

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060821\
 Data File : VL037136.D
 Acq On : 8 Jun 2021 17:40
 Operator : SY/AP
 Sample : M2614-04
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SR-5C

Manual Integrations
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 6/9/2021 4:23:43 PM

Quant Time: Jun 09 12:22:23 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

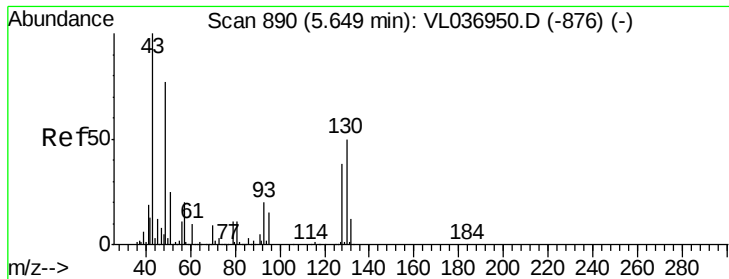
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1368124	10.00	ppbv	0.02
33) 1,4-Difluorobenzene	7.17	114	4006233	10.00	ppbv	0.02
55) Chlorobenzene-d5	12.08	117	3662197	10.00	ppbv	0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	2763504	10.05	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	54750	0.236	ppbv	89
3) Chlorodifluoromethane	2.99	51	1748273	6.975	ppbv	99
4) Chloromethane	3.14	50	49619	0.582	ppbv	95
9) Propene	3.01	41	223922	2.495	ppbv	89
10) Heptane	8.12	43	45996m	0.206	ppbv	
11) Trichlorofluoromethane	3.95	101	52661	0.245	ppbv	86
13) Ethanol	3.62	45	15973485	1333.907	ppbv	99
15) Acetone	3.85	43	1368533m	9.766	ppbv	
19) Isopropyl Alcohol	3.99	45	4563536	60.582	ppbv #	33
20) Methylene Chloride	4.34	84	220432	2.935	ppbv	98
25) Ethyl Acetate	5.68	43	792269	2.353	ppbv	97
26) Hexane	5.68	57	370547m	2.154	ppbv	
27) Carbon Disulfide	4.55	76	17010	0.098	ppbv #	65
29) Chloroform	5.75	83	402331	1.655	ppbv	96
30) Cyclohexane	7.13	84	20474m	0.140	ppbv	
34) 2-Butanone	5.25	43	180621	1.238	ppbv	96
35) Carbon Tetrachloride	7.02	117	17320m	0.065	ppbv	
36) Benzene	6.89	78	1923625	5.574	ppbv	99
41) Tetrahydrofuran	6.06	42	29298m	0.353	ppbv	
44) 2,2,4-Trimethylpentane	7.87	57	70522m	0.119	ppbv	
50) 4-Methyl-2-Pentanone	8.75	43	73030m	0.303	ppbv	
52) Tetrachloroethene	11.21	164	5204m	0.038	ppbv	
53) Toluene	9.80	91	1524176	3.712	ppbv	98
58) Ethyl Benzene	12.71	91	56711	0.110	ppbv	92
59) m/p-Xylene	12.96	91	107308m	0.251	ppbv	
60) o-Xylene	13.69	91	46140m	0.113	ppbv	
61) Styrene	13.52	104	79775m	0.348	ppbv	
74) 1,2,4-Trimethylbenzene	16.76	105	57687m	0.123	ppbv	
79) Naphthalene	22.20	128	108545	0.295	ppbv #	95

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 895

Delta R.T. 0.02 min

Lab File: VL037136.D

Acq: 8 Jun 2021 17:40

Instrument :

MSVOA_L

ClientSampleId :

SR-5C

Tot Ion: 49 Resp: 1368124

Ion Ratio Lower Upper

49 100

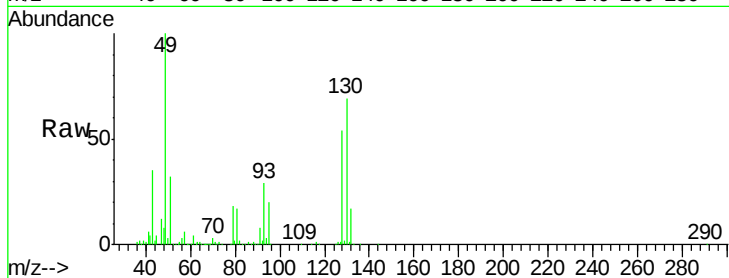
128 57.3 26.9 80.7

130 73.9 33.8 101.4

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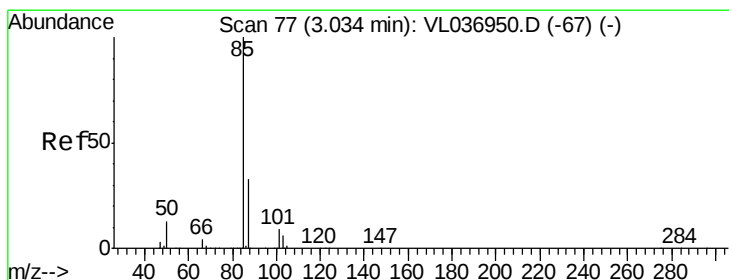
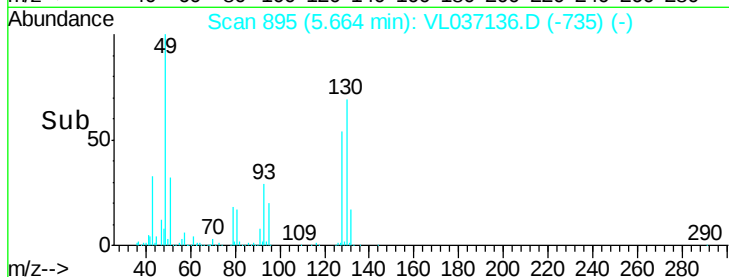
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

5.66

Time-->



#2

Dichlorodifluoromethane

Concen: 0.236 ppbv

RT: 3.04 min Scan# 80

Delta R.T. 0.01 min

Lab File: VL037136.D

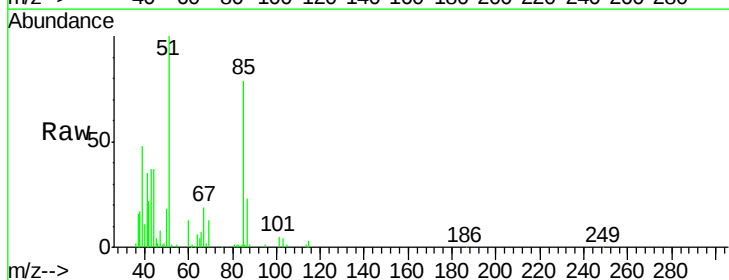
Acq: 8 Jun 2021 17:40

Tgt Ion: 85 Resp: 54750

Ion Ratio Lower Upper

85 100

87 27.1 26.6 39.8

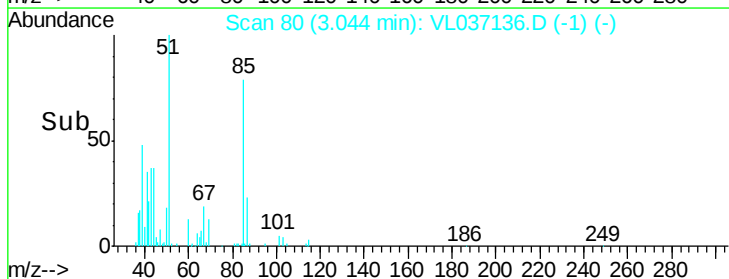


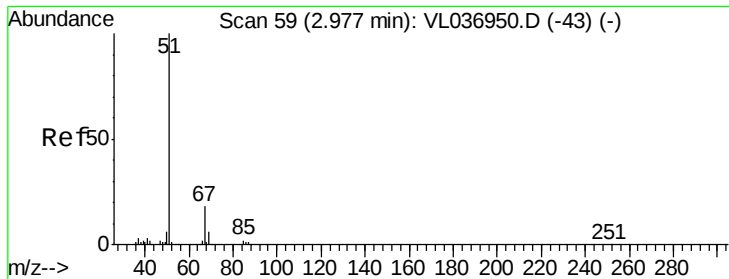
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.04

Time-->





#3

Chlorodifluoromethane

Concen: 6.975 ppbv

RT: 2.99 min Scan# 62

Delta R.T. 0.01 min

Lab File: VL037136.D

Acq: 8 Jun 2021 17:40

Instrument :

MSVOA_L

ClientSampleId :

SR-5C

Tot Ion: 51 Resp: 1748273

Ion Ratio Lower Upper

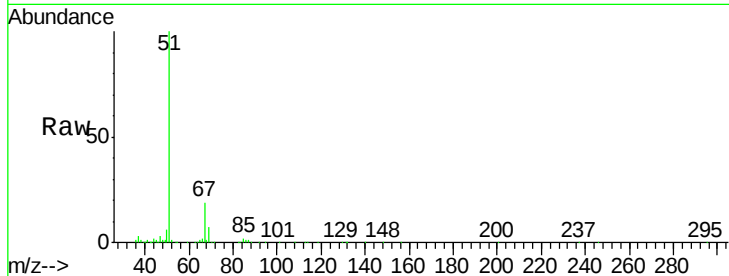
51 100

67 17.9 14.6 21.8

Manual Integrations
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

2.99

800000

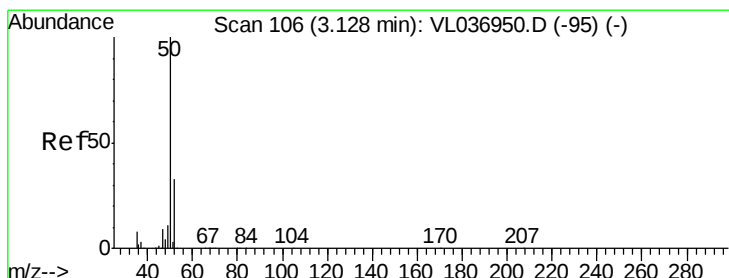
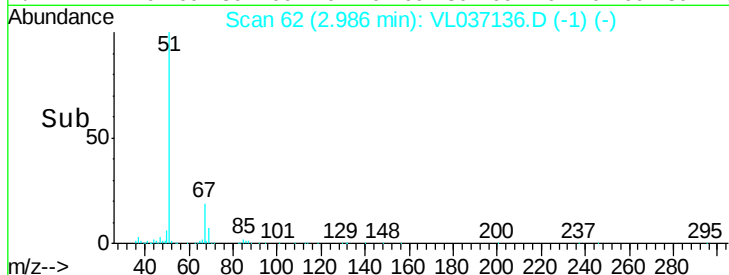
600000

400000

200000

0

Time-->



#4

Chloromethane

Concen: 0.582 ppbv

RT: 3.14 min Scan# 109

Delta R.T. 0.01 min

Lab File: VL037136.D

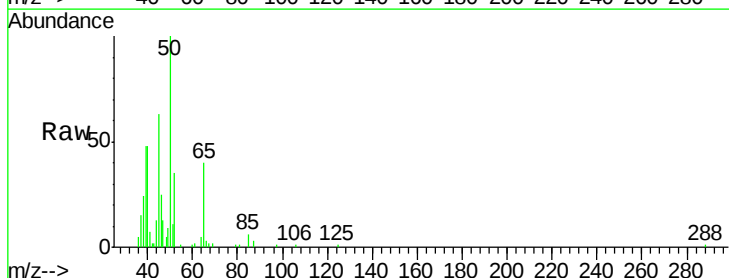
Acq: 8 Jun 2021 17:40

Tgt Ion: 50 Resp: 49619

Ion Ratio Lower Upper

50 100

52 35.6 26.1 39.1



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

3.14

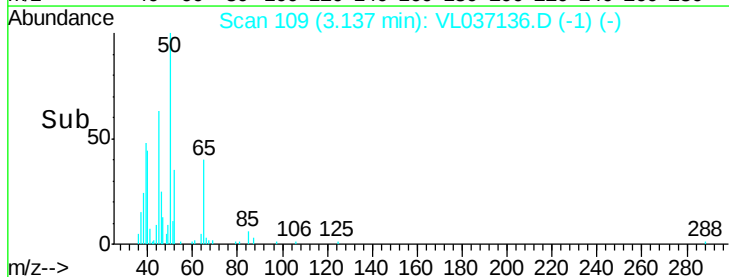
30000

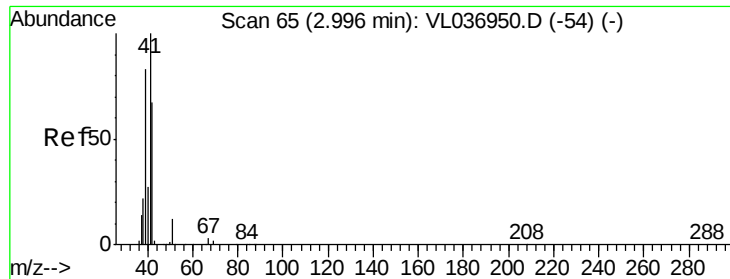
20000

10000

0

Time-->





#9

Propene

Concen: 2.495 ppbv

RT: 3.01 min Scan# 70

Delta R.T. 0.02 min

Lab File: VL037136.D

Acq: 8 Jun 2021 17:40

Instrument :

