

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL022820\
 Data File : VL034743.D
 Acq On : 28 Feb 2020 19:08
 Operator : SY/AP
 Sample : L1704-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4-4

Manual Integrations
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 3/2/2020 1:01:29 PM

Quant Time: Mar 02 12:01:48 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL022620AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Feb 28 2020
 QLast Update : Fri Feb 28 01:15:02 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1058562	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2169390	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	2159480	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.46	95	1869091	10.56	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	53811	0.322	ppbv	95
4) Chloromethane	3.11	50	33741	0.528	ppbv	99
9) Propene	2.99	41	507121m	10.620	ppbv	
10) Heptane	8.14	43	522714	4.253	ppbv	98
11) Trichlorofluoromethane	3.93	101	47456	0.324	ppbv	88
13) Ethanol	3.59	45	565795	37.506	ppbv	95
15) Acetone	3.83	43	9048478	75.014	ppbv #	76
17) tert-Butyl alcohol	4.29	59	582940	6.307	ppbv	98
19) Isopropyl Alcohol	3.96	45	144634	2.013	ppbv #	94
20) Methylene Chloride	4.33	84	831670	18.539	ppbv	95
23) Vinyl Acetate	5.07	43	4269095	26.033	ppbv	97
26) Hexane	5.69	57	412863	4.195	ppbv #	52
30) Cyclohexane	7.14	84	40361m	0.529	ppbv	
34) 2-Butanone	5.25	43	111679	0.818	ppbv	96
35) Carbon Tetrachloride	7.03	117	11237m	0.077	ppbv	
36) Benzene	6.91	78	79386m	0.424	ppbv	
38) Trichloroethene	7.86	130	10740m	0.149	ppbv	
52) Tetrachloroethene	11.26	164	326895	4.760	ppbv	95
53) Toluene	9.83	91	7766400	38.971	ppbv	90
58) Ethyl Benzene	12.75	91	261506	1.001	ppbv #	89
59) m/p-Xylene	13.00	91	929818	4.080	ppbv	100
60) o-Xylene	13.73	91	273587m	1.210	ppbv	
72) 4-Ethyltoluene	15.88	105	109348	0.434	ppbv #	97
73) 1,3,5-Trimethylbenzene	16.04	105	82515	0.341	ppbv	93
74) 1,2,4-Trimethylbenzene	16.81	105	292772	1.095	ppbv #	67
79) Naphthalene	22.27	128	38886m	0.165	ppbv	

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

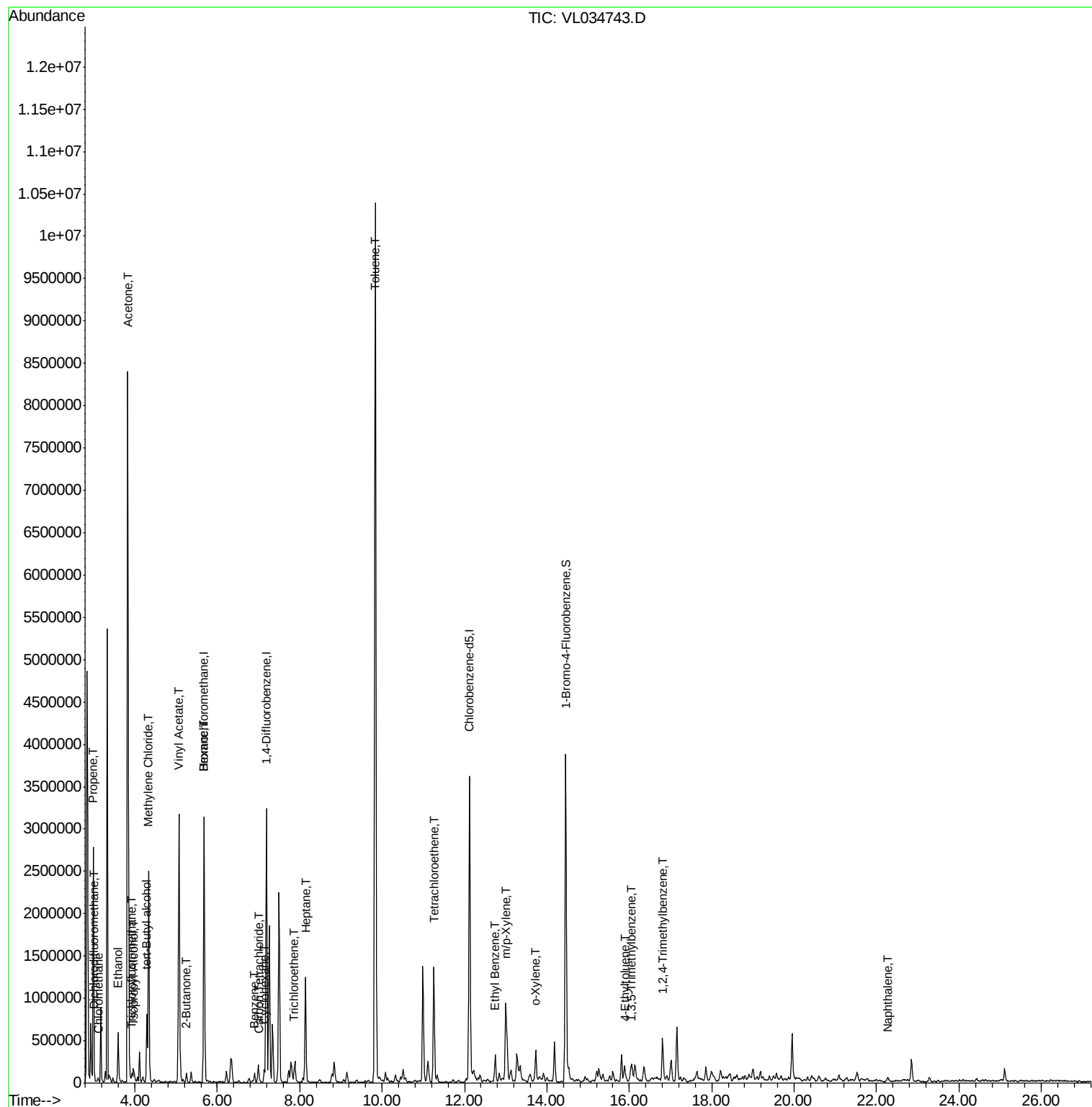
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL022820\
Data File : VL034743.D
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Operator : SY/AP
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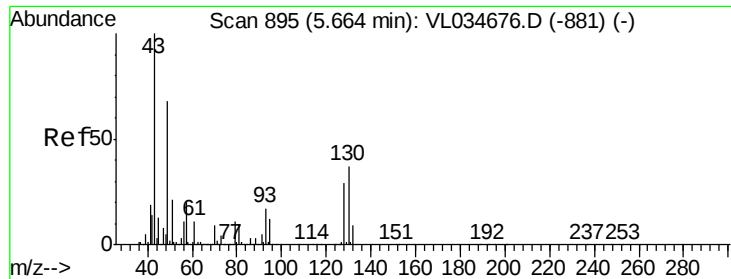
Instrument :
MSVOA_L
ClientSampleId :
IA-4-4

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Quant Time: Mar 02 12:01:48 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL022620AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Feb
QLast Update : Fri Feb 28 01:15:02 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 898

Delta R.T. 0.01 min

Lab File: VL034743.D

Acq: 28 Feb 2020 19:08

Instrument :

MSVOA_L

ClientSampled :

IA-4-4

Tot Ion: 49 Resp: 1058562

Ion Ratio Lower Upper

49 100

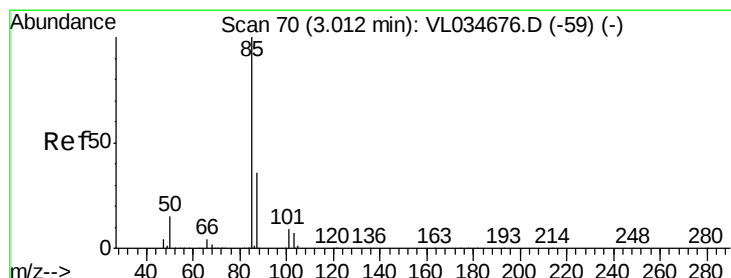
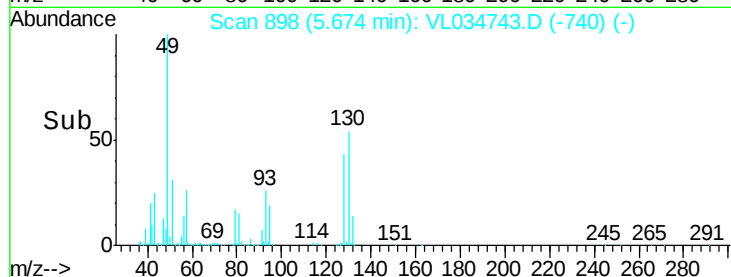
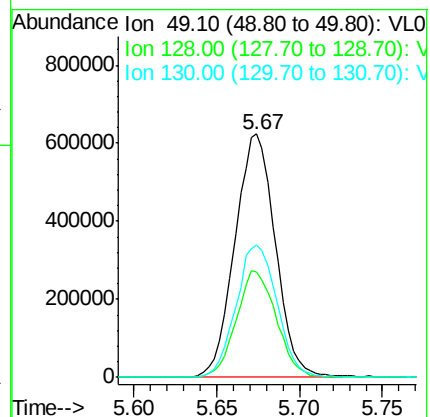
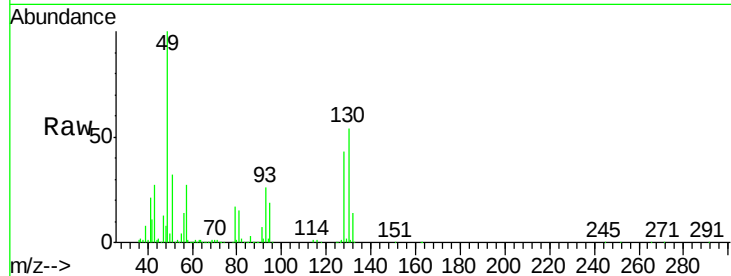
128 43.5 21.6 65.0

130 55.2 27.7 83.1

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#2

Dichlorodifluoromethane

Concen: 0.322 ppbv

RT: 3.02 min Scan# 72

Delta R.T. 0.01 min

Lab File: VL034743.D

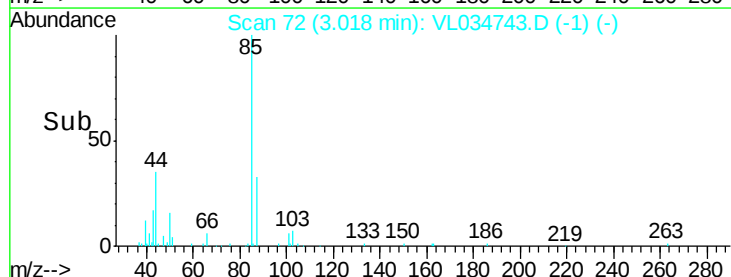
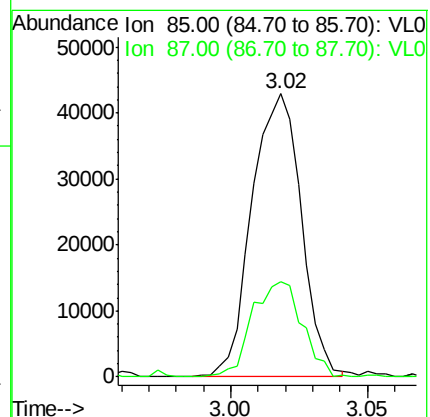
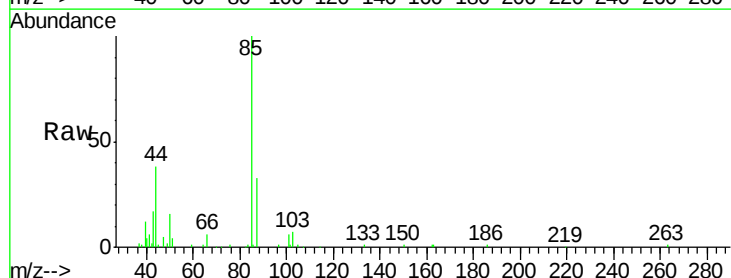
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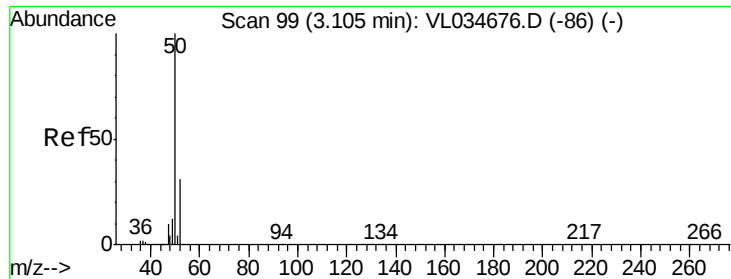
Tgt Ion: 85 Resp: 53811

