

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121719\
 Data File : VL034503.D
 Acq On : 17 Dec 2019 21:52
 Operator : SY/AP
 Sample : K6319-04
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IA3

Manual Integrations
 APPROVED

MMDadoda
 12/19/2019 3:47:49 PM

Quant Time: Dec 18 05:29:59 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	935220	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	1856477	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.13	117	1873687	10.00	ppbv	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.47	95	1617002	10.26	ppbv	-0.01	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.60%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	94898	0.561	ppbv	95
3) Chlorodifluoromethane	2.96	51	36205m	0.310	ppbv	
4) Chloromethane	3.11	50	38260	0.556	ppbv	98
9) Propene	2.99	41	50249m	0.970	ppbv	
10) Heptane	8.15	43	516587	3.864	ppbv	98
11) Trichlorofluoromethane	3.93	101	39704	0.236	ppbv #	82
13) Ethanol	3.61	45	7338514	508.532	ppbv	89
15) Acetone	3.83	43	1825781	13.634	ppbv	96
17) tert-Butyl alcohol	4.32	59	31946m	0.284	ppbv	
19) Isopropyl Alcohol	3.98	45	887612	10.340	ppbv #	99
20) Methylene Chloride	4.34	84	35626	0.750	ppbv #	83
26) Hexane	5.69	57	38466m	0.375	ppbv	
29) Chloroform	5.76	83	125023	0.752	ppbv	94
34) 2-Butanone	5.25	43	57407	0.376	ppbv	100
35) Carbon Tetrachloride	7.03	117	11547m	0.072	ppbv	
36) Benzene	6.91	78	48827	0.263	ppbv #	89
52) Tetrachloroethene	11.27	164	6857m	0.085	ppbv	
53) Toluene	9.84	91	239610	1.137	ppbv	98
59) m/p-Xylene	13.02	91	60940m	0.242	ppbv	
60) o-Xylene	13.74	91	28700m	0.115	ppbv	
74) 1,2,4-Trimethylbenzene	16.82	105	43640	0.146	ppbv #	62

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

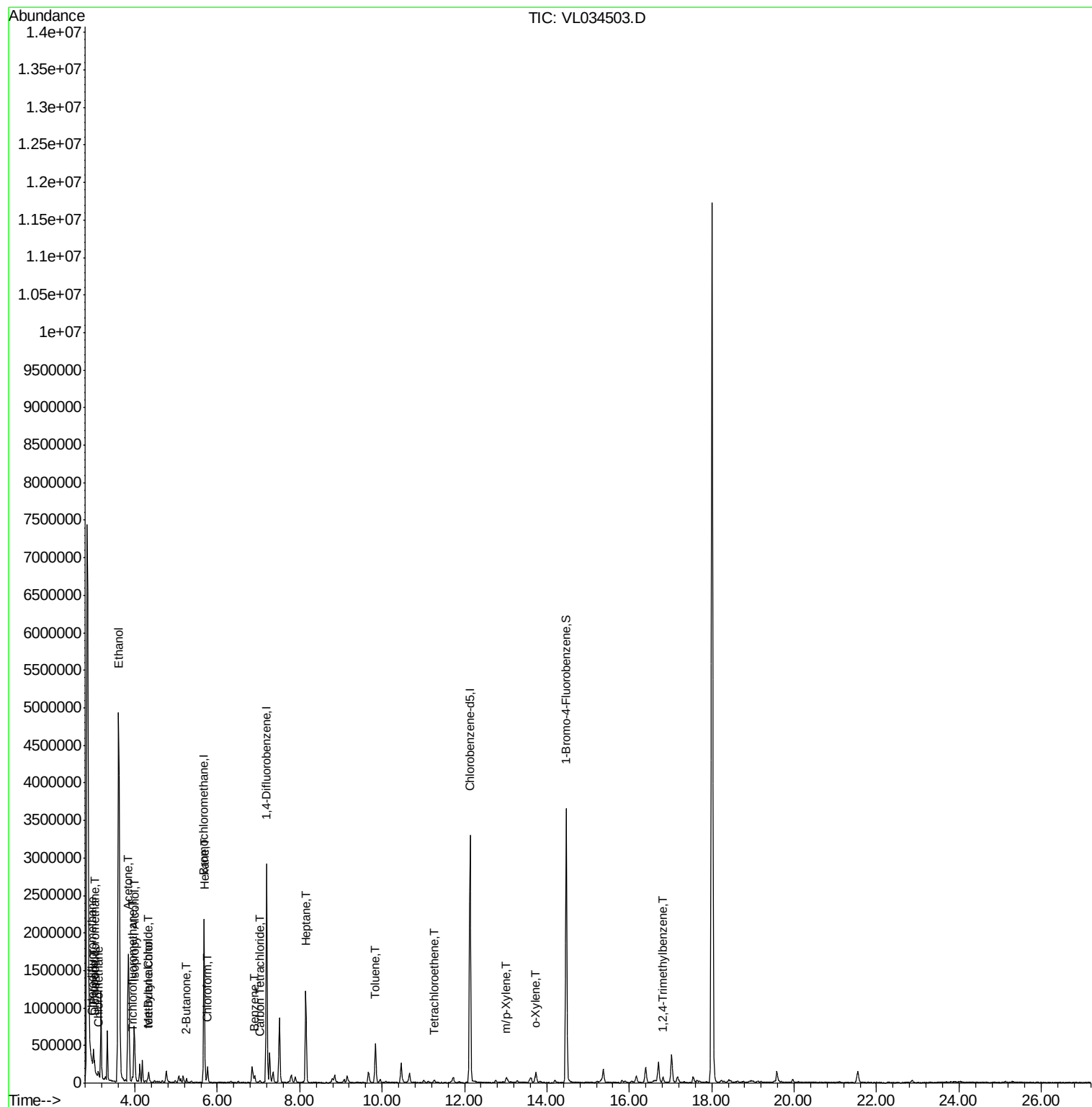
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL121719\
Data File : VL034503.D
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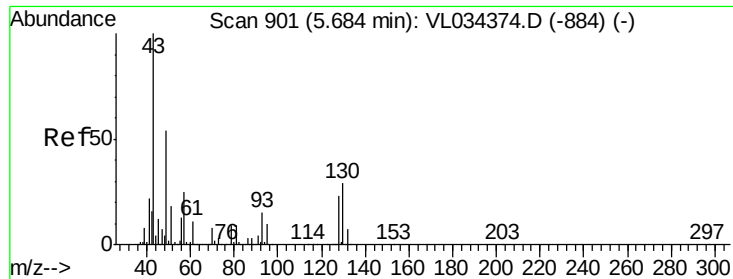
Instrument :
MSVOA_L
ClientSampleId :
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Quant Time: Dec 18 05:29:59 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Nov
QLast Update : Tue Nov 19 14:15:35 2019
Response via : Initial Calibration





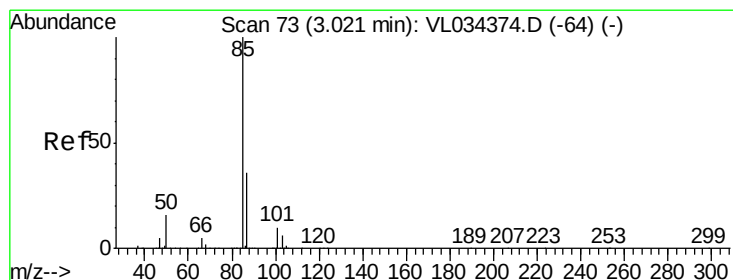
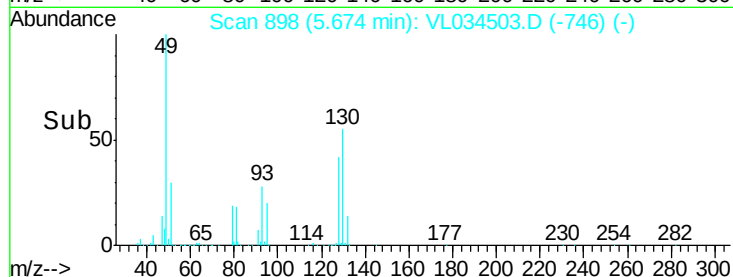
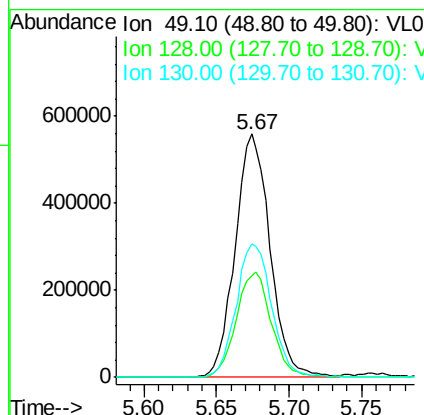
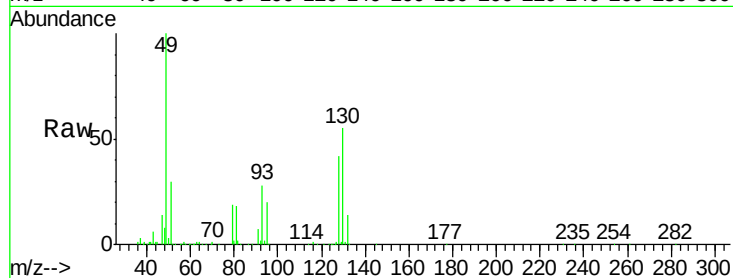
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.67 min Scan# 898
Delta R.T. -0.01 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA3

