

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL050318\
 Data File : VL031962.D
 Acq On : 3 May 2018 12:44
 Operator : SY/AP
 Sample : VSTDIC001
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Manual Integrations
 APPROVED

MMDadoda
 5/4/2018 5:00:57 PM

Quant Time: May 03 14:09:04 2018
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL050318AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu May 03 2018
 QLast Update : Thu May 03 12:00:23 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.88	49	1277301	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.42	114	2641146	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.39	117	2594115	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.72	95	1994080	9.56	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.16	85	144590	0.55	ppbv	97
3) Chlorodifluoromethane	3.10	51	132199	0.89	ppbv	95
4) Chloromethane	3.26	50	68480	0.90	ppbv	89
5) Vinyl Chloride	3.38	62	70019	0.82	ppbv	91
6) Bromomethane	3.61	94	50333	0.90	ppbv	92
7) Chloroethane	3.70	64	29437m	0.86	ppbv	
8) Dichlorotetrafluoroethane	3.31	85	175215	0.81	ppbv	99
9) Propene	3.12	41	44960	0.88	ppbv	99
10) Heptane	8.38	43	158173	0.95	ppbv	98
11) Trichlorofluoromethane	4.11	101	246954	0.96	ppbv	97
12) 1,1,2-Trichlorotrifluoroet	4.66	101	154699	0.92	ppbv	91
13) Ethanol	3.75	45	18939	1.09	ppbv	89
14) Bromoethene	3.89	108	58783m	0.93	ppbv	
15) Acetone	4.01	43	234493	1.19	ppbv	100
16) 1,3-Butadiene	3.45	39	57168	0.79	ppbv #	77
17) tert-Butyl alcohol	4.48	59	88154m	1.09	ppbv	
18) 1,1-Dichloroethene	4.46	96	70588	0.98	ppbv	83
19) Isopropyl Alcohol	4.13	45	121598	1.11	ppbv #	96
20) Methylene Chloride	4.52	84	68735	0.96	ppbv	90
21) Allyl Chloride	4.59	41	104736	0.93	ppbv	97
22) trans-1,2-Dichloroethene	5.07	96	71063	0.95	ppbv	94
23) Vinyl Acetate	5.27	43	229997	1.15	ppbv	97
24) 1,1-Dichloroethane	5.21	63	211690	1.07	ppbv	97
25) Ethyl Acetate	5.89	43	333180	1.09	ppbv	99
26) Hexane	5.90	57	155294	1.09	ppbv	97
27) Carbon Disulfide	4.73	76	170882	0.92	ppbv #	89
28) Methyl tert-Butyl Ether	5.23	73	194300	1.10	ppbv	99
29) Chloroform	5.97	83	249446	1.03	ppbv	98
30) Cyclohexane	7.38	84	95651	0.94	ppbv #	66
31) cis-1,2-Dichloroethene	5.76	61	138856	1.07	ppbv	96
32) 1,1,1-Trichloroethane	6.75	97	212756	0.90	ppbv	99
34) 2-Butanone	5.45	43	245661	1.34	ppbv	99
35) Carbon Tetrachloride	7.27	117	208604	0.91	ppbv	94
36) Benzene	7.13	78	252146	1.06	ppbv	97
37) 1,2-Dichloroethane	6.54	62	201987	1.14	ppbv #	94
38) Trichloroethene	8.09	130	103103	1.07	ppbv	91
39) 1,2-Dichloropropane	7.87	63	91466	1.04	ppbv	95
40) 1,4-Dioxane	8.11	88	42012m	1.17	ppbv	
41) Tetrahydrofuran	6.29	42	87750	1.03	ppbv	99
42) Bromodichloromethane	8.05	83	214271	1.01	ppbv	99
43) Methyl Methacrylate	8.27	69	86430	1.03	ppbv	99

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL050318\
 Data File : VL031962.D
 Acq On : 3 May 2018 12:44
 Operator : SY/AP
 Sample : VSTDIC001
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

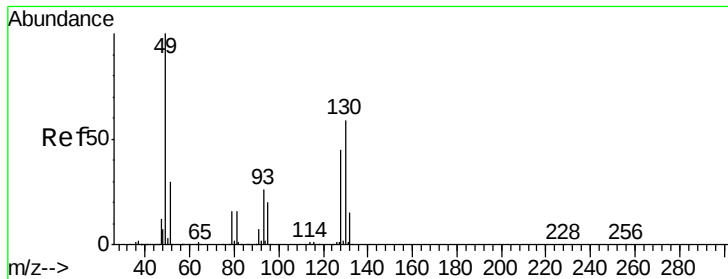
Manual Integrations
 APPROVED

MMDadoda
 5/4/2018 5:00:57 PM

Quant Time: May 03 14:09:04 2018
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL050318AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu May 03 2018
 QLast Update : Thu May 03 12:00:23 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	8.13	57	441299	1.08	ppbv	99
45) t-1,3-Dichloropropene	9.56	75	108750m	1.00	ppbv	
46) cis-1,3-Dichloropropene	8.97	75	138650	1.00	ppbv #	83
47) 1,1,2-Trichloroethane	9.76	97	111860	1.07	ppbv	95
48) Dibromochloromethane	10.59	129	173173	1.02	ppbv	99
49) Bromoform	13.35	173	129819	0.99	ppbv	99
50) 4-Methyl-2-Pentanone	9.02	43	218839	1.04	ppbv	98
51) 2-Hexanone	10.42	43	200988	1.10	ppbv #	96
52) Tetrachloroethene	11.52	164	98463	1.06	ppbv	88
53) Toluene	10.09	91	281222	1.06	ppbv	99
54) 1,2-Dibromoethane	10.91	107	159884	1.05	ppbv	98
56) 1,1,1,2-Tetrachloroethane	12.43	131	130922m	1.07	ppbv	
57) Chlorobenzene	12.45	112	247361	1.12	ppbv	92
58) Ethyl Benzene	13.01	91	392716	1.09	ppbv	96
59) m/p-Xylene	13.29	91	688091m	2.20	ppbv	
60) o-Xylene	13.99	91	346011m	1.11	ppbv	
61) Styrene	13.84	104	57413m	0.96	ppbv	
62) Isopropylbenzene	14.97	105	435476	1.08	ppbv	99
63) 1,1,2,2-Tetrachloroethane	13.98	83	238979	0.99	ppbv	100
64) n-propylbenzene	15.87	120	107434	1.10	ppbv	97
65) tert-Butylbenzene	17.05	119	394017	1.14	ppbv	99
66) Benzyl Chloride	17.30	91	29188m	0.94	ppbv	
67) sec-Butylbenzene	17.60	105	546803	1.10	ppbv	99
69) p-Isopropyltoluene	17.96	119	430257	1.12	ppbv	99
70) n-Butylbenzene	18.86	91	450524	1.12	ppbv	98
71) 2-Chlorotoluene	15.76	91	316875	1.09	ppbv	100
72) 4-Ethyltoluene	16.14	105	339790	1.06	ppbv	98
73) 1,3,5-Trimethylbenzene	16.30	105	315231	1.08	ppbv	99
74) 1,2,4-Trimethylbenzene	17.07	105	358185	1.10	ppbv	94
75) 1,3-Dichlorobenzene	17.31	146	219000	1.09	ppbv	99
76) 1,4-Dichlorobenzene	17.46	146	209570	1.08	ppbv	95
77) 1,2-Dichlorobenzene	18.13	146	221619	1.12	ppbv	98
78) Hexachloro-1,3-Butadiene	23.68	225	78820m	1.04	ppbv	
79) Naphthalene	22.59	128	219925	1.20	ppbv	99
80) Naphthalene, 2-methyl-	25.24	142	32358	0.90	ppbv	96
81) 1,2,4-Trichlorobenzene	22.31	180	129004m	1.27	ppbv	

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



#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.88 min Scan# 1491

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 49 Resp: 1277301

Ion Ratio Lower Upper

49 100

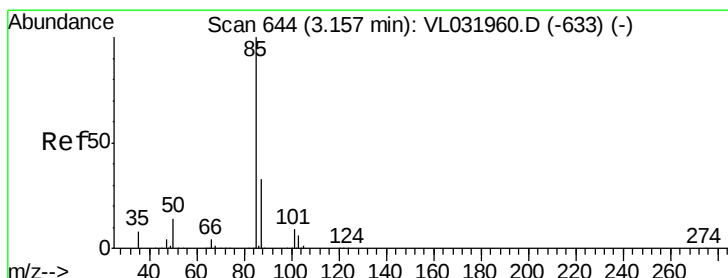
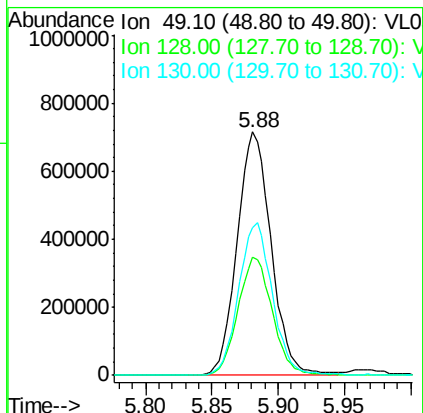
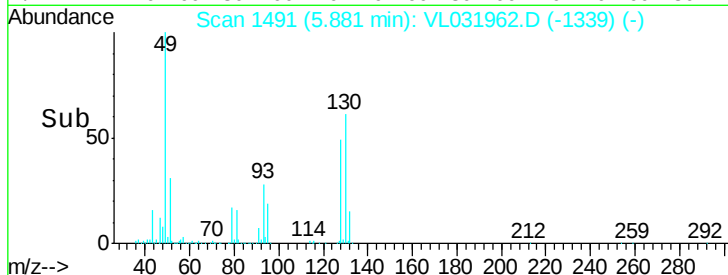
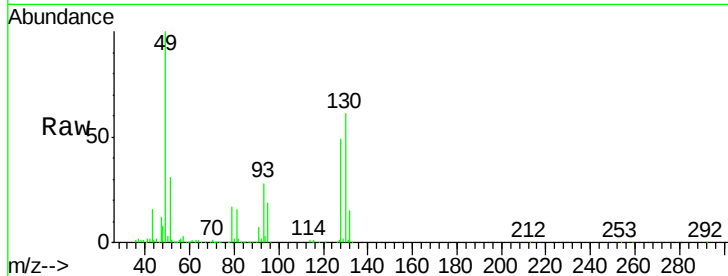
128 49.2 23.9 71.7

130 62.7 30.9 92.7

Manual Integrations
APPROVED

MMDadoda

5/4/2018 5:00:57 PM



#2

Dichlorodifluoromethane

Concen: 0.55 ppbv

RT: 3.16 min Scan# 644

Delta R.T. -0.01 min

Lab File: VL031962.D

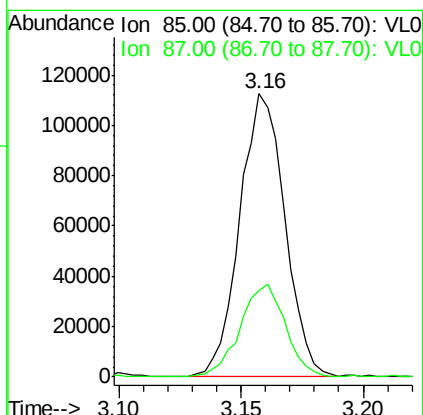
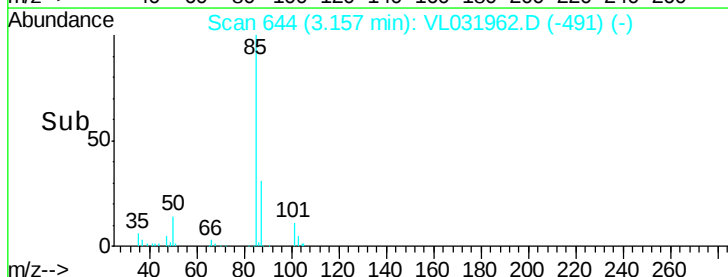
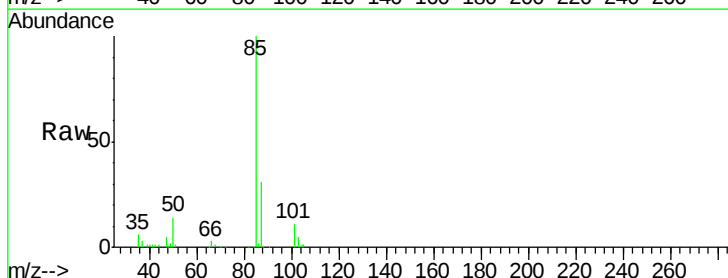
Acq: 3 May 2018 12:44

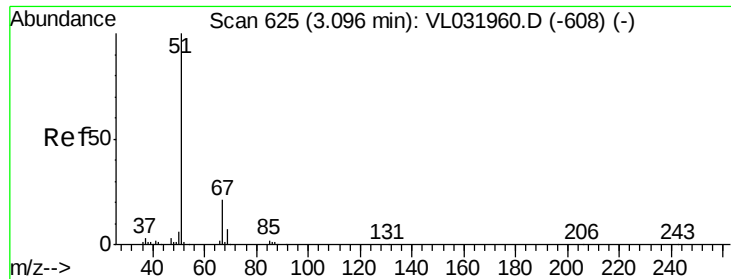
Tgt Ion: 85 Resp: 144590

Ion Ratio Lower Upper

85 100

87 30.7 25.9 38.9





#3

Chlorodifluoromethane

Concen: 0.89 ppbv

RT: 3.10 min Scan# 625

Delta R.T. -0.00 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 51 Resp: 132199

Ion Ratio Lower Upper

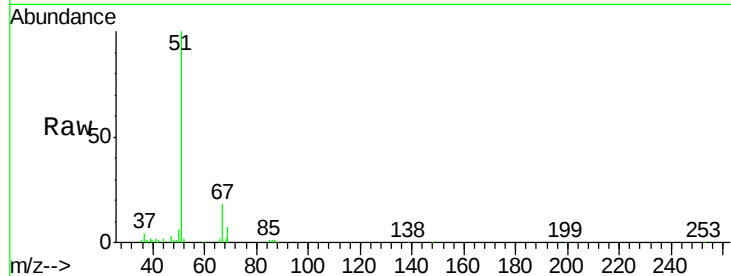
51 100

67 19.8 17.5 26.3

Manual Integrations
APPROVED

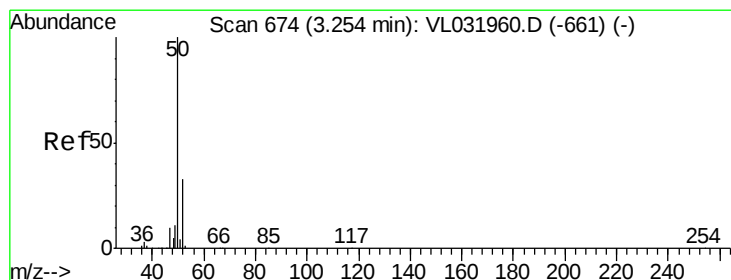
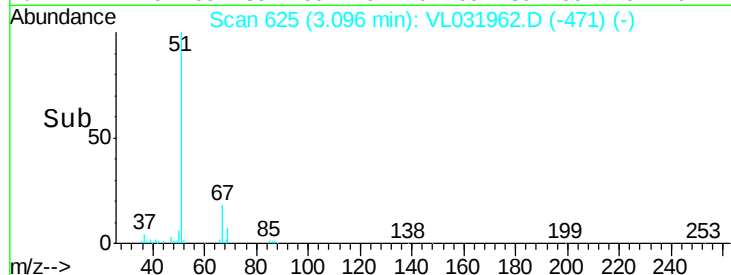
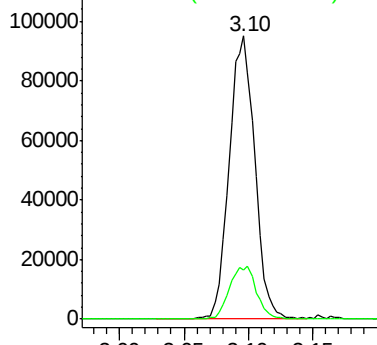
MMDadoda

5/4/2018 5:00:57 PM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.90 ppbv

RT: 3.26 min Scan# 675

Delta R.T. -0.00 min

Lab File: VL031962.D

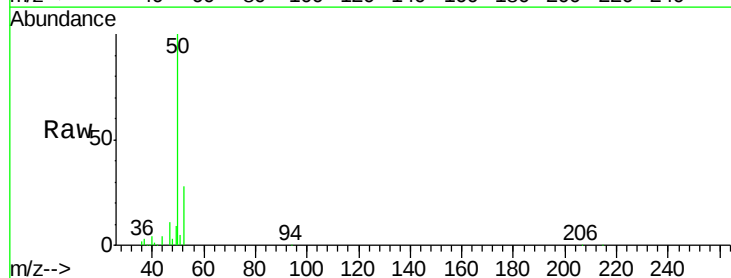
Acq: 3 May 2018 12:44

Tgt Ion: 50 Resp: 68480

Ion Ratio Lower Upper

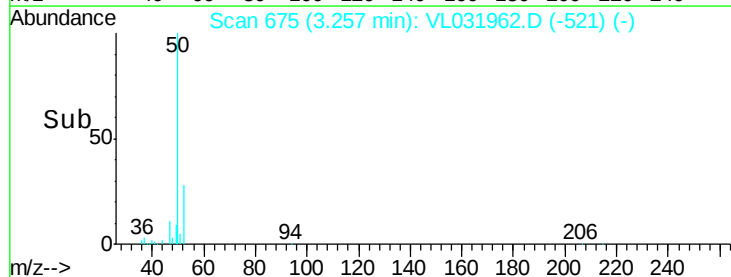
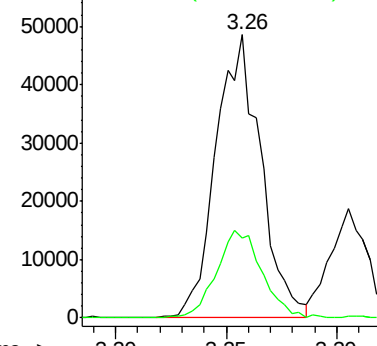
50 100

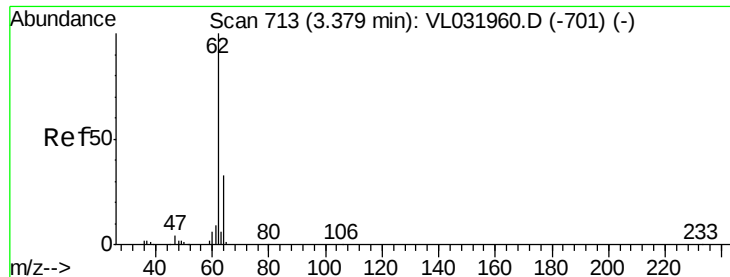
52 28.6 28.1 42.1



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.82 ppbv

RT: 3.38 min Scan# 713

Delta R.T. -0.00 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 62 Resp: 70019

Ion Ratio Lower Upper

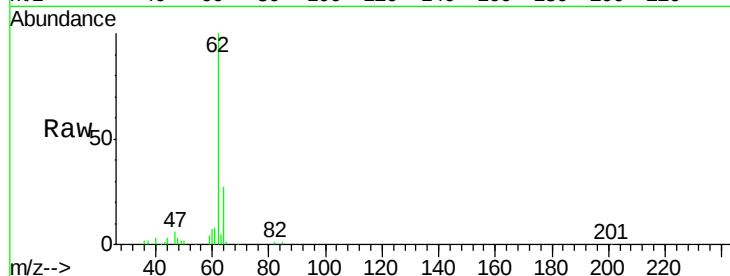
62 100

64 27.4 25.9 38.9

Manual Integrations
APPROVED

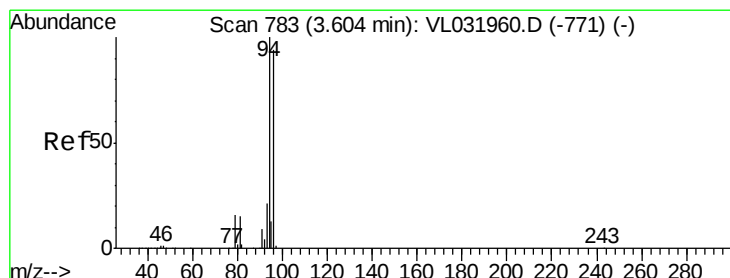
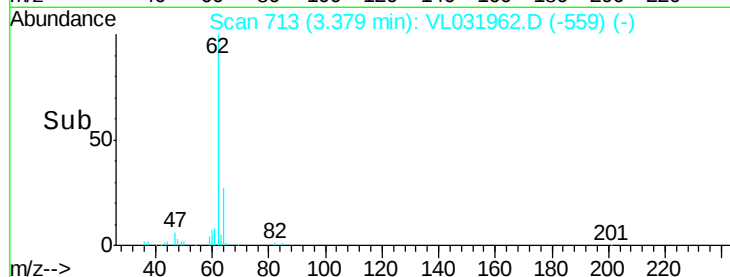
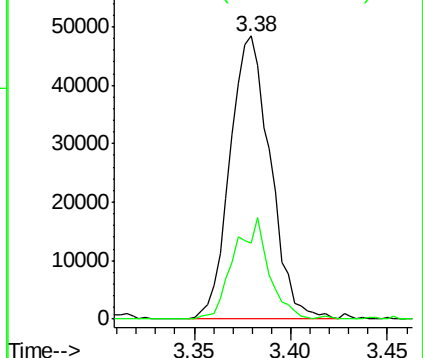
MMDadoda

5/4/2018 5:00:57 PM



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 0.90 ppbv

RT: 3.61 min Scan# 784

Delta R.T. -0.00 min

Lab File: VL031962.D

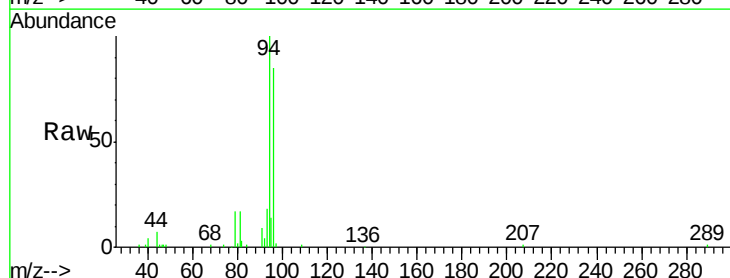
Acq: 3 May 2018 12:44

Tgt Ion: 94 Resp: 50333

Ion Ratio Lower Upper

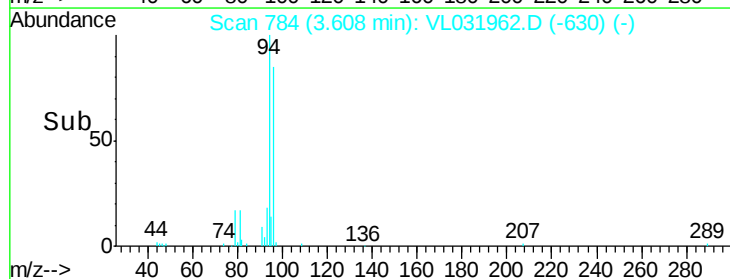
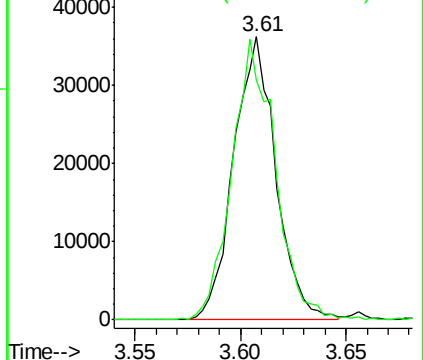
94 100

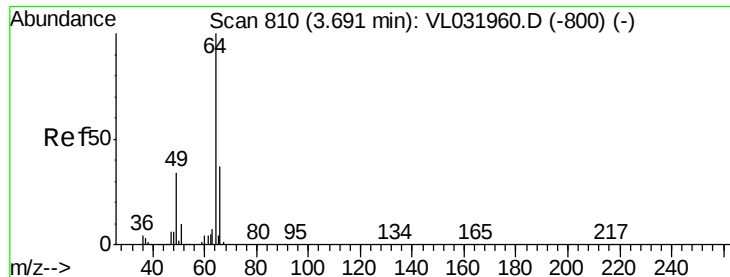
96 84.7 73.8 110.6



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

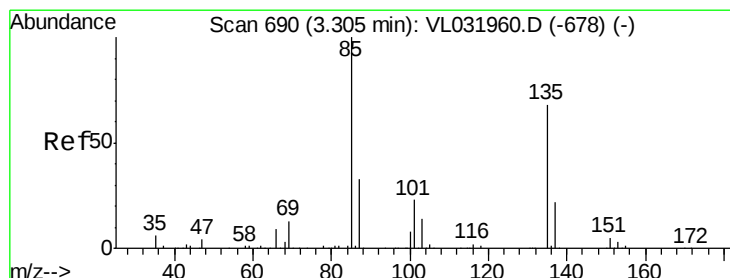
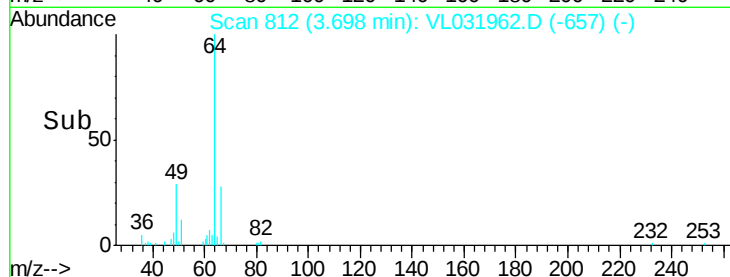
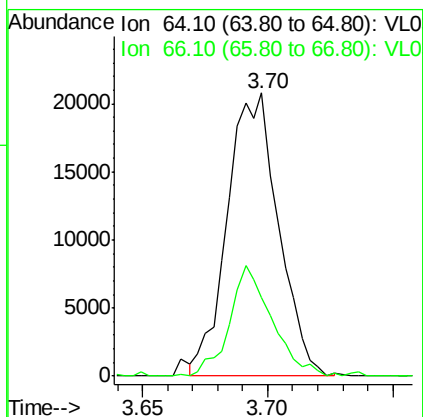
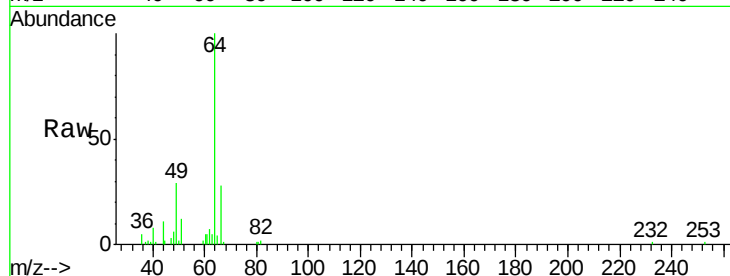
Concen: 0.86 ppbv m
RT: 3.70 min Scan# 812
Delta R.T. -0.00 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	64.10 (63.80 to 64.80): VL0	Resp	29437
Ion Ratio	Lower	Upper	
64	100		
66	27.5	23.4	35.0

Manual Integrations
APPROVED

MMDadoda
5/4/2018 5:00:57 PM

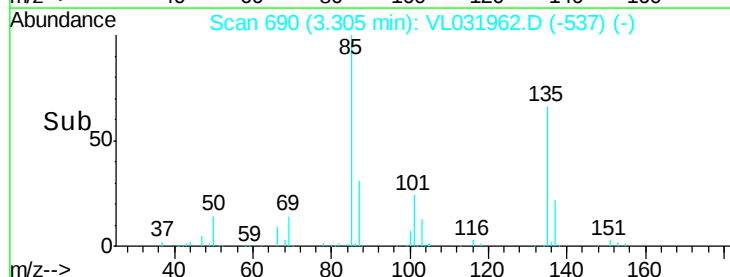
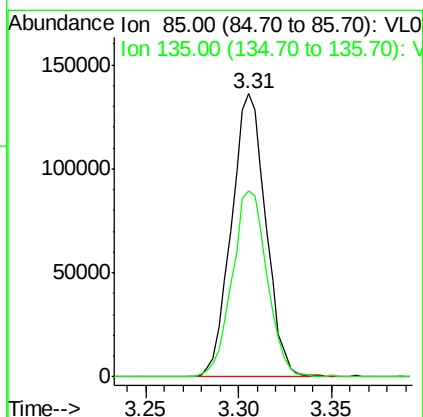
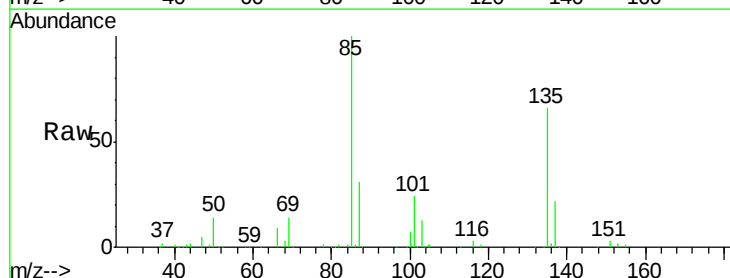