Ion Ratio Lower Upper

85 100

87 33.5 29.2 43.8





#4

Chloromethane

Concen: 0.528 ppbv

RT: 3.11 min Scan# 100

Delta R.T. 0.00 min

Lab File: VL034743.D

Acq: 28 Feb 2020 19:08

Instrument :

MSVOA_L

ClientSampleId :

IA-4-4

Tot Ion: 50 Resp: 33741

Ion Ratio Lower Upper

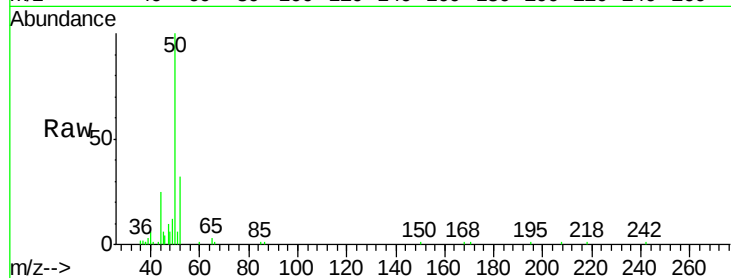
50 100

52 32.0 25.0 37.4

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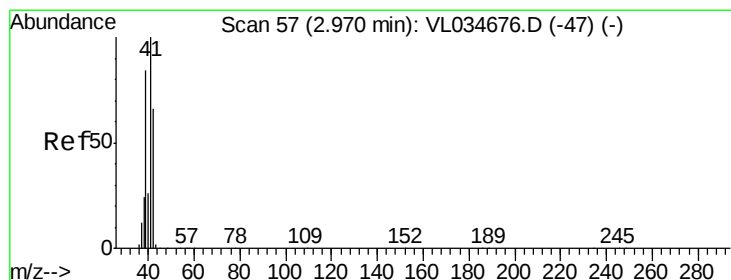
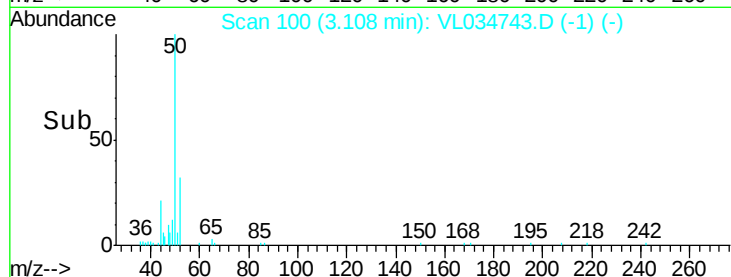
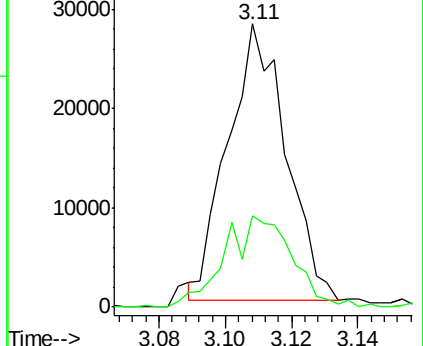
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Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#9

Propene

Concen: 10.620 ppbv m

RT: 2.99 min Scan# 63

Delta R.T. 0.02 min

Lab File: VL034743.D

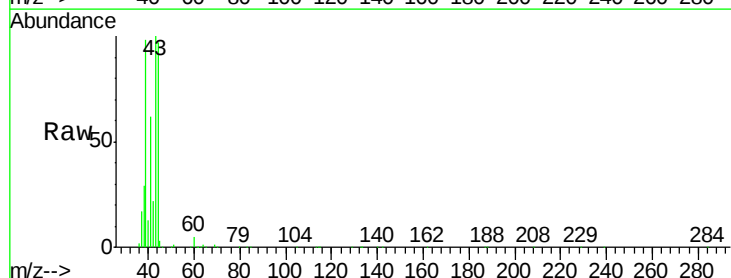
Acq: 28 Feb 2020 19:08

Tgt Ion: 41 Resp: 507121

Ion Ratio Lower Upper

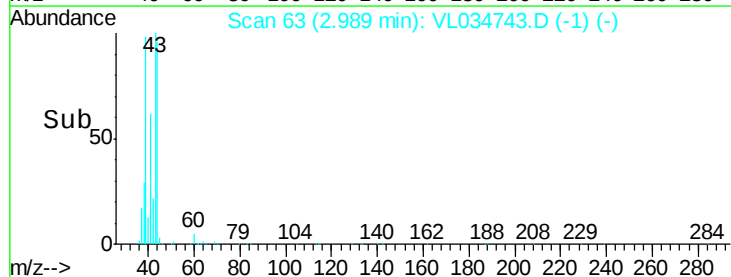
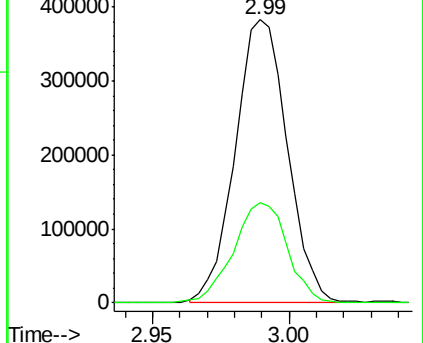
41 100

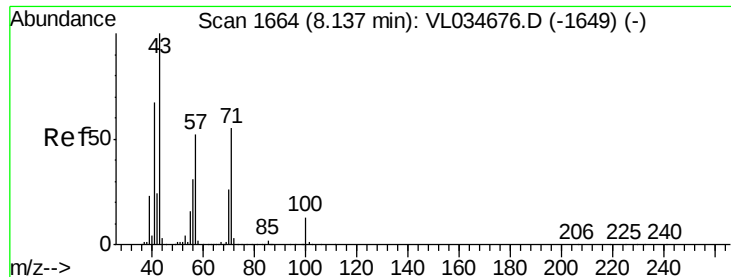
42 30.1 54.9 82.3#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





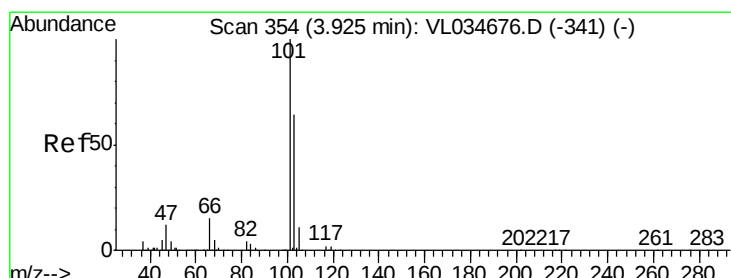
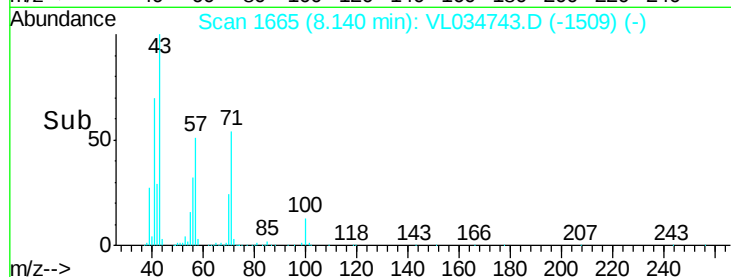
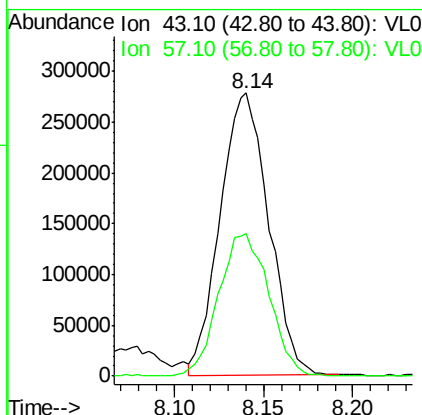
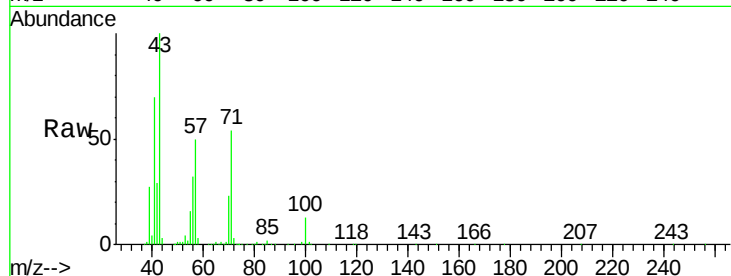
#10
Heptane
Concen: 4.253 ppbv
RT: 8.14 min Scan# 1665
Delta R.T. 0.00 min
Lab File: VL034743.D
Acq: 28 Feb 2020 19:08

Instrument :
MSVOA_L
ClientSampleId :
IA-4-4

Tot Ion: 43 Resp: 522714
Ion Ratio Lower Upper
43 100
57 52.7 41.0 61.6

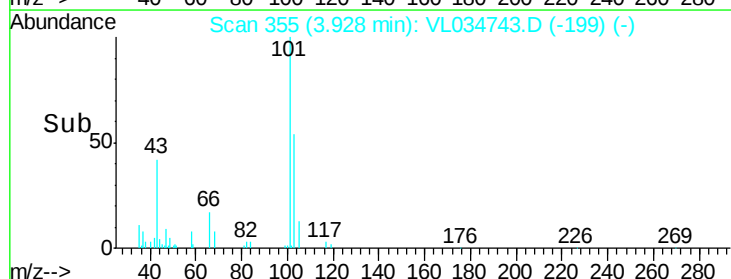
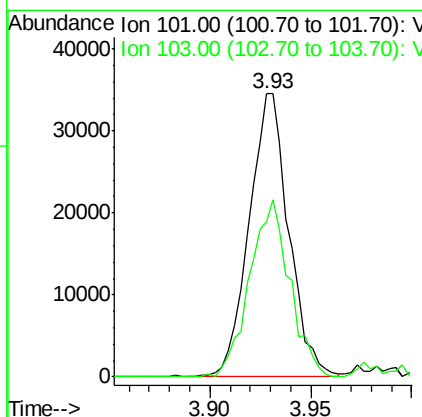
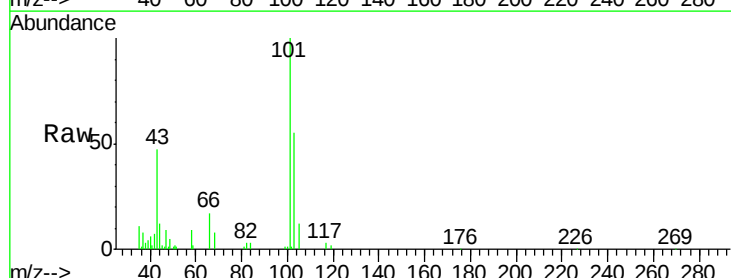
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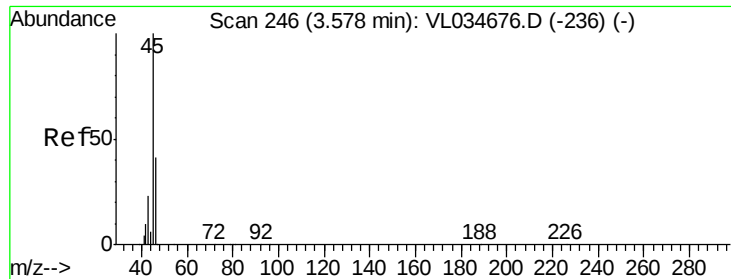
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#11
Trichlorofluoromethane
Concen: 0.324 ppbv
RT: 3.93 min Scan# 355
Delta R.T. 0.00 min
Lab File: VL034743.D
Acq: 28 Feb 2020 19:08

