

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL033121\
 Data File : VL036601.D
 Acq On : 31 Mar 2021 14:26
 Operator : SY/AP
 Sample : M1840-03
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SSB-SS-1

Manual Integrations
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 4/2/2021 6:52:26 PM

Quant Time: Apr 01 22:49:11 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 2
 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	5.67	49	1509752	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3523713	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	3071711	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2551771	10.42	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.20%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.05	85	40651	0.165 ppbv	92
4) Chloromethane	3.14	50	14372	0.144 ppbv	99
9) Propene	3.02	41	66688m	0.742 ppbv	
10) Heptane	8.12	43	63438m	0.277 ppbv	
11) Trichlorofluoromethane	3.94	101	58610	0.234 ppbv #	74
13) Ethanol	3.61	45	1054646	98.486 ppbv	94
15) Acetone	3.84	43	11433102	76.941 ppbv	91
17) tert-Butyl alcohol	4.30	59	814860	6.299 ppbv	99
19) Isopropyl Alcohol	3.98	45	4450181	54.442 ppbv	99
20) Methylene Chloride	4.35	84	2041497	29.343 ppbv	96
26) Hexane	5.69	57	2768258	16.886 ppbv #	47
30) Cyclohexane	7.17	84	19801m	0.149 ppbv	
32) 1,1,1-Trichloroethane	6.52	97	75077m	0.284 ppbv	
34) 2-Butanone	5.24	43	1621950	9.430 ppbv	95
35) Carbon Tetrachloride	7.02	117	15570	0.058 ppbv #	93
36) Benzene	6.89	78	559051	1.720 ppbv	96
44) 2,2,4-Trimethylpentane	7.87	57	71414m	0.125 ppbv	
50) 4-Methyl-2-Pentanone	8.75	43	46195m	0.186 ppbv	
51) 2-Hexanone	10.14	43	133652	1.064 ppbv #	88
52) Tetrachloroethene	11.22	164	75113m	0.628 ppbv	
53) Toluene	9.81	91	832206	2.405 ppbv	99
58) Ethyl Benzene	12.72	91	152506	0.341 ppbv	98
59) m/p-Xylene	12.97	91	599424	1.538 ppbv	97
60) o-Xylene	13.70	91	207400m	0.550 ppbv	
72) 4-Ethyltoluene	15.85	105	71800	0.174 ppbv #	92
73) 1,3,5-Trimethylbenzene	16.00	105	83675m	0.217 ppbv	
74) 1,2,4-Trimethylbenzene	16.77	105	282955	0.686 ppbv #	68
79) Naphthalene	22.21	128	43359m	0.180 ppbv	

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

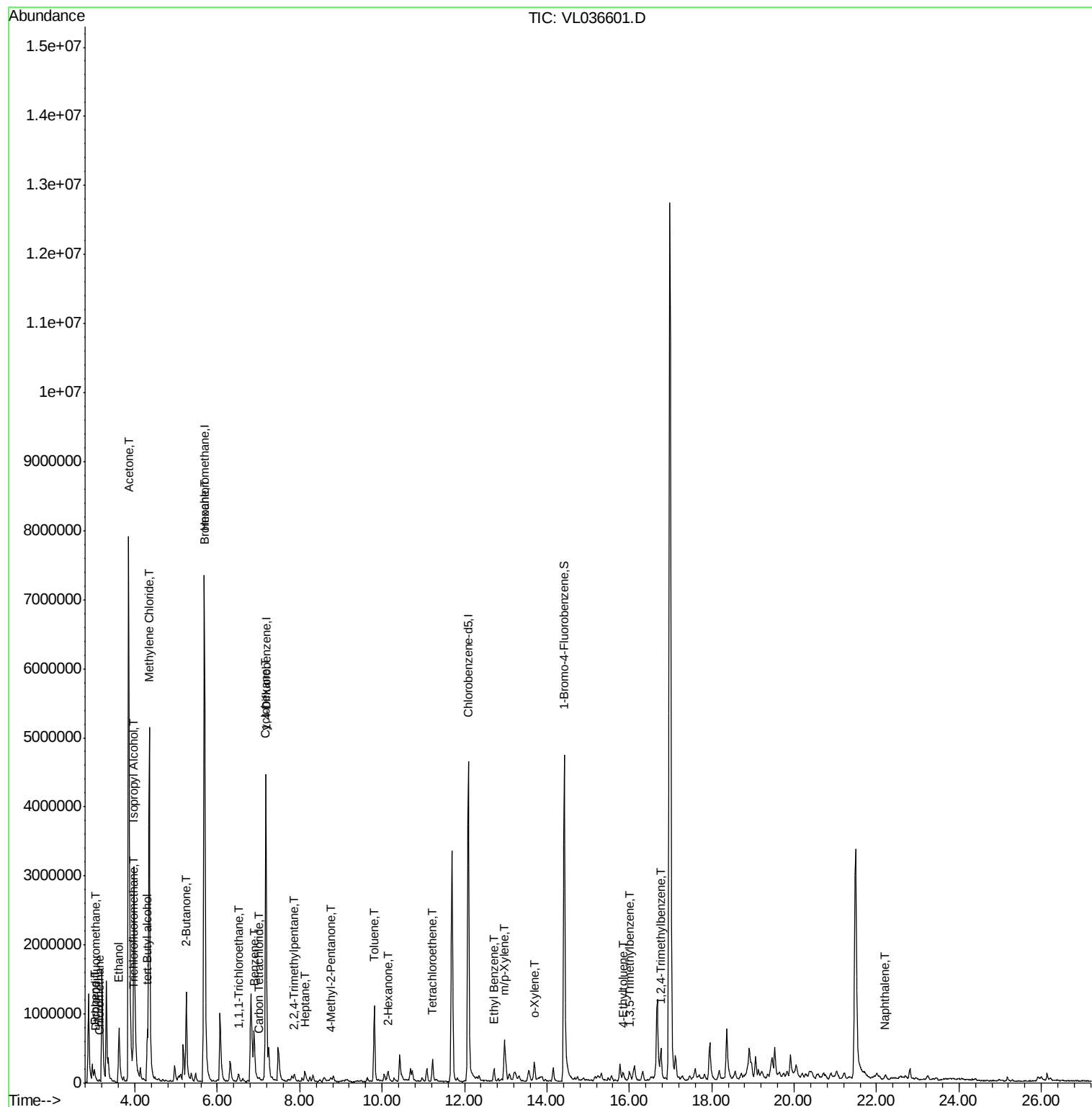
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL033121\
Data File : VL036601.D
Acq On : 31 Mar 2021 14:26
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Manual Integrations
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Quant Time: Apr 01 22:49:11 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar
QLast Update : Thu Mar 25 09:42:40 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 897

Delta R.T. 0.00 min

Lab File: VL036601.D

Acq: 31 Mar 2021 14:26

Instrument :

MSVOA_L

ClientSampleId :

SSB-SS-1

Tot Ion: 49 Resp: 1509752

Ion Ratio Lower Upper

49 100

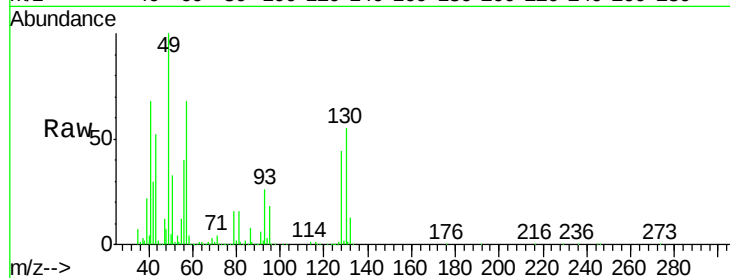
128 44.0 23.5 70.6

130 57.3 29.1 87.4

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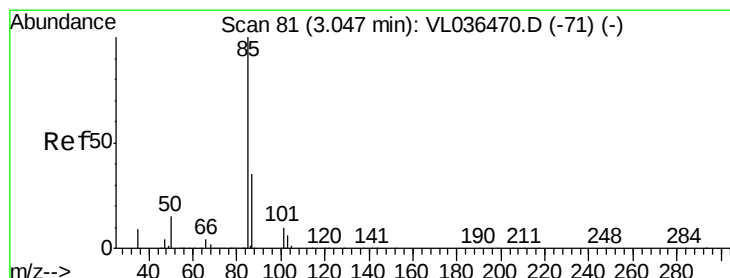
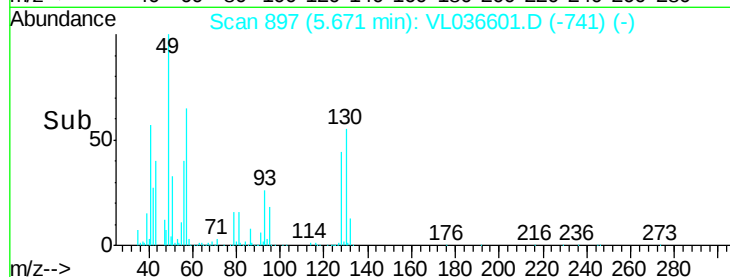
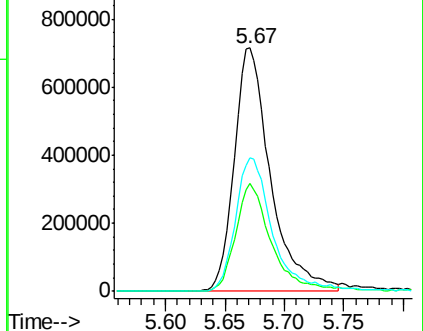
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.165 ppbv

RT: 3.05 min Scan# 81

Delta R.T. 0.00 min

Lab File: VL036601.D

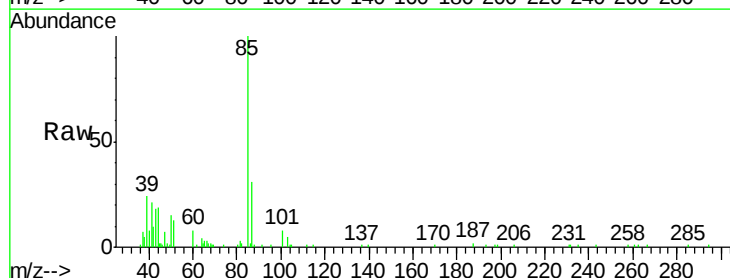
Acq: 31 Mar 2021 14:26

Tgt Ion: 85 Resp: 40651

Ion Ratio Lower Upper

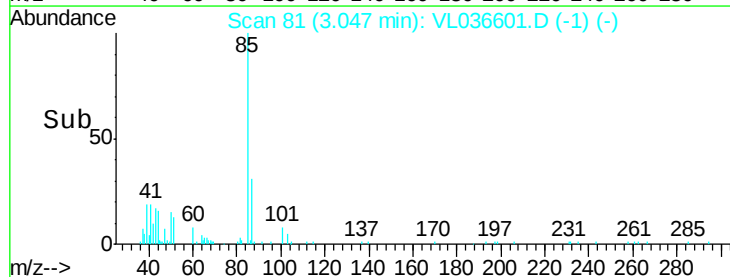
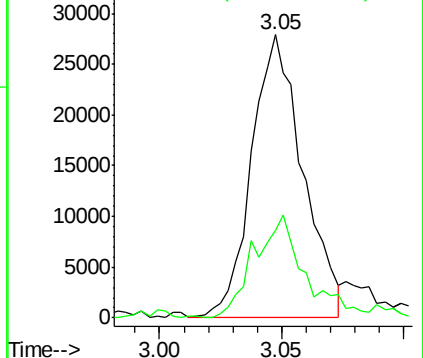
85 100

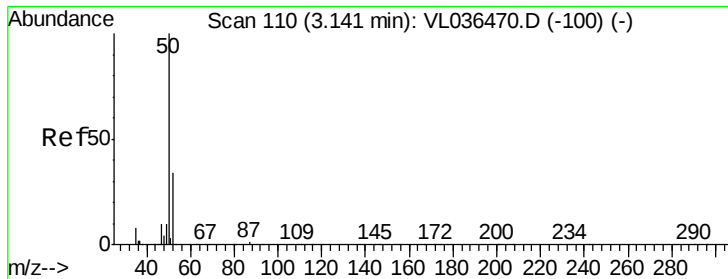
87 30.0 27.8 41.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 0.144 ppbv

