

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060821\
 Data File : VL037134.D
 Acq On : 8 Jun 2021 16:20
 Operator : SY/AP
 Sample : M2614-03
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SR-4C

Manual Integrations
 APPROVED

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 6/9/2021 4:23:37 PM

Quant Time: Jun 09 12:36:07 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	5.66	49	1351718	10.00	ppbv	0.01
33) 1,4-Difluorobenzene	7.17	114	4020840	10.00	ppbv	0.01
55) Chlorobenzene-d5	12.08	117	3668298	10.00	ppbv	0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.41	95	2725325	9.89	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	60486	0.264	ppbv	89
3) Chlorodifluoromethane	2.98	51	954782	3.856	ppbv	94
4) Chloromethane	3.14	50	57181	0.679	ppbv	100
9) Propene	3.01	41	194953	2.199	ppbv	84
10) Heptane	8.12	43	29001m	0.131	ppbv	
11) Trichlorofluoromethane	3.94	101	50527	0.238	ppbv	93
13) Ethanol	3.62	45	13767485	1163.643	ppbv	98
15) Acetone	3.84	43	1525567m	11.019	ppbv	
17) tert-Butyl alcohol	4.31	59	45696	0.360	ppbv #	72
19) Isopropyl Alcohol	3.98	45	3700262	49.718	ppbv #	34
20) Methylene Chloride	4.34	84	424447	5.719	ppbv	99
25) Ethyl Acetate	5.67	43	2224116	6.685	ppbv #	94
26) Hexane	5.68	57	419062m	2.466	ppbv	
29) Chloroform	5.75	83	62960	0.262	ppbv	97
30) Cyclohexane	7.13	84	18484m	0.128	ppbv	
34) 2-Butanone	5.24	43	164897	1.126	ppbv	92
35) Carbon Tetrachloride	7.01	117	17297m	0.065	ppbv	
36) Benzene	6.89	78	1379444	3.983	ppbv	99
44) 2,2,4-Trimethylpentane	7.86	57	63435	0.107	ppbv #	67
50) 4-Methyl-2-Pentanone	8.75	43	50456	0.209	ppbv	99
53) Toluene	9.80	91	589589	1.431	ppbv	99
58) Ethyl Benzene	12.70	91	52663m	0.102	ppbv	
59) m/p-Xylene	12.96	91	105466m	0.246	ppbv	
60) o-Xylene	13.69	91	40849	0.100	ppbv	92
61) Styrene	13.52	104	44215m	0.192	ppbv	
74) 1,2,4-Trimethylbenzene	16.76	105	47464	0.101	ppbv #	68
79) Naphthalene	22.20	128	59739m	0.162	ppbv	

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

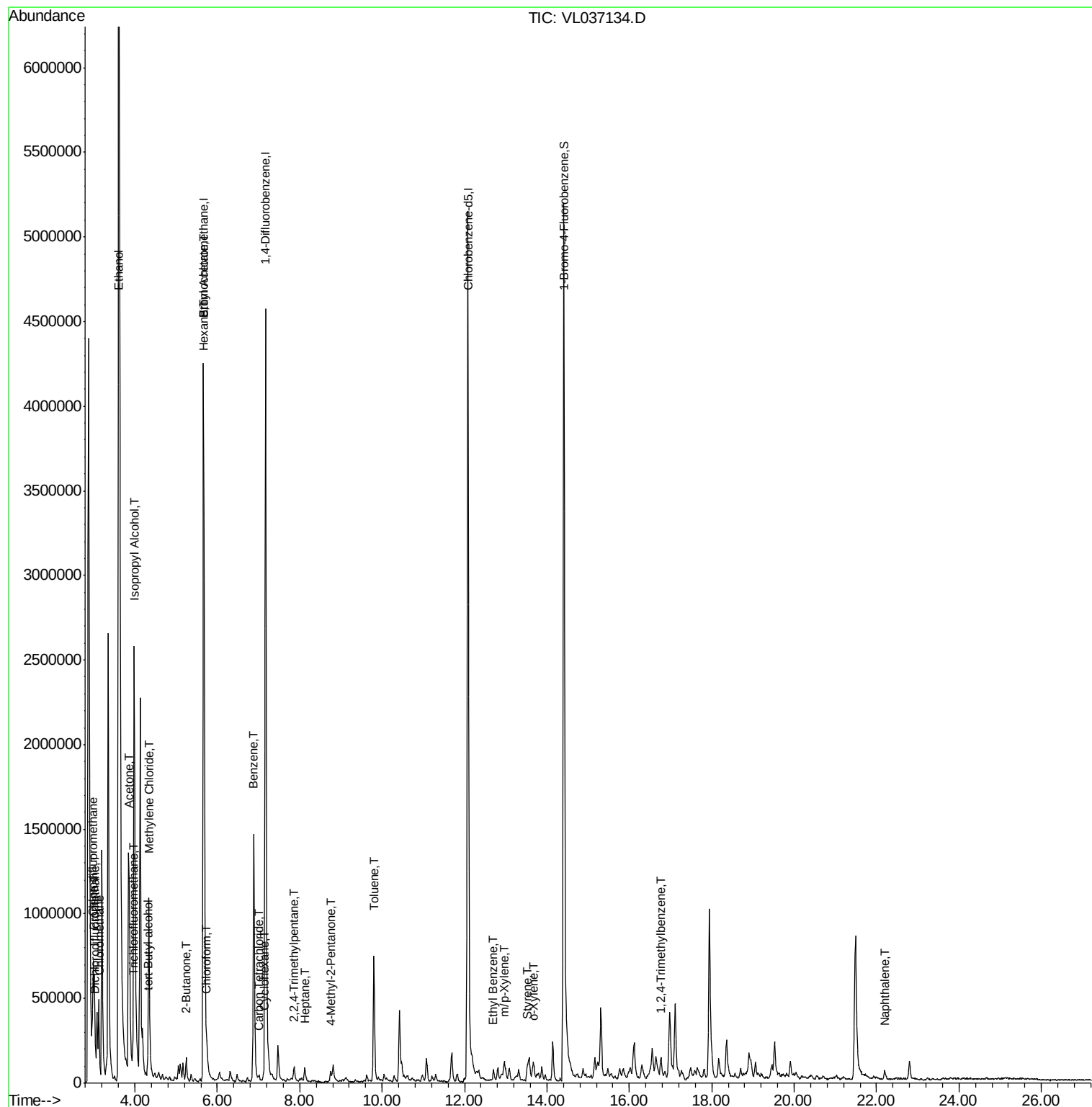
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL060821\
Data File : VL037134.D
Acq On : 8 Jun 2021 16:20
Operator : SY/AP
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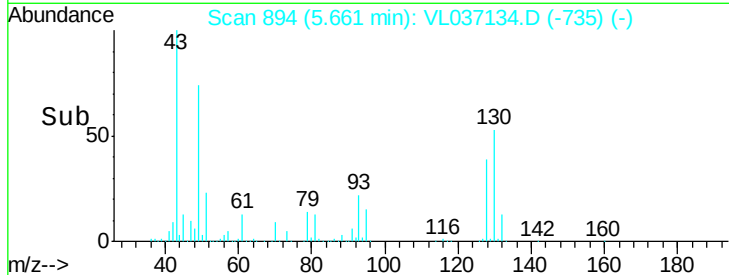
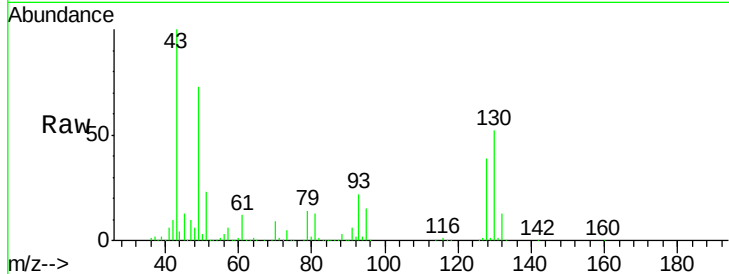
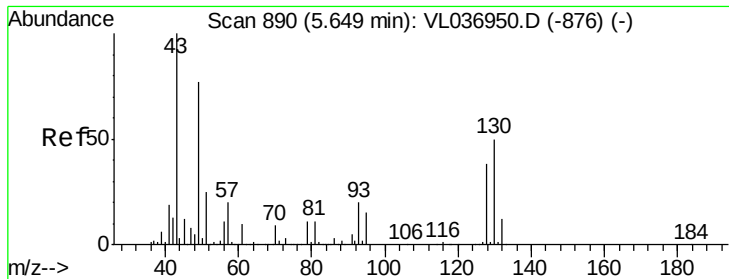
Instrument :
MSVOA_L
ClientSampleId :
SR-4C

Manual Integrations
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Quant Time: Jun 09 12:36:07 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: 5.66 min Scan# 894

Delta R.T. 0.01 min

Lab File: VL037134.D

Acq: 8 Jun 2021 16:20

Tot Ion: 49 Resp: 1351718

Ion Ratio Lower Upper

49 100

128 56.6 26.9 80.7

130 73.5 33.8 101.4

Instrument :

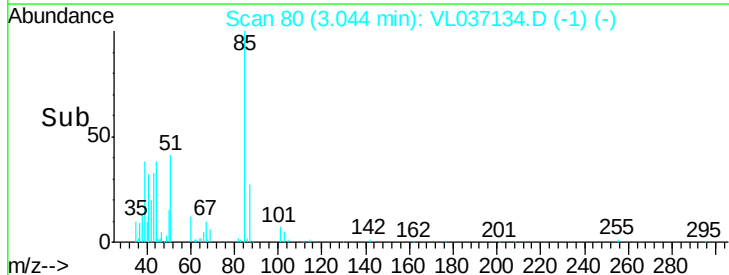
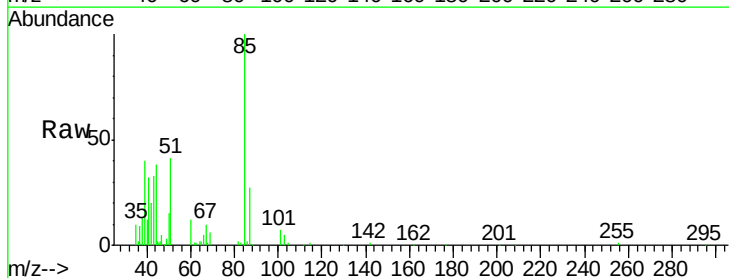
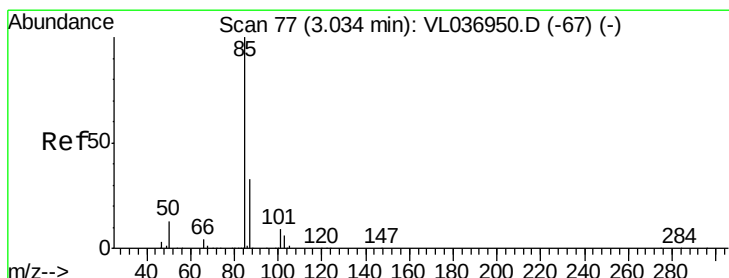
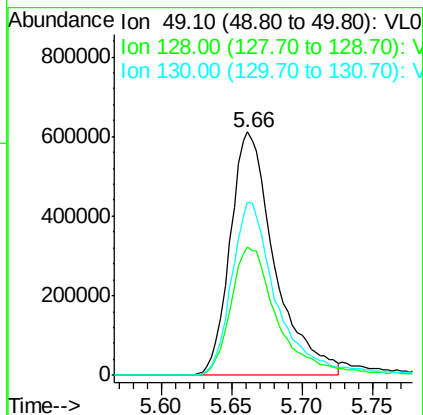
MSVOA_L

ClientSampleId :

