

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110718\
 Data File : VL032723.D
 Acq On : 7 Nov 2018 19:00
 Operator : SY/AP
 Sample : J5823-05
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-03

Manual Integrations
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MMDadoda
 11/12/2018 12:30:10 PM

Quant Time: Nov 12 01:23:27 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	1420107	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3517614	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3425277	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.59	95	2584426	10.13	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	36748	0.254	ppbv	99
3) Chlorodifluoromethane	3.02	51	47026m	0.423	ppbv	
4) Chloromethane	3.18	50	27719	0.447	ppbv	95
9) Propene	3.05	41	184743	4.042	ppbv	89
10) Heptane	8.26	43	68172	0.387	ppbv	90
11) Trichlorofluoromethane	4.01	101	43761	0.232	ppbv	90
13) Ethanol	3.66	45	81577	6.245	ppbv	97
15) Acetone	3.91	43	498479	3.801	ppbv	93
19) Isopropyl Alcohol	4.04	45	58589	0.627	ppbv #	1
20) Methylene Chloride	4.42	84	64742	0.973	ppbv	95
26) Hexane	5.79	57	274675	1.923	ppbv #	48
30) Cyclohexane	7.26	84	25456m	0.225	ppbv	
34) 2-Butanone	5.35	43	82957	0.440	ppbv	96
35) Carbon Tetrachloride	7.14	117	20448m	0.082	ppbv	
36) Benzene	7.02	78	516526	1.808	ppbv	98
44) 2,2,4-Trimethylpentane	8.00	57	749803	1.538	ppbv #	91
52) Tetrachloroethene	11.38	164	20684m	0.208	ppbv	
53) Toluene	9.96	91	4276125	13.059	ppbv	99
58) Ethyl Benzene	12.88	91	422509	1.062	ppbv	94
59) m/p-Xylene	13.13	91	1552690	4.382	ppbv	99
60) o-Xylene	13.86	91	581651	1.702	ppbv	98
61) Styrene	13.70	104	36673m	0.160	ppbv	
64) n-propylbenzene	15.74	120	13516m	0.112	ppbv	
72) 4-Ethyltoluene	16.01	105	152614	0.419	ppbv #	96
73) 1,3,5-Trimethylbenzene	16.17	105	120184m	0.339	ppbv	
74) 1,2,4-Trimethylbenzene	16.93	105	530209	1.400	ppbv #	76
79) Naphthalene	22.43	128	42466m	0.180	ppbv	

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

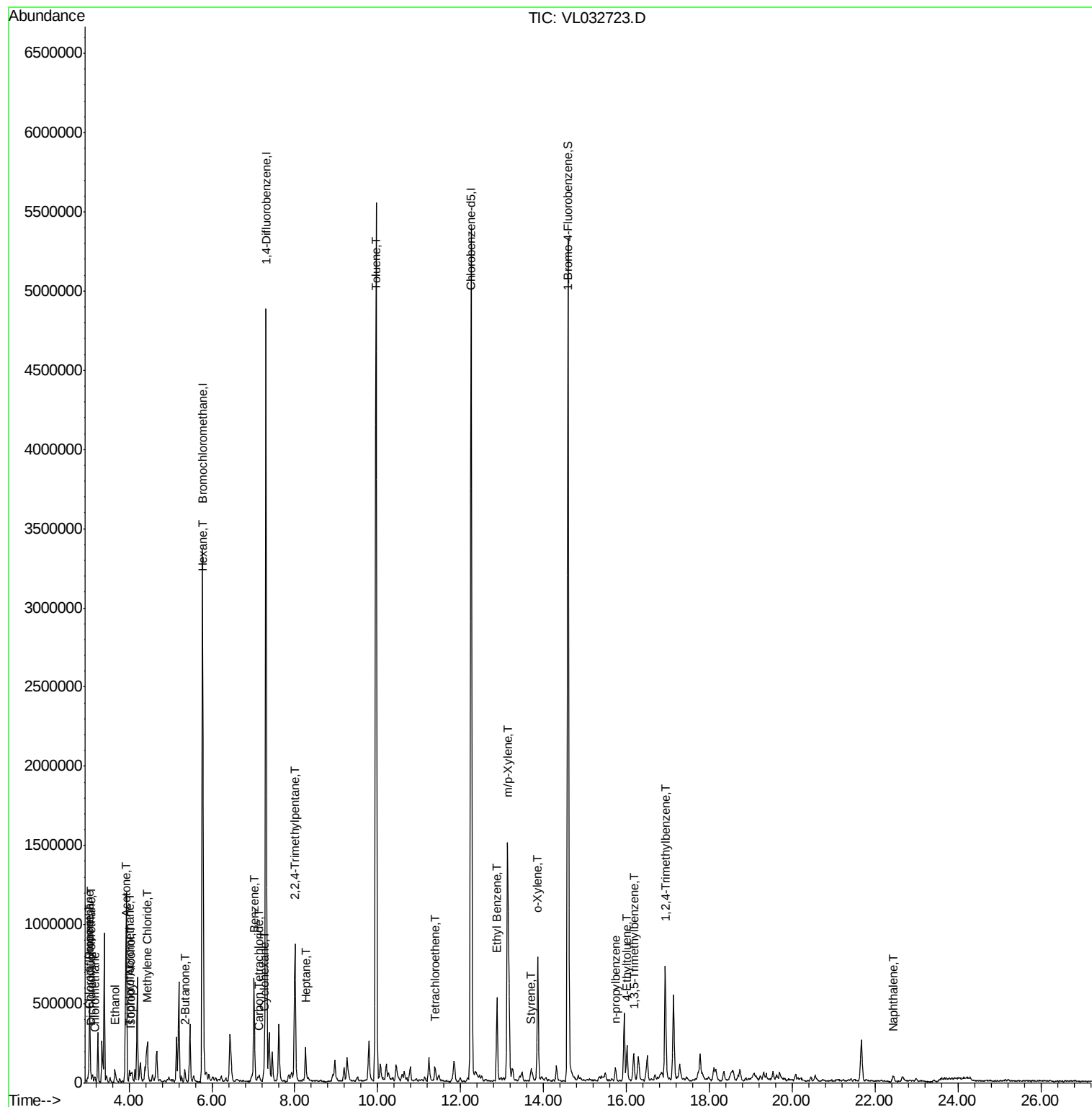
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL110718\
Data File : VL032723.D
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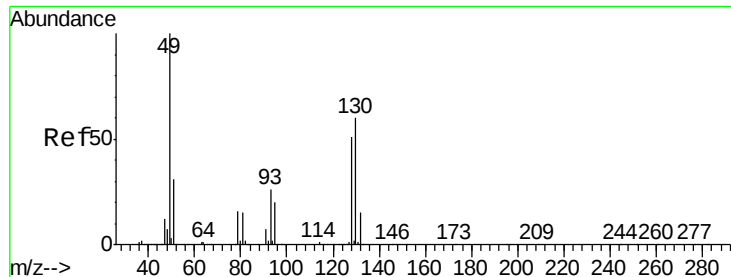
Instrument :
MSVOA_L
ClientSampleId :
IA-03

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11/12/2018 12:30:10 PM

Quant Time: Nov 12 01:23:27 2018
Quant Method : Z:\V0ASRV\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: VL032723.D

Acq: 7 Nov 2018 19:00

Instrument :

MSVOA_L

ClientSampleId :

IA-03

Tot Ion: 49 Resp: 1420107

Ion Ratio Lower Upper

49 100

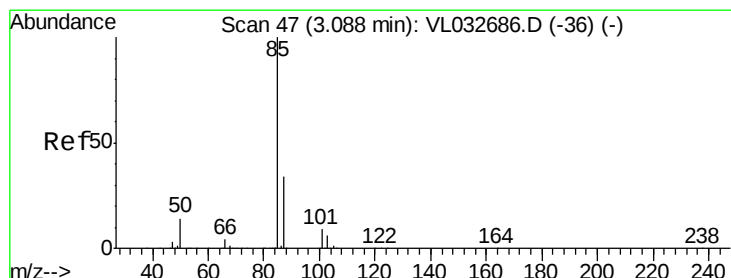
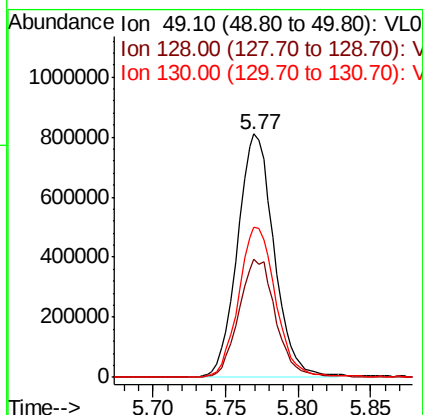
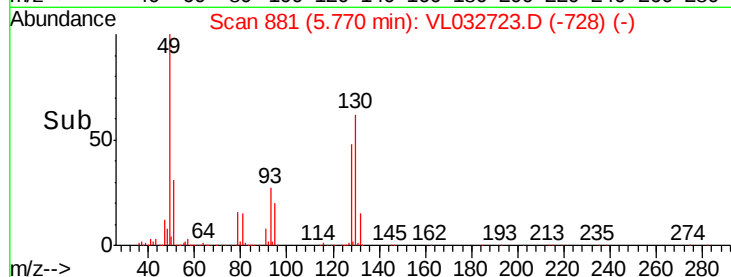
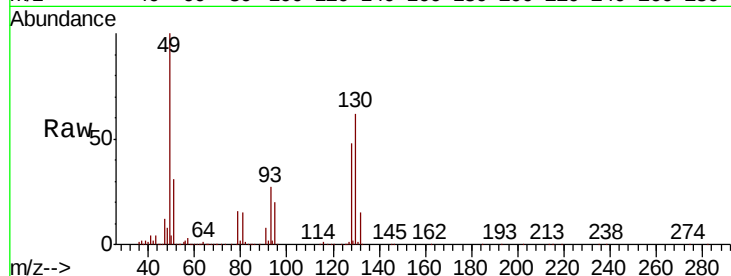
128 49.2 22.3 66.8

130 63.0 28.4 85.3

Manual Integrations
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#2

Dichlorodifluoromethane

Concen: 0.254 ppbv

RT: 3.08 min Scan# 46

Delta R.T. 0.00 min

Lab File: VL032723.D

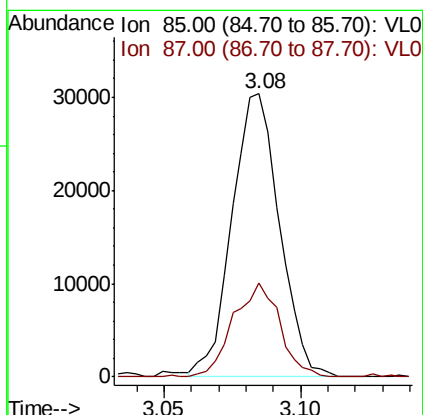
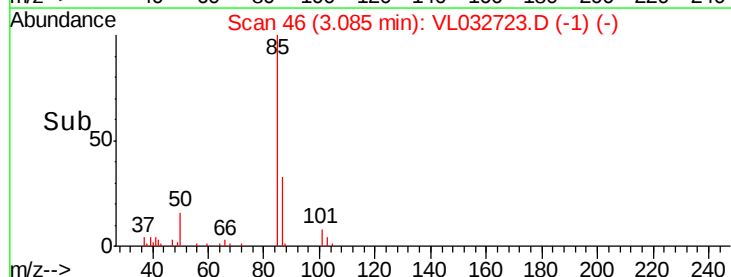
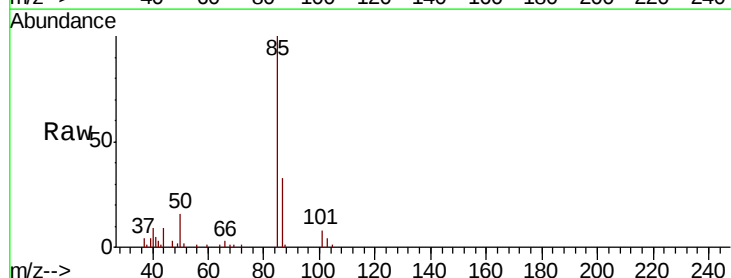
Acq: 7 Nov 2018 19:00

