

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL053118\
 Data File : VL032017.D
 Acq On : 31 May 2018 16:46
 Operator : SY/AP
 Sample : VSTDIC002
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC002

Manual Integrations
 APPROVED

MMDadoda
 6/4/2018 10:54:53 AM

Quant Time: Jun 01 02:14:08 2018
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL053118AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 01
 QLast Update : Fri Jun 01 01:58:27 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.86	49	1428890	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.40	114	2729334	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.36	117	2711047	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.70	95	2049703	9.73	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.30%

Target Compounds						Ovalue
2) Dichlorodifluoromethane	3.15	85	303756	1.67	ppbv	95
3) Chlorodifluoromethane	3.08	51	273315	2.04	ppbv	98
4) Chloromethane	3.24	50	142440	2.05	ppbv	97
5) Vinyl Chloride	3.37	62	150553	1.90	ppbv	96
6) Bromomethane	3.59	94	105280	2.04	ppbv	97
7) Chloroethane	3.68	64	62788	2.07	ppbv	100
8) Dichlorotetrafluoroethane	3.29	85	374302	2.01	ppbv	99
9) Propene	3.11	41	90399	1.86	ppbv	94
10) Heptane	8.36	43	331766	1.96	ppbv	98
11) Trichlorofluoromethane	4.09	101	586076	2.53	ppbv	97
12) 1,1,2-Trichlorotrifluoroet	4.64	101	372697	2.26	ppbv	99
13) Ethanol	3.73	45	32879	1.80	ppbv	98
14) Bromoethene	3.87	108	141980	2.39	ppbv	97
15) Acetone	3.99	43	393937	1.97	ppbv	98
16) 1,3-Butadiene	3.44	39	126077	1.95	ppbv	92
17) tert-Butyl alcohol	4.45	59	176332m	2.11	ppbv	
18) 1,1-Dichloroethene	4.44	96	165117	2.30	ppbv	97
19) Isopropyl Alcohol	4.11	45	250442	2.25	ppbv #	97
20) Methylene Chloride	4.50	84	164653	2.39	ppbv	97
21) Allyl Chloride	4.57	41	251084	2.16	ppbv	97
22) trans-1,2-Dichloroethene	5.06	96	169339	2.12	ppbv	97
23) Vinyl Acetate	5.25	43	476408	2.05	ppbv	97
24) 1,1-Dichloroethane	5.19	63	459829	2.10	ppbv	97
25) Ethyl Acetate	5.87	43	726072	2.09	ppbv	100
26) Hexane	5.88	57	344365	2.10	ppbv	99
27) Carbon Disulfide	4.71	76	422633	2.24	ppbv	100
28) Methyl tert-Butyl Ether	5.22	73	414758	2.06	ppbv	100
29) Chloroform	5.95	83	569151	2.18	ppbv	97
30) Cyclohexane	7.36	84	205388	1.90	ppbv	90
31) cis-1,2-Dichloroethene	5.74	61	301196	2.00	ppbv	98
32) 1,1,1-Trichloroethane	6.73	97	430702	1.81	ppbv	99
34) 2-Butanone	5.43	43	454292	2.01	ppbv	100
35) Carbon Tetrachloride	7.25	117	457509	2.09	ppbv	95
36) Benzene	7.12	78	505878	1.97	ppbv	98
37) 1,2-Dichloroethane	6.52	62	365406	2.02	ppbv	100
38) Trichloroethene	8.08	130	211329	2.16	ppbv	97
39) 1,2-Dichloropropane	7.85	63	183234	2.04	ppbv	96
40) 1,4-Dioxane	8.09	88	71908	1.79	ppbv	69
41) Tetrahydrofuran	6.27	42	218964m	2.25	ppbv	
42) Bromodichloromethane	8.03	83	452107	2.17	ppbv	96
43) Methyl Methacrylate	8.25	69	181227	2.07	ppbv	99

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL053118\
 Data File : VL032017.D
 Acq On : 31 May 2018 16:46
 Operator : SY/AP
 Sample : VSTDIC002
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC002

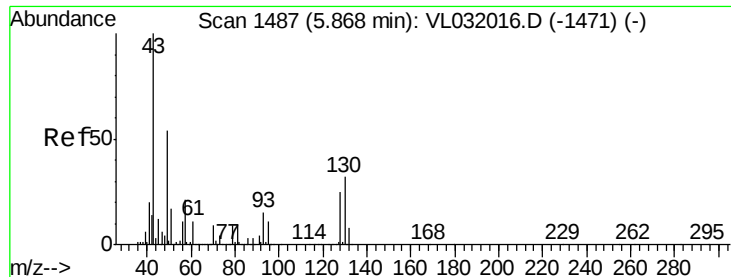
Manual Integrations
 APPROVED

MMDadoda
 6/4/2018 10:54:53 AM

Quant Time: Jun 01 02:14:08 2018
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL053118AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 01 02:14:08 2018
 QLast Update : Fri Jun 01 01:58:27 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	8.11	57	880833	2.11	ppbv	99
45) t-1,3-Dichloropropene	9.54	75	237161	2.04	ppbv	97
46) cis-1,3-Dichloropropene	8.95	75	300196	2.10	ppbv	99
47) 1,1,2-Trichloroethane	9.74	97	228662	2.15	ppbv	94
48) Dibromochloromethane	10.58	129	373385	2.17	ppbv	99
49) Bromoform	13.33	173	302209	2.25	ppbv	97
50) 4-Methyl-2-Pentanone	8.99	43	451820	2.12	ppbv	98
51) 2-Hexanone	10.40	43	404786	2.09	ppbv #	95
52) Tetrachloroethene	11.50	164	199173m	2.09	ppbv	
53) Toluene	10.07	91	588816	2.12	ppbv	98
54) 1,2-Dibromoethane	10.89	107	336266	2.12	ppbv	88
56) 1,1,1,2-Tetrachloroethane	12.41	131	275473m	2.21	ppbv	
57) Chlorobenzene	12.43	112	517714	2.18	ppbv	98
58) Ethyl Benzene	12.99	91	846344	2.15	ppbv	97
59) m/p-Xylene	13.27	91	1462635m	4.36	ppbv	
60) o-Xylene	13.97	91	758424	2.25	ppbv	98
61) Styrene	13.81	104	136046	2.00	ppbv	97
62) Isopropylbenzene	14.95	105	939822	2.19	ppbv	99
63) 1,1,2,2-Tetrachloroethane	13.96	83	536049	2.25	ppbv	100
64) n-propylbenzene	15.85	120	233117	2.16	ppbv	96
65) tert-Butylbenzene	17.03	119	821854	2.15	ppbv	98
66) Benzyl Chloride	17.28	91	82686m	2.32	ppbv	
67) sec-Butylbenzene	17.58	105	1195517	2.25	ppbv	99
69) p-Isopropyltoluene	17.94	119	948114	2.23	ppbv	100
70) n-Butylbenzene	18.84	91	947877	2.16	ppbv	100
71) 2-Chlorotoluene	15.74	91	690169	2.19	ppbv	100
72) 4-Ethyltoluene	16.12	105	745913	2.18	ppbv	99
73) 1,3,5-Trimethylbenzene	16.28	105	677484	2.15	ppbv	98
74) 1,2,4-Trimethylbenzene	17.05	105	747415	2.14	ppbv	95
75) 1,3-Dichlorobenzene	17.29	146	497352	2.29	ppbv	99
76) 1,4-Dichlorobenzene	17.43	146	482673	2.25	ppbv	99
77) 1,2-Dichlorobenzene	18.11	146	482435	2.23	ppbv	99
78) Hexachloro-1,3-Butadiene	23.66	225	189601	2.14	ppbv	99
79) Naphthalene	22.56	128	401629m	1.67	ppbv	
80) Naphthalene, 2-methyl-	25.21	142	38860	0.61	ppbv	96
81) 1,2,4-Trichlorobenzene	22.28	180	241883m	1.82	ppbv	

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



#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.86 min Scan# 1486

Delta R.T. -0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC002

Tot Ion: 49 Resp: 1428890

Ion Ratio Lower Upper

49 100

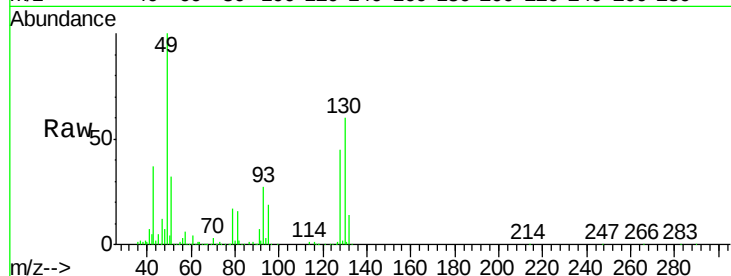
128 48.6 24.1 72.3

130 62.1 30.9 92.8

Manual Integrations
APPROVED

MMDadoda

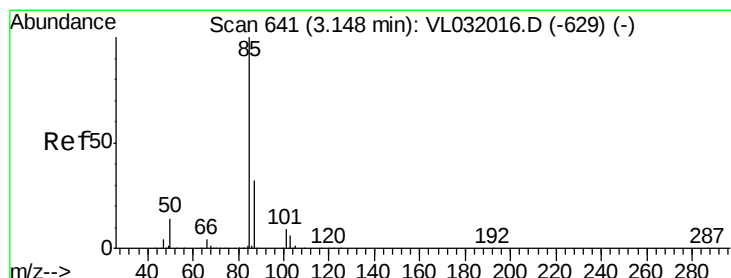
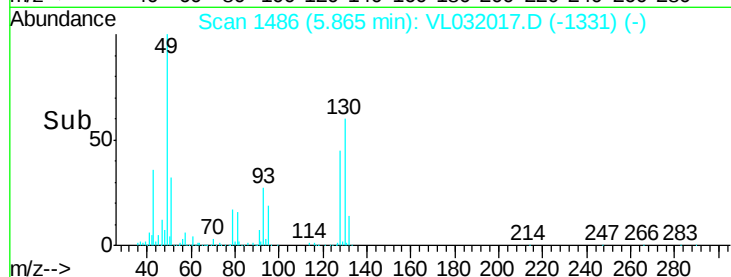
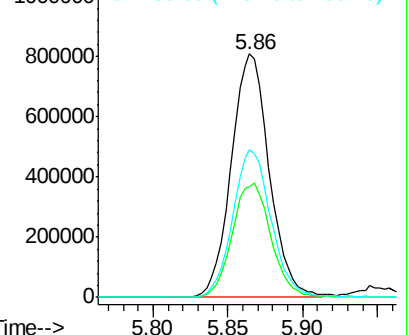
6/4/2018 10:54:53 AM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 1.67 ppbv

RT: 3.15 min Scan# 641

Delta R.T. 0.00 min

Lab File: VL032017.D

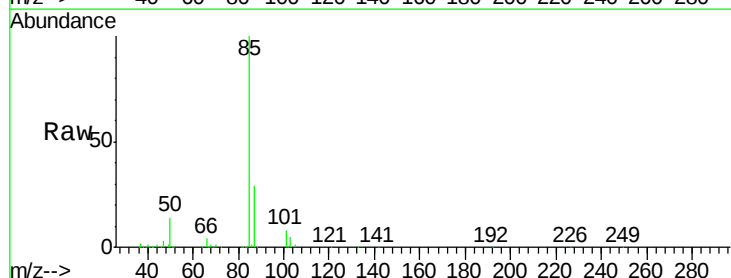
Acq: 31 May 2018 16:46

Tgt Ion: 85 Resp: 303756

Ion Ratio Lower Upper

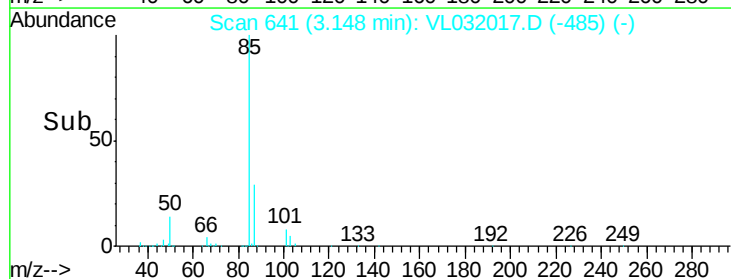
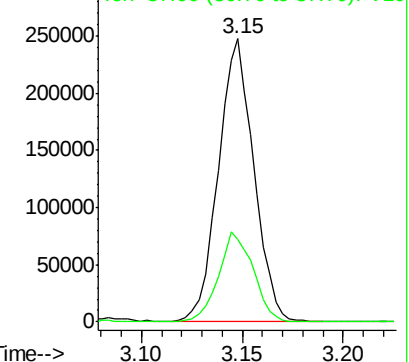
85 100

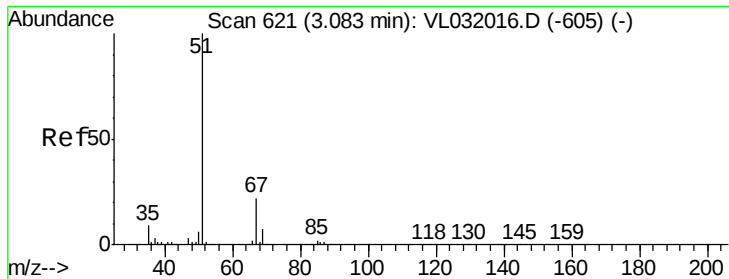
87 29.2 25.5 38.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 2.04 ppbv

RT: 3.08 min Scan# 621

Delta R.T. 0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tot Ion: 51 Resp: 273315

Ion Ratio Lower Upper

51 100

67 20.7 17.2 25.8

Instrument :

MSVOA_L

ClientSampleId :

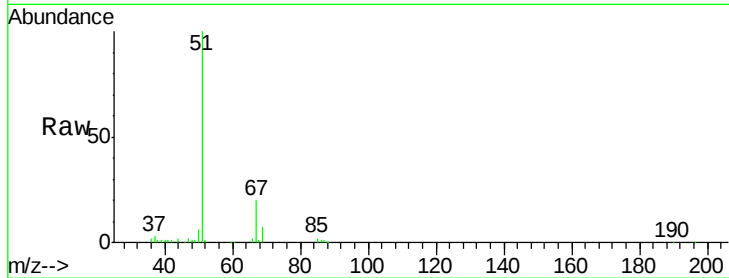
VSTDIC002

Manual Integrations

APPROVED

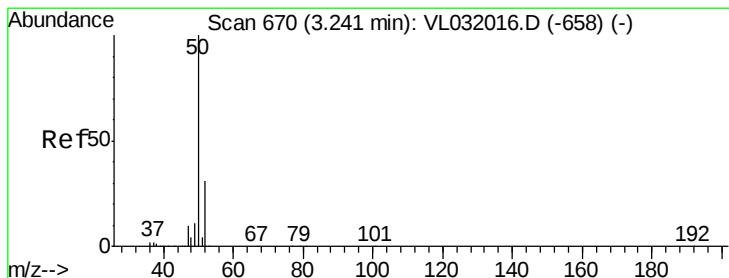
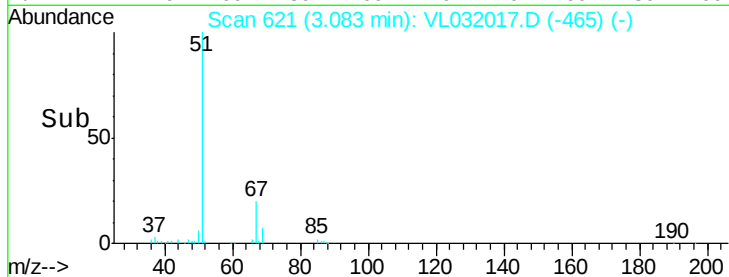
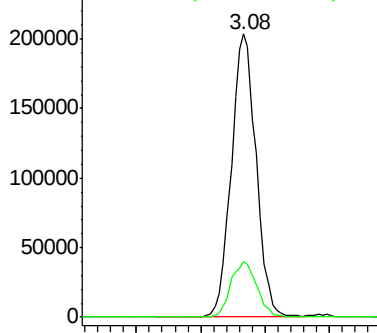
MMDadoda

6/4/2018 10:54:53 AM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 2.05 ppbv

RT: 3.24 min Scan# 670

Delta R.T. 0.00 min

Lab File: VL032017.D

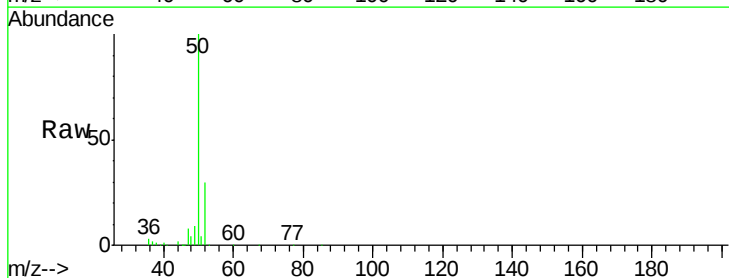
Acq: 31 May 2018 16:46

Tgt Ion: 50 Resp: 142440

Ion Ratio Lower Upper

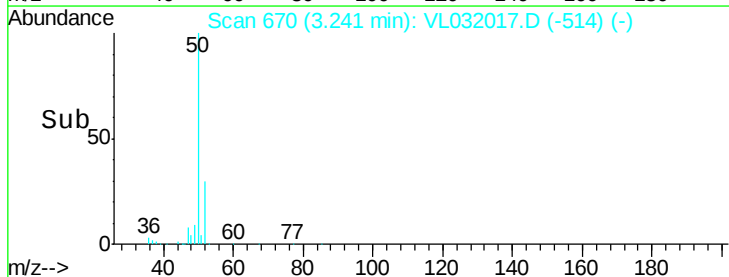
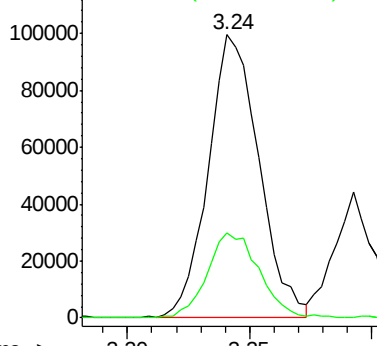
50 100

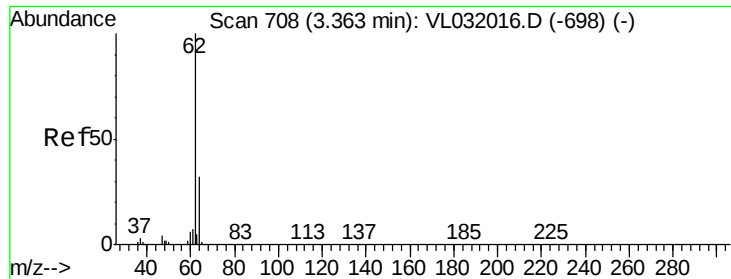
52 29.7 25.0 37.6



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 1.90 ppbv

RT: 3.37 min Scan# 709

Delta R.T. 0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

ClientSampleID :

VSTDIC002

Tot Ion: 62 Resp: 150553

Ion Ratio Lower Upper

62 100

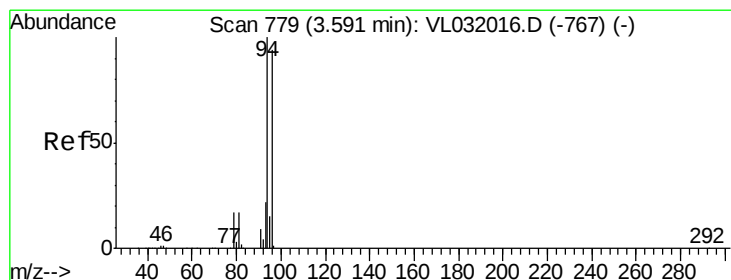
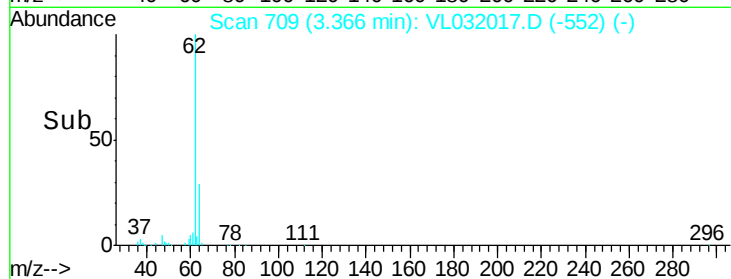
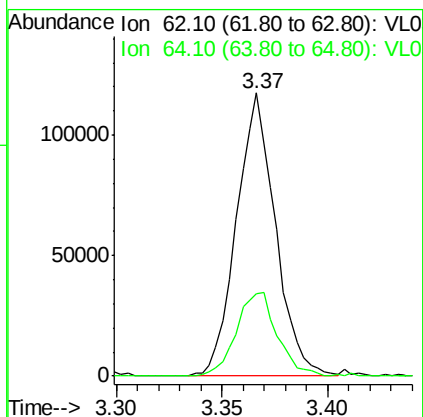
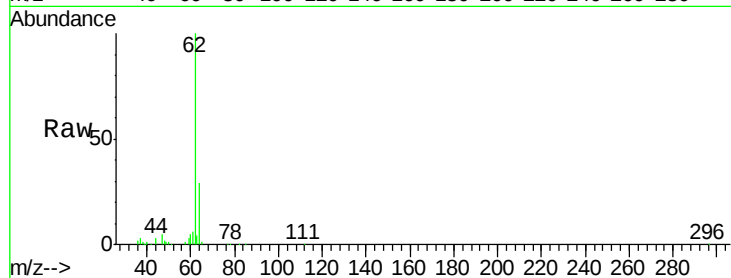
64 29.2 25.2 37.8

Manual Integrations

APPROVED

MMDadoda

6/4/2018 10:54:53 AM



#6

Bromomethane

Concen: 2.04 ppbv

RT: 3.59 min Scan# 780

Delta R.T. 0.00 min

Lab File: VL032017.D

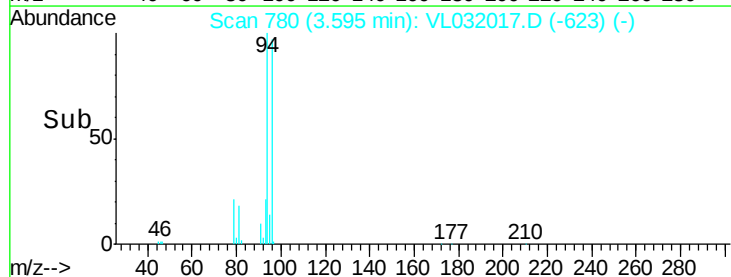
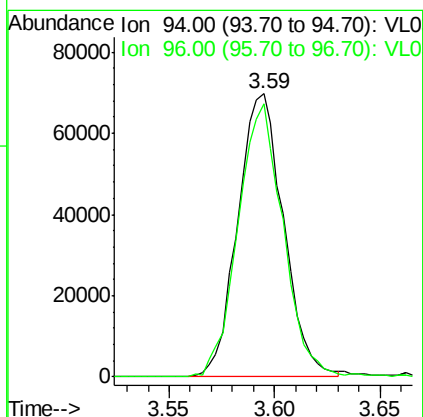
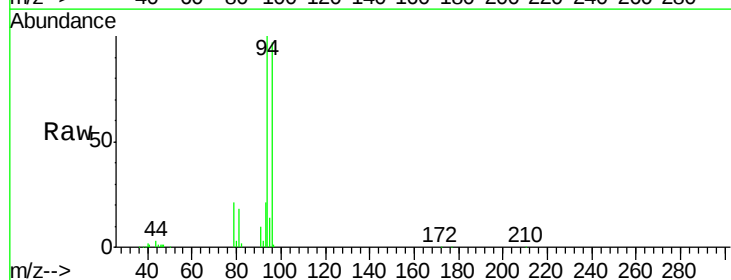
Acq: 31 May 2018 16:46

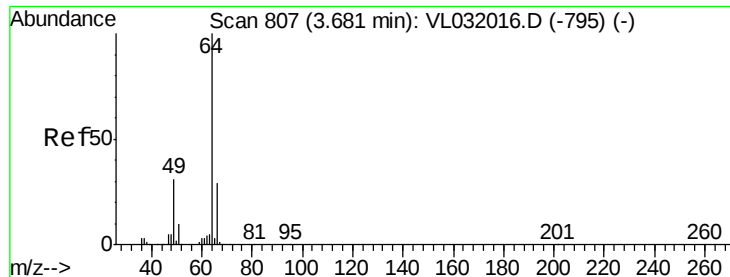
Tgt Ion: 94 Resp: 105280

Ion Ratio Lower Upper

94 100

96 96.6 75.1 112.7





#7

Chloroethane

Concen: 2.07 ppbv

RT: 3.68 min Scan# 808

Delta R.T. 0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC002

Tot Ion: 64 Resp: 62788

Ion Ratio Lower Upper

64 100

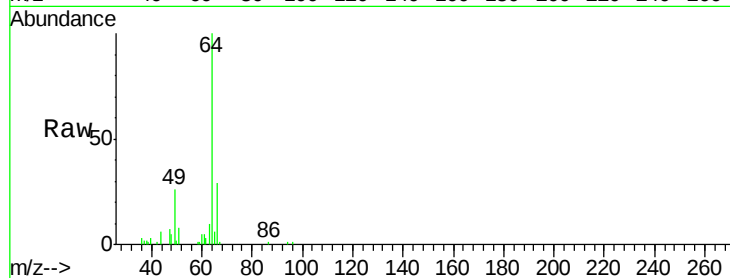
66 29.0 23.4 35.2

Manual Integrations

APPROVED

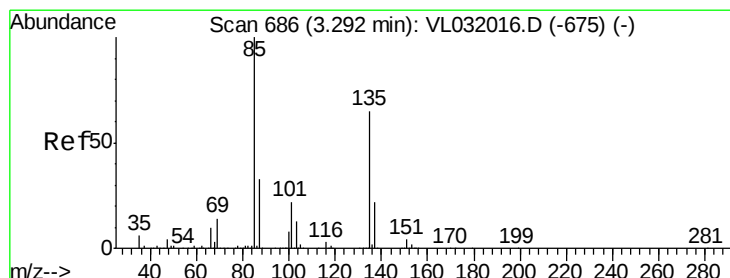
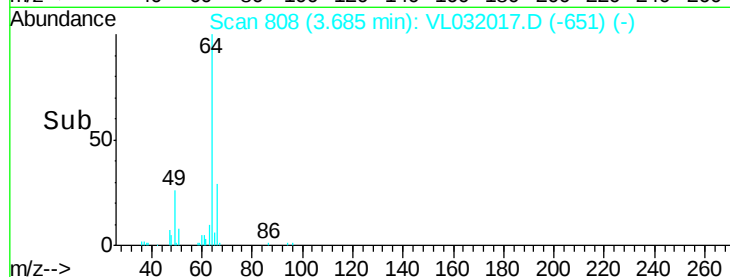
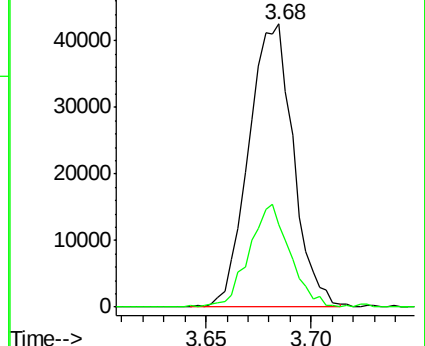
MMDadoda

6/4/2018 10:54:53 AM



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 2.01 ppbv

RT: 3.29 min Scan# 686

Delta R.T. 0.00 min

Lab File: VL032017.D

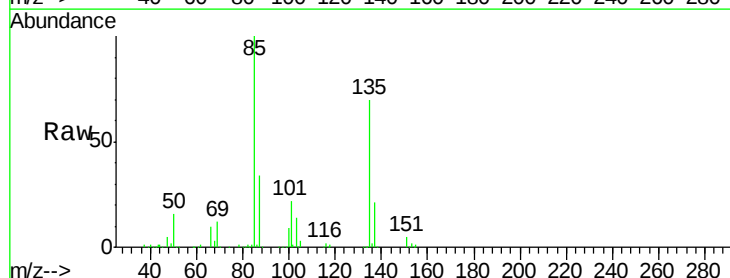
Acq: 31 May 2018 16:46

Tgt Ion: 85 Resp: 374302

Ion Ratio Lower Upper

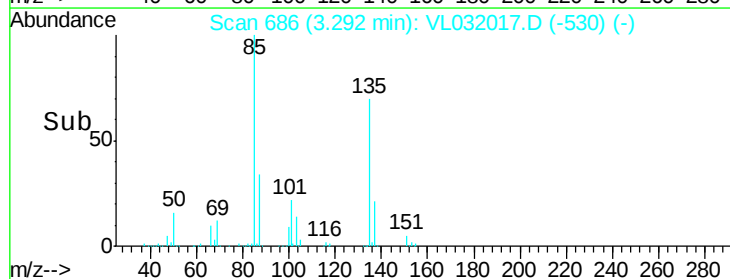
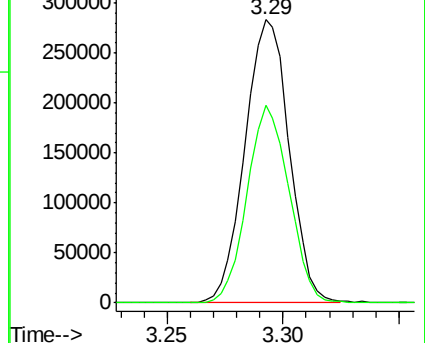
85 100