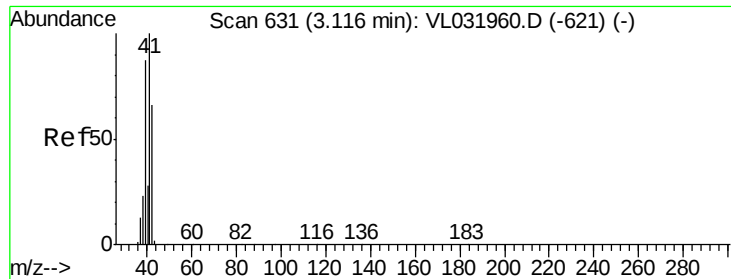
#8

Dichlorotetrafluoroethane

Concen: 0.81 ppbv
RT: 3.31 min Scan# 690
Delta R.T. -0.01 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Tgt Ion	85.00 (84.70 to 85.70): VL0	Resp	175215
Ion Ratio	Lower	Upper	
85	100		
135	66.8	52.7	79.1





#9

Propene

Concen: 0.88 ppbv

RT: 3.12 min Scan# 631

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 41 Resp: 44960

Ion Ratio Lower Upper

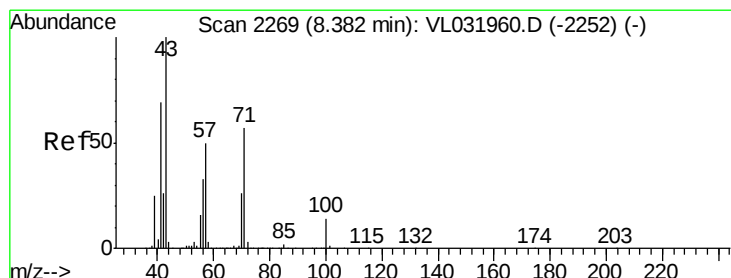
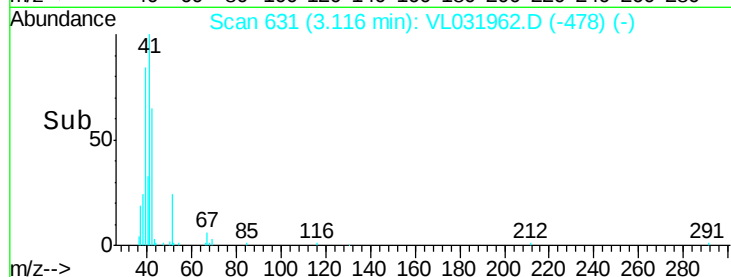
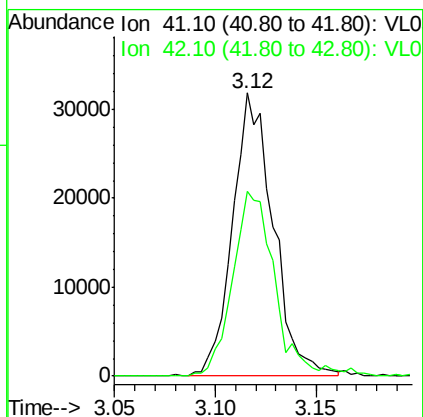
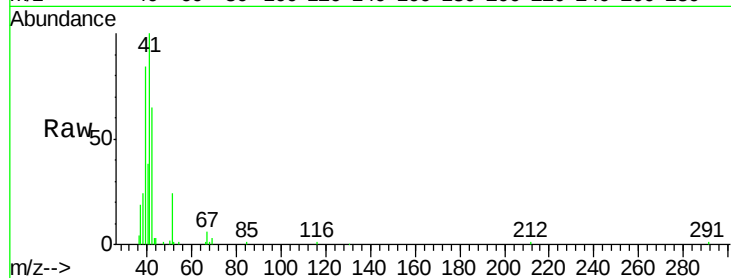
41 100

42 67.8 55.0 82.4

Manual Integrations
APPROVED

MMDadoda

5/4/2018 5:00:57 PM



#10

Heptane

Concen: 0.95 ppbv

RT: 8.38 min Scan# 2267

Delta R.T. -0.01 min

Lab File: VL031962.D

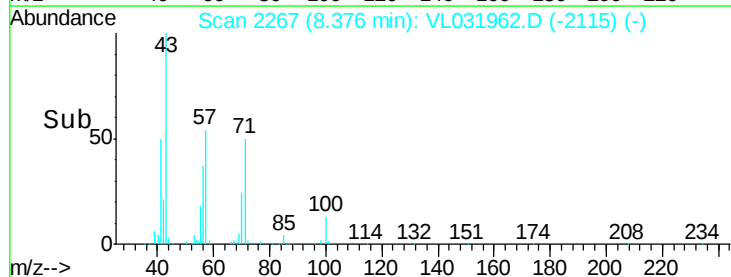
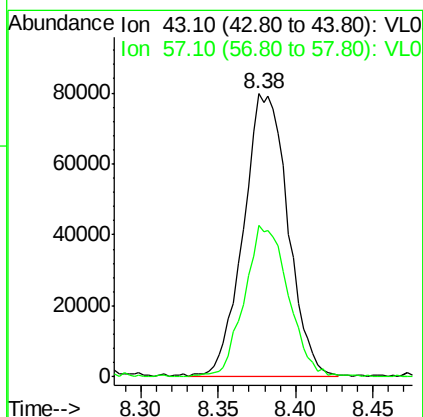
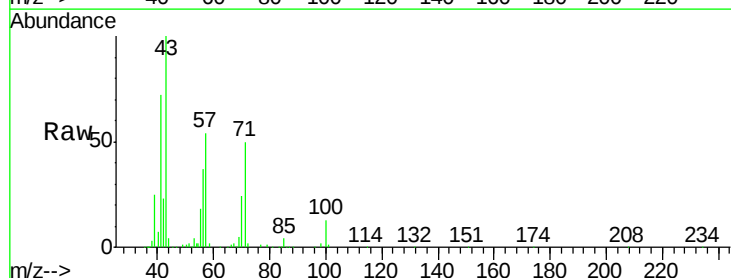
Acq: 3 May 2018 12:44

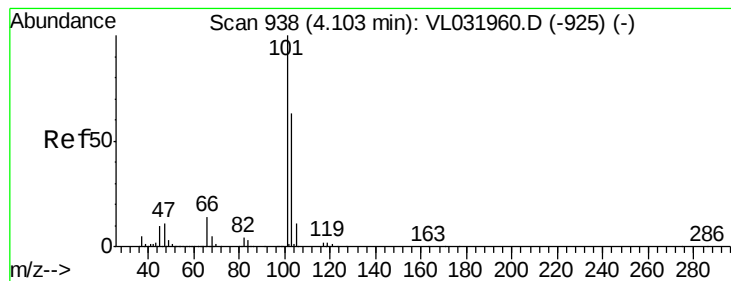
Tgt Ion: 43 Resp: 158173

Ion Ratio Lower Upper

43 100

57 53.4 41.5 62.3





#11

Trichlorofluoromethane

Concen: 0.96 ppbv

RT: 4.11 min Scan# 939

Delta R.T. -0.00 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion:101 Resp: 246954

Ion Ratio Lower Upper

101 100

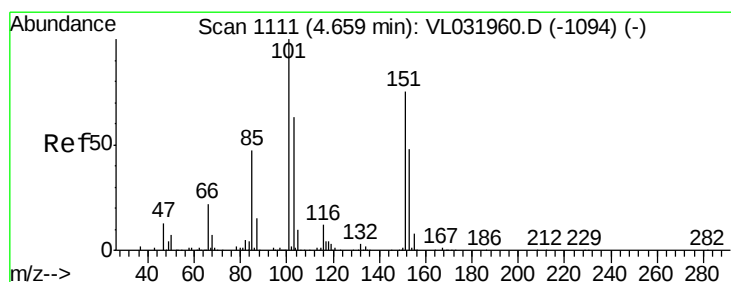
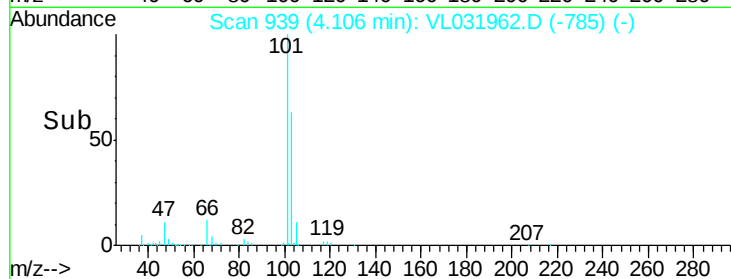
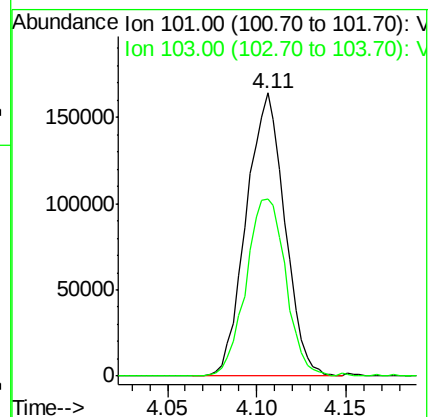
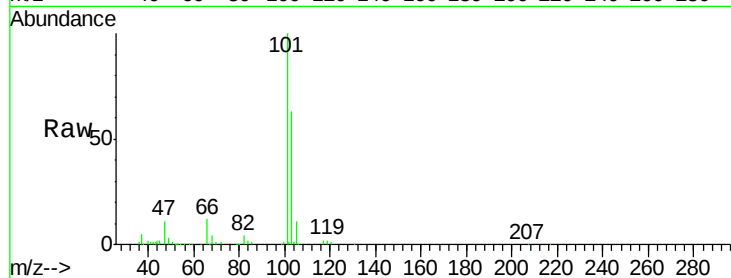
103 62.4 51.8 77.8

Manual Integrations

APPROVED

MMDadoda

5/4/2018 5:00:57 PM



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.92 ppbv

RT: 4.66 min Scan# 1112

Delta R.T. -0.00 min

Lab File: VL031962.D

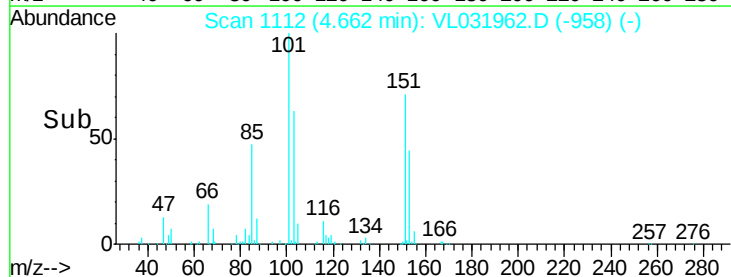
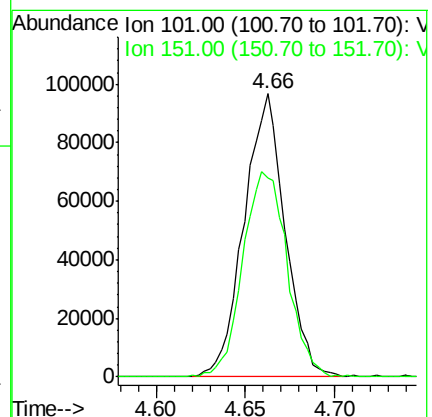
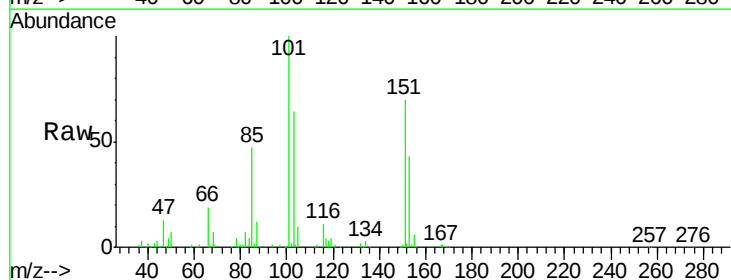
Acq: 3 May 2018 12:44

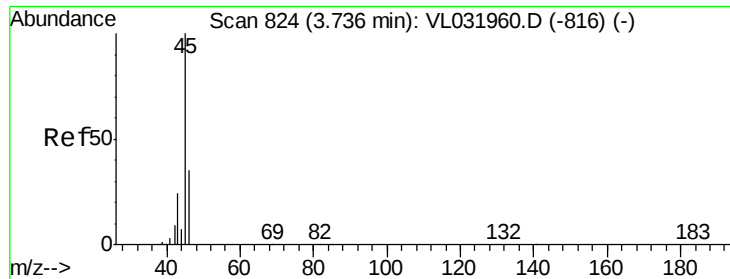
Tgt Ion:101 Resp: 154699

Ion Ratio Lower Upper

101 100

151 78.8 57.0 85.6





#13

Ethanol

Concen: 1.09 ppbv

RT: 3.75 min Scan# 827

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 45 Resp: 18939

Ion Ratio Lower Upper

45 100

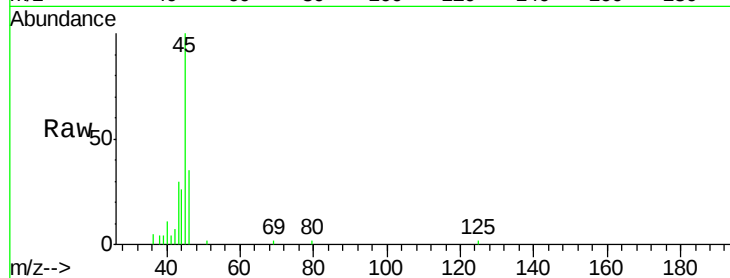
46 42.9 14.6 58.6

Manual Integrations

APPROVED

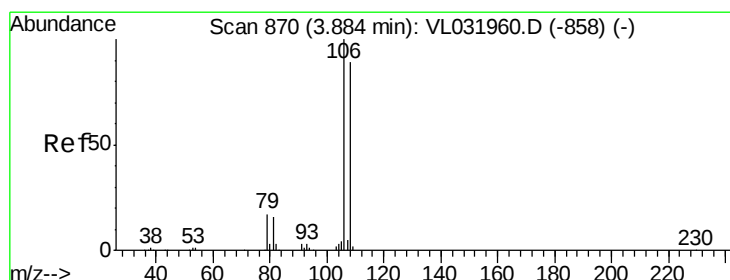
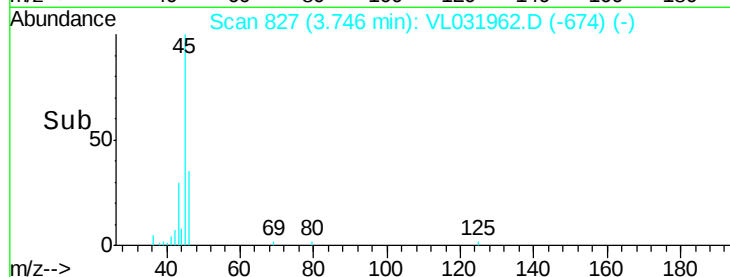
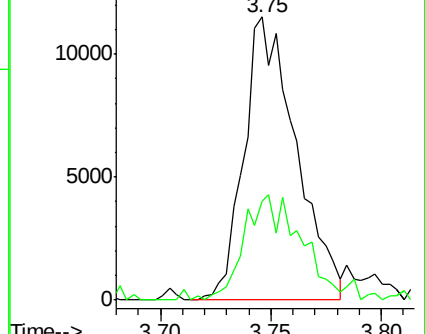
MMDadoda

5/4/2018 5:00:57 PM



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0



#14

Bromoethene

Concen: 0.93 ppbv m

RT: 3.89 min Scan# 872

Delta R.T. -0.00 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

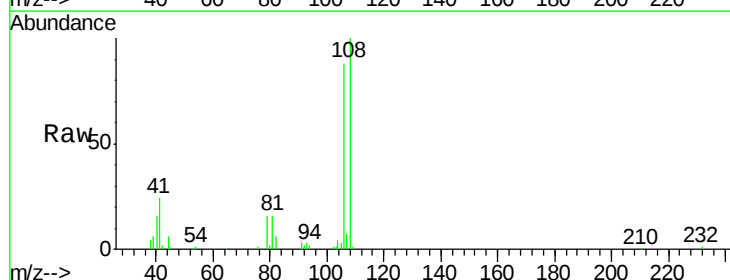
Tgt Ion: 108 Resp: 58783

Ion Ratio Lower Upper

108 100

106 107.8 86.6 130.0

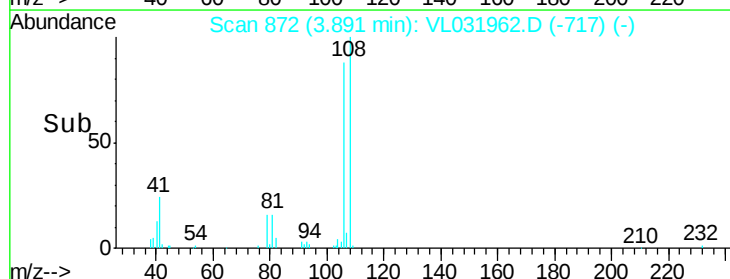
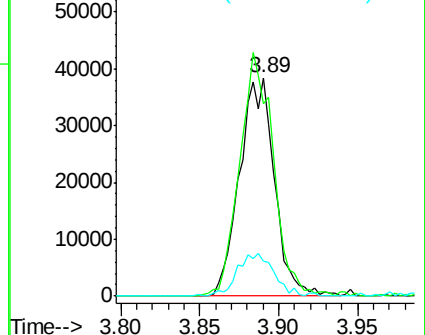
79 0.0 15.5 23.3#

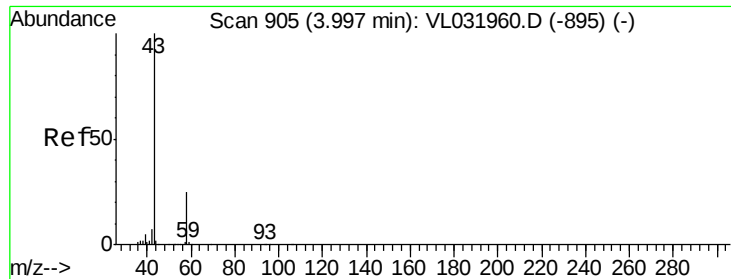


Abundance Ion 108.00 (107.70 to 108.70): V

Ion 106.00 (105.70 to 106.70): V

Ion 79.00 (78.70 to 79.70): VL0





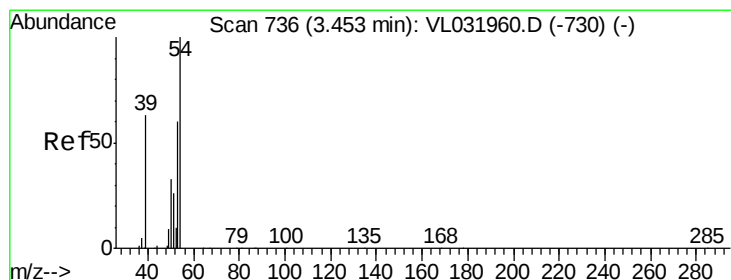
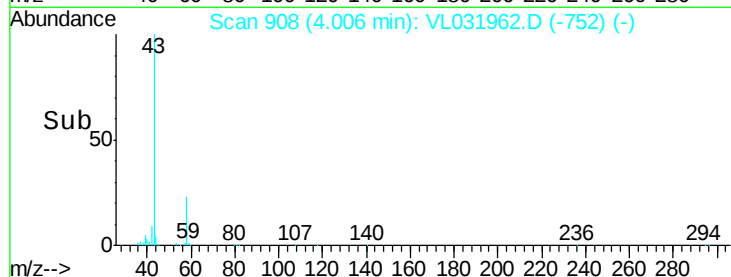
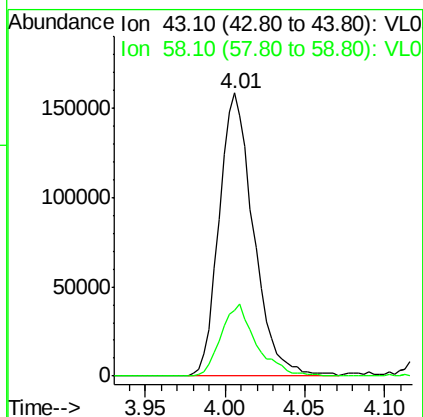
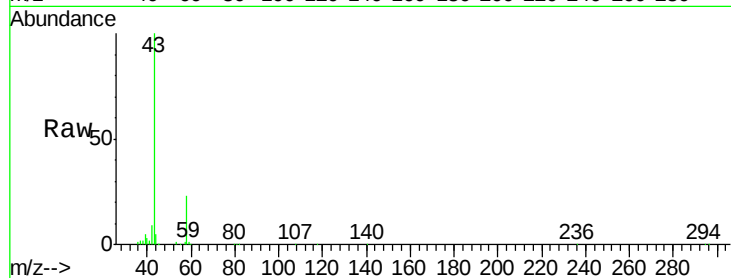
#15
Acetone
Concen: 1.19 ppbv
RT: 4.01 min Scan# 908
Delta R.T. 0.00 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	43	Resp	234493
Ion Ratio	Lower	Upper	
43	100		
58	26.0	20.9	31.3

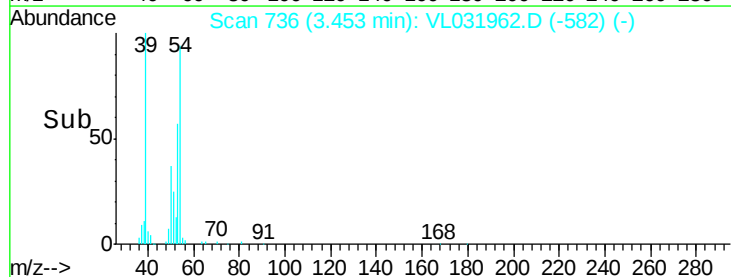
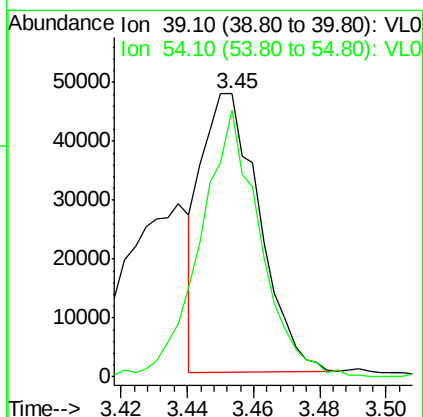
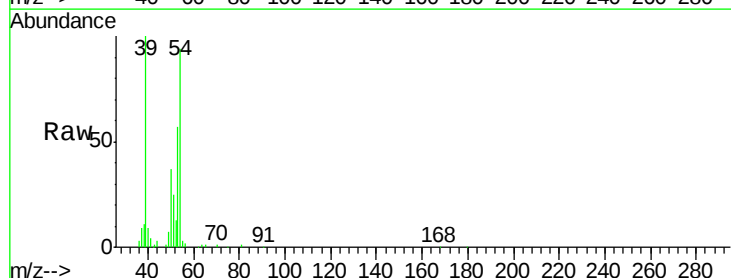
Manual Integrations
APPROVED

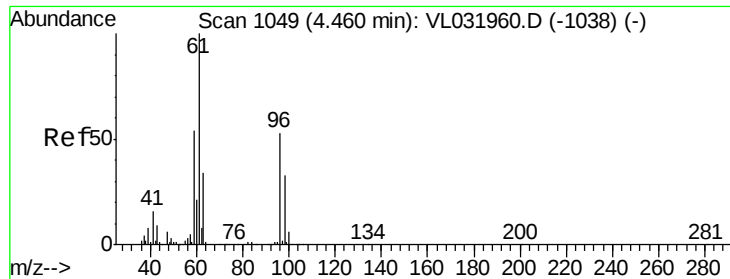
MMDadoda
5/4/2018 5:00:57 PM



#16
1,3-Butadiene
Concen: 0.79 ppbv
RT: 3.45 min Scan# 736
Delta R.T. -0.00 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Tgt Ion	39	Resp	57168
Ion Ratio	Lower	Upper	
39	100		
54	99.4	63.3	94.9#





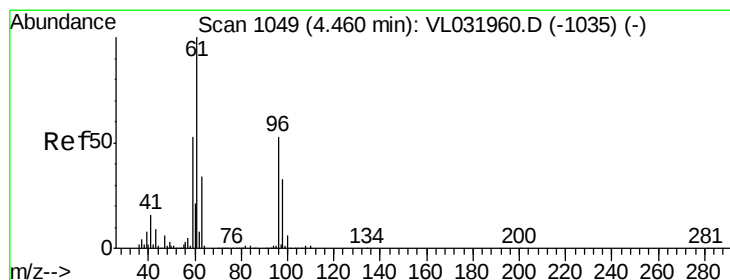
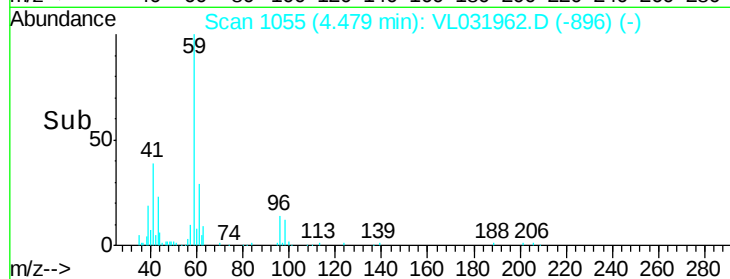
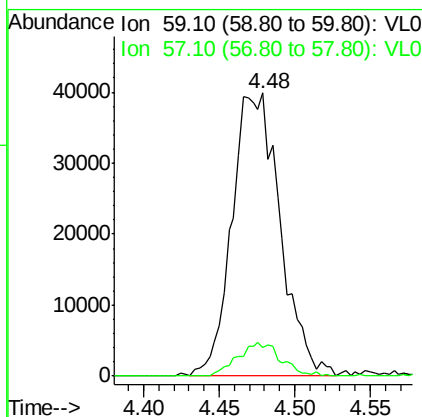
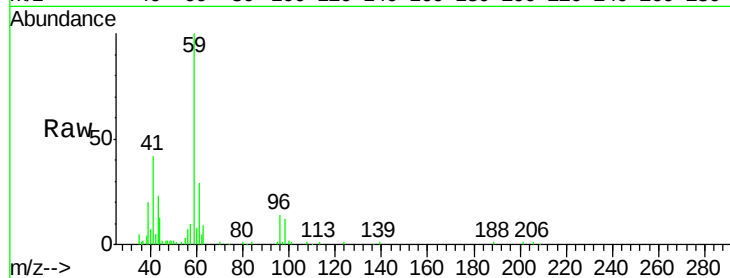
#17
tert-Butyl alcohol
Concen: 1.09 ppbv m
RT: 4.48 min Scan# 1055
Delta R.T. 0.01 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	59	Resp	88154
Ion Ratio	Lower	Upper	
59	100		
57	0.0	8.5	12.7#

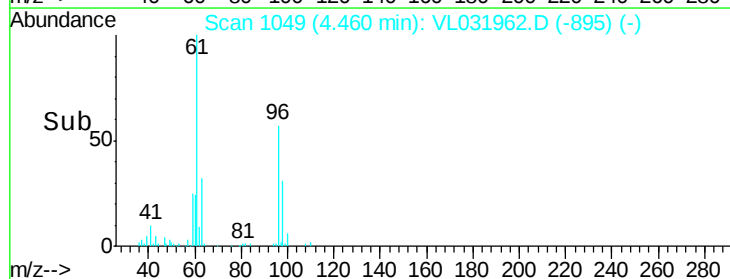
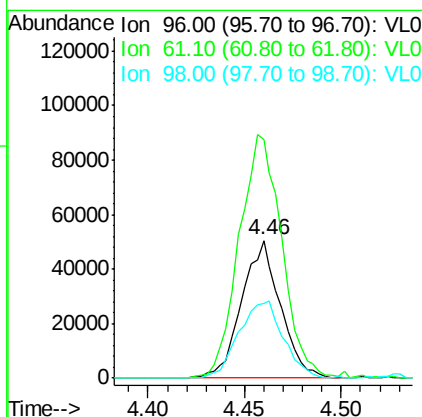
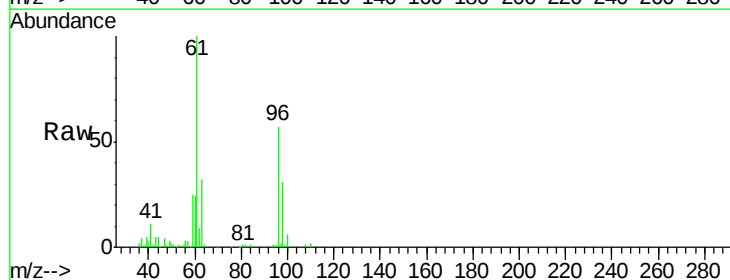
Manual Integrations
APPROVED

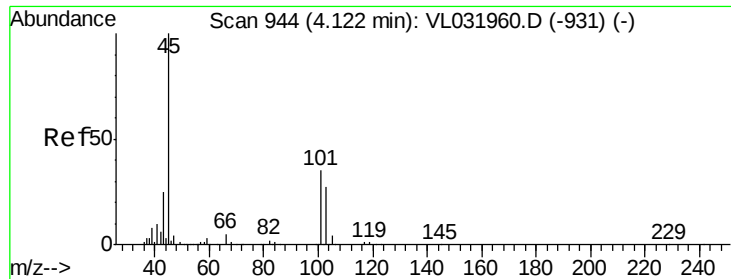
MMDadoda
5/4/2018 5:00:57 PM



#18
1,1-Dichloroethene
Concen: 0.98 ppbv
RT: 4.46 min Scan# 1049
Delta R.T. -0.00 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Tgt Ion	96	Resp	70588
Ion Ratio	Lower	Upper	
96	100		
61	173.7	161.0	241.6
98	54.5	52.7	79.1





