

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_N\DATA\VN101218\
 Data File : VN051827.D
 Acq On : 12 Oct 2018 9:52
 Operator : MD\SY
 Sample : VSTDICC150
 Misc : 5.00mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 28

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC150

Manual Integrations
 APPROVED

MMDadoda
 10/15/2018 11:27:51 AM

Quant Time: Oct 12 10:24:18 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\624N101218W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Oct 12 09:52:02 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.20	128	165680	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.59	114	906239	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.41	117	856949	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	8.03	65	281343	27.43	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	91.43%
60) 4-Bromofluorobenzene	12.40	95	392208	32.21	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	107.37%
63) Toluene-d8	10.09	98	1080092	28.79	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	95.97%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.85	85	1027906	162.32	ug/l	100
3) Chloromethane	2.06	50	969414	140.74	ug/l	99
4) Vinyl Chloride	2.18	62	1455608	141.70	ug/l	98
5) Bromomethane	2.55	94	1300544	143.67	ug/l	86
6) Chloroethane	2.69	64	1014865	136.04	ug/l	100
7) Trichlorofluoromethane	3.01	101	2181965	150.81	ug/l	96
8) Diethyl Ether	3.41	74	617211	145.51	ug/l	71
9) 1,1,2-Trichlorotrifluoroet	3.76	101	1190715m	143.01	ug/l	
10) 1,1-Dichloroethene	3.73	96	1109739	144.39	ug/l	84
11) Methyl Iodide	3.95	142	1868488	173.86	ug/l	94
12) Methyl Acetate	4.33	43	706667	148.99	ug/l	90
13) Acrolein	3.61	56	222588	704.58	ug/l	90
14) Acrylonitrile	4.99	53	1603102	759.07	ug/l #	61
15) Acetone	3.82	58	370978	699.29	ug/l	99
16) Carbon Disulfide	4.05	76	3100631	156.01	ug/l	98
17) Allyl chloride	4.32	41	1308945	143.23	ug/l	75
18) Methylene Chloride	4.55	84	1256876	146.72	ug/l #	87
19) trans-1,2-Dichloroethene	5.04	96	1298645	148.87	ug/l	81
20) Diisopropyl ether	5.96	45	2894389	141.97	ug/l #	79
21) 1,1-Dichloroethane	5.85	63	2004203	140.39	ug/l #	97
22) cis-1,2-Dichloroethene	6.83	96	1500715	145.88	ug/l #	80
23) tert-Butyl Alcohol	4.79	59	422436	759.58	ug/l #	100
24) Methyl tert-Butyl Ether	5.05	73	3215800	145.43	ug/l #	68
25) Chloroform	7.37	83	2431522	144.33	ug/l	97
26) Cyclohexane	7.65	56	1670821	137.51	ug/l #	69
29) 1,1-Dichloropropene	7.79	75	1755159	150.31	ug/l	94
30) 2-Butanone	6.84	43	1775125	721.52	ug/l #	85
31) 2,2-Dichloropropane	6.83	77	2010031	145.37	ug/l #	77
32) 1,1,1-Trichloroethane	7.57	97	2343847	151.68	ug/l #	93
33) Carbon Tetrachloride	7.77	117	2174707	156.56	ug/l	92
34) Benzene	8.04	78	5163962m	149.31	ug/l	
35) Methacrylonitrile	7.19	41	532125m	170.40	ug/l	
36) 1,2-Dichloroethane	8.13	62	1638042m	147.56	ug/l	
37) Trichloroethene	8.83	130	1635182	153.07	ug/l	95
38) Methylcyclohexane	9.08	83	2243129	149.64	ug/l	78
39) 1,2-Dichloropropane	9.12	63	1187651	144.97	ug/l	96
40) Dibromomethane	9.21	93	925370	154.05	ug/l	94

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_N\DATA\VN101218\
 Data File : VN051827.D
 Acq On : 12 Oct 2018 9:52
 Operator : MD\SY
 Sample : VSTDICC150
 Misc : 5.00mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 28

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC150

Manual Integrations
 APPROVED

MMDadoda
 10/15/2018 11:27:51 AM

Quant Time: Oct 12 10:24:18 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\624N101218W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Oct 12 09:52:02 2018
 Response via : Initial Calibration

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

41) Bromodichloromethane	9.40	83	1936083	156.56	ug/l	95
42) Vinyl Acetate	5.90	43	10491218	766.71	ug/l #	87
43) Ethyl Acetate	6.93	43	809894	153.47	ug/l	98
44) Isopropyl Acetate	8.17	43	1607103	152.22	ug/l	96
45) 1,4-Dioxane	9.20	88	275517	3306.58	ug/l #	73
46) Methyl methacrylate	9.20	41	756467	156.15	ug/l	71
47) n-amyl Acetate	12.07	43	1525163m	178.62	ug/l	
48) t-1,3-Dichloropropene	10.38	75	1975096	165.77	ug/l	99
49) cis-1,3-Dichloropropene	9.84	75	2121202	160.36	ug/l	95
50) 1,1,2-Trichloroethane	10.56	97	1304526	158.00	ug/l	94
51) Ethyl methacrylate	10.43	69	1541507	164.47	ug/l	84
52) 1,3-Dichloropropane	10.71	76	1960999	152.84	ug/l	98
53) Dibromochloromethane	10.90	129	1735729	173.38	ug/l	96
54) 1,2-Dibromoethane	11.01	107	1411619	164.22	ug/l	99
55) 2-Chloroethyl vinyl ether	9.70	63	3428186	865.20	ug/l #	92
56) Bromoform	12.13	173	1270246	198.69	ug/l	95
58) 4-Methyl-2-Pentanone	9.99	43	4226328	733.80	ug/l #	85
59) 2-Hexanone	10.75	43	2875674	741.64	ug/l #	89
61) Tetrachloroethene	10.63	164	1601840	145.24	ug/l	97
62) Toluene	10.16	91	6387570	150.05	ug/l	98
64) Chlorobenzene	11.43	112	4322206	156.33	ug/l	95
65) 1,1,1,2-Tetrachloroethane	11.51	131	1686097	159.56	ug/l	100
66) Ethyl Benzene	11.51	91	7174852	153.13	ug/l	98
67) m/p-Xylenes	11.62	106	5954701	315.37	ug/l	95
68) o-Xylene	11.95	106	2908443	155.88	ug/l	88
69) Styrene	11.96	104	4763408	169.36	ug/l	96
70) Isopropylbenzene	12.25	105	7791611	156.78	ug/l	98
71) 1,1,2,2-Tetrachloroethane	12.50	83	1540759	157.04	ug/l	95
72) 1,2,3-Trichloropropane	12.55	75	1270952m	144.49	ug/l	
73) Bromobenzene	12.53	156	2088262	173.36	ug/l	78
74) n-propylbenzene	12.59	91	8548835	160.76	ug/l	93
75) 2-Chlorotoluene	12.68	91	4915138	156.85	ug/l	91
76) 1,3,5-Trimethylbenzene	12.73	105	6569781	160.69	ug/l	98
77) t-1,4-Dichloro-2-butene	12.30	75	469091	192.33	ug/l	90
78) 4-Chlorotoluene	12.77	91	5063845	166.59	ug/l	89
79) tert-butylbenzene	12.99	119	5883458	155.39	ug/l	93
80) 1,2,4-Trimethylbenzene	13.04	105	6612514	162.13	ug/l	96
81) sec-Butylbenzene	13.17	105	7882314	160.14	ug/l	95
82) p-Isopropyltoluene	13.29	119	7308323	167.54	ug/l	95
83) 1,3-Dichlorobenzene	13.28	146	3829843	182.26	ug/l	99
84) 1,4-Dichlorobenzene	13.36	146	3706826	188.99	ug/l	99
85) n-Butylbenzene	13.62	91	5793053	178.67	ug/l	93
86) Hexachloroethane	13.88	117	1284941	171.78	ug/l	94
87) 1,2-Dichlorobenzene	13.65	146	3614733	176.34	ug/l	96
88) 1,2-Dibromo-3-Chloropropan	14.27	75	243187	168.49	ug/l #	64
89) 1,2,4-Trichlorobenzene	14.91	180	2038341	227.38	ug/l	99
90) Hexachlorobutadiene	15.01	225	1076296	159.36	ug/l	97
91) Naphthalene	15.13	128	4225949	233.74	ug/l	99
92) 1,2,3-Trichlorobenzene	15.32	180	1897501	213.08	ug/l	93

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_N\DATA\VN101218\
Data File : VN051827.D
Acq On : 12 Oct 2018 9:52
Operator : MD\SY
Sample : VSTDICC150
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 28

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

MMDadoda
10/15/2018 11:27:51 AM

Quant Time: Oct 12 10:24:18 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\624N101218W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Oct 12 09:52:02 2018
Response via : Initial Calibration

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

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

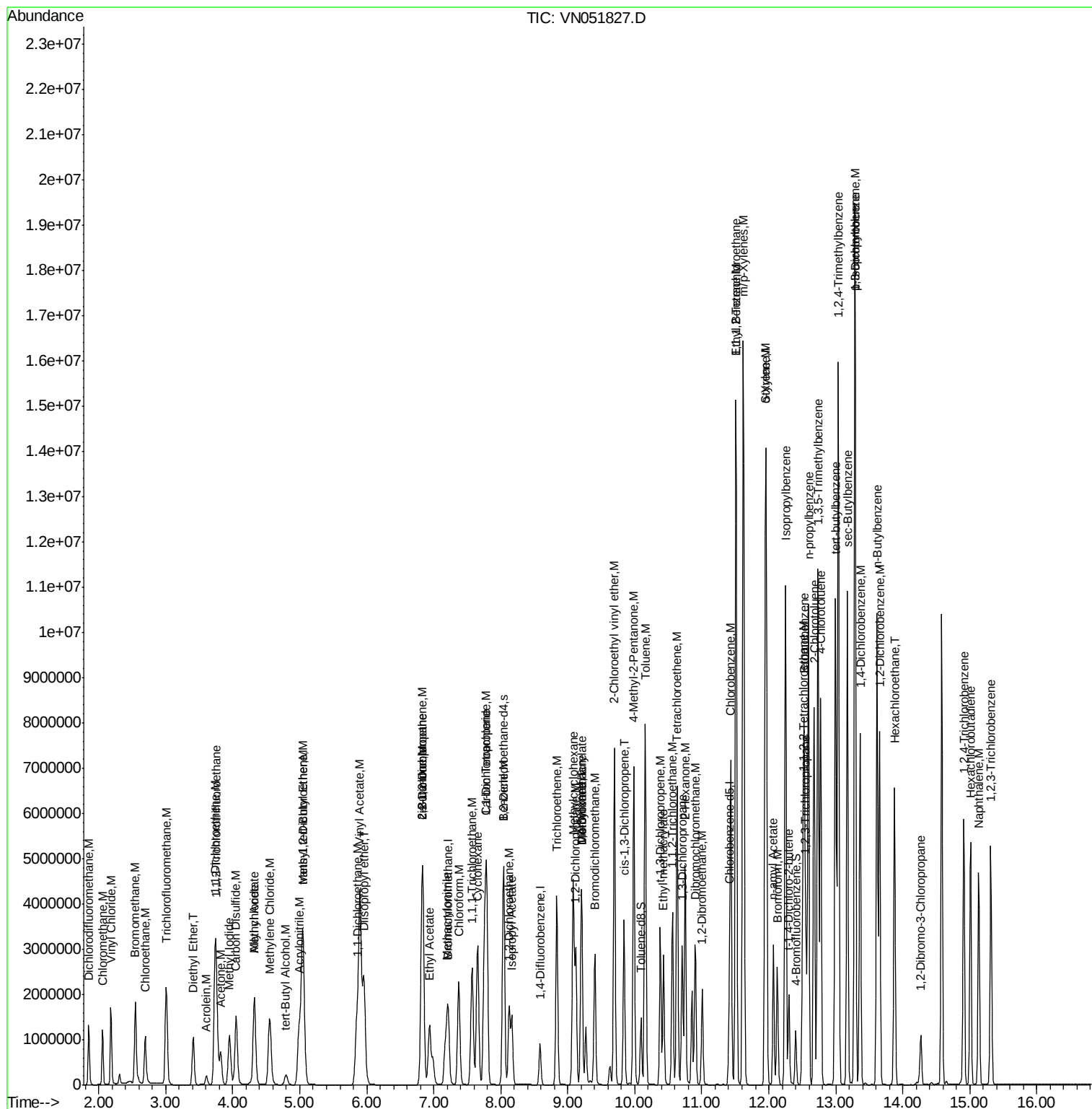
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_N\DATA\VN101218\
Data File : VN051827.D
Acq On : 12 Oct 2018 9:52
Operator : MD\SY
Sample : VSTDIC150
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 28

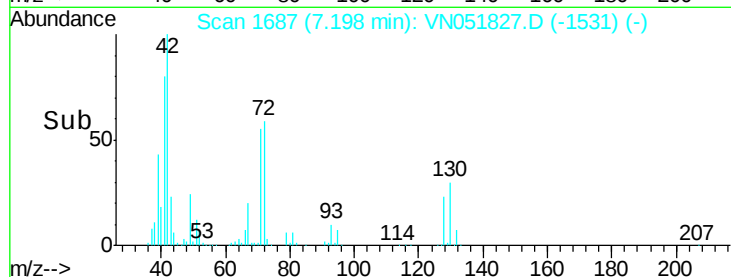
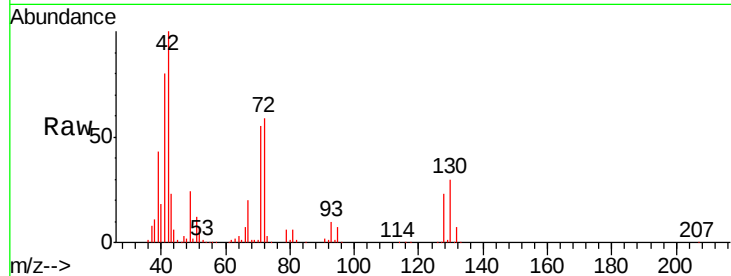
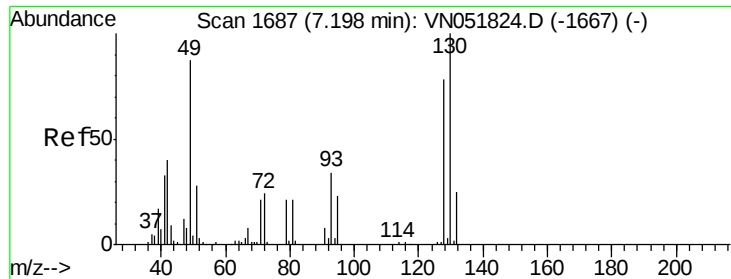
Instrument :
MSVOA_N
Client Sample Id :
VSTDIC150

Manual Integrations
APPROVED

MMDadoda
10/15/2018 11:27:51 AM

Quant Time: Oct 12 10:24:18 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_N\METHODS\624N101218W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Oct 12 09:52:02 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.00 ug/l

RT: 7.20 min Scan# 1687

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Tgt Ion	Ratio	Lower	Upper
128	100		
49	110.8	0.0	403.3
130	129.7	0.0	326.0

Instrument :

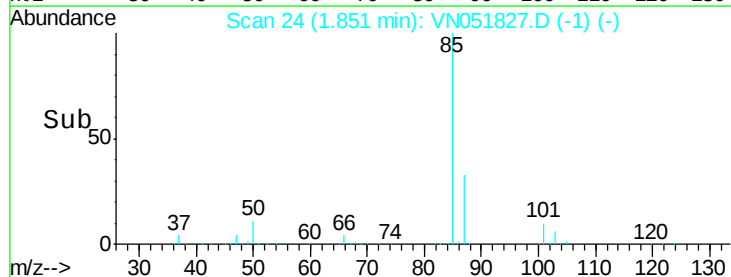
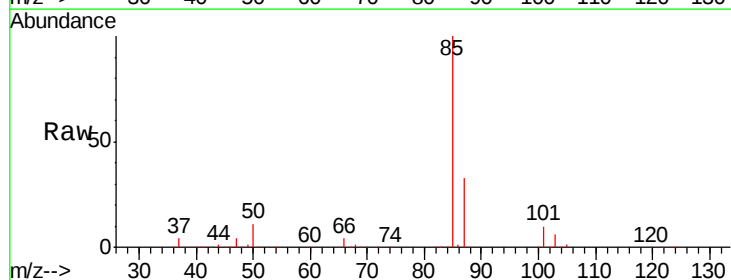
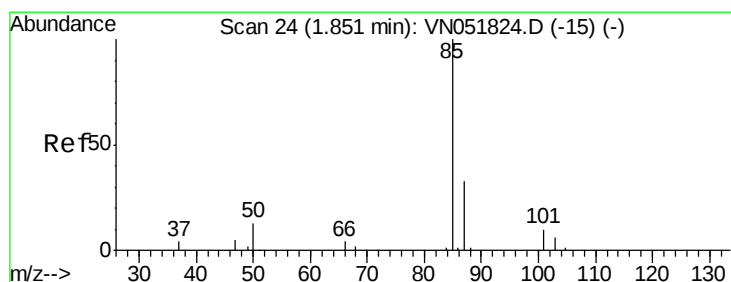
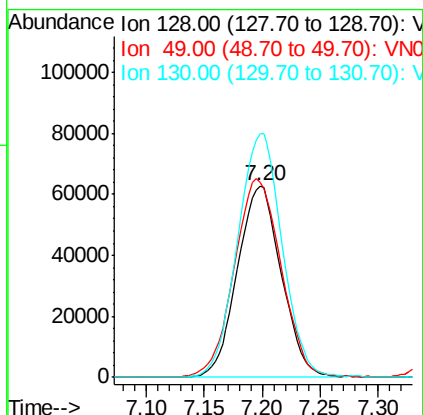
MSVOA_N

ClientSampleId :

VSTDIC150

Manual Integrations
APPROVED

MMDadoda
10/15/2018 11:27:51 AM



#2

Dichlorodifluoromethane

Concen: 162.32 ug/l

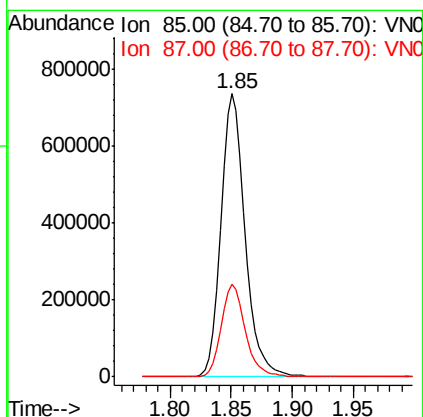
RT: 1.85 min Scan# 24

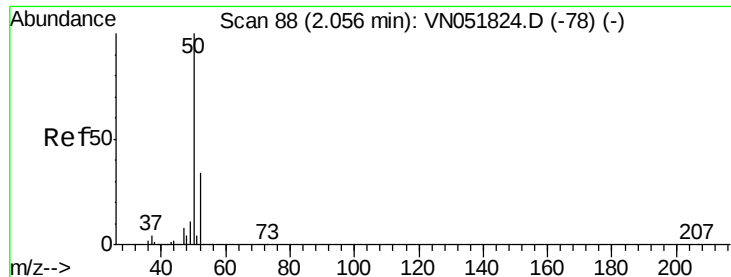
Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Tgt Ion	Ratio	Lower	Upper
85	100		
87	32.7	16.3	48.8





#3

Chloromethane

Concen: 140.74 ug/l

RT: 2.06 min Scan# 88

Delta R.T. -0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 50 Resp: 969414

Ion Ratio Lower Upper

50 100

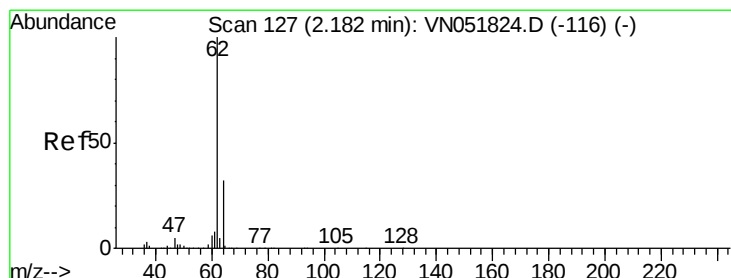
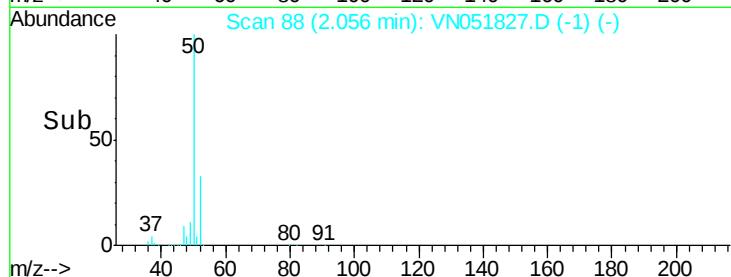
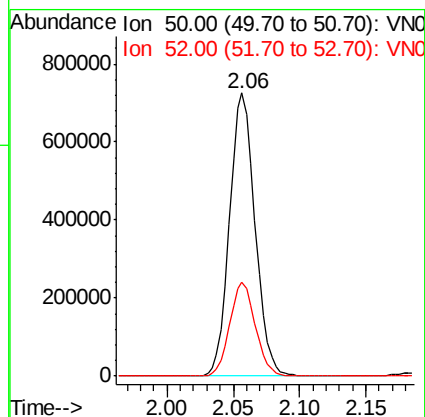
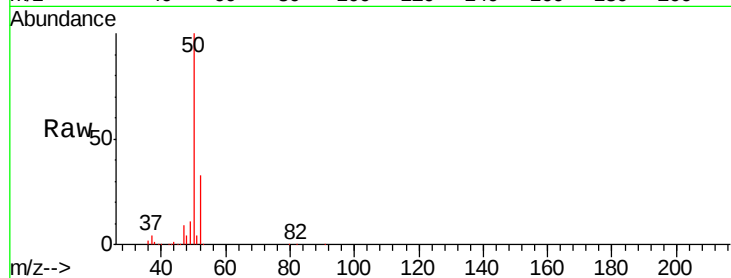
52 33.3 27.2 40.8

Manual Integrations

APPROVED

MMDadoda

10/15/2018 11:27:51 AM



#4

Vinyl Chloride

Concen: 141.70 ug/l

RT: 2.18 min Scan# 127

Delta R.T. 0.00 min

Lab File: VN051827.D

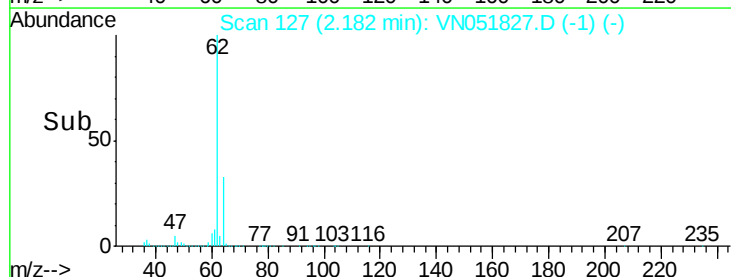
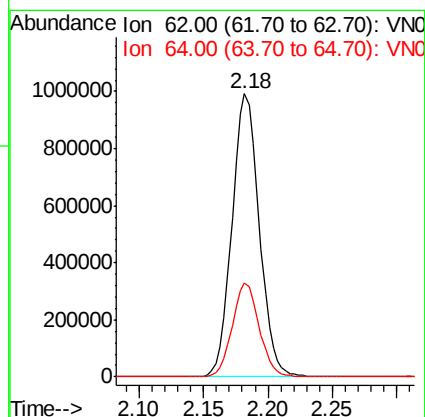
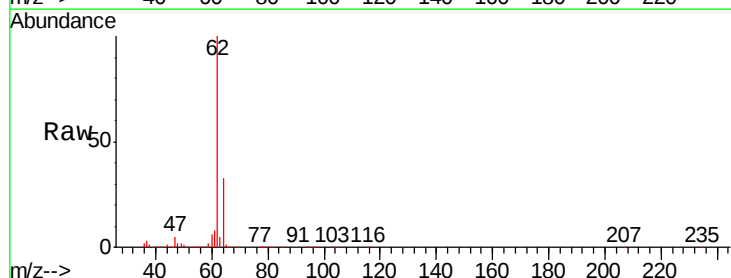
Acq: 12 Oct 2018 9:52

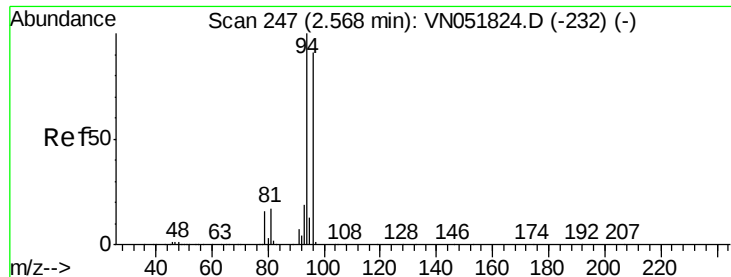
Tgt Ion: 62 Resp: 1455608

Ion Ratio Lower Upper

62 100

64 33.0 25.4 38.2





#5

Bromomethane

Concen: 143.67 ug/l

RT: 2.55 min Scan# 241

Delta R.T. -0.02 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 94 Resp: 1300544

Ion Ratio Lower Upper

94 100

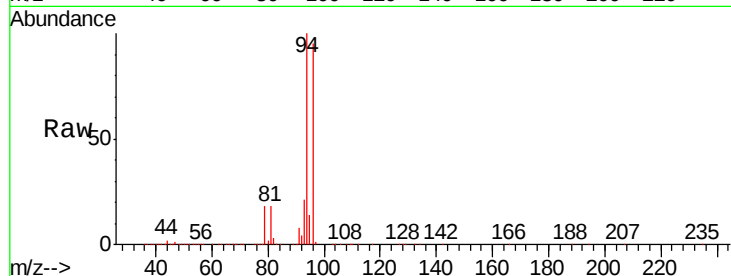
96 95.2 66.4 99.6

Manual Integrations

APPROVED

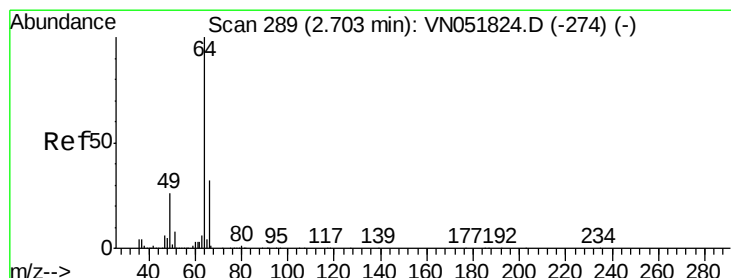
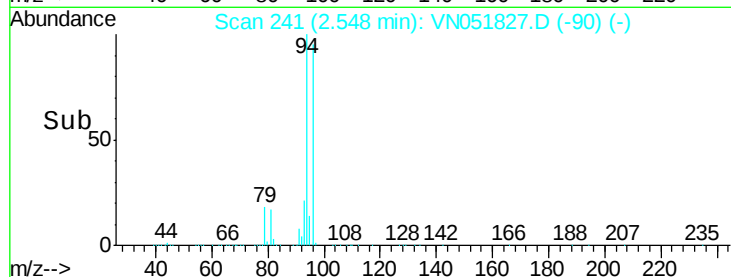
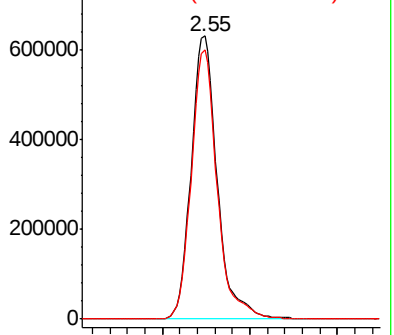
MMDadoda

10/15/2018 11:27:51 AM



Abundance Ion 94.00 (93.70 to 94.70): VN0

Ion 96.00 (95.70 to 96.70): VN0



#6

Chloroethane

Concen: 136.04 ug/l

RT: 2.69 min Scan# 286

Delta R.T. -0.01 min

Lab File: VN051827.D

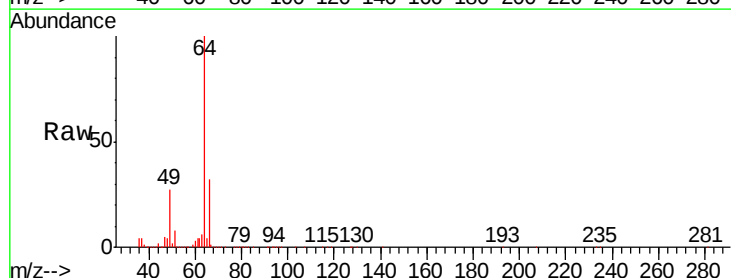
Acq: 12 Oct 2018 9:52

Tgt Ion: 64 Resp: 1014865

Ion Ratio Lower Upper

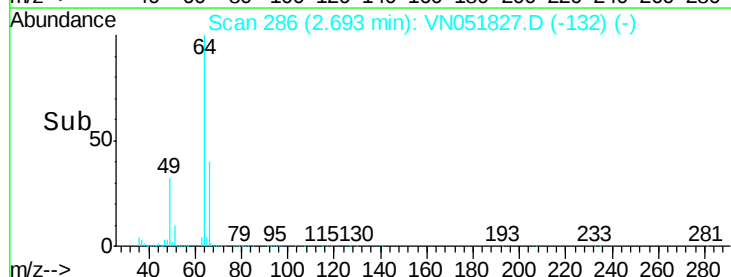
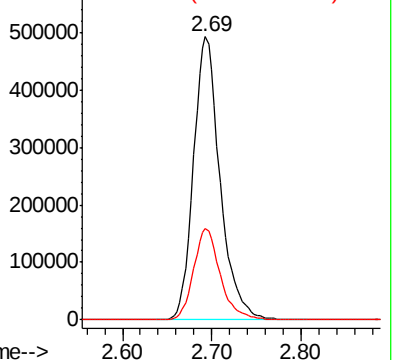
64 100

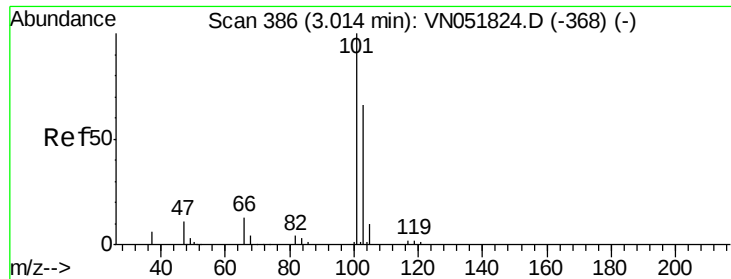
66 32.2 25.8 38.6



Abundance Ion 64.00 (63.70 to 64.70): VN0

Ion 66.00 (65.70 to 66.70): VN0





#7

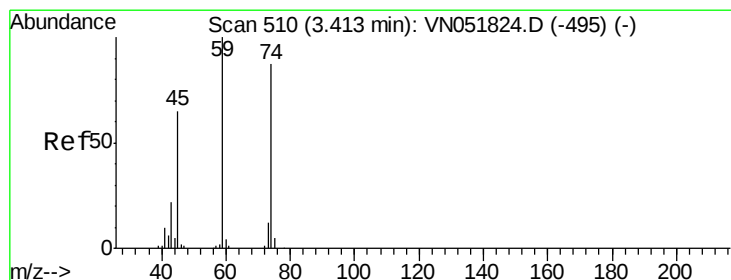
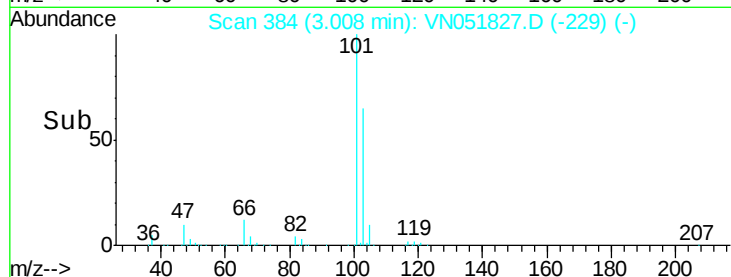
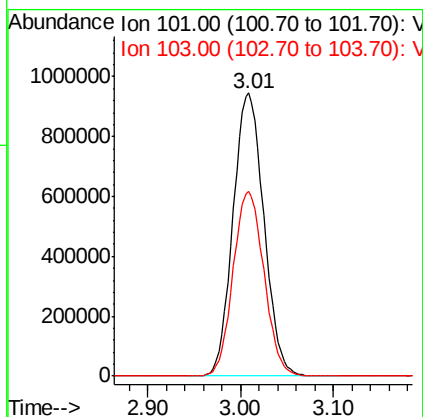
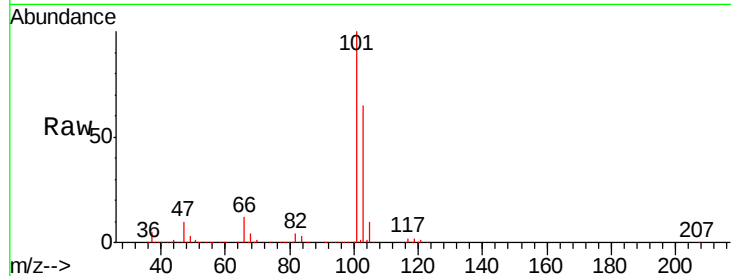
Trichlorofluoromethane
Concen: 150.81 ug/l
RT: 3.01 min Scan# 384
Delta R.T. -0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC150

