

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN031319\
 Data File : VN054229.D
 Acq On : 13 Mar 2019 23:34
 Operator : JC/SP
 Sample : VN0313WBS02
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 33 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0313WBS02

Manual Integrations
 APPROVED

MMDadoda
 3/14/2019 10:28:17 AM

Quant Time: Mar 14 08:22:11 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N031219W.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 13 03:33:31 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.66	168	1341070	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	2108178	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	1871738	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.34	152	891004	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.03	65	754780	53.00	ug/l	0.00
Spiked Amount	50.000		Recovery	=	106.00%	
35) Dibromofluoromethane	7.59	113	683710	50.28	ug/l	0.00
Spiked Amount	50.000		Recovery	=	100.56%	
50) Toluene-d8	10.09	98	2498996	49.77	ug/l	0.00
Spiked Amount	50.000		Recovery	=	99.54%	
62) 4-Bromofluorobenzene	12.40	95	860897	49.00	ug/l	0.00
Spiked Amount	50.000		Recovery	=	98.00%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.85	85	281661	22.161	ug/l	100
3) Chloromethane	2.06	50	257210	20.833	ug/l	99
4) Vinyl Chloride	2.19	62	299191	21.202	ug/l	99
5) Bromomethane	2.57	94	181829	18.605	ug/l	99
6) Chloroethane	2.71	64	177058	20.738	ug/l	99
7) Trichlorofluoromethane	3.02	101	386492	20.600	ug/l	99
8) Diethyl Ether	3.41	74	191766	22.430	ug/l	95
9) 1,1,2-Trichlorotrifluoroet	3.75	101	307862	21.898	ug/l	99
10) Methyl Iodide	3.94	142	282347	15.215	ug/l	99
11) Tert butyl alcohol	4.82	59	91328	93.539	ug/l	97
12) 1,1-Dichloroethene	3.73	96	310253	22.269	ug/l	99
13) Acrolein	3.61	56	67863	73.350	ug/l	98
14) Allyl chloride	4.32	41	363486	20.334	ug/l	98
15) Acrylonitrile	5.00	53	436262	108.777	ug/l	99
16) Acetone	3.82	43	325588	79.843	ug/l	100
17) Carbon Disulfide	4.04	76	656830	18.806	ug/l	100
18) Methyl Acetate	4.33	43	191076	23.160	ug/l	99
19) Methyl tert-butyl Ether	5.05	73	755197	21.868	ug/l	98
20) Methylene Chloride	4.55	84	290731	21.713	ug/l	98
21) trans-1,2-Dichloroethene	5.04	96	286527	21.464	ug/l	99
22) Diisopropyl ether	5.96	45	778065	21.809	ug/l	97
23) Vinyl Acetate	5.90	43	2746765	104.422	ug/l	100
24) 1,1-Dichloroethane	5.85	63	500115	21.832	ug/l	98
25) 2-Butanone	6.85	43	480145	100.319	ug/l	99
26) 2,2-Dichloropropane	6.82	77	331885	16.475	ug/l	99
27) cis-1,2-Dichloroethene	6.83	96	336110	22.569	ug/l	95
28) Bromochloromethane	7.19	49	193684	20.682	ug/l	97
29) Tetrahydrofuran	7.22	42	323028	104.970	ug/l	99
30) Chloroform	7.37	83	528620	22.115	ug/l	98
31) Cyclohexane	7.65	56	458644	20.696	ug/l	98
32) 1,1,1-Trichloroethane	7.57	97	461553	21.380	ug/l	100
36) 1,1-Dichloropropene	7.79	75	394892	20.340	ug/l	99
37) Ethyl Acetate	6.94	43	225903	20.251	ug/l #	94
38) Carbon Tetrachloride	7.77	117	389073	19.110	ug/l	100

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN031319\
 Data File : VN054229.D
 Acq On : 13 Mar 2019 23:34
 Operator : JC/SP
 Sample : VN0313WBS02
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 33 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleID :
 VN0313WBS02

Manual Integrations
 APPROVED

MMDadoda
 3/14/2019 10:28:17 AM

Quant Time: Mar 14 08:22:11 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N031219W.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 13 03:33:31 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	9.08	83	473647	19.828	ug/l	99
40) Benzene	8.04	78	1174793	21.146	ug/l	100
41) Methacrylonitrile	7.18	41	117692	18.478	ug/l	94
42) 1,2-Dichloroethane	8.13	62	390823	20.836	ug/l	100
43) Isopropyl Acetate	8.17	43	377588	19.284	ug/l	99
44) Trichloroethene	8.84	130	358764	20.788	ug/l	98
45) 1,2-Dichloropropane	9.12	63	294978	21.383	ug/l	99
46) Dibromomethane	9.21	93	191446	20.539	ug/l	98
47) Bromodichloromethane	9.40	83	385144	20.612	ug/l	97
48) Methyl methacrylate	9.20	41	205236	20.654	ug/l	99
49) 1,4-Dioxane	9.20	88	58326	414.966	ug/l	98
51) 4-Methyl-2-Pentanone	9.99	43	1063243	102.607	ug/l	100
52) Toluene	10.16	92	740929	21.033	ug/l	99
53) t-1,3-Dichloropropene	10.38	75	352263	17.814	ug/l	99
54) cis-1,3-Dichloropropene	9.84	75	420849	19.327	ug/l	99
55) 1,1,2-Trichloroethane	10.56	97	271415	21.101	ug/l	98
56) Ethyl methacrylate	10.43	69	313647	20.450	ug/l	99
57) 1,3-Dichloropropane	10.71	76	441610	20.997	ug/l	100
58) 2-Chloroethyl Vinyl ether	9.70	63	558446	95.107	ug/l	100
59) 2-Hexanone	10.75	43	671325	97.364	ug/l	99
60) Dibromochloromethane	10.90	129	284023	19.618	ug/l	99
61) 1,2-Dibromoethane	11.00	107	274709	21.016	ug/l	99
64) Tetrachloroethene	10.63	164	368592	20.368	ug/l	99
65) Chlorobenzene	11.43	112	850558	20.696	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.51	131	300772	20.146	ug/l	99
67) Ethyl Benzene	11.51	91	1385940	20.343	ug/l	99
68) m/p-Xylenes	11.62	106	1090268	40.945	ug/l	100
69) o-Xylene	11.95	106	536739	20.678	ug/l	99
70) Styrene	11.96	104	846893	20.803	ug/l	100
71) Bromoform	12.13	173	182602	17.641	ug/l #	99
73) Isopropylbenzene	12.25	105	1417720	19.888	ug/l	100
74) N-amyl acetate	12.07	43	305463	19.305	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.50	83	306339	20.170	ug/l	100
76) 1,2,3-Trichloropropane	12.55	75	253998m	19.385	ug/l	
77) Bromobenzene	12.53	156	382847	20.296	ug/l	97
78) n-propylbenzene	12.59	91	1544992	19.974	ug/l	100
79) 2-Chlorotoluene	12.67	91	928533	19.965	ug/l	99
80) 1,3,5-Trimethylbenzene	12.73	105	1178867	19.881	ug/l	100
81) trans-1,4-Dichloro-2-buten	12.30	75	55786	14.554	ug/l	88
82) 4-Chlorotoluene	12.77	91	922186	19.858	ug/l	99
83) tert-Butylbenzene	12.99	119	1090498	19.981	ug/l	100
84) 1,2,4-Trimethylbenzene	13.04	105	1174374	20.188	ug/l	100
85) sec-Butylbenzene	13.17	105	1395069	19.710	ug/l	100
86) p-Isopropyltoluene	13.29	119	1223774	19.708	ug/l	99
87) 1,3-Dichlorobenzene	13.28	146	649125	20.422	ug/l	99
88) 1,4-Dichlorobenzene	13.36	146	630024	20.177	ug/l	99
89) n-Butylbenzene	13.61	91	925878	19.624	ug/l	100
90) Hexachloroethane	13.87	117	178642	17.374	ug/l	99
91) 1,2-Dichlorobenzene	13.65	146	645188	20.764	ug/l	99
92) 1,2-Dibromo-3-Chloropropan	14.27	75	43786	18.631	ug/l	98

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN031319\
Data File : VN054229.D
Acq On : 13 Mar 2019 23:34
Operator : JC/SP
Sample : VN0313WBS02
Misc : 5.00mL/MSVOA N/WATER
ALS Vial : 33 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0313WBS02

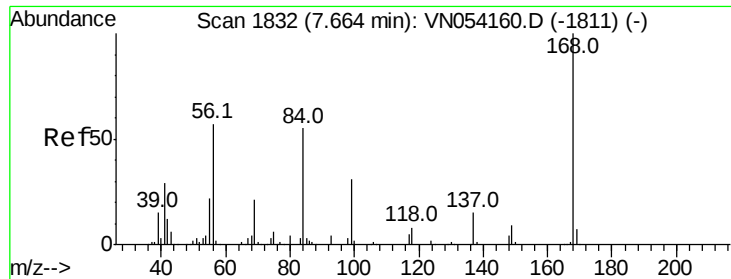
Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM

Quant Time: Mar 14 08:22:11 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N031219W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 13 03:33:31 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	14.91	180	334343	19.442	ug/l	100
94) Hexachlorobutadiene	15.01	225	227210	19.197	ug/l	98
95) Naphthalene	15.13	128	668774	19.395	ug/l	100
96) 1,2,3-Trichlorobenzene	15.31	180	345765	20.943	ug/l	99

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion:168 Resp: 1341070

Ion Ratio Lower Upper

168 100

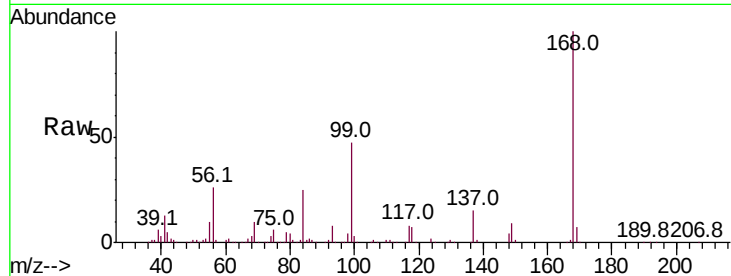
99 46.5 37.1 55.7

Manual Integrations

APPROVED

MMDadoda

3/14/2019 10:28:17 AM



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.66

600000

500000

400000

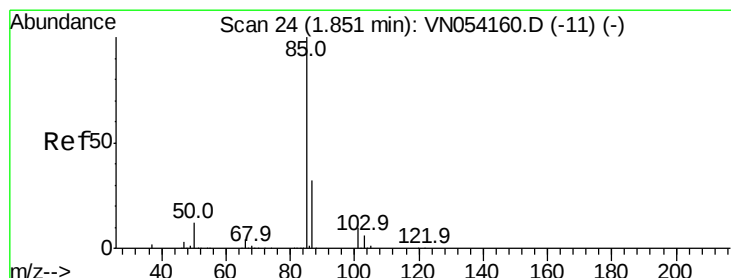
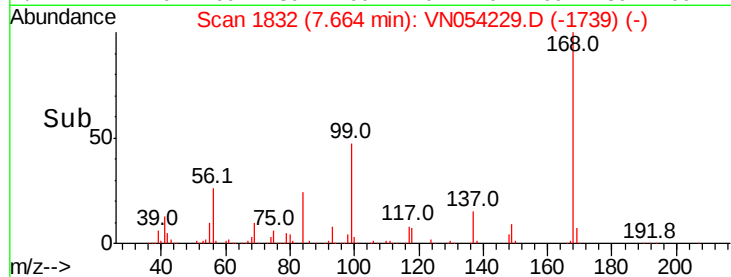
300000

200000

100000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 22.161 ug/l

RT: 1.85 min Scan# 24

Delta R.T. 0.00 min

Lab File: VN054229.D

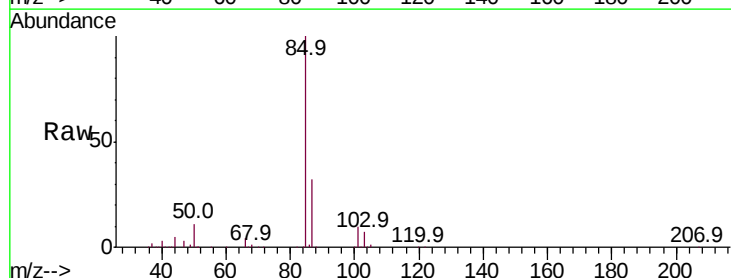
Acq: 13 Mar 2019 23:34

Tgt Ion: 85 Resp: 281661

Ion Ratio Lower Upper

85 100

87 31.6 15.9 47.7



Abundance Ion 84.90 (84.60 to 85.60): VN

Ion 86.90 (86.60 to 87.60): VN

1.85

200000

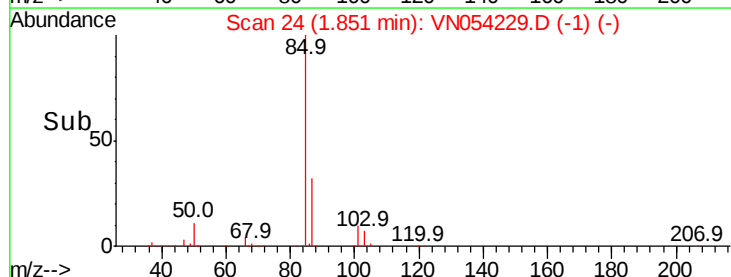
150000

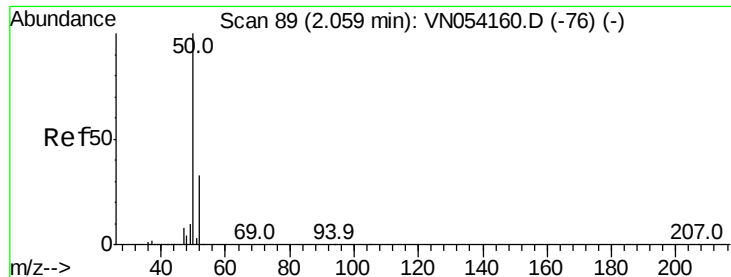
100000

50000

0

Time-->





#3

Chloromethane

Concen: 20.833 ug/l

RT: 2.06 min Scan# 88

Delta R.T. -0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion: 50 Resp: 257210

Ion Ratio Lower Upper

50 100

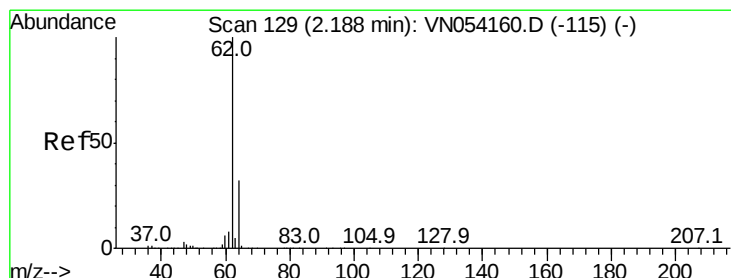
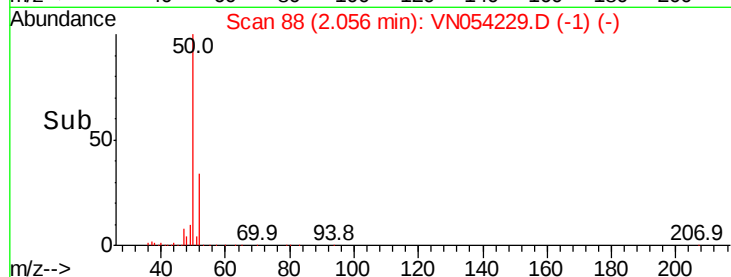
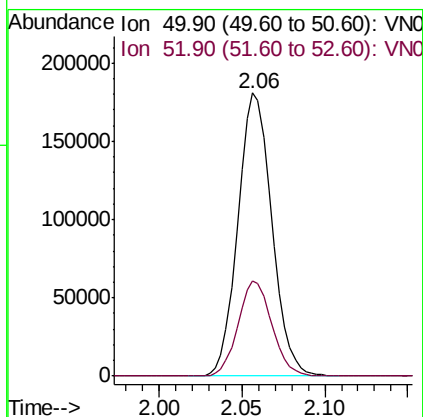
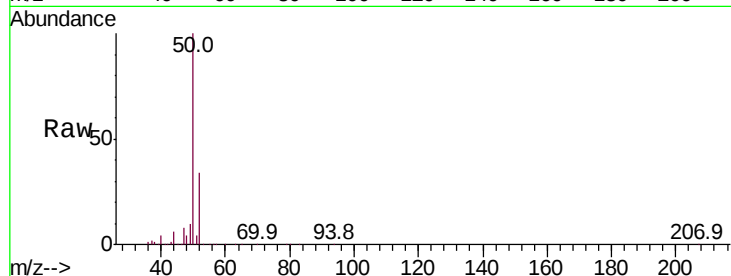
52 33.8 26.4 39.6

Manual Integrations

APPROVED

MMDadoda

3/14/2019 10:28:17 AM



#4

Vinyl Chloride

Concen: 21.202 ug/l

RT: 2.19 min Scan# 129

Delta R.T. 0.00 min

Lab File: VN054229.D

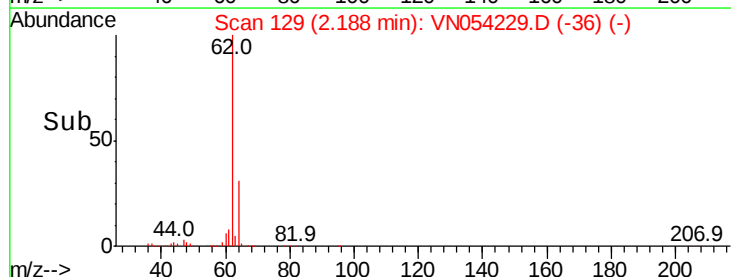
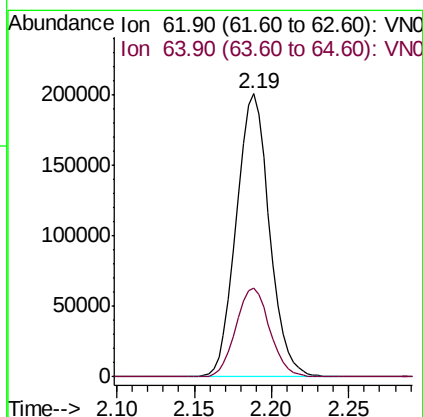
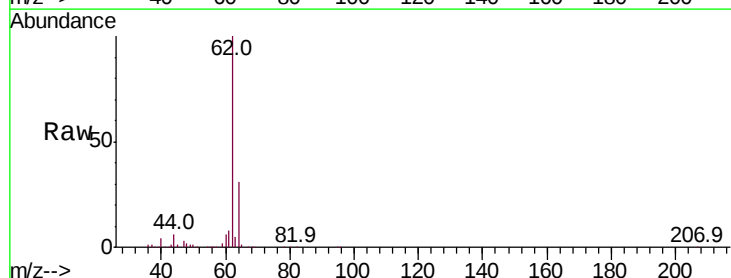
Acq: 13 Mar 2019 23:34

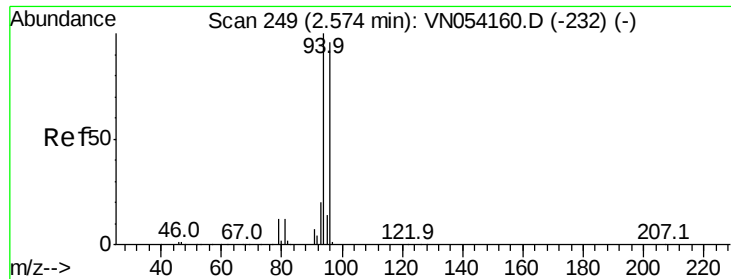
Tgt Ion: 62 Resp: 299191

Ion Ratio Lower Upper

62 100

64 31.2 25.5 38.3





#5

Bromomethane

Concen: 18.605 ug/l

RT: 2.57 min Scan# 249

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion: 94 Resp: 181829

Ion Ratio Lower Upper

94 100

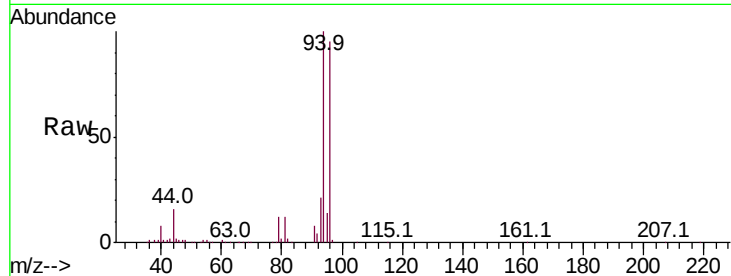
96 94.9 77.0 115.4

Manual Integrations

APPROVED

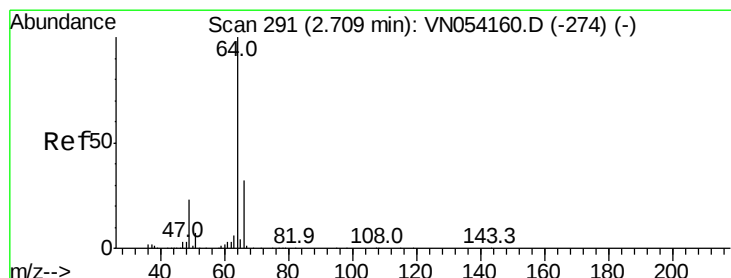
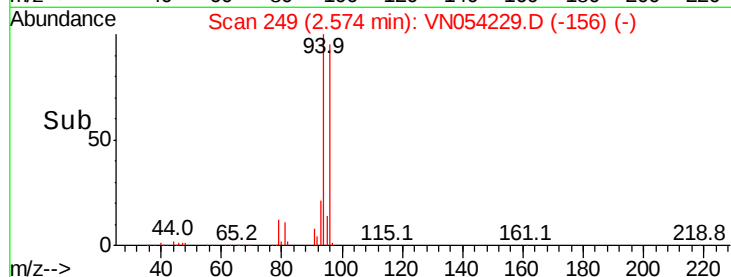
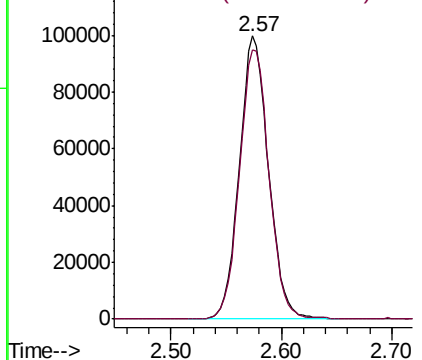
MMDadoda

3/14/2019 10:28:17 AM



Abundance Ion 93.90 (93.60 to 94.60): VNO

Ion 95.90 (95.60 to 96.60): VNO



#6

Chloroethane

Concen: 20.738 ug/l

RT: 2.71 min Scan# 291

Delta R.T. 0.00 min

Lab File: VN054229.D

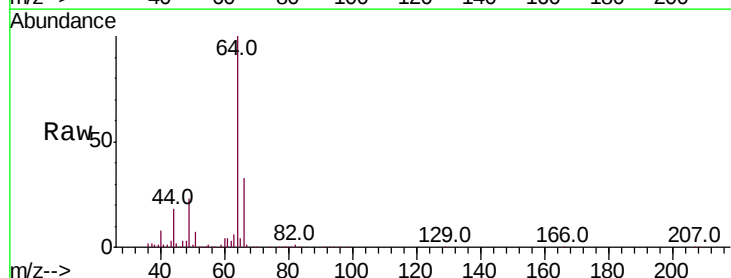
Acq: 13 Mar 2019 23:34

Tgt Ion: 64 Resp: 177058

Ion Ratio Lower Upper

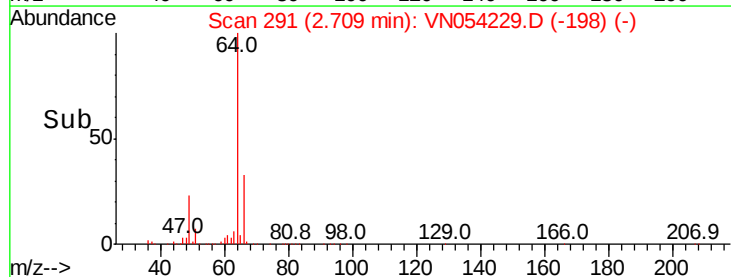
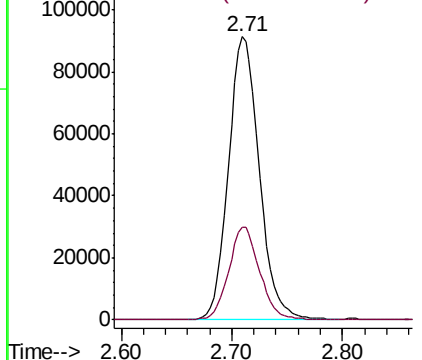
64 100

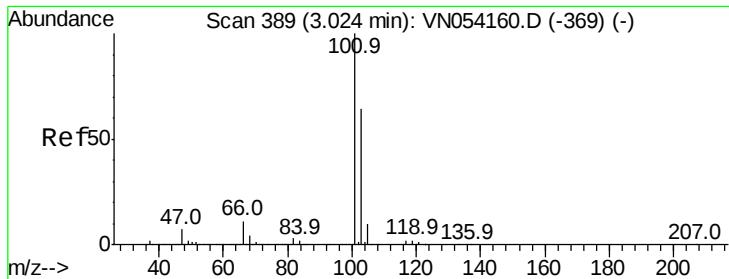
66 32.6 25.7 38.5



Abundance Ion 63.90 (63.60 to 64.60): VNO

Ion 65.90 (65.60 to 66.60): VNO





#7

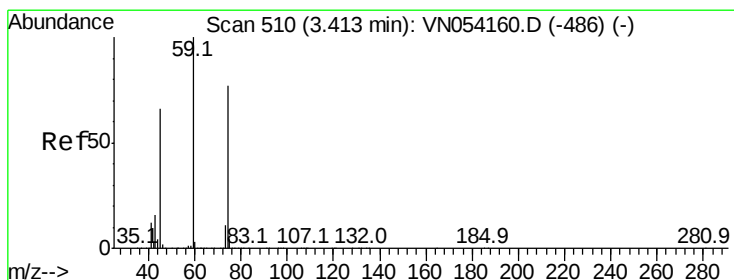
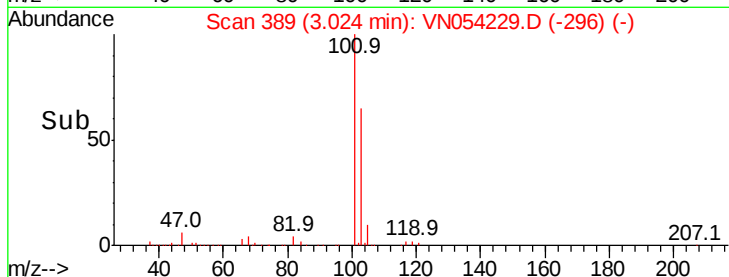
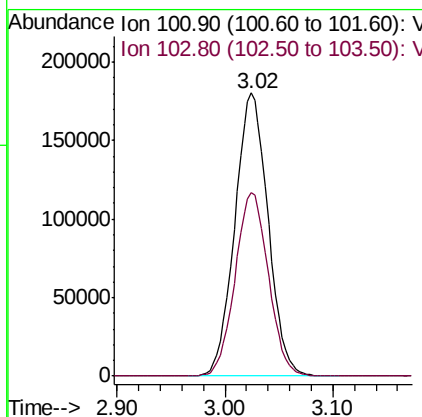
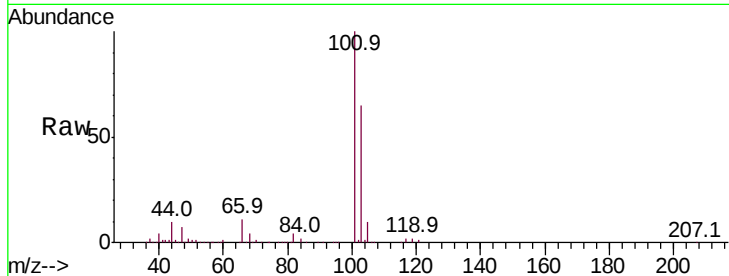
Trichlorofluoromethane
 Concen: 20.600 ug/l
 RT: 3.02 min Scan# 389
 Delta R.T. 0.00 min
 Lab File: VN054229.D
 Acq: 13 Mar 2019 23:34

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0313WBS02

Tot Ion	Ratio	Lower	Upper
101	100		
103	65.0	51.4	77.2

Manual Integrations
 APPROVED

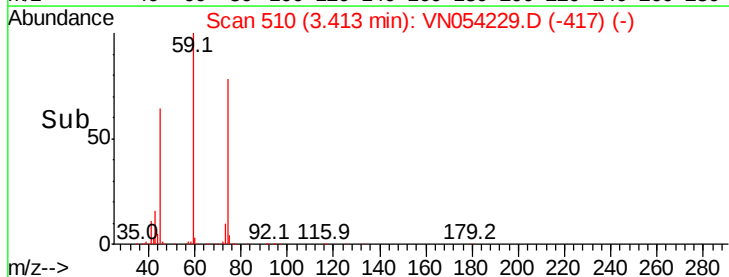
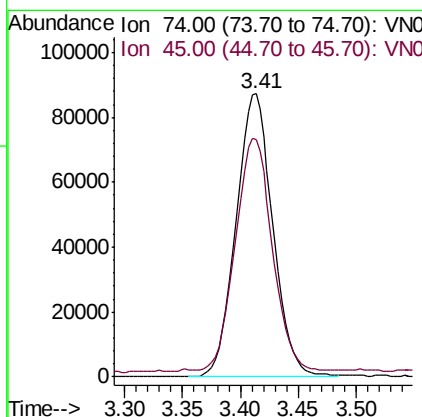
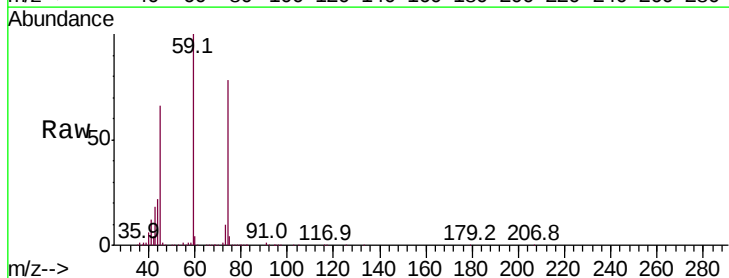
MMDadoda
 3/14/2019 10:28:17 AM

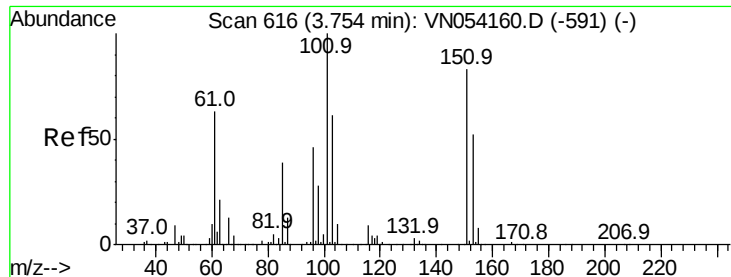


#8

Diethyl Ether
 Concen: 22.430 ug/l
 RT: 3.41 min Scan# 510
 Delta R.T. 0.00 min
 Lab File: VN054229.D
 Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Lower	Upper
74	100		
45	82.0	43.1	129.4





#9

1,1,2-Trichlorotrifluoroethane

Concen: 21.898 ug/l

RT: 3.75 min Scan# 615

Delta R.T. -0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

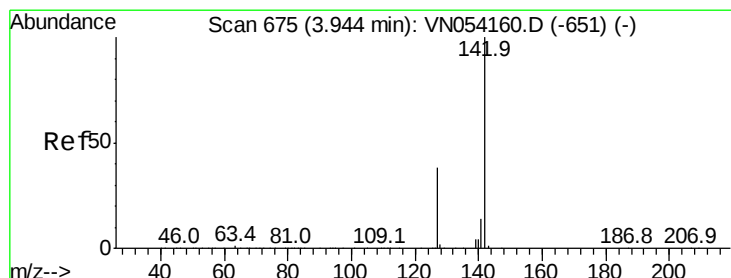
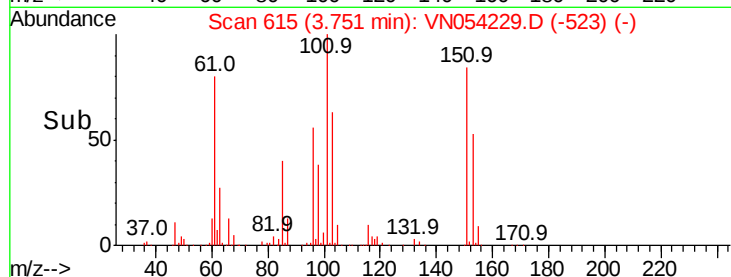
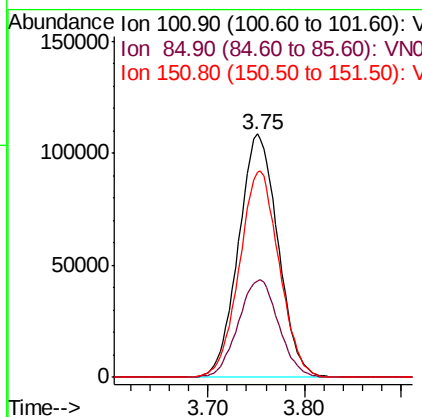
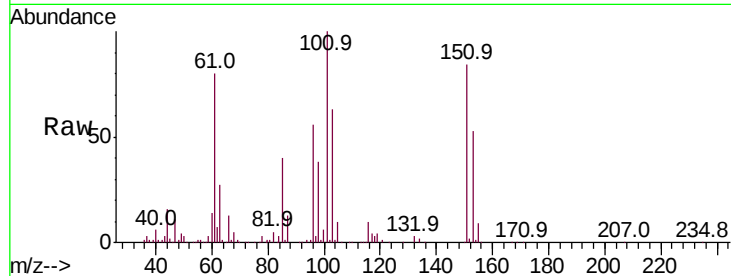
ClientSampleId :

VN0313WBS02

Tot Ion:	101	Resp:	307862
Ion Ratio	Lower	Upper	
101	100		
85	41.2	32.4	48.6
151	85.4	68.2	102.2

