

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL050619\
 Data File : VL033656.D
 Acq On : 6 May 2019 12:17
 Operator : SY/AP
 Sample : VSTDIC001
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Manual Integrations
 APPROVED

MMDadoda
 5/8/2019 12:05:58 PM

Quant Time: May 06 14:05:07 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050619AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon May 0
 QLast Update : Mon May 06 12:00:34 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	1017816	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2492876	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2479289	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.57	95	2005092	10.13	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.30%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.07	85	271280	1.598 ppbv	99
3) Chlorodifluoromethane	3.01	51	164669	1.342 ppbv	93
4) Chloromethane	3.17	50	81158	1.201 ppbv	98
5) Vinyl Chloride	3.29	62	77167	1.097 ppbv	94
6) Bromomethane	3.52	94	50029	1.197 ppbv	98
7) Chloroethane	3.60	64	28953	1.232 ppbv	99
8) Dichlorotetrafluoroethane	3.22	85	212233	1.240 ppbv	99
9) Propene	3.04	41	58192	1.362 ppbv	100
10) Heptane	8.24	43	138371	1.064 ppbv	99
11) Trichlorofluoromethane	4.00	101	244472	1.294 ppbv	94
12) 1,1,2-Trichlorotrifluoroet	4.55	101	164075	1.265 ppbv	97
13) Ethanol	3.65	45	19060	1.208 ppbv	93
14) Bromoethene	3.79	108	61853	1.177 ppbv	99
15) Acetone	3.90	43	165753	1.294 ppbv	97
16) 1,3-Butadiene	3.36	39	67418	1.182 ppbv	100
17) tert-Butyl alcohol	4.37	59	127714	1.185 ppbv	96
18) 1,1-Dichloroethene	4.35	96	66966	1.189 ppbv	95
19) Isopropyl Alcohol	4.03	45	105308	1.231 ppbv	# 93
20) Methylene Chloride	4.41	84	63587	1.269 ppbv	94
21) Allyl Chloride	4.47	41	94434	1.177 ppbv	97
22) trans-1,2-Dichloroethene	4.96	96	65122	1.172 ppbv	96
23) Vinyl Acetate	5.15	43	204716	1.103 ppbv	98
24) 1,1-Dichloroethane	5.08	63	159342	1.147 ppbv	99
25) Ethyl Acetate	5.77	43	257921	1.089 ppbv	100
26) Hexane	5.78	57	109169	1.089 ppbv	92
27) Carbon Disulfide	4.62	76	140364	1.127 ppbv	# 92
28) Methyl tert-Butyl Ether	5.12	73	182972	1.086 ppbv	99
29) Chloroform	5.84	83	199244	1.087 ppbv	92
30) Cyclohexane	7.24	84	82122	0.966 ppbv	94
31) cis-1,2-Dichloroethene	5.63	61	105676	1.046 ppbv	# 84
32) 1,1,1-Trichloroethane	6.62	97	201965	1.051 ppbv	98
34) 2-Butanone	5.33	43	169295	1.098 ppbv	96
35) Carbon Tetrachloride	7.13	117	214592	1.073 ppbv	95
36) Benzene	7.00	78	233619m	1.082 ppbv	
37) 1,2-Dichloroethane	6.41	62	153977	1.075 ppbv	100
38) Trichloroethene	7.96	130	89615	1.045 ppbv	93
39) 1,2-Dichloropropane	7.73	63	85212	1.053 ppbv	93
40) 1,4-Dioxane	7.97	88	37336m	1.149 ppbv	
41) Tetrahydrofuran	6.16	42	80627	0.974 ppbv	99
42) Bromodichloromethane	7.91	83	206902	1.066 ppbv	93
43) Methyl Methacrylate	8.14	69	83320	1.024 ppbv	96

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL050619\
 Data File : VL033656.D
 Acq On : 6 May 2019 12:17
 Operator : SY/AP
 Sample : VSTDIC001
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Manual Integrations
 APPROVED

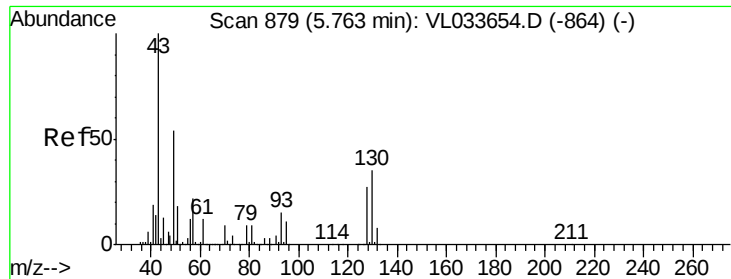
MMDadoda
 5/8/2019 12:05:58 PM

Quant Time: May 06 14:05:07 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050619AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon May 0
 QLast Update : Mon May 06 12:00:34 2019
 Response via : Initial Calibration

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

44) 2,2,4-Trimethylpentane	7.99	57	401777	1.071	ppbv	97
45) t-1,3-Dichloropropene	9.41	75	86269	0.821	ppbv	100
46) cis-1,3-Dichloropropene	8.83	75	111301	0.916	ppbv	92
47) 1,1,2-Trichloroethane	9.61	97	100234	1.048	ppbv	95
48) Dibromochloromethane	10.45	129	156600	0.975	ppbv	100
49) Bromoform	13.19	173	131916	0.957	ppbv	98
50) 4-Methyl-2-Pentanone	8.88	43	247245	1.022	ppbv	97
51) 2-Hexanone	10.28	43	180323	0.950	ppbv #	96
52) Tetrachloroethene	11.37	164	84389	1.032	ppbv	94
53) Toluene	9.94	91	242614	0.996	ppbv	97
54) 1,2-Dibromoethane	10.75	107	144979	1.014	ppbv	100
56) 1,1,1,2-Tetrachloroethane	12.28	131	122915	1.132	ppbv #	1
57) Chlorobenzene	12.30	112	219984	1.137	ppbv	97
58) Ethyl Benzene	12.86	91	328638	1.056	ppbv	98
59) m/p-Xylene	13.15	91	601627m	2.246	ppbv	
60) o-Xylene	13.84	91	305270	1.131	ppbv	95
61) Styrene	13.68	104	186611	1.008	ppbv	98
62) Isopropylbenzene	14.82	105	402281	1.119	ppbv	98
63) 1,1,2,2-Tetrachloroethane	13.83	83	231131	1.132	ppbv	98
64) n-propylbenzene	15.72	120	102224	1.093	ppbv	86
65) tert-Butylbenzene	16.90	119	372643	1.107	ppbv	97
66) Benzyl Chloride	17.15	91	138371	0.891	ppbv	99
67) sec-Butylbenzene	17.45	105	530150	1.123	ppbv	98
69) p-Isopropyltoluene	17.81	119	425356	1.083	ppbv	98
70) n-Butylbenzene	18.71	91	459686	1.074	ppbv	98
71) 2-Chlorotoluene	15.61	91	288889	1.070	ppbv	99
72) 4-Ethyltoluene	16.00	105	335362	1.086	ppbv	98
73) 1,3,5-Trimethylbenzene	16.15	105	329771	1.090	ppbv	98
74) 1,2,4-Trimethylbenzene	16.92	105	385233	1.148	ppbv	94
75) 1,3-Dichlorobenzene	17.16	146	236385	1.135	ppbv	97
76) 1,4-Dichlorobenzene	17.30	146	218890	1.102	ppbv	100
77) 1,2-Dichlorobenzene	17.98	146	212531	1.096	ppbv	98
78) Hexachloro-1,3-Butadiene	23.54	225	163893	1.108	ppbv	97
79) Naphthalene	22.41	128	318476	1.017	ppbv	99
80) Naphthalene, 2-methyl-	25.11	142	94559	0.711	ppbv	96
81) 1,2,4-Trichlorobenzene	22.13	180	193216	1.070	ppbv	99

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 49 Resp: 1017816

Ion Ratio Lower Upper

49 100

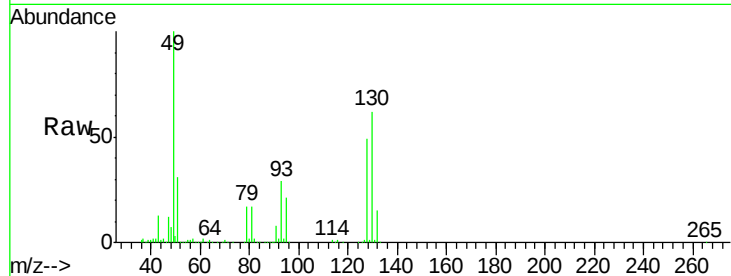
128 50.1 24.8 74.4

130 63.7 32.1 96.5

Manual Integrations
APPROVED

MMDadoda

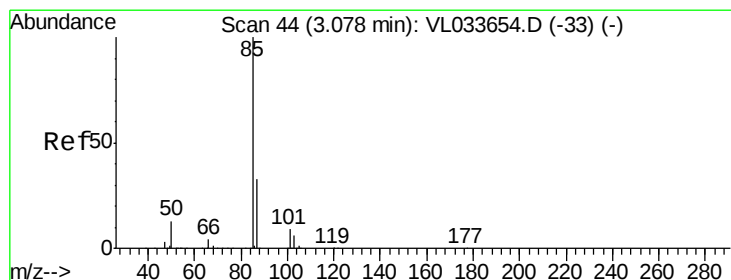
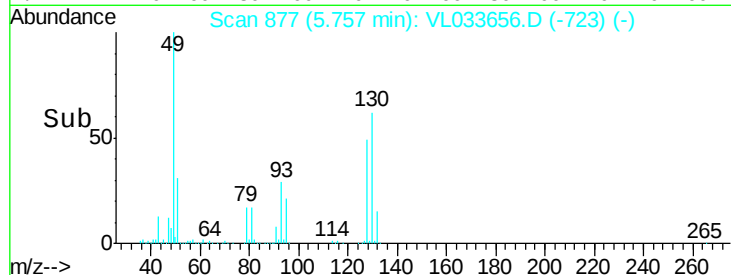
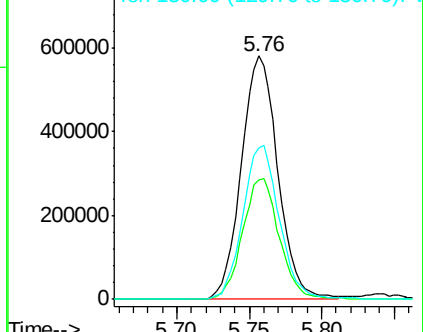
5/8/2019 12:05:58 PM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 1.598 ppbv

RT: 3.07 min Scan# 43

Delta R.T. -0.00 min

Lab File: VL033656.D

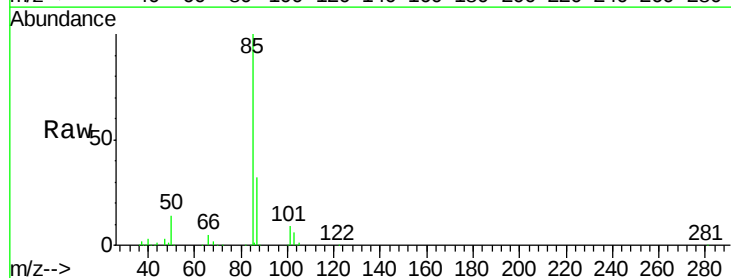
Acq: 6 May 2019 12:17

Tgt Ion: 85 Resp: 271280

Ion Ratio Lower Upper

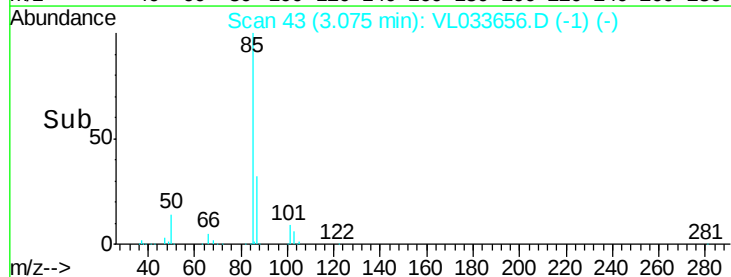
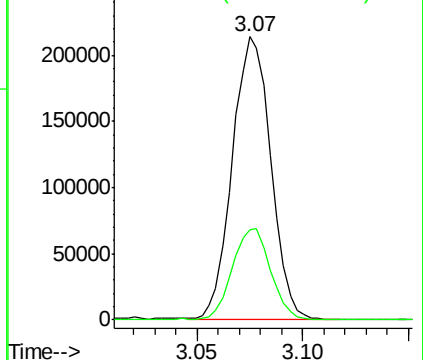
85 100

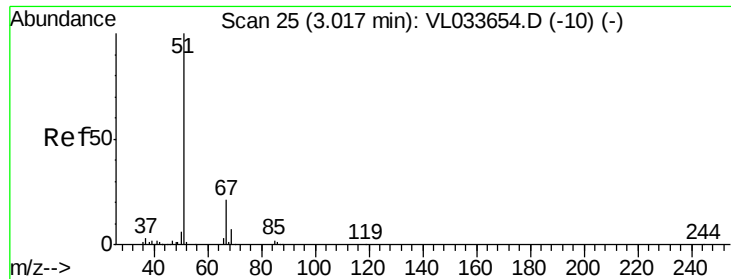
87 31.8 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 1.342 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 51 Resp: 164669

Ion Ratio Lower Upper

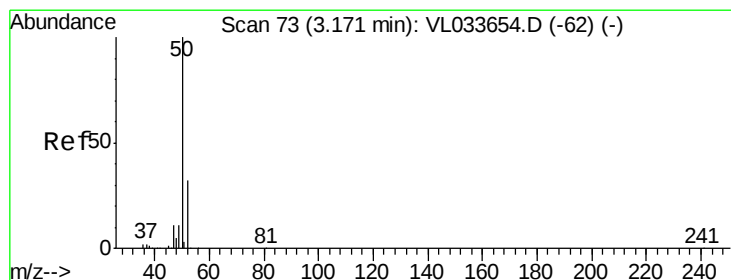
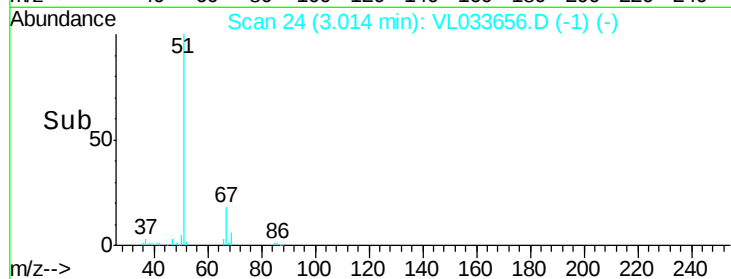
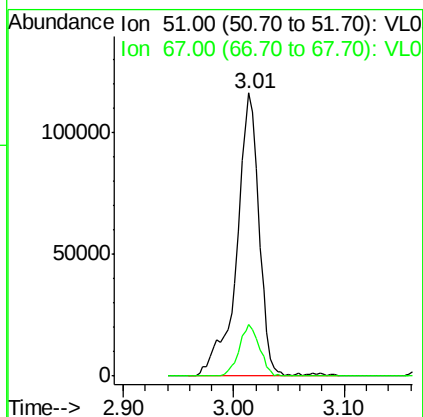
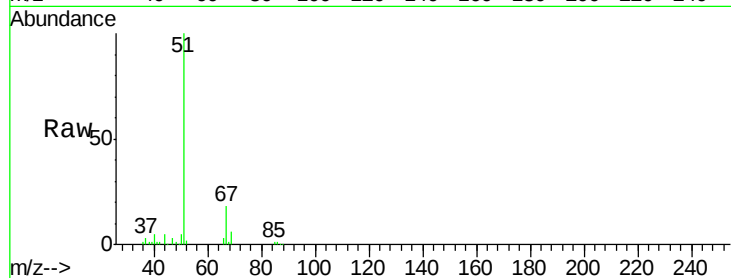
51 100

67 16.5 15.7 23.5

Manual Integrations
APPROVED

MMDadoda

5/8/2019 12:05:58 PM



#4

Chloromethane

Concen: 1.201 ppbv

RT: 3.17 min Scan# 73

Delta R.T. 0.00 min

Lab File: VL033656.D

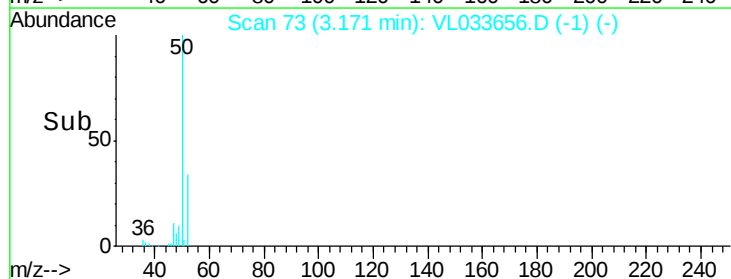
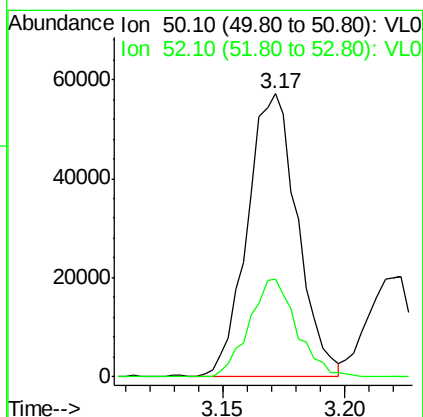
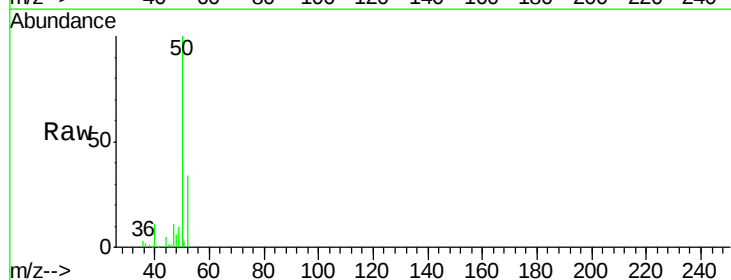
Acq: 6 May 2019 12:17

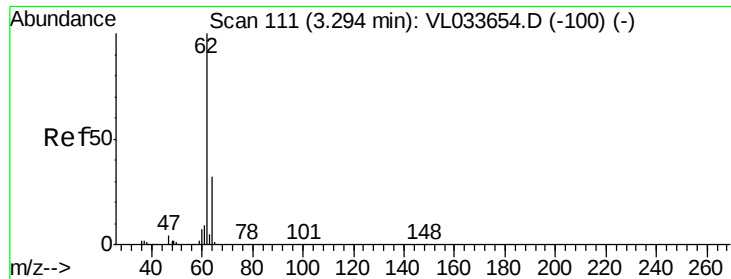
Tgt Ion: 50 Resp: 81158

Ion Ratio Lower Upper

50 100

52 33.2 25.8 38.8





#5

Vinyl Chloride

Concen: 1.097 ppbv

RT: 3.29 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 62 Resp: 77167

Ion Ratio Lower Upper

62 100

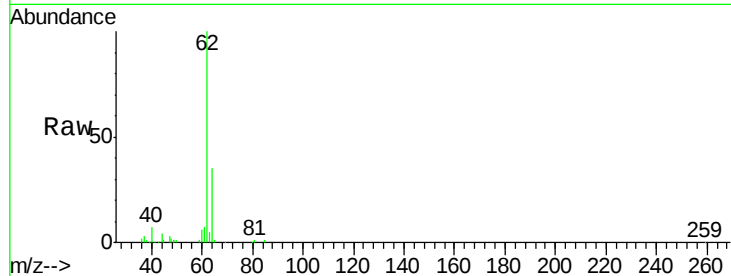
64 35.2 25.6 38.4

Manual Integrations

APPROVED

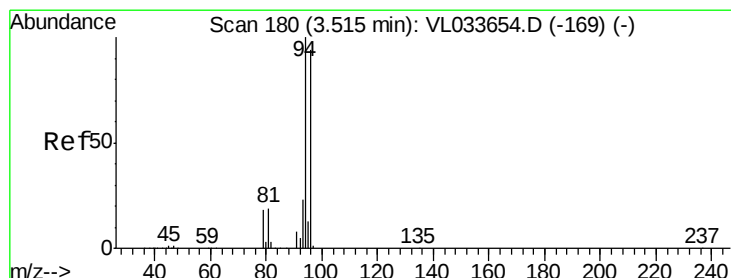
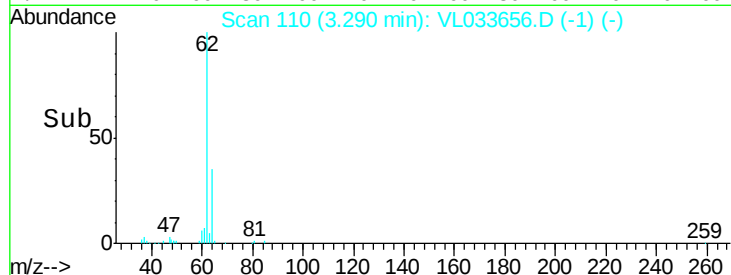
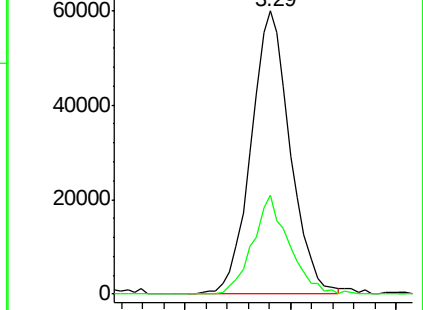
MMDadoda

5/8/2019 12:05:58 PM



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 1.197 ppbv

RT: 3.52 min Scan# 180

Delta R.T. 0.00 min

Lab File: VL033656.D

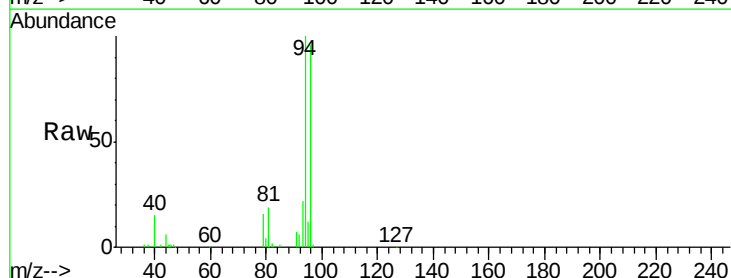
Acq: 6 May 2019 12:17

Tgt Ion: 94 Resp: 50029

Ion Ratio Lower Upper

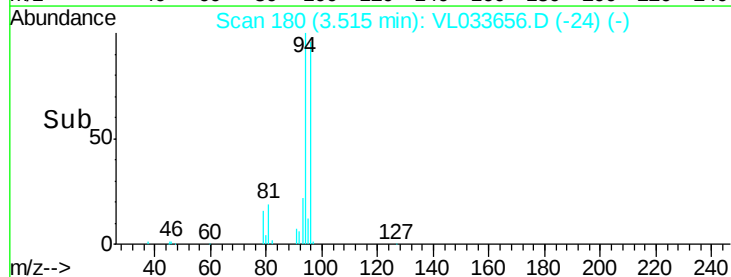
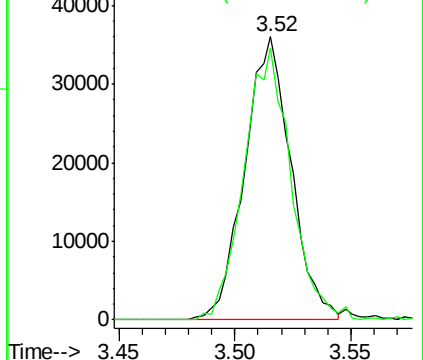
94 100

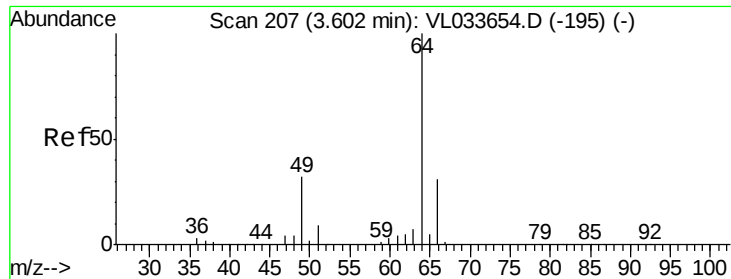
96 95.9 75.2 112.8



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 1.232 ppbv

RT: 3.60 min Scan# 206

Delta R.T. -0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 64 Resp: 28953

Ion Ratio Lower Upper

64 100

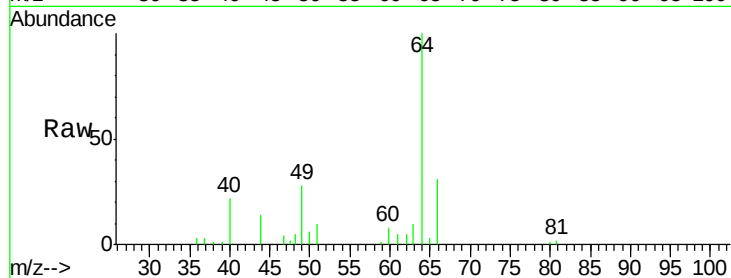
66 30.9 25.1 37.7

Manual Integrations

APPROVED

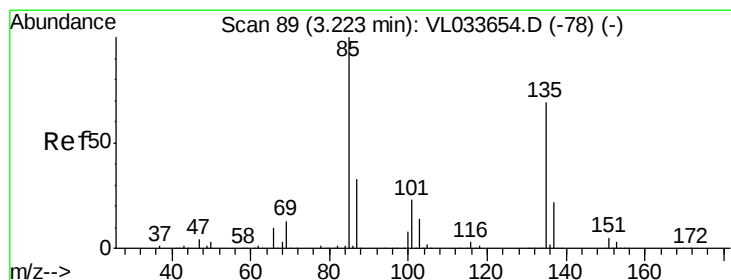
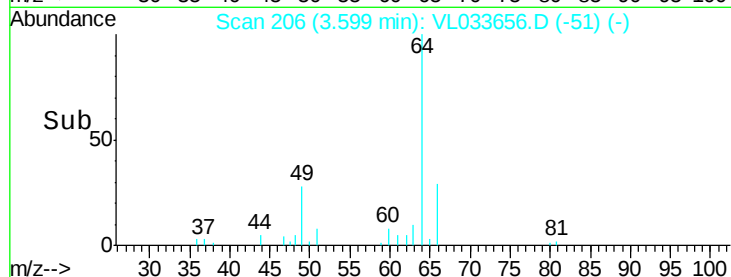
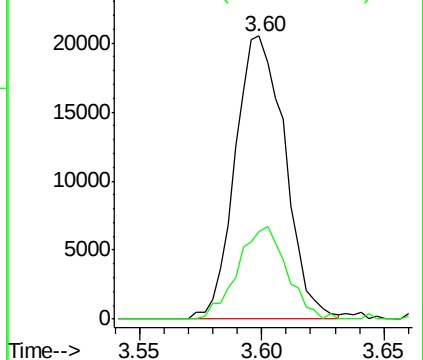
MMDadoda

5/8/2019 12:05:58 PM



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 1.240 ppbv

RT: 3.22 min Scan# 88

Delta R.T. -0.00 min

Lab File: VL033656.D

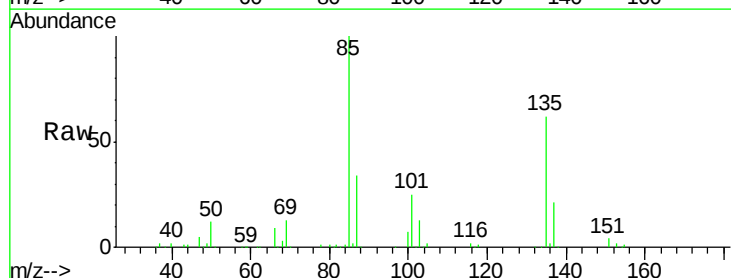
Acq: 6 May 2019 12:17

Tgt Ion: 85 Resp: 212233

Ion Ratio Lower Upper

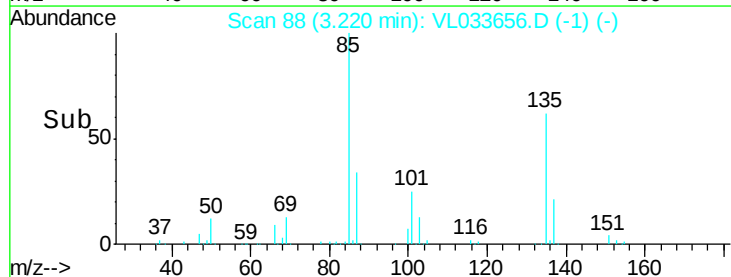
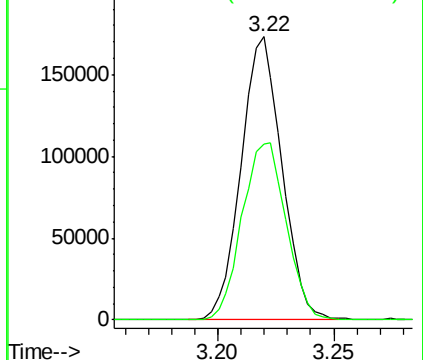
85 100

