

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032921\
 Data File : VL036554.D
 Acq On : 30 Mar 2021 1:03
 Operator : SY/AP
 Sample : M1759-05
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 EP-103

Manual Integrations
 APPROVED

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 3/30/2021 7:44:30 PM

Quant Time: Mar 30 11:48:32 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 25 2021
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1556195	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	3327484	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.07	117	3171735	10.00	ppbv	-0.02

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.40	95	2508755	9.92	ppbv	-0.03	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.20%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.03	85	36906m	0.145	ppbv	
3) Chlorodifluoromethane	2.97	51	57148	0.197	ppbv	# 90
4) Chloromethane	3.13	50	43166	0.420	ppbv	90
9) Propene	3.01	41	32697	0.353	ppbv	99
11) Trichlorofluoromethane	3.93	101	50246	0.194	ppbv	85
13) Ethanol	3.64	45	30993328m	2807.878	ppbv	
15) Acetone	3.83	43	3149004m	20.559	ppbv	
17) tert-Butyl alcohol	4.35	59	164758m	1.236	ppbv	
19) Isopropyl Alcohol	4.02	45	5395895m	64.042	ppbv	
20) Methylene Chloride	4.33	84	47917m	0.668	ppbv	
28) Methyl tert-Butyl Ether	5.00	73	131711m	0.661	ppbv	
29) Chloroform	5.73	83	73770	0.273	ppbv	88
32) 1,1,1-Trichloroethane	6.48	97	11762m	0.043	ppbv	
34) 2-Butanone	5.23	43	205852	1.267	ppbv	96
35) Carbon Tetrachloride	7.00	117	19769m	0.077	ppbv	
36) Benzene	6.87	78	78975	0.257	ppbv	95
38) Trichloroethene	7.81	130	62185m	0.521	ppbv	
41) Tetrahydrofuran	6.03	42	22142m	0.296	ppbv	
53) Toluene	9.78	91	218874	0.670	ppbv	96
59) m/p-Xylene	12.95	91	104402m	0.259	ppbv	
60) o-Xylene	13.67	91	40023m	0.103	ppbv	
61) Styrene	13.51	104	67770m	0.346	ppbv	
76) 1,4-Dichlorobenzene	17.12	146	74398m	0.313	ppbv	

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

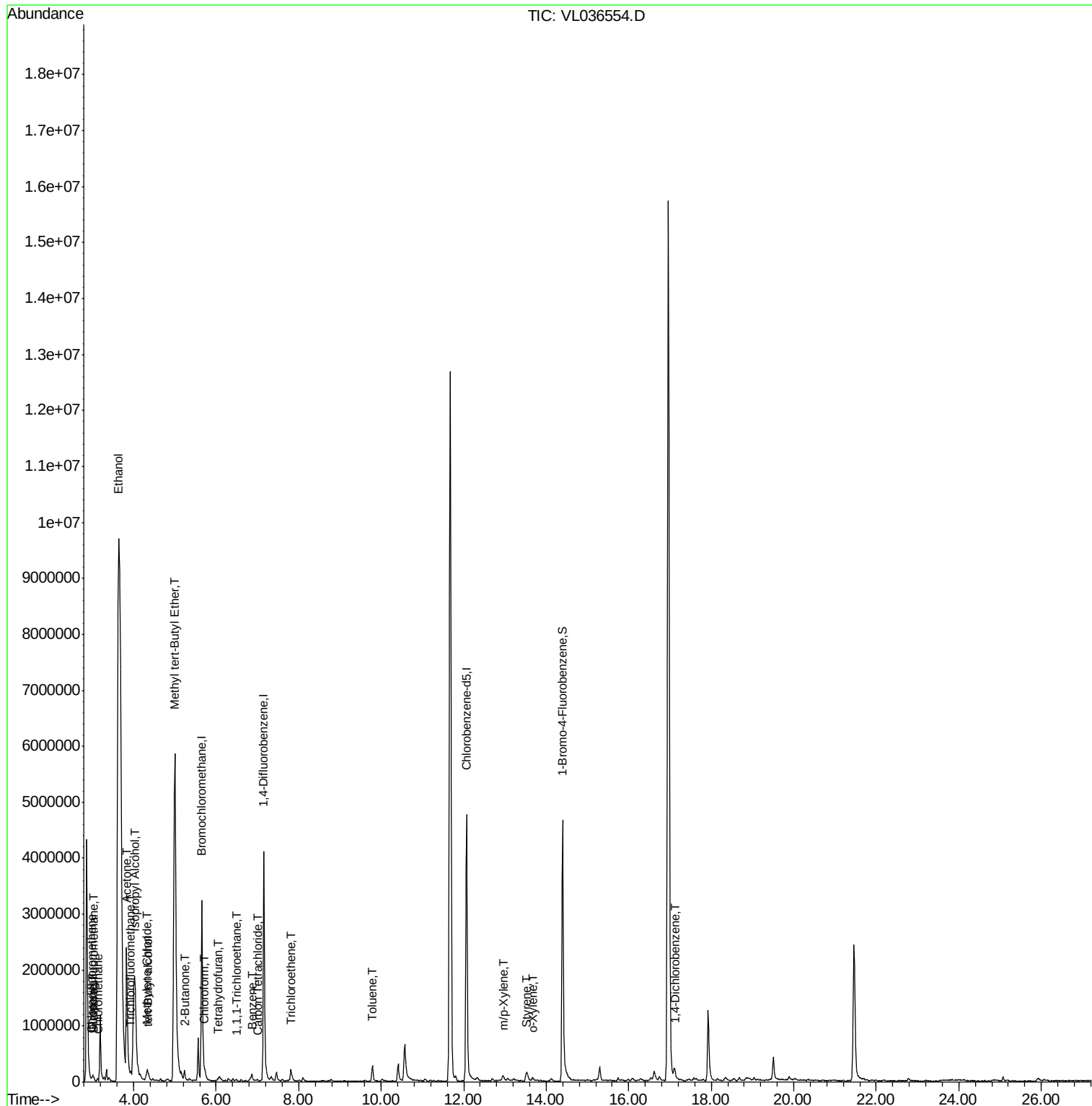
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL032921\
Data File : VL036554.D
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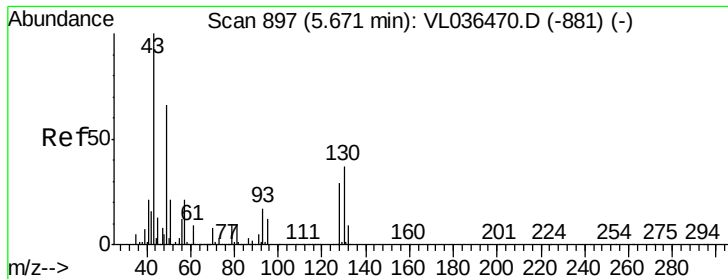
Instrument :
MSVOA_L
ClientSampleId :
EP-103

Manual Integrations

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Quant Time: Mar 30 11:48:32 2021
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LThu Mar
QLast Update : Thu Mar 25 09:42:40 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 890

Delta R.T. -0.02 min

Lab File: VL036554.D

Acq: 30 Mar 2021 1:03

Instrument :

MSVOA_L

ClientSampleId :

EP-103

Tot Ion: 49 Resp: 1556195

Ion Ratio Lower Upper

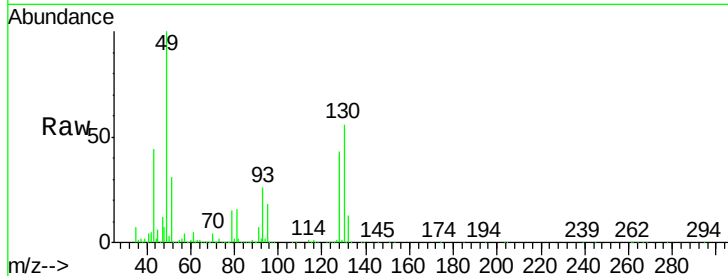
49 100

128 44.7 23.5 70.6

130 56.7 29.1 87.4

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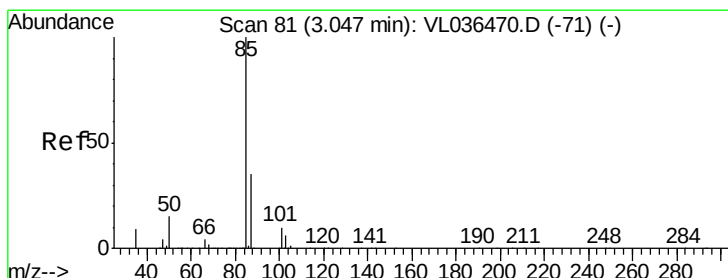
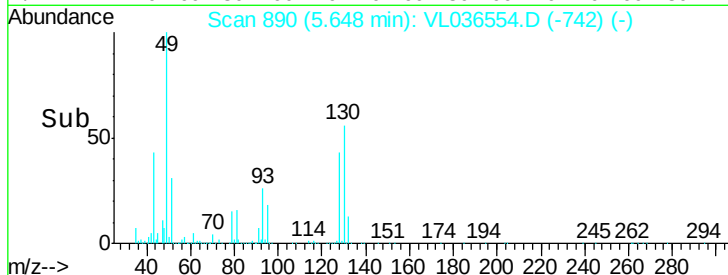
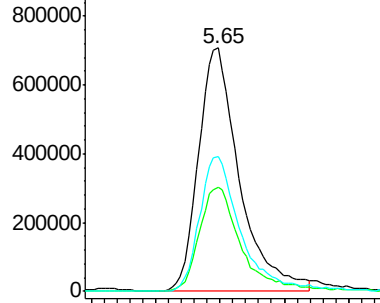
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.145 ppbv m