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#10

Methyl Iodide

Concen: 15.215 ug/l

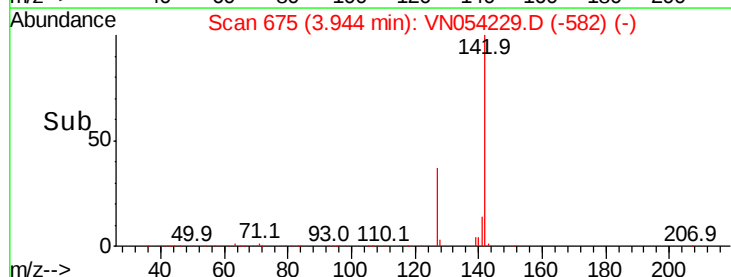
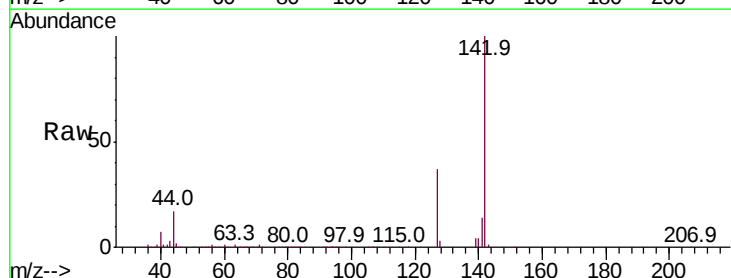
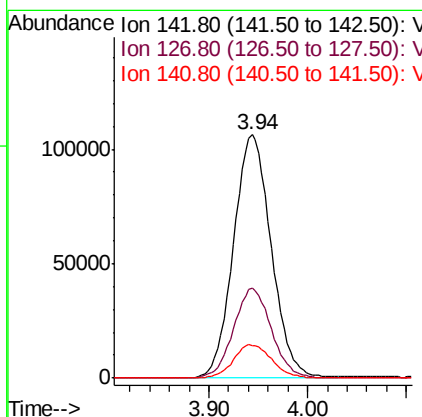
RT: 3.94 min Scan# 675

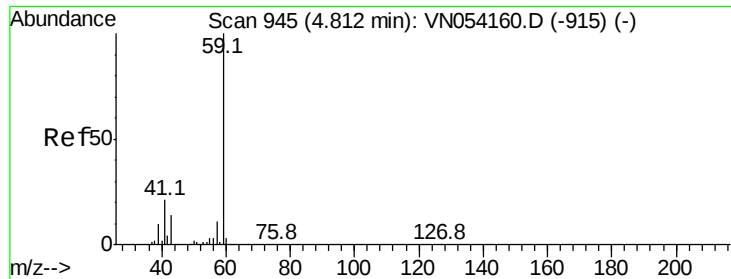
Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Tgt Ion:	142	Resp:	282347
Ion Ratio	Lower	Upper	
142	100		
127	37.1	30.3	45.5
141	14.0	11.2	16.8





#11

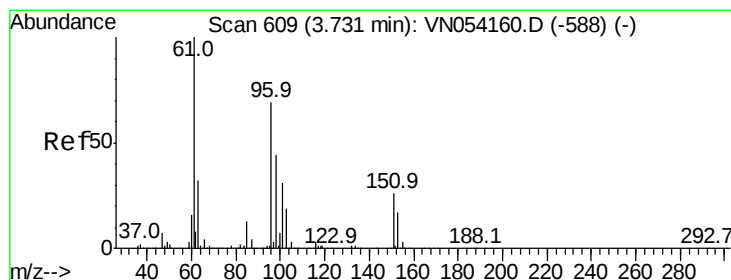
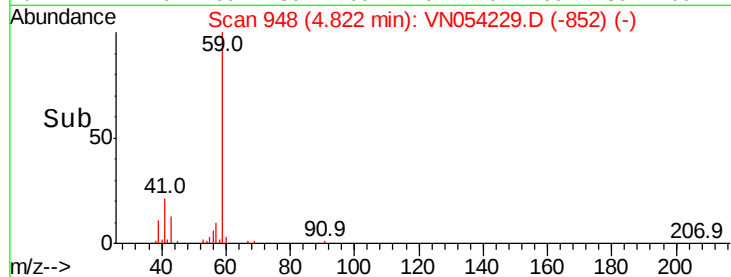
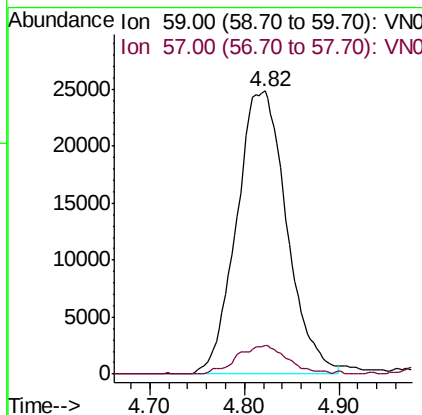
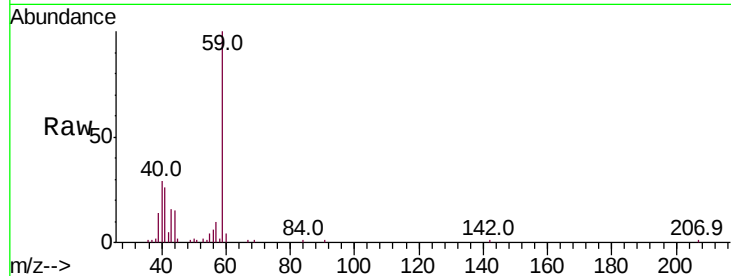
Tert butyl alcohol
 Concen: 93.539 ug/l
 RT: 4.82 min Scan# 948
 Delta R.T. 0.01 min
 Lab File: VN054229.D
 Acq: 13 Mar 2019 23:34

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0313WBS02

Tot Ion	59	Resp	91328
Ion Ratio	100	Lower	Upper
59	100		
57	10.3	9.0	13.6

Manual Integrations
 APPROVED

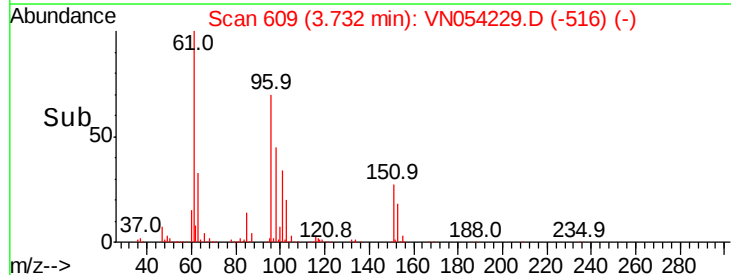
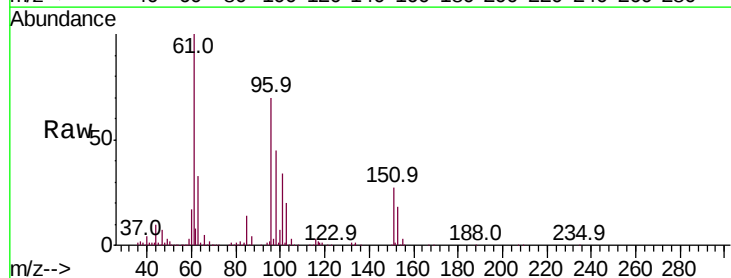
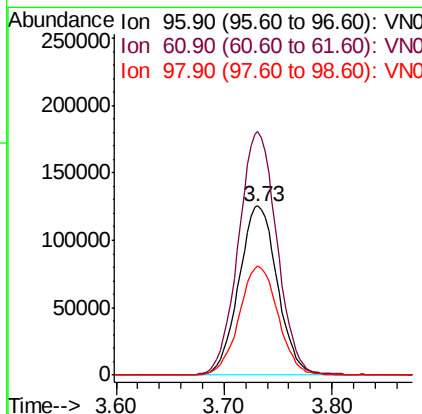
MMDadoda
 3/14/2019 10:28:17 AM

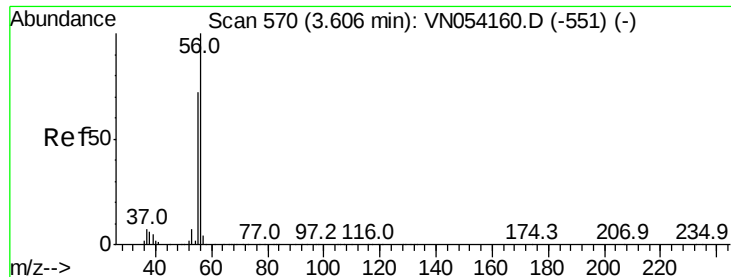


#12

1,1-Dichloroethene
 Concen: 22.269 ug/l
 RT: 3.73 min Scan# 609
 Delta R.T. 0.00 min
 Lab File: VN054229.D
 Acq: 13 Mar 2019 23:34

Tgt Ion	96	Resp	310253
Ion Ratio	100	Lower	Upper
96	100		
61	143.8	116.5	174.7
98	64.4	51.0	76.4





#13

Acrolein

Concen: 73.350 ug/l

RT: 3.61 min Scan# 571

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion: 56 Resp: 67863

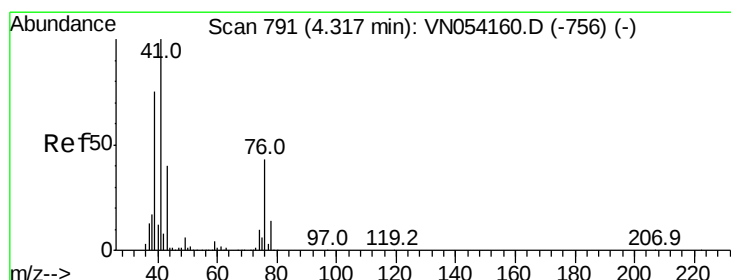
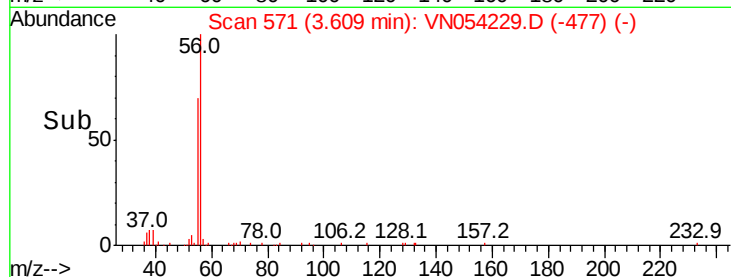
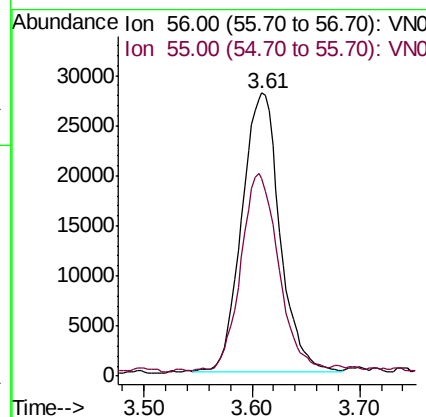
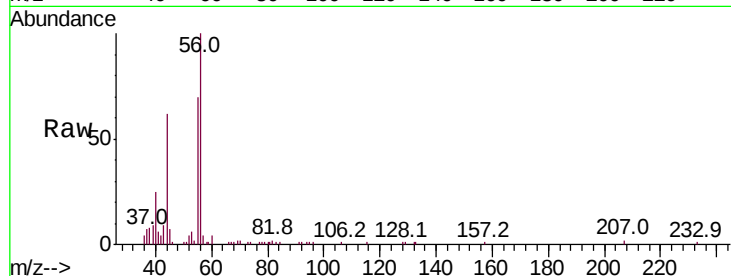
Ion Ratio Lower Upper

56 100

55 68.9 56.7 85.1

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#14

Allyl chloride

Concen: 20.334 ug/l

RT: 4.32 min Scan# 791

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

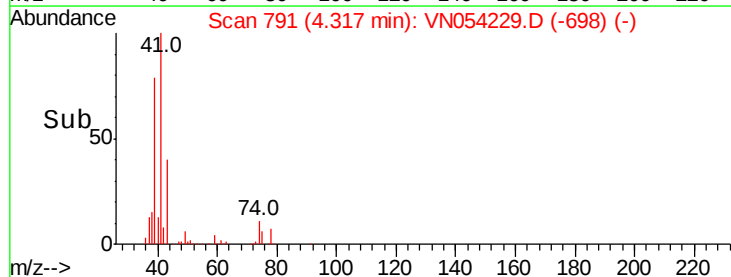
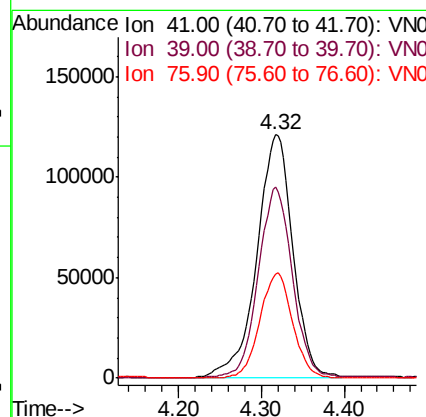
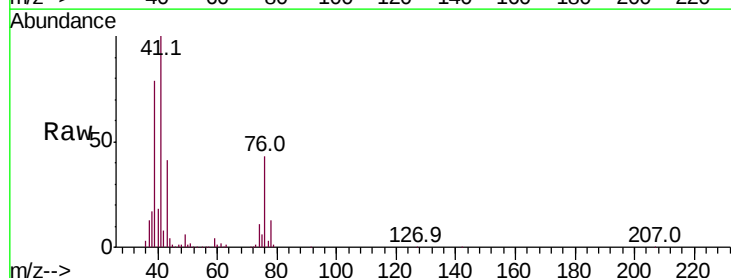
Tgt Ion: 41 Resp: 363486

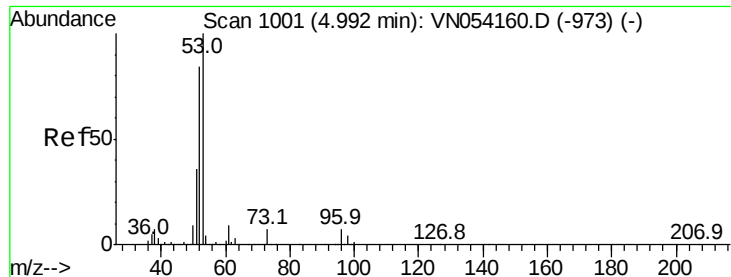
Ion Ratio Lower Upper

41 100

39 74.6 58.2 87.4

76 39.0 31.7 47.5





#15

Acrylonitrile

Concen: 108.777 ug/l

RT: 5.00 min Scan# 1002

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

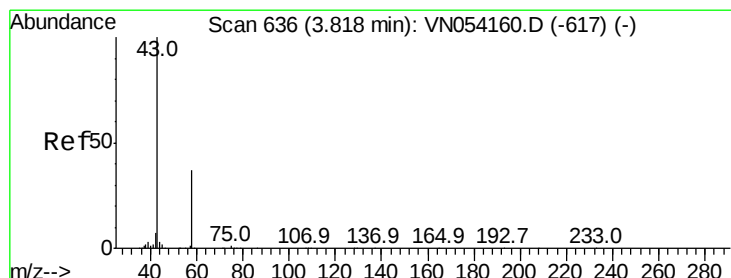
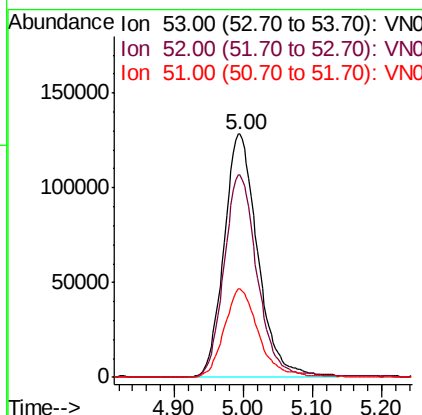
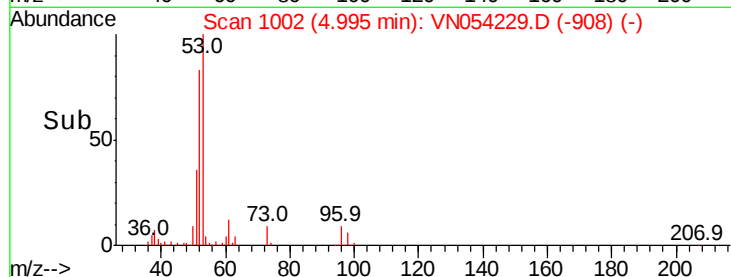
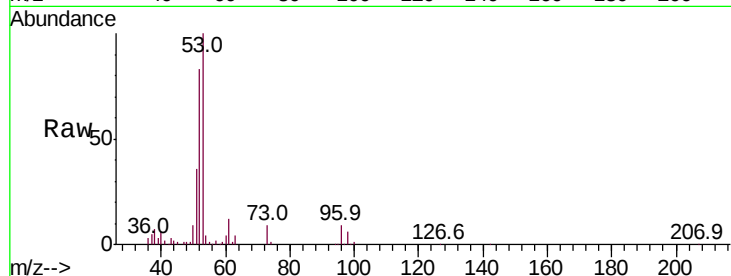
ClientSampleId :

VN0313WBS02

Tot Ion:	53	Resp:	436262
Ion	Ratio	Lower	Upper
53	100		
52	82.0	66.4	99.6
51	36.8	29.6	44.4

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#16

Acetone

Concen: 79.843 ug/l

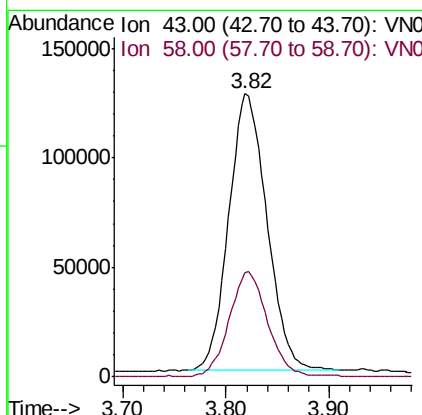
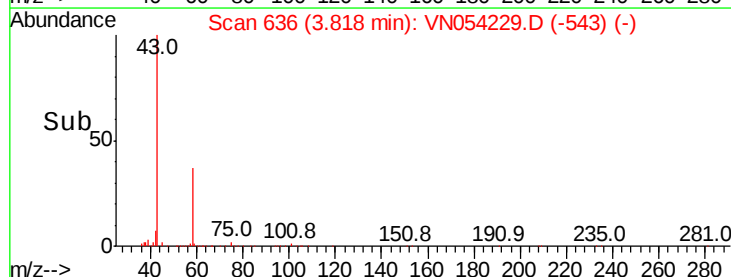
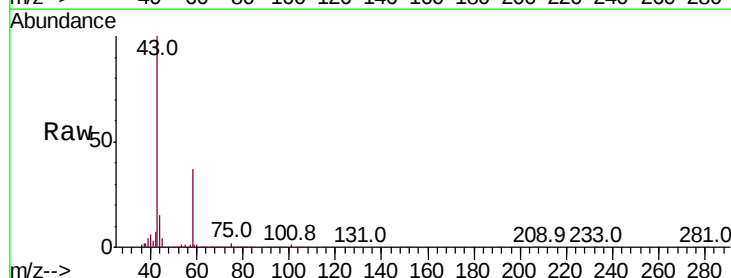
RT: 3.82 min Scan# 636

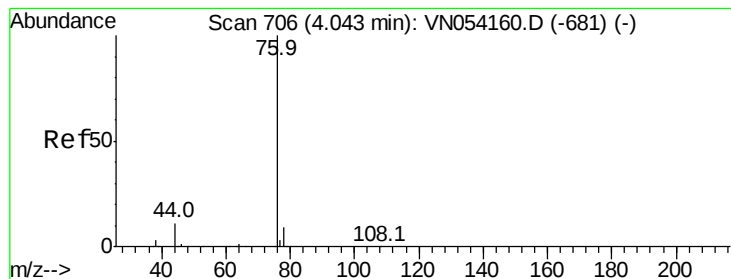
Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Tgt Ion:	43	Resp:	325588
Ion	Ratio	Lower	Upper
43	100		
58	37.5	29.9	44.9





#17

Carbon Disulfide

Concen: 18.806 ug/l

RT: 4.04 min Scan# 705

Delta R.T. -0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion: 76 Resp: 656830

Ion Ratio Lower Upper

76 100

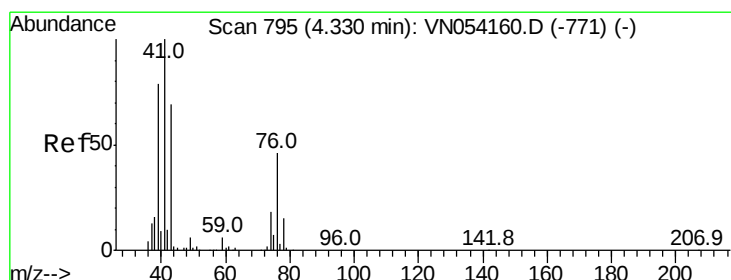
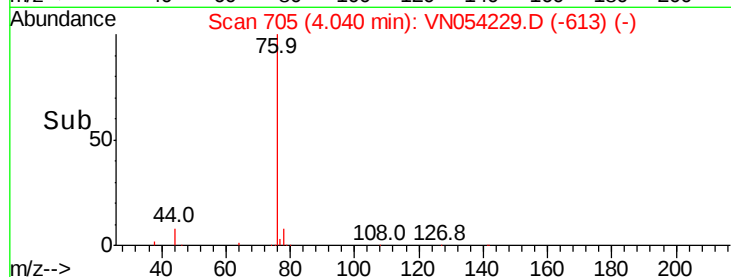
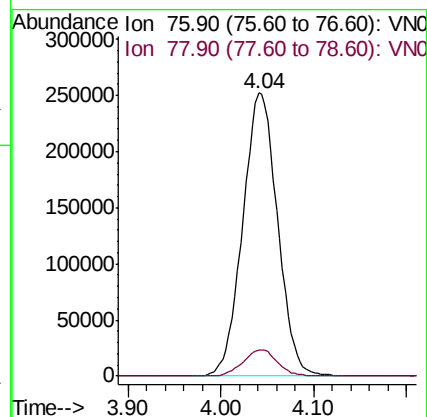
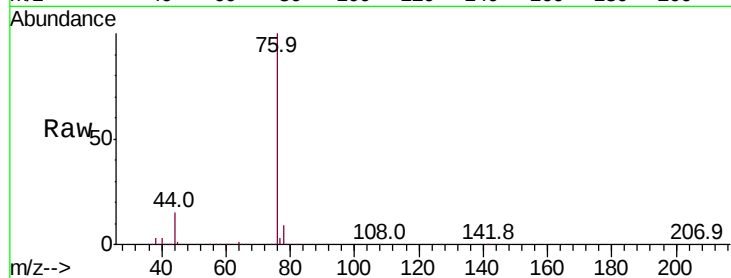
78 9.3 7.5 11.3

Manual Integrations

APPROVED

MMDadoda

3/14/2019 10:28:17 AM



#18

Methyl Acetate

Concen: 23.160 ug/l

RT: 4.33 min Scan# 795

Delta R.T. 0.00 min

Lab File: VN054229.D

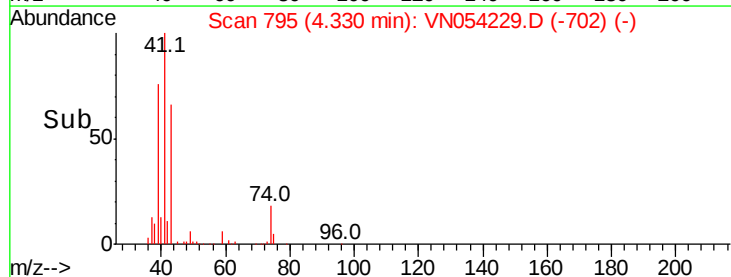
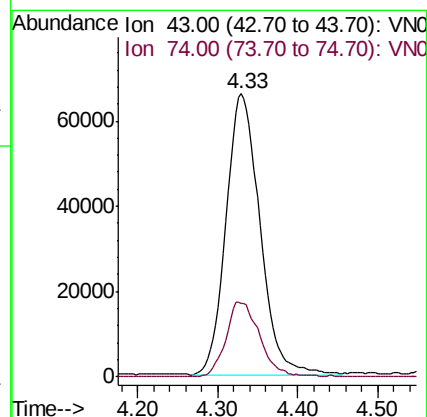
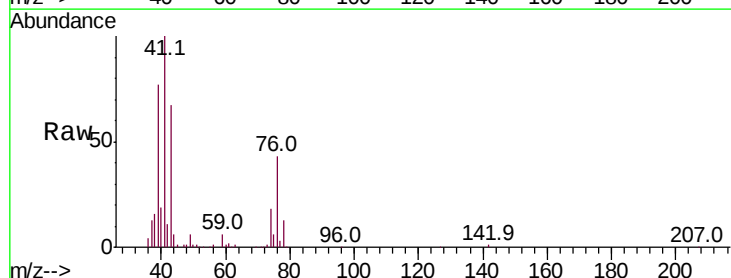
Acq: 13 Mar 2019 23:34

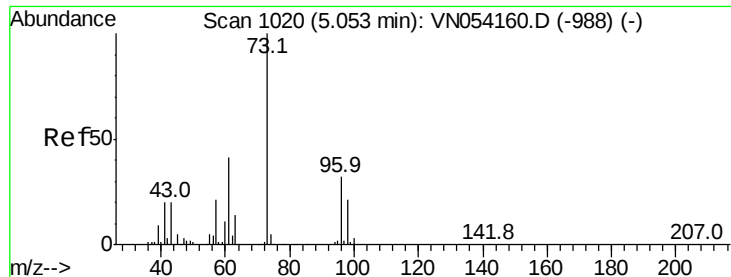
Tgt Ion: 43 Resp: 191076

Ion Ratio Lower Upper

43 100

74 26.5 20.8 31.2





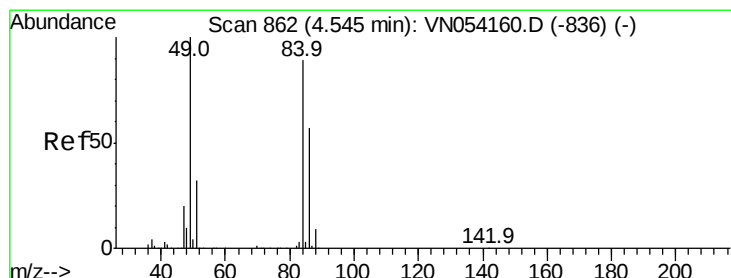
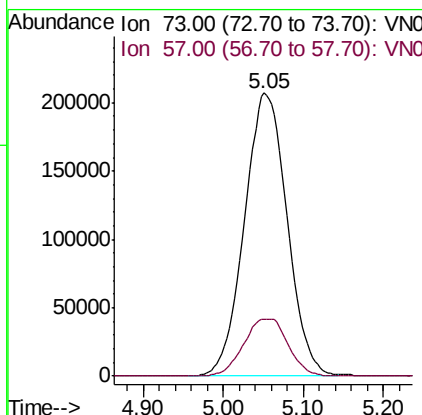
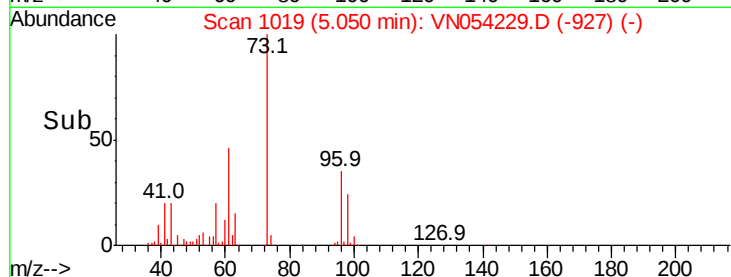
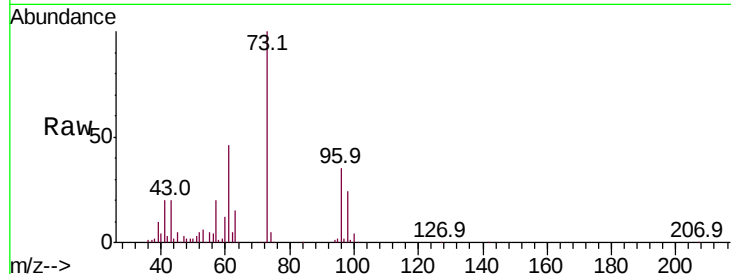
#19
Methvl tert-butvl Ether
Concen: 21.868 ug/l
RT: 5.05 min Scan# 1019
Delta R.T. -0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampleId :
VN0313WBS02

Tot Ion: 73 Resp: 755197
Ion Ratio Lower Upper
73 100
57 20.2 16.8 25.2

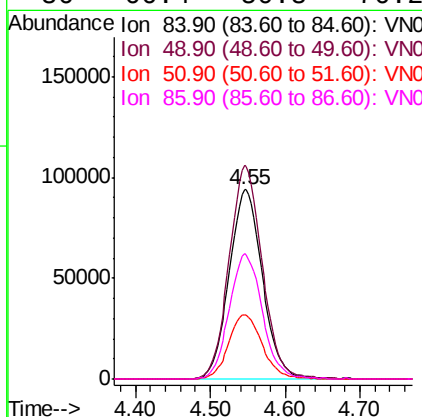
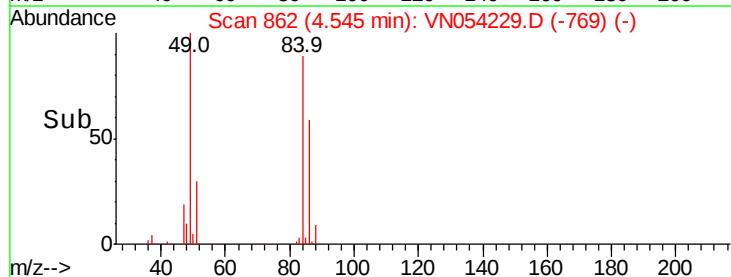
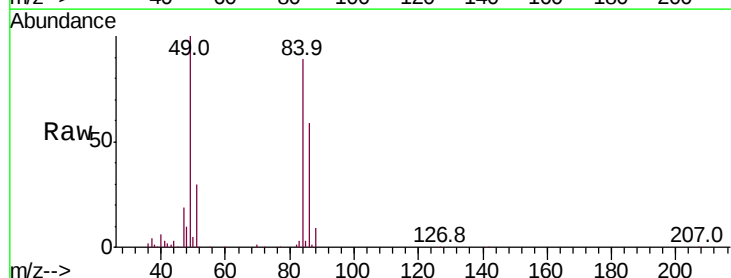
Manual Integrations
APPROVED

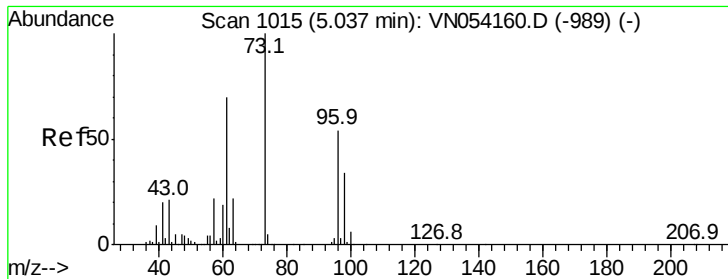
MMDadoda
3/14/2019 10:28:17 AM



#20
Methylene Chloride
Concen: 21.713 ug/l
RT: 4.55 min Scan# 862
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Tgt Ion: 84 Resp: 290731
Ion Ratio Lower Upper
84 100
49 113.0 89.7 134.5
51 34.1 28.2 42.4
86 66.4 50.8 76.2





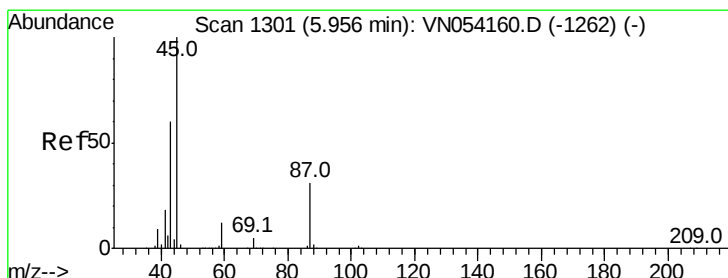
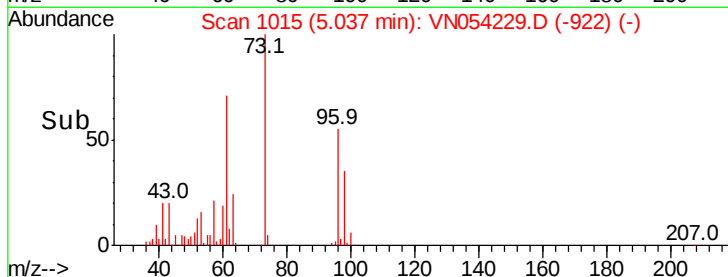
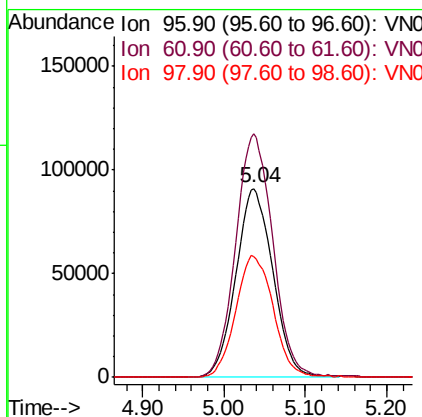
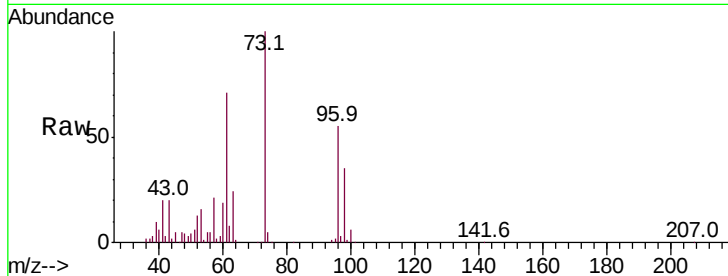
#21
trans-1,2-Dichloroethene
Concen: 21.464 ug/l
RT: 5.04 min Scan# 1015
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampleId :
VN0313WBS02

Tot Ion	Ratio	Lower	Upper
96	100		
61	128.8	102.8	154.2
98	64.2	50.0	75.0

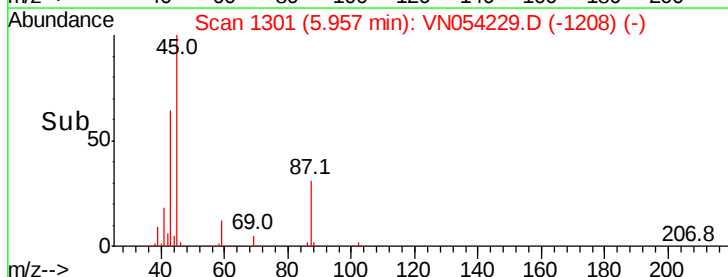
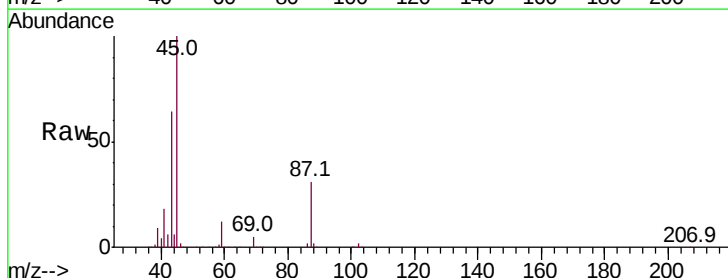
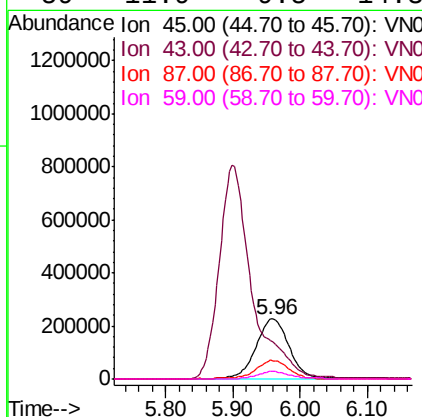
Manual Integrations
APPROVED

