

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121719\
 Data File : VL034501.D
 Acq On : 17 Dec 2019 20:33
 Operator : SY/AP
 Sample : K6319-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IA2

Manual Integrations
 APPROVED

MMDadoda
 12/19/2019 3:47:37 PM

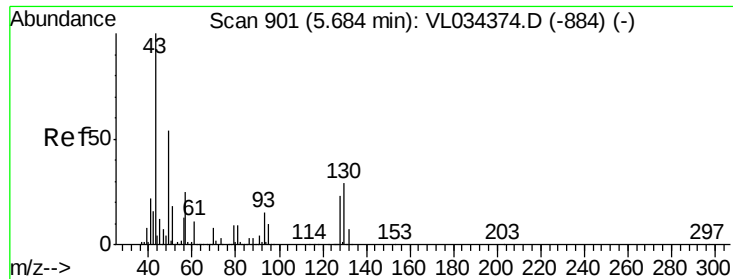
Quant Time: Dec 18 05:26:44 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Nov 19 14:15:35 2019
 QLast Update : Tue Nov 19 14:15:35 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	933610	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.20	114	1822046	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.13	117	1817738	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.47	95	1560736	10.21	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	90445	0.535	ppbv	92
3) Chlorodifluoromethane	2.96	51	40298m	0.346	ppbv	
4) Chloromethane	3.11	50	29840	0.434	ppbv #	87
9) Propene	2.99	41	68405m	1.323	ppbv	
10) Heptane	8.15	43	67461	0.505	ppbv	98
11) Trichlorofluoromethane	3.93	101	40307	0.240	ppbv #	82
13) Ethanol	3.59	45	3667151	254.558	ppbv	94
15) Acetone	3.83	43	1048300	7.841	ppbv	91
19) Isopropyl Alcohol	3.98	45	252646m	2.948	ppbv	
20) Methylene Chloride	4.33	84	120134	2.534	ppbv	97
26) Hexane	5.69	57	87496	0.854	ppbv #	58
29) Chloroform	5.76	83	159252	0.959	ppbv	93
34) 2-Butanone	5.25	43	35914	0.239	ppbv	98
35) Carbon Tetrachloride	7.04	117	12524m	0.080	ppbv	
36) Benzene	6.91	78	34200m	0.188	ppbv	
52) Tetrachloroethene	11.26	164	8083m	0.103	ppbv	
53) Toluene	9.84	91	192769m	0.932	ppbv	
59) m/p-Xylene	13.01	91	45555m	0.187	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 897

Delta R.T. -0.01 min

Lab File: VL034501.D

Acq: 17 Dec 2019 20:33

Instrument :

MSVOA_L

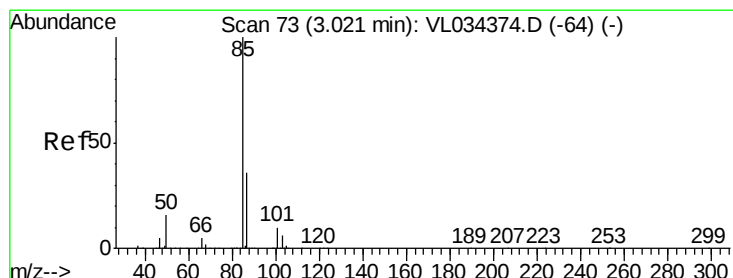
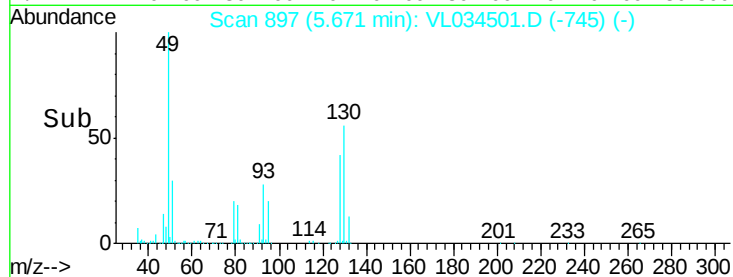
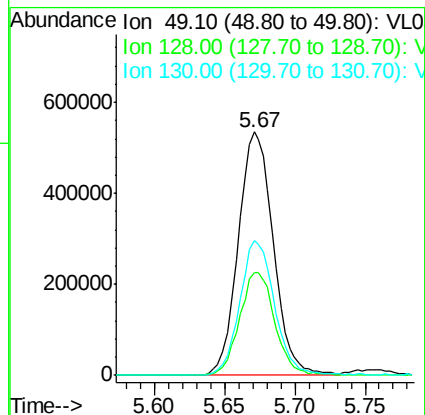
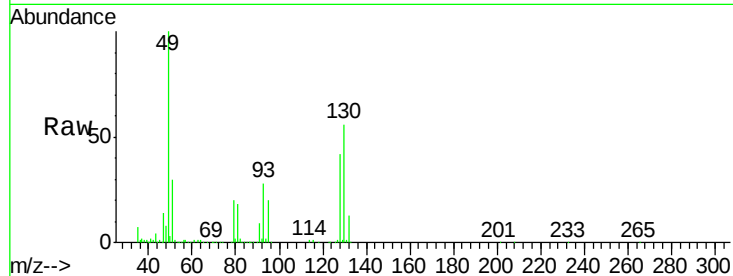
ClientSampleId :

LIHA-IA2

Tot Ion	Ratio	Lower	Upper
49	100		
128	43.0	21.8	65.3
130	55.4	28.0	84.0

Manual Integrations
APPROVED

MMDadoda
12/19/2019 3:47:37 PM



#2

Dichlorodifluoromethane

Concen: 0.535 ppbv

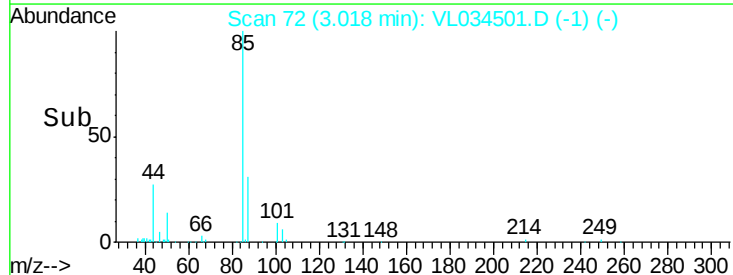
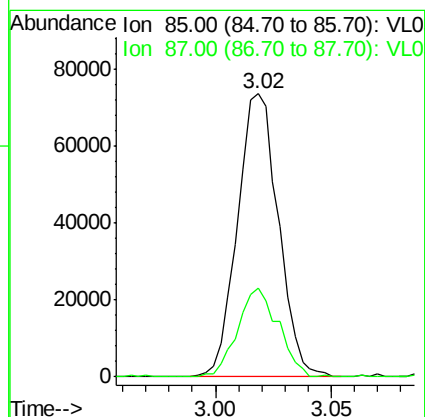
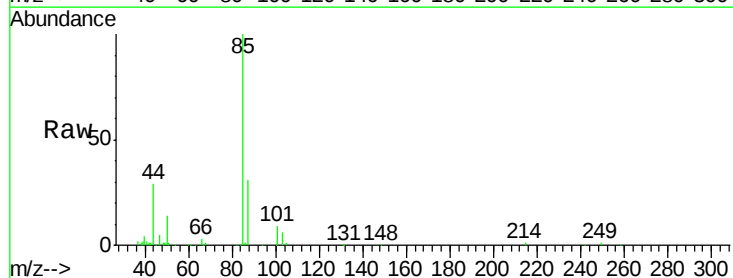
RT: 3.02 min Scan# 72