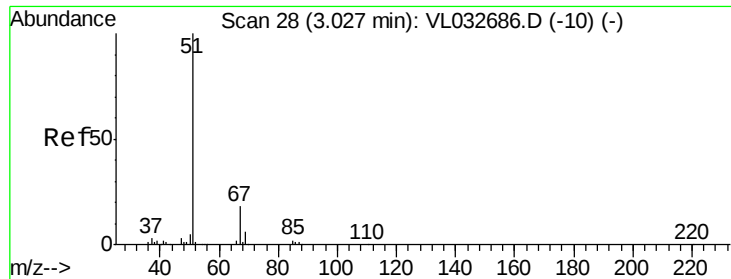
Tgt Ion: 85 Resp: 36748

Ion Ratio Lower Upper

85 100

87 33.3 26.2 39.2





#3

Chlorodifluoromethane

Concen: 0.423 ppbv

RT: 3.02 min Scan# 27

Delta R.T. -0.00 min

Lab File: VL032723.D

Acq: 7 Nov 2018 19:00

Instrument :

MSVOA_L

ClientSampled :

IA-03

Tot Ion: 51 Resp: 47026

Ion Ratio Lower Upper

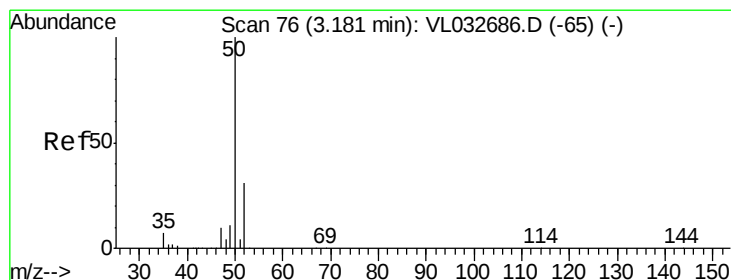
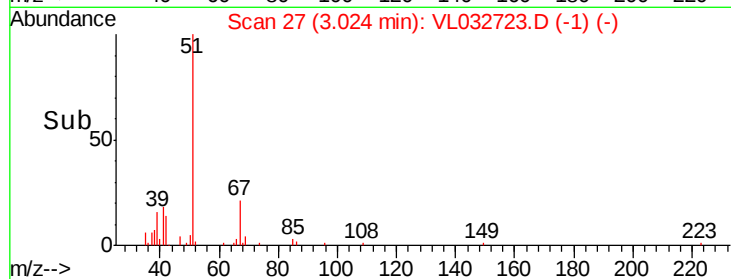
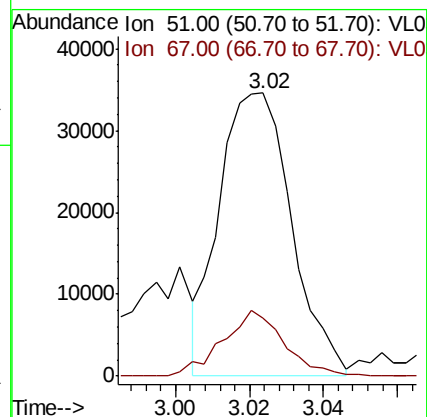
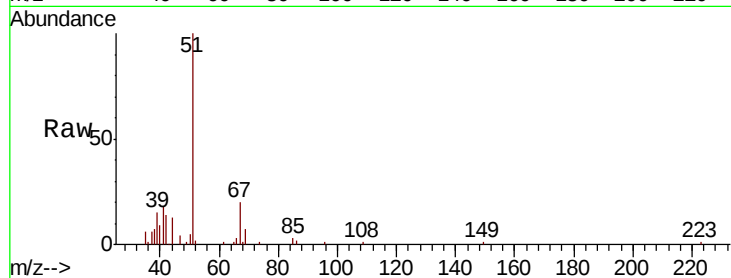
51 100

67 19.7 15.2 22.8

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#4

Chloromethane

Concen: 0.447 ppbv

RT: 3.18 min Scan# 75

Delta R.T. 0.00 min

Lab File: VL032723.D

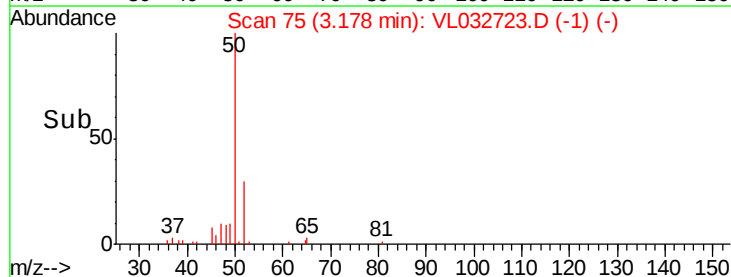
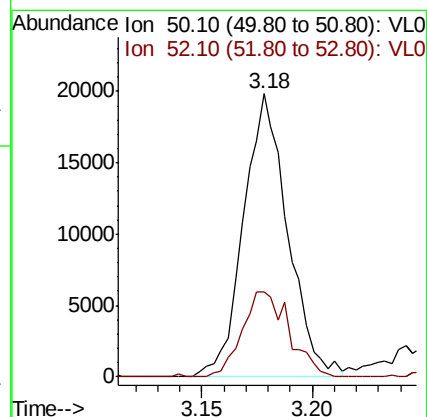
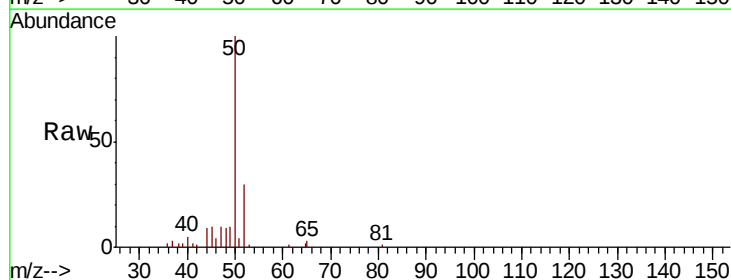
Acq: 7 Nov 2018 19:00

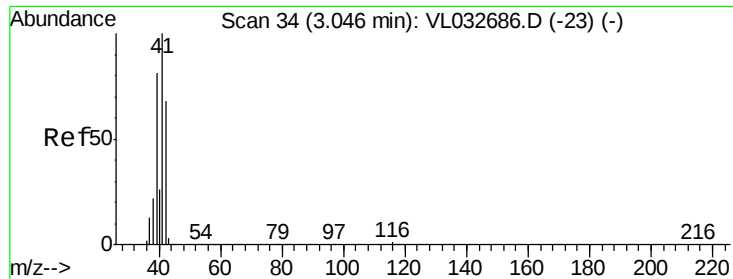
Tgt Ion: 50 Resp: 27719

Ion Ratio Lower Upper

50 100

52 29.9 25.9 38.9





#9

Propene

Concen: 4.042 ppbv

RT: 3.05 min Scan# 34

Delta R.T. 0.00 min

Lab File: VL032723.D

Acq: 7 Nov 2018 19:00

Instrument :

MSVOA_L

ClientSampleId :

IA-03

Tot Ion: 41 Resp: 184743

Ion Ratio Lower Upper

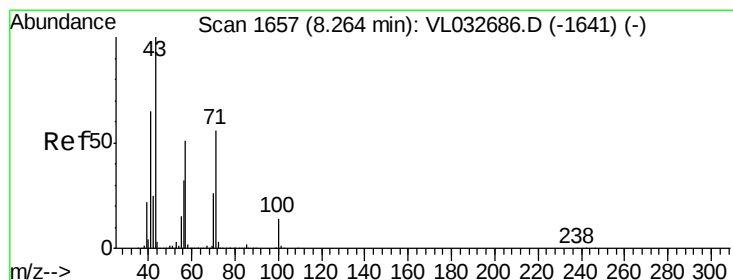
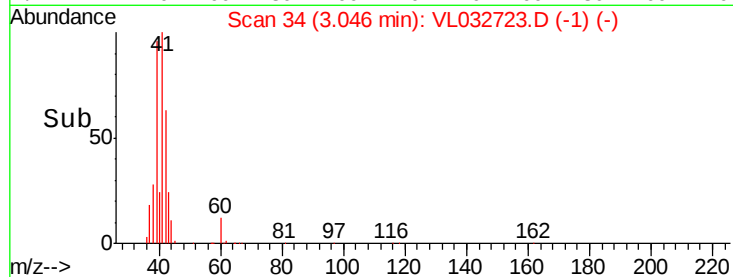
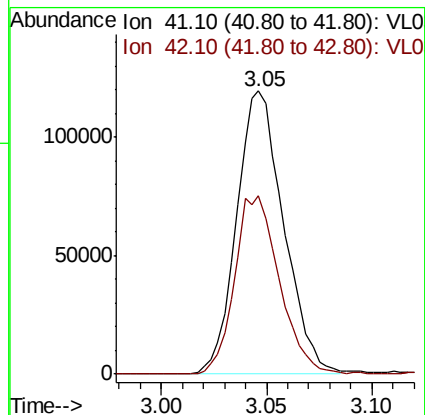
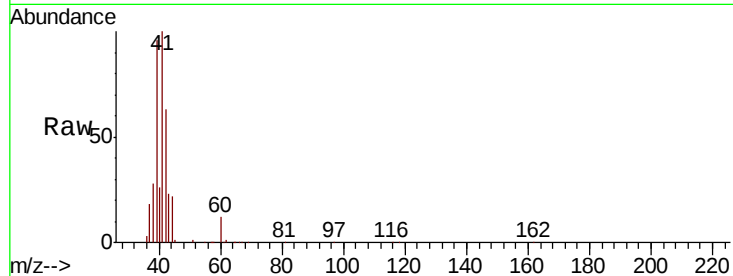
41 100

42 60.4 55.4 83.0

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#10

Heptane

Concen: 0.387 ppbv

RT: 8.26 min Scan# 1656

Delta R.T. -0.00 min

Lab File: VL032723.D

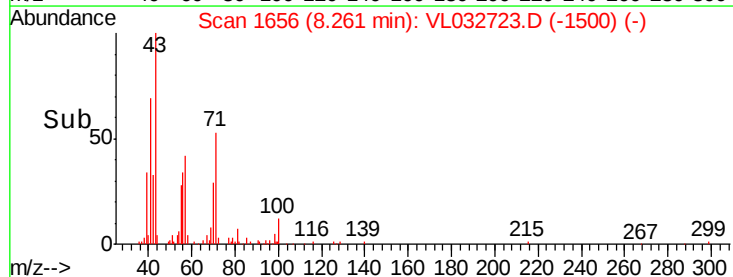
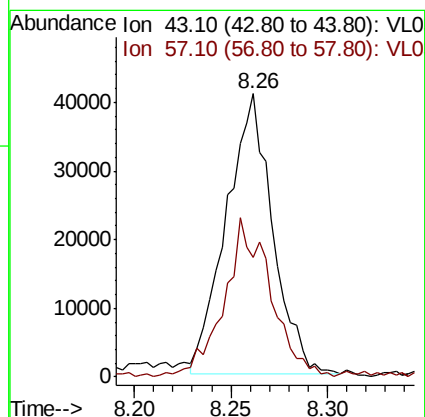
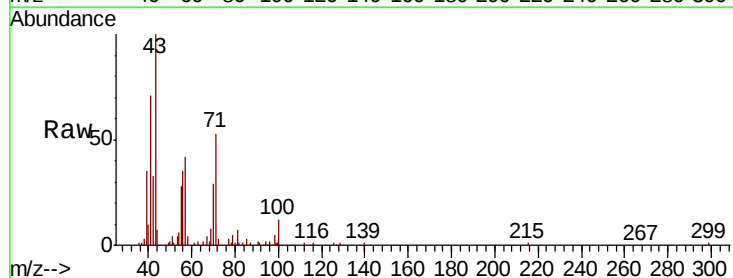
Acq: 7 Nov 2018 19:00