RT: 3.14 min Scan# 109

Delta R.T. -0.00 min

Lab File: VL036601.D

Acq: 31 Mar 2021 14:26

Instrument :

MSVOA_L

ClientSampleId :

SSB-SS-1

Tot Ion: 50 Resp: 14372

Ion Ratio Lower Upper

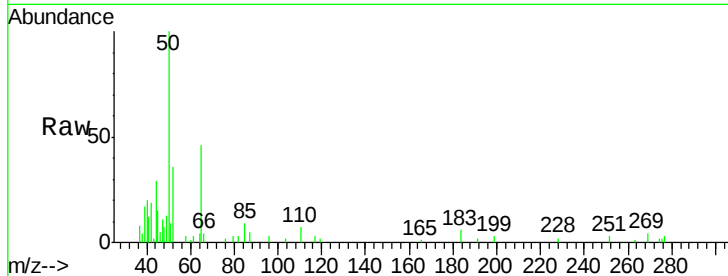
50 100

52 33.5 27.0 40.6

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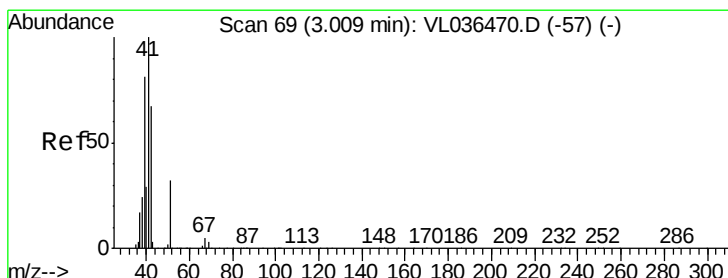
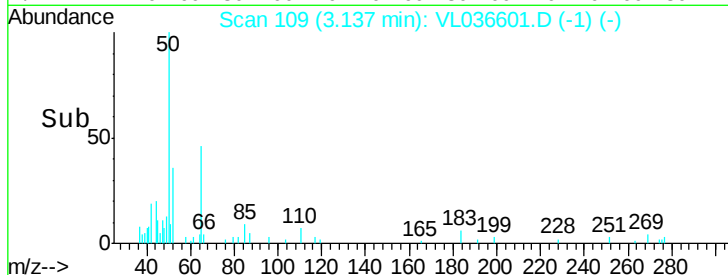
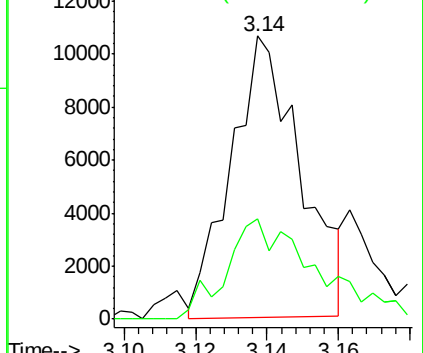
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Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#9

Propene

Concen: 0.742 ppbv m

RT: 3.02 min Scan# 71

Delta R.T. 0.01 min

Lab File: VL036601.D

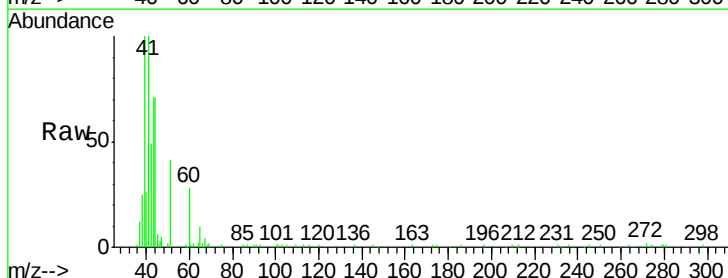
Acq: 31 Mar 2021 14:26

Tgt Ion: 41 Resp: 66688

Ion Ratio Lower Upper

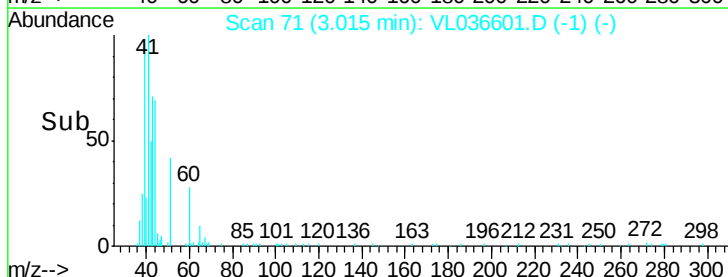
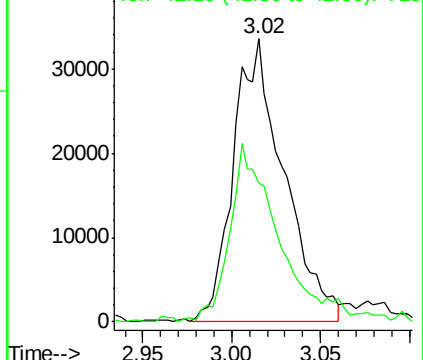
41 100

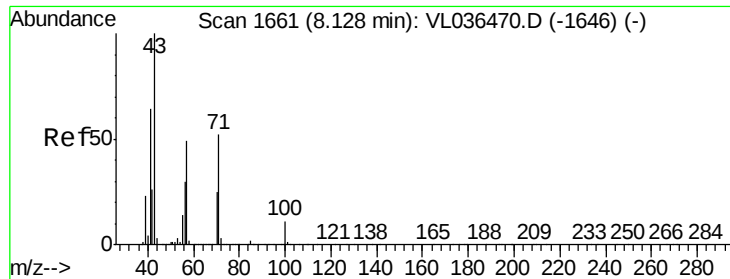
42 62.8 57.0 85.4



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





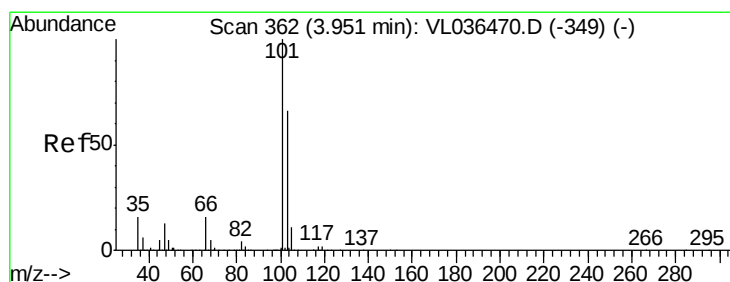
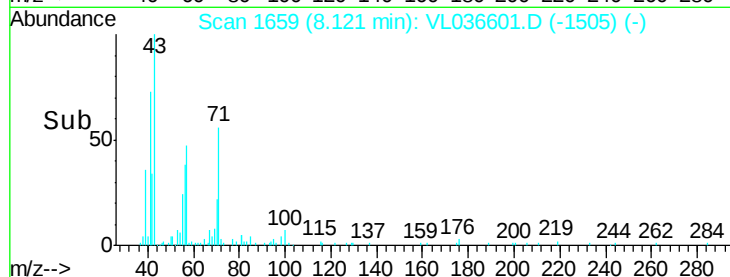
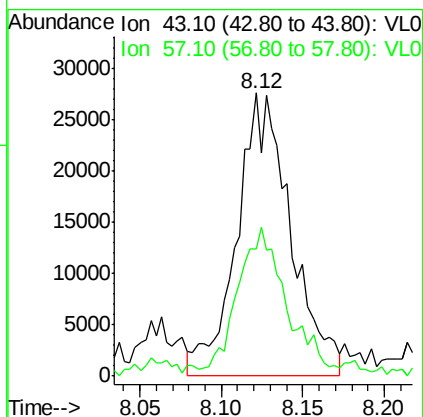
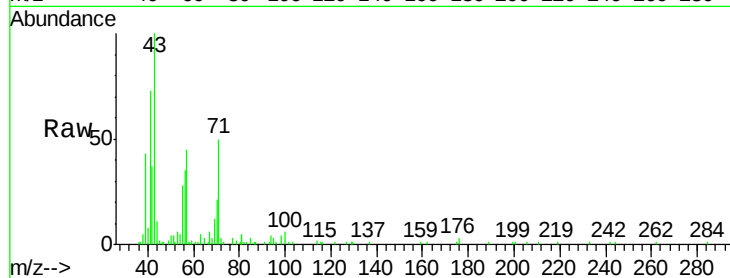
#10
Heptane
Concen: 0.277 ppbv m
RT: 8.12 min Scan# 1659
Delta R.T. -0.01 min
Lab File: VL036601.D
Acq: 31 Mar 2021 14:26

Instrument :
MSVOA_L
ClientSampleId :
SSB-SS-1

Tot Ion: 43 Resp: 63438
Ion Ratio Lower Upper
43 100
57 52.6 39.0 58.6

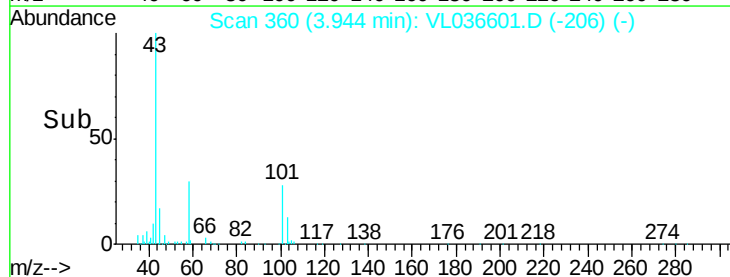
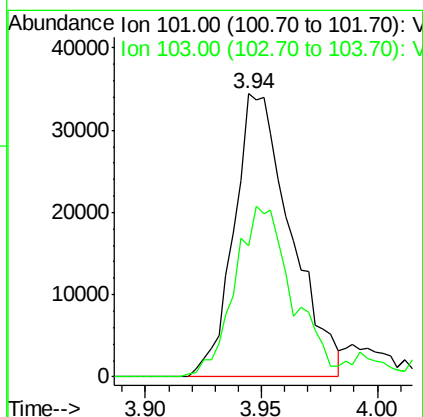
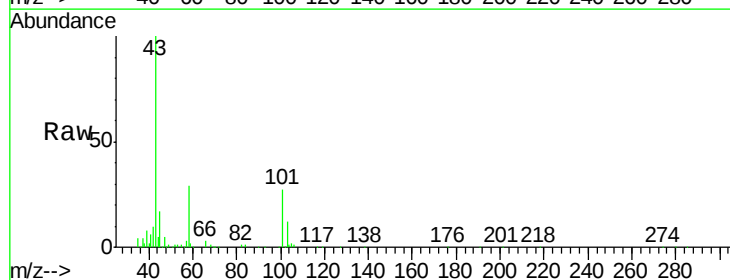
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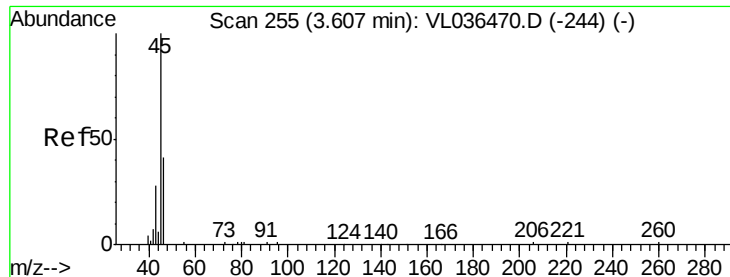
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#11
Trichlorofluoromethane
Concen: 0.234 ppbv
RT: 3.94 min Scan# 360
Delta R.T. -0.01 min
Lab File: VL036601.D
Acq: 31 Mar 2021 14:26