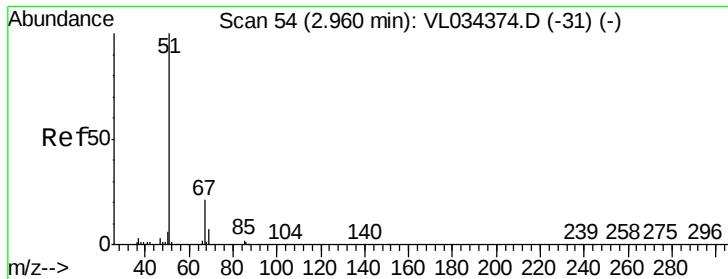
Delta R.T. -0.00 min

Lab File: VL034501.D

Acq: 17 Dec 2019 20:33

Tgt Ion	Ratio	Lower	Upper
85	100		
87	31.2	28.5	42.7





#3

Chlorodifluoromethane

Concen: 0.346 ppbv

RT: 2.96 min Scan# 53

Delta R.T. -0.00 min

Lab File: VL034501.D

Acq: 17 Dec 2019 20:33

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IA2

Tot Ion: 51 Resp: 40298

Ion Ratio Lower Upper

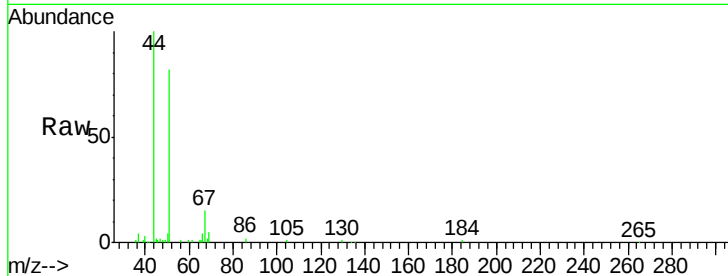
51 100

67 20.5 16.2 24.2

Manual Integrations
APPROVED

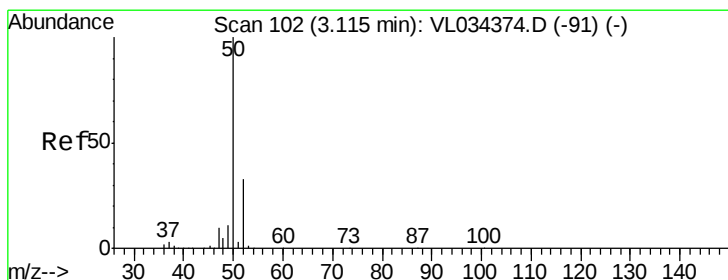
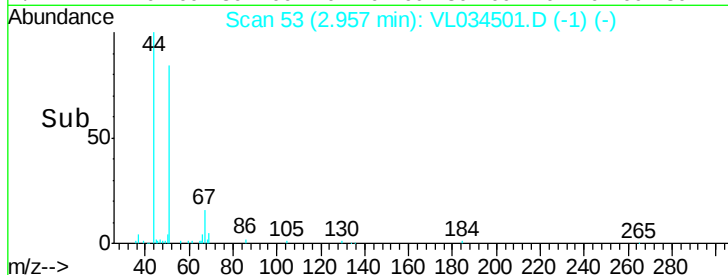
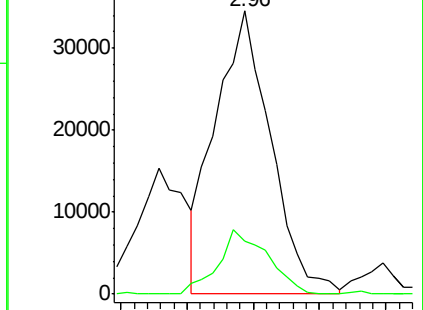
MMDadoda

12/19/2019 3:47:37 PM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.434 ppbv

RT: 3.11 min Scan# 101

Delta R.T. -0.00 min

Lab File: VL034501.D

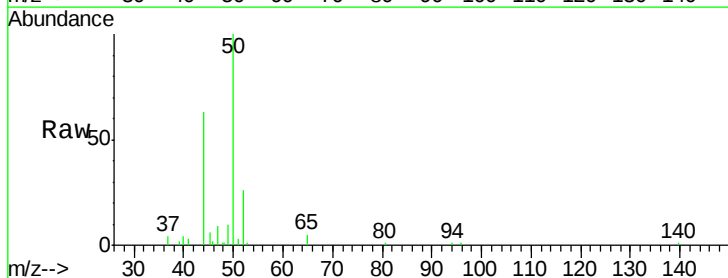
Acq: 17 Dec 2019 20:33

Tgt Ion: 50 Resp: 29840

Ion Ratio Lower Upper

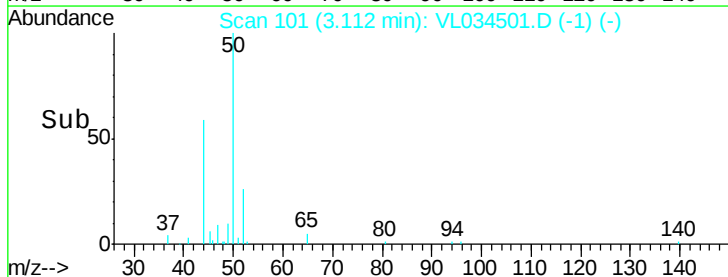
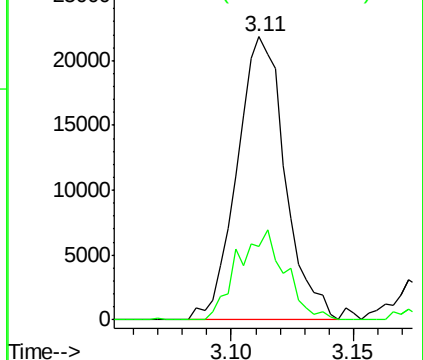
50 100

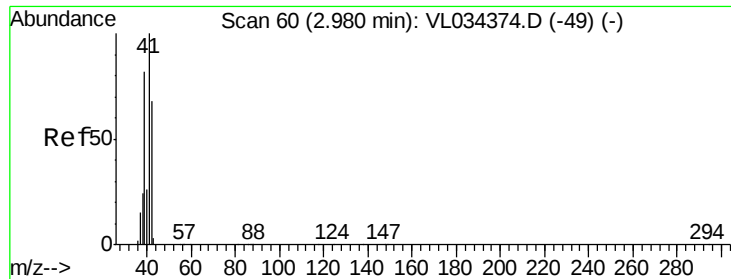
52 26.0 26.8 40.2#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 1.323 ppbv m

RT: 2.99 min Scan# 64

Delta R.T. 0.01 min

Lab File: VL034501.D

Acq: 17 Dec 2019 20:33

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IA2

Tot Ion: 41 Resp: 68405

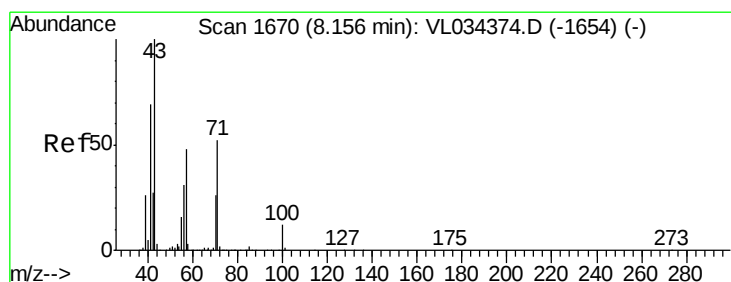
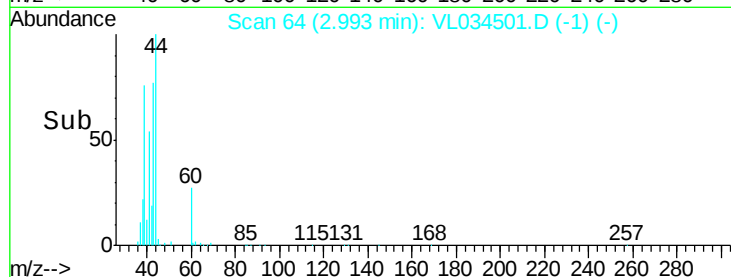
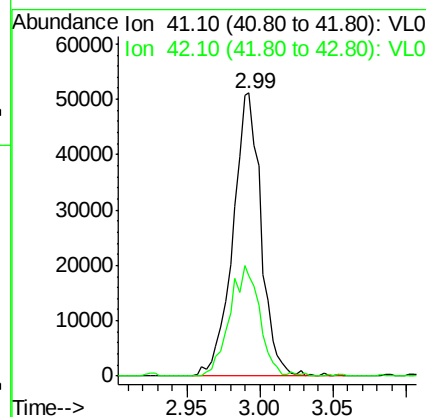
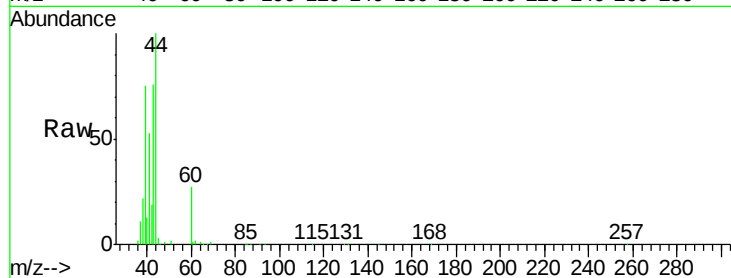
Ion Ratio Lower Upper

