

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL080620\
 Data File : VL035345.D
 Acq On : 6 Aug 2020 11:41
 Operator : SY/AP
 Sample : L3557-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1

Manual Integrations
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MMDadoda
 8/7/2020 12:53:32 PM

Quant Time: Aug 07 10:02:18 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL080520AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Aug 0
 QLast Update : Wed Aug 05 13:04:46 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.64	49	1180294	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.16	114	3034766	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.10	117	2921636	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.43	95	2507132	10.29	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.90%

Target Compounds						Ovalue
2) Dichlorodifluoromethane	3.00	85	33342	0.212	ppbv	97
3) Chlorodifluoromethane	2.94	51	46966m	0.349	ppbv	
4) Chloromethane	3.09	50	51522	0.675	ppbv	89
9) Propene	2.98	41	31384m	0.654	ppbv	
10) Heptane	8.11	43	28278m	0.231	ppbv	
11) Trichlorofluoromethane	3.91	101	49490	0.243	ppbv	97
13) Ethanol	3.56	45	1848282	111.621	ppbv	97
15) Acetone	3.80	43	2178487m	12.997	ppbv	
19) Isopropyl Alcohol	3.93	45	369127m	3.474	ppbv	
20) Methylene Chloride	4.31	84	204106	2.986	ppbv	89
26) Hexane	5.66	57	262126	2.373	ppbv #	57
27) Carbon Disulfide	4.52	76	50819	0.329	ppbv #	71
34) 2-Butanone	5.22	43	156187	1.045	ppbv	95
35) Carbon Tetrachloride	7.00	117	14342m	0.069	ppbv	
36) Benzene	6.87	78	53547	0.261	ppbv #	90
37) 1,2-Dichloroethane	6.29	62	18719m	0.131	ppbv	
38) Trichloroethene	7.83	130	4225m	0.045	ppbv	
44) 2,2,4-Trimethylpentane	7.86	57	49990m	0.137	ppbv	
50) 4-Methyl-2-Pentanone	8.75	43	32856m	0.144	ppbv	
52) Tetrachloroethene	11.23	164	6869m	0.085	ppbv	
53) Toluene	9.81	91	2259524	10.136	ppbv	100
58) Ethyl Benzene	12.73	91	89574	0.295	ppbv	92
59) m/p-Xylene	12.99	91	189899m	0.671	ppbv	
60) o-Xylene	13.71	91	74238m	0.264	ppbv	
61) Styrene	13.55	104	38374m	0.224	ppbv	
73) 1,3,5-Trimethylbenzene	16.01	105	35163m	0.114	ppbv	
74) 1,2,4-Trimethylbenzene	16.79	105	83759m	0.238	ppbv	
79) Naphthalene	22.24	128	125326m	0.464	ppbv	
80) Naphthalene,2-methyl-	25.00	142	9137	0.149	ppbv #	92

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

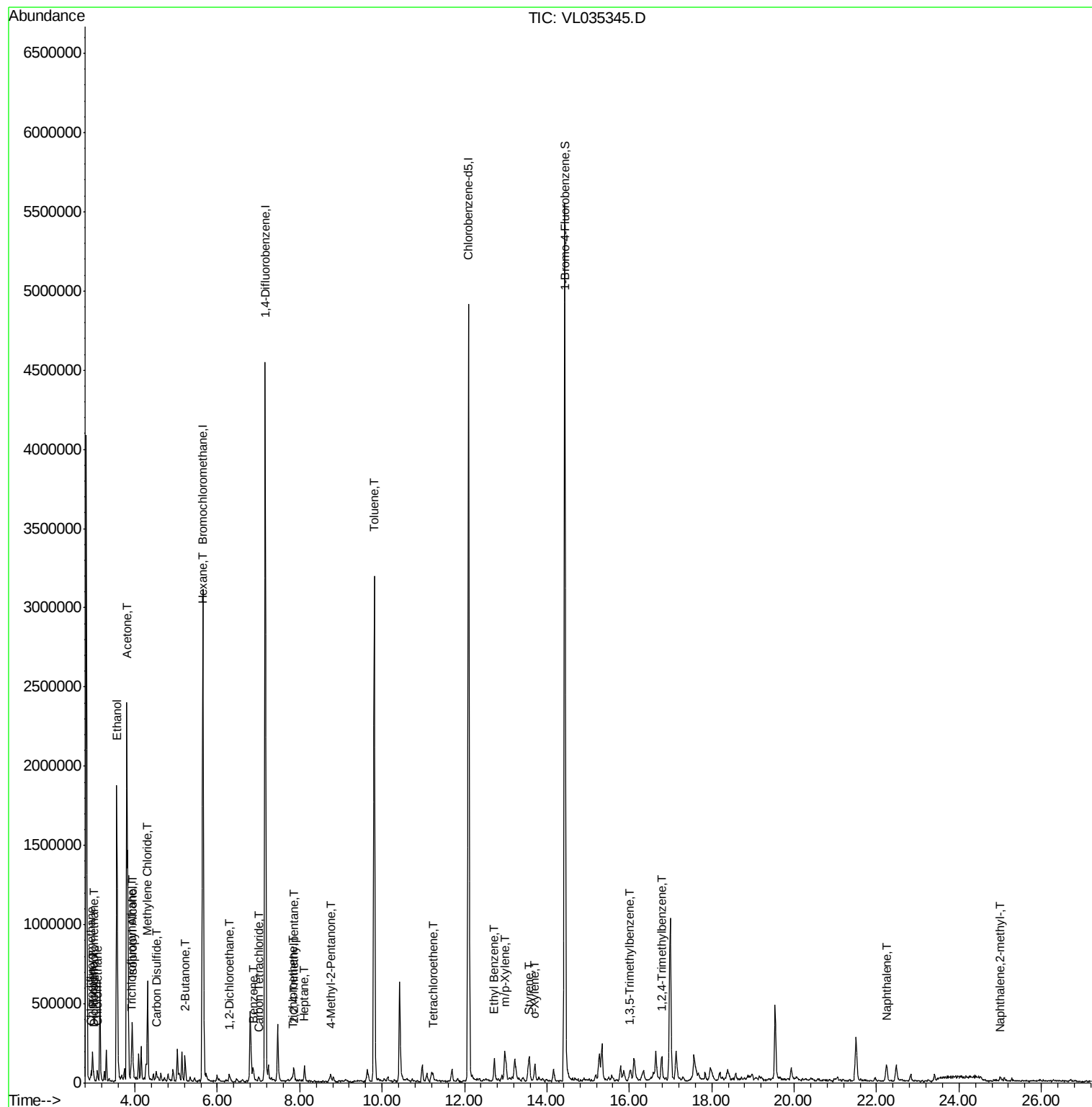
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL080620\
Data File : VL035345.D
Acq On : 6 Aug 2020 11:41
Operator : SY/AP
Sample : L3557-01
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

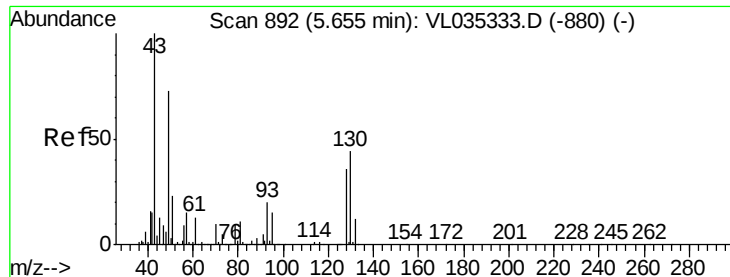
Instrument :
MSVOA_L
ClientSampleId :
IA-1

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Quant Time: Aug 07 10:02:18 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL080520AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Aug
QLast Update : Wed Aug 05 13:04:46 2020
Response via : Initial Calibration





#1

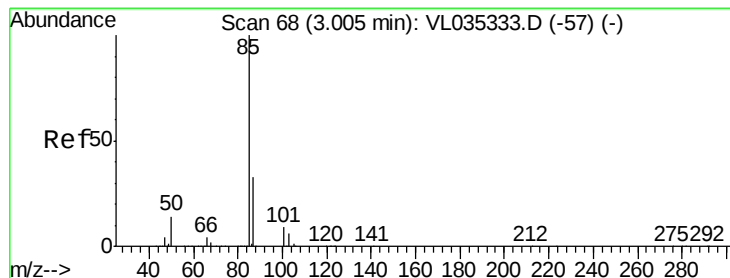
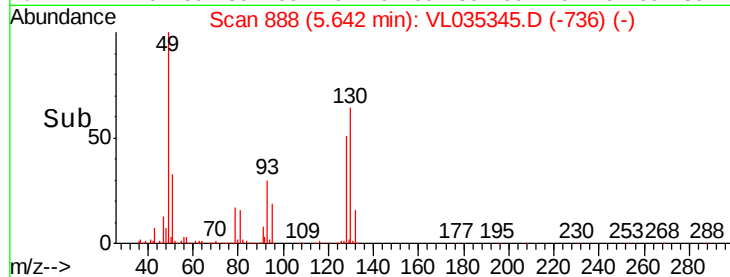
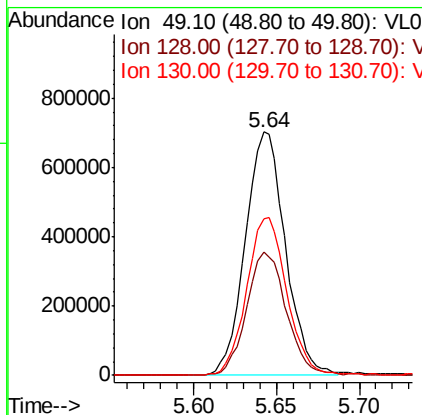
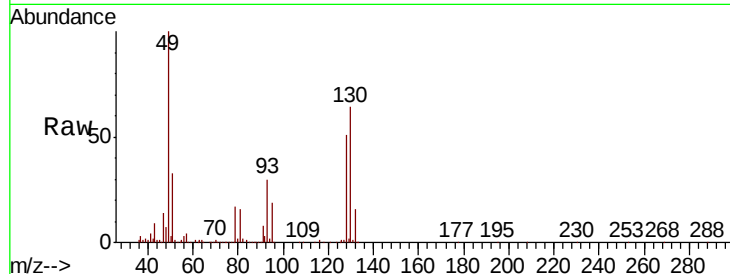
Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.64 min Scan# 888
 Delta R.T. -0.01 min
 Lab File: VL035345.D
 Acq: 6 Aug 2020 11:41

Instrument :
 MSVOA_L
 ClientSampled :
 IA-1

Tot Ion: 49 Resp: 1180294
 Ion Ratio Lower Upper
 49 100
 128 51.0 25.4 76.0
 130 65.5 32.1 96.3

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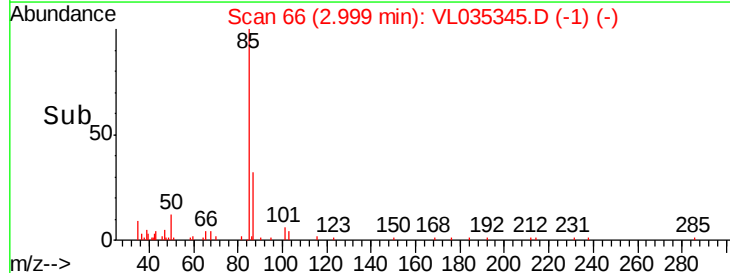
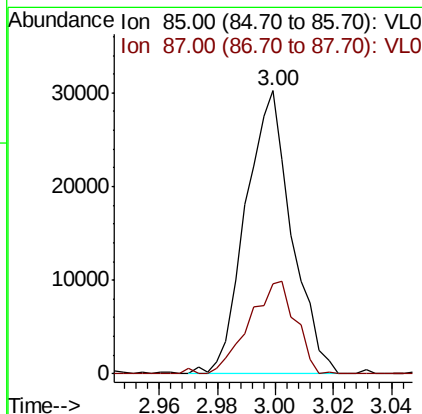
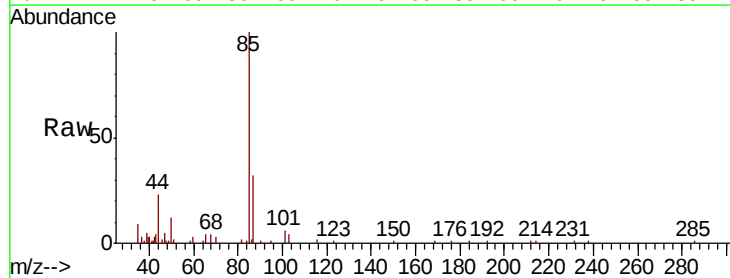
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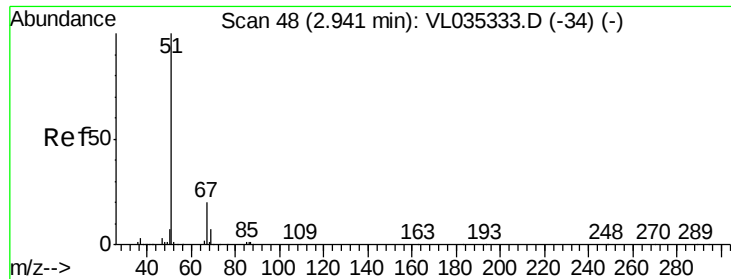


