

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110420\
 Data File : VL035846.D
 Acq On : 5 Nov 2020 00:01
 Operator : SY/AP
 Sample : L4220-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA2

Manual Integrations
 APPROVED

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 11/5/2020 2:17:48 PM

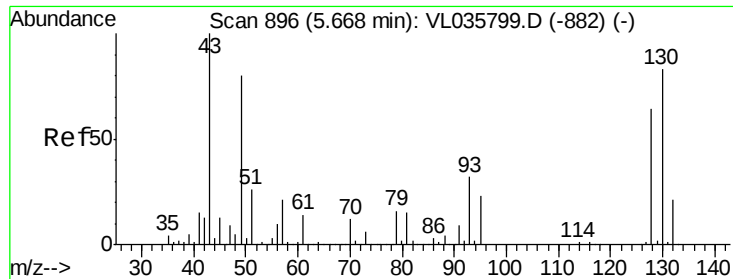
Quant Time: Nov 05 05:14:32 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Nov 04
 QLast Update : Wed Nov 04 02:40:06 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.64	49	776470	10.00	ppbv	-0.03
33) 1,4-Difluorobenzene	7.14	114	3412484	10.00	ppbv	-0.04
55) Chlorobenzene-d5	12.05	117	3100037	10.00	ppbv	-0.05

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.38	95	2197996	9.98	ppbv	-0.04	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.80%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	31486	0.215	ppbv	97
3) Chlorodifluoromethane	2.96	51	32567m	0.350	ppbv	
4) Chloromethane	3.11	50	29771	0.659	ppbv	93
9) Propene	2.99	41	88713m	2.607	ppbv	
11) Trichlorofluoromethane	3.92	101	47879	0.261	ppbv	96
13) Ethanol	3.58	45	910000	123.250	ppbv	94
15) Acetone	3.82	43	574416	6.920	ppbv	98
19) Isopropyl Alcohol	3.95	45	265286	5.200	ppbv #	94
20) Methylene Chloride	4.31	84	114072	1.952	ppbv	94
26) Hexane	5.65	57	134151	1.487	ppbv #	51
27) Carbon Disulfide	4.53	76	16210	0.120	ppbv #	79
29) Chloroform	5.72	83	25678	0.145	ppbv	93
30) Cyclohexane	7.10	84	16637m	0.169	ppbv	
34) 2-Butanone	5.22	43	25954	0.234	ppbv #	88
35) Carbon Tetrachloride	6.99	117	11577m	0.063	ppbv	
36) Benzene	6.86	78	98081	0.387	ppbv	92
53) Toluene	9.77	91	579788	1.894	ppbv	98
59) m/p-Xylene	12.93	91	46196	0.145	ppbv	96

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.64 min Scan# 886

Delta R.T. -0.03 min

Lab File: VL035846.D

Acq: 5 Nov 2020 00:01

Instrument :

MSVOA_L

ClientSampled :

IA2

Tot Ion: 49 Resp: 776470

Ion Ratio Lower Upper

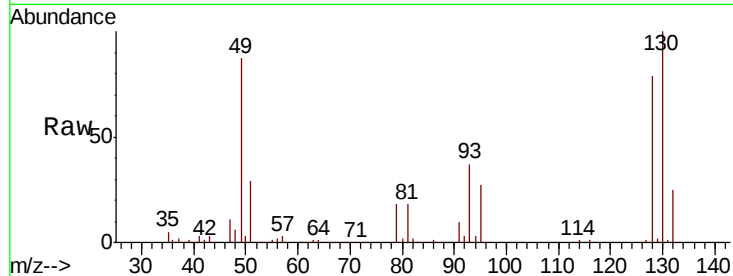
49 100

128 89.7 41.5 124.6

130 114.8 53.7 161.1

Manual Integrations
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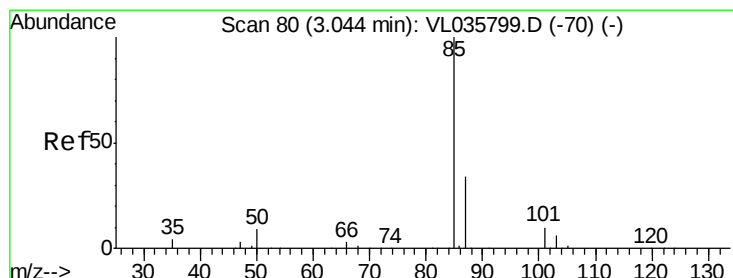
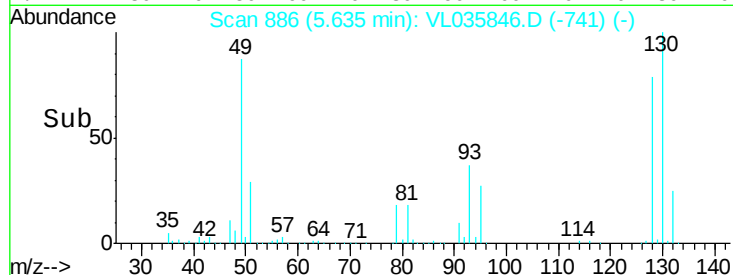
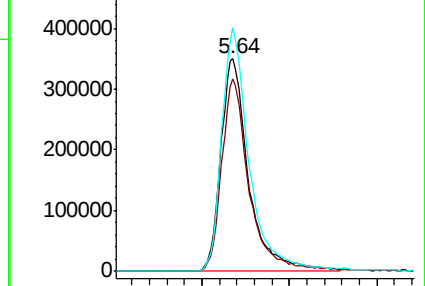
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.215 ppbv

RT: 3.02 min Scan# 73

Delta R.T. -0.02 min

Lab File: VL035846.D

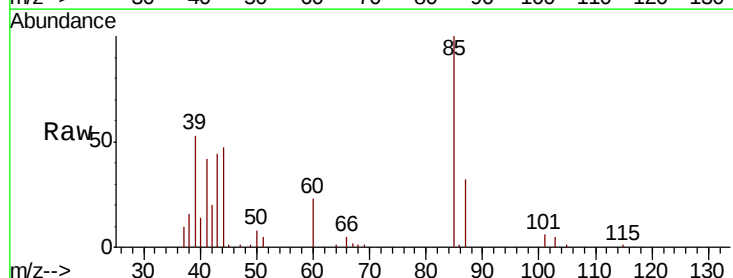
Acq: 5 Nov 2020 00:01

Tgt Ion: 85 Resp: 31486

Ion Ratio Lower Upper

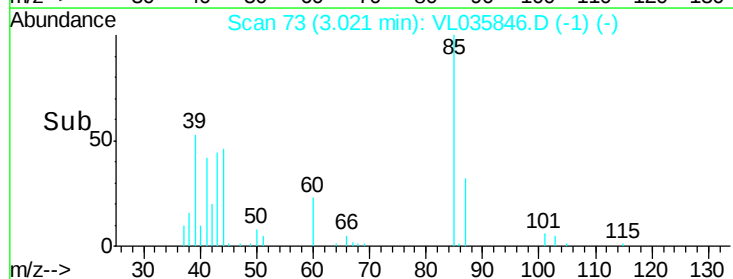
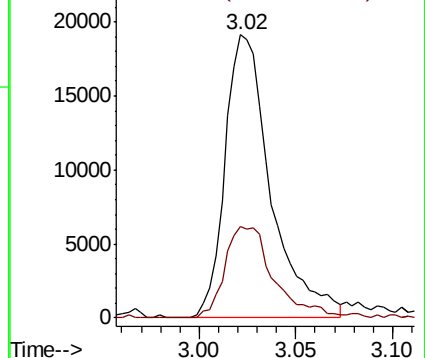
85 100

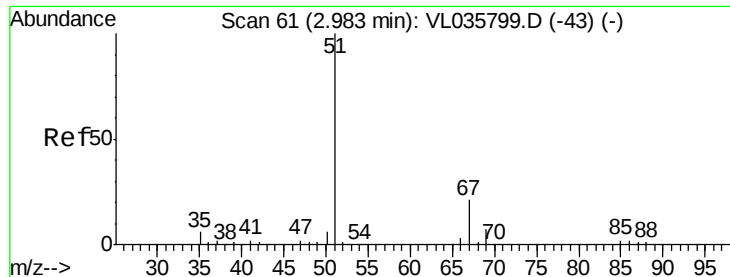
87 32.1 27.1 40.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.350 ppbv