Tot Ion	Ratio	Lower	Upper
49	100		
128	43.9	21.8	65.3
130	56.1	28.0	84.0

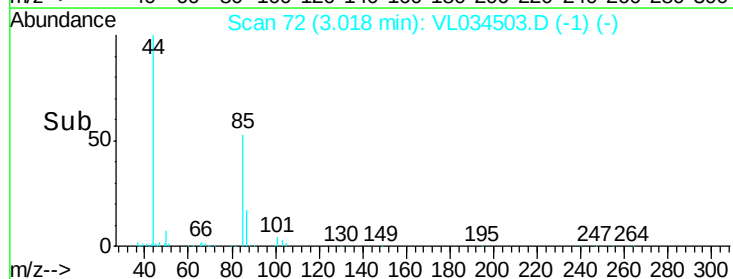
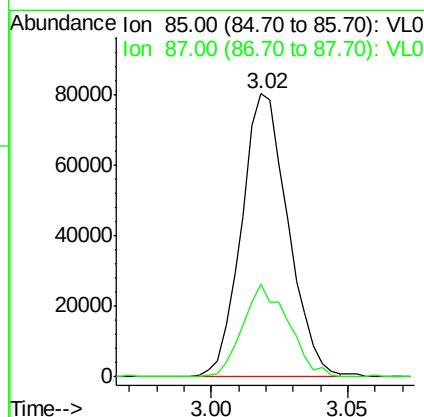
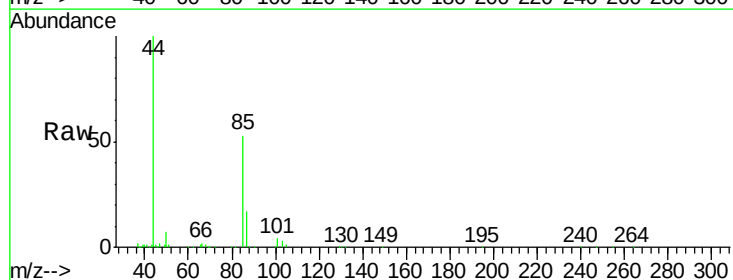
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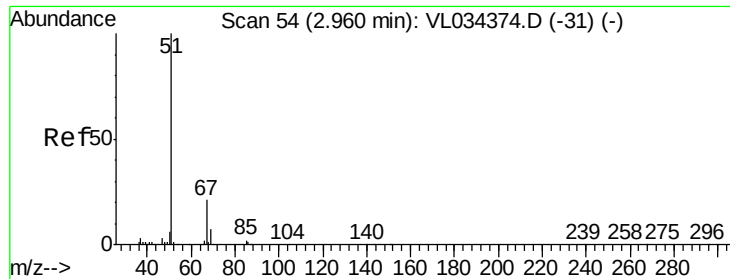
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#2
Dichlorodifluoromethane
Concen: 0.561 ppbv
RT: 3.02 min Scan# 72
Delta R.T. -0.00 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Tgt Ion	Ratio	Lower	Upper
85	100		
87	32.6	28.5	42.7





#3

Chlorodifluoromethane

Concen: 0.310 ppbv

RT: 2.96 min Scan# 54

Delta R.T. -0.00 min

Lab File: VL034503.D

Acq: 17 Dec 2019 21:52

Tot Ion: 51 Resp: 36205

Ion Ratio Lower Upper

51 100

67 22.3 16.2 24.2

Instrument :

MSVOA_L

ClientSampleId :

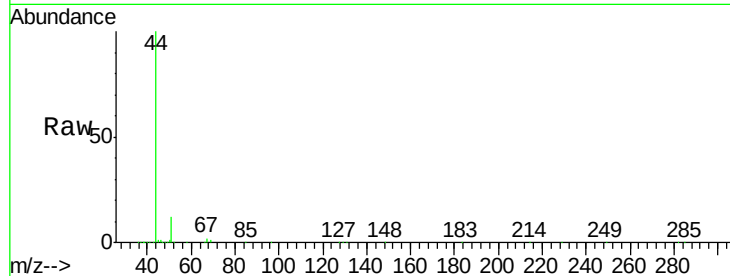
LIHA-IA3

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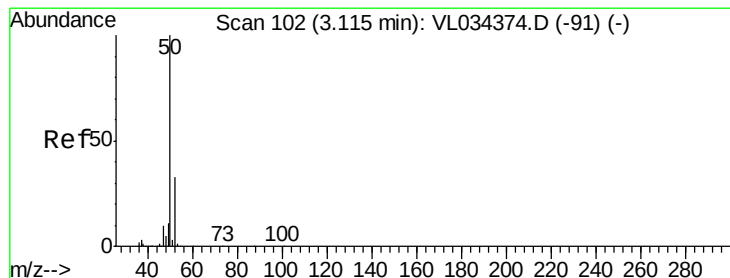
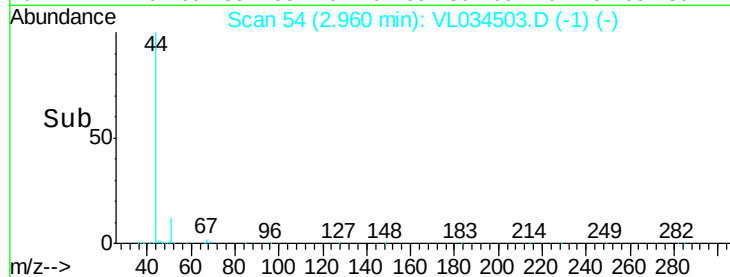
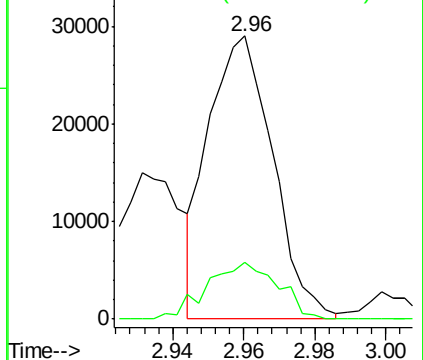
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.556 ppbv

RT: 3.11 min Scan# 101

Delta R.T. -0.00 min

Lab File: VL034503.D

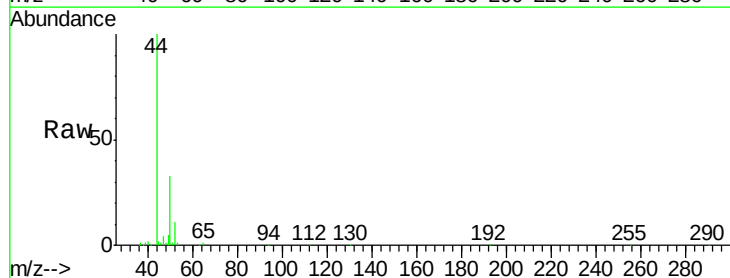
Acq: 17 Dec 2019 21:52

Tgt Ion: 50 Resp: 38260

Ion Ratio Lower Upper

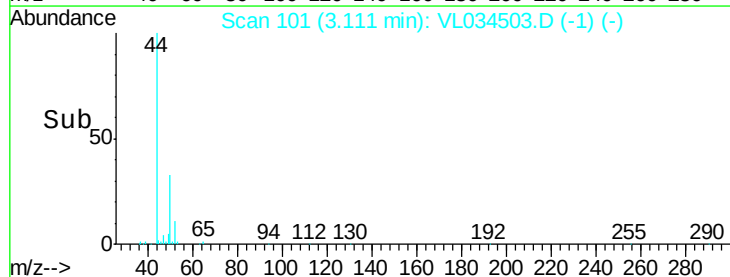
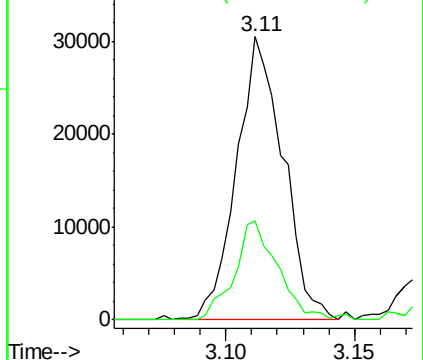
50 100