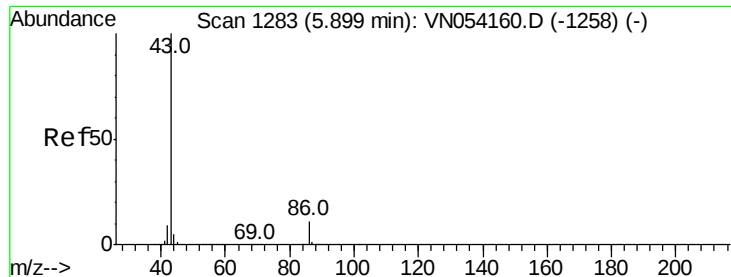
MMDadoda
3/14/2019 10:28:17 AM



#22
Diisopropyl ether
Concen: 21.809 ug/l
RT: 5.96 min Scan# 1301
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Lower	Upper
45	100		
43	63.6	48.2	72.2
87	30.8	24.9	37.3
59	11.9	9.5	14.3





#23

Vinyl Acetate

Concen: 104.422 ug/l

RT: 5.90 min Scan# 1283

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

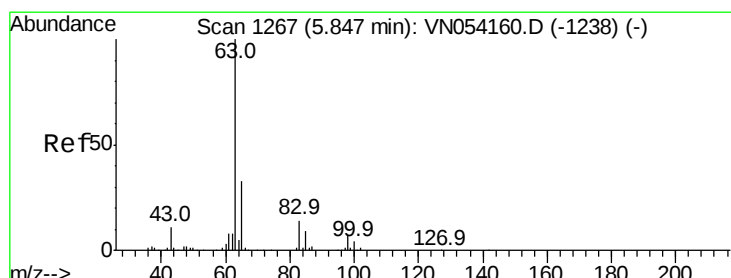
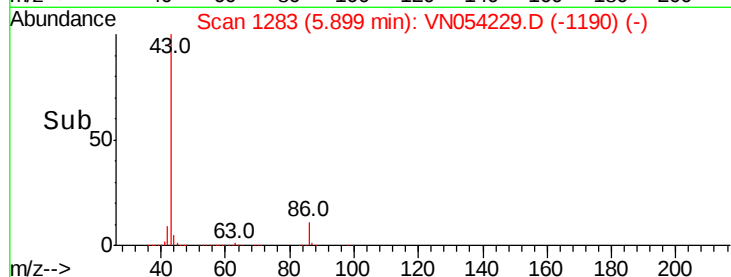
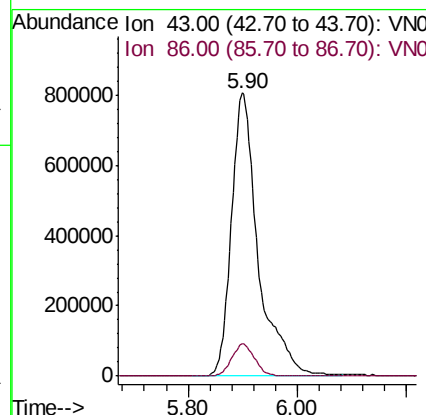
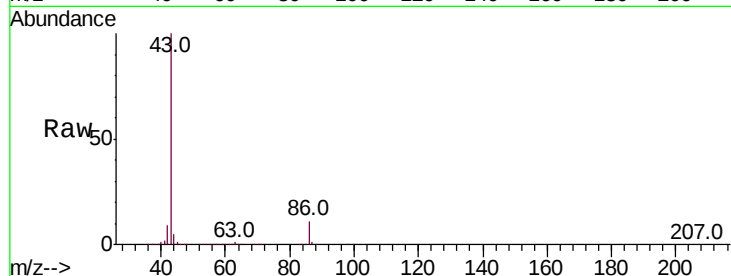
Instrument :
MSVOA_N
ClientSampleId :
VN0313WBS02

Tot Ion: 43 Resp: 2746765

Ion	Ratio	Lower	Upper
43	100		
86	11.3	9.1	13.7

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#24

1,1-Dichloroethane

Concen: 21.832 ug/l

RT: 5.85 min Scan# 1267

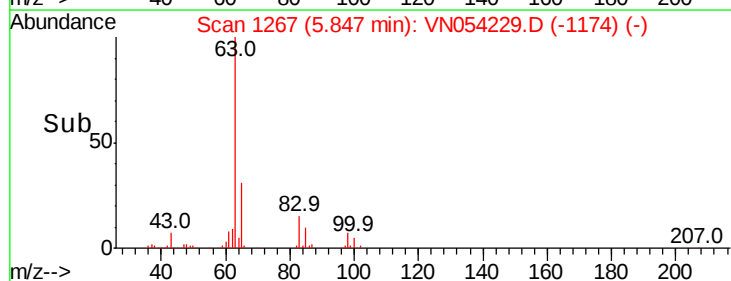
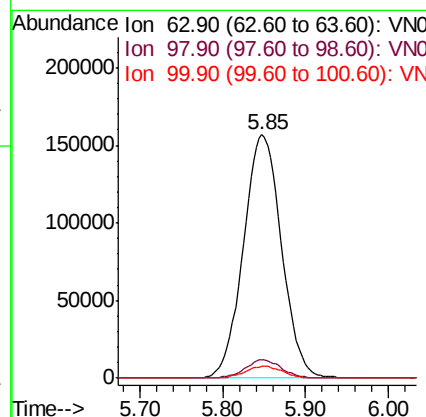
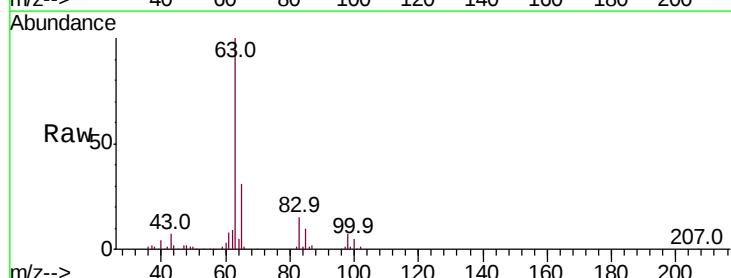
Delta R.T. 0.00 min

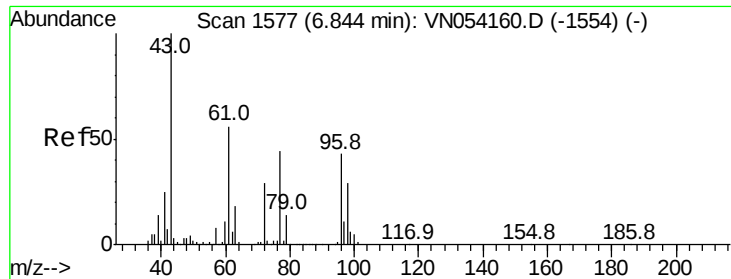
Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Tgt Ion: 63 Resp: 500115

Ion	Ratio	Lower	Upper
63	100		
98	7.4	3.5	10.5
100	4.7	2.0	6.0





#25

2-Butanone

Concen: 100.319 ug/l

RT: 6.85 min Scan# 1578

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampled :

VN0313WBS02

Tot Ion: 43 Resp: 480145

Ion Ratio Lower Upper

43 100

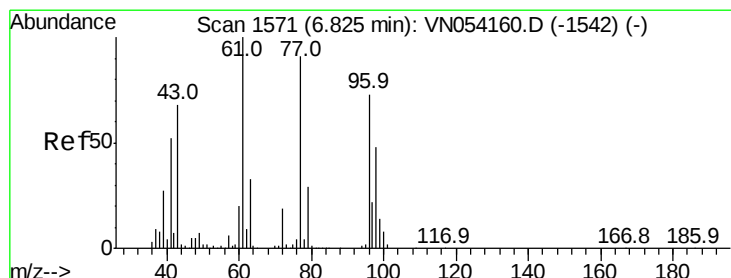
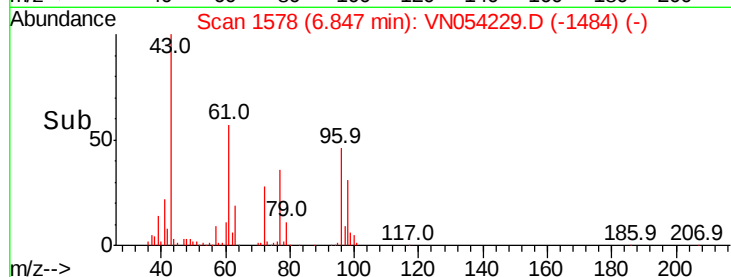
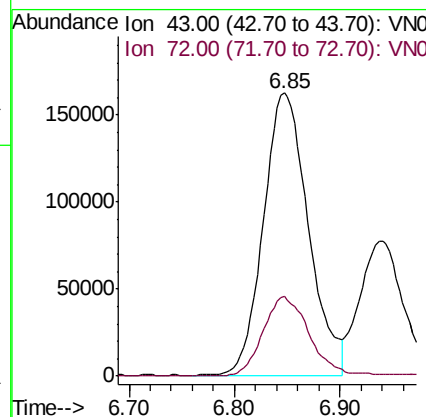
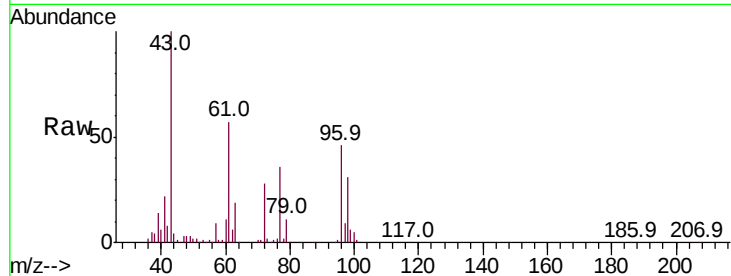
72 28.2 23.0 34.6

Manual Integrations

APPROVED

MMDadoda

3/14/2019 10:28:17 AM



#26

2,2-Dichloropropane

Concen: 16.475 ug/l

RT: 6.82 min Scan# 1571

Delta R.T. 0.00 min

Lab File: VN054229.D

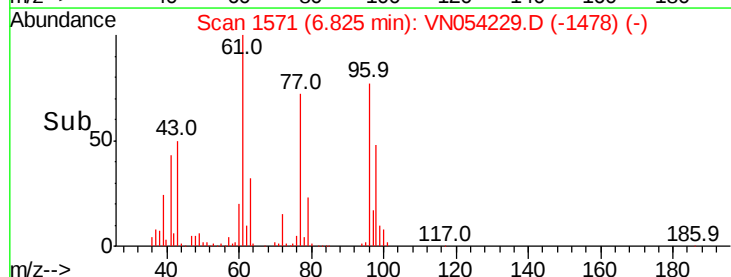
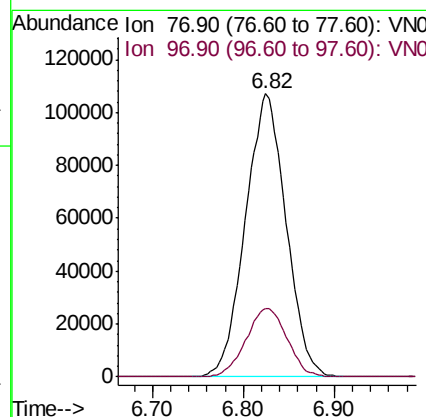
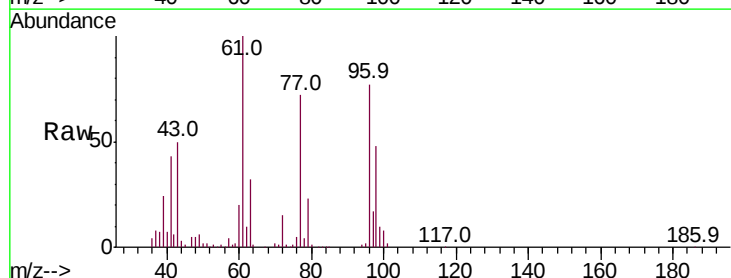
Acq: 13 Mar 2019 23:34

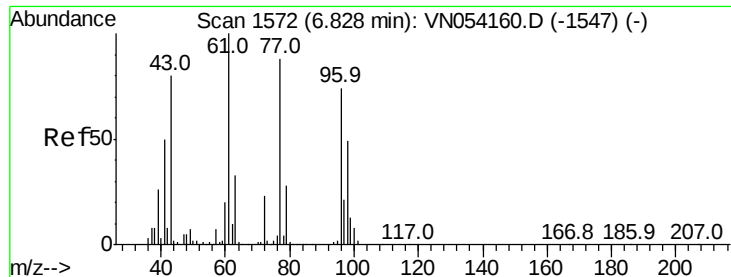
Tgt Ion: 77 Resp: 331885

Ion Ratio Lower Upper

77 100

97 24.5 11.9 35.9





#27

cis-1,2-Dichloroethene

Concen: 22.569 ug/l

RT: 6.83 min Scan# 1572

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

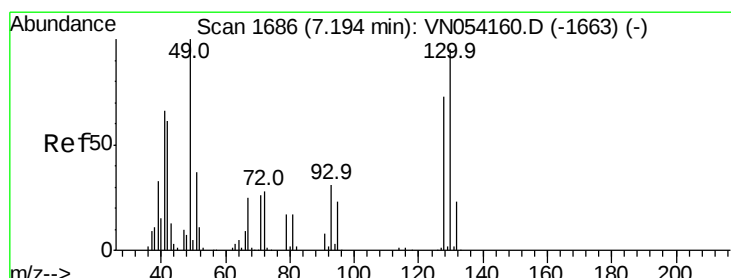
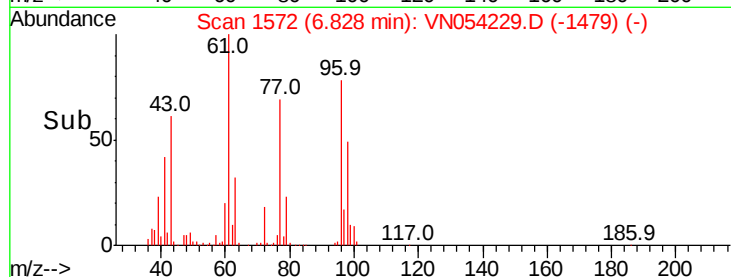
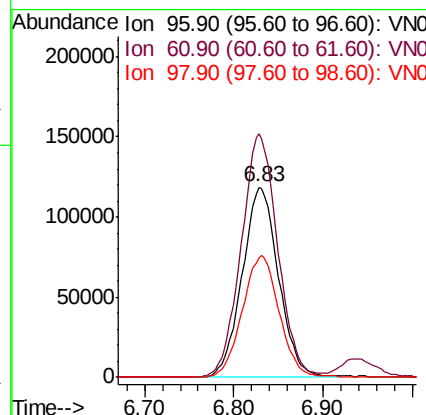
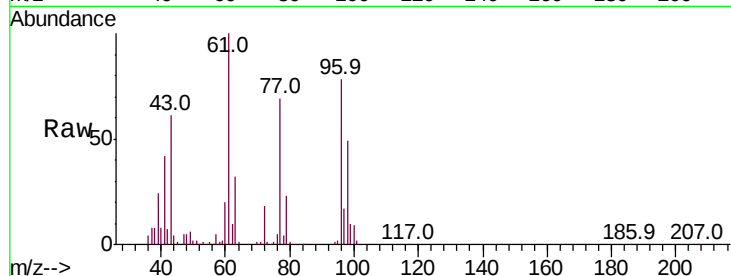
ClientSampleId :

VN0313WBS02

Tot Ion	96	Resp	336110
Ion	Ratio	Lower	Upper
96	100		
61	128.2	0.0	273.0
98	64.7	0.0	130.6

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#28

Bromochloromethane

Concen: 20.682 ug/l

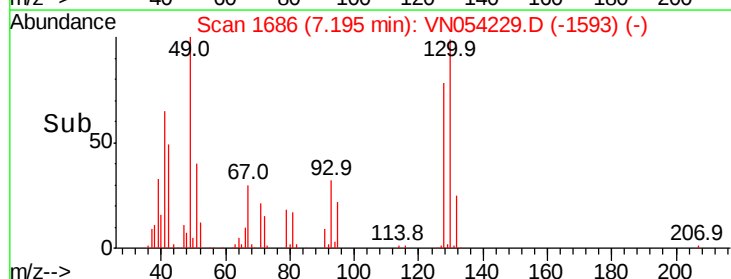
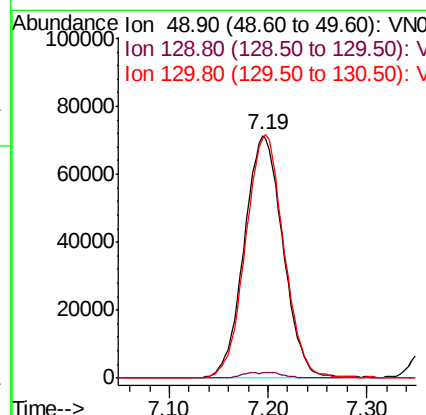
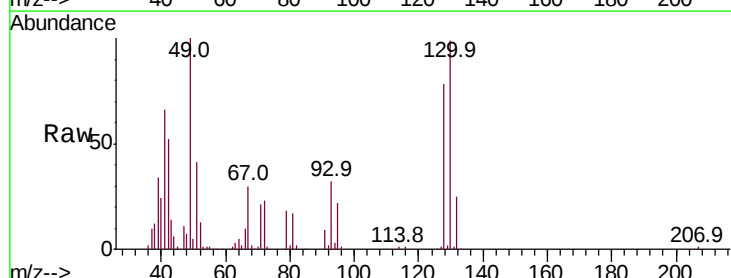
RT: 7.19 min Scan# 1686

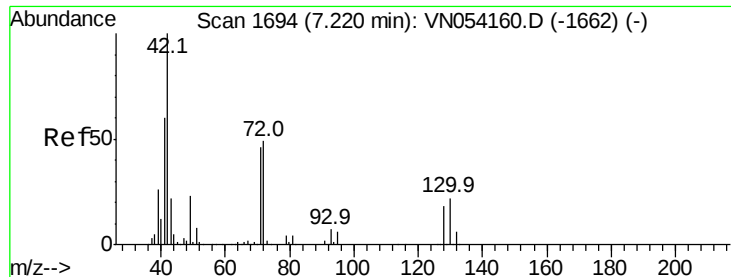
Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Tgt Ion	49	Resp	193684
Ion	Ratio	Lower	Upper
49	100		
129	1.1	0.0	4.6
130	99.2	76.7	115.1





#29

Tetrahydrofuran

Concen: 104.970 ug/l

RT: 7.22 min Scan# 1694

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion: 42 Resp: 323028

Ion Ratio Lower Upper

42 100

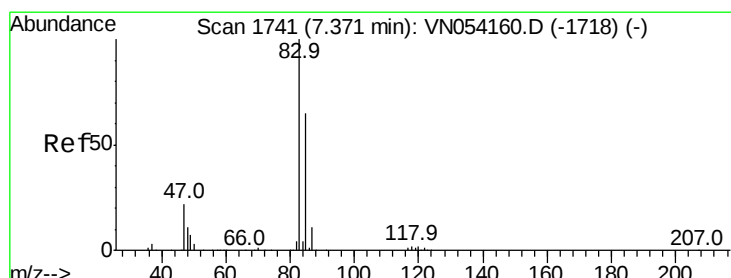
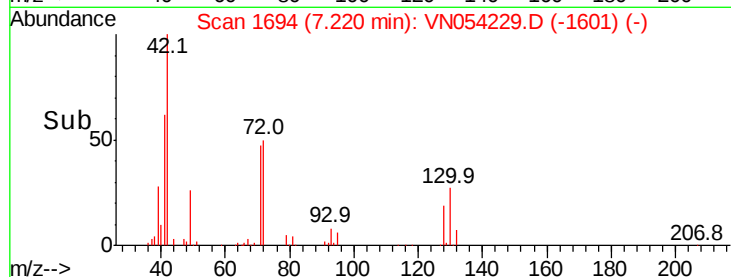
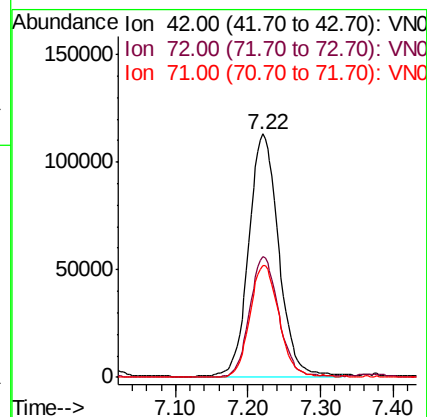
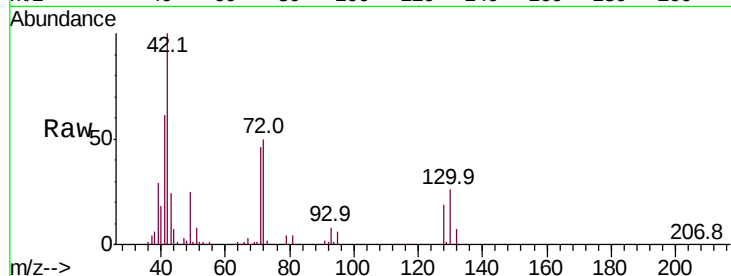
72 48.8 37.8 56.6

71 45.1 36.2 54.2

Manual Integrations
APPROVED

MMDadoda

3/14/2019 10:28:17 AM



#30

Chloroform

Concen: 22.115 ug/l

RT: 7.37 min Scan# 1742

Delta R.T. 0.00 min

Lab File: VN054229.D

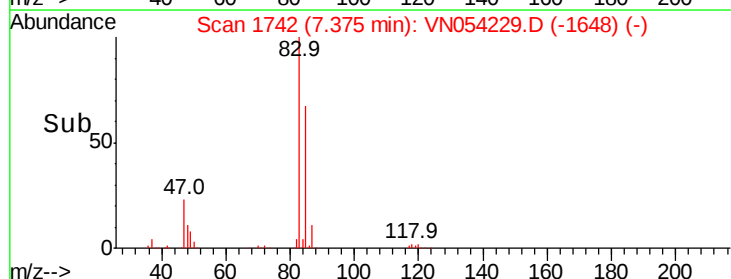
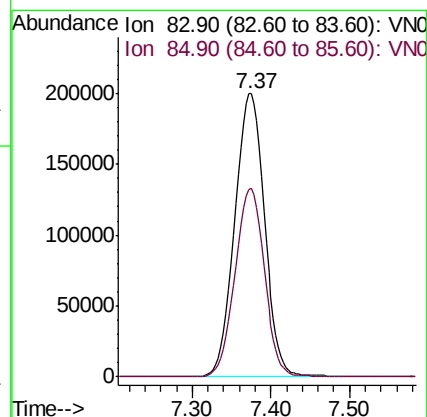
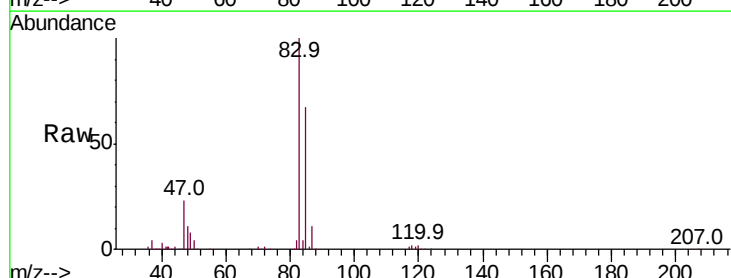
Acq: 13 Mar 2019 23:34

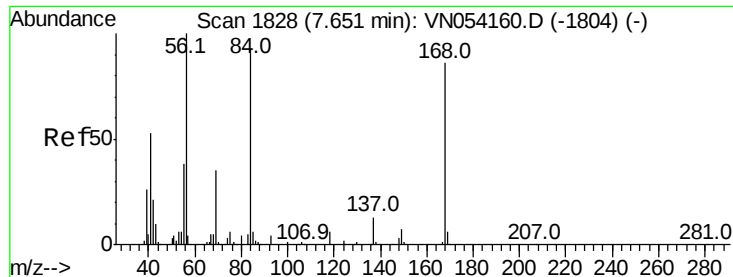
Tgt Ion: 83 Resp: 528620

Ion Ratio Lower Upper

83 100

85 66.7 52.2 78.4





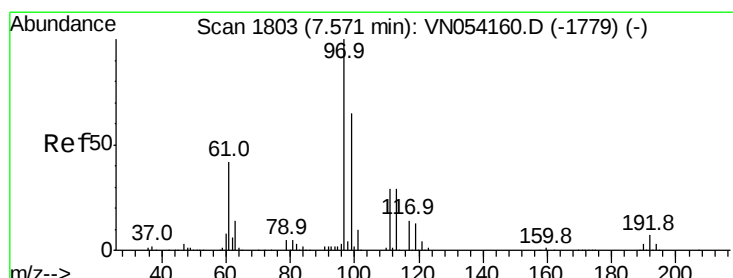
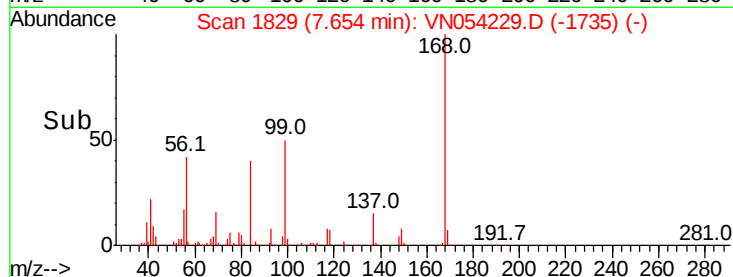
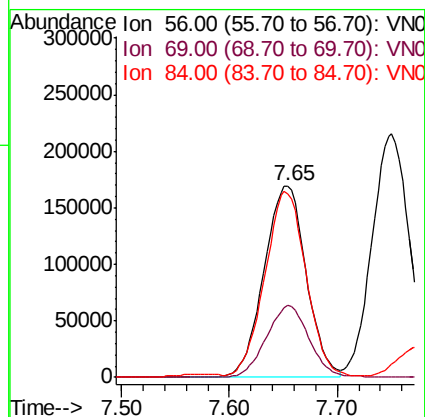
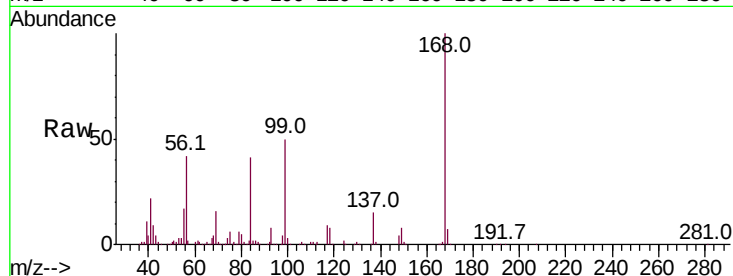
#31
Cyclohexane
Concen: 20.696 ug/l
RT: 7.65 min Scan# 1829
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampled :
VN0313WBS02

Tot Ion	Ratio	Lower	Upper
56	100		
69	37.5	27.8	41.6
84	94.4	74.6	111.8

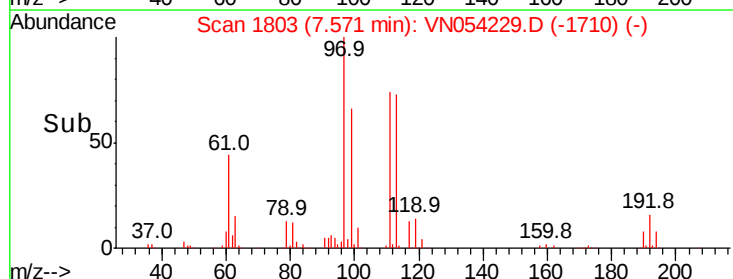
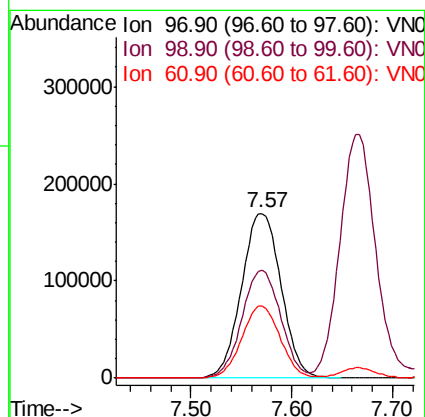
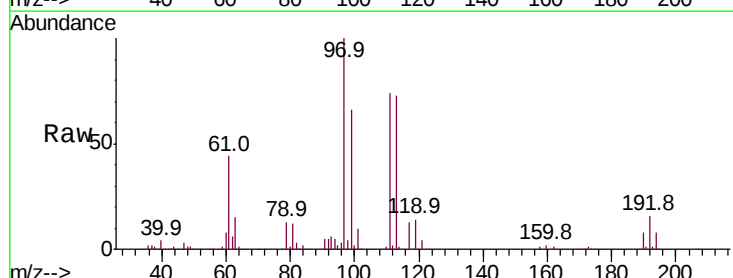
Manual Integrations
APPROVED

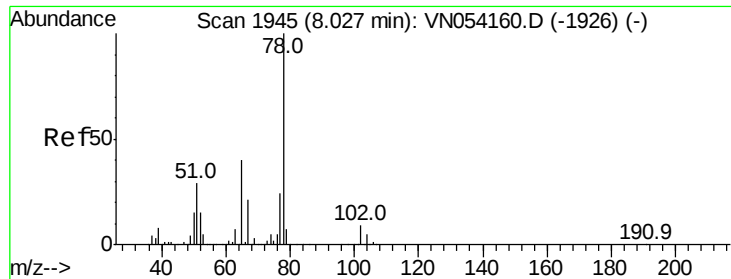
MMDadoda
3/14/2019 10:28:17 AM



#32
1,1,1-Trichloroethane
Concen: 21.380 ug/l
RT: 7.57 min Scan# 1803
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Lower	Upper
97	100		
99	64.3	51.5	77.3
61	42.6	33.6	50.4





#33

1,2-Dichloroethane-d4

Concen: 52.996 ug/l

RT: 8.03 min Scan# 1945

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion: 65 Resp: 754780

Ion Ratio Lower Upper

65 100

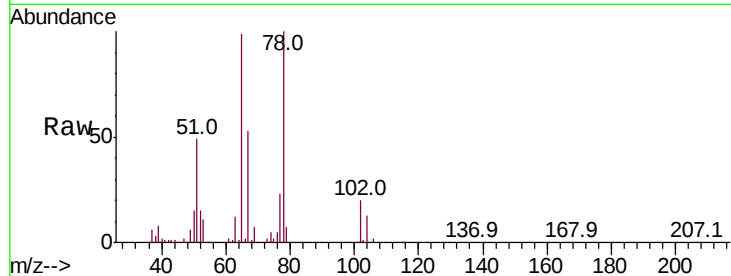
67 52.3 0.0 104.6

Manual Integrations

APPROVED

MMDadoda

3/14/2019 10:28:17 AM



Abundance Ion 64.90 (64.60 to 65.60): VN054160.D (-1926) (-)

Ion 66.90 (66.60 to 67.60): VN054160.D (-1926) (-)

8.03

300000

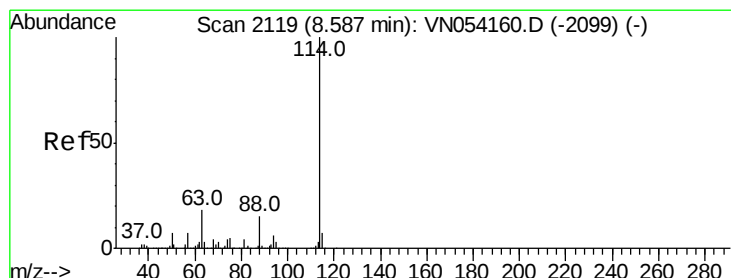
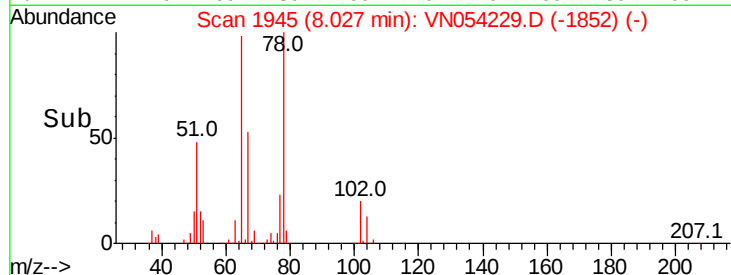
200000

100000

0

Time-->

7.90 8.00 8.10



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.59 min Scan# 2119

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

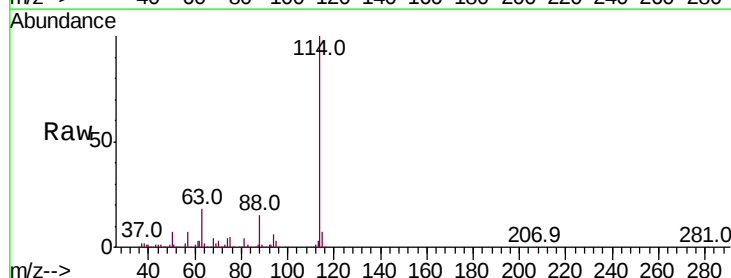
Tgt Ion:114 Resp: 2108178

Ion Ratio Lower Upper

114 100

63 17.8 0.0 35.2

88 14.9 0.0 30.2



Abundance Ion 113.90 (113.60 to 114.60): VN054160.D (-2099) (-)

Ion 63.00 (62.70 to 63.70): VN054160.D (-2099) (-)

Ion 87.90 (87.60 to 88.60): VN054160.D (-2099) (-)