Tgt Ion: 101 Resp: 58610
Ion Ratio Lower Upper
101 100
103 45.1 52.5 78.7#





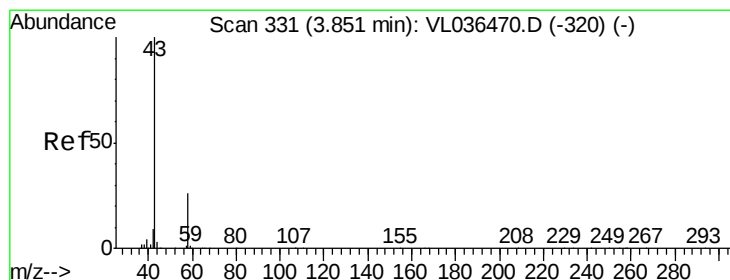
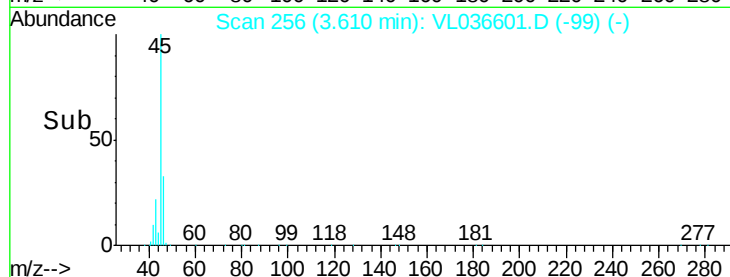
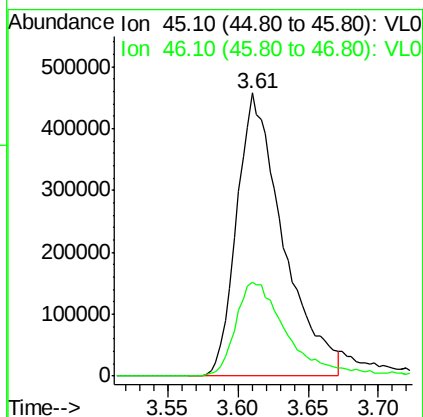
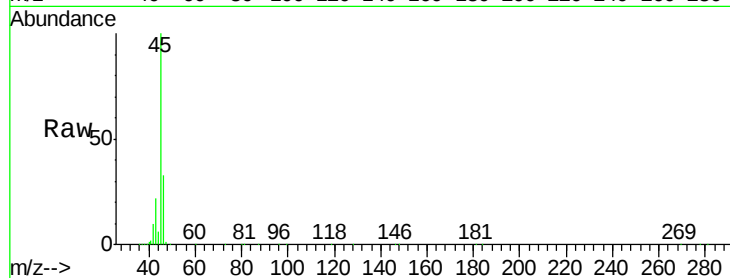
#13
Ethanol
Concen: 98.486 ppbv
RT: 3.61 min Scan# 256
Delta R.T. 0.00 min
Lab File: VL036601.D
Acq: 31 Mar 2021 14:26

Instrument :
MSVOA_L
ClientSampled :
SSB-SS-1

Tot Ion: 45 Resp: 1054646
Ion Ratio Lower Upper
45 100
46 37.9 16.6 66.2

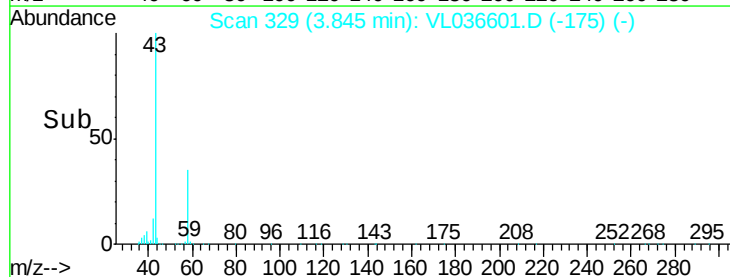
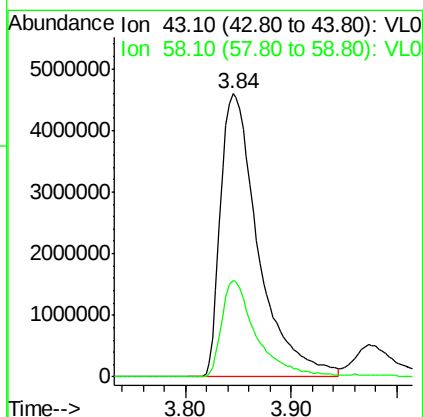
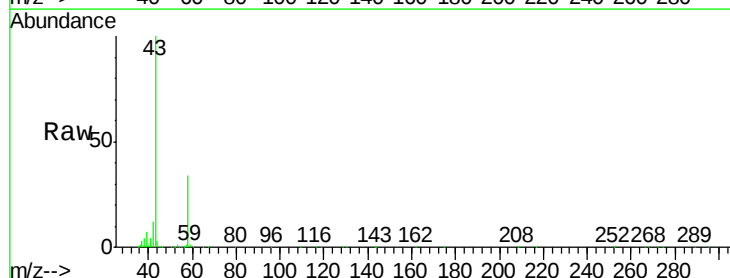
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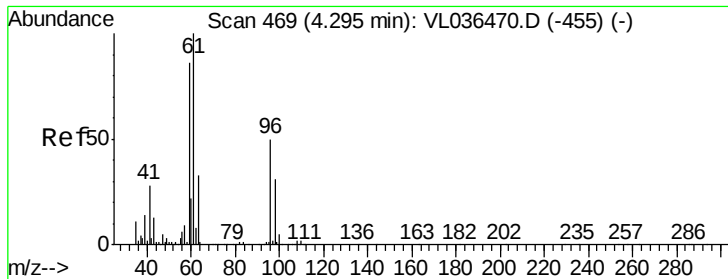
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#15
Acetone
Concen: 76.941 ppbv
RT: 3.84 min Scan# 329
Delta R.T. -0.01 min
Lab File: VL036601.D
Acq: 31 Mar 2021 14:26

Tgt Ion: 43 Resp: 11433102
Ion Ratio Lower Upper
43 100
58 31.3 21.2 31.8





#17

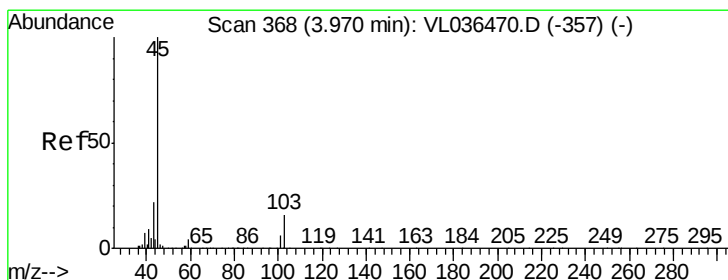
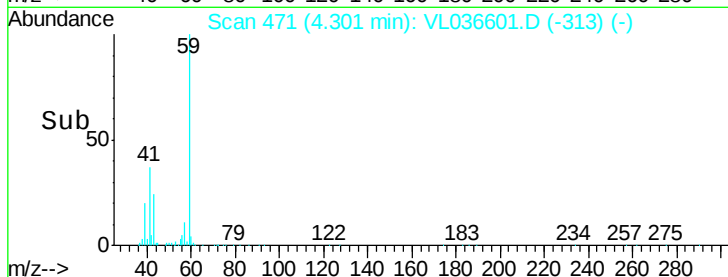
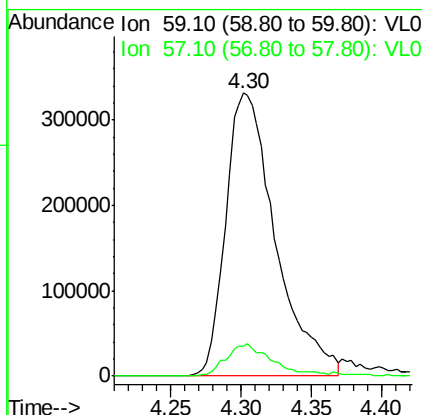
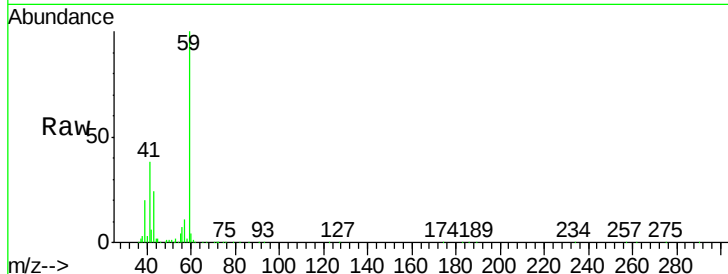
tert-Butyl alcohol
Concen: 6.299 ppbv
RT: 4.30 min Scan# 471
Delta R.T. 0.01 min
Lab File: VL036601.D
Acq: 31 Mar 2021 14:26

Instrument :
MSVOA_L
ClientSampleId :
SSB-SS-1

Tot Ion	Ratio	Lower	Upper
59	100		
57	11.2	8.6	12.8

Manual Integrations
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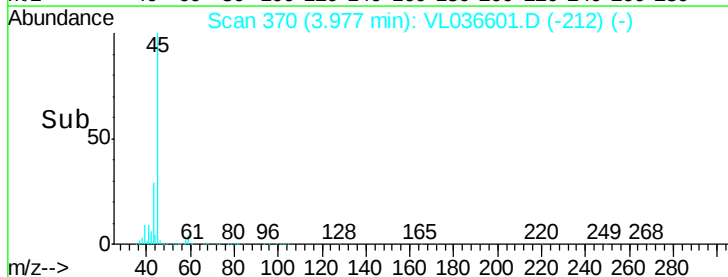
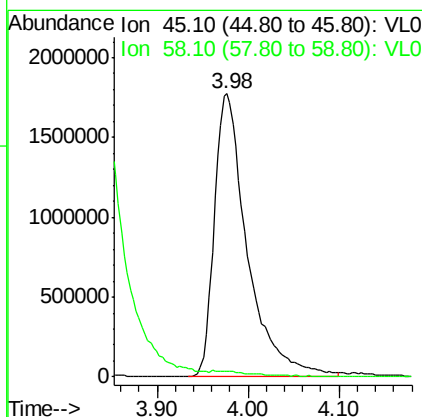
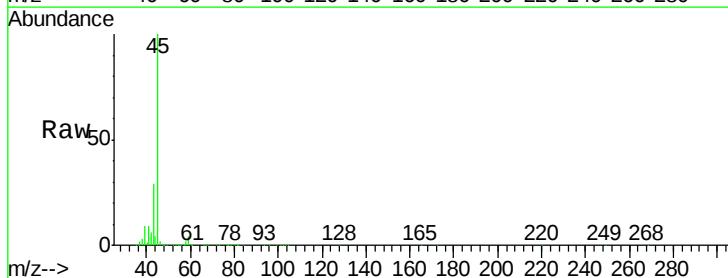
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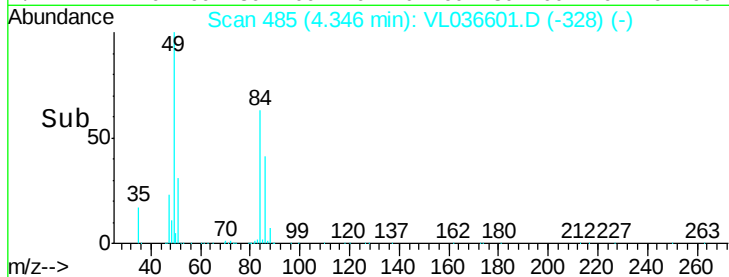
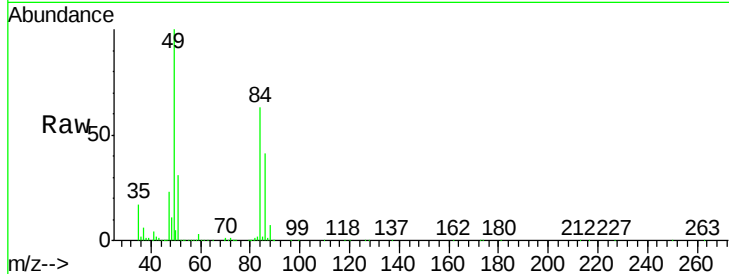
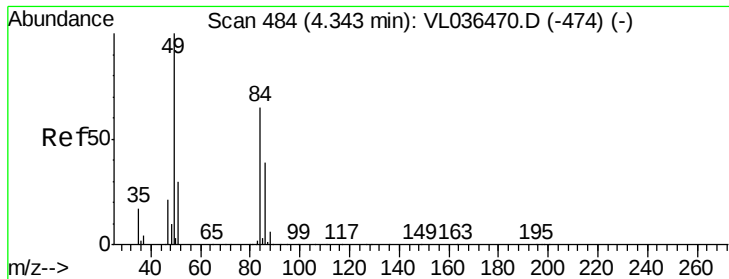


#19

Isopropyl Alcohol
Concen: 54.442 ppbv
RT: 3.98 min Scan# 370
Delta R.T. 0.01 min
Lab File: VL036601.D
Acq: 31 Mar 2021 14:26