MSVOA_L

ClientSampleId :

SR-5C

Tot Ion: 41 Resp: 223922

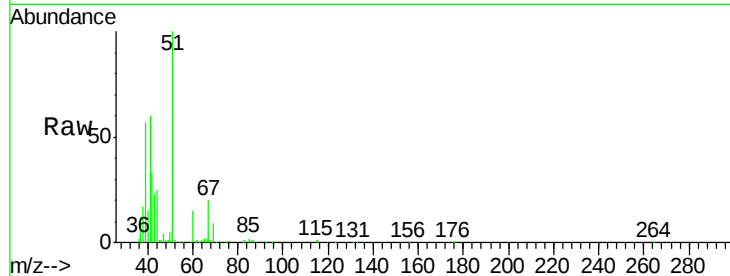
Ion Ratio Lower Upper

41 100

42 58.7 53.9 80.9

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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

120000

100000

80000

60000

40000

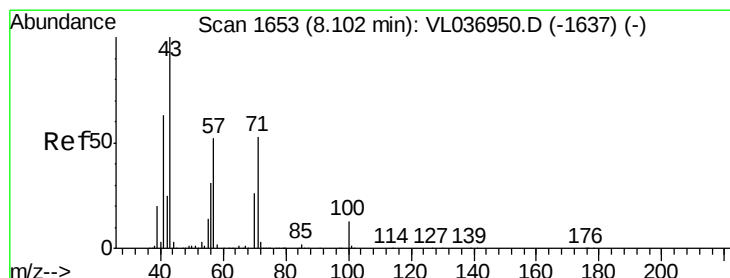
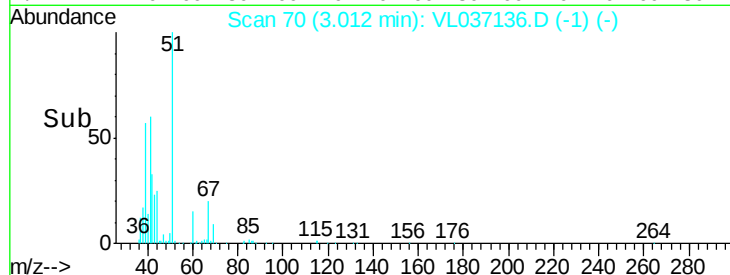
20000

0

Time-->

2.95 3.00 3.05

3.01



#10

Heptane

Concen: 0.206 ppbv m

RT: 8.12 min Scan# 1659

Delta R.T. 0.02 min

Lab File: VL037136.D

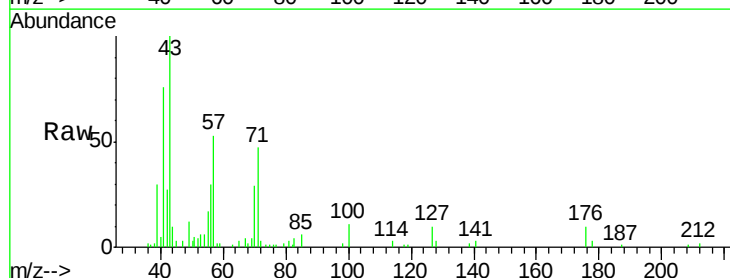
Acq: 8 Jun 2021 17:40

Tgt Ion: 43 Resp: 45996

Ion Ratio Lower Upper

43 100

57 46.1 41.0 61.6



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

20000

15000

10000

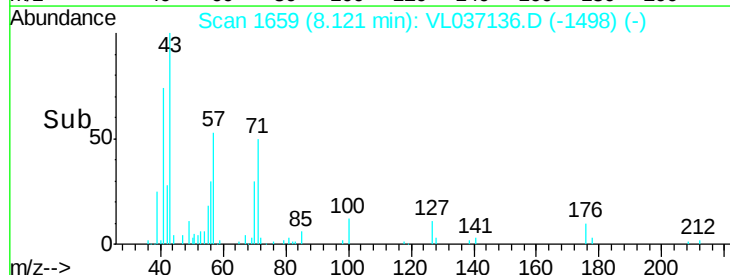
5000

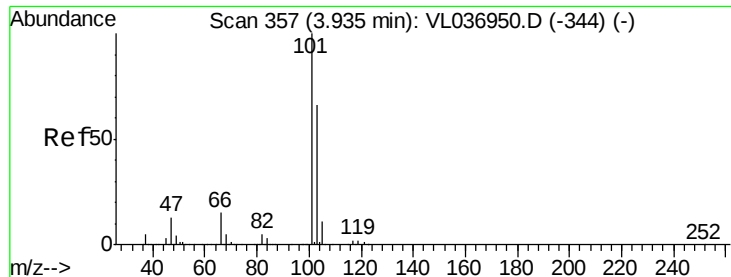
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Time-->

8.05 8.10 8.15

8.12





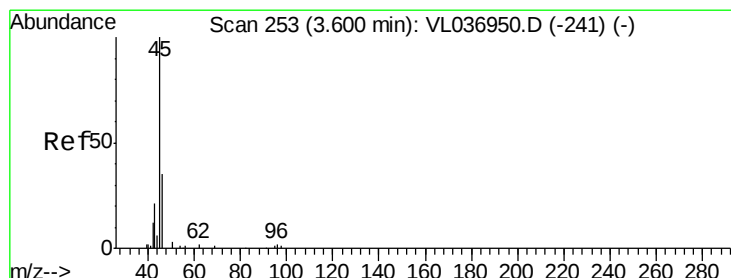
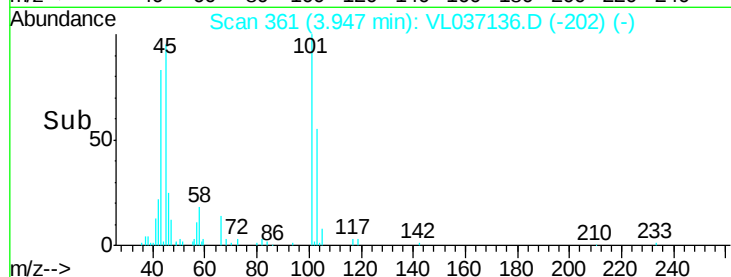
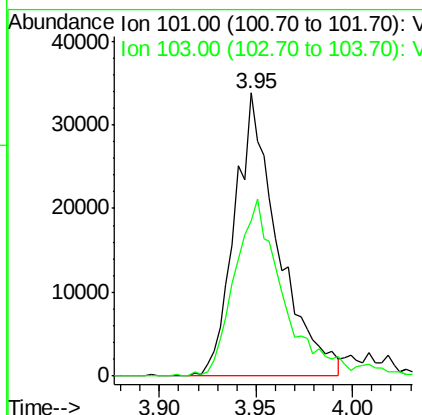
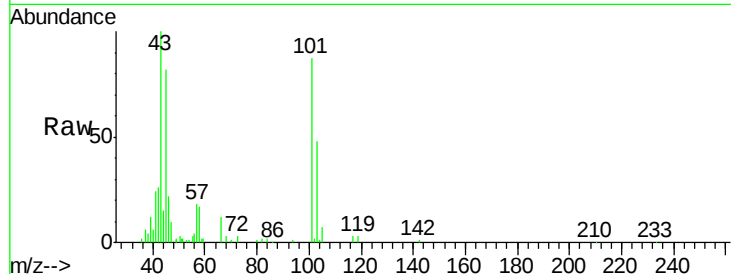
#11
 Trichlorofluoromethane
 Concen: 0.245 ppbv
 RT: 3.95 min Scan# 361
 Delta R.T. 0.01 min
 Lab File: VL037136.D
 Acq: 8 Jun 2021 17:40

Instrument :
 MSVOA_L
 ClientSampleId :
 SR-5C

Tot Ion	Ratio	Lower	Upper
101	100		
103	54.9	52.6	79.0

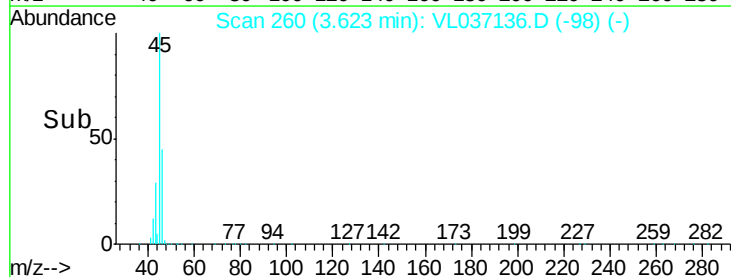
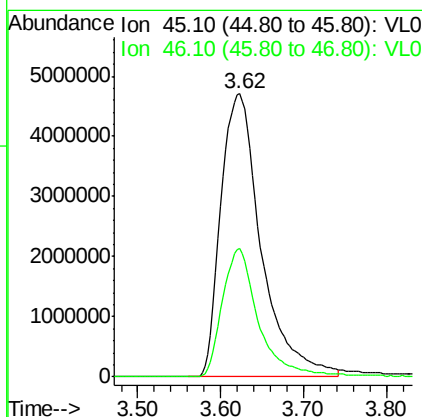
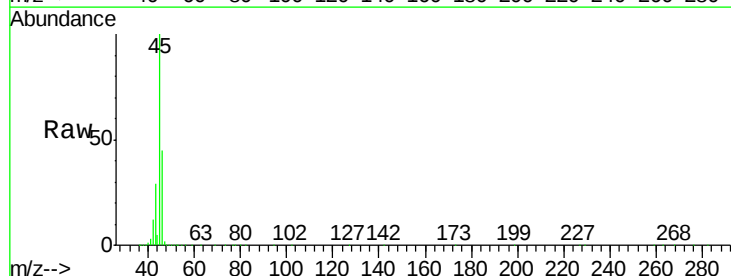
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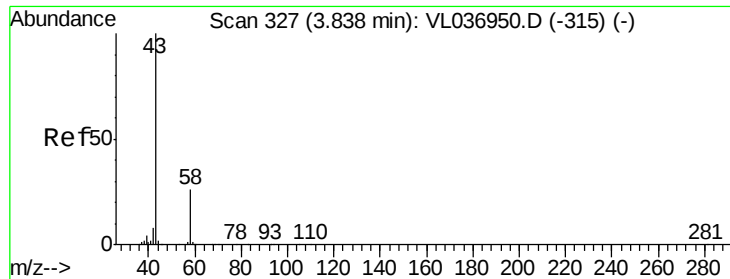
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#13
 Ethanol
 Concen: 1333.907 ppbv
 RT: 3.62 min Scan# 260
 Delta R.T. 0.02 min
 Lab File: VL037136.D
 Acq: 8 Jun 2021 17:40

Tgt Ion	Ratio	Lower	Upper
45	100		
46	41.5	16.3	65.3





#15

Acetone

Concen: 9.766 ppbv m

RT: 3.85 min Scan# 330

Delta R.T. 0.01 min

Lab File: VL037136.D

Acq: 8 Jun 2021 17:40

Instrument :

