

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110718\
 Data File : VL032716.D
 Acq On : 7 Nov 2018 14:20
 Operator : SY/AP
 Sample : J5809-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IA-DUP-110118

Manual Integrations
 APPROVED

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 11/12/2018 12:30:03 PM

Quant Time: Nov 12 00:26:48 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101818AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct 25 2018
 QLast Update : Thu Oct 25 05:15:43 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1432747	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3505999	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3312008	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.59	95	2511732	10.19	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	41370	0.283	ppbv	98
3) Chlorodifluoromethane	3.02	51	48034m	0.429	ppbv	
4) Chloromethane	3.17	50	34834	0.556	ppbv #	88
9) Propene	3.06	41	81195m	1.761	ppbv	
10) Heptane	8.26	43	62320m	0.351	ppbv	
11) Trichlorofluoromethane	4.01	101	44459m	0.233	ppbv	
12) 1,1,2-Trichlorotrifluoroet	4.56	101	14248	0.090	ppbv	100
13) Ethanol	3.68	45	13106590	994.495	ppbv	99
15) Acetone	3.91	43	1694363	12.807	ppbv	93
17) tert-Butyl alcohol	4.40	59	145243m	3.733	ppbv	
19) Isopropyl Alcohol	4.07	45	1254210	13.311	ppbv #	97
20) Methylene Chloride	4.42	84	38358	0.571	ppbv	95
26) Hexane	5.79	57	75380	0.523	ppbv #	22
29) Chloroform	5.86	83	36311	0.158	ppbv	93
34) 2-Butanone	5.34	43	131270	0.698	ppbv	100
35) Carbon Tetrachloride	7.14	117	19817m	0.080	ppbv	
36) Benzene	7.01	78	115818	0.407	ppbv	95
44) 2,2,4-Trimethylpentane	8.00	57	137534	0.283	ppbv #	70
52) Tetrachloroethene	11.38	164	17730m	0.179	ppbv	
53) Toluene	9.96	91	1048595	3.213	ppbv	98
58) Ethyl Benzene	12.88	91	68101m	0.177	ppbv	
59) m/p-Xylene	13.13	91	206087	0.601	ppbv	100
60) o-Xylene	13.87	91	73034m	0.221	ppbv	
61) Styrene	13.70	104	26822m	0.121	ppbv	
74) 1,2,4-Trimethylbenzene	16.94	105	129207	0.353	ppbv #	74

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

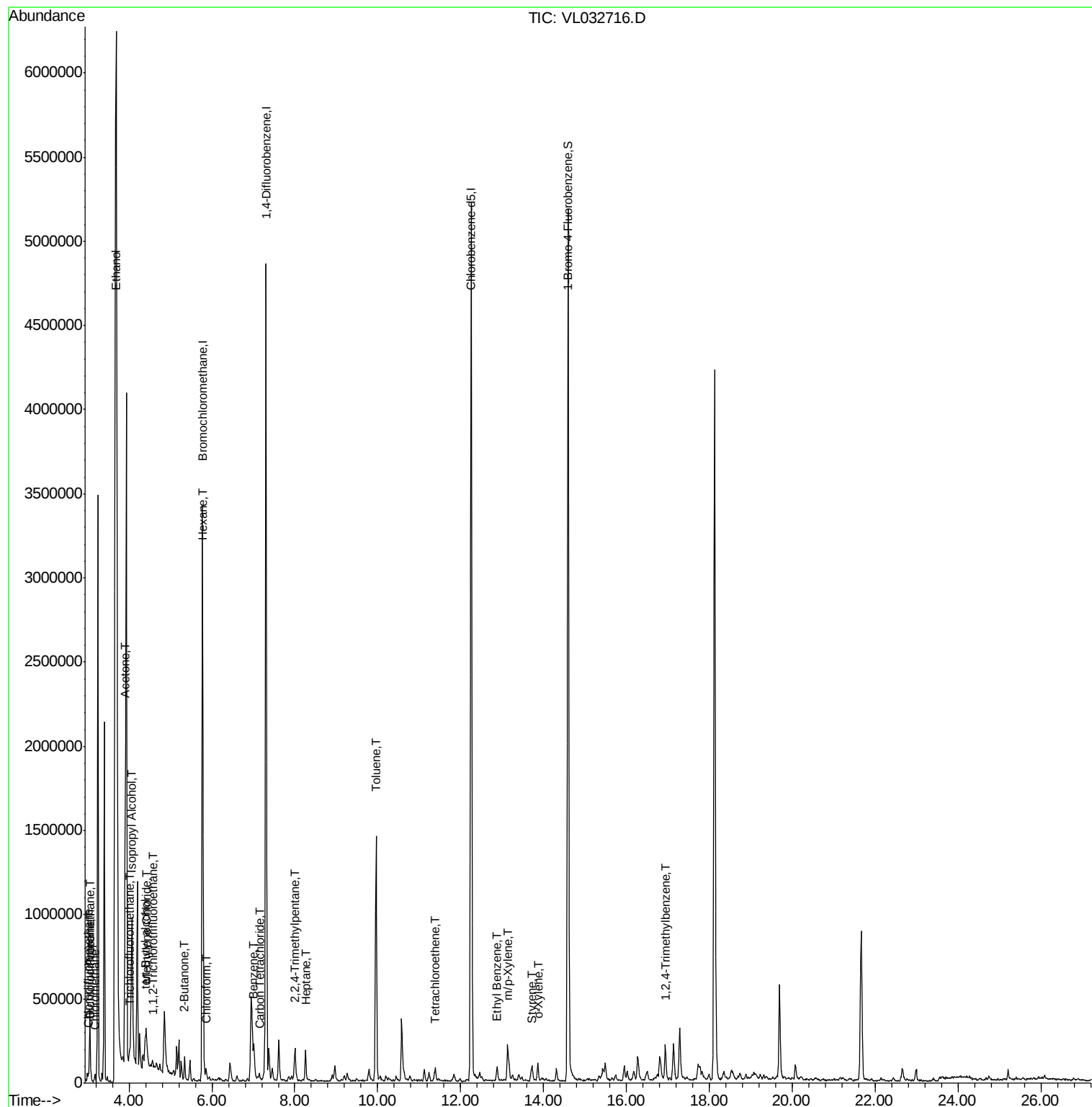
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110718\
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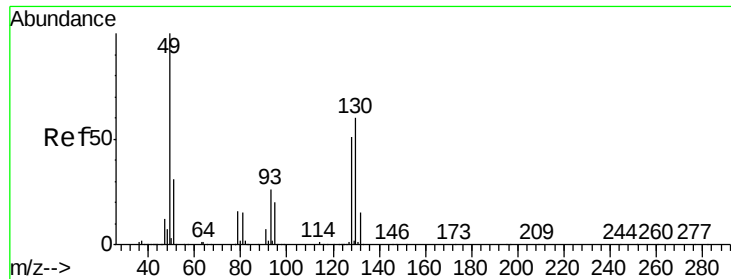
Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA-DUP-110118

Manual Integrations
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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101818AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct
QLast Update : Thu Oct 25 05:15:43 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 881

Delta R.T. -0.01 min

Lab File: VL032716.D

Acq: 7 Nov 2018 14:20

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IA-DUP-110118

Tot Ion: 49 Resp: 1432747

Ion Ratio Lower Upper

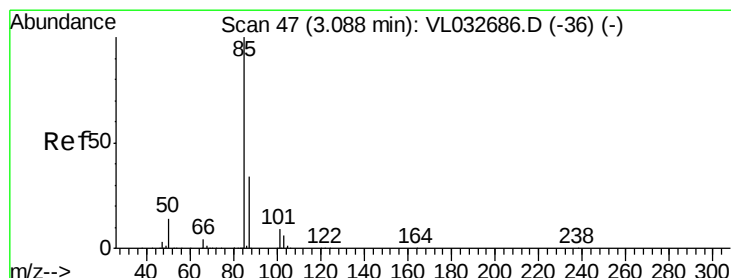
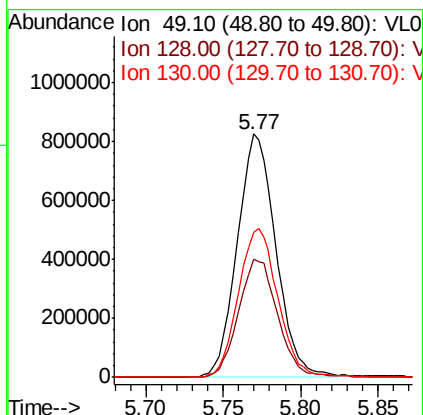
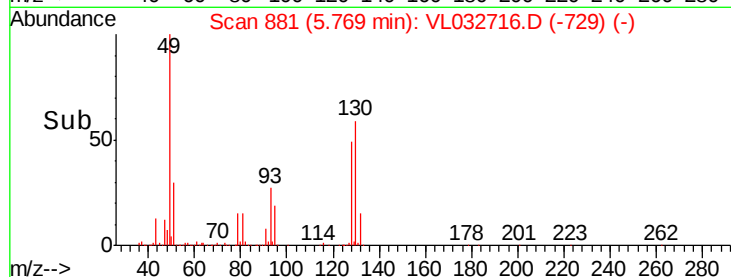
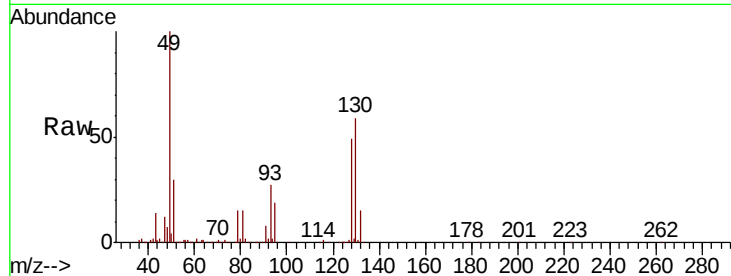
49 100

128 49.4 22.3 66.8

130 63.1 28.4 85.3

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#2

Dichlorodifluoromethane

Concen: 0.283 ppbv

RT: 3.08 min Scan# 45

Delta R.T. -0.00 min

Lab File: VL032716.D

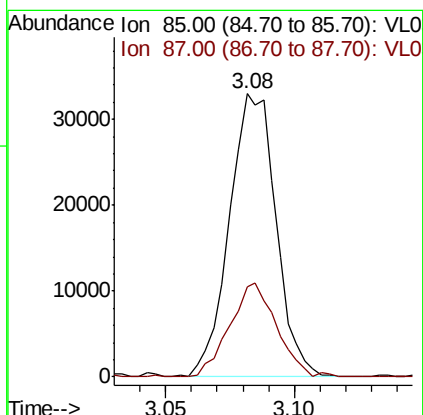
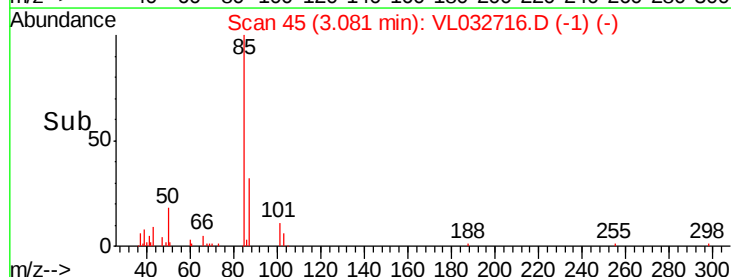
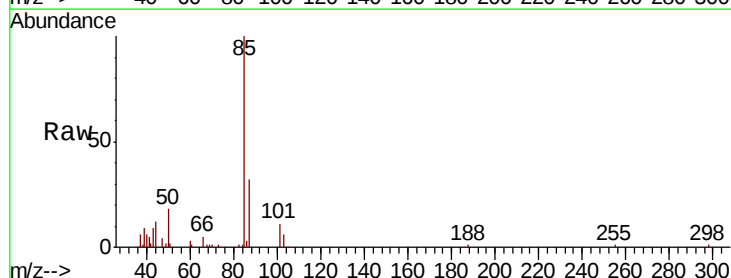
Acq: 7 Nov 2018 14:20