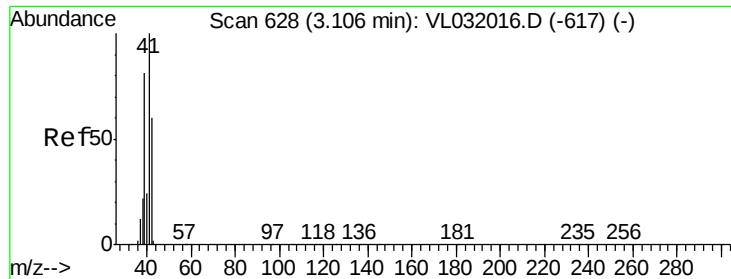
135 66.6 52.6 79.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 1.86 ppbv

RT: 3.11 min Scan# 629

Delta R.T. 0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC002

Tot Ion: 41 Resp: 90399

Ion Ratio Lower Upper

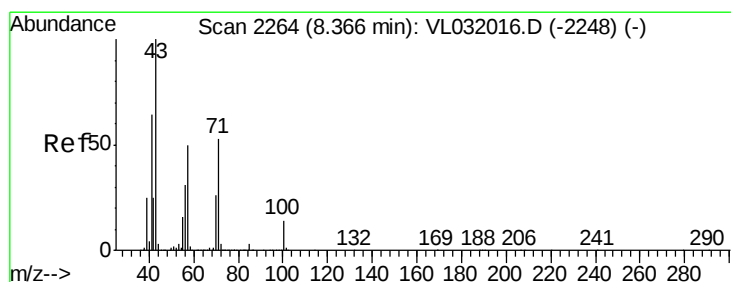
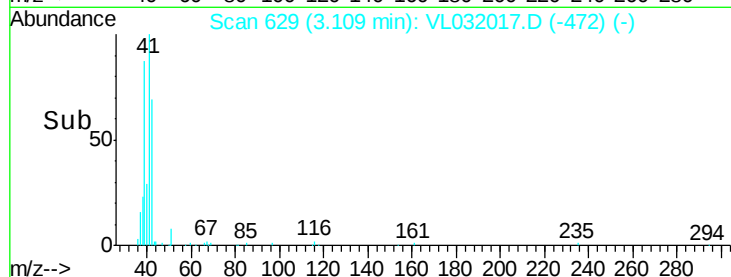
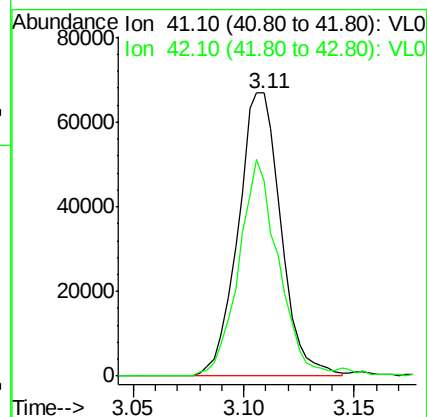
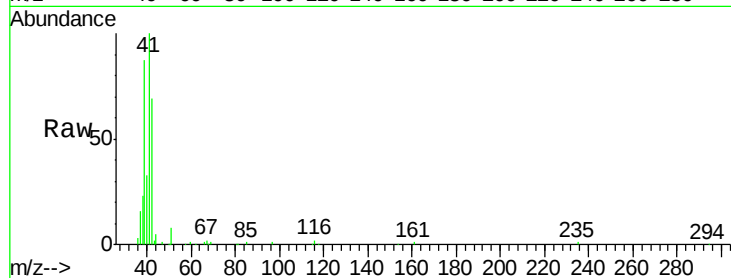
41 100

42 72.5 54.4 81.6

Manual Integrations
APPROVED

MMDadoda

6/4/2018 10:54:53 AM



#10

Heptane

Concen: 1.96 ppbv

RT: 8.36 min Scan# 2263

Delta R.T. -0.00 min

Lab File: VL032017.D

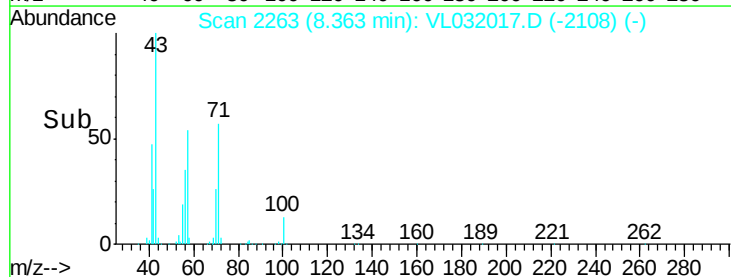
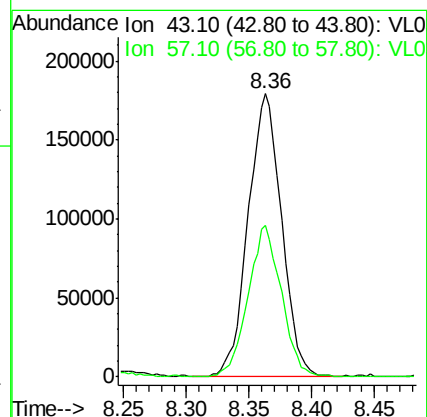
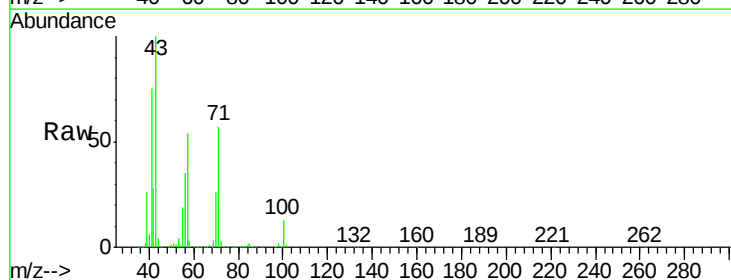
Acq: 31 May 2018 16:46

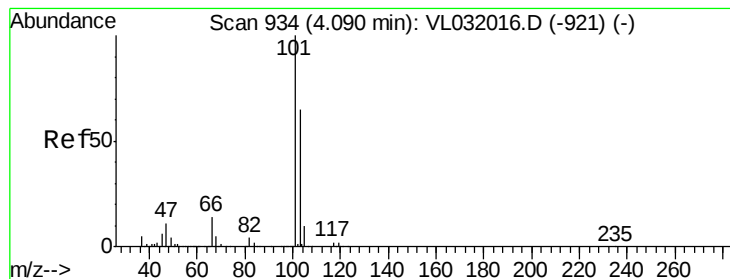
Tgt Ion: 43 Resp: 331766

Ion Ratio Lower Upper

43 100

57 53.4 41.7 62.5





#11

Trichlorofluoromethane

Concen: 2.53 ppbv

RT: 4.09 min Scan# 935

Delta R.T. 0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC002

Tot Ion:101 Resp: 586076

Ion Ratio Lower Upper

101 100

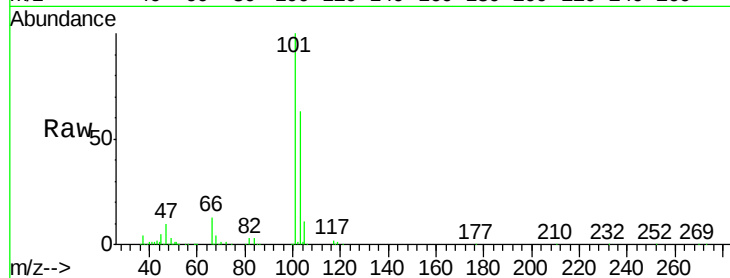
103 62.6 52.0 78.0

Manual Integrations

APPROVED

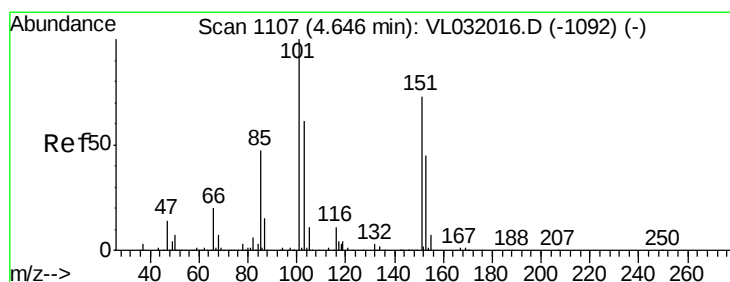
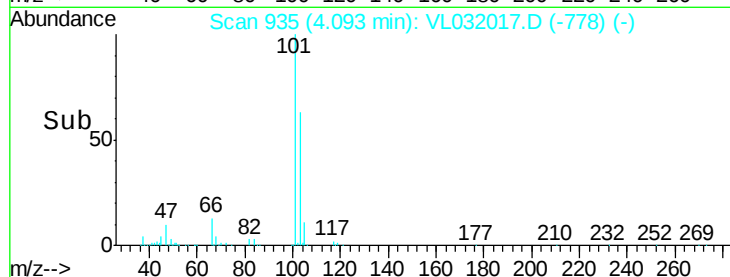
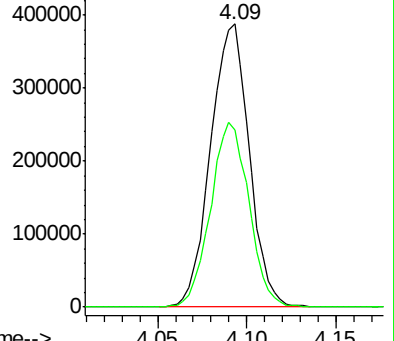
MMDadoda

6/4/2018 10:54:53 AM



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 2.26 ppbv

RT: 4.64 min Scan# 1106

Delta R.T. -0.00 min

Lab File: VL032017.D

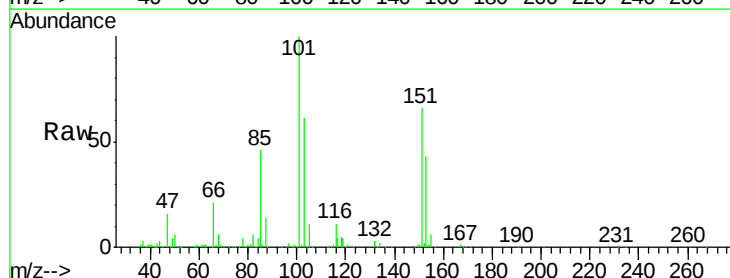
Acq: 31 May 2018 16:46

Tgt Ion:101 Resp: 372697

Ion Ratio Lower Upper

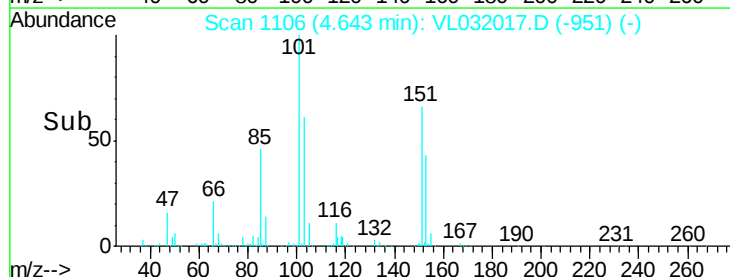
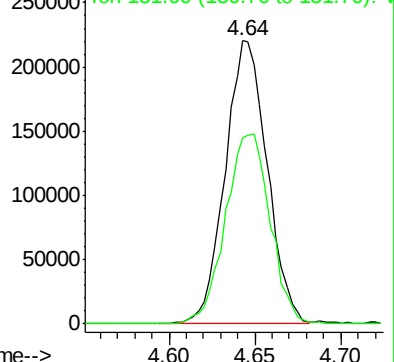
101 100

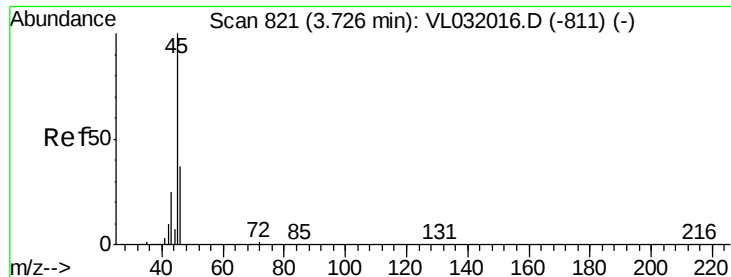
151 71.7 58.2 87.4



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





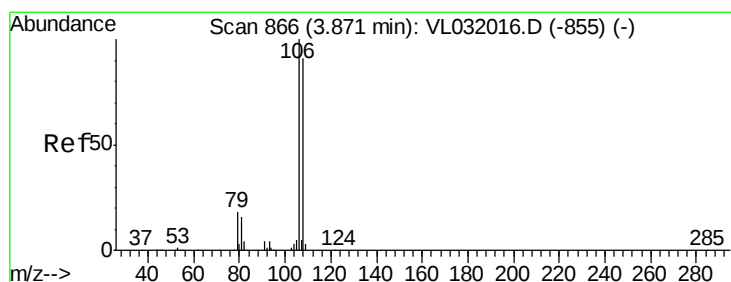
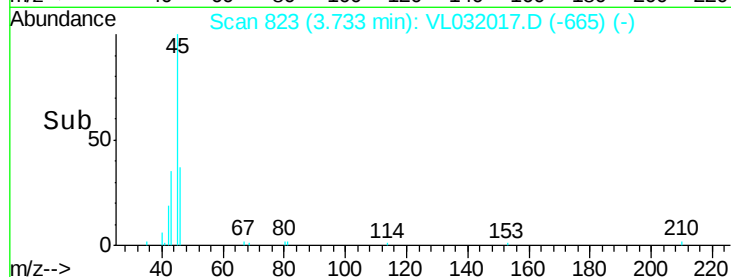
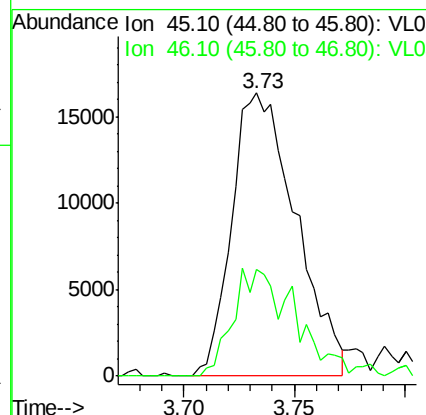
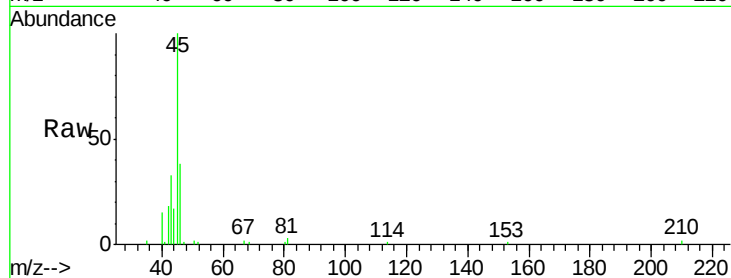
#13
Ethanol
Concen: 1.80 ppbv
RT: 3.73 min Scan# 823
Delta R.T. 0.01 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC002

Tot Ion: 45 Resp: 32879
Ion Ratio Lower Upper
45 100
46 38.2 14.9 59.5

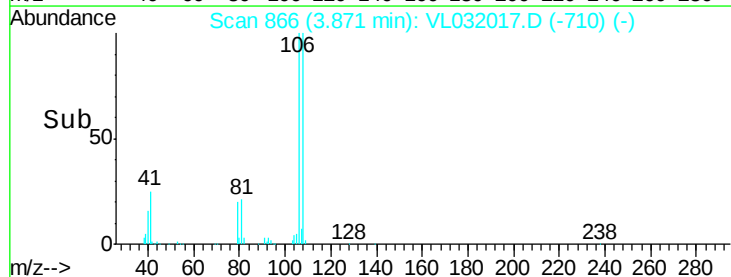
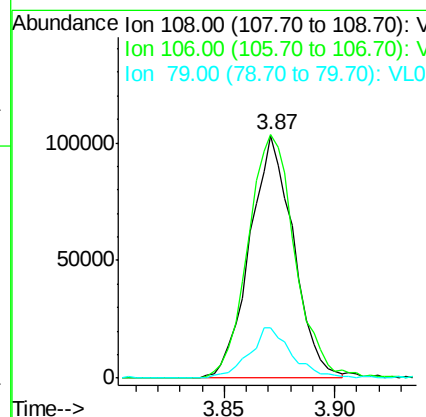
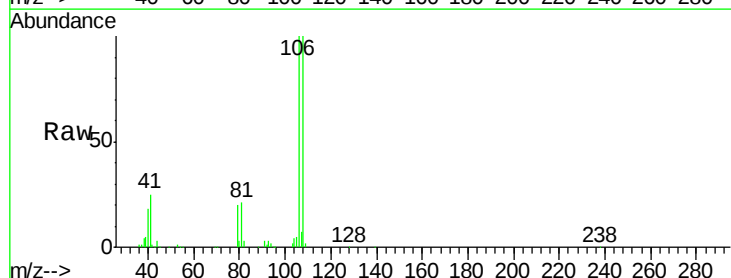
Manual Integrations
APPROVED

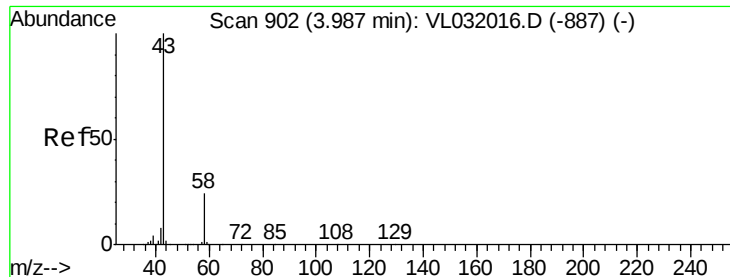
MMDadoda
6/4/2018 10:54:53 AM



#14
Bromoethene
Concen: 2.39 ppbv
RT: 3.87 min Scan# 866
Delta R.T. 0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Tgt Ion: 108 Resp: 141980
Ion Ratio Lower Upper
108 100
106 108.9 85.1 127.7
79 20.9 15.2 22.8





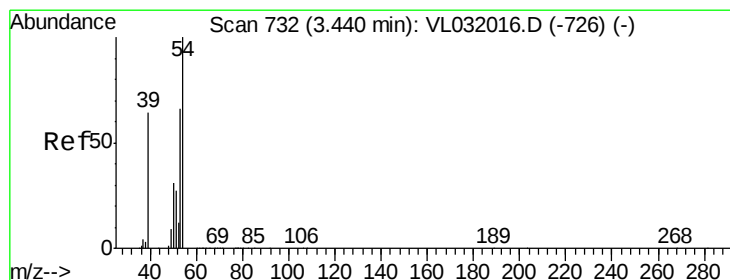
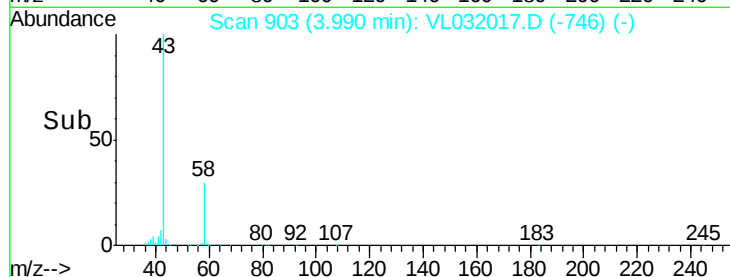
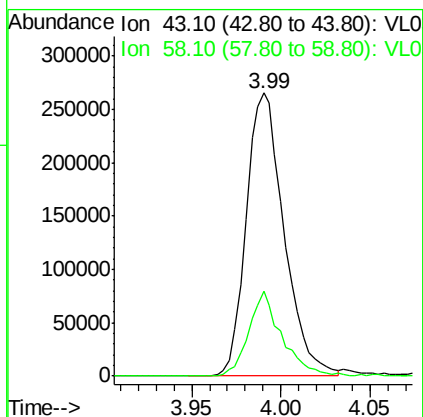
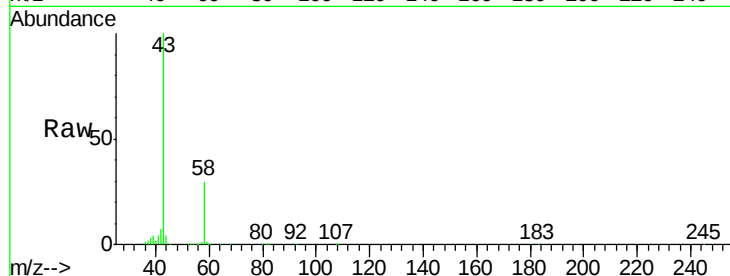
#15
Acetone
Concen: 1.97 ppbv
RT: 3.99 min Scan# 903
Delta R.T. 0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC002

Tot Ion: 43 Resp: 393937
Ion Ratio Lower Upper
43 100
58 26.8 20.7 31.1

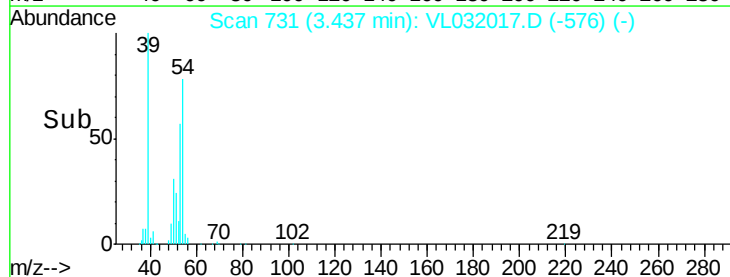
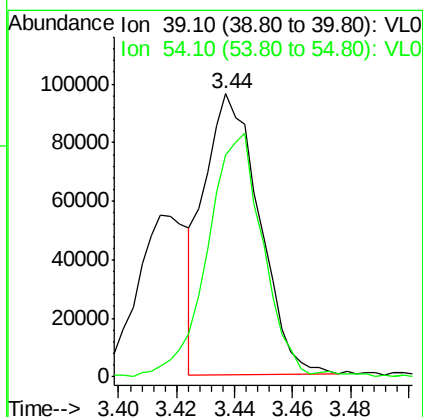
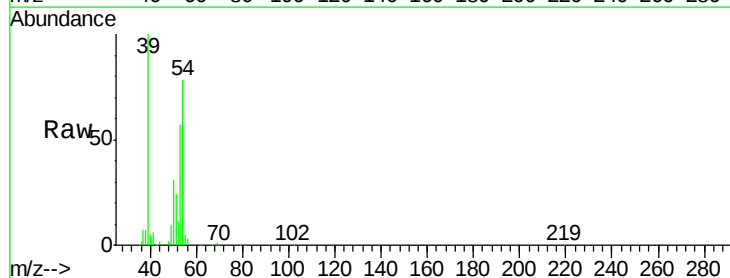
Manual Integrations
APPROVED

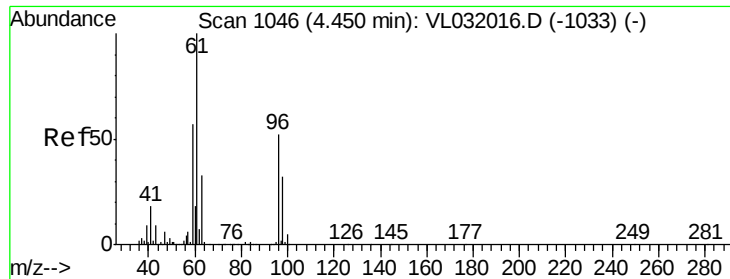
MMDadoda
6/4/2018 10:54:53 AM



#16
1,3-Butadiene
Concen: 1.95 ppbv
RT: 3.44 min Scan# 731
Delta R.T. -0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Tgt Ion: 39 Resp: 126077
Ion Ratio Lower Upper
39 100
54 89.4 65.7 98.5





#17

tert-Butyl alcohol

Concen: 2.11 ppbv m

RT: 4.45 min Scan# 1046

Delta R.T. 0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

ClientSampleID :

VSTDIC002

Tot Ion: 59 Resp: 176332

Ion Ratio Lower Upper

59 100

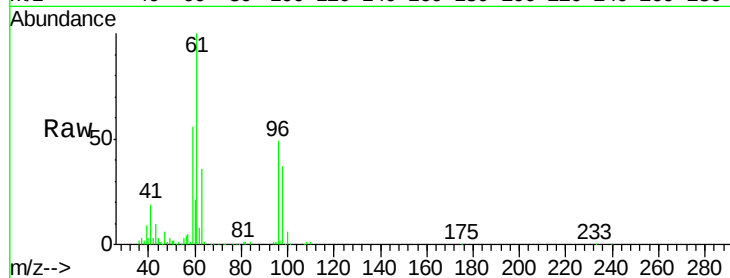
57 11.3 8.3 12.5

Manual Integrations

APPROVED

MMDadoda

6/4/2018 10:54:53 AM



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

4.45

80000

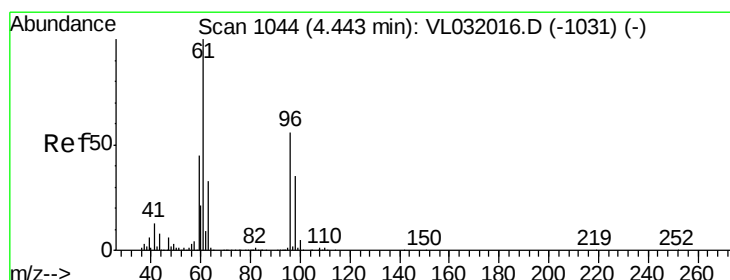
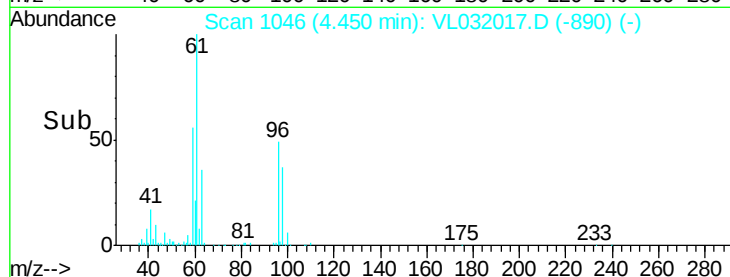
60000

40000

20000

0

Time-->



#18

1,1-Dichloroethene

Concen: 2.30 ppbv

RT: 4.44 min Scan# 1043

Delta R.T. -0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

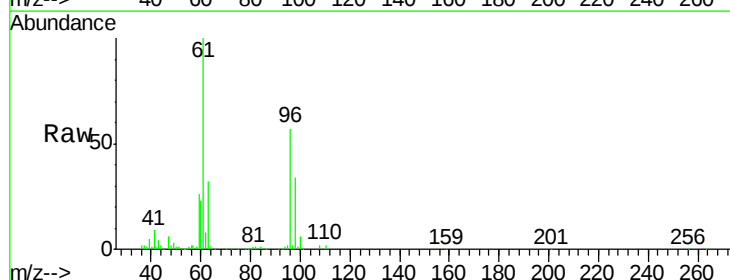
Tgt Ion: 96 Resp: 165117

Ion Ratio Lower Upper

96 100

61 176.4 143.5 215.3

98 59.2 50.0 75.0



Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

250000

200000

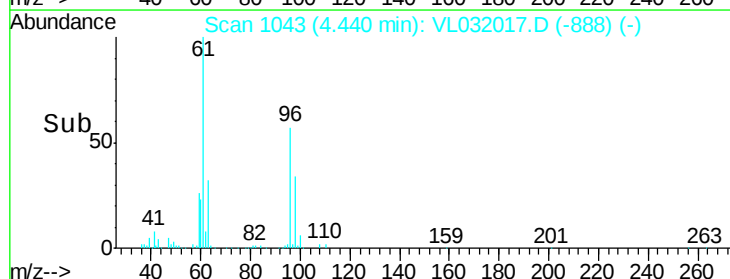
150000

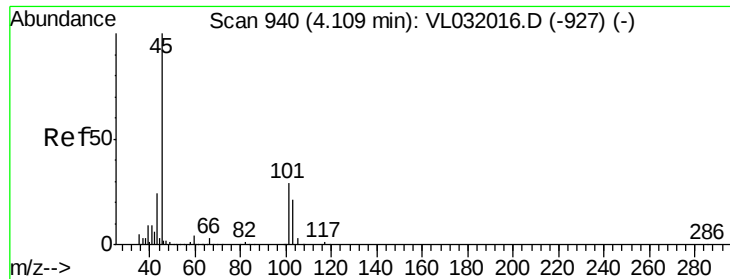
100000

50000

0

Time-->





#19

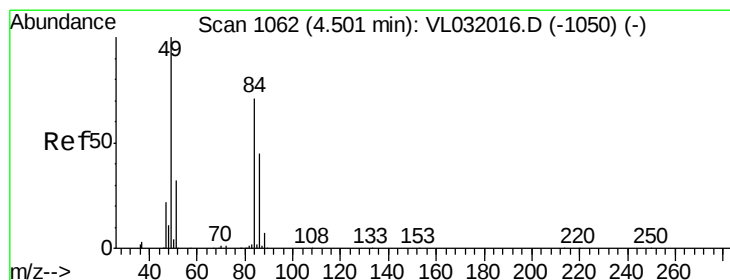
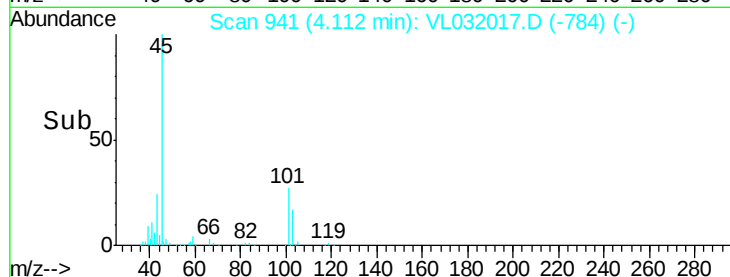
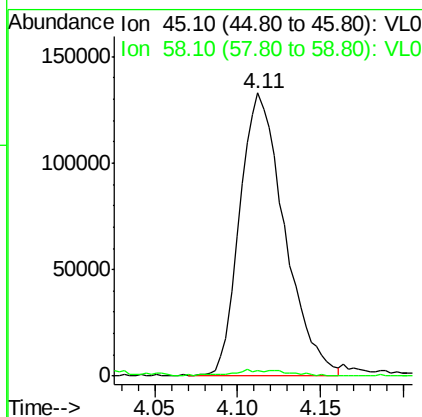
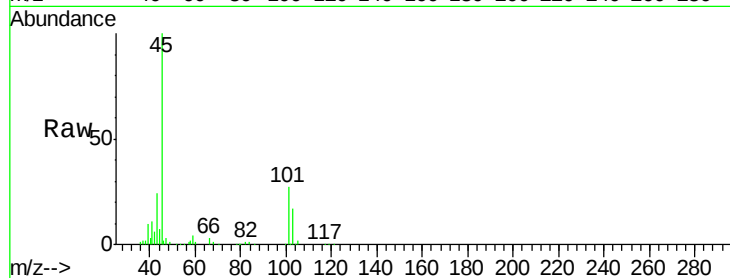
Isopropyl Alcohol
 Concen: 2.25 ppbv
 RT: 4.11 min Scan# 941
 Delta R.T. 0.00 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Instrument :
 MSVOA_L
 ClientSampleID :
 VSTDIC002