SR-4C

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#2

Dichlorodifluoromethane

Concen: 0.264 ppbv

RT: 3.04 min Scan# 80

Delta R.T. 0.01 min

Lab File: VL037134.D

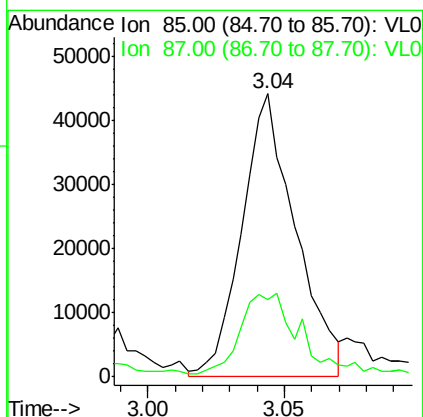
Acq: 8 Jun 2021 16:20

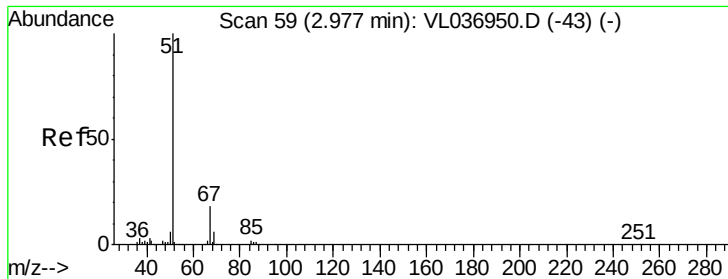
Tgt Ion: 85 Resp: 60486

Ion Ratio Lower Upper

85 100

87 26.9 26.6 39.8





#3

Chlorodifluoromethane

Concen: 3.856 ppbv

RT: 2.98 min Scan# 61

Delta R.T. 0.01 min

Lab File: VL037134.D

Acq: 8 Jun 2021 16:20

Instrument :

MSVOA_L

ClientSampleId :

SR-4C

Tot Ion: 51 Resp: 954782

Ion Ratio Lower Upper

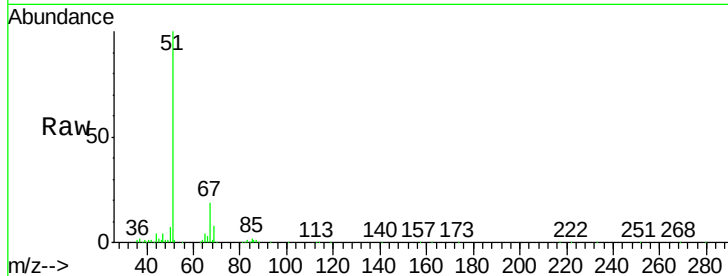
51 100

67 15.7 14.6 21.8

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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

500000

400000

300000

200000

100000

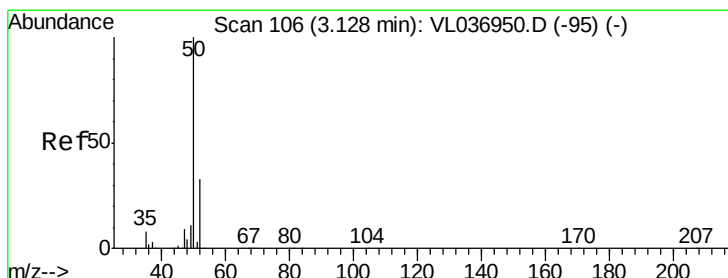
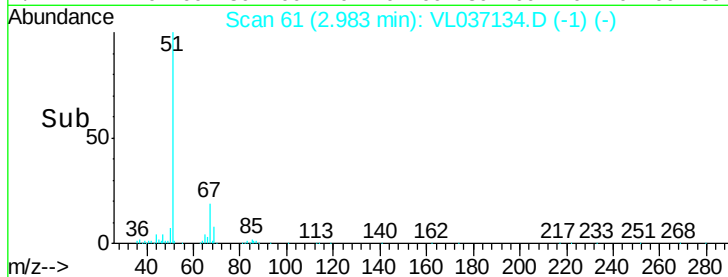
0

2.90

3.00

3.10

Time-->



#4

Chloromethane

Concen: 0.679 ppbv

RT: 3.14 min Scan# 109

Delta R.T. 0.01 min

Lab File: VL037134.D

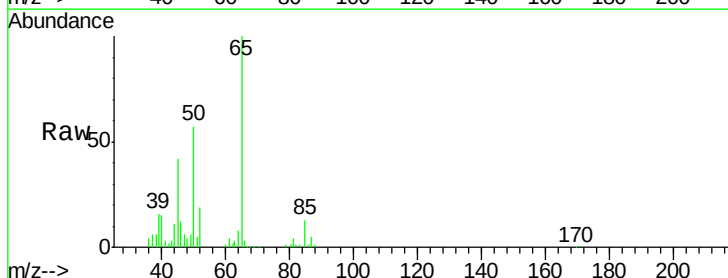
Acq: 8 Jun 2021 16:20

Tgt Ion: 50 Resp: 57181

Ion Ratio Lower Upper

50 100

52 32.5 26.1 39.1



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

30000

20000

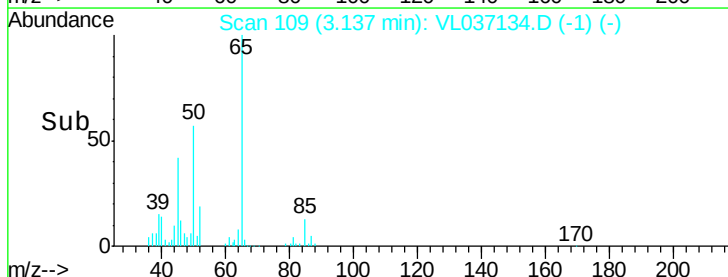
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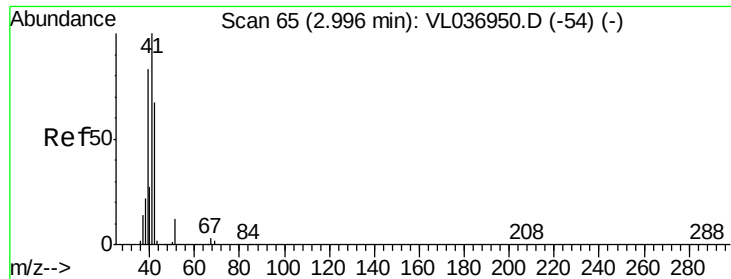
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3.10

3.15

Time-->





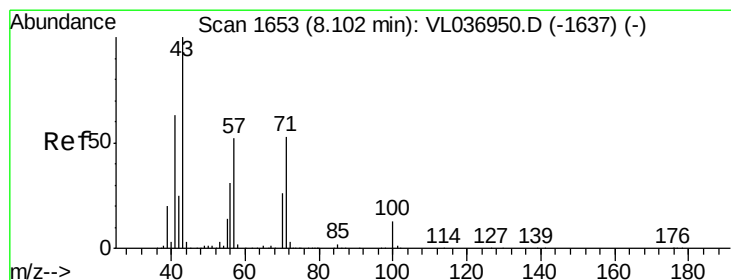
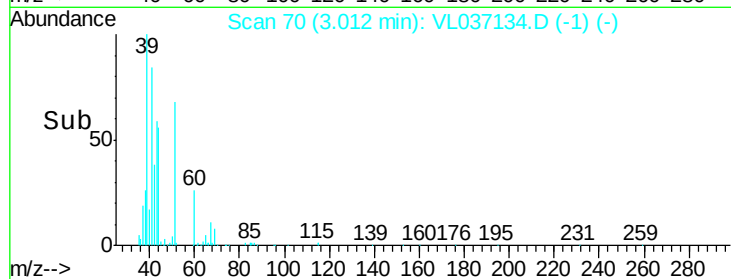
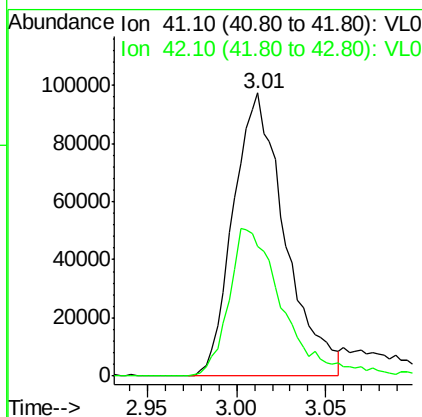
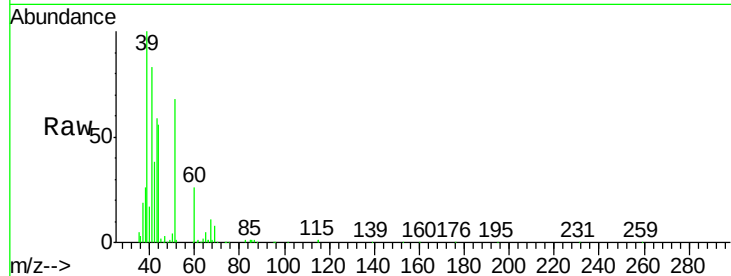
#9
 Propene
 Concen: 2.199 ppbv
 RT: 3.01 min Scan# 70
 Delta R.T. 0.02 min
 Lab File: VL037134.D
 Acq: 8 Jun 2021 16:20

Instrument :
 MSVOA_L
 ClientSampleId :
 SR-4C

Tot Ion: 41 Resp: 194953
 Ion Ratio Lower Upper
 41 100
 42 54.3 53.9 80.9

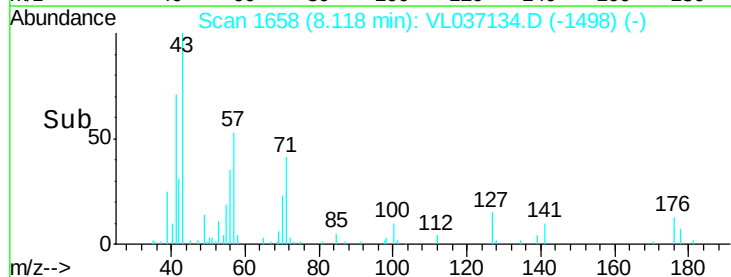
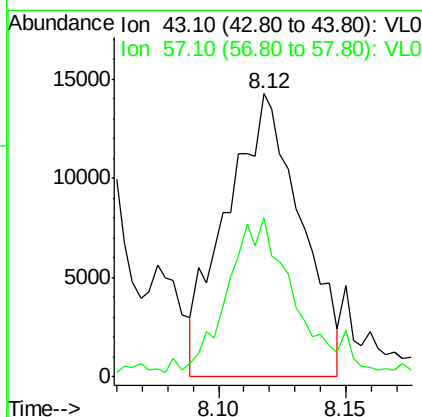
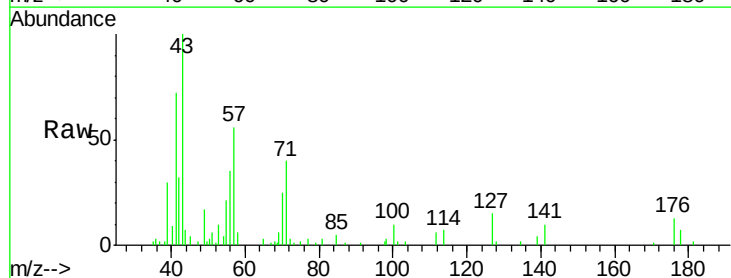
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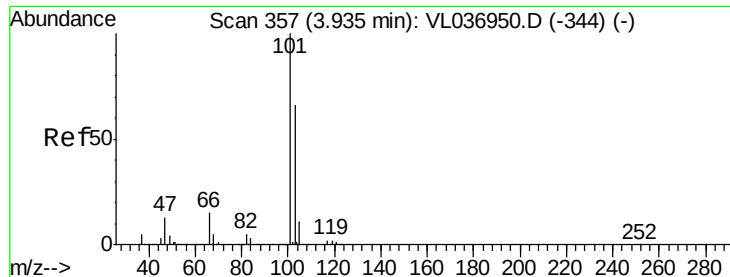
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#10
 Heptane
 Concen: 0.131 ppbv m
 RT: 8.12 min Scan# 1658
 Delta R.T. 0.02 min
 Lab File: VL037134.D
 Acq: 8 Jun 2021 16:20

