

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110520\
 Data File : VL035874.D
 Acq On : 6 Nov 2020 00:25
 Operator : SY/AP
 Sample : L4618-02DUP
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1DUP

Manual Integrations
 APPROVED

MMDadoda
 11/9/2020 10:47:44 AM

Quant Time: Nov 08 14:22:41 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov 0
 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	1103280	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	4037928	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.07	117	3838365	10.00	ppbv	-0.03

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.39	95	2785423	10.21	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.03	85	49694	0.239	ppbv	94
3) Chlorodifluoromethane	2.96	51	42398	0.321	ppbv	96
4) Chloromethane	3.12	50	31979	0.498	ppbv	95
9) Propene	3.00	41	1907431m	39.444	ppbv	
10) Heptane	8.10	43	223842	1.676	ppbv	99
11) Trichlorofluoromethane	3.93	101	60769	0.233	ppbv	95
13) Ethanol	3.59	45	117244	11.176	ppbv	97
15) Acetone	3.83	43	25082186	212.650	ppbv #	60
20) Methylene Chloride	4.33	84	144892	1.745	ppbv	98
26) Hexane	5.66	57	127211	0.993	ppbv #	46
29) Chloroform	5.74	83	164510	0.653	ppbv	94
30) Cyclohexane	7.11	84	26563	0.190	ppbv #	87
34) 2-Butanone	5.23	43	30634	0.234	ppbv	98
35) Carbon Tetrachloride	7.00	117	13092m	0.061	ppbv	
36) Benzene	6.88	78	142571	0.475	ppbv	94
44) 2,2,4-Trimethylpentane	7.85	57	206447	0.520	ppbv #	82
50) 4-Methyl-2-Pentanone	8.73	43	64640	0.323	ppbv	100
52) Tetrachloroethene	11.20	164	116113	0.816	ppbv	96
53) Toluene	9.79	91	15777829	43.558	ppbv #	80
58) Ethyl Benzene	12.69	91	1281496	2.741	ppbv	93
59) m/p-Xylene	12.95	91	4197089	10.612	ppbv	97
60) o-Xylene	13.67	91	1274774	3.313	ppbv	97
61) Styrene	13.51	104	43525m	0.154	ppbv	
64) n-propylbenzene	15.55	120	27406m	0.157	ppbv	
72) 4-Ethyltoluene	15.82	105	164365	0.352	ppbv	96
73) 1,3,5-Trimethylbenzene	15.98	105	136432	0.319	ppbv	88
74) 1,2,4-Trimethylbenzene	16.74	105	444147	0.971	ppbv #	68

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

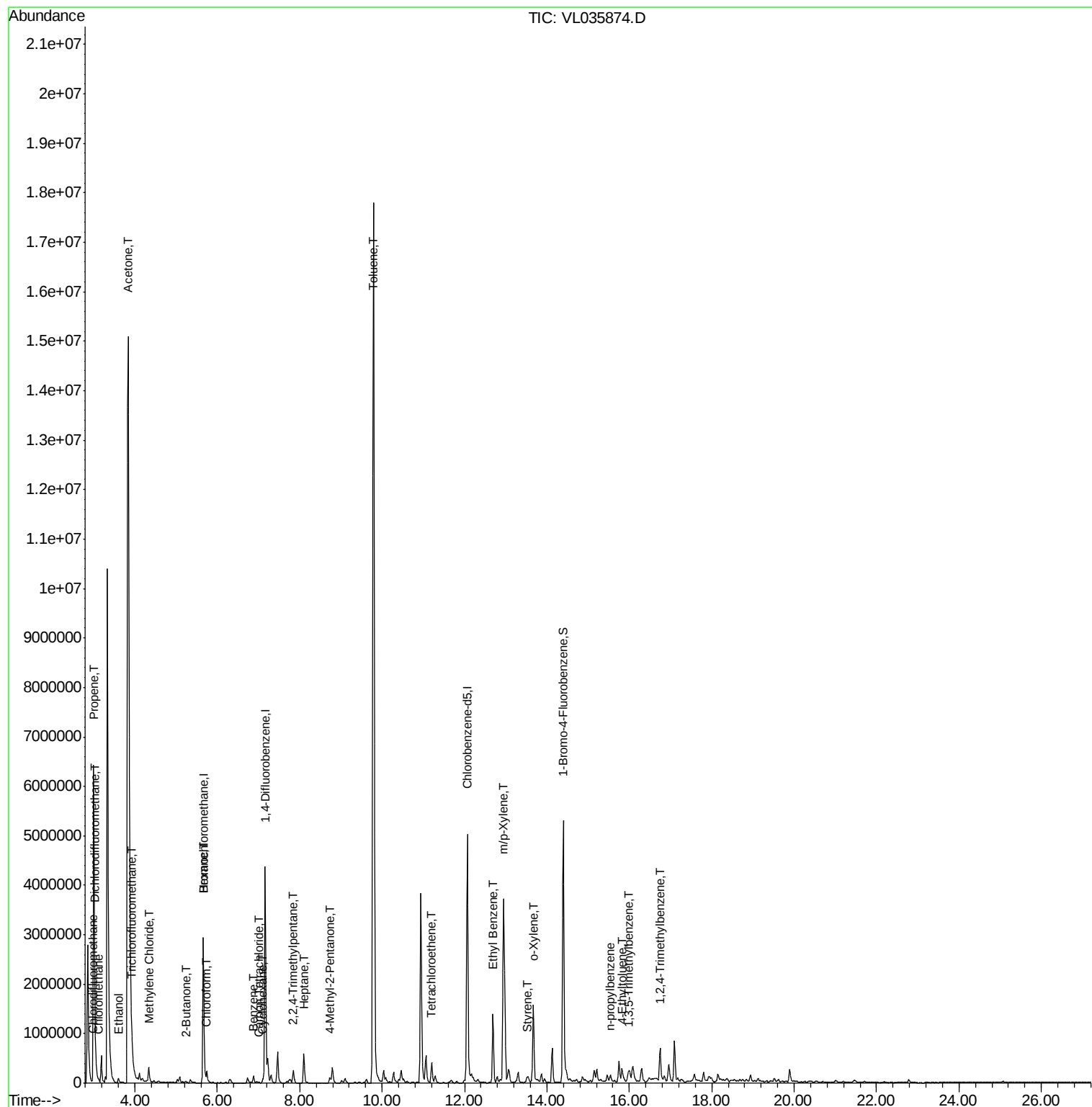
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL110520\
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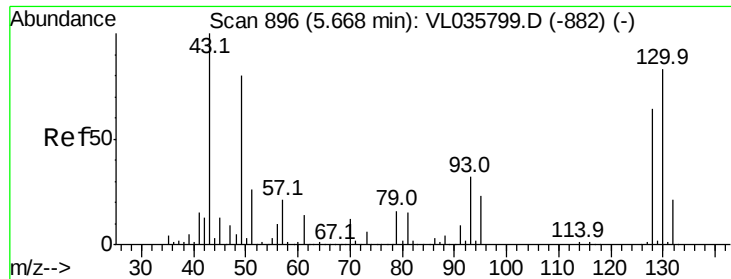
Instrument :
MSVOA_L
ClientSampleId :
IA-1DUP

Manual Integrations
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11/9/2020 10:47:44 AM

Quant Time: Nov 08 14:22:41 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# 893

Delta R.T. -0.01 min

Lab File: VL035874.D

Acq: 6 Nov 2020 00:25

Instrument :

MSVOA_L

ClientSampled :

IA-1DUP

Tot Ion: 49 Resp: 1103280

Ion Ratio Lower Upper

49 100

128 78.4 41.5 124.6

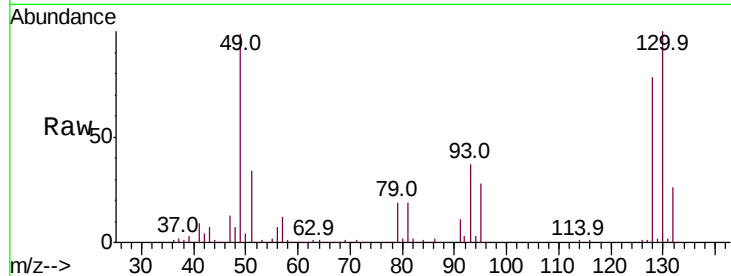
130 101.1 53.7 161.1

Manual Integrations

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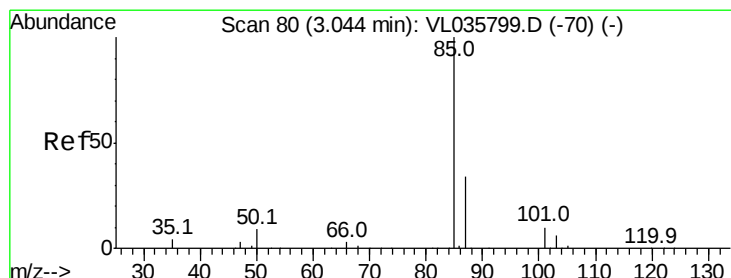
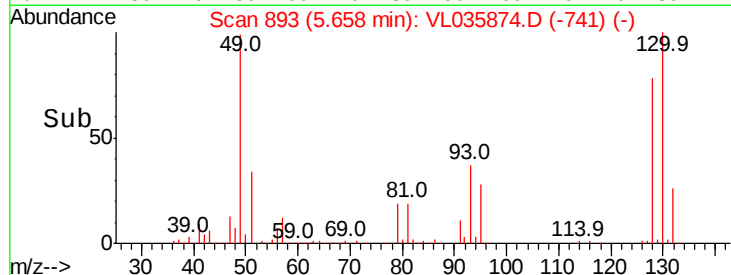
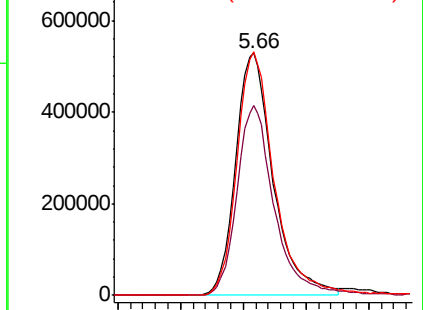
11/9/2020 10:47:44 AM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.239 ppbv

RT: 3.03 min Scan# 75

Delta R.T. -0.02 min

Lab File: VL035874.D

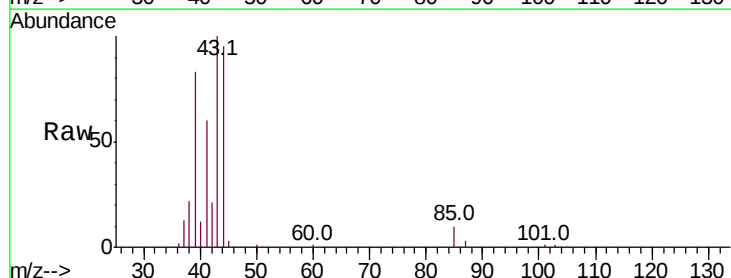
Acq: 6 Nov 2020 00:25

Tgt Ion: 85 Resp: 49694

Ion Ratio Lower Upper

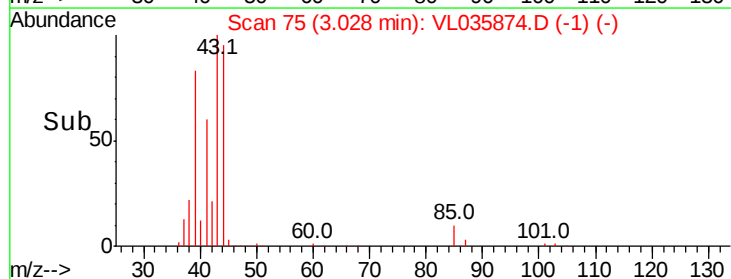
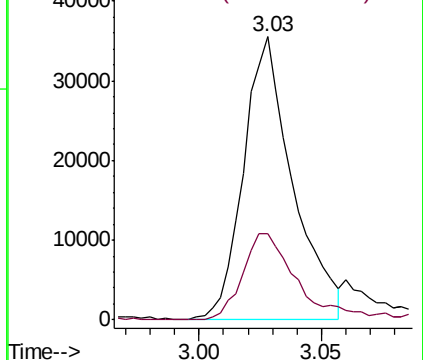
85 100