Tot Ion	Ratio	Lower	Upper
45	100		
58	2.8	1.5	2.3#

Manual Integrations
 APPROVED

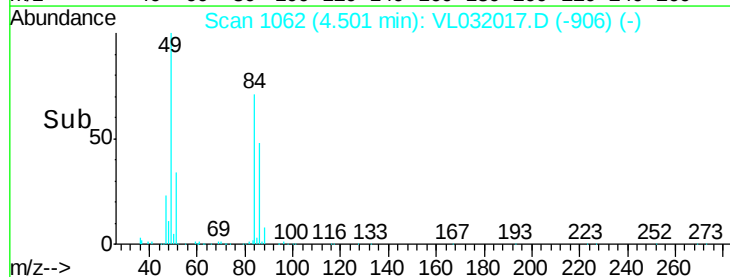
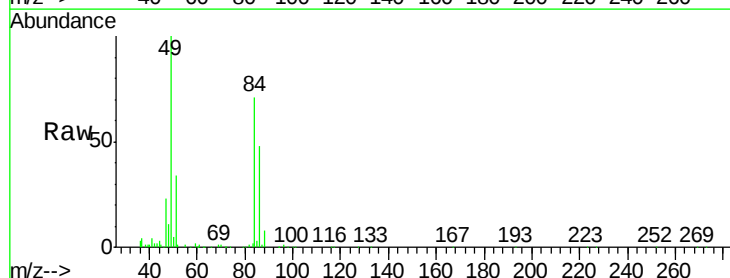
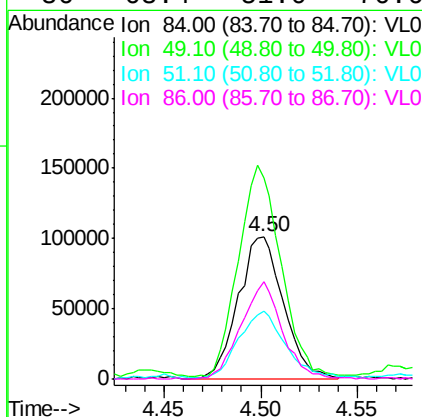
MMDadoda
 6/4/2018 10:54:53 AM

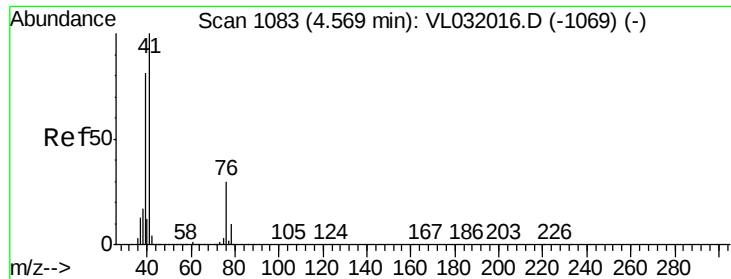


#20

Methylene Chloride
 Concen: 2.39 ppbv
 RT: 4.50 min Scan# 1062
 Delta R.T. 0.00 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Lower	Upper
84	100		
49	139.3	113.0	169.4
51	46.7	36.4	54.6
86	68.4	51.0	76.6





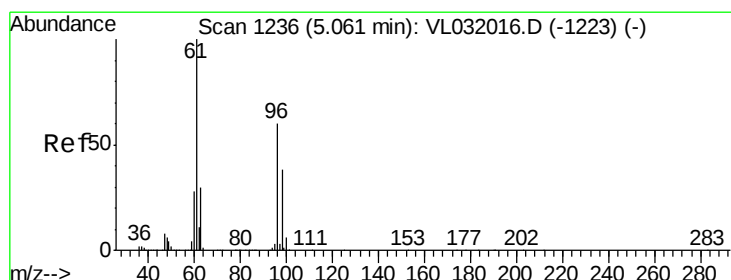
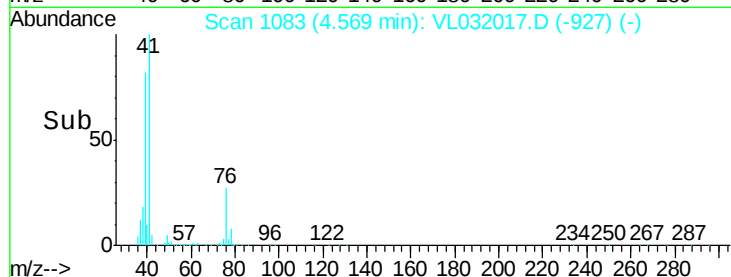
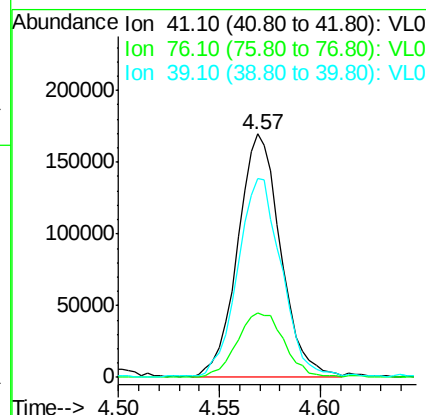
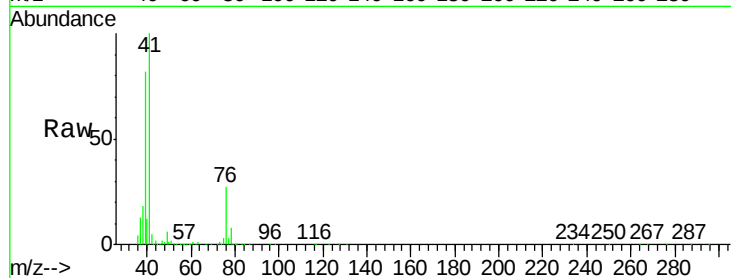
#21
Allvl Chloride
Concen: 2.16 ppbv
RT: 4.57 min Scan# 1083
Delta R.T. 0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC002

Tot Ion	Ratio	Lower	Upper
41	100		
76	29.9	23.9	35.9
39	86.5	65.9	98.9

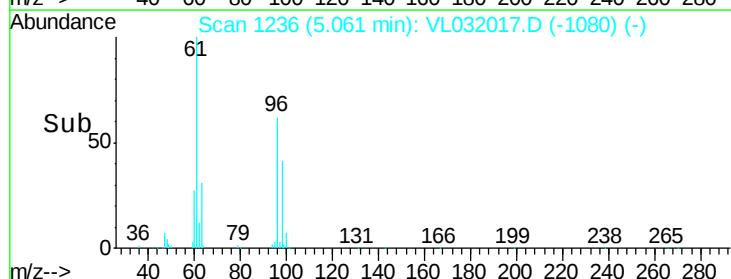
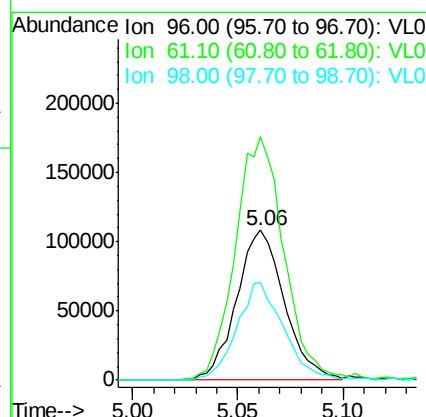
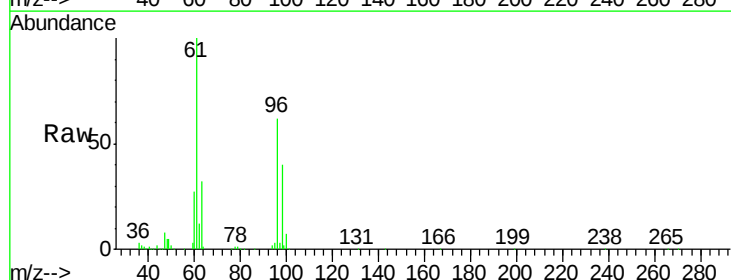
Manual Integrations
APPROVED

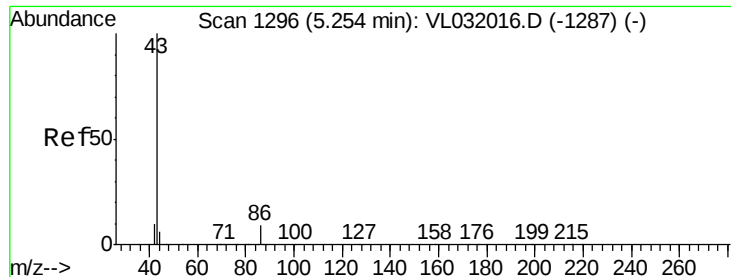
MMDadoda
6/4/2018 10:54:53 AM



#22
trans-1,2-Dichloroethene
Concen: 2.12 ppbv
RT: 5.06 min Scan# 1236
Delta R.T. 0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Lower	Upper
96	100		
61	161.2	133.3	199.9
98	65.2	51.0	76.4





#23

Vinyl Acetate

Concen: 2.05 ppbv

RT: 5.25 min Scan# 1296

Delta R.T. 0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

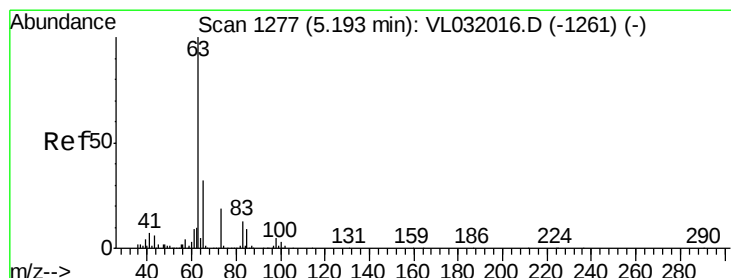
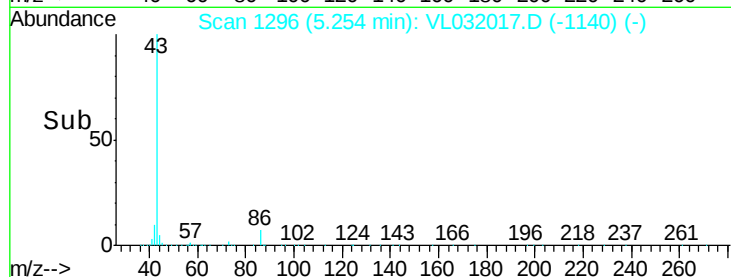
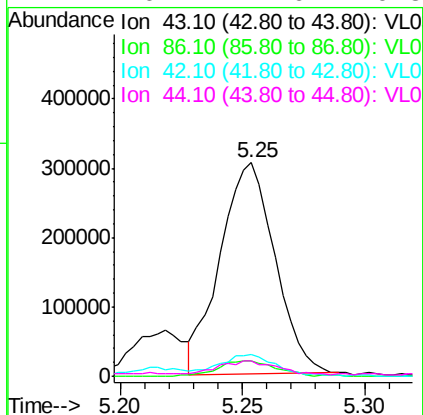
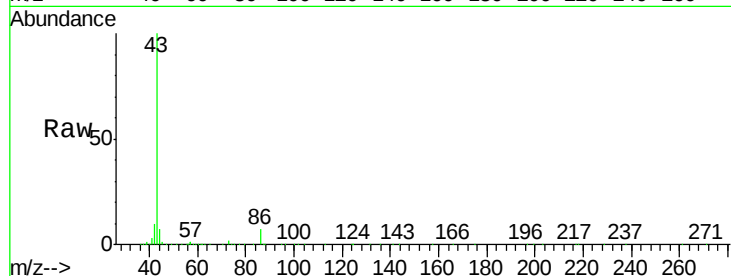
ClientSampleId :

VSTDIC002

Tot Ion	43	Resp	476408
Ion	Ratio	Lower	Upper
43	100		
86	7.0	6.2	9.4
42	9.7	8.7	13.1
44	6.2	4.6	6.8

Manual Integrations
APPROVED

MMDadoda
6/4/2018 10:54:53 AM



#24

1,1-Dichloroethane

Concen: 2.10 ppbv

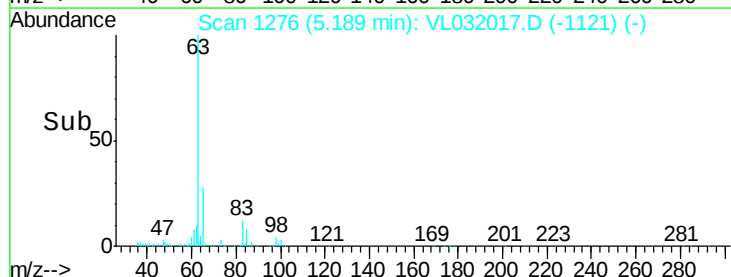
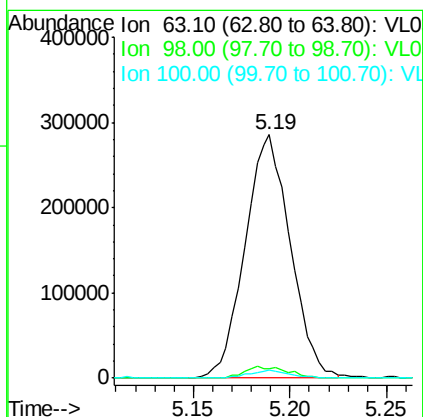
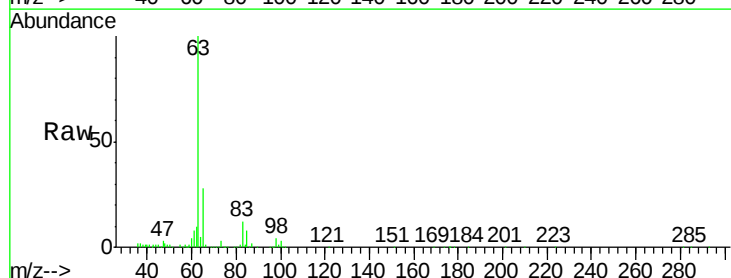
RT: 5.19 min Scan# 1276

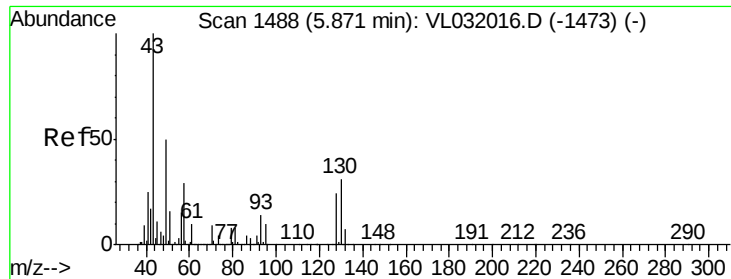
Delta R.T. -0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tgt Ion	63	Resp	459829
Ion	Ratio	Lower	Upper
63	100		
98	3.5	2.4	7.1
100	3.2	1.5	4.5





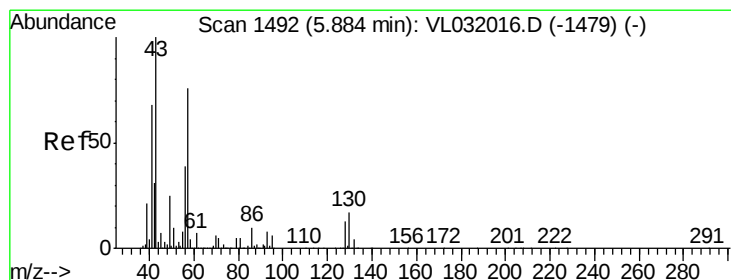
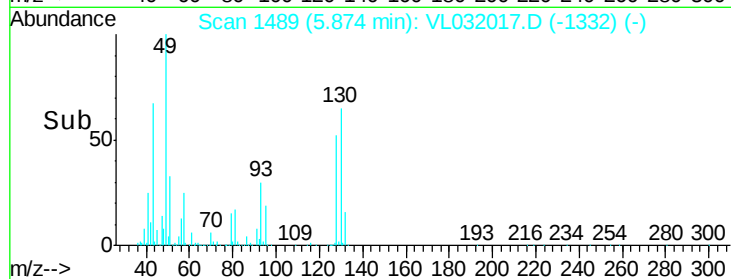
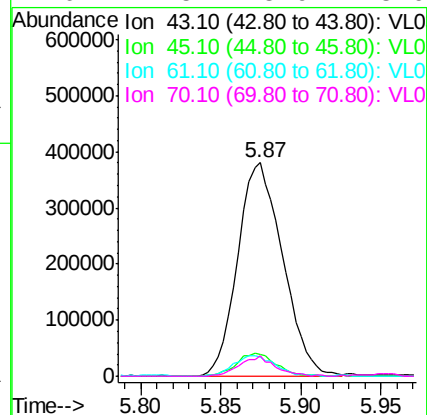
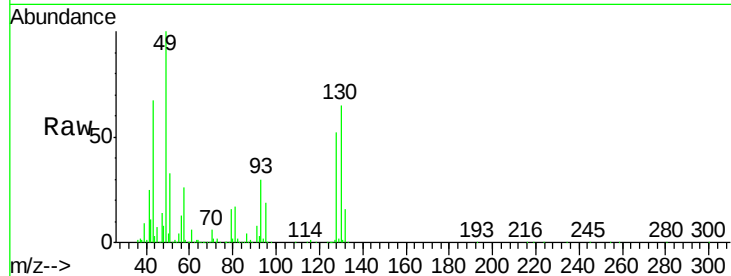
#25
Ethyl Acetate
Concen: 2.09 ppbv
RT: 5.87 min Scan# 1489
Delta R.T. 0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC002

Tot Ion	Ratio	Lower	Upper
43	100		
45	9.8	7.8	11.6
61	9.0	7.4	11.2
70	7.5	5.9	8.9

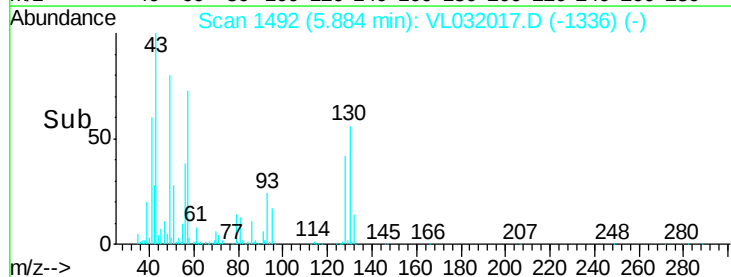
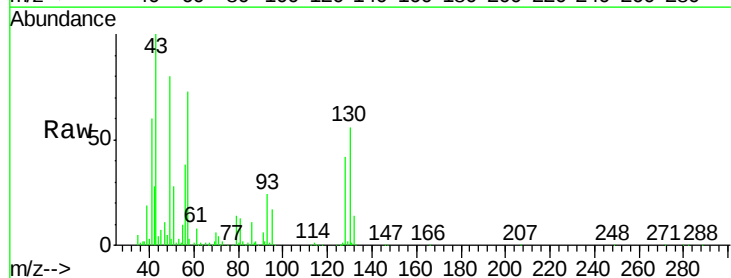
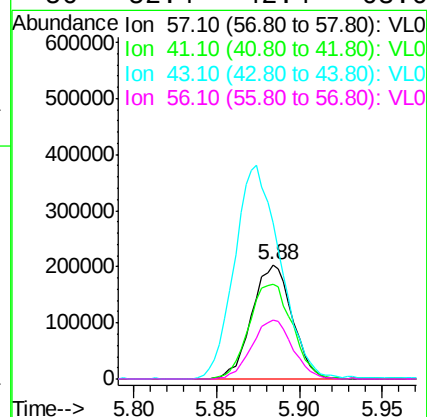
Manual Integrations
APPROVED

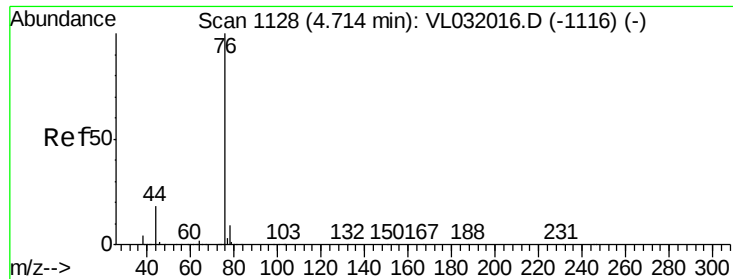
MMDadoda
6/4/2018 10:54:53 AM



#26
Hexane
Concen: 2.10 ppbv
RT: 5.88 min Scan# 1492
Delta R.T. 0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Lower	Upper
57	100		
41	90.3	71.4	107.2
43	213.2	168.6	252.8
56	52.4	42.4	63.6





#27

Carbon Disulfide

Concen: 2.24 ppbv

RT: 4.71 min Scan# 1128

Delta R.T. 0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

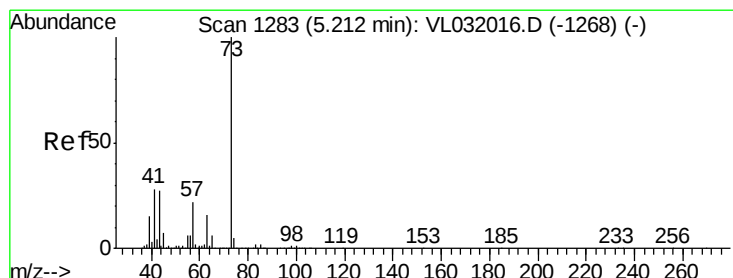
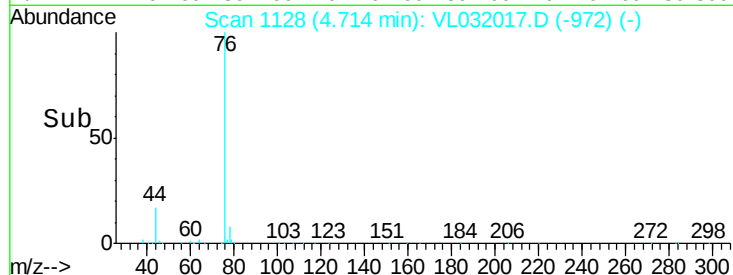
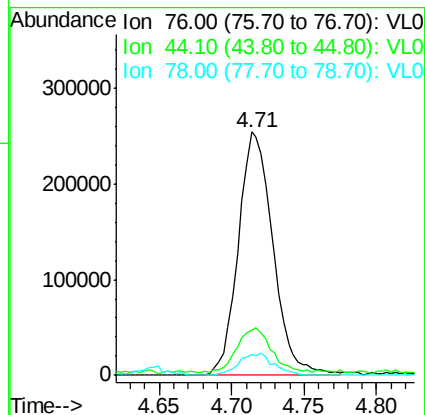
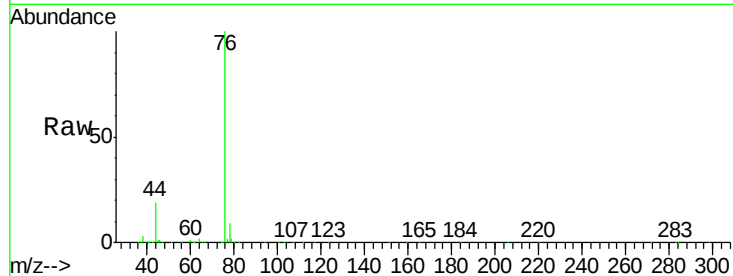
ClientSampleId :

VSTDIC002

Tot Ion:	76	Resp:	422633
Ion	Ratio	Lower	Upper
76	100		
44	18.8	14.9	22.3
78	9.3	7.6	11.4

Manual Integrations
APPROVED

MMDadoda
6/4/2018 10:54:53 AM



#28

Methyl tert-Butyl Ether

Concen: 2.06 ppbv

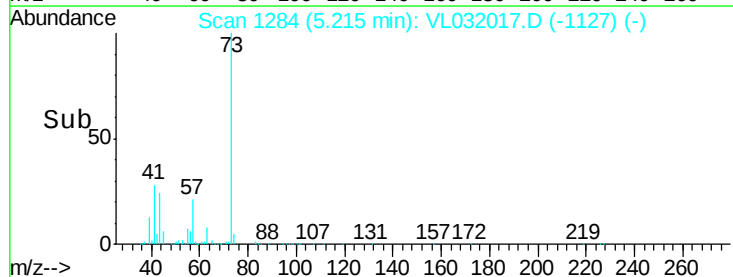
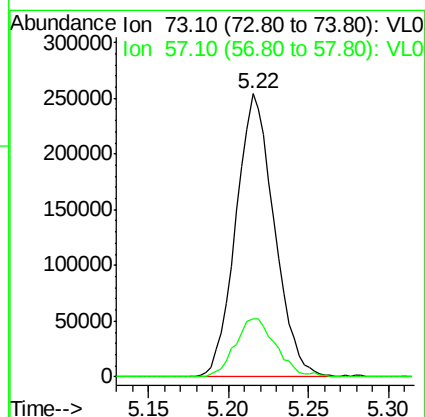
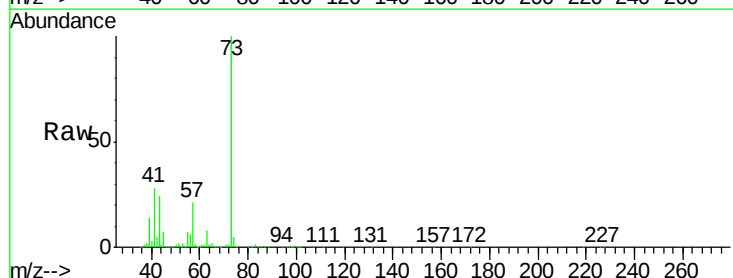
RT: 5.22 min Scan# 1284

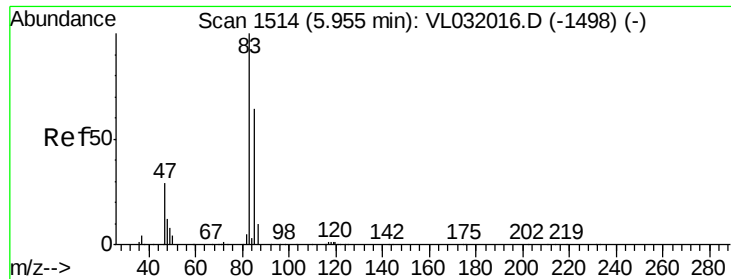
Delta R.T. 0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tgt Ion:	73	Resp:	414758
Ion	Ratio	Lower	Upper
73	100		
57	22.1	17.8	26.8





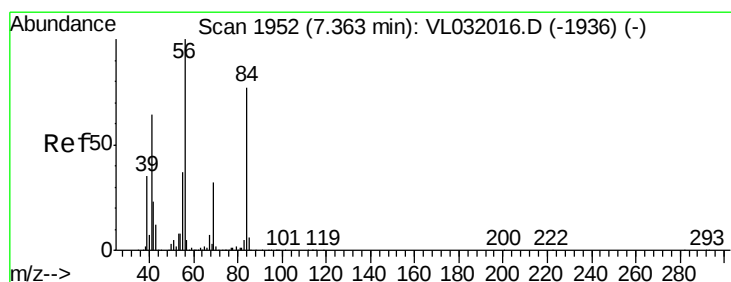
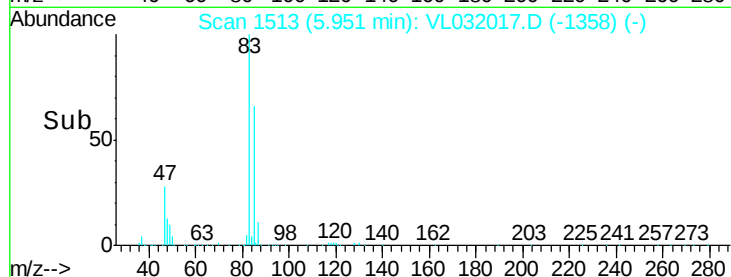
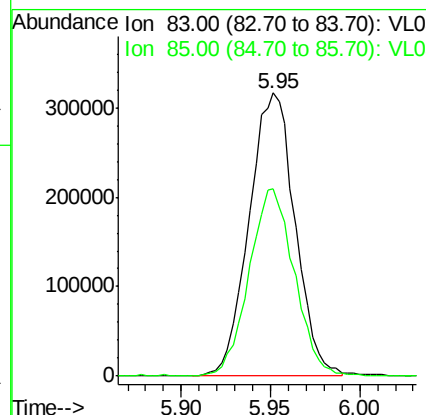
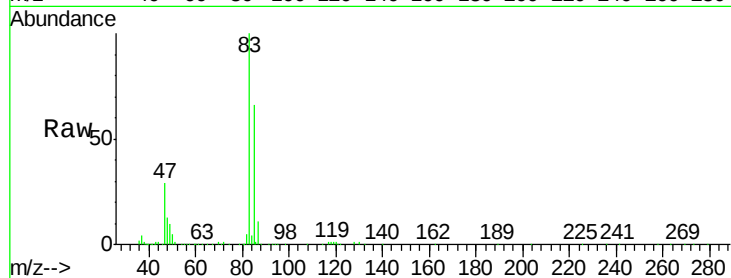
#29
Chloroform
Concen: 2.18 ppbv
RT: 5.95 min Scan# 1513
Delta R.T. -0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC002