MSVOA_L

ClientSampleId :

SR-5C

Tot Ion: 43 Resp: 1368533

Ion Ratio Lower Upper

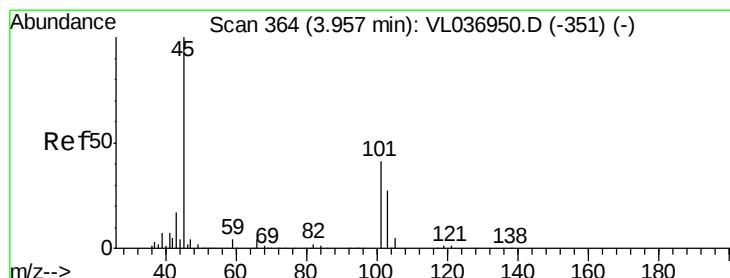
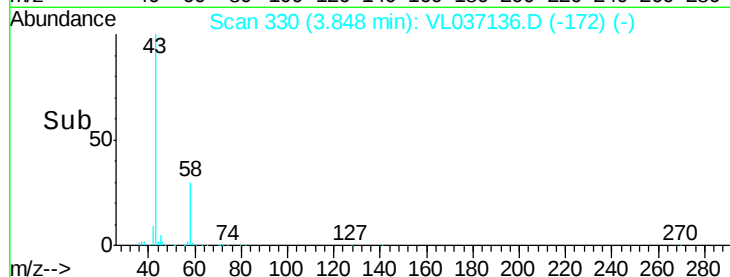
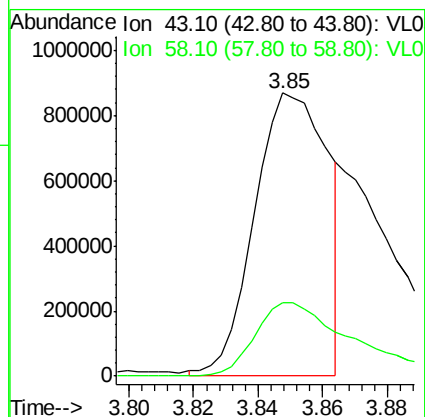
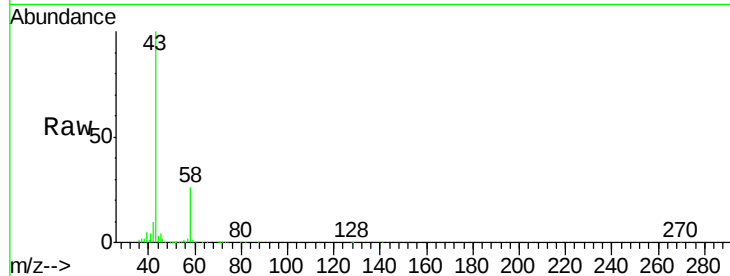
43 100

58 37.8 24.0 36.0#

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#19

Isopropyl Alcohol

Concen: 60.582 ppbv

RT: 3.99 min Scan# 373

Delta R.T. 0.03 min

Lab File: VL037136.D

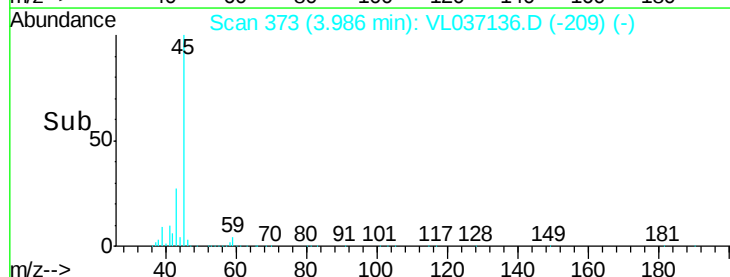
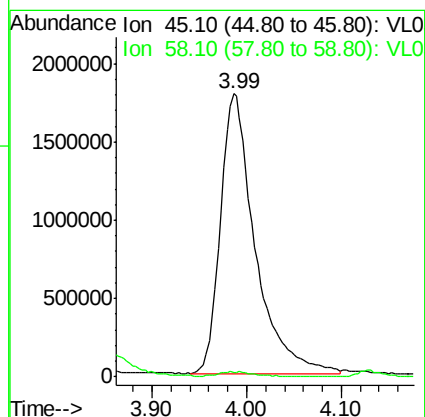
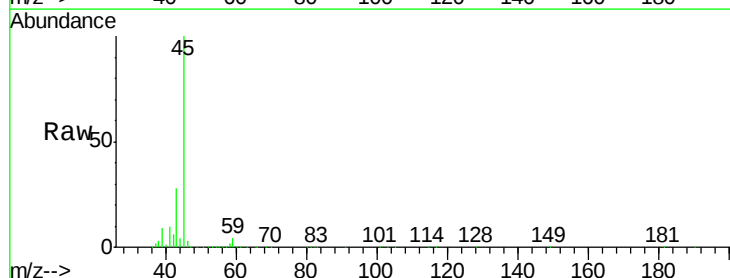
Acq: 8 Jun 2021 17:40

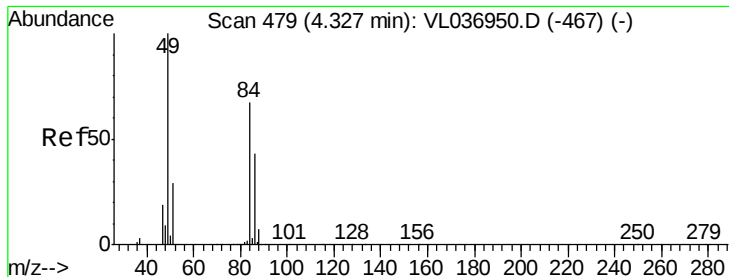
Tgt Ion: 45 Resp: 4563536

Ion Ratio Lower Upper

45 100

58 2.1 37.2 55.8#





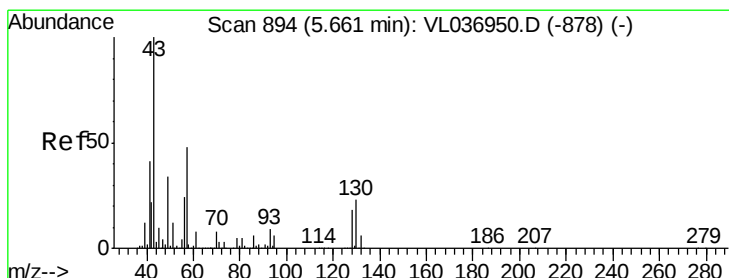
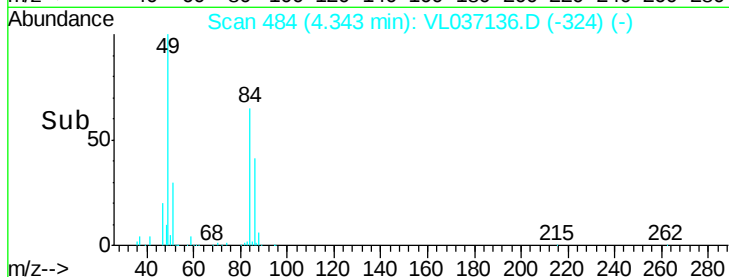
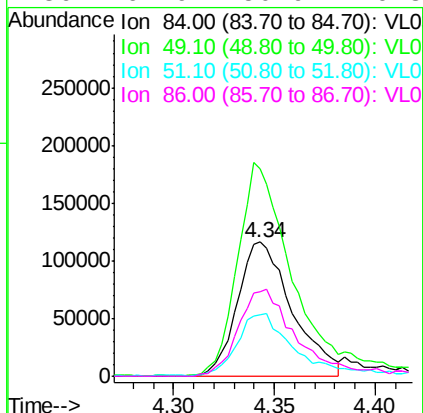
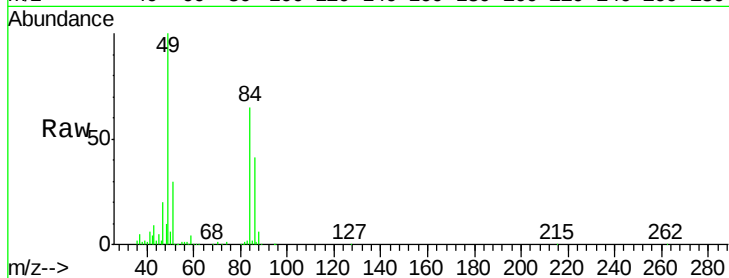
#20
Methvlene Chloride
Concen: 2.935 ppbv
RT: 4.34 min Scan# 484
Delta R.T. 0.02 min
Lab File: VL037136.D
Acq: 8 Jun 2021 17:40

Instrument :
MSVOA_L
ClientSampleId :
SR-5C

Tot Ion	84	Resp	220432
Ion	Ratio	Lower	Upper
84	100		
49	153.6	119.8	179.6
51	45.2	35.1	52.7
86	62.9	50.9	76.3

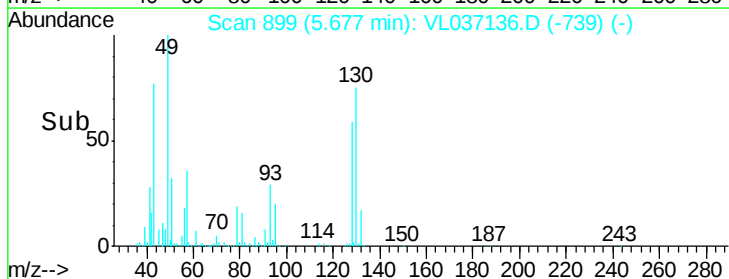
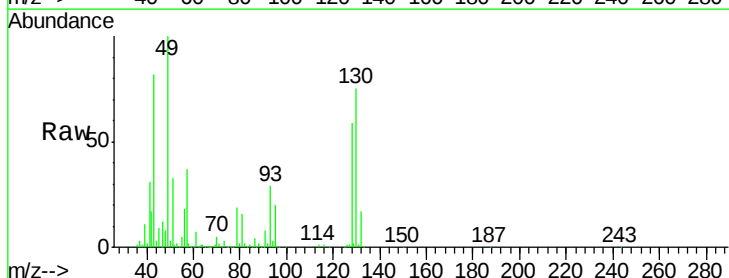
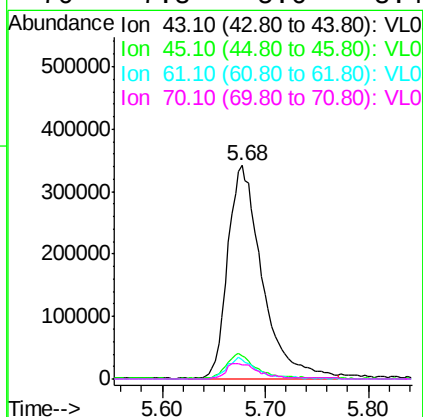
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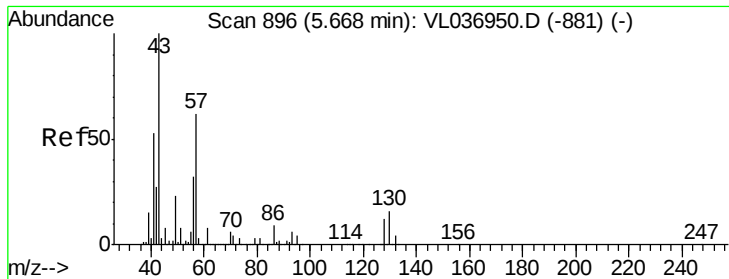
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#25
Ethyl Acetate
Concen: 2.353 ppbv
RT: 5.68 min Scan# 899
Delta R.T. 0.02 min
Lab File: VL037136.D
Acq: 8 Jun 2021 17:40

Tgt Ion	43	Resp	792269
Ion	Ratio	Lower	Upper
43	100		
45	11.0	7.8	11.8
61	8.7	7.8	11.8
70	7.8	5.6	8.4