Tgt Ion: 43 Resp: 29001
 Ion Ratio Lower Upper
 43 100
 57 52.0 41.0 61.6





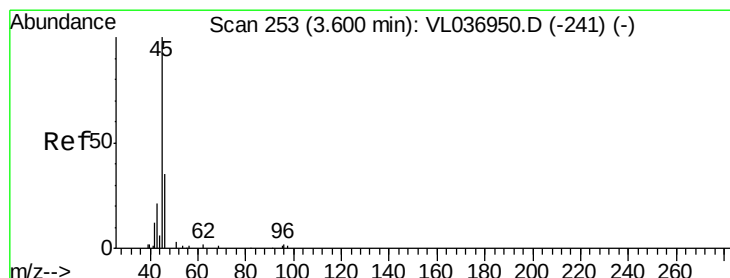
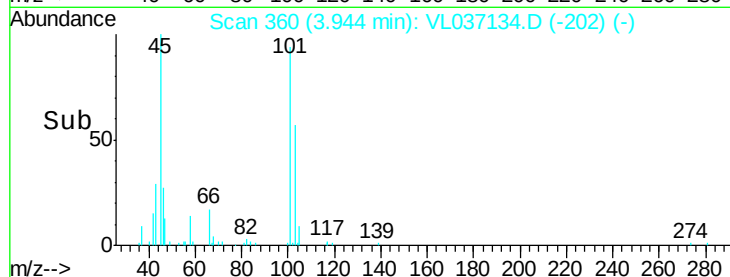
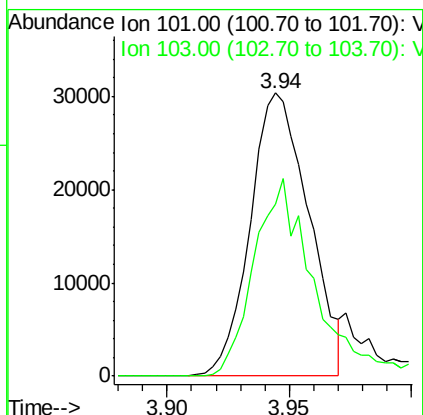
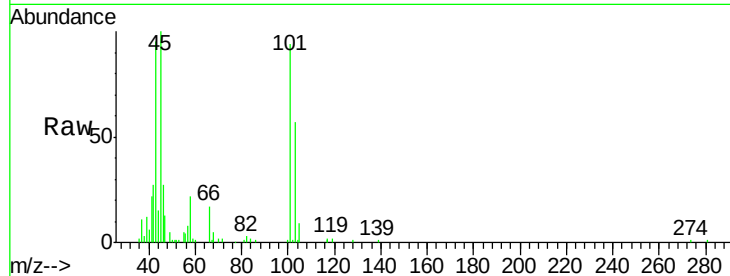
#11
 Trichlorofluoromethane
 Concen: 0.238 ppbv
 RT: 3.94 min Scan# 360
 Delta R.T. 0.01 min
 Lab File: VL037134.D
 Acq: 8 Jun 2021 16:20

Instrument :
 MSVOA_L
 ClientSampleId :
 SR-4C

Tot Ion:101 Resp: 50527
 Ion Ratio Lower Upper
 101 100
 103 60.6 52.6 79.0

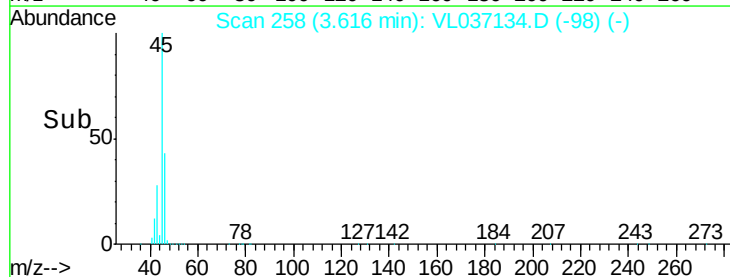
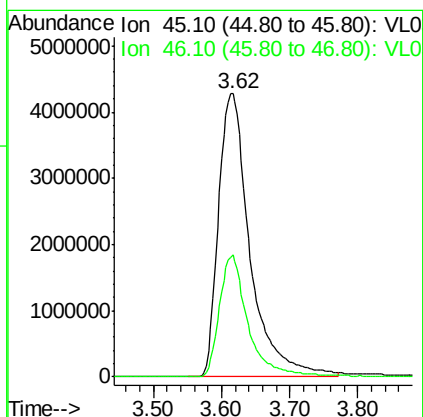
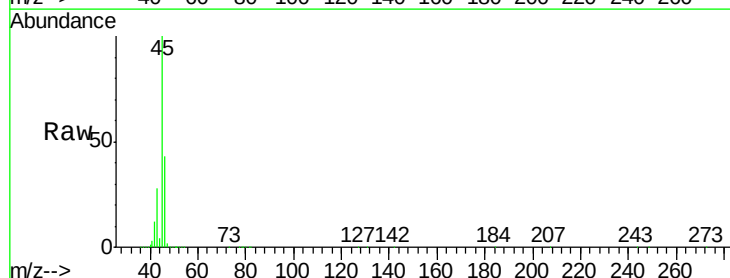
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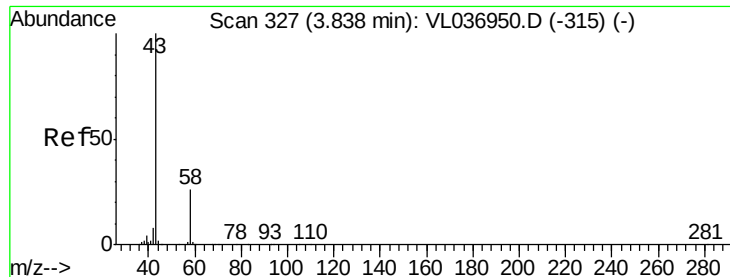
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#13
 Ethanol
 Concen: 1163.643 ppbv
 RT: 3.62 min Scan# 258
 Delta R.T. 0.02 min
 Lab File: VL037134.D
 Acq: 8 Jun 2021 16:20

Tgt Ion: 45 Resp:13767485
 Ion Ratio Lower Upper
 45 100
 46 39.6 16.3 65.3





#15

Acetone

Concen: 11.019 ppbv m

RT: 3.84 min Scan# 329

Delta R.T. 0.01 min

Lab File: VL037134.D

Acq: 8 Jun 2021 16:20

Instrument :

MSVOA_L

ClientSampleId :

SR-4C

Tot Ion: 43 Resp: 1525567

Ion Ratio Lower Upper

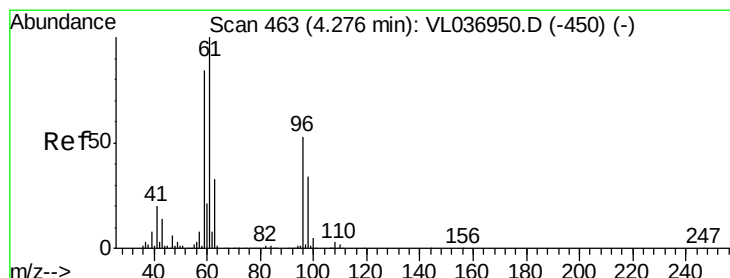
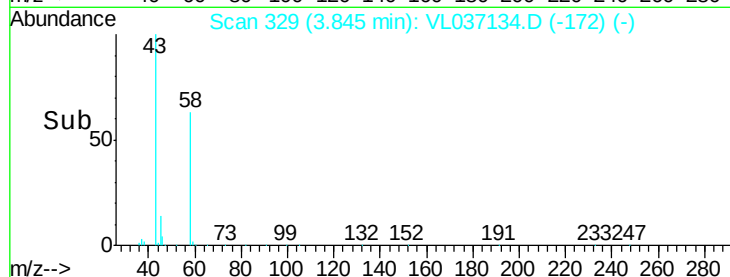
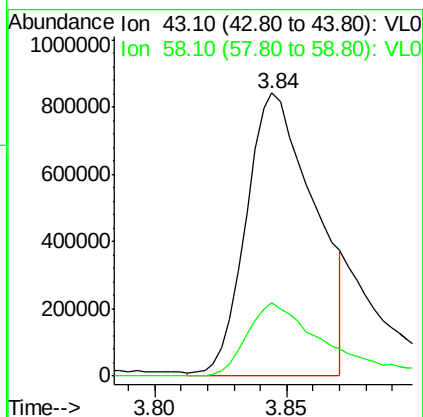
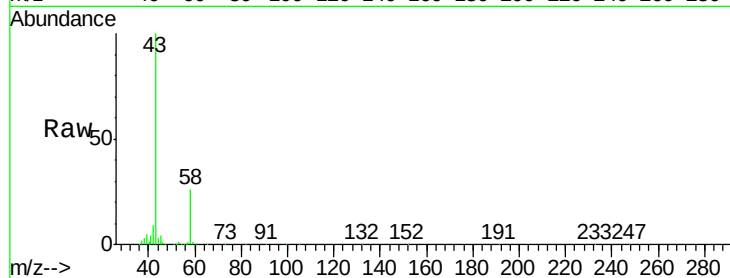
43 100

58 31.1 24.0 36.0

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#17

tert-Butyl alcohol

Concen: 0.360 ppbv

RT: 4.31 min Scan# 474

Delta R.T. 0.04 min

Lab File: VL037134.D

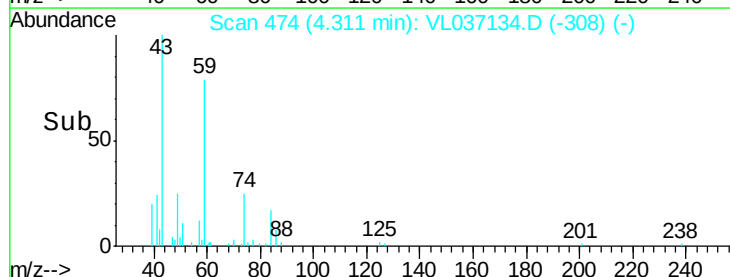
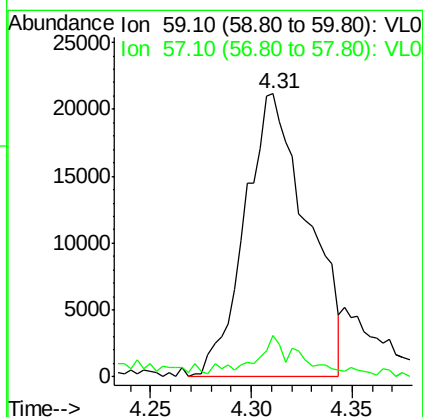
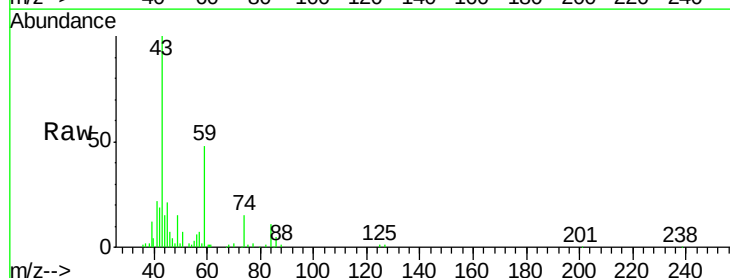
Acq: 8 Jun 2021 16:20