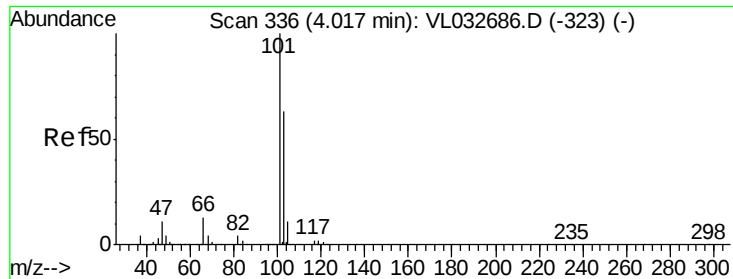
Tgt Ion: 43 Resp: 68172

Ion Ratio Lower Upper

43 100

57 59.1 41.5 62.3





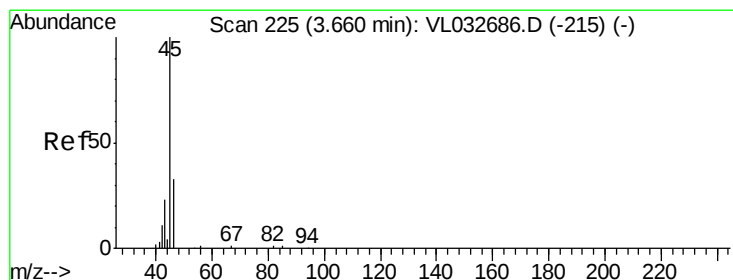
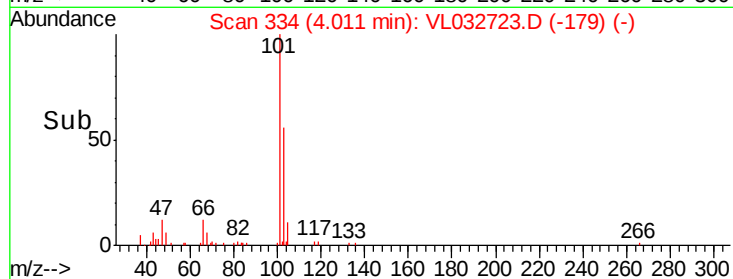
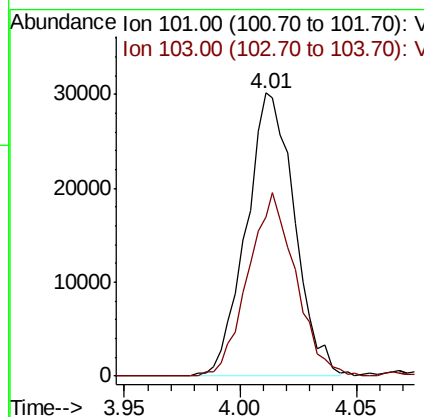
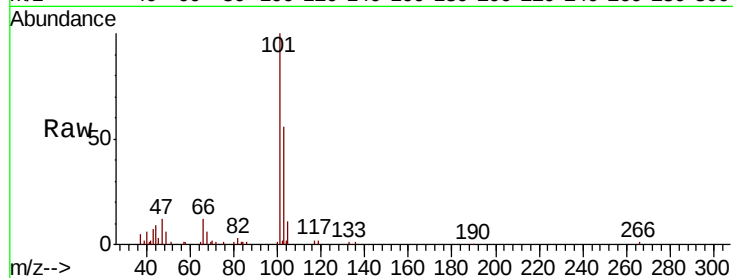
#11
 Trichlorofluoromethane
 Concen: 0.232 ppbv
 RT: 4.01 min Scan# 334
 Delta R.T. -0.00 min
 Lab File: VL032723.D
 Acq: 7 Nov 2018 19:00

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-03

Tot Ion	Ion	Ratio	Resp	Lower	Upper
101	100		43761		
103	56.1		51.4	77.2	

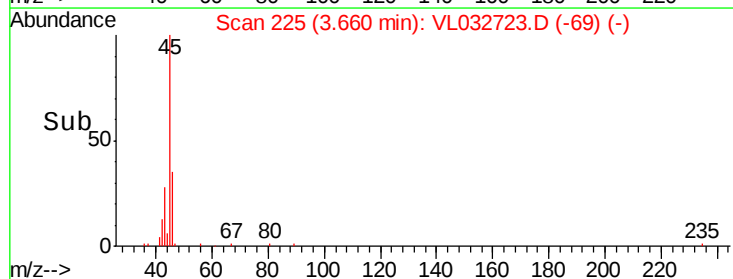
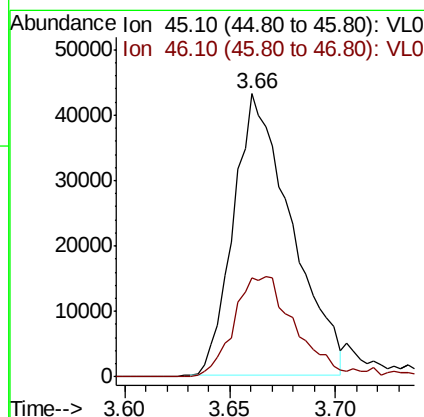
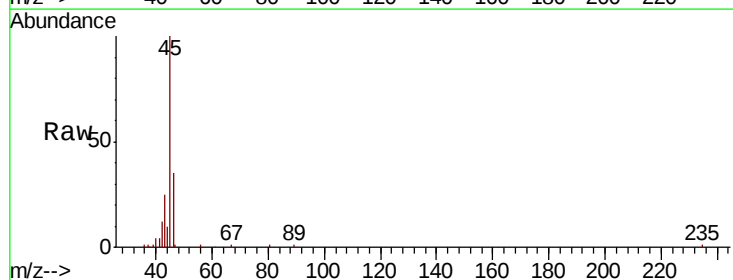
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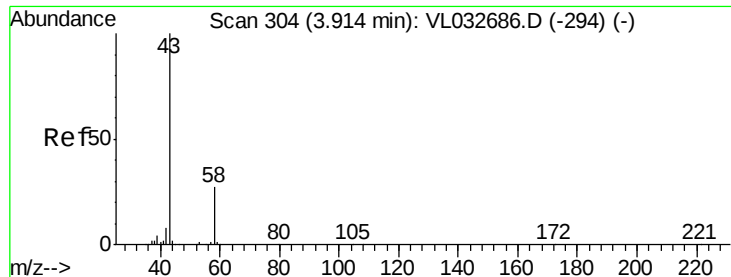
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#13
 Ethanol
 Concen: 6.245 ppbv
 RT: 3.66 min Scan# 225
 Delta R.T. -0.00 min
 Lab File: VL032723.D
 Acq: 7 Nov 2018 19:00

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
45	100		81577		
46	40.6		15.4	61.8	





#15

Acetone

Concen: 3.801 ppbv

RT: 3.91 min Scan# 303

Delta R.T. 0.00 min

Lab File: VL032723.D

Acq: 7 Nov 2018 19:00

Instrument :

MSVOA_L

ClientSampleId :

IA-03

Tot Ion: 43 Resp: 498479

Ion Ratio Lower Upper

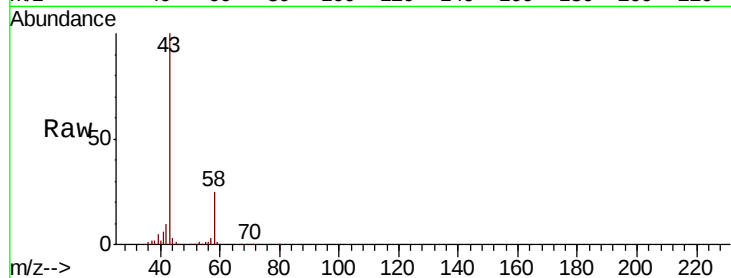
43 100

58 31.2 22.1 33.1

Manual Integrations
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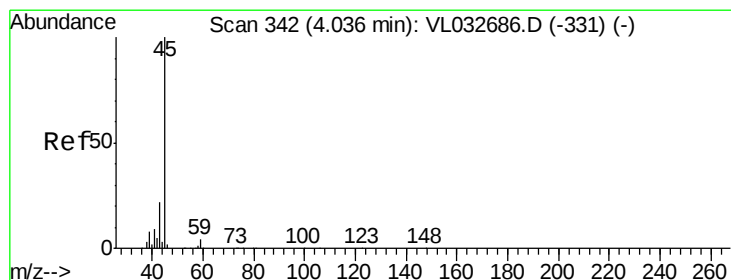
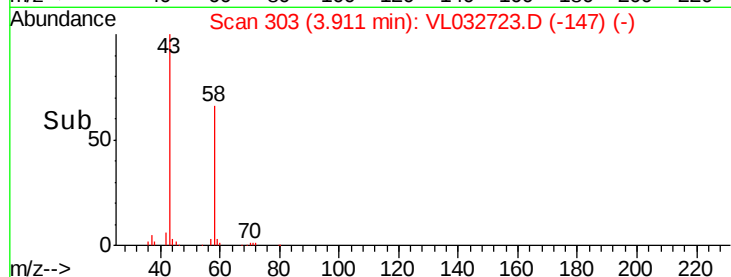
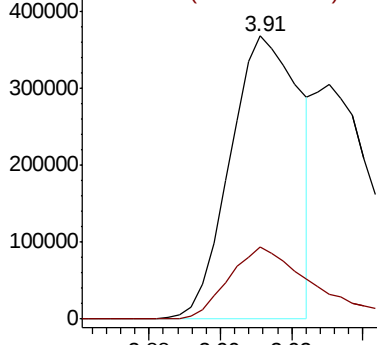
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#19

Isopropyl Alcohol

Concen: 0.627 ppbv

RT: 4.04 min Scan# 344

Delta R.T. 0.01 min

Lab File: VL032723.D

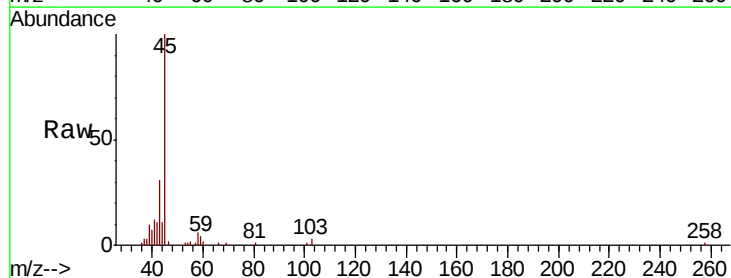
Acq: 7 Nov 2018 19:00

Tgt Ion: 45 Resp: 58589

Ion Ratio Lower Upper

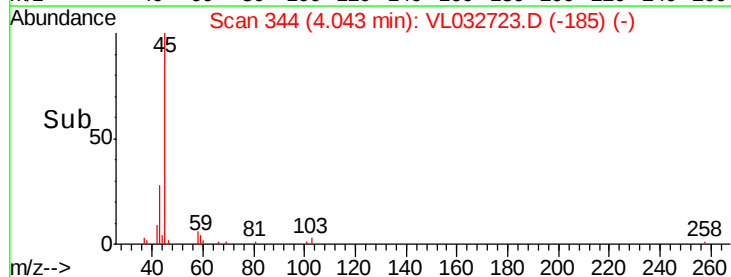
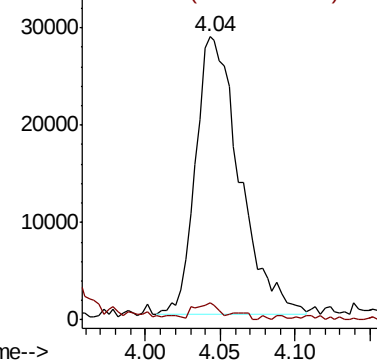
45 100

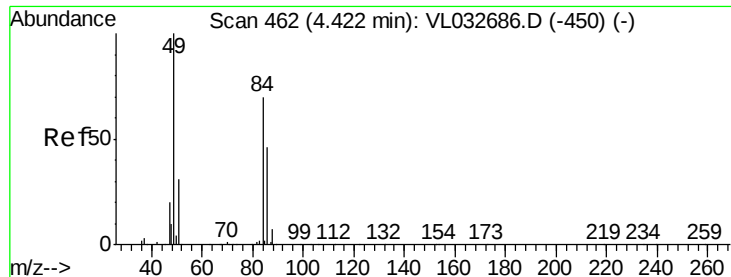
58 265.8 2.0 3.0#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#20