Tgt Ion	Ratio	Lower	Upper
45	100		
58	3.3	2.9	4.3





#20

Methvlene Chloride

Concen: 29.343 ppbv

RT: 4.35 min Scan# 485

Delta R.T. 0.00 min

Lab File: VL036601.D

Acq: 31 Mar 2021 14:26

Tot Ion: 84 Resp: 2041497

Ion Ratio Lower Upper

84 100

49 157.3 122.9 184.3

51 48.4 36.9 55.3

86 65.1 48.2 72.4

Instrument :

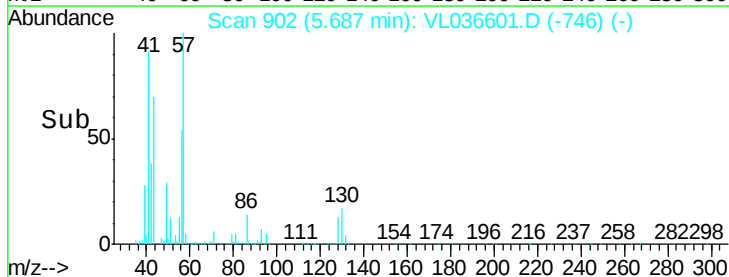
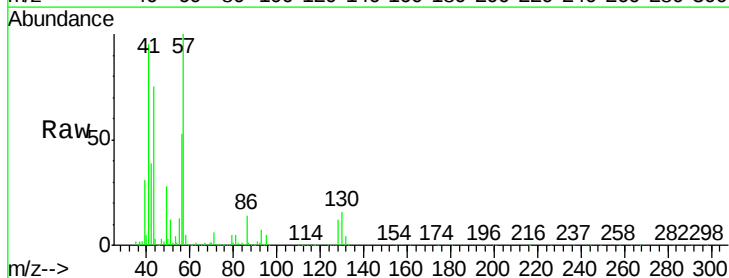
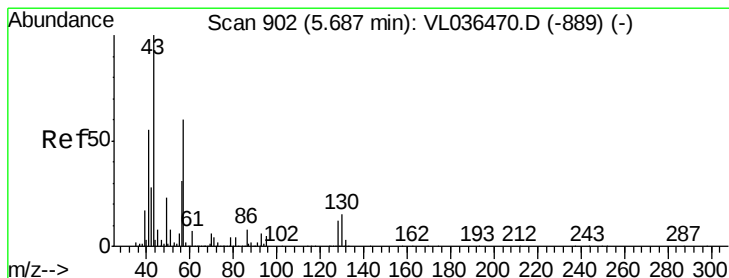
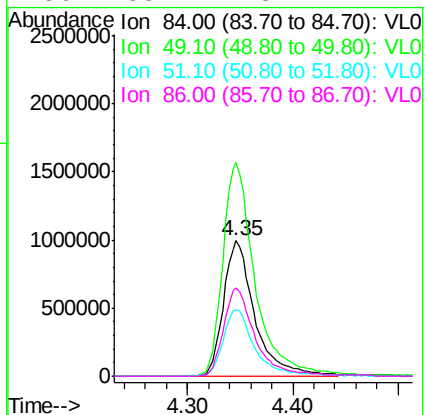
MSVOA_L

ClientSampleId :

SSB-SS-1

Manual Integrations
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#26

Hexane

Concen: 16.886 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.00 min

Lab File: VL036601.D

Acq: 31 Mar 2021 14:26

Tgt Ion: 57 Resp: 2768258

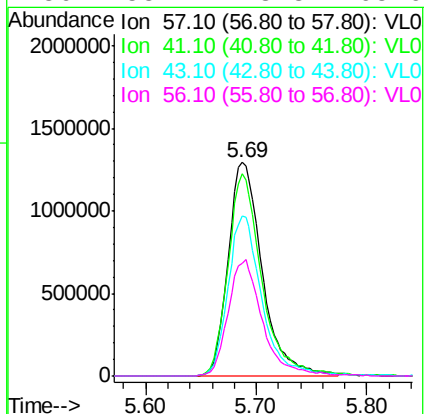
Ion Ratio Lower Upper

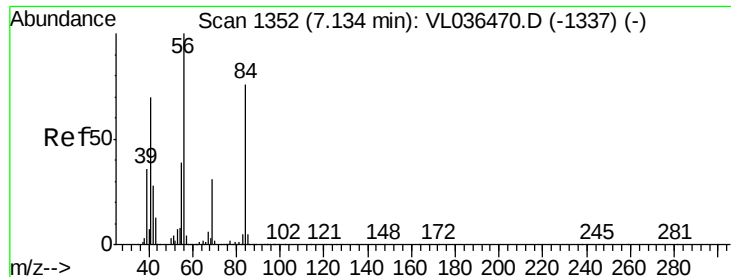
57 100

41 94.7 77.2 115.8

43 75.0 173.8 260.6#

56 55.2 43.8 65.6





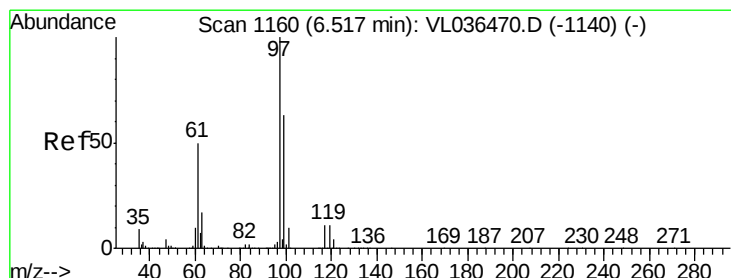
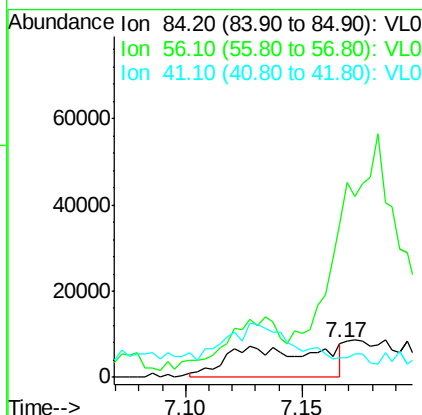
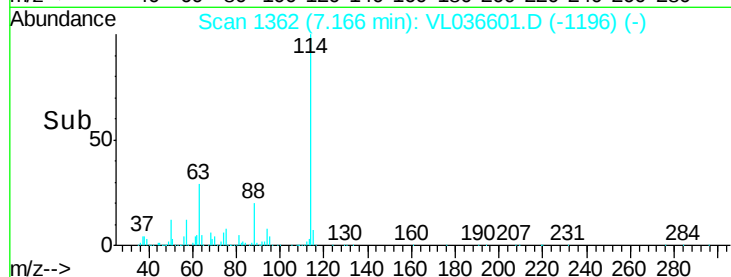
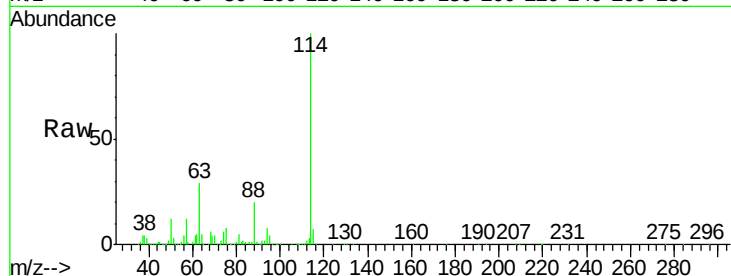
#30
Cvclohexane
Concen: 0.149 ppbv m
RT: 7.17 min Scan# 1362
Delta R.T. 0.03 min
Lab File: VL036601.D
Acq: 31 Mar 2021 14:26

Instrument :
MSVOA_L
ClientSampleId :
SSB-SS-1

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	114.6	171.8#
41	0.0	75.3	112.9#

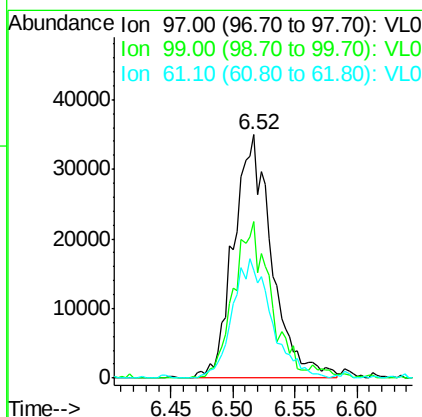
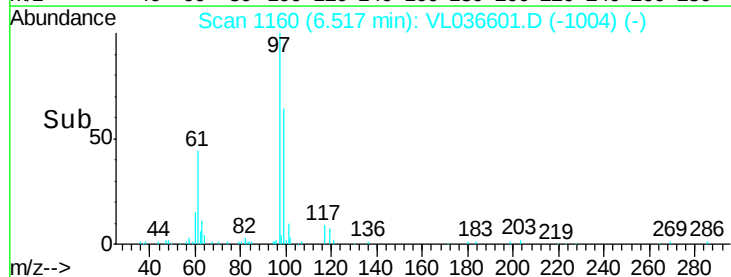
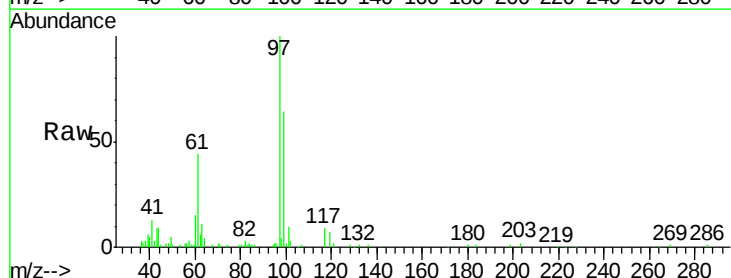
Manual Integrations
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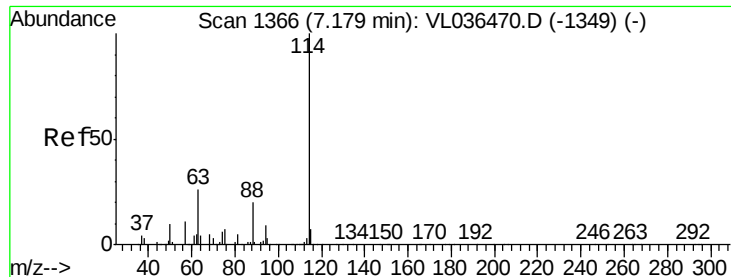
MMDadoda
4/2/2021 6:52:26 PM



#32
1,1,1-Trichloroethane
Concen: 0.284 ppbv m
RT: 6.52 min Scan# 1160
Delta R.T. 0.00 min
Lab File: VL036601.D
Acq: 31 Mar 2021 14:26

Tgt Ion	Ratio	Lower	Upper
97	100		
99	64.5	51.4	77.0
61	50.7	40.6	60.8





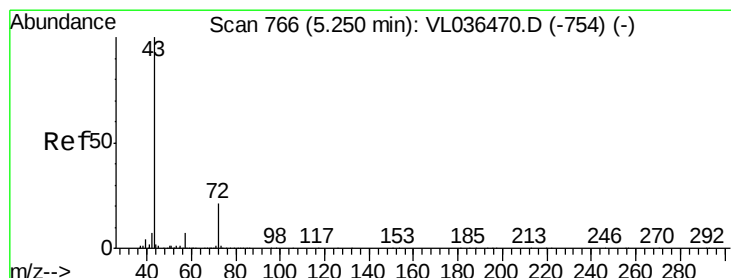
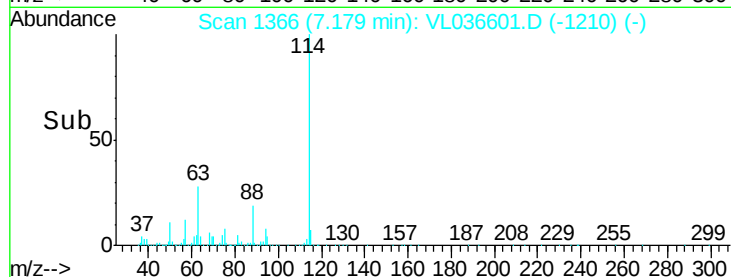
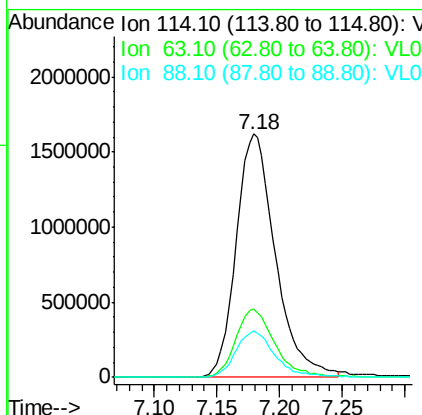
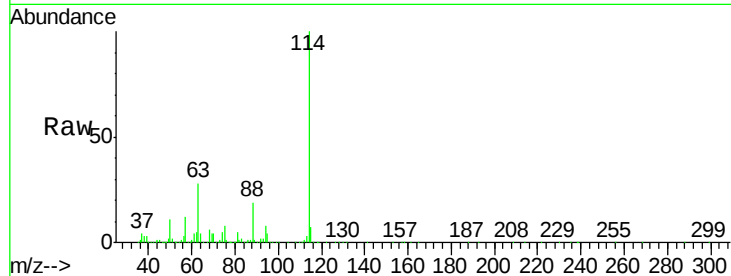
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18 min Scan# 1366
 Delta R.T. 0.00 min
 Lab File: VL036601.D
 Acq: 31 Mar 2021 14:26

