

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN072719\
 Data File : VN056946.D
 Acq On : 26 Jul 2019 17:00
 Operator : JC/SP
 Sample : K3591-09
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 11 Sample Multiplier: 1

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

Manual Integrations
 APPROVED

MMDadoda
 8/2/2019 9:13:36 AM

Quant Time: Jul 27 01:33:22 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N072719W.M
 Quant Title : SW846 8260
 QLast Update : Sat Jul 27 01:19:50 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.65	168	567284	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.57	114	849402	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.40	117	695032	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.34	152	209080	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	8.01	65	315216	54.28	ug/l	0.00
Spiked Amount						
			Recovery	=	108.56%	
35) Dibromofluoromethane	7.58	113	286176	52.63	ug/l	0.00
Spiked Amount						
			Recovery	=	105.26%	
50) Toluene-d8	10.08	98	1068857	51.55	ug/l	0.00
Spiked Amount						
			Recovery	=	103.10%	
62) 4-Bromofluorobenzene	12.40	95	288418	42.73	ug/l	0.00
Spiked Amount						
			Recovery	=	85.46%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.84	85	2218	0.387	ug/l	94
3) Chloromethane	2.05	50	4887	0.712	ug/l	99
4) Vinyl Chloride	2.18	62	3013	0.468	ug/l #	85
5) Bromomethane	2.56	94	4069	1.016	ug/l	86
6) Chloroethane	2.69	64	1818	0.512	ug/l	89
7) Trichlorofluoromethane	3.00	101	3683	0.437	ug/l	94
8) Diethyl Ether	3.40	74	1388	0.440	ug/l	79
9) 1,1,2-Trichlorotrifluoroet	3.74	101	2425m	0.464	ug/l	
10) Methyl Iodide	3.95	142	2046	0.293	ug/l #	68
11) Tert butyl alcohol	4.74	59	4935m	6.287	ug/l	
12) 1,1-Dichloroethene	3.73	96	2422	0.486	ug/l #	88
13) Acrolein	3.60	56	1392m	3.260	ug/l	
14) Allyl chloride	4.30	41	3565	0.440	ug/l #	75
15) Acrylonitrile	4.99	53	4482	1.947	ug/l	93
16) Acetone	3.82	43	5517	2.622	ug/l	94
17) Carbon Disulfide	4.04	76	8717	0.658	ug/l	96
18) Methyl Acetate	4.32	43	4971	0.741	ug/l #	77
19) Methyl tert-butyl Ether	5.03	73	6824	0.459	ug/l	98
20) Methylene Chloride	4.53	84	3311	0.546	ug/l #	95
21) trans-1,2-Dichloroethene	5.02	96	2931	0.553	ug/l #	82
22) Diisopropyl ether	5.94	45	7431	0.445	ug/l #	83
23) Vinyl Acetate	5.88	43	23782	2.054	ug/l	98
24) 1,1-Dichloroethane	5.83	63	4594	0.466	ug/l #	84
25) 2-Butanone	6.82	43	6981	2.340	ug/l #	89
26) 2,2-Dichloropropane	6.81	77	4376	0.584	ug/l #	58
27) cis-1,2-Dichloroethene	6.82	96	3111	0.497	ug/l	85
28) Bromochloromethane	7.18	49	2113	0.456	ug/l #	94
29) Tetrahydrofuran	7.20	42	4696	2.413	ug/l #	73
30) Chloroform	7.36	83	6404	0.635	ug/l	95
31) Cyclohexane	7.65	56	12533	1.313	ug/l #	1
32) 1,1,1-Trichloroethane	7.56	97	3676	0.457	ug/l #	46
36) 1,1-Dichloropropene	7.78	75	3749	0.502	ug/l	87
37) Ethyl Acetate	6.93	43	3543	0.592	ug/l #	68
38) Carbon Tetrachloride	7.77	117	3037	0.430	ug/l	93

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	9.07	83	4293	0.449	ug/l	87
40) Benzene	8.03	78	10684	0.464	ug/l	96
41) Methacrylonitrile	7.17	41	1080	0.390	ug/l #	67
42) 1,2-Dichloroethane	8.11	62	3953	0.548	ug/l	99
43) Isopropyl Acetate	8.16	43	4291	0.434	ug/l #	89
44) Trichloroethene	8.83	130	3221	0.508	ug/l	93
45) 1,2-Dichloropropane	9.10	63	2828	0.459	ug/l	93
46) Dibromomethane	9.20	93	1779	0.479	ug/l	96
47) Bromodichloromethane	9.39	83	3397	0.465	ug/l #	77
48) Methyl methacrylate	9.20	41	2170	0.454	ug/l #	22
49) 1,4-Dioxane	9.19	88	691	7.019	ug/l	92
51) 4-Methyl-2-Pentanone	9.98	43	12732	2.166	ug/l	95
52) Toluene	10.15	92	6944	0.502	ug/l	90
53) t-1,3-Dichloropropene	10.38	75	2965	0.391	ug/l #	83
54) cis-1,3-Dichloropropene	9.83	75	3858	0.438	ug/l	98
55) 1,1,2-Trichloroethane	10.55	97	2390	0.431	ug/l	89
56) Ethyl methacrylate	10.42	69	3269	0.439	ug/l	98
57) 1,3-Dichloropropane	10.70	76	4088	0.444	ug/l	93
58) 2-Chloroethyl Vinyl ether	9.69	63	6950	2.091	ug/l	93
59) 2-Hexanone	10.75	43	8729	2.132	ug/l	85
60) Dibromochloromethane	10.89	129	1977	0.348	ug/l	90
61) 1,2-Dibromoethane	11.00	107	2512	0.464	ug/l	99
64) Tetrachloroethene	10.62	164	3239	0.541	ug/l	90
65) Chlorobenzene	11.43	112	7146	0.504	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.50	131	2430	0.456	ug/l #	63
67) Ethyl Benzene	11.51	91	11762	0.480	ug/l	92
68) m/p-Xylenes	11.61	106	7875	0.872	ug/l	98
69) o-Xylene	11.94	106	3815	0.432	ug/l	95
70) Styrene	11.96	104	5763	0.409	ug/l	94
71) Bromoform	12.13	173	1463	0.393	ug/l #	98
73) Isopropylbenzene	12.24	105	10509	0.582	ug/l	96
74) N-amyl acetate	12.07	43	2640	0.503	ug/l	95
75) 1,1,2,2-Tetrachloroethane	12.50	83	2963	0.563	ug/l	94
76) 1,2,3-Trichloropropane	12.55	75	2335m	0.550	ug/l	
77) Bromobenzene	12.52	156	2771	0.588	ug/l	92
78) n-propylbenzene	12.59	91	11281	0.585	ug/l	98
79) 2-Chlorotoluene	12.67	91	6895	0.580	ug/l	94
80) 1,3,5-Trimethylbenzene	12.73	105	8692	0.586	ug/l	99
81) trans-1,4-Dichloro-2-buten	12.30	75	514m	0.389	ug/l	
82) 4-Chlorotoluene	12.77	91	6689	0.602	ug/l	93
83) tert-Butylbenzene	12.99	119	7928	0.604	ug/l	93
84) 1,2,4-Trimethylbenzene	13.03	105	8284	0.581	ug/l	96
85) sec-Butylbenzene	13.17	105	9207	0.544	ug/l	98
86) p-Isopropyltoluene	13.28	119	7879	0.524	ug/l	97
87) 1,3-Dichlorobenzene	13.28	146	4409	0.615	ug/l	99
88) 1,4-Dichlorobenzene	13.36	146	4881m	0.707	ug/l	
89) n-Butylbenzene	13.61	91	6236	0.538	ug/l	96
90) Hexachloroethane	13.87	117	1220	0.471	ug/l	97
91) 1,2-Dichlorobenzene	13.65	146	4827	0.684	ug/l	89
92) 1,2-Dibromo-3-Chloropropan	14.26	75	195	0.271	ug/l #	23

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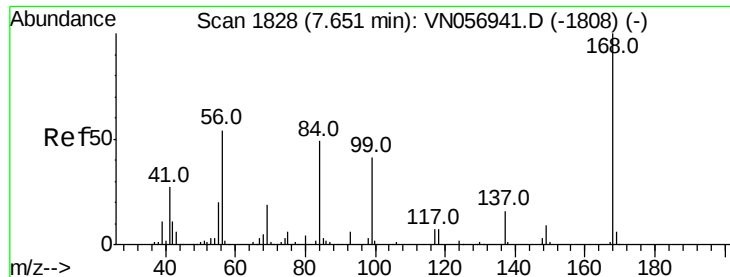
Manual Integrations
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Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	14.91	180	2496	0.815	ug/l	95
94) Hexachlorobutadiene	15.00	225	1866	0.635	ug/l	94
95) Naphthalene	15.12	128	6135	0.874	ug/l #	94
96) 1,2,3-Trichlorobenzene	15.29	180	3232	1.009	ug/l	93

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.65 min Scan# 1828

Delta R.T. 0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:168 Resp: 567284

Ion Ratio Lower Upper

168 100

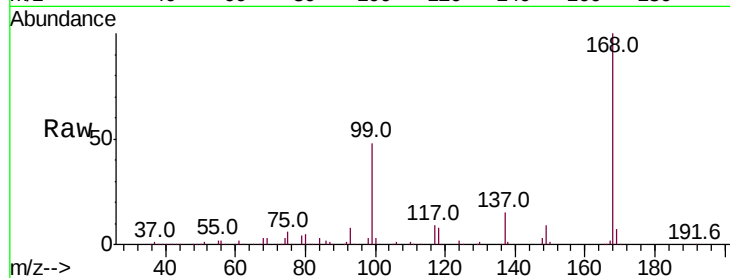
99 48.2 39.0 58.4

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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.65

250000

200000

150000

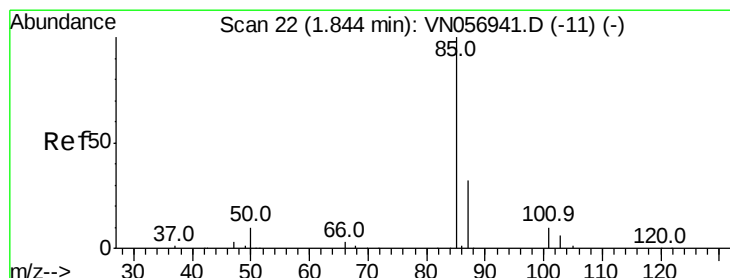
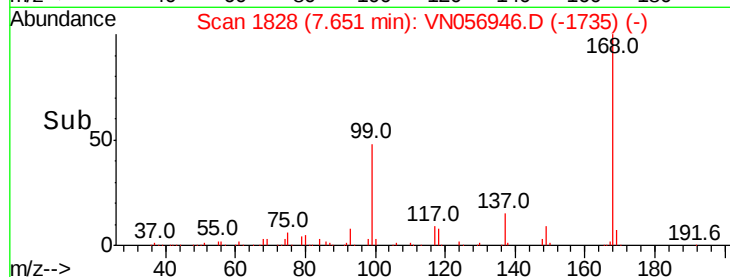
100000

50000

0

7.55 7.60 7.65 7.70 7.75

Time-->



#2

Dichlorodifluoromethane

Concen: 0.387 ug/l

RT: 1.84 min Scan# 22

Delta R.T. -0.00 min

Lab File: VN056946.D

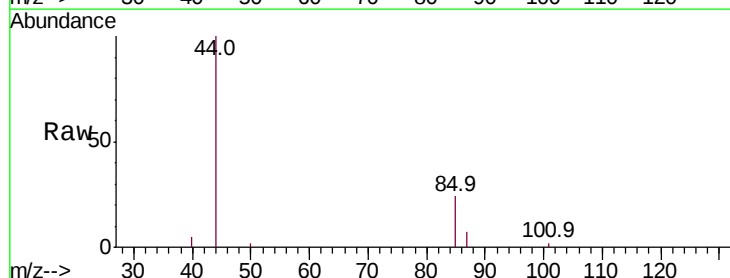
Acq: 26 Jul 2019 17:00

Tgt Ion: 85 Resp: 2218

Ion Ratio Lower Upper

85 100

87 28.3 15.8 47.4



Abundance Ion 84.90 (84.60 to 85.60): VN

Ion 86.90 (86.60 to 87.60): VN

1.84

2000

1500

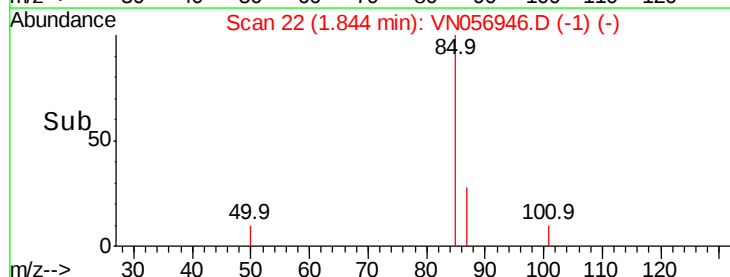
1000

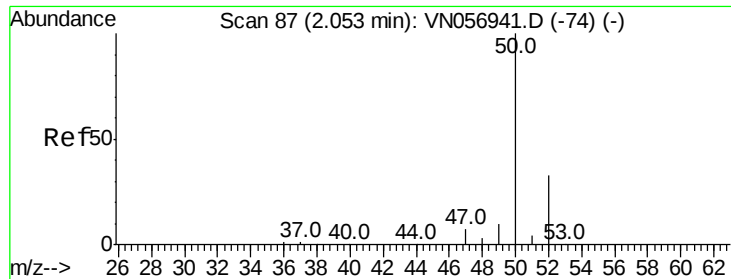
500

0

1.80 1.85

Time-->





#3

Chloromethane

Concen: 0.712 ug/l

RT: 2.05 min Scan# 87

Delta R.T. -0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 50 Resp: 4887

Ion Ratio Lower Upper

50 100

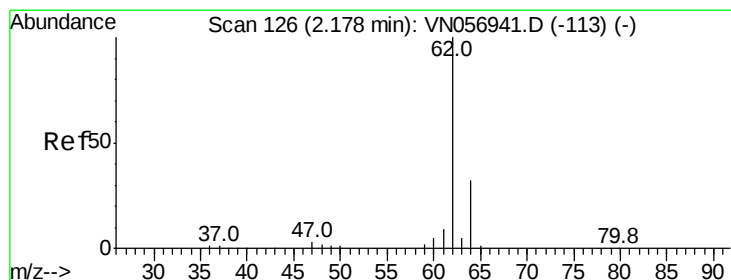
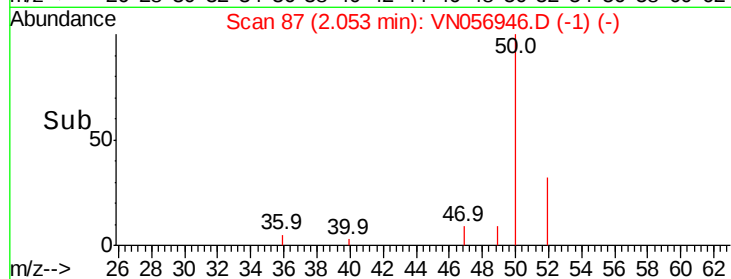
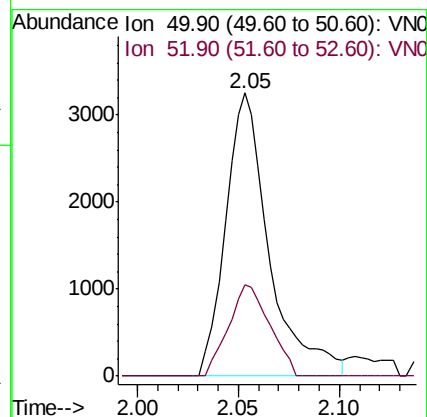
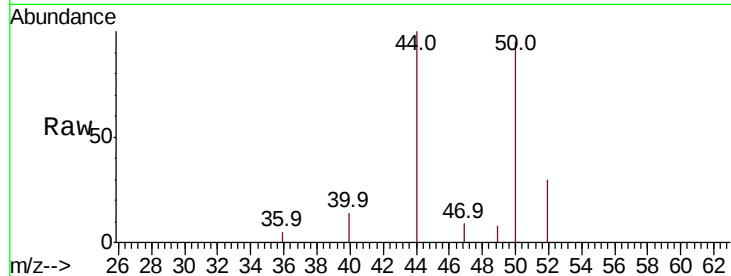
52 32.1 26.2 39.2

Manual Integrations

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#4

Vinyl Chloride

Concen: 0.468 ug/l

RT: 2.18 min Scan# 127

Delta R.T. 0.00 min

Lab File: VN056946.D

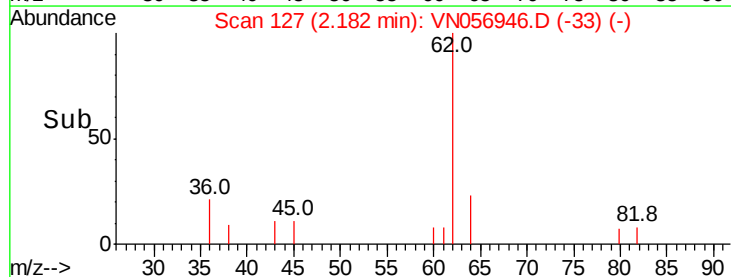
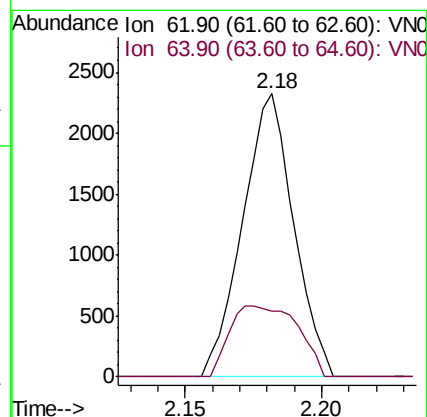
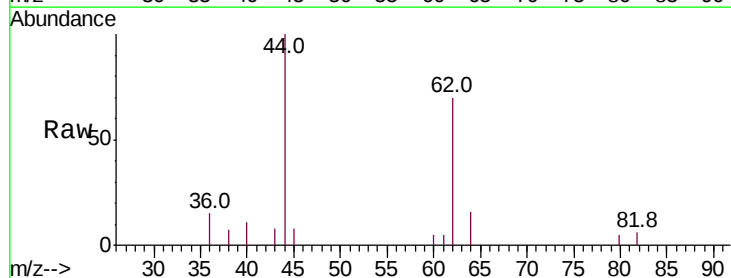
Acq: 26 Jul 2019 17:00

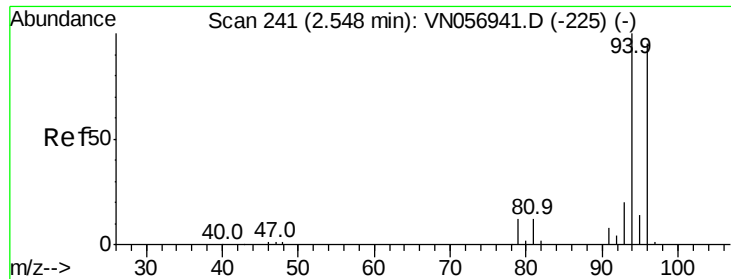
Tgt Ion: 62 Resp: 3013

Ion Ratio Lower Upper

62 100

64 23.3 25.4 38.0#





#5

Bromomethane

Concen: 1.016 ug/l

RT: 2.56 min Scan# 244

Delta R.T. 0.01 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

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Tot Ion: 94 Resp: 4069

Ion Ratio Lower Upper

94 100

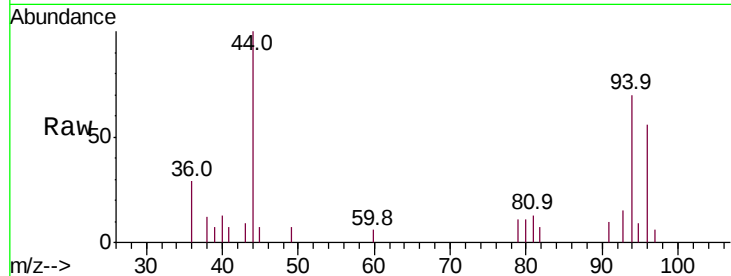
96 81.2 76.2 114.2

Manual Integrations

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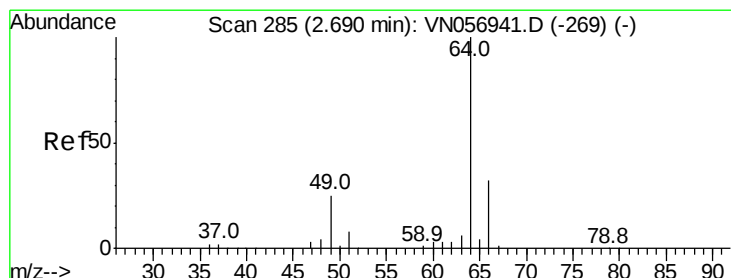
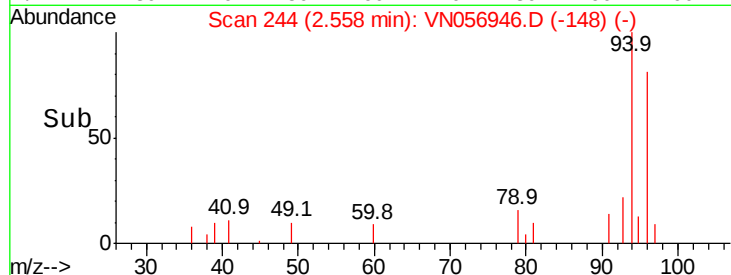
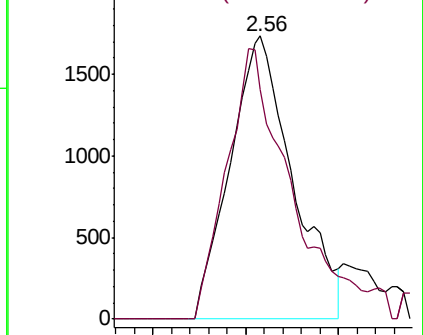
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Abundance Ion 93.90 (93.60 to 94.60): VN0

Ion 95.90 (95.60 to 96.60): VN0



#6

Chloroethane

Concen: 0.512 ug/l

RT: 2.69 min Scan# 286

Delta R.T. 0.00 min

Lab File: VN056946.D

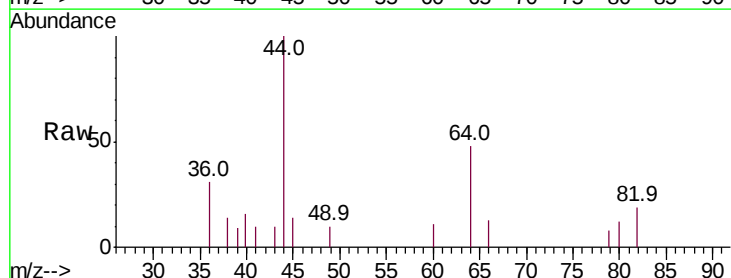
Acq: 26 Jul 2019 17:00

Tgt Ion: 64 Resp: 1818

Ion Ratio Lower Upper

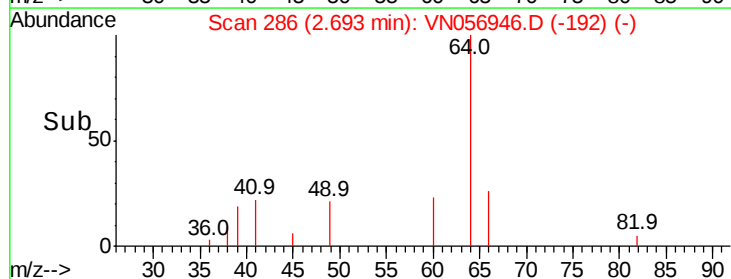
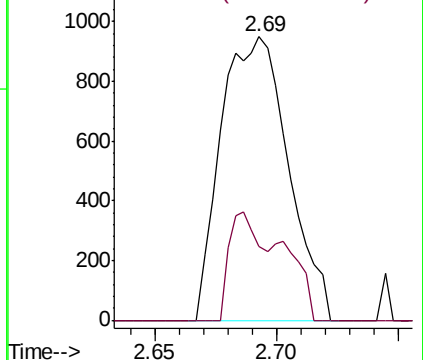
64 100

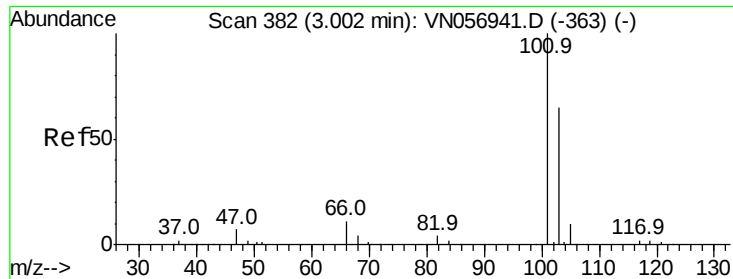
66 26.0 25.8 38.8



Abundance Ion 63.90 (63.60 to 64.60): VN0

Ion 65.90 (65.60 to 66.60): VN0





#7

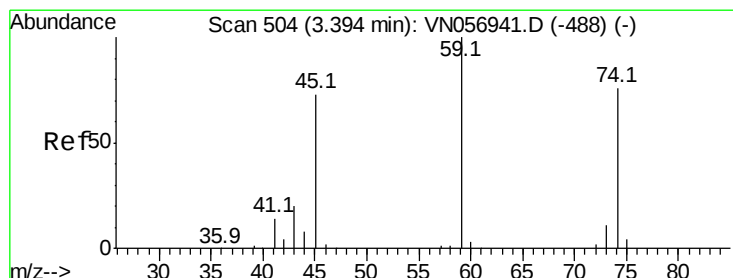
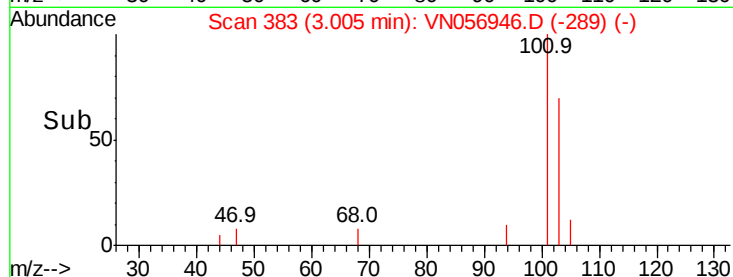
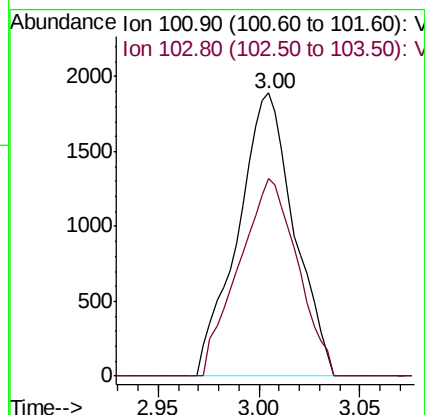
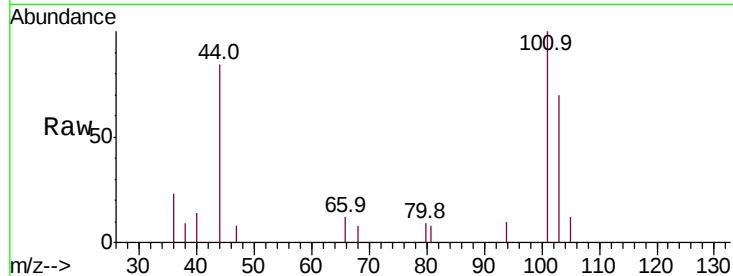
Trichlorofluoromethane
Concen: 0.437 ug/l
RT: 3.00 min Scan# 383
Delta R.T. 0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

Tot Ion:101 Resp: 3683
Ion Ratio Lower Upper
101 100
103 69.7 52.1 78.1

Manual Integrations
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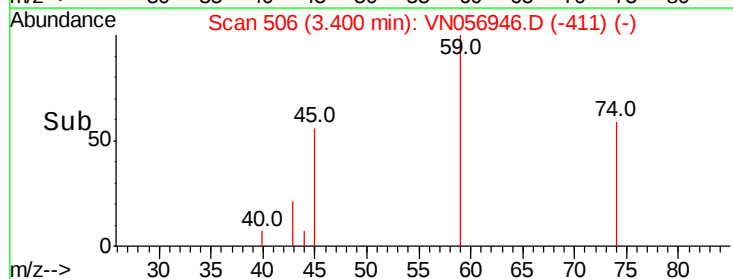
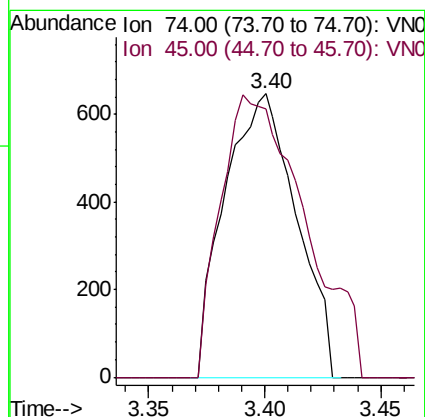
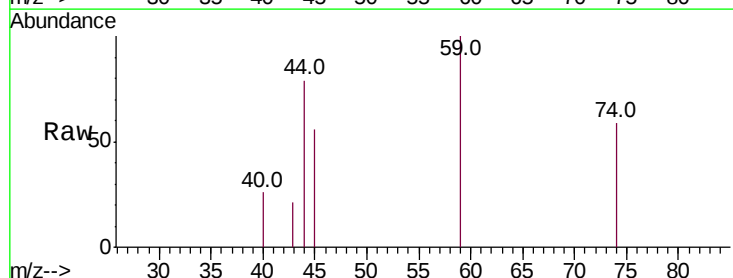
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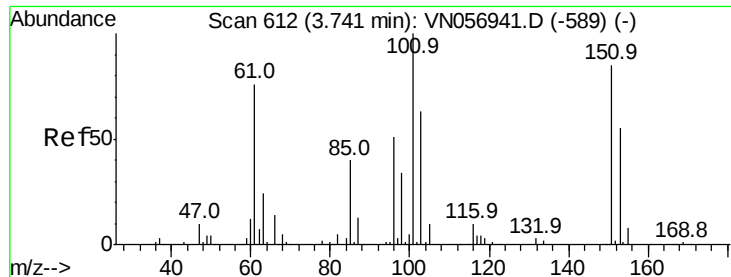


#8

Diethyl Ether
Concen: 0.440 ug/l
RT: 3.40 min Scan# 506
Delta R.T. 0.01 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion: 74 Resp: 1388
Ion Ratio Lower Upper
74 100
45 117.0 48.1 144.3





#9

1,1,2-Trichlorotrifluoroethane

Concen: 0.464 ug/l m

RT: 3.74 min Scan# 611

Delta R.T. -0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

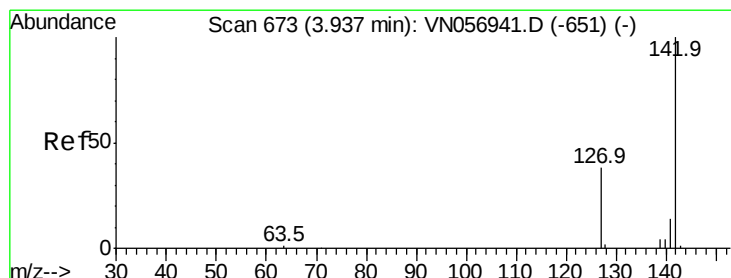
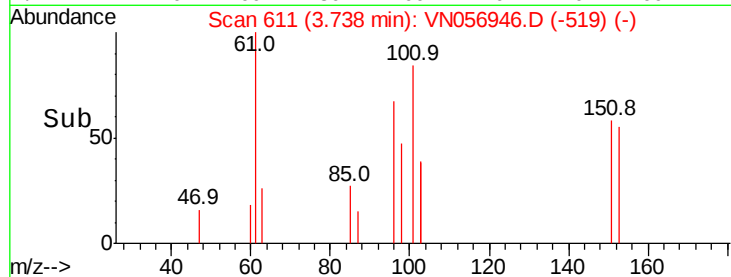
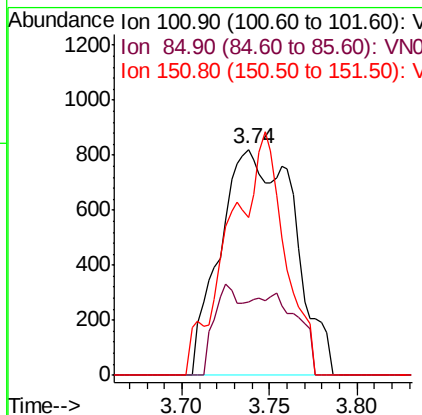
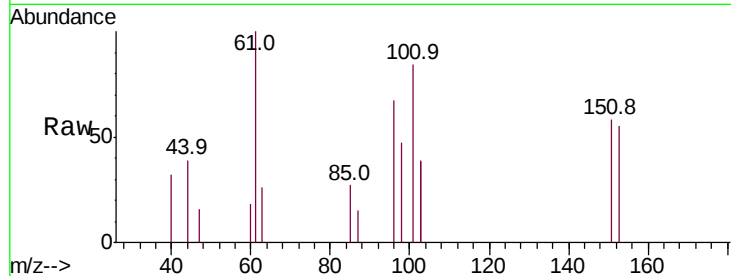
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:	101	Resp:	2425
Ion Ratio	Lower	Upper	
101	100		
85	14.4	32.3	48.5#
151	34.8	68.0	102.0#

Manual Integrations
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MMDadoda
8/2/2019 9:13:36 AM



#10

Methyl Iodide

Concen: 0.293 ug/l

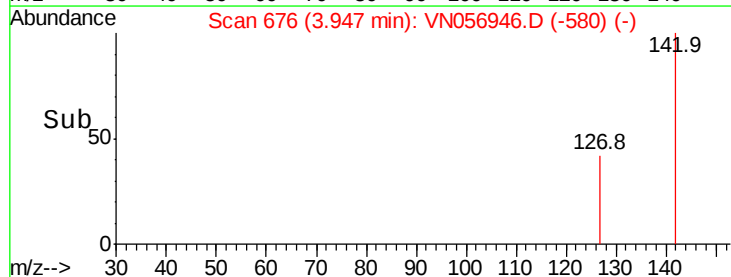
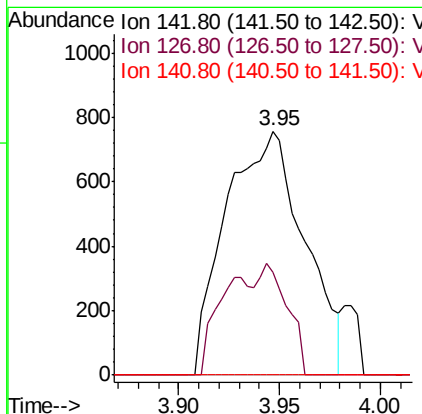
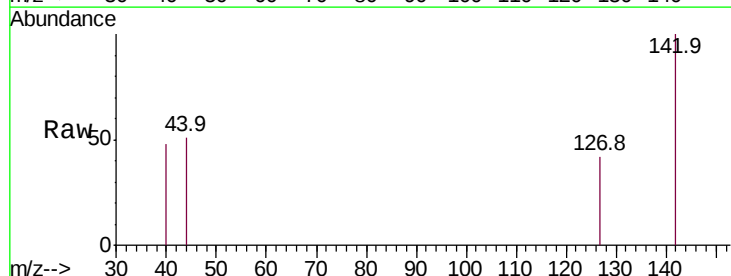
RT: 3.95 min Scan# 676

