

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL060118\
 Data File : VL032032.D
 Acq On : 1 Jun 2018 22:14
 Operator : SY/AP
 Sample : J3193-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IA1-052518

Manual Integrations
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 6/4/2018 3:35:48 PM

Quant Time: Jun 03 13:54:57 2018
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL053118AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 0
 QLast Update : Fri Jun 01 02:31:35 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.87	49	1131199	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.40	114	2162639	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.37	117	2137684	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.71	95	1716368	10.39	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.15	85	26459m	0.19	ppbv	
3) Chlorodifluoromethane	3.09	51	53460m	0.50	ppbv	
4) Chloromethane	3.24	50	30856	0.57	ppbv	93
10) Heptane	8.37	43	80109	0.65	ppbv	91
11) Trichlorofluoromethane	4.09	101	44072	0.21	ppbv #	76
13) Ethanol	3.81	45	38500826m	2834.71	ppbv	
15) Acetone	3.98	43	1391762	10.20	ppbv #	88
19) Isopropyl Alcohol	4.21	45	2488265m	27.55	ppbv	
20) Methylene Chloride	4.50	84	133265	2.15	ppbv	98
25) Ethyl Acetate	5.87	43	536783	1.99	ppbv #	96
26) Hexane	5.88	57	352794	2.81	ppbv #	76
29) Chloroform	5.95	83	54694	0.26	ppbv	97
34) 2-Butanone	5.43	43	83679	0.49	ppbv	100
35) Carbon Tetrachloride	7.25	117	15034m	0.08	ppbv	
36) Benzene	7.12	78	138607	0.73	ppbv	94
44) 2,2,4-Trimethylpentane	8.11	57	487733	1.50	ppbv #	88
52) Tetrachloroethene	11.50	164	9017m	0.12	ppbv	
53) Toluene	10.07	91	1125642	5.29	ppbv	99
58) Ethyl Benzene	12.99	91	63858m	0.21	ppbv	
59) m/p-Xylene	13.24	91	168380m	0.64	ppbv	
60) o-Xylene	13.97	91	68594	0.26	ppbv	98
61) Styrene	13.82	104	31434	0.62	ppbv #	86
73) 1,3,5-Trimethylbenzene	16.28	105	45990	0.19	ppbv	89
74) 1,2,4-Trimethylbenzene	17.05	105	128458	0.47	ppbv #	74

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

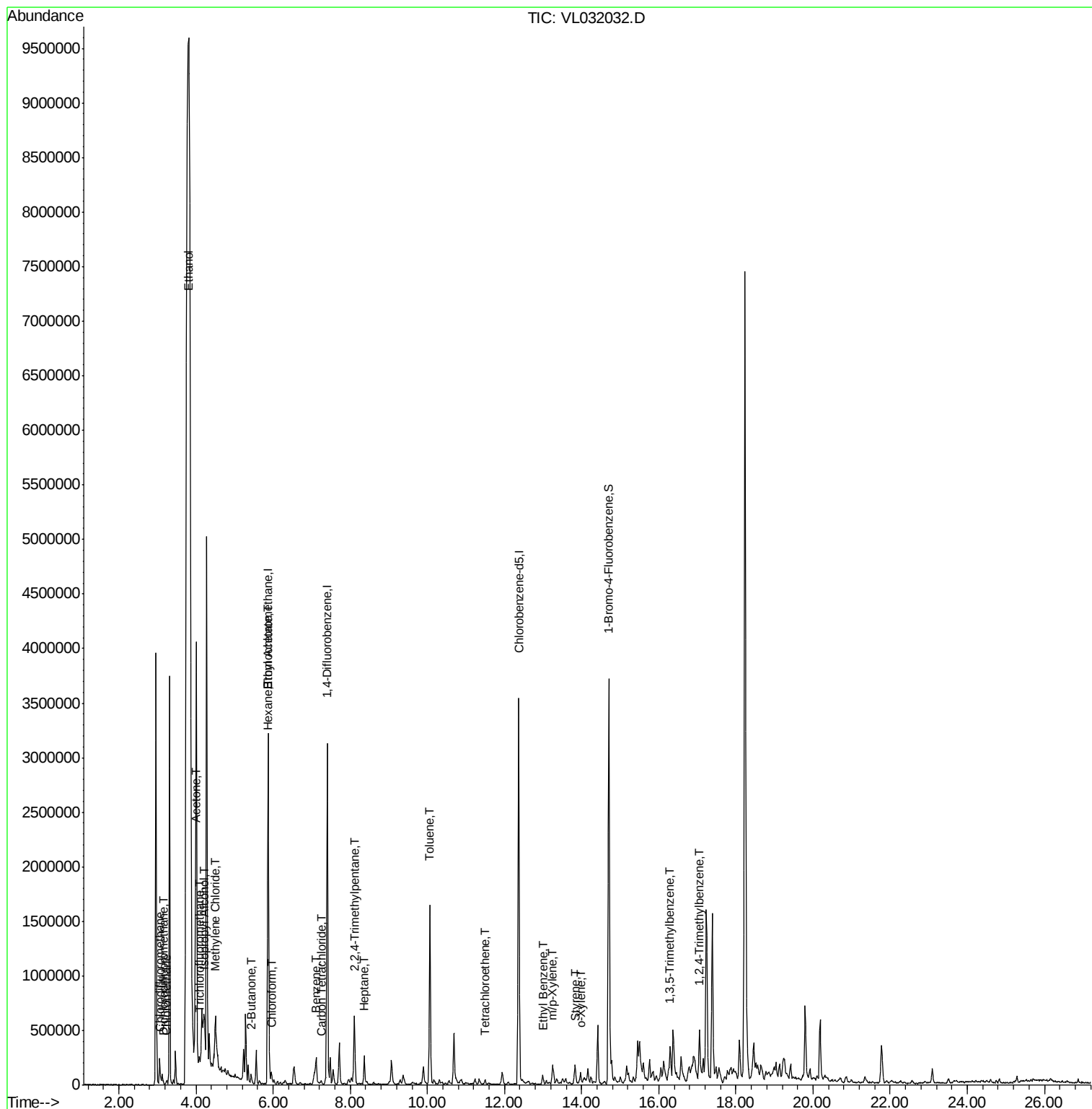
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL060118\
Data File : VL032032.D
Acq On : 1 Jun 2018 22:14
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Misc : 400ml/MSVOA L
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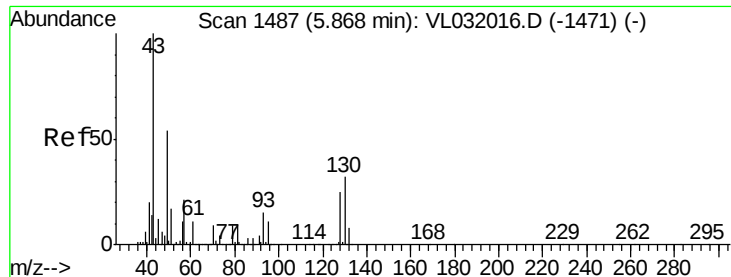
Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA1-052518

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Quant Time: Jun 03 13:54:57 2018
Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL053118AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Jun
QLast Update : Fri Jun 01 02:31:35 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.87 min Scan# 1487

Delta R.T. 0.00 min

Lab File: VL032032.D

Acq: 1 Jun 2018 22:14

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IA1-052518

Tot Ion: 49 Resp: 1131199

Ion Ratio Lower Upper

49 100

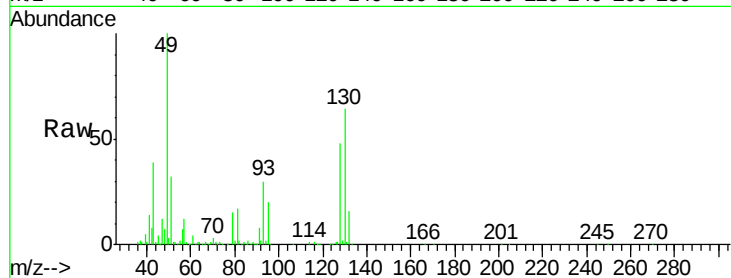
128 49.1 24.1 72.3

130 63.2 30.9 92.8

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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

5.87

600000

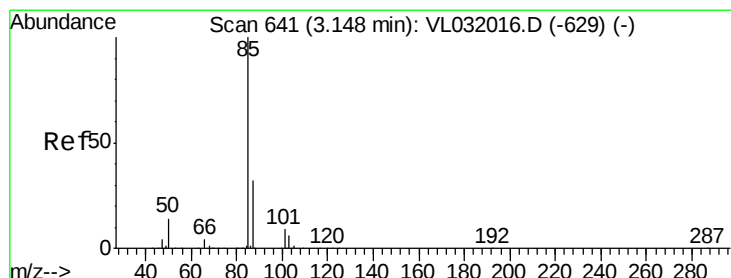
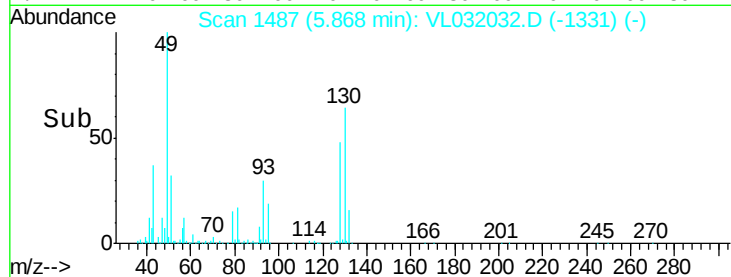
400000

200000

0

5.80 5.85 5.90 5.95

Time-->



#2

Dichlorodifluoromethane

Concen: 0.19 ppbv m

RT: 3.15 min Scan# 641

Delta R.T. 0.00 min

Lab File: VL032032.D

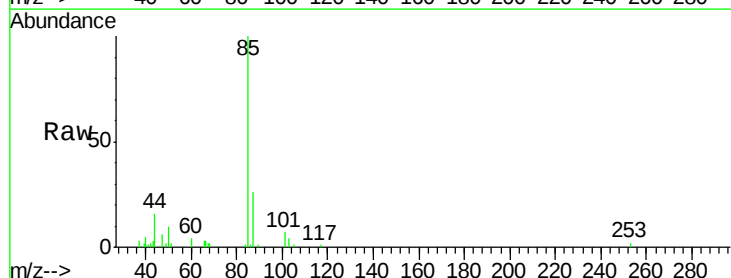
Acq: 1 Jun 2018 22:14

Tgt Ion: 85 Resp: 26459

Ion Ratio Lower Upper

85 100

87 25.5 25.5 38.3#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

25000

20000

15000

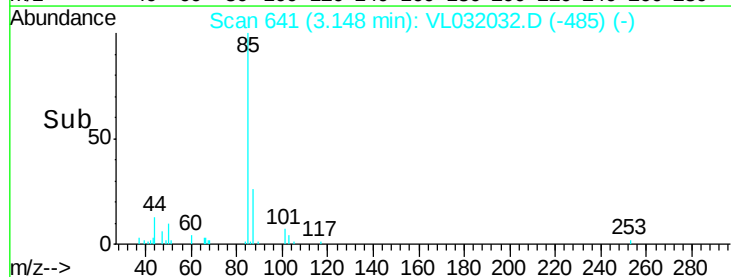
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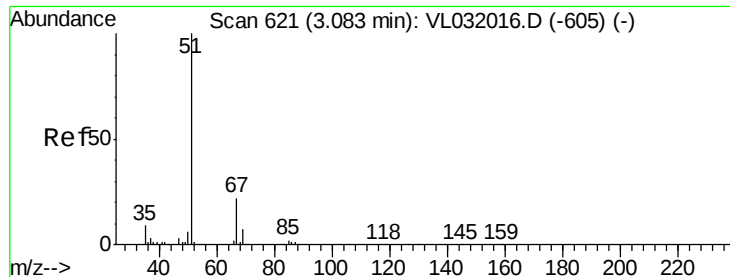
5000