Instrument :
 MSVOA_L
 ClientSampleId :
 SSB-SS-1

Tot Ion:114 Resp: 3523713
 Ion Ratio Lower Upper
 114 100
 63 28.5 22.4 33.6
 88 19.3 15.4 23.0

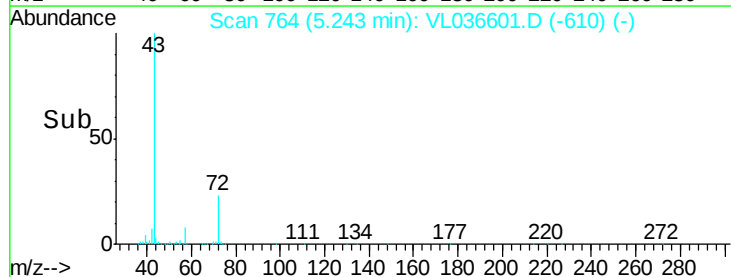
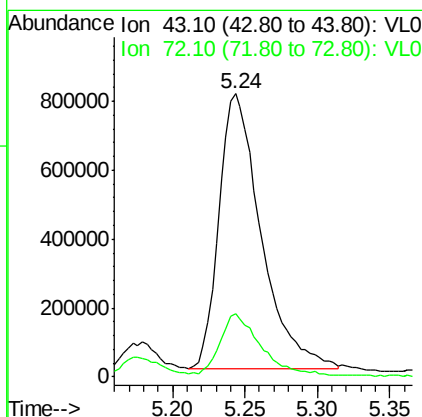
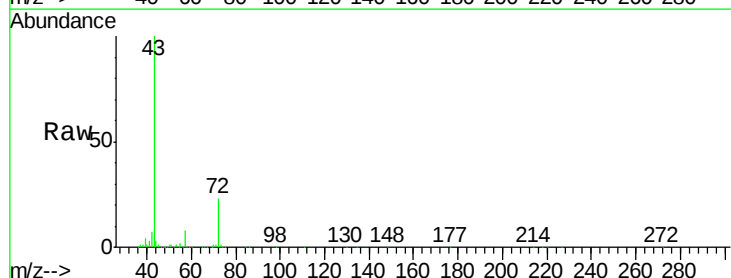
Manual Integrations
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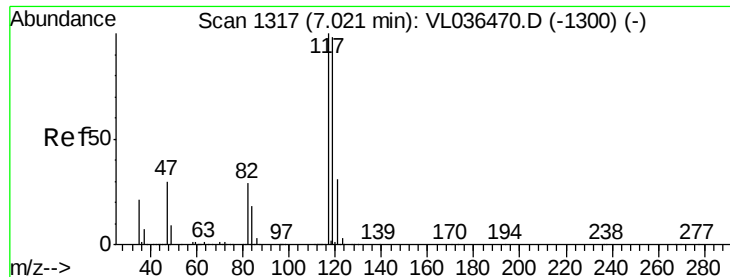
MMDadoda
 4/2/2021 6:52:26 PM



#34
 2-Butanone
 Concen: 9.430 ppbv
 RT: 5.24 min Scan# 764
 Delta R.T. -0.01 min
 Lab File: VL036601.D
 Acq: 31 Mar 2021 14:26

Tgt Ion: 43 Resp: 1621950
 Ion Ratio Lower Upper
 43 100
 72 23.8 17.0 25.6





#35

Carbon Tetrachloride

Concen: 0.058 ppbv

RT: 7.02 min Scan# 1318

Delta R.T. 0.00 min

Lab File: VL036601.D

Acq: 31 Mar 2021 14:26

Instrument :

MSVOA_L

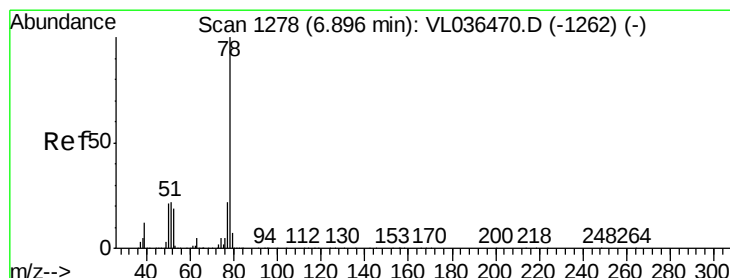
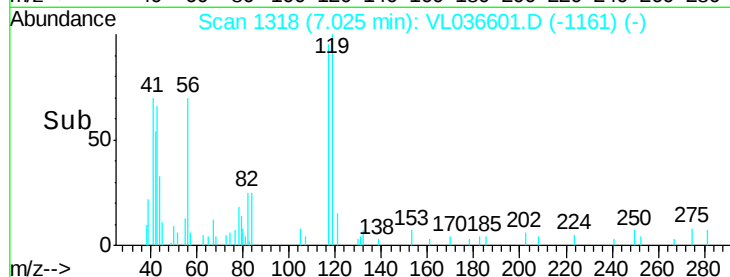
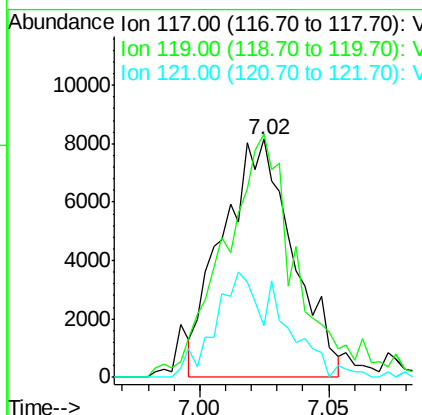
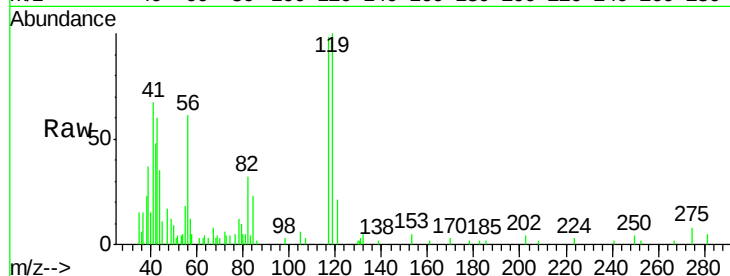
ClientSampled :

SSB-SS-1

Tot Ion:	117	Resp:	15570
Ion Ratio	Lower	Upper	
117	100		
119	99.1	78.2	117.2
121	18.1	24.5	36.7#

Manual Integrations
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#36

Benzene

Concen: 1.720 ppbv

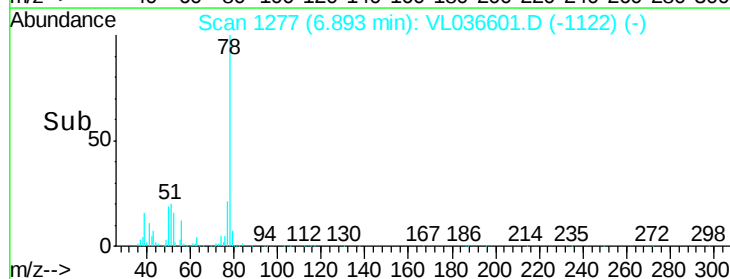
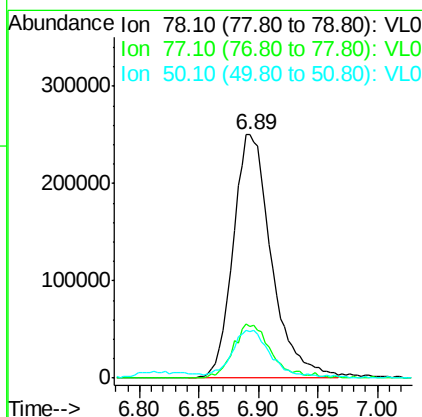
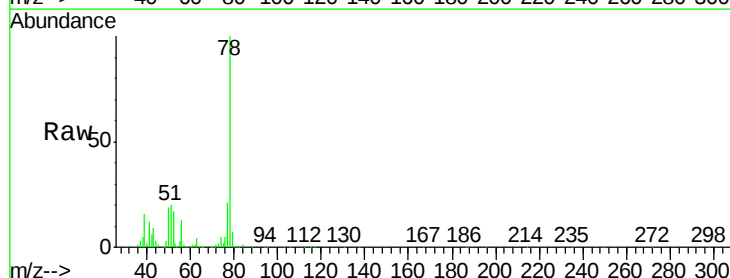
RT: 6.89 min Scan# 1277

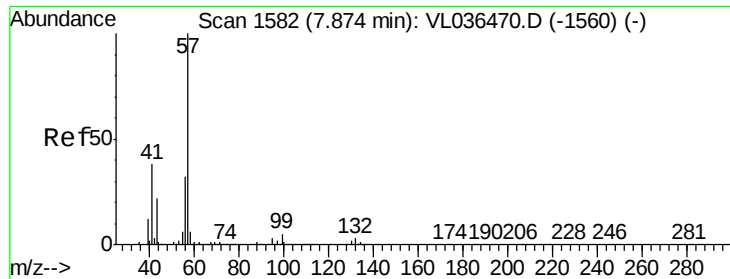
Delta R.T. -0.00 min

Lab File: VL036601.D

Acq: 31 Mar 2021 14:26

Tgt Ion:	78	Resp:	559051
Ion Ratio	Lower	Upper	
78	100		
77	20.8	18.0	27.0
50	18.5	16.5	24.7





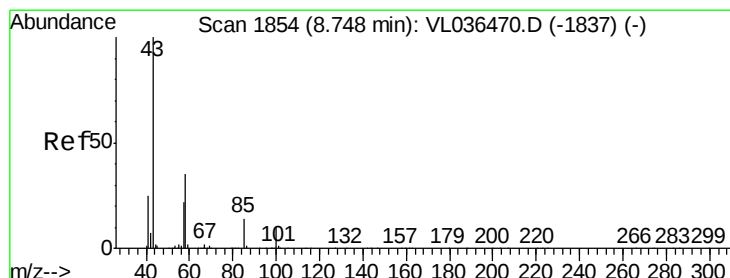
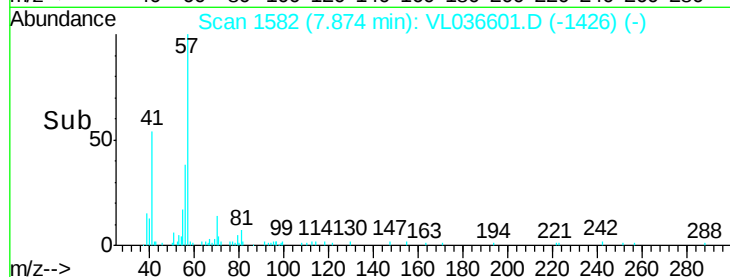
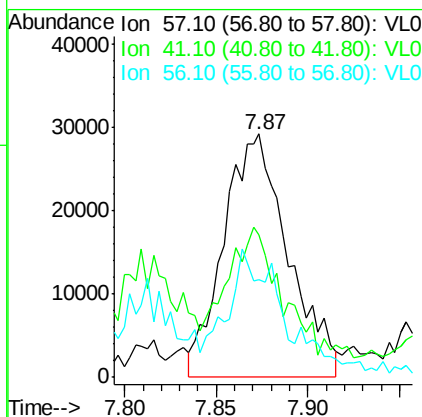
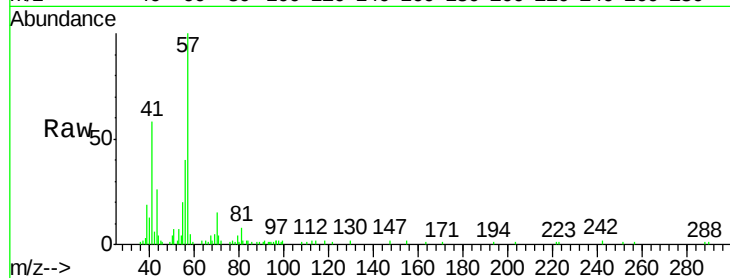
#44
 2,2,4-Trimethylpentane
 Concen: 0.125 ppbv m
 RT: 7.87 min Scan# 1582
 Delta R.T. 0.00 min
 Lab File: VL036601.D
 Acq: 31 Mar 2021 14:26

