

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060121\
 Data File : VL037067.D
 Acq On : 1 Jun 2021 12:49
 Operator : SY/AP
 Sample : M2559-01 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 HSG1

Manual Integrations
 APPROVED

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 6/7/2021 2:58:22 PM

Quant Time: Jun 04 11:06:00 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18 2021
 QLast Update : Tue May 18 12:00:15 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1577252	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.15	114	4664347	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.06	117	4367811	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.39	95	3404471	10.38	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
9) Propene	3.01	41	42923	0.415	ppbv	86
10) Heptane	8.11	43	3504746	13.592	ppbv	99
13) Ethanol	3.59	45	262559m	19.019	ppbv	
15) Acetone	3.84	43	1187657m	7.351	ppbv	
17) tert-Butyl alcohol	4.30	59	97774	0.661	ppbv #	86
19) Isopropyl Alcohol	3.97	45	78010m	0.898	ppbv	
20) Methylene Chloride	4.33	84	188308	2.174	ppbv	98
26) Hexane	5.67	57	487034	2.456	ppbv #	47
27) Carbon Disulfide	4.54	76	36128	0.181	ppbv #	83
30) Cyclohexane	7.11	84	148474	0.881	ppbv	91
34) 2-Butanone	5.24	43	115592m	0.681	ppbv	
36) Benzene	6.87	78	433800	1.080	ppbv	96
53) Toluene	9.79	91	8907892	18.634	ppbv	98
58) Ethyl Benzene	12.69	91	946087	1.535	ppbv	97
59) m/p-Xylene	12.94	91	2715673	5.329	ppbv	99
60) o-Xylene	13.67	91	882848	1.817	ppbv	97
61) Styrene	13.51	104	54992	0.201	ppbv #	87
62) Isopropylbenzene	14.64	105	792944	1.135	ppbv	97
64) n-propylbenzene	15.55	120	59444	0.330	ppbv	89
69) p-Isopropyltoluene	17.63	119	472075m	0.639	ppbv	
70) n-Butylbenzene	18.53	91	76014m	0.108	ppbv	
72) 4-Ethyltoluene	15.82	105	328373	0.569	ppbv	98
73) 1,3,5-Trimethylbenzene	15.98	105	201194	0.371	ppbv	97
74) 1,2,4-Trimethylbenzene	16.74	105	779473	1.392	ppbv #	72

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

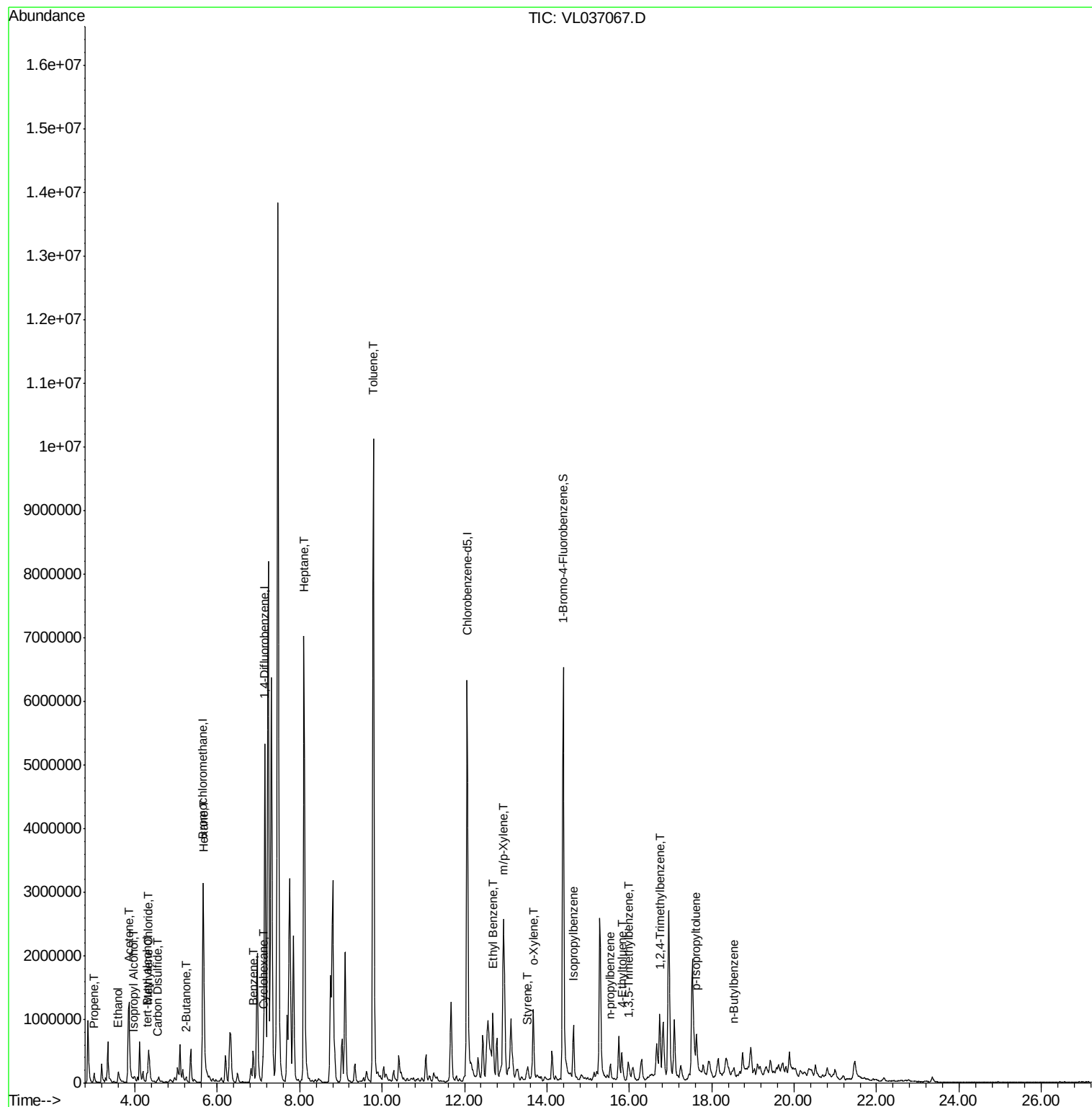
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL060121\
Data File : VL037067.D
Acq On : 1 Jun 2021 12:49
Operator : SY/AP
Sample : M2559-01 10X
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

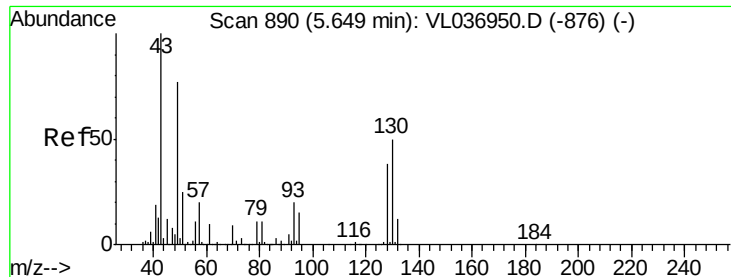
Instrument :
MSVOA_L
ClientSampleId :
HSG1

Manual Integrations
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Quant Time: Jun 04 11:06:00 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May
QLast Update : Tue May 18 12:00:15 2021
Response via : Initial Calibration





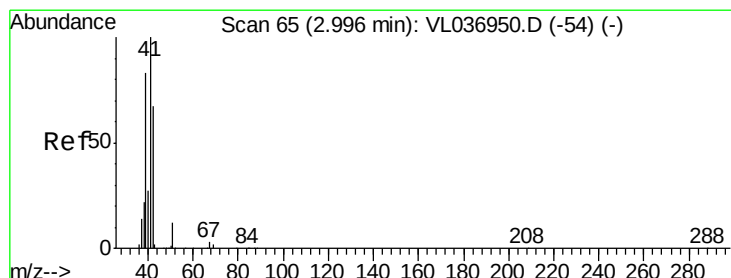
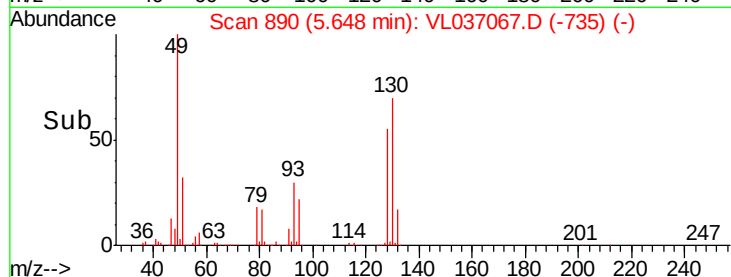
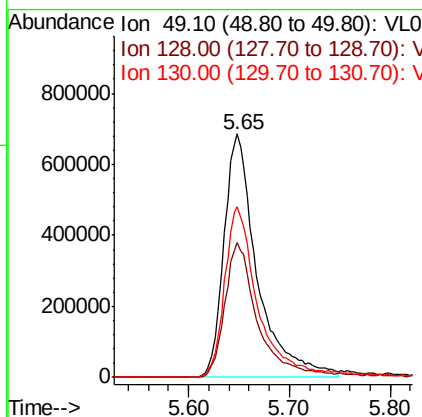
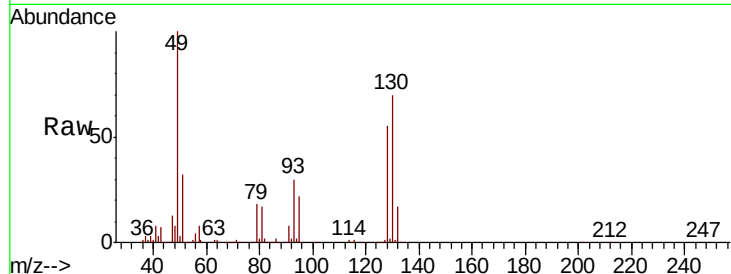
#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.65 min Scan# 890
 Delta R.T. -0.00 min
 Lab File: VL037067.D
 Acq: 1 Jun 2021 12:49

Instrument :
 MSVOA_L
 ClientSampled :
 HSG1

Tot Ion: 49 Resp: 1577252
 Ion Ratio Lower Upper
 49 100
 128 56.2 26.9 80.7
 130 72.8 33.8 101.4