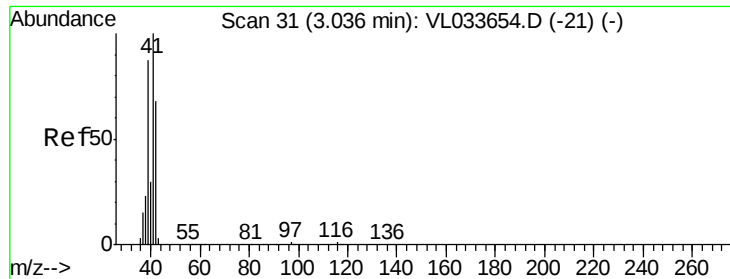
135 67.3 54.3 81.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): VL0





#9

Propene

Concen: 1.362 ppbv

RT: 3.04 min Scan# 31

Delta R.T. 0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 41 Resp: 58192

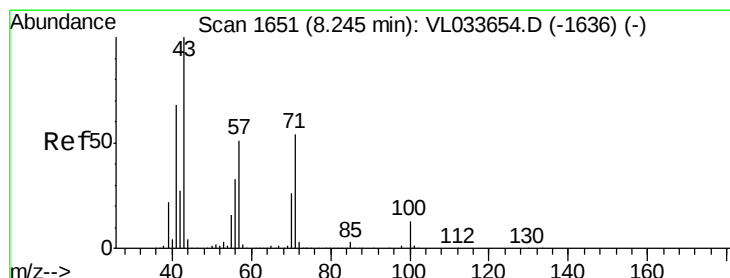
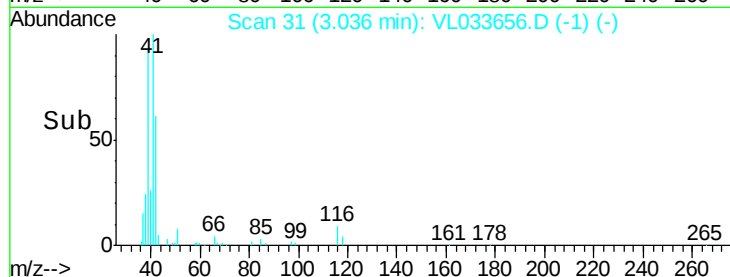
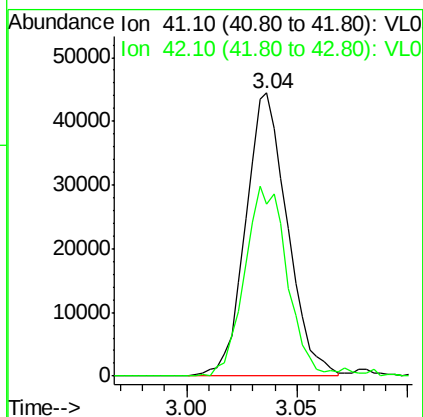
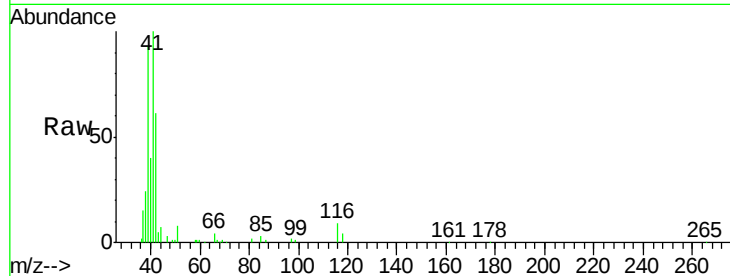
Ion Ratio Lower Upper

41 100

42 69.7 55.6 83.4

Manual Integrations
APPROVED

MMDadoda
5/8/2019 12:05:58 PM



#10

Heptane

Concen: 1.064 ppbv

RT: 8.24 min Scan# 1650

Delta R.T. -0.00 min

Lab File: VL033656.D

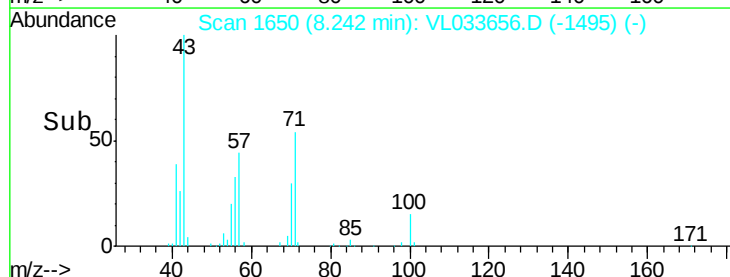
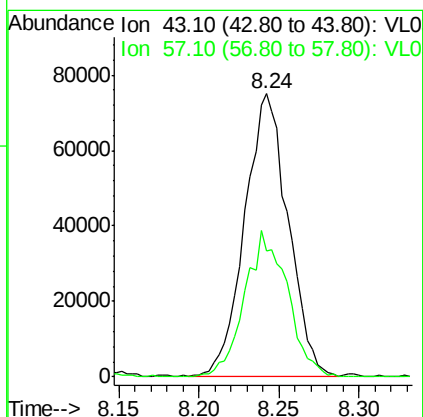
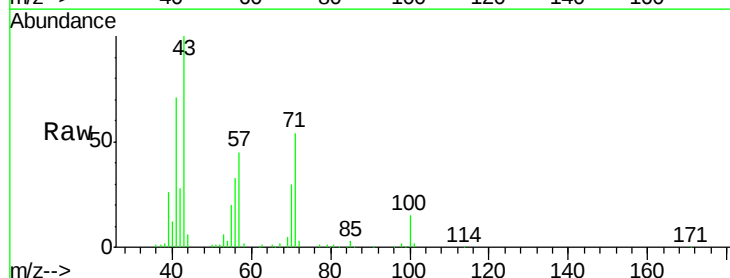
Acq: 6 May 2019 12:17

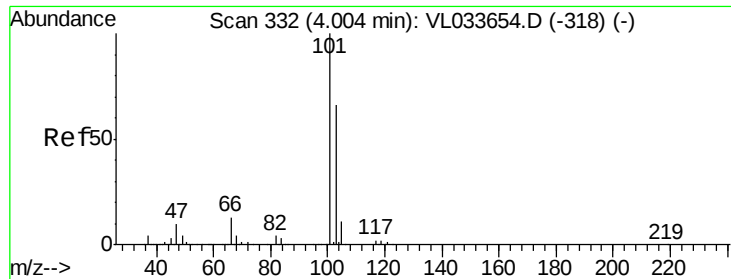
Tgt Ion: 43 Resp: 138371

Ion Ratio Lower Upper

43 100

57 51.4 41.8 62.6





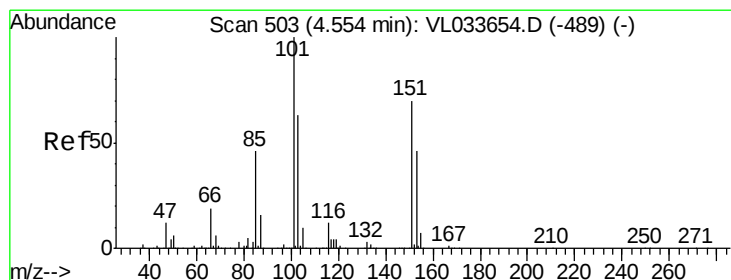
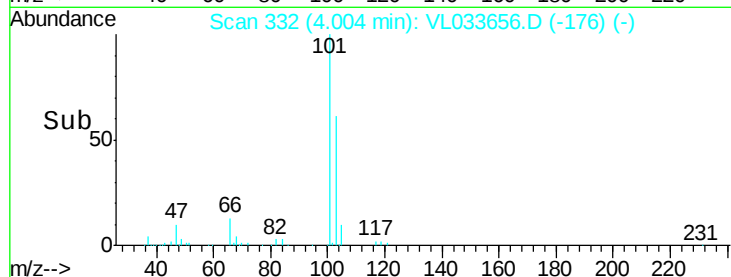
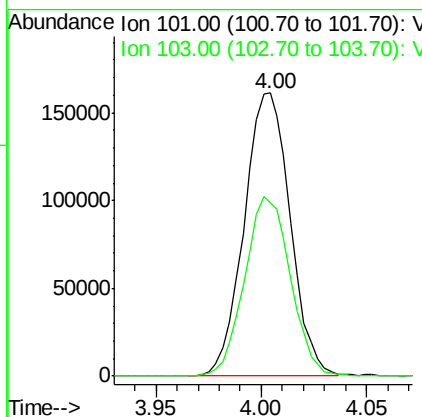
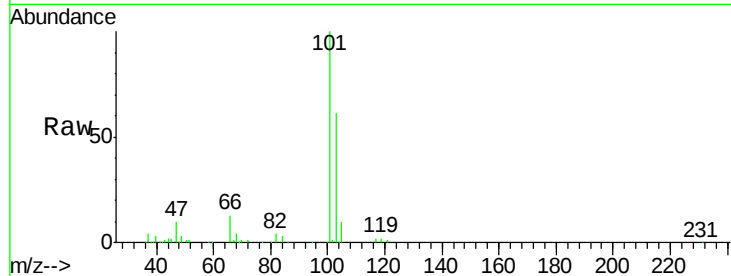
#11
 Trichlorofluoromethane
 Concen: 1.294 ppbv
 RT: 4.00 min Scan# 332
 Delta R.T. 0.00 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Lower	Upper
101	100		
103	61.4	52.7	79.1

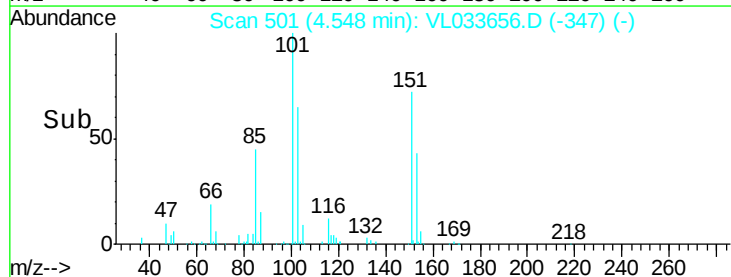
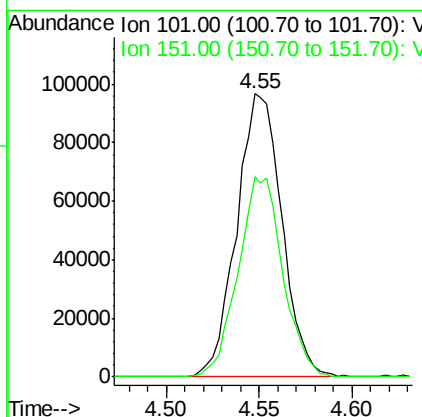
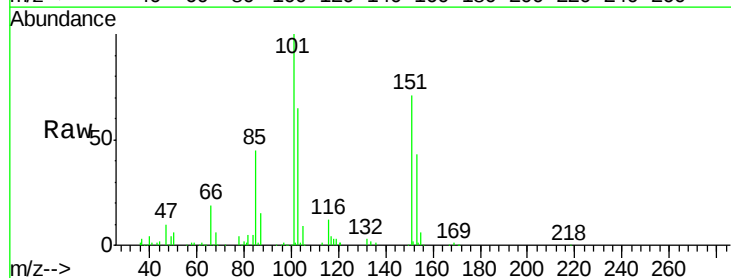
Manual Integrations
 APPROVED

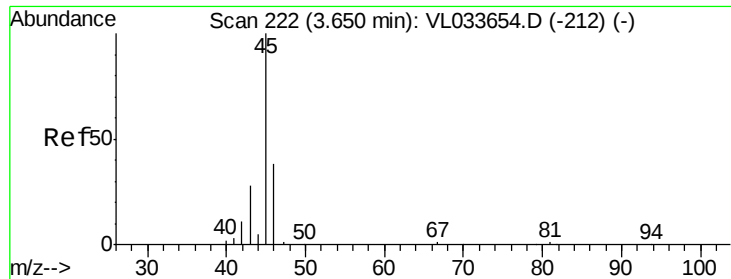
MMDadoda
 5/8/2019 12:05:58 PM



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 1.265 ppbv
 RT: 4.55 min Scan# 501
 Delta R.T. -0.01 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Tgt Ion	Ratio	Lower	Upper
101	100		
151	69.9	58.0	87.0





#13

Ethanol

Concen: 1.208 ppbv

RT: 3.65 min Scan# 223

Delta R.T. 0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 45 Resp: 19060

Ion Ratio Lower Upper

45 100

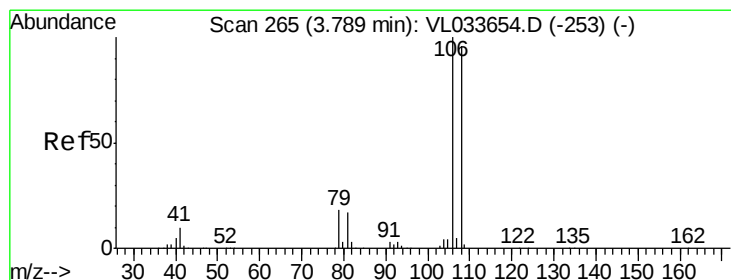
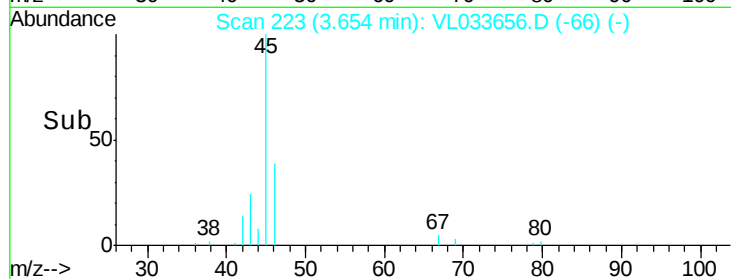
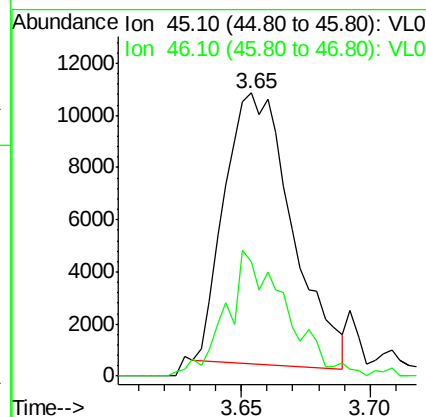
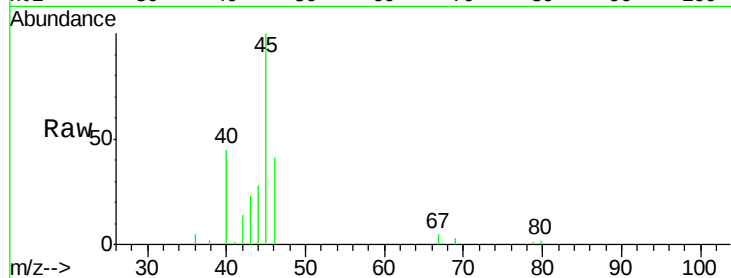
46 41.6 14.9 59.7

Manual Integrations

APPROVED

MMDadoda

5/8/2019 12:05:58 PM



#14

Bromoethene

Concen: 1.177 ppbv

RT: 3.79 min Scan# 265

Delta R.T. 0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

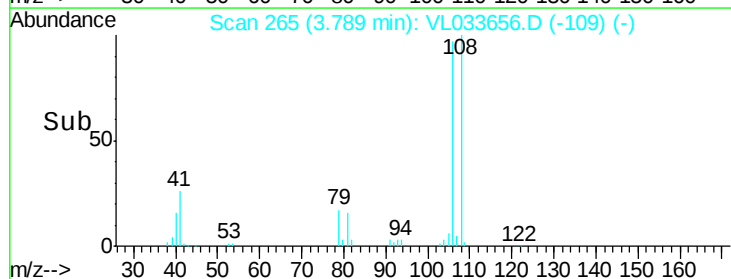
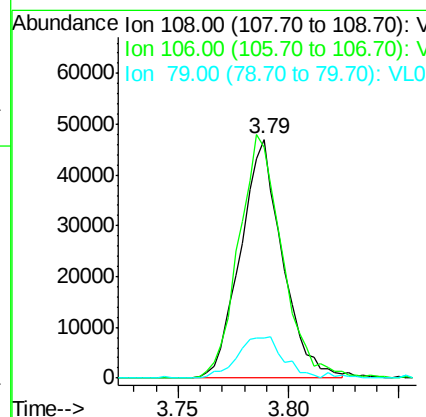
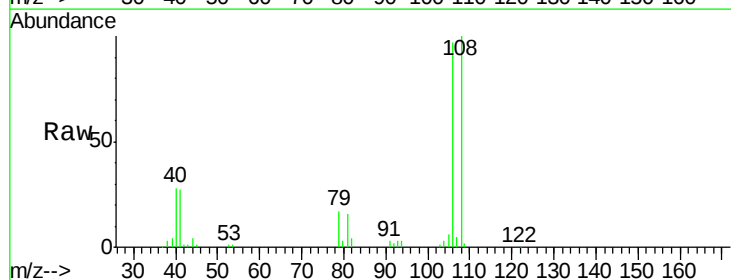
Tgt Ion: 108 Resp: 61853

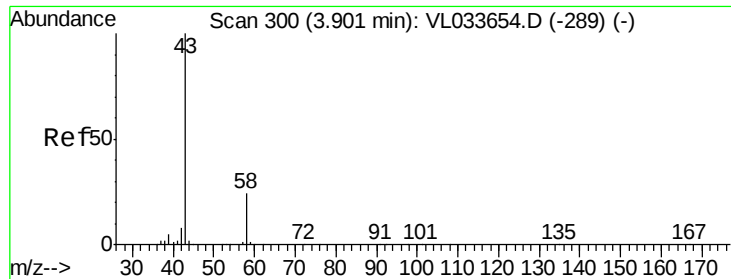
Ion Ratio Lower Upper

108 100

106 106.3 85.8 128.6

79 20.1 15.2 22.8





#15

Acetone

Concen: 1.294 ppbv

RT: 3.90 min Scan# 301

Delta R.T. 0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 43 Resp: 165753

Ion Ratio Lower Upper

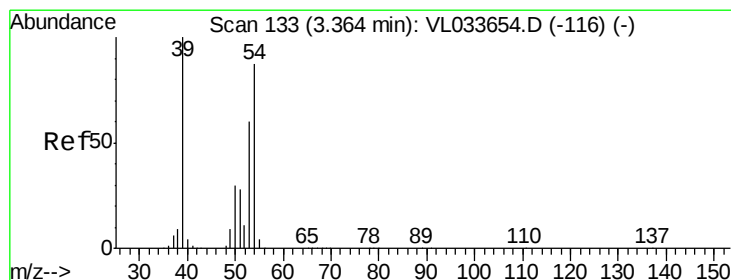
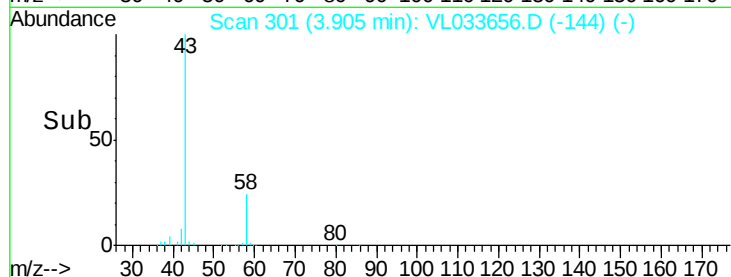
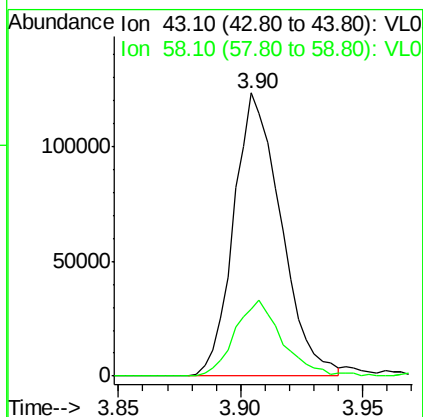
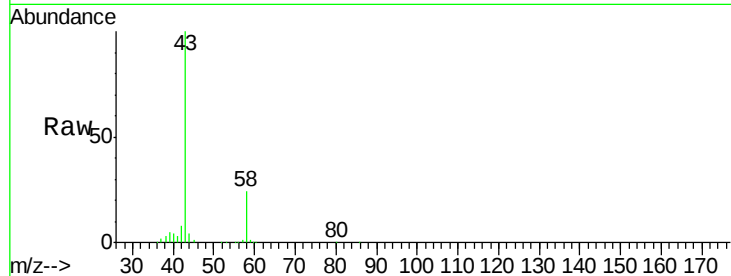
43 100

58 27.5 20.9 31.3

Manual Integrations
APPROVED

MMDadoda

5/8/2019 12:05:58 PM



#16

1,3-Butadiene

Concen: 1.182 ppbv

RT: 3.36 min Scan# 132

Delta R.T. -0.00 min

Lab File: VL033656.D

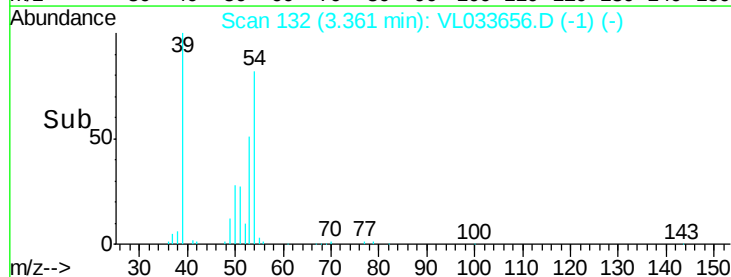
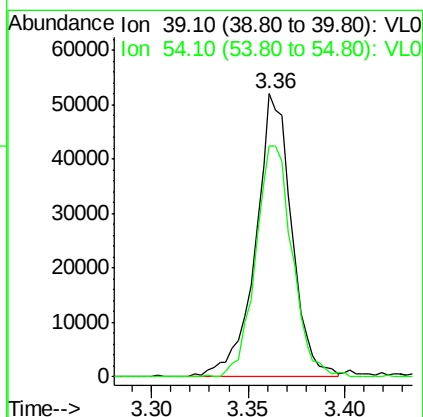
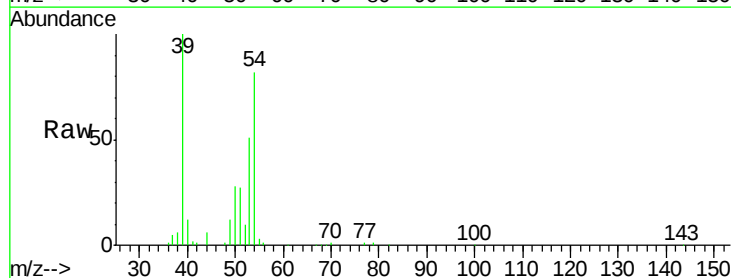
Acq: 6 May 2019 12:17

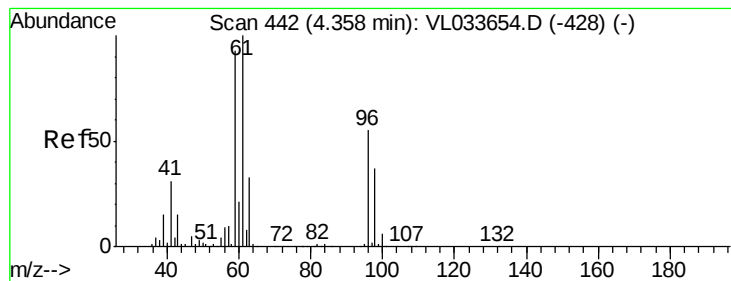
Tgt Ion: 39 Resp: 67418

Ion Ratio Lower Upper

39 100

54 83.3 67.0 100.4





#17

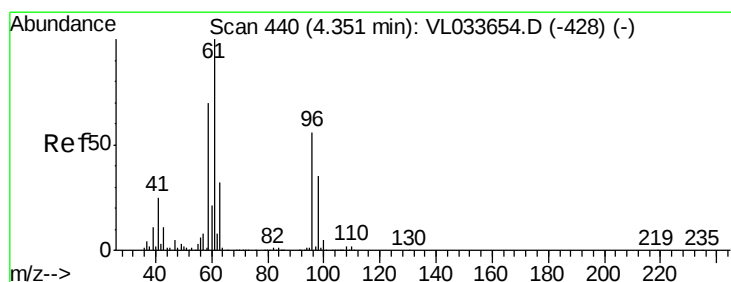
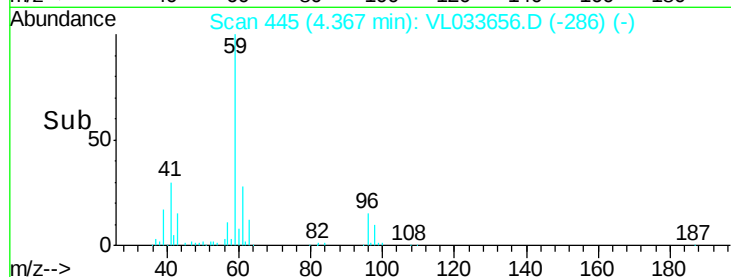
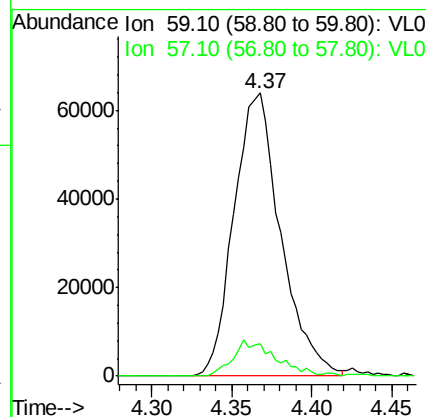
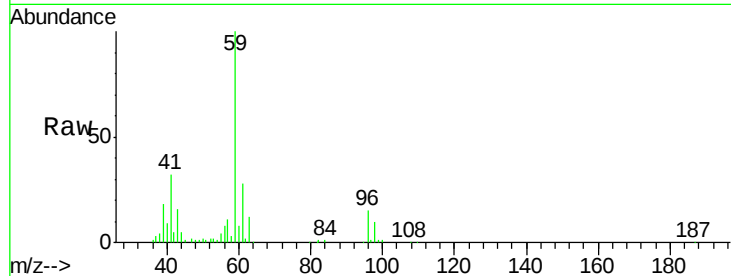
tert-Butyl alcohol
Concen: 1.185 ppbv
RT: 4.37 min Scan# 445
Delta R.T. 0.01 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	59	Resp	127714
Ion Ratio	Lower	Upper	
59	100		
57	12.1	8.4	12.6

Manual Integrations
APPROVED

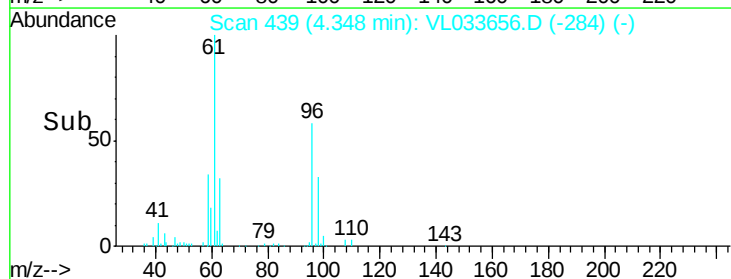
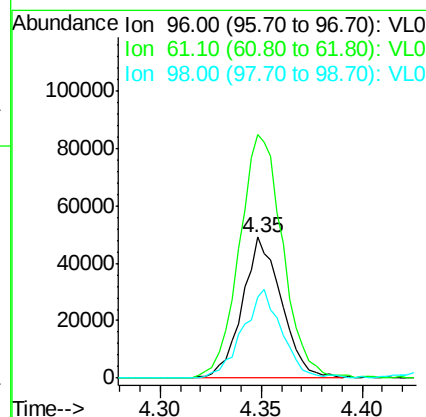
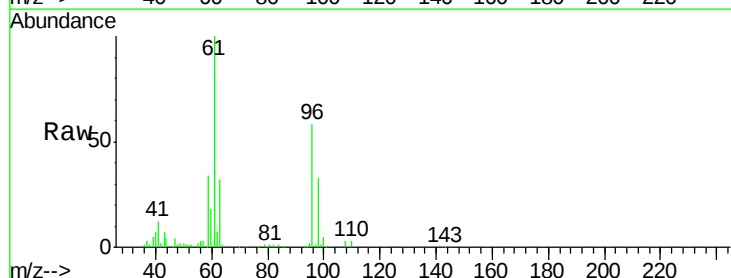
MMDadoda
5/8/2019 12:05:58 PM

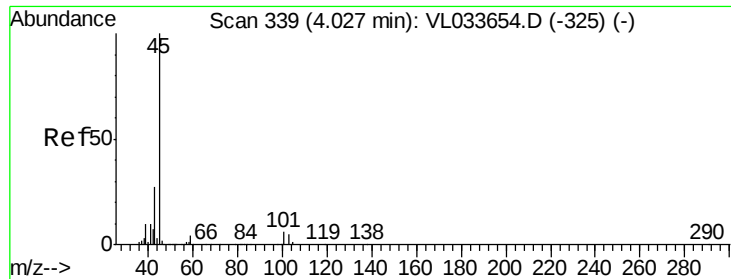


#18

1,1-Dichloroethene
Concen: 1.189 ppbv
RT: 4.35 min Scan# 439
Delta R.T. -0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Tgt Ion	96	Resp	66966
Ion Ratio	Lower	Upper	
96	100		
61	172.7	143.4	215.0
98	57.4	50.4	75.6