1200000

1000000

800000

600000

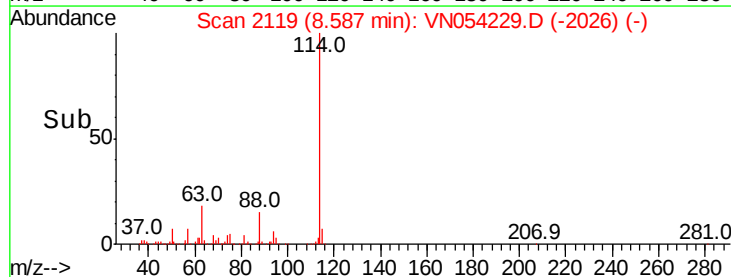
400000

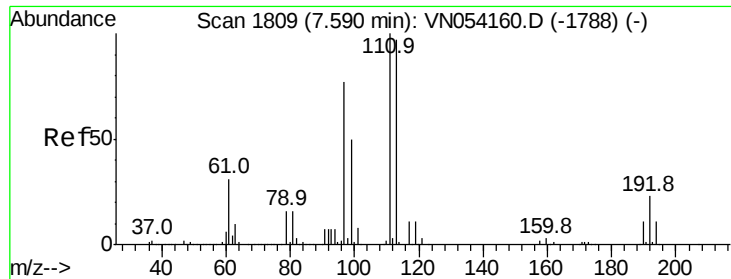
200000

0

Time-->

8.50 8.60 8.70 8.80





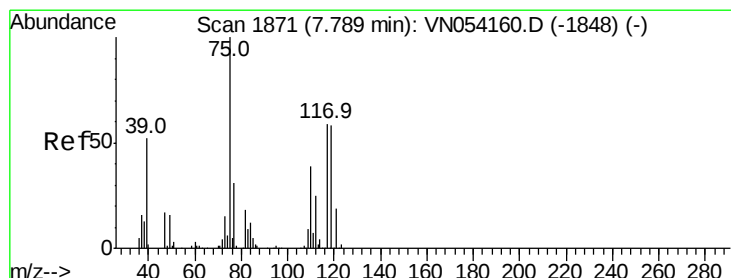
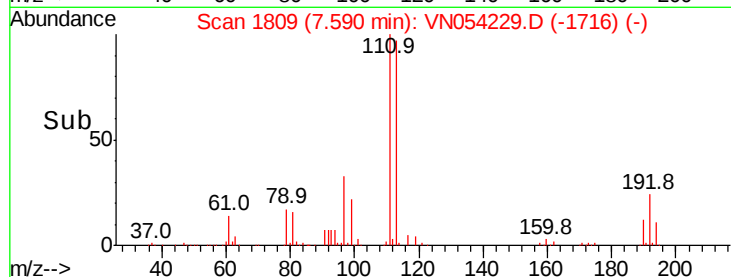
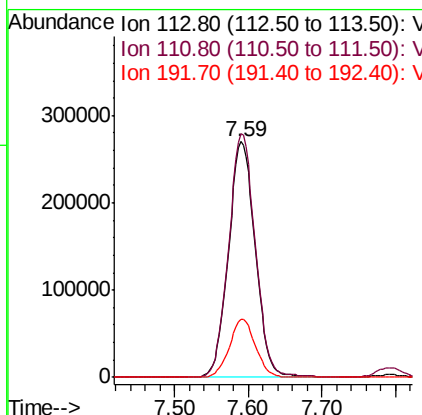
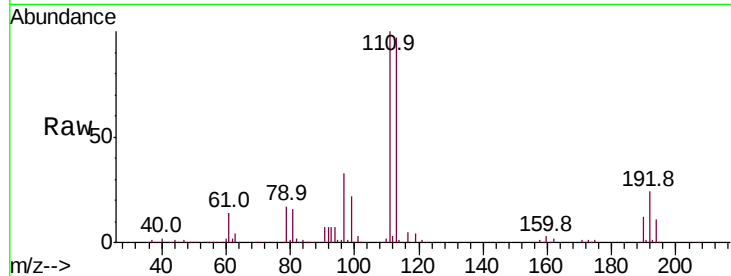
#35
 Dibromofluoromethane
 Concen: 50.284 ug/l
 RT: 7.59 min Scan# 1809
 Delta R.T. 0.00 min
 Lab File: VN054229.D
 Acq: 13 Mar 2019 23:34

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0313WBS02

Tot Ion	Ratio	Resp	Lower	Upper
113	100	683710		
111	102.9		82.2	123.4
192	23.9		19.2	28.8

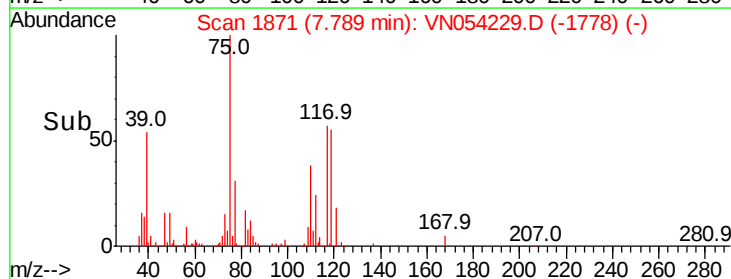
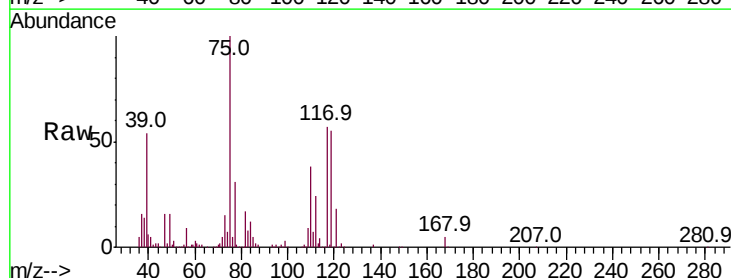
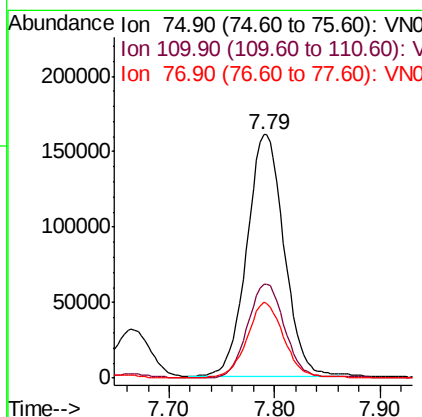
Manual Integrations
 APPROVED

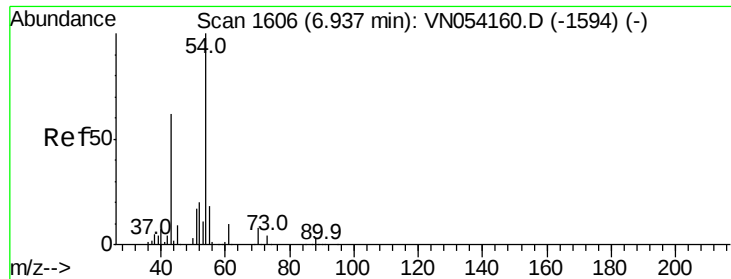
MMDadoda
 3/14/2019 10:28:17 AM



#36
 1,1-Dichloropropene
 Concen: 20.340 ug/l
 RT: 7.79 min Scan# 1871
 Delta R.T. 0.00 min
 Lab File: VN054229.D
 Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Resp	Lower	Upper
75	100	394892		
110	38.8		19.1	57.5
77	30.9		25.0	37.4





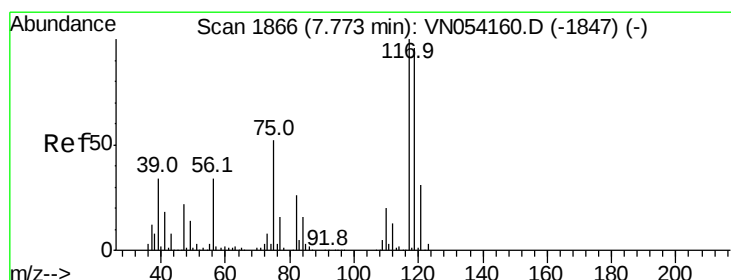
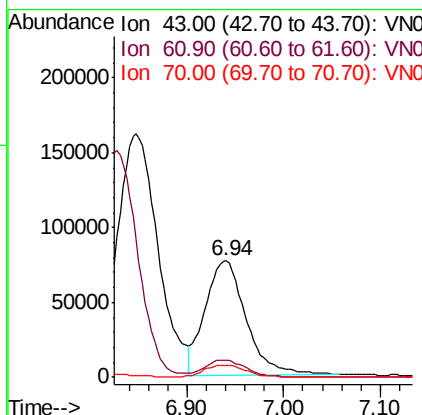
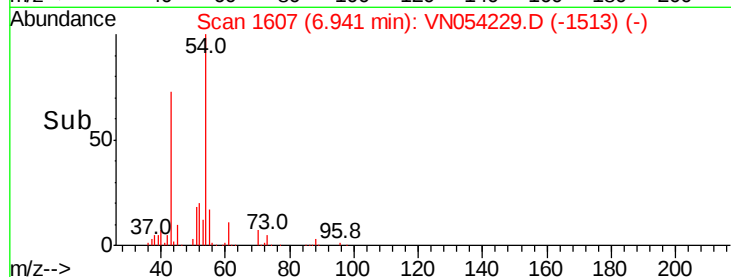
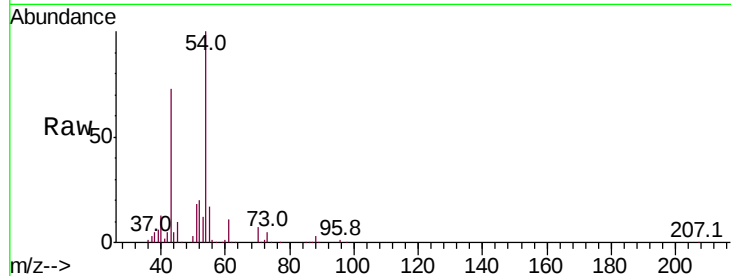
#37
Ethyl Acetate
Concen: 20.251 ug/l
RT: 6.94 min Scan# 1607
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampleId :
VN0313WBS02

Tot Ion	Ratio	Lower	Upper
43	100		
61	14.5	11.8	17.6
70	5.7	8.4	12.6

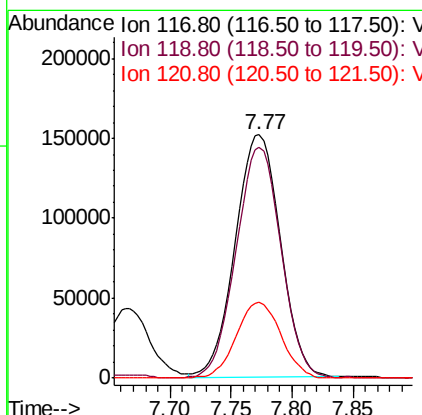
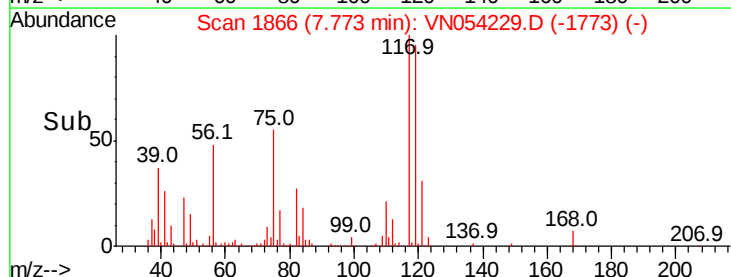
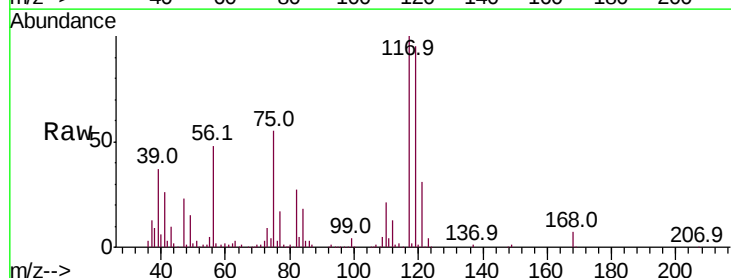
Manual Integrations
APPROVED

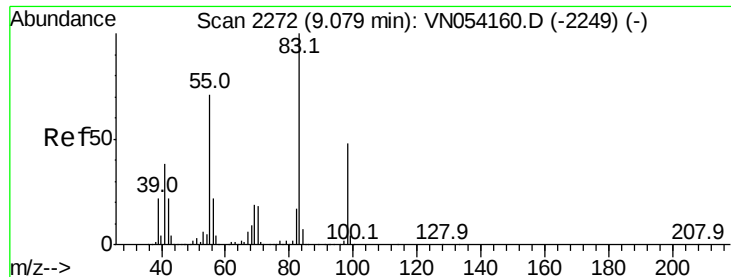
MMDadoda
3/14/2019 10:28:17 AM



#38
Carbon Tetrachloride
Concen: 19.110 ug/l
RT: 7.77 min Scan# 1866
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Lower	Upper
117	100		
119	95.1	76.3	114.5
121	31.2	24.6	36.8





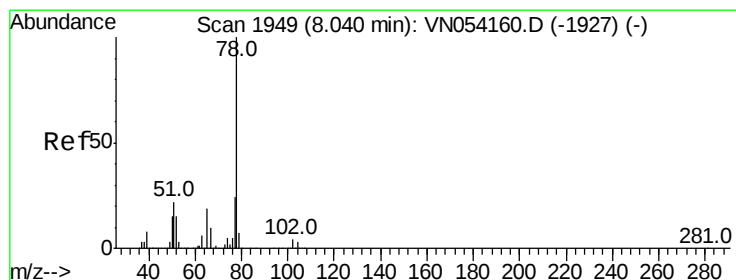
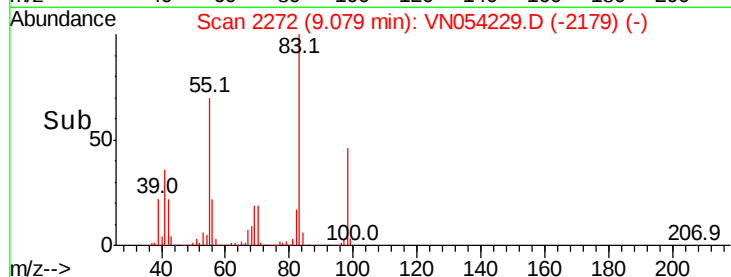
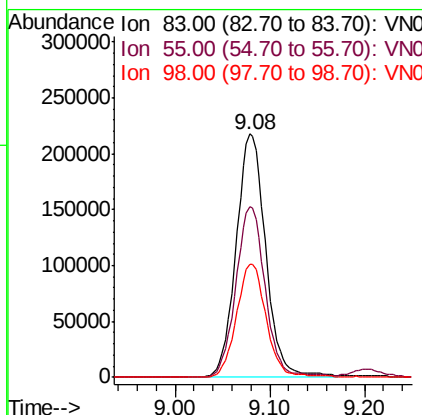
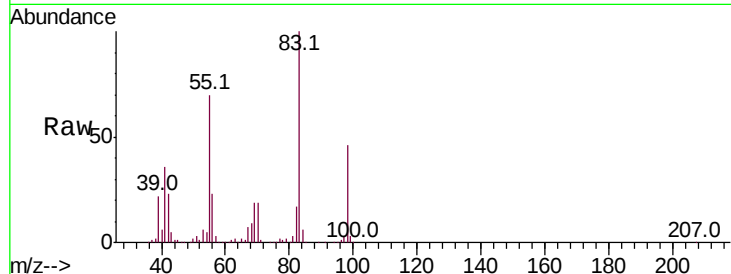
#39
Methvlcvclohexane
Concen: 19.828 ug/l
RT: 9.08 min Scan# 2272
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampleId :
VN0313WBS02

Tot Ion	83	Resp	473647
Ion Ratio	100	Lower	Upper
83	100		
55	70.1	56.6	84.8
98	46.4	38.4	57.6

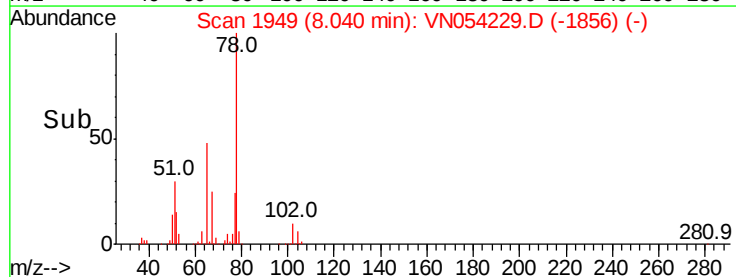
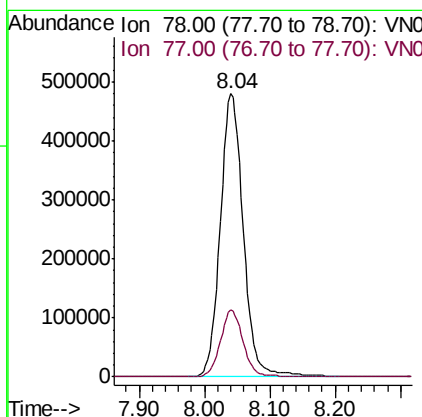
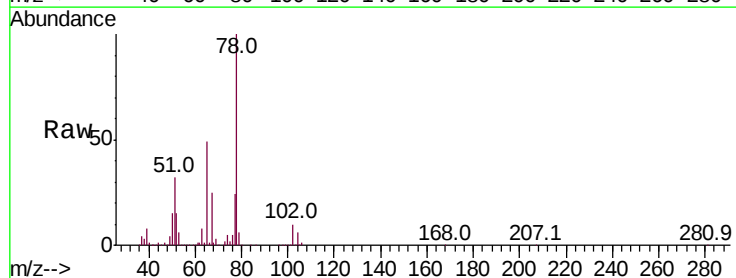
Manual Integrations
APPROVED

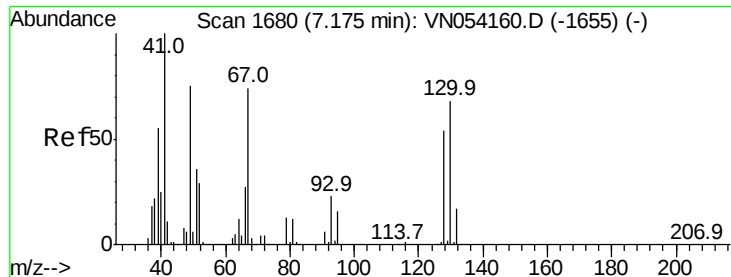
MMDadoda
3/14/2019 10:28:17 AM



#40
Benzene
Concen: 21.146 ug/l
RT: 8.04 min Scan# 1949
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Tgt Ion	78	Resp	1174793
Ion Ratio	100	Lower	Upper
78	100		
77	23.8	19.1	28.7





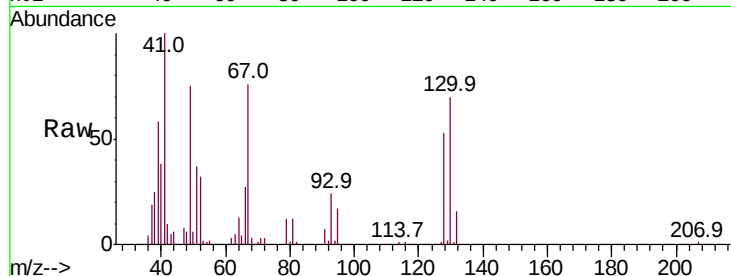
#41
Methacrylonitrile
Concen: 18.478 ug/l
RT: 7.18 min Scan# 1680
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampled :
VN0313WBS02

Tot Ion	Ion	Ratio	Lower	Upper
41	100			
39	60.2	46.8	70.2	
67	90.8	67.0	100.4	
52	36.5	26.5	39.7	

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



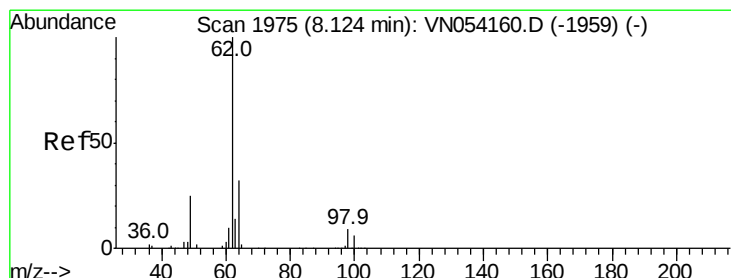
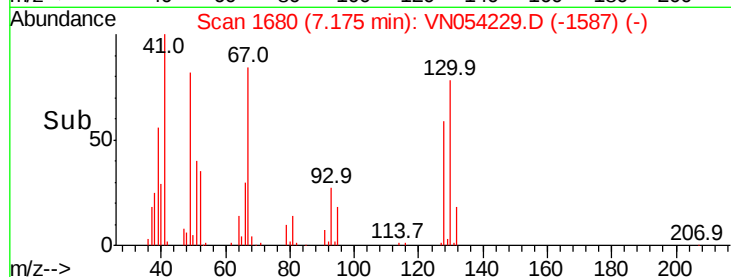
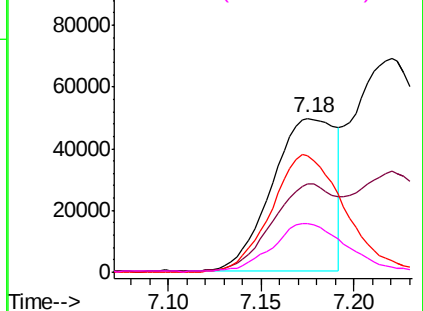
Abundance

Ion 41.00 (40.70 to 41.70): VNO

Ion 39.00 (38.70 to 39.70): VNO

Ion 67.00 (66.70 to 67.70): VNO

Ion 52.00 (51.70 to 52.70): VNO



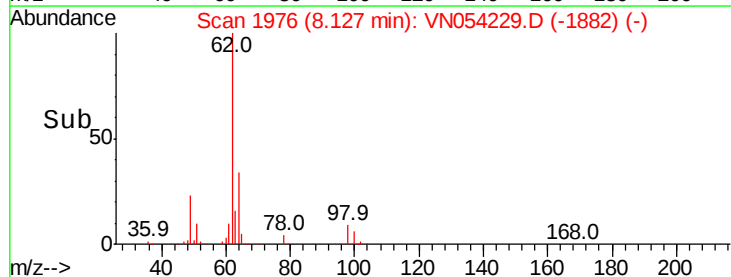
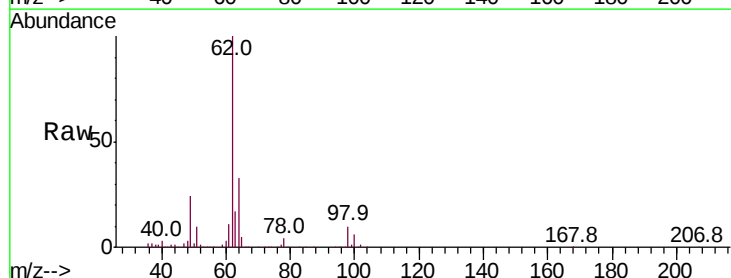
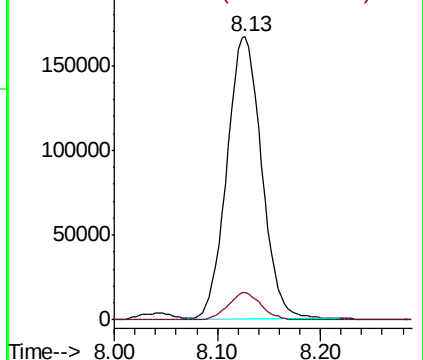
#42
1,2-Dichloroethane
Concen: 20.836 ug/l
RT: 8.13 min Scan# 1976
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

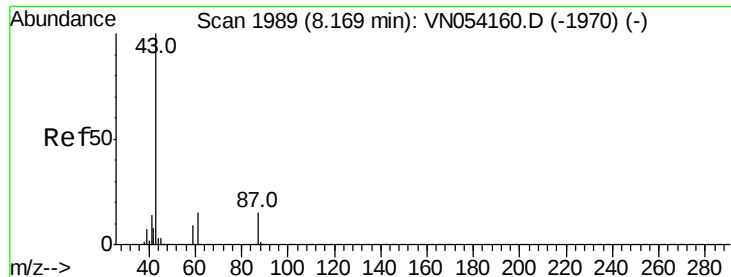
Tgt Ion	Ion	Ratio	Lower	Upper
62	100			
98	9.2	0.0	18.4	

Abundance

Ion 61.90 (61.60 to 62.60): VNO

Ion 97.90 (97.60 to 98.60): VNO





#43

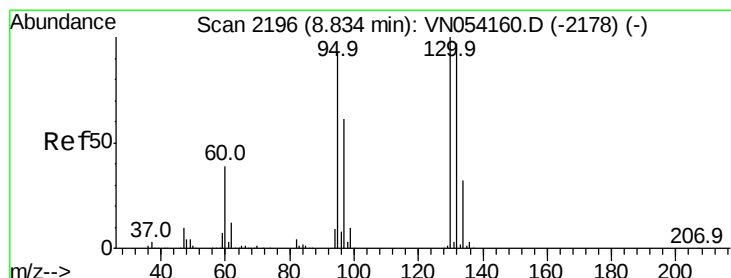
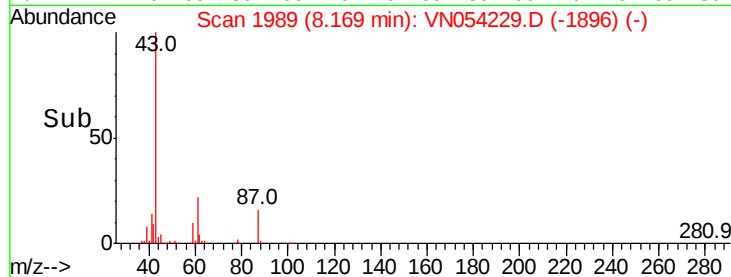
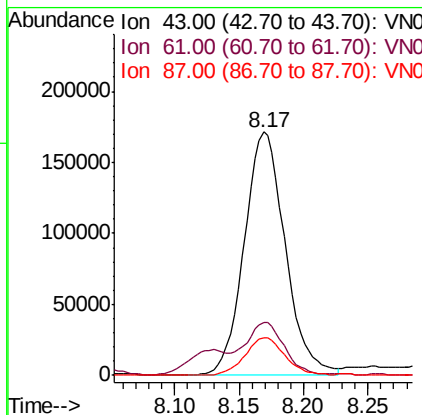
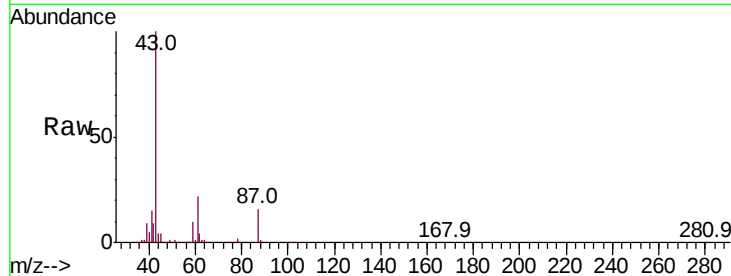
Isopropyl Acetate
 Concen: 19.284 ug/l
 RT: 8.17 min Scan# 1989
 Delta R.T. 0.00 min
 Lab File: VN054229.D
 Acq: 13 Mar 2019 23:34

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0313WBS02

Tot Ion	Ratio	Lower	Upper
43	100		
61	20.1	15.8	23.8
87	15.3	12.0	18.0

Manual Integrations
 APPROVED

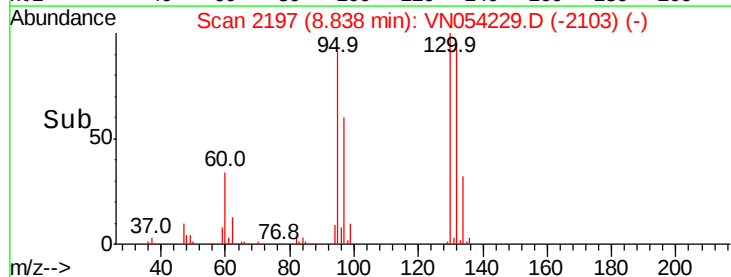
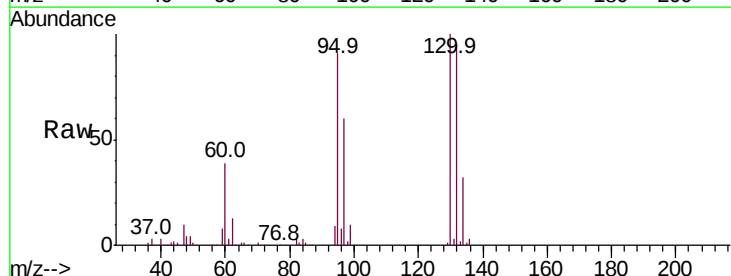
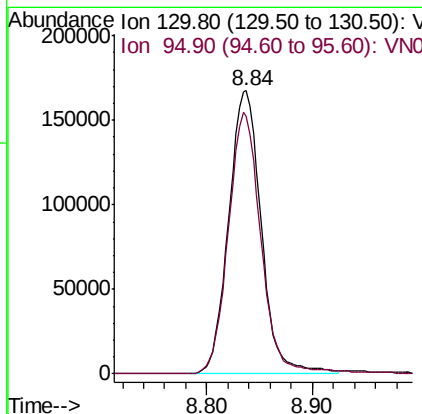
MMDadoda
 3/14/2019 10:28:17 AM

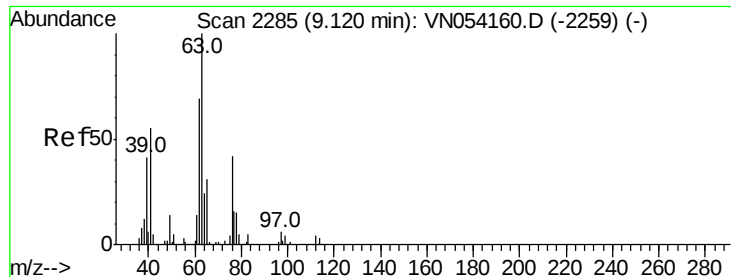


#44

Trichloroethene
 Concen: 20.788 ug/l
 RT: 8.84 min Scan# 2197
 Delta R.T. 0.00 min
 Lab File: VN054229.D
 Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Lower	Upper
130	100		
95	91.1	0.0	185.2





#45

1,2-Dichloropropane

Concen: 21.383 ug/l

RT: 9.12 min Scan# 2284

Delta R.T. -0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion: 63 Resp: 294978

Ion Ratio Lower Upper

63 100

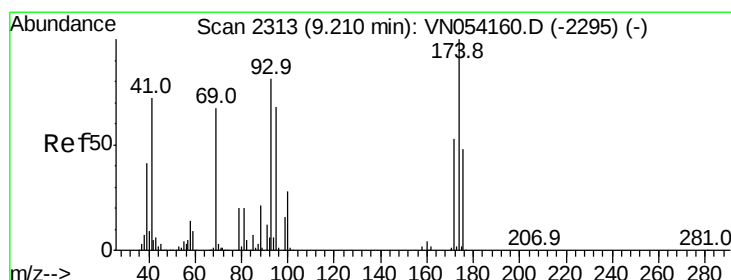
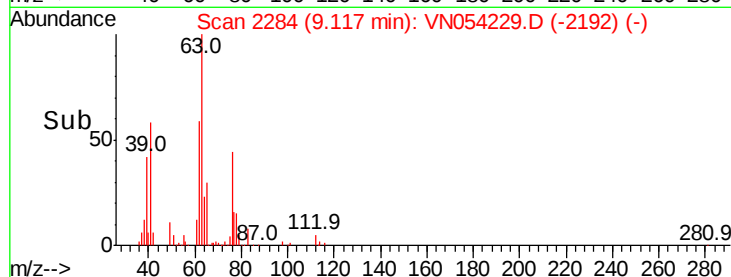
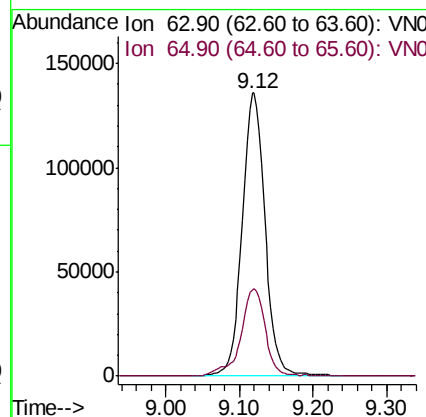
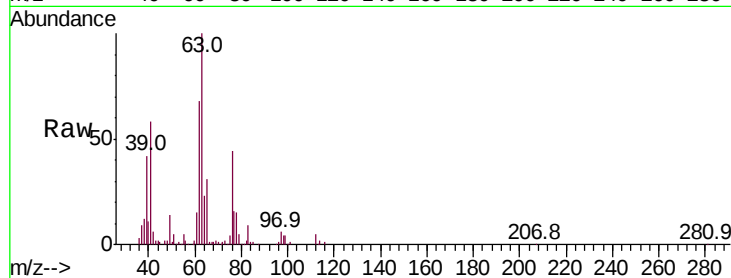
65 30.6 25.0 37.6

Manual Integrations

APPROVED

MMDadoda

3/14/2019 10:28:17 AM



#46

Dibromomethane

Concen: 20.539 ug/l

RT: 9.21 min Scan# 2313

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

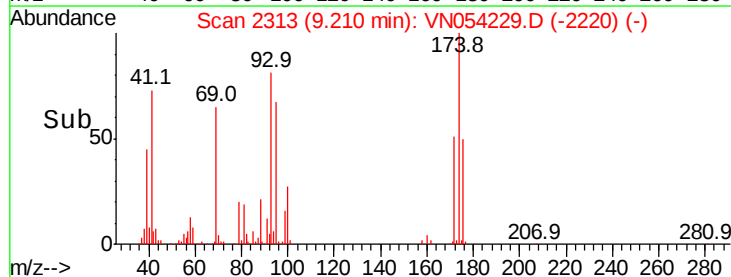
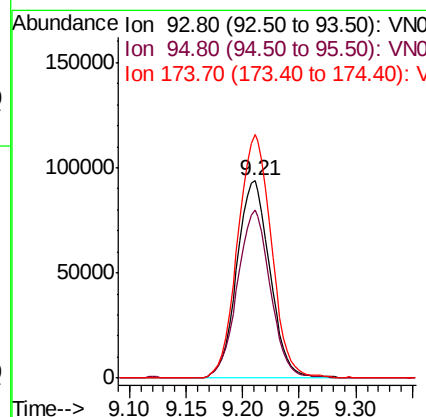
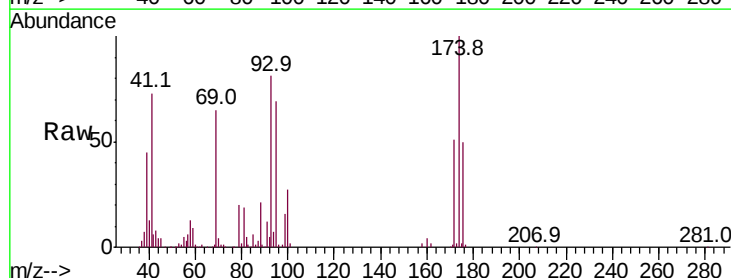
Tgt Ion: 93 Resp: 191446