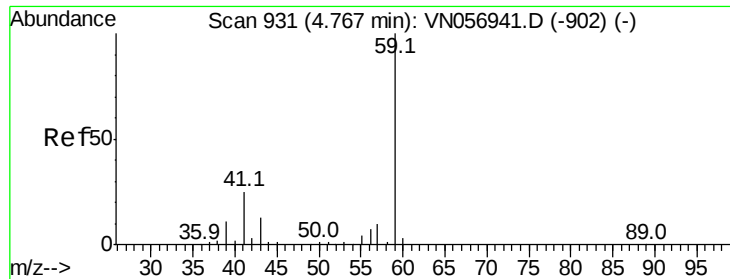
Delta R.T. 0.01 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Tgt Ion:	142	Resp:	2046
Ion Ratio	Lower	Upper	
142	100		
127	19.1	30.4	45.6#
141	0.0	11.1	16.7#





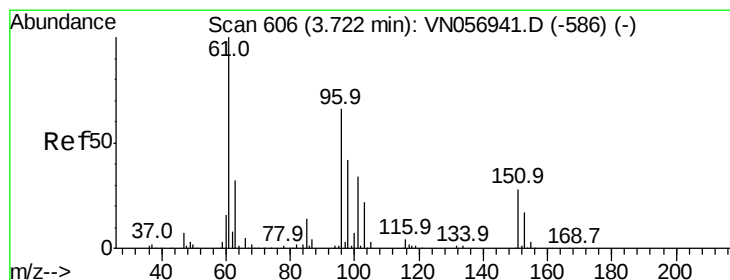
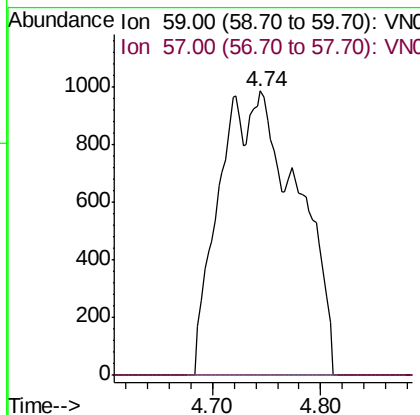
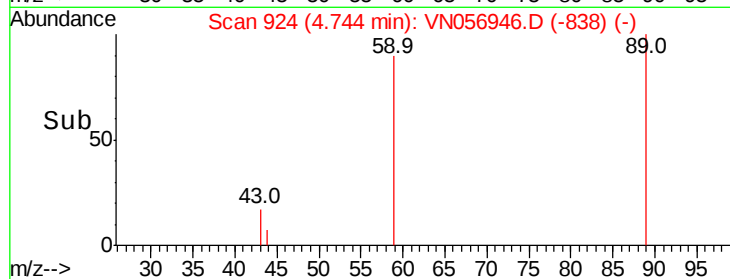
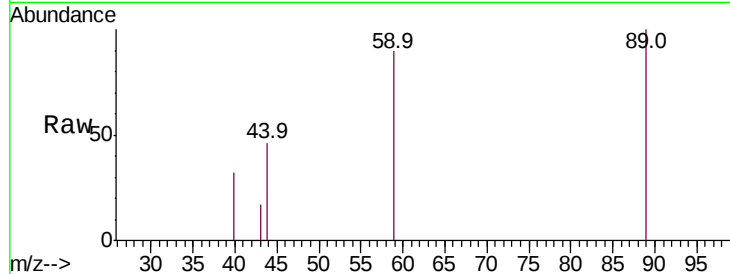
#11
Tert butyl alcohol
Concen: 6.287 ug/l m
RT: 4.74 min Scan# 924
Delta R.T. -0.02 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

Tot Ion: 59 Resp: 4935
Ion Ratio Lower Upper
59 100
57 0.0 7.5 11.3#

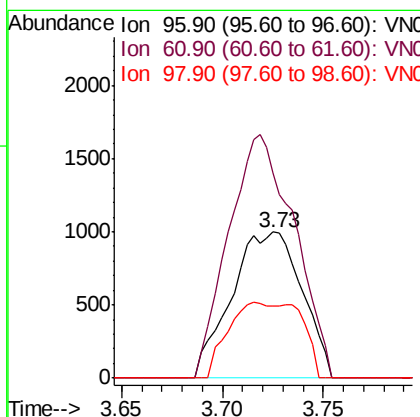
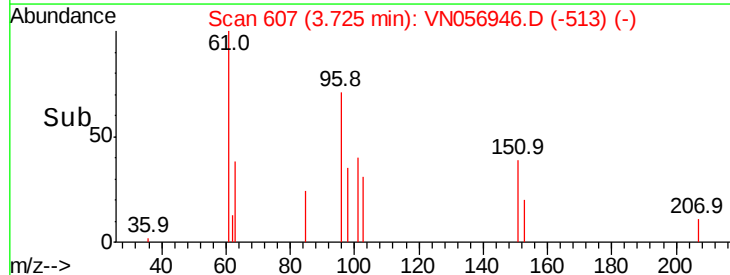
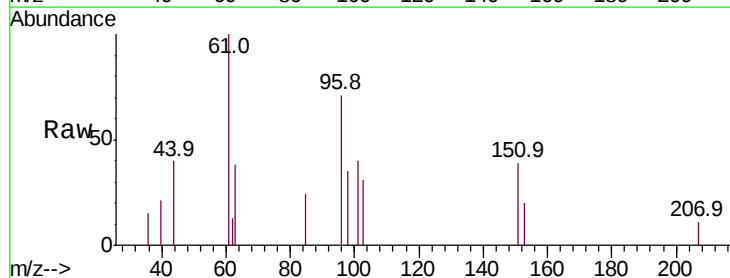
Manual Integrations
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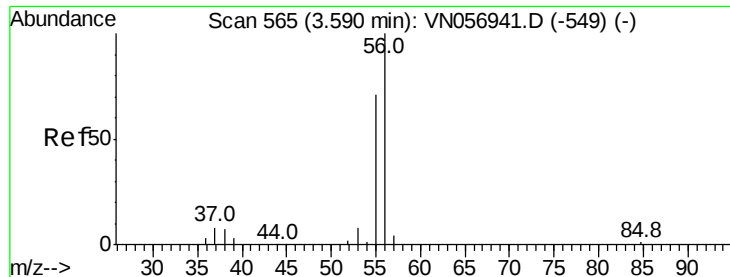
MMDadoda
8/2/2019 9:13:36 AM



#12
1,1-Dichloroethene
Concen: 0.486 ug/l
RT: 3.73 min Scan# 607
Delta R.T. 0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion: 96 Resp: 2422
Ion Ratio Lower Upper
96 100
61 141.1 121.8 182.8
98 49.4 51.7 77.5#





#13

Acrolein

Concen: 3.260 ug/l m

RT: 3.60 min Scan# 567

Delta R.T. 0.01 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 56 Resp: 1392

Ion Ratio Lower Upper

56 100

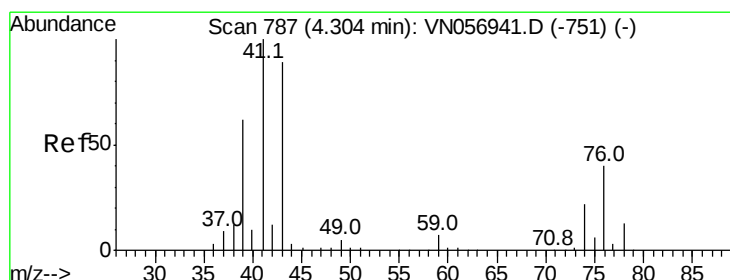
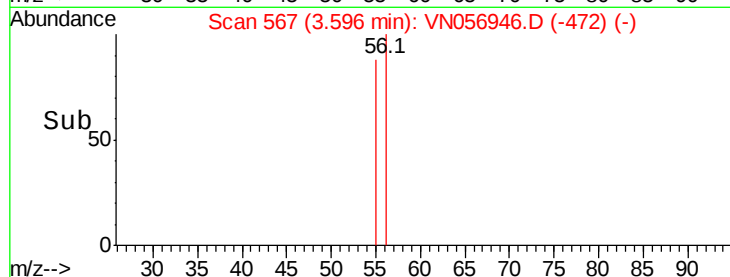
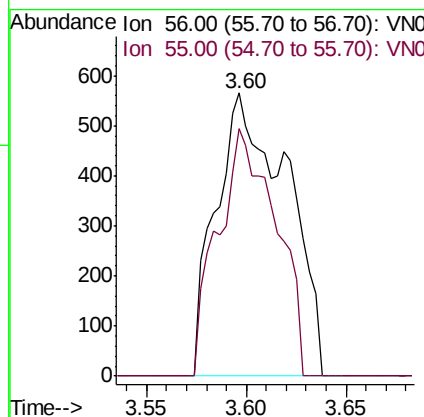
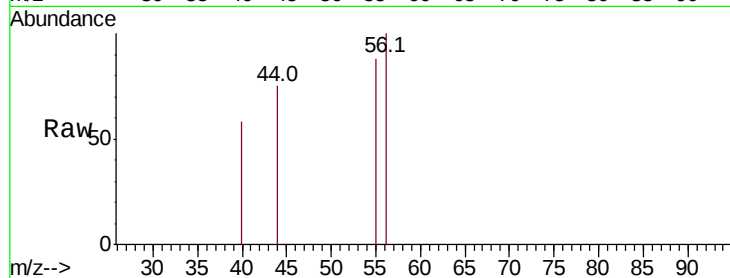
55 72.0 55.8 83.6

Manual Integrations

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MMDadoda

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#14

Allyl chloride

Concen: 0.440 ug/l

RT: 4.30 min Scan# 785

Delta R.T. -0.01 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

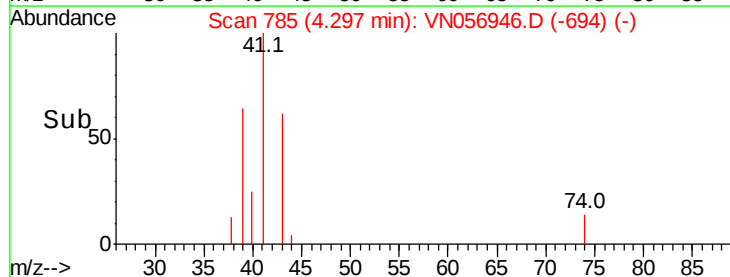
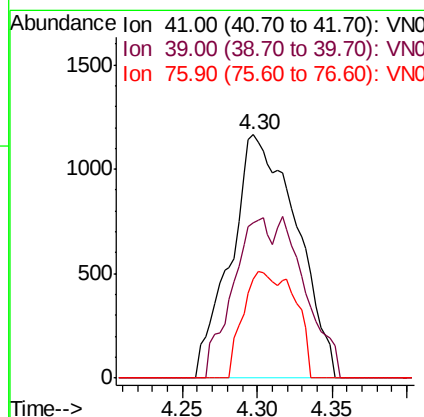
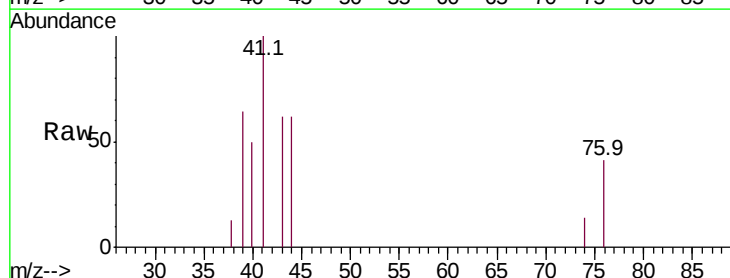
Tgt Ion: 41 Resp: 3565

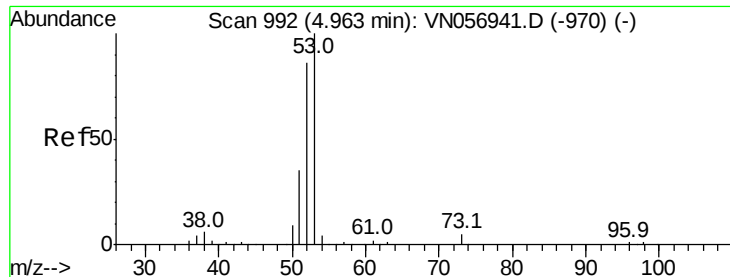
Ion Ratio Lower Upper

41 100

39 38.9 46.4 69.6#

76 21.9 28.4 42.6#





#15

Acrylonitrile

Concen: 1.947 ug/l

RT: 4.99 min Scan# 1000

Delta R.T. 0.03 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

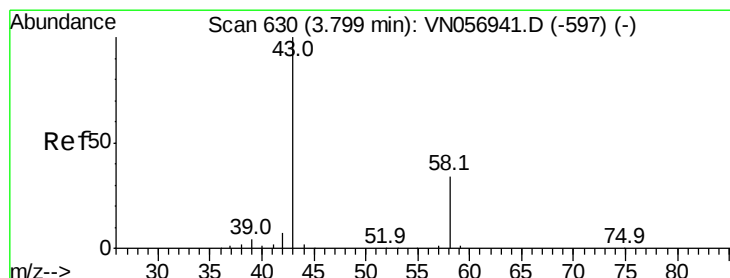
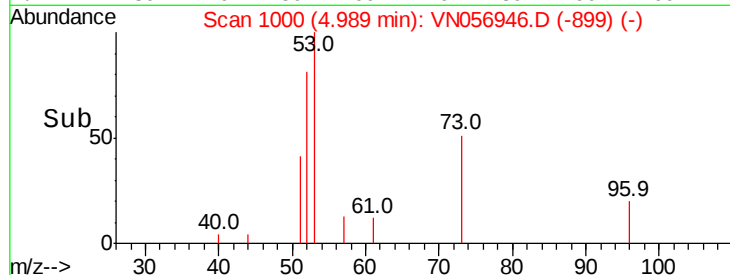
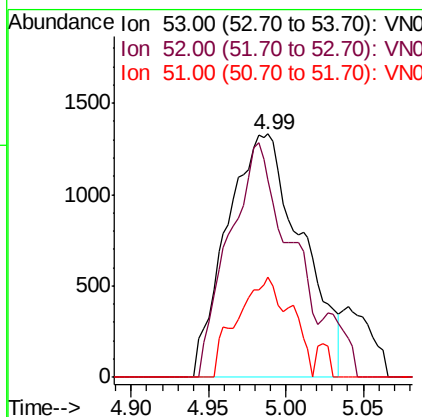
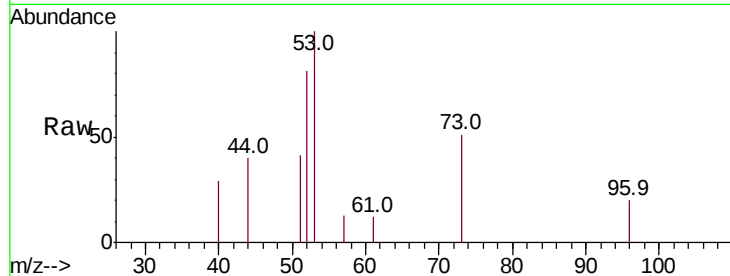
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:	53	Resp:	4482
Ion	Ratio	Lower	Upper
53	100		
52	78.2	66.5	99.7
51	29.7	28.4	42.6

Manual Integrations
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#16

Acetone

Concen: 2.622 ug/l

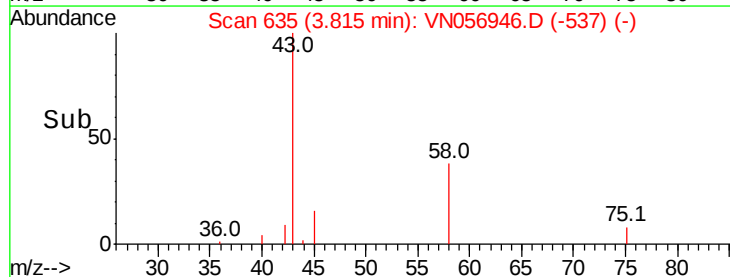
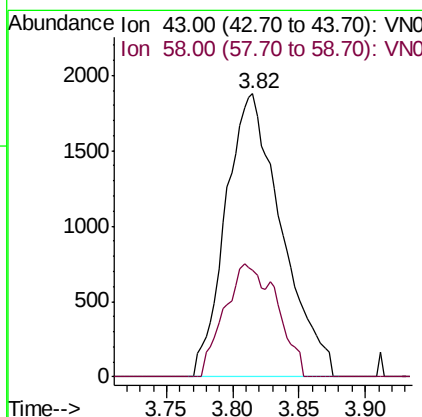
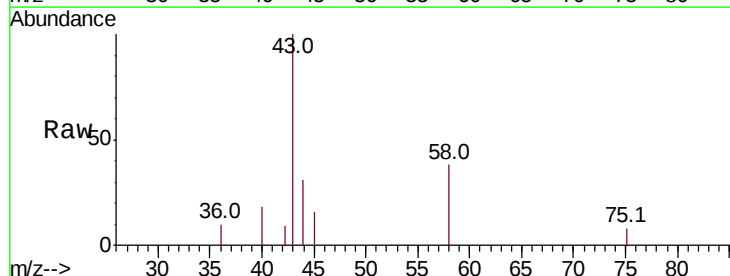
RT: 3.82 min Scan# 635

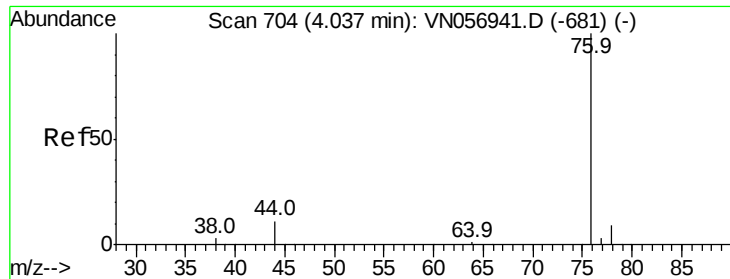
Delta R.T. 0.02 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Tgt Ion:	43	Resp:	5517
Ion	Ratio	Lower	Upper
43	100		
58	37.7	27.2	40.8





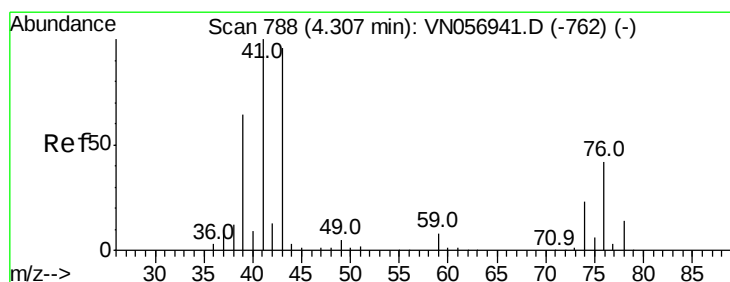
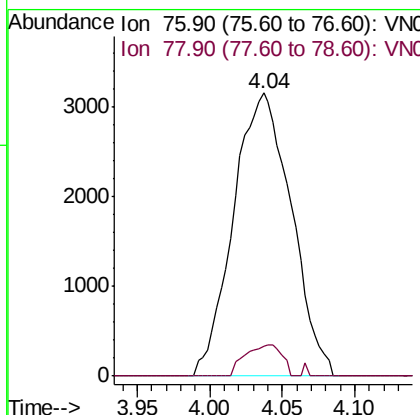
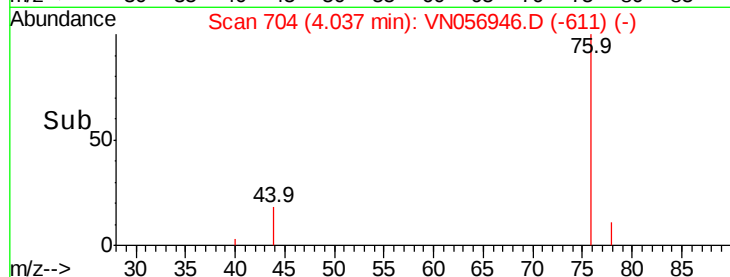
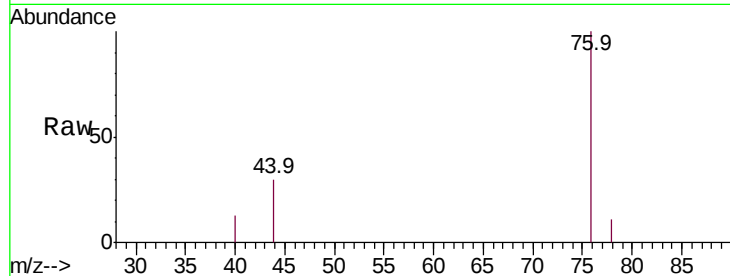
#17
Carbon Disulfide
Concen: 0.658 ug/l
RT: 4.04 min Scan# 704
Delta R.T. -0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

Tot Ion: 76 Resp: 8717
Ion Ratio Lower Upper
76 100
78 10.6 7.2 10.8

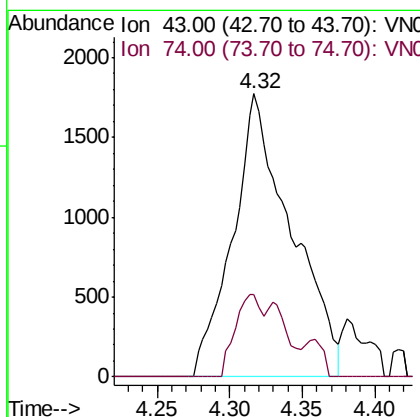
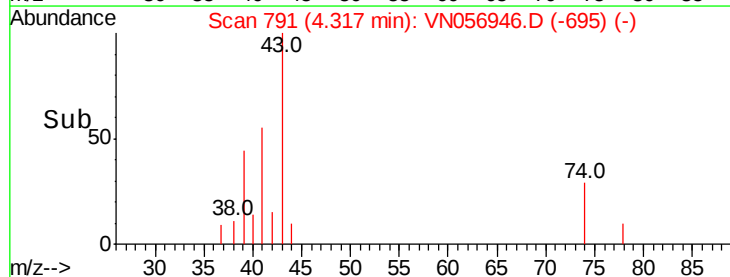
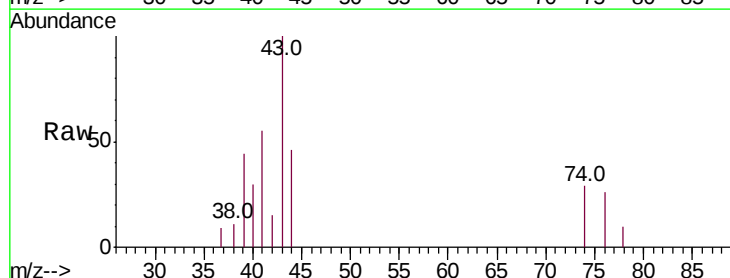
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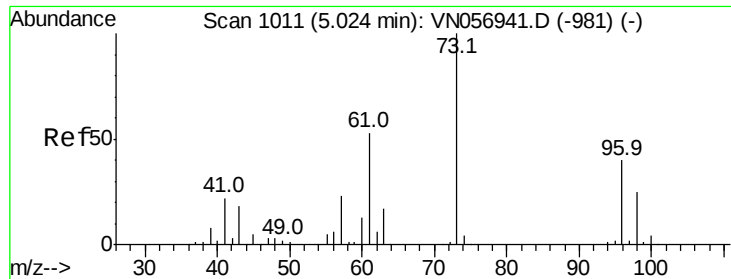
MMDadoda
8/2/2019 9:13:36 AM



#18
Methyl Acetate
Concen: 0.741 ug/l
RT: 4.32 min Scan# 791
Delta R.T. 0.01 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion: 43 Resp: 4971
Ion Ratio Lower Upper
43 100
74 13.2 19.7 29.5#





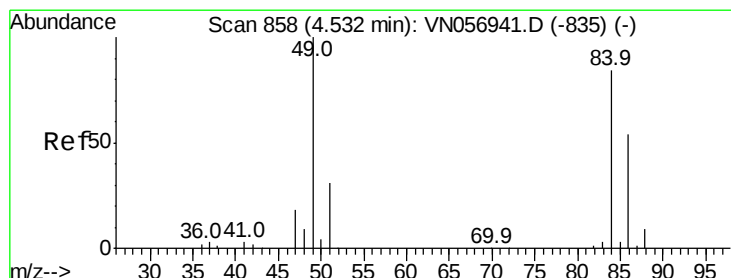
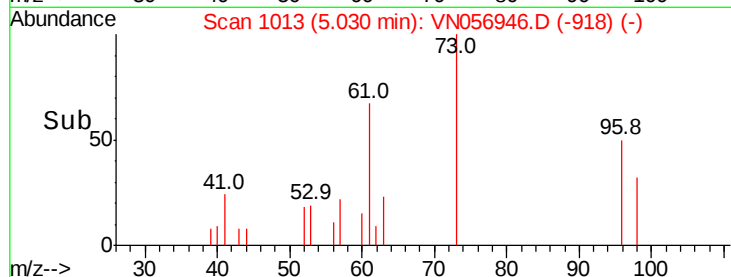
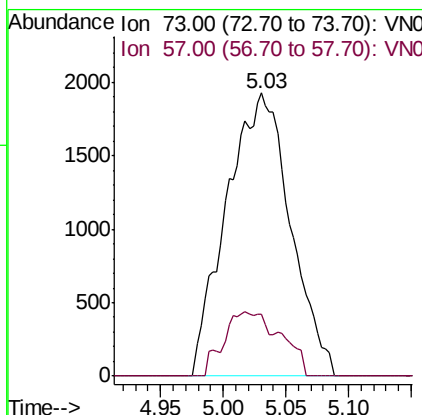
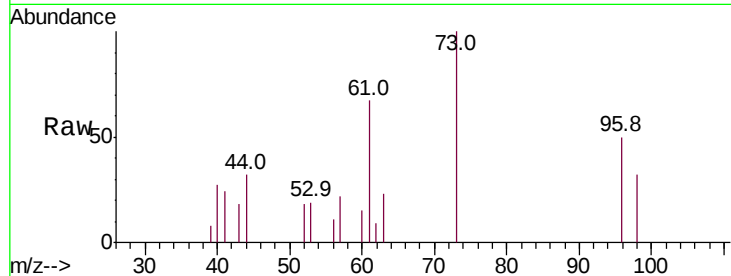
#19
Methvl tert-butvl Ether
Concen: 0.459 ug/l
RT: 5.03 min Scan# 1013
Delta R.T. 0.01 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

Tot Ion: 73 Resp: 6824
Ion Ratio Lower Upper
73 100
57 21.9 18.3 27.5

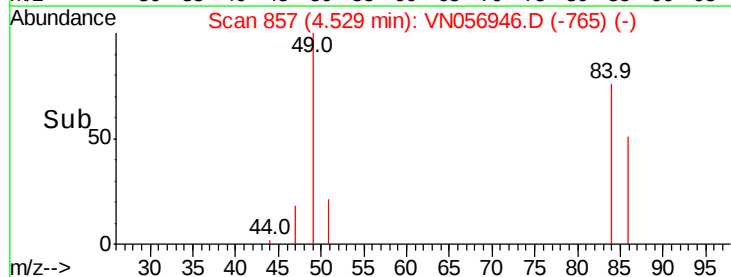
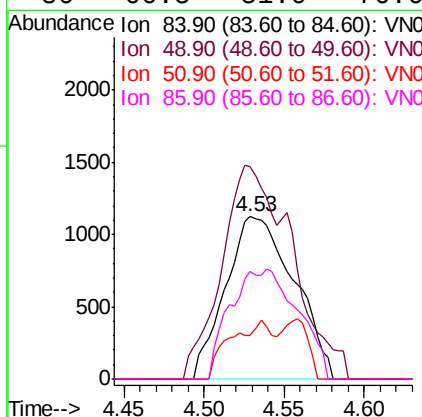
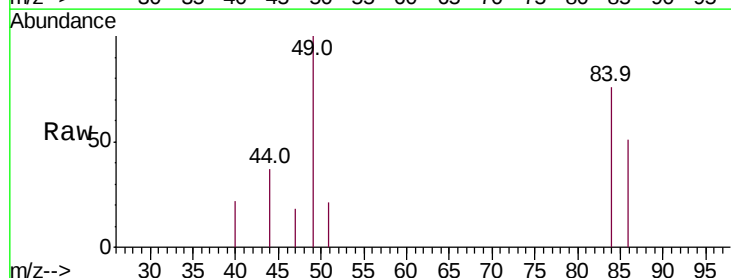
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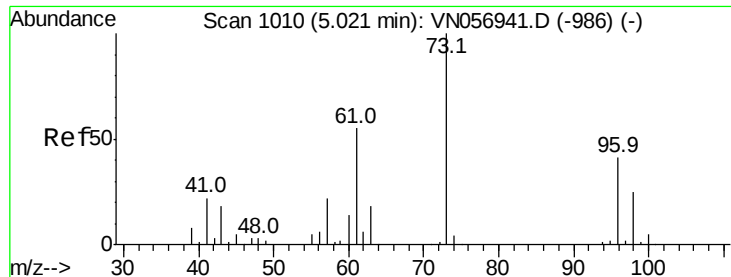
MMDadoda
8/2/2019 9:13:36 AM



#20
Methylene Chloride
Concen: 0.546 ug/l
RT: 4.53 min Scan# 857
Delta R.T. -0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion: 84 Resp: 3311
Ion Ratio Lower Upper
84 100
49 117.4 95.2 142.8
51 27.2 29.7 44.5#
86 66.5 51.0 76.6





#21

trans-1,2-Dichloroethene

Concen: 0.553 ug/l

RT: 5.02 min Scan# 1011

Delta R.T. 0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 96 Resp: 2931

Ion Ratio Lower Upper

96 100

61 104.1 107.5 161.3#

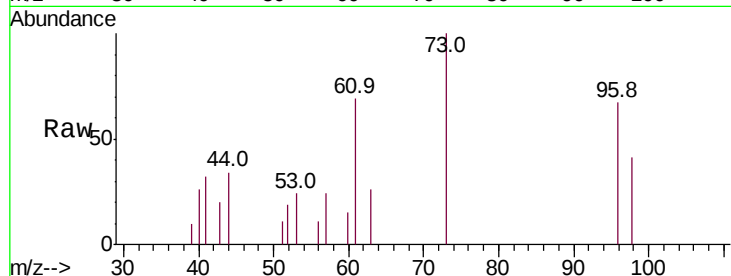
98 61.2 49.9 74.9

Manual Integrations

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MMDadoda

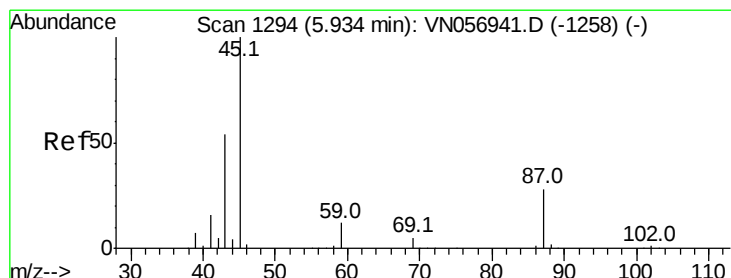
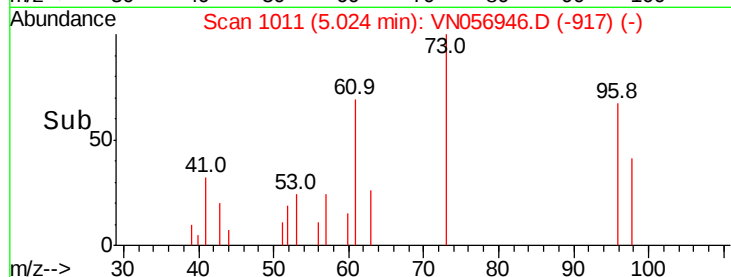
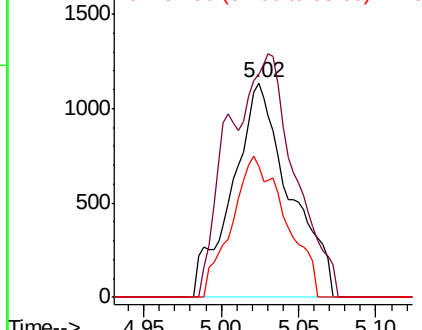
8/2/2019 9:13:36 AM



Abundance Ion 95.90 (95.60 to 96.60): VNC

Ion 60.90 (60.60 to 61.60): VNC

Ion 97.90 (97.60 to 98.60): VNC



#22

Diisopropyl ether

Concen: 0.445 ug/l

RT: 5.94 min Scan# 1295

Delta R.T. 0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Tgt Ion: 45 Resp: 7431

Ion Ratio Lower Upper

45 100

43 75.3 44.7 67.1#

87 27.9 23.0 34.6

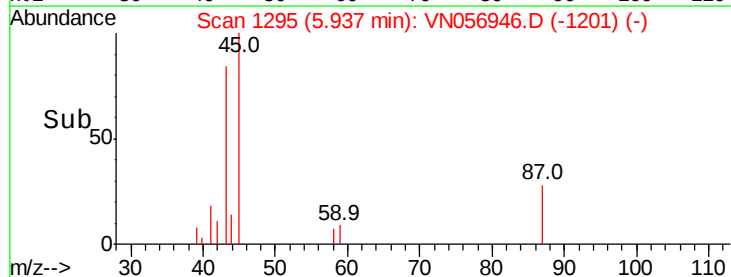
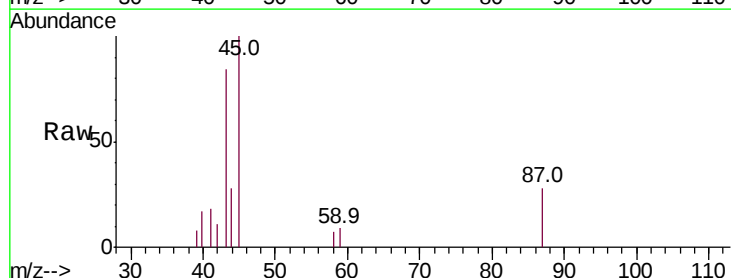
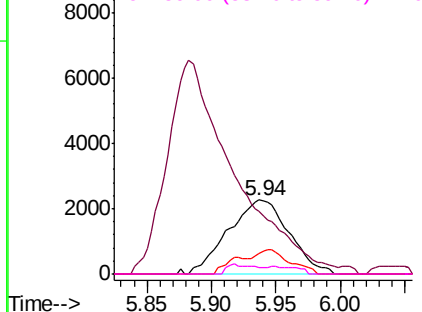
59 9.1 9.8 14.8#