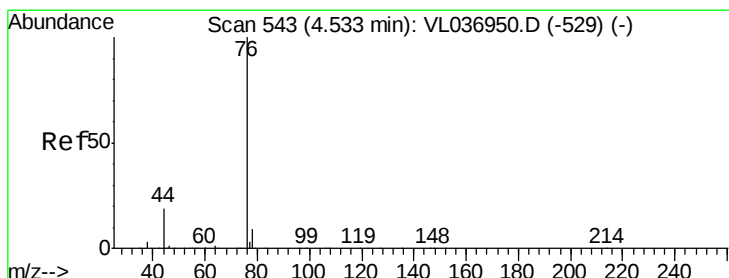
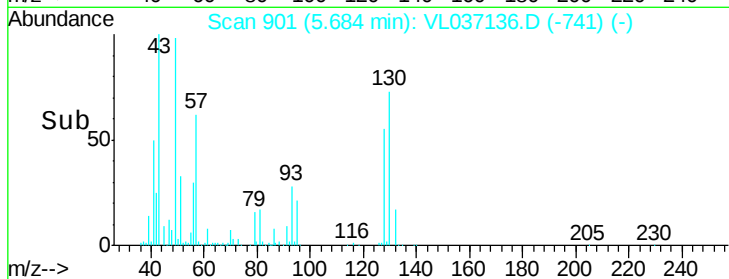
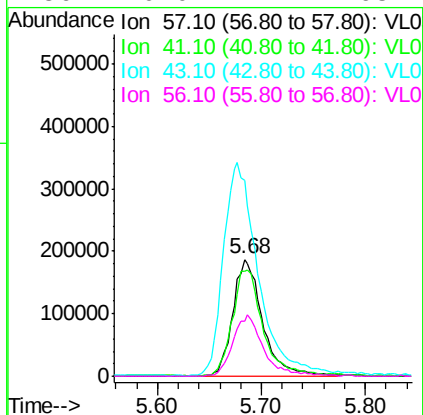
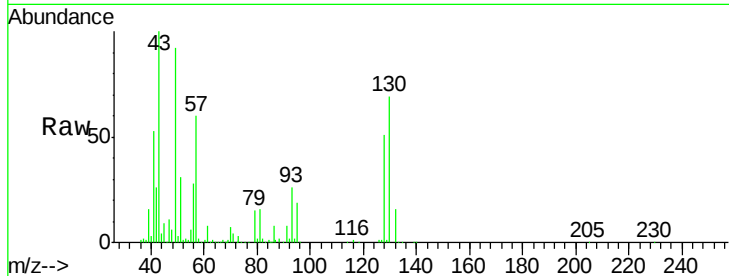
#26
Hexane
Concen: 2.154 ppbv m
RT: 5.68 min Scan# 901
Delta R.T. 0.02 min
Lab File: VL037136.D
Acq: 8 Jun 2021 17:40

Instrument :
MSVOA_L
ClientSampled :
SR-5C

Tot 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#

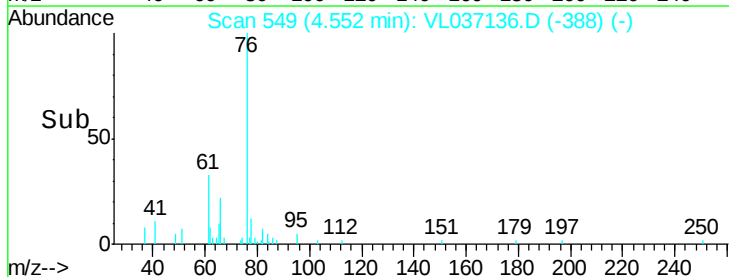
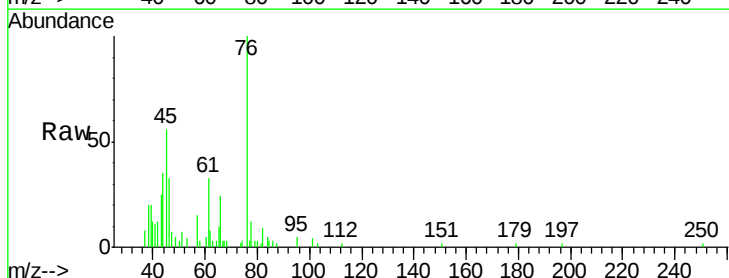
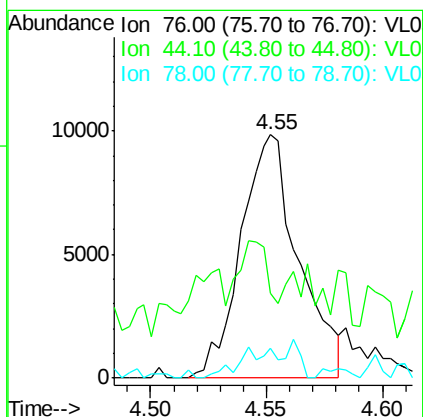
Manual Integrations
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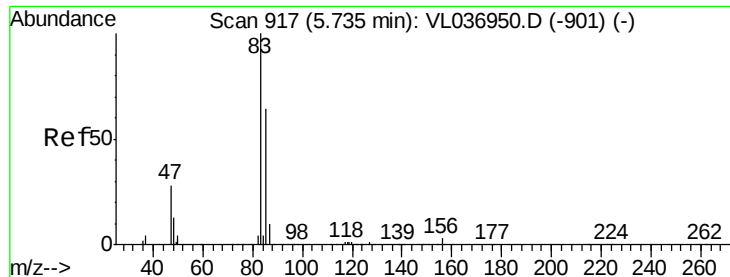
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#27
Carbon Disulfide
Concen: 0.098 ppbv
RT: 4.55 min Scan# 549
Delta R.T. 0.02 min
Lab File: VL037136.D
Acq: 8 Jun 2021 17:40

Tgt Ion	Ratio	Lower	Upper
76	100		
44	0.0	15.5	23.3#
78	17.2	7.8	11.6#





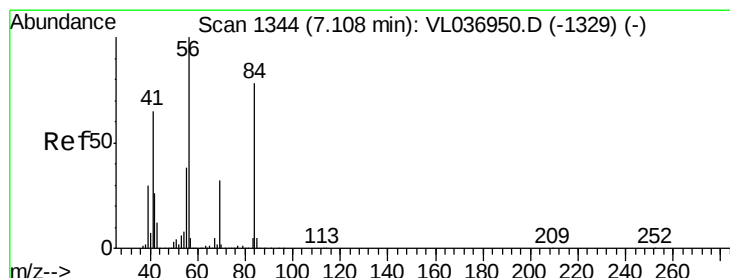
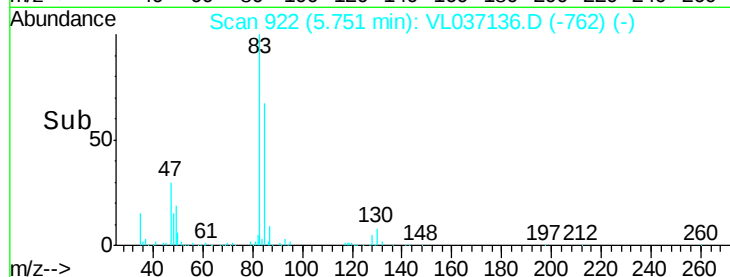
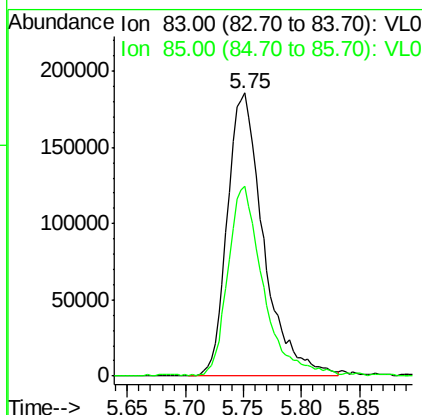
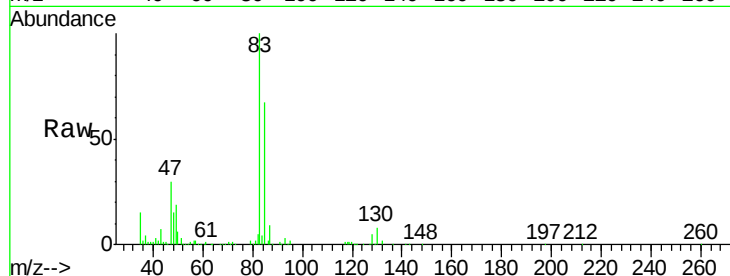
#29
Chloroform
Concen: 1.655 ppbv
RT: 5.75 min Scan# 922
Delta R.T. 0.02 min
Lab File: VL037136.D
Acq: 8 Jun 2021 17:40

Instrument :
MSVOA_L
ClientSampleId :
SR-5C

Tot Ion	83	Resp	402331
Ion Ratio	100	Lower	Upper
85	66.8	51.1	76.7

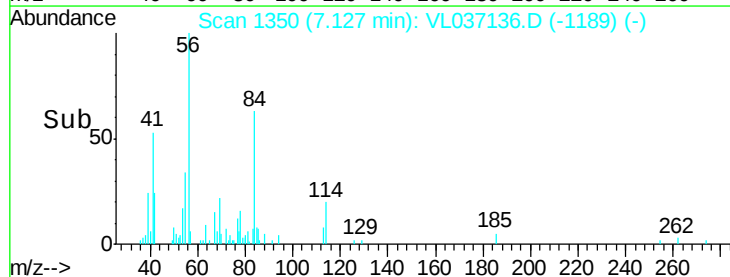
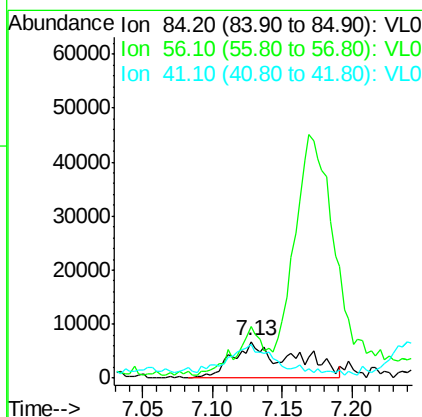
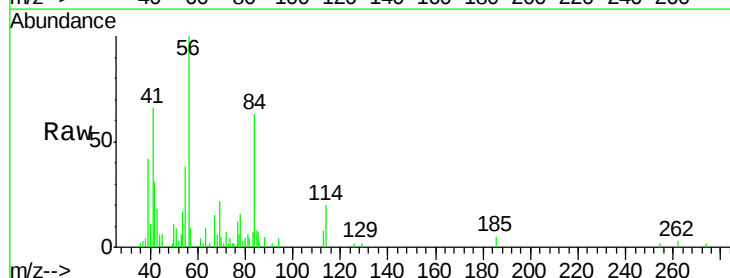
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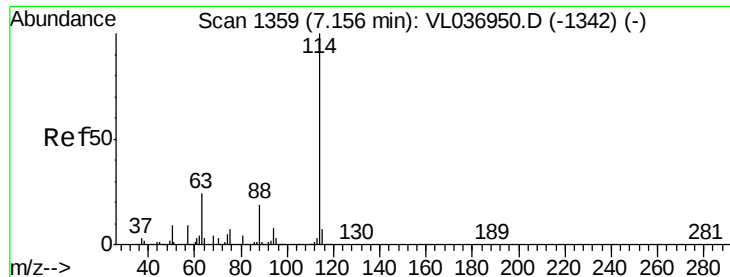
MMDadoda
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#30
Cyclohexane
Concen: 0.140 ppbv m
RT: 7.13 min Scan# 1350
Delta R.T. 0.02 min
Lab File: VL037136.D
Acq: 8 Jun 2021 17:40

Tgt Ion	84	Resp	20474
Ion Ratio	100	Lower	Upper
56	0.0	107.9	161.9#
41	73.1	65.5	98.3





