

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL111220\
 Data File : VL035926.D
 Acq On : 12 Nov 2020 23:19
 Operator : SY/AP
 Sample : L4721-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 LA-2

Manual Integrations
 APPROVED

MMDadoda
 11/16/2020 2:31:53 PM

Quant Time: Nov 14 21:42:33 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Nov 04
 QLast Update : Wed Nov 04 02:40:06 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1163445	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	4066941	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	3724725	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2782456	10.51	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	50194	0.229	ppbv	93
3) Chlorodifluoromethane	2.98	51	68128m	0.489	ppbv	
4) Chloromethane	3.13	50	39736	0.587	ppbv	100
9) Propene	3.01	41	69704	1.367	ppbv #	81
10) Heptane	8.12	43	18190m	0.129	ppbv	
11) Trichlorofluoromethane	3.94	101	66586	0.242	ppbv	95
13) Ethanol	3.64	45	15498290m	1400.900	ppbv	
15) Acetone	3.84	43	1670569	13.431	ppbv	96
17) tert-Butyl alcohol	4.34	59	120788m	0.733	ppbv	
19) Isopropyl Alcohol	4.00	45	7453996	97.518	ppbv #	97
20) Methylene Chloride	4.34	84	225844	2.579	ppbv	99
26) Hexane	5.68	57	543302	4.020	ppbv #	48
29) Chloroform	5.74	83	43106	0.162	ppbv	90
30) Cyclohexane	7.16	84	38746m	0.263	ppbv	
34) 2-Butanone	5.24	43	75792	0.574	ppbv	99
35) Carbon Tetrachloride	7.01	117	13923	0.064	ppbv	85
36) Benzene	6.89	78	107112	0.354	ppbv	97
44) 2,2,4-Trimethylpentane	7.87	57	102205m	0.255	ppbv	
50) 4-Methyl-2-Pentanone	8.75	43	23754m	0.118	ppbv	
52) Tetrachloroethene	11.22	164	18039m	0.126	ppbv	
53) Toluene	9.80	91	1595898	4.374	ppbv	98
58) Ethyl Benzene	12.71	91	45322m	0.100	ppbv	
59) m/p-Xylene	12.97	91	138178m	0.360	ppbv	
60) o-Xylene	13.69	91	53143	0.142	ppbv	97
74) 1,2,4-Trimethylbenzene	16.76	105	57690	0.130	ppbv #	65

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

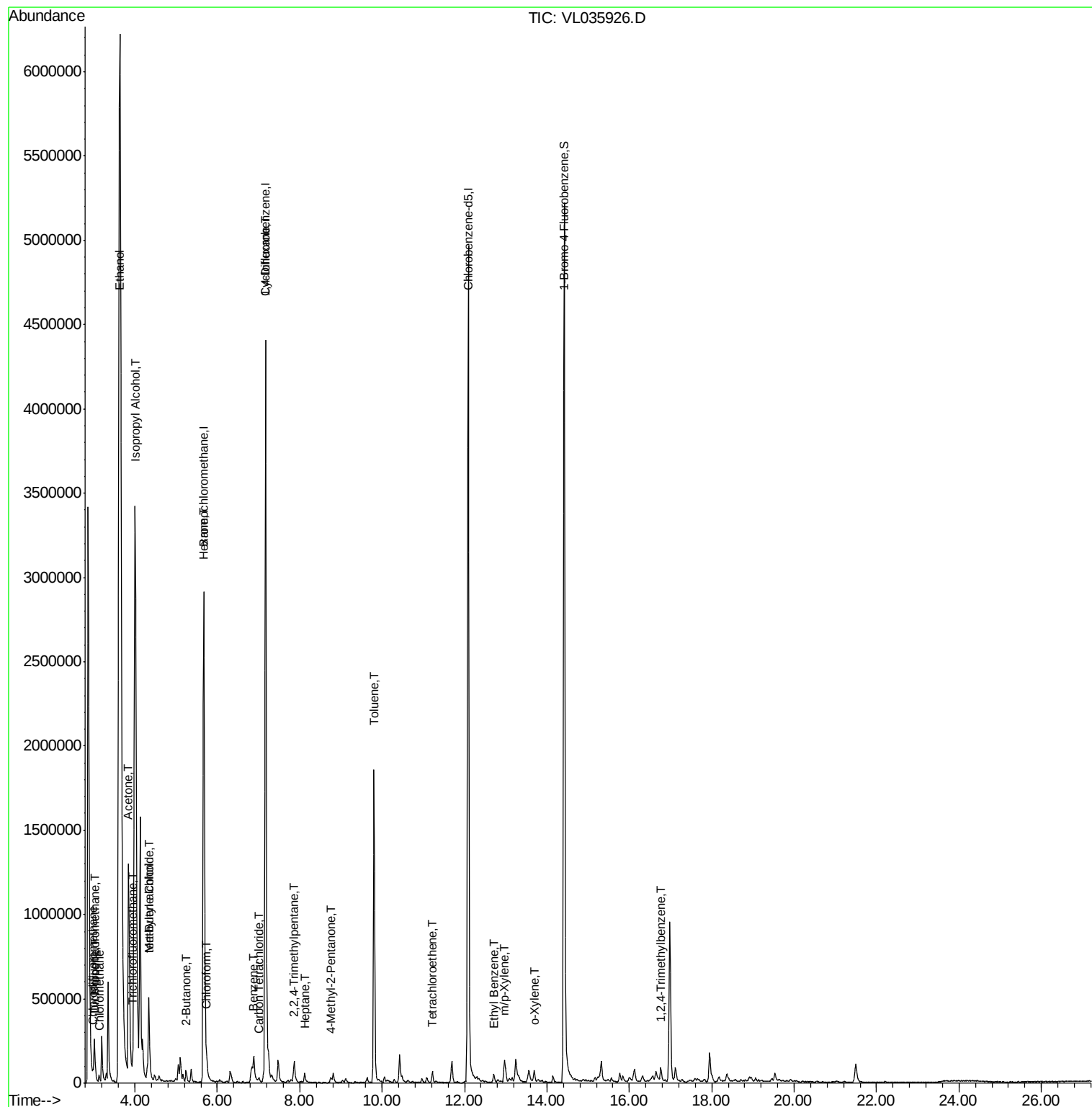
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL111220\
Data File : VL035926.D
Acq On : 12 Nov 2020 23:19
Operator : SY/AP
Sample : L4721-02
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

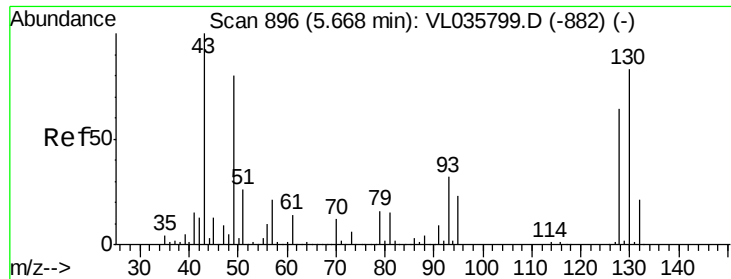
Instrument :
MSVOA_L
ClientSampleId :
LA-2

Manual Integrations
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Quant Time: Nov 14 21:42:33 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 04 02:40:06 2020
Response via : Initial Calibration





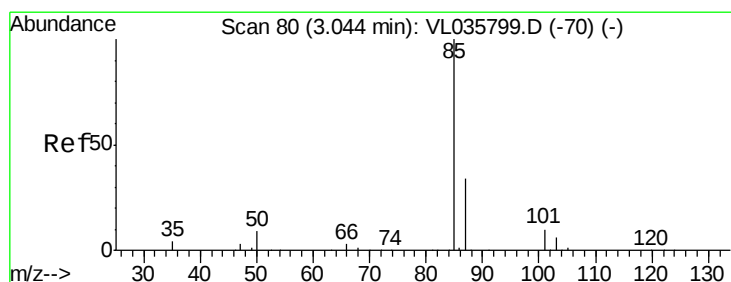
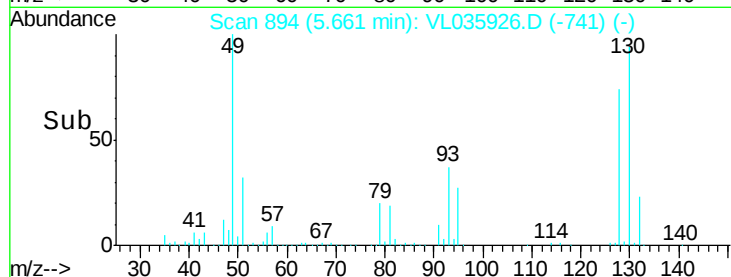
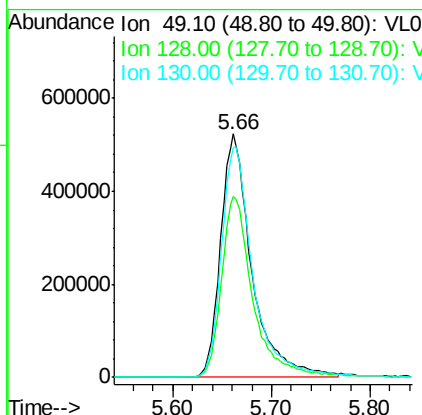
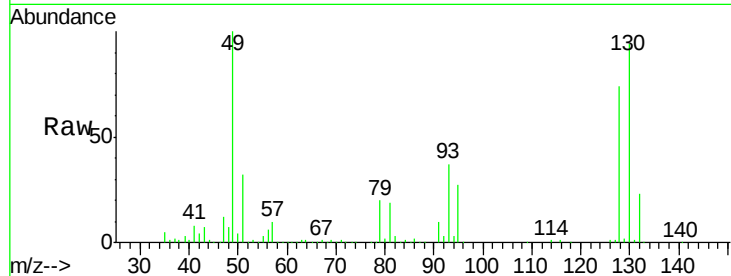
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.66 min Scan# 894
Delta R.T. -0.01 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Instrument :
MSVOA_L
ClientSampleId :
LA-2

Tot Ion: 49 Resp: 1163445
Ion Ratio Lower Upper
49 100
128 75.4 41.5 124.6
130 96.8 53.7 161.1