Tot Ion	Ratio	Lower	Upper
83	100		
85	66.1	50.9	76.3

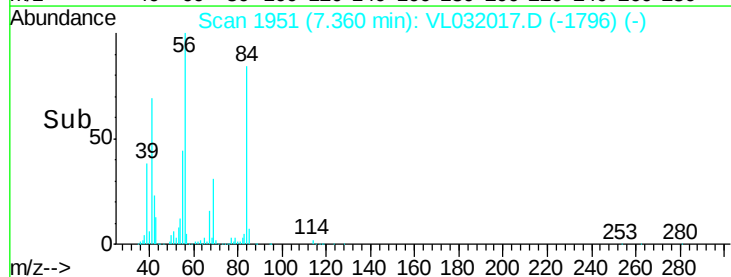
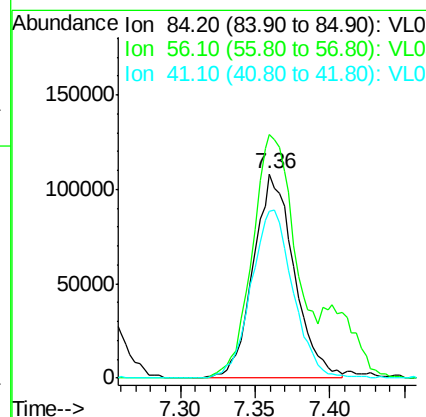
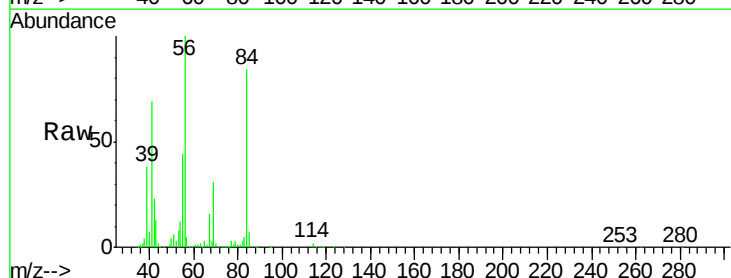
Manual Integrations
APPROVED

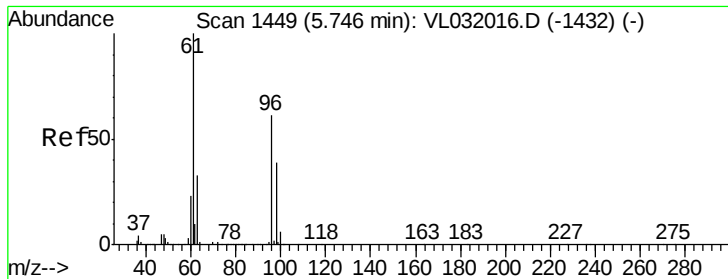
MMDadoda
6/4/2018 10:54:53 AM



#30
Cyclohexane
Concen: 1.90 ppbv
RT: 7.36 min Scan# 1951
Delta R.T. -0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Lower	Upper
84	100		
56	154.4	108.6	162.8
41	84.3	66.8	100.2





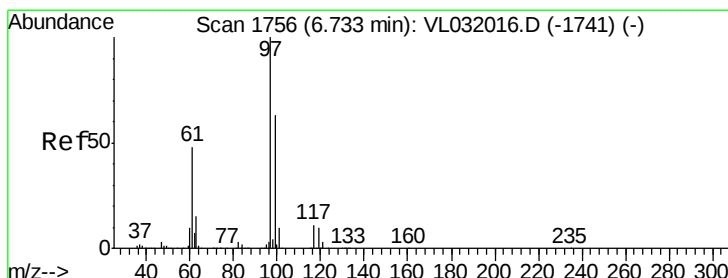
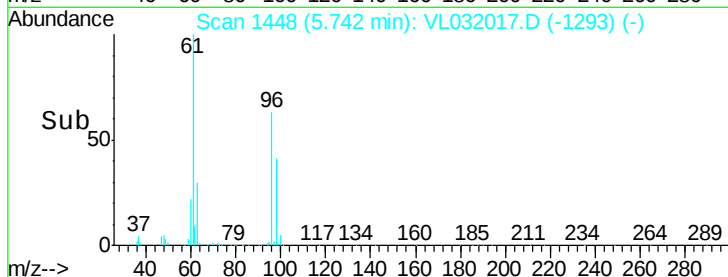
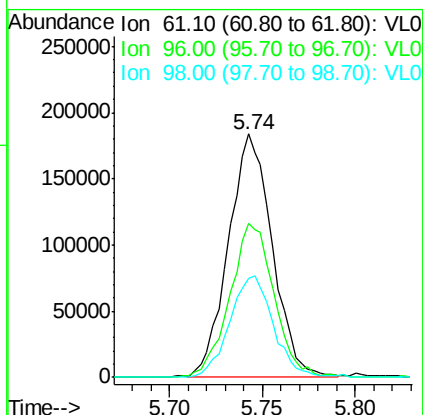
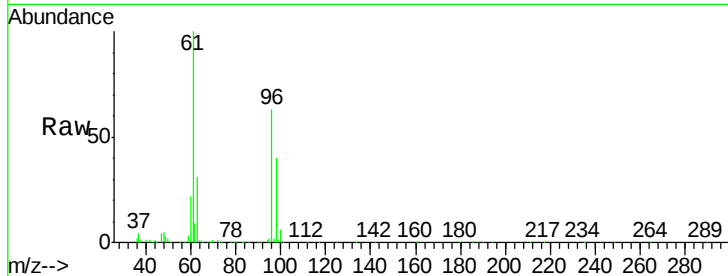
#31
 cis-1,2-Dichloroethene
 Concen: 2.00 ppbv
 RT: 5.74 min Scan# 1448
 Delta R.T. -0.00 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC002

Tot Ion	Ratio	Resp	Lower	Upper
61	100	301196		
96	62.8	49.0	73.6	
98	40.2	31.2	46.8	

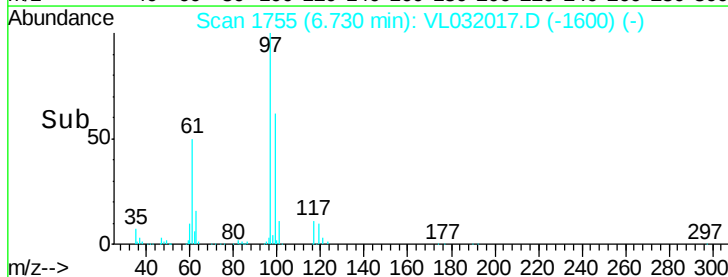
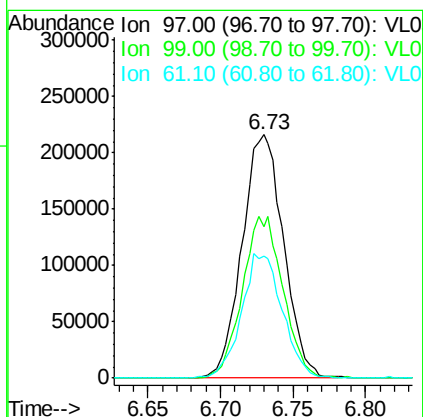
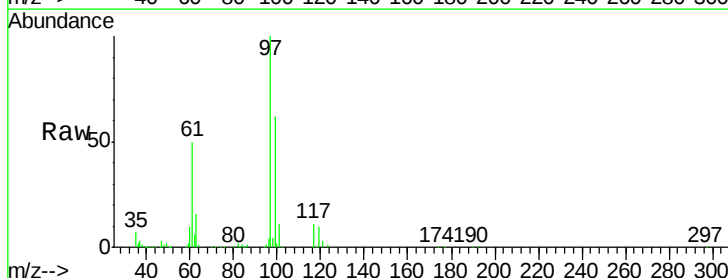
Manual Integrations
 APPROVED

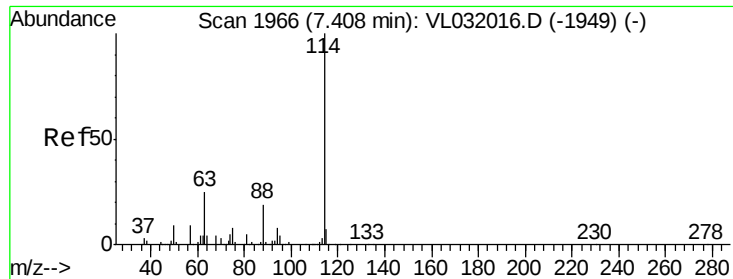
MMDadoda
 6/4/2018 10:54:53 AM



#32
 1,1,1-Trichloroethane
 Concen: 1.81 ppbv
 RT: 6.73 min Scan# 1755
 Delta R.T. -0.00 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Resp	Lower	Upper
97	100	430702		
99	65.0	51.5	77.3	
61	50.3	39.4	59.2	





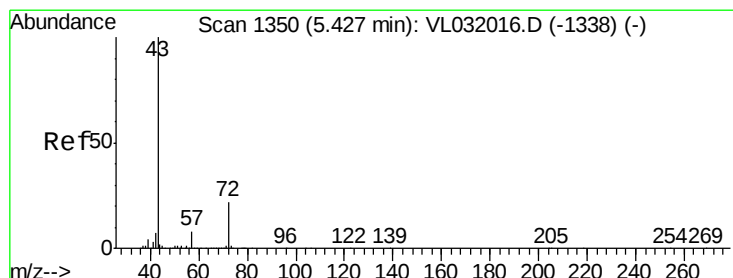
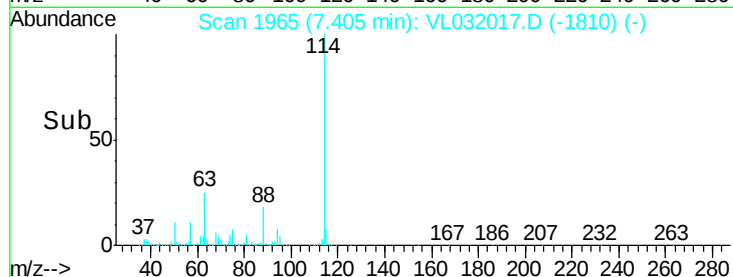
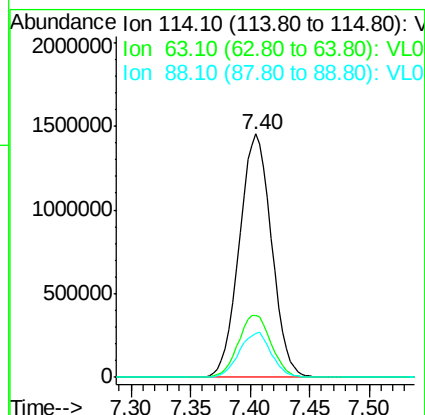
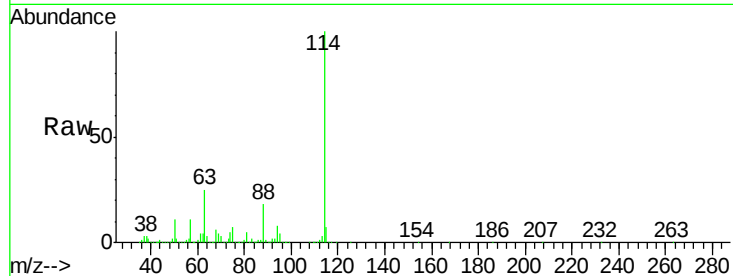
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.40 min Scan# 1965
 Delta R.T. -0.00 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC002

Tot Ion	Ratio	Lower	Upper
114	100		
63	26.2	21.1	31.7
88	18.4	14.8	22.2

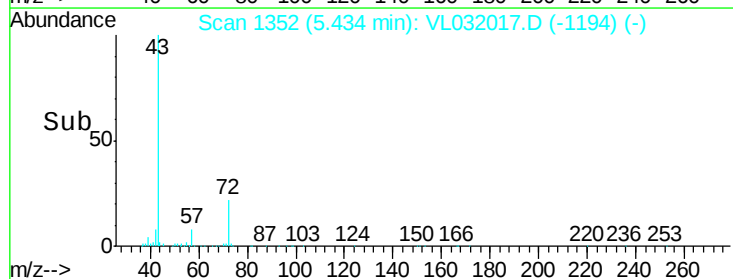
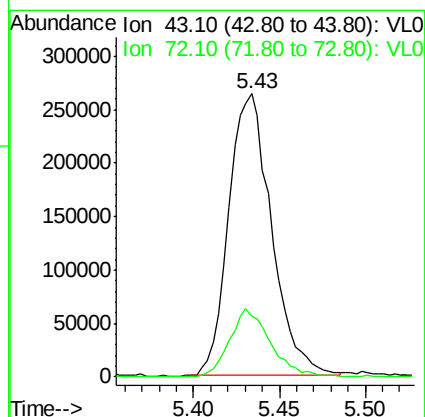
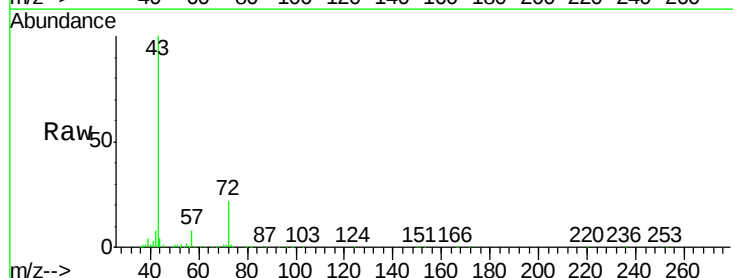
Manual Integrations
 APPROVED

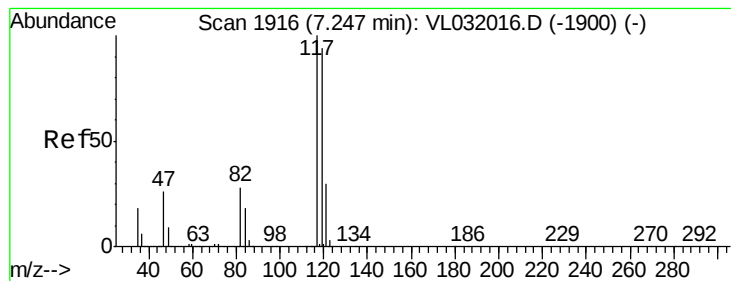
MMDadoda
 6/4/2018 10:54:53 AM



#34
 2-Butanone
 Concen: 2.01 ppbv
 RT: 5.43 min Scan# 1352
 Delta R.T. 0.01 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.3	18.6	27.8





#35

Carbon Tetrachloride

Concen: 2.09 ppbv

RT: 7.25 min Scan# 1916

Delta R.T. 0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

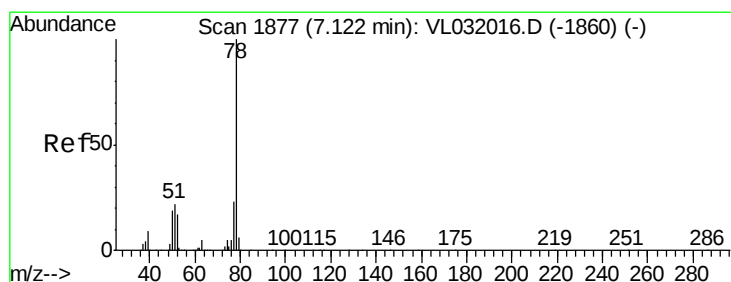
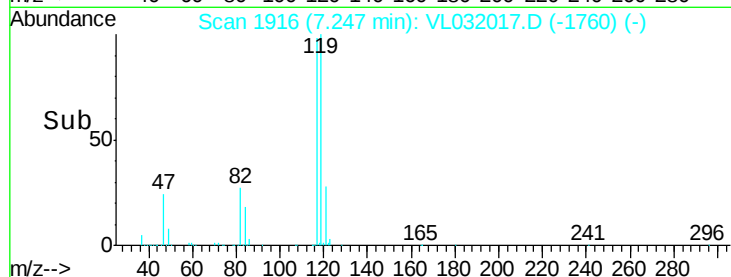
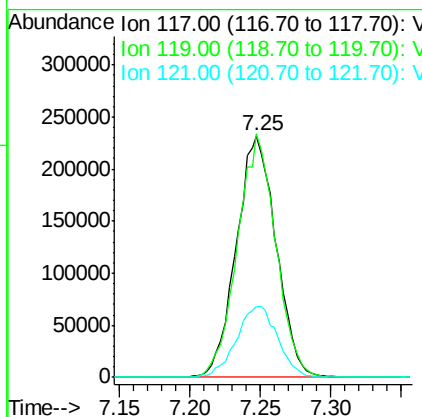
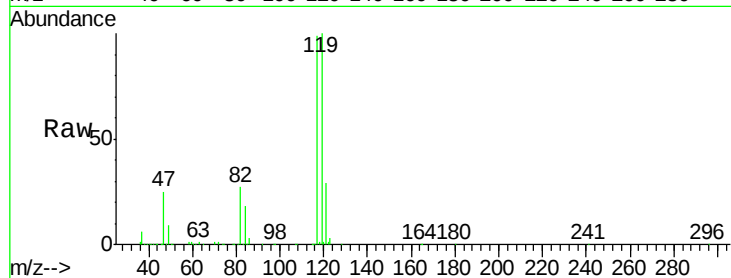
ClientSampleId :

VSTDIC002

Tot Ion:	117	Resp:	457509
Ion Ratio	Lower	Upper	
117	100		
119	100.6	75.3	112.9
121	29.3	24.1	36.1

Manual Integrations
APPROVED

MMDadoda
6/4/2018 10:54:53 AM



#36

Benzene

Concen: 1.97 ppbv

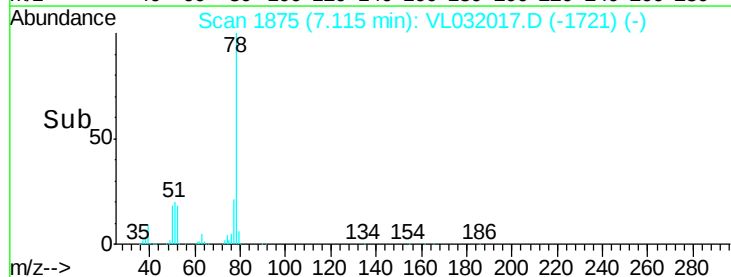
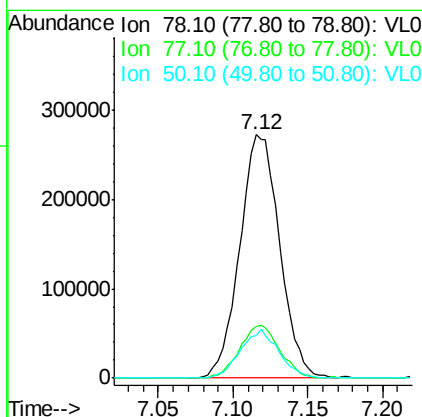
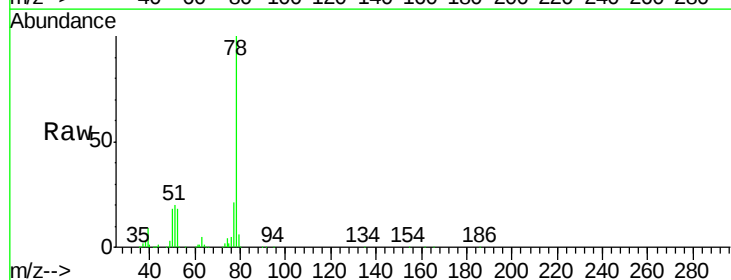
RT: 7.12 min Scan# 1875

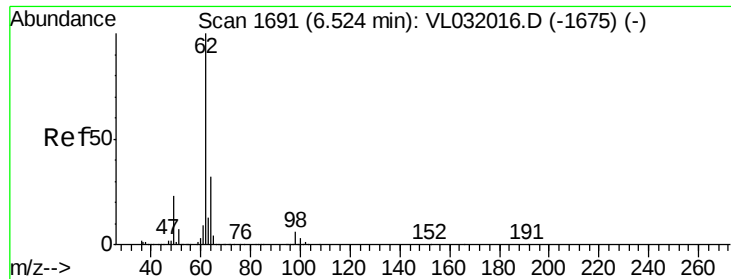
Delta R.T. -0.01 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tgt Ion:	78	Resp:	505878
Ion Ratio	Lower	Upper	
78	100		
77	21.3	18.1	27.1
50	17.7	14.9	22.3





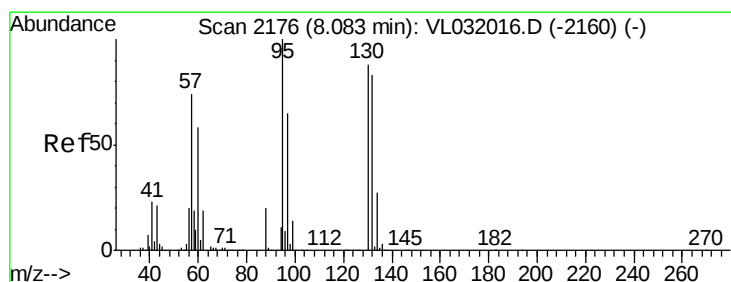
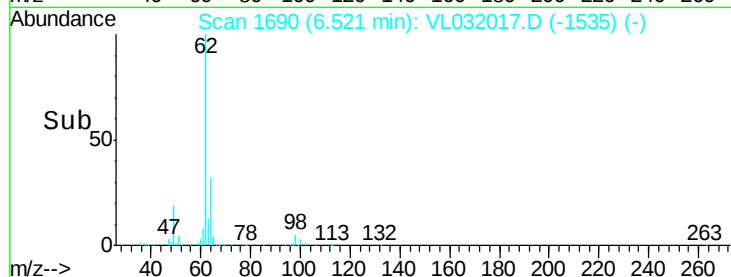
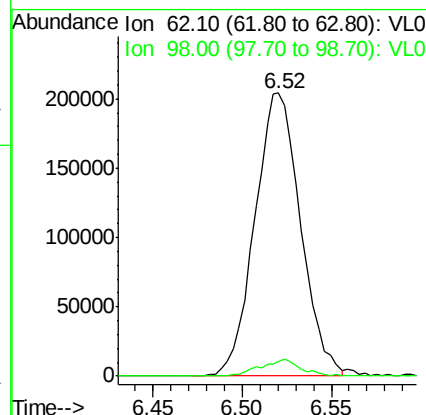
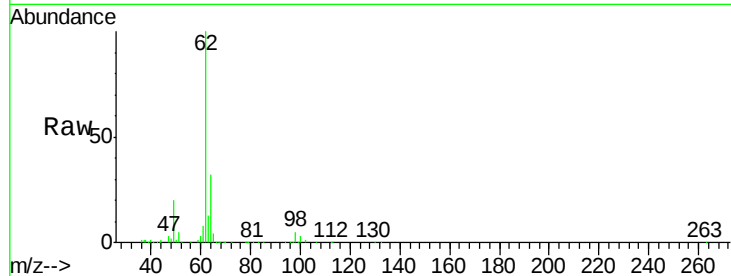
#37
 1,2-Dichloroethane
 Concen: 2.02 ppbv
 RT: 6.52 min Scan# 1690
 Delta R.T. -0.00 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC002

Tot Ion	Ratio	Resp	Lower	Upper
62	100	365406		
98	5.3	4.2	6.4	

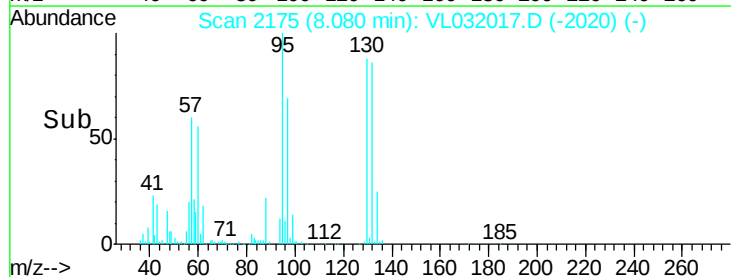
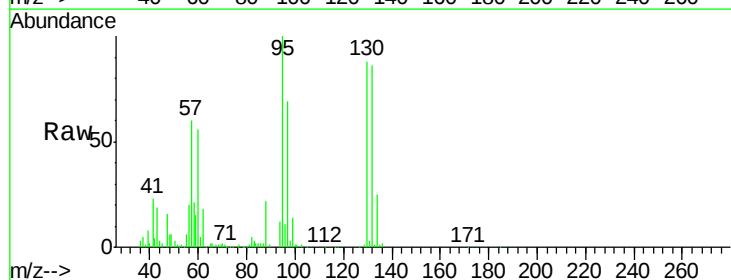
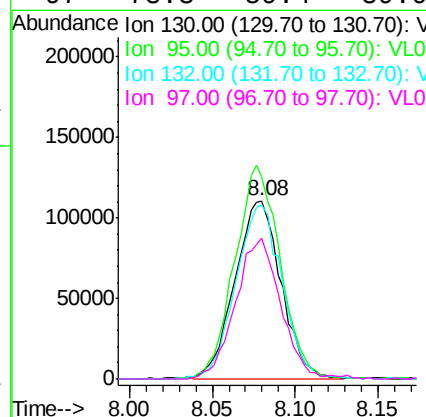
Manual Integrations
 APPROVED

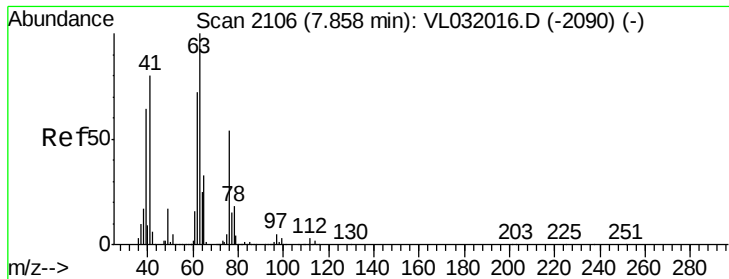
MMDadoda
 6/4/2018 10:54:53 AM



#38
 Trichloroethene
 Concen: 2.16 ppbv
 RT: 8.08 min Scan# 2175
 Delta R.T. -0.00 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Resp	Lower	Upper
130	100	211329		
95	113.0	90.7	136.1	
132	97.6	75.6	113.4	
97	78.3	59.4	89.0	





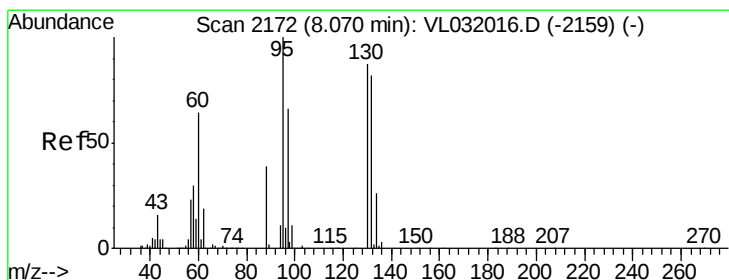
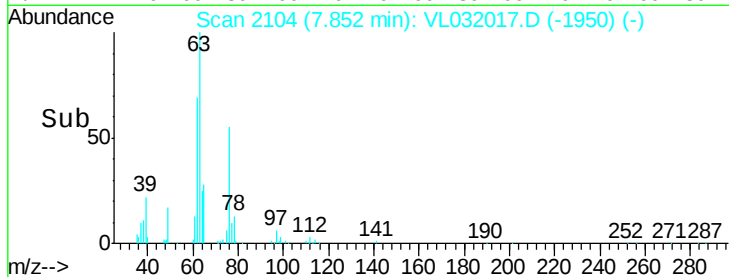
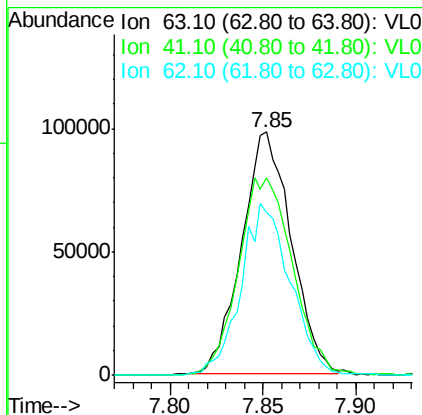
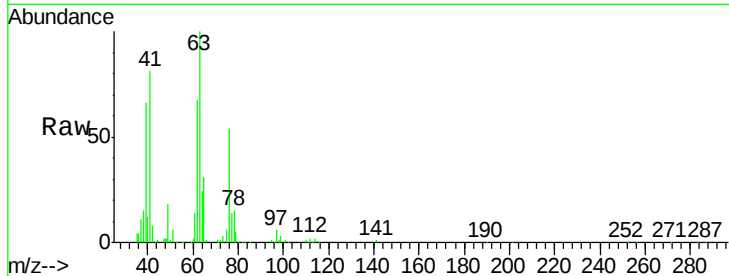
#39
 1,2-Dichloropropane
 Concen: 2.04 ppbv
 RT: 7.85 min Scan# 2104
 Delta R.T. -0.01 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC002