Instrument :
 MSVOA_L
 ClientSampleId :
 SSB-SS-1

Tot Ion	Ratio	Lower	Upper
57	100		
41	45.0	28.8	43.2#
56	0.0	26.1	39.1#

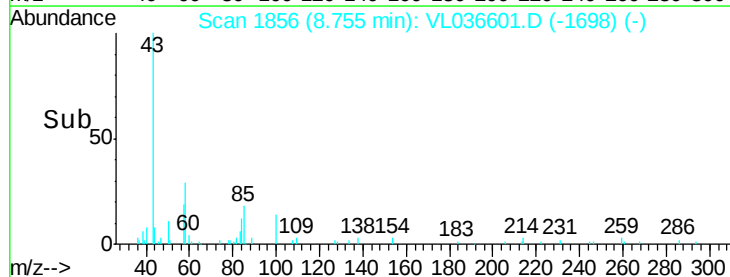
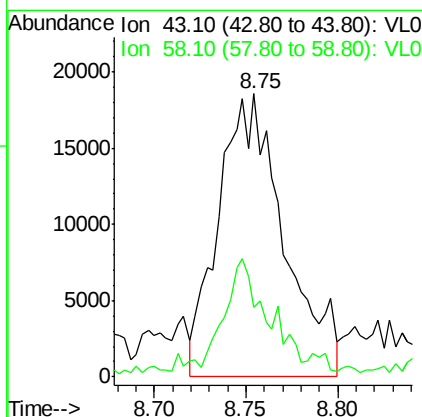
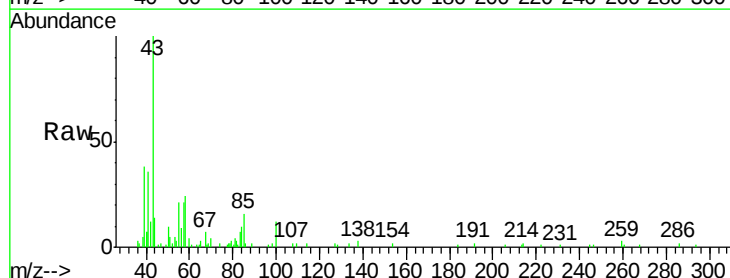
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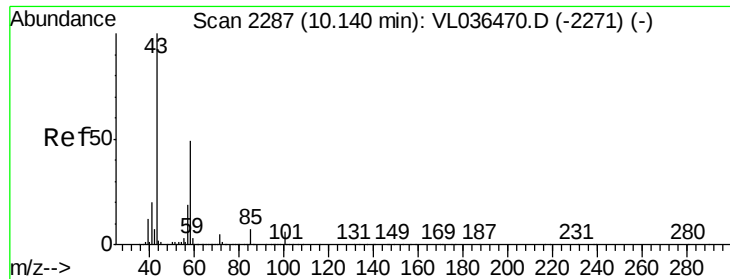
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#50
 4-Methyl-2-Pentanone
 Concen: 0.186 ppbv m
 RT: 8.75 min Scan# 1856
 Delta R.T. 0.01 min
 Lab File: VL036601.D
 Acq: 31 Mar 2021 14:26

Tgt Ion	Ratio	Lower	Upper
43	100		
58	38.9	28.2	42.2





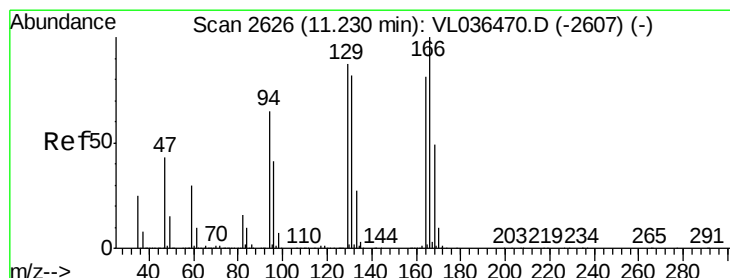
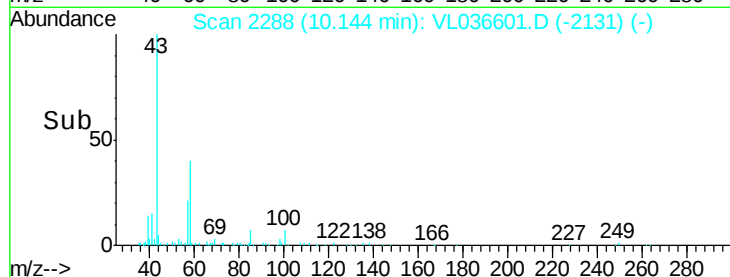
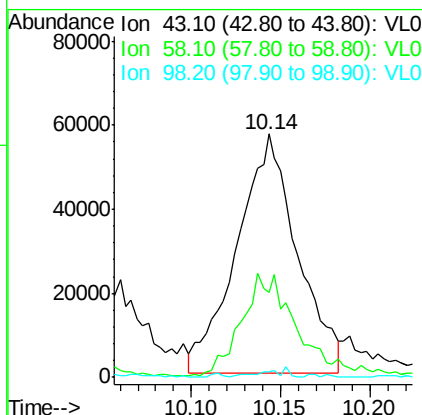
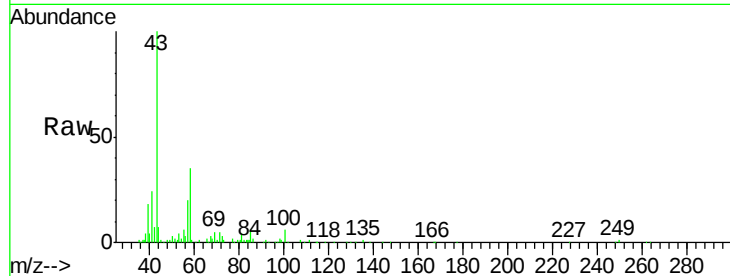
#51
2-Hexanone
Concen: 1.064 ppbv
RT: 10.14 min Scan# 2288
Delta R.T. 0.00 min
Lab File: VL036601.D
Acq: 31 Mar 2021 14:26

Instrument :
MSVOA_L
ClientSampleId :
SSB-SS-1

Tot Ion	Ratio	Lower	Upper
43	100		
58	39.2	37.7	56.5
98	1.9	0.2	0.2#

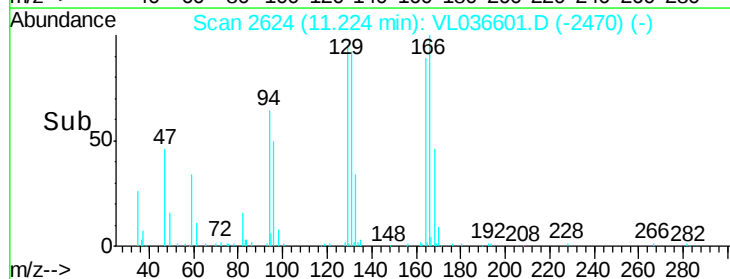
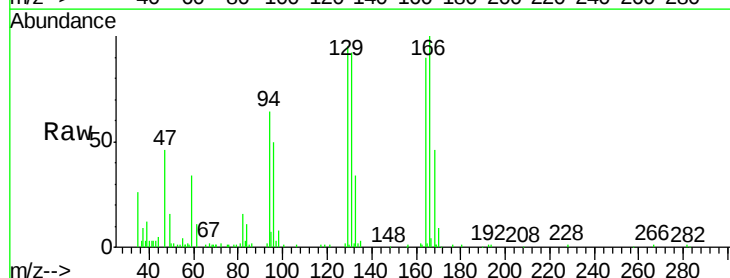
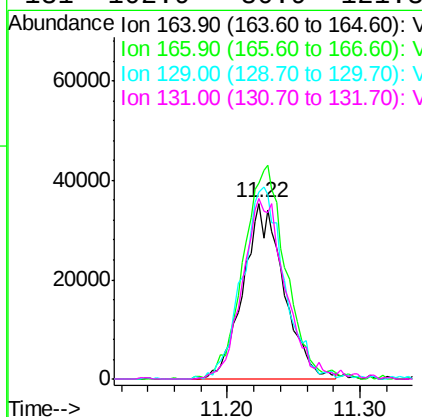
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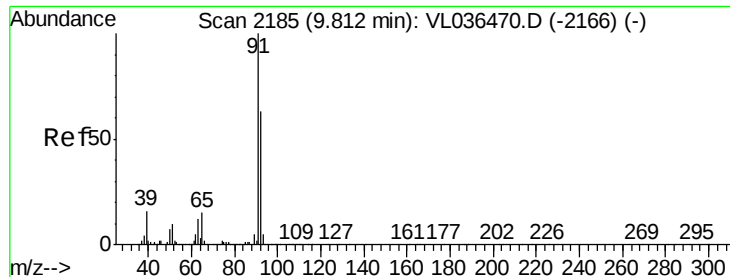
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#52
Tetrachloroethene
Concen: 0.628 ppbv m
RT: 11.22 min Scan# 2624
Delta R.T. -0.01 min
Lab File: VL036601.D
Acq: 31 Mar 2021 14:26

Tgt Ion	Ratio	Lower	Upper
164	100		
166	111.7	98.3	147.5
129	106.5	85.8	128.8
131	102.9	80.9	121.3





#53

Toluene

Concen: 2.405 ppbv

RT: 9.81 min Scan# 2184

Delta R.T. -0.00 min

Lab File: VL036601.D

Acq: 31 Mar 2021 14:26

Instrument :

MSVOA_L

ClientSampleId :

SSB-SS-1

Tot Ion: 91 Resp: 832206

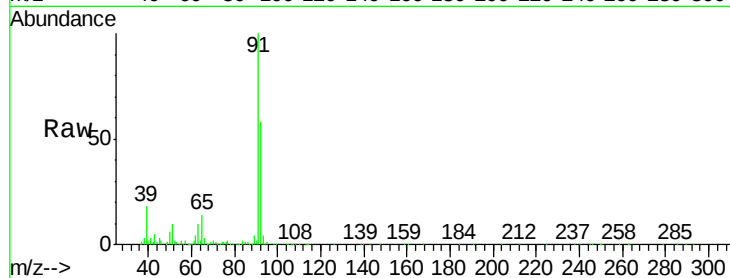
Ion Ratio Lower Upper

91 100

92 60.3 48.8 73.2

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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

9.81

400000

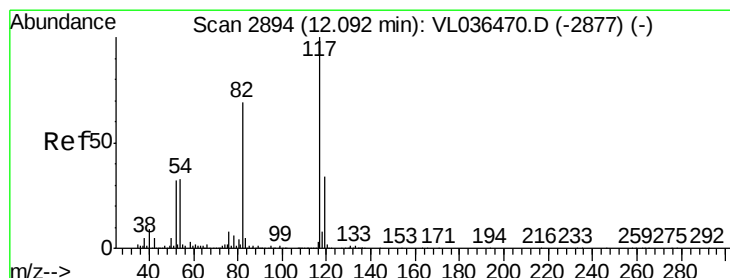
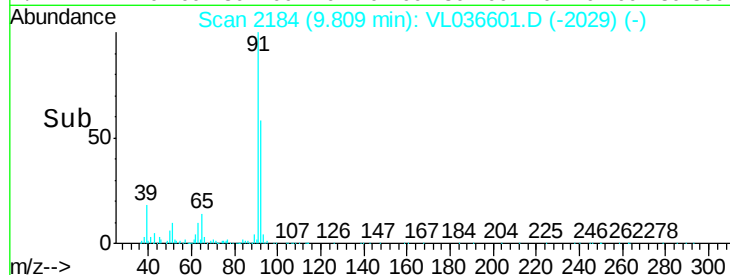
300000