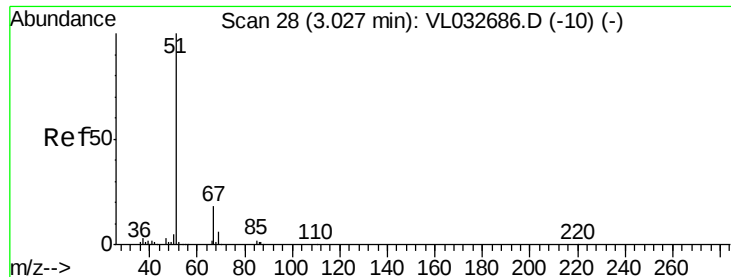
Tgt Ion: 85 Resp: 41370

Ion Ratio Lower Upper

85 100

87 31.8 26.2 39.2





#3

Chlorodifluoromethane

Concen: 0.429 ppbv

RT: 3.02 min Scan# 26

Delta R.T. -0.00 min

Lab File: VL032716.D

Acq: 7 Nov 2018 14:20

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IA-DUP-110118

Tot Ion: 51 Resp: 48034

Ion Ratio Lower Upper

51 100

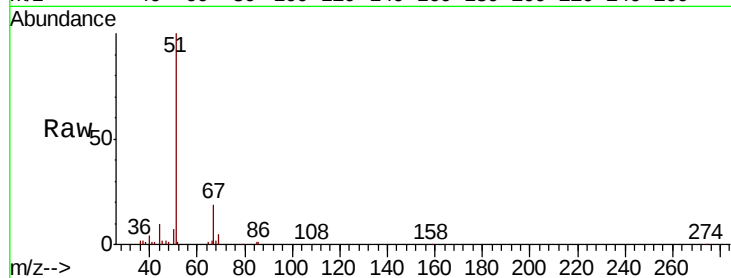
67 18.7 15.2 22.8

Manual Integrations

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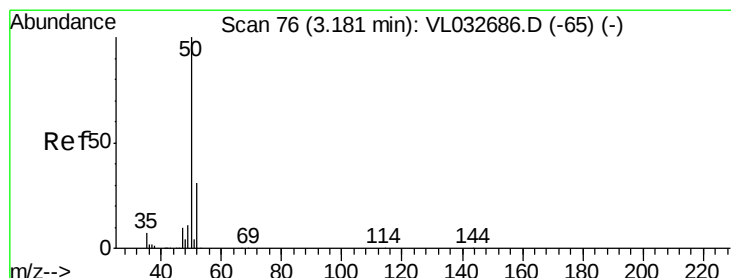
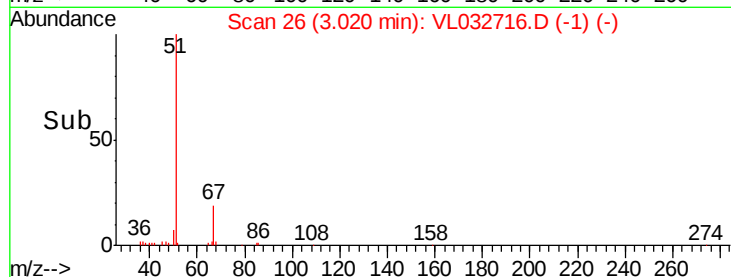
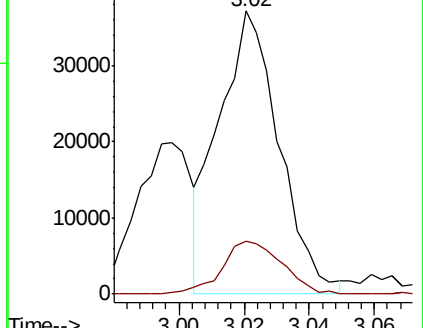
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.556 ppbv

RT: 3.17 min Scan# 74

Delta R.T. -0.00 min

Lab File: VL032716.D

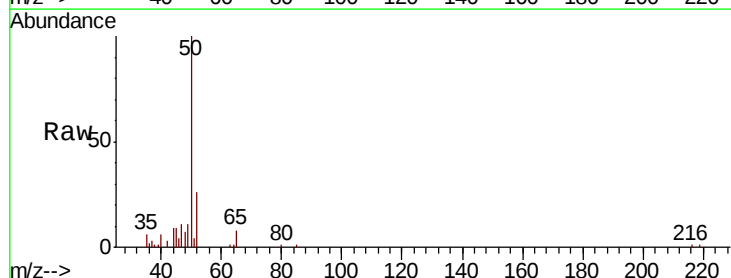
Acq: 7 Nov 2018 14:20

Tgt Ion: 50 Resp: 34834

Ion Ratio Lower Upper

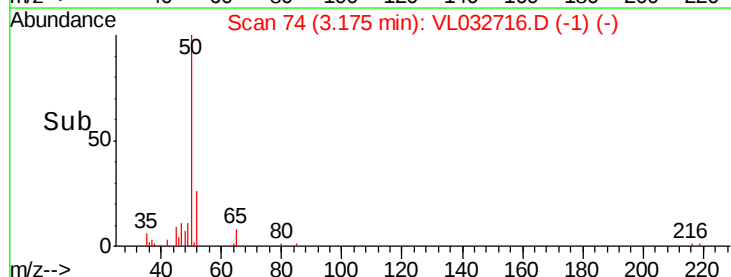
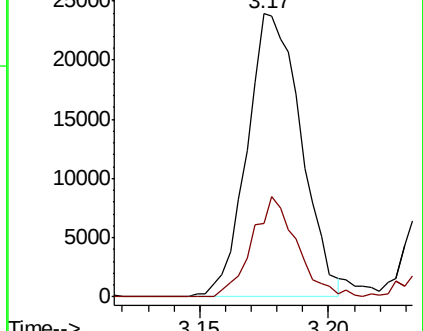
50 100

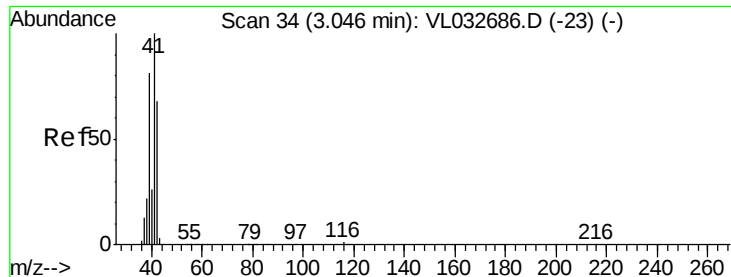
52 25.7 25.9 38.9#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 1.761 ppbv m

RT: 3.06 min Scan# 37

Delta R.T. 0.01 min

Lab File: VL032716.D

Acq: 7 Nov 2018 14:20

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IA-DUP-110118

Tot Ion: 41 Resp: 81195

Ion Ratio Lower Upper

41 100

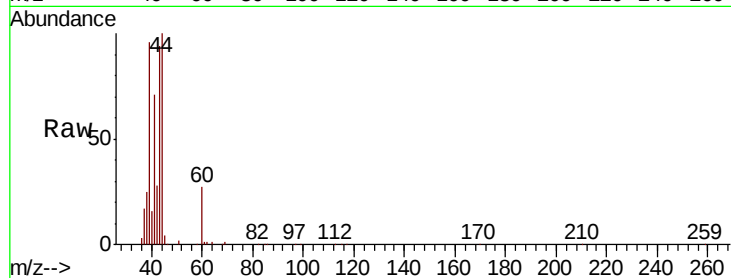
42 768.7 55.4 83.0#

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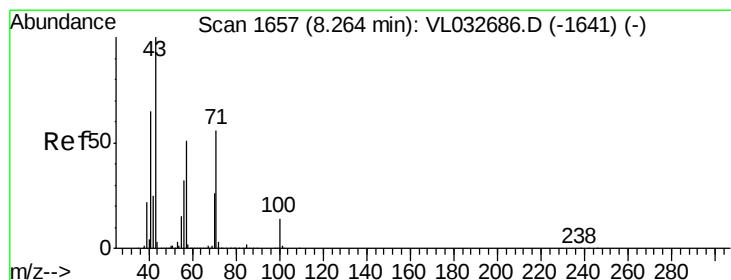
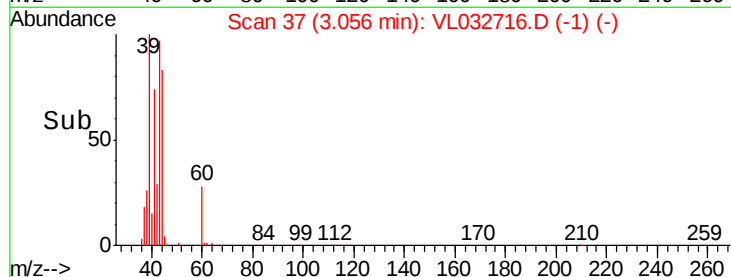
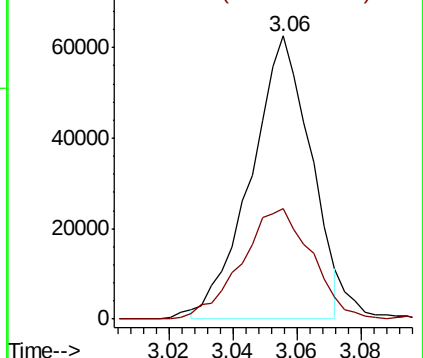
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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.351 ppbv m