#2

Dichlorodifluoromethane
 Concen: 0.212 ppbv
 RT: 3.00 min Scan# 66
 Delta R.T. -0.01 min
 Lab File: VL035345.D
 Acq: 6 Aug 2020 11:41

Tgt Ion: 85 Resp: 33342
 Ion Ratio Lower Upper
 85 100
 87 31.7 26.7 40.1





#3

Chlorodifluoromethane

Concen: 0.349 ppbv

RT: 2.94 min Scan# 47

Delta R.T. -0.00 min

Lab File: VL035345.D

Acq: 6 Aug 2020 11:41

Instrument :

MSVOA_L

ClientSampleId :

IA-1

Tot Ion: 51 Resp: 46966

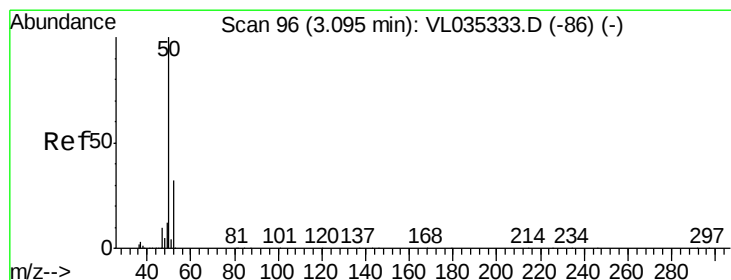
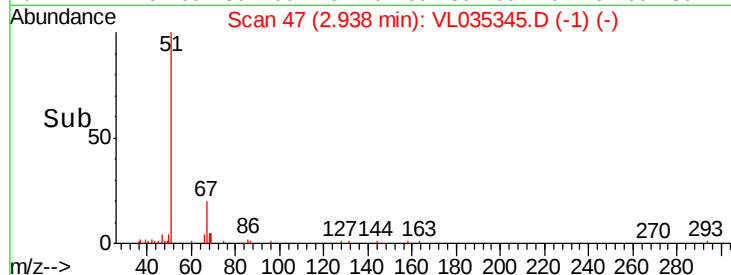
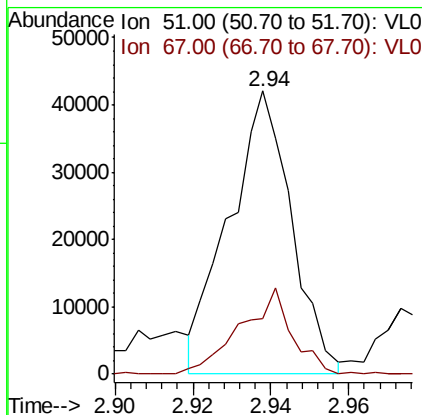
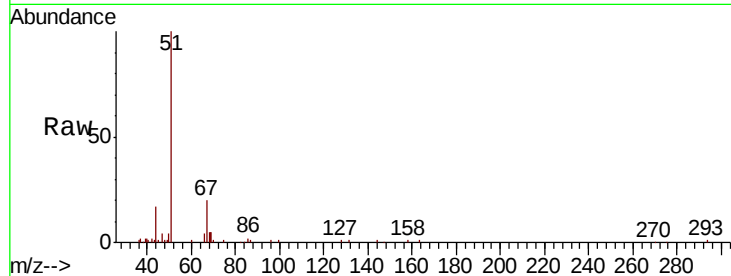
Ion Ratio Lower Upper

51 100

67 25.1 16.6 25.0#

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#4

Chloromethane

Concen: 0.675 ppbv

RT: 3.09 min Scan# 94

Delta R.T. -0.01 min

Lab File: VL035345.D

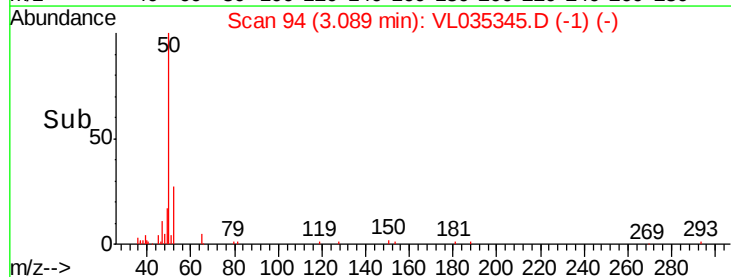
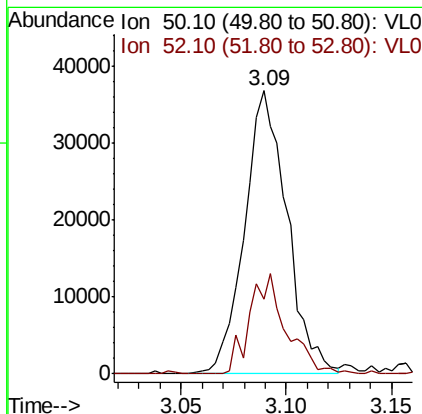
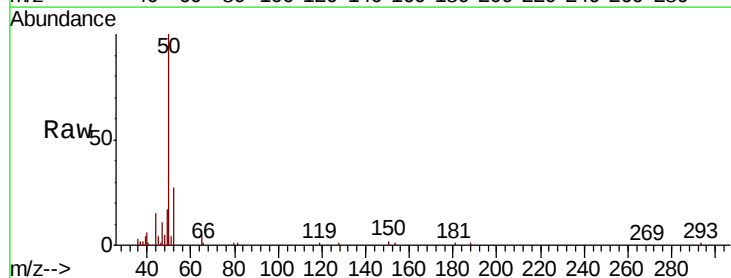
Acq: 6 Aug 2020 11:41

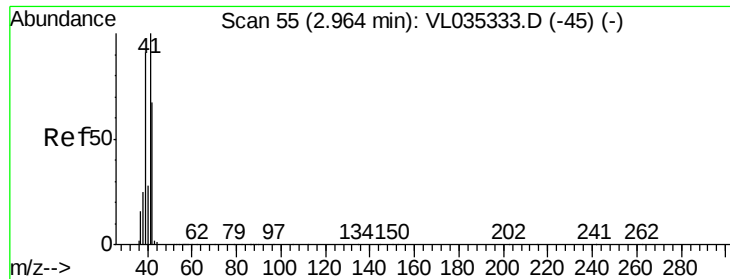
Tgt Ion: 50 Resp: 51522

Ion Ratio Lower Upper

50 100

52 26.6 26.0 39.0





#9

Propene

Concen: 0.654 ppbv m

RT: 2.98 min Scan# 59

Delta R.T. 0.01 min

Lab File: VL035345.D

Acq: 6 Aug 2020 11:41

Instrument :

MSVOA_L

ClientSampleId :

IA-1

Tot Ion: 41 Resp: 31384

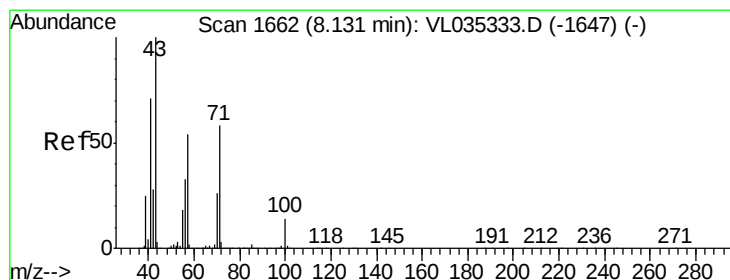
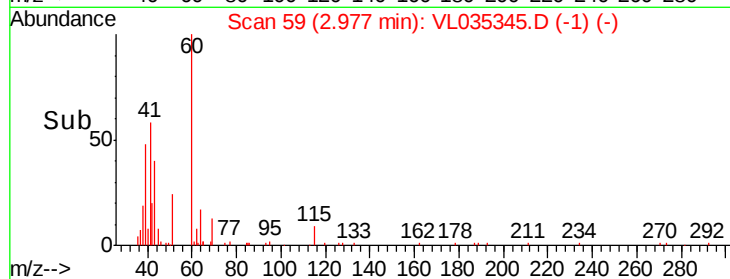
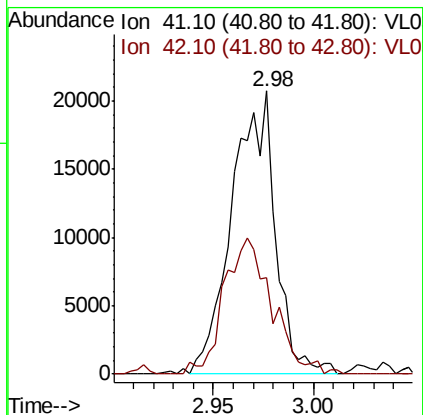
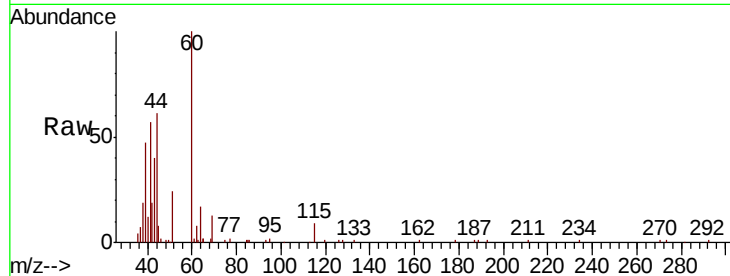
Ion Ratio Lower Upper

41 100

42 53.4 55.3 82.9#

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#10

Heptane

Concen: 0.231 ppbv m

RT: 8.11 min Scan# 1657

Delta R.T. -0.02 min

Lab File: VL035345.D

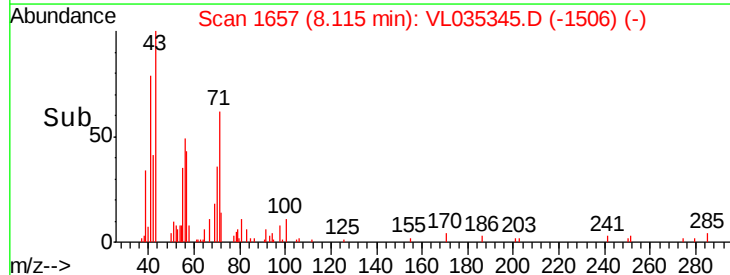
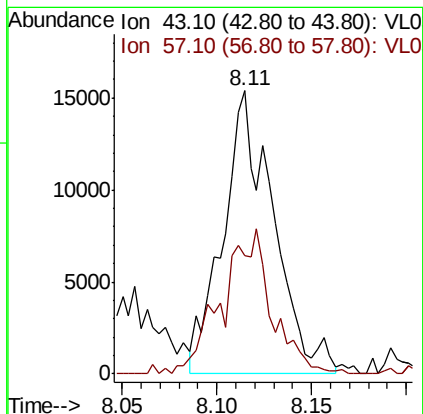
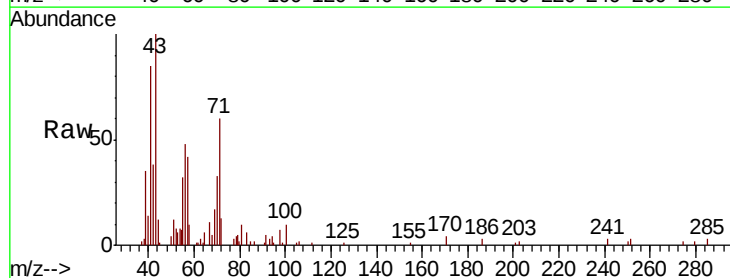
Acq: 6 Aug 2020 11:41