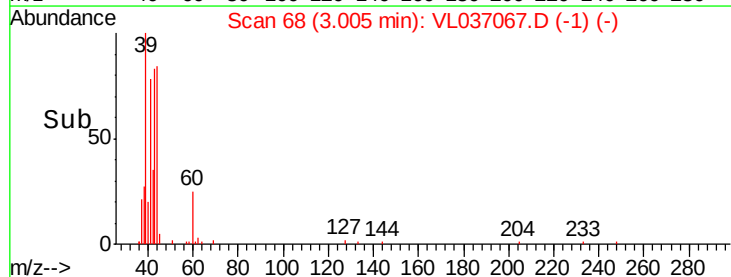
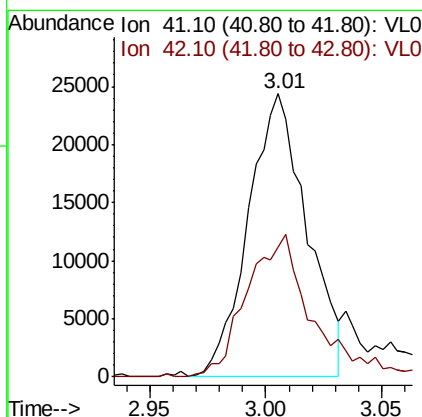
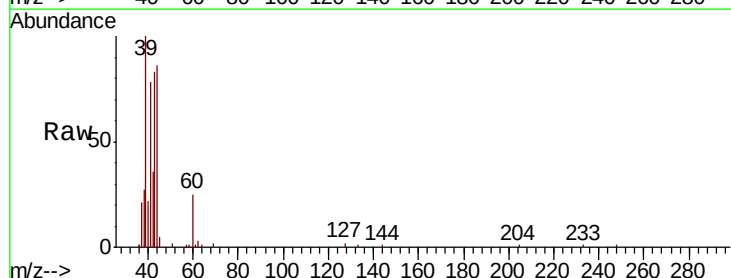
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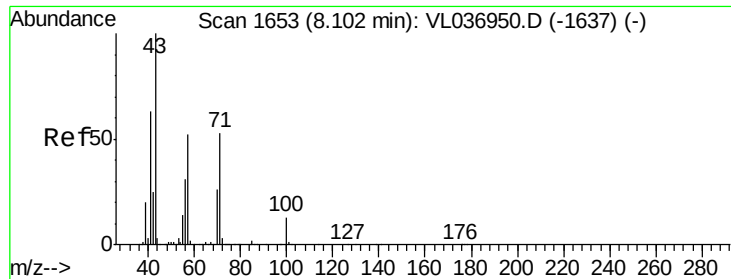
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#9
 Propene
 Concen: 0.415 ppbv
 RT: 3.01 min Scan# 68
 Delta R.T. 0.01 min
 Lab File: VL037067.D
 Acq: 1 Jun 2021 12:49

Tgt Ion: 41 Resp: 42923
 Ion Ratio Lower Upper
 41 100
 42 55.8 53.9 80.9





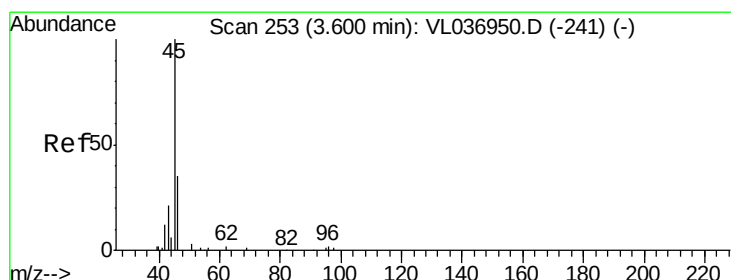
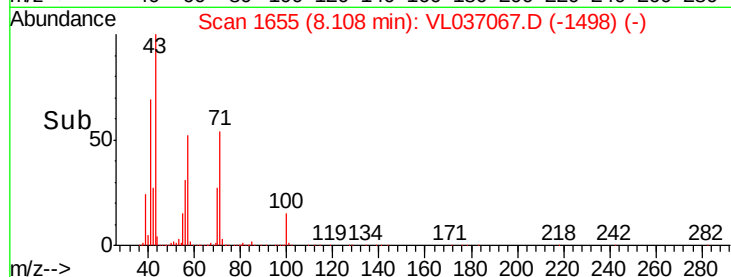
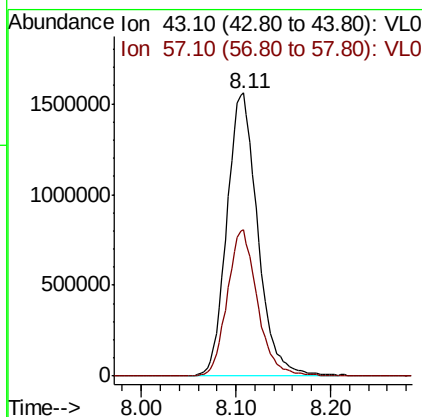
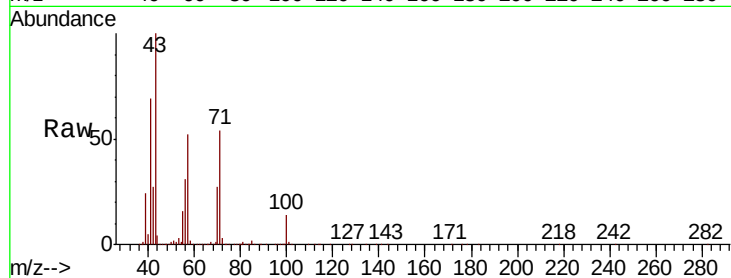
#10
Heptane
Concen: 13.592 ppbv
RT: 8.11 min Scan# 1655
Delta R.T. 0.01 min
Lab File: VL037067.D
Acq: 1 Jun 2021 12:49

Instrument :
MSVOA_L
ClientSampleId :
HSG1

Tot Ion: 43 Resp: 3504746
Ion Ratio Lower Upper
43 100
57 50.8 41.0 61.6

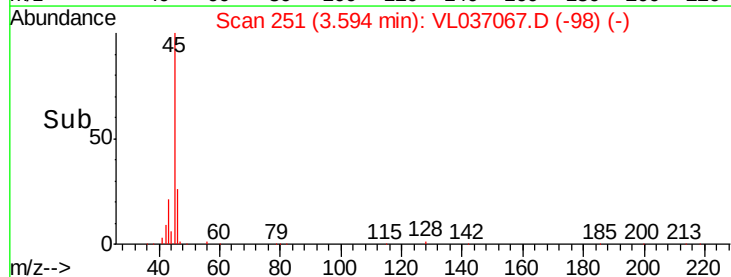
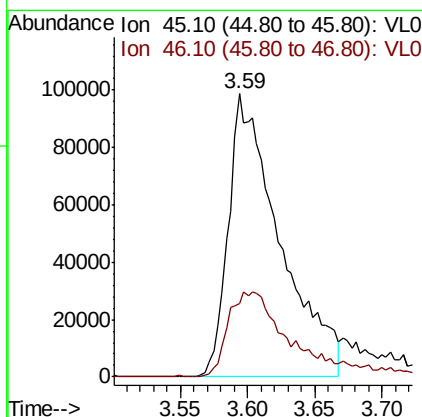
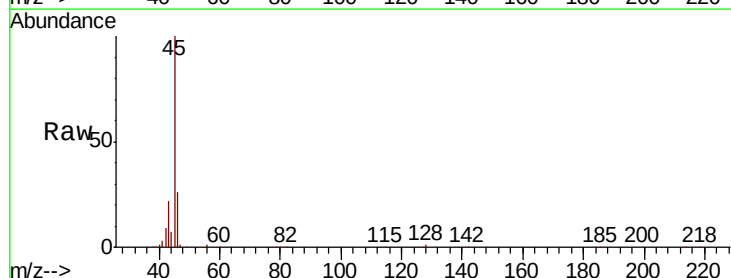
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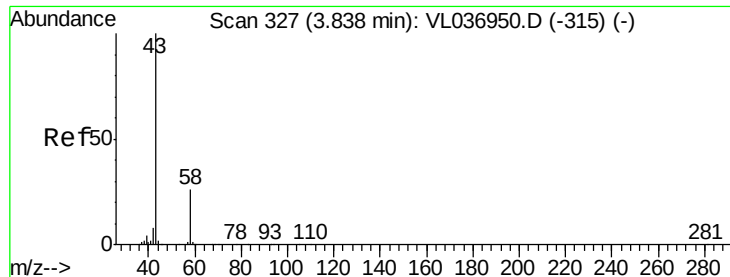
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#13
Ethanol
Concen: 19.019 ppbv m
RT: 3.59 min Scan# 251
Delta R.T. -0.01 min
Lab File: VL037067.D
Acq: 1 Jun 2021 12:49

Tgt Ion: 45 Resp: 262559
Ion Ratio Lower Upper
45 100
46 38.7 16.3 65.3





#15

Acetone

Concen: 7.351 ppbv m

RT: 3.84 min Scan# 327

Delta R.T. -0.00 min

Lab File: VL037067.D

Acq: 1 Jun 2021 12:49

Instrument :

MSVOA_L

ClientSampleId :

HSG1

Tot Ion: 43 Resp: 1187657

Ion Ratio Lower Upper

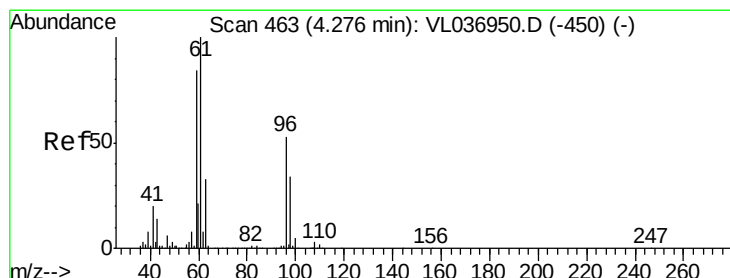
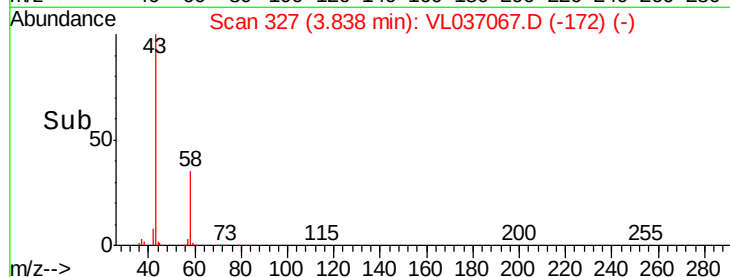
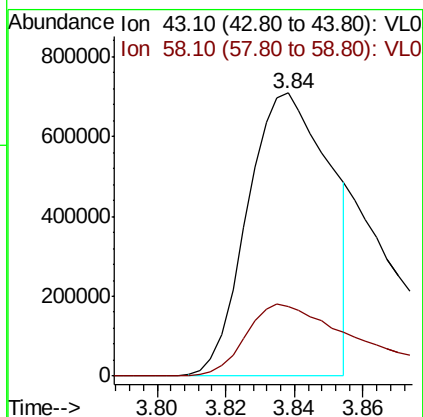
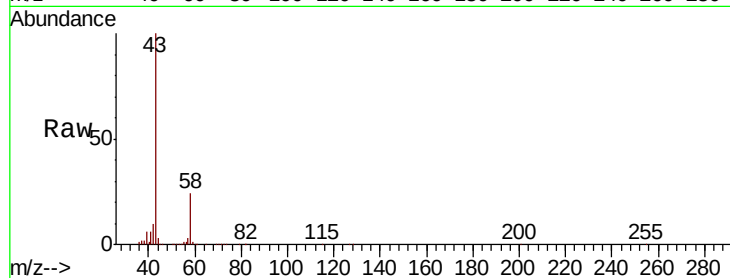
43 100