RT: 8.26 min Scan# 1656

Delta R.T. -0.00 min

Lab File: VL032716.D

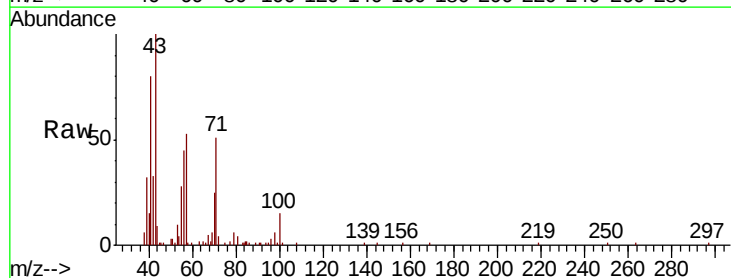
Acq: 7 Nov 2018 14:20

Tgt Ion: 43 Resp: 62320

Ion Ratio Lower Upper

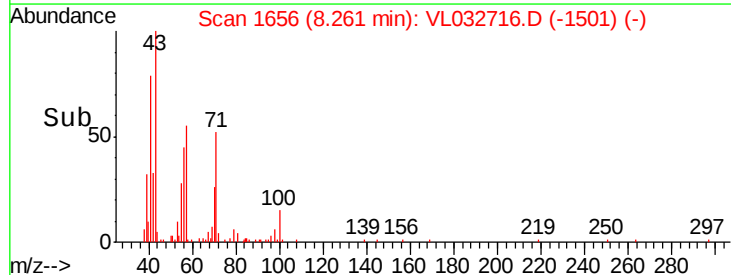
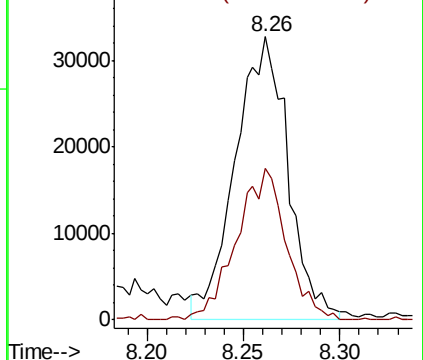
43 100

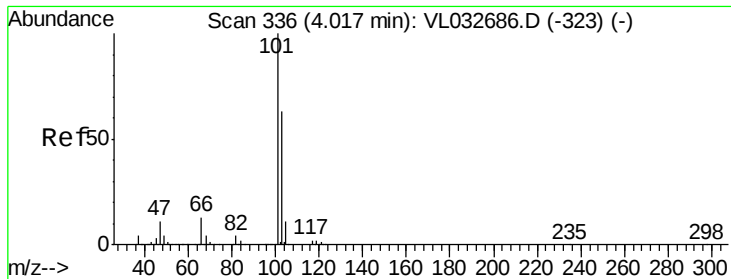
57 0.0 41.5 62.3#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#11

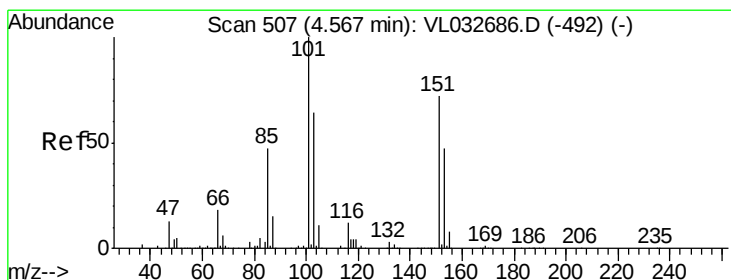
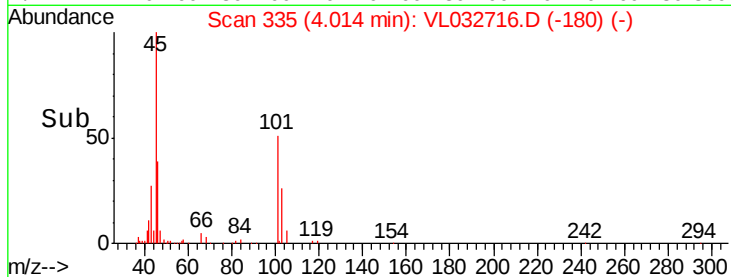
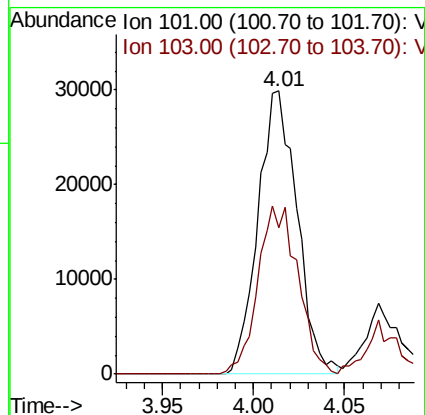
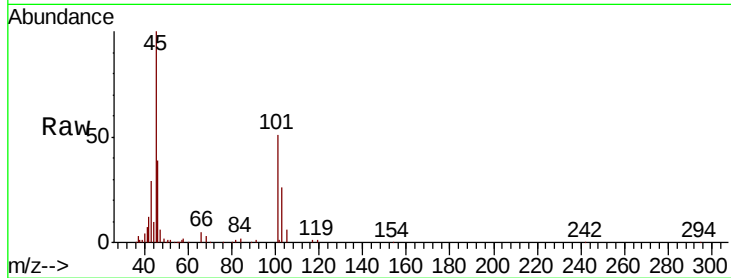
Trichlorofluoromethane
Concen: 0.233 ppbv m
RT: 4.01 min Scan# 335
Delta R.T. -0.00 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA-DUP-110118

Tot Ion:101 Resp: 44459
Ion Ratio Lower Upper
101 100
103 51.9 51.4 77.2

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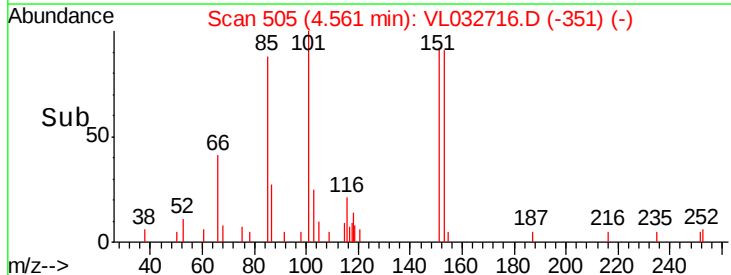
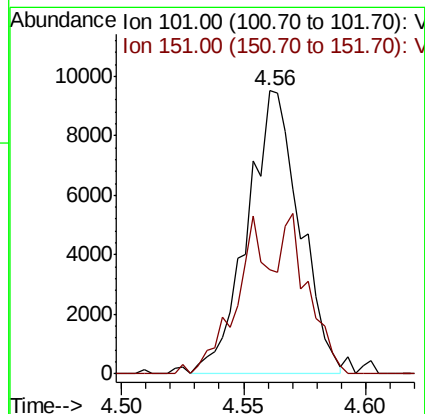
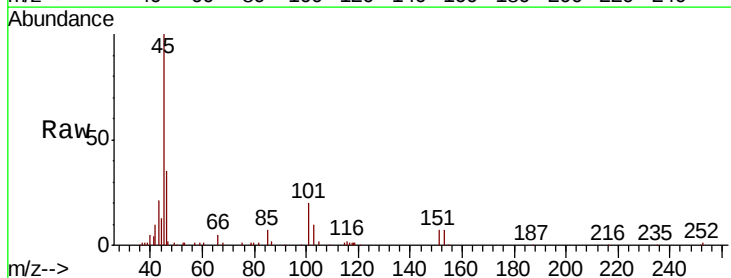
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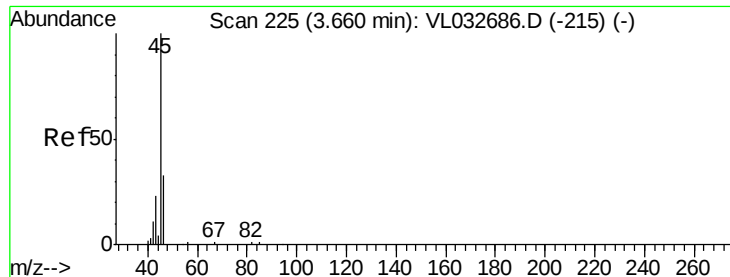


#12

1,1,2-Trichlorotrifluoroethane
Concen: 0.090 ppbv
RT: 4.56 min Scan# 505
Delta R.T. -0.00 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Tgt Ion:101 Resp: 14248
Ion Ratio Lower Upper
101 100
151 65.7 52.3 78.5





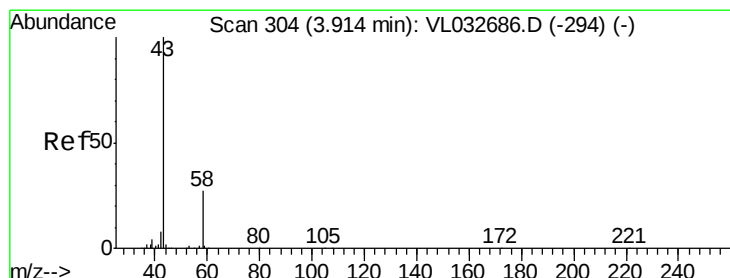
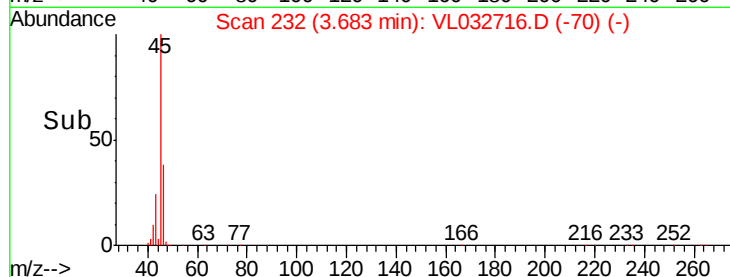
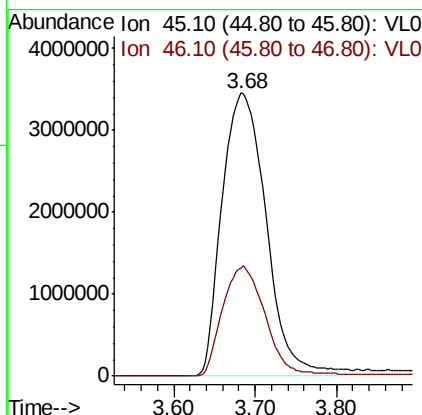
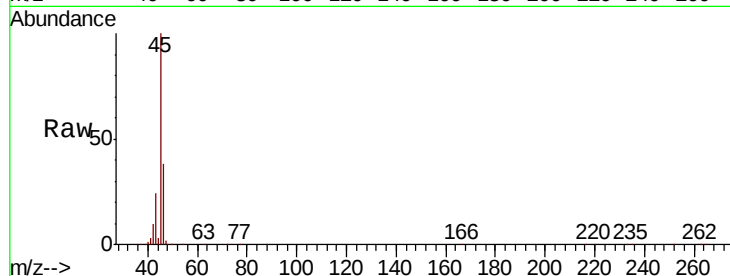
#13
Ethanol
Concen: 994.495 ppbv
RT: 3.68 min Scan# 232
Delta R.T. 0.02 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA-DUP-110118