#19

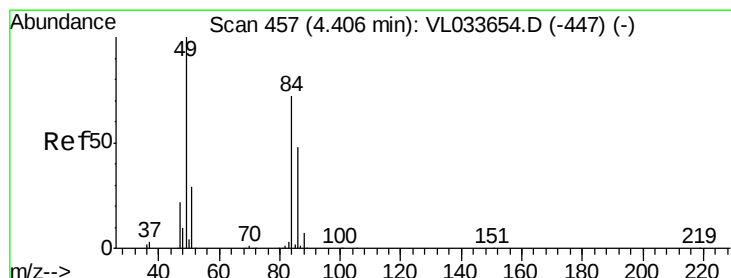
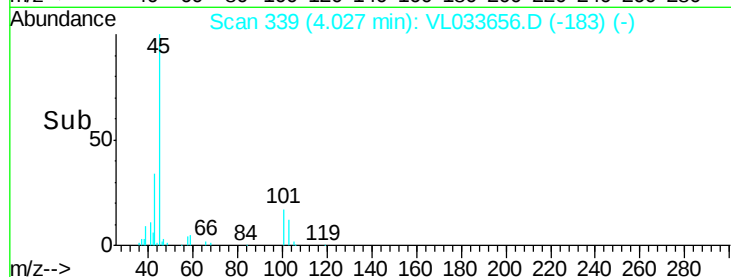
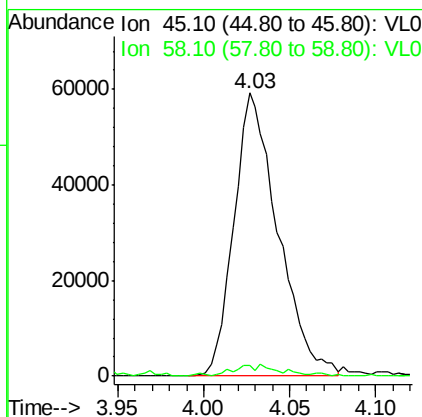
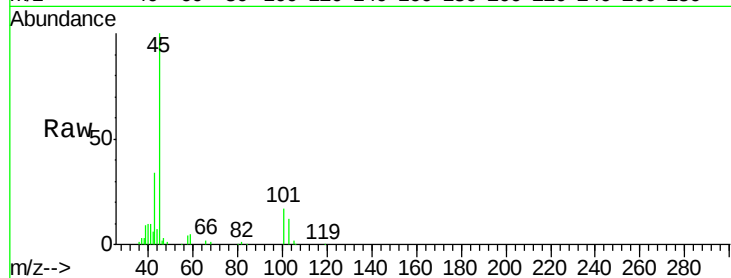
Isopropyl Alcohol
 Concen: 1.231 ppbv
 RT: 4.03 min Scan# 339
 Delta R.T. 0.00 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Lower	Upper
45	100		
58	4.7	1.9	2.9#

Manual Integrations
 APPROVED

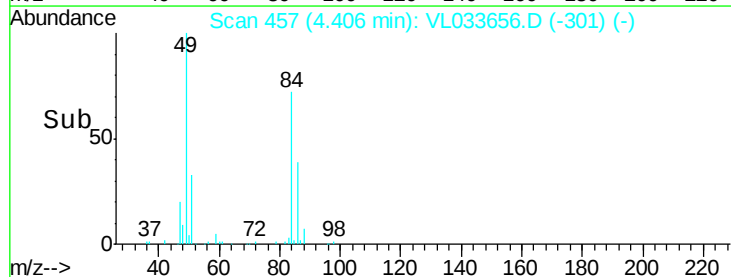
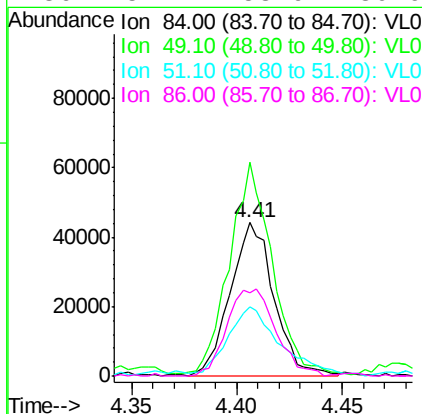
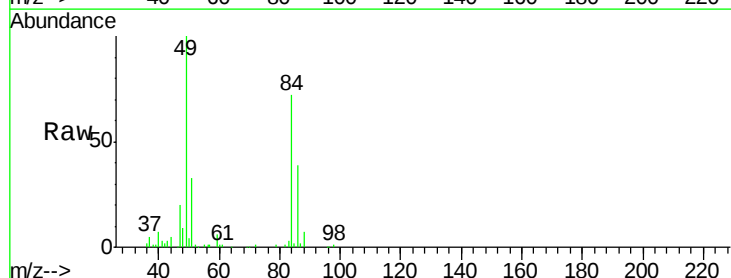
MMDadoda
 5/8/2019 12:05:58 PM

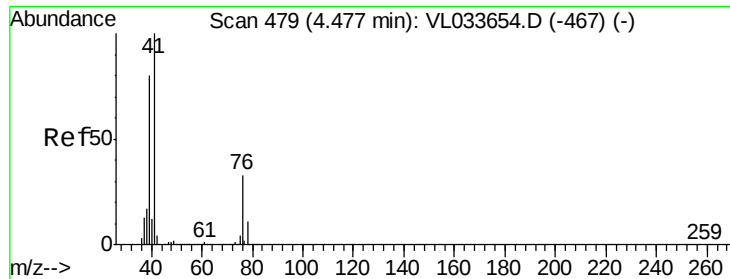


#20

Methylene Chloride
 Concen: 1.269 ppbv
 RT: 4.41 min Scan# 457
 Delta R.T. 0.00 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Tgt Ion	Ratio	Lower	Upper
84	100		
49	137.4	111.8	167.6
51	43.5	32.3	48.5
86	54.4	53.9	80.9





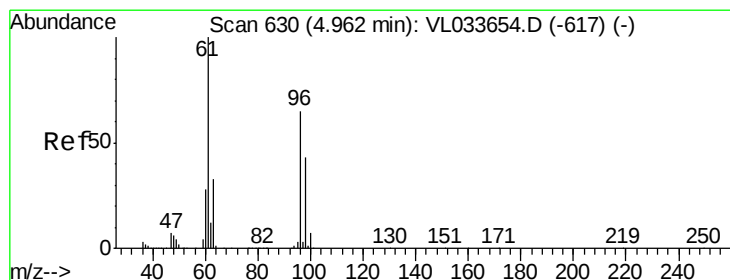
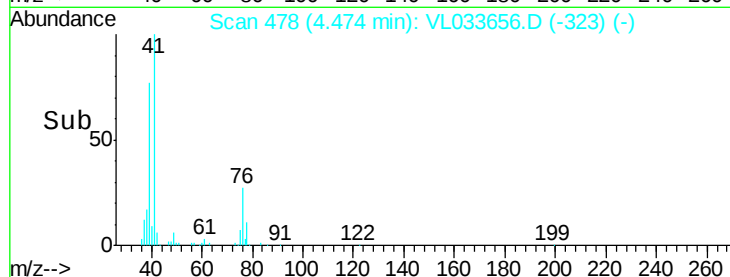
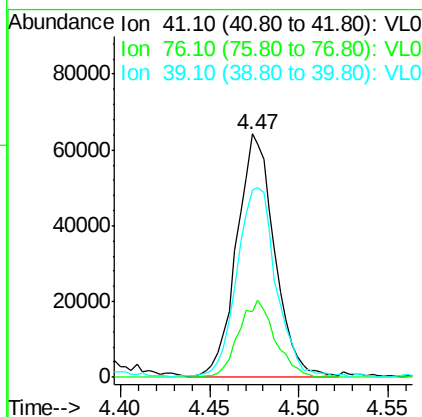
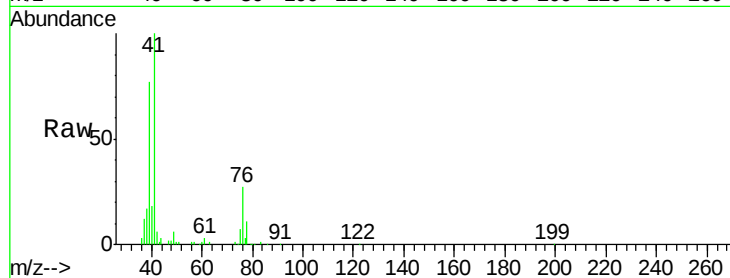
#21
Allvl Chloride
Concen: 1.177 ppbv
RT: 4.47 min Scan# 478
Delta R.T. -0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	Ratio	Lower	Upper
41	100		
76	31.1	26.0	39.0
39	82.9	64.4	96.6

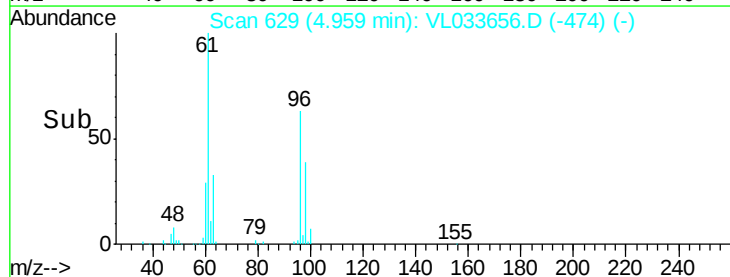
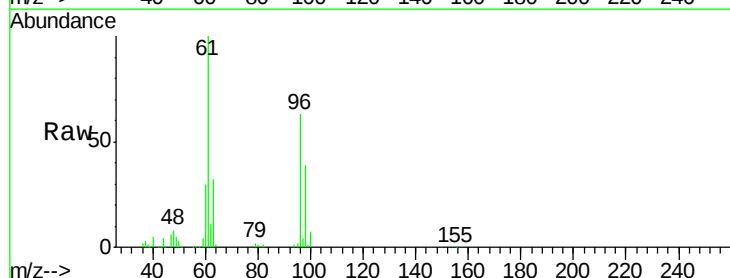
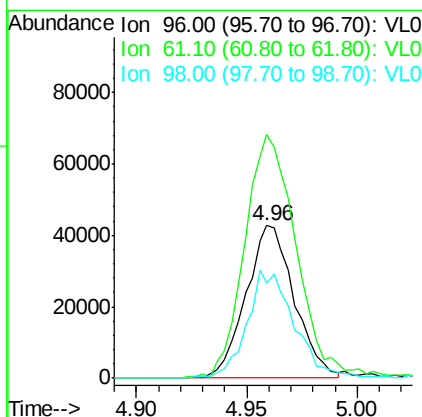
Manual Integrations
APPROVED

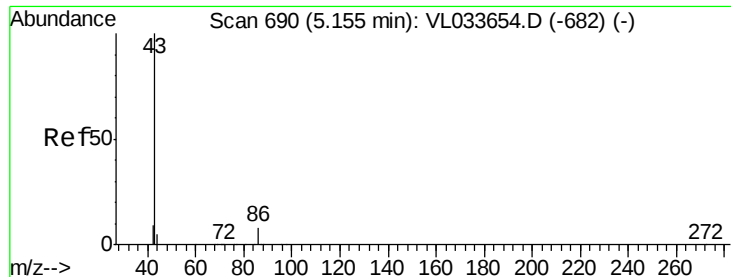
MMDadoda
5/8/2019 12:05:58 PM



#22
trans-1,2-Dichloroethene
Concen: 1.172 ppbv
RT: 4.96 min Scan# 629
Delta R.T. -0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Tgt Ion	Ratio	Lower	Upper
96	100		
61	159.0	123.1	184.7
98	62.1	52.6	79.0





#23

Vinyl Acetate

Concen: 1.103 ppbv

RT: 5.15 min Scan# 688

Delta R.T. -0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

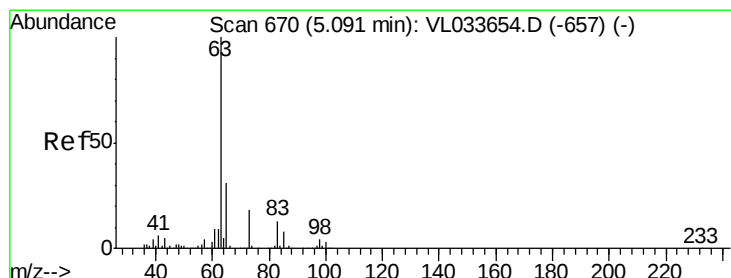
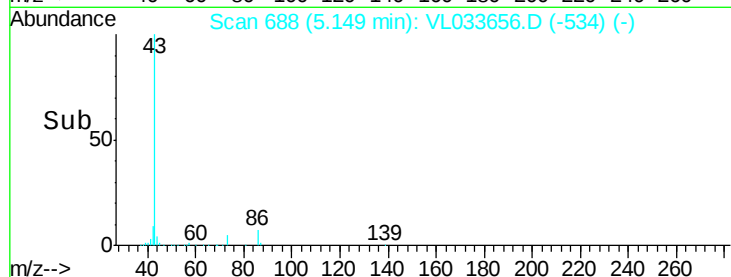
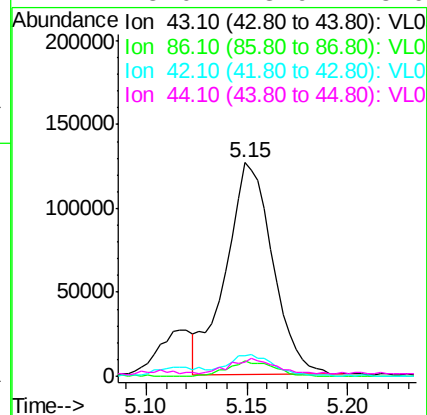
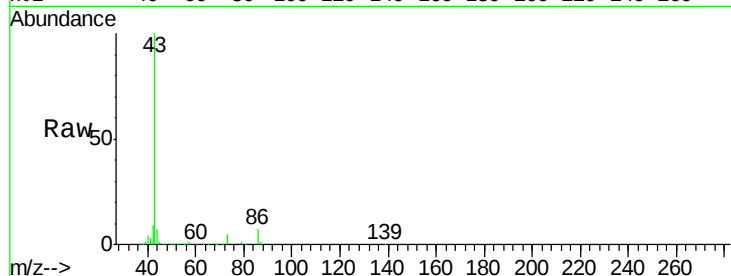
ClientSampleId :

VSTDIC001

Tot Ion	Ion	Ratio	Resp	Lower	Upper
43	100		204716		
86	7.0		6.0	9.0	
42	9.2		8.0	12.0	
44	5.0		3.9	5.9	

Manual Integrations
APPROVED

MMDadoda
5/8/2019 12:05:58 PM



#24

1,1-Dichloroethane

Concen: 1.147 ppbv

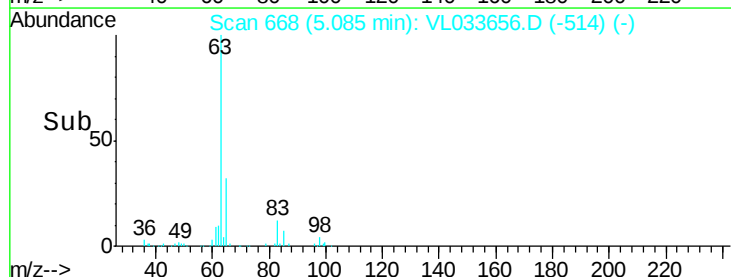
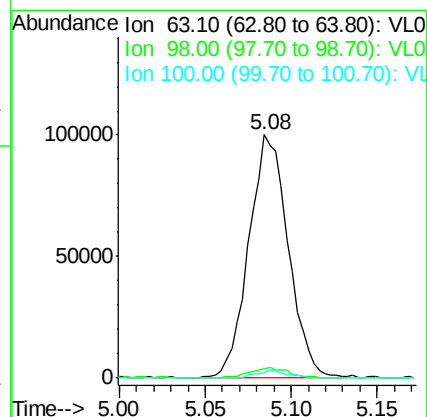
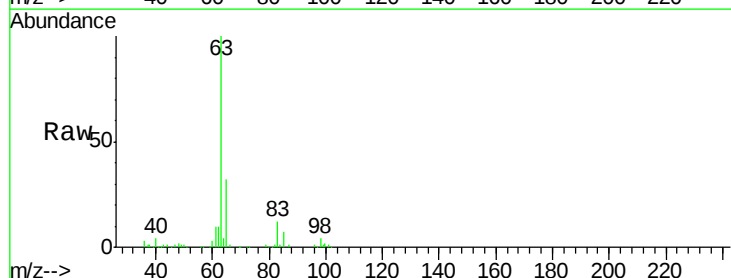
RT: 5.08 min Scan# 668

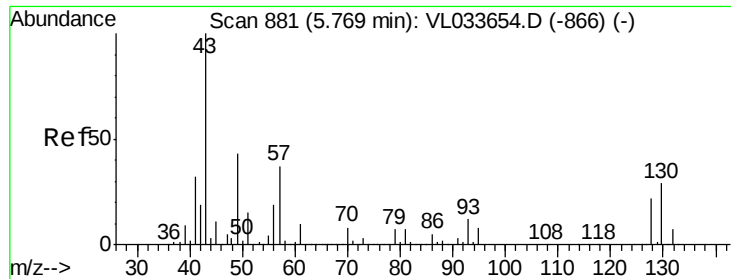
Delta R.T. -0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
63	100		159342		
98	4.0		2.1	6.2	
100	2.0		1.5	4.4	





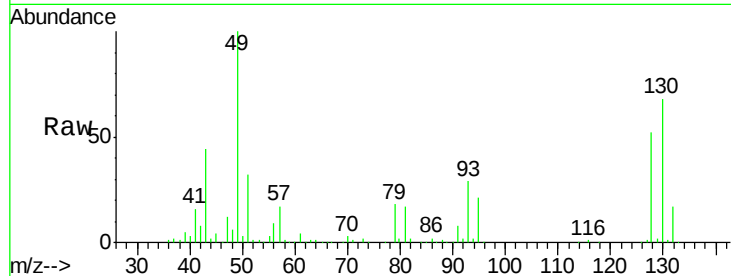
#25
Ethyl Acetate
Concen: 1.089 ppbv
RT: 5.77 min Scan# 881
Delta R.T. 0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	Ion	Ratio	Lower	Upper
43	100			
45	10.1	8.0	12.0	
61	9.4	7.5	11.3	
70	6.9	5.8	8.8	

Manual Integrations
APPROVED

MMDadoda
5/8/2019 12:05:58 PM



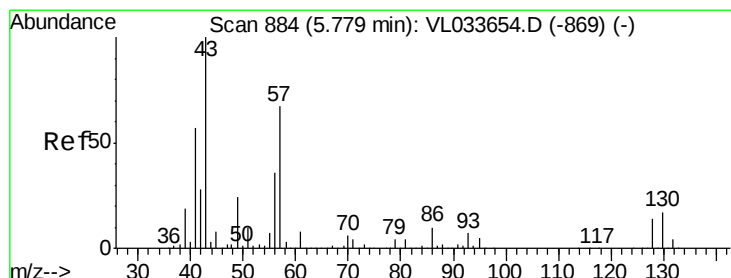
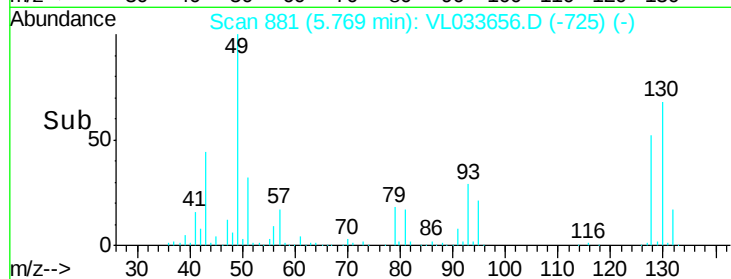
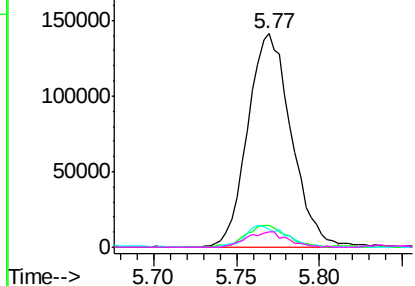
Abundance

Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26
Hexane
Concen: 1.089 ppbv
RT: 5.78 min Scan# 883
Delta R.T. -0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Tgt Ion	Ion	Ratio	Lower	Upper
57	100			
41	95.0	69.7	104.5	
43	241.7	181.9	272.9	
56	55.1	42.5	63.7	

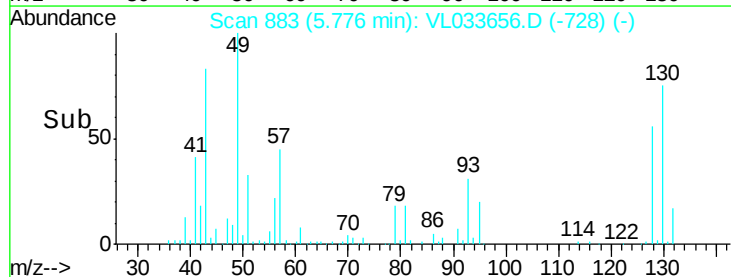
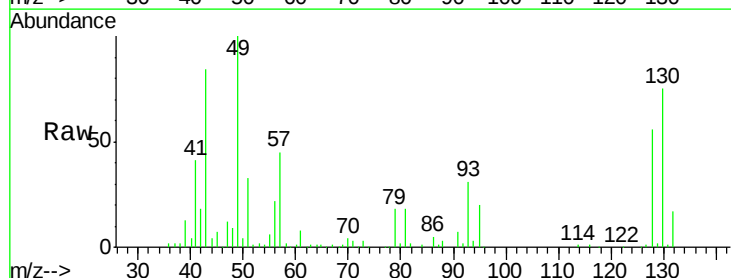
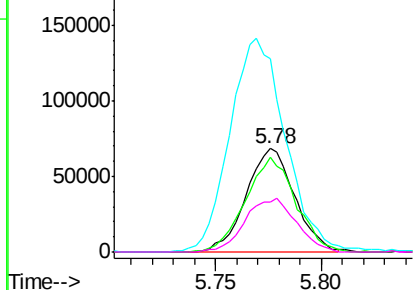
Abundance

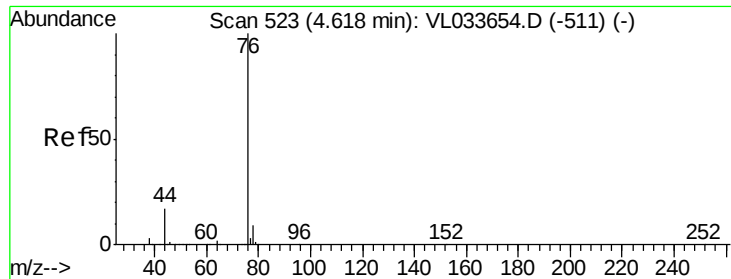
Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#27

Carbon Disulfide

Concen: 1.127 ppbv

RT: 4.62 min Scan# 524

Delta R.T. 0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

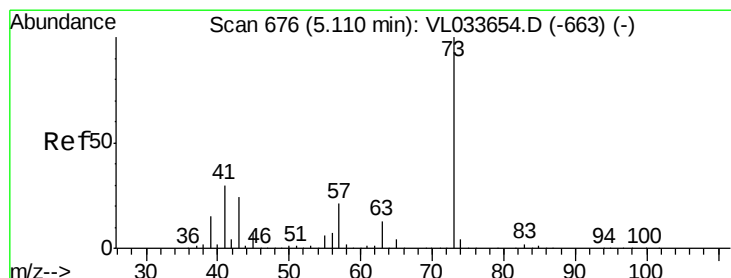
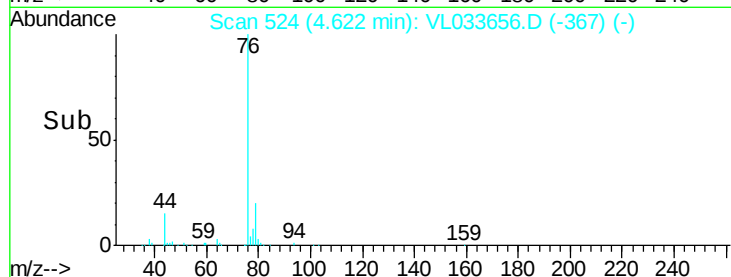
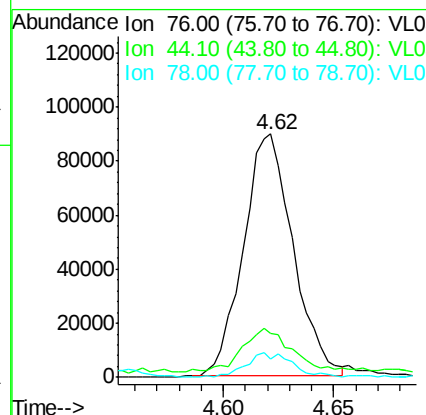
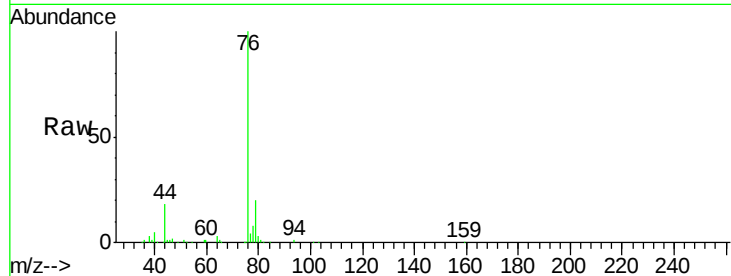
ClientSampleId :

VSTDIC001

Tot Ion:	76	Resp:	140364
Ion	Ratio	Lower	Upper
76	100		
44	22.7	14.4	21.6#
78	9.9	7.4	11.2

Manual Integrations
APPROVED

MMDadoda
5/8/2019 12:05:58 PM



#28

Methyl tert-Butyl Ether

Concen: 1.086 ppbv

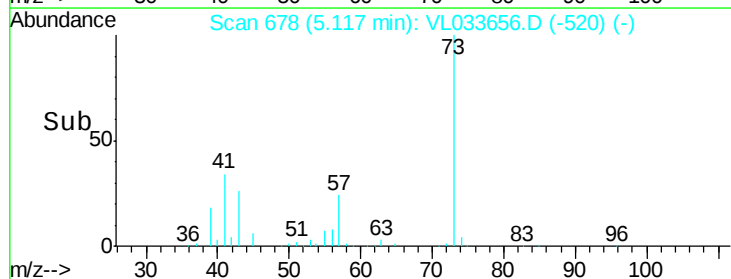
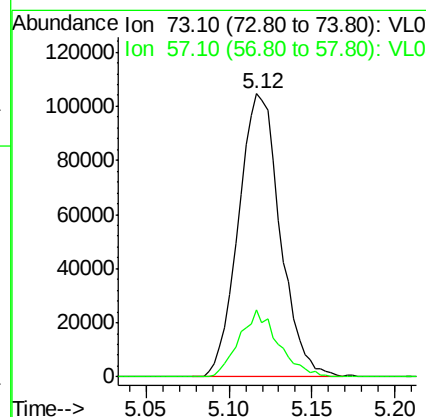
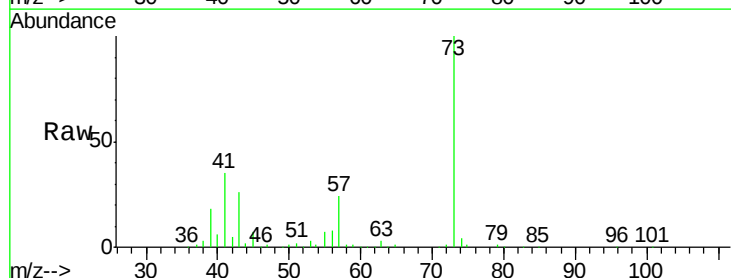
RT: 5.12 min Scan# 678

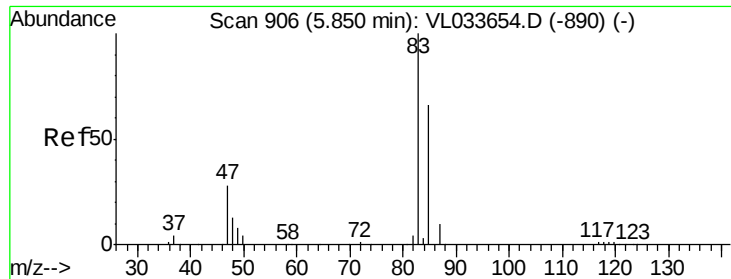
Delta R.T. 0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Tgt Ion:	73	Resp:	182972
Ion	Ratio	Lower	Upper
73	100		
57	22.2	17.4	26.0