RT: 3.03 min Scan# 75

Delta R.T. -0.02 min

Lab File: VL036554.D

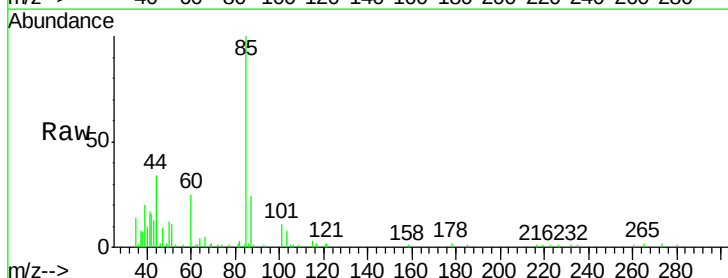
Acq: 30 Mar 2021 1:03

Tgt Ion: 85 Resp: 36906

Ion Ratio Lower Upper

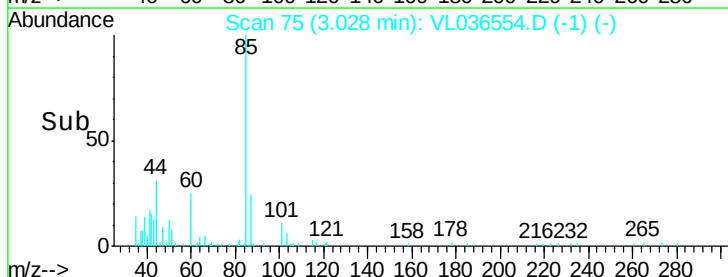
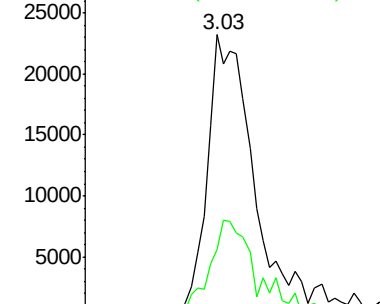
85 100

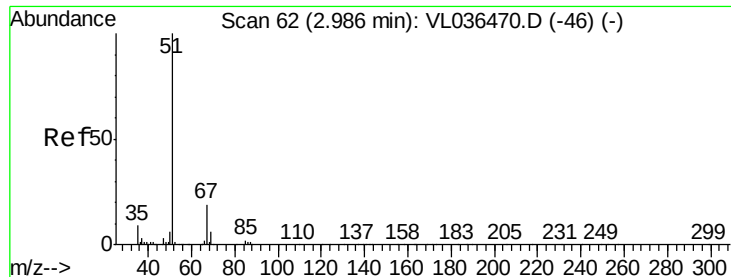
87 24.1 27.8 41.8#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.197 ppbv

RT: 2.97 min Scan# 58

Delta R.T. -0.01 min

Lab File: VL036554.D

Acq: 30 Mar 2021 1:03

Instrument :

MSVOA_L

ClientSampled :

EP-103

Tot Ion: 51 Resp: 57148

Ion Ratio Lower Upper

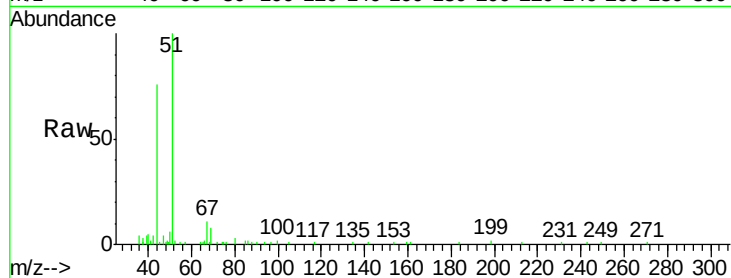
51 100

67 14.0 14.7 22.1#

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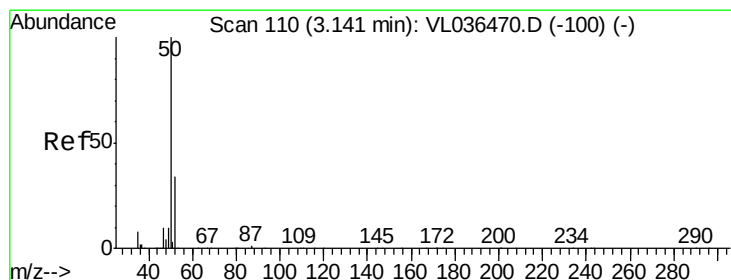
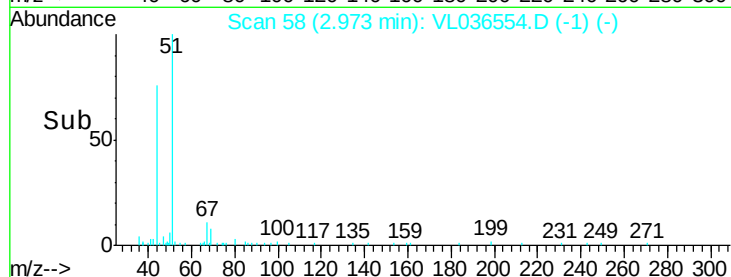
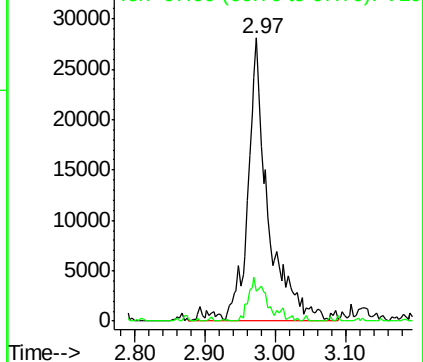
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.420 ppbv

RT: 3.13 min Scan# 106

Delta R.T. -0.01 min

Lab File: VL036554.D

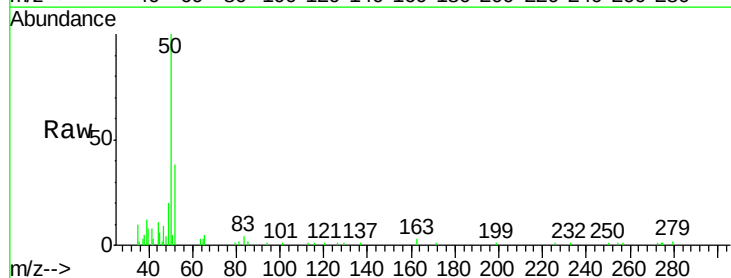
Acq: 30 Mar 2021 1:03

Tgt Ion: 50 Resp: 43166

Ion Ratio Lower Upper

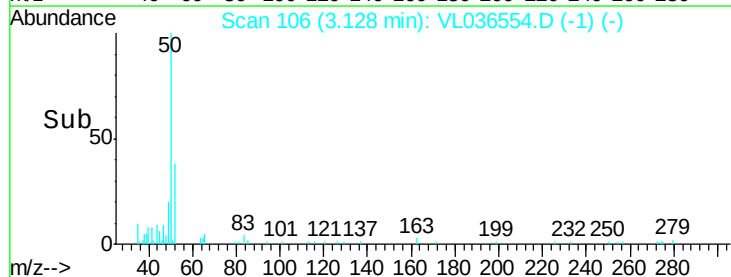
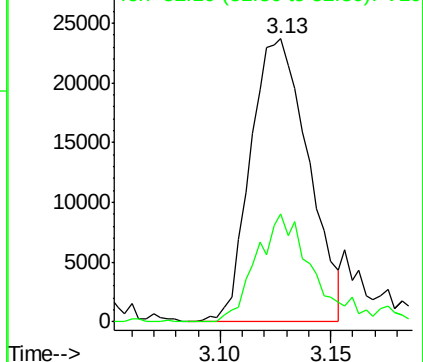
50 100

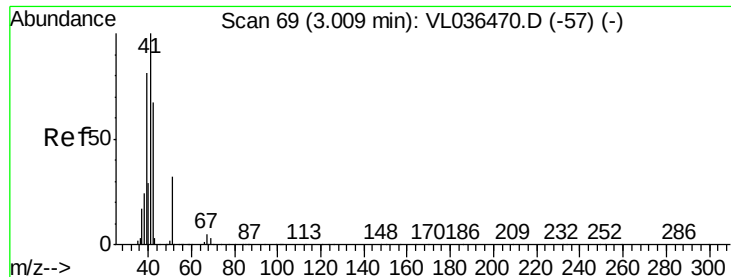
52 39.3 27.0 40.6



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.353 ppbv

RT: 3.01 min Scan# 68

Delta R.T. -0.00 min

Lab File: VL036554.D

Acq: 30 Mar 2021 1:03

Instrument :

MSVOA_L

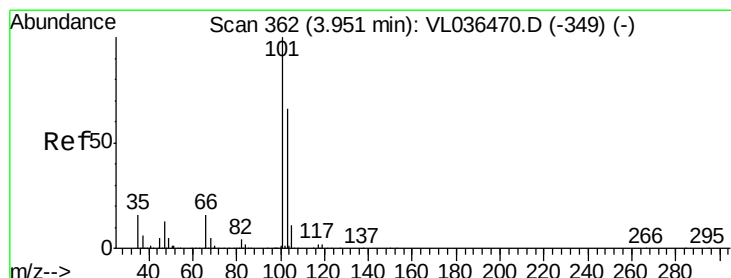
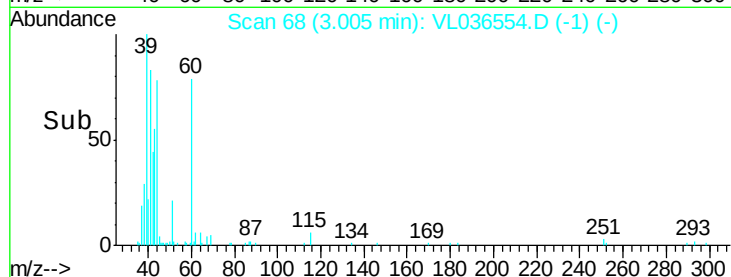
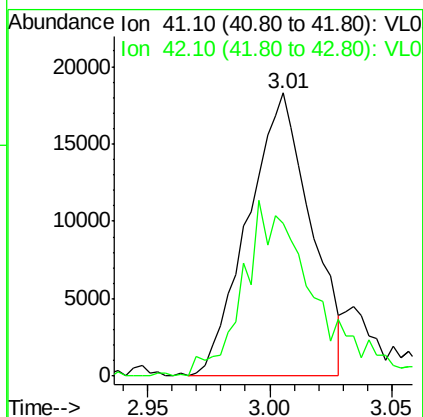
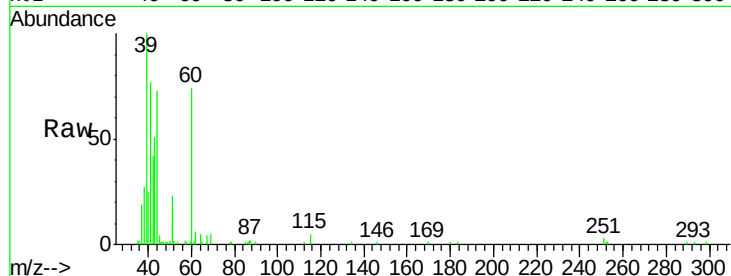
ClientSampleId :