0

3.10 3.15 3.20

Time-->





#3

Chlorodifluoromethane

Concen: 0.50 ppbv m

RT: 3.09 min Scan# 622

Delta R.T. 0.00 min

Lab File: VL032032.D

Acq: 1 Jun 2018 22:14

Tot Ion: 51 Resp: 53460

Ion Ratio Lower Upper

51 100

67 23.2 17.2 25.8

Instrument :

MSVOA_L

ClientSampleId :

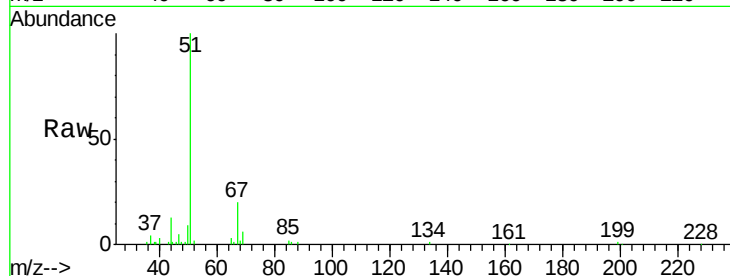
LIHA-IA1-052518

Manual Integrations

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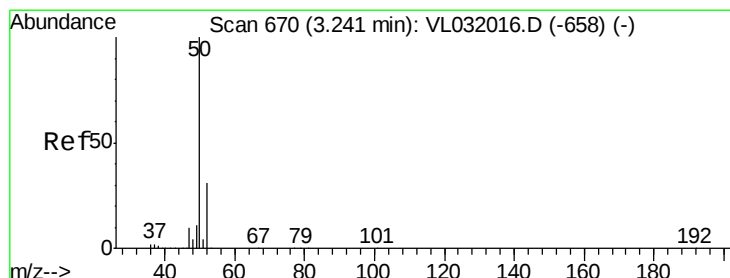
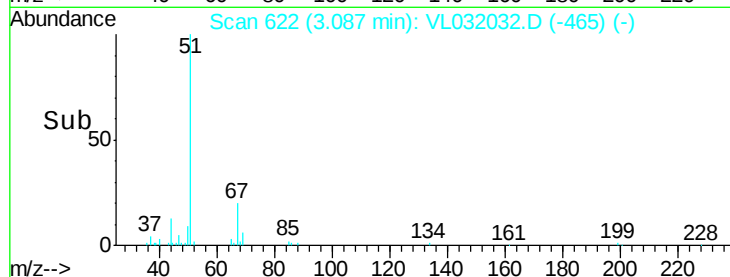
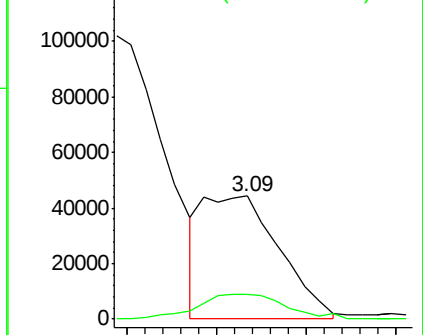
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.57 ppbv

RT: 3.24 min Scan# 671

Delta R.T. 0.00 min

Lab File: VL032032.D

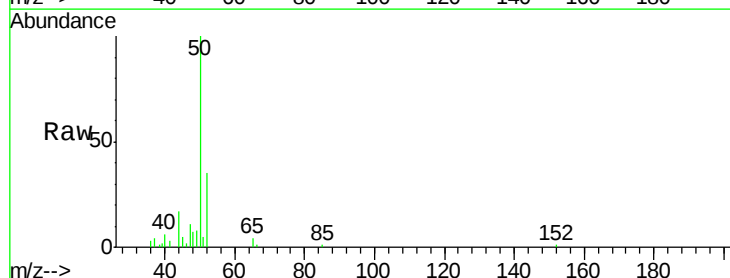
Acq: 1 Jun 2018 22:14

Tgt Ion: 50 Resp: 30856

Ion Ratio Lower Upper

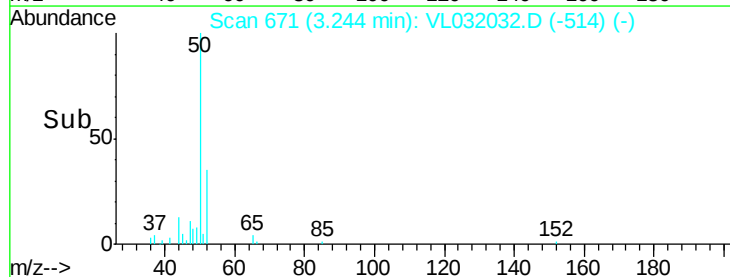
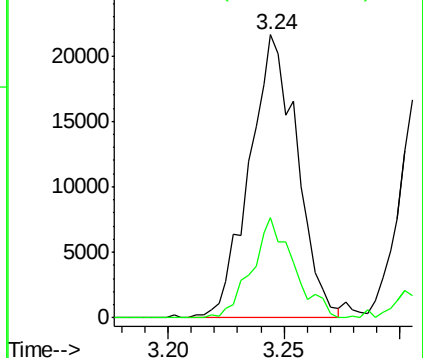
50 100

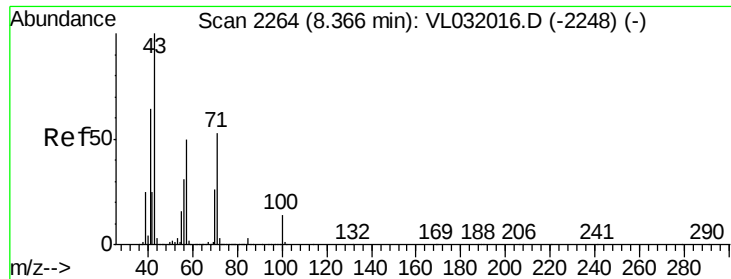
52 35.4 25.0 37.6



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





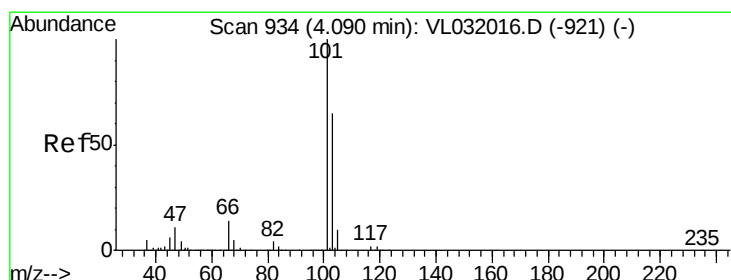
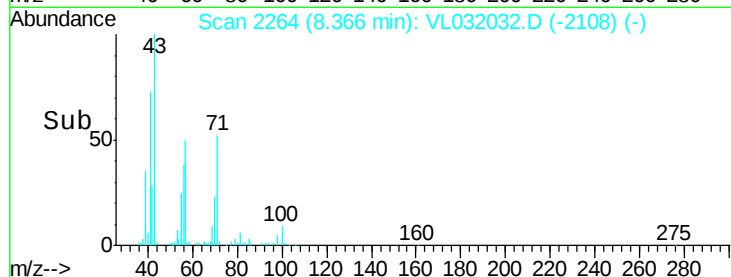
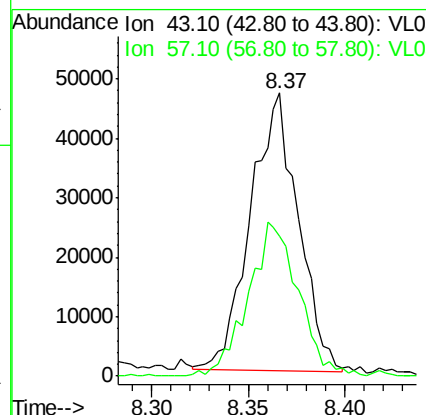
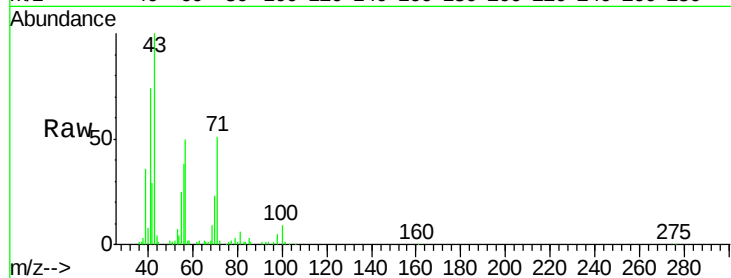
#10
Heptane
Concen: 0.65 ppbv
RT: 8.37 min Scan# 2264
Delta R.T. 0.00 min
Lab File: VL032032.D
Acq: 1 Jun 2018 22:14