Tgt Ion: 101 Resp: 47456
Ion Ratio Lower Upper
101 100
103 54.7 51.2 76.8





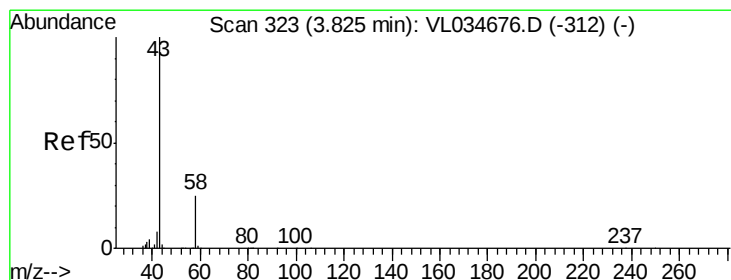
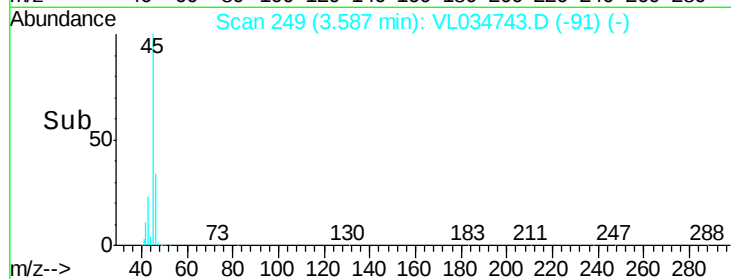
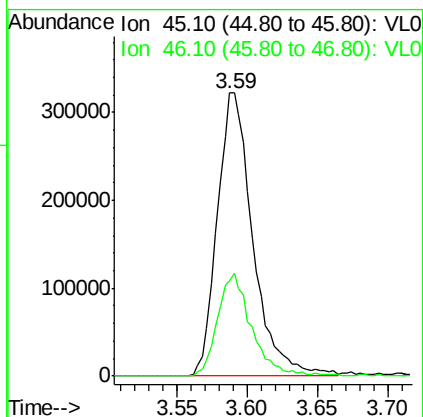
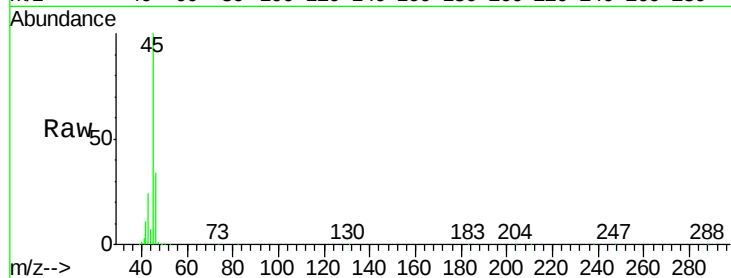
#13
Ethanol
Concen: 37.506 ppbv
RT: 3.59 min Scan# 249
Delta R.T. 0.01 min
Lab File: VL034743.D
Acq: 28 Feb 2020 19:08

Instrument :
MSVOA_L
ClientSampleId :
IA-4-4

Tot Ion	45	Resp	565795
Ion Ratio	100	Lower	Upper
46	35.2	15.4	61.4

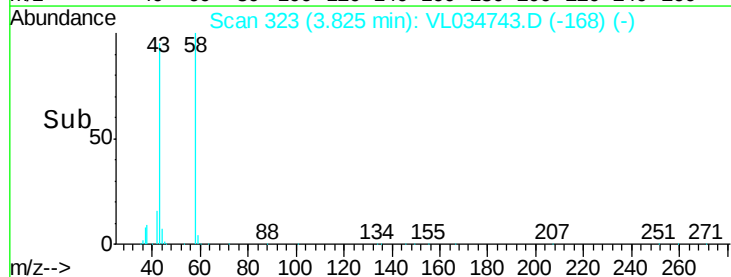
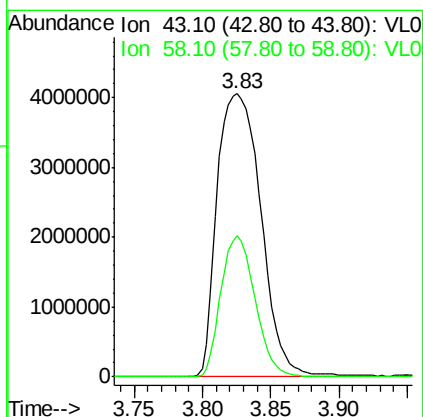
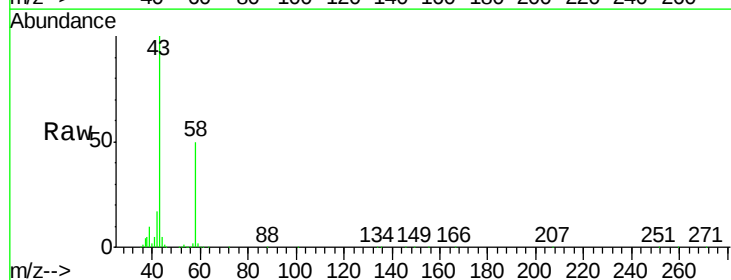
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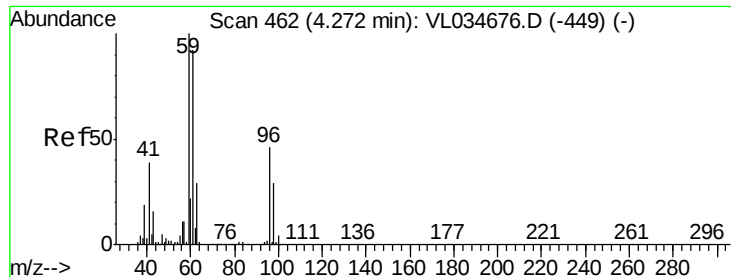
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#15
Acetone
Concen: 75.014 ppbv
RT: 3.83 min Scan# 323
Delta R.T. -0.00 min
Lab File: VL034743.D
Acq: 28 Feb 2020 19:08

Tgt Ion	43	Resp	9048478
Ion Ratio	100	Lower	Upper
58	39.3	21.4	32.0#





#17

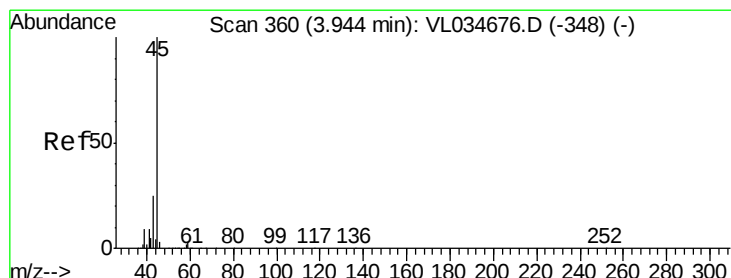
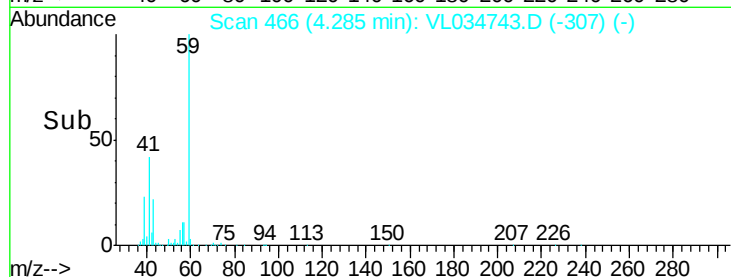
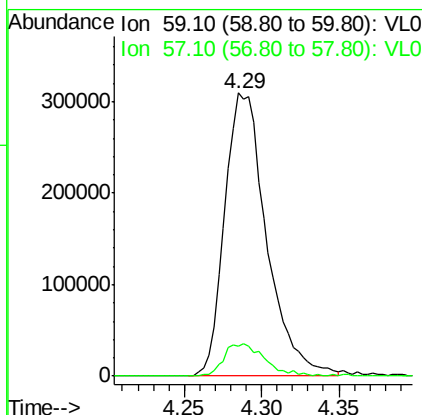
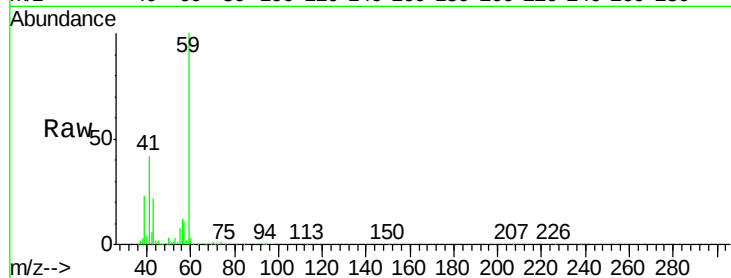
tert-Butyl alcohol
Concen: 6.307 ppbv
RT: 4.29 min Scan# 466
Delta R.T. 0.01 min
Lab File: VL034743.D
Acq: 28 Feb 2020 19:08