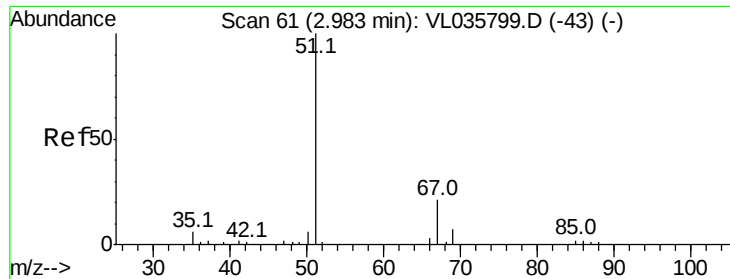
87 30.7 27.1 40.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.321 ppbv

RT: 2.96 min Scan# 55

Delta R.T. -0.02 min

Lab File: VL035874.D

Acq: 6 Nov 2020 00:25

Instrument :

MSVOA_L

ClientSampleId :

IA-1DUP

Tot Ion: 51 Resp: 42398

Ion Ratio Lower Upper

51 100

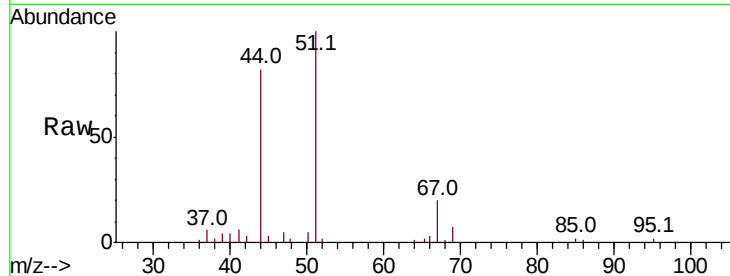
67 19.2 17.0 25.4

Manual Integrations

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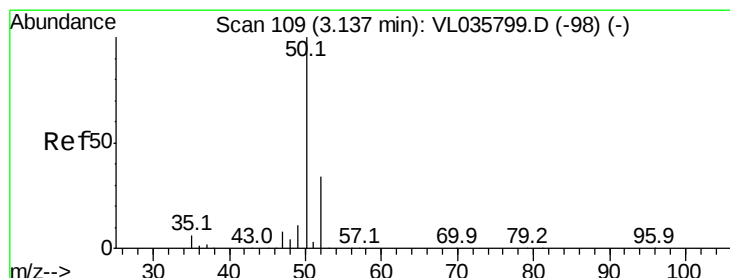
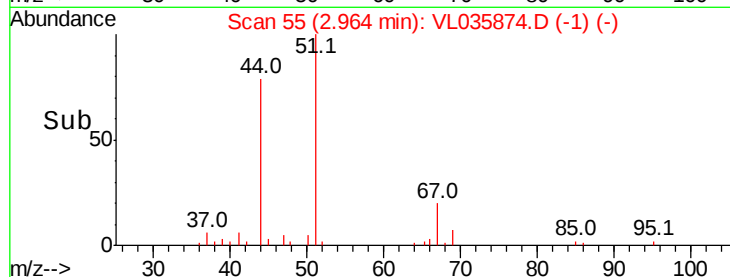
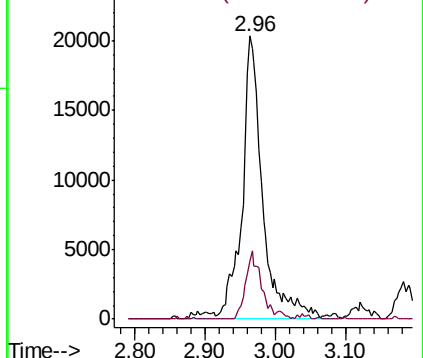
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.498 ppbv

RT: 3.12 min Scan# 104

Delta R.T. -0.02 min

Lab File: VL035874.D

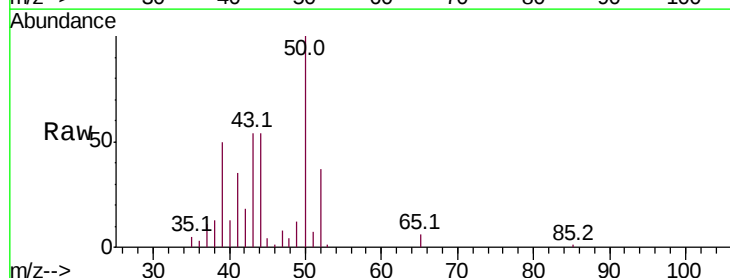
Acq: 6 Nov 2020 00:25

Tgt Ion: 50 Resp: 31979

Ion Ratio Lower Upper

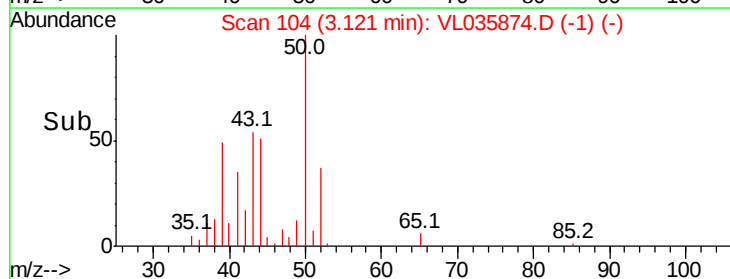
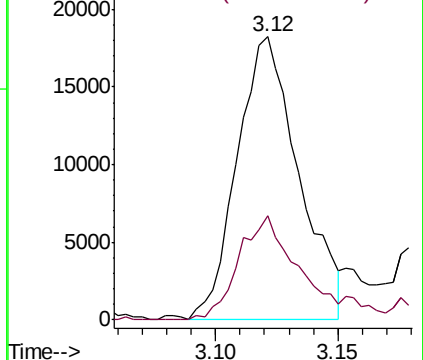
50 100

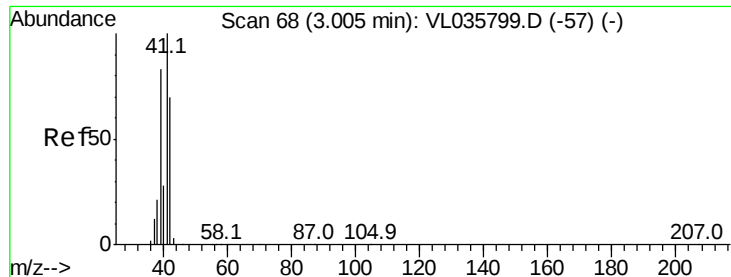
52 36.6 27.1 40.7



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 39.444 ppbv m

RT: 3.00 min Scan# 67

Delta R.T. -0.00 min

Lab File: VL035874.D

Acq: 6 Nov 2020 00:25

Instrument :

MSVOA_L

ClientSampleId :

IA-1DUP

Tot Ion: 41 Resp: 1907431

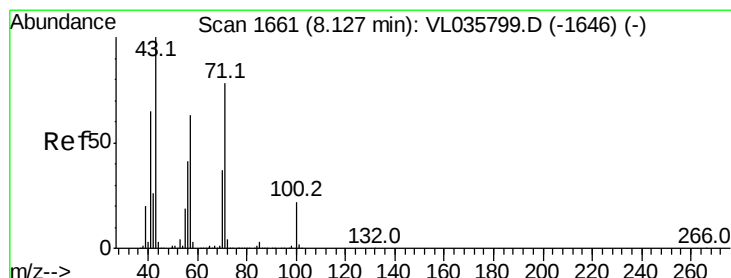
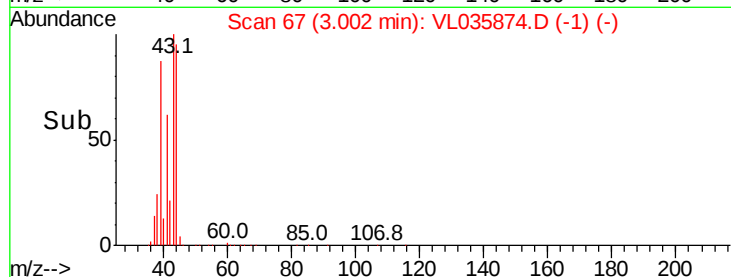
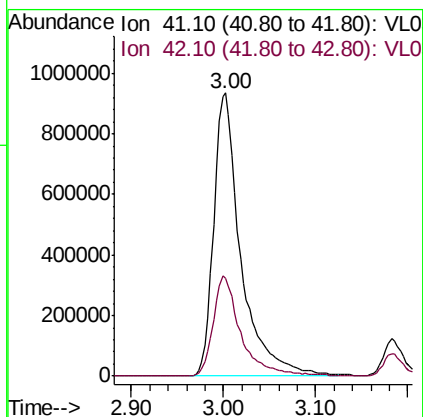
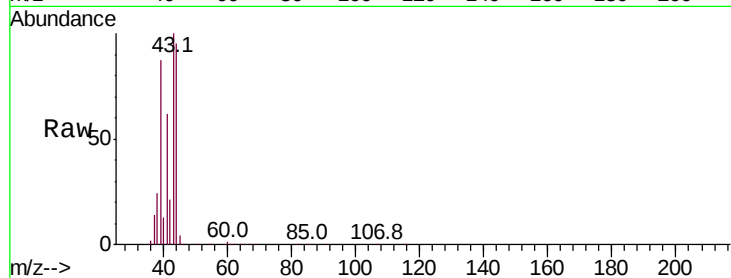
Ion Ratio Lower Upper

41 100

42 6.2 56.2 84.4#

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#10

Heptane

Concen: 1.676 ppbv

RT: 8.10 min Scan# 1653

Delta R.T. -0.03 min

Lab File: VL035874.D

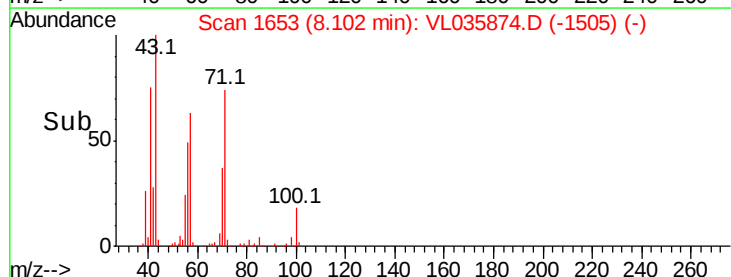
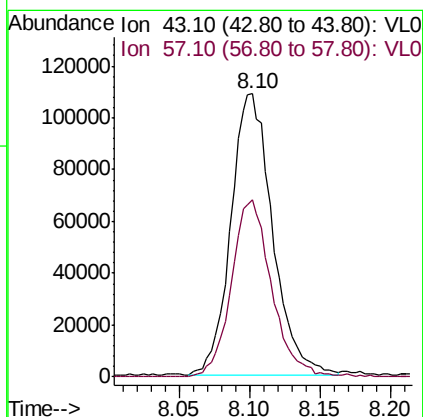
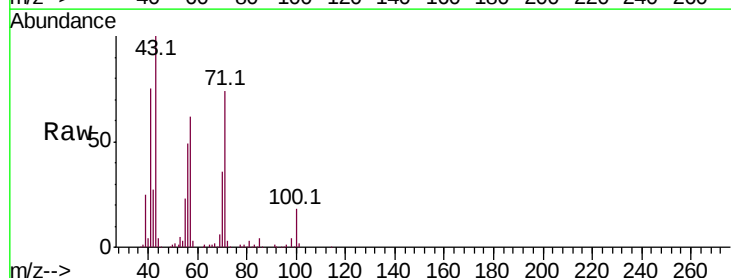
Acq: 6 Nov 2020 00:25