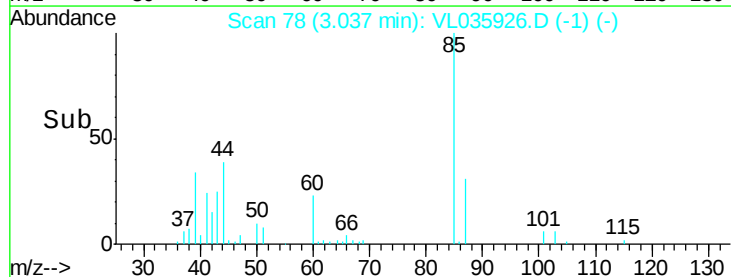
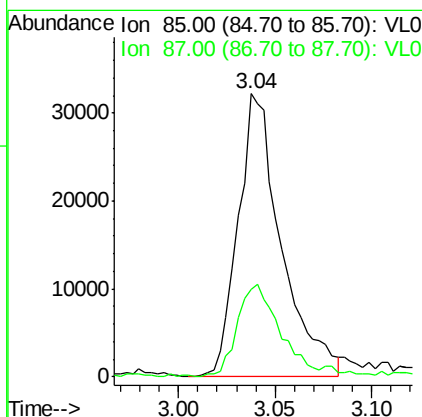
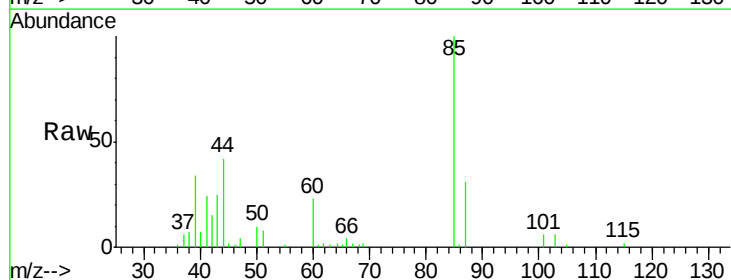
Manual Integrations
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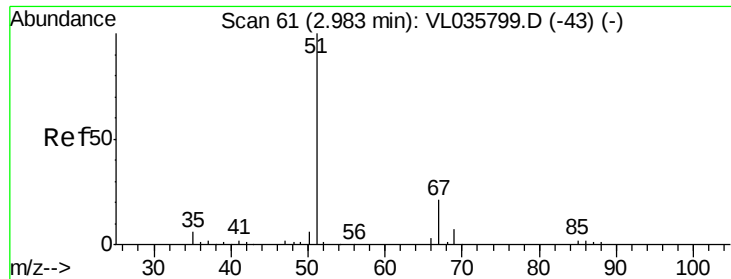
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#2
Dichlorodifluoromethane
Concen: 0.229 ppbv
RT: 3.04 min Scan# 78
Delta R.T. -0.01 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Tgt Ion: 85 Resp: 50194
Ion Ratio Lower Upper
85 100
87 30.1 27.1 40.7





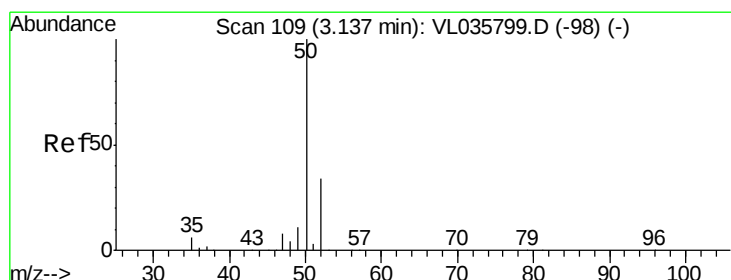
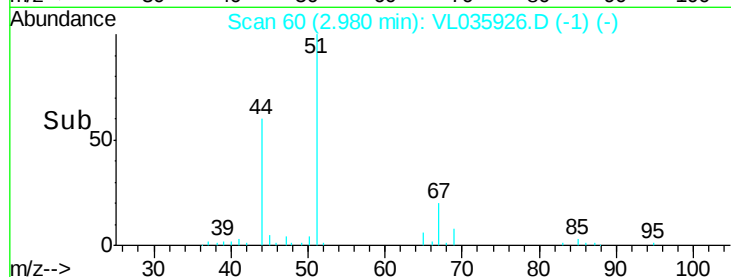
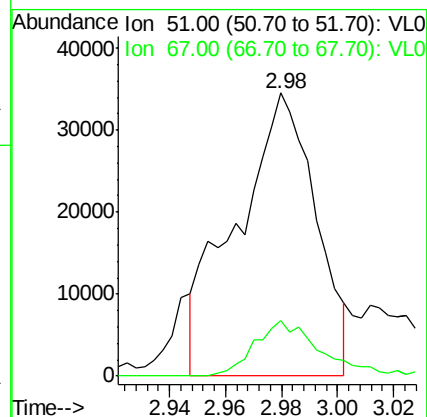
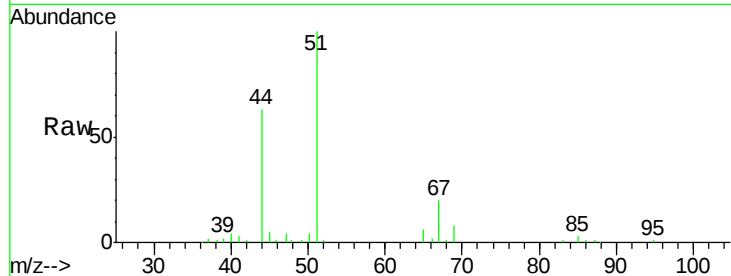
#3
Chlorodifluoromethane
Concen: 0.489 ppbv
RT: 2.98 min Scan# 60
Delta R.T. -0.00 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Instrument :
MSVOA_L
ClientSampled :
LA-2

Tot Ion	Ratio	Lower	Upper
51	100		
67	17.7	17.0	25.4

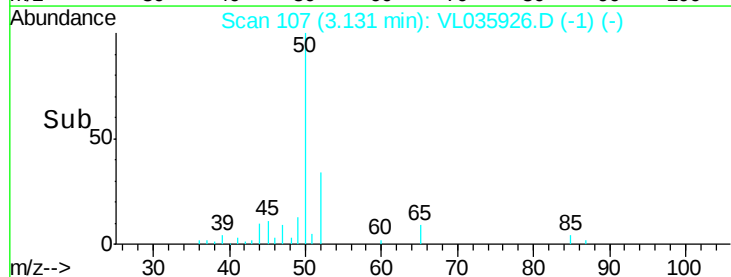
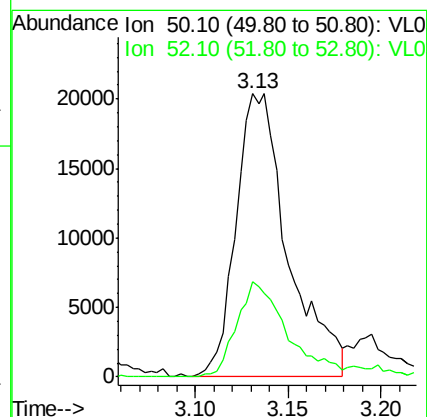
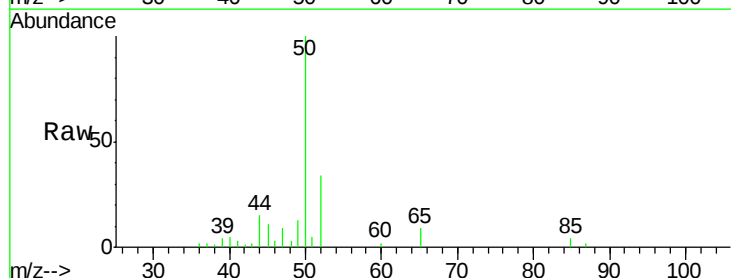
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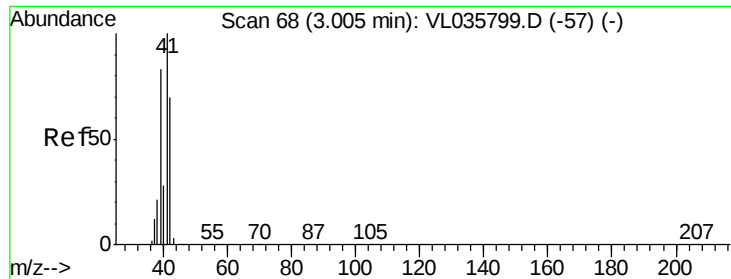
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#4
Chloromethane
Concen: 0.587 ppbv
RT: 3.13 min Scan# 107
Delta R.T. -0.01 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Tgt Ion	Ratio	Lower	Upper
50	100		
52	33.7	27.1	40.7





#9

Propene

Concen: 1.367 ppbv

RT: 3.01 min Scan# 69

Delta R.T. 0.00 min

Lab File: VL035926.D

Acq: 12 Nov 2020 23:19

Instrument :

MSVOA_L

ClientSampled :

LA-2

Tot Ion: 41 Resp: 69704

Ion Ratio Lower Upper

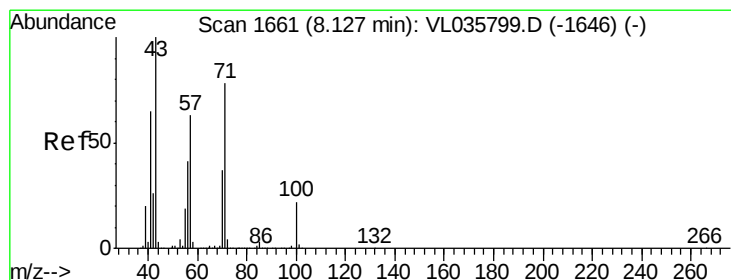
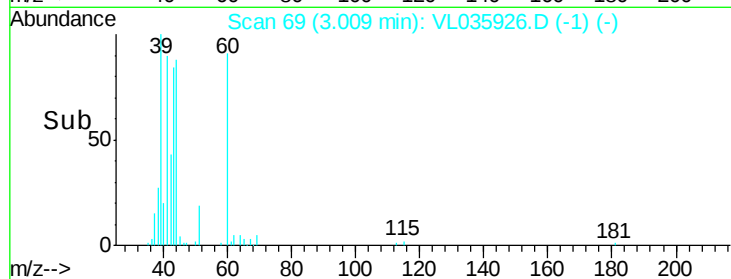
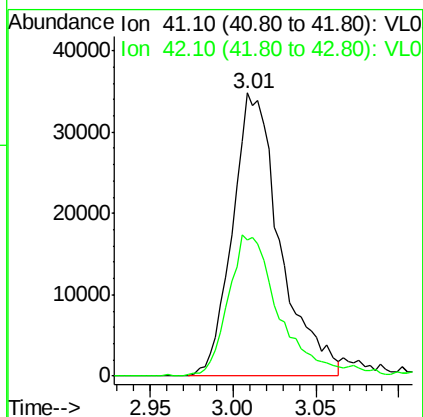
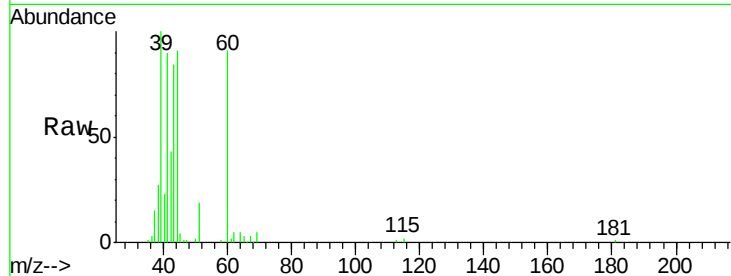
41 100