EP-103

Tot Ion	41	Resp	32697
Ion Ratio	100	Lower	Upper
42	71.8	57.0	85.4

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#11

Trichlorofluoromethane

Concen: 0.194 ppbv

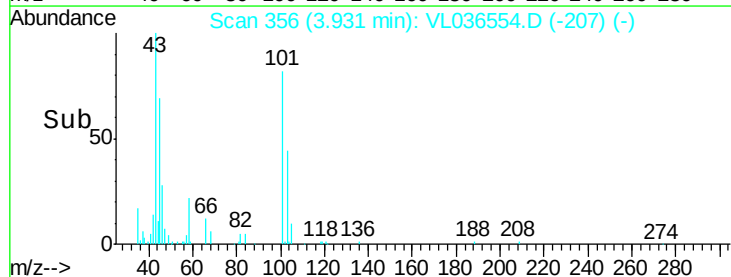
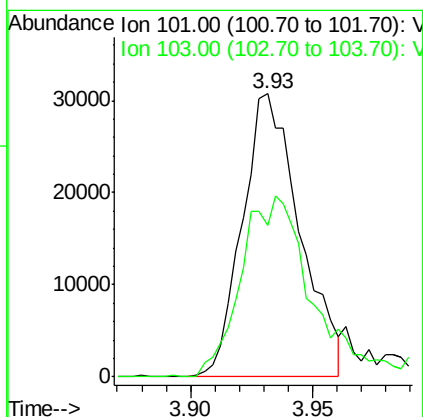
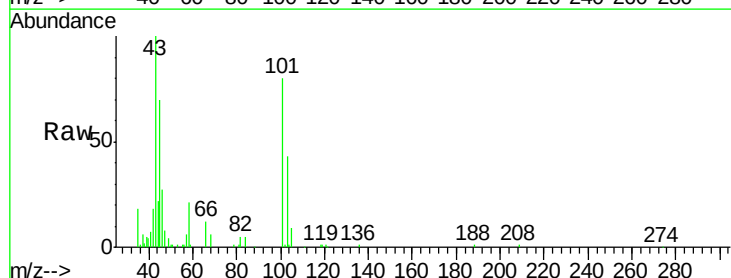
RT: 3.93 min Scan# 356

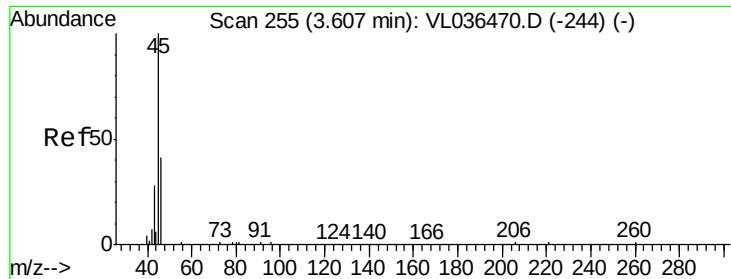
Delta R.T. -0.02 min

Lab File: VL036554.D

Acq: 30 Mar 2021 1:03

Tgt Ion	101	Resp	50246
Ion Ratio <td>100</td> <td>Lower</td> <td>Upper</td>	100	Lower	Upper
103	53.4	52.5	78.7





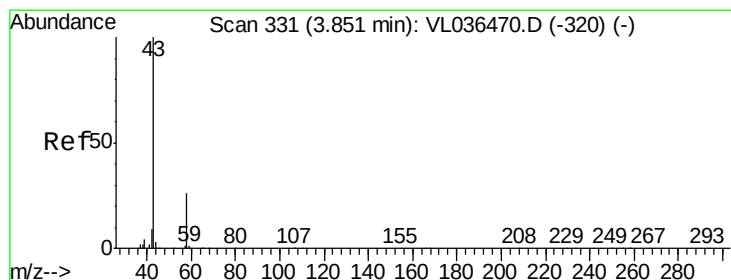
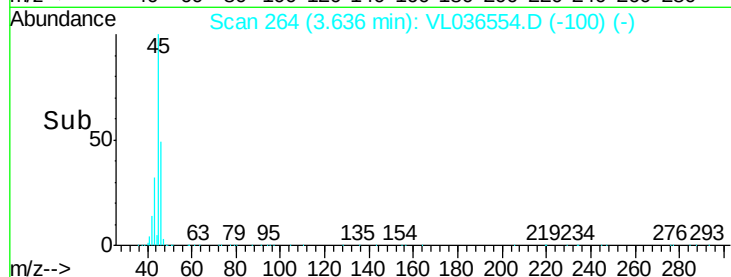
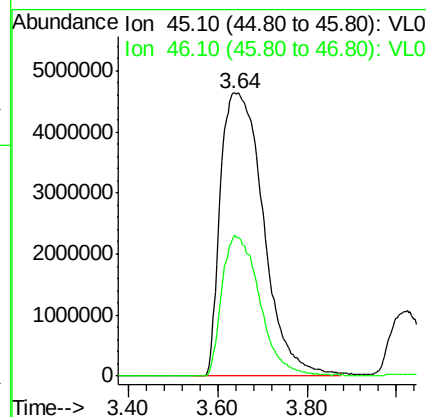
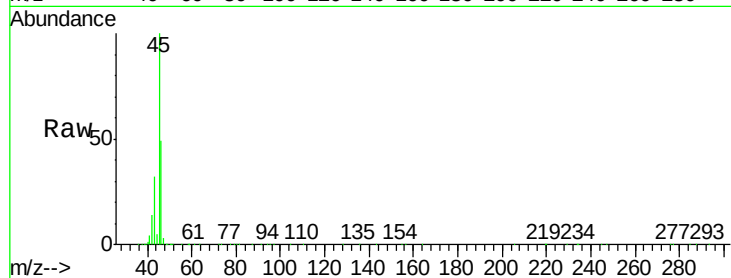
#13
Ethanol
Concen: 2807.878 ppbv m
RT: 3.64 min Scan# 264
Delta R.T. 0.03 min
Lab File: VL036554.D
Acq: 30 Mar 2021 1:03

Instrument :
MSVOA_L
ClientSampled :
EP-103

Tot Ion: 45 Resp:30993328
Ion Ratio Lower Upper
45 100
46 43.8 16.6 66.2

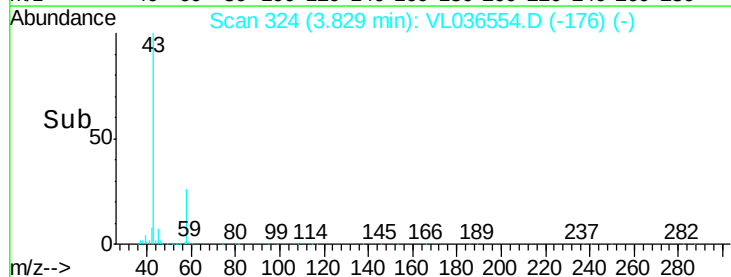
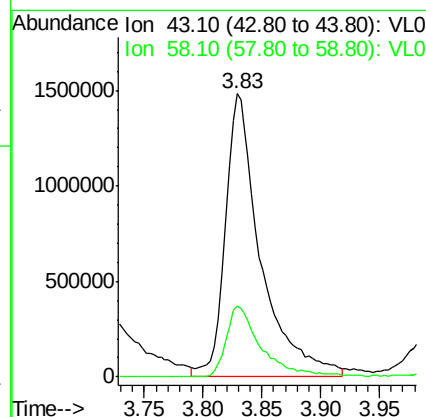
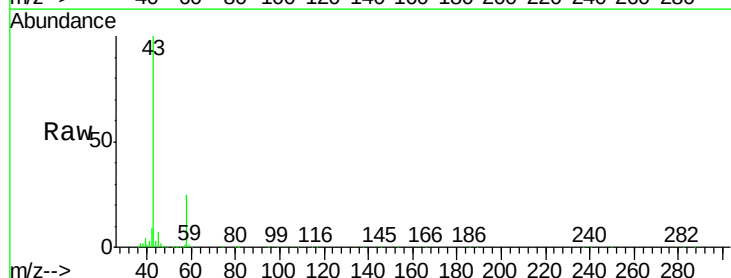
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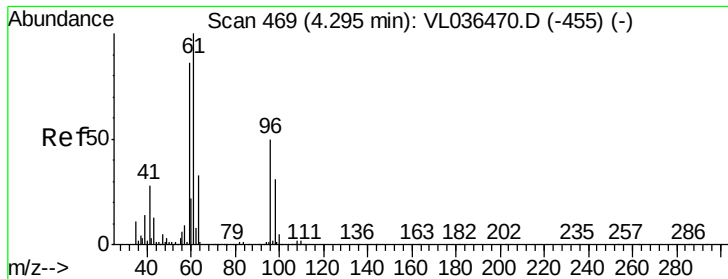
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#15
Acetone
Concen: 20.559 ppbv m
RT: 3.83 min Scan# 324
Delta R.T. -0.02 min
Lab File: VL036554.D
Acq: 30 Mar 2021 1:03

Tgt Ion: 43 Resp: 3149004
Ion Ratio Lower Upper
43 100
58 25.1 21.2 31.8





#17

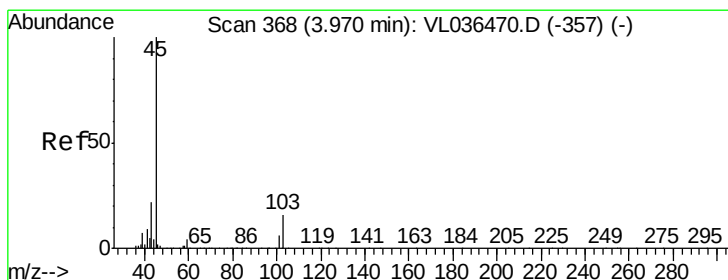
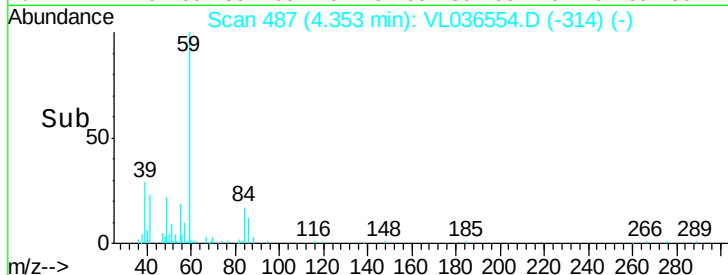
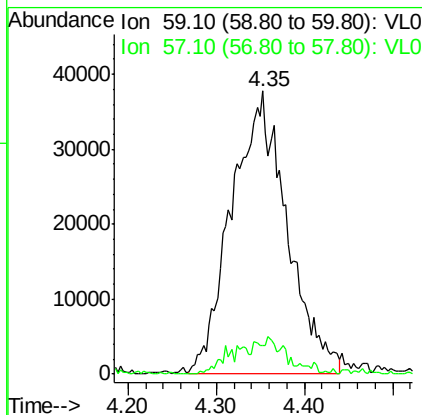
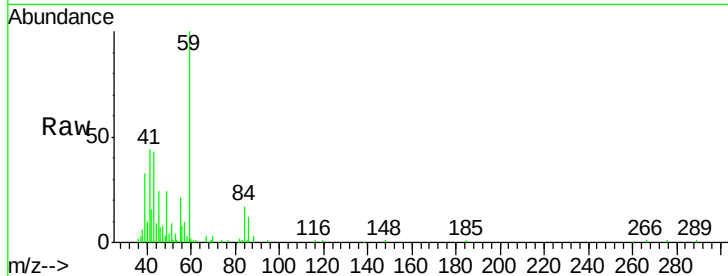
tert-Butyl alcohol
Concen: 1.236 ppbv m
RT: 4.35 min Scan# 487
Delta R.T. 0.06 min
Lab File: VL036554.D
Acq: 30 Mar 2021 1:03