RT: 2.96 min Scan# 54

Delta R.T. -0.02 min

Lab File: VL035846.D

Acq: 5 Nov 2020 00:01

Instrument :

MSVOA_L

ClientSampled :

IA2

Tot Ion: 51 Resp: 32567

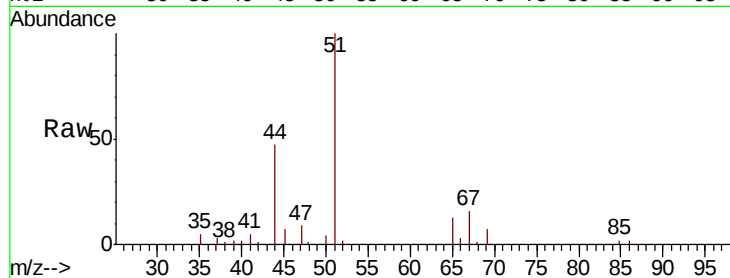
Ion Ratio Lower Upper

51 100

67 19.4 17.0 25.4

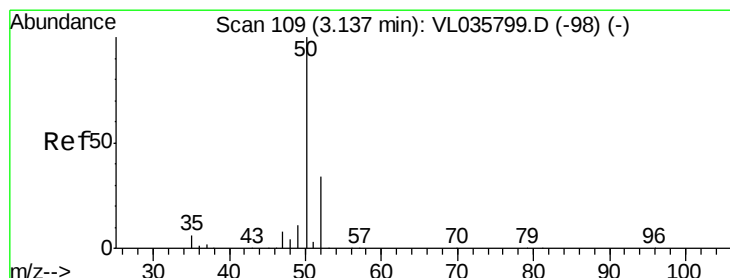
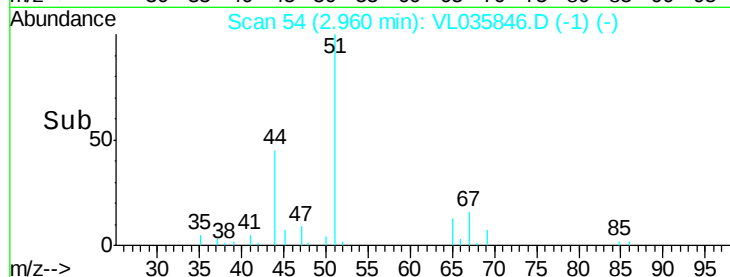
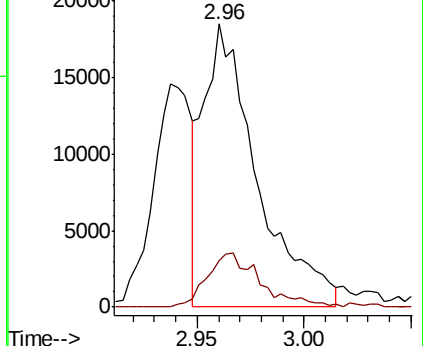
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.659 ppbv

RT: 3.11 min Scan# 102

Delta R.T. -0.02 min

Lab File: VL035846.D

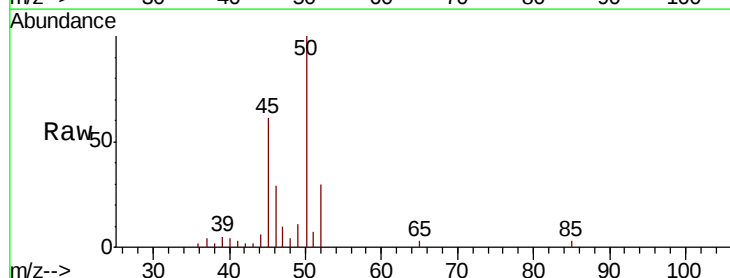
Acq: 5 Nov 2020 00:01

Tgt Ion: 50 Resp: 29771

Ion Ratio Lower Upper

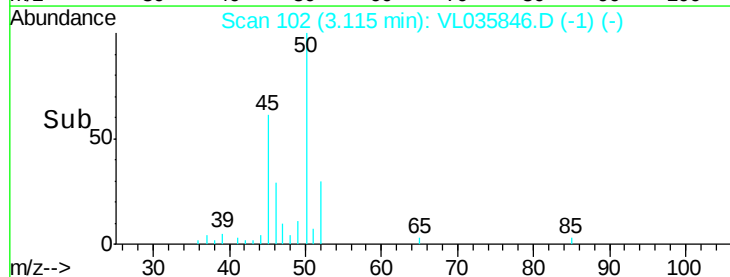
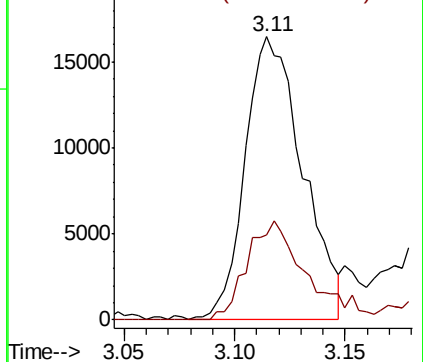
50 100

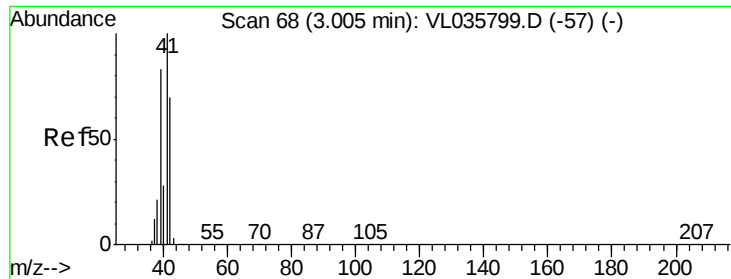
52 29.9 27.1 40.7



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 2.607 ppbv m

RT: 2.99 min Scan# 63

Delta R.T. -0.02 min

Lab File: VL035846.D

Acq: 5 Nov 2020 00:01

Instrument :

MSVOA_L

ClientSampled :

IA2

Tot Ion: 41 Resp: 88713

Ion Ratio Lower Upper

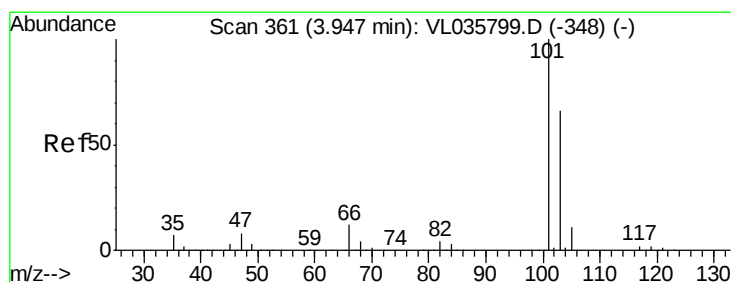
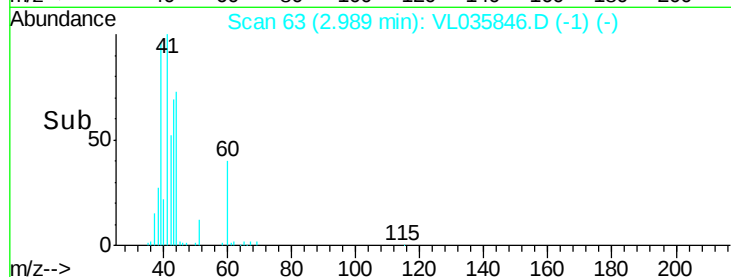
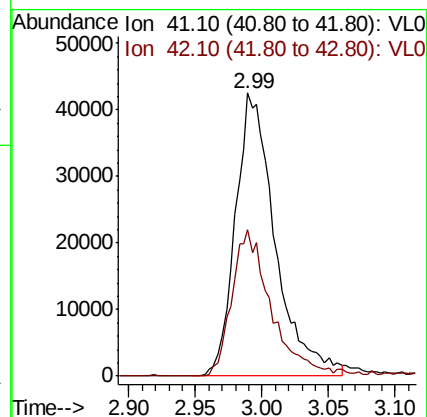
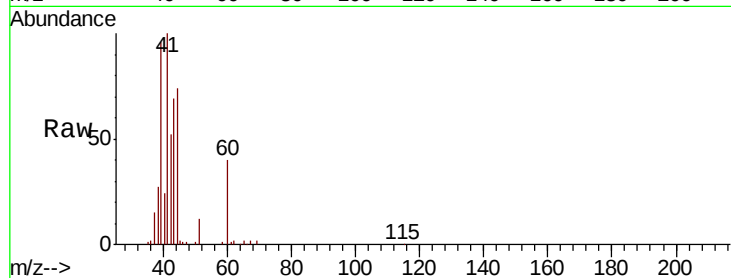
41 100