Tot Ion: 45 Resp:13106590
Ion Ratio Lower Upper
45 100
46 38.1 15.4 61.8

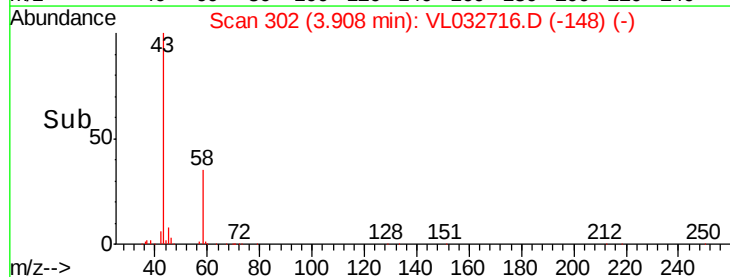
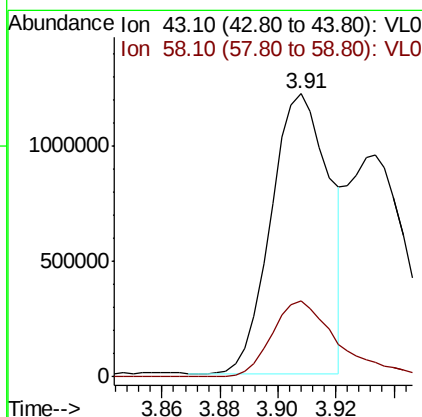
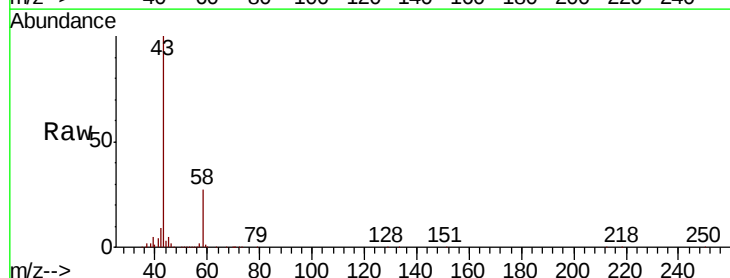
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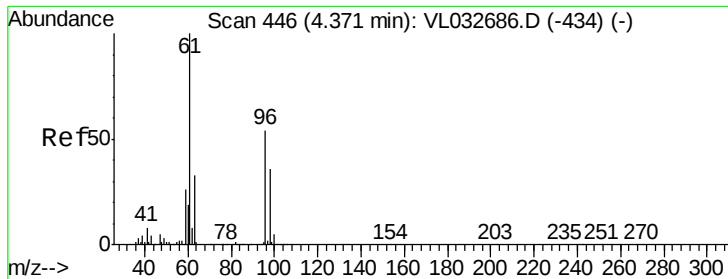
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#15
Acetone
Concen: 12.807 ppbv
RT: 3.91 min Scan# 302
Delta R.T. -0.00 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Tgt Ion: 43 Resp: 1694363
Ion Ratio Lower Upper
43 100
58 31.3 22.1 33.1





#17

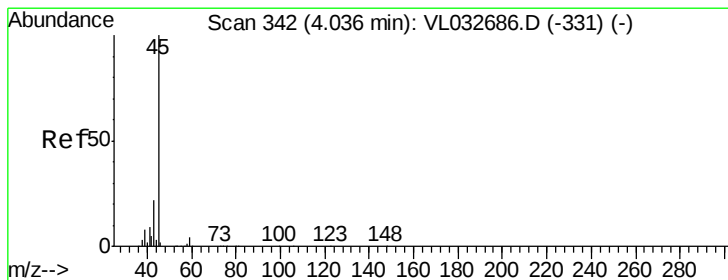
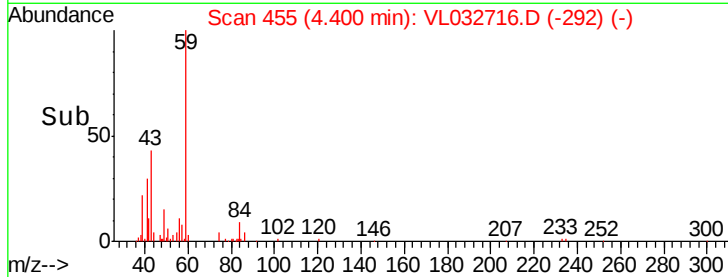
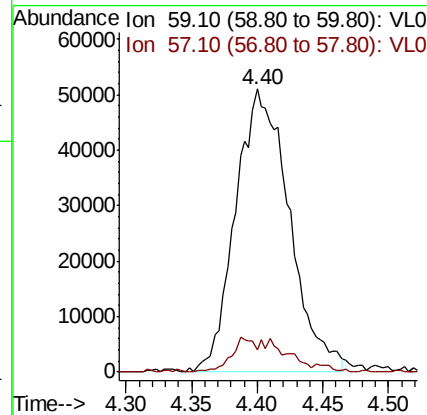
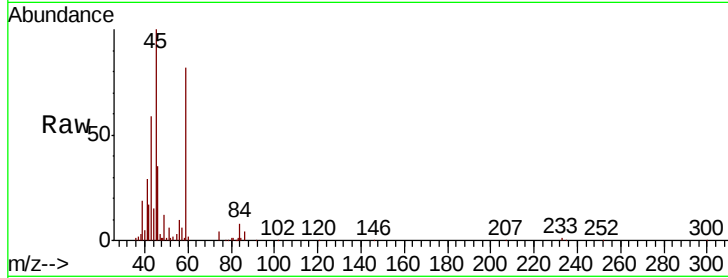
tert-Butyl alcohol
 Concen: 3.733 ppbv m
 RT: 4.40 min Scan# 455
 Delta R.T. 0.03 min
 Lab File: VL032716.D
 Acq: 7 Nov 2018 14:20

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IA-DUP-110118

Tot Ion	Ratio	Lower	Upper
59	100		
57	0.0	0.0	0.0

Manual Integrations
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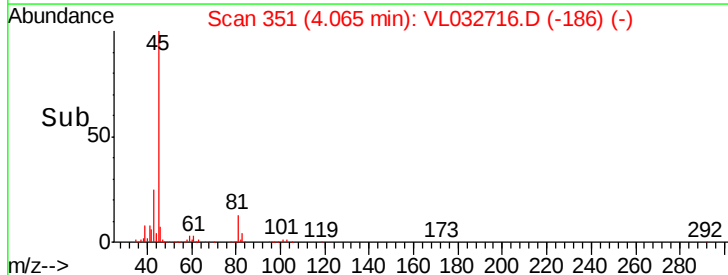
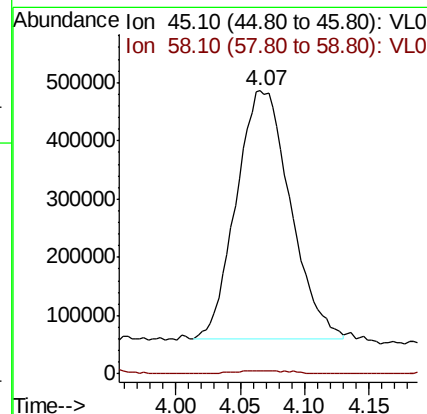
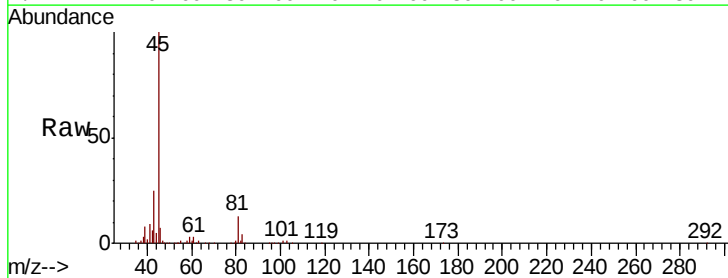
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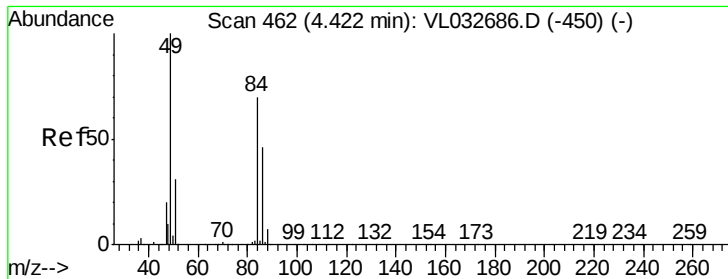


#19

Isopropyl Alcohol
 Concen: 13.311 ppbv
 RT: 4.07 min Scan# 351
 Delta R.T. 0.03 min
 Lab File: VL032716.D
 Acq: 7 Nov 2018 14:20

Tgt Ion	Ratio	Lower	Upper
45	100		
58	1.5	2.0	3.0#





#20

Methvlene Chloride

Concen: 0.571 ppbv

RT: 4.42 min Scan# 461

Delta R.T. -0.00 min

Lab File: VL032716.D

Acq: 7 Nov 2018 14:20

Instrument :

MSVOA_L

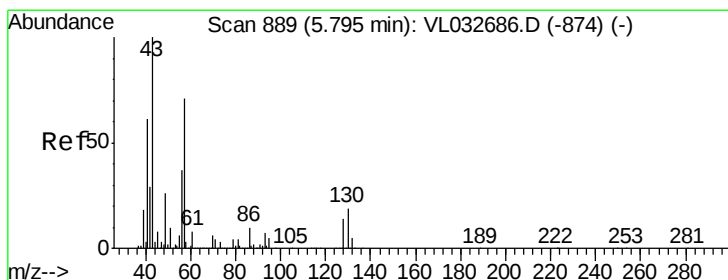
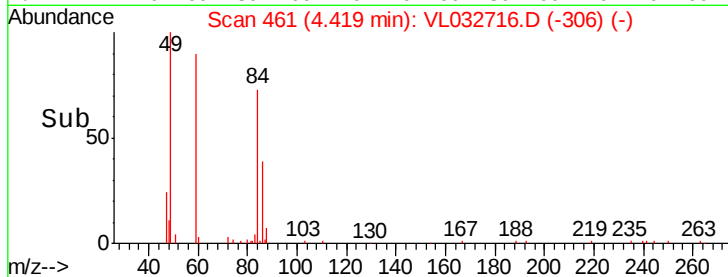
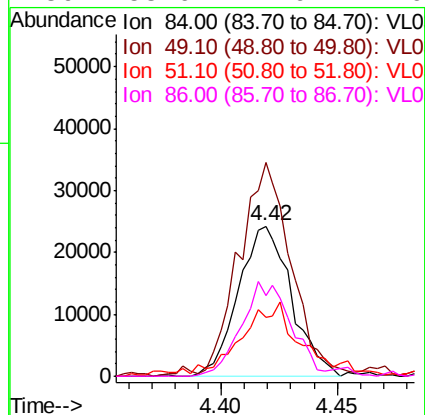
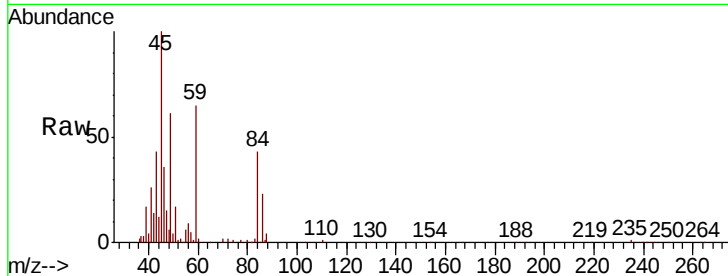
ClientSampleId :

