

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL111220\
 Data File : VL035932.D
 Acq On : 13 Nov 2020 3:15
 Operator : SY/AP
 Sample : L4721-05
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 LA-5

Manual Integrations
 APPROVED

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

Quant Time: Nov 13 04:03:11 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	1082256	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3863829	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	3524160	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2647635	10.57	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	45360	0.223	ppbv	98
3) Chlorodifluoromethane	2.98	51	73808m	0.569	ppbv	
4) Chloromethane	3.13	50	35259	0.560	ppbv	97
9) Propene	3.01	41	71129m	1.499	ppbv	
10) Heptane	8.12	43	17262m	0.132	ppbv	
11) Trichlorofluoromethane	3.94	101	67341	0.263	ppbv	93
13) Ethanol	3.63	45	15460082	1502.281	ppbv	99
15) Acetone	3.84	43	1590223	13.744	ppbv	96
17) tert-Butyl alcohol	4.33	59	112989m	0.737	ppbv	
19) Isopropyl Alcohol	4.00	45	6335119	89.098	ppbv #	97
20) Methylene Chloride	4.34	84	567174	6.963	ppbv	99
26) Hexane	5.68	57	531660	4.229	ppbv #	48
29) Chloroform	5.75	83	43613	0.177	ppbv #	82
30) Cyclohexane	7.16	84	34901m	0.255	ppbv	
34) 2-Butanone	5.24	43	62760	0.500	ppbv	97
35) Carbon Tetrachloride	7.01	117	12495	0.061	ppbv	94
36) Benzene	6.89	78	103357m	0.360	ppbv	
44) 2,2,4-Trimethylpentane	7.87	57	91912m	0.242	ppbv	
52) Tetrachloroethene	11.22	164	5576m	0.041	ppbv	
53) Toluene	9.81	91	901811	2.602	ppbv	97
59) m/p-Xylene	12.97	91	117235m	0.323	ppbv	
60) o-Xylene	13.69	91	48737	0.138	ppbv	91
74) 1,2,4-Trimethylbenzene	16.77	105	59614	0.142	ppbv #	65

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

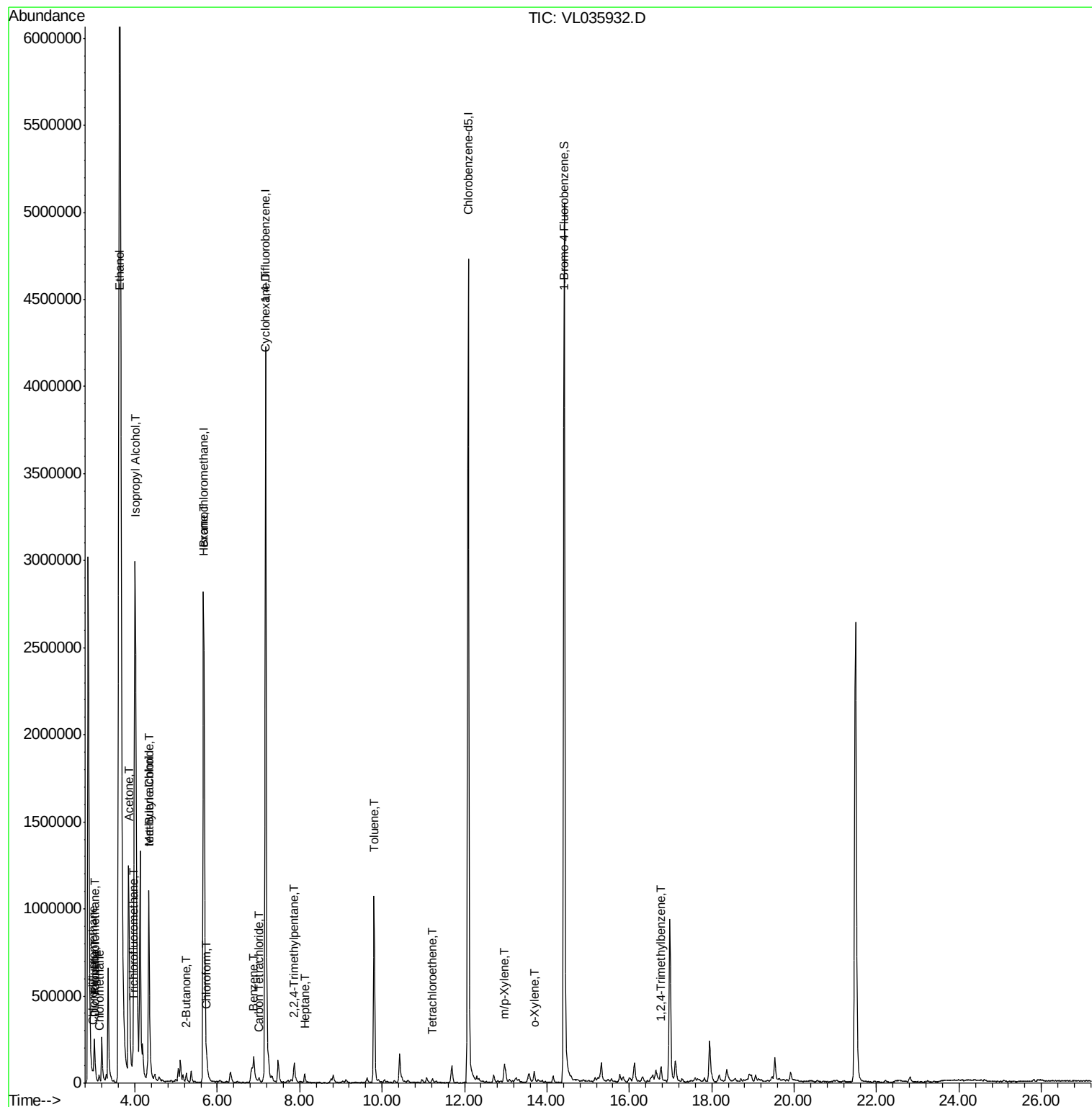
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL111220\
Data File : VL035932.D
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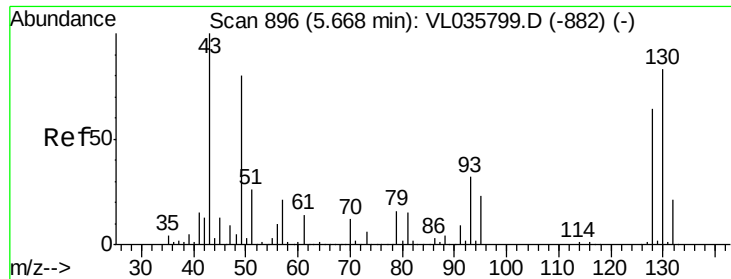
Instrument :
MSVOA_L
ClientSampleId :
LA-5

Manual Integrations
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11/16/2020 2:31:31 PM

Quant Time: Nov 13 04:03:11 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





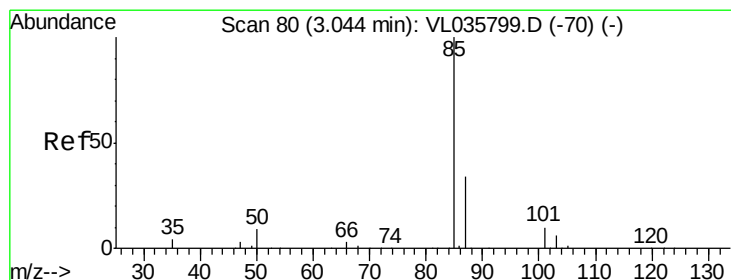
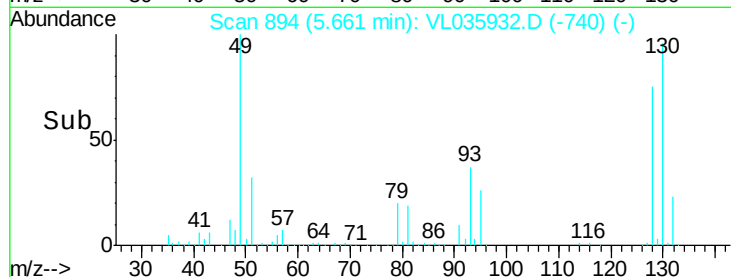
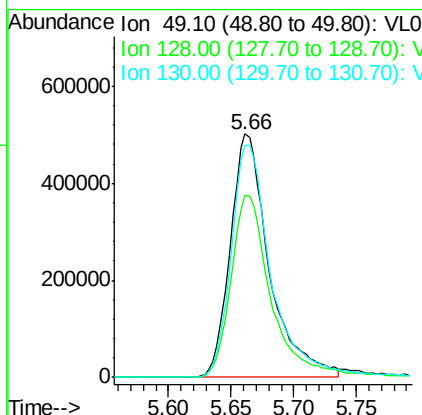
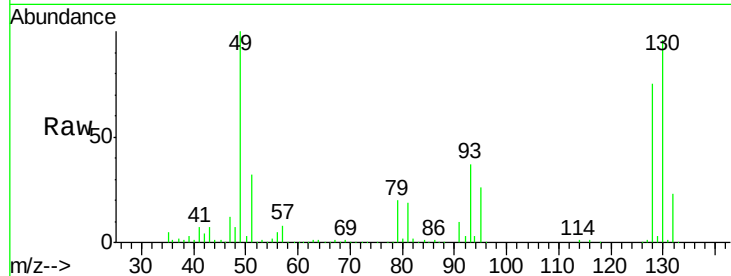
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.66 min Scan# 894
Delta R.T. -0.01 min
Lab File: VL035932.D
Acq: 13 Nov 2020 3:15

Instrument :
MSVOA_L
ClientSampled :
LA-5

Tot Ion: 49 Resp: 1082256
Ion Ratio Lower Upper
49 100
128 77.9 41.5 124.6
130 100.0 53.7 161.1