200000

100000

0

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2893

Delta R.T. -0.00 min

Lab File: VL036601.D

Acq: 31 Mar 2021 14:26

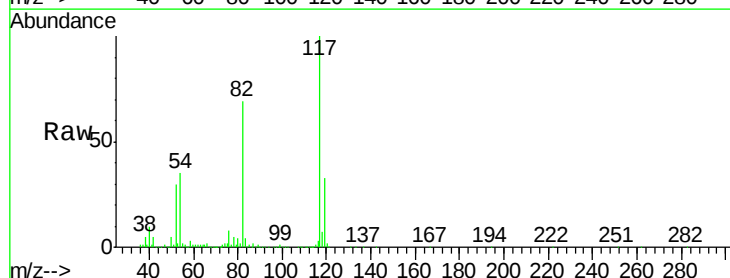
Tgt Ion: 117 Resp: 3071711

Ion Ratio Lower Upper

117 100

82 71.4 57.4 86.0

119 34.7 47.4 71.0#



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

12.09

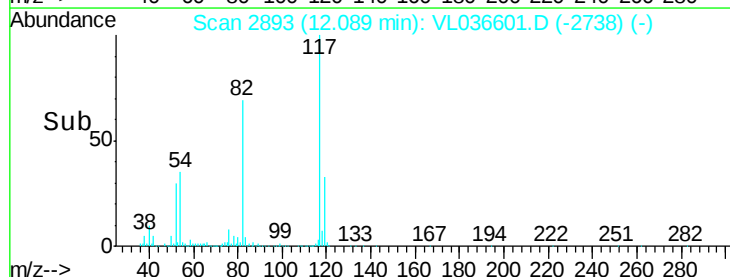
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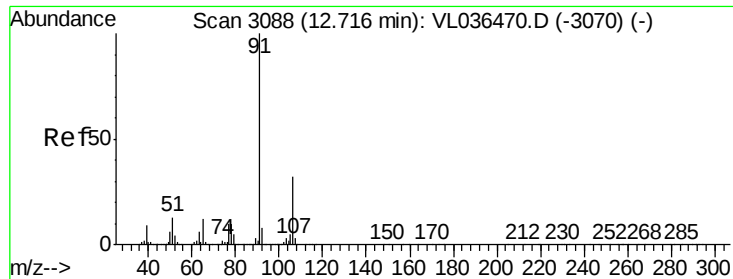
1000000

500000

0

Time-->





#58

Ethyl Benzene

Concen: 0.341 ppbv

RT: 12.72 min Scan# 3088

Delta R.T. 0.00 min

Lab File: VL036601.D

Acq: 31 Mar 2021 14:26

Instrument :

MSVOA_L

ClientSampleId :

SSB-SS-1

Tot Ion: 91 Resp: 152506

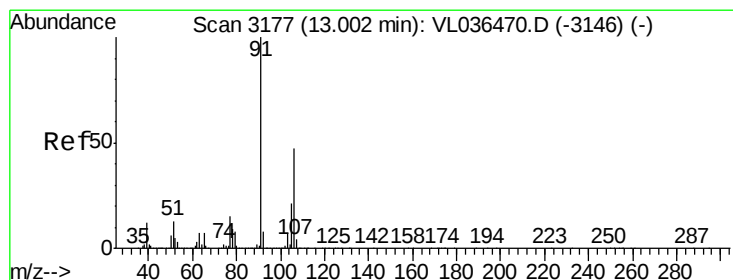
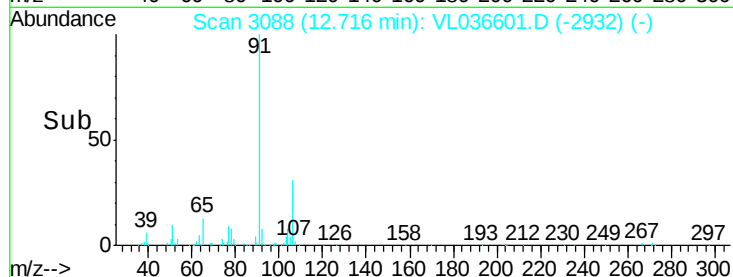
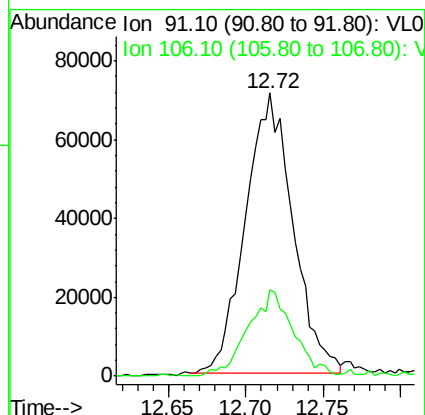
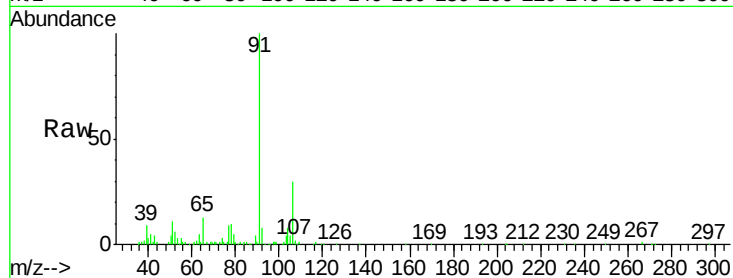
Ion Ratio Lower Upper

91 100

106 30.3 25.3 37.9

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#59

m/p-Xylene

Concen: 1.538 ppbv

RT: 12.97 min Scan# 3167

Delta R.T. -0.03 min

Lab File: VL036601.D

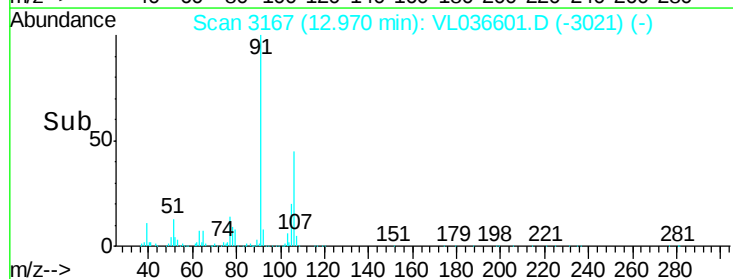
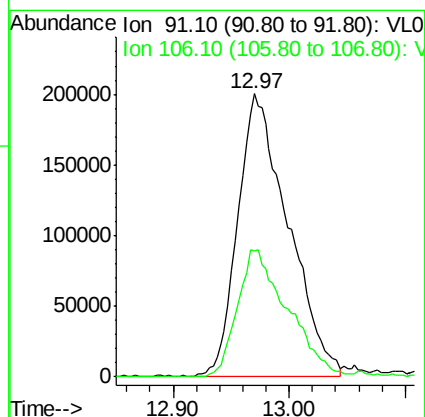
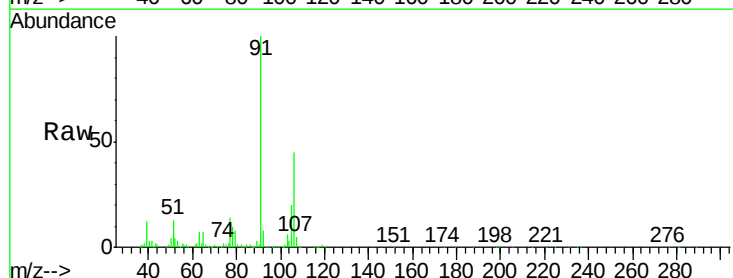
Acq: 31 Mar 2021 14:26

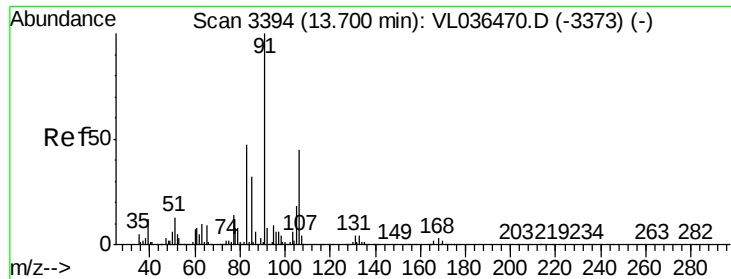
Tgt Ion: 91 Resp: 599424

Ion Ratio Lower Upper

91 100

106 45.8 35.3 52.9





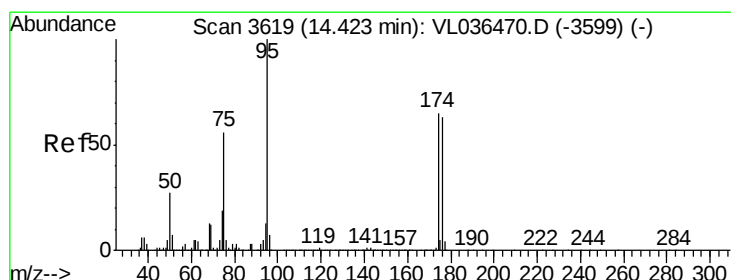
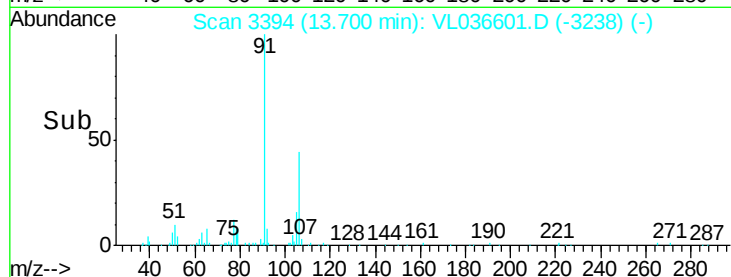
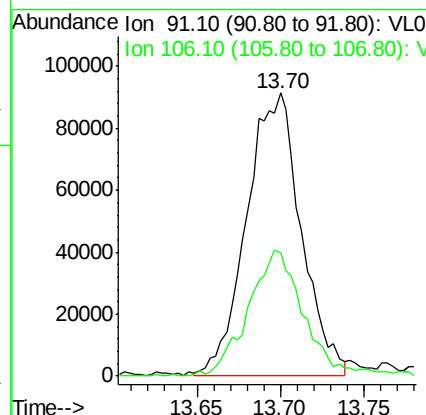
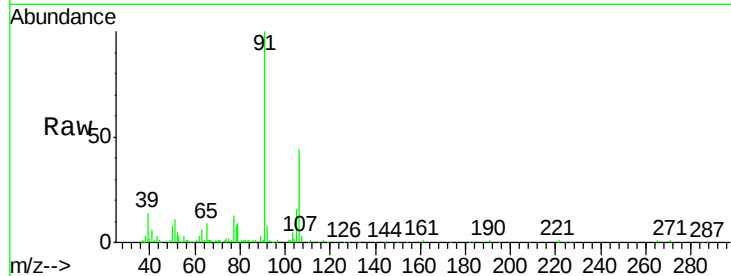
#60
o-Xylene
Concen: 0.550 ppbv m
RT: 13.70 min Scan# 3394
Delta R.T. 0.00 min
Lab File: VL036601.D
Acq: 31 Mar 2021 14:26