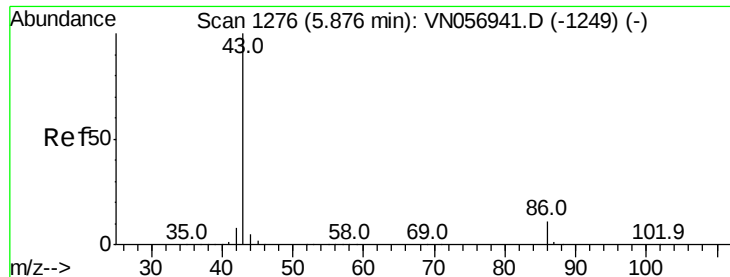
Abundance Ion 45.00 (44.70 to 45.70): VNC

Ion 43.00 (42.70 to 43.70): VNC

Ion 87.00 (86.70 to 87.70): VNC

Ion 59.00 (58.70 to 59.70): VNC





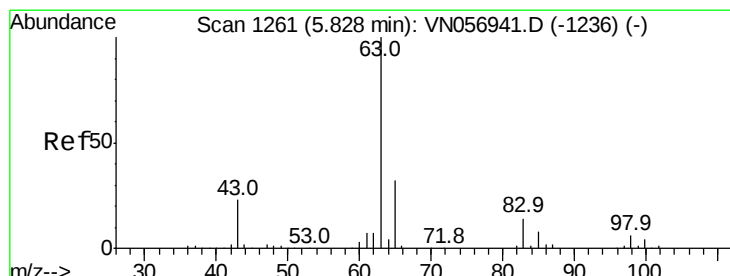
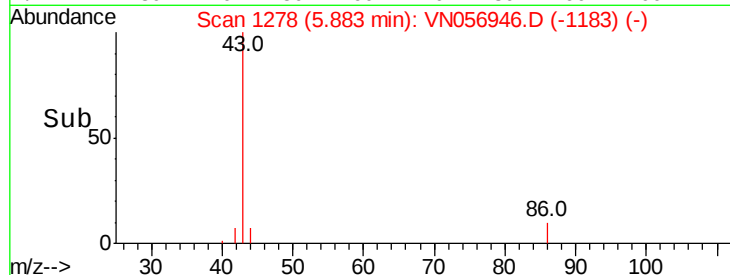
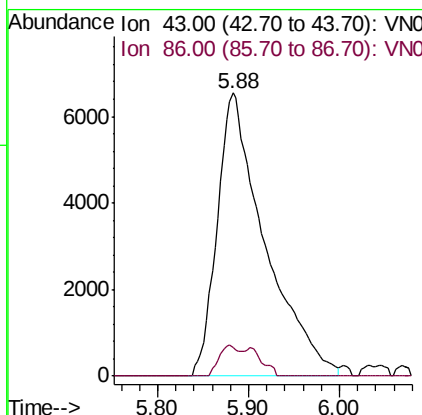
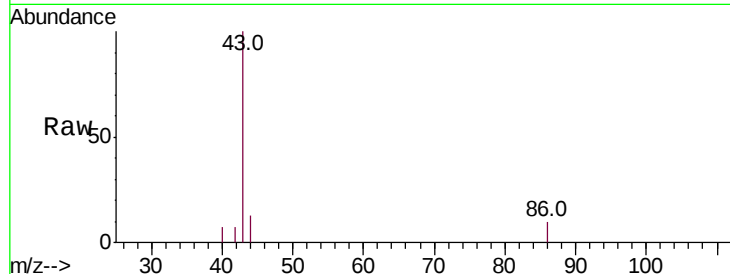
#23
 Vinyl Acetate
 Concen: 2.054 ug/l
 RT: 5.88 min Scan# 1278
 Delta R.T. 0.01 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

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

Tot Ion	43	Resp	23782
Ion Ratio	100	Lower	Upper
43	100		
86	10.0	8.5	12.7

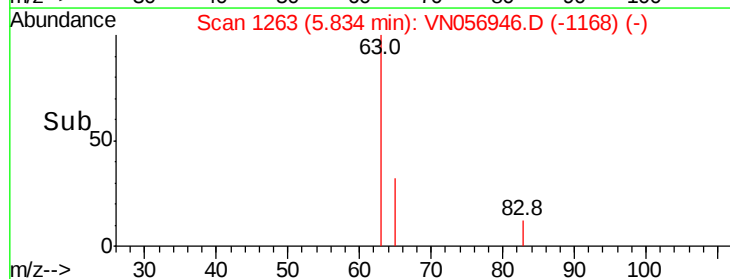
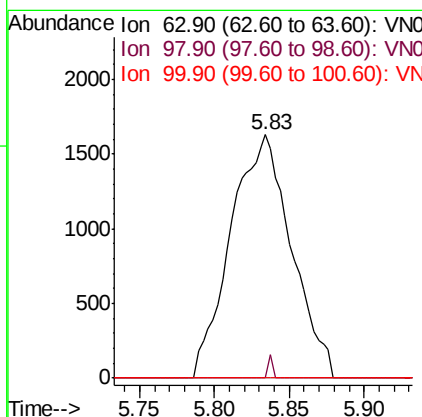
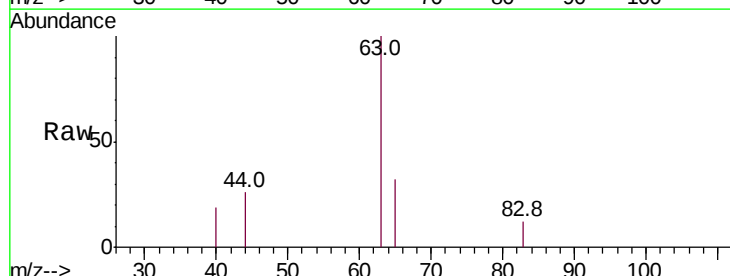
Manual Integrations
 APPROVED

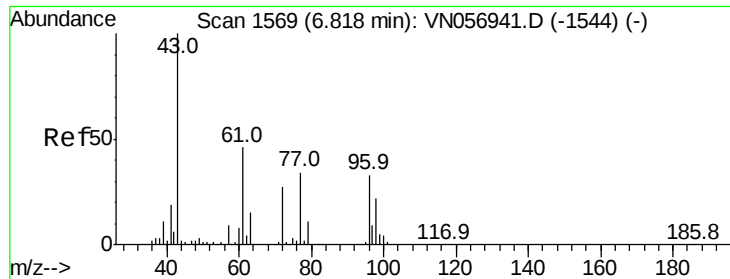
MMDadoda
 8/2/2019 9:13:36 AM



#24
 1,1-Dichloroethane
 Concen: 0.466 ug/l
 RT: 5.83 min Scan# 1263
 Delta R.T. 0.01 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

Tgt Ion	63	Resp	4594
Ion Ratio	100	Lower	Upper
63	100		
98	0.0	3.2	9.6#
100	0.0	2.1	6.3#





#25

2-Butanone

Concen: 2.340 ug/l

RT: 6.82 min Scan# 1571

Delta R.T. 0.01 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 43 Resp: 6981

Ion Ratio Lower Upper

43 100

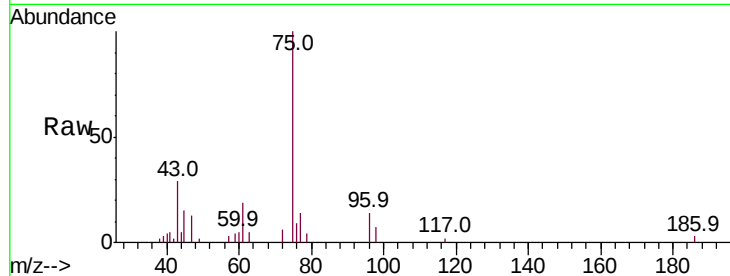
72 21.4 21.5 32.3#

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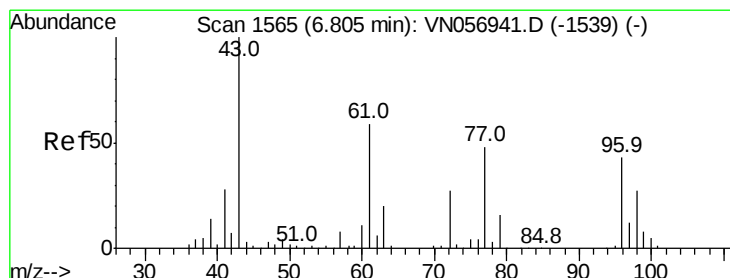
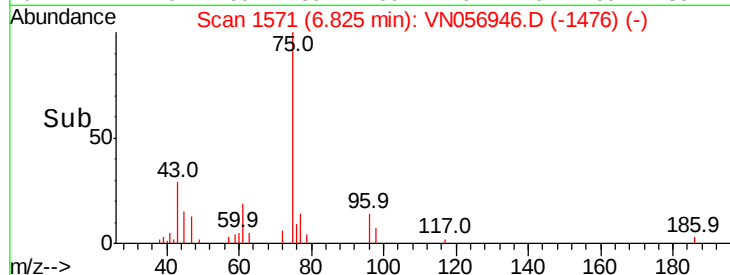
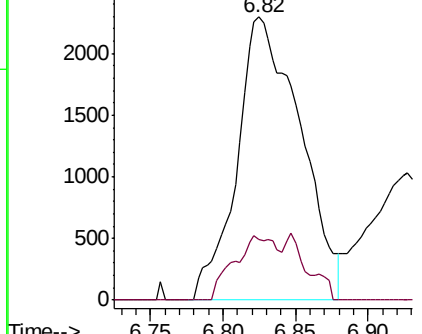
MMDadoda

8/2/2019 9:13:36 AM



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 72.00 (71.70 to 72.70): VN0



#26

2,2-Dichloropropane

Concen: 0.584 ug/l

RT: 6.81 min Scan# 1567

Delta R.T. 0.01 min

Lab File: VN056946.D

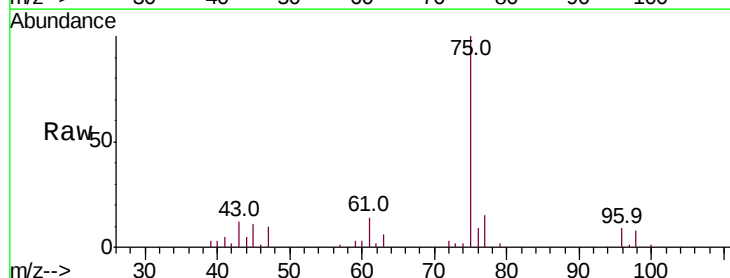
Acq: 26 Jul 2019 17:00

Tgt Ion: 77 Resp: 4376

Ion Ratio Lower Upper

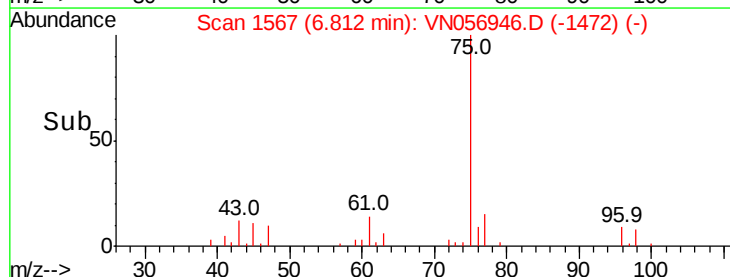
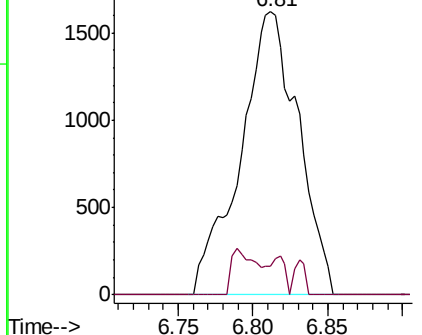
77 100

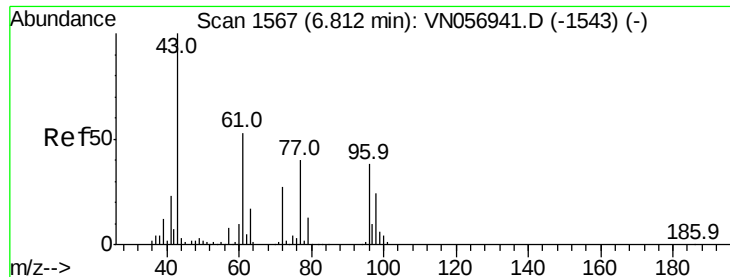
97 3.4 12.2 36.6#



Abundance Ion 76.90 (76.60 to 77.60): VN0

Ion 96.90 (96.60 to 97.60): VN0





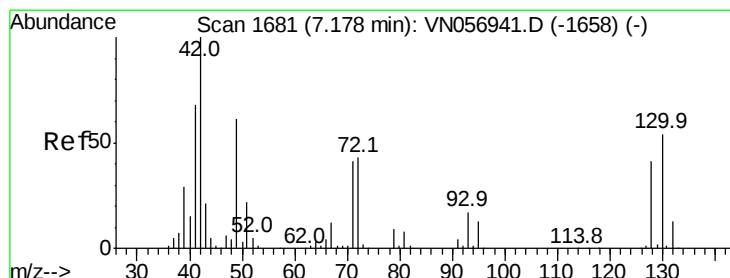
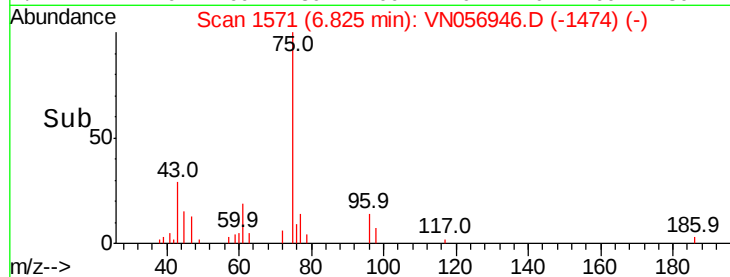
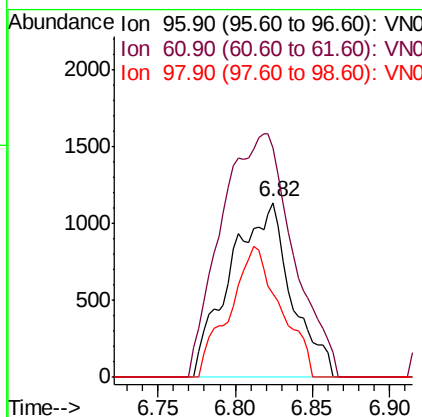
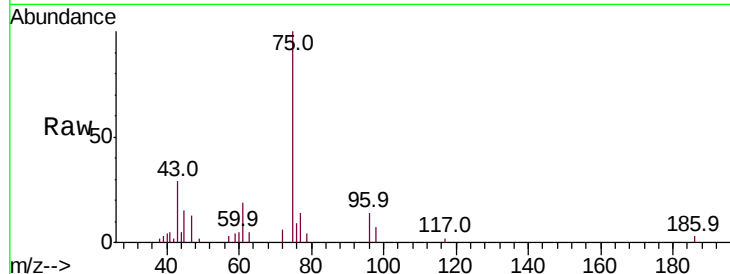
#27
 cis-1,2-Dichloroethene
 Concen: 0.497 ug/l
 RT: 6.82 min Scan# 1571
 Delta R.T. 0.01 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

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

Tot Ion	Ratio	Lower	Upper
96	100		
61	164.6	0.0	277.2
98	62.7	0.0	128.4

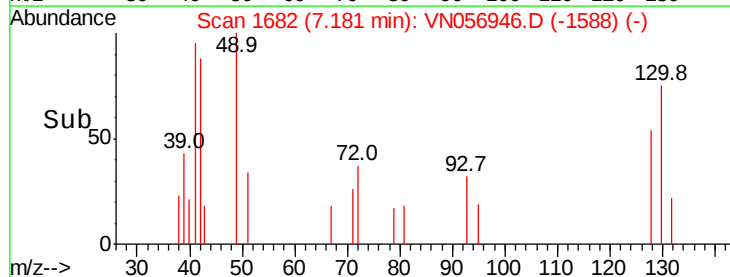
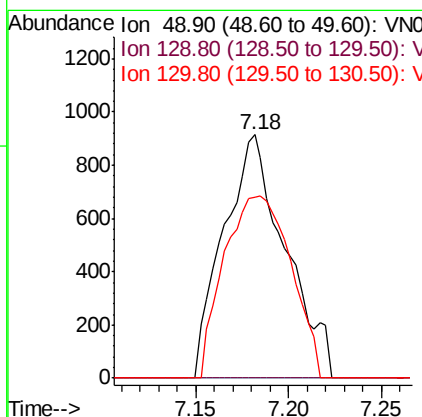
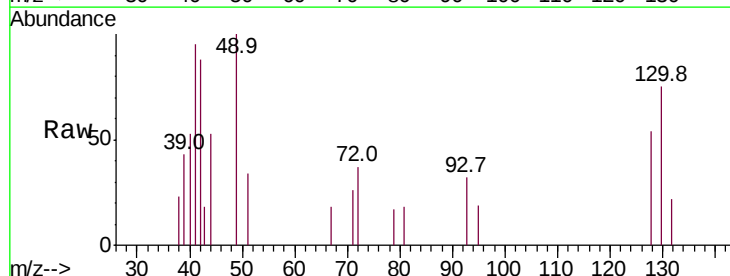
Manual Integrations
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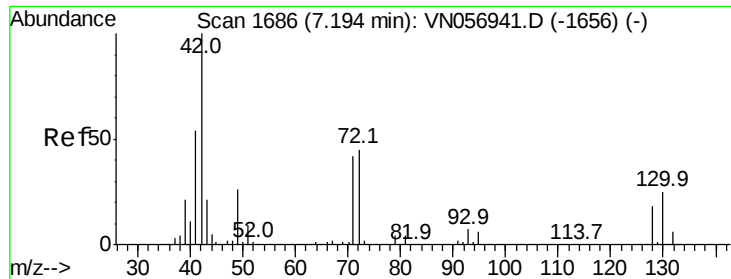
MMDadoda
 8/2/2019 9:13:36 AM



#28
 Bromochloromethane
 Concen: 0.456 ug/l
 RT: 7.18 min Scan# 1682
 Delta R.T. 0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	4.6
130	81.0	69.0	103.4





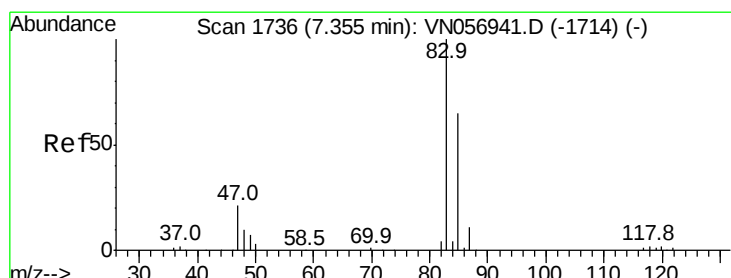
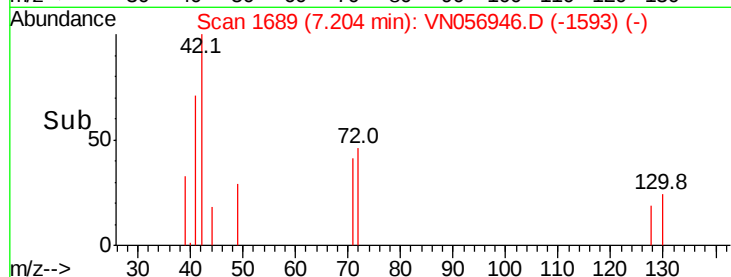
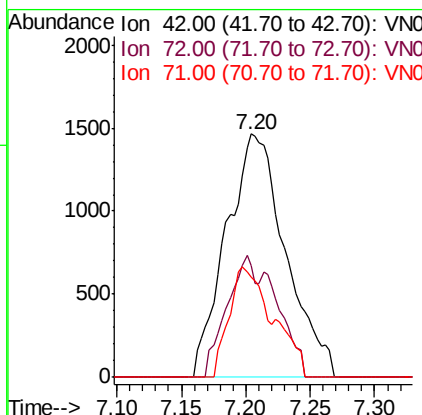
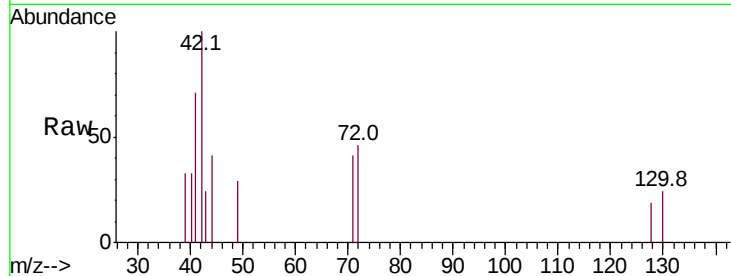
#29
Tetrahydrofuran
Concen: 2.413 ug/l
RT: 7.20 min Scan# 1689
Delta R.T. 0.01 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

Tot Ion	Ratio	Lower	Upper
42	100		
72	25.4	35.6	53.4#
71	26.1	33.5	50.3#

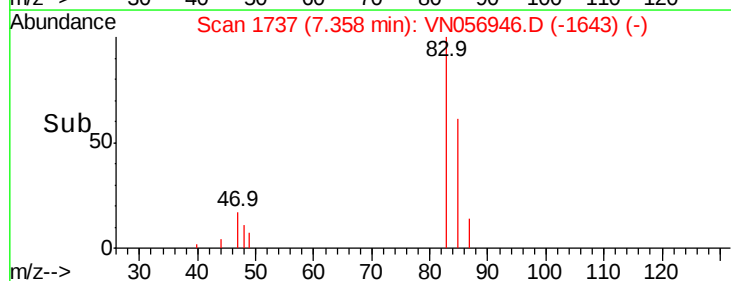
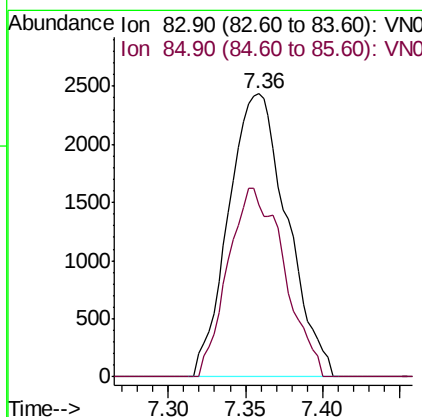
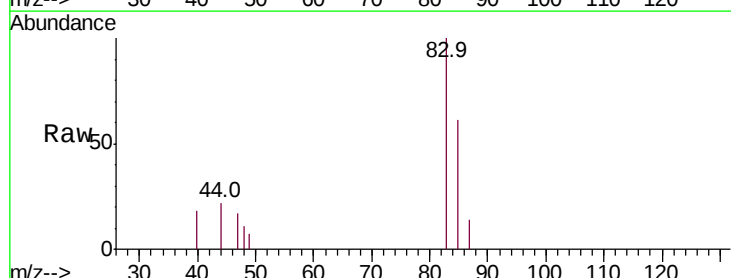
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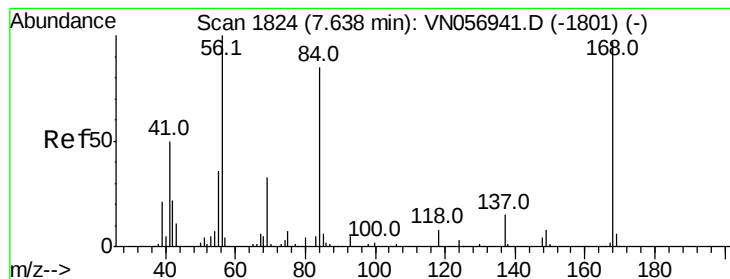
MMDadoda
8/2/2019 9:13:36 AM



#30
Chloroform
Concen: 0.635 ug/l
RT: 7.36 min Scan# 1737
Delta R.T. 0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Lower	Upper
83	100		
85	60.9	52.2	78.2





#31

Cyclohexane

Concen: 1.313 ug/l

RT: 7.65 min Scan# 1828

Delta R.T. 0.01 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 56 Resp: 12533

Ion Ratio Lower Upper

56 100

69 152.2 26.2 39.2#

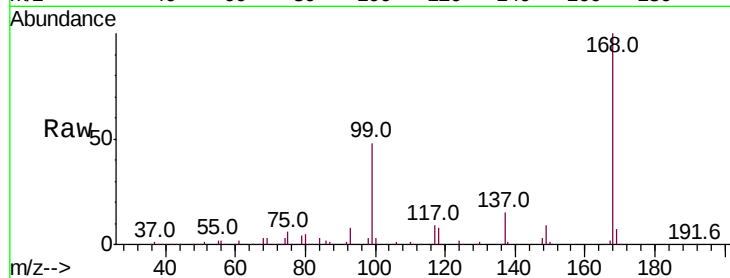
84 137.0 68.2 102.2#

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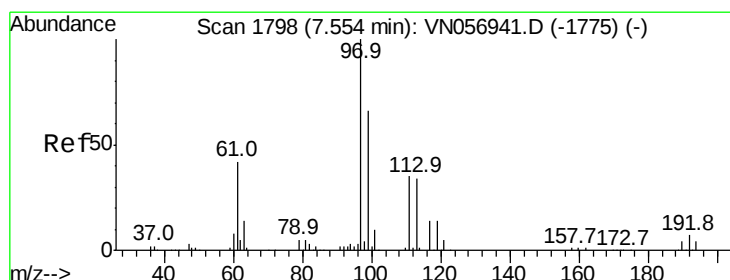
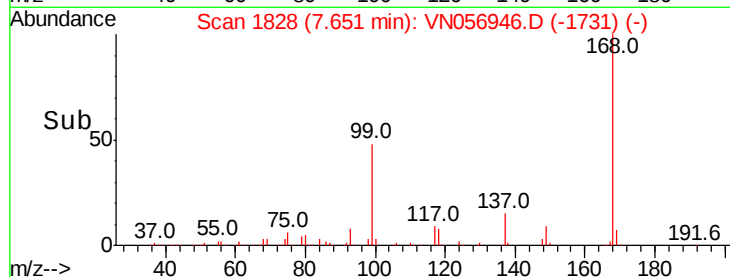
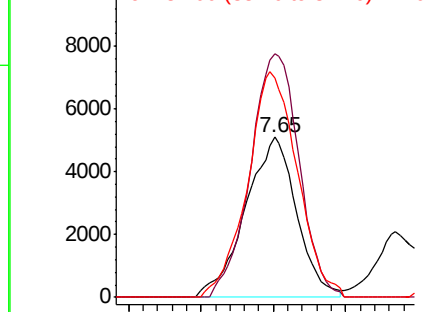


Abundance

Ion 56.00 (55.70 to 56.70): VN0

Ion 69.00 (68.70 to 69.70): VN0

Ion 84.00 (83.70 to 84.70): VN0



#32

1,1,1-Trichloroethane

Concen: 0.457 ug/l

RT: 7.56 min Scan# 1799

Delta R.T. 0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

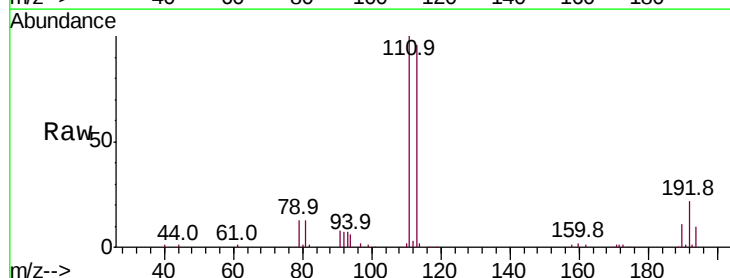
Tgt Ion: 97 Resp: 3676

Ion Ratio Lower Upper

97 100

99 0.0 52.3 78.5#

61 36.5 33.9 50.9

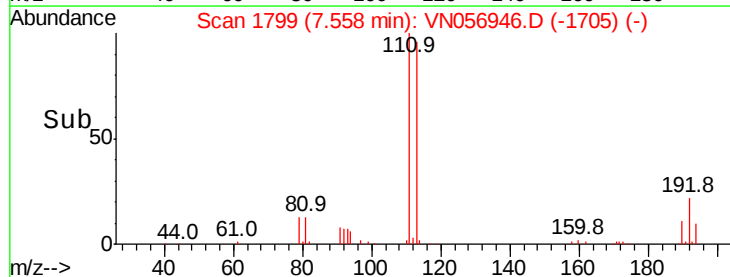
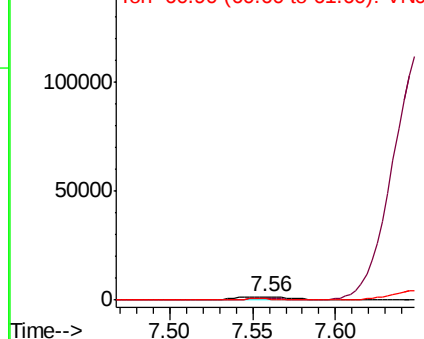


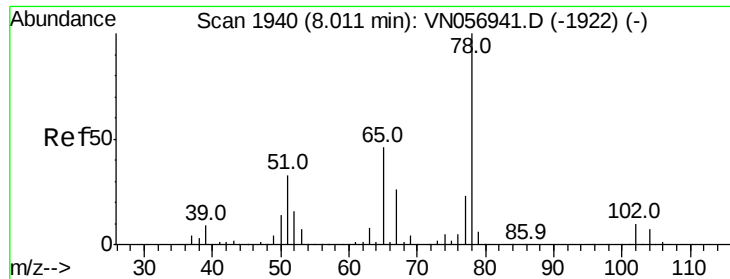
Abundance

Ion 96.90 (96.60 to 97.60): VN0

Ion 98.90 (98.60 to 99.60): VN0

Ion 60.90 (60.60 to 61.60): VN0





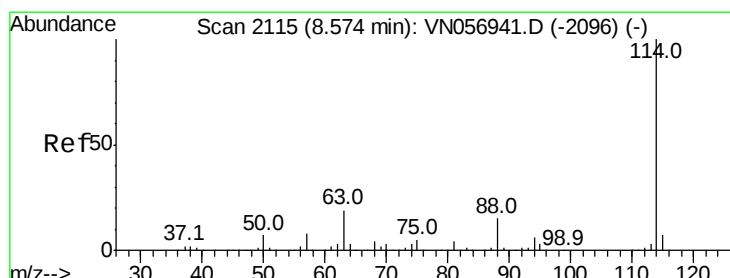
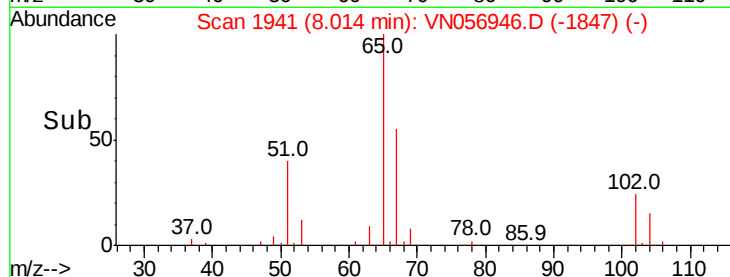
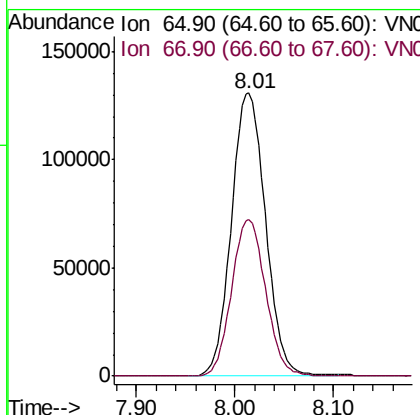
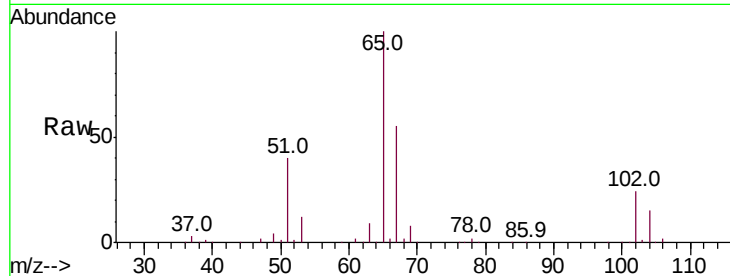
#33
 1,2-Dichloroethane-d4
 Concen: 54.282 ug/l
 RT: 8.01 min Scan# 1941
 Delta R.T. 0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

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

Tot Ion	Ratio	Resp	Lower	Upper
65	100	315216		
67	55.3	0.0	112.0	

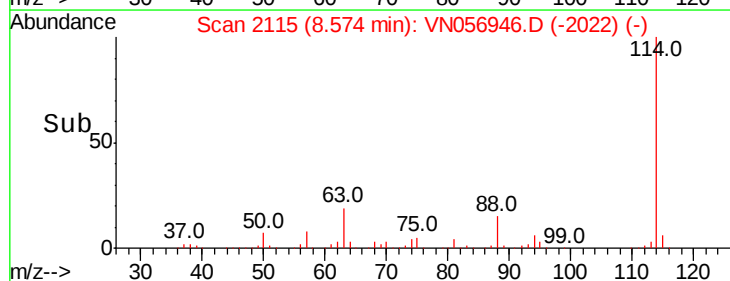
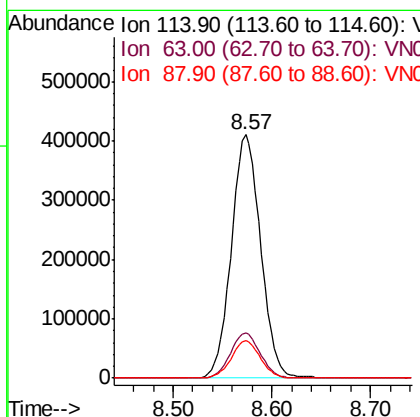
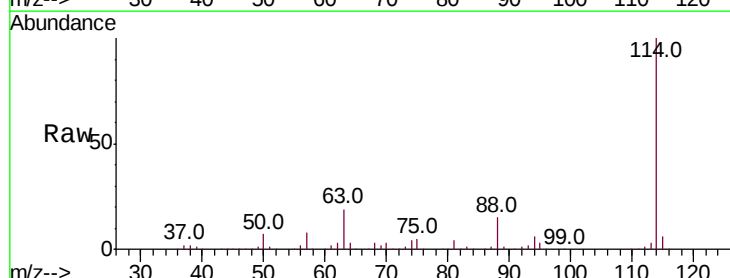
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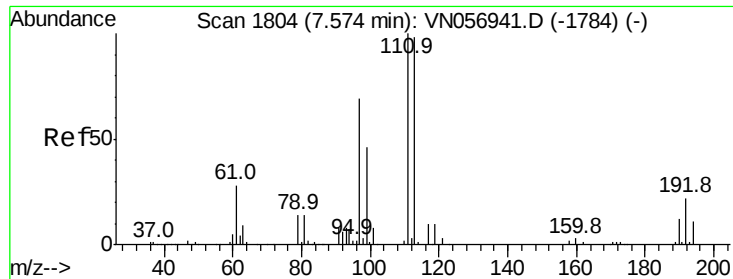
MMDadoda
 8/2/2019 9:13:36 AM