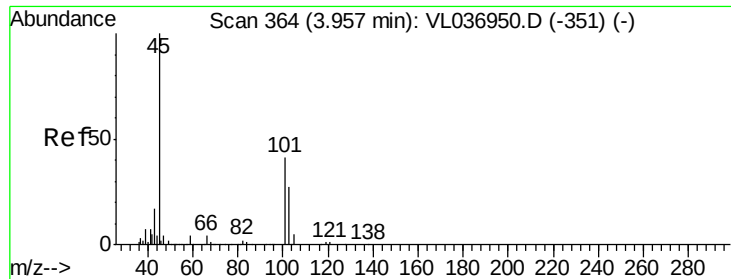
Tgt Ion: 59 Resp: 45696

Ion Ratio Lower Upper

59 100

57 0.0 8.3 12.5#





#19

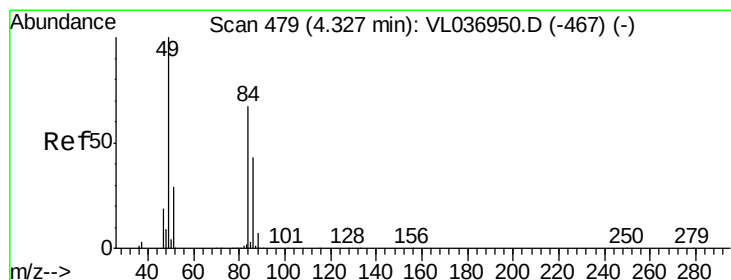
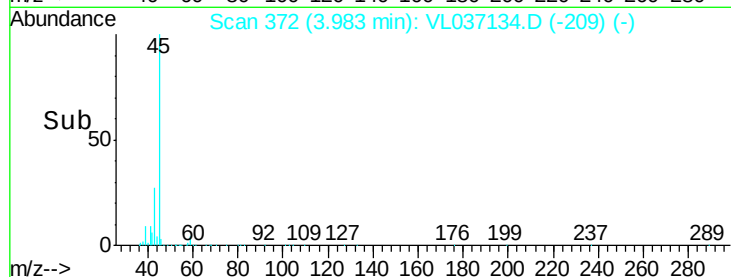
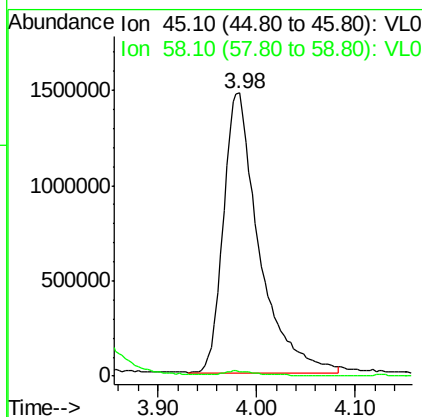
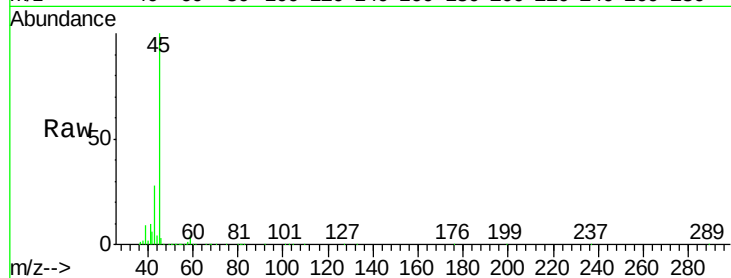
Isopropyl Alcohol
 Concen: 49.718 ppbv
 RT: 3.98 min Scan# 372
 Delta R.T. 0.03 min
 Lab File: VL037134.D
 Acq: 8 Jun 2021 16:20

Instrument :
 MSVOA_L
 ClientSampleId :
 SR-4C

Tot Ion: 45 Resp: 3700262
 Ion Ratio Lower Upper
 45 100
 58 2.4 37.2 55.8#

Manual Integrations
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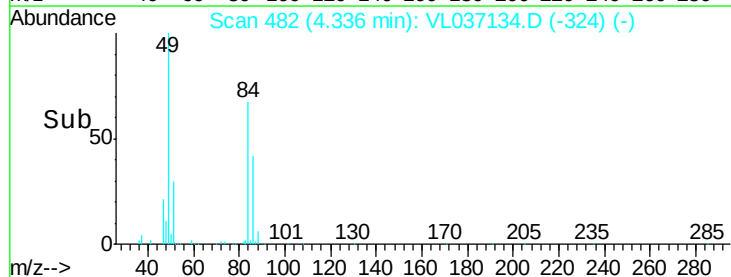
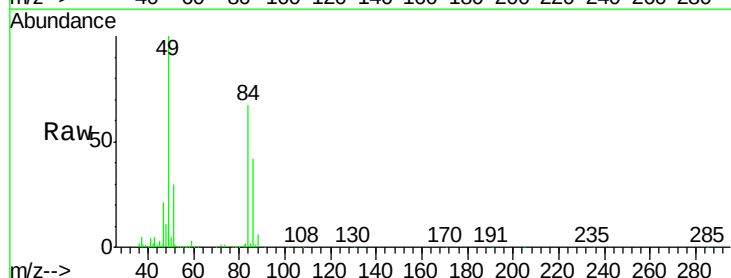
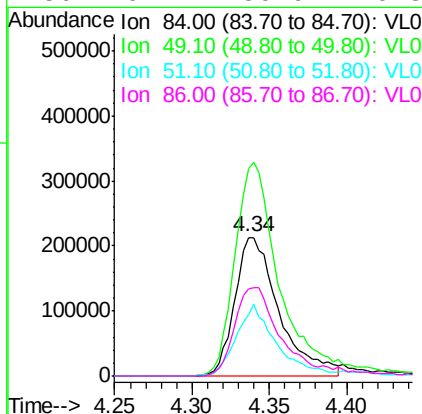
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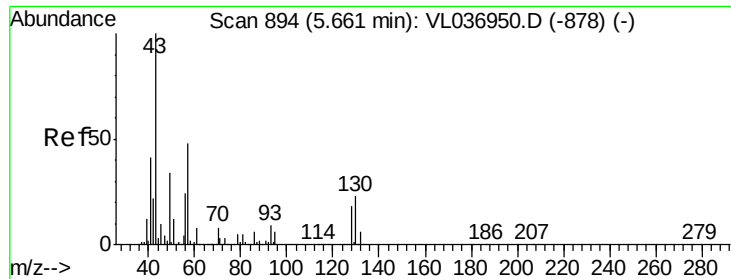


#20

Methylene Chloride
 Concen: 5.719 ppbv
 RT: 4.34 min Scan# 482
 Delta R.T. 0.01 min
 Lab File: VL037134.D
 Acq: 8 Jun 2021 16:20

Tgt Ion: 84 Resp: 424447
 Ion Ratio Lower Upper
 84 100
 49 149.3 119.8 179.6
 51 44.3 35.1 52.7
 86 62.7 50.9 76.3





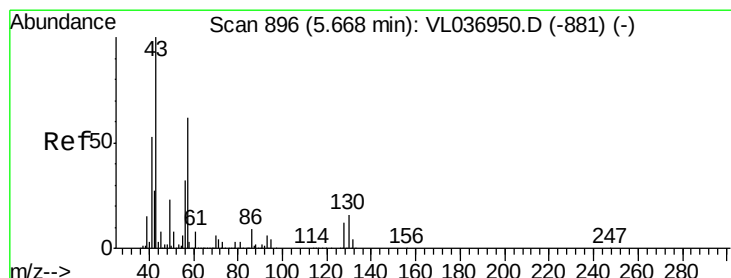
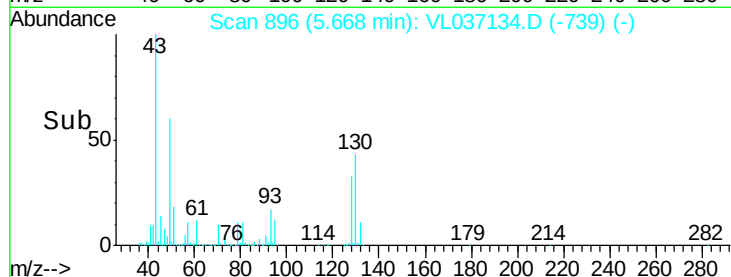
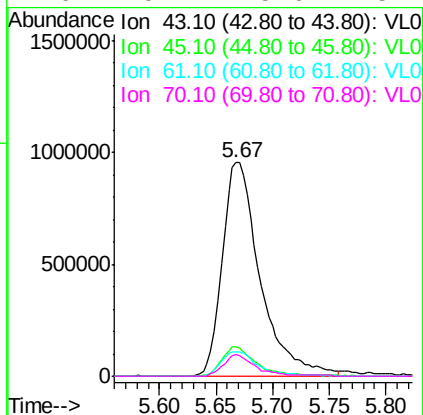
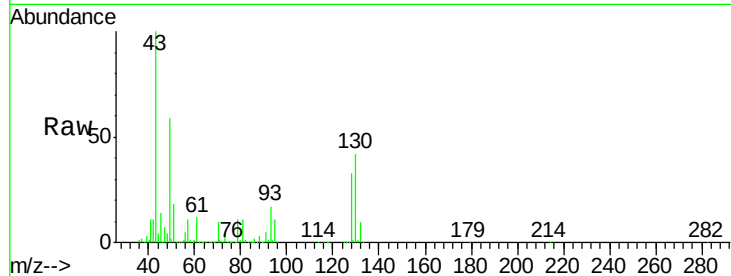
#25
Ethyl Acetate
Concen: 6.685 ppbv
RT: 5.67 min Scan# 896
Delta R.T. 0.01 min
Lab File: VL037134.D
Acq: 8 Jun 2021 16:20

Instrument :
MSVOA_L
ClientSampled :
SR-4C

Tot Ion	Ratio	Lower	Upper
43	100		
45	12.6	7.8	11.8#
61	11.4	7.8	11.8
70	9.2	5.6	8.4#

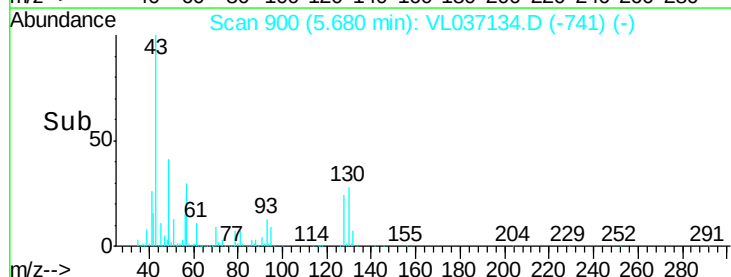
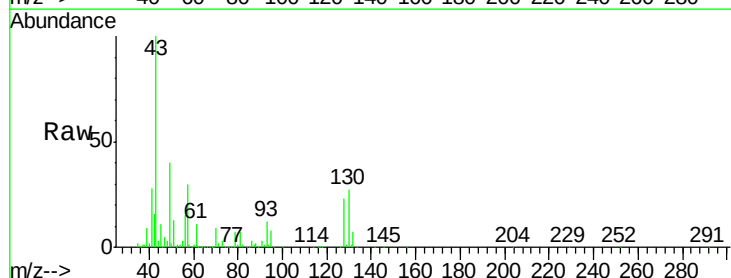
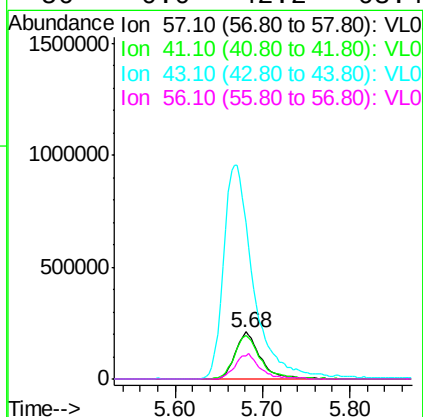
Manual Integrations
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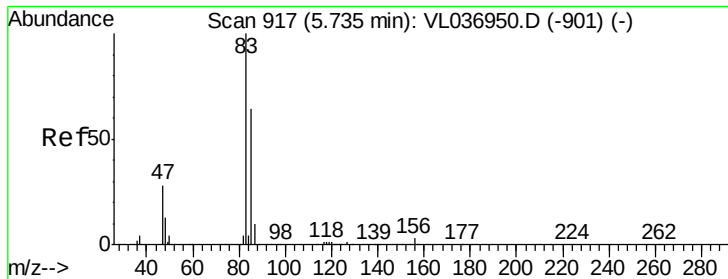
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#26
Hexane
Concen: 2.466 ppbv m
RT: 5.68 min Scan# 900
Delta R.T. 0.01 min
Lab File: VL037134.D
Acq: 8 Jun 2021 16:20