#19

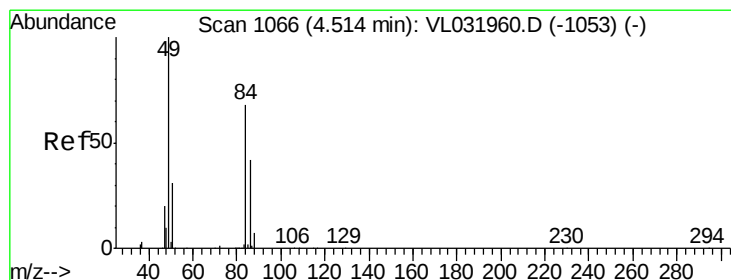
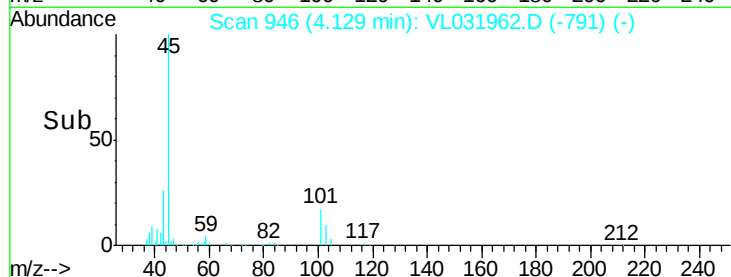
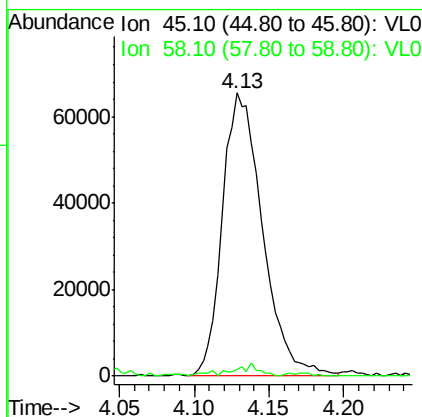
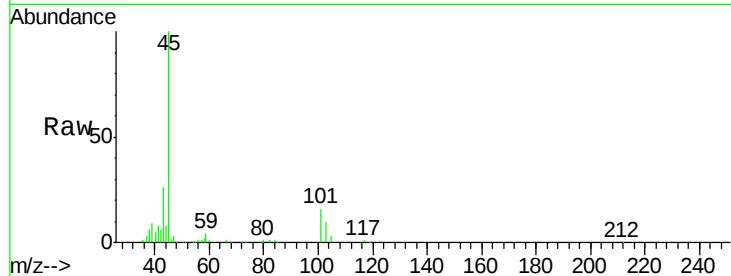
Isopropyl Alcohol
 Concen: 1.11 ppbv
 RT: 4.13 min Scan# 946
 Delta R.T. -0.00 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	45	Ratio	Lower	Upper
121598	100			
58	3.4	1.7	2.5#	

Manual Integrations
 APPROVED

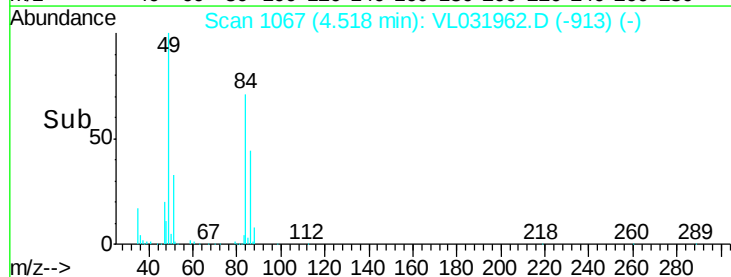
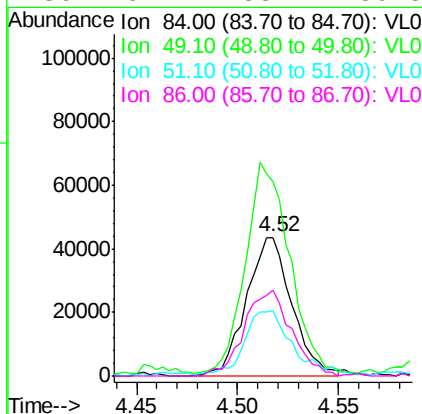
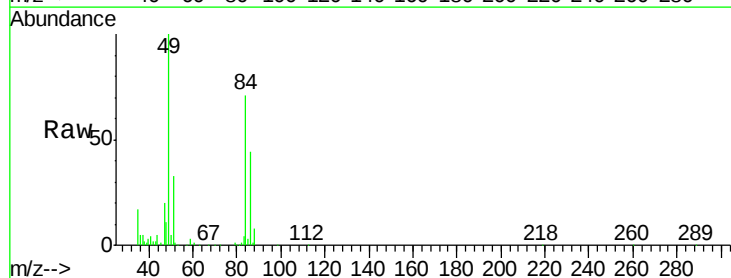
MMDadoda
 5/4/2018 5:00:57 PM

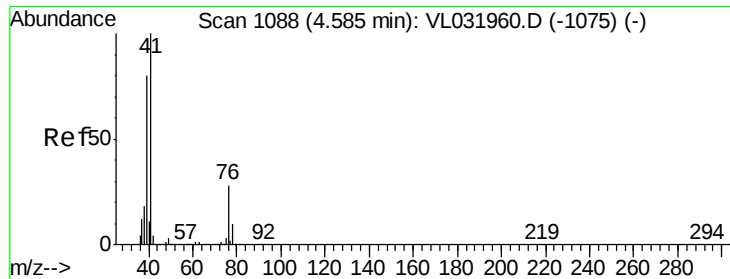


#20

Methylene Chloride
 Concen: 0.96 ppbv
 RT: 4.52 min Scan# 1067
 Delta R.T. -0.00 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Tgt Ion	84	Resp	Lower	Upper
68735	100			
49	138.3	125.6	188.4	
51	45.0	36.4	54.6	
86	62.2	53.7	80.5	





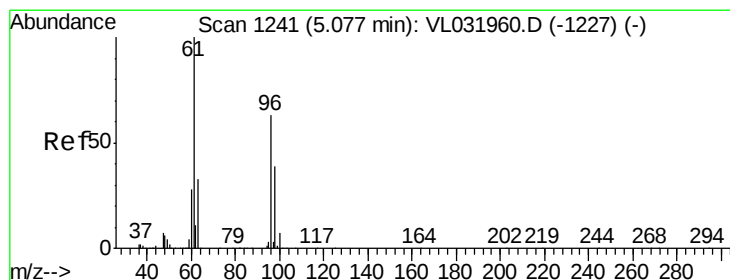
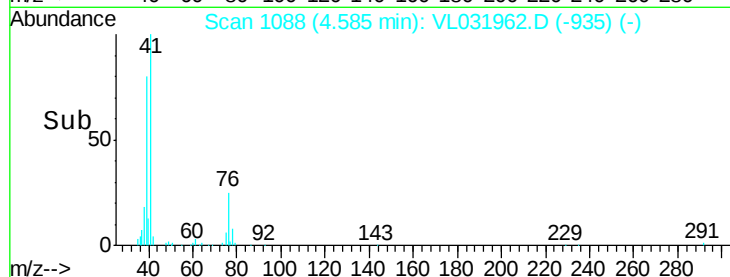
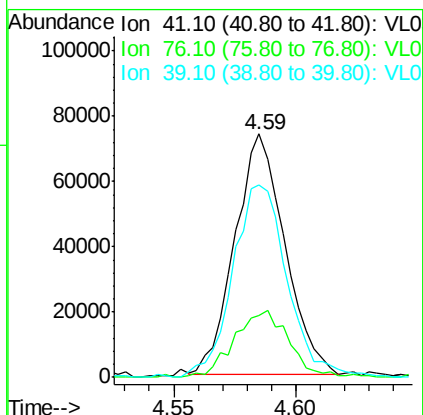
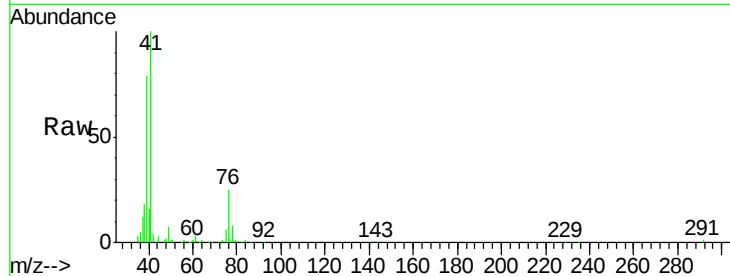
#21
 Allvl Chloride
 Concen: 0.93 ppbv
 RT: 4.59 min Scan# 1088
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Lower	Upper
41	100		
76	30.9	23.4	35.2
39	87.0	67.6	101.4

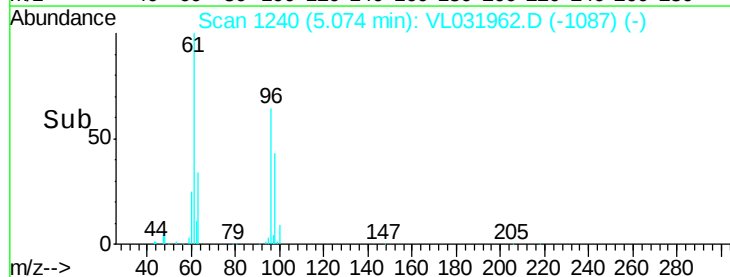
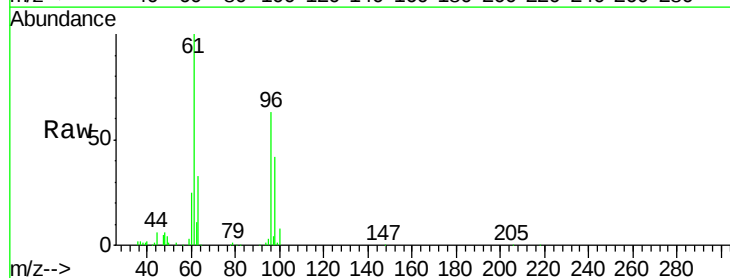
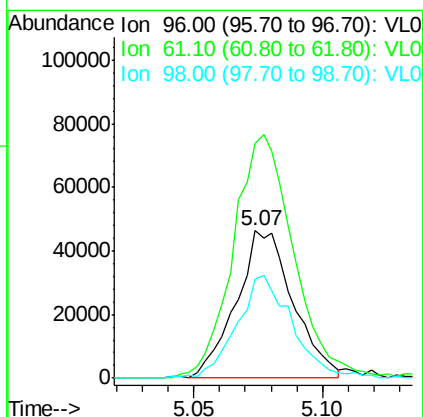
Manual Integrations
 APPROVED

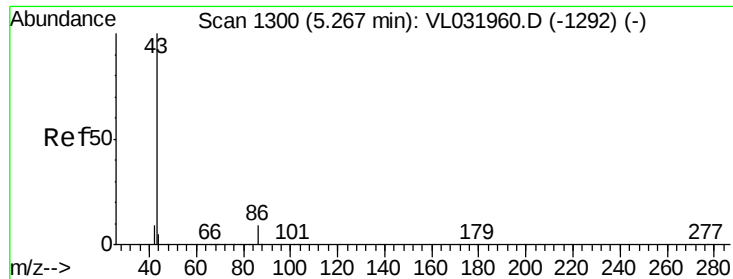
MMDadoda
 5/4/2018 5:00:57 PM



#22
 trans-1,2-Dichloroethene
 Concen: 0.95 ppbv
 RT: 5.07 min Scan# 1240
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Tgt Ion	Ratio	Lower	Upper
96	100		
61	155.8	131.1	196.7
98	64.9	47.6	71.4





#23

Vinyl Acetate

Concen: 1.15 ppbv

RT: 5.27 min Scan# 1300

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

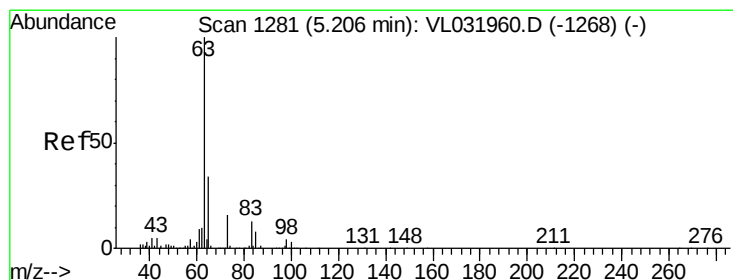
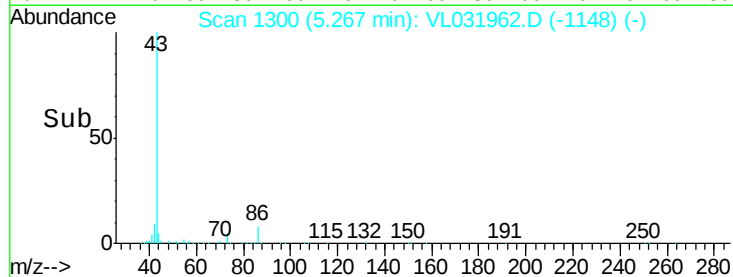
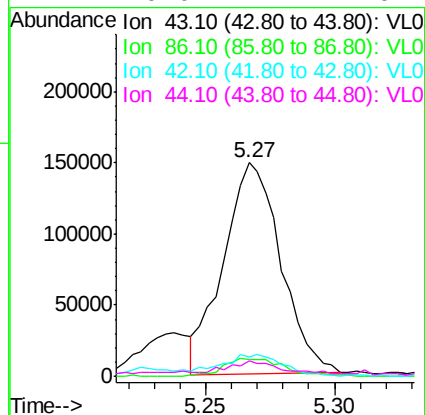
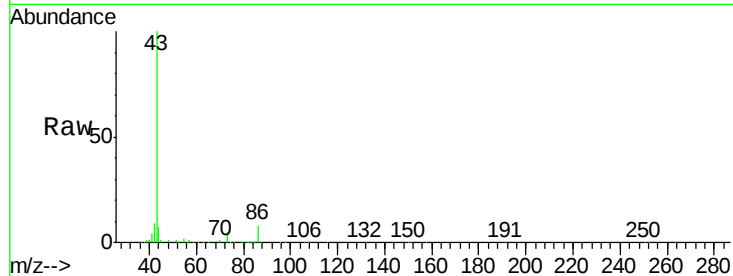
ClientSampleId :

VSTDIC001

Tot Ion	43	Resp	229997
Ion	Ratio	Lower	Upper
43	100		
86	7.4	5.8	8.8
42	8.9	8.5	12.7
44	6.0	4.2	6.4

Manual Integrations
APPROVED

MMDadoda
5/4/2018 5:00:57 PM



#24

1,1-Dichloroethane

Concen: 1.07 ppbv

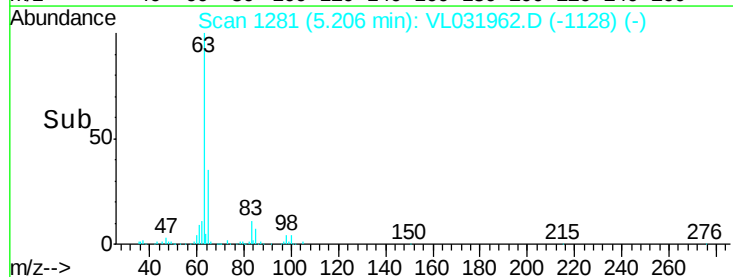
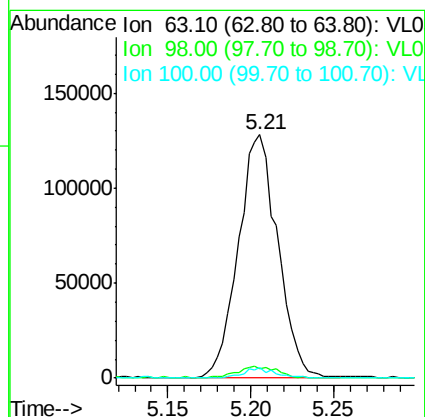
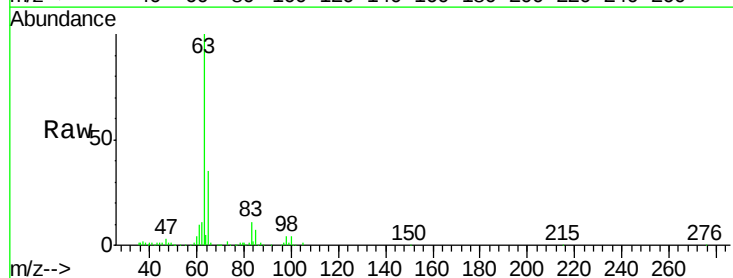
RT: 5.21 min Scan# 1281

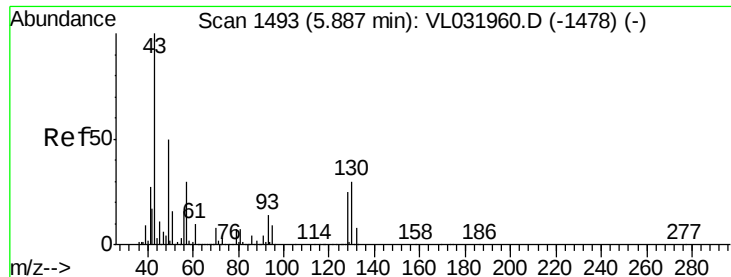
Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Tgt Ion	63	Resp	211690
Ion	Ratio	Lower	Upper
63	100		
98	3.7	2.4	7.2
100	4.2	1.5	4.4





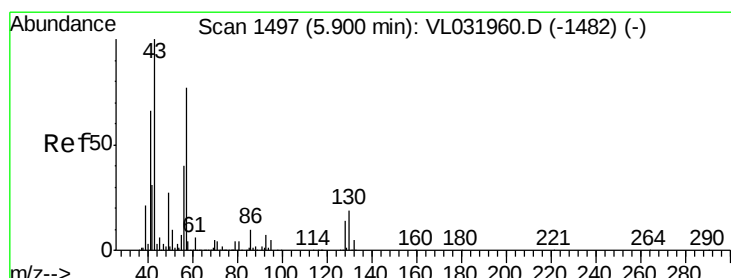
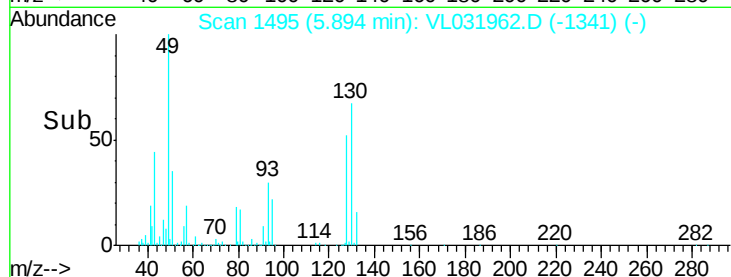
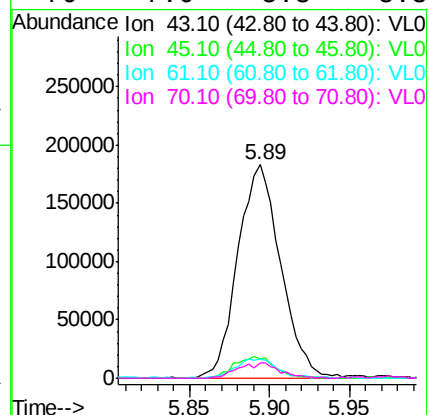
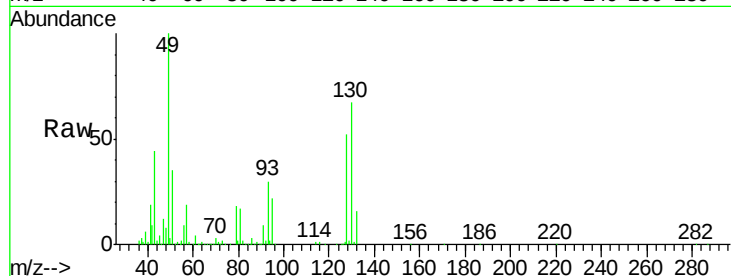
#25
Ethyl Acetate
Concen: 1.09 ppbv
RT: 5.89 min Scan# 1495
Delta R.T. -0.00 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Instrument :
MSVOA_L
ClientSampleID :
VSTDIC001

Tot Ion	Ratio	Lower	Upper
43	100		
45	9.9	7.8	11.8
61	9.6	7.2	10.8
70	7.0	5.8	8.8

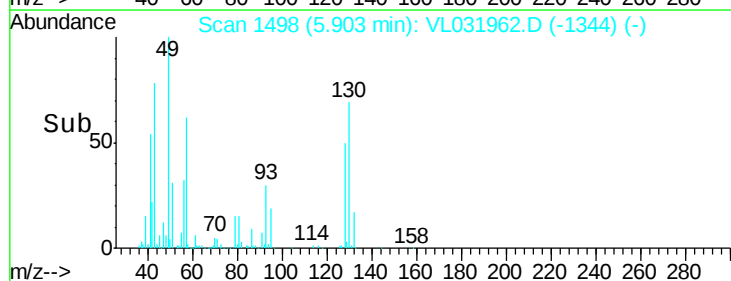
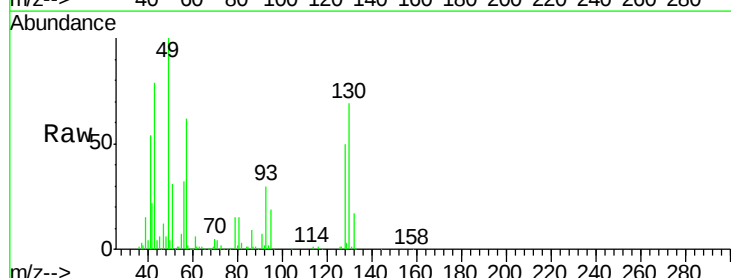
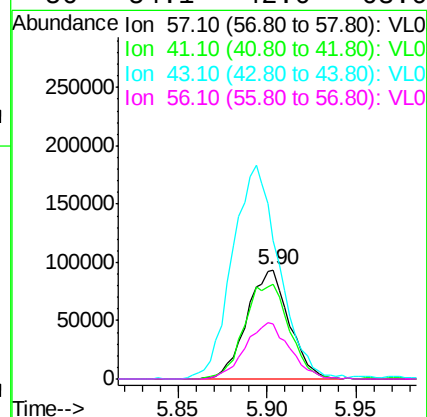
Manual Integrations
APPROVED

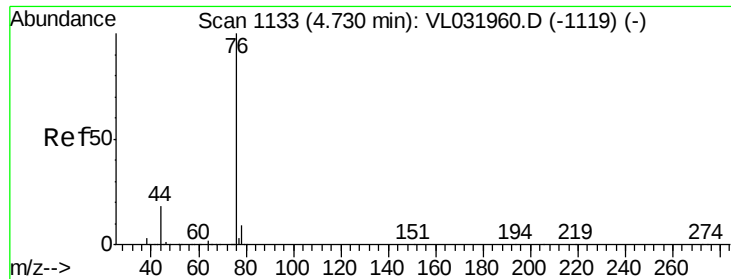
MMDadoda
5/4/2018 5:00:57 PM



#26
Hexane
Concen: 1.09 ppbv
RT: 5.90 min Scan# 1498
Delta R.T. -0.00 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Tgt Ion	Ratio	Lower	Upper
57	100		
41	91.7	72.0	108.0
43	218.6	169.8	254.8
56	54.1	42.0	63.0





#27

Carbon Disulfide

Concen: 0.92 ppbv

RT: 4.73 min Scan# 1134

Delta R.T. -0.00 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

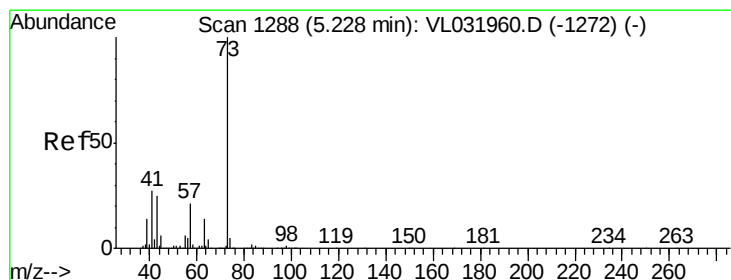
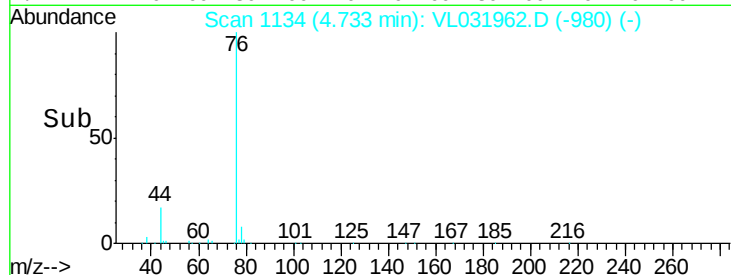
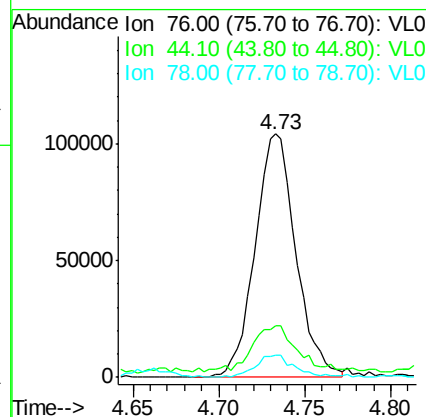
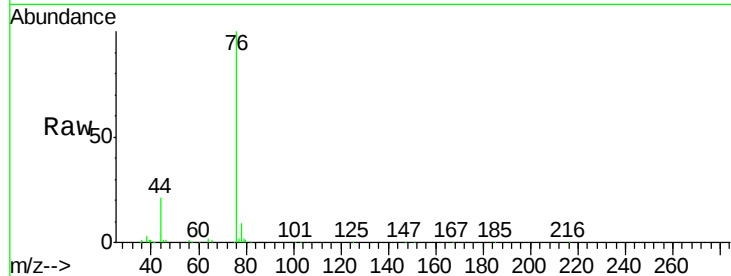
ClientSampleId :

VSTDIC001

Tot Ion:	76	Resp:	170882
Ion	Ratio	Lower	Upper
76	100		
44	26.6	15.6	23.4#
78	9.2	7.6	11.4

Manual Integrations
APPROVED

MMDadoda
5/4/2018 5:00:57 PM



#28

Methyl tert-Butyl Ether

Concen: 1.10 ppbv

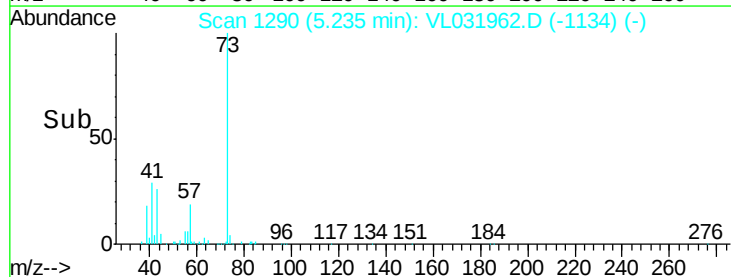
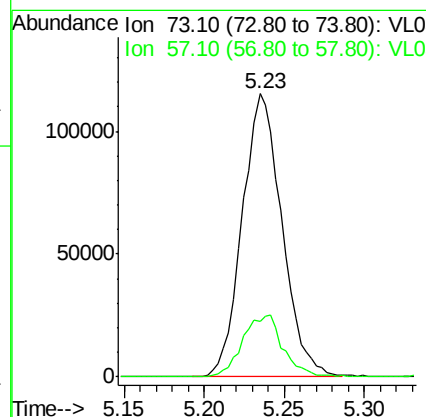
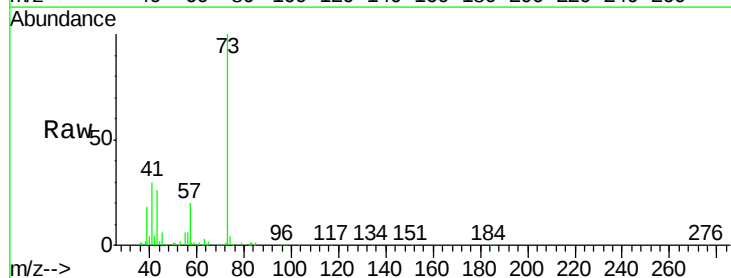
RT: 5.23 min Scan# 1290

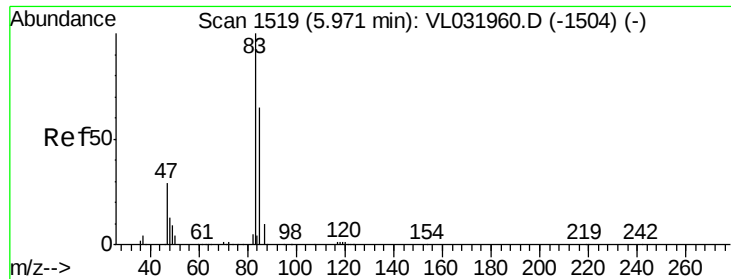
Delta R.T. 0.00 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Tgt Ion:	73	Resp:	194300
Ion	Ratio	Lower	Upper
73	100		
57	22.3	17.6	26.4





