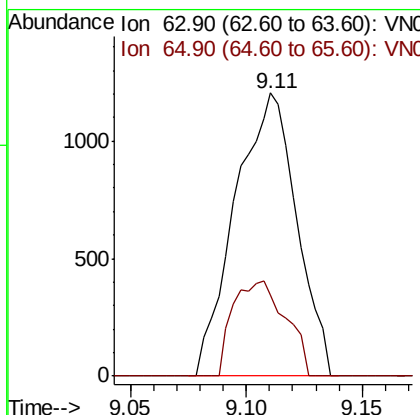
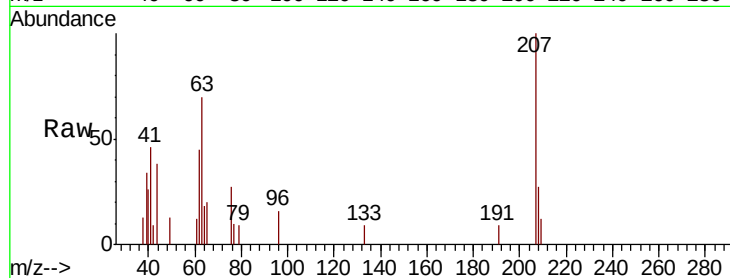
#45
 1,2-Dichloropropane
 Concen: 0.492 ug/l
 RT: 9.11 min Scan# 2282
 Delta R.T. 0.00 min
 Lab File: VN058774.D
 Acq: 15 Oct 2019 12:14

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

Tot Ion: 63 Resp: 2212
 Ion Ratio Lower Upper
 63 100
 65 28.7 24.1 36.1

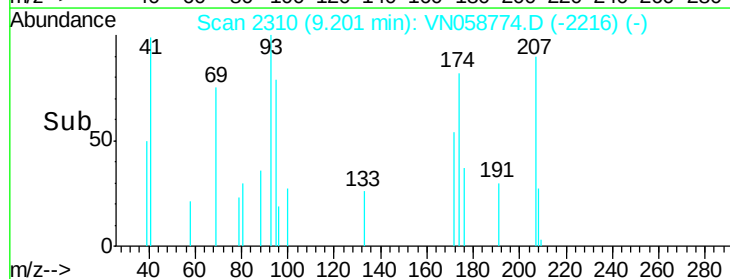
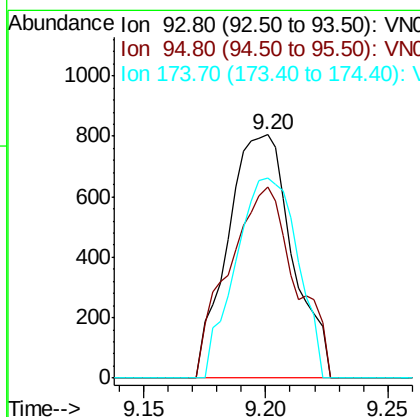
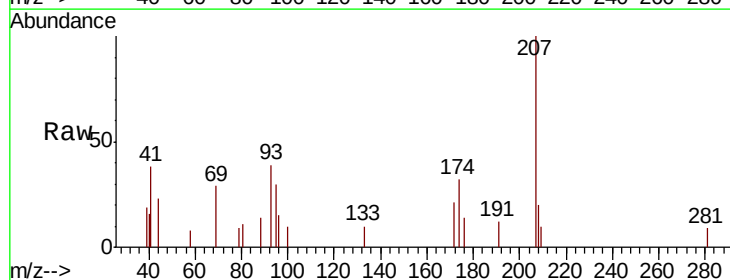
Manual Integrations
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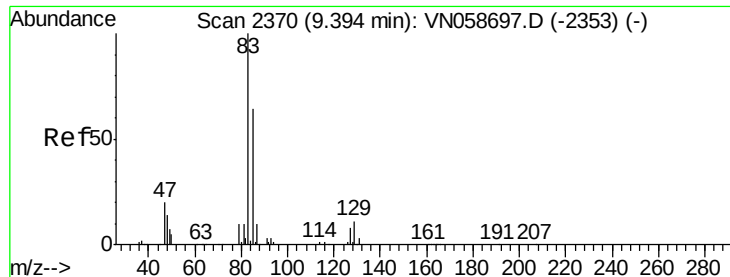
MMDadoda
 10/18/2019 12:42:32 AM



#46
 Dibromomethane
 Concen: 0.519 ug/l
 RT: 9.20 min Scan# 2310
 Delta R.T. 0.00 min
 Lab File: VN058774.D
 Acq: 15 Oct 2019 12:14

Tgt Ion: 93 Resp: 1480
 Ion Ratio Lower Upper
 93 100
 95 81.0 66.6 100.0
 174 79.2 75.2 112.8





#47

Bromodichloromethane

Concen: 0.469 ug/l

RT: 9.39 min Scan# 2369

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

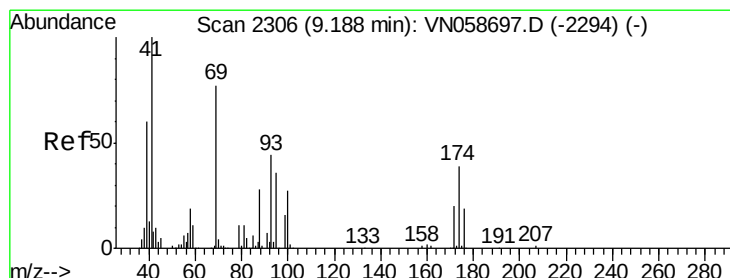
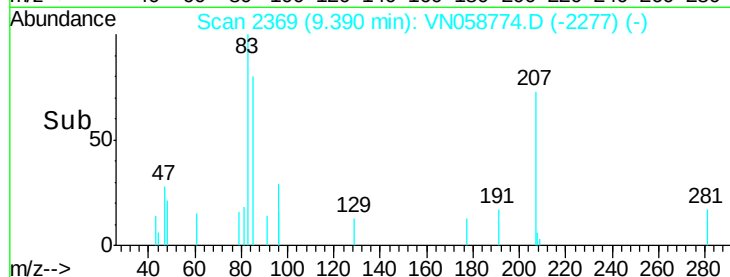
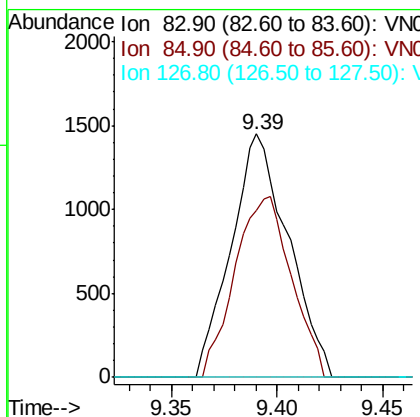
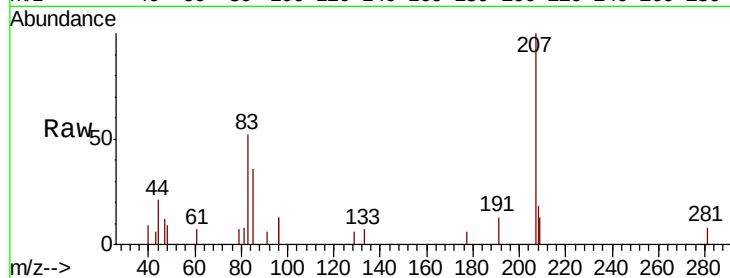
ClientSampleId :

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

Tot Ion:	83	Resp:	2719
Ion	Ratio	Lower	Upper
83	100		
85	68.5	50.9	76.3
127	0.0	6.3	9.5#

Manual Integrations
APPROVED

MMDadoda
10/18/2019 12:42:32 AM



#48

Methyl methacrylate

Concen: 0.493 ug/l

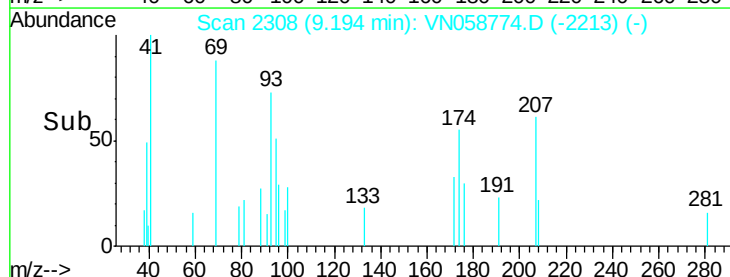
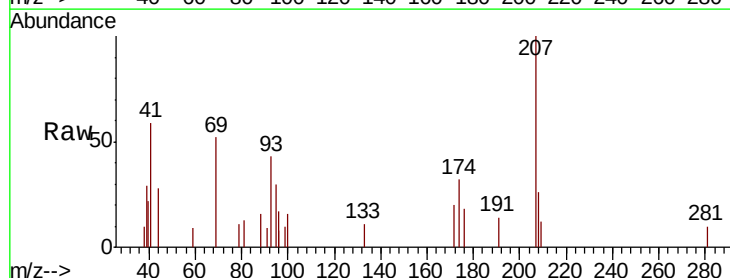
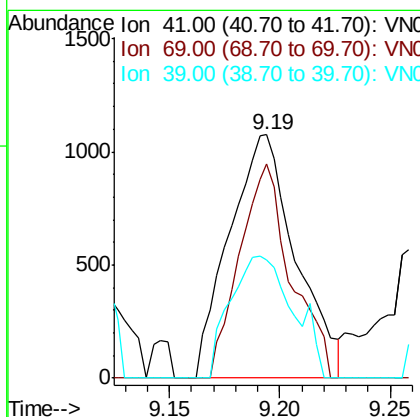
RT: 9.19 min Scan# 2308

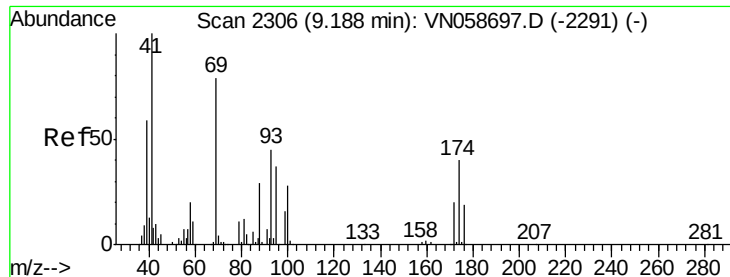
Delta R.T. 0.01 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Tgt Ion:	41	Resp:	2249
Ion	Ratio	Lower	Upper
41	100		
69	68.2	63.4	95.2
39	47.4	48.9	73.3#





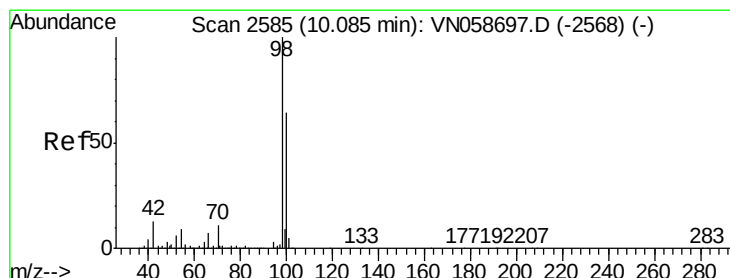
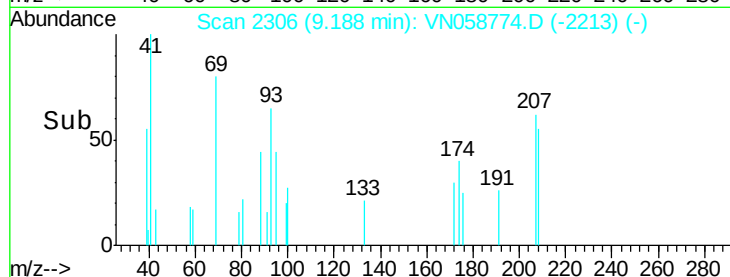
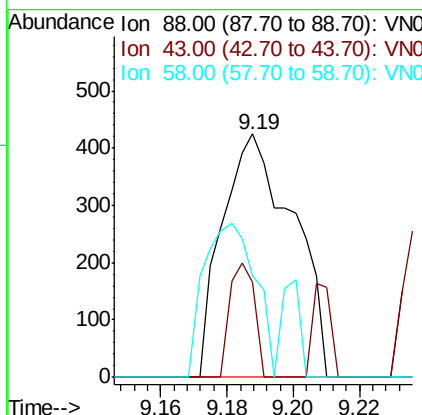
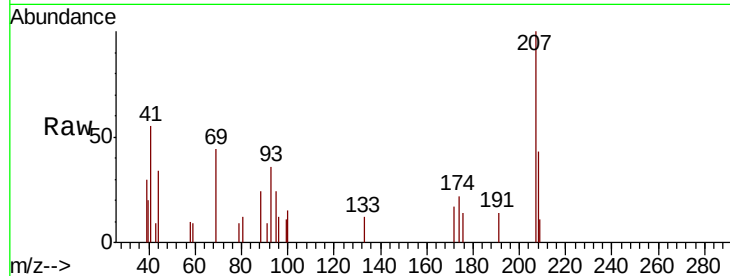
#49
1,4-Dioxane
Concen: 8.921 ug/l
RT: 9.19 min Scan# 2306
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

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

Tot Ion	Ratio	Lower	Upper
88	100		
43	0.0	28.6	43.0#
58	45.7	57.2	85.8#

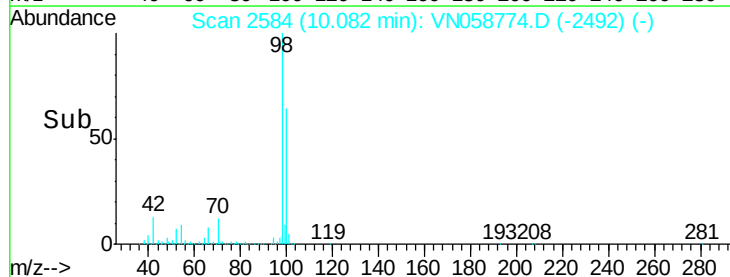
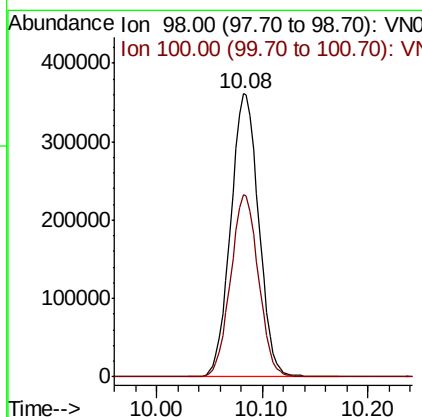
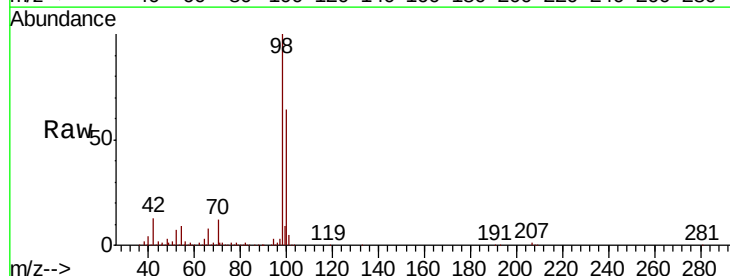
Manual Integrations
APPROVED

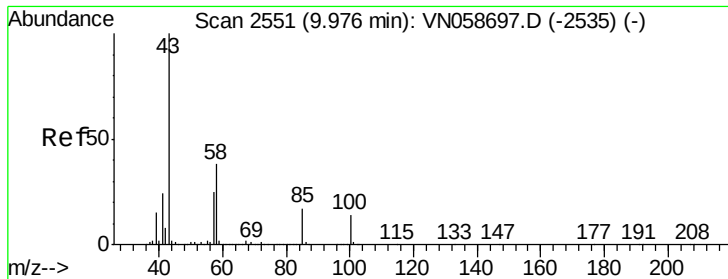
MMDadoda
10/18/2019 12:42:32 AM



#50
Toluene-d8
Concen: 46.561 ug/l
RT: 10.08 min Scan# 2584
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

Tgt Ion	Ratio	Lower	Upper
98	100		
100	63.8	51.1	76.7





#51

4-Methyl-2-Pentanone

Concen: 2.286 ug/l

RT: 9.98 min Scan# 2551

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion: 43 Resp: 12930

Ion Ratio Lower Upper

43 100

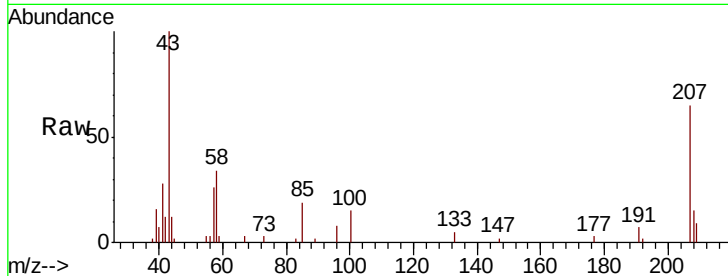
58 36.8 30.3 45.5

Manual Integrations

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MMDadoda

10/18/2019 12:42:32 AM



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

8000

6000

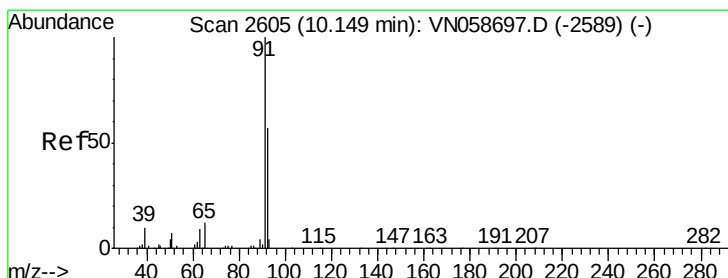
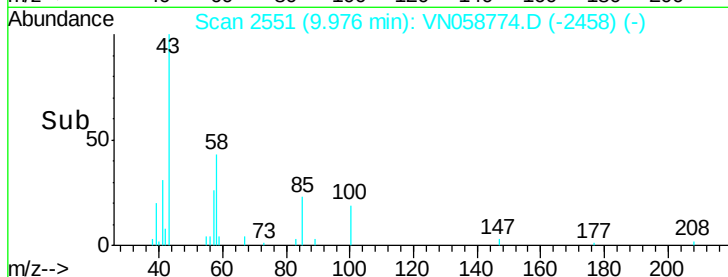
4000