Tot Ion	Ratio	Lower	Upper
63	100		
41	80.8	64.0	96.0
62	66.5	57.6	86.4

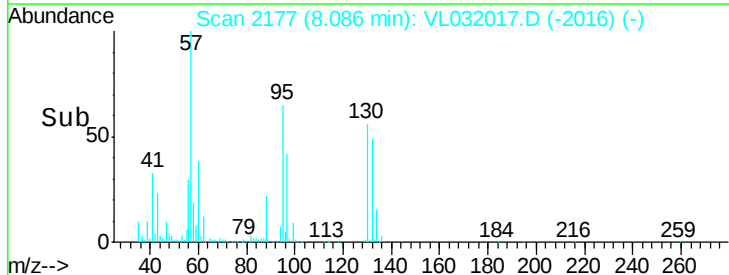
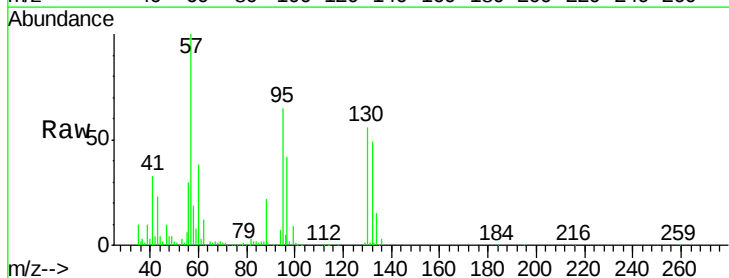
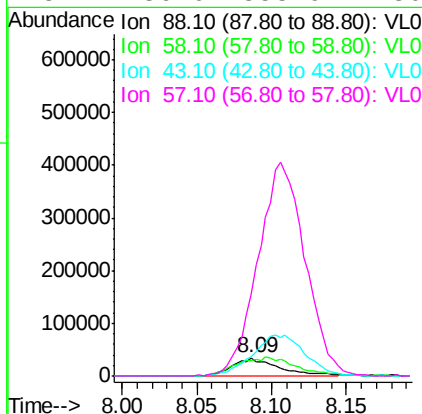
Manual Integrations
 APPROVED

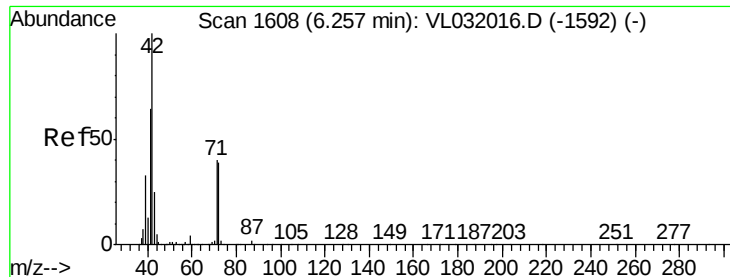
MMDadoda
 6/4/2018 10:54:53 AM



#40
 1,4-Dioxane
 Concen: 1.79 ppbv
 RT: 8.09 min Scan# 2177
 Delta R.T. 0.02 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Lower	Upper
88	100		
58	140.5	100.5	150.7
43	268.4	193.8	290.6
57	1236.0	853.9	1280.9





#41

Tetrahydrofuran

Concen: 2.25 ppbv m

RT: 6.27 min Scan# 1611

Delta R.T. 0.01 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tot Ion	Ratio	Lower	Upper
42	100		
72	0.0	32.3	48.5#
71	0.0	32.3	48.5#

Instrument :

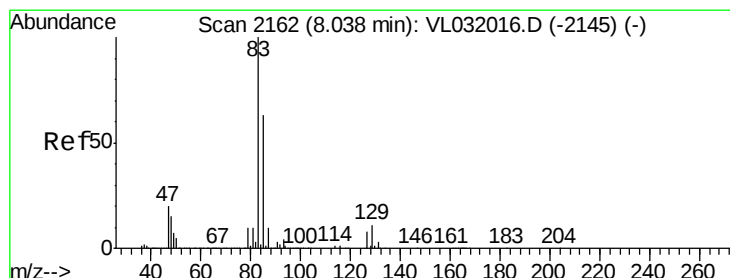
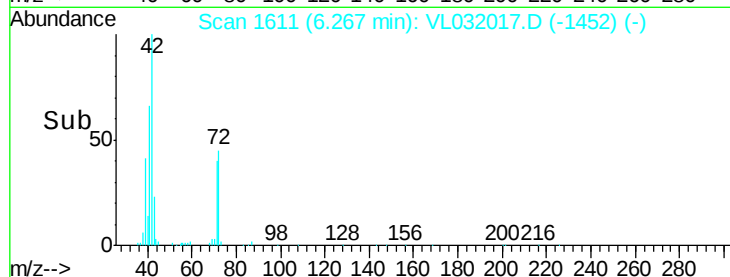
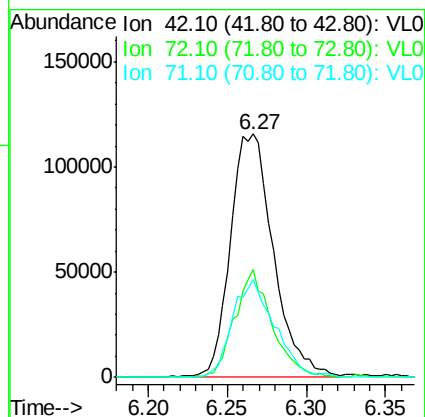
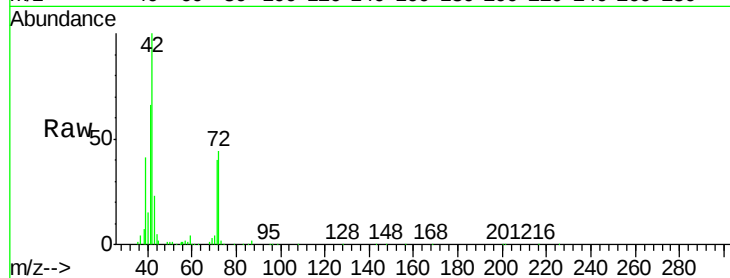
MSVOA_L

ClientSampleId :

VSTDIC002

Manual Integrations
APPROVED

MMDadoda
6/4/2018 10:54:53 AM



#42

Bromodichloromethane

Concen: 2.17 ppbv

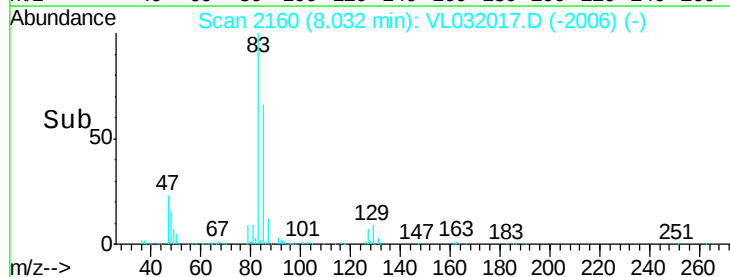
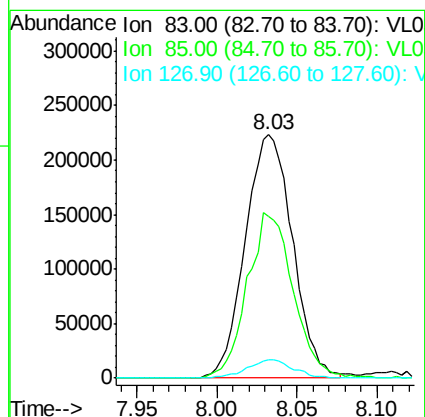
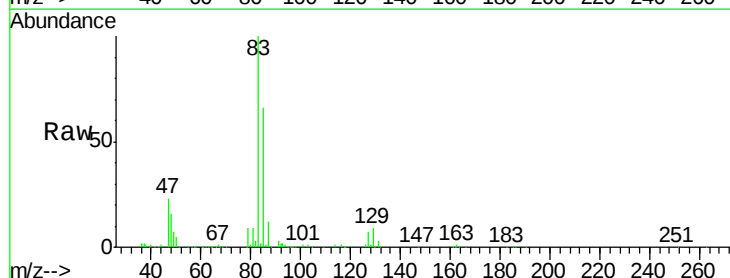
RT: 8.03 min Scan# 2160

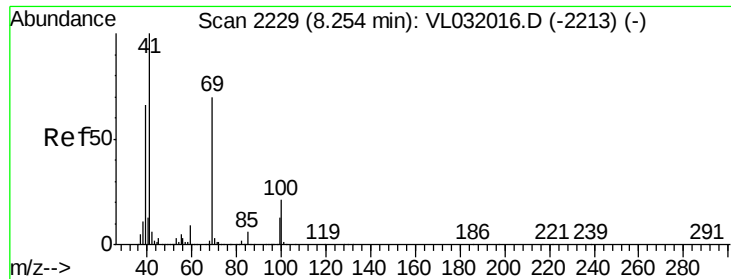
Delta R.T. -0.01 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Lower	Upper
83	100		
85	65.9	50.3	75.5
127	7.5	6.6	9.8





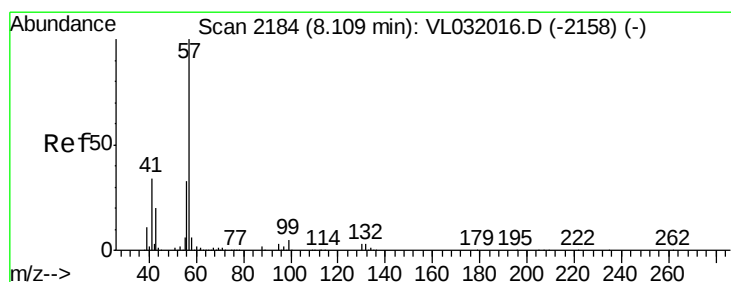
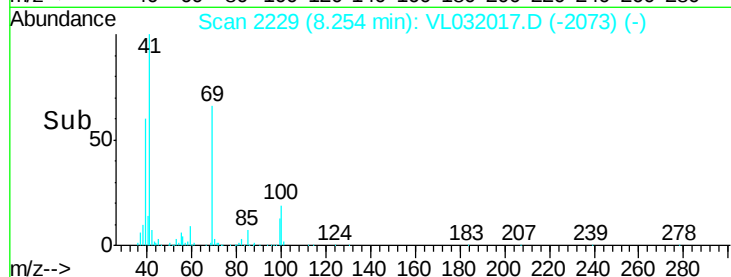
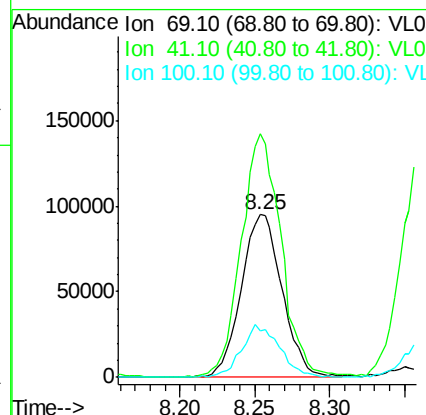
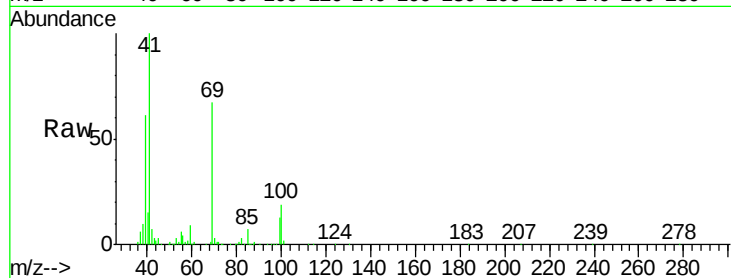
#43
Methvl Methacrilate
Concen: 2.07 ppbv
RT: 8.25 min Scan# 2229
Delta R.T. 0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC002

Tot Ion	Ratio	Lower	Upper
69	100		
41	145.5	115.5	173.3
100	30.1	25.4	38.0

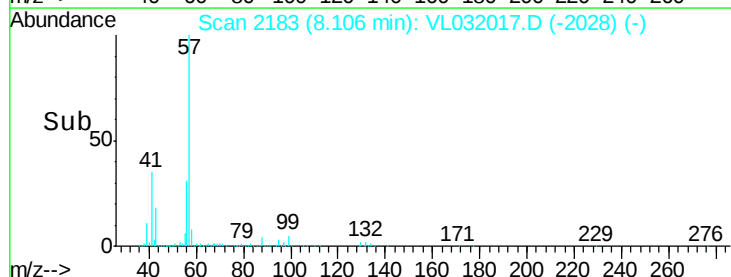
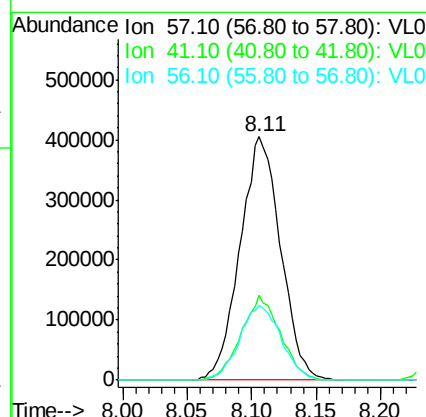
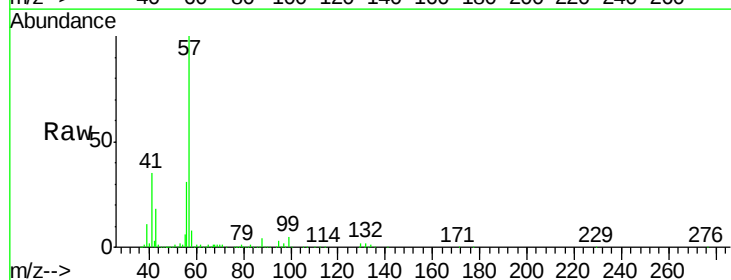
Manual Integrations
APPROVED

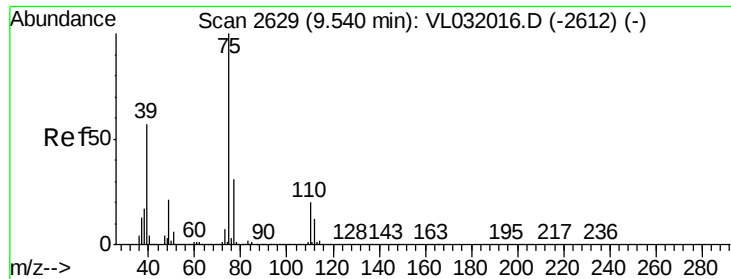
MMDadoda
6/4/2018 10:54:53 AM



#44
2,2,4-Trimethylpentane
Concen: 2.11 ppbv
RT: 8.11 min Scan# 2183
Delta R.T. -0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Lower	Upper
57	100		
41	33.9	26.6	40.0
56	31.8	24.9	37.3





#45

t-1,3-Dichloropropene

Concen: 2.04 ppbv

RT: 9.54 min Scan# 2628

Delta R.T. -0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC002

Tot Ion: 75 Resp: 237161

Ion Ratio Lower Upper

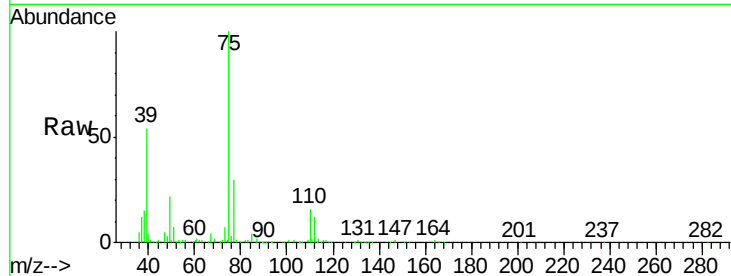
75 100

77 29.6 25.0 37.4

Manual Integrations
APPROVED

MMDadoda

6/4/2018 10:54:53 AM



Abundance Ion 75.10 (74.80 to 75.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

9.54

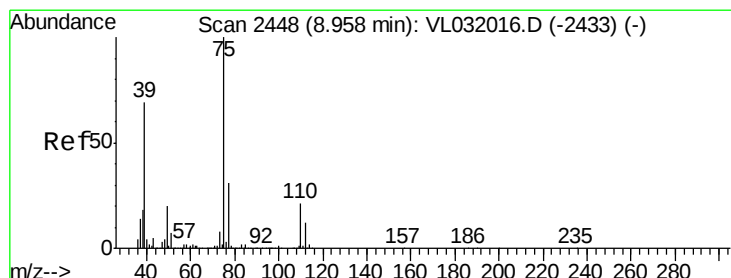
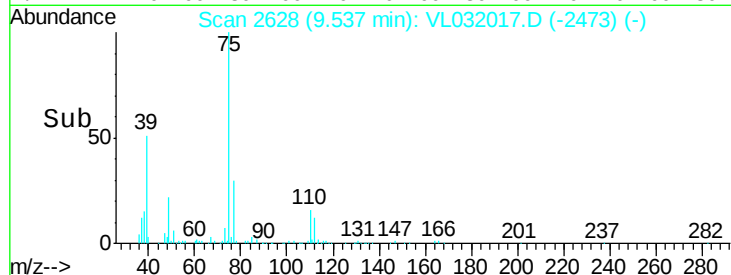
150000

100000

50000

0

Time--> 9.45 9.50 9.55 9.60



#46

cis-1,3-Dichloropropene

Concen: 2.10 ppbv

RT: 8.95 min Scan# 2447

Delta R.T. -0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

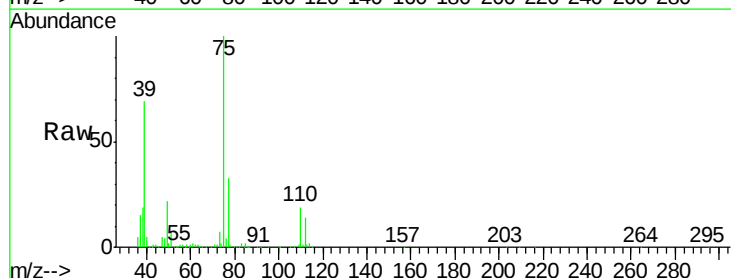
Tgt Ion: 75 Resp: 300196

Ion Ratio Lower Upper

75 100

39 68.4 55.0 82.6

77 32.6 25.0 37.6



Abundance Ion 75.00 (74.70 to 75.70): VL0

Ion 39.00 (38.70 to 39.70): VL0

Ion 77.00 (76.70 to 77.70): VL0

200000

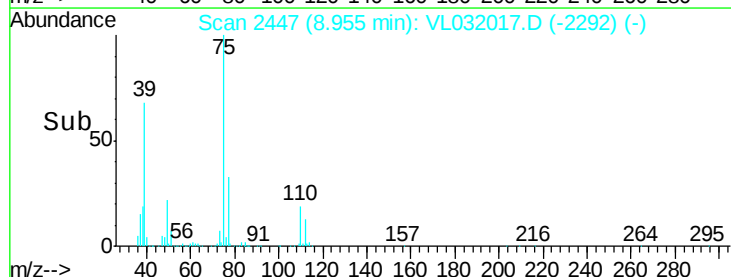
150000

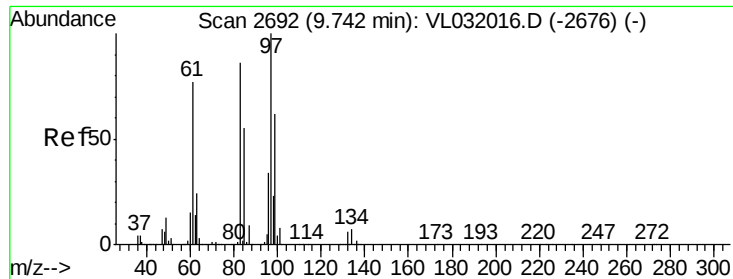
100000

50000

0

Time--> 8.90 8.95 9.00





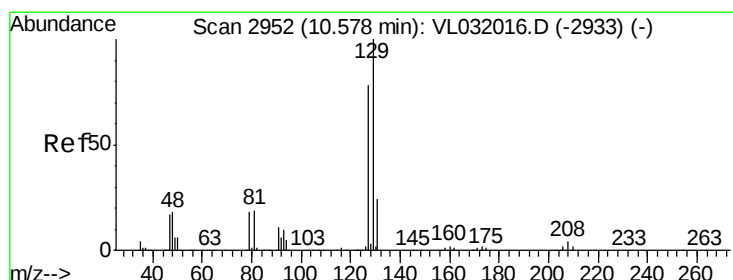
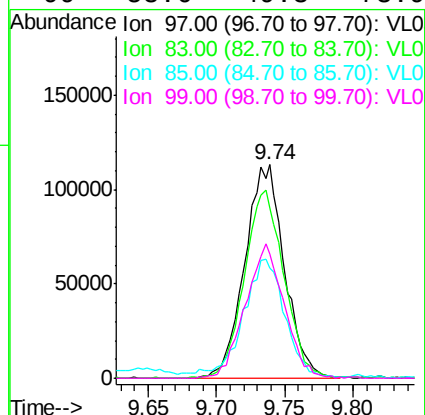
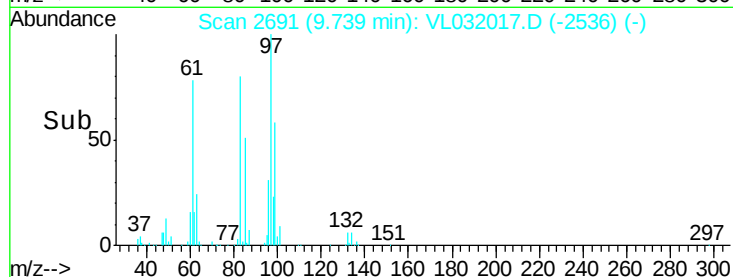
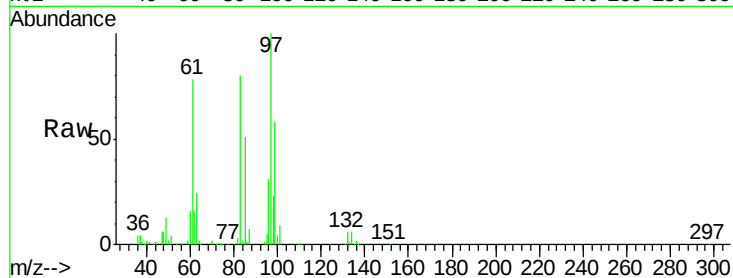
#47
 1,1,2-Trichloroethane
 Concen: 2.15 ppbv
 RT: 9.74 min Scan# 2691
 Delta R.T. -0.00 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC002

Tot Ion	97	Resp	228662
Ion	Ratio	Lower	Upper
97	100		
83	79.8	69.1	103.7
85	50.8	44.5	66.7
99	58.6	49.3	73.9

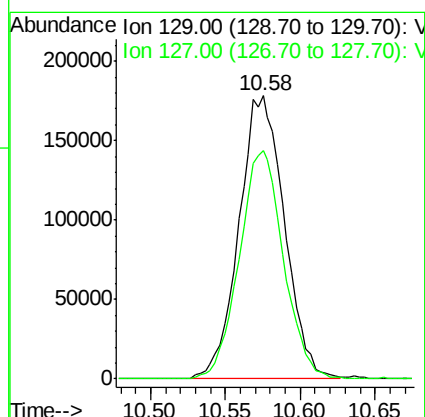
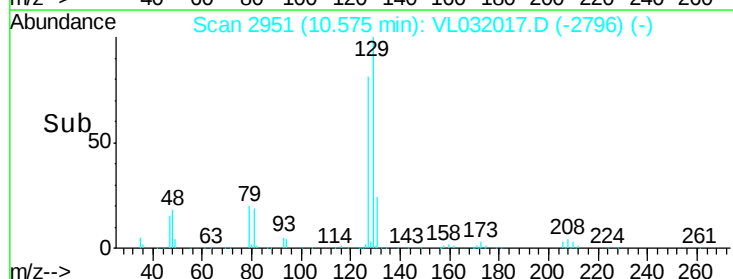
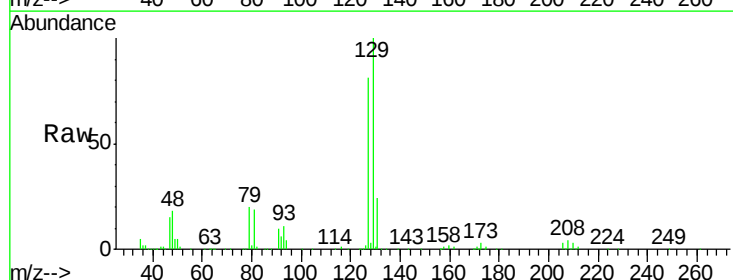
Manual Integrations
 APPROVED

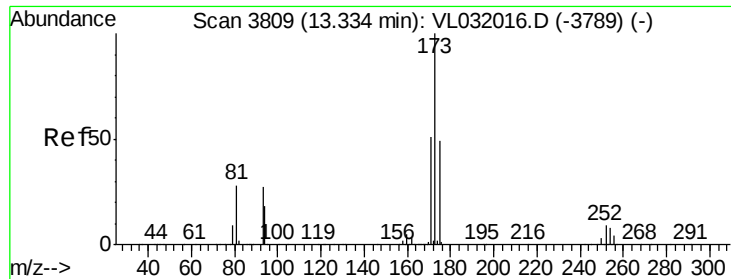
MMDadoda
 6/4/2018 10:54:53 AM



#48
 Dibromochloromethane
 Concen: 2.17 ppbv
 RT: 10.58 min Scan# 2951
 Delta R.T. -0.00 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Tgt Ion	129	Resp	373385
Ion	Ratio	Lower	Upper
129	100		
127	79.3	39.3	117.9





#49

Bromoform

Concen: 2.25 ppbv

RT: 13.33 min Scan# 3807

Delta R.T. -0.01 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

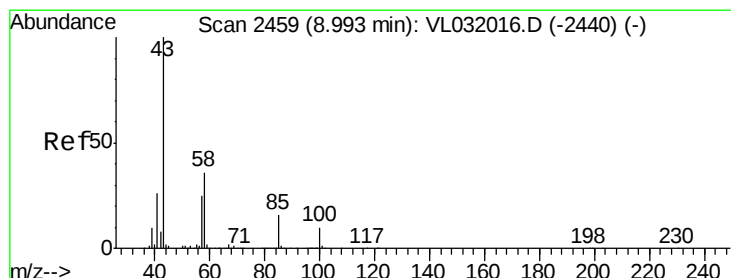
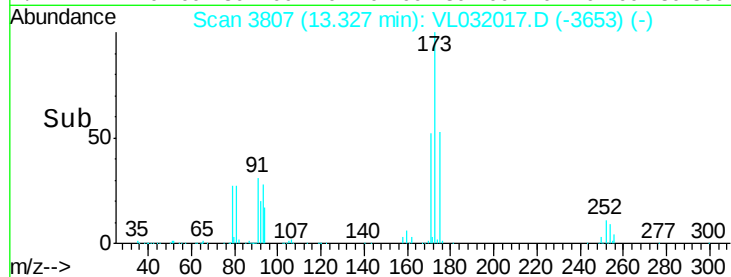
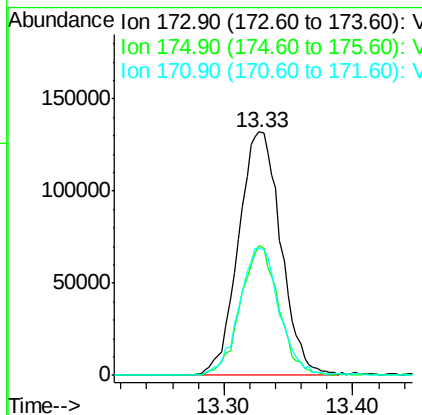
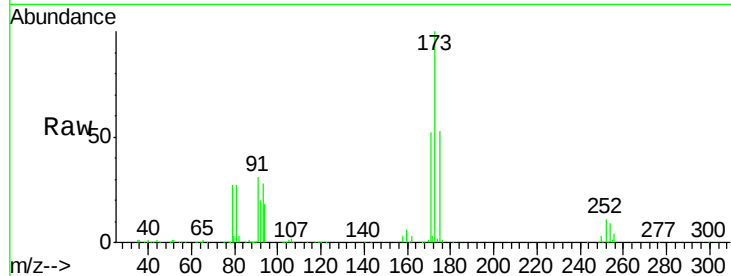
ClientSampleId :

VSTDIC002

Tot Ion	Ratio	Lower	Upper
173	100		
175	48.0	39.8	59.8
171	49.6	41.7	62.5

Manual Integrations
APPROVED

MMDadoda
6/4/2018 10:54:53 AM



#50

4-Methyl-2-Pentanone

Concen: 2.12 ppbv

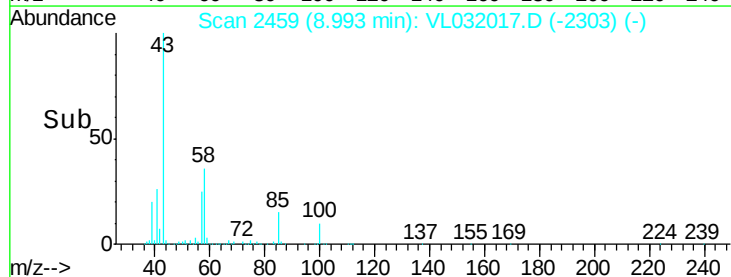
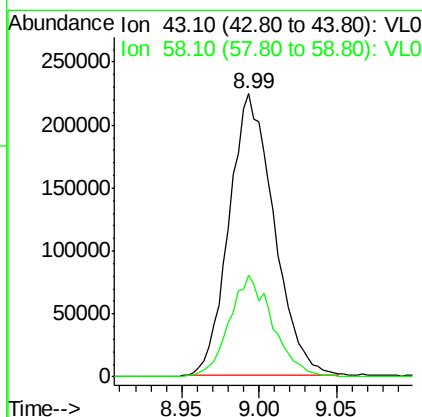
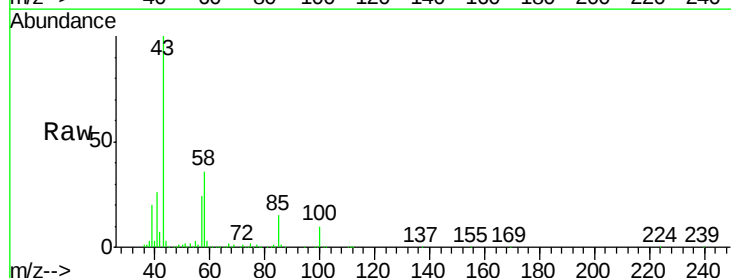
RT: 8.99 min Scan# 2459