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA1-052518

Tot Ion: 43 Resp: 80109
Ion Ratio Lower Upper
43 100
57 58.7 41.7 62.5

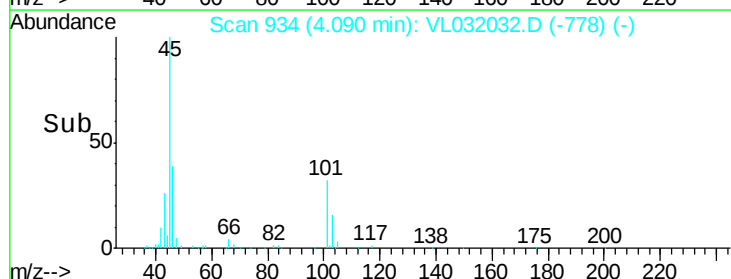
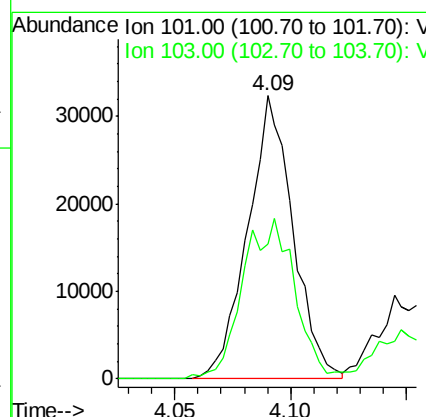
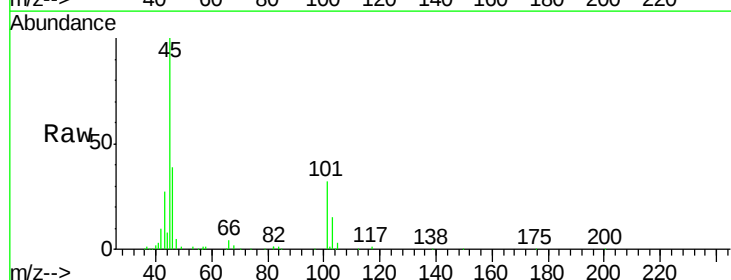
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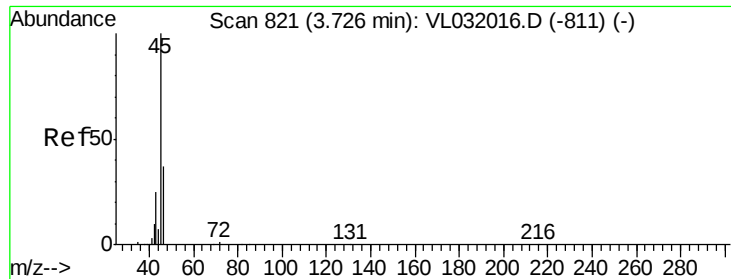
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#11
Trichlorofluoromethane
Concen: 0.21 ppbv
RT: 4.09 min Scan# 934
Delta R.T. 0.00 min
Lab File: VL032032.D
Acq: 1 Jun 2018 22:14

Tgt Ion: 101 Resp: 44072
Ion Ratio Lower Upper
101 100
103 46.2 52.0 78.0#





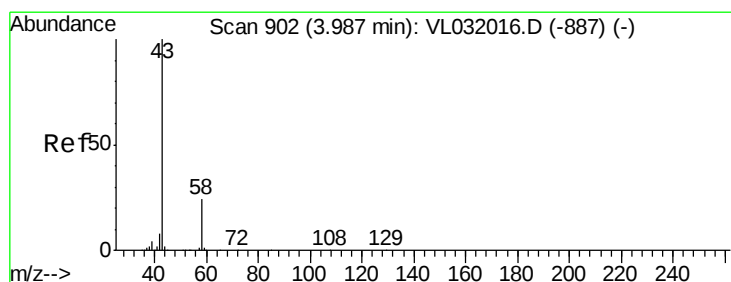
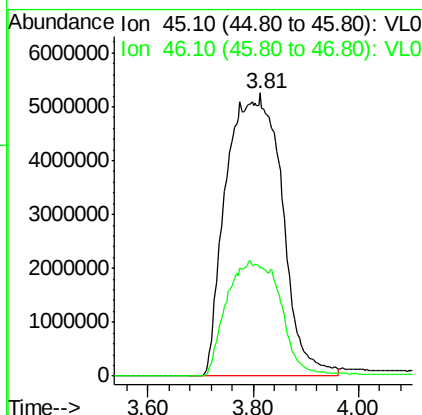
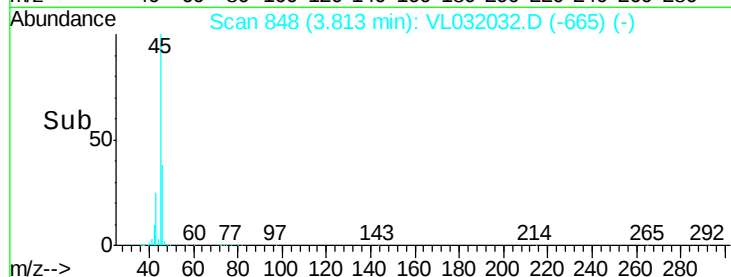
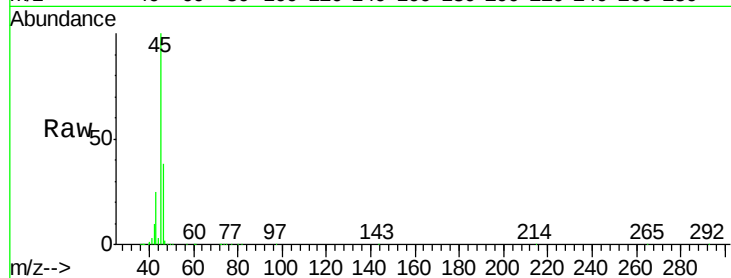
#13
Ethanol
Concen: 2834.71 ppbv m
RT: 3.81 min Scan# 848
Delta R.T. 0.09 min
Lab File: VL032032.D
Acq: 1 Jun 2018 22:14

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA1-052518

Tot Ion: 45 Resp: 38500826
Ion Ratio Lower Upper
45 100
46 0.0 14.9 59.5#

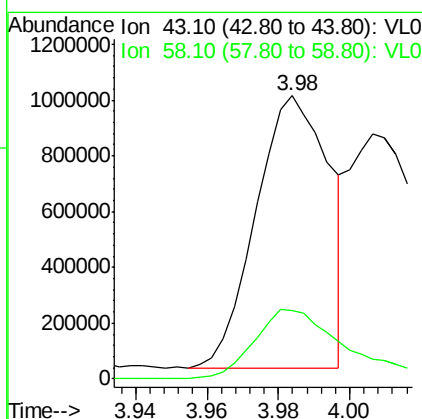
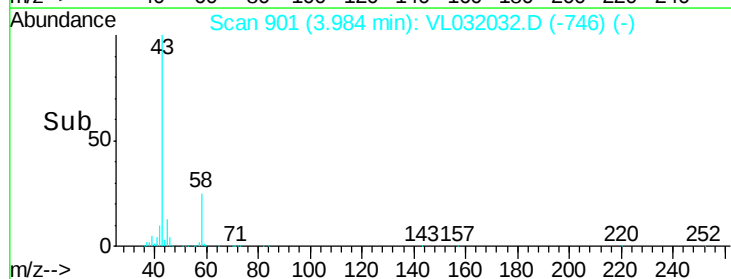
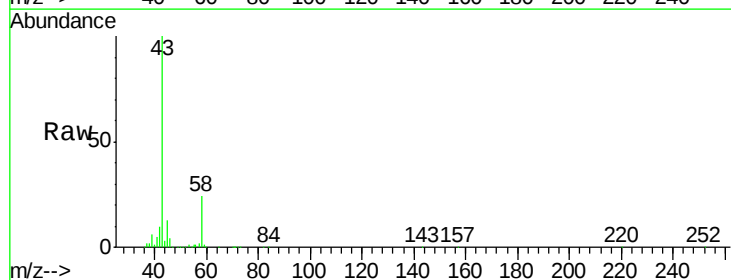
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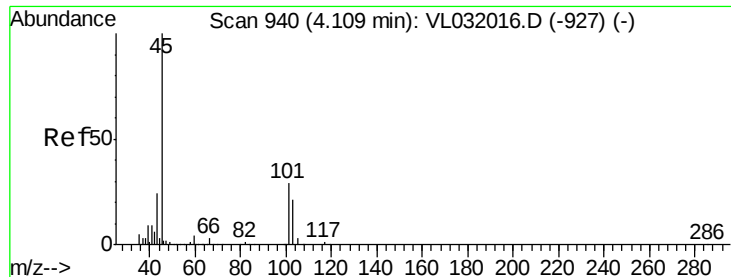
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#15
Acetone
Concen: 10.20 ppbv
RT: 3.98 min Scan# 901
Delta R.T. -0.00 min
Lab File: VL032032.D
Acq: 1 Jun 2018 22:14

Tgt Ion: 43 Resp: 1391762
Ion Ratio Lower Upper
43 100
58 32.1 20.7 31.1#





#19

Isopropyl Alcohol

Concen: 27.55 ppbv m

RT: 4.21 min Scan# 972

Delta R.T. 0.10 min

Lab File: VL032032.D

Acq: 1 Jun 2018 22:14

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IA1-052518

Tot Ion: 45 Resp: 2488265

Ion Ratio Lower Upper

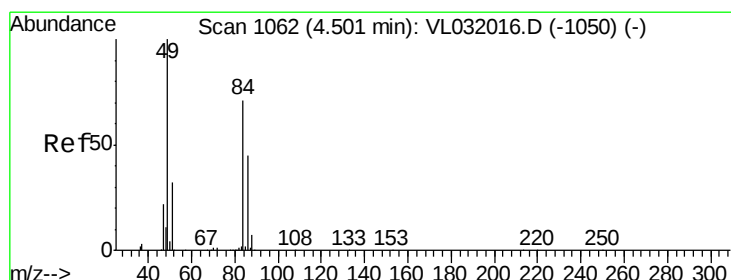
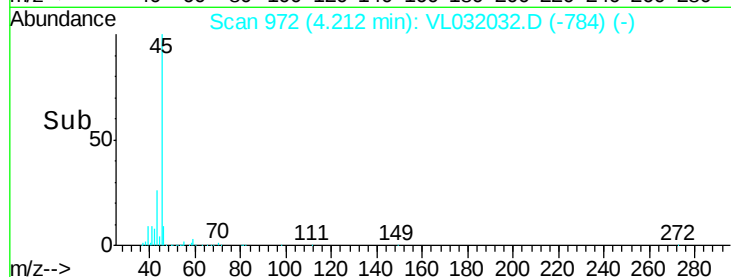
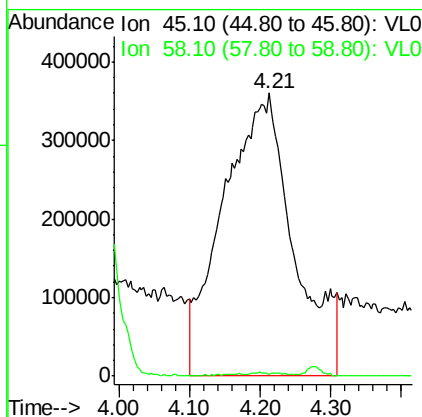
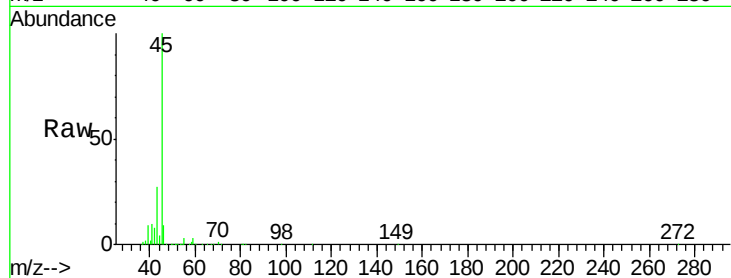
45 100