Instrument :
MSVOA_L
ClientSampled :
SSB-SS-1

Tot Ion: 91 Resp: 207400
Ion Ratio Lower Upper
91 100
106 45.1 22.3 66.9

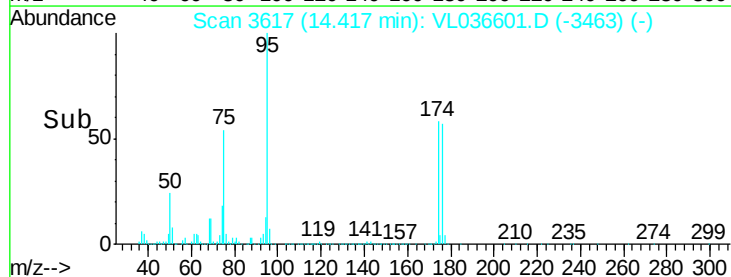
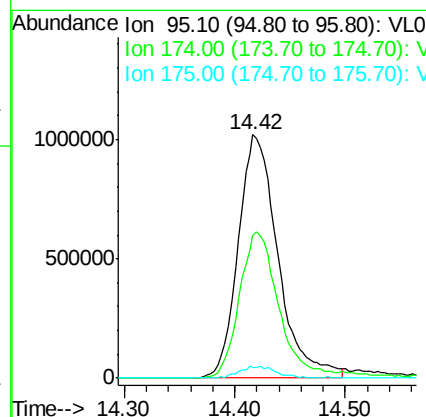
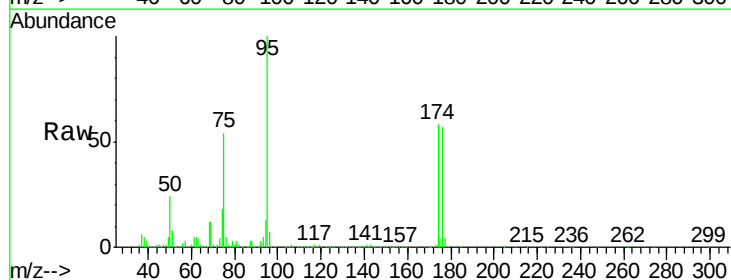
Manual Integrations
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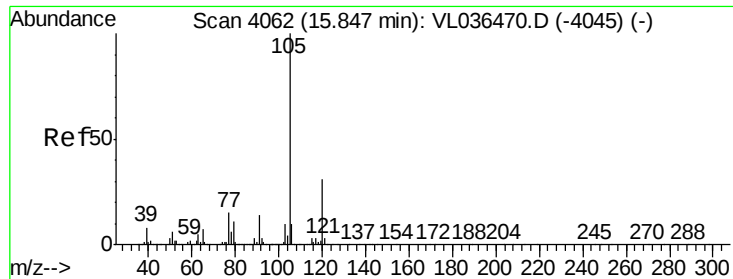
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.423 ppbv
RT: 14.42 min Scan# 3617
Delta R.T. -0.01 min
Lab File: VL036601.D
Acq: 31 Mar 2021 14:26

Tgt Ion: 95 Resp: 2551771
Ion Ratio Lower Upper
95 100
174 62.6 51.0 76.6
175 4.7 3.9 5.9





#72

4-Ethyltoluene

Concen: 0.174 ppbv

RT: 15.85 min Scan# 4062

Delta R.T. 0.00 min

Lab File: VL036601.D

Acq: 31 Mar 2021 14:26

Instrument :

MSVOA_L

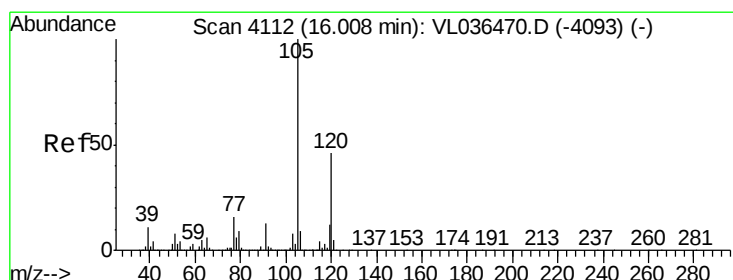
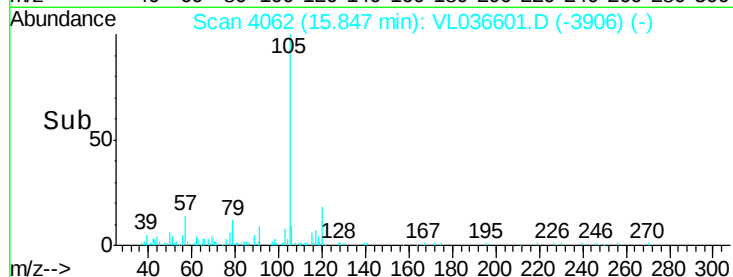
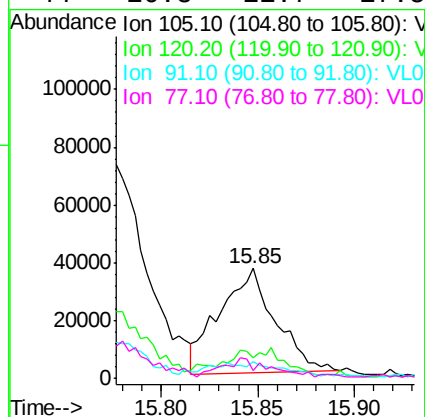
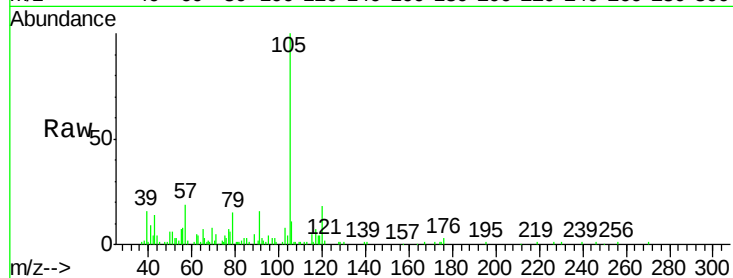
ClientSampleId :

SSB-SS-1

Tot Ion:	105	Resp:	71800
Ion Ratio	Lower	Upper	
105	100		
120	34.8	24.0	36.0
91	17.2	11.0	16.4
77	16.8	11.7	17.5

Manual Integrations
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#73

1,3,5-Trimethylbenzene

Concen: 0.217 ppbv m

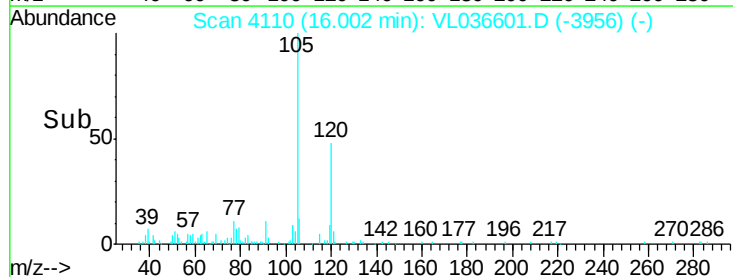
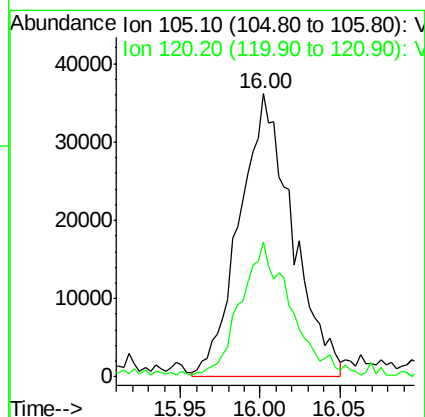
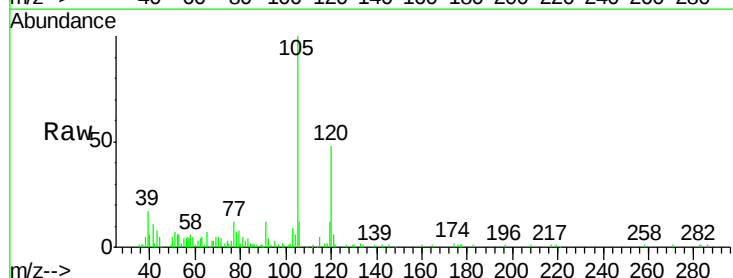
RT: 16.00 min Scan# 4110

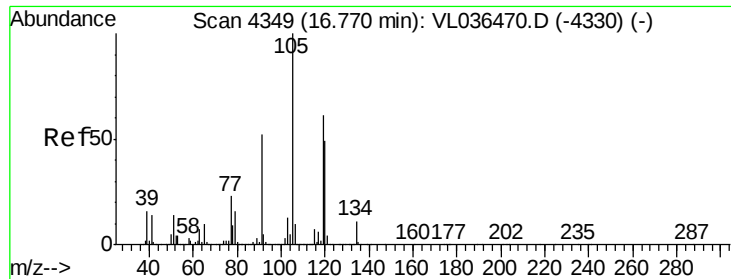
Delta R.T. -0.01 min

Lab File: VL036601.D

Acq: 31 Mar 2021 14:26

Tgt Ion:	105	Resp:	83675
Ion Ratio	Lower	Upper	
105	100		
120	47.7	36.6	54.8





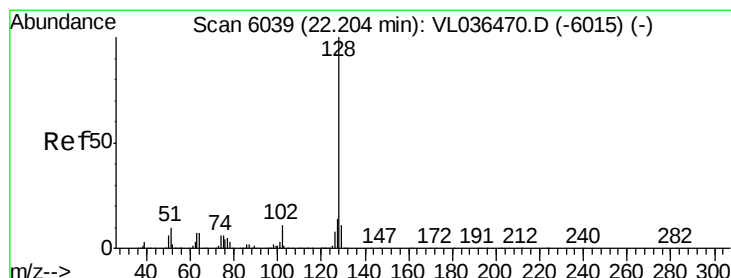
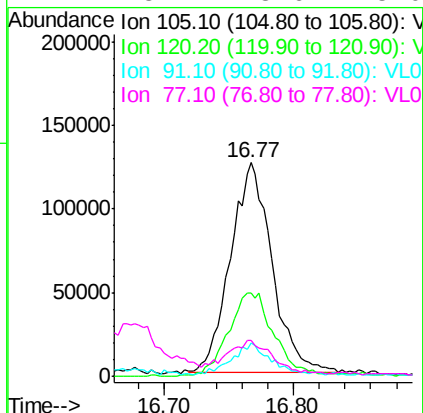
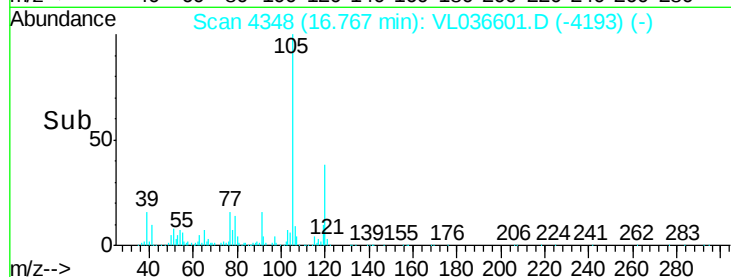
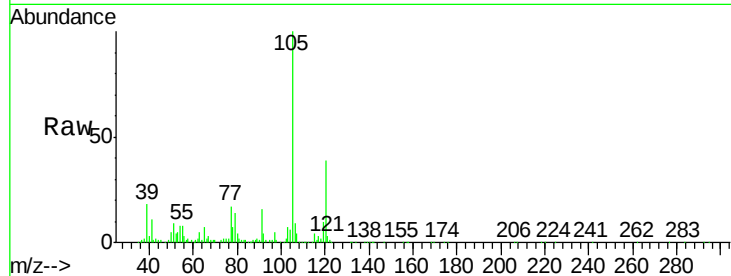
#74
 1,2,4-Trimethylbenzene
 Concen: 0.686 ppbv
 RT: 16.77 min Scan# 4348
 Delta R.T. -0.00 min
 Lab File: VL036601.D
 Acq: 31 Mar 2021 14:26

Instrument :
 MSVOA_L
 ClientSampleId :
 SSB-SS-1

Tot Ion	Ratio	Resp	Lower	Upper
105	100			
120	38.6	39.2	58.8#	
91	15.0	42.6	64.0#	
77	15.4	18.6	28.0#	

Manual Integrations
 APPROVED

MMDadoda
 4/2/2021 6:52:26 PM



#79
 Naphthalene
 Concen: 0.180 ppbv m
 RT: 22.21 min Scan# 6041
 Delta R.T. 0.01 min
 Lab File: VL036601.D
 Acq: 31 Mar 2021 14:26

Tgt Ion	Ratio	Resp	Lower	Upper
128	100			
127	19.7	10.9	16.3#	
129	26.6	9.0	13.4#	