#29

Chloroform

Concen: 1.03 ppbv

RT: 5.97 min Scan# 1518

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 83 Resp: 249446

Ion Ratio Lower Upper

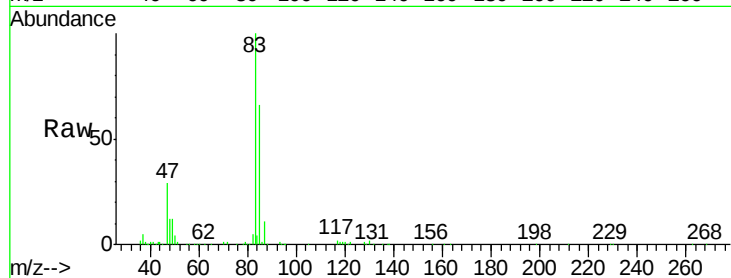
83 100

85 65.5 51.4 77.0

Manual Integrations
APPROVED

MMDadoda

5/4/2018 5:00:57 PM



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

5.97

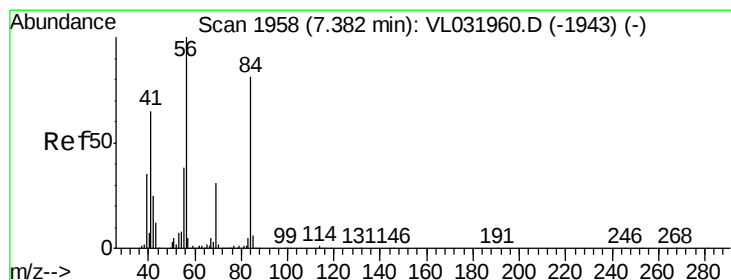
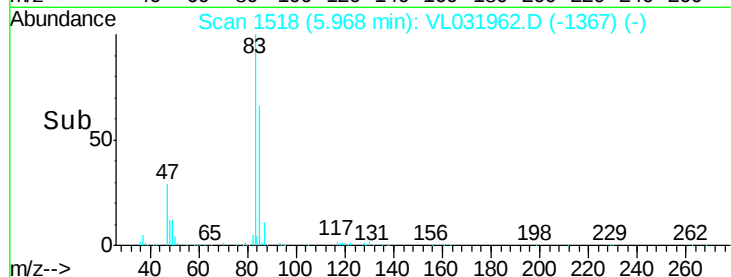
150000

100000

50000

0

Time-->



#30

Cyclohexane

Concen: 0.94 ppbv

RT: 7.38 min Scan# 1958

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

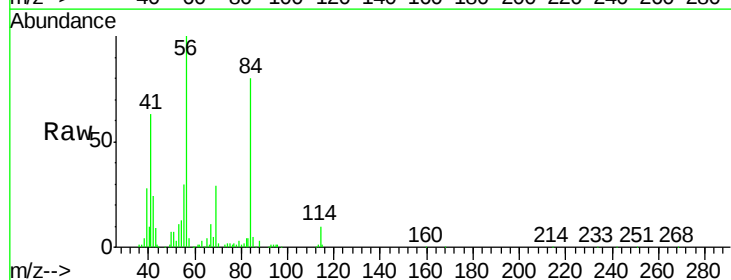
Tgt Ion: 84 Resp: 95651

Ion Ratio Lower Upper

84 100

56 196.1 107.7 161.5#

41 90.5 68.2 102.2



Abundance Ion 84.20 (83.90 to 84.90): VL0

Ion 56.10 (55.80 to 56.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

80000

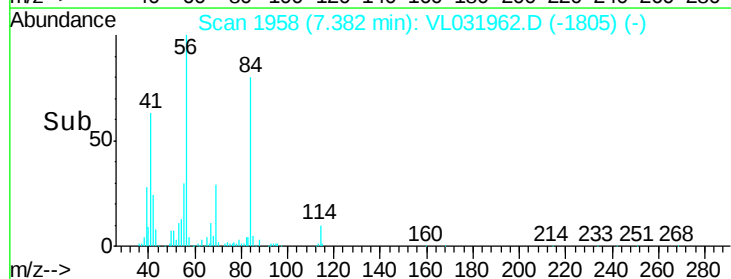
60000

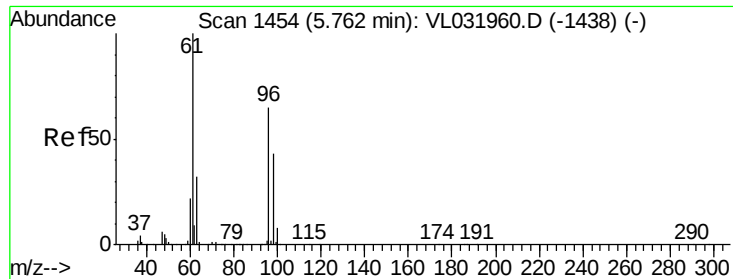
40000

20000

0

Time-->





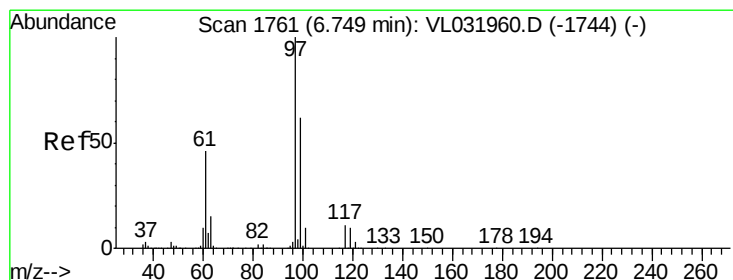
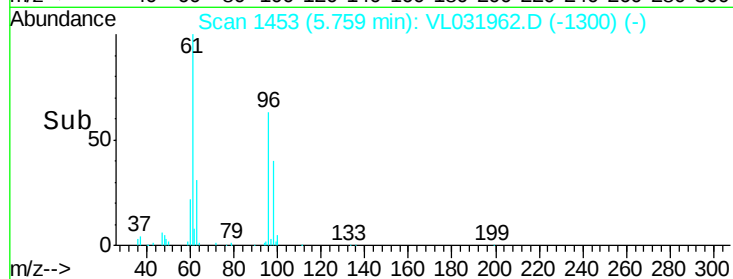
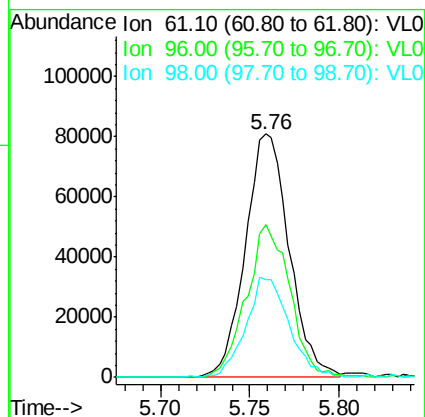
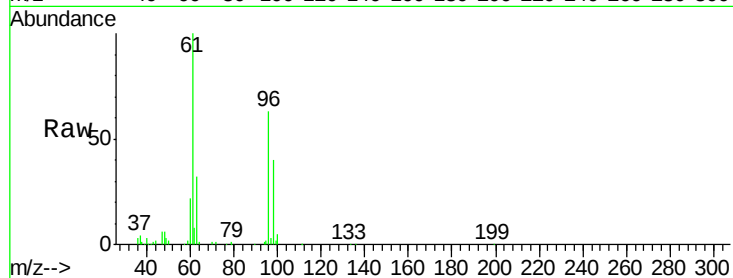
#31
 cis-1,2-Dichloroethene
 Concen: 1.07 ppbv
 RT: 5.76 min Scan# 1453
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Resp	Lower	Upper
61	100			
96	62.8	47.6	71.4	
98	39.9	30.3	45.5	

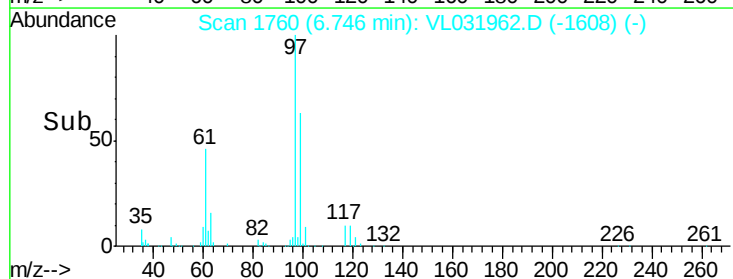
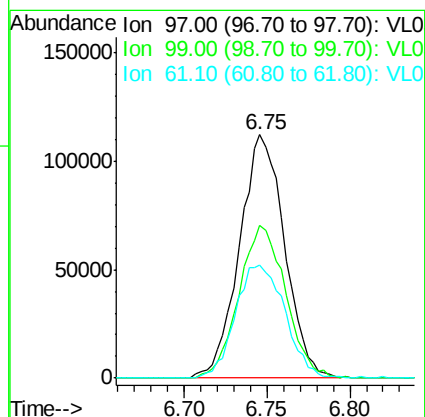
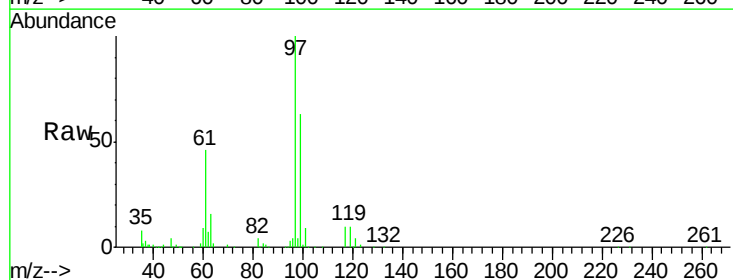
Manual Integrations
 APPROVED

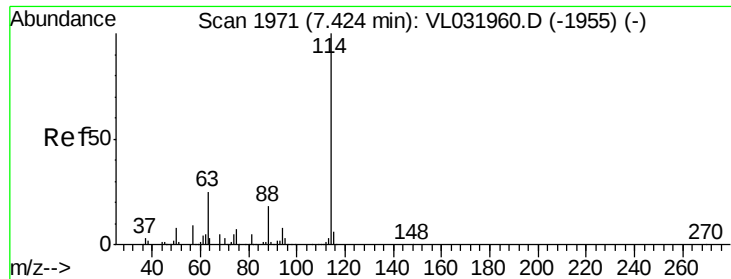
MMDadoda
 5/4/2018 5:00:57 PM



#32
 1,1,1-Trichloroethane
 Concen: 0.90 ppbv
 RT: 6.75 min Scan# 1760
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Tgt Ion	Ratio	Resp	Lower	Upper
97	100			
99	65.0	51.5	77.3	
61	51.3	40.0	60.0	





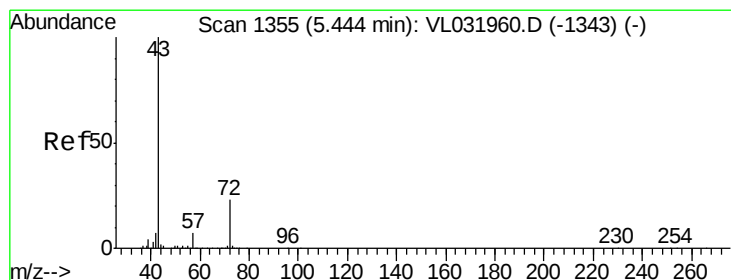
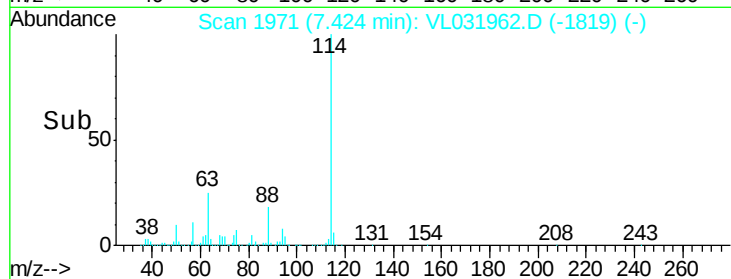
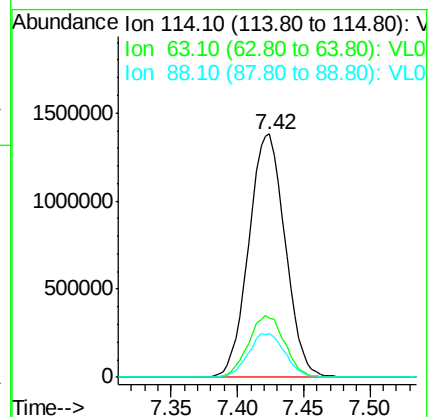
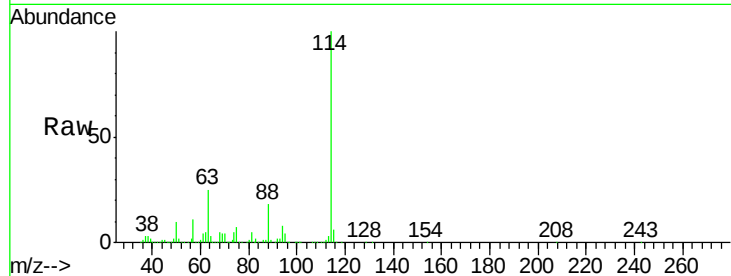
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.42 min Scan# 1971
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Lower	Upper
114	100		
63	25.5	21.8	32.6
88	18.3	14.6	22.0

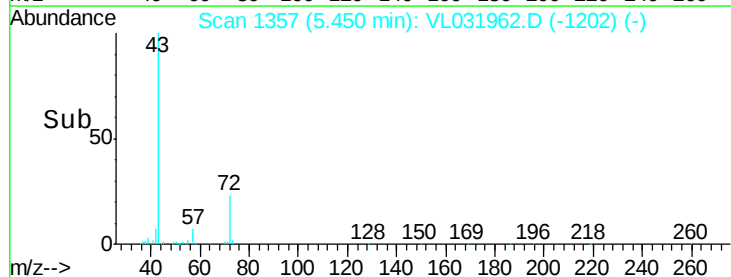
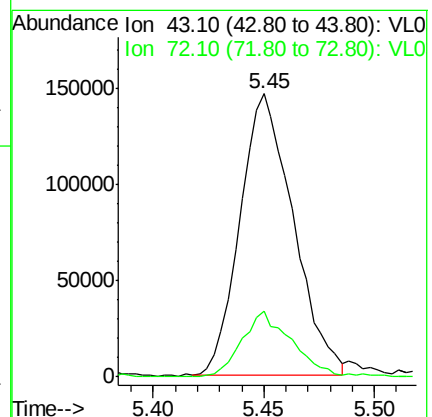
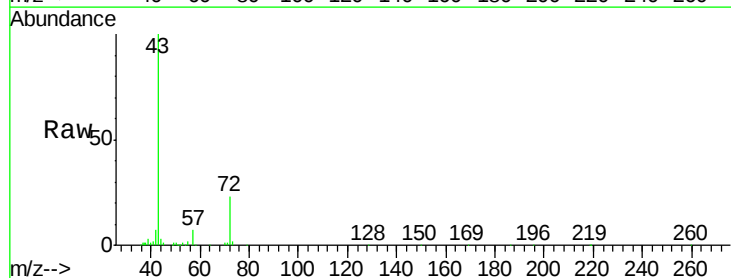
Manual Integrations
 APPROVED

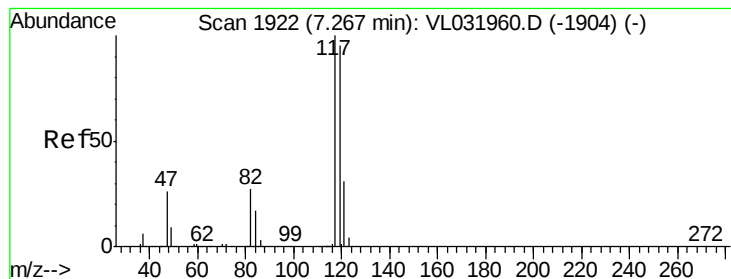
MMDadoda
 5/4/2018 5:00:57 PM



#34
 2-Butanone
 Concen: 1.34 ppbv
 RT: 5.45 min Scan# 1357
 Delta R.T. -0.00 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Tgt Ion	Ratio	Lower	Upper
43	100		
72	22.6	18.6	27.8





#35

Carbon Tetrachloride

Concen: 0.91 ppbv

RT: 7.27 min Scan# 1922

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

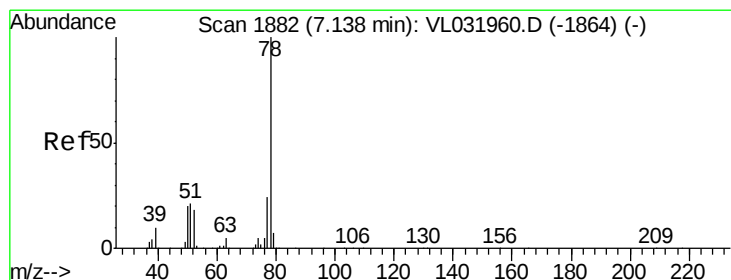
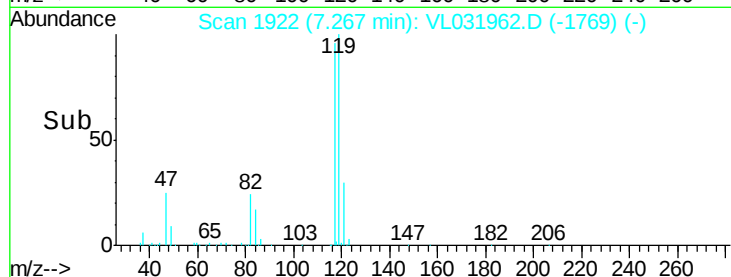
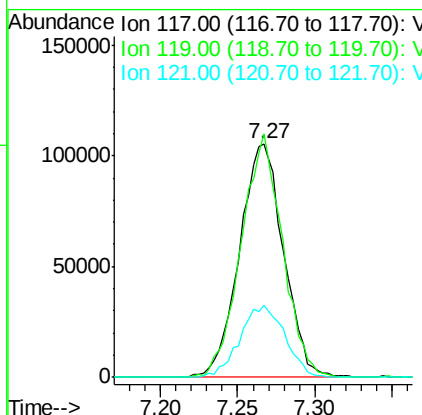
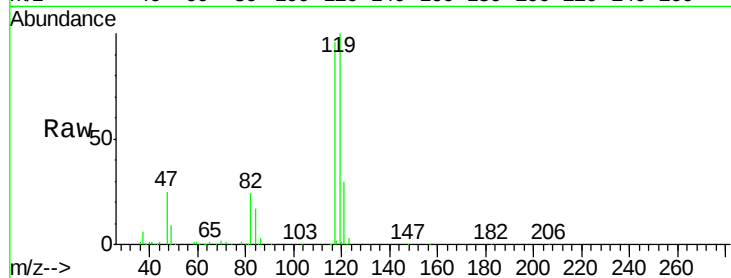
ClientSampleId :

VSTDIC001

Tot Ion:	117	Resp:	208604
Ion Ratio	Lower	Upper	
117	100		
119	104.1	76.9	115.3
121	30.8	24.5	36.7

Manual Integrations
APPROVED

MMDadoda
5/4/2018 5:00:57 PM



#36

Benzene

Concen: 1.06 ppbv

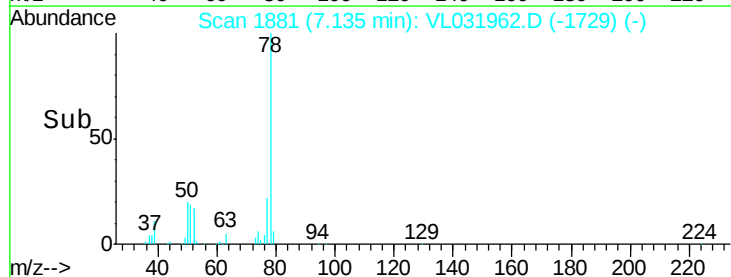
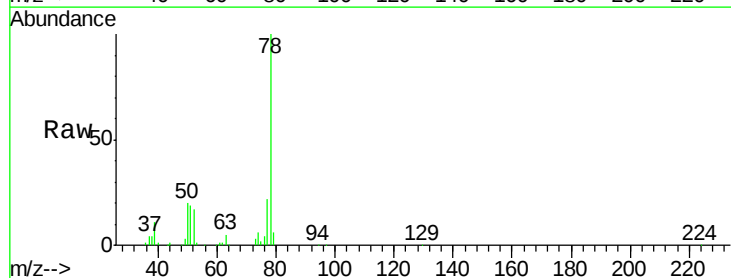
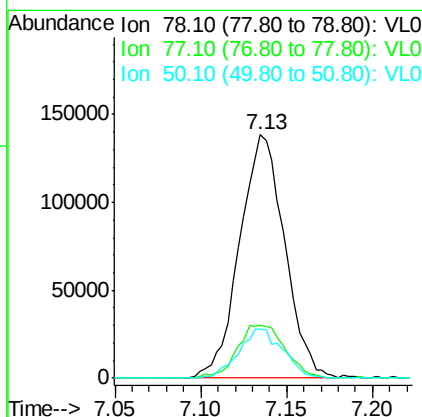
RT: 7.13 min Scan# 1881

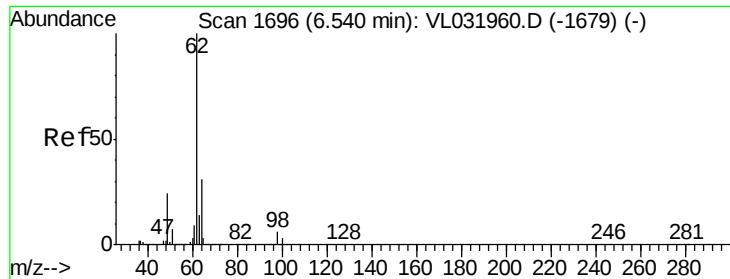
Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Tgt Ion:	78	Resp:	252146
Ion Ratio	Lower	Upper	
78	100		
77	21.6	19.2	28.8
50	20.3	16.7	25.1





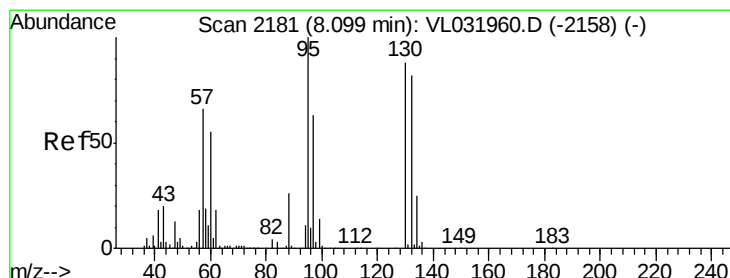
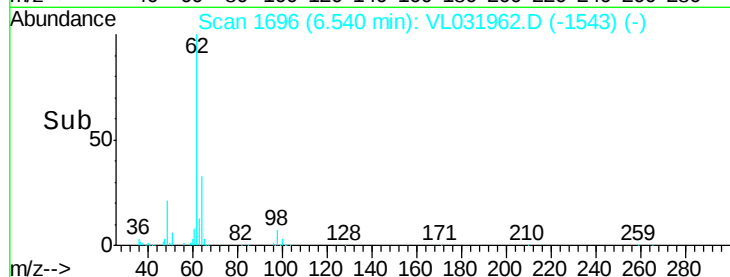
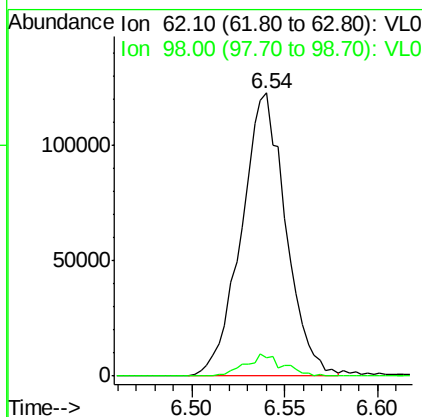
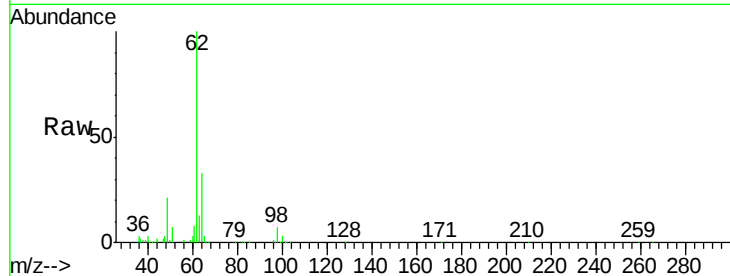
#37
 1,2-Dichloroethane
 Concen: 1.14 ppbv
 RT: 6.54 min Scan# 1696
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Resp	Lower	Upper
62	100	201987		
98	6.8	4.0	6.0#	

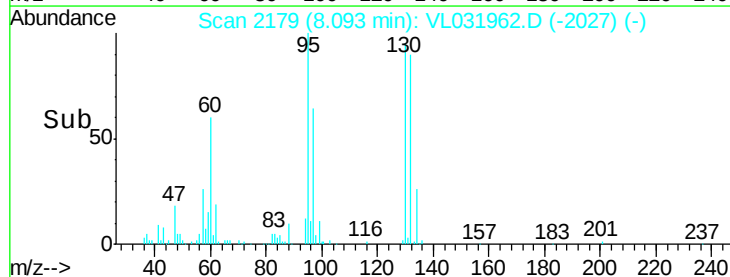
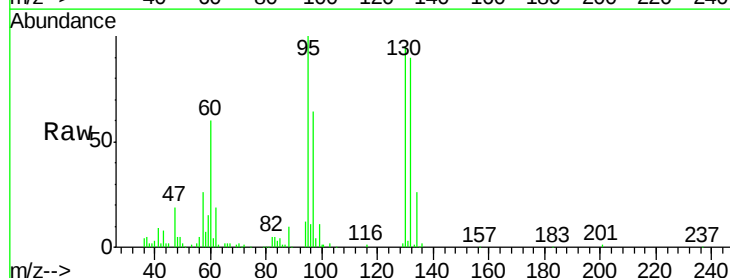
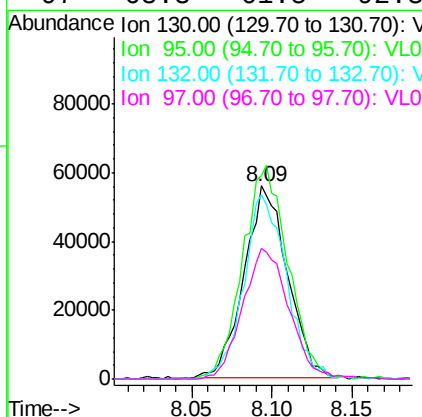
Manual Integrations
 APPROVED

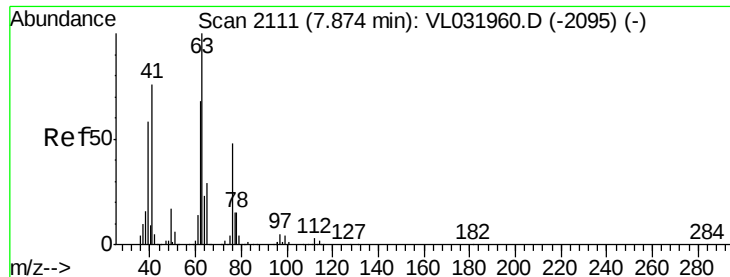
MMDadoda
 5/4/2018 5:00:57 PM



#38
 Trichloroethene
 Concen: 1.07 ppbv
 RT: 8.09 min Scan# 2179
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Tgt Ion	Ratio	Resp	Lower	Upper
130	100	103103		
95	106.3	96.6	144.8	
132	95.6	79.1	118.7	
97	68.3	61.5	92.3	





#39

1,2-Dichloropropane

Concen: 1.04 ppbv

RT: 7.87 min Scan# 2109

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

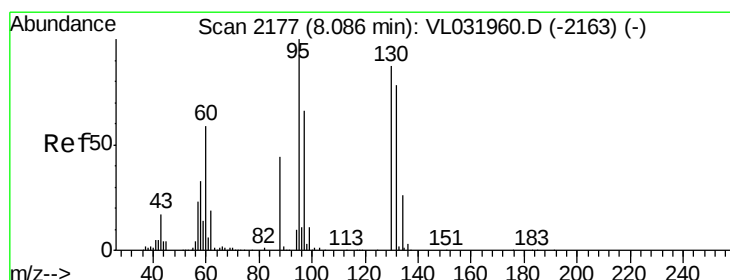
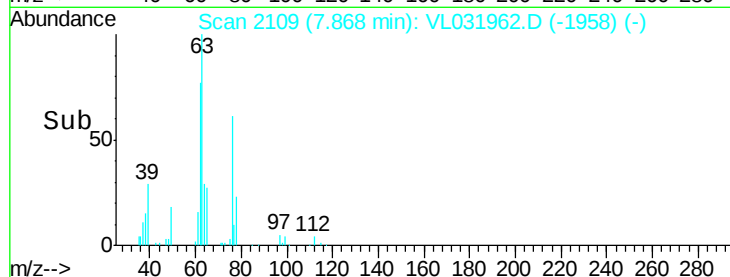
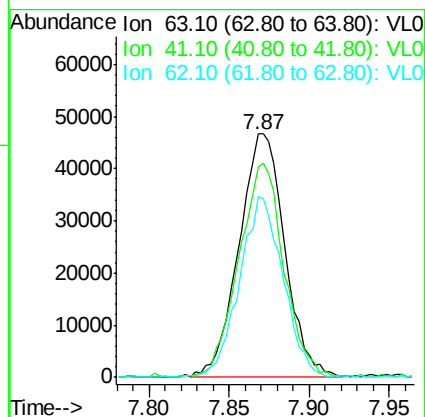
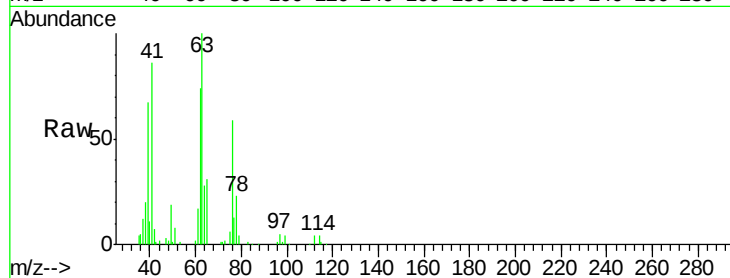
ClientSampleId :