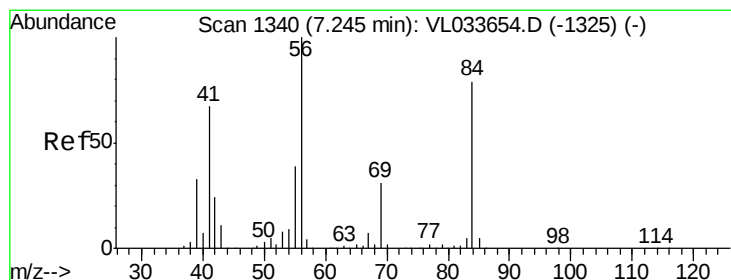
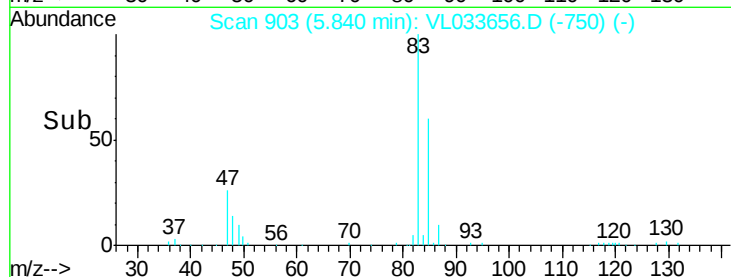
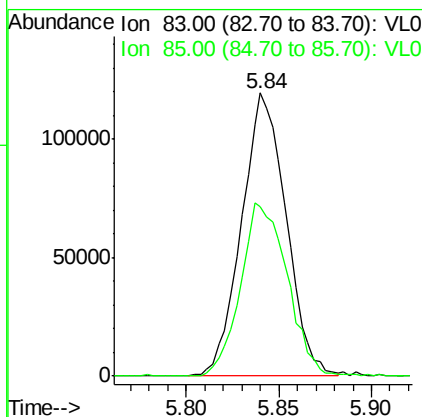
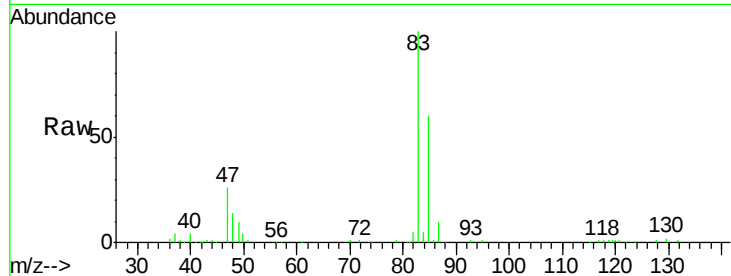
#29
Chloroform
Concen: 1.087 ppbv
RT: 5.84 min Scan# 903
Delta R.T. -0.01 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion: 83 Resp: 199244
Ion Ratio Lower Upper
83 100
85 59.6 52.6 78.8

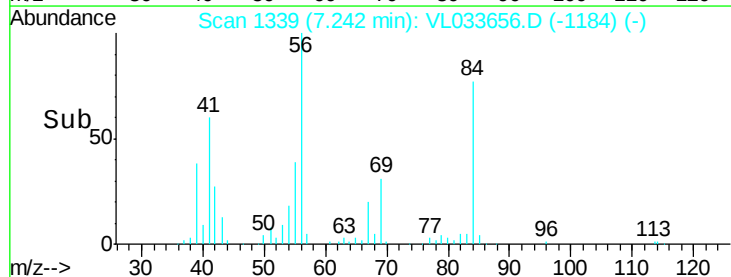
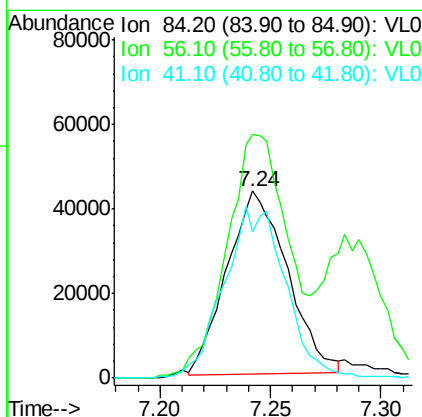
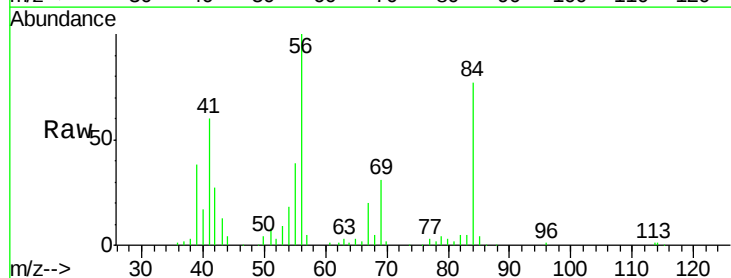
Manual Integrations
APPROVED

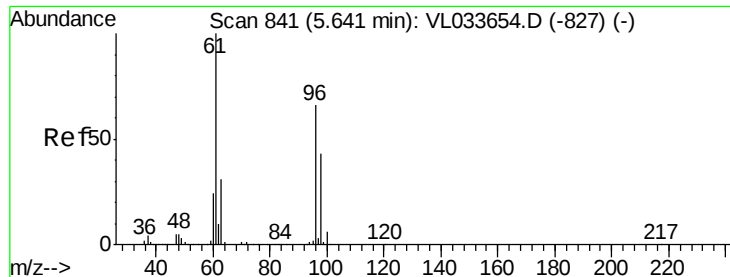
MMDadoda
5/8/2019 12:05:58 PM



#30
Cyclohexane
Concen: 0.966 ppbv
RT: 7.24 min Scan# 1339
Delta R.T. -0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Tgt Ion: 84 Resp: 82122
Ion Ratio Lower Upper
84 100
56 135.8 107.0 160.4
41 95.9 66.6 99.8





#31

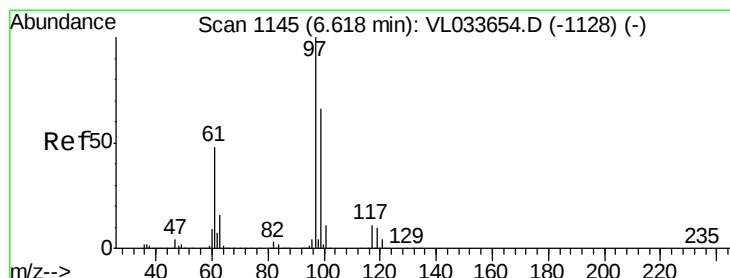
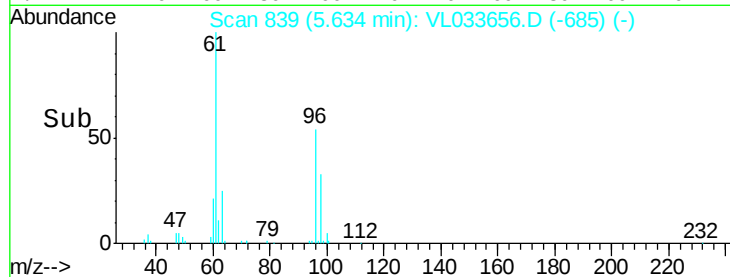
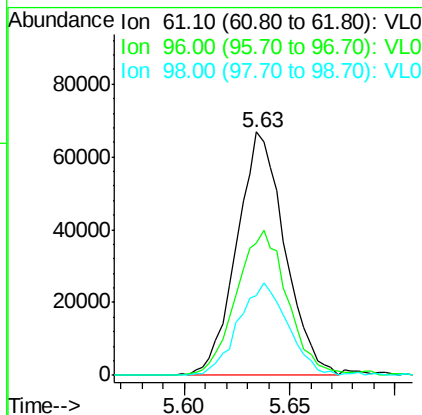
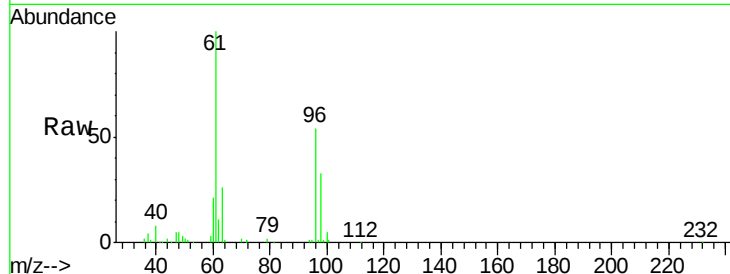
cis-1,2-Dichloroethene
Concen: 1.046 ppbv
RT: 5.63 min Scan# 839
Delta R.T. -0.01 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	Ratio	Lower	Upper
61	100		
96	53.6	53.2	79.8
98	33.0	34.2	51.4#

Manual Integrations
APPROVED

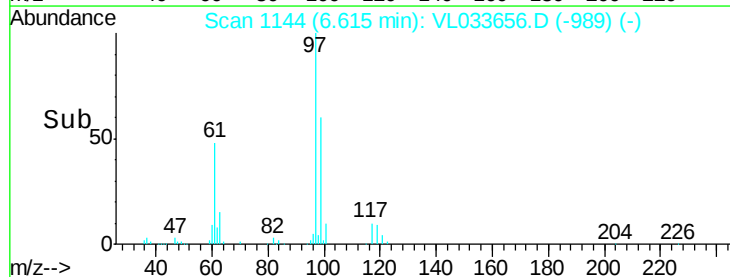
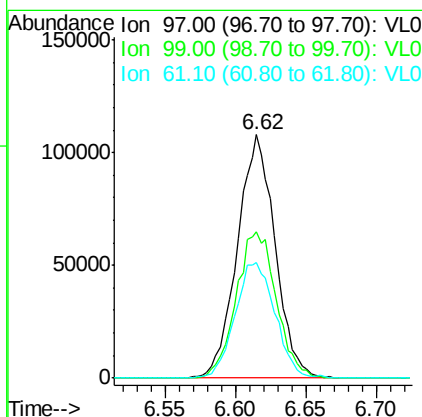
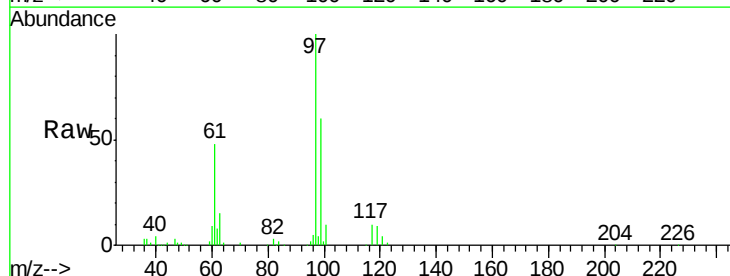
MMDadoda
5/8/2019 12:05:58 PM

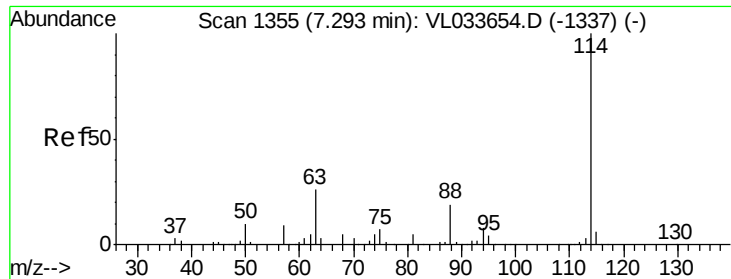


#32

1,1,1-Trichloroethane
Concen: 1.051 ppbv
RT: 6.62 min Scan# 1144
Delta R.T. -0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Tgt Ion	Ratio	Lower	Upper
97	100		
99	64.1	51.5	77.3
61	50.5	38.5	57.7





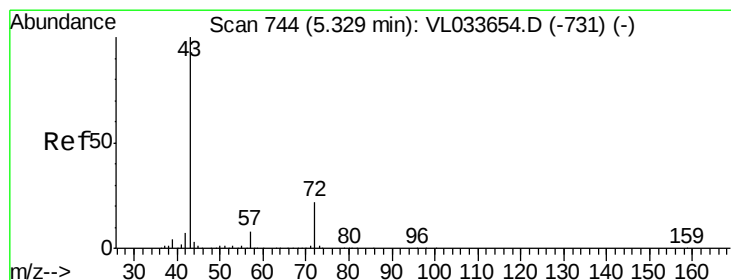
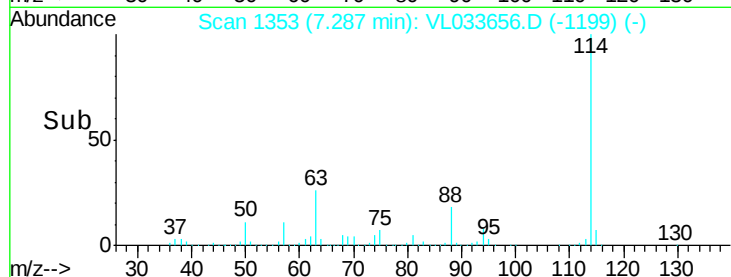
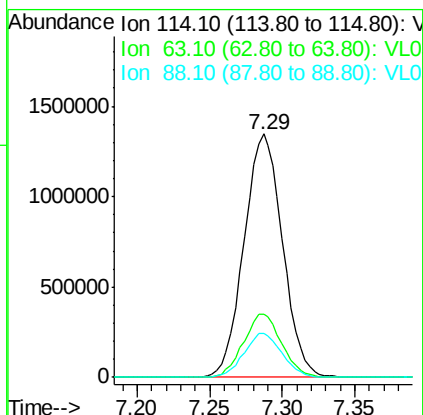
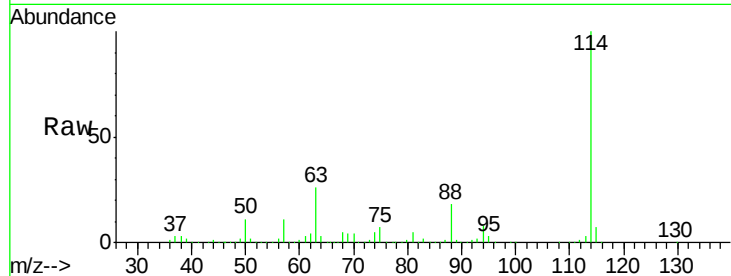
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.29 min Scan# 1353
 Delta R.T. -0.01 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion:114 Resp: 2492876
 Ion Ratio Lower Upper
 114 100
 63 26.0 21.2 31.8
 88 17.9 14.4 21.6

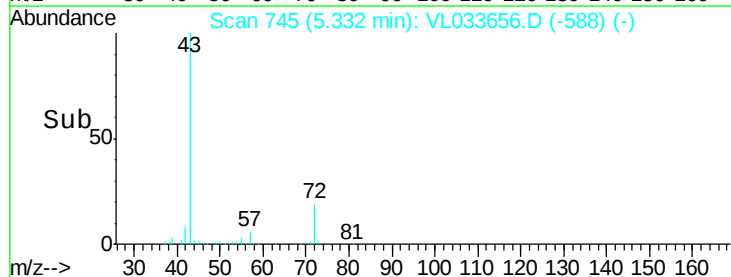
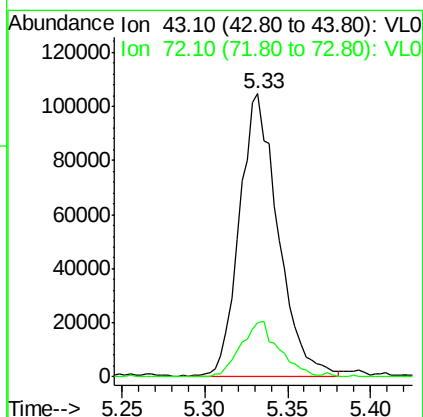
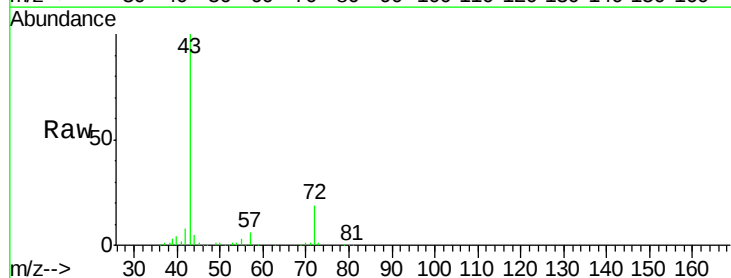
Manual Integrations
 APPROVED

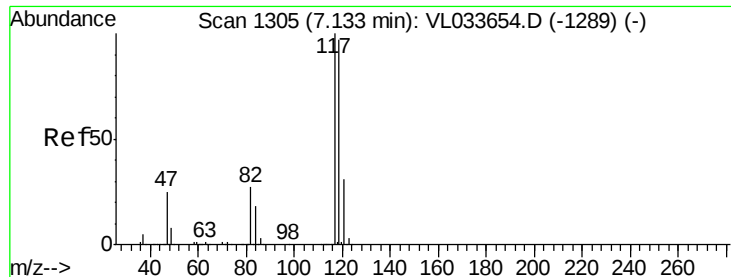
MMDadoda
 5/8/2019 12:05:58 PM



#34
 2-Butanone
 Concen: 1.098 ppbv
 RT: 5.33 min Scan# 745
 Delta R.T. 0.00 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Tgt Ion: 43 Resp: 169295
 Ion Ratio Lower Upper
 43 100
 72 19.8 17.4 26.2





#35

Carbon Tetrachloride

Concen: 1.073 ppbv

RT: 7.13 min Scan# 1304

Delta R.T. -0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

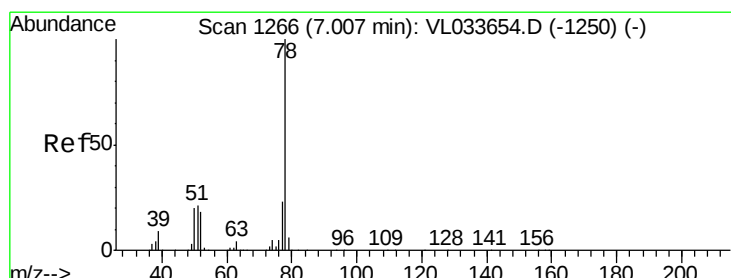
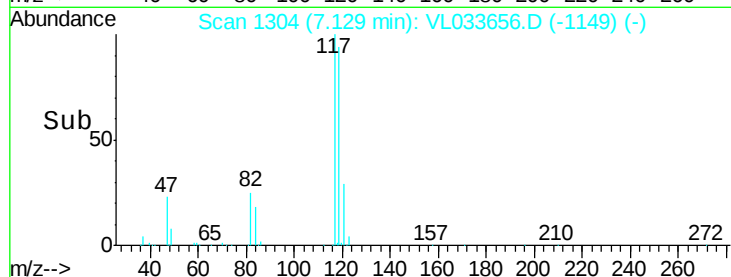
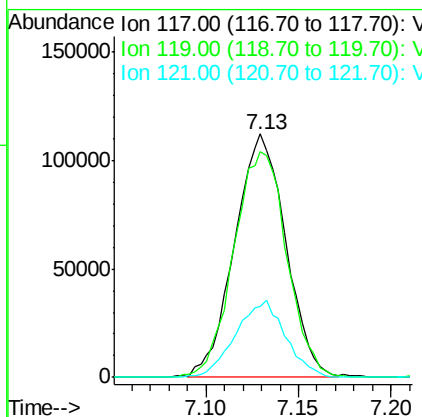
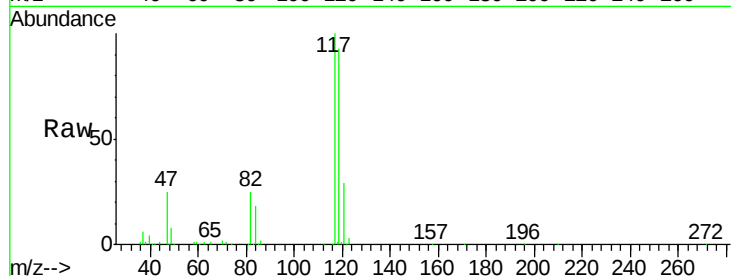
ClientSampleId :

VSTDIC001

Tot Ion:	117	Resp:	214592
Ion Ratio	Lower	Upper	
117	100		
119	91.9	77.9	116.9
121	28.4	25.0	37.6

Manual Integrations
APPROVED

MMDadoda
5/8/2019 12:05:58 PM



#36

Benzene

Concen: 1.082 ppbv m

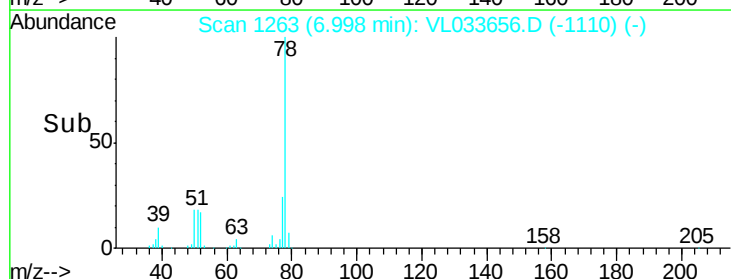
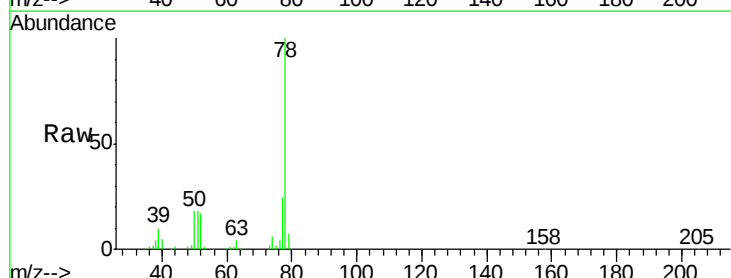
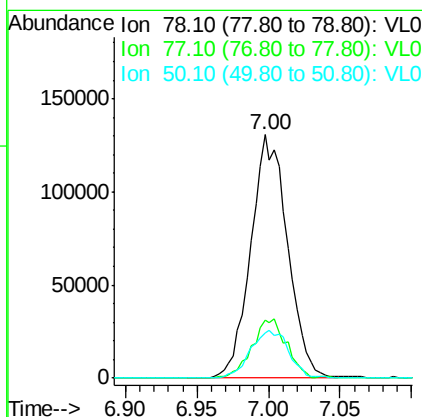
RT: 7.00 min Scan# 1263

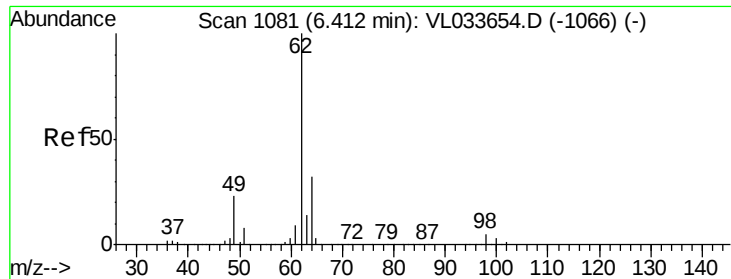
Delta R.T. -0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Tgt Ion:	78	Resp:	233619
Ion Ratio	Lower	Upper	
78	100		
77	24.0	18.2	27.2
50	18.4	15.8	23.6





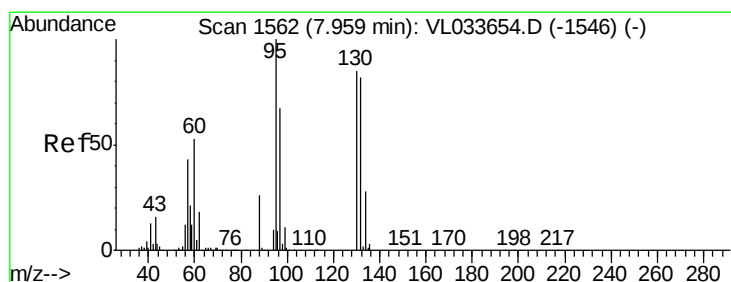
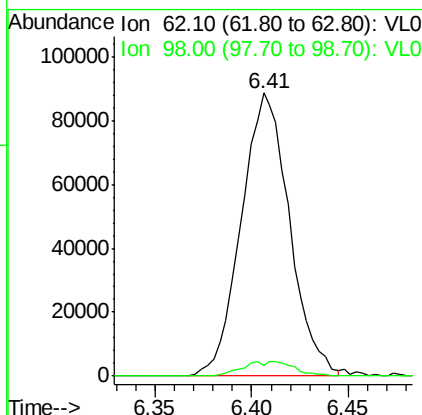
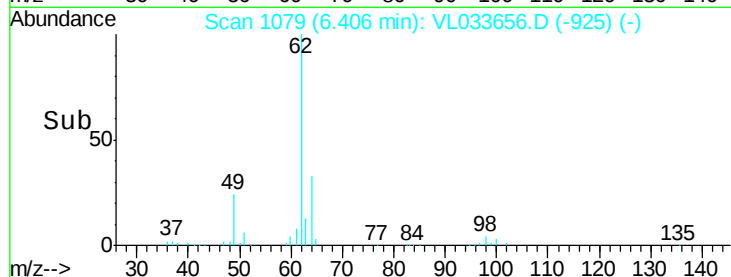
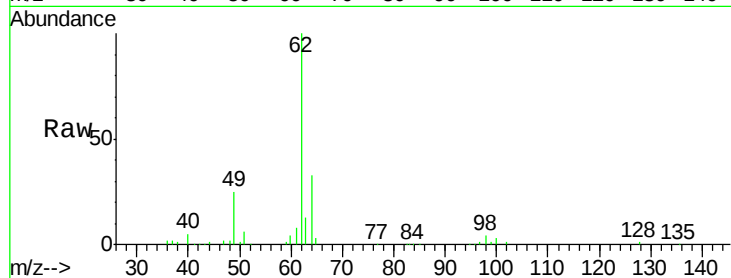
#37
 1,2-Dichloroethane
 Concen: 1.075 ppbv
 RT: 6.41 min Scan# 1079
 Delta R.T. -0.01 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Resp	Lower	Upper
62	100	153977		
98	5.7		4.5	6.7

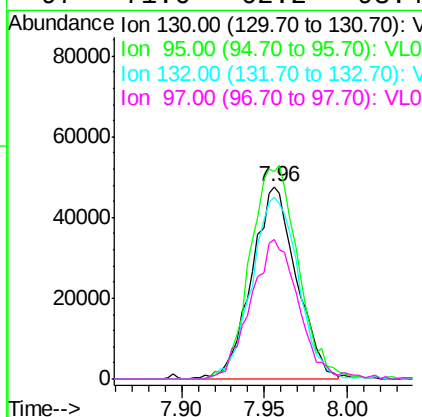
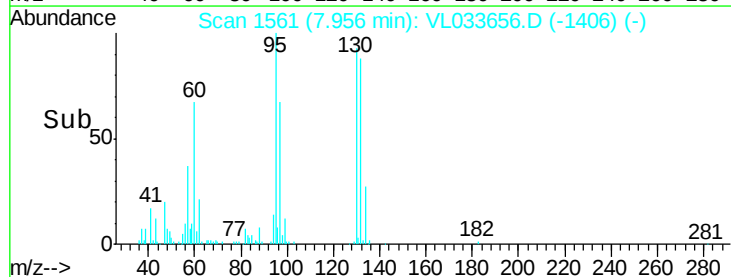
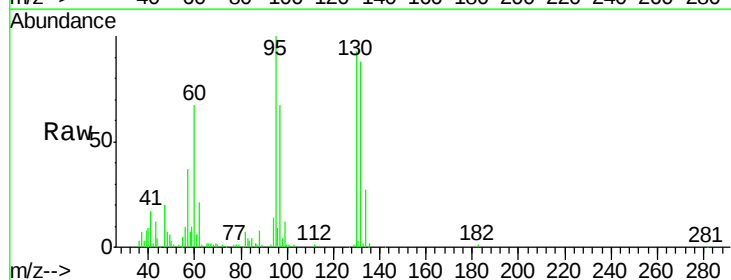
Manual Integrations
 APPROVED

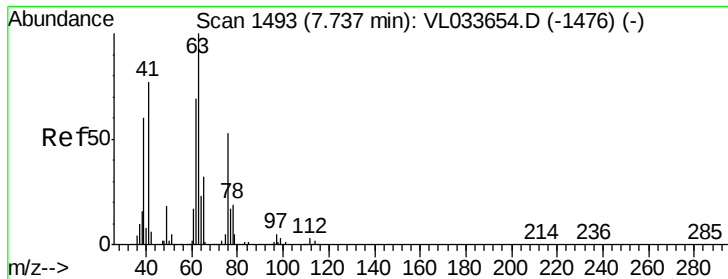
MMDadoda
 5/8/2019 12:05:58 PM



#38
 Trichloroethene
 Concen: 1.045 ppbv
 RT: 7.96 min Scan# 1561
 Delta R.T. -0.00 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Tgt Ion	Ratio	Resp	Lower	Upper
130	100	89615		
95	106.1		93.4	140.0
132	92.9		76.2	114.4
97	71.6		62.2	93.4





#39

1,2-Dichloropropane

Concen: 1.053 ppbv

RT: 7.73 min Scan# 1490

Delta R.T. -0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

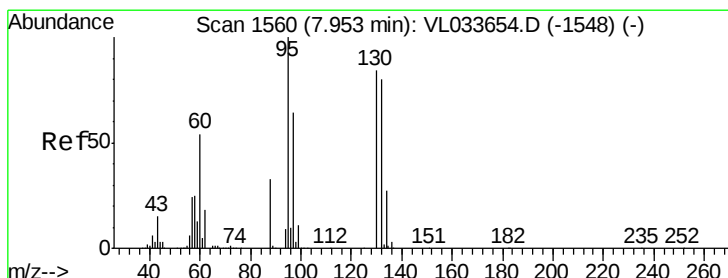
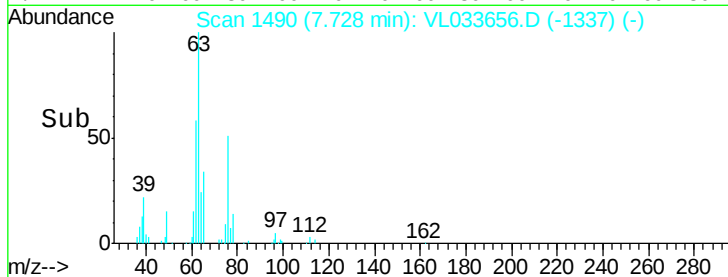
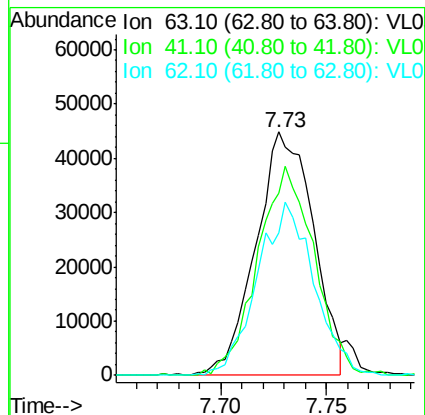
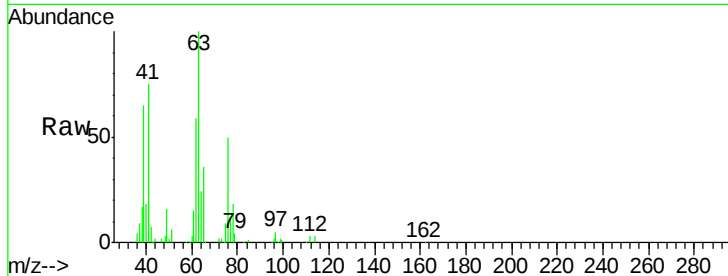
ClientSampleId :