Tgt Ion: 101 Resp: 2181965
Ion Ratio Lower Upper
101 100
103 65.1 54.8 82.2

Manual Integrations
APPROVED

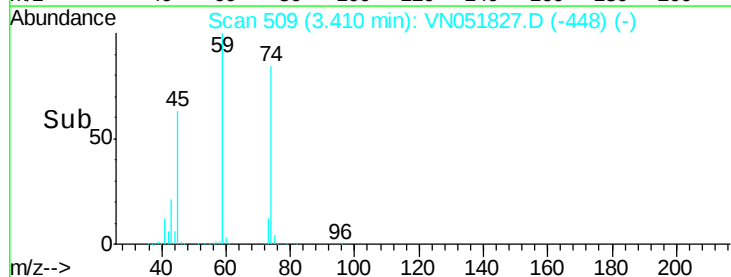
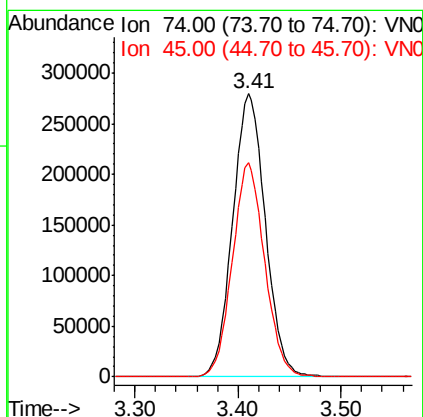
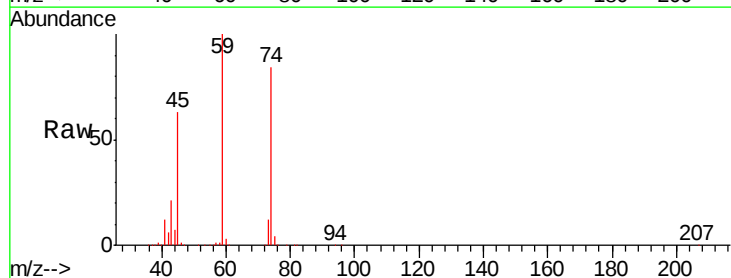
MMDadoda
10/15/2018 11:27:51 AM

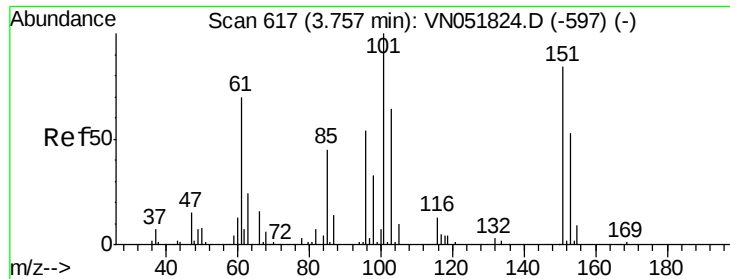


#8

Diethyl Ether
Concen: 145.51 ug/l
RT: 3.41 min Scan# 509
Delta R.T. -0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Tgt Ion: 74 Resp: 617211
Ion Ratio Lower Upper
74 100
45 74.5 20.7 186.5





#9

1,1,2-Trichlorotrifluoroethane

Concen: 143.01 ug/l m

RT: 3.76 min Scan# 617

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

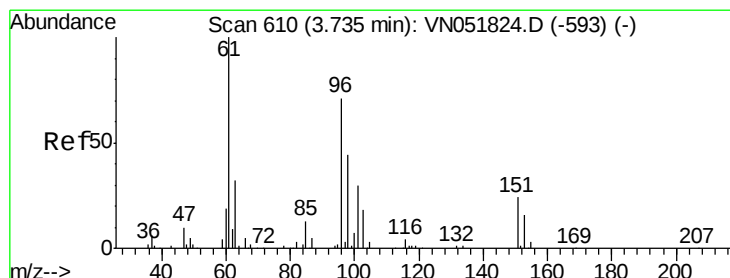
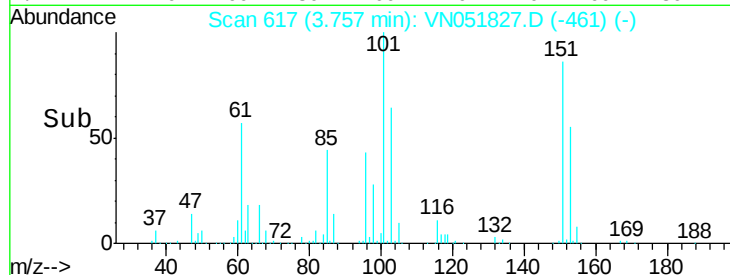
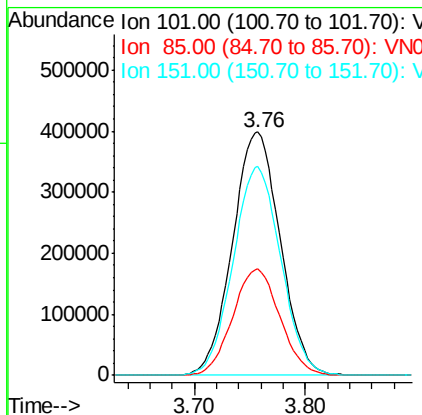
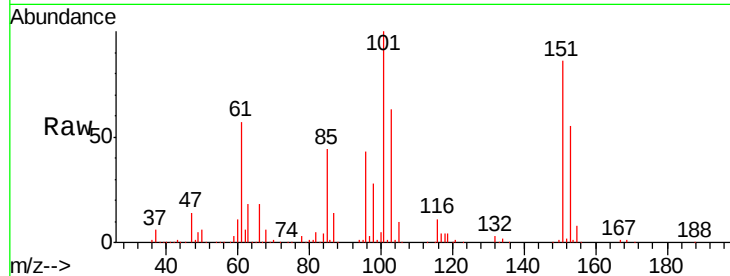
ClientSampleId :

VSTDIC150

Tgt Ion:	101	Resp:	1190715
Ion	Ratio	Lower	Upper
101	100		
85	0.0	0.0	46.0
151	0.0	0.0	82.2

Manual Integrations
APPROVED

MMDadoda
10/15/2018 11:27:51 AM



#10

1,1-Dichloroethene

Concen: 144.39 ug/l

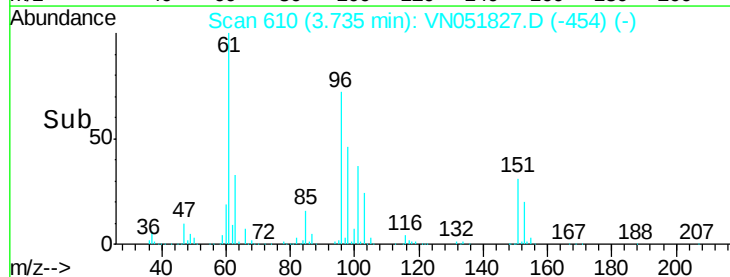
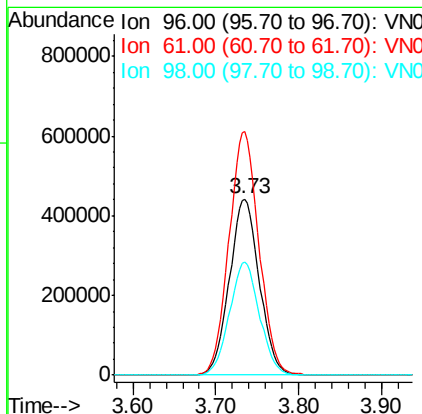
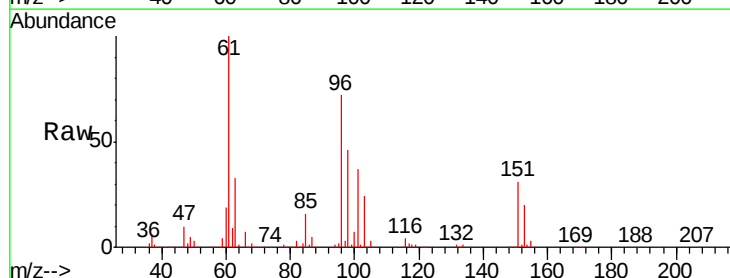
RT: 3.73 min Scan# 610

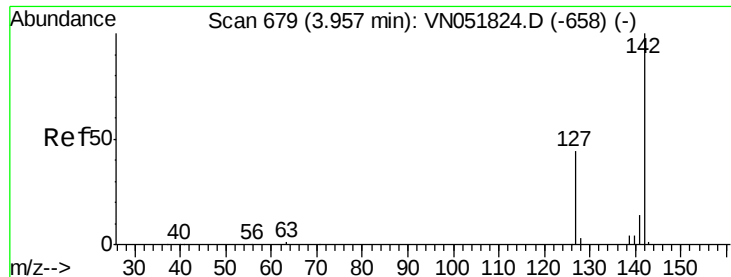
Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Tgt Ion:	96	Resp:	1109739
Ion	Ratio	Lower	Upper
96	100		
61	138.0	133.0	199.6
98	63.9	52.6	78.8





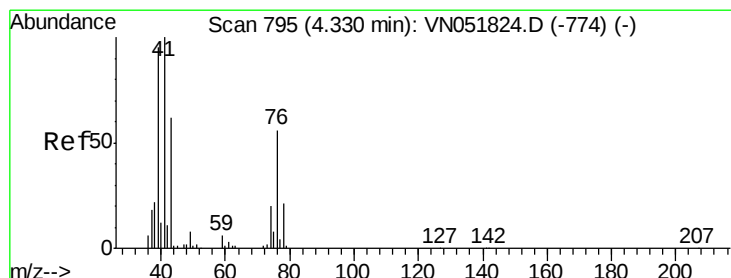
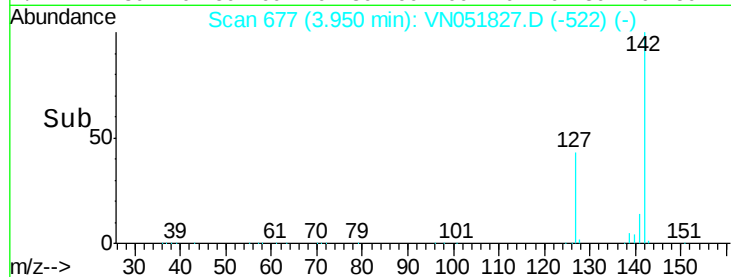
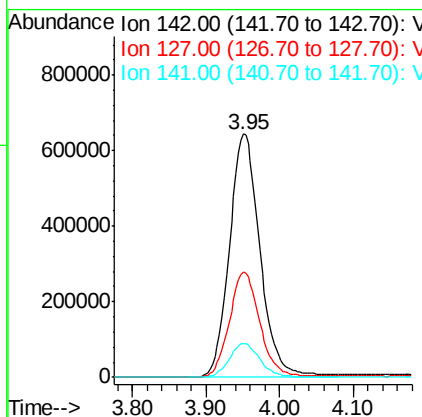
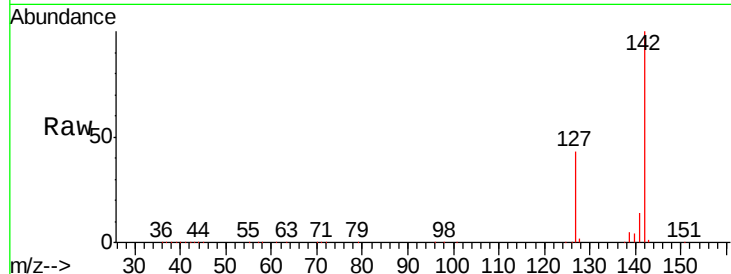
#11
Methyl Iodide
Concen: 173.86 ug/l
RT: 3.95 min Scan# 677
Delta R.T. -0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC150

Tgt Ion: 142 Resp: 1868488
Ion Ratio Lower Upper
142 100
127 43.5 19.7 59.0
141 13.9 6.3 18.9

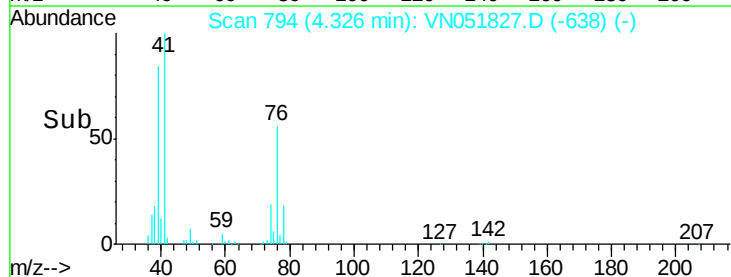
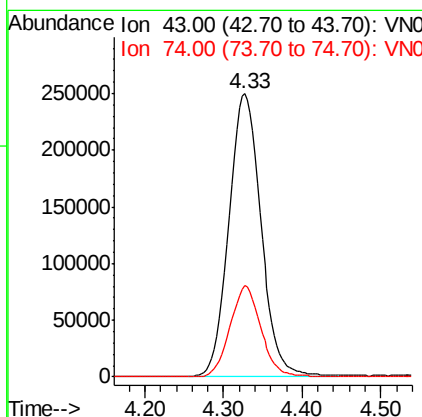
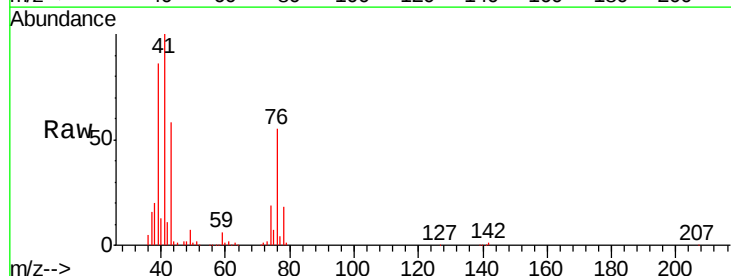
Manual Integrations
APPROVED

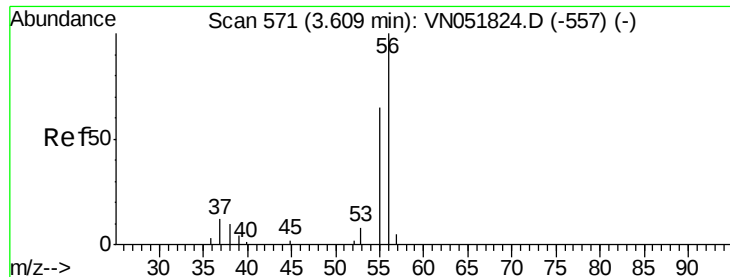
MMDadoda
10/15/2018 11:27:51 AM



#12
Methyl Acetate
Concen: 148.99 ug/l
RT: 4.33 min Scan# 794
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Tgt Ion: 43 Resp: 706667
Ion Ratio Lower Upper
43 100
74 32.2 21.8 32.6





#13

Acrolein

Concen: 704.58 ug/l

RT: 3.61 min Scan# 570

Delta R.T. -0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 56 Resp: 222588

Ion Ratio Lower Upper

56 100

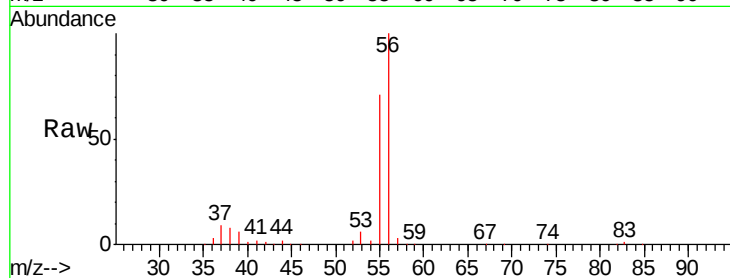
55 71.6 64.0 96.0

Manual Integrations

APPROVED

MMDadoda

10/15/2018 11:27:51 AM



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 55.00 (54.70 to 55.70): VN0

3.61

100000

80000

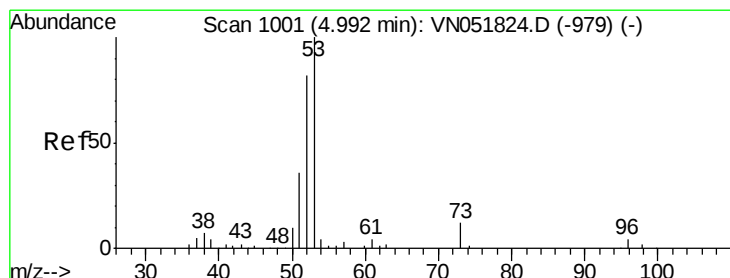
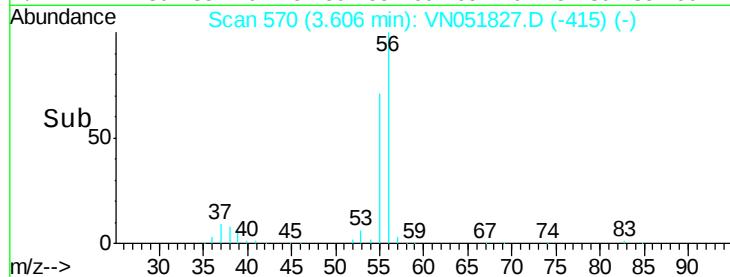
60000

40000

20000

0

Time-->



#14

Acrylonitrile

Concen: 759.07 ug/l

RT: 4.99 min Scan# 1000

Delta R.T. -0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

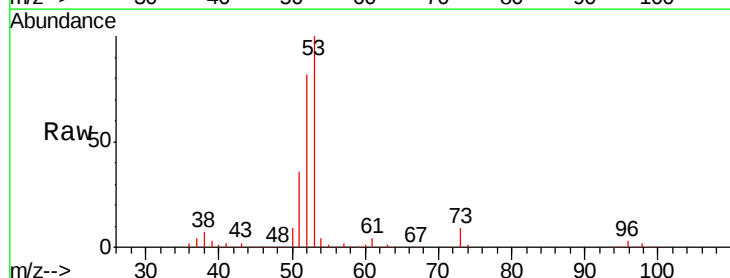
Tgt Ion: 53 Resp: 1603102

Ion Ratio Lower Upper

53 100

52 82.2 18.3 54.8#

51 37.3 19.7 59.1



Abundance Ion 53.00 (52.70 to 53.70): VN0

Ion 52.00 (51.70 to 52.70): VN0

Ion 51.00 (50.70 to 51.70): VN0

4.99

600000

500000

400000

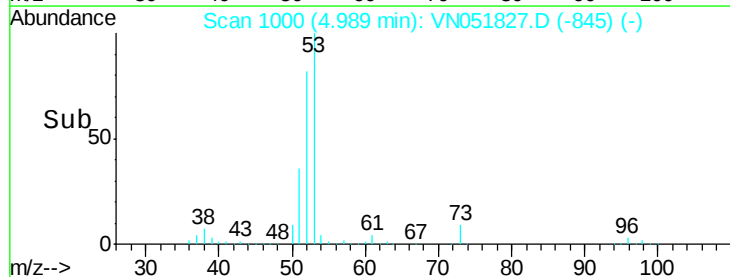
300000

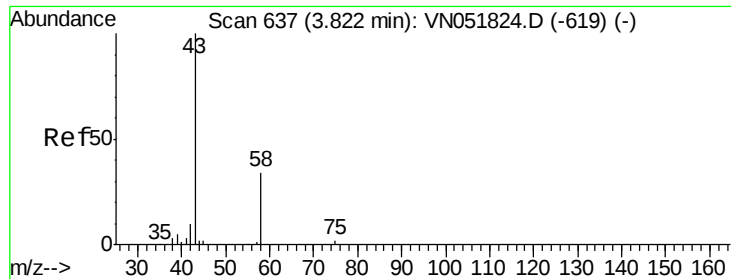
200000

100000

0

Time-->





#15

Acetone

Concen: 699.29 ug/l

RT: 3.82 min Scan# 637

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 58 Resp: 370978

Ion Ratio Lower Upper

58 100

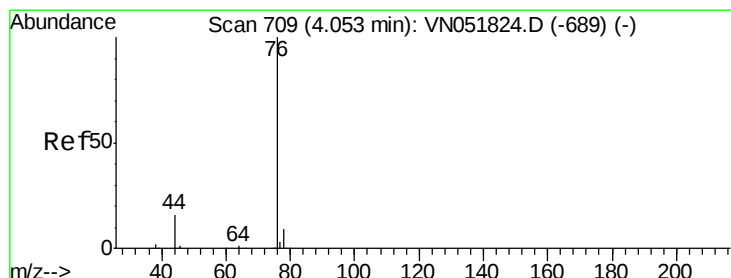
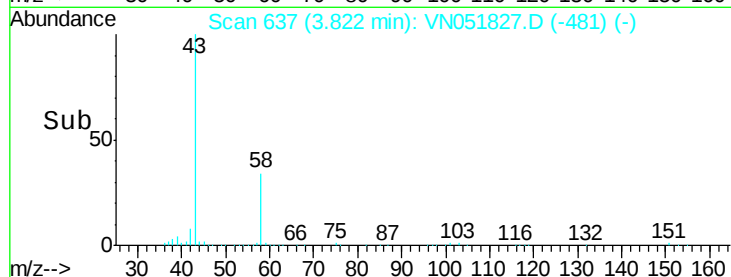
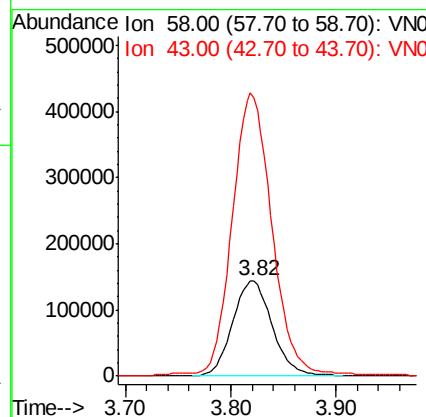
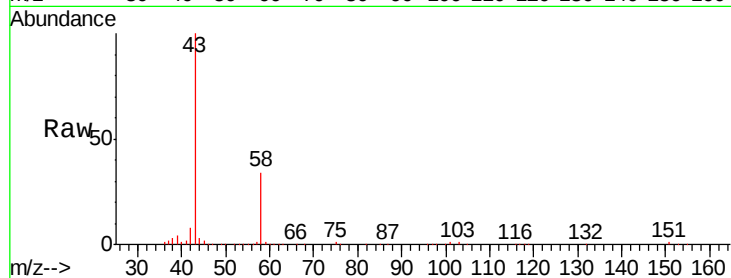
43 291.7 232.2 348.2

Manual Integrations

APPROVED

MMDadoda

10/15/2018 11:27:51 AM



#16

Carbon Disulfide

Concen: 156.01 ug/l

RT: 4.05 min Scan# 708

Delta R.T. -0.00 min

Lab File: VN051827.D

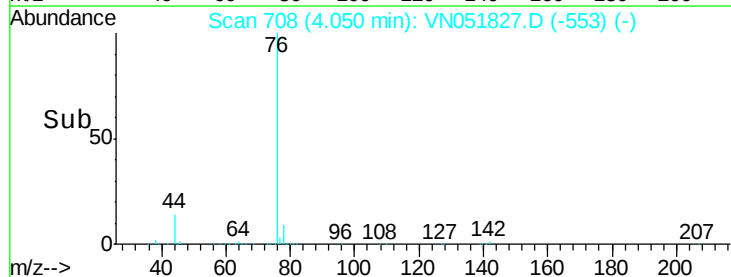
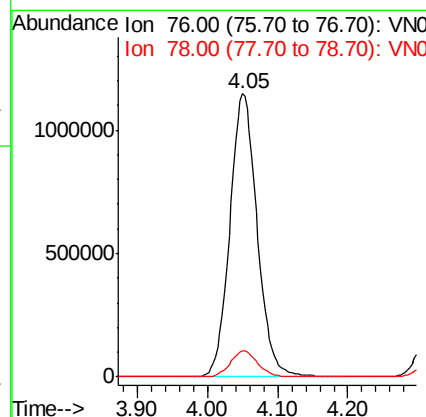
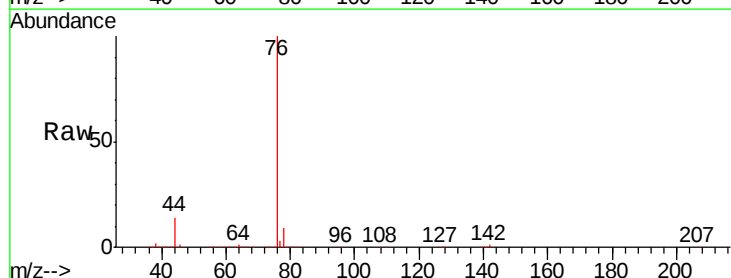
Acq: 12 Oct 2018 9:52

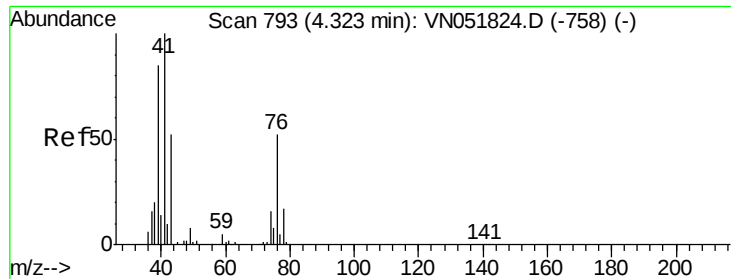
Tgt Ion: 76 Resp: 3100631

Ion Ratio Lower Upper

76 100

78 9.3 6.7 10.1





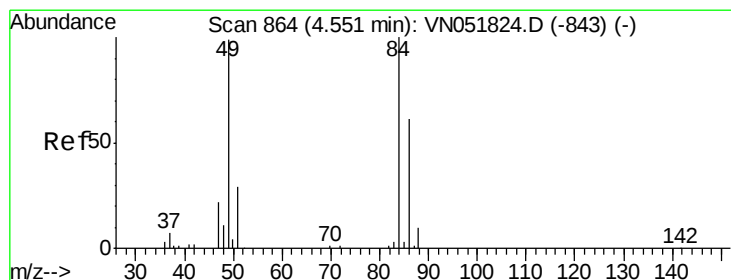
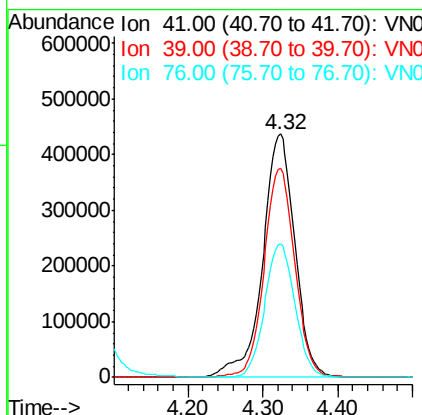
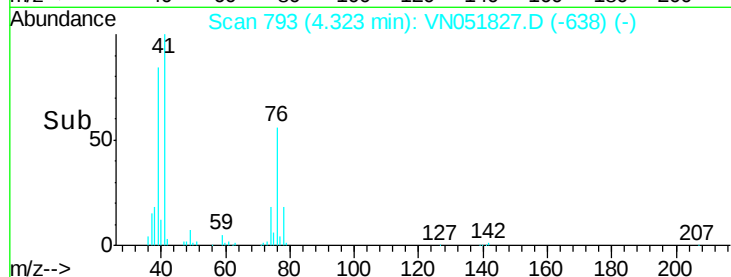
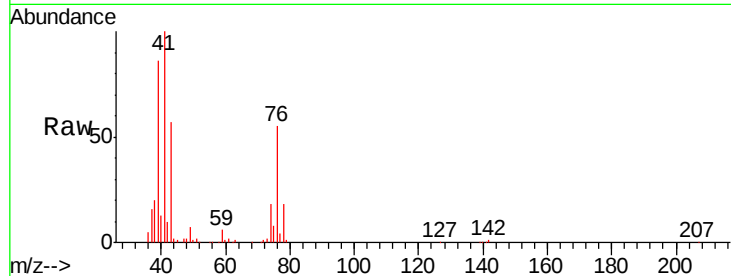
#17
 Allyl chloride
 Concen: 143.23 ug/l
 RT: 4.32 min Scan# 793
 Delta R.T. -0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC150

Tgt Ion: 41 Resp: 1308945
 Ion Ratio Lower Upper
 41 100
 39 85.7 32.6 97.8
 76 54.6 20.2 60.5

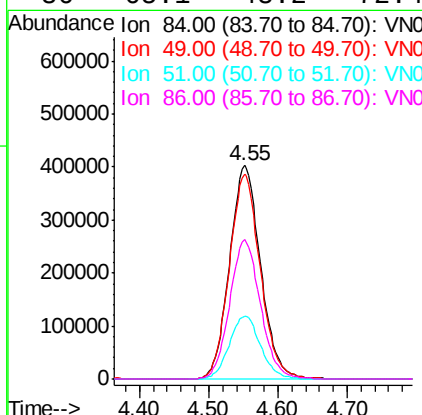
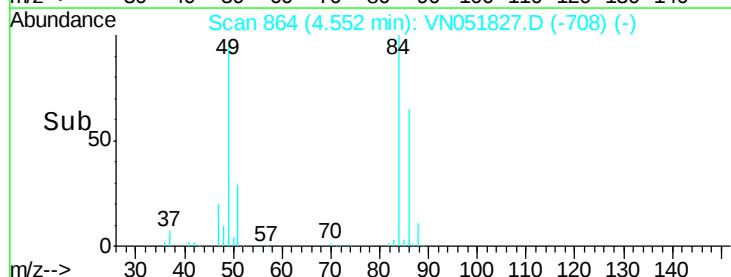
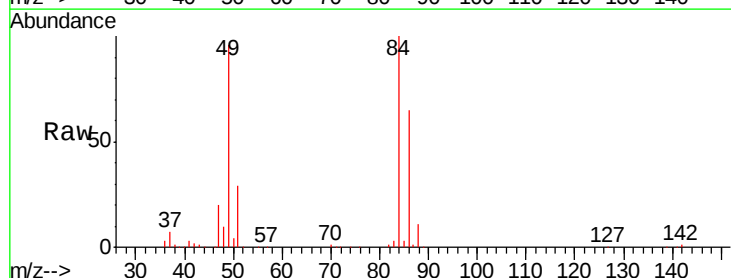
Manual Integrations
 APPROVED

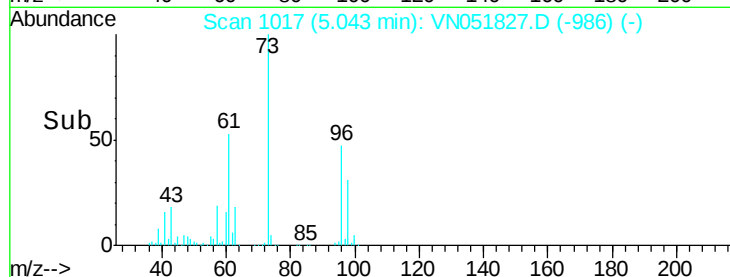
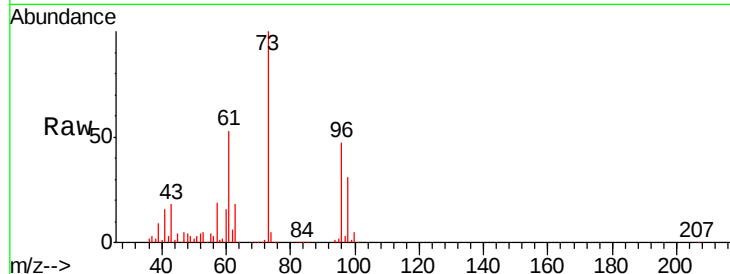
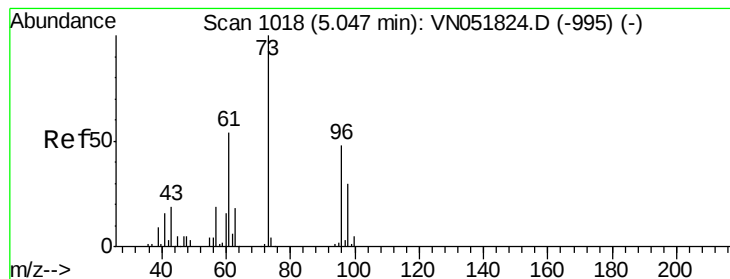
MMDadoda
 10/15/2018 11:27:51 AM



#18
 Methylene Chloride
 Concen: 146.72 ug/l
 RT: 4.55 min Scan# 864
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Tgt Ion: 84 Resp: 1256876
 Ion Ratio Lower Upper
 84 100
 49 95.8 91.6 137.4
 51 29.3 29.8 44.6#
 86 65.1 48.2 72.4





#19

trans-1,2-Dichloroethene

Concen: 148.87 ug/l

RT: 5.04 min Scan# 1017

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Tgt Ion:	96	Resp:	1298645
Ion	Ratio	Lower	Upper
96	100		
61	112.8	112.3	168.5
98	65.6	47.1	70.7

Instrument :

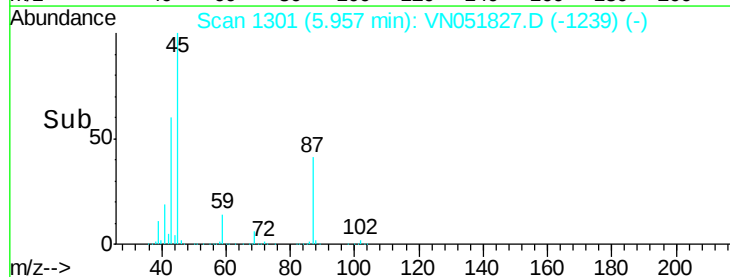
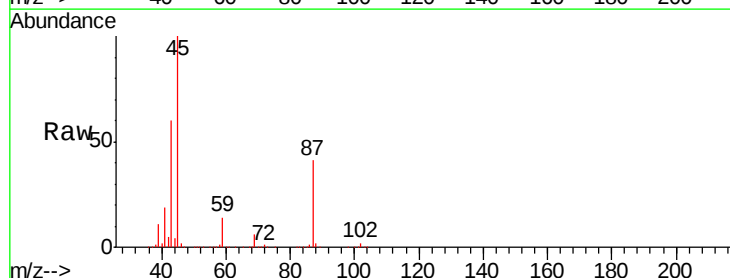
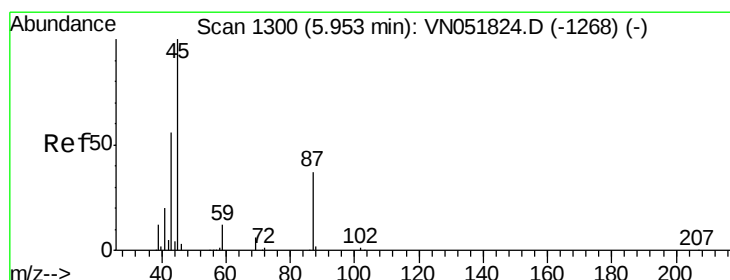
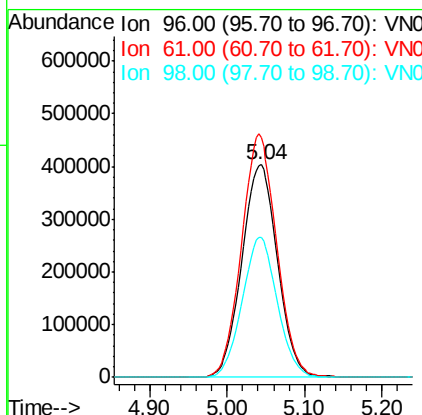
MSVOA_N