42 54.7 56.2 84.4#

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#10

Heptane

Concen: 0.129 ppbv m

RT: 8.12 min Scan# 1660

Delta R.T. -0.00 min

Lab File: VL035926.D

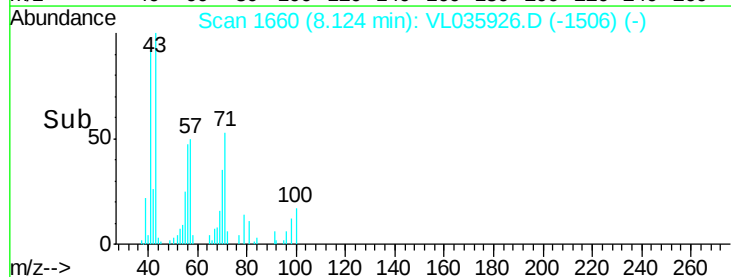
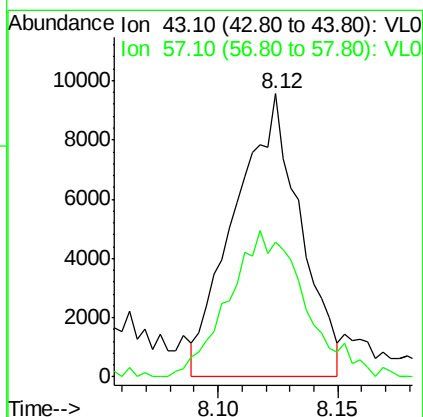
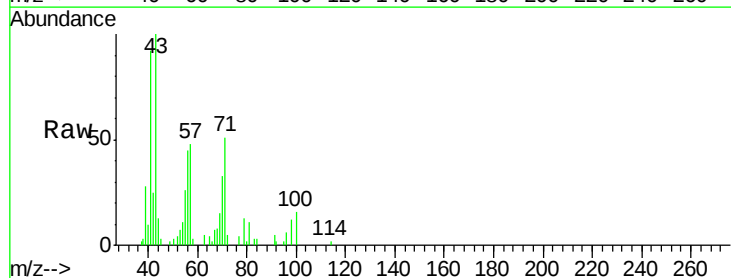
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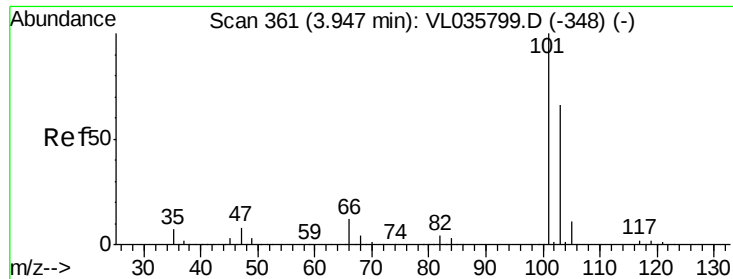
Tgt Ion: 43 Resp: 18190

Ion Ratio Lower Upper

43 100

57 60.9 50.0 75.0





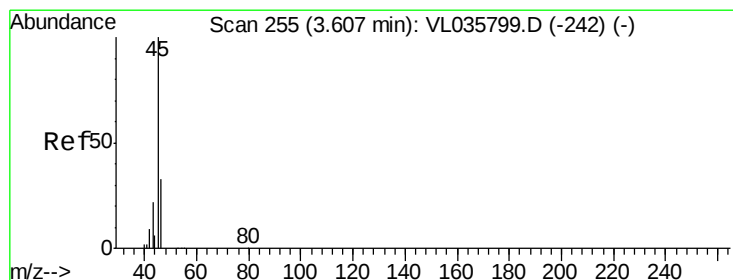
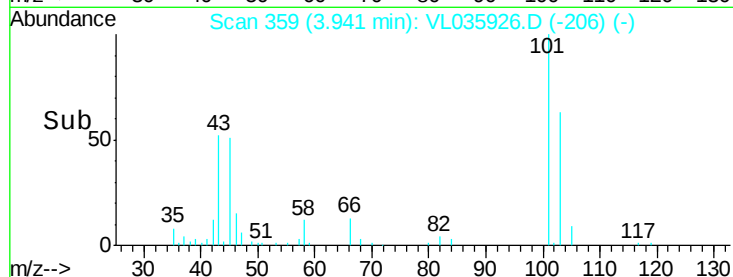
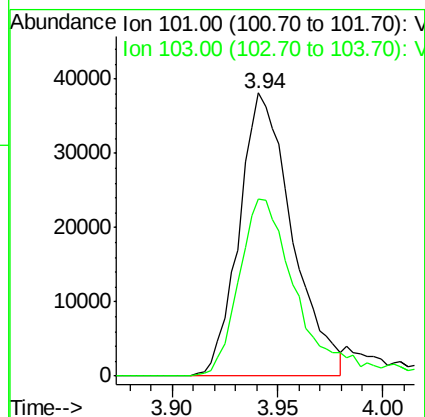
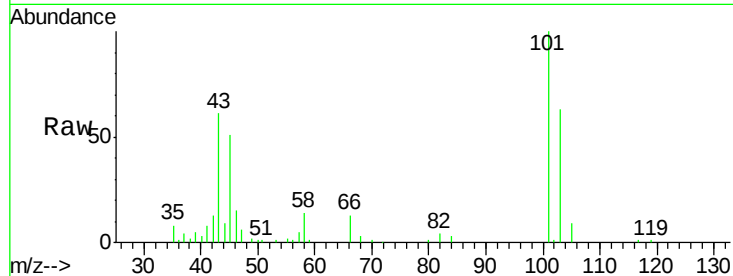
#11
Trichlorofluoromethane
Concen: 0.242 ppbv
RT: 3.94 min Scan# 359
Delta R.T. -0.01 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Instrument :
MSVOA_L
ClientSampled :
LA-2

Tot Ion:101 Resp: 66586
Ion Ratio Lower Upper
101 100
103 62.3 53.0 79.4

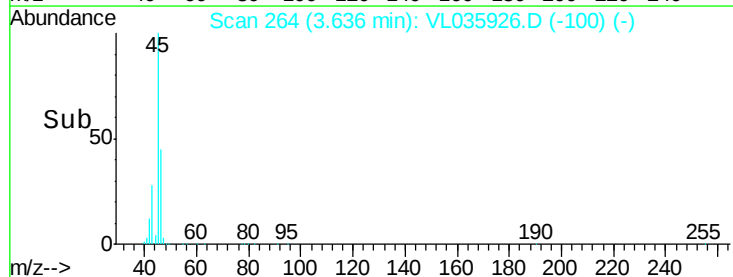
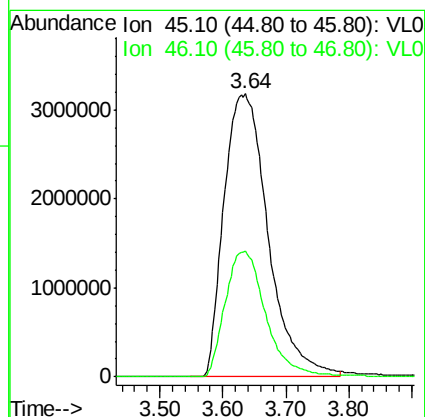
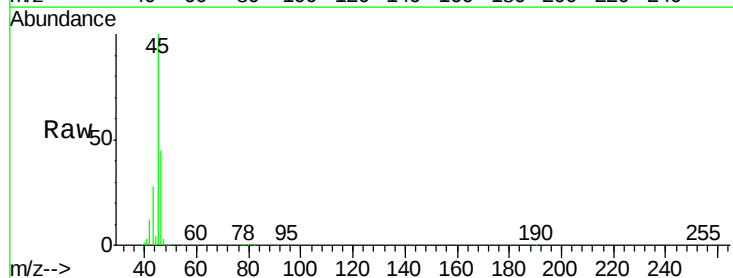
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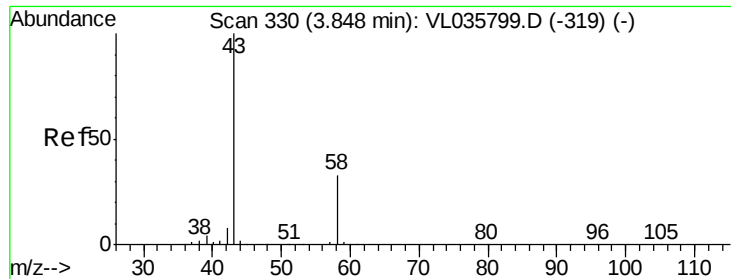
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#13
Ethanol
Concen: 1400.900 ppbv m
RT: 3.64 min Scan# 264
Delta R.T. 0.03 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Tgt Ion: 45 Resp:15498290
Ion Ratio Lower Upper
45 100
46 0.0 16.1 64.5#





#15

Acetone

Concen: 13.431 ppbv

RT: 3.84 min Scan# 328

Delta R.T. -0.01 min

Lab File: VL035926.D

Acq: 12 Nov 2020 23:19

Instrument :

MSVOA_L

ClientSampled :

LA-2

Tot Ion: 43 Resp: 1670569

Ion Ratio Lower Upper

43 100

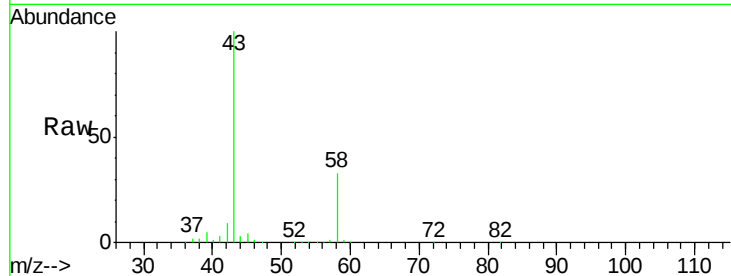
58 32.2 27.5 41.3

Manual Integrations

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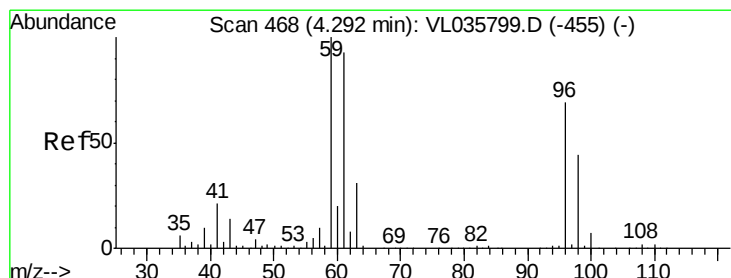
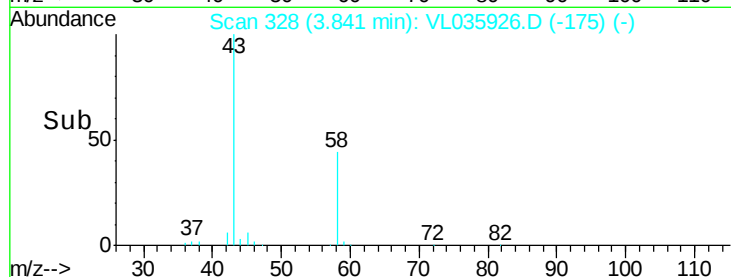
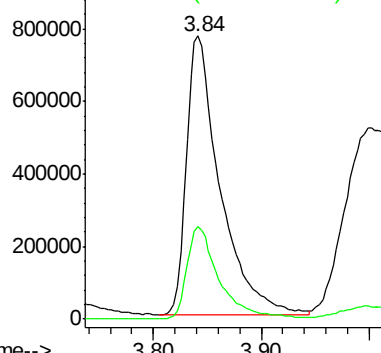
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#17