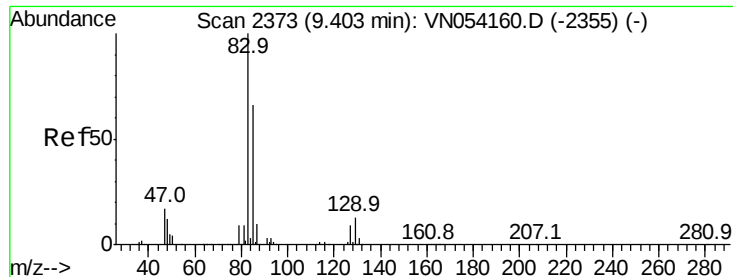
Ion Ratio Lower Upper

93 100

95 85.1 66.7 100.1

174 125.4 98.5 147.7





#47

Bromodichloromethane

Concen: 20.612 ug/l

RT: 9.40 min Scan# 2373

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

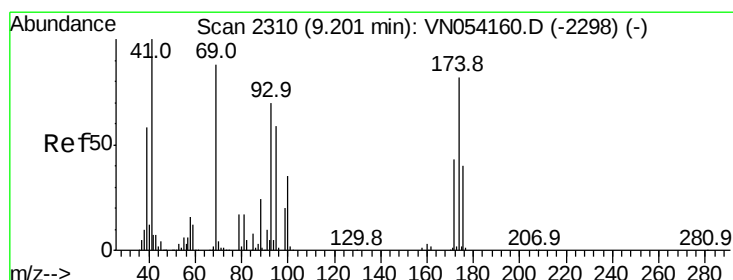
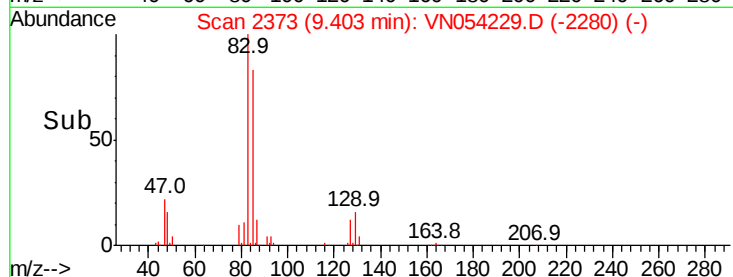
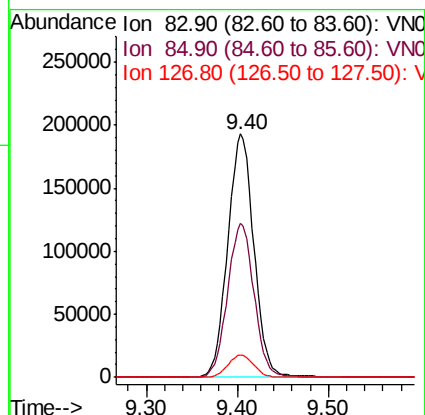
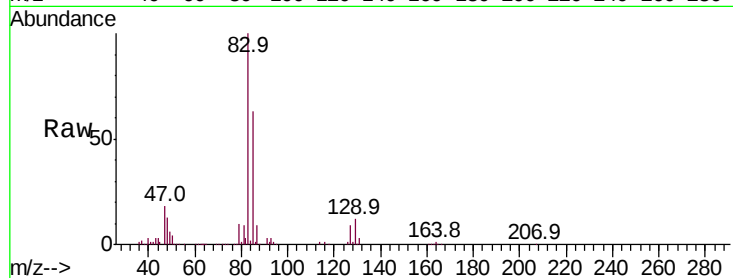
ClientSampleId :

VN0313WBS02

Tot Ion:	83	Resp:	385144
Ion Ratio	Lower	Upper	
83	100		
85	63.2	52.8	79.2
127	9.3	7.4	11.2

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#48

Methyl methacrylate

Concen: 20.654 ug/l

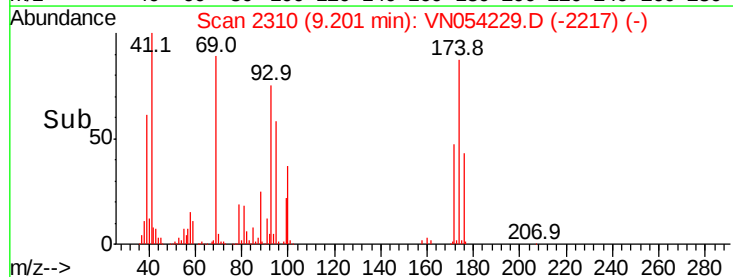
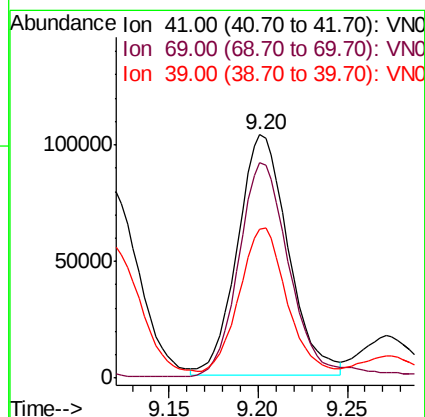
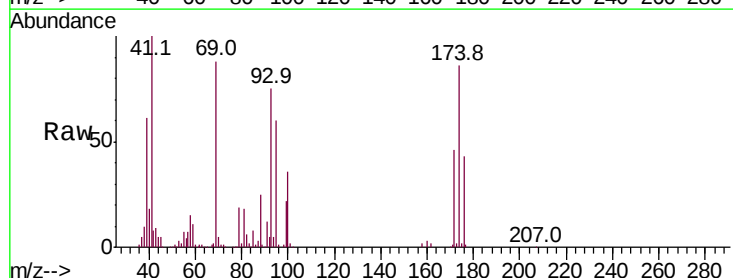
RT: 9.20 min Scan# 2310

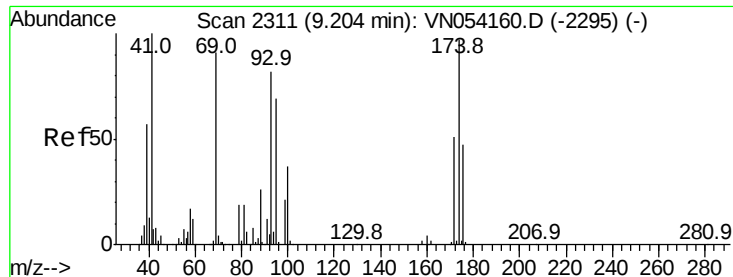
Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Tgt Ion:	41	Resp:	205236
Ion Ratio	Lower	Upper	
41	100		
69	90.2	72.6	108.8
39	59.8	47.5	71.3





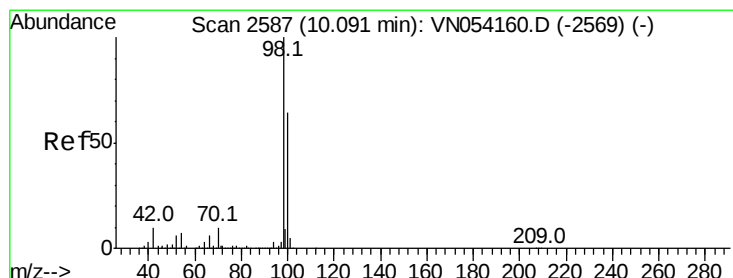
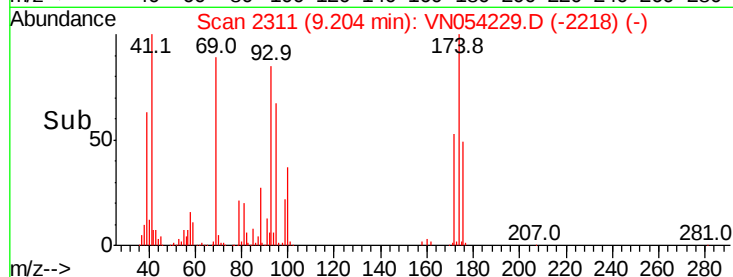
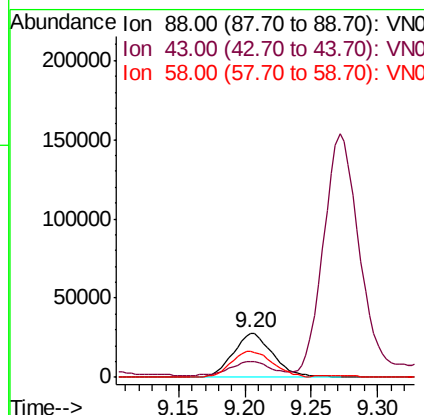
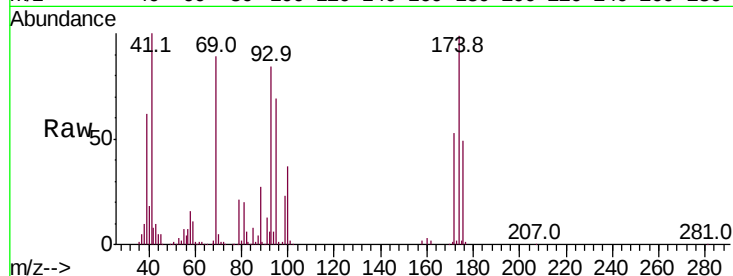
#49
1,4-Dioxane
Concen: 414.966 ug/l
RT: 9.20 min Scan# 2311
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampleId :
VN0313WBS02

Tot Ion	88	Resp	58326
Ion	Ratio	Lower	Upper
88	100		
43	31.3	24.1	36.1
58	61.8	50.8	76.2

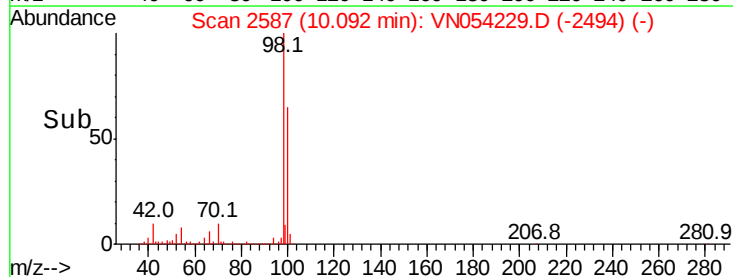
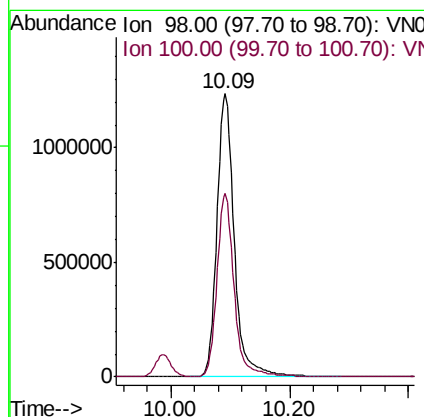
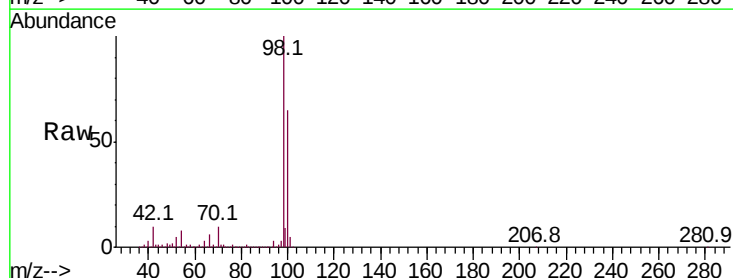
Manual Integrations
APPROVED

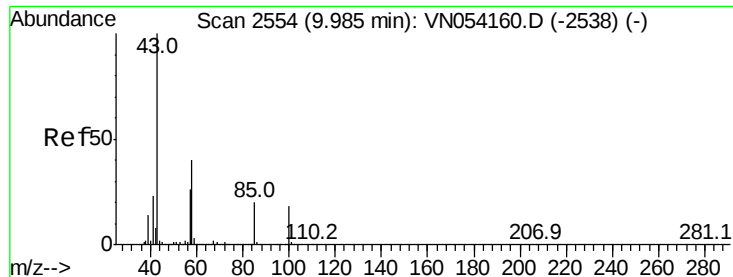
MMDadoda
3/14/2019 10:28:17 AM



#50
Toluene-d8
Concen: 49.766 ug/l
RT: 10.09 min Scan# 2587
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Tgt Ion	98	Resp	2498996
Ion	Ratio	Lower	Upper
98	100		
100	64.0	51.2	76.8





#51

4-Methyl-2-Pentanone

Concen: 102.607 ug/l

RT: 9.99 min Scan# 2554

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion: 43 Resp: 1063243

Ion Ratio Lower Upper

43 100

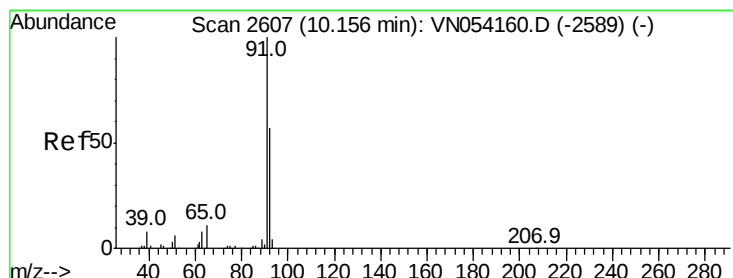
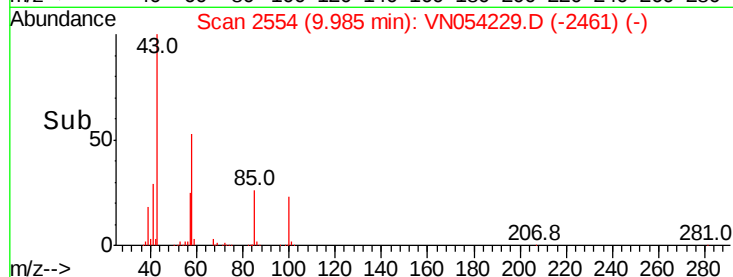
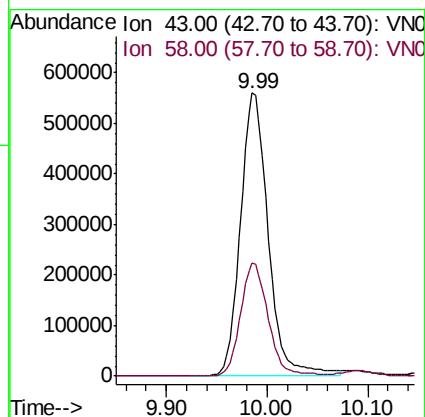
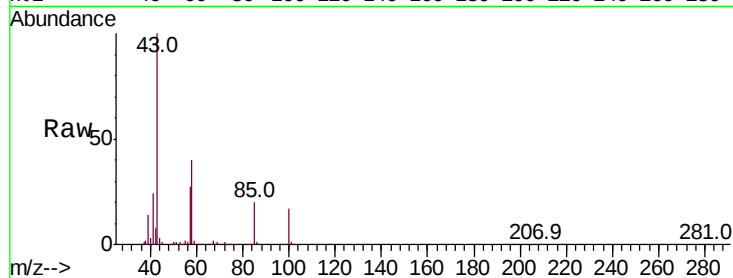
58 40.0 31.8 47.6

Manual Integrations

APPROVED

MMDadoda

3/14/2019 10:28:17 AM



#52

Toluene

Concen: 21.033 ug/l

RT: 10.16 min Scan# 2607

Delta R.T. 0.00 min

Lab File: VN054229.D

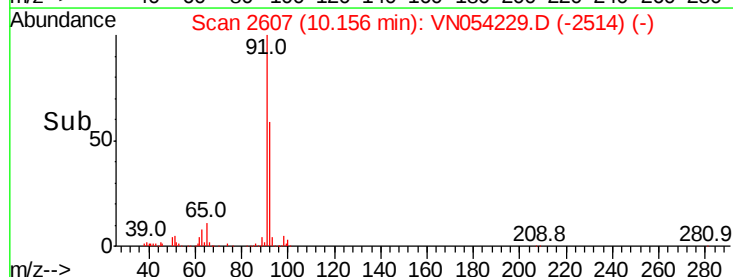
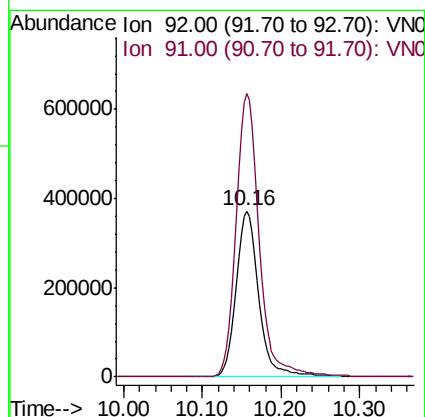
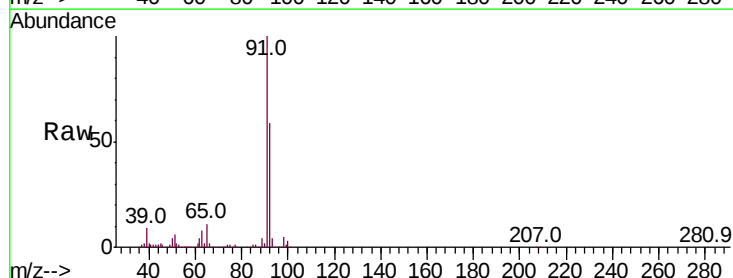
Acq: 13 Mar 2019 23:34

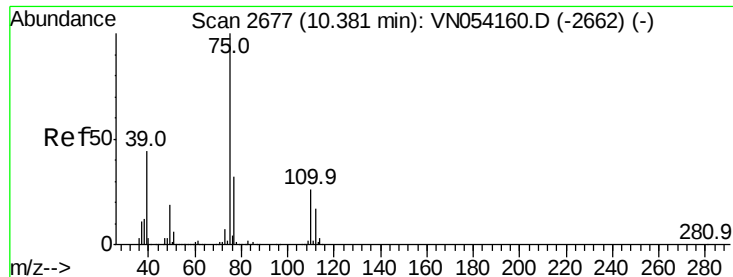
Tgt Ion: 92 Resp: 740929

Ion Ratio Lower Upper

92 100

91 174.8 140.7 211.1





#53

t-1,3-Dichloropropene

Concen: 17.814 ug/l

RT: 10.38 min Scan# 2678

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

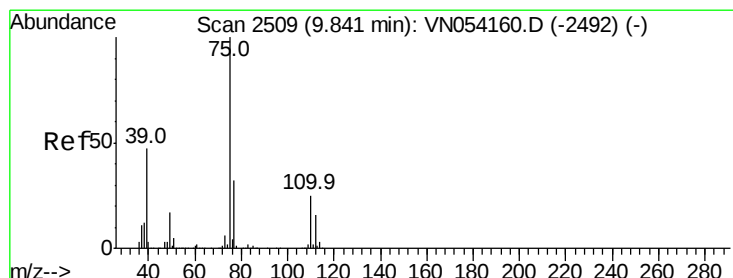
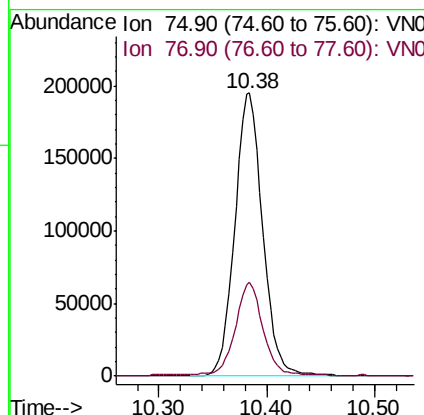
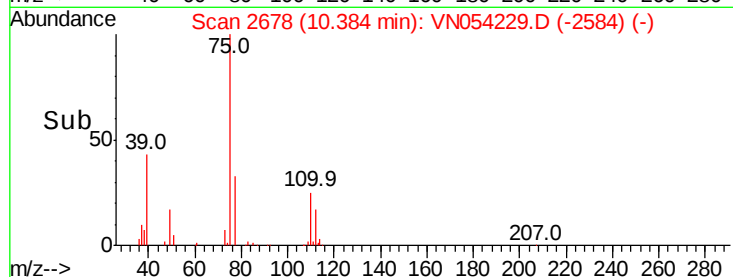
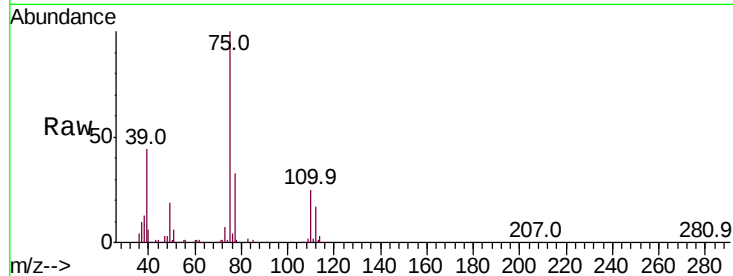
Instrument :
MSVOA_N
ClientSampleId :
VN0313WBS02

Tot Ion: 75 Resp: 352263

Ion	Ratio	Lower	Upper
75	100		
77	33.1	25.8	38.8

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#54

cis-1,3-Dichloropropene

Concen: 19.327 ug/l

RT: 9.84 min Scan# 2509

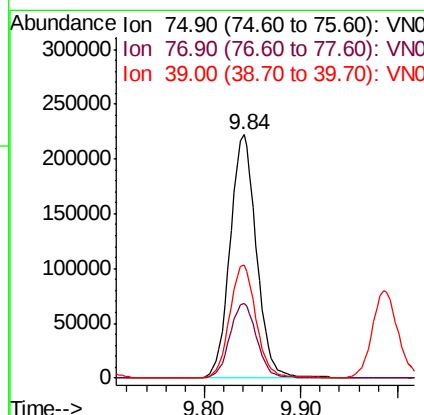
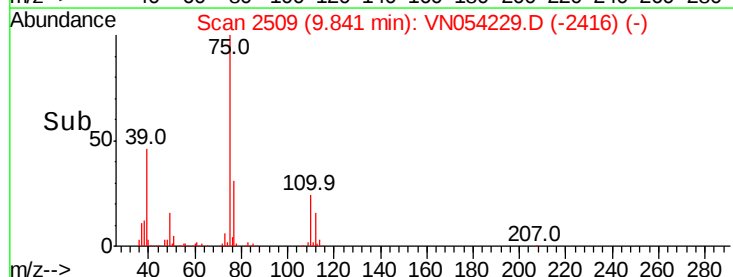
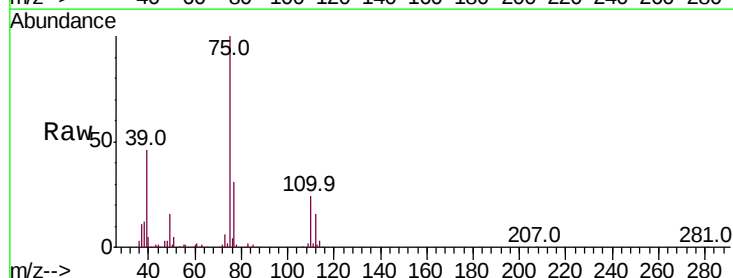
Delta R.T. 0.00 min

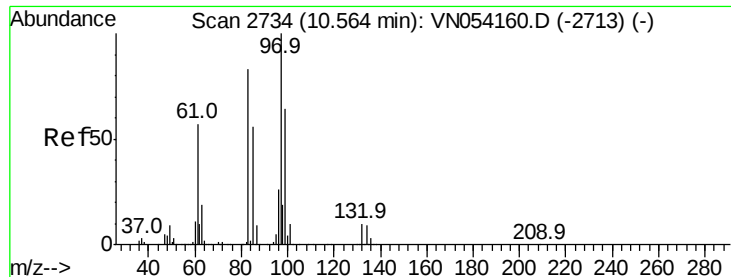
Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Tgt Ion: 75 Resp: 420849

Ion	Ratio	Lower	Upper
75	100		
77	30.7	25.4	38.0
39	46.2	37.2	55.8





#55

1,1,2-Trichloroethane

Concen: 21.101 ug/l

RT: 10.56 min Scan# 2734

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

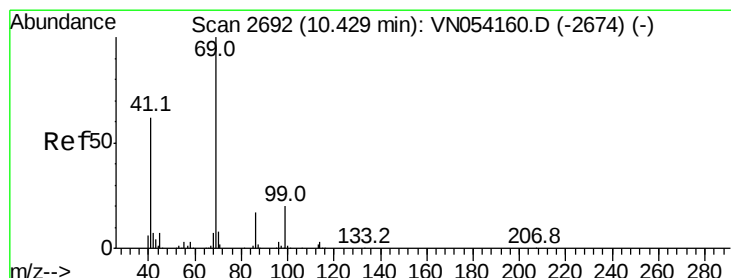
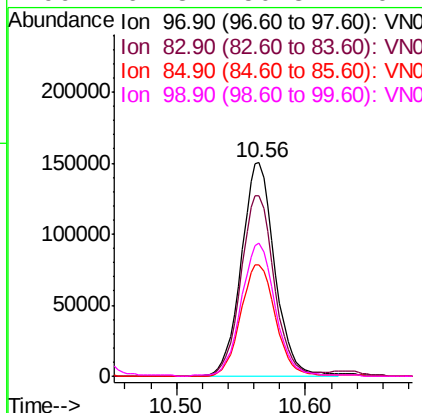
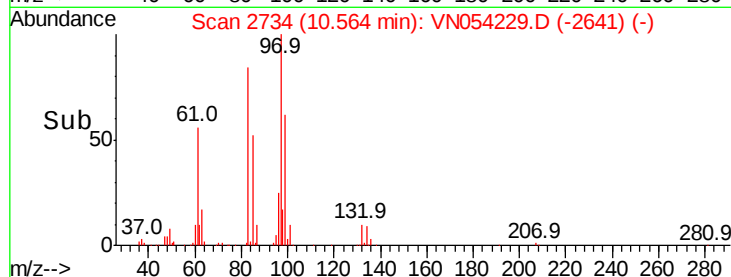
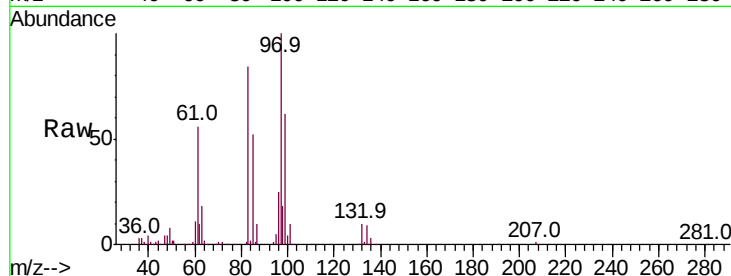
ClientSampleId :

VN0313WBS02

Tot Ion:	97	Resp:	271415
Ion	Ratio	Lower	Upper
97	100		
83	84.4	66.6	100.0
85	52.2	44.4	66.6
99	61.8	50.8	76.2

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#56

Ethyl methacrylate

Concen: 20.450 ug/l

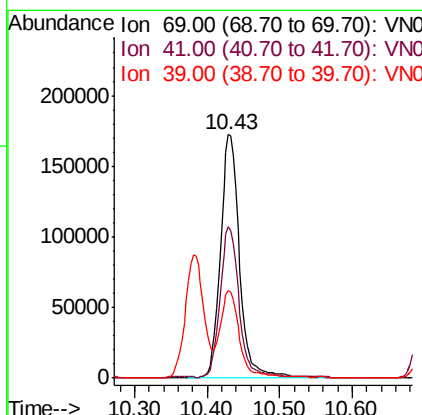
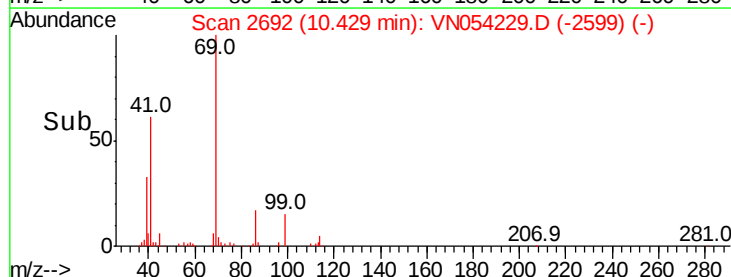
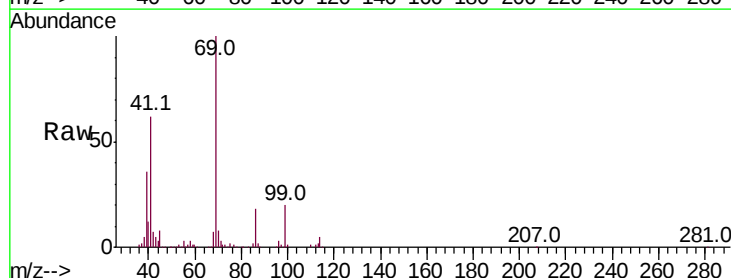
RT: 10.43 min Scan# 2692

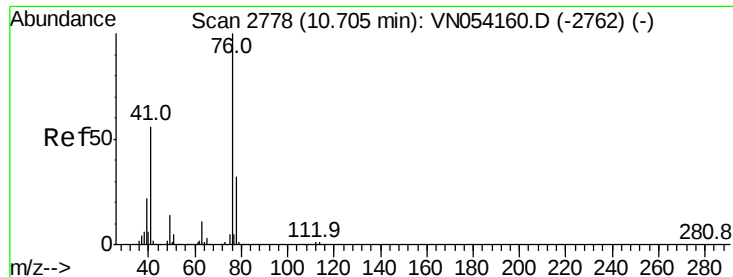
Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Tgt Ion:	69	Resp:	313647
Ion	Ratio	Lower	Upper
69	100		
41	60.9	49.4	74.2
39	35.8	28.3	42.5





#57

1,3-Dichloropropane

Concen: 20.997 ug/l

RT: 10.71 min Scan# 2779

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion: 76 Resp: 441610

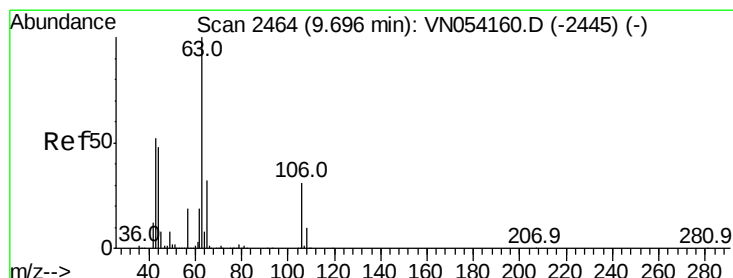
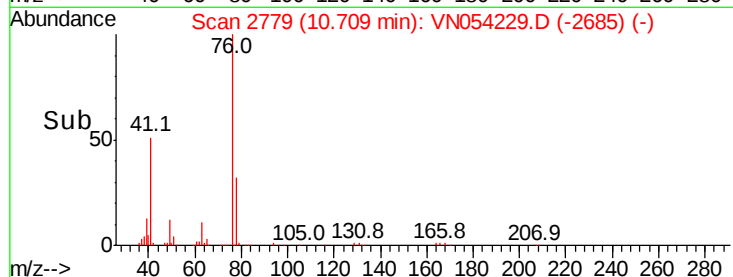
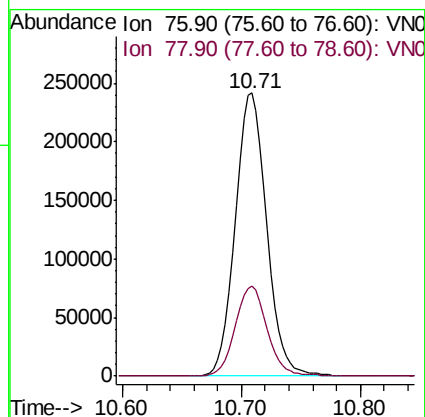
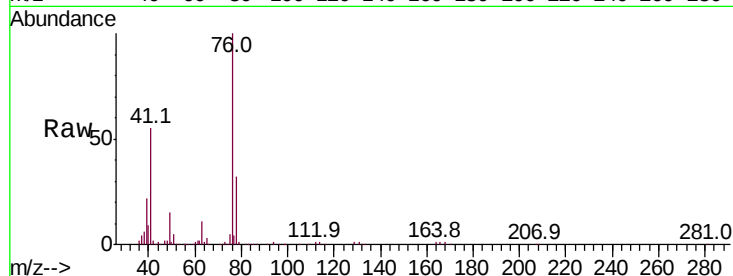
Ion Ratio Lower Upper

76 100

78 32.4 25.7 38.5

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#58

2-Chloroethyl Vinyl ether

Concen: 95.107 ug/l

RT: 9.70 min Scan# 2464

Delta R.T. 0.00 min

Lab File: VN054229.D

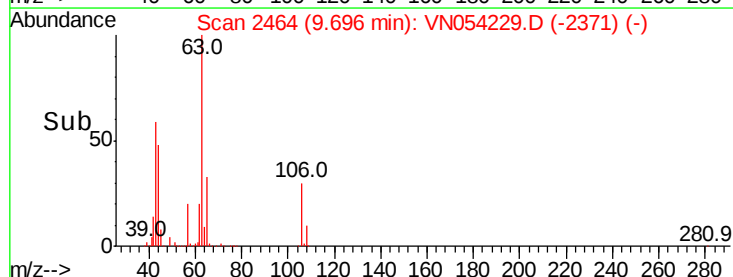
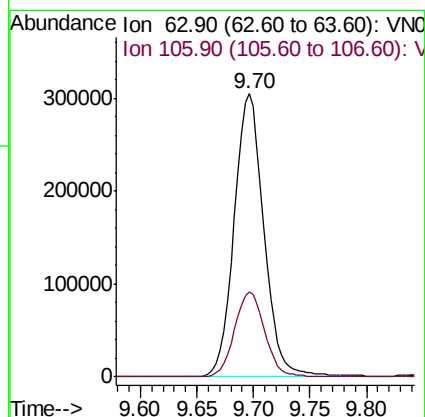
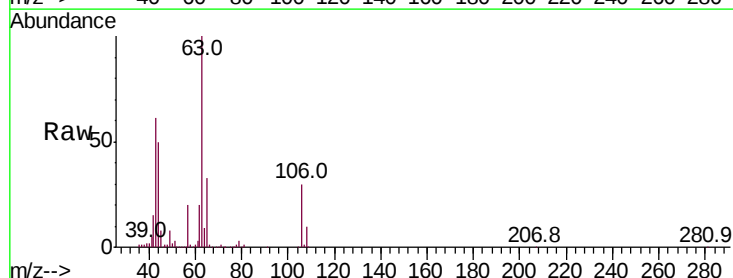
Acq: 13 Mar 2019 23:34