VSTDIC001

Tot Ion:	63	Resp:	85212
Ion	Ratio	Lower	Upper
63	100		
41	74.8	61.6	92.4
62	58.5	55.0	82.6

Manual Integrations
APPROVED

MMDadoda
5/8/2019 12:05:58 PM



#40

1,4-Dioxane

Concen: 1.149 ppbv m

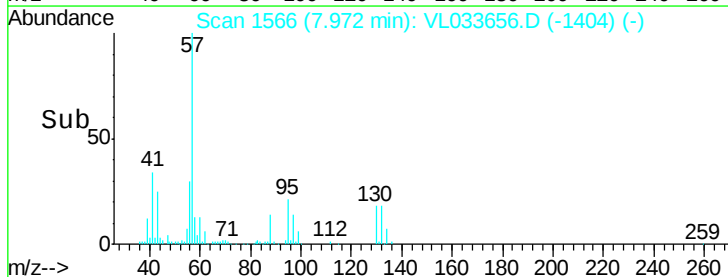
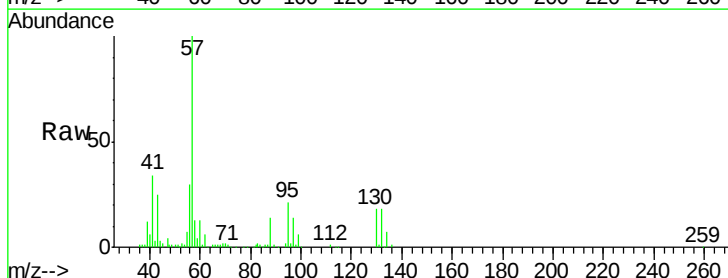
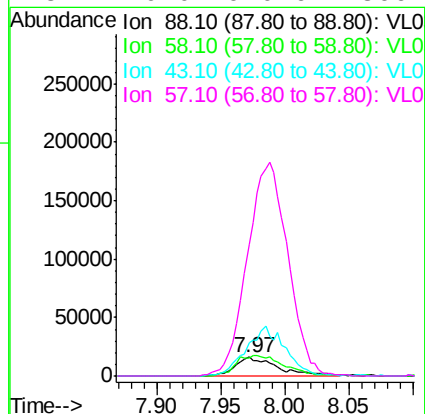
RT: 7.97 min Scan# 1566

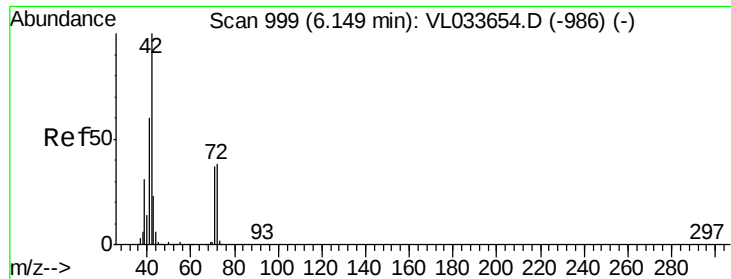
Delta R.T. 0.02 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Tgt Ion:	88	Resp:	37336
Ion	Ratio	Lower	Upper
88	100		
58	0.0	102.3	153.5#
43	0.0	206.1	309.1#
57	0.0	910.6	1366.0#





#41

Tetrahydrofuran

Concen: 0.974 ppbv

RT: 6.16 min Scan# 1002

Delta R.T. 0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

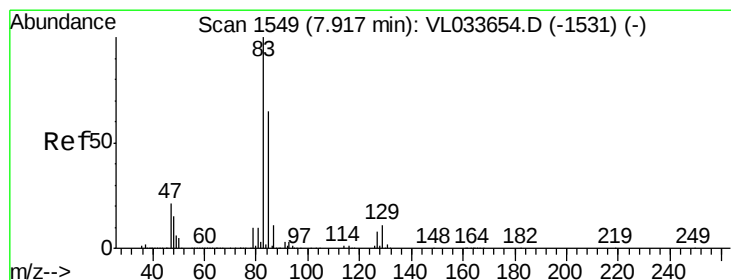
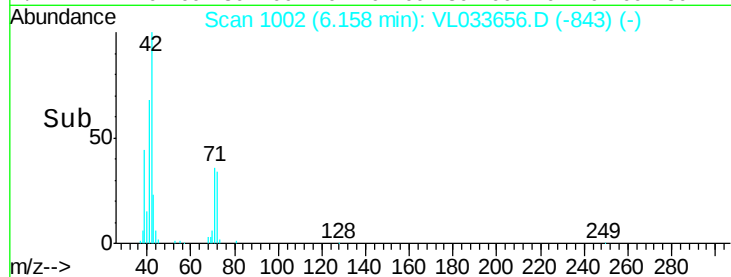
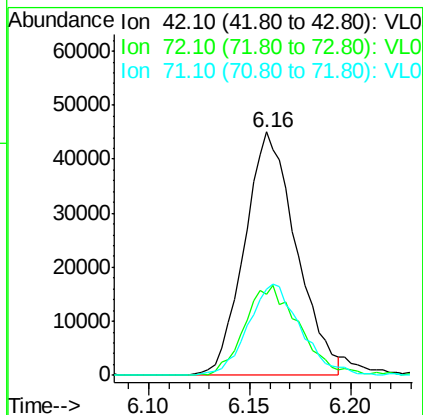
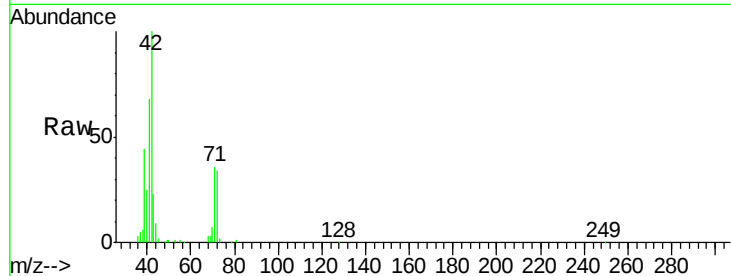
ClientSampleId :

VSTDIC001

Tot Ion:	42	Resp:	80627
Ion Ratio		Lower	Upper
42	100		
72	39.9	31.6	47.4
71	38.6	30.6	45.8

Manual Integrations
APPROVED

MMDadoda
5/8/2019 12:05:58 PM



#42

Bromodichloromethane

Concen: 1.066 ppbv

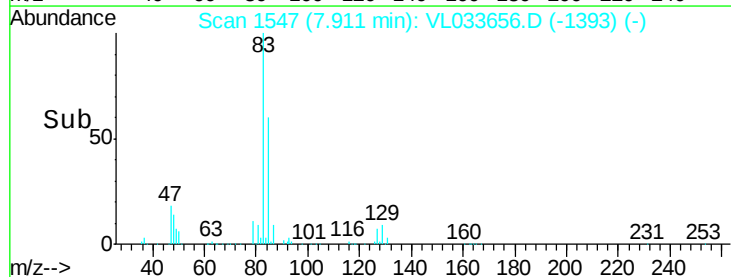
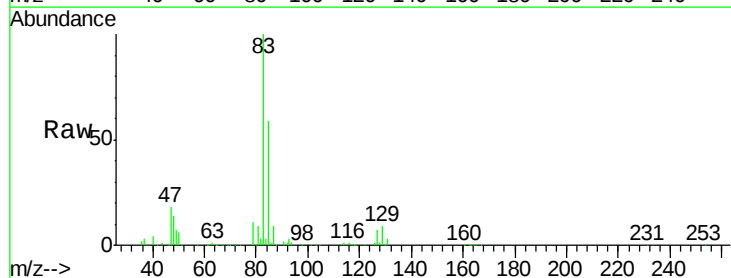
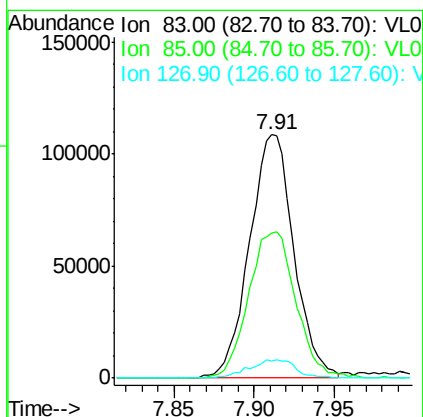
RT: 7.91 min Scan# 1547

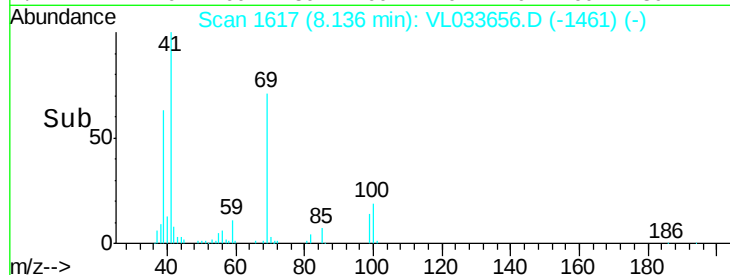
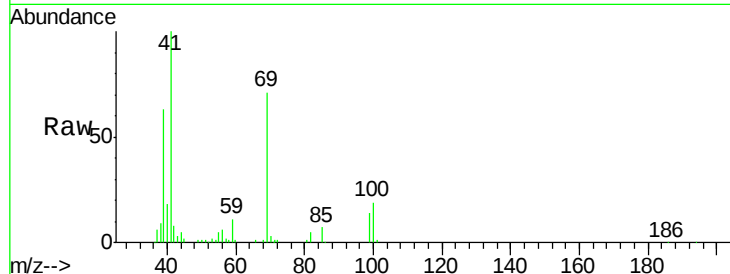
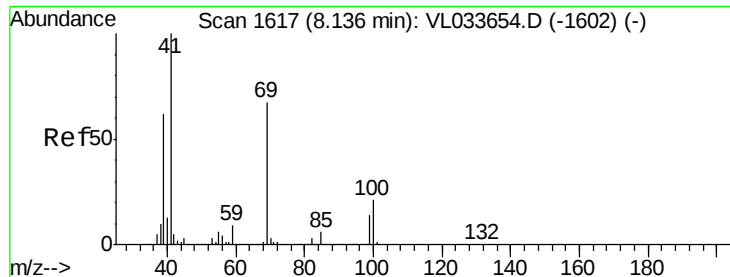
Delta R.T. -0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Tgt Ion:	83	Resp:	206902
Ion Ratio		Lower	Upper
83	100		
85	59.4	52.4	78.6
127	7.2	6.6	9.8





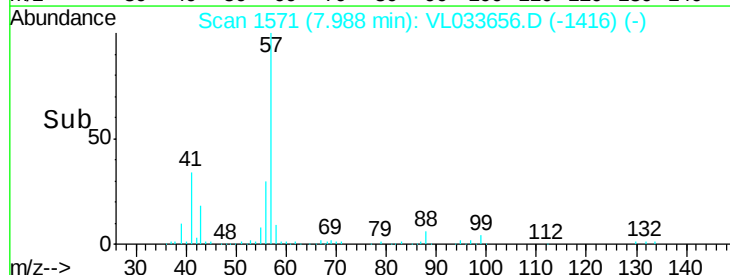
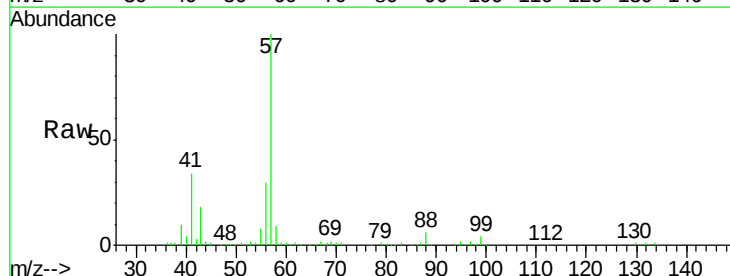
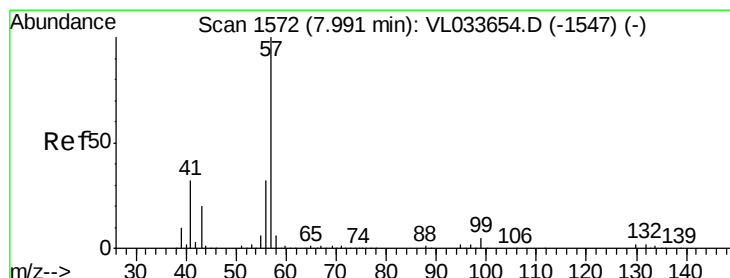
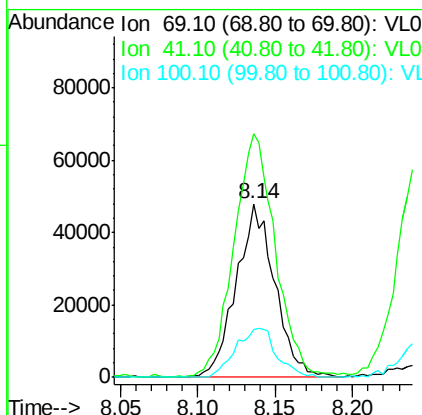
#43
Methvl Methacrylate
Concen: 1.024 ppbv
RT: 8.14 min Scan# 1617
Delta R.T. 0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Tot Ion	Ion	Ratio	Resp	Lower	Upper
69	100		83320		
41	150.9	116.5	174.7		
100	29.8	24.6	37.0		

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

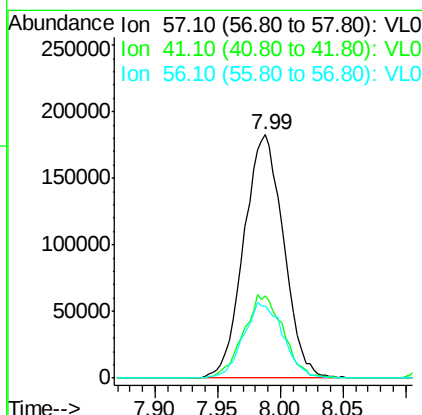
Manual Integrations
APPROVED

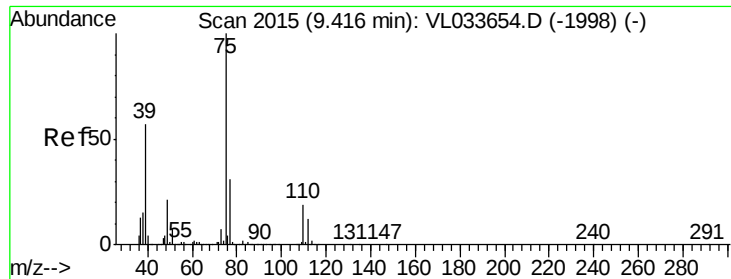
MMDadoda
5/8/2019 12:05:58 PM



#44
2,2,4-Trimethylpentane
Concen: 1.071 ppbv
RT: 7.99 min Scan# 1571
Delta R.T. -0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
57	100		401777		
41	34.6	25.7	38.5		
56	30.9	25.0	37.6		





#45

t-1,3-Dichloropropene

Concen: 0.821 ppbv

RT: 9.41 min Scan# 2013

Delta R.T. -0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 75 Resp: 86269

Ion Ratio Lower Upper

75 100

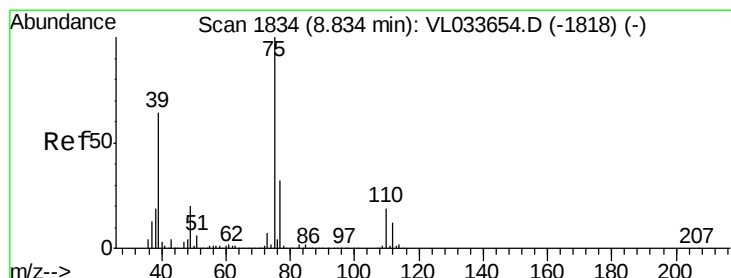
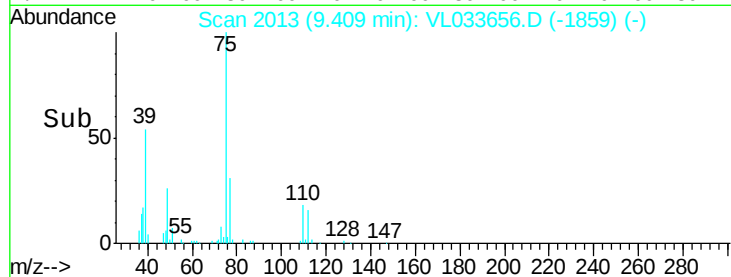
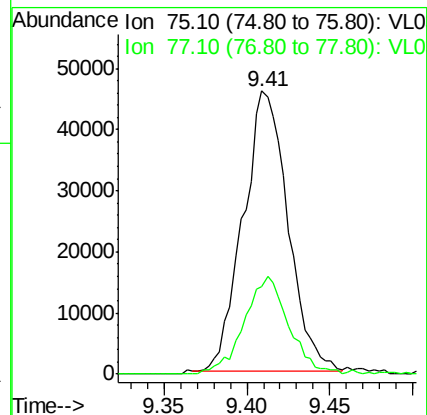
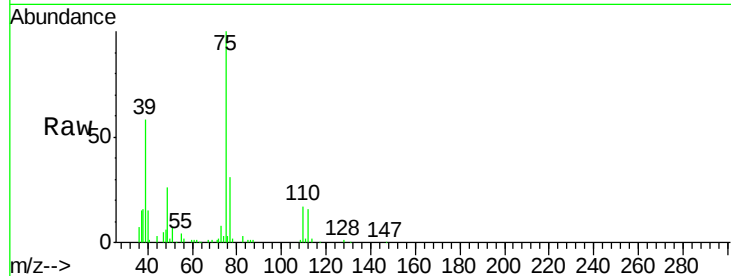
77 30.8 24.7 37.1

Manual Integrations

APPROVED

MMDadoda

5/8/2019 12:05:58 PM



#46

cis-1,3-Dichloropropene

Concen: 0.916 ppbv

RT: 8.83 min Scan# 1833

Delta R.T. -0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

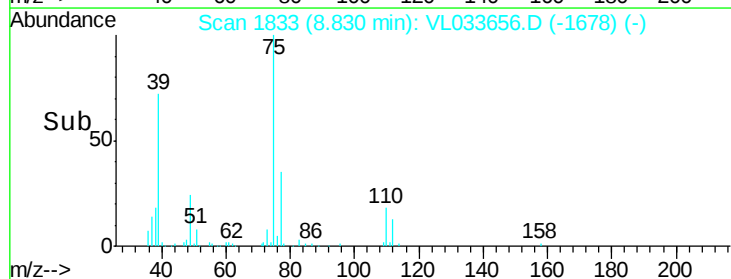
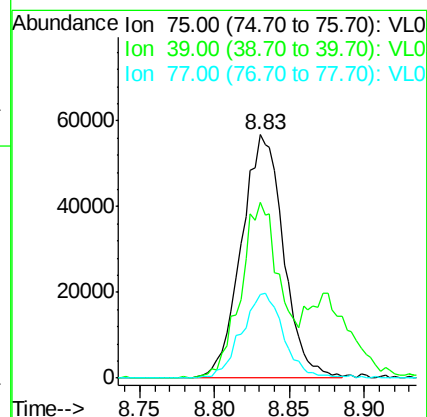
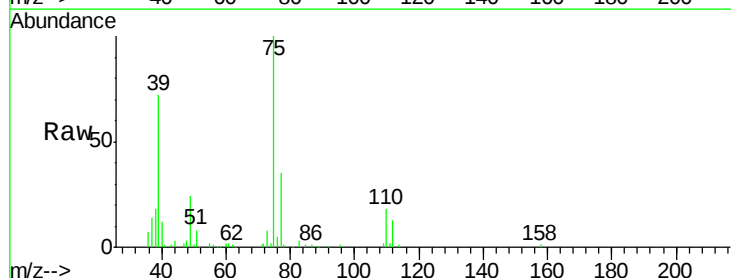
Tgt Ion: 75 Resp: 111301

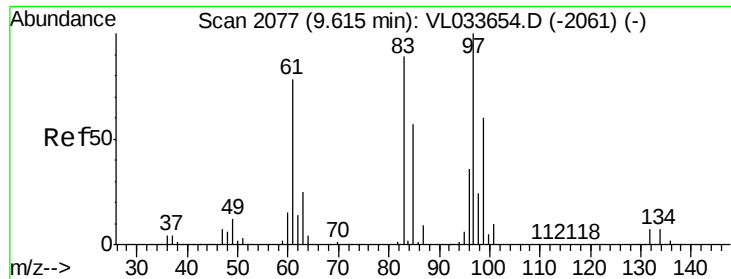
Ion Ratio Lower Upper

75 100

39 71.6 51.5 77.3

77 34.5 25.4 38.0





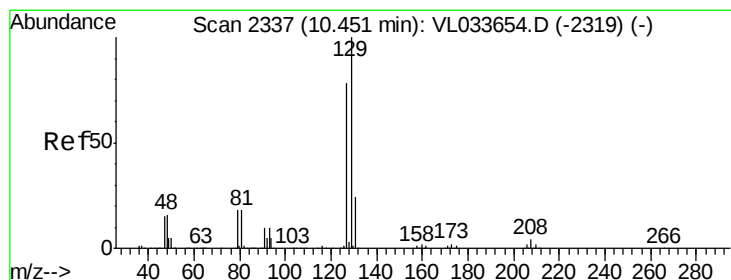
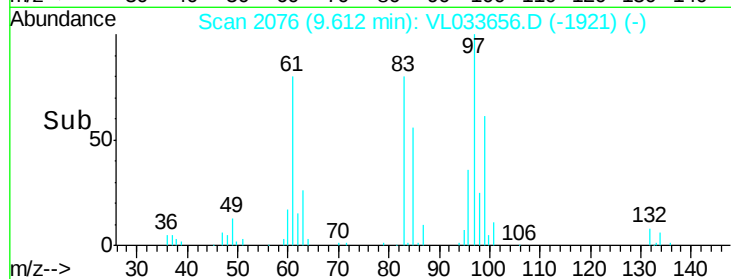
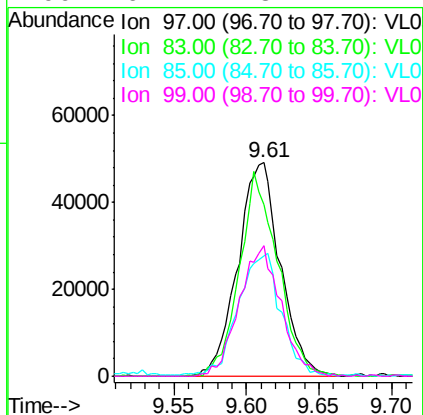
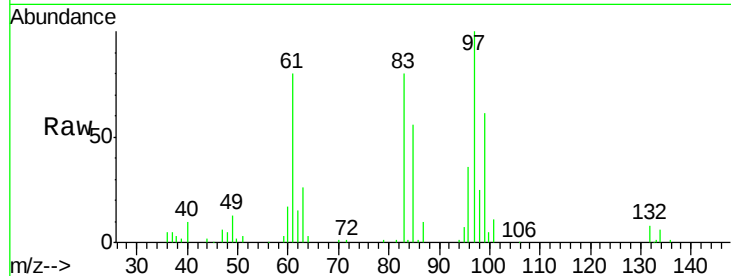
#47
 1,1,2-Trichloroethane
 Concen: 1.048 ppbv
 RT: 9.61 min Scan# 2076
 Delta R.T. -0.00 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion:	97	Resp:	100234
Ion	Ratio	Lower	Upper
97	100		
83	79.7	70.9	106.3
85	56.4	45.8	68.6
99	61.2	48.2	72.4

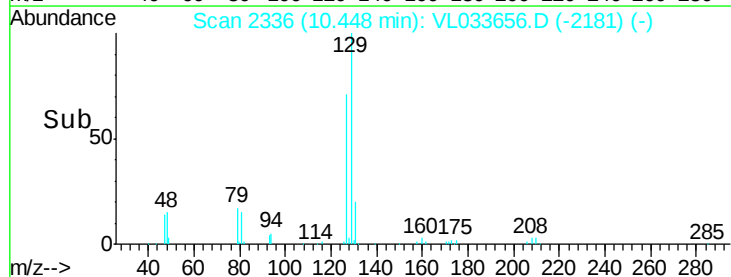
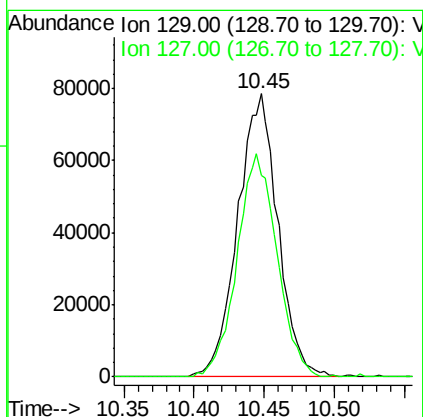
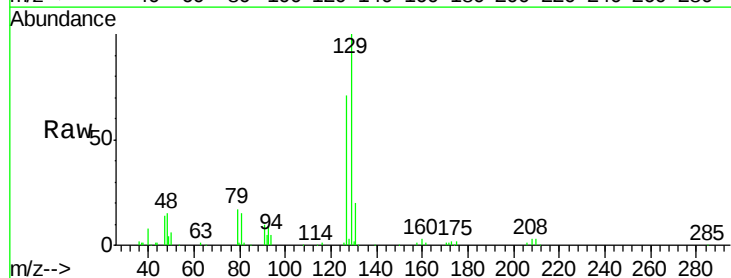
Manual Integrations
 APPROVED

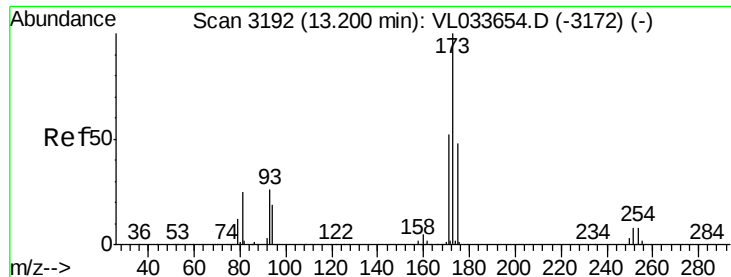
MMDadoda
 5/8/2019 12:05:58 PM



#48
 Dibromochloromethane
 Concen: 0.975 ppbv
 RT: 10.45 min Scan# 2336
 Delta R.T. -0.00 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Tgt Ion:	129	Resp:	156600
Ion	Ratio	Lower	Upper
129	100		
127	78.3	39.1	117.2





#49

Bromoform

Concen: 0.957 ppbv

RT: 13.19 min Scan# 3189

Delta R.T. -0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

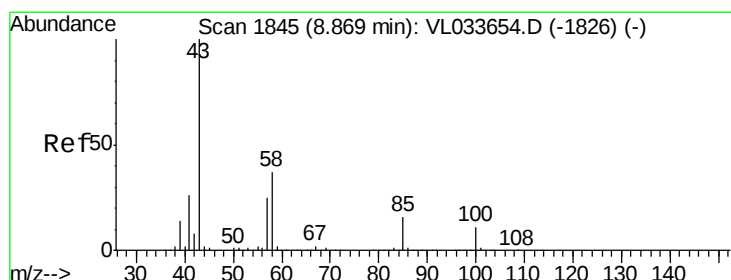
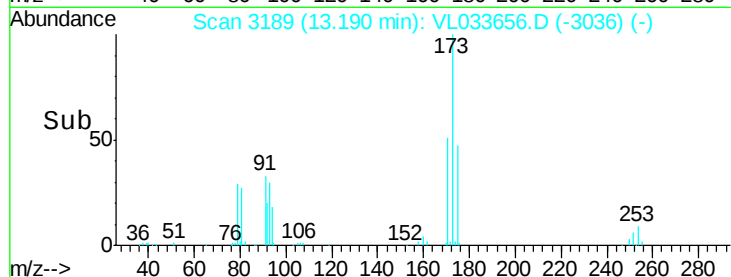
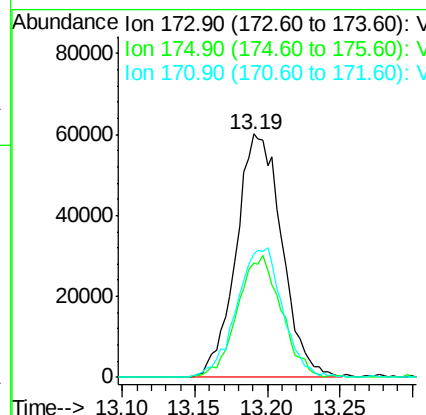
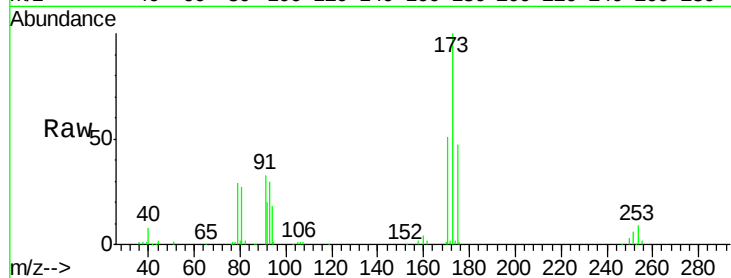
ClientSampleId :