Instrument :
MSVOA_L
ClientSampleId :
EP-103

Tot Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.6	12.8#

Manual Integrations
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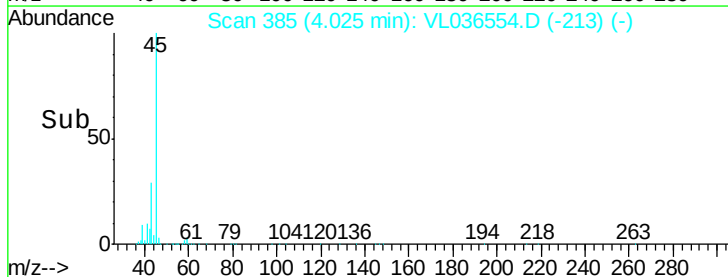
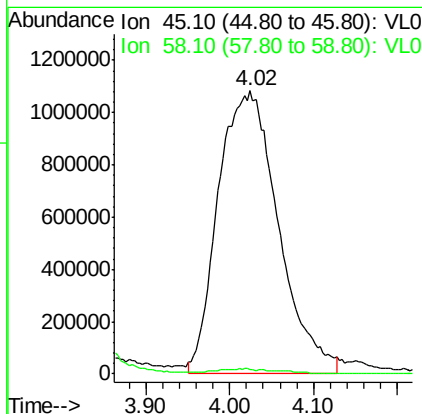
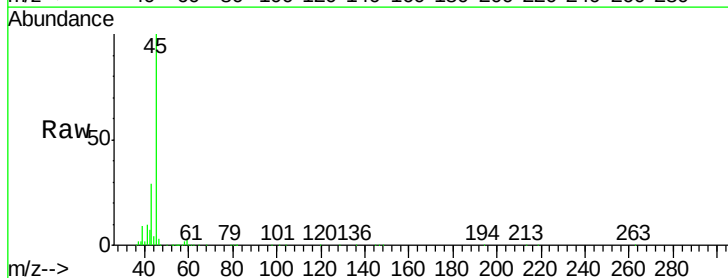
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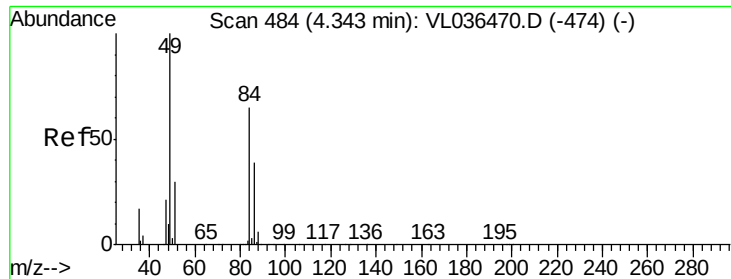


#19

Isopropyl Alcohol
Concen: 64.042 ppbv m
RT: 4.02 min Scan# 385
Delta R.T. 0.05 min
Lab File: VL036554.D
Acq: 30 Mar 2021 1:03

Tgt Ion	Ratio	Lower	Upper
45	100		
58	2.0	2.9	4.3#





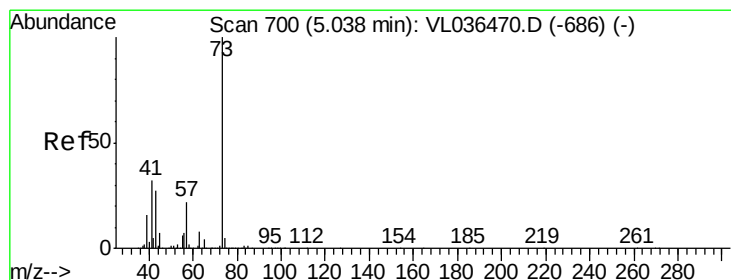
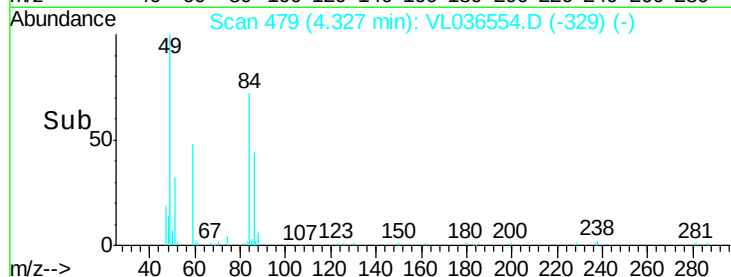
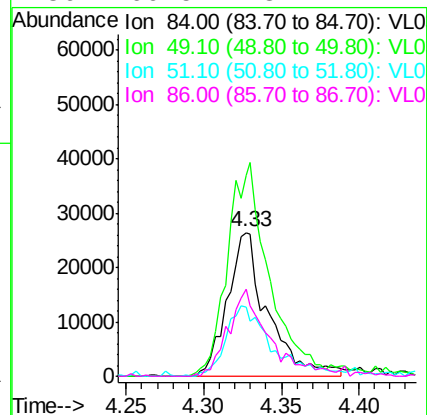
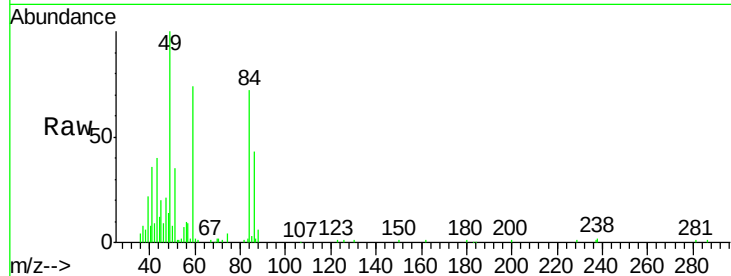
#20
Methylene Chloride
Concen: 0.668 ppbv m
RT: 4.33 min Scan# 479
Delta R.T. -0.02 min
Lab File: VL036554.D
Acq: 30 Mar 2021 1:03

Instrument :
MSVOA_L
ClientSampleId :
EP-103

Tot Ion:	84	Resp:	47917
Ion	Ratio	Lower	Upper
84	100		
49	139.5	122.9	184.3
51	48.3	36.9	55.3
86	60.5	48.2	72.4

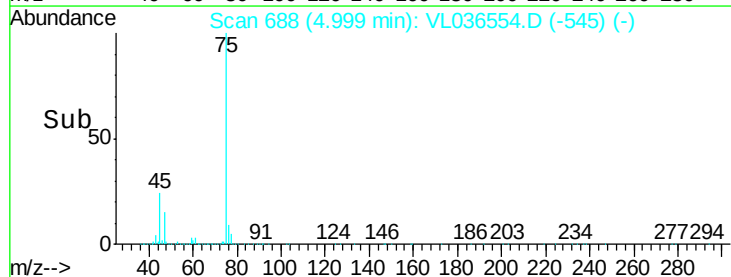
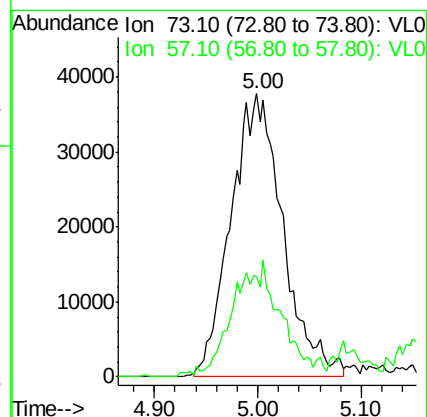
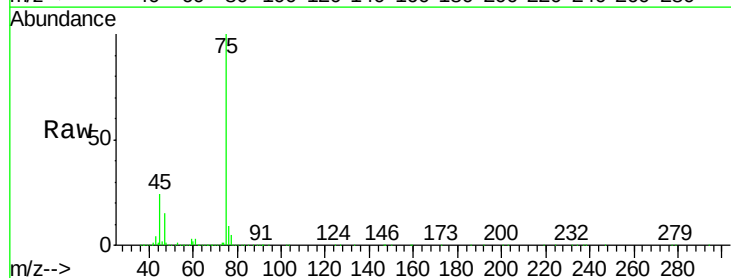
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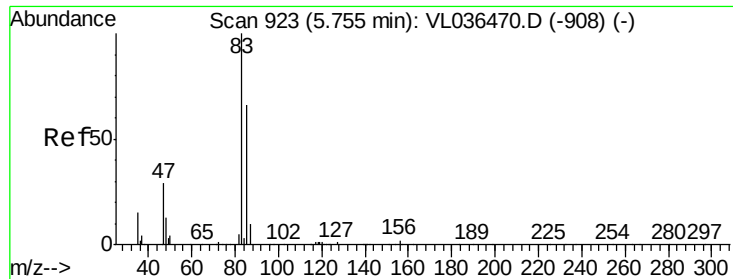
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#28
Methyl tert-Butyl Ether
Concen: 0.661 ppbv m
RT: 5.00 min Scan# 688
Delta R.T. -0.04 min
Lab File: VL036554.D
Acq: 30 Mar 2021 1:03