58 0.0 1.5 2.3#

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#20

Methylene Chloride

Concen: 2.15 ppbv

RT: 4.50 min Scan# 1061

Delta R.T. -0.00 min

Lab File: VL032032.D

Acq: 1 Jun 2018 22:14

Tgt Ion: 84 Resp: 133265

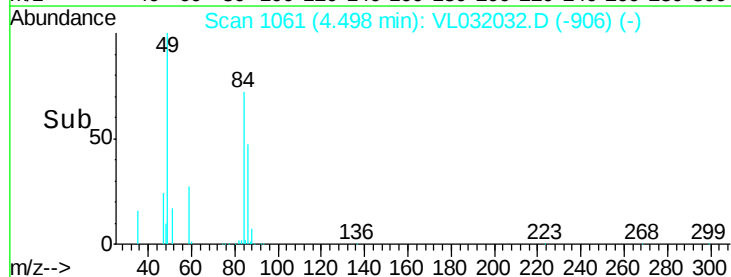
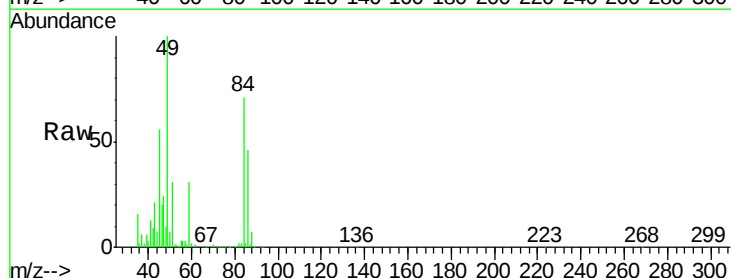
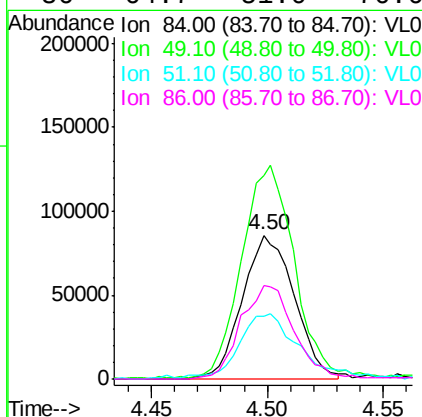
Ion Ratio Lower Upper

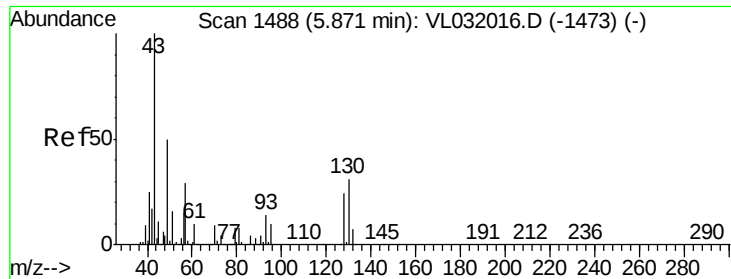
84 100

49 140.7 113.0 169.4

51 41.5 36.4 54.6

86 64.7 51.0 76.6





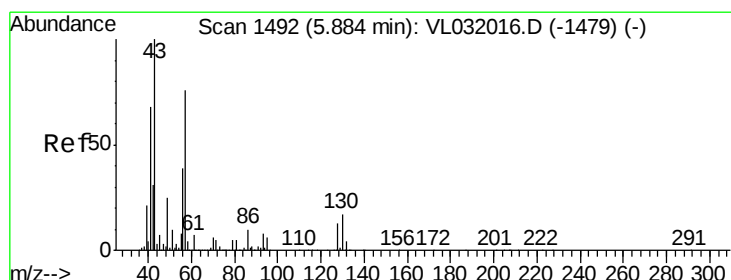
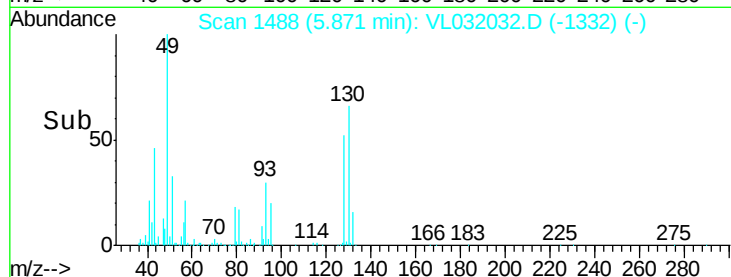
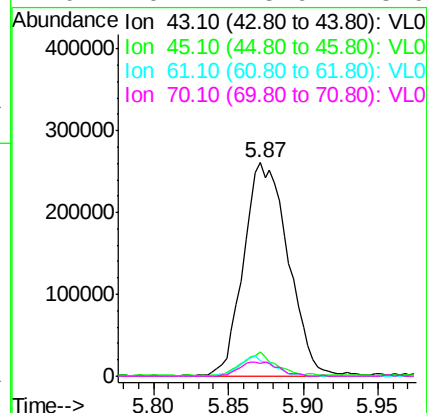
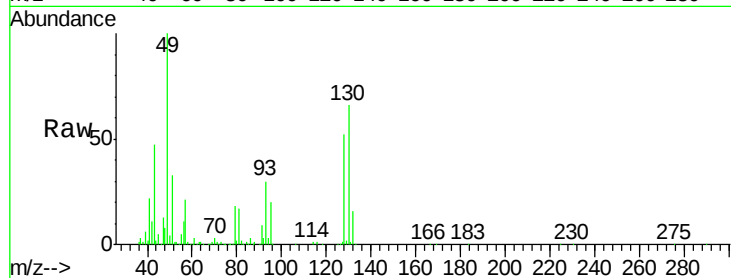
#25
Ethyl Acetate
Concen: 1.99 ppbv
RT: 5.87 min Scan# 1488
Delta R.T. 0.00 min
Lab File: VL032032.D
Acq: 1 Jun 2018 22:14

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA1-052518

Tot Ion	Ratio	Lower	Upper
43	100		
45	8.7	7.8	11.6
61	7.1	7.4	11.2#
70	6.2	5.9	8.9

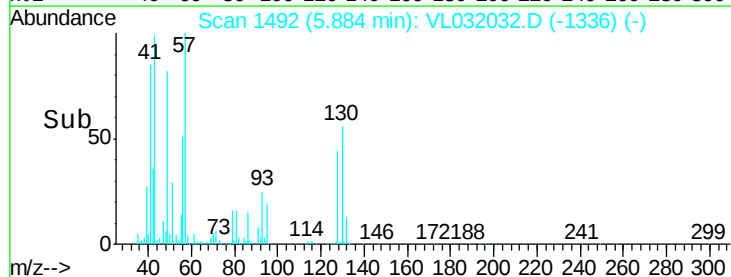
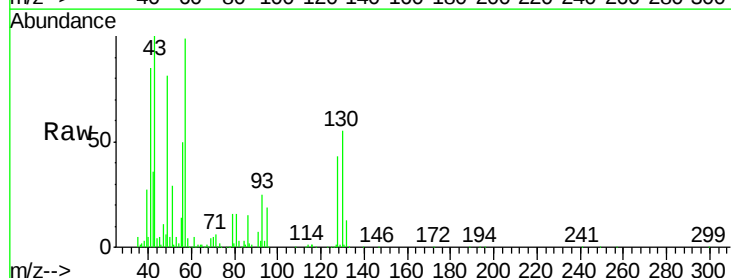
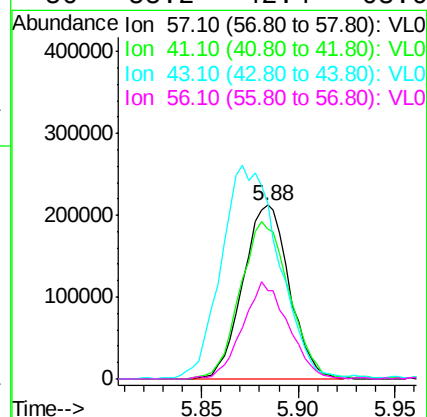
Manual Integrations
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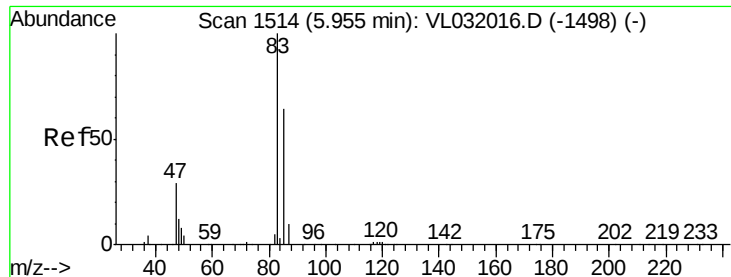
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#26
Hexane
Concen: 2.81 ppbv
RT: 5.88 min Scan# 1492
Delta R.T. 0.00 min
Lab File: VL032032.D
Acq: 1 Jun 2018 22:14

Tgt Ion	Ratio	Lower	Upper
57	100		
41	96.7	71.4	107.2
43	154.0	168.6	252.8#
56	55.2	42.4	63.6





#29

Chloroform

Concen: 0.26 ppbv

RT: 5.95 min Scan# 1513

Delta R.T. -0.00 min

Lab File: VL032032.D

Acq: 1 Jun 2018 22:14

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IA1-052518

Tot Ion: 83 Resp: 54694

Ion Ratio Lower Upper

83 100

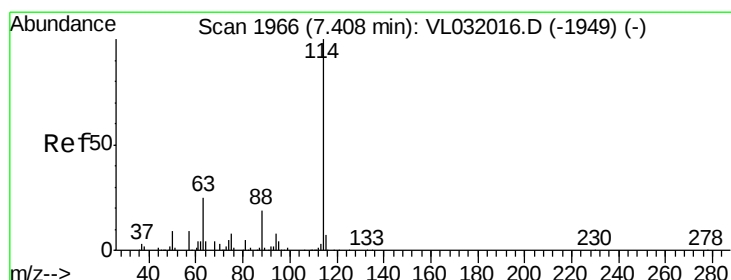
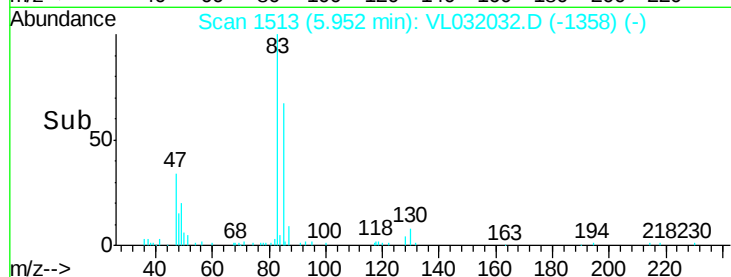
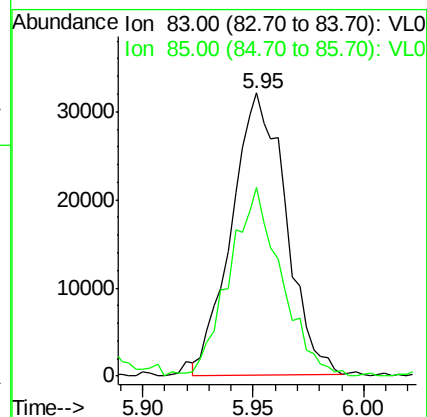
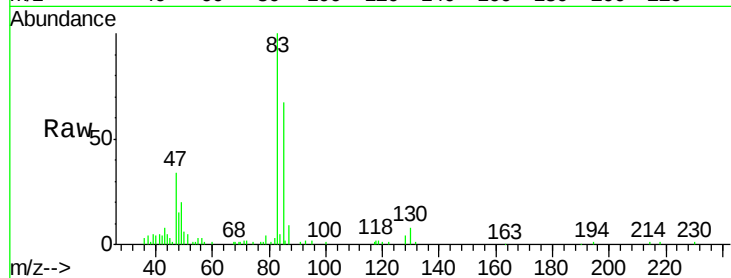
85 65.7 50.9 76.3