41 100

42 127.7 54.6 82.0#

Manual Integrations
APPROVED

MMDadoda
12/19/2019 3:47:37 PM



#10

Heptane

Concen: 0.505 ppbv

RT: 8.15 min Scan# 1669

Delta R.T. -0.00 min

Lab File: VL034501.D

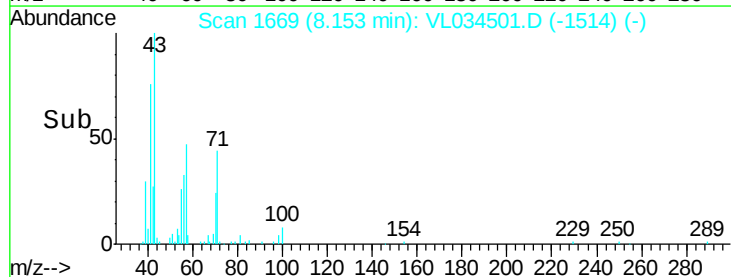
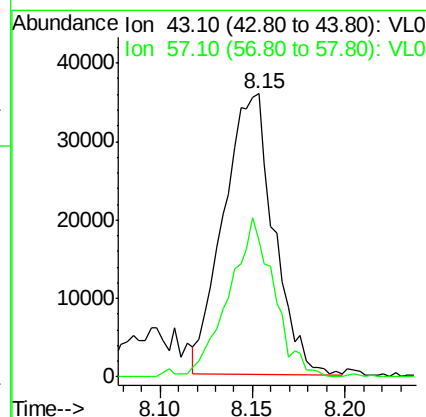
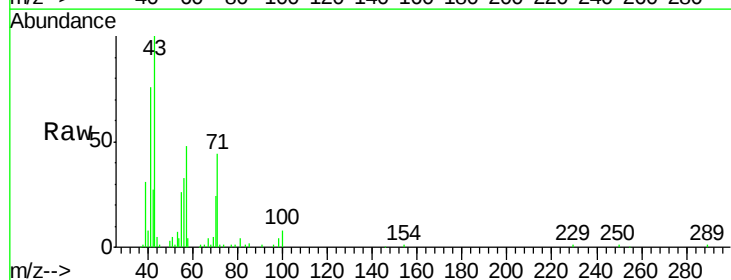
Acq: 17 Dec 2019 20:33

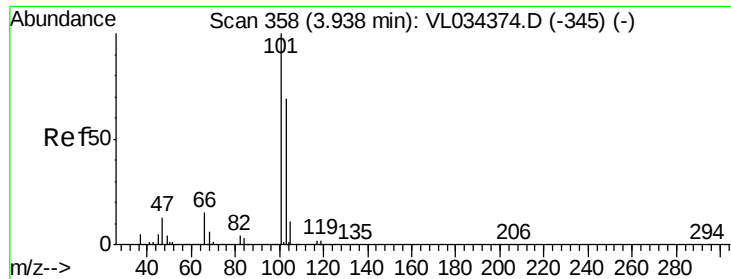
Tgt Ion: 43 Resp: 67461

Ion Ratio Lower Upper

43 100

57 51.6 40.2 60.2





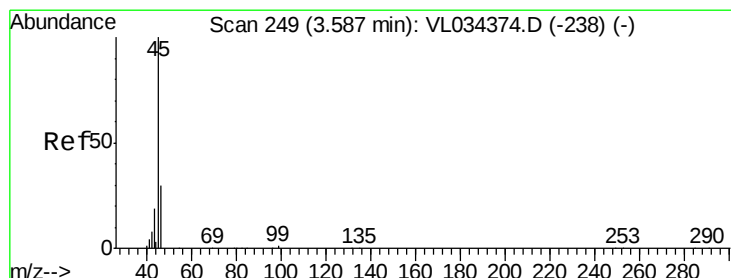
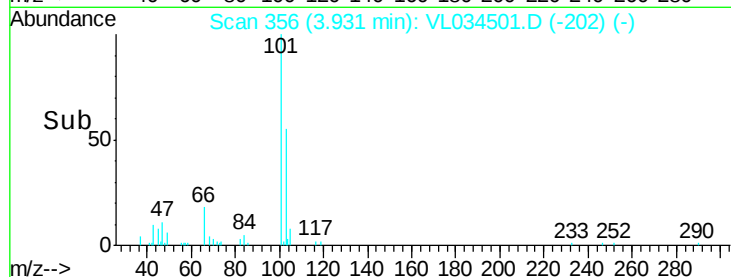
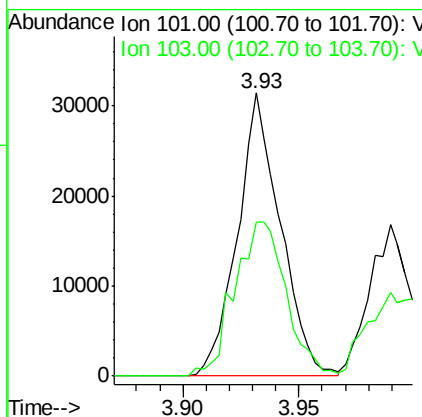
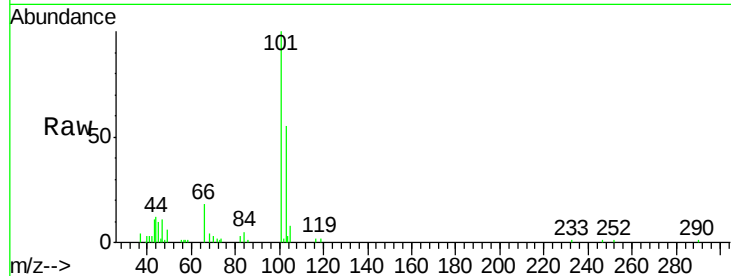
#11
Trichlorofluoromethane
Concen: 0.240 ppbv
RT: 3.93 min Scan# 356
Delta R.T. -0.01 min
Lab File: VL034501.D
Acq: 17 Dec 2019 20:33

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA2

Tot Ion:101 Resp: 40307
Ion Ratio Lower Upper
101 100
103 54.6 55.4 83.0#

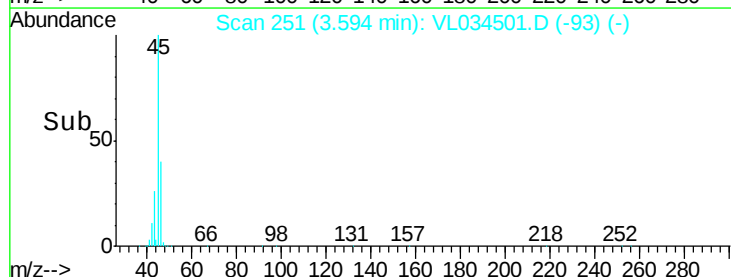
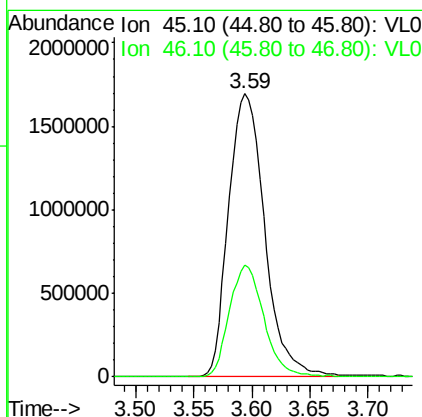
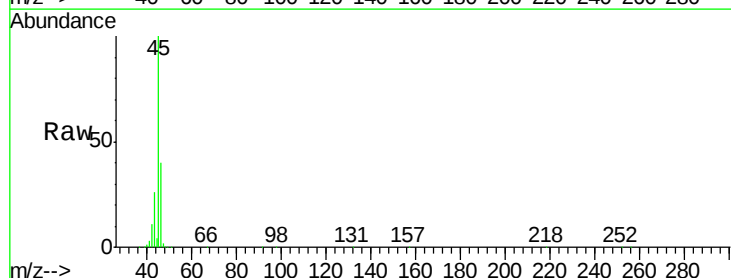
Manual Integrations
APPROVED