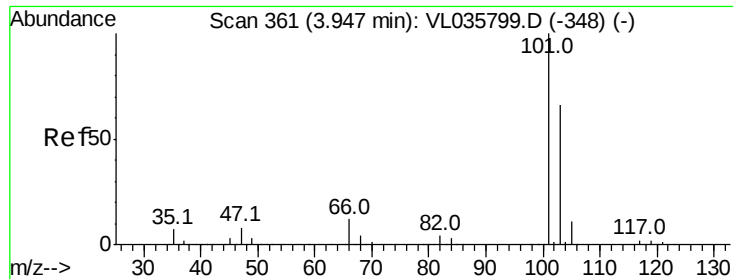
Tgt Ion: 43 Resp: 223842

Ion Ratio Lower Upper

43 100

57 61.4 50.0 75.0





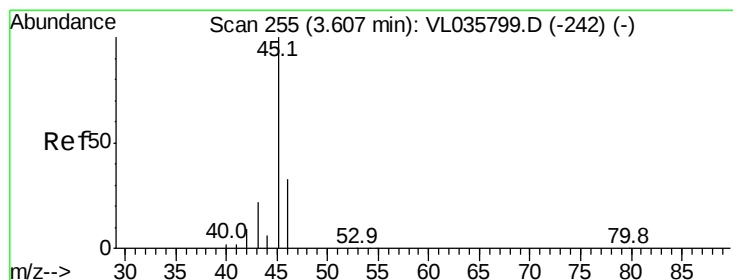
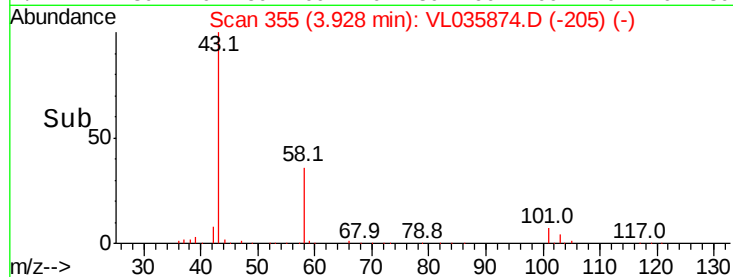
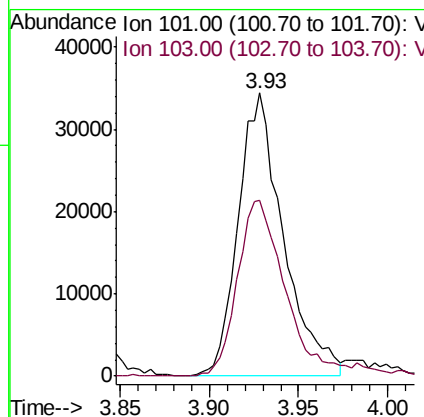
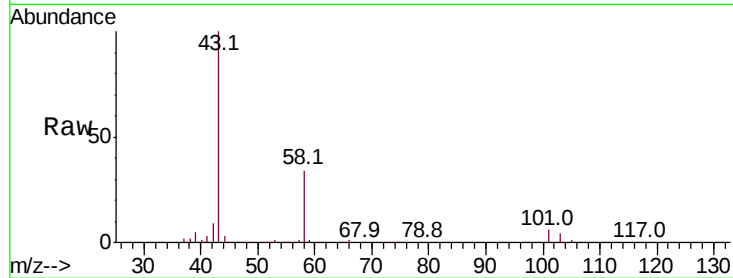
#11
Trichlorofluoromethane
Concen: 0.233 ppbv
RT: 3.93 min Scan# 355
Delta R.T. -0.02 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Instrument :
MSVOA_L
ClientSampleId :
IA-1DUP

Tot Ion:101 Resp: 60769
Ion Ratio Lower Upper
101 100
103 62.1 53.0 79.4

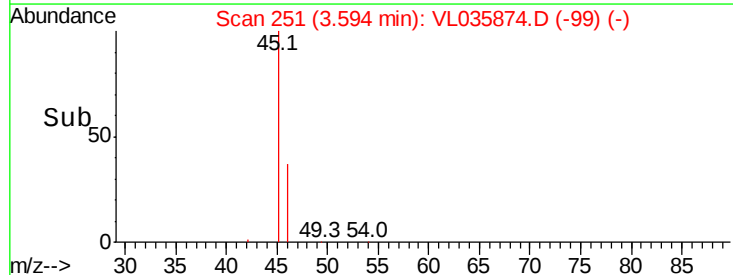
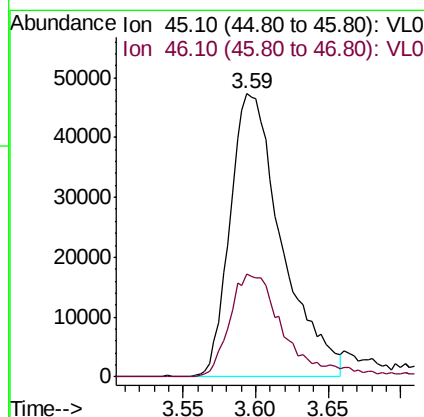
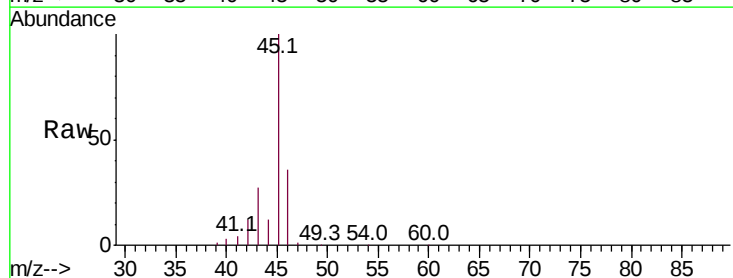
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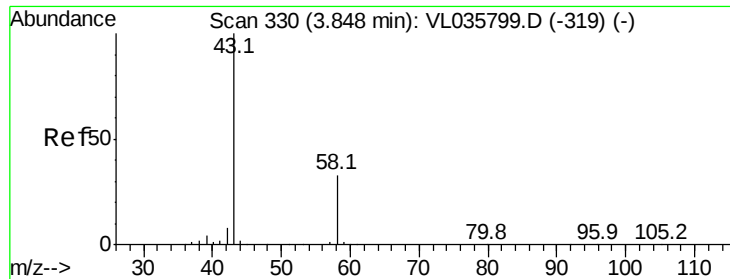
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#13
Ethanol
Concen: 11.176 ppbv
RT: 3.59 min Scan# 251
Delta R.T. -0.01 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Tgt Ion: 45 Resp: 117244
Ion Ratio Lower Upper
45 100
46 38.3 16.1 64.5





#15

Acetone

Concen: 212.650 ppbv

RT: 3.83 min Scan# 325

Delta R.T. -0.02 min

Lab File: VL035874.D

Acq: 6 Nov 2020 00:25

Instrument :

MSVOA_L

ClientSampleId :

IA-1DUP

Tot Ion: 43 Resp: 25082186

Ion Ratio Lower Upper

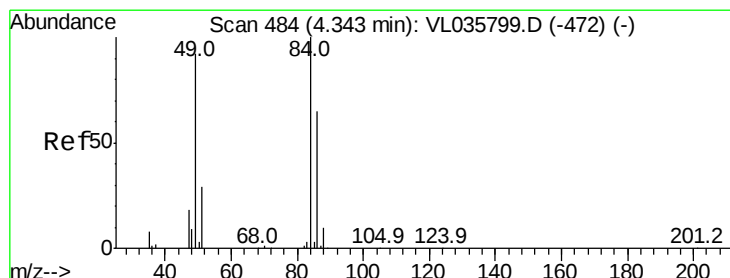
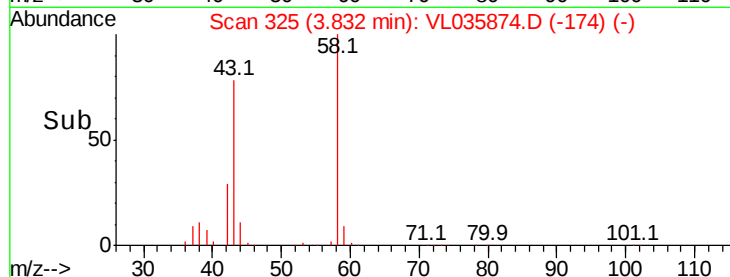
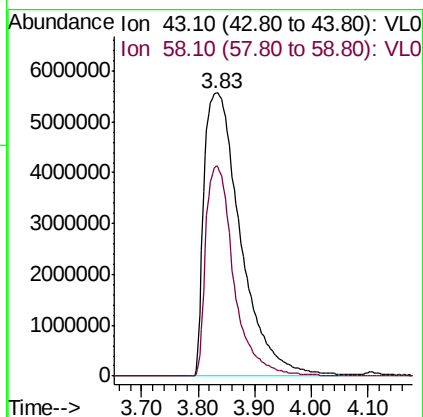
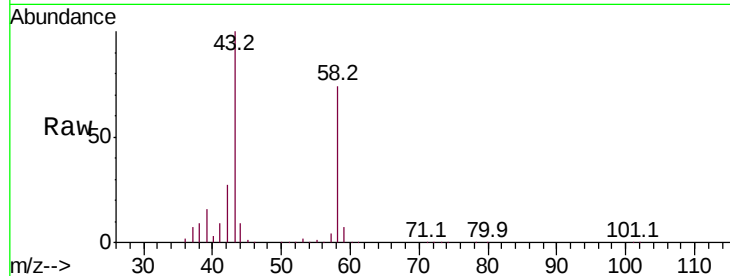
43 100

58 57.2 27.5 41.3#

Manual Integrations
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#20

Methylene Chloride

Concen: 1.745 ppbv

RT: 4.33 min Scan# 481

Delta R.T. -0.01 min

Lab File: VL035874.D

Acq: 6 Nov 2020 00:25

Tgt Ion: 84 Resp: 144892

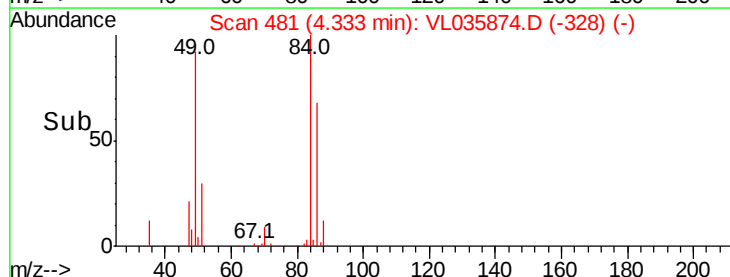
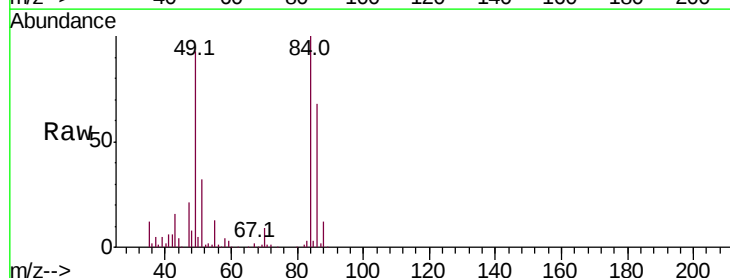
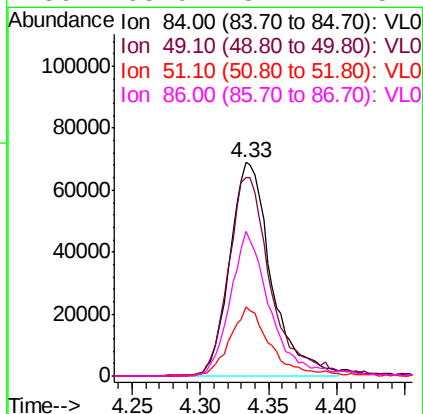
Ion Ratio Lower Upper