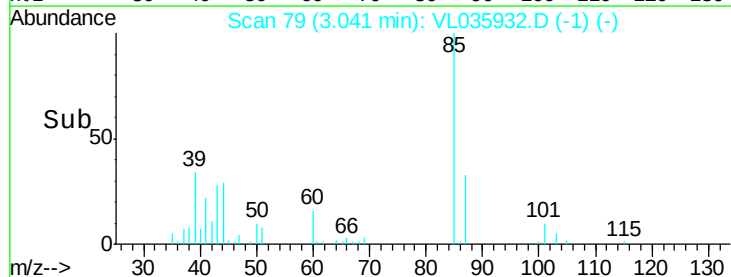
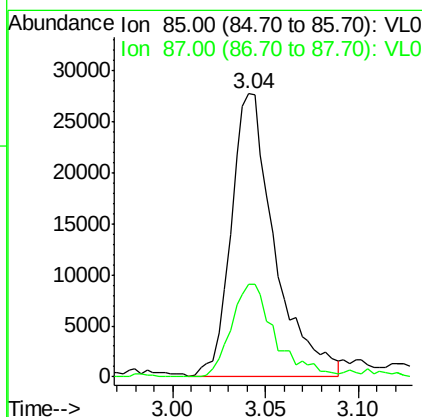
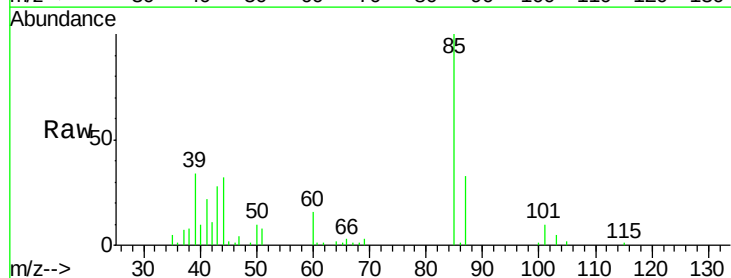
Manual Integrations
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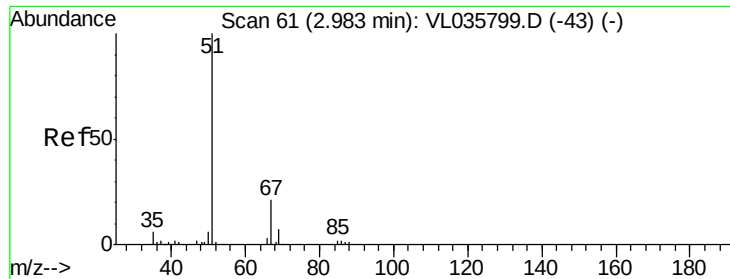
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#2
Dichlorodifluoromethane
Concen: 0.223 ppbv
RT: 3.04 min Scan# 79
Delta R.T. -0.00 min
Lab File: VL035932.D
Acq: 13 Nov 2020 3:15

Tgt Ion: 85 Resp: 45360
Ion Ratio Lower Upper
85 100
87 32.9 27.1 40.7





#3

Chlorodifluoromethane

Concen: 0.569 ppbv

RT: 2.98 min Scan# 61

Delta R.T. 0.00 min

Lab File: VL035932.D

Acq: 13 Nov 2020 3:15

Instrument :

MSVOA_L

ClientSampled :

LA-5

Tot Ion: 51 Resp: 73808

Ion Ratio Lower Upper

51 100

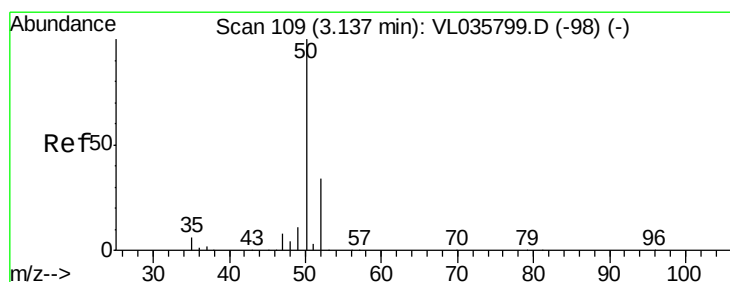
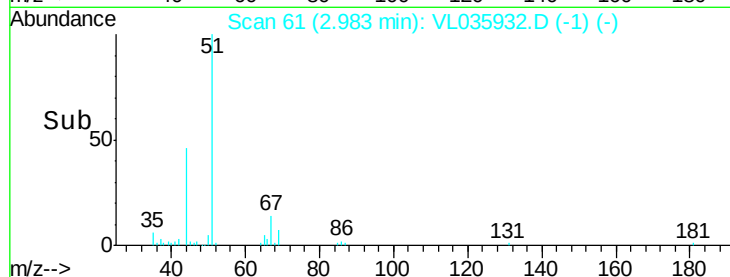
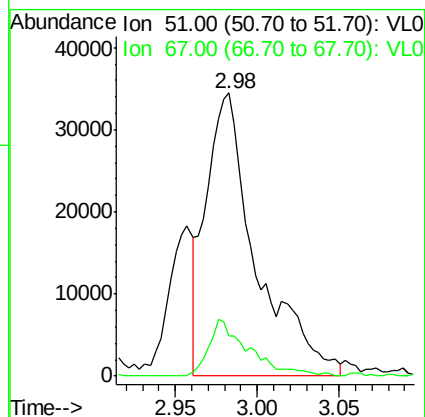
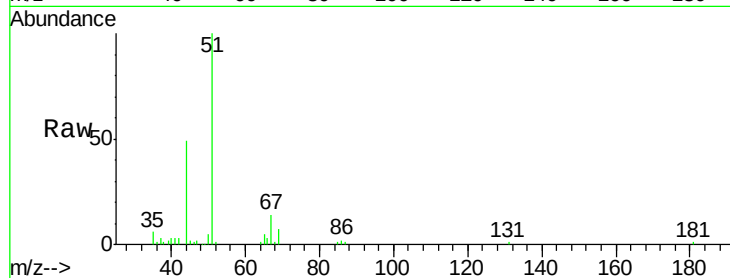
67 16.0 17.0 25.4#

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#4

Chloromethane

Concen: 0.560 ppbv

RT: 3.13 min Scan# 108

Delta R.T. -0.00 min

Lab File: VL035932.D

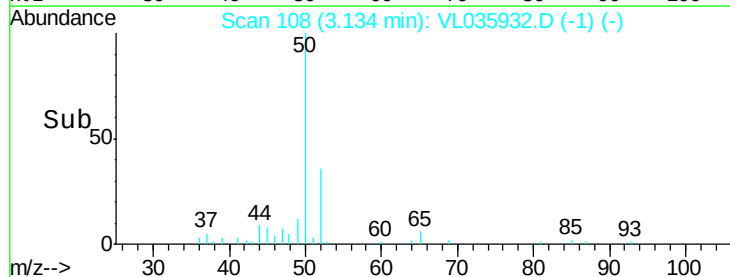
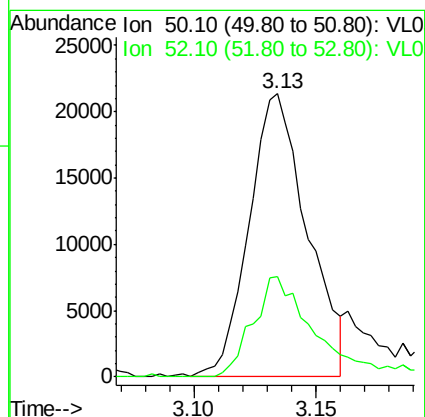
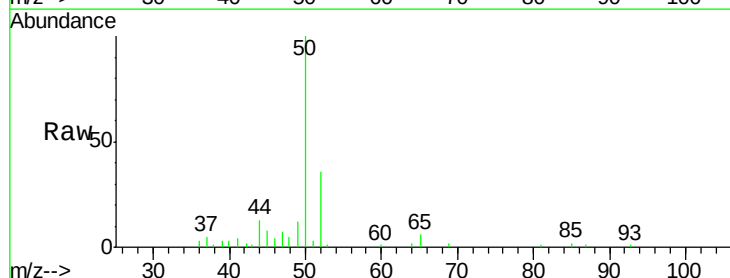
Acq: 13 Nov 2020 3:15

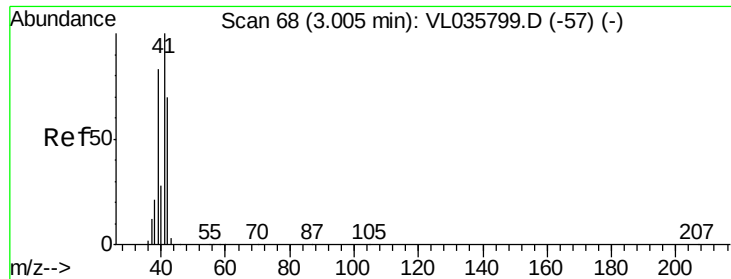
Tgt Ion: 50 Resp: 35259

Ion Ratio Lower Upper

50 100

52 35.6 27.1 40.7





#9

Propene

Concen: 1.499 ppbv m

RT: 3.01 min Scan# 70

Delta R.T. 0.01 min

Lab File: VL035932.D

Acq: 13 Nov 2020 3:15

Instrument :

MSVOA_L

ClientSampled :

LA-5

Tot Ion: 41 Resp: 71129

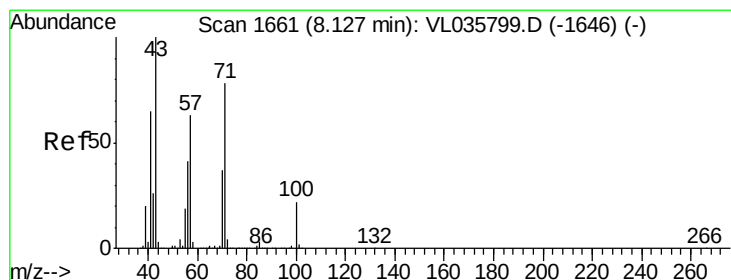
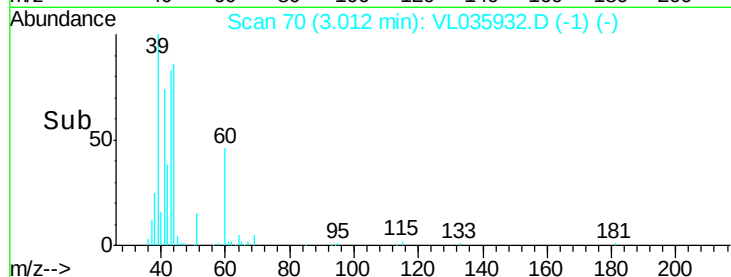
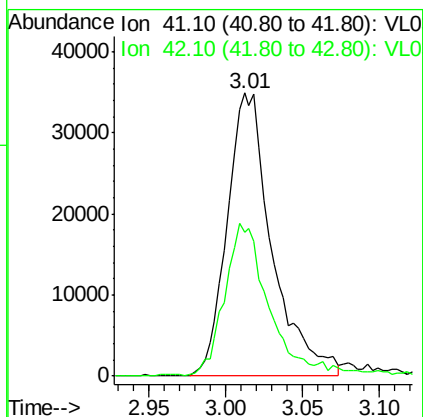
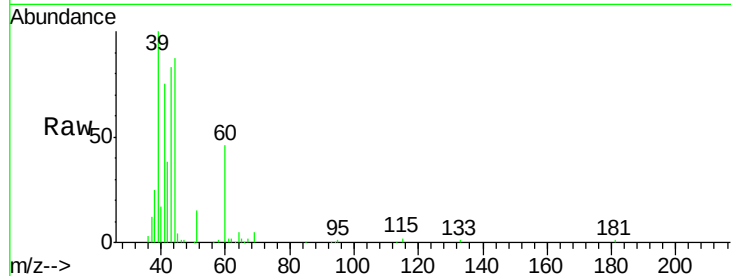
Ion Ratio Lower Upper