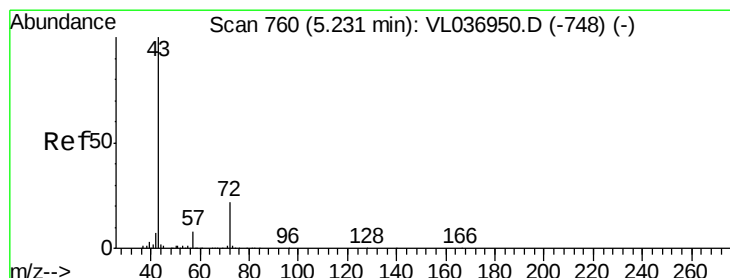
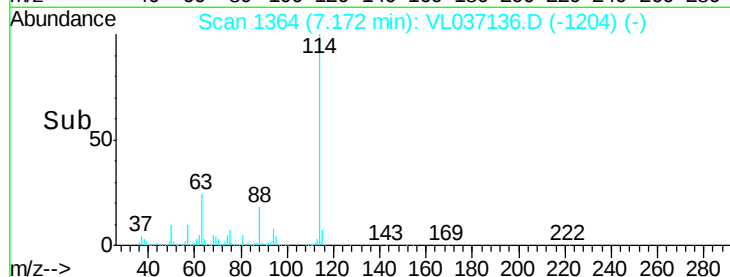
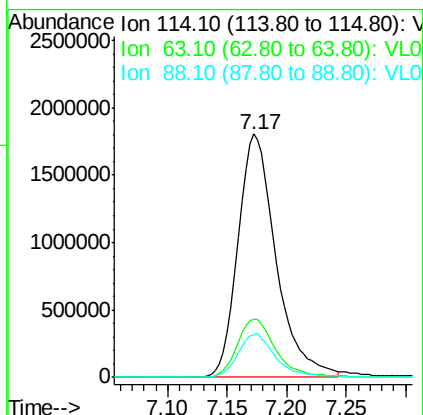
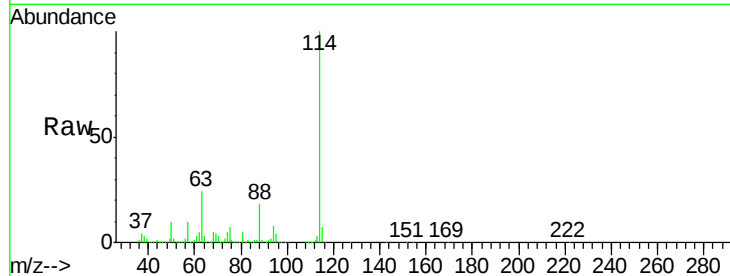
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17 min Scan# 1364
 Delta R.T. 0.02 min
 Lab File: VL037136.D
 Acq: 8 Jun 2021 17:40

Instrument :
 MSVOA_L
 ClientSampleId :
 SR-5C

Tot Ion:114 Resp: 4006233
 Ion Ratio Lower Upper
 114 100
 63 24.5 19.6 29.4
 88 17.9 14.6 21.8

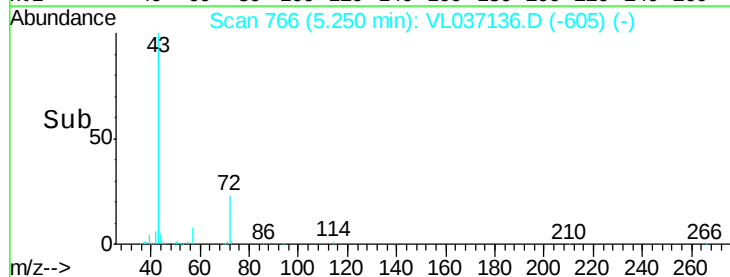
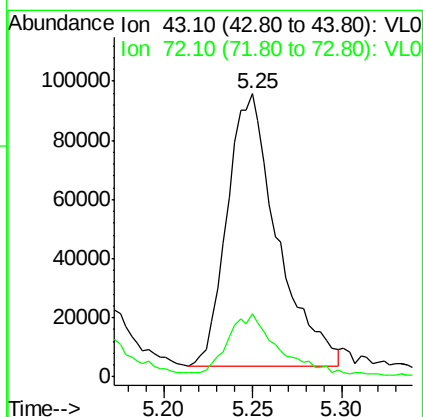
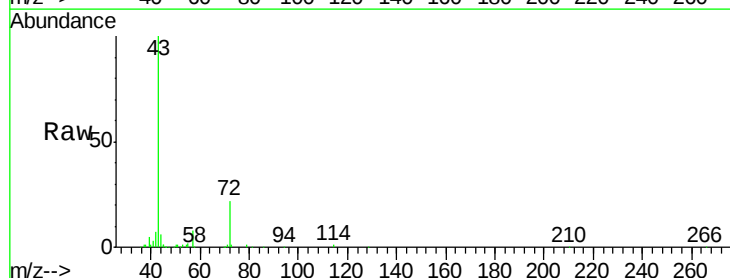
Manual Integrations
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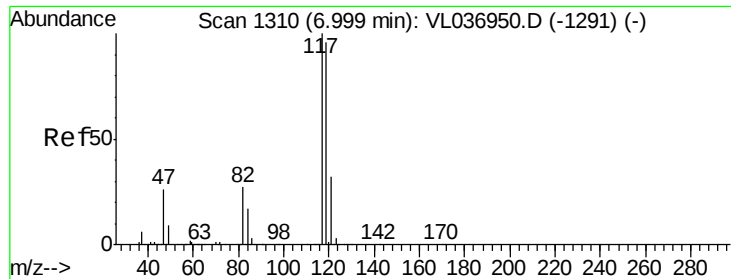
MMDadoda
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#34
 2-Butanone
 Concen: 1.238 ppbv
 RT: 5.25 min Scan# 766
 Delta R.T. 0.02 min
 Lab File: VL037136.D
 Acq: 8 Jun 2021 17:40

Tgt Ion: 43 Resp: 180621
 Ion Ratio Lower Upper
 43 100
 72 25.5 19.0 28.4





#35

Carbon Tetrachloride

Concen: 0.065 ppbv m

RT: 7.02 min Scan# 1316

Delta R.T. 0.02 min

Lab File: VL037136.D

Acq: 8 Jun 2021 17:40

Instrument :

MSVOA_L

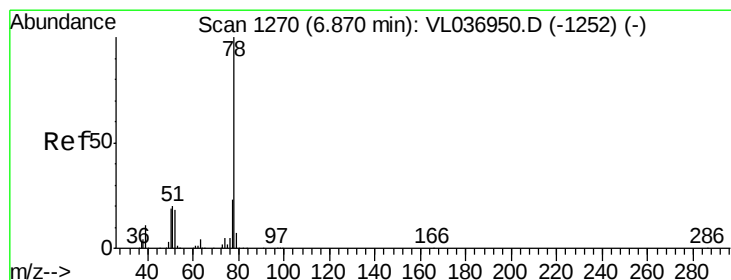
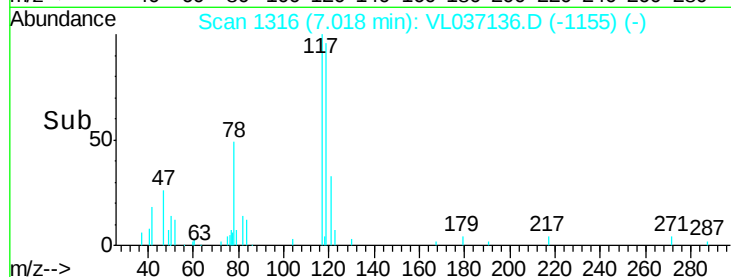
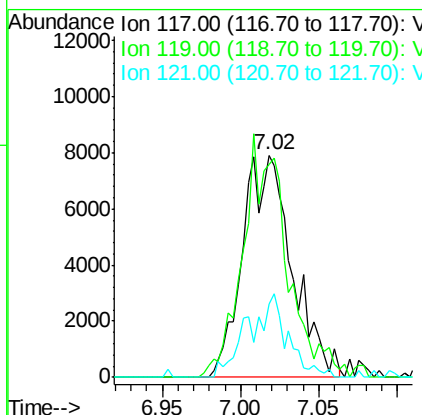
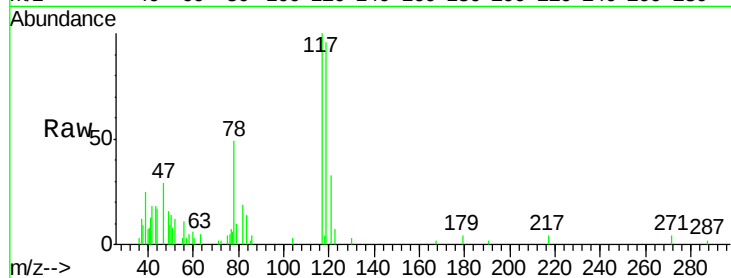
ClientSampleId :

SR-5C

Tot Ion:	117	Resp:	17320
Ion Ratio	Lower	Upper	
117	100		
119	96.1	76.6	114.8
121	33.1	25.8	38.6

Manual Integrations
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#36

Benzene

Concen: 5.574 ppbv

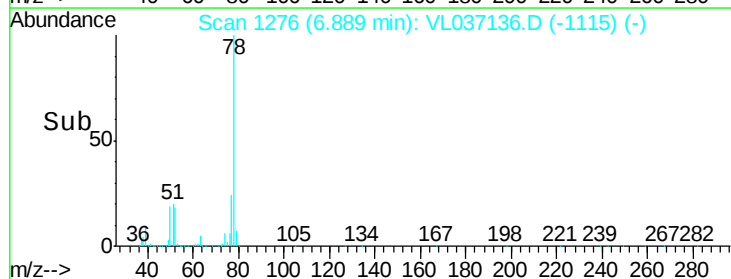
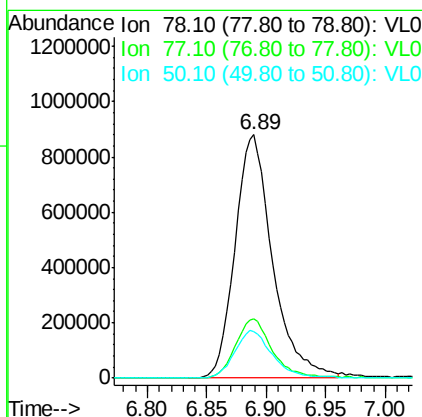
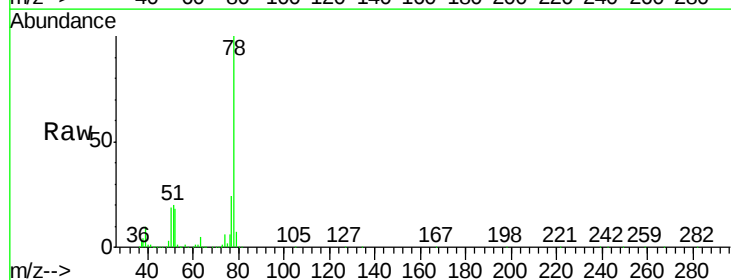
RT: 6.89 min Scan# 1276

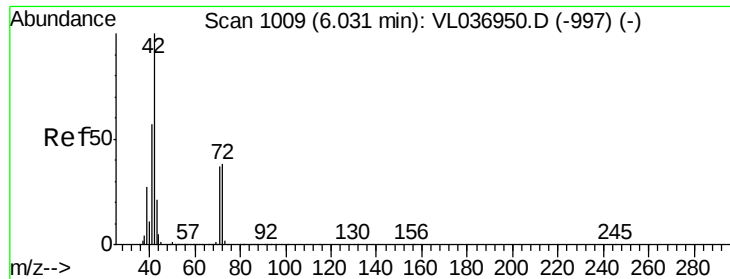
Delta R.T. 0.02 min

Lab File: VL037136.D

Acq: 8 Jun 2021 17:40

Tgt Ion:	78	Resp:	1923625
Ion Ratio	Lower	Upper	
78	100		
77	24.2	18.6	28.0
50	19.0	15.0	22.4





#41

Tetrahydrofuran

Concen: 0.353 ppbv m

RT: 6.06 min Scan# 1017

Delta R.T. 0.03 min

Lab File: VL037136.D

Acq: 8 Jun 2021 17:40

Instrument :