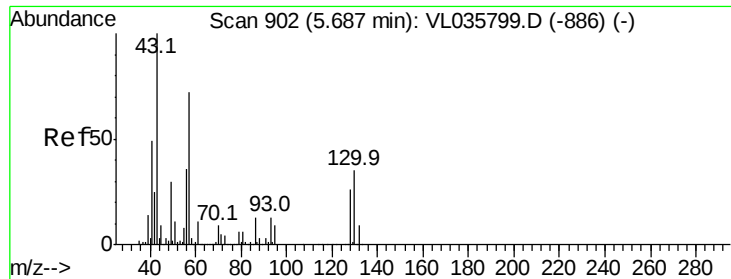
84 100

49 92.3 73.8 110.8

51 31.5 23.0 34.4

86 68.0 52.1 78.1





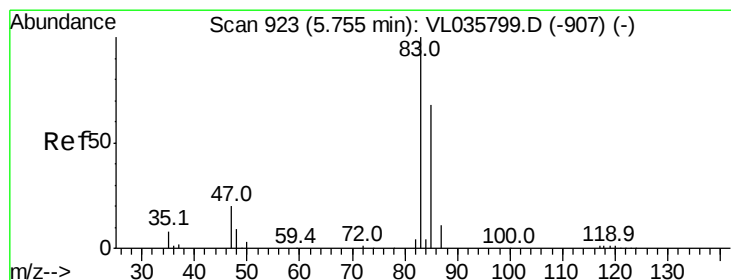
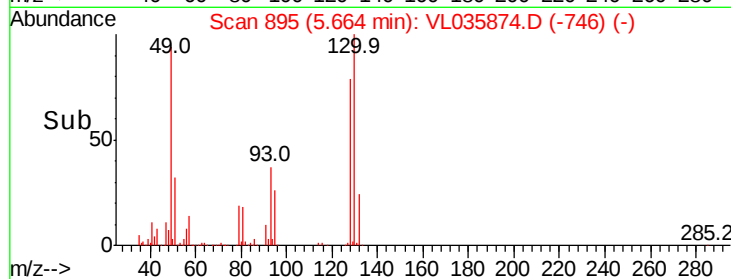
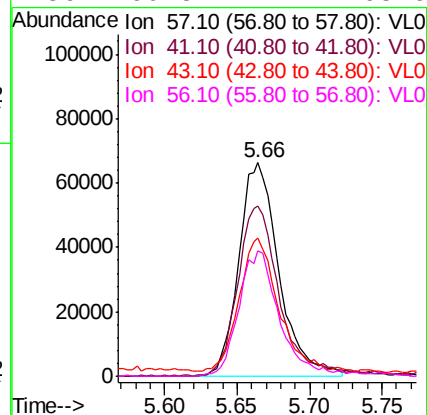
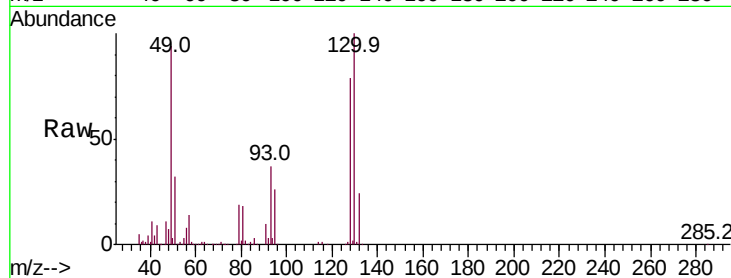
#26
Hexane
Concen: 0.993 ppbv
RT: 5.66 min Scan# 895
Delta R.T. -0.02 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Instrument :
MSVOA_L
ClientSampleId :
IA-1DUP

Tot Ion	Ratio	Lower	Upper
57	100		
41	85.2	58.9	88.3
43	69.0	150.2	225.2#
56	60.8	42.4	63.6

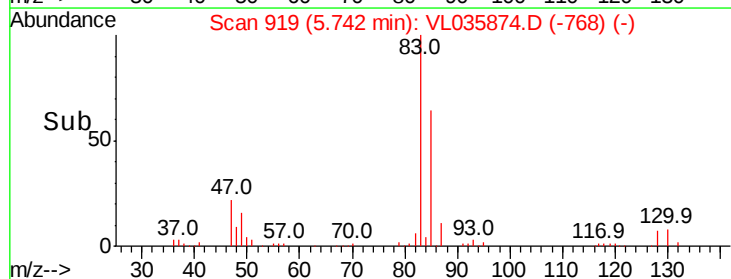
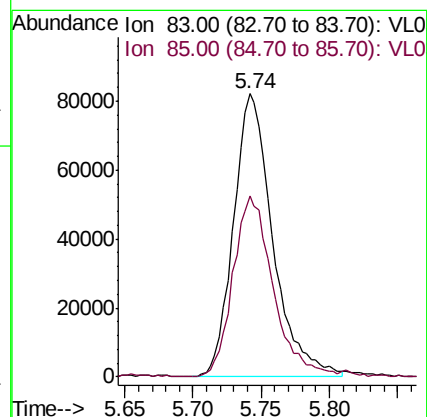
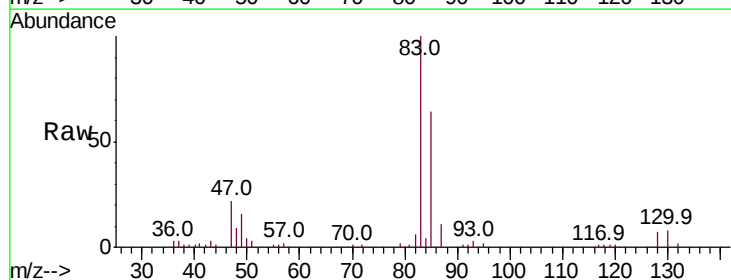
Manual Integrations
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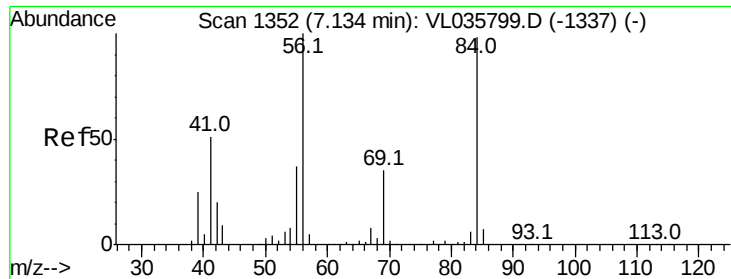
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11/9/2020 10:47:44 AM



#29
Chloroform
Concen: 0.653 ppbv
RT: 5.74 min Scan# 919
Delta R.T. -0.01 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Tgt Ion	Ratio	Lower	Upper
83	100		
85	63.6	54.6	81.8





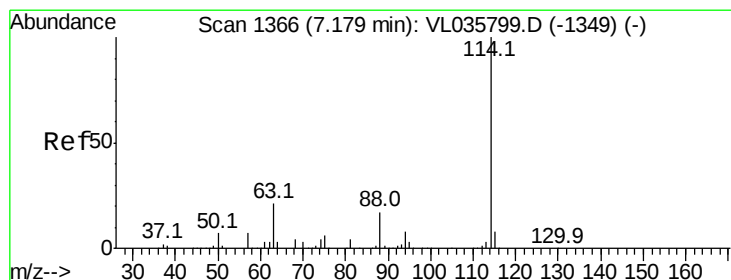
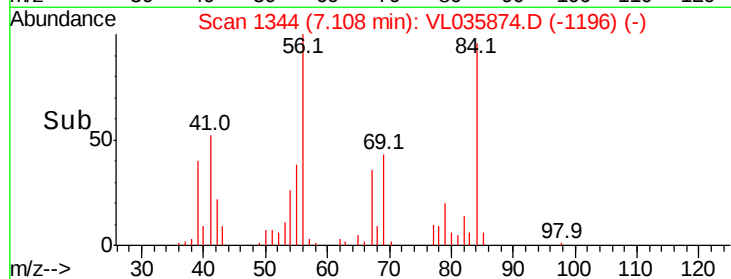
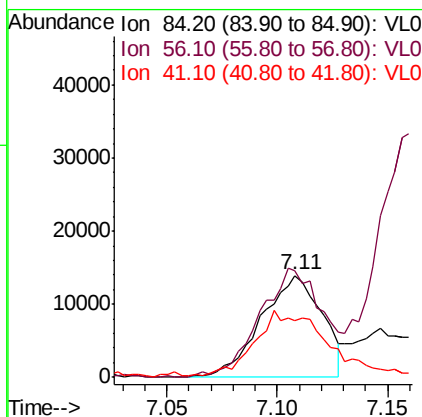
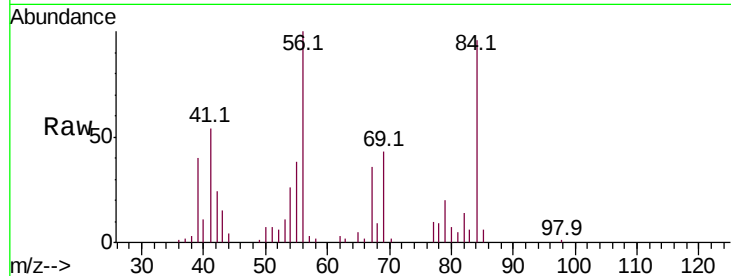
#30
Cvclohexane
Concen: 0.190 ppbv
RT: 7.11 min Scan# 1344
Delta R.T. -0.03 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Instrument :
MSVOA_L
ClientSampleId :
IA-1DUP

Tot Ion	Ratio	Lower	Upper
84	100		
56	104.5	86.4	129.6
41	75.3	42.1	63.1#

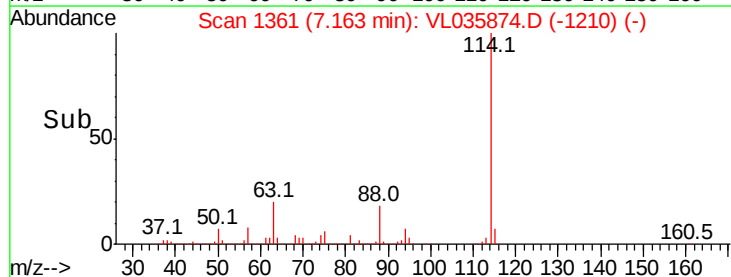
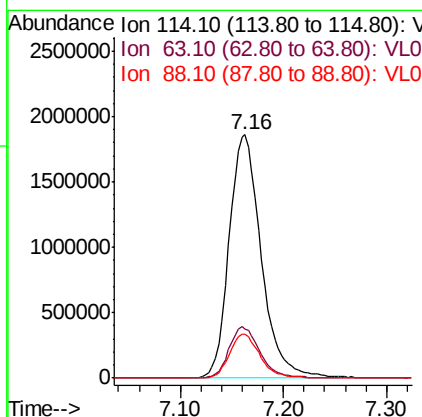
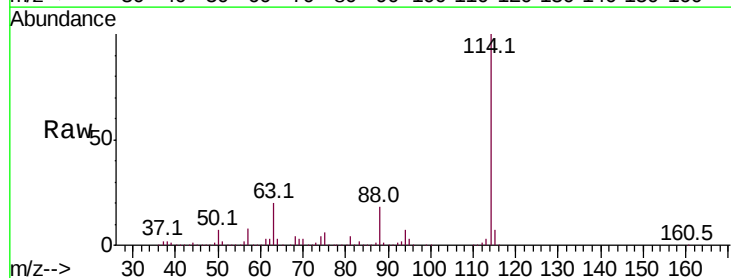
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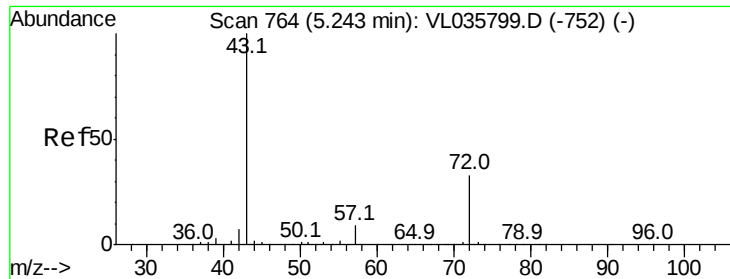
MMDadoda
11/9/2020 10:47:44 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1361
Delta R.T. -0.02 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Tgt Ion	Ratio	Lower	Upper
114	100		
63	20.5	16.1	24.1
88	17.4	13.7	20.5