Tgt Ion	Ratio	Lower	Upper
57	100		
41	0.0	70.5	105.7#
43	0.0	165.8	248.8#
56	0.0	42.2	63.4#





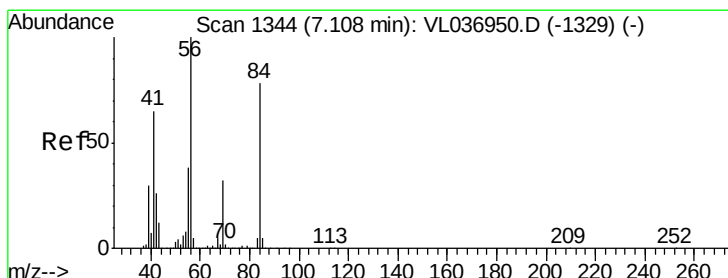
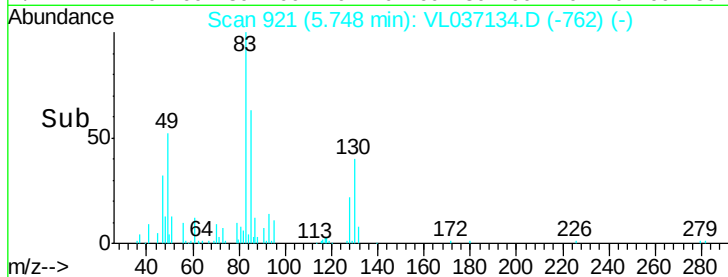
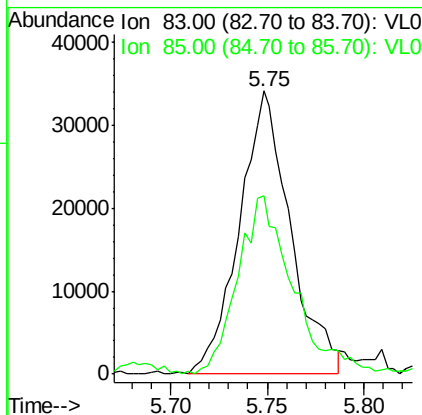
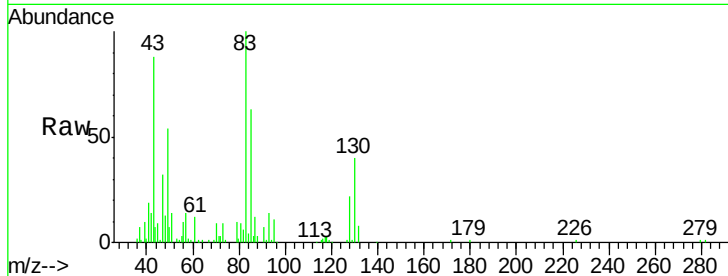
#29
Chloroform
Concen: 0.262 ppbv
RT: 5.75 min Scan# 921
Delta R.T. 0.01 min
Lab File: VL037134.D
Acq: 8 Jun 2021 16:20

Instrument :
MSVOA_L
ClientSampleId :
SR-4C

Tot Ion	83	Resp	62960
Ion Ratio	Lower	Upper	
83	100		
85	61.7	51.1	76.7

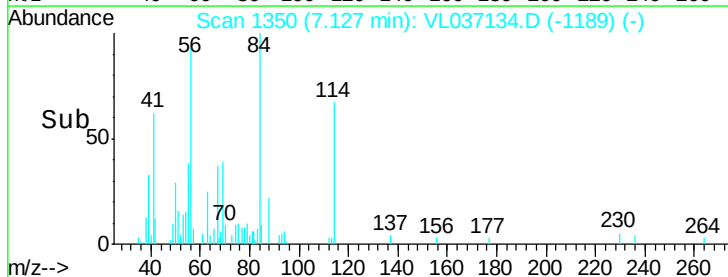
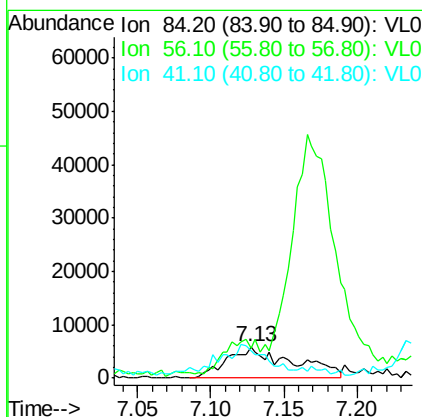
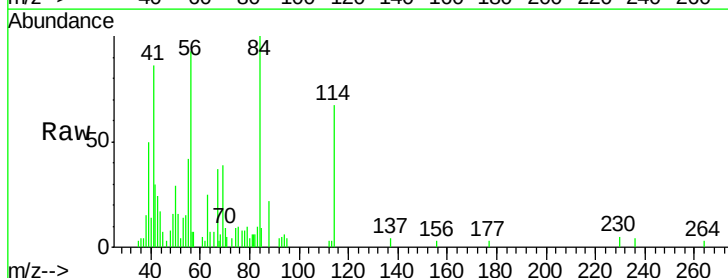
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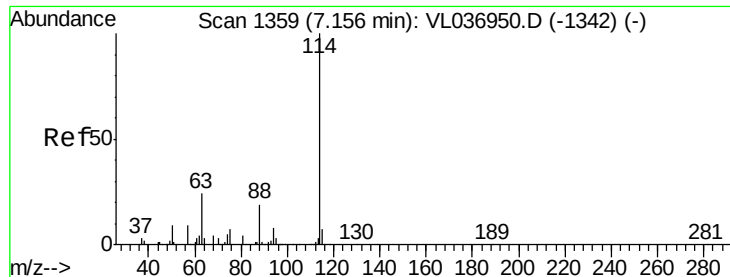
MMDadoda
6/9/2021 4:23:37 PM



#30
Cyclohexane
Concen: 0.128 ppbv m
RT: 7.13 min Scan# 1350
Delta R.T. 0.02 min
Lab File: VL037134.D
Acq: 8 Jun 2021 16:20

Tgt Ion	84	Resp	18484
Ion Ratio	Lower	Upper	
84	100		
56	0.0	107.9	161.9#
41	97.1	65.5	98.3





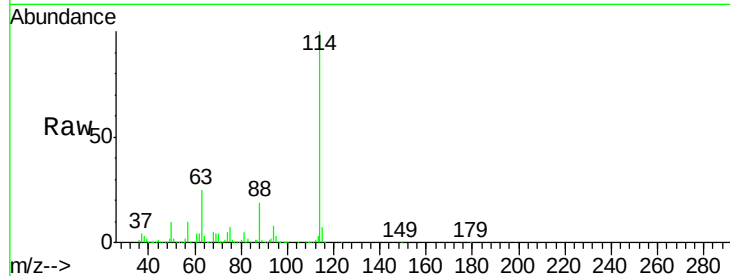
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17 min Scan# 1363
 Delta R.T. 0.01 min
 Lab File: VL037134.D
 Acq: 8 Jun 2021 16:20

Instrument :
 MSVOA_L
 ClientSampleId :
 SR-4C

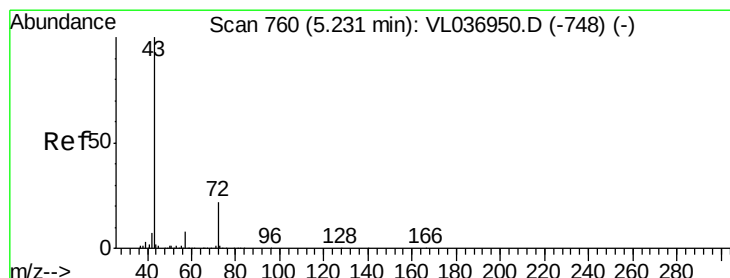
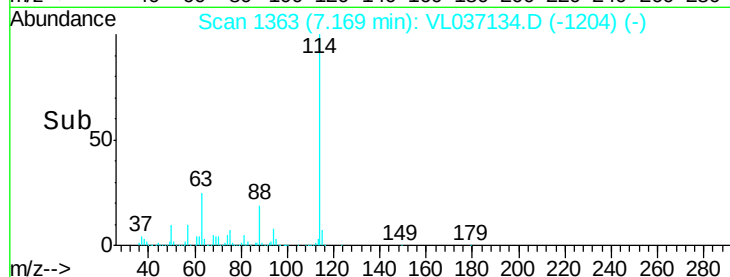
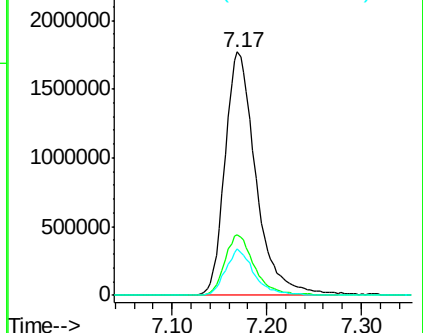
Tot Ion:114 Resp: 4020840
 Ion Ratio Lower Upper
 114 100
 63 24.3 19.6 29.4
 88 17.7 14.6 21.8

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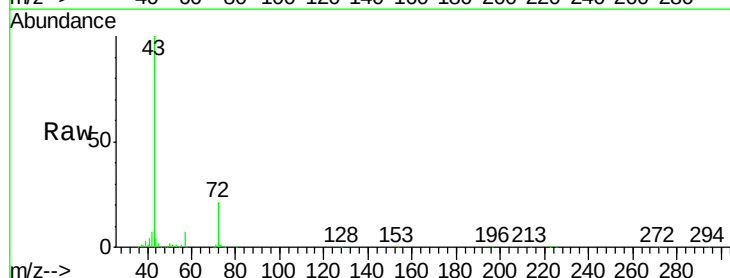


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

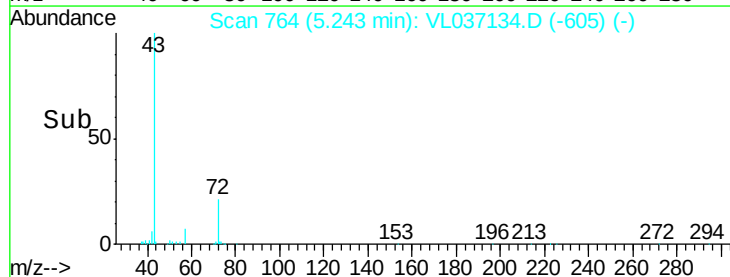
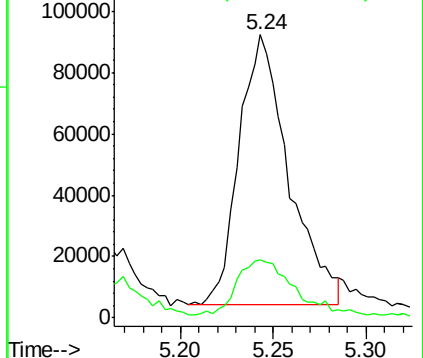


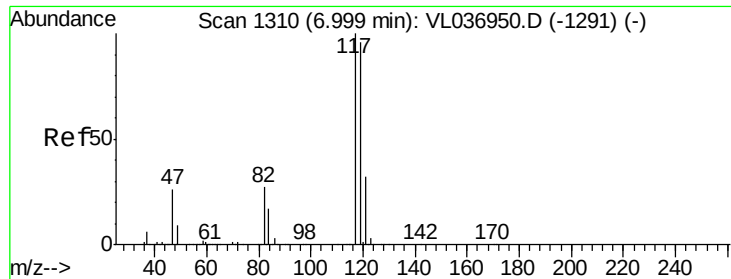
#34
 2-Butanone
 Concen: 1.126 ppbv
 RT: 5.24 min Scan# 764
 Delta R.T. 0.01 min
 Lab File: VL037134.D
 Acq: 8 Jun 2021 16:20