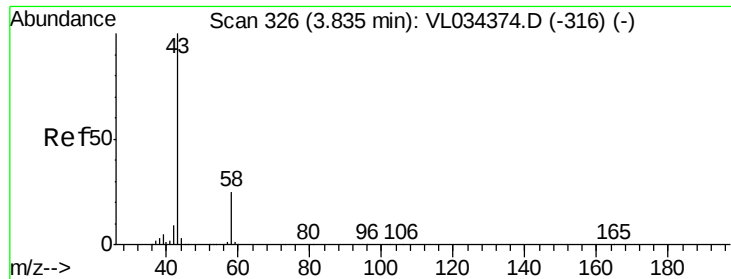
MMDadoda
12/19/2019 3:47:37 PM



#13
Ethanol
Concen: 254.558 ppbv
RT: 3.59 min Scan# 251
Delta R.T. 0.01 min
Lab File: VL034501.D
Acq: 17 Dec 2019 20:33

Tgt Ion: 45 Resp: 3667151
Ion Ratio Lower Upper
45 100
46 38.1 13.8 55.4





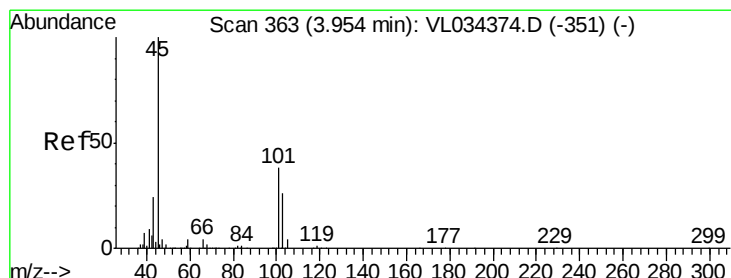
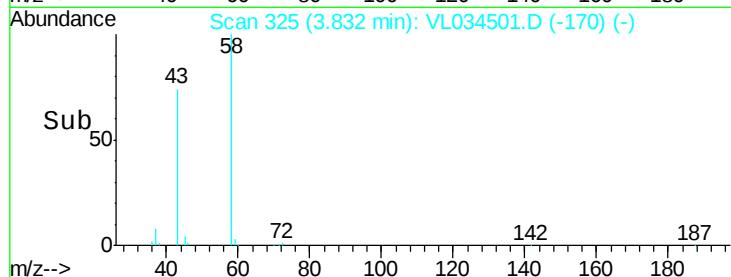
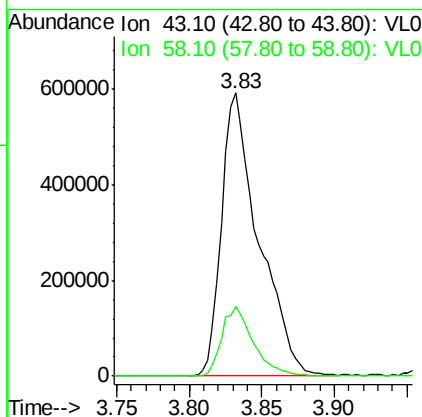
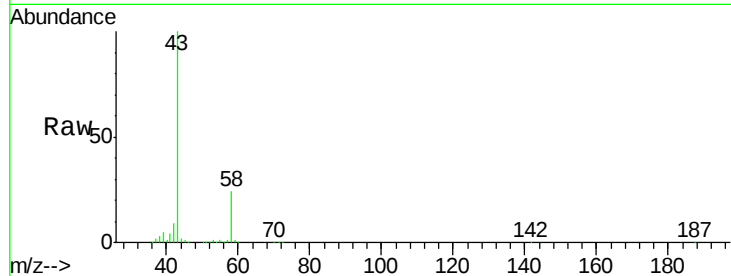
#15
Acetone
Concen: 7.841 ppbv
RT: 3.83 min Scan# 325
Delta R.T. -0.00 min
Lab File: VL034501.D
Acq: 17 Dec 2019 20:33

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA2

Tot Ion: 43 Resp: 1048300
Ion Ratio Lower Upper
43 100
58 21.0 20.2 30.4

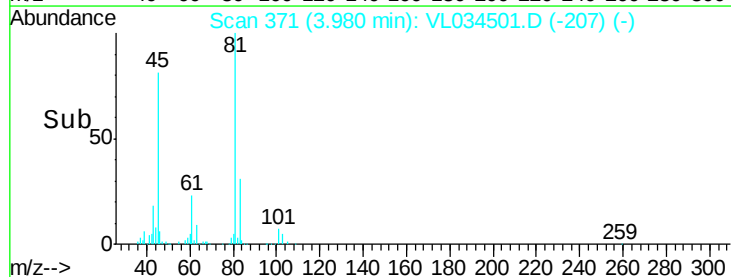
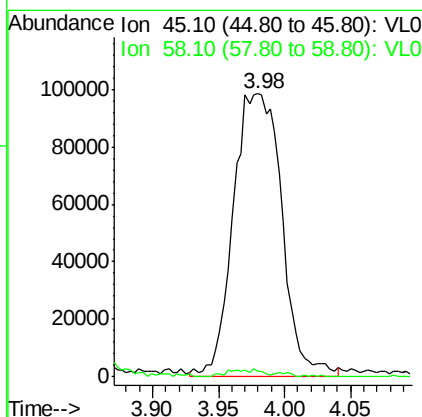
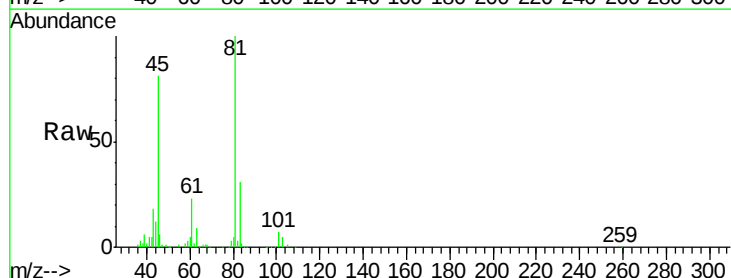
Manual Integrations
APPROVED

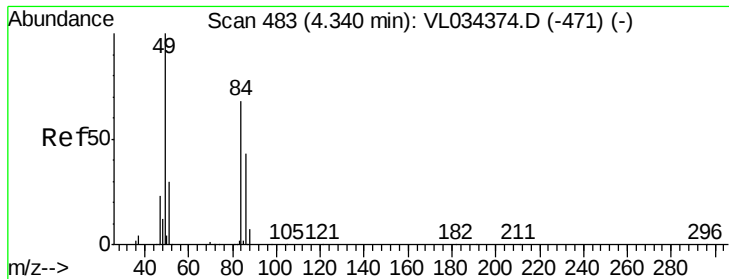
MMDadoda
12/19/2019 3:47:37 PM



#19
Isopropyl Alcohol
Concen: 2.948 ppbv m
RT: 3.98 min Scan# 371
Delta R.T. 0.03 min
Lab File: VL034501.D
Acq: 17 Dec 2019 20:33