42 132.4 56.2 84.4#

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#11

Trichlorofluoromethane

Concen: 0.261 ppbv

RT: 3.92 min Scan# 354

Delta R.T. -0.02 min

Lab File: VL035846.D

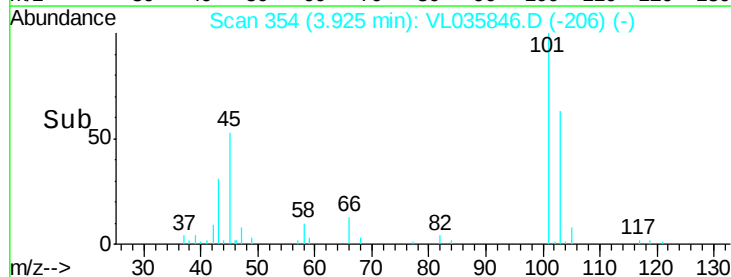
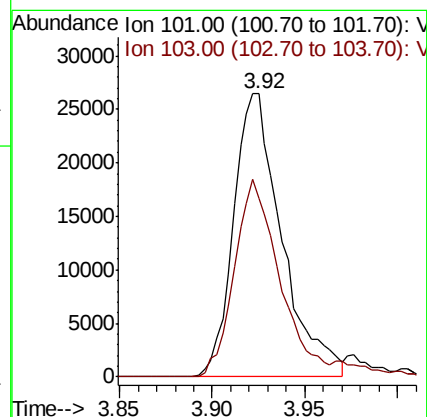
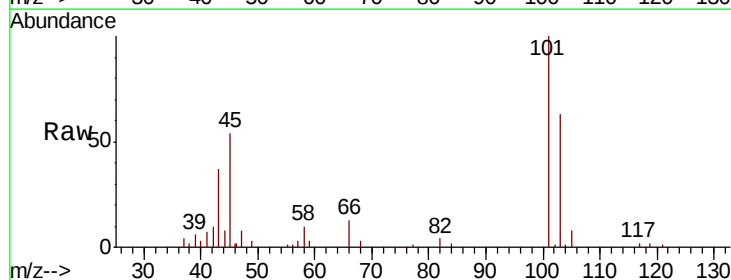
Acq: 5 Nov 2020 00:01

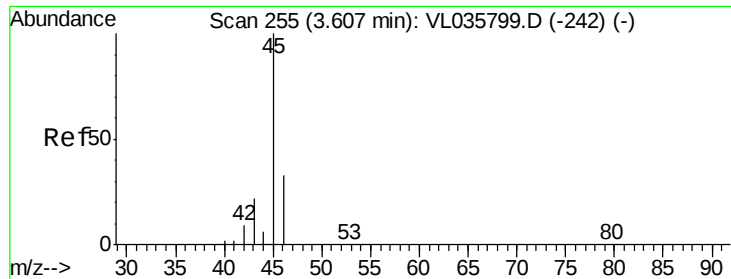
Tgt Ion: 101 Resp: 47879

Ion Ratio Lower Upper

101 100

103 63.2 53.0 79.4





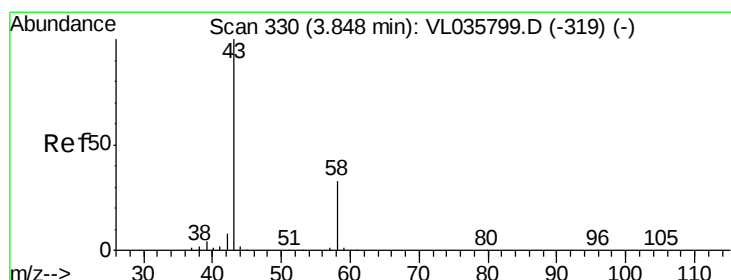
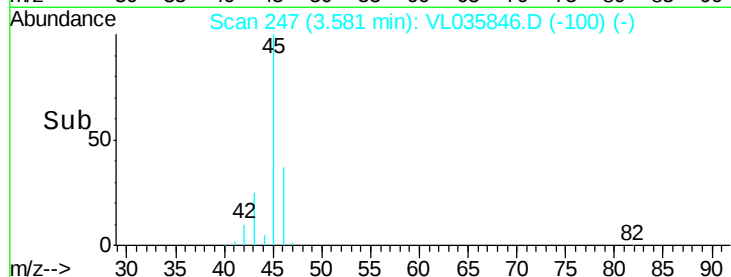
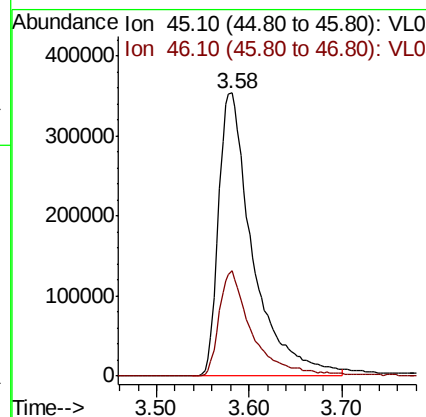
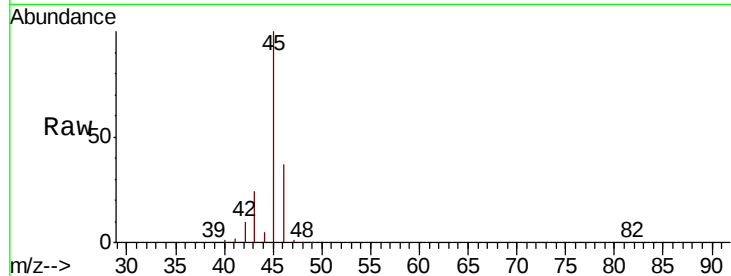
#13
Ethanol
Concen: 123.250 ppbv
RT: 3.58 min Scan# 247
Delta R.T. -0.03 min
Lab File: VL035846.D
Acq: 5 Nov 2020 00:01

Instrument :
MSVOA_L
ClientSampled :
IA2

Tot Ion	45	46	Ratio	Lower	Upper
45	100				
46	36.5		16.1	64.5	

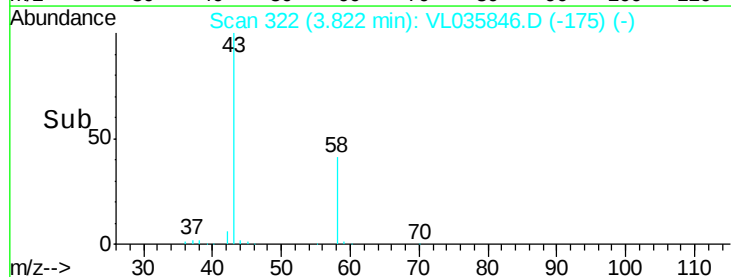
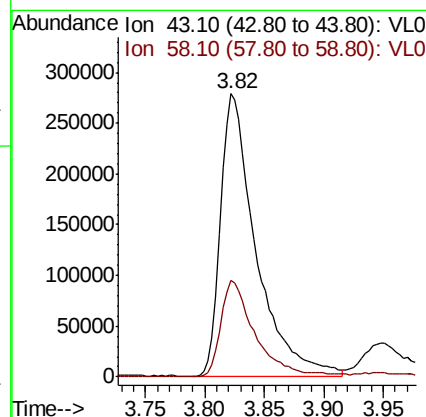
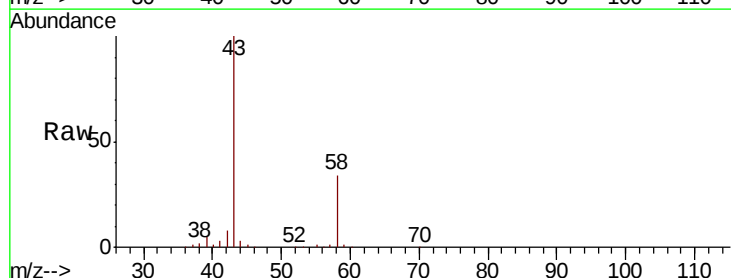
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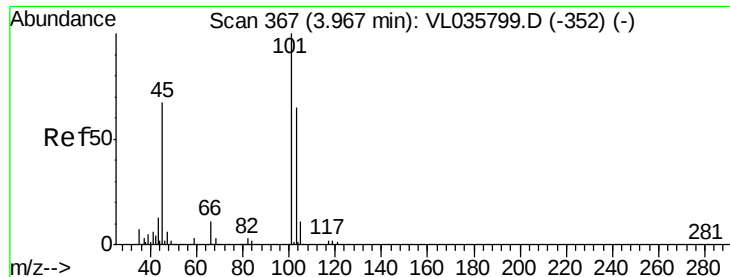
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#15
Acetone
Concen: 6.920 ppbv
RT: 3.82 min Scan# 322
Delta R.T. -0.03 min
Lab File: VL035846.D
Acq: 5 Nov 2020 00:01