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.57 min Scan# 2115
 Delta R.T. -0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Resp	Lower	Upper
114	100	849402		
63	18.6	0.0	38.0	
88	15.3	0.0	30.0	





#35

Dibromofluoromethane

Concen: 52.629 ug/l

RT: 7.58 min Scan# 1805

Delta R.T. 0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

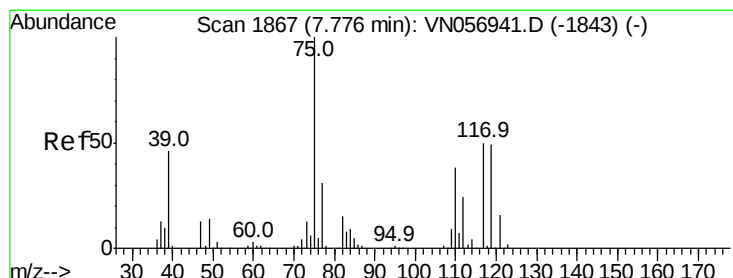
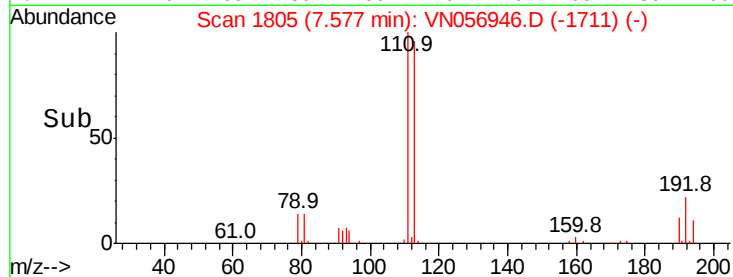
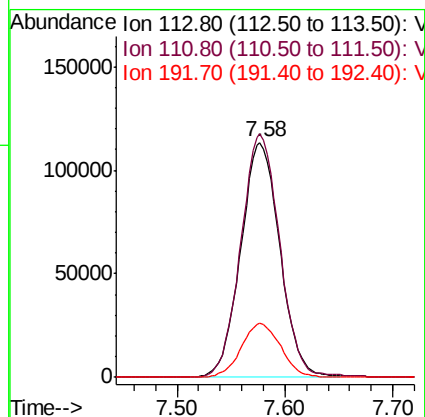
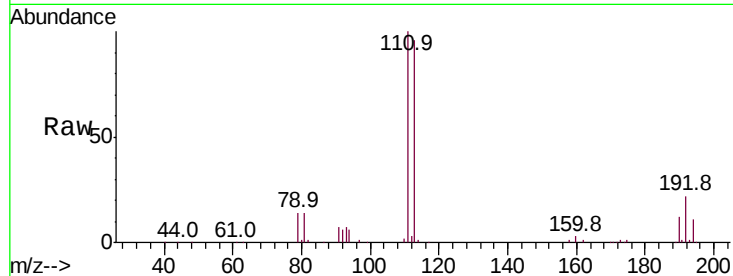
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:	113	Resp:	286176
Ion Ratio	Lower	Upper	
113	100		
111	103.4	82.0	123.0
192	23.2	18.4	27.6

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8/2/2019 9:13:36 AM



#36

1,1-Dichloropropene

Concen: 0.502 ug/l

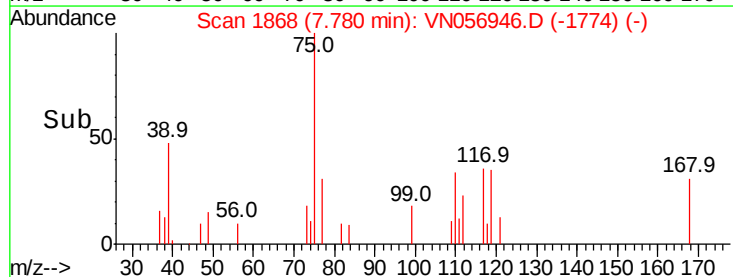
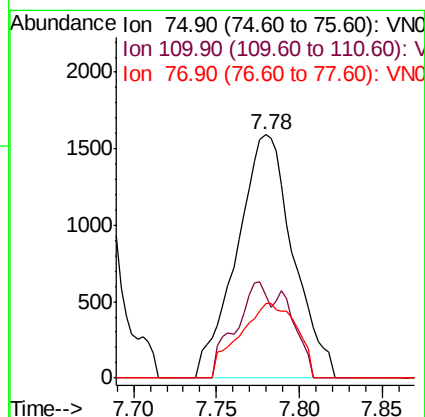
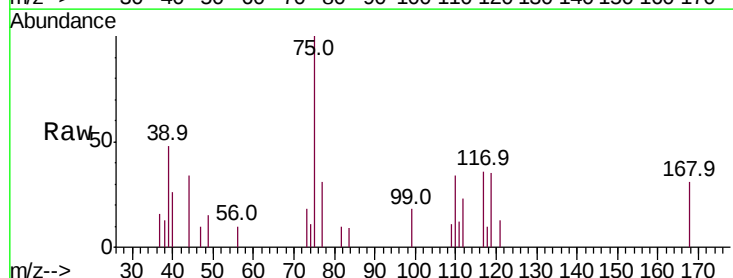
RT: 7.78 min Scan# 1868

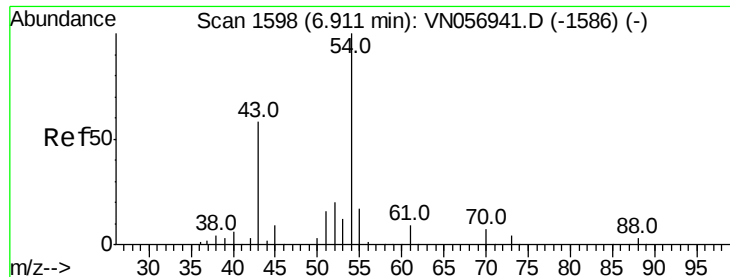
Delta R.T. 0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Tgt Ion:	75	Resp:	3749
Ion Ratio	Lower	Upper	
75	100		
110	23.8	18.6	55.8
77	31.0	25.2	37.8





#37

Ethyl Acetate

Concen: 0.592 ug/l

RT: 6.93 min Scan# 1603

Delta R.T. 0.02 min

Lab File: VN056946.D

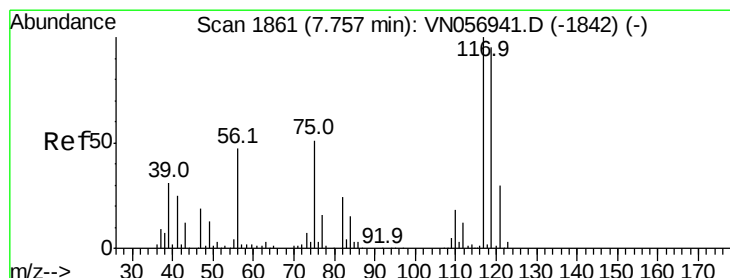
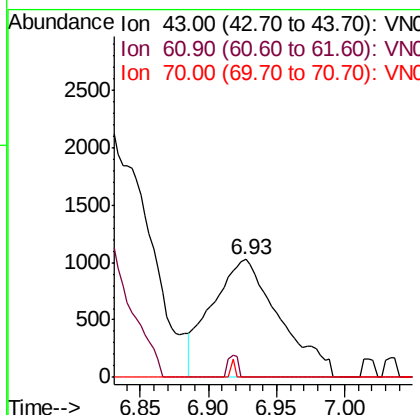
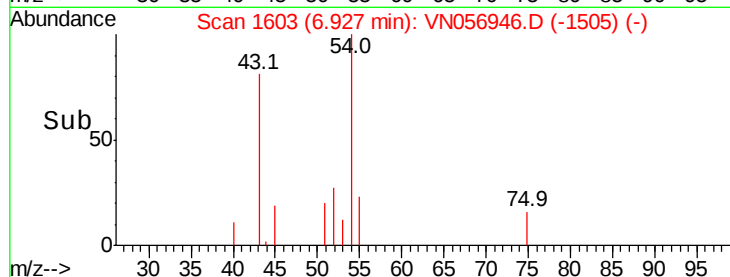
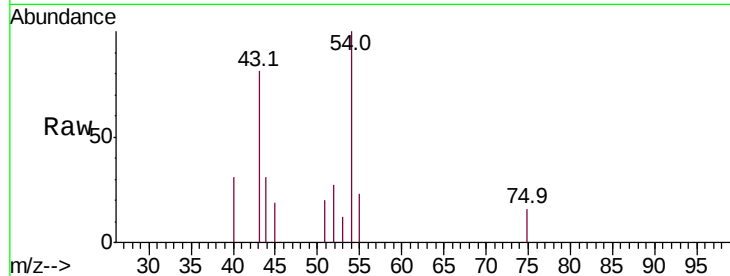
Acq: 26 Jul 2019 17:00

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

Tot Ion	Ratio	Lower	Upper
43	100		
61	0.0	11.8	17.6#
70	0.9	8.5	12.7#

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8/2/2019 9:13:36 AM



#38

Carbon Tetrachloride

Concen: 0.430 ug/l

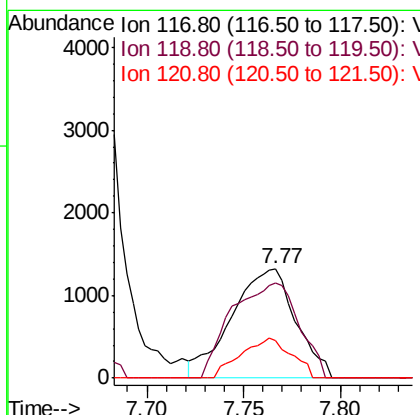
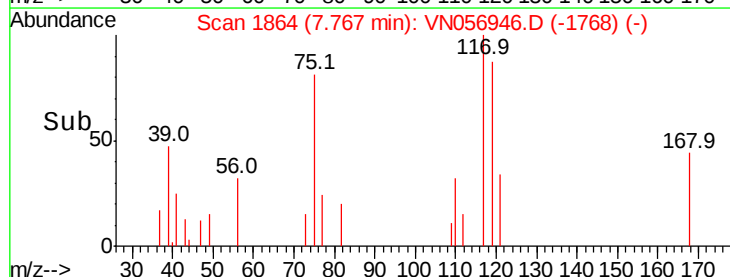
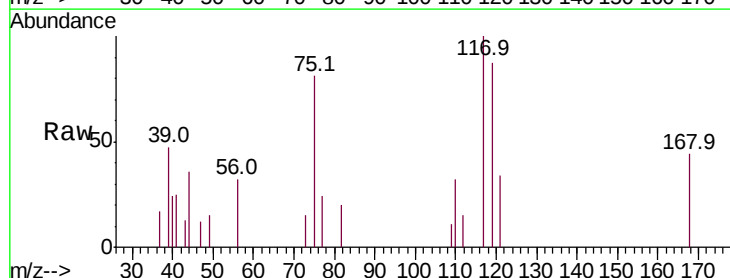
RT: 7.77 min Scan# 1864

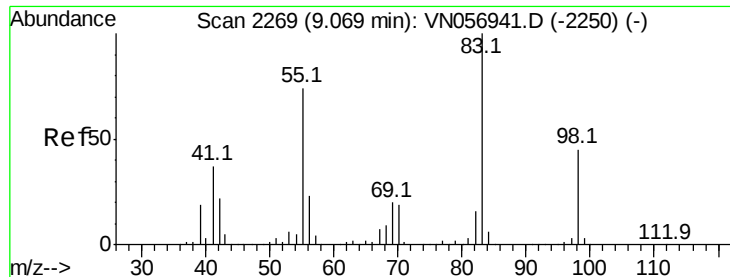
Delta R.T. 0.01 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Lower	Upper
117	100		
119	87.1	75.3	112.9
121	33.9	24.2	36.4





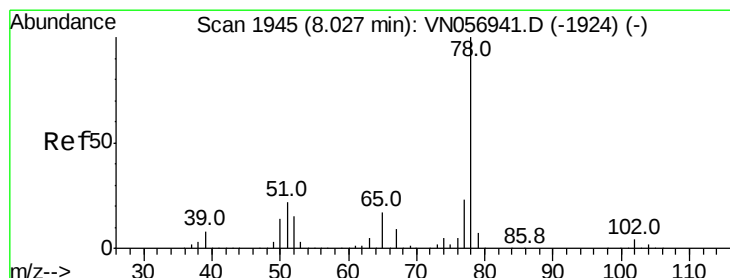
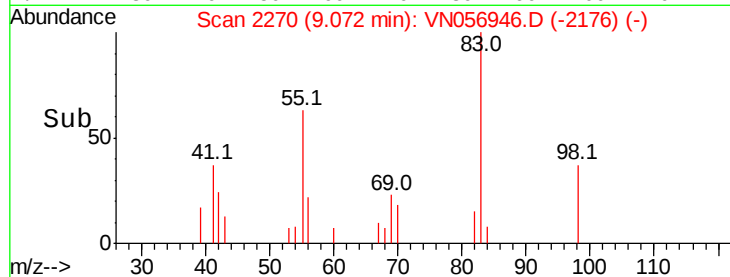
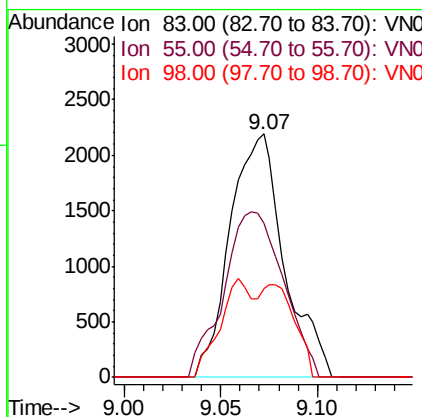
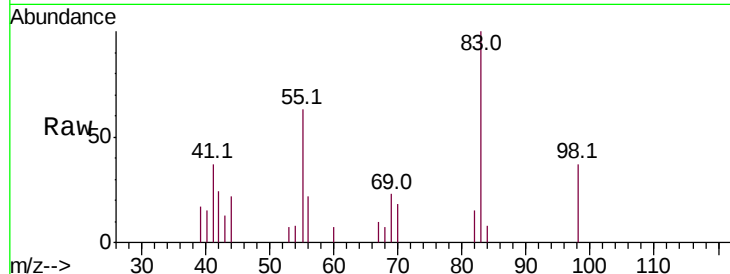
#39
Methvlcvclohexane
Concen: 0.449 ug/l
RT: 9.07 min Scan# 2270
Delta R.T. 0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

Tot Ion	Ratio	Lower	Upper
83	100		
55	63.1	59.0	88.6
98	36.5	36.2	54.4

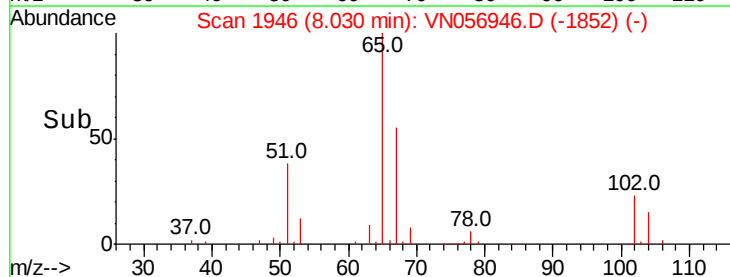
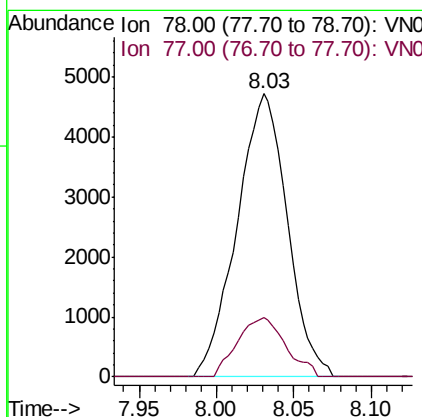
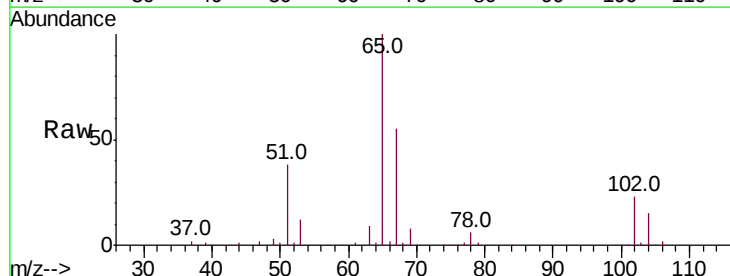
Manual Integrations
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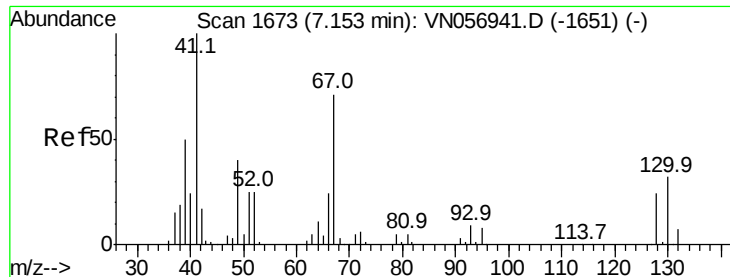
MMDadoda
8/2/2019 9:13:36 AM



#40
Benzene
Concen: 0.464 ug/l
RT: 8.03 min Scan# 1946
Delta R.T. 0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Lower	Upper
78	100		
77	20.9	18.3	27.5





#41

Methacrylonitrile

Concen: 0.390 ug/l

RT: 7.17 min Scan# 1677

Delta R.T. 0.01 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 41 Resp: 1080

Ion Ratio Lower Upper

41 100

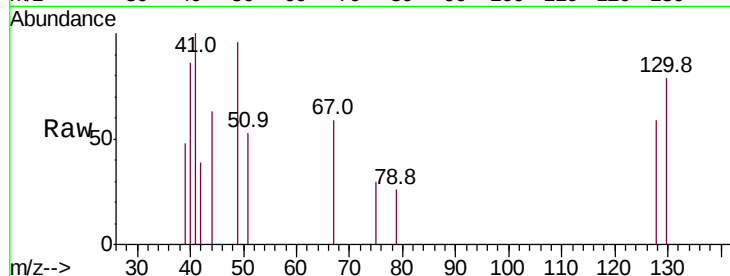
39 37.3 48.9 73.3#

67 77.6 83.4 125.0#

52 5.9 30.9 46.3#

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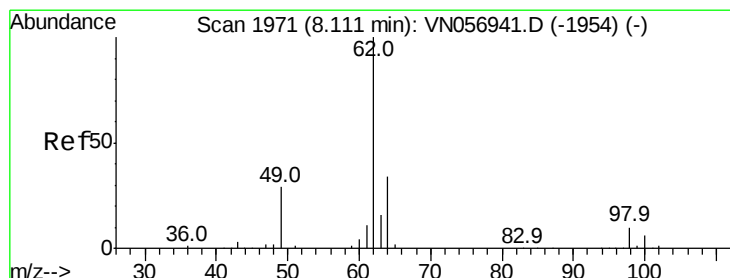
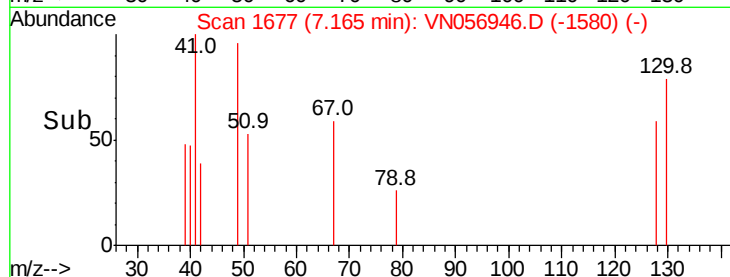
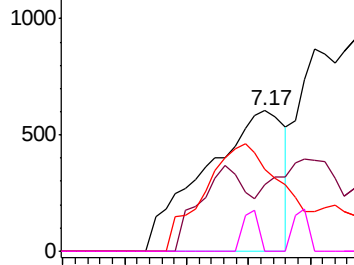


Abundance Ion 41.00 (40.70 to 41.70): VNO

Ion 39.00 (38.70 to 39.70): VNO

Ion 67.00 (66.70 to 67.70): VNO

Ion 52.00 (51.70 to 52.70): VNO



#42

1,2-Dichloroethane

Concen: 0.548 ug/l

RT: 8.11 min Scan# 1972

Delta R.T. 0.00 min

Lab File: VN056946.D

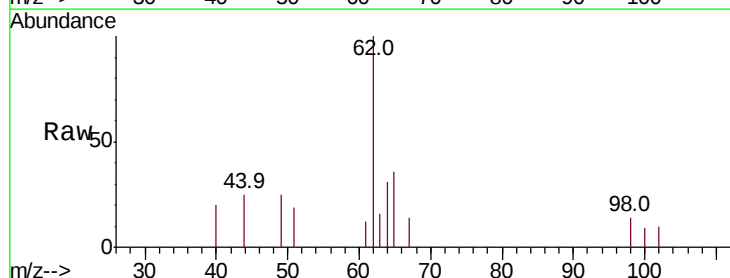
Acq: 26 Jul 2019 17:00

Tgt Ion: 62 Resp: 3953

Ion Ratio Lower Upper

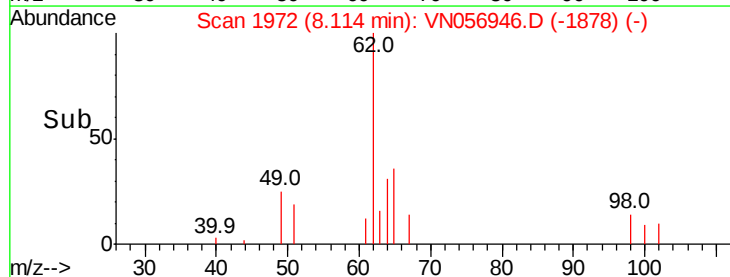
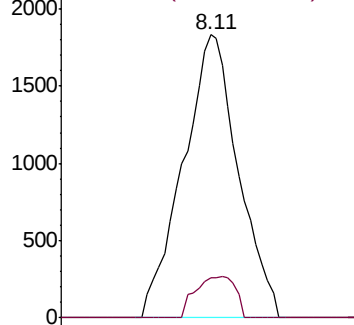
62 100

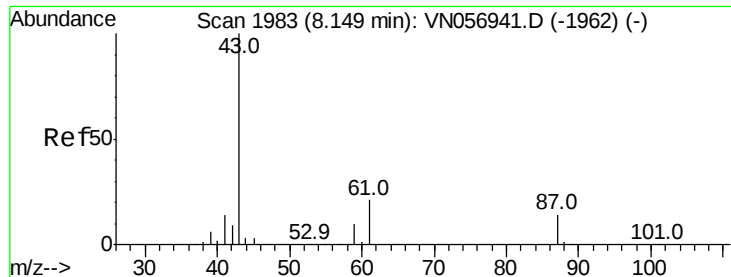
98 10.6 0.0 20.6



Abundance Ion 61.90 (61.60 to 62.60): VNO

Ion 97.90 (97.60 to 98.60): VNO





#43

Isopropyl Acetate

Concen: 0.434 ug/l

RT: 8.16 min Scan# 1985

Delta R.T. 0.01 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

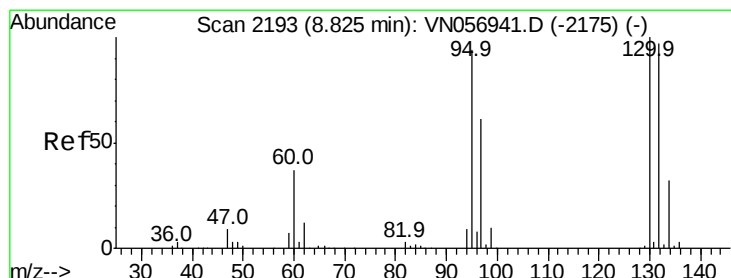
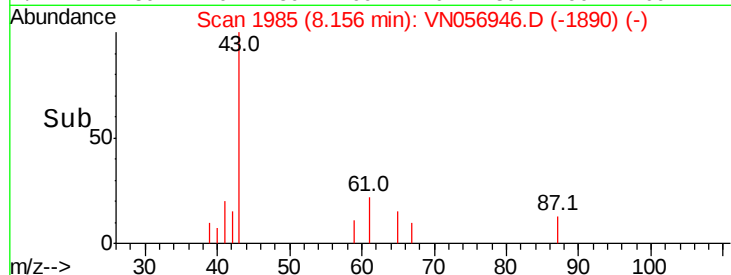
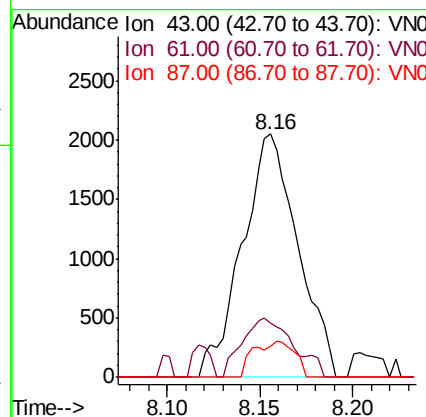
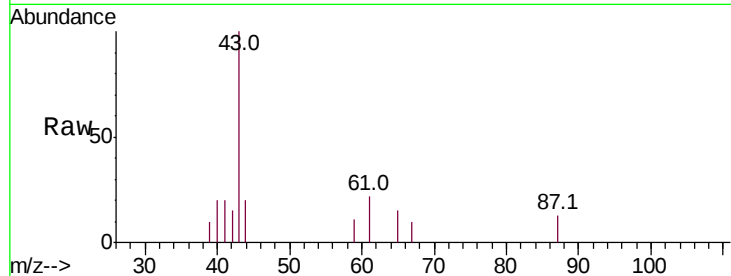
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:	43	Resp:	4291
Ion	Ratio	Lower	Upper
43	100		
61	22.3	23.0	34.6#
87	10.9	11.7	17.5#

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#44

Trichloroethene

Concen: 0.508 ug/l

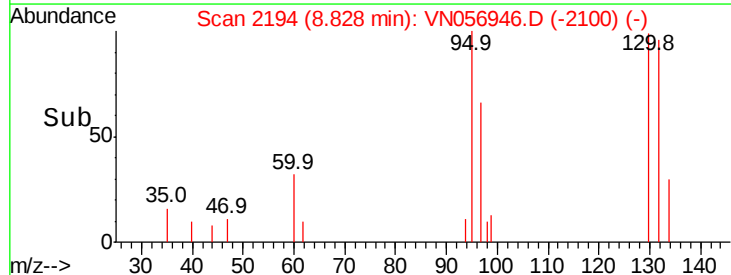
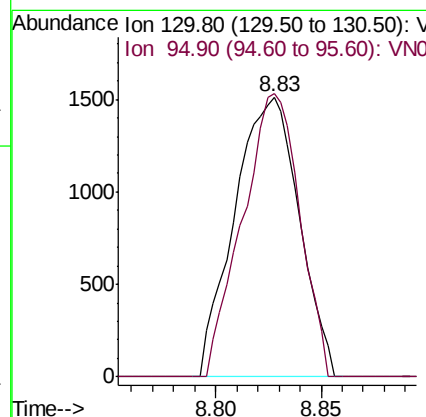
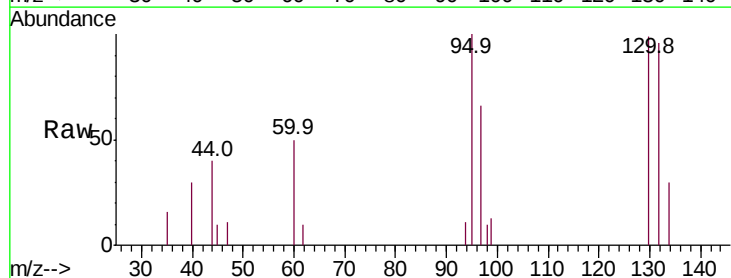
RT: 8.83 min Scan# 2194

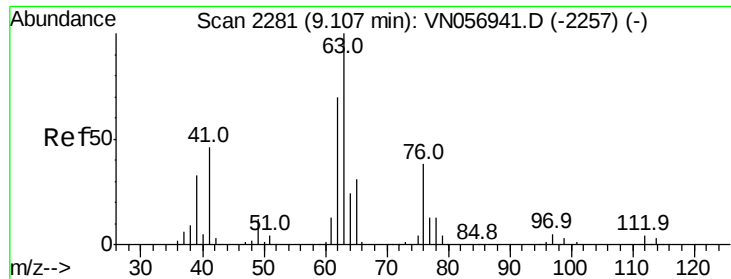
Delta R.T. 0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Tgt Ion:	130	Resp:	3221
Ion	Ratio	Lower	Upper
130	100		
95	101.3	0.0	189.0





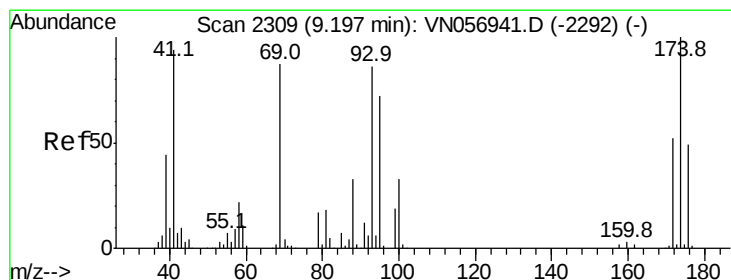
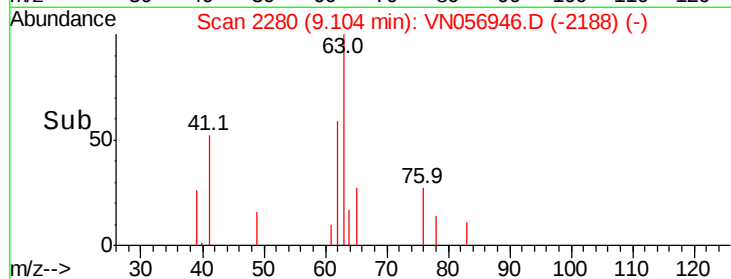
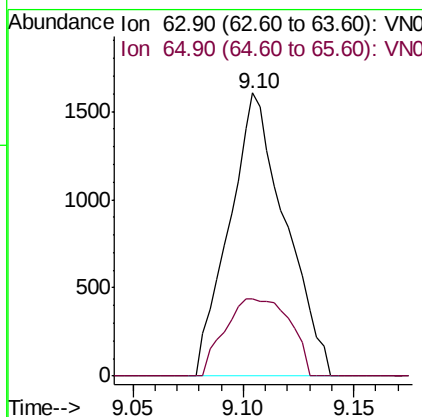
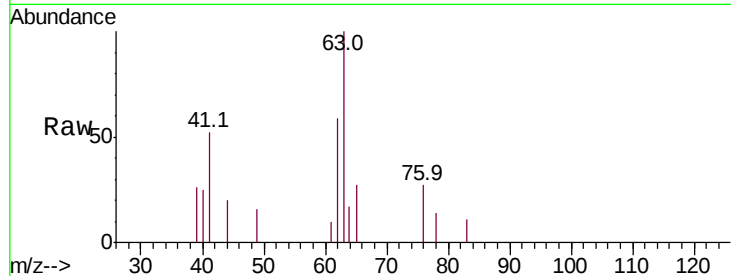
#45
 1,2-Dichloropropane
 Concen: 0.459 ug/l
 RT: 9.10 min Scan# 2280
 Delta R.T. -0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

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

Tot Ion: 63 Resp: 2828
 Ion Ratio Lower Upper
 63 100
 65 27.1 24.8 37.2

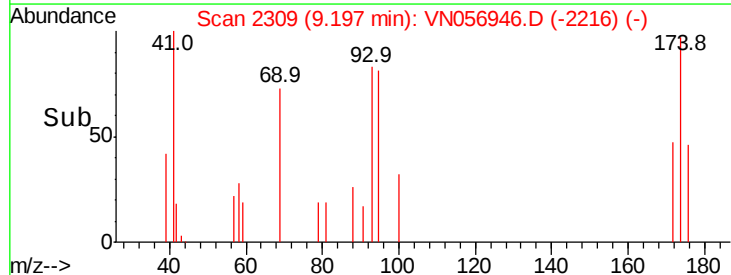
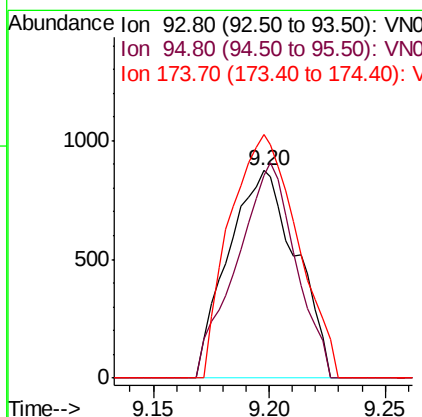
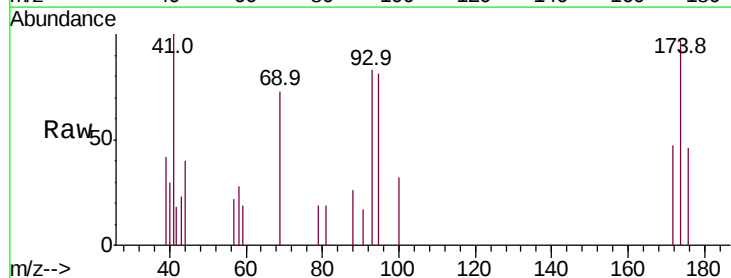
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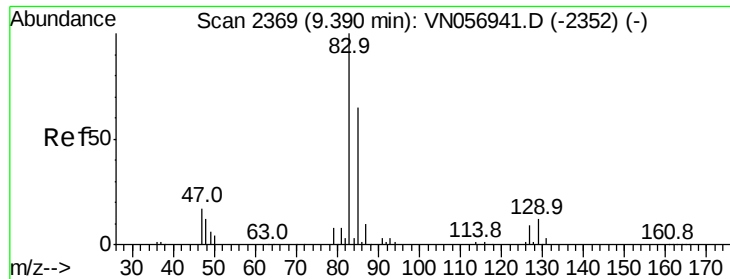
MMDadoda
 8/2/2019 9:13:36 AM



#46
 Dibromomethane
 Concen: 0.479 ug/l
 RT: 9.20 min Scan# 2309
 Delta R.T. -0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

Tgt Ion: 93 Resp: 1779
 Ion Ratio Lower Upper
 93 100
 95 90.1 67.0 100.6
 174 117.1 92.7 139.1