2000

0

9.90 9.95 10.00 10.05

Time-->



#52

Toluene

Concen: 0.523 ug/l

RT: 10.15 min Scan# 2604

Delta R.T. -0.00 min

Lab File: VN058774.D

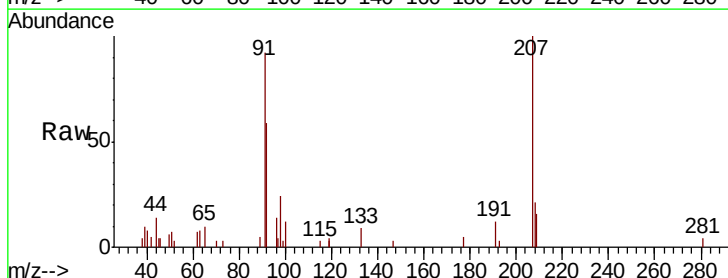
Acq: 15 Oct 2019 12:14

Tgt Ion: 92 Resp: 5370

Ion Ratio Lower Upper

92 100

91 170.9 139.1 208.7



Abundance Ion 92.00 (91.70 to 92.70): VN0

Ion 91.00 (90.70 to 91.70): VN0

5000

4000

3000

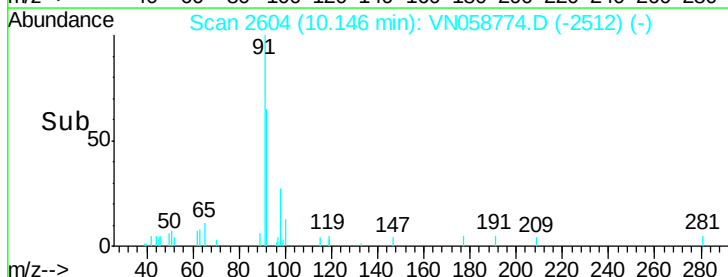
2000

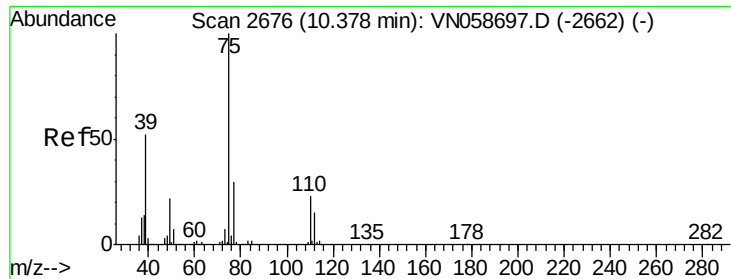
1000

0

10.10 10.15 10.20

Time-->





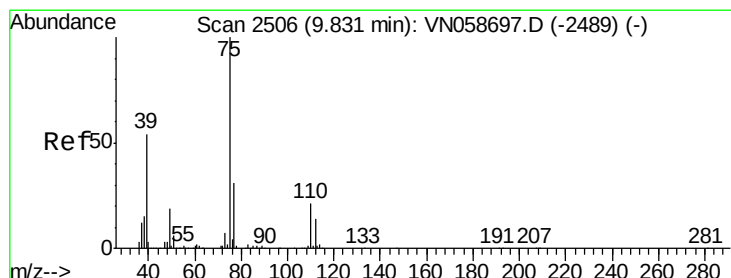
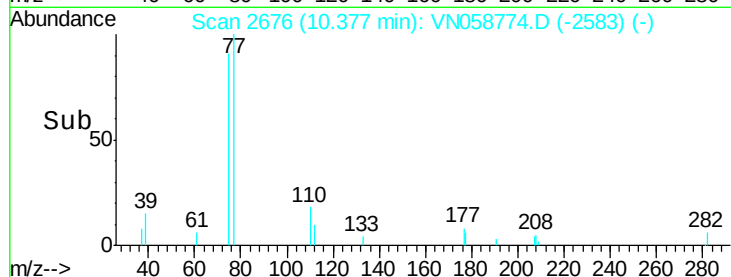
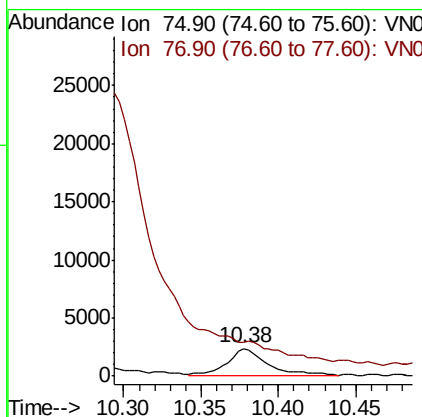
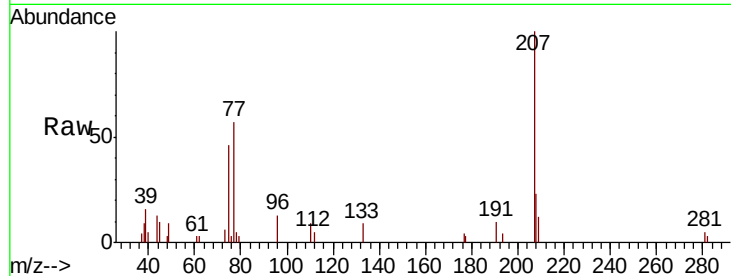
#53
 t-1,3-Dichloropropene
 Concen: 0.669 ug/l
 RT: 10.38 min Scan# 2676
 Delta R.T. -0.00 min
 Lab File: VN058774.D
 Acq: 15 Oct 2019 12:14

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

Tot Ion: 75 Resp: 4450
 Ion Ratio Lower Upper
 75 100
 77 66.8 26.2 39.4#

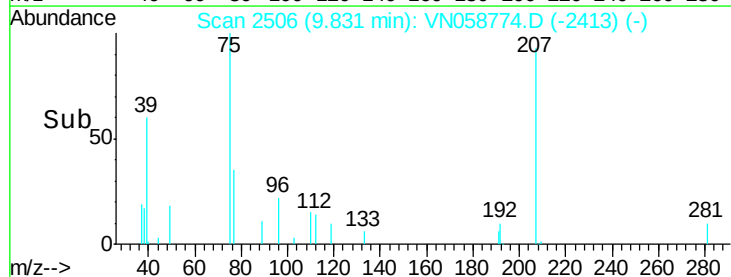
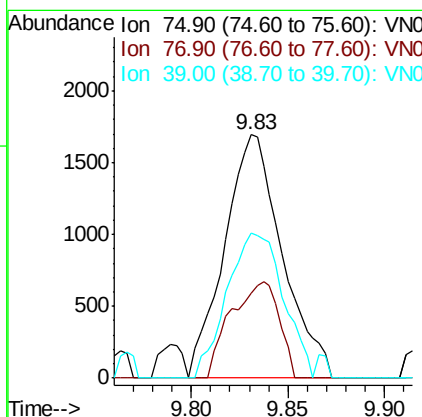
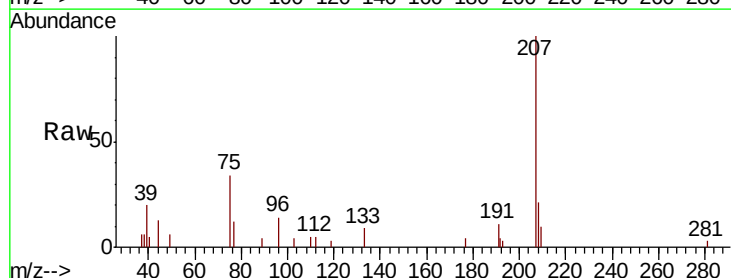
Manual Integrations
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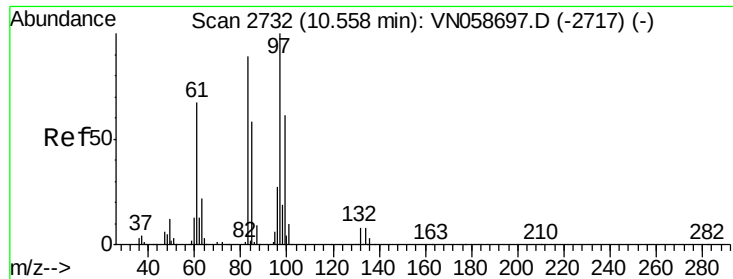
MMDadoda
 10/18/2019 12:42:32 AM



#54
 cis-1,3-Dichloropropene
 Concen: 0.498 ug/l
 RT: 9.83 min Scan# 2506
 Delta R.T. -0.00 min
 Lab File: VN058774.D
 Acq: 15 Oct 2019 12:14

Tgt Ion: 75 Resp: 3517
 Ion Ratio Lower Upper
 75 100
 77 34.7 24.4 36.6
 39 59.8 43.1 64.7





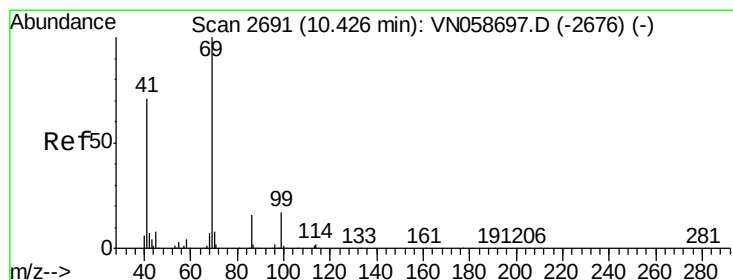
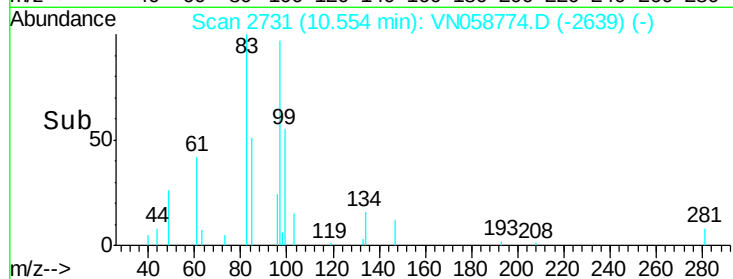
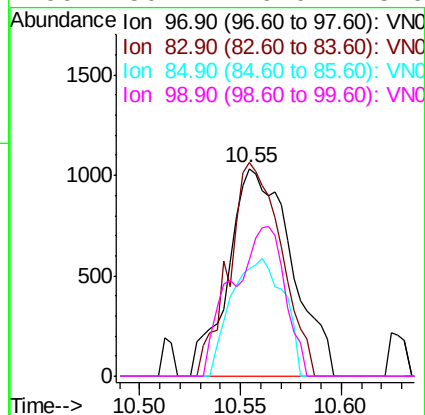
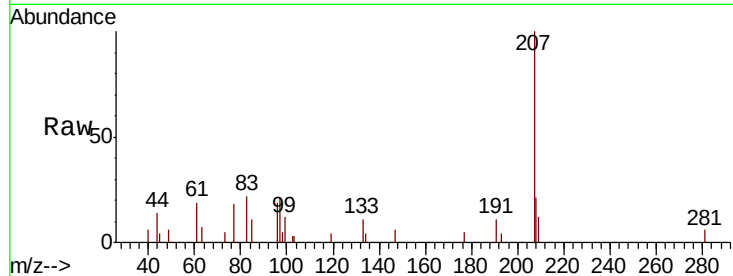
#55
 1,1,2-Trichloroethane
 Concen: 0.540 ug/l
 RT: 10.55 min Scan# 2731
 Delta R.T. -0.00 min
 Lab File: VN058774.D
 Acq: 15 Oct 2019 12:14

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

Tot Ion:	97	Resp:	2268
Ion	Ratio	Lower	Upper
97	100		
83	103.0	71.2	106.8
85	52.1	46.7	70.1
99	56.2	49.0	73.6

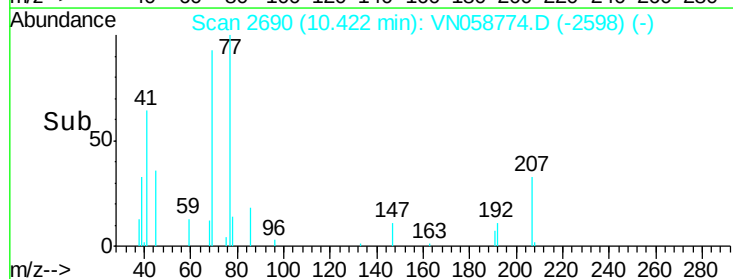
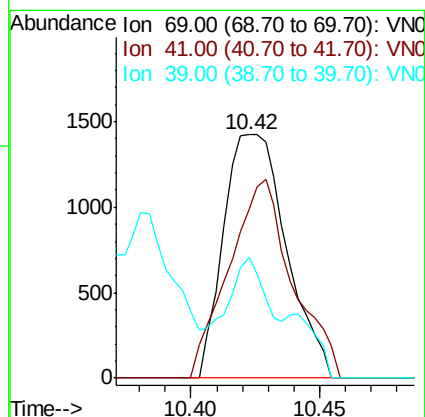
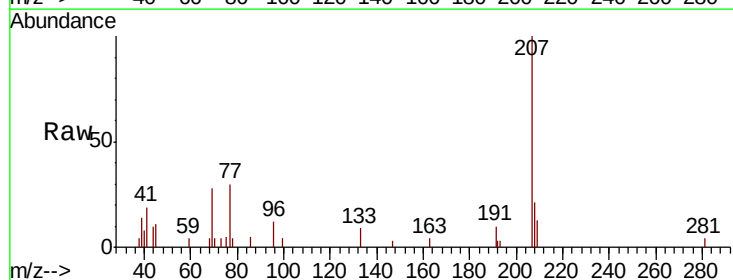
Manual Integrations
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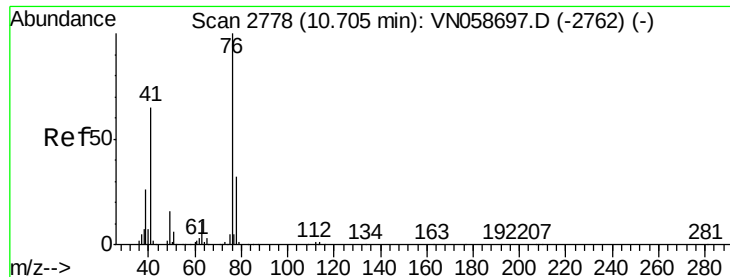
MMDadoda
 10/18/2019 12:42:32 AM



#56
 Ethyl methacrylate
 Concen: 0.393 ug/l
 RT: 10.42 min Scan# 2690
 Delta R.T. -0.00 min
 Lab File: VN058774.D
 Acq: 15 Oct 2019 12:14

Tgt Ion:	69	Resp:	2415
Ion	Ratio	Lower	Upper
69	100		
41	82.6	56.8	85.2
39	15.9	32.5	48.7#





#57

1,3-Dichloropropane

Concen: 0.457 ug/l

RT: 10.71 min Scan# 2779

Delta R.T. 0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion: 76 Resp: 3272

Ion Ratio Lower Upper

76 100

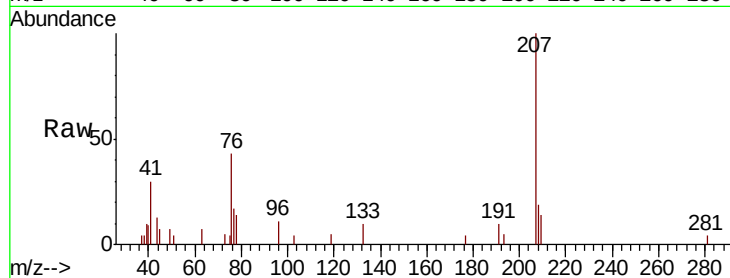
78 40.3 25.9 38.9#

Manual Integrations

APPROVED

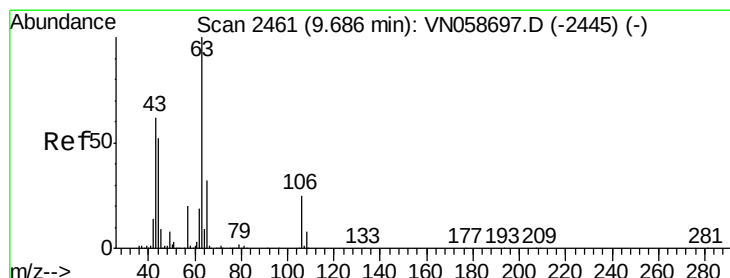
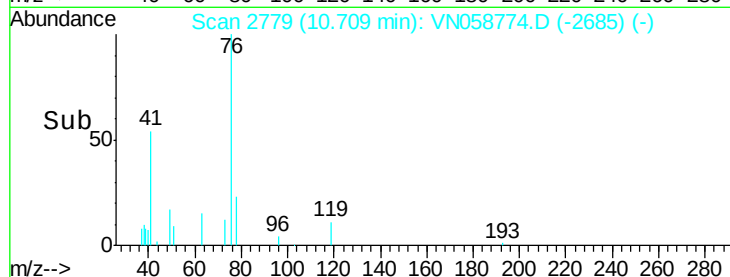
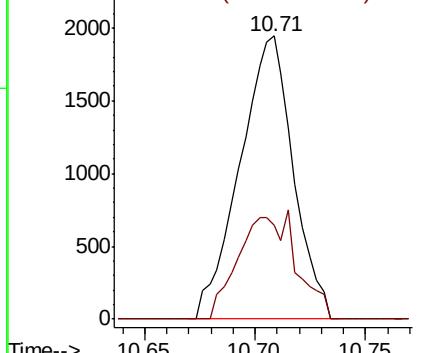
MMDadoda