MSVOA_L

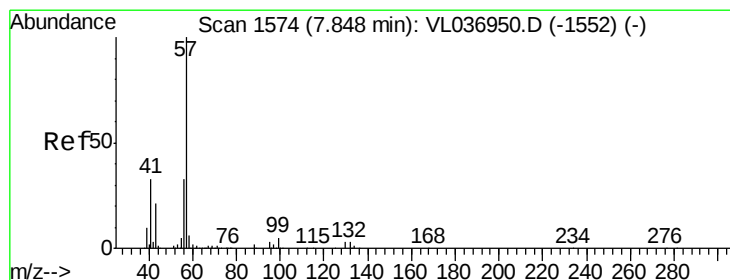
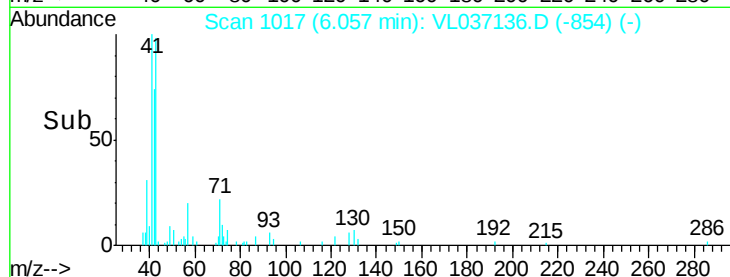
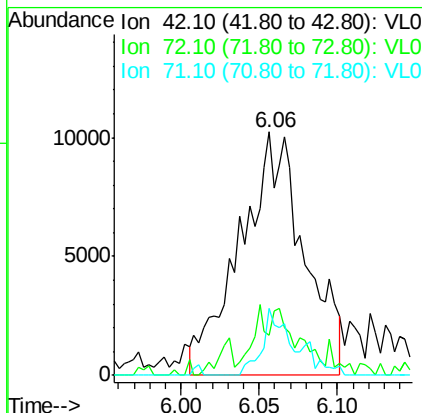
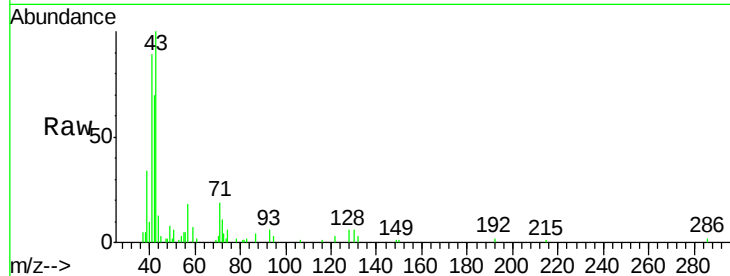
ClientSampleId :

SR-5C

Tot Ion:	42	Resp:	29298
Ion Ratio		Lower	Upper
42	100		
72	0.0	31.4	47.2#
71	0.0	30.4	45.6#

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#44

2,2,4-Trimethylpentane

Concen: 0.119 ppbv m

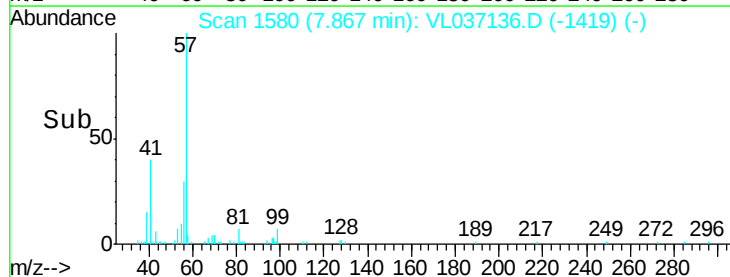
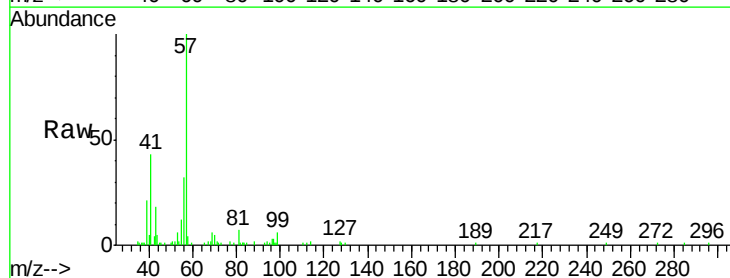
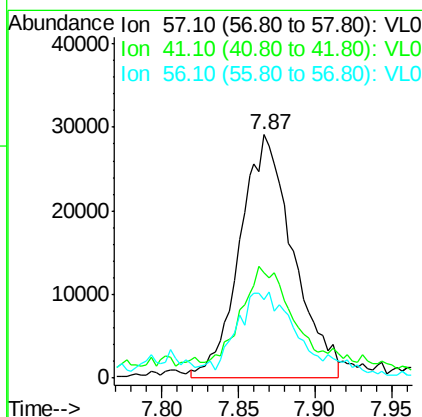
RT: 7.87 min Scan# 1580

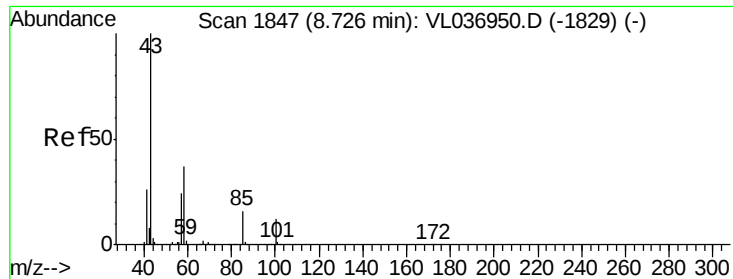
Delta R.T. 0.02 min

Lab File: VL037136.D

Acq: 8 Jun 2021 17:40

Tgt Ion:	57	Resp:	70522
Ion Ratio		Lower	Upper
57	100		
41	54.7	27.0	40.4#
56	44.5	25.4	38.2#





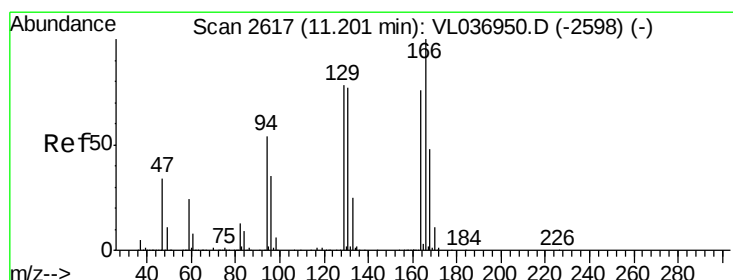
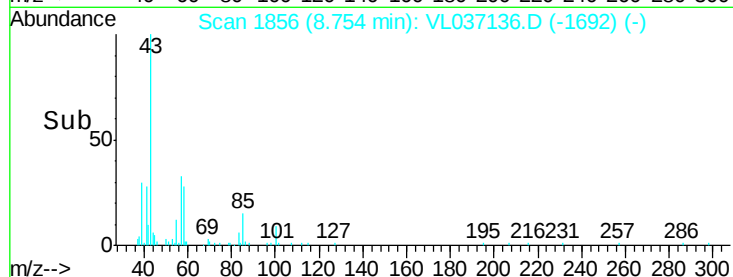
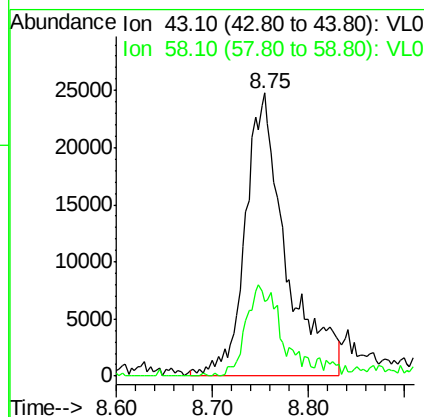
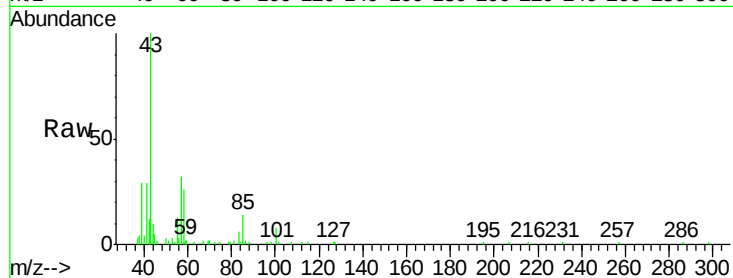
#50
4-Methyl-2-Pentanone
Concen: 0.303 ppbv m
RT: 8.75 min Scan# 1856
Delta R.T. 0.03 min
Lab File: VL037136.D
Acq: 8 Jun 2021 17:40

Instrument :
MSVOA_L
ClientSampled :
SR-5C

Tot Ion: 43 Resp: 73030
Ion Ratio Lower Upper
43 100
58 27.4 29.4 44.2#

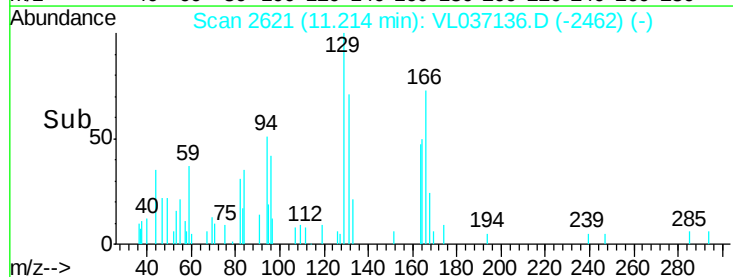
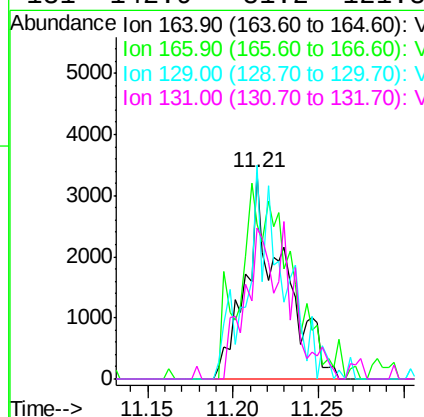
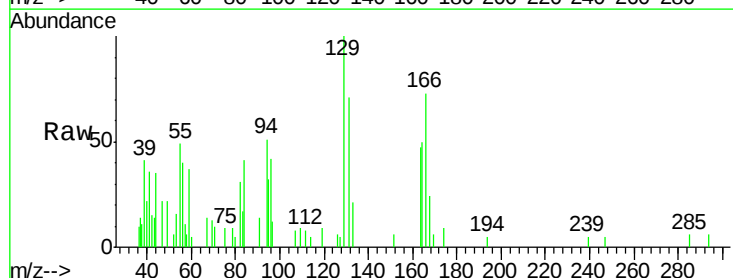
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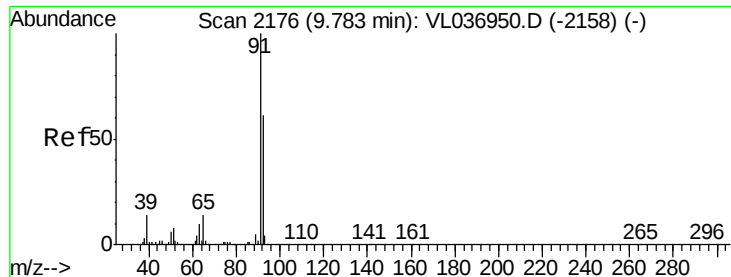
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#52
Tetrachloroethene
Concen: 0.038 ppbv m
RT: 11.21 min Scan# 2621
Delta R.T. 0.01 min
Lab File: VL037136.D
Acq: 8 Jun 2021 17:40

Tgt Ion: 164 Resp: 5204
Ion Ratio Lower Upper
164 100
166 146.1 105.5 158.3
129 201.3 81.8 122.8#
131 142.9 81.2 121.8#





#53

Toluene

Concen: 3.712 ppbv

RT: 9.80 min Scan# 2182

Delta R.T. 0.02 min

Lab File: VL037136.D

Acq: 8 Jun 2021 17:40

Instrument :

MSVOA_L

ClientSampleId :