58 40.7 24.0 36.0#

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#17

tert-Butyl alcohol

Concen: 0.661 ppbv

RT: 4.30 min Scan# 470

Delta R.T. 0.02 min

Lab File: VL037067.D

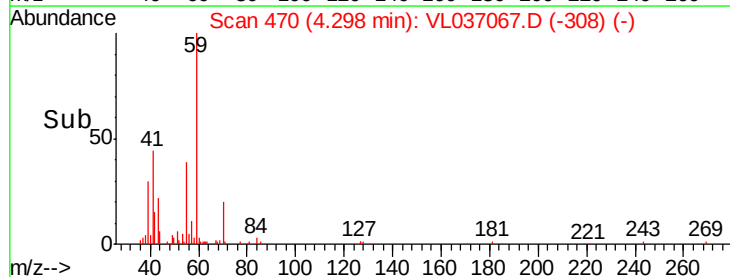
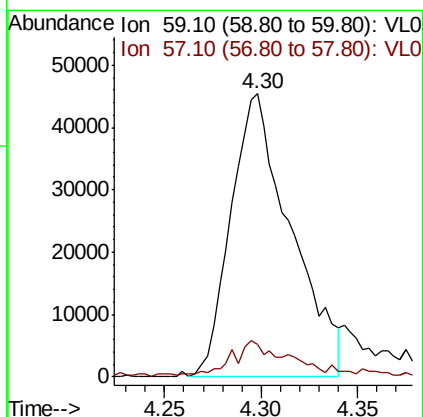
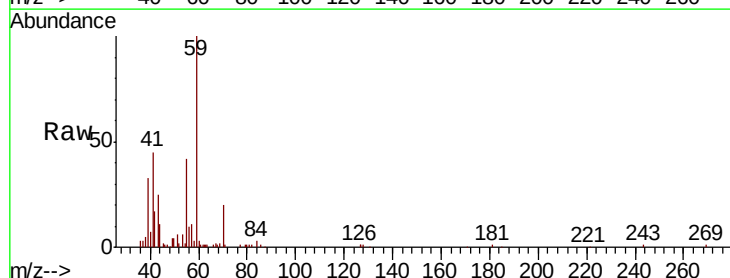
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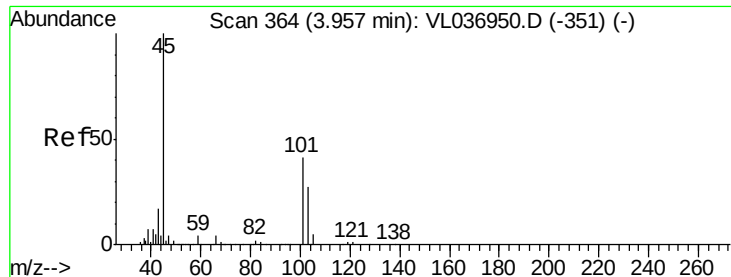
Tgt Ion: 59 Resp: 97774

Ion Ratio Lower Upper

59 100

57 15.5 8.3 12.5#





#19

Isopropyl Alcohol

Concen: 0.898 ppbv m

RT: 3.97 min Scan# 367

Delta R.T. 0.01 min

Lab File: VL037067.D

Acq: 1 Jun 2021 12:49

Instrument :

MSVOA_L

ClientSampled :

HSG1

Tot Ion: 45 Resp: 78010

Ion Ratio Lower Upper

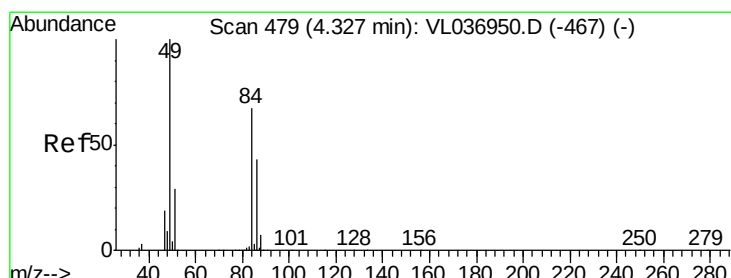
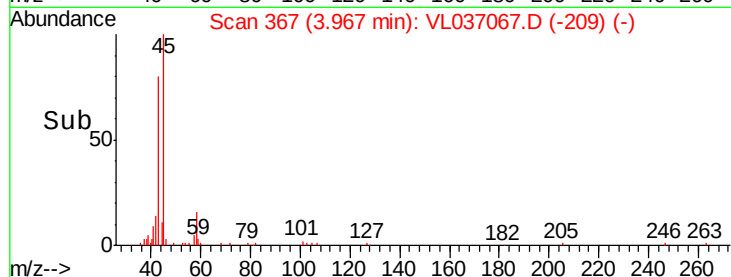
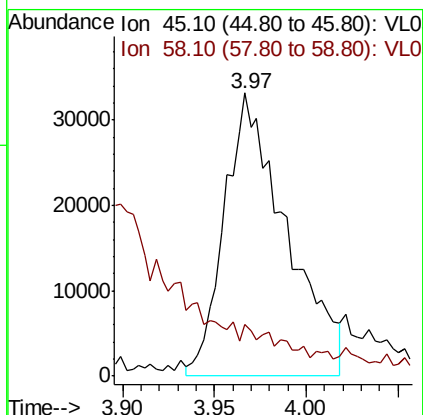
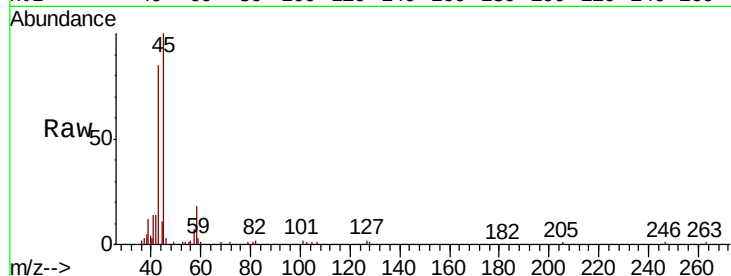
45 100

58 0.0 37.2 55.8#

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#20

Methylene Chloride

Concen: 2.174 ppbv

RT: 4.33 min Scan# 480

Delta R.T. 0.00 min

Lab File: VL037067.D

Acq: 1 Jun 2021 12:49

Tgt Ion: 84 Resp: 188308

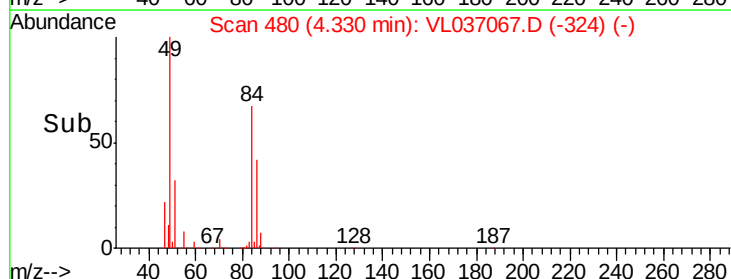
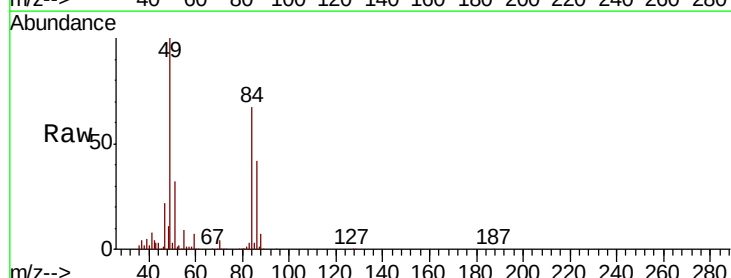
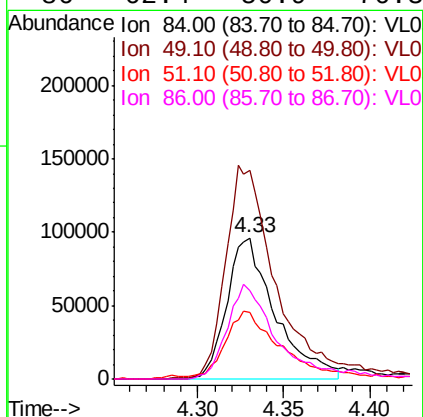
Ion Ratio Lower Upper

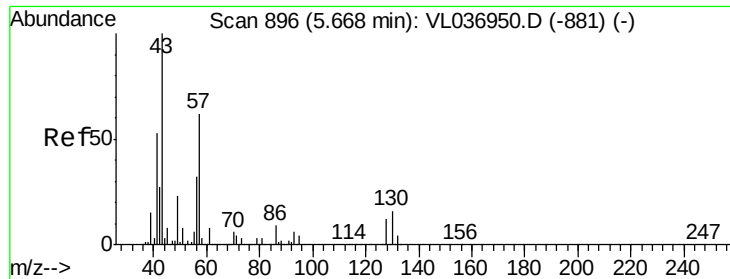
84 100

49 147.4 119.8 179.6

51 45.6 35.1 52.7

86 62.4 50.9 76.3





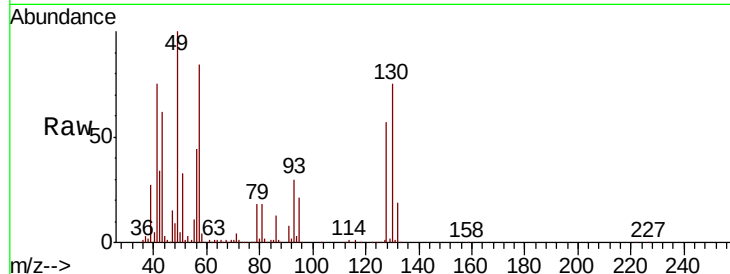
#26
Hexane
Concen: 2.456 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.00 min
Lab File: VL037067.D
Acq: 1 Jun 2021 12:49

Instrument :
MSVOA_L
ClientSampled :
HSG1

Tot Ion	Ratio	Lower	Upper
57	100		
41	100.3	70.5	105.7
43	79.3	165.8	248.8#
56	56.0	42.2	63.4