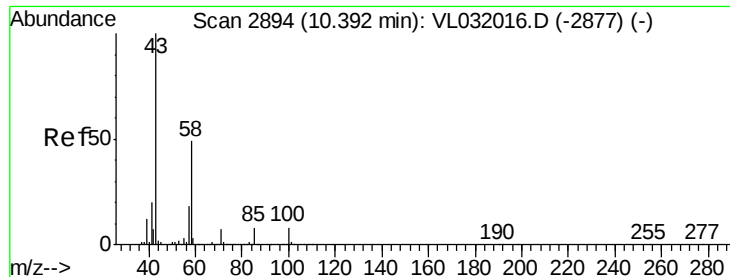
Delta R.T. 0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Lower	Upper
43	100		
58	35.0	29.1	43.7





#51

2-Hexanone

Concen: 2.09 ppbv

RT: 10.40 min Scan# 2897

Delta R.T. 0.01 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

ClientSampleId :

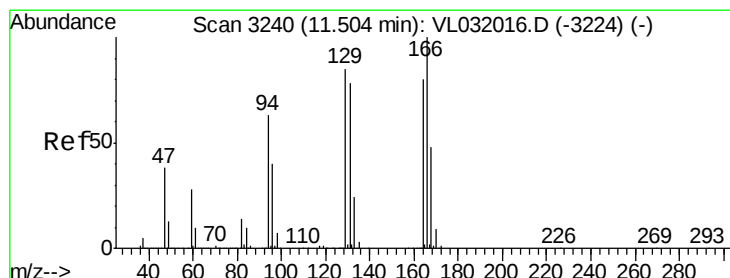
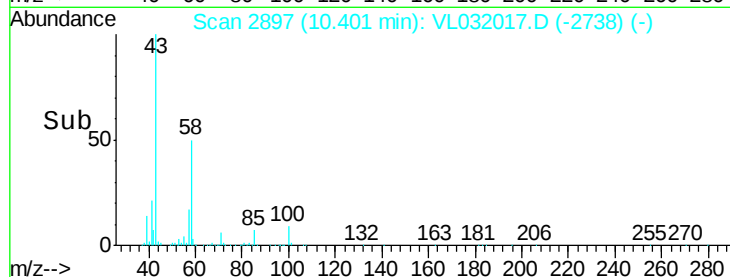
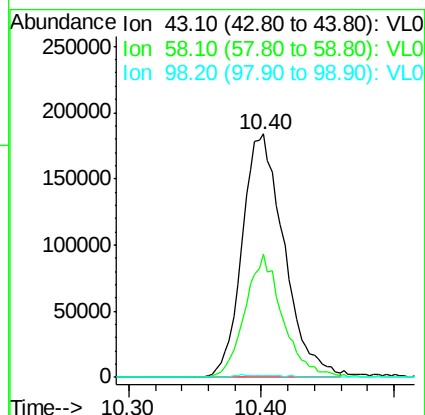
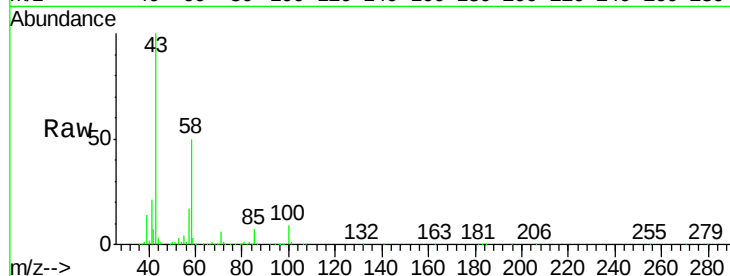
VSTDIC002

Tot Ion: 43 Resp: 404786

Ion	Ratio	Lower	Upper
43	100		
58	45.7	39.0	58.6
98	1.1	0.4	0.6

Manual Integrations
APPROVED

MMDadoda
6/4/2018 10:54:53 AM



#52

Tetrachloroethene

Concen: 2.09 ppbv m

RT: 11.50 min Scan# 3238

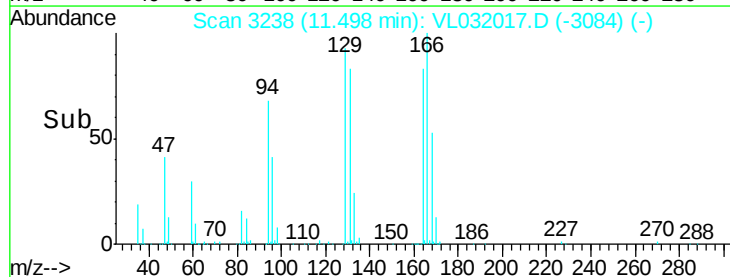
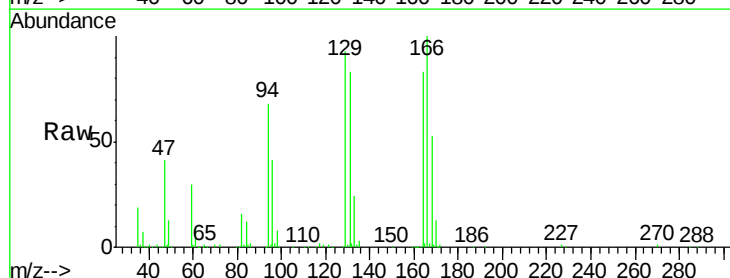
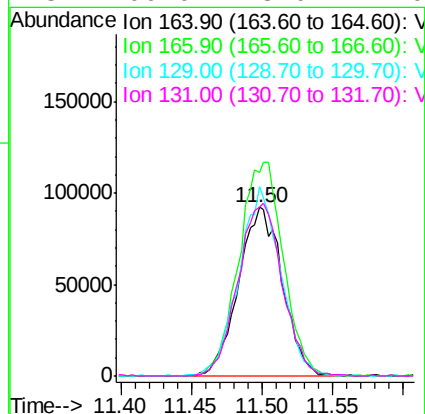
Delta R.T. -0.01 min

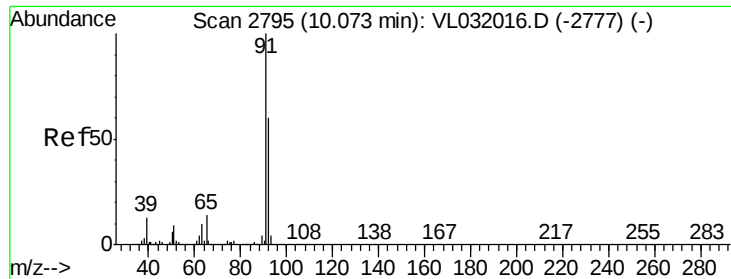
Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tgt Ion: 164 Resp: 199173

Ion	Ratio	Lower	Upper
164	100		
166	120.5	100.2	150.2
129	112.4	85.4	128.0
131	100.0	78.0	117.0





#53

Toluene

Concen: 2.12 ppbv

RT: 10.07 min Scan# 2794

Delta R.T. -0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC002

Tot Ion: 91 Resp: 588816

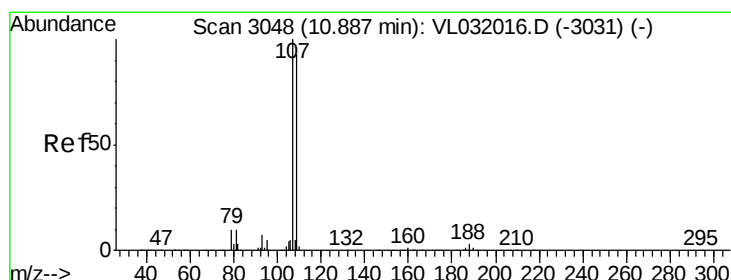
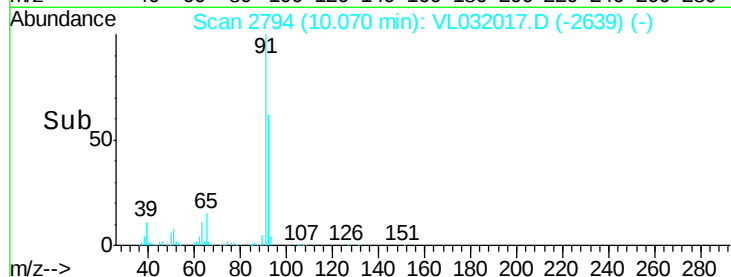
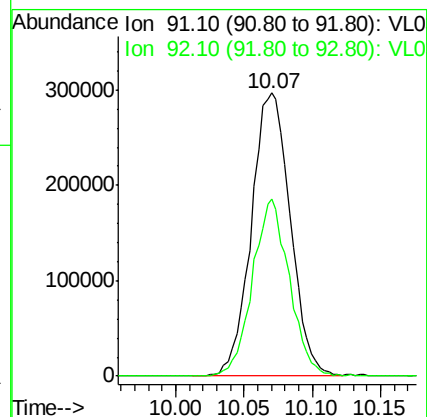
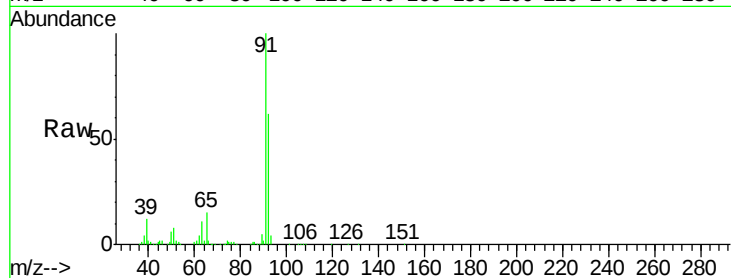
Ion Ratio Lower Upper

91 100

92 59.0 48.2 72.2

Manual Integrations
APPROVED

MMDadoda
6/4/2018 10:54:53 AM



#54

1,2-Dibromoethane

Concen: 2.12 ppbv

RT: 10.89 min Scan# 3048

Delta R.T. 0.00 min

Lab File: VL032017.D

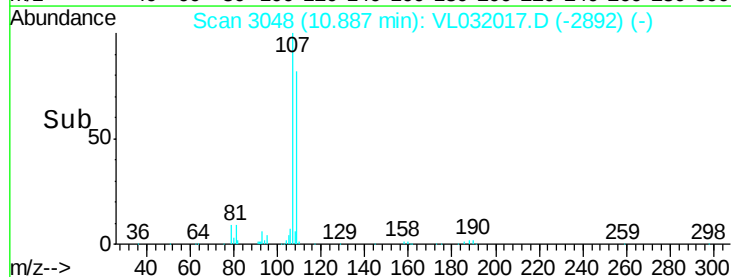
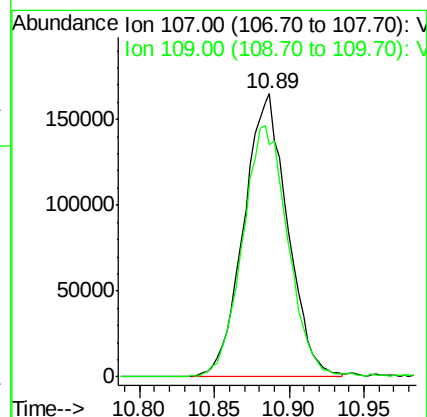
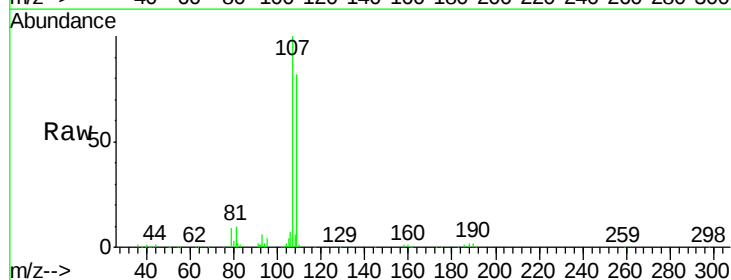
Acq: 31 May 2018 16:46

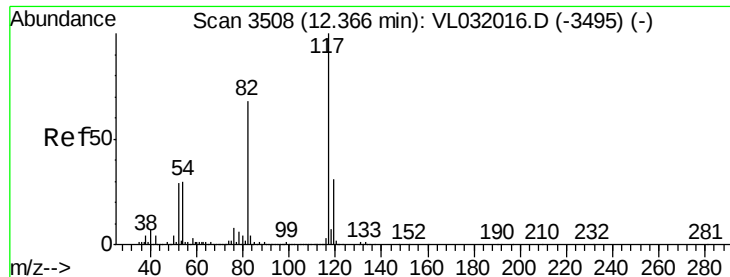
Tgt Ion: 107 Resp: 336266

Ion Ratio Lower Upper

107 100

109 81.5 74.6 111.8





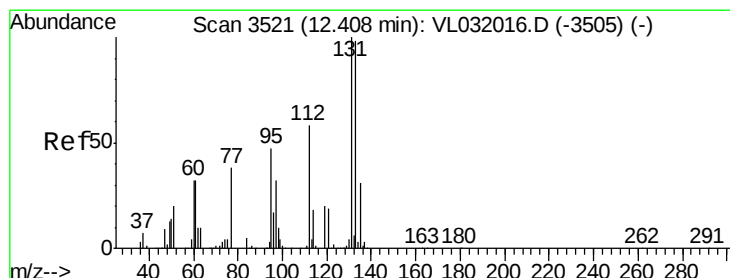
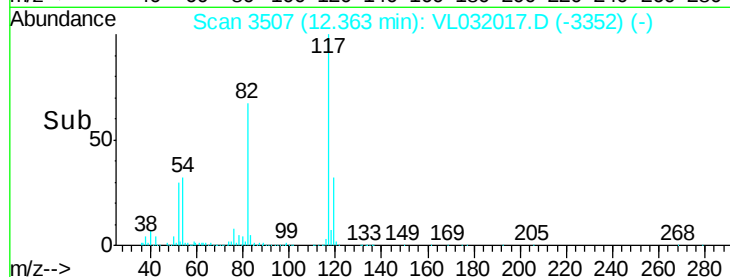
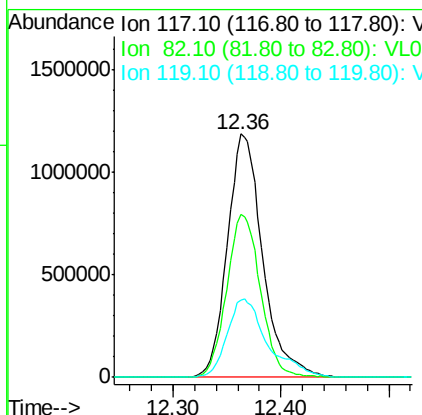
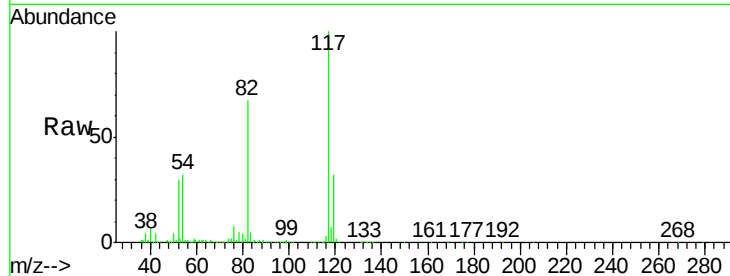
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.36 min Scan# 3507
Delta R.T. -0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC002

Tot Ion	Ratio	Lower	Upper
117	100		
82	64.4	52.7	79.1
119	36.7	25.5	38.3

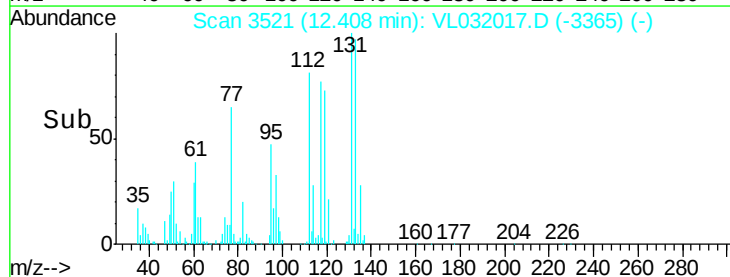
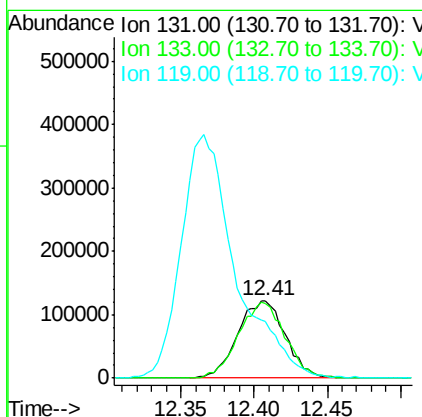
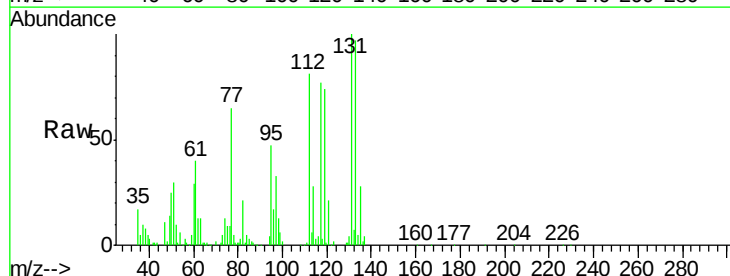
Manual Integrations
APPROVED

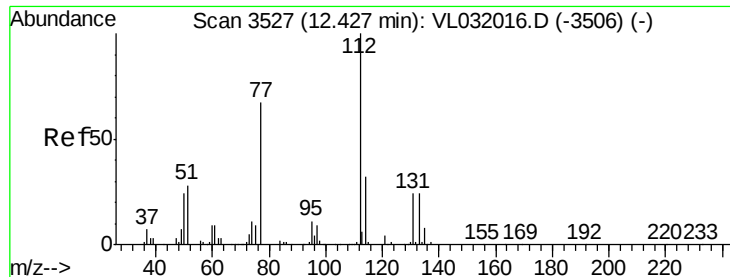
MMDadoda
6/4/2018 10:54:53 AM



#56
1,1,1,2-Tetrachloroethane
Concen: 2.21 ppbv m
RT: 12.41 min Scan# 3521
Delta R.T. 0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Lower	Upper
131	100		
133	97.1	76.7	115.1
119	0.0	49.2	73.8#





#57

Chlorobenzene

Concen: 2.18 ppbv

RT: 12.43 min Scan# 3527

Delta R.T. 0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

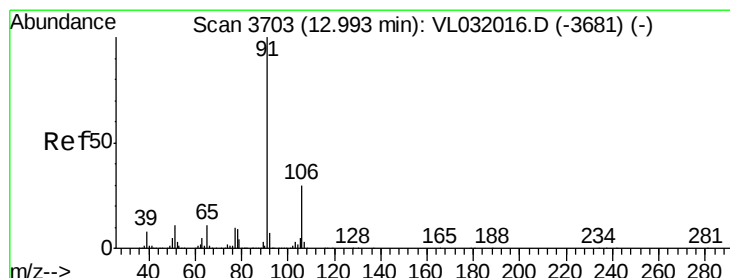
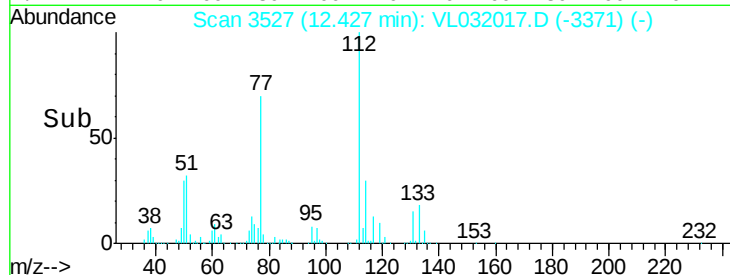
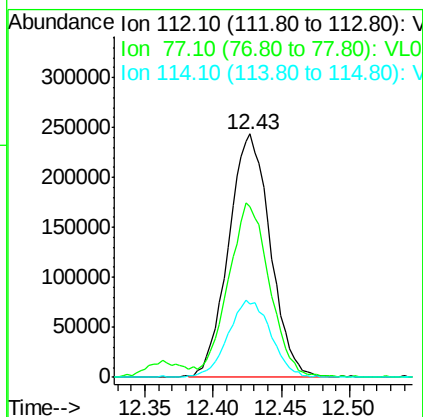
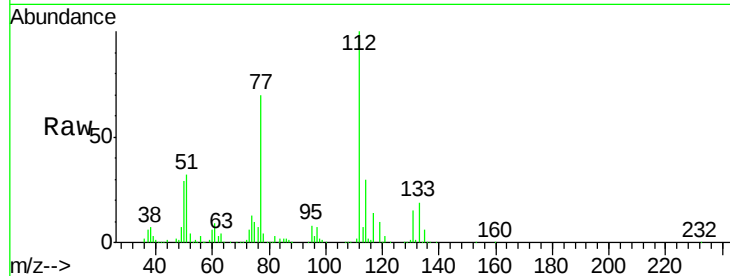
ClientSampleId :

VSTDIC002

Tot Ion	Ratio	Lower	Upper
112	100		
77	69.6	54.3	81.5
114	30.1	28.6	35.0

Manual Integrations
APPROVED

MMDadoda
6/4/2018 10:54:53 AM



#58

Ethyl Benzene

Concen: 2.15 ppbv

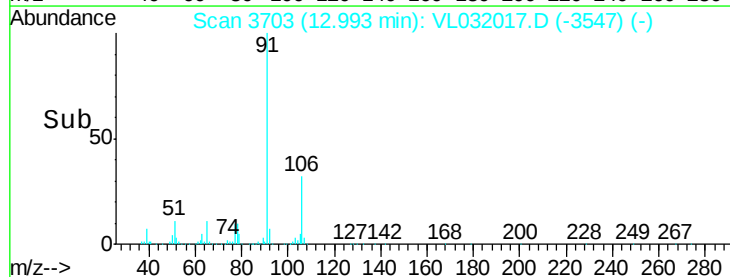
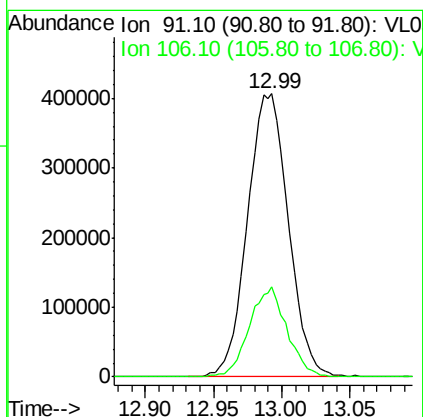
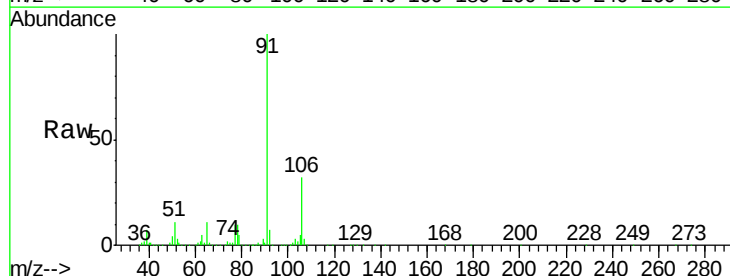
RT: 12.99 min Scan# 3703

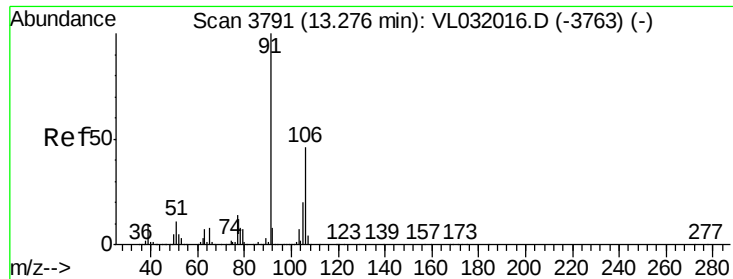
Delta R.T. 0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Lower	Upper
91	100		
106	31.6	24.2	36.2





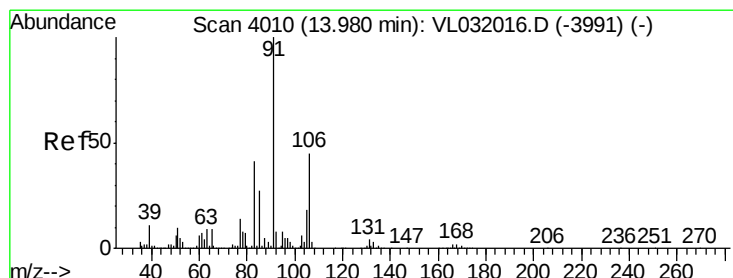
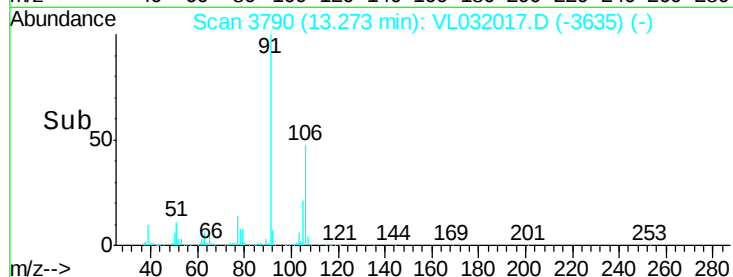
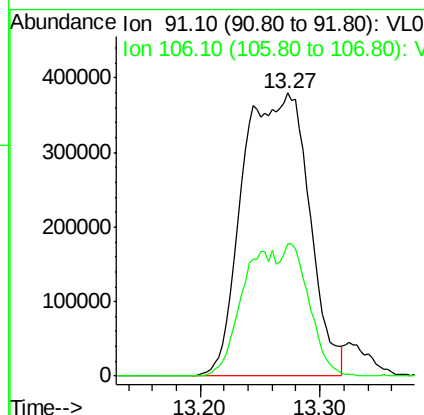
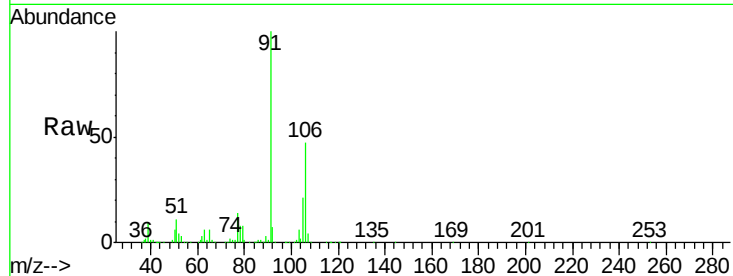
#59
m/p-Xylene
Concen: 4.36 ppbv m
RT: 13.27 min Scan# 3790
Delta R.T. -0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC002

Tot Ion: 91 Resp: 1462635
Ion Ratio Lower Upper
91 100
106 44.2 35.7 53.5

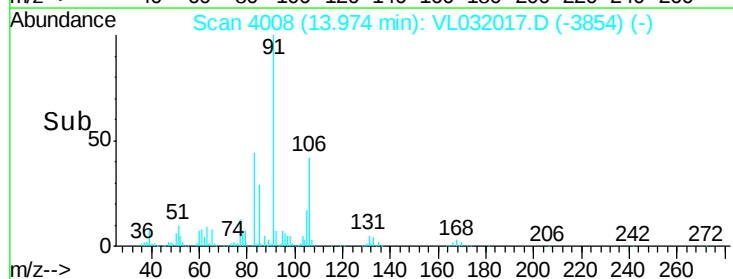
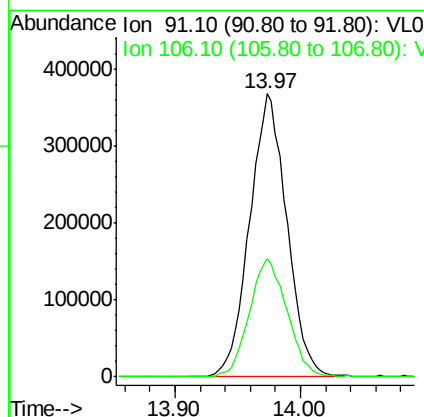
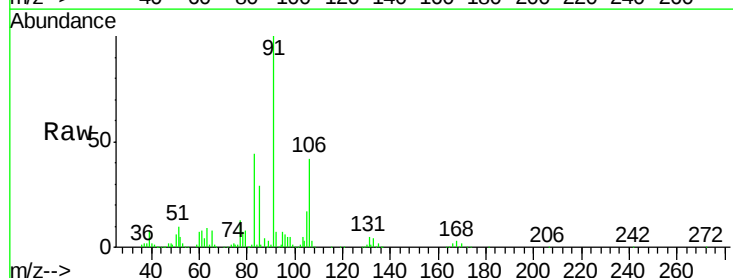
Manual Integrations
APPROVED