Tgt Ion: 43 Resp: 164897
 Ion Ratio Lower Upper
 43 100
 72 27.6 19.0 28.4



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





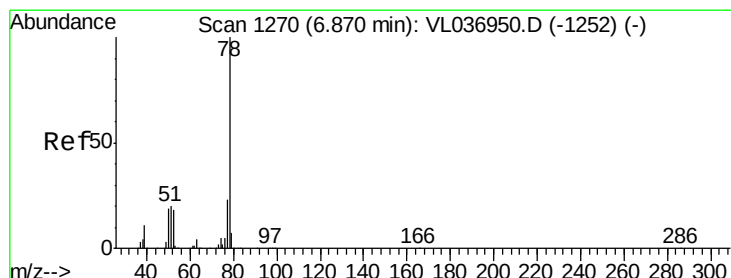
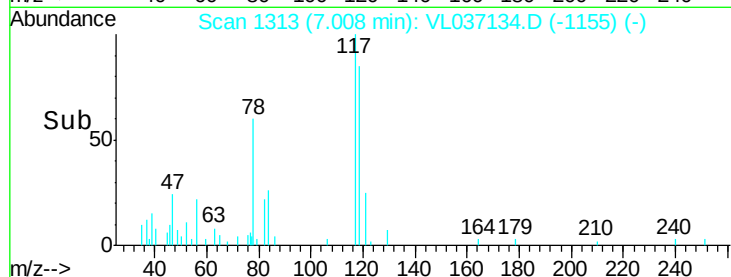
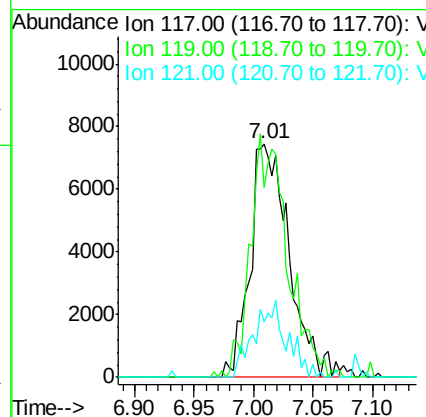
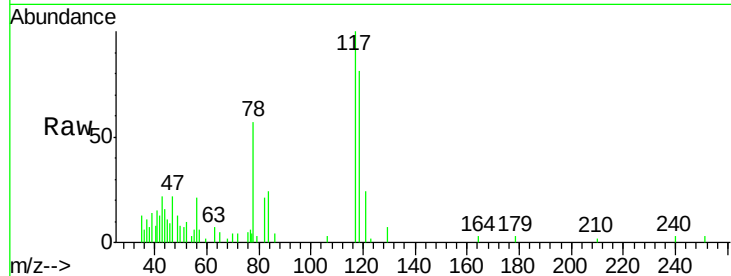
#35
Carbon Tetrachloride
Concen: 0.065 ppbv m
RT: 7.01 min Scan# 1313
Delta R.T. 0.01 min
Lab File: VL037134.D
Acq: 8 Jun 2021 16:20

Instrument :
MSVOA_L
ClientSampled :
SR-4C

Tot Ion	Ratio	Lower	Upper
117	100		
119	81.0	76.6	114.8
121	23.9	25.8	38.6#

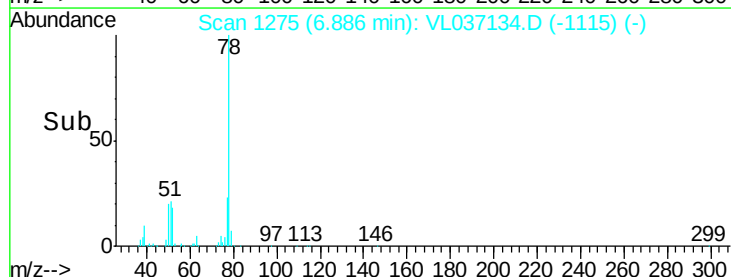
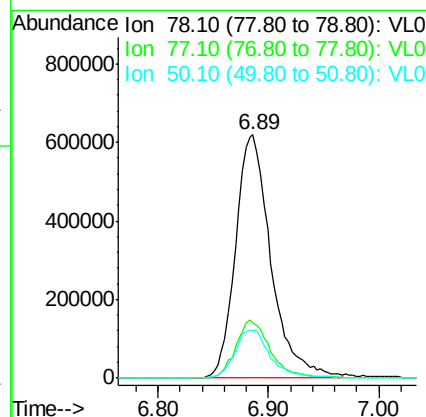
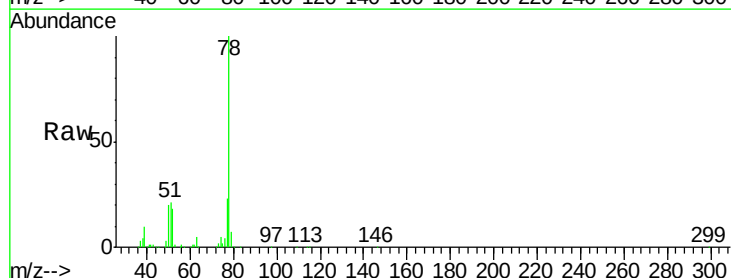
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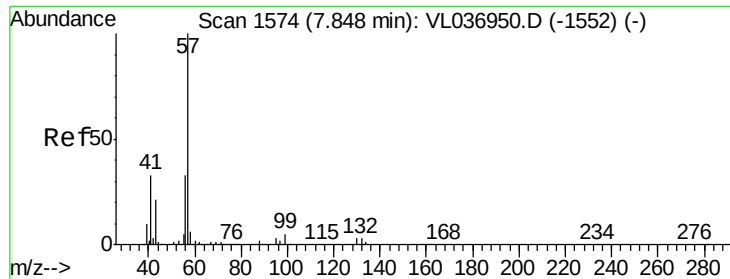
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#36
Benzene
Concen: 3.983 ppbv
RT: 6.89 min Scan# 1275
Delta R.T. 0.02 min
Lab File: VL037134.D
Acq: 8 Jun 2021 16:20

Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.0	18.6	28.0
50	19.5	15.0	22.4





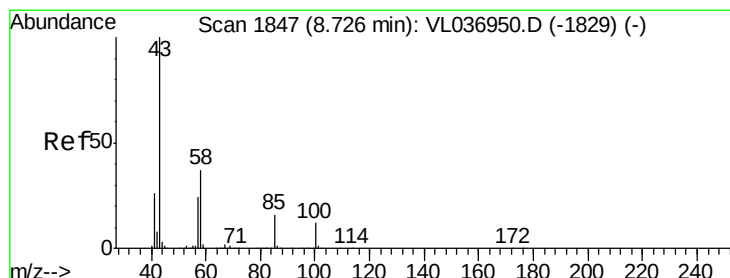
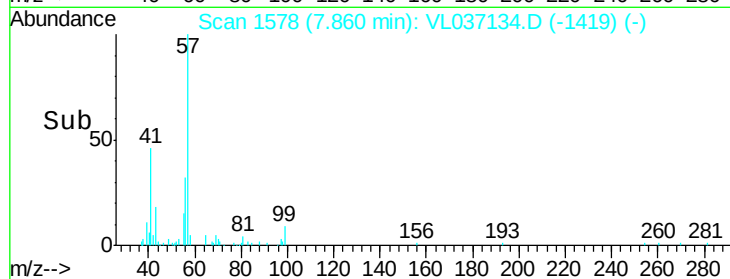
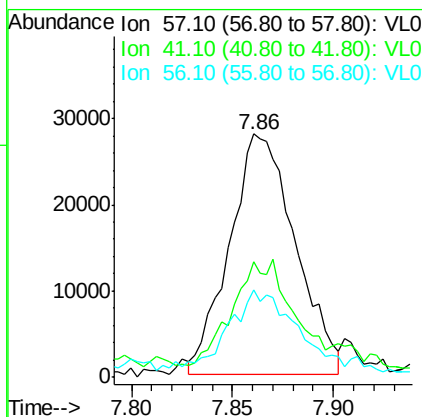
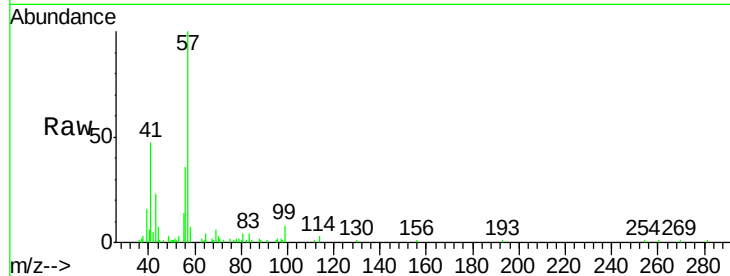
#44
 2,2,4-Trimethylpentane
 Concen: 0.107 ppbv
 RT: 7.86 min Scan# 1578
 Delta R.T. 0.01 min
 Lab File: VL037134.D
 Acq: 8 Jun 2021 16:20

Instrument :
 MSVOA_L
 ClientSampleId :
 SR-4C

Tot Ion	Ratio	Lower	Upper
57	100		
41	58.6	27.0	40.4#
56	43.6	25.4	38.2#

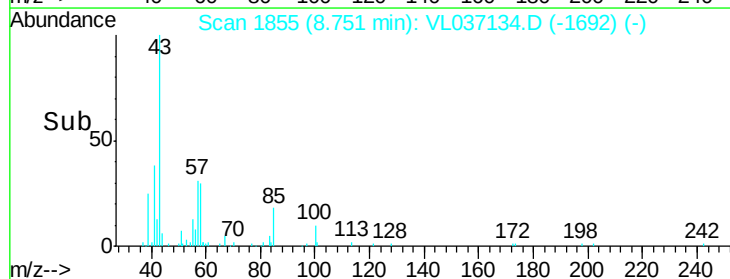
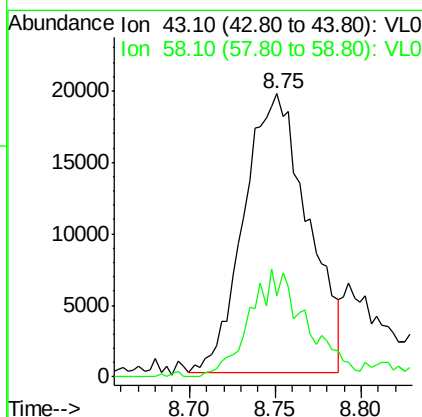
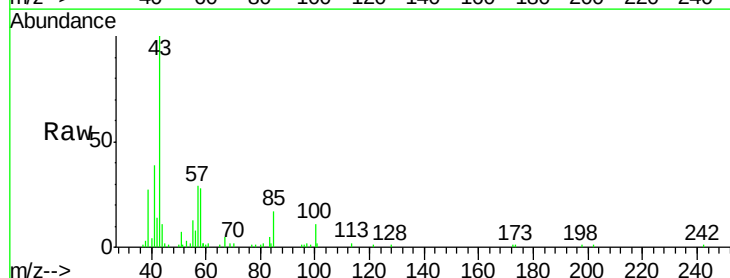
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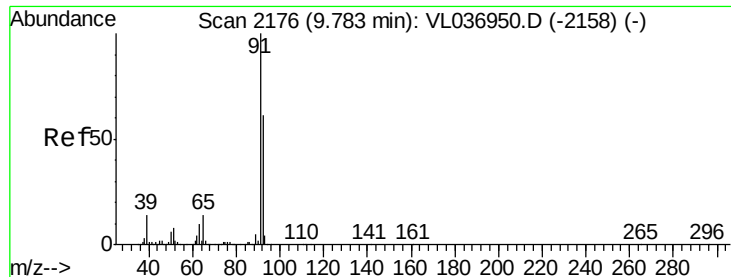
MMDadoda
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#50
 4-Methyl-2-Pentanone
 Concen: 0.209 ppbv
 RT: 8.75 min Scan# 1855
 Delta R.T. 0.03 min
 Lab File: VL037134.D
 Acq: 8 Jun 2021 16:20

Tgt Ion	Ratio	Lower	Upper
43	100		
58	36.1	29.4	44.2





#53

Toluene

Concen: 1.431 ppbv

RT: 9.80 min Scan# 2181

Delta R.T. 0.02 min

Lab File: VL037134.D

Acq: 8 Jun 2021 16:20

Instrument :