VSTDIC001

Tot Ion:	63	Resp:	91466
Ion Ratio	Lower	Upper	
63	100		
41	85.8	65.8	98.6
62	74.4	55.0	82.6

Manual Integrations
APPROVED

MMDadoda
5/4/2018 5:00:57 PM



#40

1,4-Dioxane

Concen: 1.17 ppbv m

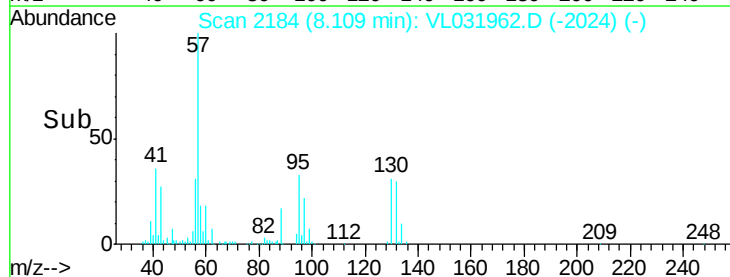
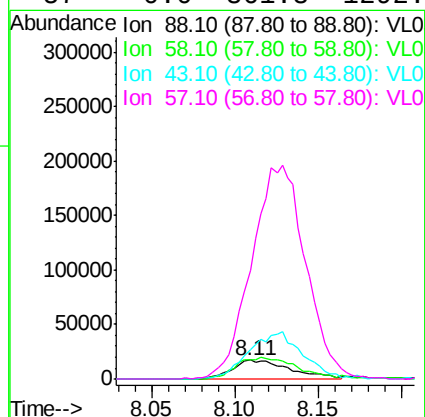
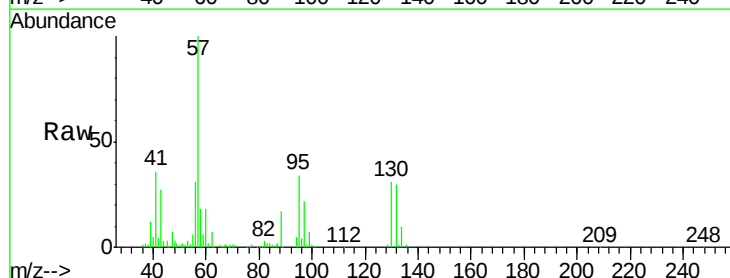
RT: 8.11 min Scan# 2184

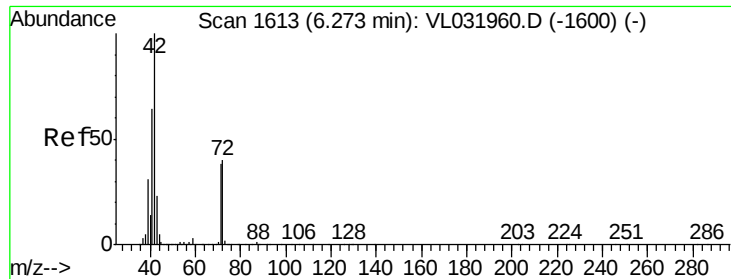
Delta R.T. 0.02 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Tgt Ion:	88	Resp:	42012
Ion Ratio	Lower	Upper	
88	100		
58	0.0	98.5	147.7#
43	0.0	194.3	291.5#
57	0.0	861.8	1292.6#





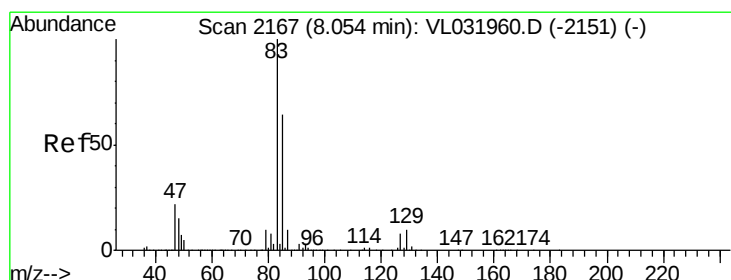
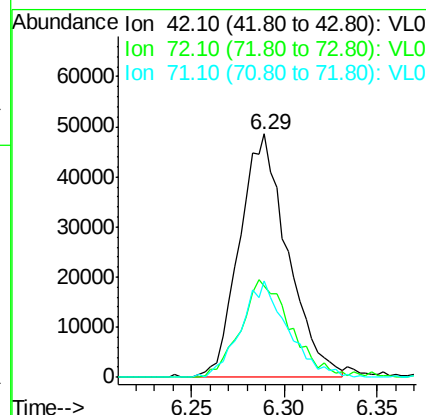
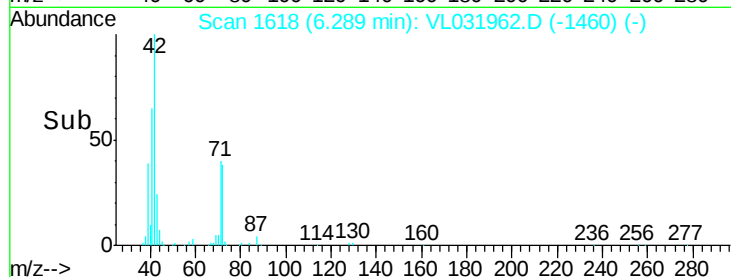
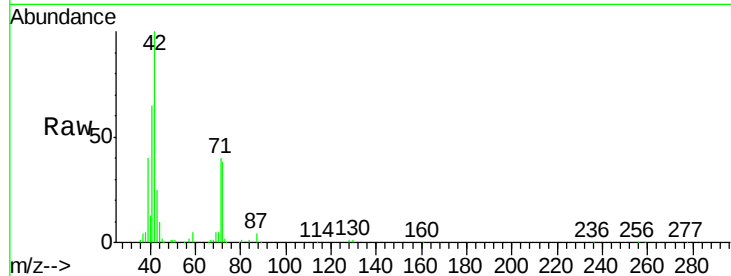
#41
Tetrahydrofuran
Concen: 1.03 ppbv
RT: 6.29 min Scan# 1618
Delta R.T. 0.01 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	Ratio	Lower	Upper
42	100		
72	42.7	33.2	49.8
71	38.8	31.5	47.3

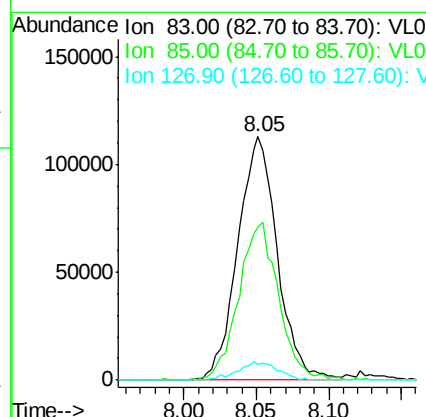
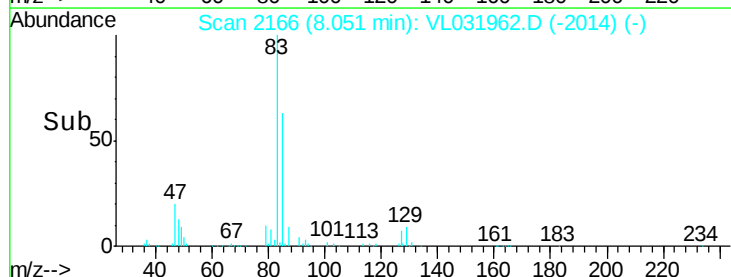
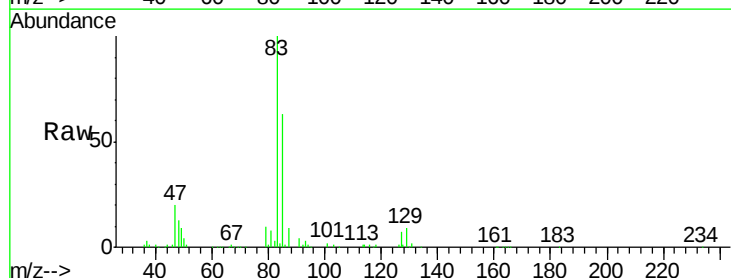
Manual Integrations
APPROVED

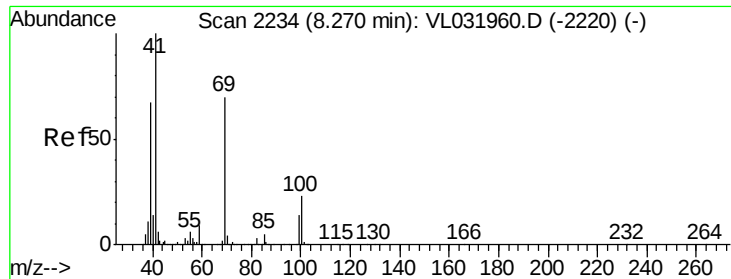
MMDadoda
5/4/2018 5:00:57 PM



#42
Bromodichloromethane
Concen: 1.01 ppbv
RT: 8.05 min Scan# 2166
Delta R.T. -0.01 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Tgt Ion	Ratio	Lower	Upper
83	100		
85	62.2	50.5	75.7
127	6.7	6.0	9.0





#43

Methyl Methacrylate

Concen: 1.03 ppbv

RT: 8.27 min Scan# 2234

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

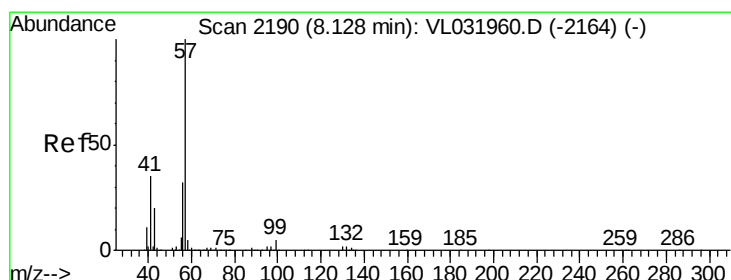
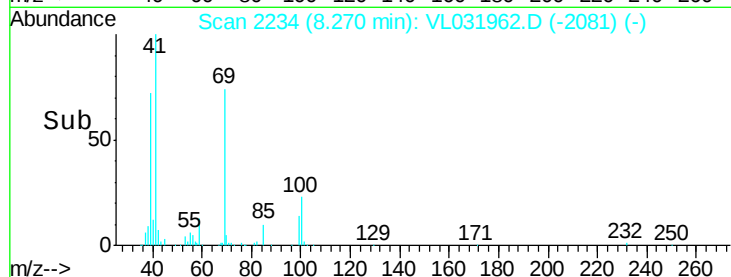
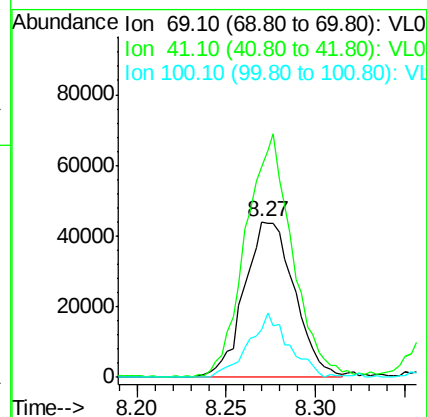
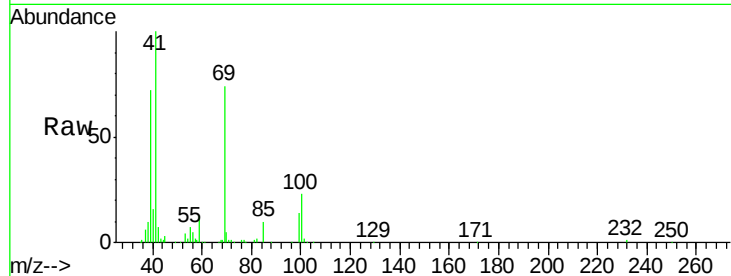
Instrument :
MSVOA_L

ClientSampleId :
VSTDIC001

Tot Ion	Ion	Ratio	Lower	Upper
69	100			
41	146.2	117.8	176.8	
100	33.1	24.6	37.0	

Manual Integrations
APPROVED

MMDadoda
5/4/2018 5:00:57 PM



#44

2,2,4-Trimethylpentane

Concen: 1.08 ppbv

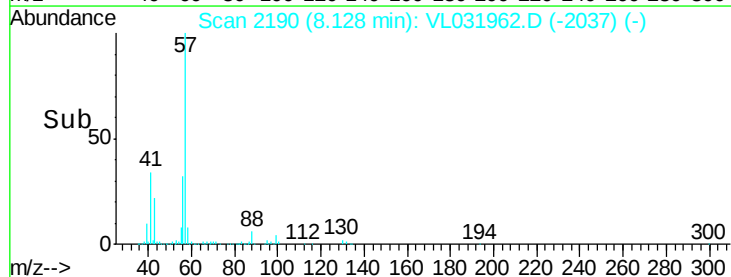
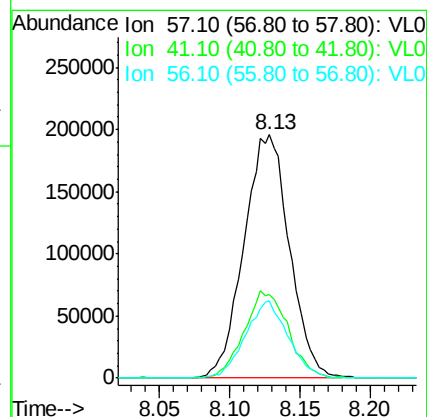
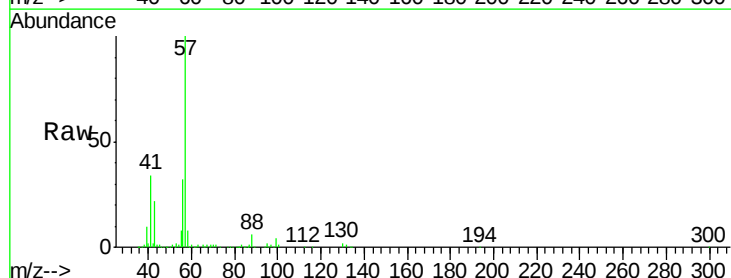
RT: 8.13 min Scan# 2190

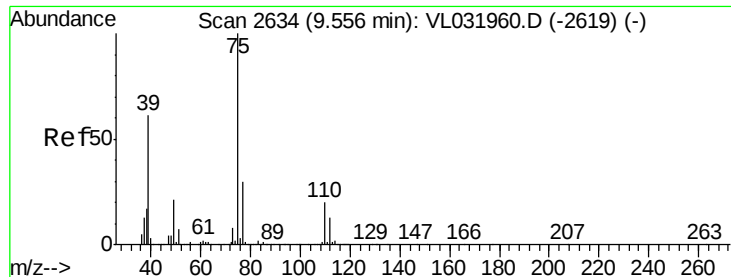
Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Tgt Ion	Ion	Ratio	Lower	Upper
57	100			
41	34.8	27.0	40.6	
56	30.0	24.1	36.1	





#45

t-1,3-Dichloropropene

Concen: 1.00 ppbv m

RT: 9.56 min Scan# 2634

Delta R.T. -0.00 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Tot Ion: 75 Resp: 108750

Ion Ratio Lower Upper

75 100

77 30.8 25.1 37.7

Instrument :

MSVOA_L

ClientSampleId :

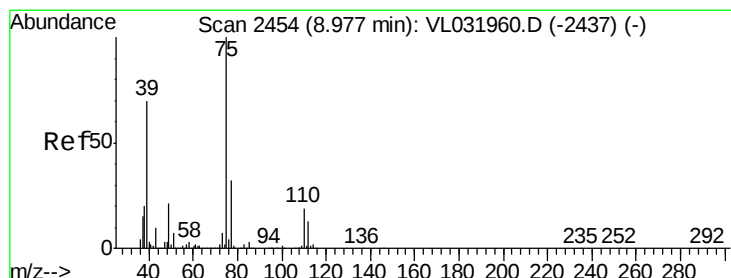
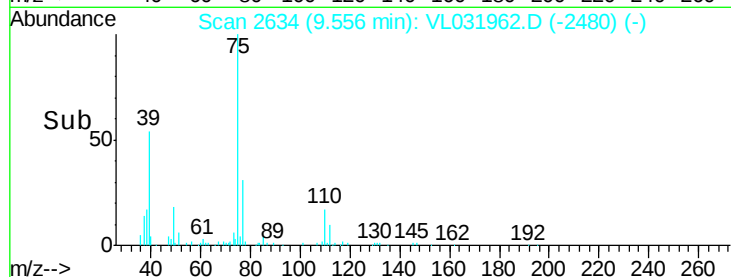
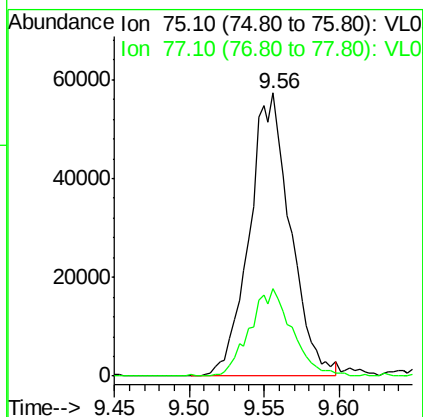
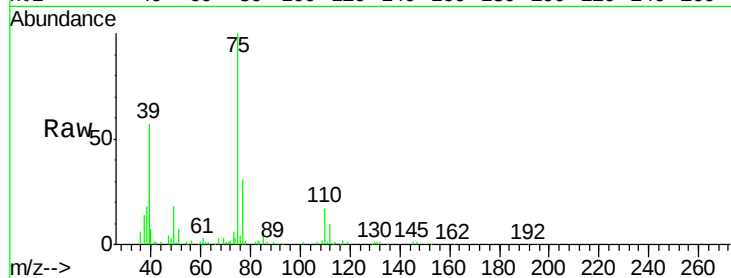
VSTDIC001

Manual Integrations

APPROVED

MMDadoda

5/4/2018 5:00:57 PM



#46

cis-1,3-Dichloropropene

Concen: 1.00 ppbv

RT: 8.97 min Scan# 2452

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

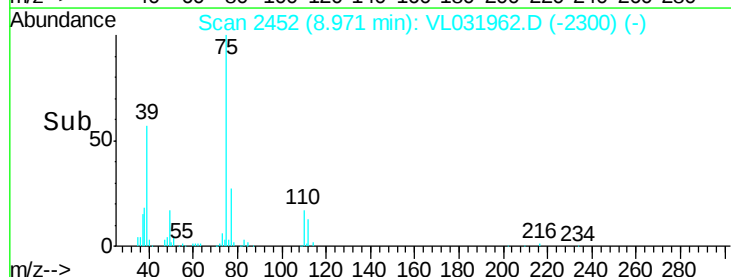
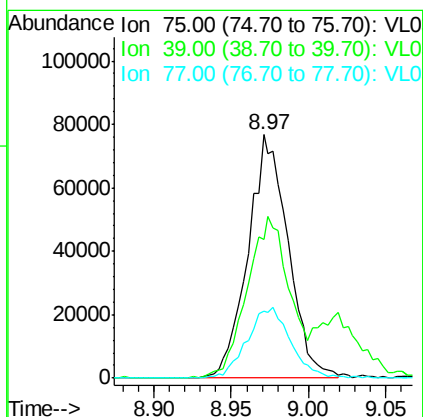
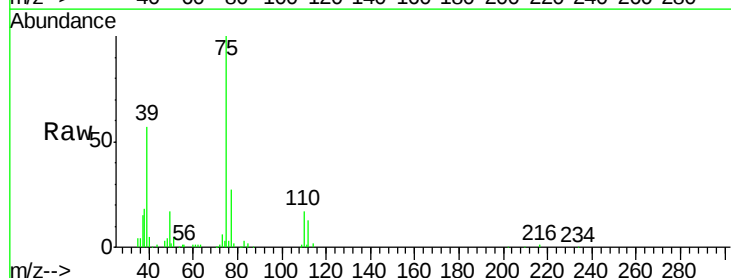
Tgt Ion: 75 Resp: 138650

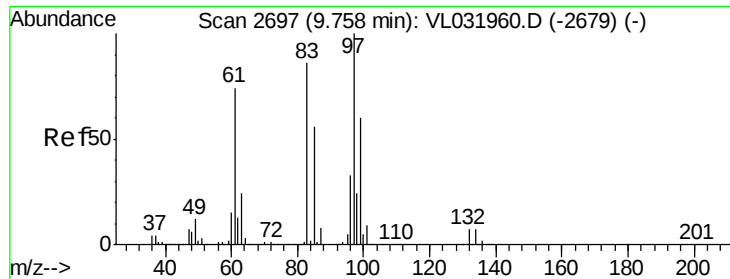
Ion Ratio Lower Upper

75 100

39 56.5 58.6 87.8#

77 27.3 26.8 40.2





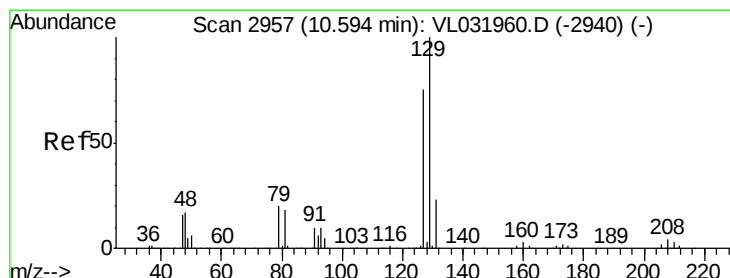
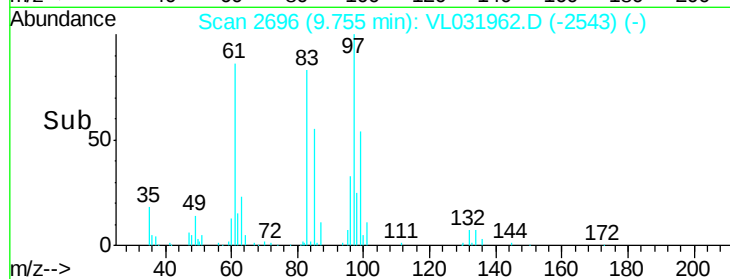
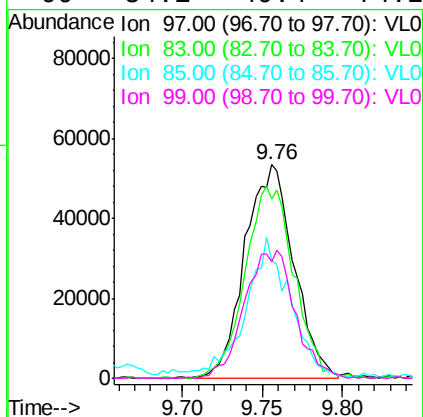
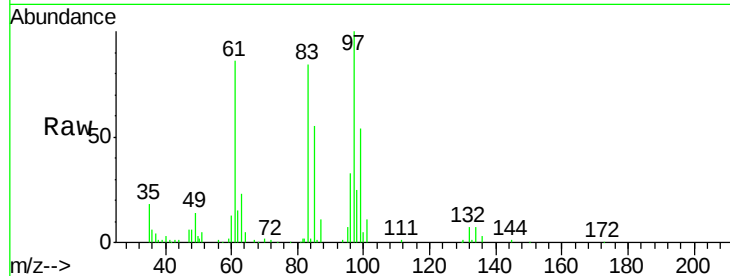
#47
 1,1,2-Trichloroethane
 Concen: 1.07 ppbv
 RT: 9.76 min Scan# 2696
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ion	Ratio	Lower	Upper
97	100			
83	83.8	69.1	103.7	
85	53.9	43.7	65.5	
99	54.1	49.4	74.2	

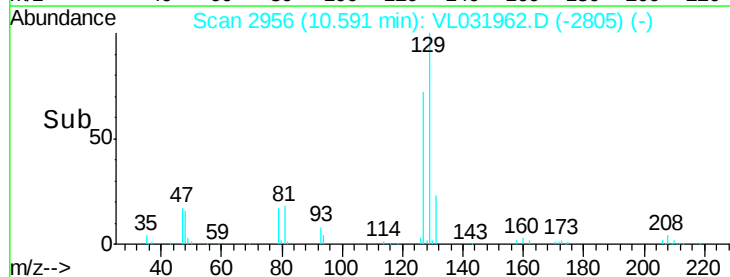
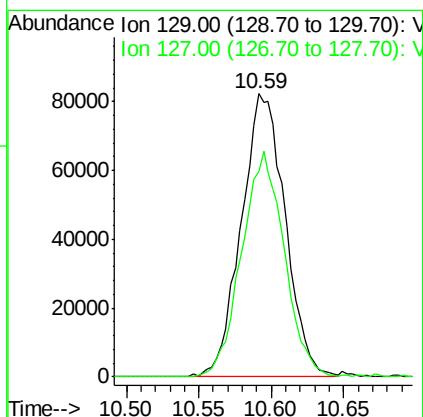
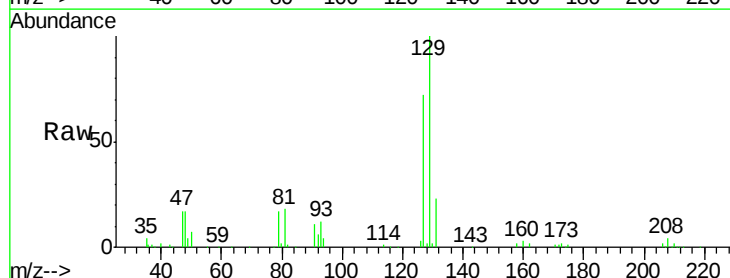
Manual Integrations
 APPROVED

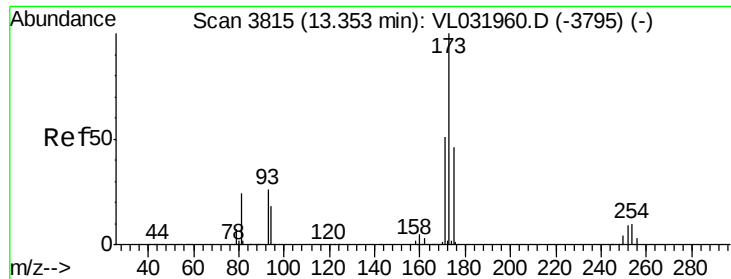
MMDadoda
 5/4/2018 5:00:57 PM



#48
 Dibromochloromethane
 Concen: 1.02 ppbv
 RT: 10.59 min Scan# 2956
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Tgt Ion	Ion	Ratio	Lower	Upper
129	100			
127	77.7	39.1	117.5	





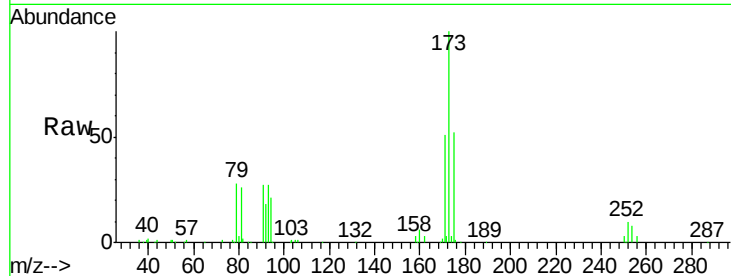
#49
Bromoform
Concen: 0.99 ppbv
RT: 13.35 min Scan# 3814
Delta R.T. -0.01 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

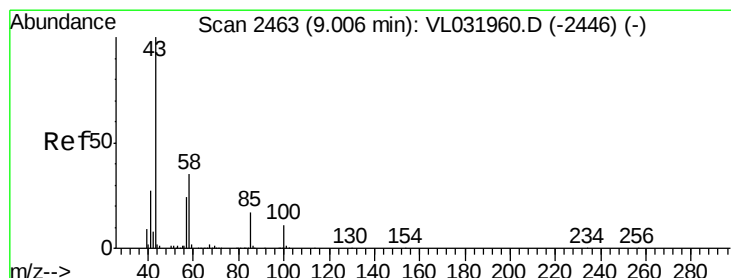
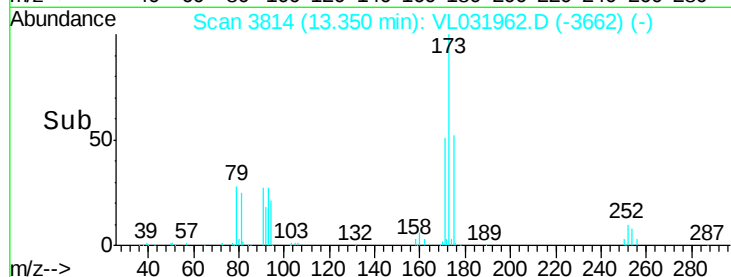
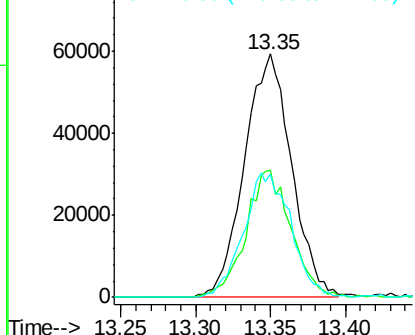
Tot Ion	Ratio	Lower	Upper
173	100		
175	50.4	39.0	58.6
171	52.0	41.4	62.0