41 100

42 54.6 56.2 84.4#

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#10

Heptane

Concen: 0.132 ppbv m

RT: 8.12 min Scan# 1659

Delta R.T. -0.01 min

Lab File: VL035932.D

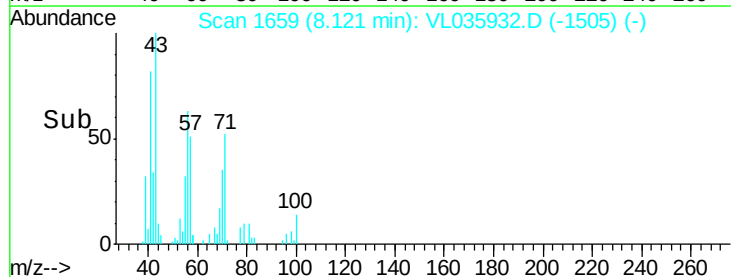
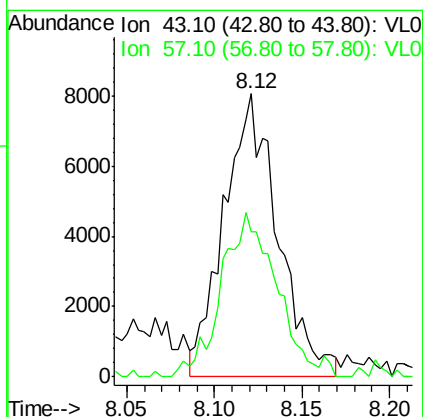
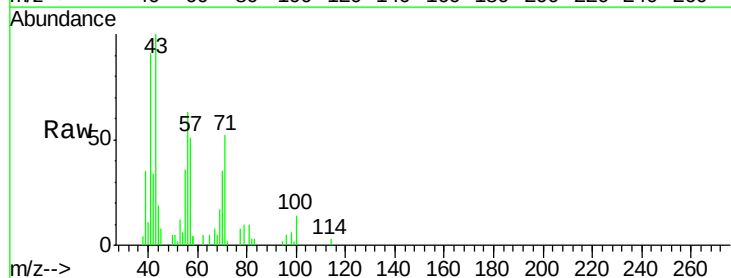
Acq: 13 Nov 2020 3:15

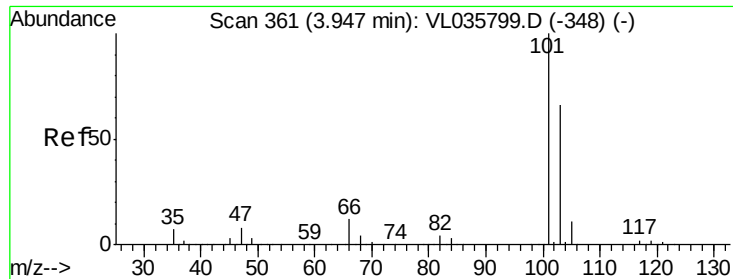
Tgt Ion: 43 Resp: 17262

Ion Ratio Lower Upper

43 100

57 59.6 50.0 75.0





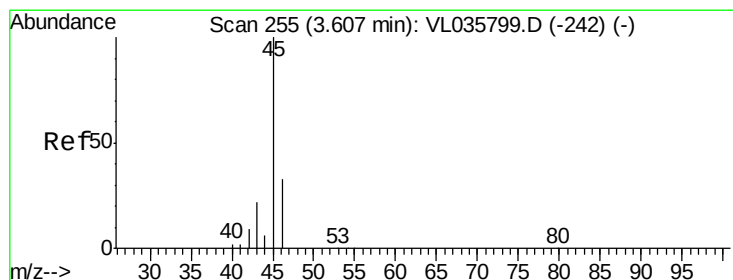
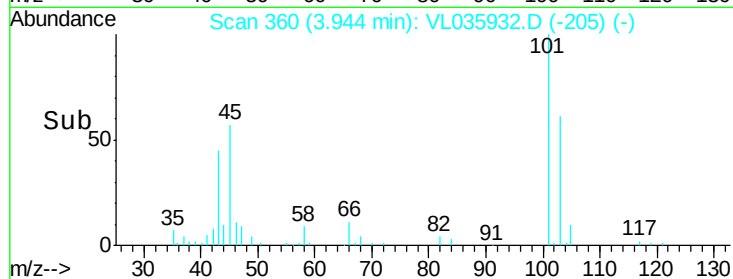
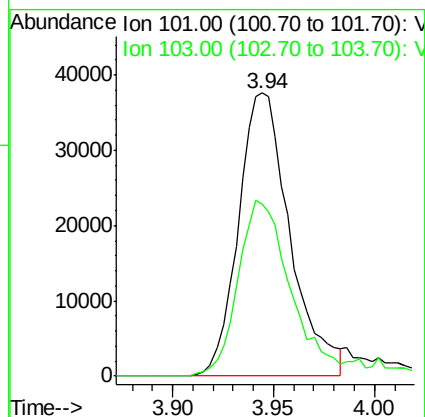
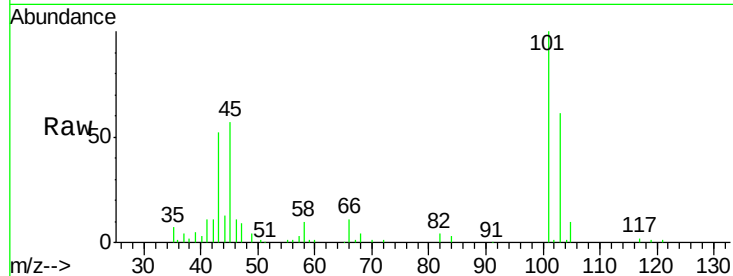
#11
 Trichlorofluoromethane
 Concen: 0.263 ppbv
 RT: 3.94 min Scan# 360
 Delta R.T. -0.00 min
 Lab File: VL035932.D
 Acq: 13 Nov 2020 3:15

Instrument :
 MSVOA_L
 ClientSampleId :
 LA-5

Tot Ion:101 Resp: 67341
 Ion Ratio Lower Upper
 101 100
 103 60.6 53.0 79.4

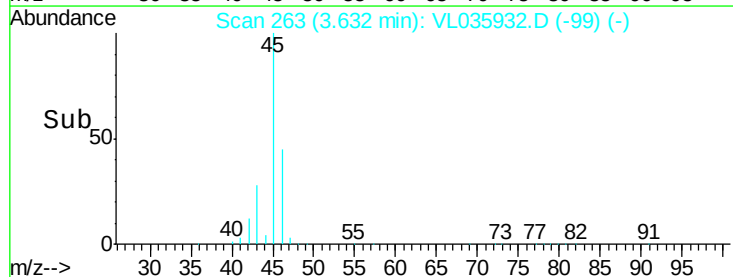
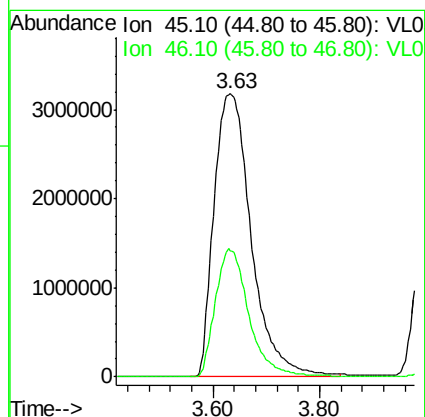
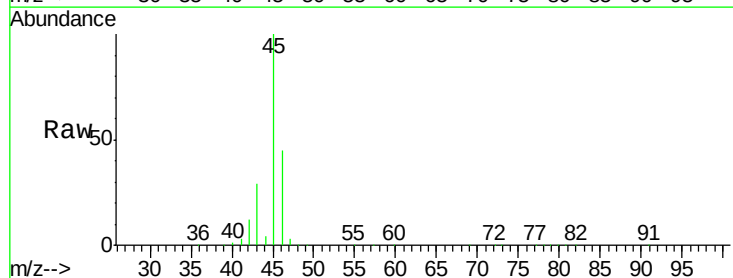
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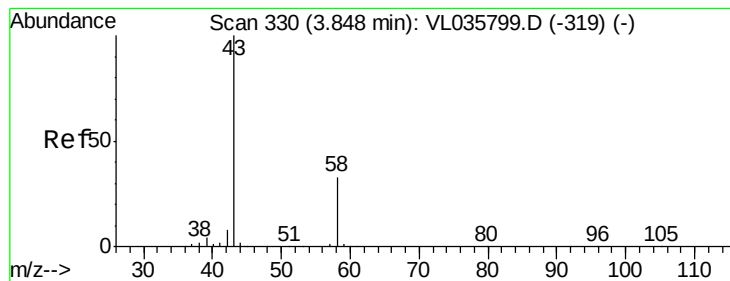
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#13
 Ethanol
 Concen: 1502.281 ppbv
 RT: 3.63 min Scan# 263
 Delta R.T. 0.03 min
 Lab File: VL035932.D
 Acq: 13 Nov 2020 3:15

Tgt Ion: 45 Resp:15460082
 Ion Ratio Lower Upper
 45 100
 46 41.0 16.1 64.5





#15

Acetone

Concen: 13.744 ppbv

RT: 3.84 min Scan# 329

Delta R.T. -0.00 min

Lab File: VL035932.D

Acq: 13 Nov 2020 3:15

Instrument :

MSVOA_L

ClientSampled :

LA-5

Tot Ion: 43 Resp: 1590223

Ion Ratio Lower Upper

43 100

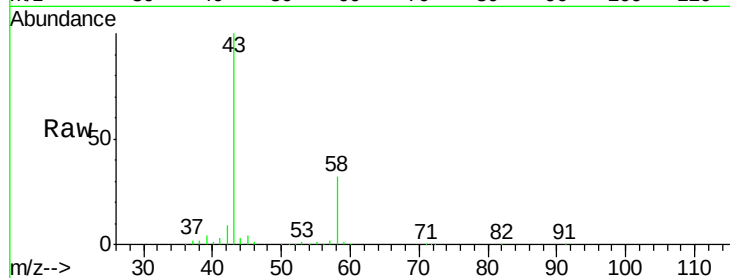
58 32.1 27.5 41.3

Manual Integrations

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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.84