tert-Butyl alcohol

Concen: 0.733 ppbv m

RT: 4.34 min Scan# 482

Delta R.T. 0.04 min

Lab File: VL035926.D

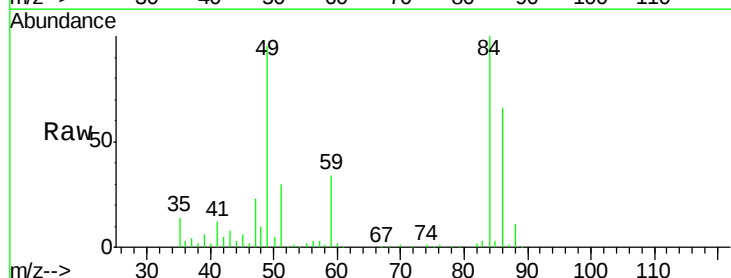
Acq: 12 Nov 2020 23:19

Tgt Ion: 59 Resp: 120788

Ion Ratio Lower Upper

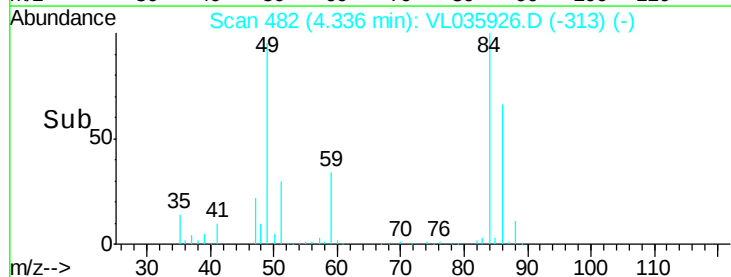
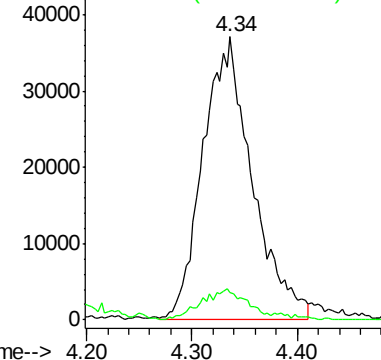
59 100

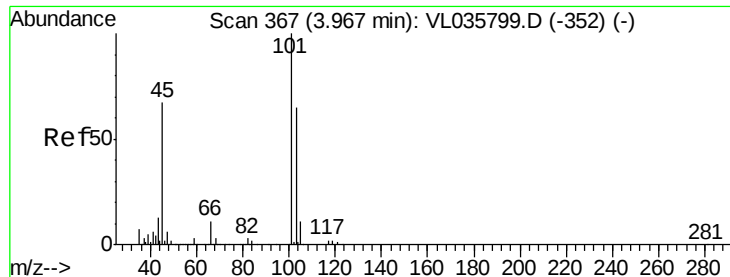
57 28.0 8.2 12.4#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#19

Isopropyl Alcohol

Concen: 97.518 ppbv

RT: 4.00 min Scan# 378

Delta R.T. 0.04 min

Lab File: VL035926.D

Acq: 12 Nov 2020 23:19

Instrument :

MSVOA_L

ClientSampled :

LA-2

Tot Ion: 45 Resp: 7453996

Ion Ratio Lower Upper

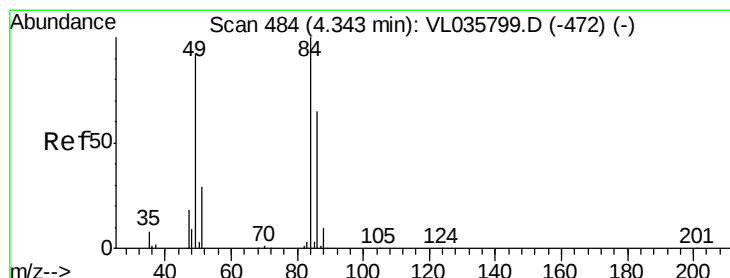
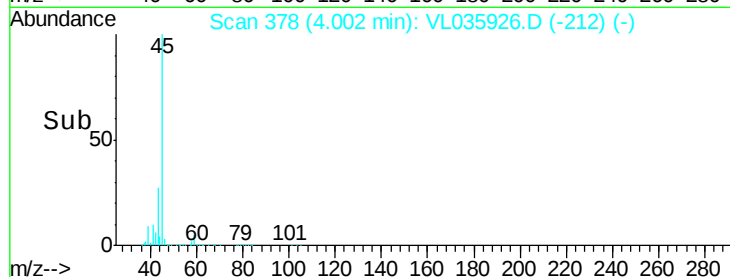
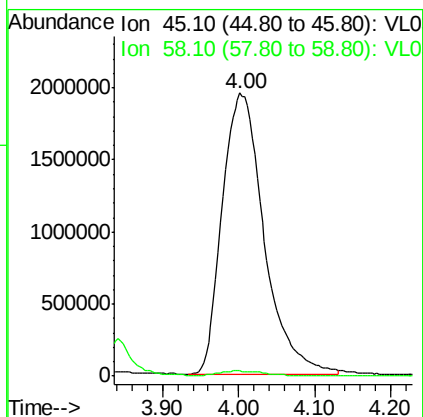
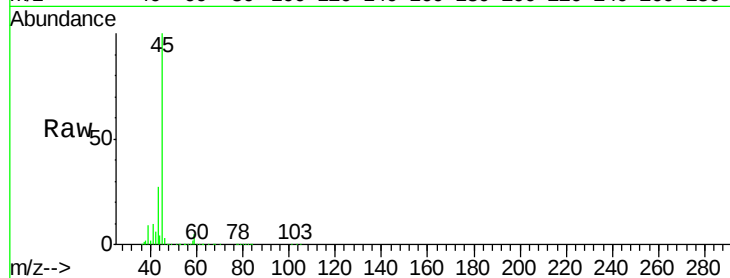
45 100

58 2.2 2.6 3.8#

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#20

Methylene Chloride

Concen: 2.579 ppbv

RT: 4.34 min Scan# 483

Delta R.T. -0.00 min

Lab File: VL035926.D

Acq: 12 Nov 2020 23:19

Tgt Ion: 84 Resp: 225844

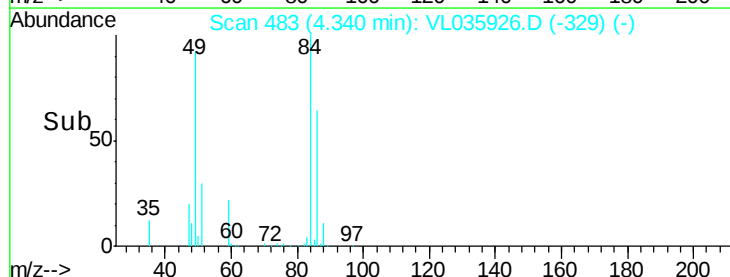
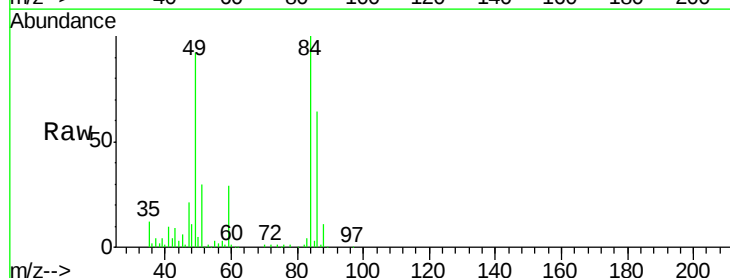
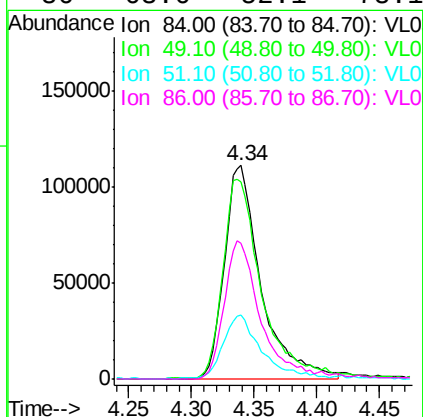
Ion Ratio Lower Upper

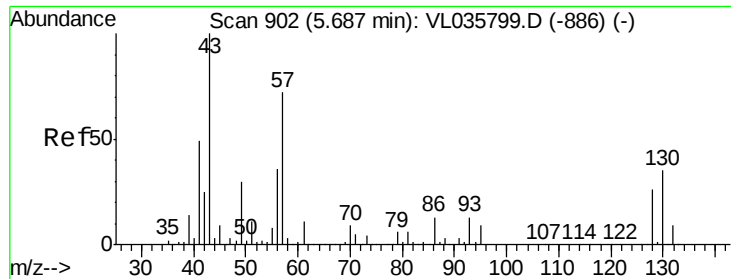
84 100

49 91.2 73.8 110.8

51 29.5 23.0 34.4

86 63.6 52.1 78.1





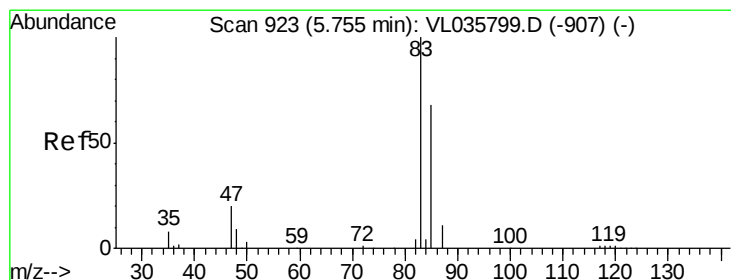
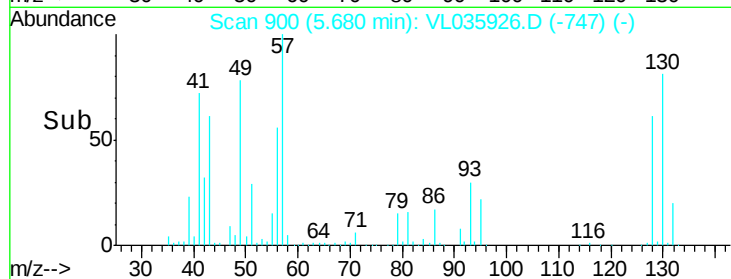
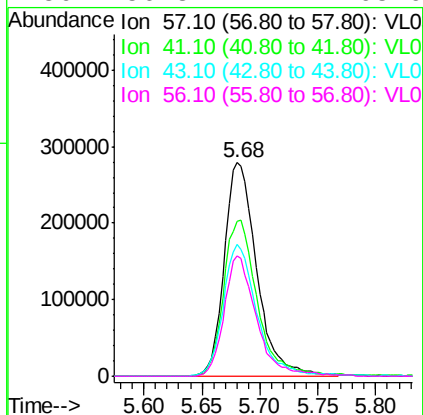
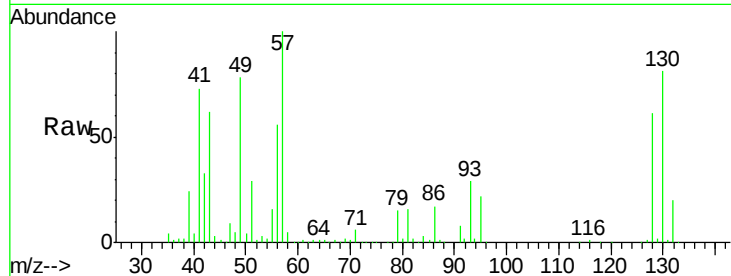
#26
Hexane
Concen: 4.020 ppbv
RT: 5.68 min Scan# 900
Delta R.T. -0.01 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Instrument :
MSVOA_L
ClientSampled :
LA-2