VSTDIC001

Tot Ion:	173	Resp:	131916
Ion Ratio	Lower	Upper	
173	100		
175	47.9	39.3	58.9
171	53.5	41.5	62.3

Manual Integrations
APPROVED

MMDadoda
5/8/2019 12:05:58 PM



#50

4-Methyl-2-Pentanone

Concen: 1.022 ppbv

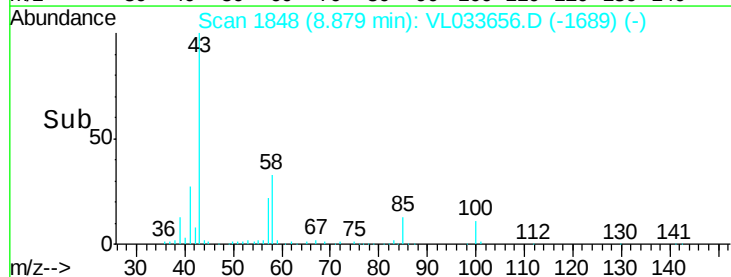
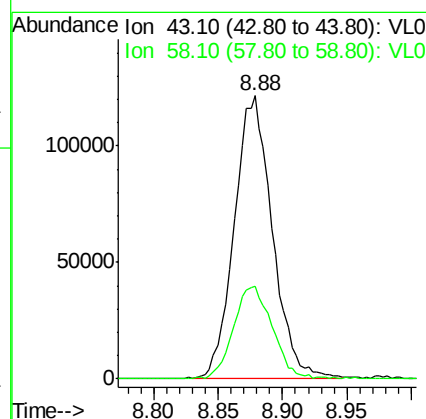
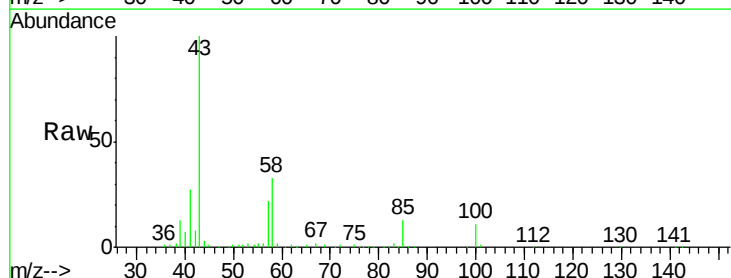
RT: 8.88 min Scan# 1848

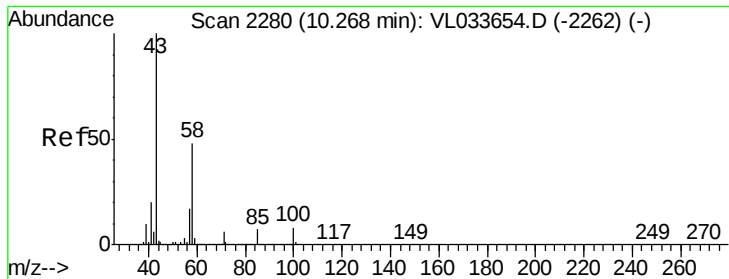
Delta R.T. 0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Tgt Ion:	43	Resp:	247245
Ion Ratio	Lower	Upper	
43	100		
58	34.1	28.8	43.2





#51

2-Hexanone

Concen: 0.950 ppbv

RT: 10.28 min Scan# 2284

Delta R.T. 0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

ClientSampleId :

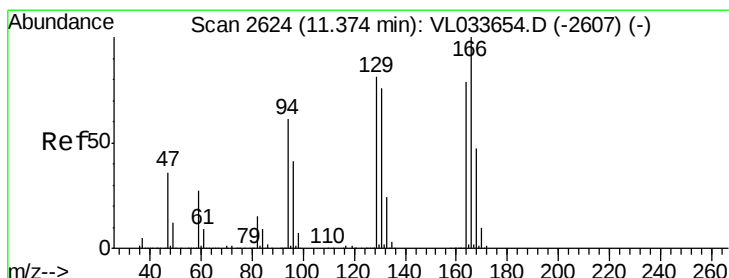
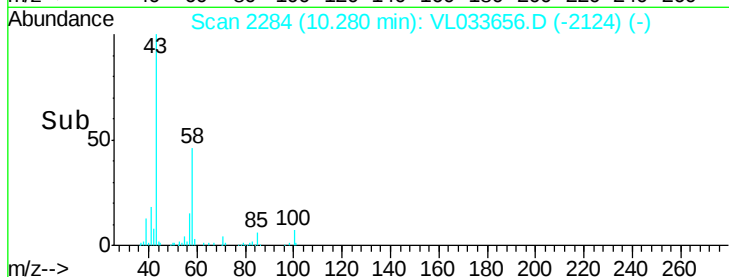
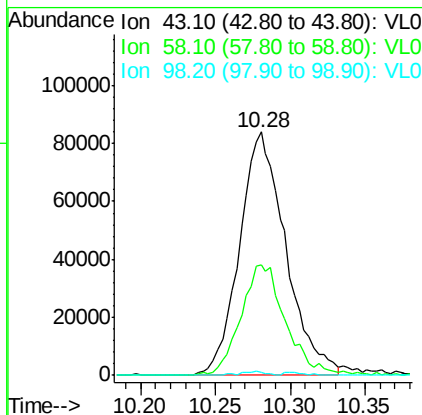
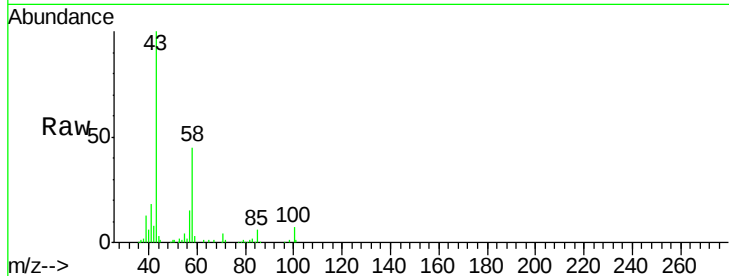
VSTDIC001

Tot Ion: 43 Resp: 180323

Ion	Ratio	Lower	Upper
43	100		
58	44.9	38.2	57.4
98	0.9	0.2	0.4

Manual Integrations
APPROVED

MMDadoda
5/8/2019 12:05:58 PM



#52

Tetrachloroethene

Concen: 1.032 ppbv

RT: 11.37 min Scan# 2623

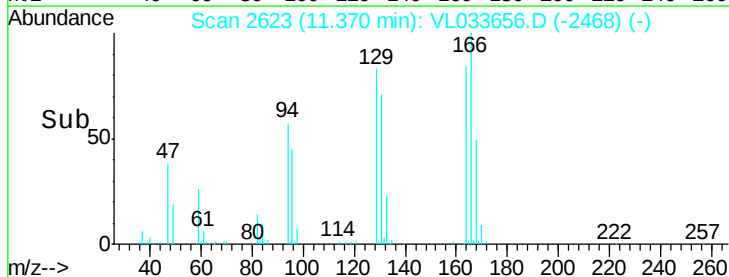
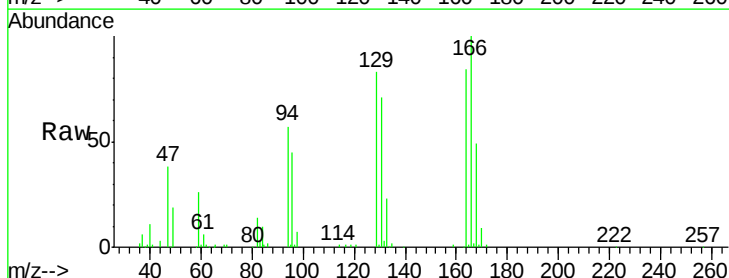
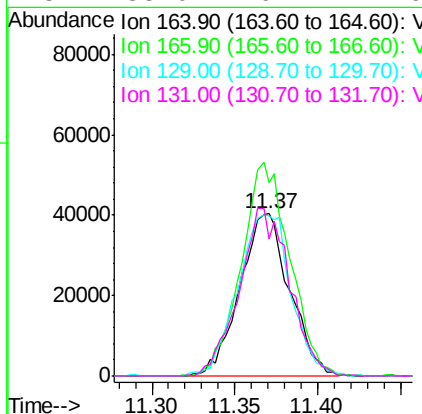
Delta R.T. -0.00 min

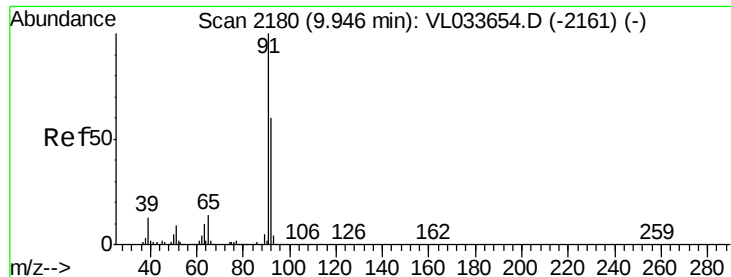
Lab File: VL033656.D

Acq: 6 May 2019 12:17

Tgt Ion: 164 Resp: 84389

Ion	Ratio	Lower	Upper
164	100		
166	119.0	100.6	151.0
129	97.2	81.0	121.6
131	88.0	76.4	114.6





#53

Toluene

Concen: 0.996 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. -0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 91 Resp: 242614

Ion Ratio Lower Upper

91 100

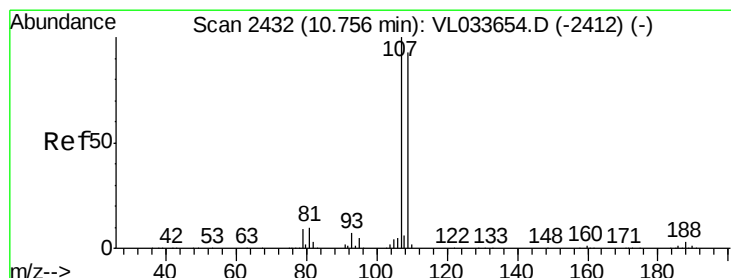
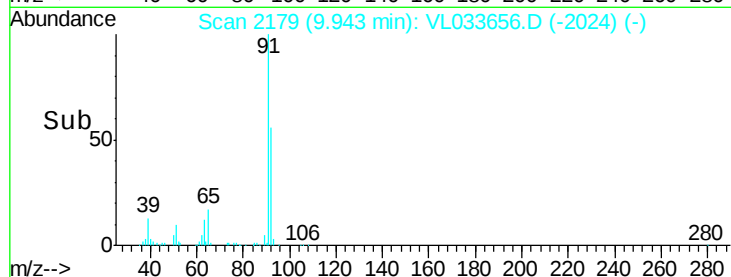
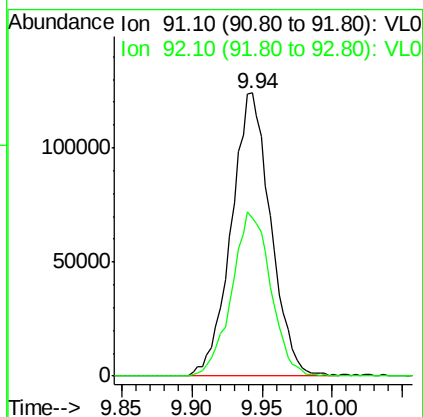
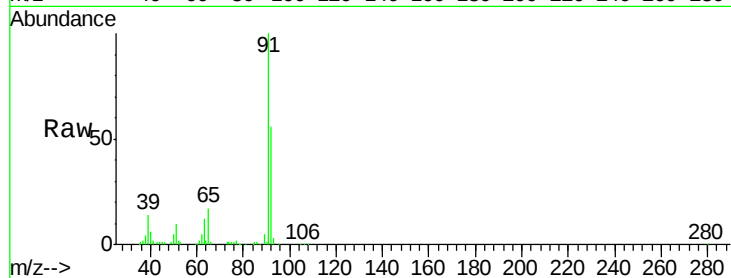
92 57.5 47.8 71.6

Manual Integrations

APPROVED

MMDadoda

5/8/2019 12:05:58 PM



#54

1,2-Dibromoethane

Concen: 1.014 ppbv

RT: 10.75 min Scan# 2430

Delta R.T. -0.01 min

Lab File: VL033656.D

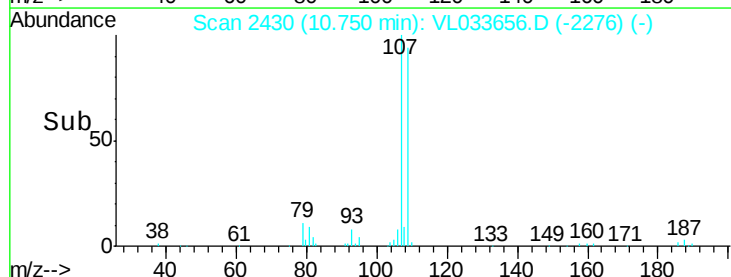
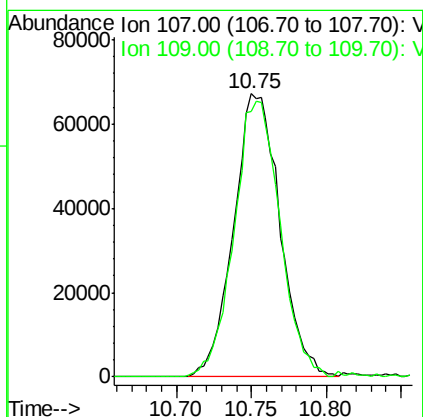
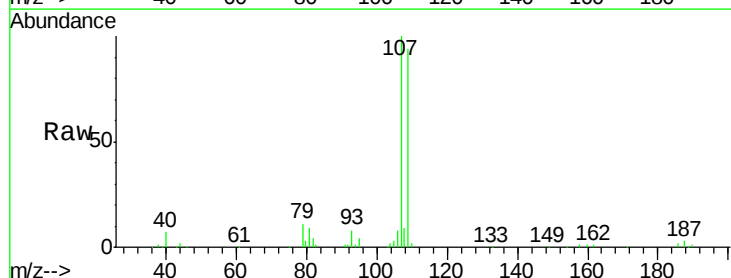
Acq: 6 May 2019 12:17

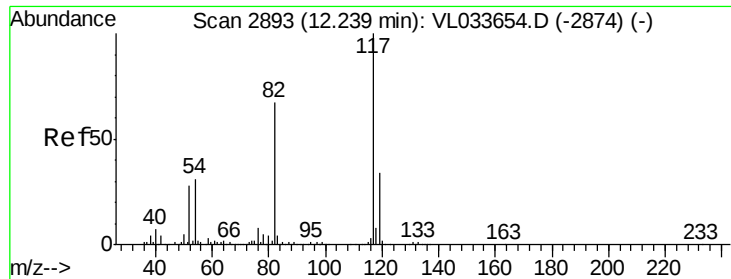
Tgt Ion: 107 Resp: 144979

Ion Ratio Lower Upper

107 100

109 93.4 74.6 111.8





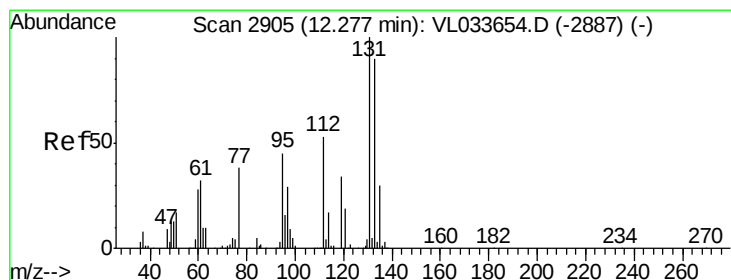
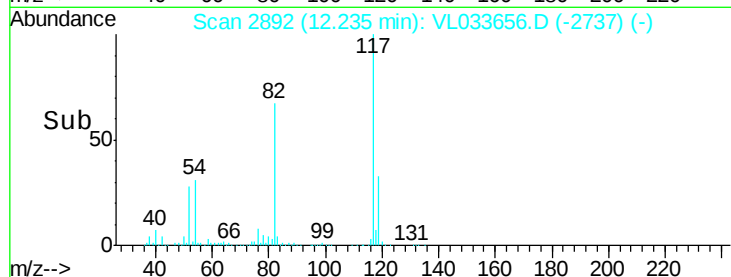
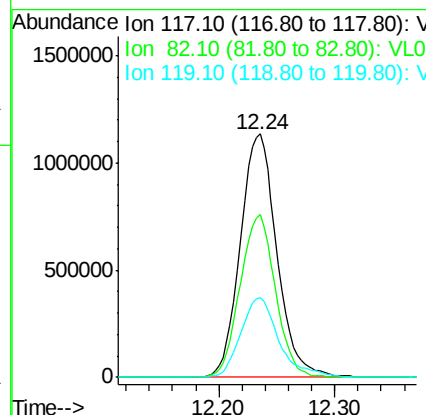
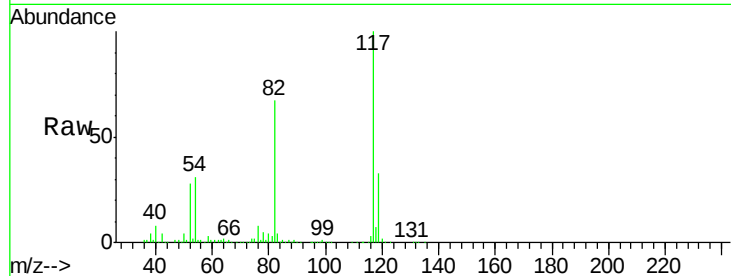
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2892
Delta R.T. -0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	Ratio	Lower	Upper
117	100		
82	64.8	49.7	74.5
119	34.3	23.3	34.9

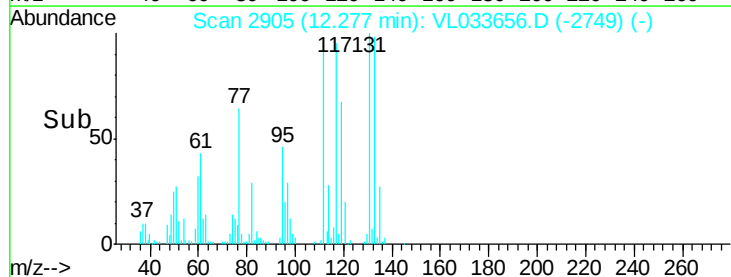
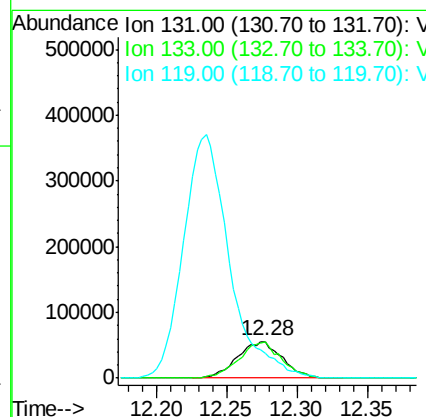
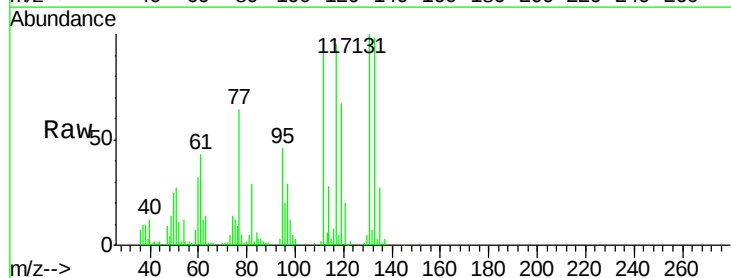
Manual Integrations
APPROVED

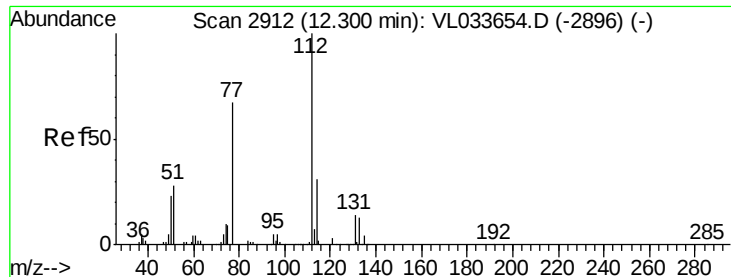
MMDadoda
5/8/2019 12:05:58 PM



#56
1,1,1,2-Tetrachloroethane
Concen: 1.132 ppbv
RT: 12.28 min Scan# 2905
Delta R.T. 0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Tgt Ion	Ratio	Lower	Upper
131	100		
133	94.4	76.1	114.1
119	692.4	49.4	74.0#





#57

Chlorobenzene

Concen: 1.137 ppbv

RT: 12.30 min Scan# 2911

Delta R.T. -0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

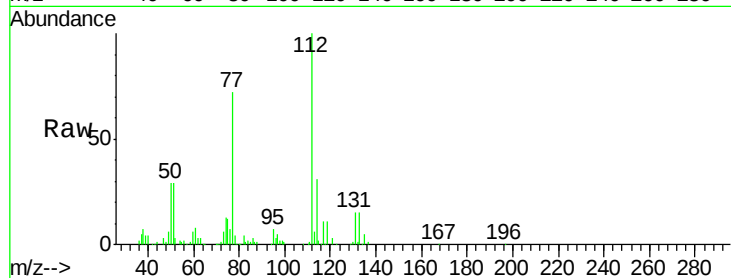
ClientSampleId :

VSTDIC001

Tot Ion:	112	Resp:	219984
Ion Ratio	Lower	Upper	
112	100		
77	71.0	54.4	81.6
114	30.1	28.2	34.4

Manual Integrations
APPROVED

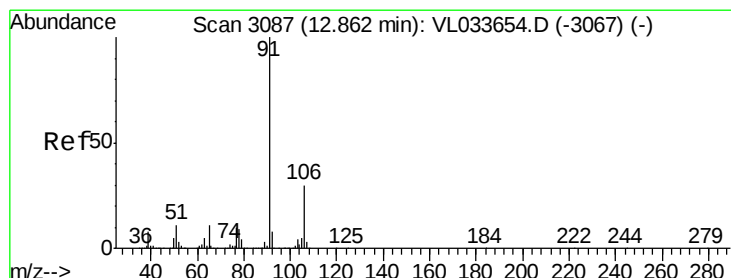
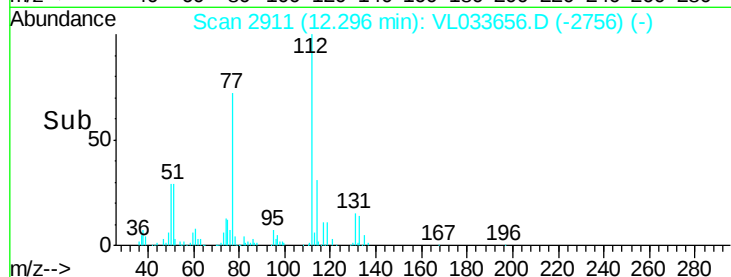
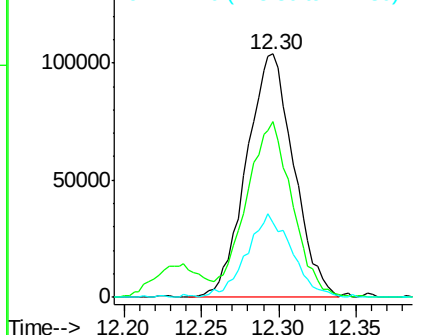
MMDadoda
5/8/2019 12:05:58 PM



Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 1.056 ppbv

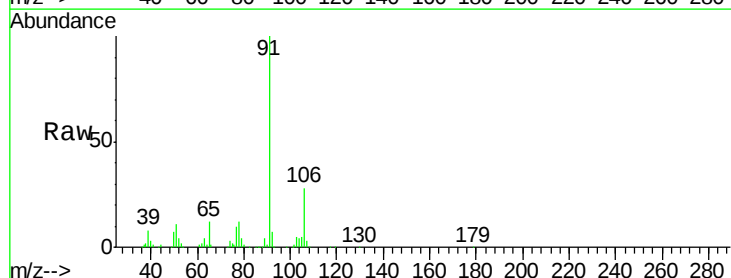
RT: 12.86 min Scan# 3086

Delta R.T. -0.00 min

Lab File: VL033656.D

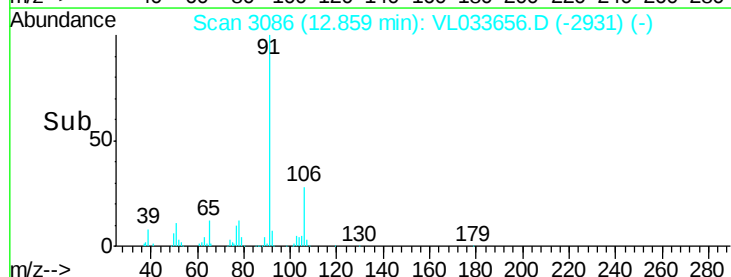
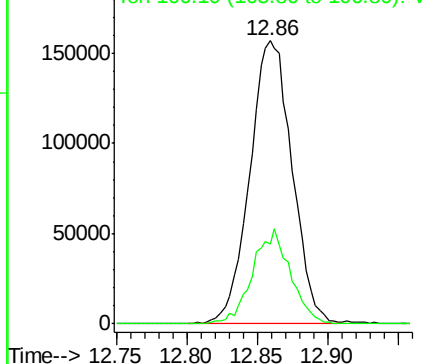
Acq: 6 May 2019 12:17

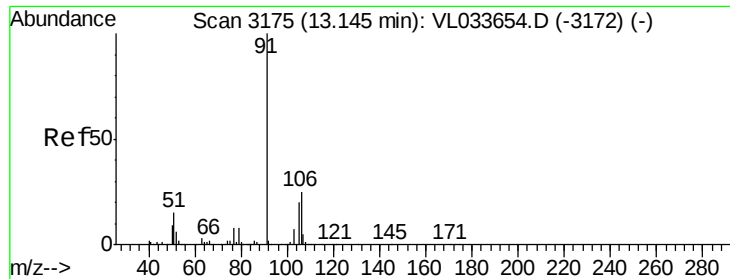
Tgt Ion:	91	Resp:	328638
Ion Ratio	Lower	Upper	
91	100		
106	28.3	23.7	35.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





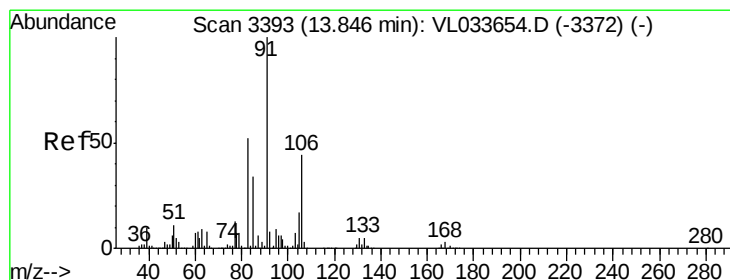
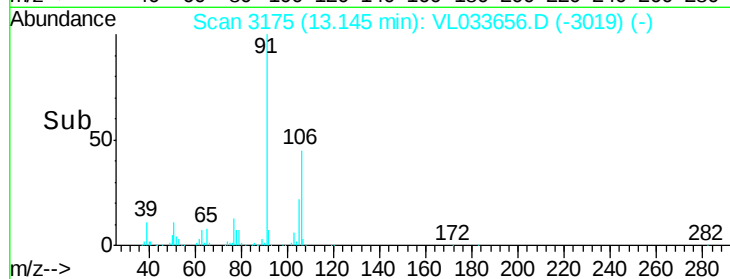
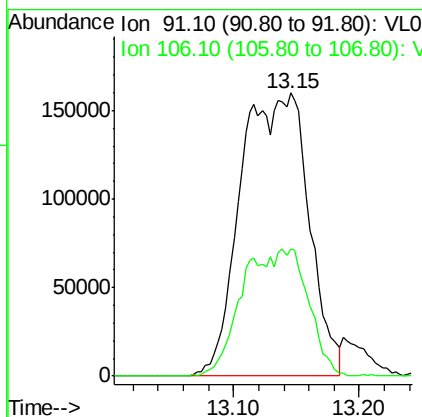
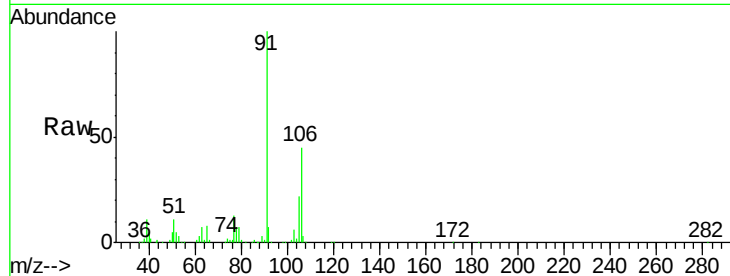
#59
m/p-Xylene
Concen: 2.246 ppbv m
RT: 13.15 min Scan# 3175
Delta R.T. 0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion: 91 Resp: 601627
Ion Ratio Lower Upper
91 100
106 43.5 35.9 53.9