MSVOA_L

ClientSampleId :

SR-4C

Tot Ion: 91 Resp: 589589

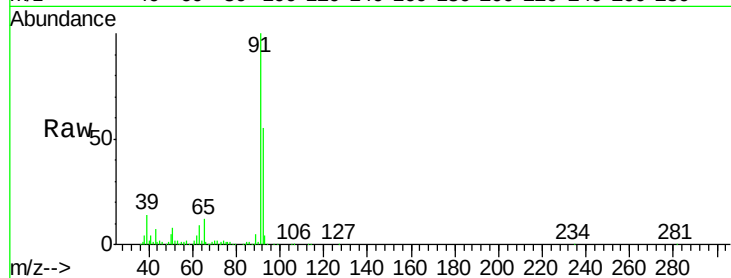
Ion Ratio Lower Upper

91 100

92 60.8 49.5 74.3

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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

9.80

250000

200000

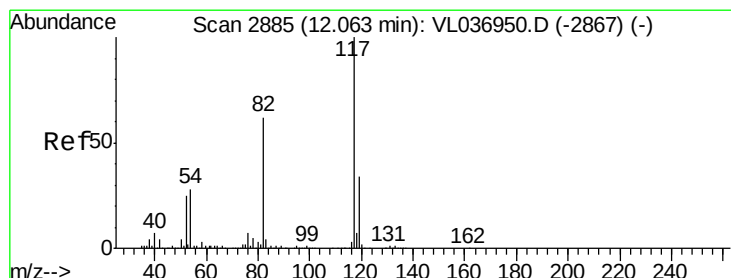
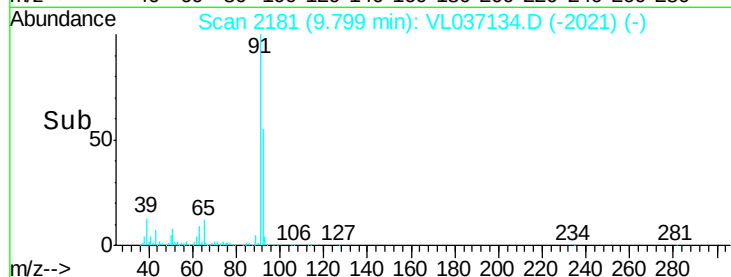
150000

100000

50000

0

Time--> 9.70 9.75 9.80 9.85



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2891

Delta R.T. 0.02 min

Lab File: VL037134.D

Acq: 8 Jun 2021 16:20

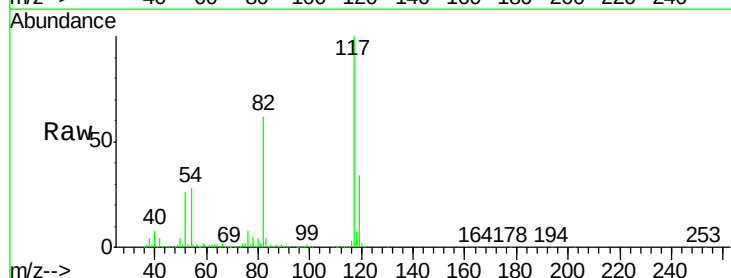
Tgt Ion: 117 Resp: 3668298

Ion Ratio Lower Upper

117 100

82 63.1 52.6 79.0

119 33.6 46.6 70.0#



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

12.08

2000000

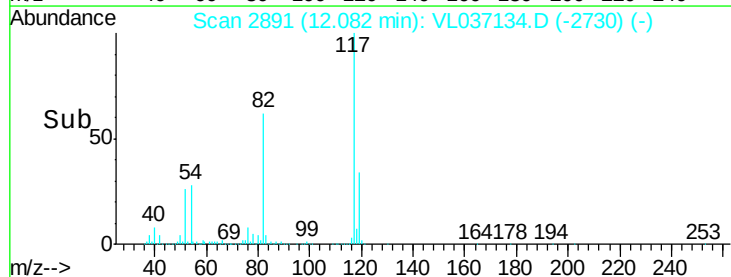
1500000

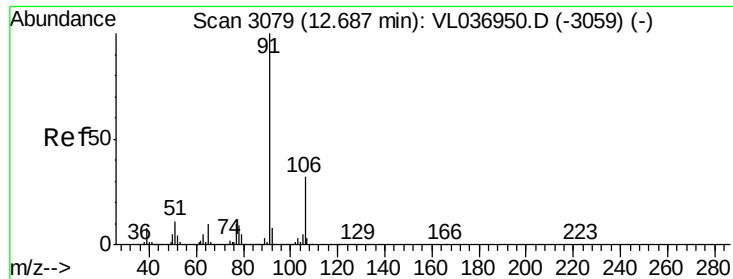
1000000

500000

0

Time--> 12.00 12.10 12.20





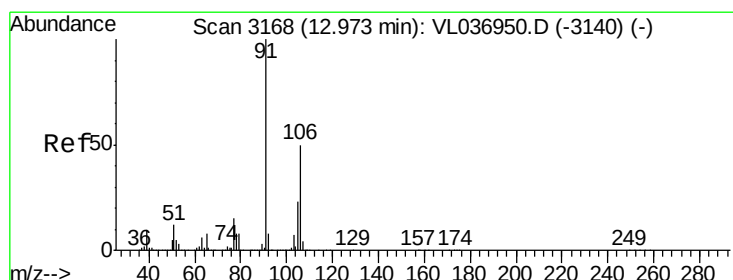
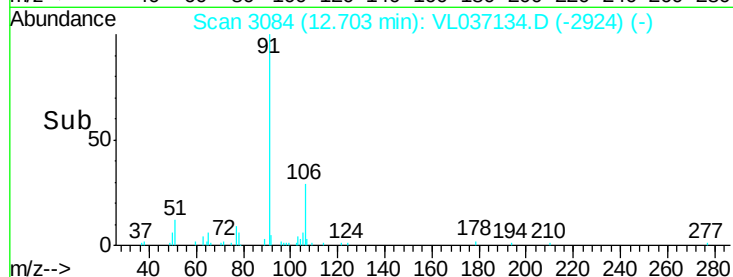
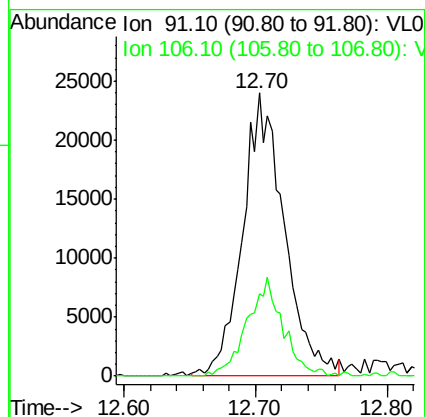
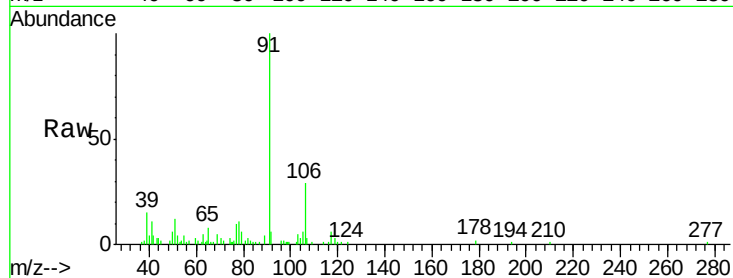
#58
Ethyl Benzene
Concen: 0.102 ppbv m
RT: 12.70 min Scan# 3084
Delta R.T. 0.02 min
Lab File: VL037134.D
Acq: 8 Jun 2021 16:20

Instrument :
MSVOA_L
ClientSampled :
SR-4C

Tot Ion: 91 Resp: 52663
Ion Ratio Lower Upper
91 100
106 29.1 25.6 38.4

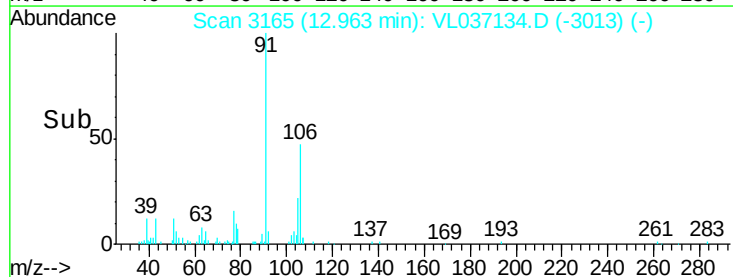
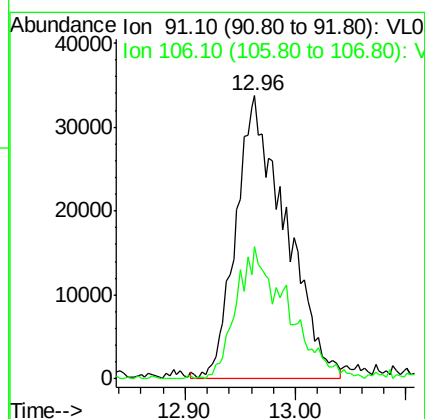
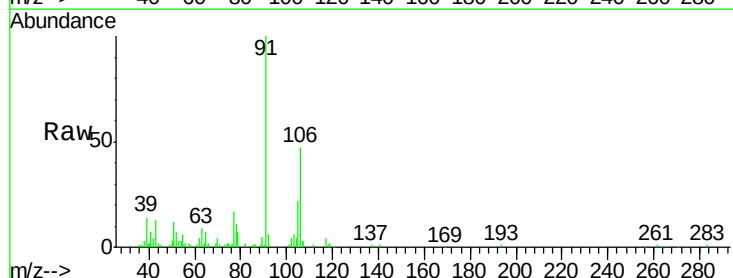
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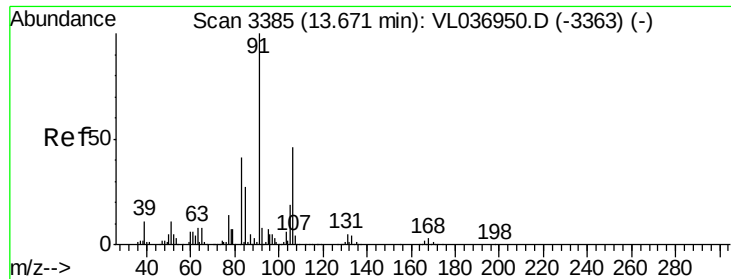
MMDadoda
6/9/2021 4:23:37 PM



#59
m/p-Xylene
Concen: 0.246 ppbv m
RT: 12.96 min Scan# 3165
Delta R.T. -0.01 min
Lab File: VL037134.D
Acq: 8 Jun 2021 16:20