Tgt Ion:	73	Resp:	131711
Ion	Ratio	Lower	Upper
73	100		
57	39.0	18.5	27.7#





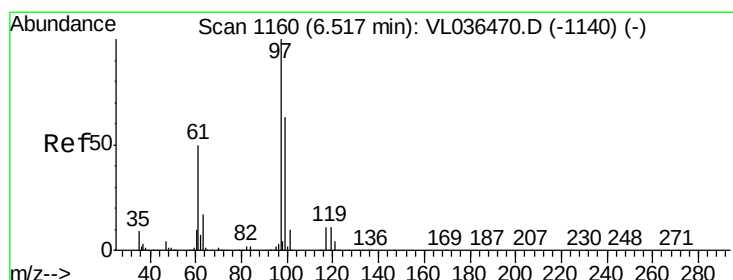
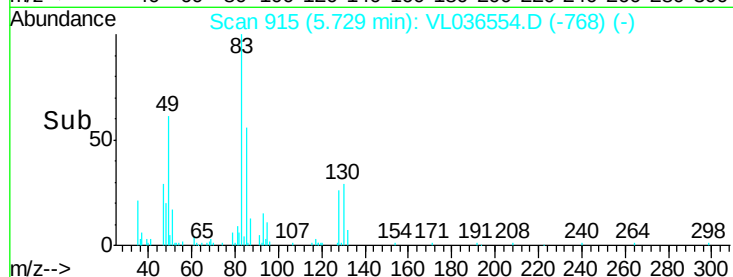
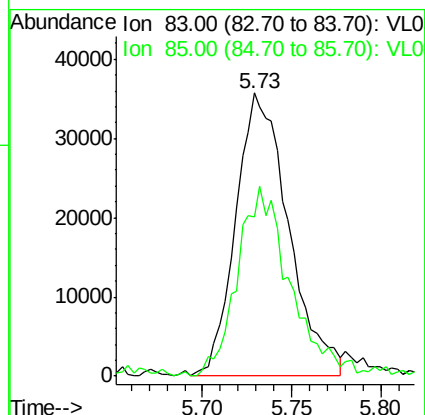
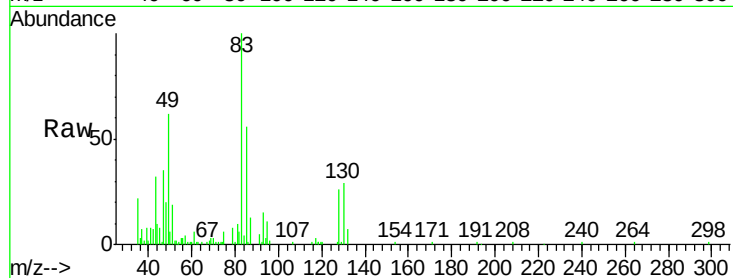
#29
Chloroform
Concen: 0.273 ppbv
RT: 5.73 min Scan# 915
Delta R.T. -0.03 min
Lab File: VL036554.D
Acq: 30 Mar 2021 1:03

Instrument :
MSVOA_L
ClientSampleId :
EP-103

Tot Ion	83	Resp	73770
Ion Ratio	100	Lower	Upper
85	56.2	52.6	78.8

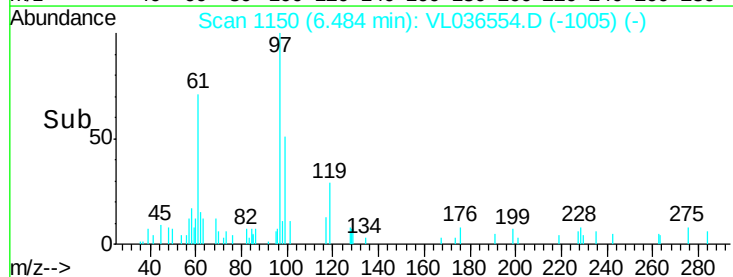
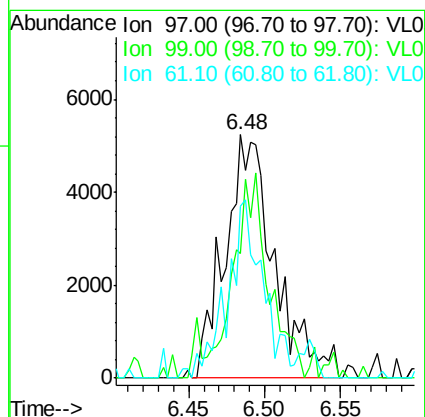
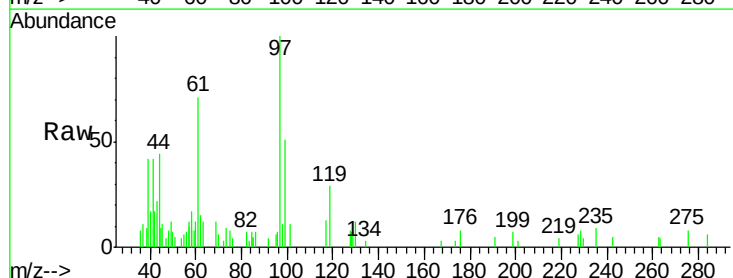
Manual Integrations
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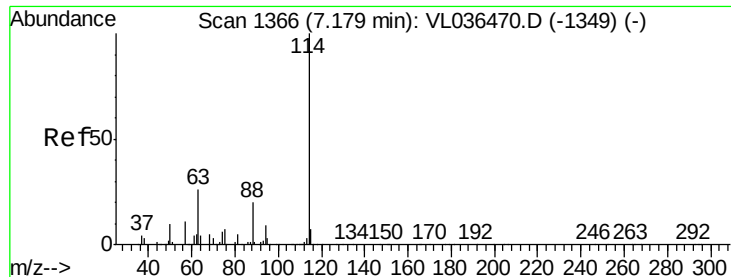
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#32
1,1,1-Trichloroethane
Concen: 0.043 ppbv m
RT: 6.48 min Scan# 1150
Delta R.T. -0.03 min
Lab File: VL036554.D
Acq: 30 Mar 2021 1:03

Tgt Ion	97	Resp	11762
Ion Ratio	100	Lower	Upper
99	68.4	51.4	77.0
61	58.7	40.6	60.8





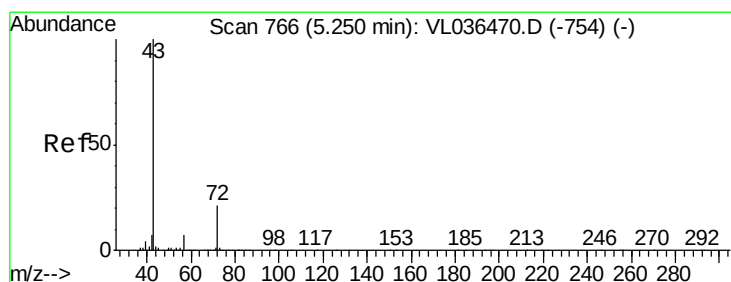
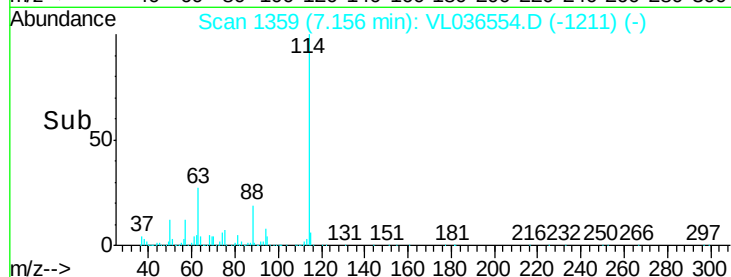
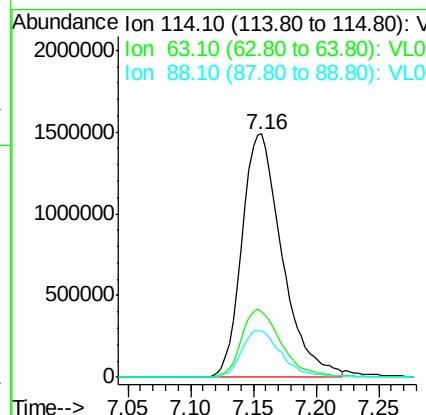
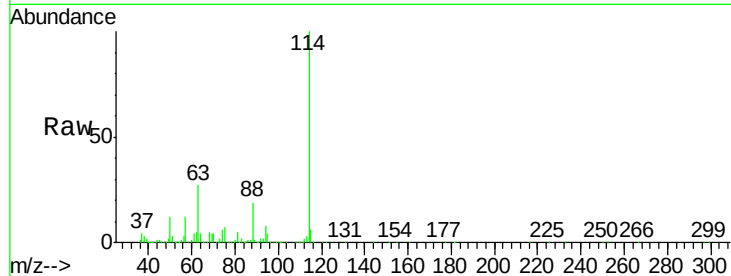
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16 min Scan# 1359
 Delta R.T. -0.02 min
 Lab File: VL036554.D
 Acq: 30 Mar 2021 1:03

Instrument :
 MSVOA_L
 ClientSampleId :
 EP-103

Tot Ion	Ratio	Lower	Upper
114	100		
63	28.3	22.4	33.6
88	19.3	15.4	23.0

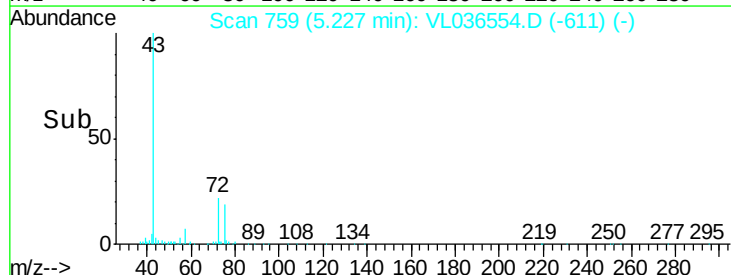
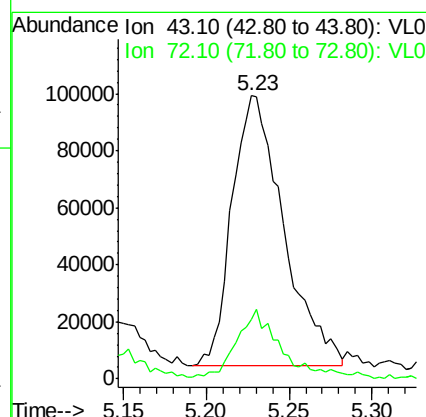
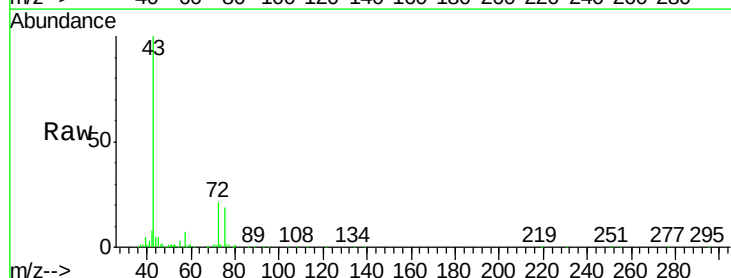
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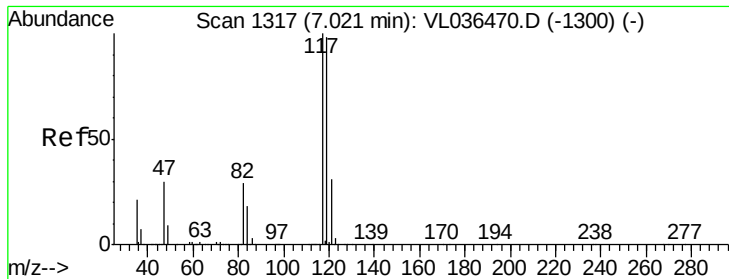
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#34
 2-Butanone
 Concen: 1.267 ppbv
 RT: 5.23 min Scan# 759
 Delta R.T. -0.02 min
 Lab File: VL036554.D
 Acq: 30 Mar 2021 1:03