Tot Ion	Ratio	Lower	Upper
57	100		
41	76.4	58.9	88.3
43	64.1	150.2	225.2#
56	56.3	42.4	63.6

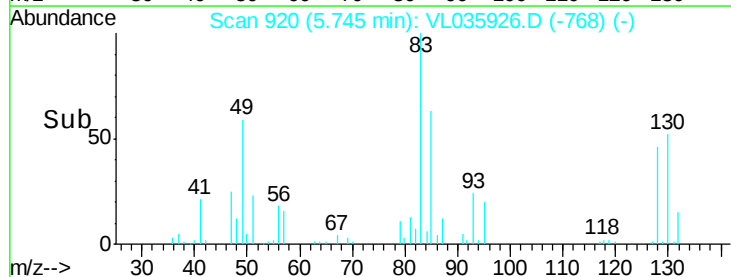
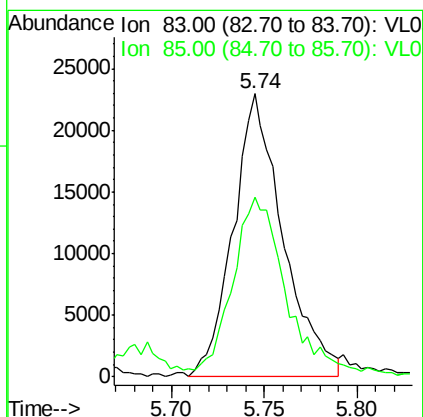
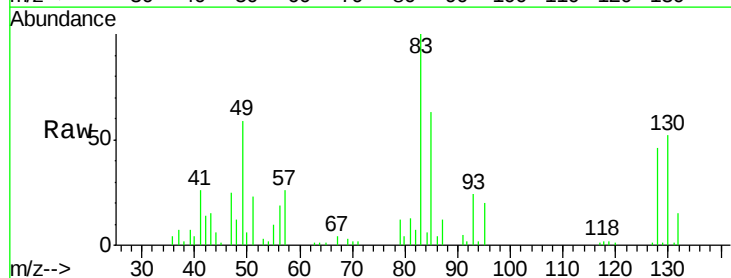
Manual Integrations
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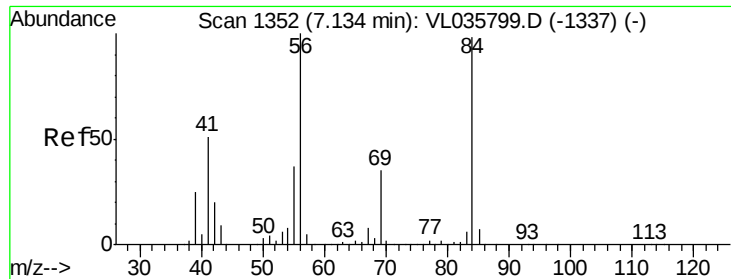
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#29
Chloroform
Concen: 0.162 ppbv
RT: 5.74 min Scan# 920
Delta R.T. -0.01 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Tgt Ion	Ratio	Lower	Upper
83	100		
85	60.5	54.6	81.8





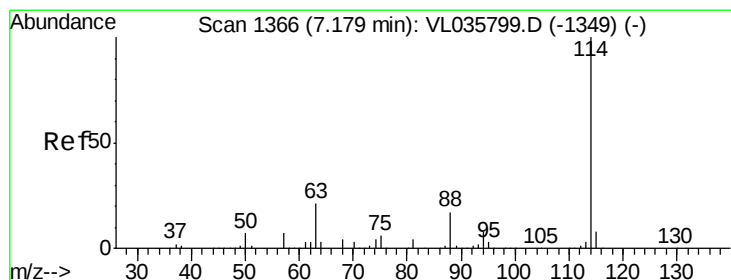
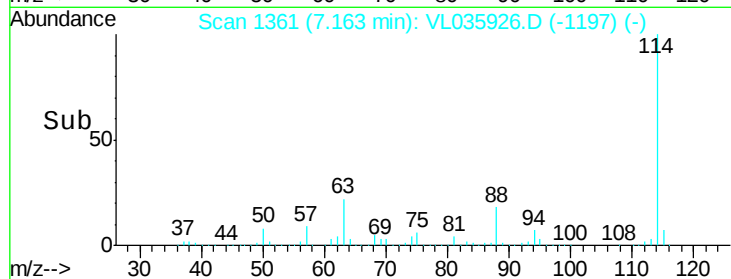
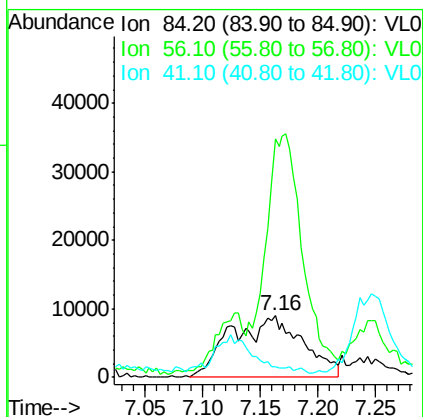
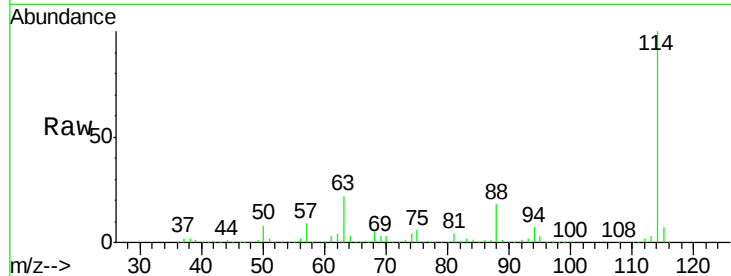
#30
Cvclohexane
Concen: 0.263 ppbv m
RT: 7.16 min Scan# 1361
Delta R.T. 0.03 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Instrument :
MSVOA_L
ClientSampleId :
LA-2

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	86.4	129.6#
41	36.6	42.1	63.1#

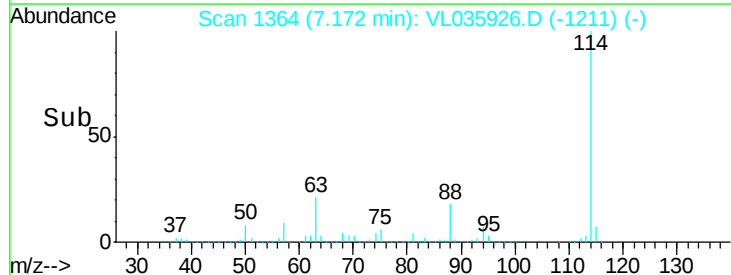
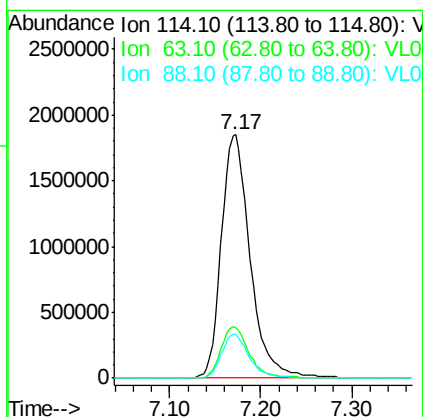
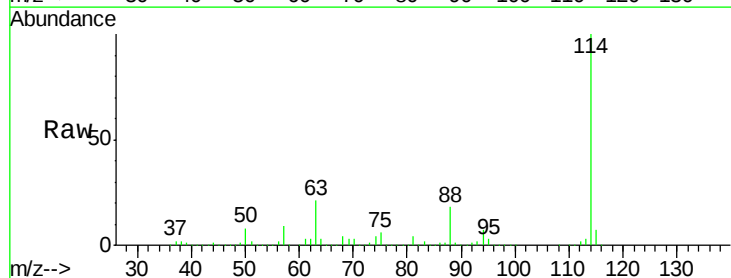
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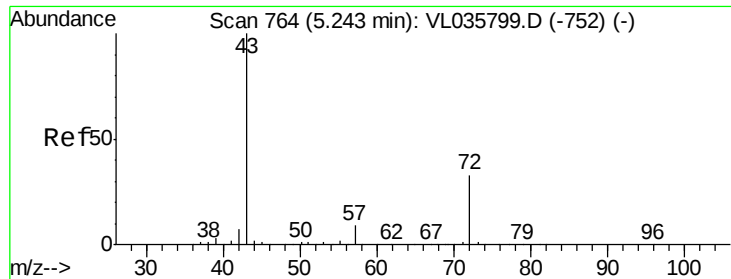
MMDadoda
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1364
Delta R.T. -0.01 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Tgt Ion	Ratio	Lower	Upper
114	100		
63	20.9	16.1	24.1
88	17.5	13.7	20.5





#34

2-Butanone

Concen: 0.574 ppbv

RT: 5.24 min Scan# 763

Delta R.T. -0.00 min

Lab File: VL035926.D

Acq: 12 Nov 2020 23:19

Instrument :

MSVOA_L

ClientSampled :

LA-2

Tot Ion: 43 Resp: 75792

Ion Ratio Lower Upper

43 100

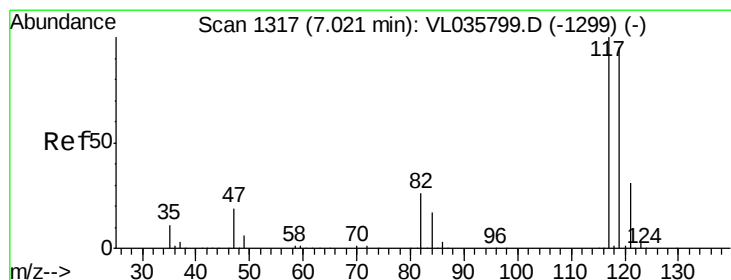
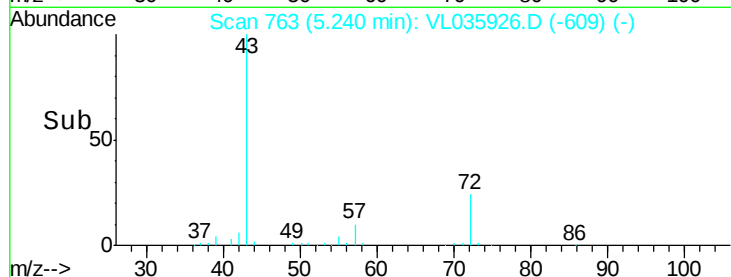
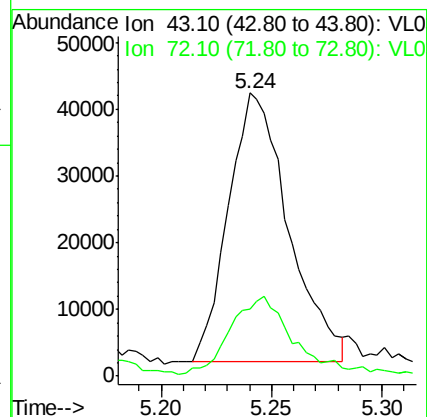
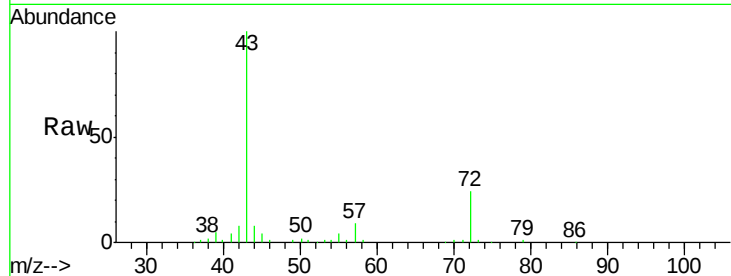
72 33.5 26.5 39.7