Manual Integrations
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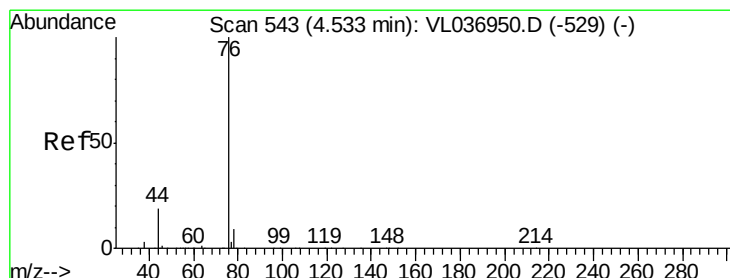
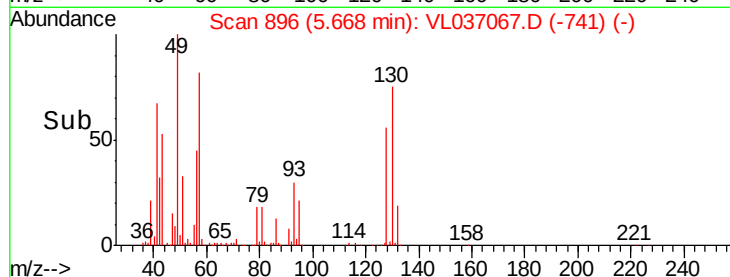
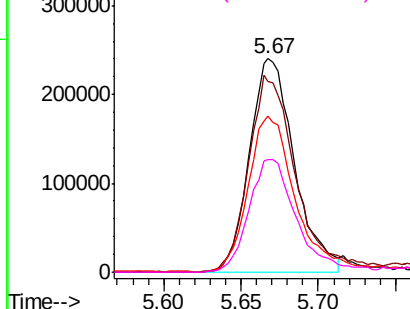
Abundance

Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#27
Carbon Disulfide
Concen: 0.181 ppbv
RT: 4.54 min Scan# 544
Delta R.T. 0.00 min
Lab File: VL037067.D
Acq: 1 Jun 2021 12:49

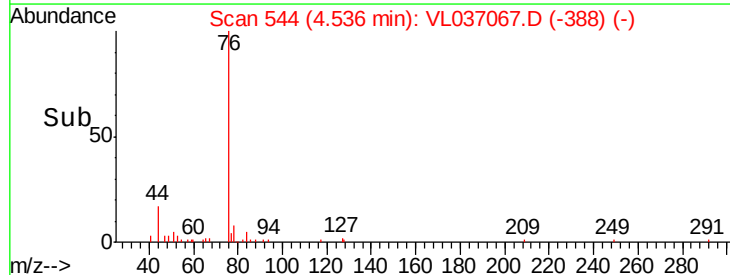
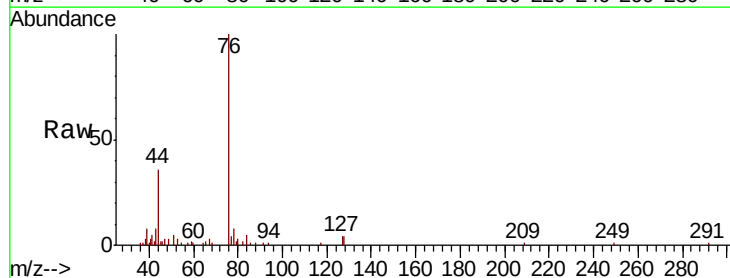
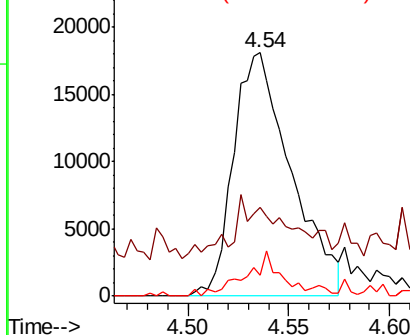
Tgt Ion	Ratio	Lower	Upper
76	100		
44	28.5	15.5	23.3#
78	14.3	7.8	11.6#

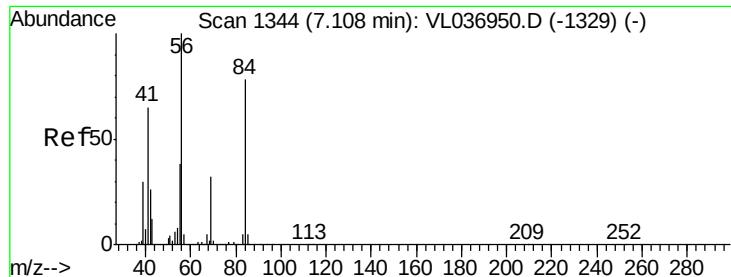
Abundance

Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0





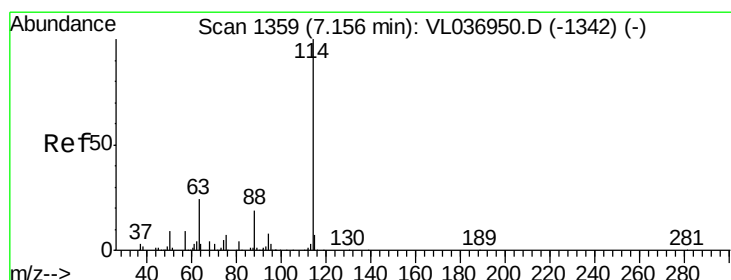
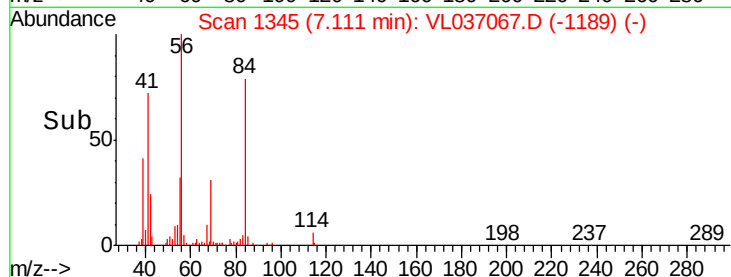
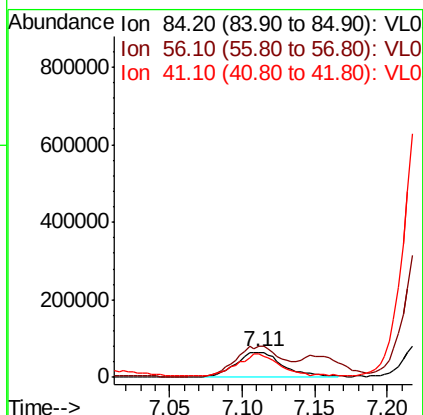
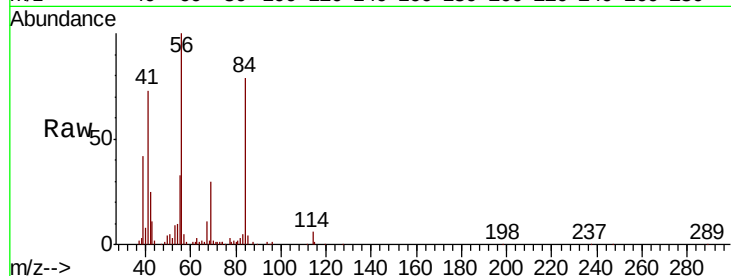
#30
Cyclohexane
Concen: 0.881 ppbv
RT: 7.11 min Scan# 1345
Delta R.T. 0.00 min
Lab File: VL037067.D
Acq: 1 Jun 2021 12:49

Instrument :
MSVOA_L
ClientSampleId :
HSG1

Tot Ion	Ratio	Lower	Upper
84	100		
56	119.3	107.9	161.9
41	78.7	65.5	98.3

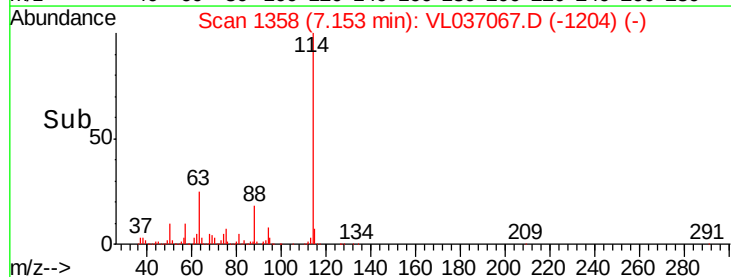
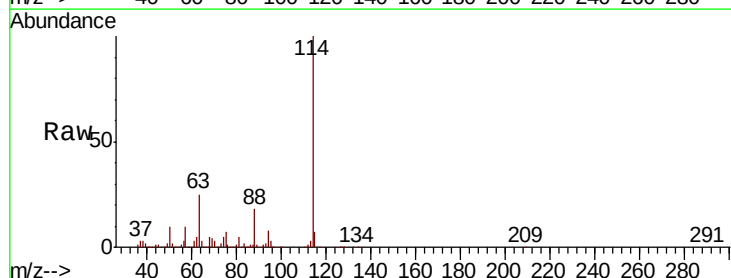
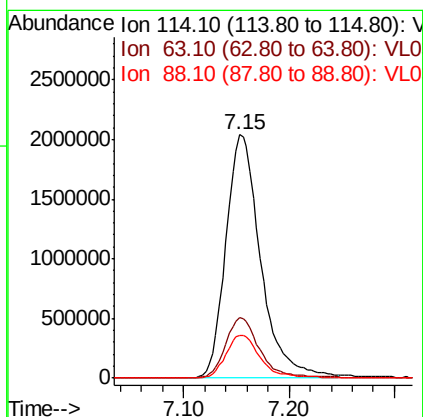
Manual Integrations
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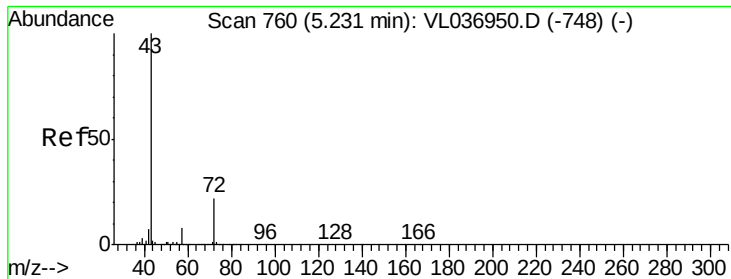
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.15 min Scan# 1358
Delta R.T. -0.00 min
Lab File: VL037067.D
Acq: 1 Jun 2021 12:49