ClientSampleId :

VSTDIC150

Manual Integrations
APPROVED

MMDadoda
10/15/2018 11:27:51 AM



#20

Diisopropyl ether

Concen: 141.97 ug/l

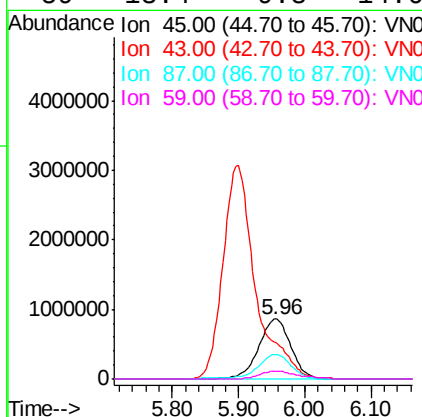
RT: 5.96 min Scan# 1301

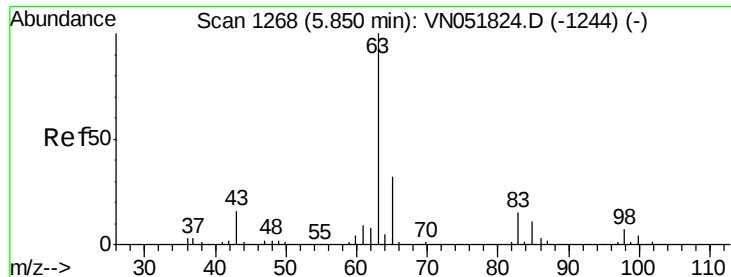
Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Tgt Ion:	45	Resp:	2894389
Ion	Ratio	Lower	Upper
45	100		
43	59.5	62.1	93.1#
87	40.8	19.9	29.9#
59	13.4	9.8	14.6





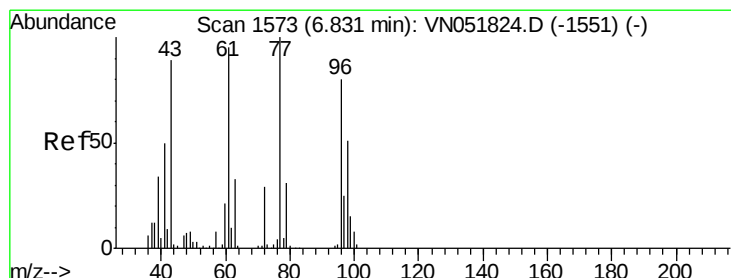
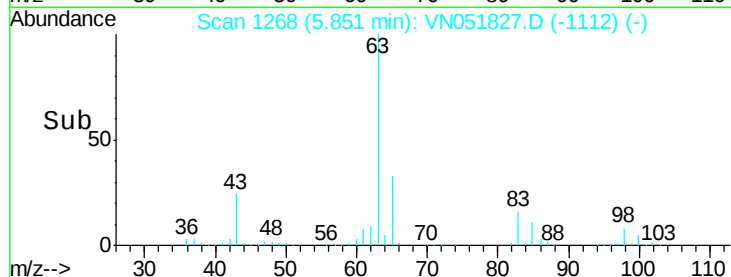
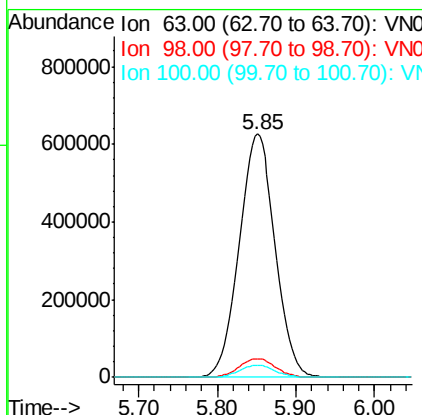
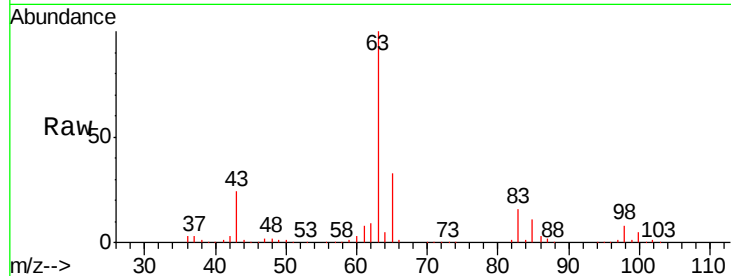
#21
 1,1-Dichloroethane
 Concen: 140.39 ug/l
 RT: 5.85 min Scan# 1268
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC150

Tgt Ion	Ratio	Lower	Upper
63	100		
98	7.7	4.1	12.3
100	5.0	1.6	4.7

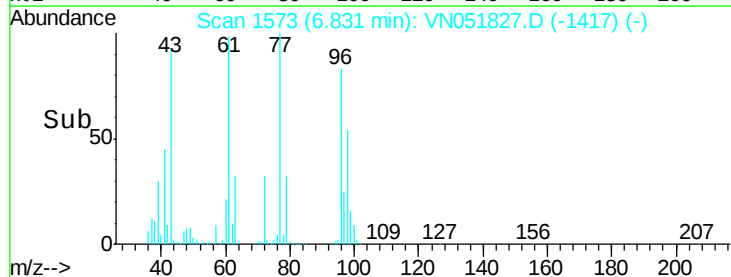
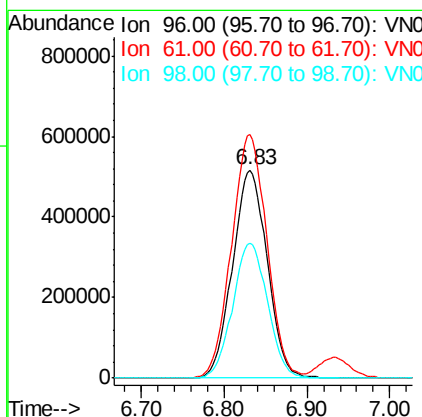
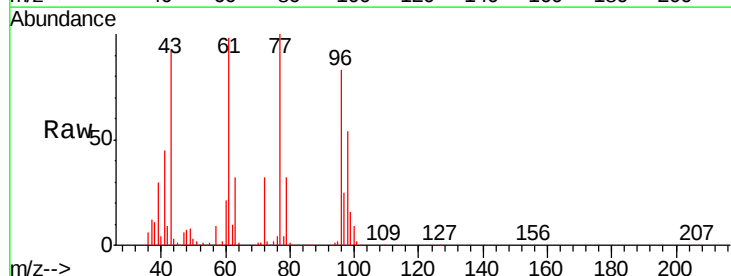
Manual Integrations
 APPROVED

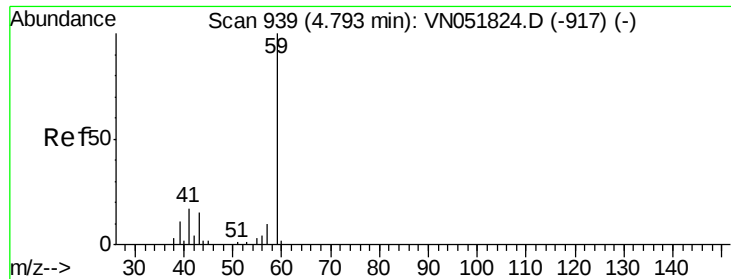
MMDadoda
 10/15/2018 11:27:51 AM



#22
 cis-1,2-Dichloroethene
 Concen: 145.88 ug/l
 RT: 6.83 min Scan# 1573
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Tgt Ion	Ratio	Lower	Upper
96	100		
61	119.2	124.5	186.7
98	65.3	51.9	77.9





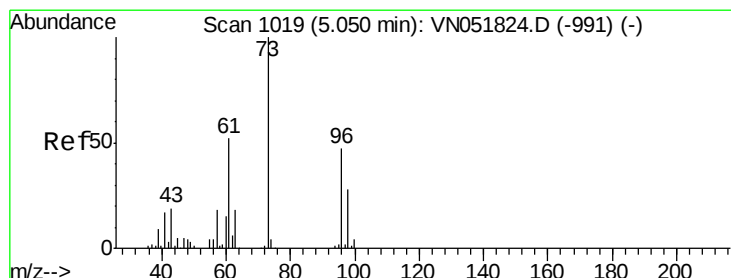
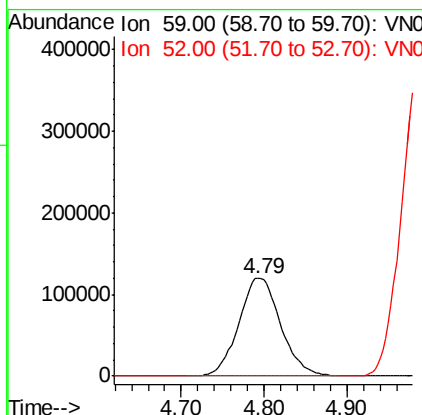
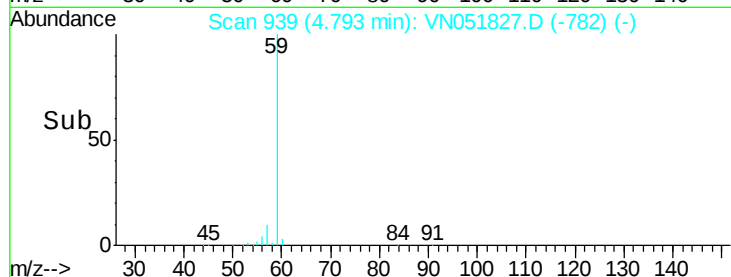
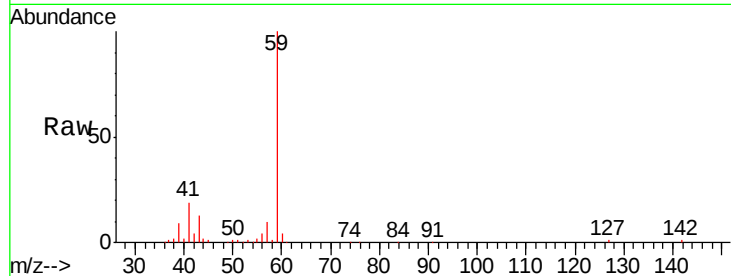
#23
 tert-Butyl Alcohol
 Concen: 759.58 ug/l
 RT: 4.79 min Scan# 939
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC150

Tgt Ion: 59 Resp: 422436
 Ion Ratio Lower Upper
 59 100
 52 0.0 0.0 0.0#

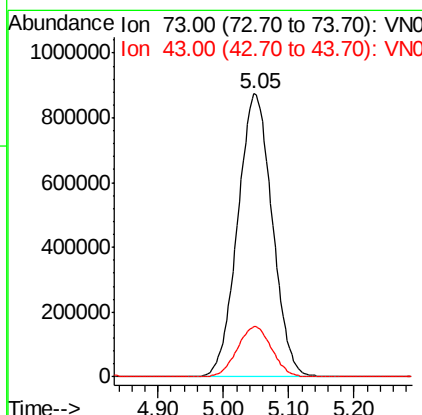
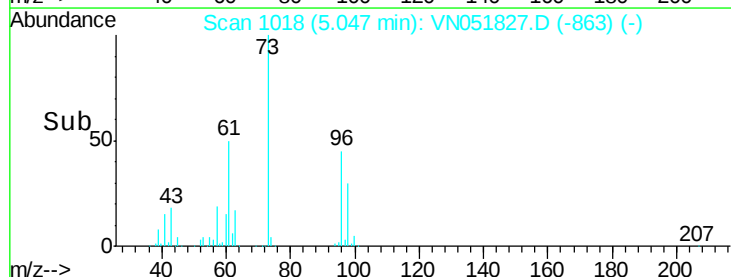
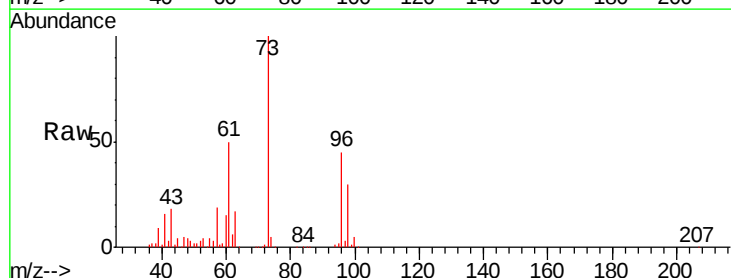
Manual Integrations
 APPROVED

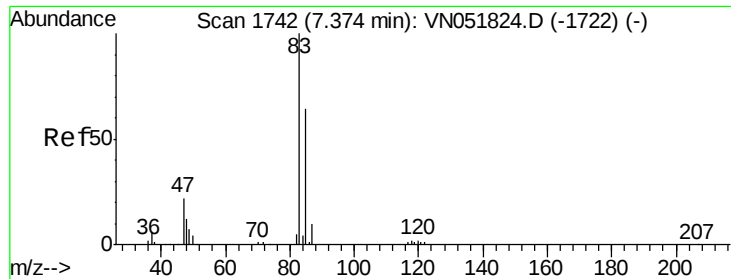
MMDadoda
 10/15/2018 11:27:51 AM



#24
 Methyl tert-Butyl Ether
 Concen: 145.43 ug/l
 RT: 5.05 min Scan# 1018
 Delta R.T. -0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Tgt Ion: 73 Resp: 3215800
 Ion Ratio Lower Upper
 73 100
 43 17.7 5.4 8.0#





#25

Chloroform

Concen: 144.33 ug/l

RT: 7.37 min Scan# 1742

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 83 Resp: 2431522

Ion Ratio Lower Upper

83 100

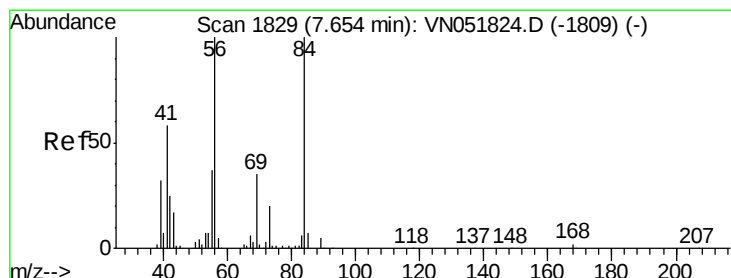
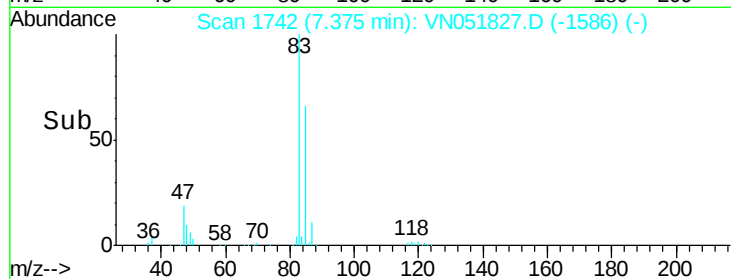
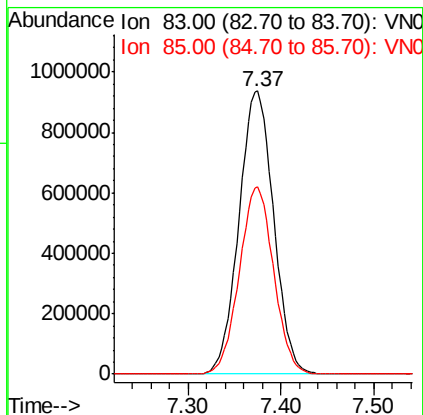
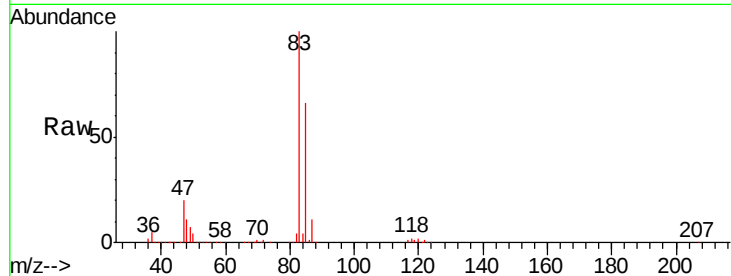
85 66.2 54.6 82.0

Manual Integrations

APPROVED

MMDadoda

10/15/2018 11:27:51 AM



#26

Cyclohexane

Concen: 137.51 ug/l

RT: 7.65 min Scan# 1829

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

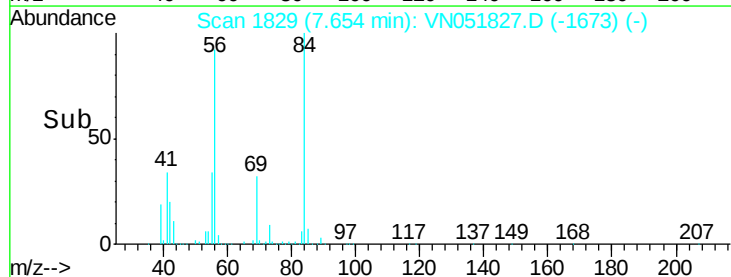
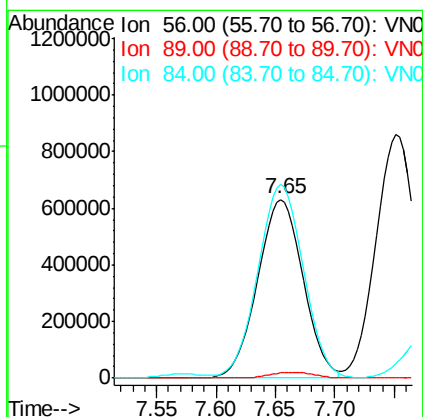
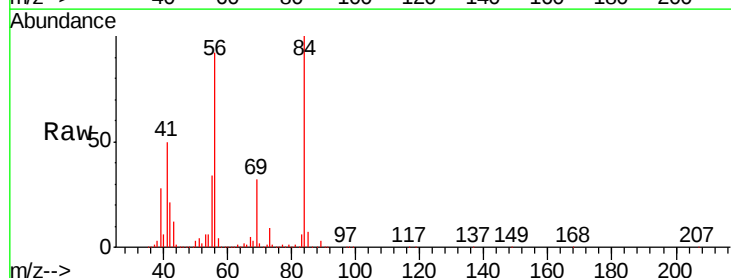
Tgt Ion: 56 Resp: 1670821

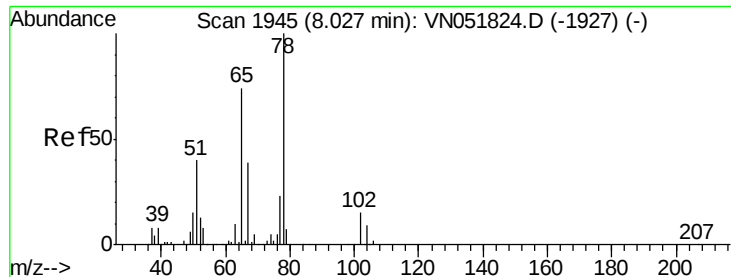
Ion Ratio Lower Upper

56 100

89 3.3 1.5 2.3#

84 108.7 64.2 96.4#





#27

1,2-Dichloroethane-d4

Concen: 137.51 ug/l

RT: 8.03 min Scan# 1946

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 65 Resp: 281343

Ion Ratio Lower Upper

65 100

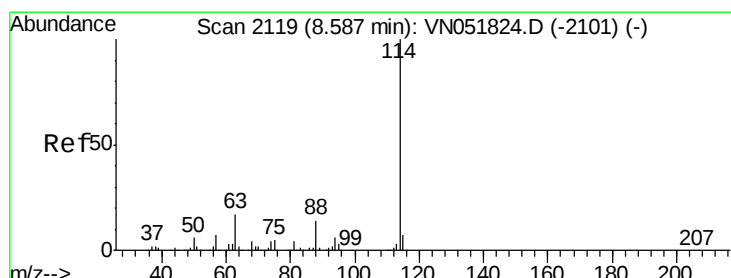
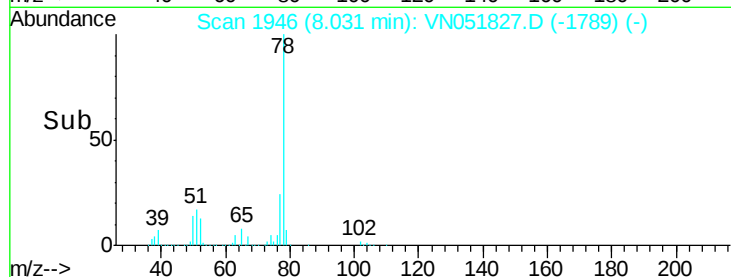
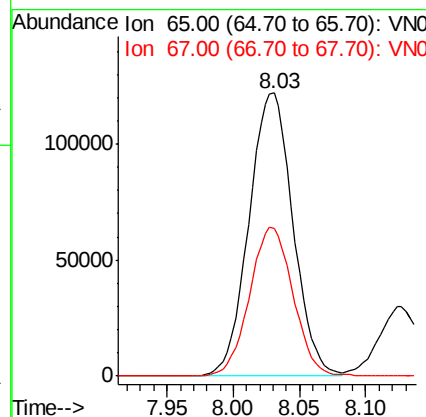
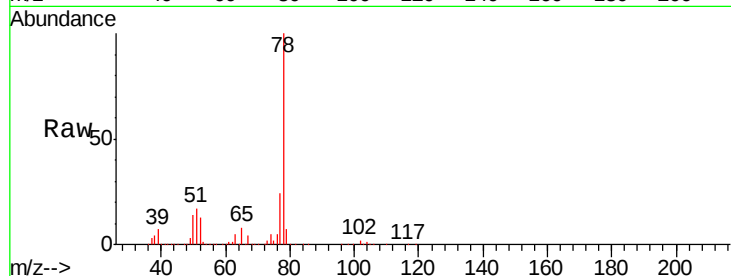
67 51.9 41.8 62.8

Manual Integrations

APPROVED

MMDadoda

10/15/2018 11:27:51 AM



#28

1,4-Difluorobenzene

Concen: 30.00 ug/l

RT: 8.59 min Scan# 2119

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

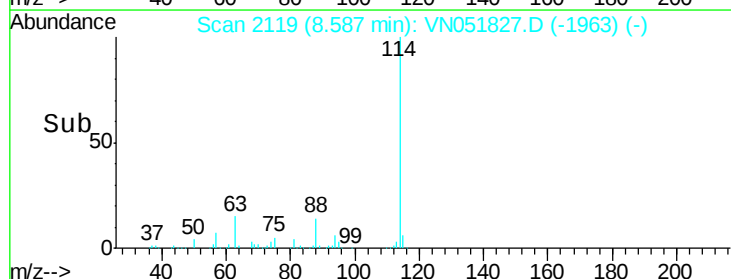
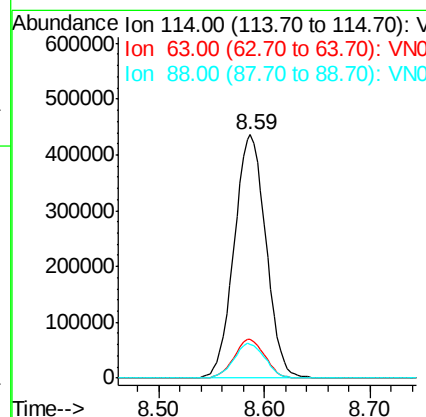
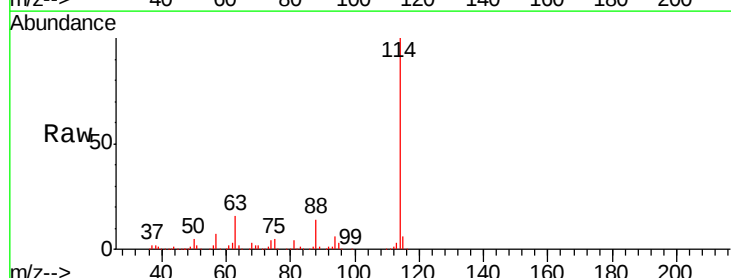
Tgt Ion: 114 Resp: 906239

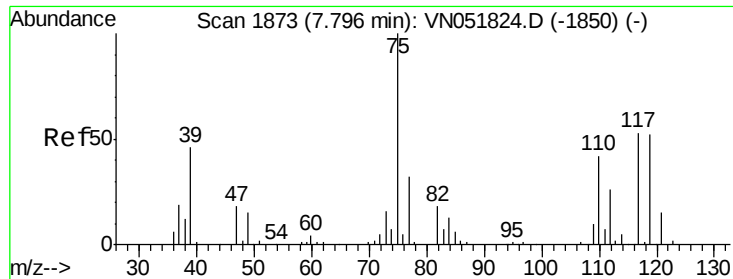
Ion Ratio Lower Upper

114 100

63 15.7 16.2 24.2#

88 14.1 12.2 18.4





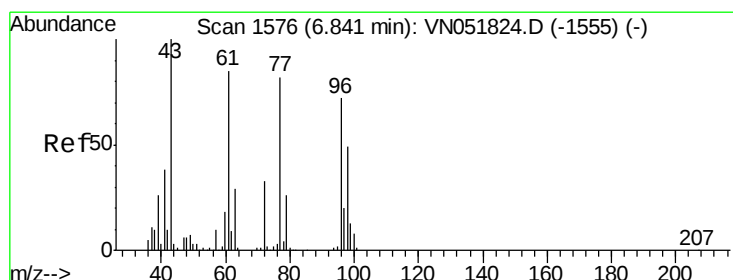
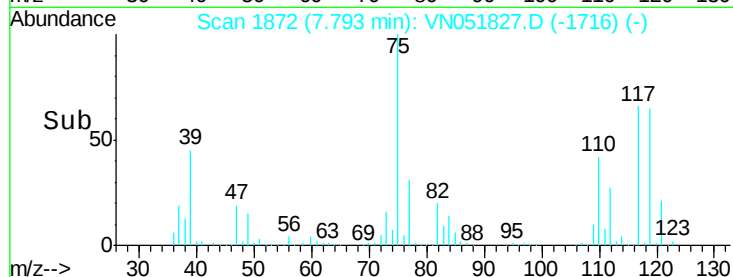
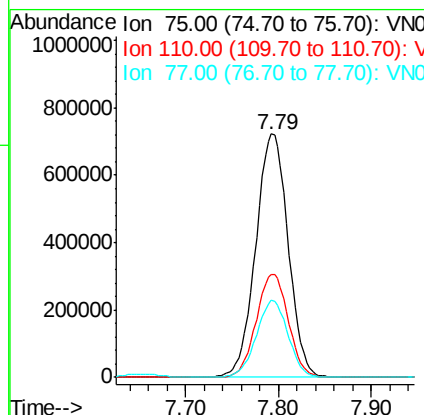
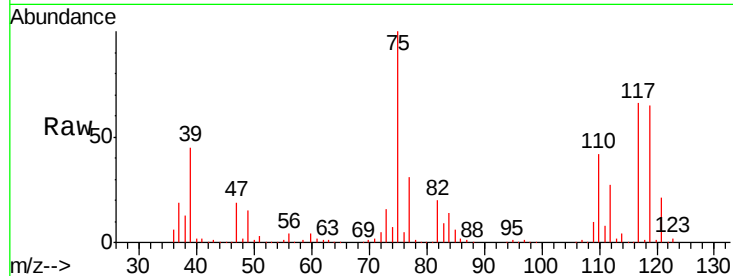
#29
 1,1-Dichloropropene
 Concen: 150.31 ug/l
 RT: 7.79 min Scan# 1872
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC150

Tgt Ion: 75 Resp: 1755159
 Ion Ratio Lower Upper
 75 100
 110 42.0 0.0 70.8
 77 31.1 0.0 61.6

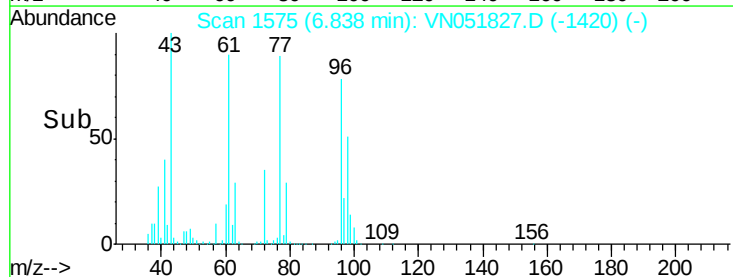
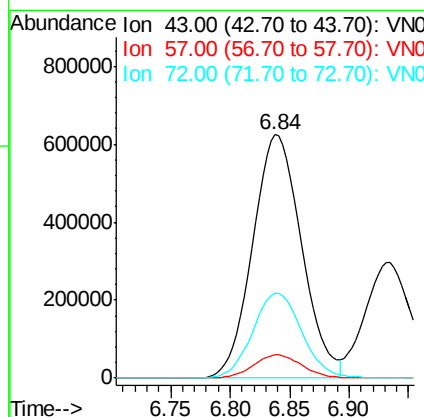
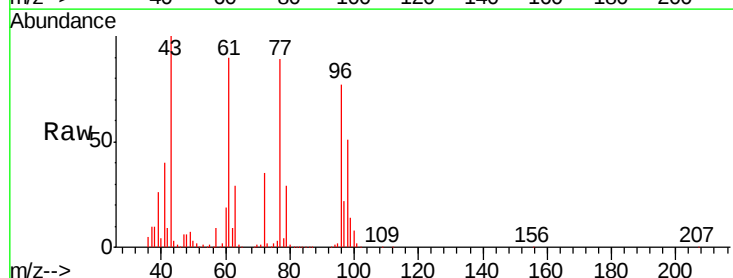
Manual Integrations
 APPROVED

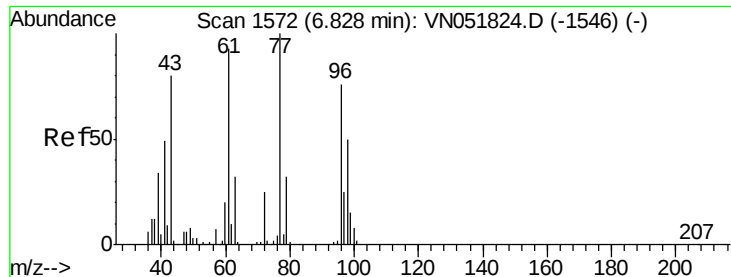
MMDadoda
 10/15/2018 11:27:51 AM



#30
 2-Butanone
 Concen: 721.52 ug/l
 RT: 6.84 min Scan# 1575
 Delta R.T. -0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Tgt Ion: 43 Resp: 1775125
 Ion Ratio Lower Upper
 43 100
 57 9.5 4.5 6.7#
 72 35.3 21.5 32.3#





#31

2,2-Dichloropropane

Concen: 145.37 ug/l

RT: 6.83 min Scan# 1572

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 77 Resp: 2010031

Ion Ratio Lower Upper

77 100

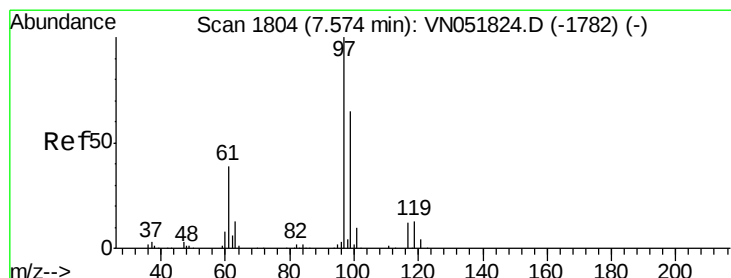
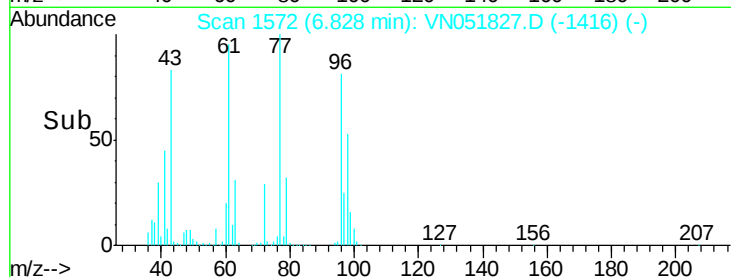
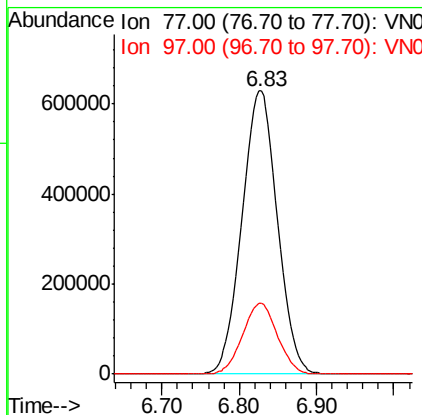
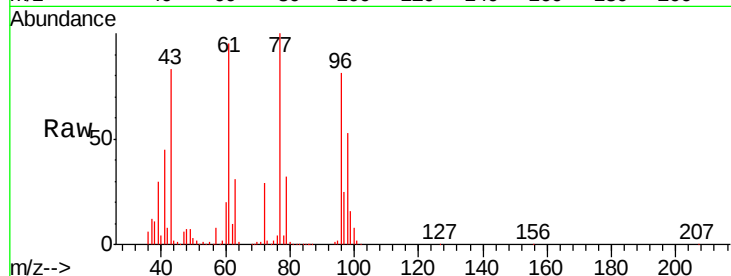
97 24.6 12.0 18.0#