Tgt Ion	43	58	Ratio	Lower	Upper
43	100				
58	33.3		27.5	41.3	





#19

Isopropyl Alcohol

Concen: 5.200 ppbv

RT: 3.95 min Scan# 361

Delta R.T. -0.02 min

Lab File: VL035846.D

Acq: 5 Nov 2020 00:01

Instrument :

MSVOA_L

ClientSampled :

IA2

Tot Ion: 45 Resp: 265286

Ion Ratio Lower Upper

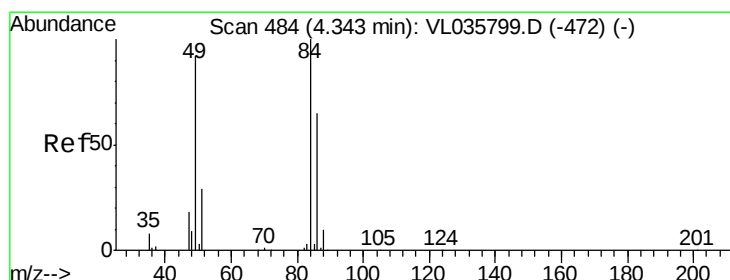
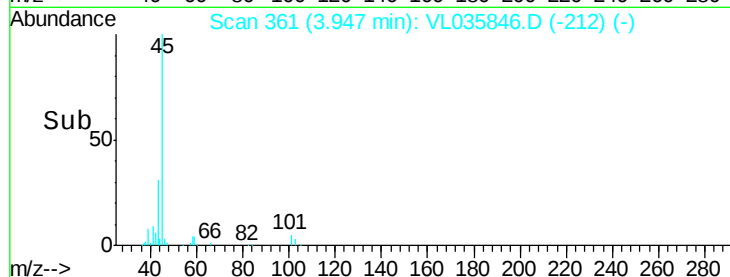
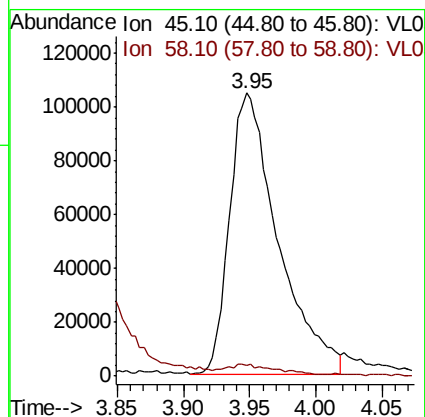
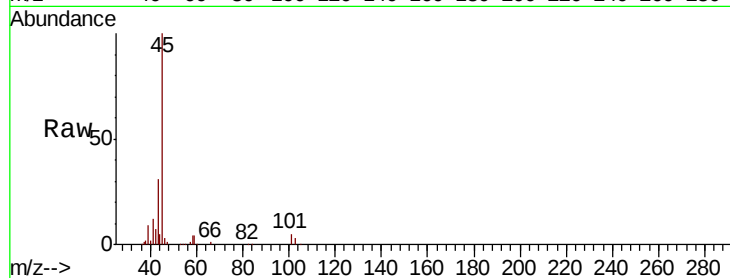
45 100

58 5.1 2.6 3.8#

Manual Integrations
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#20

Methylene Chloride

Concen: 1.952 ppbv

RT: 4.31 min Scan# 475

Delta R.T. -0.03 min

Lab File: VL035846.D

Acq: 5 Nov 2020 00:01

Tgt Ion: 84 Resp: 114072

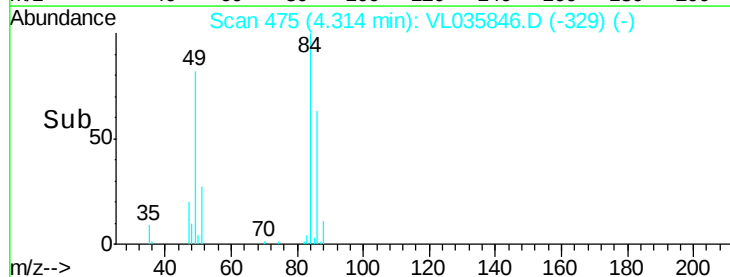
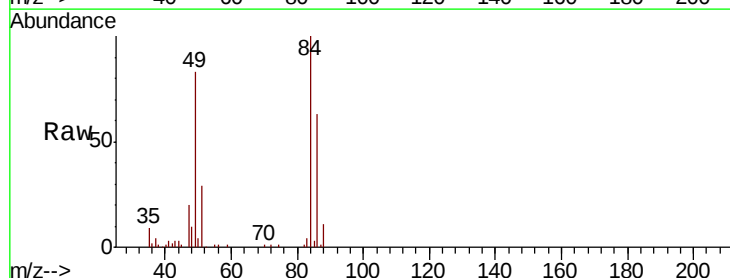
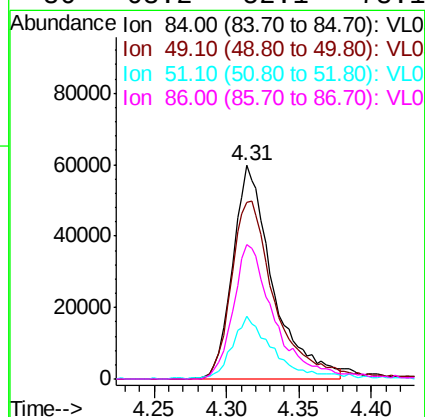
Ion Ratio Lower Upper