Tgt Ion	Ratio	Lower	Upper
114	100		
63	24.8	19.6	29.4
88	17.8	14.6	21.8





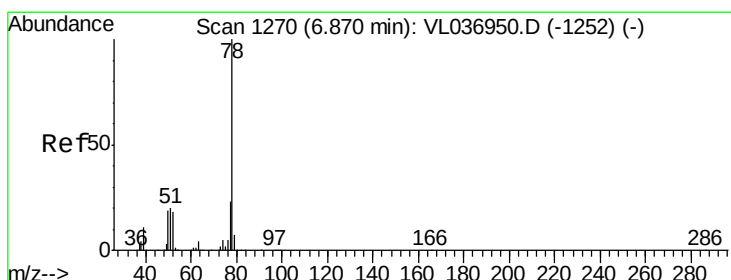
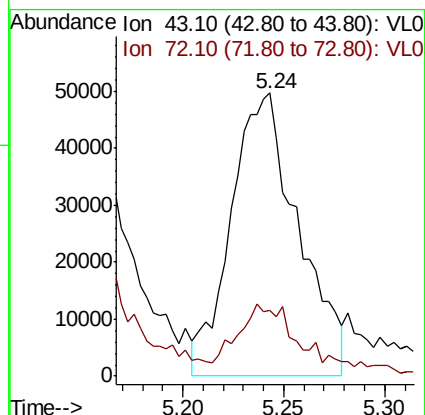
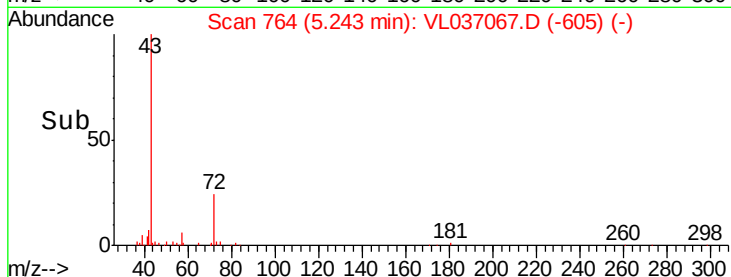
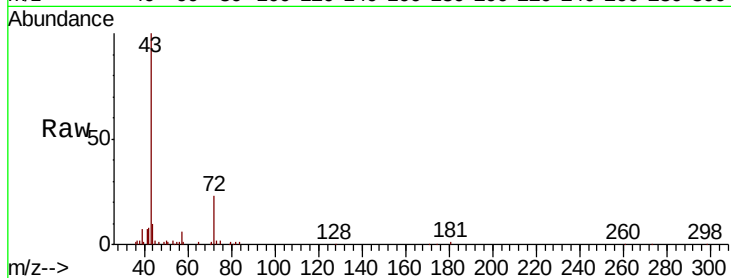
#34
2-Butanone
Concen: 0.681 ppbv m
RT: 5.24 min Scan# 764
Delta R.T. 0.01 min
Lab File: VL037067.D
Acq: 1 Jun 2021 12:49

Instrument :
MSVOA_L
ClientSampled :
HSG1

Tot Ion	43	Resp	11592
Ion Ratio	43	100	
Lower	72	26.7	19.0
Upper			28.4

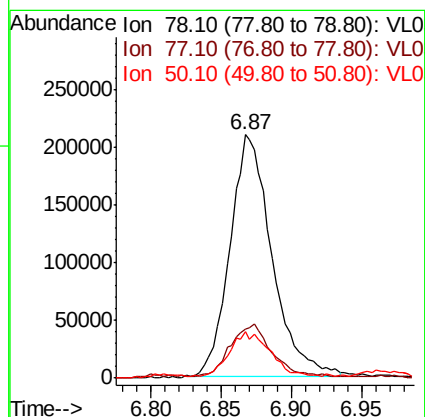
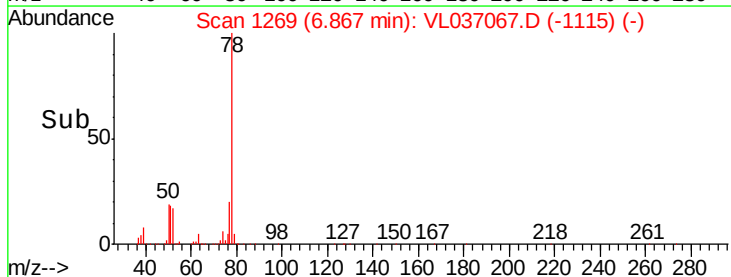
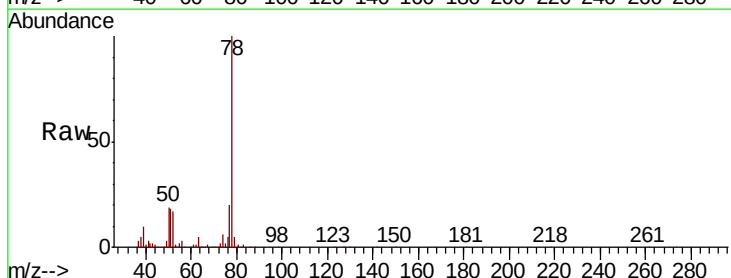
Manual Integrations
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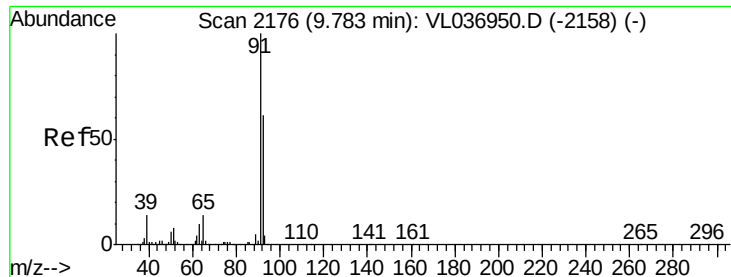
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#36
Benzene
Concen: 1.080 ppbv
RT: 6.87 min Scan# 1269
Delta R.T. -0.00 min
Lab File: VL037067.D
Acq: 1 Jun 2021 12:49

Tgt Ion	78	Resp	433800
Ion Ratio	78	100	
Lower	77	19.5	18.6
Upper	50	18.8	15.0
			22.4





#53

Toluene

Concen: 18.634 ppbv

RT: 9.79 min Scan# 2177

Delta R.T. 0.00 min

Lab File: VL037067.D

Acq: 1 Jun 2021 12:49

Instrument :

MSVOA_L

ClientSampleId :

HSG1

Tot Ion: 91 Resp: 8907892

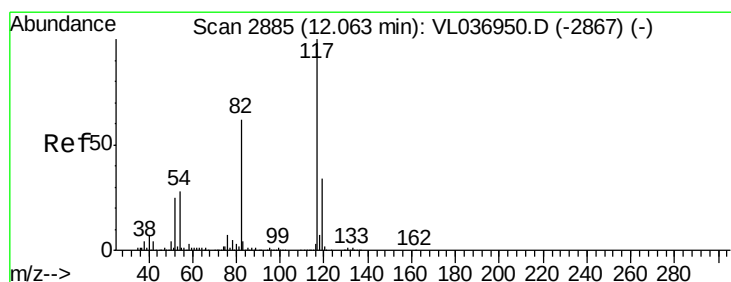
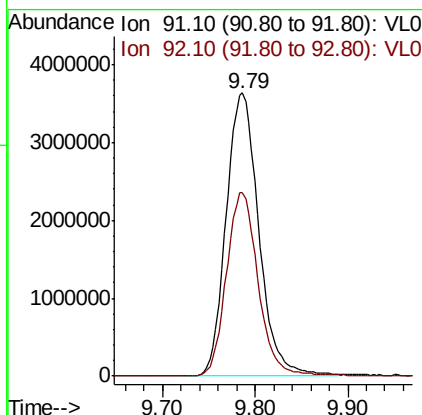
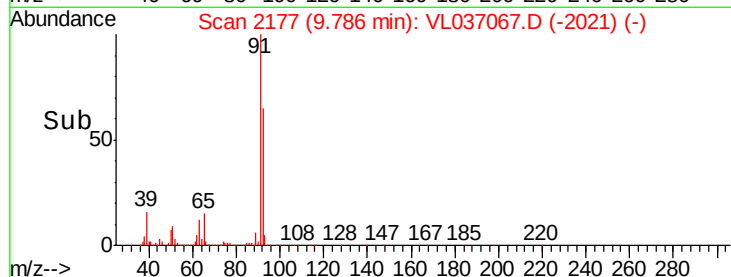
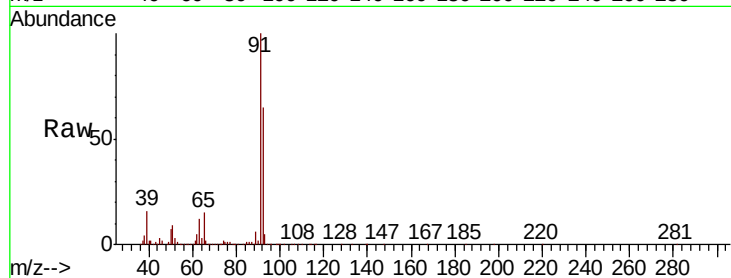
Ion Ratio Lower Upper

91 100

92 63.8 49.5 74.3

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.06 min Scan# 2885

Delta R.T. -0.00 min

Lab File: VL037067.D

Acq: 1 Jun 2021 12:49

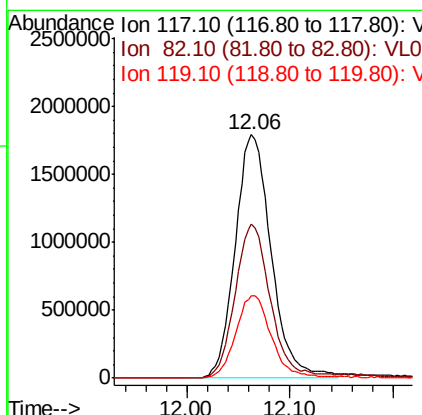
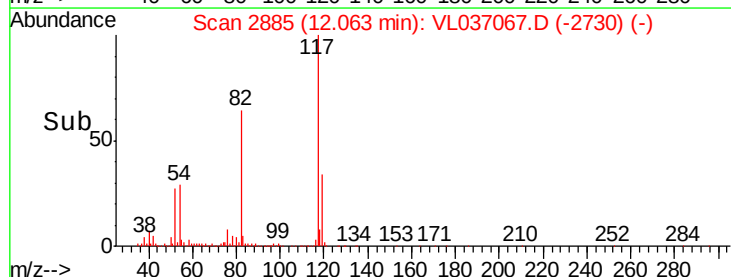
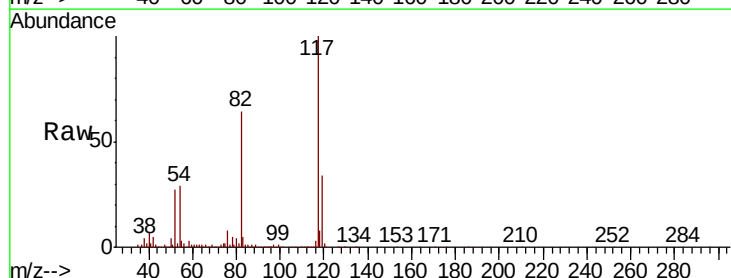
Tgt Ion: 117 Resp: 4367811