LIHA-IA-DUP-110118

Tot Ion:	84	Resp:	38358
Ion	Ratio	Lower	Upper
84	100		
49	139.0	113.5	170.3
51	37.4	34.8	52.2
86	53.6	47.9	71.9

Manual Integrations
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#26

Hexane

Concen: 0.523 ppbv

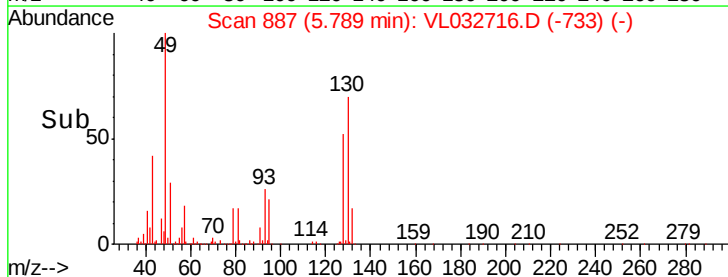
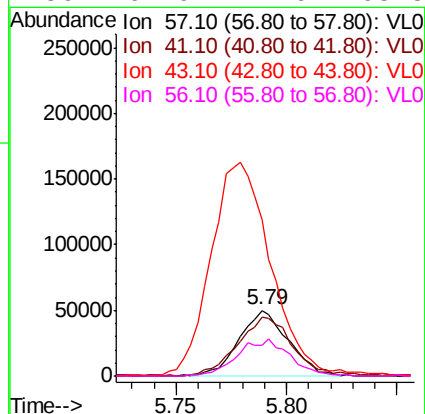
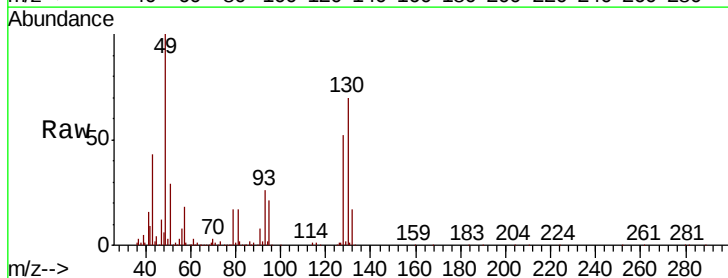
RT: 5.79 min Scan# 887

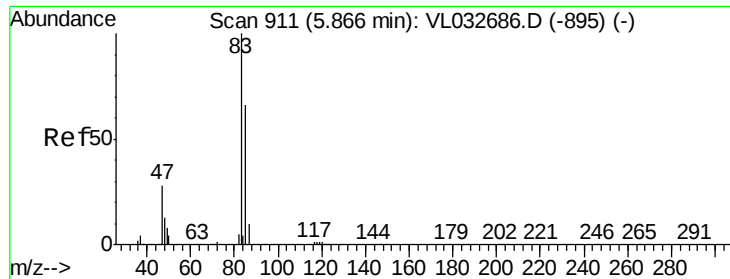
Delta R.T. -0.00 min

Lab File: VL032716.D

Acq: 7 Nov 2018 14:20

Tgt Ion:	57	Resp:	75380
Ion	Ratio	Lower	Upper
57	100		
41	101.1	67.4	101.0#
43	402.3	171.9	257.9#
56	61.9	42.6	63.8





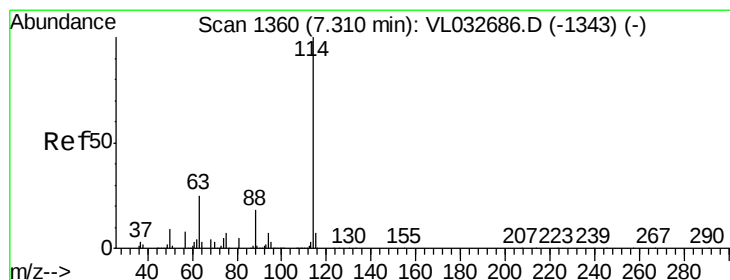
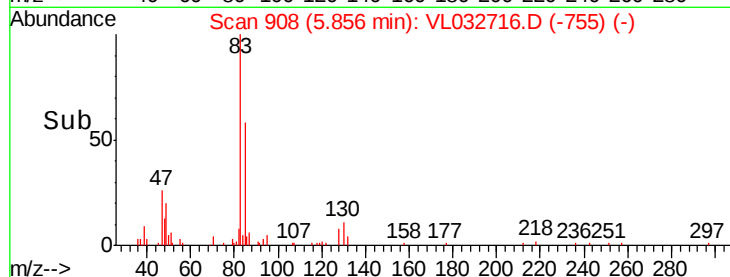
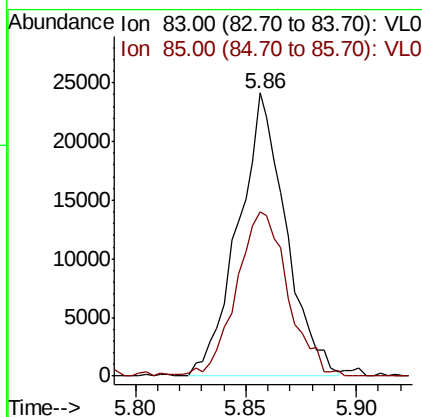
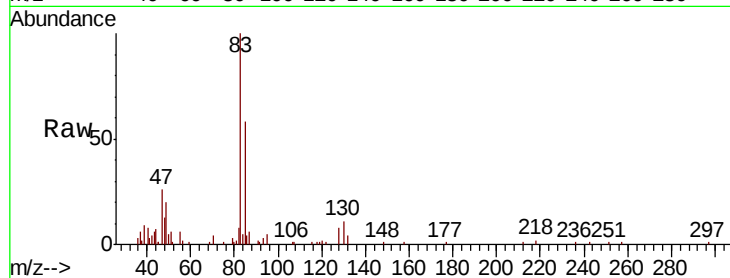
#29
Chloroform
Concen: 0.158 ppbv
RT: 5.86 min Scan# 908
Delta R.T. -0.01 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA-DUP-110118

Tot Ion	83	Resp	36311
Ion Ratio	100	Lower	Upper
85	60.6	53.0	79.6

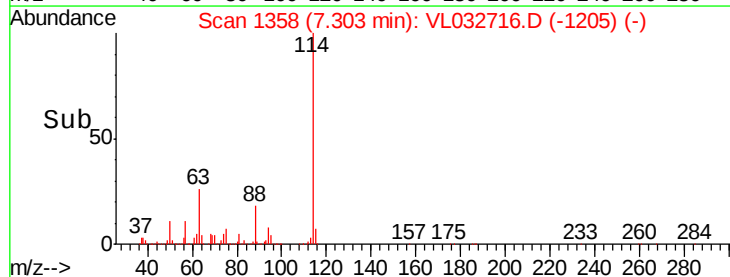
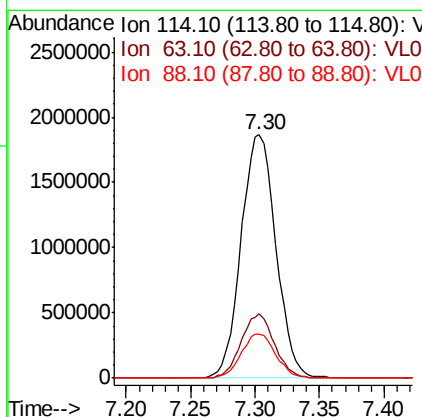
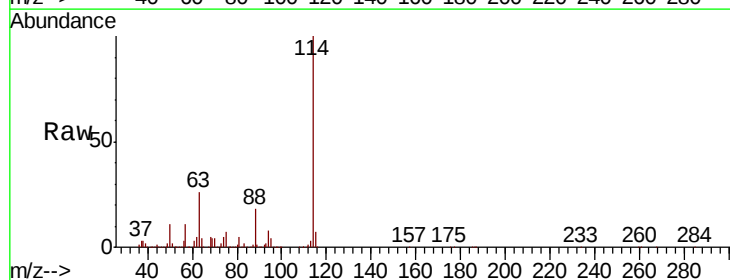
Manual Integrations
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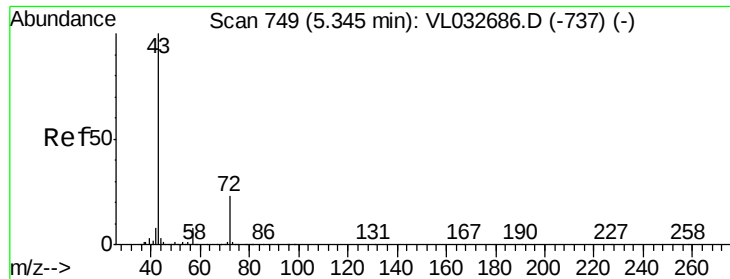
MMDadoda
11/12/2018 12:30:03 PM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.30 min Scan# 1358
Delta R.T. -0.01 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Tgt Ion	114	Resp	3505999
Ion Ratio	100	Lower	Upper
63	25.4	21.7	32.5
88	17.9	14.9	22.3





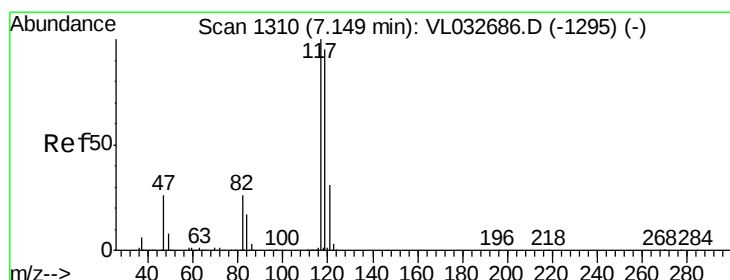
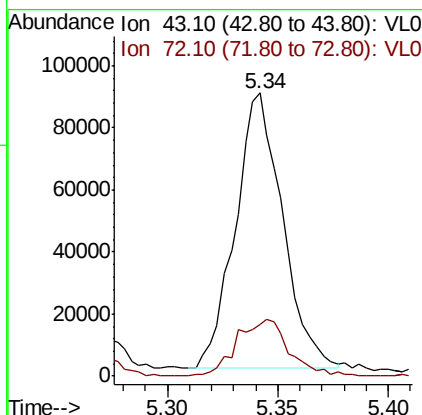
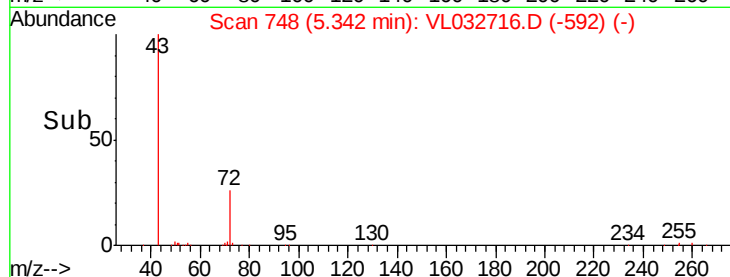
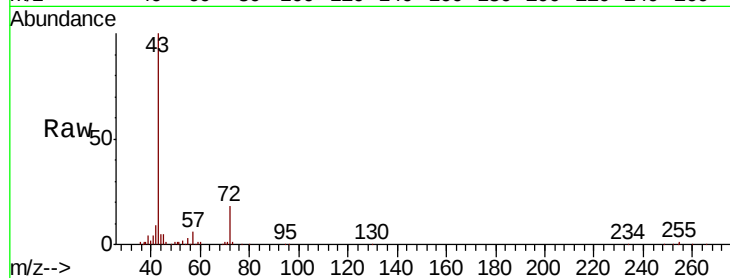
#34
2-Butanone
Concen: 0.698 ppbv
RT: 5.34 min Scan# 748
Delta R.T. 0.00 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA-DUP-110118