SR-5C

Tot Ion: 91 Resp: 1524176

Ion Ratio Lower Upper

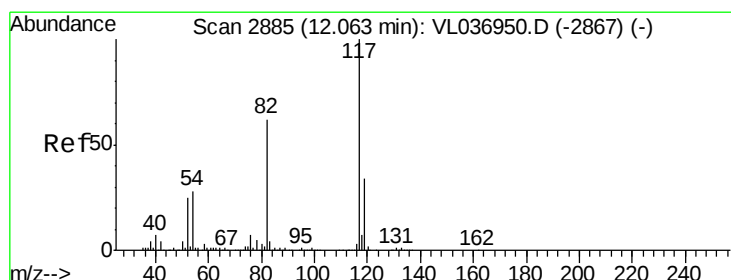
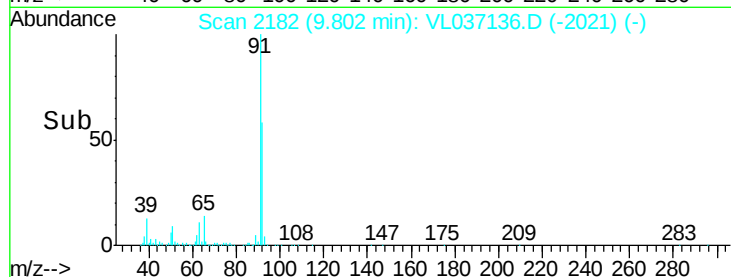
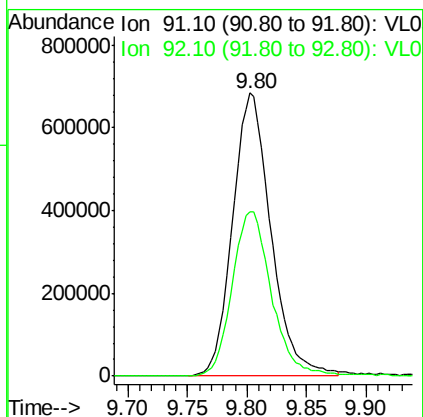
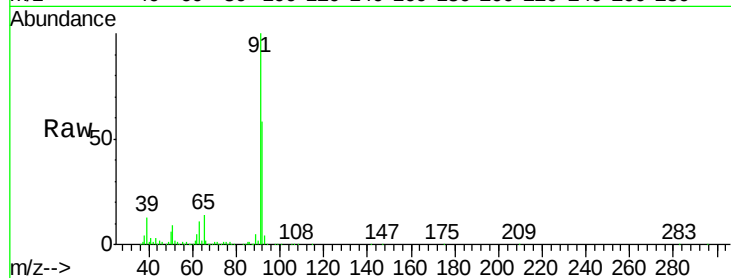
91 100

92 60.6 49.5 74.3

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2891

Delta R.T. 0.02 min

Lab File: VL037136.D

Acq: 8 Jun 2021 17:40

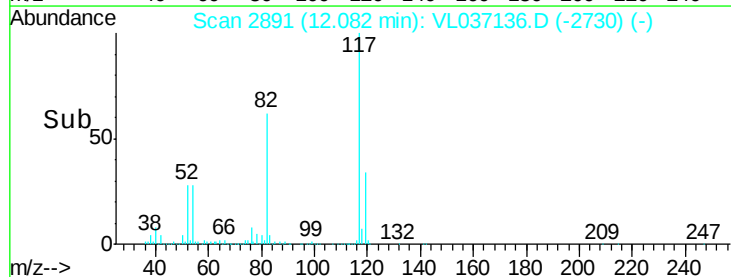
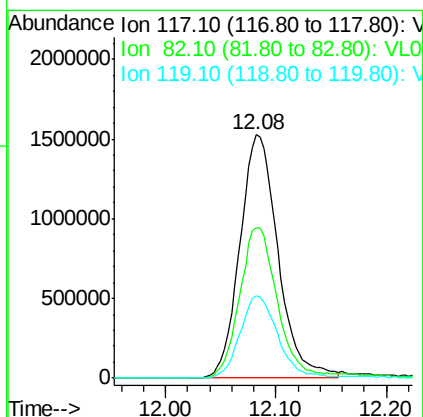
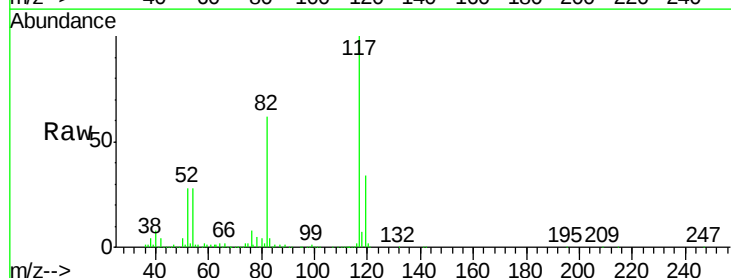
Tgt Ion: 117 Resp: 3662197

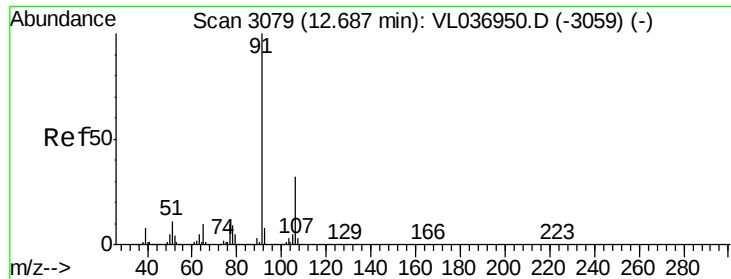
Ion Ratio Lower Upper

117 100

82 64.4 52.6 79.0

119 34.6 46.6 70.0#





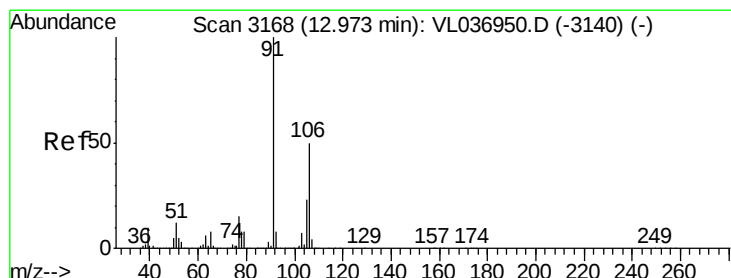
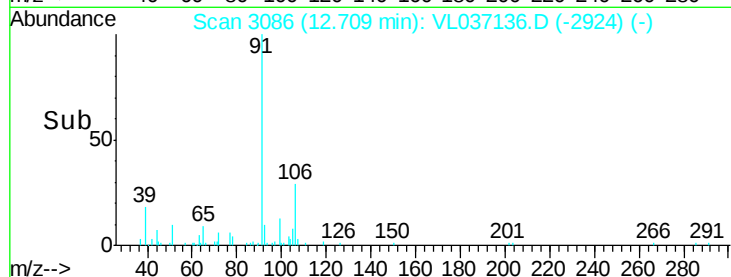
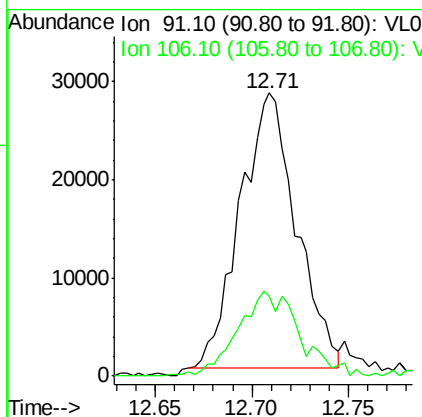
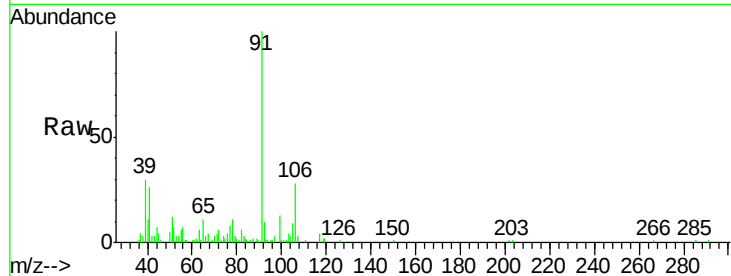
#58
Ethyl Benzene
Concen: 0.110 ppbv
RT: 12.71 min Scan# 3086
Delta R.T. 0.02 min
Lab File: VL037136.D
Acq: 8 Jun 2021 17:40

Instrument :
MSVOA_L
ClientSampled :
SR-5C

Tot Ion	Ratio	Lower	Upper
91	100		
106	27.8	25.6	38.4

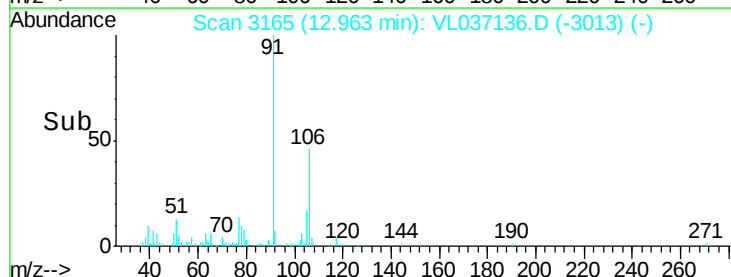
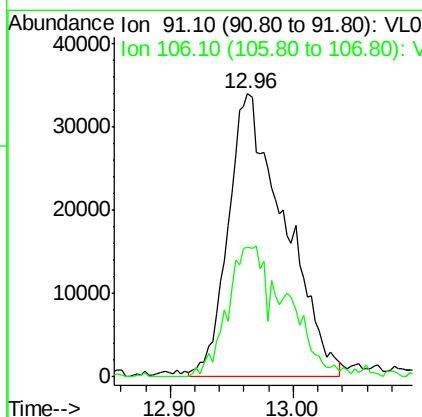
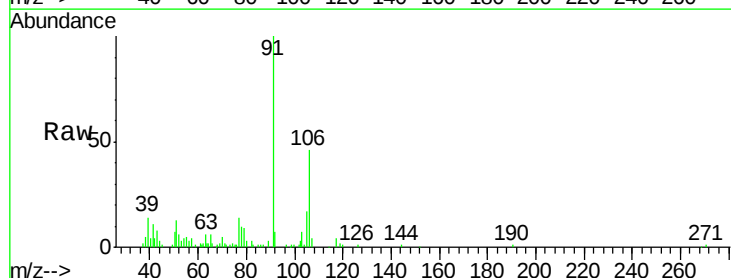
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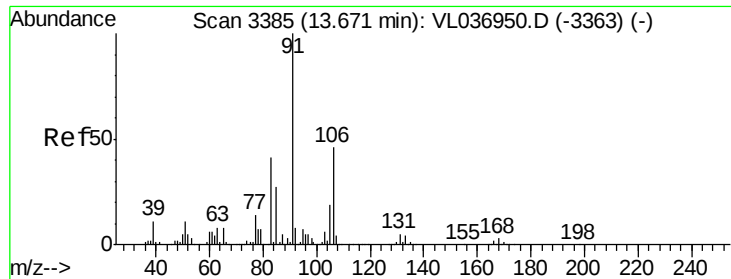
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#59
m/p-Xylene
Concen: 0.251 ppbv m
RT: 12.96 min Scan# 3165
Delta R.T. -0.01 min
Lab File: VL037136.D
Acq: 8 Jun 2021 17:40