Manual Integrations

APPROVED

MMDadoda

10/15/2018 11:27:51 AM



#32

1,1,1-Trichloroethane

Concen: 151.68 ug/l

RT: 7.57 min Scan# 1803

Delta R.T. -0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

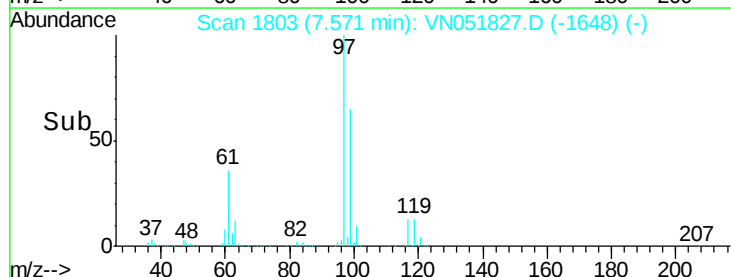
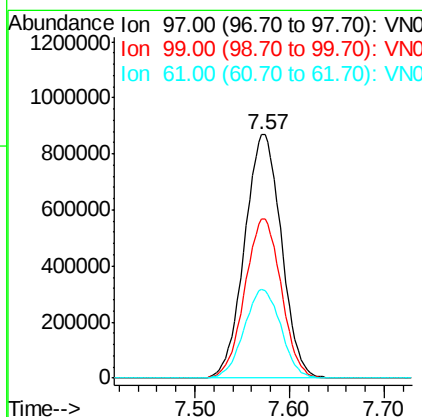
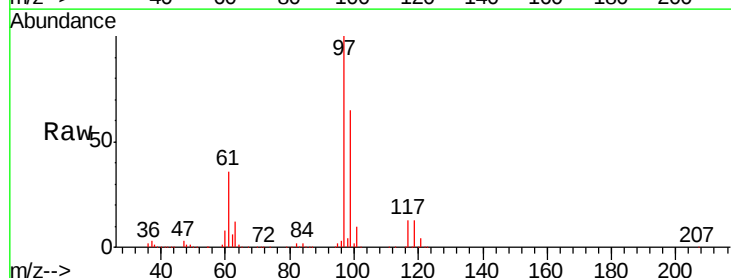
Tgt Ion: 97 Resp: 2343847

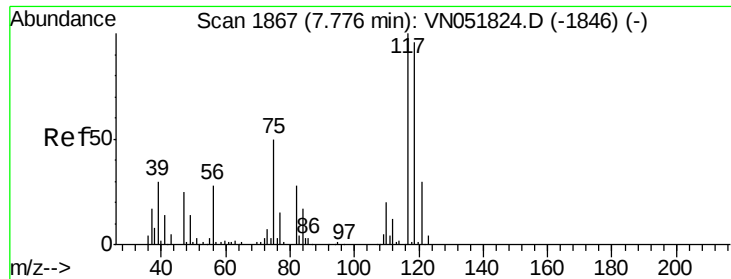
Ion Ratio Lower Upper

97 100

99 64.8 51.6 77.4

61 36.5 37.4 56.0#





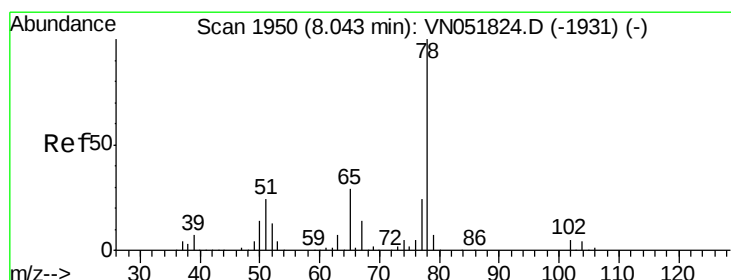
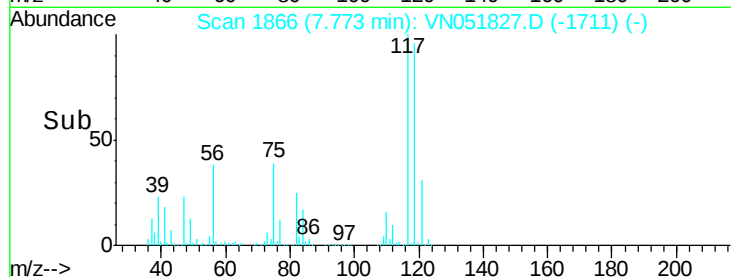
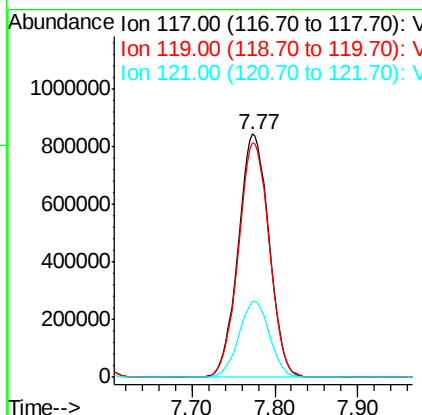
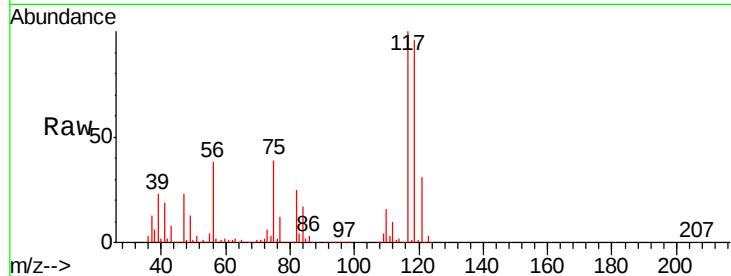
#33
Carbon Tetrachloride
Concen: 156.56 ug/l
RT: 7.77 min Scan# 1866
Delta R.T. -0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Instrument :
MSVOA_N
ClientSampled :
VSTDIC150

Tgt Ion: 117 Resp: 2174707
Ion Ratio Lower Upper
117 100
119 96.4 85.1 127.7
121 31.1 24.2 36.2

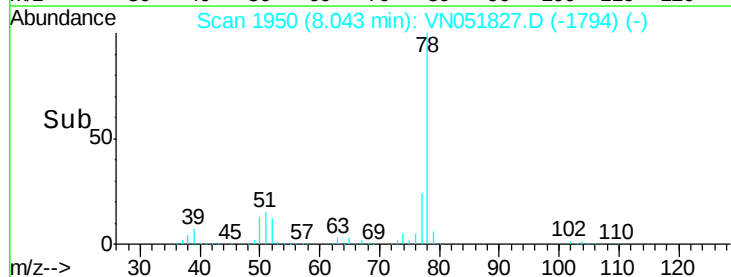
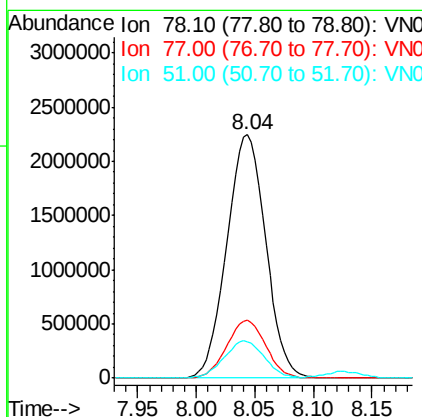
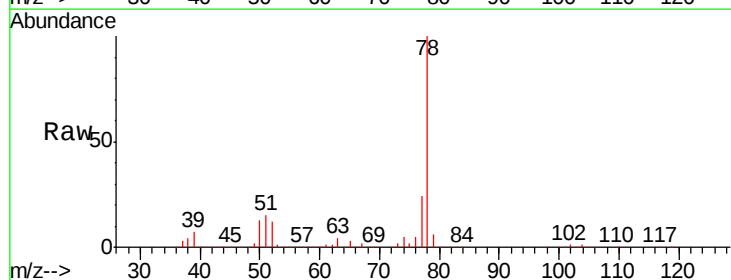
Manual Integrations
APPROVED

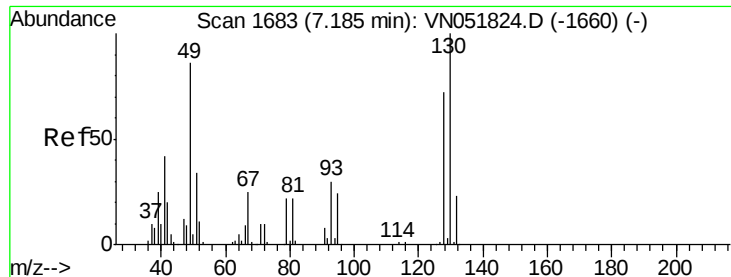
MMDadoda
10/15/2018 11:27:51 AM



#34
Benzene
Concen: 149.31 ug/l m
RT: 8.04 min Scan# 1950
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Tgt Ion: 78 Resp: 5163962
Ion Ratio Lower Upper
78 100
77 23.6 18.8 28.2
51 15.0 46.2 69.4#





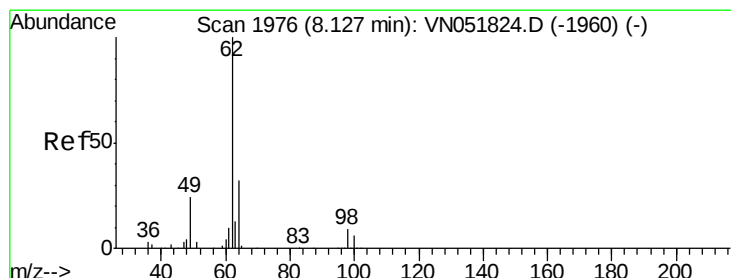
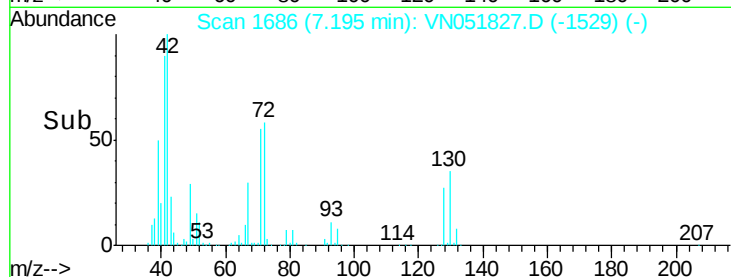
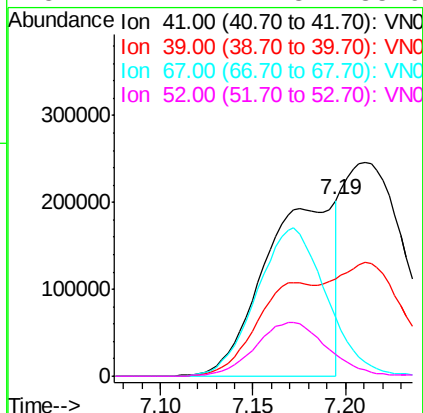
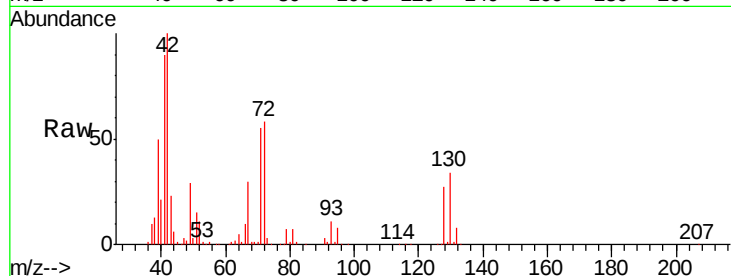
#35
Methacrylonitrile
Concen: 170.40 ug/l m
RT: 7.19 min Scan# 1686
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC150

Tgt Ion	Ratio	Lower	Upper
41	100		
39	55.6	22.6	67.7
67	33.8	28.9	86.8
52	12.4	11.3	33.9

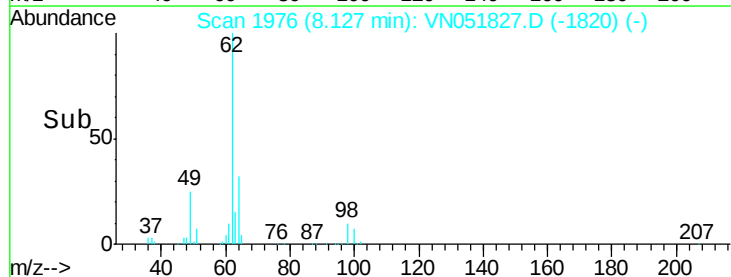
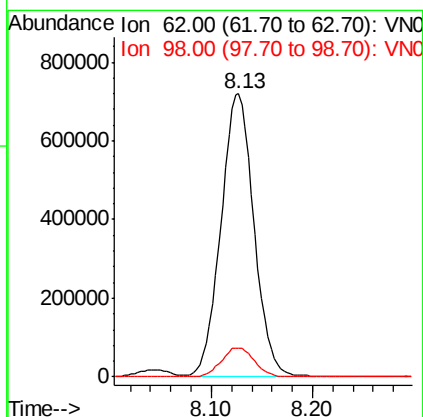
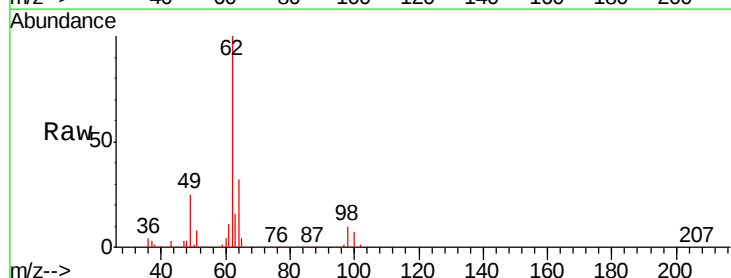
Manual Integrations
APPROVED

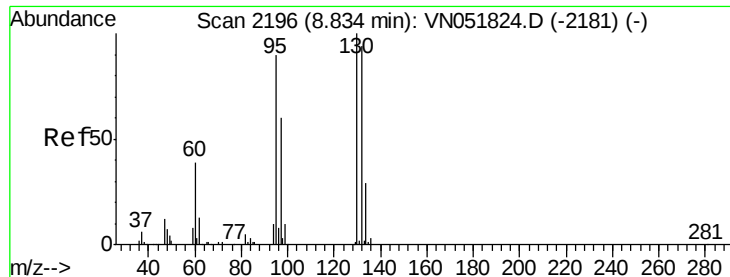
MMDadoda
10/15/2018 11:27:51 AM



#36
1,2-Dichloroethane
Concen: 147.56 ug/l m
RT: 8.13 min Scan# 1976
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Tgt Ion	Ratio	Lower	Upper
62	100		
98	0.0	6.9	10.3#





#37

Trichloroethene

Concen: 153.07 ug/l

RT: 8.83 min Scan# 2196

Delta R.T. -0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion:130 Resp: 1635182

Ion Ratio Lower Upper

130 100

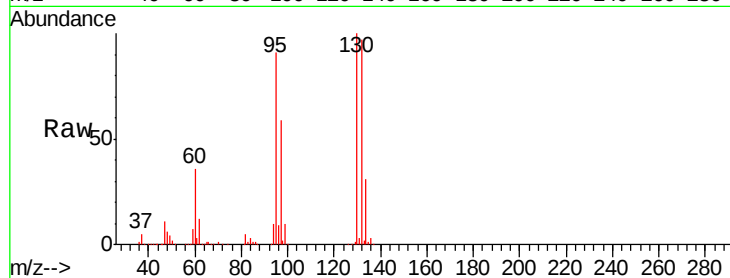
95 90.7 76.4 114.6

Manual Integrations

APPROVED

MMDadoda

10/15/2018 11:27:51 AM



Abundance Ion 129.90 (129.60 to 130.60): V

Ion 94.90 (94.60 to 95.60): VN

8.83

800000

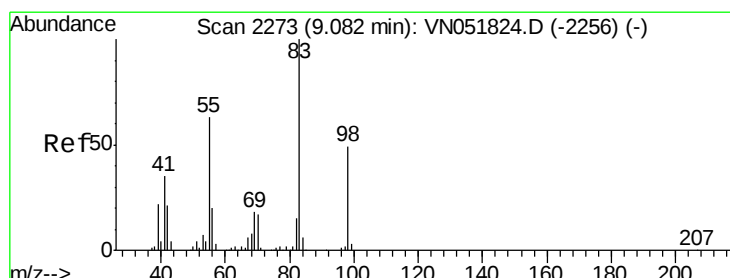
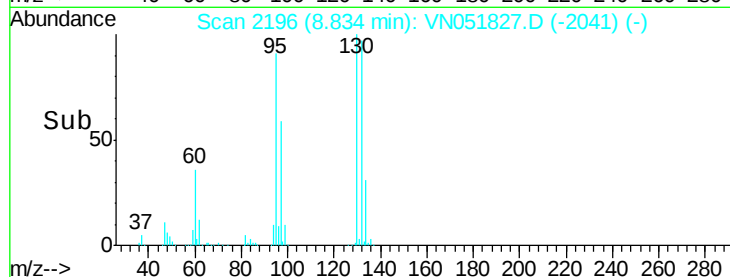
600000

400000

200000

0

Time-->



#38

Methylcyclohexane

Concen: 149.64 ug/l

RT: 9.08 min Scan# 2273

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

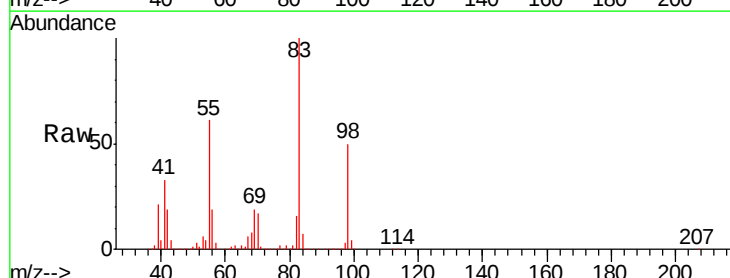
Tgt Ion: 83 Resp: 2243129

Ion Ratio Lower Upper

83 100

55 60.4 43.0 129.2

98 49.3 21.3 63.7



Abundance Ion 83.00 (82.70 to 83.70): VN

Ion 55.00 (54.70 to 55.70): VN

Ion 98.00 (97.70 to 98.70): VN

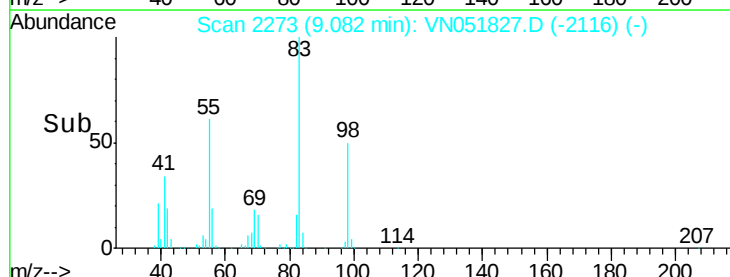
9.08

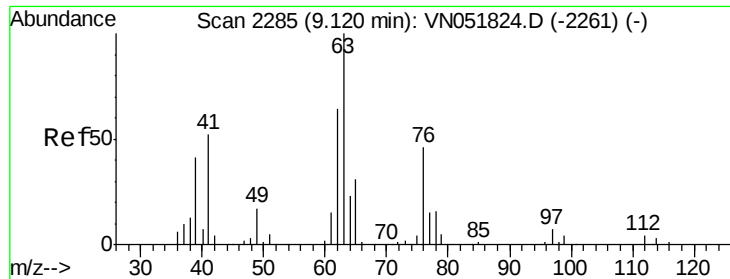
1000000

500000

0

Time-->





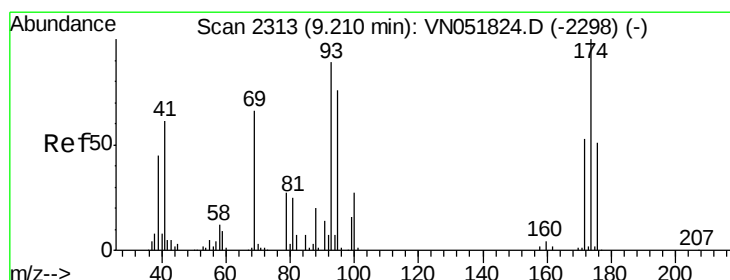
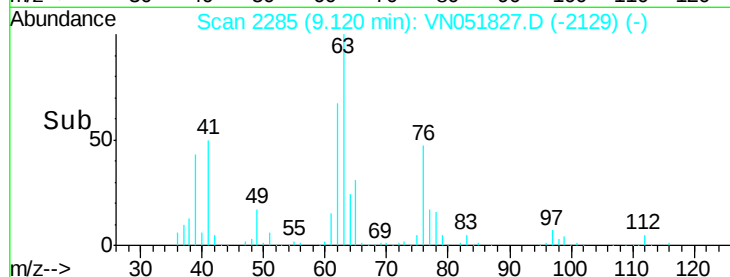
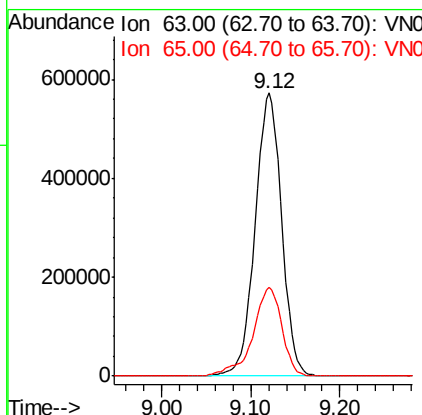
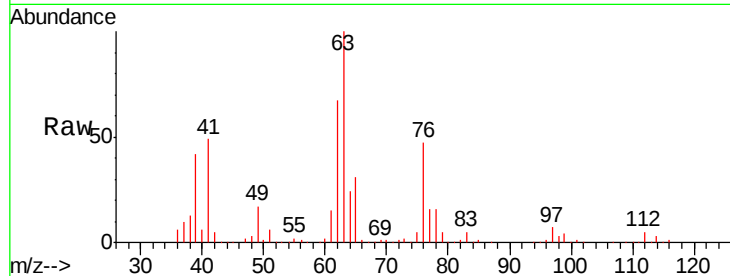
#39
 1,2-Dichloropropane
 Concen: 144.97 ug/l
 RT: 9.12 min Scan# 2285
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC150

Tgt Ion: 63 Resp: 1187651
 Ion Ratio Lower Upper
 63 100
 65 31.3 23.2 34.8

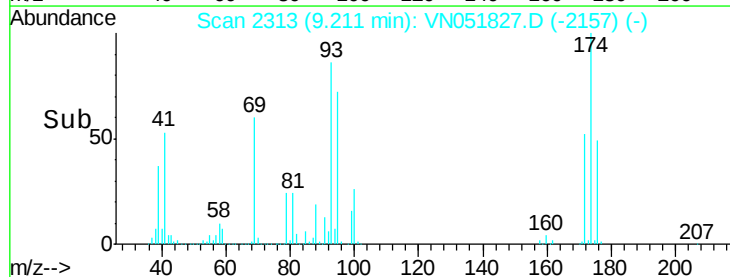
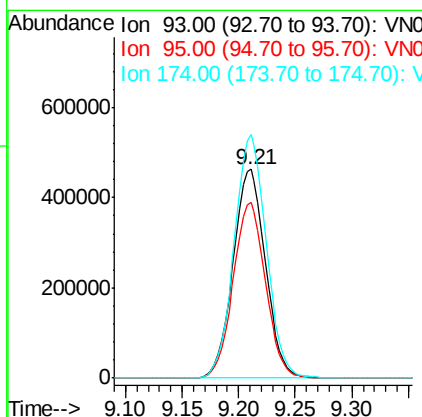
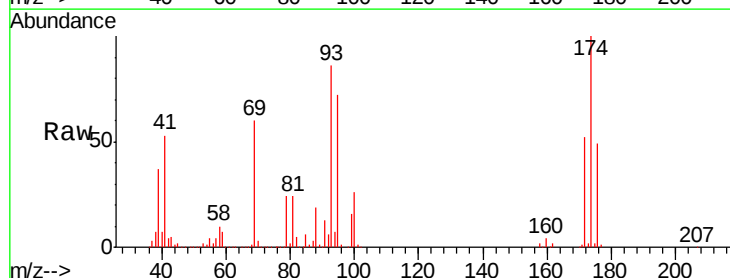
Manual Integrations
 APPROVED

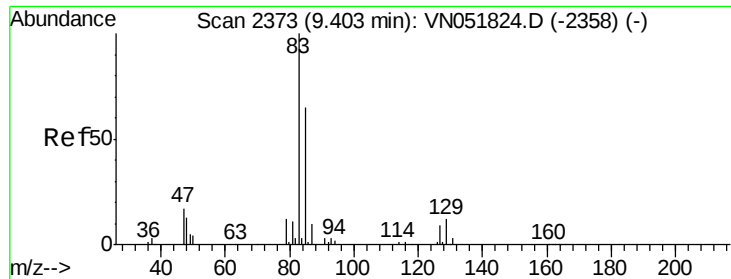
MMDadoda
 10/15/2018 11:27:51 AM



#40
 Dibromomethane
 Concen: 154.05 ug/l
 RT: 9.21 min Scan# 2313
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Tgt Ion: 93 Resp: 925370
 Ion Ratio Lower Upper
 93 100
 95 83.8 0.0 162.0
 174 115.5 0.0 214.0





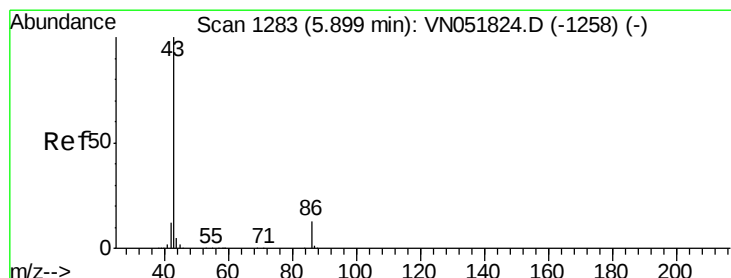
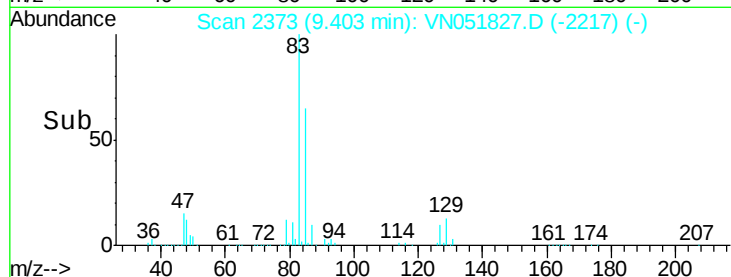
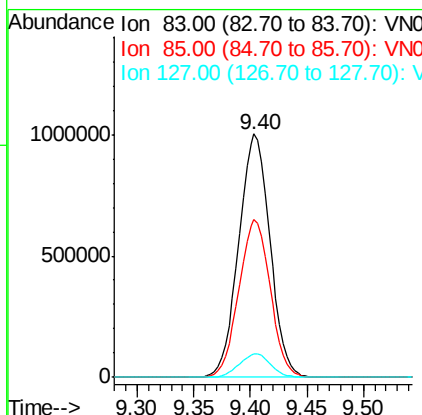
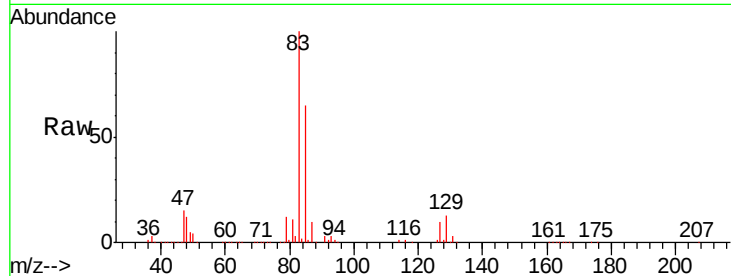
#41
 Bromodichloromethane
 Concen: 156.56 ug/l
 RT: 9.40 min Scan# 2373
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC150

Tgt Ion: 83 Resp: 1936083
 Ion Ratio Lower Upper
 83 100
 85 64.6 55.7 83.5
 127 9.8 8.2 12.4

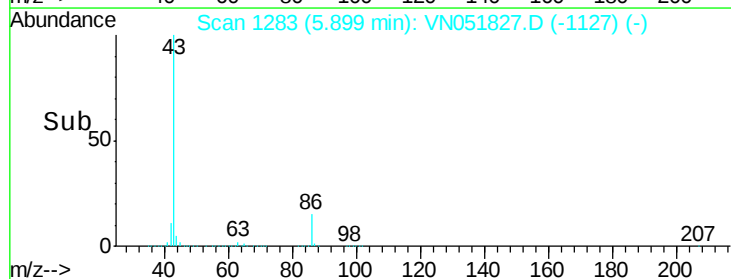
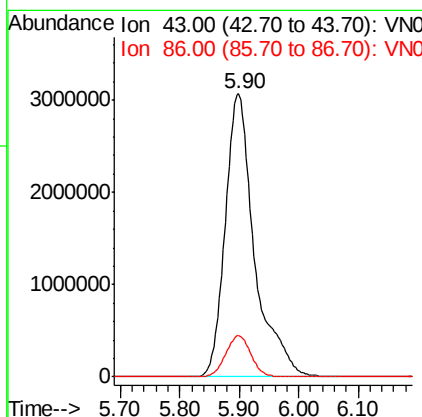
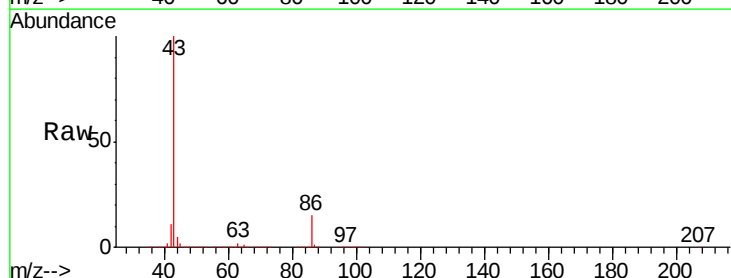
Manual Integrations
 APPROVED

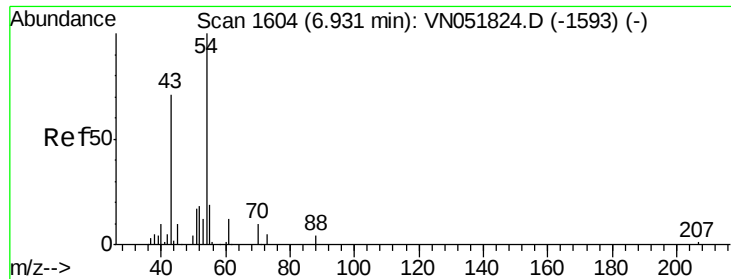
MMDadoda
 10/15/2018 11:27:51 AM



#42
 Vinyl Acetate
 Concen: 766.71 ug/l
 RT: 5.90 min Scan# 1283
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Tgt Ion: 43 Resp: 10491218
 Ion Ratio Lower Upper
 43 100
 86 12.6 6.5 9.7#





#43

Ethyl Acetate

Concen: 153.47 ug/l

RT: 6.93 min Scan# 1604

Delta R.T. -0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 43 Resp: 809894

Ion Ratio Lower Upper

43 100

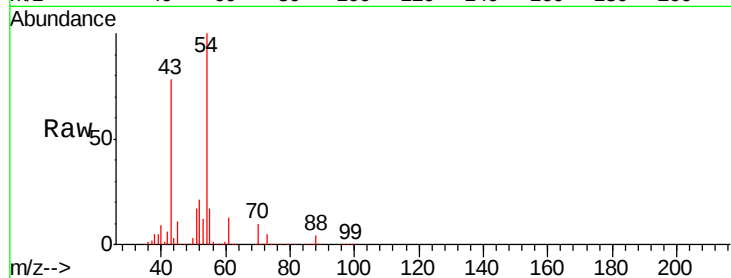
45 13.1 11.0 16.6

Manual Integrations

APPROVED

MMDadoda

10/15/2018 11:27:51 AM



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 45.00 (44.70 to 45.70): VN0

600000

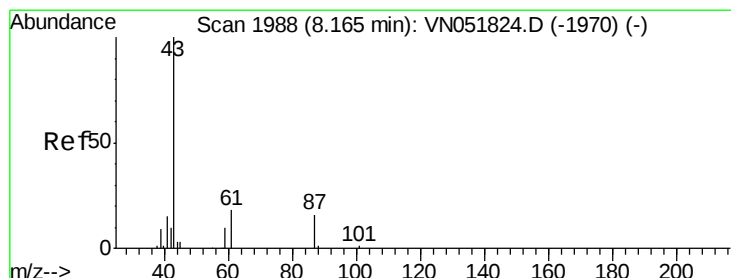
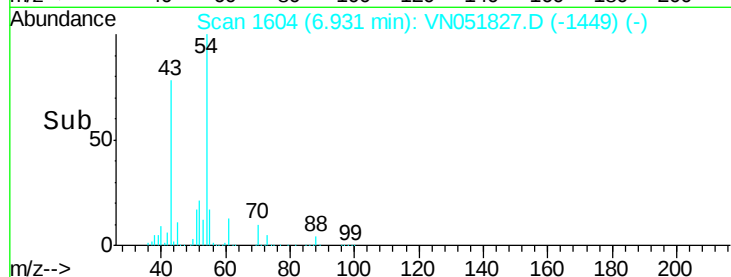
400000

200000

0

6.93

Time-->



#44

Isopropyl Acetate

Concen: 152.22 ug/l

RT: 8.17 min Scan# 1988

Delta R.T. 0.00 min

Lab File: VN051827.D

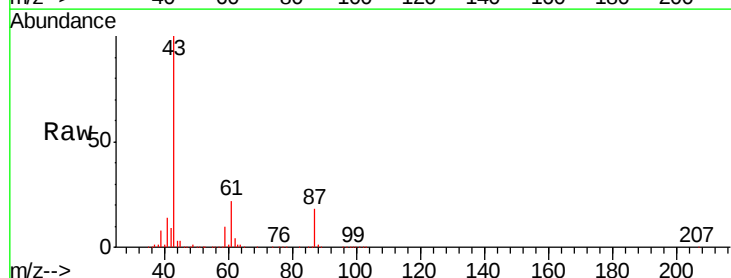
Acq: 12 Oct 2018 9:52

Tgt Ion: 43 Resp: 1607103

Ion Ratio Lower Upper

43 100

61 21.8 15.9 23.9



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 61.00 (60.70 to 61.70): VN0