10/18/2019 12:42:32 AM



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0



#58

2-Chloroethyl Vinyl ether

Concen: 2.075 ug/l

RT: 9.69 min Scan# 2461

Delta R.T. -0.00 min

Lab File: VN058774.D

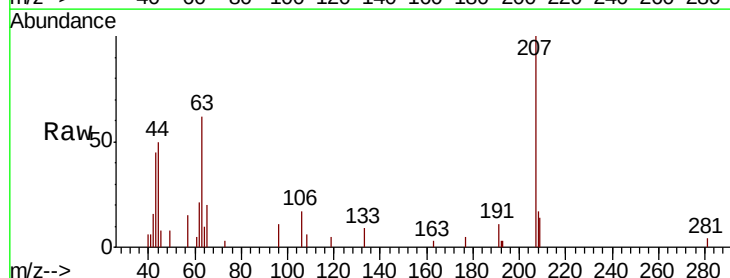
Acq: 15 Oct 2019 12:14

Tgt Ion: 63 Resp: 6139

Ion Ratio Lower Upper

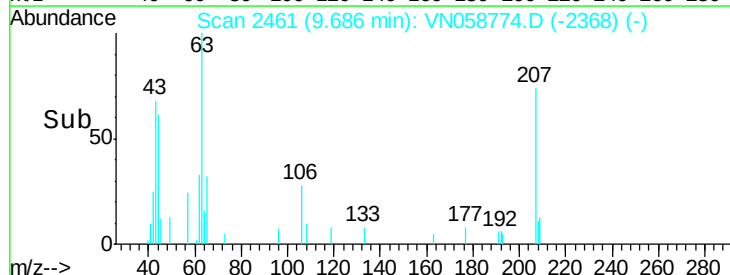
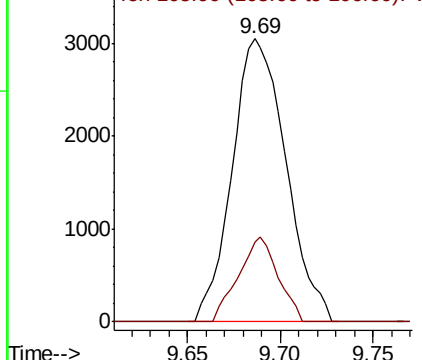
63 100

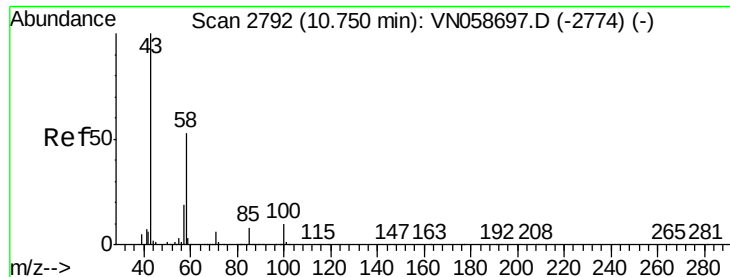
106 22.0 20.0 30.0



Abundance Ion 62.90 (62.60 to 63.60): VN0

Ion 105.90 (105.60 to 106.60): V





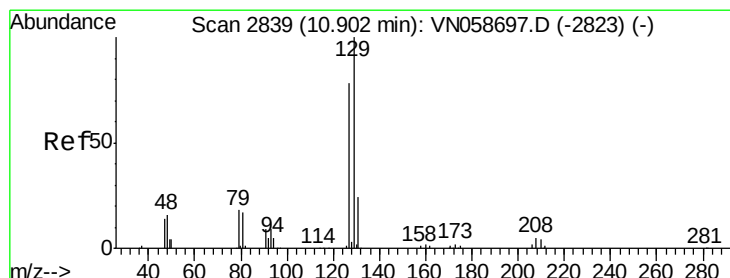
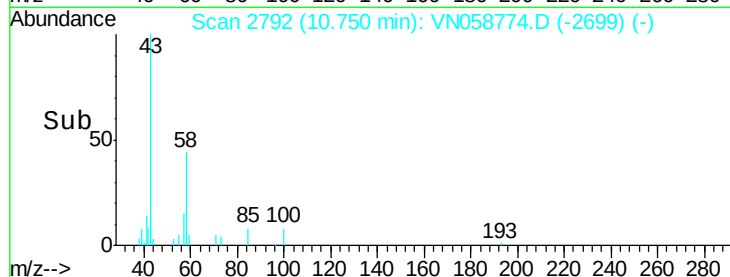
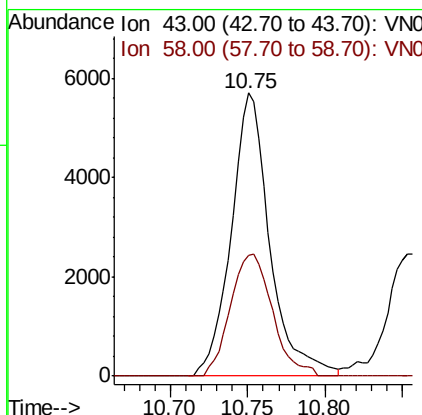
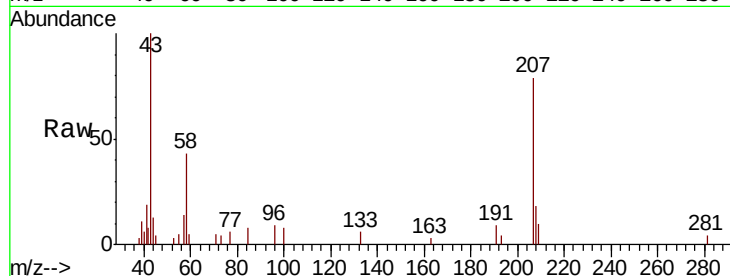
#59
2-Hexanone
Concen: 2.261 ug/l
RT: 10.75 min Scan# 2792
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

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

Tot Ion	Ratio	Lower	Upper
43	100		
58	46.9	26.1	78.3

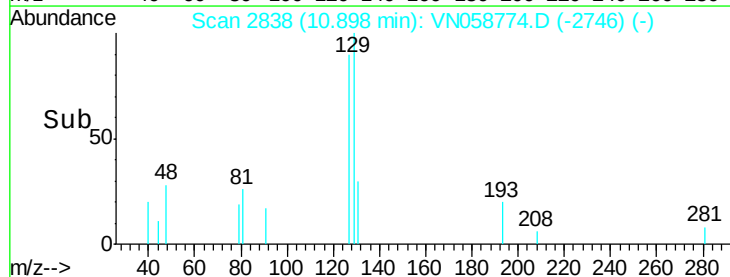
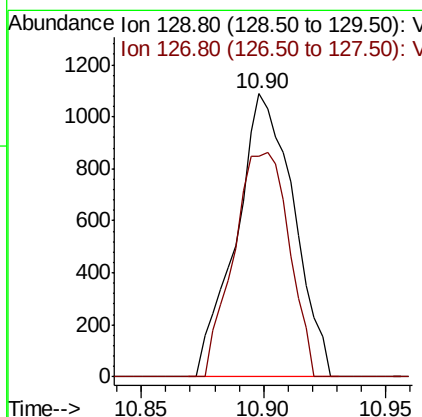
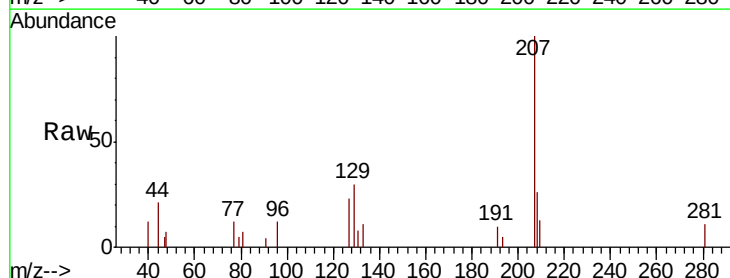
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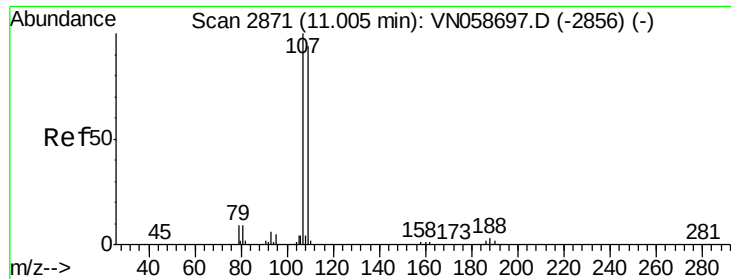
MMDadoda
10/18/2019 12:42:32 AM



#60
Dibromochloromethane
Concen: 0.410 ug/l
RT: 10.90 min Scan# 2838
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

Tgt Ion	Ratio	Lower	Upper
129	100		
127	76.6	38.5	115.3





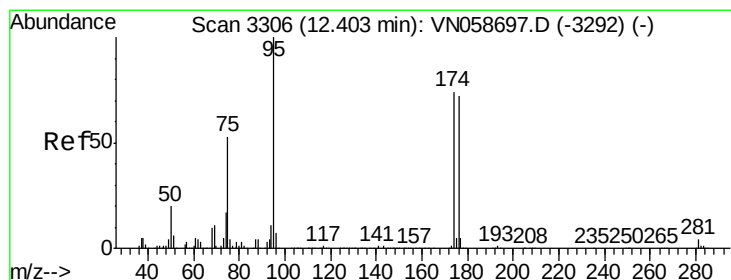
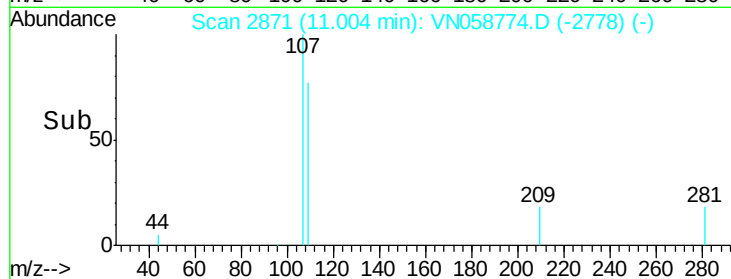
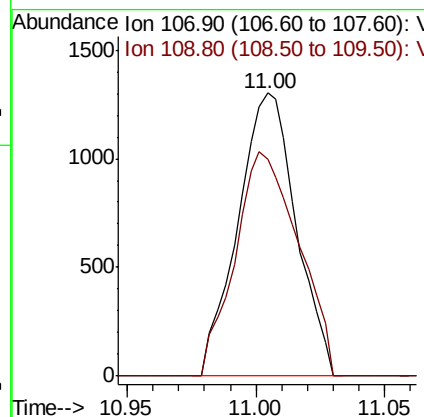
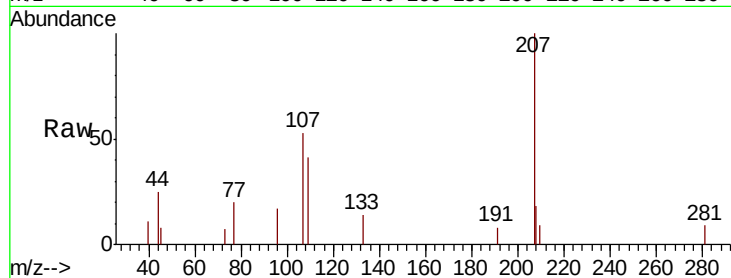
#61
 1,2-Dibromoethane
 Concen: 0.486 ug/l
 RT: 11.00 min Scan# 2871
 Delta R.T. -0.00 min
 Lab File: VN058774.D
 Acq: 15 Oct 2019 12:14

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

Tot Ion: 107 Resp: 2047
 Ion Ratio Lower Upper
 107 100
 109 86.5 75.4 113.0

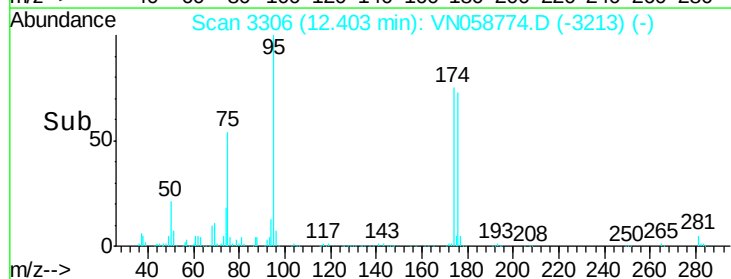
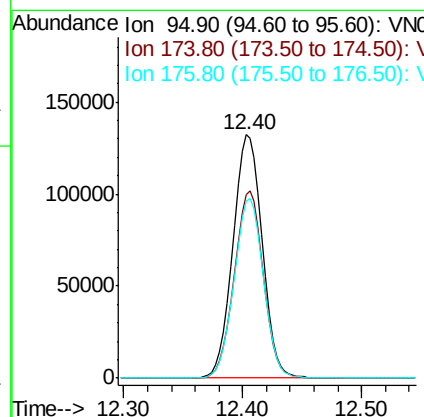
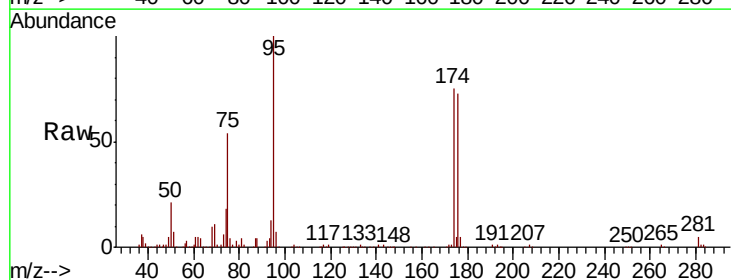
Manual Integrations
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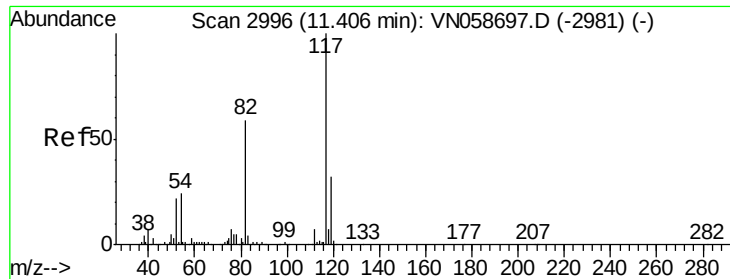
MMDadoda
 10/18/2019 12:42:32 AM



#62
 4-Bromofluorobenzene
 Concen: 41.743 ug/l
 RT: 12.40 min Scan# 3306
 Delta R.T. -0.00 min
 Lab File: VN058774.D
 Acq: 15 Oct 2019 12:14

Tgt Ion: 95 Resp: 225633
 Ion Ratio Lower Upper
 95 100
 174 76.3 0.0 150.4
 176 74.0 0.0 146.8





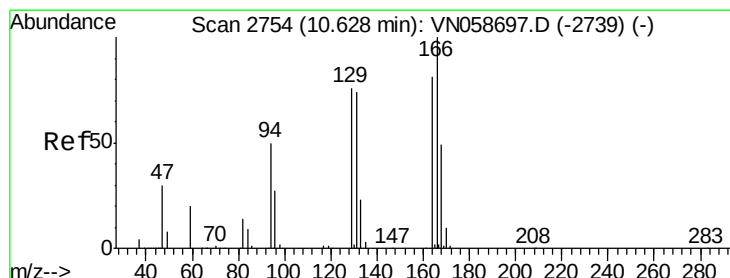
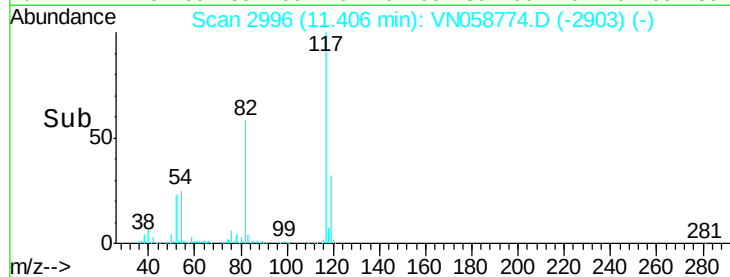
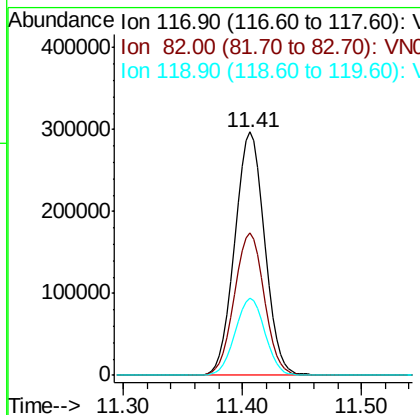
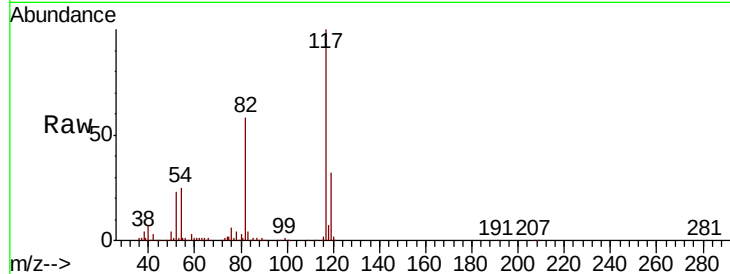
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

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

Tot Ion	Ratio	Resp	Lower	Upper
117	100	518173		
82	58.4		47.0	70.4
119	31.7		25.4	38.2

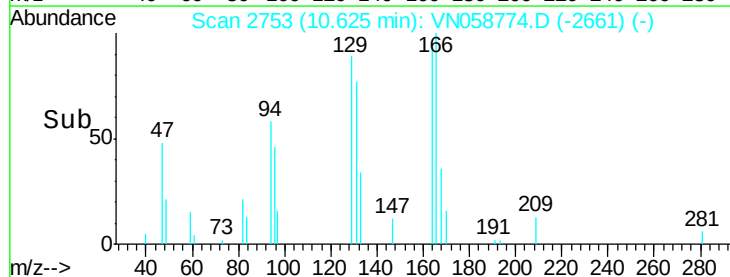
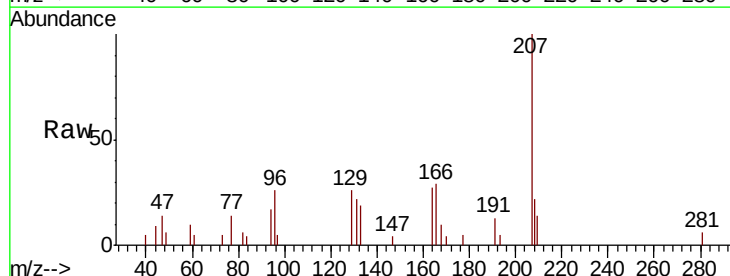
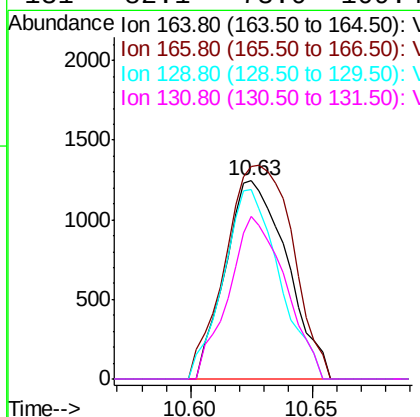
Manual Integrations
APPROVED