Tot Ion: 43 Resp: 131270
Ion Ratio Lower Upper
43 100
72 23.2 18.6 27.8

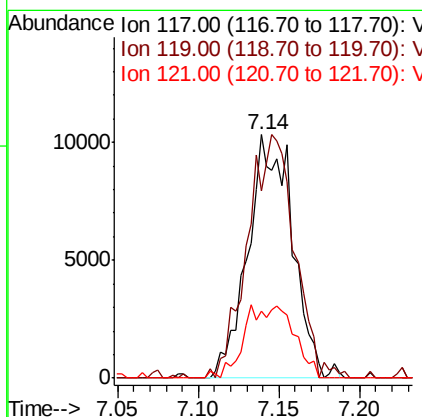
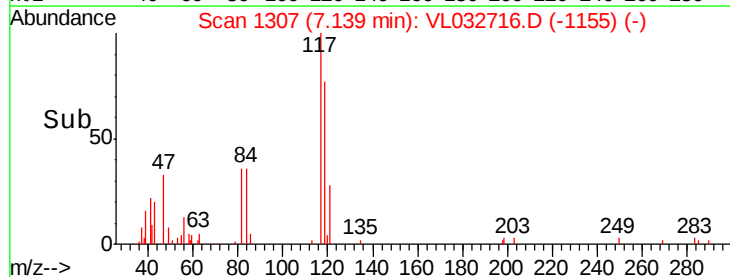
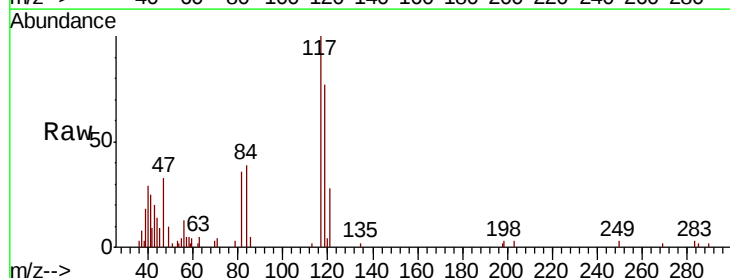
Manual Integrations
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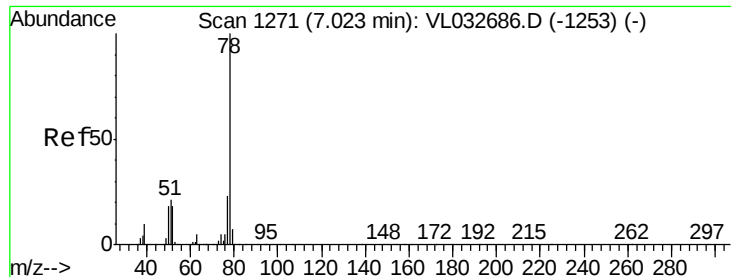
MMDadoda
11/12/2018 12:30:03 PM



#35
Carbon Tetrachloride
Concen: 0.080 ppbv m
RT: 7.14 min Scan# 1307
Delta R.T. -0.01 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Tgt Ion: 117 Resp: 19817
Ion Ratio Lower Upper
117 100
119 77.0 75.7 113.5
121 27.7 24.7 37.1





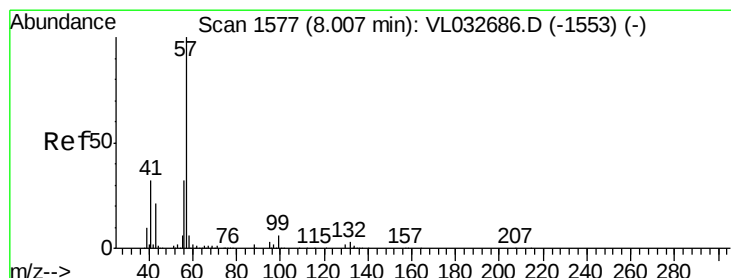
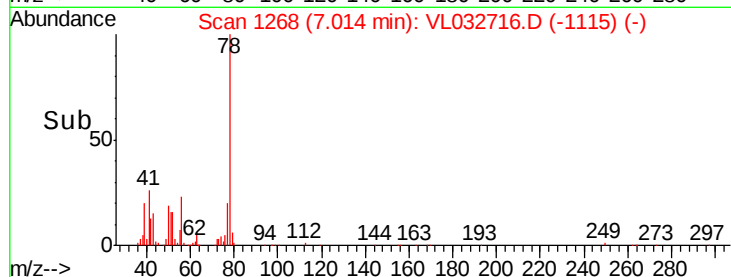
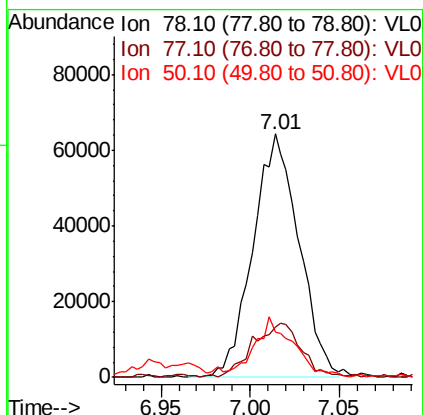
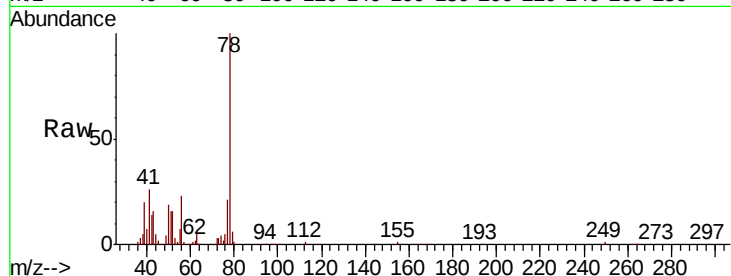
#36
Benzene
Concen: 0.407 ppbv
RT: 7.01 min Scan# 1268
Delta R.T. -0.01 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA-DUP-110118

Tot Ion	Ratio	Lower	Upper
78	100		
77	20.0	18.1	27.1
50	16.9	15.1	22.7

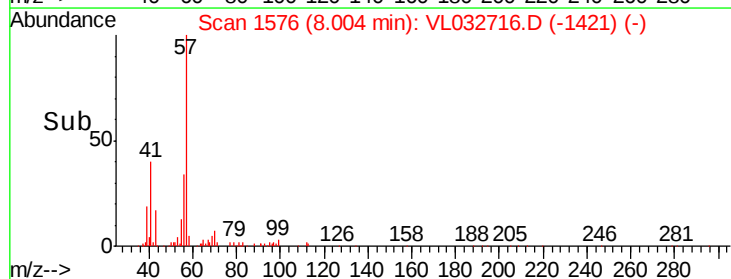
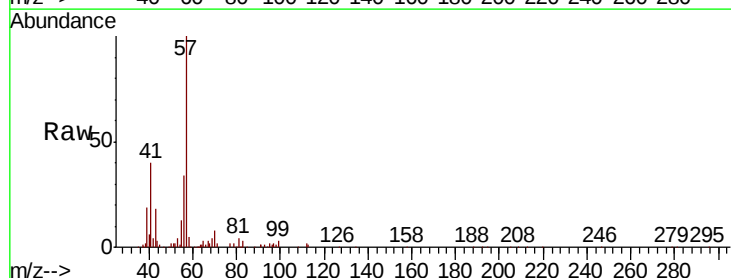
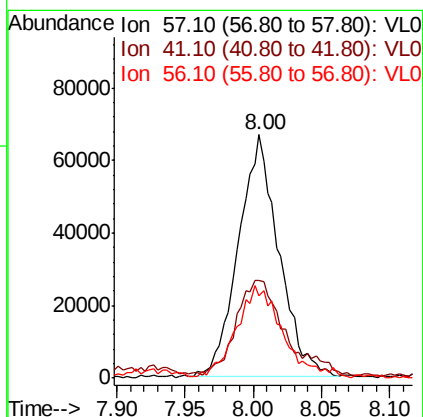
Manual Integrations
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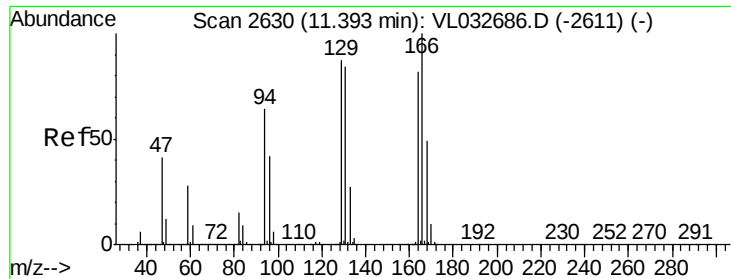
MMDadoda
11/12/2018 12:30:03 PM



#44
2,2,4-Trimethylpentane
Concen: 0.283 ppbv
RT: 8.00 min Scan# 1576
Delta R.T. -0.00 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Tgt Ion	Ratio	Lower	Upper
57	100		
41	50.7	24.7	37.1#
56	44.6	25.0	37.4#





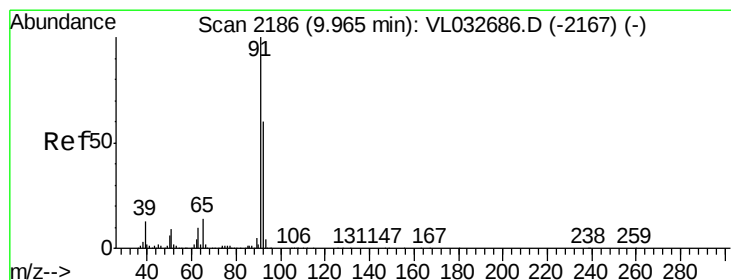
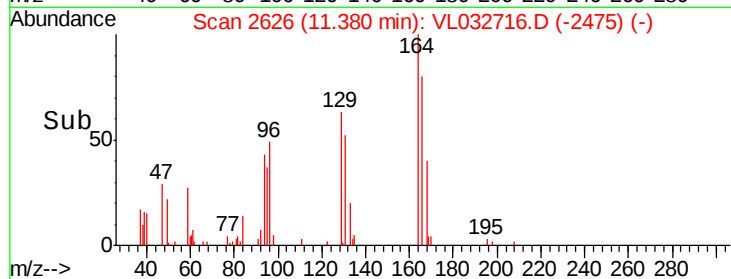
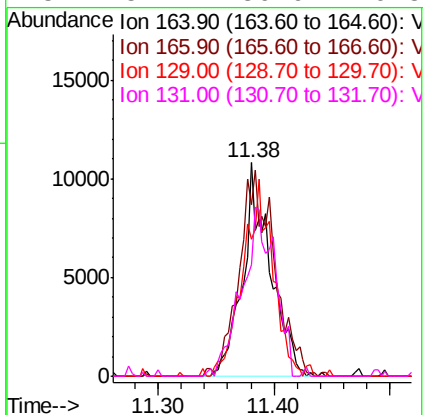
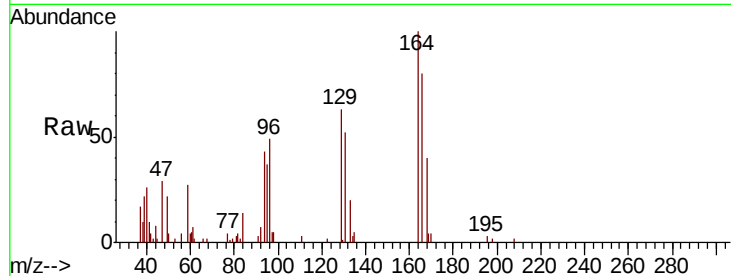
#52
Tetrachloroethene
Concen: 0.179 ppbv m
RT: 11.38 min Scan# 2626
Delta R.T. -0.01 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA-DUP-110118