#47

Bromodichloromethane

Concen: 0.465 ug/l

RT: 9.39 min Scan# 2369

Delta R.T. -0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

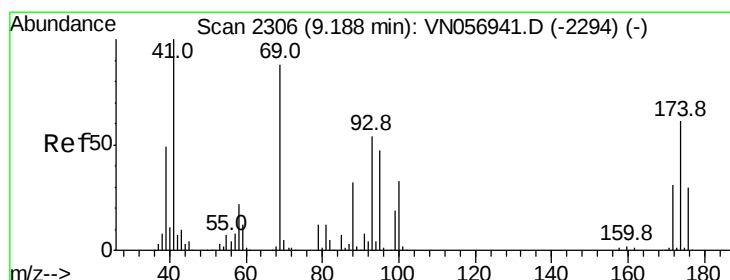
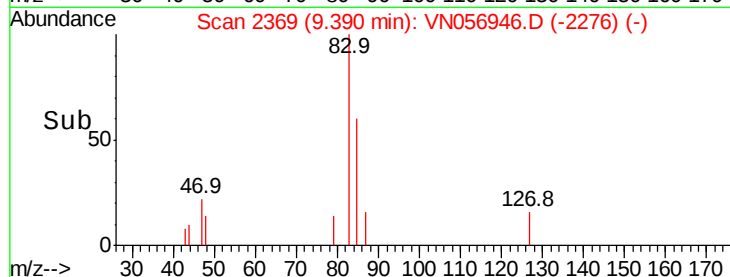
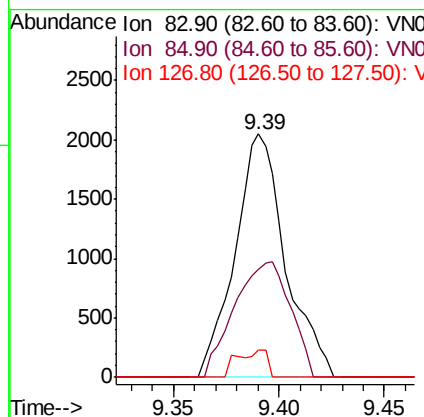
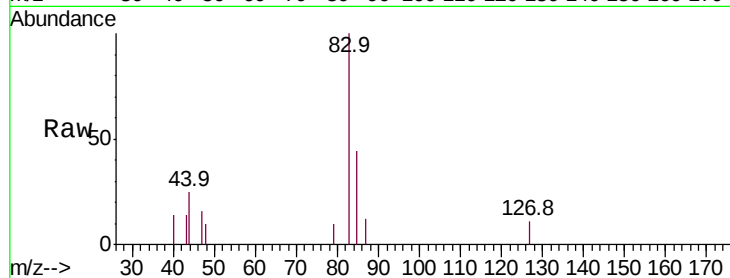
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:	83	Resp:	3397
Ion	Ratio	Lower	Upper
83	100		
85	44.1	51.6	77.4#
127	11.4	7.3	10.9#

Manual Integrations
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8/2/2019 9:13:36 AM



#48

Methyl methacrylate

Concen: 0.454 ug/l

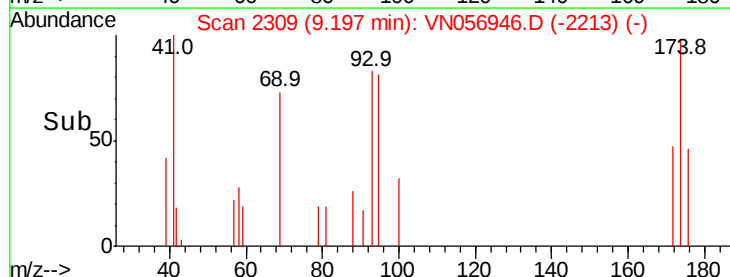
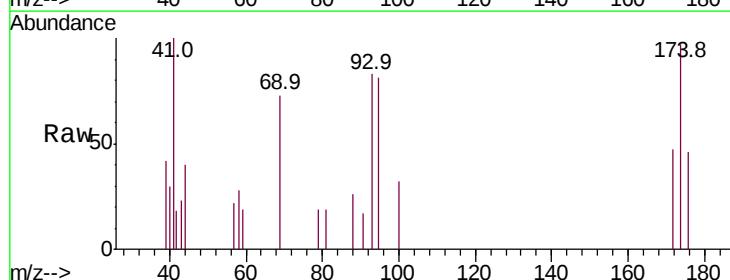
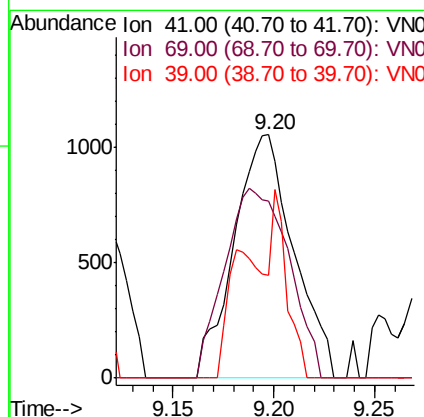
RT: 9.20 min Scan# 2309

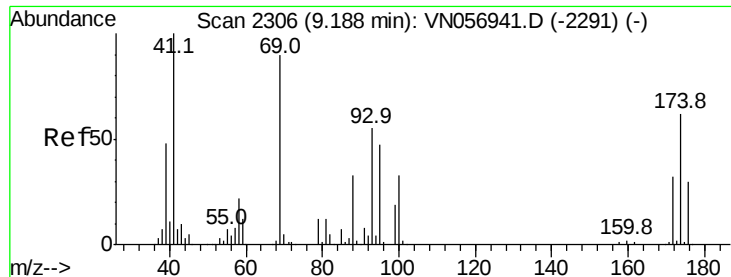
Delta R.T. 0.01 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Tgt Ion:	41	Resp:	2170
Ion	Ratio	Lower	Upper
41	100		
69	0.0	73.4	110.0#
39	19.4	39.9	59.9#





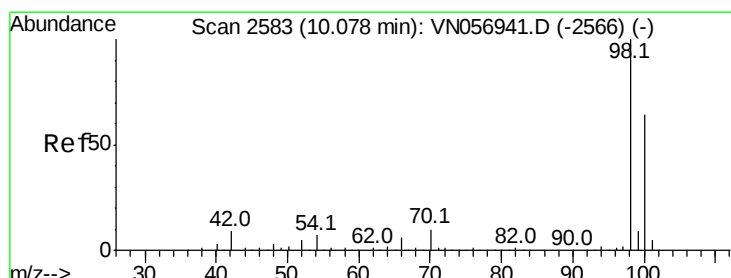
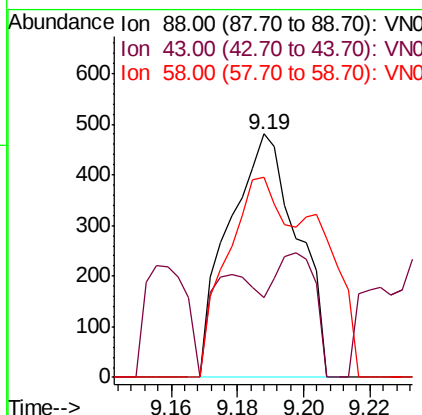
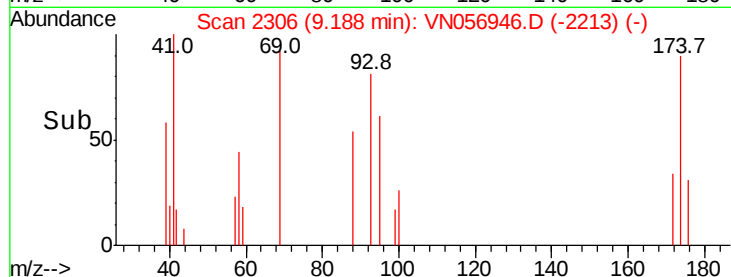
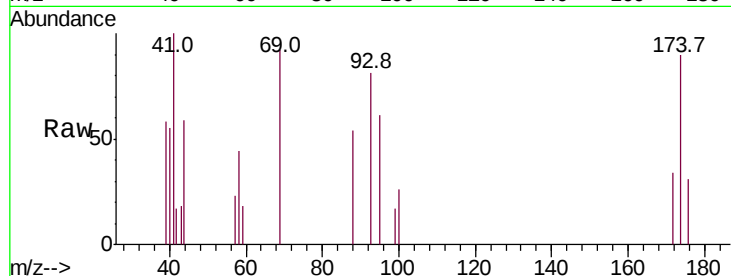
#49
 1,4-Dioxane
 Concen: 7.019 ug/l
 RT: 9.19 min Scan# 2306
 Delta R.T. 0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

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

Tot Ion	Ratio	Lower	Upper
88	100		
43	30.7	22.2	33.2
58	74.7	54.1	81.1

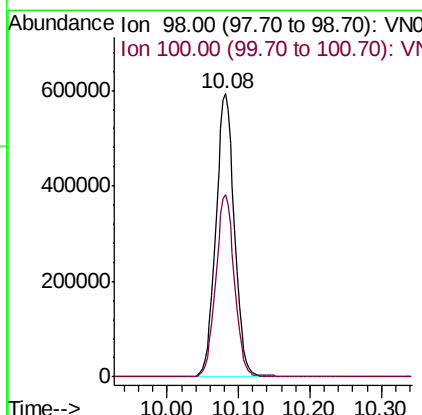
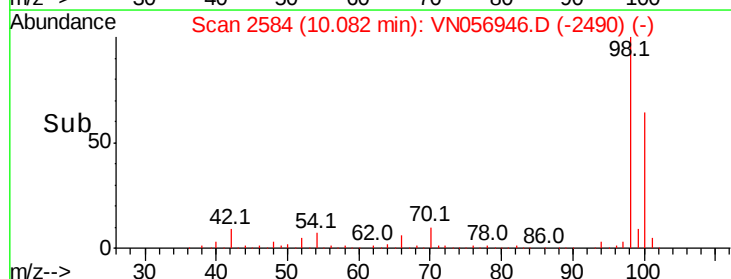
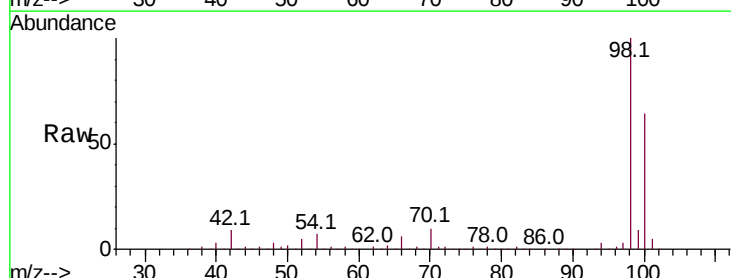
Manual Integrations
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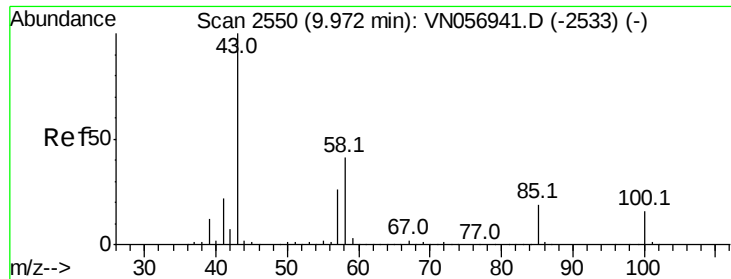
MMDadoda
 8/2/2019 9:13:36 AM



#50
 Toluene-d8
 Concen: 51.546 ug/l
 RT: 10.08 min Scan# 2584
 Delta R.T. 0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Lower	Upper
98	100		
100	64.4	51.3	76.9





#51

4-Methyl-2-Pentanone

Concen: 2.166 ug/l

RT: 9.98 min Scan# 2551

Delta R.T. 0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 43 Resp: 12732

Ion Ratio Lower Upper

43 100

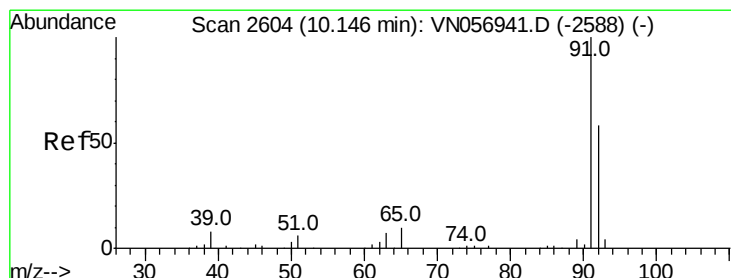
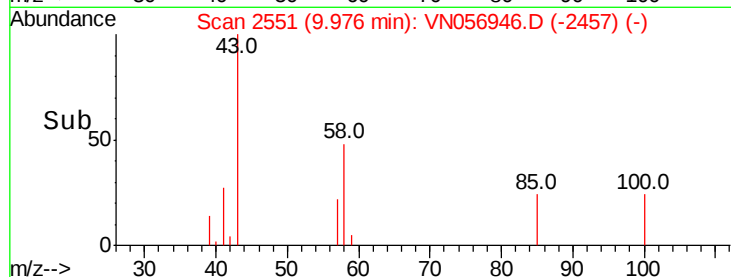
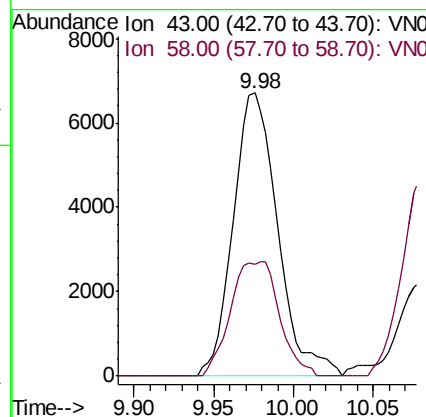
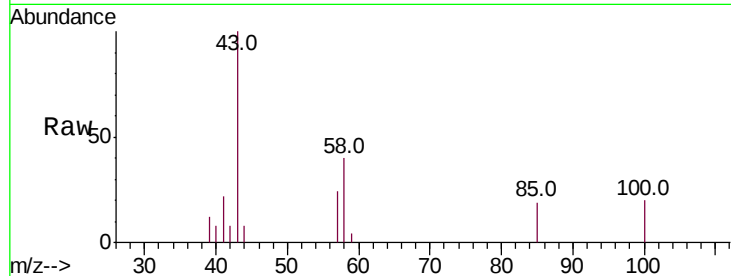
58 44.2 33.1 49.7

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#52

Toluene

Concen: 0.502 ug/l

RT: 10.15 min Scan# 2605

Delta R.T. 0.00 min

Lab File: VN056946.D

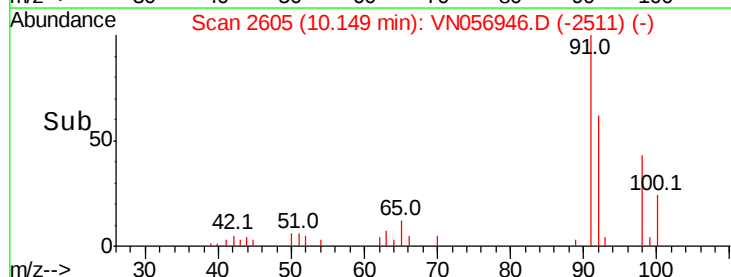
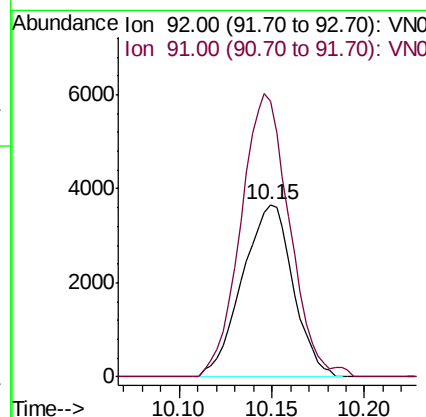
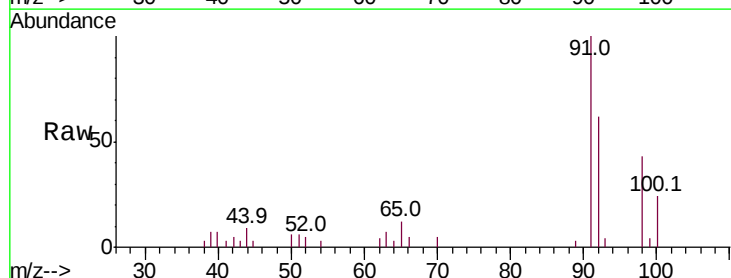
Acq: 26 Jul 2019 17:00

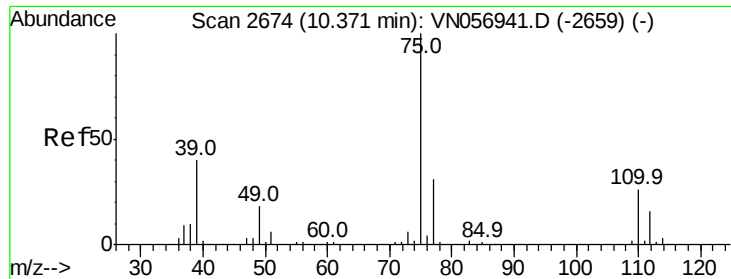
Tgt Ion: 92 Resp: 6944

Ion Ratio Lower Upper

92 100

91 158.0 138.0 207.0





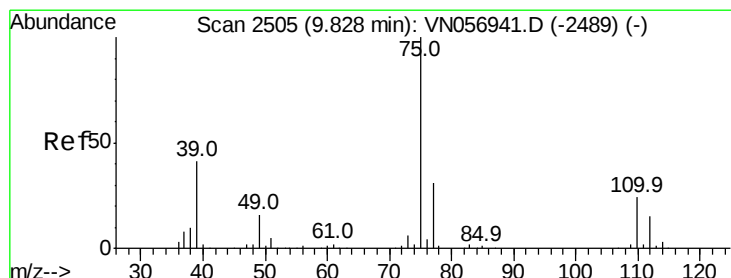
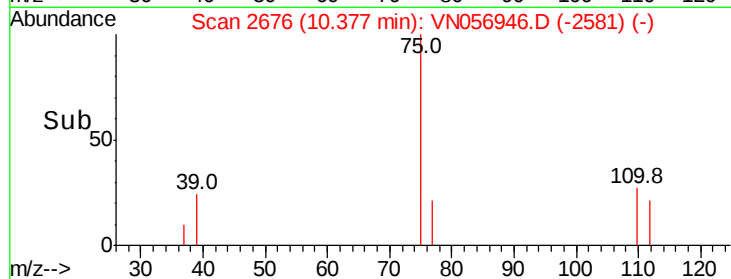
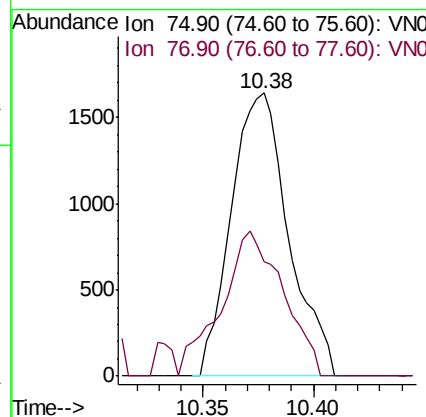
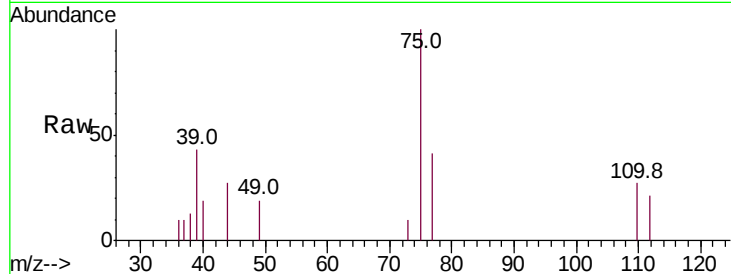
#53
t-1,3-Dichloropropene
Concen: 0.391 ug/l
RT: 10.38 min Scan# 2676
Delta R.T. 0.01 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

Tot Ion: 75 Resp: 2965
Ion Ratio Lower Upper
75 100
77 40.6 25.1 37.7#

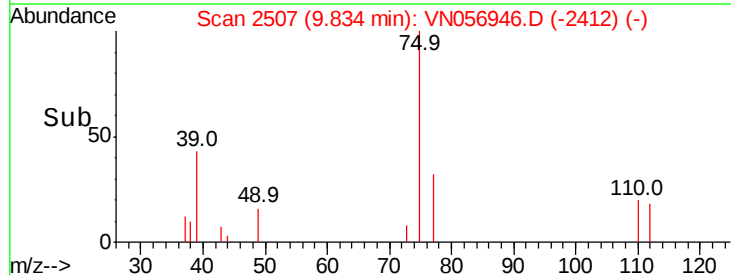
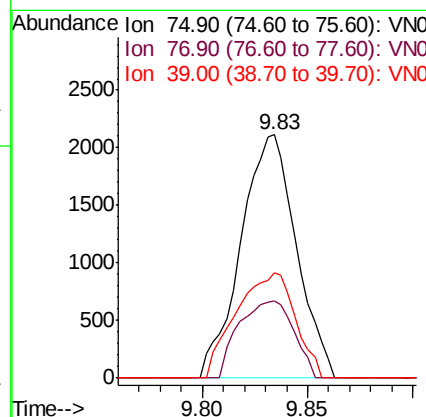
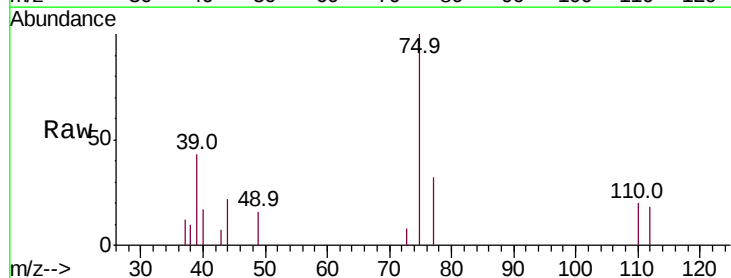
Manual Integrations
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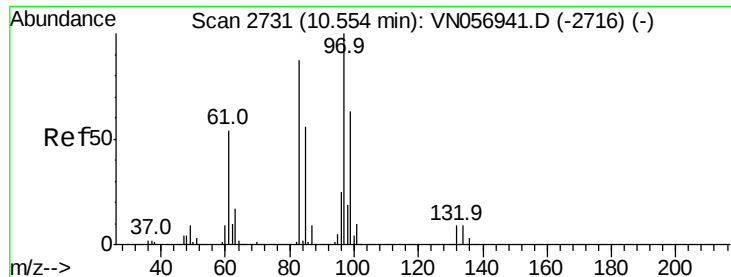
MMDadoda
8/2/2019 9:13:36 AM



#54
cis-1,3-Dichloropropene
Concen: 0.438 ug/l
RT: 9.83 min Scan# 2507
Delta R.T. 0.01 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion: 75 Resp: 3858
Ion Ratio Lower Upper
75 100
77 31.5 25.0 37.6
39 43.1 32.6 49.0





#55

1,1,2-Trichloroethane

Concen: 0.431 ug/l

RT: 10.55 min Scan# 2730

Delta R.T. -0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

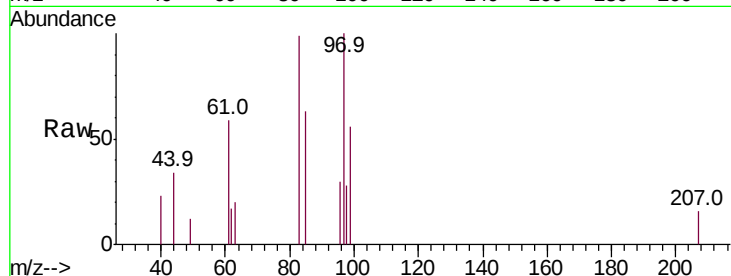
ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

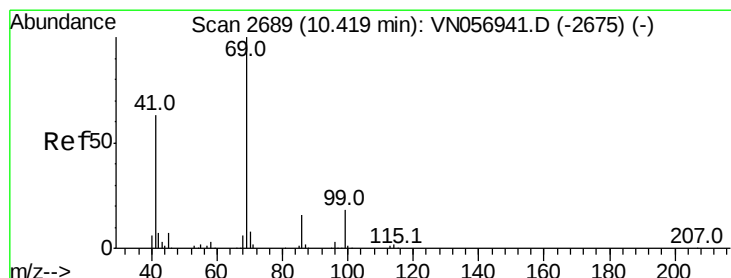
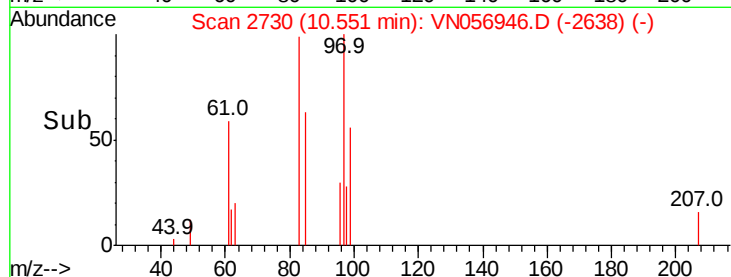
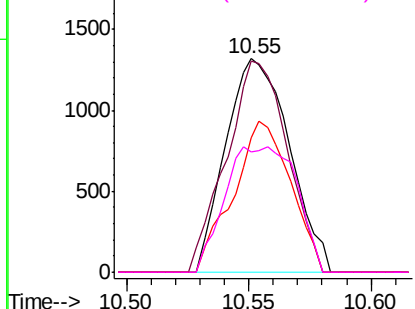
Tot Ion:	97	Resp:	2390
Ion	Ratio	Lower	Upper
97	100		
83	98.8	69.4	104.0
85	62.7	44.7	67.1
99	56.2	50.1	75.1

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Abundance Ion 96.90 (96.60 to 97.60): VNO
Ion 82.90 (82.60 to 83.60): VNO
Ion 84.90 (84.60 to 85.60): VNO
Ion 98.90 (98.60 to 99.60): VNO



#56

Ethyl methacrylate

Concen: 0.439 ug/l

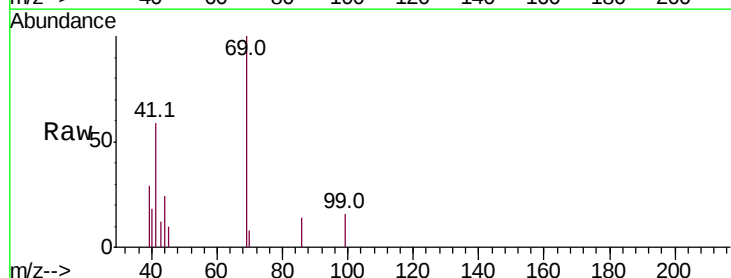
RT: 10.42 min Scan# 2690

Delta R.T. 0.00 min

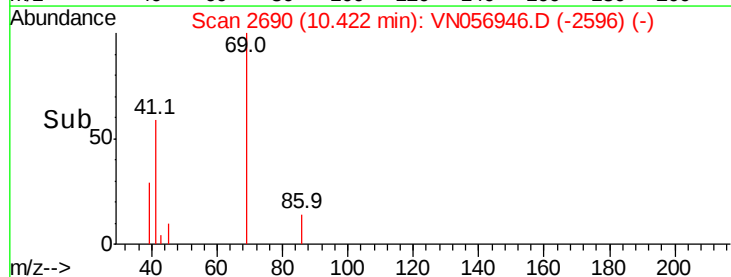
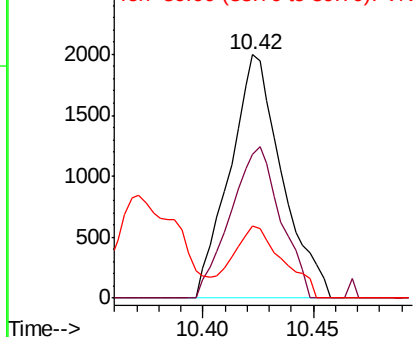
Lab File: VN056946.D

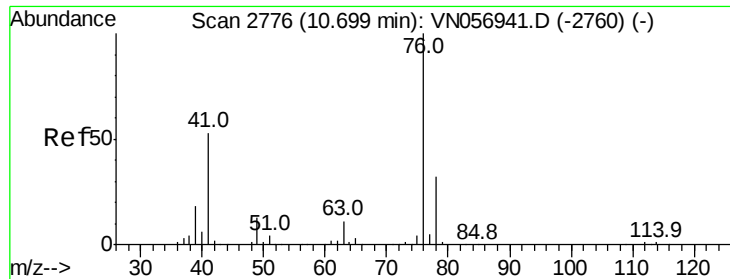
Acq: 26 Jul 2019 17:00

Tgt Ion:	69	Resp:	3269
Ion	Ratio	Lower	Upper
69	100		
41	59.8	49.2	73.8
39	28.8	23.1	34.7



Abundance Ion 69.00 (68.70 to 69.70): VNO
Ion 41.00 (40.70 to 41.70): VNO
Ion 39.00 (38.70 to 39.70): VNO





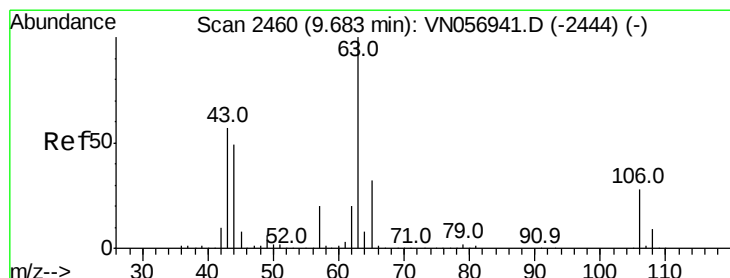
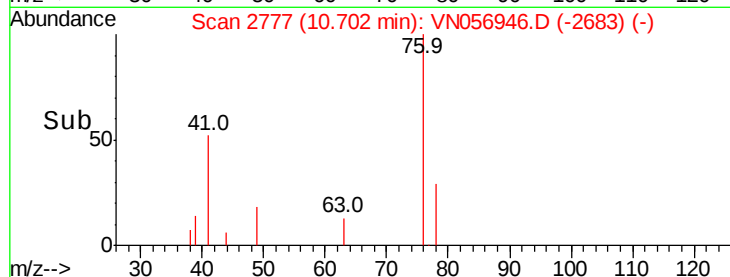
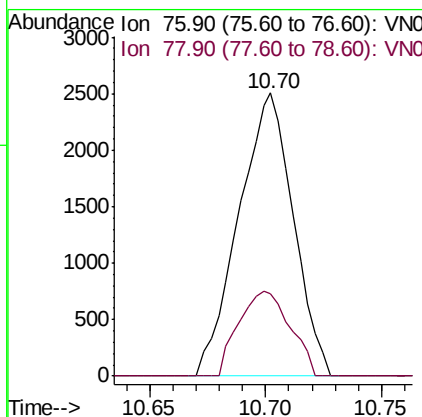
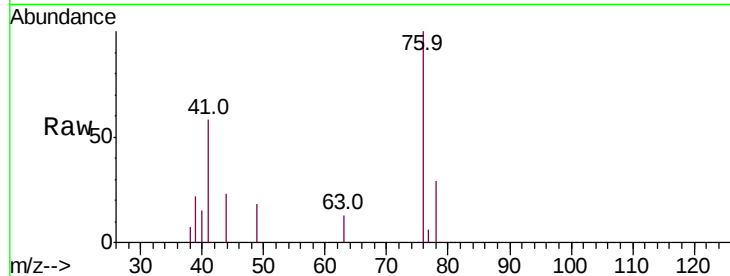
#57
 1,3-Dichloropropane
 Concen: 0.444 ug/l
 RT: 10.70 min Scan# 2777
 Delta R.T. 0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

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

Tot Ion: 76 Resp: 4088
 Ion Ratio Lower Upper
 76 100
 78 28.4 25.9 38.9

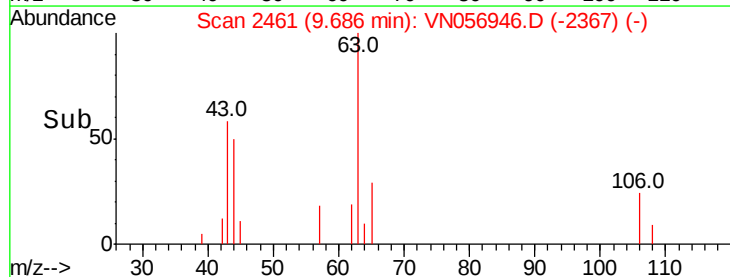
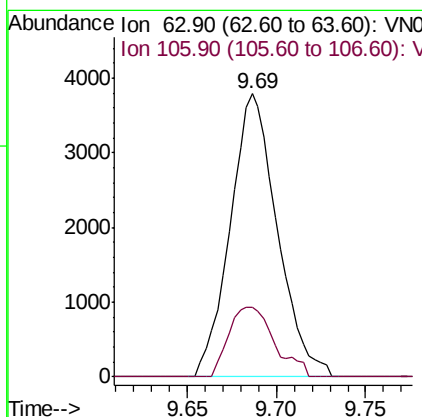
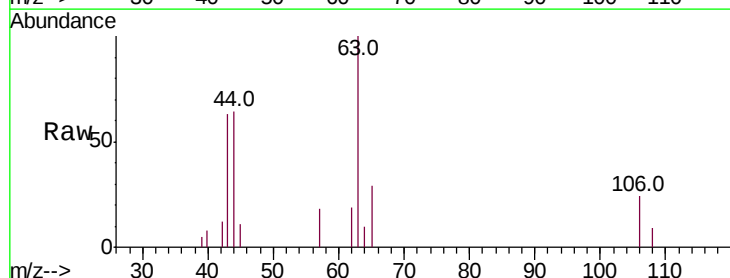
Manual Integrations
 APPROVED

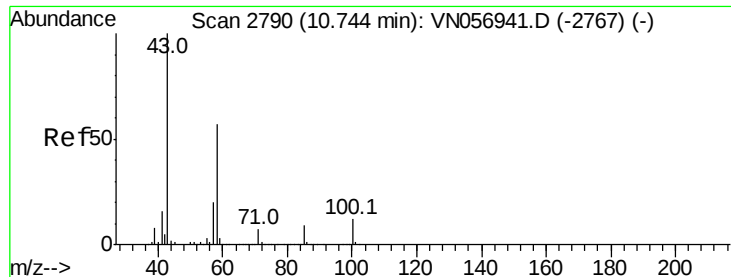
MMDadoda
 8/2/2019 9:13:36 AM



#58
 2-Chloroethyl Vinyl ether
 Concen: 2.091 ug/l
 RT: 9.69 min Scan# 2461
 Delta R.T. 0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