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#35

Carbon Tetrachloride

Concen: 0.064 ppbv

RT: 7.01 min Scan# 1315

Delta R.T. -0.01 min

Lab File: VL035926.D

Acq: 12 Nov 2020 23:19

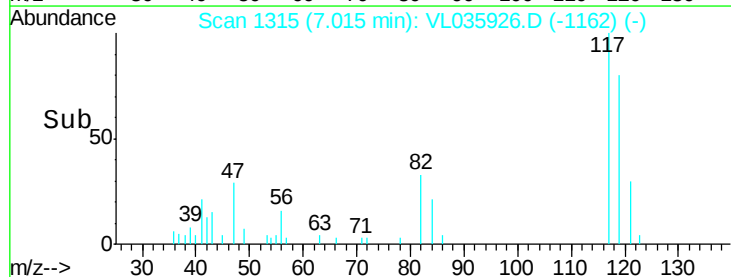
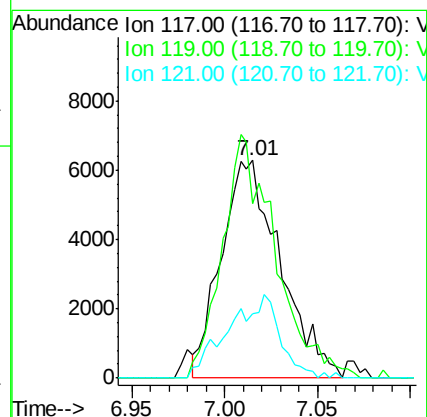
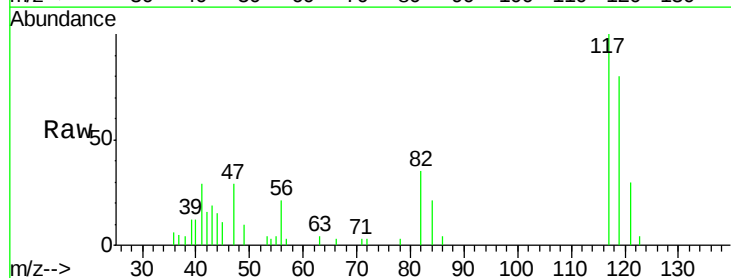
Tgt Ion: 117 Resp: 13923

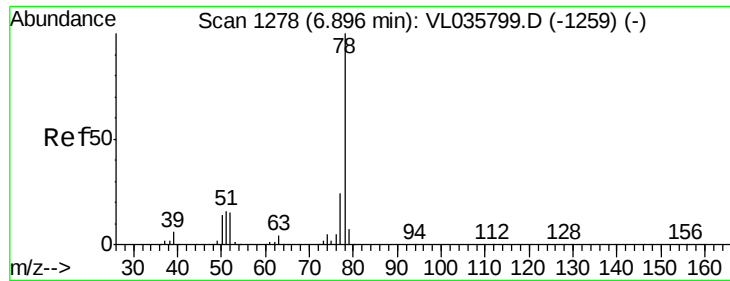
Ion Ratio Lower Upper

117 100

119 75.9 75.6 113.4

121 29.6 25.1 37.7





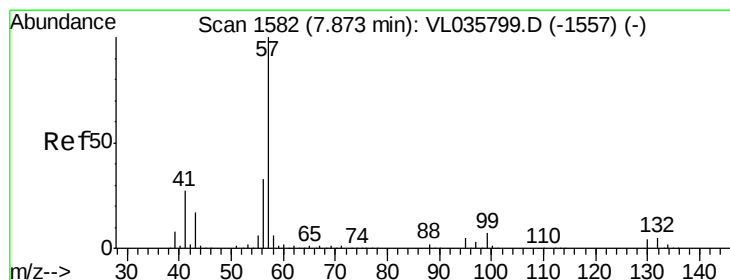
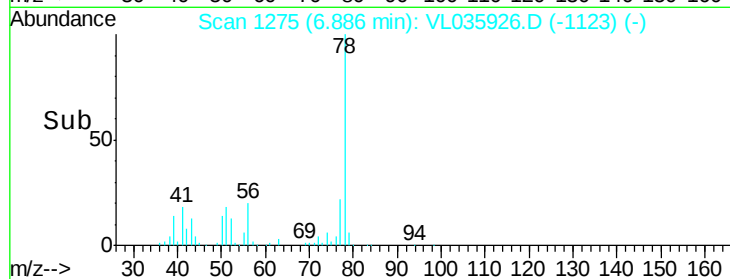
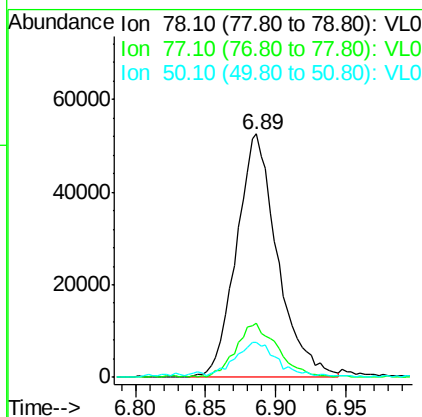
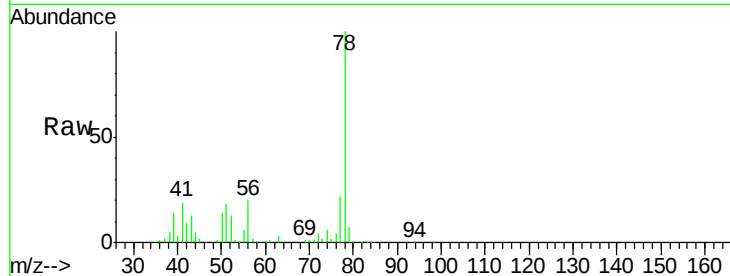
#36
Benzene
Concen: 0.354 ppbv
RT: 6.89 min Scan# 1275
Delta R.T. -0.01 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Instrument :
MSVOA_L
ClientSampled :
LA-2

Tot Ion	Ratio	Lower	Upper
78	100		
77	21.7	19.3	28.9
50	13.9	11.4	17.2

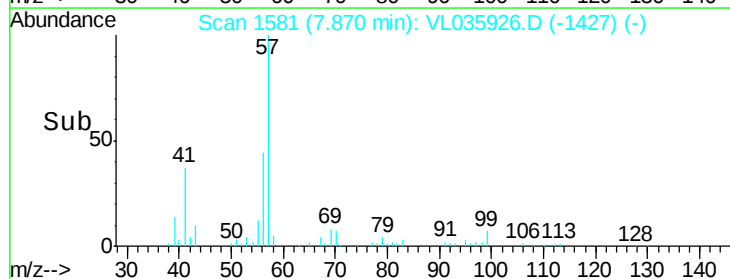
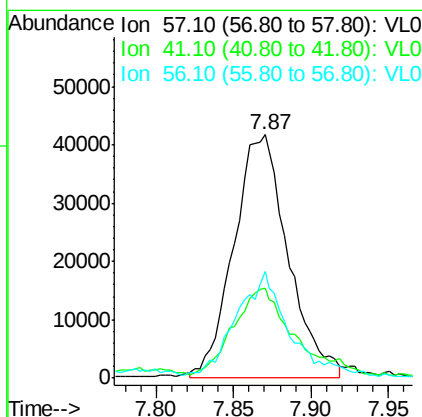
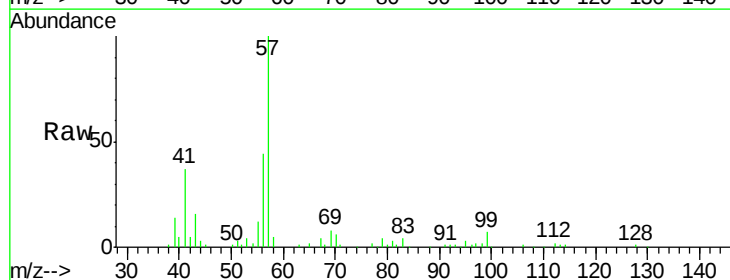
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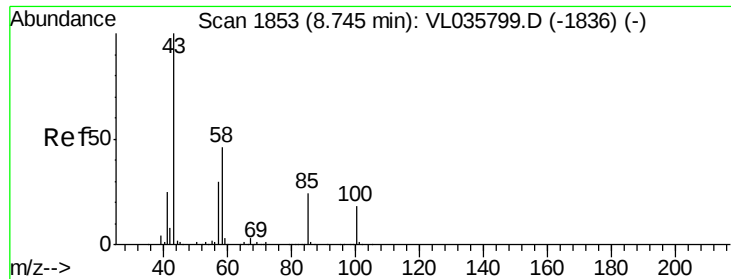
MMDadoda
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#44
2,2,4-Trimethylpentane
Concen: 0.255 ppbv m
RT: 7.87 min Scan# 1581
Delta R.T. -0.00 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Tgt Ion	Ratio	Lower	Upper
57	100		
41	40.9	21.0	31.4#
56	42.5	25.4	38.0#