Tot Ion	Ratio	Lower	Upper
164	100		
166	80.1	100.5	150.7#
129	62.8	90.0	135.0#
131	52.2	86.6	129.8#

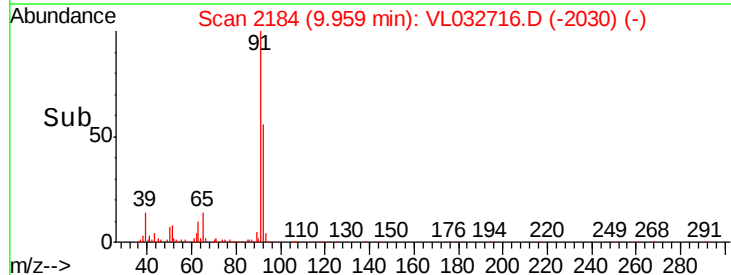
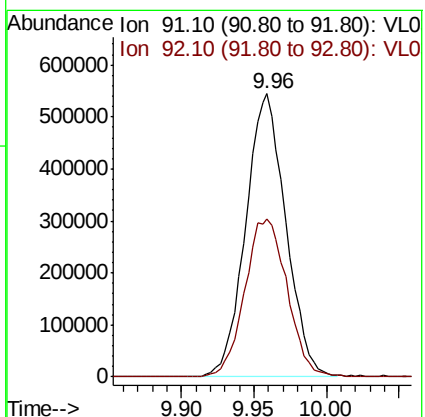
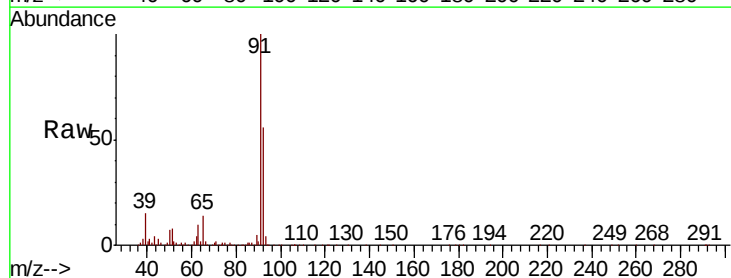
Manual Integrations
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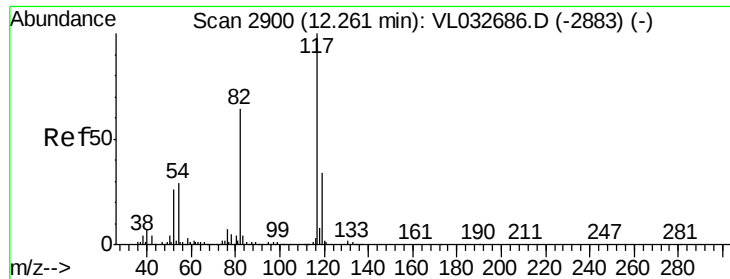
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#53
Toluene
Concen: 3.213 ppbv
RT: 9.96 min Scan# 2184
Delta R.T. -0.00 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Tgt Ion	Ratio	Lower	Upper
91	100		
92	59.0	48.4	72.6





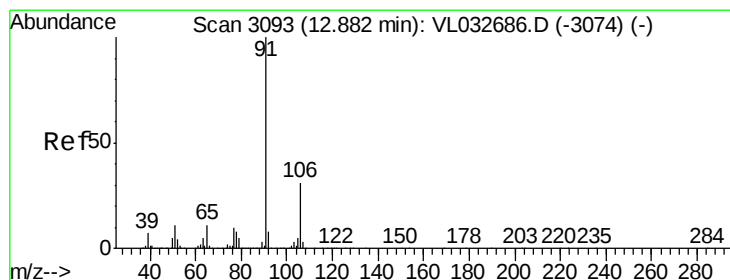
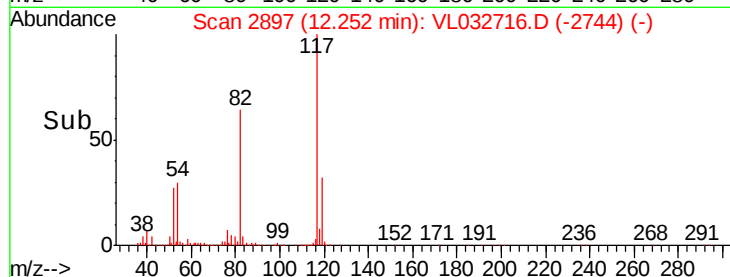
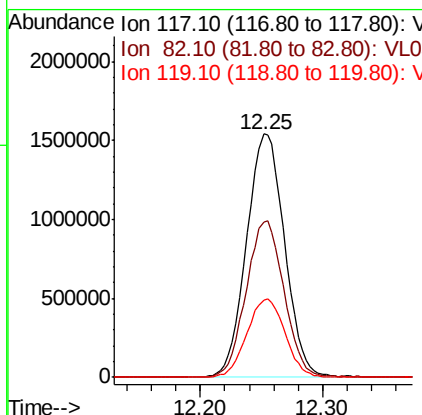
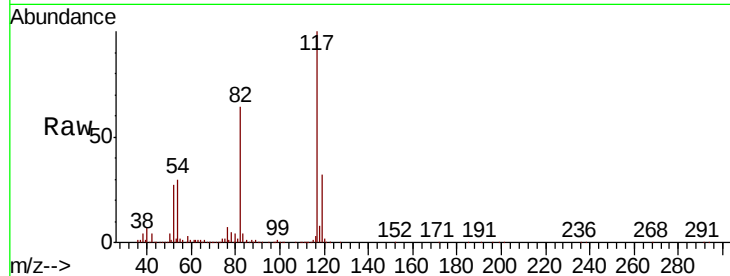
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2897
Delta R.T. -0.01 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA-DUP-110118

Tot Ion	Ratio	Lower	Upper
117	100		
82	64.2	52.7	79.1
119	32.5	26.7	40.1

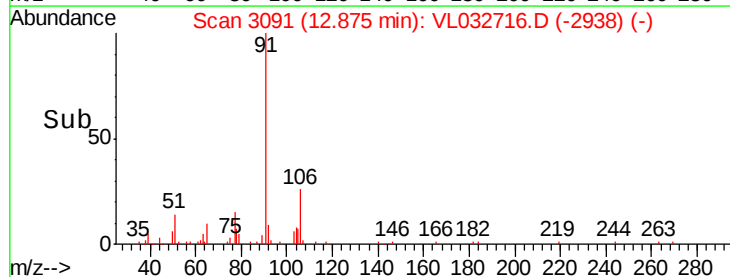
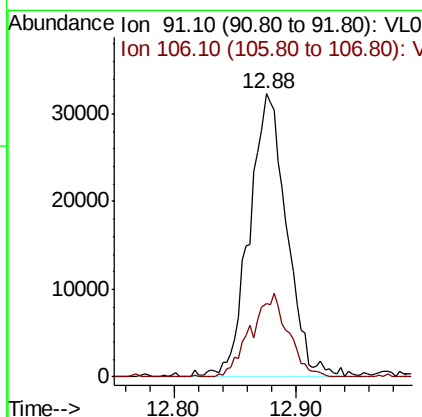
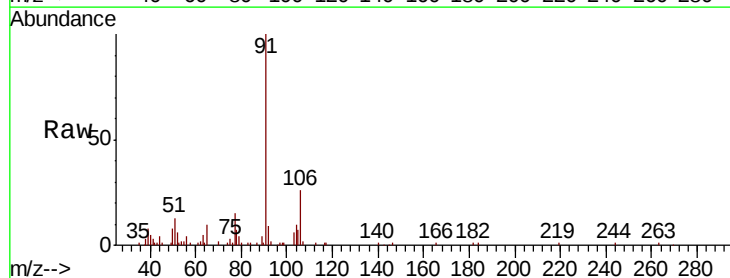
Manual Integrations
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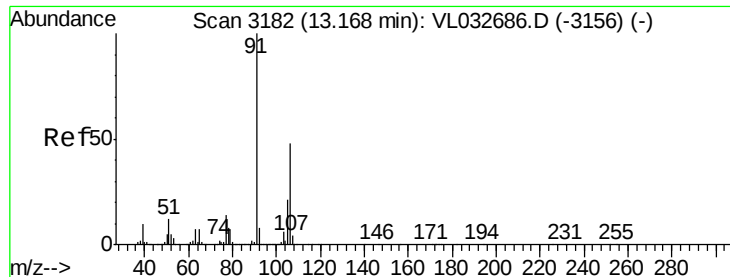
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#58
Ethyl Benzene
Concen: 0.177 ppbv m
RT: 12.88 min Scan# 3091
Delta R.T. -0.01 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Tgt Ion	Ratio	Lower	Upper
91	100		
106	25.9	24.2	36.2