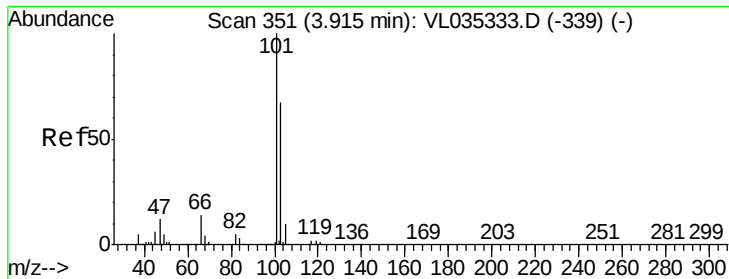
Tgt Ion: 43 Resp: 28278

Ion Ratio Lower Upper

43 100

57 0.0 43.0 64.6#





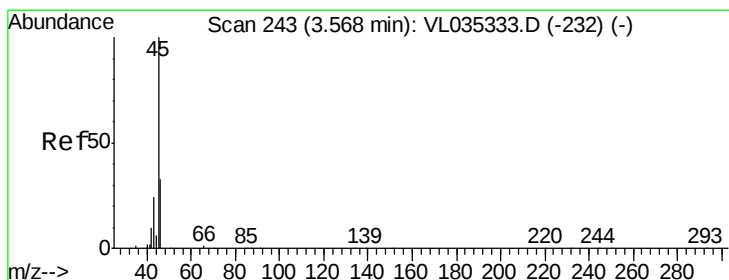
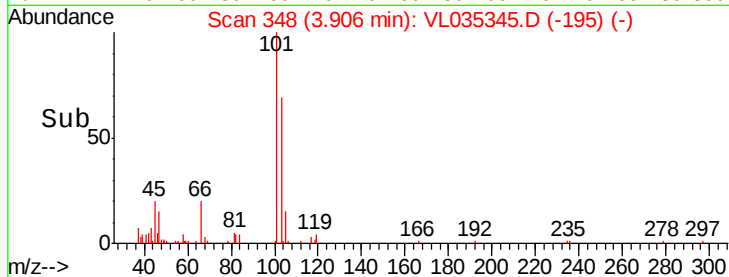
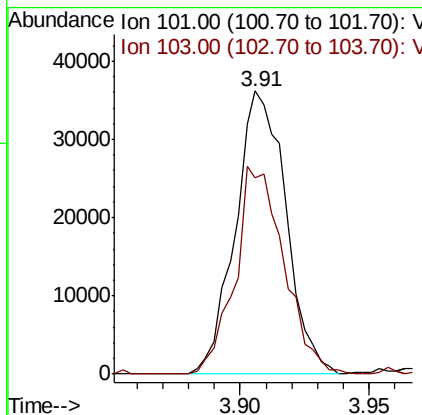
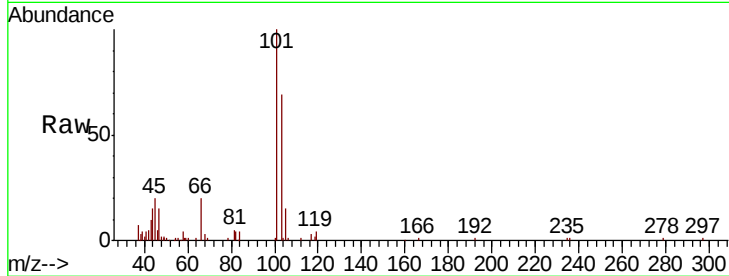
#11
 Trichlorofluoromethane
 Concen: 0.243 ppbv
 RT: 3.91 min Scan# 348
 Delta R.T. -0.01 min
 Lab File: VL035345.D
 Acq: 6 Aug 2020 11:41

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1

Tot Ion	Ratio	Lower	Upper
101	100		
103	69.4	53.8	80.8

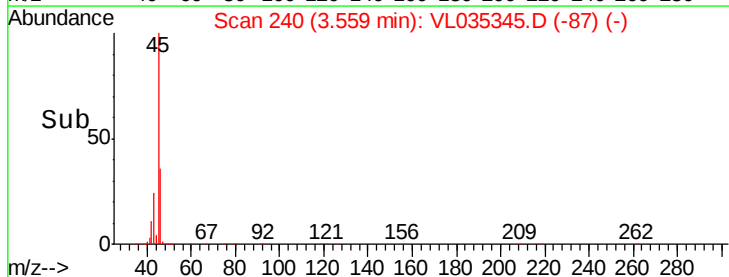
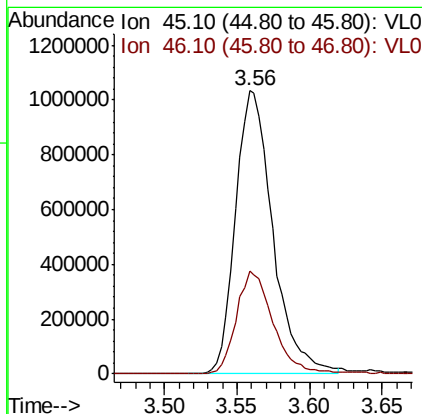
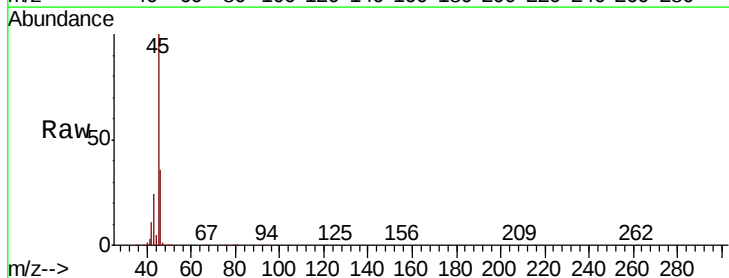
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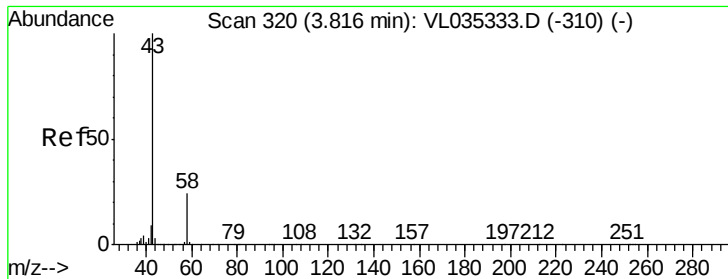
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#13
 Ethanol
 Concen: 111.621 ppbv
 RT: 3.56 min Scan# 240
 Delta R.T. -0.01 min
 Lab File: VL035345.D
 Acq: 6 Aug 2020 11:41

Tgt Ion	Ratio	Lower	Upper
45	100		
46	36.2	15.2	61.0





#15

Acetone

Concen: 12.997 ppbv m

RT: 3.80 min Scan# 316

Delta R.T. -0.01 min

Lab File: VL035345.D

Acq: 6 Aug 2020 11:41

Tot Ion: 43 Resp: 2178487

Ion Ratio Lower Upper

43 100

58 29.8 21.0 31.4

Instrument :

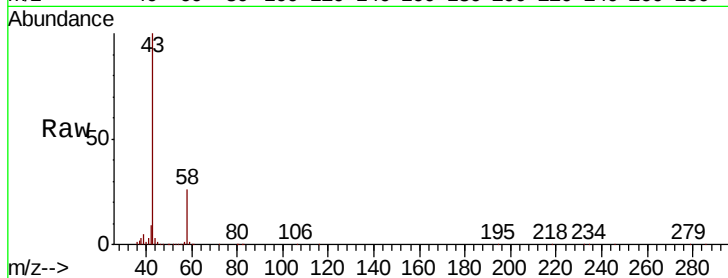
MSVOA_L

ClientSampleId :

IA-1

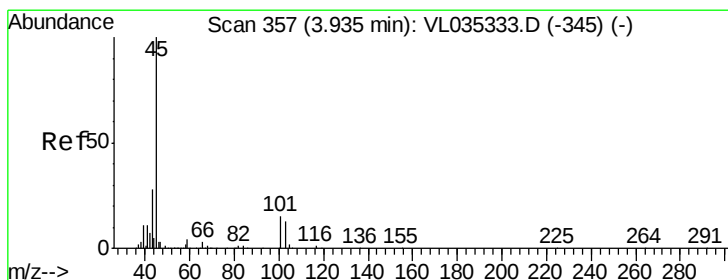
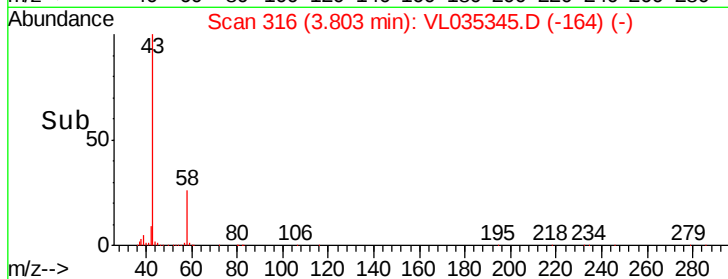
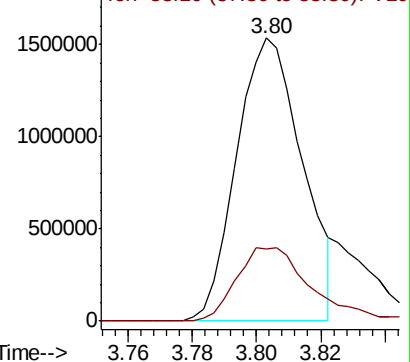
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#19

Isopropyl Alcohol

Concen: 3.474 ppbv m

RT: 3.93 min Scan# 357

Delta R.T. 0.00 min

Lab File: VL035345.D

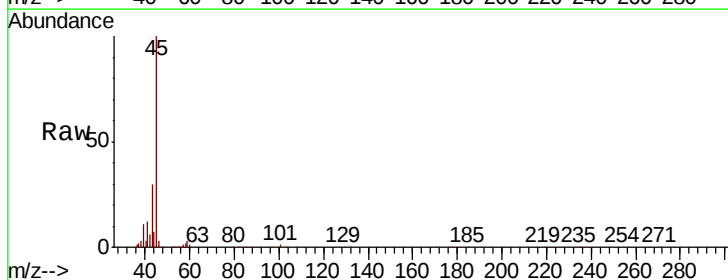
Acq: 6 Aug 2020 11:41

Tgt Ion: 45 Resp: 369127

Ion Ratio Lower Upper

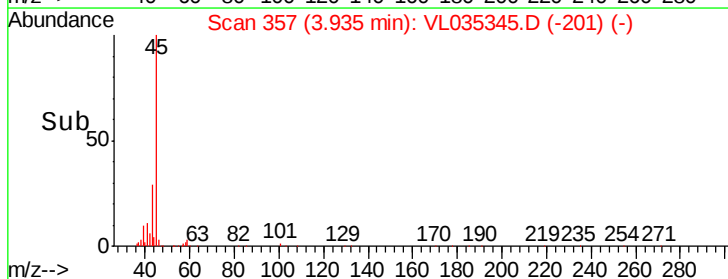
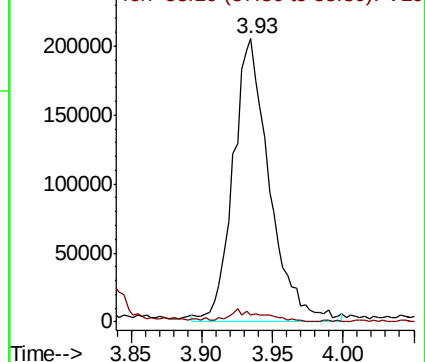
45 100

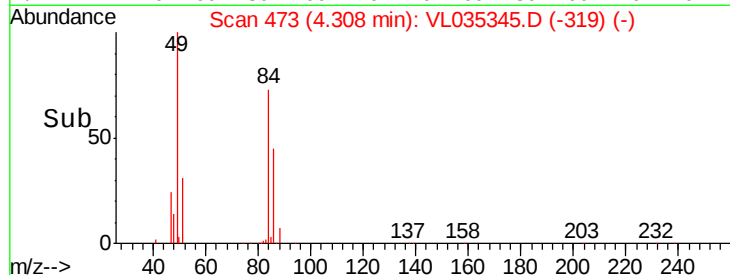
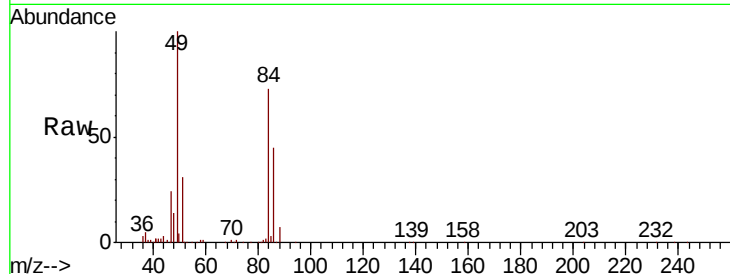
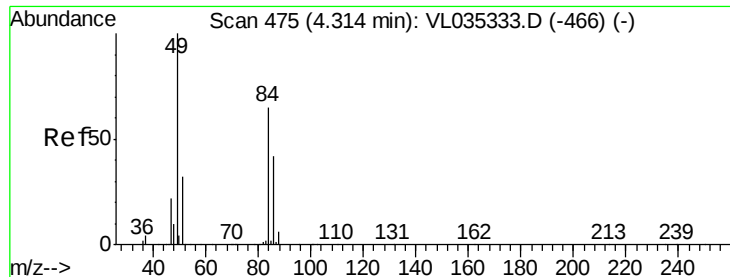
58 0.0 1.9 2.9#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