Methvlene Chloride

Concen: 0.973 ppbv

RT: 4.42 min Scan# 462

Delta R.T. 0.00 min

Lab File: VL032723.D

Acq: 7 Nov 2018 19:00

Instrument :

MSVOA_L

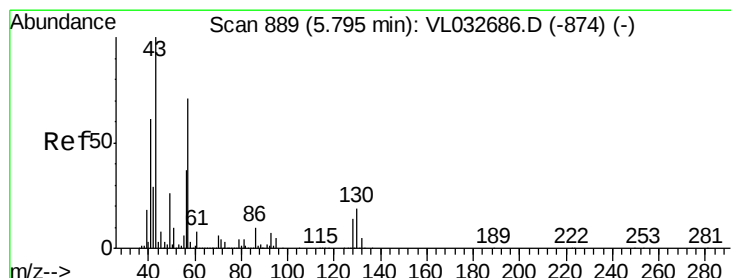
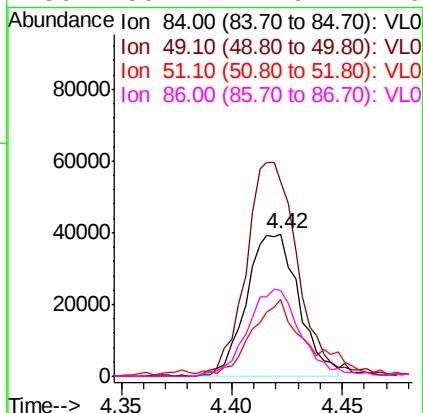
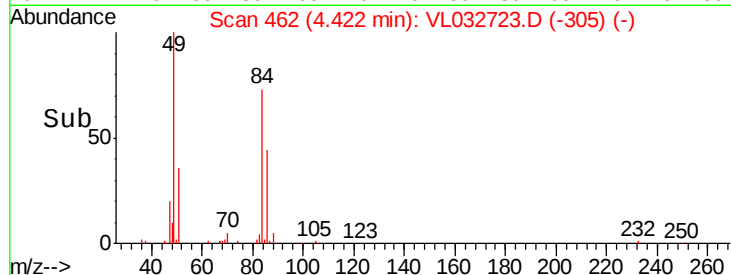
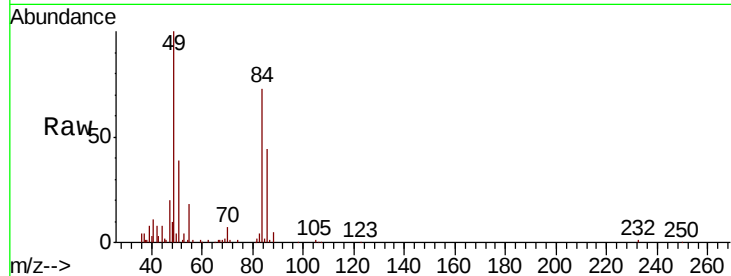
ClientSampleId :

IA-03

Tot Ion:	84	Resp:	64742
Ion	Ratio	Lower	Upper
84	100		
49	136.3	113.5	170.3
51	50.4	34.8	52.2
86	59.7	47.9	71.9

Manual Integrations
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#26

Hexane

Concen: 1.923 ppbv

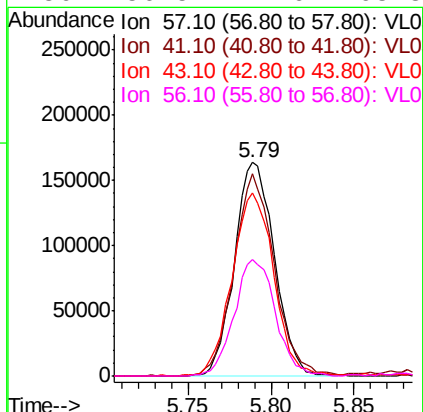
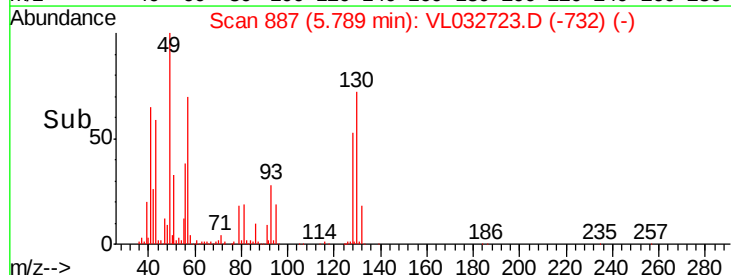
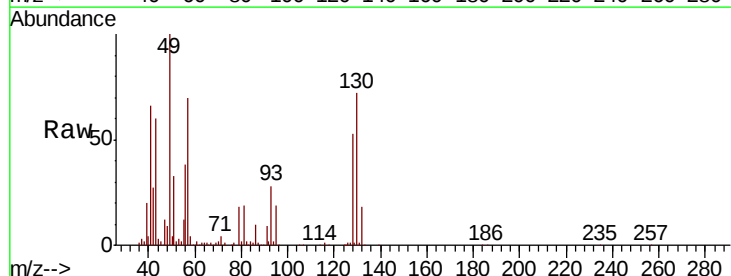
RT: 5.79 min Scan# 887

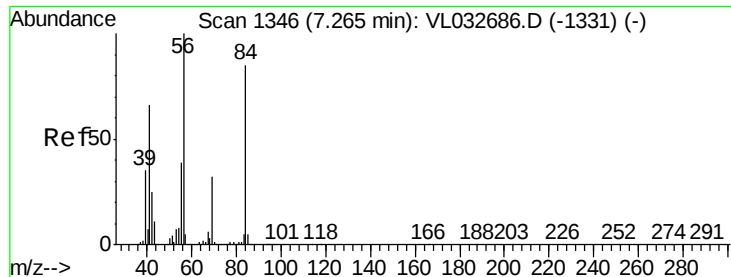
Delta R.T. -0.00 min

Lab File: VL032723.D

Acq: 7 Nov 2018 19:00

Tgt Ion:	57	Resp:	274675
Ion	Ratio	Lower	Upper
57	100		
41	95.5	67.4	101.0
43	90.1	171.9	257.9#
56	56.5	42.6	63.8





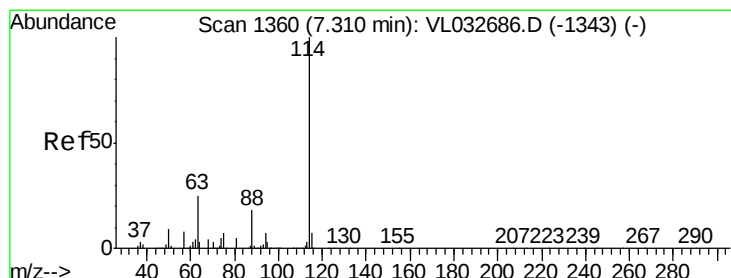
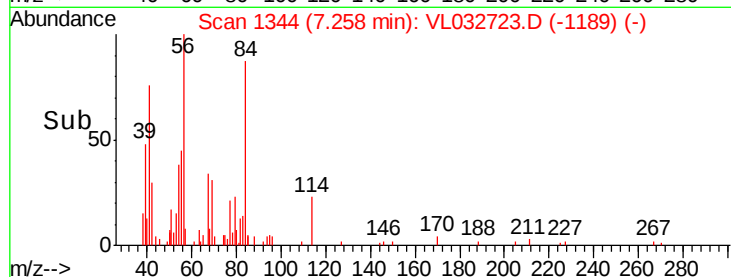
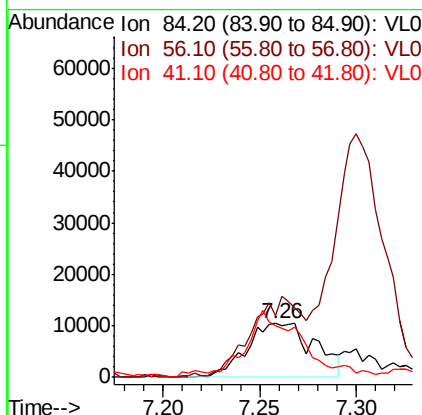
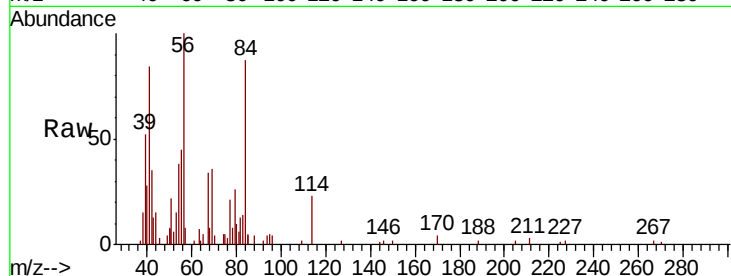
#30
Cyclohexane
Concen: 0.225 ppbv m
RT: 7.26 min Scan# 1344
Delta R.T. -0.00 min
Lab File: VL032723.D
Acq: 7 Nov 2018 19:00

Instrument :
MSVOA_L
ClientSampled :
IA-03

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	108.3	162.5#
41	105.0	64.8	97.2#

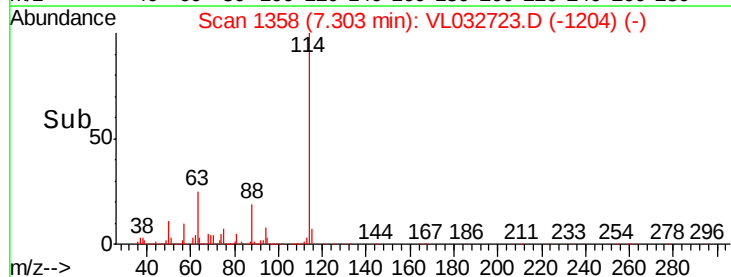
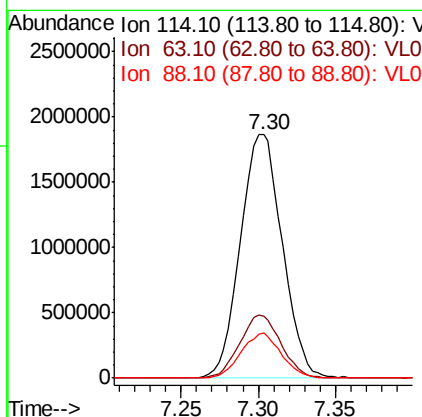
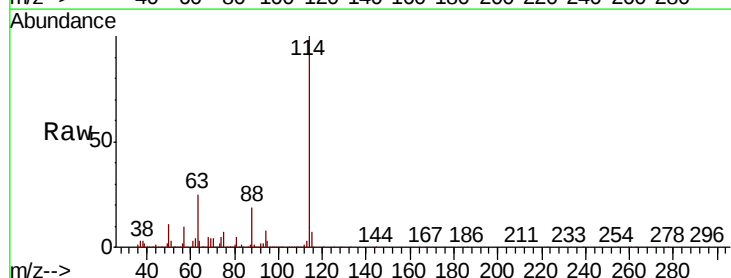
Manual Integrations
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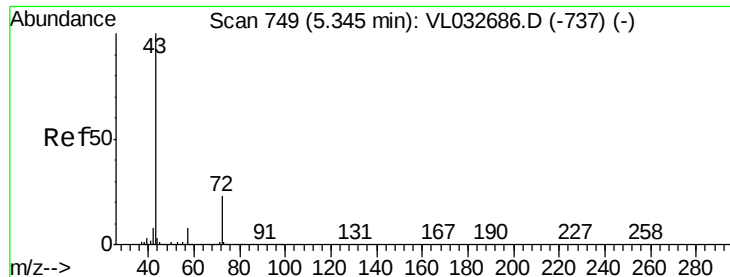
MMDadoda
11/12/2018 12:30:10 PM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.30 min Scan# 1358
Delta R.T. -0.01 min
Lab File: VL032723.D
Acq: 7 Nov 2018 19:00