800000

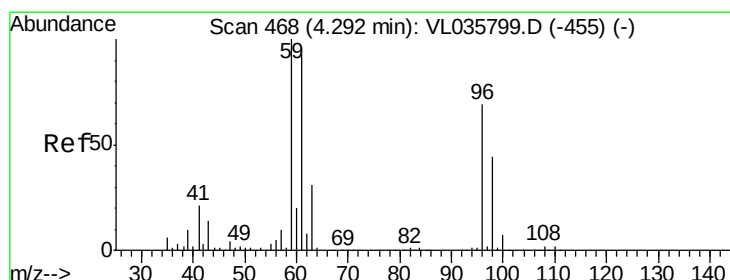
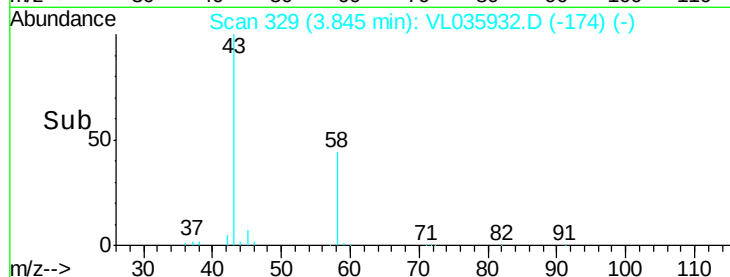
600000

400000

200000

0

Time-->



#17

tert-Butyl alcohol

Concen: 0.737 ppbv m

RT: 4.33 min Scan# 481

Delta R.T. 0.04 min

Lab File: VL035932.D

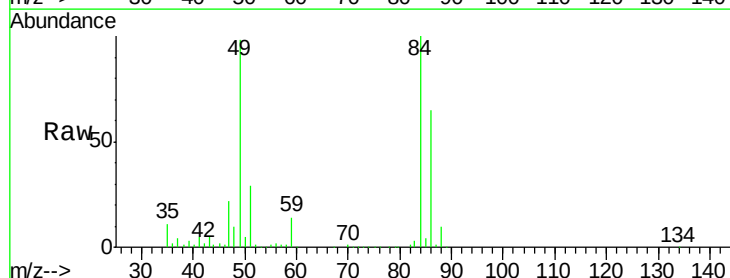
Acq: 13 Nov 2020 3:15

Tgt Ion: 59 Resp: 112989

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.4#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

4.33

40000

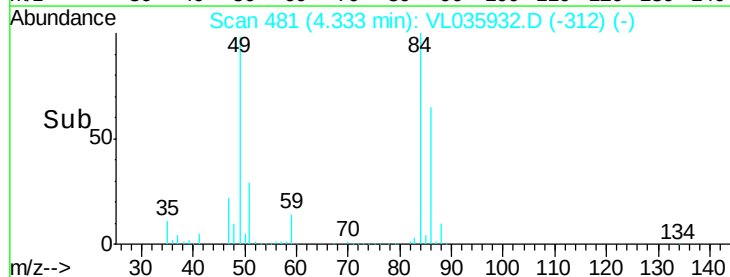
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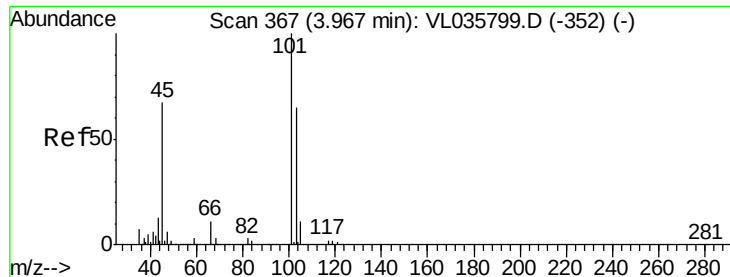
20000

10000

0

Time-->





#19

Isopropyl Alcohol

Concen: 89.098 ppbv

RT: 4.00 min Scan# 378

Delta R.T. 0.04 min

Lab File: VL035932.D

Acq: 13 Nov 2020 3:15

Instrument :

MSVOA_L

ClientSampled :

LA-5

Tot Ion: 45 Resp: 6335119

Ion Ratio Lower Upper

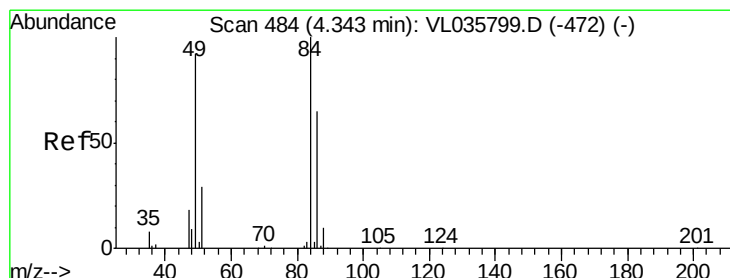
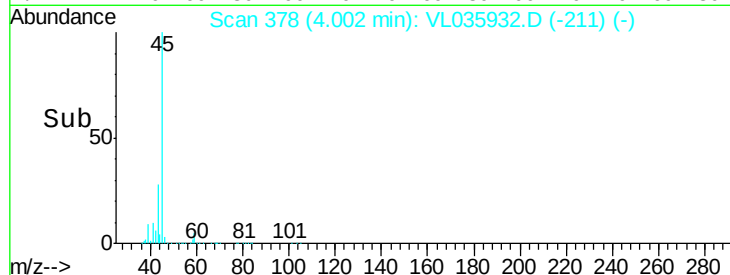
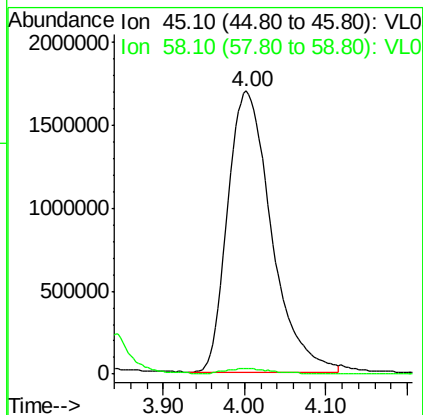
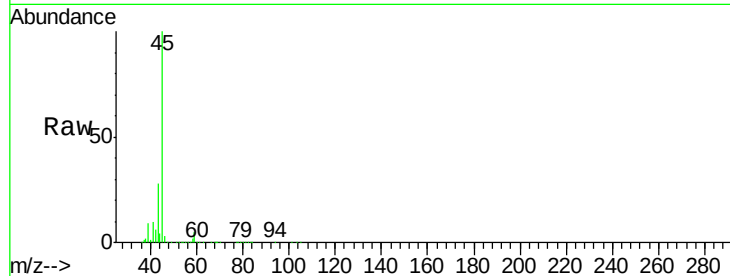
45 100

58 2.3 2.6 3.8#

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#20

Methylene Chloride

Concen: 6.963 ppbv

RT: 4.34 min Scan# 482

Delta R.T. -0.01 min

Lab File: VL035932.D

Acq: 13 Nov 2020 3:15

Tgt Ion: 84 Resp: 567174

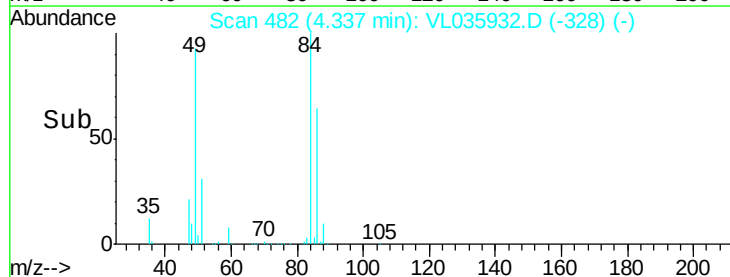
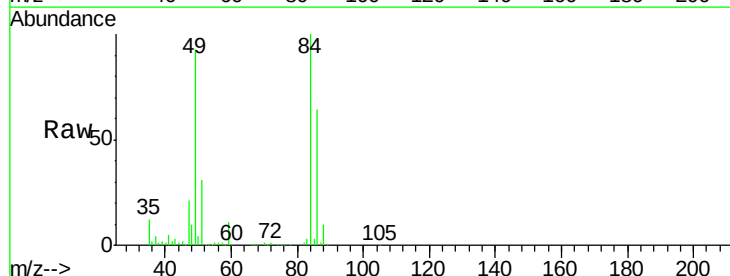
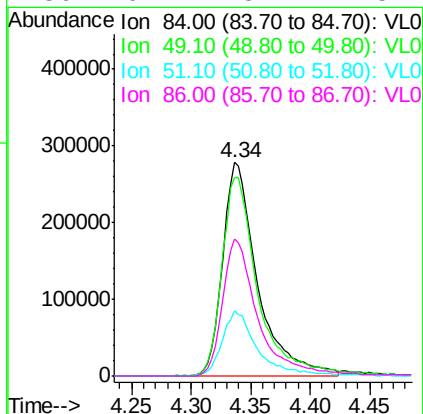
Ion Ratio Lower Upper