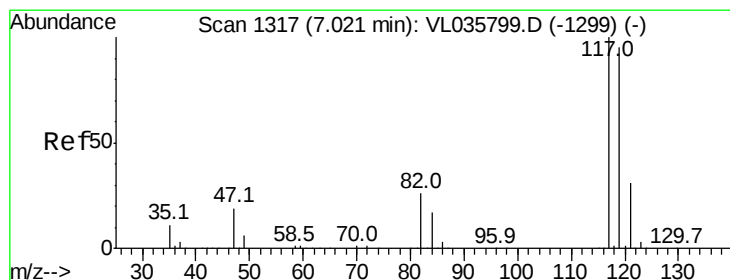
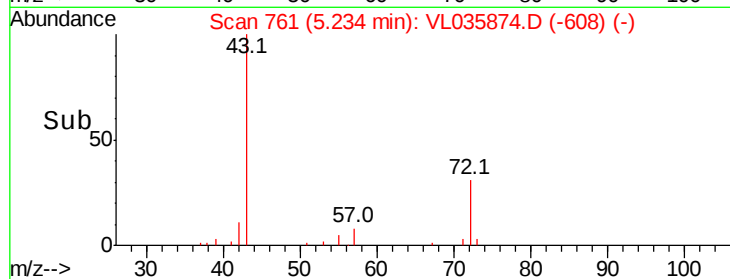
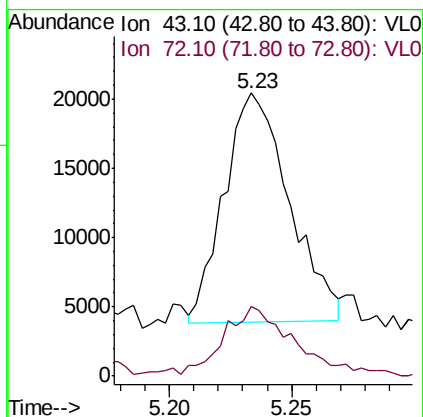
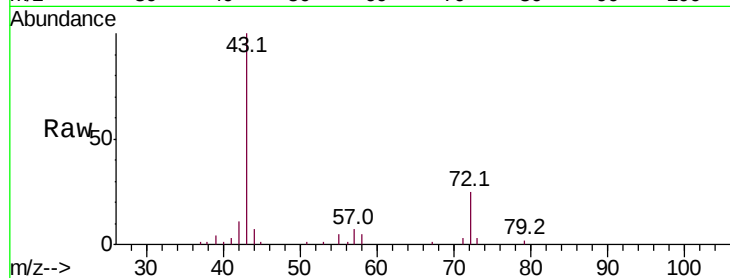
#34
2-Butanone
Concen: 0.234 ppbv
RT: 5.23 min Scan# 761
Delta R.T. -0.01 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Instrument :
MSVOA_L
ClientSampleId :
IA-1DUP

Tot Ion: 43 Resp: 30634
Ion Ratio Lower Upper
43 100
72 34.4 26.5 39.7

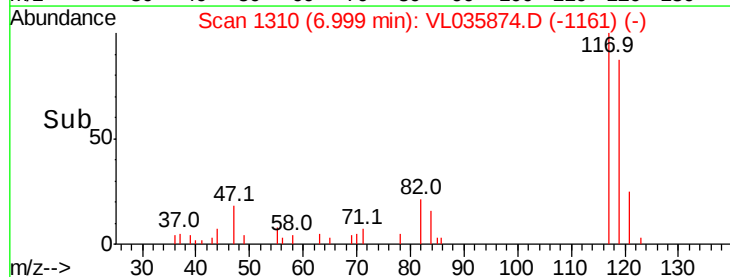
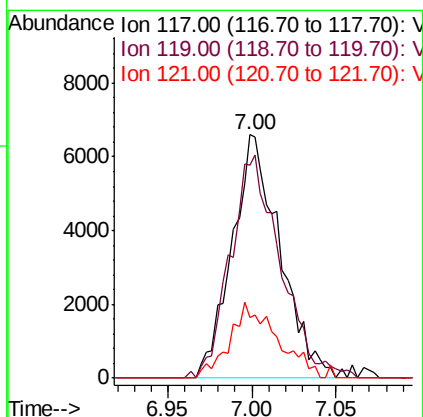
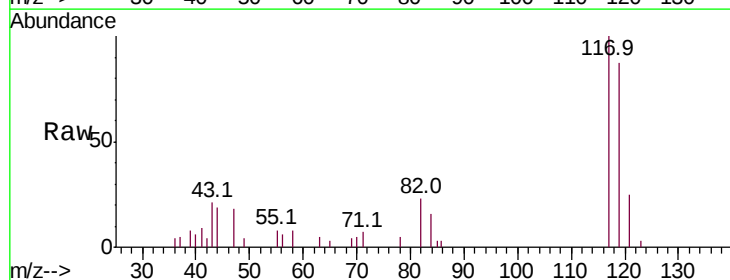
Manual Integrations
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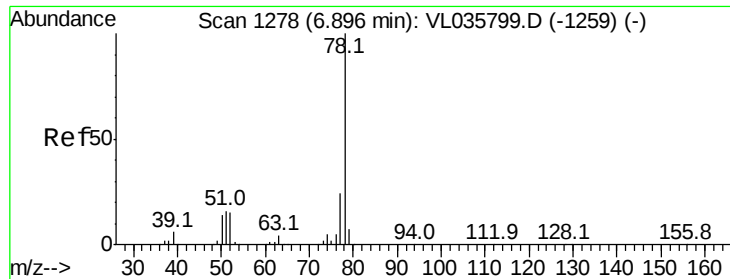
MMDadoda
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#35
Carbon Tetrachloride
Concen: 0.061 ppbv m
RT: 7.00 min Scan# 1310
Delta R.T. -0.02 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Tgt Ion: 117 Resp: 13092
Ion Ratio Lower Upper
117 100
119 87.4 75.6 113.4
121 25.0 25.1 37.7#





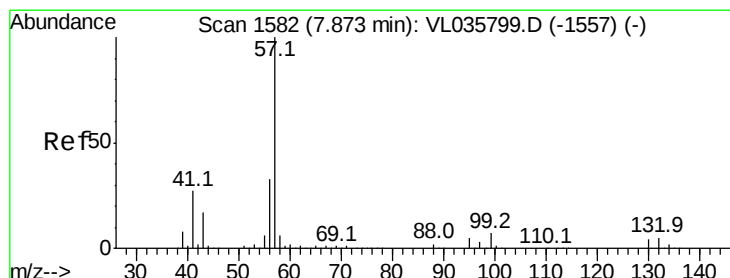
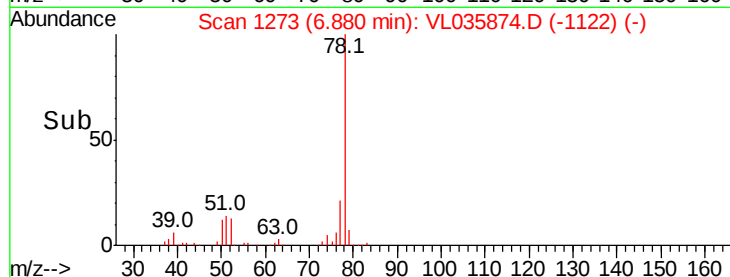
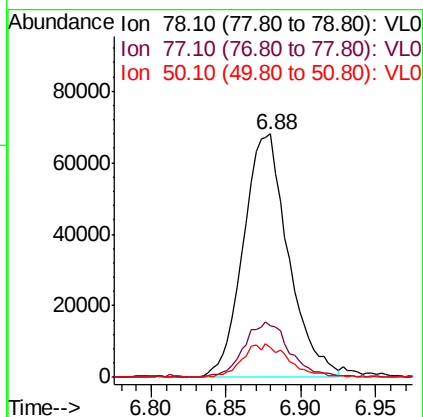
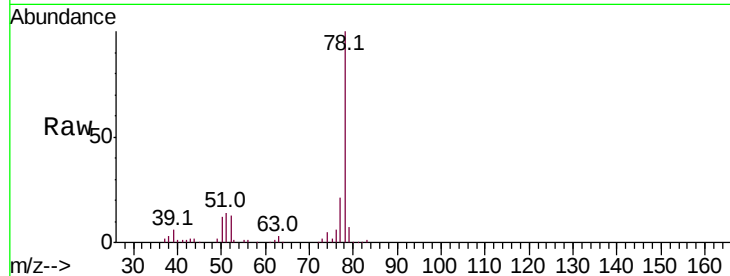
#36
Benzene
Concen: 0.475 ppbv
RT: 6.88 min Scan# 1273
Delta R.T. -0.02 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Instrument :
MSVOA_L
ClientSampleId :
IA-1DUP

Tot Ion	Ratio	Lower	Upper
78	100		
77	21.1	19.3	28.9
50	12.1	11.4	17.2

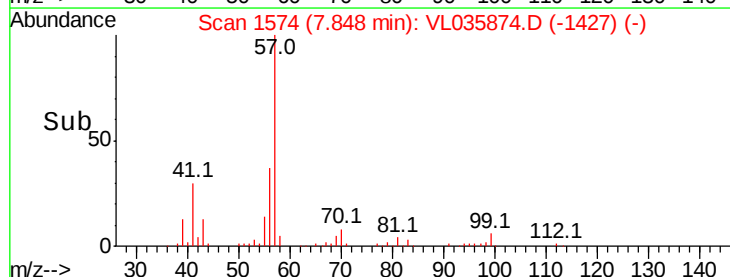
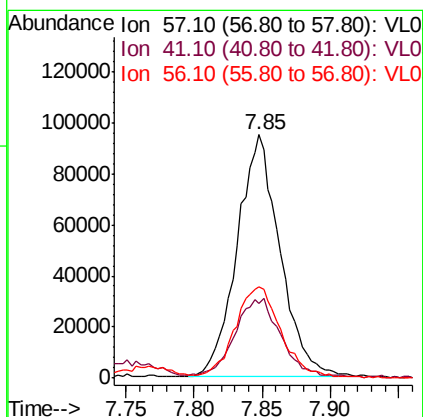
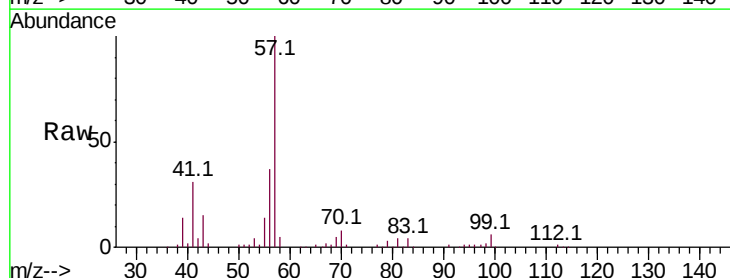
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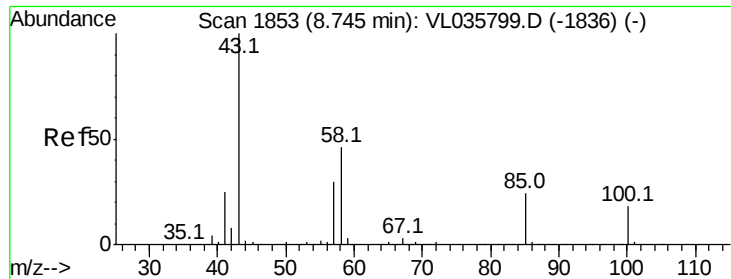
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11/9/2020 10:47:44 AM



#44
2,2,4-Trimethylpentane
Concen: 0.520 ppbv
RT: 7.85 min Scan# 1574
Delta R.T. -0.03 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Tgt Ion	Ratio	Lower	Upper
57	100		
41	35.6	21.0	31.4#
56	41.3	25.4	38.0#