Tgt Ion	Ratio	Lower	Upper
114	100		
63	25.6	21.7	32.5
88	17.9	14.9	22.3





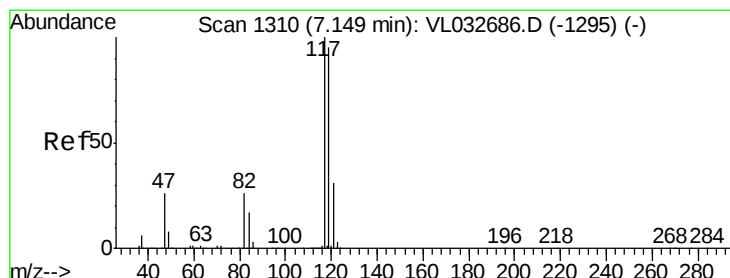
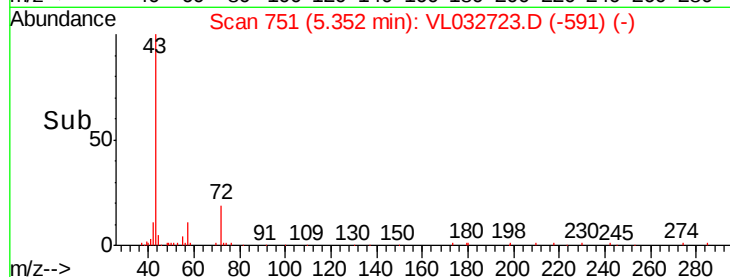
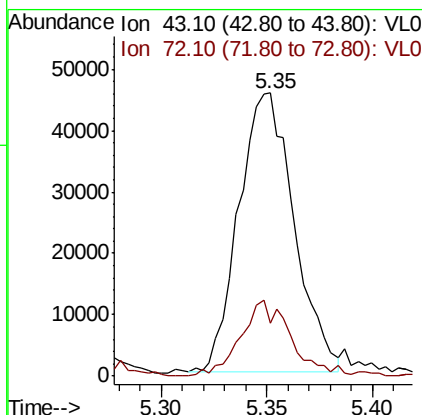
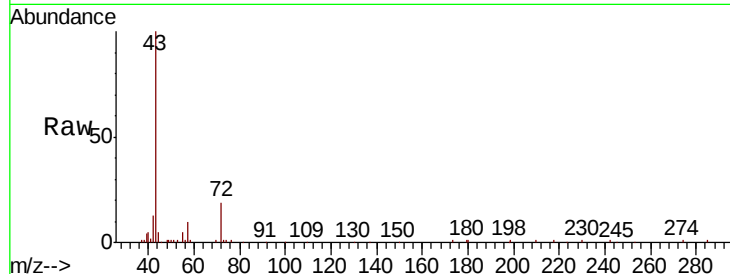
#34
2-Butanone
Concen: 0.440 ppbv
RT: 5.35 min Scan# 751
Delta R.T. 0.01 min
Lab File: VL032723.D
Acq: 7 Nov 2018 19:00

Instrument :
MSVOA_L
ClientSampled :
IA-03

Tot Ion	43	Resp	82957
Ion Ratio	Lower	Upper	
43	100		
72	25.4	18.6	27.8

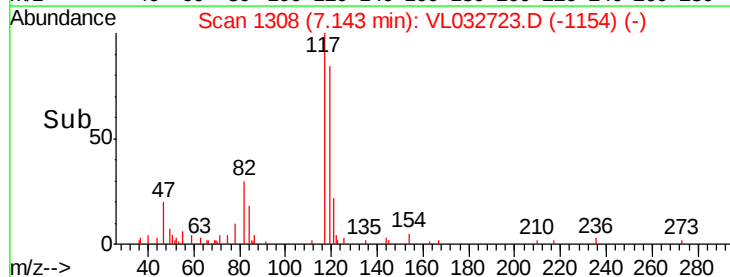
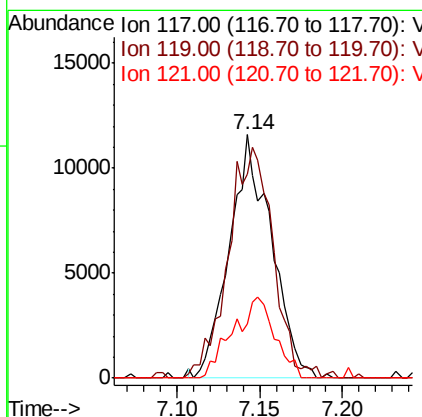
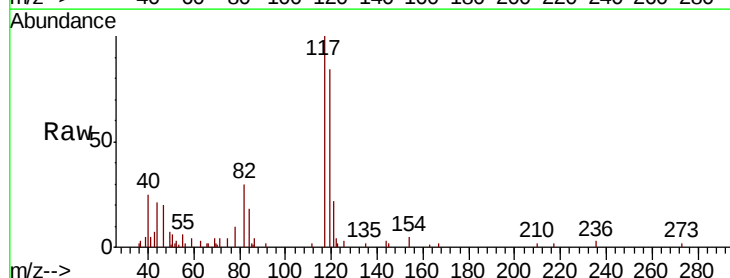
Manual Integrations
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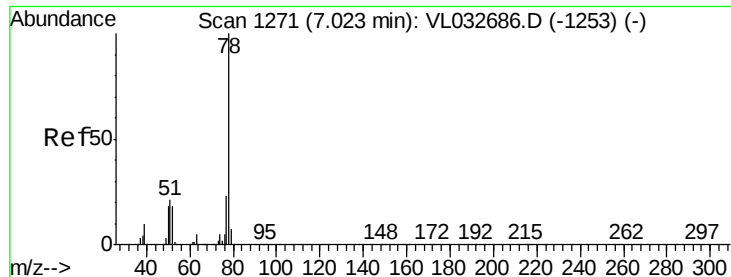
MMDadoda
11/12/2018 12:30:10 PM



#35
Carbon Tetrachloride
Concen: 0.082 ppbv m
RT: 7.14 min Scan# 1308
Delta R.T. -0.01 min
Lab File: VL032723.D
Acq: 7 Nov 2018 19:00

Tgt Ion	117	Resp	20448
Ion Ratio	Lower	Upper	
117	100		
119	83.7	75.7	113.5
121	22.2	24.7	37.1#





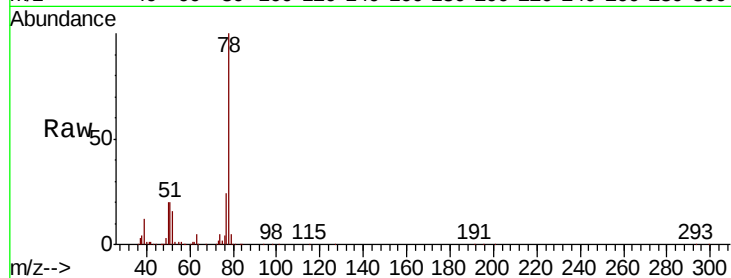
#36
Benzene
Concen: 1.808 ppbv
RT: 7.02 min Scan# 1269
Delta R.T. -0.00 min
Lab File: VL032723.D
Acq: 7 Nov 2018 19:00

Instrument :
MSVOA_L
ClientSampled :
IA-03

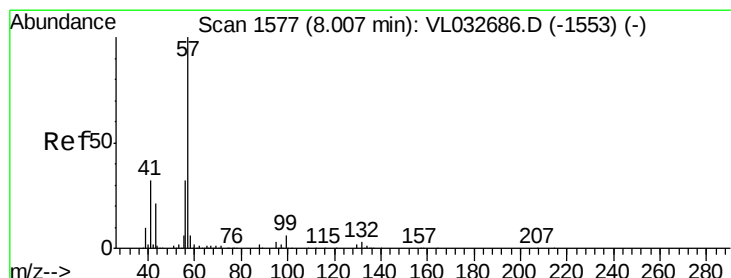
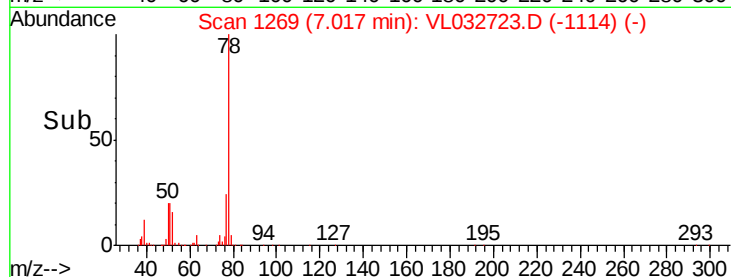
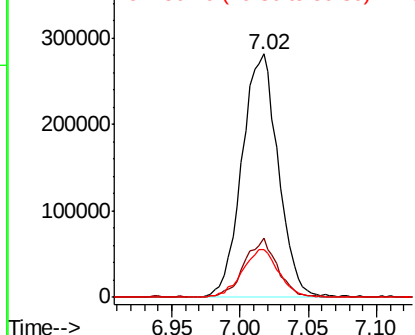
Tot Ion	Ratio	Lower	Upper
78	100		
77	24.2	18.1	27.1
50	19.6	15.1	22.7

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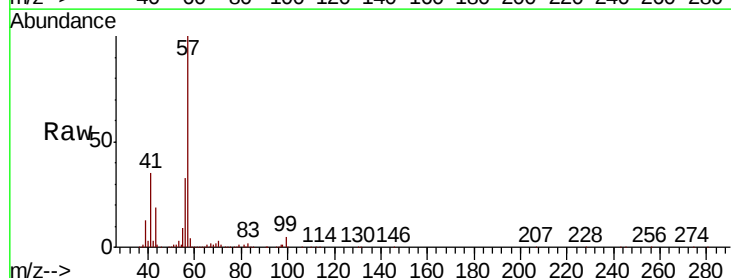


Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0

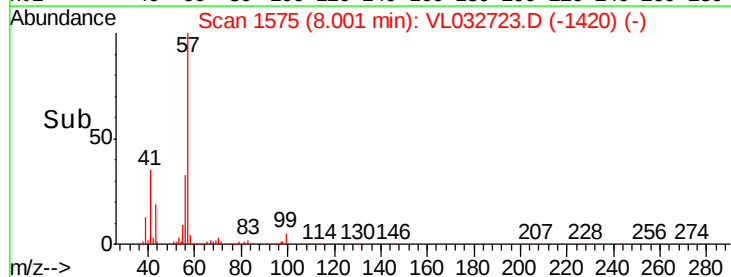
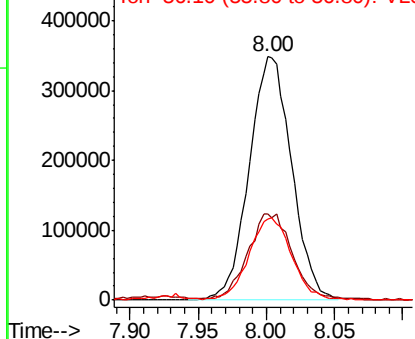


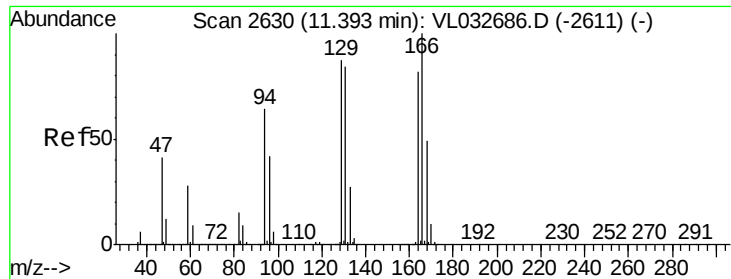
#44
2,2,4-Trimethylpentane
Concen: 1.538 ppbv
RT: 8.00 min Scan# 1575
Delta R.T. -0.00 min
Lab File: VL032723.D
Acq: 7 Nov 2018 19:00

Tgt Ion	Ratio	Lower	Upper
57	100		
41	37.6	24.7	37.1#
56	34.5	25.0	37.4



Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 56.10 (55.80 to 56.80): VL0