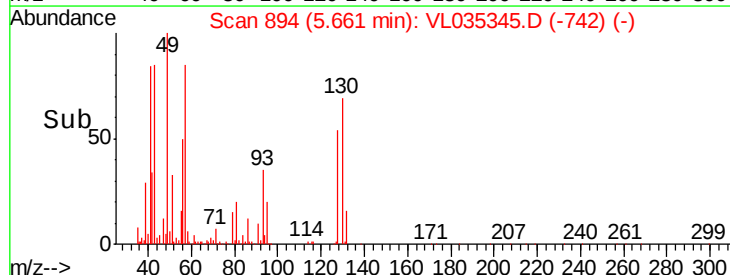
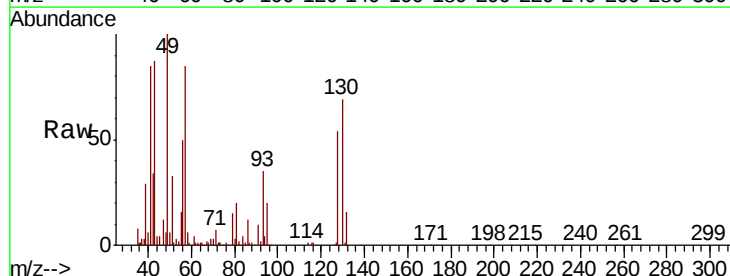
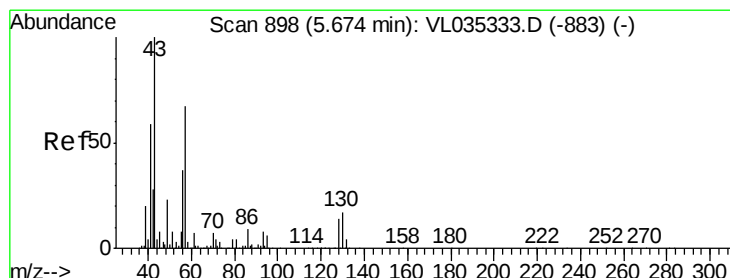
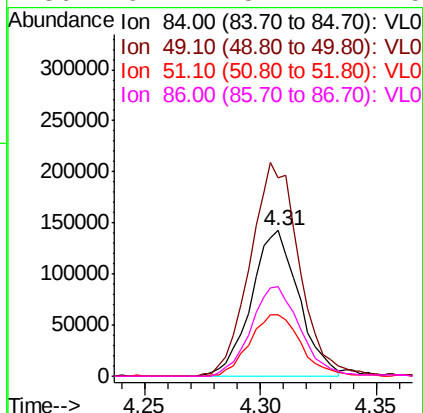
#20
Methvlene Chloride
Concen: 2.986 ppbv
RT: 4.31 min Scan# 473
Delta R.T. -0.01 min
Lab File: VL035345.D
Acq: 6 Aug 2020 11:41

Tot Ion	Ion	Ratio	Resp	Lower	Upper
84	100				
49	136.4	122.8	184.2		
51	42.2	40.1	60.1		
86	61.1	51.7	77.5		

Instrument :
MSVOA_L
ClientSampled :
IA-1

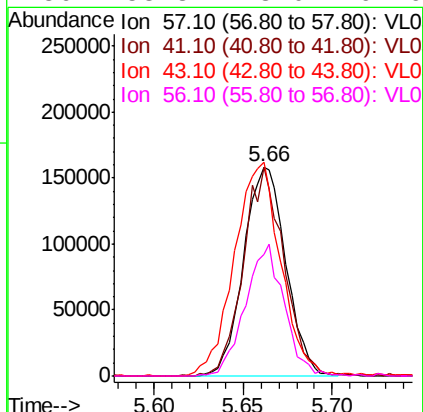
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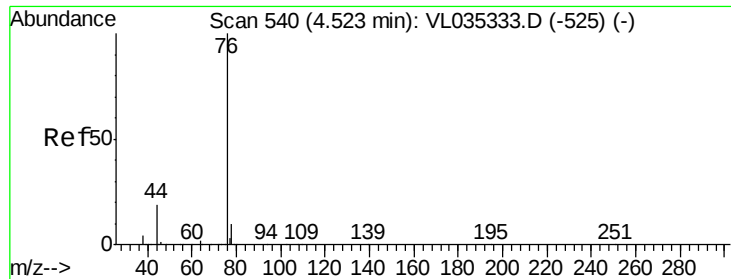
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#26
Hexane
Concen: 2.373 ppbv
RT: 5.66 min Scan# 894
Delta R.T. -0.01 min
Lab File: VL035345.D
Acq: 6 Aug 2020 11:41

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
57	100				
41	96.3	75.2	112.8		
43	113.3	180.6	270.8#		
56	58.3	43.0	64.6		





#27

Carbon Disulfide

Concen: 0.329 ppbv

RT: 4.52 min Scan# 538

Delta R.T. -0.01 min

Lab File: VL035345.D

Acq: 6 Aug 2020 11:41

Instrument :

MSVOA_L

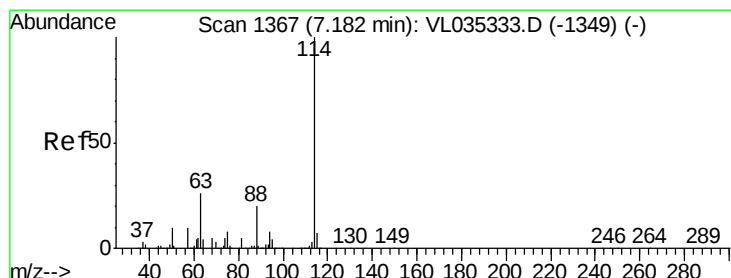
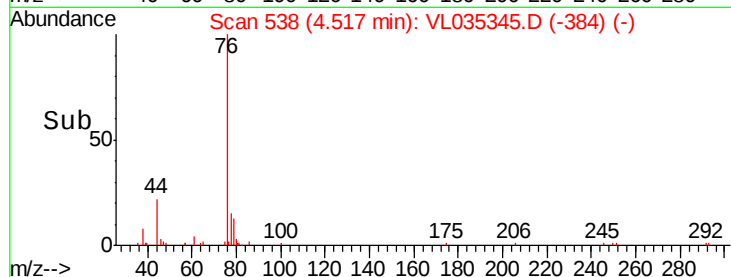
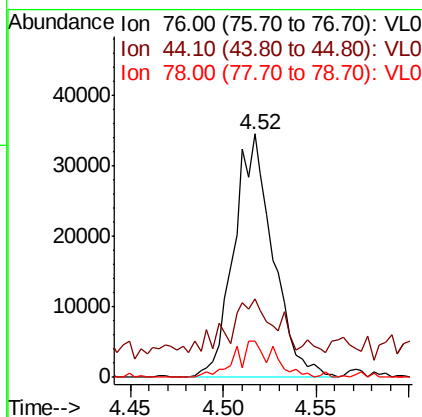
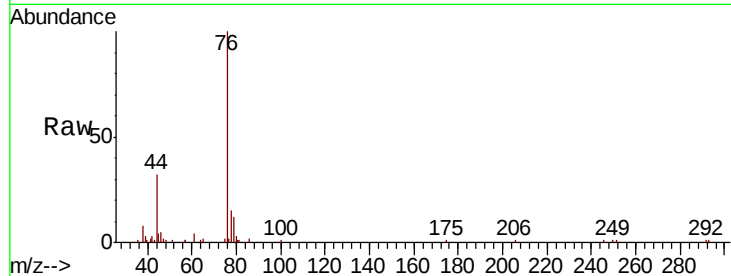
ClientSampleId :

IA-1

Tot Ion:	76	Resp:	50819
Ion Ratio	Lower	Upper	
76	100		
44	35.5	15.4	23.2#
78	15.8	7.7	11.5#

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#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

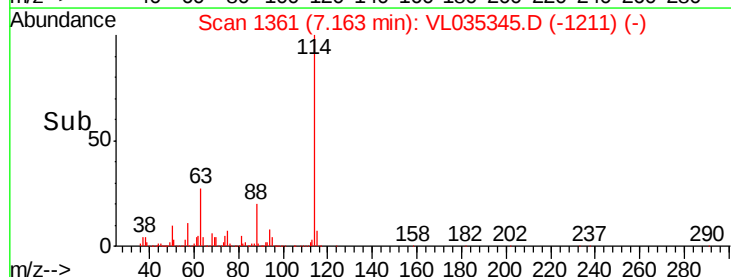
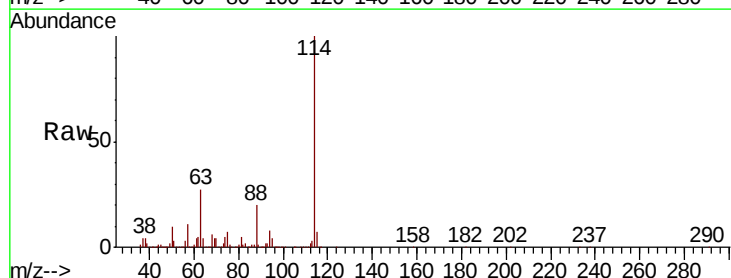
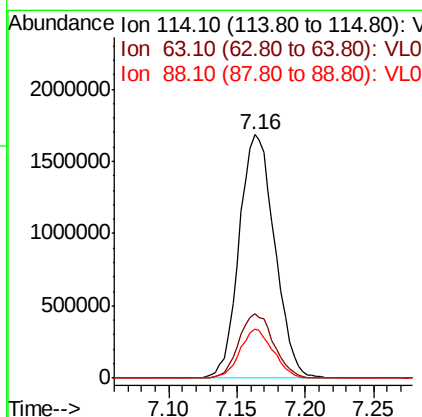
RT: 7.16 min Scan# 1361

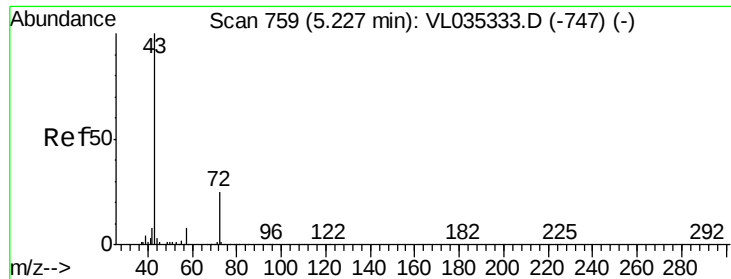
Delta R.T. -0.02 min

Lab File: VL035345.D

Acq: 6 Aug 2020 11:41

Tgt Ion:	114	Resp:	3034766
Ion Ratio	Lower	Upper	
114	100		
63	26.1	21.3	31.9
88	19.0	15.3	22.9





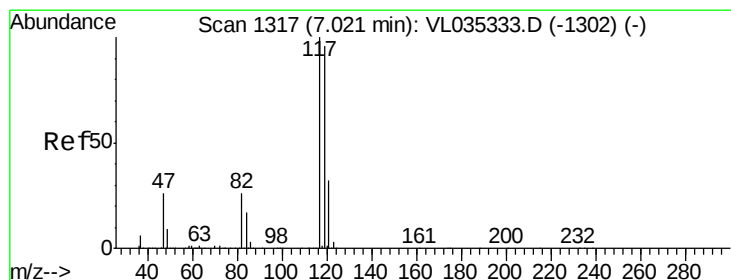
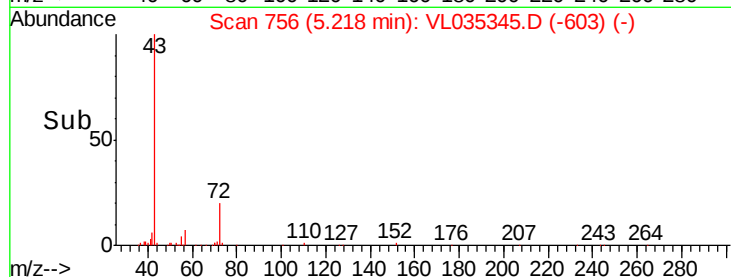
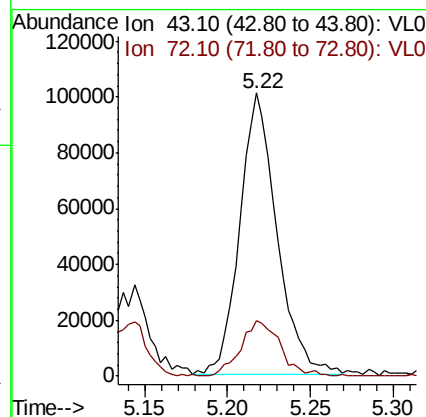
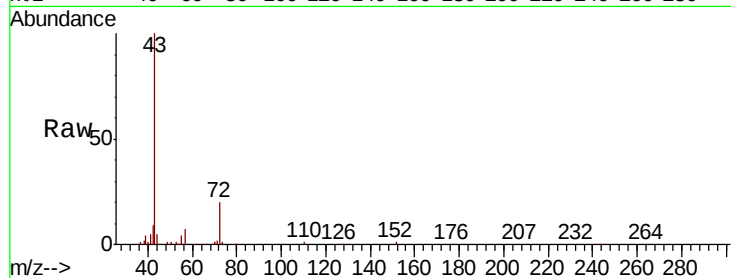
#34
2-Butanone
Concen: 1.045 ppbv
RT: 5.22 min Scan# 756
Delta R.T. -0.01 min
Lab File: VL035345.D
Acq: 6 Aug 2020 11:41