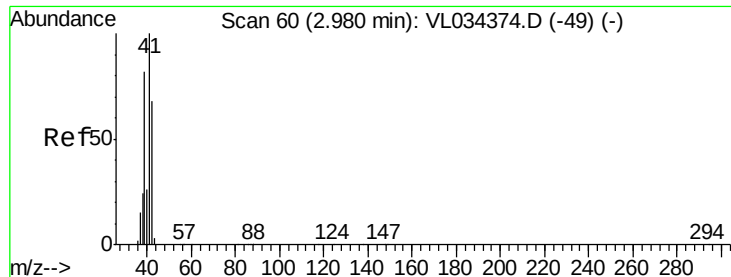
52 34.9 26.8 40.2



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.970 ppbv m

RT: 2.99 min Scan# 64

Delta R.T. 0.01 min

Lab File: VL034503.D

Acq: 17 Dec 2019 21:52

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IA3

Tot Ion: 41 Resp: 50249

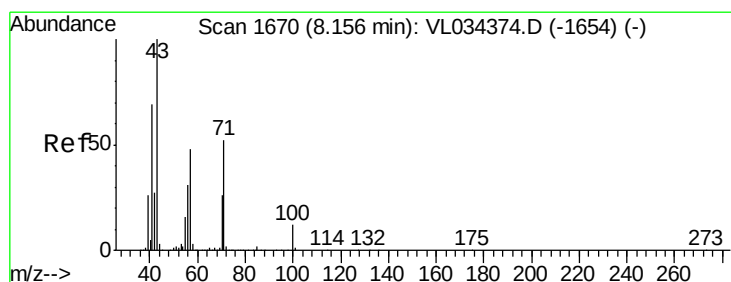
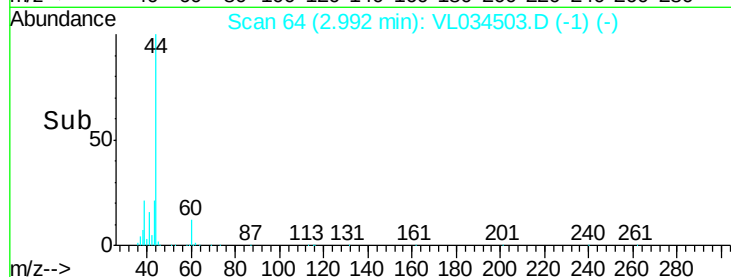
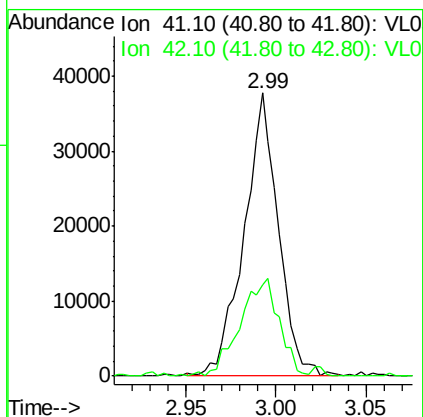
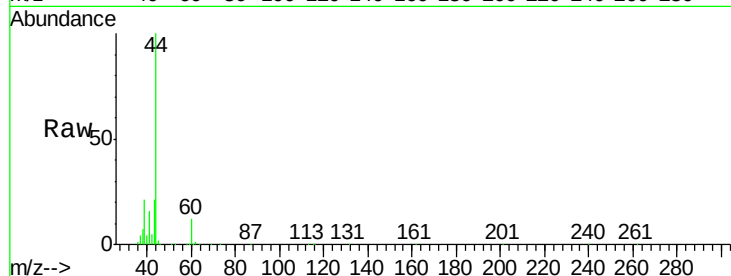
Ion Ratio Lower Upper

41 100

42 388.9 54.6 82.0#

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#10

Heptane

Concen: 3.864 ppbv

RT: 8.15 min Scan# 1667

Delta R.T. -0.01 min

Lab File: VL034503.D

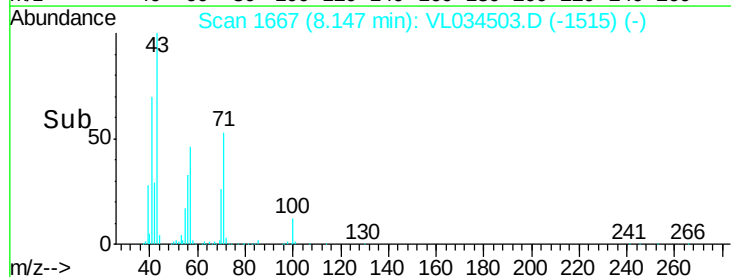
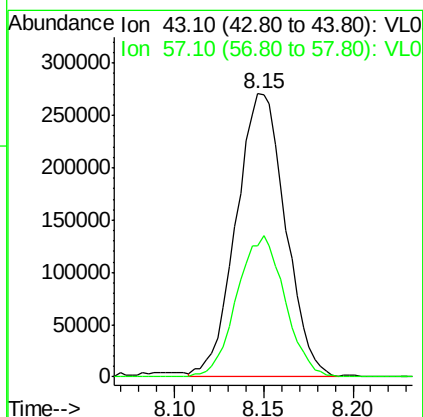
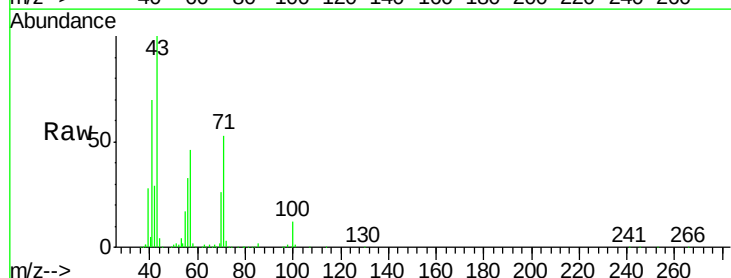
Acq: 17 Dec 2019 21:52

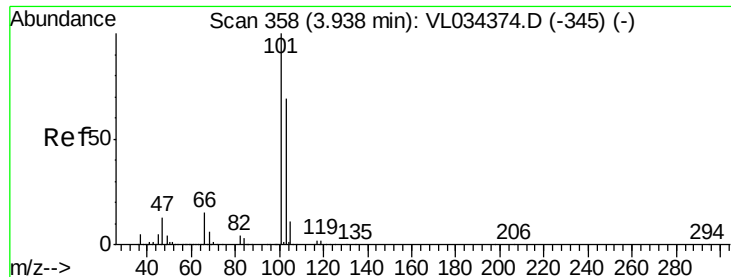
Tgt Ion: 43 Resp: 516587

Ion Ratio Lower Upper

43 100

57 49.1 40.2 60.2





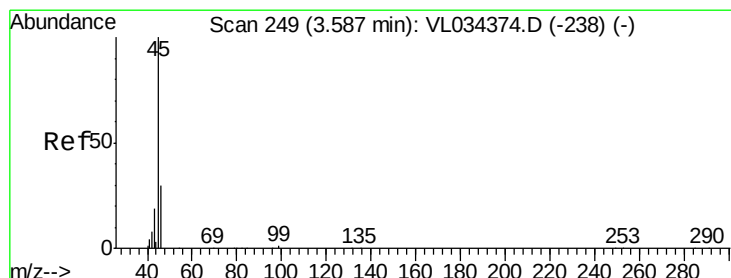
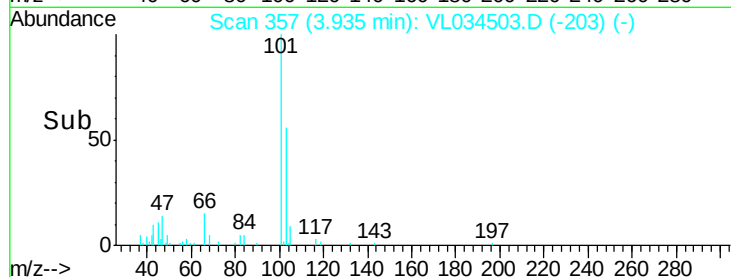
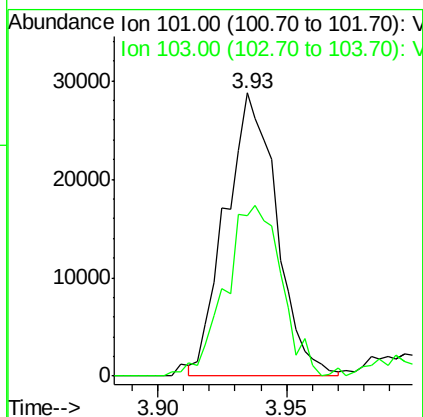
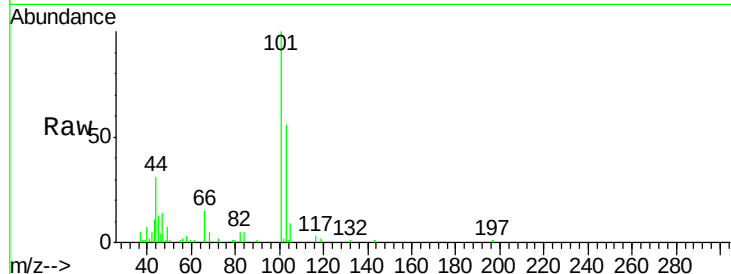
#11
Trichlorofluoromethane
Concen: 0.236 ppbv
RT: 3.93 min Scan# 357
Delta R.T. -0.00 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA3

Tot Ion:101 Resp: 39704
Ion Ratio Lower Upper
101 100
103 54.3 55.4 83.0#

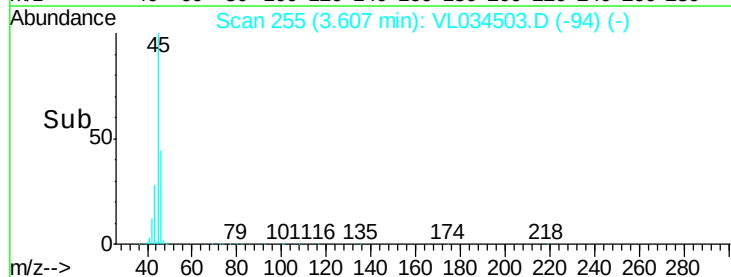
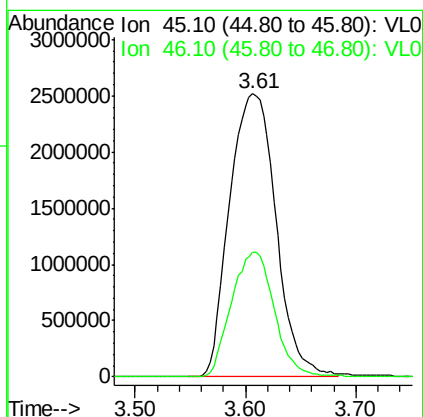
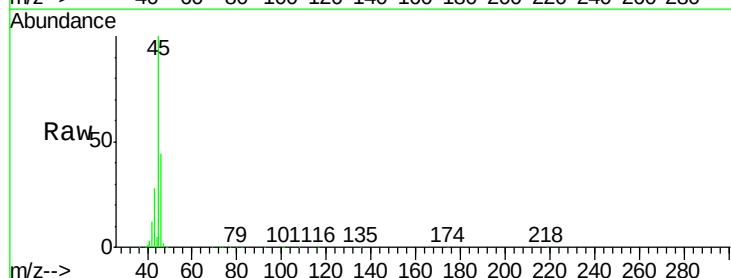
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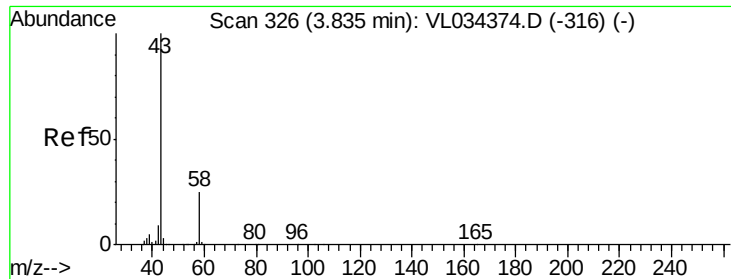
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#13
Ethanol
Concen: 508.532 ppbv
RT: 3.61 min Scan# 255
Delta R.T. 0.02 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Tgt Ion: 45 Resp: 7338514
Ion Ratio Lower Upper
45 100
46 41.1 13.8 55.4