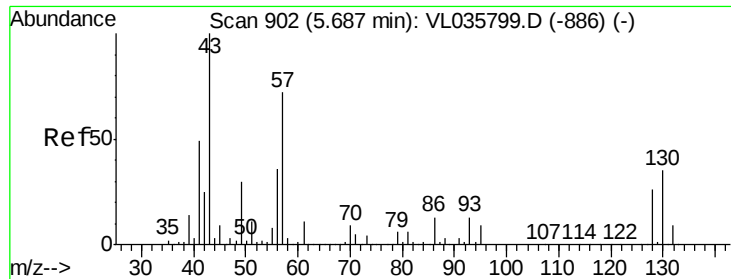
84 100

49 82.8 73.8 110.8

51 28.9 23.0 34.4

86 63.2 52.1 78.1





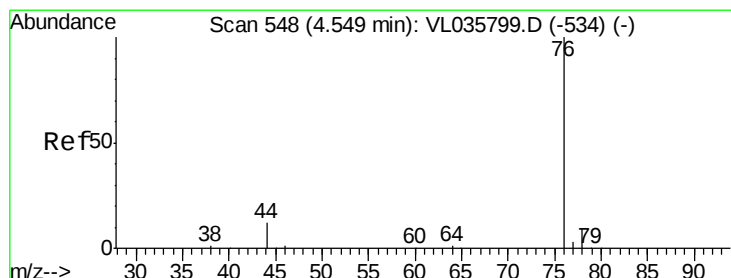
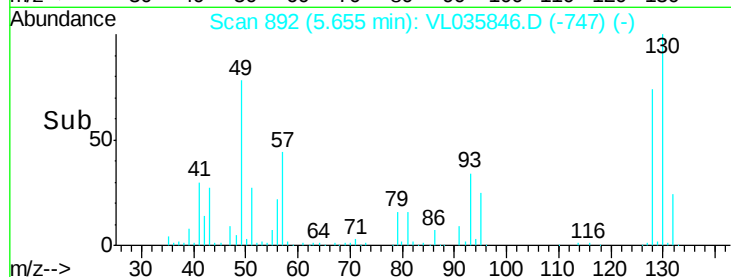
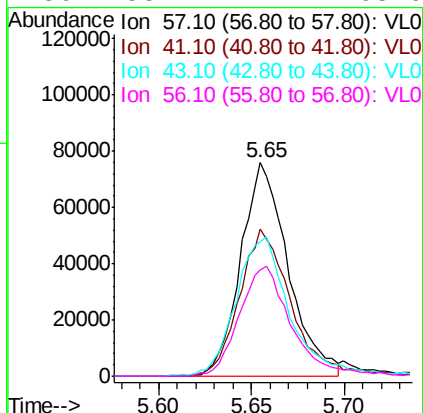
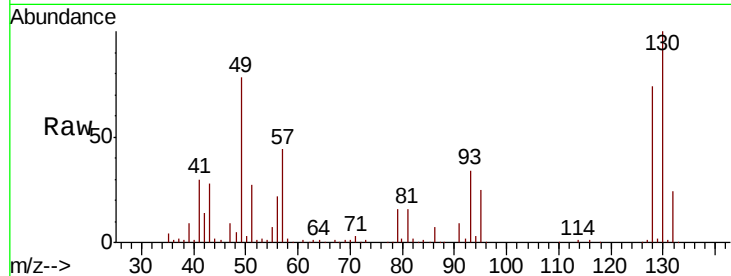
#26
Hexane
Concen: 1.487 ppbv
RT: 5.65 min Scan# 892
Delta R.T. -0.03 min
Lab File: VL035846.D
Acq: 5 Nov 2020 00:01

Instrument :
MSVOA_L
ClientSampled :
IA2

Tot Ion	57	Resp	134151
Ion Ratio	Lower	Upper	
57	100		
41	77.6	58.9	88.3
43	75.1	150.2	225.2#
56	58.1	42.4	63.6

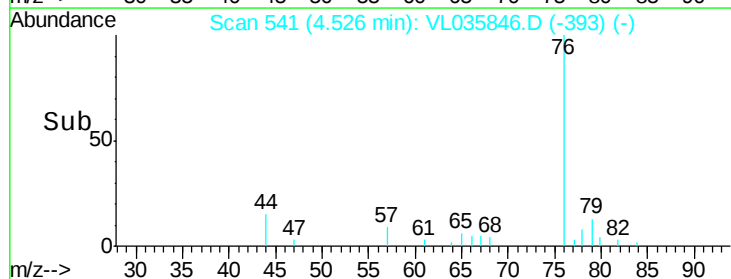
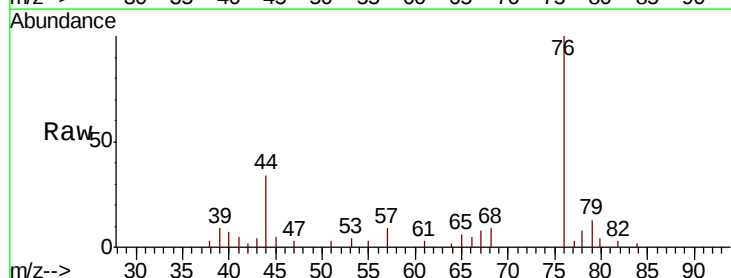
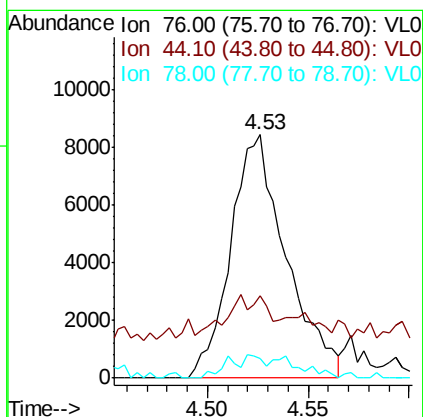
Manual Integrations
APPROVED

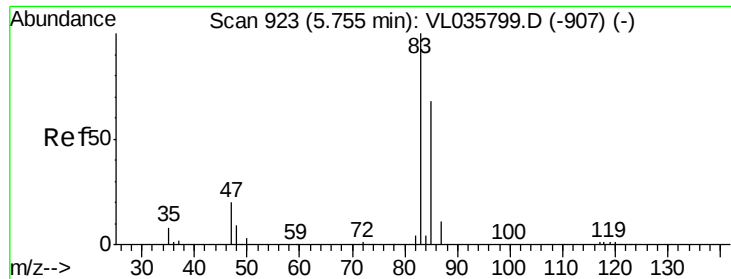
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#27
Carbon Disulfide
Concen: 0.120 ppbv
RT: 4.53 min Scan# 541
Delta R.T. -0.02 min
Lab File: VL035846.D
Acq: 5 Nov 2020 00:01

Tgt Ion	76	Resp	16210
Ion Ratio	Lower	Upper	
76	100		
44	26.6	9.9	14.9#
78	11.3	8.1	12.1





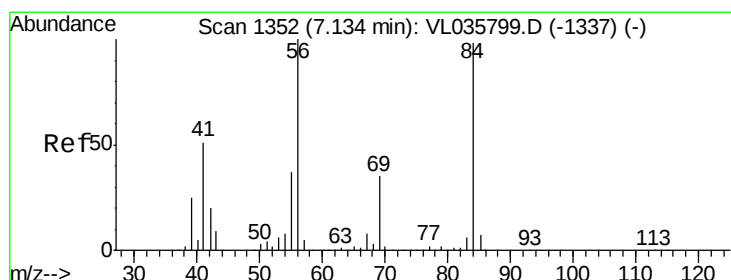
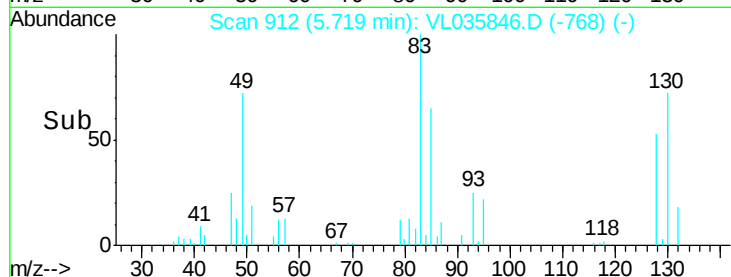
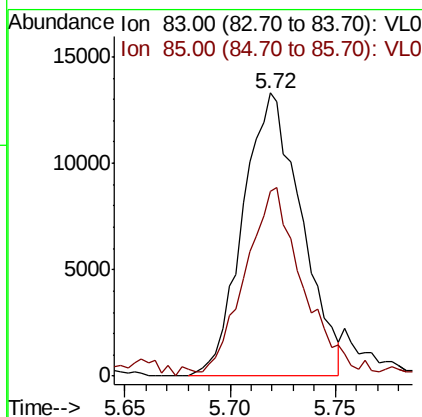
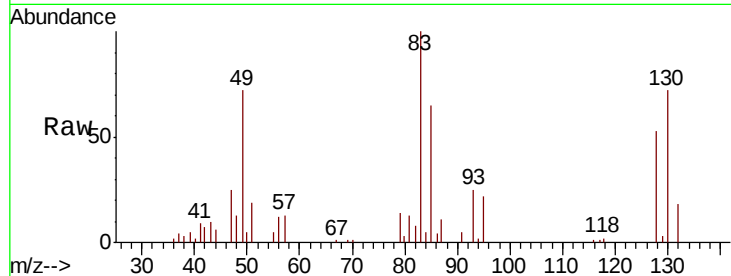
#29
Chloroform
Concen: 0.145 ppbv
RT: 5.72 min Scan# 912
Delta R.T. -0.04 min
Lab File: VL035846.D
Acq: 5 Nov 2020 00:01