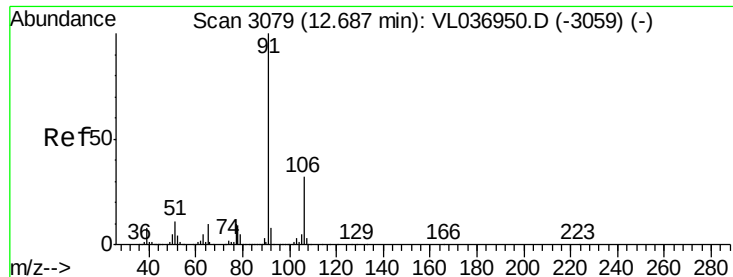
Ion Ratio Lower Upper

117 100

82 64.4 52.6 79.0

119 34.3 46.6 70.0#





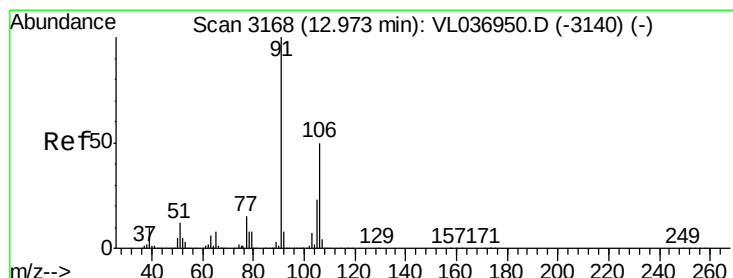
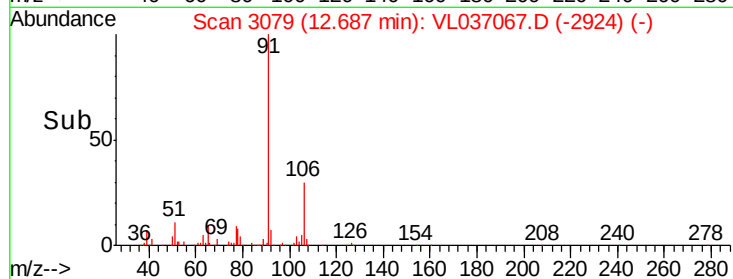
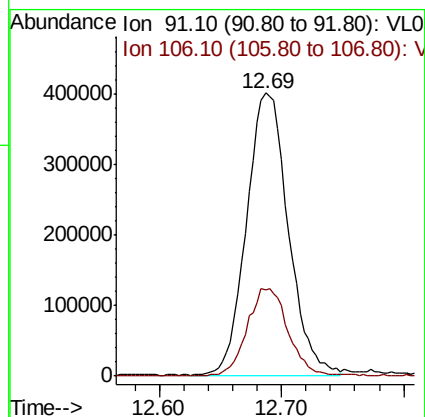
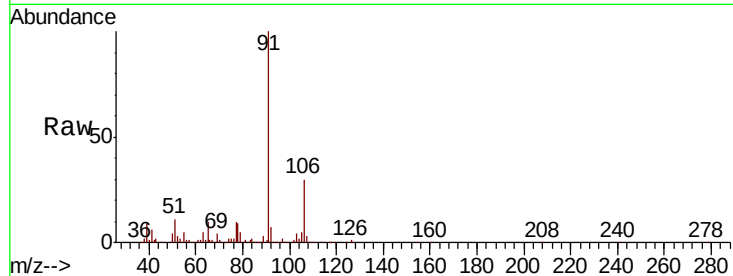
#58
Ethyl Benzene
Concen: 1.535 ppbv
RT: 12.69 min Scan# 3079
Delta R.T. -0.00 min
Lab File: VL037067.D
Acq: 1 Jun 2021 12:49

Instrument :
MSVOA_L
ClientSampled :
HSG1

Tot Ion: 91 Resp: 946087
Ion Ratio Lower Upper
91 100
106 30.4 25.6 38.4

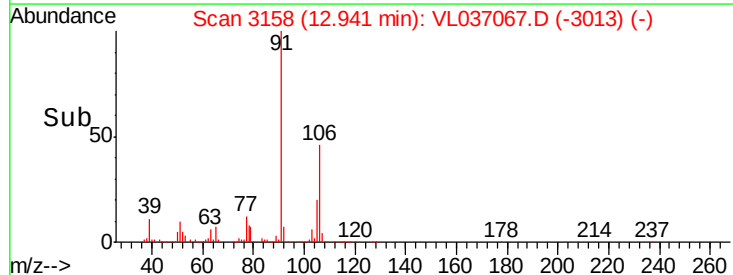
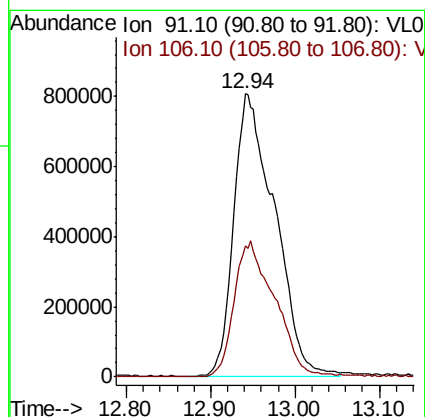
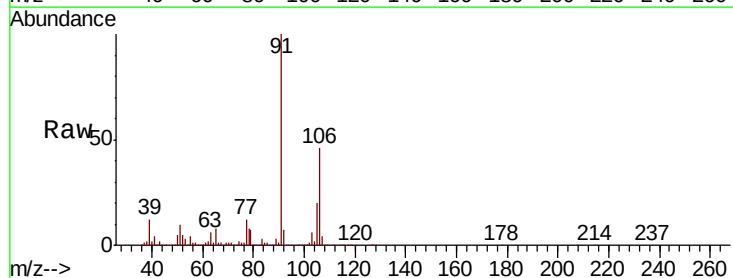
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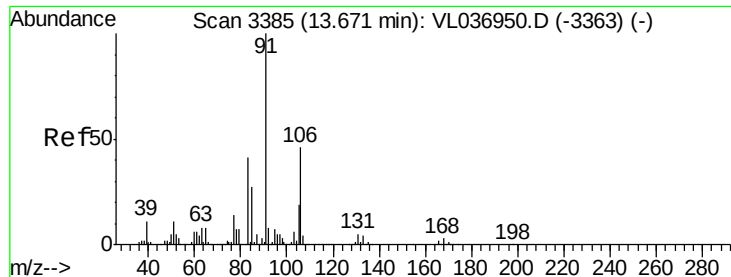
MMDadoda
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#59
m/p-Xylene
Concen: 5.329 ppbv
RT: 12.94 min Scan# 3158
Delta R.T. -0.03 min
Lab File: VL037067.D
Acq: 1 Jun 2021 12:49

Tgt Ion: 91 Resp: 2715673
Ion Ratio Lower Upper
91 100
106 47.7 37.4 56.2





#60

o-Xylene

Concen: 1.817 ppbv

RT: 13.67 min Scan# 3384

Delta R.T. -0.00 min

Lab File: VL037067.D

Acq: 1 Jun 2021 12:49

Instrument :

MSVOA_L

ClientSampled :

HSG1

Tot Ion: 91 Resp: 882848

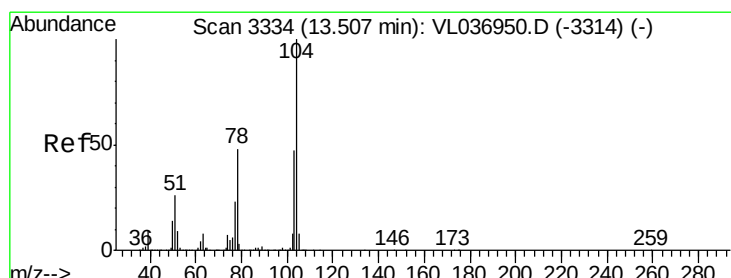
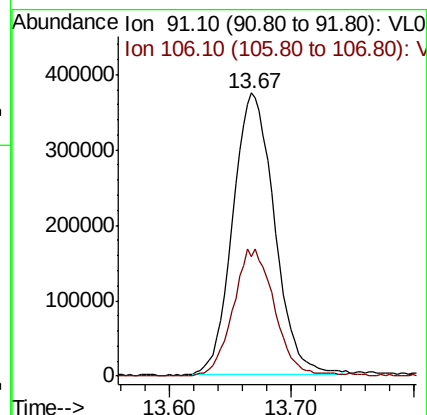
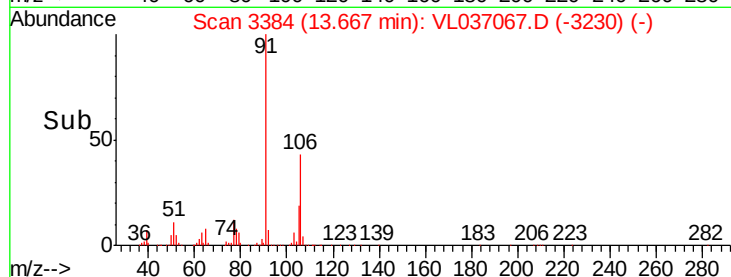
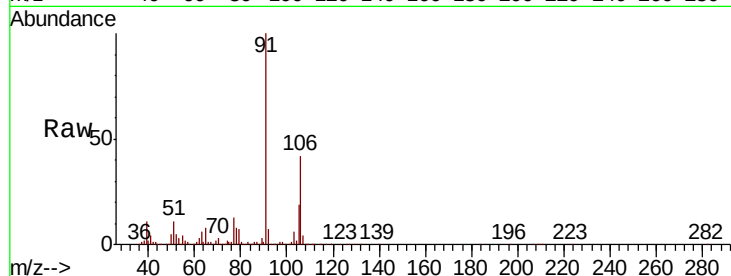
Ion Ratio Lower Upper

91 100

106 45.1 23.4 70.3

Manual Integrations
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#61

Styrene

Concen: 0.201 ppbv

RT: 13.51 min Scan# 3335

Delta R.T. 0.00 min

Lab File: VL037067.D

Acq: 1 Jun 2021 12:49

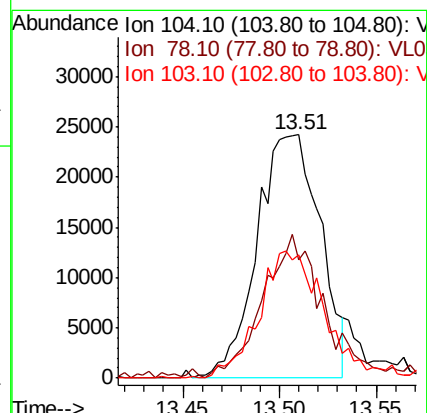
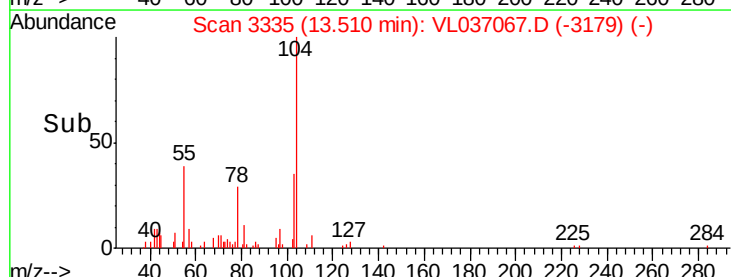
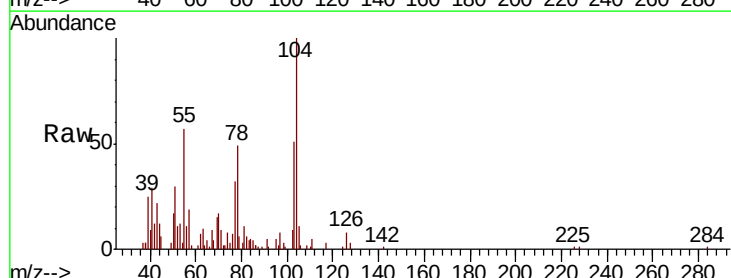
Tgt Ion: 104 Resp: 54992