#52

Tetrachloroethene

Concen: 0.208 ppbv m

RT: 11.38 min Scan# 2626

Delta R.T. -0.01 min

Lab File: VL032723.D

Acq: 7 Nov 2018 19:00

Instrument :

MSVOA_L

ClientSampled :

IA-03

Tot Ion:164 Resp: 20684

Ion Ratio Lower Upper

164 100

166 125.5 100.5 150.7

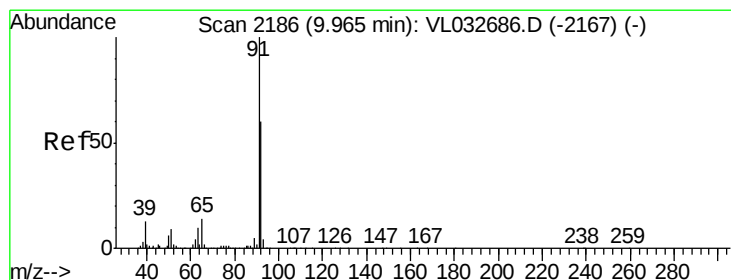
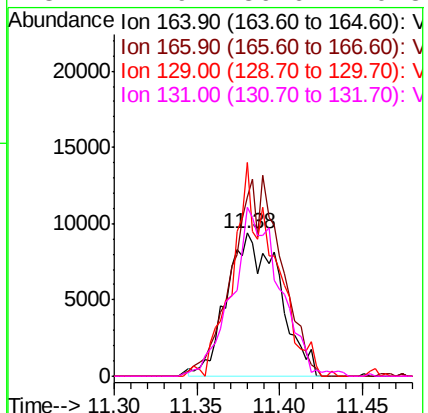
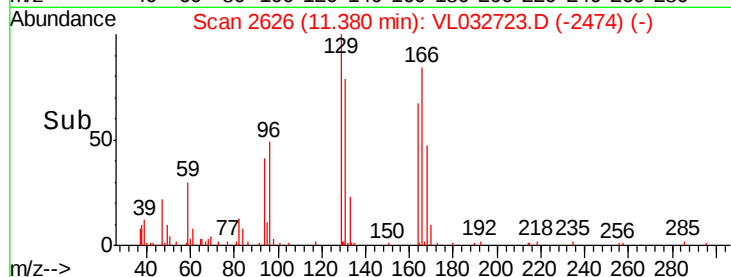
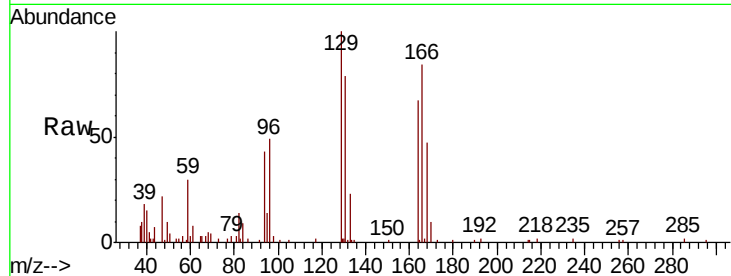
129 149.5 90.0 135.0#

131 117.9 86.6 129.8

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#53

Toluene

Concen: 13.059 ppbv

RT: 9.96 min Scan# 2184

Delta R.T. -0.00 min

Lab File: VL032723.D

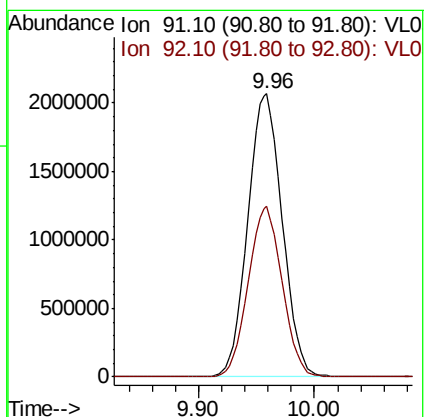
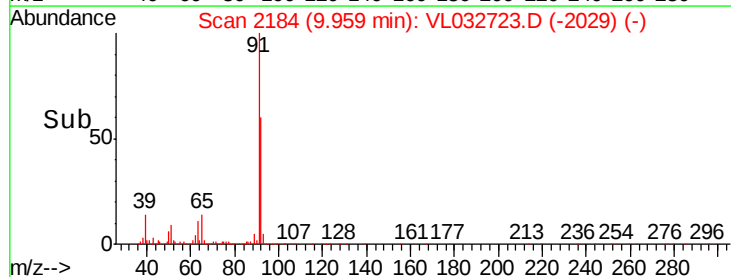
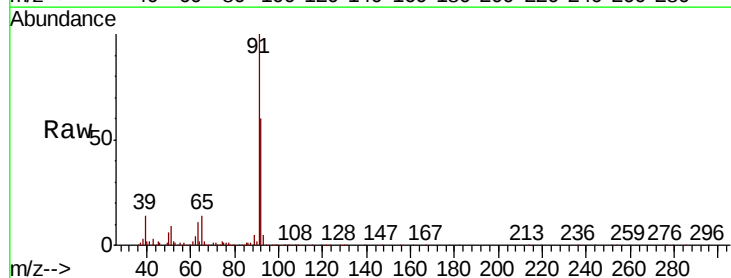
Acq: 7 Nov 2018 19:00

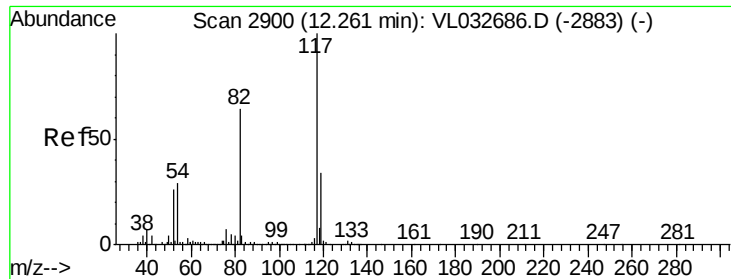
Tgt Ion: 91 Resp: 4276125

Ion Ratio Lower Upper

91 100

92 59.5 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: VL032723.D

Acq: 7 Nov 2018 19:00

Instrument :

MSVOA_L

ClientSampleId :

IA-03

Tot Ion:117 Resp: 3425277

Ion Ratio Lower Upper

117 100

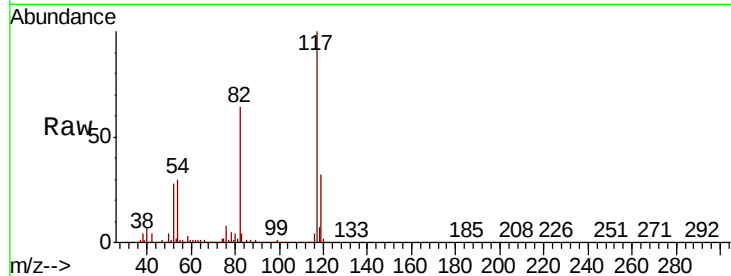
82 64.5 52.7 79.1

119 32.9 26.7 40.1

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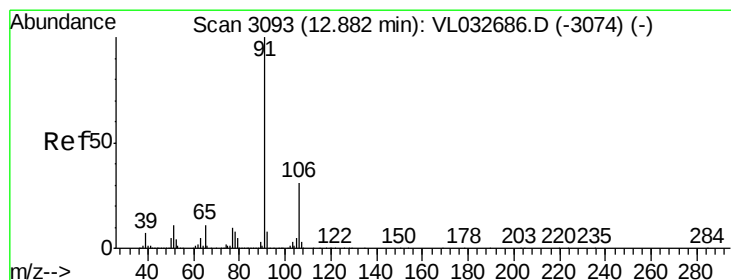
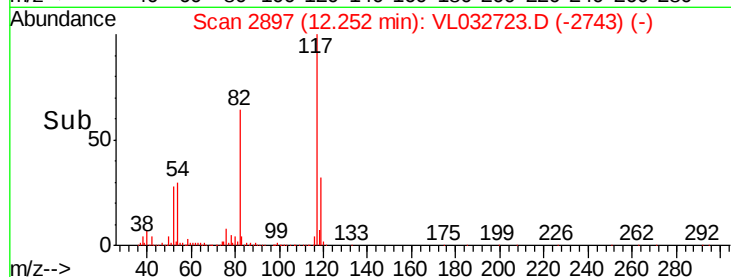
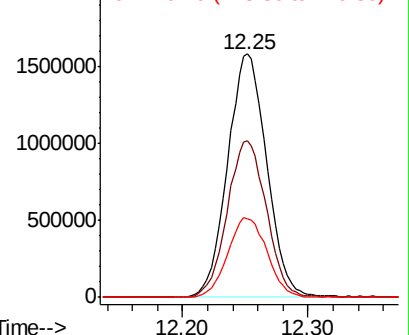
11/12/2018 12:30:10 PM



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 1.062 ppbv

RT: 12.88 min Scan# 3092

Delta R.T. -0.00 min

Lab File: VL032723.D

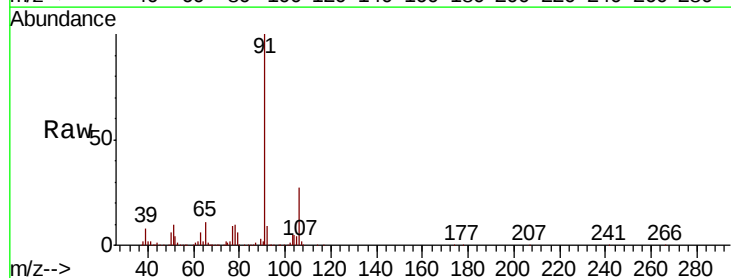
Acq: 7 Nov 2018 19:00

Tgt Ion: 91 Resp: 422509

Ion Ratio Lower Upper

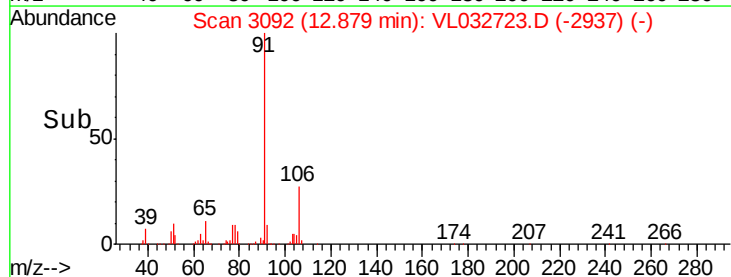
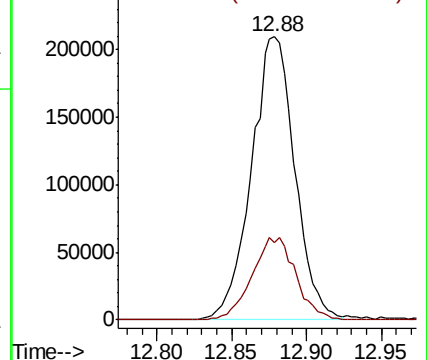
91 100

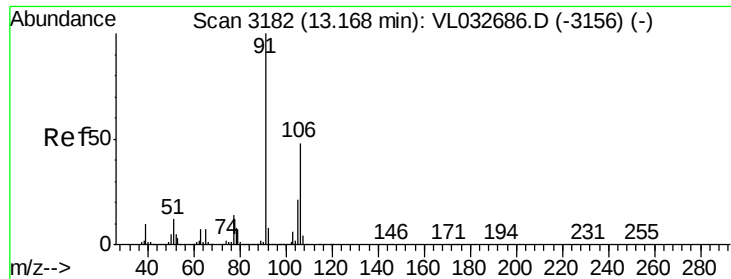
106 27.1 24.2 36.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