#15

Acetone

Concen: 13.634 ppbv

RT: 3.83 min Scan# 325

Delta R.T. -0.00 min

Lab File: VL034503.D

Acq: 17 Dec 2019 21:52

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IA3

Tot Ion: 43 Resp: 1825781

Ion Ratio Lower Upper

43 100

58 23.3

20.2

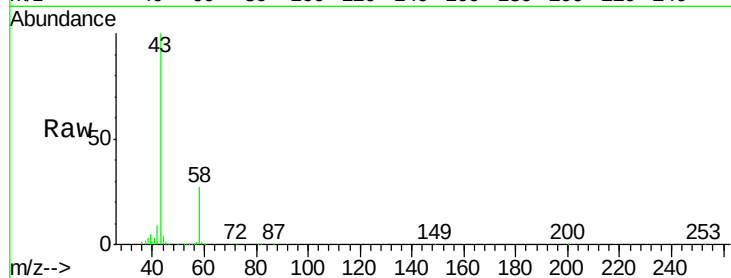
30.4

Manual Integrations

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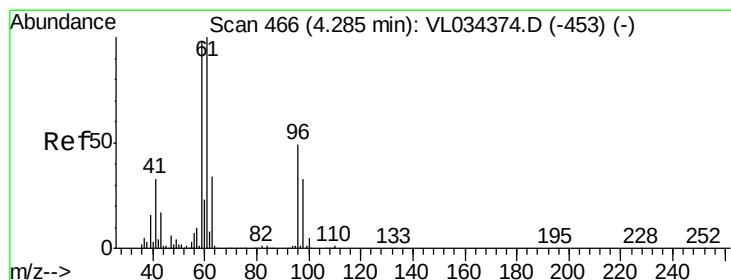
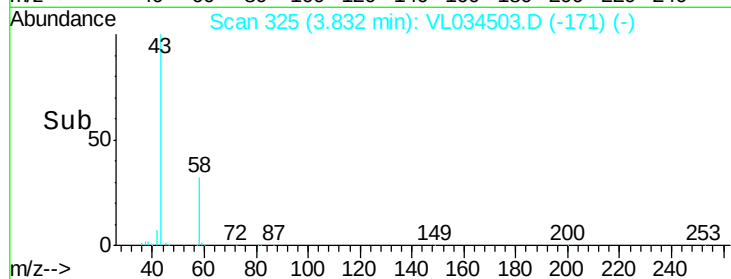
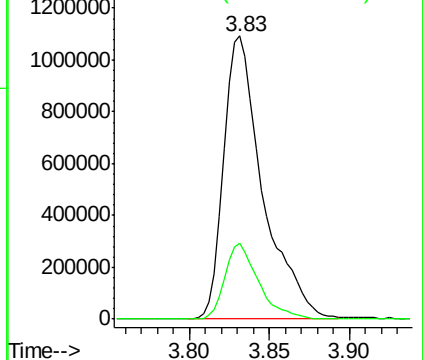
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#17

tert-Butyl alcohol

Concen: 0.284 ppbv m

RT: 4.32 min Scan# 477

Delta R.T. 0.04 min

Lab File: VL034503.D

Acq: 17 Dec 2019 21:52

Tgt Ion: 59 Resp: 31946

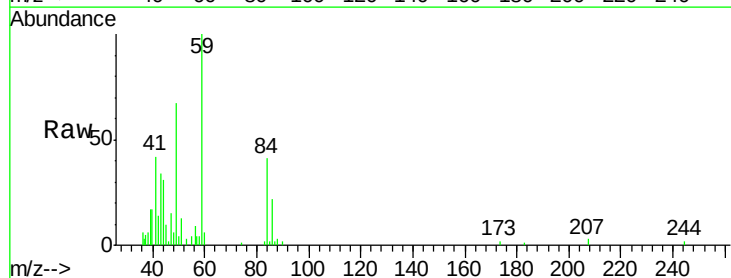
Ion Ratio Lower Upper

59 100

57 0.0

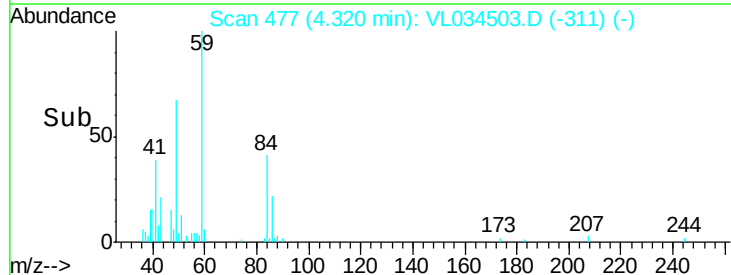
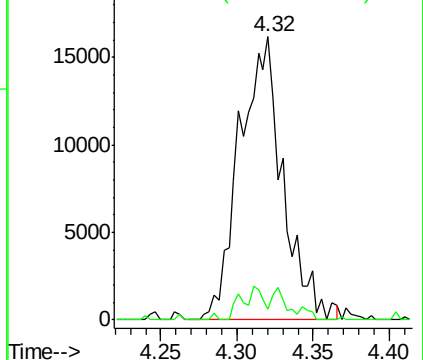
8.8

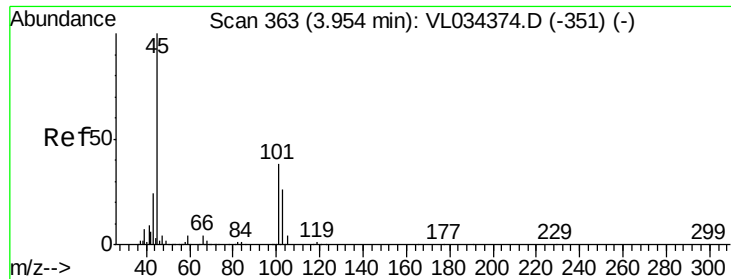
13.2#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





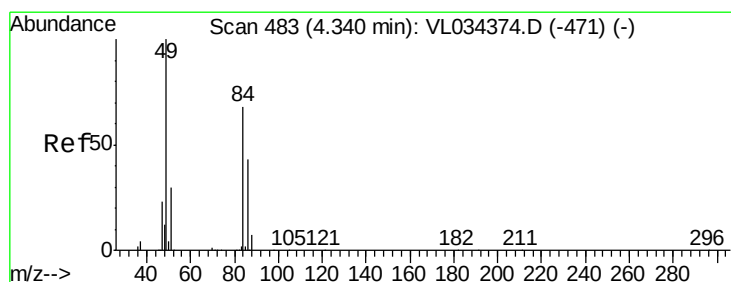
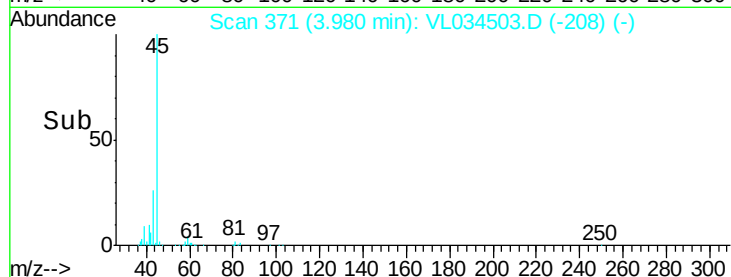
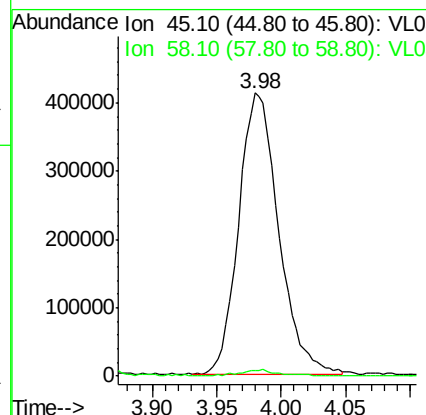
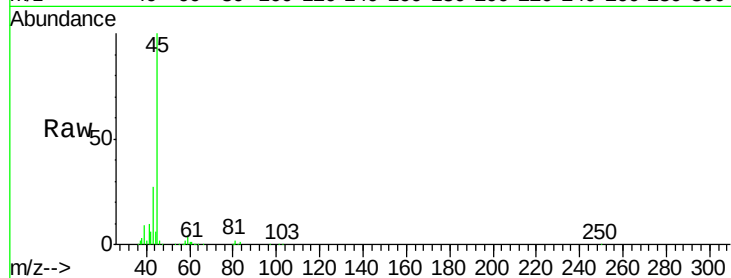
#19
Isopropyl Alcohol
Concen: 10.340 ppbv
RT: 3.98 min Scan# 371
Delta R.T. 0.03 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA3