Instrument :
MSVOA_L
ClientSampled :
IA2

Tot Ion: 83 Resp: 25678
Ion Ratio Lower Upper
83 100
85 62.8 54.6 81.8

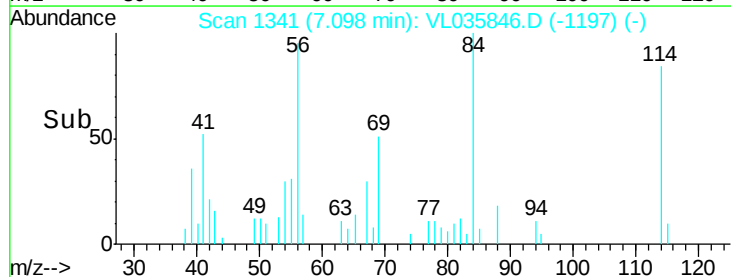
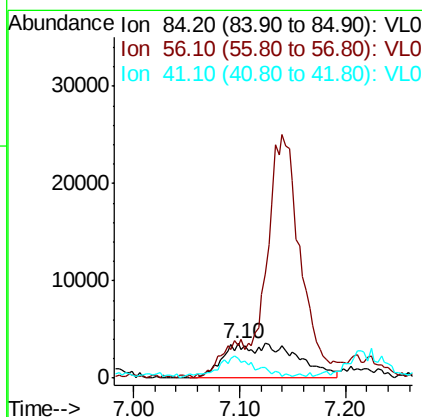
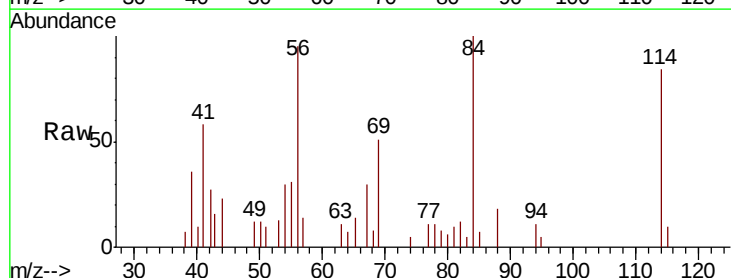
Manual Integrations
APPROVED

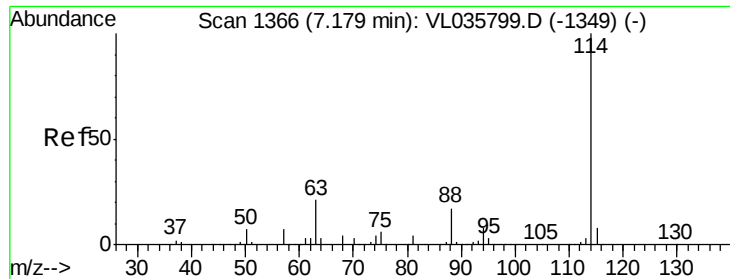
MMDadoda
11/5/2020 2:17:48 PM



#30
Cyclohexane
Concen: 0.169 ppbv m
RT: 7.10 min Scan# 1341
Delta R.T. -0.04 min
Lab File: VL035846.D
Acq: 5 Nov 2020 00:01

Tgt Ion: 84 Resp: 16637
Ion Ratio Lower Upper
84 100
56 0.0 86.4 129.6#
41 0.0 42.1 63.1#





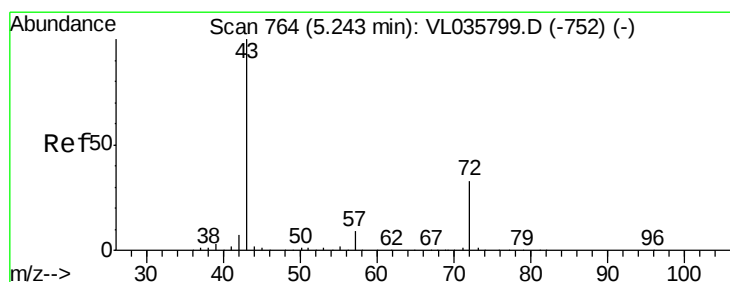
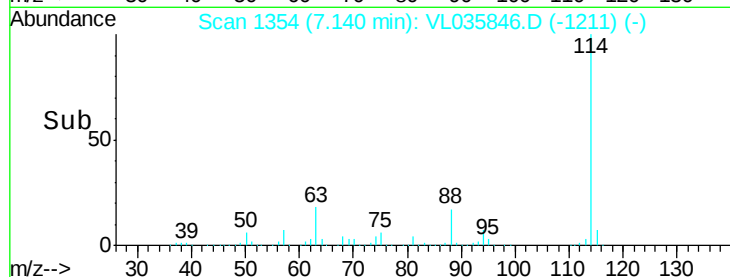
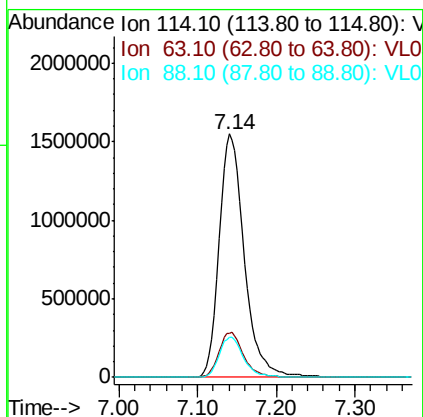
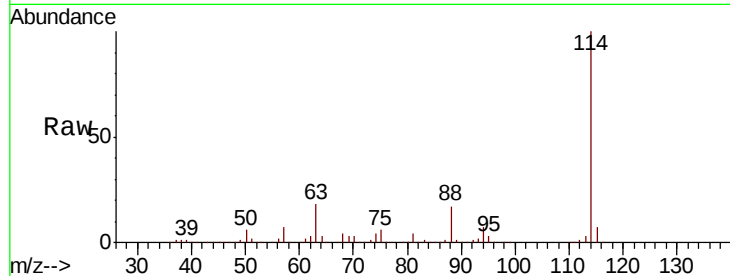
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.14 min Scan# 1354
 Delta R.T. -0.04 min
 Lab File: VL035846.D
 Acq: 5 Nov 2020 00:01

Instrument :
 MSVOA_L
 ClientSampled :
 IA2

Tot Ion:114 Resp: 3412484
 Ion Ratio Lower Upper
 114 100
 63 18.3 16.1 24.1
 88 16.3 13.7 20.5

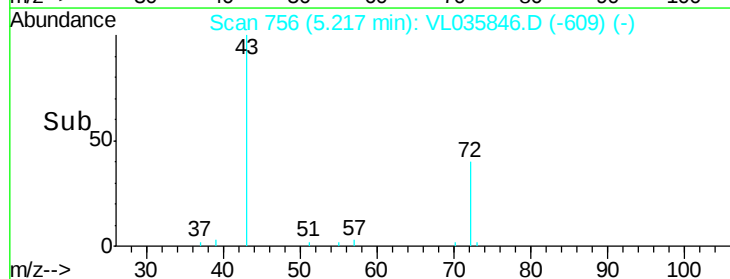
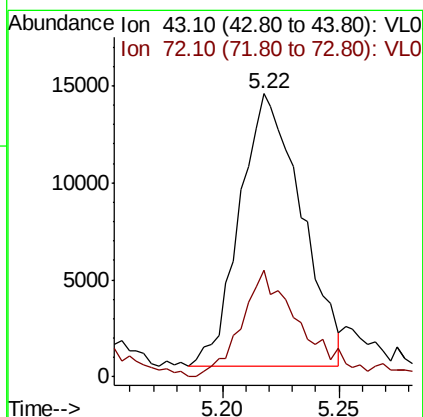
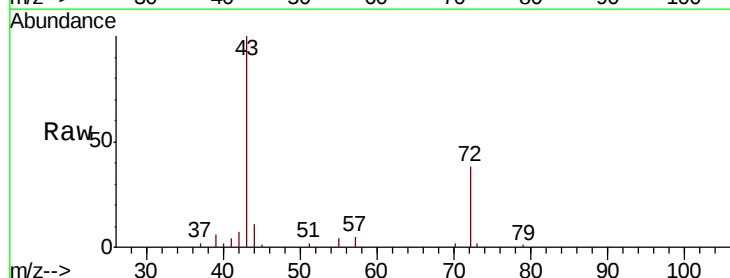
Manual Integrations
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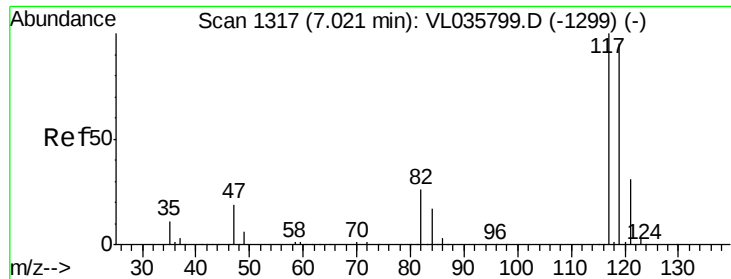
MMDadoda
 11/5/2020 2:17:48 PM