Instrument :
MSVOA_L
ClientSampled :
IA-1

Tot Ion	43	Resp	156187
Ion Ratio	Lower	Upper	
43	100		
72	21.4	18.9	28.3

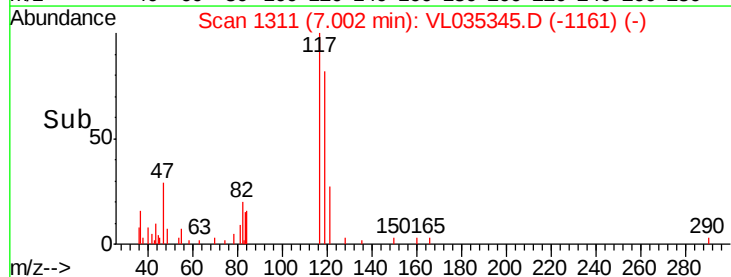
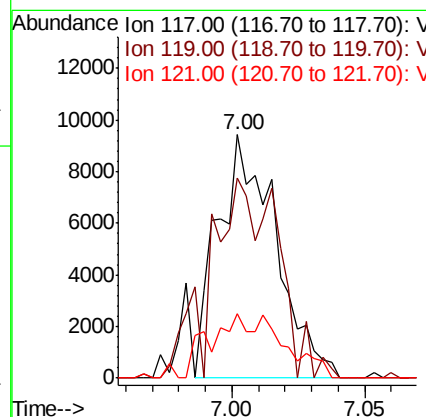
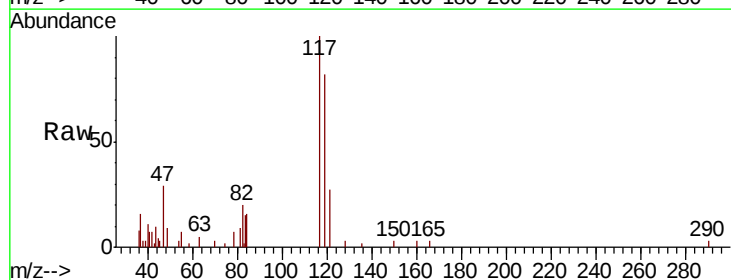
Manual Integrations
APPROVED

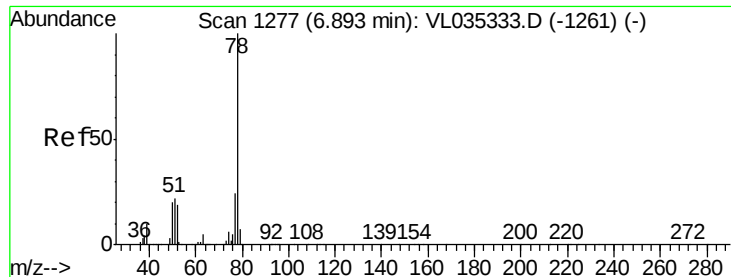
MMDadoda
8/7/2020 12:53:32 PM



#35
Carbon Tetrachloride
Concen: 0.069 ppbv m
RT: 7.00 min Scan# 1311
Delta R.T. -0.02 min
Lab File: VL035345.D
Acq: 6 Aug 2020 11:41

Tgt Ion	117	Resp	14342
Ion Ratio	Lower	Upper	
117	100		
119	82.1	77.0	115.6
121	26.5	26.0	39.0





#36

Benzene

Concen: 0.261 ppbv

RT: 6.87 min Scan# 1271

Delta R.T. -0.02 min

Lab File: VL035345.D

Acq: 6 Aug 2020 11:41

Instrument :

MSVOA_L

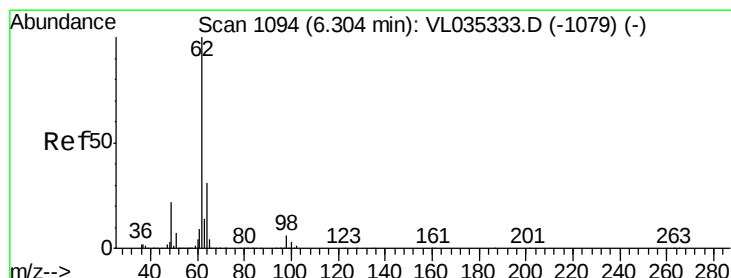
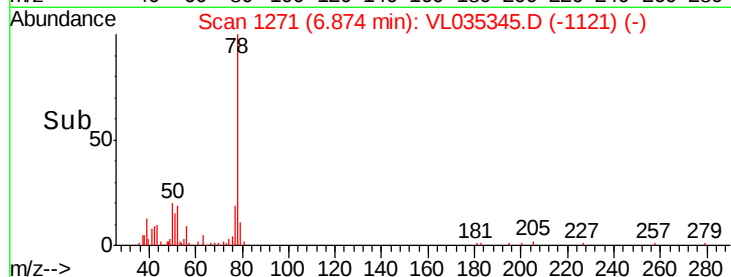
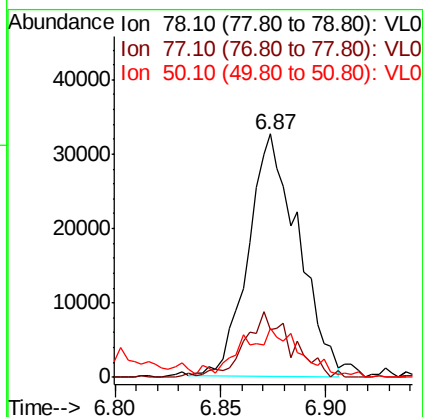
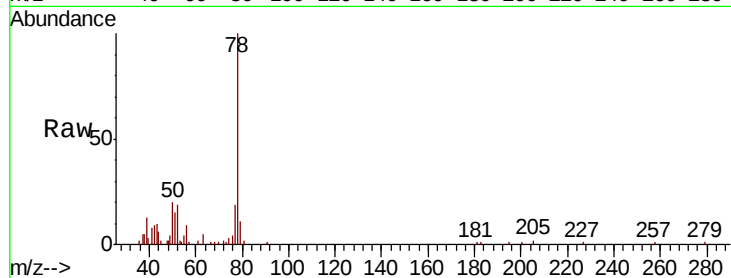
ClientSampleId :

IA-1

Tot Ion:	78	Resp:	53547
Ion	Ratio	Lower	Upper
78	100		
77	18.0	19.3	28.9#
50	16.7	16.3	24.5

Manual Integrations
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#37

1,2-Dichloroethane

Concen: 0.131 ppbv m

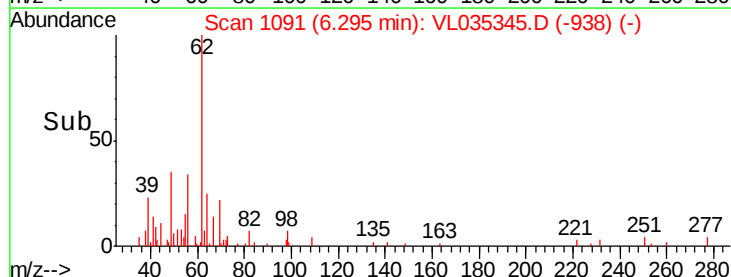
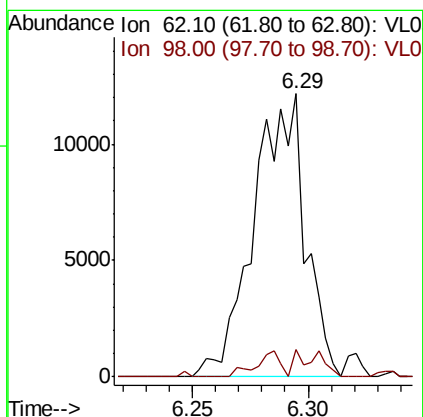
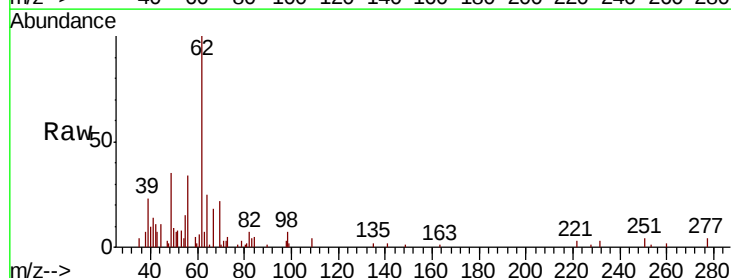
RT: 6.29 min Scan# 1091

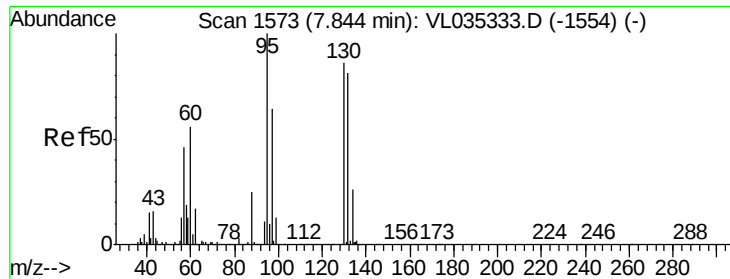
Delta R.T. -0.01 min

Lab File: VL035345.D

Acq: 6 Aug 2020 11:41

Tgt Ion:	62	Resp:	18719
Ion	Ratio	Lower	Upper
62	100		
98	0.0	4.6	7.0#





#38

Trichloroethene

Concen: 0.045 ppbv m

RT: 7.83 min Scan# 1570

Delta R.T. -0.01 min

Lab File: VL035345.D

Acq: 6 Aug 2020 11:41

Instrument :

MSVOA_L

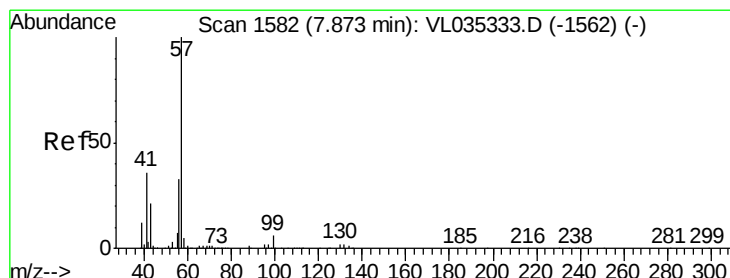
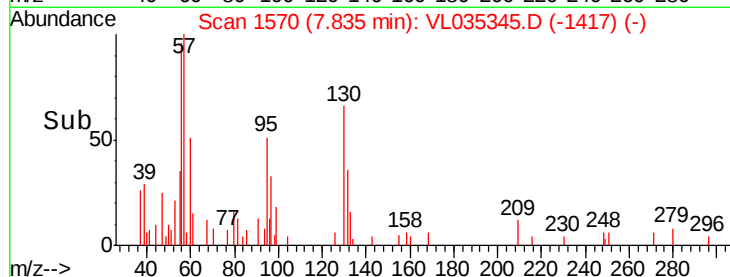
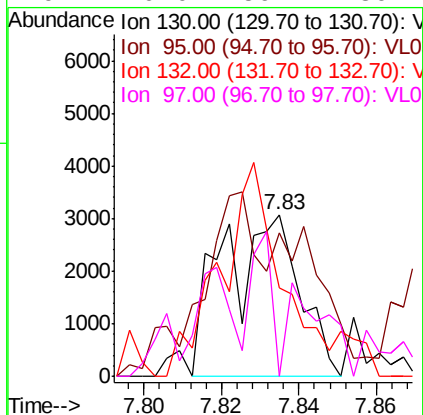
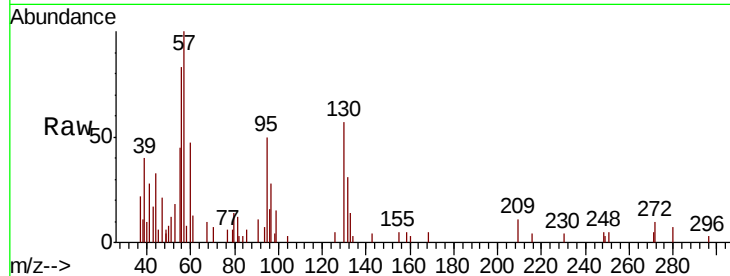
ClientSampled :

IA-1

Tot Ion	Ratio	Lower	Upper
130	100		
95	88.5	93.4	140.2#
132	54.6	76.1	114.1#
97	0.0	59.4	89.2#

Manual Integrations
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8/7/2020 12:53:32 PM