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.0	17.0	25.6





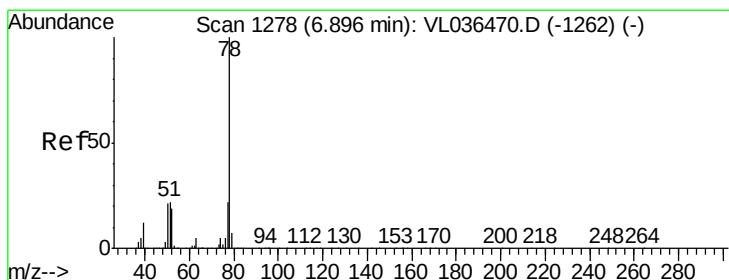
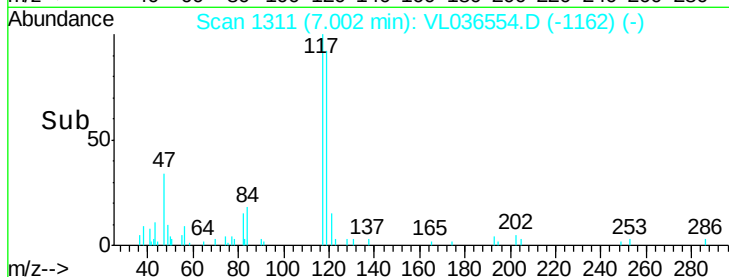
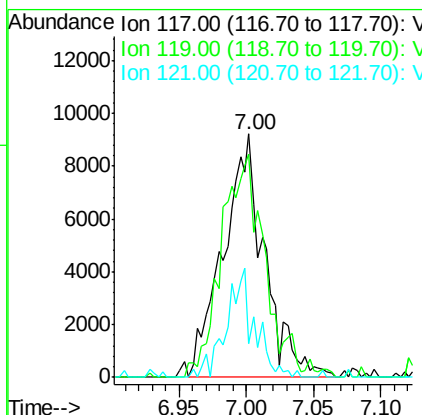
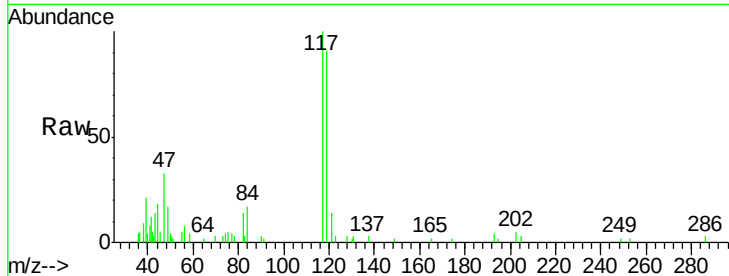
#35
Carbon Tetrachloride
Concen: 0.077 ppbv m
RT: 7.00 min Scan# 1311
Delta R.T. -0.02 min
Lab File: VL036554.D
Acq: 30 Mar 2021 1:03

Instrument :
MSVOA_L
ClientSampleId :
EP-103

Tot Ion	Ratio	Lower	Upper
117	100		
119	91.4	78.2	117.2
121	14.1	24.5	36.7#

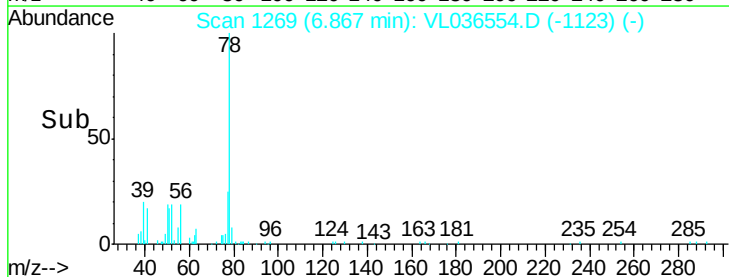
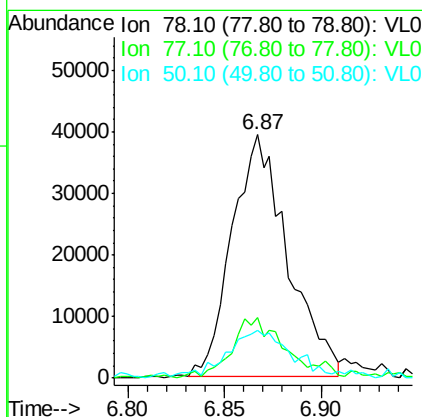
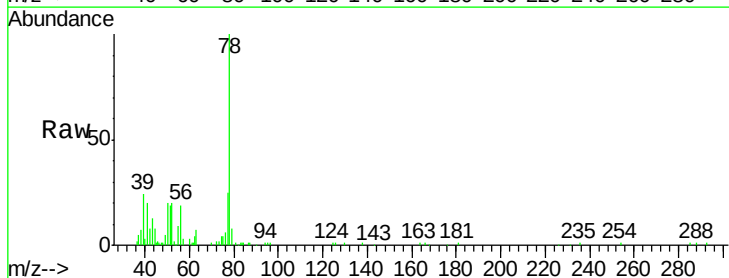
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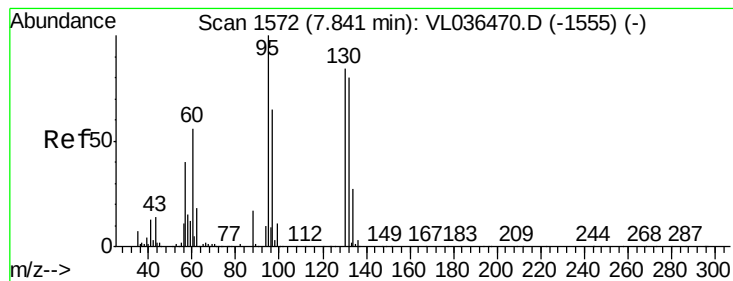
MMDadoda
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#36
Benzene
Concen: 0.257 ppbv
RT: 6.87 min Scan# 1269
Delta R.T. -0.03 min
Lab File: VL036554.D
Acq: 30 Mar 2021 1:03

Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.9	18.0	27.0
50	17.6	16.5	24.7





#38

Trichloroethene

Concen: 0.521 ppbv m

RT: 7.81 min Scan# 1563

Delta R.T. -0.03 min

Lab File: VL036554.D

Acq: 30 Mar 2021 1:03

Instrument :

MSVOA_L

ClientSampleId :

EP-103

Tot Ion:130 Resp: 62185

Ion Ratio Lower Upper

130 100

95 121.9 95.7 143.5

132 103.8 76.2 114.4

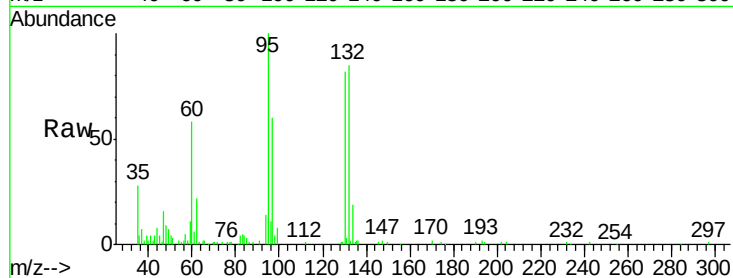
97 73.4 61.8 92.6

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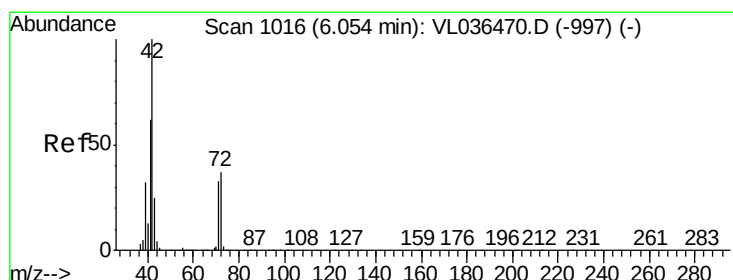
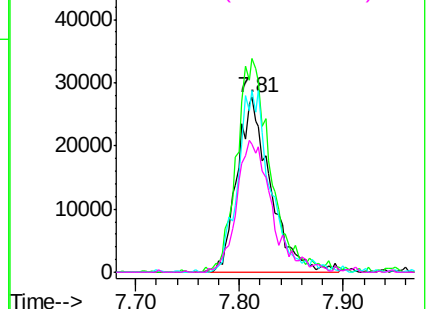
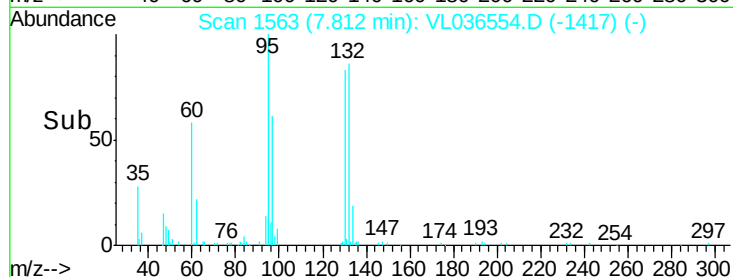