Tgt Ion: 45 Resp: 252646
Ion Ratio Lower Upper
45 100
58 0.0 1.3 1.9#





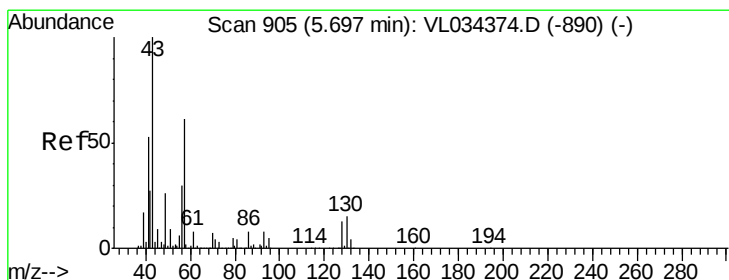
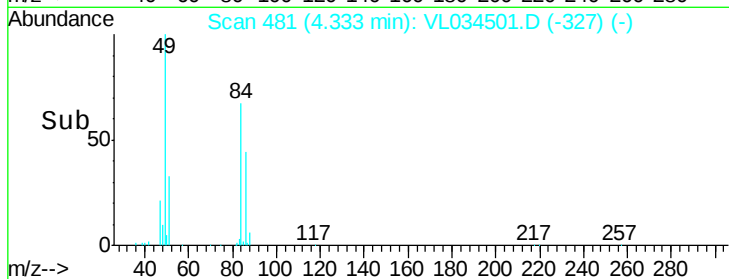
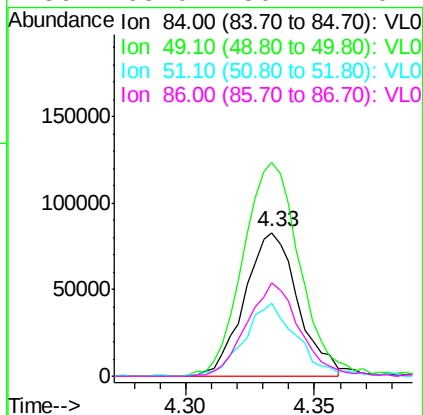
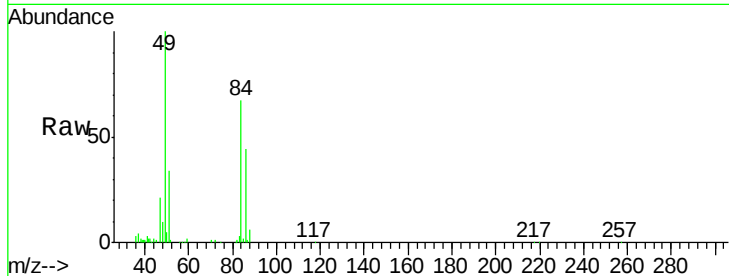
#20
Methvlene Chloride
Concen: 2.534 ppbv
RT: 4.33 min Scan# 481
Delta R.T. -0.01 min
Lab File: VL034501.D
Acq: 17 Dec 2019 20:33

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA2

Tot Ion:	84	Resp:	120134
Ion	Ratio	Lower	Upper
84	100		
49	148.2	116.8	175.2
51	50.4	35.6	53.4
86	65.0	50.7	76.1

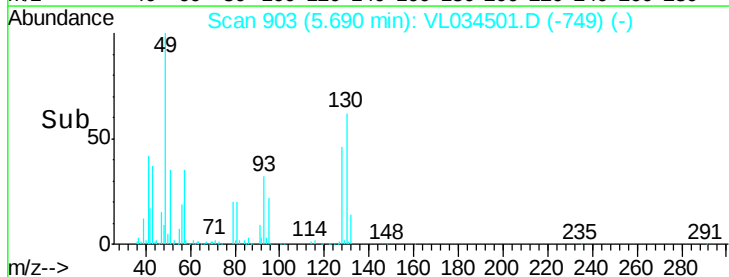
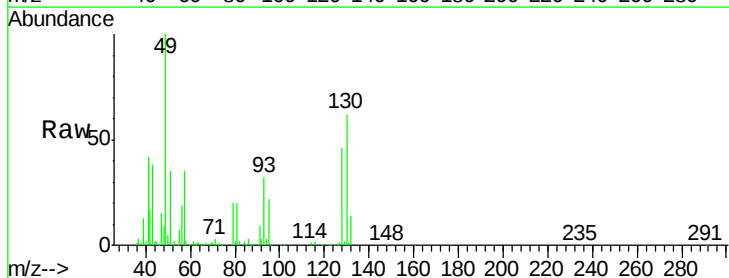
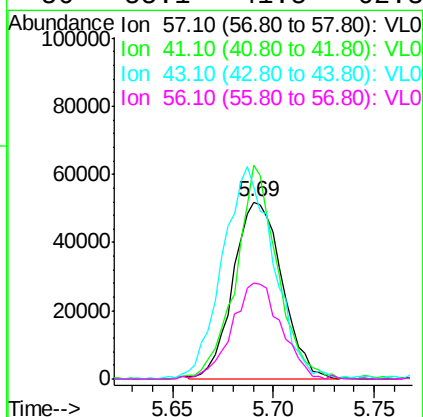
Manual Integrations
APPROVED

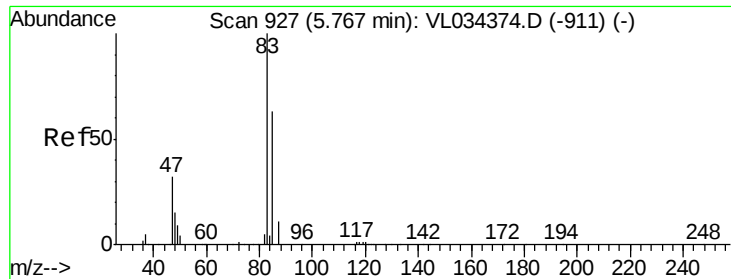
MMDadoda
12/19/2019 3:47:37 PM



#26
Hexane
Concen: 0.854 ppbv
RT: 5.69 min Scan# 903
Delta R.T. -0.01 min
Lab File: VL034501.D
Acq: 17 Dec 2019 20:33

Tgt Ion:	57	Resp:	87496
Ion	Ratio	Lower	Upper
57	100		
41	103.9	75.0	112.4
43	127.8	186.6	279.8#
56	55.1	41.5	62.3





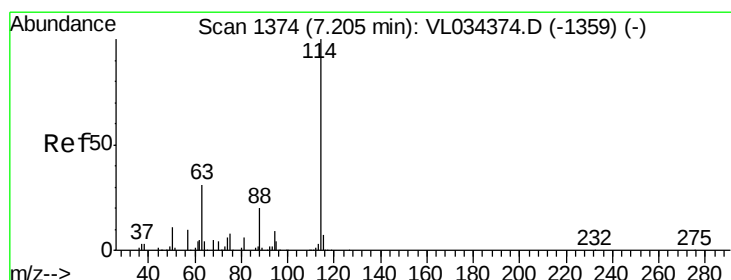
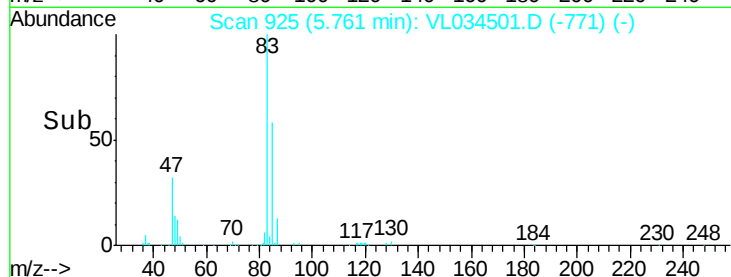
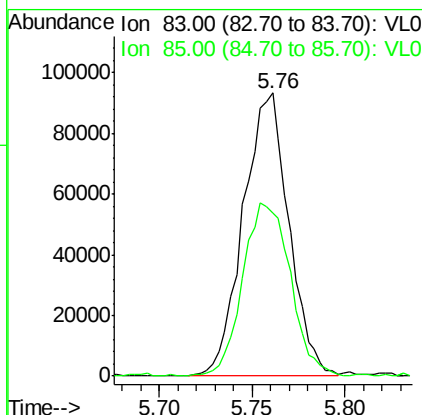
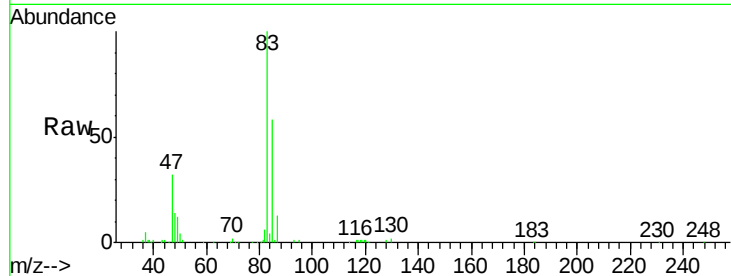
#29
Chloroform
Concen: 0.959 ppbv
RT: 5.76 min Scan# 925
Delta R.T. -0.01 min
Lab File: VL034501.D
Acq: 17 Dec 2019 20:33