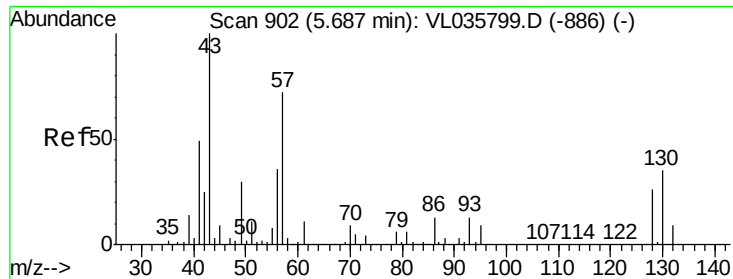
84 100

49 92.8 73.8 110.8

51 30.5 23.0 34.4

86 64.1 52.1 78.1





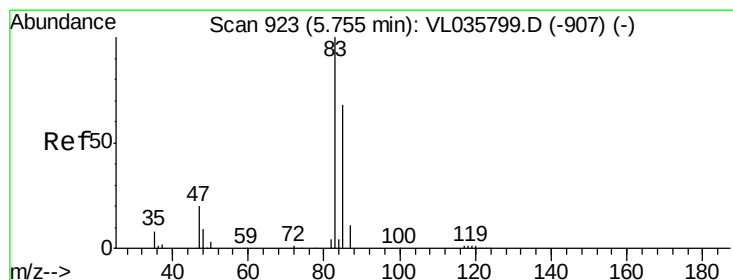
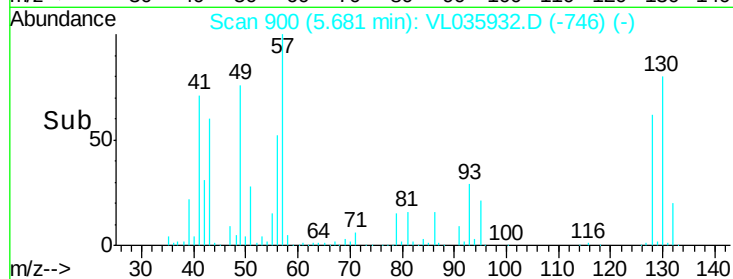
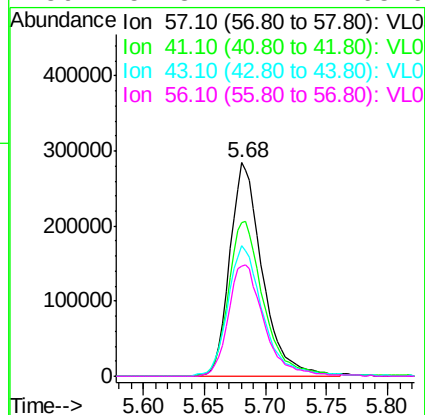
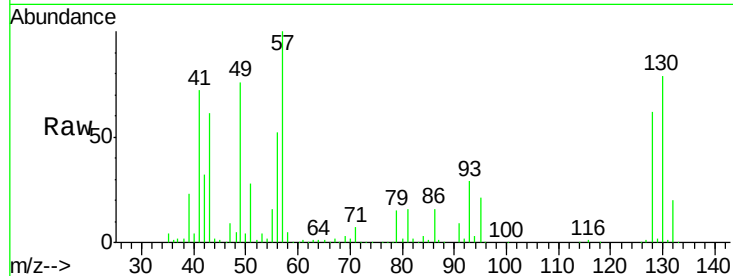
#26
Hexane
Concen: 4.229 ppbv
RT: 5.68 min Scan# 900
Delta R.T. -0.01 min
Lab File: VL035932.D
Acq: 13 Nov 2020 3:15

Instrument :
MSVOA_L
ClientSampled :
LA-5

Tot Ion	Ratio	Lower	Upper
57	100		
41	79.2	58.9	88.3
43	66.1	150.2	225.2#
56	57.3	42.4	63.6

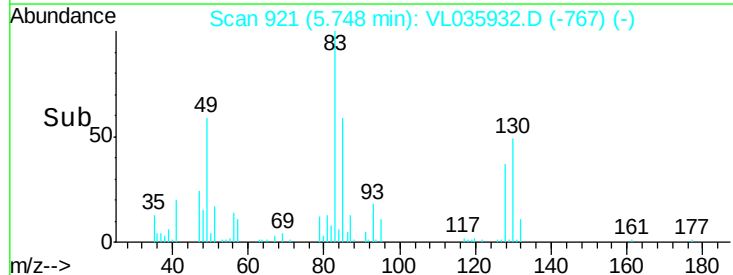
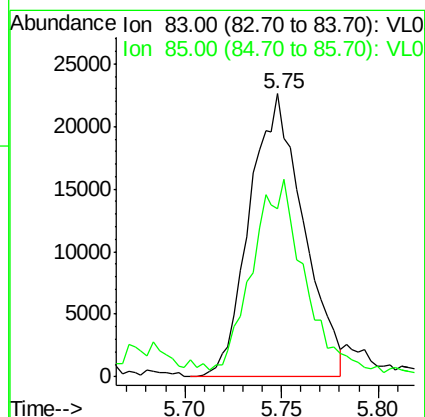
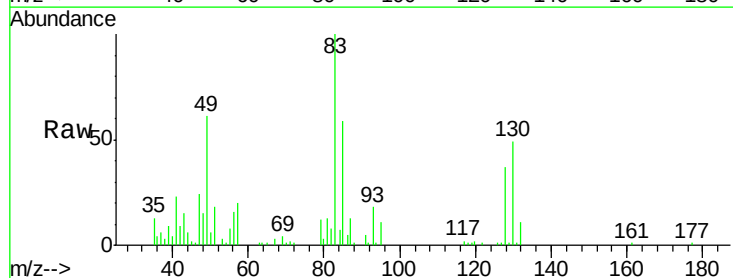
Manual Integrations
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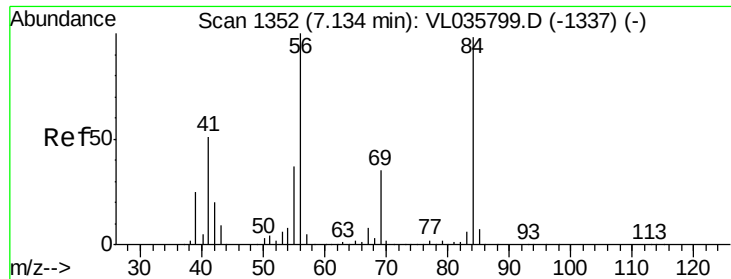
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#29
Chloroform
Concen: 0.177 ppbv
RT: 5.75 min Scan# 921
Delta R.T. -0.01 min
Lab File: VL035932.D
Acq: 13 Nov 2020 3:15

Tgt Ion	Ratio	Lower	Upper
83	100		
85	53.6	54.6	81.8#





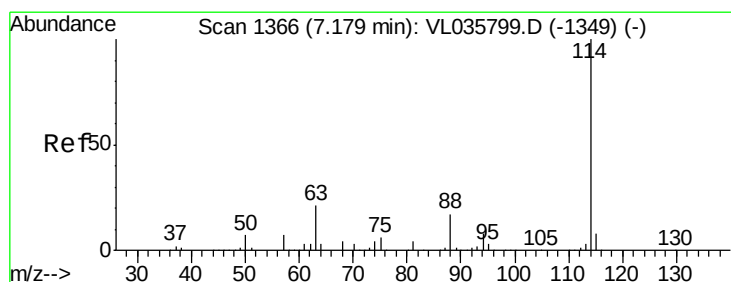
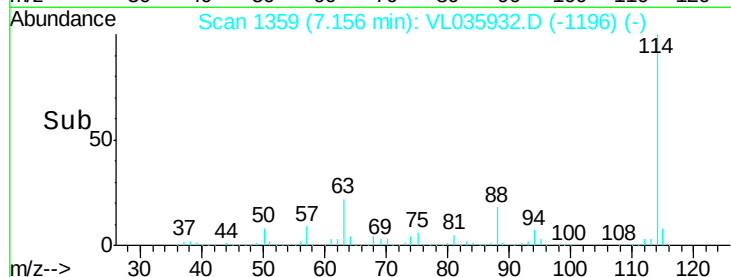
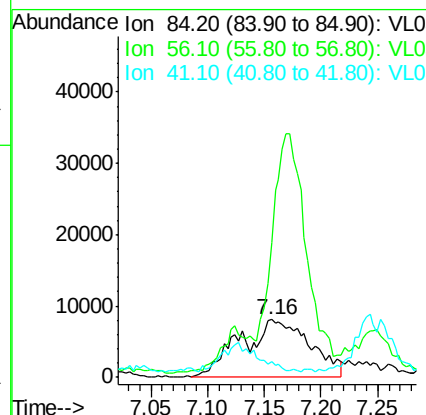
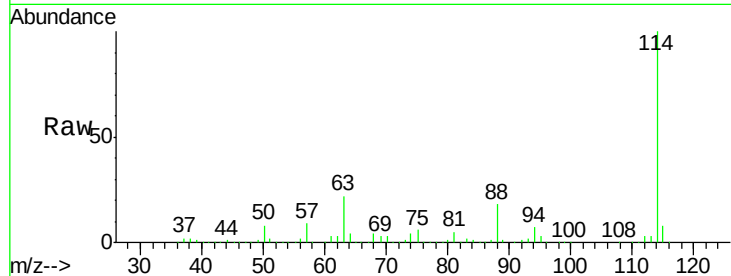
#30
Cyclohexane
Concen: 0.255 ppbv m
RT: 7.16 min Scan# 1359
Delta R.T. 0.02 min
Lab File: VL035932.D
Acq: 13 Nov 2020 3:15

Instrument :
MSVOA_L
ClientSampled :
LA-5

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

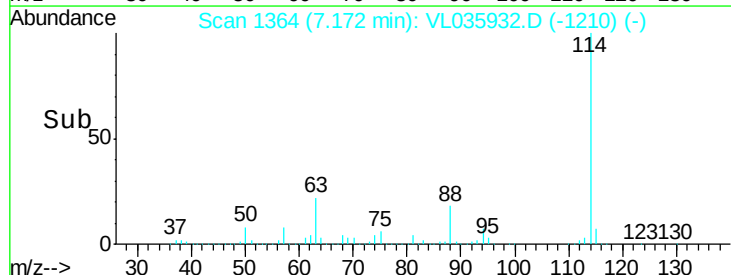
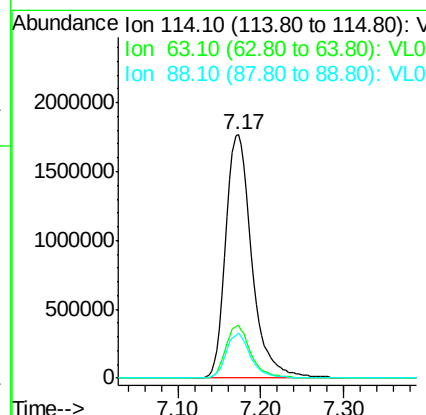
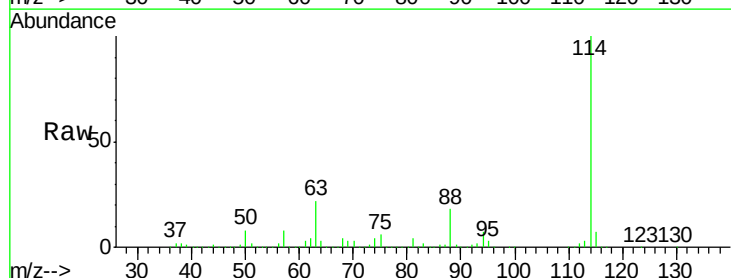
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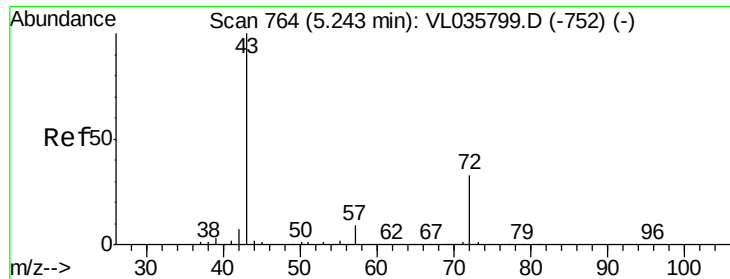
MMDadoda
11/16/2020 2:31:31 PM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1364
Delta R.T. -0.01 min
Lab File: VL035932.D
Acq: 13 Nov 2020 3:15