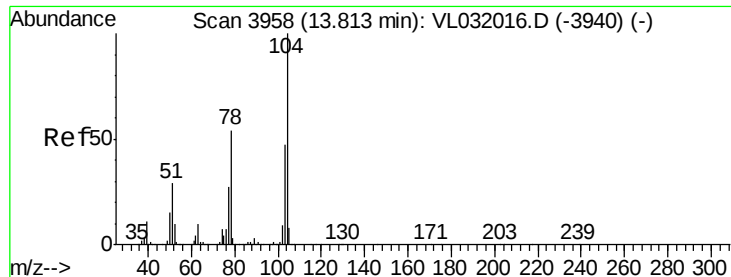
MMDadoda
6/4/2018 10:54:53 AM



#60
o-Xylene
Concen: 2.25 ppbv
RT: 13.97 min Scan# 4008
Delta R.T. -0.01 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Tgt Ion: 91 Resp: 758424
Ion Ratio Lower Upper
91 100
106 42.3 21.9 65.5





#61

Stvrene

Concen: 2.00 ppbv

RT: 13.81 min Scan# 3957

Delta R.T. -0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

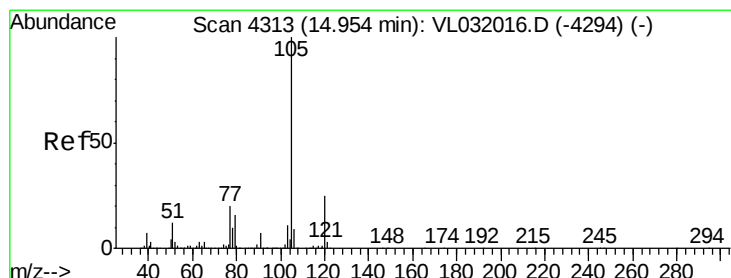
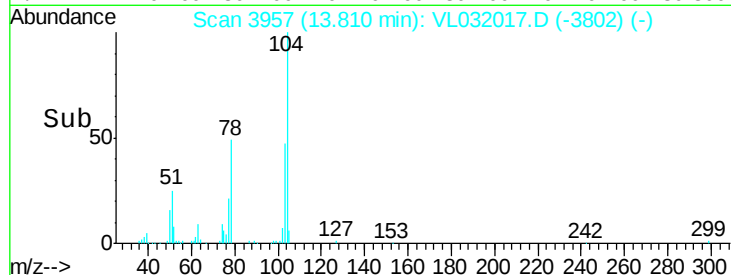
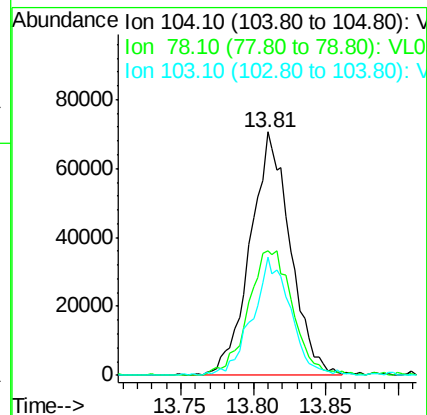
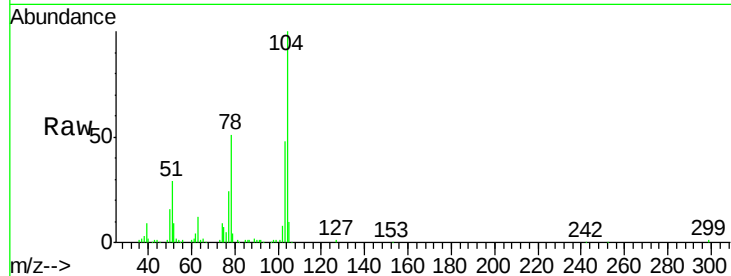
ClientSampleId :

VSTDIC002

Tot Ion:	104	Resp:	136046
Ion Ratio	Lower	Upper	
104	100		
78	57.3	43.0	64.4
103	46.2	37.4	56.2

Manual Integrations
APPROVED

MMDadoda
6/4/2018 10:54:53 AM



#62

Isopropylbenzene

Concen: 2.19 ppbv

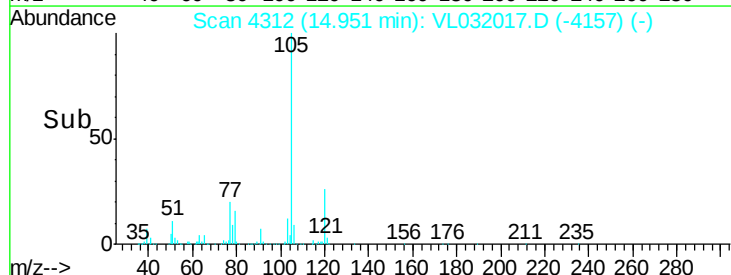
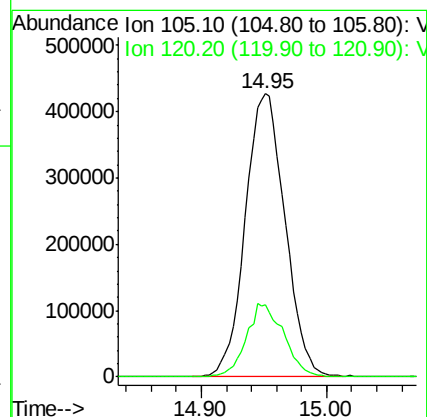
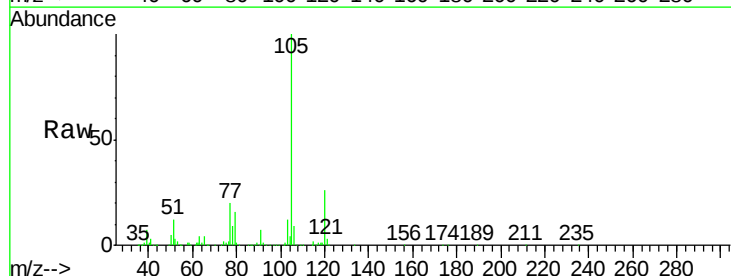
RT: 14.95 min Scan# 4312

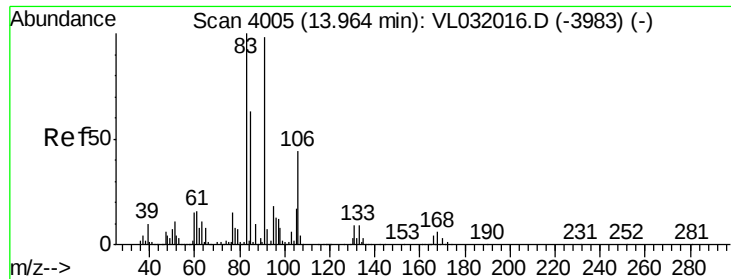
Delta R.T. -0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tgt Ion:	105	Resp:	939822
Ion Ratio	Lower	Upper	
105	100		
120	24.5	19.8	29.8





#63

1,1,2,2-Tetrachloroethane

Concen: 2.25 ppbv

RT: 13.96 min Scan# 4004

Delta R.T. -0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

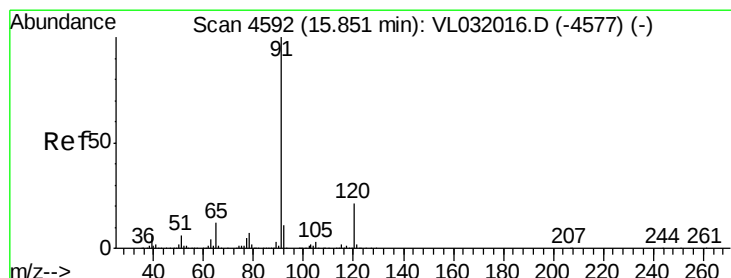
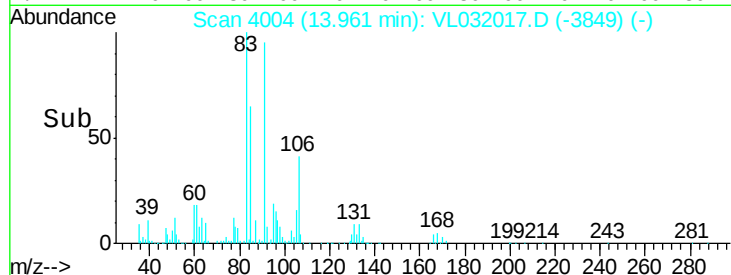
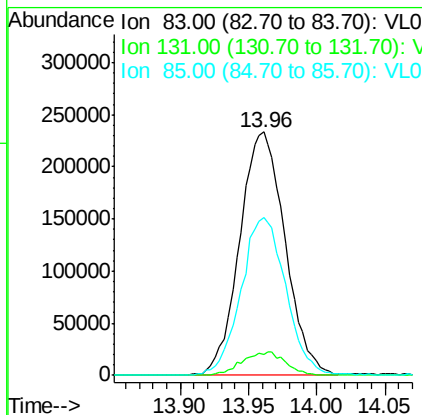
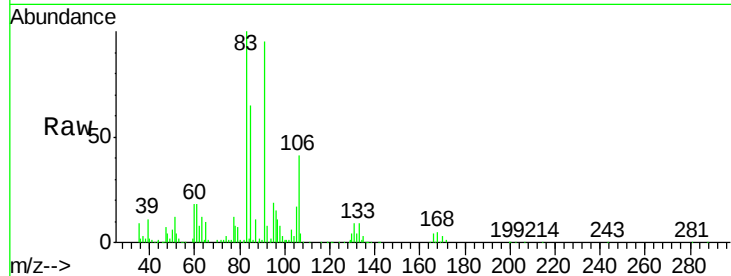
ClientSampleId :

VSTDIC002

Tot Ion:	83	Resp:	536049
Ion Ratio	Lower	Upper	
83	100		
131	9.4	4.7	14.0
85	64.4	32.2	96.6

Manual Integrations
APPROVED

MMDadoda
6/4/2018 10:54:53 AM



#64

n-propylbenzene

Concen: 2.16 ppbv

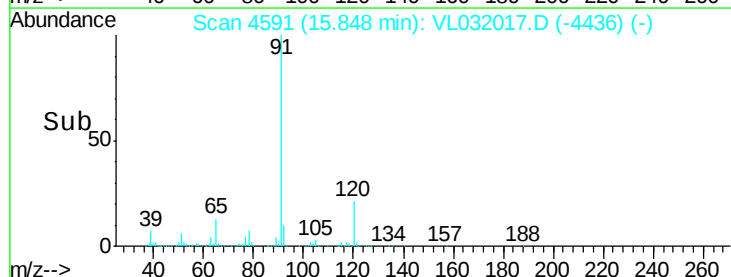
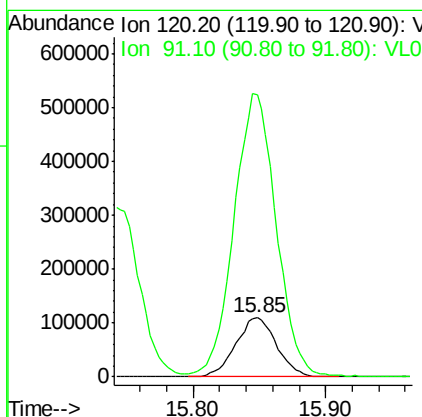
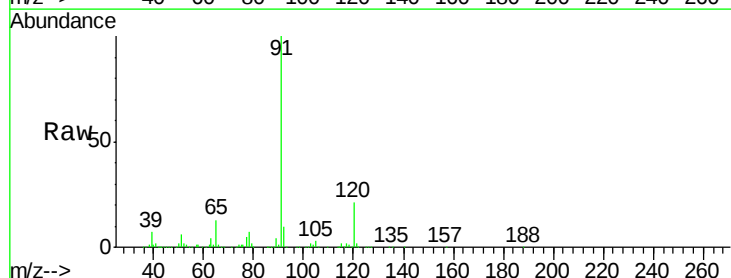
RT: 15.85 min Scan# 4591

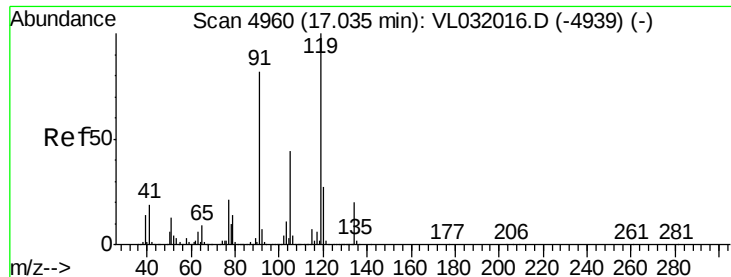
Delta R.T. -0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tgt Ion:	120	Resp:	233117
Ion Ratio	Lower	Upper	
120	100		
91	500.4	391.1	586.7





#65

tert-Butylbenzene

Concen: 2.15 ppbv

RT: 17.03 min Scan# 4959

Delta R.T. -0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

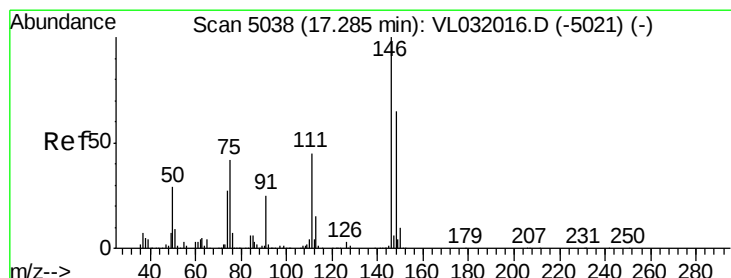
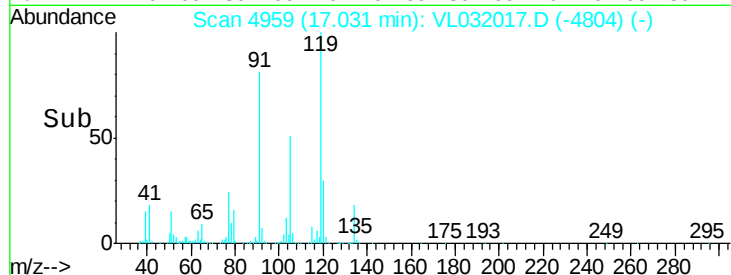
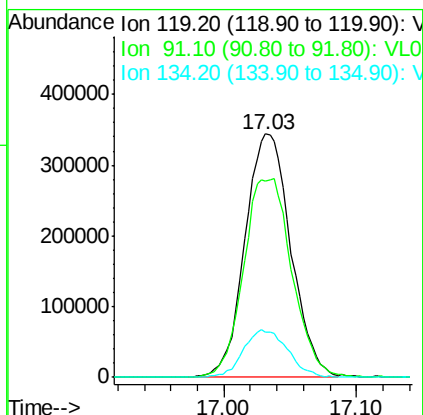
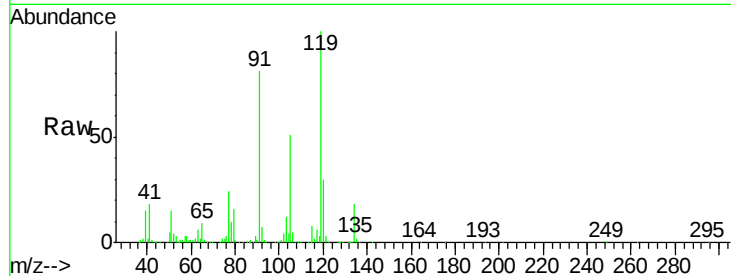
ClientSampleId :

VSTDIC002

Tot Ion:	119	Resp:	821854
Ion Ratio	Lower	Upper	
119	100		
91	86.9	68.2	102.4
134	19.1	15.6	23.4

Manual Integrations
APPROVED

MMDadoda
6/4/2018 10:54:53 AM



#66

Benzyl Chloride

Concen: 2.32 ppbv m

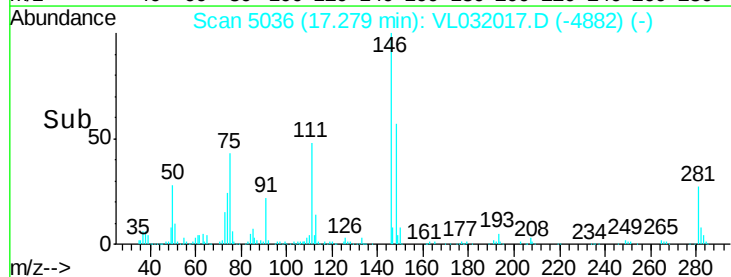
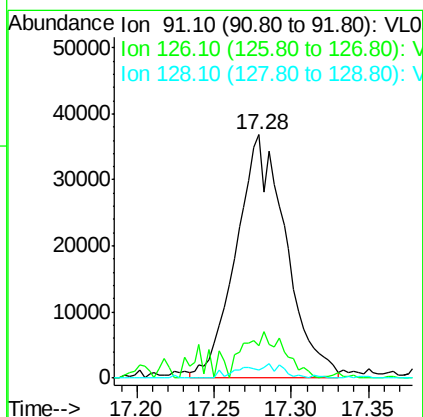
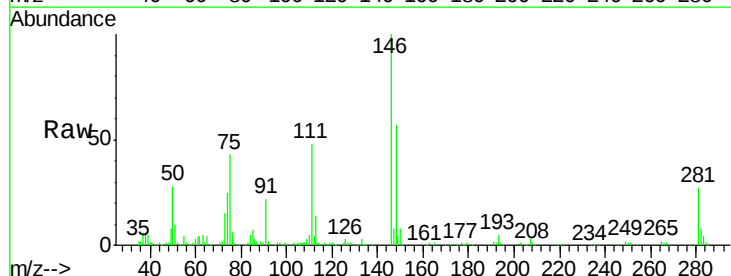
RT: 17.28 min Scan# 5036

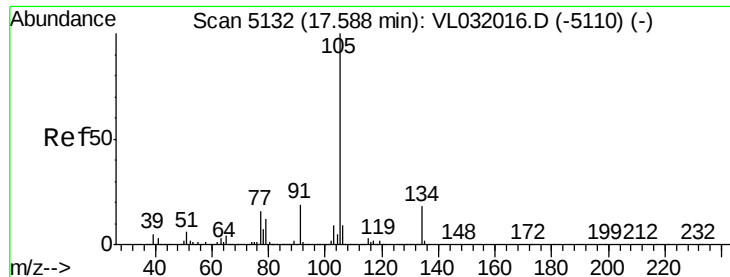
Delta R.T. -0.01 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tgt Ion:	91	Resp:	82686
Ion Ratio	Lower	Upper	
91	100		
126	21.7	14.2	21.2#
128	5.1	4.5	6.7





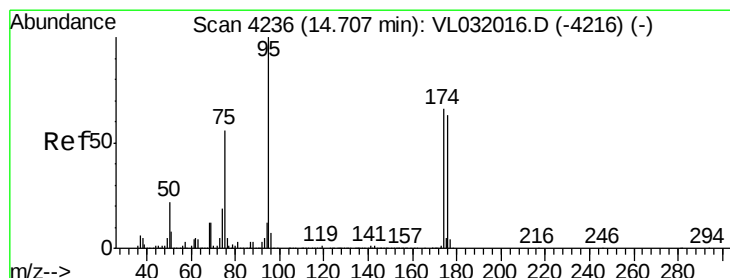
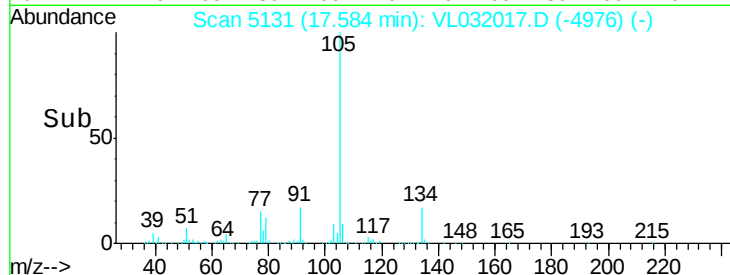
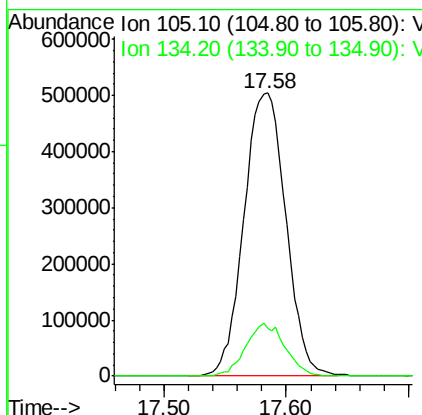
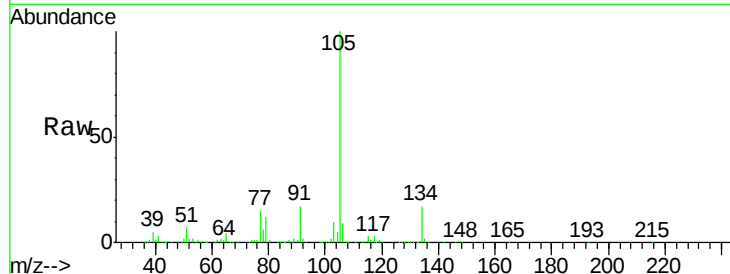
#67
 sec-Butylbenzene
 Concen: 2.25 ppbv
 RT: 17.58 min Scan# 5131
 Delta R.T. -0.00 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC002

Tot Ion: 105 Resp: 1195517
 Ion Ratio Lower Upper
 105 100
 134 17.5 14.4 21.6

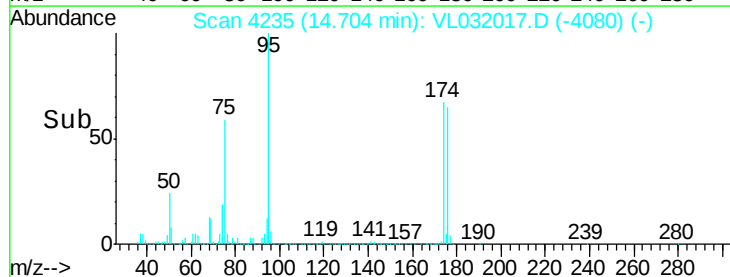
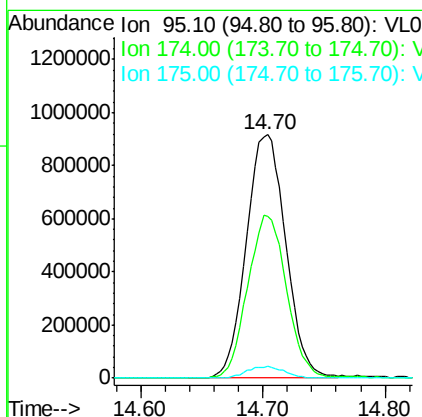
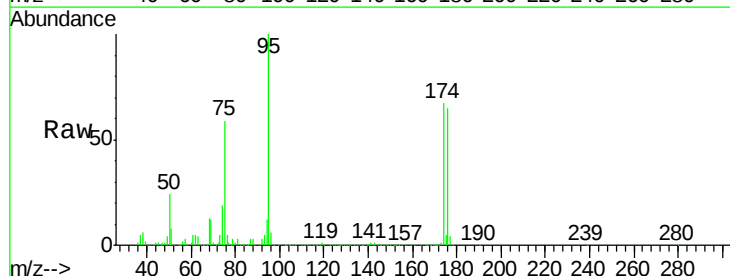
Manual Integrations
 APPROVED

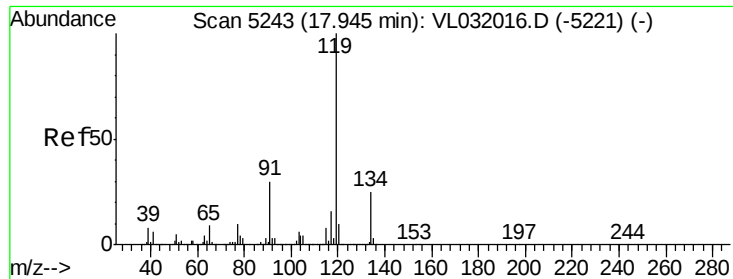
MMDadoda
 6/4/2018 10:54:53 AM



#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.73 ppbv
 RT: 14.70 min Scan# 4235
 Delta R.T. -0.00 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Tgt Ion: 95 Resp: 2049703
 Ion Ratio Lower Upper
 95 100
 174 66.6 53.2 79.8
 175 4.7 3.7 5.5





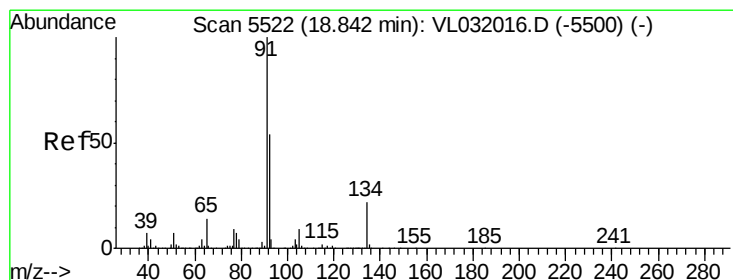
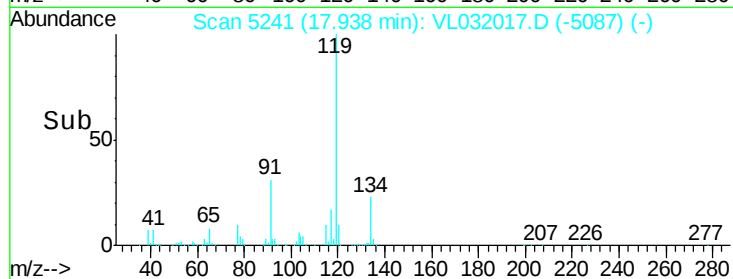
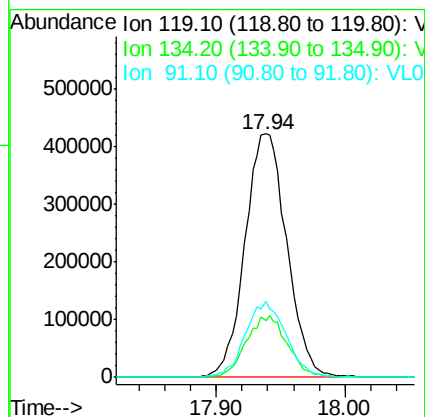
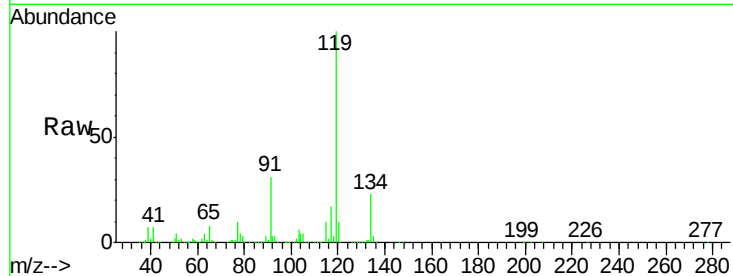
#69
p-Isopropyltoluene
Concen: 2.23 ppbv
RT: 17.94 min Scan# 5241
Delta R.T. -0.01 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC002

Tot Ion	Ratio	Resp	Lower	Upper
119	100	948114		
134	25.0	19.9	29.9	
91	30.5	24.1	36.1	

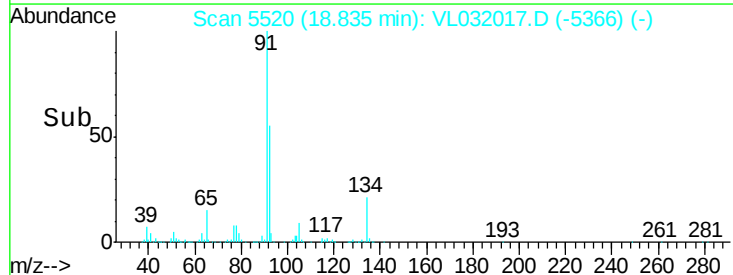
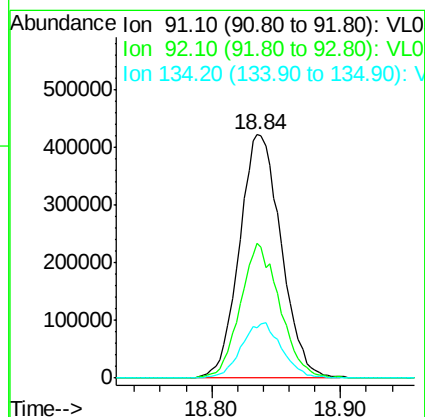
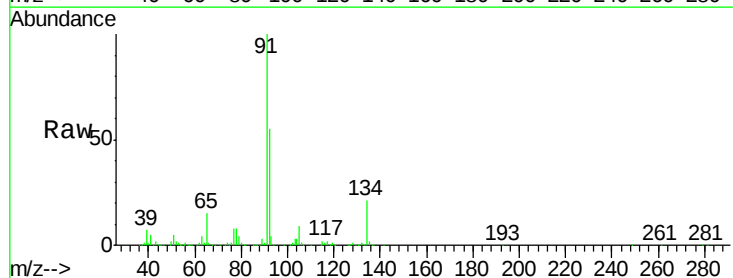
Manual Integrations
APPROVED

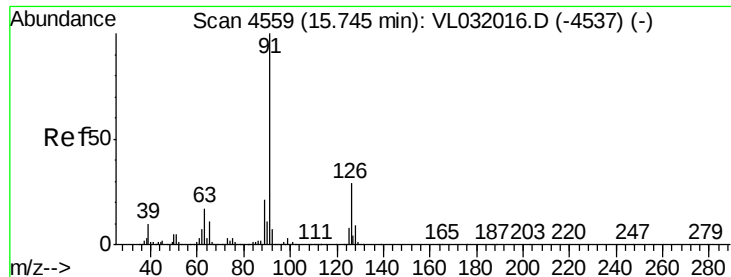
MMDadoda
6/4/2018 10:54:53 AM



#70
n-Butylbenzene
Concen: 2.16 ppbv
RT: 18.84 min Scan# 5520
Delta R.T. -0.01 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Resp	Lower	Upper
91	100	947877		
92	53.0	42.5	63.7	
134	22.0	17.4	26.2	