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA2

Tot Ion: 83 Resp: 159252
Ion Ratio Lower Upper
83 100
85 57.8 50.4 75.6

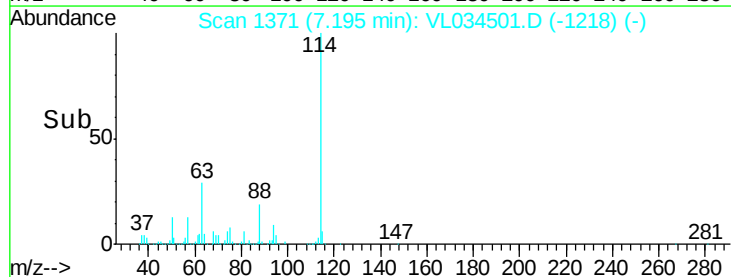
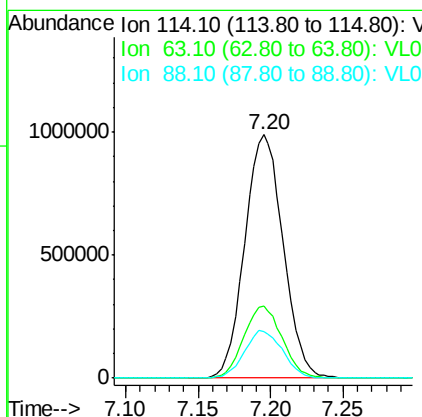
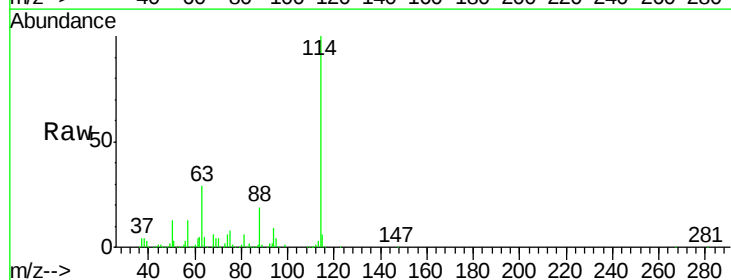
Manual Integrations
APPROVED

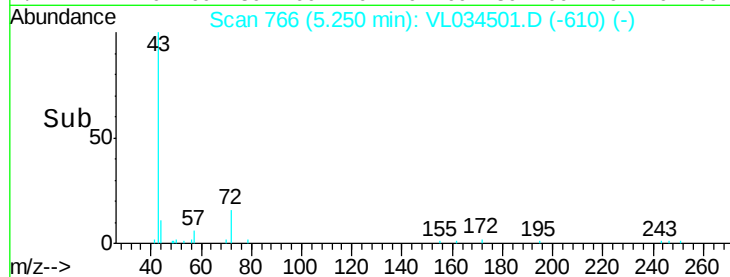
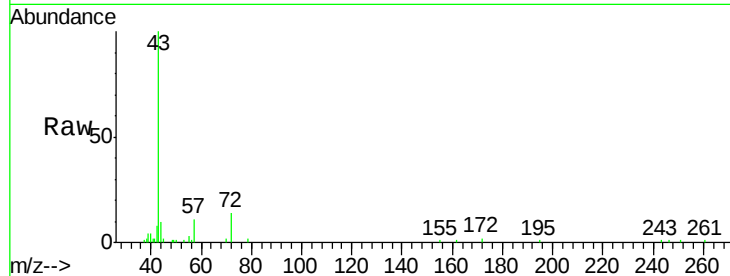
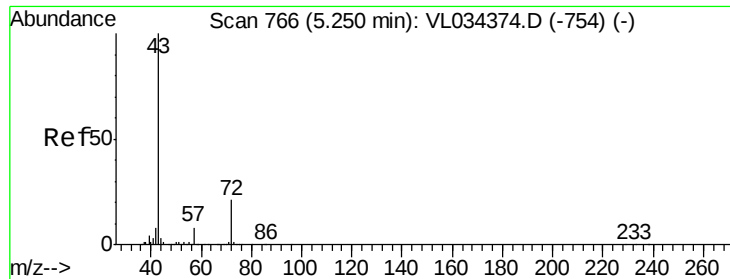
MMDadoda
12/19/2019 3:47:37 PM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.20 min Scan# 1371
Delta R.T. -0.01 min
Lab File: VL034501.D
Acq: 17 Dec 2019 20:33

Tgt Ion: 114 Resp: 1822046
Ion Ratio Lower Upper
114 100
63 29.6 24.2 36.4
88 19.4 15.9 23.9





#34

2-Butanone

Concen: 0.239 ppbv

RT: 5.25 min Scan# 766

Delta R.T. 0.00 min

Lab File: VL034501.D

Acq: 17 Dec 2019 20:33

Tot Ion: 43 Resp: 35914

Ion Ratio Lower Upper

43 100

72 20.6 17.0 25.6

Instrument :

MSVOA_L

ClientSampleId :

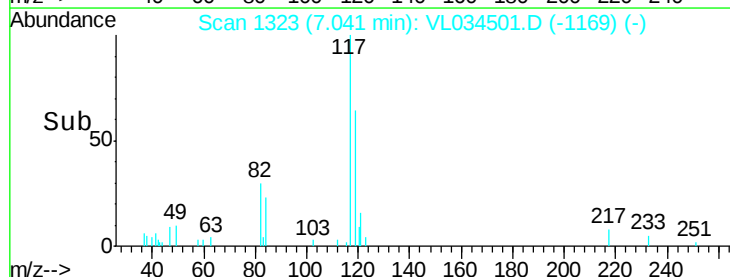
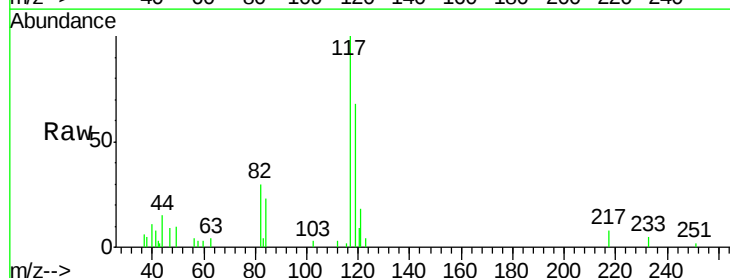
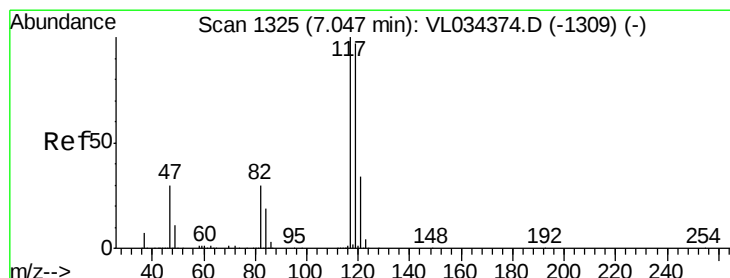
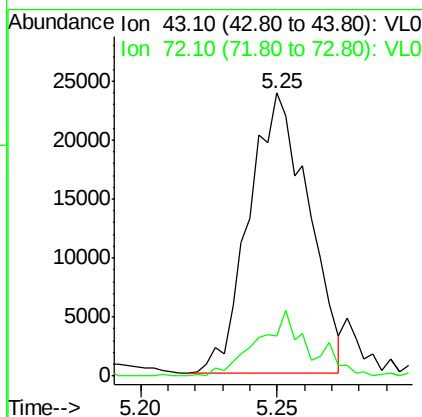
LIHA-IA2