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#41

Tetrahydrofuran

Concen: 0.296 ppbv m

RT: 6.03 min Scan# 1010

Delta R.T. -0.02 min

Lab File: VL036554.D

Acq: 30 Mar 2021 1:03

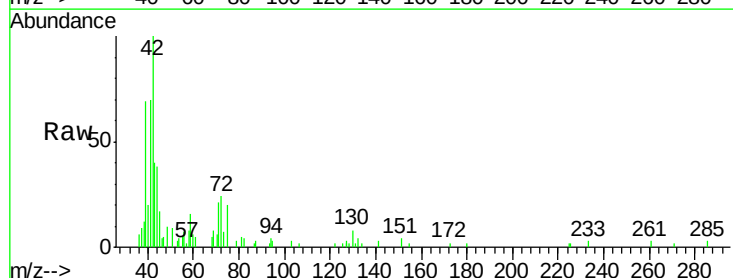
Tgt Ion: 42 Resp: 22142

Ion Ratio Lower Upper

42 100

72 37.0 27.6 41.4

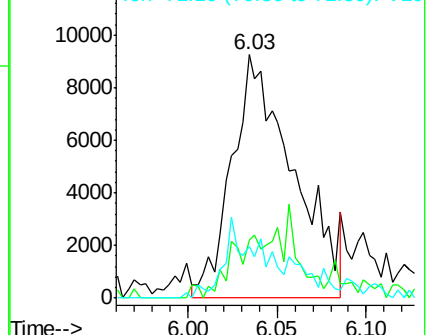
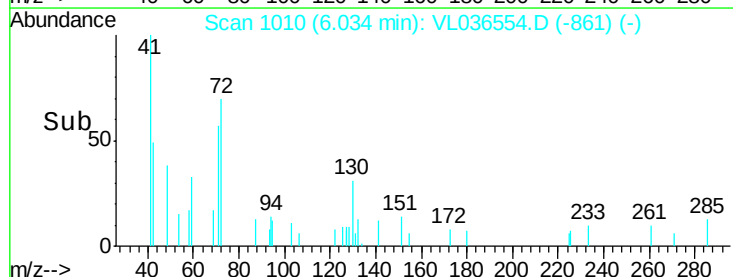
71 0.0 27.0 40.4#

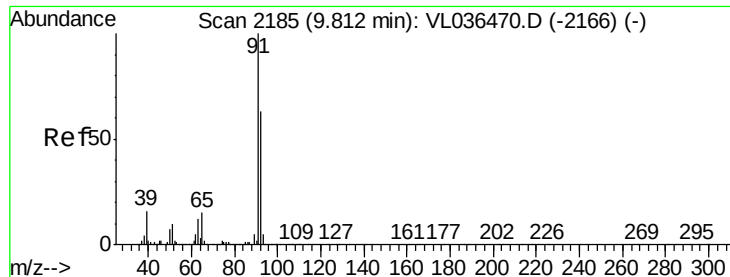


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0





#53

Toluene

Concen: 0.670 ppbv

RT: 9.78 min Scan# 2176

Delta R.T. -0.03 min

Lab File: VL036554.D

Acq: 30 Mar 2021 1:03

Instrument :

MSVOA_L

ClientSampleId :

EP-103

Tot Ion: 91 Resp: 218874

Ion Ratio Lower Upper

91 100

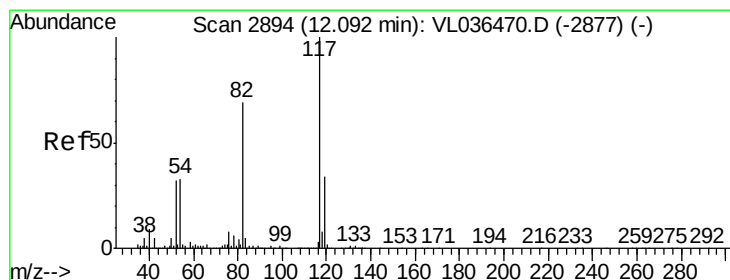
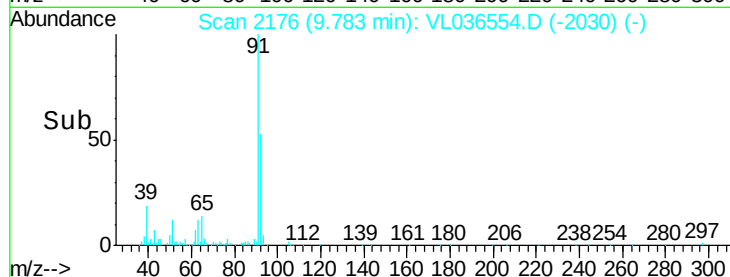
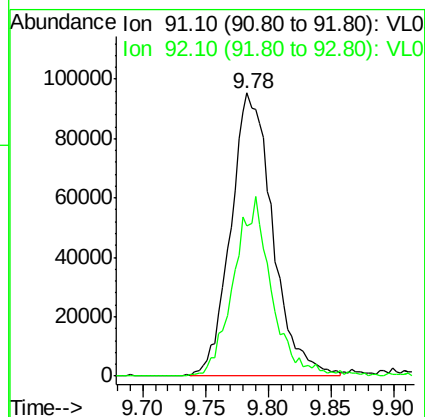
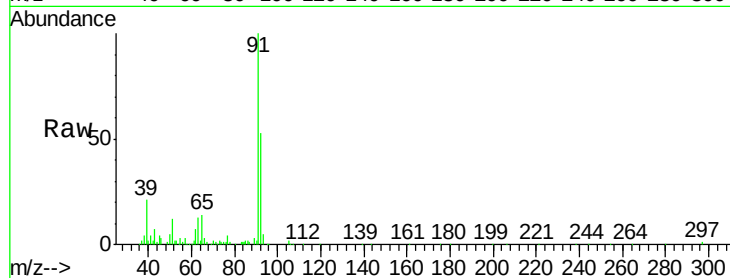
92 58.1 48.8 73.2

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2887

Delta R.T. -0.02 min

Lab File: VL036554.D

Acq: 30 Mar 2021 1:03

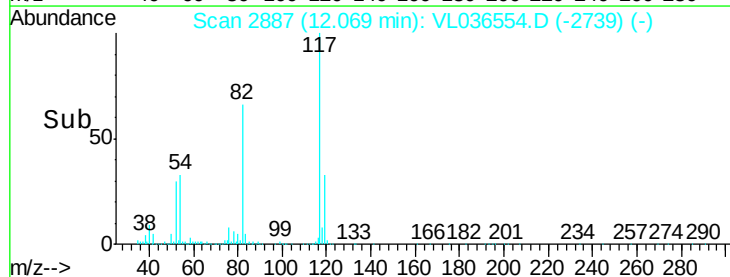
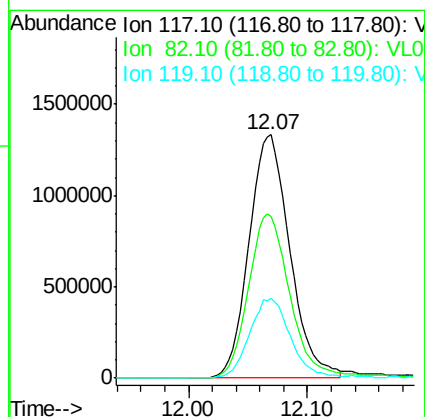
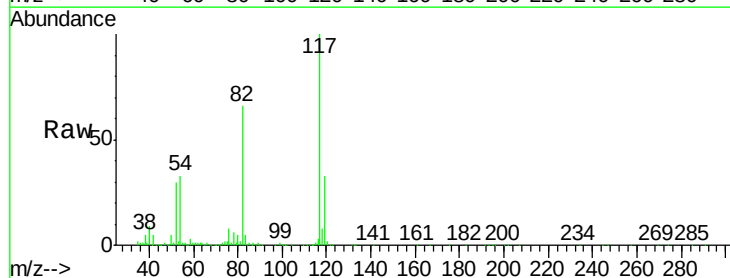
Tgt Ion: 117 Resp: 3171735

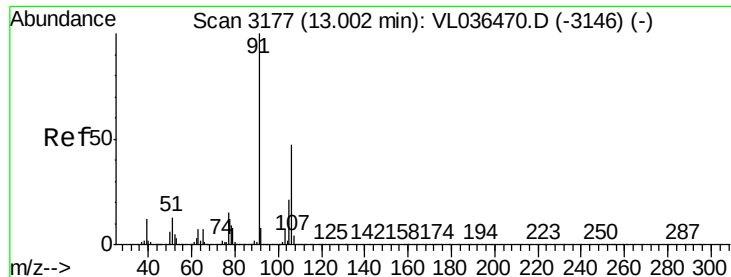
Ion Ratio Lower Upper

117 100

82 70.0 57.4 86.0

119 33.6 47.4 71.0#





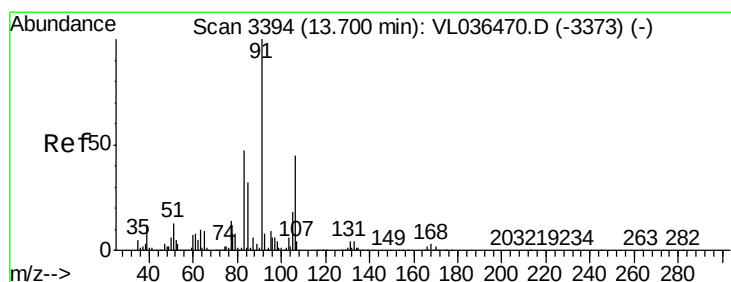
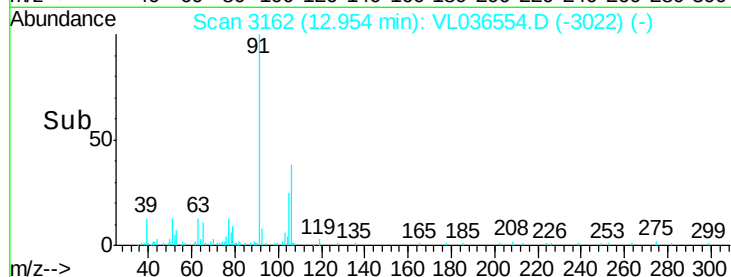
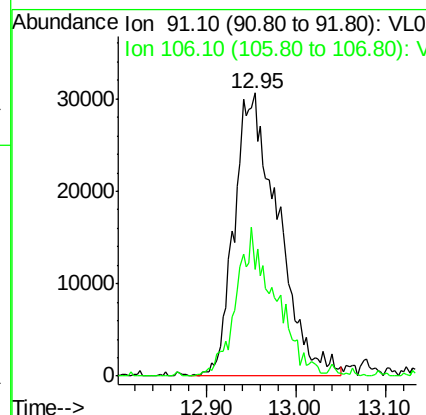
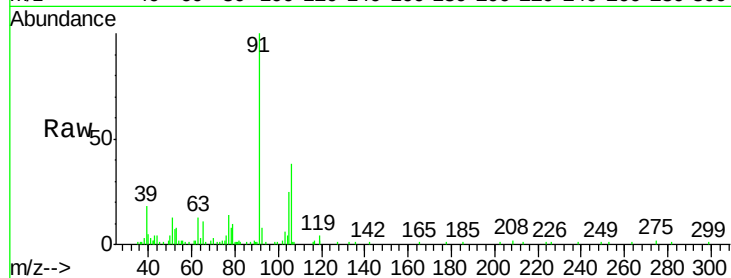
#59
m/p-Xylene
Concen: 0.259 ppbv m
RT: 12.95 min Scan# 3162
Delta R.T. -0.05 min
Lab File: VL036554.D
Acq: 30 Mar 2021 1:03