#50

4-Methyl-2-Pentanone

Concen: 0.323 ppbv

RT: 8.73 min Scan# 1848

Delta R.T. -0.02 min

Lab File: VL035874.D

Acq: 6 Nov 2020 00:25

Instrument :

MSVOA_L

ClientSampleId :

IA-1DUP

Tot Ion: 43 Resp: 64640

Ion Ratio Lower Upper

43 100

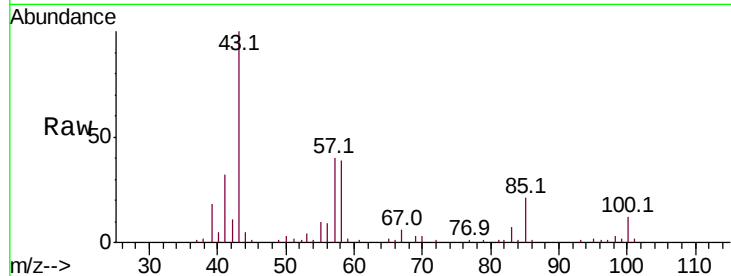
58 45.1 36.0 54.0

Manual Integrations

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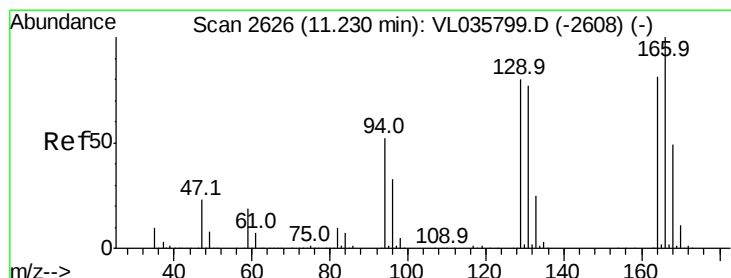
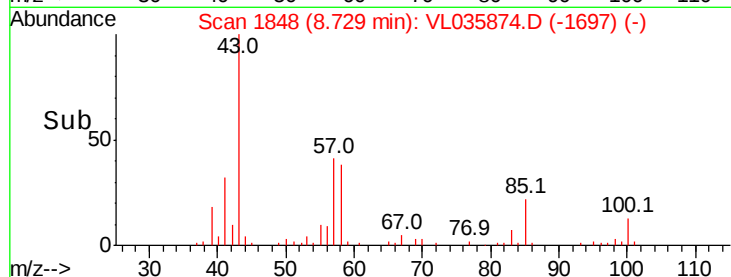
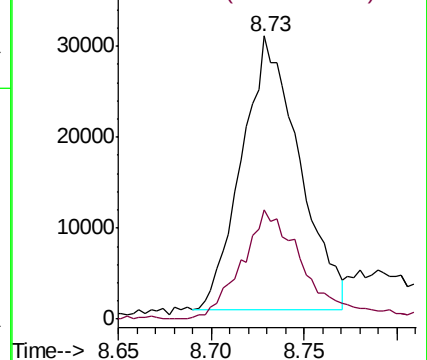
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#52

Tetrachloroethene

Concen: 0.816 ppbv

RT: 11.20 min Scan# 2618

Delta R.T. -0.03 min

Lab File: VL035874.D

Acq: 6 Nov 2020 00:25

Tgt Ion:164 Resp: 116113

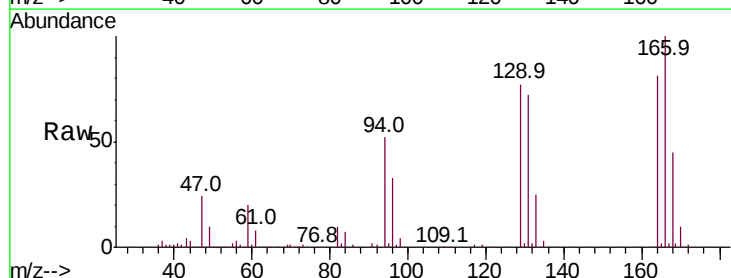
Ion Ratio Lower Upper

164 100

166 123.3 99.3 148.9

129 95.6 79.3 118.9

131 88.4 76.5 114.7

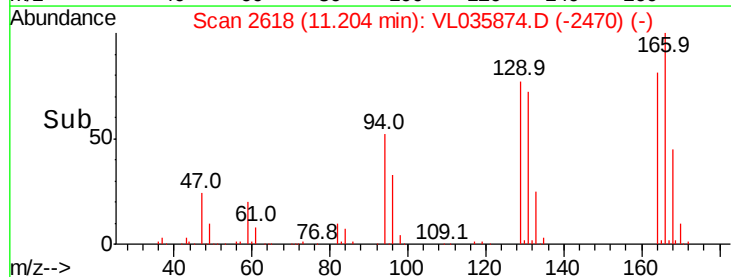
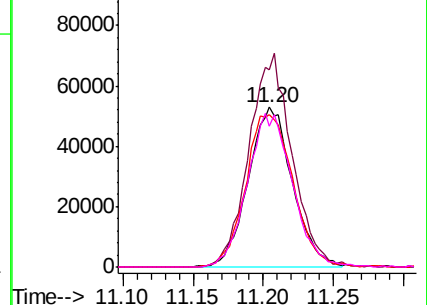


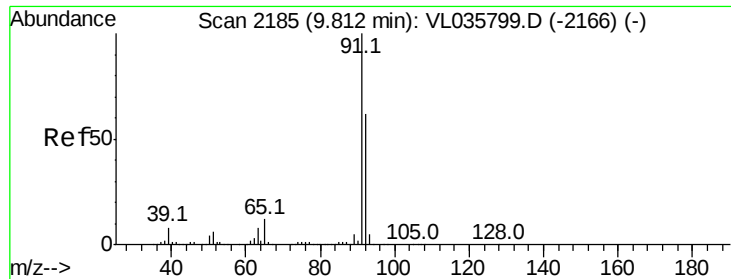
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 43.558 ppbv

RT: 9.79 min Scan# 2178

Delta R.T. -0.02 min

Lab File: VL035874.D

Acq: 6 Nov 2020 00:25

Instrument :

MSVOA_L

ClientSampleId :

IA-1DUP

Tot Ion: 91 Resp: 15777829

Ion Ratio Lower Upper

91 100

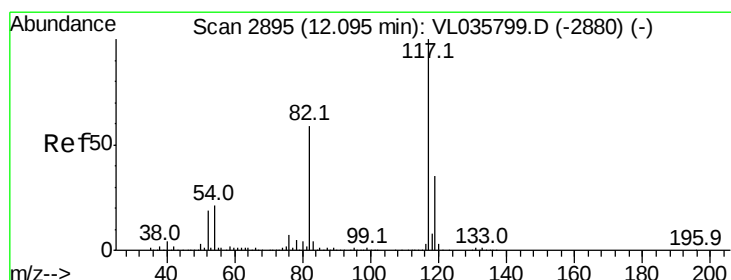
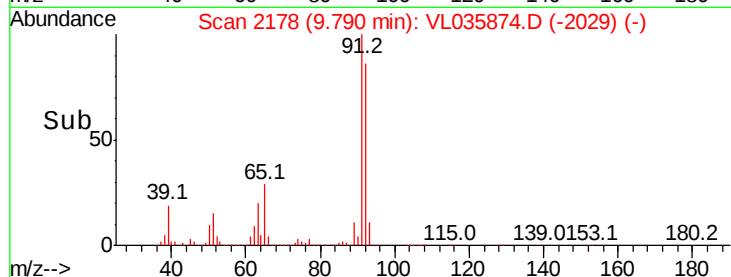
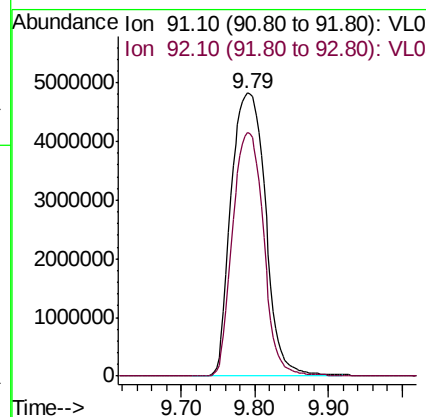
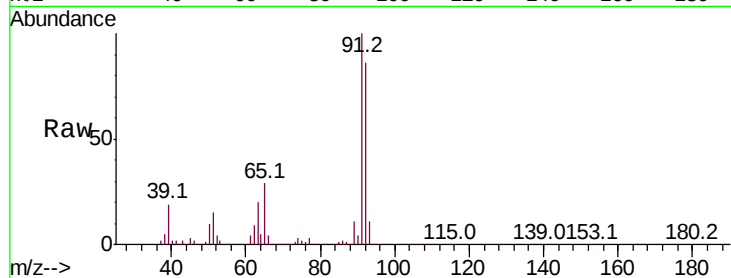
92 77.5 49.8 74.6#

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2886

Delta R.T. -0.03 min

Lab File: VL035874.D

Acq: 6 Nov 2020 00:25

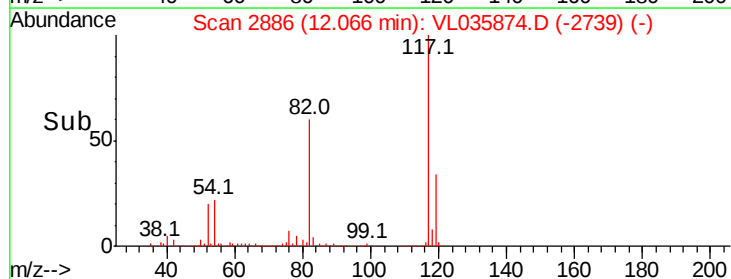
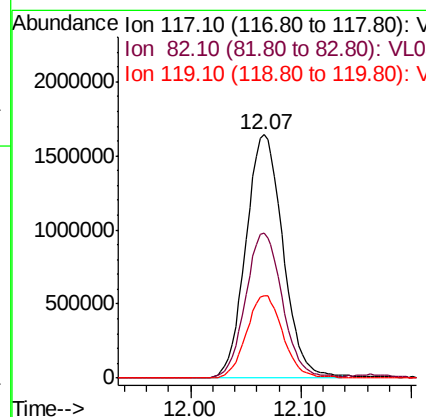
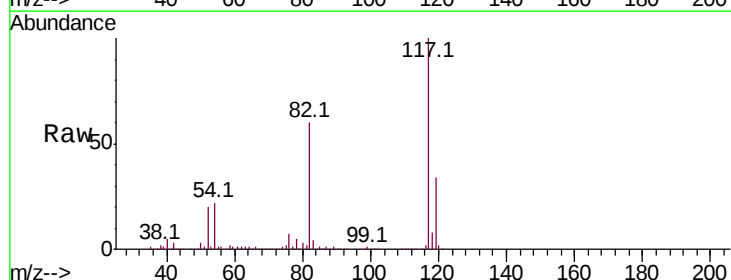
Tgt Ion: 117 Resp: 3838365