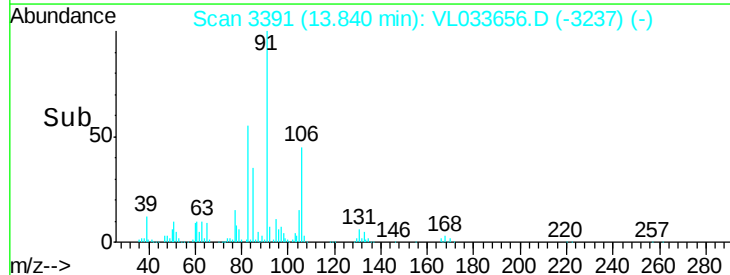
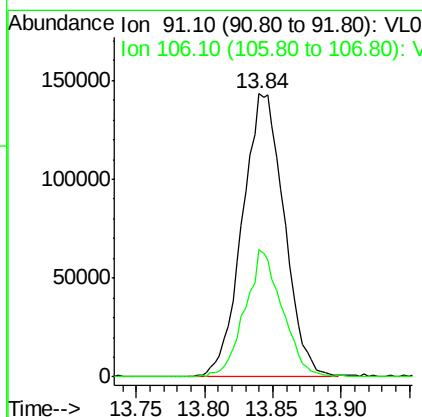
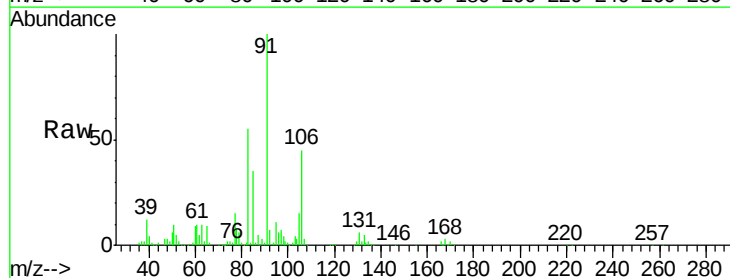
Manual Integrations
APPROVED

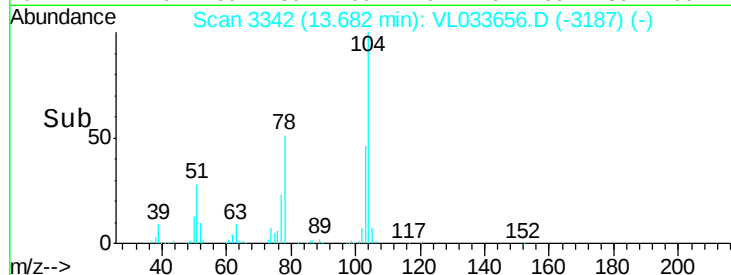
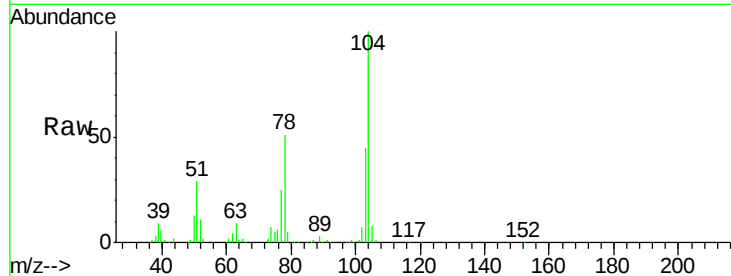
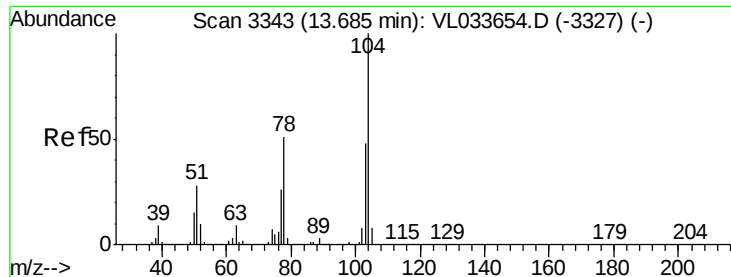
MMDadoda
5/8/2019 12:05:58 PM



#60
o-Xylene
Concen: 1.131 ppbv
RT: 13.84 min Scan# 3391
Delta R.T. -0.01 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Tgt Ion: 91 Resp: 305270
Ion Ratio Lower Upper
91 100
106 40.2 21.7 65.1





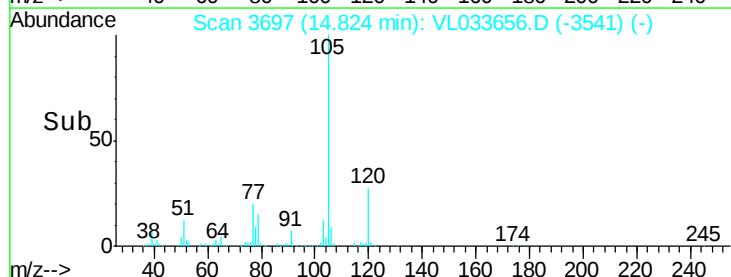
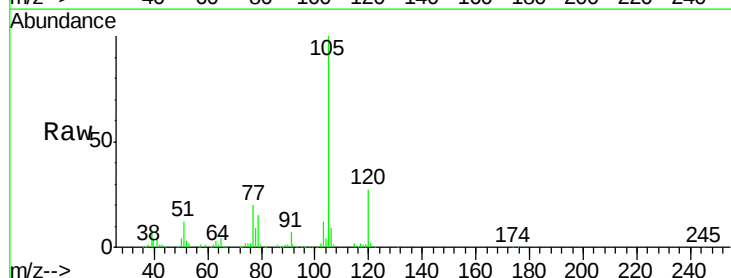
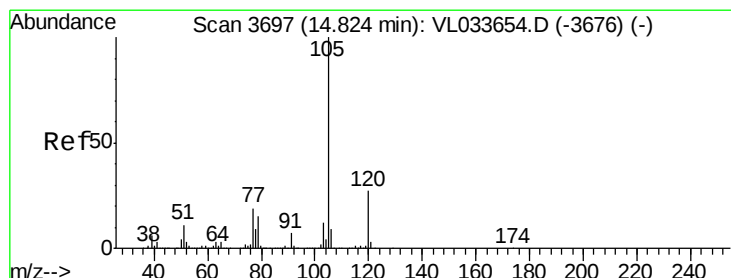
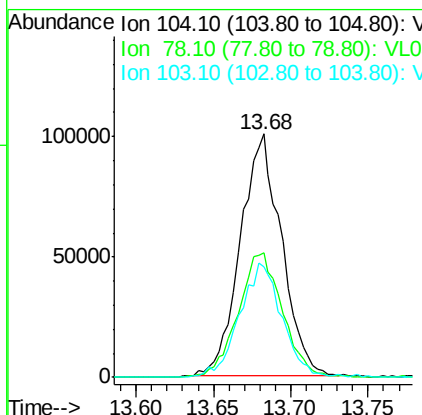
#61
Stvrene
Concen: 1.008 ppbv
RT: 13.68 min Scan# 3342
Delta R.T. -0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Tot Ion	Ratio	Resp	Lower	Upper
104	100	186611		
78	55.5	43.0	64.6	
103	48.8	38.1	57.1	

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

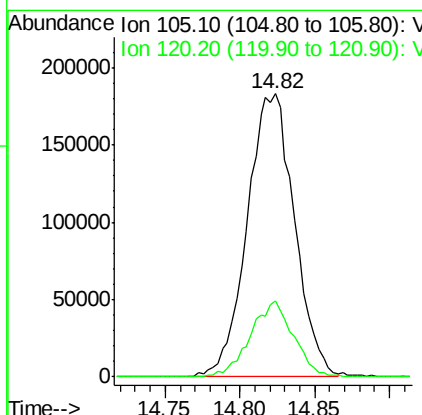
Manual Integrations
APPROVED

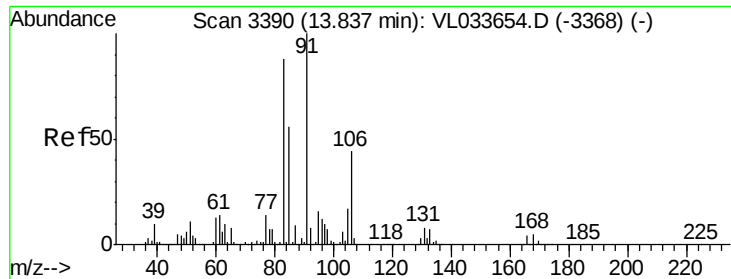
MMDadoda
5/8/2019 12:05:58 PM



#62
Isopropylbenzene
Concen: 1.119 ppbv
RT: 14.82 min Scan# 3697
Delta R.T. 0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	402281		
120	24.5	20.5	30.7	





#63

1,1,2,2-Tetrachloroethane

Concen: 1.132 ppbv

RT: 13.83 min Scan# 3387

Delta R.T. -0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

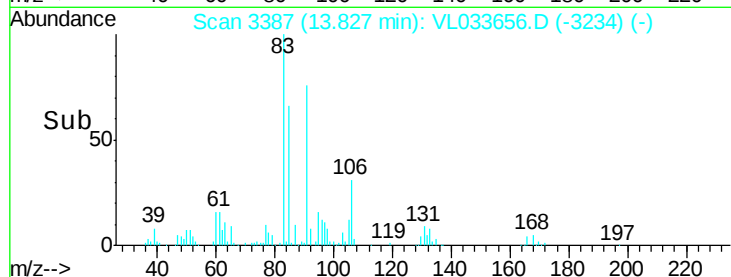
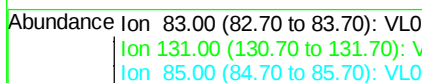
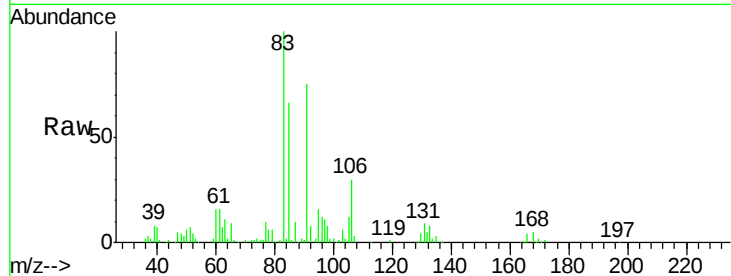
ClientSampleId :

VSTDIC001

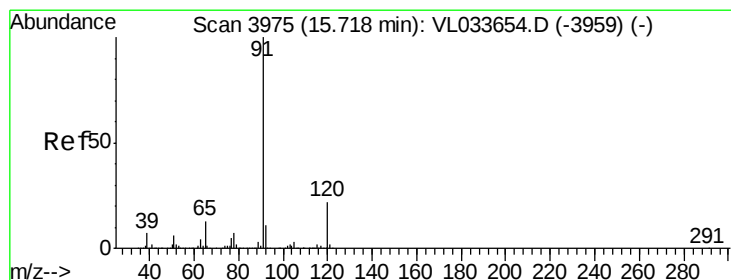
Tot Ion:	83	Resp:	231131
Ion Ratio	Lower	Upper	
83	100		
131	9.5	4.8	14.3
85	63.6	32.5	97.5

Manual Integrations
APPROVED

MMDadoda
5/8/2019 12:05:58 PM



Time-->



#64

n-propylbenzene

Concen: 1.093 ppbv

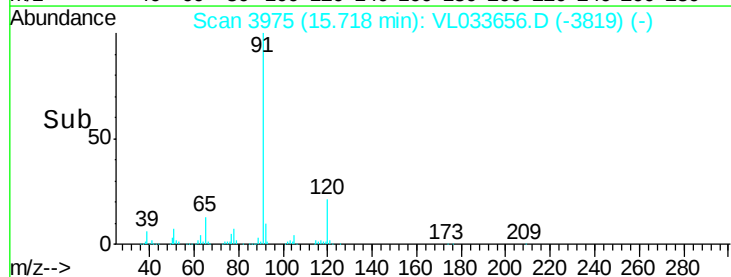
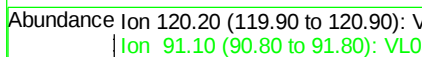
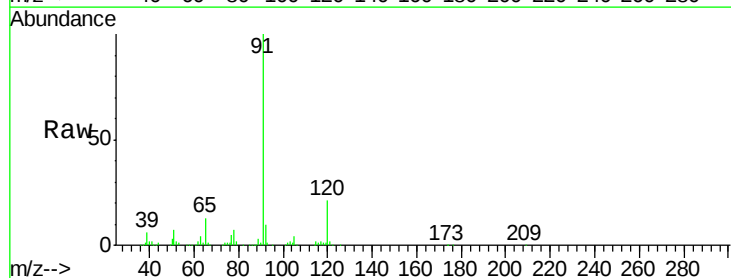
RT: 15.72 min Scan# 3975

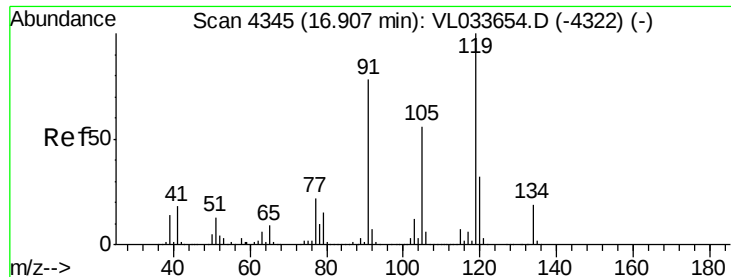
Delta R.T. 0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Tgt Ion:	120	Resp:	102224
Ion Ratio	Lower	Upper	
120	100		
91	510.8	379.4	569.2





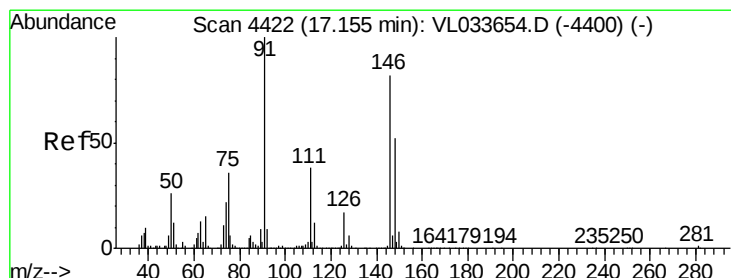
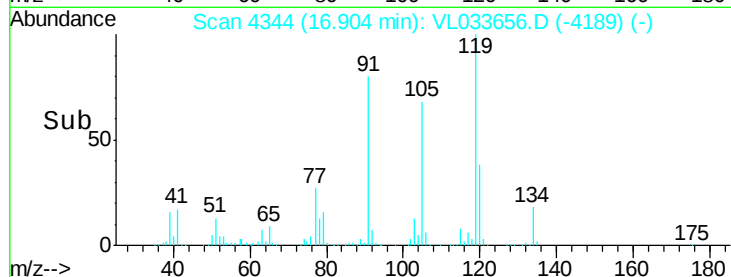
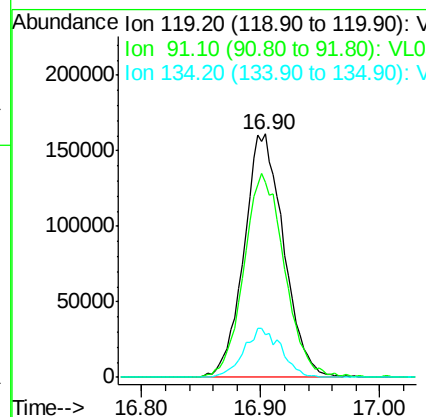
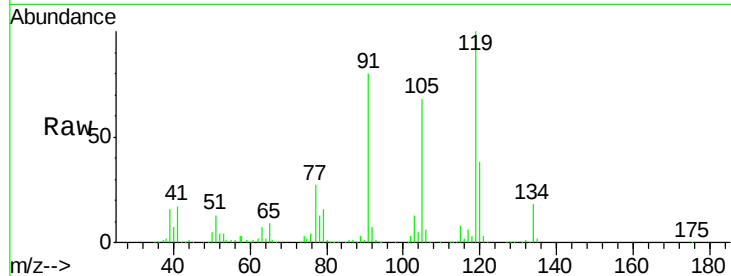
#65
tert-Butylbenzene
Concen: 1.107 ppbv
RT: 16.90 min Scan# 4344
Delta R.T. -0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	Ratio	Resp	Lower	Upper
119	100	372643		
91	85.9	65.9	98.9	
134	18.8	15.5	23.3	

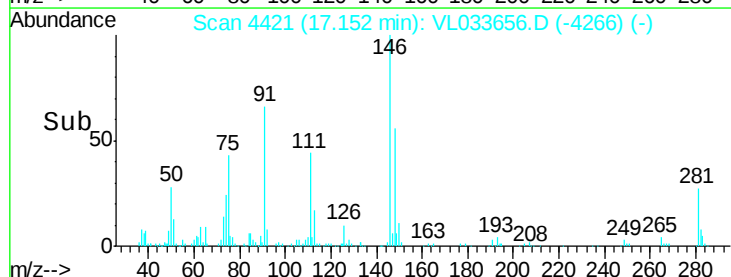
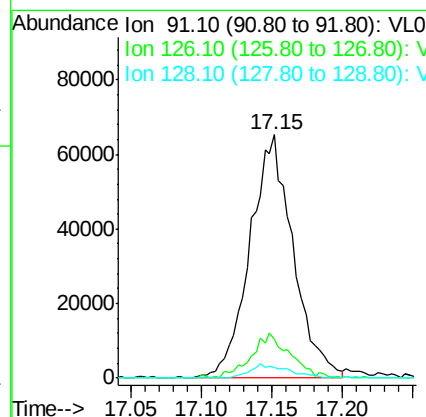
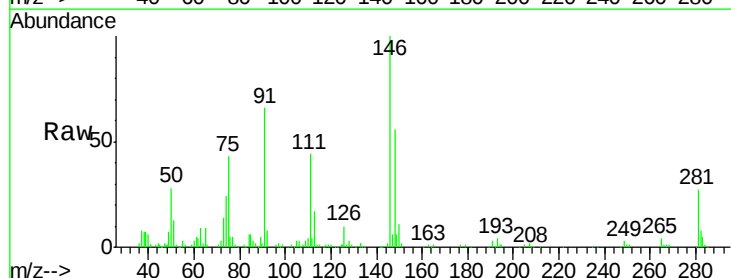
Manual Integrations
APPROVED

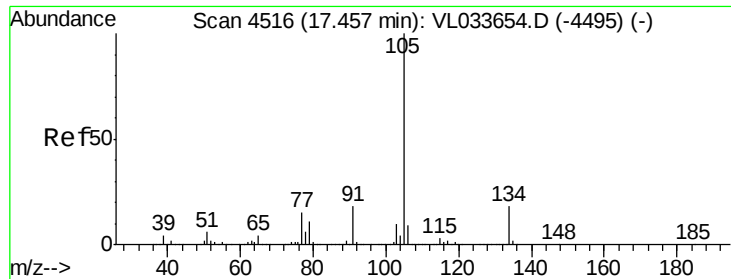
MMDadoda
5/8/2019 12:05:58 PM



#66
Benzyl Chloride
Concen: 0.891 ppbv
RT: 17.15 min Scan# 4421
Delta R.T. -0.00 min
Lab File: VL033656.D
Acq: 6 May 2019 12:17

Tgt Ion	Ratio	Resp	Lower	Upper
91	100	138371		
126	17.1	13.4	20.2	
128	5.1	4.4	6.6	





#67

sec-Butylbenzene

Concen: 1.123 ppbv

RT: 17.45 min Scan# 4515

Delta R.T. -0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

ClientSampleID :

VSTDIC001

Tot Ion: 105 Resp: 530150

Ion Ratio Lower Upper

105 100

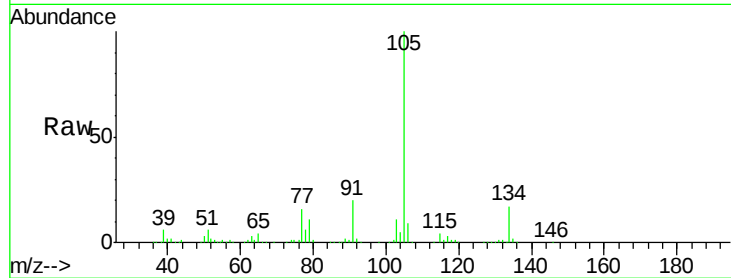
134 17.3 14.6 22.0

Manual Integrations

APPROVED

MMDadoda

5/8/2019 12:05:58 PM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

17.45

250000

200000

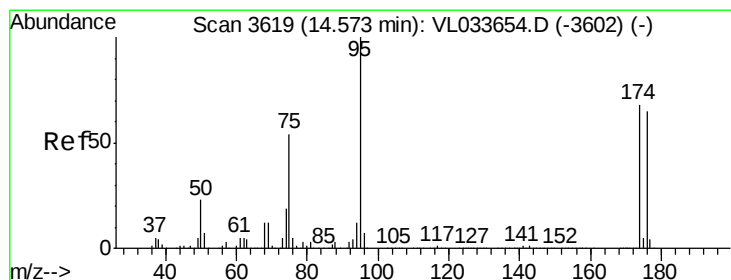
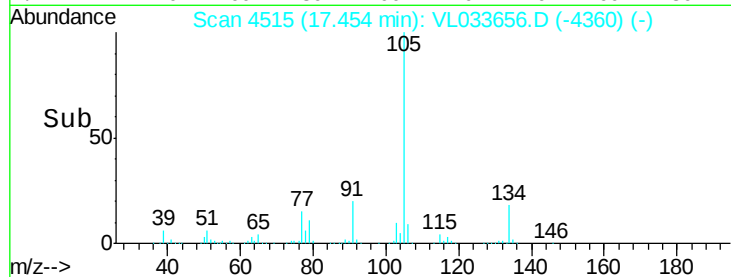
150000

100000

50000

0

Time--> 17.35 17.40 17.45 17.50



#68

1-Bromo-4-Fluorobenzene

Concen: 10.129 ppbv

RT: 14.57 min Scan# 3618

Delta R.T. -0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

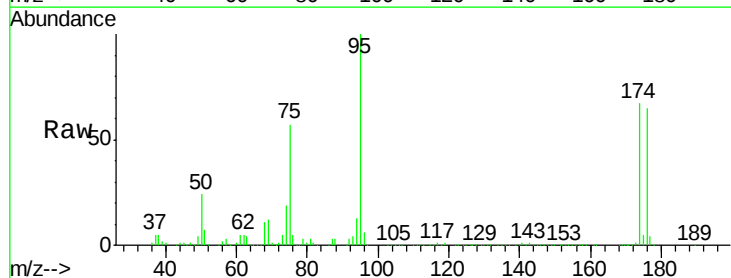
Tgt Ion: 95 Resp: 2005092

Ion Ratio Lower Upper

95 100

174 67.0 54.0 81.0

175 4.9 3.8 5.8



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

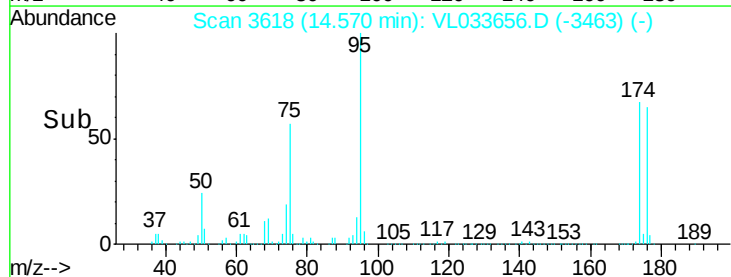
600000

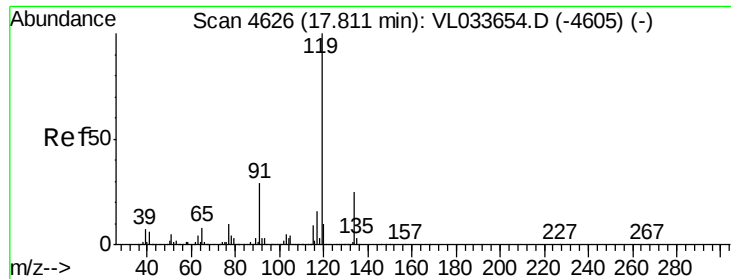
400000

200000

0

Time--> 14.50 14.55 14.60





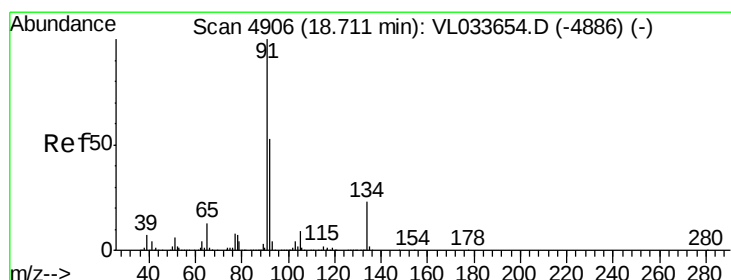
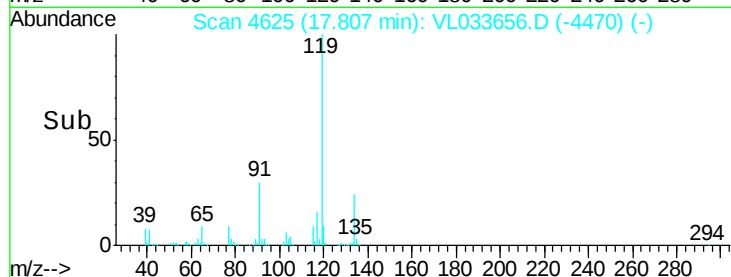
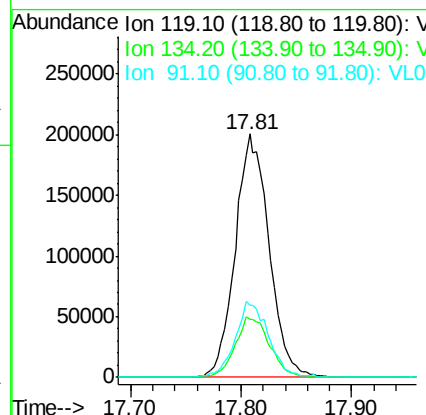
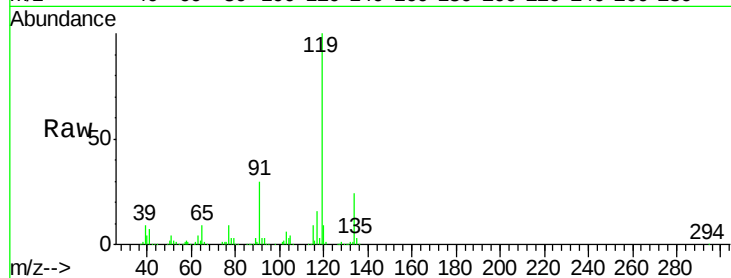
#69
 p-Isopropyltoluene
 Concen: 1.083 ppbv
 RT: 17.81 min Scan# 4625
 Delta R.T. -0.00 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Resp	Lower	Upper
119	100	425356		
134	25.3	20.2	30.2	
91	30.8	23.3	34.9	

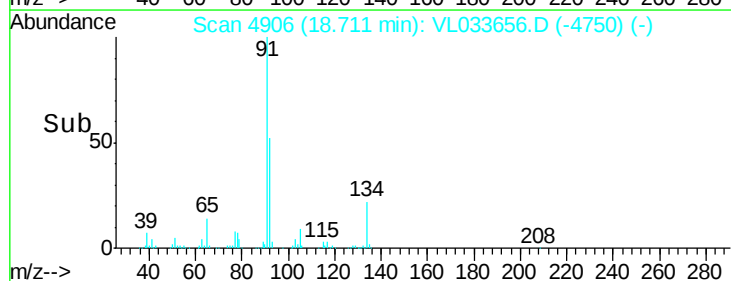
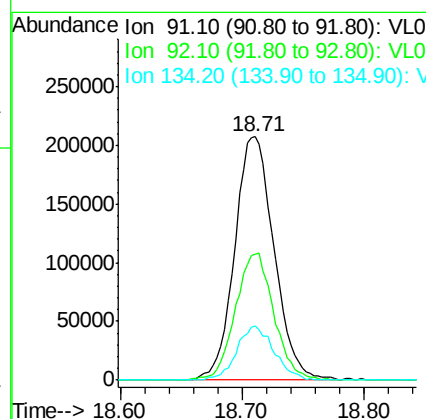
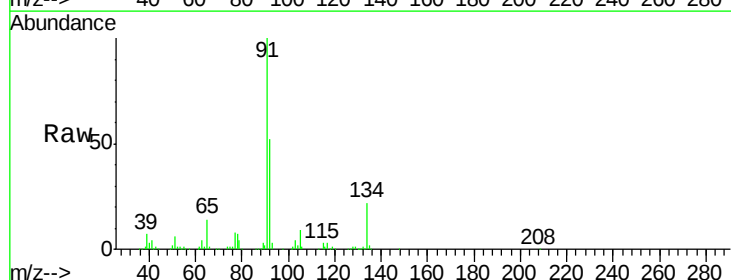
Manual Integrations
 APPROVED