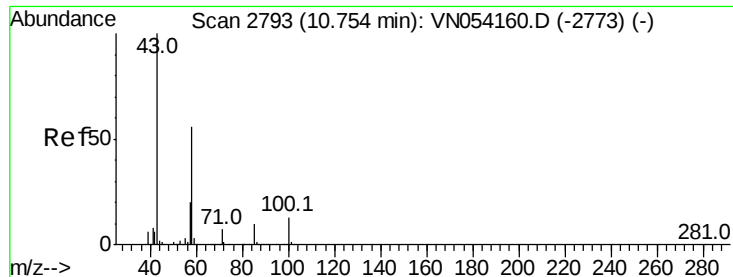
Tgt Ion: 63 Resp: 558446

Ion Ratio Lower Upper

63 100

106 30.5 24.4 36.6





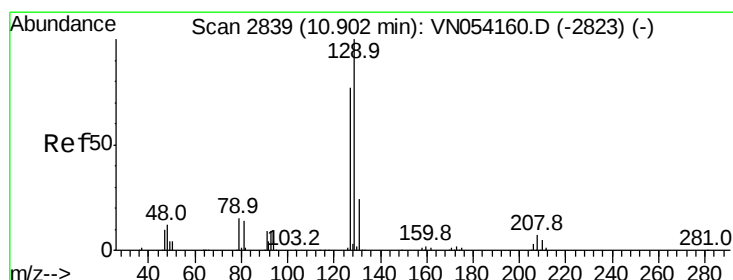
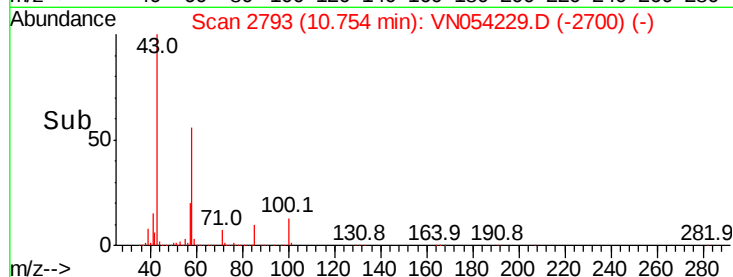
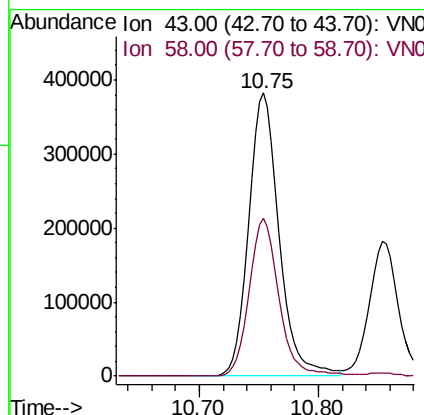
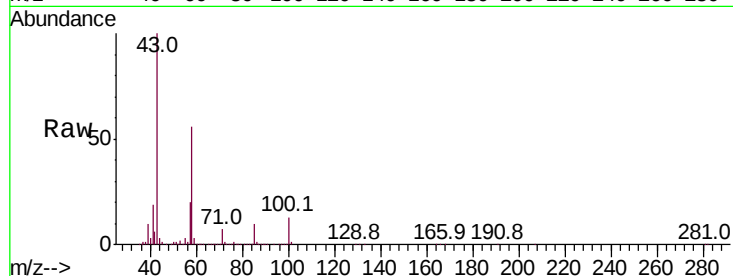
#59
2-Hexanone
Concen: 97.364 ug/l
RT: 10.75 min Scan# 2793
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampled :
VN0313WBS02

Tot Ion	Ratio	Lower	Upper
43	100		
58	55.1	28.0	83.9

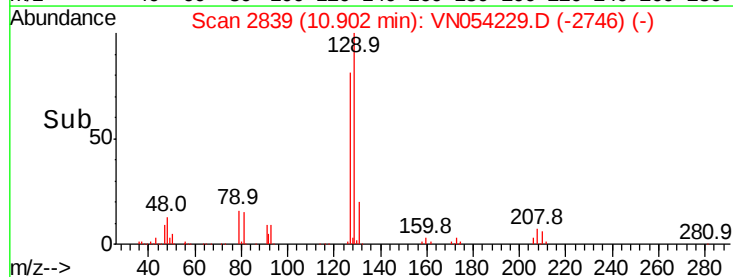
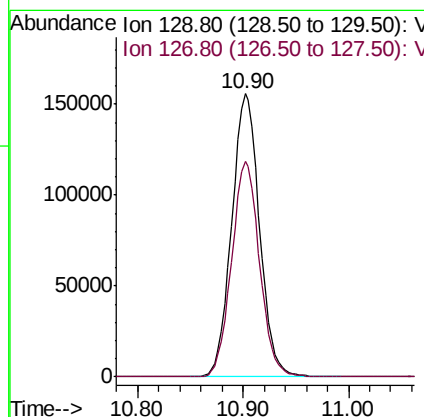
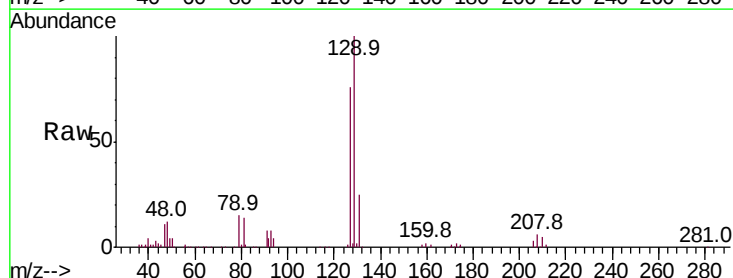
Manual Integrations
APPROVED

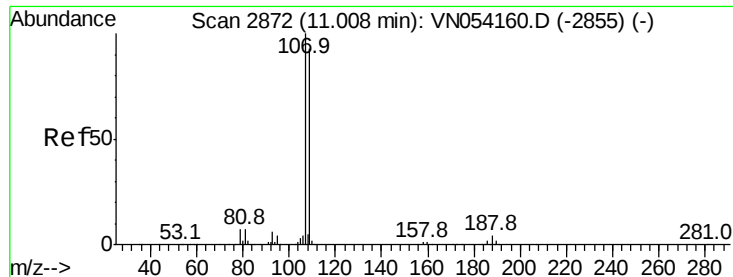
MMDadoda
3/14/2019 10:28:17 AM



#60
Dibromochloromethane
Concen: 19.618 ug/l
RT: 10.90 min Scan# 2839
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Lower	Upper
129	100		
127	76.3	38.6	115.8





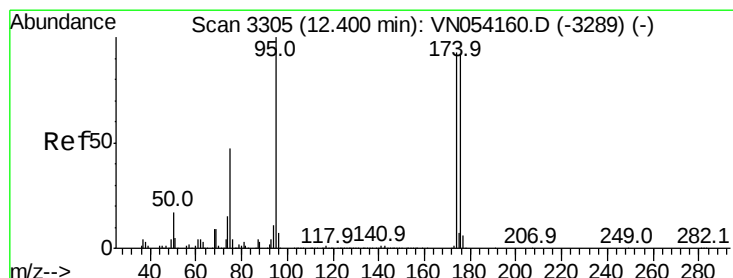
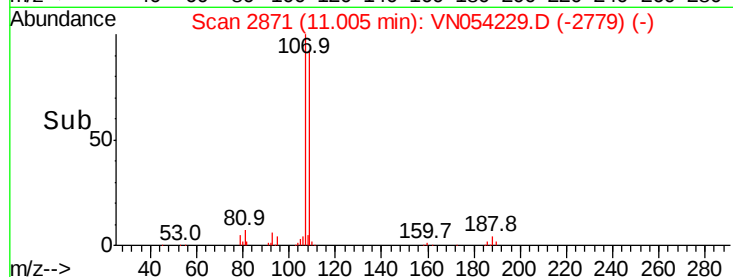
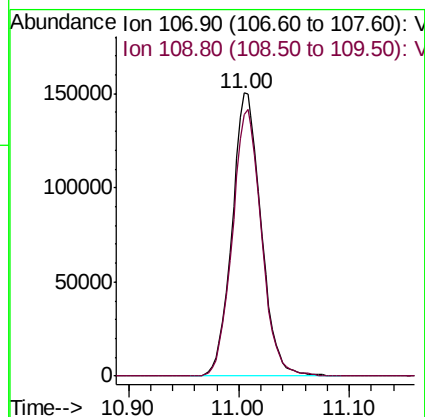
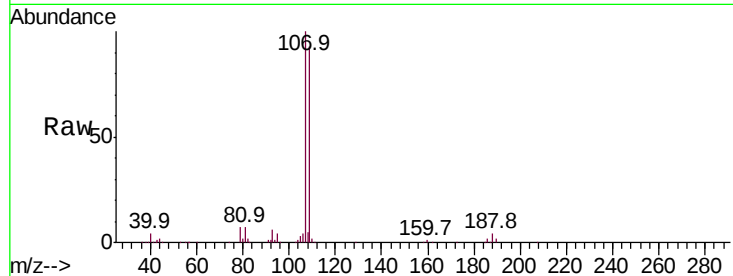
#61
 1,2-Dibromoethane
 Concen: 21.016 ug/l
 RT: 11.00 min Scan# 2871
 Delta R.T. -0.00 min
 Lab File: VN054229.D
 Acq: 13 Mar 2019 23:34

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0313WBS02

Tot Ion	Ratio	Lower	Upper
107	100		
109	94.3	75.9	113.9

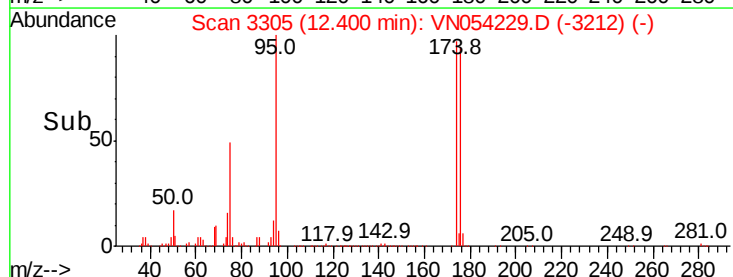
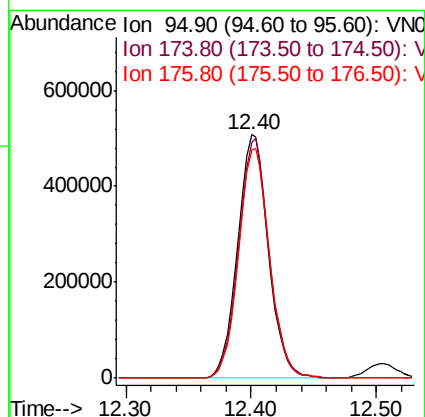
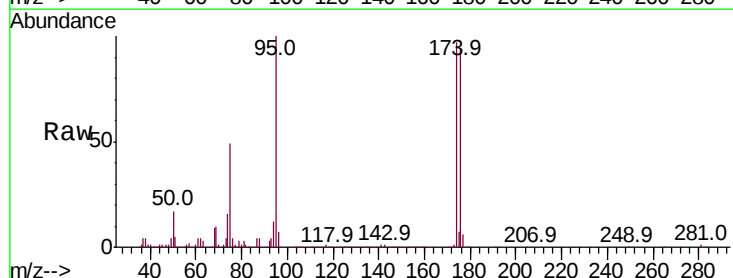
Manual Integrations
 APPROVED

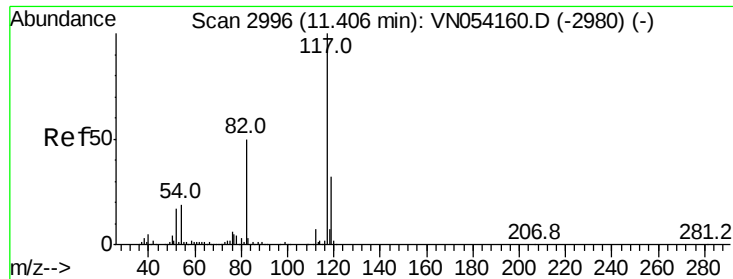
MMDadoda
 3/14/2019 10:28:17 AM



#62
 4-Bromofluorobenzene
 Concen: 48.997 ug/l
 RT: 12.40 min Scan# 3305
 Delta R.T. 0.00 min
 Lab File: VN054229.D
 Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Lower	Upper
95	100		
174	97.9	0.0	191.0
176	94.9	0.0	187.4





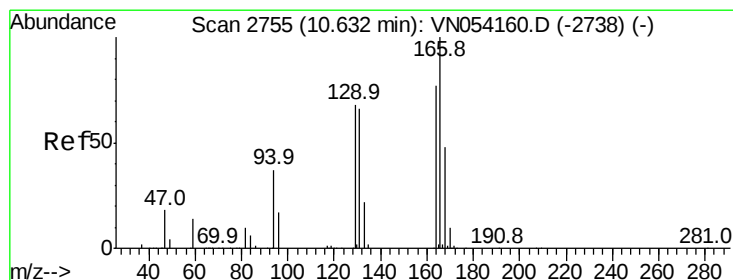
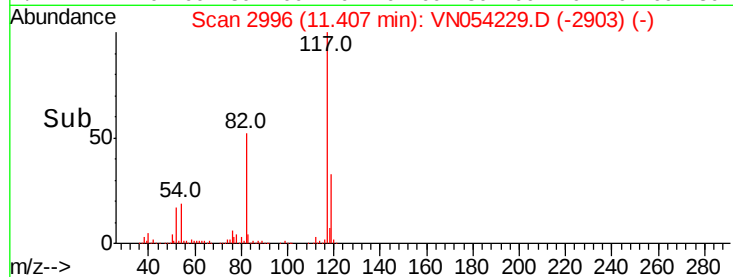
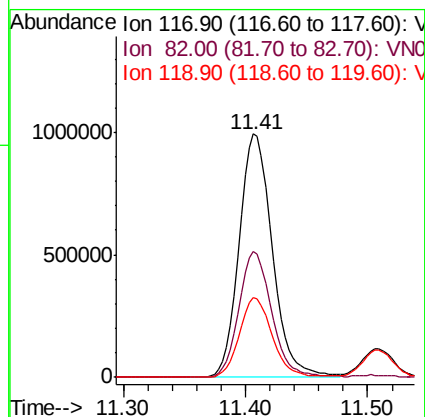
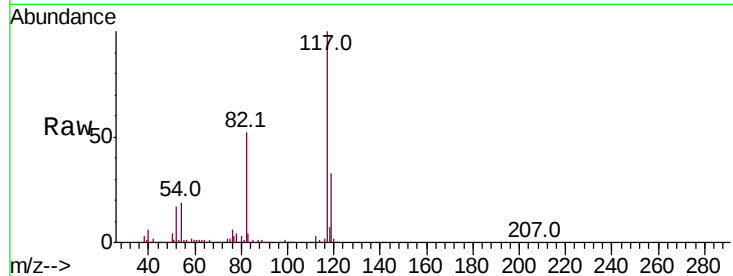
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampleId :
VN0313WBS02

Tot Ion	Ratio	Lower	Upper
117	100		
82	51.6	40.0	60.0
119	32.6	25.8	38.6

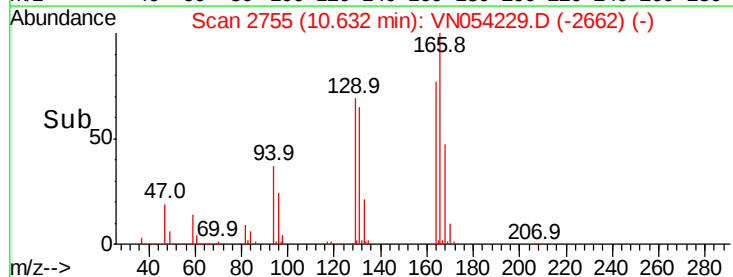
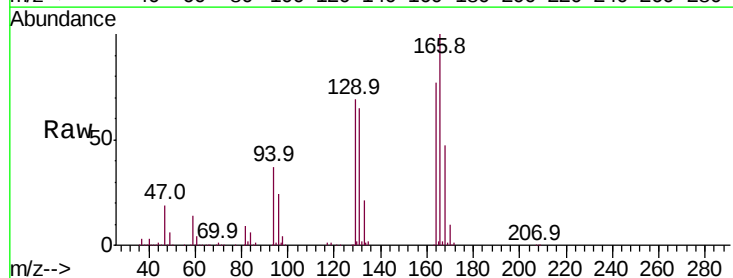
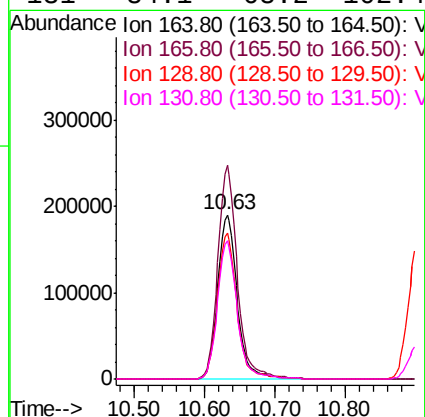
Manual Integrations
APPROVED

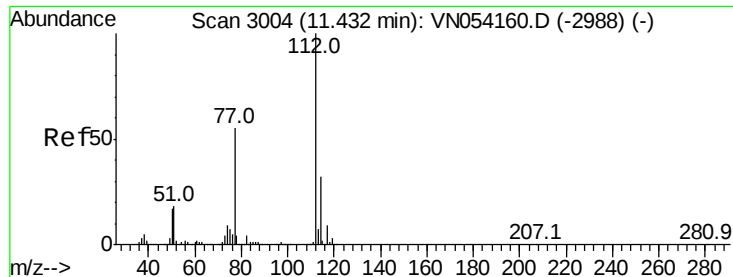
MMDadoda
3/14/2019 10:28:17 AM



#64
Tetrachloroethene
Concen: 20.368 ug/l
RT: 10.63 min Scan# 2755
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Lower	Upper
164	100		
166	130.2	103.9	155.9
129	89.3	71.1	106.7
131	84.1	68.2	102.4





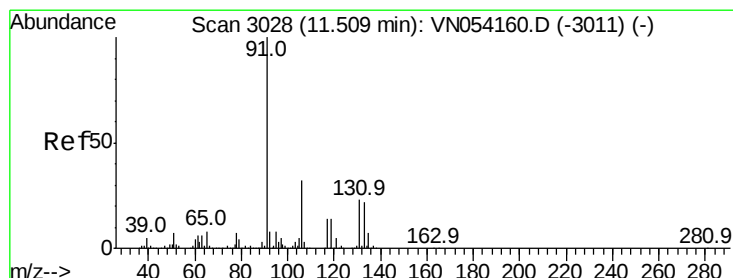
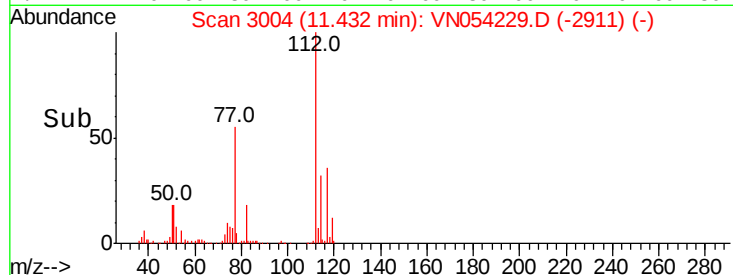
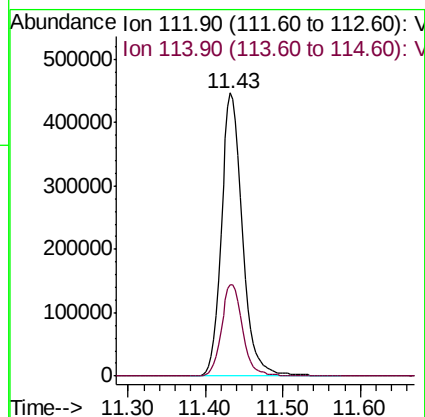
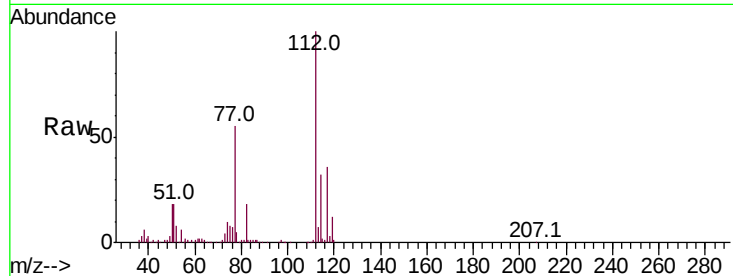
#65
Chlorobenzene
Concen: 20.696 ug/l
RT: 11.43 min Scan# 3004
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampleId :
VN0313WBS02

Tot Ion	Ratio	Lower	Upper
112	100		
114	32.4	25.9	38.9

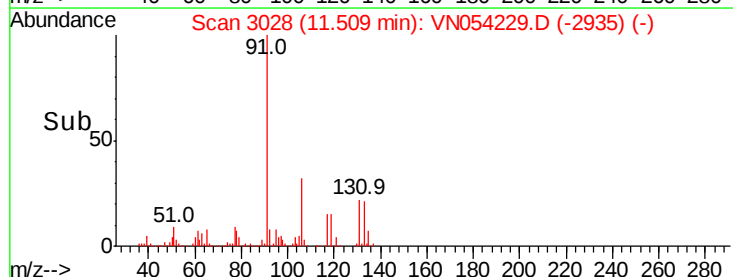
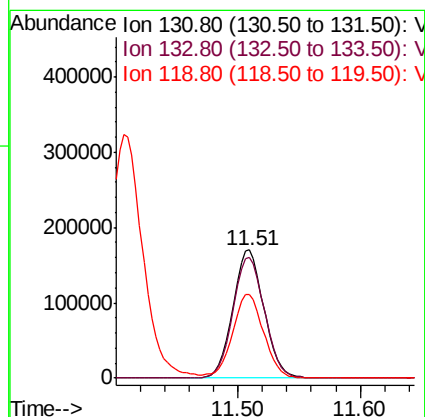
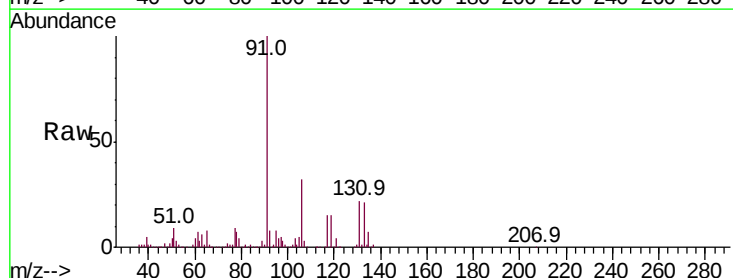
Manual Integrations
APPROVED

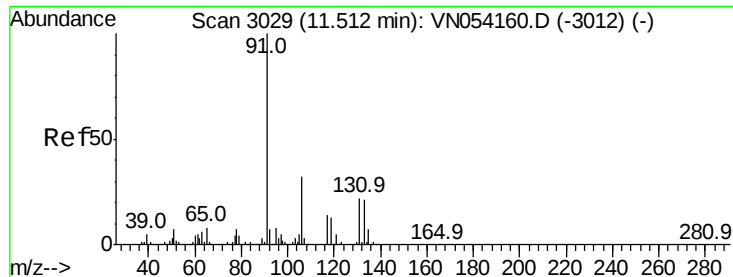
MMDadoda
3/14/2019 10:28:17 AM



#66
1,1,1,2-Tetrachloroethane
Concen: 20.146 ug/l
RT: 11.51 min Scan# 3028
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Lower	Upper
131	100		
133	96.0	47.6	142.9
119	65.4	32.4	97.0





#67

Ethyl Benzene

Concen: 20.343 ug/l

RT: 11.51 min Scan# 3028

Delta R.T. -0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion: 91 Resp: 1385940

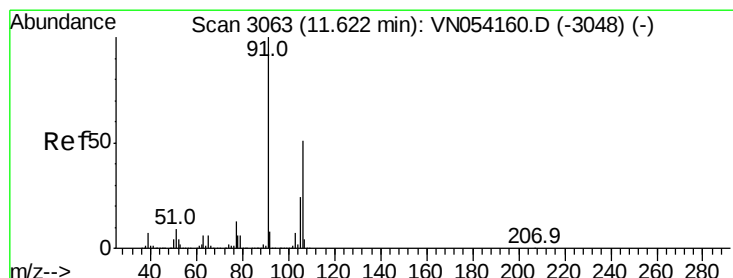
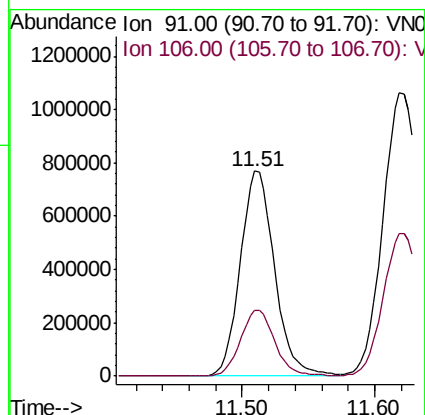
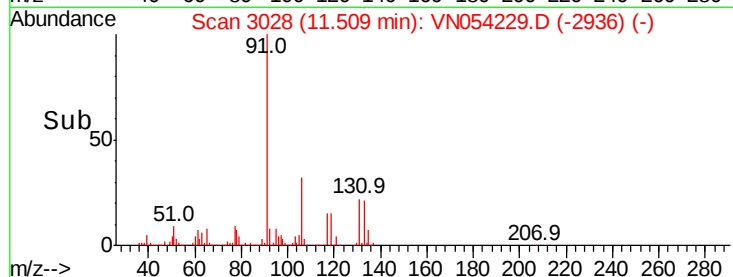
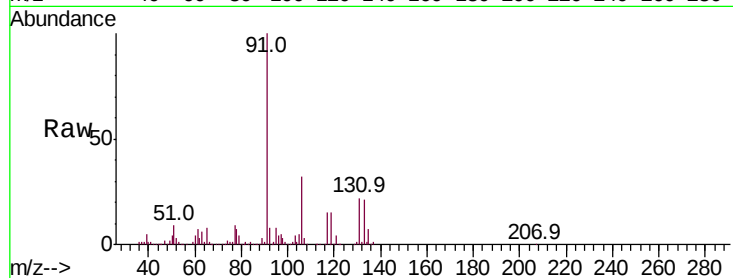
Ion Ratio Lower Upper

91 100

106 32.2 25.5 38.3

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#68

m/p-Xylenes

Concen: 40.945 ug/l

RT: 11.62 min Scan# 3063

Delta R.T. 0.00 min

Lab File: VN054229.D

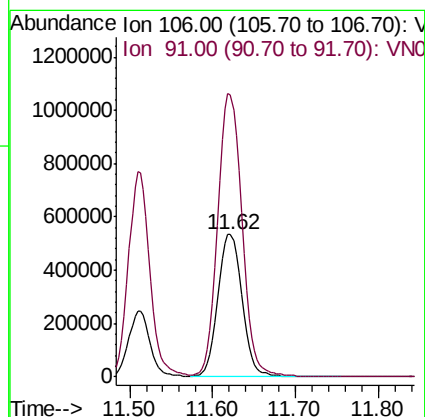
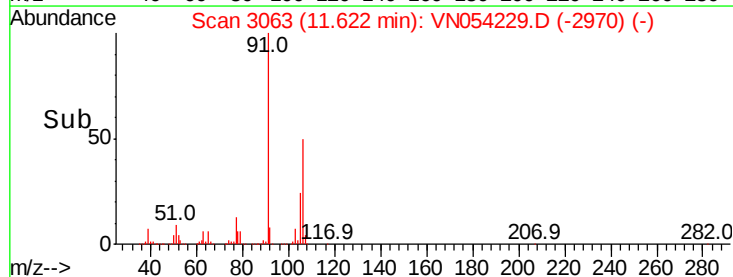
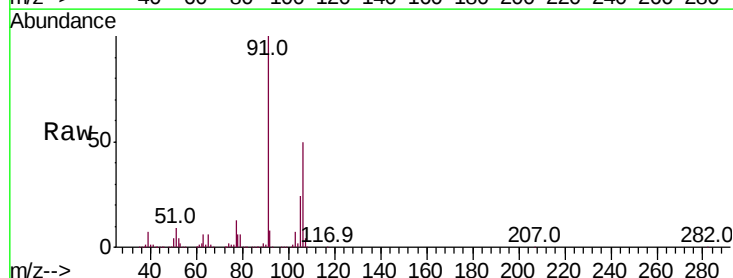
Acq: 13 Mar 2019 23:34

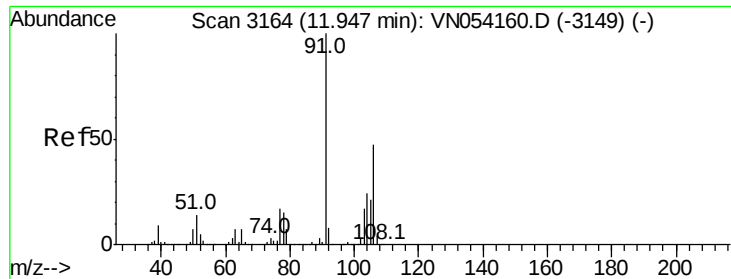
Tgt Ion: 106 Resp: 1090268

Ion Ratio Lower Upper

106 100

91 199.3 159.4 239.2





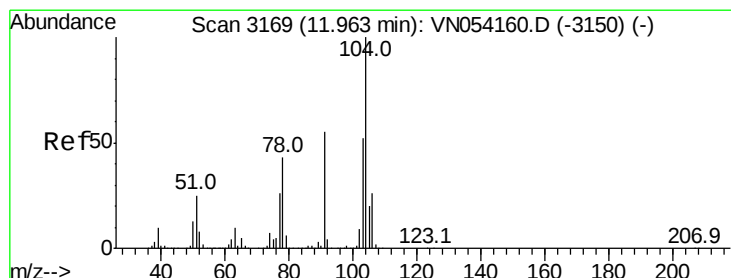
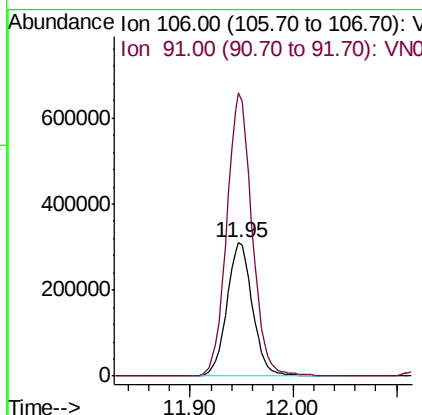
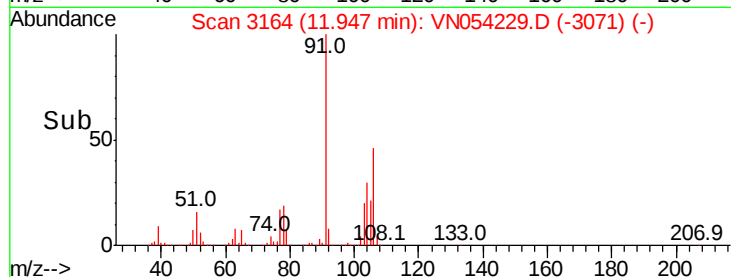
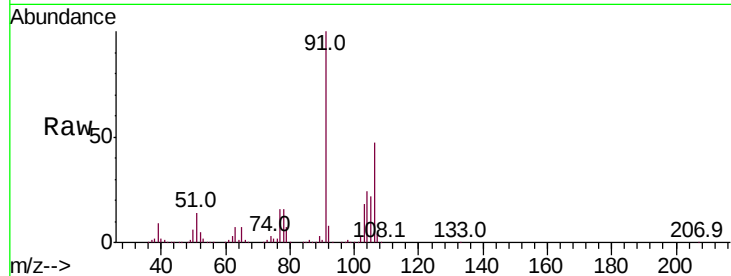
#69
o-Xylene
Concen: 20.678 ug/l
RT: 11.95 min Scan# 3164
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampleId :
VN0313WBS02

Tot Ion:106 Resp: 536739
Ion Ratio Lower Upper
106 100
91 209.8 105.7 317.1

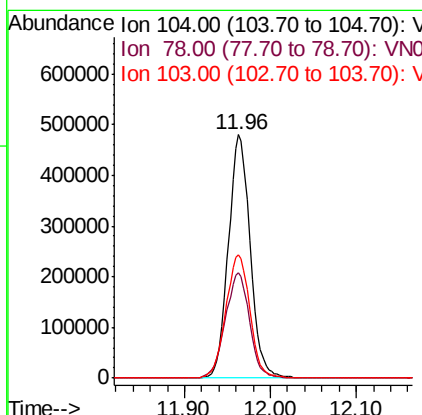
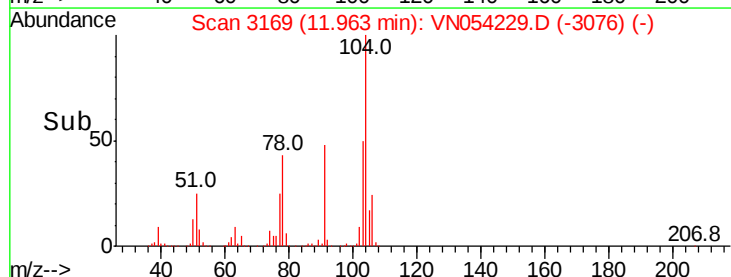
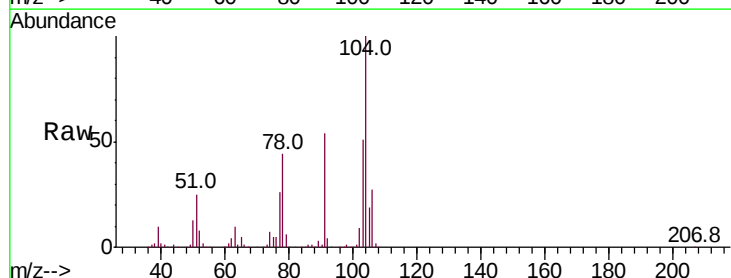
Manual Integrations
APPROVED

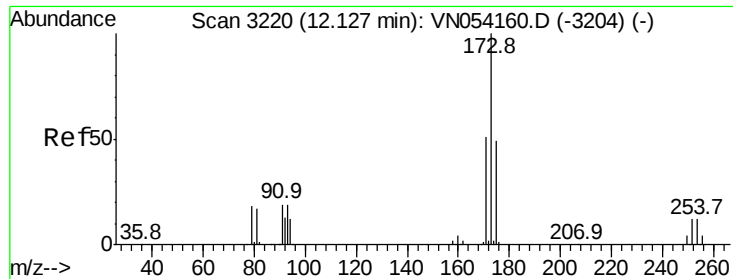
MMDadoda
3/14/2019 10:28:17 AM



#70
Styrene
Concen: 20.803 ug/l
RT: 11.96 min Scan# 3169
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Tgt Ion:104 Resp: 846893
Ion Ratio Lower Upper
104 100
78 48.0 38.2 57.2
103 55.9 44.4 66.6





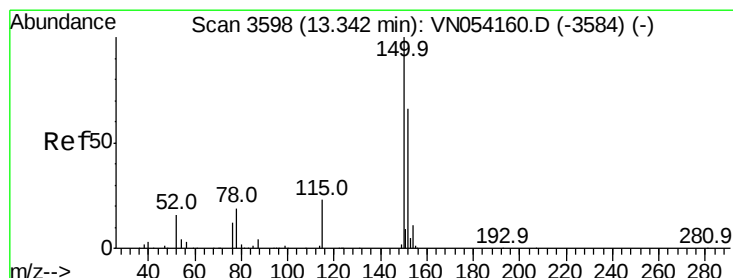
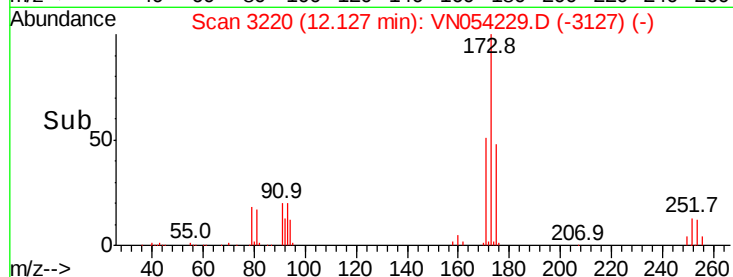
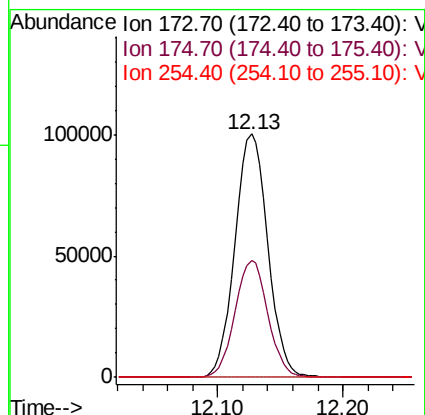
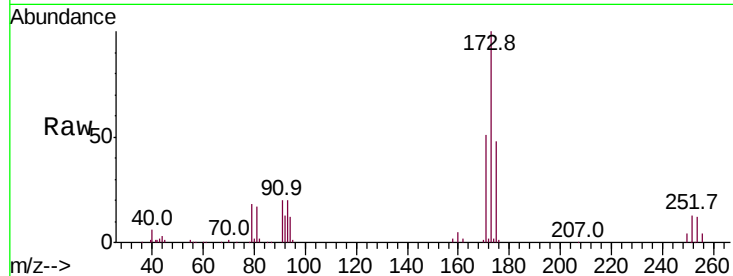
#71
Bromoform
Concen: 17.641 ug/l
RT: 12.13 min Scan# 3220
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampled :
VN0313WBS02