Tgt Ion: 91 Resp: 105466
Ion Ratio Lower Upper
91 100
106 0.0 37.4 56.2#





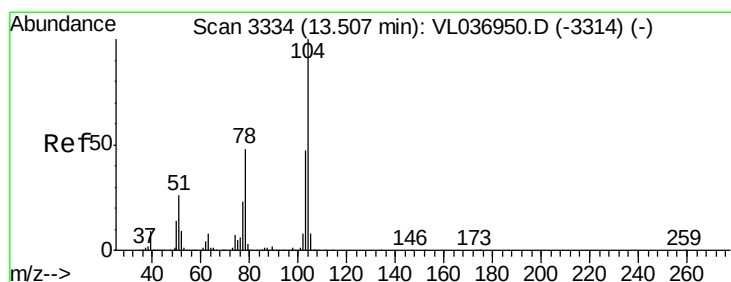
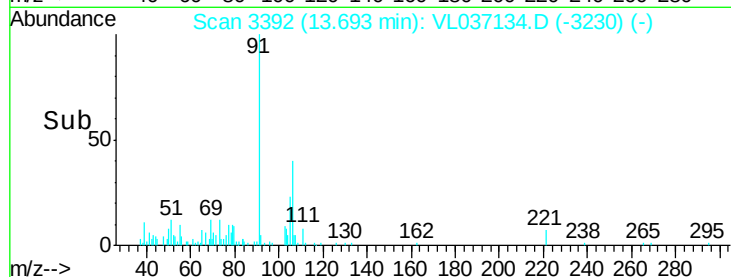
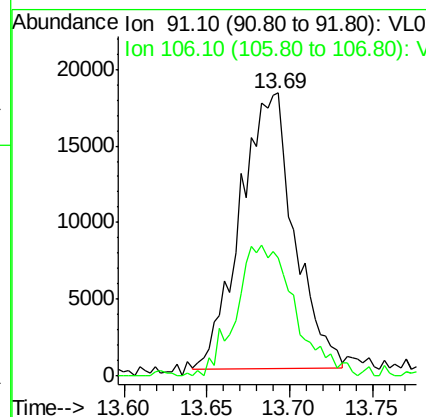
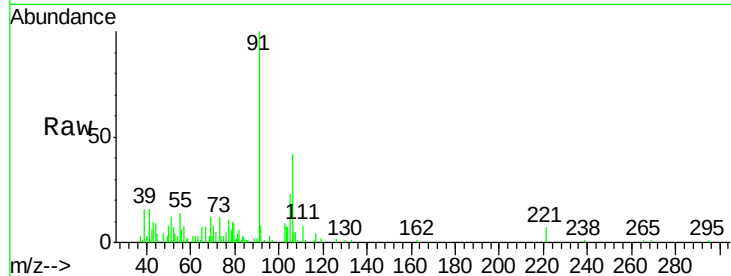
#60
o-Xylene
Concen: 0.100 ppbv
RT: 13.69 min Scan# 3392
Delta R.T. 0.02 min
Lab File: VL037134.D
Acq: 8 Jun 2021 16:20

Instrument :
MSVOA_L
ClientSampleId :
SR-4C

Tot Ion	Ratio	Lower	Upper
91	100		
106	52.2	23.4	70.3

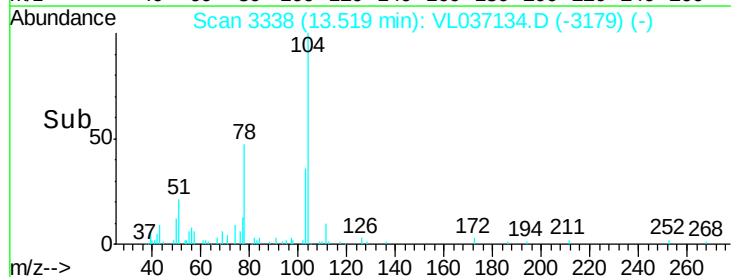
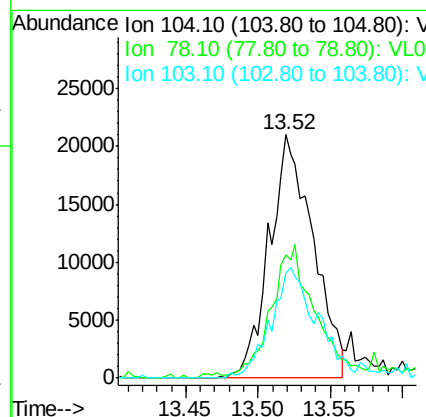
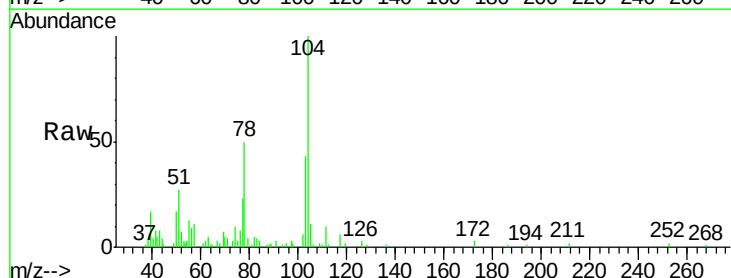
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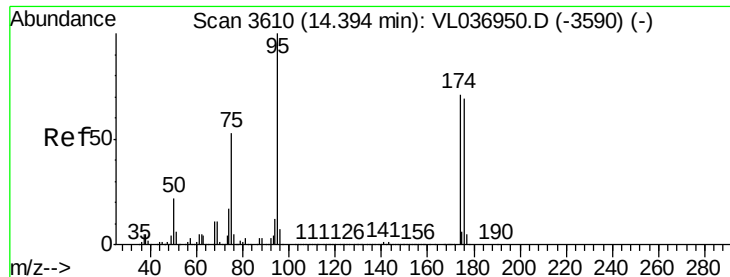
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#61
Styrene
Concen: 0.192 ppbv m
RT: 13.52 min Scan# 3338
Delta R.T. 0.01 min
Lab File: VL037134.D
Acq: 8 Jun 2021 16:20

Tgt Ion	Ratio	Lower	Upper
104	100		
78	61.1	39.0	58.6#
103	48.9	38.0	57.0





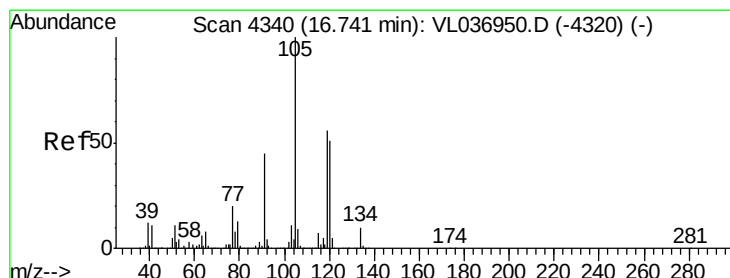
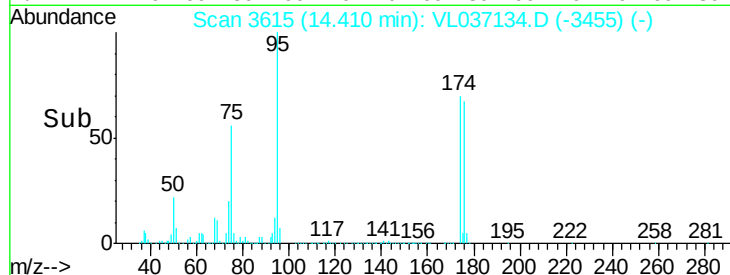
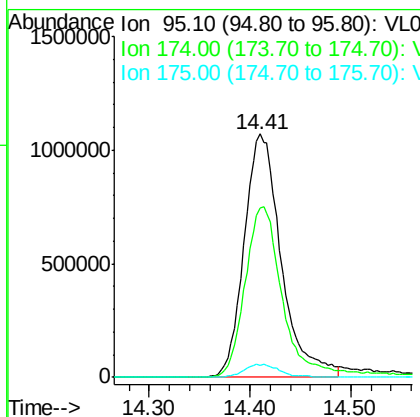
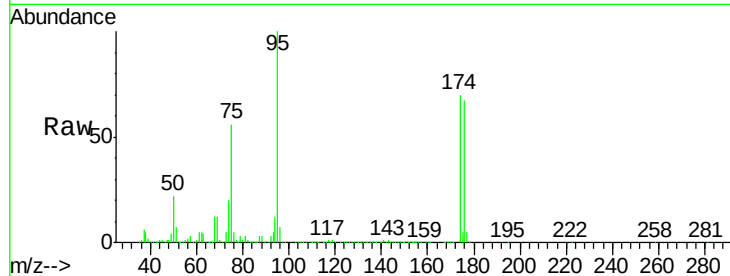
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.890 ppbv
 RT: 14.41 min Scan# 3615
 Delta R.T. 0.02 min
 Lab File: VL037134.D
 Acq: 8 Jun 2021 16:20

Instrument :
 MSVOA_L
 ClientSampled :
 SR-4C

Tot Ion: 95 Resp: 2725325
 Ion Ratio Lower Upper
 95 100
 174 73.2 58.4 87.6
 175 5.4 4.4 6.6

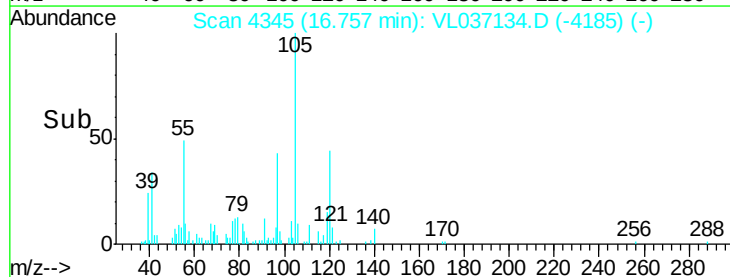
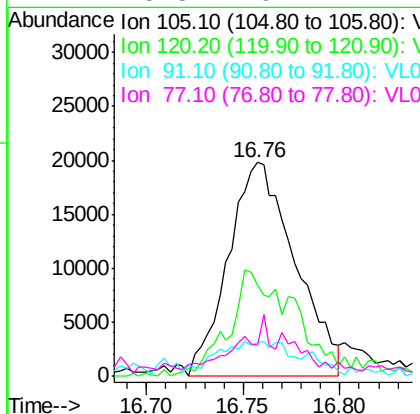
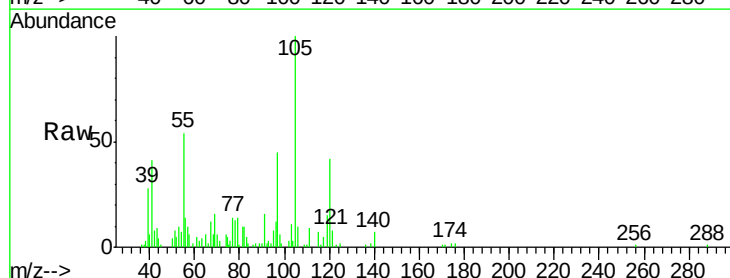
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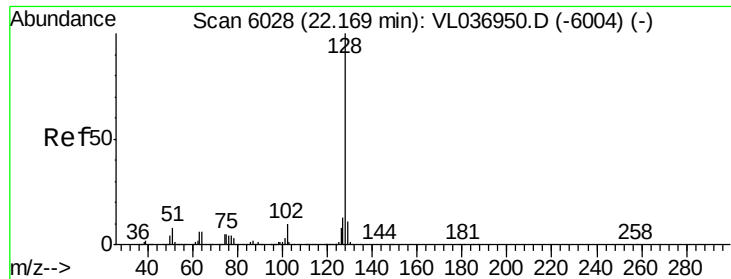
MMDadoda
 6/9/2021 4:23:37 PM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.101 ppbv
 RT: 16.76 min Scan# 4345
 Delta R.T. 0.02 min
 Lab File: VL037134.D
 Acq: 8 Jun 2021 16:20

Tgt Ion: 105 Resp: 47464
 Ion Ratio Lower Upper
 105 100
 120 39.1 40.6 61.0#
 91 13.1 37.4 56.0#
 77 8.8 16.2 24.4#





#79

Naphthalene

Concen: 0.162 ppbv m

RT: 22.20 min Scan# 6039

Delta R.T. 0.04 min

Lab File: VL037134.D

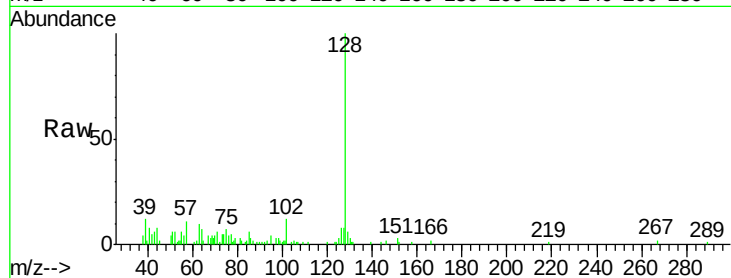
Acq: 8 Jun 2021 16:20

Instrument :

MSVOA_L

ClientSampleId :

SR-4C



Tot Ion:	128	Resp:	59739
Ion Ratio	Lower	Upper	
128	100		
127	8.5	10.4	15.6#
129	5.9	9.0	13.6#

Manual Integrations
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