Manual Integrations
APPROVED

MMDadoda
5/4/2018 5:00:57 PM

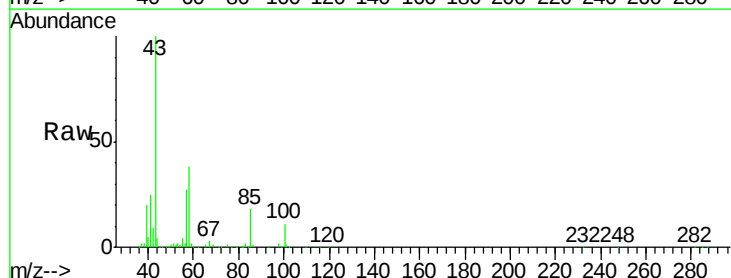


Abundance Ion 172.90 (172.60 to 173.60): V
Ion 174.90 (174.60 to 175.60): V
Ion 170.90 (170.60 to 171.60): V

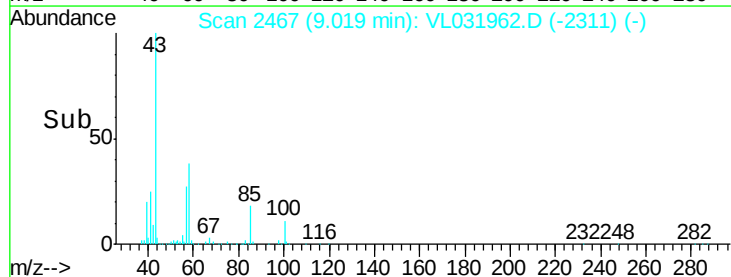
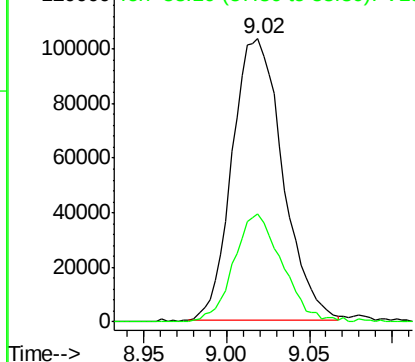


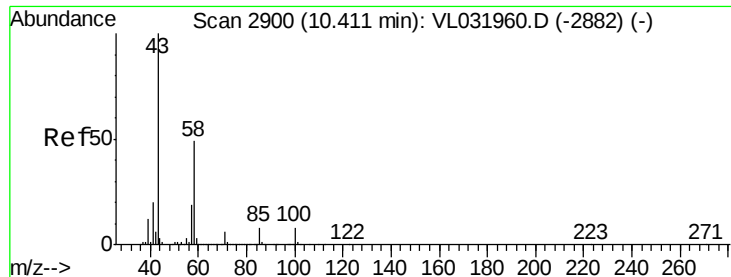
#50
4-Methyl-2-Pentanone
Concen: 1.04 ppbv
RT: 9.02 min Scan# 2467
Delta R.T. 0.00 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Tgt Ion	Ratio	Lower	Upper
43	100		
58	37.2	28.6	43.0



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 58.10 (57.80 to 58.80): VL0





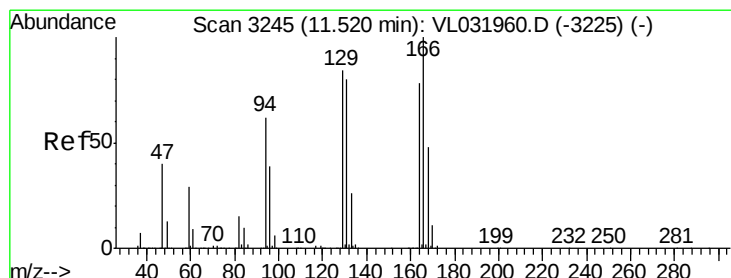
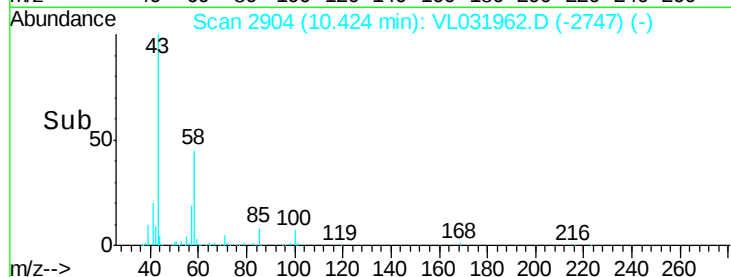
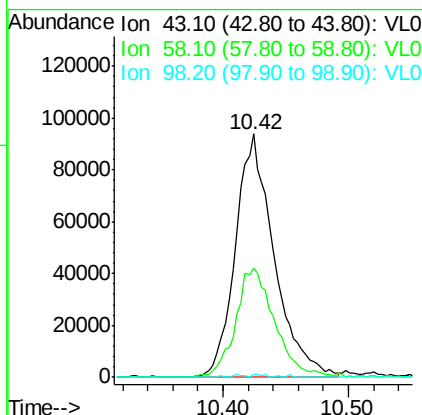
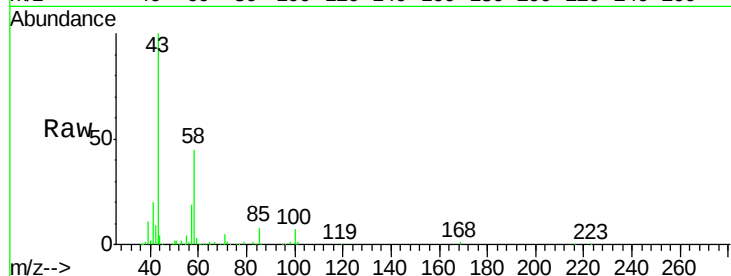
#51
2-Hexanone
Concen: 1.10 ppbv
RT: 10.42 min Scan# 2904
Delta R.T. 0.01 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	Ratio	Lower	Upper
43	100		
58	45.7	38.5	57.7
98	1.1	0.2	0.4

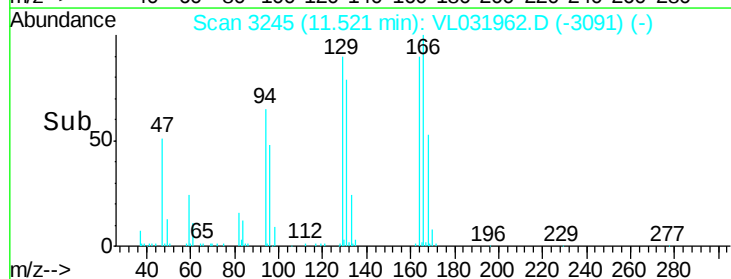
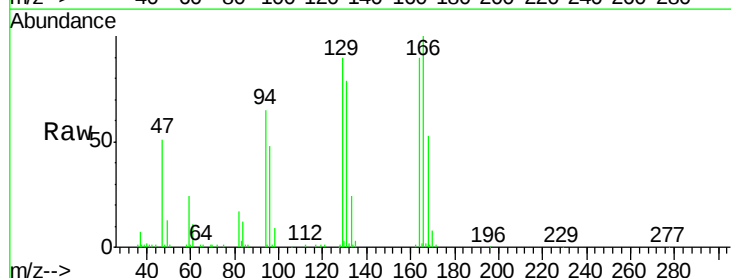
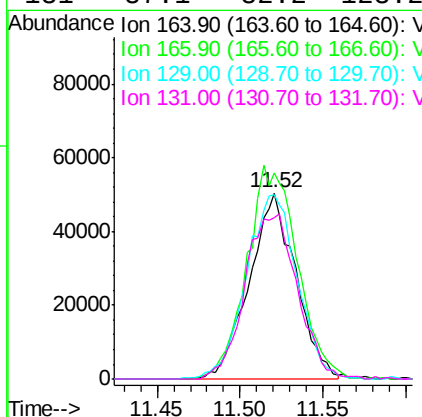
Manual Integrations
APPROVED

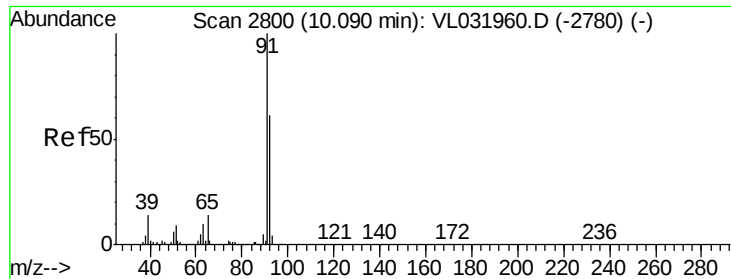
MMDadoda
5/4/2018 5:00:57 PM



#52
Tetrachloroethene
Concen: 1.06 ppbv
RT: 11.52 min Scan# 3245
Delta R.T. -0.00 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Tgt Ion	Ratio	Lower	Upper
164	100		
166	110.7	98.2	147.4
129	98.3	86.5	129.7
131	87.1	82.2	123.2





#53

Toluene

Concen: 1.06 ppbv

RT: 10.09 min Scan# 2800

Delta R.T. -0.00 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 91 Resp: 281222

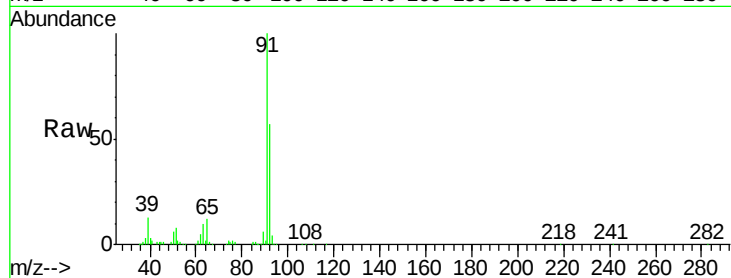
Ion Ratio Lower Upper

91 100

92 58.8 47.4 71.2

Manual Integrations
APPROVED

MMDadoda
5/4/2018 5:00:57 PM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

10.09

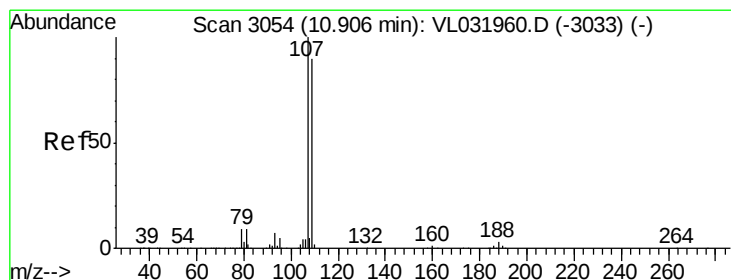
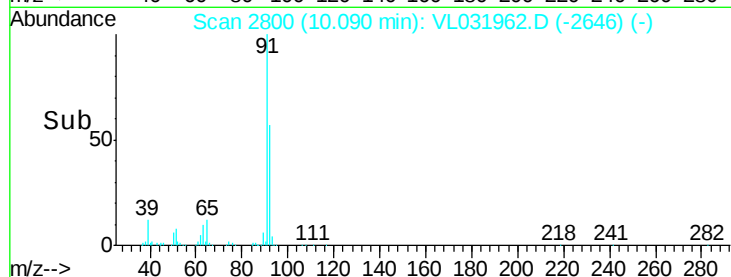
150000

100000

50000

0

Time-->



#54

1,2-Dibromoethane

Concen: 1.05 ppbv

RT: 10.91 min Scan# 3054

Delta R.T. -0.00 min

Lab File: VL031962.D

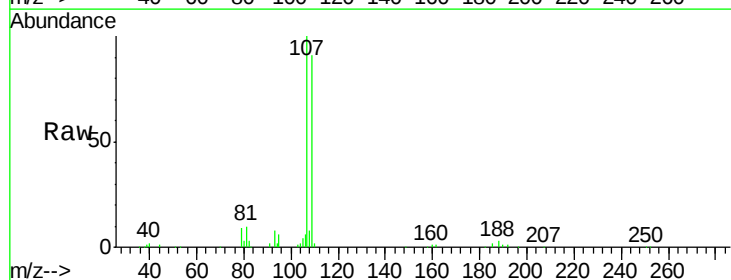
Acq: 3 May 2018 12:44

Tgt Ion:107 Resp: 159884

Ion Ratio Lower Upper

107 100

109 91.1 74.6 112.0



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V

10.91

80000

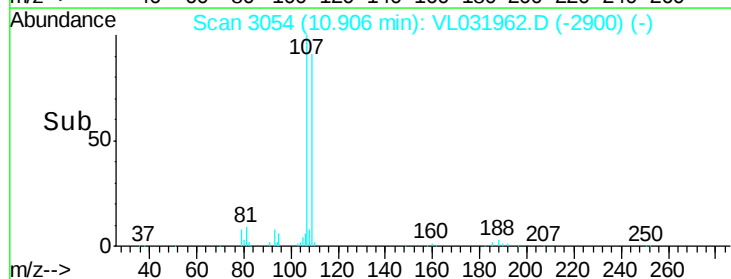
60000

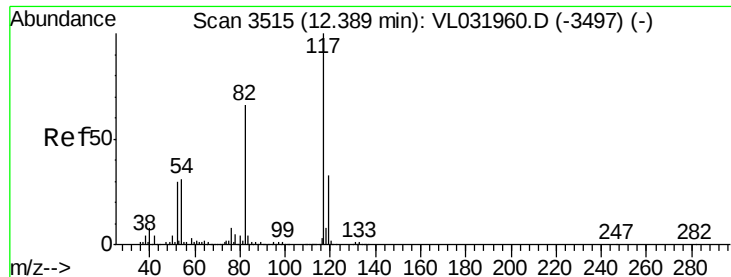
40000

20000

0

Time-->





#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.39 min Scan# 3514

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion:117 Resp: 2594115

Ion Ratio Lower Upper

117 100

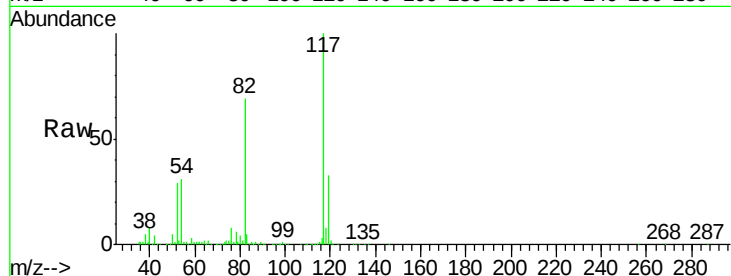
82 66.0 54.6 81.8

119 34.5 26.0 39.0

Manual Integrations
APPROVED

MMDadoda

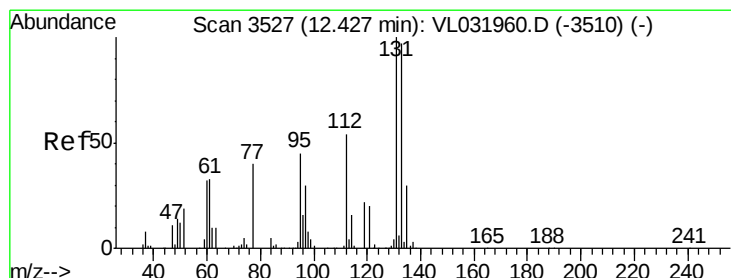
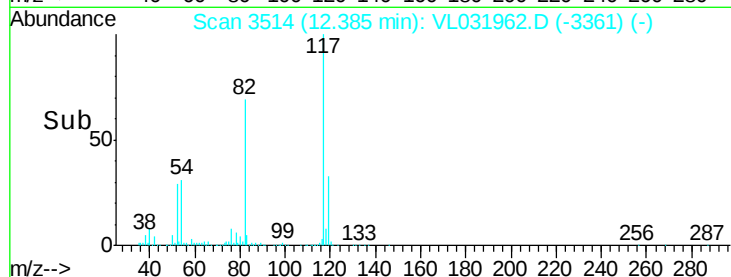
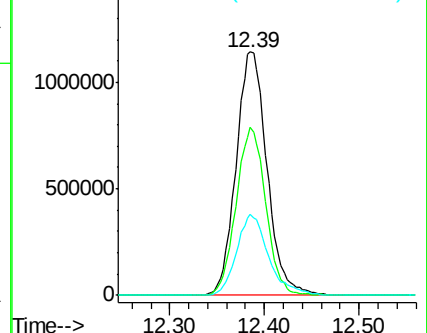
5/4/2018 5:00:57 PM



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#56

1,1,1,2-Tetrachloroethane

Concen: 1.07 ppbv m

RT: 12.43 min Scan# 3527

Delta R.T. -0.00 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

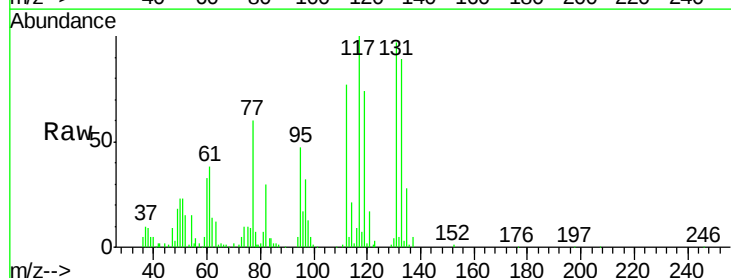
Tgt Ion:131 Resp: 130922

Ion Ratio Lower Upper

131 100

133 97.0 76.1 114.1

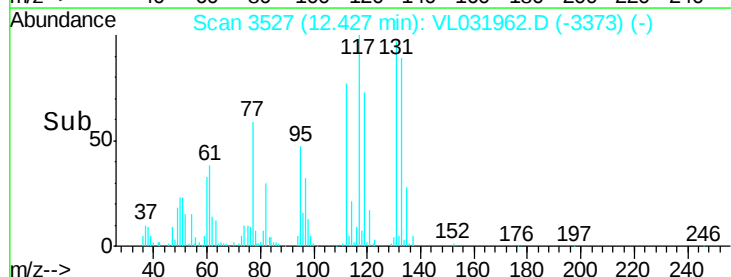
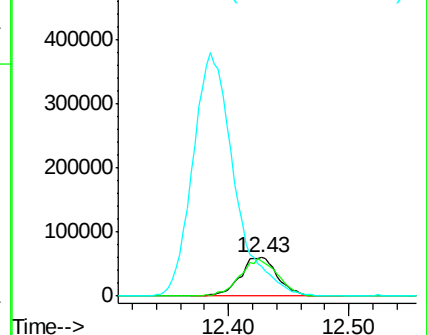
119 0.0 106.3 159.5#

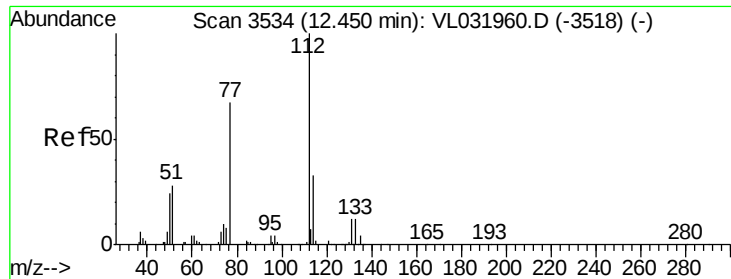


Abundance Ion 131.00 (130.70 to 131.70): V

Ion 133.00 (132.70 to 133.70): V

Ion 119.00 (118.70 to 119.70): V





#57

Chlorobenzene

Concen: 1.12 ppbv

RT: 12.45 min Scan# 3533

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

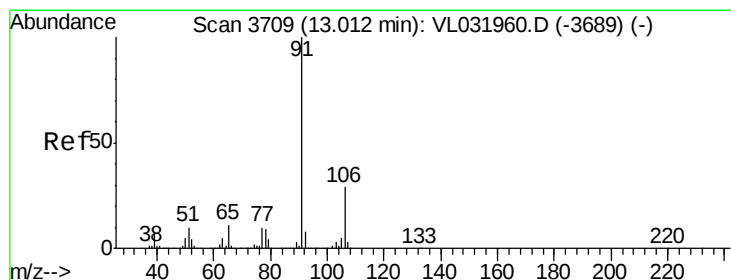
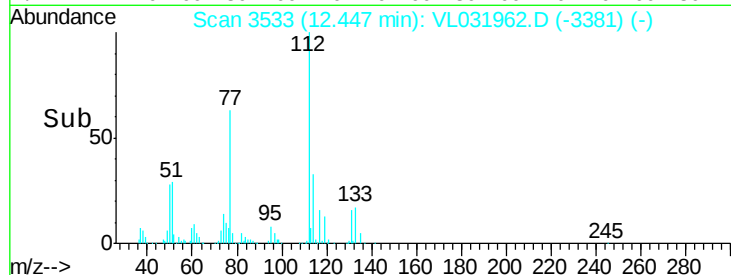
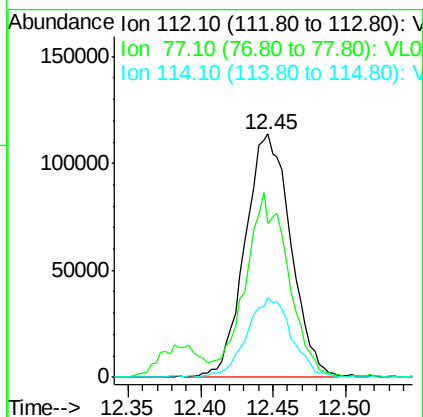
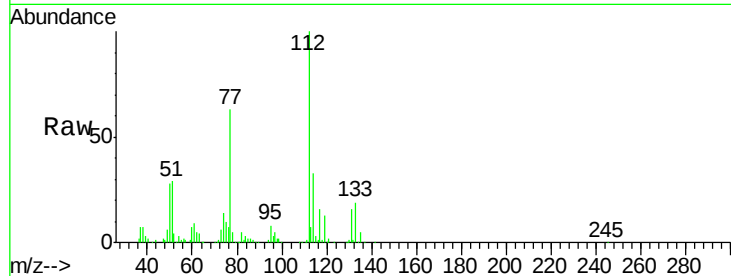
ClientSampleId :

VSTDIC001

Tot Ion:	112	Resp:	247361
Ion Ratio	Lower	Upper	
112	100		
77	62.6	57.0	85.6
114	32.7	28.5	34.9

Manual Integrations
APPROVED

MMDadoda
5/4/2018 5:00:57 PM



#58

Ethyl Benzene

Concen: 1.09 ppbv

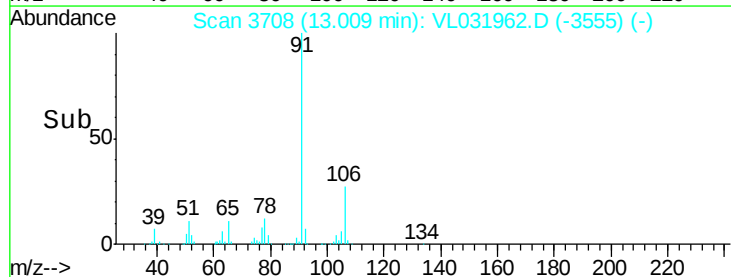
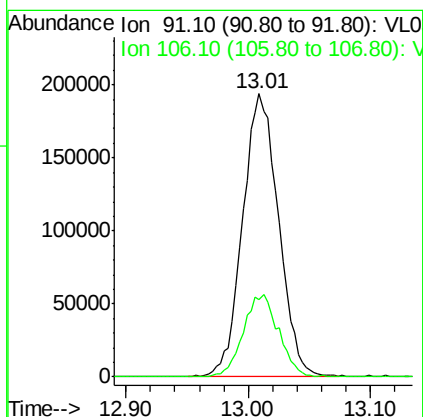
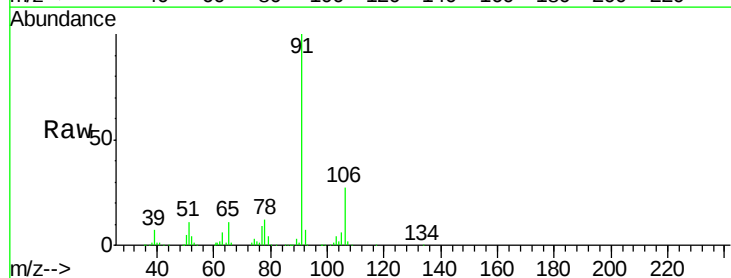
RT: 13.01 min Scan# 3708

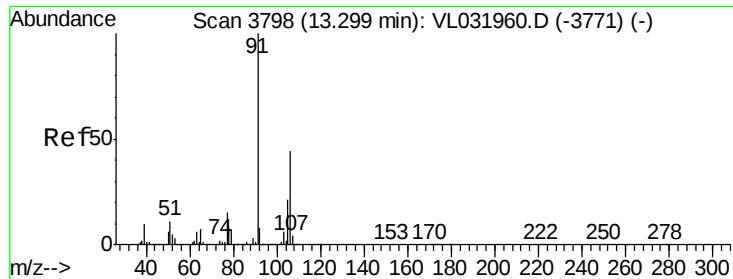
Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Tgt Ion:	91	Resp:	392716
Ion Ratio	Lower	Upper	
91	100		
106	27.4	23.8	35.6





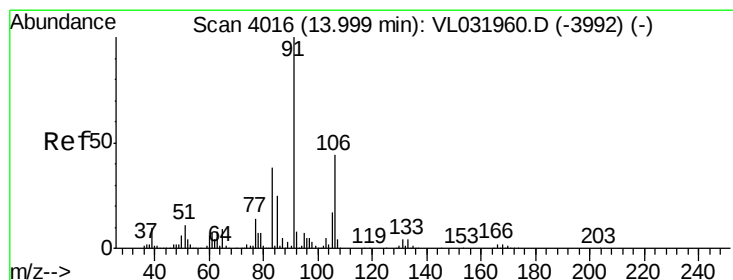
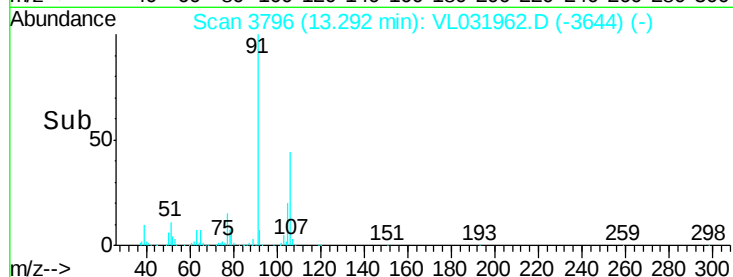
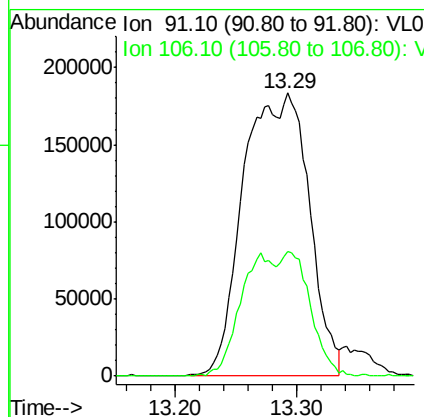
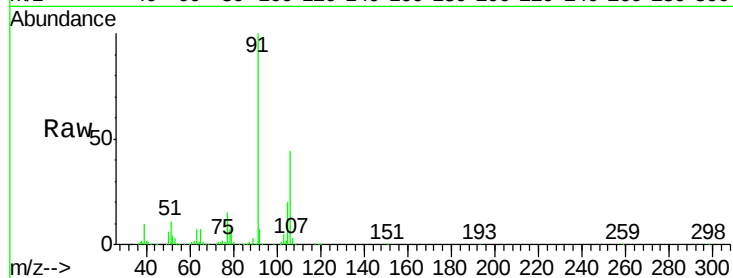
#59
m/p-Xylene
Concen: 2.20 ppbv m
RT: 13.29 min Scan# 3796
Delta R.T. -0.01 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	91	Resp	688091
Ion Ratio	100	Lower	Upper
106	43.9	35.5	53.3

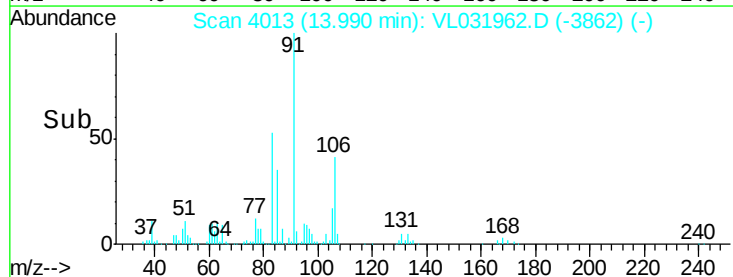
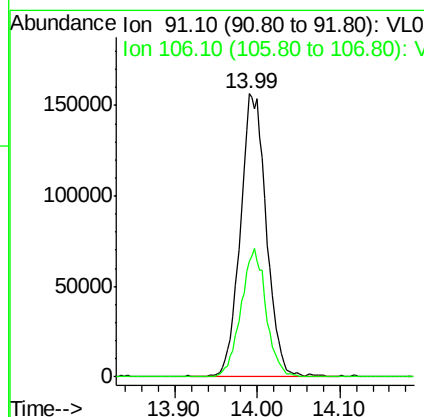
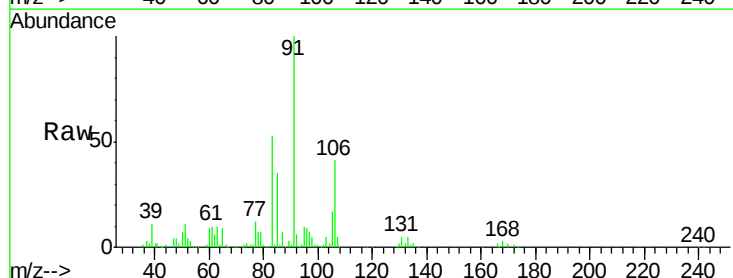
Manual Integrations
APPROVED