Instrument :
MSVOA_L
ClientSampled :
IA-4-4

Tot Ion	Ratio	Lower	Upper
59	100		
57	11.6	8.8	13.2

Manual Integrations
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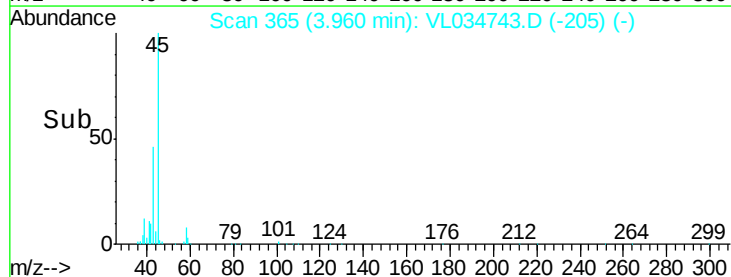
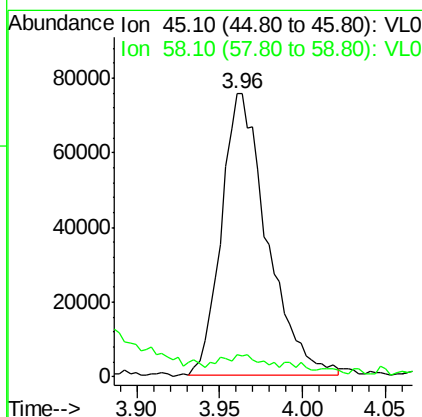
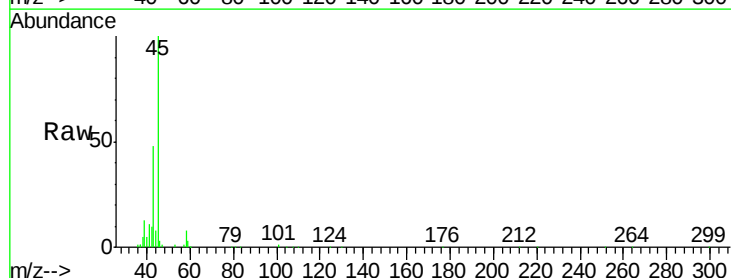
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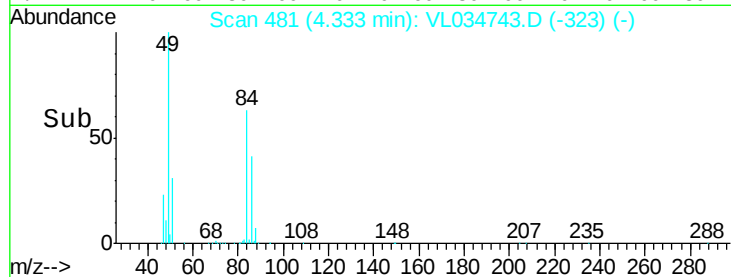
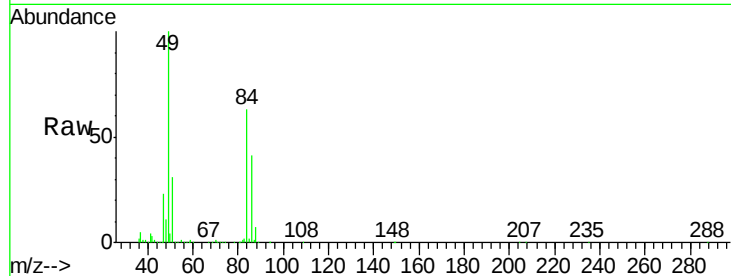
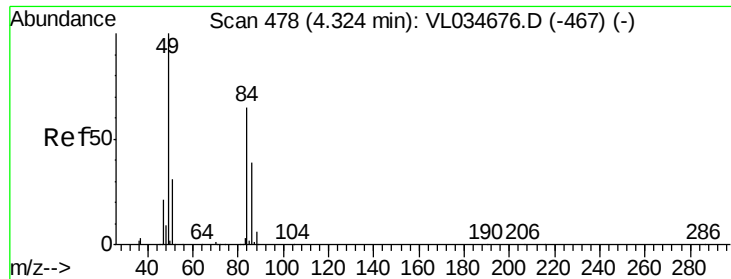


#19

Isopropyl Alcohol
Concen: 2.013 ppbv
RT: 3.96 min Scan# 365
Delta R.T. 0.02 min
Lab File: VL034743.D
Acq: 28 Feb 2020 19:08

Tgt Ion	Ratio	Lower	Upper
45	100		
58	0.0	1.8	2.6#





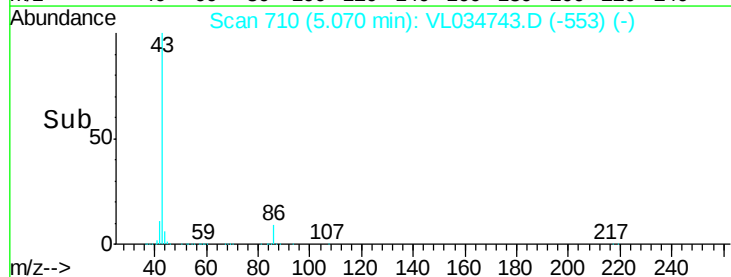
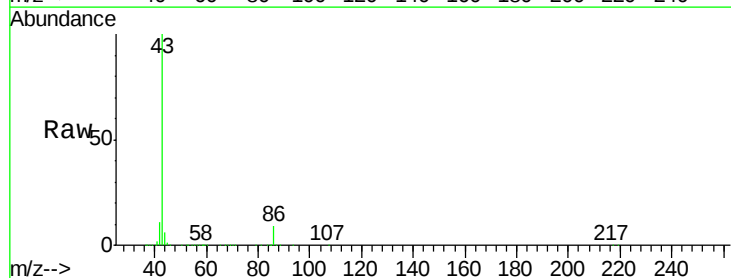
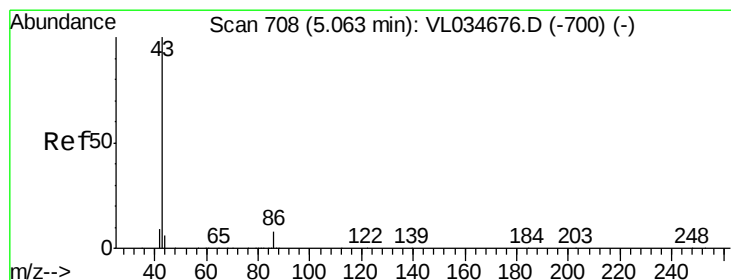
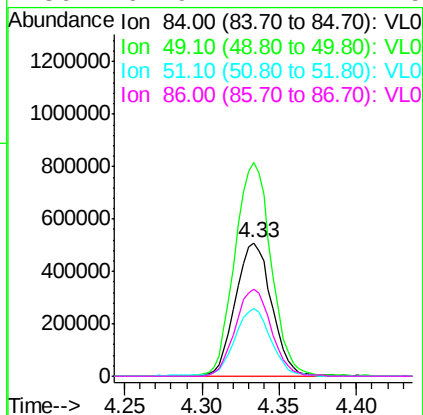
#20
Methvlene Chloride
Concen: 18.539 ppbv
RT: 4.33 min Scan# 481
Delta R.T. 0.01 min
Lab File: VL034743.D
Acq: 28 Feb 2020 19:08

Tot Ion:	84	Resp:	831670
Ion	Ratio	Lower	Upper
84	100		
49	159.8	122.8	184.2
51	50.1	38.6	58.0
86	64.9	47.7	71.5

Instrument :
MSVOA_L
ClientSampleId :
IA-4-4

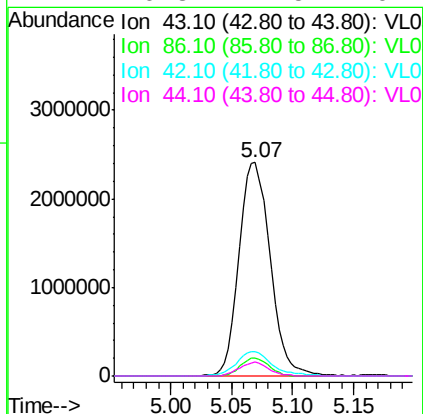
Manual Integrations
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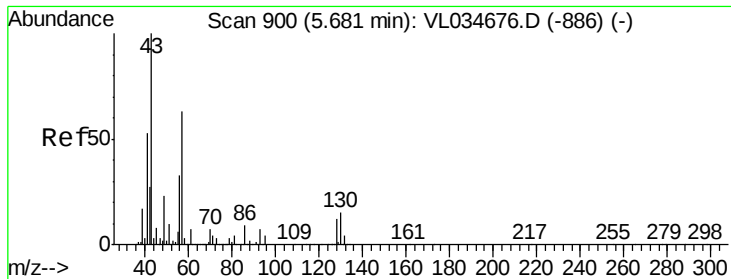
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#23
Vinyl Acetate
Concen: 26.033 ppbv
RT: 5.07 min Scan# 710
Delta R.T. 0.01 min
Lab File: VL034743.D
Acq: 28 Feb 2020 19:08

Tgt Ion:	43	Resp:	4269095
Ion	Ratio	Lower	Upper
43	100		
86	8.6	6.0	9.0
42	11.3	8.0	12.0
44	6.3	4.5	6.7





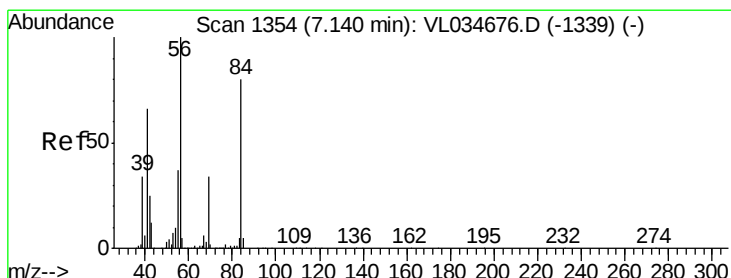
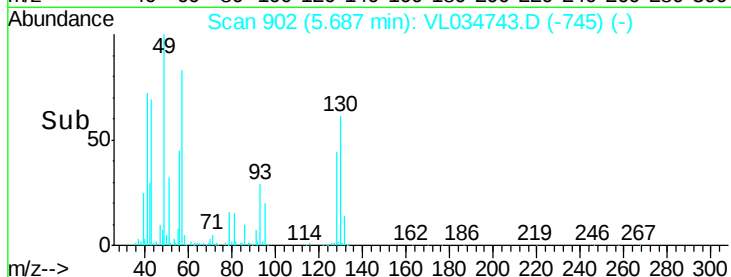
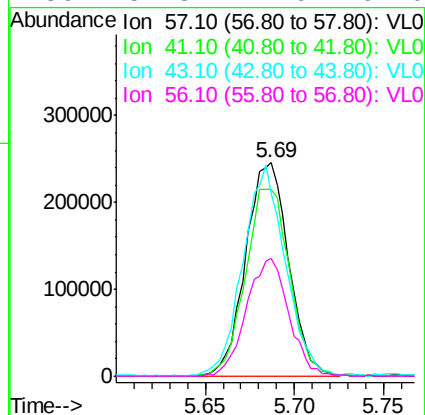
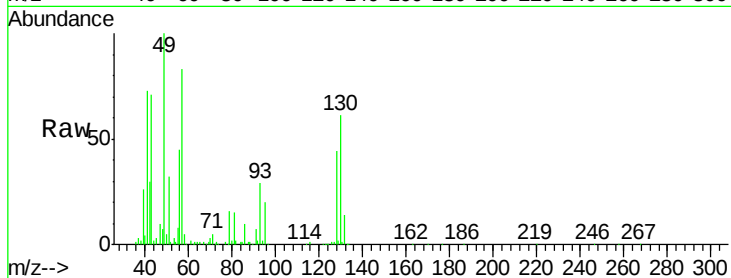
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Hexane
Concen: 4.195 ppbv
RT: 5.69 min Scan# 902
Delta R.T. 0.01 min
Lab File: VL034743.D
Acq: 28 Feb 2020 19:08

Instrument :
MSVOA_L
ClientSampled :
IA-4-4

Tot Ion	Ratio	Lower	Upper
57	100		
41	91.1	70.3	105.5
43	96.9	177.0	265.4#
56	54.8	42.6	64.0