Tot Ion	Ratio	Lower	Upper
173	100		
175	48.0	24.4	73.2
254	0.0	0.1	0.1#

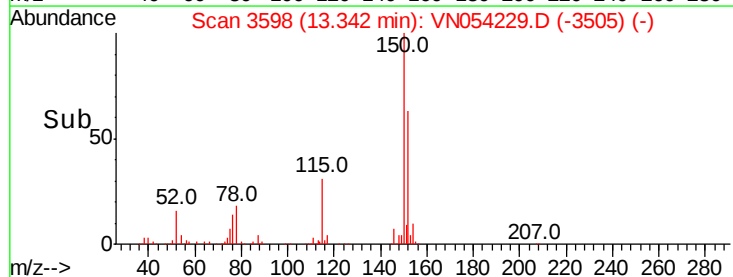
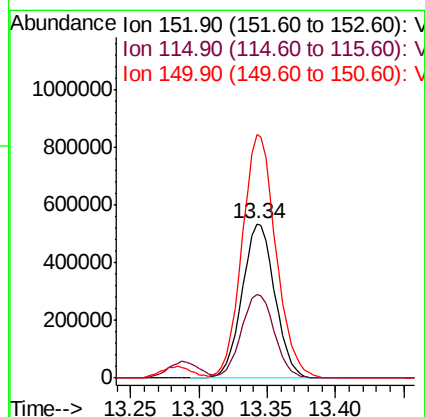
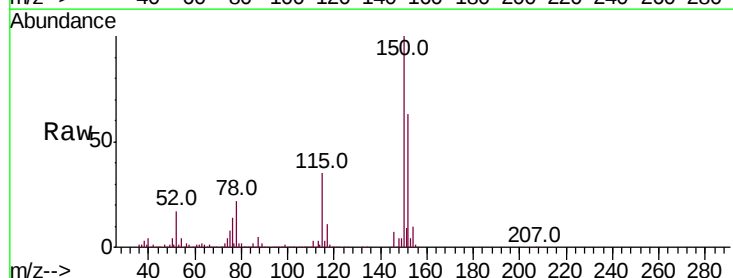
Manual Integrations
APPROVED

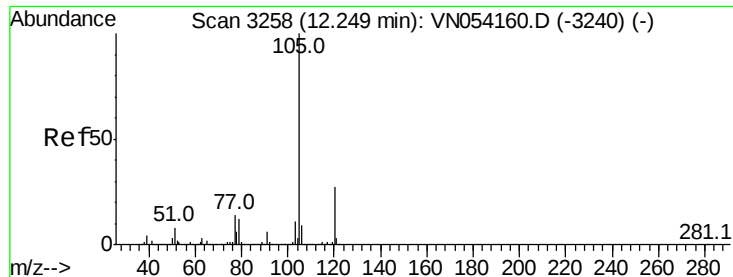
MMDadoda
3/14/2019 10:28:17 AM



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.34 min Scan# 3598
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Lower	Upper
152	100		
115	54.8	27.2	81.6
150	162.7	0.0	349.2





#73

Isopropylbenzene

Concen: 19.888 ug/l

RT: 12.25 min Scan# 3258

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion:105 Resp: 1417720

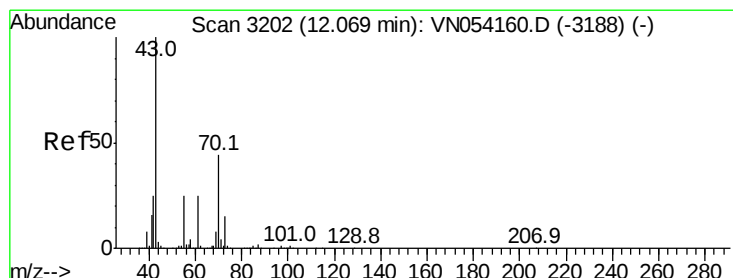
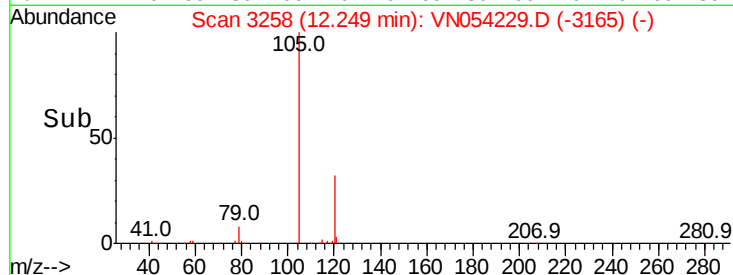
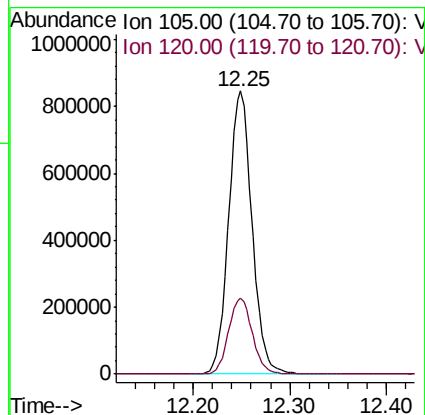
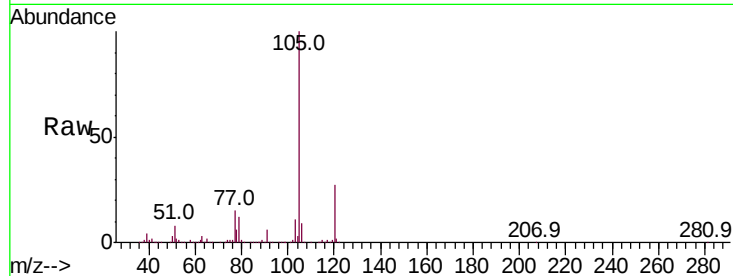
Ion Ratio Lower Upper

105 100

120 27.3 13.8 41.3

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#74

N-ethyl acetate

Concen: 19.305 ug/l

RT: 12.07 min Scan# 3202

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Tgt Ion: 43 Resp: 305463

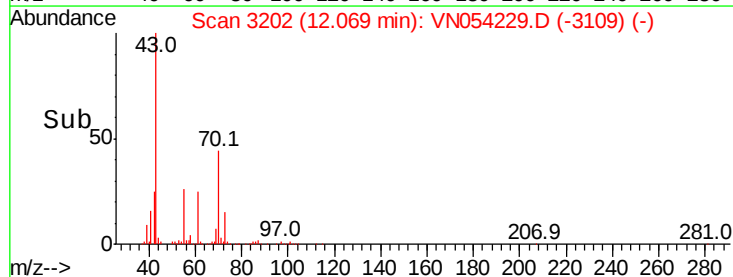
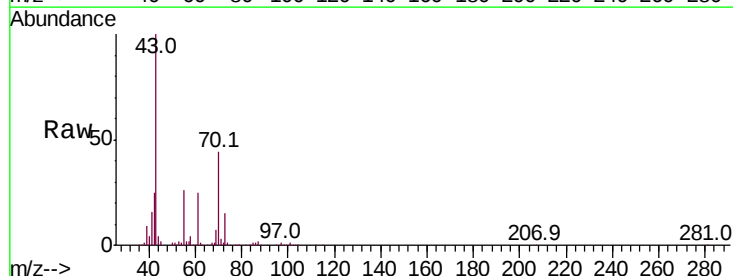
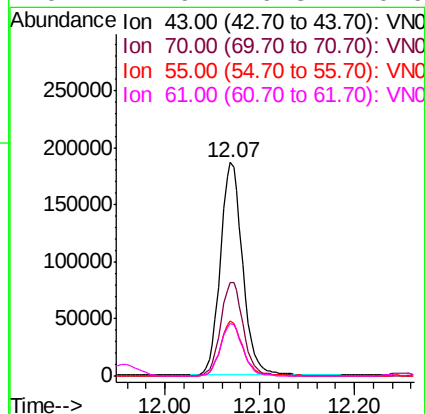
Ion Ratio Lower Upper

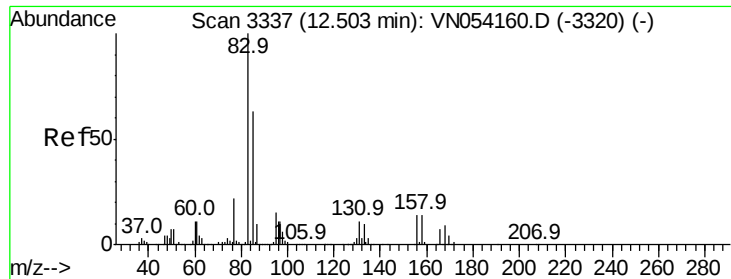
43 100

70 44.7 35.4 53.0

55 25.9 19.8 29.6

61 24.6 19.8 29.6





#75

1,1,2,2-Tetrachloroethane

Concen: 20.170 ug/l

RT: 12.50 min Scan# 3337

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion: 83 Resp: 306339

Ion Ratio Lower Upper

83 100

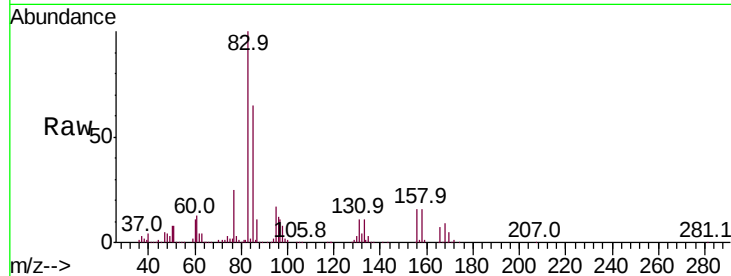
131 11.7 5.8 17.4

85 64.1 32.2 96.6

Manual Integrations
APPROVED

MMDadoda

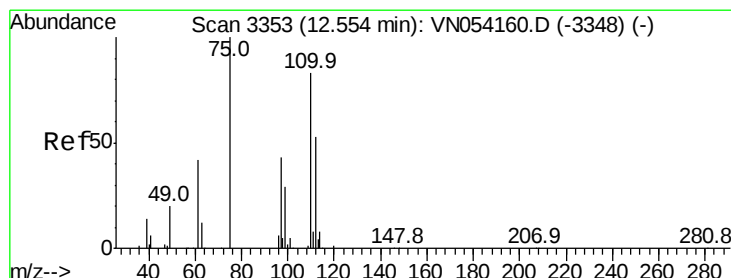
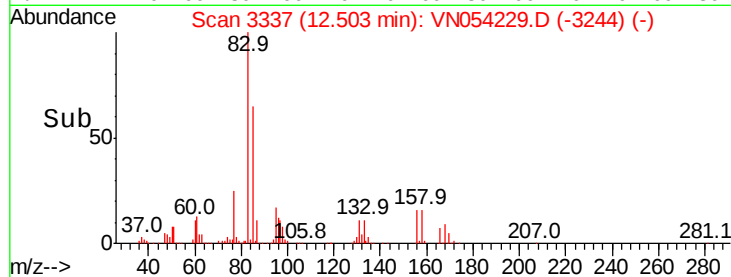
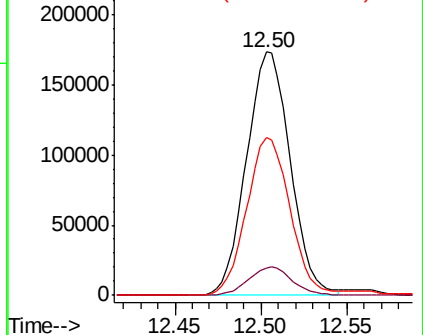
3/14/2019 10:28:17 AM



Abundance Ion 82.90 (82.60 to 83.60): VNO

Ion 130.80 (130.50 to 131.50): VNO

Ion 84.90 (84.60 to 85.60): VNO



#76

1,2,3-Trichloropropane

Concen: 19.385 ug/l m

RT: 12.55 min Scan# 3353

Delta R.T. 0.00 min

Lab File: VN054229.D

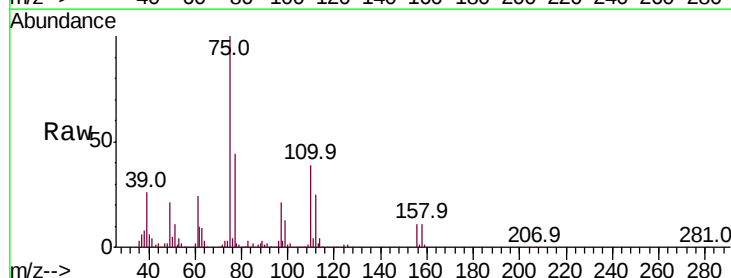
Acq: 13 Mar 2019 23:34

Tgt Ion: 75 Resp: 253998

Ion Ratio Lower Upper

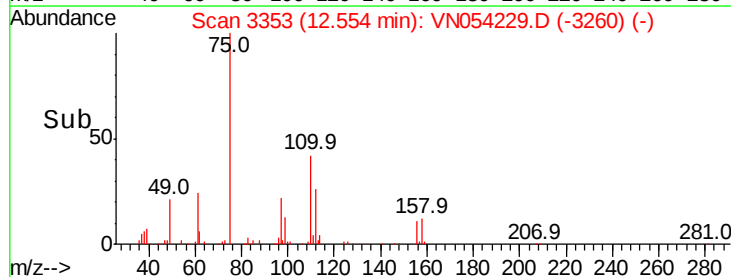
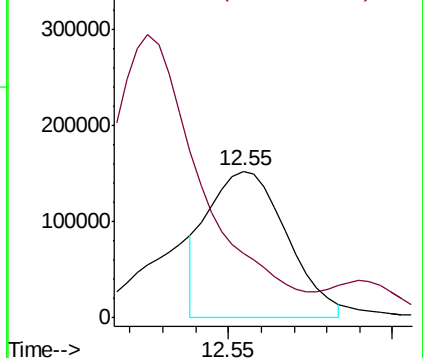
75 100

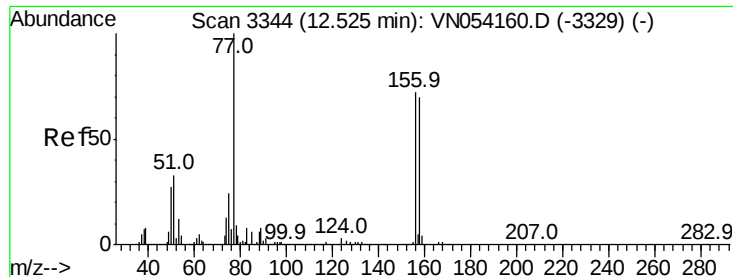
77 0.0 0.0 0.0



Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 77.00 (76.70 to 77.70): VNO





#77

Bromobenzene

Concen: 20.296 ug/l

RT: 12.53 min Scan# 3344

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

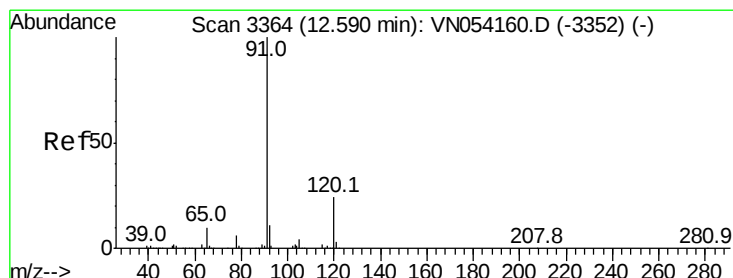
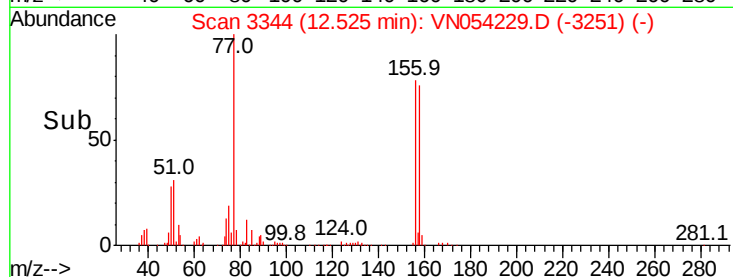
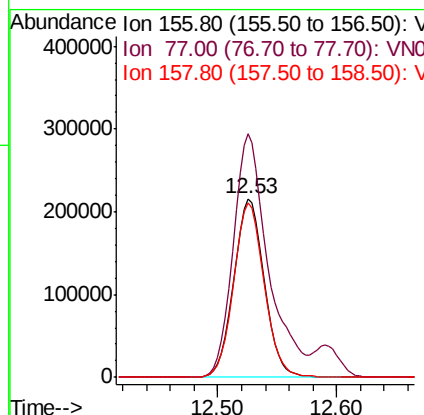
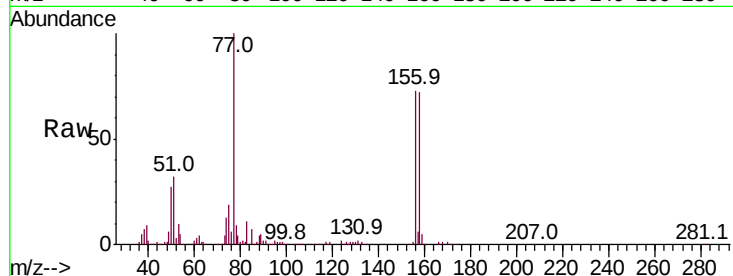
ClientSampleId :

VN0313WBS02

Tot Ion:	156	Resp:	382847
Ion Ratio	Lower	Upper	
156	100		
77	157.3	81.5	244.4
158	97.9	49.0	147.2

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#78

n-propylbenzene

Concen: 19.974 ug/l

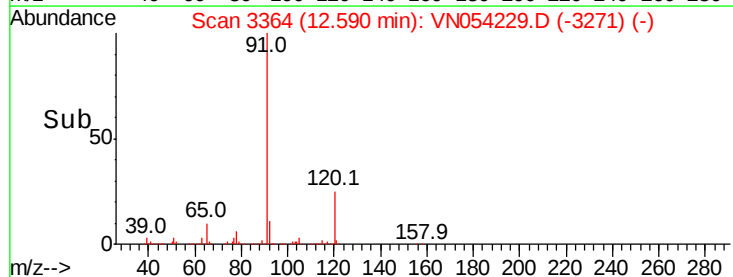
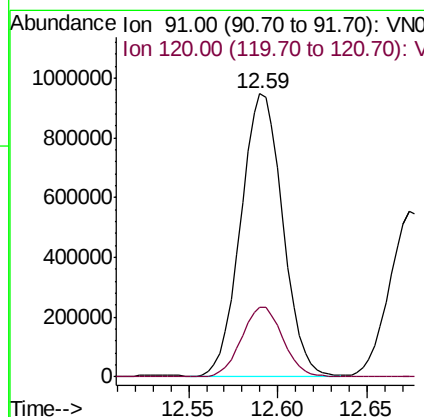
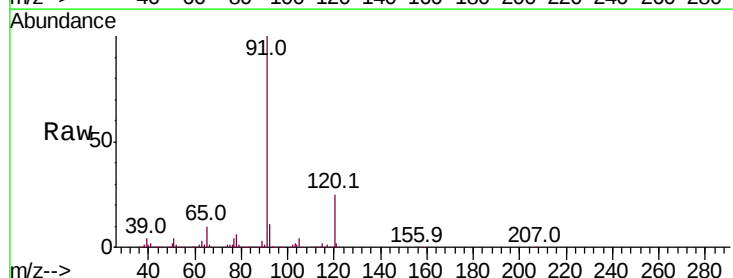
RT: 12.59 min Scan# 3364

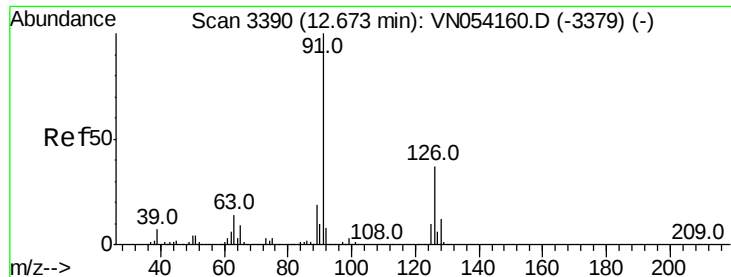
Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Tgt Ion:	91	Resp:	1544992
Ion Ratio	Lower	Upper	
91	100		
120	24.6	12.3	36.9





#79

2-Chlorotoluene

Concen: 19.965 ug/l

RT: 12.67 min Scan# 3390

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion: 91 Resp: 928533

Ion Ratio Lower Upper

91 100

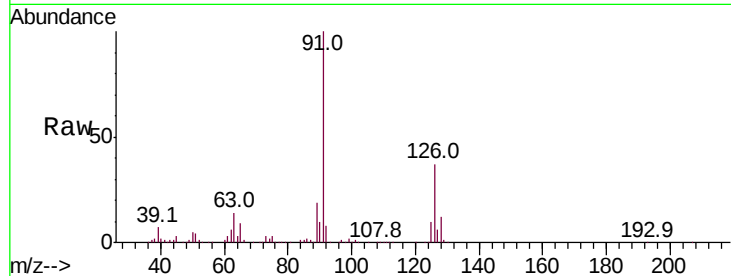
126 37.7 18.7 56.1

Manual Integrations

APPROVED

MMDadoda

3/14/2019 10:28:17 AM



Abundance Ion 91.00 (90.70 to 91.70): VN054160.D (-3379) (-)

Ion 125.90 (125.60 to 126.60): VN054160.D (-3379) (-)

1000000

800000

600000

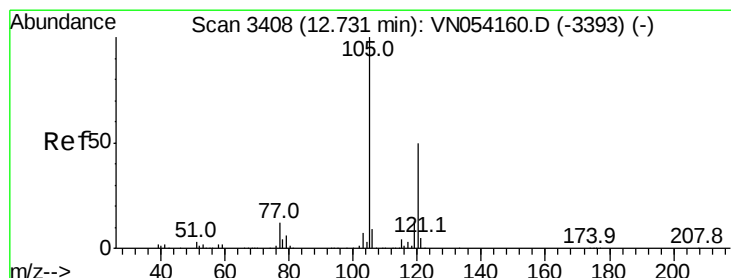
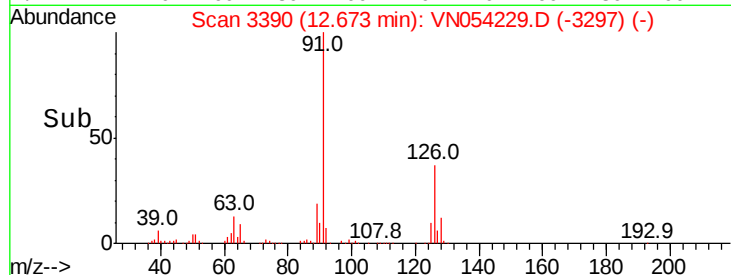
400000

200000

0

12.60 12.65 12.70

Time-->



#80

1,3,5-Trimethylbenzene

Concen: 19.881 ug/l

RT: 12.73 min Scan# 3408

Delta R.T. 0.00 min

Lab File: VN054229.D

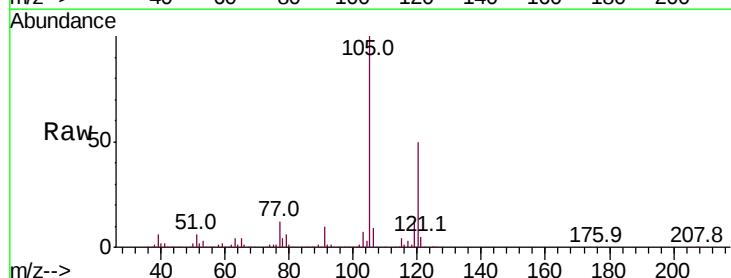
Acq: 13 Mar 2019 23:34

Tgt Ion:105 Resp: 1178867

Ion Ratio Lower Upper

105 100

120 49.8 25.0 75.0



Abundance Ion 105.00 (104.70 to 105.70): VN054160.D (-3393) (-)

Ion 120.00 (119.70 to 120.70): VN054160.D (-3393) (-)

800000

600000

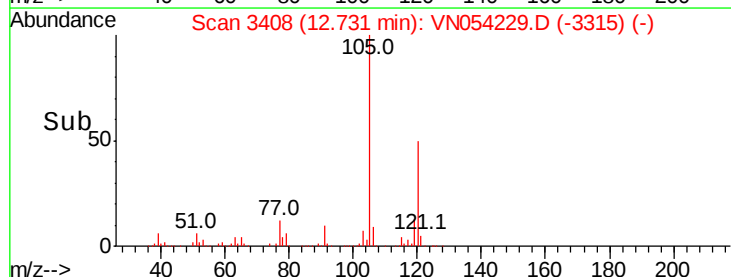
400000

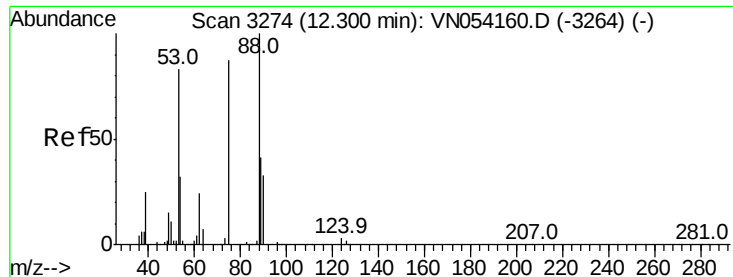
200000

0

12.70 12.80

Time-->





#81

trans-1,4-Dichloro-2-butene

Concen: 14.554 ug/l

RT: 12.30 min Scan# 3274

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion: 75 Resp: 55786

Ion Ratio Lower Upper

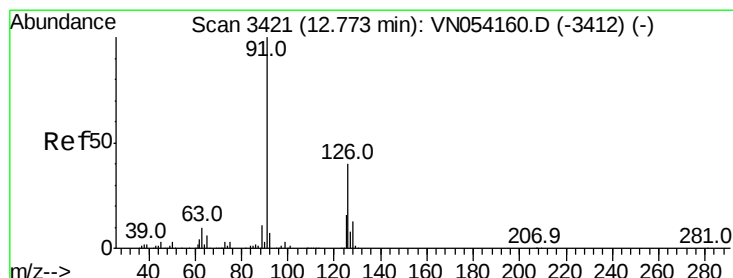
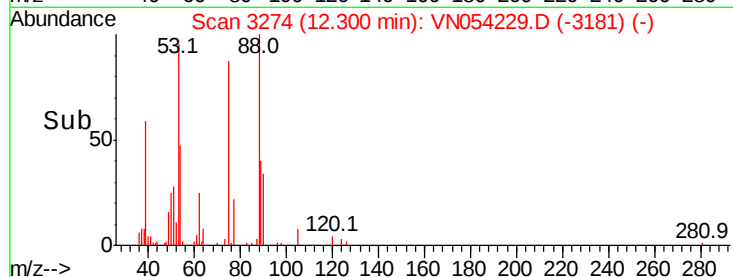
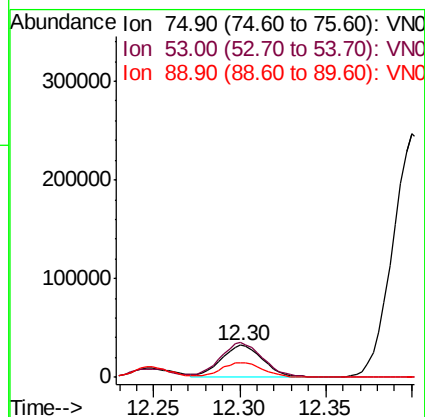
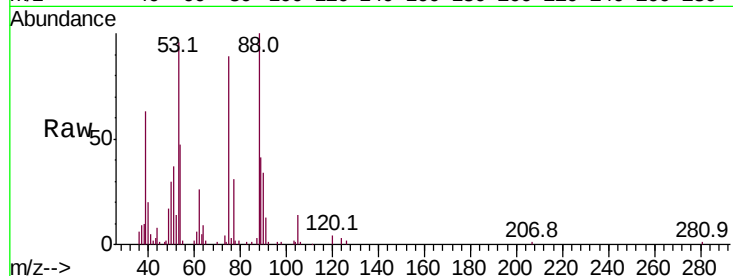
75 100

53 111.0 76.2 114.2

89 46.9 39.2 58.8

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#82

4-Chlorotoluene

Concen: 19.858 ug/l

RT: 12.77 min Scan# 3421

Delta R.T. 0.00 min

Lab File: VN054229.D

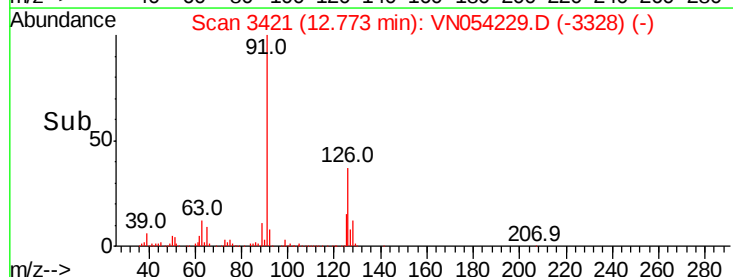
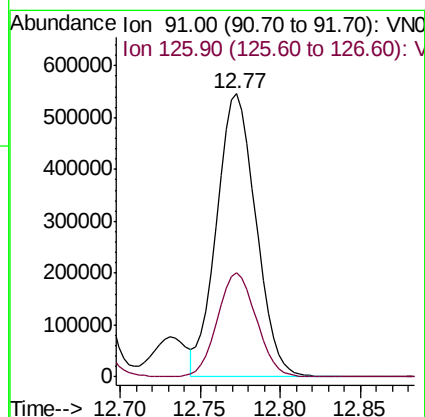
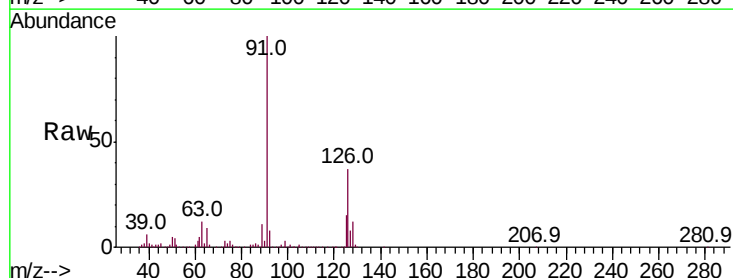
Acq: 13 Mar 2019 23:34

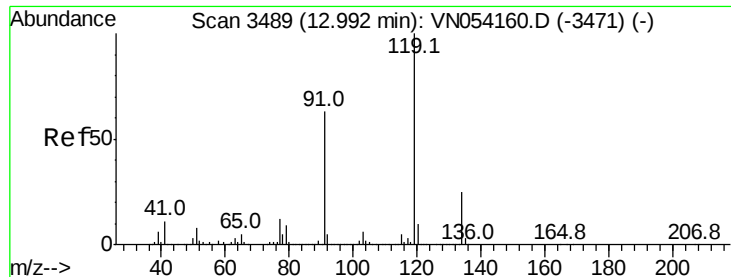
Tgt Ion: 91 Resp: 922186

Ion Ratio Lower Upper

91 100

126 36.5 18.1 54.1





#83

tert-Butylbenzene

Concen: 19.981 ug/l

RT: 12.99 min Scan# 3489

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion:119 Resp: 1090498

Ion Ratio Lower Upper

119 100

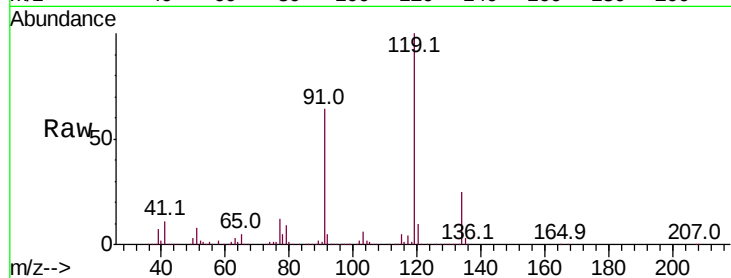
91 61.6 30.9 92.8

134 26.5 13.2 39.6

Manual Integrations
APPROVED

MMDadoda

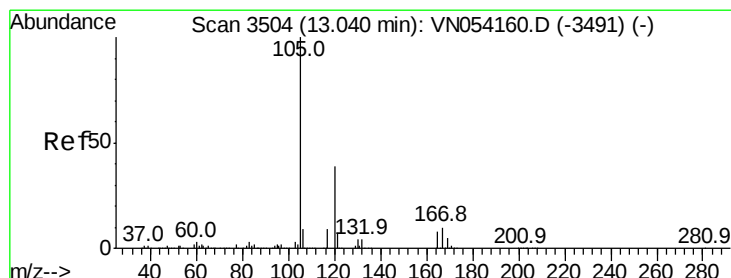
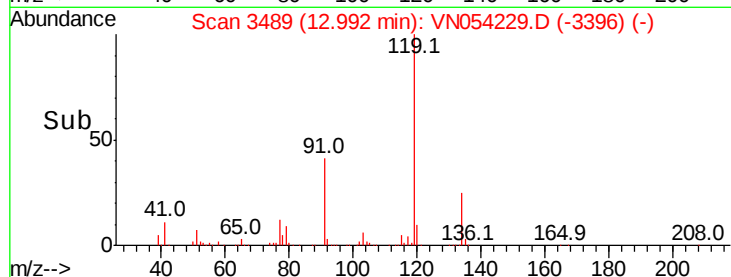
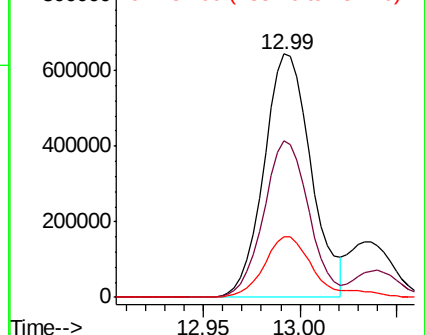
3/14/2019 10:28:17 AM