Tot Ion: 45 Resp: 887612
Ion Ratio Lower Upper
45 100
58 2.1 1.3 1.9#

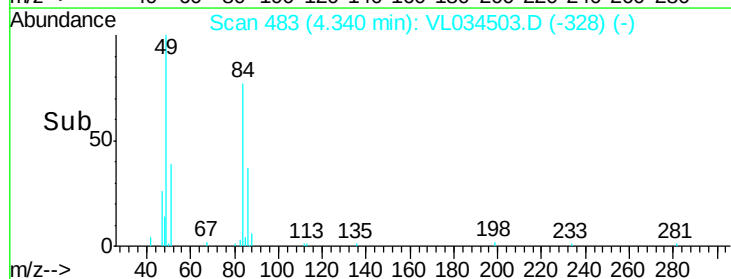
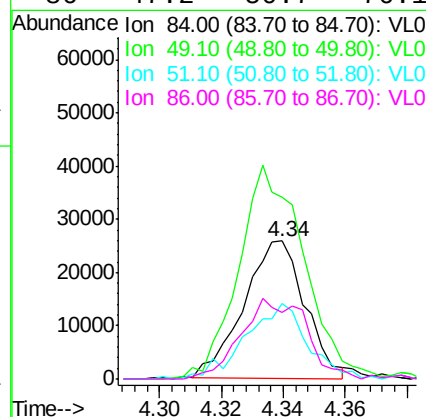
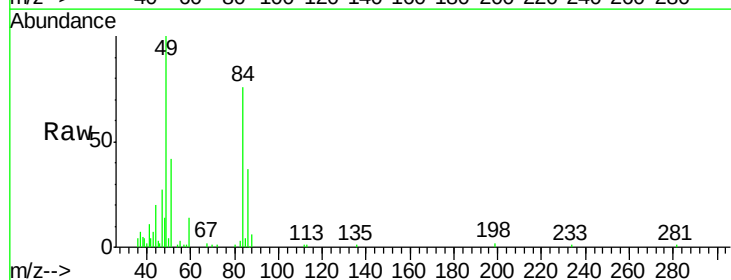
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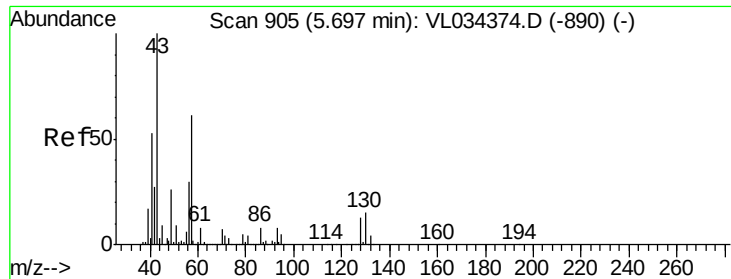
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#20
Methylene Chloride
Concen: 0.750 ppbv
RT: 4.34 min Scan# 483
Delta R.T. -0.00 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Tgt Ion: 84 Resp: 35626
Ion Ratio Lower Upper
84 100
49 124.2 116.8 175.2
51 51.7 35.6 53.4
86 47.2 50.7 76.1#





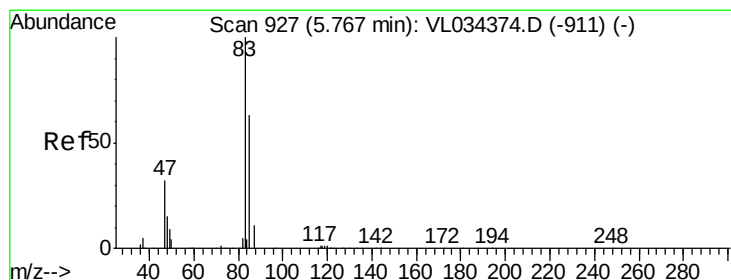
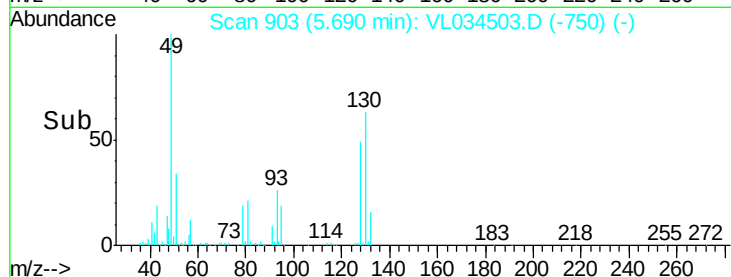
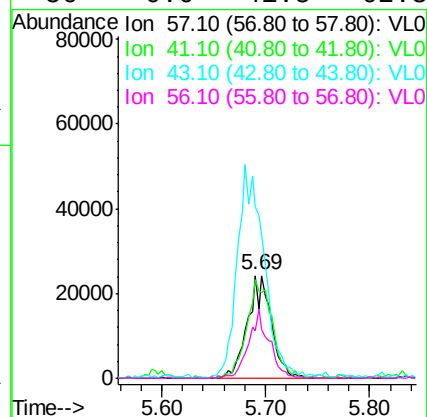
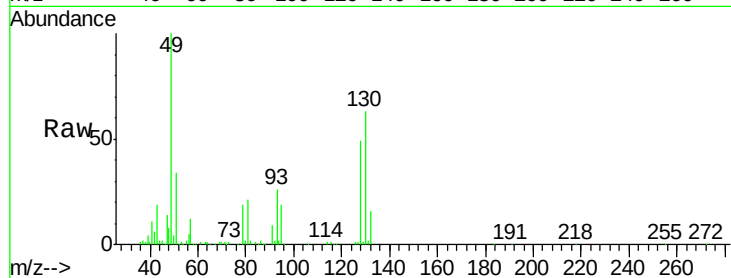
#26
Hexane
Concen: 0.375 ppbv m
RT: 5.69 min Scan# 903
Delta R.T. -0.01 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA3

Tot Ion	Ratio	Lower	Upper
57	100		
41	105.0	75.0	112.4
43	231.2	186.6	279.8
56	0.0	41.5	62.3#

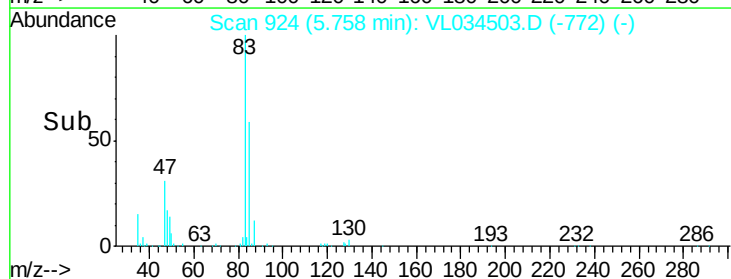
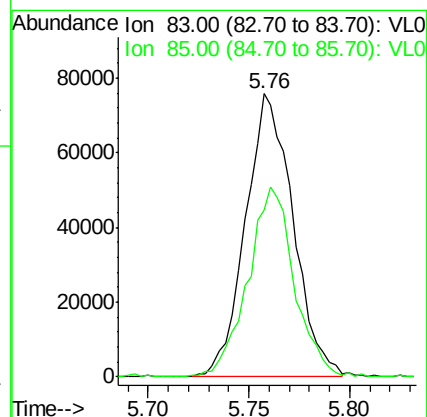
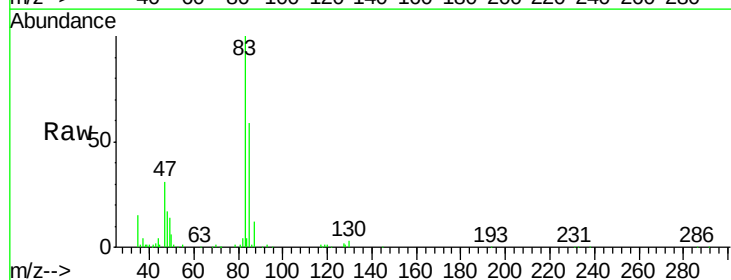
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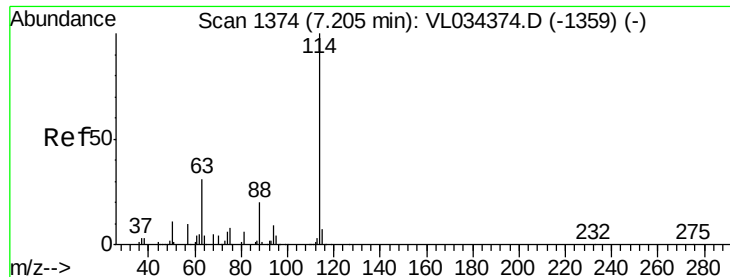
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#29
Chloroform
Concen: 0.752 ppbv
RT: 5.76 min Scan# 924
Delta R.T. -0.01 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Tgt Ion	Ratio	Lower	Upper
83	100		
85	58.2	50.4	75.6