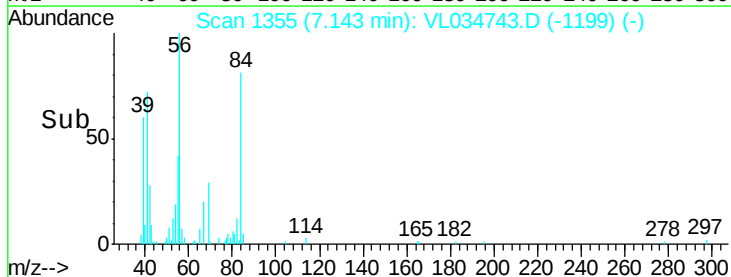
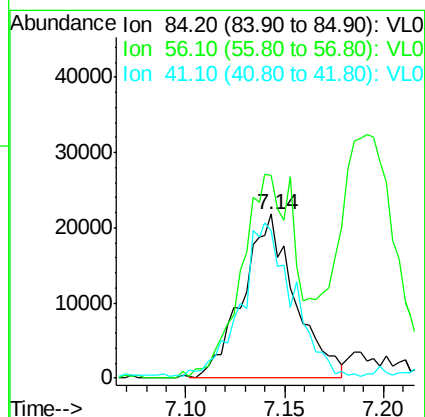
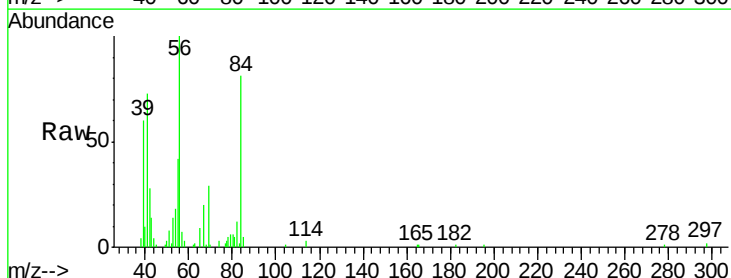
Manual Integrations
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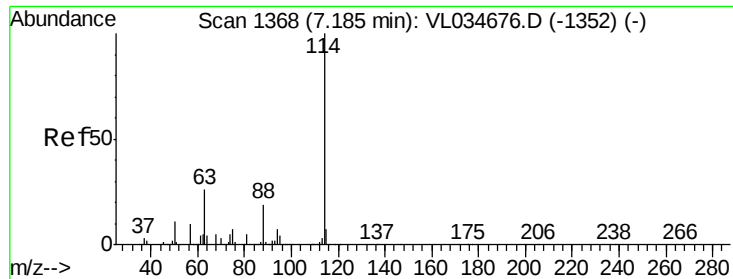
MMDadoda
3/2/2020 1:01:29 PM



#30
Cyclohexane
Concen: 0.529 ppbv m
RT: 7.14 min Scan# 1355
Delta R.T. 0.00 min
Lab File: VL034743.D
Acq: 28 Feb 2020 19:08

Tgt Ion	Ratio	Lower	Upper
84	100		
56	128.9	113.4	170.2
41	96.3	68.2	102.4





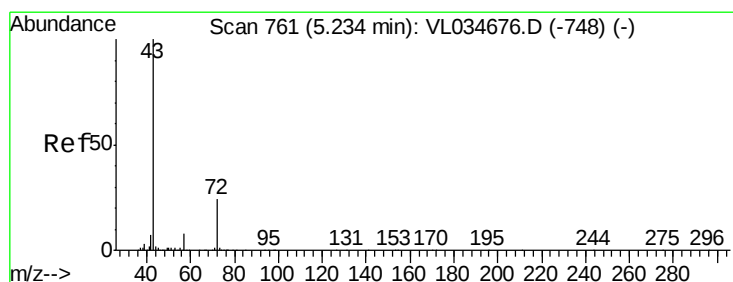
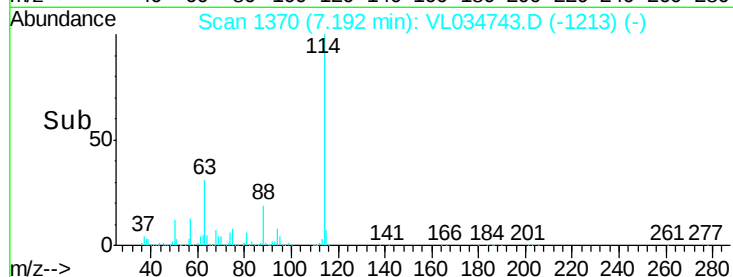
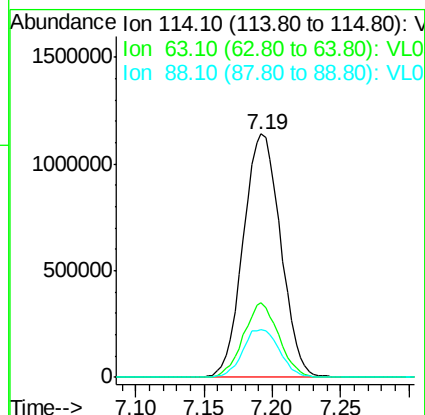
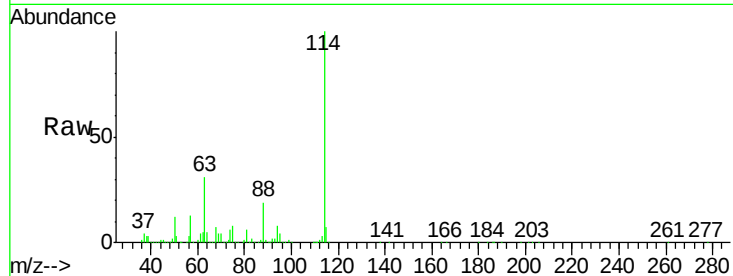
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1370
 Delta R.T. 0.01 min
 Lab File: VL034743.D
 Acq: 28 Feb 2020 19:08

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4-4

Tot Ion	Ratio	Lower	Upper
114	100		
63	29.1	22.9	34.3
88	19.5	15.8	23.6

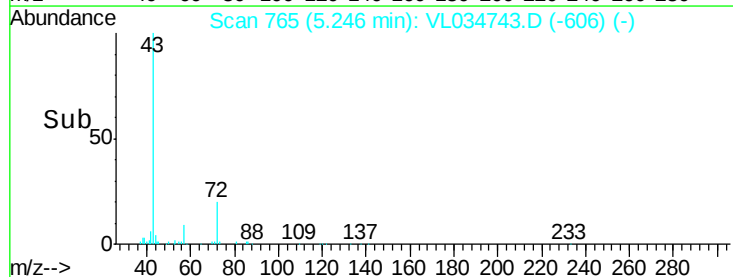
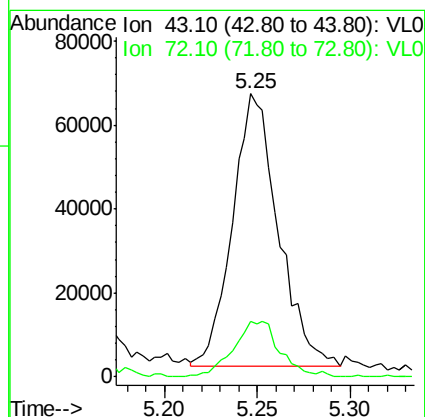
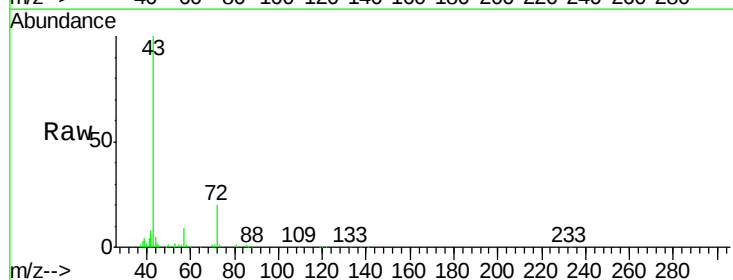
Manual Integrations
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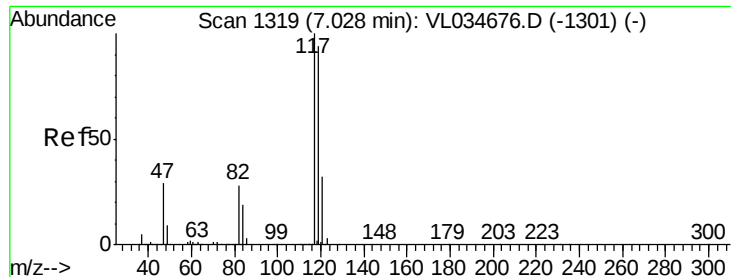
MMDadoda
 3/2/2020 1:01:29 PM



#34
 2-Butanone
 Concen: 0.818 ppbv
 RT: 5.25 min Scan# 765
 Delta R.T. 0.01 min
 Lab File: VL034743.D
 Acq: 28 Feb 2020 19:08

Tgt Ion	Ratio	Lower	Upper
43	100		
72	20.9	18.2	27.2





#35

Carbon Tetrachloride

Concen: 0.077 ppbv m

RT: 7.03 min Scan# 1319

Delta R.T. -0.00 min

Lab File: VL034743.D

Acq: 28 Feb 2020 19:08

Instrument :

MSVOA_L

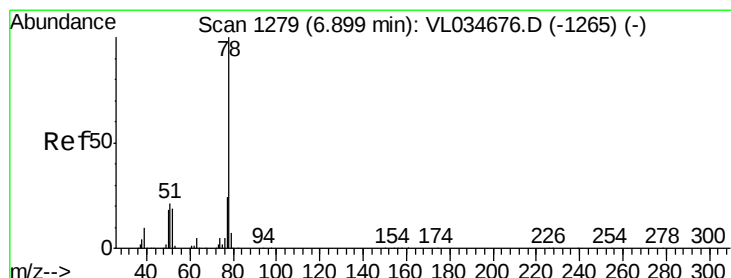
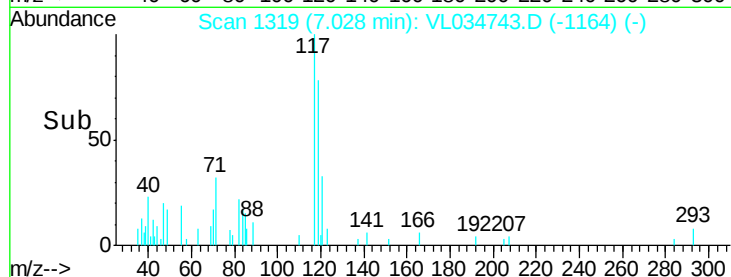
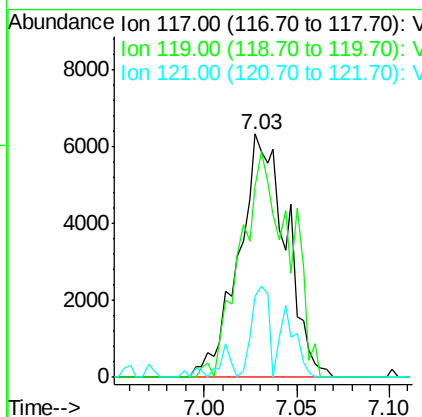
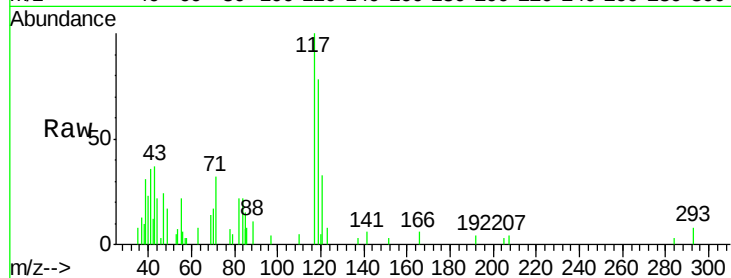
ClientSampled :

IA-4-4

Tot Ion:	117	Resp:	11237
Ion Ratio	Lower	Upper	
117	100		
119	78.4	75.5	113.3
121	33.1	25.4	38.0