Tgt Ion: 63 Resp: 6950
 Ion Ratio Lower Upper
 63 100
 106 23.8 22.0 33.0





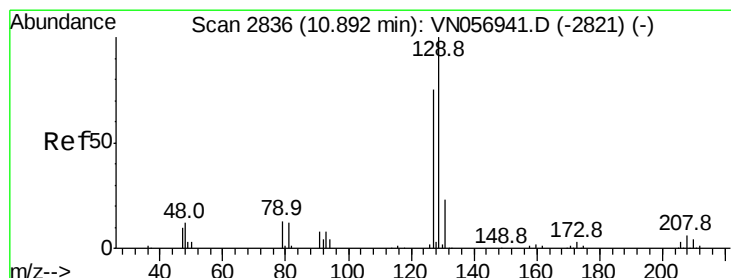
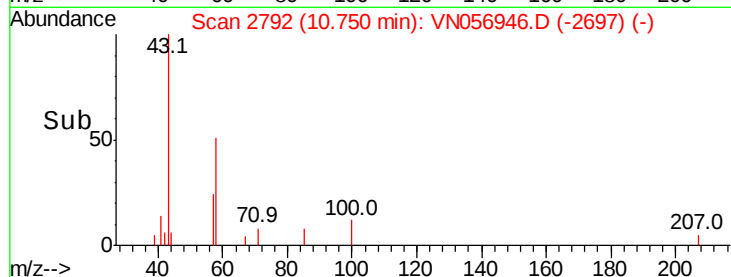
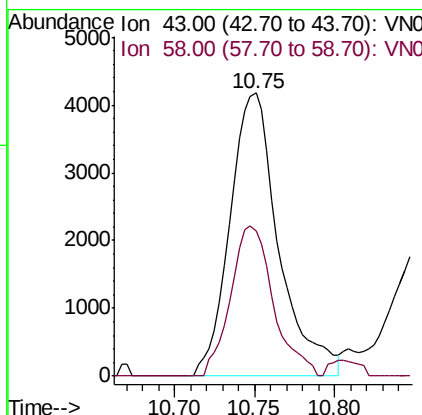
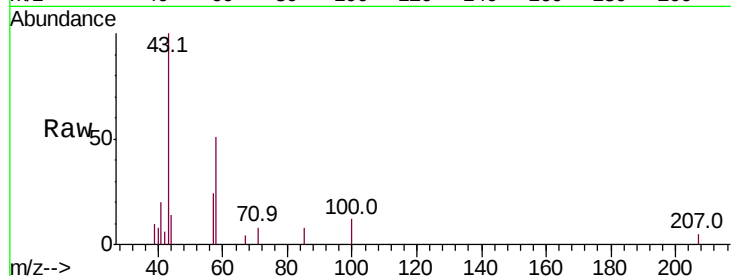
#59
2-Hexanone
Concen: 2.132 ug/l
RT: 10.75 min Scan# 2792
Delta R.T. 0.01 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

Tot Ion: 43 Resp: 8729
Ion Ratio Lower Upper
43 100
58 46.1 28.5 85.5

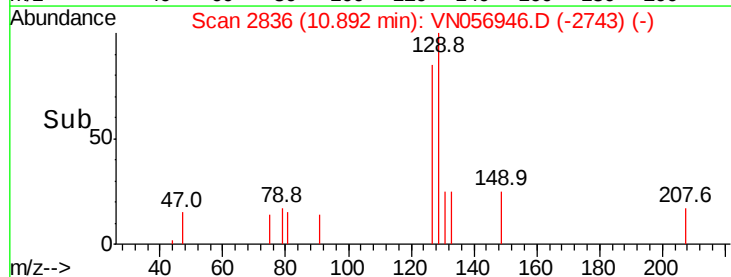
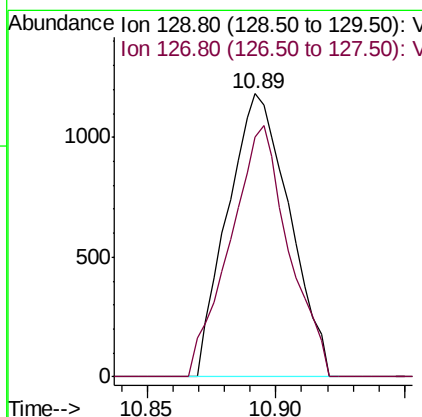
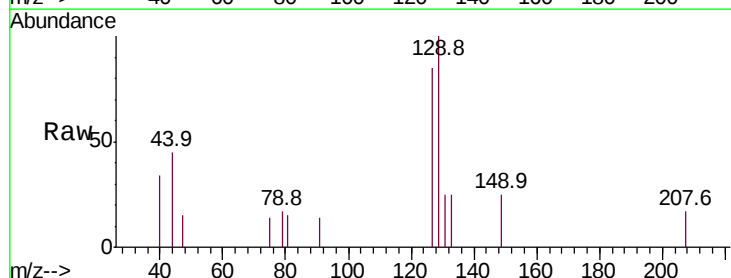
Manual Integrations
APPROVED

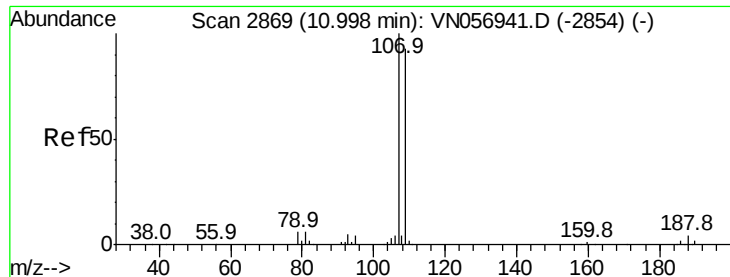
MMDadoda
8/2/2019 9:13:36 AM



#60
Dibromochloromethane
Concen: 0.348 ug/l
RT: 10.89 min Scan# 2836
Delta R.T. -0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion: 129 Resp: 1977
Ion Ratio Lower Upper
129 100
127 84.2 38.0 113.9





#61

1,2-Dibromoethane

Concen: 0.464 ug/l

RT: 11.00 min Scan# 2869

Delta R.T. 0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 107 Resp: 2512

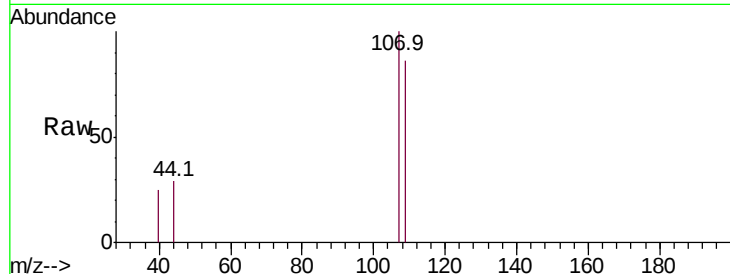
Ion Ratio Lower Upper

107 100

109 96.3 76.0 114.0

Manual Integrations
APPROVED

MMDadoda
8/2/2019 9:13:36 AM



Abundance Ion 106.90 (106.60 to 107.60): V

Ion 108.80 (108.50 to 109.50): V

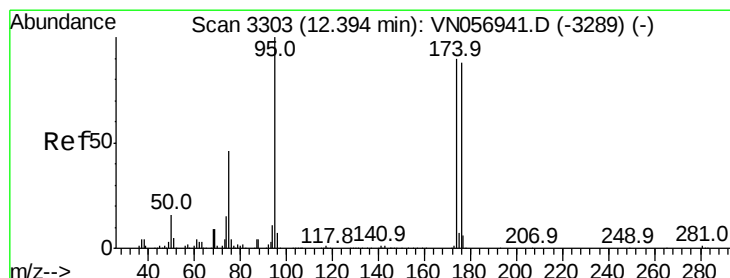
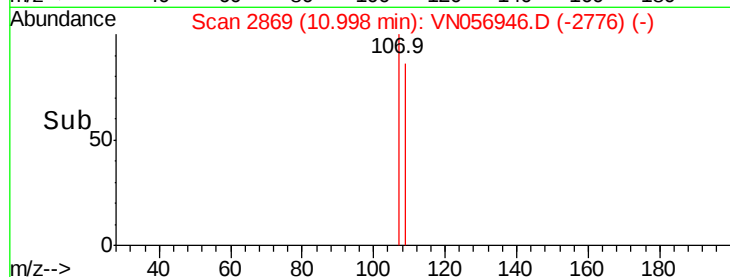
11.00

1000

500

0

Time--> 10.95 11.00 11.05



#62

4-Bromofluorobenzene

Concen: 42.725 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. 0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

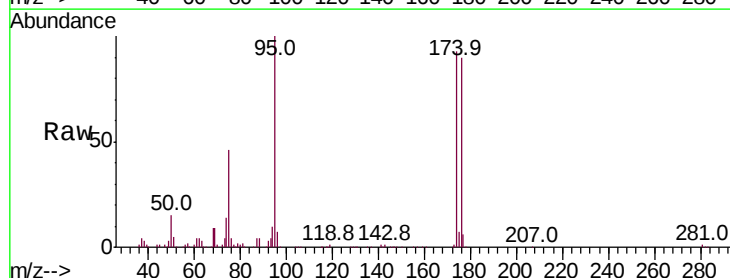
Tgt Ion: 95 Resp: 288418

Ion Ratio Lower Upper

95 100

174 92.1 0.0 182.2

176 89.5 0.0 179.4



Abundance Ion 94.90 (94.60 to 95.60): V

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

200000

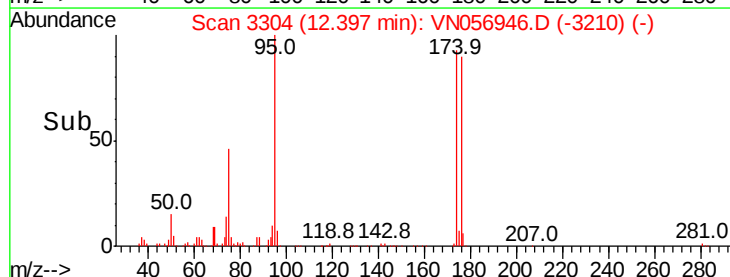
150000

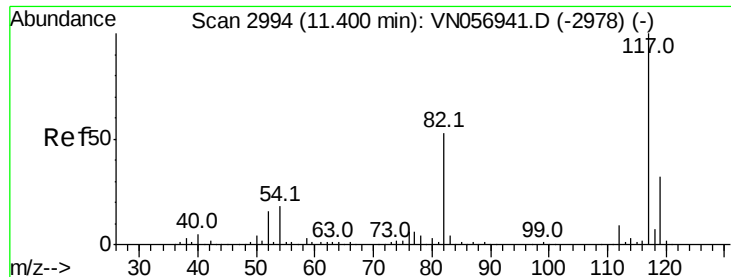
100000

50000

0

Time--> 12.30 12.40 12.50





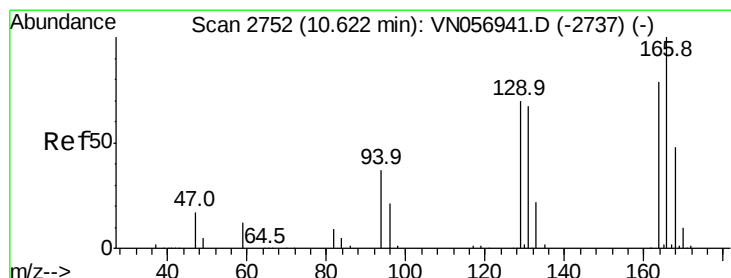
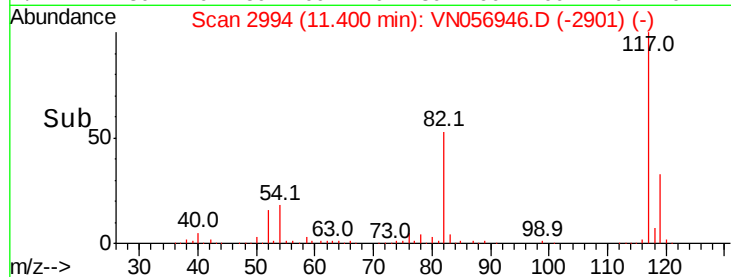
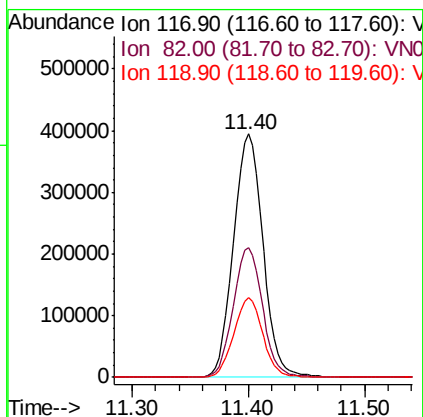
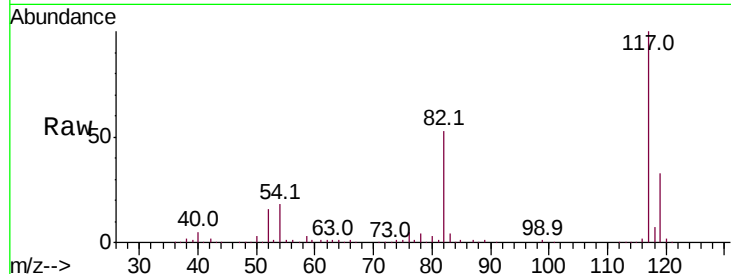
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.40 min Scan# 2994
Delta R.T. -0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

Tot Ion	Ratio	Lower	Upper
117	100		
82	53.2	42.2	63.4
119	32.5	25.8	38.6

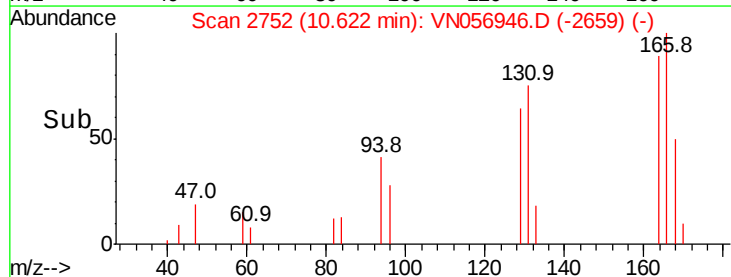
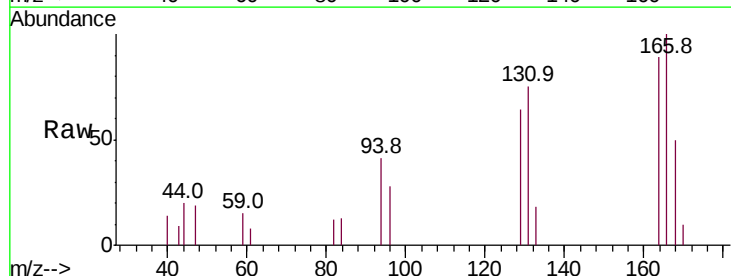
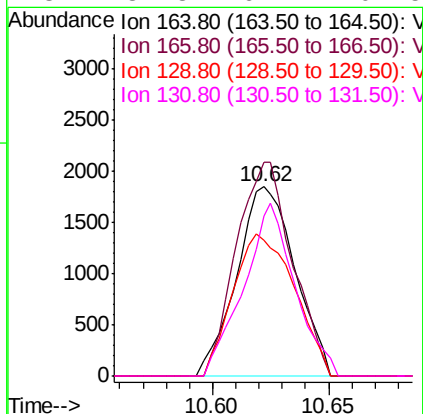
Manual Integrations
APPROVED

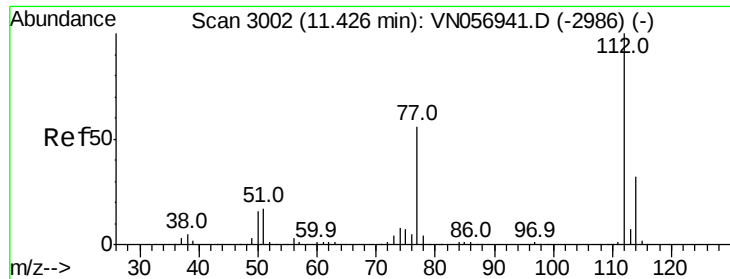
MMDadoda
8/2/2019 9:13:36 AM



#64
Tetrachloroethene
Concen: 0.541 ug/l
RT: 10.62 min Scan# 2752
Delta R.T. -0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Lower	Upper
164	100		
166	112.8	101.1	151.7
129	72.0	70.9	106.3
131	84.8	67.7	101.5





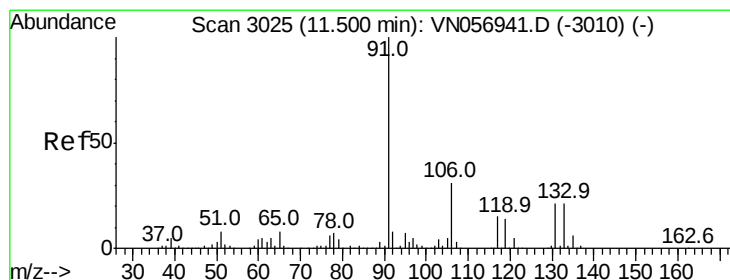
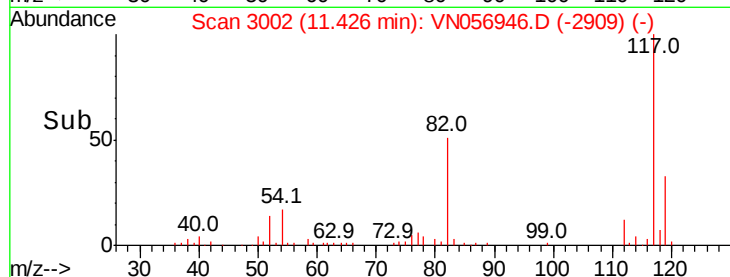
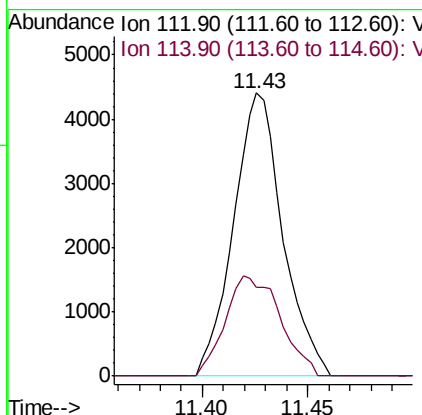
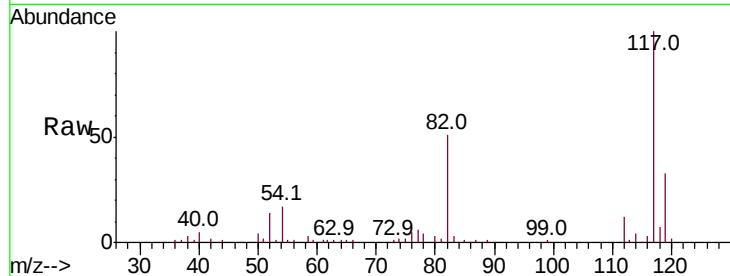
#65
Chlorobenzene
Concen: 0.504 ug/l
RT: 11.43 min Scan# 3002
Delta R.T. -0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

Tot Ion:112 Resp: 7146
Ion Ratio Lower Upper
112 100
114 31.3 26.0 39.0

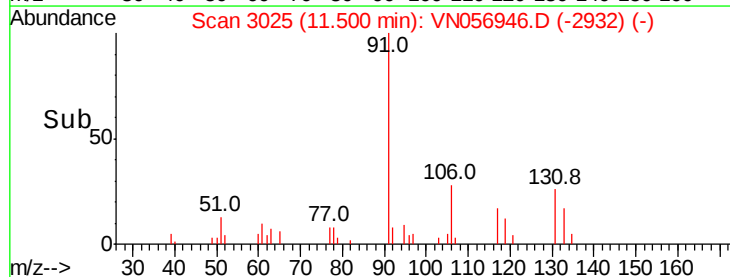
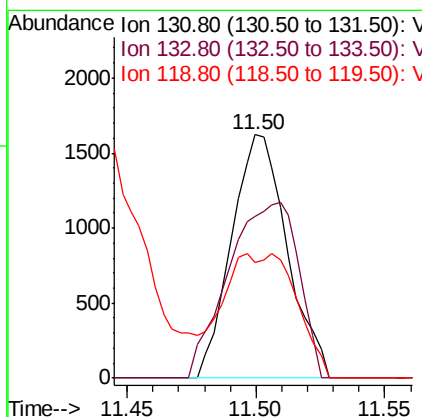
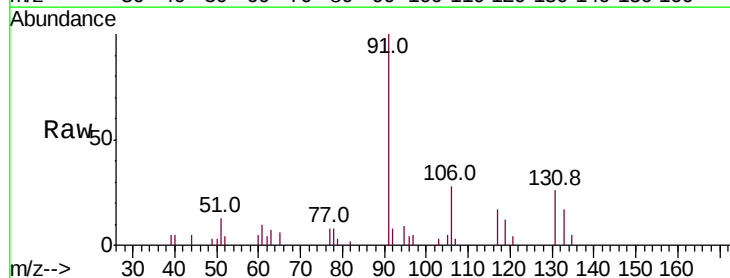
Manual Integrations
APPROVED

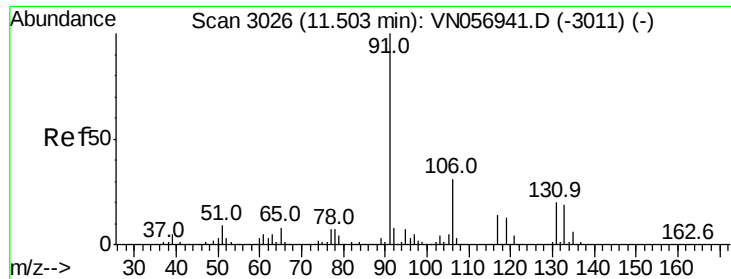
MMDadoda
8/2/2019 9:13:36 AM



#66
1,1,1,2-Tetrachloroethane
Concen: 0.456 ug/l
RT: 11.50 min Scan# 3025
Delta R.T. -0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion:131 Resp: 2430
Ion Ratio Lower Upper
131 100
133 91.3 48.0 144.0
119 0.0 33.2 99.6#





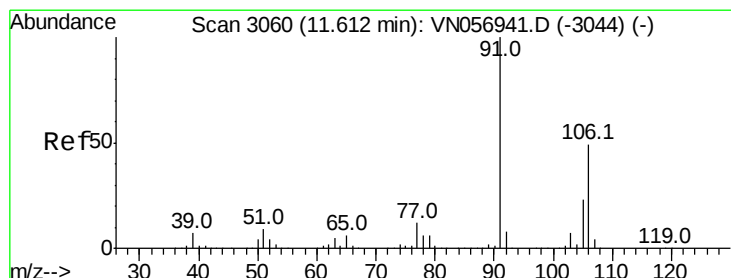
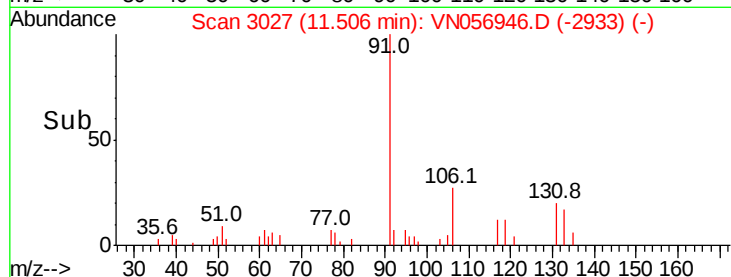
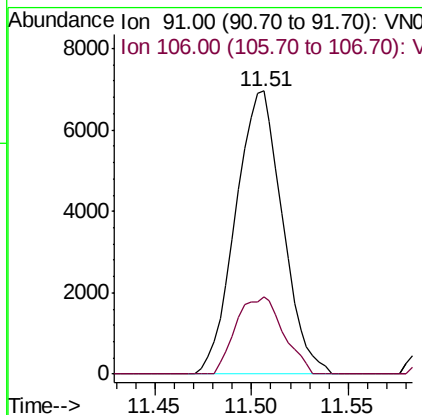
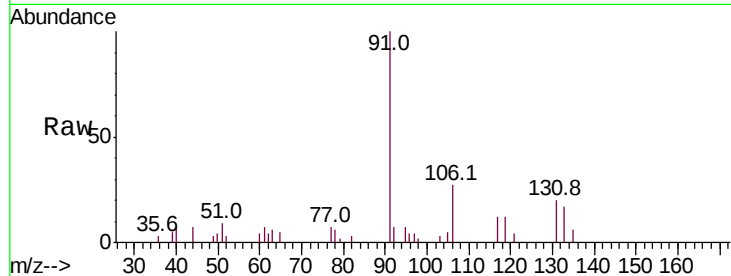
#67
Ethyl Benzene
Concen: 0.480 ug/l
RT: 11.51 min Scan# 3027
Delta R.T. 0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

Tot Ion: 91 Resp: 11762
Ion Ratio Lower Upper
91 100
106 27.2 25.1 37.7

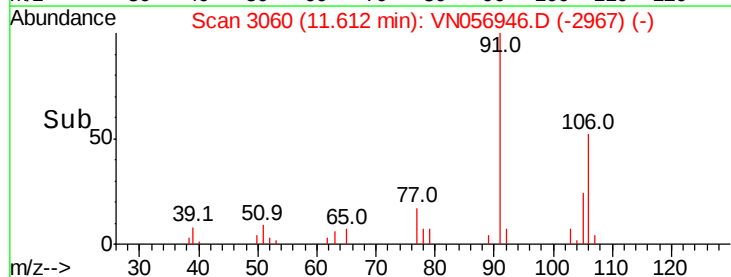
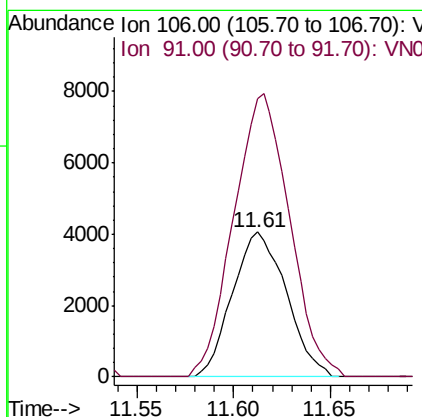
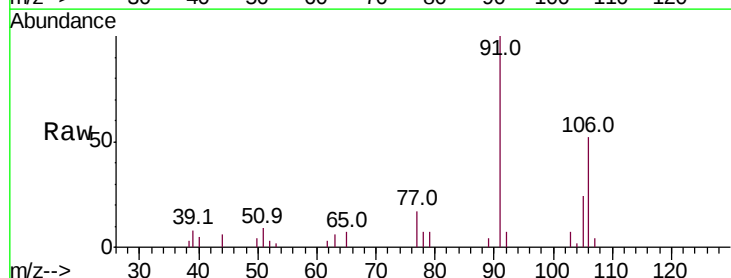
Manual Integrations
APPROVED

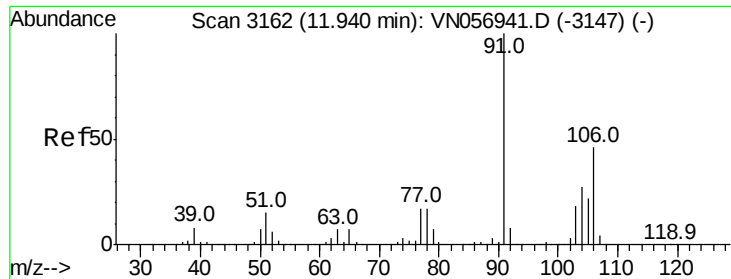
MMDadoda
8/2/2019 9:13:36 AM



#68
m/p-Xylenes
Concen: 0.872 ug/l
RT: 11.61 min Scan# 3060
Delta R.T. -0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion: 106 Resp: 7875
Ion Ratio Lower Upper
106 100
91 202.5 160.0 240.0





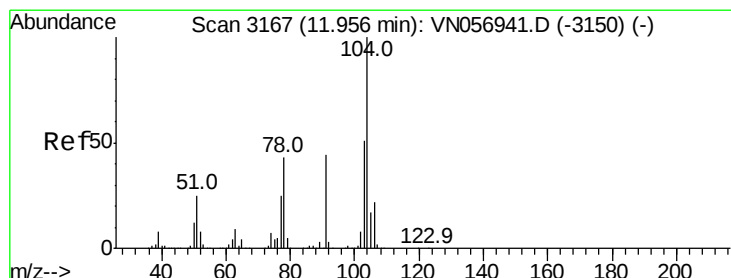
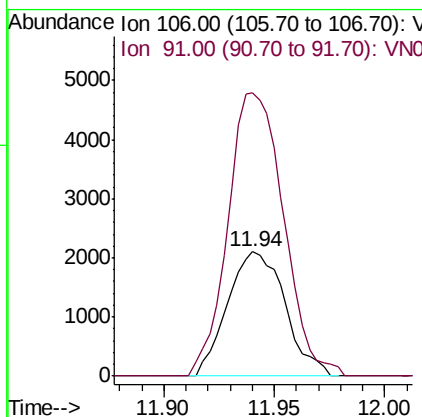
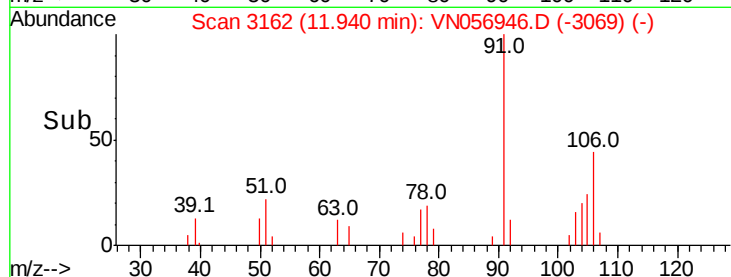
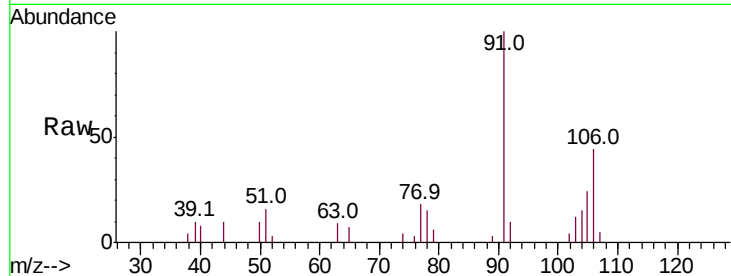
#69
o-Xylene
Concen: 0.432 ug/l
RT: 11.94 min Scan# 3162
Delta R.T. 0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

Tot Ion:106 Resp: 3815
Ion Ratio Lower Upper
106 100
91 220.1 106.2 318.6

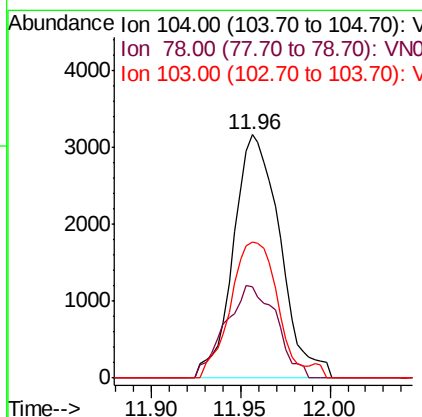
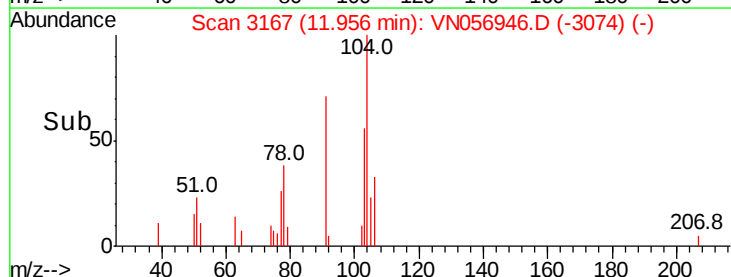
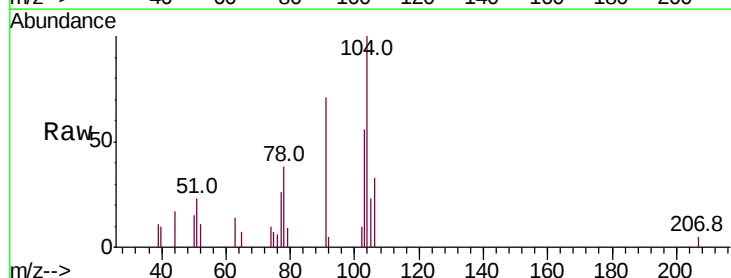
Manual Integrations
APPROVED

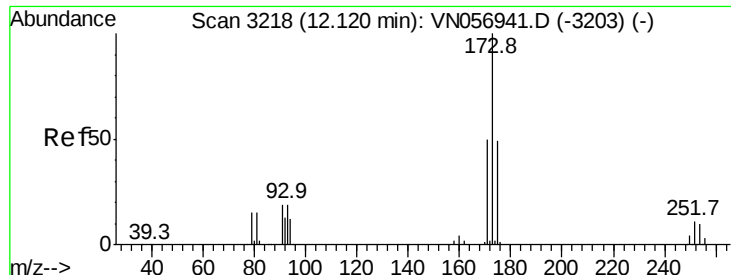
MMDadoda
8/2/2019 9:13:36 AM



#70
Styrene
Concen: 0.409 ug/l
RT: 11.96 min Scan# 3167
Delta R.T. 0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion:104 Resp: 5763
Ion Ratio Lower Upper
104 100
78 41.5 38.1 57.1
103 57.5 44.3 66.5





#71

Bromoform

Concen: 0.393 ug/l

RT: 12.13 min Scan# 3220

Delta R.T. 0.01 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

ClientSampleId :

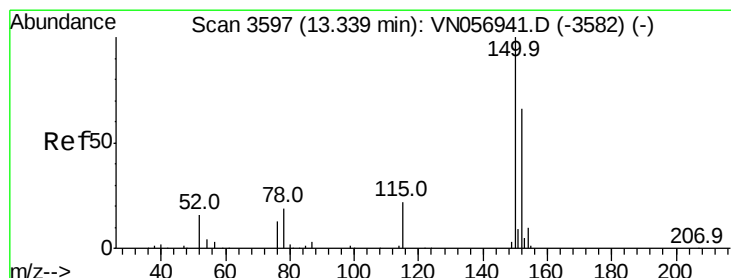
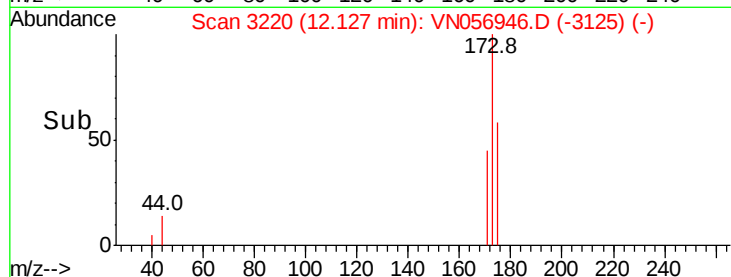
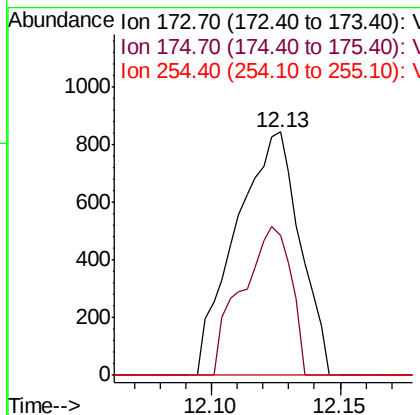
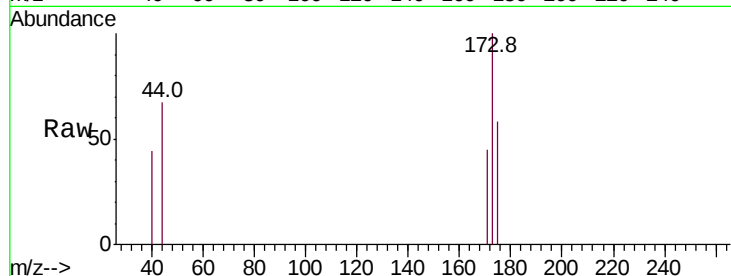
MDL-MDL-WATER-03-QT3-2019