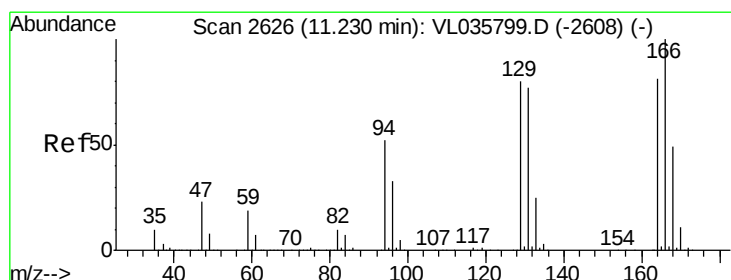
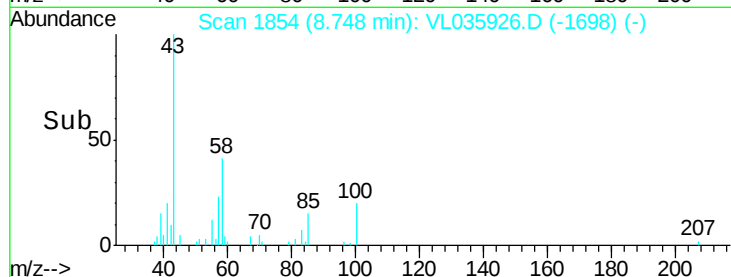
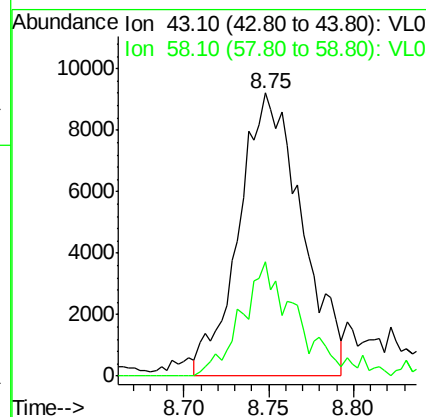
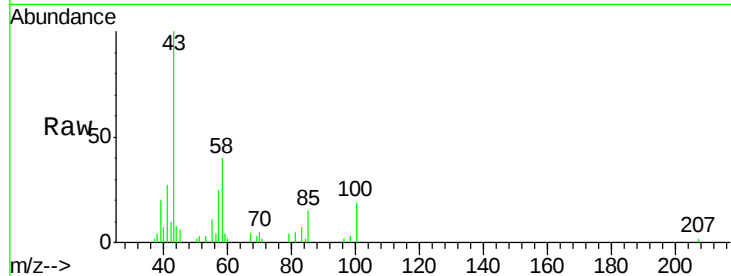
#50
4-Methyl-2-Pentanone
Concen: 0.118 ppbv m
RT: 8.75 min Scan# 1854
Delta R.T. 0.00 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Instrument :
MSVOA_L
ClientSampled :
LA-2

Tot Ion: 43 Resp: 23754
Ion Ratio Lower Upper
43 100
58 0.0 36.0 54.0#

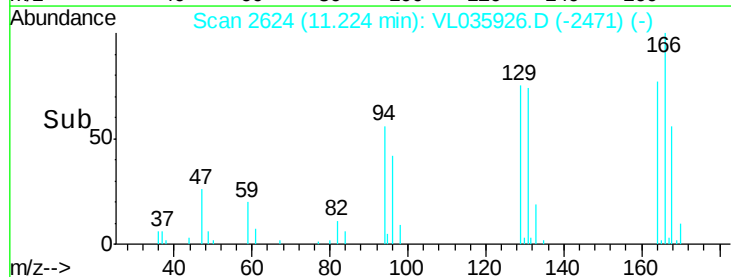
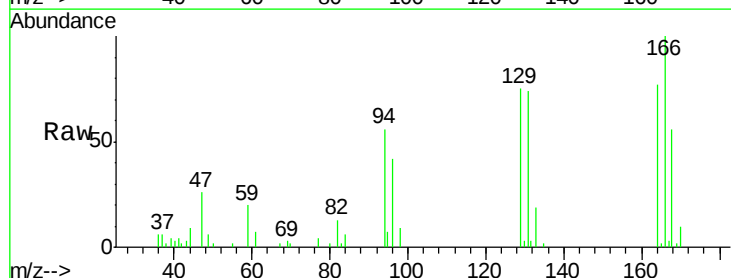
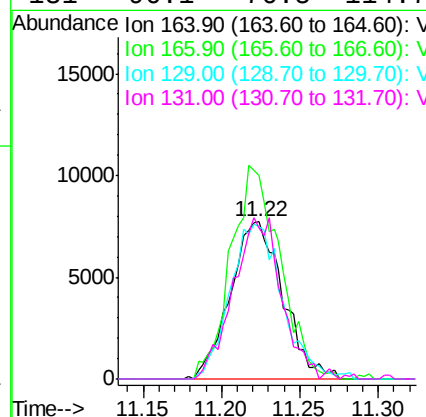
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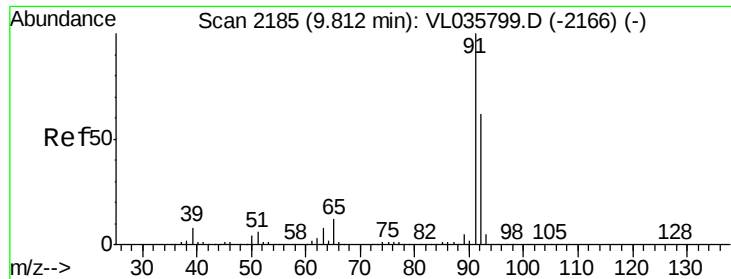
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#52
Tetrachloroethene
Concen: 0.126 ppbv m
RT: 11.22 min Scan# 2624
Delta R.T. -0.01 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Tgt Ion: 164 Resp: 18039
Ion Ratio Lower Upper
164 100
166 129.3 99.3 148.9
129 97.2 79.3 118.9
131 96.1 76.5 114.7





#53

Toluene

Concen: 4.374 ppbv

RT: 9.80 min Scan# 2182

Delta R.T. -0.01 min

Lab File: VL035926.D

Acq: 12 Nov 2020 23:19

Instrument :

MSVOA_L

ClientSampled :

LA-2

Tot Ion: 91 Resp: 1595898

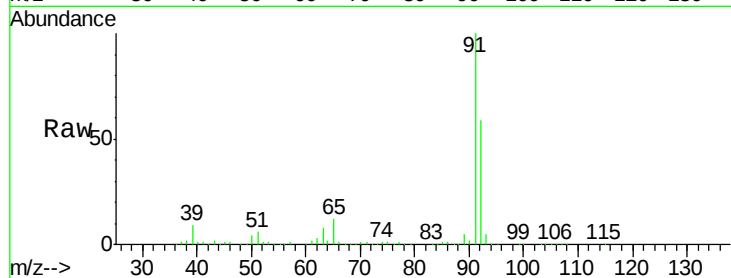
Ion Ratio Lower Upper

91 100

92 60.6 49.8 74.6

Manual Integrations
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

800000

600000

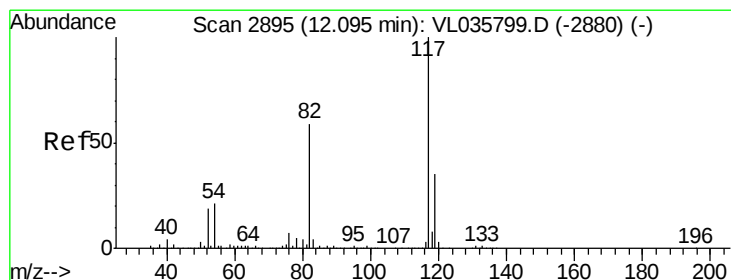
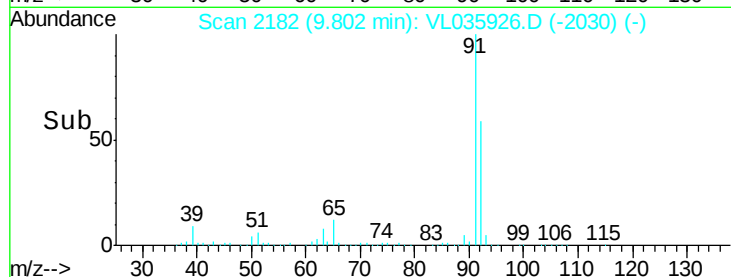
400000

200000

0

9.70 9.75 9.80 9.85 9.90

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2892

Delta R.T. -0.01 min

Lab File: VL035926.D

Acq: 12 Nov 2020 23:19

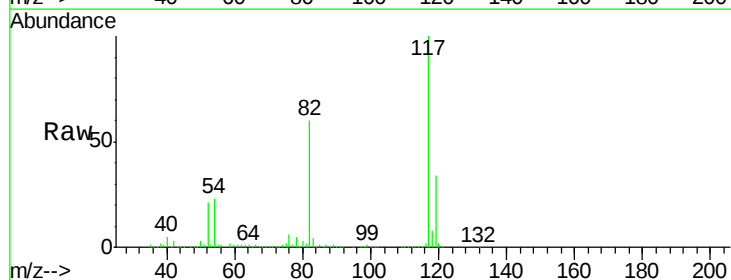
Tgt Ion: 117 Resp: 3724725

Ion Ratio Lower Upper

117 100

82 61.2 50.6 76.0

119 34.0 52.6 78.8#



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

2000000

1500000

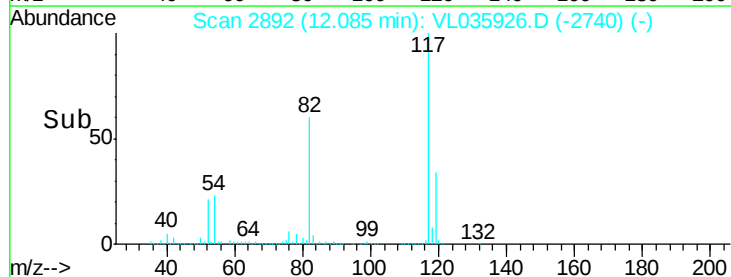
1000000

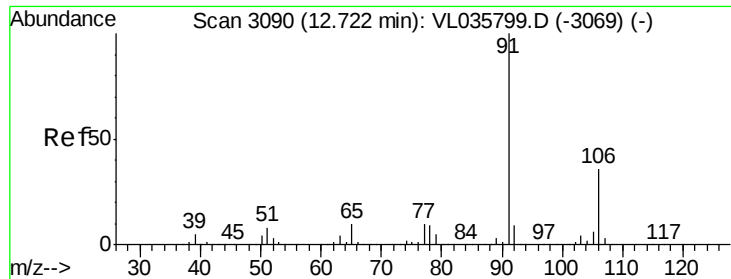
500000

0

12.00 12.10 12.20

Time-->





#58

Ethyl Benzene

Concen: 0.100 ppbv m

RT: 12.71 min Scan# 3086

Delta R.T. -0.01 min

Lab File: VL035926.D

Acq: 12 Nov 2020 23:19

Instrument :

MSVOA_L

ClientSampled :