#44

2,2,4-Trimethylpentane

Concen: 0.137 ppbv m

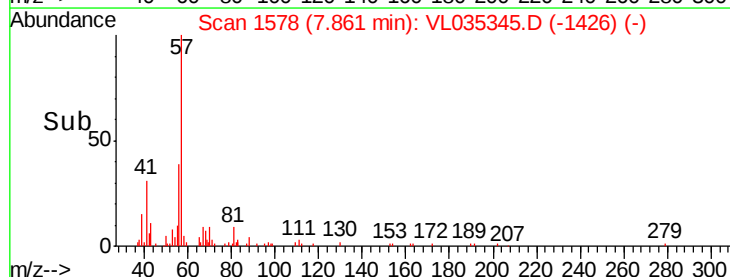
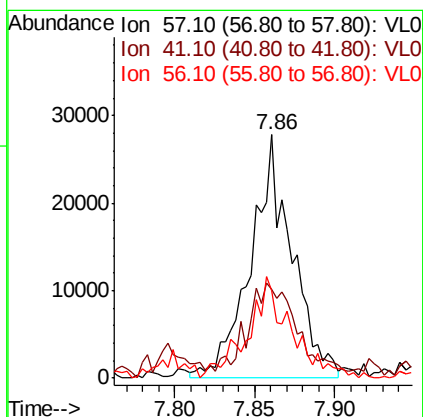
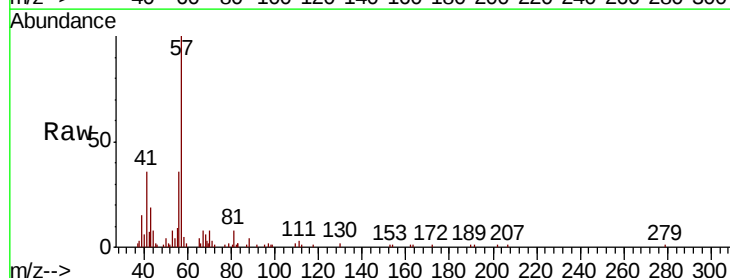
RT: 7.86 min Scan# 1578

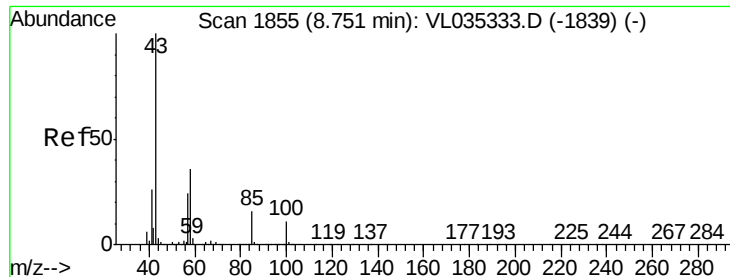
Delta R.T. -0.01 min

Lab File: VL035345.D

Acq: 6 Aug 2020 11:41

Tgt Ion	Ratio	Lower	Upper
57	100		
41	45.2	27.9	41.9#
56	44.0	25.4	38.0#





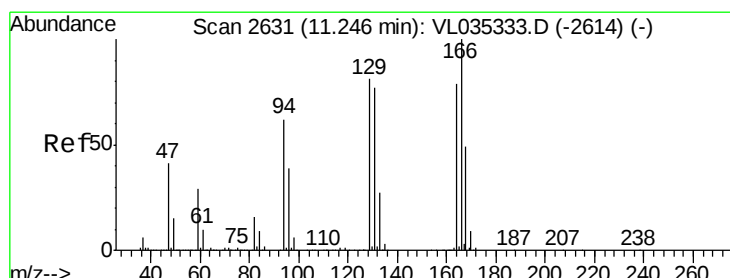
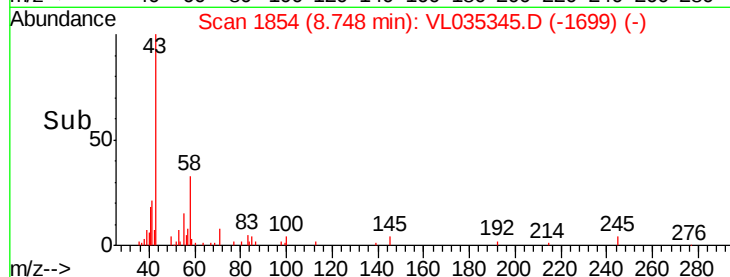
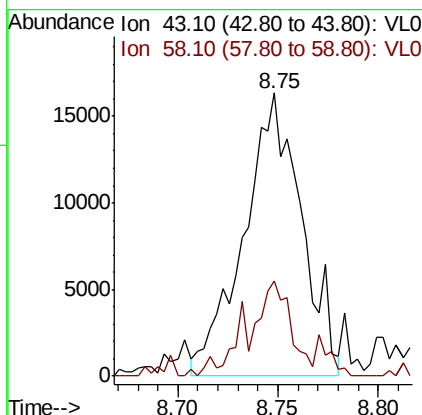
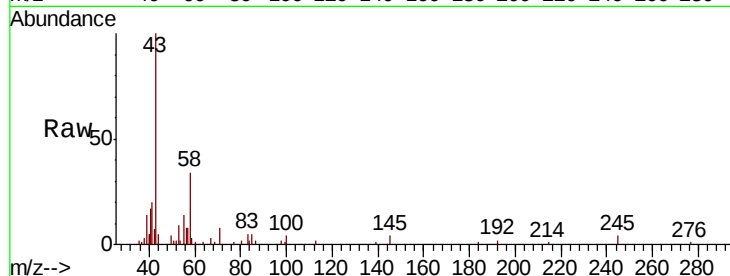
#50
4-Methyl-2-Pentanone
Concen: 0.144 ppbv m
RT: 8.75 min Scan# 1854
Delta R.T. -0.00 min
Lab File: VL035345.D
Acq: 6 Aug 2020 11:41

Instrument :
MSVOA_L
ClientSampleId :
IA-1

Tot Ion	Ratio	Lower	Upper
43	100		
58	28.6	29.2	43.8#

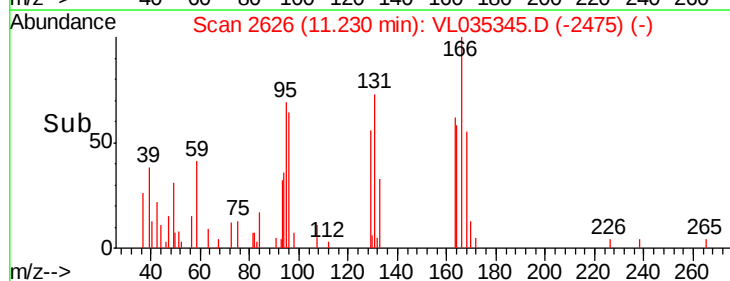
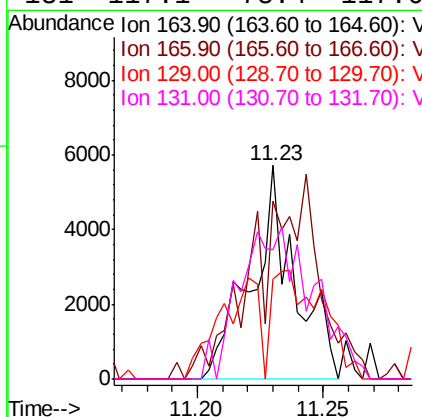
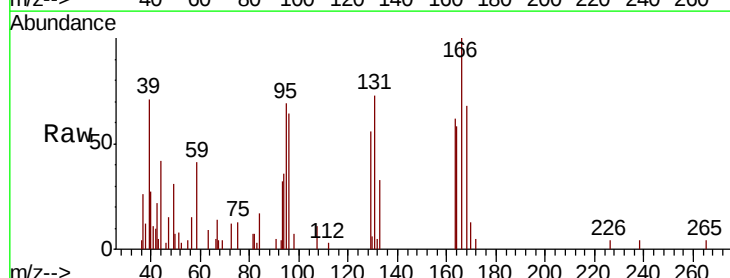
Manual Integrations
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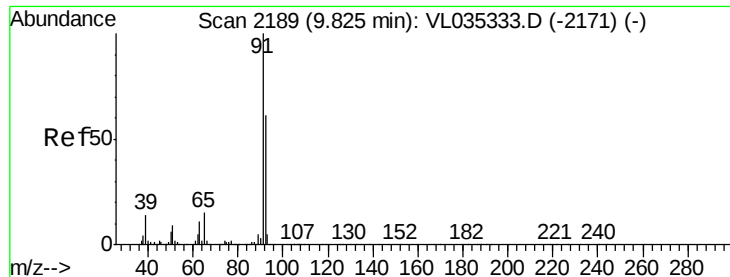
MMDadoda
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#52
Tetrachloroethene
Concen: 0.085 ppbv m
RT: 11.23 min Scan# 2626
Delta R.T. -0.02 min
Lab File: VL035345.D
Acq: 6 Aug 2020 11:41

Tgt Ion	Ratio	Lower	Upper
164	100		
166	160.5	101.4	152.0#
129	89.7	82.1	123.1
131	117.1	78.4	117.6





#53

Toluene

Concen: 10.136 ppbv

RT: 9.81 min Scan# 2183

Delta R.T. -0.02 min

Lab File: VL035345.D

Acq: 6 Aug 2020 11:41

Instrument :

MSVOA_L

ClientSampled :

IA-1

Tot Ion: 91 Resp: 2259524

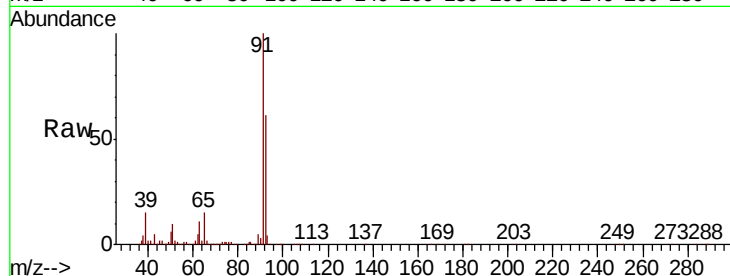
Ion Ratio Lower Upper

91 100

92 60.6 48.5 72.7

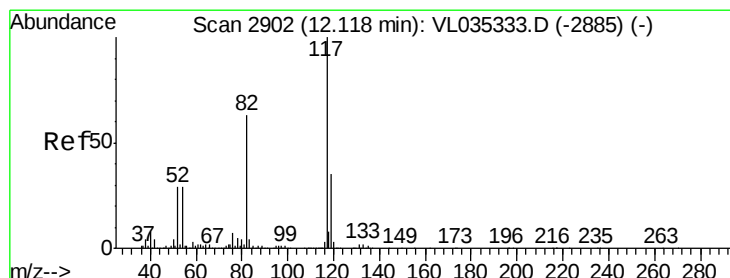
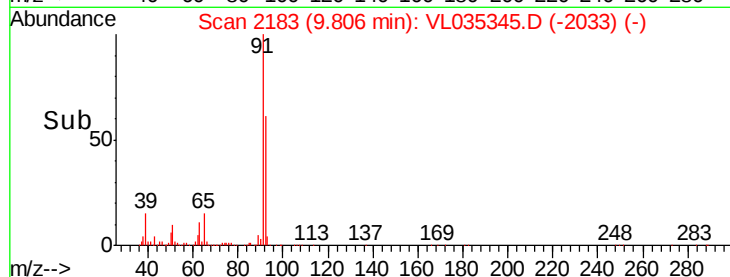
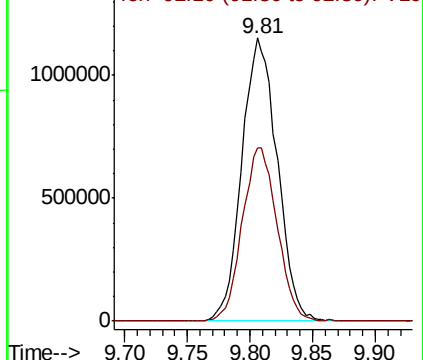
Manual Integrations
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2895

Delta R.T. -0.02 min

Lab File: VL035345.D

Acq: 6 Aug 2020 11:41

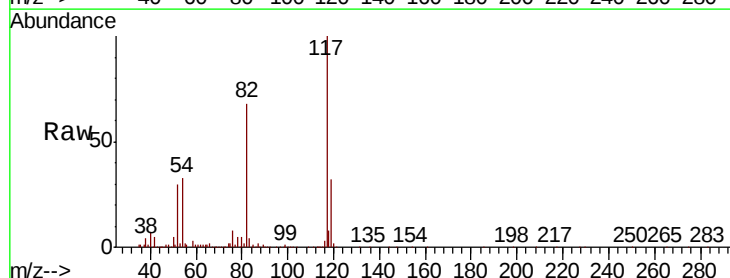
Tgt Ion: 117 Resp: 2921636

Ion Ratio Lower Upper

117 100

82 66.9 51.0 76.4

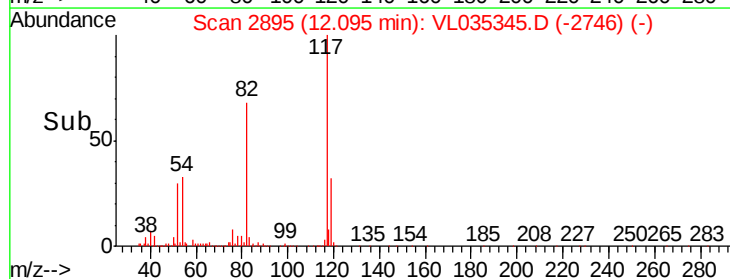
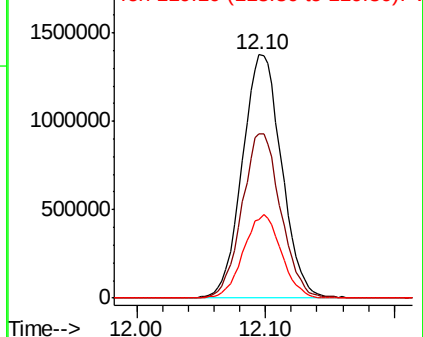
119 33.3 24.7 37.1