Tot Ion:173 Resp: 1463

Ion	Ratio	Lower	Upper
173	100		
175	47.0	24.1	72.4
254	0.0	0.1	0.1#

Manual Integrations
APPROVED

MMDadoda
8/2/2019 9:13:36 AM



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.34 min Scan# 3597

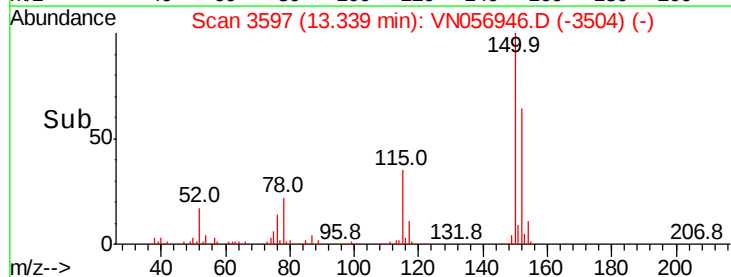
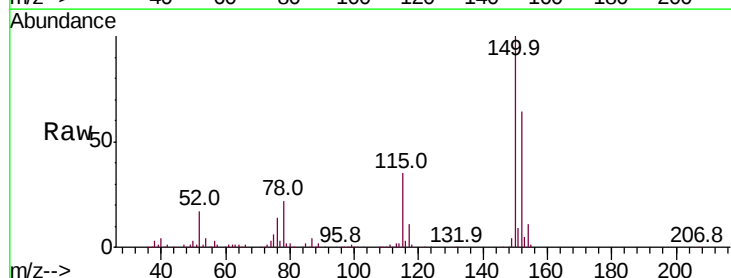
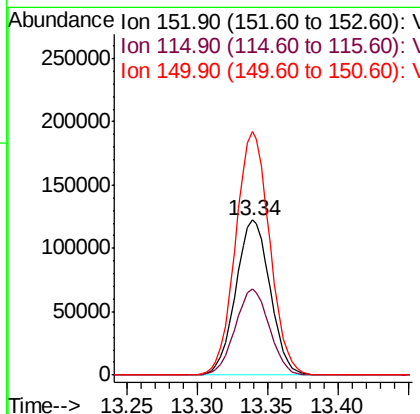
Delta R.T. -0.00 min

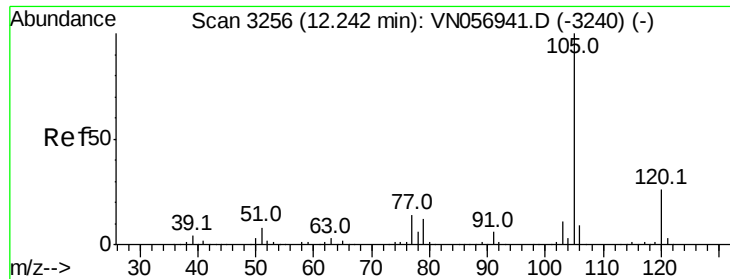
Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Tgt Ion:152 Resp: 209080

Ion	Ratio	Lower	Upper
152	100		
115	55.5	28.2	84.6
150	155.6	0.0	349.4





#73

Isopropylbenzene

Concen: 0.582 ug/l

RT: 12.24 min Scan# 3256

Delta R.T. -0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 105 Resp: 10509

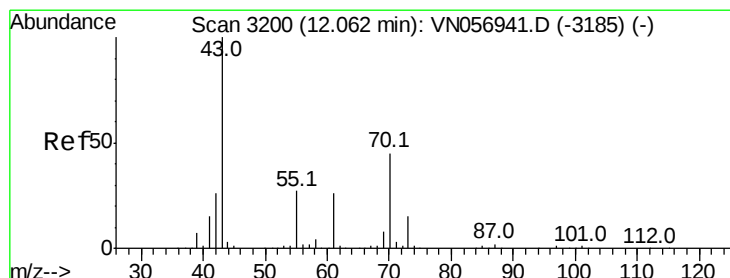
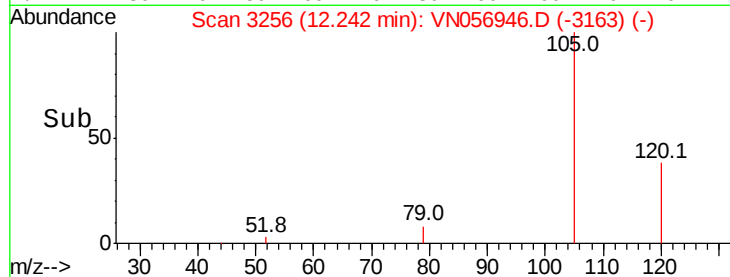
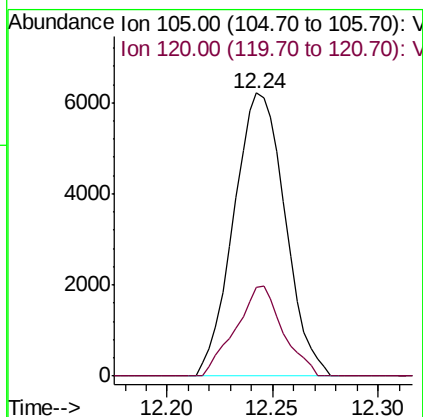
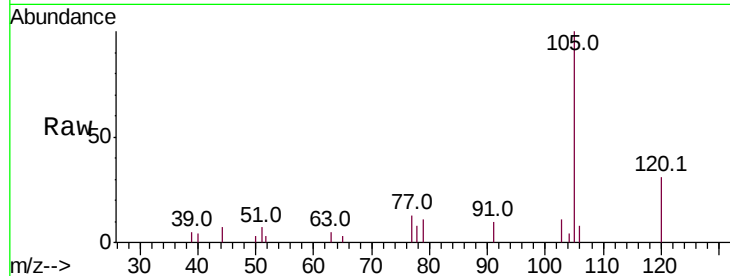
Ion Ratio Lower Upper

105 100

120 29.1 13.5 40.5

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#74

N-ethyl acetate

Concen: 0.503 ug/l

RT: 12.07 min Scan# 3202

Delta R.T. 0.01 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Tgt Ion: 43 Resp: 2640

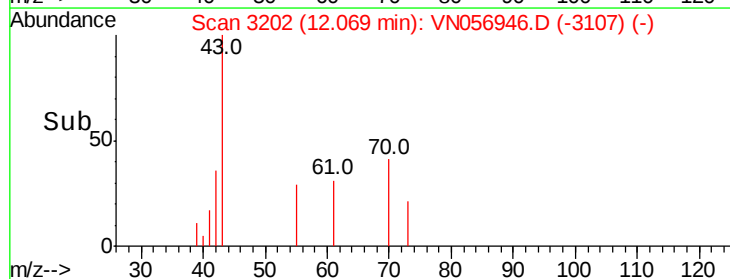
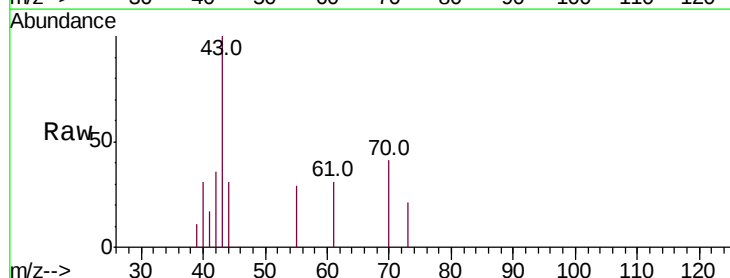
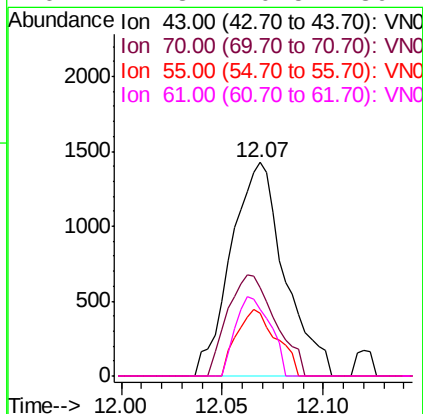
Ion Ratio Lower Upper

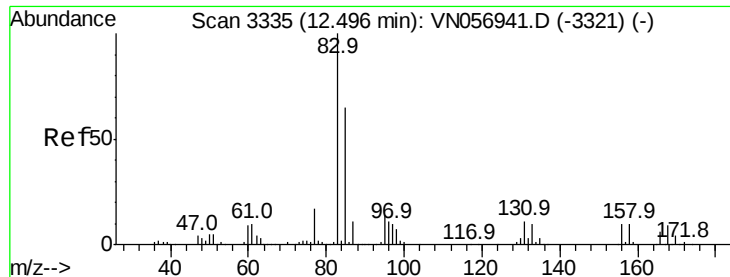
43 100

70 42.5 36.5 54.7

55 23.3 21.4 32.0

61 24.3 20.5 30.7





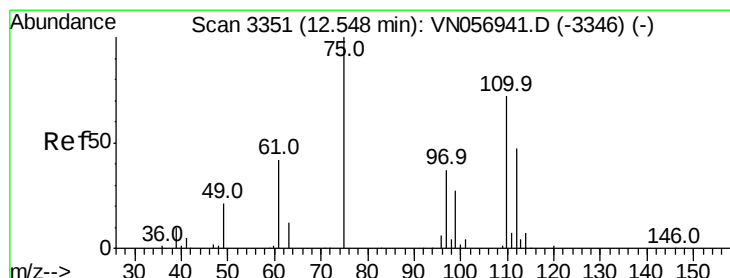
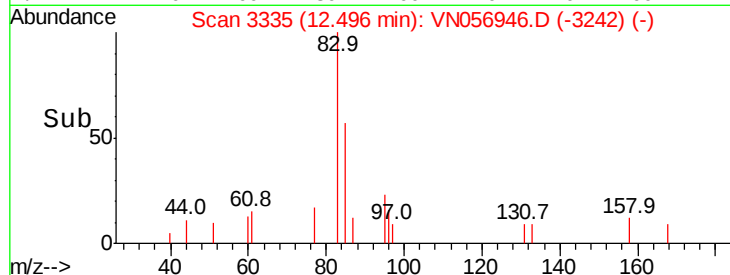
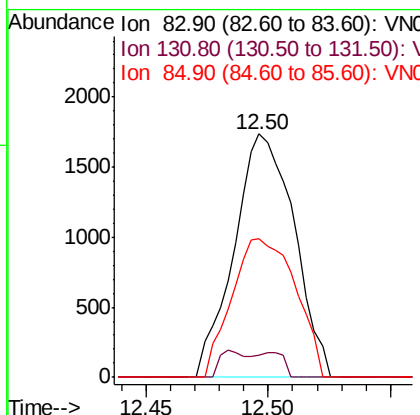
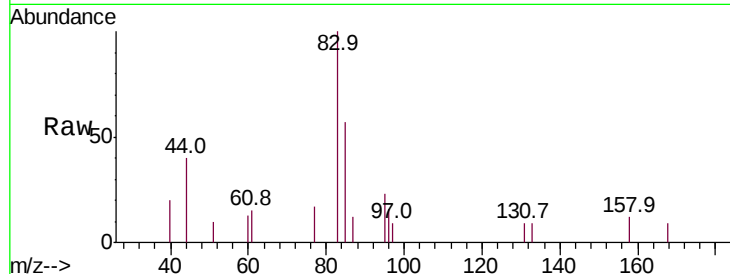
#75
 1,1,2,2-Tetrachloroethane
 Concen: 0.563 ug/l
 RT: 12.50 min Scan# 3335
 Delta R.T. 0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

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

Tot Ion	83	Resp	2963
Ion	Ratio	Lower	Upper
83	100		
131	5.4	5.3	16.1
85	60.9	32.5	97.4

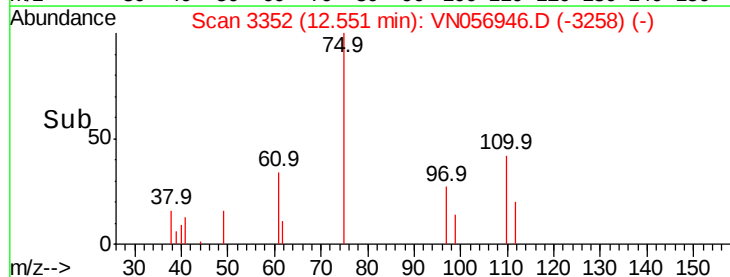
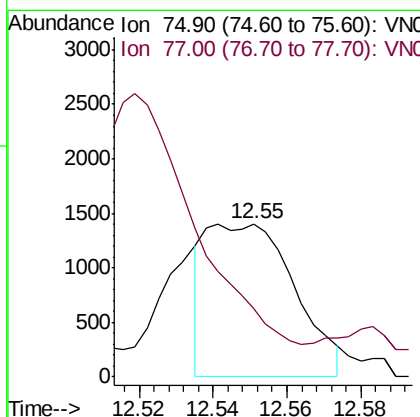
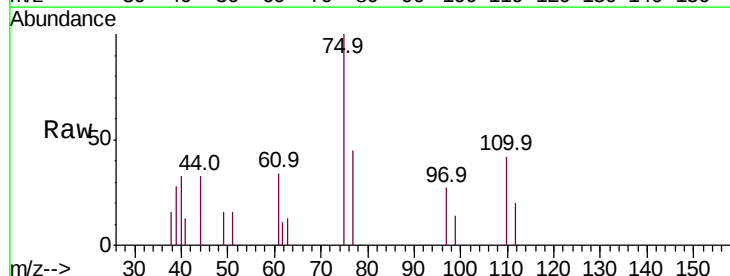
Manual Integrations
 APPROVED

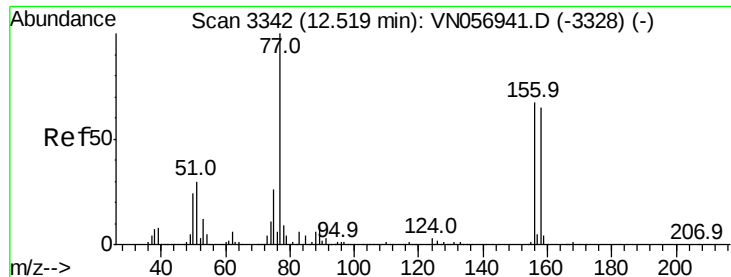
MMDadoda
 8/2/2019 9:13:36 AM



#76
 1,2,3-Trichloropropane
 Concen: 0.550 ug/l m
 RT: 12.55 min Scan# 3352
 Delta R.T. 0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

Tgt Ion	75	Resp	2335
Ion	Ratio	Lower	Upper
75	100		
77	65.2	0.0	0.0#





#77

Bromobenzene

Concen: 0.588 ug/l

RT: 12.52 min Scan# 3341

Delta R.T. -0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion:156 Resp: 2771

Ion Ratio Lower Upper

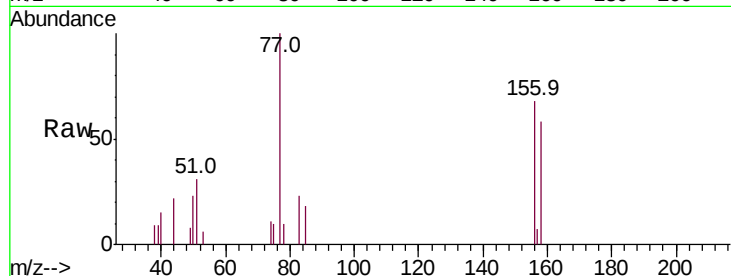
156 100

77 194.5 89.5 268.5

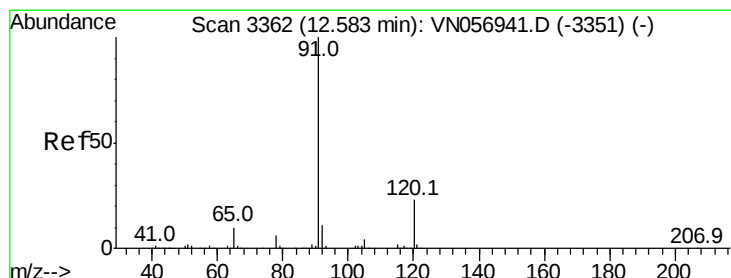
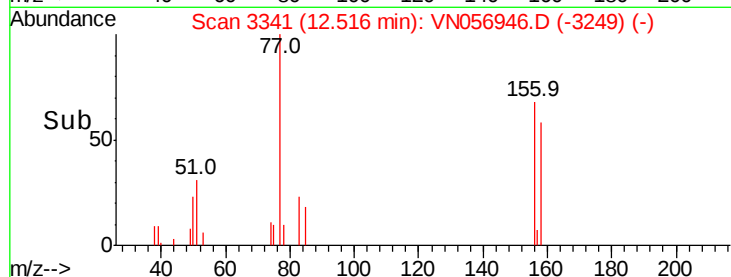
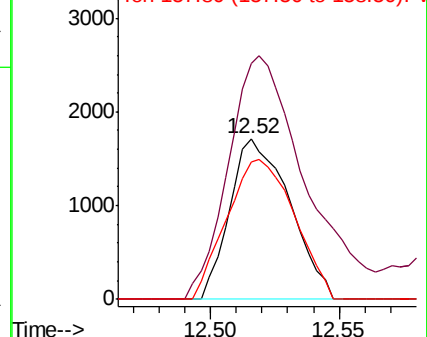
158 98.1 48.4 145.3

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



#78

n-propylbenzene

Concen: 0.585 ug/l

RT: 12.59 min Scan# 3363

Delta R.T. 0.00 min

Lab File: VN056946.D

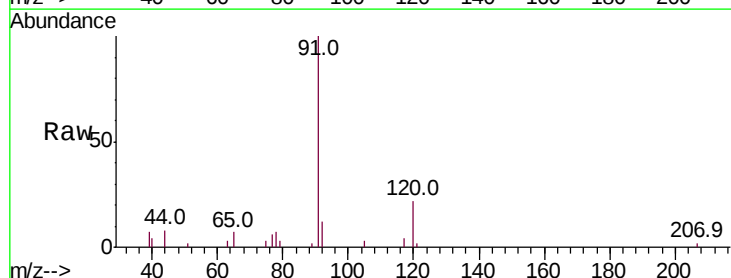
Acq: 26 Jul 2019 17:00

Tgt Ion: 91 Resp: 11281

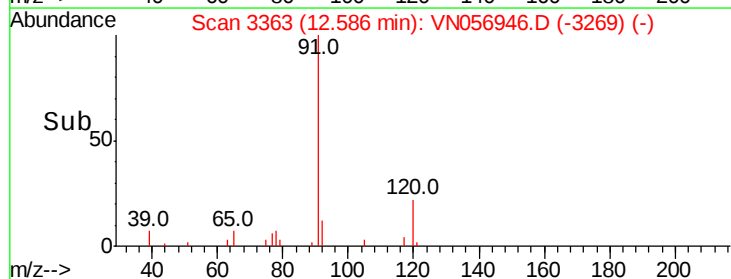
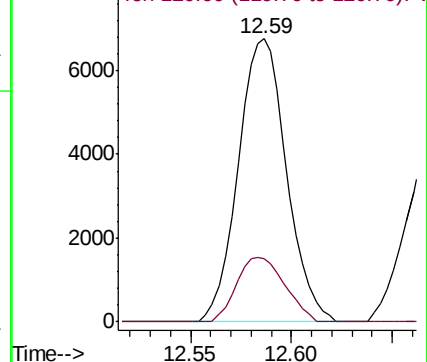
Ion Ratio Lower Upper

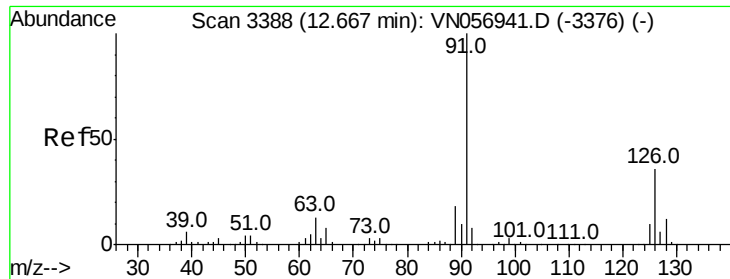
91 100

120 22.8 11.8 35.4



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





#79

2-Chlorotoluene

Concen: 0.580 ug/l

RT: 12.67 min Scan# 3388

Delta R.T. -0.00 min

Lab File: VN056946.D

Acq: 26 Jul 2019 17:00

Instrument :

MSVOA_N

ClientSampleId :

MDL-MDL-WATER-03-QT3-2019

Tot Ion: 91 Resp: 6895

Ion Ratio Lower Upper

91 100

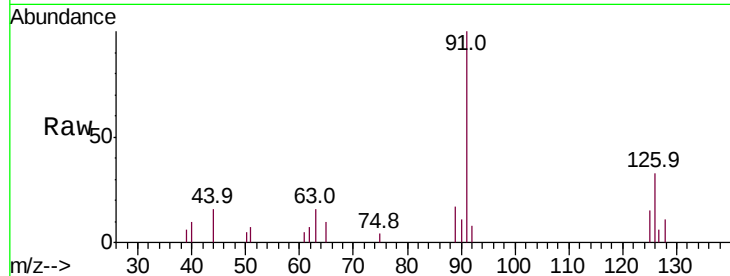
126 32.4 17.9 53.7

Manual Integrations

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Abundance Ion 91.00 (90.70 to 91.70): VN056946.D (-3376) (-)

Ion 125.90 (125.60 to 126.60): VN056946.D (-3376) (-)

12.67

4000

3000

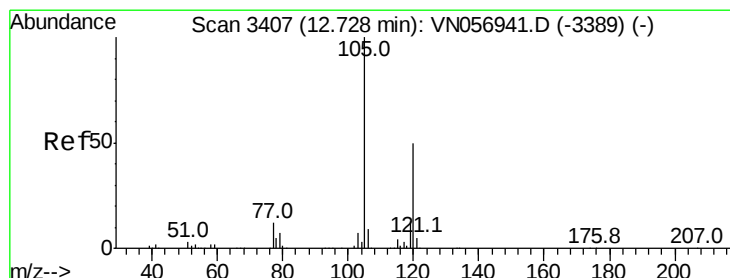
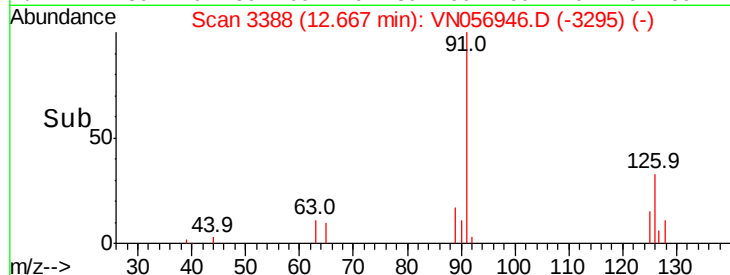
2000

1000

0

12.65 12.70

Time-->



#80

1,3,5-Trimethylbenzene

Concen: 0.586 ug/l

RT: 12.73 min Scan# 3407

Delta R.T. 0.00 min

Lab File: VN056946.D

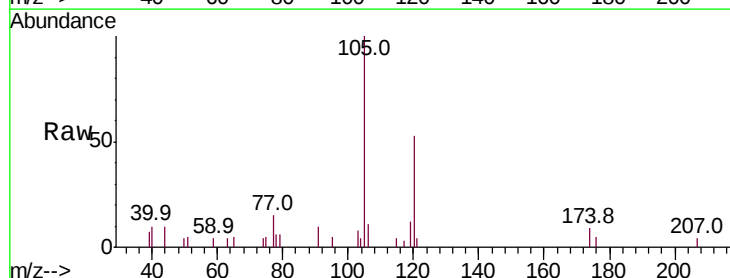
Acq: 26 Jul 2019 17:00

Tgt Ion:105 Resp: 8692

Ion Ratio Lower Upper

105 100

120 50.3 24.8 74.3



Abundance Ion 105.00 (104.70 to 105.70): VN056946.D (-3389) (-)

Ion 120.00 (119.70 to 120.70): VN056946.D (-3389) (-)

12.73

6000

5000

4000

3000

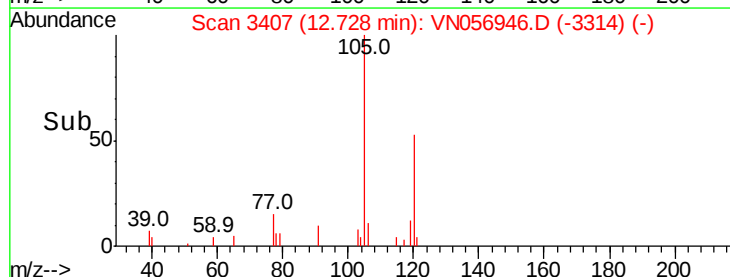
2000

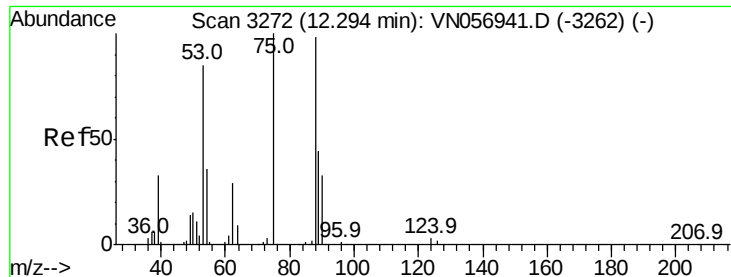
1000

0

12.70 12.75

Time-->





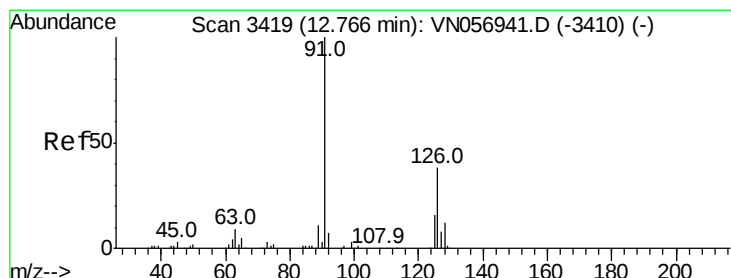
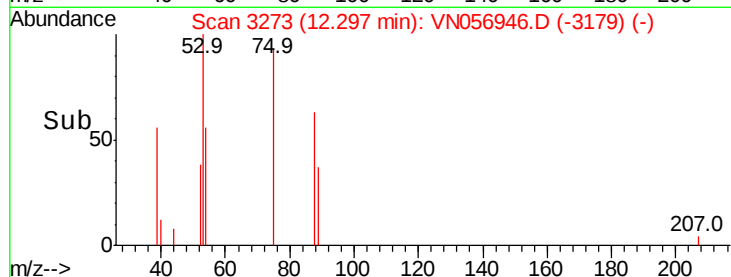
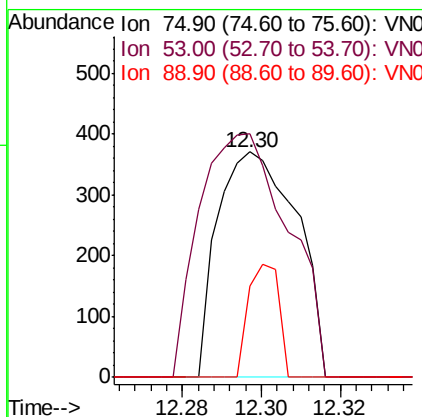
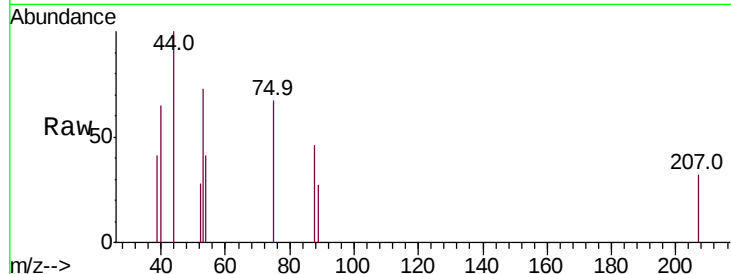
#81
trans-1,4-Dichloro-2-butene
Concen: 0.389 ug/l m
RT: 12.30 min Scan# 3273
Delta R.T. 0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

Tot Ion	Ratio	Lower	Upper
75	100		
53	0.0	69.3	103.9#
89	0.0	35.8	53.6#

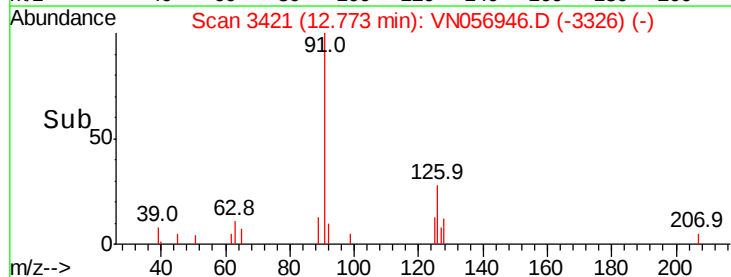
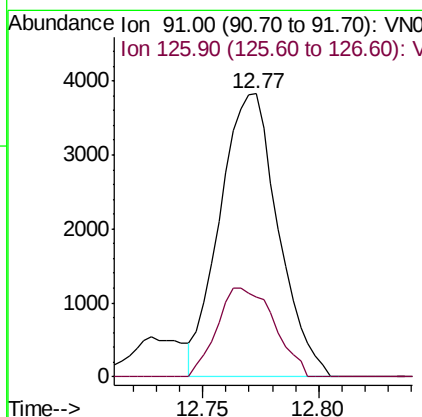
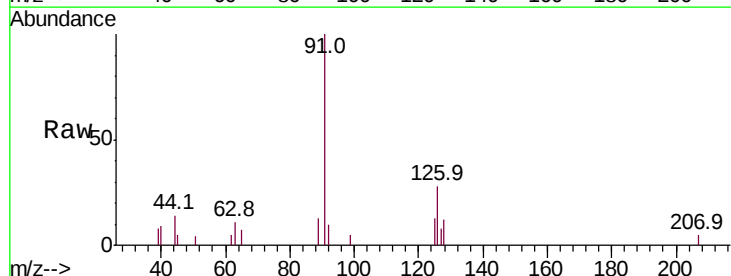
Manual Integrations
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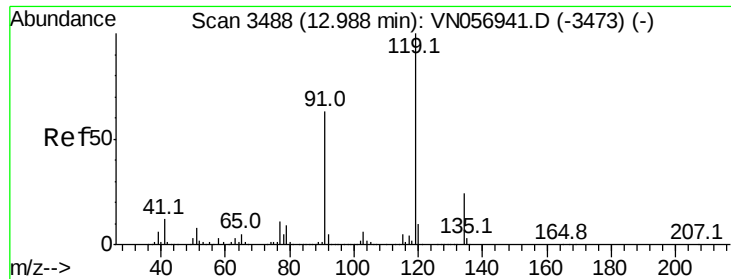
MMDadoda
8/2/2019 9:13:36 AM



#82
4-Chlorotoluene
Concen: 0.602 ug/l
RT: 12.77 min Scan# 3421
Delta R.T. 0.01 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Lower	Upper
91	100		
126	30.9	17.5	52.5





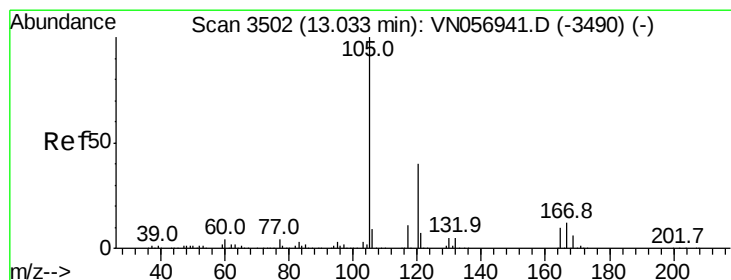
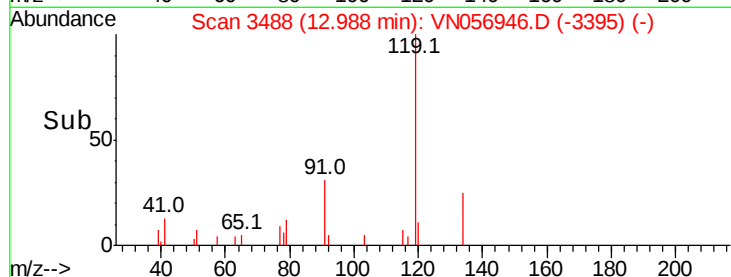
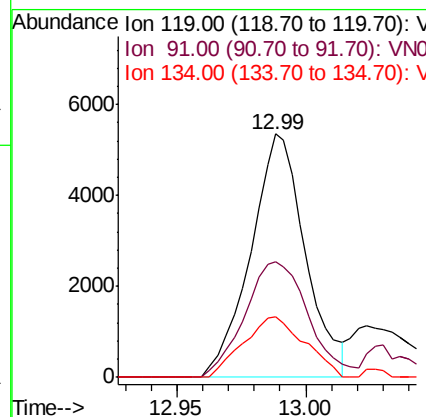
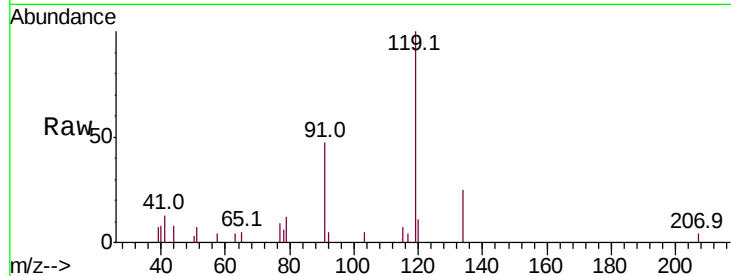
#83
 tert-Butylbenzene
 Concen: 0.604 ug/l
 RT: 12.99 min Scan# 3488
 Delta R.T. -0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