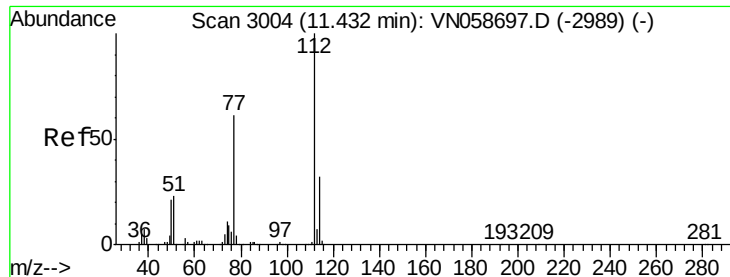
MMDadoda
10/18/2019 12:42:32 AM



#64
Tetrachloroethene
Concen: 0.604 ug/l
RT: 10.63 min Scan# 2753
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

Tgt Ion	Ratio	Resp	Lower	Upper
164	100	2189		
166	107.2		99.3	148.9
129	95.8		75.2	112.8
131	82.1		73.0	109.4





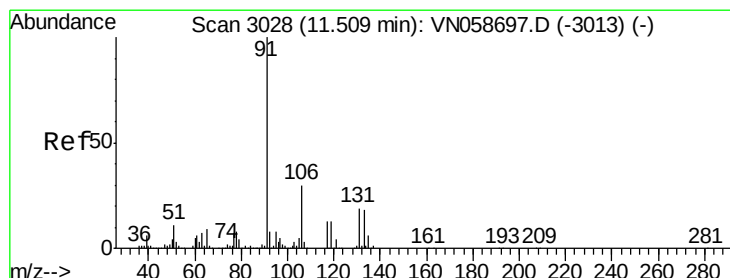
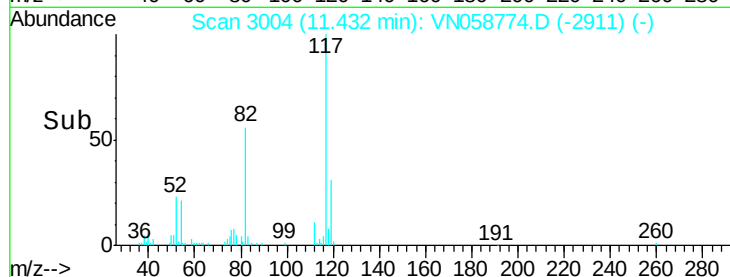
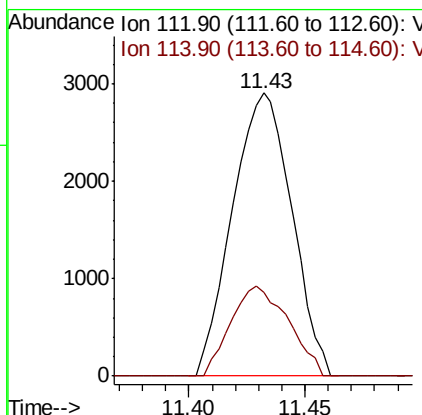
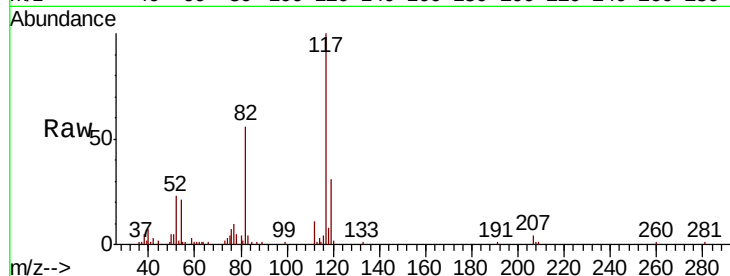
#65
Chlorobenzene
Concen: 0.491 ug/l
RT: 11.43 min Scan# 3004
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

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

Tot Ion:112 Resp: 5170
Ion Ratio Lower Upper
112 100
114 29.5 25.2 37.8

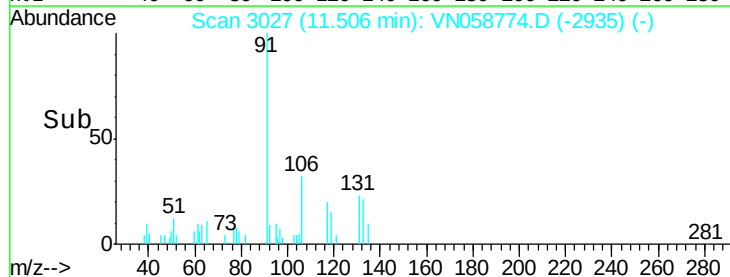
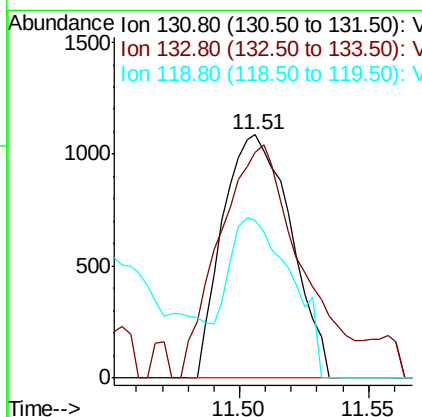
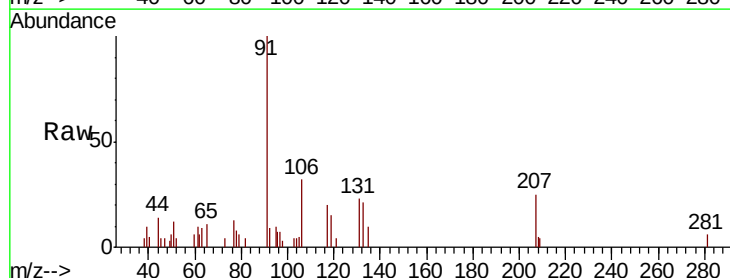
Manual Integrations
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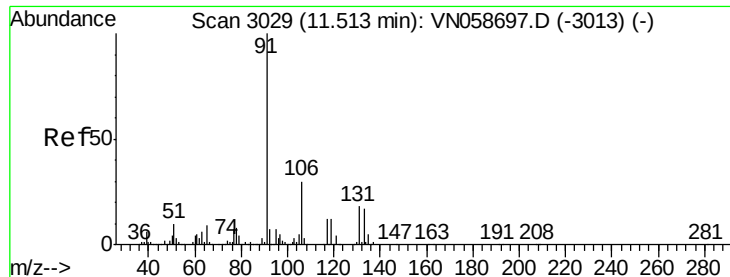
MMDadoda
10/18/2019 12:42:32 AM



#66
1,1,1,2-Tetrachloroethane
Concen: 0.513 ug/l
RT: 11.51 min Scan# 3027
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

Tgt Ion:131 Resp: 1996
Ion Ratio Lower Upper
131 100
133 115.1 47.6 142.9
119 0.0 33.0 98.9#





#67

Ethyl Benzene

Concen: 0.469 ug/l

RT: 11.51 min Scan# 3029

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion: 91 Resp: 8806

Ion Ratio Lower Upper

91 100

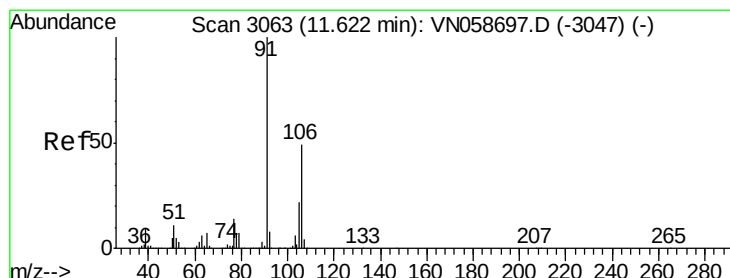
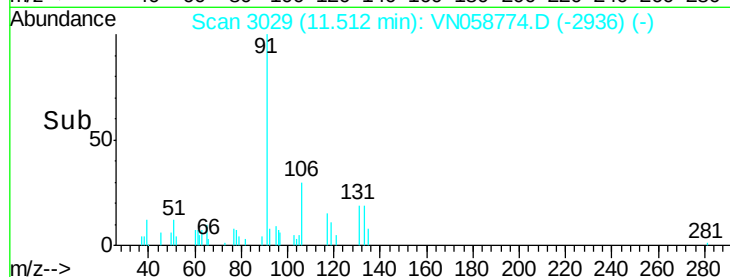
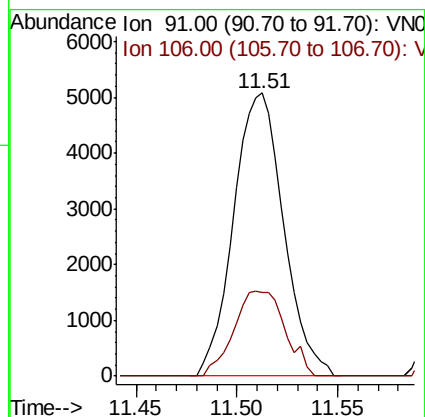
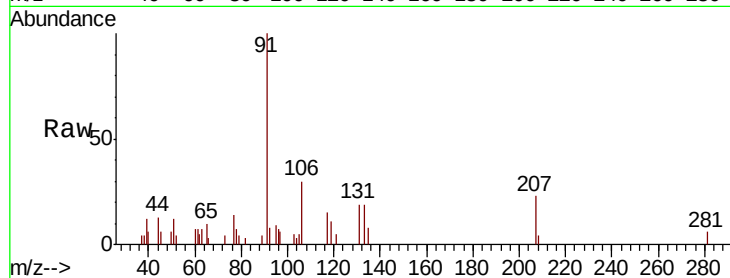
106 29.6 24.1 36.1

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#68

m/p-Xylenes

Concen: 0.868 ug/l

RT: 11.62 min Scan# 3062

Delta R.T. -0.00 min

Lab File: VN058774.D

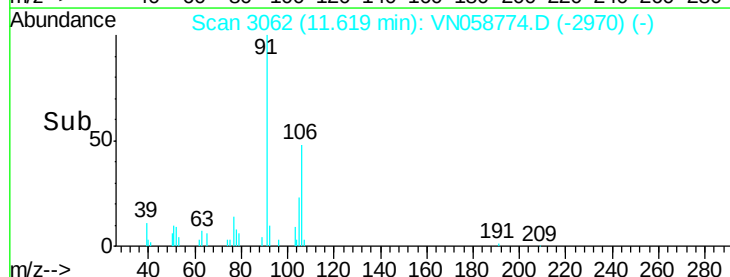
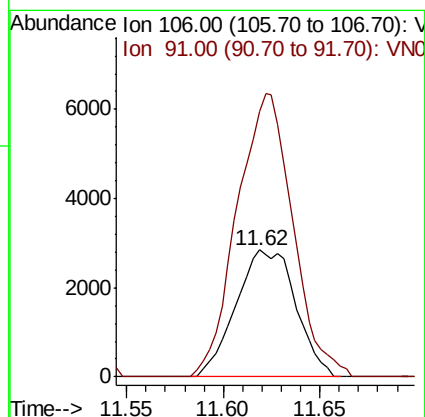
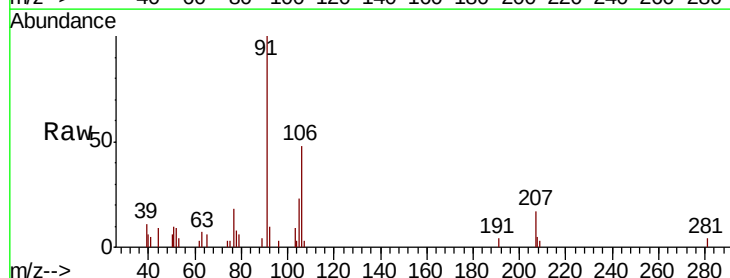
Acq: 15 Oct 2019 12:14

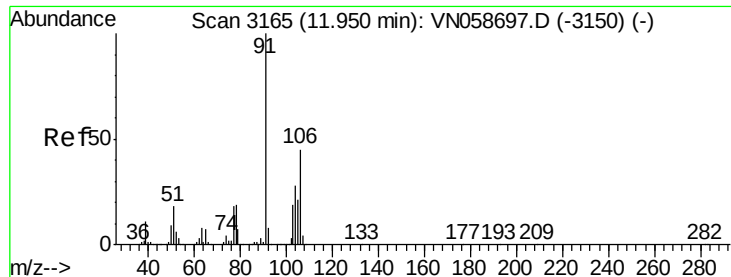
Tgt Ion: 106 Resp: 6109

Ion Ratio Lower Upper

106 100

91 208.2 165.7 248.5





#69

o-Xylene

Concen: 0.414 ug/l

RT: 11.95 min Scan# 3165

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion:106 Resp: 2821

Ion Ratio Lower Upper

106 100

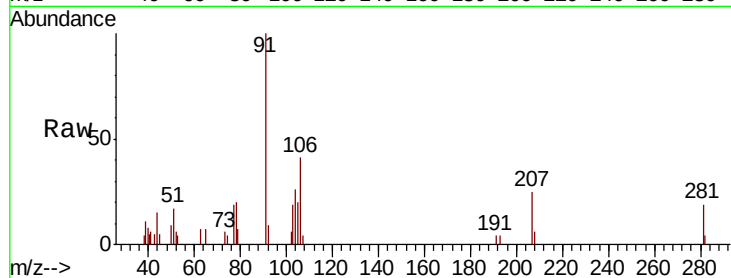
91 222.5 110.9 332.9

Manual Integrations

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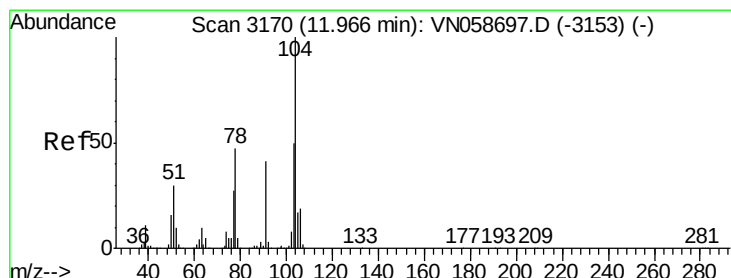
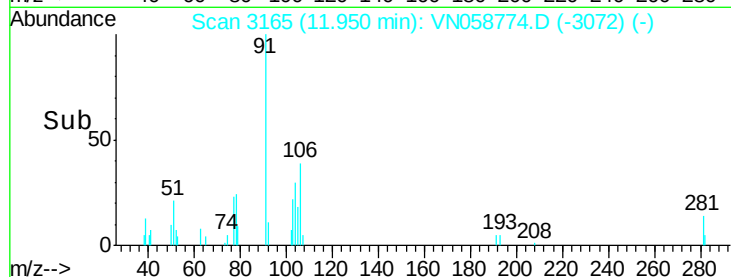
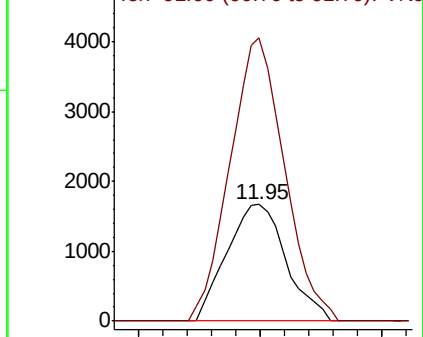
MMDadoda

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Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VN



#70

Styrene

Concen: 0.370 ug/l

RT: 11.97 min Scan# 3170

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

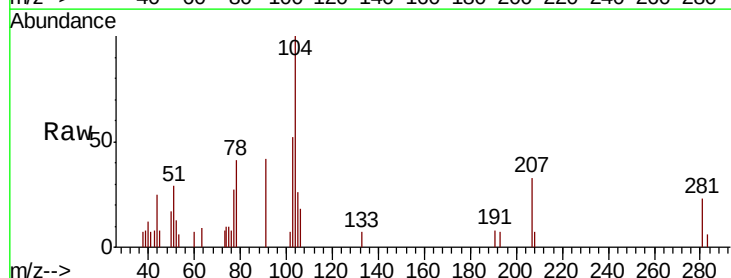
Tgt Ion:104 Resp: 4135

Ion Ratio Lower Upper

104 100

78 58.4 42.2 63.2

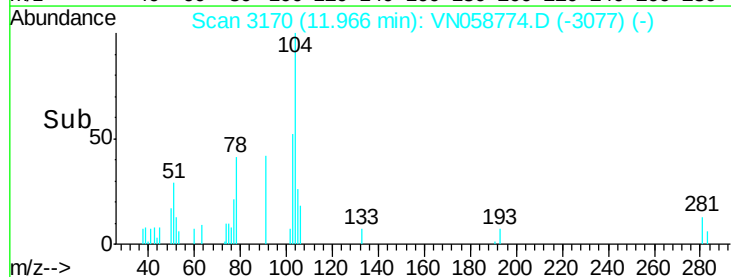
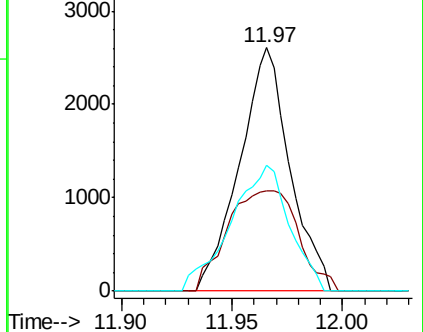
103 60.2 43.7 65.5