Manual Integrations
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#36

Benzene

Concen: 0.424 ppbv m

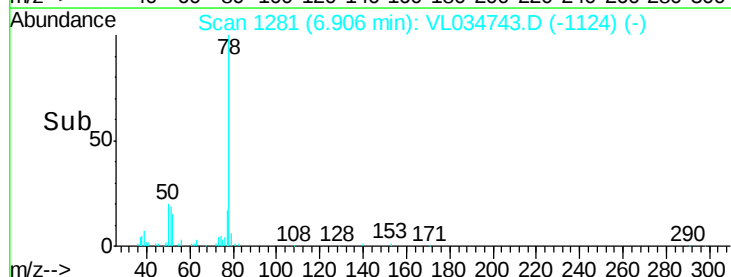
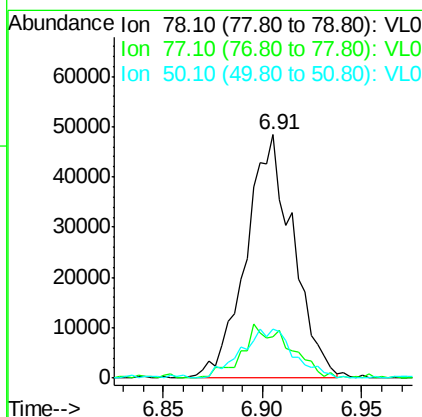
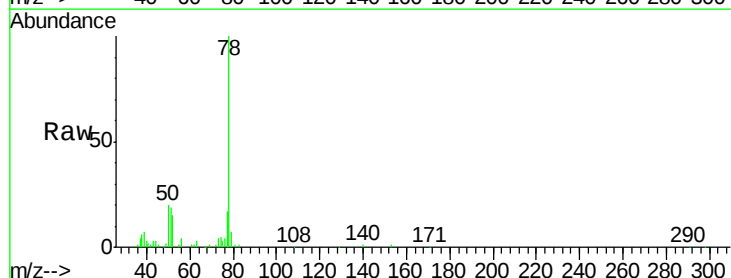
RT: 6.91 min Scan# 1281

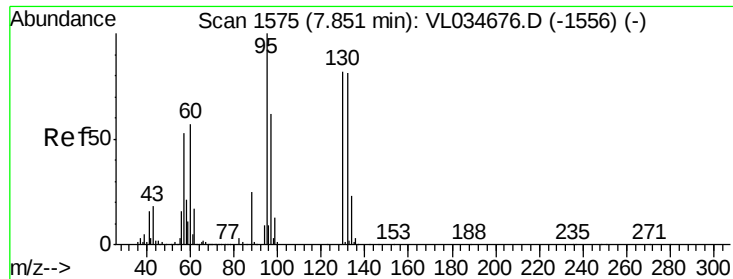
Delta R.T. 0.01 min

Lab File: VL034743.D

Acq: 28 Feb 2020 19:08

Tgt Ion:	78	Resp:	79386
Ion Ratio	Lower	Upper	
78	100		
77	16.8	19.5	29.3#
50	20.0	14.6	21.8





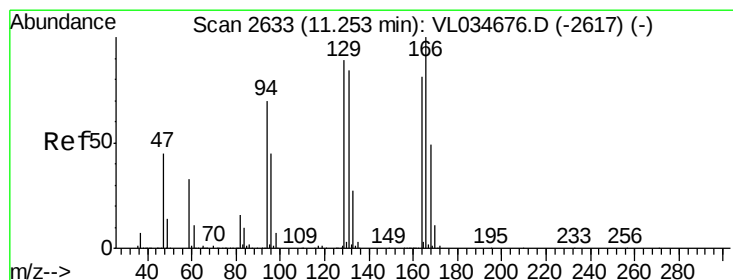
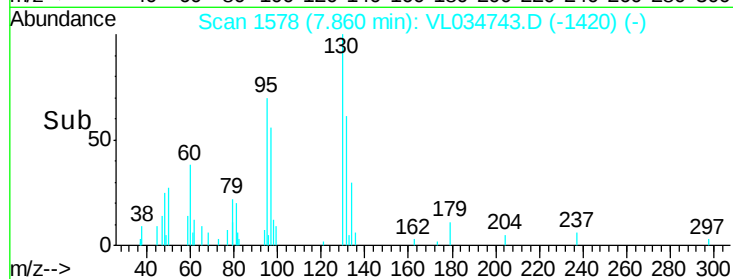
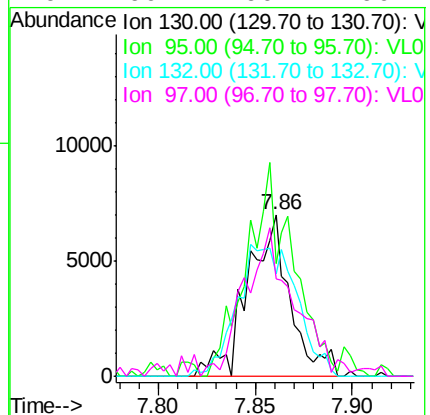
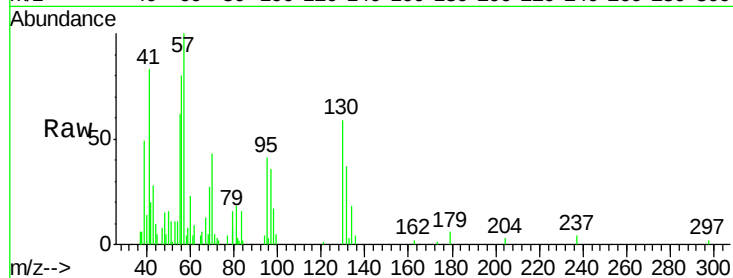
#38
 Trichloroethene
 Concen: 0.149 ppbv m
 RT: 7.86 min Scan# 1578
 Delta R.T. 0.01 min
 Lab File: VL034743.D
 Acq: 28 Feb 2020 19:08

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4-4

Tot Ion	Ratio	Lower	Upper
130	100		
95	69.8	97.1	145.7#
132	63.2	78.3	117.5#
97	60.4	60.1	90.1

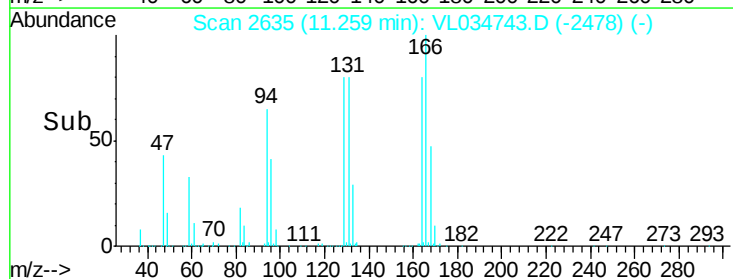
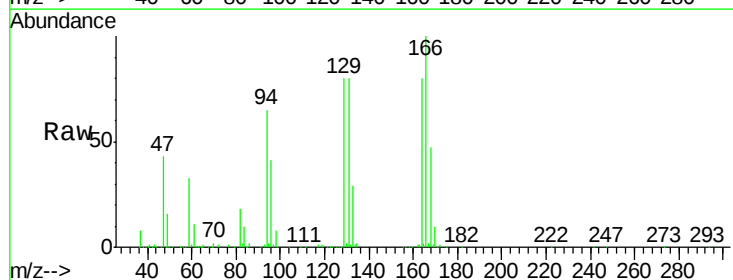
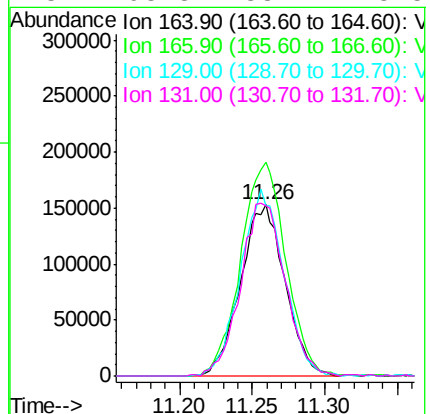
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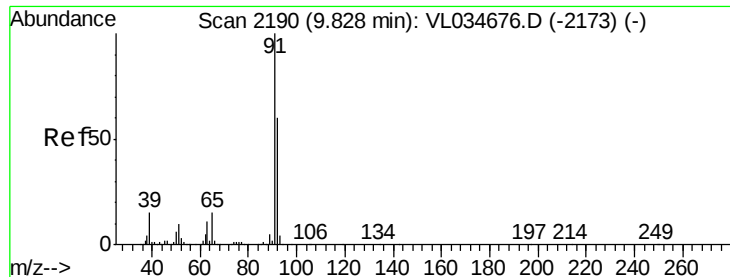
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#52
 Tetrachloroethene
 Concen: 4.760 ppbv
 RT: 11.26 min Scan# 2635
 Delta R.T. 0.01 min
 Lab File: VL034743.D
 Acq: 28 Feb 2020 19:08

Tgt Ion	Ratio	Lower	Upper
164	100		
166	124.4	99.2	148.8
129	99.1	88.0	132.0
131	98.8	83.7	125.5





#53

Toluene

Concen: 38.971 ppbv

RT: 9.83 min Scan# 2192

Delta R.T. 0.01 min

Lab File: VL034743.D

Acq: 28 Feb 2020 19:08

Instrument :

MSVOA_L

ClientSampleId :

IA-4-4

Tot Ion: 91 Resp: 7766400

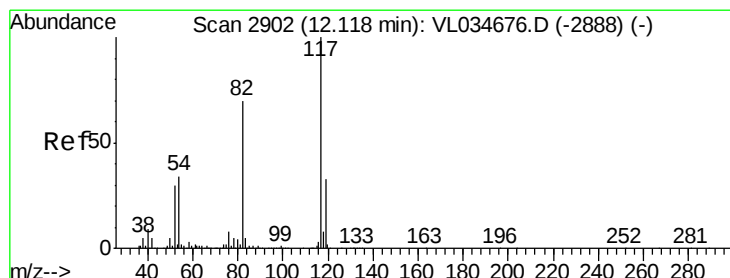
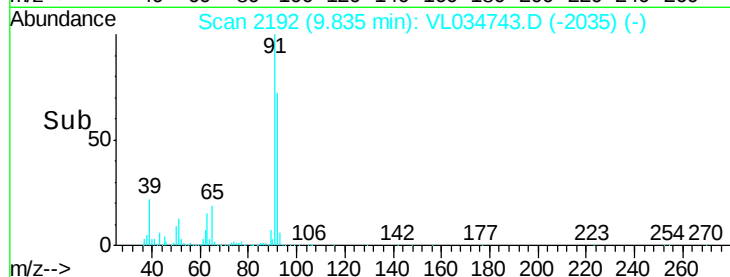
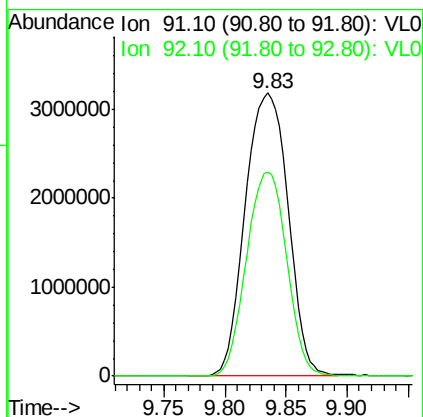
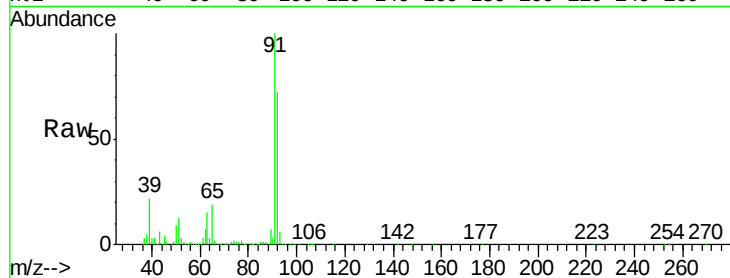
Ion Ratio Lower Upper