Manual Integrations

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#33

1,4-Difluorobenzene

Concen: 10.00 ppbv

RT: 7.40 min Scan# 1965

Delta R.T. -0.00 min

Lab File: VL032032.D

Acq: 1 Jun 2018 22:14

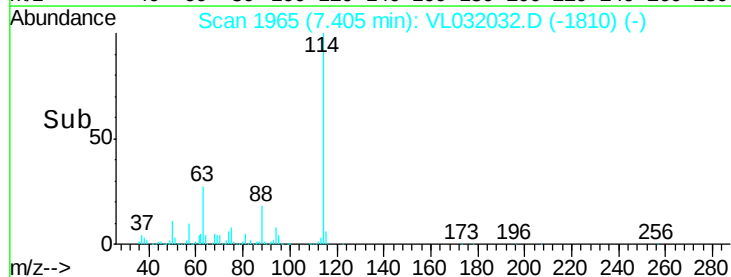
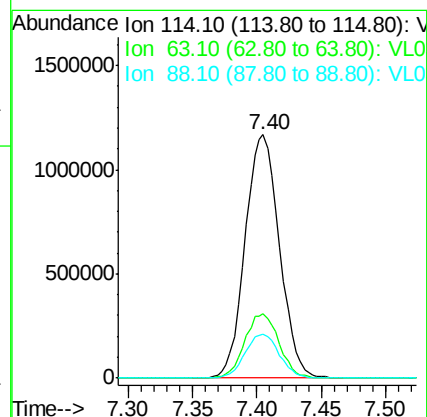
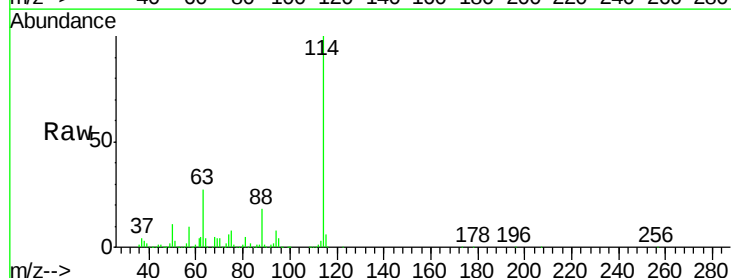
Tgt Ion: 114 Resp: 2162639

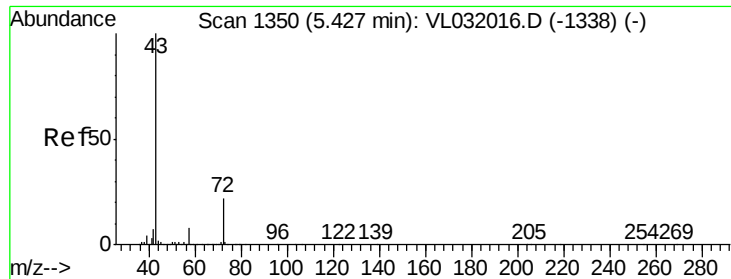
Ion Ratio Lower Upper

114 100

63 26.6 21.1 31.7

88 18.2 14.8 22.2





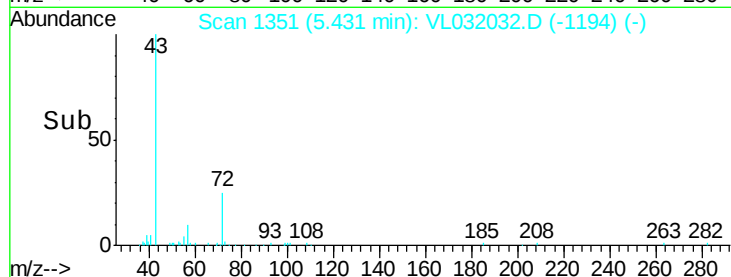
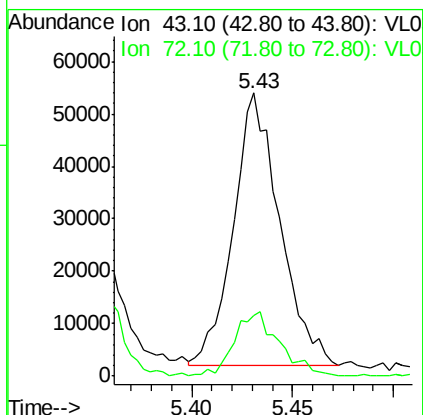
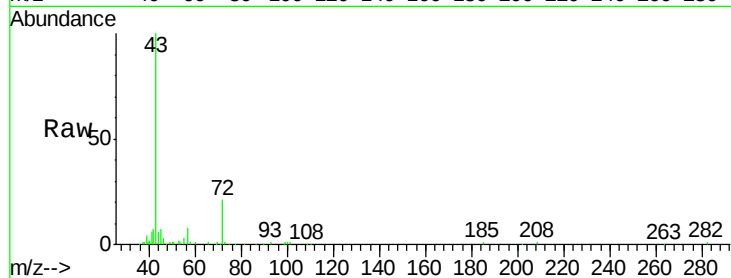
#34
2-Butanone
Concen: 0.49 ppbv
RT: 5.43 min Scan# 1351
Delta R.T. 0.00 min
Lab File: VL032032.D
Acq: 1 Jun 2018 22:14

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA1-052518

Tot Ion: 43 Resp: 83679
Ion Ratio Lower Upper
43 100
72 23.4 18.6 27.8

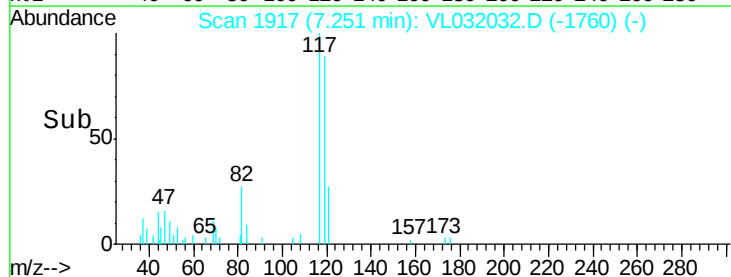
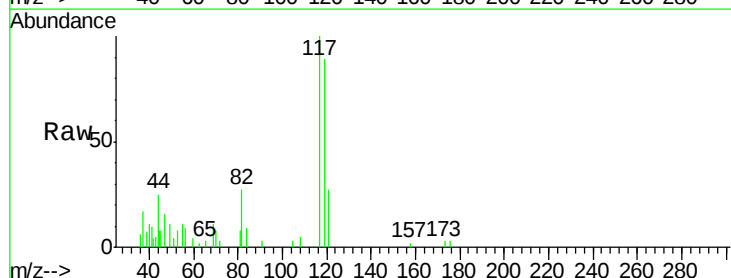
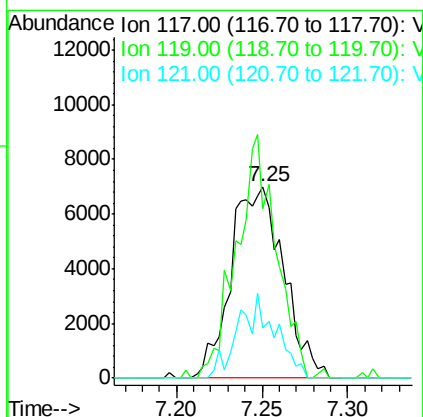
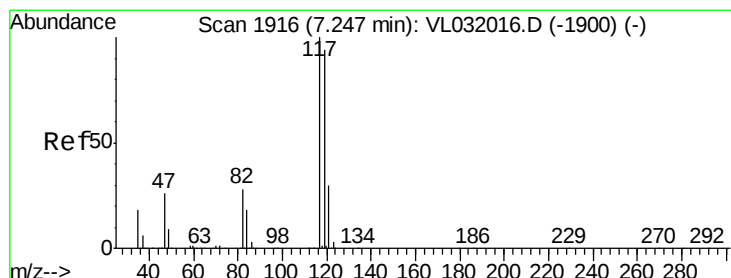
Manual Integrations
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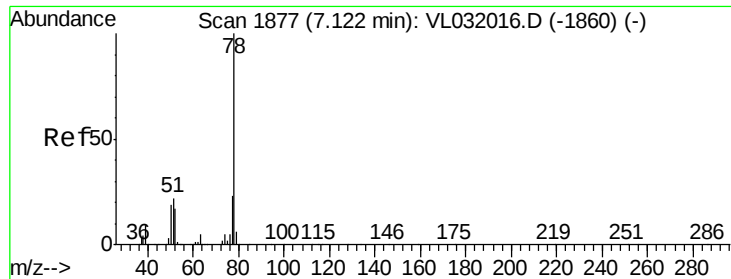
MMDadoda
6/4/2018 3:35:48 PM



#35
Carbon Tetrachloride
Concen: 0.08 ppbv m
RT: 7.25 min Scan# 1917
Delta R.T. 0.00 min
Lab File: VL032032.D
Acq: 1 Jun 2018 22:14

Tgt Ion: 117 Resp: 15034
Ion Ratio Lower Upper
117 100
119 88.7 75.3 112.9
121 26.5 24.1 36.1





#36

Benzene

Concen: 0.73 ppbv

RT: 7.12 min Scan# 1875

Delta R.T. -0.01 min

Lab File: VL032032.D

Acq: 1 Jun 2018 22:14

Instrument :