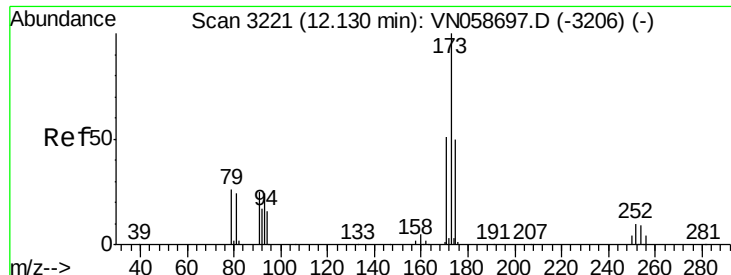


Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VN

Ion 103.00 (102.70 to 103.70): V





#71

Bromoform

Concen: 0.430 ug/l

RT: 12.13 min Scan# 3220

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

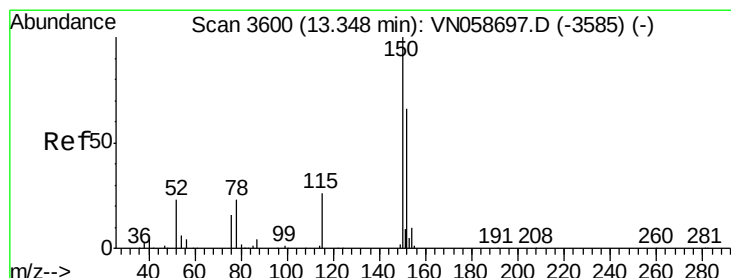
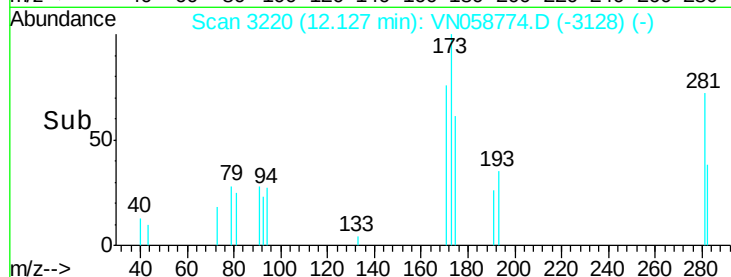
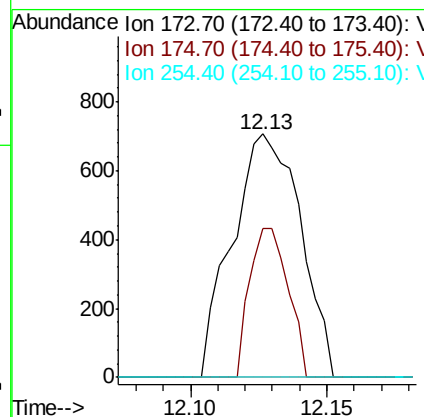
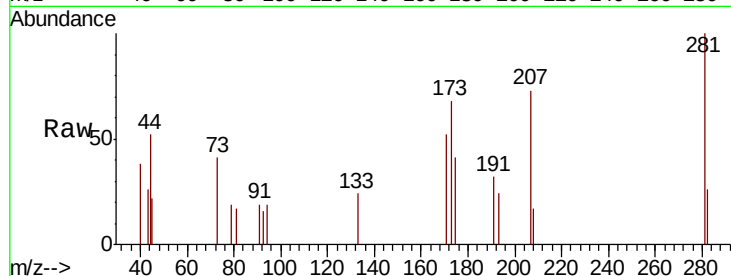
ClientSampleId :

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

Tot Ion	Ratio	Lower	Upper
173	100		
175	34.1	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

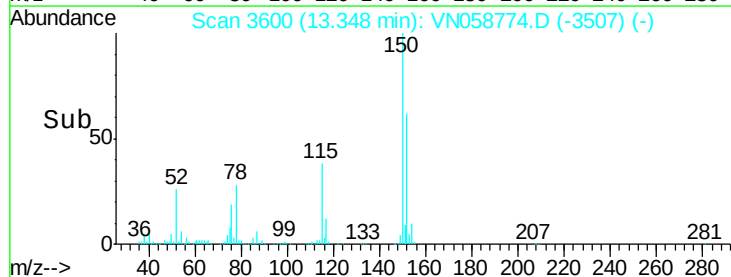
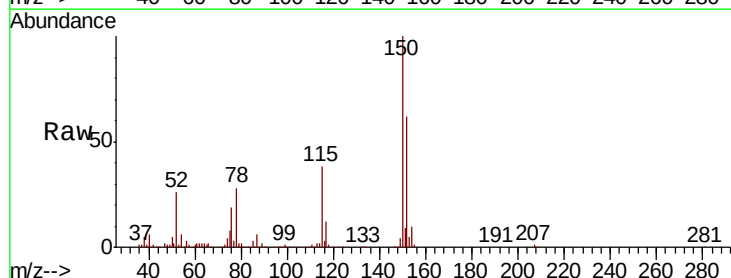
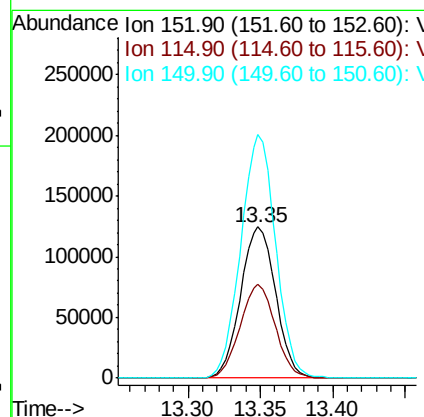
RT: 13.35 min Scan# 3600

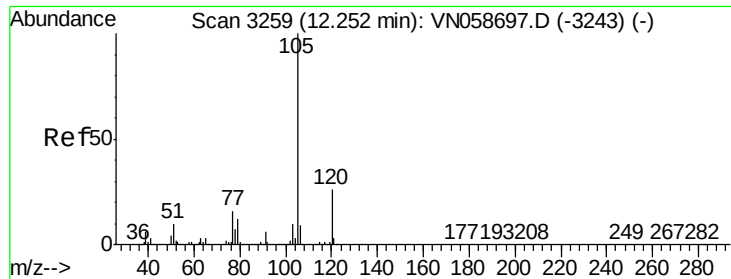
Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Tgt Ion	Ratio	Lower	Upper
152	100		
115	61.4	30.4	91.2
150	159.4	0.0	345.4





#73

Isopropylbenzene

Concen: 0.499 ug/l

RT: 12.25 min Scan# 3258

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion: 105 Resp: 7579

Ion Ratio Lower Upper

105 100

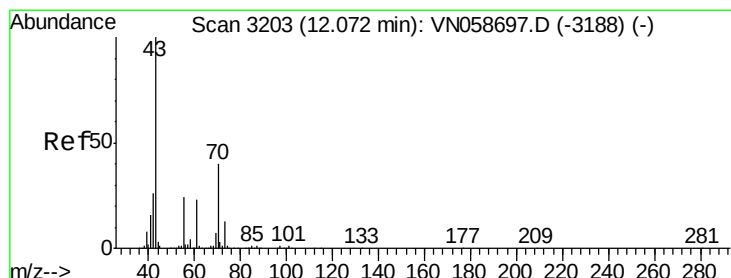
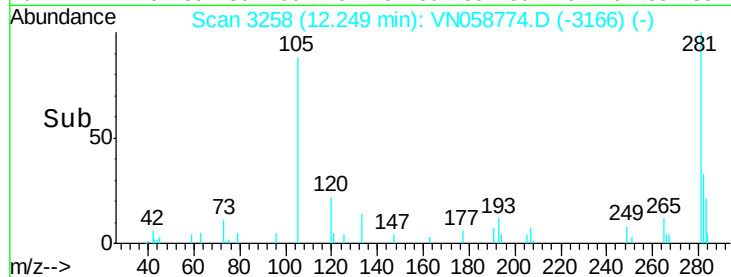
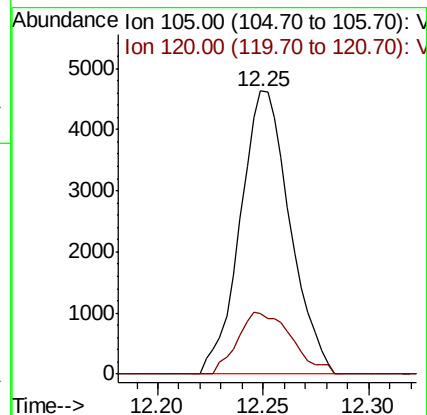
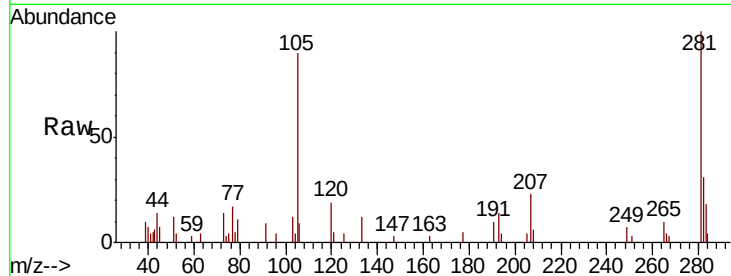
120 23.7 13.1 39.1

Manual Integrations

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MMDadoda

10/18/2019 12:42:32 AM



#74

N-ethyl acetate

Concen: 0.398 ug/l

RT: 12.07 min Scan# 3203

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Tgt Ion: 43 Resp: 2715

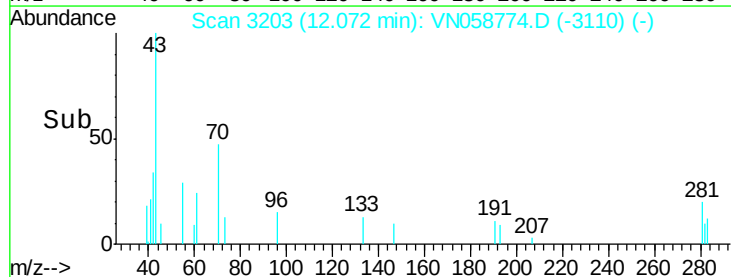
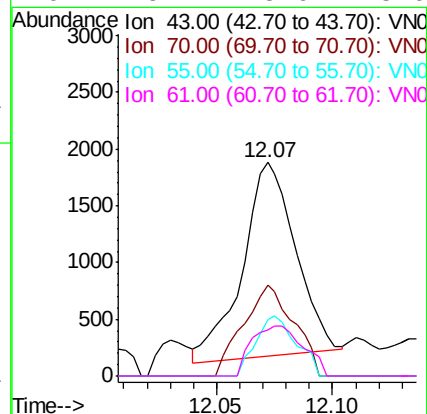
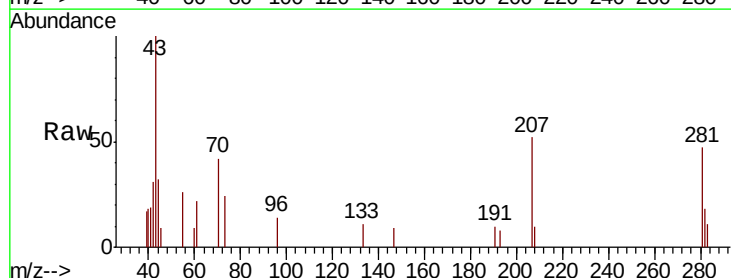
Ion Ratio Lower Upper

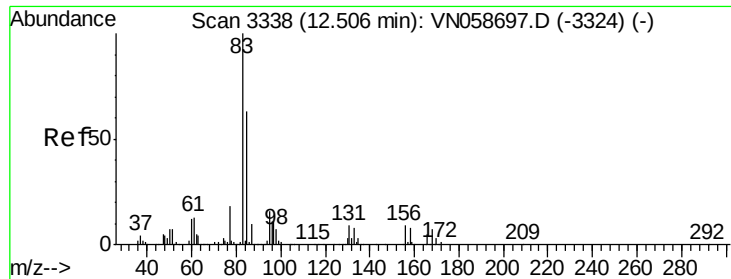
43 100

70 44.7 32.2 48.4

55 23.7 19.6 29.4

61 25.2 18.6 28.0





#75

1,1,2,2-Tetrachloroethane

Concen: 0.597 ug/l

RT: 12.51 min Scan# 3338

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

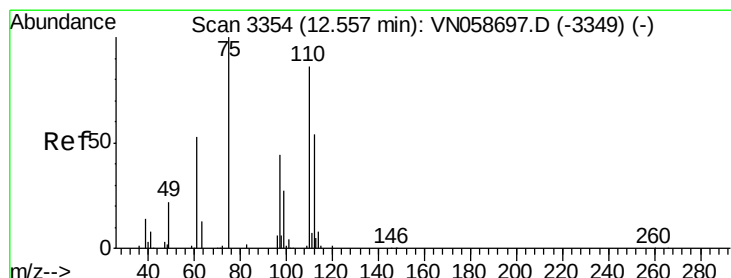
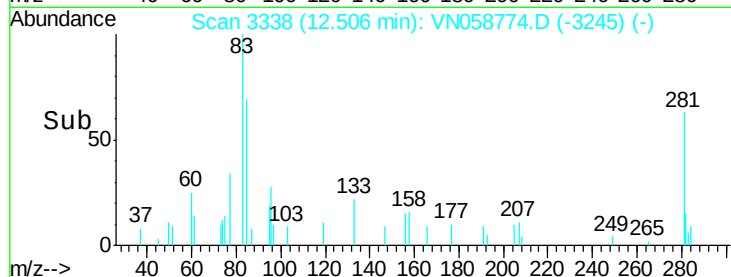
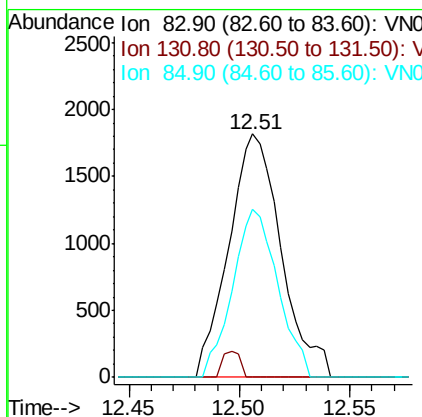
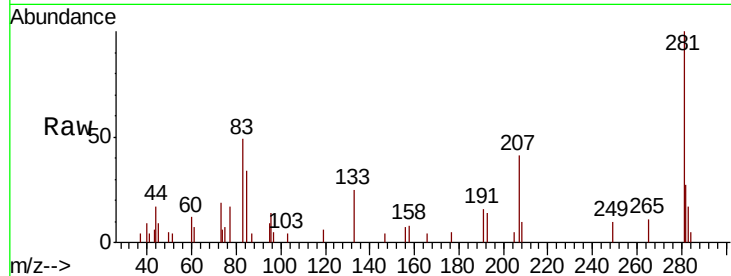
ClientSampleId :

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

Tot Ion:	83	Resp:	2989
Ion Ratio	Lower	Upper	
83	100		
131	3.5	4.8	14.4#
85	59.7	31.9	95.5

Manual Integrations
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10/18/2019 12:42:32 AM



#76

1,2,3-Trichloropropane

Concen: 0.785 ug/l m

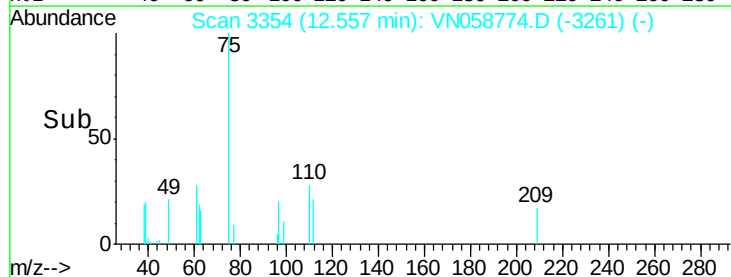
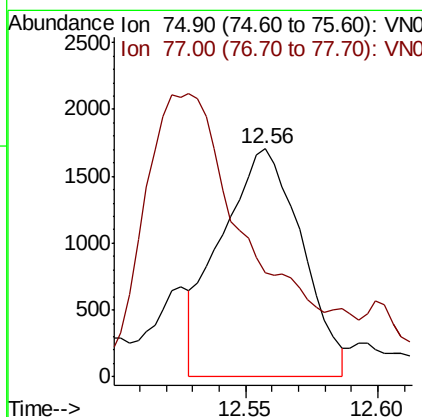
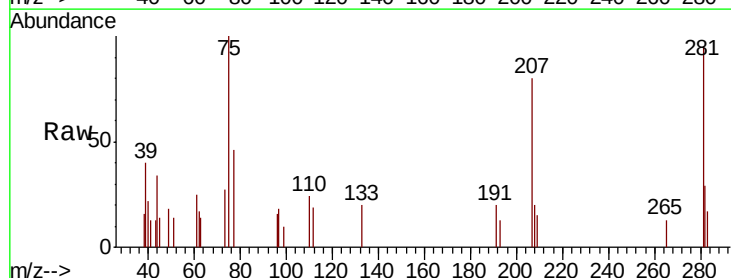
RT: 12.56 min Scan# 3354

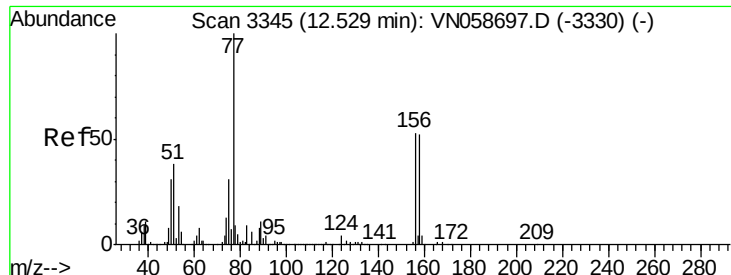
Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Tgt Ion:	75	Resp:	3615
Ion Ratio	Lower	Upper	
75	100		
77	51.9	0.0	0.0#





#77

Bromobenzene

Concen: 0.583 ug/l

RT: 12.53 min Scan# 3345

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

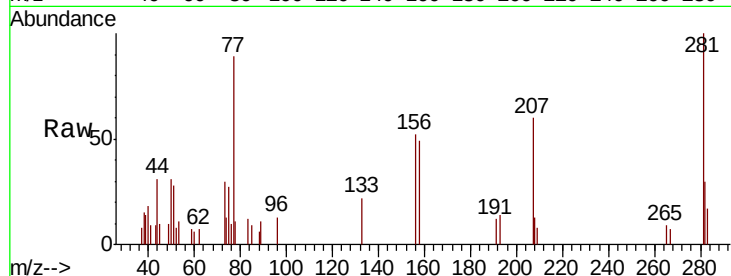
ClientSampleId :