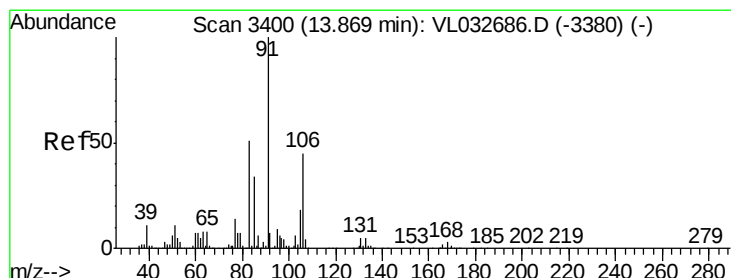
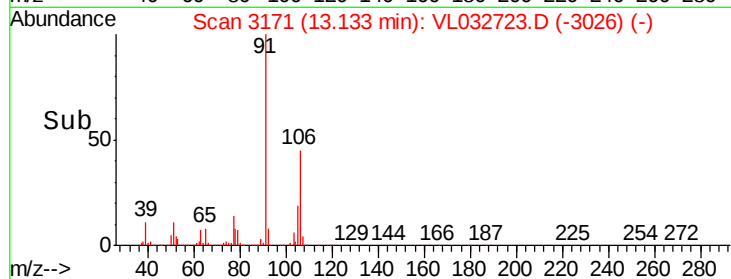
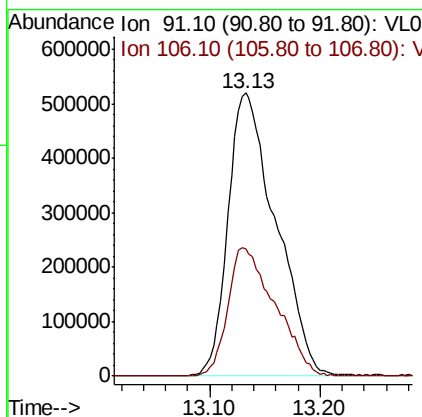
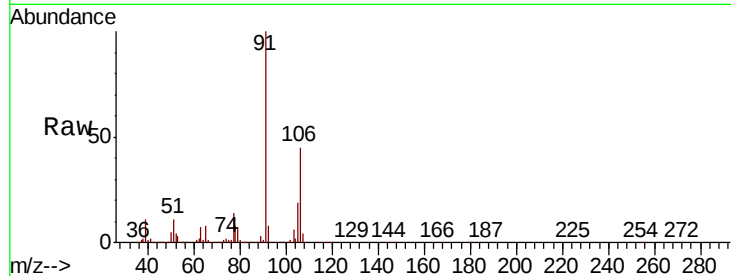
#59
m/p-Xylene
Concen: 4.382 ppbv
RT: 13.13 min Scan# 3171
Delta R.T. -0.04 min
Lab File: VL032723.D
Acq: 7 Nov 2018 19:00

Instrument :
MSVOA_L
ClientSampled :
IA-03

Tot Ion: 91 Resp: 1552690
Ion Ratio Lower Upper
91 100
106 45.4 35.9 53.9

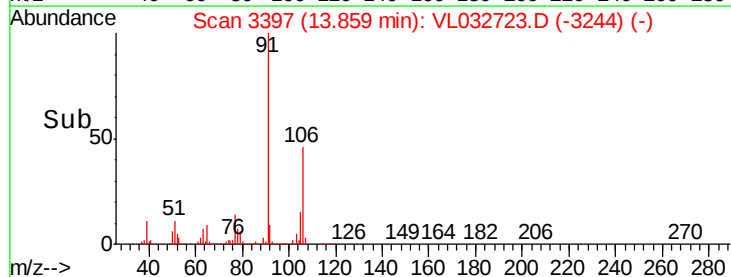
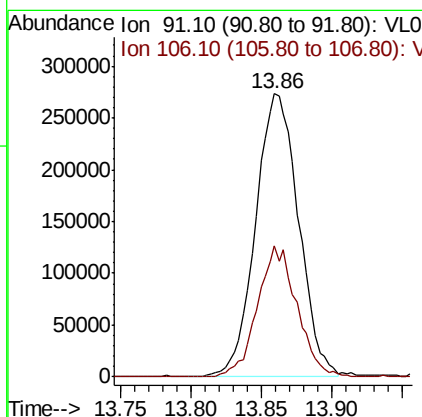
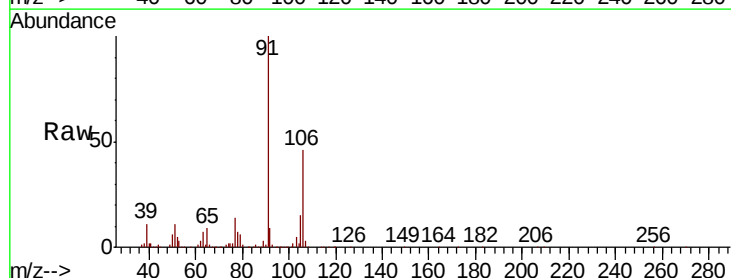
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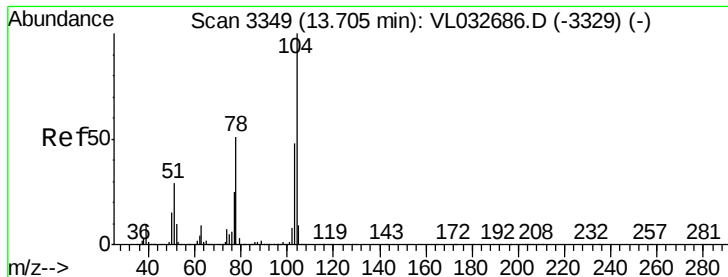
MMDadoda
11/12/2018 12:30:10 PM



#60
o-Xylene
Concen: 1.702 ppbv
RT: 13.86 min Scan# 3397
Delta R.T. -0.01 min
Lab File: VL032723.D
Acq: 7 Nov 2018 19:00

Tgt Ion: 91 Resp: 581651
Ion Ratio Lower Upper
91 100
106 42.7 22.1 66.1





#61

Stvrene

Concen: 0.160 ppbv m

RT: 13.70 min Scan# 3346

Delta R.T. -0.01 min

Lab File: VL032723.D

Acq: 7 Nov 2018 19:00

Instrument :

MSVOA_L

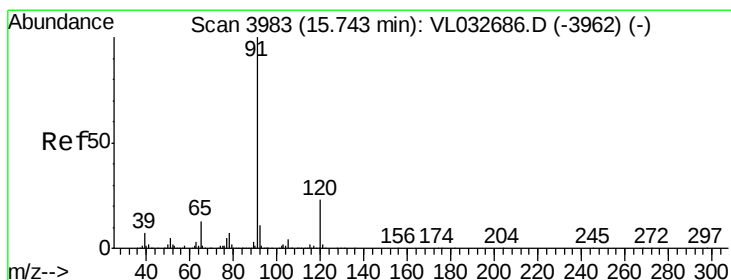
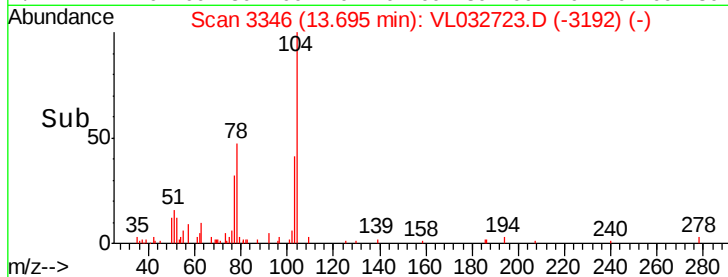
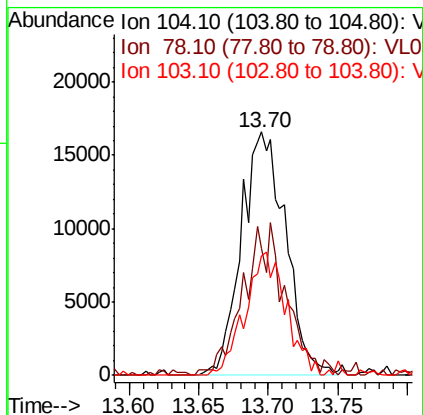
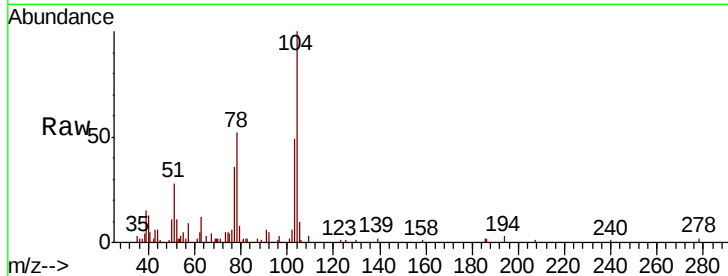
ClientSampled :

IA-03

Tot Ion:	104	Resp:	36673
Ion Ratio	Lower	Upper	
104	100		
78	63.0	42.8	64.2
103	48.3	37.4	56.0

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#64

n-propylbenzene

Concen: 0.112 ppbv m

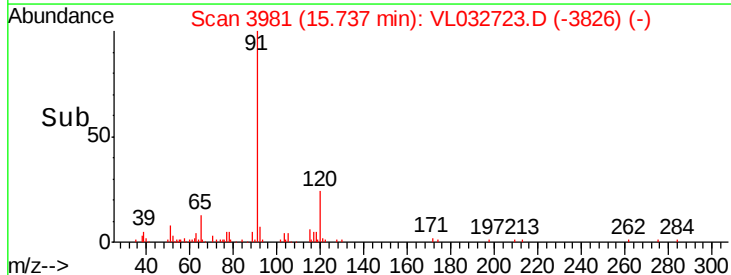
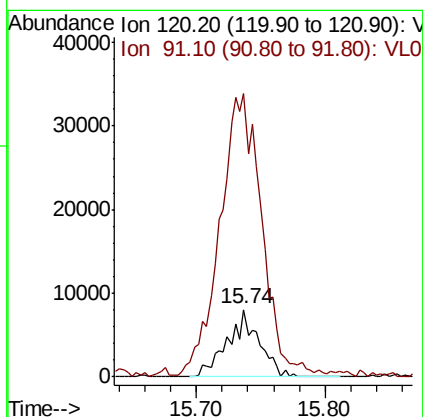
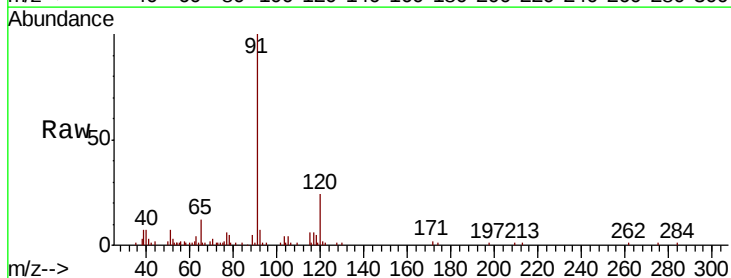
RT: 15.74 min Scan# 3981