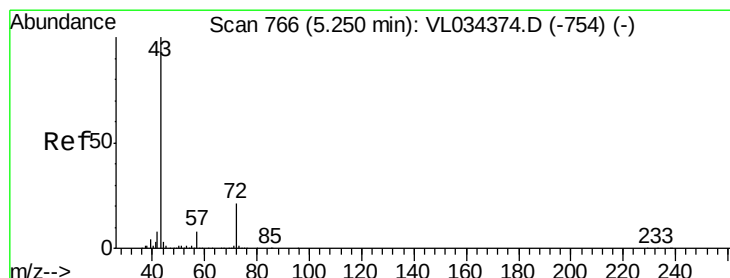
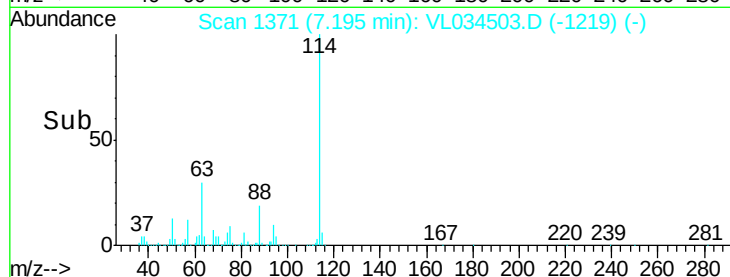
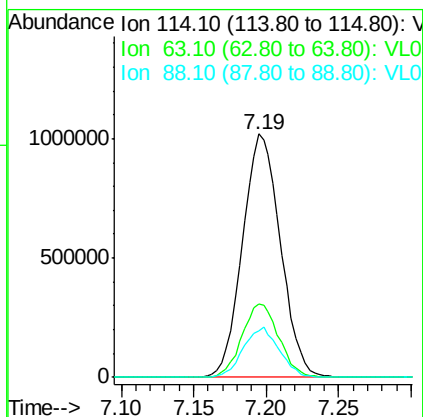
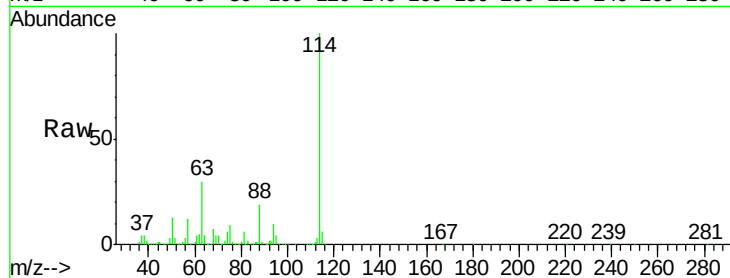
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1371
 Delta R.T. -0.01 min
 Lab File: VL034503.D
 Acq: 17 Dec 2019 21:52

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IA3

Tot Ion	Ratio	Lower	Upper
114	100		
63	29.8	24.2	36.4
88	19.7	15.9	23.9

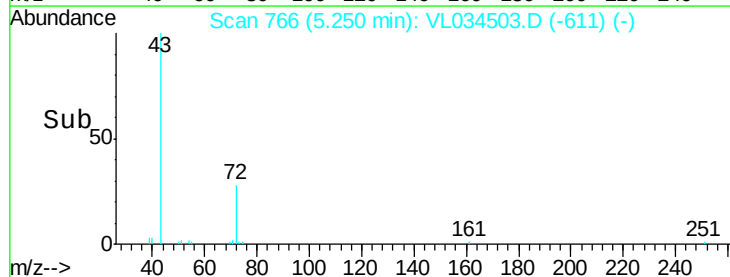
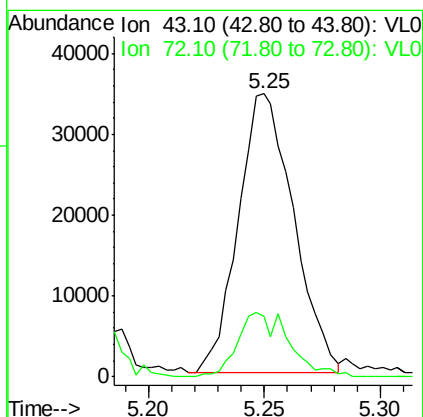
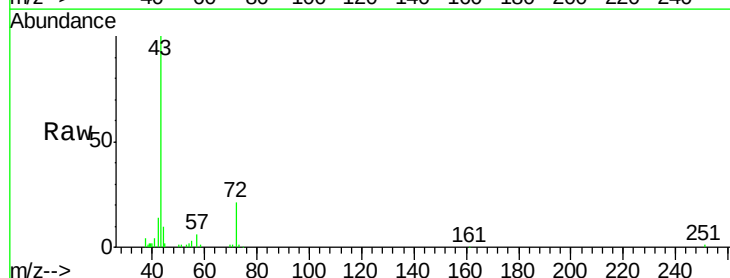
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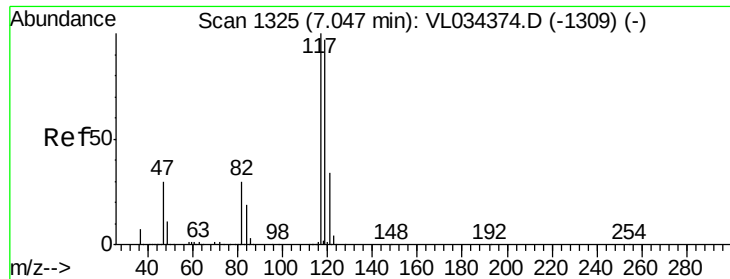
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#34
 2-Butanone
 Concen: 0.376 ppbv
 RT: 5.25 min Scan# 766
 Delta R.T. -0.00 min
 Lab File: VL034503.D
 Acq: 17 Dec 2019 21:52

Tgt Ion	Ratio	Lower	Upper
43	100		
72	21.4	17.0	25.6





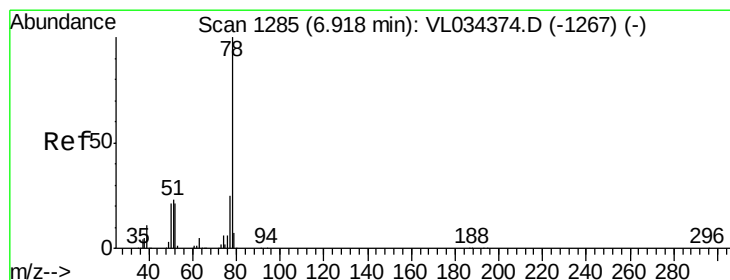
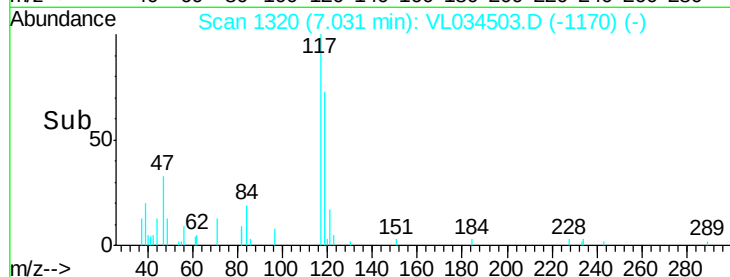
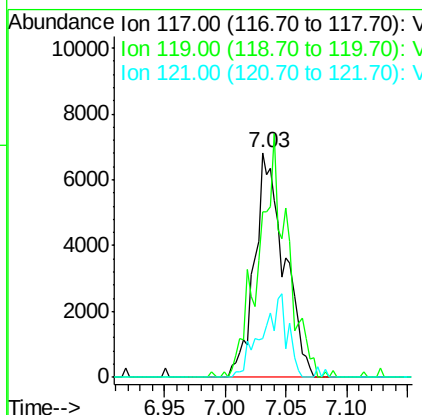
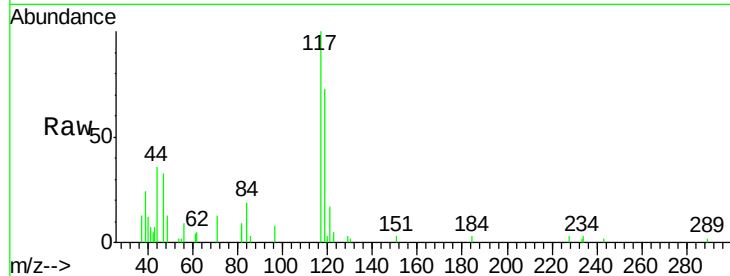
#35
Carbon Tetrachloride
Concen: 0.072 ppbv m
RT: 7.03 min Scan# 1320
Delta R.T. -0.02 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA3

Tot Ion	Ratio	Lower	Upper
117	100		
119	73.3	77.3	115.9#
121	17.4	27.4	41.2#

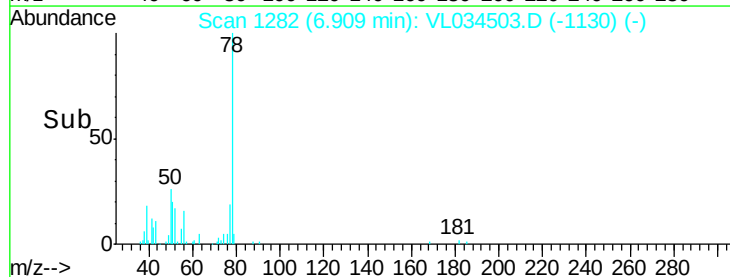
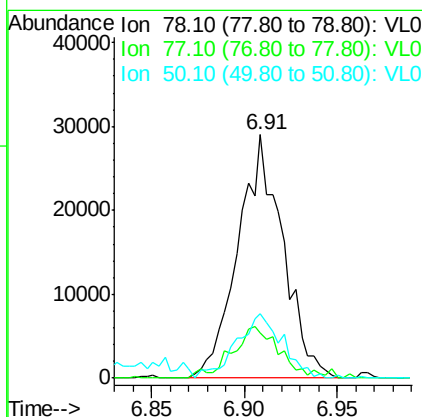
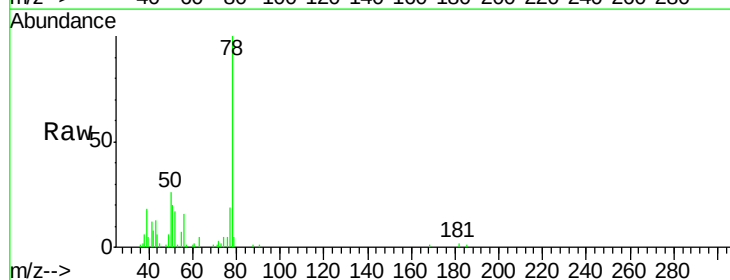
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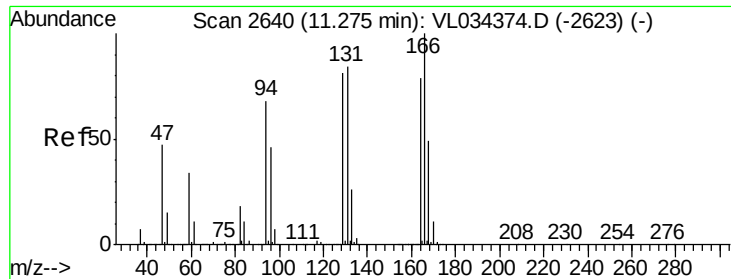
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#36
Benzene
Concen: 0.263 ppbv
RT: 6.91 min Scan# 1282
Delta R.T. -0.01 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Tgt Ion	Ratio	Lower	Upper
78	100		
77	18.6	20.2	30.4#
50	25.3	17.1	25.7