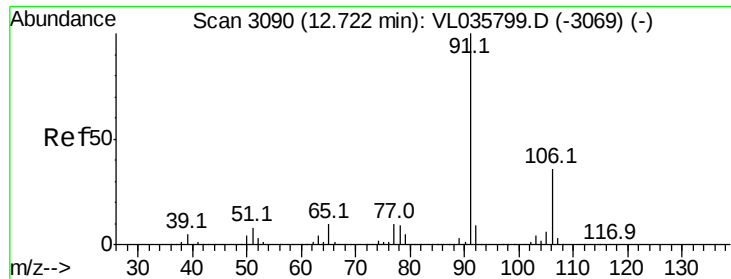
Ion Ratio Lower Upper

117 100

82 59.2 50.6 76.0

119 33.8 52.6 78.8#





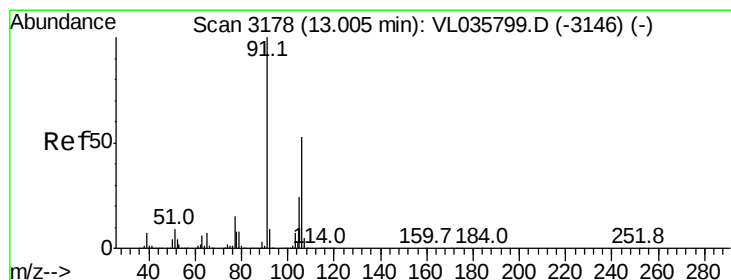
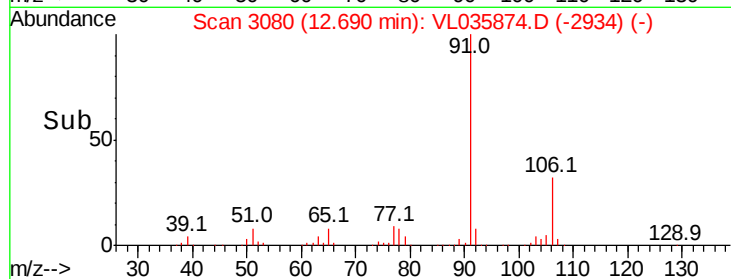
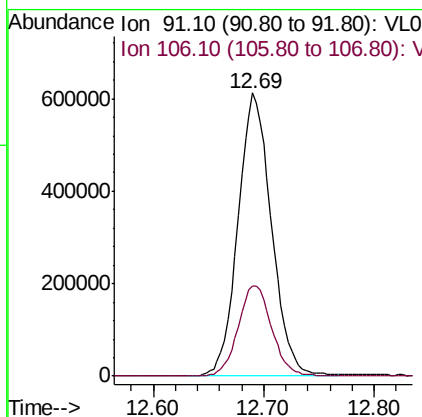
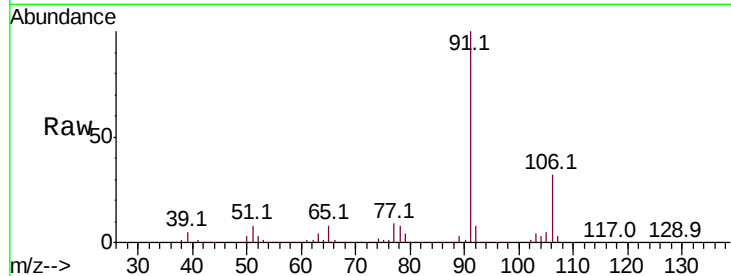
#58
Ethyl Benzene
Concen: 2.741 ppbv
RT: 12.69 min Scan# 3080
Delta R.T. -0.03 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Instrument :
MSVOA_L
ClientSampleId :
IA-1DUP

Tot Ion: 91 Resp: 1281496
Ion Ratio Lower Upper
91 100
106 31.9 28.6 43.0

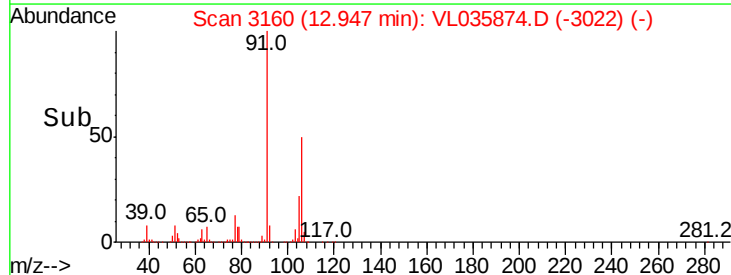
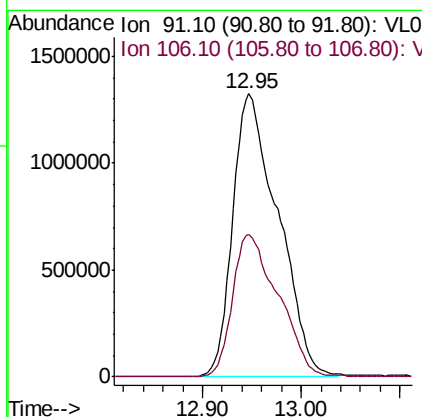
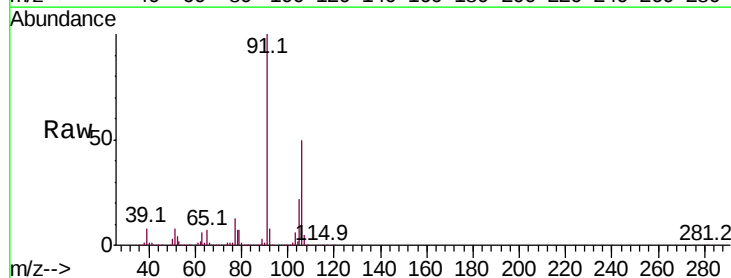
Manual Integrations
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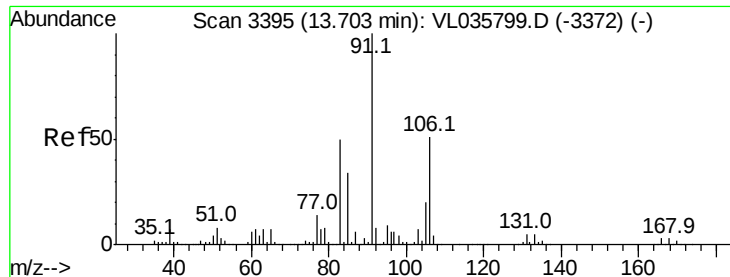
MMDadoda
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#59
m/p-Xylene
Concen: 10.612 ppbv
RT: 12.95 min Scan# 3160
Delta R.T. -0.06 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Tgt Ion: 91 Resp: 4197089
Ion Ratio Lower Upper
91 100
106 51.2 39.5 59.3





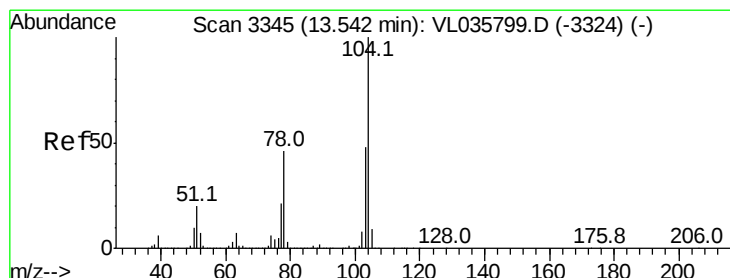
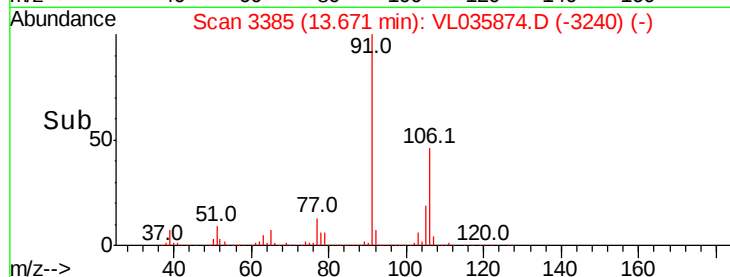
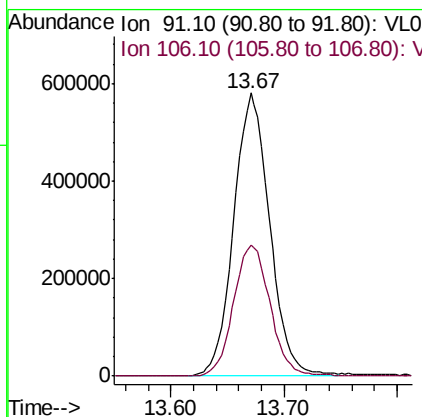
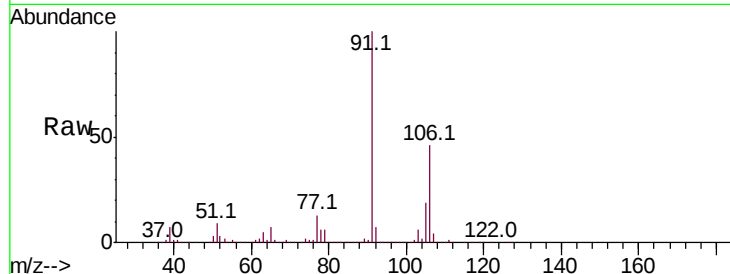
#60
o-Xylene
Concen: 3.313 ppbv
RT: 13.67 min Scan# 3385
Delta R.T. -0.03 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Instrument :
MSVOA_L
ClientSampled :
IA-1DUP

Tot Ion: 91 Resp: 1274774
Ion Ratio Lower Upper
91 100
106 47.7 24.8 74.4

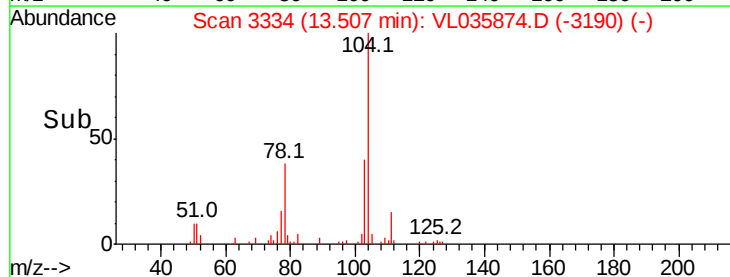
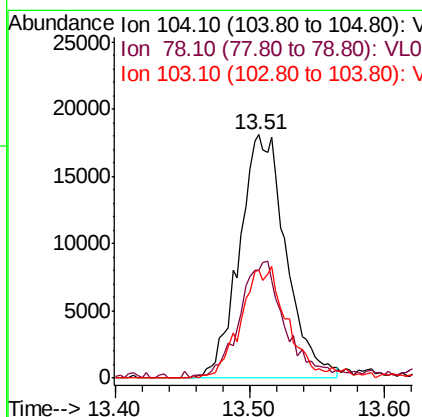
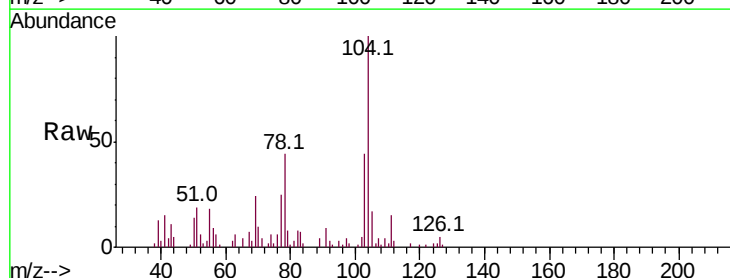
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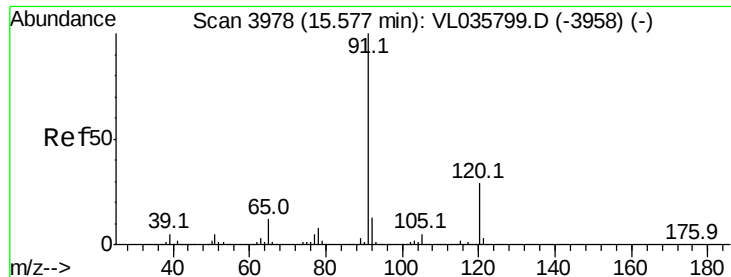
MMDadoda
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#61
Styrene
Concen: 0.154 ppbv m
RT: 13.51 min Scan# 3334
Delta R.T. -0.04 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Tgt Ion: 104 Resp: 43525
Ion Ratio Lower Upper
104 100
78 0.0 37.1 55.7#
103 0.0 37.9 56.9#