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

Tot Ion	Ratio	Lower	Upper
119	100		
91	55.2	31.3	93.8
134	27.8	13.3	39.8

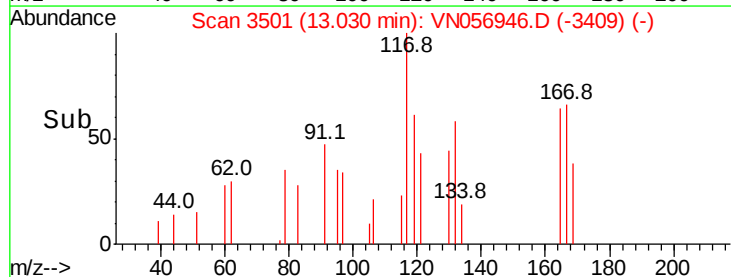
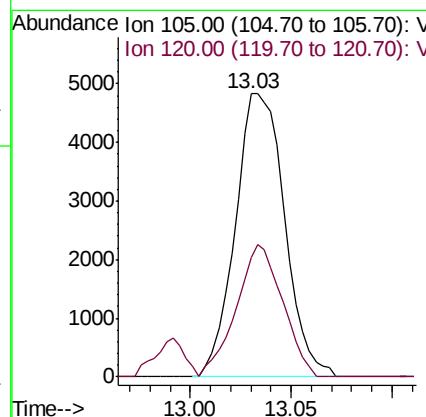
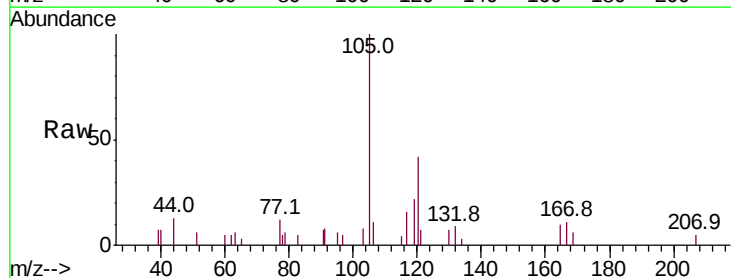
Manual Integrations
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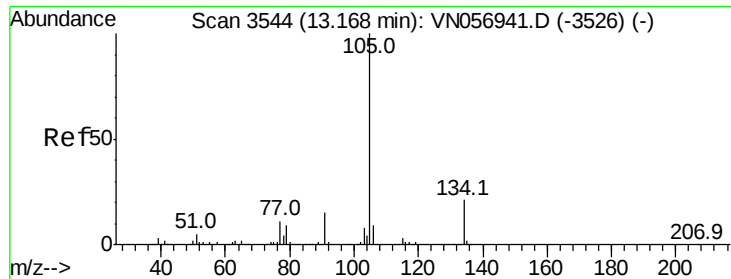
MMDadoda
 8/2/2019 9:13:36 AM



#84
 1,2,4-Trimethylbenzene
 Concen: 0.581 ug/l
 RT: 13.03 min Scan# 3501
 Delta R.T. -0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Lower	Upper
105	100		
120	43.6	23.2	69.6





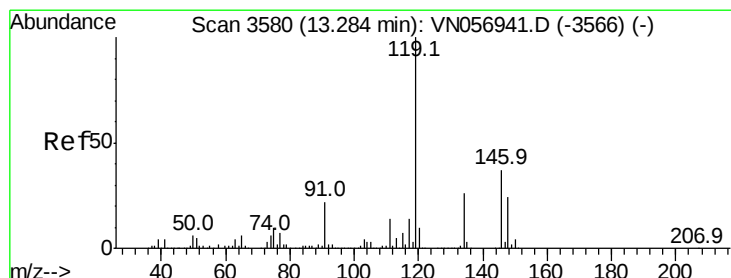
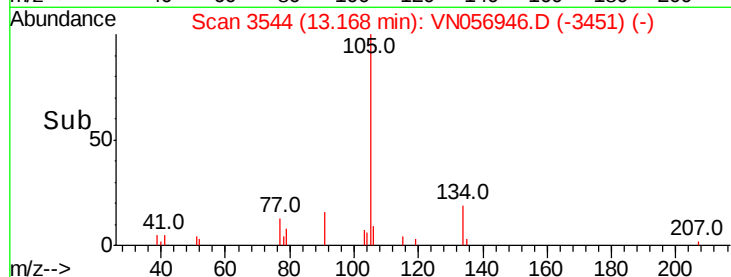
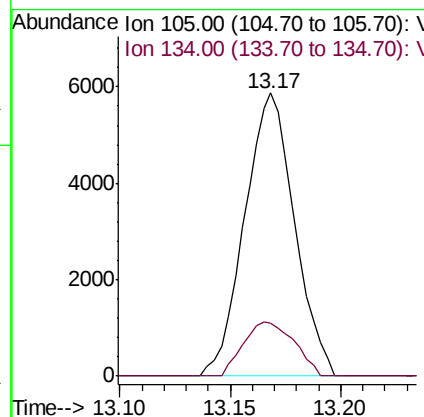
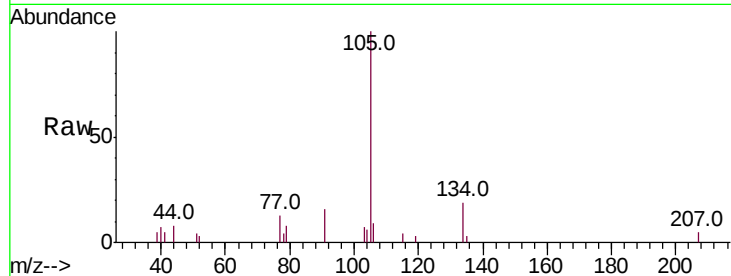
#85
 sec-Butylbenzene
 Concen: 0.544 ug/l
 RT: 13.17 min Scan# 3544
 Delta R.T. -0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

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

Tot Ion	Ratio	Lower	Upper
105	100		
134	19.5	10.3	30.8

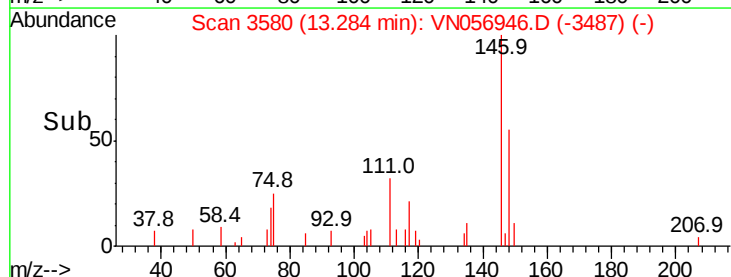
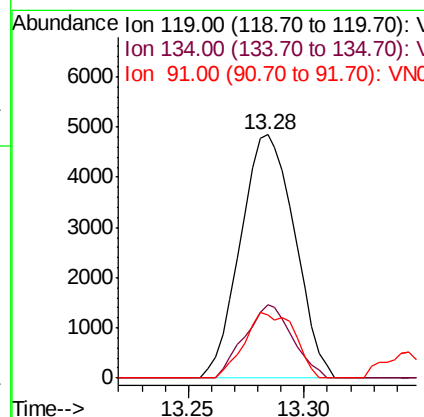
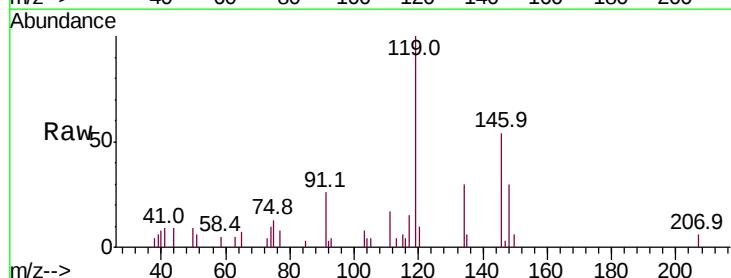
Manual Integrations
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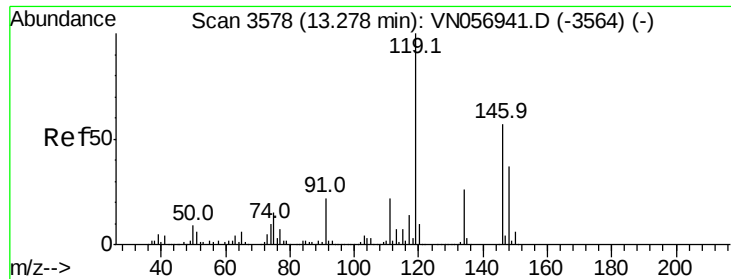
MMDadoda
 8/2/2019 9:13:36 AM



#86
 p-Isopropyltoluene
 Concen: 0.524 ug/l
 RT: 13.28 min Scan# 3580
 Delta R.T. -0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Lower	Upper
119	100		
134	26.6	13.4	40.1
91	24.8	11.0	33.0





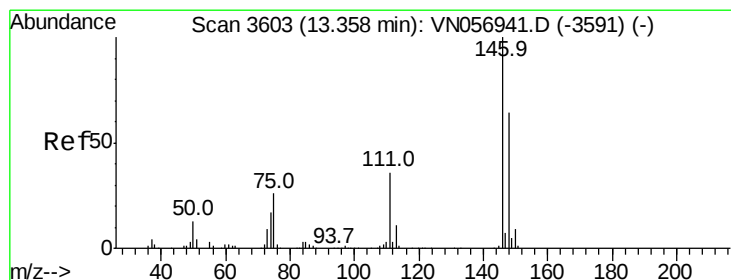
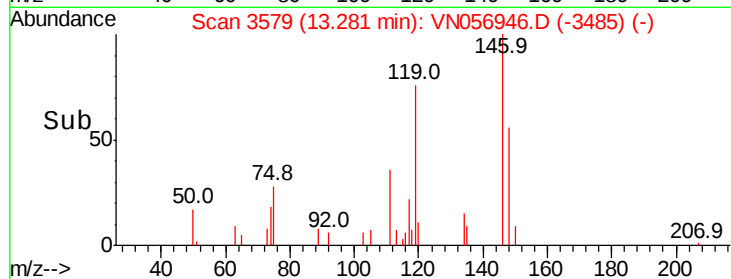
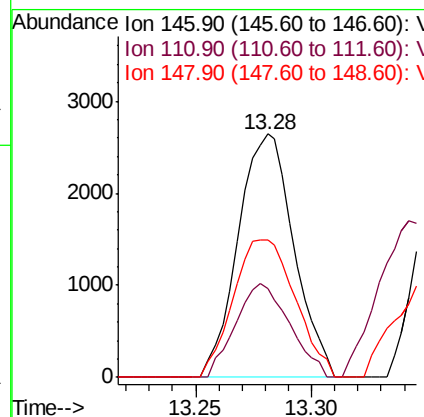
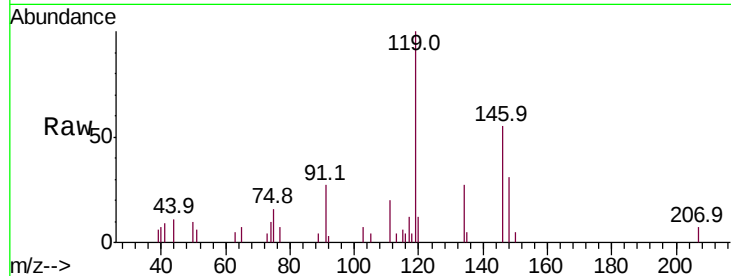
#87
 1,3-Dichlorobenzene
 Concen: 0.615 ug/l
 RT: 13.28 min Scan# 3579
 Delta R.T. 0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

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

Tot Ion	Ratio	Lower	Upper
146	100		
111	37.5	18.6	55.8
148	63.0	32.2	96.6

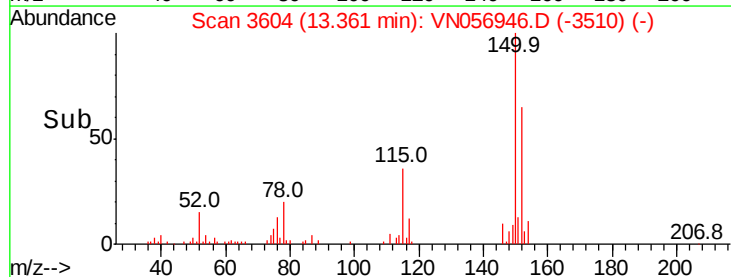
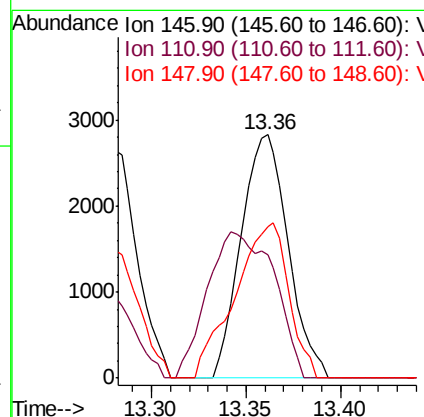
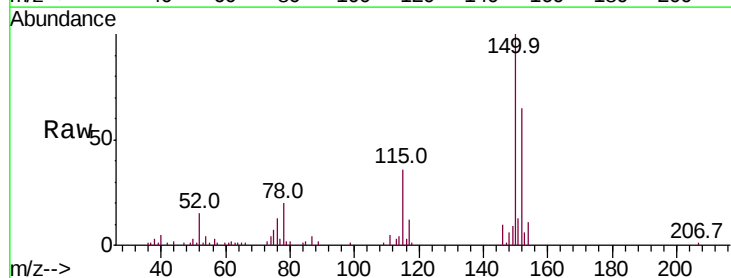
Manual Integrations
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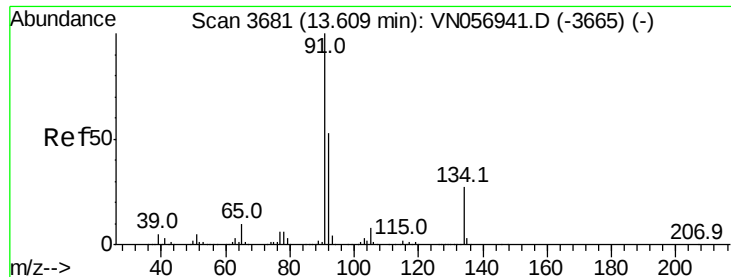
MMDadoda
 8/2/2019 9:13:36 AM



#88
 1,4-Dichlorobenzene
 Concen: 0.707 ug/l m
 RT: 13.36 min Scan# 3604
 Delta R.T. 0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Lower	Upper
146	100		
111	33.9	18.4	55.2
148	56.9	32.3	96.9





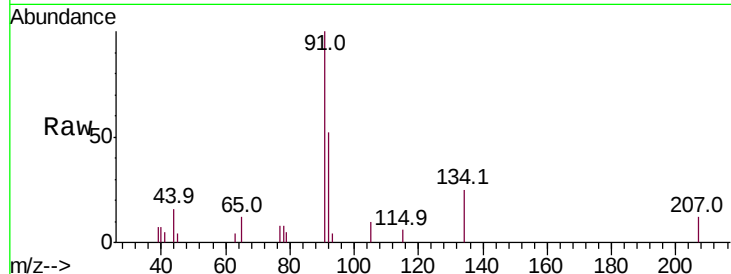
#89
n-Butylbenzene
Concen: 0.538 ug/l
RT: 13.61 min Scan# 3682
Delta R.T. 0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

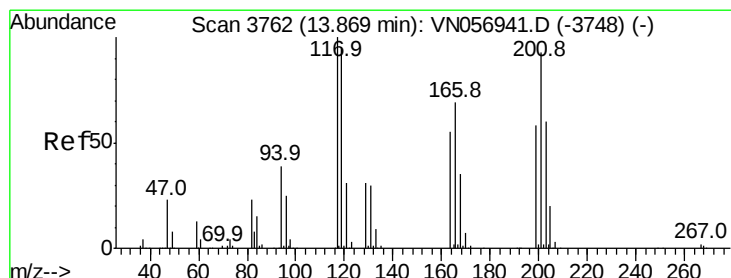
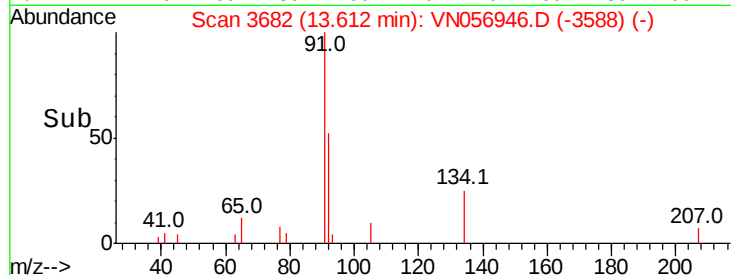
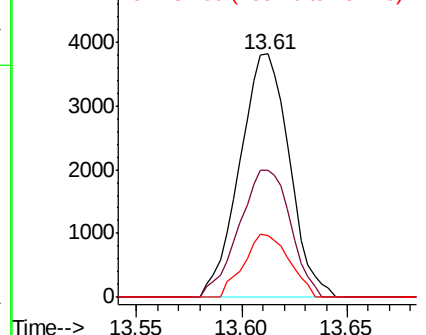
Tot Ion	Ratio	Lower	Upper
91	100		
92	54.2	26.2	78.5
134	23.6	13.5	40.4

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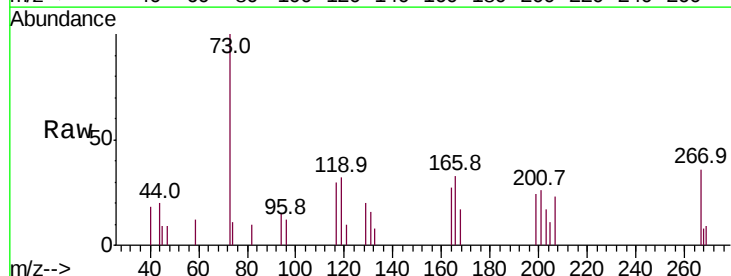


Abundance Ion 91.00 (90.70 to 91.70): VN056946.D (-3665) (-)
Ion 92.00 (91.70 to 92.70): VN056946.D (-3665) (-)
Ion 134.00 (133.70 to 134.70): VN056946.D (-3665) (-)

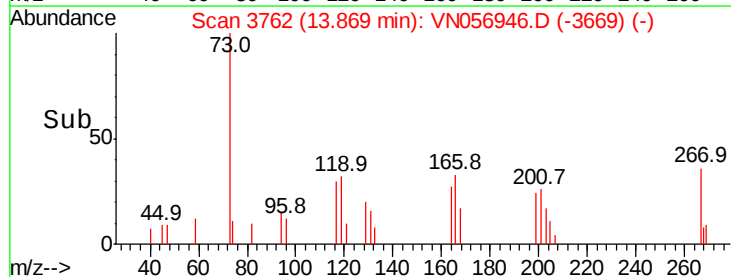
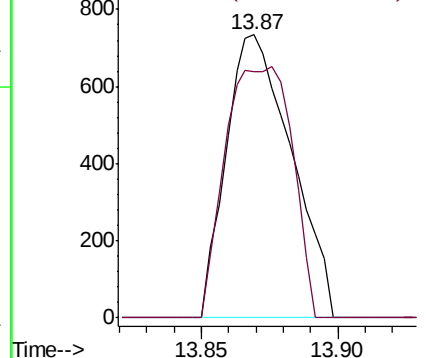


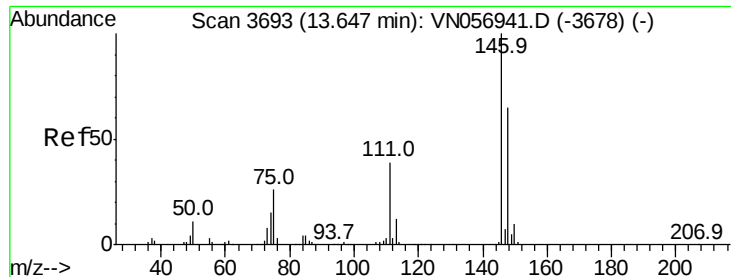
#90
Hexachloroethane
Concen: 0.471 ug/l
RT: 13.87 min Scan# 3762
Delta R.T. 0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Lower	Upper
117	100		
201	91.1	47.0	141.2



Abundance Ion 116.80 (116.50 to 117.50): VN056946.D (-3748) (-)
Ion 200.70 (200.40 to 201.40): VN056946.D (-3748) (-)





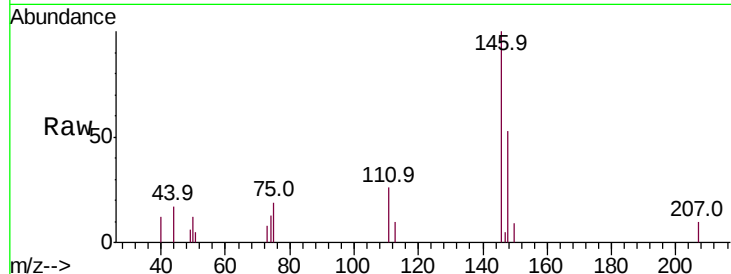
#91
 1,2-Dichlorobenzene
 Concen: 0.684 ug/l
 RT: 13.65 min Scan# 3695
 Delta R.T. 0.01 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

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

Tot Ion	Ratio	Lower	Upper
146	100		
111	31.5	19.4	58.4
148	56.4	32.2	96.6

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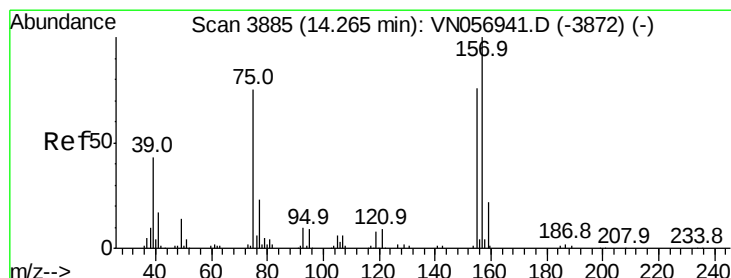
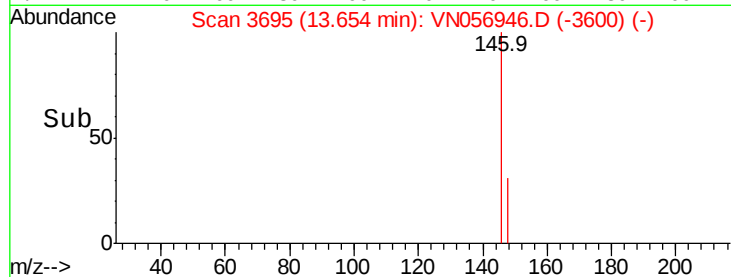
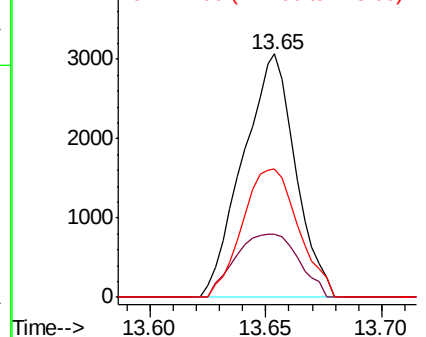


Abundance

Ion 145.90 (145.60 to 146.60): V

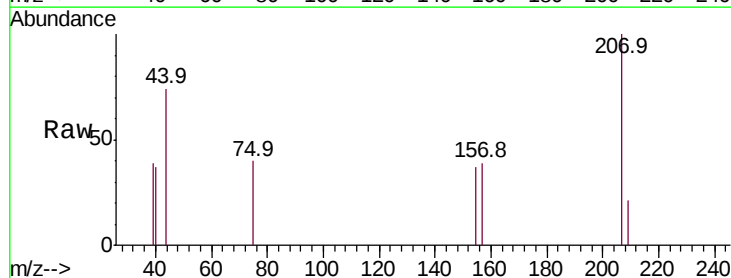
Ion 110.90 (110.60 to 111.60): V

Ion 147.90 (147.60 to 148.60): V



#92
 1,2-Dibromo-3-Chloropropane
 Concen: 0.271 ug/l
 RT: 14.26 min Scan# 3885
 Delta R.T. 0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Lower	Upper
75	100		
155	198.5	50.2	150.6#
157	200.5	65.1	195.4#

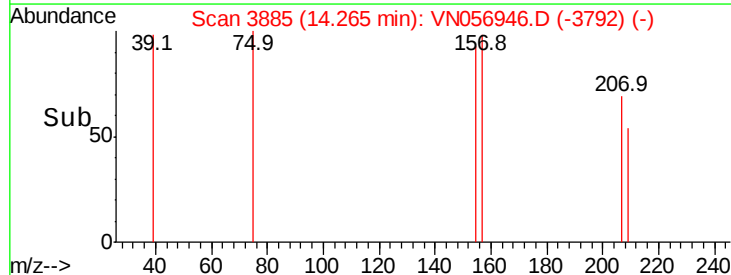
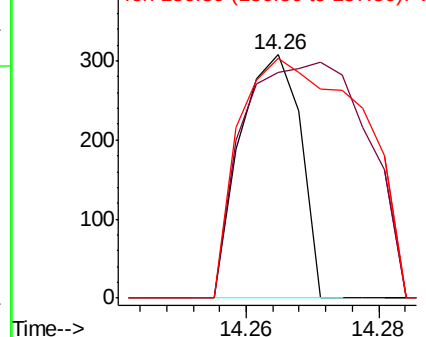


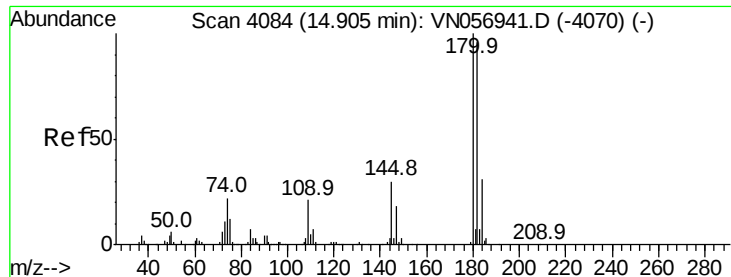
Abundance

Ion 74.90 (74.60 to 75.60): V

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V





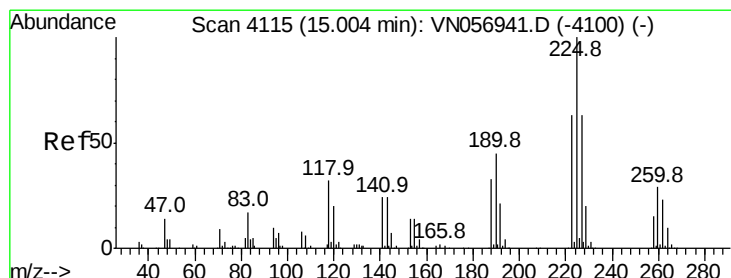
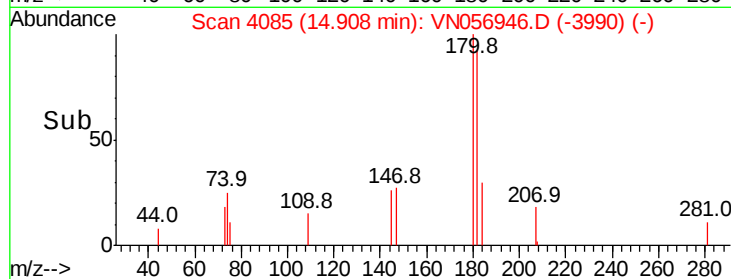
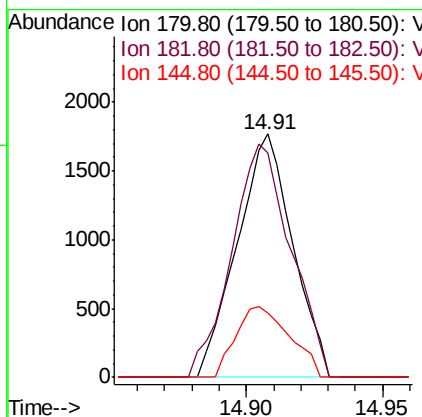
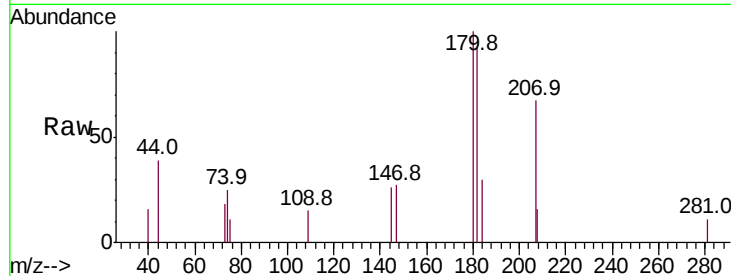
#93
 1,2,4-Trichlorobenzene
 Concen: 0.815 ug/l
 RT: 14.91 min Scan# 4085
 Delta R.T. 0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

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

Tot Ion	Ratio	Lower	Upper
180	100		
182	102.1	47.6	142.8
145	28.4	14.2	42.8

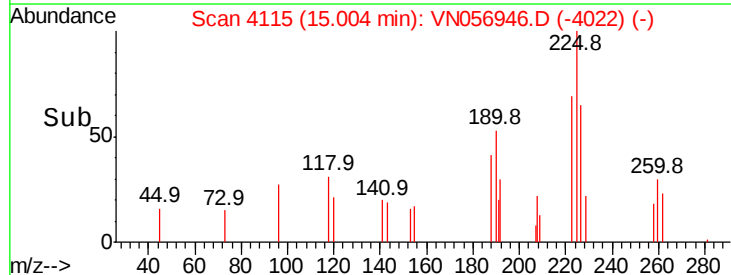
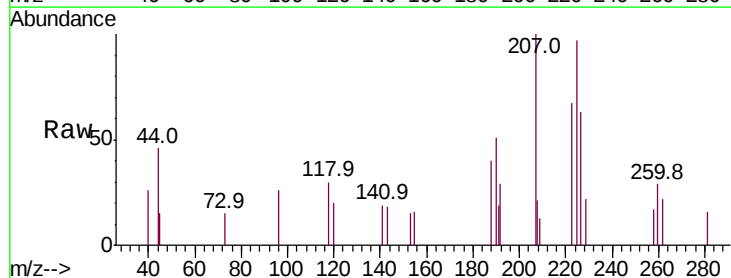
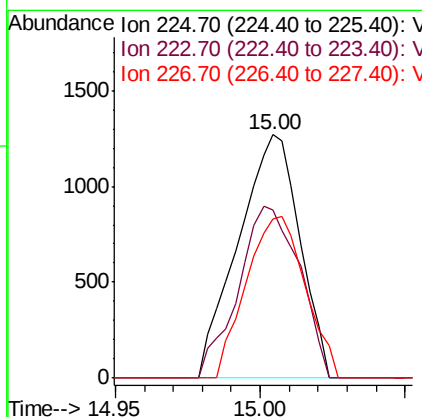
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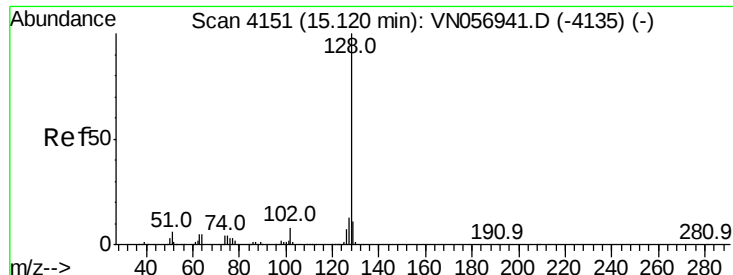
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#94
 Hexachlorobutadiene
 Concen: 0.635 ug/l
 RT: 15.00 min Scan# 4115
 Delta R.T. 0.00 min
 Lab File: VN056946.D
 Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Lower	Upper
225	100		
223	70.3	30.8	92.4
227	63.5	31.1	93.5





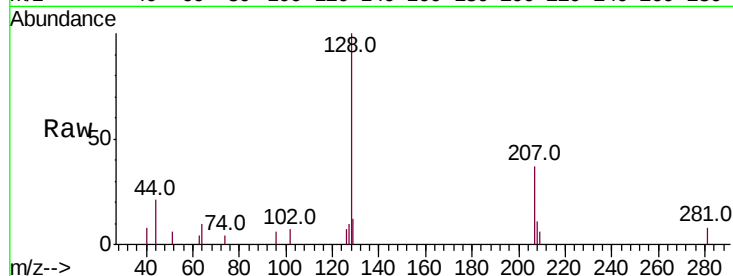
#95
Naphthalene
Concen: 0.874 ug/l
RT: 15.12 min Scan# 4151
Delta R.T. 0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

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

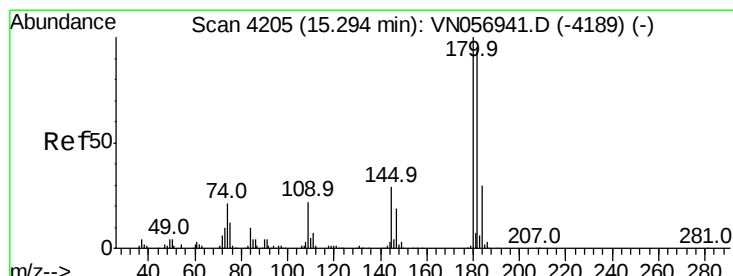
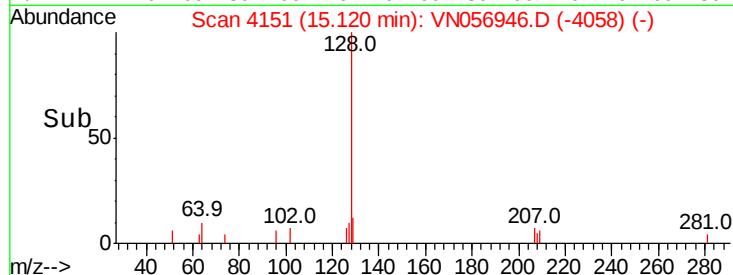
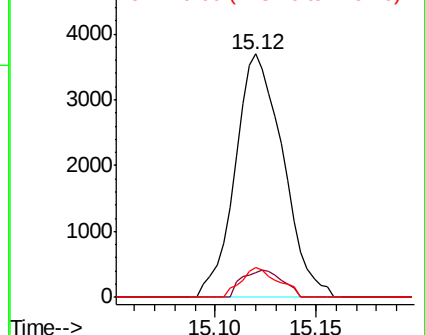
Tot Ion	Ratio	Resp	Lower	Upper
128	100	6135		
127	9.5	10.0	15.0#	
129	9.5	8.7	13.1	

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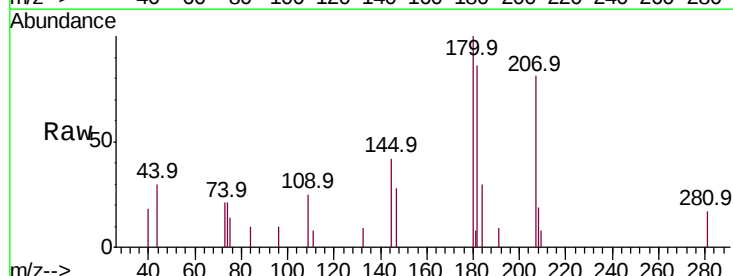


Abundance Ion 128.00 (127.70 to 128.70): V
Ion 127.00 (126.70 to 127.70): V
Ion 129.00 (128.70 to 129.70): V



#96
1,2,3-Trichlorobenzene
Concen: 1.009 ug/l
RT: 15.29 min Scan# 4204
Delta R.T. -0.00 min
Lab File: VN056946.D
Acq: 26 Jul 2019 17:00

Tgt Ion	Ratio	Resp	Lower	Upper
180	100	3232		
182	89.0	48.0	144.2	
145	34.2	15.0	45.0	



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