#34
 2-Butanone
 Concen: 0.234 ppbv
 RT: 5.22 min Scan# 756
 Delta R.T. -0.03 min
 Lab File: VL035846.D
 Acq: 5 Nov 2020 00:01

Tgt Ion: 43 Resp: 25954
 Ion Ratio Lower Upper
 43 100
 72 40.1 26.5 39.7#





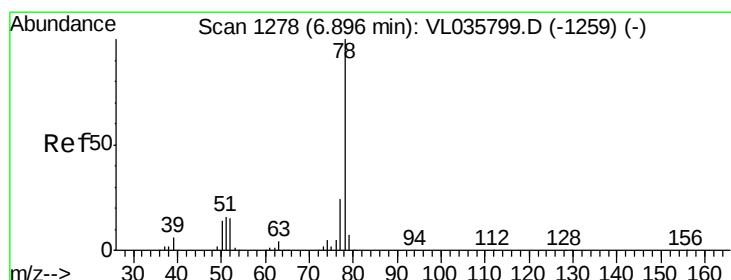
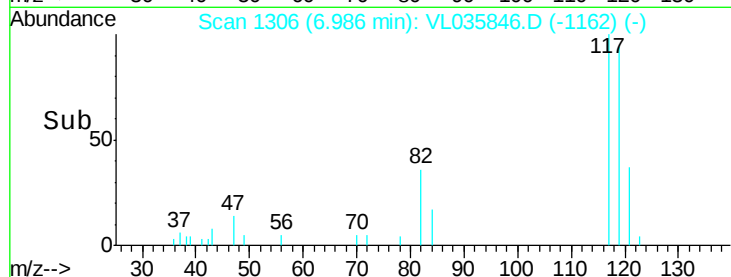
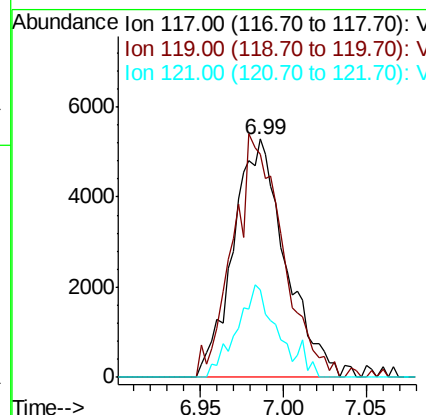
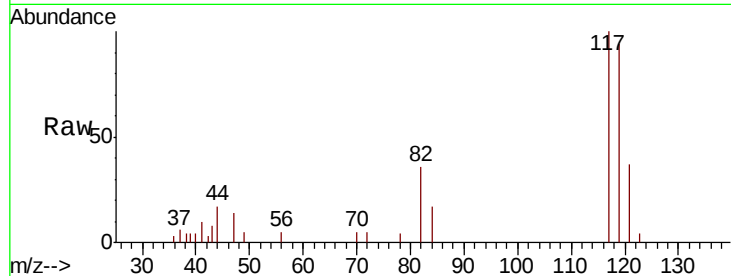
#35
Carbon Tetrachloride
Concen: 0.063 ppbv m
RT: 6.99 min Scan# 1306
Delta R.T. -0.04 min
Lab File: VL035846.D
Acq: 5 Nov 2020 00:01

Instrument :
MSVOA_L
ClientSampleId :
IA2

Tot Ion	Ratio	Lower	Upper
117	100		
119	93.6	75.6	113.4
121	36.9	25.1	37.7

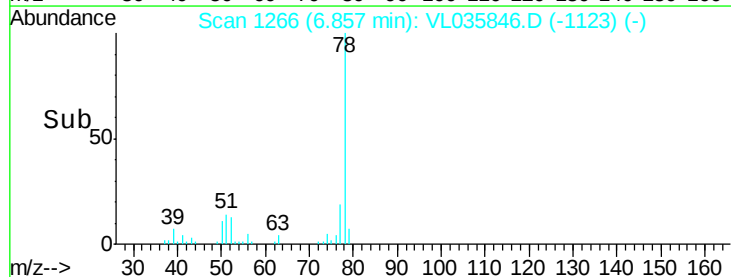
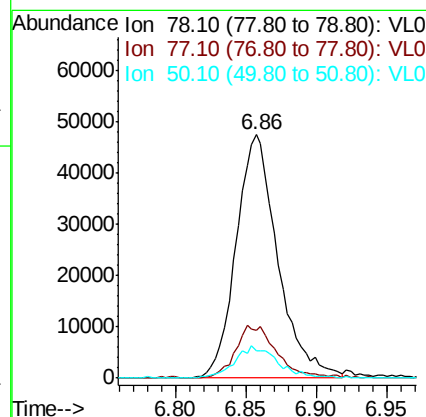
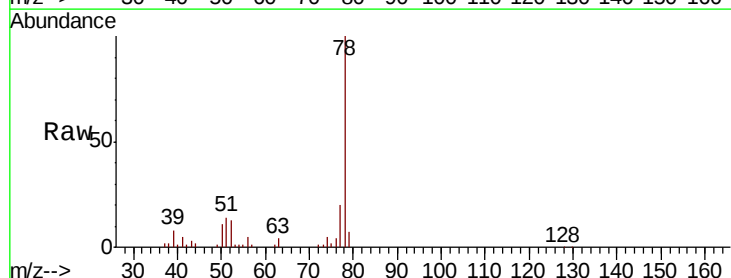
Manual Integrations
APPROVED

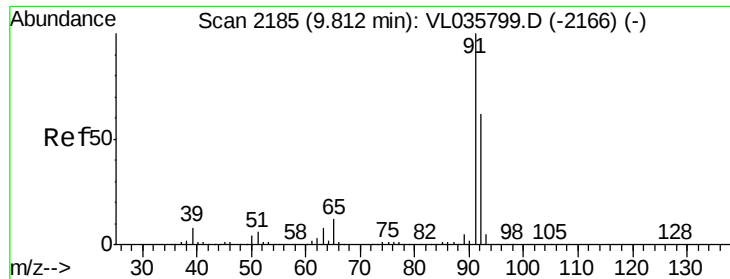
MMDadoda
11/5/2020 2:17:48 PM



#36
Benzene
Concen: 0.387 ppbv
RT: 6.86 min Scan# 1266
Delta R.T. -0.04 min
Lab File: VL035846.D
Acq: 5 Nov 2020 00:01

Tgt Ion	Ratio	Lower	Upper
78	100		
77	19.9	19.3	28.9
50	11.4	11.4	17.2





#53

Toluene

Concen: 1.894 ppbv

RT: 9.77 min Scan# 2173

Delta R.T. -0.04 min

Lab File: VL035846.D

Acq: 5 Nov 2020 00:01

Instrument :

MSVOA_L

ClientSampled :