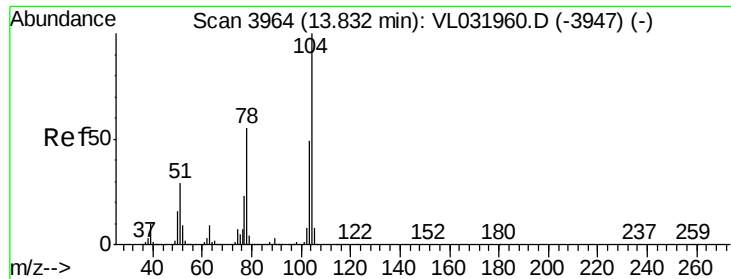
MMDadoda
5/4/2018 5:00:57 PM



#60
o-Xylene
Concen: 1.11 ppbv m
RT: 13.99 min Scan# 4013
Delta R.T. -0.01 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Tgt Ion	91	Resp	346011
Ion Ratio	100	Lower	Upper
106	43.5	21.3	63.9





#61

Stvrene

Concen: 0.96 ppbv m

RT: 13.84 min Scan# 3965

Delta R.T. -0.00 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

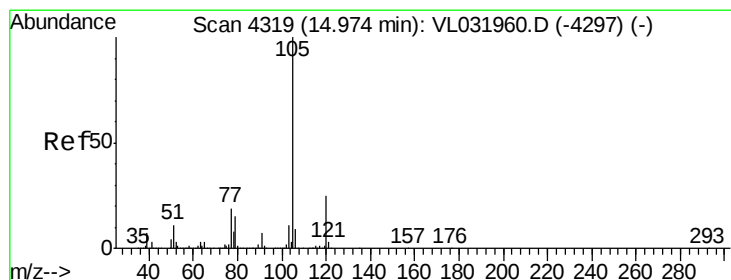
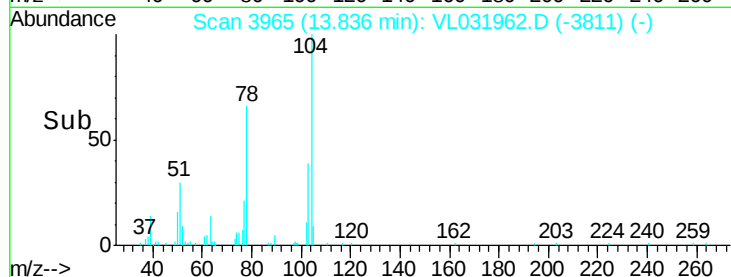
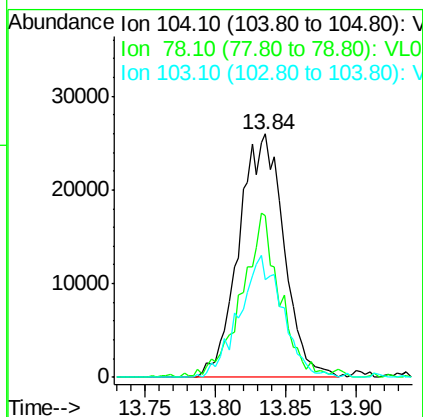
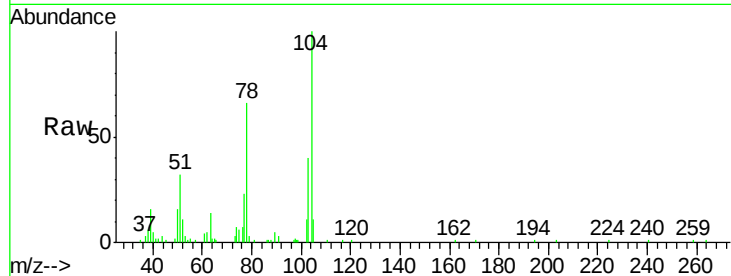
ClientSampleId :

VSTDIC001

Tot Ion:	104	Resp:	57413
Ion Ratio	Lower	Upper	
104	100		
78	58.7	44.4	66.6
103	48.3	37.9	56.9

Manual Integrations
APPROVED

MMDadoda
5/4/2018 5:00:57 PM



#62

Isopropylbenzene

Concen: 1.08 ppbv

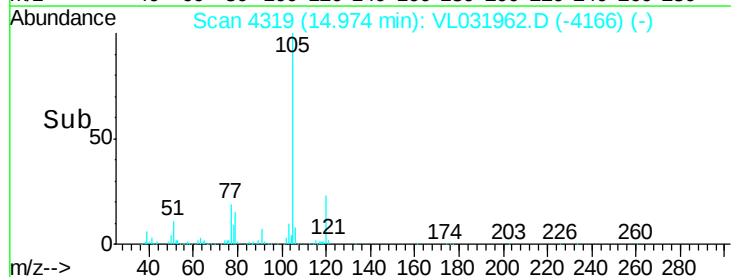
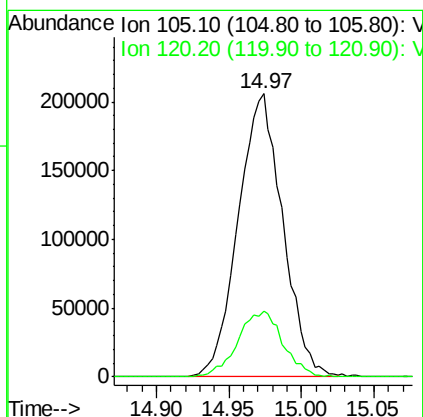
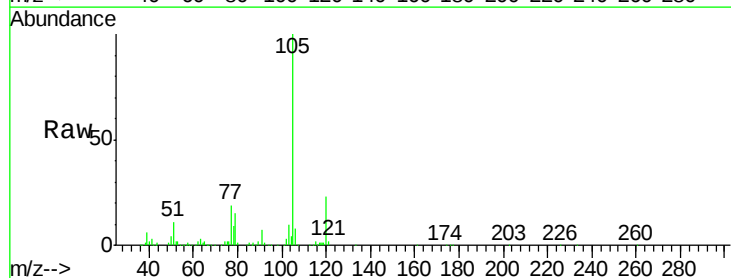
RT: 14.97 min Scan# 4319

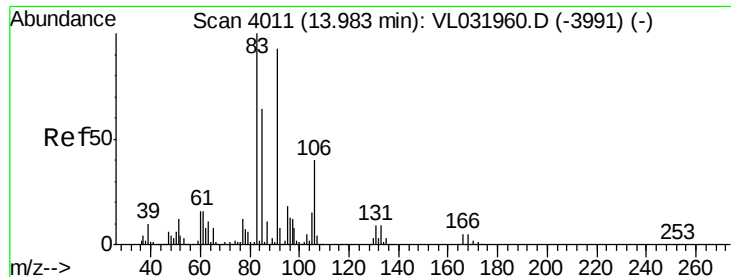
Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Tgt Ion:	105	Resp:	435476
Ion Ratio	Lower	Upper	
105	100		
120	23.8	19.4	29.2





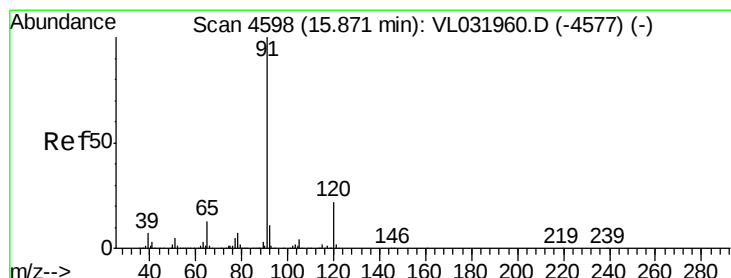
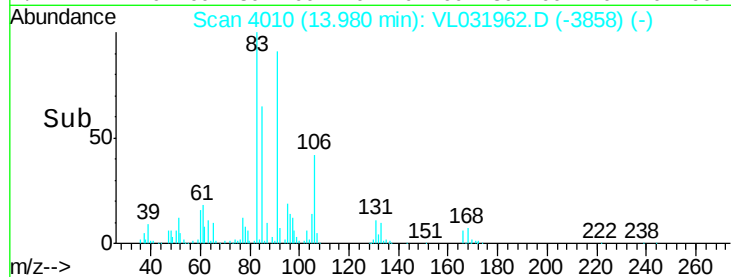
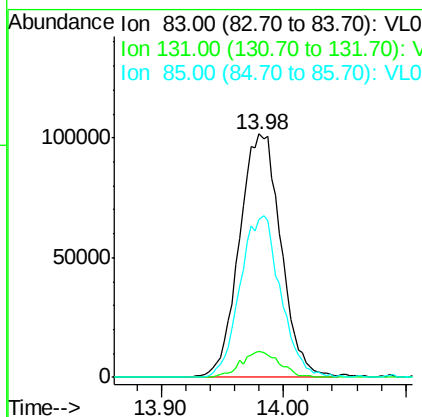
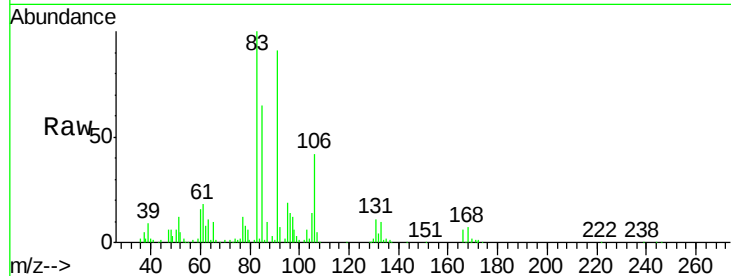
#63
 1,1,2,2-Tetrachloroethane
 Concen: 0.99 ppbv
 RT: 13.98 min Scan# 4010
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Resp	Lower	Upper
83	100	238979		
131	9.9	4.9	14.6	
85	64.6	32.2	96.6	

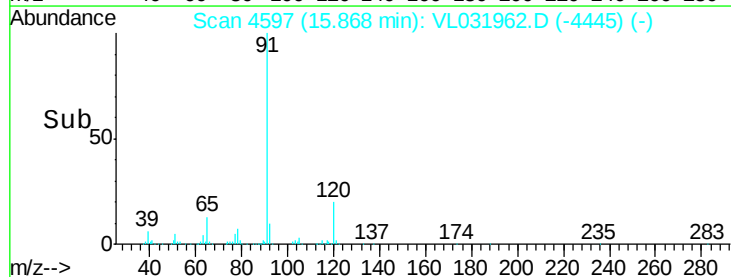
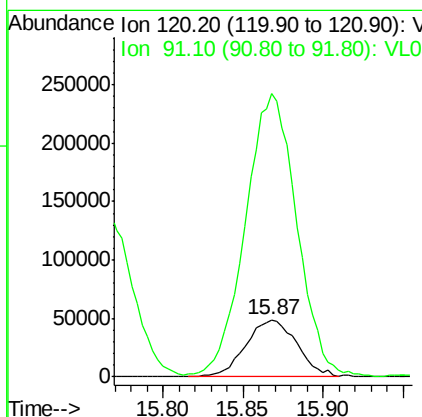
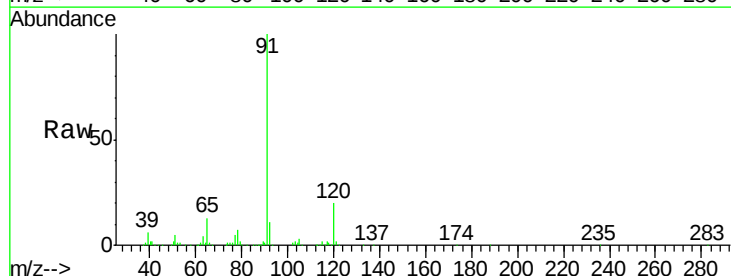
Manual Integrations
 APPROVED

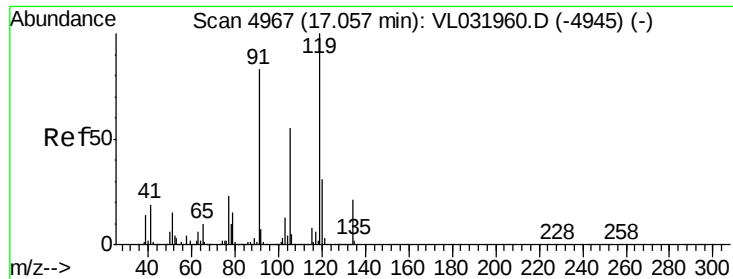
MMDadoda
 5/4/2018 5:00:57 PM



#64
 n-propylbenzene
 Concen: 1.10 ppbv
 RT: 15.87 min Scan# 4597
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Tgt Ion	Ratio	Resp	Lower	Upper
120	100	107434		
91	499.4	393.7	590.5	





#65

tert-Butylbenzene

Concen: 1.14 ppbv

RT: 17.05 min Scan# 4966

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

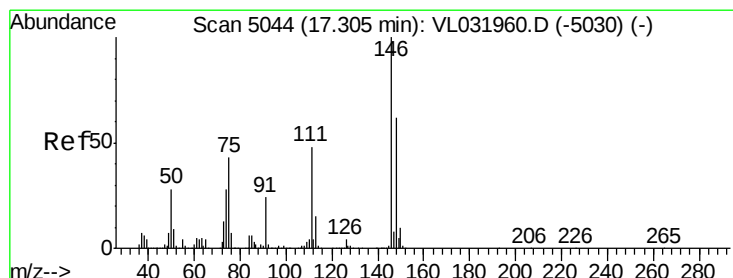
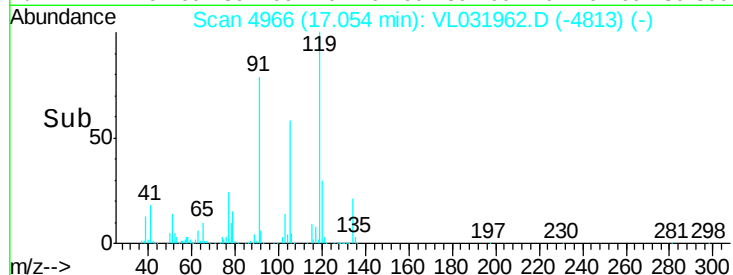
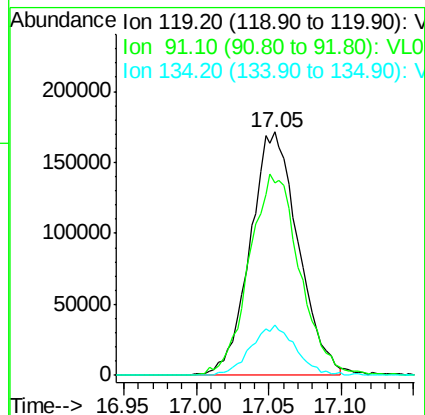
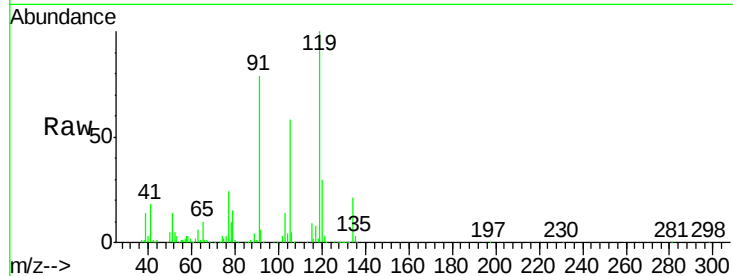
ClientSampleId :

VSTDIC001

Tot Ion:	119	Resp:	394017
Ion Ratio	Lower	Upper	
119	100		
91	87.7	69.4	104.0
134	19.4	15.4	23.2

Manual Integrations
APPROVED

MMDadoda
5/4/2018 5:00:57 PM



#66

Benzyl Chloride

Concen: 0.94 ppbv m

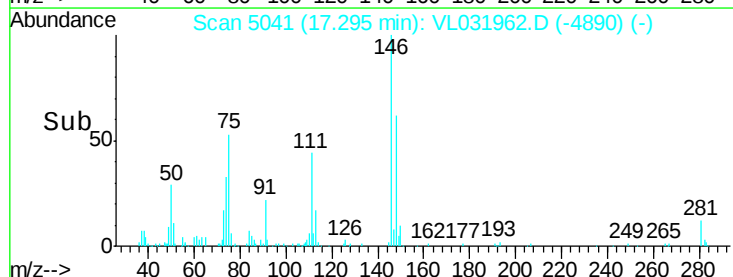
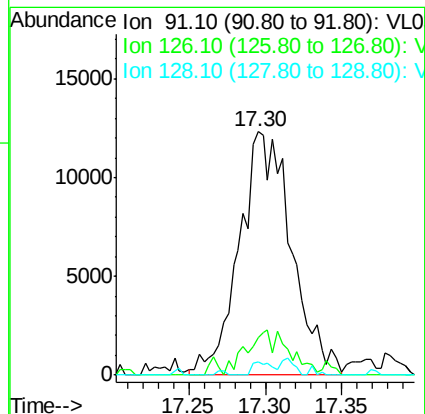
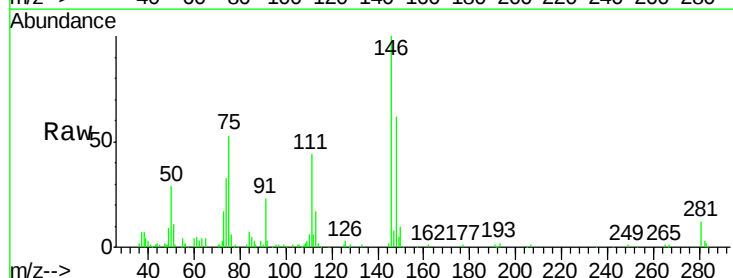
RT: 17.30 min Scan# 5041

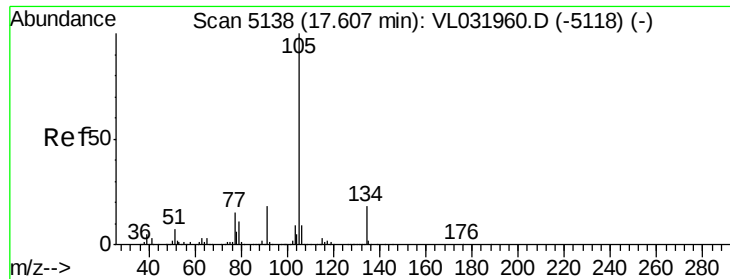
Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Tgt Ion:	91	Resp:	29188
Ion Ratio	Lower	Upper	
91	100		
126	17.2	12.6	19.0
128	4.4	4.0	6.0





#67

sec-Butylbenzene

Concen: 1.10 ppbv

RT: 17.60 min Scan# 5136

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 105 Resp: 546803

Ion Ratio Lower Upper

105 100

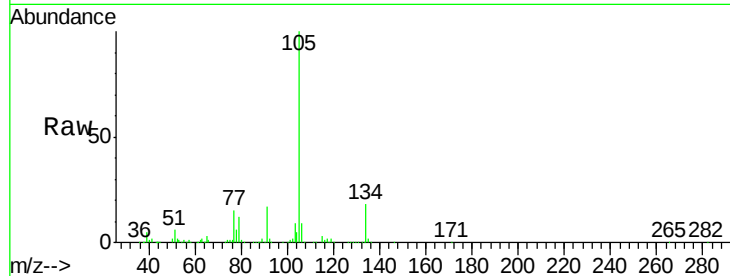
134 18.1 14.2 21.2

Manual Integrations

APPROVED

MMDadoda

5/4/2018 5:00:57 PM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

17.60

250000

200000

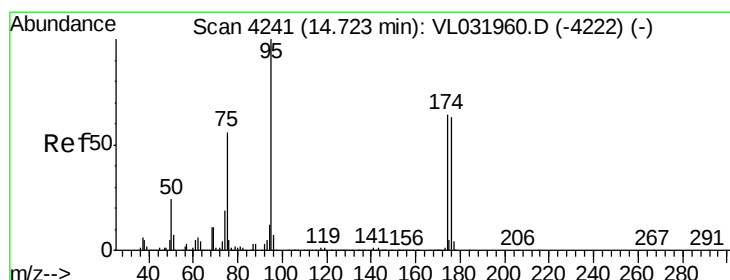
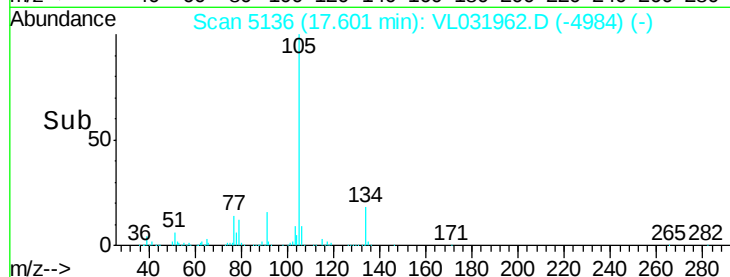
150000

100000

50000

0

Time--> 17.50 17.60



#68

1-Bromo-4-Fluorobenzene

Concen: 9.56 ppbv

RT: 14.72 min Scan# 4240

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

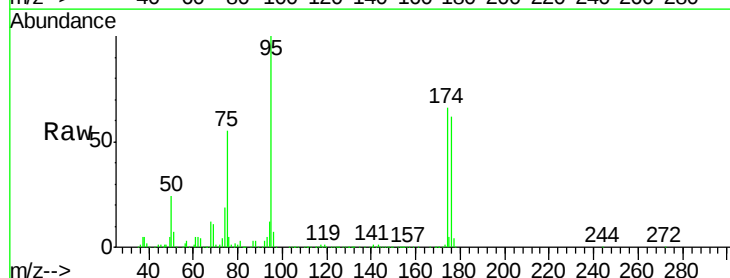
Tgt Ion: 95 Resp: 1994080

Ion Ratio Lower Upper

95 100

174 66.1 52.3 78.5

175 5.0 3.9 5.9



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

1200000

1000000

800000

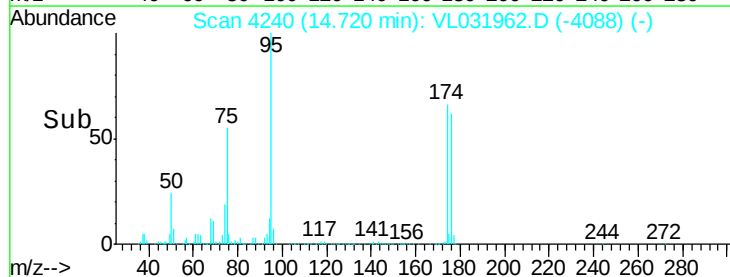
600000

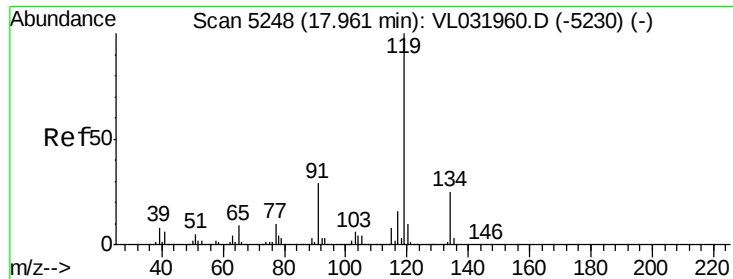
400000

200000

0

Time--> 14.70 14.80





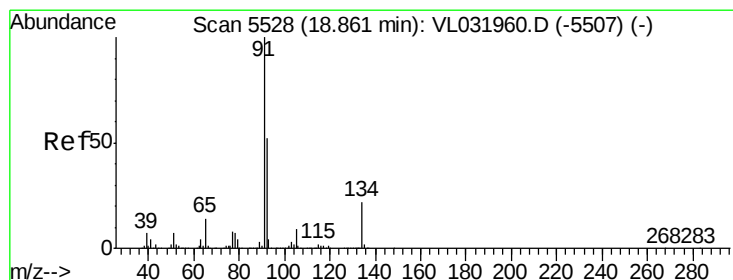
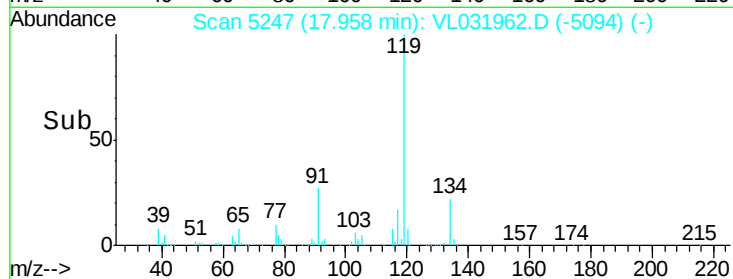
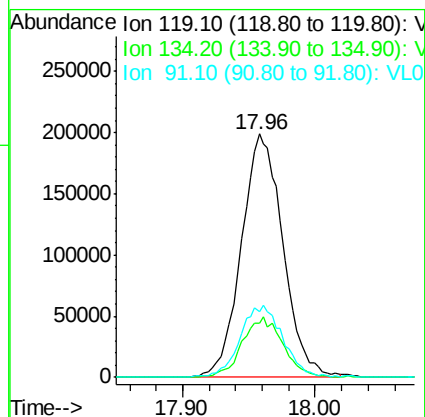
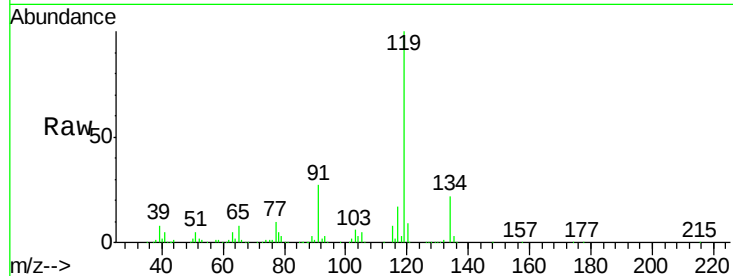
#69
 p-Isopropyltoluene
 Concen: 1.12 ppbv
 RT: 17.96 min Scan# 5247
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion:	119	Resp:	430257
Ion Ratio	Lower	Upper	
119	100		
134	24.5	20.0	30.0
91	30.8	24.9	37.3

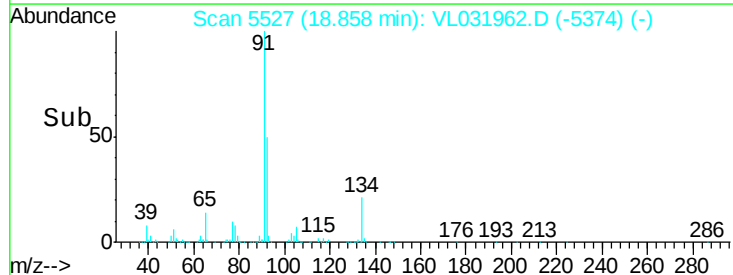
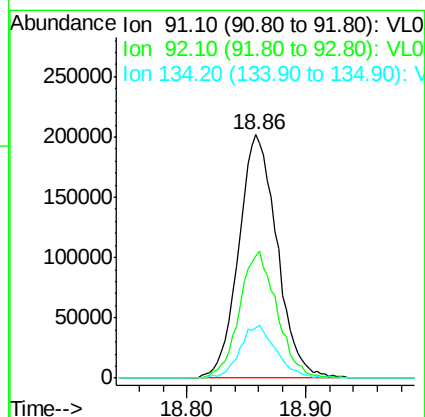
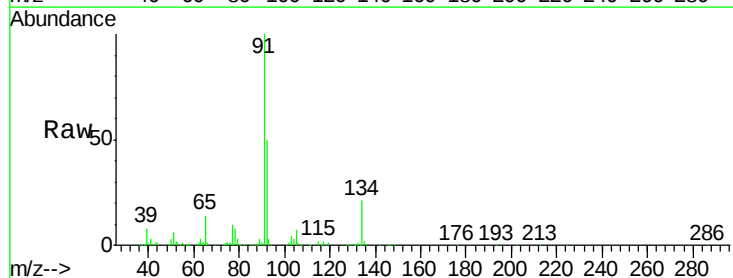
Manual Integrations
 APPROVED

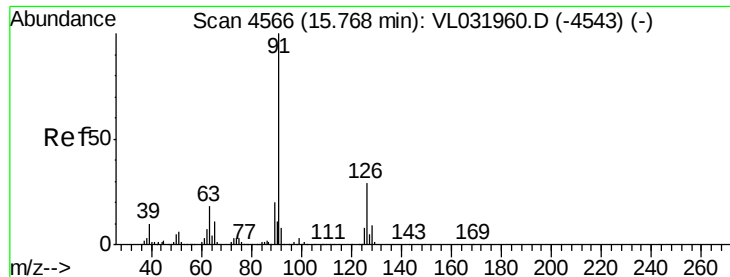
MMDadoda
 5/4/2018 5:00:57 PM



#70
 n-Butylbenzene
 Concen: 1.12 ppbv
 RT: 18.86 min Scan# 5527
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Tgt Ion:	91	Resp:	450524
Ion Ratio	Lower	Upper	
91	100		
92	51.1	42.2	63.4
134	20.6	17.4	26.0