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

Tot Ion	Ratio	Lower	Upper
156	100		
77	270.0	115.8	347.3
158	97.4	48.9	146.6

Manual Integrations
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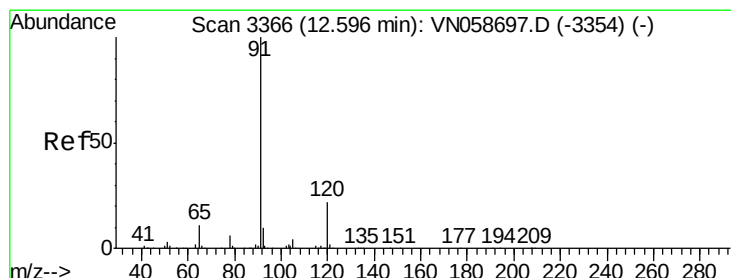
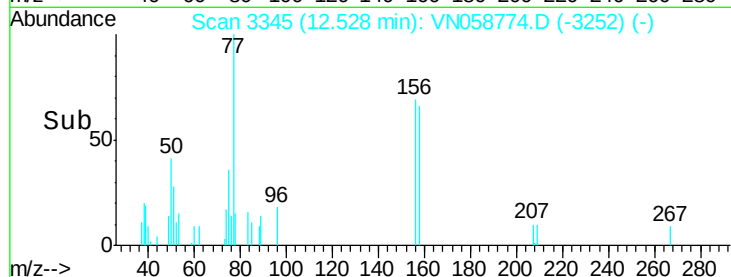
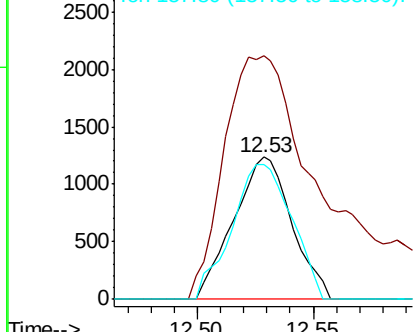
MMDadoda
10/18/2019 12:42:32 AM



Abundance Ion 155.80 (155.50 to 156.50): V

Ion 77.00 (76.70 to 77.70): VN0

Ion 157.80 (157.50 to 158.50): V



#78

n-propylbenzene

Concen: 0.536 ug/l

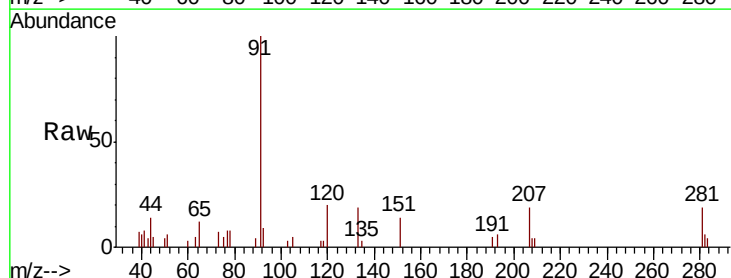
RT: 12.59 min Scan# 3365

Delta R.T. -0.00 min

Lab File: VN058774.D

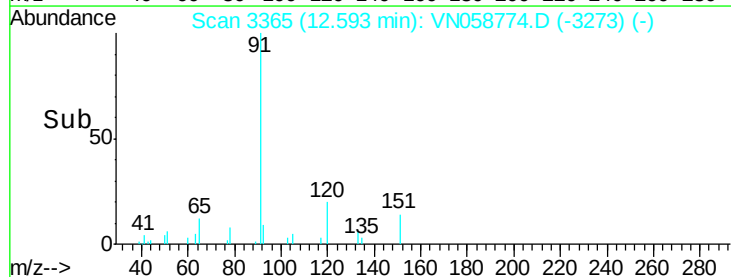
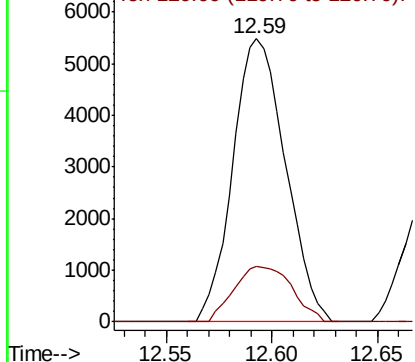
Acq: 15 Oct 2019 12:14

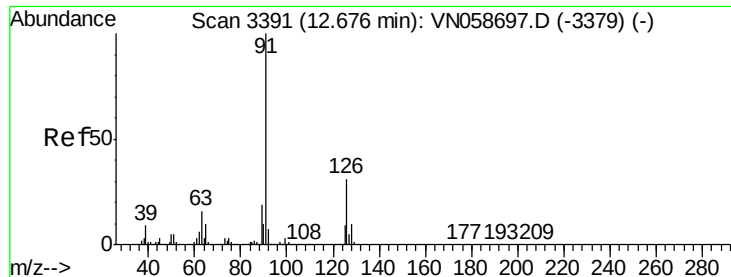
Tgt Ion	Ratio	Lower	Upper
91	100		
120	21.5	11.1	33.3



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 120.00 (119.70 to 120.70): V





#79

2-Chlorotoluene

Concen: 0.517 ug/l

RT: 12.68 min Scan# 3391

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion: 91 Resp: 5685

Ion Ratio Lower Upper

91 100

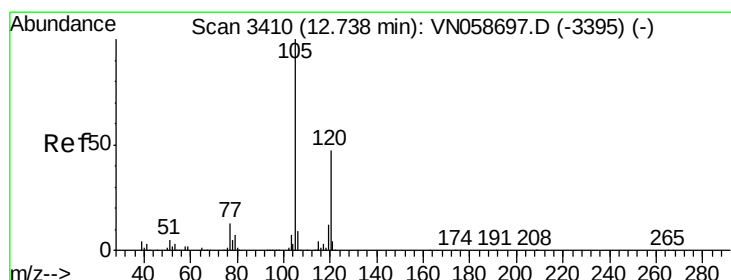
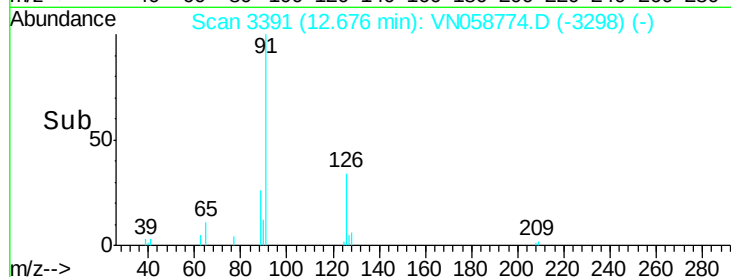
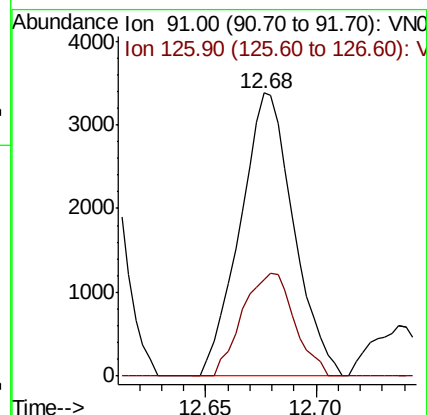
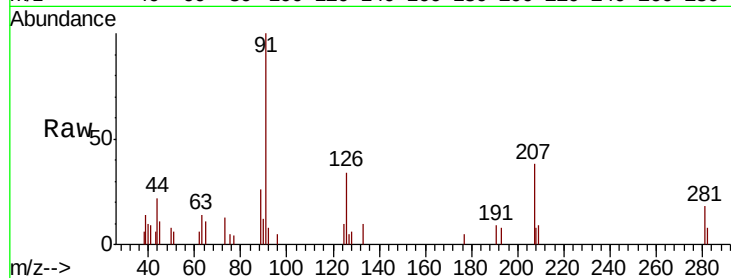
126 35.2 16.2 48.5

Manual Integrations

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#80

1,3,5-Trimethylbenzene

Concen: 0.477 ug/l

RT: 12.74 min Scan# 3410

Delta R.T. -0.00 min

Lab File: VN058774.D

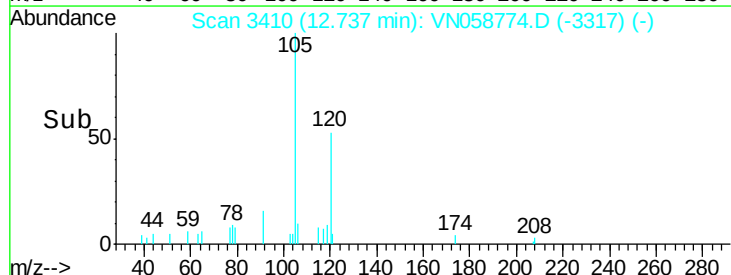
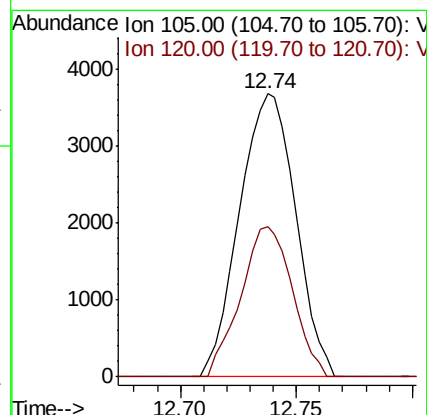
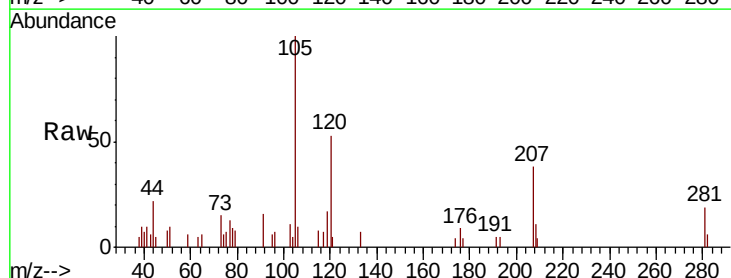
Acq: 15 Oct 2019 12:14

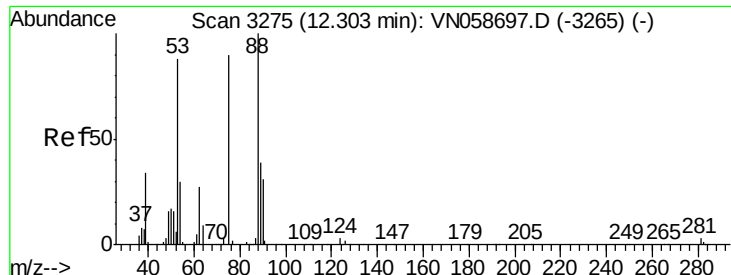
Tgt Ion: 105 Resp: 6187

Ion Ratio Lower Upper

105 100

120 48.9 23.4 70.2





#81

trans-1,4-Dichloro-2-butene

Concen: 0.787 ug/l m

RT: 12.31 min Scan# 3276

Delta R.T. 0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

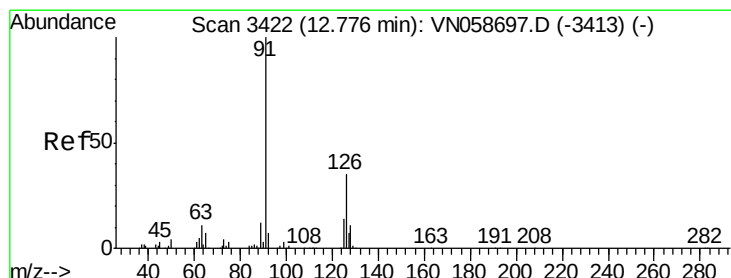
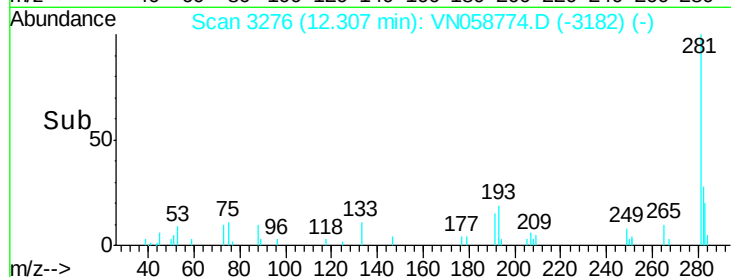
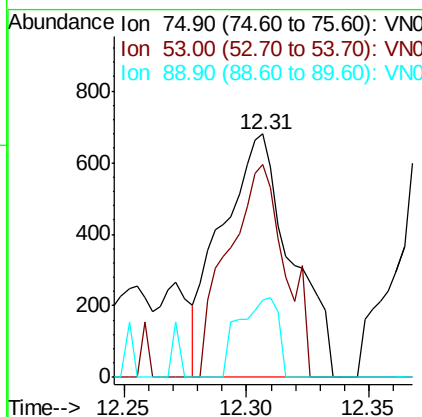
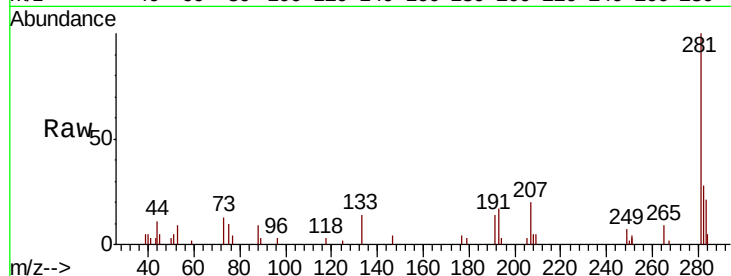
ClientSampleId :

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

Tot Ion:	75	Resp:	1352
Ion Ratio	Lower	Upper	
75	100		
53	0.0	78.4	117.6#
89	0.0	34.9	52.3#

Manual Integrations
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#82

4-Chlorotoluene

Concen: 0.506 ug/l

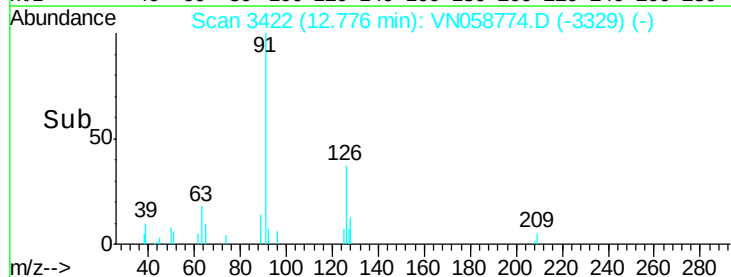
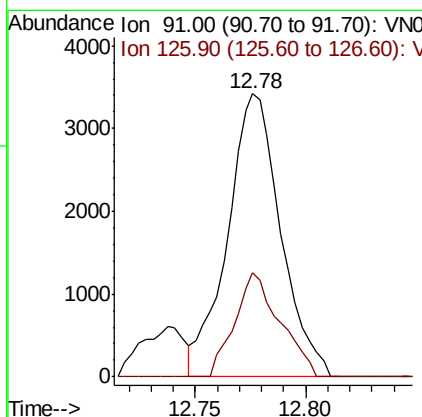
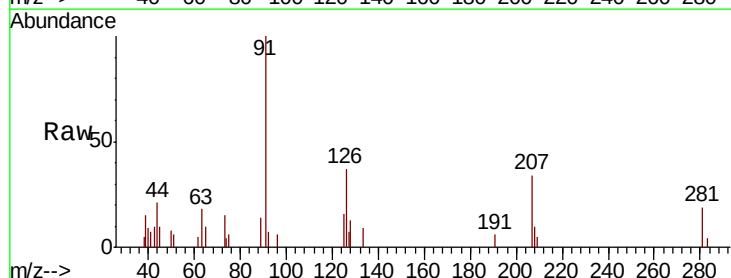
RT: 12.78 min Scan# 3422

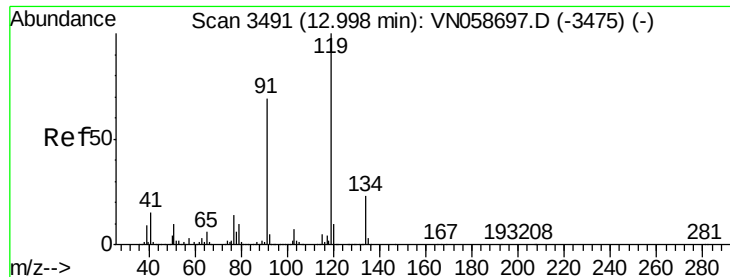
Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Tgt Ion:	91	Resp:	5707
Ion Ratio	Lower	Upper	
91	100		
126	31.2	15.9	47.6





#83

tert-Butylbenzene

Concen: 0.503 ug/l

RT: 13.00 min Scan# 3491

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

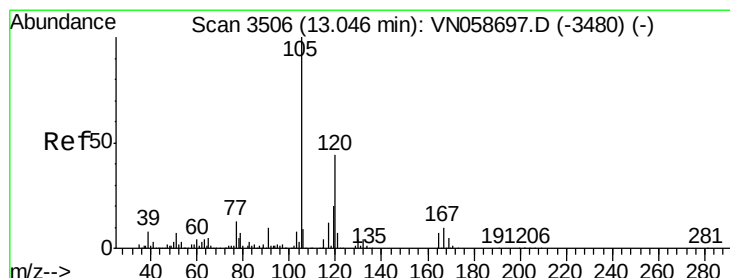
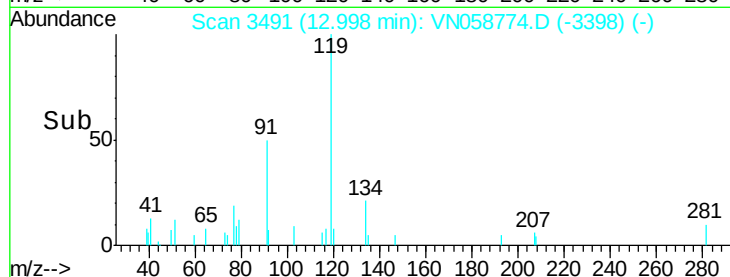
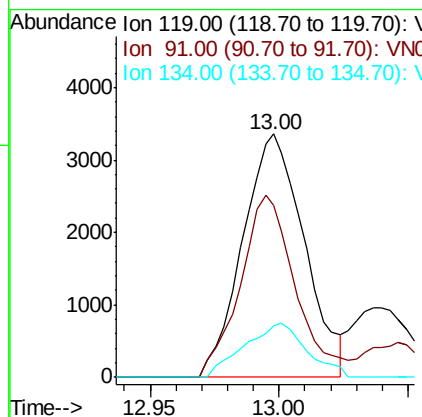
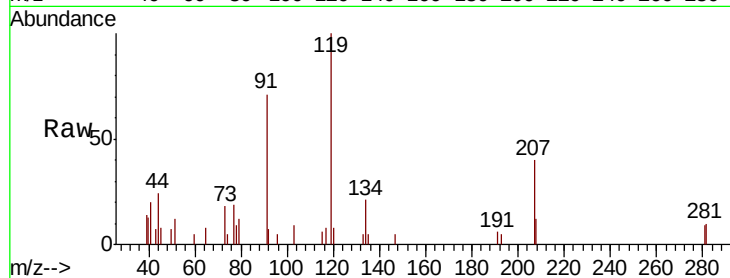
ClientSampleId :