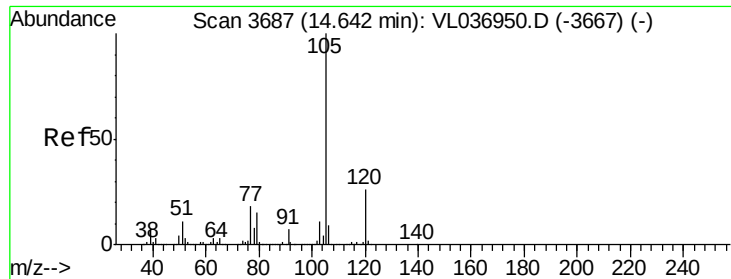
Ion Ratio Lower Upper

104 100

78 58.8 39.0 58.6#

103 54.9 38.0 57.0





#62

Isopropylbenzene

Concen: 1.135 ppbv

RT: 14.64 min Scan# 3688

Delta R.T. 0.00 min

Lab File: VL037067.D

Acq: 1 Jun 2021 12:49

Instrument :

MSVOA_L

ClientSampled :

HSG1

Tot Ion:105 Resp: 792944

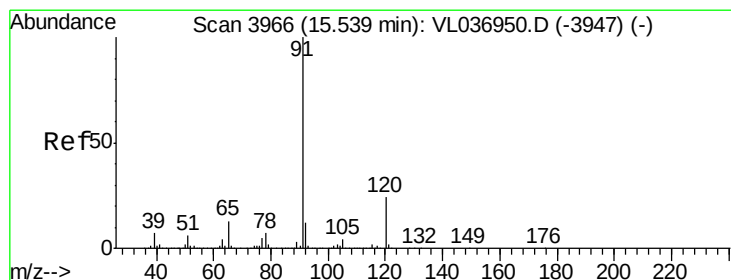
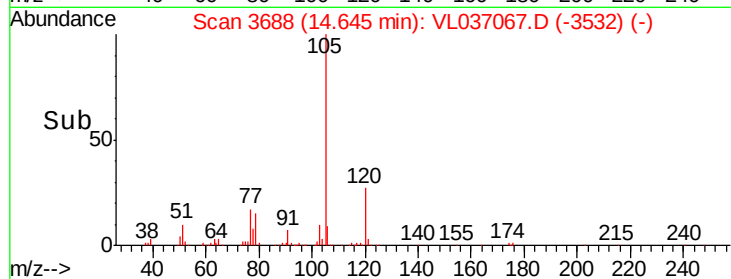
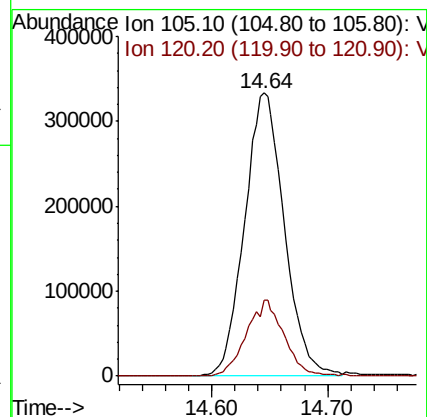
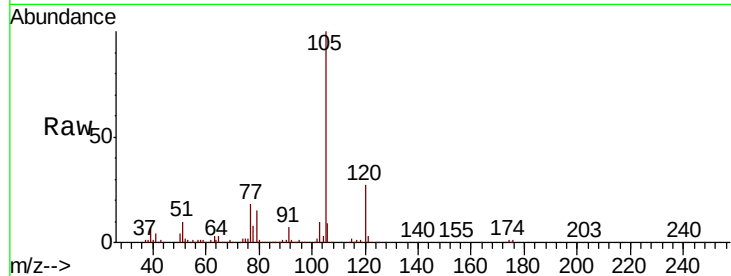
Ion Ratio Lower Upper

105 100

120 25.4 21.7 32.5

Manual Integrations
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#64

n-propylbenzene

Concen: 0.330 ppbv

RT: 15.55 min Scan# 3968

Delta R.T. 0.01 min

Lab File: VL037067.D

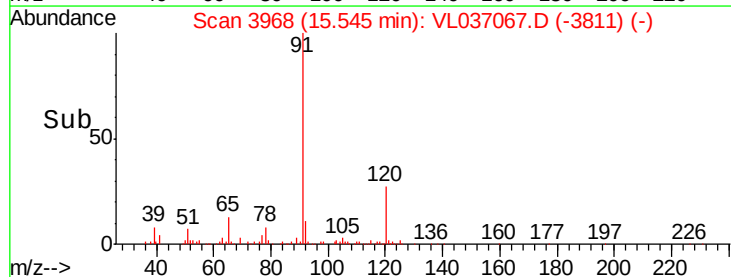
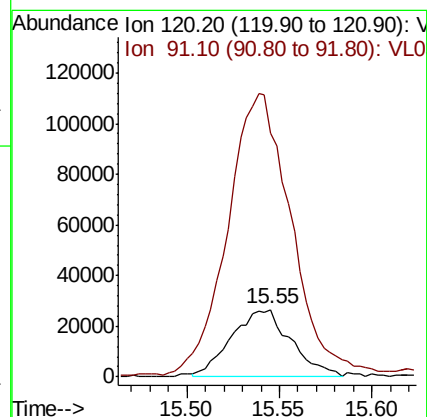
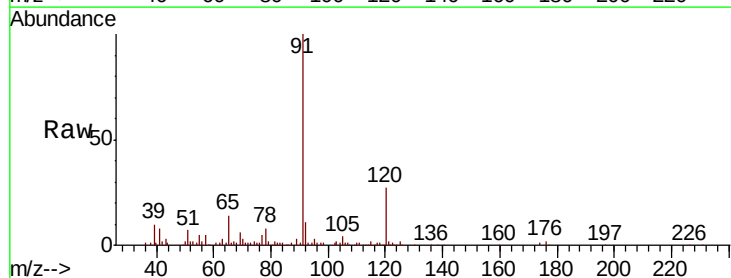
Acq: 1 Jun 2021 12:49

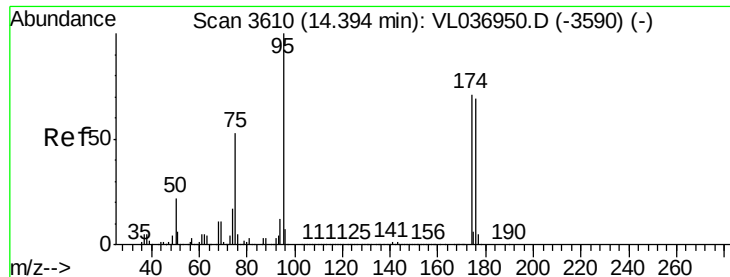
Tgt Ion:120 Resp: 59444

Ion Ratio Lower Upper

120 100

91 455.8 343.8 515.6





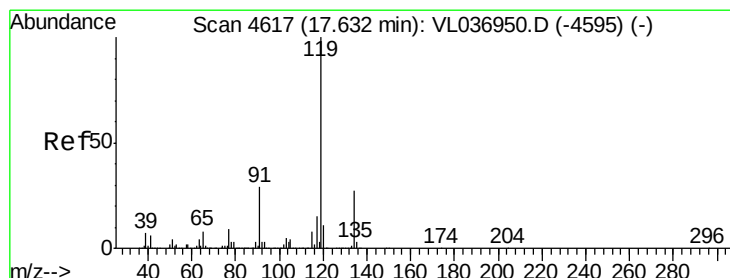
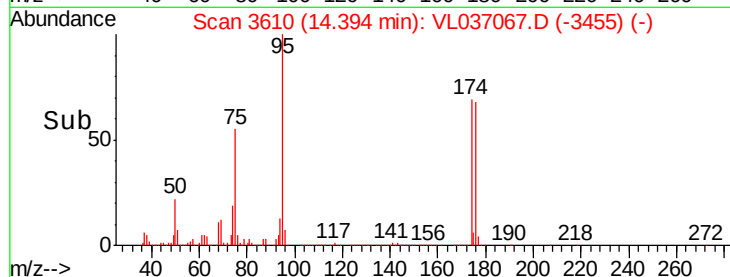
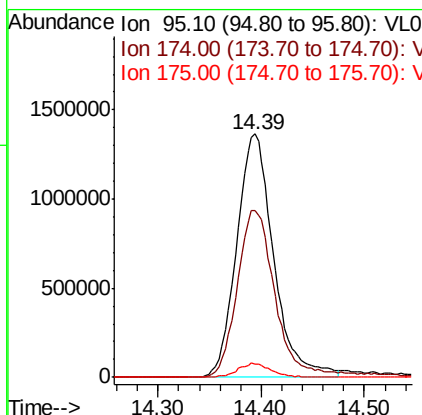
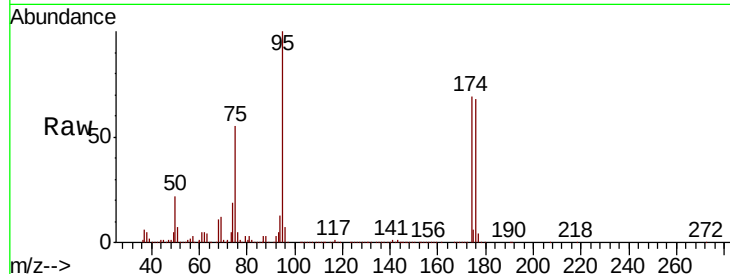
#68
1-Bromo-4-Fluorobenzene
Concen: 10.376 ppbv
RT: 14.39 min Scan# 3610
Delta R.T. -0.00 min
Lab File: VL037067.D
Acq: 1 Jun 2021 12:49

Instrument :
MSVOA_L
ClientSampled :
HSG1

Tot Ion: 95 Resp: 3404471
Ion Ratio Lower Upper
95 100
174 73.2 58.4 87.6
175 5.4 4.4 6.6