Manual Integrations

APPROVED

MMDadoda

12/19/2019 3:47:37 PM



#35

Carbon Tetrachloride

Concen: 0.080 ppbv m

RT: 7.04 min Scan# 1323

Delta R.T. -0.01 min

Lab File: VL034501.D

Acq: 17 Dec 2019 20:33

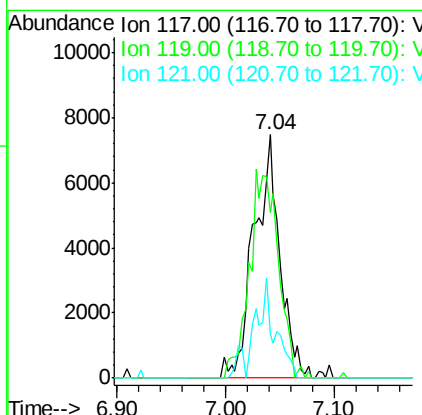
Tgt Ion: 117 Resp: 12524

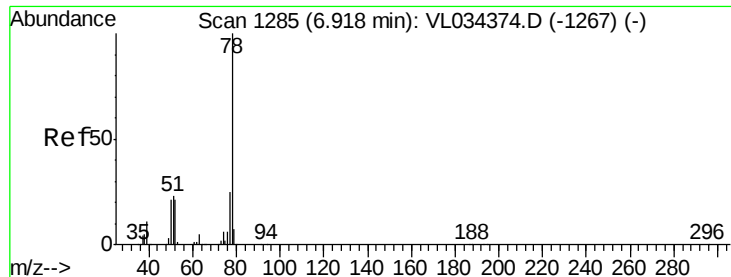
Ion Ratio Lower Upper

117 100

119 67.8 77.3 115.9#

121 17.9 27.4 41.2#





#36

Benzene

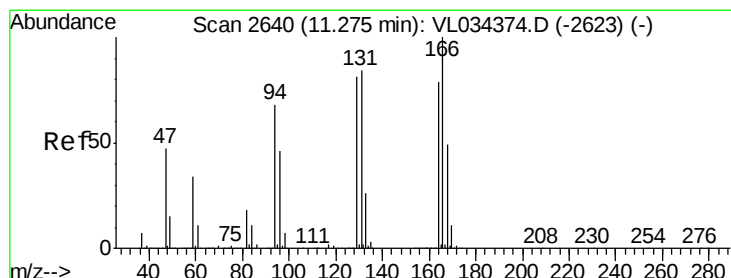
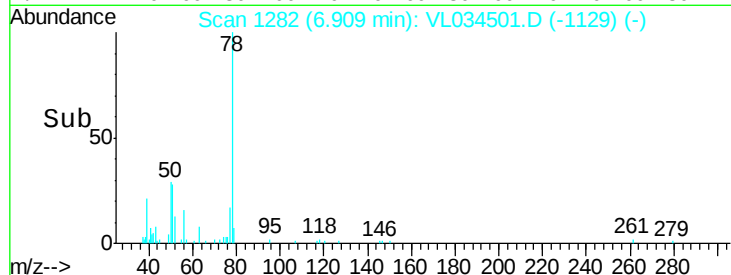
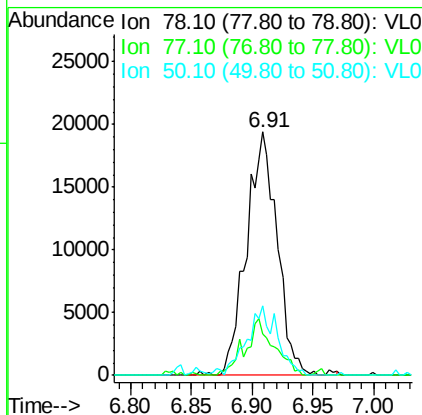
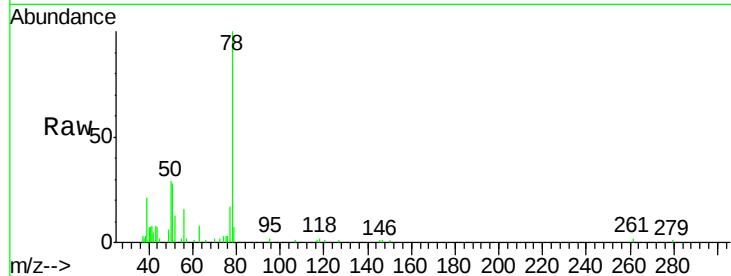
Concen: 0.188 ppbv m
RT: 6.91 min Scan# 1282
Delta R.T. -0.01 min
Lab File: VL034501.D
Acq: 17 Dec 2019 20:33

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA2

Tot Ion	Ratio	Lower	Upper
78	100		
77	17.0	20.2	30.4#
50	28.7	17.1	25.7#

Manual Integrations
APPROVED

MMDadoda
12/19/2019 3:47:37 PM

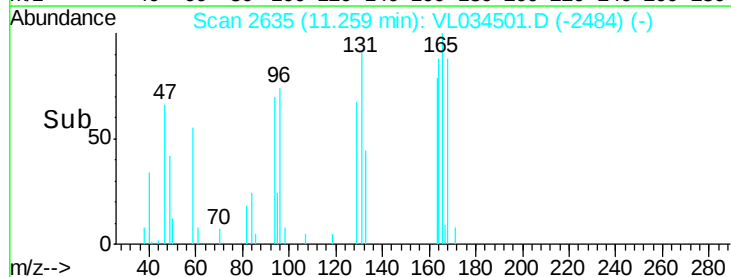
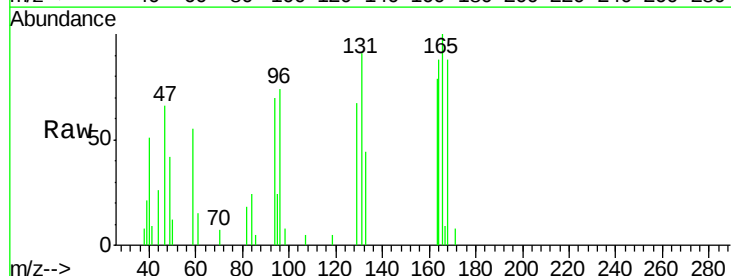
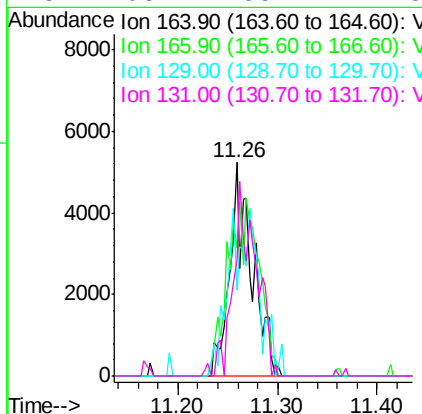


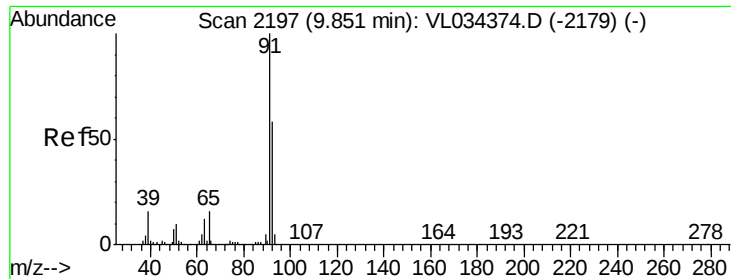
#52

Tetrachloroethene

Concen: 0.103 ppbv m
RT: 11.26 min Scan# 2635
Delta R.T. -0.02 min
Lab File: VL034501.D
Acq: 17 Dec 2019 20:33

Tgt Ion	Ratio	Lower	Upper
164	100		
166	113.8	101.7	152.5
129	76.5	82.6	123.8#
131	103.7	85.2	127.8