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





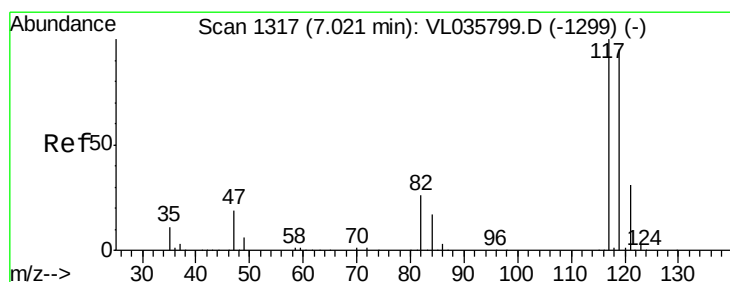
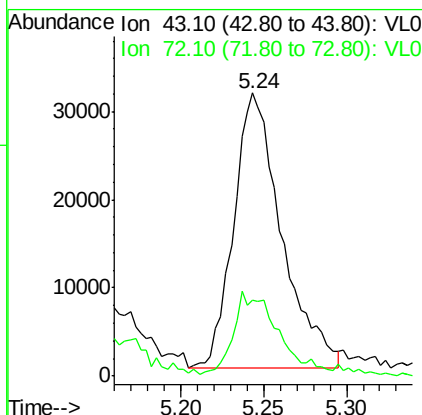
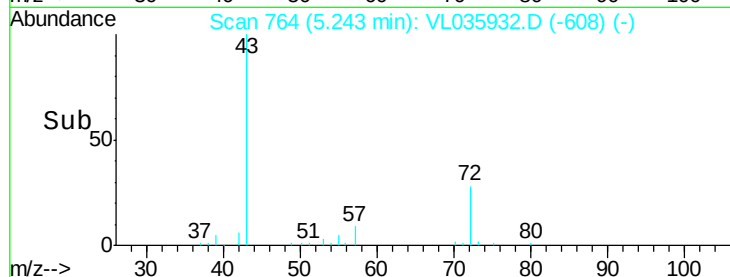
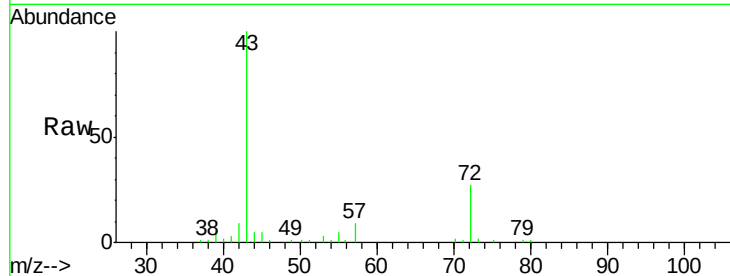
#34
2-Butanone
Concen: 0.500 ppbv
RT: 5.24 min Scan# 764
Delta R.T. 0.00 min
Lab File: VL035932.D
Acq: 13 Nov 2020 3:15

Instrument :
MSVOA_L
ClientSampled :
LA-5

Tot Ion: 43 Resp: 62760
Ion Ratio Lower Upper
43 100
72 31.6 26.5 39.7

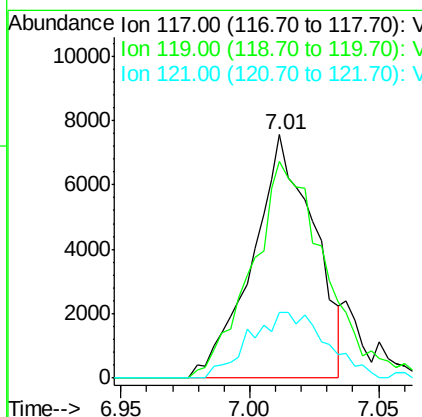
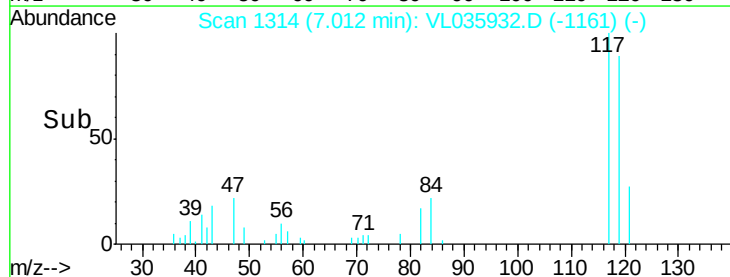
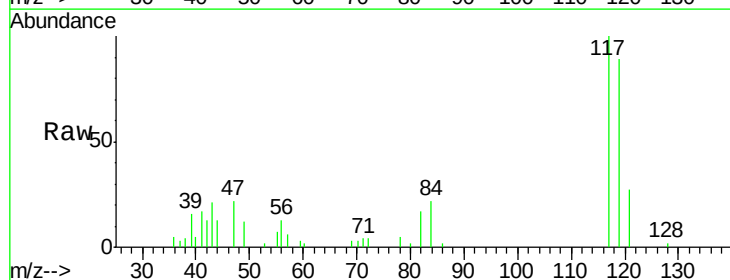
Manual Integrations
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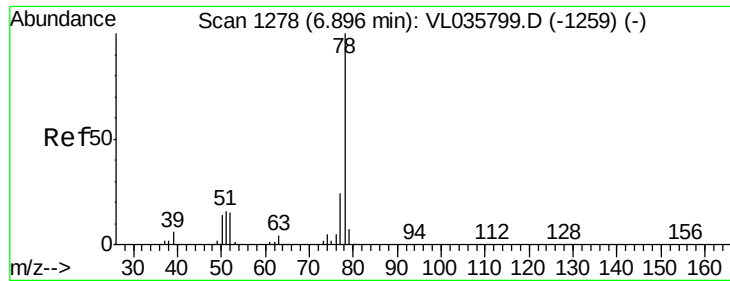
MMDadoda
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#35
Carbon Tetrachloride
Concen: 0.061 ppbv
RT: 7.01 min Scan# 1314
Delta R.T. -0.01 min
Lab File: VL035932.D
Acq: 13 Nov 2020 3:15

Tgt Ion: 117 Resp: 12495
Ion Ratio Lower Upper
117 100
119 88.8 75.6 113.4
121 27.2 25.1 37.7





#36

Benzene

Concen: 0.360 ppbv m

RT: 6.89 min Scan# 1276

Delta R.T. -0.01 min

Lab File: VL035932.D

Acq: 13 Nov 2020 3:15

Instrument :

MSVOA_L

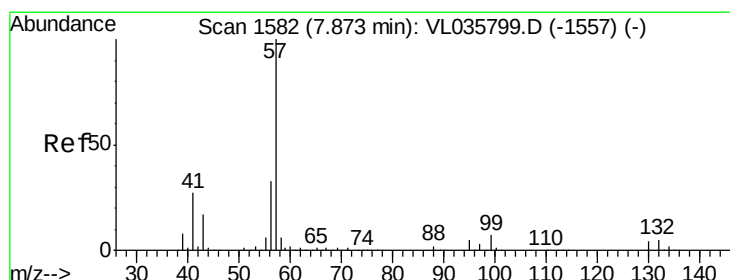
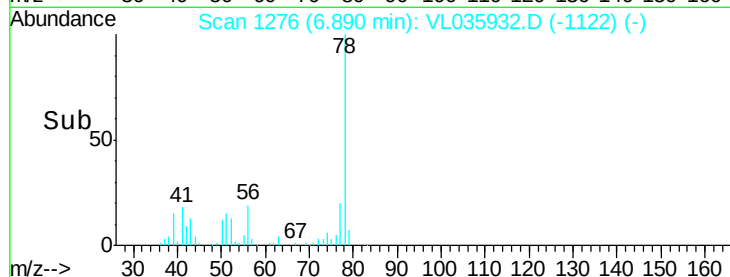
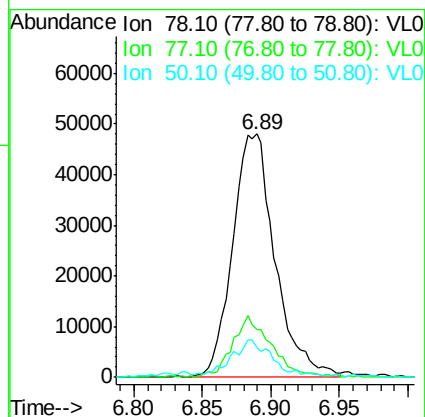
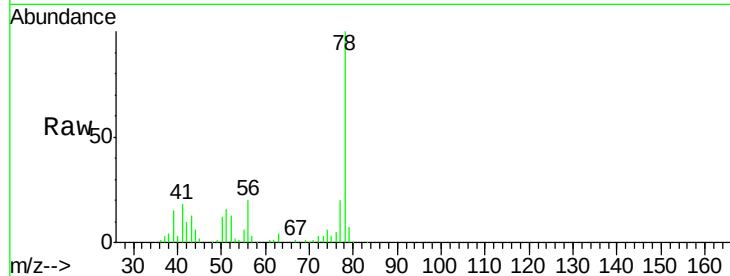
ClientSampled :

LA-5

Tot Ion:	78	Resp:	103357
Ion	Ratio	Lower	Upper
78	100		
77	19.7	19.3	28.9
50	12.1	11.4	17.2