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

Tot Ion:	119	Resp:	5595
Ion Ratio	Lower	Upper	
119	100		
91	67.1	33.8	101.3
134	22.5	12.6	37.6

Manual Integrations
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#84

1,2,4-Trimethylbenzene

Concen: 0.440 ug/l

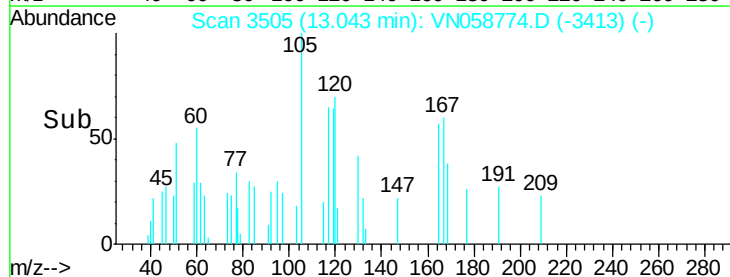
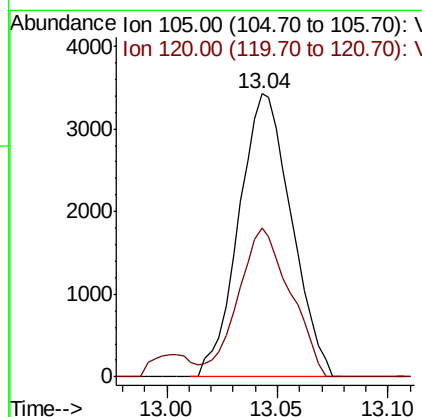
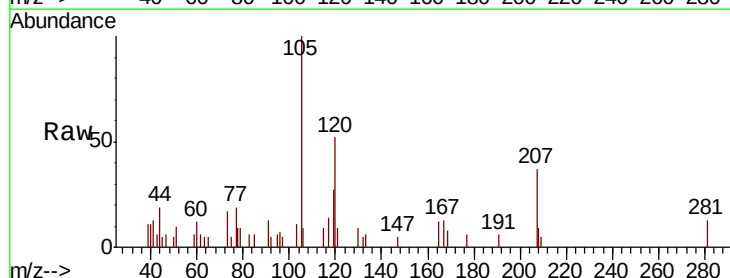
RT: 13.04 min Scan# 3505

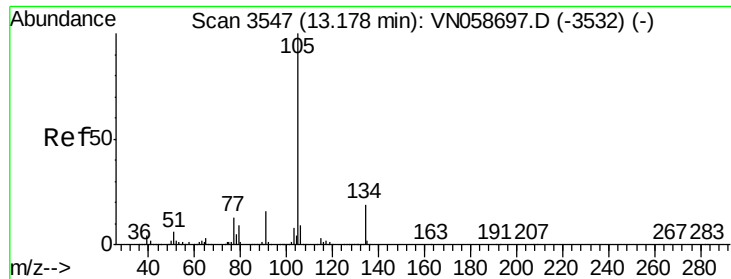
Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Tgt Ion:	105	Resp:	5662
Ion Ratio	Lower	Upper	
105	100		
120	52.2	21.9	65.7





#85

sec-Butylbenzene

Concen: 0.451 ug/l

RT: 13.18 min Scan# 3547

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

ClientSampleId :

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

Tot Ion:105 Resp: 6609

Ion Ratio Lower Upper

105 100

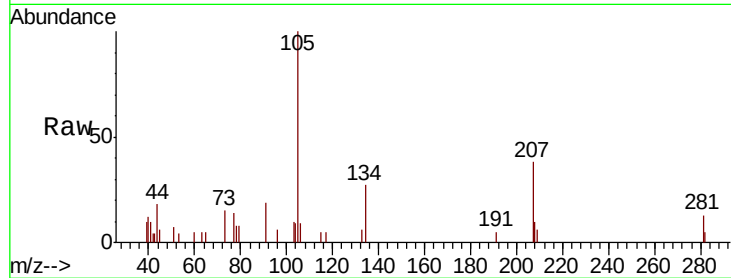
134 25.4 9.7 29.1

Manual Integrations

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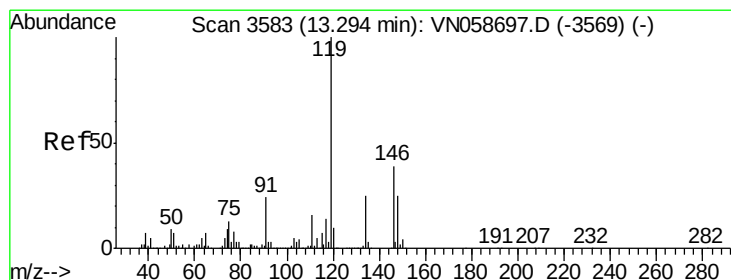
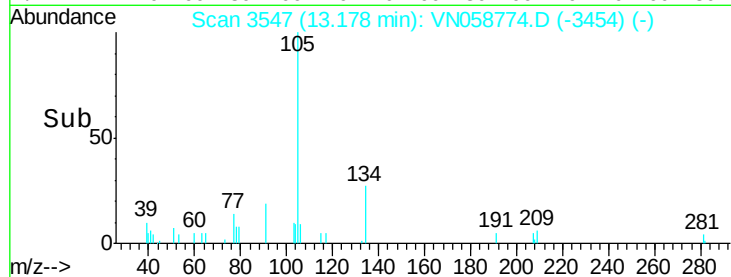
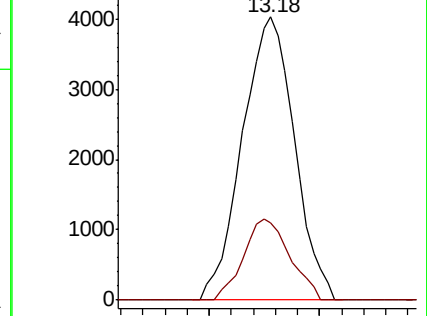
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Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V



#86

p-Isopropyltoluene

Concen: 0.436 ug/l

RT: 13.29 min Scan# 3583

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

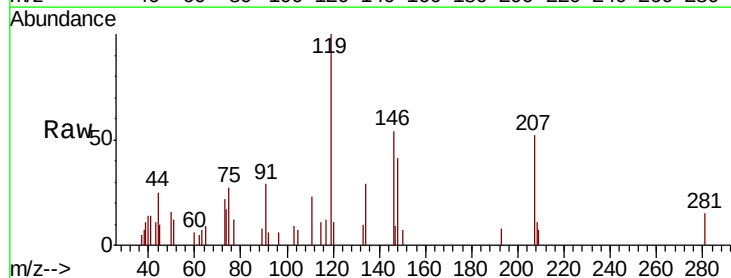
Tgt Ion:119 Resp: 5805

Ion Ratio Lower Upper

119 100

134 21.7 12.7 38.1

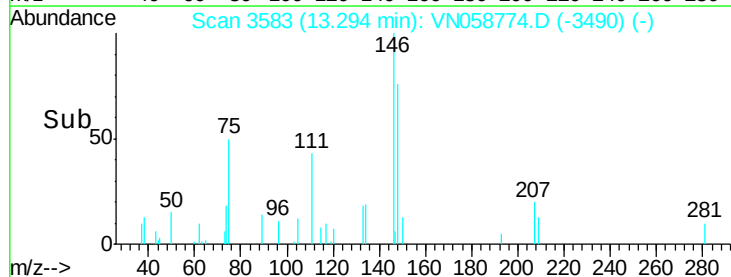
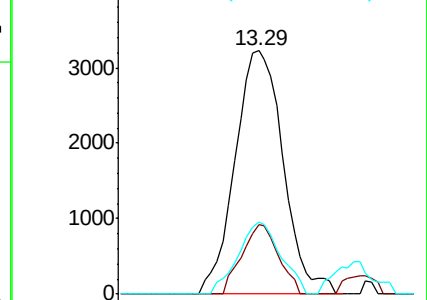
91 26.1 11.9 35.5

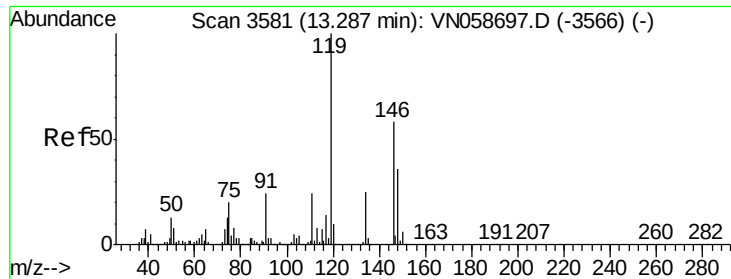


Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): V





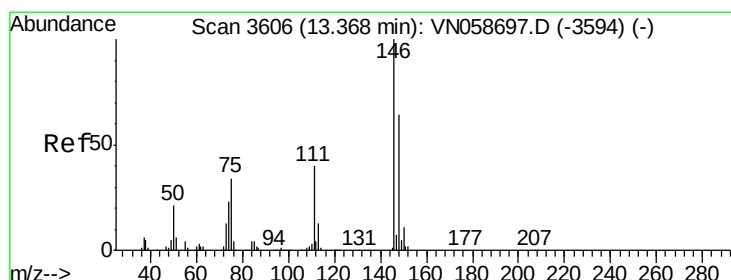
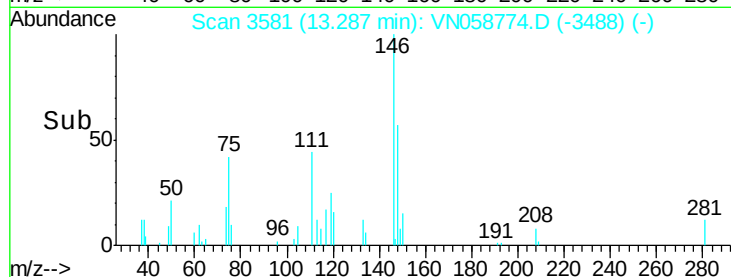
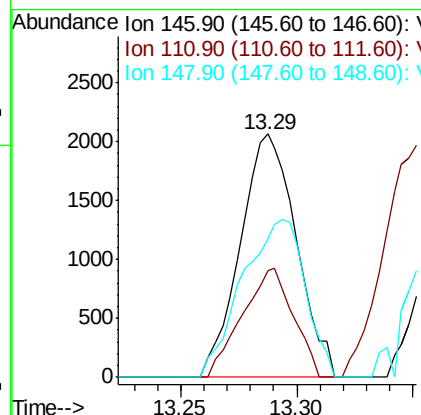
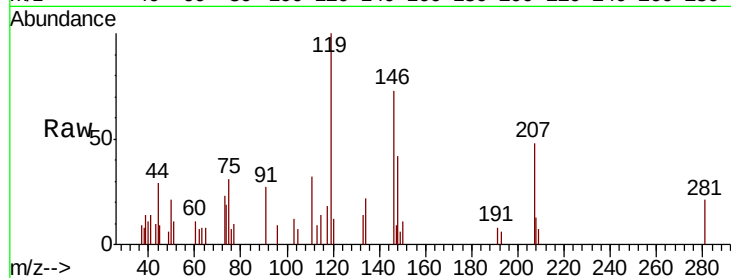
#87
 1,3-Dichlorobenzene
 Concen: 0.507 ug/l
 RT: 13.29 min Scan# 3581
 Delta R.T. -0.00 min
 Lab File: VN058774.D
 Acq: 15 Oct 2019 12:14

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

Tot Ion	Ratio	Lower	Upper
146	100		
111	40.9	20.5	61.6
148	72.9	31.3	93.9

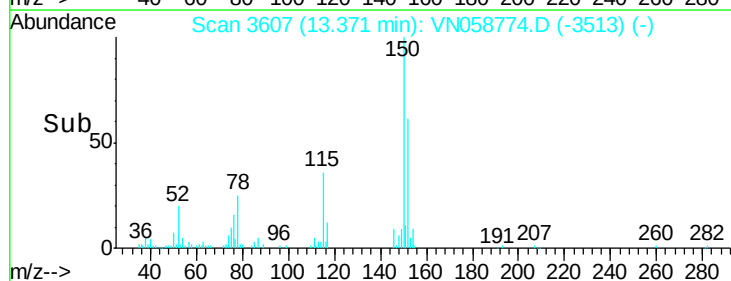
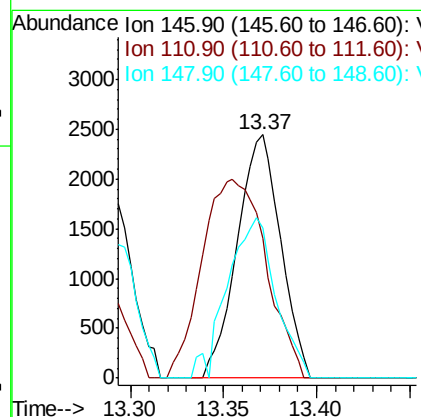
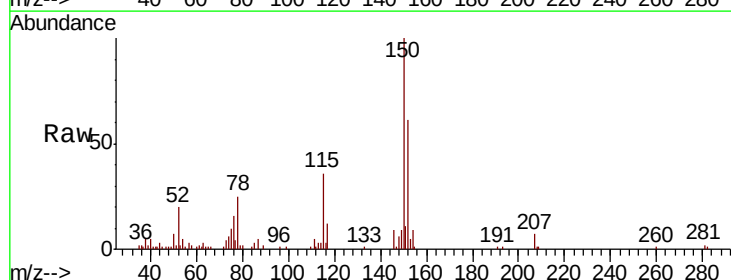
Manual Integrations
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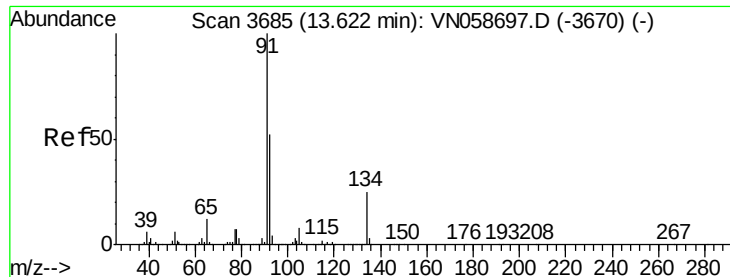
MMDadoda
 10/18/2019 12:42:32 AM



#88
 1,4-Dichlorobenzene
 Concen: 0.573 ug/l m
 RT: 13.37 min Scan# 3607
 Delta R.T. 0.00 min
 Lab File: VN058774.D
 Acq: 15 Oct 2019 12:14

Tgt Ion	Ratio	Lower	Upper
146	100		
111	35.6	20.1	60.2
148	63.5	31.9	95.7





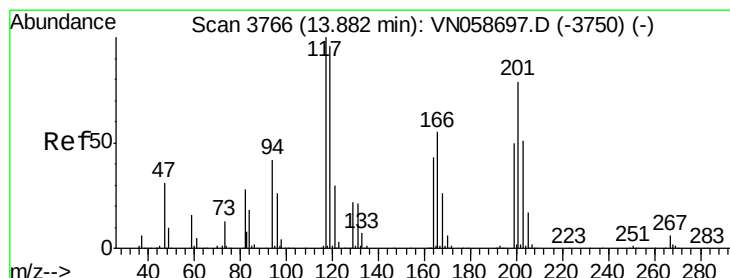
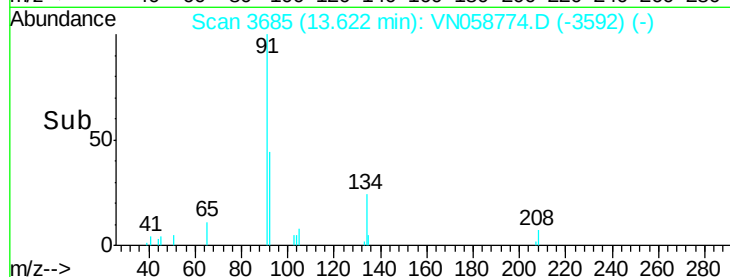
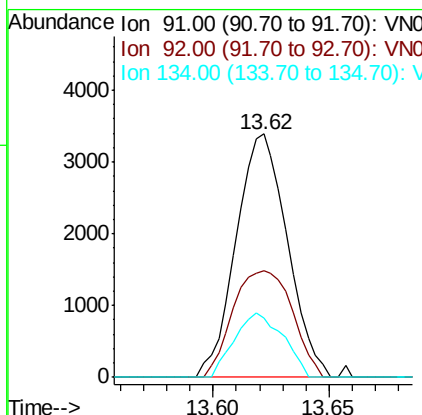
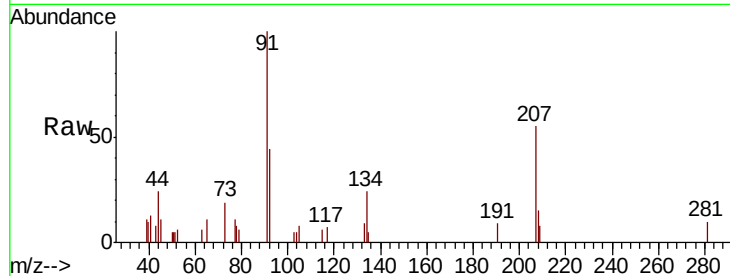
#89
n-Butylbenzene
Concen: 0.422 ug/l
RT: 13.62 min Scan# 3685
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