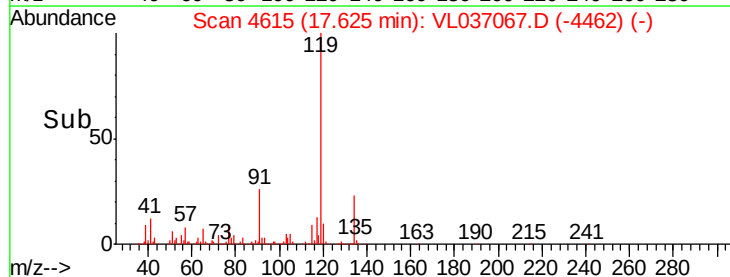
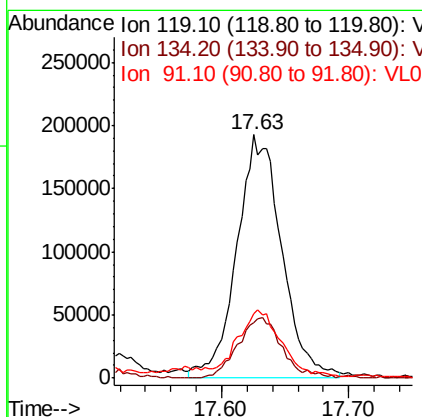
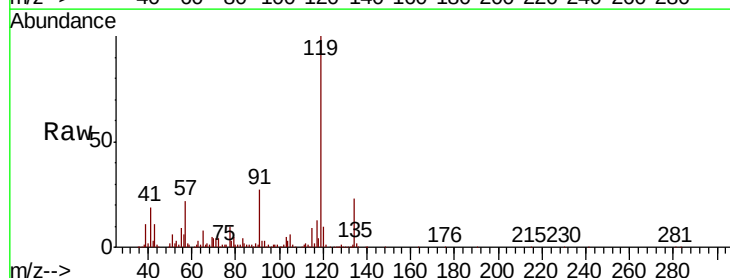
Manual Integrations
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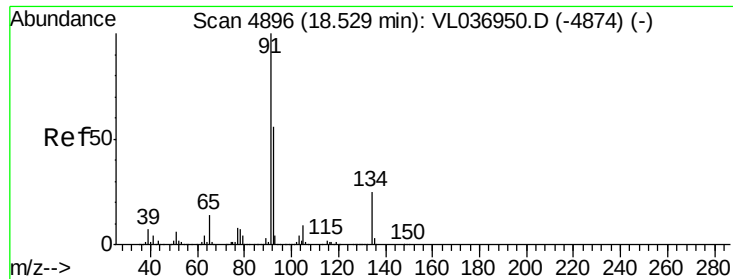
MMDadoda
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#69
p-Isopropyltoluene
Concen: 0.639 ppbv m
RT: 17.63 min Scan# 4615
Delta R.T. -0.01 min
Lab File: VL037067.D
Acq: 1 Jun 2021 12:49

Tgt Ion: 119 Resp: 472075
Ion Ratio Lower Upper
119 100
134 24.8 21.2 31.8
91 31.5 22.2 33.4





#70

n-Butylbenzene

Concen: 0.108 ppbv m

RT: 18.53 min Scan# 4897

Delta R.T. 0.00 min

Lab File: VL037067.D

Acq: 1 Jun 2021 12:49

Instrument :

MSVOA_L

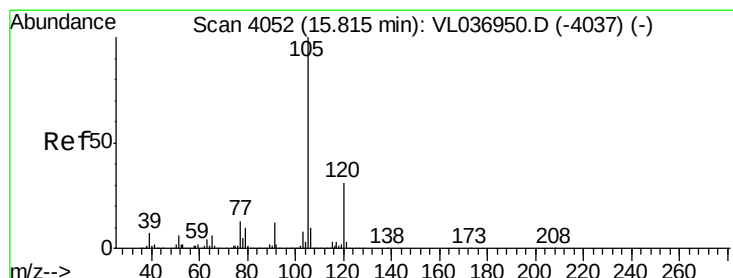
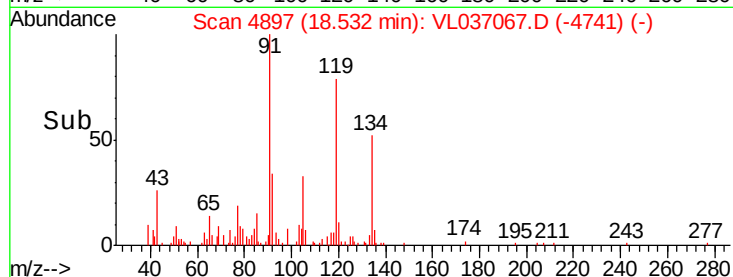
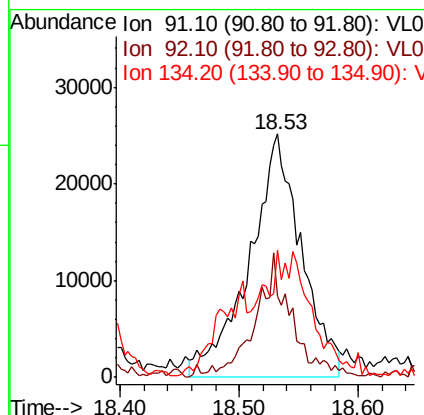
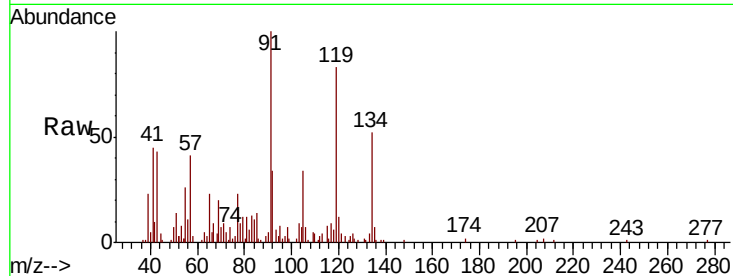
ClientSampled :

HSG1

Tot Ion:	91	Resp:	76014
Ion Ratio	Lower	Upper	
91	100		
92	35.6	44.6	66.8#
134	70.7	20.2	30.2#

Manual Integrations
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MMDadoda
6/7/2021 2:58:22 PM



#72

4-Ethyltoluene

Concen: 0.569 ppbv

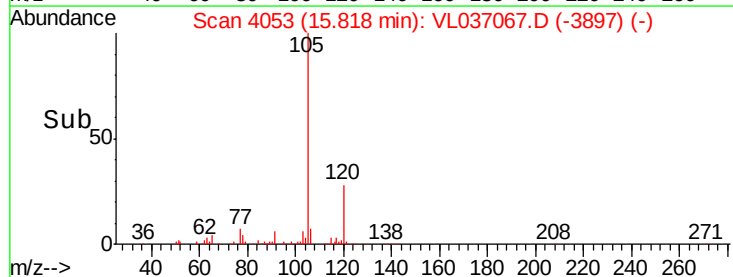
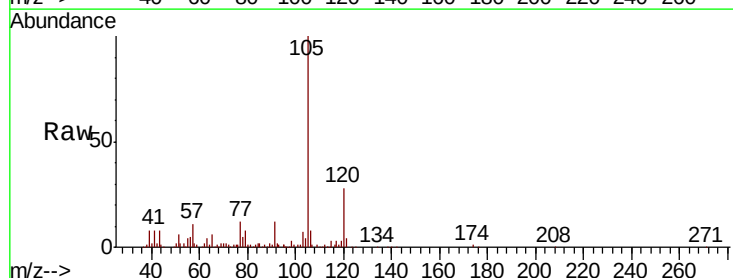
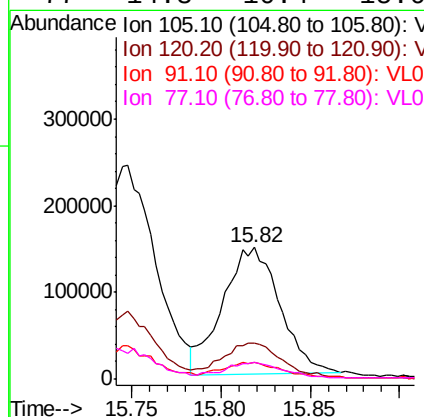
RT: 15.82 min Scan# 4053

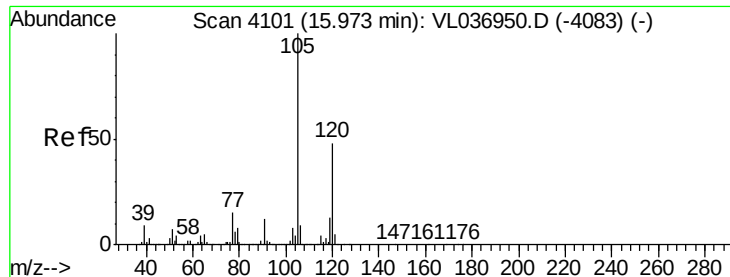
Delta R.T. 0.00 min

Lab File: VL037067.D

Acq: 1 Jun 2021 12:49

Tgt Ion:	105	Resp:	328373
Ion Ratio	Lower	Upper	
105	100		
120	31.3	24.6	37.0
91	13.7	9.8	14.6
77	14.3	10.4	15.6





#73

1,3,5-Trimethylbenzene

Concen: 0.371 ppbv

RT: 15.98 min Scan# 4102

Delta R.T. 0.00 min

Lab File: VL037067.D

Acq: 1 Jun 2021 12:49

Instrument :

MSVOA_L

ClientSampled :

HSG1

Tot Ion:105 Resp: 201194

Ion Ratio Lower Upper

105 100

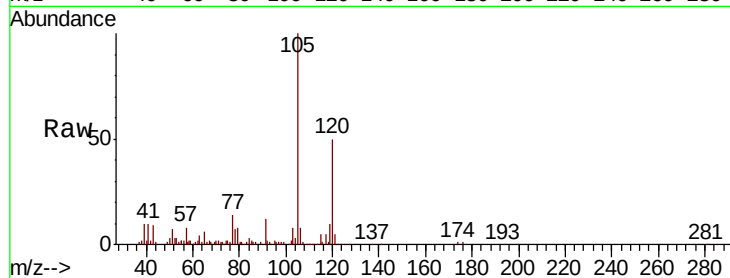
120 50.1 38.6 58.0

Manual Integrations

APPROVED

MMDadoda

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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

15.98

100000

80000

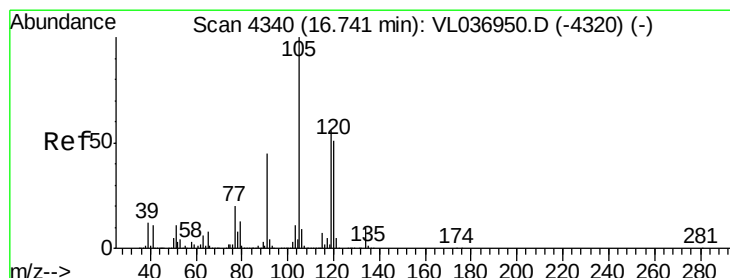
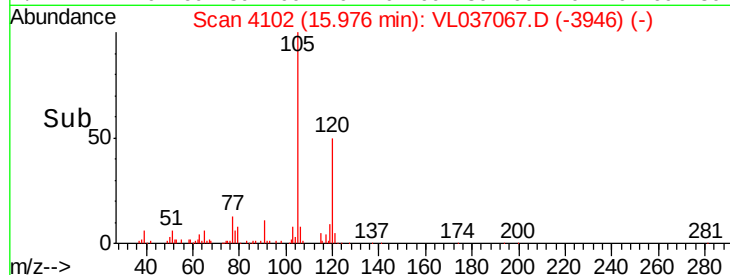
60000

40000

20000

0

Time-->



#74

1,2,4-Trimethylbenzene

Concen: 1.392 ppbv

RT: 16.74 min Scan# 4340

Delta R.T. -0.00 min

Lab File: VL037067.D

Acq: 1 Jun 2021 12:49

Tgt Ion:105 Resp: 779473

Ion Ratio Lower Upper

105 100

120 44.6 40.6 61.0

91 11.6 37.4 56.0#

77 11.9 16.2 24.4#

Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

500000

400000

300000

200000

100000

0

Time-->