MSVOA_L

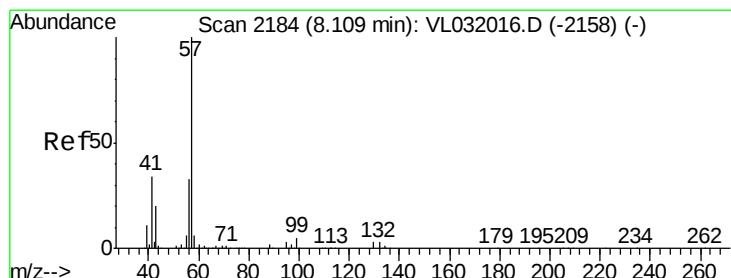
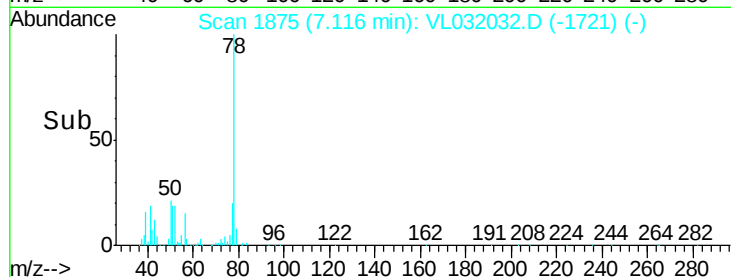
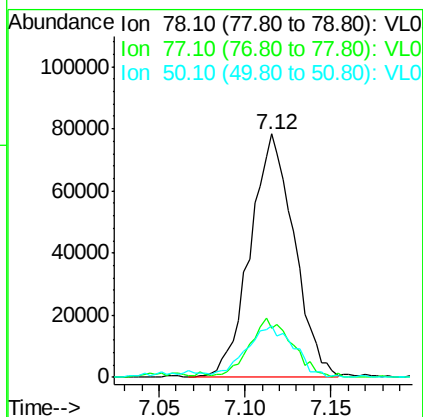
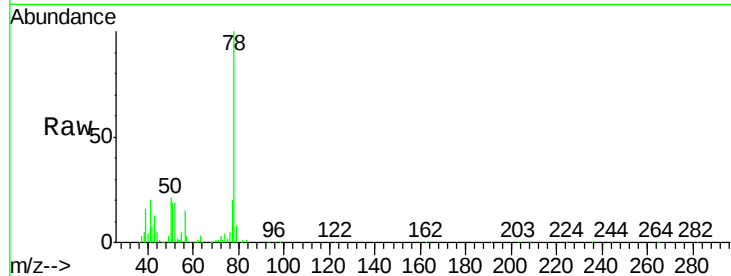
ClientSampleId :

LIHA-IA1-052518

Tot Ion:	78	Resp:	138607
Ion	Ratio	Lower	Upper
78	100		
77	19.4	18.1	27.1
50	20.9	14.9	22.3

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6/4/2018 3:35:48 PM



#44

2,2,4-Trimethylpentane

Concen: 1.50 ppbv

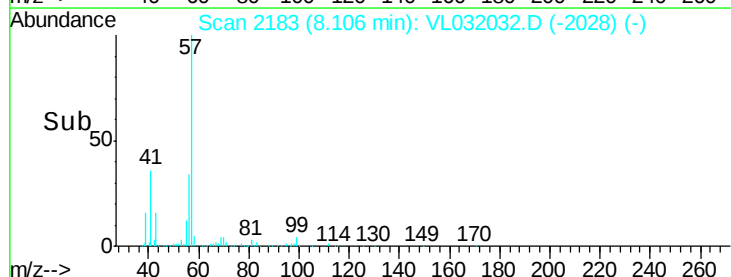
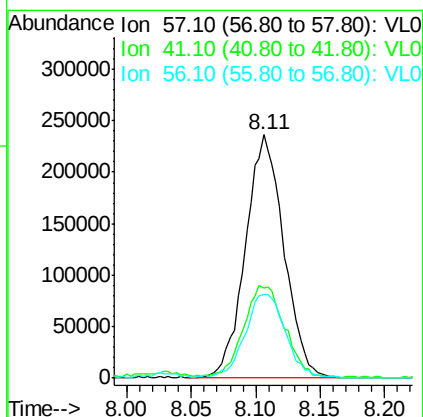
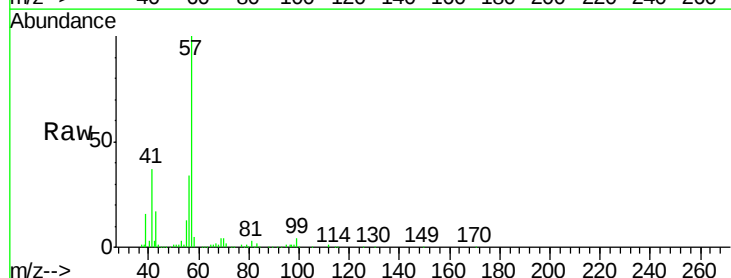
RT: 8.11 min Scan# 2183

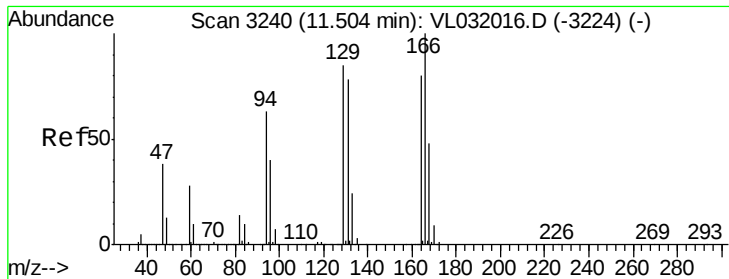
Delta R.T. -0.00 min

Lab File: VL032032.D

Acq: 1 Jun 2018 22:14

Tgt Ion:	57	Resp:	487733
Ion	Ratio	Lower	Upper
57	100		
41	41.0	26.6	40.0#
56	36.7	24.9	37.3





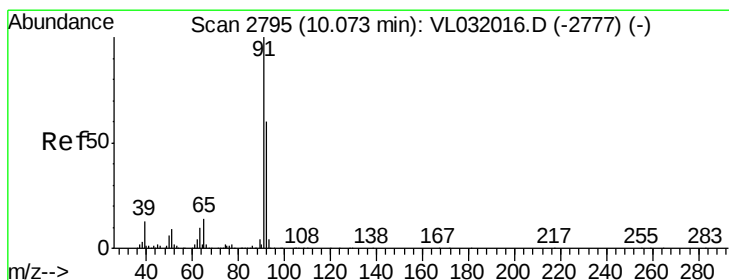
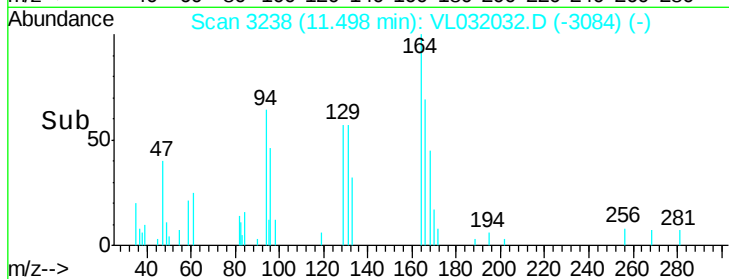
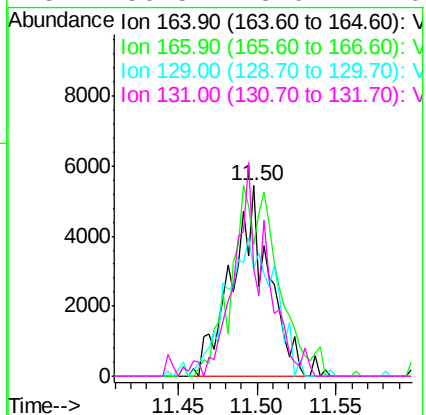
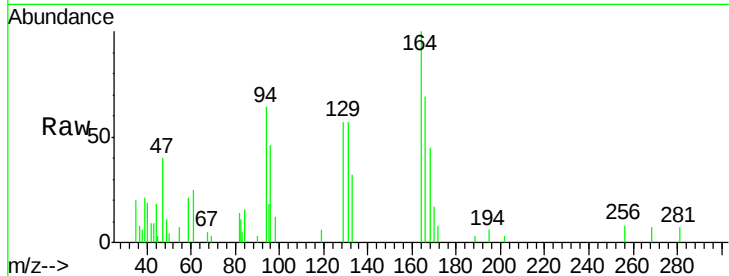
#52
Tetrachloroethene
Concen: 0.12 ppbv m
RT: 11.50 min Scan# 3238
Delta R.T. -0.01 min
Lab File: VL032032.D
Acq: 1 Jun 2018 22:14

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA1-052518

Tot Ion	Ratio	Lower	Upper
164	100		
166	69.2	100.2	150.2#
129	56.7	85.4	128.0#
131	56.8	78.0	117.0#

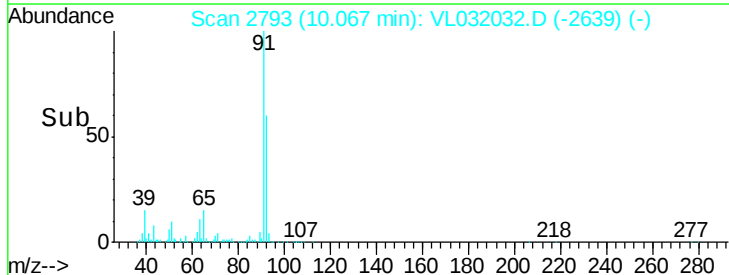
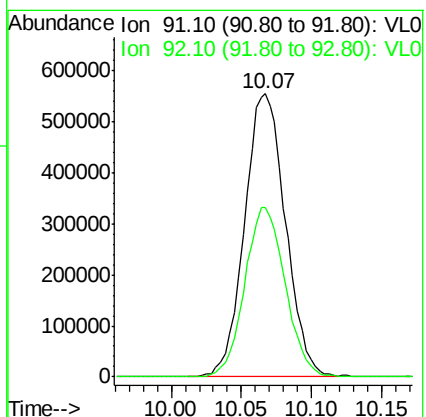
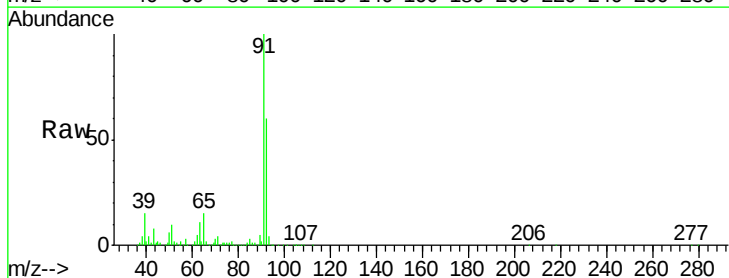
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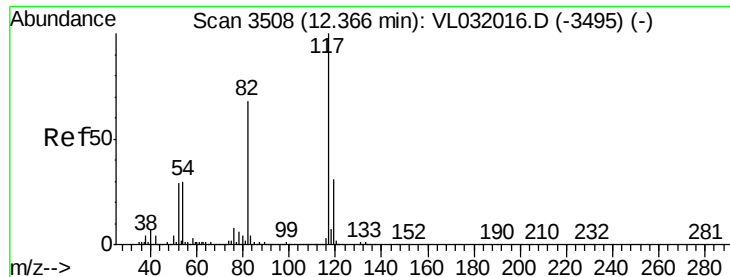
MMDadoda
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#53
Toluene
Concen: 5.29 ppbv
RT: 10.07 min Scan# 2793
Delta R.T. -0.01 min
Lab File: VL032032.D
Acq: 1 Jun 2018 22:14