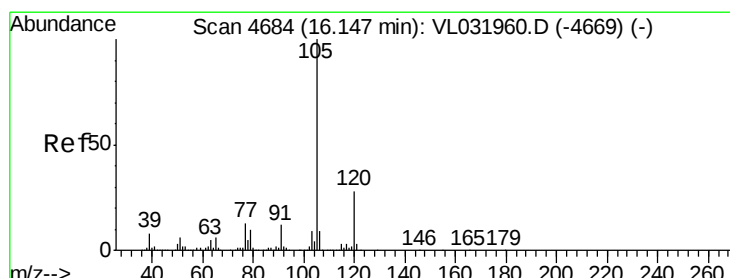
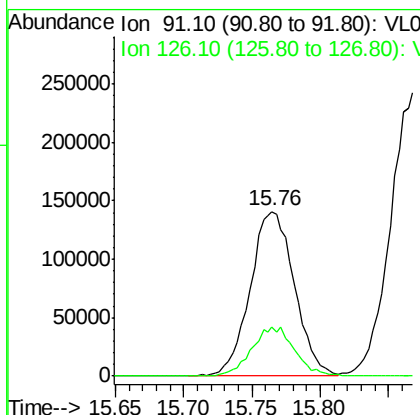
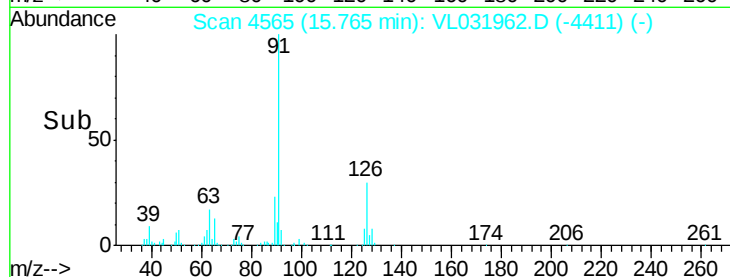
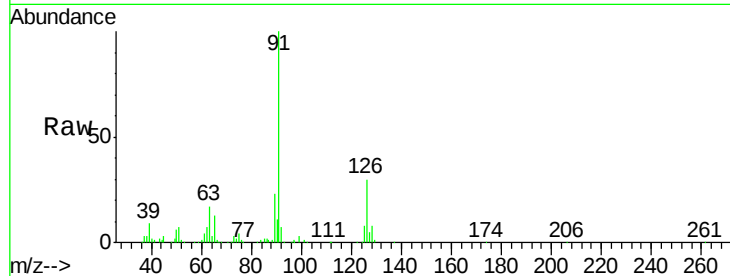
#71
 2-Chlorotoluene
 Concen: 1.09 ppbv
 RT: 15.76 min Scan# 4565
 Delta R.T. -0.00 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion: 91 Resp: 316875
 Ion Ratio Lower Upper
 91 100
 126 28.9 11.6 46.2

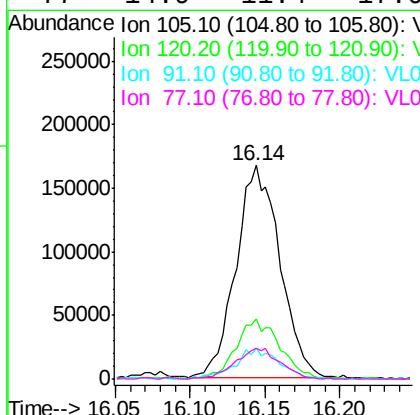
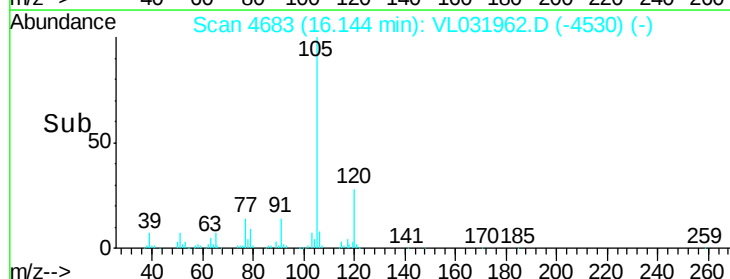
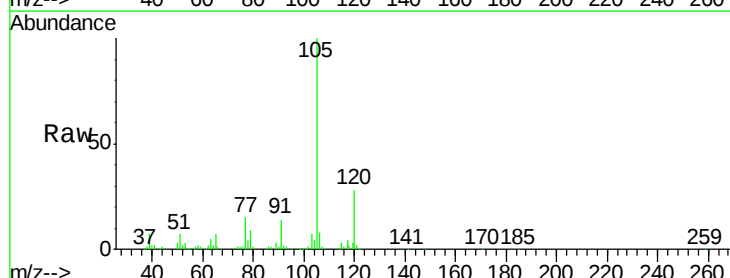
Manual Integrations
 APPROVED

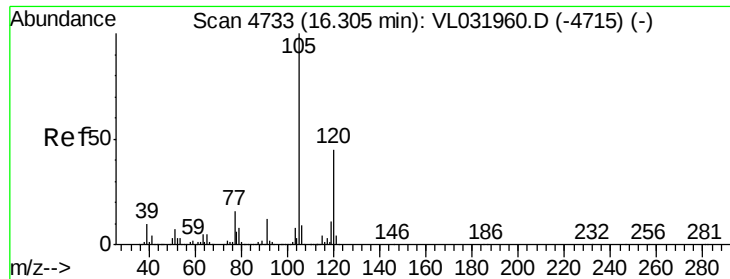
MMDadoda
 5/4/2018 5:00:57 PM



#72
 4-Ethyltoluene
 Concen: 1.06 ppbv
 RT: 16.14 min Scan# 4683
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Tgt Ion: 105 Resp: 339790
 Ion Ratio Lower Upper
 105 100
 120 29.2 22.7 34.1
 91 14.6 10.6 16.0
 77 14.9 11.4 17.0





#73

1,3,5-Trimethylbenzene

Concen: 1.08 ppbv

RT: 16.30 min Scan# 4732

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion:105 Resp: 315231

Ion Ratio Lower Upper

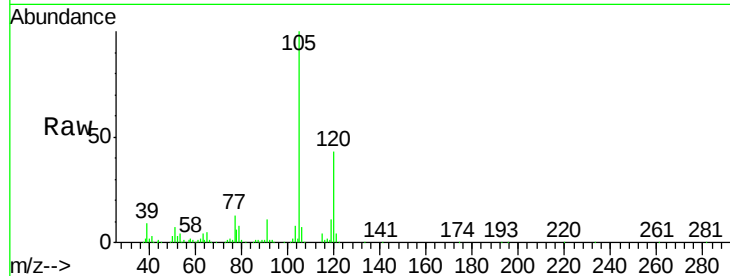
105 100

120 43.5 35.3 52.9

Manual Integrations
APPROVED

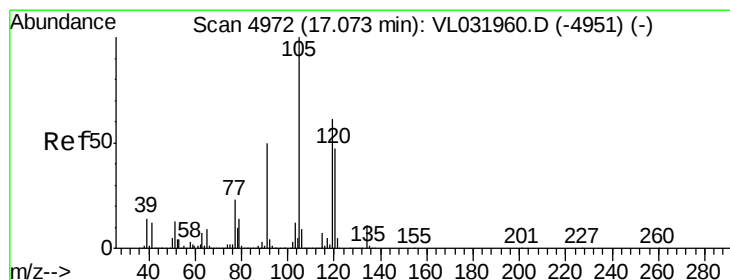
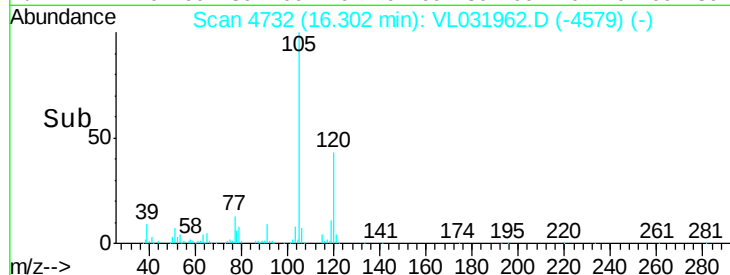
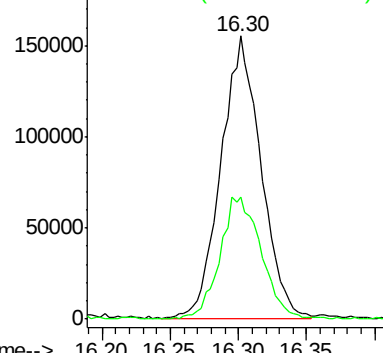
MMDadoda

5/4/2018 5:00:57 PM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 1.10 ppbv

RT: 17.07 min Scan# 4971

Delta R.T. -0.01 min

Lab File: VL031962.D

Acq: 3 May 2018 12:44

Tgt Ion:105 Resp: 358185

Ion Ratio Lower Upper

105 100

120 43.7 37.0 55.4

91 46.9 43.0 64.4

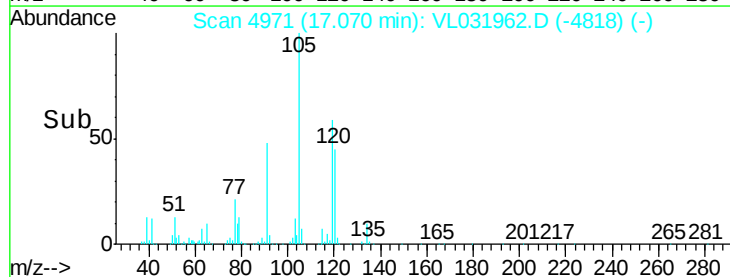
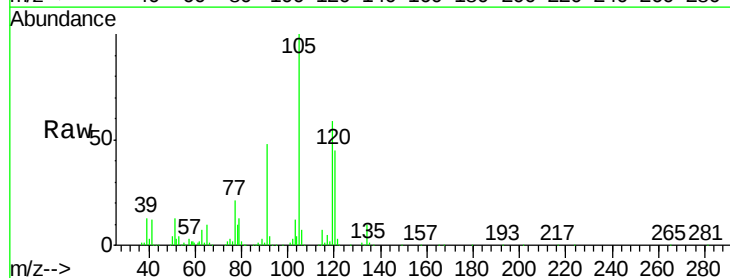
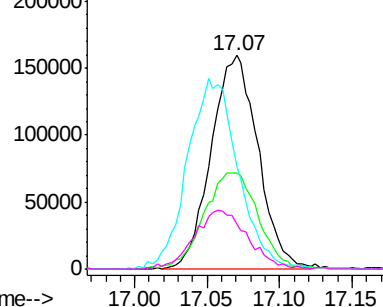
77 20.9 18.7 28.1

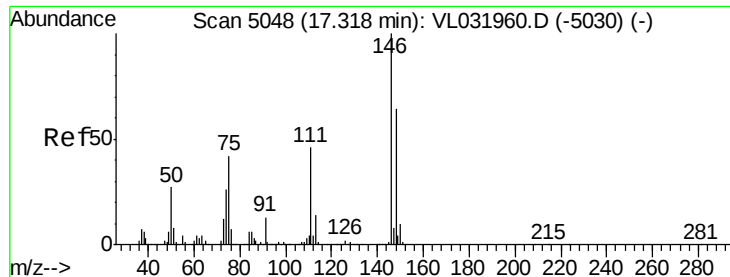
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





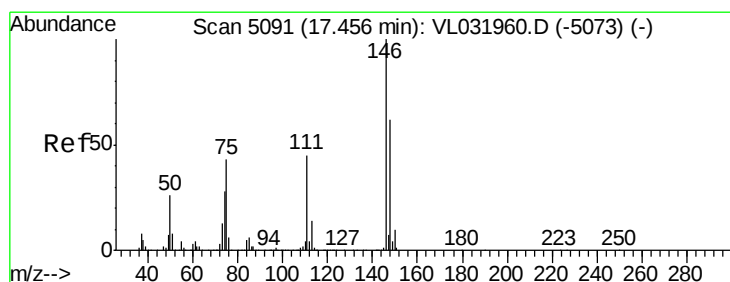
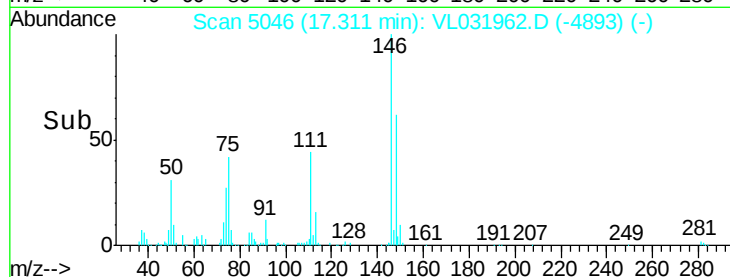
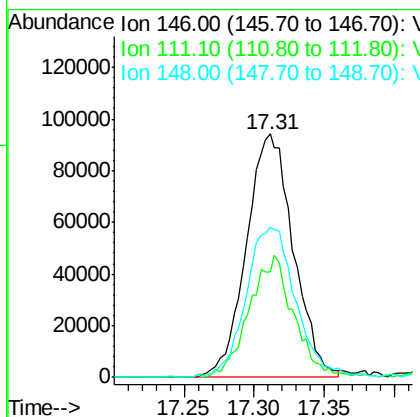
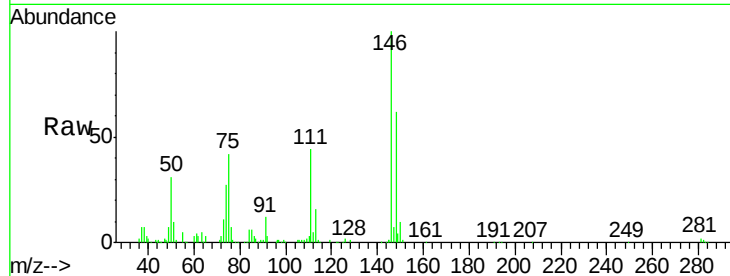
#75
 1,3-Dichlorobenzene
 Concen: 1.09 ppbv
 RT: 17.31 min Scan# 5046
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Lower	Upper
146	100		
111	48.3	23.8	71.4
148	65.5	32.0	96.2

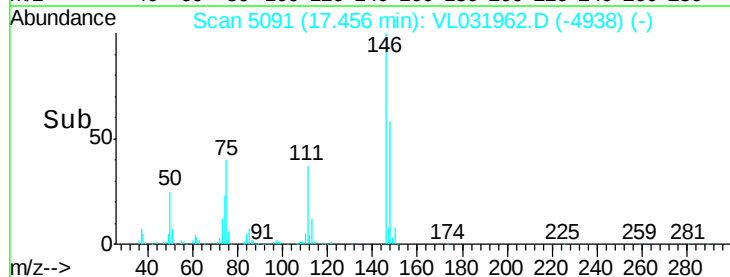
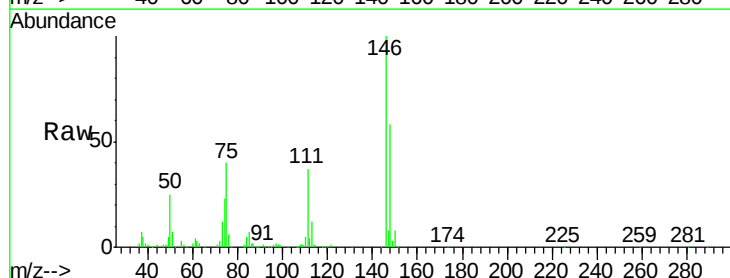
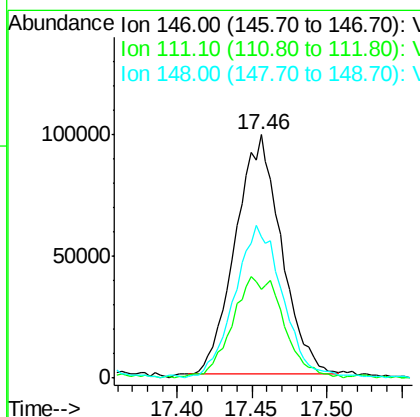
Manual Integrations
 APPROVED

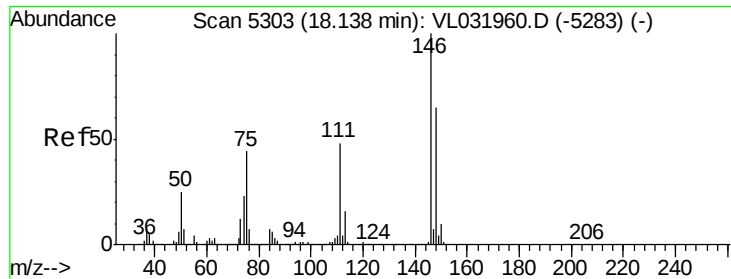
MMDadoda
 5/4/2018 5:00:57 PM



#76
 1,4-Dichlorobenzene
 Concen: 1.08 ppbv
 RT: 17.46 min Scan# 5091
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Tgt Ion	Ratio	Lower	Upper
146	100		
111	48.1	22.9	68.7
148	68.3	32.0	96.0





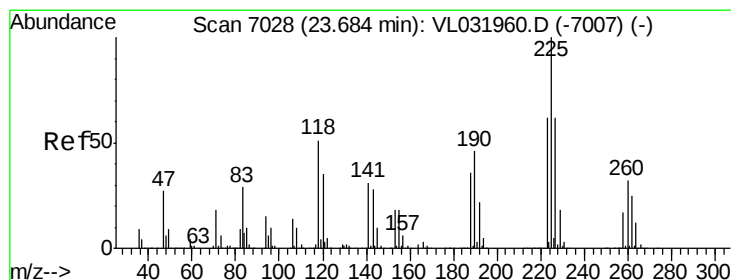
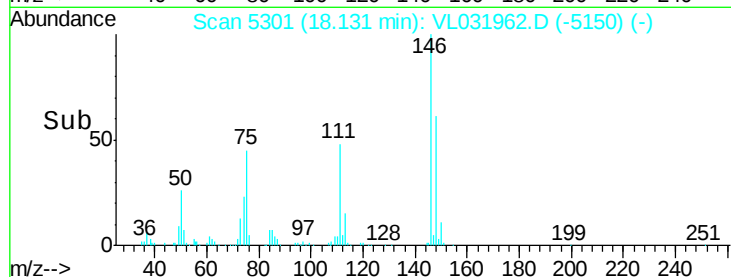
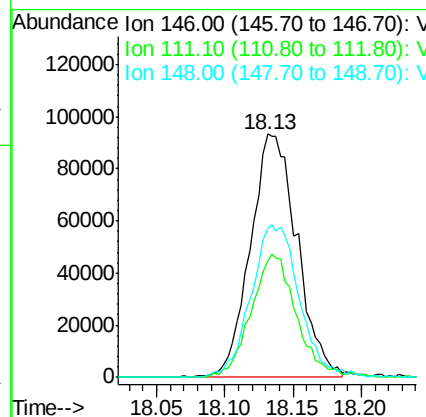
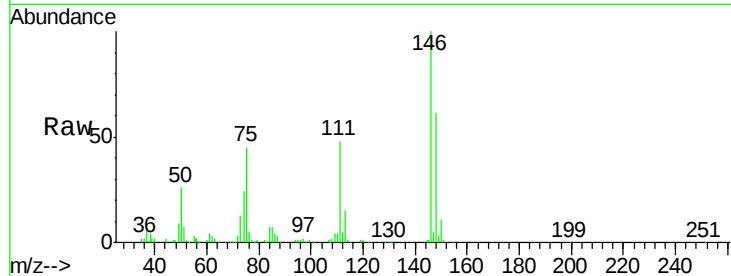
#77
 1,2-Dichlorobenzene
 Concen: 1.12 ppbv
 RT: 18.13 min Scan# 5301
 Delta R.T. -0.01 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Lower	Upper
146	100		
111	49.4	24.3	72.8
148	65.0	31.8	95.3

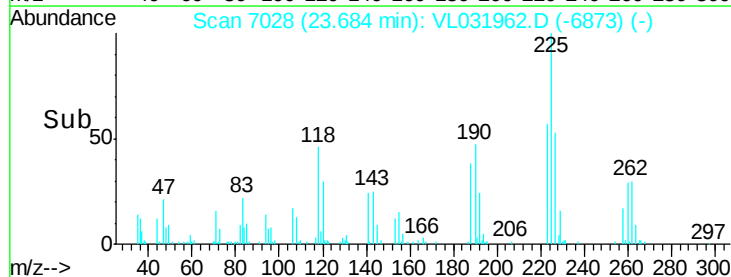
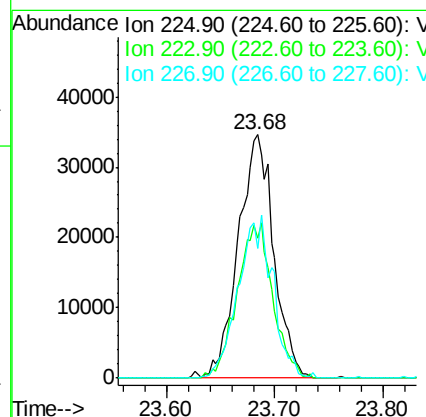
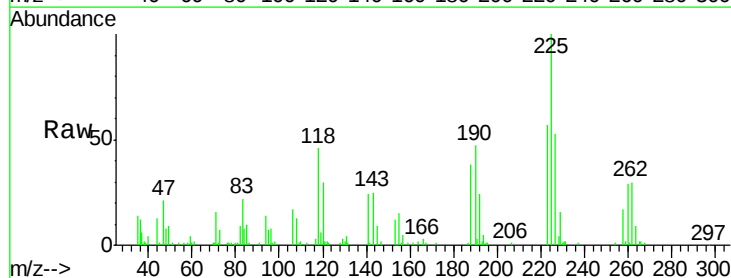
Manual Integrations
 APPROVED

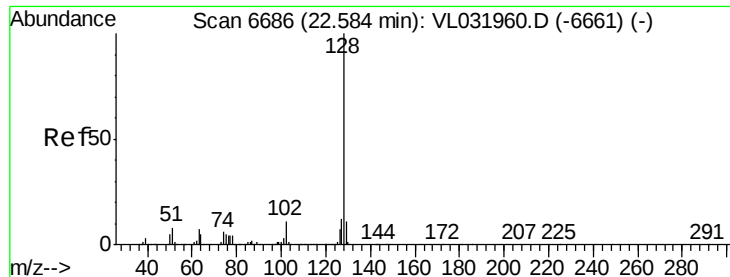
MMDadoda
 5/4/2018 5:00:57 PM



#78
 Hexachloro-1,3-Butadiene
 Concen: 1.04 ppbv m
 RT: 23.68 min Scan# 7028
 Delta R.T. -0.00 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Tgt Ion	Ratio	Lower	Upper
225	100		
223	63.9	50.6	76.0
227	65.6	52.2	78.4





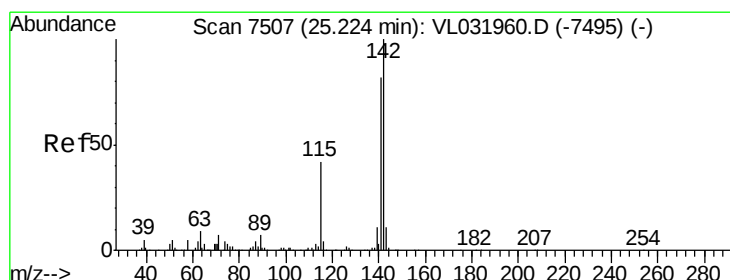
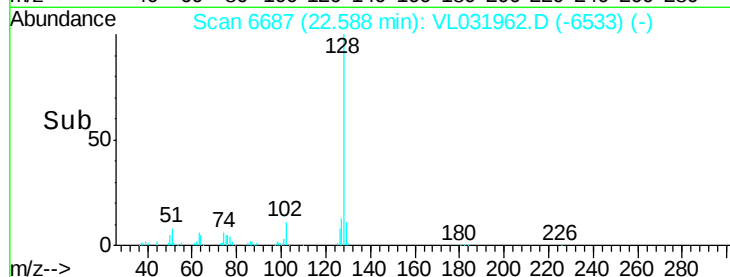
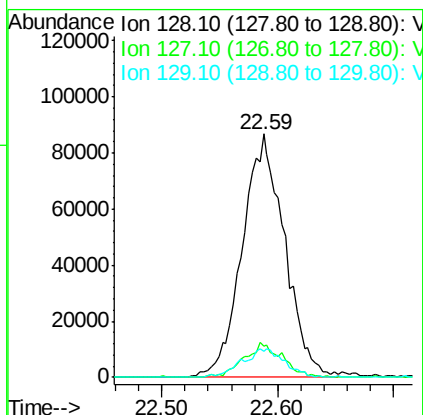
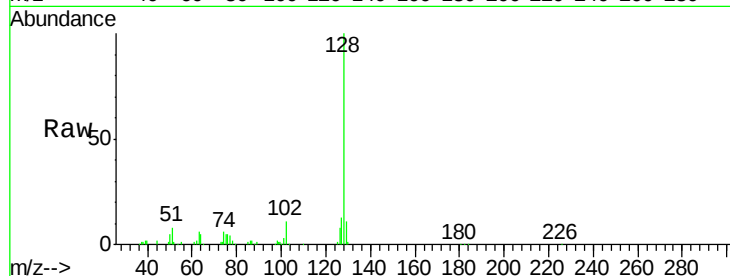
#79
Naphthalene
Concen: 1.20 ppbv
RT: 22.59 min Scan# 6687
Delta R.T. -0.00 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	Ratio	Resp	Lower	Upper
128	100	219925		
127	13.0		10.2	15.4
129	10.9		9.4	14.2

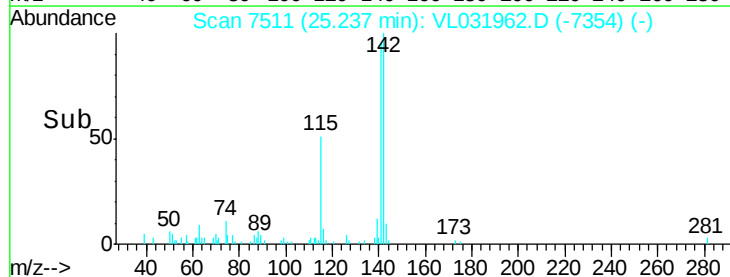
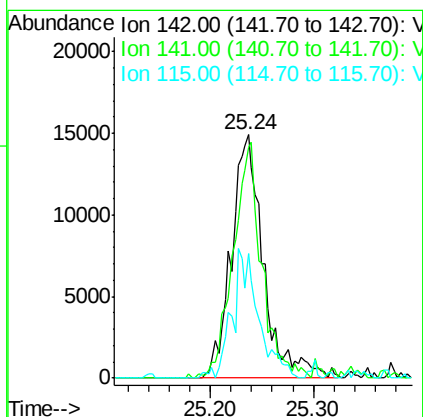
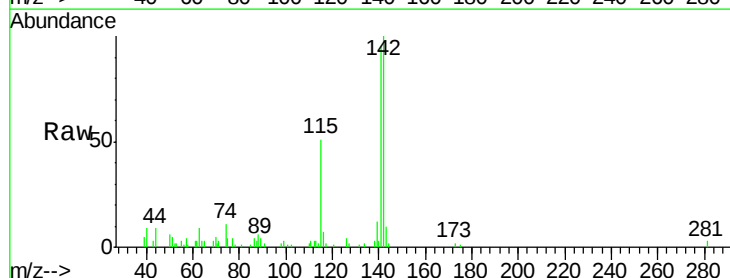
Manual Integrations
APPROVED

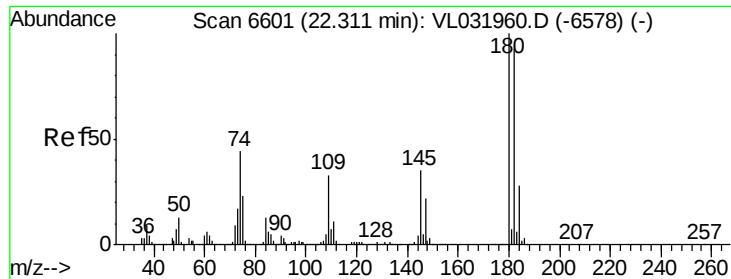
MMDadoda
5/4/2018 5:00:57 PM



#80
Naphthalene, 2-methyl-
Concen: 0.90 ppbv
RT: 25.24 min Scan# 7511
Delta R.T. 0.01 min
Lab File: VL031962.D
Acq: 3 May 2018 12:44

Tgt Ion	Ratio	Resp	Lower	Upper
142	100	32358		
141	88.5		67.0	100.4
115	45.4		35.3	52.9





#81
 1,2,4-Trichlorobenzene
 Concen: 1.27 ppbv m
 RT: 22.31 min Scan# 6602
 Delta R.T. 0.00 min
 Lab File: VL031962.D
 Acq: 3 May 2018 12:44

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Resp	Lower	Upper
180	100	129004		
182	95.8		76.3	114.5
184	0.0		24.2	36.2#

Manual Integrations
 APPROVED

MMDadoda
 5/4/2018 5:00:57 PM