Instrument :
MSVOA_L
ClientSampled :
EP-103

Tot Ion	Ratio	Lower	Upper
91	100		
106	47.2	35.3	52.9

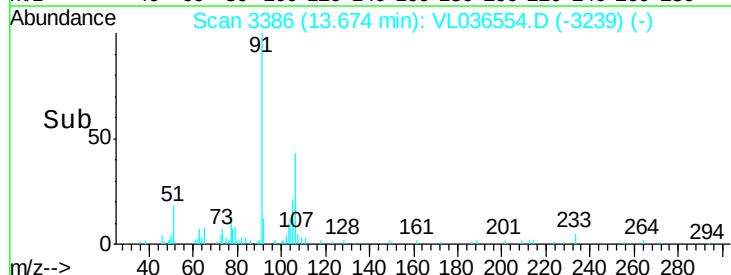
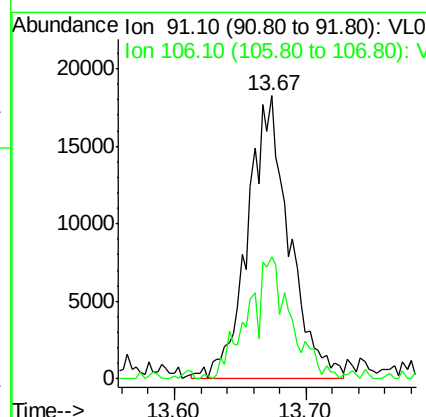
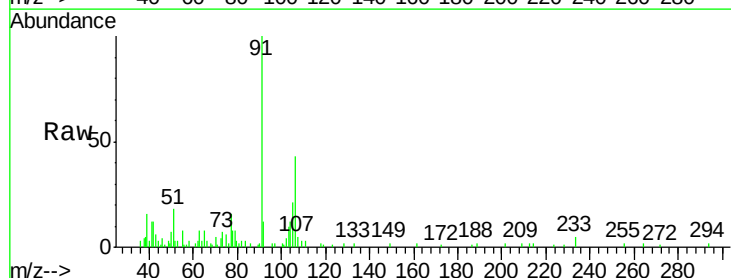
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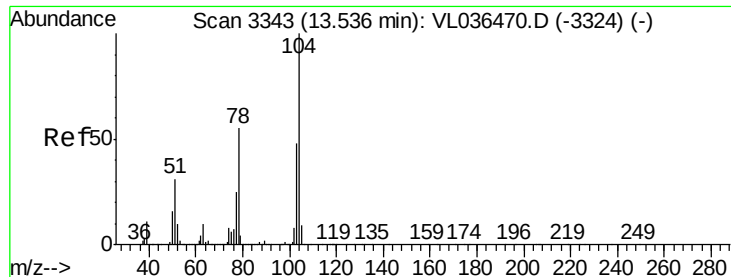
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#60
o-Xylene
Concen: 0.103 ppbv m
RT: 13.67 min Scan# 3386
Delta R.T. -0.03 min
Lab File: VL036554.D
Acq: 30 Mar 2021 1:03

Tgt Ion	Ratio	Lower	Upper
91	100		
106	44.0	22.3	66.9





#61

Stvrene

Concen: 0.346 ppbv m

RT: 13.51 min Scan# 3335

Delta R.T. -0.03 min

Lab File: VL036554.D

Acq: 30 Mar 2021 1:03

Instrument :

MSVOA_L

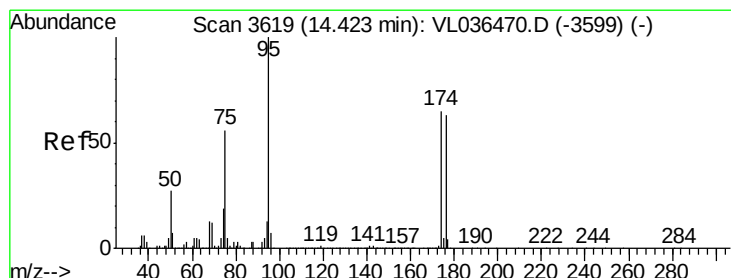
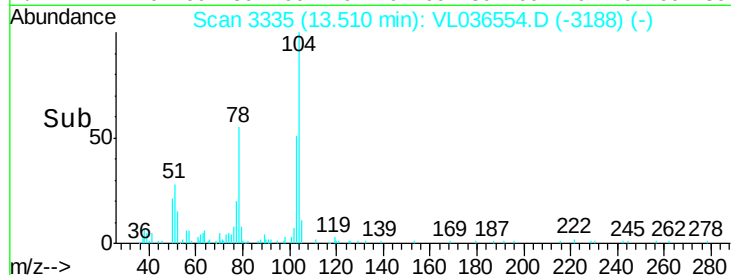
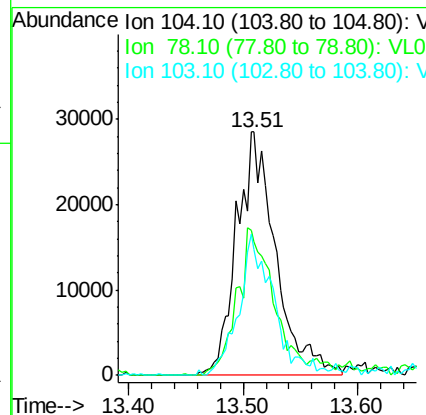
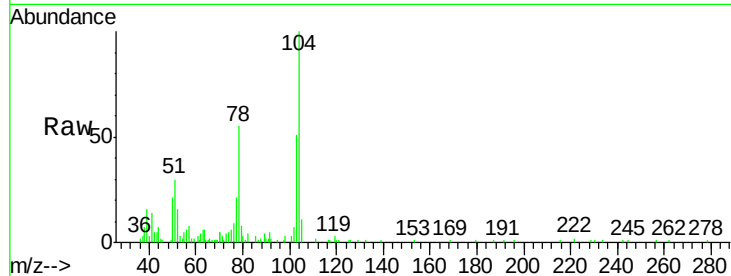
ClientSampled :

EP-103

Tot Ion:	104	Resp:	67770
Ion Ratio	Lower	Upper	
104	100		
78	62.8	43.8	65.8
103	53.6	38.3	57.5

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#68

1-Bromo-4-Fluorobenzene

Concen: 9.924 ppbv

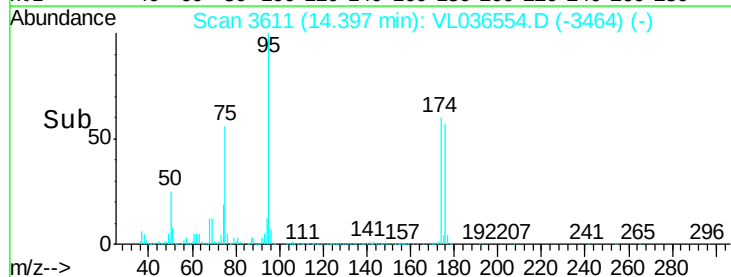
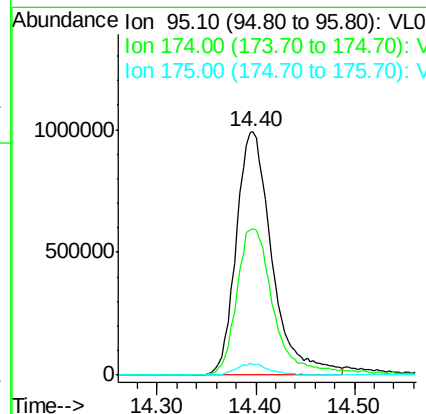
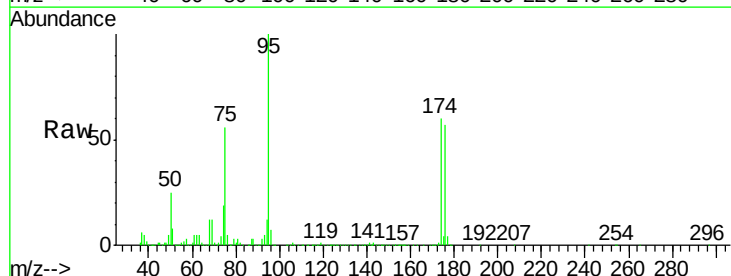
RT: 14.40 min Scan# 3611

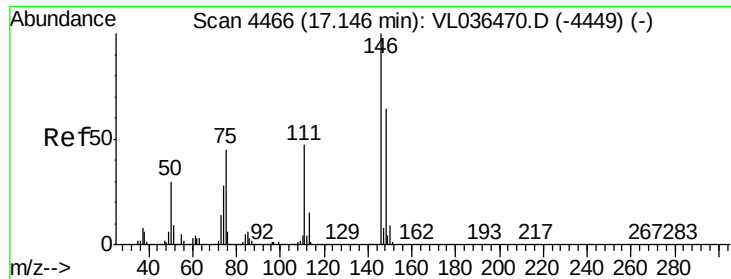
Delta R.T. -0.03 min

Lab File: VL036554.D

Acq: 30 Mar 2021 1:03

Tgt Ion:	95	Resp:	2508755
Ion Ratio	Lower	Upper	
95	100		
174	63.8	51.0	76.6
175	4.6	3.9	5.9





#76

1,4-Dichlorobenzene

Concen: 0.313 ppbv m

RT: 17.12 min Scan# 4458

Delta R.T. -0.03 min

Lab File: VL036554.D

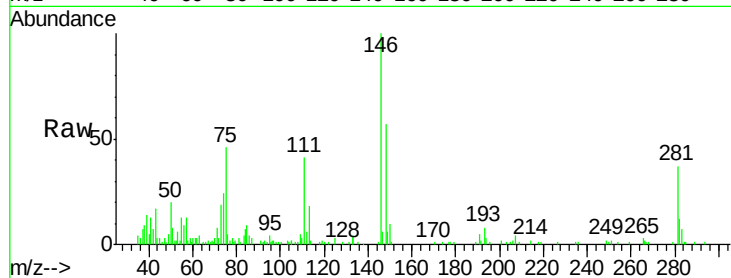
Acq: 30 Mar 2021 1:03

Instrument :

MSVOA_L

ClientSampleId :

EP-103



Tot Ion:	146	Resp:	74398
Ion Ratio	Lower	Upper	
146	100		
111	52.2	24.3	72.8
148	71.4	33.0	98.9

Manual Integrations
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