91 100

92 67.9 48.5 72.7

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.12 min Scan# 2903

Delta R.T. 0.00 min

Lab File: VL034743.D

Acq: 28 Feb 2020 19:08

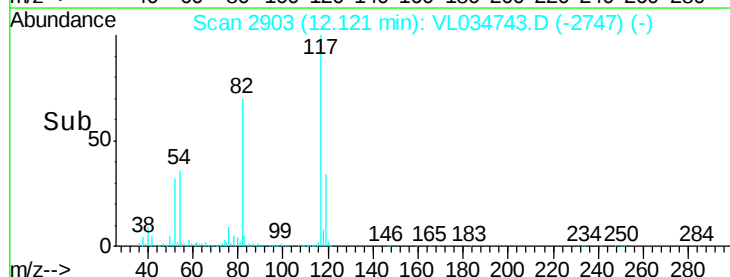
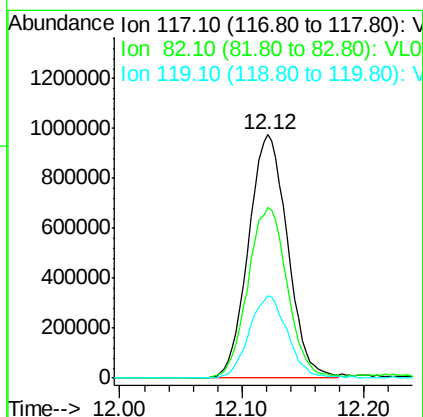
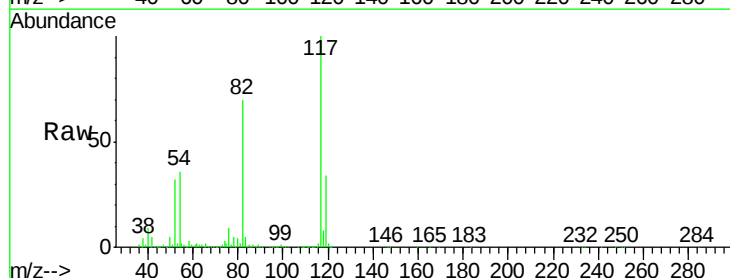
Tgt Ion: 117 Resp: 2159480

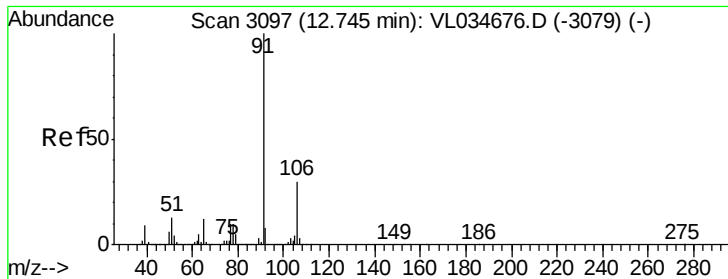
Ion Ratio Lower Upper

117 100

82 71.0 54.1 81.1

119 33.8 27.6 41.4





#58

Ethyl Benzene

Concen: 1.001 ppbv

RT: 12.75 min Scan# 3099

Delta R.T. 0.01 min

Lab File: VL034743.D

Acq: 28 Feb 2020 19:08

Instrument :

MSVOA_L

ClientSampled :

IA-4-4

Tot Ion: 91 Resp: 261506

Ion Ratio Lower Upper

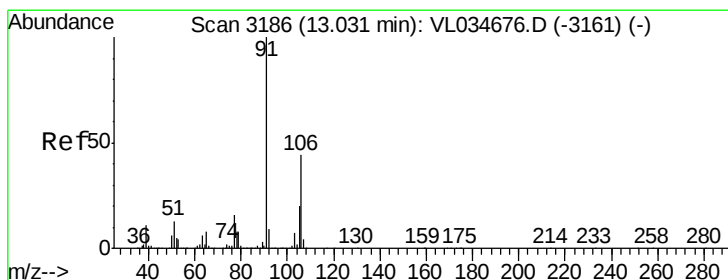
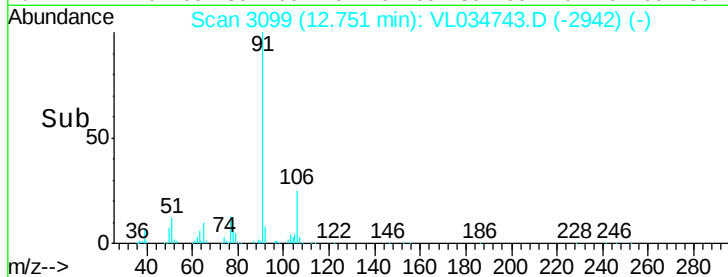
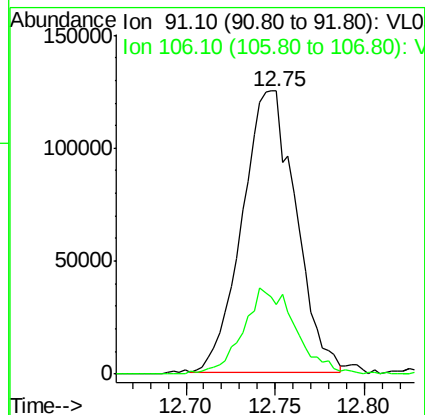
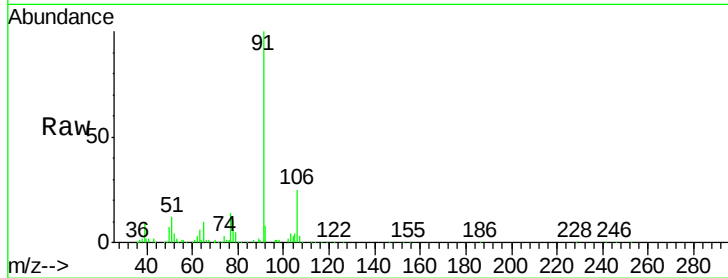
91 100

106 24.0 24.0 36.0#

Manual Integrations
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#59

m/p-Xylene

Concen: 4.080 ppbv

RT: 13.00 min Scan# 3177

Delta R.T. -0.03 min

Lab File: VL034743.D

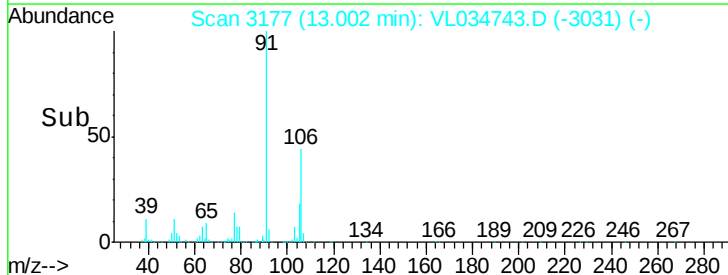
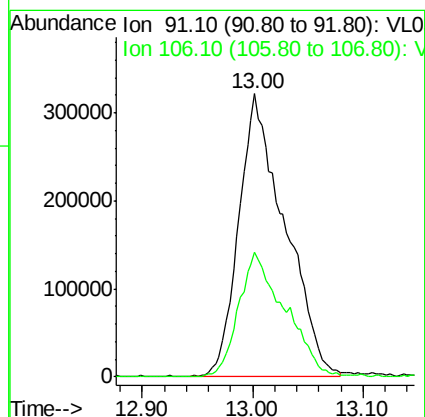
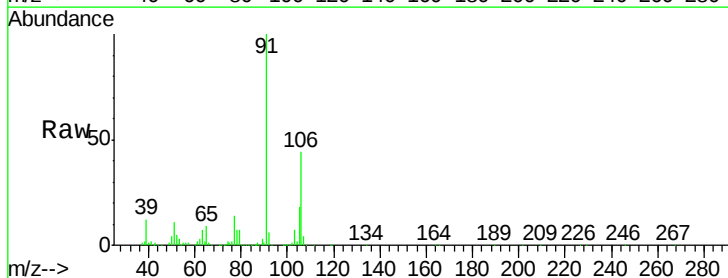
Acq: 28 Feb 2020 19:08

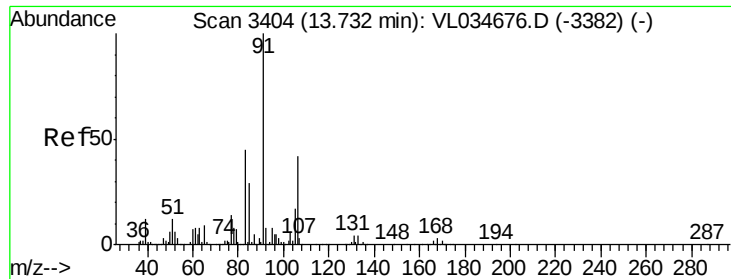
Tgt Ion: 91 Resp: 929818

Ion Ratio Lower Upper

91 100

106 44.3 35.6 53.4





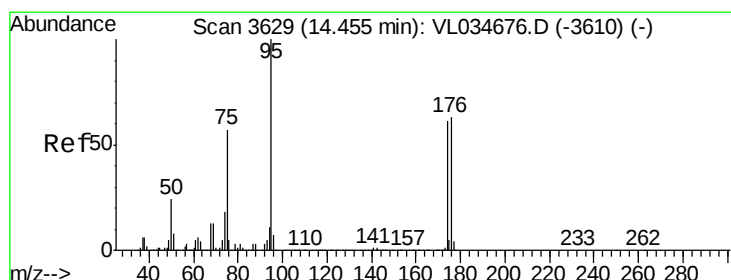
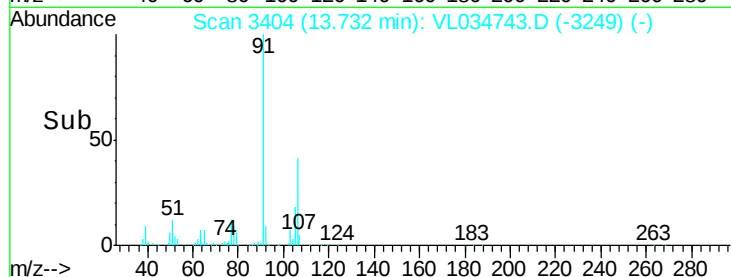
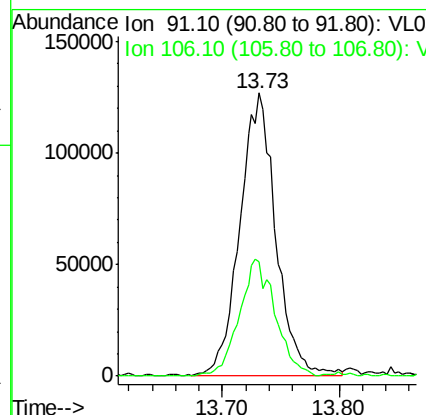
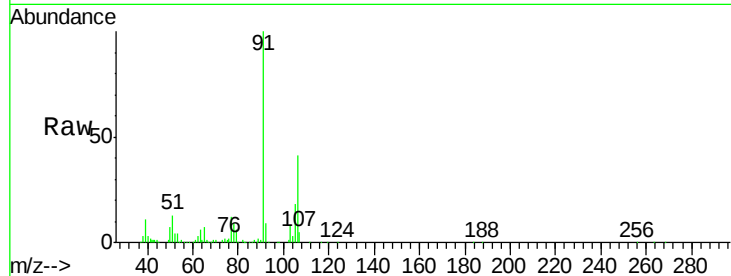
#60
o-Xylene
Concen: 1.210 ppbv m
RT: 13.73 min Scan# 3404
Delta R.T. -0.00 min
Lab File: VL034743.D
Acq: 28 Feb 2020 19:08