800000

600000

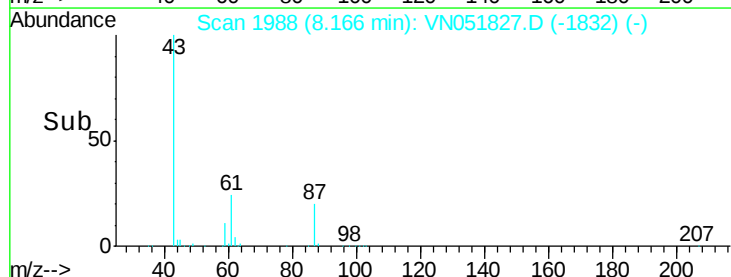
400000

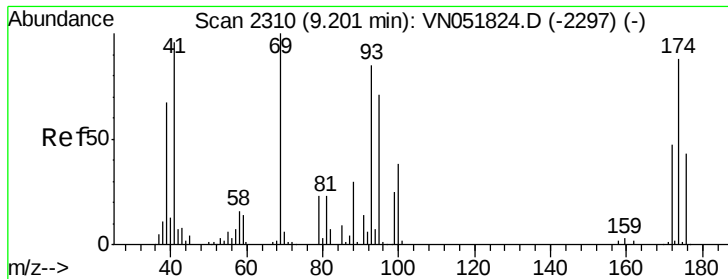
200000

0

8.17

Time-->





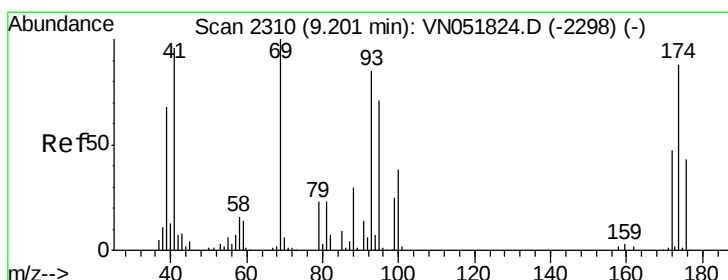
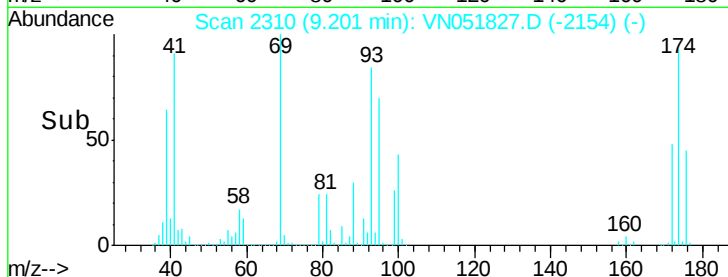
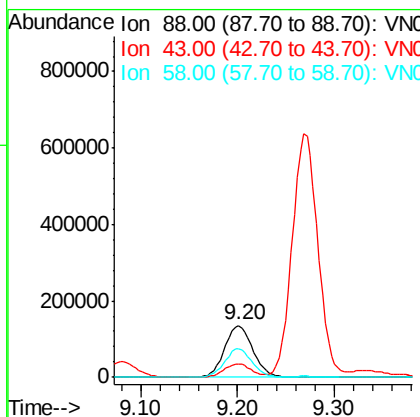
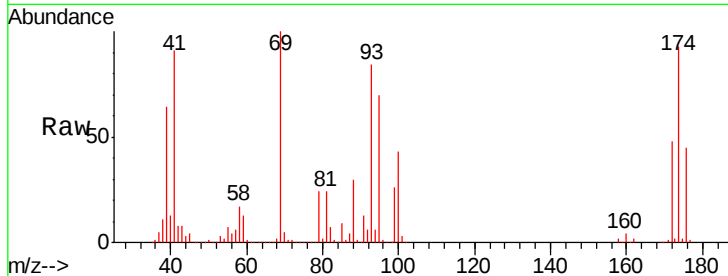
#45
 1,4-Dioxane
 Concen: 3306.58 ug/l
 RT: 9.20 min Scan# 2310
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC150

Tgt Ion	Ratio	Resp	Lower	Upper
88	100	275517		
43	24.4	26.2	39.2#	
58	53.4	65.6	98.4#	

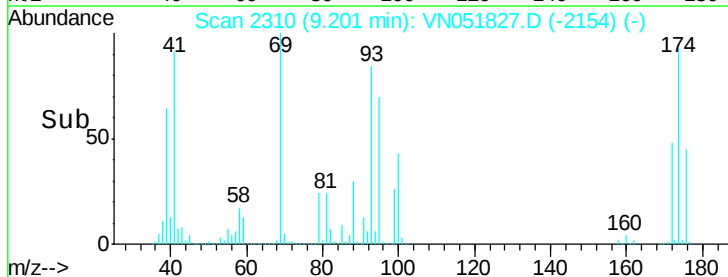
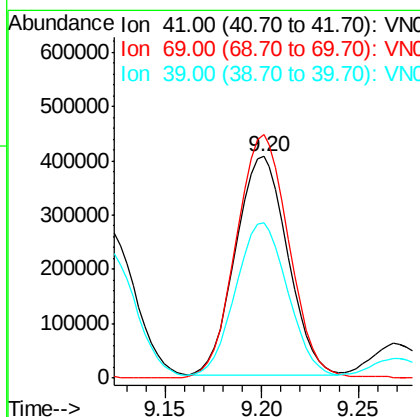
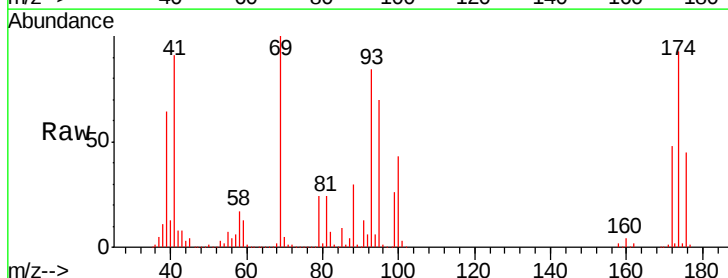
Manual Integrations
 APPROVED

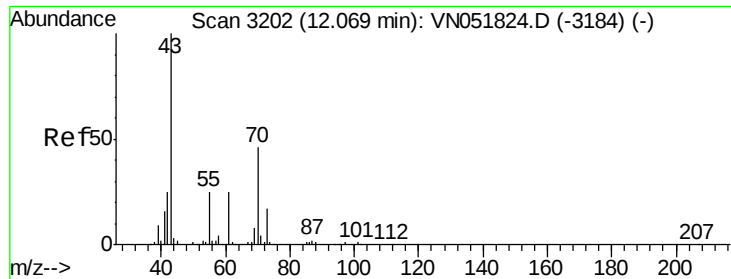
MMDadoda
 10/15/2018 11:27:51 AM



#46
 Methyl methacrylate
 Concen: 156.15 ug/l
 RT: 9.20 min Scan# 2310
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Tgt Ion	Ratio	Resp	Lower	Upper
41	100	756467		
69	111.1	40.7	122.1	
39	70.1	27.3	81.9	





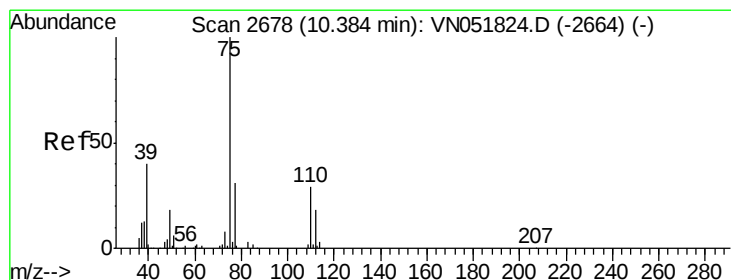
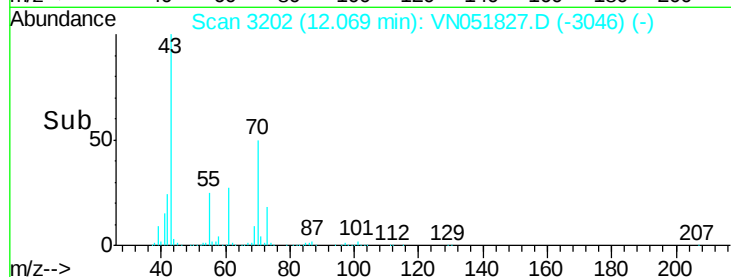
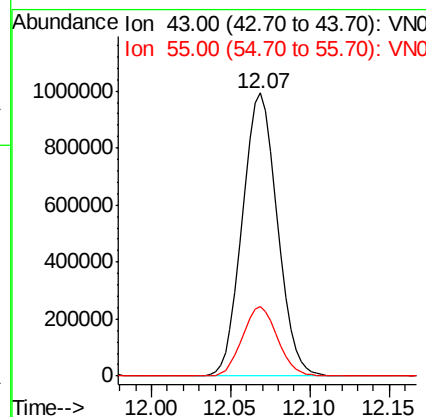
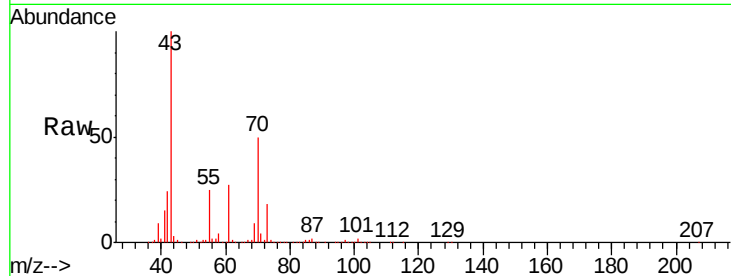
#47
n-amyl Acetate
Concen: 178.62 ug/l m
RT: 12.07 min Scan# 3202
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC150

Tgt Ion: 43 Resp: 1525163
Ion Ratio Lower Upper
43 100
55 0.2 12.2 18.4#

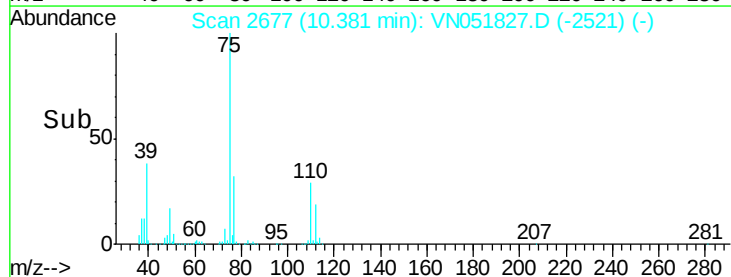
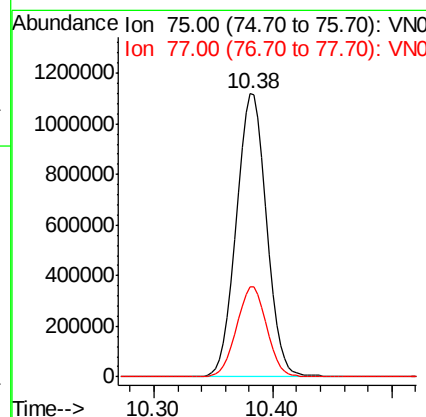
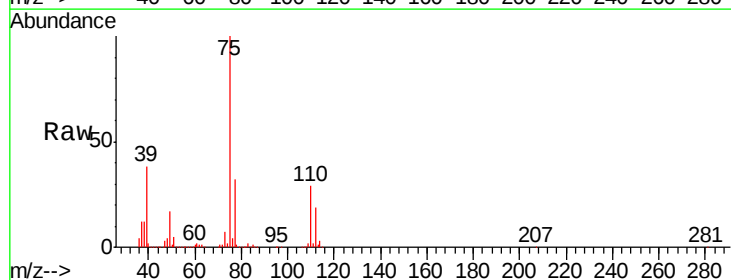
Manual Integrations
APPROVED

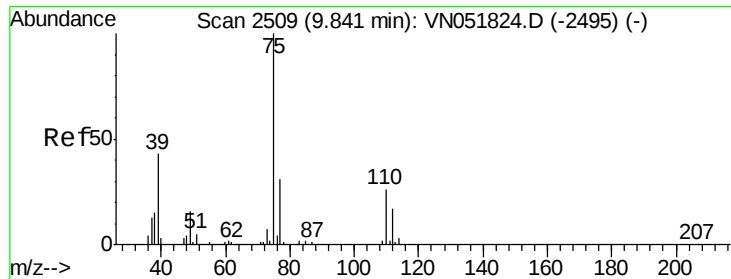
MMDadoda
10/15/2018 11:27:51 AM



#48
t-1,3-Dichloropropene
Concen: 165.77 ug/l
RT: 10.38 min Scan# 2677
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Tgt Ion: 75 Resp: 1975096
Ion Ratio Lower Upper
75 100
77 31.6 24.6 37.0





#49

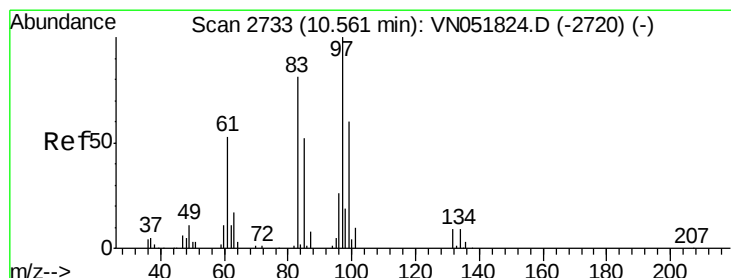
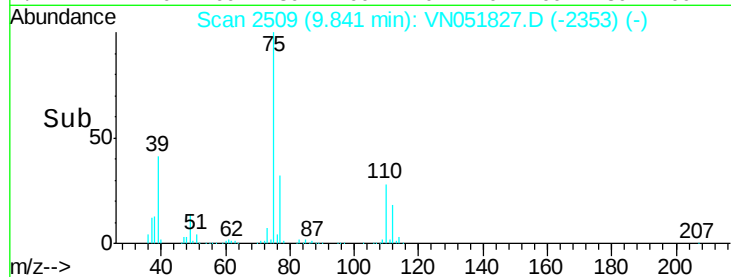
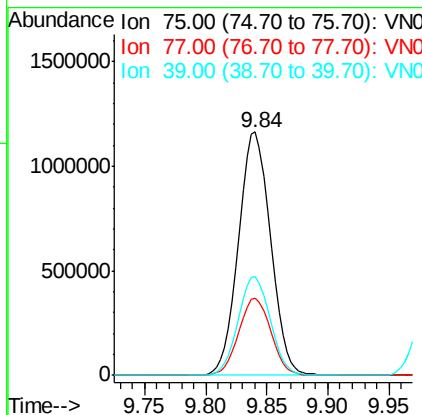
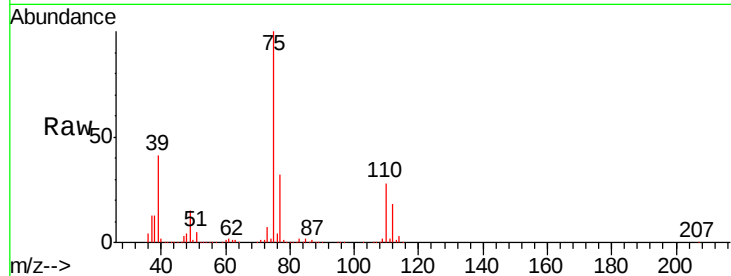
cis-1,3-Dichloropropene
 Concen: 160.36 ug/l
 RT: 9.84 min Scan# 2509
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC150

Tgt Ion	Ratio	Lower	Upper
75	100		
77	31.8	23.2	34.8
39	40.6	34.6	52.0

Manual Integrations
 APPROVED

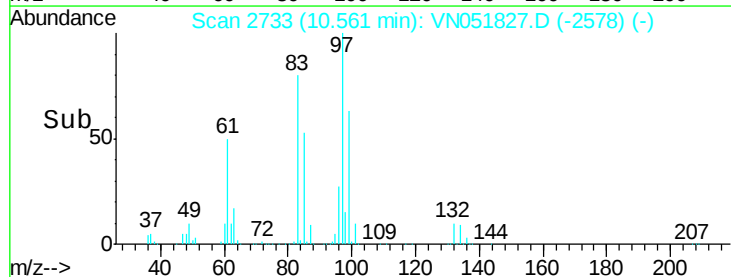
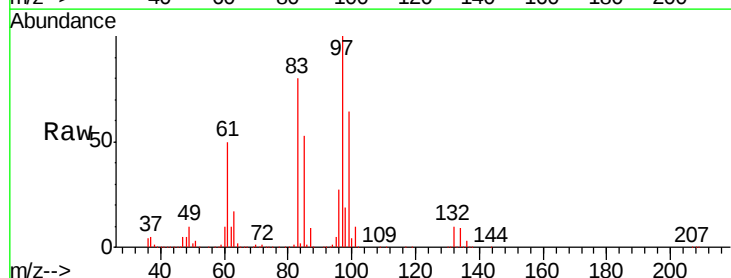
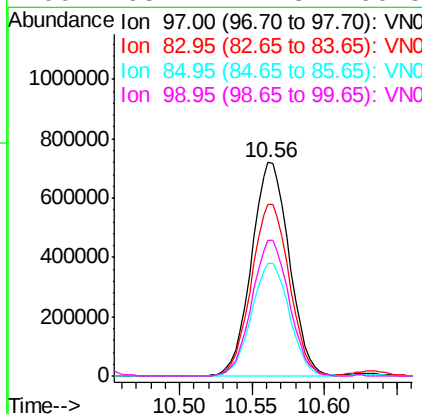
MMDadoda
 10/15/2018 11:27:51 AM

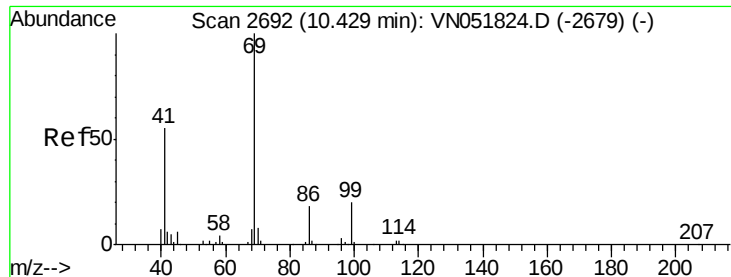


#50

1,1,2-Trichloroethane
 Concen: 158.00 ug/l
 RT: 10.56 min Scan# 2733
 Delta R.T. -0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Tgt Ion	Ratio	Lower	Upper
97	100		
83	80.4	68.2	102.4
85	52.8	42.5	63.7
99	63.4	44.3	66.5





#51

Ethyl methacrylate

Concen: 164.47 ug/l

RT: 10.43 min Scan# 2692

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 69 Resp: 1541507

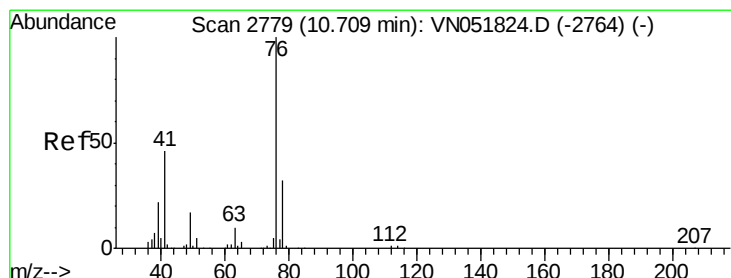
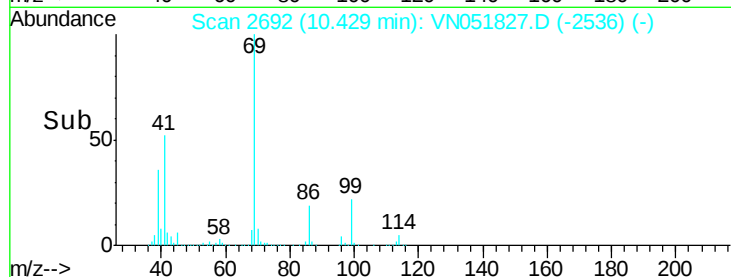
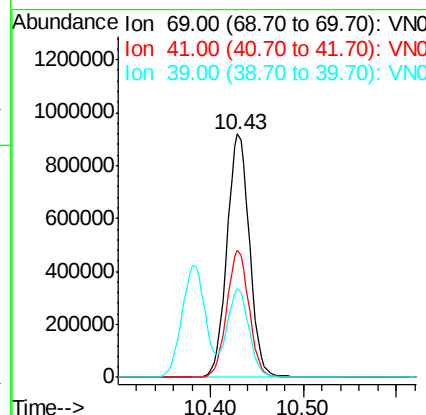
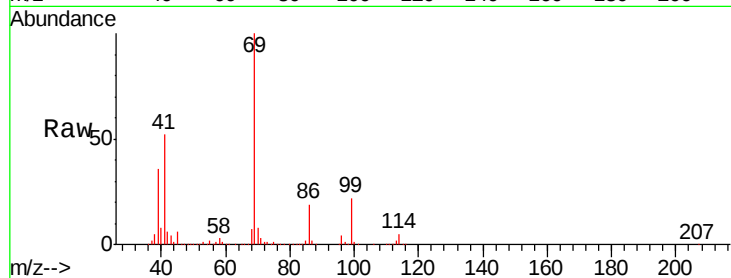
Ion	Ratio	Lower	Upper
69	100		
41	52.0	34.4	103.1
39	36.1	16.3	48.8

Manual Integrations

APPROVED

MMDadoda

10/15/2018 11:27:51 AM



#52

1,3-Dichloropropane

Concen: 152.84 ug/l

RT: 10.71 min Scan# 2778

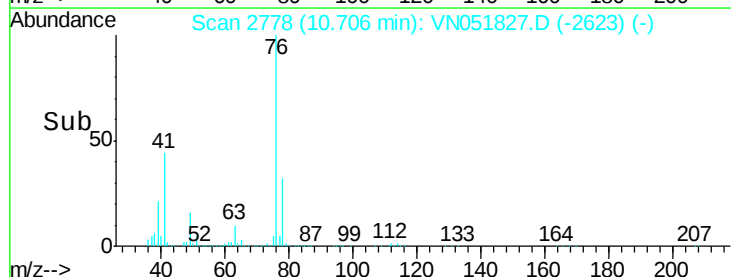
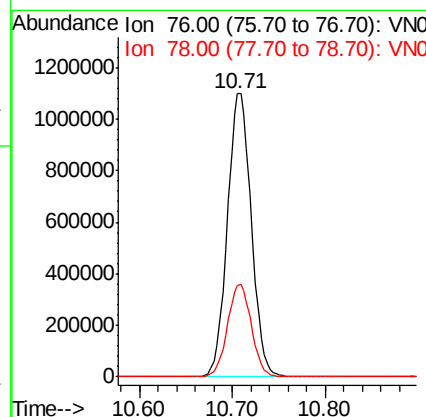
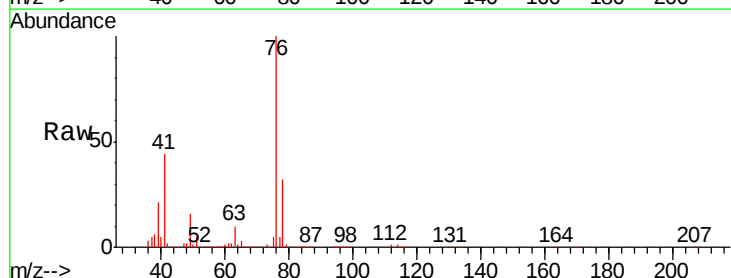
Delta R.T. -0.00 min

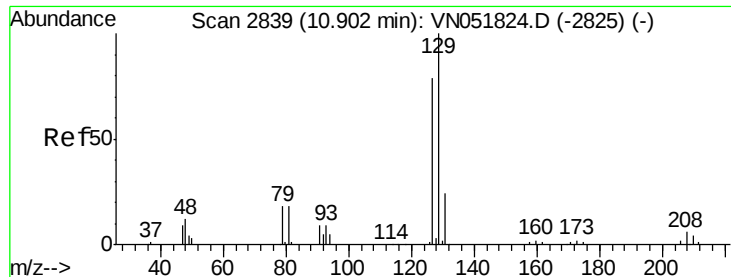
Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Tgt Ion: 76 Resp: 1960999

Ion	Ratio	Lower	Upper
76	100		
78	32.7	0.0	67.6





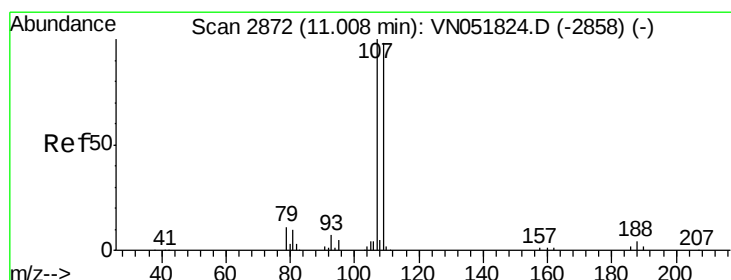
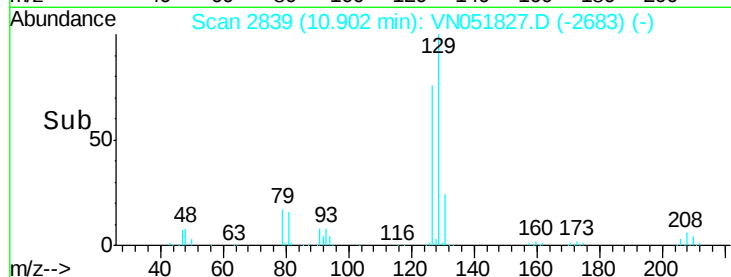
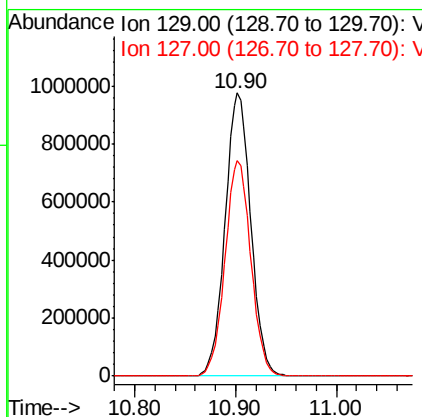
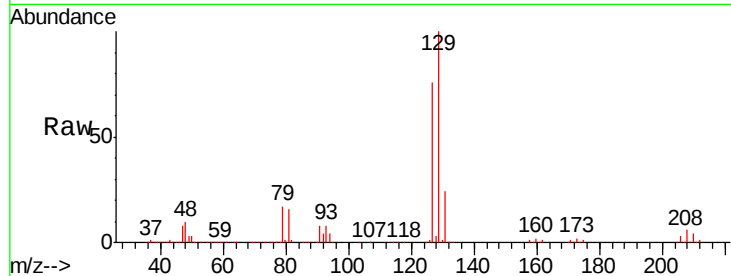
#53
 Dibromochloromethane
 Concen: 173.38 ug/l
 RT: 10.90 min Scan# 2839
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC150

Tgt Ion:129 Resp: 1735729
 Ion Ratio Lower Upper
 129 100
 127 76.6 40.2 120.5

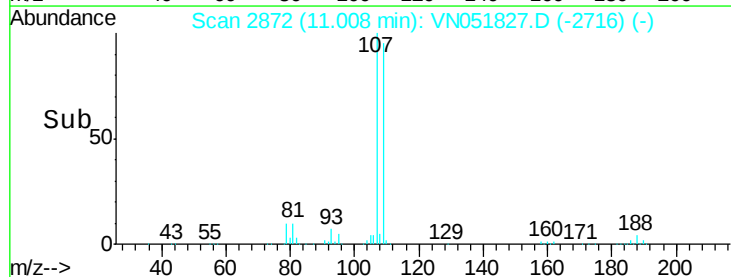
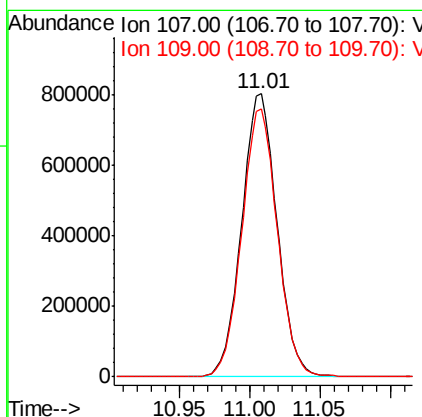
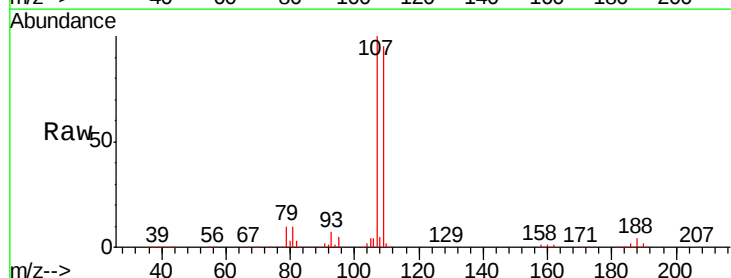
Manual Integrations
 APPROVED

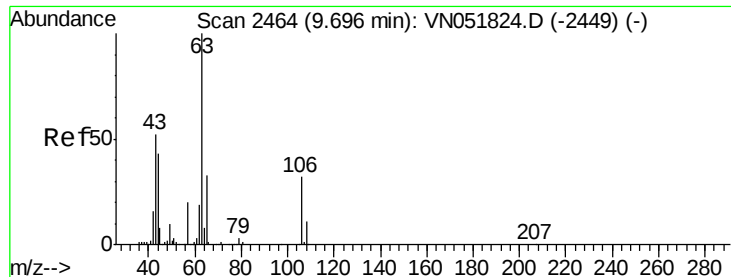
MMDadoda
 10/15/2018 11:27:51 AM



#54
 1,2-Dibromoethane
 Concen: 164.22 ug/l
 RT: 11.01 min Scan# 2872
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Tgt Ion:107 Resp: 1411619
 Ion Ratio Lower Upper
 107 100
 109 95.4 77.4 116.0





#55

2-Chloroethyl vinyl ether

Concen: 865.20 ug/l

RT: 9.70 min Scan# 2464

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 63 Resp: 3428186

Ion Ratio Lower Upper

63 100

65 32.4 25.4 38.0

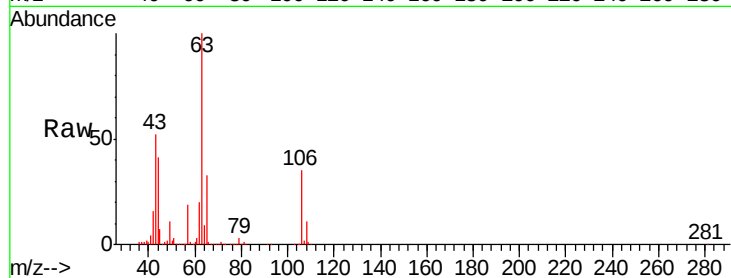
106 34.8 21.2 31.8#

Manual Integrations

APPROVED

MMDadoda

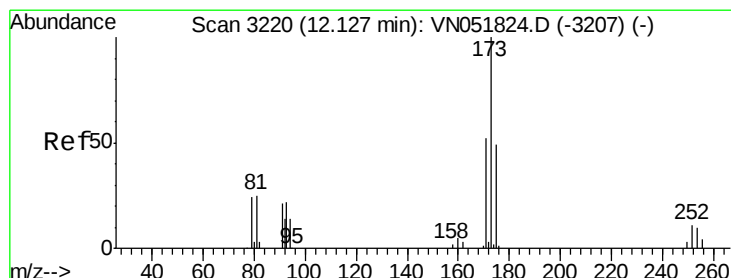
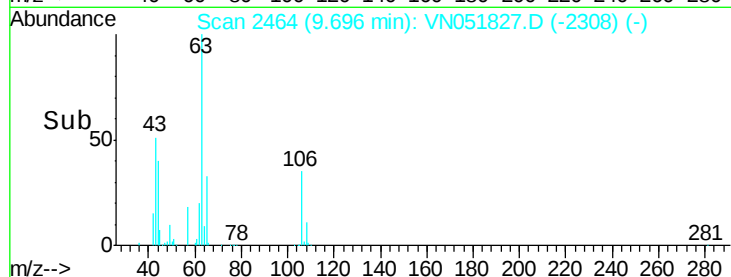
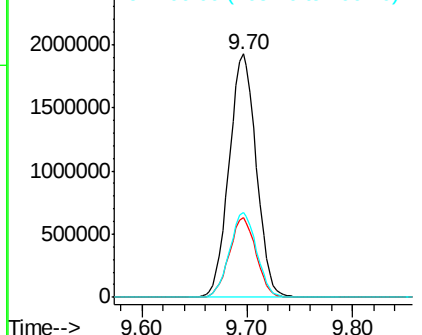
10/15/2018 11:27:51 AM



Abundance Ion 63.00 (62.70 to 63.70): VN051827.D (-2308) (-)

Ion 65.00 (64.70 to 65.70): VN051827.D (-2308) (-)

Ion 106.00 (105.70 to 106.70): VN051827.D (-2308) (-)



#56

Bromoform

Concen: 198.69 ug/l

RT: 12.13 min Scan# 3220

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

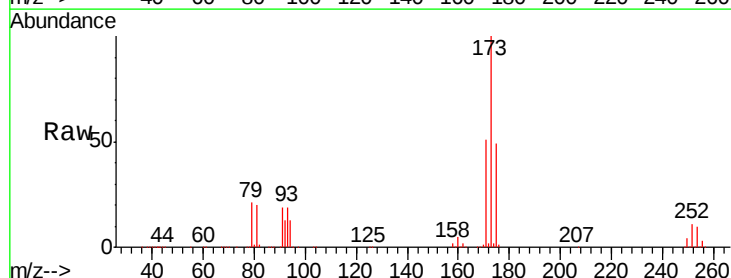
Tgt Ion: 173 Resp: 1270246

Ion Ratio Lower Upper

173 100

175 48.5 35.8 53.8

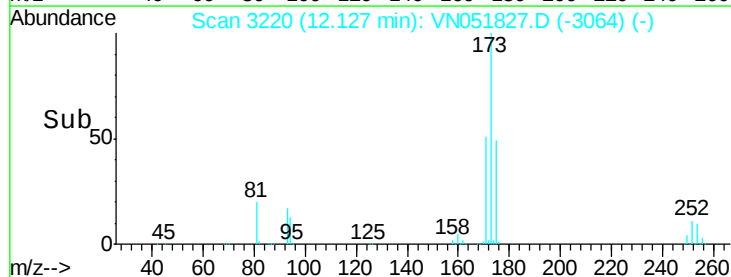
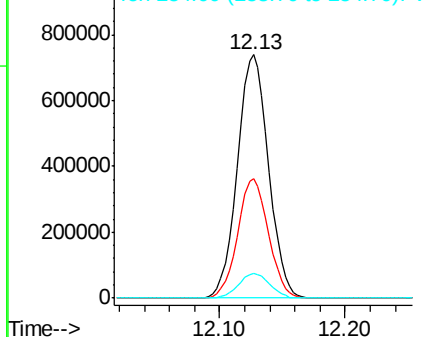
254 9.9 8.6 13.0