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

Tot Ion	Ratio	Lower	Upper
91	100		
92	50.6	26.0	78.0
134	25.0	12.2	36.6

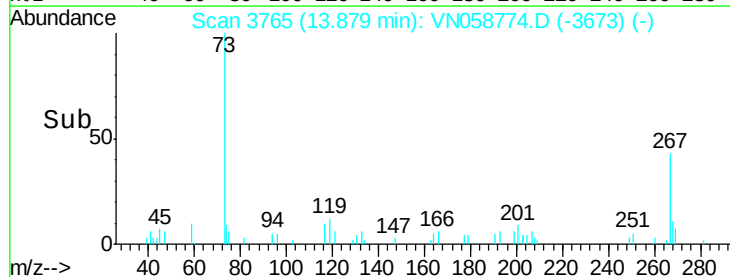
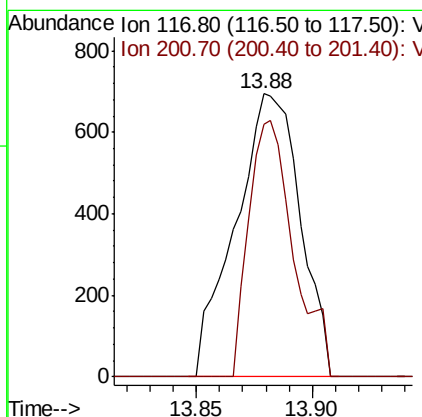
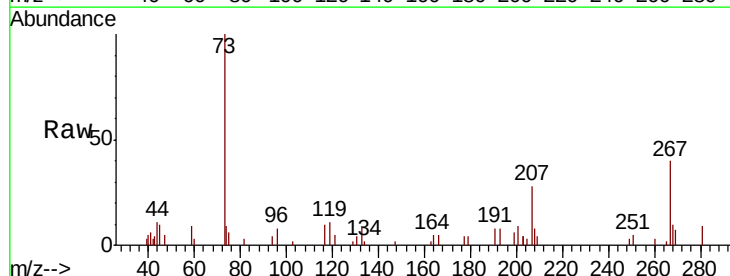
Manual Integrations
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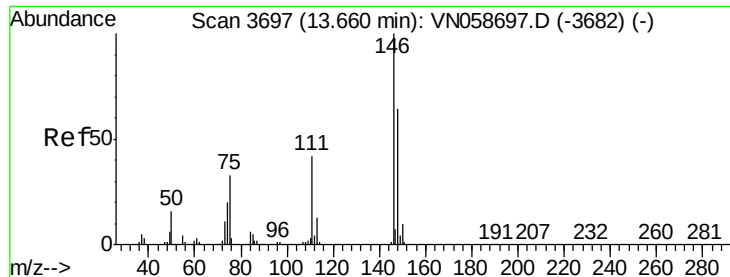
MMDadoda
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#90
Hexachloroethane
Concen: 0.567 ug/l
RT: 13.88 min Scan# 3765
Delta R.T. -0.00 min
Lab File: VN058774.D
Acq: 15 Oct 2019 12:14

Tgt Ion	Ratio	Lower	Upper
117	100		
201	62.5	39.6	118.7





#91

1,2-Dichlorobenzene

Concen: 0.496 ug/l

RT: 13.66 min Scan# 3697

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

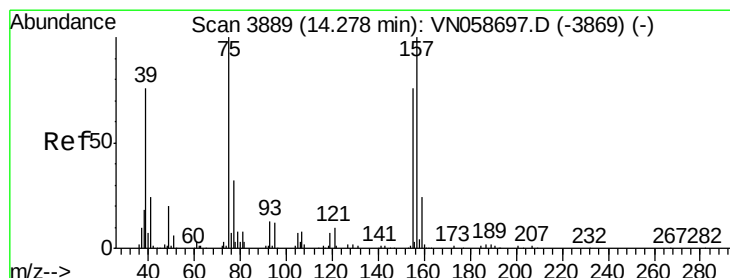
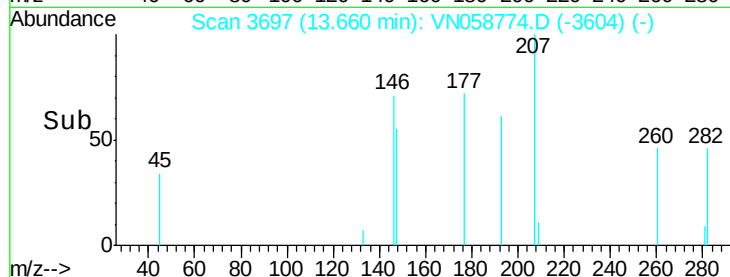
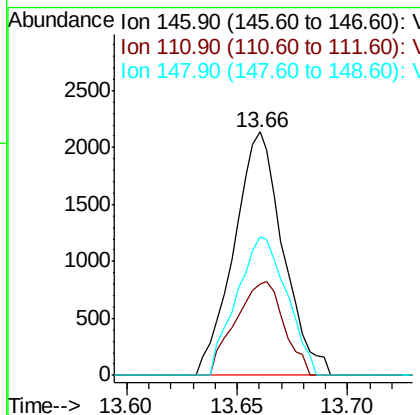
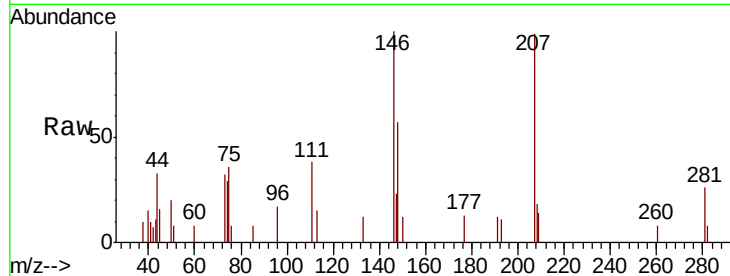
ClientSampleId :

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

Tot Ion:	146	Resp:	3292
Ion	Ratio	Lower	Upper
146	100		
111	38.1	21.1	63.4
148	58.1	31.8	95.3

Manual Integrations
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#92

1,2-Dibromo-3-Chloropropane

Concen: 0.767 ug/l

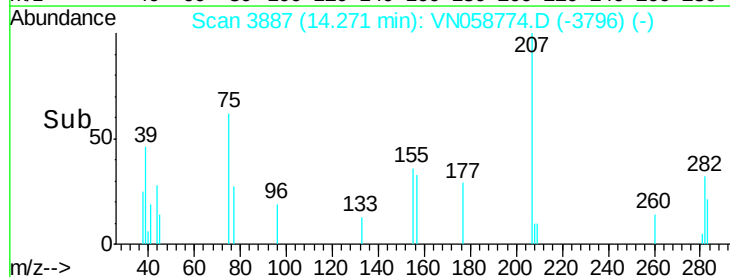
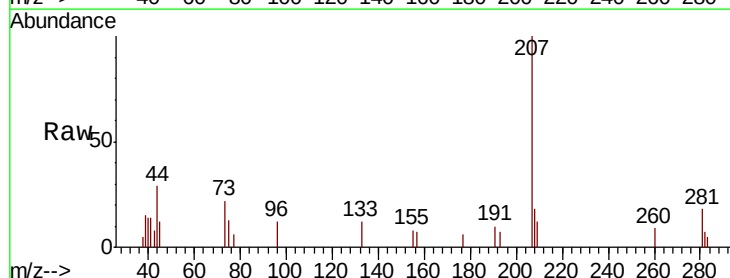
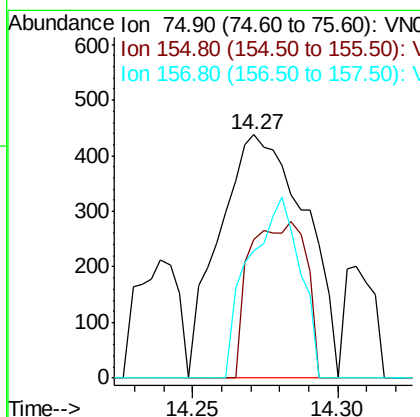
RT: 14.27 min Scan# 3887

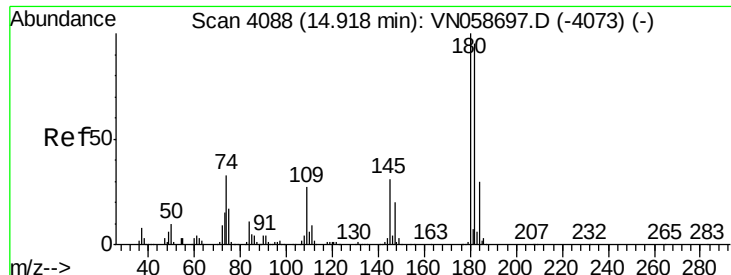
Delta R.T. -0.01 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Tgt Ion:	75	Resp:	897
Ion	Ratio	Lower	Upper
75	100		
155	42.5	37.9	113.6
157	44.4	49.4	148.2#





#93

1,2,4-Trichlorobenzene

Concen: 0.455 ug/l

RT: 14.92 min Scan# 4089

Delta R.T. 0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

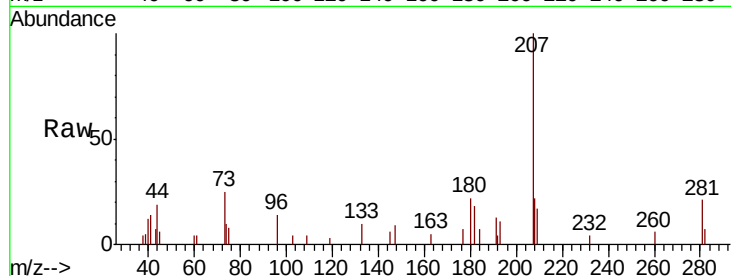
ClientSampleId :

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

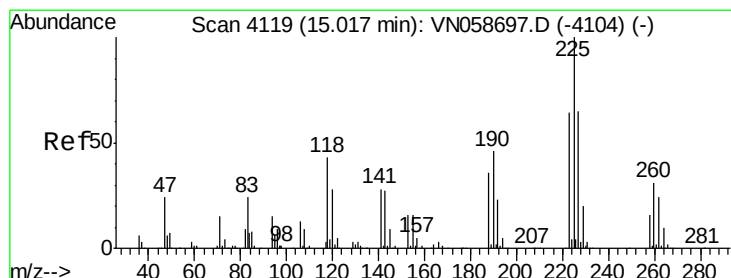
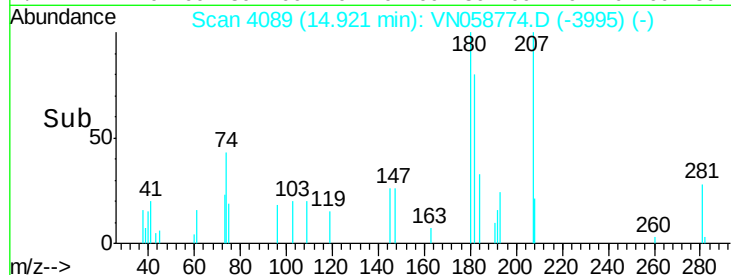
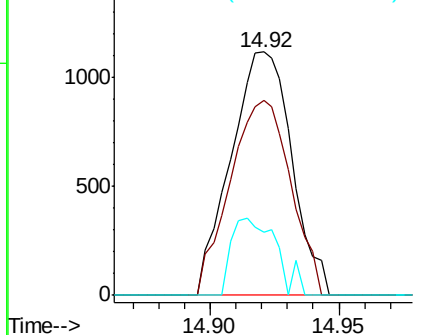
Tot Ion:	180	Resp:	1846
Ion Ratio	Lower	Upper	
180	100		
182	79.7	47.4	142.2
145	23.2	15.4	46.2

Manual Integrations
APPROVED

MMDadoda
10/18/2019 12:42:32 AM



Abundance Ion 179.80 (179.50 to 180.50): V
Ion 181.80 (181.50 to 182.50): V
Ion 144.80 (144.50 to 145.50): V



#94

Hexachlorobutadiene

Concen: 0.549 ug/l

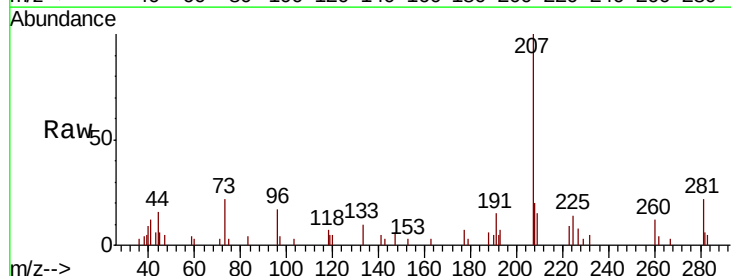
RT: 15.01 min Scan# 4117

Delta R.T. -0.01 min

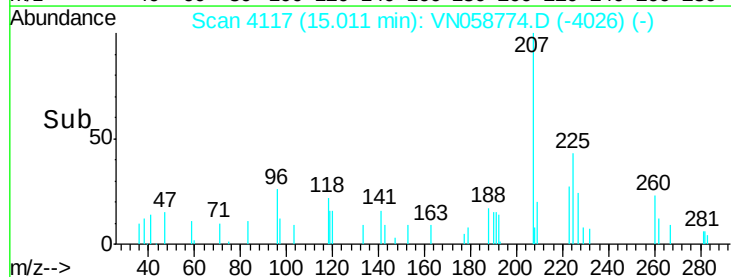
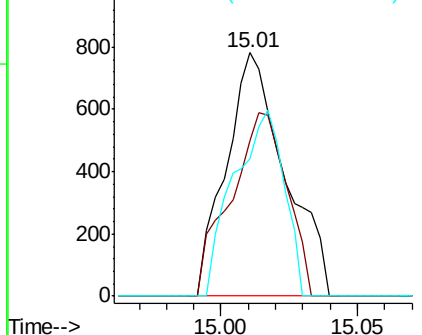
Lab File: VN058774.D

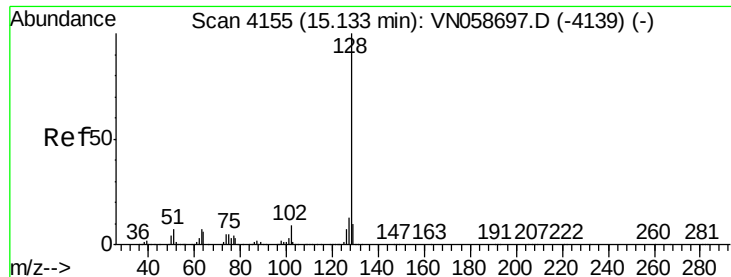
Acq: 15 Oct 2019 12:14

Tgt Ion:	225	Resp:	1172
Ion Ratio	Lower	Upper	
225	100		
223	71.9	32.3	96.8
227	65.0	32.4	97.0



Abundance Ion 224.70 (224.40 to 225.40): V
Ion 222.70 (222.40 to 223.40): V
Ion 226.70 (226.40 to 227.40): V





#95

Naphthalene

Concen: 0.480 ug/l

RT: 15.13 min Scan# 4155

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Instrument :

MSVOA_N

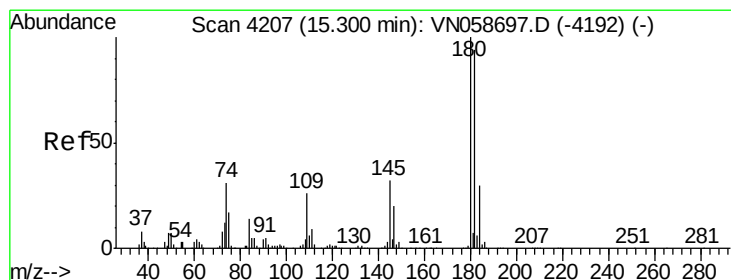
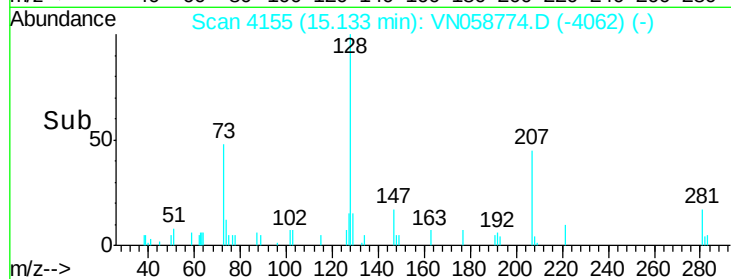
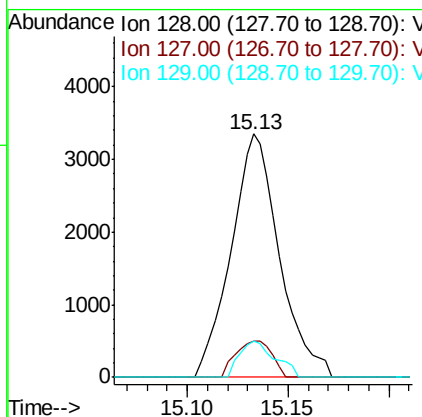
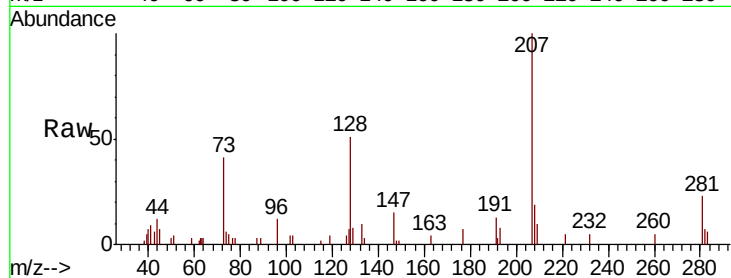
ClientSampleId :

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

Tot Ion:	128	Resp:	5590
Ion Ratio	Lower	Upper	
128	100		
127	11.3	10.2	15.4
129	11.0	8.5	12.7

Manual Integrations
APPROVED

MMDadoda
10/18/2019 12:42:32 AM



#96

1,2,3-Trichlorobenzene

Concen: 0.482 ug/l

RT: 15.30 min Scan# 4207

Delta R.T. -0.00 min

Lab File: VN058774.D

Acq: 15 Oct 2019 12:14

Tgt Ion:	180	Resp:	1909
Ion Ratio	Lower	Upper	
180	100		
182	99.3	47.3	142.0
145	9.7	16.2	48.6#