IA2

Tot Ion: 91 Resp: 579788

Ion Ratio Lower Upper

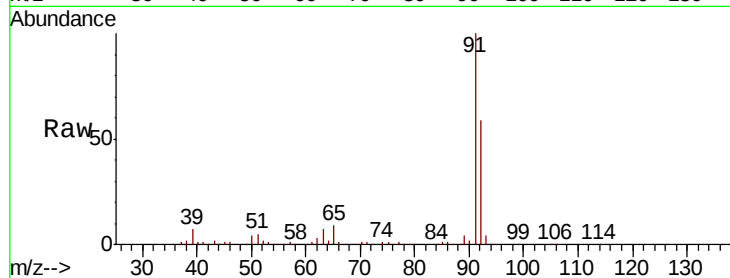
91 100

92 60.4 49.8 74.6

Manual Integrations
APPROVED

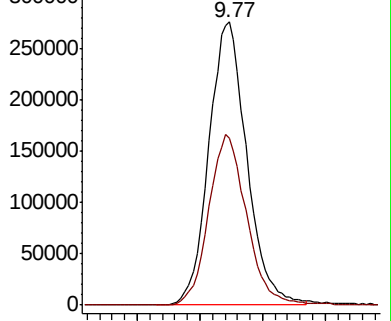
MMDadoda

11/5/2020 2:17:48 PM

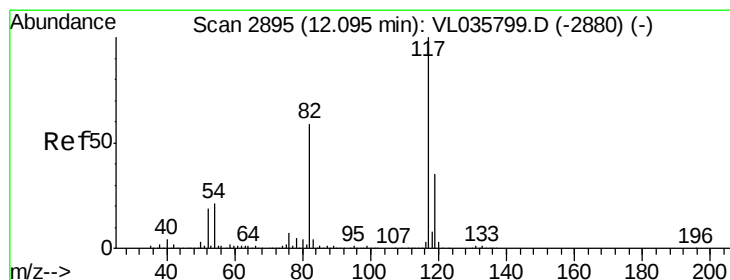
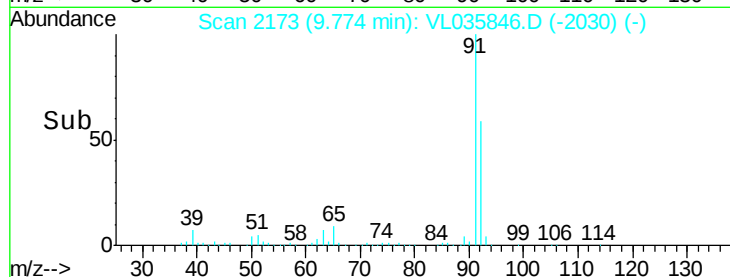


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.05 min Scan# 2881

Delta R.T. -0.05 min

Lab File: VL035846.D

Acq: 5 Nov 2020 00:01

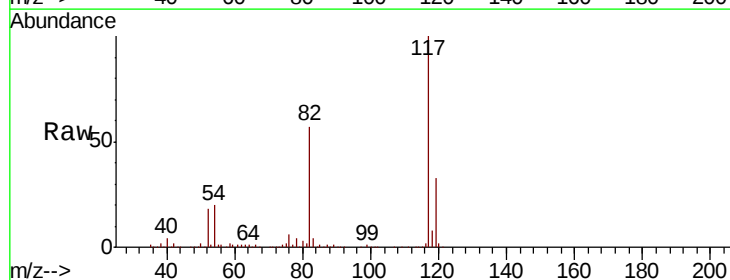
Tgt Ion: 117 Resp: 3100037

Ion Ratio Lower Upper

117 100

82 56.5 50.6 76.0

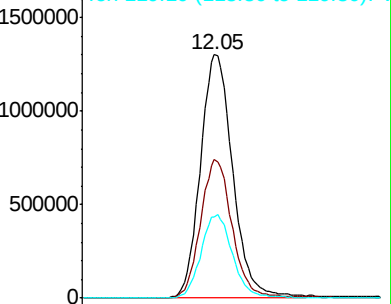
119 34.0 52.6 78.8#



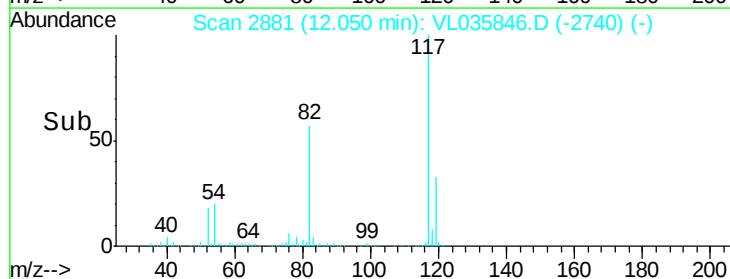
Abundance Ion 117.10 (116.80 to 117.80): V

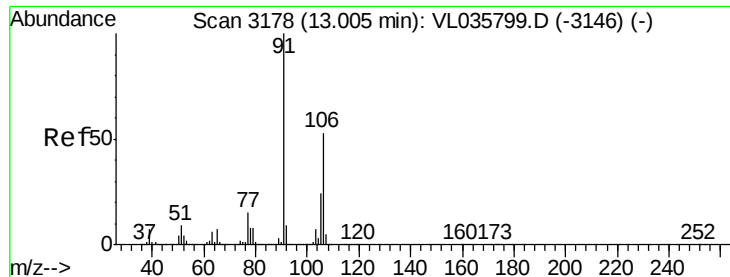
Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



Time-->





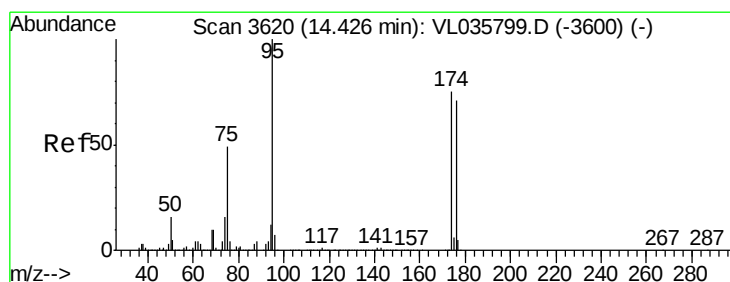
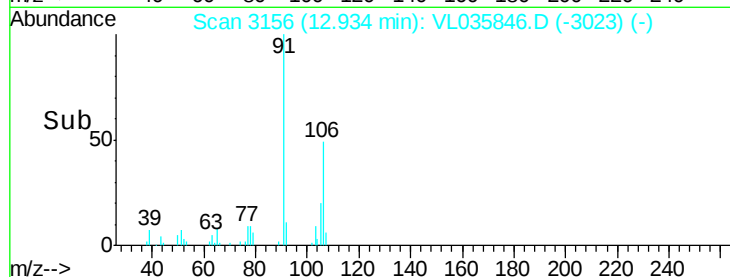
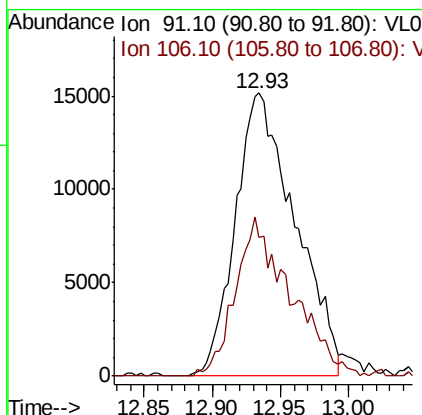
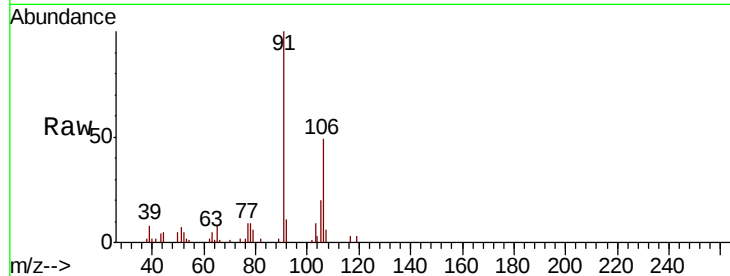
#59
m/p-Xylene
Concen: 0.145 ppbv
RT: 12.93 min Scan# 3156
Delta R.T. -0.07 min
Lab File: VL035846.D
Acq: 5 Nov 2020 00:01

Instrument :
MSVOA_L
ClientSampled :
IA2

Tot Ion	Ratio	Lower	Upper
91	100		
106	52.0	39.5	59.3

Manual Integrations
APPROVED

MMDadoda
11/5/2020 2:17:48 PM



#68
1-Bromo-4-Fluorobenzene
Concen: 9.980 ppbv
RT: 14.38 min Scan# 3607
Delta R.T. -0.04 min
Lab File: VL035846.D
Acq: 5 Nov 2020 00:01

Tgt Ion	Ratio	Lower	Upper
95	100		
174	79.7	59.8	89.6
175	5.4	4.3	6.5