Tgt Ion	Ratio	Lower	Upper
91	100		
92	59.2	48.2	72.2





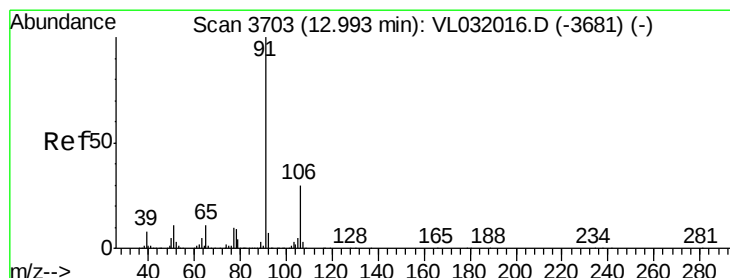
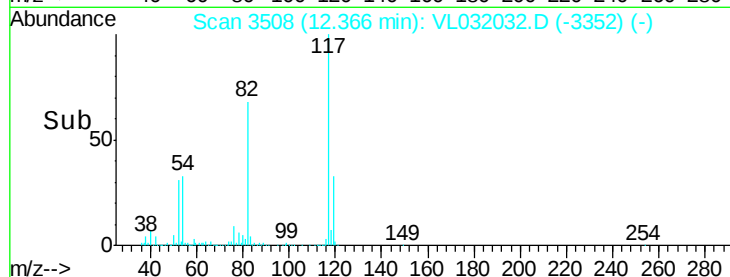
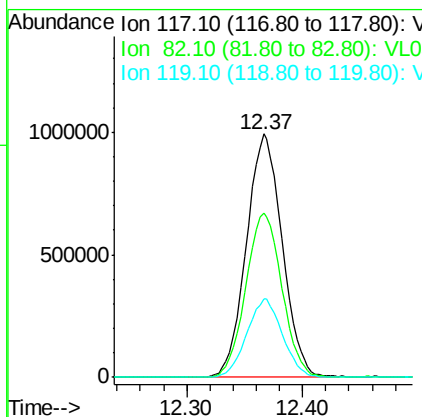
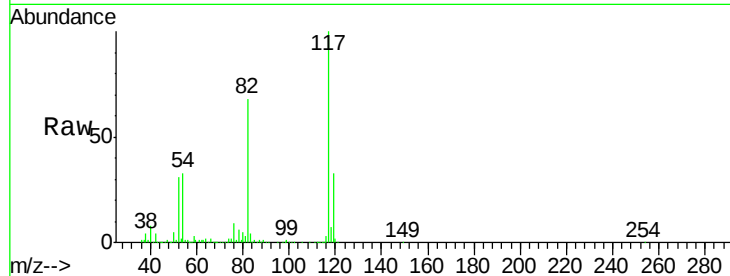
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.37 min Scan# 3508
Delta R.T. 0.00 min
Lab File: VL032032.D
Acq: 1 Jun 2018 22:14

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA1-052518

Tot Ion	Ratio	Lower	Upper
117	100		
82	68.3	52.7	79.1
119	32.2	25.5	38.3

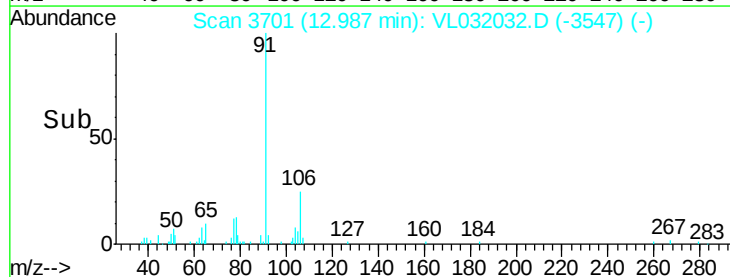
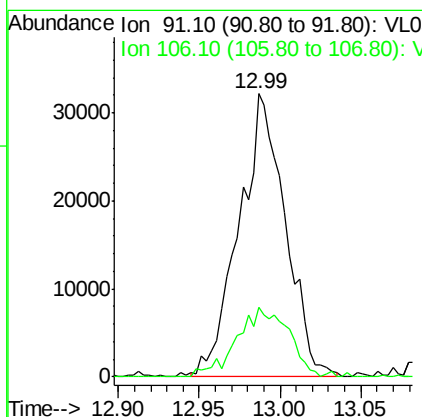
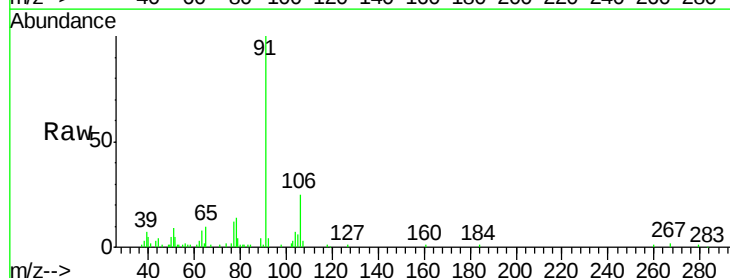
Manual Integrations
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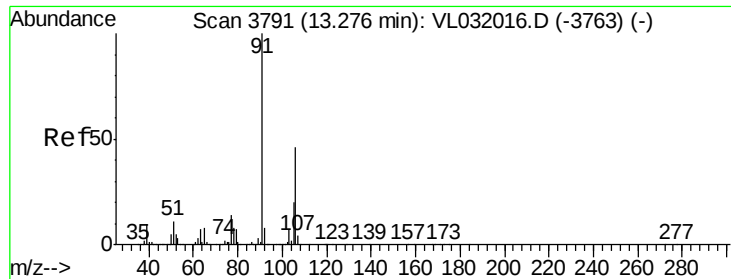
MMDadoda
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#58
Ethyl Benzene
Concen: 0.21 ppbv m
RT: 12.99 min Scan# 3701
Delta R.T. -0.01 min
Lab File: VL032032.D
Acq: 1 Jun 2018 22:14

Tgt Ion	Ratio	Lower	Upper
91	100		
106	24.7	24.2	36.2





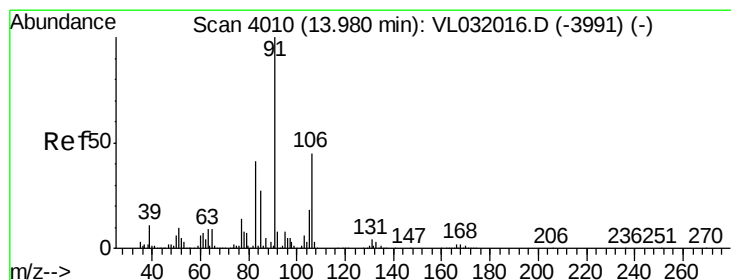
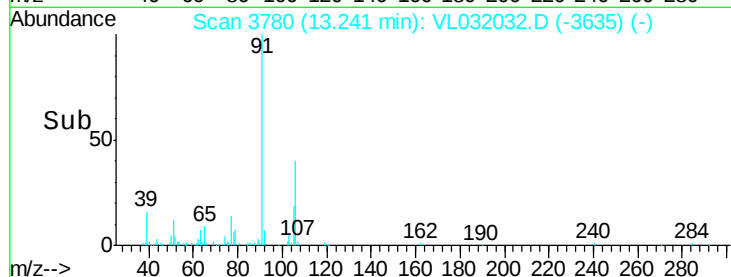
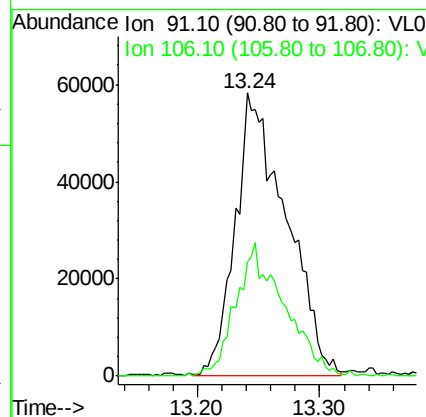
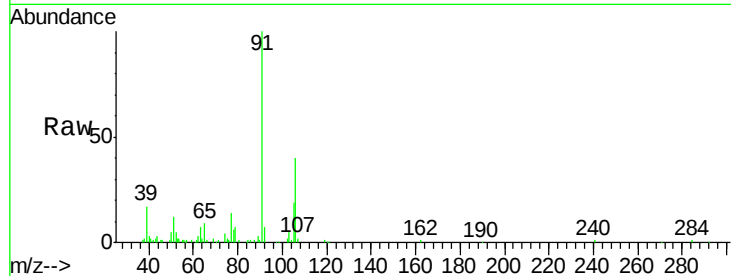
#59
m/p-Xylene
Concen: 0.64 ppbv m
RT: 13.24 min Scan# 3780
Delta R.T. -0.04 min
Lab File: VL032032.D
Acq: 1 Jun 2018 22:14

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA1-052518

Tot Ion: 91 Resp: 168380
Ion Ratio Lower Upper
91 100
106 0.0 35.7 53.5#

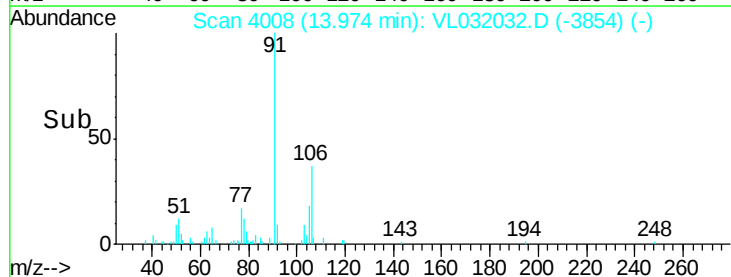
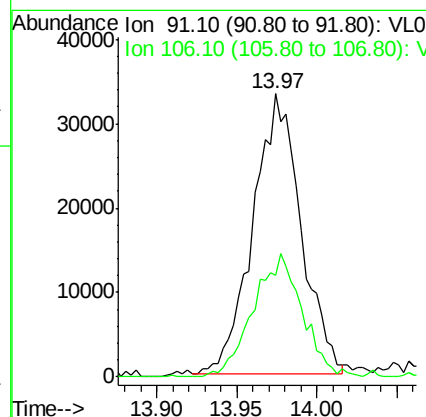
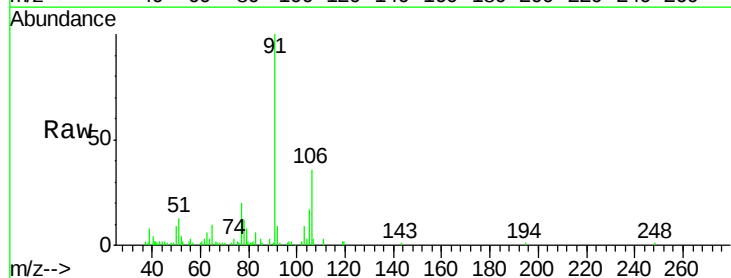
Manual Integrations
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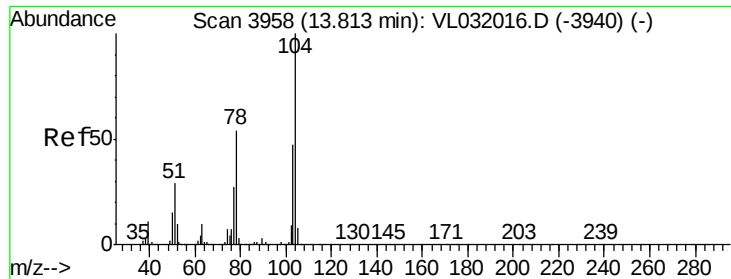
MMDadoda
6/4/2018 3:35:48 PM