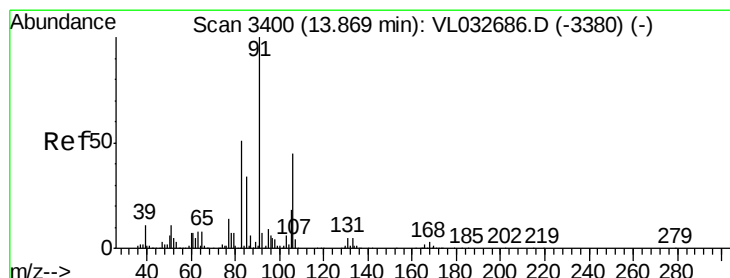
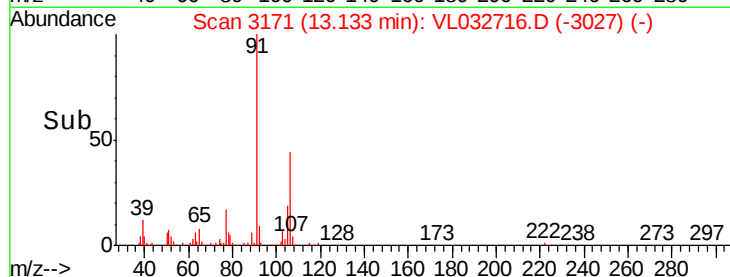
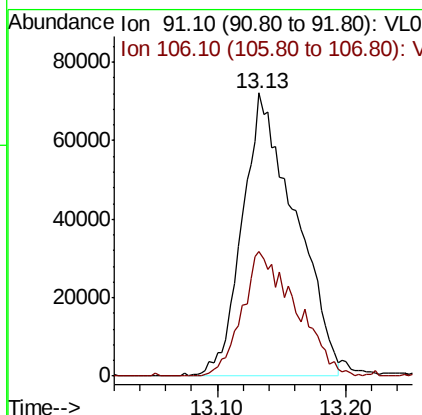
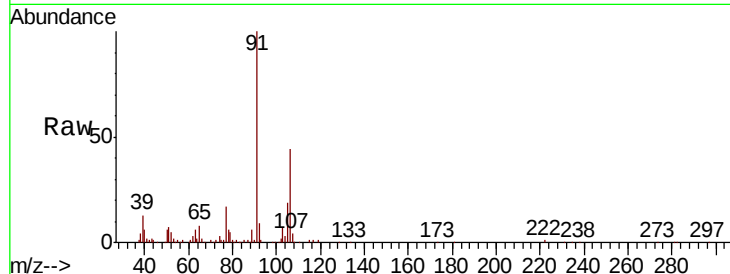
#59
m/p-Xylene
Concen: 0.601 ppbv
RT: 13.13 min Scan# 3171
Delta R.T. -0.04 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA-DUP-110118

Tot Ion: 91 Resp: 206087
Ion Ratio Lower Upper
91 100
106 45.0 35.9 53.9

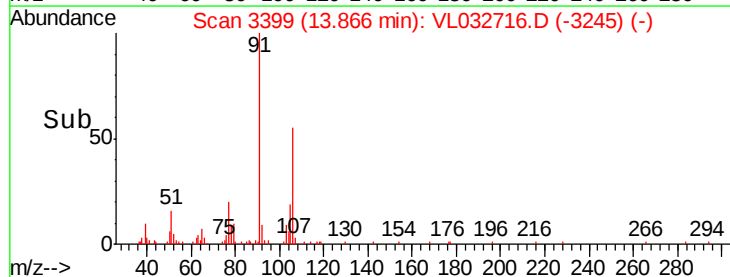
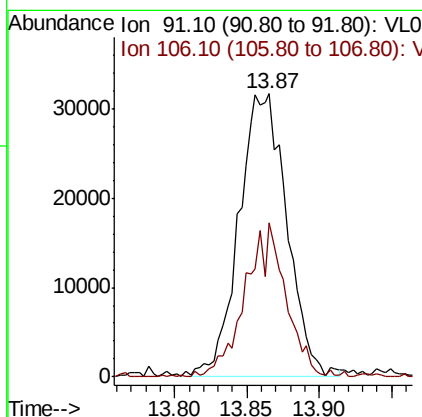
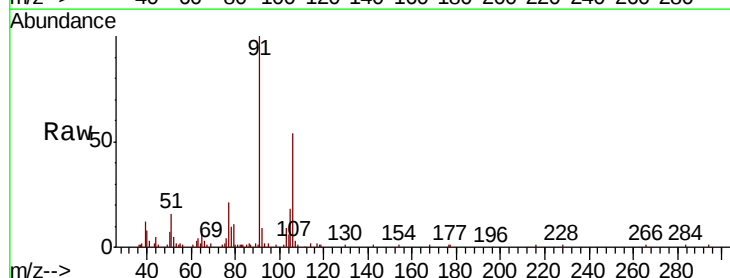
Manual Integrations
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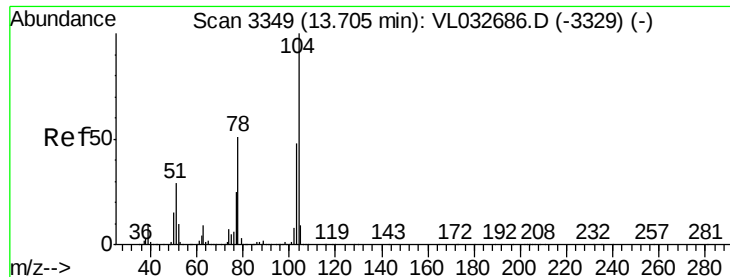
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#60
o-Xylene
Concen: 0.221 ppbv m
RT: 13.87 min Scan# 3399
Delta R.T. -0.00 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Tgt Ion: 91 Resp: 73034
Ion Ratio Lower Upper
91 100
106 46.3 22.1 66.1





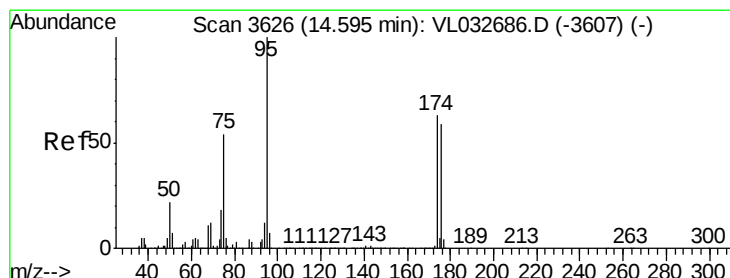
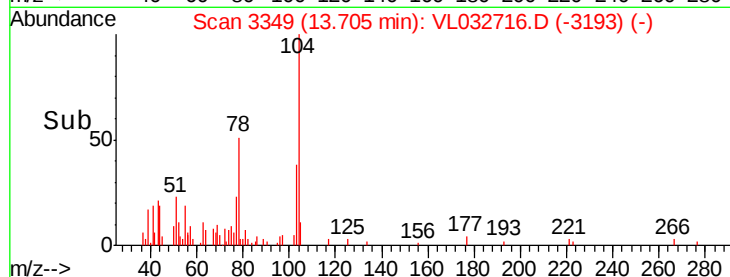
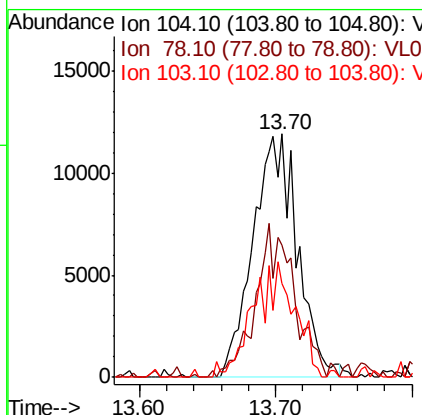
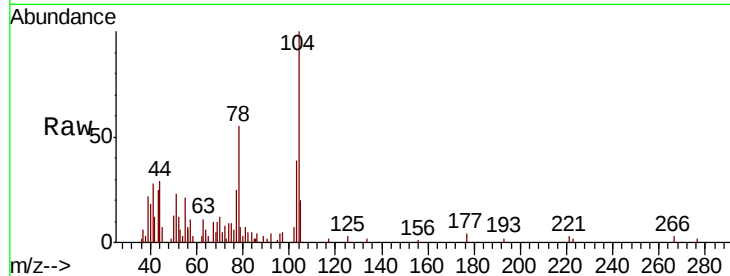
#61
Stvrene
Concen: 0.121 ppbv m
RT: 13.70 min Scan# 3349
Delta R.T. 0.00 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA-DUP-110118

Tot Ion	Ratio	Lower	Upper
104	100		
78	57.9	42.8	64.2
103	0.0	37.4	56.0#

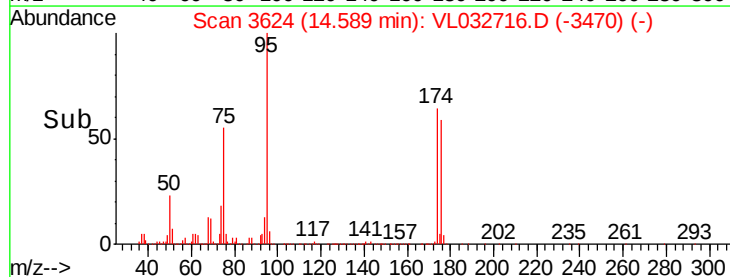
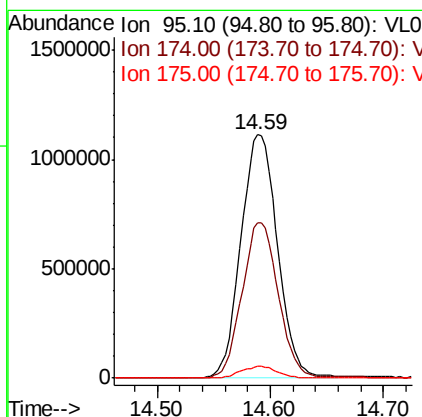
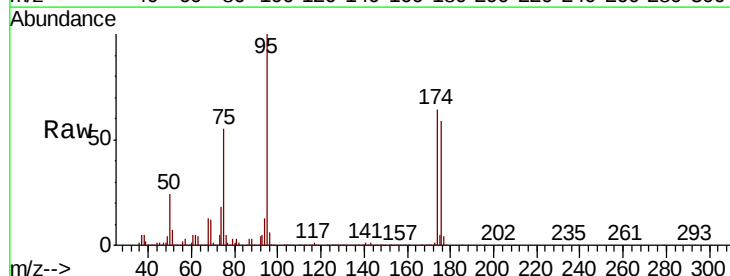
Manual Integrations
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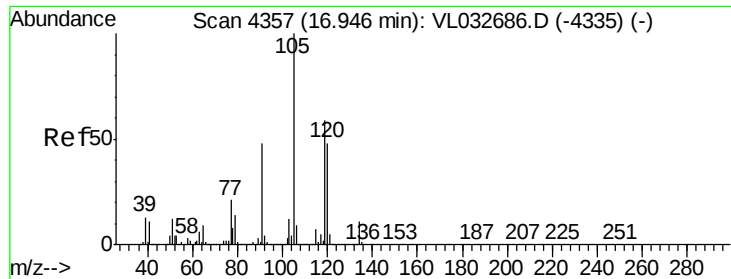
MMDadoda
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.185 ppbv
RT: 14.59 min Scan# 3624
Delta R.T. -0.00 min
Lab File: VL032716.D
Acq: 7 Nov 2018 14:20

Tgt Ion	Ratio	Lower	Upper
95	100		
174	64.1	46.0	69.0
175	4.9	3.4	5.0





#74
 1,2,4-Trimethylbenzene
 Concen: 0.353 ppbv
 RT: 16.94 min Scan# 4355
 Delta R.T. -0.01 min
 Lab File: VL032716.D
 Acq: 7 Nov 2018 14:20

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IA-DUP-110118

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	39.8	35.8	53.8
91	11.2	33.2	49.8#
77	10.5	16.2	24.4#

Manual Integrations
 APPROVED

MMDadoda
 11/12/2018 12:30:03 PM