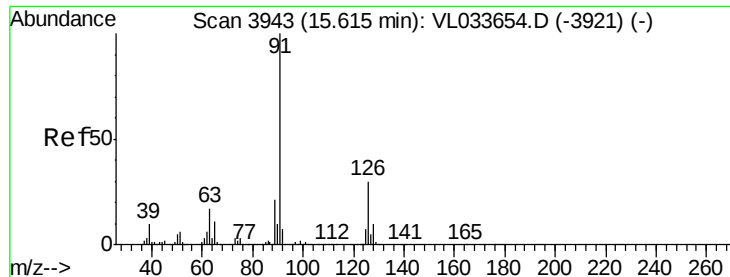
MMDadoda
 5/8/2019 12:05:58 PM



#70
 n-Butylbenzene
 Concen: 1.074 ppbv
 RT: 18.71 min Scan# 4906
 Delta R.T. 0.00 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Tgt Ion	Ratio	Resp	Lower	Upper
91	100	459686		
92	51.6	42.5	63.7	
134	21.3	18.0	27.0	





#71

2-Chlorotoluene

Concen: 1.070 ppbv

RT: 15.61 min Scan# 3941

Delta R.T. -0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 91 Resp: 288889

Ion Ratio Lower Upper

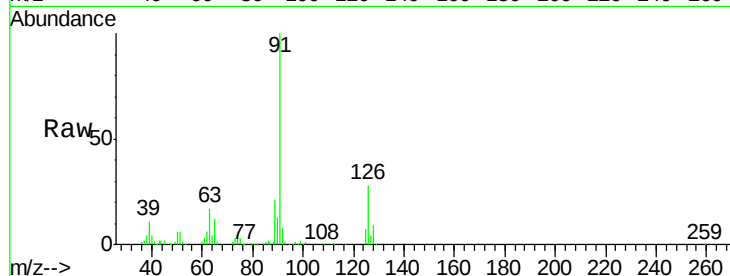
91 100

126 29.5 12.0 47.8

Manual Integrations
APPROVED

MMDadoda

5/8/2019 12:05:58 PM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

200000

150000

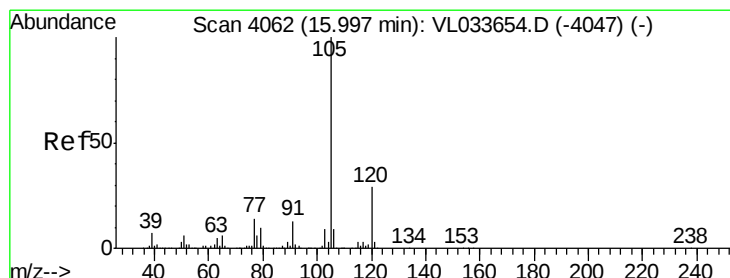
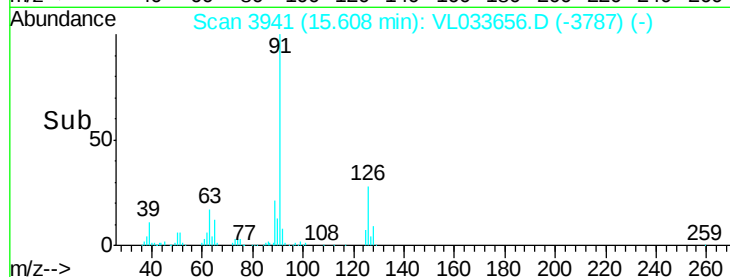
100000

50000

0

15.55 15.60 15.65

Time-->



#72

4-Ethyltoluene

Concen: 1.086 ppbv

RT: 16.00 min Scan# 4062

Delta R.T. 0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Tgt Ion:105 Resp: 335362

Ion Ratio Lower Upper

105 100

120 29.3 23.0 34.6

91 14.9 10.6 15.8

77 15.0 11.1 16.7

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

250000

200000

150000

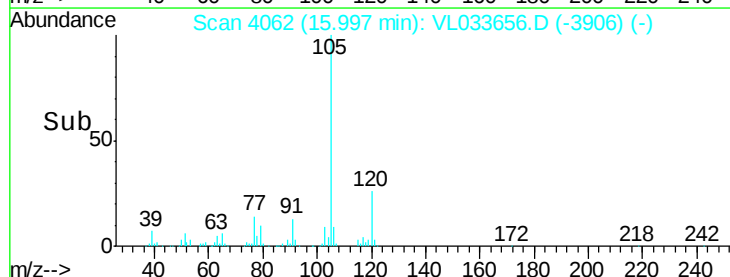
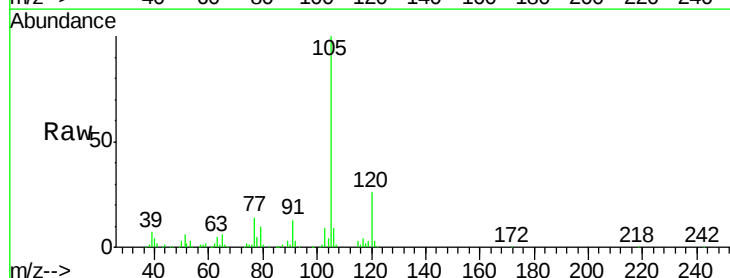
100000

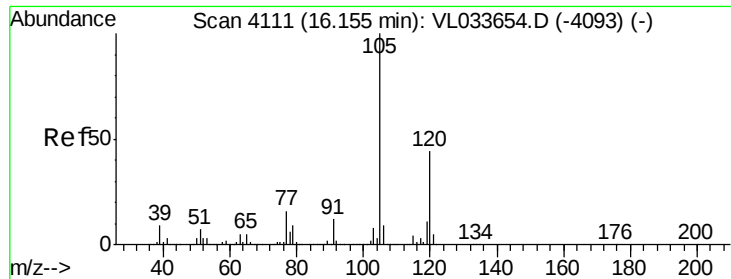
50000

0

15.90 15.95 16.00 16.05

Time-->





#73

1,3,5-Trimethylbenzene

Concen: 1.090 ppbv

RT: 16.15 min Scan# 4110

Delta R.T. -0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion:105 Resp: 329771

Ion Ratio Lower Upper

105 100

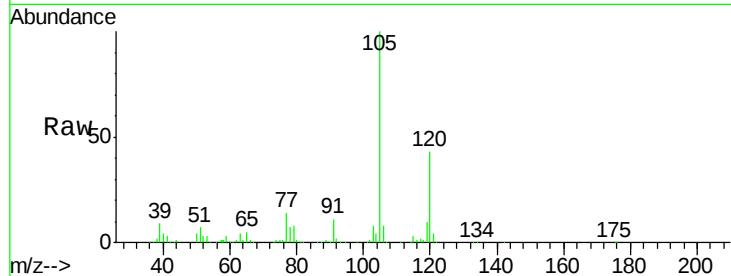
120 43.2 35.5 53.3

Manual Integrations

APPROVED

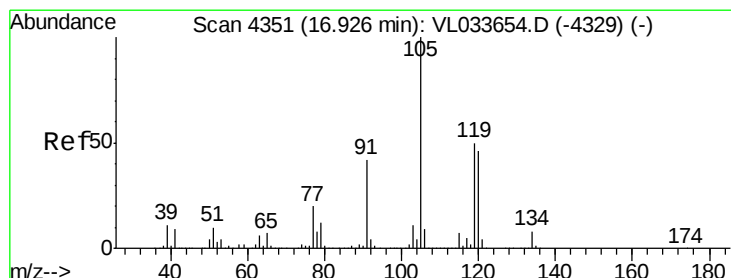
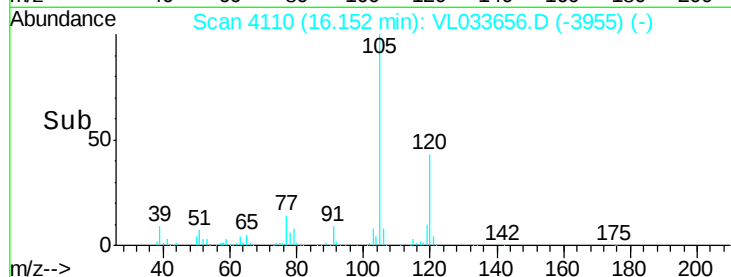
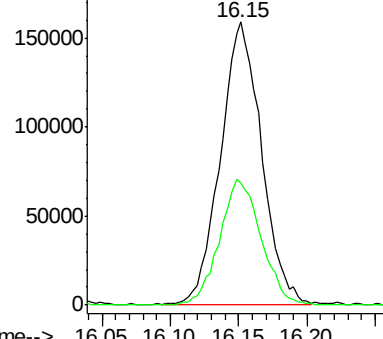
MMDadoda

5/8/2019 12:05:58 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: 1.148 ppbv

RT: 16.92 min Scan# 4348

Delta R.T. -0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Tgt Ion:105 Resp: 385233

Ion Ratio Lower Upper

105 100

120 43.3 36.5 54.7

91 49.2 33.7 50.5

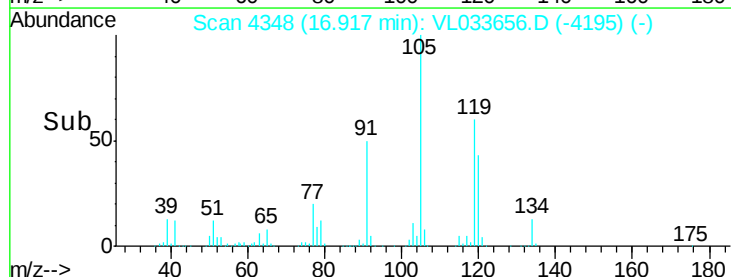
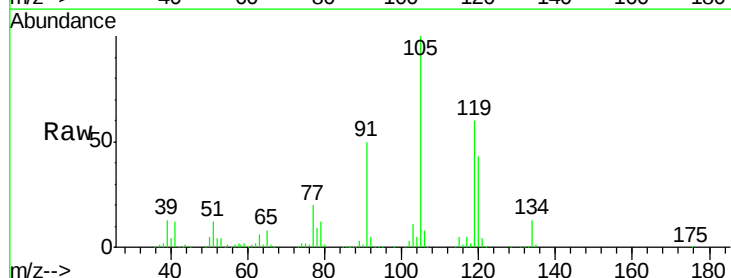
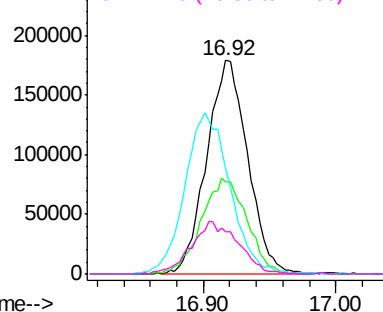
77 19.6 16.3 24.5

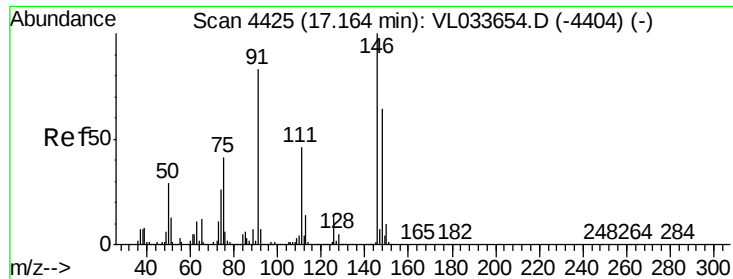
Abundance Ion 105.10 (104.80 to 105.80): V

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: 1.135 ppbv

RT: 17.16 min Scan# 4423

Delta R.T. -0.01 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

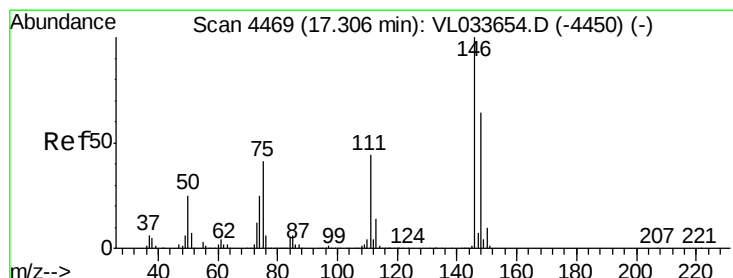
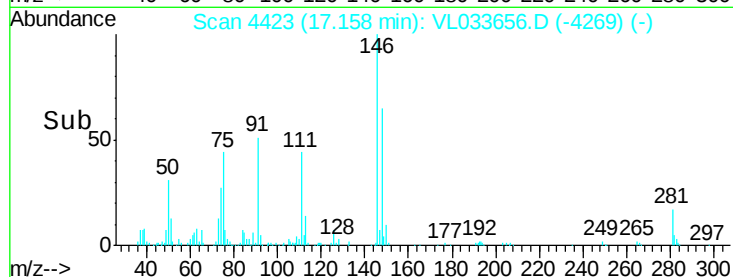
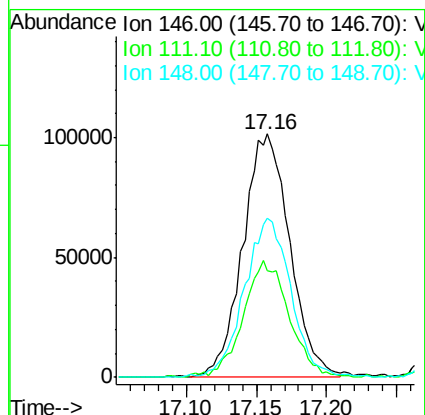
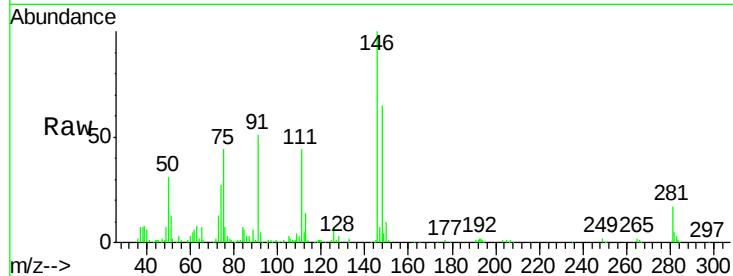
ClientSampleId :

VSTDIC001

Tot Ion:	146	Resp:	236385
Ion Ratio	Lower	Upper	
146	100		
111	47.4	22.6	67.7
148	65.0	31.8	95.4

Manual Integrations
APPROVED

MMDadoda
5/8/2019 12:05:58 PM



#76

1,4-Dichlorobenzene

Concen: 1.102 ppbv

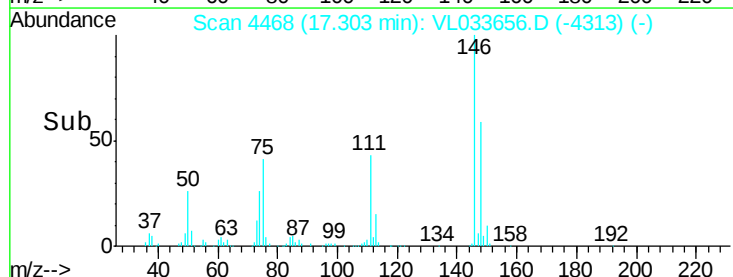
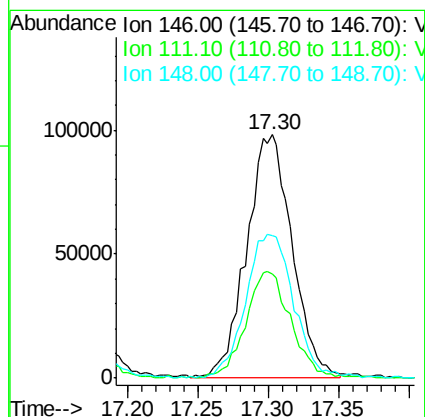
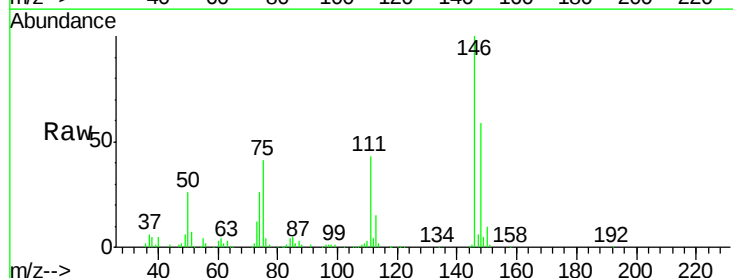
RT: 17.30 min Scan# 4468

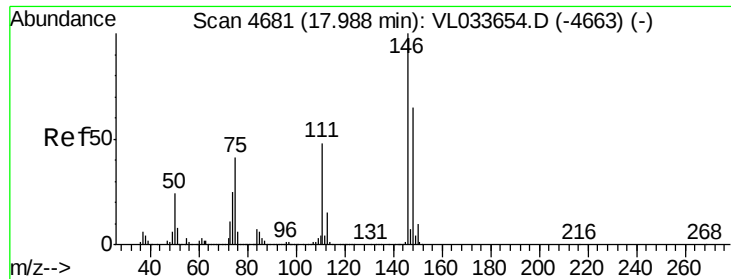
Delta R.T. -0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Tgt Ion:	146	Resp:	218890
Ion Ratio	Lower	Upper	
146	100		
111	44.2	21.9	65.7
148	64.0	32.0	96.0





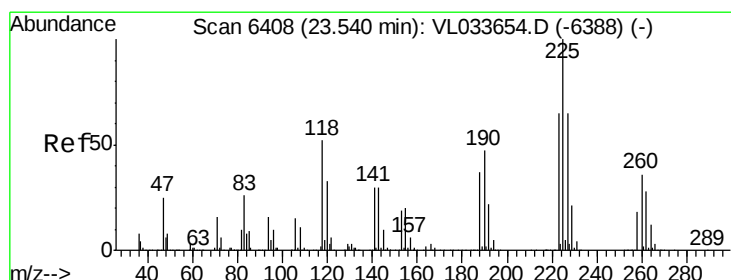
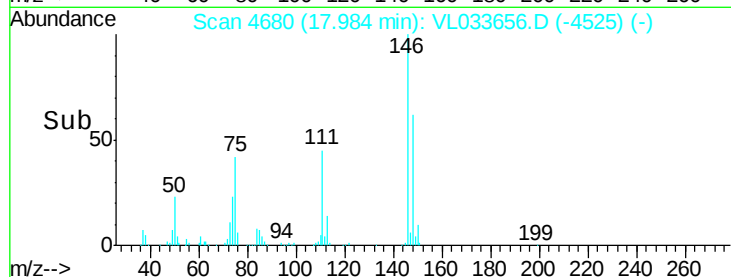
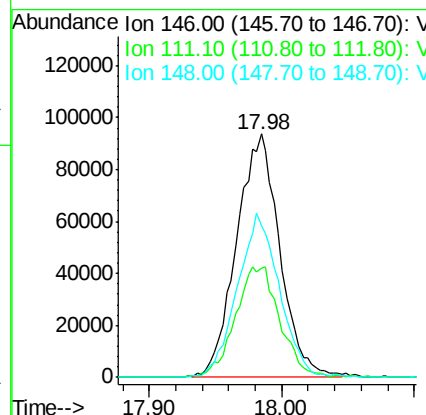
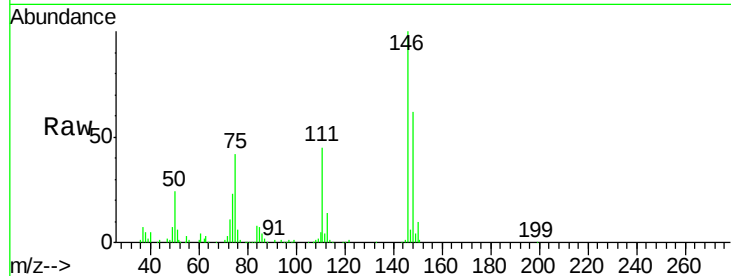
#77
 1,2-Dichlorobenzene
 Concen: 1.096 ppbv
 RT: 17.98 min Scan# 4680
 Delta R.T. -0.00 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Lower	Upper
146	100		
111	47.3	23.4	70.0
148	65.5	31.9	95.9

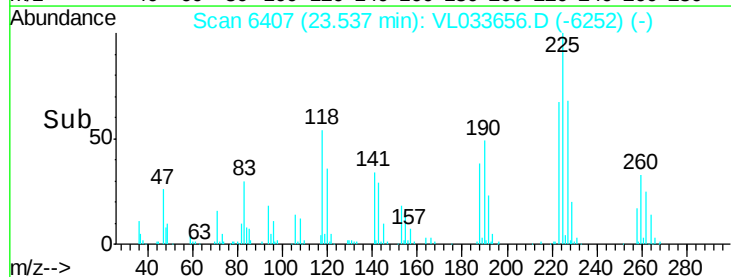
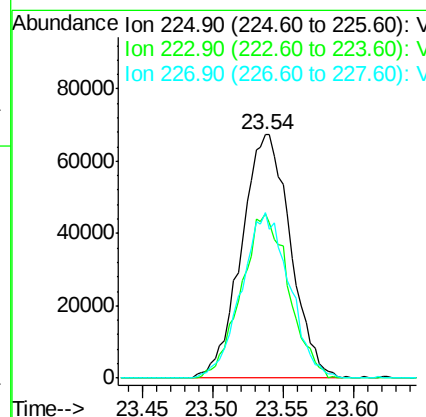
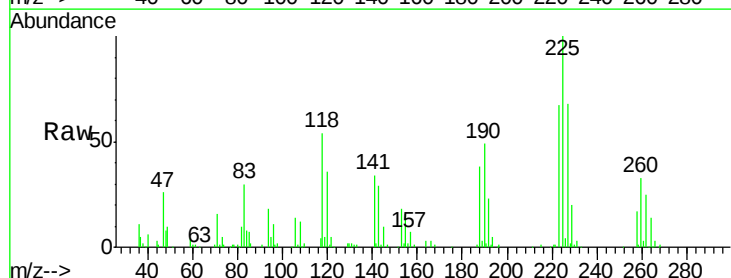
Manual Integrations
 APPROVED

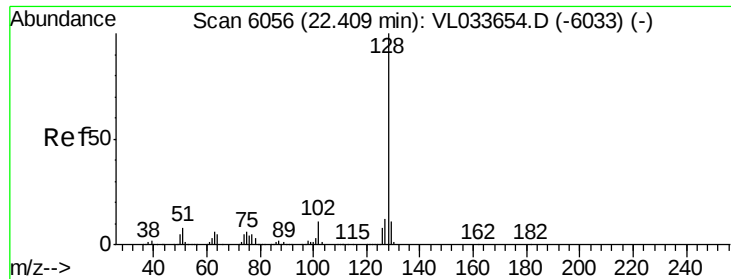
MMDadoda
 5/8/2019 12:05:58 PM



#78
 Hexachloro-1,3-Butadiene
 Concen: 1.108 ppbv
 RT: 23.54 min Scan# 6407
 Delta R.T. -0.00 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Tgt Ion	Ratio	Lower	Upper
225	100		
223	65.3	50.7	76.1
227	66.3	51.4	77.2





#79

Naphthalene

Concen: 1.017 ppbv

RT: 22.41 min Scan# 6056

Delta R.T. 0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Instrument :

MSVOA_L

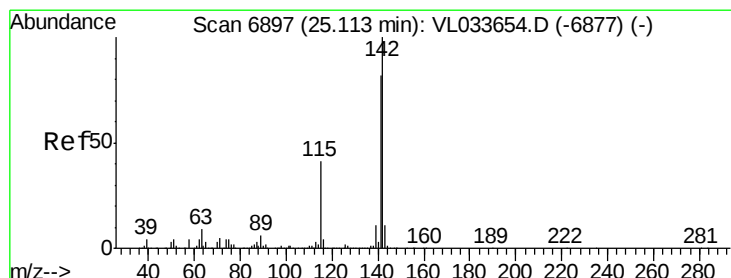
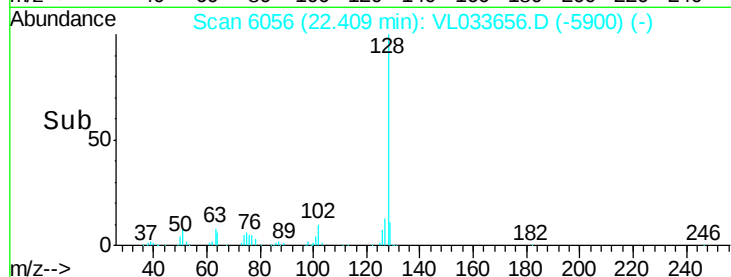
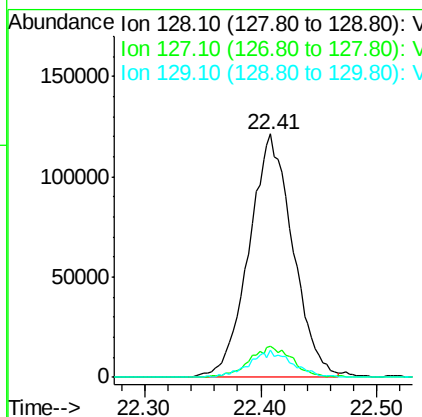
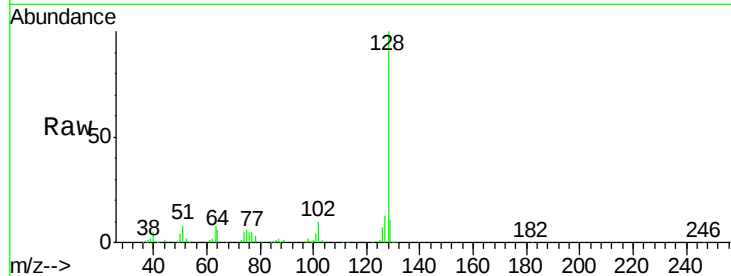
ClientSampleId :

VSTDIC001

Tot Ion:	128	Resp:	318476
Ion Ratio		Lower	Upper
128	100		
127	12.9	9.8	14.8
129	11.5	8.8	13.2

Manual Integrations
APPROVED

MMDadoda
5/8/2019 12:05:58 PM



#80

Naphthalene, 2-methyl-

Concen: 0.711 ppbv

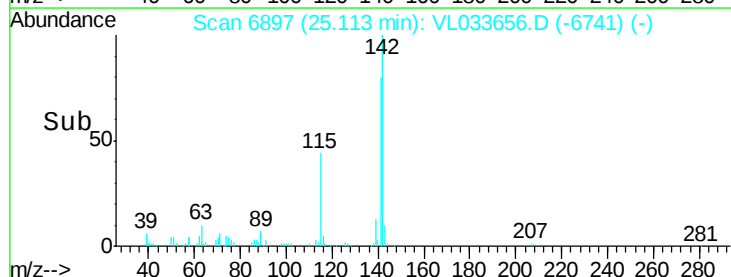
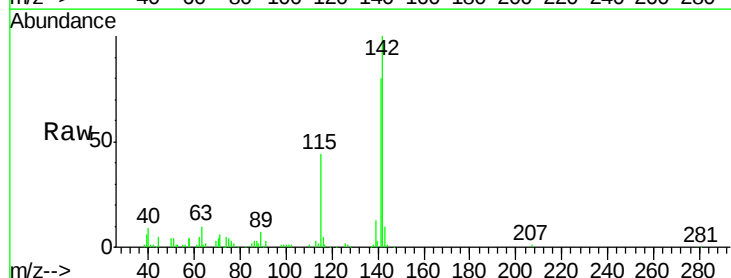
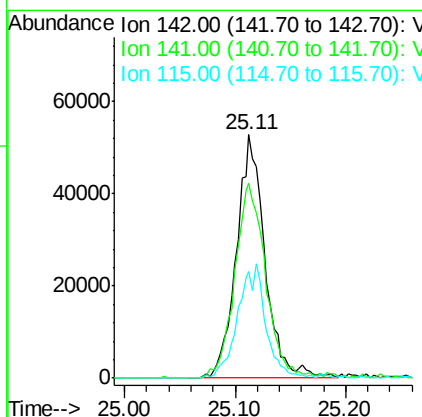
RT: 25.11 min Scan# 6897

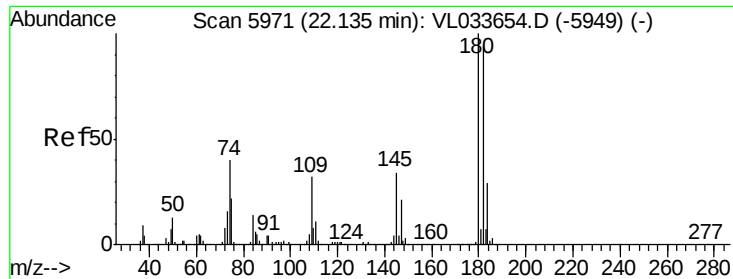
Delta R.T. 0.00 min

Lab File: VL033656.D

Acq: 6 May 2019 12:17

Tgt Ion:	142	Resp:	94559
Ion Ratio		Lower	Upper
142	100		
141	87.5	67.8	101.8
115	45.8	34.2	51.4





#81
 1,2,4-Trichlorobenzene
 Concen: 1.070 ppbv
 RT: 22.13 min Scan# 5968
 Delta R.T. -0.01 min
 Lab File: VL033656.D
 Acq: 6 May 2019 12:17

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Resp	Lower	Upper
180	100	193216		
182	97.2		77.4	116.0
184	29.9		24.6	36.8

Manual Integrations
 APPROVED

MMDadoda
 5/8/2019 12:05:58 PM