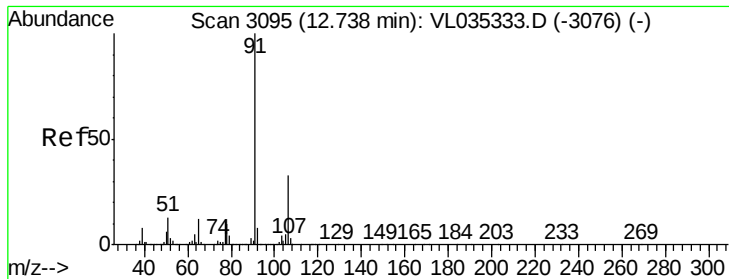


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V





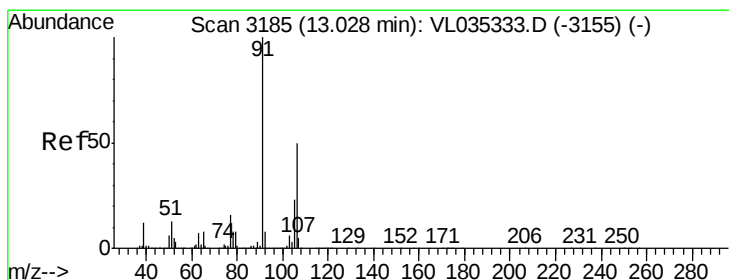
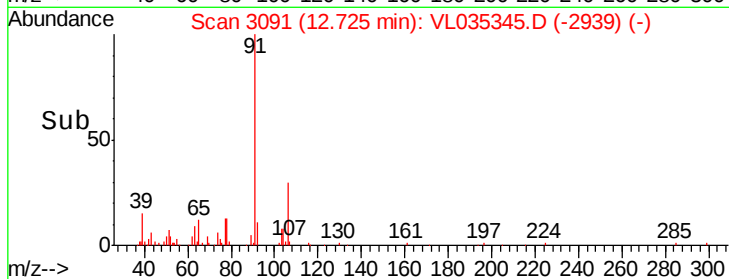
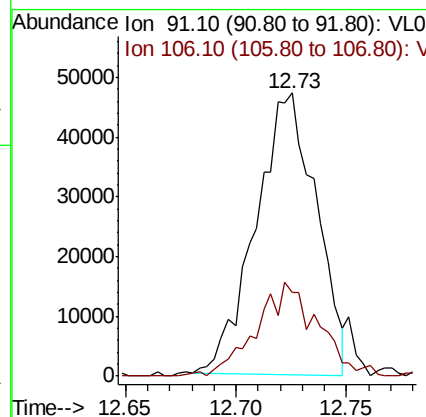
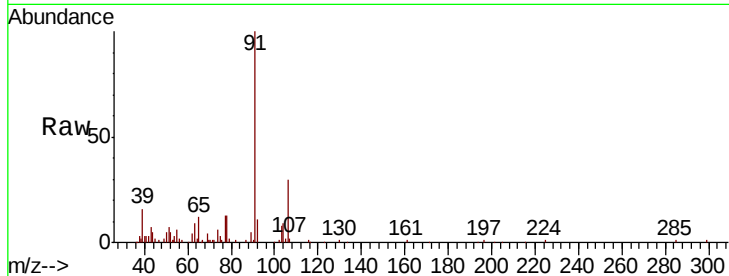
#58
Ethyl Benzene
Concen: 0.295 ppbv
RT: 12.73 min Scan# 3091
Delta R.T. -0.01 min
Lab File: VL035345.D
Acq: 6 Aug 2020 11:41

Instrument :
MSVOA_L
ClientSampled :
IA-1

Tot Ion	Ratio	Lower	Upper
91	100		
106	29.2	26.8	40.2

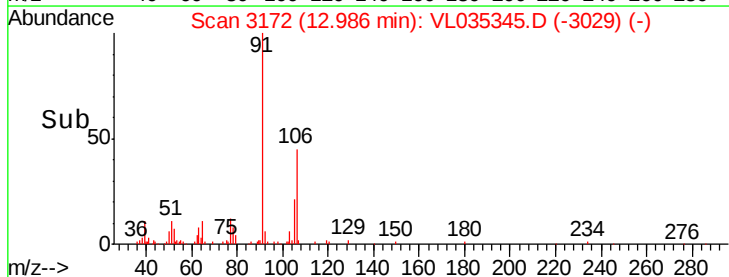
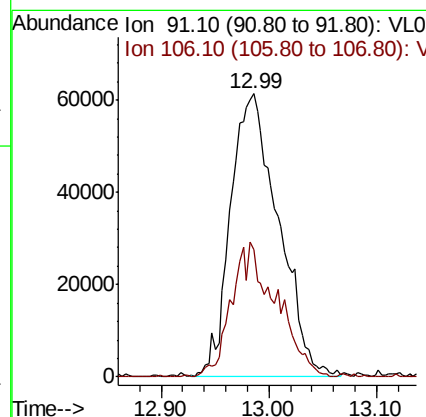
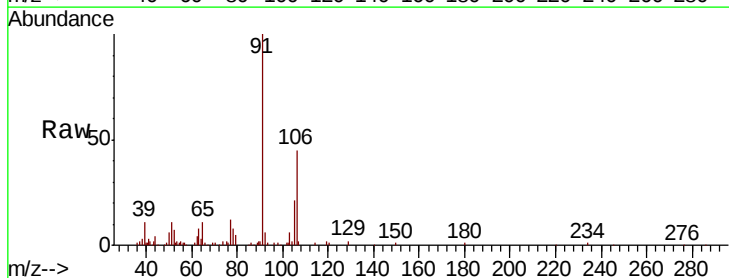
Manual Integrations
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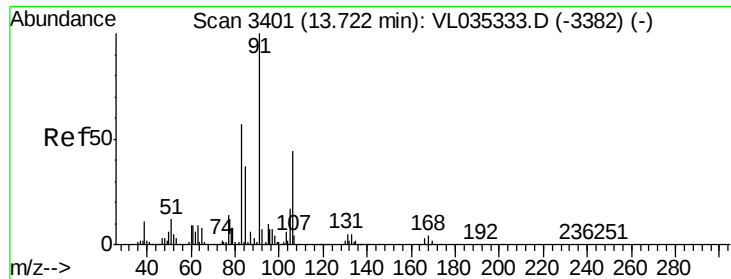
MMDadoda
8/7/2020 12:53:32 PM



#59
m/p-Xylene
Concen: 0.671 ppbv m
RT: 12.99 min Scan# 3172
Delta R.T. -0.04 min
Lab File: VL035345.D
Acq: 6 Aug 2020 11:41

Tgt Ion	Ratio	Lower	Upper
91	100		
106	44.4	37.8	56.8





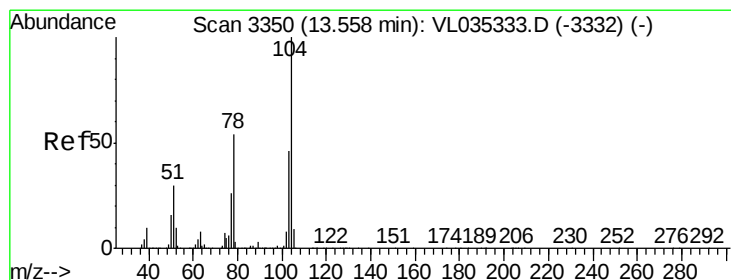
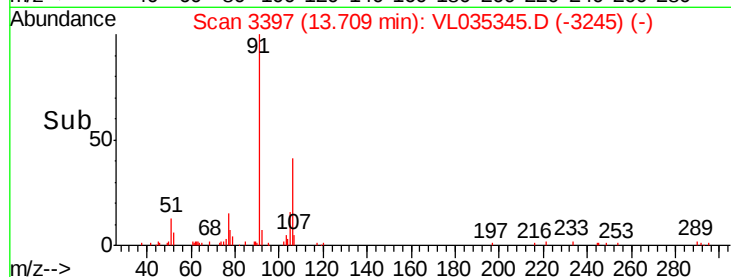
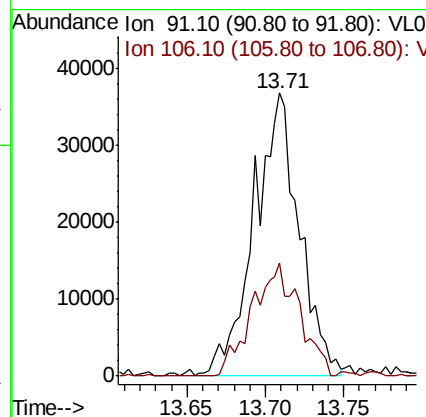
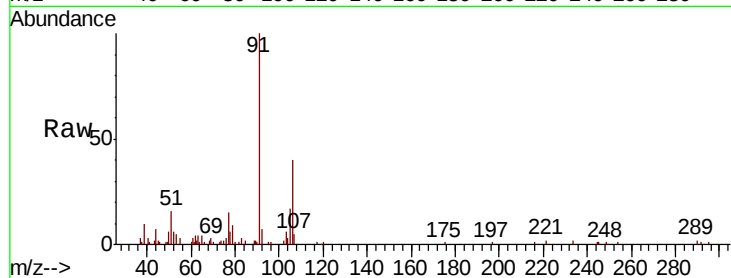
#60
o-Xylene
Concen: 0.264 ppbv m
RT: 13.71 min Scan# 3397
Delta R.T. -0.01 min
Lab File: VL035345.D
Acq: 6 Aug 2020 11:41

Instrument :
MSVOA_L
ClientSampled :
IA-1

Tot Ion	Ratio	Lower	Upper
91	100		
106	42.6	22.7	68.0

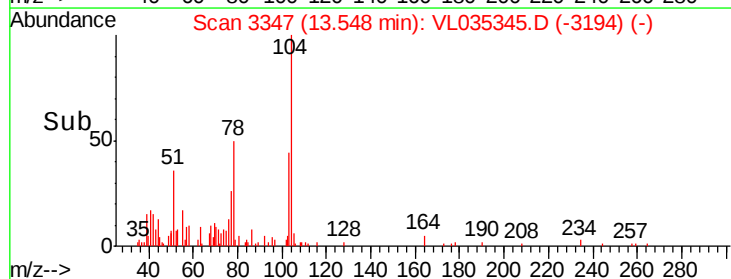
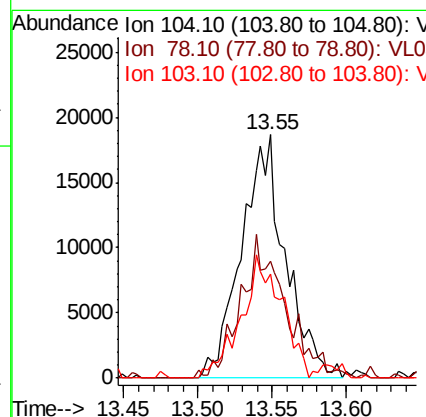
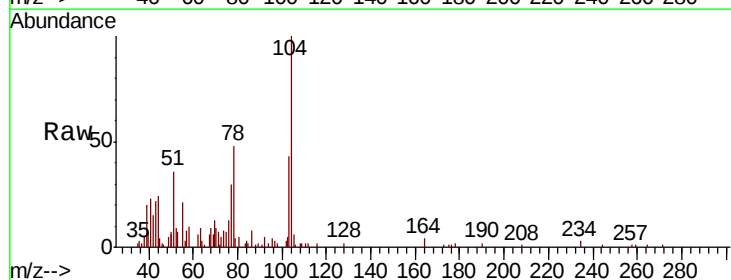
Manual Integrations
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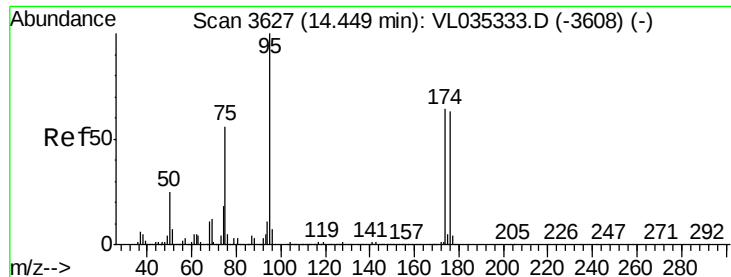
MMDadoda
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#61
Styrene
Concen: 0.224 ppbv m
RT: 13.55 min Scan# 3347
Delta R.T. -0.01 min
Lab File: VL035345.D
Acq: 6 Aug 2020 11:41