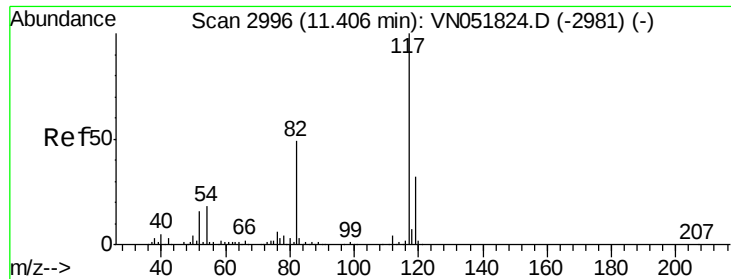


Abundance Ion 173.00 (172.70 to 173.70): VN051827.D (-3064) (-)

Ion 175.00 (174.70 to 175.70): VN051827.D (-3064) (-)

Ion 254.00 (253.70 to 254.70): VN051827.D (-3064) (-)





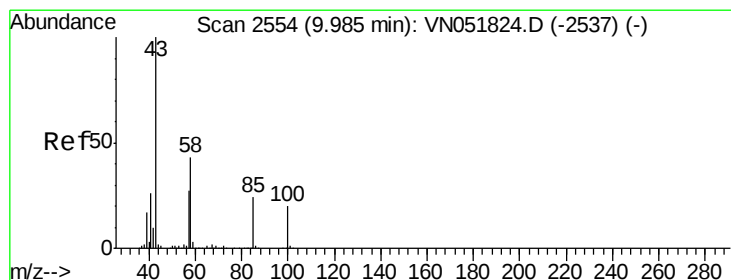
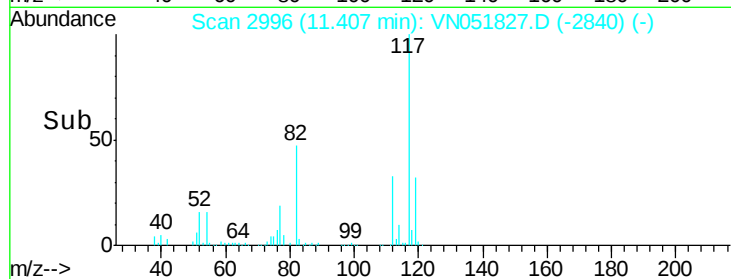
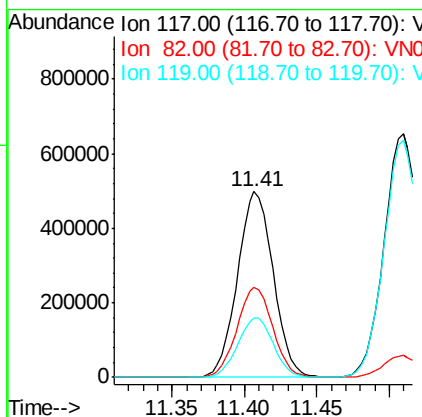
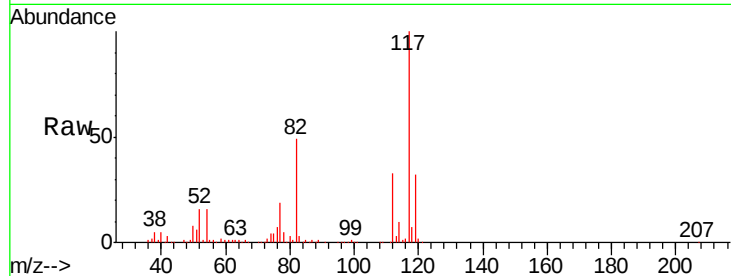
#57
Chlorobenzene-d5
Concen: 30.00 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC150

Tgt Ion	Ratio	Lower	Upper
117	100		
82	48.3	44.1	66.1
119	31.9	25.8	38.8

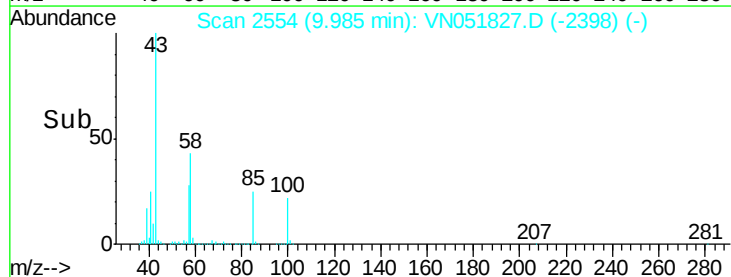
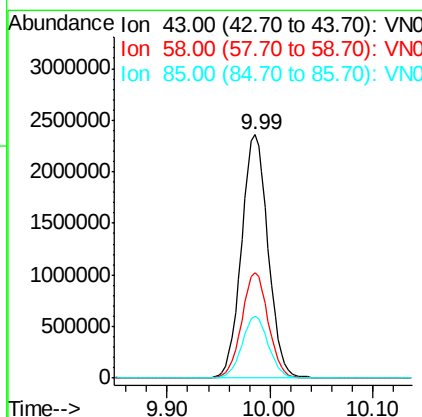
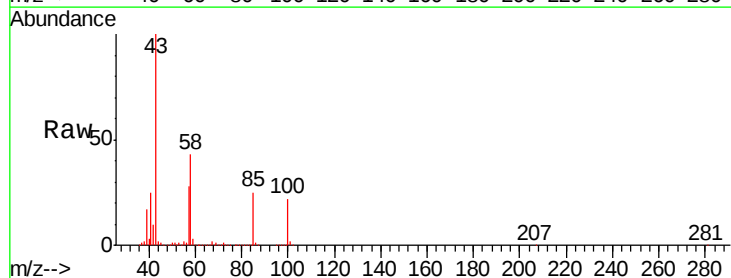
Manual Integrations
APPROVED

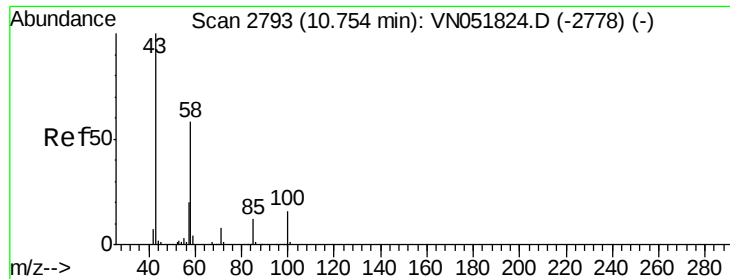
MMDadoda
10/15/2018 11:27:51 AM



#58
4-Methyl-2-Pentanone
Concen: 733.80 ug/l
RT: 9.99 min Scan# 2554
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Tgt Ion	Ratio	Lower	Upper
43	100		
58	43.3	29.3	43.9
85	25.1	12.6	18.8





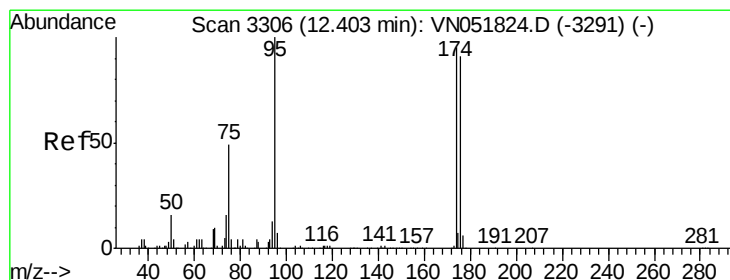
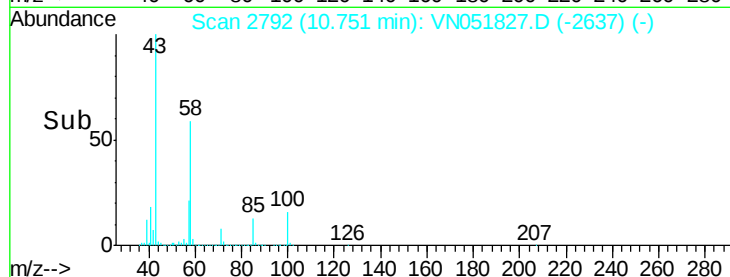
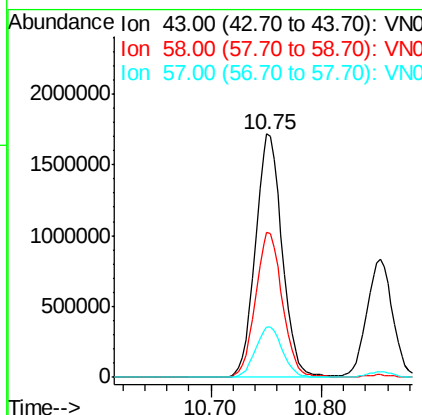
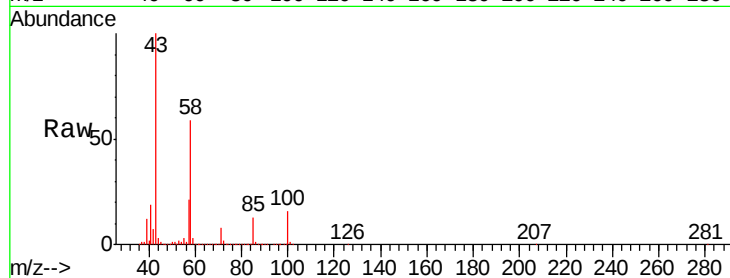
#59
2-Hexanone
Concen: 741.64 ug/l
RT: 10.75 min Scan# 2792
Delta R.T. -0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC150

Tgt Ion: 43 Resp: 2875674
Ion Ratio Lower Upper
43 100
58 59.8 41.3 61.9
57 20.9 13.4 20.0#

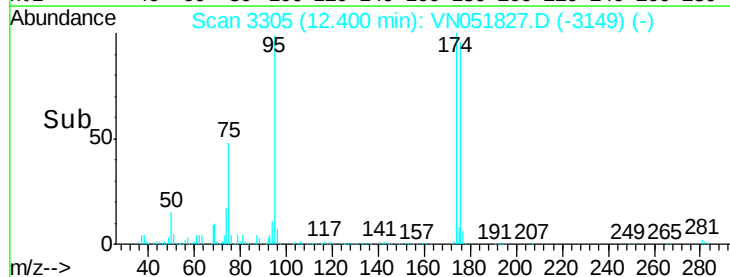
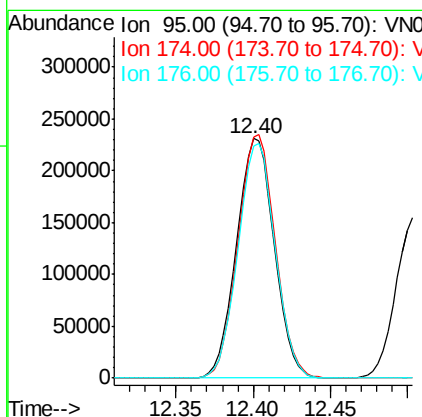
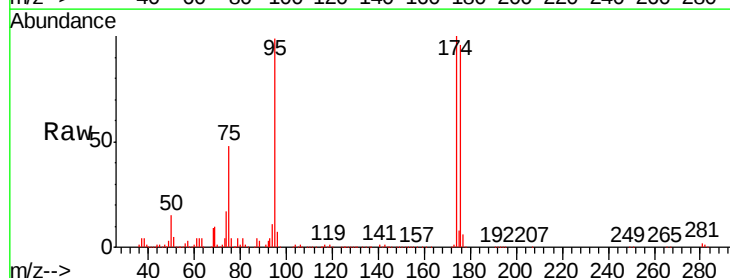
Manual Integrations
APPROVED

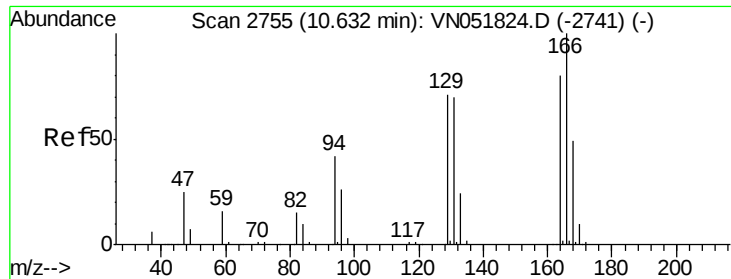
MMDadoda
10/15/2018 11:27:51 AM



#60
4-Bromofluorobenzene
Concen: 741.64 ug/l
RT: 12.40 min Scan# 3305
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Tgt Ion: 95 Resp: 392208
Ion Ratio Lower Upper
95 100
174 100.5 73.5 110.3
176 97.0 70.2 105.2





#61

Tetrachloroethene

Concen: 145.24 ug/l

RT: 10.63 min Scan# 2755

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion:164 Resp: 1601840

Ion Ratio Lower Upper

164 100

166 126.7 98.7 148.1

129 89.8 69.6 104.4

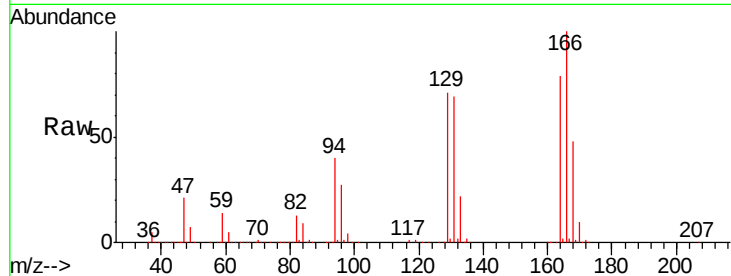
131 87.6 72.4 108.6

Manual Integrations

APPROVED

MMDadoda

10/15/2018 11:27:51 AM

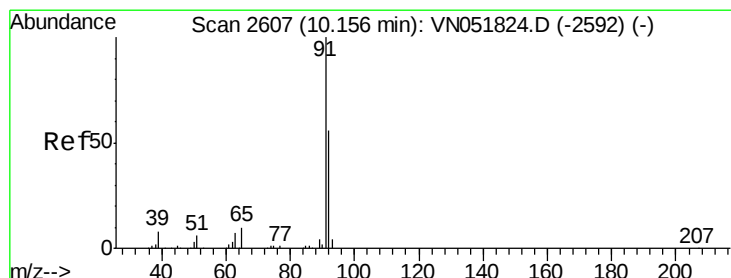
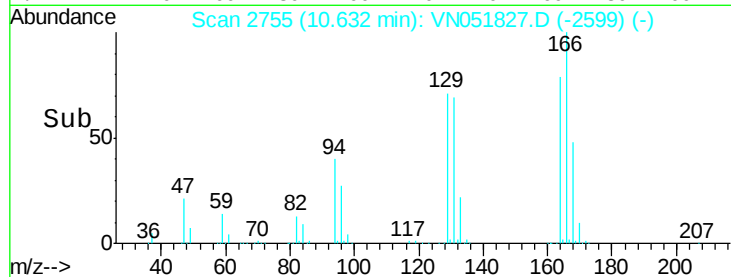
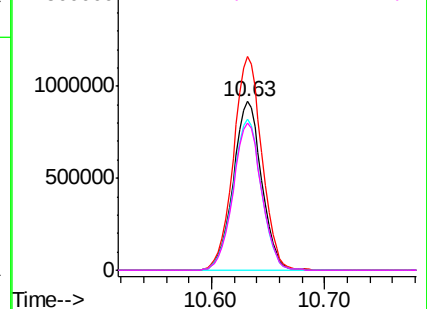


Abundance Ion 163.85 (163.55 to 164.55): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.90 (128.60 to 129.60): V

Ion 130.90 (130.60 to 131.60): V



#62

Toluene

Concen: 150.05 ug/l

RT: 10.16 min Scan# 2607

Delta R.T. 0.00 min

Lab File: VN051827.D

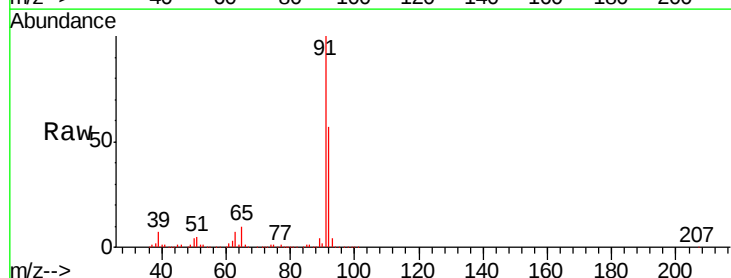
Acq: 12 Oct 2018 9:52

Tgt Ion: 91 Resp: 6387570

Ion Ratio Lower Upper

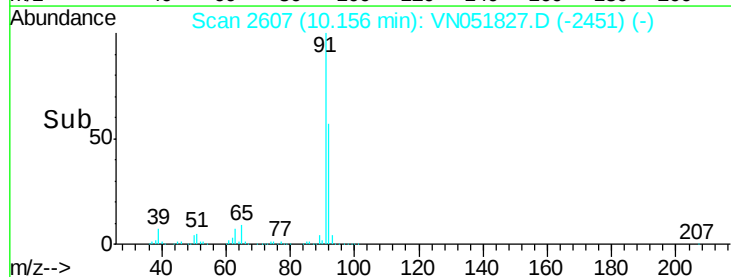
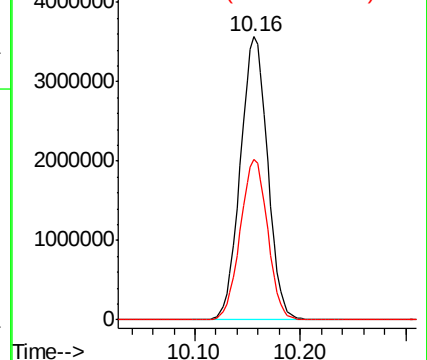
91 100

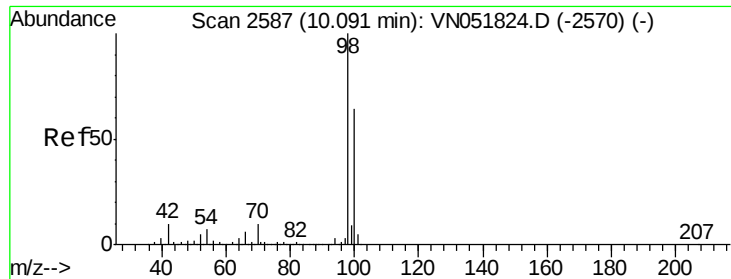
92 57.0 44.6 66.8



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 92.00 (91.70 to 92.70): VN0





#63

Toluene-d8

Concen: 150.05 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 98 Resp: 1080092

Ion Ratio Lower Upper

98 100

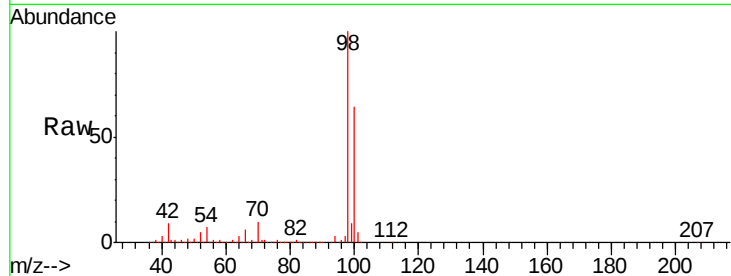
100 64.1 50.8 76.2

Manual Integrations

APPROVED

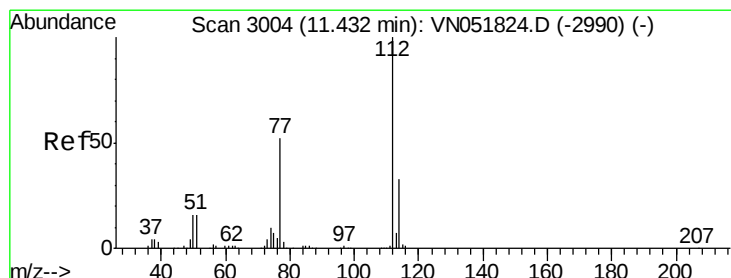
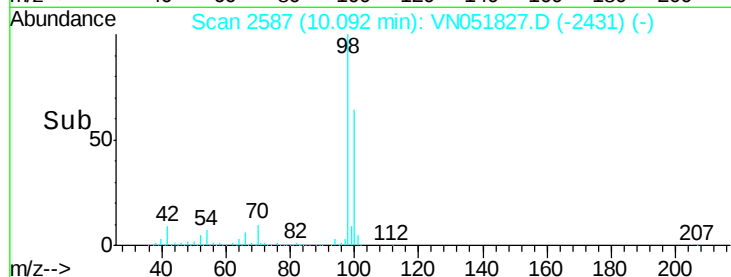
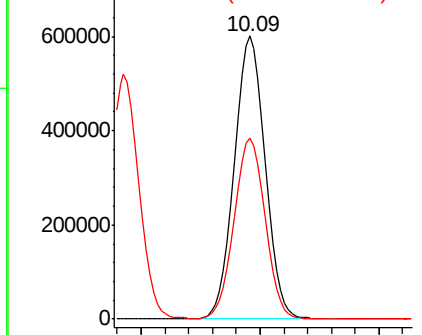
MMDadoda

10/15/2018 11:27:51 AM



Abundance Ion 98.00 (97.70 to 98.70): VN051827.D (-2570) (-)

Ion 100.00 (99.70 to 100.70): VN051827.D (-2570) (-)



#64

Chlorobenzene

Concen: 156.33 ug/l

RT: 11.43 min Scan# 3004

Delta R.T. 0.00 min

Lab File: VN051827.D

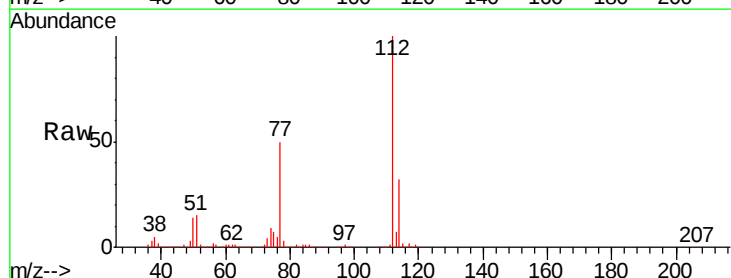
Acq: 12 Oct 2018 9:52

Tgt Ion: 112 Resp: 4322206

Ion Ratio Lower Upper

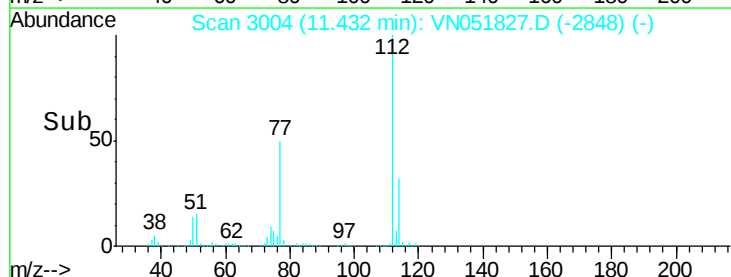
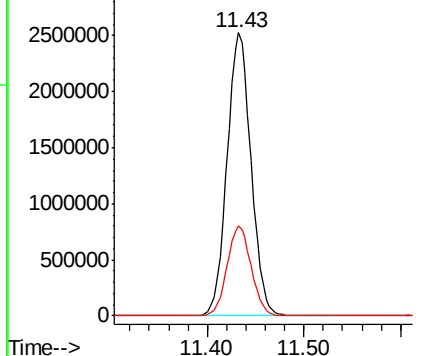
112 100

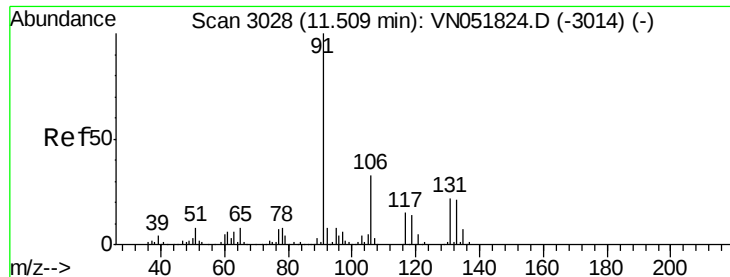
114 31.6 27.5 41.3



Abundance Ion 112.00 (111.70 to 112.70): VN051827.D (-2848) (-)

Ion 114.00 (113.70 to 114.70): VN051827.D (-2848) (-)





#65

1,1,1,2-Tetrachloroethane

Concen: 159.56 ug/l

RT: 11.51 min Scan# 3028

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion:131 Resp: 1686097

Ion Ratio Lower Upper

131 100

133 95.4 0.0 190.4

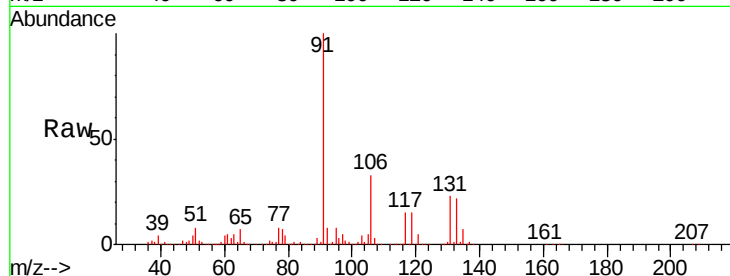
119 64.5 0.0 128.0

Manual Integrations

APPROVED

MMDadoda

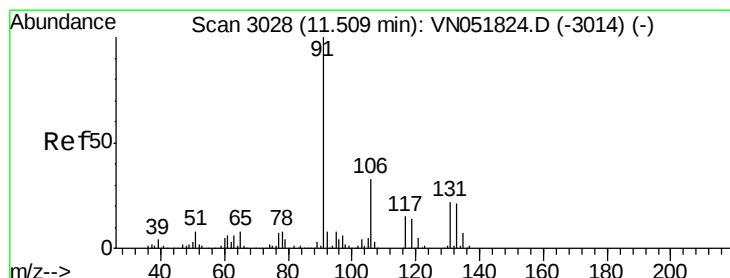
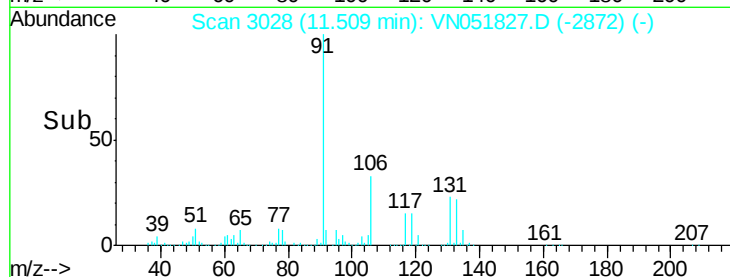
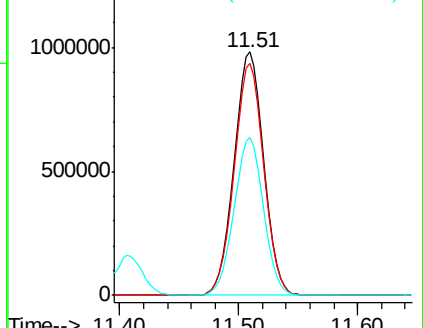
10/15/2018 11:27:51 AM



Abundance Ion 131.00 (130.70 to 131.70): V

Ion 133.00 (132.70 to 133.70): V

Ion 119.00 (118.70 to 119.70): V



#66

Ethyl Benzene

Concen: 153.13 ug/l

RT: 11.51 min Scan# 3028

Delta R.T. 0.00 min

Lab File: VN051827.D

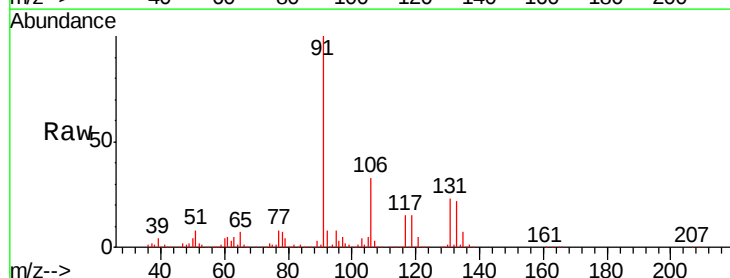
Acq: 12 Oct 2018 9:52

Tgt Ion: 91 Resp: 7174852

Ion Ratio Lower Upper

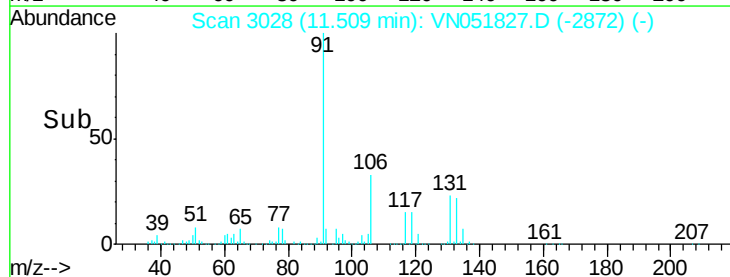
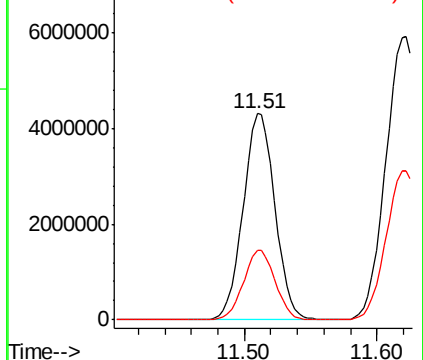
91 100

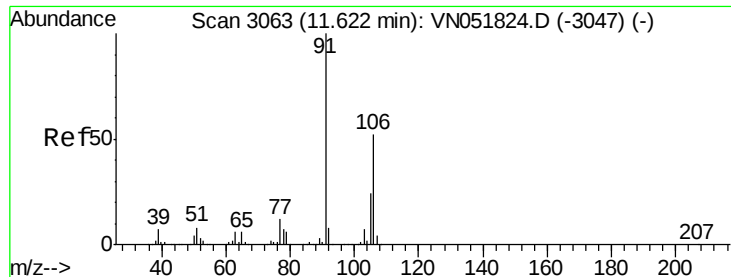
106 33.5 25.9 38.9



Abundance Ion 91.00 (90.70 to 91.70): V

Ion 106.00 (105.70 to 106.70): V





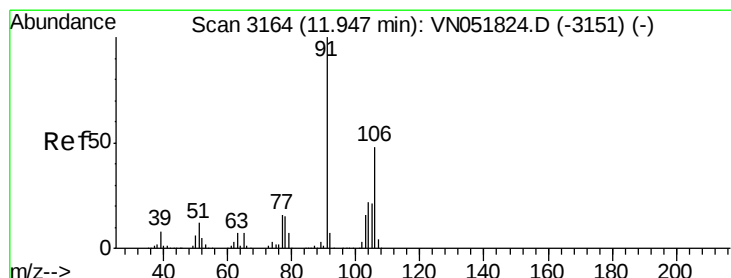
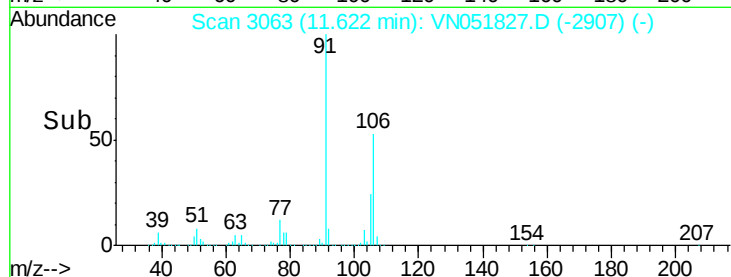
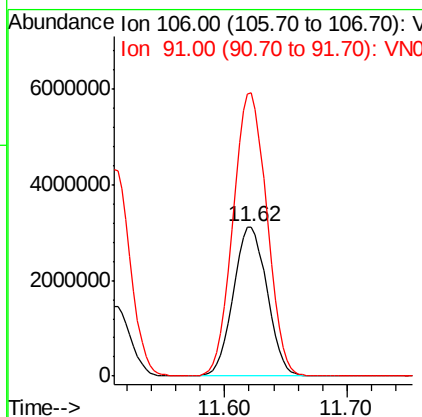
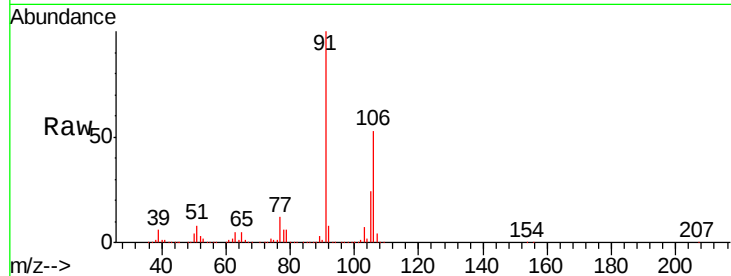
#67
m/p-Xylenes
Concen: 315.37 ug/l
RT: 11.62 min Scan# 3063
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC150

Tgt Ion:106 Resp: 5954701
Ion Ratio Lower Upper
106 100
91 191.1 158.8 238.2

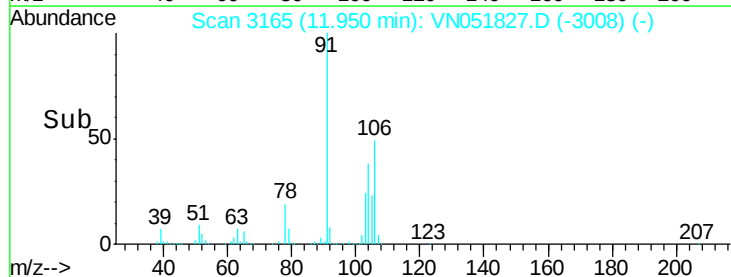
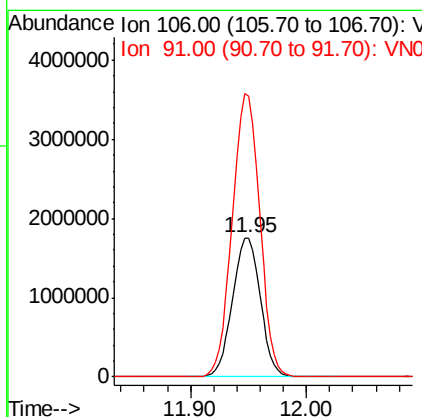
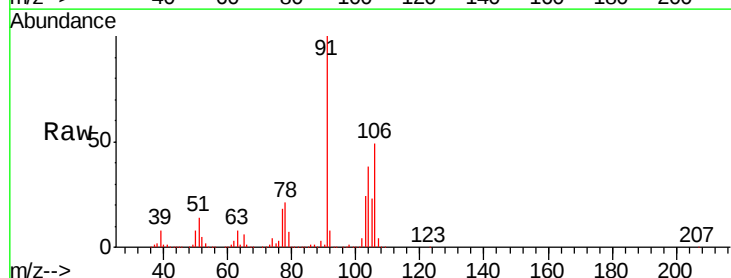
Manual Integrations
APPROVED