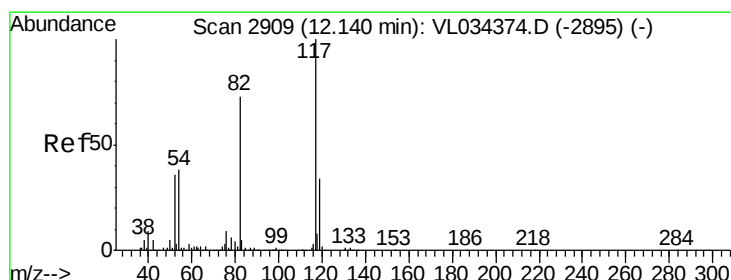
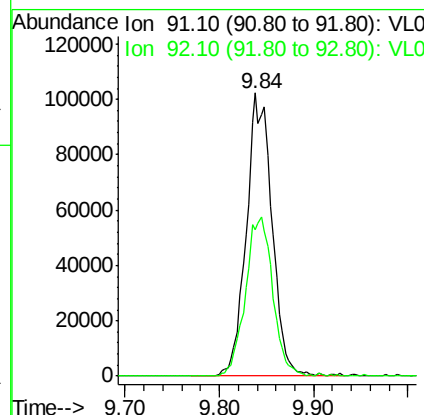
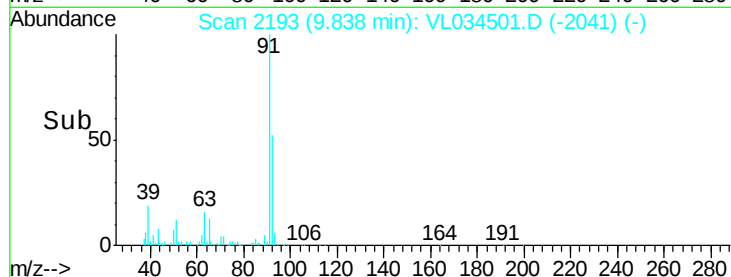
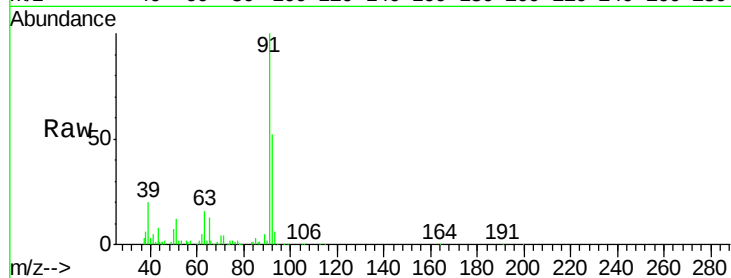
#53
Toluene
Concen: 0.932 ppbv m
RT: 9.84 min Scan# 2193
Delta R.T. -0.01 min
Lab File: VL034501.D
Acq: 17 Dec 2019 20:33

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA2

Tot Ion: 91 Resp: 192769
Ion Ratio Lower Upper
91 100
92 0.0 47.9 71.9#

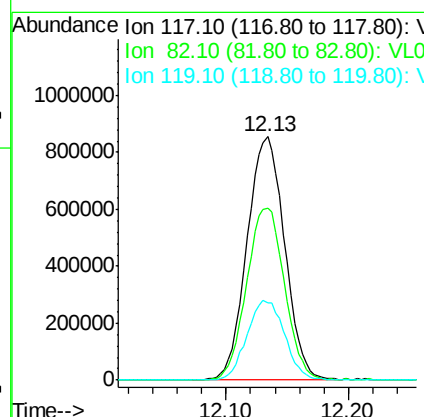
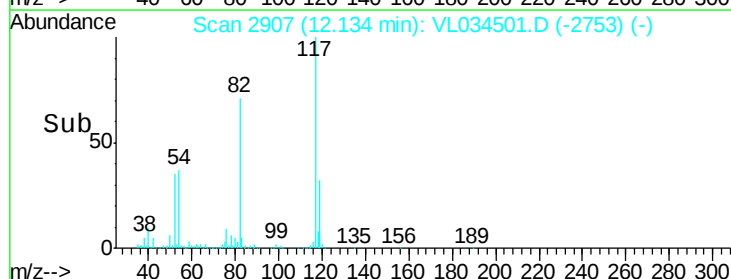
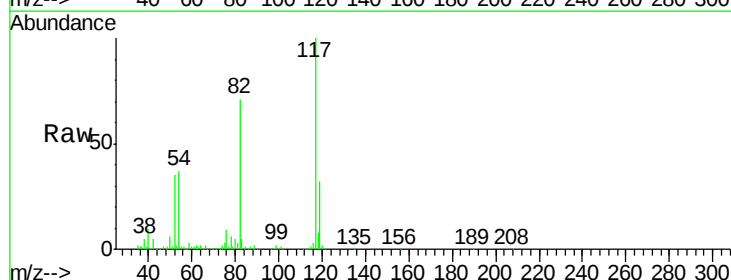
Manual Integrations
APPROVED

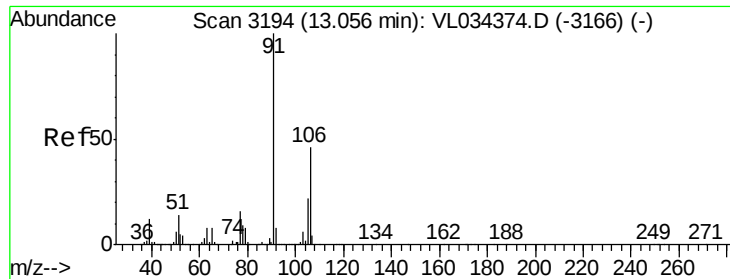
MMDadoda
12/19/2019 3:47:37 PM



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.13 min Scan# 2907
Delta R.T. -0.01 min
Lab File: VL034501.D
Acq: 17 Dec 2019 20:33

Tgt Ion: 117 Resp: 1817738
Ion Ratio Lower Upper
117 100
82 71.9 57.5 86.3
119 32.9 25.4 38.2





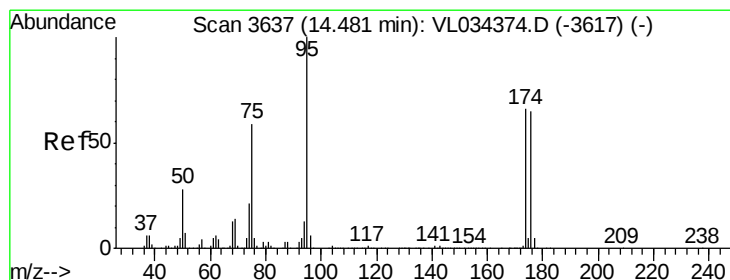
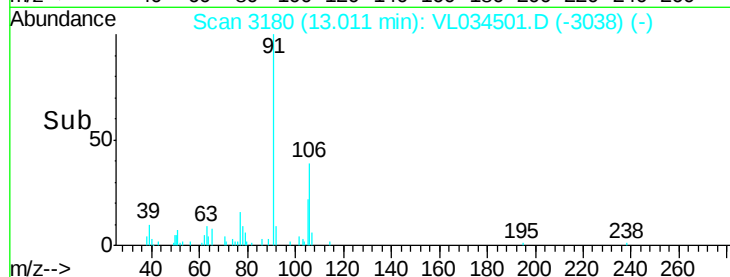
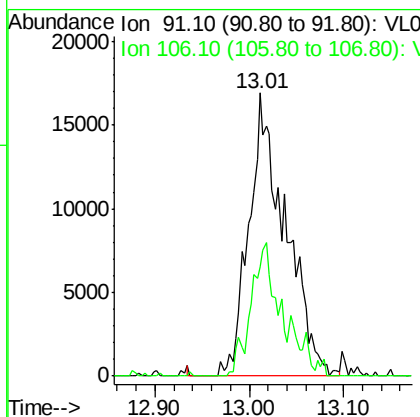
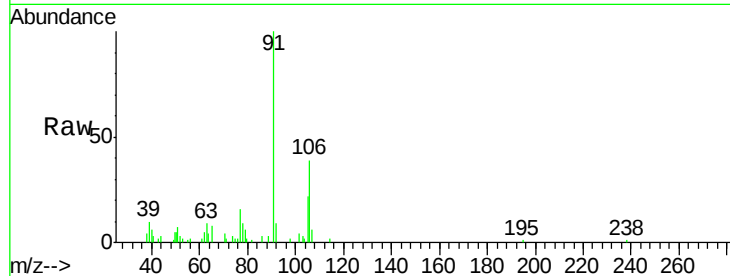
#59
m/p-Xylene
Concen: 0.187 ppbv m
RT: 13.01 min Scan# 3180
Delta R.T. -0.04 min
Lab File: VL034501.D
Acq: 17 Dec 2019 20:33

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA2

Tot Ion: 91 Resp: 45555
Ion Ratio Lower Upper
91 100
106 0.0 34.6 51.8#

Manual Integrations
APPROVED

MMDadoda
12/19/2019 3:47:37 PM



#68
1-Bromo-4-Fluorobenzene
Concen: 10.206 ppbv
RT: 14.47 min Scan# 3633
Delta R.T. -0.01 min
Lab File: VL034501.D
Acq: 17 Dec 2019 20:33

Tgt Ion: 95 Resp: 1560736
Ion Ratio Lower Upper
95 100
174 64.3 52.2 78.2
175 4.8 3.8 5.8