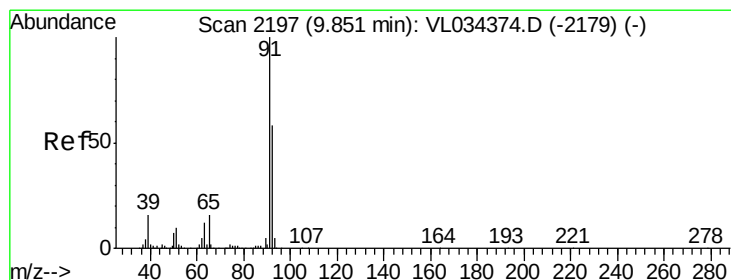
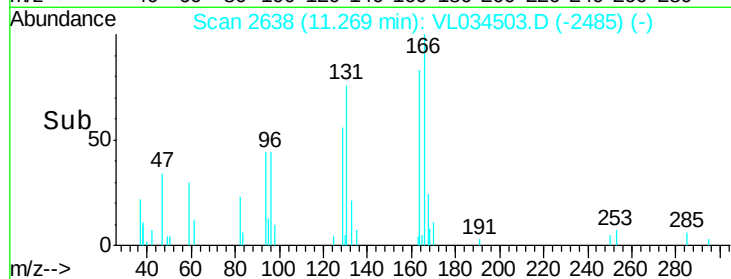
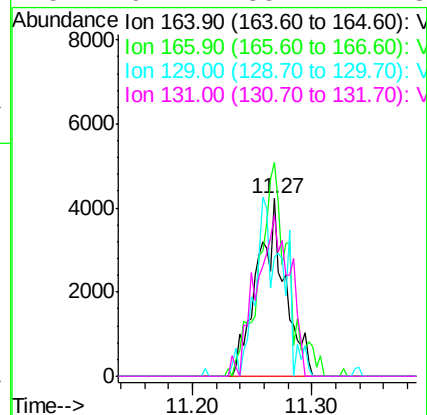
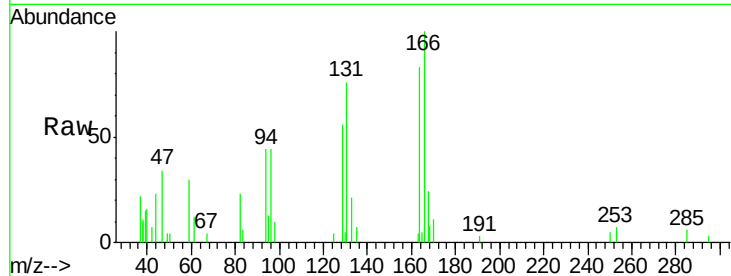
#52
Tetrachloroethene
Concen: 0.085 ppbv m
RT: 11.27 min Scan# 2638
Delta R.T. -0.01 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Instrument :
MSVOA_L
ClientSampled :
LIHA-IA3

Tot Ion	Ratio	Lower	Upper
164	100		
166	120.2	101.7	152.5
129	67.0	82.6	123.8#
131	91.1	85.2	127.8

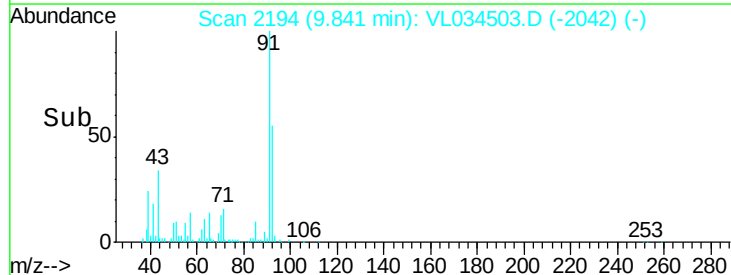
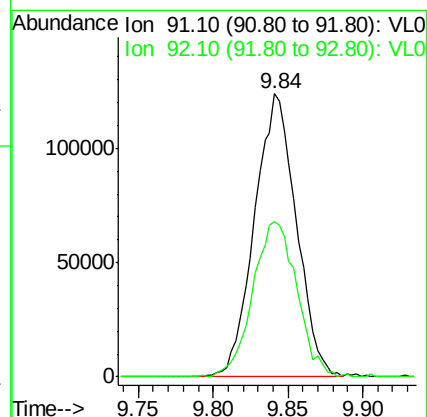
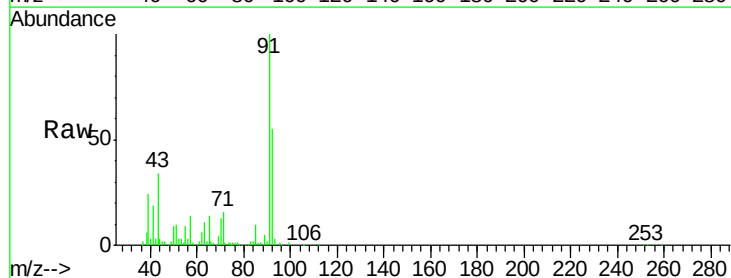
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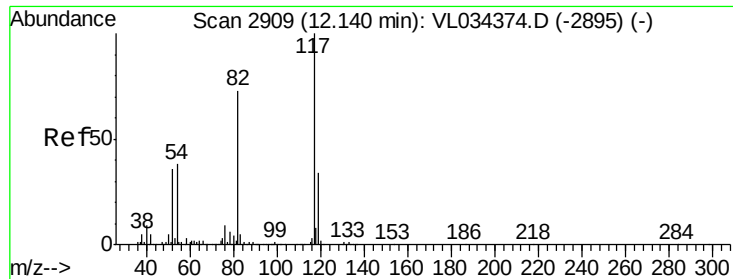
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#53
Toluene
Concen: 1.137 ppbv
RT: 9.84 min Scan# 2194
Delta R.T. -0.01 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Tgt Ion	Ratio	Lower	Upper
91	100		
92	58.1	47.9	71.9





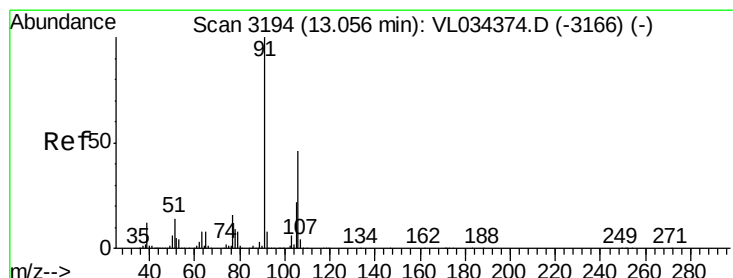
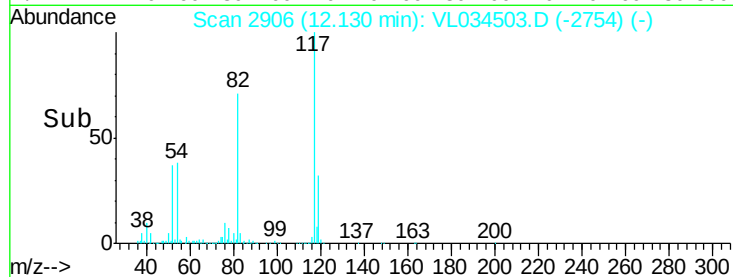
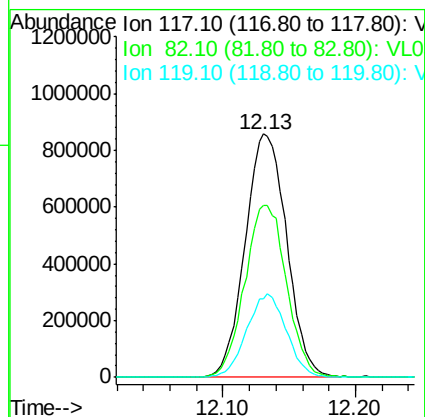
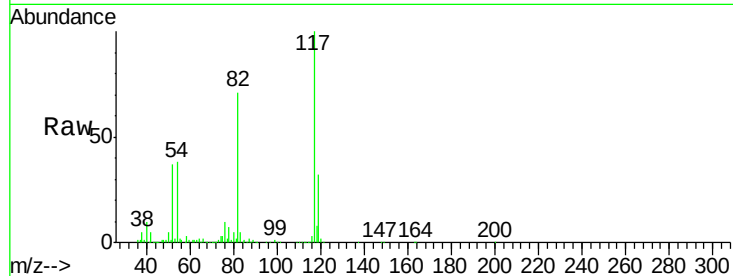
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.13 min Scan# 2906
Delta R.T. -0.01 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA3