LA-2

Tot Ion: 91 Resp: 45322

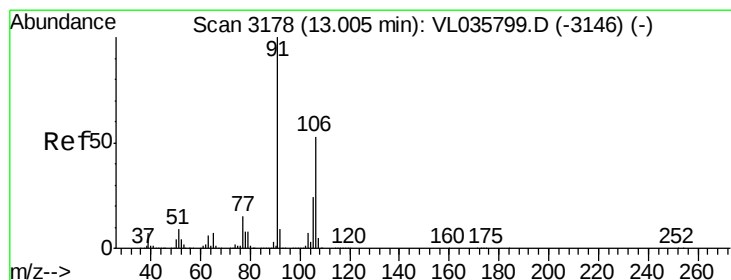
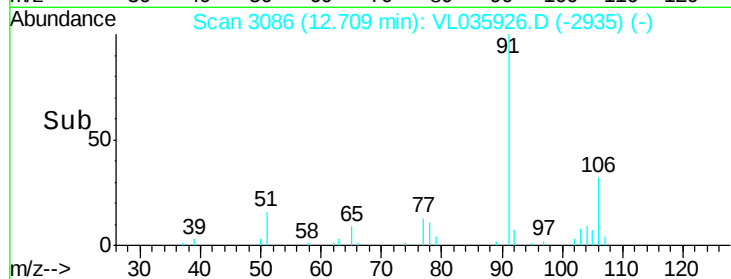
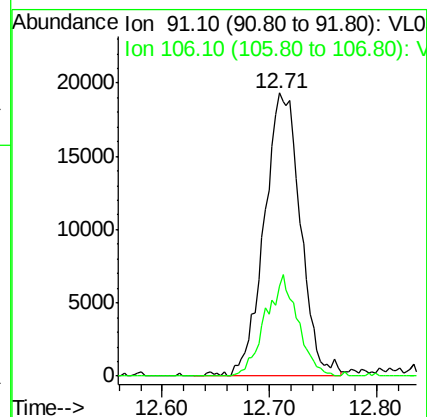
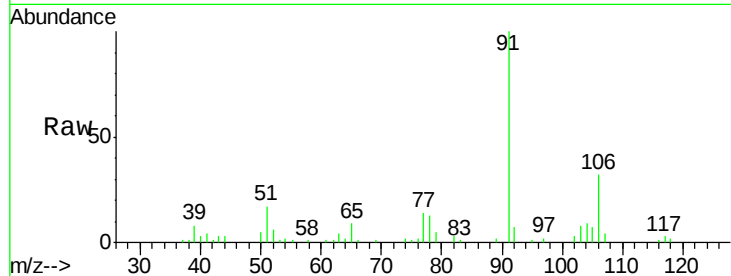
Ion Ratio Lower Upper

91 100

106 32.0 28.6 43.0

Manual Integrations
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#59

m/p-Xylene

Concen: 0.360 ppbv m

RT: 12.97 min Scan# 3168

Delta R.T. -0.03 min

Lab File: VL035926.D

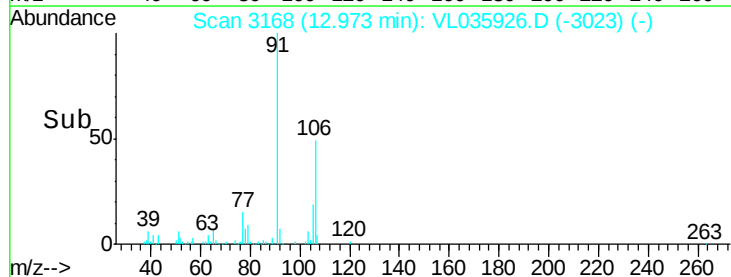
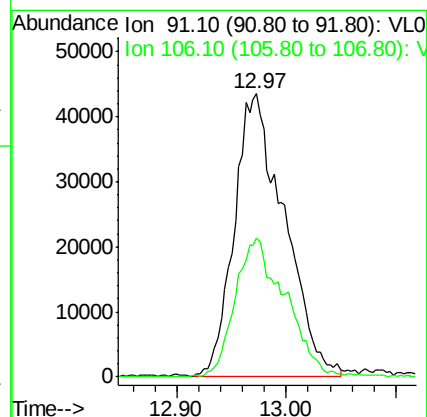
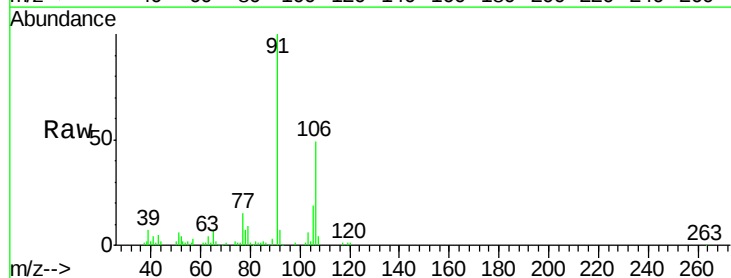
Acq: 12 Nov 2020 23:19

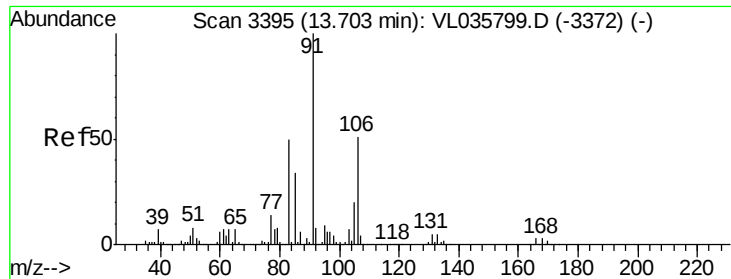
Tgt Ion: 91 Resp: 138178

Ion Ratio Lower Upper

91 100

106 0.0 39.5 59.3#





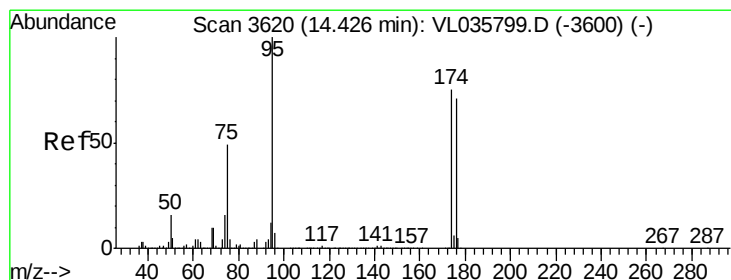
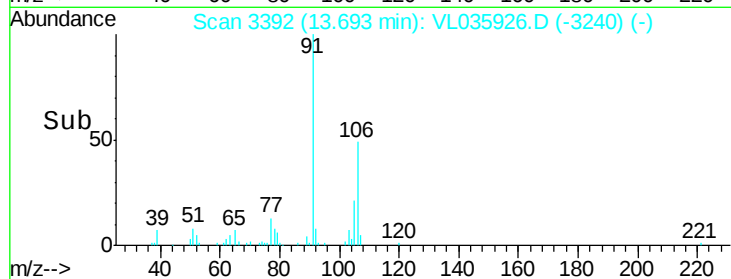
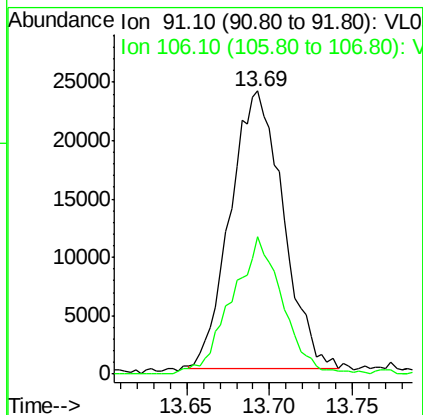
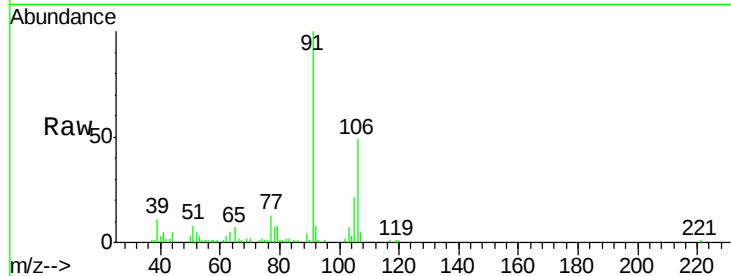
#60
o-Xylene
Concen: 0.142 ppbv
RT: 13.69 min Scan# 3392
Delta R.T. -0.01 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Instrument :
MSVOA_L
ClientSampled :
LA-2

Tot Ion: 91 Resp: 53143
Ion Ratio Lower Upper
91 100
106 47.3 24.8 74.4

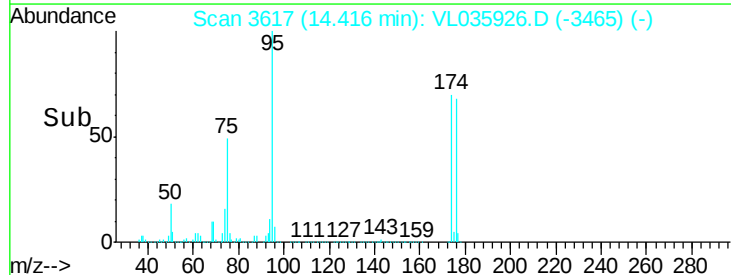
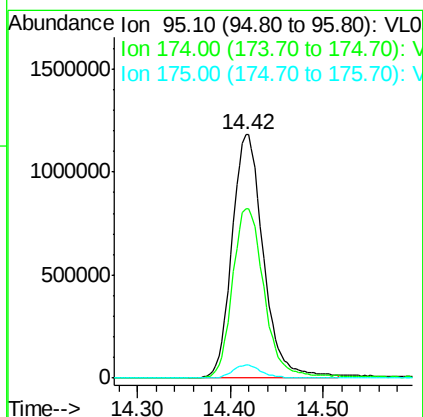
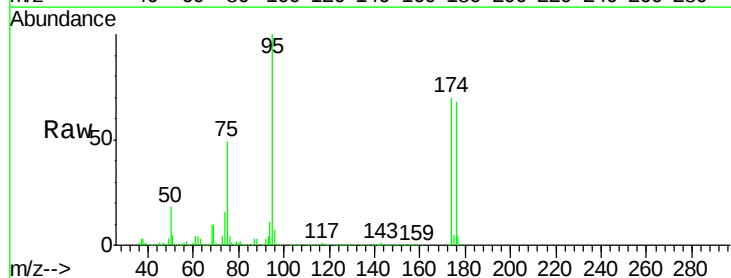
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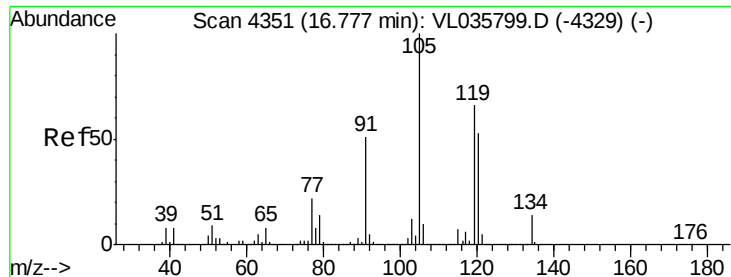
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.514 ppbv
RT: 14.42 min Scan# 3617
Delta R.T. -0.01 min
Lab File: VL035926.D
Acq: 12 Nov 2020 23:19

Tgt Ion: 95 Resp: 2782456
Ion Ratio Lower Upper
95 100
174 71.8 59.8 89.6
175 5.2 4.3 6.5





#74
 1,2,4-Trimethylbenzene
 Concen: 0.130 ppbv
 RT: 16.76 min Scan# 4347
 Delta R.T. -0.01 min
 Lab File: VL035926.D
 Acq: 12 Nov 2020 23:19

Instrument :
 MSVOA_L
 ClientSampleId :
 LA-2

Tot Ion:	105	Resp:	57690
Ion Ratio	Lower	Upper	
105	100		
120	42.3	42.0	63.0
91	8.0	41.0	61.6#
77	11.8	17.3	25.9#

Manual Integrations
 APPROVED

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 11/16/2020 2:31:53 PM