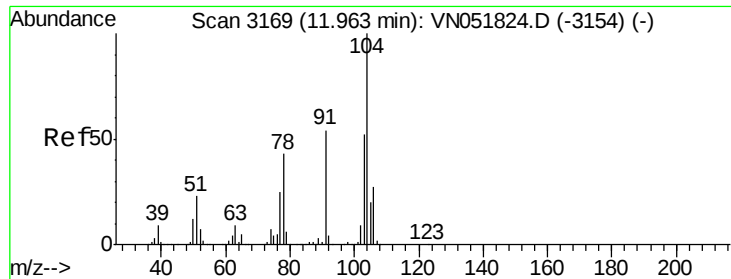
MMDadoda
10/15/2018 11:27:51 AM



#68
o-Xylene
Concen: 155.88 ug/l
RT: 11.95 min Scan# 3165
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Tgt Ion:106 Resp: 2908443
Ion Ratio Lower Upper
106 100
91 202.1 111.1 333.3





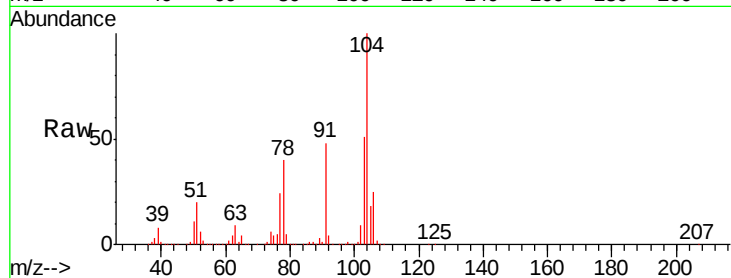
#69
Styrene
Concen: 169.36 ug/l
RT: 11.96 min Scan# 3169
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC150

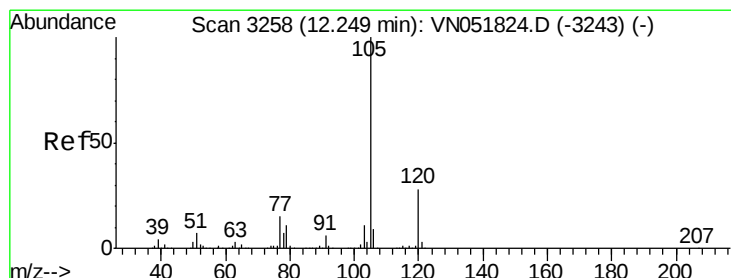
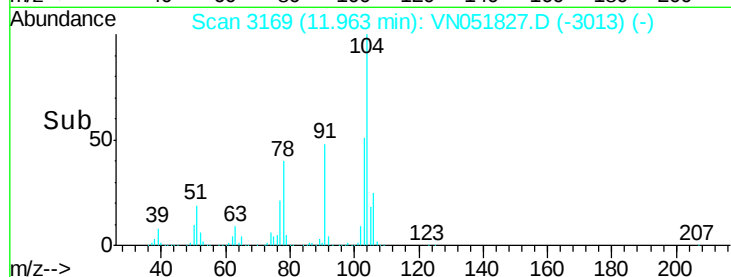
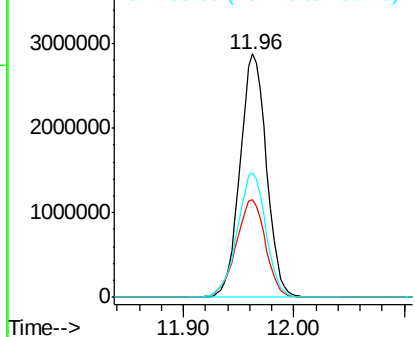
Tgt Ion:104 Resp: 4763408
Ion Ratio Lower Upper
104 100
78 44.6 40.6 60.8
103 55.3 44.0 66.0

Manual Integrations
APPROVED

MMDadoda
10/15/2018 11:27:51 AM

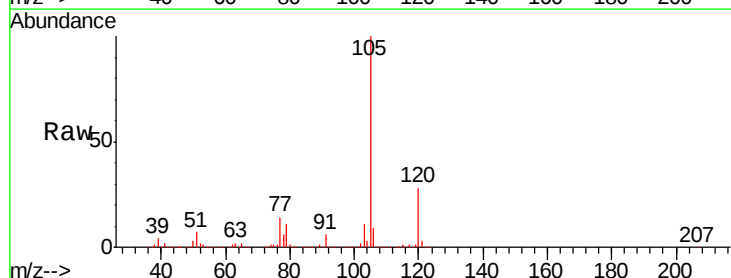


Abundance Ion 104.00 (103.70 to 104.70): V
Ion 78.00 (77.70 to 78.70): V
Ion 103.00 (102.70 to 103.70): V

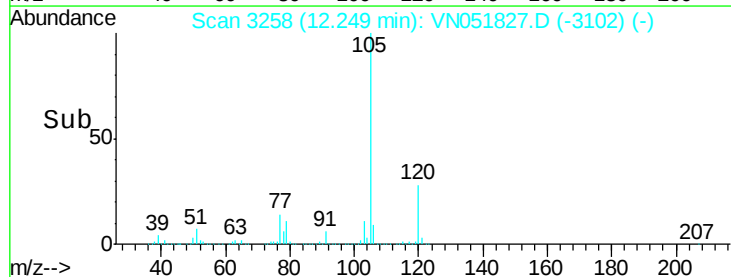
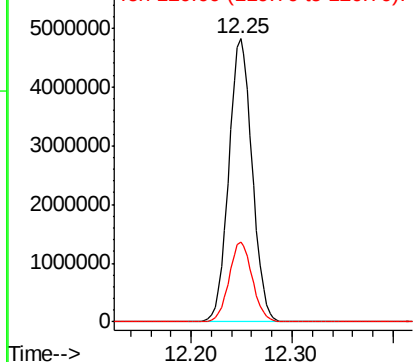


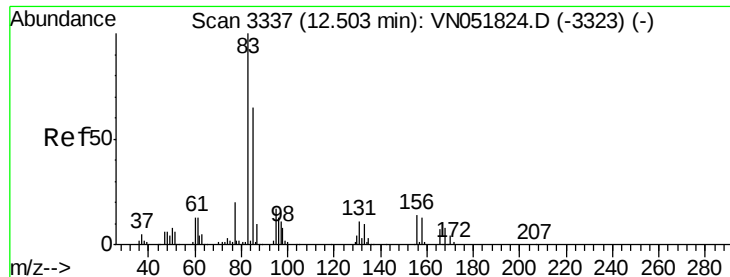
#70
Isopropylbenzene
Concen: 156.78 ug/l
RT: 12.25 min Scan# 3258
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Tgt Ion:105 Resp: 7791611
Ion Ratio Lower Upper
105 100
120 28.1 19.0 35.4



Abundance Ion 105.00 (104.70 to 105.70): V
Ion 120.00 (119.70 to 120.70): V





#71

1,1,2,2-Tetrachloroethane

Concen: 157.04 ug/l

RT: 12.50 min Scan# 3337

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 83 Resp: 1540759

Ion Ratio Lower Upper

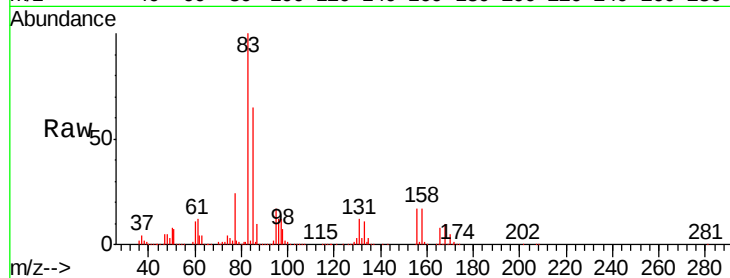
83 100

131 12.5 5.5 16.4

85 64.8 30.6 91.8

Manual Integrations
APPROVED

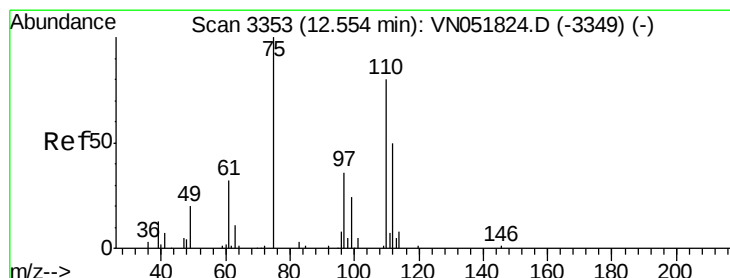
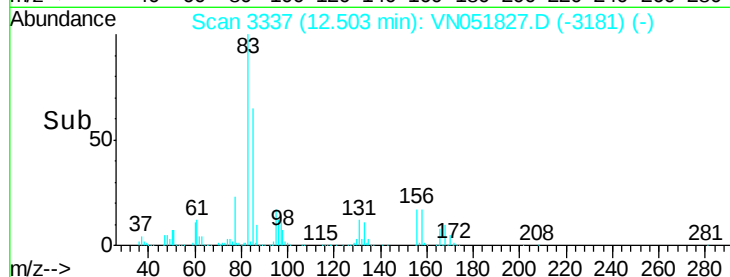
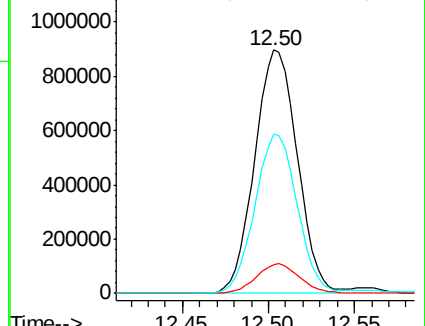
MMDadoda
10/15/2018 11:27:51 AM



Abundance Ion 83.00 (82.70 to 83.70): VN0

Ion 131.00 (130.70 to 131.70): VN0

Ion 85.00 (84.70 to 85.70): VN0



#72

1,2,3-Trichloropropane

Concen: 144.49 ug/l m

RT: 12.55 min Scan# 3353

Delta R.T. 0.00 min

Lab File: VN051827.D

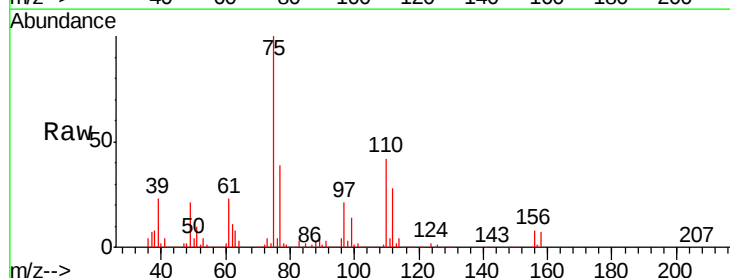
Acq: 12 Oct 2018 9:52

Tgt Ion: 75 Resp: 1270952

Ion Ratio Lower Upper

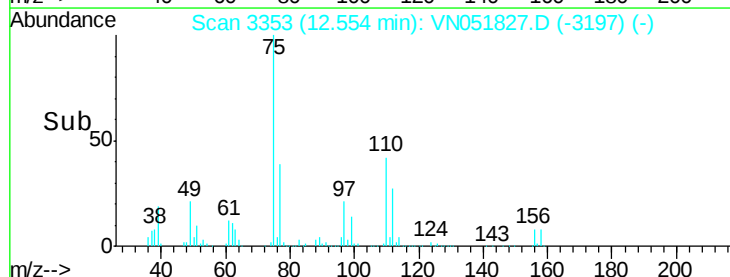
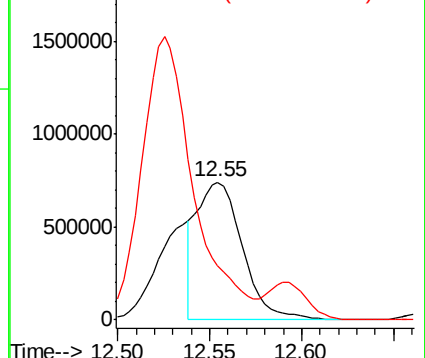
75 100

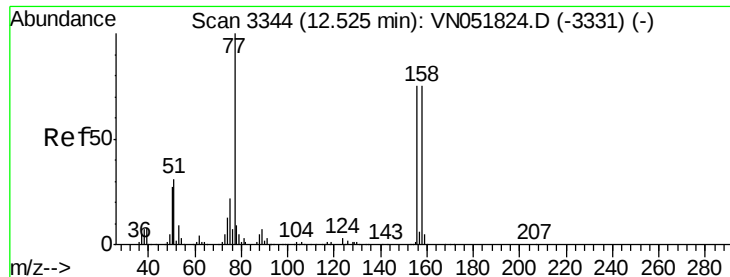
77 235.5 0.0 400.0



Abundance Ion 75.00 (74.70 to 75.70): VN0

Ion 77.00 (76.70 to 77.70): VN0





#73

Bromobenzene

Concen: 173.36 ug/l

RT: 12.53 min Scan# 3344

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion:156 Resp: 2088262

Ion Ratio Lower Upper

156 100

77 143.3 0.0 377.4

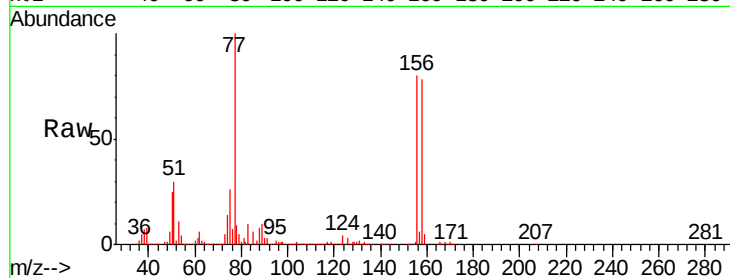
158 97.1 0.0 203.0

Manual Integrations

APPROVED

MMDadoda

10/15/2018 11:27:51 AM



Abundance Ion 156.00 (155.70 to 156.70): V

Ion 77.00 (76.70 to 77.70): VN0

Ion 158.00 (157.70 to 158.70): V

12.53

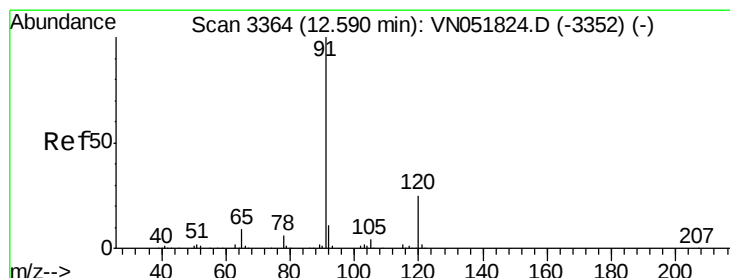
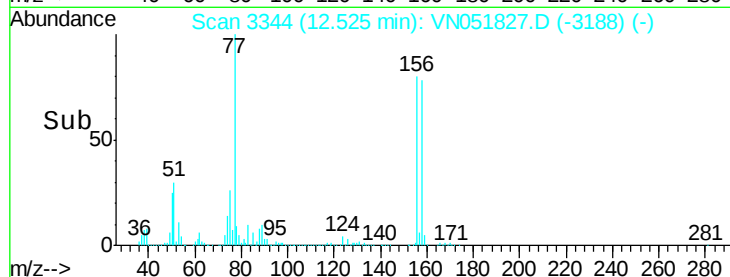
1000000

500000

0

Time-->

12.45 12.50 12.55 12.60



#74

n-propylbenzene

Concen: 160.76 ug/l

RT: 12.59 min Scan# 3365

Delta R.T. 0.00 min

Lab File: VN051827.D

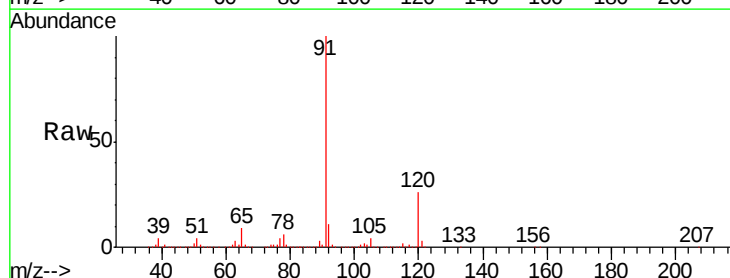
Acq: 12 Oct 2018 9:52

Tgt Ion: 91 Resp: 8548835

Ion Ratio Lower Upper

91 100

120 25.9 0.0 45.0



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 120.00 (119.70 to 120.70): V

12.59

6000000

5000000

4000000

3000000

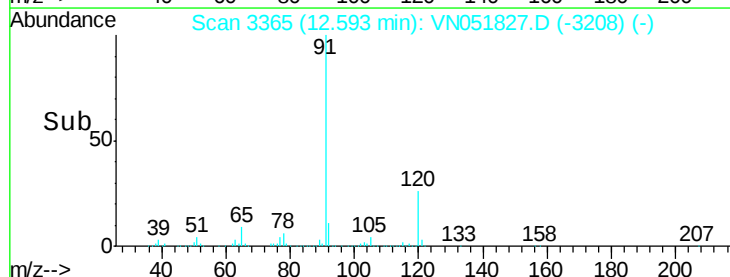
2000000

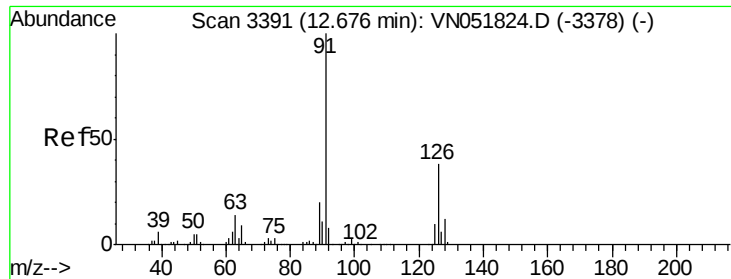
1000000

0

Time-->

12.55 12.60 12.65





#75

2-Chlorotoluene

Concen: 156.85 ug/l

RT: 12.68 min Scan# 3391

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 91 Resp: 4915138

Ion Ratio Lower Upper

91 100

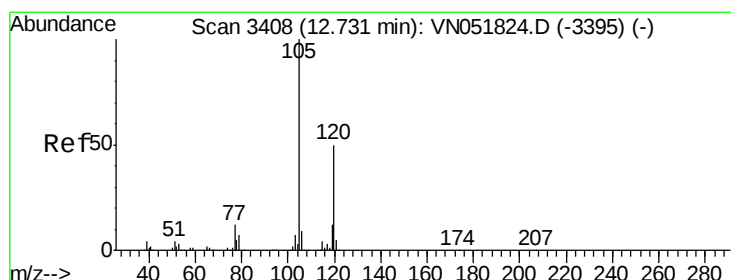
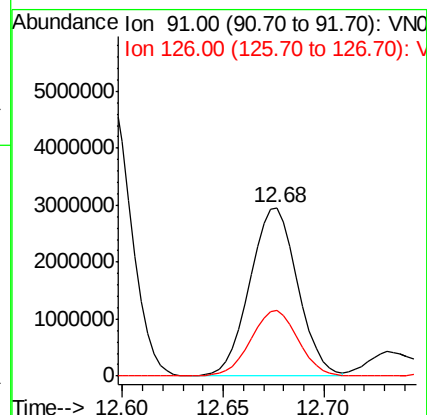
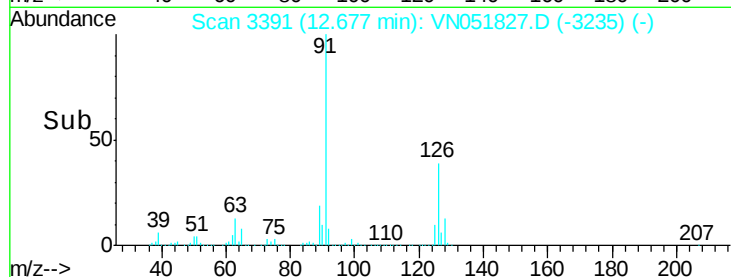
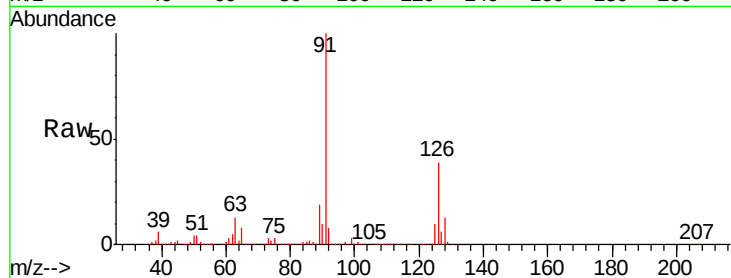
126 38.8 0.0 67.6

Manual Integrations

APPROVED

MMDadoda

10/15/2018 11:27:51 AM



#76

1,3,5-Trimethylbenzene

Concen: 160.69 ug/l

RT: 12.73 min Scan# 3408

Delta R.T. -0.00 min

Lab File: VN051827.D

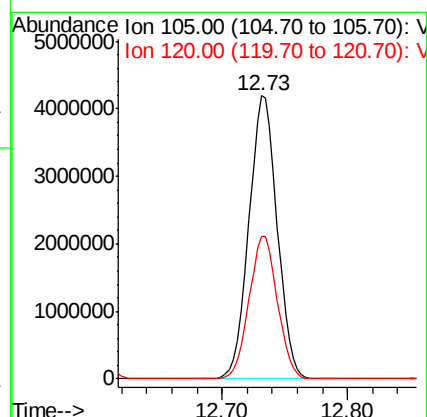
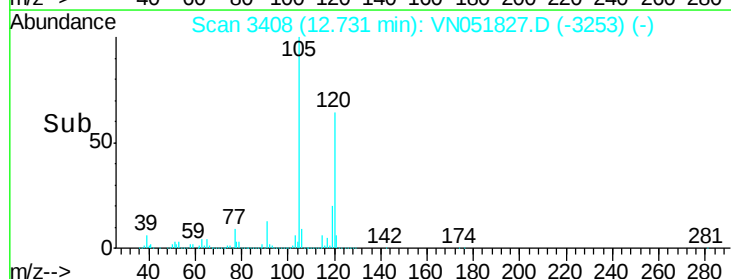
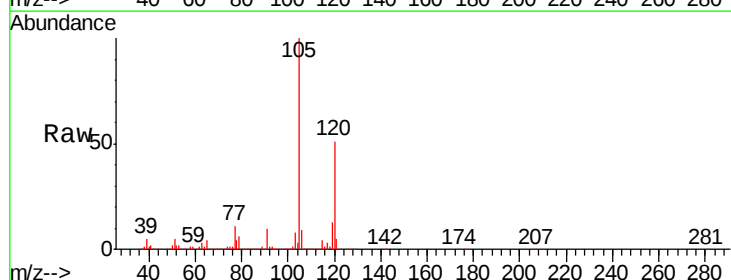
Acq: 12 Oct 2018 9:52

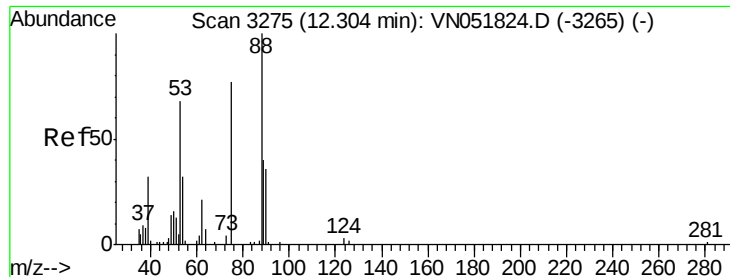
Tgt Ion: 105 Resp: 6569781

Ion Ratio Lower Upper

105 100

120 50.6 0.0 98.2





#77

t-1,4-Dichloro-2-butene

Concen: 192.33 ug/l

RT: 12.30 min Scan# 3274

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

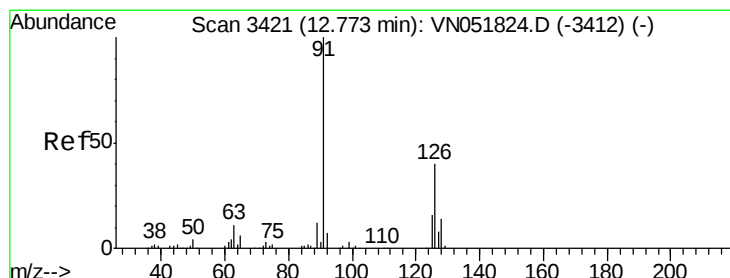
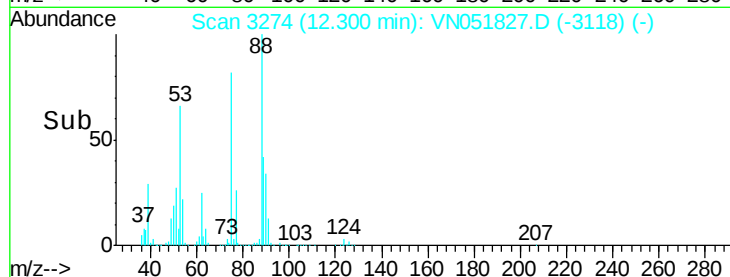
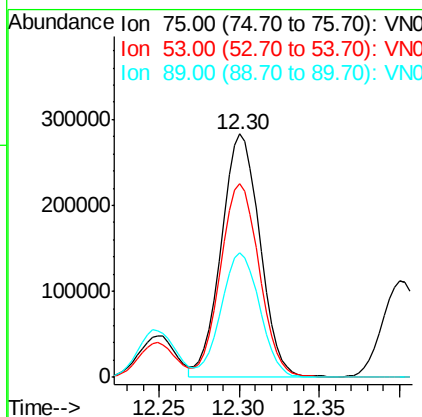
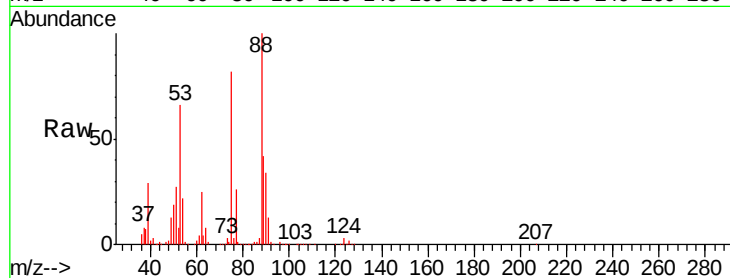
ClientSampleId :

VSTDIC150

Tgt Ion:	75	Resp:	469091
Ion	Ratio	Lower	Upper
75	100		
53	79.7	46.3	138.9
89	51.5	24.6	73.8

Manual Integrations
APPROVED

MMDadoda
10/15/2018 11:27:51 AM



#78

4-Chlorotoluene

Concen: 166.59 ug/l

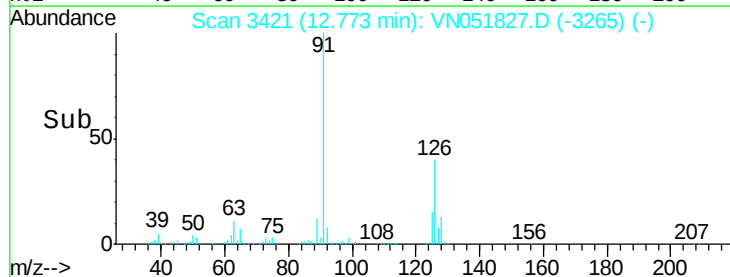
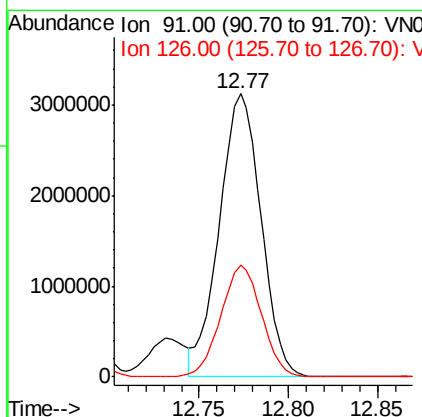
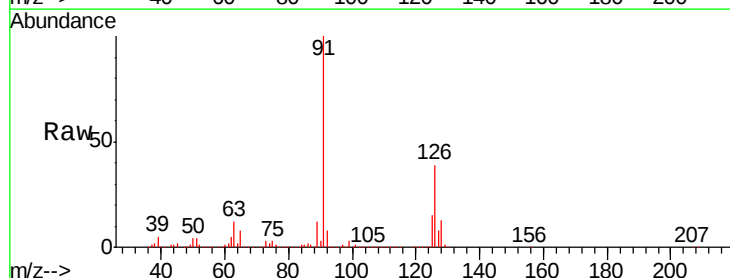
RT: 12.77 min Scan# 3421

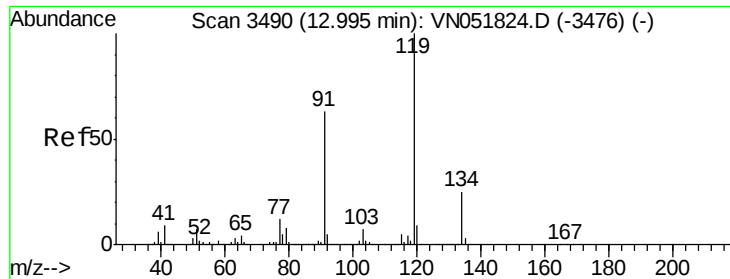
Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Tgt Ion:	91	Resp:	5063845
Ion	Ratio	Lower	Upper
91	100		
126	38.6	0.0	65.2





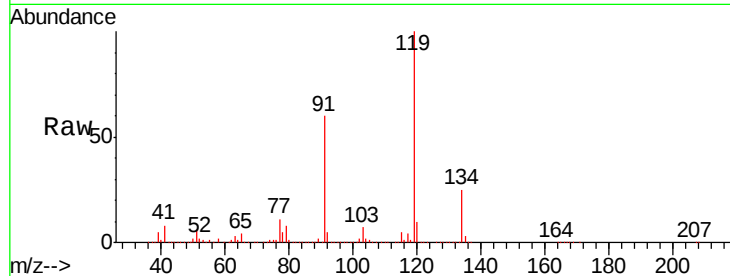
#79
tert-butylbenzene
Concen: 155.39 ug/l
RT: 12.99 min Scan# 3490
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC150

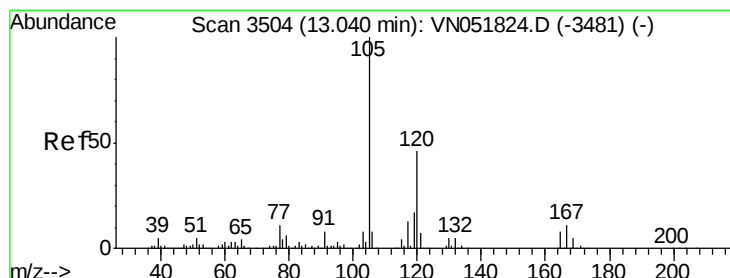
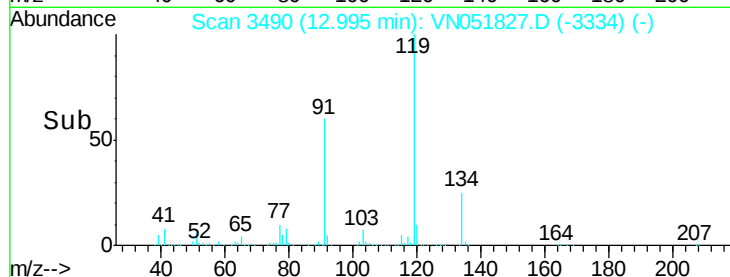
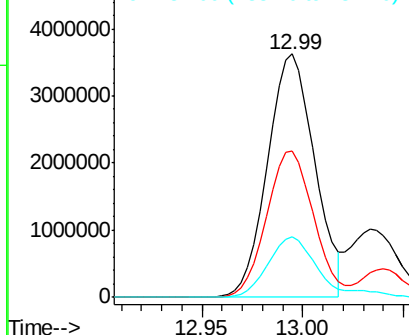
Tgt Ion:119 Resp: 5883458
Ion Ratio Lower Upper
119 100
91 59.9 0.0 131.6
134 25.4 0.0 46.2

Manual Integrations
APPROVED

MMDadoda
10/15/2018 11:27:51 AM

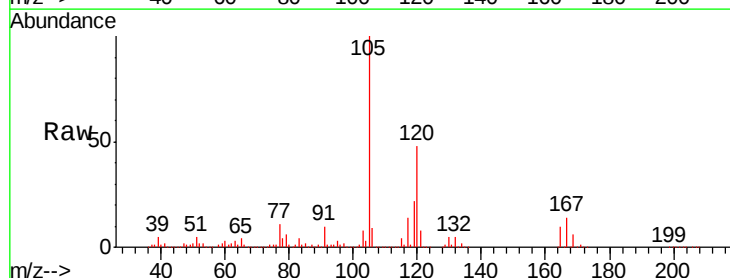


Abundance Ion 119.00 (118.70 to 119.70): V
Ion 91.00 (90.70 to 91.70): V
Ion 134.00 (133.70 to 134.70): V

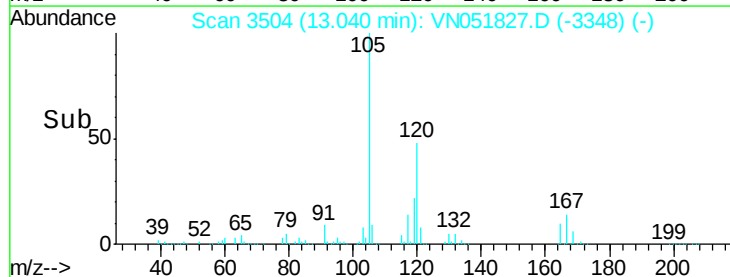
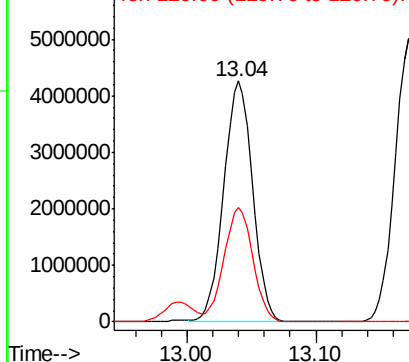