Tot Ion	Ratio	Lower	Upper
117	100		
82	71.2	57.5	86.3
119	32.9	25.4	38.2

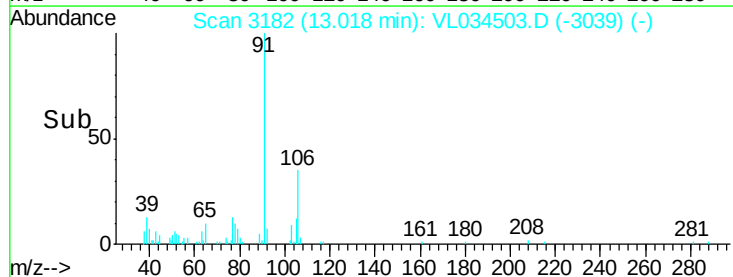
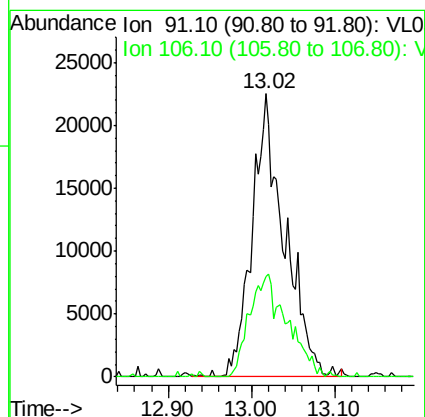
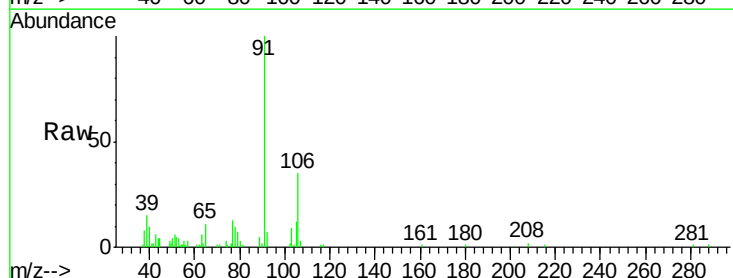
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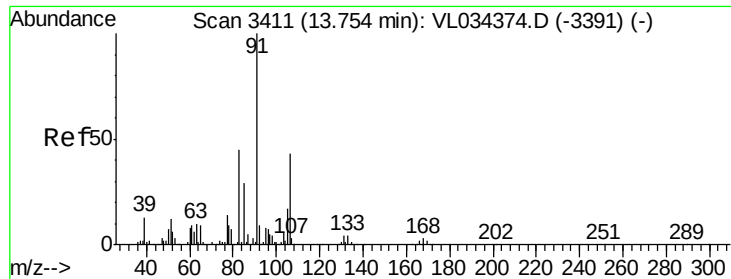
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#59
m/p-Xylene
Concen: 0.242 ppbv m
RT: 13.02 min Scan# 3182
Delta R.T. -0.04 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Tgt Ion	Ratio	Lower	Upper
91	100		
106	0.0	34.6	51.8#





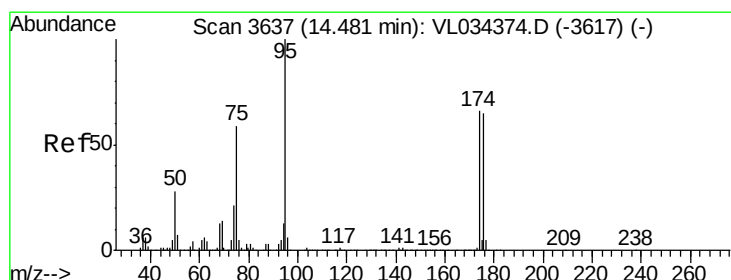
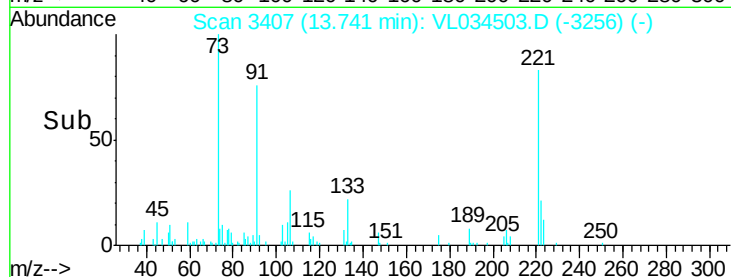
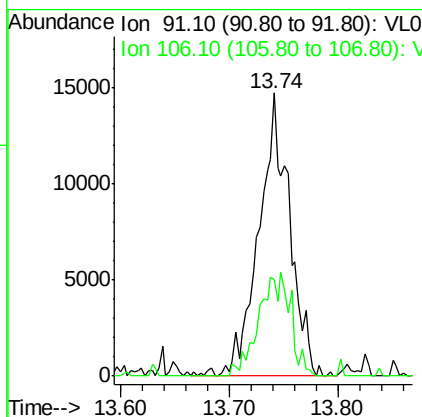
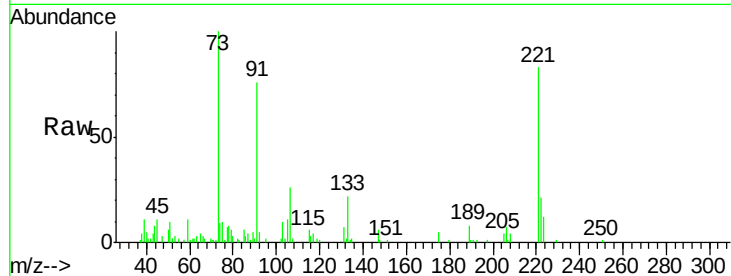
#60
o-Xylene
Concen: 0.115 ppbv m
RT: 13.74 min Scan# 3407
Delta R.T. -0.01 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA3

Tot Ion: 91 Resp: 28700
Ion Ratio Lower Upper
91 100
106 0.0 21.3 64.0#

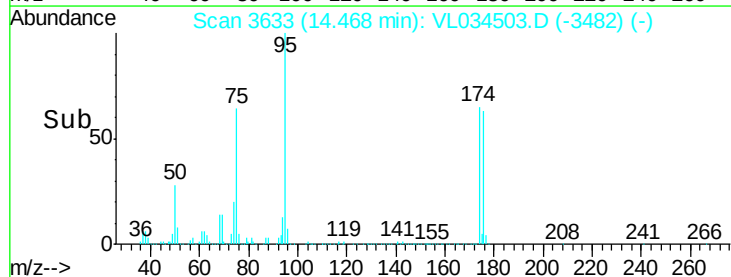
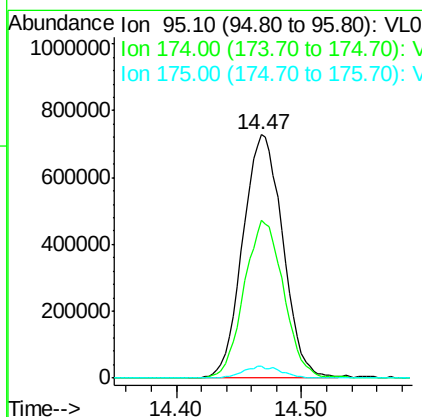
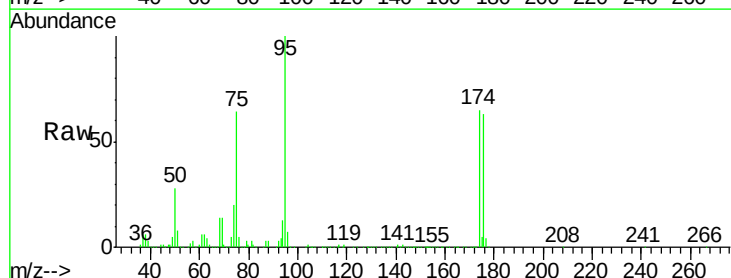
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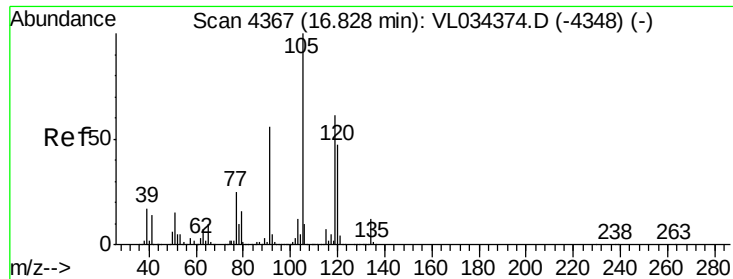
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.258 ppbv
RT: 14.47 min Scan# 3633
Delta R.T. -0.01 min
Lab File: VL034503.D
Acq: 17 Dec 2019 21:52

Tgt Ion: 95 Resp: 1617002
Ion Ratio Lower Upper
95 100
174 64.0 52.2 78.2
175 4.6 3.8 5.8





#74
 1,2,4-Trimethylbenzene
 Concen: 0.146 ppbv
 RT: 16.82 min Scan# 4365
 Delta R.T. -0.01 min
 Lab File: VL034503.D
 Acq: 17 Dec 2019 21:52

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IA3

Tot Ion:	105	Resp:	43640
Ion Ratio		Lower	Upper
105	100		
120	30.8	37.4	56.0#
91	17.9	46.3	69.5#
77	12.6	20.6	30.8#

Manual Integrations
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