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#44

2,2,4-Trimethylpentane

Concen: 0.242 ppbv m

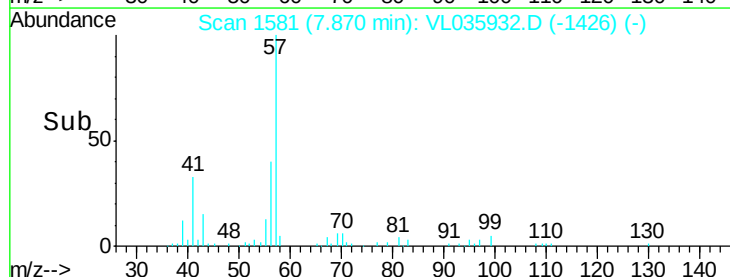
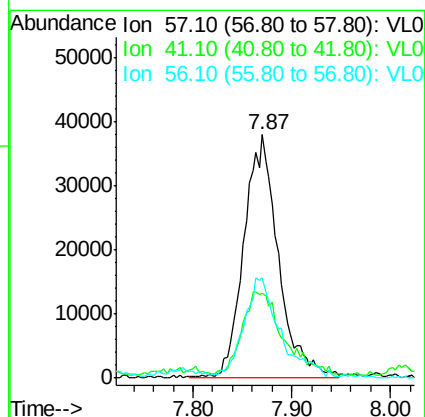
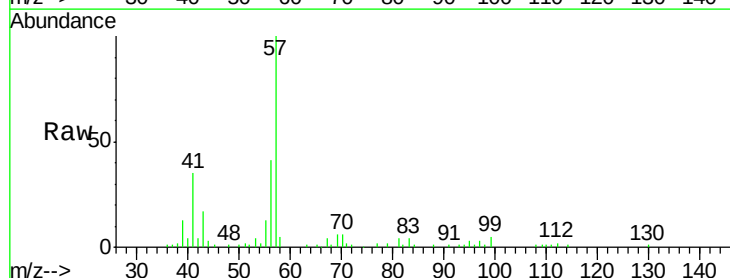
RT: 7.87 min Scan# 1581

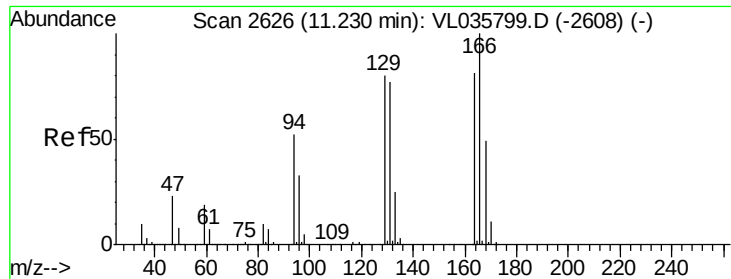
Delta R.T. -0.00 min

Lab File: VL035932.D

Acq: 13 Nov 2020 3:15

Tgt Ion:	57	Resp:	91912
Ion	Ratio	Lower	Upper
57	100		
41	44.4	21.0	31.4#
56	43.1	25.4	38.0#





#52

Tetrachloroethene

Concen: 0.041 ppbv m

RT: 11.22 min Scan# 2624

Delta R.T. -0.01 min

Lab File: VL035932.D

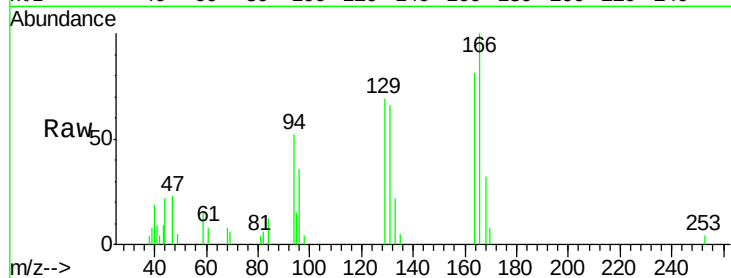
Acq: 13 Nov 2020 3:15

Instrument :

MSVOA_L

ClientSampled :

LA-5



Tot Ion:164 Resp: 5576

Ion Ratio Lower Upper

164 100

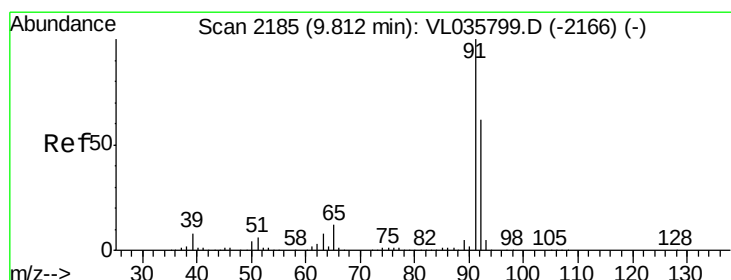
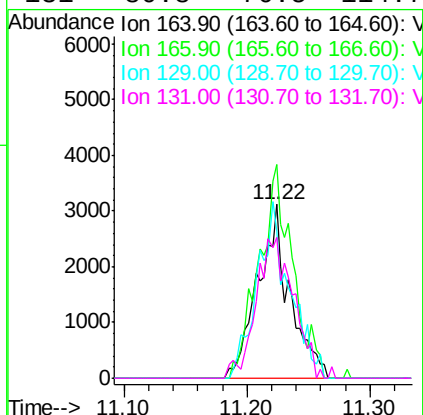
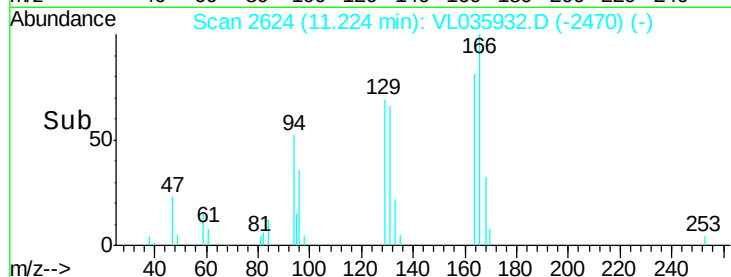
166 122.9 99.3 148.9

129 84.8 79.3 118.9

131 80.8 76.5 114.7

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#53

Toluene

Concen: 2.602 ppbv

RT: 9.81 min Scan# 2183

Delta R.T. -0.01 min

Lab File: VL035932.D

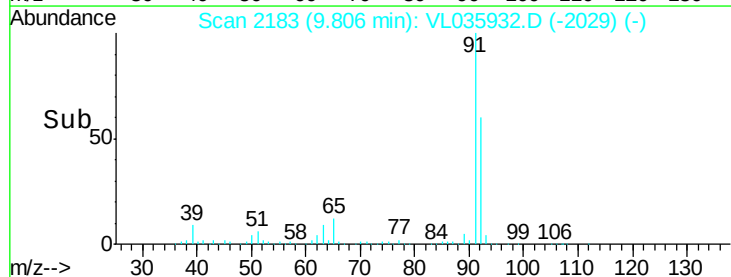
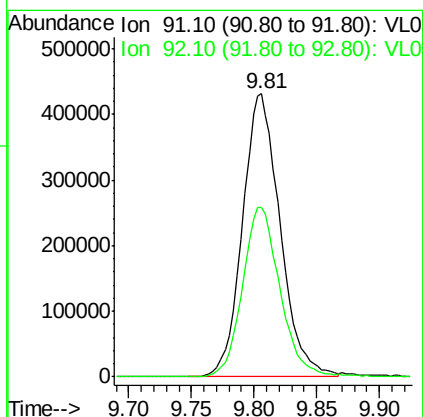
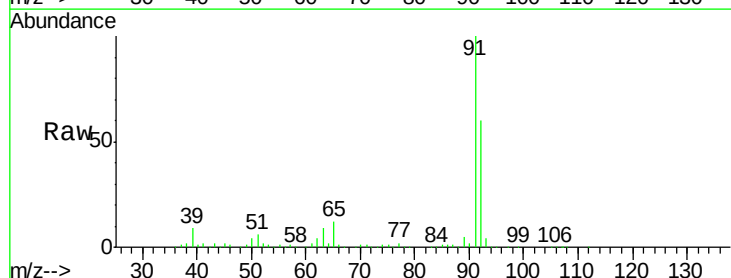
Acq: 13 Nov 2020 3:15

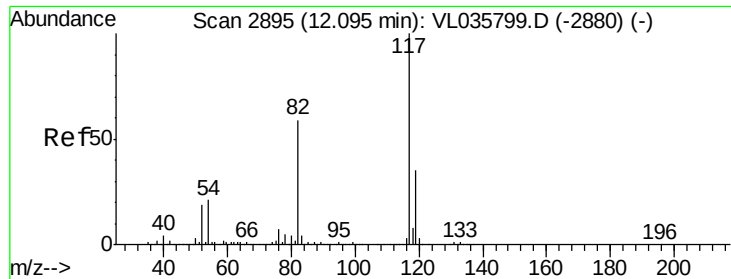
Tgt Ion: 91 Resp: 901811

Ion Ratio Lower Upper

91 100

92 60.0 49.8 74.6





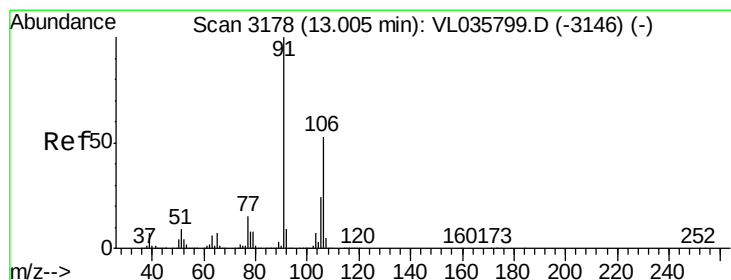
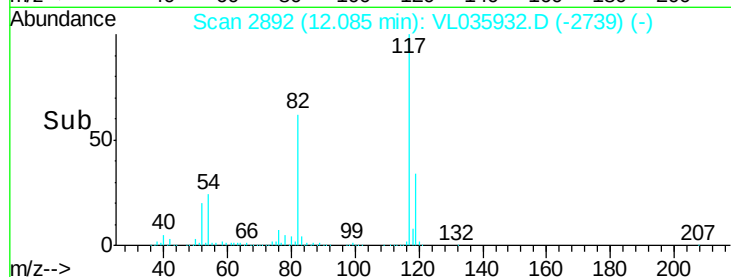
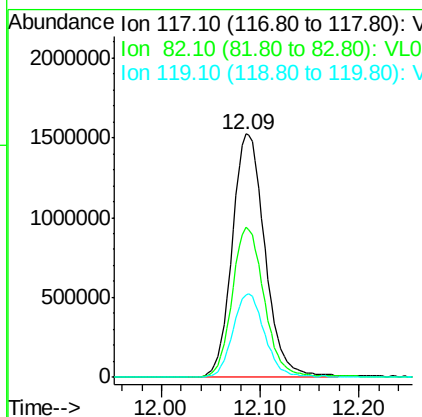
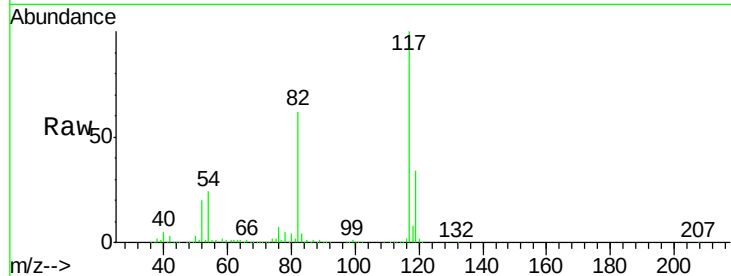
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min Scan# 2892
Delta R.T. -0.01 min
Lab File: VL035932.D
Acq: 13 Nov 2020 3:15