Tgt Ion	Ratio	Lower	Upper
104	100		
78	60.2	42.6	63.8
103	49.9	38.1	57.1





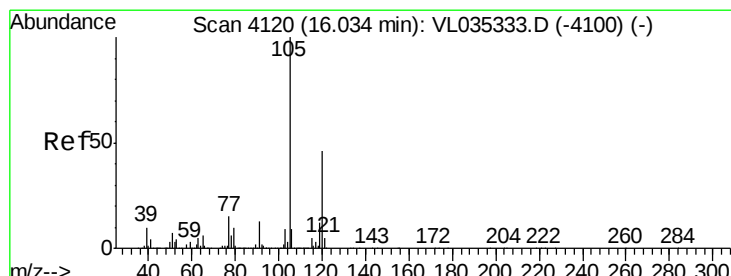
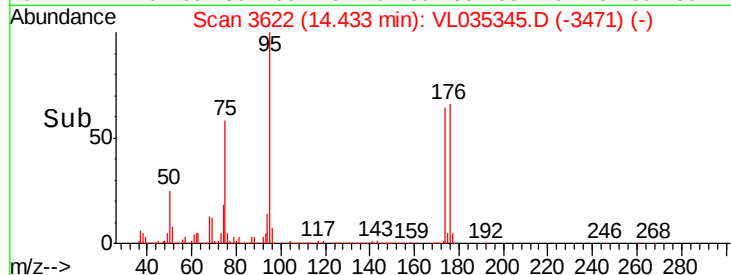
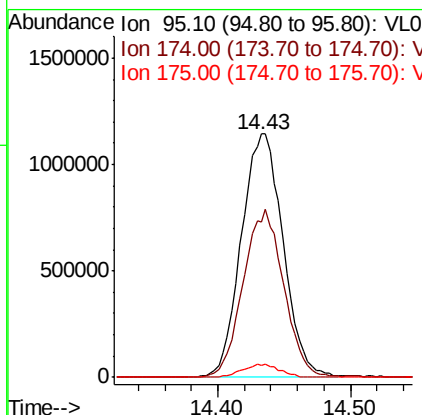
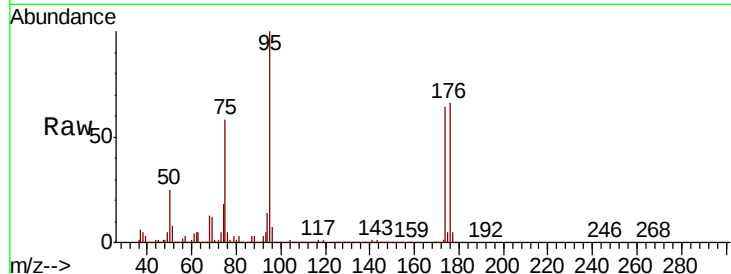
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.290 ppbv
 RT: 14.43 min Scan# 3622
 Delta R.T. -0.02 min
 Lab File: VL035345.D
 Acq: 6 Aug 2020 11:41

Instrument :
 MSVOA_L
 ClientSampled :
 IA-1

Tot Ion: 95 Resp: 2507132
 Ion Ratio Lower Upper
 95 100
 174 67.2 53.5 80.3
 175 4.9 4.2 6.2

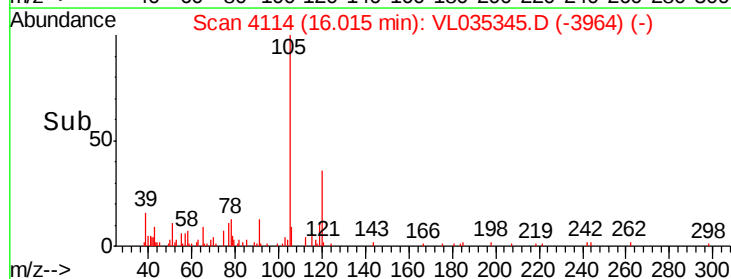
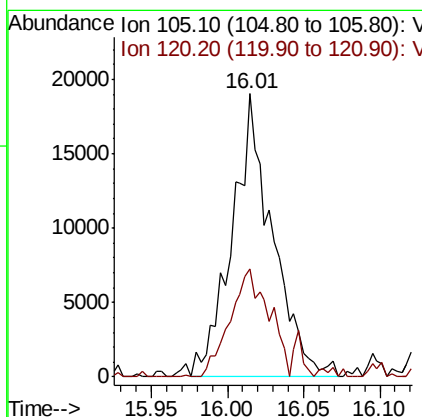
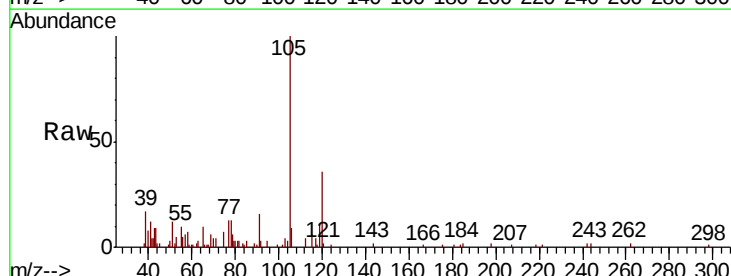
Manual Integrations
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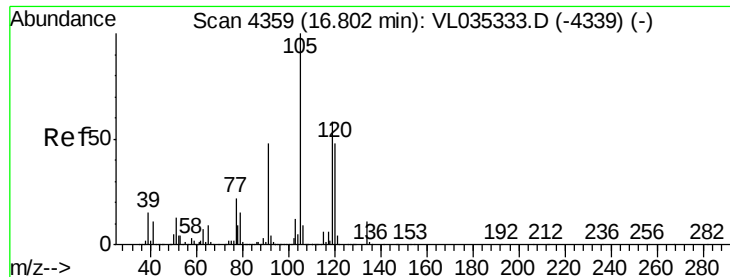
MMDadoda
 8/7/2020 12:53:32 PM



#73
 1,3,5-Trimethylbenzene
 Concen: 0.114 ppbv m
 RT: 16.01 min Scan# 4114
 Delta R.T. -0.02 min
 Lab File: VL035345.D
 Acq: 6 Aug 2020 11:41

Tgt Ion:105 Resp: 35163
 Ion Ratio Lower Upper
 105 100
 120 35.8 36.9 55.3#





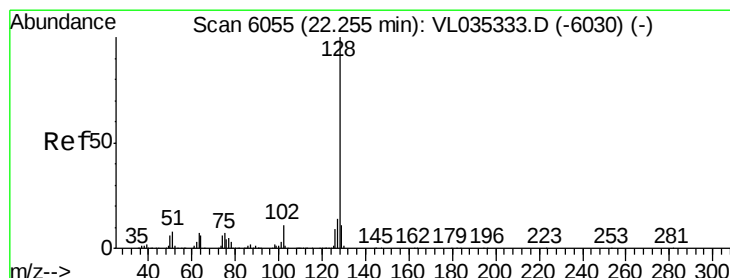
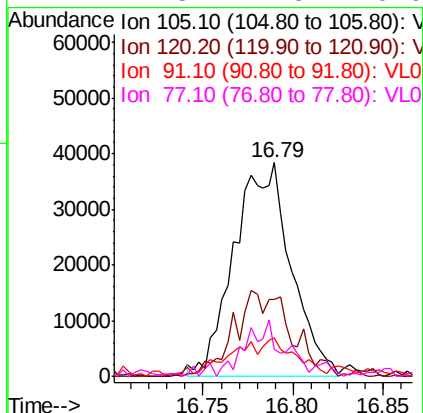
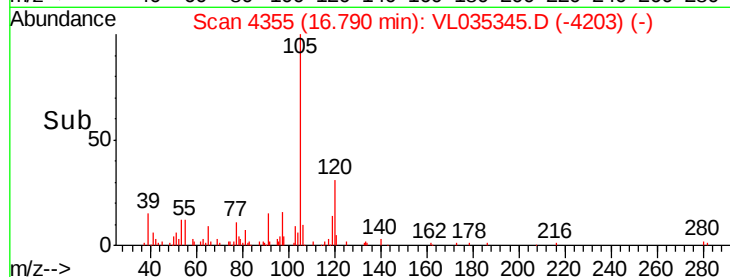
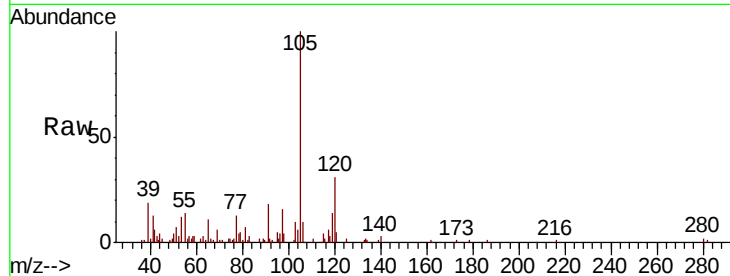
#74
1,2,4-Trimethylbenzene
Concen: 0.238 ppbv m
RT: 16.79 min Scan# 4359
Delta R.T. -0.01 min
Lab File: VL035345.D
Acq: 6 Aug 2020 11:41

Instrument :
MSVOA_L
ClientSampled :
IA-1

Tot Ion	Ion	Ratio	Resp	Lower	Upper
105	100				
120	30.6	38.5	57.7#		
91	18.1	39.0	58.6#		
77	12.8	17.8	26.6#		

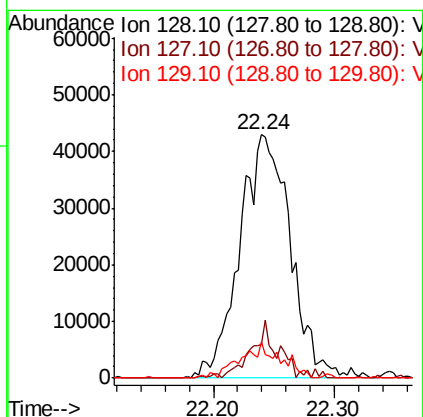
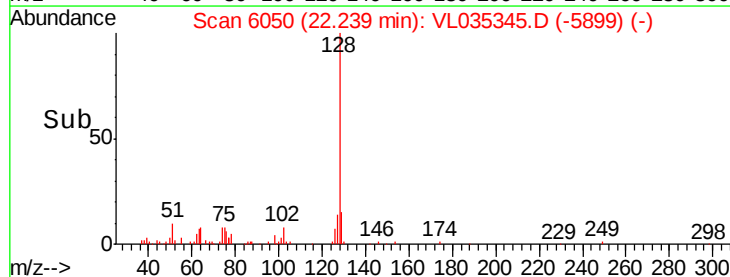
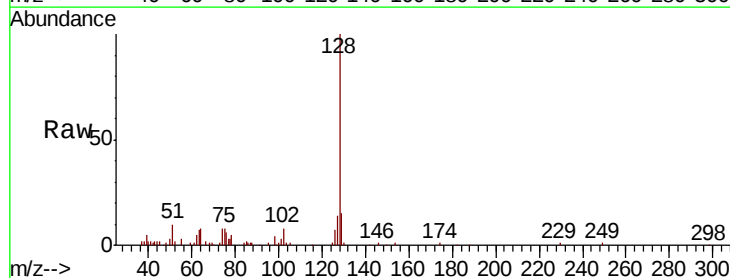
Manual Integrations
APPROVED

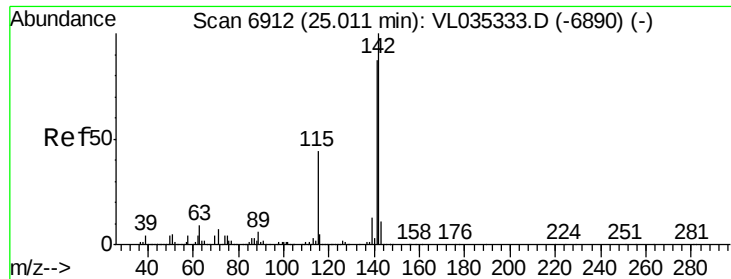
MMDadoda
8/7/2020 12:53:32 PM



#79
Naphthalene
Concen: 0.464 ppbv m
RT: 22.24 min Scan# 6050
Delta R.T. -0.02 min
Lab File: VL035345.D
Acq: 6 Aug 2020 11:41

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
128	100				
127	13.8	11.1	16.7		
129	14.7	8.7	13.1#		





#80
 Naphthalene, 2-methyl-
 Concen: 0.149 ppbv
 RT: 25.00 min Scan# 6908
 Delta R.T. -0.01 min
 Lab File: VL035345.D
 Acq: 6 Aug 2020 11:41

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1

Tot Ion	Ratio	Lower	Upper
142	100		
141	83.6	69.0	103.6
115	56.0	35.5	53.3

Manual Integrations
 APPROVED

MMDadoda
 8/7/2020 12:53:32 PM