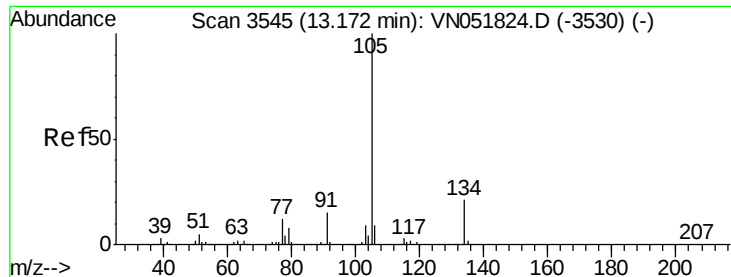
#80
1,2,4-Trimethylbenzene
Concen: 162.13 ug/l
RT: 13.04 min Scan# 3504
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Tgt Ion:105 Resp: 6612514
Ion Ratio Lower Upper
105 100
120 47.7 0.0 89.6



Abundance Ion 105.00 (104.70 to 105.70): V
Ion 120.00 (119.70 to 120.70): V





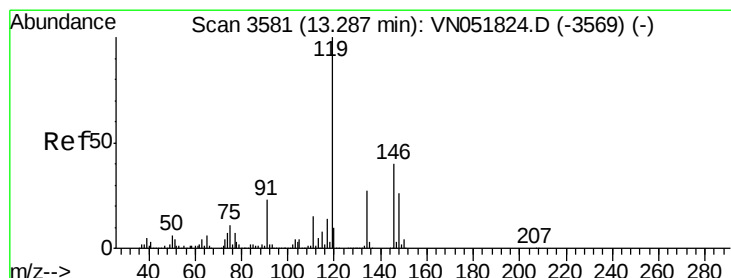
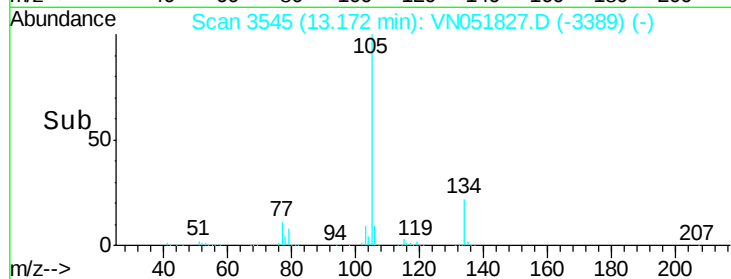
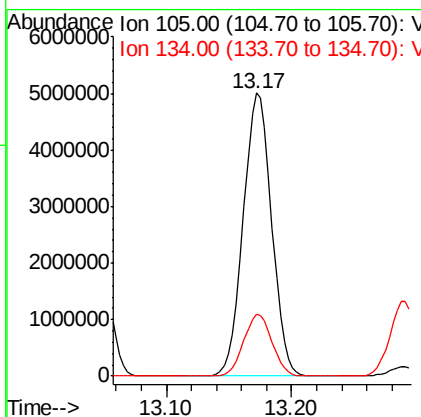
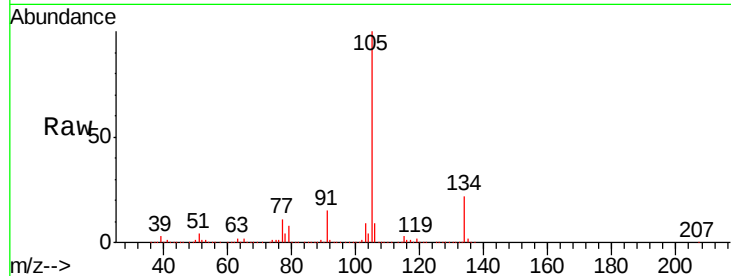
#81
 sec-Butylbenzene
 Concen: 160.14 ug/l
 RT: 13.17 min Scan# 3545
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC150

Tgt Ion:105 Resp: 7882314
 Ion Ratio Lower Upper
 105 100
 134 21.8 0.0 39.4

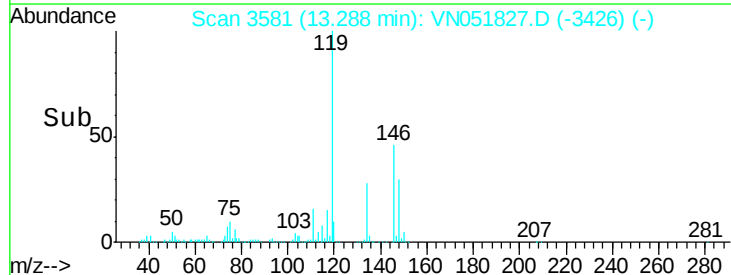
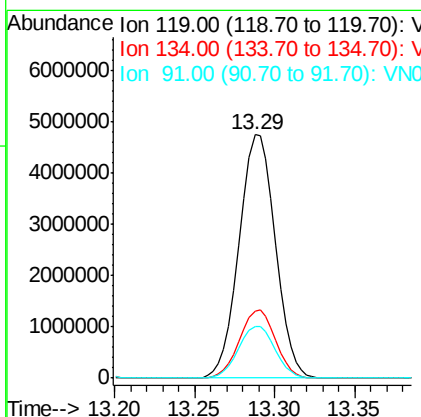
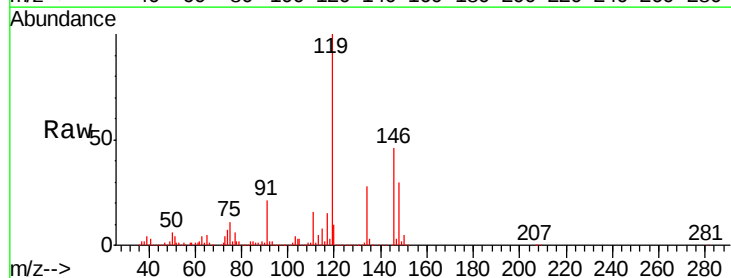
Manual Integrations
 APPROVED

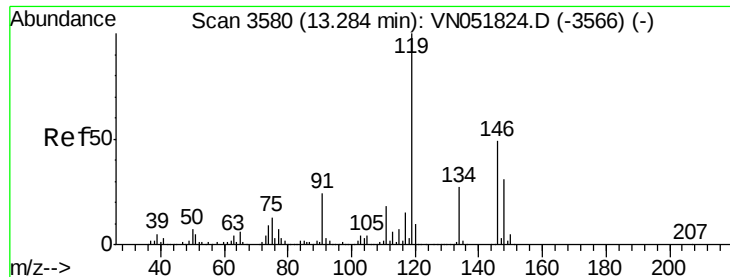
MMDadoda
 10/15/2018 11:27:51 AM



#82
 p-Isopropyltoluene
 Concen: 167.54 ug/l
 RT: 13.29 min Scan# 3581
 Delta R.T. -0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Tgt Ion:119 Resp: 7308323
 Ion Ratio Lower Upper
 119 100
 134 27.6 0.0 53.6
 91 21.5 0.0 52.0





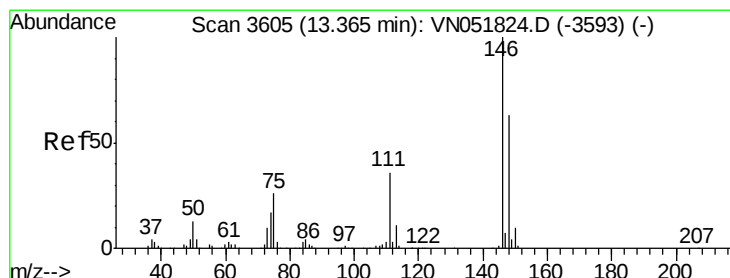
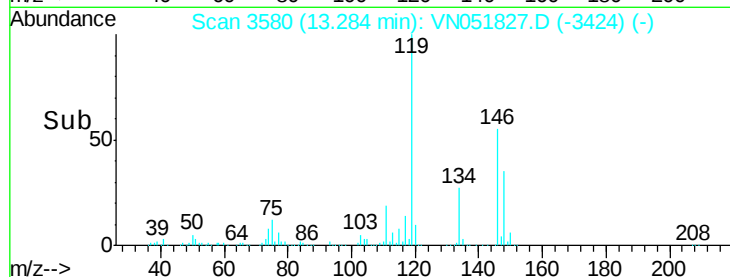
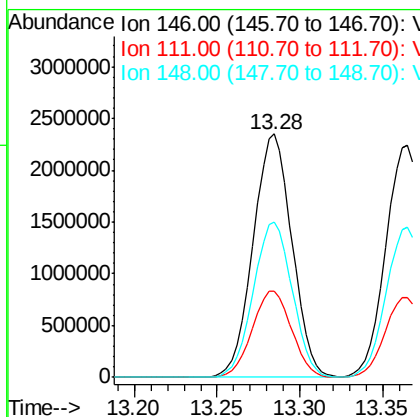
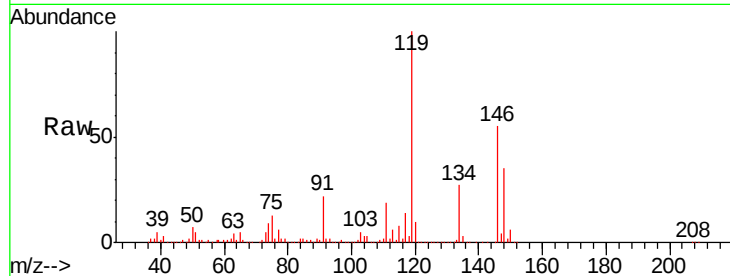
#83
 1,3-Dichlorobenzene
 Concen: 182.26 ug/l
 RT: 13.28 min Scan# 3580
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC150

Tgt Ion:146 Resp: 3829843
 Ion Ratio Lower Upper
 146 100
 111 35.8 18.1 54.3
 148 63.9 31.3 93.8

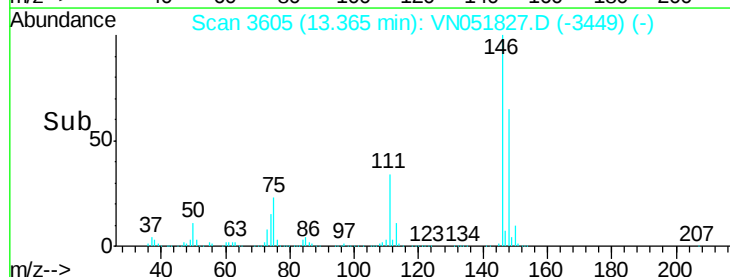
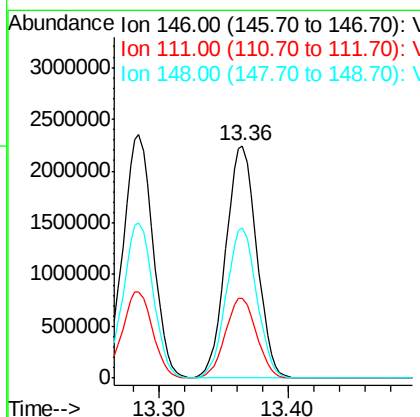
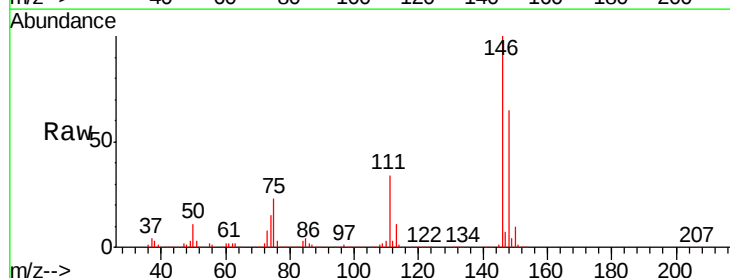
Manual Integrations
 APPROVED

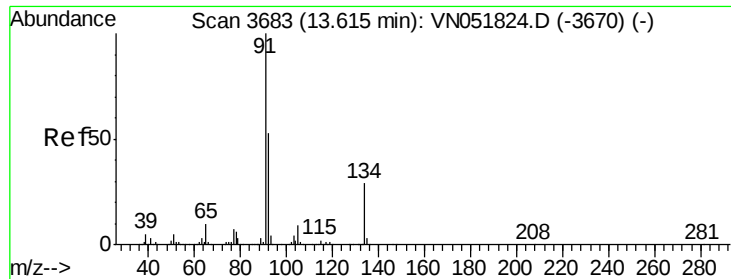
MMDadoda
 10/15/2018 11:27:51 AM



#84
 1,4-Dichlorobenzene
 Concen: 188.99 ug/l
 RT: 13.36 min Scan# 3605
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Tgt Ion:146 Resp: 3706826
 Ion Ratio Lower Upper
 146 100
 111 34.8 17.4 52.2
 148 64.1 32.8 98.3





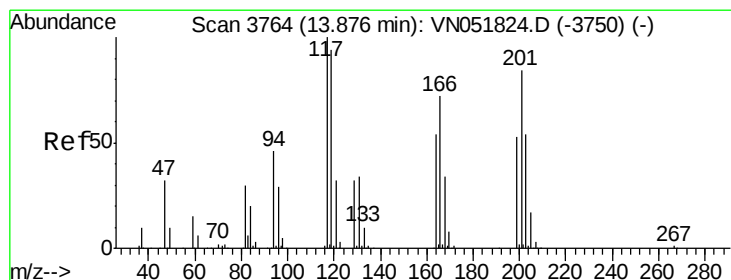
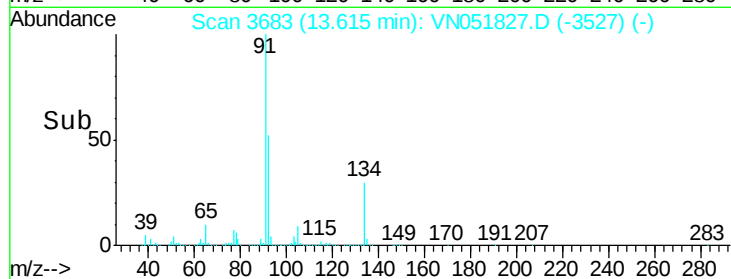
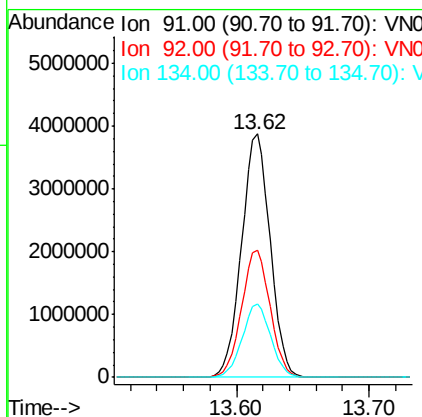
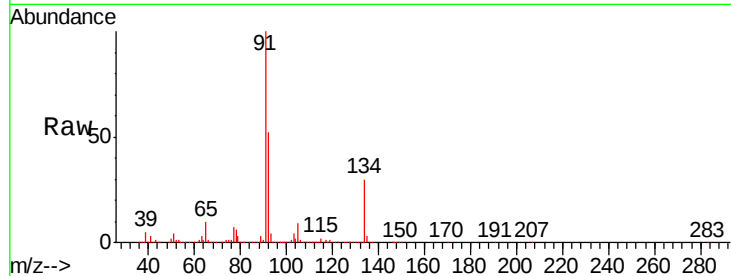
#85
n-Butylbenzene
Concen: 178.67 ug/l
RT: 13.62 min Scan# 3683
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC150

Tgt Ion	Ratio	Lower	Upper
91	100		
92	52.2	0.0	97.4
134	30.0	0.0	49.6

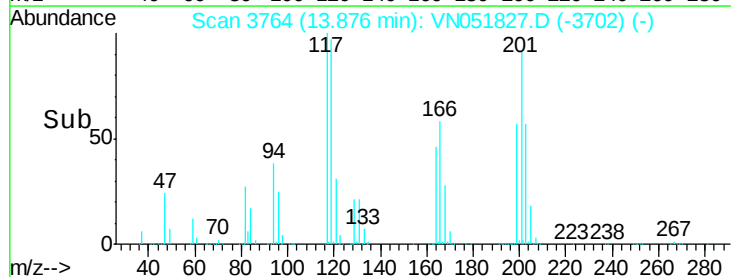
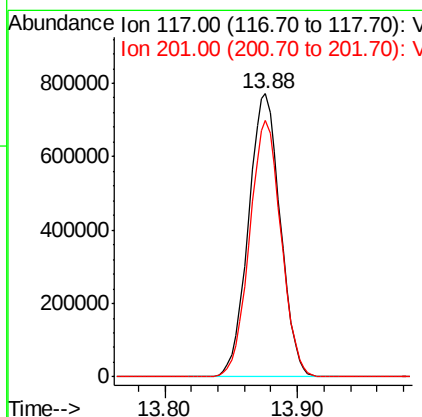
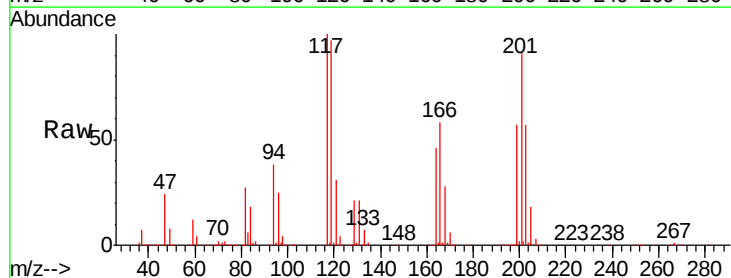
Manual Integrations
APPROVED

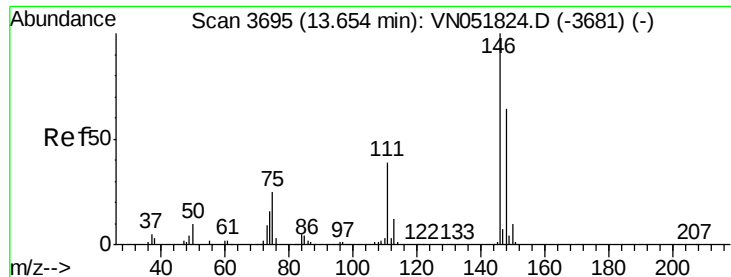
MMDadoda
10/15/2018 11:27:51 AM



#86
Hexachloroethane
Concen: 171.78 ug/l
RT: 13.88 min Scan# 3764
Delta R.T. 0.00 min
Lab File: VN051827.D
Acq: 12 Oct 2018 9:52

Tgt Ion	Ratio	Lower	Upper
117	100		
201	89.6	47.8	143.3





#87

1,2-Dichlorobenzene

Concen: 176.34 ug/l

RT: 13.65 min Scan# 3695

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 146 Resp: 3614733

Ion Ratio Lower Upper

146 100

111 37.0 20.8 62.2

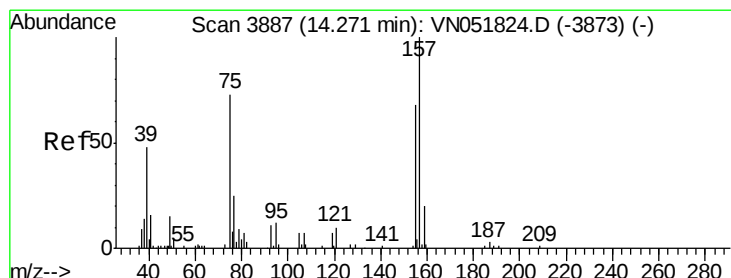
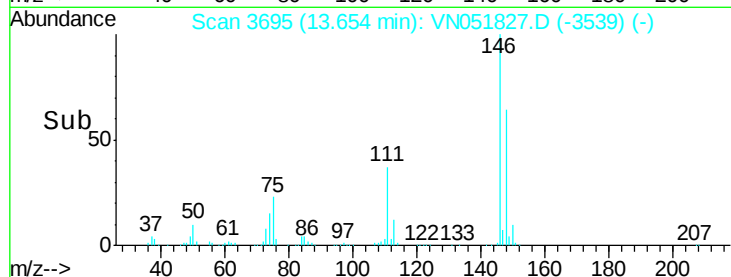
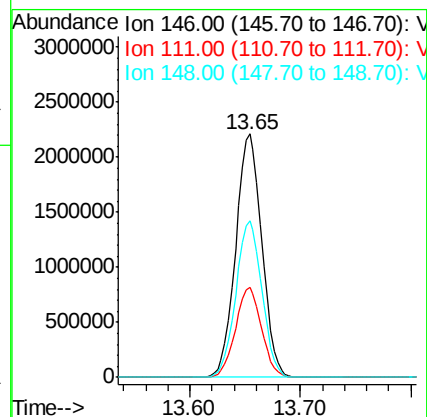
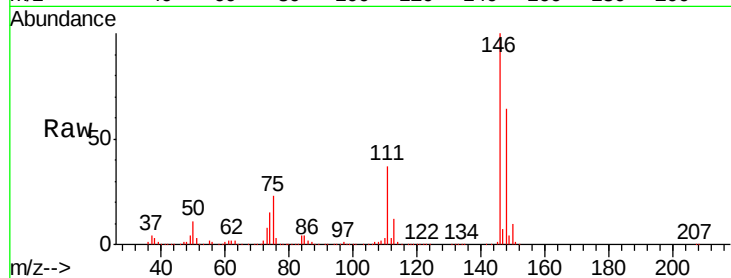
148 64.4 33.2 99.6

Manual Integrations

APPROVED

MMDadoda

10/15/2018 11:27:51 AM



#88

1,2-Dibromo-3-Chloropropane

Concen: 168.49 ug/l

RT: 14.27 min Scan# 3886

Delta R.T. -0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

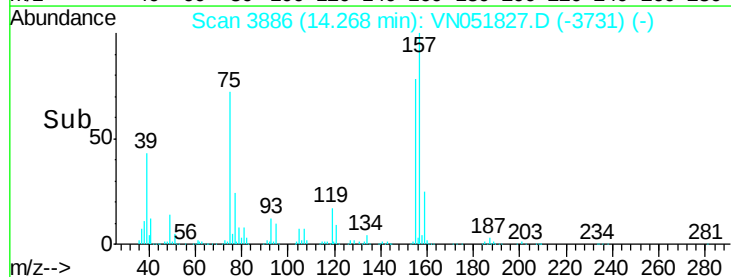
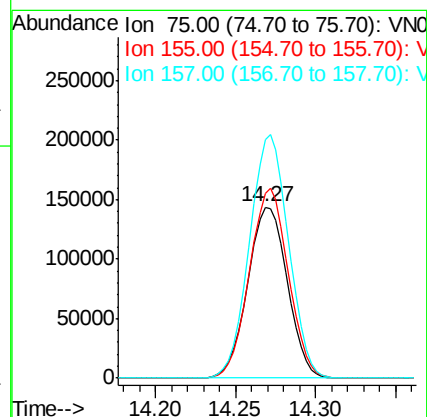
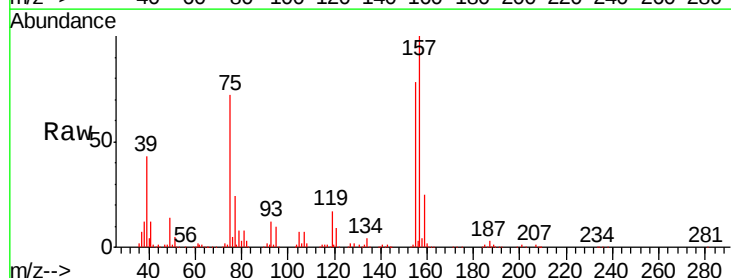
Tgt Ion: 75 Resp: 243187

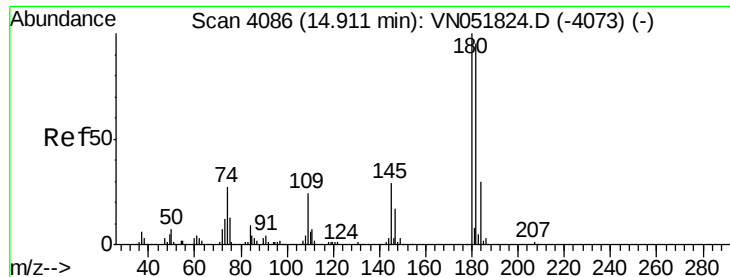
Ion Ratio Lower Upper

75 100

155 108.8 57.0 85.6#

157 140.4 87.4 131.0#





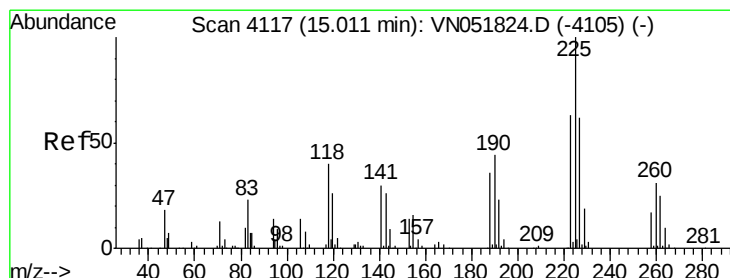
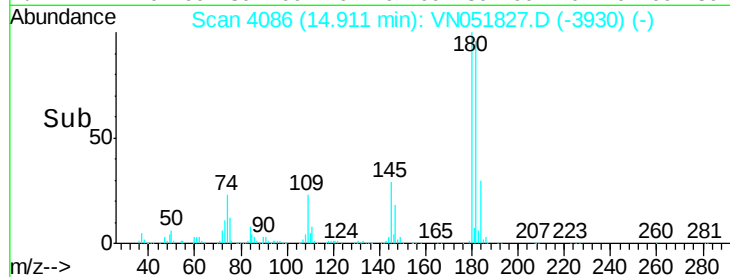
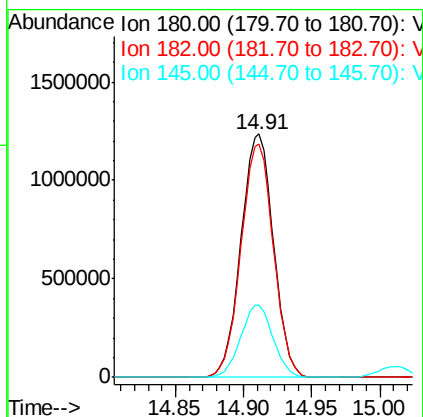
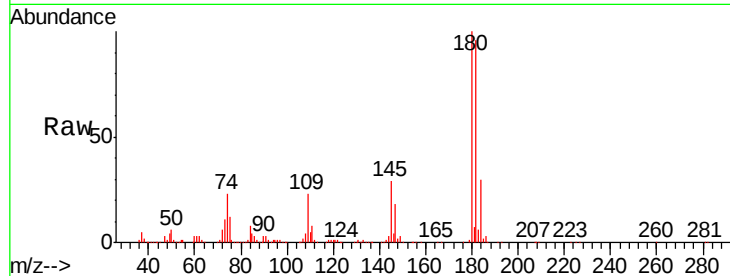
#89
 1,2,4-Trichlorobenzene
 Concen: 227.38 ug/l
 RT: 14.91 min Scan# 4086
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC150

Tgt Ion	Ratio	Lower	Upper
180	100		
182	95.7	77.7	116.5
145	29.6	23.4	35.2

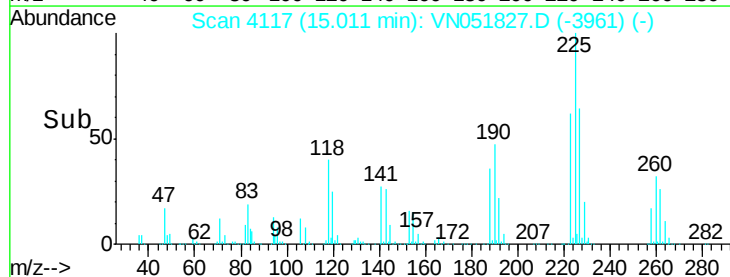
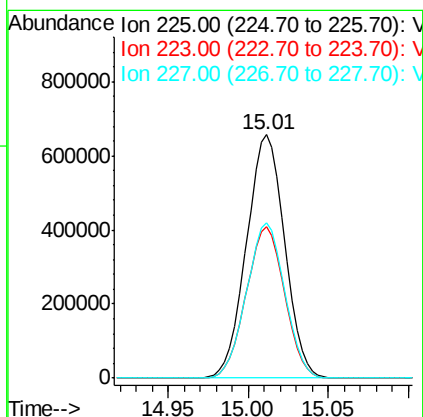
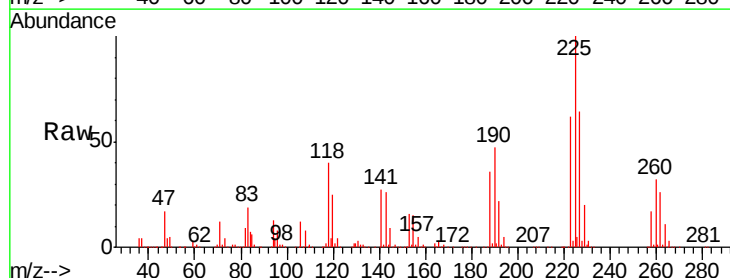
Manual Integrations
 APPROVED

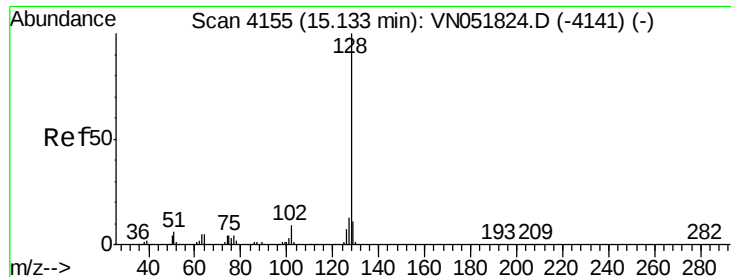
MMDadoda
 10/15/2018 11:27:51 AM



#90
 Hexachlorobutadiene
 Concen: 159.36 ug/l
 RT: 15.01 min Scan# 4117
 Delta R.T. 0.00 min
 Lab File: VN051827.D
 Acq: 12 Oct 2018 9:52

Tgt Ion	Ratio	Lower	Upper
225	100		
223	62.4	0.0	117.0
227	63.7	0.0	127.0





#91

Naphthalene

Concen: 233.74 ug/l

RT: 15.13 min Scan# 4155

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion:128 Resp: 4225949

Ion Ratio Lower Upper

128 100

127 12.9 10.1 15.1

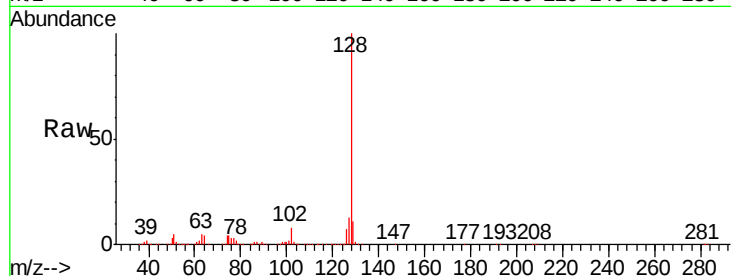
129 10.9 8.4 12.6

Manual Integrations

APPROVED

MMDadoda

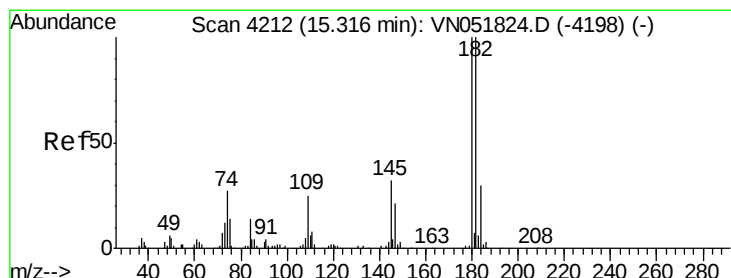
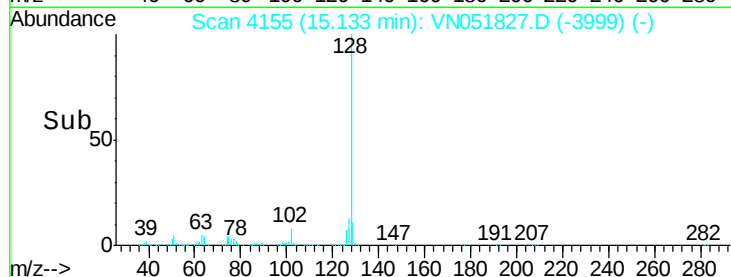
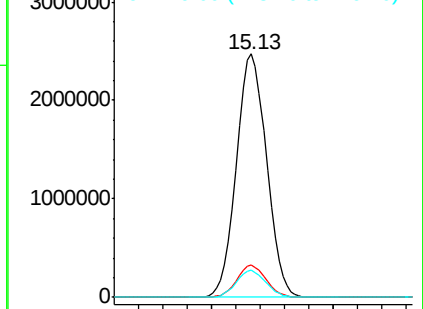
10/15/2018 11:27:51 AM



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



#92

1,2,3-Trichlorobenzene

Concen: 213.08 ug/l

RT: 15.32 min Scan# 4212

Delta R.T. 0.00 min

Lab File: VN051827.D

Acq: 12 Oct 2018 9:52

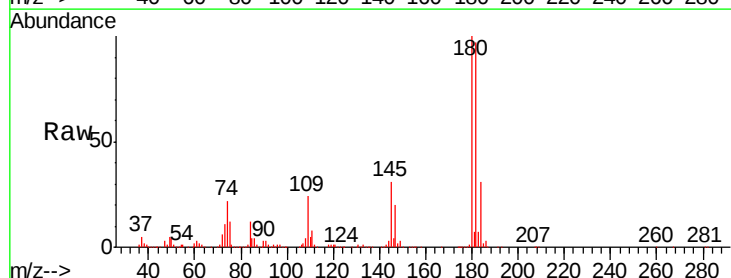
Tgt Ion:180 Resp: 1897501

Ion Ratio Lower Upper

180 100

182 96.5 0.0 198.0

145 31.5 0.0 36.8



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