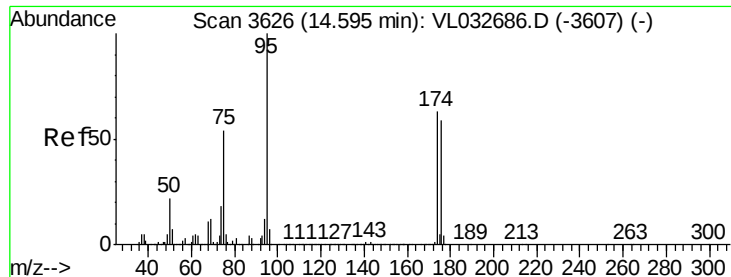
Delta R.T. -0.00 min

Lab File: VL032723.D

Acq: 7 Nov 2018 19:00

Tgt Ion:	120	Resp:	13516
Ion Ratio	Lower	Upper	
120	100		
91	560.8	390.2	585.2





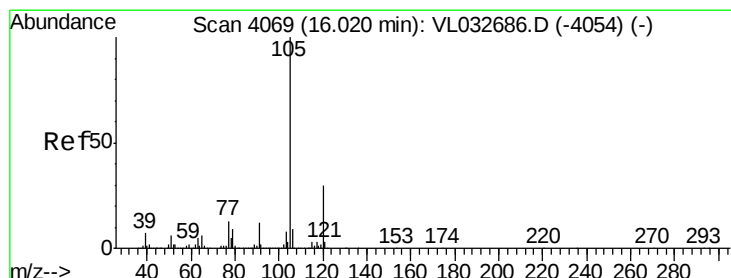
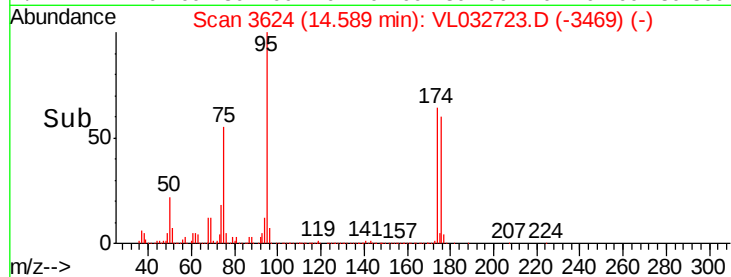
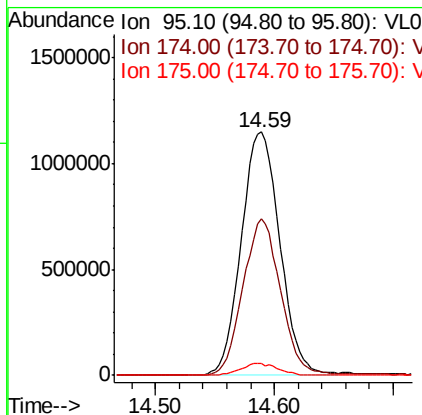
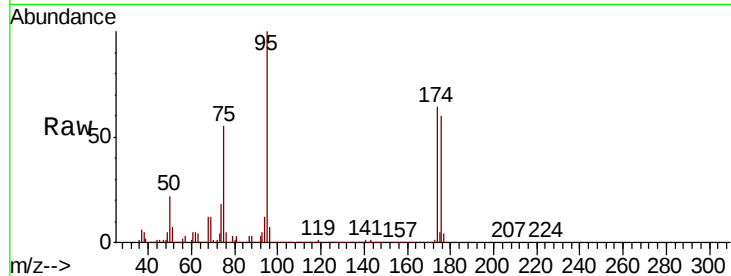
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.133 ppbv
 RT: 14.59 min Scan# 3624
 Delta R.T. -0.00 min
 Lab File: VL032723.D
 Acq: 7 Nov 2018 19:00

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-03

Tot Ion: 95 Resp: 2584426
 Ion Ratio Lower Upper
 95 100
 174 63.7 46.0 69.0
 175 4.8 3.4 5.0

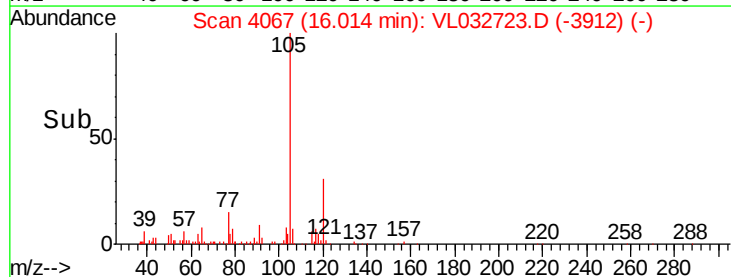
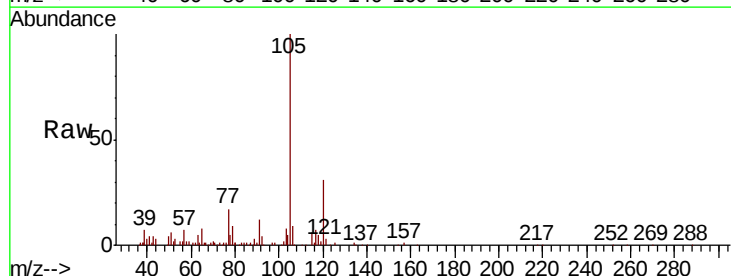
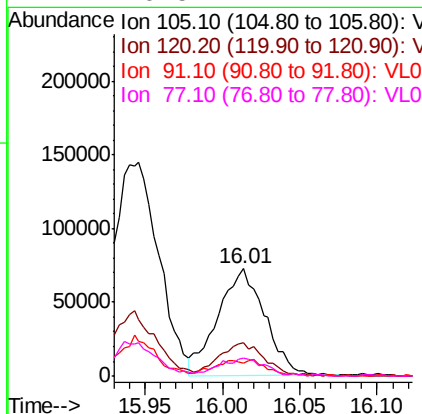
Manual Integrations
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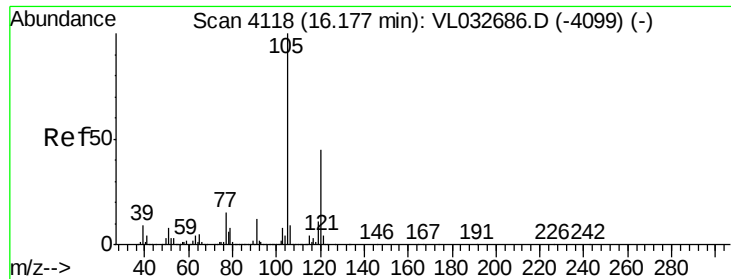
MMDadoda
 11/12/2018 12:30:10 PM



#72
 4-Ethyltoluene
 Concen: 0.419 ppbv
 RT: 16.01 min Scan# 4067
 Delta R.T. -0.00 min
 Lab File: VL032723.D
 Acq: 7 Nov 2018 19:00

Tgt Ion: 105 Resp: 152614
 Ion Ratio Lower Upper
 105 100
 120 29.8 23.7 35.5
 91 17.1 10.4 15.6#
 77 16.5 11.4 17.2





#73

1,3,5-Trimethylbenzene

Concen: 0.339 ppbv m

RT: 16.17 min Scan# 4117

Delta R.T. -0.00 min

Lab File: VL032723.D

Acq: 7 Nov 2018 19:00

Instrument :

MSVOA_L

ClientSampled :

IA-03

Tot Ion:105 Resp: 120184

Ion Ratio Lower Upper

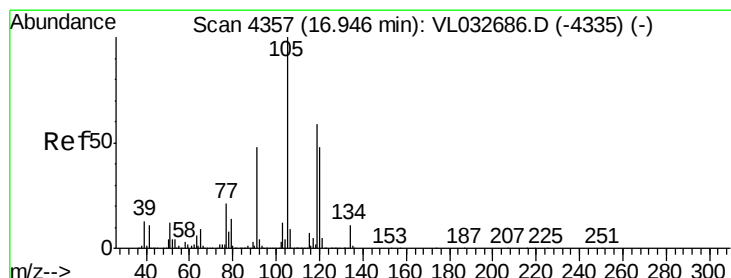
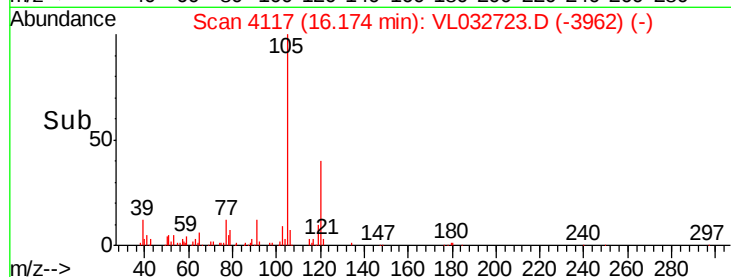
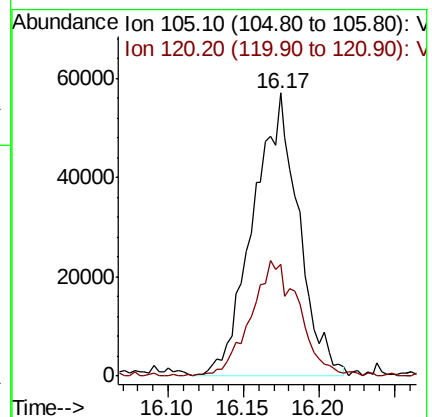
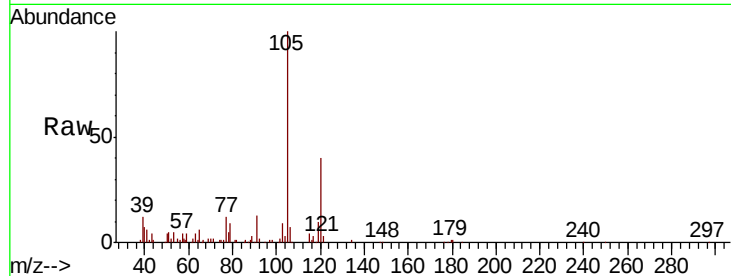
105 100

120 39.7 35.4 53.2

Manual Integrations
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#74

1,2,4-Trimethylbenzene

Concen: 1.400 ppbv

RT: 16.93 min Scan# 4353

Delta R.T. -0.01 min

Lab File: VL032723.D

Acq: 7 Nov 2018 19:00

Tgt Ion:105 Resp: 530209

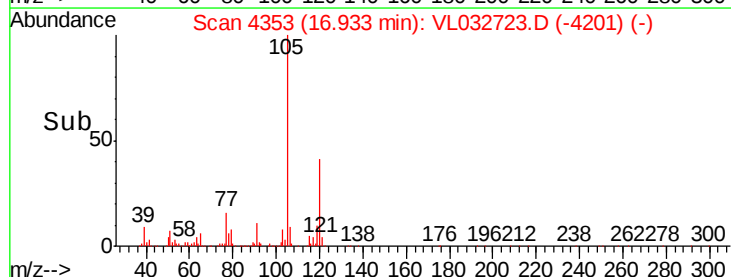
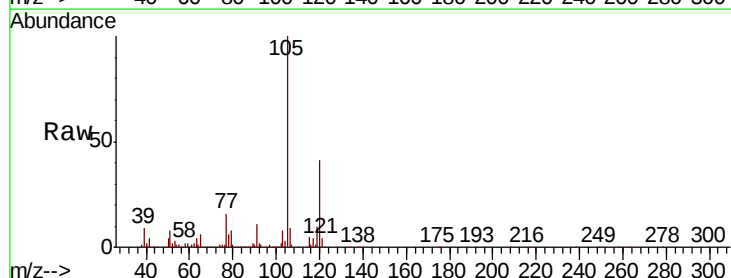
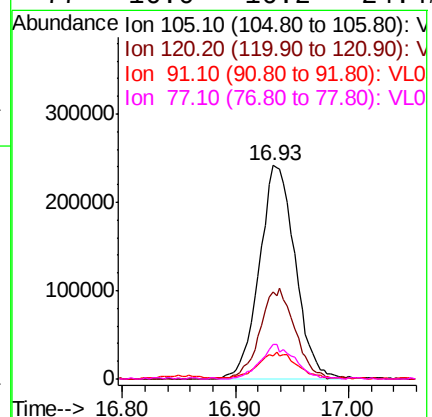
Ion Ratio Lower Upper

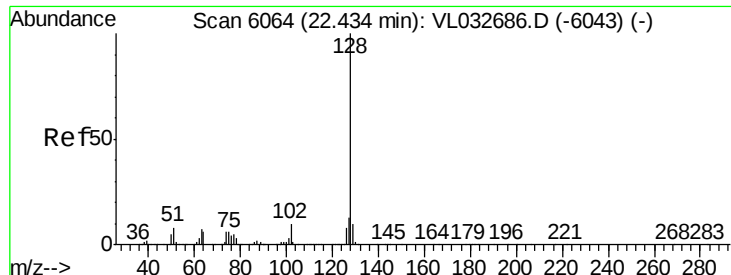
105 100

120 40.8 35.8 53.8

91 10.3 33.2 49.8#

77 16.0 16.2 24.4#





#79

Naphthalene

Concen: 0.180 ppbv m

RT: 22.43 min Scan# 6063

Delta R.T. -0.00 min

Lab File: VL032723.D

Acq: 7 Nov 2018 19:00

Instrument :

MSVOA_L

ClientSampleId :

IA-03

Tot Ion:	128	Resp:	42466
Ion Ratio		Lower	Upper
128	100		
127	6.0	10.3	15.5#
129	14.8	8.6	13.0#

Manual Integrations
APPROVED

MMDadoda
11/12/2018 12:30:10 PM