Abundance Ion 119.00 (118.70 to 119.70): V

Ion 91.00 (90.70 to 91.70): VN

Ion 134.00 (133.70 to 134.70): V



#84

1,2,4-Trimethylbenzene

Concen: 20.188 ug/l

RT: 13.04 min Scan# 3504

Delta R.T. 0.00 min

Lab File: VN054229.D

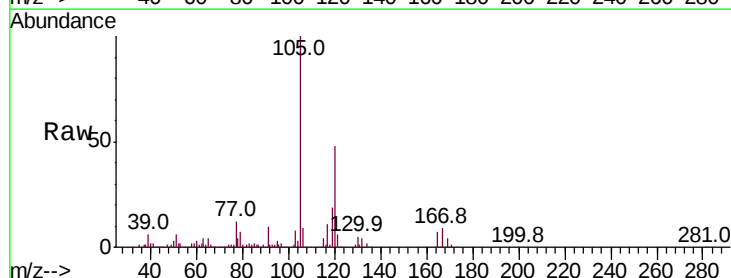
Acq: 13 Mar 2019 23:34

Tgt Ion:105 Resp: 1174374

Ion Ratio Lower Upper

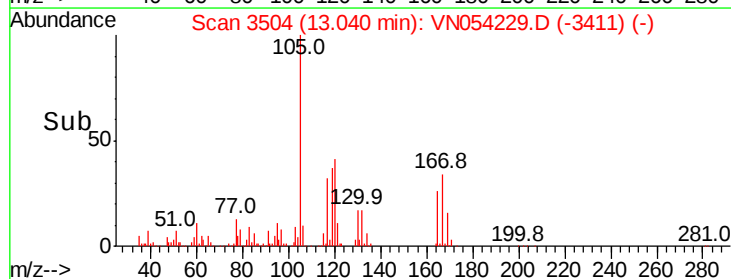
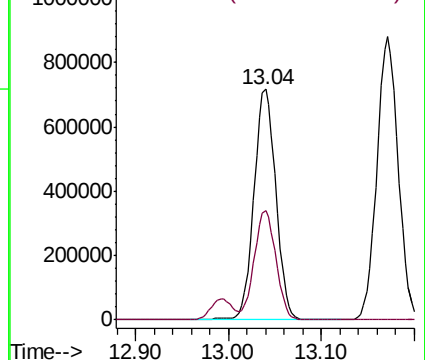
105 100

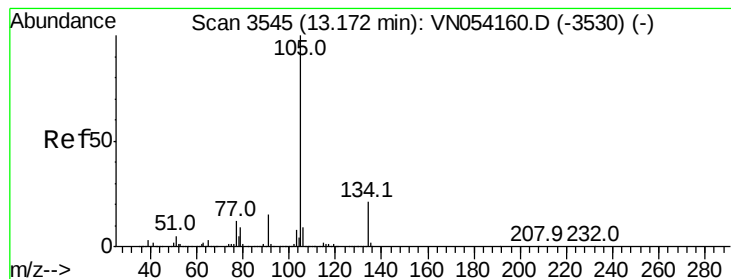
120 47.2 23.4 70.3



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





#85

sec-Butylbenzene

Concen: 19.710 ug/l

RT: 13.17 min Scan# 3545

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

ClientSampleId :

VN0313WBS02

Tot Ion:105 Resp: 1395069

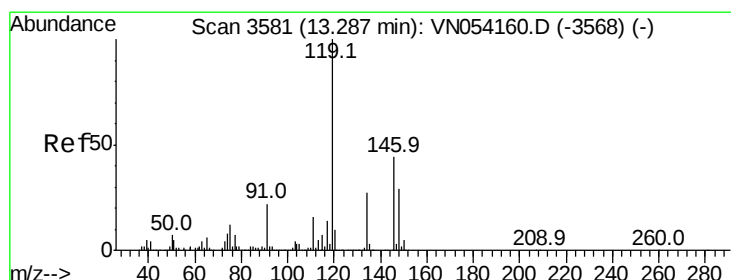
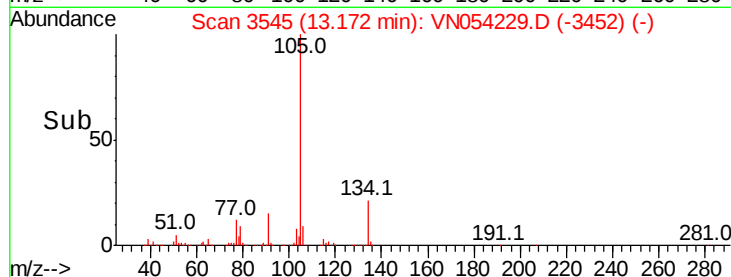
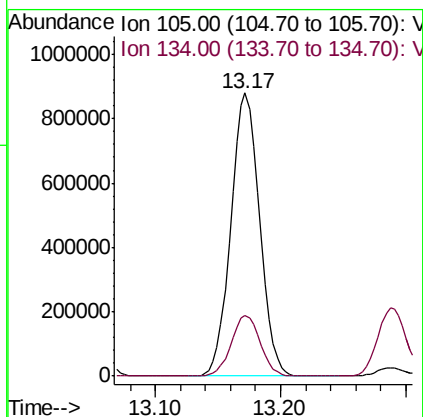
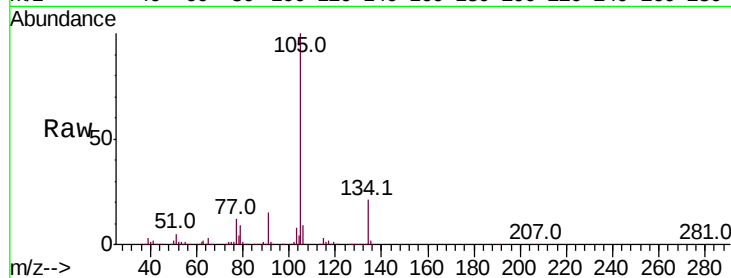
Ion Ratio Lower Upper

105 100

134 21.6 10.7 32.1

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#86

p-Isopropyltoluene

Concen: 19.708 ug/l

RT: 13.29 min Scan# 3581

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

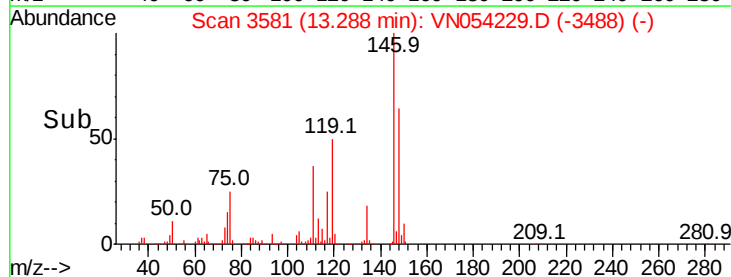
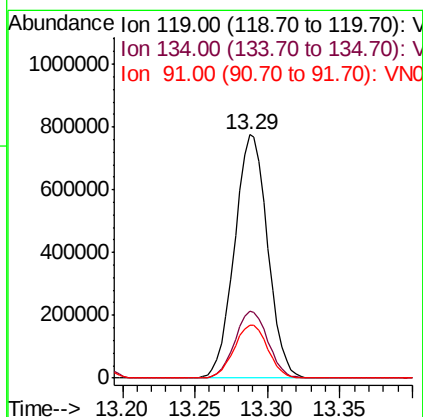
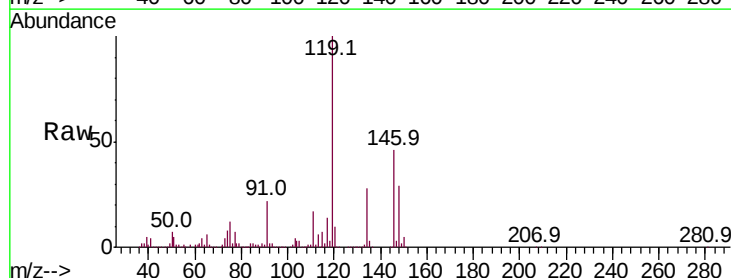
Tgt Ion:119 Resp: 1223774

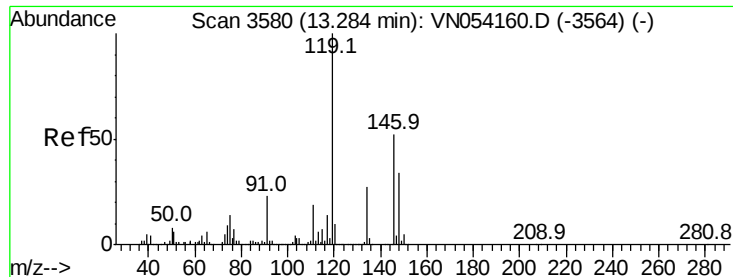
Ion Ratio Lower Upper

119 100

134 27.6 13.6 40.8

91 22.1 11.1 33.3





#87

1,3-Dichlorobenzene

Concen: 20.422 ug/l

RT: 13.28 min Scan# 3579

Delta R.T. -0.00 min

Lab File: VN054229.D

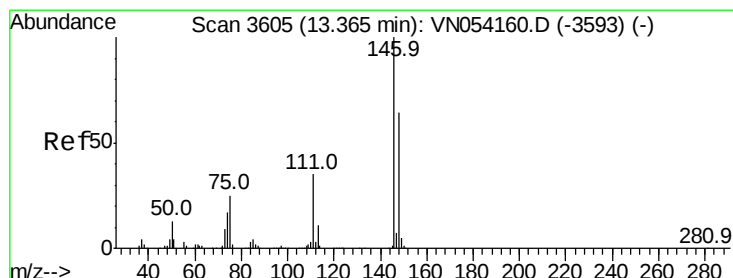
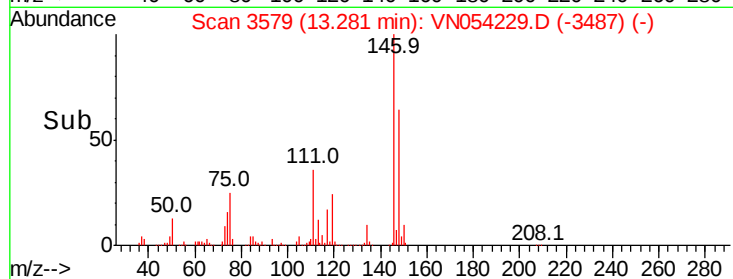
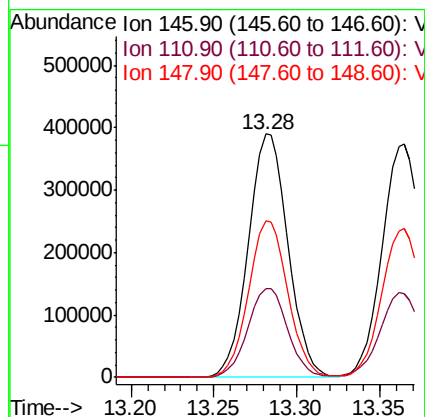
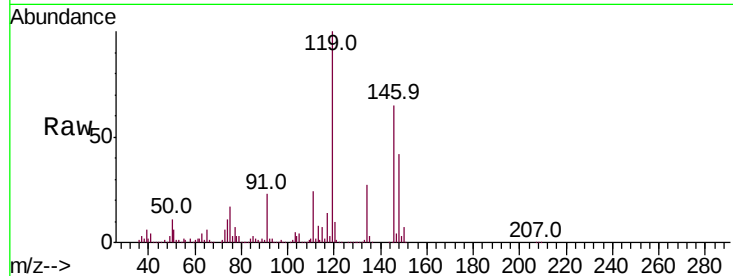
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampleId :
VN0313WBS02

Tot Ion	Ratio	Lower	Upper
146	100		
111	36.8	18.8	56.3
148	63.9	32.2	96.6

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#88

1,4-Dichlorobenzene

Concen: 20.177 ug/l

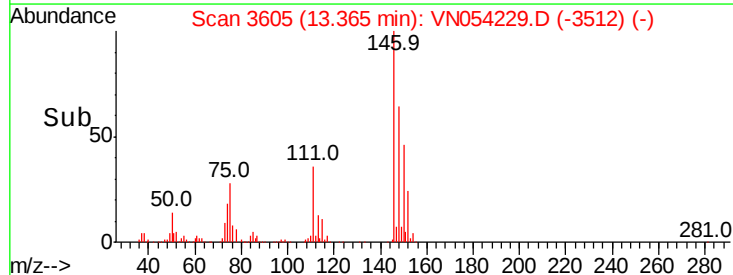
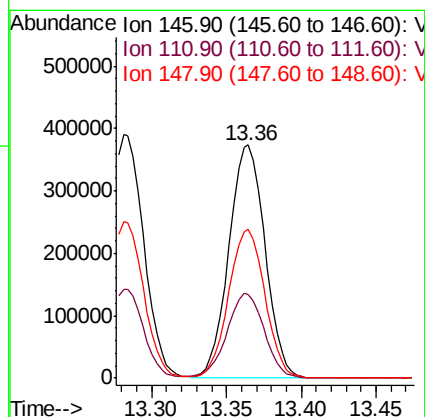
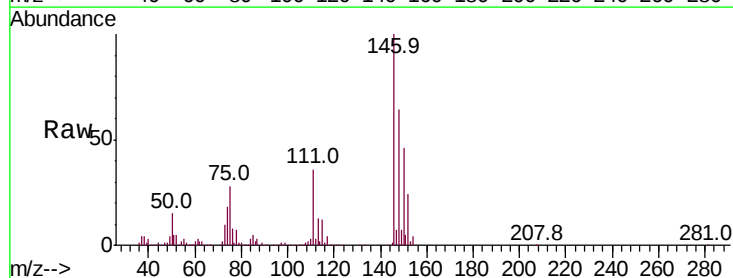
RT: 13.36 min Scan# 3605

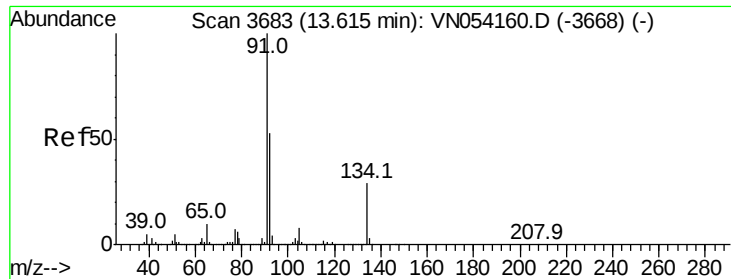
Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Lower	Upper
146	100		
111	37.4	18.1	54.1
148	64.2	32.0	96.0





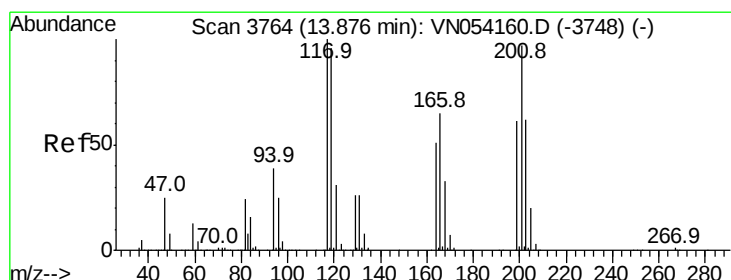
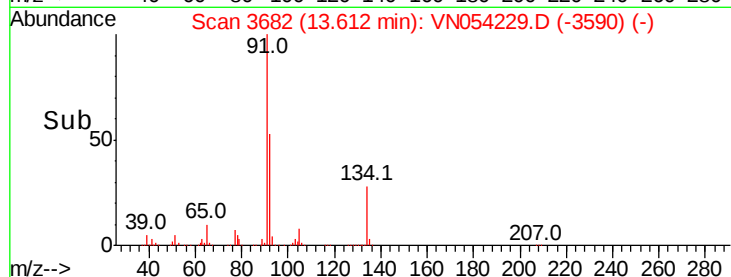
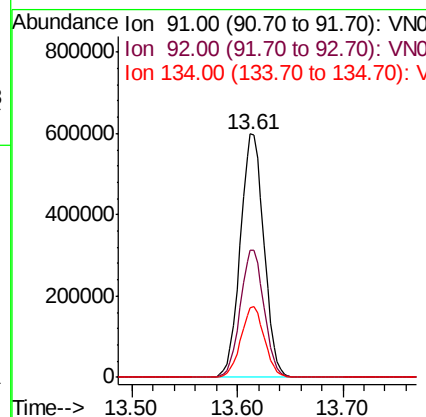
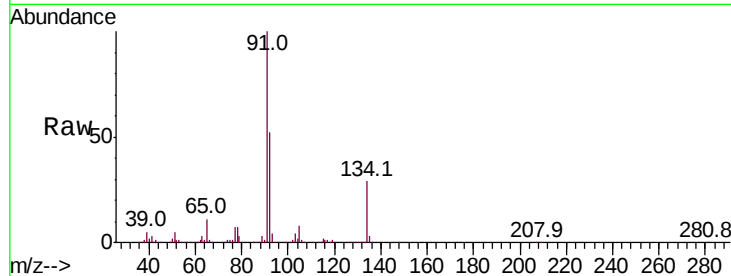
#89
n-Butylbenzene
Concen: 19.624 ug/l
RT: 13.61 min Scan# 3682
Delta R.T. -0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampleId :
VN0313WBS02

Tot Ion	Ratio	Lower	Upper
91	100		
92	52.5	26.2	78.6
134	28.7	14.3	42.9

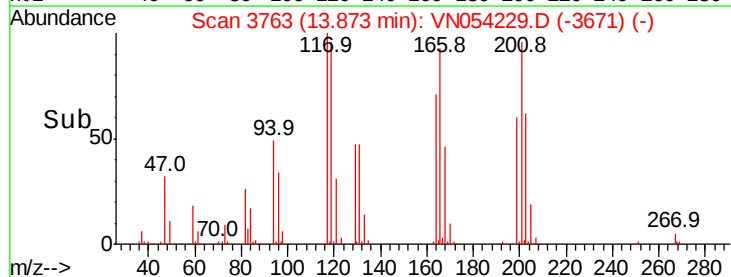
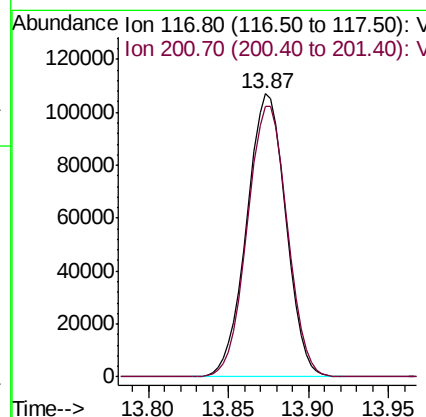
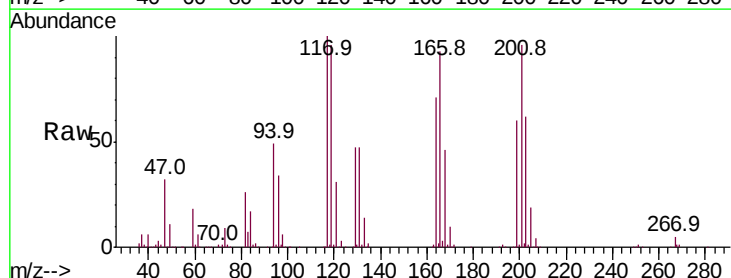
Manual Integrations
APPROVED

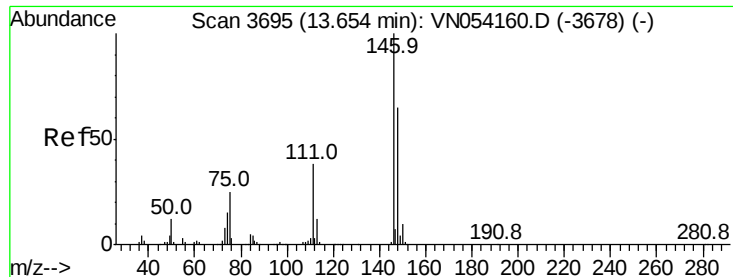
MMDadoda
3/14/2019 10:28:17 AM



#90
Hexachloroethane
Concen: 17.374 ug/l
RT: 13.87 min Scan# 3763
Delta R.T. -0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Lower	Upper
117	100		
201	97.6	48.1	144.4





#91

1,2-Dichlorobenzene

Concen: 20.764 ug/l

RT: 13.65 min Scan# 3695

Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Instrument :

MSVOA_N

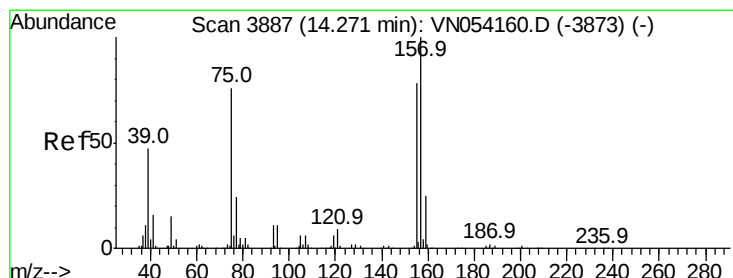
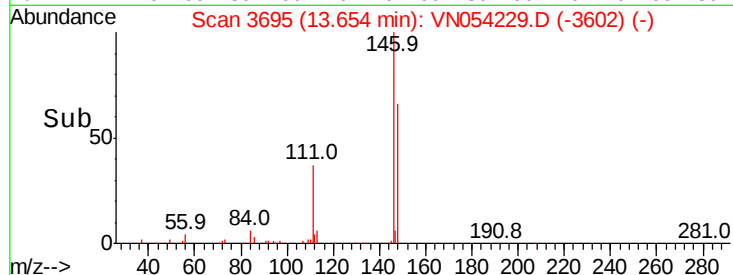
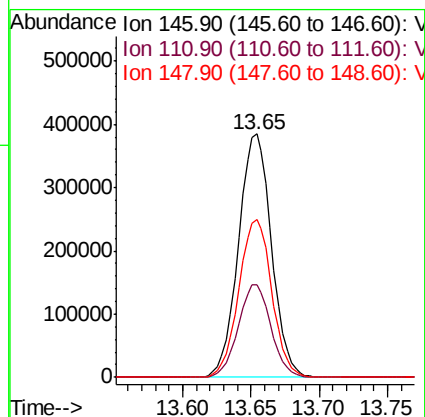
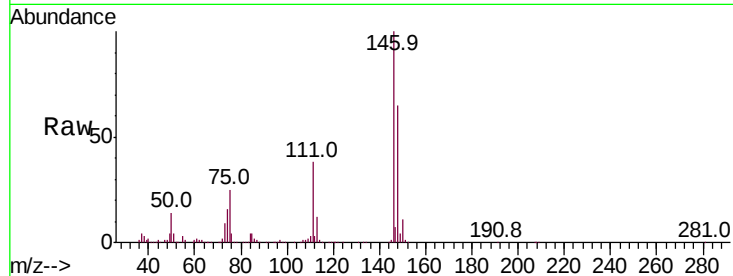
ClientSampleId :

VN0313WBS02

Tot Ion:	146	Resp:	645188
Ion Ratio	Lower	Upper	
146	100		
111	37.8	19.1	57.3
148	65.0	32.4	97.0

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#92

1,2-Dibromo-3-Chloropropane

Concen: 18.631 ug/l

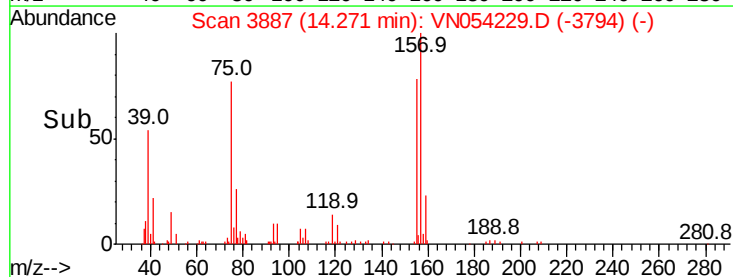
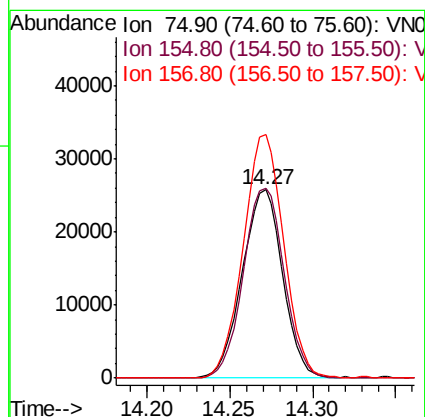
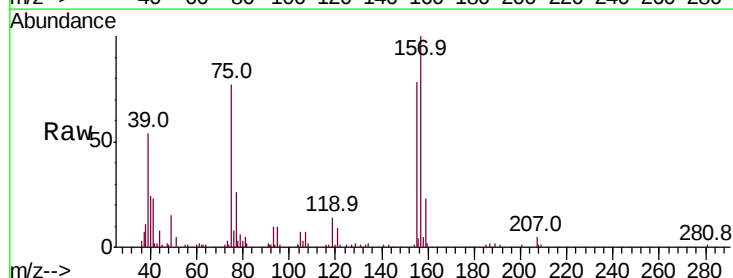
RT: 14.27 min Scan# 3887

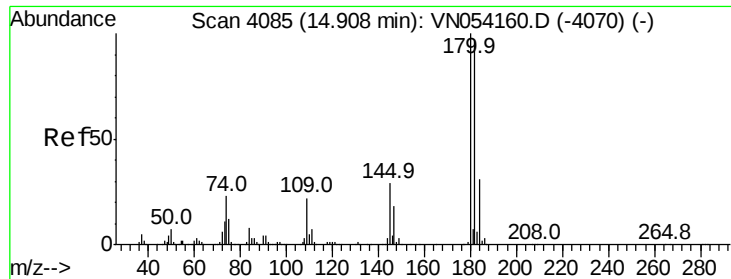
Delta R.T. 0.00 min

Lab File: VN054229.D

Acq: 13 Mar 2019 23:34

Tgt Ion:	75	Resp:	43786
Ion Ratio	Lower	Upper	
75	100		
155	102.1	50.1	150.3
157	129.5	63.1	189.3





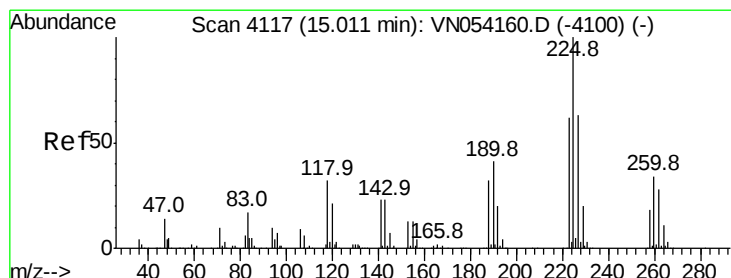
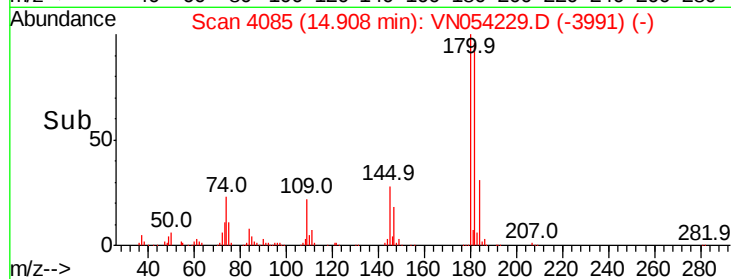
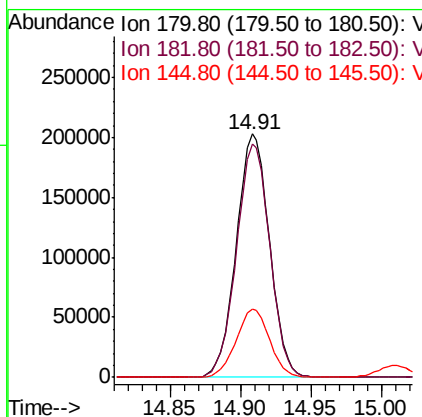
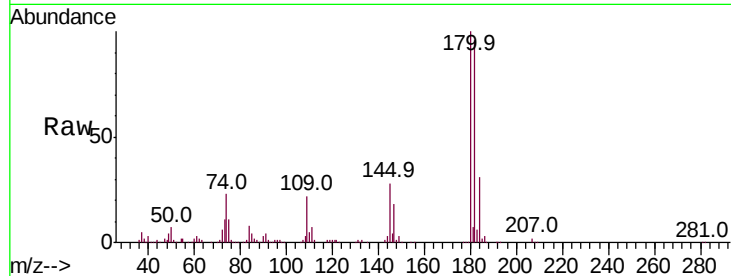
#93
 1,2,4-Trichlorobenzene
 Concen: 19.442 ug/l
 RT: 14.91 min Scan# 4085
 Delta R.T. 0.00 min
 Lab File: VN054229.D
 Acq: 13 Mar 2019 23:34

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0313WBS02

Tot Ion	Ratio	Resp	Lower	Upper
180	100			
182	96.3	48.0	144.2	
145	28.2	14.2	42.8	

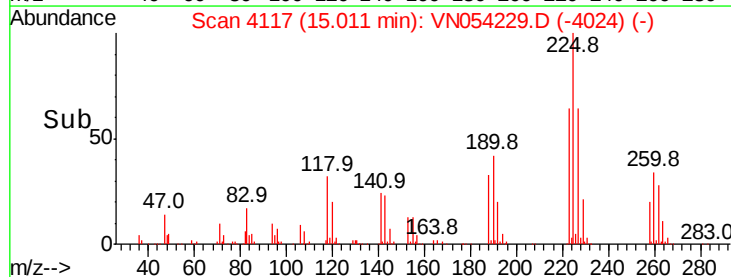
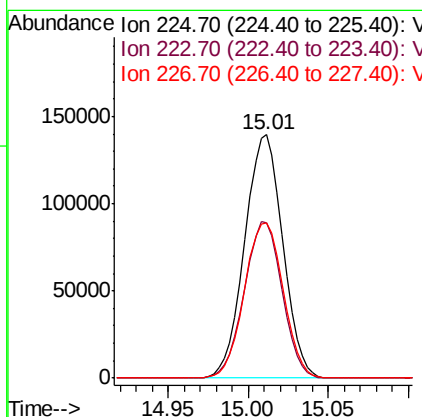
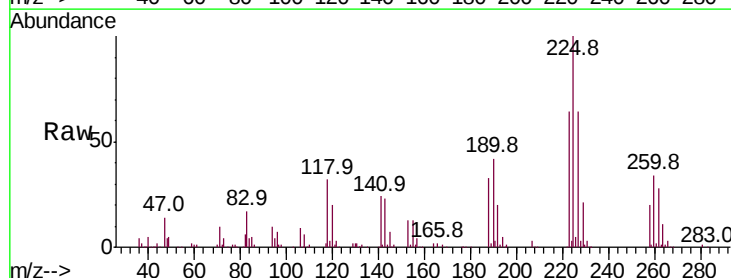
Manual Integrations
 APPROVED

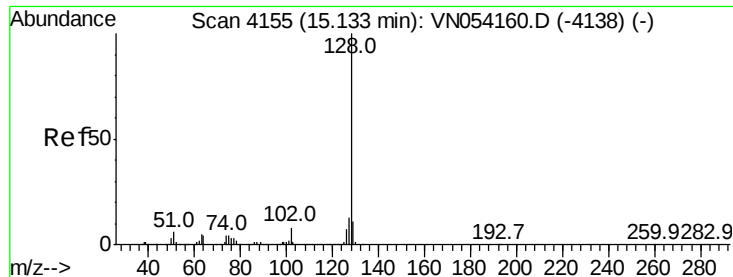
MMDadoda
 3/14/2019 10:28:17 AM



#94
 Hexachlorobutadiene
 Concen: 19.197 ug/l
 RT: 15.01 min Scan# 4117
 Delta R.T. 0.00 min
 Lab File: VN054229.D
 Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Resp	Lower	Upper
225	100			
223	63.7	31.1	93.5	
227	65.1	31.9	95.9	





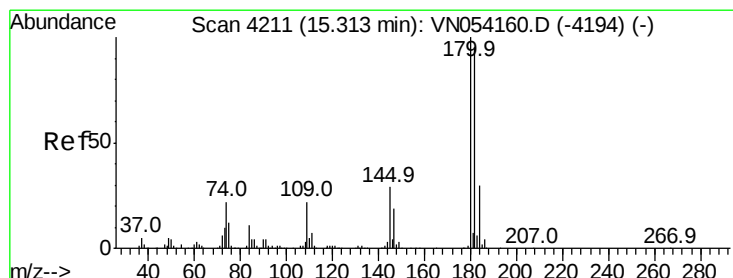
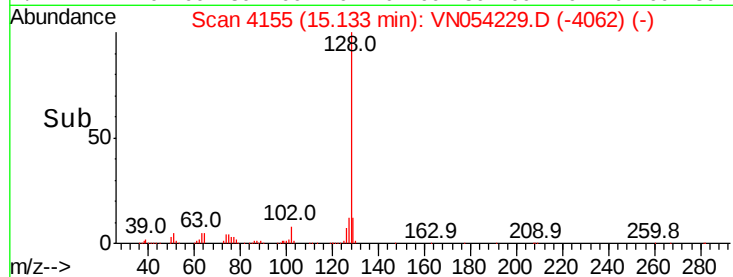
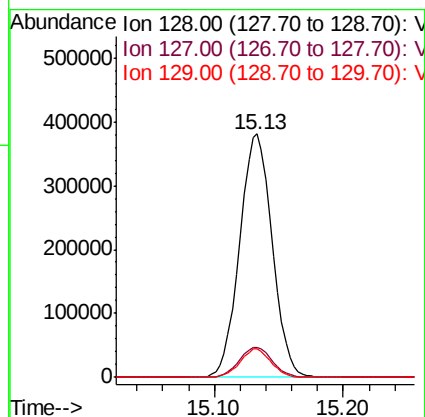
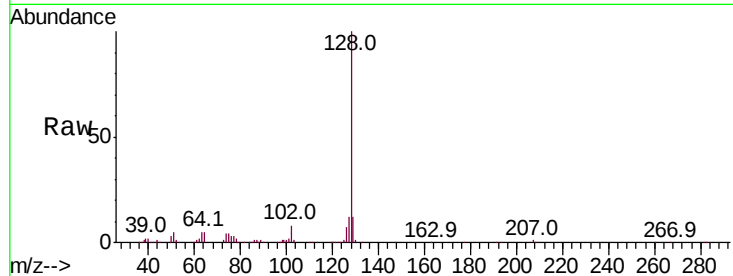
#95
Naphthalene
Concen: 19.395 ug/l
RT: 15.13 min Scan# 4155
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Instrument :
MSVOA_N
ClientSampleId :
VN0313WBS02

Tot Ion	Ratio	Lower	Upper
128	100		
127	12.6	10.1	15.1
129	11.1	8.7	13.1

Manual Integrations
APPROVED

MMDadoda
3/14/2019 10:28:17 AM



#96
1,2,3-Trichlorobenzene
Concen: 20.943 ug/l
RT: 15.31 min Scan# 4211
Delta R.T. 0.00 min
Lab File: VN054229.D
Acq: 13 Mar 2019 23:34

Tgt Ion	Ratio	Lower	Upper
180	100		
182	96.0	47.5	142.6
145	29.1	14.8	44.3