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





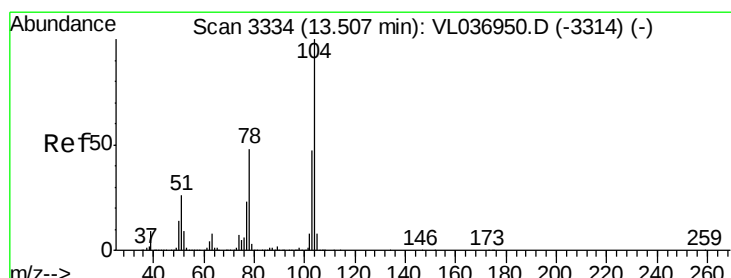
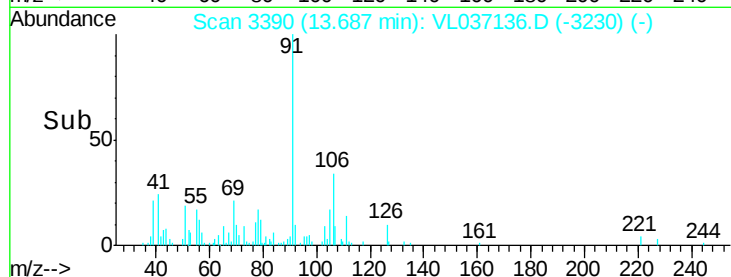
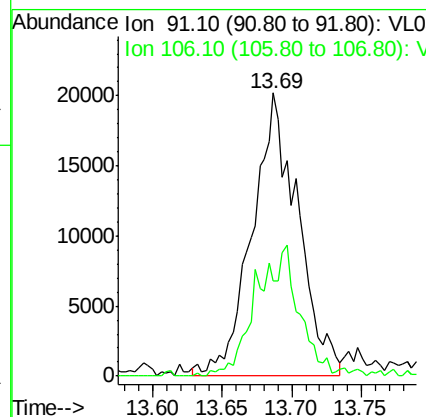
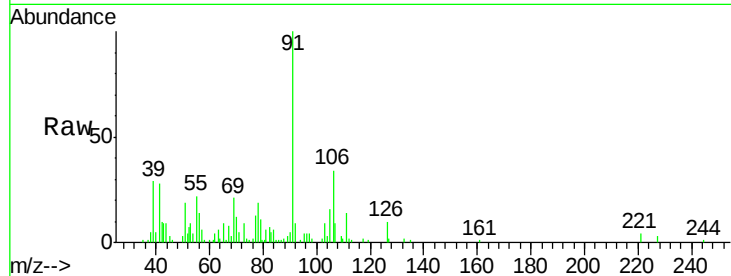
#60
o-Xylene
Concen: 0.113 ppbv m
RT: 13.69 min Scan# 3390
Delta R.T. 0.02 min
Lab File: VL037136.D
Acq: 8 Jun 2021 17:40

Instrument :
MSVOA_L
ClientSampled :
SR-5C

Tot Ion: 91 Resp: 46140
Ion Ratio Lower Upper
91 100
106 0.0 23.4 70.3#

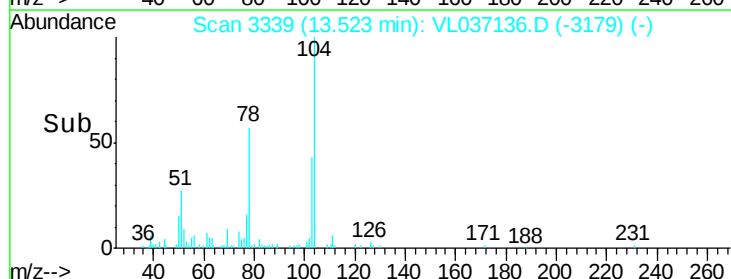
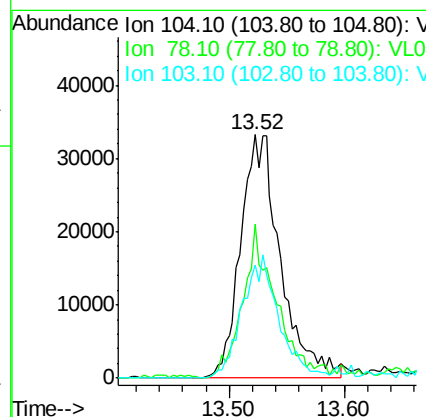
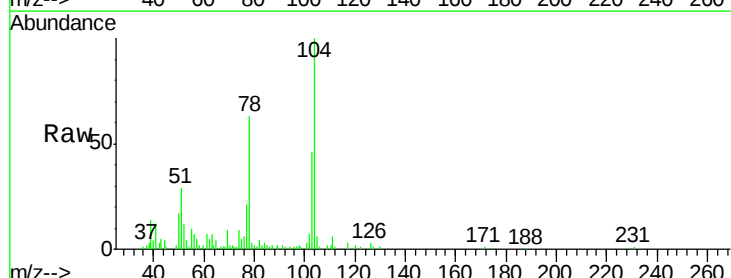
Manual Integrations
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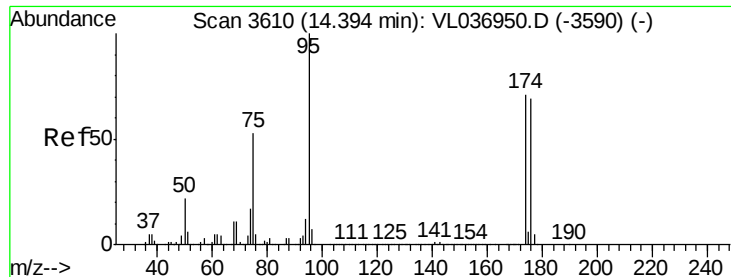
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#61
Styrene
Concen: 0.348 ppbv m
RT: 13.52 min Scan# 3339
Delta R.T. 0.02 min
Lab File: VL037136.D
Acq: 8 Jun 2021 17:40

Tgt Ion: 104 Resp: 79775
Ion Ratio Lower Upper
104 100
78 0.0 39.0 58.6#
103 46.2 38.0 57.0





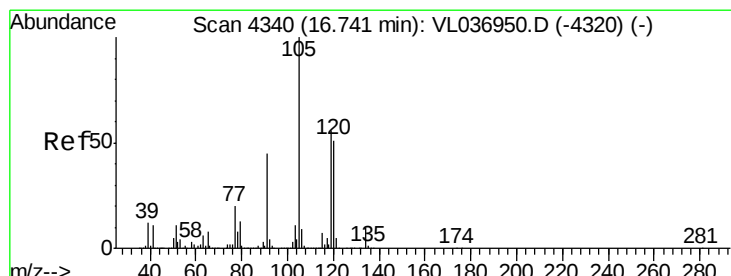
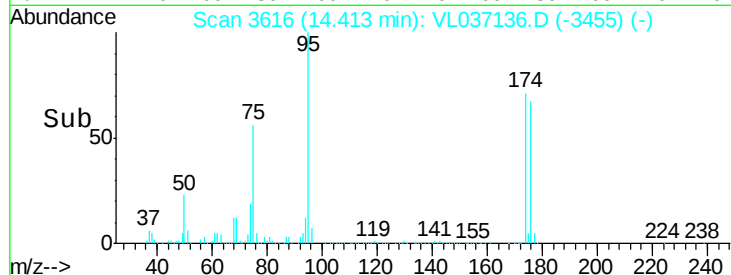
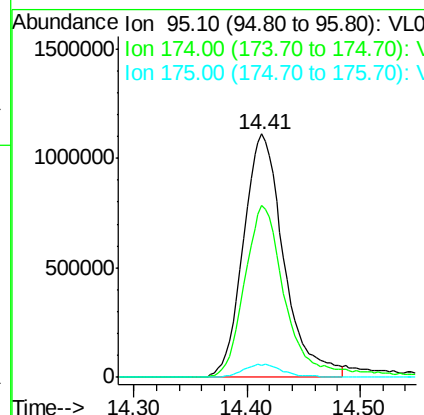
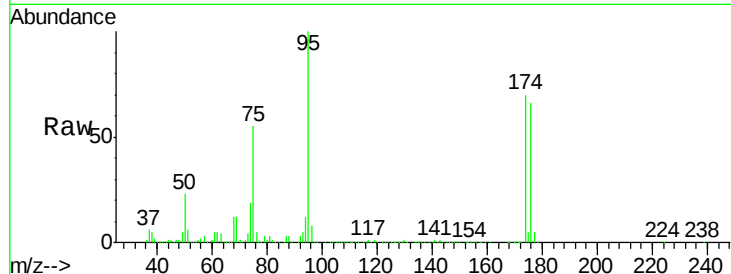
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.045 ppbv
 RT: 14.41 min Scan# 3616
 Delta R.T. 0.02 min
 Lab File: VL037136.D
 Acq: 8 Jun 2021 17:40

Instrument :
 MSVOA_L
 ClientSampled :
 SR-5C

Tot Ion: 95 Resp: 2763504
 Ion Ratio Lower Upper
 95 100
 174 74.4 58.4 87.6
 175 5.5 4.4 6.6

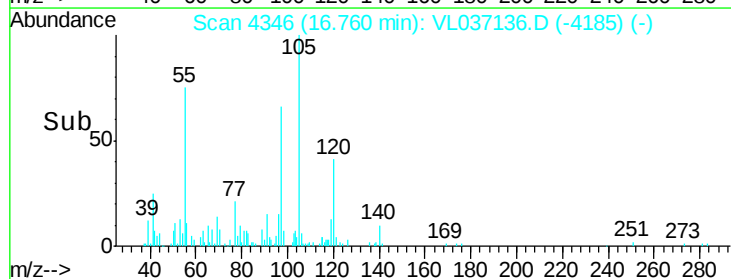
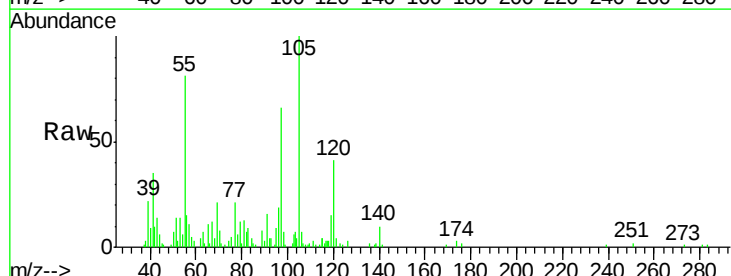
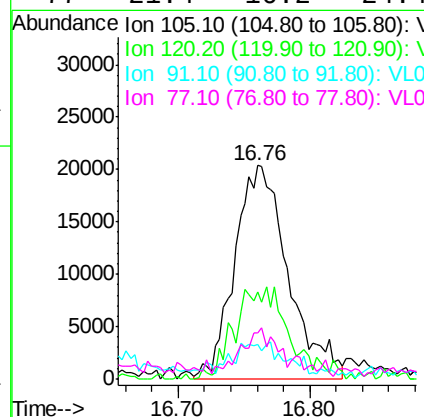
Manual Integrations
 APPROVED

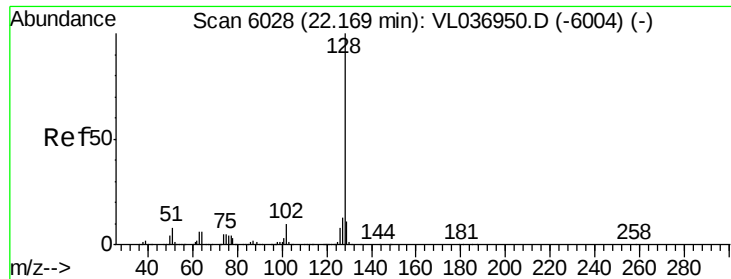
MMDadoda
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#74
 1,2,4-Trimethylbenzene
 Concen: 0.123 ppbv m
 RT: 16.76 min Scan# 4346
 Delta R.T. 0.02 min
 Lab File: VL037136.D
 Acq: 8 Jun 2021 17:40

Tgt Ion: 105 Resp: 57687
 Ion Ratio Lower Upper
 105 100
 120 40.6 40.6 61.0#
 91 16.3 37.4 56.0#
 77 21.4 16.2 24.4





#79

Naphthalene

Concen: 0.295 ppbv

RT: 22.20 min Scan# 6039

Delta R.T. 0.04 min

Lab File: VL037136.D

Acq: 8 Jun 2021 17:40

Instrument :

MSVOA_L

ClientSampleId :

SR-5C

Tot Ion	Ratio	Lower	Upper
128	100		
127	16.6	10.4	15.6#
129	10.8	9.0	13.6

Manual Integrations
APPROVED

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6/9/2021 4:23:43 PM