Instrument :
MSVOA_L
ClientSampleId :
LA-5

Tot Ion:117 Resp: 3524160
Ion Ratio Lower Upper
117 100
82 61.6 50.6 76.0
119 33.9 52.6 78.8#

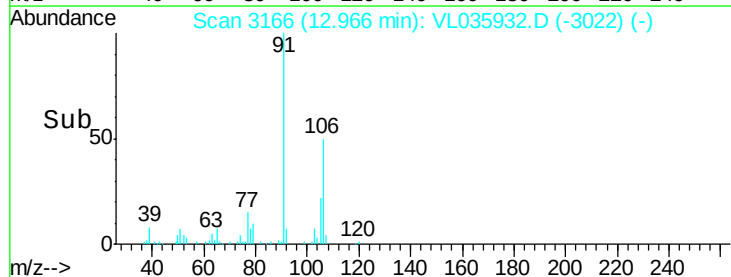
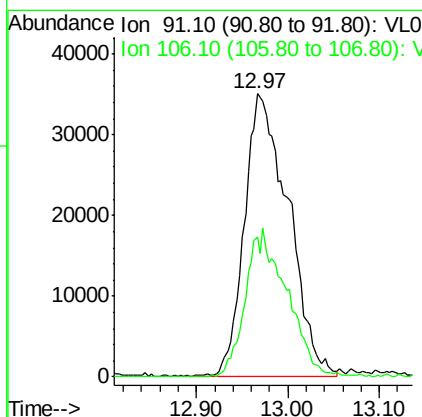
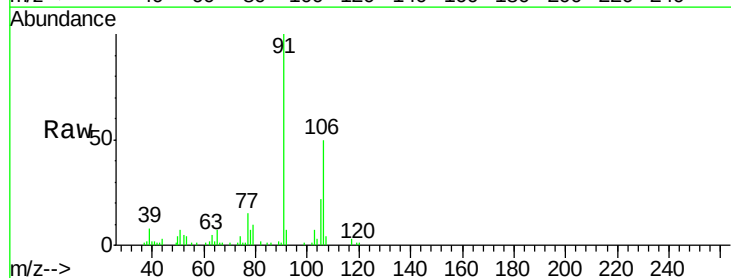
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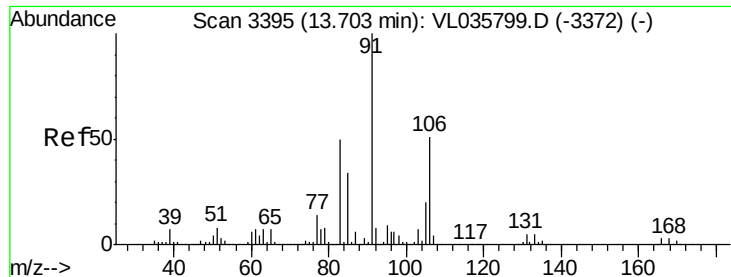
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#59
m/p-Xylene
Concen: 0.323 ppbv m
RT: 12.97 min Scan# 3166
Delta R.T. -0.04 min
Lab File: VL035932.D
Acq: 13 Nov 2020 3:15

Tgt Ion: 91 Resp: 117235
Ion Ratio Lower Upper
91 100
106 49.3 39.5 59.3





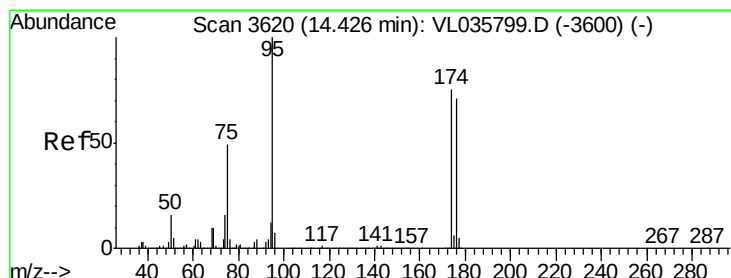
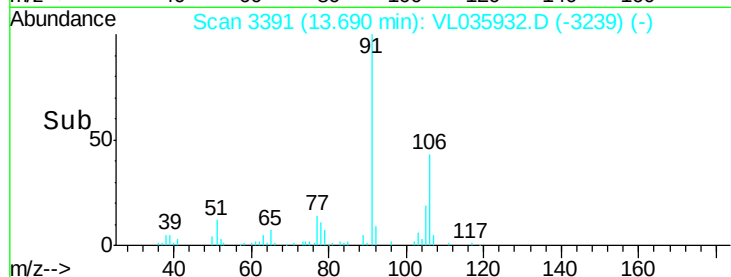
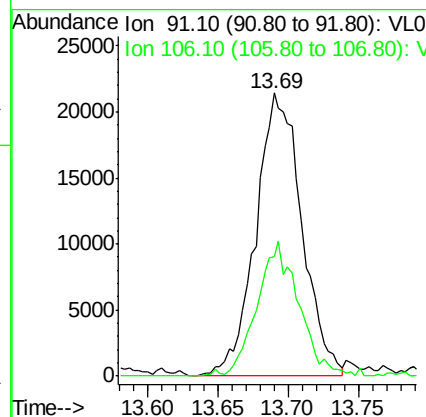
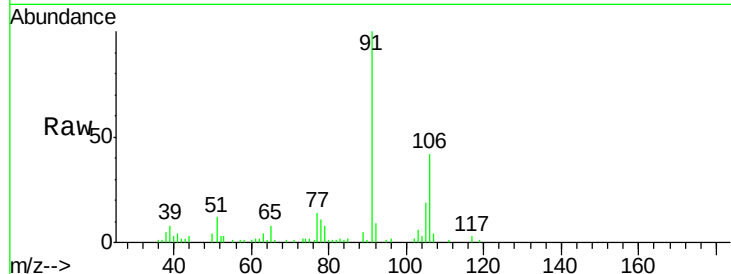
#60
o-Xylene
Concen: 0.138 ppbv
RT: 13.69 min Scan# 3391
Delta R.T. -0.01 min
Lab File: VL035932.D
Acq: 13 Nov 2020 3:15

Instrument :
MSVOA_L
Client Sampled :
LA-5

Tot Ion: 91 Resp: 48737
Ion Ratio Lower Upper
91 100
106 43.7 24.8 74.4

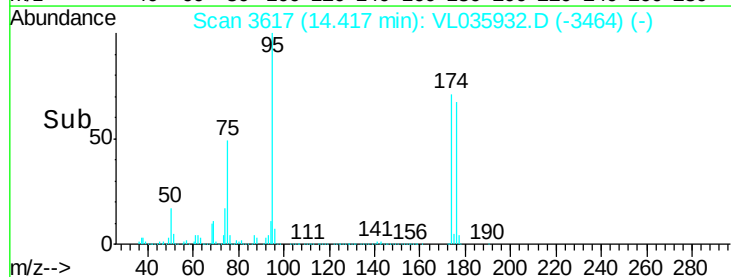
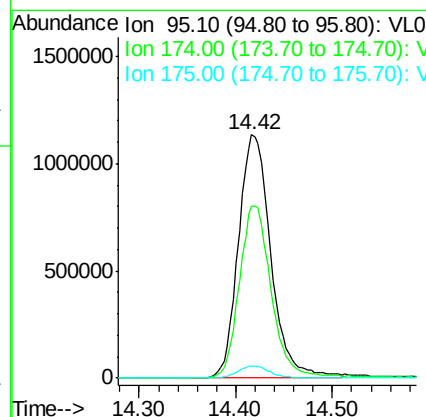
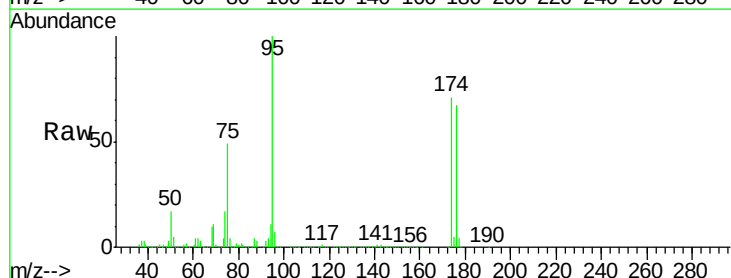
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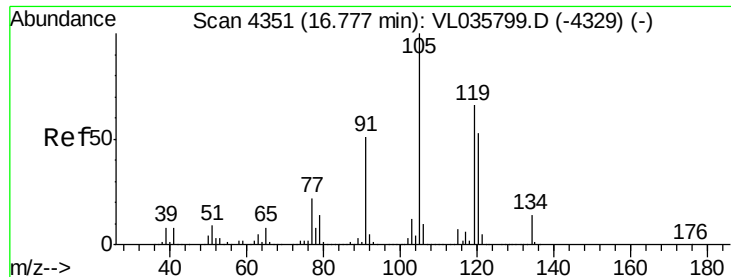
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.574 ppbv
RT: 14.42 min Scan# 3617
Delta R.T. -0.01 min
Lab File: VL035932.D
Acq: 13 Nov 2020 3:15

Tgt Ion: 95 Resp: 2647635
Ion Ratio Lower Upper
95 100
174 71.2 59.8 89.6
175 5.0 4.3 6.5





#74

1,2,4-Trimethylbenzene

Concen: 0.142 ppbv

RT: 16.77 min Scan# 4349

Delta R.T. -0.01 min

Lab File: VL035932.D

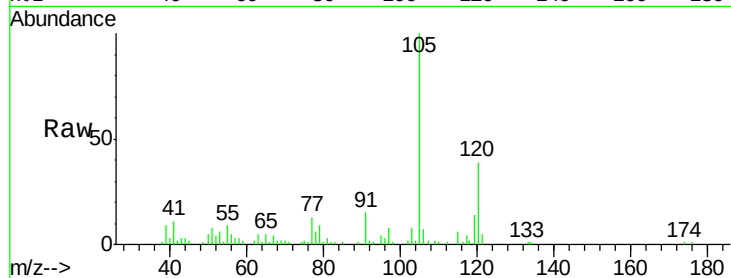
Acq: 13 Nov 2020 3:15

Instrument :

MSVOA_L

ClientSampleId :

LA-5



Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	38.9	42.0	63.0#
91	12.3	41.0	61.6#
77	11.4	17.3	25.9#

Manual Integrations
APPROVED

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