#60
o-Xylene
Concen: 0.26 ppbv
RT: 13.97 min Scan# 4008
Delta R.T. -0.01 min
Lab File: VL032032.D
Acq: 1 Jun 2018 22:14

Tgt Ion: 91 Resp: 68594
Ion Ratio Lower Upper
91 100
106 45.0 21.9 65.5





#61

Stvrene

Concen: 0.62 ppbv

RT: 13.82 min Scan# 3960

Delta R.T. 0.01 min

Lab File: VL032032.D

Acq: 1 Jun 2018 22:14

Instrument :

MSVOA_L

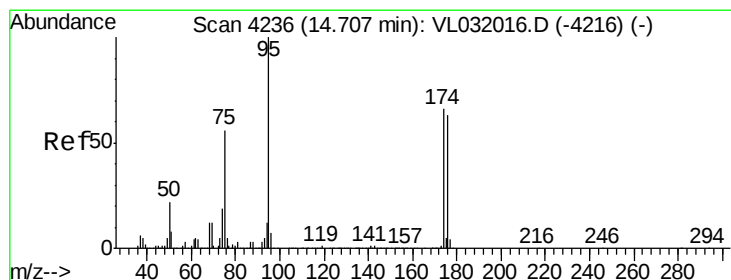
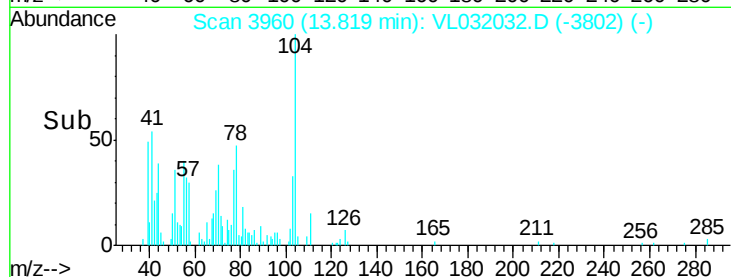
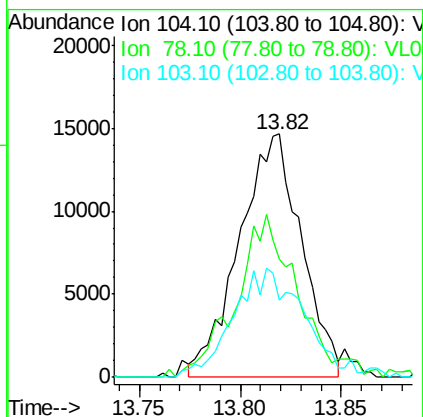
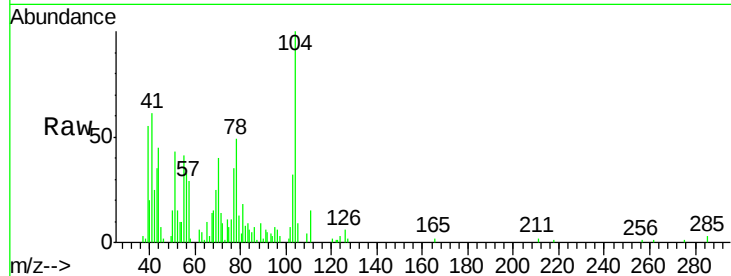
ClientSampleId :

LIHA-IA1-052518

Tot Ion:	104	Resp:	31434
Ion Ratio	Lower	Upper	
104	100		
78	67.2	43.0	64.4#
103	51.7	37.4	56.2

Manual Integrations
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#68

1-Bromo-4-Fluorobenzene

Concen: 10.39 ppbv

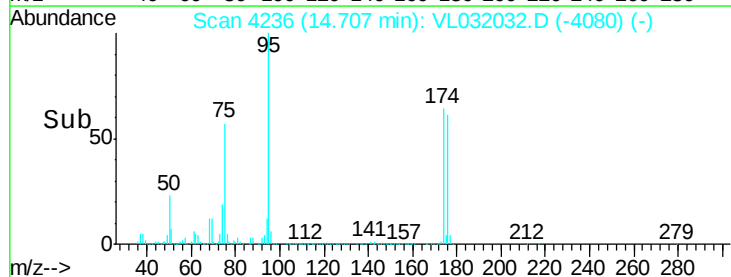
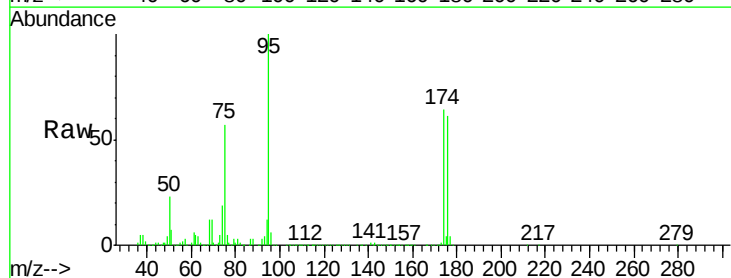
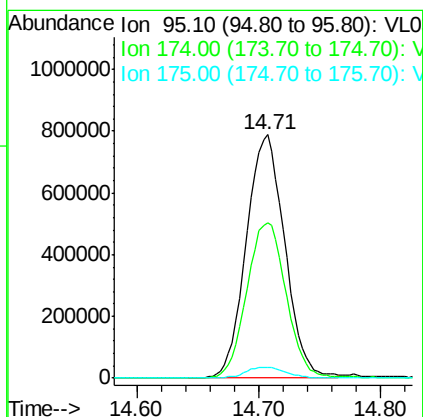
RT: 14.71 min Scan# 4236

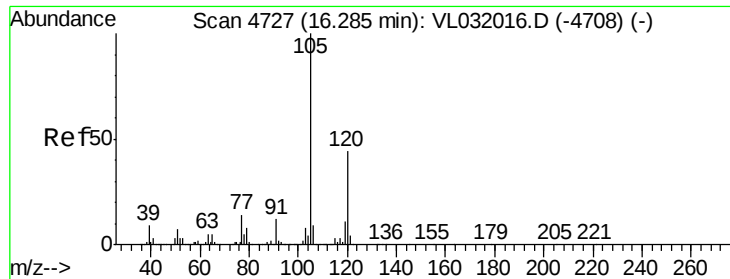
Delta R.T. 0.00 min

Lab File: VL032032.D

Acq: 1 Jun 2018 22:14

Tgt Ion:	95	Resp:	1716368
Ion Ratio	Lower	Upper	
95	100		
174	65.9	53.2	79.8
175	4.8	3.7	5.5





#73

1,3,5-Trimethylbenzene

Concen: 0.19 ppbv

RT: 16.28 min Scan# 4726

Delta R.T. -0.00 min

Lab File: VL032032.D

Acq: 1 Jun 2018 22:14

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IA1-052518

Tot Ion:105 Resp: 45990

Ion Ratio Lower Upper

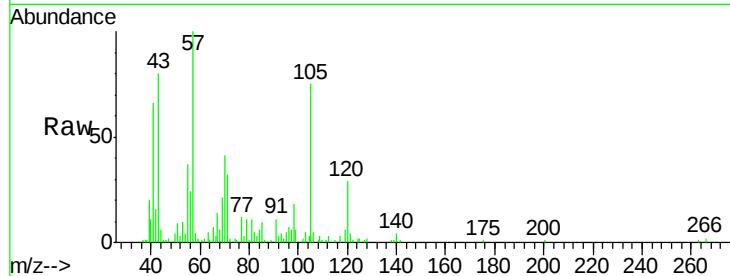
105 100

120 36.6 35.0 52.4

Manual Integrations
APPROVED

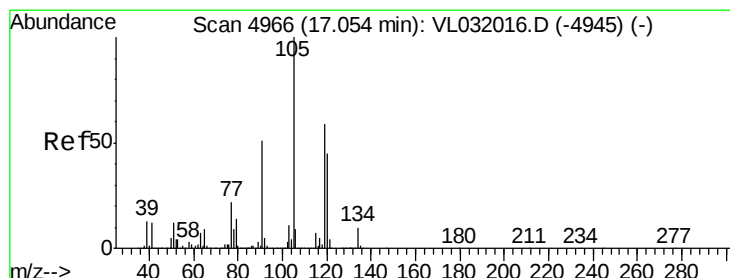
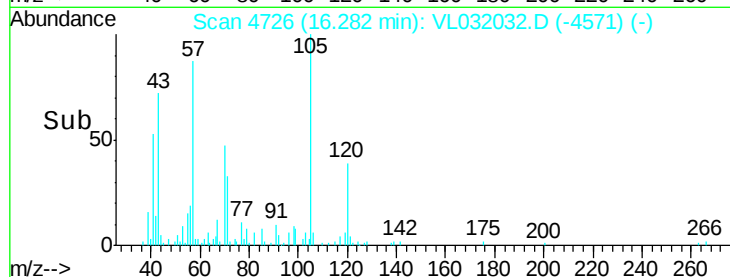
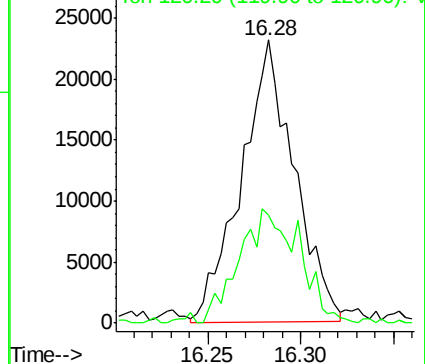
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 0.47 ppbv

RT: 17.05 min Scan# 4965

Delta R.T. -0.00 min

Lab File: VL032032.D

Acq: 1 Jun 2018 22:14

Tgt Ion:105 Resp: 128458

Ion Ratio Lower Upper

105 100

120 38.7 36.0 54.0

91 19.6 41.4 62.0#

77 16.5 17.3 25.9#

Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