#71

2-Chlorotoluene

Concen: 2.19 ppbv

RT: 15.74 min Scan# 4558

Delta R.T. -0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC002

Tot Ion: 91 Resp: 690169

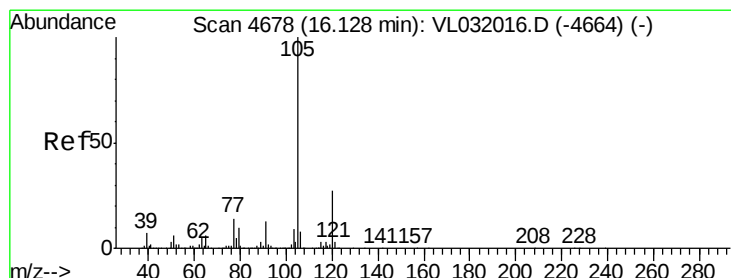
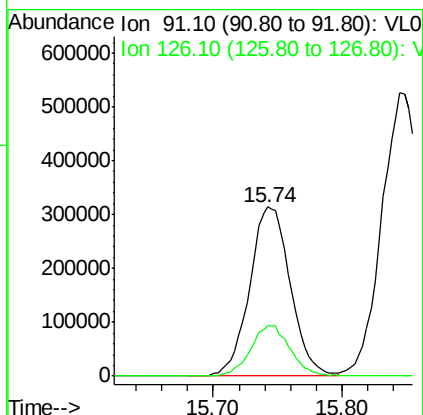
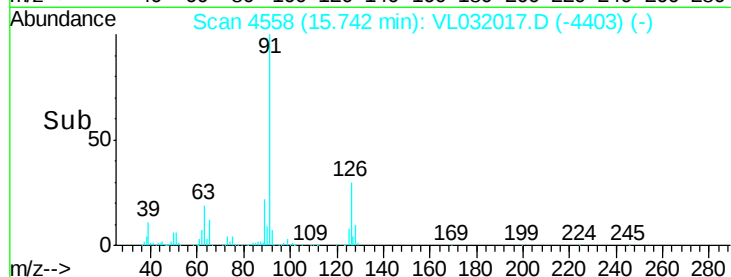
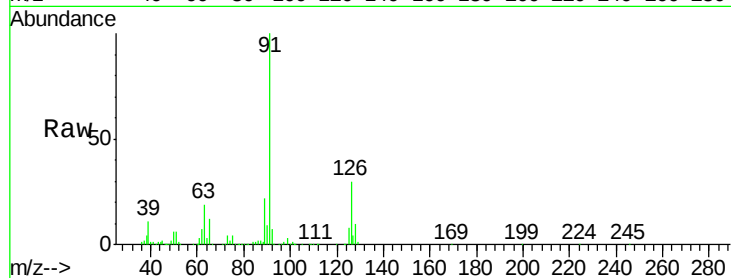
Ion Ratio Lower Upper

91 100

126 29.3 11.7 46.7

Manual Integrations
APPROVED

MMDadoda
6/4/2018 10:54:53 AM



#72

4-Ethyltoluene

Concen: 2.18 ppbv

RT: 16.12 min Scan# 4677

Delta R.T. -0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tgt Ion: 105 Resp: 745913

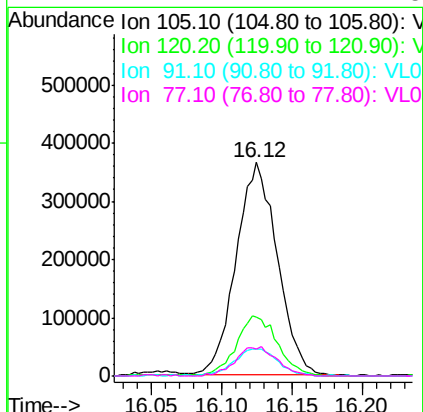
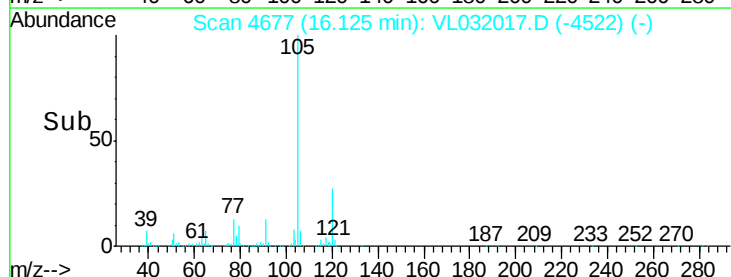
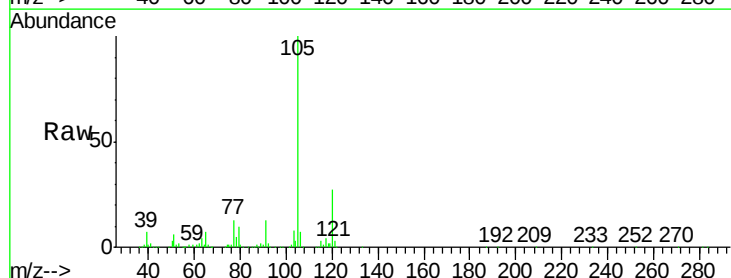
Ion Ratio Lower Upper

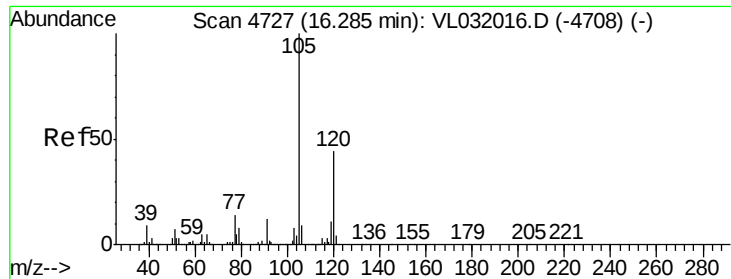
105 100

120 28.3 23.4 35.0

91 13.0 10.7 16.1

77 14.2 11.7 17.5





#73

1,3,5-Trimethylbenzene

Concen: 2.15 ppbv

RT: 16.28 min Scan# 4725

Delta R.T. -0.01 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC002

Tot Ion:105 Resp: 677484

Ion Ratio Lower Upper

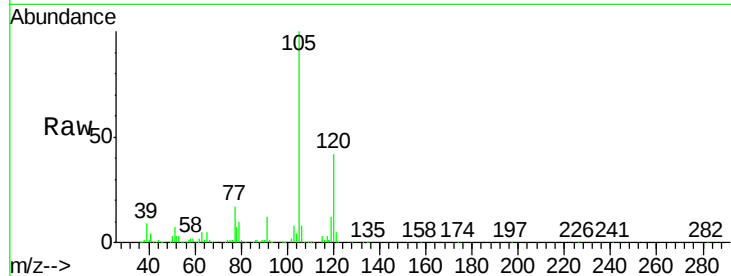
105 100

120 42.5 35.0 52.4

Manual Integrations
APPROVED

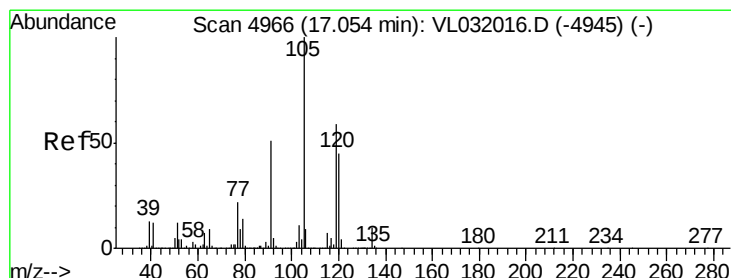
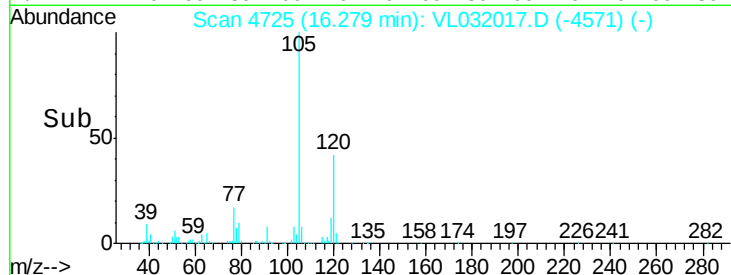
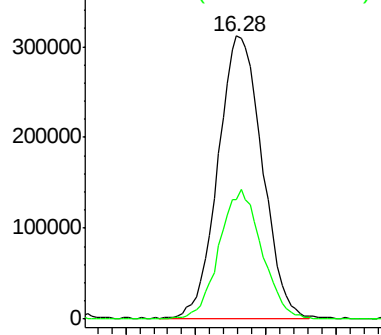
MMDadoda

6/4/2018 10:54:53 AM



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: 2.14 ppbv

RT: 17.05 min Scan# 4964

Delta R.T. -0.01 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tgt Ion:105 Resp: 747415

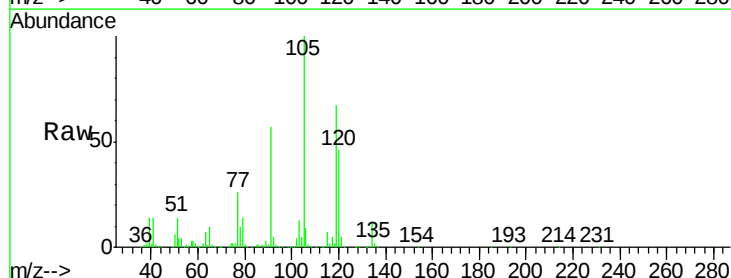
Ion Ratio Lower Upper

105 100

120 45.6 36.0 54.0

91 56.6 41.4 62.0

77 25.8 17.3 25.9

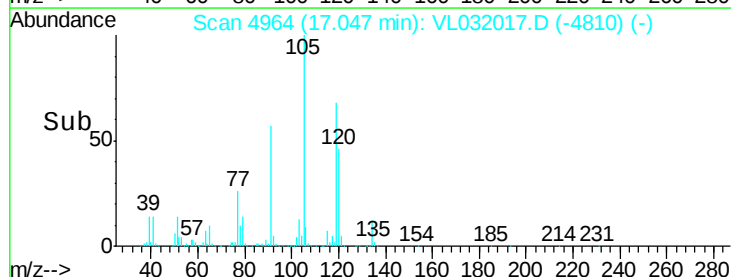
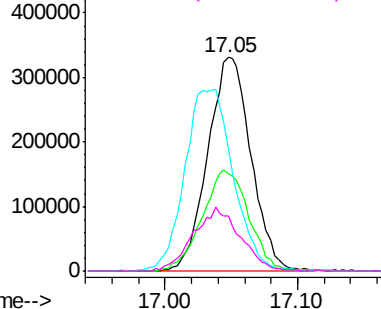


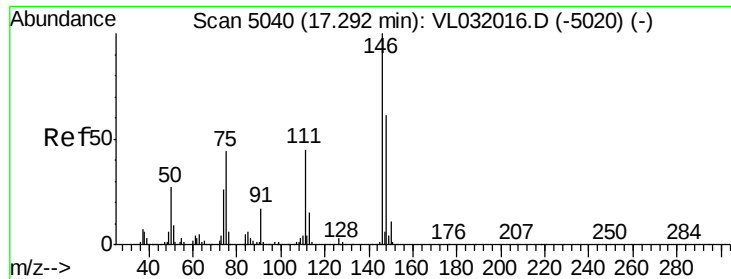
Abundance Ion 105.10 (104.80 to 105.80): V

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: 2.29 ppbv

RT: 17.29 min Scan# 5040

Delta R.T. 0.00 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Instrument :

MSVOA_L

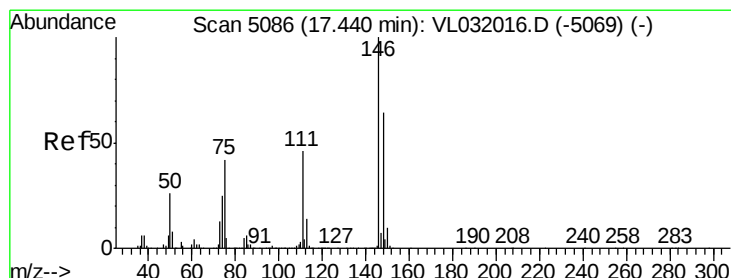
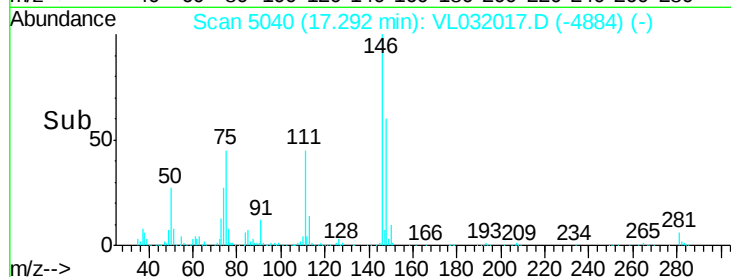
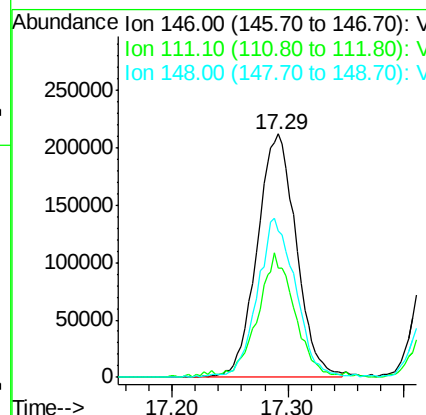
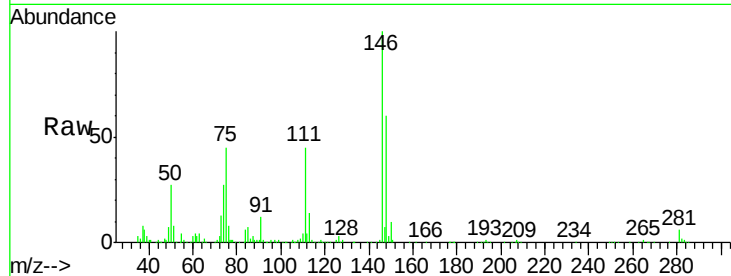
ClientSampleId :

VSTDIC002

Tot Ion	Ratio	Lower	Upper
146	100		
111	49.5	23.7	71.1
148	64.3	32.1	96.5

Manual Integrations
APPROVED

MMDadoda
6/4/2018 10:54:53 AM



#76

1,4-Dichlorobenzene

Concen: 2.25 ppbv

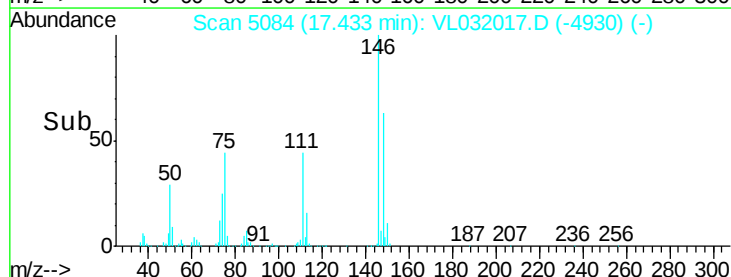
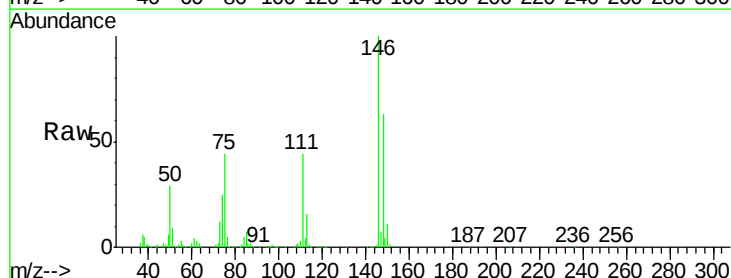
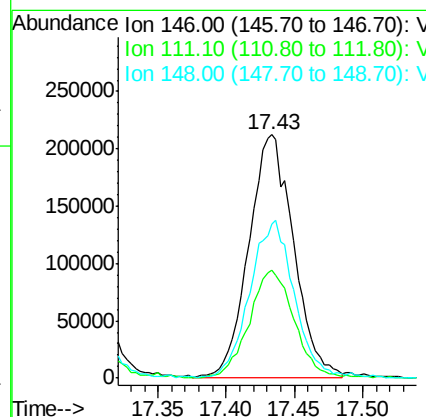
RT: 17.43 min Scan# 5084

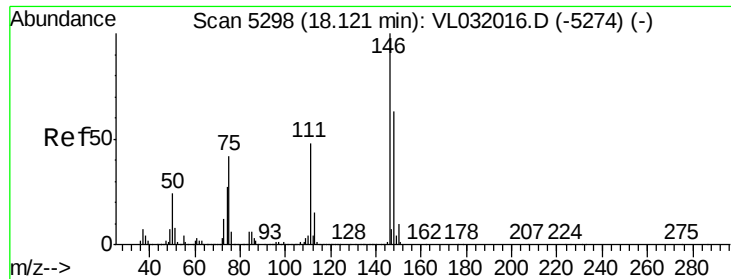
Delta R.T. -0.01 min

Lab File: VL032017.D

Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Lower	Upper
146	100		
111	45.1	22.4	67.0
148	65.0	32.1	96.3





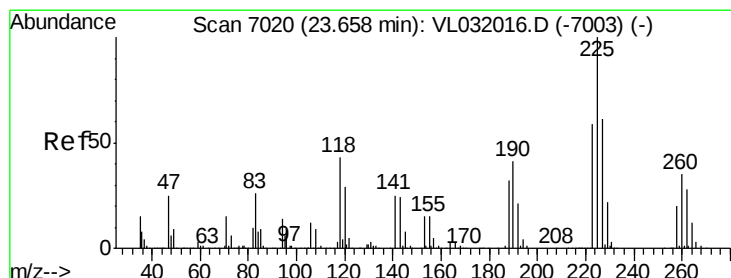
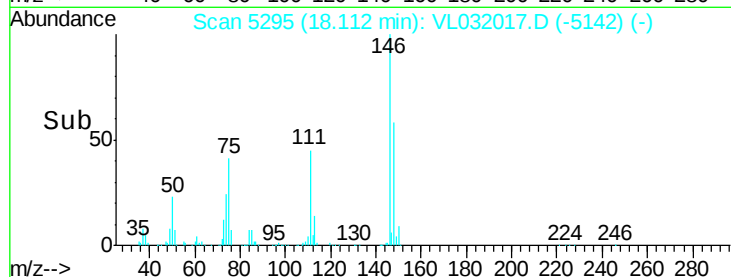
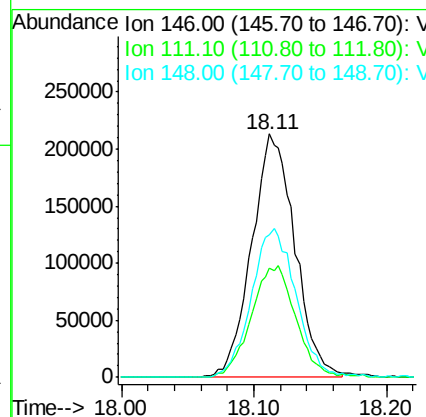
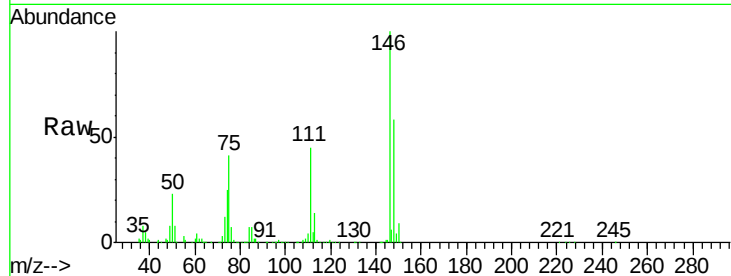
#77
 1,2-Dichlorobenzene
 Concen: 2.23 ppbv
 RT: 18.11 min Scan# 5295
 Delta R.T. -0.01 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC002

Tot Ion	Ratio	Lower	Upper
146	100		
111	47.7	24.2	72.6
148	63.4	32.0	96.2

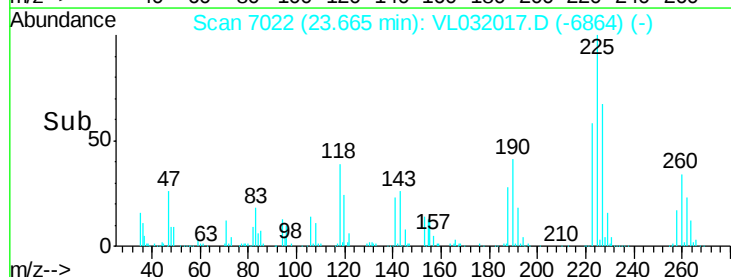
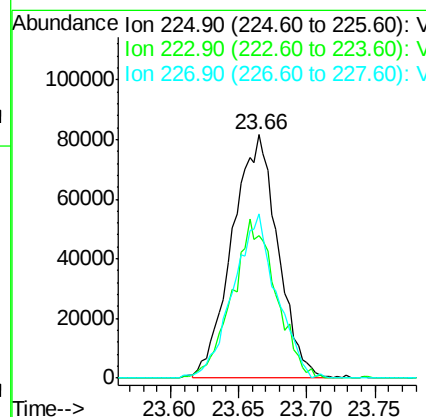
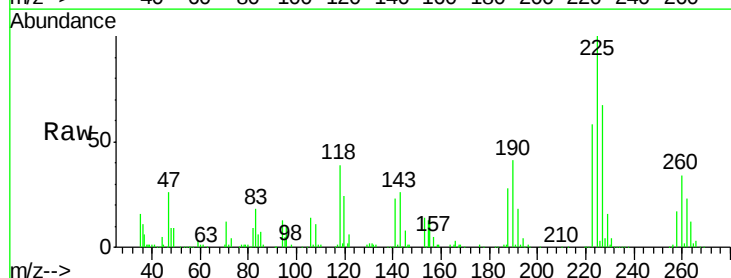
Manual Integrations
 APPROVED

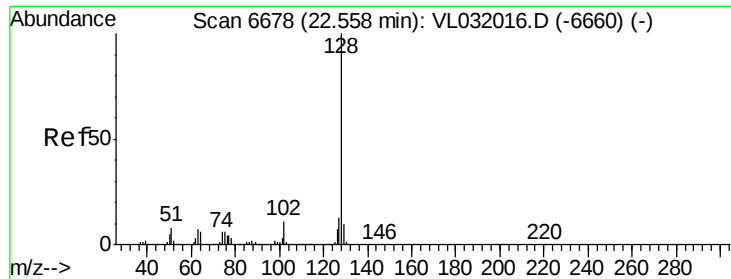
MMDadoda
 6/4/2018 10:54:53 AM



#78
 Hexachloro-1,3-Butadiene
 Concen: 2.14 ppbv
 RT: 23.66 min Scan# 7022
 Delta R.T. 0.01 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Lower	Upper
225	100		
223	62.3	49.4	74.2
227	63.7	51.2	76.8





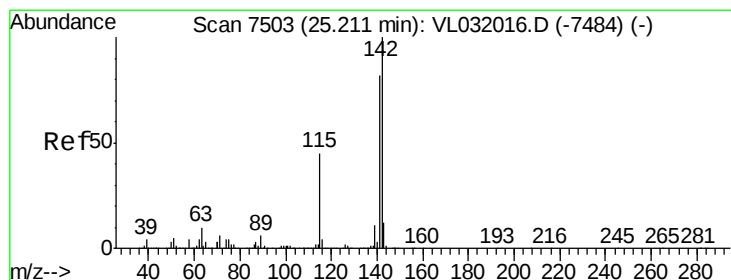
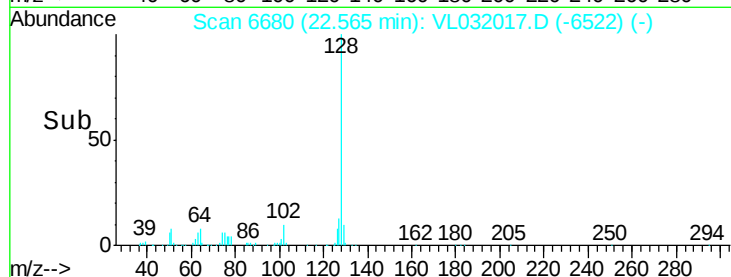
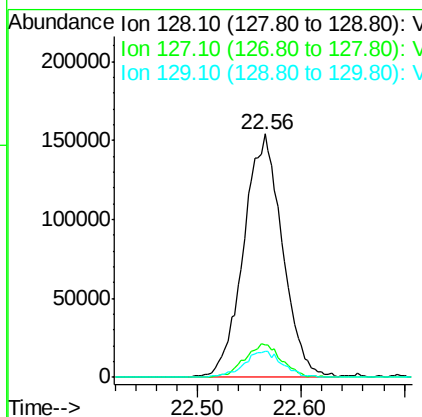
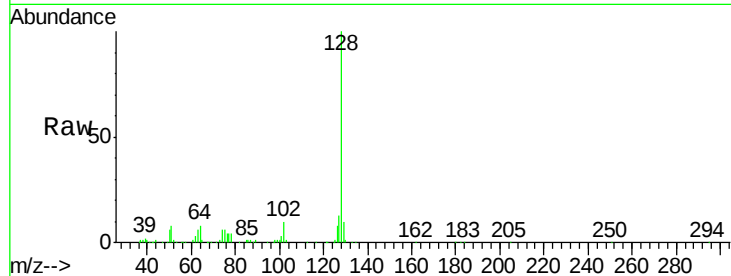
#79
Naphthalene
Concen: 1.67 ppbv m
RT: 22.56 min Scan# 6680
Delta R.T. 0.01 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC002

Tot Ion	Ratio	Lower	Upper
128	100		
127	13.5	10.2	15.2
129	10.4	8.2	12.2

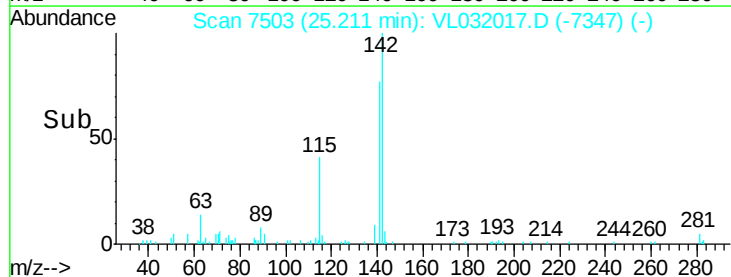
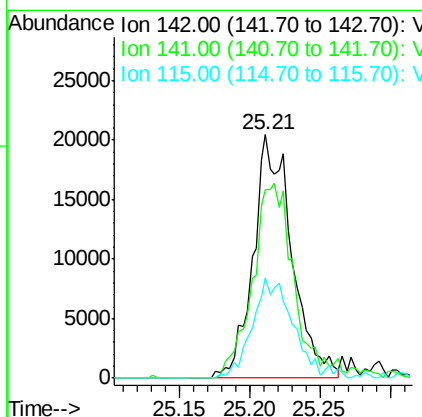
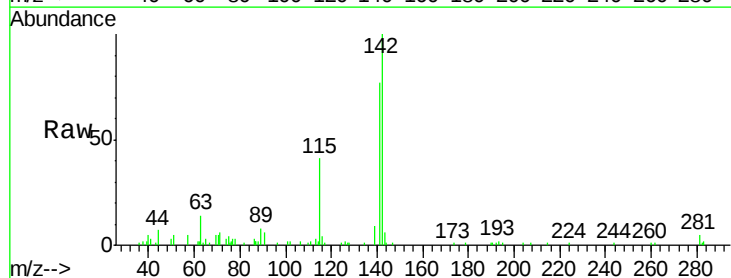
Manual Integrations
APPROVED

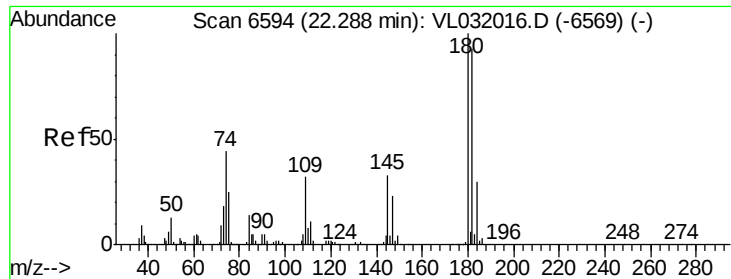
MMDadoda
6/4/2018 10:54:53 AM



#80
Naphthalene, 2-methyl-
Concen: 0.61 ppbv
RT: 25.21 min Scan# 7503
Delta R.T. 0.00 min
Lab File: VL032017.D
Acq: 31 May 2018 16:46

Tgt Ion	Ratio	Lower	Upper
142	100		
141	89.8	67.4	101.2
115	44.5	35.3	52.9





#81
 1,2,4-Trichlorobenzene
 Concen: 1.82 ppbv m
 RT: 22.28 min Scan# 6592
 Delta R.T. -0.01 min
 Lab File: VL032017.D
 Acq: 31 May 2018 16:46

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC002

Tot Ion	Ratio	Resp	Lower	Upper
180	100	241883		
182	0.0	77.8	116.6#	
184	29.5	24.9	37.3	

Manual Integrations
 APPROVED

MMDadoda
 6/4/2018 10:54:53 AM