Instrument :
MSVOA_L
ClientSampled :
IA-4-4

Tot Ion: 91 Resp: 273587
Ion Ratio Lower Upper
91 100
106 0.0 21.9 65.5#

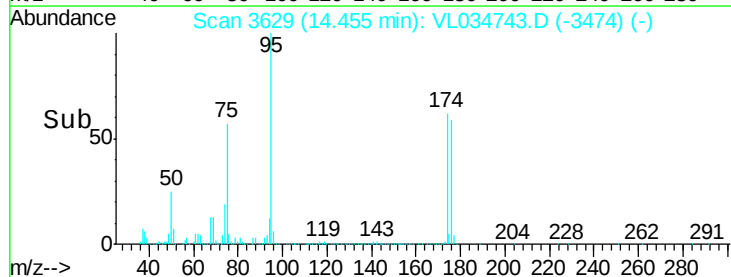
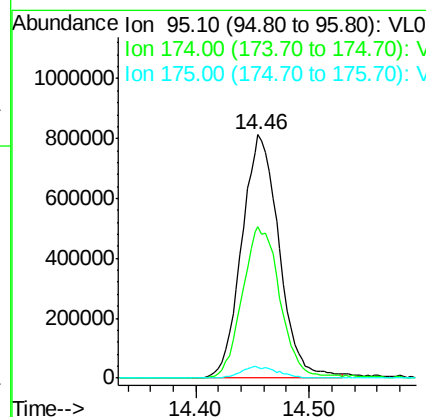
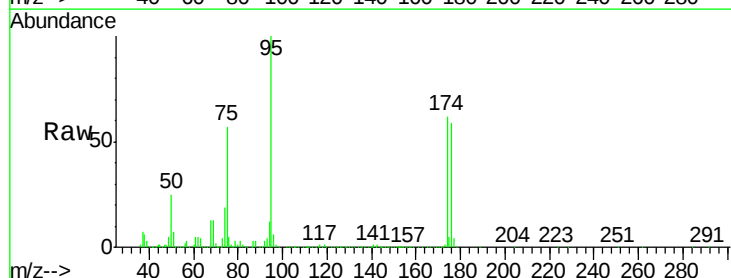
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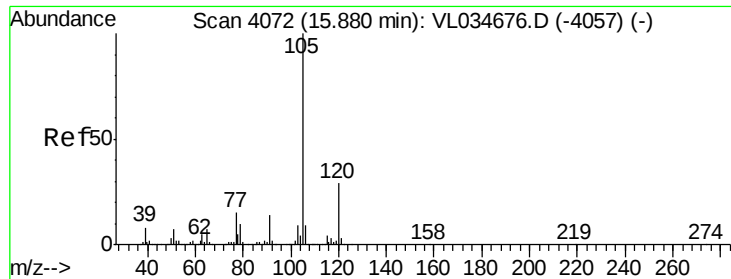
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.556 ppbv
RT: 14.46 min Scan# 3629
Delta R.T. -0.00 min
Lab File: VL034743.D
Acq: 28 Feb 2020 19:08

Tgt Ion: 95 Resp: 1869091
Ion Ratio Lower Upper
95 100
174 63.7 50.7 76.1
175 4.8 3.9 5.9





#72

4-Ethyltoluene

Concen: 0.434 ppbv

RT: 15.88 min Scan# 4073

Delta R.T. 0.00 min

Lab File: VL034743.D

Acq: 28 Feb 2020 19:08

Instrument :

MSVOA_L

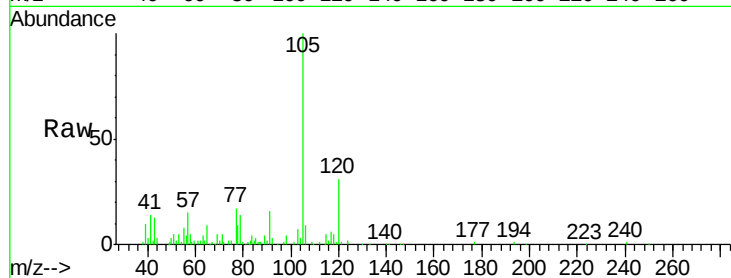
ClientSampled :

IA-4-4

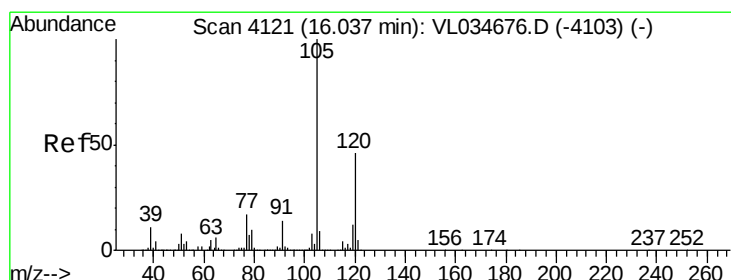
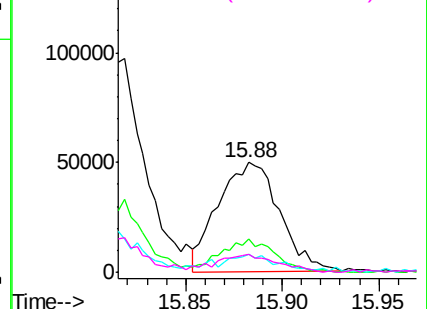
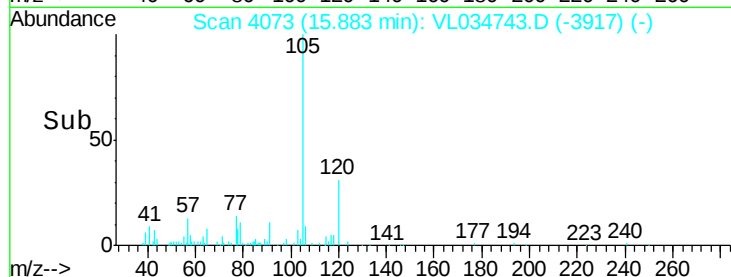
Tot Ion	Ratio	Resp	Lower	Upper
105	100	109348		
120	28.3		23.7	35.5
91	16.5		10.9	16.3
77	16.1		12.2	18.2

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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



#73

1,3,5-Trimethylbenzene

Concen: 0.341 ppbv

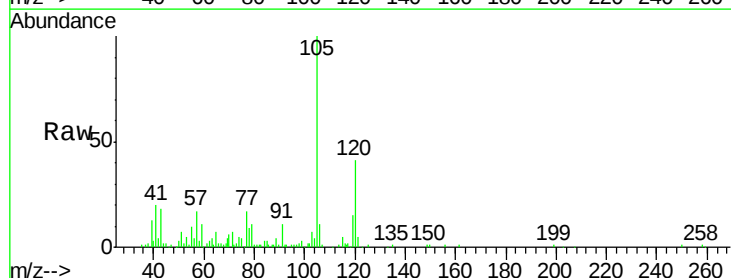
RT: 16.04 min Scan# 4122

Delta R.T. 0.00 min

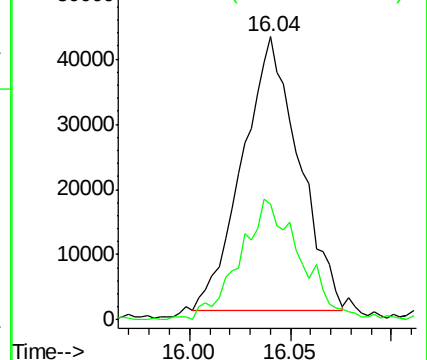
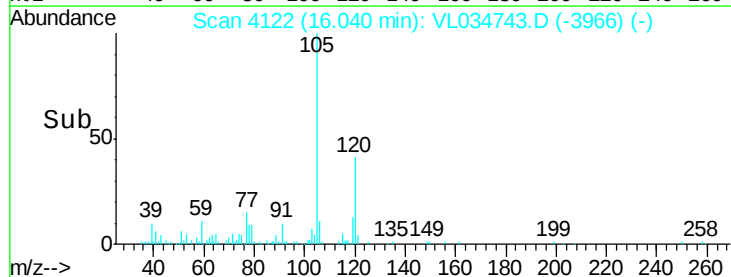
Lab File: VL034743.D

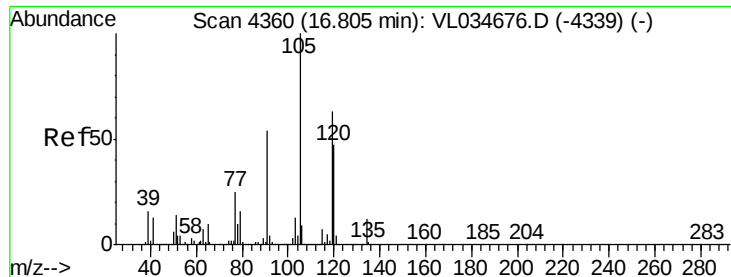
Acq: 28 Feb 2020 19:08

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	82515		
120	41.6		37.1	55.7



Abundance Ion 105.10 (104.80 to 105.80): V
Ion 120.20 (119.90 to 120.90): V





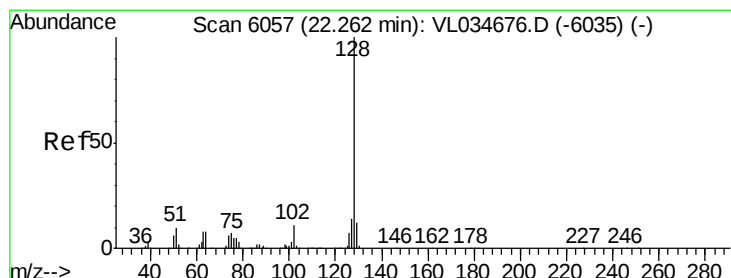
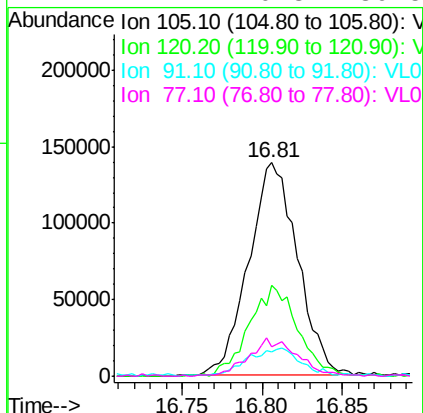
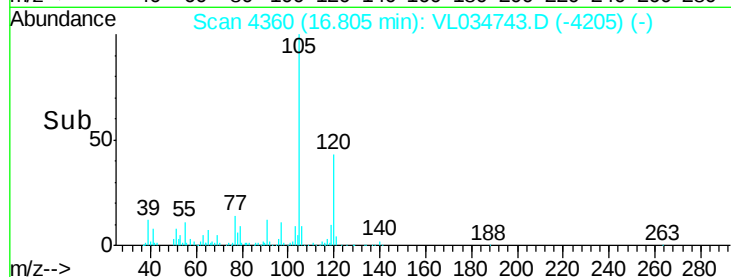
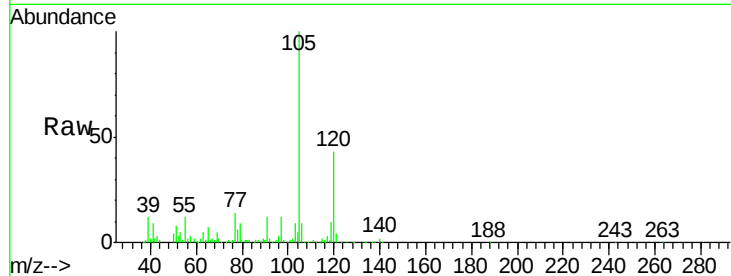
#74
 1,2,4-Trimethylbenzene
 Concen: 1.095 ppbv
 RT: 16.81 min Scan# 4360
 Delta R.T. -0.00 min
 Lab File: VL034743.D
 Acq: 28 Feb 2020 19:08

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4-4

Tot Ion	Ratio	Resp	Lower	Upper
105	100	292772		
120	42.5	37.9	56.9	
91	11.0	43.9	65.9	#
77	14.1	20.3	30.5	#

Manual Integrations
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 3/2/2020 1:01:29 PM



#79
 Naphthalene
 Concen: 0.165 ppbv m
 RT: 22.27 min Scan# 6060
 Delta R.T. 0.01 min
 Lab File: VL034743.D
 Acq: 28 Feb 2020 19:08

Tgt Ion	Ratio	Resp	Lower	Upper
128	100	38886		
127	5.6	11.0	16.6	#
129	4.3	9.4	14.2	#