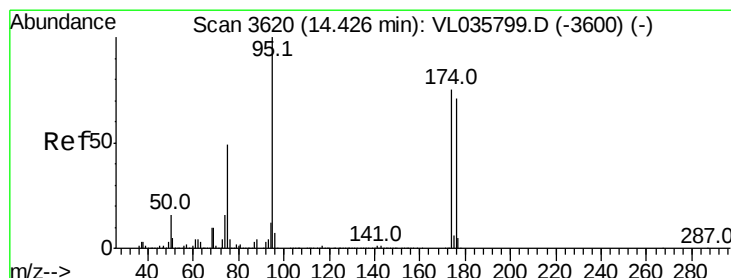
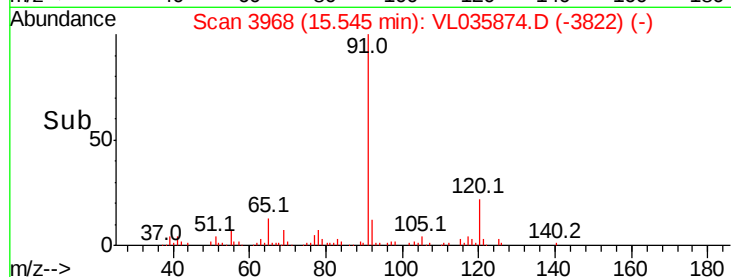
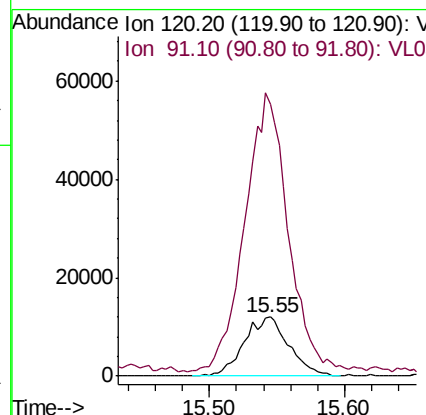
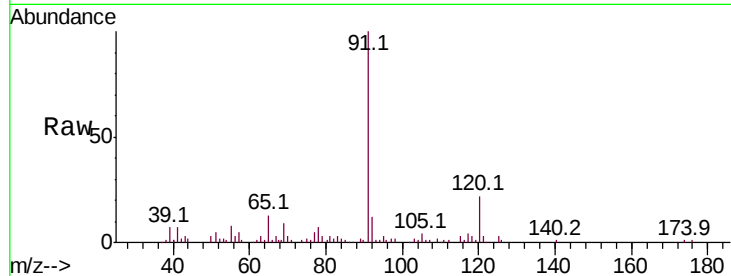
#64
n-propylbenzene
Concen: 0.157 ppbv m
RT: 15.55 min Scan# 3968
Delta R.T. -0.03 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Instrument :
MSVOA_L
ClientSampleId :
IA-1DUP

Tot Ion:120 Resp: 27406
Ion Ratio Lower Upper
120 100
91 464.8 311.1 466.7

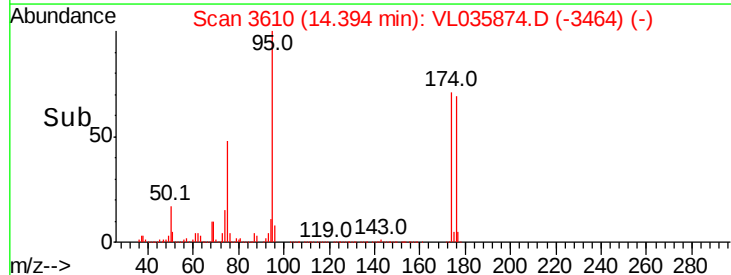
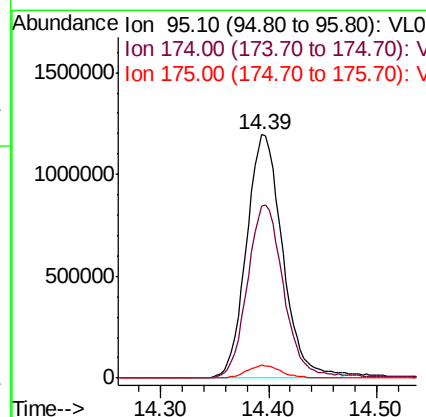
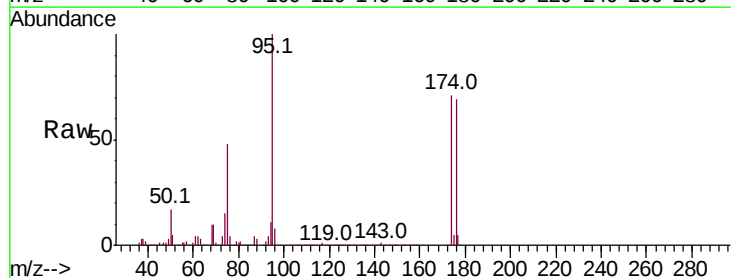
Manual Integrations
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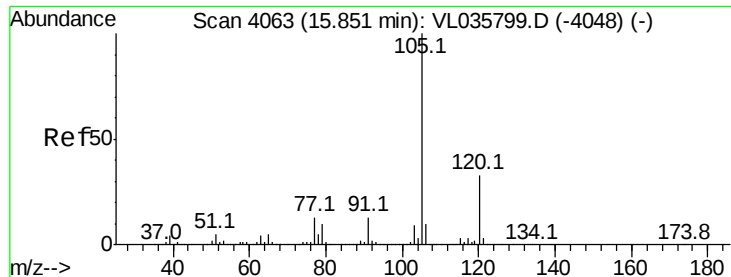
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.214 ppbv
RT: 14.39 min Scan# 3610
Delta R.T. -0.03 min
Lab File: VL035874.D
Acq: 6 Nov 2020 00:25

Tgt Ion: 95 Resp: 2785423
Ion Ratio Lower Upper
95 100
174 73.1 59.8 89.6
175 5.2 4.3 6.5





#72

4-Ethyltoluene

Concen: 0.352 ppbv

RT: 15.82 min Scan# 4054

Delta R.T. -0.03 min

Lab File: VL035874.D

Acq: 6 Nov 2020 00:25

Instrument :

MSVOA_L

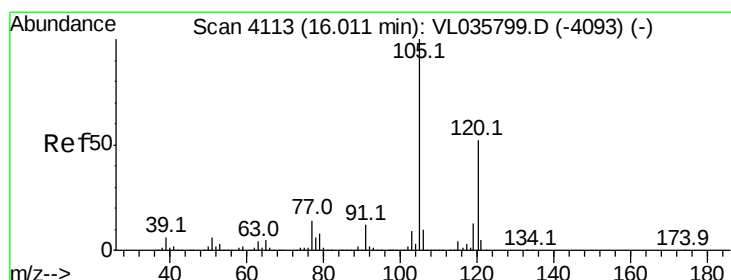
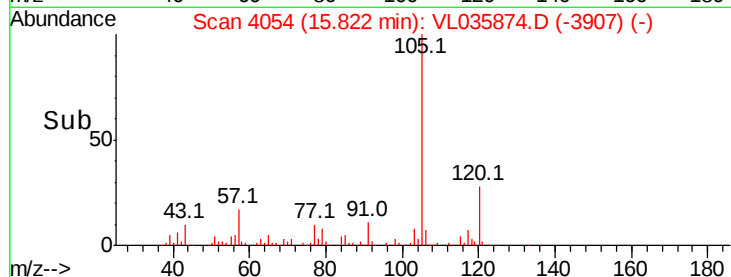
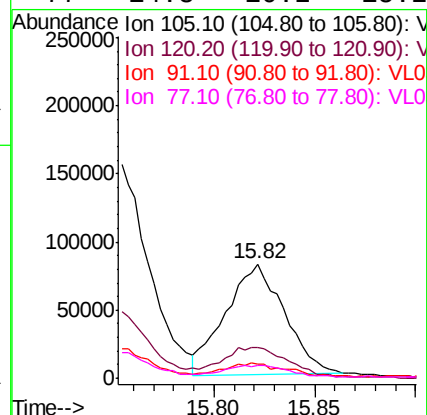
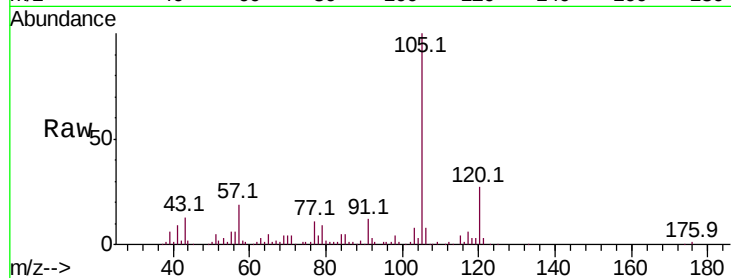
ClientSampleId :

IA-1DUP

Tot Ion	Ratio	Resp	Lower	Upper
105	100	164365		
120	34.6	25.9	38.9	
91	13.4	9.9	14.9	
77	14.8	10.2	15.2	

Manual Integrations
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#73

1,3,5-Trimethylbenzene

Concen: 0.319 ppbv

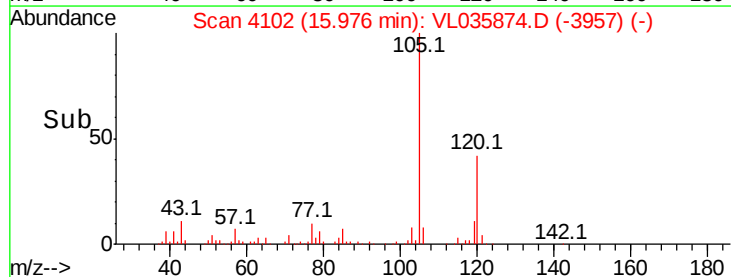
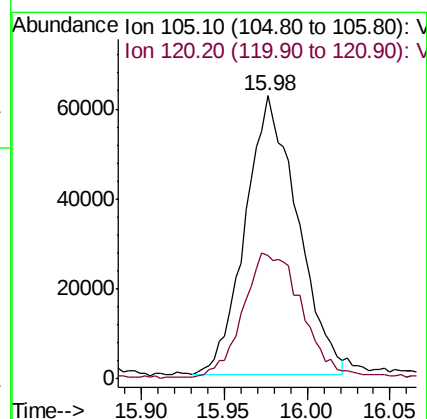
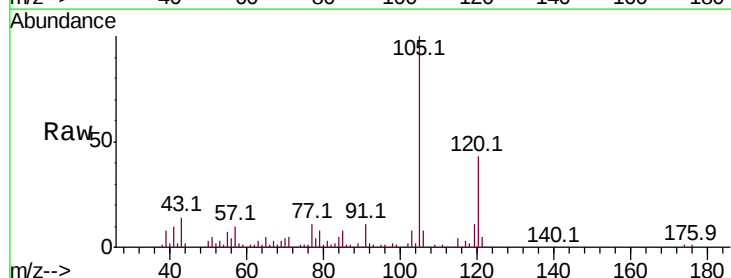
RT: 15.98 min Scan# 4102

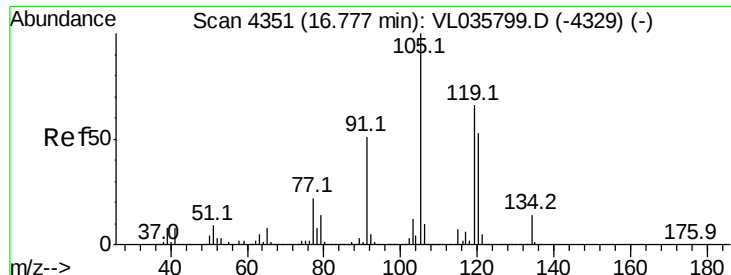
Delta R.T. -0.04 min

Lab File: VL035874.D

Acq: 6 Nov 2020 00:25

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	136432		
120	43.6	41.4	62.2	





#74
 1,2,4-Trimethylbenzene
 Concen: 0.971 ppbv
 RT: 16.74 min Scan# 4341
 Delta R.T. -0.03 min
 Lab File: VL035874.D
 Acq: 6 Nov 2020 00:25

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1DUP

Tot Ion:	105	Resp:	444147
Ion Ratio	Lower	Upper	
105	100		
120	43.7	42.0	63.0
91	11.2	41.0	61.6#
77	12.6	17.3	25.9#

Manual Integrations
 APPROVED

MMDadoda
 11/9/2020 10:47:44 AM

